WOOD BUFFALO
ENVIRONMENTAL ASSOCIATION

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Wood Buffalo Environmental Association

SEPTEMBER 2026

MONTHLY REPORT

CONTINUOUS MONITORING

October 30, 2026

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

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

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October 30, 2026

Director, Environmental Monitoring and Evaluation Branch
Alberta Environment and Protected Areas
11th Floor, Oxbridge Place
9820 106 Street
Edmonton, Alberta T5K 2J6

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

Enclosed is the September 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

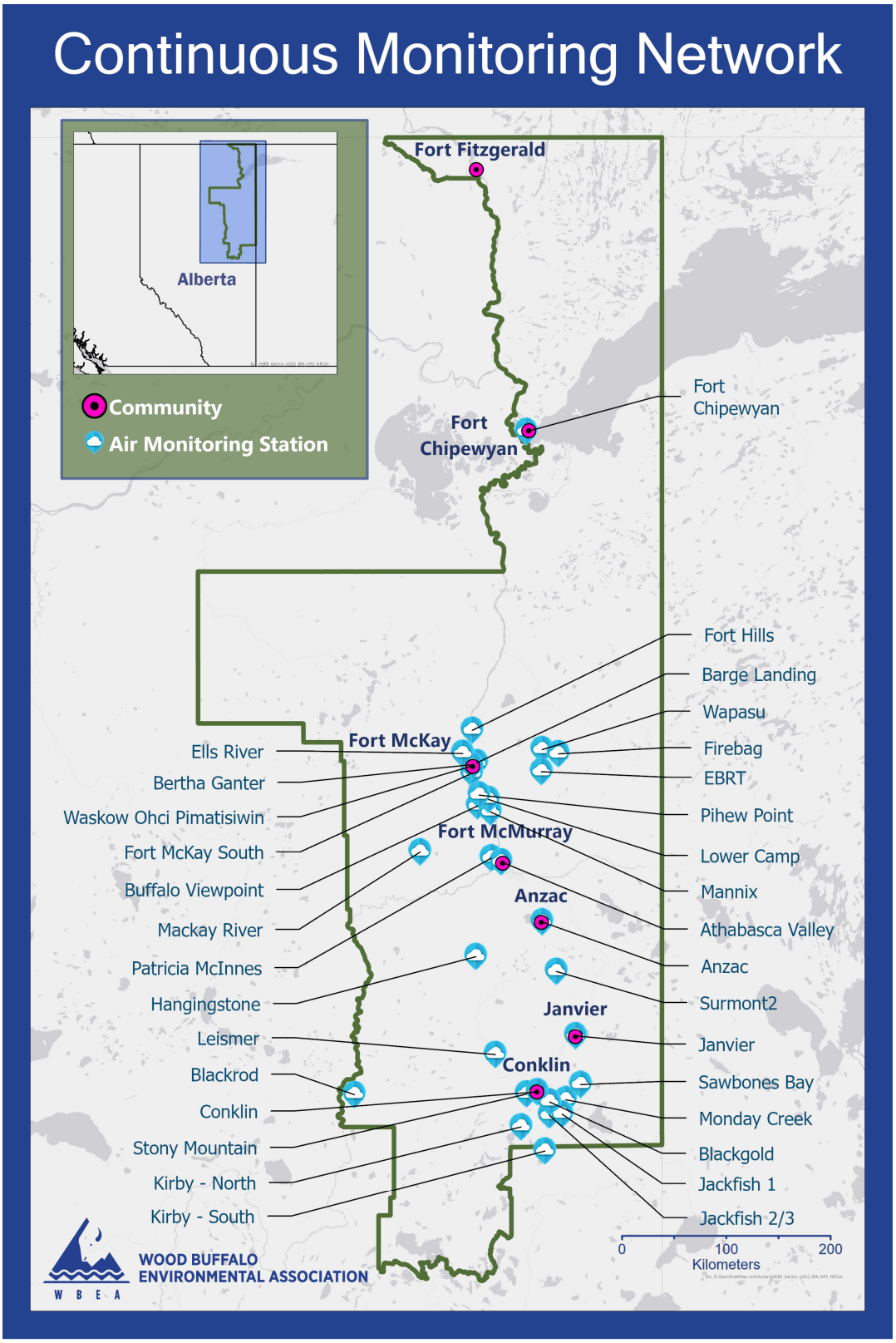


Figure 1. Map of WBEA Continuous Monitoring Network

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 twenty ambient ground-level concentrations in excess of the 1-hour H_2S objective reported to AB EPA; following data validation and processing, thirteen exceedances were confirmed.

There were three ambient ground-level concentrations in excess of the 24-hour H_2S objective reported to AB EPA; following data validation and processing, the exceedances were confirmed.

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

There was one ambient ground-level concentration in excess of the 1-hour $PM_{2.5}$ guideline 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 September 2026, there were 5 instances of monitoring instruments operating less than 90% of the time.

Station	Parameter	Details
AMS 8	TRS	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). 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.
AMS 30	$PM_{2.5}$	The $PM_{2.5}$ analyzer at Ells River air monitoring station (AMS) operated for less than 90% of September 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 October 9, 2026 (reference number 459826). During September, the $PM_{2.5}$ analyzer continued to experience intermittent communication failures with the station data logger, resulting in periods where valid $PM_{2.5}$ data were not recorded. The analyzer was reset each time communication was lost to restore normal operation. Although WBEA installed a remote switch in August to facilitate remote resets of the analyzer when communication failures occur, the issue persisted throughout September. Following data validation, these events resulted in 149 invalid hours and an operational time of 79% for September 2026. WBEA continues to investigate the intermittent communication issue and is evaluating further changes to the communications configuration to mitigate the potential for recurrence.
AMS 3	WS/WD/VWS	The WS/WD/VWS at the 100-, and 163-meter elevations at Lower Camp Met Tower operated less than 90% of 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 October 21, 2026 (reference number 460196). In September 2026, the Lower Camp Met Tower continued to experience operational issues following the power surge in July, which damaged the overhead power lines and components of the data acquisition system (DAS). Despite troubleshooting efforts and the installation of replacement SDM serial converters for the 100- and 163-meter wind sensors, as well as a replacement site modem on September 17, 2026, the issues persisted. An additional power failure occurred during September, further affecting the operation of the meteorological sensors. The WS/WD/VWS at the 100- and 163-meter elevations continued to experience operational issues throughout the month. Following data validation, the operational time for September 2026 was 0%. WBEA continues to address the issues affecting the Lower Camp Met Tower. WBEA is coordinating with a third-party contractor to schedule the replacement of the 100- and 163-meter wind sensors and with Syncrude (operated by Suncor) to restore power to the tower. Further troubleshooting and corrective actions will be undertaken as required to restore reliable operation of the meteorological monitoring system.
AMS 22	$PM_{2.5}$	The $PM_{2.5}$ analyzer at the Janvier AMS operated for less than 90% of the time in August, September, and October 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 October 26, 2026 (reference number 460350). In August, on-going communication issues caused the $PM_{2.5}$ analyzer at Janvier AMS to flatline, therefore, it was replaced on August 24, 2026, after inconclusive troubleshooting. A subsequent routine data validation review identified issues with the comparability of the $PM_{2.5}$ data with nearby sites, prompting a site visit on October 23, 2026. Following field checks, it was determined that the PMT sensitivity of the analyzer had not been verified upon installation in August and could not be verified during the October site visit, therefore, a replacement was installed and the PMT sensitivity and manufacturer-recommended verifications were completed. The $PM_{2.5}$ analyzer returned to normal operation on October 23, 2026, at 14:00 MST. During the data validation process, unstable operation

		of the $PM_{2.5}$ analyzer due to this issue resulted in a total of 178 invalid hours in August (69% operational time), 720 invalid hours in September (0% operational time), and 539 invalid hours in October. The final operational time for October will be confirmed upon completion of the Level 2 data validation. During August, 3 exceedances of the Alberta Ambient Air Quality Objectives were reported during periods of invalid data; all these exceedances were rescinded.
AMS 13	THC/NMHC/CH4	The total hydrocarbon (THC)/non-methane hydrocarbon (NMHC)/methane (CH4) analyzer at the Fort McKay South AMS operated less than 90% of 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 October 8, 2026 (reference number 459803). There were two issues associated with the operation of the THC/NMHC/CH4 analyzer that resulted in 79 hours of analyzer downtime. • Preventative maintenance was done to the THC/NMHC/CH_4 analyzer on September 1 replacing the pump. The instrument required time to stabilize following the pump installation until September 2, this resulted in 19 hours of downtime from September 1 to 2. • The daily spans for the THC/NMHC/CH_4 analyzer failed to meet the AMD criteria on September 20 and 21. Maintenance was conducted on September 21 to adjust the chromatogram and multiple other settings on the analyzer. Following the maintenance the analyzer operations were verified and returned to normal operations on September 21 at 14:00 MST. Data for this period was invalidated back to the last acceptable QA check on September 19, resulting in 60 hours of invalid data. Following the data validation, the final operational uptime for September 2026 was 89.0%.

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 48 hours this month.

Unstable operation due to AMD non-compliance of the TRS analyzer on September 3 and 4 resulted in 33 hours of downtime.

Maintenance to verify the daily QA response of the TRS analyzer on September 10 resulted in 1 hour of downtime.

Maintenance to clean the sample manifold on September 21 interrupted the normal operation of all gaseous analyzers resulting in 1 hour of downtime.

Flatline in the output signal of the wind speed and wind direction sensors on September 8 resulted in 2 hours of downtime.

Station 3, Lower Camp – Meteorology

Station power failure from September 1 to 3 interrupted the normal operation of all meteorological sensors at all elevations for 61 hours.

Flatlines in the output signal of the vertical wind speed, wind speed, and wind direction sensors at 100- and 163-meter elevations from September 3 to 5 resulted in 57 hours of downtime.

Failure to record data on September 5 interrupted the normal operation of the vertical wind speed, wind speed, and wind direction sensors at 100- and 163-meter elevations for 1 hour.

Flatlines in the output signal of the vertical wind speed, wind speed, and wind direction sensors at 100- and 163-meter elevations from September 6 to October 1 resulted in 601 hours of downtime.

Station 4, Buffalo Viewpoint

Maintenance to replace the support gas cylinder of the THC/NMHC/CH_4 analyzer on September 12 resulted in 2 hours of downtime.

Maintenance to replace the bearings of the wind speed sensor on September 25 resulted in 1 hour downtime.

Station 5, Mannix

Maintenance to clean the sample manifold on September 11 interrupted the normal operation of H_2S analyzer resulting in 1 hour of downtime.

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 65 hours this month.

The relative humidity sensor operated out of range throughout the month resulting in 17 hours of invalid data.

Station 7, Athabasca Valley

Maintenance to reset the station modem on September 21 affected the normal operation of all parameters resulting in 1 hour of downtime.

The relative humidity sensor operated out of range on September 8 resulting in 9 hours of invalid data.

Station 8, Fort Chipewyan

Analyzer failure due to converter failure of the TRS analyzer from September 1 to 4 resulted in 81 hours of invalid data.

Failure to record data of all air quality analyzers on September 10 resulted in 1 hour of invalid data.

Unstable operations due to flatlines in the output signal of the $PM_{2.5}$ analyzer on September 18 resulted in 11 hours of invalid data.

Station power failure on September 25 interrupted the normal operation of all air quality analyzers and precipitation collector for 2 hours.

Failure to record data of precipitation collector on September 6 resulted in 1 hour of invalid data.

Failure to record data for all meteorological sensors on September 10 resulted in 1 hour 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 September. Therefore, the calibrator zeros of August and September multi-point calibrations were used to validate the analyzer baseline response.

Station 9, Barge Landing

No operational issues to note.

Station 11, Lower Camp

Maintenance to verify the daily QA response of the SO_2 and THC/NMHC/CH_4 analyzers on September 2 resulted in 1 hour of downtime.

Analyzer failure of the H_2S analyzer due to UV lamp failure on September 21 and 22 resulted in 33 hours of invalid data.

Cleaning of the sample manifold on September 29 interrupted the normal operation of the H_2S analyzer for 1 hour.

Station 13, Fort McKay South

Maintenance to replace the pump and calibrate the THC/NMHC/CH_4 analyzer from September 1 to 2 resulted in 22 hours of downtime.

Failure to record data of the $PM_{2.5}$ analyzer on September 6 resulted in 1 hour of invalid data.

Unstable operation of the THC/NMHC/CH_4 analyzer due to the daily spans falling outside of AMD criteria on September 20 and 21 resulted in 57 hours of invalid data. Subsequent maintenance on the THC/NMHC/CH_4 analyzer on September 21 resulted in an additional 3 hours of downtime.

Station 14, Anzac

No operational issues to report.

Station 17, Wapasu

Failure to record data of the $PM_{2.5}$ analyzer on September 7 and 15 resulted in a total of 2 hours of invalid data.

Cleaning of the manifold on September 22 interrupted the normal operation of the H_2S, O_3, SO_2, and THC analyzers for 1 hour.

Intermittent flatlines in the output signal of the wind sensor throughout the month resulted in 3 hours of invalid data.

Station 18, Stony Mountain

Failure to record data of all parameters except $PM_{2.5}$ on September 10 resulted in 3 hours of invalid data.

Unstable operation of $NO/NO_2/NO_X$ analyzer due to the daily span falling outside AMD criteria on September 29 and 30 resulted in 64 hours of invalid data.

Unstable operation due to intermittent flatlining of the $PM_{2.5}$ analyzer throughout the month resulted in 30 hours of invalid data.

Station 19, Firebag

Maintenance to replace the zero-air generator on September 29 affected the normal operation of the THC analyzer resulting in 4 hours of downtime.

Note: Automated daily zero response checks of the THC analyzer did not meet WBEA's QC acceptance criteria from September 18 to 29 due to issues with the zero-air supply. Therefore, the daily baseline zero values for this period were not interpolated for baseline correction.

Station 20, MacKay River

Intermittent flatlines in the output signal of the wind sensor throughout the month resulted in 12 hours of invalid data.

Station 21, Conklin

Maintenance to replace the support gas cylinder of the $THC/NMHC/CH_4$ analyzer on September 16 resulted in 2 hours of downtime.

Maintenance to replace the zero-air generator on September 29 affected the normal operation of the $THC/NMHC/CH_4$ analyzer resulting in 5 hours of downtime.

Flatlining in the output signal of the wind sensor throughout the month resulted in 4 hours of invalid data.

The relative humidity sensor operated out of range throughout the month resulting in 19 hours of invalid data.

Note: Automated daily zero response checks of the $THC/NMHC/CH_4$ analyzer did not meet WBEA's QC acceptance criteria from September 25 to 29 due to issues with the zero-air supply. Therefore, the daily baseline zero values for this period were not interpolated for baseline correction.

Station 22, Janvier

Failure to record data of all gaseous analyzers on September 8 and 9 resulted in a total of 4 hours.

Maintenance to replace the $NO/NO_2/NO_X$ analyzer on September 24-25 resulted in 22 hours of downtime.

Analyzer failure due to unverified PMT verification check resulted in 720 hours of invalid hours.

A flatline in the output signal of the wind sensor on September 4 resulted in 1 hour of invalid data.

A flatline in the output signal of the ambient temperature and relative humidity sensor on September 8 resulted in 2 hours of invalid data.

Station 23, Fort Hills

Maintenance to reinitiate the daily QA checks of the H_2S and TRS analyzers on September 14 resulted in 1 hour of downtime.

Maintenance to reinitiate the daily QA checks of the H_2S, SO_2 and TRS analyzers on September 18 resulted in 1 hour of downtime.

Maintenance to clean the sample manifold on September 25 interrupted the normal operation of H_2S, SO_2, THC/NMHC/CH_4 and TRS analyzers resulting in 1 hour of downtime.

A flatline in the output signal of the $PM_{2.5}$ analyzer from September 28 to 29 resulted in 27 hours of downtime.

Station 25, Waskōw ohci Pimâtisiwin

Failure to record data of the SO_2 analyzer on September 7 resulted in 1 hour of invalid data.

Cleaning of the manifold on September 29 interrupted the normal operation of SO_2 analyzer for 1 hour.

Station 27, Jackfish 2/3

Unstable operation due to a flatline of the H_2S analyzer on September 13 resulted in 1 hour of invalid data.

Station 29, Surmont 2

Failure to record wind sensor data on September 5 resulted in 1 hour of invalid data.

Intermittent flatlines in the output signal of the wind sensor throughout the month resulted in 40 hours of invalid data.

Station 30, Ells River

Flatlines in the output signal of the $PM_{2.5}$ analyzer from September 1 through September 29 resulted in 149 hours of invalid data.

Intermittent flatlining in the output signals of the wind speed and wind direction sensors from September 8 through September 24 resulted in 5 hours of downtime.

Station 31, Blackrod

Cleaning of the manifold on September 10 interrupted the normal operation of the H_2S, SO_2, and THC analyzers for 1 hour.

Station 32, Pihew Point

Cleaning of the manifold on September 2 interrupted the normal operation of the H_2S analyzer for 1 hour.

Cleaning of the manifold on September 14 interrupted the normal operation of the H_2S and SO_2 analyzers for 1 hour.

Maintenance on the THC/NMHC/CH_4 analyzer on September 14 and 21 resulted in 9 hours of downtime.

Unstable operations due to excessive baseline drift of the THC/NMHC/CH_4 analyzer on September 20 and 21 resulted in 30 hours of invalid data. Subsequent maintenance to replace the THC/NMHC/CH_4 analyzer on September 25 resulted in 2 hours of downtime.

Flatline in the output signal of the wind sensor on September 1 resulted in 1 hour of invalid data.

Station 33, Monday Creek

Unstable operation of NO/NO_2/NO_X analyzer due to the daily span falling outside AMD criteria on September 18 resulted in 43 hours of invalid data.

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

The relative humidity sensor operated out of range throughout the month resulting in 4 hours of invalid data.

Flatline in the output signal of the wind sensor throughout the month resulted in 4 hours of invalid data.

Station 34, Hangingstone Expansion

Cleaning of the manifold on September 28 interrupted the normal operation of the NO/NO_2/NO_X and SO_2 analyzers for 1 hour.

Station 505, Sawbones Bay

Cleaning of the manifold on September 22 interrupted the normal operation of the H_2S and NO/NO_2/NO_X analyzers for 1 hour.

A flatline in the output signal of the wind sensor on September 18 resulted in 1 hour of invalid data.

Station 506, Jackfish 1

Cleaning of the manifold on September 9 interrupted the normal operation of the NO/NO_2/NO_X and SO_2 analyzers for 1 hour.

Intermittent flatlines in the output signal of the wind sensor throughout the month resulted in 19 hours of invalid data.

The relative humidity sensor operated out of range throughout the month resulting in 20 hours of invalid data.

Note: Multiple daily span checks for the $NO/NO_2/NO_X$ analyzer were outside of the 10% AMD criteria throughout the month due to an interruption in the station calibrator configuration.

Station 508, Kirby North

No operational issues to report.

Station 513, EBRT

Station power failures throughout the month interrupted the normal operation of all air quality analyzers for 16 hours.

Flatlining in the output signal of the H_2S analyzer throughout the month resulted in 8 hours of invalid data.

Cleaning of the manifold on September 25 interrupted the normal operation of the H_2S and SO_2 analyzers for 1 hour.

The relative humidity sensor operated out of range on September 8 and 14 resulting in 6 hours of invalid data.

A flatline in the output signal of the wind sensor on September 22 and 23 resulted in 4 hours of invalid data.

Note: Multiple daily span checks for the $NO/NO_2/NO_X$ analyzer were outside of the 10% AMD criteria throughout the month due to an interruption in the station calibrator configuration.

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.

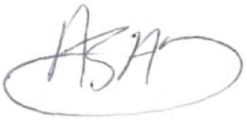
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I certify that I have reviewed and verified this report, and that the information is complete, accurate and representative of the monitoring results, reporting timeframe, and the specified analysis, summarization, and reporting requirements.



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R00_2609

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION
MONTHLY AIR MONITORING SUMMARY

Created: Oct 28 2026 11:02:48

APPROVAL NUMBERS: 289664-00-00, 241311-00-00, 20809-02-00, 149968-01-00, 237382-00-00, 48522-01-00, 240008-00-00, 48263-01-00, 224816-00-00, 151469-01-00, 189942-00-00, 206355-00-00, 46586-00-00, 73203-02-00, 216466-01-00, 137467-01-00, 236394-00-00, 254465-00-00, 094-03-00, 80105-01-00, 305529-00-00, 318401-00-00, 026-03-00, 364232-00-00, 228044-00-00, 247548-00-00, 231302-00-00, 246984-01-00, 153125-01-00

REPORT DATE: MONTH 9, YEAR 2026

CONTINUOUS AMBIENT MONITORING

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
SO2(ppb)	1	100	-	-	18	0	2.6	0
SO2(ppb)	4	100	-	-	29.6	0	2.9	0
SO2(ppb)	5	100	-	-	39.7	0	3.9	0
SO2(ppb)	6	100	-	-	12.3	0	1.8	0
SO2(ppb)	7	100	-	-	5.8	0	1.5	0
SO2(ppb)	8	100	-	-	4.0	0	0.8	0
SO2(ppb)	9	100	-	-	11.9	0	2.3	0
SO2(ppb)	11	100	-	-	41.2	0	6.7	0
SO2(ppb)	13	100	-	-	18.5	0	2.7	0
SO2(ppb)	14	100	-	-	4.6	0	0.8	0
SO2(ppb)	17	100	-	-	39.1	0	4.1	0
SO2(ppb)	18	100	-	-	1.8	0	0.5	0
SO2(ppb)	19	100	-	-	25.1	0	2.6	0
SO2(ppb)	20	100	-	-	11.8	0	4.5	0
SO2(ppb)	21	100	-	-	1.7	0	0.4	0
SO2(ppb)	22	99	-	-	1.5	0	0.2	0
SO2(ppb)	23	100	-	-	15.4	0	3.1	0
SO2(ppb)	25	100	-	-	10.6	0	1.6	0
SO2(ppb)	27	100	-	-	12.2	0	2.6	0
SO2(ppb)	29	100	-	-	10.3	0	1.7	0
SO2(ppb)	30	100	-	-	24.5	0	2.7	0
SO2(ppb)	31	100	-	-	4.9	0	2.0	0
SO2(ppb)	32	100	-	-	37.0	0	11.9	0
SO2(ppb)	33	100	-	-	14.8	0	4.6	0
SO2(ppb)	34	100	-	-	33.2	0	12.0	0
SO2(ppb)	505	100	-	-	39.1	0	13.8	0
SO2(ppb)	506	100	-	-	11.6	0	2.4	0
SO2(ppb)	508	100	-	-	14.2	0	5.1	0
SO2(ppb)	513	98	-	-	28.8	0	4.3	0
H2S(ppb)	1	100	-	-	3.5	0	1.1	0
H2S(ppb)	4	100	-	-	4.6	0	0.6	0
H2S(ppb)	5	100	-	-	6.5	0	1.9	0
H2S(ppb)	11	95	-	-	13.5	10	7.5	2
H2S(ppb)	17	100	-	-	1.1	0	0.3	0
H2S(ppb)	19	100	-	-	2.0	0	0.6	0
H2S(ppb)	20	100	-	-	1.2	0	0.4	0
H2S(ppb)	23	100	-	-	5.4	0	1.2	0
H2S(ppb)	25	100	-	-	3.2	0	1.1	0
H2S(ppb)	27	100	-	-	1.4	0	0.3	0
H2S(ppb)	29	100	-	-	0.5	0	0.2	0
H2S(ppb)	31	100	-	-	1.0	0	0.3	0
H2S(ppb)	32	100	-	-	12.4	2	3.4	1
H2S(ppb)	33	100	-	-	0.7	0	0.2	0
H2S(ppb)	34	100	-	-	1.7	0	0.6	0
H2S(ppb)	505	100	-	-	3.4	0	1.6	0
H2S(ppb)	506	100	-	-	10.8	1	1.4	0
H2S(ppb)	508	100	-	-	1.8	0	0.3	0
H2S(ppb)	513	97	-	-	1.0	0	0.3	0
TRS(ppb)	1	95	2.8	0	2.7	-	0.8	-
TRS(ppb)	6	100	1.5	0	1.3	-	0.4	-
TRS(ppb)	7	100	2.8	0	2.2	-	0.7	-
TRS(ppb)	8	88	0.9	0	0.9	-	0.4	-
TRS(ppb)	9	100	4.1	0	3.8	-	1.2	-
TRS(ppb)	13	100	7.2	1	4.5	-	1.4	-
TRS(ppb)	14	100	2.6	0	2.2	-	0.6	-
TRS(ppb)	18	100	0.4	0	0.4	-	0.3	-
TRS(ppb)	21	100	0.5	0	0.5	-	0.2	-
TRS(ppb)	22	99	0.4	0	0.3	-	0.2	-
TRS(ppb)	23	100	6.6	1	5.7	-	1.3	-
TRS(ppb)	30	100	4.3	0	3.7	-	1.1	-
THC(ppm)	1	100	-	-	3.4	-	2.4	-
THC(ppm)	4	100	-	-	3.4	-	2.3	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION
MONTHLY AIR MONITORING SUMMARY

APPROVAL NUMBERS	REPORT DATE	
	MONTH	YEAR
289664-00-00 241311-00-00 20809-02-00 149968-01-00 237382-00-00 48522-01-00	9	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	-	-	3.1	0	2.3	-
48263-01-00	THC(ppm)	6	100	-	-	2.9	0	2.3	-
224816-00-00	THC(ppm)	7	100	-	-	2.7	0	2.2	-
151469-01-00	THC(ppm)	9	100	-	-	3.2	0	2.5	-
189942-00-00	THC(ppm)	11	100	-	-	3.5	0	2.4	-
206355-00-00	THC(ppm)	13	89	-	-	3.2	0	2.4	-
46586-00-00	THC(ppm)	14	100	-	-	2.3	0	2.1	-
73203-02-00	THC(ppm)	17	100	-	-	2.9	0	2.4	-
216466-01-00	THC(ppm)	18	100	-	-	2.5	0	2.2	-
137467-01-00	THC(ppm)	19	99	-	-	2.9	0	2.4	-
236394-00-00	THC(ppm)	20	100	-	-	3.6	0	2.6	-
254465-00-00	THC(ppm)	21	99	-	-	3.7	0	2.6	-
094-03-00	THC(ppm)	22	99	-	-	2.7	0	2.2	-
80105-01-00	THC(ppm)	23	100	-	-	4.2	0	2.8	-
305529-00-00	THC(ppm)	29	100	-	-	2.6	0	2.3	-
318401-00-00	THC(ppm)	30	100	-	-	3.3	0	2.3	-
026-03-00	THC(ppm)	31	100	-	-	8.1	0	3.7	-
364232-00-00	THC(ppm)	32	94	-	-	4.8	0	2.5	-
228044-00-00	THC(ppm)	508	100	-	-	2.6	0	2.4	-
247548-00-00	O3(ppb)	1	100	-	-	42.4	0	25.6	-
231302-00-00	O3(ppb)	4	100	-	-	43.5	0	27.9	-
246984-01-00	O3(ppb)	6	100	-	-	46.7	0	31.0	-
153125-01-00	O3(ppb)	7	100	-	-	42.3	0	23.1	-
	O3(ppb)	8	100	-	-	42.6	0	32.2	-
	O3(ppb)	13	100	-	-	39.0	0	23.1	-
	O3(ppb)	14	100	-	-	48.3	0	35.5	-
	O3(ppb)	17	100	-	-	40.4	0	32.7	-
	O3(ppb)	18	100	-	-	46.9	0	35.8	-
	O3(ppb)	21	100	-	-	47.6	0	28.7	-
	O3(ppb)	22	99	-	-	48.5	0	28.9	-
	NO2(ppb)	1	100	-	-	29.5	0	15.2	-
	NO2(ppb)	4	100	-	-	23.9	0	7.9	-
	NO2(ppb)	6	100	-	-	13.7	0	4.8	-
	NO2(ppb)	7	100	-	-	21.6	0	8.0	-
	NO2(ppb)	8	100	-	-	12.6	0	3.5	-
	NO2(ppb)	9	100	-	-	30.2	0	16.4	-
	NO2(ppb)	13	100	-	-	21.8	0	10.1	-
	NO2(ppb)	14	100	-	-	9.8	0	3.1	-
	NO2(ppb)	17	100	-	-	12.8	0	4.1	-
	NO2(ppb)	18	91	-	-	3.7	0	1.3	-
	NO2(ppb)	19	100	-	-	17.0	0	5.5	-
	NO2(ppb)	20	100	-	-	24.0	0	8.0	-
	NO2(ppb)	21	100	-	-	15.3	0	3.5	-
	NO2(ppb)	22	96	-	-	3.6	0	1.5	-
	NO2(ppb)	23	100	-	-	39.2	0	14.6	-
	NO2(ppb)	27	100	-	-	10.5	0	2.8	-
	NO2(ppb)	29	100	-	-	6.0	0	2.0	-
	NO2(ppb)	30	100	-	-	35.5	0	9.4	-
	NO2(ppb)	31	100	-	-	15.5	0	3.6	-
	NO2(ppb)	33	94	-	-	13.9	0	4.7	-
	NO2(ppb)	34	100	-	-	18.3	0	4.2	-
	NO2(ppb)	505	100	-	-	20.2	0	8.6	-
	NO2(ppb)	506	100	-	-	12.4	0	4.3	-
	NO2(ppb)	508	100	-	-	5.9	0	2.7	-
	NO2(ppb)	513	98	-	-	18.4	0	4.9	-
	CO(ppm)	7	100	-	-	0.3	0	0.2	-
	NH3(ppb)	1	93	-	-	0.0	0	0.0	-
	NH3(ppb)	6	91	-	-	0.0	0	0.0	-
	PM2.5(ug/m3)	1	100	-	-	25.4	0	13.8	0
	PM2.5(ug/m3)	4	100	-	-	24.8	0	9.3	0
	PM2.5(ug/m3)	6	100	-	-	31.2	0	7.5	0
	PM2.5(ug/m3)	7	100	-	-	17.1	0	7.9	0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION
MONTHLY AIR MONITORING SUMMARY

Created: Oct 28 2026 11:02:48

APPROVAL NUMBERS	REPORT DATE MONTH	REPORT DATE YEAR
289664-00-00 241311-00-00 20809-02-00 149968-01-00 237382-00-00 48522-01-00	9	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	PM2.5(ug/m3)	8	98	-	-	11.7	0	7.7	0
48263-01-00	PM2.5(ug/m3)	9	100	-	-	36.3	0	18	0
224816-00-00	PM2.5(ug/m3)	13	100	-	-	27.6	0	11.9	0
151469-01-00	PM2.5(ug/m3)	14	100	-	-	15.3	0	7.1	0
189942-00-00	PM2.5(ug/m3)	17	100	-	-	27.6	0	7.2	0
206355-00-00	PM2.5(ug/m3)	18	96	-	-	12.9	0	4.8	0
46586-00-00	PM2.5(ug/m3)	21	100	-	-	26.4	0	7.7	0
73203-02-00	PM2.5(ug/m3)	22	0	-	-	--	0	--	0
216466-01-00	PM2.5(ug/m3)	23	96	-	-	102.9	1	23.8	0
137467-01-00	PM2.5(ug/m3)	29	100	-	-	35.6	0	8.9	0
236394-00-00	PM2.5(ug/m3)	30	79	-	-	30.3	0	10.7	0
254465-00-00	WS(km/h)	1	100	-	-	-	-	-	-
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	100	-	-	-	-	-	-
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	98	-	-	-	-	-	-
	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	94	-	-	-	-	-	-
	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	97	-	-	-	-	-	-
	WS(km/h)	508	100	-	-	-	-	-	-
	WS(km/h)	513	99	-	-	-	-	-	-

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
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT McKAY - BERTHA GANTER (AMS01)
SEPTEMBER 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	685	34	35	99.86	-	-	18.2	0	2.6	0
H2S(ppb) Average	684	35	36	99.86	-	-	3.5	0	1.1	0
TRS(ppb) Average	652	33	68	95.14	2.8	0	2.7	-	0.8	-
THC(ppm) Average	685	34	35	99.86	-	-	3.4	-	2.4	-
NMHC(ppm) Average	685	34	35	99.86	-	-	0.501	-	0.09	-
CH4(ppm) Average	685	34	35	99.86	-	-	3.4	-	2.4	-
O3 (ppb) Average	686	33	34	99.86	-	-	42.4	0	25.6	-
NO2 (ppb) Average	684	35	36	99.86	-	-	29.5	0	15.2	-
NO (ppb) Average	684	35	36	99.86	-	-	68.5	-	9.3	-
NOX (ppb) Average	684	35	36	99.86	-	-	77.7	-	18.7	-
NH3 (ppb) Average	627	44	93	93.19	-	-	0	0	0	-
PM2.5 (ug/m3) Average	718	2	2	100	-	-	25.4	0	13.8	0
Temperature 2 m (C) Average	720	0	0	100	-	-	27.9	-	20.1	-
Temperature 10 m (C) Average	720	0	0	100	-	-	27.5	-	20.7	-
Relative Humidity (%) Average	720	0	0	100	-	-	100	-	88.5	-
Wind Speed 10 m (km/h) Average	718	0	2	99.72	-	-	27	-	18	-
Wind Direction 10 m (deg) Average	718	0	2	99.72	-	-	-	-	-	-
Precipitation (mm) Total	720	0	0	100	-	-	5.5	-	13	-
Leaf Wetness (% of range) Average	720	0	0	100	-	-	70.8	-	22.1	-
Global Solar Radiation (W/m2) Average	720	0	0	100	-	-	672.4	-	213.2	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BERTHA GANTER FORT McKAY (AMS01)
SEPTEMBER 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	685	0.46	1.5	-	0	0	0	0.1	0.2	0.5	18.2
H2S (ppb) Average	684	0.3	0.5	-	0	0	0.1	0.1	0.3	0.7	3.5
TRS (ppb) Average	652	0.32	0.2	-	0.1	0.2	0.2	0.2	0.3	0.6	2.7
THC (ppm) Average	685	2.18	0.2	-	2	2	2.1	2.1	2.3	2.4	3.4
NMHC(ppm) Average	685	0.019	0.041	-	0	0	0	0	0	0.1	0.501
CH4(ppm) Average	685	2.16	0.2	-	2	2	2	2.1	2.2	2.4	3.4
O3 (ppb) Average	686	16.85	10.2	-	1.3	3.2	7.7	16.4	24.4	30.8	42.4
NO2 (ppb) Average	684	4.44	4.7	-	0	0.1	0.8	3.2	6.7	10.1	29.5
NO (ppb) Average	684	2.08	5.8	-	0	0	0	0.1	1.3	5.5	68.5
NOX (ppb) Average	684	6.52	8.9	-	0	0.1	0.8	3.8	8.5	14.4	77.7
NH3 (ppb) Average	627	0	0	-	0	0	0	0	0	0	0
PM2.5 (ug/m3) Average	718	5.04	4.1	-	0.1	1.1	2	4.1	6.6	10.1	25.4
Temperature 2 m (C) Average	720	11.96	5.6	-	1.4	5	7.9	11.1	15.8	19.8	27.9
Temperature 10 m (C) Average	720	12.3	5.4	-	2.3	5.7	8.3	11.6	16.1	19.5	27.5
Relative Humidity (%) Average	720	75.34	19.3	-	26.4	46.1	61.8	78.9	92.1	97.8	100
Wind Speed 10 m (km/h) Average	718	7.4	5	-	0	2	3	6	10	15	27
Wind Direction 10 m (deg) Average	718	-	-	-	-	-	-	-	-	-	-
Precipitation (mm) Total	720	-	-	33.57	-	-	-	-	-	-	-
Leaf Wetness (% of range) Average	720	11.15	15.3	-	0	0.8	1.4	2.2	17.1	37.3	70.8
Global Solar Radiation (W/m2) Average	720	126.88	180.5	-	0	0	0	13.8	206	456.4	672.4

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

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
ALL GASEOUS ANALYZERS	21 Sep 2026 11:00	21 Sep 2026 11:00	1	Maintenance - sample manifold cleaned
TRS	03 Sep 2026 02:00	04 Sep 2026 10:00	33	Unstable Operation - AMD non-compliance
TRS	10 Sep 2026 09:00	10 Sep 2026 09:00	1	Maintenance - verify daily QA response
NH3	01 Sep 2026 02:00	31 Aug 2026 08:00	48	Stabilization after daily QA check
Wind Speed, Wind Direction	08 Sep 2026 20:00	08 Sep 2026 21:00	2	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Fort McKay - Bertha Ganter - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 18.2 ppb on Sep 1 12:00 Maximum Daily Average: 2.6 ppb on Sep 1

Minimum Value: 0.0 ppb on Sep 3 20:00 Minimum Daily Average: 0.0 ppb on Sep 10
Maximum Diurnal Average: 1.3 ppb at hour 12 Minimum Diurnal Average: 0.1 ppb at hour 4
Monthly Average: 0.46 ppb 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} = 7.3

Hours in Service:	720
Hours of Data:	685
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-Sep	0.1	0.1	0.1	Z	0.1	0.1	0.2	1.2	6.2	7.5	7.7	18.2	8.2	0.9	1.2	1.2	3.3	1.3	0.5	0.5	0.4	0.4	0.3	0.2	2.6	18.2
2-Sep	0.3	0.3	0.2	0.2	Z	0.2	0.2	0.3	0.2	0.4	0.3	0.4	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.5
3-Sep	0.2	0.2	0.2	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
4-Sep	Z	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	0.0	0.0	0.1
5-Sep	0.0	Z	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	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
6-Sep	0.1	0.1	Z	0.2	0.1	0.0	0.0	0.0	0.0	0.2	0.3	0.7	0.8	1.0	1.6	1.6	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.3	0.3	1.6
7-Sep	0.5	0.3	0.1	Z	0.0	0.1	0.1	0.0	0.2	0.3	0.3	0.3	1.2	13.6	10.9	3.7	2.1	5.1	5.6	2.3	0.9	0.4	0.2	0.1	2.1	13.6
8-Sep	0.1	0.1	0.0	0.0	Z	0.1	0.0	0.1	0.1	0.0	0.1	0.2	4.8	4.6	1.0	0.4	0.2	0.2	0.4	0.2	0.0	0.0	0.0	0.0	0.6	4.8
9-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	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	0.0	0.0	0.1	0.0	0.3
10-Sep	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
11-Sep	0.0	Z	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2
12-Sep	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.2
13-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	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
14-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
15-Sep	0.0	0.1	0.1	0.1	0.0	Z	0.1	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	0.0	0.0	0.0	0.0	0.0	0.1
16-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.9	3.0	1.7	0.5	0.3	0.1	0.2	3.4	1.9	0.5	0.2	0.1	0.1	0.0	0.6	3.4
17-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.8	C	C	C	C	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.8
18-Sep	0.2	0.2	Z	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.3
19-Sep	0.0	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.3	0.7	2.7	4.6	5.4	1.2	5.4	5.8	4.3	0.5	0.3	0.3	0.6	1.4	0.5	0.5	1.5	5.8
20-Sep	0.5	0.3	0.2	0.1	Z	0.1	0.1	0.1	0.3	0.2	0.2	0.2	0.1	0.0	0.1	0.1	0.1	0.3	0.1	0.1	0.3	0.3	0.2	0.2	0.2	0.5
21-Sep	0.1	0.1	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.3	M	5.9	7.2	5.9	4.7	4.6	4.9	4.1	2.3	1.7	1.8	1.3	0.6	0.3	2.1	7.2
22-Sep	Z	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
23-Sep	0.0	Z	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.2	0.4	3.0	5.0	4.5	12.4	6.7	1.5	0.7	0.4	0.4	0.4	6.0	3.9	1.4	2.0	12.4
24-Sep	0.4	0.1	Z	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	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.4
25-Sep	0.0	0.0	0.0	Z	0.3	0.3	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3
26-Sep	0.1	0.1	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1
27-Sep	0.1	0.1	0.1	0.0	0.1	Z	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	0.0	0.1	0.1
28-Sep	Z	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.5	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.5	0.1	0.5
29-Sep	0.5	Z	0.1	0.1	0.1	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.0	0.1	0.5
30-Sep	0.2	0.1	Z	0.2	0.2	0.2	0.1	0.2	0.2	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	0.1	0.2	0.2
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.5	1.3	1.3	1.2	1.3	0.9	0.6	0.6	0.4	0.2	0.2	0.4	0.2	0.2	Diurnal Average	
	0.5	0.3	0.2	0.2	0.3	0.3	0.3	1.2	6.2	7.5	7.7	18.2	8.2	13.6	12.4	6.7	4.9	5.1	5.6	2.3	1.8	6.0	3.9	1.4	Diurnal Maximum	

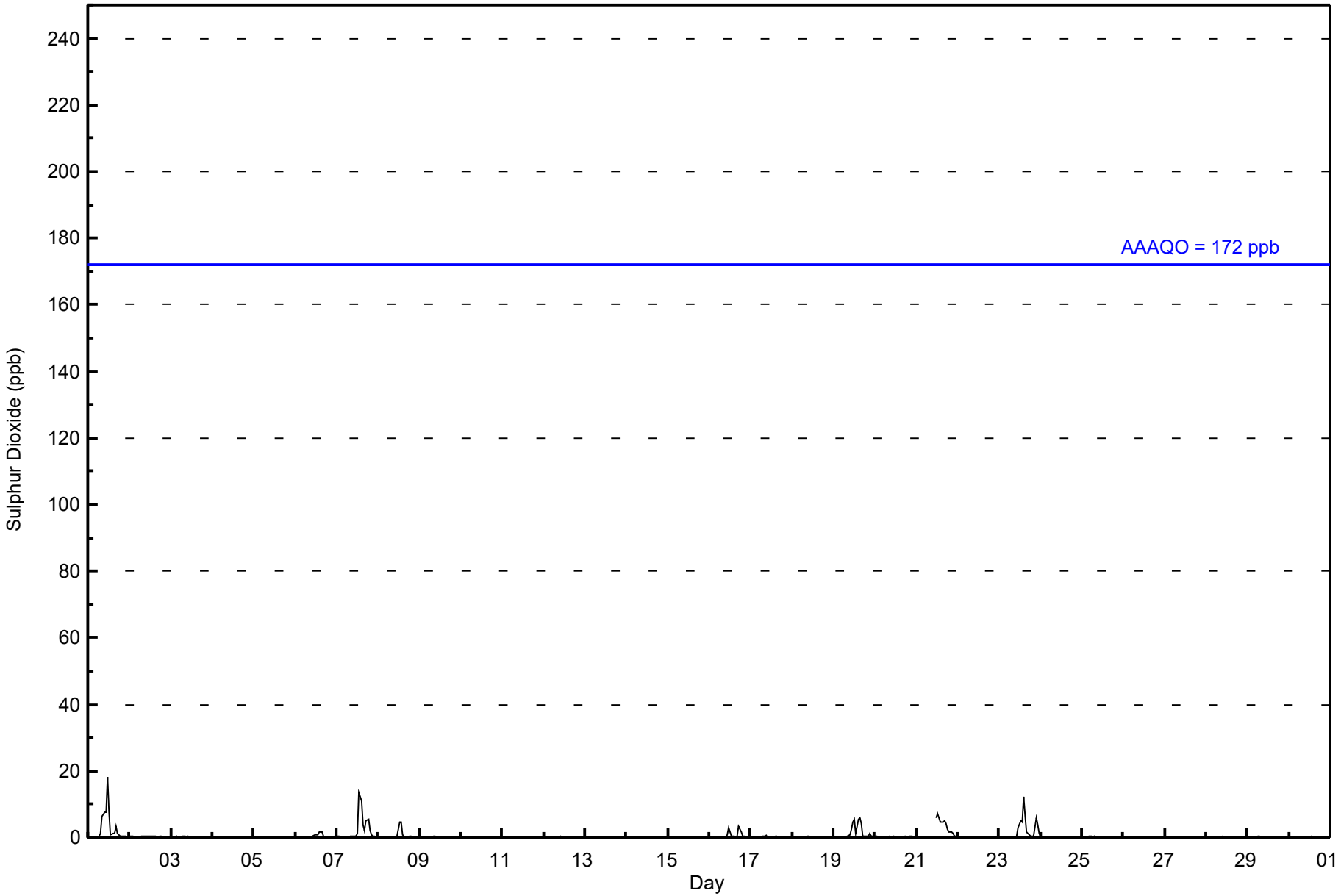
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Fort McKay - Bertha Ganter - September 2026



Sulphur Dioxide (SO_2) - ppb

Fort McKay - Bertha Ganter - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	681	99.42	99.42
11 - 20	4	0.58	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Fort McKay - Bertha Ganter - September 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	74	21	5	3	3	6	31	77	82	67	59	34	46	76	50	45	679
11 - 20	0	0	0	0	0	0	1	3	0	0	0	0	0	0	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	74	21	5	3	3	6	32	80	82	67	59	34	46	76	50	45	683

Total Number of Valid Hours: 683

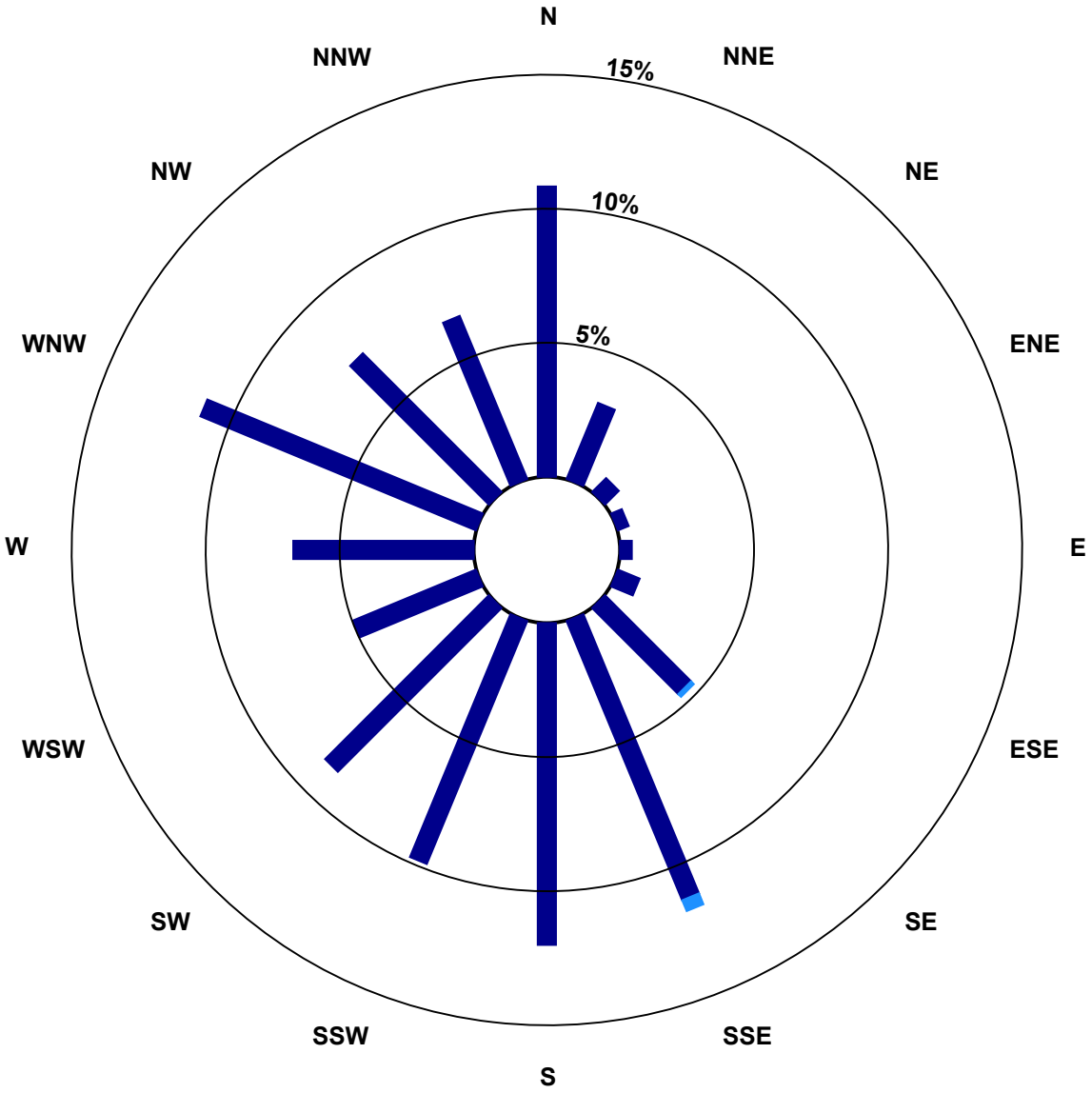
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

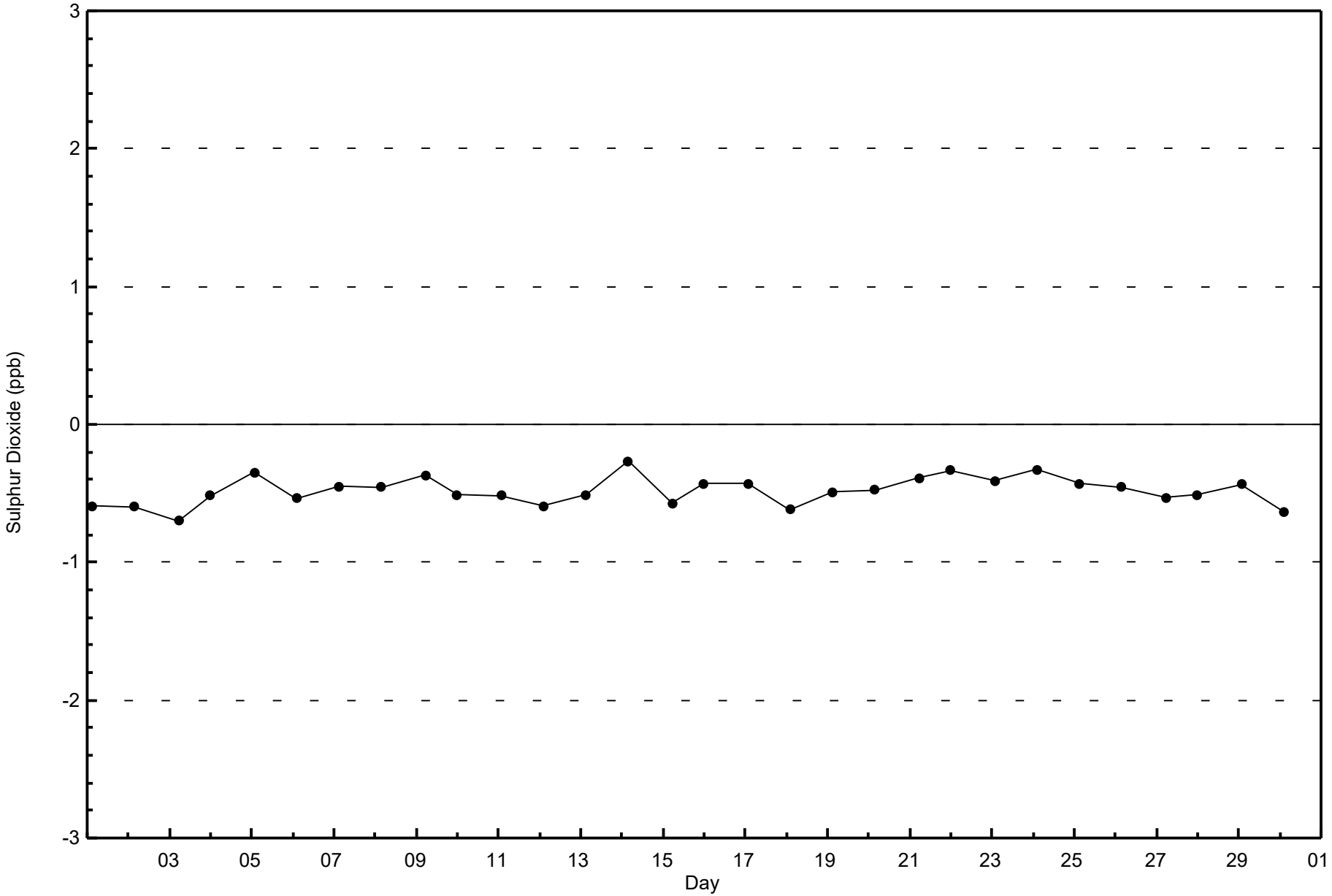
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Fort McKay - Bertha Ganter - September 2026

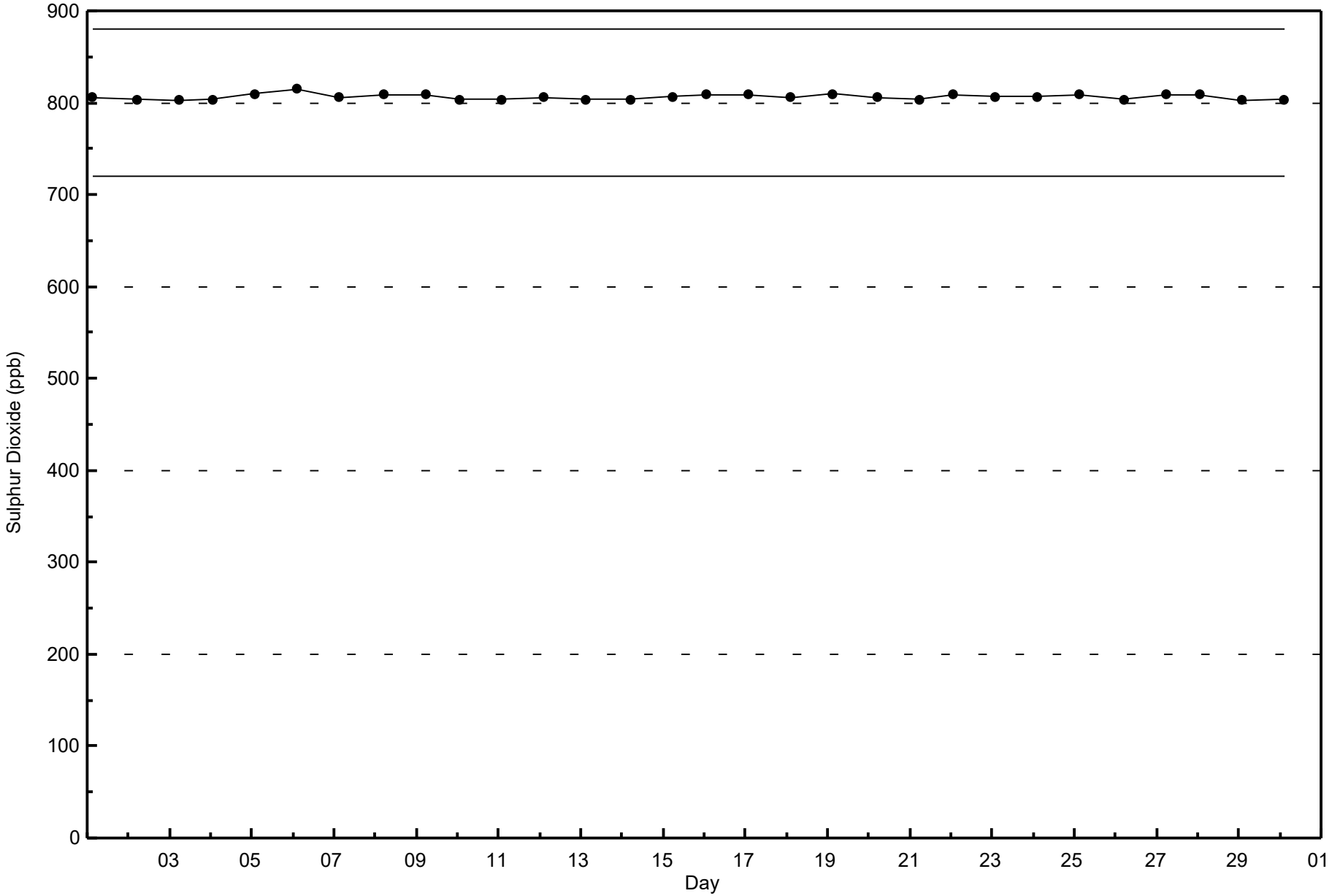


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Fort McKay - Bertha Ganter - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Fort McKay - Bertha Ganter - September 2026

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

Maximum Value: 3.5 ppb on Sep 7 00:00

Maximum Daily Average: 1.1 ppb on Sep 7

Minimum Value: 0.0 ppb on Sep 3 12:00

Minimum Daily Average: 0.1 ppb on Sep 12

Maximum Diurnal Average: 0.5 ppb at hour 9

Minimum Diurnal Average: 0.1 ppb at hour 17

Monthly Average: 0.30 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.3 P_{90} = 0.7 P_{99} = 2.4

Hours in Service:	720
Hours of Data:	684
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-Sep	0.3	0.2	0.3	0.2	Z	1.0	0.8	1.6	2.7	1.2	0.6	0.4	0.2	0.1	0.2	0.2	0.5	1.2	1.7	1.5	0.5	0.3	0.2	0.1	0.7	2.7
2-Sep	0.3	0.2	0.2	0.2	0.3	Z	0.4	0.3	0.2	0.6	0.6	0.5	0.5	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.2	0.6
3-Sep	Z	0.2	0.0	0.1	0.2	0.2	0.3	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.3
4-Sep	0.3	Z	0.2	0.2	0.3	0.6	0.7	0.7	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.7
5-Sep	0.1	0.2	Z	0.3	0.3	0.3	0.3	0.4	0.7	0.6	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	0.2	0.2	0.7
6-Sep	0.2	0.2	0.1	Z	0.1	0.1	0.2	0.2	0.6	1.0	1.1	1.8	1.8	1.3	0.6	0.2	0.1	0.1	0.2	0.2	0.7	0.5	1.1	3.5	0.7	3.5
7-Sep	3.1	2.2	1.0	1.6	Z	0.6	0.6	0.5	1.3	2.4	0.2	0.1	0.1	0.5	0.4	0.2	0.1	0.3	0.9	2.3	2.6	2.1	1.7	1.1	1.1	3.1
8-Sep	0.5	0.3	0.2	0.1	0.1	Z	0.2	0.2	0.2	0.3	0.3	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.8	0.3	0.2	0.8
9-Sep	Z	0.2	0.2	0.9	1.4	1.3	0.9	1.0	2.0	1.0	0.2	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	0.4	2.0
10-Sep	0.1	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
11-Sep	0.1	0.1	Z	0.1	0.1	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.3
12-Sep	0.0	0.1	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	0.1	0.1	0.1	0.1	0.2	0.1	0.2
13-Sep	0.1	0.1	0.2	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	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2
14-Sep	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	0.1	0.1	0.1
15-Sep	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
16-Sep	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.5	0.3	0.1	0.1	0.1	0.0	0.2	0.5
17-Sep	0.0	0.1	Z	0.1	0.1	0.2	0.4	0.7	0.8	0.4	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.8
18-Sep	0.2	0.2	0.1	Z	0.1	0.1	0.2	0.3	0.2	0.4	0.4	C	C	C	C	C	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.4
19-Sep	0.3	0.2	0.2	0.2	Z	0.8	2.7	2.5	2.5	2.0	0.5	0.4	0.3	0.2	0.3	0.4	0.3	0.1	0.1	0.9	2.4	0.6	0.2	0.3	0.8	2.7
20-Sep	0.5	0.4	0.3	0.3	1.0	Z	0.6	0.5	0.6	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	1.6	0.8	0.6	0.5	0.4	1.6
21-Sep	Z	0.1	0.2	0.2	0.2	0.1	0.1	0.4	0.7	1.4	M	0.9	1.1	1.2	1.0	0.9	0.9	0.7	0.6	0.6	0.7	0.7	0.6	0.4	0.6	1.4
22-Sep	0.2	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
23-Sep	0.1	0.1	Z	0.1	0.2	0.3	0.5	0.4	0.5	1.1	1.0	1.4	0.6	0.6	1.0	1.3	0.8	0.8	1.8	2.4	2.0	2.4	1.9	1.0	1.0	2.4
24-Sep	0.3	0.2	0.1	Z	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.3
25-Sep	0.2	0.1	0.1	0.2	Z	0.6	0.6	0.7	0.5	0.4	0.4	0.3	0.2	0.1	0.1	0.2	0.1	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.3	0.7
26-Sep	0.1	0.1	0.1	0.1	0.1	Z	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	0.2
27-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
28-Sep	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	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
29-Sep	0.2	0.2	Z	0.2	0.3	0.4	0.7	0.6	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.7
30-Sep	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	0.1
	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.5	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.4	0.4	0.3	0.3	0.3	Diurnal Average	
	3.1	2.2	1.0	1.6	1.4	1.3	2.7	2.5	2.7	2.4	1.1	1.8	1.8	1.3	1.0	1.3	0.9	1.2	1.8	2.4	2.6	2.4	1.9	3.5	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

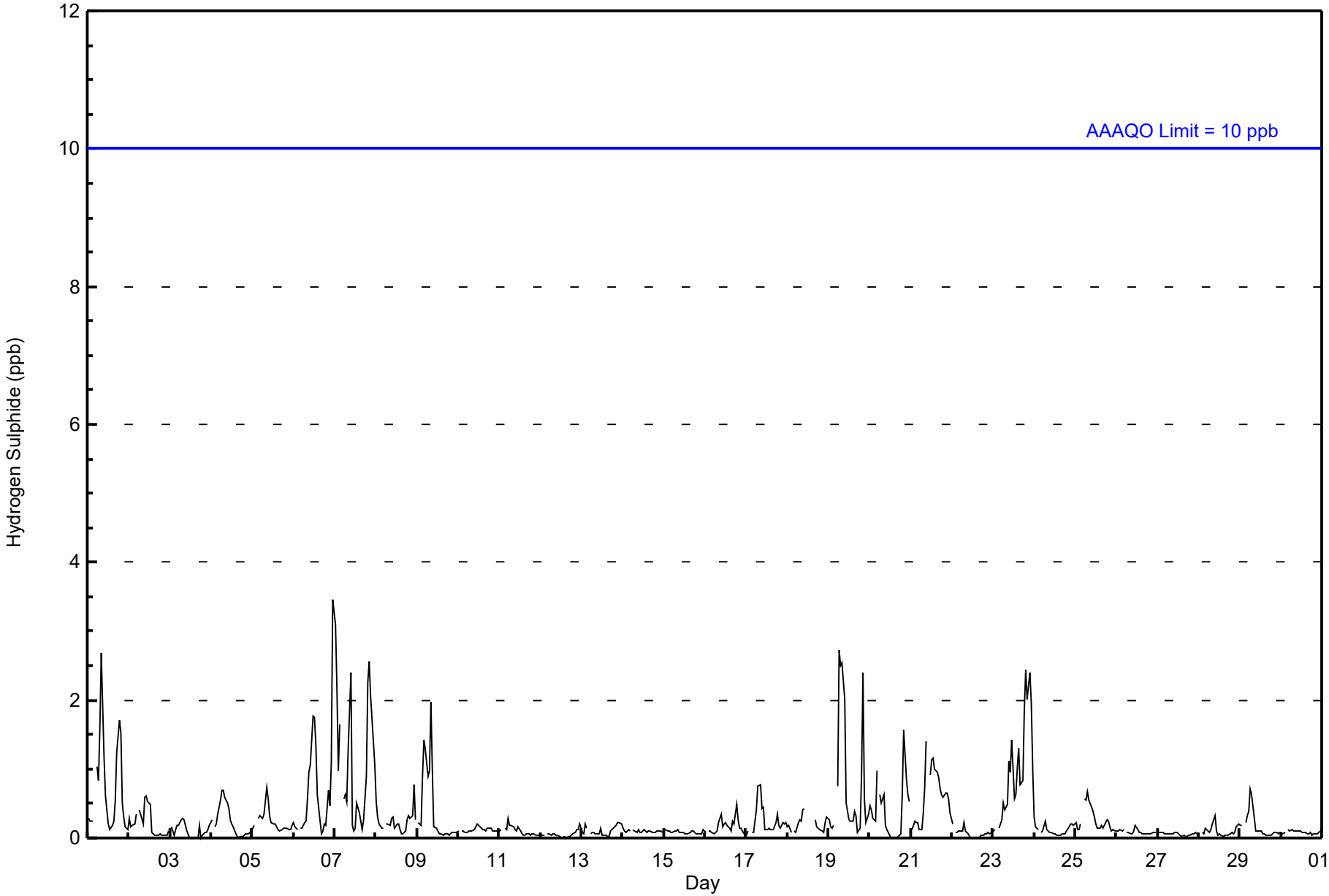
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Fort McKay - Bertha Ganter - September 2026



Hydrogen Sulphide (H_2S) - ppb

Fort McKay - Bertha Ganter - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	678	99.12	99.12
3 - 4	6	0.88	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Fort McKay - Bertha Ganter - September 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	20	5	3	3	5	28	77	82	66	59	35	46	73	52	45	676
3 - 4	0	0	0	0	0	0	0	4	0	2	0	0	0	0	0	0	6
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	77	20	5	3	3	5	28	81	82	68	59	35	46	73	52	45	682

Total Number of Valid Hours: 682

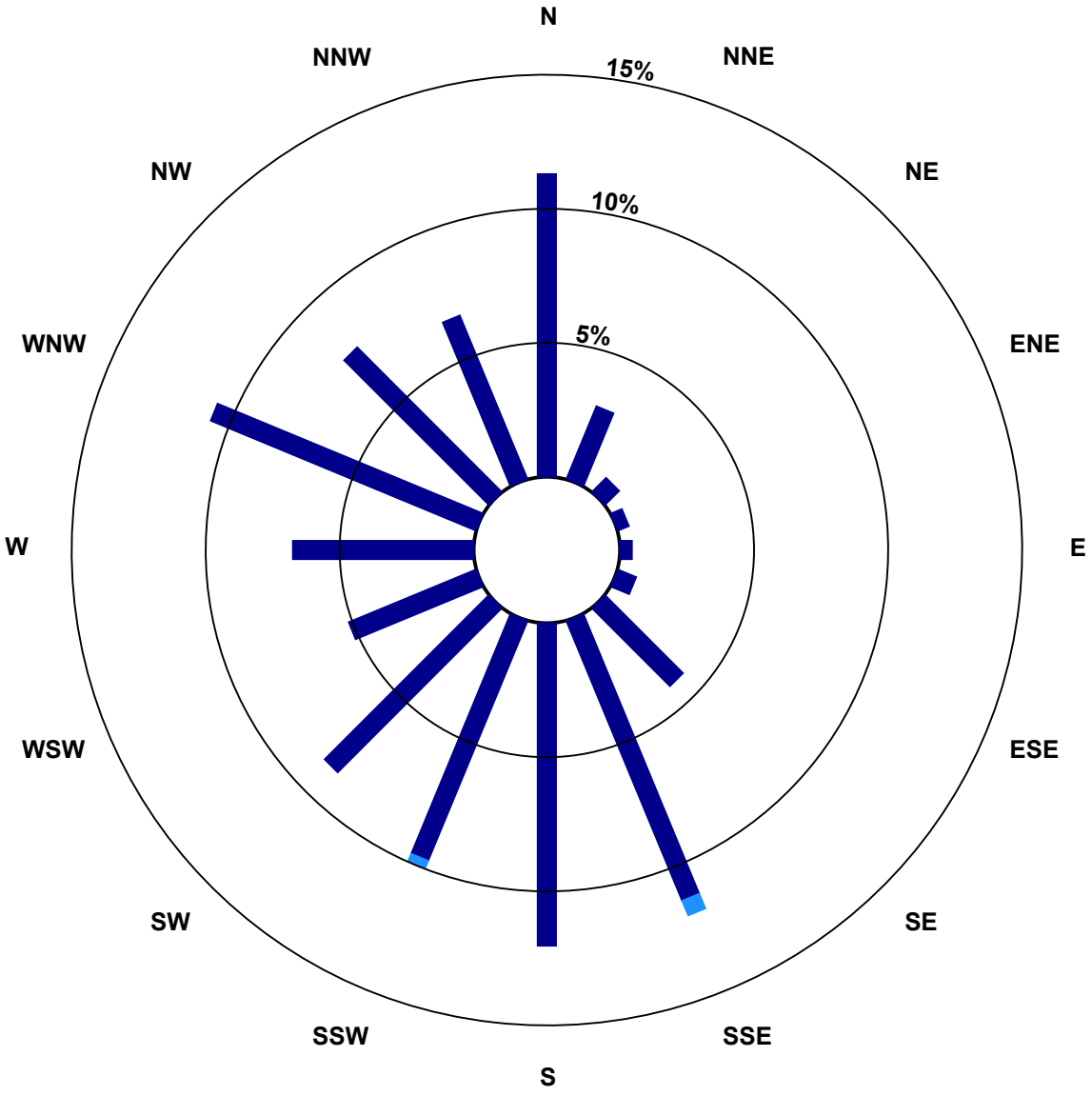
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

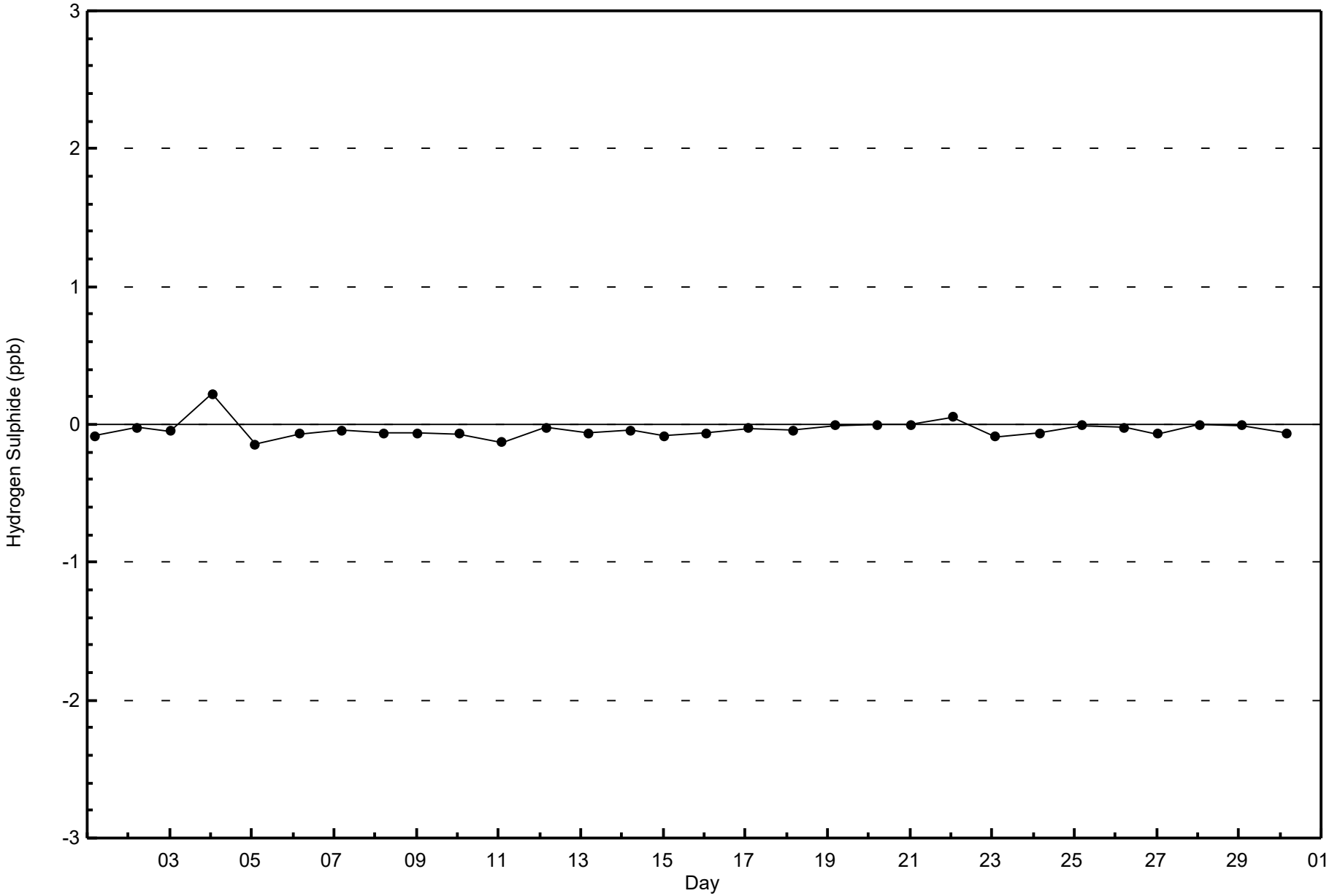
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Fort McKay - Bertha Ganter - September 2026

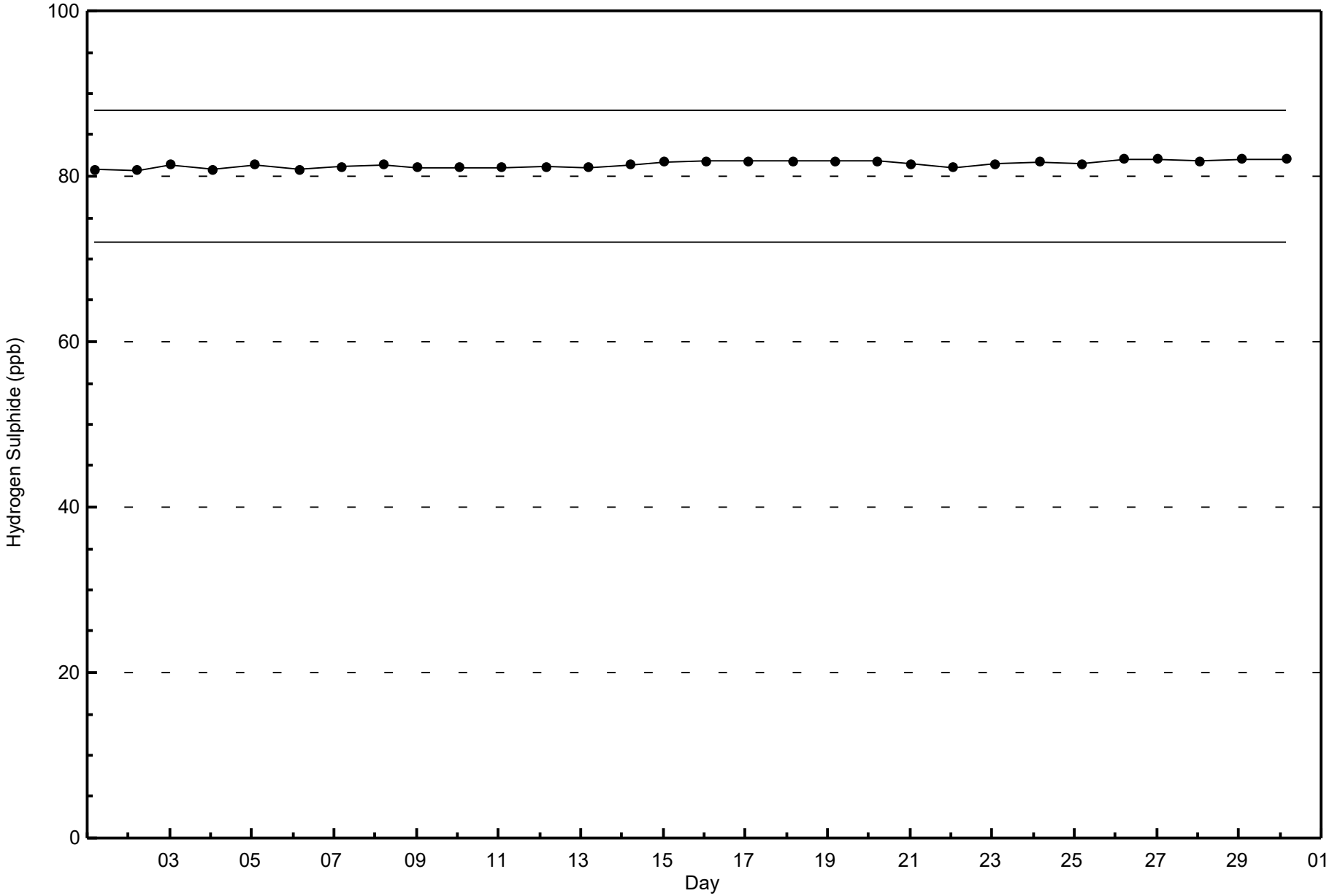


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Fort McKay - Bertha Ganter - September 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Fort McKay - Bertha Ganter - September 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 2.8 ppb on Sep 19 07:00 Maximum Daily Average: 0.8 ppb on Sep 23

Minimum Value: 0.1 ppb on Sep 20 15:30 Minimum Daily Average: 0.2 ppb on Sep 27

Maximum Diurnal Average: 0.4 ppb at hour 10 Minimum Diurnal Average: 0.3 ppb at hour 16

Monthly Average: 0.32 ppb Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.2 Median = 0.2 Q_3 = 0.3 P_{90} = 0.6 P_{99} = 1.2

Periods in Service:	1440
Periods of Valid Data:	1303
Periods of Invalid Data:	137
Periods of Calibration:	66
Percent Operational Time:	95.1

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-Sep	0.2	0.2	0.2	0.2	Z	1.1	0.6	1.0	1.3	0.9	0.6	0.4	0.3	0.3	0.3	0.3	0.4	0.9	1.1	1.0	0.5	0.3	0.2	0.2	0.5	1.3
	0.2	0.2	0.2	0.2	SP	1.2	0.7	0.9	0.9	0.8	0.5	0.4	0.3	0.2	0.3	0.2	0.6	0.8	1.0	0.8	0.2	0.2	0.2	0.2		
2-Sep	0.3	0.2	0.2	0.2	0.3	Z	0.5	0.2	0.2	0.2	0.3	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.5
	0.2	0.2	0.2	0.2	0.3	SP	0.5	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2		
3-Sep	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		
4-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	C	C	C	C	0.6	0.4	0.5	0.5	0.8	0.8	0.7	0.3	0.3	0.3	--	0.9
	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	C	C	C	C	0.4	0.4	0.5	0.7	0.9	0.8	0.5	0.3	0.3	0.5		
5-Sep	0.7	0.3	Z	0.4	0.6	0.2	0.2	0.2	0.6	0.8	0.6	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.8
	0.4	0.3	SP	0.6	0.4	0.2	0.2	0.3	0.8	0.7	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3		
6-Sep	0.3	0.3	0.2	Z	0.2	0.2	0.2	0.2	0.3	0.5	0.6	0.7	0.8	0.7	0.4	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.8
	0.3	0.3	0.2	SP	0.2	0.2	0.1	0.2	0.4	0.5	0.6	0.7	0.8	0.6	0.3	0.2	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.6		
7-Sep	0.6	0.8	0.6	0.7	Z	0.6	0.4	0.3	0.6	1.2	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.6	0.7	0.7	0.7	0.6	0.5	1.2
	0.8	0.7	0.5	0.7	SP	0.5	0.4	0.5	0.9	0.9	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.7	0.8	0.7	0.6	0.6		
8-Sep	0.5	0.4	0.3	0.2	0.2	Z	0.2	0.1	0.2	0.6	0.8	0.5	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.3	0.5	0.3	0.3	0.8
	0.5	0.4	0.3	0.2	0.2	SP	0.2	0.2	0.4	0.7	0.7	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.5	0.3		
9-Sep	Z	0.4	0.5	0.6	0.8	0.9	0.8	0.7	0.8	0.6	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.4	0.9
	SP	0.5	0.6	0.8	0.8	0.8	0.7	0.8	0.8	0.5	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2		
10-Sep	0.2	Z	0.3	0.1	0.2	0.2	0.2	0.2	M	0.5	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	0.5
	0.2	SP	0.2	0.1	0.2	0.2	0.2	0.2	M	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		
11-Sep	0.2	0.2	Z	0.3	0.2	0.2	0.3	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	0.3
	0.2	0.2	SP	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2		
12-Sep	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	0.3	0.2	0.4
	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	0.3	0.2	0.4		
13-Sep	0.2	0.2	0.3	0.3	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.2	0.4
	0.2	0.2	0.3	0.2	SP	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	0.2	0.2	0.2	0.3	0.4	0.3		
14-Sep	0.3	0.2	0.2	0.2	0.2	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	0.2	0.2	0.2	0.4
	0.3	0.2	0.2	0.3	0.2	SP	0.3	0.1	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		
15-Sep	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	0.1	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	0.2		

Wood Buffalo Environmental Association

Total Reduced Sulphur (TRS) - ppb

Summary of 30-Minute Averages

Fort McKay - Bertha Ganter - September 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-Sep	0.2	Z	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.3	0.2	0.3	0.4	0.5	0.4	0.3	0.3	0.2	0.2	0.3	0.6
	0.2	SP	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.2	0.4	0.3	0.6	0.3	0.3	0.3	0.2	0.2		
17-Sep	0.2	0.2	Z	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.5	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	0.6
	0.2	0.3	SP	0.2	0.2	0.3	0.4	0.5	0.6	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3		
18-Sep	0.3	0.3	0.2	Z	0.3	0.2	0.3	0.4	0.5	0.5	0.6	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.3	0.6
	0.3	0.2	0.2	SP	0.2	0.2	0.4	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	0.3	0.2	0.3	0.4		
19-Sep	0.4	0.3	0.3	0.3	Z	0.5	2.5	1.8	1.0	1.1	0.6	0.3	0.3	0.3	0.4	0.4	0.3	0.2	0.2	0.2	0.7	0.3	0.2	0.2	0.6	2.8
	0.4	0.3	0.3	0.3	SP	1.4	2.8	1.1	1.2	1.0	0.4	0.4	0.2	0.4	0.3	0.5	0.4	0.2	0.2	0.5	0.4	0.3	0.2	0.2		
20-Sep	0.3	0.3	0.2	0.2	0.3	Z	1.0	0.5	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	1.2	0.6	0.5	0.4	0.3	1.2
	0.3	0.2	0.2	0.2	0.4	SP	0.9	0.5	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.8	0.9	0.6	0.5	0.4		
21-Sep	Z	0.4	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.5	M	0.4	0.4	0.5	0.5	0.5	0.4	0.6	0.7	0.7	0.8	0.8	0.8	0.6	0.5	0.9
	SP	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.4	0.5	M	0.4	0.5	0.4	0.5	0.4	0.6	0.6	0.6	0.7	0.9	0.8	0.7	0.6		
22-Sep	0.4	Z	0.3	0.2	0.2	0.3	0.3	0.4	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.1	DF	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4
	0.3	SP	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
23-Sep	0.2	0.2	Z	0.3	0.3	0.3	0.4	0.5	0.3	1.0	0.8	1.2	0.7	0.7	0.9	1.2	0.9	0.7	1.3	1.9	1.7	1.3	1.1	0.8	0.8	1.9
	0.2	0.3	SP	0.3	0.3	0.4	0.7	0.3	0.6	0.8	0.9	1.2	0.6	0.7	1.1	1.2	0.6	0.9	1.7	1.7	1.3	1.2	1.2	0.5		
24-Sep	0.4	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	0.3	0.3	0.4	0.4	0.3	0.2	0.4
	0.3	0.2	0.2	SP	0.2	0.2	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	0.3	0.4	0.3	0.3	0.3		
25-Sep	0.3	0.3	0.3	0.4	Z	0.5	0.6	0.7	0.6	0.6	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.7
	0.5	0.3	0.3	0.4	SP	0.5	0.6	0.7	0.6	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.2		
26-Sep	0.3	0.3	0.2	0.2	0.2	Z	0.3	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
	0.2	0.2	0.2	0.2	0.2	SP	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		
27-Sep	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	0.2		
28-Sep	0.2	Z	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.5	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	0.4	0.2	0.5
	0.2	SP	0.2	0.2	0.2	0.2	0.2	0.2	0.4	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		
29-Sep	0.3	0.3	Z	0.3	0.5	0.4	0.7	0.7	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	0.8
	0.3	0.3	SP	0.4	0.4	0.6	0.8	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	0.2	0.2		
30-Sep	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		
	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	Diurnal Average	
	0.8	0.8	0.6	0.8	0.8	1.4	2.8	1.8	1.3	1.2	0.9	1.2	0.8	0.7	1.1	1.2	0.9	0.9	1.7	1.9	1.7	1.3	1.2	0.8	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance DF - DAS Failure 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 McKay - Bertha Ganter - September 2026

Maximum Value: 2.7 ppb on Sep 19 07:00

Maximum Daily Average: 0.8 ppb on Sep 23

Minimum Value: 0.1 ppb on Sep 20 15:00

Minimum Daily Average: 0.2 ppb on Sep 27

Maximum Diurnal Average: 0.4 ppb at hour 10

Minimum Diurnal Average: 0.3 ppb at hour 16

Monthly Average: 0.32 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.2 Median = 0.2 Q_3 = 0.3 P_{90} = 0.6 P_{99} = 1.2

Hours in Service:	720
Hours of Data:	652
Hours of Missing Data:	68
Hours of Calibration:	33
Percent Operational Time:	95.1

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-Sep	0.2	0.2	0.2	0.2	Z	1.2	0.7	1.0	1.1	0.8	0.5	0.4	0.3	0.2	0.3	0.3	0.5	0.9	1.0	0.9	0.3	0.2	0.2	0.2	0.5	1.2
2-Sep	0.3	0.2	0.2	0.2	0.3	Z	0.5	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.5
3-Sep	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
4-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	C	C	C	C	0.5	0.4	0.5	0.6	0.9	0.8	0.6	0.3	0.3	0.4	--	0.9
5-Sep	0.5	0.3	Z	0.5	0.5	0.2	0.2	0.2	0.7	0.8	0.5	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	0.8
6-Sep	0.3	0.3	0.2	Z	0.2	0.2	0.2	0.2	0.3	0.5	0.6	0.7	0.8	0.6	0.4	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.5	0.3	0.8
7-Sep	0.7	0.8	0.5	0.7	Z	0.6	0.4	0.4	0.8	1.1	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.6	0.7	0.7	0.7	0.6	0.5	1.1
8-Sep	0.5	0.4	0.3	0.2	0.2	Z	0.2	0.2	0.3	0.7	0.7	0.4	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.5	0.3	0.3	0.7
9-Sep	Z	0.5	0.5	0.7	0.8	0.9	0.8	0.7	0.8	0.6	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.4	0.9
10-Sep	0.2	Z	0.3	0.1	0.2	0.2	0.2	0.2	M	0.4	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	0.4
11-Sep	0.2	0.2	Z	0.2	0.2	0.3	0.2	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	0.3
12-Sep	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	0.3	0.2	0.3
13-Sep	0.2	0.2	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	0.3	0.3	0.4	0.3	0.2	0.4
14-Sep	0.3	0.2	0.2	0.2	0.2	Z	0.4	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	0.4
15-Sep	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	0.1	0.2	0.2	0.2
16-Sep	0.2	Z	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.4	0.3	0.6	0.4	0.3	0.3	0.2	0.2	0.3	0.6
17-Sep	0.2	0.2	Z	0.2	0.2	0.3	0.3	0.5	0.6	0.4	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.6
18-Sep	0.3	0.2	0.2	Z	0.3	0.2	0.3	0.5	0.5	0.6	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.3	0.6
19-Sep	0.4	0.3	0.3	0.3	Z	0.9	2.7	1.4	1.1	1.1	0.5	0.4	0.3	0.3	0.4	0.4	0.3	0.2	0.2	0.4	0.6	0.3	0.2	0.2	0.6	2.7
20-Sep	0.3	0.2	0.2	0.2	0.4	Z	0.9	0.5	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.5	1.0	0.6	0.5	0.4	0.3	1.0
21-Sep	Z	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.4	0.5	M	0.4	0.5	0.5	0.5	0.4	0.5	0.6	0.6	0.7	0.8	0.8	0.8	0.6	0.5	0.8
22-Sep	0.3	Z	0.2	0.2	0.2	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	0.2	0.2	0.4
23-Sep	0.2	0.3	Z	0.3	0.3	0.3	0.6	0.4	0.4	0.9	0.8	1.2	0.7	0.7	1.0	1.2	0.8	0.8	1.5	1.8	1.5	1.3	1.2	0.7	0.8	1.8
24-Sep	0.4	0.2	0.2	Z	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	0.3	0.3	0.4	0.4	0.3	0.2	0.4
25-Sep	0.4	0.3	0.3	0.4	Z	0.5	0.6	0.7	0.6	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.7
26-Sep	0.2	0.2	0.2	0.2	0.2	Z	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	0.2	0.2	0.2	0.2	0.2	0.2	0.3
27-Sep	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
28-Sep	0.2	Z	0.2	0.2	0.3	0.2	0.2	0.2	0.3	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	0.3	0.3	0.2	0.4
29-Sep	0.3	0.3	Z	0.4	0.4	0.5	0.8	0.6	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	0.8
30-Sep	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
	0.3	0.3	0.3	0.3	0.3	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	0.4	0.4	0.3	0.3	0.3	Diurnal Average	
	0.7	0.8	0.5	0.7	0.8	1.2	2.7	1.4	1.1	1.1	0.8	1.2	0.8	0.7	1.0	1.2	0.8	0.9	1.5	1.8	1.5	1.3	1.2	0.7	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

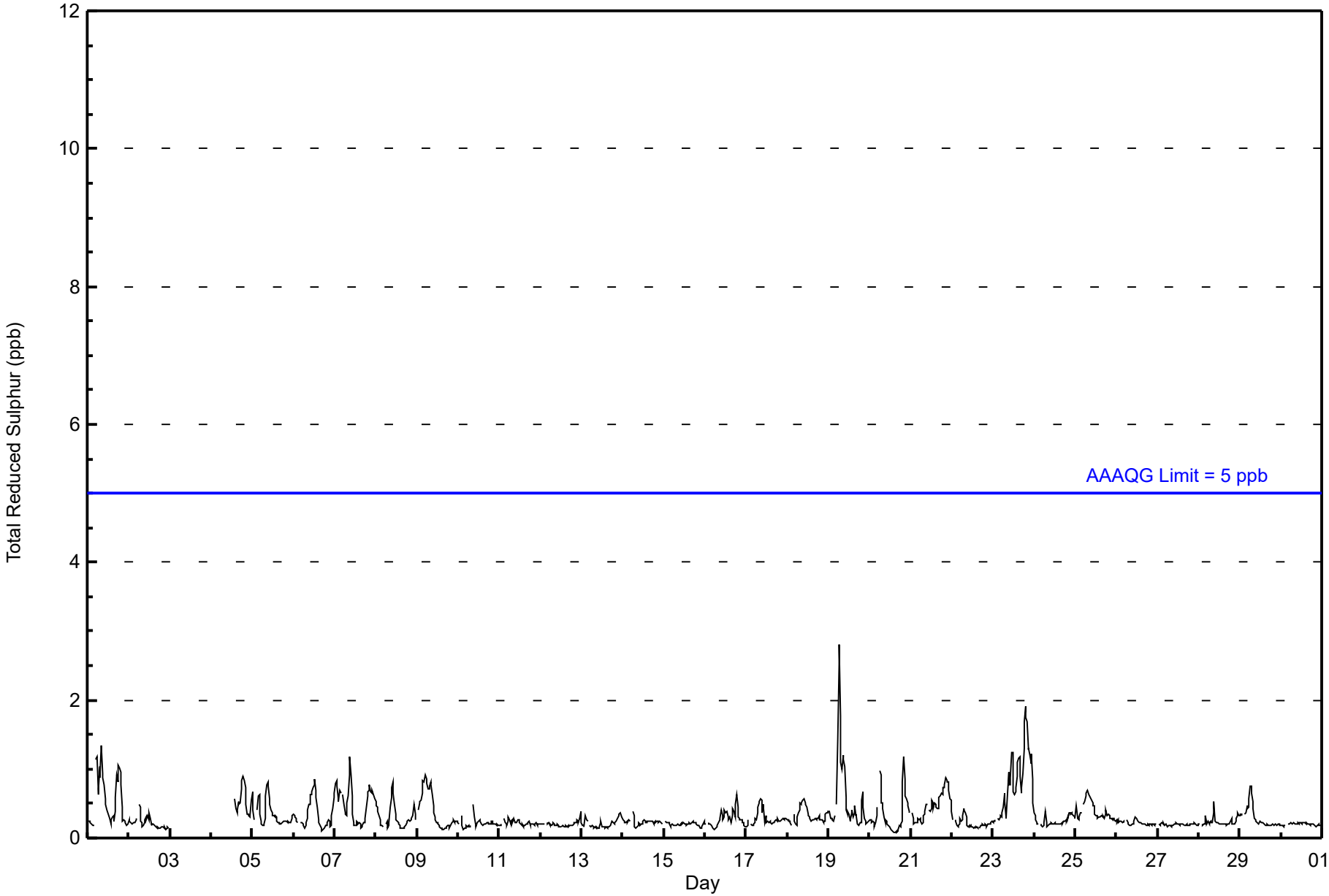
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Fort McKay - Bertha Ganter - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	651	99.85	99.85
3 - 4	1	0.15	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: 652

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Reduced Sulphur (TRS) - ppb

Fort McKay - Bertha Ganter - September 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	60	12	2	1	2	5	31	81	82	67	59	35	45	73	51	43	649
3 - 4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
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	60	12	2	1	2	5	31	81	82	68	59	35	45	73	51	43	650

Total Number of Valid Hours: 650

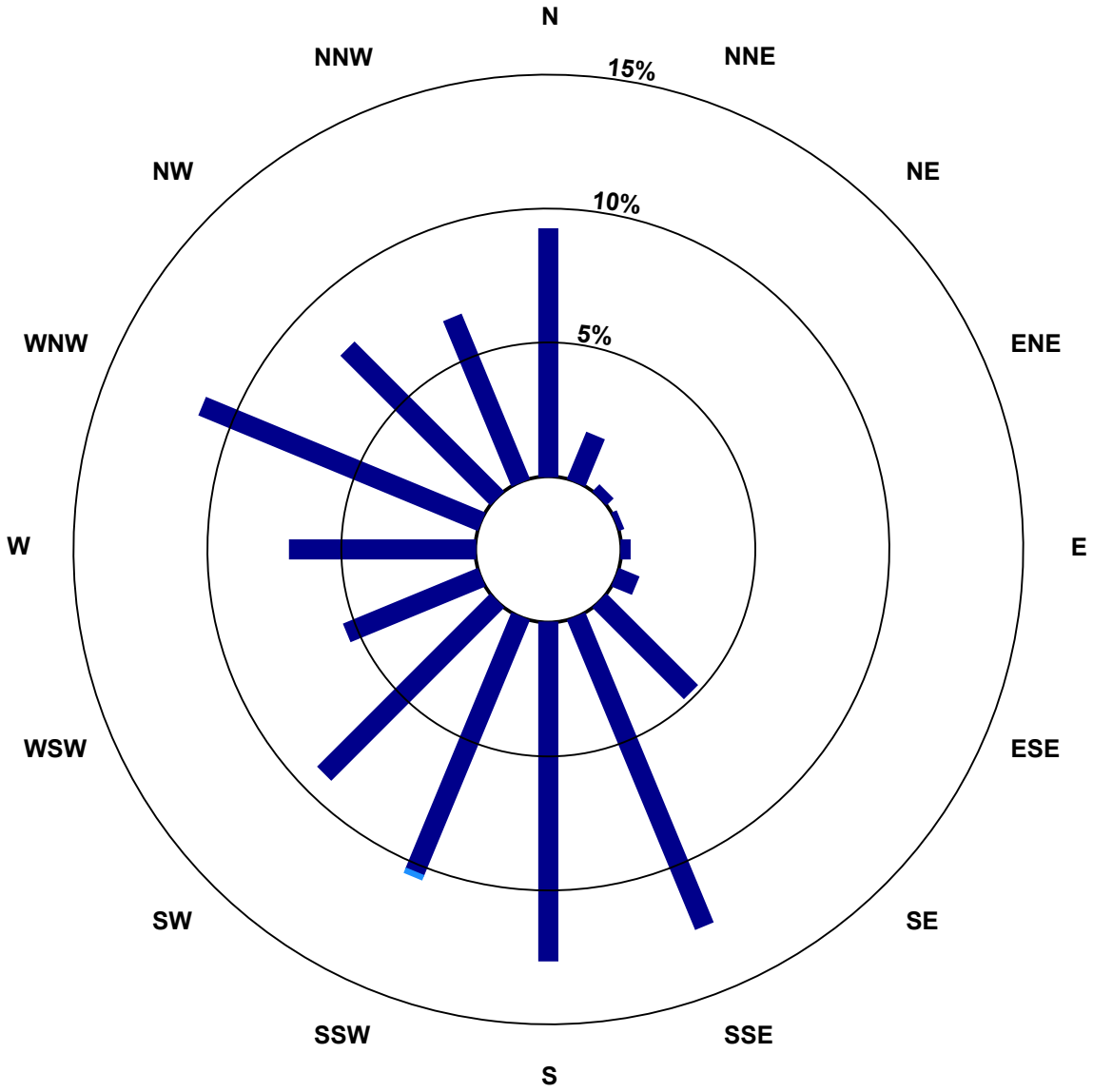
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Reduced Sulphur (TRS) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

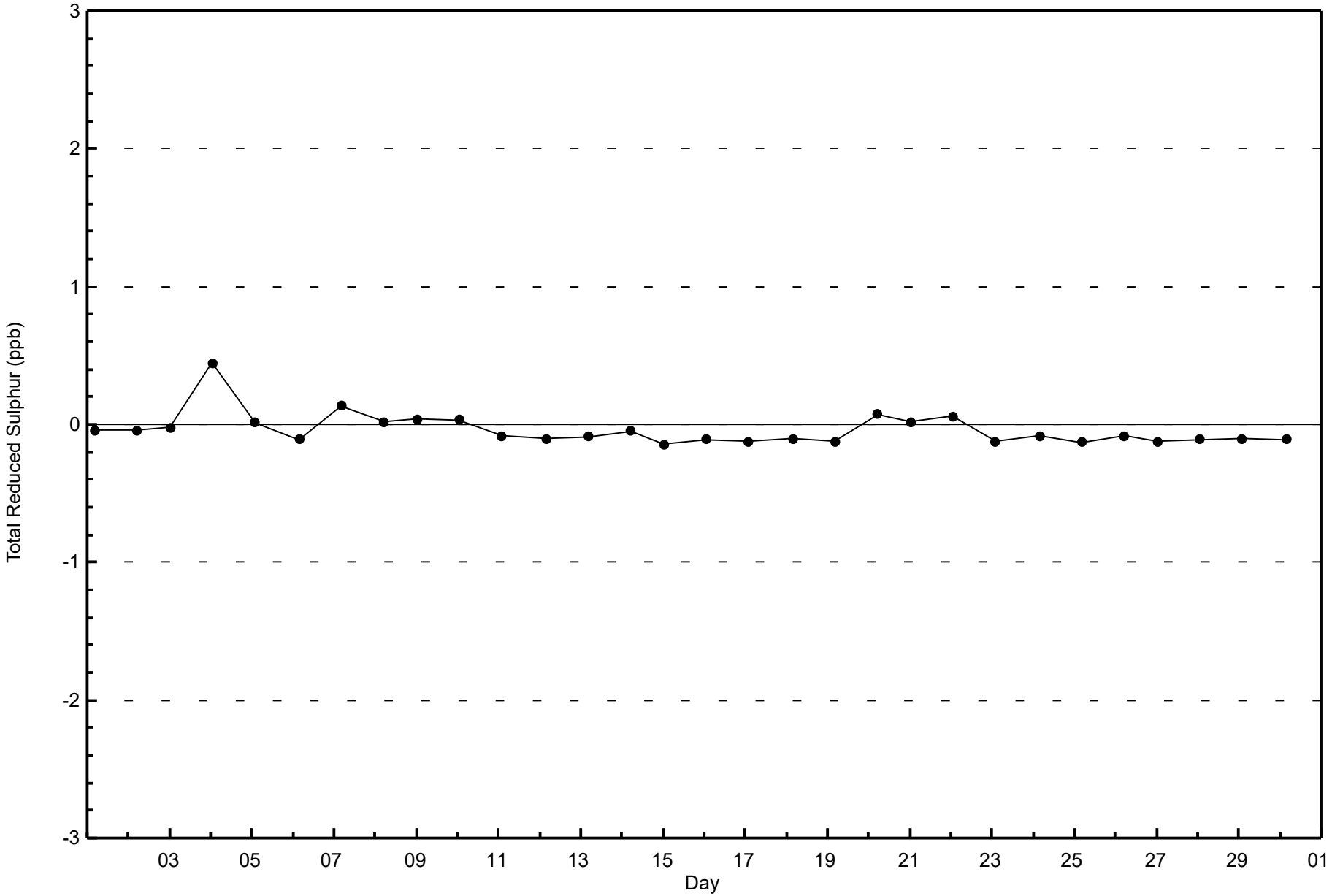
Total Number of Valid Hours: 650

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Fort McKay - Bertha Ganter - September 2026

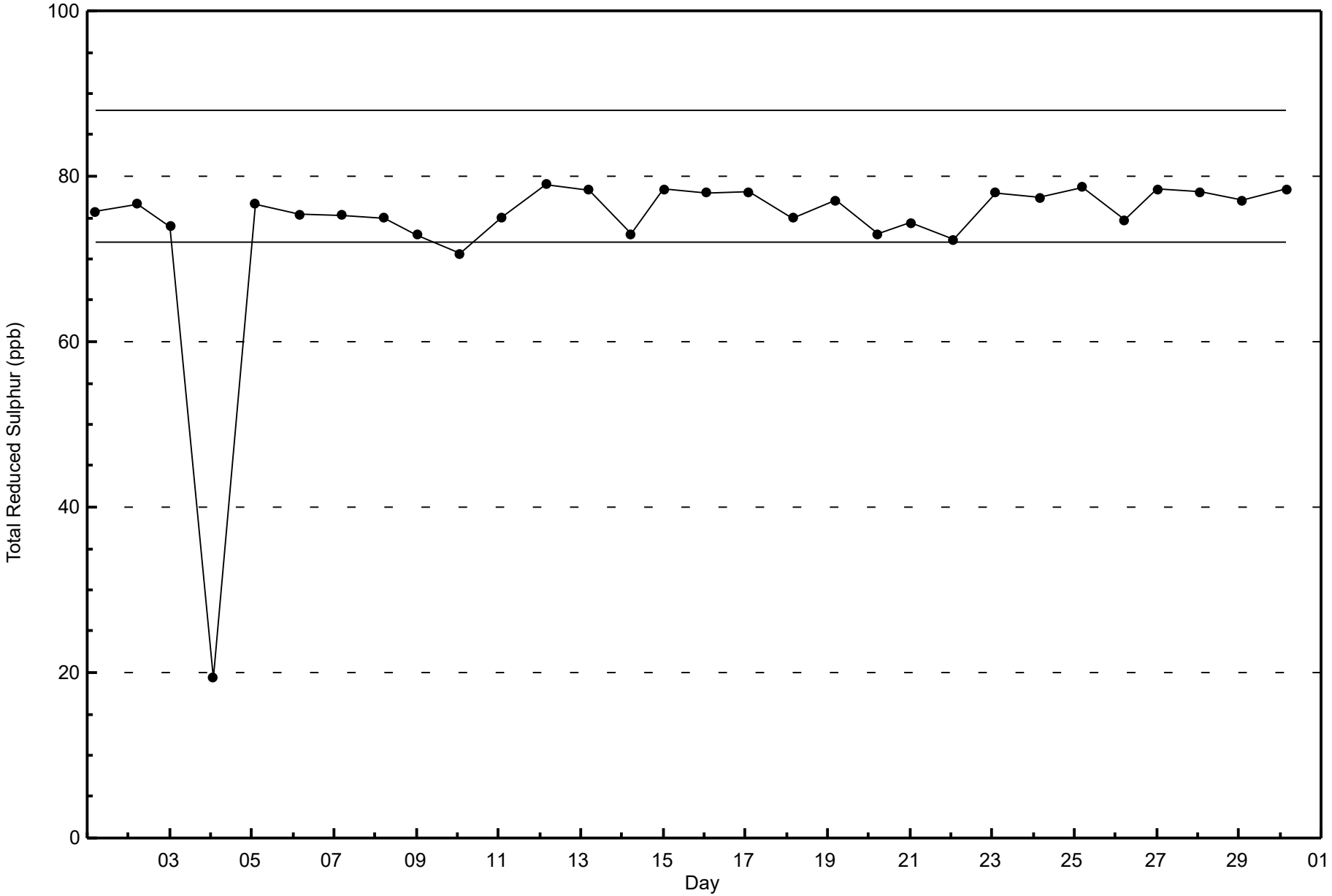


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Fort McKay - Bertha Ganter - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Fort McKay - Bertha Ganter - September 2026

Maximum Value: 3.4 ppm on Sep 17 08:00

Maximum Daily Average: 2.4 ppm on Sep 17

Minimum Value: 2.0 ppm on Sep 29 17:00

Minimum Daily Average: 2.0 ppm on Sep 30

Maximum Diurnal Average: 2.3 ppm at hour 8

Minimum Diurnal Average: 2.1 ppm at hour 16

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} = 2.8

Hours in Service:	720
Hours of Data:	685
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-Sep	2.2	2.2	2.2	Z	2.3	2.5	2.4	2.4	2.5	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.5
2-Sep	2.2	2.2	2.2	2.2	Z	2.3	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.3
3-Sep	2.2	2.3	2.1	2.2	2.4	Z	2.5	2.6	2.5	2.4	2.3	2.2	2.2	2.1	2.2	2.1	2.2	2.4	2.6	2.4	2.5	2.6	2.6	2.8	2.4	2.8
4-Sep	Z	2.7	2.7	2.6	2.7	2.7	2.6	2.5	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.3	2.7
5-Sep	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.4	2.4	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.4
6-Sep	2.3	2.3	Z	2.3	2.3	2.3	2.2	2.3	2.3	2.4	2.4	2.6	2.5	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.6
7-Sep	2.3	2.3	2.2	Z	2.2	2.2	2.4	2.2	2.3	2.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.4	2.4	2.6	2.5	2.5	2.3	2.6
8-Sep	2.4	2.3	2.3	2.2	Z	2.3	2.3	2.3	2.2	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.2	2.2	2.4
9-Sep	2.2	2.2	2.2	2.5	2.6	Z	2.4	2.5	2.6	2.5	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.2	2.6
10-Sep	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	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.1
11-Sep	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.2	2.1	2.0	2.1	2.2
12-Sep	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	2.1	2.2	2.2	2.3	2.3	2.1	2.3
13-Sep	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	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.2	2.2	2.1	2.1	2.2
14-Sep	2.1	2.1	2.1	2.2	Z	2.1	2.1	2.0	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	2.1	2.1	2.1	2.2
15-Sep	2.1	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2
16-Sep	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.3
17-Sep	2.1	Z	2.2	2.2	2.2	2.5	2.7	3.4	3.2	2.4	C	C	C	C	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	3.4
18-Sep	2.4	2.3	Z	2.1	2.1	2.1	2.5	2.5	2.4	2.9	2.7	2.5	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.9
19-Sep	2.3	2.3	2.3	Z	2.3	2.5	3.1	2.7	2.6	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.6	2.4	2.2	2.3	2.3	3.1
20-Sep	2.3	2.3	2.3	2.3	Z	2.6	2.5	2.5	2.5	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.5	2.9	2.4	2.3	2.3	2.3	2.9
21-Sep	2.3	2.2	2.3	2.2	2.3	Z	2.2	2.4	2.5	2.7	M	2.5	2.3	2.2	2.2	2.2	2.5	2.4	2.4	2.4	2.6	2.7	2.6	2.5	2.4	2.7
22-Sep	Z	2.2	2.3	2.3	2.3	2.3	2.3	2.5	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	2.1	2.1	2.1	2.1	2.5
23-Sep	2.1	Z	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.5	2.5	2.6	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.4	2.2	2.2	2.6
24-Sep	2.3	2.2	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	2.0	2.0	2.0	2.1	2.3	2.3	2.2	2.2	2.1	2.3
25-Sep	2.2	2.2	2.2	Z	2.6	2.7	2.6	2.5	2.4	2.5	2.4	2.2	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.3	2.7
26-Sep	2.1	2.2	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	2.0	2.0	2.0	2.0	2.1	2.2
27-Sep	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	2.1	2.1	2.1	2.1	2.0	2.1
28-Sep	Z	2.1	2.1	2.1	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	2.1	2.1	2.2	2.1	2.1	2.4	2.5	2.1	2.5
29-Sep	2.4	Z	2.4	2.6	2.8	2.7	2.4	2.4	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	2.2	2.8
30-Sep	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	2.1	2.1	2.0	2.1
	2.2	2.2	2.2	2.2	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	2.2	2.2	2.2	2.2	2.2	Diurnal Average	
	2.4	2.7	2.7	2.6	2.8	2.7	3.1	3.4	3.2	2.9	2.7	2.6	2.5	2.2	2.2	2.2	2.5	2.4	2.6	2.5	2.9	2.7	2.6	2.8	Diurnal Maximum	

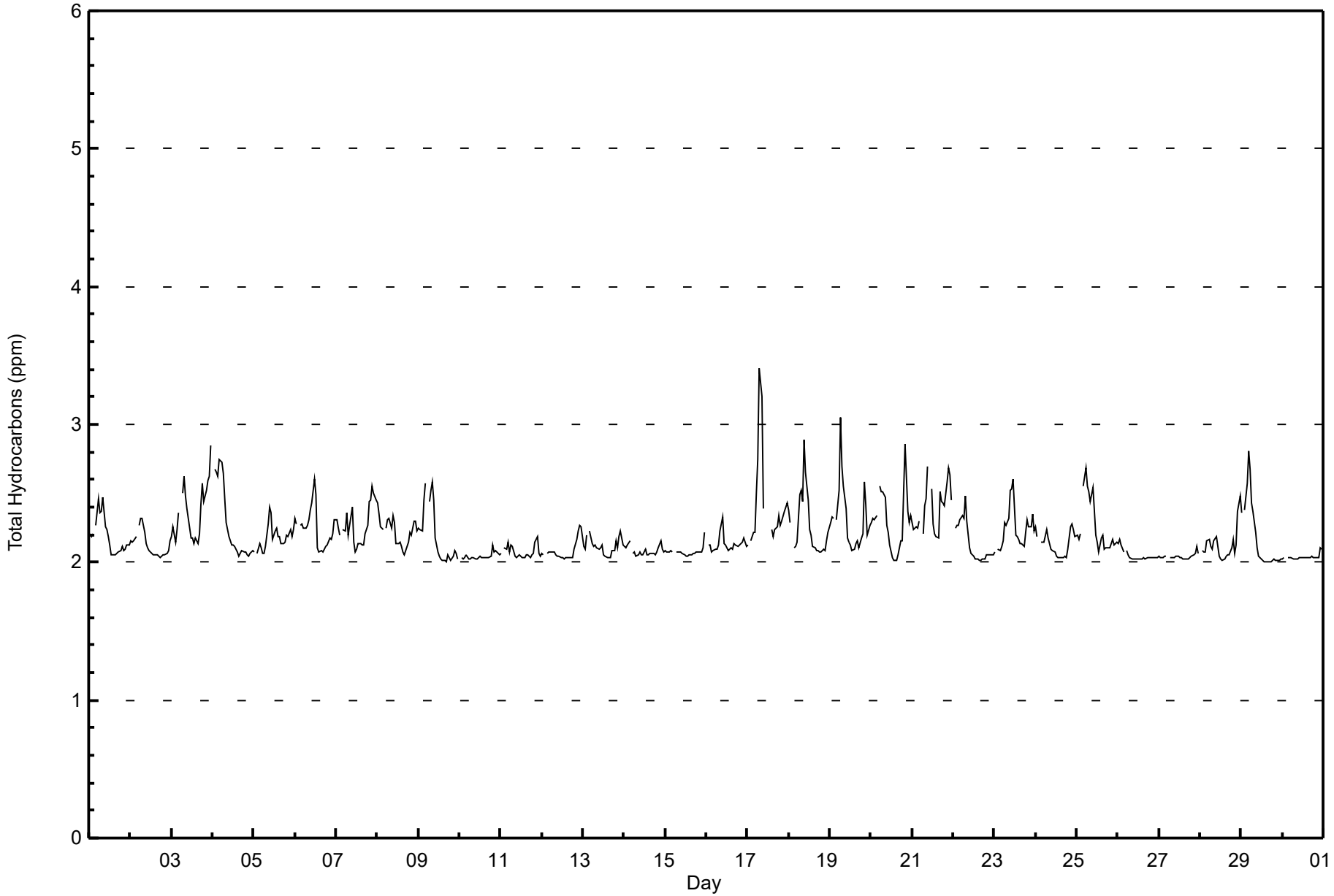
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Fort McKay - Bertha Ganter - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	152	22.19	22.19
2.1 - 3.0	530	77.37	99.56
3.1 - 10.0	3	0.44	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Fort McKay - Bertha Ganter - September 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	0	0	0	0	0	3	1	3	15	24	18	24	39	15	6	152
2.1 - 3.0	70	21	4	3	3	6	29	79	79	51	35	16	22	36	35	39	528
3.1 - 10.0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	3
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	74	21	5	3	3	6	32	80	82	67	59	34	46	76	50	45	683

Total Number of Valid Hours: 683

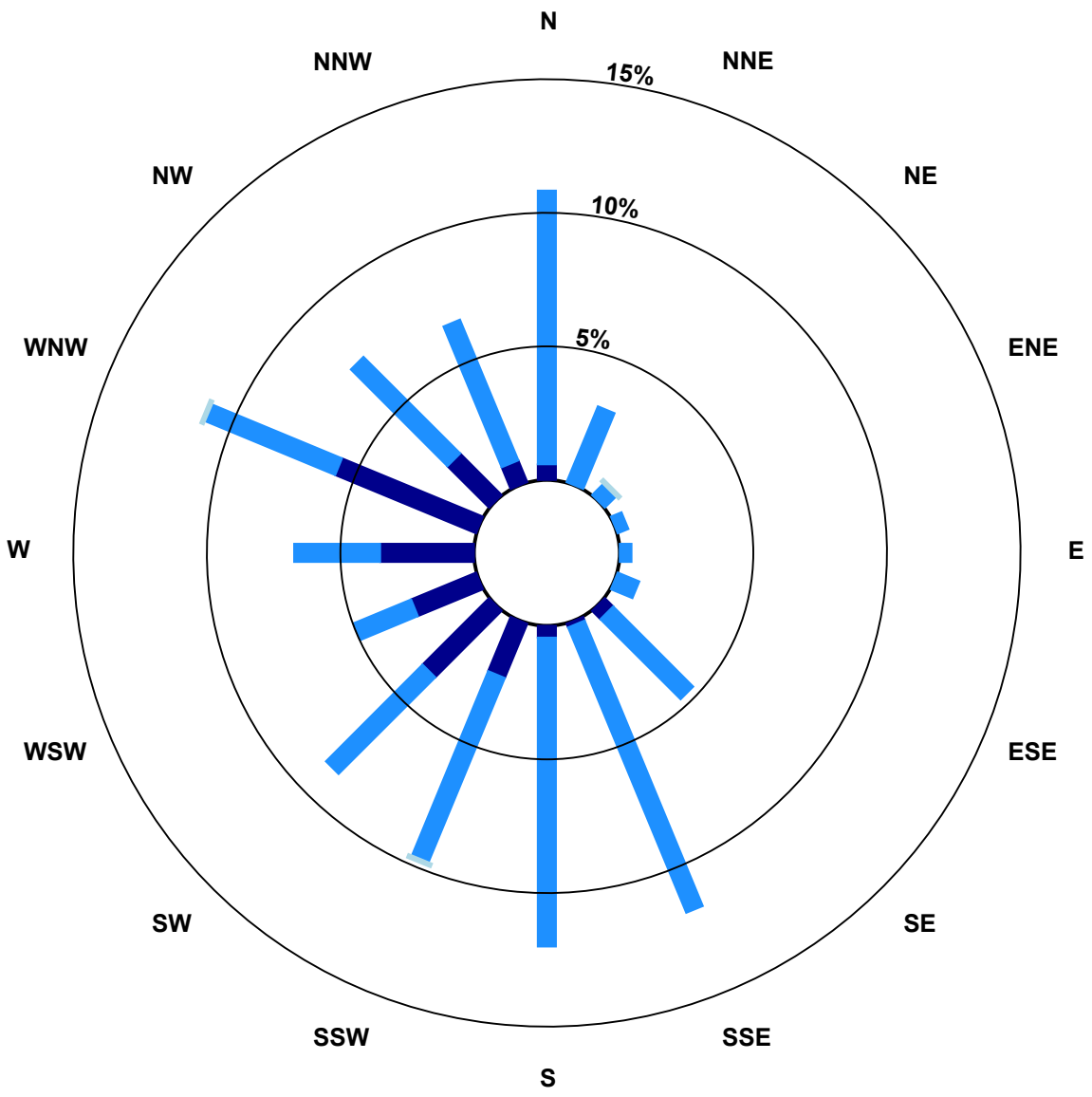
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Fort McKay - Bertha Ganter



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

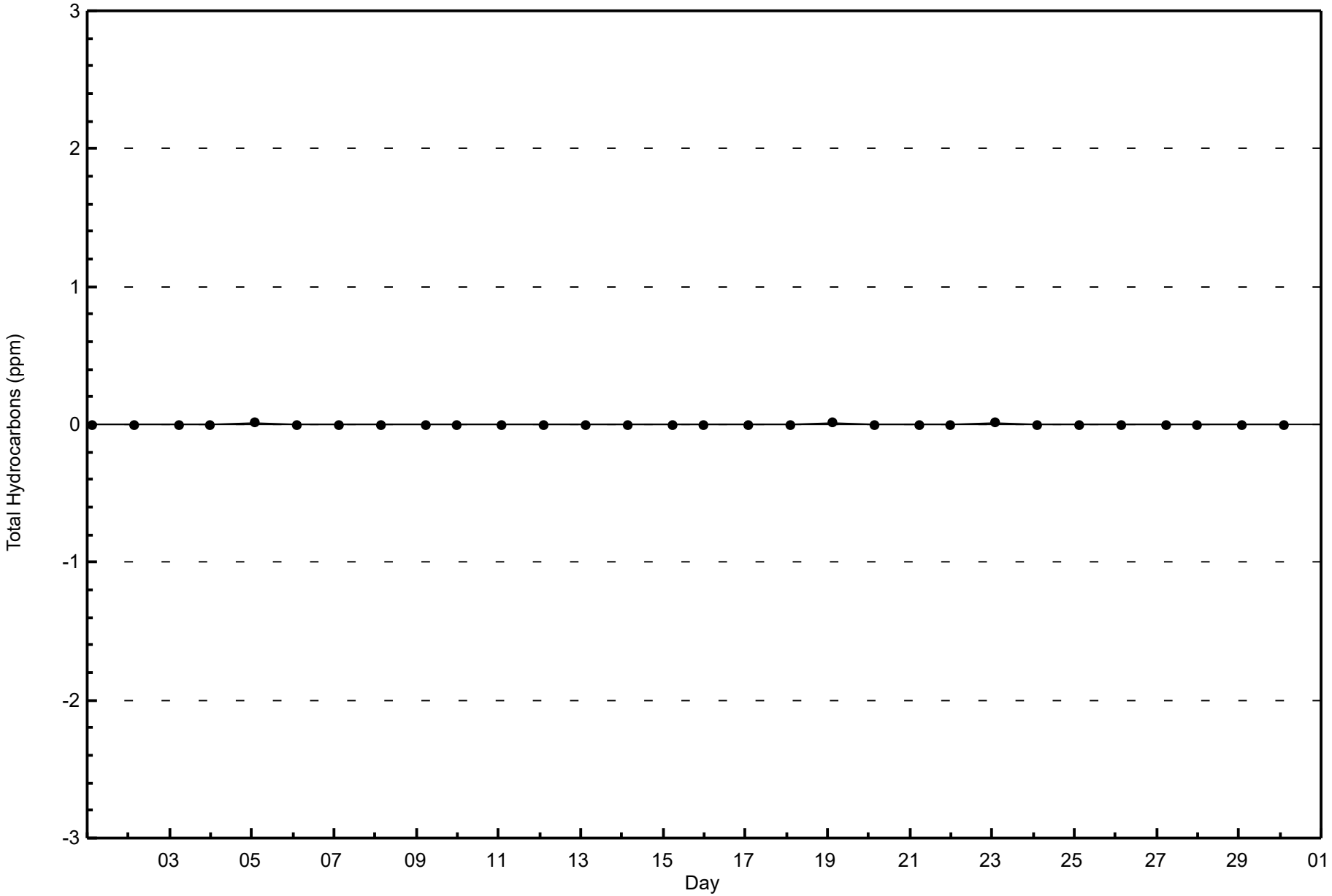
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Fort McKay - Bertha Ganter - September 2026

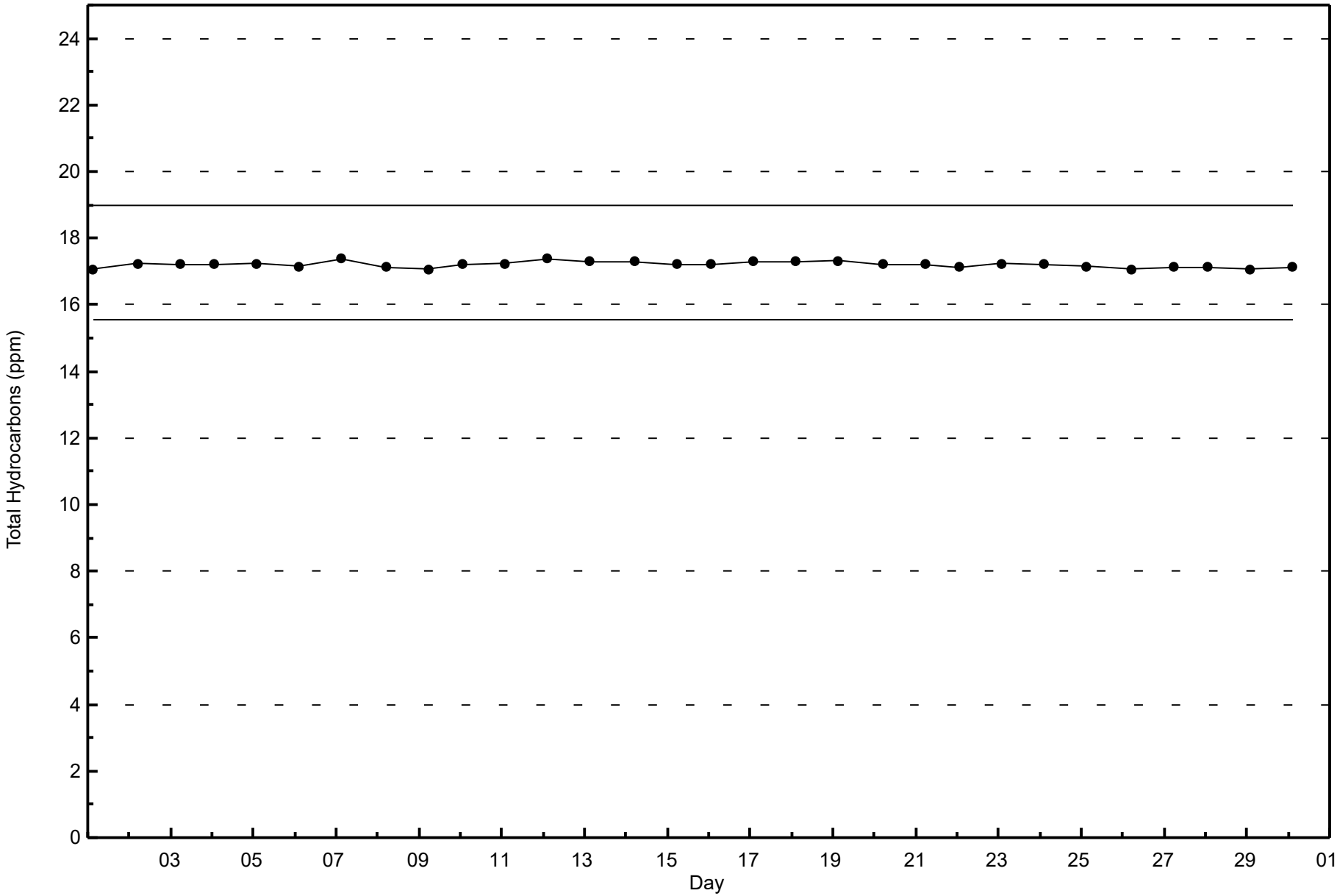


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Fort McKay - Bertha Ganter - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay - Bertha Ganter - September 2026

Maximum Value: 0.501 ppm on Sep 18 10:00

Maximum Daily Average: 0.090 ppm on Sep 3

Minimum Value: 0.000 ppm on Sep 11 12:00

Minimum Daily Average: 0.001 ppm on Sep 30

Maximum Diurnal Average: 0.045 ppm at hour 10

Minimum Diurnal Average: 0.011 ppm at hour 1

Monthly Average: 0.019 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} = 0.2

Hours in Service:	720
Hours of Data:	685
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-Sep	0.010	0.006	0.002	Z	0.021	0.075	0.056	0.058	0.128	0.041	0.060	0.046	0.033	0.013	0.018	0.015	0.011	0.004	0.006	0.025	0.007	0.003	0.022	0.018	0.029	0.128
2-Sep	0.028	0.011	0.021	0.011	Z	0.015	0.006	0.011	0.009	0.005	0.008	0.004	0.005	0.012	0.014	0.015	0.022	0.012	0.009	0.013	0.010	0.011	0.031	0.019	0.013	0.031
3-Sep	0.025	0.032	0.029	0.035	0.015	Z	0.070	0.079	0.039	0.064	0.059	0.075	0.063	0.040	0.060	0.040	0.081	0.140	0.268	0.158	0.147	0.147	0.102	0.297	0.090	0.297
4-Sep	Z	0.096	0.065	0.089	0.074	0.020	0.005	0.007	0.049	0.026	0.022	0.026	0.020	0.010	0.011	0.007	0.012	0.009	0.004	0.006	0.006	0.005	0.017	0.002	0.025	0.096
5-Sep	0.004	Z	0.007	0.005	0.009	0.007	0.004	0.001	0.027	0.226	0.245	0.075	0.141	0.157	0.088	0.056	0.001	0.002	0.008	0.049	0.047	0.075	0.031	0.012	0.056	0.245
6-Sep	0.030	0.032	Z	0.010	0.006	0.003	0.000	0.001	0.010	0.062	0.061	0.109	0.073	0.002	0.002	0.007	0.011	0.014	0.013	0.018	0.013	0.008	0.020	0.056	0.024	0.109
7-Sep	0.035	0.014	0.003	Z	0.009	0.008	0.006	0.005	0.010	0.038	0.015	0.003	0.011	0.007	0.009	0.005	0.007	0.001	0.033	0.121	0.103	0.090	0.039	0.035	0.026	0.121
8-Sep	0.018	0.003	0.006	0.003	Z	0.006	0.005	0.001	0.001	0.007	0.007	0.029	0.038	0.042	0.049	0.023	0.002	0.014	0.005	0.053	0.041	0.084	0.017	0.011	0.020	0.084
9-Sep	0.016	0.013	0.005	0.018	0.032	Z	0.044	0.062	0.078	0.016	0.015	0.007	0.005	0.008	0.006	0.007	0.007	0.004	0.006	0.006	0.005	0.007	0.036	0.005	0.018	0.078
10-Sep	Z	0.028	0.025	0.025	0.035	0.010	0.003	0.009	0.010	0.006	0.008	0.009	0.017	0.008	0.007	0.010	0.011	0.009	0.010	0.007	0.006	0.006	0.019	0.001	0.012	0.035
11-Sep	0.002	Z	0.008	0.008	0.003	0.003	0.001	0.001	0.002	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.002	0.001	0.000	0.001	0.000	0.001	0.004	0.002	0.002	0.008
12-Sep	0.017	0.005	Z	0.019	0.028	0.006	0.001	0.002	0.000	0.000	0.003	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.002	0.000	0.025	0.004	0.009	0.006	0.006	0.028
13-Sep	0.012	0.014	0.002	Z	0.005	0.021	0.003	0.002	0.005	0.004	0.004	0.001	0.004	0.004	0.001	0.001	0.003	0.005	0.000	0.070	0.001	0.000	0.004	0.002	0.007	0.070
14-Sep	0.002	0.007	0.004	0.002	Z	0.012	0.007	0.001	0.007	0.002	0.002	0.007	0.000	0.001	0.004	0.000	0.002	0.000	0.010	0.004	0.003	0.002	0.011	0.000	0.004	0.012
15-Sep	0.008	0.005	0.004	0.004	0.000	Z	0.001	0.002	0.002	0.002	0.004	0.000	0.000	0.001	0.004	0.004	0.004	0.005	0.006	0.005	0.005	0.004	0.014	0.001	0.004	0.014
16-Sep	Z	0.009	0.008	0.008	0.004	0.000	0.001	0.000	0.001	0.027	0.007	0.002	0.001	0.001	0.000	0.003	0.003	0.002	0.003	0.001	0.002	0.002	0.008	0.001	0.004	0.027
17-Sep	0.000	Z	0.010	0.012	0.003	0.013	0.032	0.048	0.045	0.010	C	C	C	C	0.003	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.003	0.001	0.010	0.048
18-Sep	0.013	0.005	Z	0.021	0.013	0.009	0.004	0.008	0.106	0.501	0.271	0.176	0.087	0.064	0.022	0.019	0.004	0.004	0.004	0.000	0.000	0.002	0.017	0.001	0.059	0.501
19-Sep	0.006	0.006	0.001	Z	0.003	0.073	0.161	0.086	0.058	0.024	0.002	0.002	0.003	0.004	0.003	0.004	0.006	0.005	0.002	0.002	0.068	0.077	0.009	0.018	0.027	0.161
20-Sep	0.012	0.031	0.024	0.034	Z	0.027	0.026	0.045	0.026	0.007	0.003	0.000	0.004	0.003	0.007	0.002	0.001	0.004	0.007	0.035	0.067	0.022	0.010	0.017	0.018	0.067
21-Sep	0.021	0.012	0.010	0.014	0.008	Z	0.002	0.023	0.021	0.073	M	0.075	0.073	0.065	0.061	0.035	0.225	0.138	0.125	0.131	0.132	0.084	0.051	0.064	0.066	0.225
22-Sep	Z	0.020	0.031	0.010	0.017	0.015	0.001	0.006	0.003	0.004	0.003	0.017	0.024	0.023	0.024	0.004	0.001	0.002	0.004	0.012	0.003	0.000	0.013	0.002	0.010	0.031
23-Sep	0.001	Z	0.002	0.004	0.001	0.001	0.000	0.000	0.000	0.000	0.006	0.028	0.005	0.007	0.001	0.006	0.000	0.000	0.070	0.140	0.054	0.001	0.007	0.001	0.015	0.140
24-Sep	0.004	0.000	Z	0.004	0.008	0.006	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.001	0.000	0.001	0.003	0.000	0.002	0.000	0.001	0.008
25-Sep	0.003	0.007	0.000	Z	0.012	0.016	0.022	0.028	0.008	0.183	0.101	0.015	0.056	0.001	0.075	0.085	0.005	0.003	0.000	0.000	0.000	0.000	0.001	0.000	0.027	0.183
26-Sep	0.001	0.001	0.003	0.000	Z	0.019	0.000	0.000	0.001	0.000	0.002	0.000	0.001	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.008	0.001	0.002	0.019
27-Sep	0.010	0.008	0.001	0.001	0.000	Z	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.006	0.001	0.001	0.010
28-Sep	Z	0.008	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.016	0.003	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.006	0.009	0.002	0.016
29-Sep	0.001	Z	0.006	0.006	0.010	0.015	0.007	0.002	0.001	0.001	0.002	0.001	0.002	0.001	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.006	0.000	0.003	0.015
30-Sep	0.001	0.001	Z	0.008	0.004	0.002	0.001	0.001	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	0.002	0.000	0.001	0.008
	0.011	0.015	0.011	0.014	0.013	0.015	0.016	0.016	0.022	0.045	0.032	0.024	0.023	0.016	0.016	0.012	0.014	0.013	0.020	0.029	0.025	0.021	0.018	0.019	Diurnal Average	
	0.035	0.096	0.065	0.089	0.074	0.075	0.161	0.086	0.128	0.501	0.271	0.176	0.141	0.157	0.088	0.085	0.225	0.140	0.268	0.158	0.147	0.147	0.102	0.297	Diurnal Maximum	

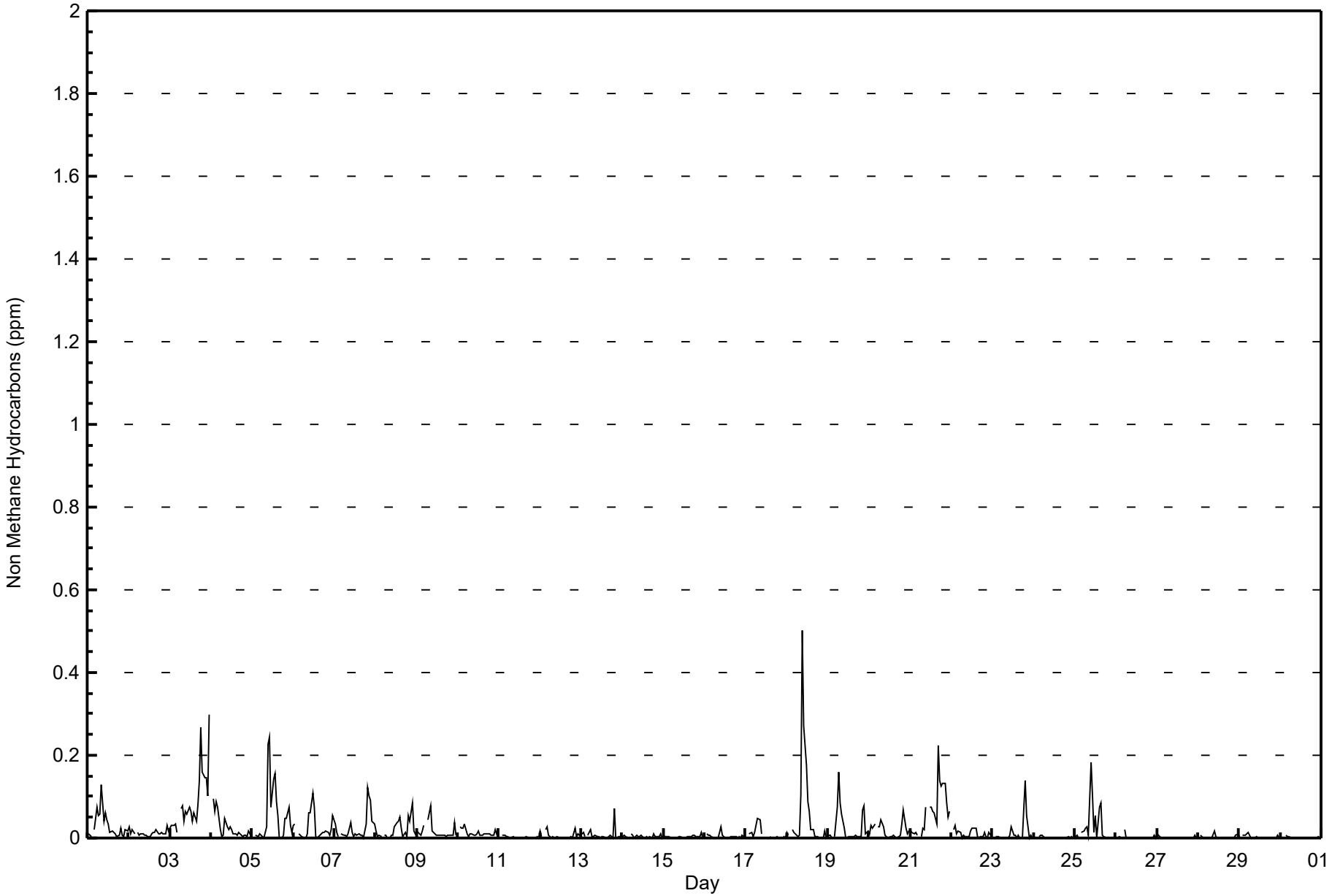
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay - Bertha Ganter - September 2026



Non Methane Hydrocarbons (NMHC) - ppm
Fort McKay - Bertha Ganter - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	349	50.95	50.95
0.006 - 0.05	260	37.96	88.91
0.06 - 0.1	64	9.34	98.25
> 0.1	12	1.75	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay - Bertha Ganter - September 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	30	2	0	0	0	1	10	25	48	38	32	27	32	48	26	30	349
0.006 - 0.05	26	8	2	3	2	3	16	43	25	24	27	7	13	26	21	12	258
0.06 - 0.1	12	9	2	0	1	2	5	12	9	4	0	0	1	2	3	2	64
> 0.1	6	2	1	0	0	0	1	0	0	1	0	0	0	0	0	1	12
Totals	74	21	5	3	3	6	32	80	82	67	59	34	46	76	50	45	683

Total Number of Valid Hours: 683

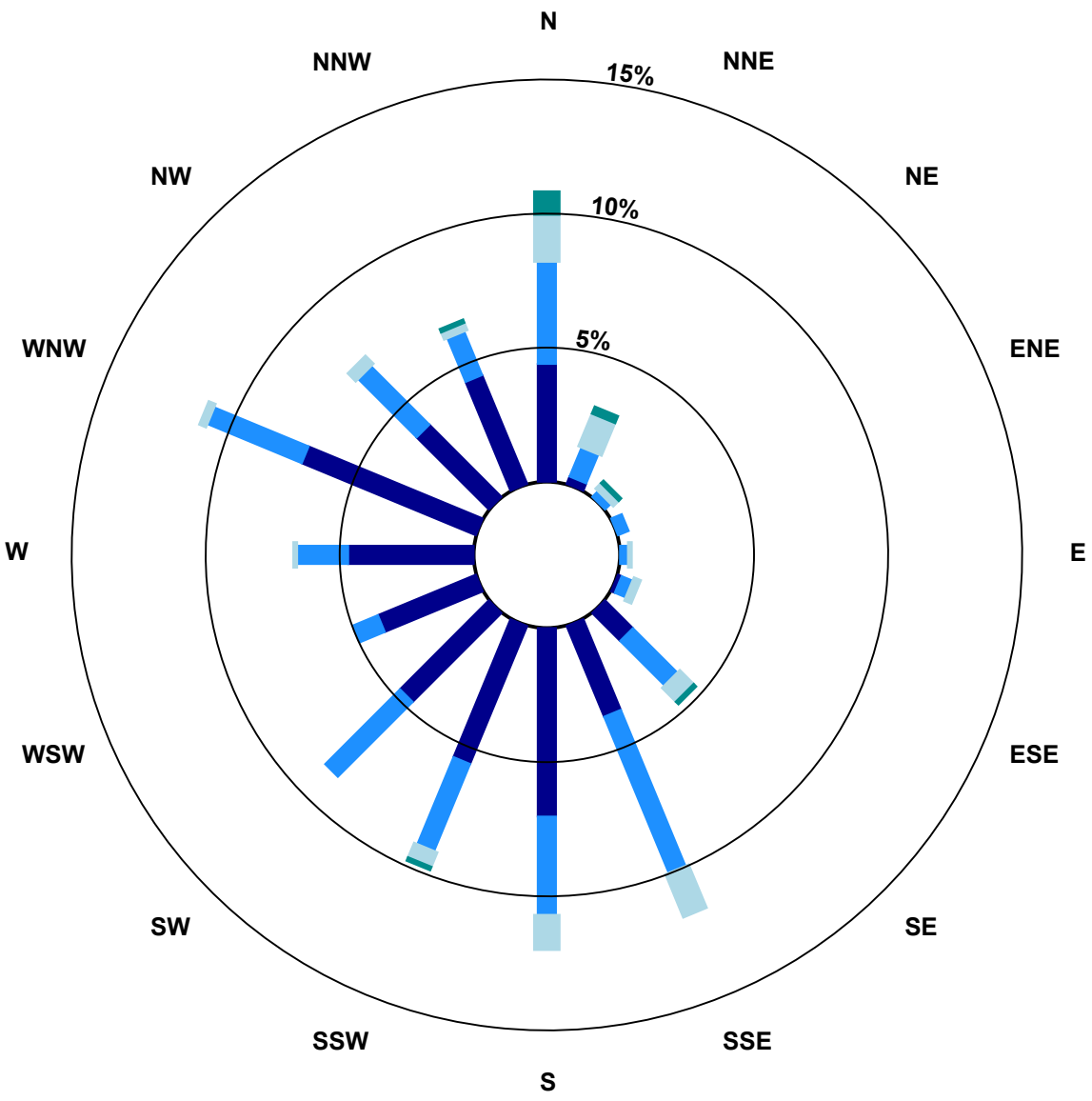
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 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

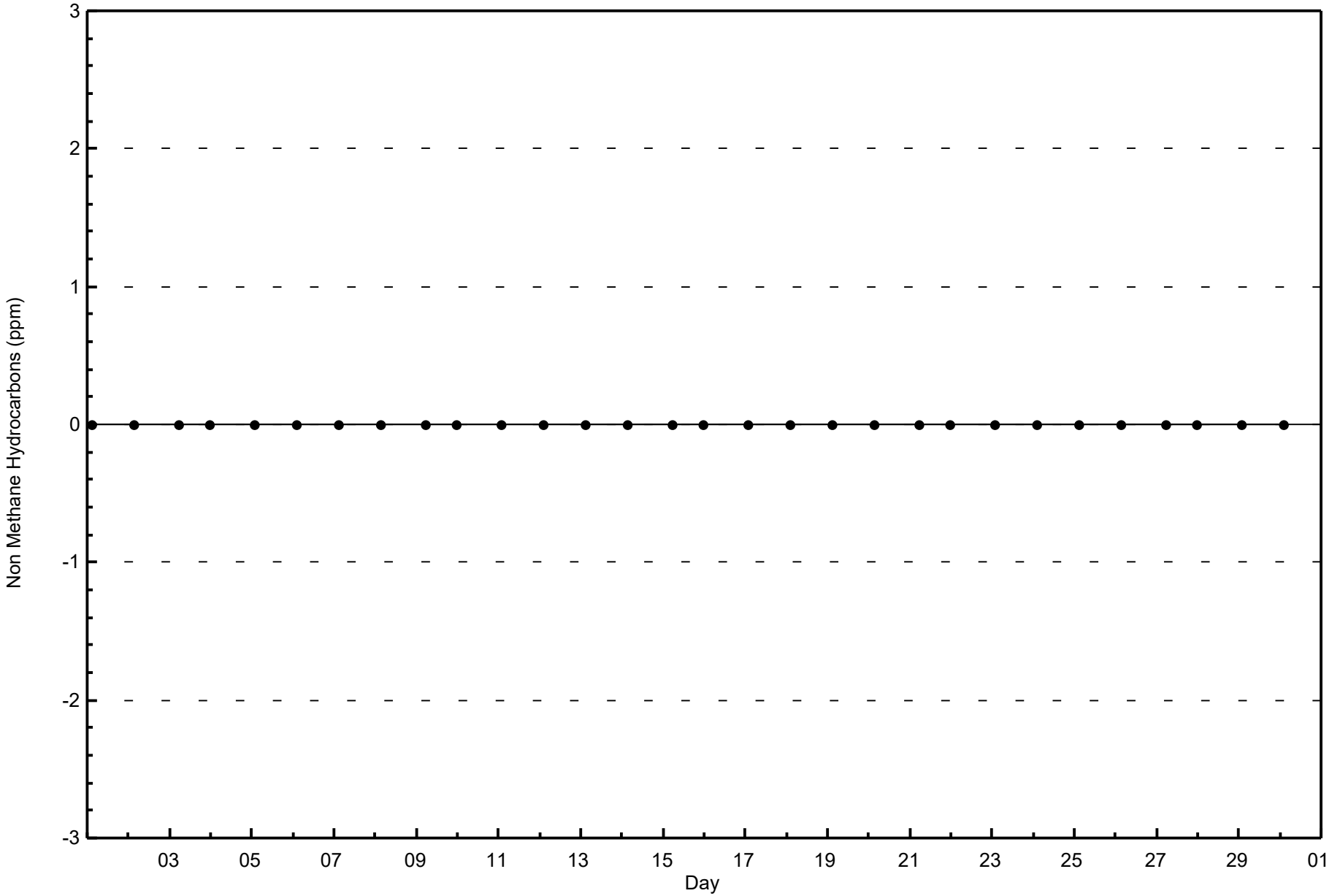
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay - Bertha Ganter - September 2026

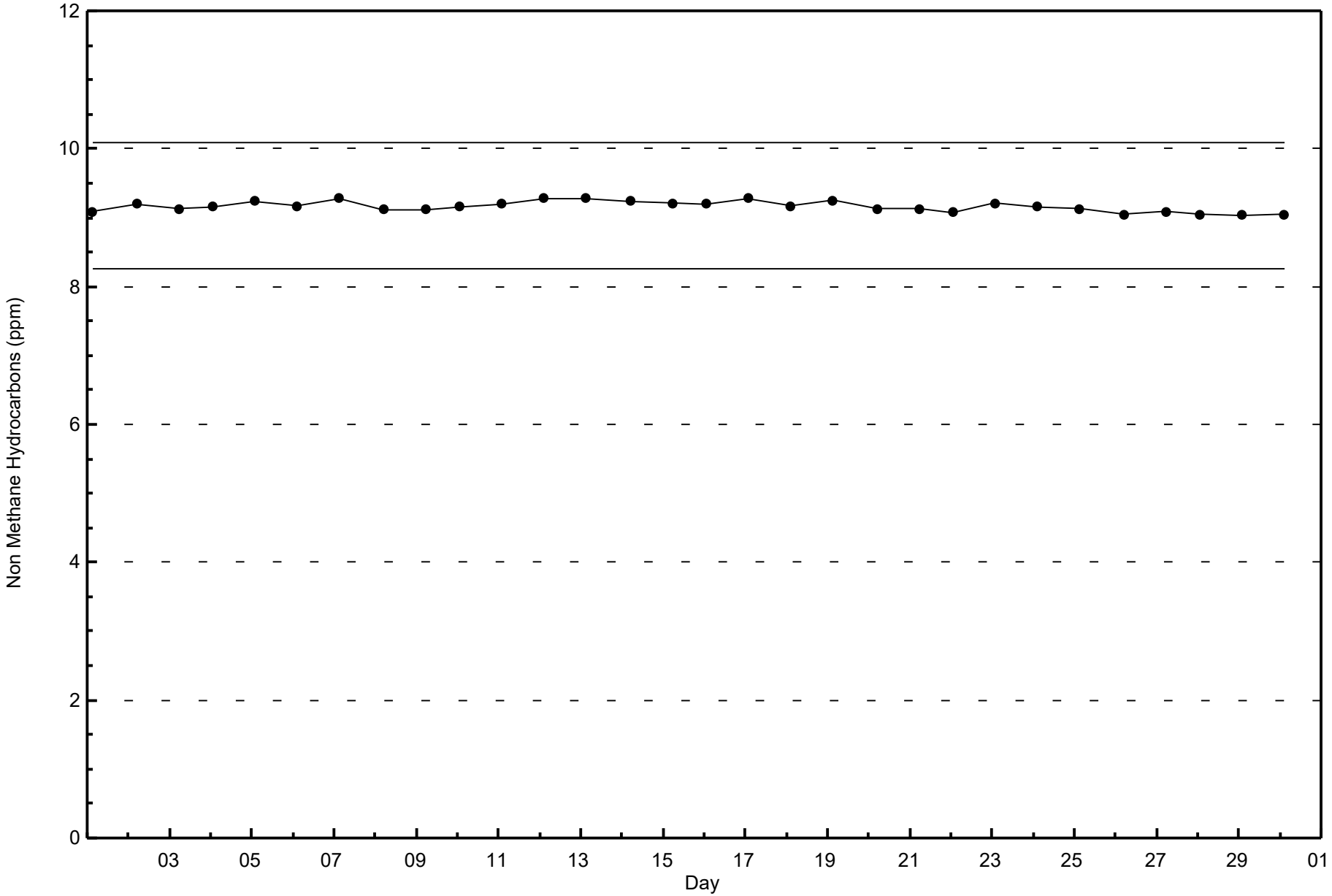


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay - Bertha Ganter - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Fort McKay - Bertha Ganter - September 2026

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

Maximum Value: 3.4 ppm on Sep 17 08:00

Maximum Daily Average: 2.4 ppm on Sep 17

Minimum Value: 2.0 ppm on Sep 22 14:00

Minimum Daily Average: 2.0 ppm on Sep 10

Maximum Diurnal Average: 2.3 ppm at hour 8

Minimum Diurnal Average: 2.1 ppm at hour 14

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} = 2.7

Hours in Service:	720
Hours of Data:	685
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-Sep	2.2	2.2	2.2	Z	2.3	2.4	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.4
2-Sep	2.1	2.1	2.1	2.2	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	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.3
3-Sep	2.2	2.2	2.1	2.2	2.3	Z	2.4	2.5	2.4	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.3	2.3	2.4	2.4	2.5	2.6	2.3	2.6
4-Sep	Z	2.6	2.6	2.5	2.7	2.7	2.6	2.5	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.2	2.7
5-Sep	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	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	2.2	2.2	2.1	2.3
6-Sep	2.3	2.2	Z	2.3	2.3	2.2	2.2	2.3	2.3	2.3	2.4	2.5	2.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.5
7-Sep	2.3	2.2	2.2	Z	2.2	2.2	2.4	2.2	2.3	2.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.5	2.5	2.4	2.2	2.5
8-Sep	2.4	2.3	2.3	2.2	Z	2.2	2.3	2.3	2.2	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.2	2.4
9-Sep	2.2	2.2	2.2	2.4	2.5	Z	2.4	2.5	2.5	2.4	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.2	2.5
10-Sep	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	2.1	2.1	2.1	2.1	2.0	2.1
11-Sep	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.2	2.1	2.0	2.1	2.2
12-Sep	2.0	2.0	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	2.2	2.3	2.3	2.1	2.3
13-Sep	2.1	2.1	2.2	Z	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	2.2	2.2	2.1	2.1	2.2
14-Sep	2.1	2.1	2.1	2.2	Z	2.1	2.1	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.2	2.1	2.1	2.1	2.2
15-Sep	2.1	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2
16-Sep	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.3
17-Sep	2.1	Z	2.1	2.2	2.2	2.5	2.7	3.4	3.2	2.4	C	C	C	C	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	3.4
18-Sep	2.4	2.3	Z	2.1	2.1	2.1	2.5	2.5	2.3	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	2.2	2.2	2.5
19-Sep	2.3	2.3	2.3	Z	2.3	2.5	2.9	2.6	2.5	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.5	2.3	2.2	2.2	2.3	2.9
20-Sep	2.3	2.3	2.3	2.3	Z	2.5	2.5	2.5	2.4	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.5	2.8	2.3	2.3	2.3	2.3	2.8
21-Sep	2.3	2.2	2.3	2.2	2.3	Z	2.2	2.4	2.4	2.6	M	2.5	2.2	2.1	2.1	2.1	2.3	2.3	2.3	2.3	2.5	2.6	2.6	2.4	2.3	2.6
22-Sep	Z	2.2	2.2	2.3	2.3	2.3	2.3	2.5	2.3	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	2.0	2.1	2.1	2.5
23-Sep	2.1	Z	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.5	2.5	2.6	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.6
24-Sep	2.3	2.2	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	2.0	2.0	2.0	2.1	2.3	2.3	2.2	2.2	2.1	2.3
25-Sep	2.2	2.2	2.2	Z	2.5	2.7	2.5	2.5	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	2.1	2.1	2.2	2.7
26-Sep	2.1	2.2	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	2.0	2.0	2.0	2.0	2.0	2.2
27-Sep	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	2.1	2.1	2.1	2.1	2.0	2.1
28-Sep	Z	2.1	2.1	2.1	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	2.1	2.1	2.2	2.1	2.1	2.4	2.5	2.1	2.5
29-Sep	2.4	Z	2.4	2.6	2.8	2.7	2.4	2.4	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	2.2	2.8
30-Sep	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	2.1	2.1	2.0	2.1
	2.2	2.2	2.2	2.2	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	2.2	2.2	2.2	2.2	Diurnal Average	
	2.4	2.6	2.6	2.6	2.8	2.7	2.9	3.4	3.2	2.6	2.5	2.6	2.4	2.2	2.2	2.2	2.3	2.3	2.3	2.5	2.8	2.6	2.6	2.6	Diurnal Maximum	

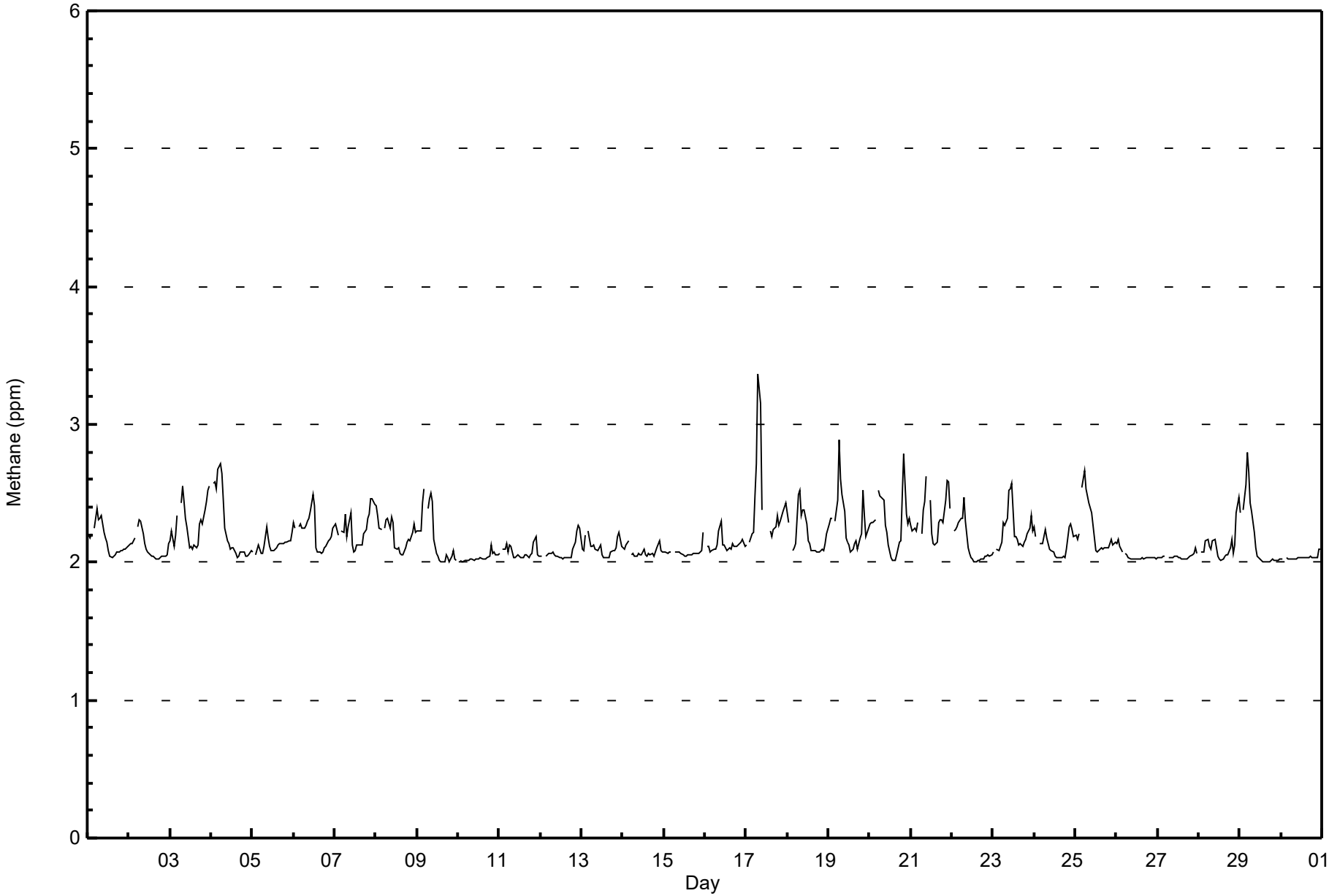
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Fort McKay - Bertha Ganter - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	176	25.69	25.69
2.1 - 3.0	507	74.01	99.71
3.1 - 10.0	2	0.29	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Fort McKay - Bertha Ganter - September 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	6	0	0	0	0	0	8	5	3	16	25	19	27	42	16	9	176
2.1 - 3.0	68	21	4	3	3	6	24	75	79	51	34	15	19	33	34	36	505
3.1 - 10.0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	74	21	5	3	3	6	32	80	82	67	59	34	46	76	50	45	683

Total Number of Valid Hours: 683

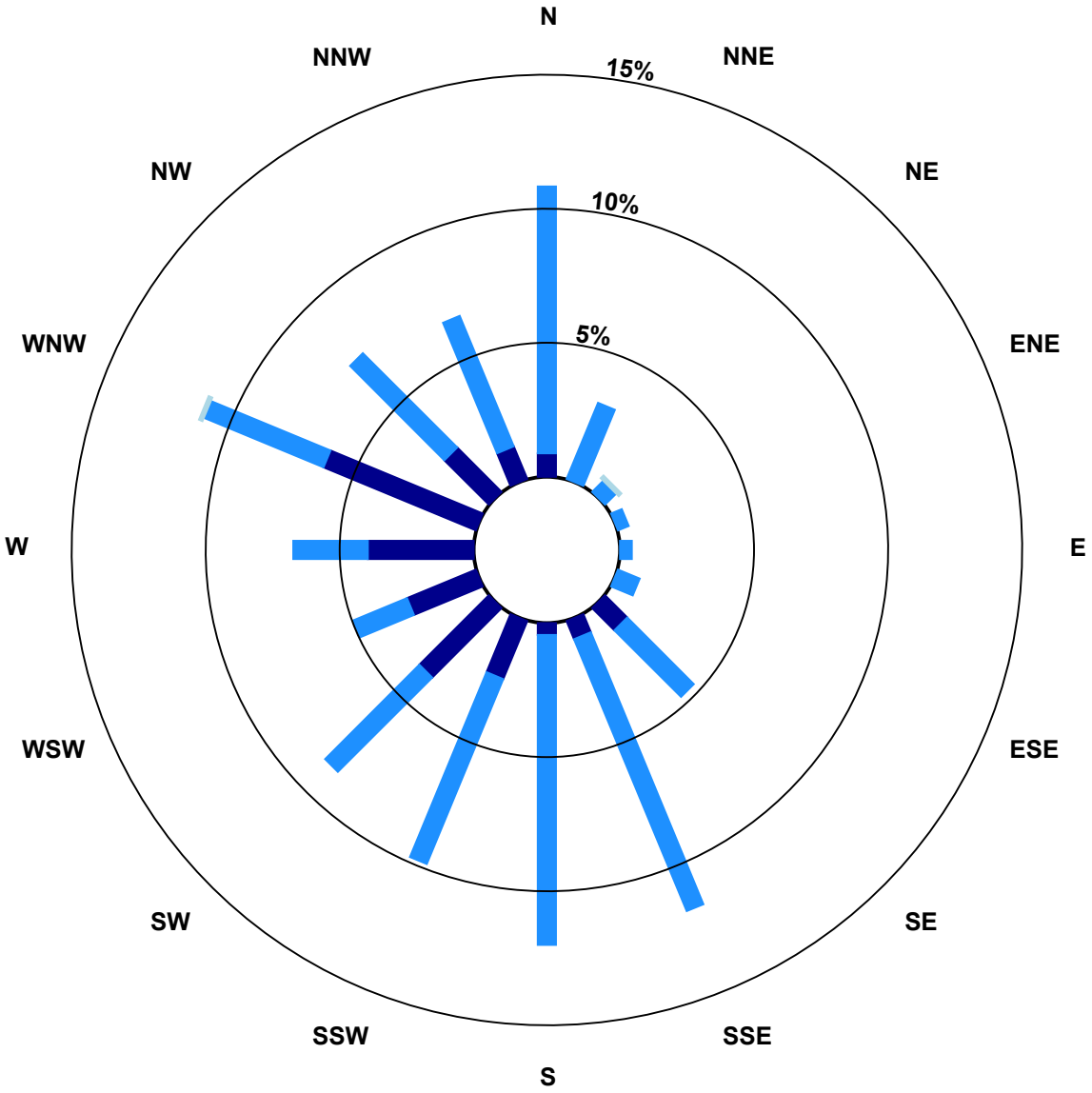
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Methane (CH_4) - ppm

Fort McKay - Bertha Ganter



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

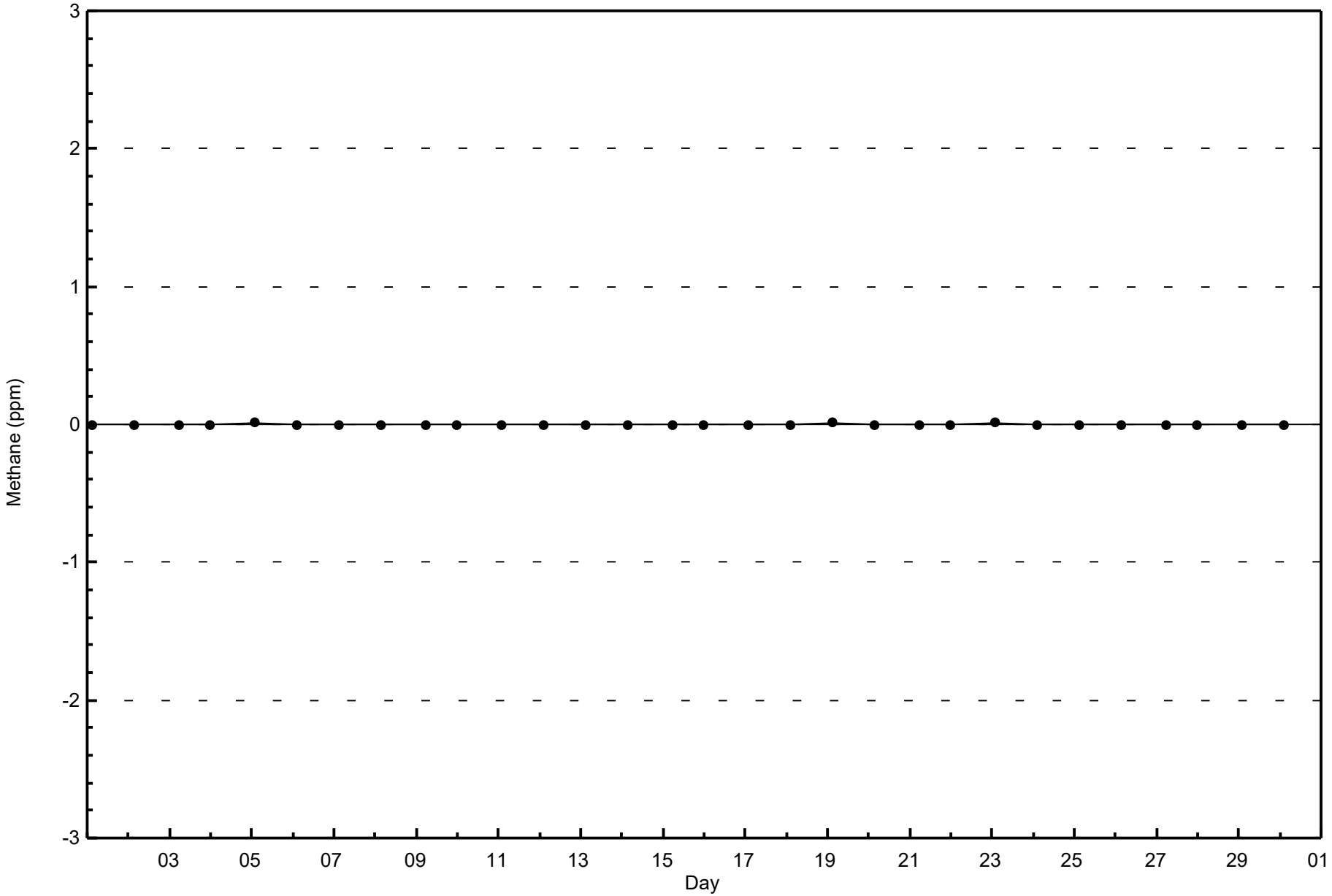
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Fort McKay - Bertha Ganter - September 2026

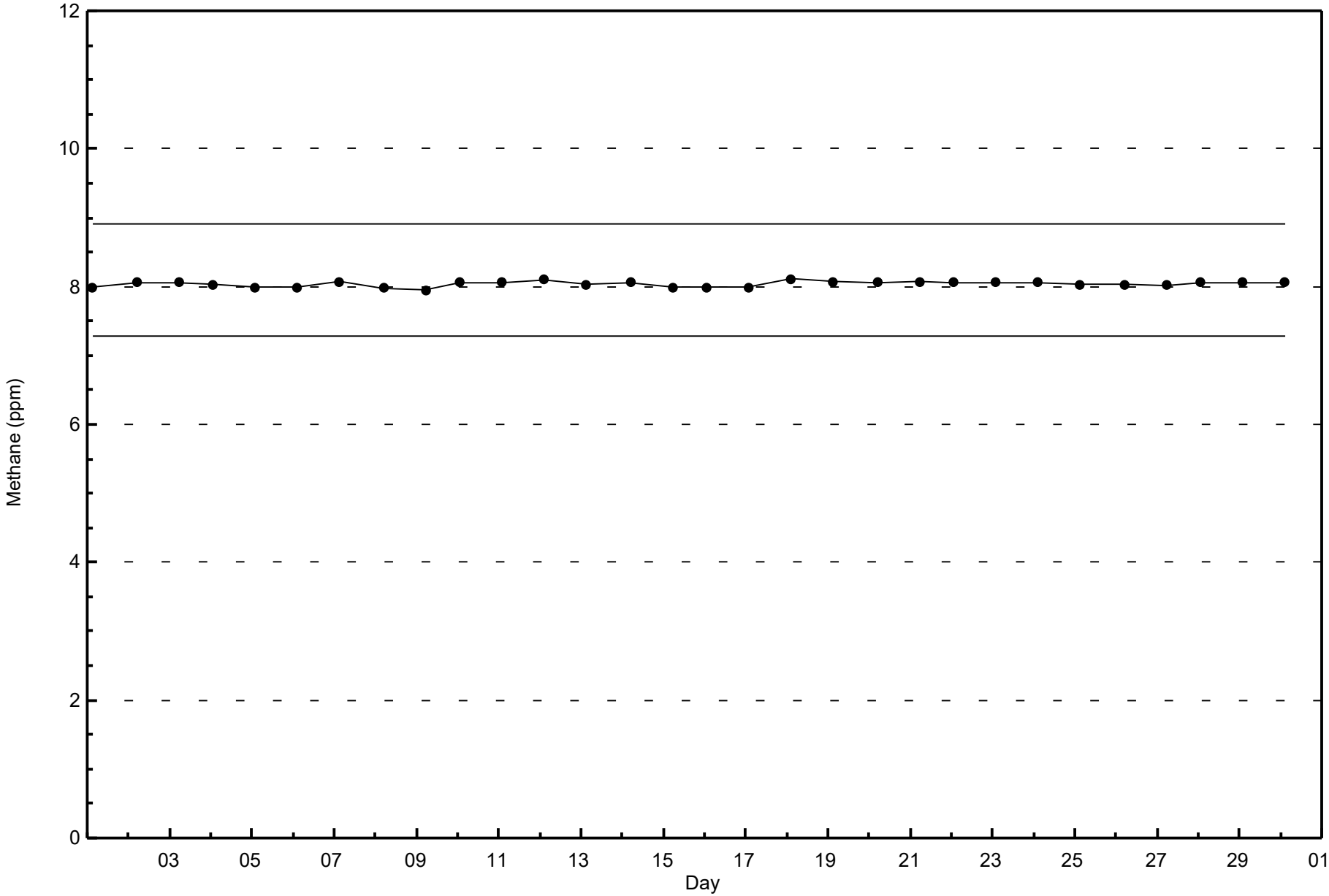


Wood Buffalo Environmental Association

Methane (CH_4) - ppm

Span Responses

Fort McKay - Bertha Ganter - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Fort McKay - Bertha Ganter - September 2026

Maximum Value: 68.5 ppb on Sep 17 08:00

Maximum Daily Average: 9.3 ppb on Sep 17

Minimum Value: 0.0 ppb on Sep 1 19:00

Minimum Daily Average: 0.0 ppb on Sep 26

Maximum Diurnal Average: 7.7 ppb at hour 8

Minimum Diurnal Average: 0.1 ppb at hour 20

Monthly Average: 2.08 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 1.3 P_{90} = 5.5 P_{99} = 28.5

Hours in Service:	720
Hours of Data:	684
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-Sep	0.0	Z	0.0	0.0	0.8	4.5	3.3	6.9	5.2	3.9	3.7	3.4	1.0	0.0	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.5	6.9
2-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.5	0.6	0.4	1.0	0.5	0.3	0.5	0.2	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.0
3-Sep	0.0	0.0	0.0	Z	0.0	0.0	12.0	18.0	13.3	8.2	4.2	0.0	0.7	0.6	0.5	0.1	1.1	4.2	1.4	0.6	0.7	0.5	0.9	8.1	3.3	18.0
4-Sep	15.1	24.0	16.1	5.8	Z	28.4	23.6	11.6	5.5	3.6	2.3	3.5	4.1	4.3	1.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	6.5	28.4
5-Sep	0.0	0.0	0.0	0.1	0.0	Z	0.0	3.4	15.3	12.1	4.5	2.9	2.3	2.6	2.6	2.1	1.4	0.8	0.1	0.0	0.0	0.1	0.4	5.7	2.5	15.3
6-Sep	Z	0.3	0.4	0.6	0.1	0.4	0.3	1.3	2.1	4.3	6.4	7.4	8.1	2.4	1.3	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	8.1
7-Sep	0.2	Z	0.0	0.0	0.4	1.5	2.0	3.5	3.8	9.8	2.6	0.4	1.3	2.0	1.2	0.5	0.4	0.3	0.2	0.0	0.0	0.0	0.0	0.3	1.3	9.8
8-Sep	6.0	5.8	Z	0.0	0.0	0.6	2.3	2.5	2.7	6.2	8.9	C	C	C	C	C	0.0	0.1	0.0	0.0	0.0	0.2	0.3	0.6	2.0	8.9
9-Sep	0.8	1.7	3.3	Z	7.7	5.4	6.0	7.0	5.6	3.4	1.5	1.0	0.7	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.9	7.7
10-Sep	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
11-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.3	1.2	0.1	0.0	0.1	0.3	0.0	0.1	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.2
12-Sep	Z	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	1.3	0.3	0.2	2.7
13-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.4	0.9	0.9	0.8	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.0	0.0	0.3	3.0	0.5	0.4	3.0
14-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.2	1.9	0.6	1.1	2.5	0.7	0.3	0.9	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.5
15-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.1	1.3	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.4	0.0	0.0	0.0	0.0	0.1	1.4	0.2	1.4
16-Sep	0.2	0.0	0.0	0.0	Z	0.1	0.4	2.3	8.5	16.6	2.6	3.2	1.7	1.3	1.2	0.6	0.4	0.5	0.1	0.0	0.0	0.0	0.0	0.0	1.7	16.6
17-Sep	0.0	0.0	0.0	0.0	0.5	Z	34.9	68.5	55.4	12.1	4.1	3.1	2.1	3.4	3.0	2.2	3.6	2.1	0.7	0.1	0.9	4.0	6.6	6.7	9.3	68.5
18-Sep	Z	0.9	0.0	0.0	0.0	0.6	14.9	15.0	14.4	25.4	24.4	14.1	5.2	3.2	1.0	1.1	0.3	0.4	0.0	0.0	0.0	0.0	0.8	0.4	5.3	25.4
19-Sep	1.1	Z	8.9	5.5	4.6	4.7	4.7	8.3	11.6	9.9	4.3	2.3	1.2	0.0	0.5	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	11.6
20-Sep	0.0	0.0	Z	0.1	0.0	0.0	0.9	4.8	2.9	6.3	5.1	1.9	0.2	0.0	0.0	0.0	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	1.0	6.3
21-Sep	0.0	0.0	0.0	Z	1.5	0.4	0.6	7.8	6.2	6.8	M	3.2	3.8	2.5	1.8	2.3	6.2	3.3	0.9	0.9	4.1	10.8	13.2	1.5	3.5	13.2
22-Sep	0.0	0.0	0.0	0.0	Z	1.3	3.9	18.5	5.4	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	18.5
23-Sep	0.0	0.0	0.1	0.1	1.2	Z	11.2	11.8	15.0	30.5	28.8	16.9	4.4	2.9	4.3	3.2	1.5	0.5	0.1	0.1	0.1	0.1	0.1	0.0	5.8	30.5
24-Sep	Z	0.1	0.0	0.0	0.0	0.1	1.5	1.2	2.7	1.5	1.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.6	4.7	3.5	0.8	4.7
25-Sep	1.7	Z	0.1	5.3	37.8	46.2	20.4	27.5	17.2	14.0	2.3	2.7	0.2	0.2	0.4	0.8	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	7.7	46.2
26-Sep	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
27-Sep	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	0.0	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-Sep	0.0	0.0	0.0	0.0	Z	0.6	1.0	5.8	3.9	3.2	2.2	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	5.8
29-Sep	0.0	0.0	0.0	0.0	0.2	Z	0.0	0.6	0.9	0.7	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	0.9
30-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.3
	1.0	1.3	1.2	0.7	2.2	3.8	4.8	7.7	6.7	6.1	3.9	2.4	1.4	0.9	0.7	0.5	0.6	0.5	0.1	0.1	0.2	0.7	1.1	1.0	Diurnal Average	
	15.1	24.0	16.1	5.8	37.8	46.2	34.9	68.5	55.4	30.5	28.8	16.9	8.1	4.3	4.3	3.2	6.2	4.2	1.4	0.9	4.1	10.8	13.2	8.1	Diurnal Maximum	

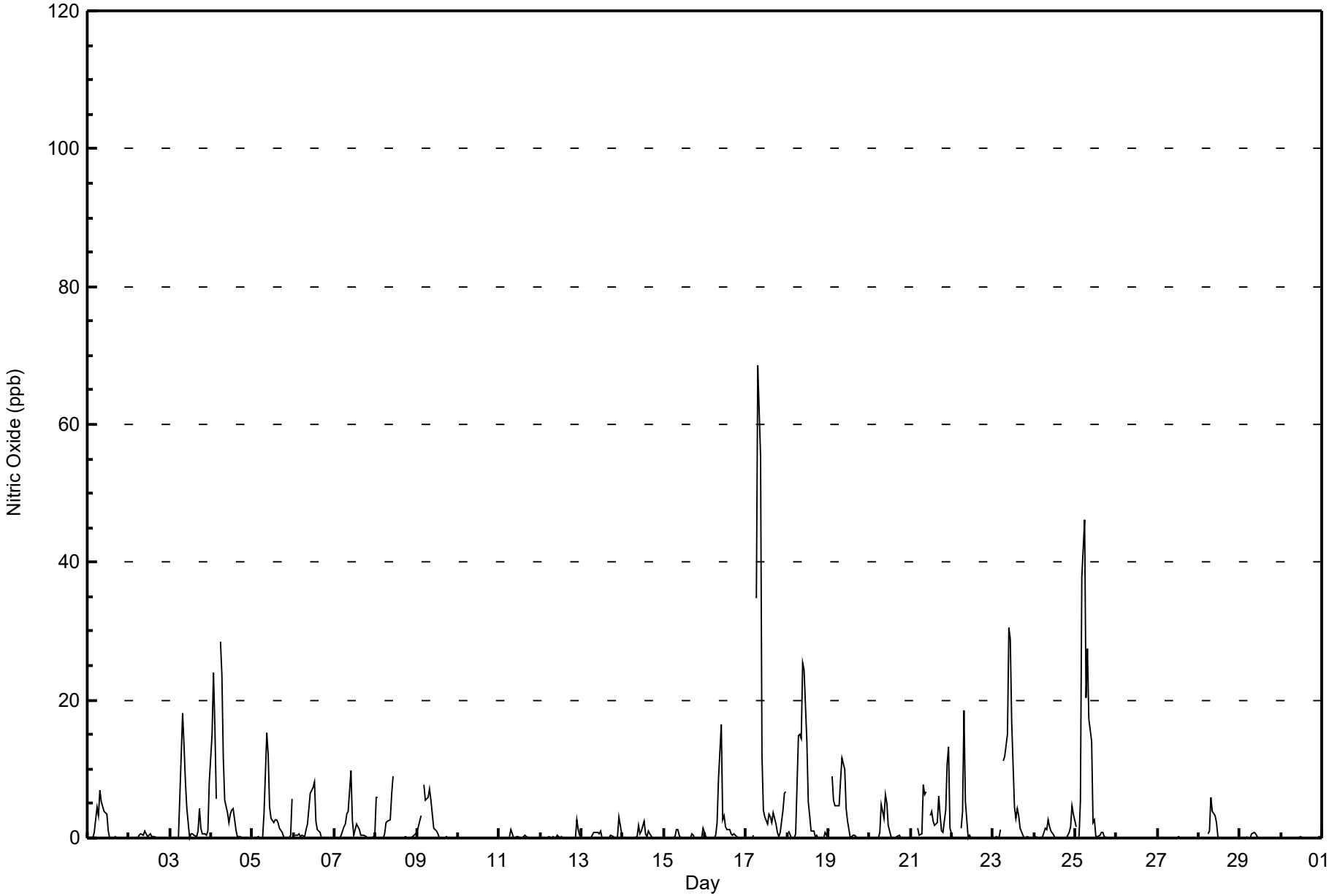
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Fort McKay - Bertha Ganter - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	671	98.10	98.10
21 - 40	10	1.46	99.56
11 - 80	3	0.44	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Fort McKay - Bertha Ganter - September 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	73	20	3	2	1	5	29	79	86	65	59	35	48	74	49	41	669
21 - 40	3	0	1	0	0	0	2	0	0	0	0	0	0	0	2	2	10
11 - 80	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	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	76	20	5	2	1	5	31	79	86	65	59	35	48	75	51	44	682

Total Number of Valid Hours: 682

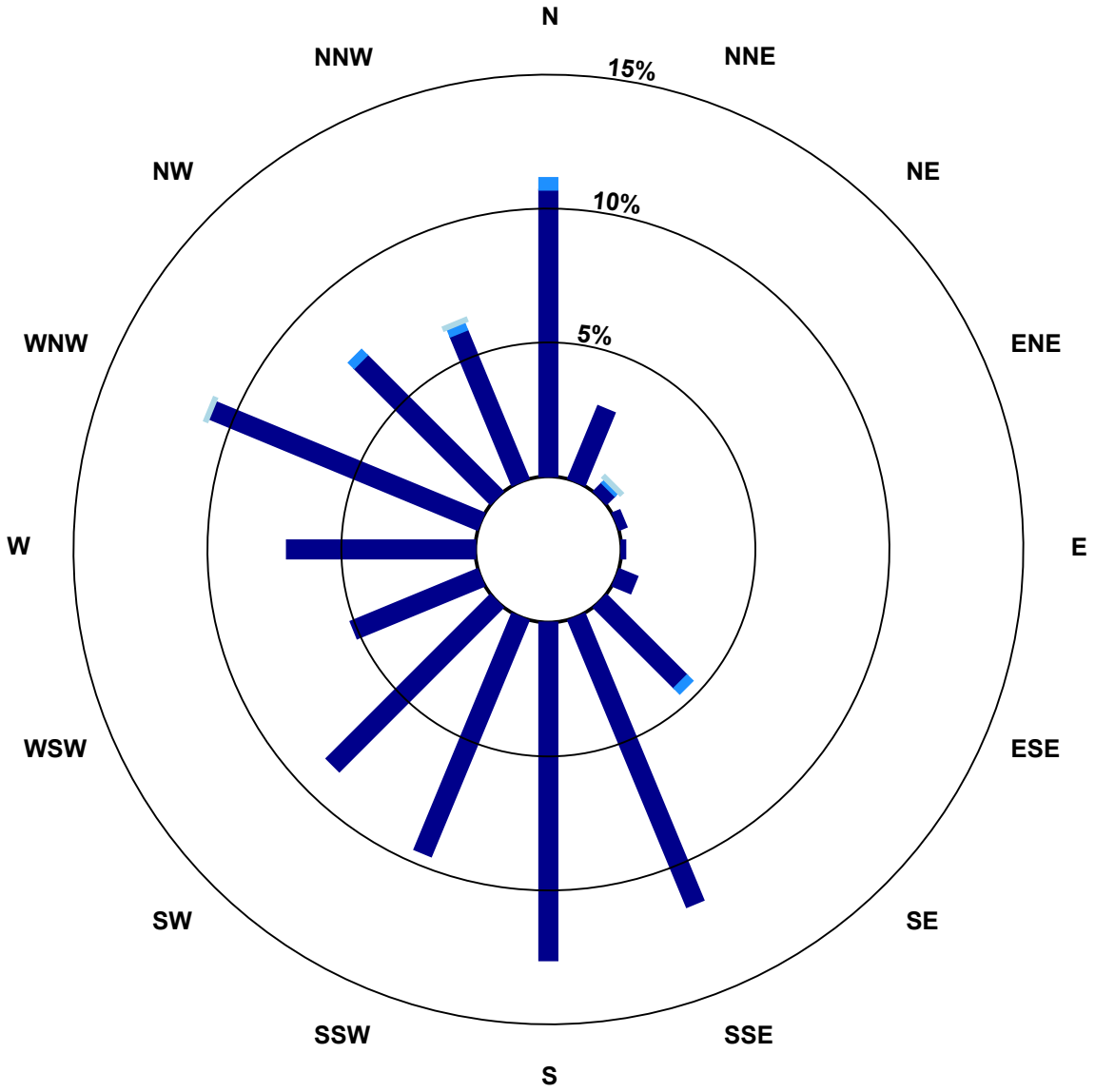
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

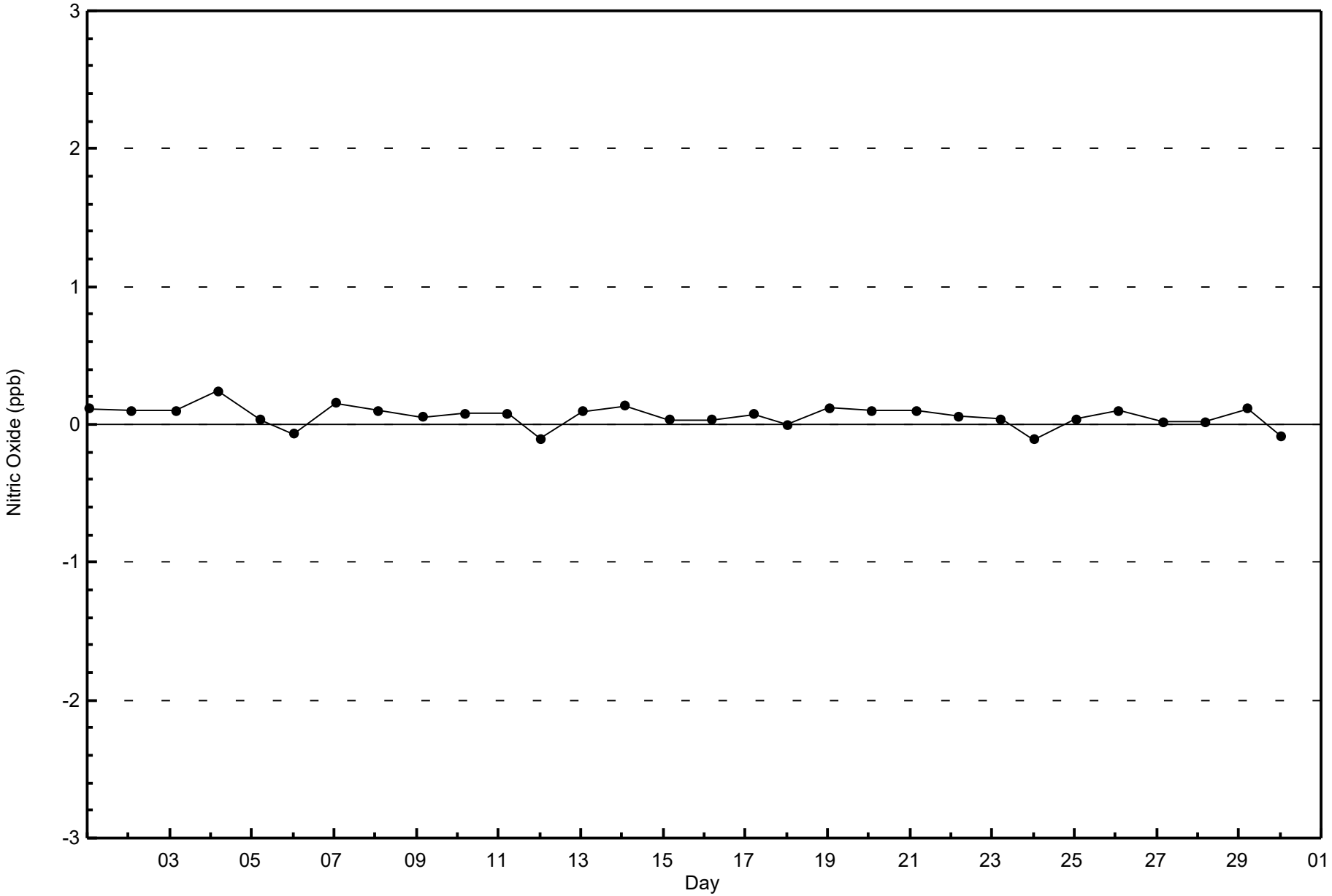
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Fort McKay - Bertha Ganter - September 2026

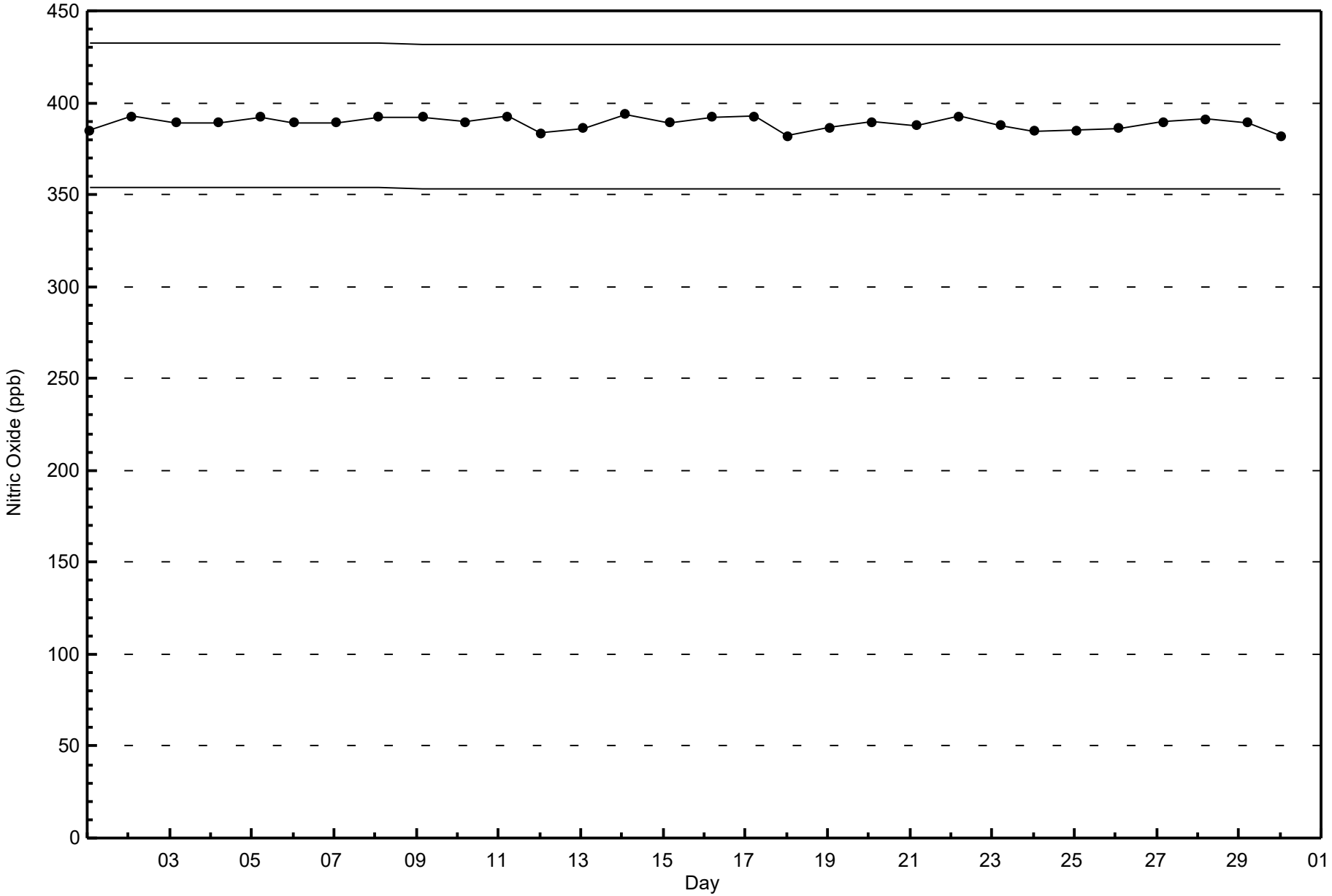


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Fort McKay - Bertha Ganter - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Fort McKay - Bertha Ganter - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 29.5 ppb on Sep 21 21:00
Maximum Daily Average: 15.2 ppb on Sep 21

Minimum Value: 0.0 ppb on Sep 10 00:00
Minimum Daily Average: 0.4 ppb on Sep 10
Maximum Diurnal Average: 6.3 ppb at hour 22
Minimum Diurnal Average: 2.3 ppb at hour 14
Monthly Average: 4.44 ppb
Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.8 Median = 3.2 Q_3 = 6.7 P_{90} = 10.1 P_{99} = 22.3

Hours in Service:	720
Hours of Data:	684
Hours of Missing Data:	36
Hours of Calibration:	35
Percent Operational Time:	99.9

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-Sep	3.0	Z	1.2	0.7	3.1	5.7	5.2	5.9	7.8	6.9	5.9	6.4	3.2	1.0	1.3	1.6	2.5	2.8	3.4	4.0	2.1	2.1	2.0	1.9	3.5	7.8
2-Sep	2.9	1.5	Z	1.0	1.2	1.1	1.2	0.9	1.3	2.6	2.3	1.8	2.2	1.3	1.5	1.0	0.8	0.4	0.3	0.6	0.5	0.1	0.1	0.4	1.2	2.9
3-Sep	0.5	0.4	0.5	Z	1.8	3.1	9.0	12.1	10.5	8.9	7.0	0.9	1.8	1.9	1.8	1.4	2.7	7.6	8.2	7.2	9.1	9.1	8.6	12.0	5.5	12.1
4-Sep	11.7	11.8	12.0	10.3	Z	8.5	10.0	10.1	8.8	5.8	4.5	4.3	5.5	5.7	3.1	1.8	2.6	3.9	4.9	4.9	1.2	0.8	1.1	5.1	6.0	12.0
5-Sep	3.6	0.2	1.4	12.2	4.0	Z	0.6	4.6	12.0	10.9	6.2	4.6	4.2	5.4	5.6	5.2	4.7	4.5	4.3	4.8	4.3	5.6	5.5	9.2	5.4	12.2
6-Sep	Z	4.1	2.5	2.1	1.6	1.2	1.3	2.2	2.7	4.1	5.4	6.1	6.8	4.8	3.0	2.6	1.1	1.6	2.2	3.3	4.3	4.0	3.5	6.4	3.3	6.8
7-Sep	10.6	Z	7.1	5.9	5.1	3.4	2.3	4.2	5.6	6.7	2.8	1.2	2.5	4.9	4.2	2.8	3.0	4.7	7.2	9.9	10.0	7.0	7.8	7.3	5.5	10.6
8-Sep	8.0	7.1	Z	1.1	1.1	2.0	1.6	1.5	2.6	6.6	9.2	C	C	C	C	C	0.8	3.6	5.0	5.4	5.5	6.1	7.9	7.0	4.6	9.2
9-Sep	6.8	7.4	7.1	Z	6.3	8.5	7.5	7.2	6.3	3.9	2.1	2.2	1.6	0.4	0.2	0.3	1.3	4.7	2.7	0.7	3.7	4.6	0.3	0.0	3.7	8.5
10-Sep	0.0	0.0	0.0	0.0	Z	0.9	0.8	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.0	0.0	0.1	0.0	4.0	0.7	1.5	0.0	0.3	0.4	4.0
11-Sep	0.2	1.1	2.6	2.1	4.6	Z	4.5	4.5	0.6	0.2	0.8	1.0	0.4	0.4	0.8	1.8	2.3	1.5	1.9	4.3	6.7	6.1	0.9	0.2	2.2	6.7
12-Sep	Z	0.3	0.2	0.1	0.3	0.9	0.7	0.6	0.1	0.2	0.4	0.1	0.6	0.0	0.1	0.3	0.5	0.8	2.3	8.6	10.3	18.7	17.9	14.1	3.4	18.7
13-Sep	3.5	Z	8.4	12.4	10.3	4.1	4.4	2.7	1.7	1.5	1.7	2.3	0.6	0.3	0.4	0.2	0.5	4.7	5.3	5.8	7.4	10.0	11.5	6.7	4.6	12.4
14-Sep	3.7	3.2	Z	7.4	6.2	1.3	3.8	1.0	1.1	5.1	2.5	2.3	5.8	2.7	1.3	3.0	2.8	2.2	0.1	1.3	3.3	4.9	1.7	0.1	2.9	7.4
15-Sep	0.0	0.0	0.0	Z	0.7	0.9	0.9	2.0	1.2	0.4	0.1	0.0	0.5	0.4	0.2	0.6	3.3	3.5	1.9	1.6	1.0	0.5	1.2	9.9	1.3	9.9
16-Sep	6.7	3.5	2.8	0.3	Z	1.0	1.3	1.9	5.0	10.2	5.4	5.1	3.6	2.3	2.0	2.0	2.3	5.8	6.5	6.1	5.8	4.1	1.4	1.0	3.7	10.2
17-Sep	0.7	0.6	0.9	0.7	2.0	Z	5.8	9.2	11.8	7.3	5.1	5.8	7.0	7.2	7.9	5.6	8.5	7.7	8.5	7.1	7.8	8.1	7.7	6.3	6.1	11.8
18-Sep	Z	2.8	0.8	0.9	0.9	2.0	11.0	10.2	12.4	18.8	18.0	13.7	7.7	5.7	2.8	4.6	4.4	4.4	4.1	3.2	2.8	2.2	3.2	3.4	6.1	18.8
19-Sep	5.7	Z	7.5	6.5	6.5	5.0	4.4	3.9	8.9	8.2	5.9	4.6	3.4	1.0	2.5	3.2	3.3	2.4	4.6	6.0	3.4	6.3	3.8	3.8	4.8	8.9
20-Sep	4.8	5.8	Z	7.3	10.4	12.2	9.8	7.2	5.2	8.6	7.6	4.4	1.1	0.0	0.4	0.8	3.1	9.6	11.8	13.0	9.0	5.7	4.7	5.4	6.4	13.0
21-Sep	6.1	9.1	8.4	Z	12.3	12.7	6.1	6.9	7.8	9.1	M	8.8	10.0	10.1	10.7	11.6	24.7	26.2	26.9	27.0	29.5	28.0	24.0	18.3	15.2	29.5
22-Sep	5.4	2.9	2.0	1.8	Z	3.5	4.7	6.4	3.9	0.7	1.4	0.8	0.6	0.0	0.1	0.0	0.0	0.8	1.1	1.9	1.2	1.1	0.6	1.0	1.8	6.4
23-Sep	1.4	3.0	6.1	6.2	7.5	Z	6.1	6.3	7.7	11.4	11.4	11.1	9.2	8.8	12.9	12.1	13.2	8.3	8.1	9.0	12.2	6.2	6.0	4.6	8.2	13.2
24-Sep	Z	4.4	2.0	1.9	4.7	8.0	9.7	3.2	4.5	2.9	2.2	1.0	0.4	0.0	0.1	0.1	0.1	0.5	3.6	12.5	20.8	21.0	21.9	16.9	6.2	21.9
25-Sep	12.1	Z	9.8	12.3	12.7	15.4	17.7	20.1	20.0	18.4	11.8	7.7	4.3	2.8	5.3	8.2	6.1	7.5	6.9	5.0	6.7	8.4	6.8	6.8	10.1	20.1
26-Sep	7.3	9.2	Z	3.8	7.1	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	0.0	0.0	0.0	0.0	1.2	9.2
27-Sep	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.5	0.2	0.0	0.0	0.1	0.4	2.7	7.2	7.3	8.8	10.8	6.3	1.9	10.8
28-Sep	4.7	2.7	2.2	2.9	Z	12.2	12.0	10.2	6.6	4.9	3.6	1.0	0.6	0.2	0.7	2.7	1.7	2.8	5.6	3.8	4.3	6.7	7.5	7.1	4.6	12.2
29-Sep	4.7	5.2	8.0	8.0	10.9	Z	6.8	8.2	7.0	4.6	1.3	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.2	2.7	0.1	0.1	0.1	0.1	3.0	10.9
30-Sep	Z	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.4	0.8	0.8	0.8	0.6	0.0	0.0	0.2	0.3	0.1	0.2	0.2	2.0	6.7	5.9	0.9	6.7
	4.6	3.5	3.7	4.3	4.9	4.6	5.0	5.1	5.4	5.6	4.3	3.4	2.9	2.3	2.4	2.5	3.2	4.1	4.7	5.7	6.0	6.3	5.8	5.6	Diurnal Average	
	12.1	11.8	12.0	12.4	12.7	15.4	17.7	20.1	20.0	18.8	18.0	13.7	10.0	10.1	12.9	12.1	24.7	26.2	26.9	27.0	29.5	28.0	24.0	18.3	Diurnal Maximum	

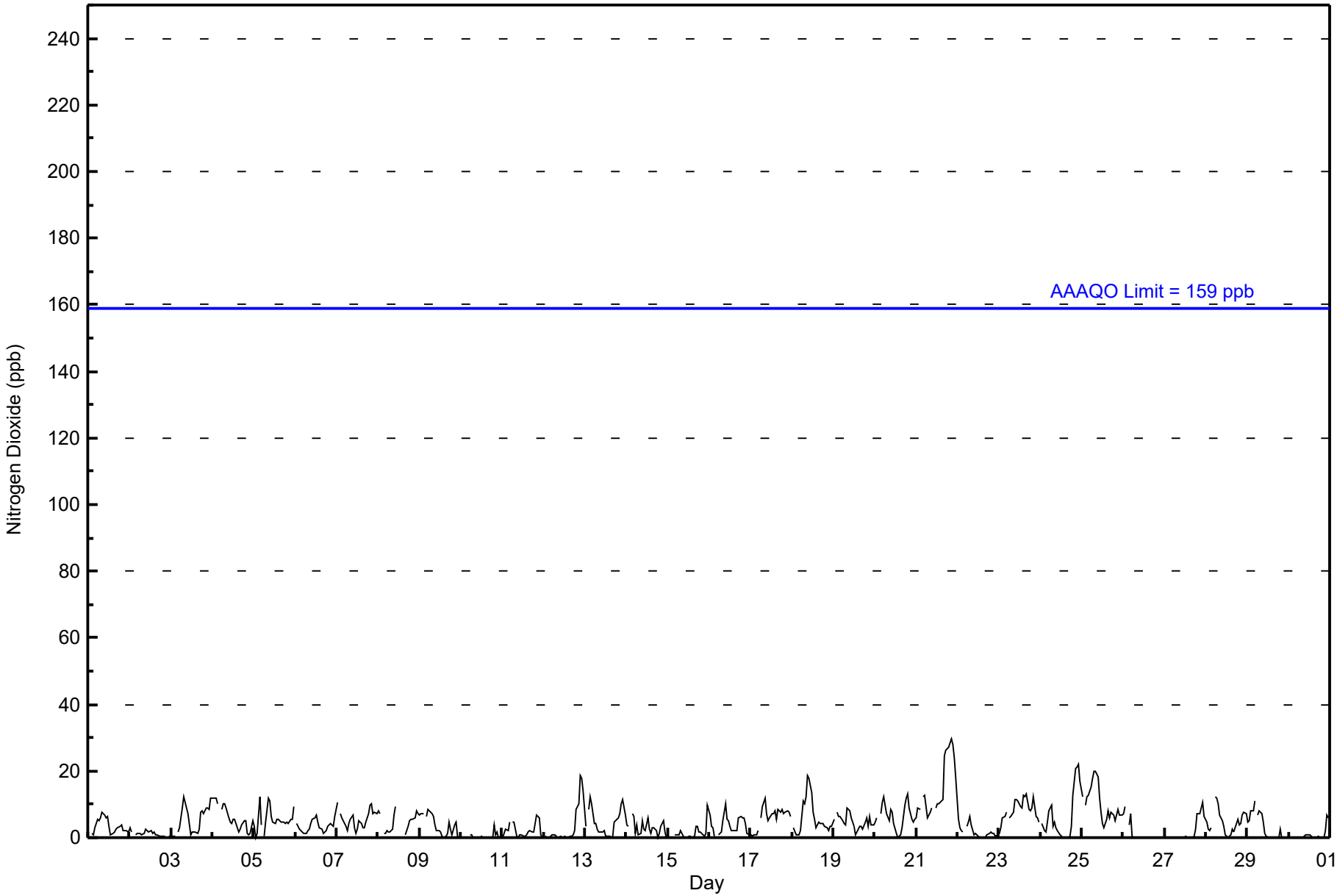
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Fort McKay - Bertha Ganter - September 2026



Nitrogen Dioxide (NO_2) - ppb
Fort McKay - Bertha Ganter - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	674	98.54	98.54
21 - 40	10	1.46	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Fort McKay - Bertha Ganter - September 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	76	20	5	2	1	5	31	79	84	64	59	35	46	74	50	41	672
21 - 40	0	0	0	0	0	0	0	0	2	1	0	0	2	1	1	3	10
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	76	20	5	2	1	5	31	79	86	65	59	35	48	75	51	44	682

Total Number of Valid Hours: 682

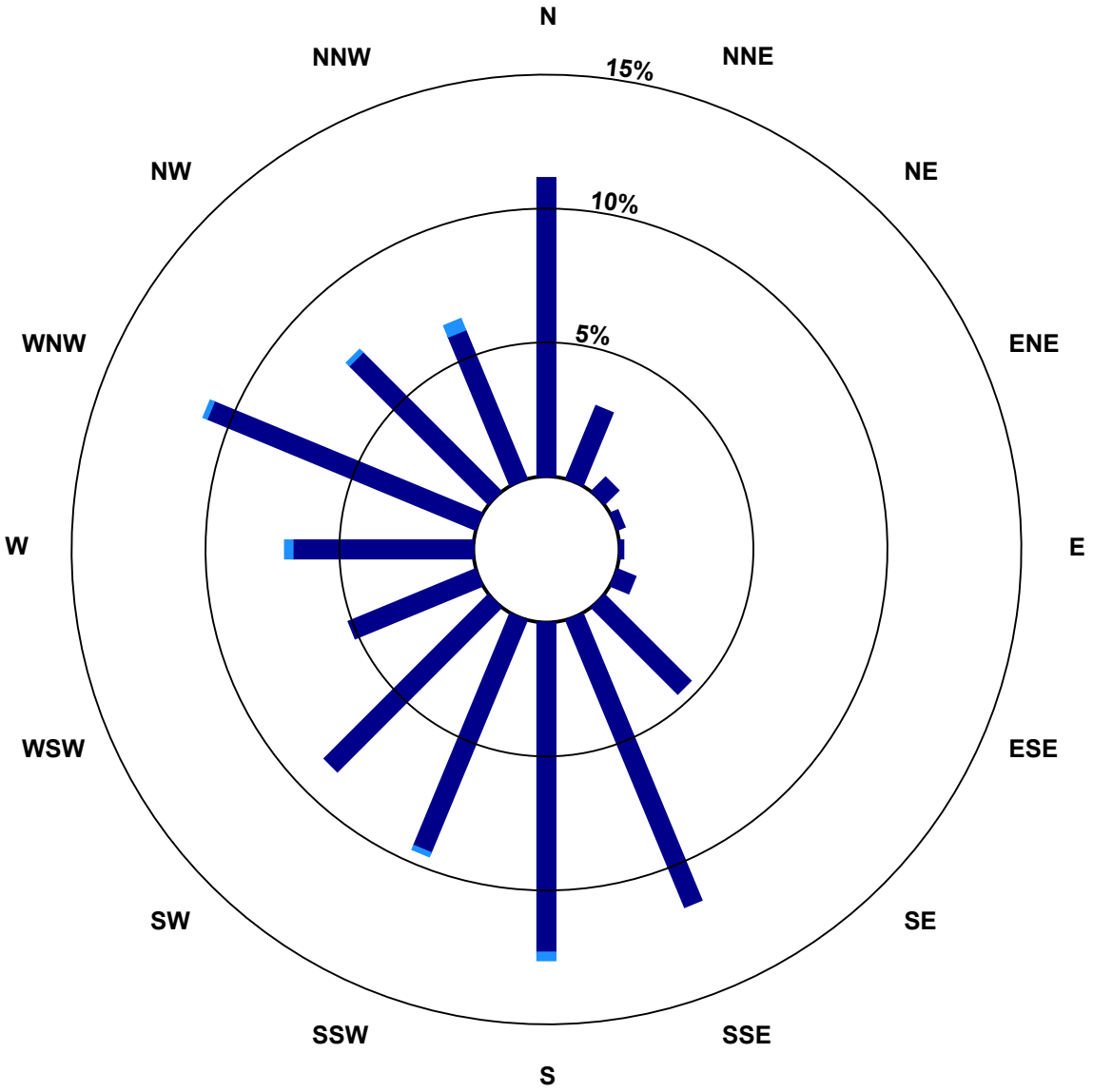
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

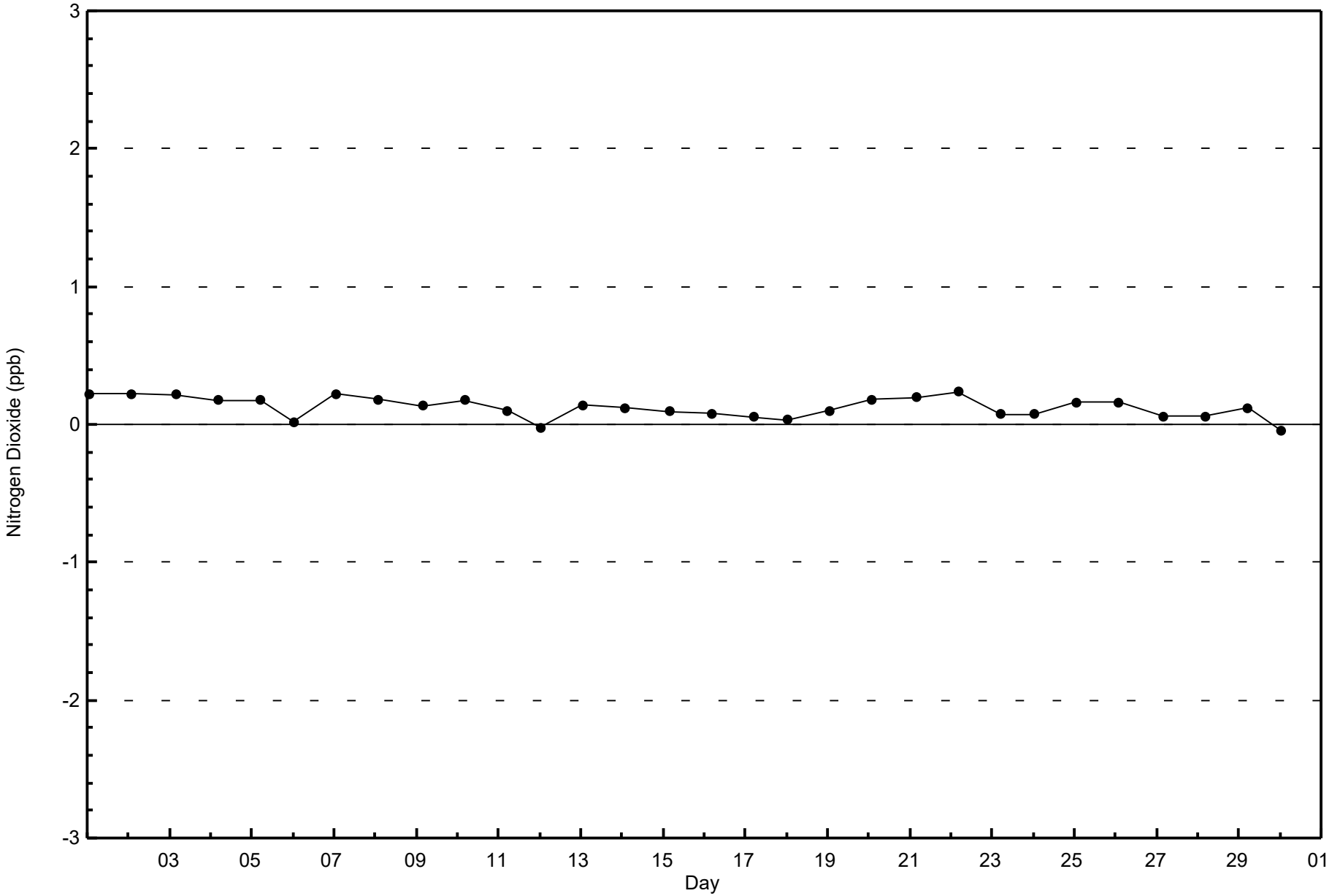
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Fort McKay - Bertha Ganter - September 2026

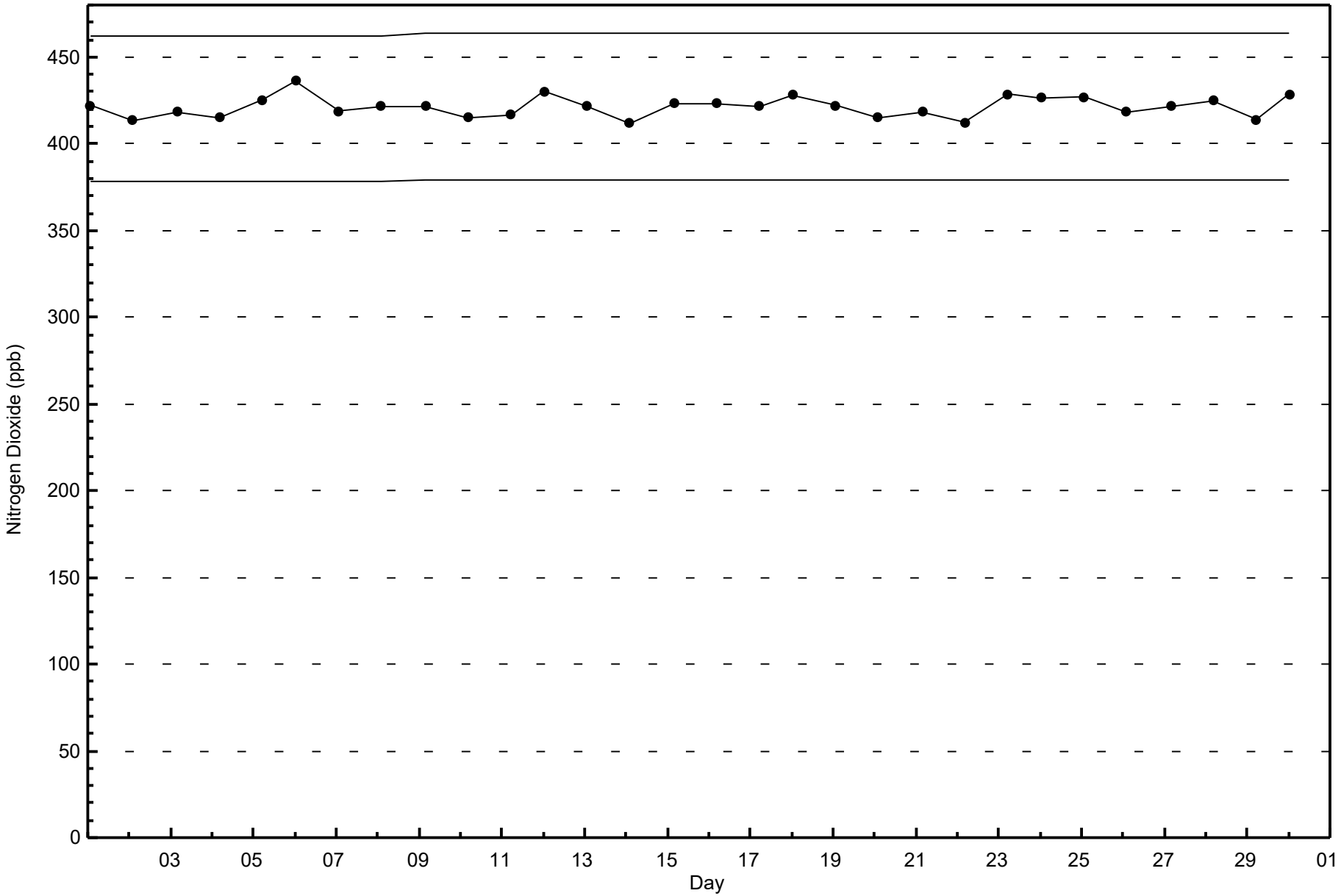


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Fort McKay - Bertha Ganter - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Fort McKay - Bertha Ganter - September 2026

Maximum Value: 77.7 ppb on Sep 17 08:00

Maximum Daily Average: 18.7 ppb on Sep 21

Minimum Value: 0.0 ppb on Sep 10 00:00

Minimum Daily Average: 0.4 ppb on Sep 10

Maximum Diurnal Average: 12.8 ppb at hour 8

Minimum Diurnal Average: 3.1 ppb at hour 15

Monthly Average: 6.52 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.8 Median = 3.8 Q_3 = 8.5 P_{90} = 14.4 P_{99} = 42.0

Hours in Service:	720
Hours of Data:	684
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-Sep	3.0	Z	1.2	0.7	3.9	10.2	8.5	12.8	13.0	10.8	9.6	9.8	4.2	1.0	1.4	1.7	2.7	2.9	3.4	4.0	2.1	2.1	2.0	1.9	4.9	13.0
2-Sep	2.9	1.5	Z	1.0	1.2	1.1	1.7	1.5	1.7	3.6	2.8	2.1	2.7	1.5	1.8	1.2	0.8	0.4	0.3	0.6	0.5	0.1	0.1	0.4	1.4	3.6
3-Sep	0.5	0.4	0.5	Z	1.8	3.1	21.0	30.1	23.8	17.1	11.2	0.9	2.5	2.5	2.3	1.5	3.8	11.8	9.6	7.8	9.8	9.6	9.5	20.1	8.7	30.1
4-Sep	26.8	35.8	28.1	16.1	Z	36.9	33.6	21.7	14.3	9.4	6.8	7.8	9.6	10.0	4.3	2.0	2.8	4.0	4.9	4.9	1.2	0.8	1.1	5.1	12.5	36.9
5-Sep	3.6	0.2	1.4	12.3	4.0	Z	0.6	8.0	27.3	23.0	10.7	7.5	6.5	8.0	8.2	7.3	6.1	5.3	4.4	4.8	4.3	5.7	5.9	14.9	7.8	27.3
6-Sep	Z	4.4	2.9	2.7	1.7	1.6	1.6	3.5	4.8	8.4	11.8	13.5	14.9	7.2	4.3	3.4	1.2	1.6	2.2	3.3	4.3	4.0	3.5	6.4	4.9	14.9
7-Sep	10.8	Z	7.1	5.9	5.5	4.9	4.3	7.7	9.4	16.5	5.4	1.6	3.8	6.9	5.4	3.3	3.4	5.0	7.4	9.9	10.0	7.0	7.8	7.6	6.8	16.5
8-Sep	14.0	12.9	Z	1.1	1.1	2.6	3.9	4.0	5.3	12.8	18.1	C	C	C	C	C	0.8	3.7	5.0	5.4	5.5	6.3	8.2	7.6	6.6	18.1
9-Sep	7.6	9.1	10.4	Z	14.0	13.9	13.5	14.2	11.9	7.3	3.6	3.2	2.3	0.4	0.2	0.3	1.3	4.9	2.7	0.7	3.7	4.6	0.3	0.0	5.7	14.2
10-Sep	0.0	0.0	0.0	0.0	Z	0.9	0.8	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.0	0.0	0.1	0.0	4.0	0.7	1.5	0.0	0.3	0.4	4.0
11-Sep	0.2	1.1	2.6	2.1	4.6	Z	4.8	5.7	0.7	0.2	0.9	1.3	0.4	0.5	0.9	2.1	2.4	1.5	1.9	4.3	6.7	6.1	0.9	0.2	2.3	6.7
12-Sep	Z	0.3	0.2	0.1	0.3	1.1	0.8	0.7	0.1	0.2	0.7	0.1	0.7	0.0	0.1	0.3	0.5	0.8	2.3	8.6	10.3	21.4	19.2	14.4	3.6	21.4
13-Sep	3.5	Z	8.4	12.4	10.3	4.1	4.8	3.6	2.6	2.3	2.4	3.3	0.6	0.3	0.4	0.2	0.5	5.1	5.4	5.8	7.4	10.3	14.5	7.2	5.0	14.5
14-Sep	3.7	3.2	Z	7.4	6.2	1.3	3.8	1.1	1.3	7.0	3.1	3.4	8.3	3.4	1.6	3.9	3.4	2.3	0.1	1.3	3.3	4.9	1.7	0.1	3.3	8.3
15-Sep	0.0	0.0	0.0	Z	0.7	0.9	1.0	3.3	2.5	0.8	0.1	0.0	0.5	0.4	0.2	0.6	3.8	3.9	1.9	1.6	1.0	0.5	1.3	11.3	1.6	11.3
16-Sep	6.9	3.5	2.8	0.3	Z	1.1	1.7	4.2	13.5	26.8	8.0	8.3	5.3	3.6	3.2	2.6	2.7	6.3	6.6	6.1	5.8	4.1	1.4	1.0	5.5	26.8
17-Sep	0.7	0.6	0.9	0.7	2.5	Z	40.7	77.7	67.2	19.4	9.2	8.9	9.1	10.6	10.9	7.8	12.1	9.8	9.2	7.2	8.7	12.1	14.3	13.0	15.4	77.7
18-Sep	Z	3.7	0.8	0.9	0.9	2.6	25.9	25.2	26.8	44.2	42.4	27.8	12.9	8.9	3.8	5.7	4.7	4.8	4.1	3.2	2.8	2.2	4.0	3.8	11.4	44.2
19-Sep	6.8	Z	16.4	12.0	11.1	9.7	9.1	12.2	20.5	18.1	10.2	6.9	4.6	1.0	3.0	3.6	3.6	2.4	4.6	6.0	3.4	6.3	3.8	3.8	7.8	20.5
20-Sep	4.8	5.8	Z	7.4	10.4	12.2	10.7	12.0	8.1	14.9	12.7	6.3	1.3	0.0	0.4	0.8	3.3	10.0	11.8	13.0	9.0	5.7	4.7	5.4	7.4	14.9
21-Sep	6.1	9.1	8.4	Z	13.8	13.1	6.7	14.7	14.0	15.9	M	12.0	13.8	12.6	12.5	13.9	30.9	29.5	27.8	27.9	33.6	38.8	37.2	19.8	18.7	38.8
22-Sep	5.4	2.9	2.0	1.8	Z	4.8	8.6	24.9	9.3	0.8	1.7	0.9	0.6	0.0	0.1	0.0	0.0	0.8	1.1	1.9	1.2	1.1	0.6	1.0	3.1	24.9
23-Sep	1.4	3.0	6.2	6.3	8.7	Z	17.3	18.1	22.7	41.9	40.2	28.0	13.6	11.7	17.2	15.3	14.7	8.8	8.2	9.1	12.3	6.3	6.1	4.6	14.0	41.9
24-Sep	Z	4.5	2.0	1.9	4.7	8.1	11.2	4.4	7.2	4.4	3.3	1.4	0.4	0.0	0.1	0.1	0.1	0.5	3.6	12.5	21.6	22.6	26.6	20.4	7.0	26.6
25-Sep	13.8	Z	9.9	17.6	50.5	61.6	38.1	47.6	37.2	32.4	14.1	10.4	4.5	3.0	5.7	9.0	6.9	7.8	6.9	5.0	6.7	8.4	6.8	6.8	17.9	61.6
26-Sep	7.3	9.2	Z	3.8	7.1	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	0.0	0.0	0.0	0.0	1.2	9.2
27-Sep	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.6	0.2	0.0	0.0	0.1	0.4	2.7	7.2	7.3	8.8	10.8	6.3	1.9	10.8
28-Sep	4.7	2.7	2.2	2.9	Z	12.8	13.0	16.0	10.5	8.1	5.8	1.2	0.6	0.2	0.7	2.7	1.8	2.8	5.6	3.8	4.3	6.7	7.5	7.1	5.4	16.0
29-Sep	4.7	5.2	8.0	8.0	11.1	Z	6.8	8.8	7.9	5.3	1.5	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.2	2.7	0.1	0.1	0.1	0.1	3.1	11.1
30-Sep	Z	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.5	0.9	1.0	0.9	0.6	0.0	0.0	0.2	0.3	0.1	0.2	0.2	2.0	6.8	6.2	0.9	6.8
	5.6	4.8	4.9	5.0	7.0	8.4	9.8	12.8	12.1	11.7	8.2	5.8	4.3	3.3	3.1	3.1	3.8	4.6	4.8	5.8	6.3	7.0	6.9	6.6	Diurnal Average	
	26.8	35.8	28.1	17.6	50.5	61.6	40.7	77.7	67.2	44.2	42.4	28.0	14.9	12.6	17.2	15.3	30.9	29.5	27.8	27.9	33.6	38.8	37.2	20.4	Diurnal Maximum	

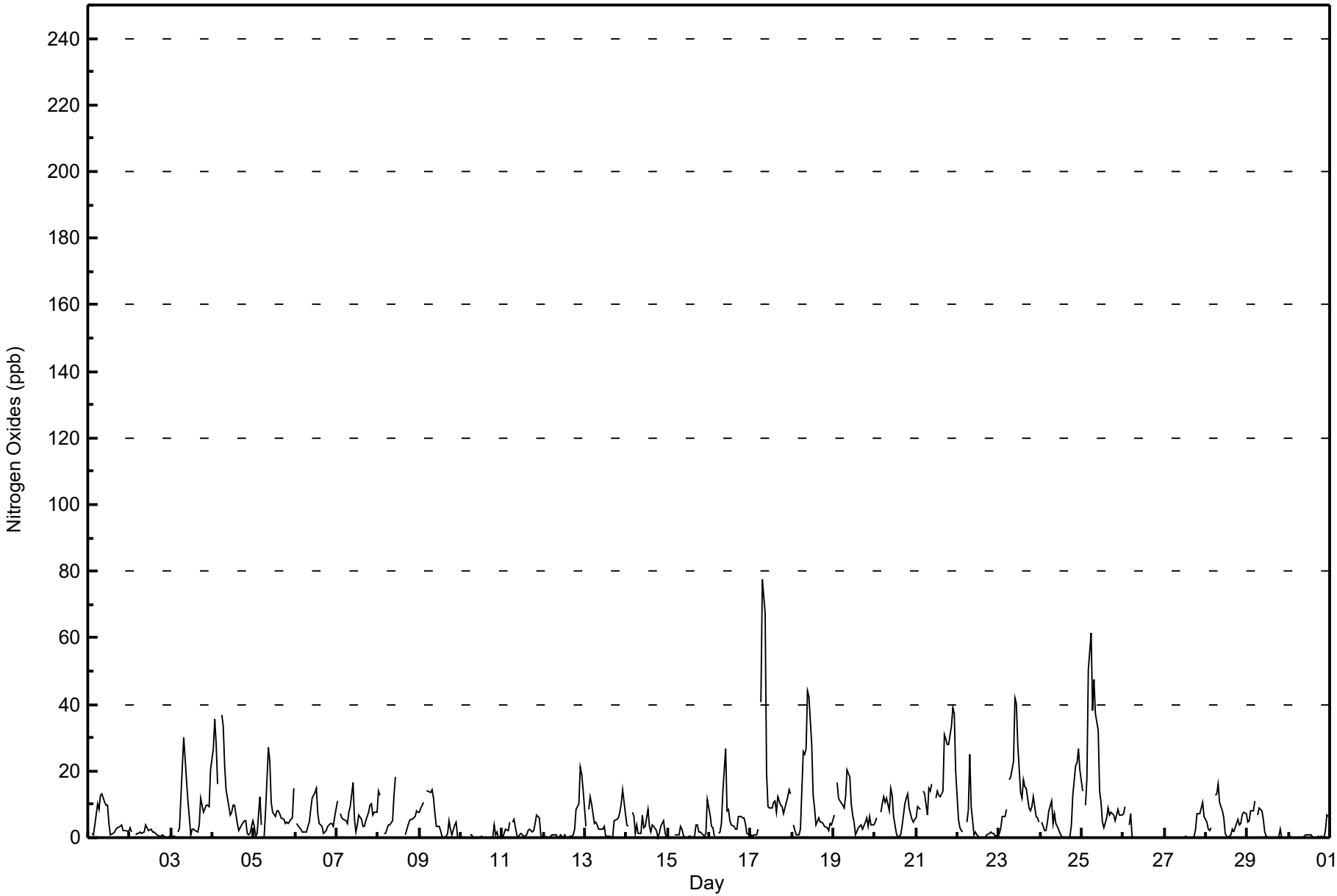
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Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Fort McKay - Bertha Ganter - September 2026



Nitrogen Oxides (NO_X) - ppb

Fort McKay - Bertha Ganter - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	641	93.71	93.71
21 - 40	34	4.97	98.68
11 - 80	9	1.32	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Fort McKay - Bertha Ganter - September 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	17	3	2	1	5	26	79	84	62	59	35	46	72	46	37	639
21 - 40	10	3	0	0	0	0	4	0	2	3	0	0	2	2	3	5	34
11 - 80	1	0	2	0	0	0	1	0	0	0	0	0	0	1	2	2	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	76	20	5	2	1	5	31	79	86	65	59	35	48	75	51	44	682

Total Number of Valid Hours: 682

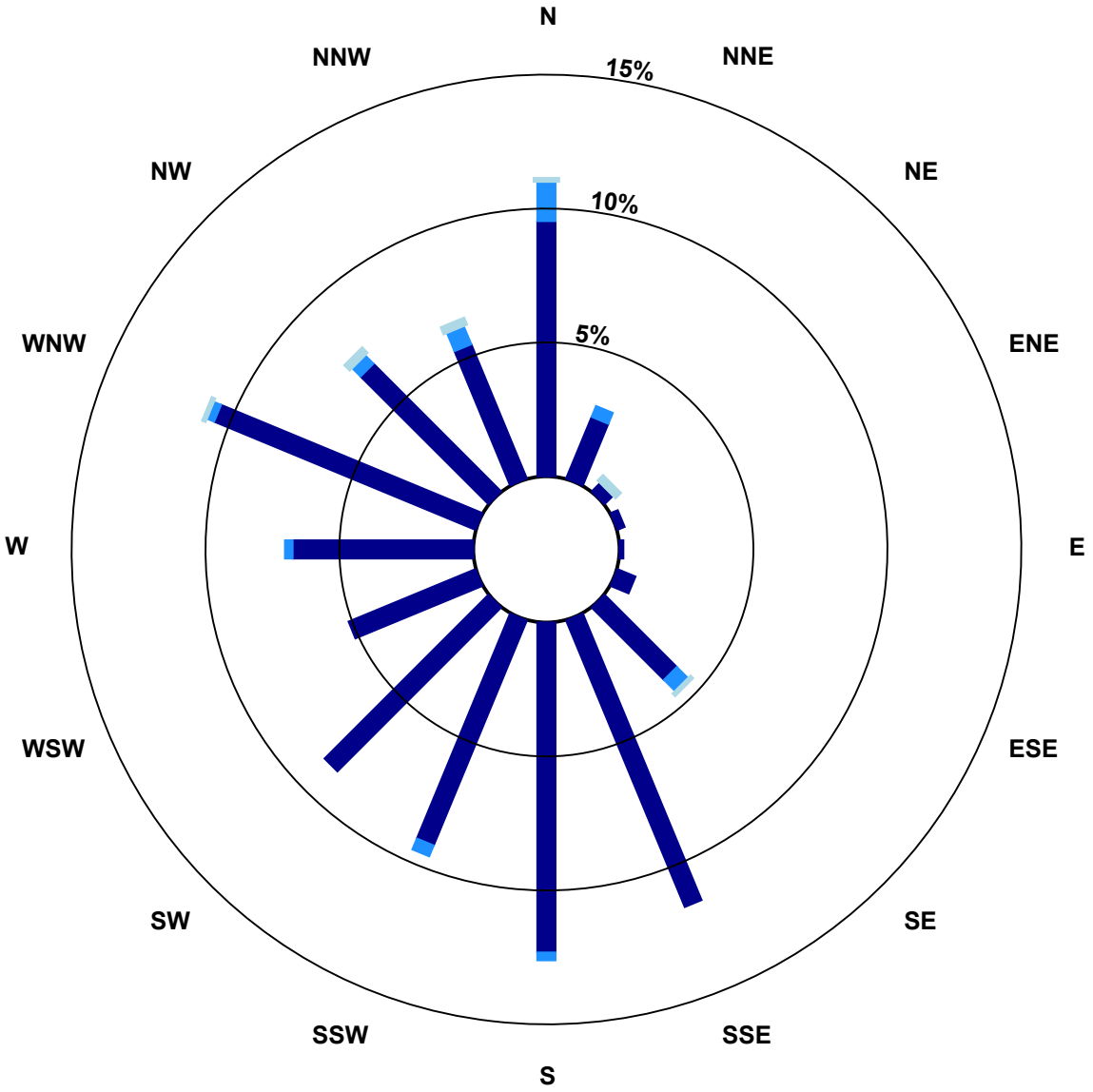
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

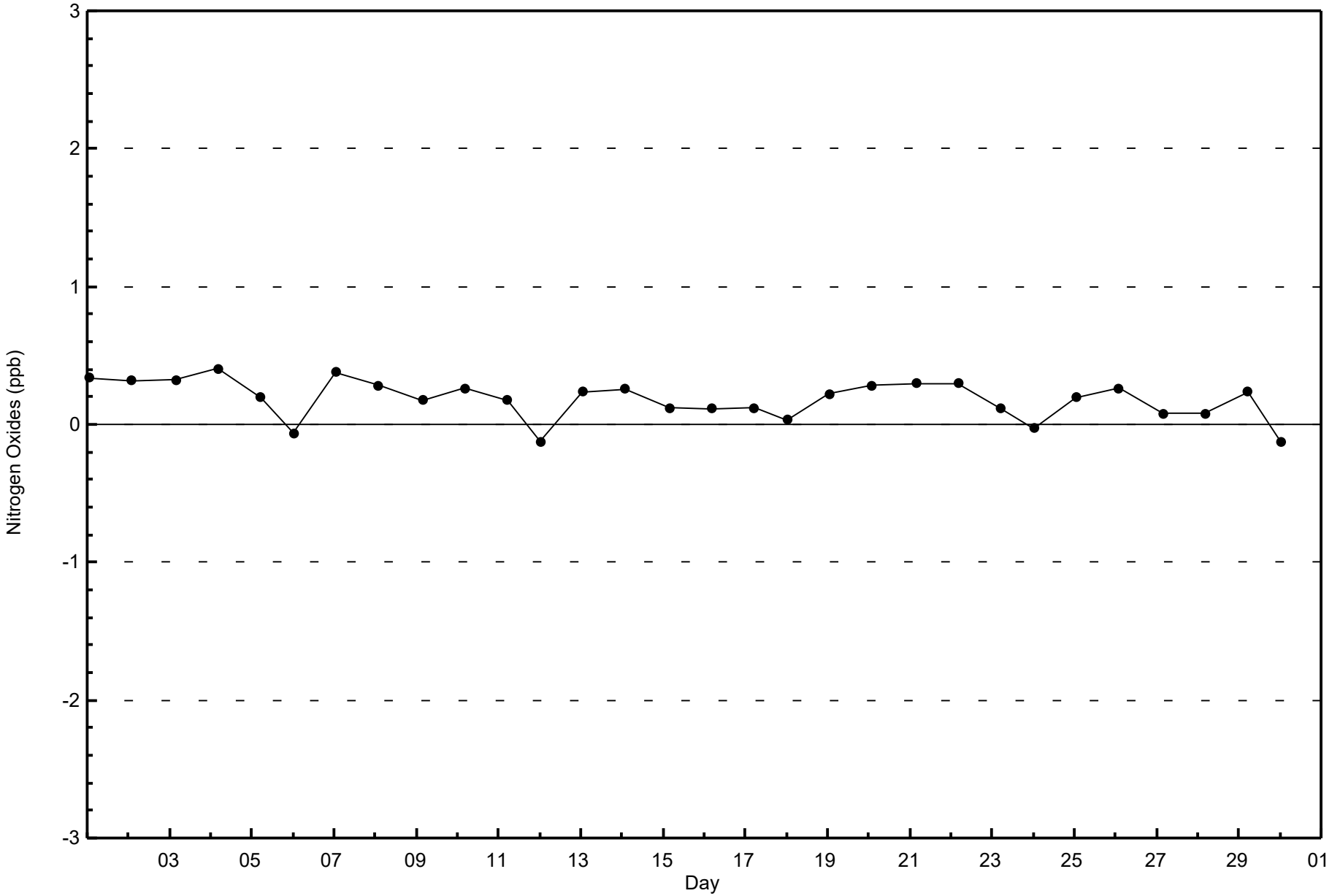
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Fort McKay - Bertha Ganter - September 2026

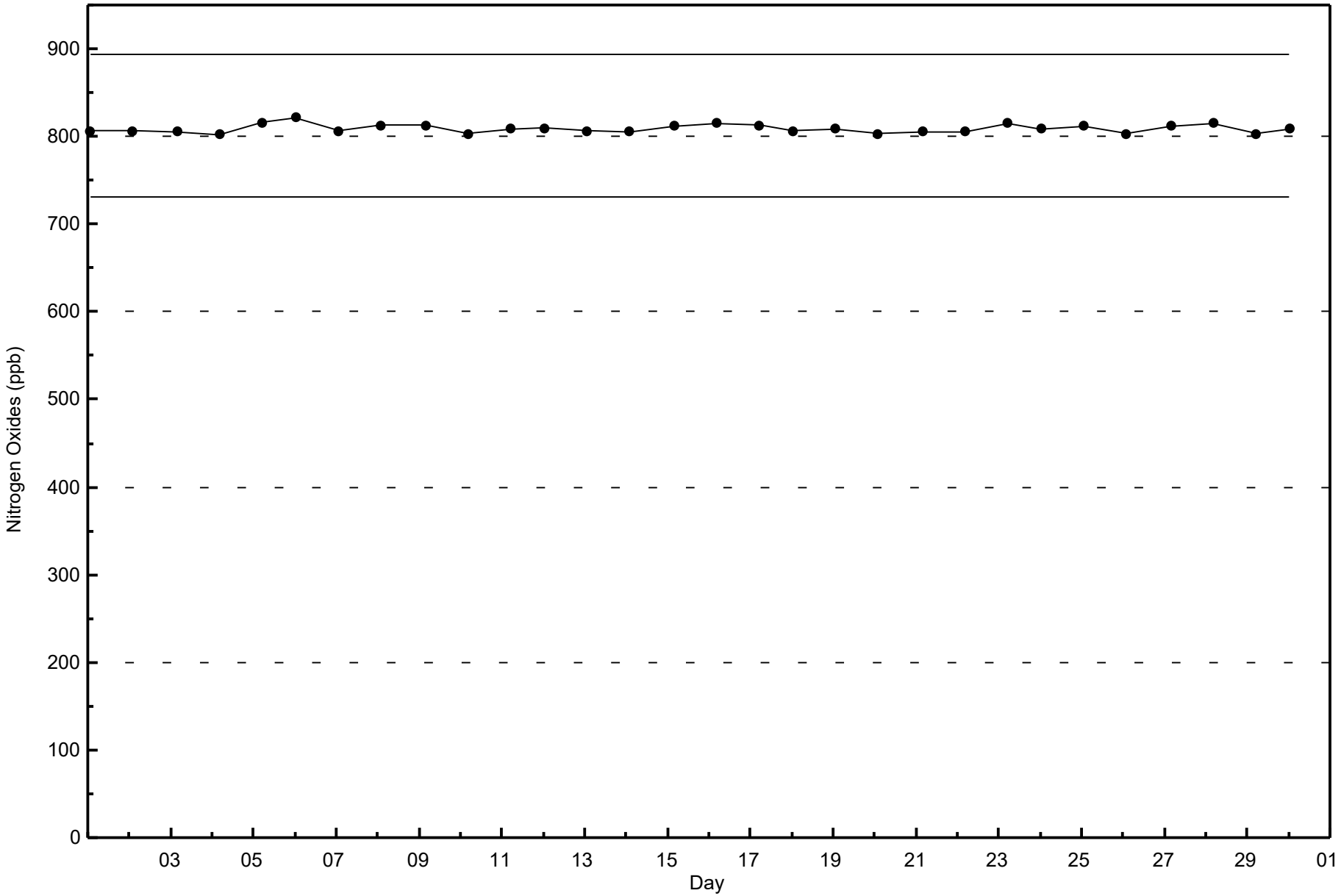


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Fort McKay - Bertha Ganter - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Fort McKay - Bertha Ganter - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 42.4 ppb on Sep 1 17:00 Maximum Daily Average: 25.6 ppb on Sep 2

Minimum Value: 1.3 ppb on Sep 19 05:00 Minimum Daily Average: 8.3 ppb on Sep 17
Maximum Diurnal Average: 28.1 ppb at hour 16 Minimum Diurnal Average: 7.7 ppb at hour 5
Monthly Average: 16.85 ppb Percentiles: P_1 = 1.4 P_{10} = 3.2 Q_1 = 7.7 Median = 16.4 Q_3 = 24.4 P_{90} = 30.8 P_{99} = 39.5

Hours in Service:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	33
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-Sep	2.6	3.3	2.5	2.1	1.9	Z	4.7	6.5	12.3	15.3	20.4	25.1	32.5	36.4	39.0	40.6	42.4	41.6	34.4	27.4	23.0	22.6	23.2	22.0	20.9	42.4
2-Sep	Z	17.9	16.7	11.8	6.6	5.0	4.7	8.4	17.7	25.8	31.6	34.8	37.7	37.9	37.7	37.3	37.3	36.2	34.1	32.3	32.2	32.2	30.8	23.2	25.6	37.9
3-Sep	19.3	Z	20.1	15.0	9.7	7.9	6.2	4.9	7.3	9.9	C	C	C	14.3	13.3	12.8	10.7	5.4	5.1	4.1	1.5	1.6	2.0	1.3	8.6	20.1
4-Sep	1.3	1.5	Z	2.4	1.4	1.5	1.3	1.9	3.9	5.5	6.7	7.0	7.0	8.1	13.5	17.1	17.6	15.5	12.7	12.3	14.6	15.6	15.0	11.7	8.5	17.6
5-Sep	13.4	17.0	16.8	Z	14.0	15.7	13.3	13.3	9.7	12.7	19.4	22.6	25.8	26.6	26.3	25.9	25.3	24.8	19.7	14.0	11.1	6.0	4.3	1.6	16.5	26.6
6-Sep	2.0	3.9	3.3	3.1	Z	3.3	2.9	2.8	4.3	5.1	5.0	5.4	9.1	19.2	23.2	26.4	28.2	23.0	16.4	16.0	13.3	14.0	12.0	9.0	10.9	28.2
7-Sep	4.7	5.1	5.2	3.2	2.3	Z	3.9	5.1	5.4	6.5	16.5	21.4	23.2	23.2	24.3	25.3	24.2	22.3	16.6	11.4	7.3	5.1	3.8	3.0	11.7	25.3
8-Sep	Z	2.6	3.7	5.0	4.5	3.0	2.8	5.3	10.0	12.0	16.1	24.0	27.8	29.4	29.1	29.5	29.8	29.5	25.1	16.6	9.5	4.1	3.2	2.6	14.1	29.8
9-Sep	2.4	Z	2.6	1.7	1.8	2.1	3.1	5.0	6.5	9.5	16.3	20.3	24.4	28.8	30.9	31.0	29.4	25.3	27.3	29.0	24.6	22.6	25.0	26.8	17.2	31.0
10-Sep	25.0	22.7	Z	27.0	24.8	23.2	21.4	20.2	20.6	20.5	18.3	14.7	14.1	14.9	19.4	18.6	17.8	14.0	13.2	14.1	18.5	18.2	20.5	19.6	19.2	27.0
11-Sep	18.7	17.3	15.9	Z	14.2	14.8	12.8	12.9	16.7	18.5	19.9	20.4	21.0	21.6	24.4	28.2	30.0	30.9	27.9	20.2	15.8	13.3	18.7	18.3	19.7	30.9
12-Sep	16.5	14.6	13.7	12.8	Z	8.1	7.6	9.5	11.8	13.7	19.7	23.6	26.8	29.3	31.0	31.7	30.6	27.9	22.7	12.4	8.0	3.5	3.5	4.9	16.7	31.7
13-Sep	15.7	18.0	8.9	5.9	7.8	Z	12.9	14.2	17.5	20.9	22.2	24.4	30.8	33.1	34.7	36.1	34.5	21.6	13.7	12.1	8.0	4.5	2.0	7.5	17.7	36.1
14-Sep	Z	23.5	17.4	12.7	11.6	17.4	15.1	17.7	17.6	16.2	18.7	18.8	20.8	21.8	22.0	21.5	21.3	20.3	19.0	14.1	6.6	7.6	10.1	9.8	16.6	23.5
15-Sep	9.4	Z	8.9	8.0	6.0	5.1	5.4	5.9	6.7	10.9	17.0	22.5	24.7	25.2	24.5	19.4	16.3	14.7	13.7	8.3	6.2	7.0	7.3	2.8	12.0	25.2
16-Sep	8.3	6.6	Z	5.7	5.1	3.5	4.0	5.5	8.3	8.2	17.9	20.6	21.6	22.5	21.3	21.4	21.6	15.9	13.0	11.8	9.8	8.7	7.3	8.7	12.0	22.5
17-Sep	9.0	10.1	7.3	Z	4.1	1.6	1.6	2.0	3.0	10.1	16.9	18.2	16.2	14.9	13.6	15.7	13.5	11.1	8.6	6.5	3.1	1.7	1.6	1.6	8.3	18.2
18-Sep	2.8	8.0	15.6	15.0	Z	8.7	2.5	4.7	9.1	9.4	10.8	15.1	21.5	23.9	27.8	26.0	21.3	22.1	13.7	8.3	5.7	5.8	2.6	3.3	12.3	27.8
19-Sep	1.8	1.3	1.3	1.4	1.3	Z	2.9	3.0	7.0	11.4	19.4	25.1	30.8	38.5	39.5	39.4	40.2	39.5	35.2	31.9	32.1	26.3	27.2	26.2	21.0	40.2
20-Sep	Z	20.0	18.0	12.3	11.1	6.7	6.7	7.4	16.0	17.2	20.4	27.6	36.3	38.3	39.4	39.6	37.7	29.8	23.7	16.5	19.4	22.5	22.3	21.4	22.2	39.6
21-Sep	18.6	Z	16.4	16.0	9.4	7.3	13.0	6.2	12.3	16.3	M	24.3	25.7	27.8	28.5	26.1	15.3	13.7	8.5	5.1	2.9	2.2	2.0	6.4	13.8	28.5
22-Sep	12.7	11.7	Z	6.4	4.1	3.1	2.4	2.3	7.0	19.1	28.8	32.1	34.6	38.0	40.5	39.5	38.2	34.1	30.9	26.9	24.5	23.2	22.7	18.0	21.8	40.5
23-Sep	13.0	10.1	5.9	Z	2.9	1.5	1.5	3.8	6.1	3.6	4.6	10.6	20.8	24.0	20.3	24.2	22.6	25.6	22.6	17.4	12.3	16.3	13.0	12.2	12.8	25.6
24-Sep	4.8	11.0	11.7	12.4	Z	11.2	8.0	14.6	15.5	21.2	24.0	27.6	32.8	35.7	36.4	36.2	34.1	32.4	27.9	14.6	5.8	2.9	2.1	2.7	18.5	36.4
25-Sep	7.0	9.2	5.3	2.1	1.4	Z	2.0	1.8	2.7	3.4	10.7	19.6	25.6	26.6	22.9	20.1	21.8	20.5	19.5	20.6	19.5	17.9	20.2	19.6	13.9	26.6
26-Sep	Z	16.2	17.4	17.2	13.6	15.4	19.0	23.1	24.9	24.8	23.9	26.9	27.7	28.4	28.8	29.2	28.9	28.8	27.6	27.6	27.6	26.2	26.7	27.8	24.3	29.2
27-Sep	27.6	Z	19.8	18.8	16.4	16.4	15.7	15.1	15.2	16.2	19.1	22.2	24.9	27.9	30.6	30.9	30.4	28.4	22.6	16.4	16.0	13.7	10.5	13.3	20.4	30.9
28-Sep	14.5	14.6	Z	16.9	5.9	5.0	4.9	6.2	9.9	17.7	22.0	29.9	36.1	35.6	33.6	32.7	33.1	31.2	27.1	28.7	27.5	22.4	18.9	18.5	21.4	36.1
29-Sep	18.5	14.5	8.7	Z	9.7	15.2	13.3	12.9	15.3	19.8	22.7	23.5	26.9	33.0	33.7	34.1	33.9	35.1	33.4	27.3	28.8	30.6	29.7	26.5	23.8	35.1
30-Sep	24.4	23.4	23.8	22.2	Z	20.9	19.9	19.4	18.8	21.9	26.5	27.3	29.2	28.8	26.2	26.6	26.3	26.8	24.6	20.6	17.1	13.3	5.4	5.9	21.7	29.2
	11.8	12.2	11.5	10.3	7.7	8.9	7.8	8.7	11.3	14.1	18.4	21.9	25.4	27.1	27.9	28.1	27.1	24.9	21.3	17.5	15.1	13.7	13.1	12.5	Diurnal Average	
	27.6	23.5	23.8	27.0	24.8	23.2	21.4	23.1	24.9	25.8	31.6	34.8	37.7	38.5	40.5	40.6	42.4	41.6	35.2	32.3	32.2	32.2	30.8	27.8	Diurnal Maximum	

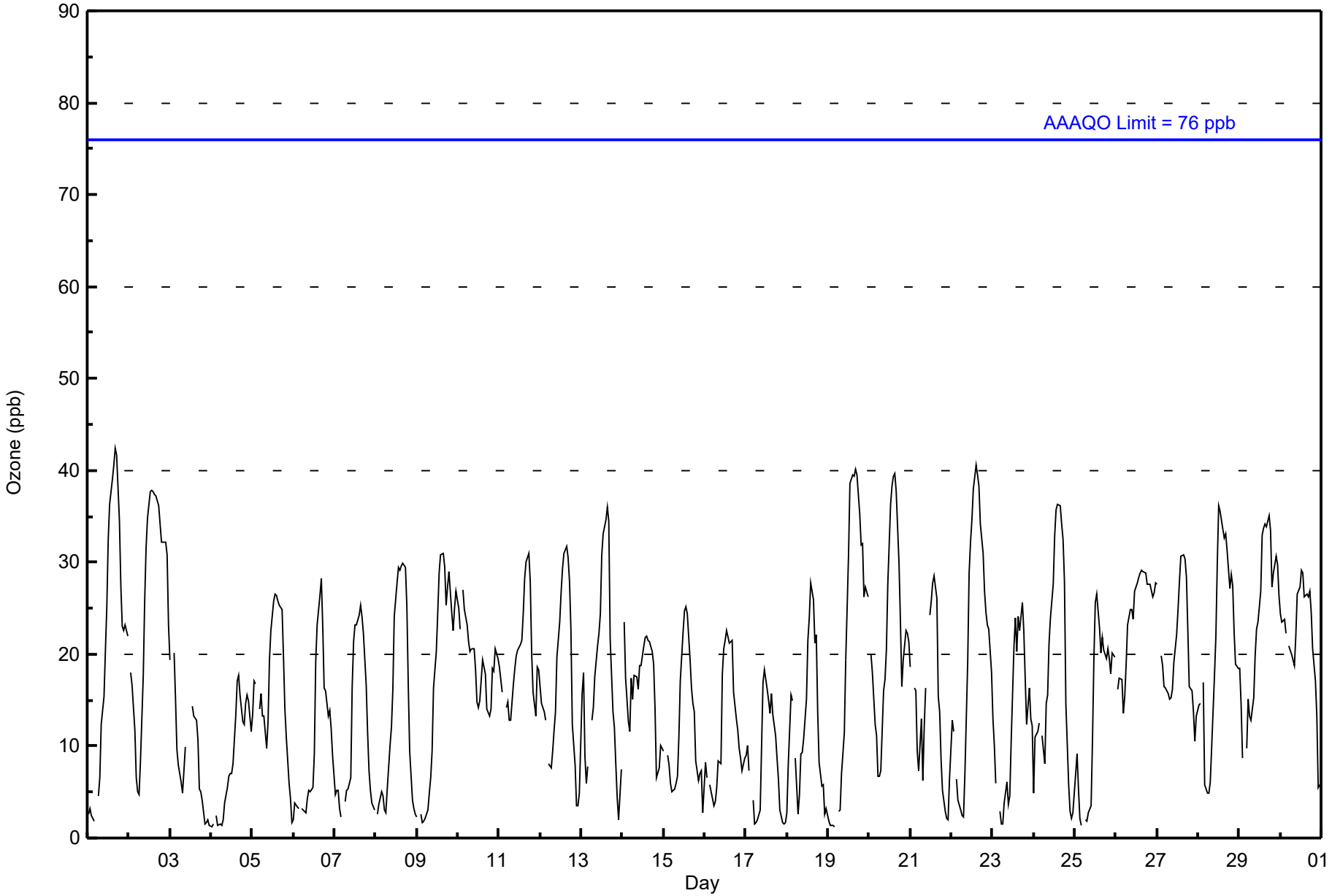
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Fort McKay - Bertha Ganter - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	434	63.27	63.27
21 - 50	252	36.73	100.00
51 - 82	0	0.00	100.00
> 83	0	0.00	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association | **Ozone (O_3) - ppb**

Frequency Distribution | **Fort McKay - Bertha Ganter - September 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	61	15	4	2	0	2	15	38	54	45	33	21	23	48	36	35	432
21 - 50	15	6	0	1	2	3	15	43	28	22	25	15	25	25	18	9	252
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	76	21	4	3	2	5	30	81	82	67	58	36	48	73	54	44	684

Total Number of Valid Hours: 684

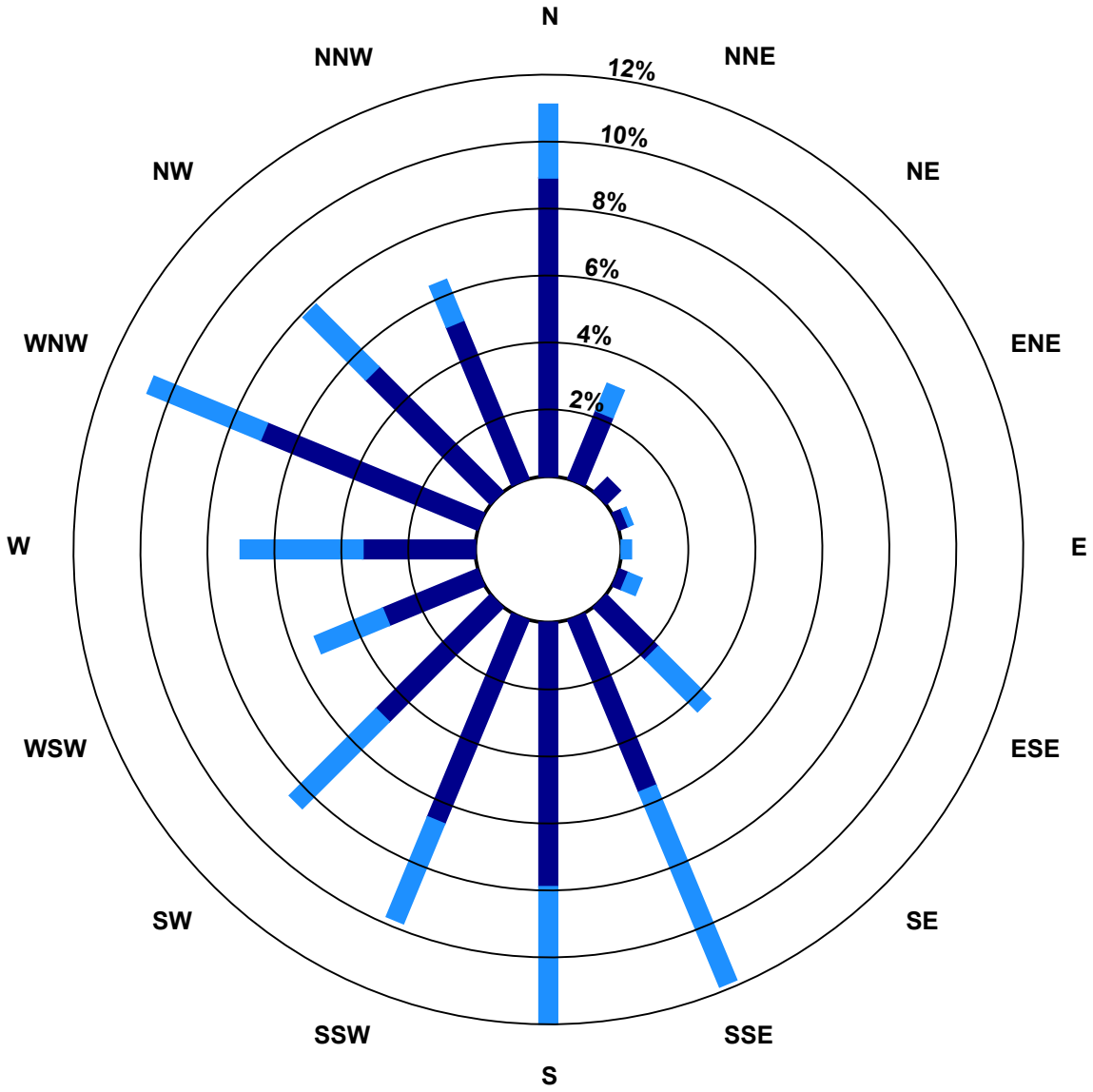
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Ozone (O_3) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

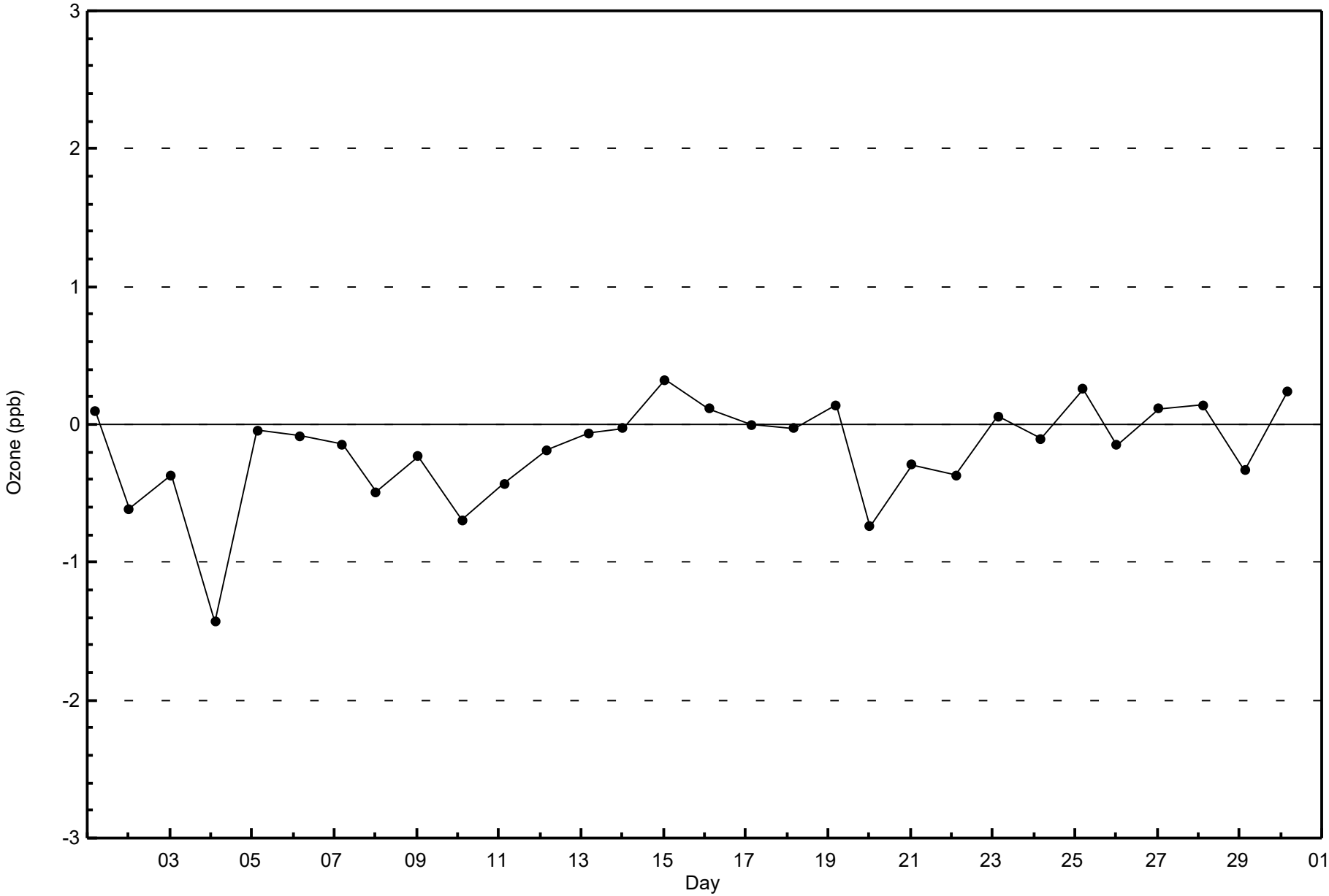
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Fort McKay - Bertha Ganter - September 2026

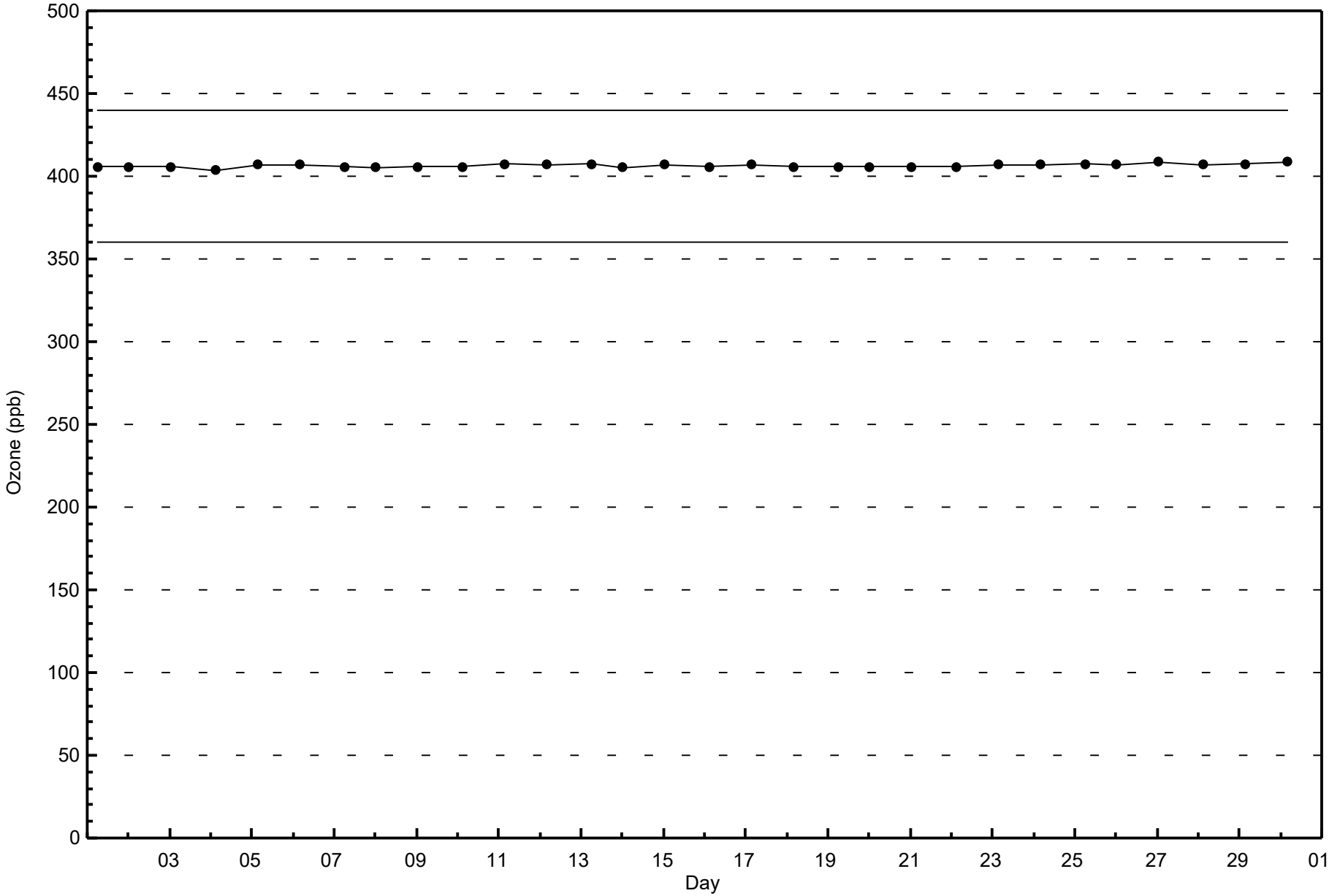


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Fort McKay - Bertha Ganter - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Fort McKay - Bertha Ganter - September 2026

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

Maximum Value: 25.4 $\mu g/m^3$ on Sep 5 22:00

Maximum Daily Average: 13.8 $\mu g/m^3$ on Sep 21

Minimum Value: 0.1 $\mu g/m^3$ on Sep 30 10:00

Minimum Daily Average: 0.5 $\mu g/m^3$ on Sep 30

Maximum Diurnal Average: 6.6 $\mu g/m^3$ at hour 20

Minimum Diurnal Average: 3.9 $\mu g/m^3$ at hour 4

Monthly Average: 5.04 $\mu g/m^3$

Percentiles: P_1 = 0.2 P_{10} = 1.1 Q_1 = 2.0 Median = 4.1 Q_3 = 6.6 P_{90} = 10.1 P_{99} = 20.2

Hours in Service:	720
Hours of Data:	718
Hours of Missing Data:	2
Hours of Calibration:	2
Percent Operational Time:	100.0

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-Sep	5.2	5.5	5.0	4.9	5.2	6.4	9.5	10.7	19.0	14.6	14.6	17.9	8.1	4.2	3.9	4.8	5.5	9.0	10.3	10.5	6.7	4.8	4.3	3.5	8.1	19.0
2-Sep	4.1	3.9	3.4	3.4	3.9	4.1	4.2	8.6	7.4	9.7	8.6	9.1	12.1	11.0	11.9	7.5	9.3	7.7	7.9	8.2	6.4	6.1	5.8	5.9	7.1	12.1
3-Sep	6.0	5.8	5.9	5.4	6.2	6.5	14.5	14.5	10.7	14.6	16.2	7.4	5.1	5.2	5.3	5.1	5.0	5.3	5.6	5.8	5.9	5.7	5.7	6.3	7.5	16.2
4-Sep	6.6	6.7	6.3	5.9	5.9	6.2	6.0	6.0	3.1	1.4	0.9	0.9	1.0	1.1	1.0	1.0	1.9	2.5	2.4	2.5	2.1	1.9	2.0	2.3	3.2	6.7
5-Sep	2.5	2.6	2.9	3.7	3.8	3.5	3.6	3.7	4.5	5.3	5.2	5.9	6.5	7.7	7.3	6.7	5.9	5.9	6.0	6.4	6.3	25.4	8.0	7.4	6.1	25.4
6-Sep	7.9	7.2	6.3	6.2	6.2	5.8	5.4	5.6	6.3	8.3	9.3	10.7	10.1	6.5	5.5	4.9	3.7	4.3	10.7	4.8	5.6	4.7	3.8	3.8	6.4	10.7
7-Sep	4.0	4.1	3.5	3.9	3.8	3.6	5.4	5.0	4.6	5.5	4.8	3.9	5.7	10.8	9.5	7.6	6.5	8.5	11.7	16.6	17.5	14.2	12.2	10.3	7.6	17.5
8-Sep	8.2	6.5	5.8	5.6	5.5	5.3	5.3	8.0	4.9	6.5	7.5	7.9	9.1	9.4	11.9	9.9	7.9	12.1	12.3	12.1	11.3	11.9	12.5	14.1	8.8	14.1
9-Sep	12.4	9.9	7.9	9.1	8.5	8.5	9.0	9.7	9.7	8.9	6.7	7.7	7.5	5.4	4.5	4.3	4.3	7.0	5.7	3.2	3.7	3.7	2.7	2.4	6.8	12.4
10-Sep	2.0	1.8	1.4	1.6	2.1	1.9	2.0	2.0	4.2	14.9	18.3	16.5	11.7	5.3	4.8	4.7	3.5	2.6	1.3	0.8	0.9	1.2	1.3	1.1	4.5	18.3
11-Sep	0.8	0.8	0.8	0.8	0.9	0.9	0.8	1.1	0.7	1.1	1.4	1.5	1.0	2.5	2.9	4.3	4.6	4.1	3.7	2.9	2.8	2.8	2.0	1.4	1.9	4.6
12-Sep	1.3	1.2	1.1	0.9	0.8	0.9	0.9	1.0	1.0	1.3	1.5	1.5	2.2	2.1	2.8	2.8	2.7	2.7	3.4	6.2	11.4	6.4	4.4	5.0	2.7	11.4
13-Sep	3.4	2.9	3.6	3.8	3.8	3.3	3.6	3.2	3.3	3.5	3.6	5.3	3.0	2.8	2.7	2.6	2.7	9.9	11.4	5.8	4.2	3.5	3.2	2.5	4.1	11.4
14-Sep	1.5	1.7	2.1	2.6	2.6	2.2	2.3	2.1	2.1	2.2	2.0	2.1	2.3	1.9	1.4	1.5	1.5	1.6	1.1	1.4	1.7	1.7	1.5	1.4	1.9	2.6
15-Sep	1.5	1.5	1.5	1.4	1.5	1.7	1.8	1.7	1.6	1.2	1.1	1.3	1.8	2.0	2.3	2.2	2.7	2.9	2.8	2.5	1.9	1.7	1.4	1.8	1.8	2.9
16-Sep	1.5	1.4	1.5	1.3	1.4	1.5	2.2	4.6	2.3	3.2	3.8	6.1	6.2	4.8	4.5	4.1	4.3	6.0	6.5	7.0	6.3	5.7	4.5	3.6	3.9	7.0
17-Sep	3.3	3.2	3.4	3.7	3.9	4.3	4.6	5.5	5.8	6.2	8.7	4.8	4.9	5.6	6.0	5.2	6.2	6.9	8.3	6.8	6.2	6.8	5.7	5.6	5.5	8.7
18-Sep	4.8	3.8	2.7	2.5	2.6	2.8	3.4	3.3	3.4	4.5	5.0	4.5	3.8	4.0	4.2	6.4	5.2	4.1	4.5	3.7	3.7	3.8	4.5	4.9	4.0	6.4
19-Sep	5.4	5.6	5.4	4.8	4.6	4.6	5.2	4.8	6.8	7.2	8.2	6.8	6.7	6.4	6.0	7.6	8.1	7.9	12.2	8.2	6.0	6.4	5.9	6.0	6.5	12.2
20-Sep	6.3	6.4	6.6	6.7	7.5	7.8	7.6	7.1	6.8	6.1	6.9	7.7	4.5	3.1	3.1	3.1	4.7	10.2	12.5	17.5	14.0	7.0	6.2	8.0	7.4	17.5
21-Sep	7.5	7.7	7.2	6.6	6.7	6.2	6.0	7.4	9.0	12.2	11.6	14.9	12.5	10.9	17.3	17.8	20.3	24.0	21.8	20.7	25.3	22.8	20.3	15.5	13.8	25.3
22-Sep	10.4	9.1	8.4	8.7	9.6	9.3	9.7	9.6	8.1	4.4	3.7	2.9	2.2	2.0	C	C	1.1	2.9	2.4	9.1	3.1	2.1	2.0	2.3	5.6	10.4
23-Sep	2.5	3.0	3.7	3.5	3.7	4.3	4.3	4.2	4.3	8.4	10.4	15.6	14.1	12.4	17.3	8.5	19.7	7.7	8.1	7.8	8.7	6.4	6.3	4.9	7.9	19.7
24-Sep	5.0	3.3	3.3	2.6	2.6	2.8	3.5	3.0	2.5	2.5	2.8	2.8	1.7	1.0	1.2	1.1	0.9	1.5	5.6	10.7	13.6	13.1	15.0	12.5	4.8	15.0
25-Sep	7.6	5.5	4.7	4.9	6.9	6.9	7.2	9.6	9.9	8.3	4.3	3.0	2.9	2.8	2.5	2.6	2.7	2.8	2.9	2.9	2.8	2.8	2.8	2.9	4.7	9.9
26-Sep	3.0	3.4	3.6	3.1	2.4	2.0	1.4	0.8	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.5	0.6	0.7	0.9	1.1	3.6
27-Sep	0.8	1.1	1.7	1.8	2.2	2.2	2.1	2.0	1.8	1.7	1.7	1.6	1.7	1.5	1.4	1.5	1.5	1.8	3.5	4.5	3.3	3.8	2.7	1.7	2.1	4.5
28-Sep	1.5	1.7	1.4	1.2	1.9	1.9	1.8	2.1	2.4	2.6	2.5	1.8	1.8	1.8	1.9	2.8	3.5	4.1	7.1	4.4	2.8	3.5	4.1	4.4	2.7	7.1
29-Sep	4.2	4.5	4.6	5.0	5.4	4.3	4.2	4.0	2.2	0.8	0.9	0.8	0.7	0.8	1.0	1.1	1.3	1.1	1.2	2.6	2.0	1.9	1.2	0.8	2.4	5.4
30-Sep	0.6	0.3	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.5	0.6	0.7	0.7	1.4	2.8	1.7	0.5	2.8
	4.4	4.1	3.9	3.9	4.1	4.1	4.6	5.0	5.0	5.6	5.8	5.8	5.0	4.5	5.0	4.6	4.9	5.6	6.5	6.6	6.2	6.1	5.2	4.8	Diurnal Average	
	12.4	9.9	8.4	9.1	9.6	9.3	14.5	14.5	19.0	14.9	18.3	17.9	14.1	12.4	17.3	17.8	20.3	24.0	21.8	20.7	25.3	25.4	20.3	15.5	Diurnal Maximum	

C - Calibration

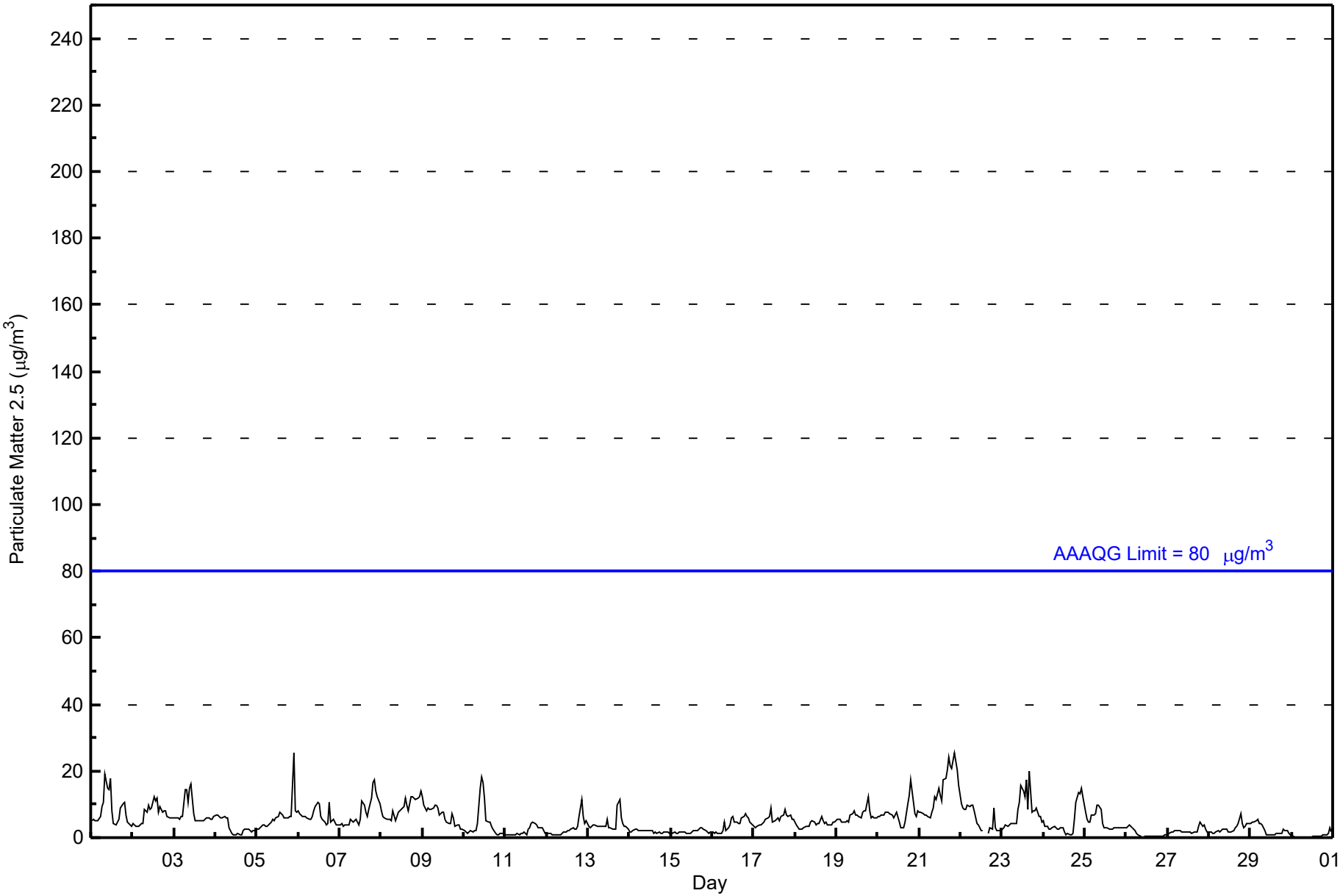
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Fort McKay - Bertha Ganter - September 2026



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

Fort McKay - Bertha Ganter - September 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	456	63.51	63.51
6 - 15	241	33.57	97.08
16 - 25	21	2.92	100.00
26 - 80	0	0.00	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 718

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Fort McKay - Bertha Ganter - September 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	51	11	2	2	0	4	8	30	39	40	51	31	40	63	46	38	456
6 - 15	26	10	3	1	2	2	22	49	45	30	10	5	6	13	8	7	239
16 - 25	2	0	0	0	1	0	2	3	3	2	1	0	2	2	1	2	21
26 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	79	21	5	3	3	6	32	82	87	72	62	36	48	78	55	47	716

Total Number of Valid Hours: 716

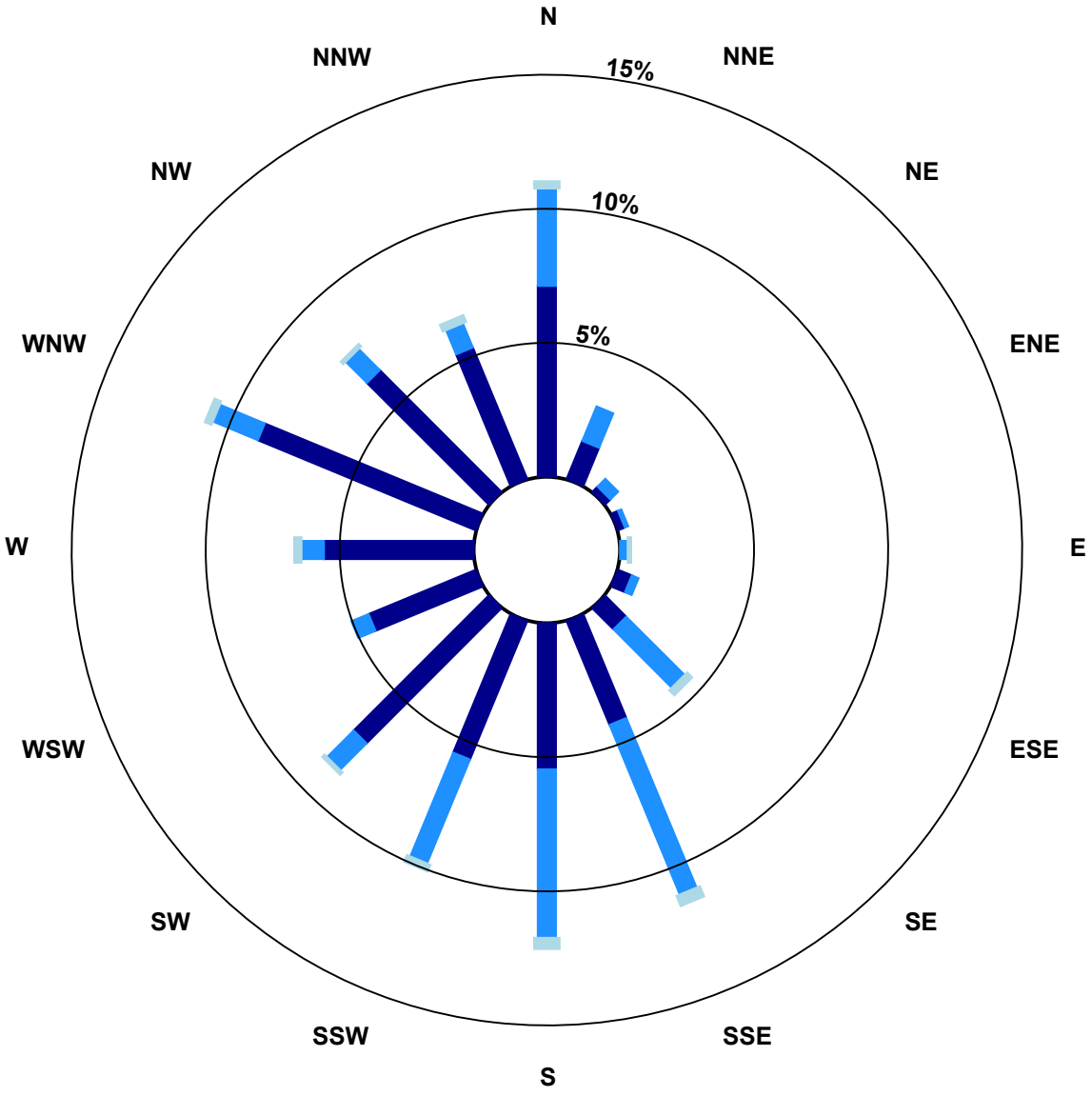
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

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

Fort McKay - Bertha Ganter



Classes ($\mu g/m^3$)

- 0 - 5
- 6 - 15
- 16 - 25
- 26 - 80
- > 81.0

Total Number of Valid Hours: 716

Wood Buffalo Environmental Association

Summary of Hour Averages

Ammonia (NH_3) - ppb

Fort McKay - Bertha Ganter - September 2026

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

Maximum Value: 0.0 ppb on Sep 1 04:00

Maximum Daily Average: 0.0 ppb on Sep 1

Minimum Value: 0.0 ppb on Sep 1 04:00

Minimum Daily Average: 0.0 ppb on Sep 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:	720
Hours of Data:	627
Hours of Missing Data:	93
Hours of Calibration:	44
Percent Operational Time:	93.2

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-Sep	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
2-Sep	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
3-Sep	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
4-Sep	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
5-Sep	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
6-Sep	0.0	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
7-Sep	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
8-Sep	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
9-Sep	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
10-Sep	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
11-Sep	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
12-Sep	0.0	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
13-Sep	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
14-Sep	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
15-Sep	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
16-Sep	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
17-Sep	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
18-Sep	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
19-Sep	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
20-Sep	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
21-Sep	0.0	0.0	Z	RE	RE	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
22-Sep	0.0	0.0	0.0	Z	RE	RE	0.0	0.0	0.0	0.0	C	C	C	C	C	RE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.0
23-Sep	0.0	0.0	0.0	0.0	Z	RE	0.0	0.0	0.0	C	C	C	C	C	C	C	C	C	RE	0.0	0.0	0.0	0.0	0.0	--	0.0
24-Sep	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
25-Sep	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
26-Sep	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
27-Sep	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
28-Sep	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
29-Sep	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
30-Sep	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

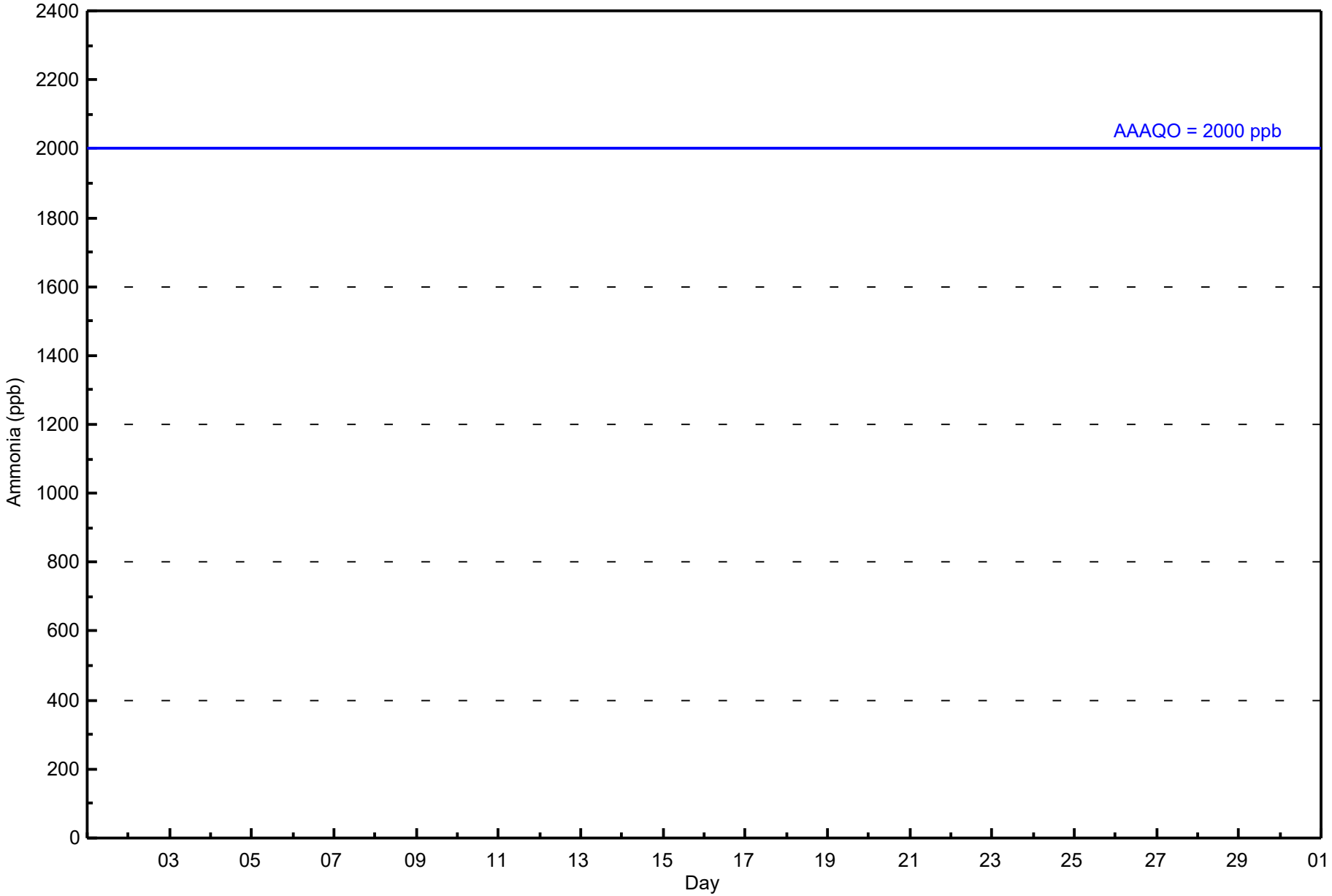
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 2000 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ammonia (NH_3) - ppb

Fort McKay - Bertha Ganter - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 5	627	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: 627

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Ammonia (NH_3) - ppb

Fort McKay - Bertha Ganter - September 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	71	20	5	3	3	5	26	72	77	62	54	30	41	72	46	38	625
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	71	20	5	3	3	5	26	72	77	62	54	30	41	72	46	38	625

Total Number of Valid Hours: 625

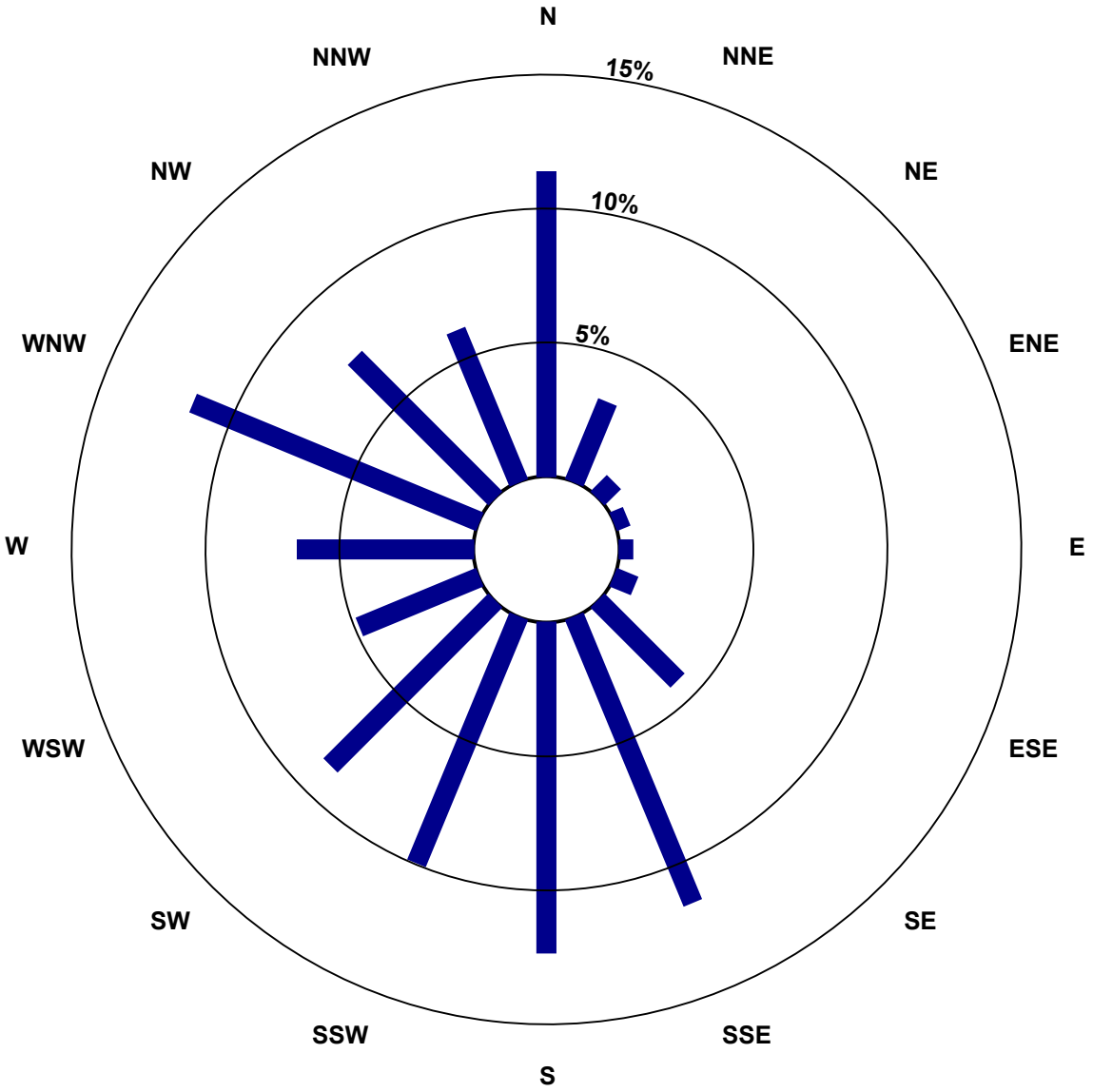
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Ammonia (NH_3) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

0 - 5

6 - 10

11 - 15

16 - 20

21 - 25

> 26

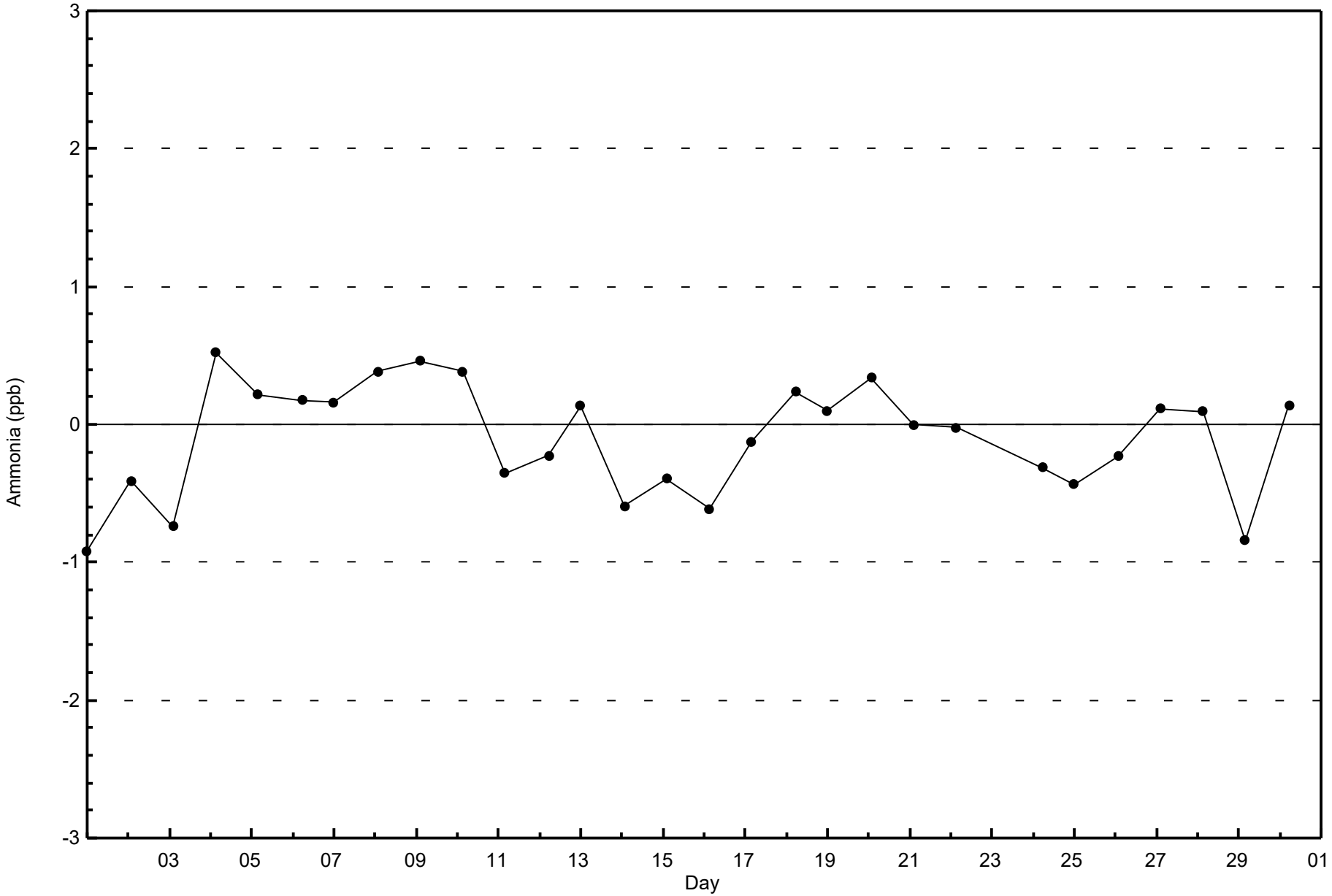
Total Number of Valid Hours: 625

Wood Buffalo Environmental Association

Zero Responses

Ammonia (NH_3) - ppb

Fort McKay - Bertha Ganter - September 2026

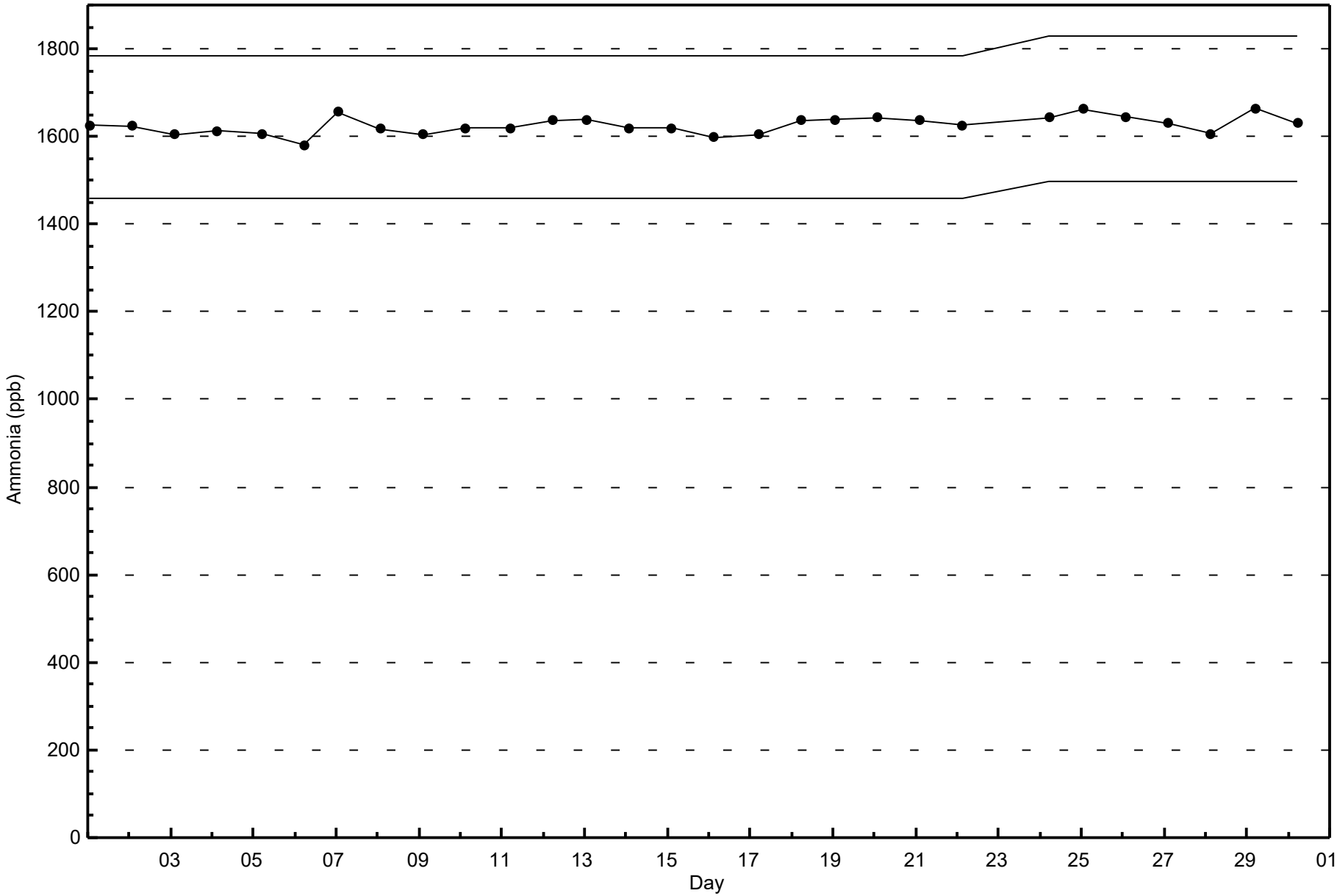


Wood Buffalo Environmental Association

Span Responses

Ammonia (NH_3) - ppb

Fort McKay - Bertha Ganter - September 2026



Maximum Value: 27.5 C on Sep 2 16:00

Maximum Daily Average: 20.7 C on Sep 2

Minimum Value: 2.3 C on Sep 15 06:00

Minimum Daily Average: 5.5 C on Sep 30

Maximum Diurnal Average: 16.9 C at hour 16

Minimum Diurnal Average: 7.7 C at hour 7

Monthly Average: 12.30 C

Percentiles: P_1 = 2.9 P_{10} = 5.7 Q_1 = 8.3 Median = 11.6 Q_3 = 16.1 P_{90} = 19.5 P_{99} = 26.1

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

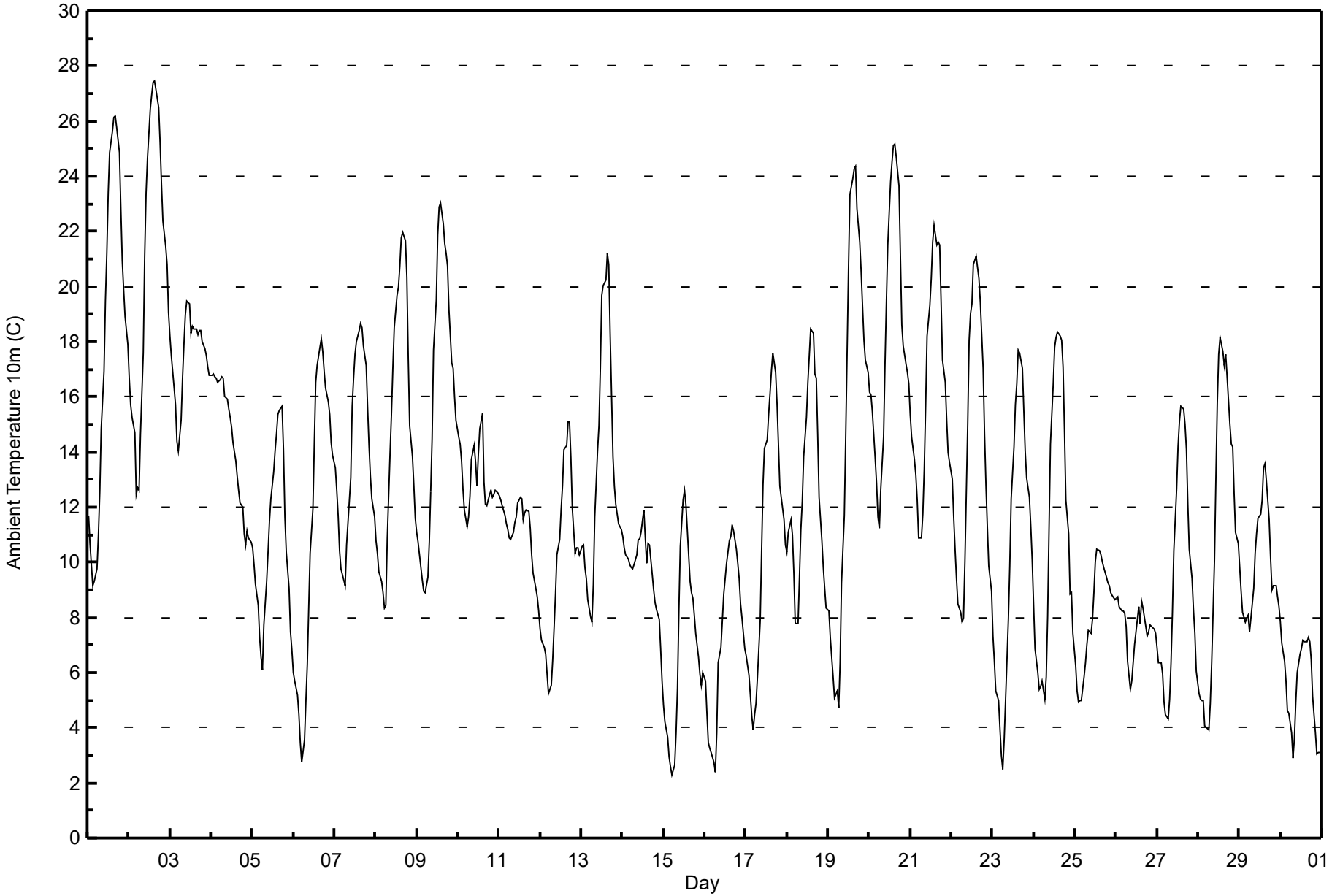
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	11.7	10.7	9.9	9.2	9.3	9.8	11.0	12.5	14.8	16.9	19.5	21.2	23.4	24.9	25.6	26.1	26.2	25.8	24.8	22.8	20.9	19.9	18.9	17.9	18.1	26.2
2-Sep	16.7	15.7	15.3	14.7	12.5	12.7	12.6	14.7	17.6	21.1	23.4	24.7	26.5	27.0	27.4	27.5	27.2	26.5	25.2	23.7	22.4	21.4	20.8	19.1	20.7	27.5
3-Sep	18.2	17.5	16.3	15.7	14.4	14.1	15.2	16.7	17.9	19.0	19.5	19.3	18.3	18.6	18.5	18.4	18.3	18.4	18.4	18.0	17.7	17.5	17.1	16.8	17.5	19.5
4-Sep	16.8	16.8	16.7	16.7	16.5	16.6	16.7	16.7	16.0	15.9	15.5	15.3	14.9	14.3	13.7	13.1	12.6	12.2	12.0	11.0	10.6	11.1	10.9	10.7	14.3	16.8
5-Sep	10.5	9.9	9.2	8.5	7.3	6.6	6.1	7.7	9.3	10.4	11.5	12.3	13.3	14.0	14.7	15.4	15.5	15.7	14.1	11.7	10.4	9.1	7.5	6.8	10.7	15.7
6-Sep	6.0	5.7	5.2	4.5	3.5	2.7	3.6	5.0	6.3	8.4	10.3	11.9	14.3	16.5	17.1	17.8	18.1	17.6	16.9	16.3	15.8	15.3	14.3	13.9	11.1	18.1
7-Sep	13.4	12.6	11.7	10.4	9.8	9.3	9.1	10.6	11.4	13.1	15.7	16.7	17.5	18.0	18.4	18.6	18.5	17.8	17.1	15.6	14.3	13.1	12.3	11.7	14.0	18.6
8-Sep	10.8	10.3	9.7	9.3	8.9	8.4	8.5	10.8	13.9	15.4	17.1	18.5	19.7	20.0	20.7	21.7	21.9	21.7	20.3	17.4	15.0	13.8	12.7	11.6	14.9	21.9
9-Sep	11.1	10.7	9.8	9.3	8.9	8.9	9.4	10.7	12.6	14.5	17.7	19.5	21.9	22.9	23.0	22.3	21.6	21.2	20.7	19.1	17.2	17.0	16.0	15.1	15.9	23.0
10-Sep	14.6	14.3	13.7	12.6	11.9	11.3	11.6	12.4	13.7	14.2	13.6	12.7	13.9	14.8	15.4	12.9	12.1	12.0	12.5	12.6	12.4	12.4	12.6	12.5	13.0	15.4
11-Sep	12.4	12.3	12.0	11.7	11.4	11.2	10.9	10.8	11.1	11.4	11.7	12.2	12.3	12.3	11.5	11.8	11.9	11.8	11.2	10.3	9.6	9.0	8.8	8.2	11.2	12.4
12-Sep	7.6	7.2	6.9	6.7	6.0	5.3	5.5	6.4	7.6	8.9	10.3	10.8	11.9	12.7	14.1	14.2	15.1	15.1	13.8	12.0	10.3	10.5	10.5	10.3	10.0	15.1
13-Sep	10.6	10.6	9.8	9.4	8.7	8.1	7.8	9.2	11.6	14.0	15.0	17.0	19.7	20.1	20.3	21.2	20.8	18.3	13.8	12.7	12.1	11.8	11.4	11.2	13.5	21.2
14-Sep	11.0	10.5	10.2	10.1	9.9	9.8	9.8	9.9	10.3	10.8	10.8	11.1	11.9	10.9	10.0	10.7	10.6	9.5	9.0	8.6	8.3	7.9	6.9	5.7	9.8	11.9
15-Sep	4.8	4.2	3.7	2.9	2.6	2.3	2.6	3.8	5.4	8.2	10.6	12.3	12.6	12.1	11.2	9.3	8.9	8.7	8.1	7.4	6.5	6.0	5.6	6.0	6.9	12.6
16-Sep	5.7	4.5	3.5	3.2	3.1	2.7	2.4	3.8	6.3	6.9	7.9	8.8	9.4	10.0	10.8	10.9	11.4	11.1	10.5	10.0	9.4	8.5	8.0	6.9	7.3	11.4
17-Sep	6.6	6.3	5.9	4.4	3.9	4.5	4.9	5.8	7.9	10.4	12.8	14.1	14.5	15.4	16.1	16.9	17.6	16.9	15.8	14.3	12.8	12.0	11.5	10.7	10.9	17.6
18-Sep	10.4	11.1	11.6	11.0	9.6	7.8	7.8	9.5	11.2	12.2	13.8	15.2	16.5	17.5	18.5	18.3	16.8	16.7	14.6	12.3	10.8	9.8	9.1	8.3	12.5	18.5
19-Sep	8.2	7.3	6.6	5.9	5.1	5.3	4.7	6.3	9.3	11.7	14.6	17.7	20.7	23.3	23.9	24.3	24.4	22.8	21.6	20.6	19.3	18.1	17.3	16.9	14.8	24.4
20-Sep	16.2	16.1	15.5	13.8	12.9	11.6	11.3	12.6	14.5	17.1	19.4	21.5	23.8	24.5	25.1	25.2	24.7	23.7	21.1	18.6	17.9	17.2	16.9	16.5	18.2	25.2
21-Sep	15.3	14.6	13.7	13.1	12.3	10.9	10.9	11.8	13.4	15.6	18.2	19.3	20.3	21.6	22.2	21.5	21.6	21.5	19.5	17.3	16.5	15.2	14.0	13.6	16.4	22.2
22-Sep	13.0	11.7	10.5	9.4	8.5	8.2	7.9	8.0	10.0	15.0	18.1	19.0	19.4	20.8	21.1	20.7	20.3	19.4	17.0	14.6	12.8	11.3	9.9	8.9	14.0	21.1
23-Sep	7.3	6.4	5.4	5.0	4.0	3.0	2.5	3.6	6.4	8.0	9.9	12.3	14.2	15.7	16.5	17.7	17.6	17.0	15.5	14.0	13.1	12.4	11.3	10.1	10.4	17.7
24-Sep	8.5	6.9	6.0	5.4	5.5	5.7	5.1	5.9	8.0	11.2	14.3	16.5	17.8	18.2	18.4	18.2	18.1	17.1	14.8	12.3	11.1	8.9	8.9	7.4	11.2	18.4
25-Sep	6.2	5.3	4.9	5.0	5.0	5.8	6.3	7.0	7.5	7.4	7.9	8.9	10.0	10.5	10.4	10.3	10.0	9.8	9.5	9.2	9.1	8.9	8.8	8.6	8.0	10.5
26-Sep	8.7	8.7	8.4	8.2	8.2	8.2	7.7	6.4	5.4	5.7	6.4	7.0	7.9	8.4	7.8	8.6	8.4	7.7	7.3	7.5	7.7	7.6	7.6	7.4	7.6	8.7
27-Sep	6.9	6.3	6.4	5.9	4.9	4.5	4.3	5.1	6.4	8.2	10.4	12.7	14.2	15.1	15.7	15.6	15.0	14.1	12.1	10.5	9.4	8.3	7.4	6.0	9.4	15.7
28-Sep	5.2	5.1	5.0	5.0	4.1	4.0	3.9	4.9	6.4	10.1	13.0	15.8	17.5	18.2	17.6	17.1	17.5	16.7	15.0	14.3	14.2	12.5	11.1	10.7	11.0	18.2
29-Sep	9.8	8.9	8.2	7.8	8.0	8.1	7.5	8.0	9.0	10.3	11.0	11.6	11.8	12.2	13.4	13.6	13.0	11.5	10.2	9.0	9.1	9.2	8.7	8.4	9.9	13.6
30-Sep	7.8	7.1	6.4	5.7	4.6	4.5	3.8	2.9	3.6	4.9	6.0	6.6	6.9	7.2	7.1	7.1	7.2	7.1	6.5	5.1	3.8	3.0	3.1	3.1	5.5	7.8
	10.4	9.8	9.3	8.7	8.0	7.7	7.7	8.6	10.2	11.9	13.5	14.8	15.9	16.6	16.9	16.9	16.8	16.2	15.0	13.6	12.7	12.0	11.3	10.7	Diurnal Average	
	18.2	17.5	16.7	16.7	16.5	16.6	16.7	16.7	17.9	21.1	23.4	24.7	26.5	27.0	27.4	27.5	27.2	26.5	25.2	23.7	22.4	21.4	20.8	19.1	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 10m (AT10) - C

Fort McKay - Bertha Ganter - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	268	37.22	37.22
10 - 20	386	53.61	90.83
> 20	66	9.17	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 27.9 C on Sep 2 15:00

Maximum Daily Average: 20.1 C on Sep 2

Minimum Value: 1.4 C on Sep 23 06:00

Minimum Daily Average: 5.3 C on Sep 30

Maximum Diurnal Average: 17.2 C at hour 15

Minimum Diurnal Average: 6.9 C at hour 6

Monthly Average: 11.96 C

Percentiles: P_1 = 2.1 P_{10} = 5.0 Q_1 = 7.9 Median = 11.1 Q_3 = 15.8 P_{90} = 19.8 P_{99} = 26.3

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

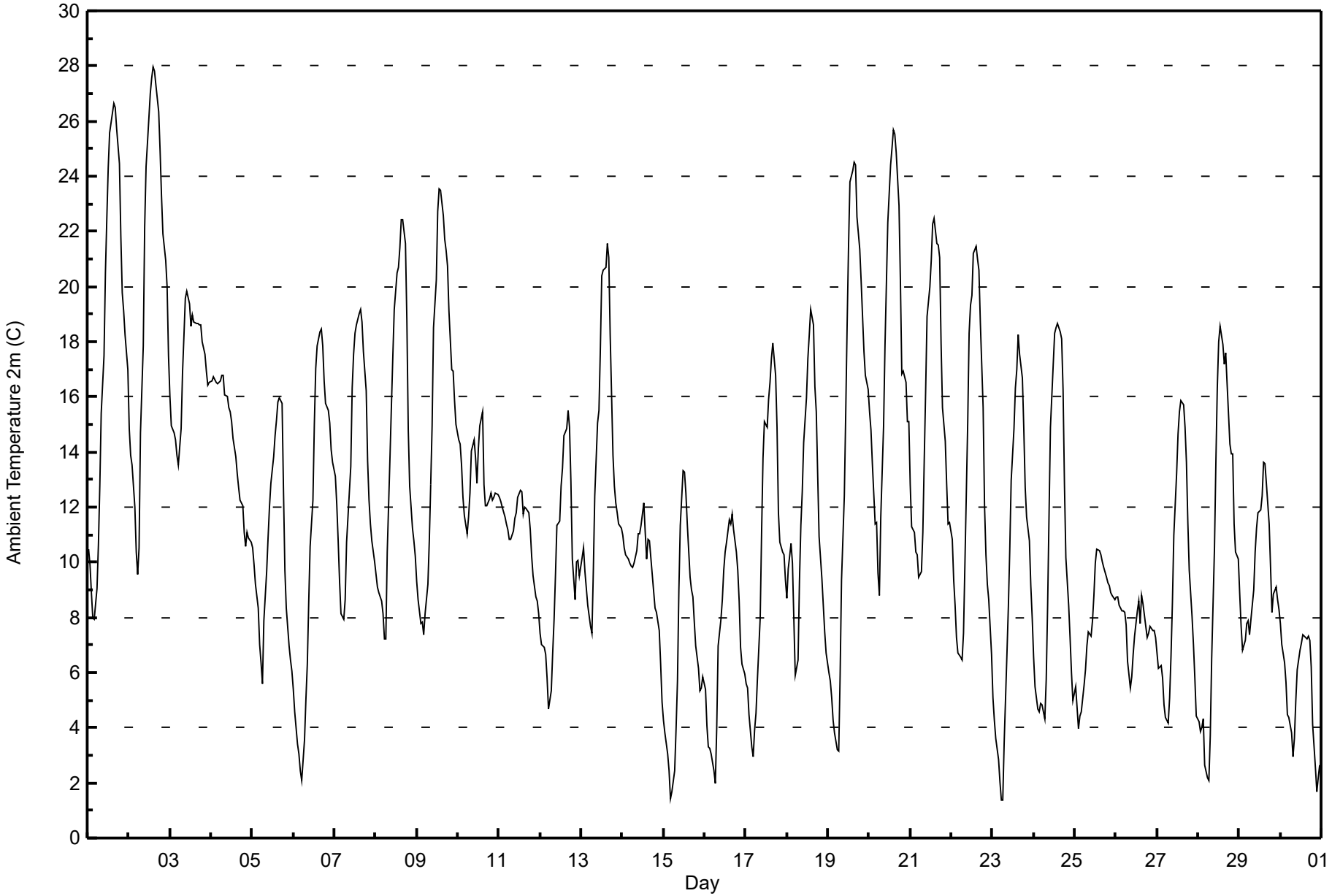
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	10.5	9.9	8.9	8.0	7.9	9.0	10.6	12.8	15.4	17.5	20.5	22.5	24.3	25.6	26.3	26.6	26.5	25.7	24.4	21.8	19.8	19.1	18.3	17.0	17.9	26.6
2-Sep	14.8	13.9	13.5	12.0	10.4	9.6	10.5	14.7	17.9	22.2	24.3	25.2	27.0	27.5	27.9	27.8	27.3	26.3	24.9	23.3	21.9	21.0	20.0	17.5	20.1	27.9
3-Sep	16.0	15.0	14.7	14.4	13.9	13.5	14.9	16.9	18.2	19.6	19.9	19.4	18.6	19.0	18.7	18.7	18.7	18.6	18.6	18.0	17.6	17.0	16.4	16.5	17.2	19.9
4-Sep	16.6	16.7	16.6	16.5	16.5	16.6	16.8	16.8	16.1	16.0	15.6	15.5	15.1	14.5	13.8	13.2	12.7	12.2	12.1	11.1	10.6	11.1	10.9	10.7	14.3	16.8
5-Sep	10.5	9.9	9.2	8.3	7.0	6.4	5.6	7.9	9.6	10.9	12.0	12.9	13.8	14.6	15.1	15.8	16.0	15.8	12.6	9.7	8.3	7.0	6.5	6.0	10.5	16.0
6-Sep	5.4	4.6	3.4	3.0	2.4	2.1	3.6	5.1	6.3	8.5	10.6	12.2	15.0	17.0	17.8	18.4	18.5	17.9	16.6	15.8	15.5	15.0	14.1	13.6	10.9	18.5
7-Sep	13.1	12.1	10.8	9.3	8.1	7.9	8.6	10.7	11.6	13.5	16.3	17.6	18.3	18.6	19.0	19.2	18.7	17.6	16.2	13.7	12.2	11.4	10.8	10.0	13.6	19.2
8-Sep	9.6	9.1	8.9	8.6	8.1	7.2	7.2	10.4	13.9	15.7	17.5	19.2	20.5	20.7	21.4	22.4	22.4	21.5	18.8	14.8	12.7	11.2	10.8	10.2	14.3	22.4
9-Sep	9.3	8.6	7.8	7.8	7.4	8.1	9.2	10.8	12.8	14.9	18.5	20.2	22.7	23.6	23.5	22.6	21.7	21.3	20.7	19.1	17.0	16.9	15.9	15.0	15.6	23.6
10-Sep	14.5	14.3	13.5	12.3	11.7	11.0	11.6	12.5	14.0	14.4	13.8	12.9	14.1	15.0	15.5	12.8	12.1	12.0	12.3	12.5	12.3	12.4	12.5	12.5	13.0	15.5
11-Sep	12.4	12.2	12.0	11.7	11.4	11.2	10.8	10.9	11.1	11.6	11.8	12.3	12.6	12.6	11.7	12.0	11.9	11.8	11.2	10.2	9.5	8.7	8.6	8.1	11.2	12.6
12-Sep	7.4	7.0	6.9	6.7	5.8	4.7	5.3	6.7	7.9	9.6	11.3	11.5	12.8	13.4	14.6	14.8	15.5	14.9	12.9	10.1	8.7	10.0	10.1	9.5	9.9	15.5
13-Sep	10.2	10.5	9.7	9.1	8.4	7.7	7.4	9.7	12.4	15.1	15.5	17.7	20.4	20.6	20.7	21.6	21.1	18.2	13.9	12.8	12.1	11.8	11.4	11.2	13.7	21.6
14-Sep	11.0	10.5	10.3	10.1	10.0	9.8	9.8	10.0	10.4	11.0	11.0	11.3	12.2	11.1	10.1	10.8	10.8	9.6	8.9	8.4	8.2	7.5	6.3	4.9	9.7	12.2
15-Sep	4.3	3.8	3.1	2.4	1.4	1.7	2.4	4.0	5.7	9.0	11.3	13.3	13.3	12.5	11.4	9.4	9.0	8.7	7.8	7.0	6.2	5.4	5.4	5.9	6.9	13.3
16-Sep	5.4	4.1	3.3	3.3	3.1	2.4	2.0	4.0	7.0	7.9	8.6	9.7	10.4	10.8	11.6	11.4	11.7	11.2	10.4	9.7	8.6	6.9	6.3	5.9	7.3	11.7
17-Sep	5.6	5.5	4.5	3.3	2.9	3.9	4.5	5.7	8.0	11.1	13.8	15.1	14.9	15.9	16.5	17.4	17.9	16.8	14.9	11.8	10.7	10.4	10.2	9.4	10.4	17.9
18-Sep	8.7	9.8	10.7	10.0	7.9	5.9	6.5	9.3	11.3	12.5	14.4	16.0	17.4	18.3	19.2	18.6	16.4	15.5	13.2	10.9	9.4	8.4	7.5	6.7	11.8	19.2
19-Sep	6.0	5.7	5.1	4.3	3.8	3.2	3.2	5.9	9.4	12.4	15.4	18.6	21.5	23.8	24.2	24.5	24.4	22.5	21.3	20.2	18.9	17.7	16.8	16.3	14.4	24.5
20-Sep	15.5	14.8	13.6	11.4	11.5	9.6	8.8	11.7	14.9	17.9	20.1	22.3	24.4	25.0	25.7	25.5	24.9	23.0	20.2	16.8	16.9	16.5	15.1	15.1	17.5	25.7
21-Sep	12.8	11.3	11.1	10.4	10.3	9.5	9.7	11.1	13.7	16.2	18.9	20.0	20.9	22.3	22.5	21.6	21.5	21.1	18.0	15.6	14.4	12.8	11.4	11.4	15.3	22.5
22-Sep	10.9	9.4	8.5	7.3	6.7	6.6	6.5	7.4	9.9	15.1	18.3	19.3	19.7	21.2	21.5	21.0	20.6	18.7	15.6	12.1	10.3	9.2	8.7	6.7	13.0	21.5
23-Sep	5.1	4.3	3.6	2.9	2.0	1.4	1.4	3.5	6.7	8.4	10.5	13.0	14.8	16.3	17.0	18.2	17.6	16.7	14.9	12.7	11.7	10.8	9.2	8.0	9.6	18.2
24-Sep	6.6	5.5	4.7	4.6	4.9	4.8	4.3	5.8	8.5	11.7	14.9	17.2	18.3	18.5	18.6	18.4	18.1	16.3	12.8	10.2	8.4	7.3	6.0	5.0	10.5	18.6
25-Sep	5.5	4.7	4.0	4.4	4.6	5.5	6.1	7.0	7.5	7.3	7.9	8.8	10.0	10.5	10.4	10.3	10.0	9.8	9.5	9.2	9.1	8.9	8.8	8.6	7.9	10.5
26-Sep	8.8	8.8	8.4	8.2	8.2	8.2	7.7	6.4	5.4	5.9	6.7	7.3	8.2	8.6	7.8	8.8	8.5	7.7	7.2	7.4	7.7	7.5	7.5	7.3	7.7	8.8
27-Sep	6.7	6.1	6.2	5.8	4.8	4.4	4.2	5.1	6.6	8.5	11.0	13.2	14.6	15.5	15.9	15.7	14.9	13.6	11.4	9.7	8.0	7.0	5.8	4.4	9.1	15.9
28-Sep	4.2	3.9	4.0	4.3	2.7	2.2	2.1	3.7	6.5	10.5	13.6	16.3	18.0	18.6	17.9	17.2	17.6	16.5	14.3	13.9	13.9	11.4	10.4	10.1	10.6	18.6
29-Sep	8.8	7.7	6.8	7.2	7.8	7.9	7.4	7.9	9.0	10.3	11.3	11.8	11.9	12.4	13.6	13.6	12.9	11.4	9.8	8.2	8.9	9.1	8.6	8.3	9.7	13.6
30-Sep	7.8	7.0	6.4	5.7	4.5	4.4	3.8	2.9	3.6	5.0	6.1	6.8	7.1	7.4	7.3	7.2	7.3	7.2	6.2	4.1	2.6	1.7	2.2	2.7	5.3	7.8
	9.5	8.9	8.3	7.8	7.2	6.9	7.1	8.6	10.4	12.3	14.0	15.3	16.4	17.0	17.2	17.2	16.9	16.0	14.4	12.7	11.7	11.0	10.4	9.8	Diurnal Average	
	16.6	16.7	16.6	16.5	16.5	16.6	16.8	16.9	18.2	22.2	24.3	25.2	27.0	27.5	27.9	27.8	27.3	26.3	24.9	23.3	21.9	21.0	20.0	17.5	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Fort McKay - Bertha Ganter - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	293	40.69	40.69
10 - 20	357	49.58	90.28
> 20	70	9.72	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Fort McKay - Bertha Ganter - September 2026

Maximum Value: 100.0 % on Sep 8 03:00

Maximum Daily Average: 88.5 % on Sep 3

Minimum Value: 26.4 % on Sep 20 16:00

Minimum Daily Average: 60.7 % on Sep 20

Maximum Diurnal Average: 93.5 % at hour 7

Minimum Diurnal Average: 53.5 % at hour 15

Monthly Average: 75.34 %

Percentiles: P_1 = 30.0 P_{10} = 46.1 Q_1 = 61.8 Median = 78.9 Q_3 = 92.1 P_{90} = 97.8 P_{99} = 100.0

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

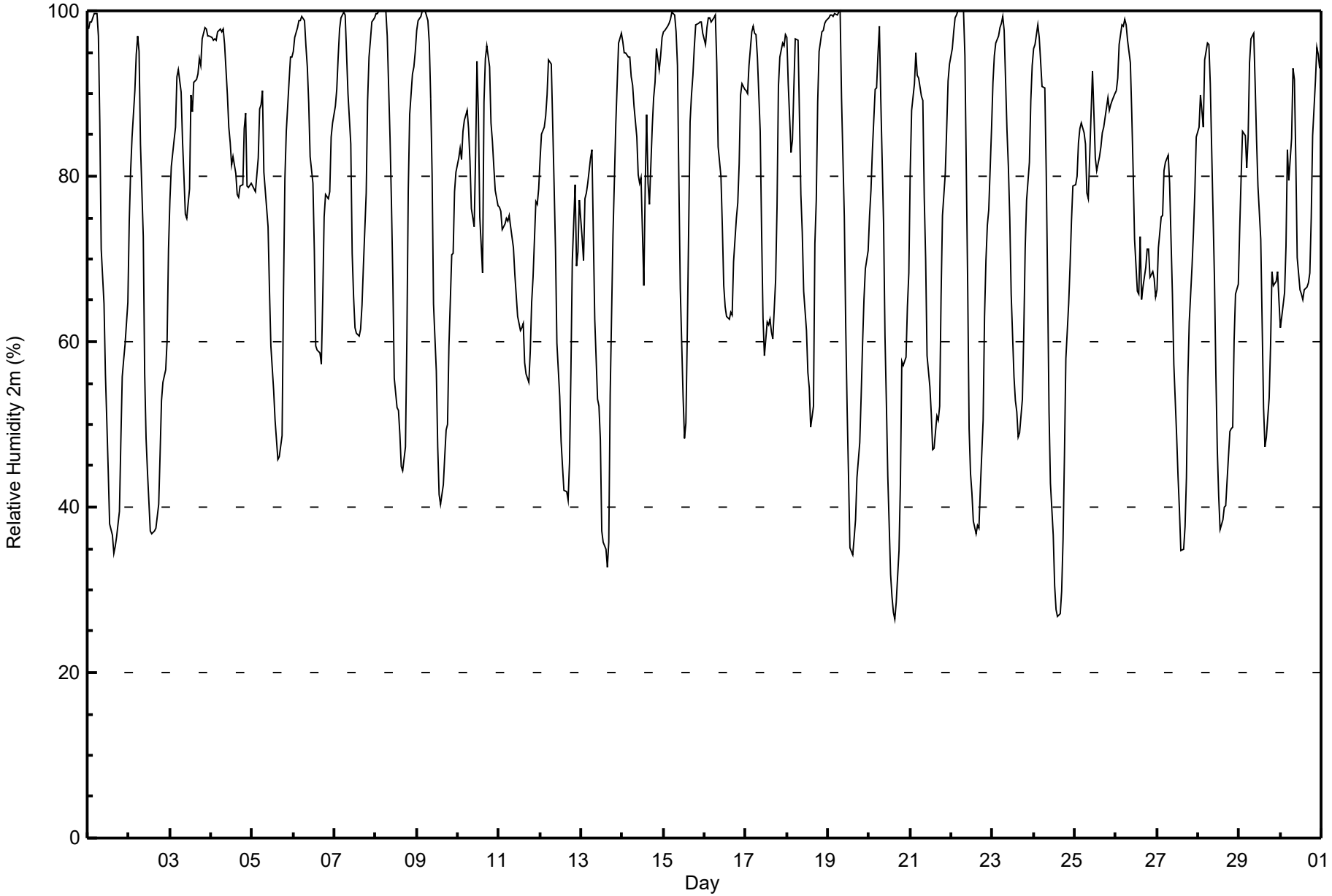
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	97.8	98.7	98.6	99.1	99.7	99.6	96.9	86.5	71.1	64.5	56.1	50.3	44.4	38.0	36.6	34.4	35.3	36.4	39.4	47.9	55.7	57.8	59.6	64.7	65.4	99.7
2-Sep	74.6	80.7	84.7	90.3	94.7	96.9	95.2	83.9	72.7	56.2	48.3	44.2	37.1	36.8	36.9	37.1	37.5	40.4	46.4	52.8	55.0	56.6	60.2	71.3	62.1	96.9
3-Sep	77.1	81.2	84.3	86.0	92.1	92.9	90.2	84.2	80.0	75.4	74.9	78.5	89.8	87.8	91.4	91.7	92.4	94.2	93.4	96.6	97.9	97.9	97.0	96.9	88.5	97.9
4-Sep	96.8	96.5	96.6	96.4	97.4	97.8	97.4	97.8	95.9	89.8	86.0	84.0	81.3	82.4	80.4	77.8	77.4	78.8	78.9	85.8	87.7	78.8	78.7	79.1	87.5	97.8
5-Sep	78.8	78.4	78.2	82.3	88.1	88.6	90.4	80.4	76.2	74.0	66.3	59.4	54.0	50.5	48.2	45.8	46.1	48.7	66.0	79.7	85.4	91.6	94.5	94.5	72.7	94.5
6-Sep	95.1	96.8	98.0	98.7	98.8	99.3	98.8	95.7	93.2	88.8	82.4	79.2	70.9	59.5	58.9	58.6	57.3	65.2	75.1	77.7	77.3	78.2	84.7	86.4	82.3	99.3
7-Sep	88.6	90.4	94.3	97.8	99.2	99.8	99.5	94.8	90.0	83.9	70.6	65.4	61.7	61.1	60.7	61.6	64.4	69.1	77.9	89.2	94.4	96.5	98.6	99.2	83.7	99.8
8-Sep	99.7	99.7	100.0	100.0	100.0	100.0	100.0	97.0	84.6	76.8	67.4	55.5	52.0	51.6	48.8	44.9	44.4	47.3	60.3	78.3	87.5	92.4	93.3	95.1	78.2	100.0
9-Sep	97.7	98.9	99.3	100.0	100.0	100.0	98.8	96.1	89.3	80.1	64.6	56.5	47.3	41.6	40.4	42.7	46.1	49.3	50.0	59.4	70.6	70.6	78.1	80.6	73.2	100.0
10-Sep	82.2	83.4	82.1	85.5	86.8	88.0	85.7	81.9	76.1	74.0	82.4	93.8	87.4	75.0	68.2	89.0	94.2	95.8	93.2	86.4	84.2	81.3	78.3	76.5	83.8	95.8
11-Sep	76.2	75.8	73.6	74.2	74.9	74.6	75.3	73.9	71.3	68.2	65.6	63.1	61.3	61.7	62.3	57.4	56.1	55.0	58.9	64.7	67.8	76.9	76.6	78.5	68.5	78.5
12-Sep	82.1	85.1	86.0	87.2	89.8	94.0	93.6	86.4	78.9	71.2	59.9	53.3	48.0	44.9	42.0	41.9	40.8	45.4	56.4	69.9	78.9	69.1	70.9	77.2	68.9	94.0
13-Sep	72.5	69.8	77.3	78.0	79.2	82.2	83.3	72.9	62.7	53.0	52.3	48.1	37.0	35.8	34.9	32.8	35.7	53.6	72.9	79.5	86.3	91.1	96.1	97.3	66.0	97.3
14-Sep	96.3	95.0	95.0	94.4	94.4	92.0	91.0	88.5	84.8	80.1	79.1	79.7	66.8	78.9	87.5	79.1	76.6	86.0	89.5	91.4	95.5	92.9	94.5	96.8	87.7	96.8
15-Sep	97.5	97.6	98.1	98.6	99.0	99.8	99.4	97.5	93.4	79.3	66.4	53.3	48.4	50.2	61.1	86.6	89.9	92.2	95.6	98.4	98.6	98.7	98.6	97.3	87.3	99.8
16-Sep	96.0	97.9	99.1	99.1	98.6	99.2	99.5	93.8	83.6	79.9	73.9	66.7	64.2	63.1	62.7	63.5	63.2	69.6	74.9	76.7	81.5	89.9	91.2	90.6	82.4	99.5
17-Sep	90.4	90.0	93.5	97.4	98.1	97.3	97.2	94.4	85.5	73.5	62.8	58.4	62.3	62.0	62.8	61.2	60.4	67.5	76.3	90.9	94.4	96.0	95.8	97.1	81.9	98.1
18-Sep	96.7	91.2	82.8	84.4	90.7	96.7	96.4	87.3	77.8	73.2	66.1	61.3	56.3	54.4	49.7	52.2	71.8	77.0	89.0	95.1	97.5	97.7	98.4	98.8	80.9	98.8
19-Sep	99.1	99.5	99.5	99.3	99.7	99.5	99.9	100.0	89.5	75.1	61.8	51.8	43.7	35.1	34.2	36.3	38.5	43.6	47.8	53.4	59.7	65.1	68.8	71.0	69.7	100.0
20-Sep	75.2	78.3	83.0	90.6	90.7	94.8	98.2	89.3	74.2	60.7	52.5	43.8	31.8	29.1	27.3	26.4	28.4	34.7	42.9	57.7	57.0	58.1	64.3	68.3	60.7	98.2
21-Sep	80.5	88.0	91.2	95.0	92.2	91.9	89.6	89.2	77.5	70.0	58.3	54.6	51.3	46.9	47.1	51.1	50.6	52.2	65.5	75.3	80.3	85.7	91.6	93.5	73.7	95.0
22-Sep	95.5	97.4	99.2	99.5	99.9	100.0	100.0	100.0	94.6	66.7	49.5	44.1	41.6	38.3	36.7	37.8	37.5	42.3	50.4	63.0	69.8	74.0	75.9	85.8	70.8	100.0
23-Sep	91.4	94.6	96.2	96.9	98.1	98.4	99.4	97.6	85.7	81.1	74.9	65.7	55.8	52.9	51.6	48.4	49.0	53.0	61.1	71.3	77.2	81.8	89.2	93.3	77.7	99.4
24-Sep	95.4	95.9	98.3	96.8	93.8	90.9	90.8	80.6	66.7	51.5	42.9	36.6	30.5	27.6	26.8	27.2	29.9	36.1	46.2	58.0	64.6	69.2	74.6	78.8	62.9	98.3
25-Sep	79.1	80.0	84.1	85.8	86.5	85.2	83.9	78.0	77.3	87.7	92.8	87.6	82.3	80.7	82.3	83.6	85.2	85.9	88.3	89.5	87.9	88.6	89.2	90.0	85.1	92.8
26-Sep	90.4	91.9	96.0	98.2	98.2	98.9	98.3	96.5	93.7	87.6	80.5	72.5	66.0	65.8	72.6	65.0	66.6	68.9	71.3	71.1	67.8	68.4	67.6	65.5	80.0	98.9
27-Sep	66.2	71.4	75.1	75.3	80.6	81.7	82.6	79.2	72.4	65.8	57.3	48.7	43.8	39.6	34.7	35.0	37.6	43.6	55.6	62.4	69.2	73.3	78.1	84.8	63.1	84.8
28-Sep	85.9	89.8	88.0	85.9	94.0	96.1	96.0	91.3	83.2	67.5	56.1	47.0	41.3	37.4	38.6	40.0	40.2	43.3	49.2	49.4	49.7	60.1	65.8	67.0	65.1	96.1
29-Sep	73.7	79.8	85.4	84.9	81.0	84.8	93.8	96.7	97.4	91.2	84.4	78.7	72.3	62.2	52.0	47.2	48.5	53.3	59.4	68.5	66.8	67.2	68.4	64.9	73.4	97.4
30-Sep	61.7	63.1	65.9	71.5	83.2	79.5	84.6	93.1	91.7	82.1	70.2	66.2	65.8	65.1	66.3	66.6	67.2	68.3	75.0	85.0	91.5	95.5	94.8	93.1	76.9	95.5
	86.3	87.9	89.4	91.0	92.6	93.3	93.5	89.5	82.4	74.3	66.9	61.6	56.6	53.9	53.5	54.1	55.6	59.9	66.9	74.2	77.9	80.0	82.4	84.5	Diurnal Average	
	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	97.4	91.2	92.8	93.8	89.8	87.8	91.4	91.7	94.2	95.8	95.6	98.4	98.6	98.7	98.6	99.2	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Fort McKay - Bertha Ganter - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Precipitation (PC) - mm

Fort McKay - Bertha Ganter - September 2026

Maximum Value: 5.5 mm on Sep 26 07:00

Maximum Daily Total: 13.0 mm on Sep 26

Minimum Value: 0.0 mm on Sep 1 01:00

Minimum Daily Total: 0.0 mm on Sep 1

Maximum Diurnal Total: 6.0 mm at hour 7

Minimum Diurnal Total: 0.0 mm at hour 2

Monthly Total: 33.57 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} = 1.1

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

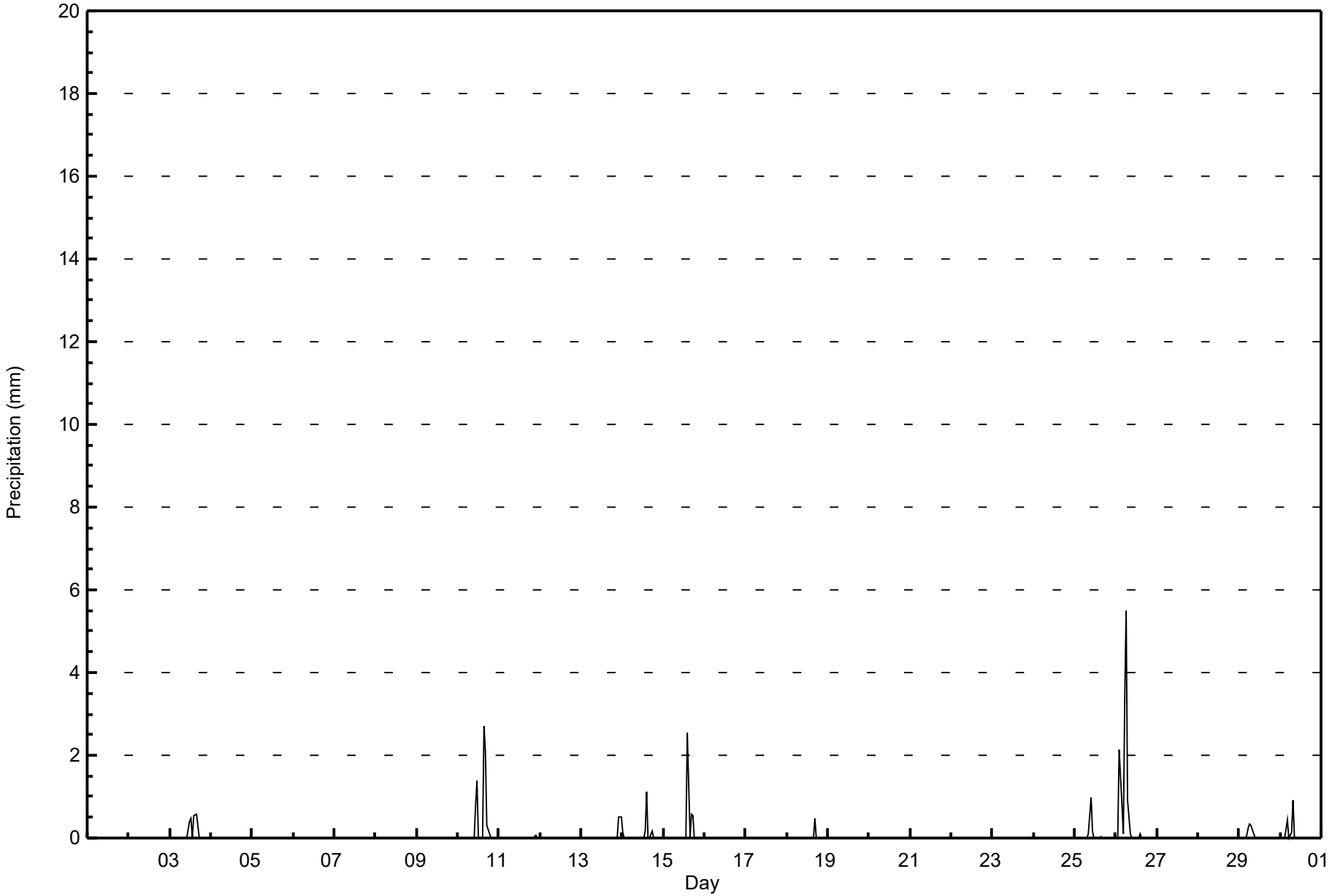
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total	Maximum
1-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.0	0.5	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.6
4-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.4	0.0	0.0	0.0	2.7	2.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0	7.4	2.7
11-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
12-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.0	0.5
14-Sep	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	1.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.1
15-Sep	0.0	0.0	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	0.0	0.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	3.7	2.6
16-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	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
19-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0	0.2	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	1.3	1.0
26-Sep	0.0	0.0	2.1	0.8	0.1	3.4	5.5	0.9	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	0.0	0.0	0.0	13.0	5.5
27-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.1	0.2	0.3	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	0.0	1.1	0.3
30-Sep	0.0	0.0	0.0	0.2	0.5	0.0	0.2	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	0.0	0.0	0.0	0.0	1.7	0.9
	0.2	0.0	2.1	1.0	0.6	3.6	6.0	2.1	0.3	1.0	0.9	1.8	0.5	0.2	4.3	3.4	3.4	1.0	0.1	0.0	0.0	0.1	0.5	0.5	Diurnal Average	
	0.2	0.0	2.1	0.8	0.5	3.4	5.5	0.9	0.1	1.0	0.8	1.4	0.5	0.2	2.6	2.7	2.1	0.5	0.1	0.0	0.0	0.1	0.5	0.5	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Precipitation (PC) - mm

Fort McKay - Bertha Ganter - September 2026



Concentration Ranges (mm)	Number of Hours	%	Cumulative %
0 - 0.3	697	96.81	96.81
0.4 - 0.5	8	1.11	97.92
0.6 - 0.7	2	0.28	98.19
0.8 - 1.4	7	0.97	99.17
1.5 - 10	6	0.83	100.00
> 10	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Leaf Wetness (LW) - %

Fort McKay - Bertha Ganter - September 2026

Maximum Value: 70.8 % on Sep 26 06:00

Maximum Daily Average: 22.1 % on Sep 15

Minimum Value: 0.0 % on Sep 20 15:00

Minimum Daily Average: 1.8 % on Sep 27

Maximum Diurnal Average: 26.8 % at hour 7

Minimum Diurnal Average: 2.2 % at hour 14

Monthly Average: 11.15 %

Percentiles: P_1 = 0.2 P_{10} = 0.8 Q_1 = 1.4 Median = 2.2 Q_3 = 17.1 P_{90} = 37.3 P_{99} = 55.6

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

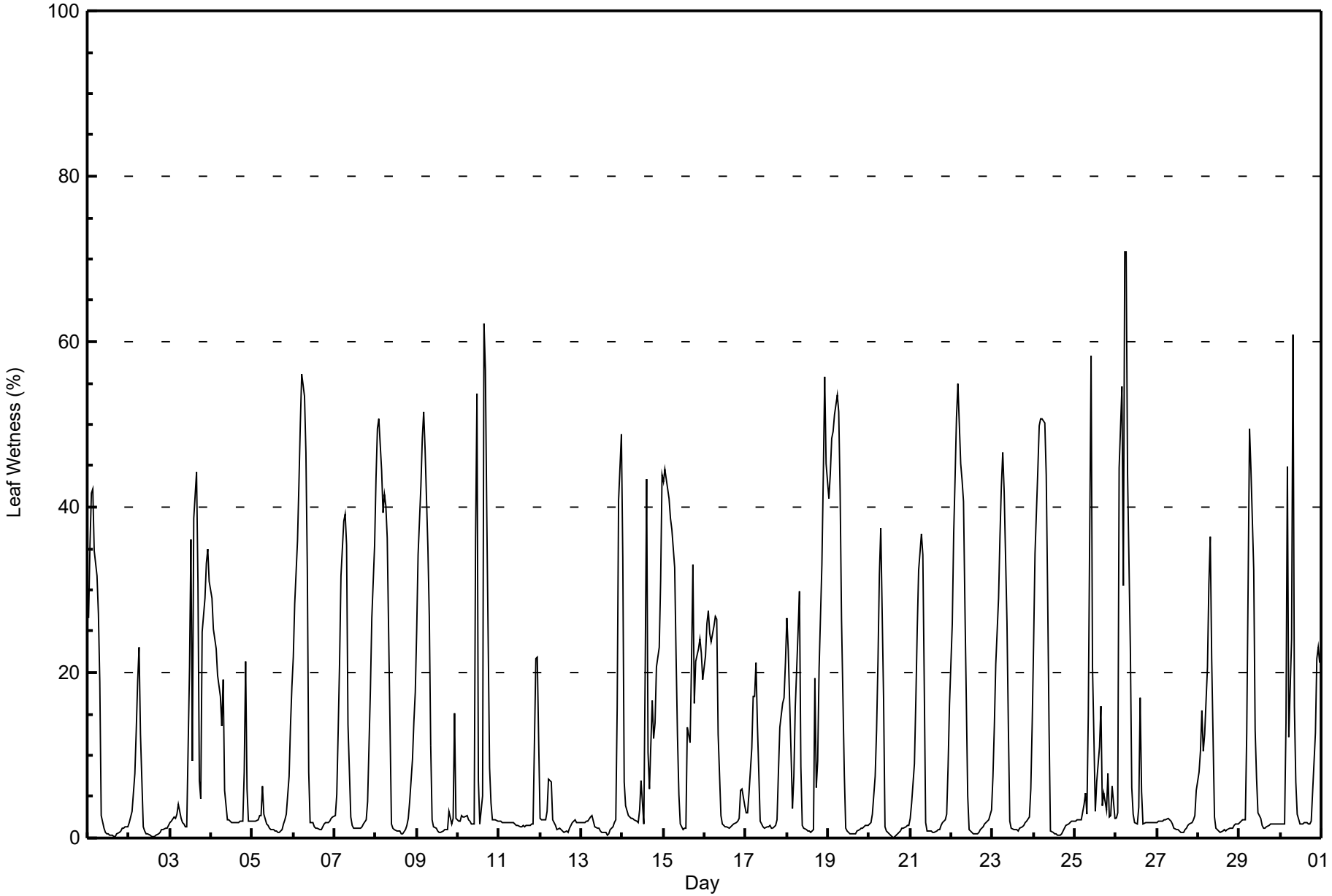
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	26.6	35.4	41.6	42.2	34.7	31.7	27.1	18.8	2.6	1.3	0.7	0.5	0.4	0.3	0.3	0.2	0.2	0.4	0.7	0.9	1.2	1.2	1.3	1.4	11.3	42.2
2-Sep	1.9	2.5	3.2	7.7	13.1	18.9	23.1	12.5	1.3	0.8	0.5	0.6	0.3	0.2	0.2	0.2	0.3	0.5	0.8	1.0	1.1	1.1	1.2	1.5	3.9	23.1
3-Sep	1.8	2.0	2.5	2.4	2.9	4.0	2.3	1.9	1.6	1.4	1.4	20.6	36.1	9.4	38.6	44.3	30.8	6.9	4.8	24.9	29.0	33.1	35.0	31.0	15.4	44.3
4-Sep	29.0	25.3	24.1	22.8	19.7	17.1	13.5	19.2	5.7	2.3	2.1	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	7.9	21.4	5.9	2.0	2.0	9.8	29.0
5-Sep	2.0	2.0	2.0	2.2	2.7	2.8	6.2	2.9	1.6	1.5	1.2	1.1	1.0	0.9	0.9	0.7	0.7	1.0	1.6	2.1	2.9	7.4	13.5	18.2	3.3	18.2
6-Sep	21.9	28.3	35.9	42.8	50.0	56.2	53.4	46.6	32.6	8.0	1.9	1.8	1.4	1.3	1.1	1.1	1.0	1.4	1.7	1.8	1.9	2.0	2.4	2.5	16.6	56.2
7-Sep	2.8	5.3	12.9	21.2	31.6	38.3	39.2	35.4	13.7	2.5	1.5	1.2	1.1	1.2	1.1	1.2	1.4	1.6	2.2	4.4	11.3	17.9	26.6	35.5	13.0	39.2
8-Sep	43.5	49.4	50.6	44.4	39.3	41.5	40.2	36.2	13.3	1.7	1.2	1.0	0.8	0.9	0.8	0.5	0.6	0.9	1.5	2.3	4.5	9.5	14.0	17.6	17.3	50.6
9-Sep	25.1	34.3	42.5	48.3	51.5	47.0	35.1	26.8	11.2	2.2	1.3	1.1	0.8	0.7	0.7	0.8	0.9	1.0	1.1	3.2	1.6	2.4	15.1	2.4	14.9	51.5
10-Sep	2.1	2.1	2.7	2.5	2.5	2.7	2.2	2.0	1.8	1.7	36.3	53.8	7.0	1.8	5.0	62.2	56.6	39.0	8.5	4.2	2.3	2.1	2.2	2.1	12.7	62.2
11-Sep	2.0	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.7	1.6	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.6	1.7	21.7	21.8	11.6	3.8	21.8
12-Sep	2.4	2.2	2.2	2.2	3.2	7.1	6.8	2.2	1.9	1.6	1.1	1.2	0.9	0.9	0.7	0.8	0.8	1.1	1.5	1.9	2.3	1.8	1.8	1.9	2.1	7.1
13-Sep	1.9	1.8	1.9	2.0	2.1	2.5	2.7	2.0	1.4	1.2	1.1	0.9	0.6	0.6	0.6	0.3	0.5	1.0	1.4	1.9	2.3	15.7	40.8	48.9	5.7	48.9
14-Sep	33.9	6.7	3.9	2.7	2.5	2.4	2.3	2.2	2.0	1.9	3.4	7.0	1.7	20.9	43.4	10.4	6.0	16.5	12.1	13.9	20.6	23.1	31.1	43.9	13.1	43.9
15-Sep	43.1	44.5	42.2	41.0	38.7	37.3	32.8	22.1	12.3	5.2	1.7	1.1	1.1	1.2	13.5	11.6	21.0	33.1	16.2	21.3	22.9	24.1	22.3	19.1	22.1	44.5
16-Sep	22.1	26.0	27.4	24.7	23.7	25.6	26.7	26.5	12.5	2.7	1.7	1.5	1.4	1.3	1.2	1.4	1.5	1.7	1.9	2.0	2.4	5.7	5.9	3.9	10.5	27.4
17-Sep	3.0	3.1	5.5	10.8	17.0	17.1	21.2	13.7	2.1	1.7	1.3	1.2	1.4	1.3	1.5	1.3	1.2	1.5	2.3	8.0	13.4	16.3	16.9	21.1	7.7	21.2
18-Sep	26.6	22.7	10.3	3.6	7.5	15.8	24.9	29.8	8.6	1.6	1.1	1.0	0.9	0.8	0.7	1.0	19.3	6.1	9.4	20.5	33.1	43.7	55.8	45.3	16.3	55.8
19-Sep	41.0	44.0	48.4	49.1	51.2	53.6	51.5	41.8	26.4	7.6	1.2	0.9	0.7	0.6	0.5	0.4	0.5	0.9	1.0	1.1	1.2	1.4	1.5	1.6	17.8	53.6
20-Sep	1.7	1.9	2.8	7.5	13.1	21.4	31.8	37.5	16.8	1.3	0.8	0.6	0.4	0.2	0.0	0.1	0.3	0.6	0.9	1.3	1.3	1.3	1.5	1.6	6.1	37.5
21-Sep	2.4	4.3	9.0	16.6	25.2	32.3	36.8	34.3	18.7	1.9	0.9	0.9	0.8	0.7	0.7	0.9	1.0	1.1	1.5	1.9	2.2	3.0	8.6	16.1	9.2	36.8
22-Sep	26.0	36.8	43.6	50.8	55.0	45.2	43.1	40.7	28.1	5.1	1.0	0.8	0.7	0.5	0.5	0.5	0.6	1.0	1.3	1.6	1.9	2.0	2.2	3.4	16.4	55.0
23-Sep	7.5	13.6	21.1	28.9	36.4	42.5	46.7	41.9	26.1	13.4	2.1	1.2	1.1	1.0	1.0	0.8	1.1	1.3	1.5	1.8	2.1	2.6	6.0	14.0	13.1	46.7
24-Sep	23.6	34.4	44.4	49.9	50.7	50.6	50.3	43.9	29.7	13.6	0.9	0.7	0.5	0.5	0.4	0.4	0.6	0.9	1.2	1.5	1.7	1.8	2.0	2.1	16.9	50.7
25-Sep	2.1	2.2	2.2	2.2	2.2	4.1	5.4	2.8	14.9	58.3	20.7	12.2	3.3	6.7	11.0	16.0	3.9	5.4	3.4	7.8	2.5	2.6	6.2	2.3	8.3	58.3
26-Sep	2.3	3.0	44.8	54.5	30.4	70.8	70.8	44.0	23.0	6.1	2.9	1.8	1.7	3.7	17.0	5.6	1.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	16.6	70.8
27-Sep	1.9	2.0	2.0	2.1	2.2	2.2	2.3	2.2	2.1	1.7	1.3	1.0	1.0	0.8	0.7	0.7	0.9	1.2	1.5	1.7	1.9	2.1	2.7	5.7	1.8	5.7
28-Sep	8.0	10.5	15.3	10.4	12.5	20.7	30.7	36.5	21.7	2.5	1.1	1.0	0.8	0.7	0.9	0.9	0.9	1.1	1.3	1.3	1.2	1.5	1.6	1.7	7.7	36.5
29-Sep	1.8	2.0	2.2	2.2	12.8	30.7	49.5	44.5	32.3	13.1	7.3	3.1	2.3	1.6	1.3	1.2	1.3	1.5	1.6	1.8	1.7	1.7	1.8	1.7	9.2	49.5
30-Sep	1.7	1.7	1.7	13.8	44.9	12.1	24.0	60.9	16.0	6.8	2.8	1.8	1.7	1.7	1.8	1.8	1.7	1.8	2.1	5.6	12.7	21.6	23.1	21.2	11.9	60.9
	13.7	15.1	18.4	20.4	22.7	25.2	26.8	24.5	12.8	5.7	3.5	4.2	2.5	2.2	5.0	5.7	5.3	4.5	3.0	5.1	6.9	9.3	12.3	12.8	Diurnal Average	
	43.5	49.4	50.6	54.5	55.0	70.8	70.8	60.9	32.6	58.3	36.3	53.8	36.1	20.9	43.4	62.2	56.6	39.0	16.2	24.9	33.1	43.7	55.8	48.9	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Leaf Wetness (LW) - %

Fort McKay - Bertha Ganter - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 0.3	14	1.94	1.94
0.4 - 0.5	18	2.50	4.44
0.6 - 0.7	26	3.61	8.06
0.8 - 1.4	135	18.75	26.81
1.5 - 10	287	39.86	66.67
> 10	233	32.36	99.03

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Global Radiation (GR) - W/m2

Fort McKay - Bertha Ganter - September 2026

Maximum Value: 672.4 W/m2 on Sep 1 13:00

Maximum Daily Average: 213.2 W/m2 on Sep 5

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

Minimum Daily Average: 18.8 W/m2 on Sep 25

Maximum Diurnal Average: 413.1 W/m2 at hour 13

Minimum Diurnal Average: 0.0 W/m2 at hour 1

Monthly Average: 126.88 W/m2

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 13.8 Q_3 = 206.0 P_{90} = 456.4 P_{99} = 625.4

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

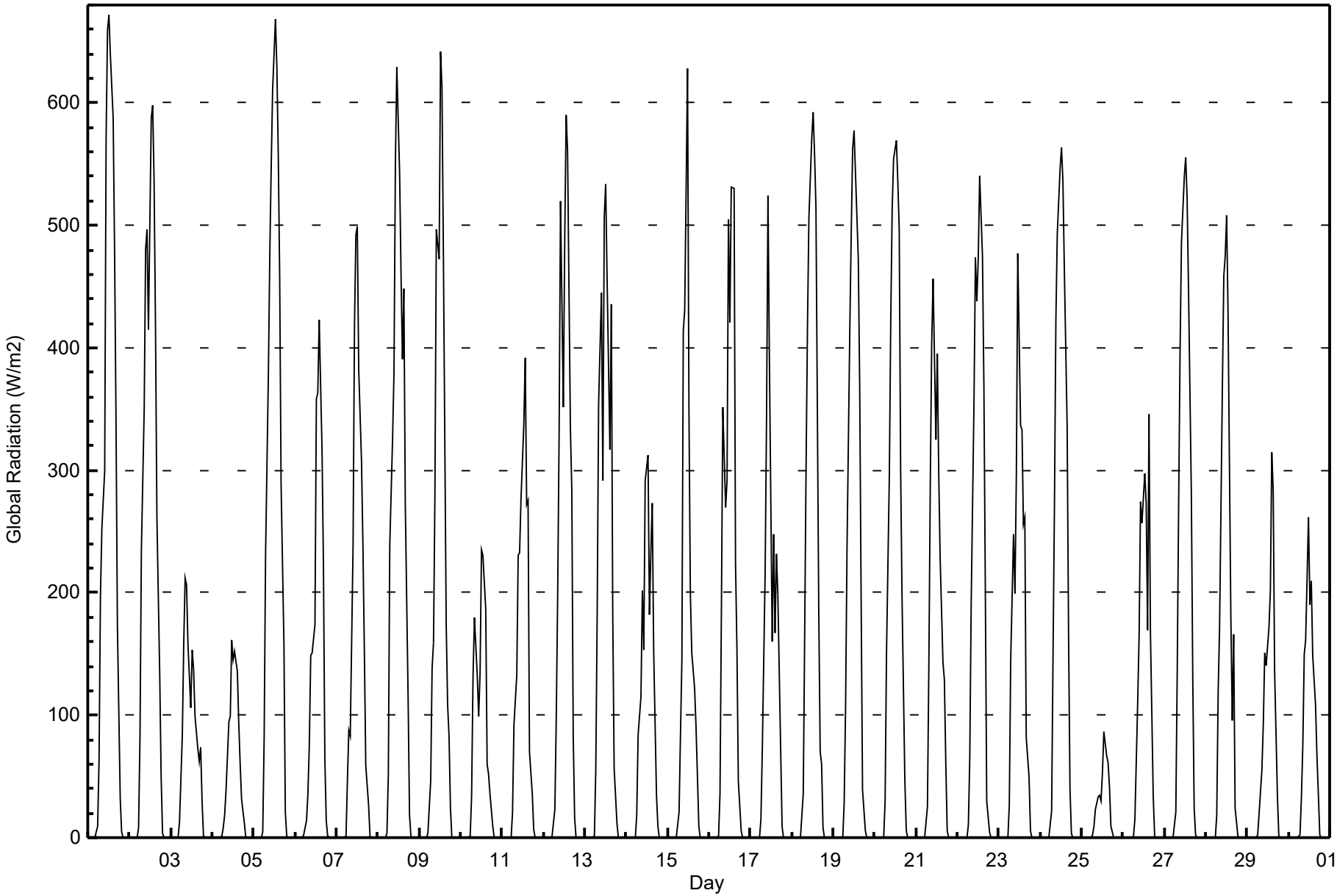
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	0.0	0.0	0.0	0.0	0.0	9.6	63.2	198.2	252.5	300.2	570.6	658.9	672.4	639.9	588.0	479.2	344.2	174.0	32.5	4.3	0.0	0.0	0.0	0.0	207.8	672.4
2-Sep	0.0	0.0	0.0	0.0	0.0	7.8	80.9	235.0	350.9	480.3	496.8	415.2	587.7	597.6	536.2	417.5	261.2	132.6	50.0	3.7	0.0	0.0	0.0	0.0	193.9	597.6
3-Sep	0.0	0.0	0.0	0.0	0.0	12.3	83.2	158.2	212.2	206.7	158.2	105.7	152.8	136.8	98.6	72.1	62.8	74.2	29.8	1.3	0.0	0.0	0.0	0.0	65.2	212.2
4-Sep	0.0	0.0	0.0	0.0	0.0	0.7	7.9	18.6	39.1	94.1	99.2	161.7	145.3	151.9	135.7	92.9	60.3	30.7	11.7	0.5	0.0	0.0	0.0	0.0	43.8	161.7
5-Sep	0.0	0.0	0.0	0.0	0.0	4.4	81.4	232.0	379.3	477.2	548.5	610.7	668.3	629.2	557.4	458.1	288.5	159.5	21.1	1.6	0.0	0.0	0.0	0.0	213.2	668.3
6-Sep	0.0	0.0	0.0	0.0	0.0	2.4	13.6	35.7	76.2	149.2	150.9	174.5	358.2	362.5	423.3	317.3	221.9	64.3	13.9	0.7	0.0	0.0	0.0	0.0	98.5	423.3
7-Sep	0.0	0.0	0.0	0.0	0.0	1.1	47.7	87.2	83.1	239.0	418.9	492.2	498.7	382.5	306.2	237.6	151.8	59.3	26.0	1.2	0.0	0.0	0.0	0.0	126.4	498.7
8-Sep	0.0	0.0	0.0	0.0	0.0	3.8	51.3	238.9	325.7	380.8	552.1	629.6	542.0	459.2	391.2	448.7	273.4	114.1	18.9	0.8	0.0	0.0	0.0	0.0	184.6	629.6
9-Sep	0.0	0.0	0.0	0.0	0.0	3.3	46.5	138.1	159.3	279.9	497.0	472.4	642.2	611.6	476.7	174.3	107.9	82.5	23.7	0.4	0.0	0.0	0.0	0.0	154.8	642.2
10-Sep	0.0	0.0	0.0	0.0	0.0	1.6	34.8	130.9	179.7	132.4	98.8	135.1	234.9	230.3	186.7	60.3	51.6	35.2	9.5	0.0	0.0	0.0	0.0	0.0	63.4	234.9
11-Sep	0.0	0.0	0.0	0.0	0.0	0.5	20.9	92.3	132.9	230.4	232.5	276.9	338.2	392.1	272.1	275.0	70.3	35.6	7.2	0.2	0.0	0.0	0.0	0.0	99.0	392.1
12-Sep	0.0	0.0	0.0	0.0	0.0	1.1	23.5	99.1	200.3	329.4	519.9	351.8	491.4	590.5	559.9	334.6	283.9	82.7	15.8	0.5	0.0	0.0	0.0	0.0	161.8	590.5
13-Sep	0.0	0.0	0.0	0.0	0.0	1.3	56.5	185.0	355.0	445.4	291.7	507.7	534.1	456.0	317.0	436.2	183.2	57.0	11.3	0.1	0.0	0.0	0.0	0.0	159.9	534.1
14-Sep	0.0	0.0	0.0	0.0	0.0	0.2	18.4	83.8	114.8	202.0	153.3	292.2	311.8	182.6	233.2	273.4	153.1	35.1	9.0	0.0	0.0	0.0	0.0	0.0	86.0	311.8
15-Sep	0.0	0.0	0.0	0.0	0.0	0.6	20.8	83.9	145.0	413.8	430.9	628.6	350.5	199.9	150.8	122.5	91.4	50.8	8.8	0.0	0.0	0.0	0.0	0.0	112.4	628.6
16-Sep	0.0	0.0	0.0	0.0	0.0	0.7	35.4	185.2	351.0	269.8	291.7	504.4	420.1	531.8	530.7	224.9	154.7	46.3	6.1	0.0	0.0	0.0	0.0	0.0	148.0	531.8
17-Sep	0.0	0.0	0.0	0.0	0.0	0.0	15.4	72.6	217.3	344.6	524.6	392.1	160.5	248.3	167.3	231.6	198.2	71.6	9.6	0.0	0.0	0.0	0.0	0.0	110.6	524.6
18-Sep	0.0	0.0	0.0	0.0	0.0	0.4	35.8	164.4	303.2	417.9	505.9	570.9	592.7	559.0	513.7	183.8	69.9	59.4	8.1	0.0	0.0	0.0	0.0	0.0	166.0	592.7
19-Sep	0.0	0.0	0.0	0.0	0.0	0.0	28.7	107.7	235.5	415.9	494.5	562.2	577.2	542.7	473.1	367.9	196.5	38.7	5.3	0.0	0.0	0.0	0.0	0.0	168.6	577.2
20-Sep	0.0	0.0	0.0	0.0	0.0	0.1	29.9	151.2	295.7	421.6	512.4	554.0	569.1	535.6	496.2	301.7	195.4	46.2	5.6	0.0	0.0	0.0	0.0	0.0	171.4	569.1
21-Sep	0.0	0.0	0.0	0.0	0.0	0.1	25.0	140.6	286.9	402.5	456.2	324.8	394.8	297.1	227.7	143.2	128.6	60.6	5.3	0.0	0.0	0.0	0.0	0.0	120.6	456.2
22-Sep	0.0	0.0	0.0	0.0	0.0	0.0	10.2	65.2	191.0	357.4	473.6	437.8	472.8	540.7	474.4	369.1	205.8	29.6	5.0	0.0	0.0	0.0	0.0	0.0	151.4	540.7
23-Sep	0.0	0.0	0.0	0.0	0.0	0.0	26.2	145.3	247.3	199.3	296.0	477.6	336.1	333.3	255.7	261.9	82.1	49.6	6.2	0.0	0.0	0.0	0.0	0.0	113.2	477.6
24-Sep	0.0	0.0	0.0	0.0	0.0	0.0	22.1	150.0	272.5	421.4	492.8	545.9	563.9	535.6	464.5	335.5	165.6	39.8	3.4	0.0	0.0	0.0	0.0	0.0	167.2	563.9
25-Sep	0.0	0.0	0.0	0.0	0.0	0.0	2.4	9.8	23.2	33.1	34.4	30.4	52.7	86.5	66.7	61.6	41.0	9.7	0.2	0.0	0.0	0.0	0.0	0.0	18.8	86.5
26-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.9	15.4	111.4	166.1	274.1	257.5	297.3	273.0	169.3	346.0	168.4	33.2	1.5	0.0	0.0	0.0	0.0	0.0	88.1	346.0
27-Sep	0.0	0.0	0.0	0.0	0.0	0.0	20.8	135.8	272.1	396.8	486.5	539.8	555.7	522.0	446.6	281.2	130.9	24.1	2.3	0.0	0.0	0.0	0.0	0.0	158.9	555.7
28-Sep	0.0	0.0	0.0	0.0	0.0	0.0	18.1	118.8	171.5	368.8	458.7	475.0	508.1	428.6	179.4	95.5	166.2	24.6	1.3	0.0	0.0	0.0	0.0	0.0	125.6	508.1
29-Sep	0.0	0.0	0.0	0.0	0.0	0.0	2.1	19.2	55.3	93.4	150.7	140.0	171.9	202.0	314.3	283.5	136.2	32.9	1.3	0.0	0.0	0.0	0.0	0.0	66.8	314.3
30-Sep	0.0	0.0	0.0	0.0	0.0	0.0	2.3	33.3	75.8	150.2	161.3	261.5	190.6	209.7	148.8	108.6	67.4	35.8	2.8	0.0	0.0	0.0	0.0	0.0	60.3	261.5
	0.0	0.0	0.0	0.0	0.0	1.7	30.9	117.7	203.9	294.0	361.1	399.6	413.1	395.6	338.7	259.8	157.1	59.6	11.8	0.5	0.0	0.0	0.0	0.0	Diurnal Average	
	0.0	0.0	0.0	0.0	0.0	12.3	83.2	238.9	379.3	480.3	570.6	658.9	672.4	639.9	588.0	479.2	344.2	174.0	50.0	4.3	0.0	0.0	0.0	0.0	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Global Radiation (GR) - W/m2

Fort McKay - Bertha Ganter - September 2026



Concentration Ranges (W/m2)	Number of Hours	%	Cumulative %
0 - 20	369	51.25	51.25
21 - 100	91	12.64	63.89
101 - 300	131	18.19	82.08
301 - 600	119	16.53	98.61
601 - 900	10	1.39	100.00
> 900	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Fort McKay - Bertha Ganter - September 2026

Maximum Speed: 27 km/h on Sep 11 10:00

Maximum Daily Speed Average: 17.9 km/h on Sep 11

Minimum Speed Value: 0 km/h on Sep 23 00:00

Minimum Daily Speed Average: 0.6 km/h on Sep 18

Maximum Diurnal Speed Average: 3.0 km/h at hour 3

Minimum Diurnal Speed Average: 1.1 km/h at hour 20

Monthly Average Velocity: 1.9 km/h 277.1 deg

Percentiles: P_1 = 1 P_{10} = 2 Q_1 = 3 Median = 6 Q_3 = 10 P_{90} = 15 P_{99} = 22

Hours in Service: 720

Hours of Data: 718

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-Sep	SW2	W3	WSW3	SW3	SSW4	S4	SE5	S4	SSE9	SSE9	SSE10	SSE14	SSE14	SSE17	SSE17	SSE17	SSE17	SSE16	SSE12	SSE5	SSE6	SSE7	SSE8	SSE5	SSE8.3	SSE17
2-Sep	SE3	ESE3	SSE3	SW3	NW4	NW3	NW3	N3	N4	SSE8	SSE12	SSE13	SSE20	SE24	SE21	SE21	SE19	SE16	SE12	SE12	SE11	SSE10	S5	N3	SE8.0	SE24
3-Sep	NNE3	NE3	NNE2	N4	N4	N6	NNE4	NNE4	NNE2	NE2	E4	SE11	ESE4	ENE4	NE4	ENE4	NNE3	N5	N5	N5	NNW4	NW4	N5	N6	NNE3.0	SE11
4-Sep	N5	N5	N6	N2	N5	N4	NNW5	N9	N15	NNE13	NNE16	N13	NNE14	N16	N20	N20	N22	N18	N16	N15	N11	NNW10	NNW11	N13	N11.7	N22
5-Sep	NNW11	NNW10	NNW9	NNW8	NNW10	NNW10	WNW4	NNW6	N5	N8	NNE9	N8	NNE7	NNE7	N8	N5	NNW2	NW4	WNW4	WNW3	WNW3	WNW2	WNW5	WNW3	NNW5.6	NNW11
6-Sep	SW1	SW2	WSW3	WSW4	W3	W4	W3	WSW2	NW3	N2	NW3	NW1	SSE5	SSE15	SSE11	SSE8	SSE8	SSE3	SE2	SSE4	SSE6	SSE8	SSE9	SSE7	S3.3	SSE15
7-Sep	SSE6	SE6	SSE3	NW2	W1	SSW2	N5	SE3	SSE7	SSE10	SSE14	SSE15	SSE13	SSE9	SE7	SE6	SSE8	S5	S3	S4	SSW3	SSE3	SSW2	SSW3	SSE5.0	SSE15
8-Sep	SW2	SSW1	NW5	WNW5	WNW4	SW2	W3	WNW2	NW4	N7	N8	NNE8	ENE5	E4	ESE3	E4	ESE5	SSE6	SSE3	UO	UO	SSW3	WSW2	SSW2	N0.7	NNE8
9-Sep	SSW3	S3	S3	SSW3	SSW3	S5	SSE6	S8	S9	SSE11	S13	S13	SSW12	SSW13	SW11	SW11	SSW10	SSW9	SW9	SSW9	S7	WSW4	W5	WSW6	SSW7.0	S13
10-Sep	W8	WNW10	WNW7	WSW5	WSW6	SSW5	SW9	SW7	W6	W9	W7	SW5	WNW8	WNW12	NW16	WNW10	WNW8	WNW7	WNW9	NW15	NW12	NW14	NW17	NW16	WNW8.2	NW17
11-Sep	NW18	NW19	NNW21	NNW20	NNW18	NNW20	NNW16	NNW18	NNW25	NNW27	NNW25	NNW23	NNW23	NW22	NW23	NNW20	NNW18	NNW19	NNW16	NNW12	NNW9	NW6	NW9	WNW8	NNW17.9	NNW27
12-Sep	WNW6	WNW4	WNW5	WNW5	WNW4	W3	W2	SW3	WNW4	WSW3	SSE2	W3	SSW5	S4	SW4	S5	SSW5	SSW5	SSW5	SSW5	S4	SSW6	S4	S4	SW3.0	WNW6
13-Sep	SW6	SW7	S4	S6	SSW4	SW3	S5	SSW6	SSW8	SSW8	SSW8	S9	SW9	SW10	SW8	W5	WSW3	N8	NNE16	N12	N11	N10	NNW9	N13	WSW2.2	NNE16
14-Sep	N14	N16	N12	N13	N14	N14	N14	N11	NNW12	N15	N14	N13	N14	N15	N12	N13	N11	NNW10	NNW8	NW5	WNW4	WNW7	WNW5	WNW4	N10.6	N16
15-Sep	WNW4	WNW4	WNW3	NW4	WSW3	SW1	S3	SSE4	S5	SW5	WSW7	SW9	SW8	SSW4	NNW8	N3	SE6	S6	SW3	W3	WNW2	NW3	NW5	NNW6	WSW2.4	SW9
16-Sep	NNW7	WNW5	W3	NW3	WNW3	WNW4	W3	WSW3	SSE5	SSW5	SW5	S10	S7	S8	SSE10	S8	SSE6	SSE5	SE6	SE5	SSE4	SE3	E2	N3	S2.7	S10
17-Sep	N4	N5	NW4	WNW4	NW4	WNW3	NW2	WNW1	NE1	SSE9	SSW8	SSE8	S7	SSW4	S6	SSW2	S6	S7	S6	SSW3	S2	SW2	WNW2	SSW2	SSW2.2	SSE9
18-Sep	SW2	SW2	W4	W2	NW3	NW4	NW5	WNW3	N5	N5	NE1	SE3	SE6	SE7	SE9	SE8	S4	S3	SSW2	WSW0	WNW3	NNW1	SW1	SW2	S0.6	SE9
19-Sep	SW3	SSW2	WSW1	SSW2	S2	SSW3	SSW1	S1	SSE4	SSE7	SSE9	SSE10	SSE11	S15	SSE19	S17	S13	SSW8	S10	S10	S9	SSE9	S6	S6	S7.2	SSE19
20-Sep	S5	S3	SSW2	S4	S6	S3	SSW2	SSE2	S7	S8	S9	S10	SW8	SW8	SW7	SSW9	SSW7	SSW6	SSW5	S5	S7	S8	SSE4	SSE6	S5.5	S10
21-Sep	SSW4	SSW4	SW4	SSW3	SW3	S4	SSW6	SSE4	SSE6	SSE7	SSE8	SSE7	SSE7	SSE3	N4	N7	NNW6	NNW5	W4	S4	SSW4	WNW3	NW1	SE1	S2.0	SSE8
22-Sep	N1	SW1	SSW1	WSW1	SSW3	SW3	W2	NW1	W2	NW12	NNW14	NNW16	NW11	WSW7	W9	W9	WSW7	SW5	W3	W2	W3	W3	NW3	WSW0	WNW3.9	NNW16
23-Sep	WSW1	SW3	SW2	SSW2	SSW3	SSW2	S2	WNW2	SE3	SE4	SE5	SE7	SE7	SSE4	SSE3	SSE5	SE5	SSE5	SSE5	SE3	S4	S5	SSW4	SW3	SSE3.1	SE7
24-Sep	SSW3	SW2	SSW1	S2	SW4	SSW4	S4	S6	SSW6	SW8	SW8	SW9	WSW10	W11	WSW10	W9	WSW6	SW3	SW4	S2	S3	NNW3	W4	WNW3	SW4.3	W11
25-Sep	SSW2	NW4	NNW4	W1	NW4	NNW2	NNW6	NNW10	N8	N11	NNE12	NNE16	NNE20	NNE20	NNE18	NNE20	N20	N21	N19	N19	N19	N20	N21	N20	N12.7	N21
26-Sep	N15	N13	NNW11	NW11	NW6	W7	WNW8	W9	WNW11	WNW10	W11	WNW13	WNW14	WNW15	WNW15	W14	W14	W13	W10	WNW9	WNW11	W11	WNW12	WNW11	WNW10.3	N15
27-Sep	W7	SW6	W10	W10	WSW10	W10	W8	WSW9	WSW8	WSW8	SW11	WSW9	SW11	WSW10	W11	WSW9	WSW8	SW6	SSW5	SSW5	SSW4	SSW5	SW3	W2	WSW7.4	SW11
28-Sep	SSW3	S4	S5	S6	S3	SW4	WSW3	WSW1	SSW4	S9	S9	SW10	SW12	SW13	SW10	SSW11	S14	S9	S7	S11	SSW9	S3	SSE5	SSE6	SSW6.6	S14
29-Sep	SSE3	WSW2	S4	S4	S6	SSE9	S8	S8	S5	SW6	WSW8	W9	WNW12	WNW11	WNW13	WNW17	WNW15	WNW12	W5	SSW3	WNW6	W9	WNW10	WNW13	W5.5	WNW17
30-Sep	NW17	NW14	NW14	WNW11	WNW11	WNW12	WNW11	WNW10	WNW10	NW12	NW21	NW21	NW18	NW16	NW13	WNW10	NW8	NW11	NW7	WNW6	WNW2	WNW2	W2	WNW3	NW10.8	NW21
	NW2.6	NW2.7	WNW3.0	WNW2.8	WNW2.9	WNW2.4	W2.3	WNW1.9	WNW1.6	W1.4	WSW1.4	SW1.4	WSW1.9	SW2.5	W2.4	WSW1.6	SW1.7	W1.5	W1.3	W1.1	W1.4	W1.9	WNW2.5	NW2.6	Diurnal Average	
	NW18	NW19	NNW21	NNW20	NNW18	NNW20	NNW16	NNW18	NNW25	NNW27	NNW25	NNW23	NNW23	SE24	NW23	SE21	N22	N21	N19	N19	N19	N20	N21	N20	Diurnal Maximum	

UO - Unstable Operation

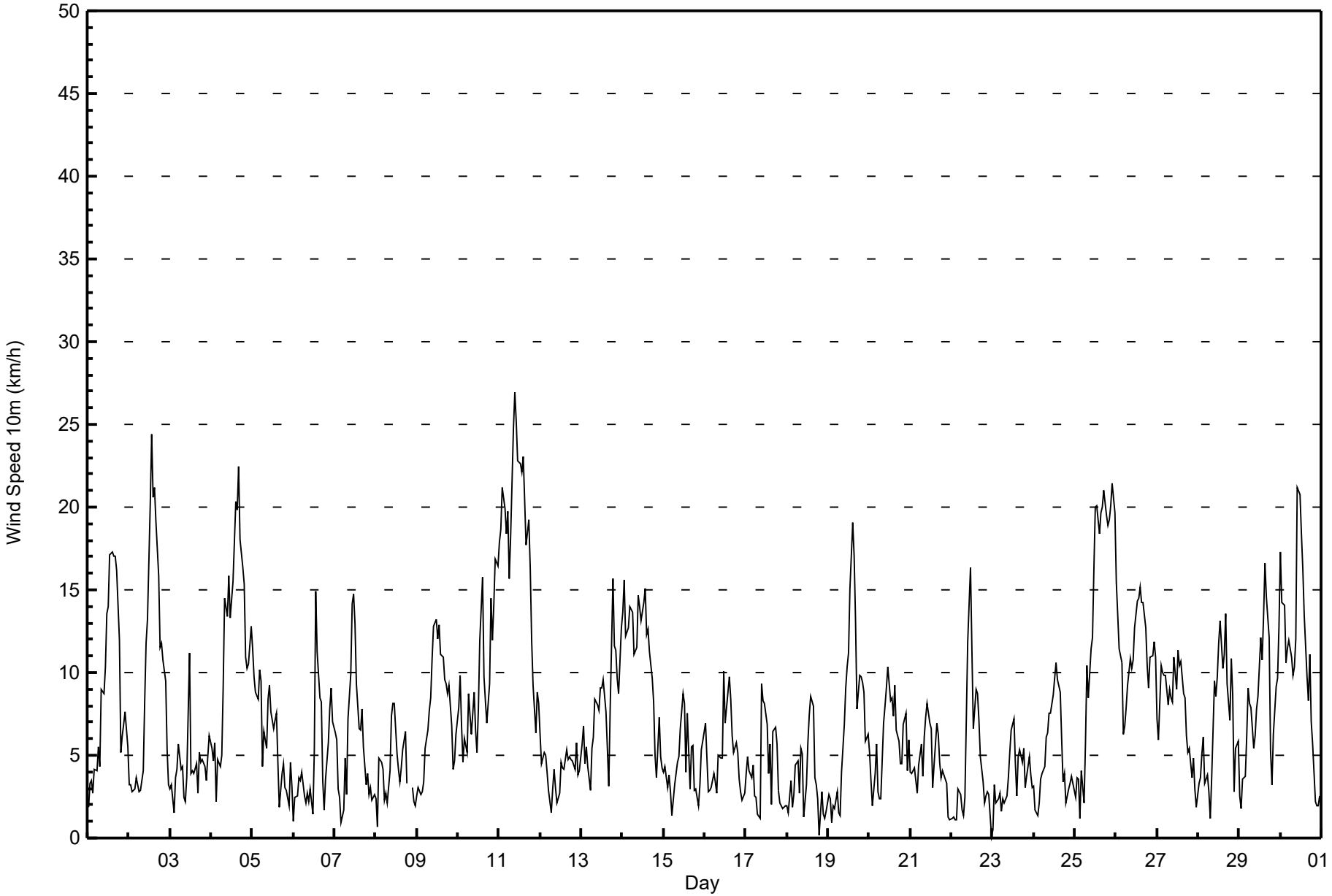
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Fort McKay - Bertha Ganter - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	338	47.08	47.08
6 - 11	246	34.26	81.34
12 - 19	106	14.76	96.10
20 - 28	28	3.90	100.00
29 - 38	0	0.00	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 718

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Fort McKay - Bertha Ganter - September 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	26	6	5	3	3	5	13	26	44	53	35	19	27	38	27	8	338
6 - 11	18	4	0	0	0	1	12	40	37	17	25	17	21	26	8	20	246
12 - 19	27	8	0	0	0	0	4	15	6	2	2	0	2	14	16	10	106
20 - 28	8	3	0	0	0	0	3	1	0	0	0	0	0	0	4	9	28
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	79	21	5	3	3	6	32	82	87	72	62	36	50	78	55	47	718

Total Number of Valid Hours: 718

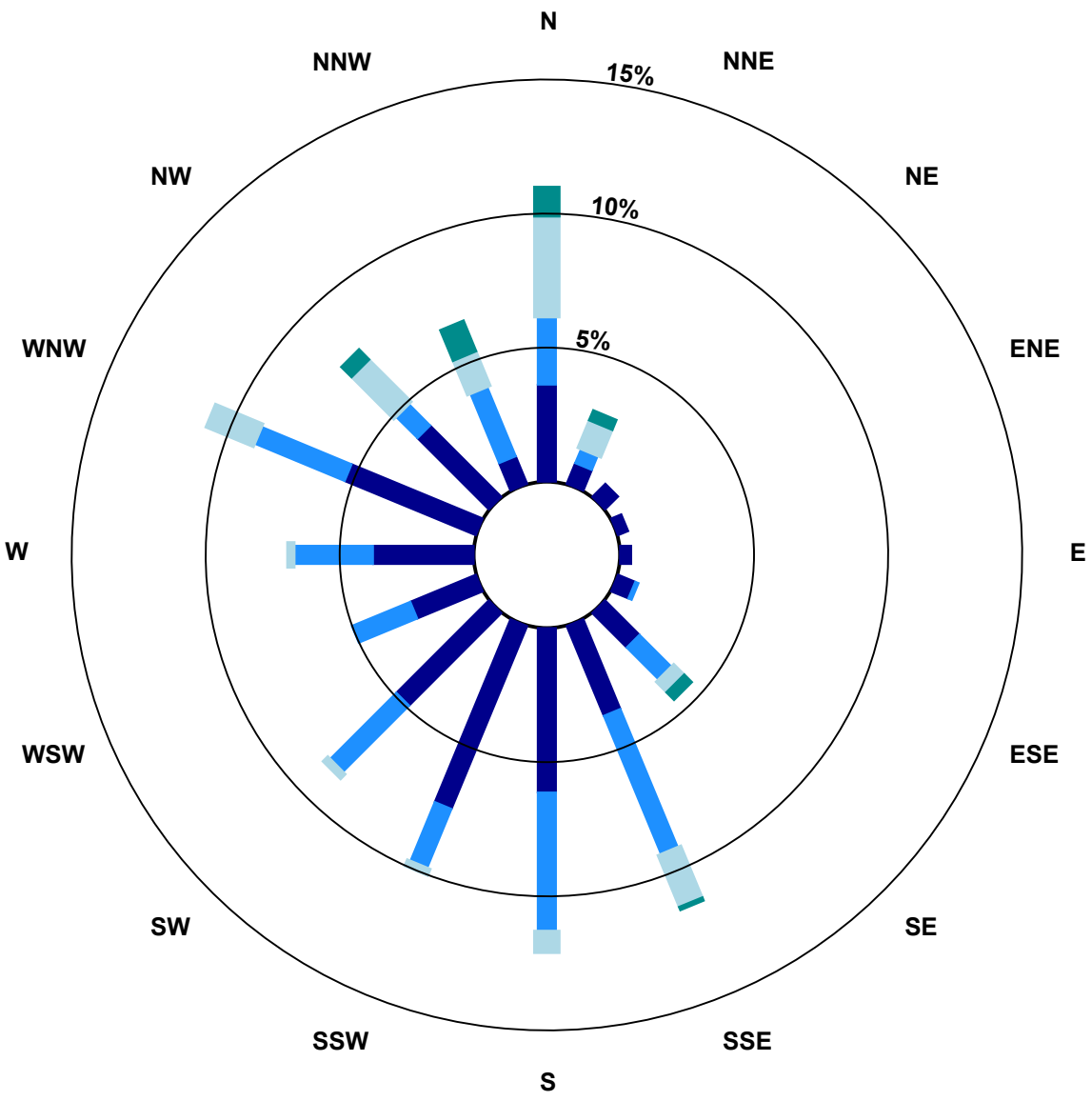
Total Number of Hours: 720

Wood Buffalo Environmental Association

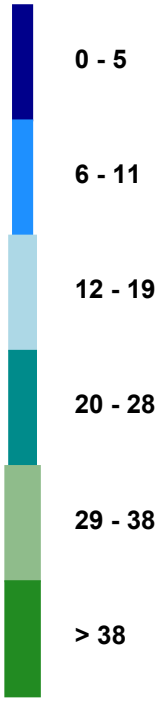
Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Fort McKay - Bertha Ganter



Classes (km/h)



Total Number of Valid Hours: 718

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 10m (WS10) - km/h

Fort McKay - Bertha Ganter - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8 km/h on Sep 13 18:00

Minimum Value: 1 km/h on Sep 8 06:00

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

Hours in Service:	720
Hours of Data:	718
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-Sep	1	1	1	1	1	1	2	2	2	2	2	3	3	4	4	4	4	4	3	2	2	1	1	1	4
2-Sep	1	1	1	1	1	1	2	1	1	3	3	4	5	6	5	4	5	4	3	2	2	2	2	2	6
3-Sep	1	1	1	2	2	1	1	1	1	2	3	4	2	2	1	2	1	1	1	2	1	1	2	1	4
4-Sep	1	1	1	1	1	2	1	3	4	3	4	3	4	4	6	5	6	5	5	5	3	2	2	3	6
5-Sep	3	2	2	2	1	3	2	3	3	3	3	3	3	3	3	2	2	2	1	1	1	2	1	2	3
6-Sep	1	2	1	1	1	1	1	1	1	1	1	1	3	4	3	2	2	1	1	1	1	1	2	1	4
7-Sep	1	1	1	1	1	1	1	1	2	2	4	3	3	2	2	2	1	2	1	1	1	1	2	2	4
8-Sep	1	1	1	1	1	1	1	2	1	2	2	3	3	2	2	2	2	1	2	UO	UO	1	2	1	3
9-Sep	1	2	1	2	2	1	1	2	2	2	3	3	4	5	6	4	3	3	3	4	1	3	2	3	6
10-Sep	3	3	3	2	3	2	4	4	3	4	2	2	5	5	5	3	3	2	2	3	3	3	4	4	5
11-Sep	5	5	5	5	5	6	4	5	6	6	6	5	5	6	5	6	4	4	4	4	2	1	2	2	6
12-Sep	2	1	2	2	2	1	1	1	1	1	2	2	3	3	3	3	2	2	1	1	1	1	1	1	3
13-Sep	2	3	1	1	1	1	2	2	3	3	3	3	4	4	3	3	2	8	5	3	2	2	2	3	8
14-Sep	3	3	2	3	3	3	3	2	3	4	3	3	3	5	3	3	2	2	3	1	2	2	2	1	5
15-Sep	1	1	1	2	1	1	1	1	2	2	3	3	3	3	5	2	2	3	1	1	1	2	2	1	5
16-Sep	1	1	1	1	1	1	1	1	1	2	2	3	3	3	4	2	1	1	1	1	1	1	1	1	4
17-Sep	1	1	1	1	2	1	1	1	1	3	2	3	2	1	2	2	2	1	1	1	1	2	1	2	3
18-Sep	1	1	1	1	1	1	2	1	2	2	1	2	2	3	2	3	2	2	2	1	1	1	1	1	3
19-Sep	1	1	1	1	1	1	1	1	1	2	2	2	2	5	4	5	4	2	2	2	2	2	1	1	5
20-Sep	2	2	2	2	2	2	2	1	2	2	2	3	4	4	3	4	2	1	2	1	2	2	1	1	4
21-Sep	1	1	1	1	2	1	2	1	2	2	2	1	2	1	2	2	3	2	1	1	1	1	1	1	3
22-Sep	1	2	2	1	2	1	1	1	2	4	4	5	3	3	4	4	3	2	2	1	1	1	1	2	5
23-Sep	2	1	1	1	1	1	2	1	1	1	2	3	2	2	1	2	2	1	1	1	1	1	1	2	3
24-Sep	1	1	1	2	2	2	2	1	2	3	3	3	4	4	4	4	3	1	1	2	1	1	1	3	4
25-Sep	2	1	2	2	2	2	2	4	4	3	3	5	5	6	5	4	5	4	4	4	4	4	5	4	6
26-Sep	4	3	3	3	3	3	3	4	4	4	4	6	6	6	6	6	6	5	4	4	5	4	5	5	6
27-Sep	3	2	5	4	4	4	3	4	4	4	4	4	5	4	5	4	4	2	1	1	1	1	1	2	5
28-Sep	1	1	1	1	2	2	1	1	3	3	3	4	5	6	4	4	4	3	1	3	3	2	1	1	6
29-Sep	2	1	1	1	2	2	2	2	1	3	3	4	5	5	6	6	7	6	3	1	2	4	5	5	7
30-Sep	7	5	5	4	5	4	4	4	3	3	6	5	5	5	4	3	3	4	2	1	1	1	1	1	7
	7	5	5	5	5	6	4	5	6	6	6	6	6	6	6	6	7	8	5	5	5	4	5	5	
	Diurnal Maximum																								

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Fort McKay - Bertha Ganter - September 2026

Direction of Maximum Speed: 345 deg on Sep 11 10:00
Direction of Maximum Daily Speed Average: 332.9 deg on Sep 11

Direction of Minimum Speed: 238 deg on Sep 23 00:00

Direction of Minimum Daily Speed Average: 0.6 deg on Sep 18

Monthly Average Direction: 277.1 deg

Hours in Service:	720
Hours of Data:	718
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-Sep	230	273	241	233	205	190	145	177	156	157	156	154	156	158	155	158	157	155	156	150	155	156	159	167	161.1
2-Sep	125	118	151	230	310	316	318	3	6	159	162	155	151	143	143	143	133	138	125	135	140	159	180	5	144.0
3-Sep	27	44	30	355	4	349	14	21	23	53	80	128	102	71	41	67	31	353	358	10	344	315	356	5	27.1
4-Sep	3	10	6	5	349	356	341	356	4	14	13	8	17	10	4	6	8	5	2	359	354	346	339	350	2.7
5-Sep	347	346	341	339	344	339	289	338	357	9	26	1	15	14	1	10	337	309	303	289	293	282	284	283	344.3
6-Sep	233	223	251	239	278	269	273	253	318	355	307	314	160	163	163	156	158	163	131	161	163	160	157	160	176.9
7-Sep	150	138	153	311	270	195	356	144	160	166	162	154	156	160	142	145	163	174	178	180	197	168	213	199	161.0
8-Sep	217	212	304	301	289	223	277	290	318	2	6	14	68	85	105	82	120	151	162	UO	UO	207	257	212	4.5
9-Sep	192	187	178	194	194	177	168	170	170	166	176	183	195	207	225	216	209	205	214	210	179	247	266	257	197.8
10-Sep	264	294	290	256	238	202	223	236	277	280	274	235	286	297	308	303	293	291	299	323	313	318	315	318	291.7
11-Sep	321	324	327	328	331	338	331	341	345	345	345	339	347	321	326	332	334	338	328	339	330	318	309	300	332.9
12-Sep	295	286	288	287	301	279	263	234	283	244	165	263	212	183	232	181	203	201	207	206	185	197	181	179	229.7
13-Sep	217	226	181	179	194	228	183	196	211	213	199	181	232	220	222	267	241	7	14	11	0	353	341	349	257.4
14-Sep	0	355	358	352	352	355	354	358	346	358	358	1	5	354	352	5	350	338	331	325	283	298	288	286	350.0
15-Sep	284	282	301	312	240	234	175	152	177	233	241	223	223	197	337	5	144	188	217	273	303	306	304	329	248.8
16-Sep	332	296	273	306	303	298	269	254	159	210	219	174	190	177	168	174	162	148	132	132	160	146	101	356	186.8
17-Sep	353	360	312	289	306	294	305	301	34	154	193	167	186	199	177	193	178	178	186	205	176	234	282	195	200.4
18-Sep	220	233	263	273	305	320	305	302	359	353	44	135	124	146	138	139	171	178	200	237	295	334	225	222	187.6
19-Sep	235	197	250	209	181	196	211	170	159	147	154	157	163	174	165	169	177	195	186	181	172	168	187	172	173.1
20-Sep	180	185	193	179	183	188	202	162	171	179	176	172	230	233	219	200	196	198	197	175	181	170	164	155	188.2
21-Sep	193	207	217	194	231	173	197	164	162	151	152	150	152	163	10	3	338	342	267	180	207	291	321	141	183.4
22-Sep	356	217	213	240	209	224	262	307	281	322	330	334	325	257	267	272	248	232	275	260	280	276	306	238	292.4
23-Sep	237	217	215	193	207	210	191	283	145	140	139	143	146	147	161	157	144	155	157	140	190	190	196	219	167.4
24-Sep	208	235	195	186	233	192	171	186	207	224	217	229	253	269	251	259	257	231	217	187	185	337	277	295	233.7
25-Sep	195	315	333	261	326	334	335	347	353	1	13	19	18	24	13	13	10	5	9	2	360	3	7	358	5.3
26-Sep	3	354	347	323	310	276	282	273	285	285	274	286	282	289	292	279	281	281	277	284	286	278	283	284	293.7
27-Sep	267	234	270	263	254	260	263	253	258	255	230	243	227	243	267	246	240	234	211	212	210	211	230	275	246.6
28-Sep	211	181	189	184	183	216	237	245	196	177	182	215	232	235	230	199	186	189	182	190	194	188	159	168	198.8
29-Sep	167	243	178	181	176	163	169	169	179	218	241	273	294	291	290	295	289	287	267	196	293	265	285	292	261.1
30-Sep	308	307	305	295	298	295	296	299	302	313	320	320	318	316	306	302	307	322	317	293	301	282	267	303	308.2
	305.8	304.4	300.9	288.7	289.3	283.2	276.9	286.2	290.8	279.5	255.5	223.8	241.6	234.5	266.2	250.5	230.3	262.1	277.4	274.9	266.0	273.5	291.0	305.1	
	Diurnal Average																								

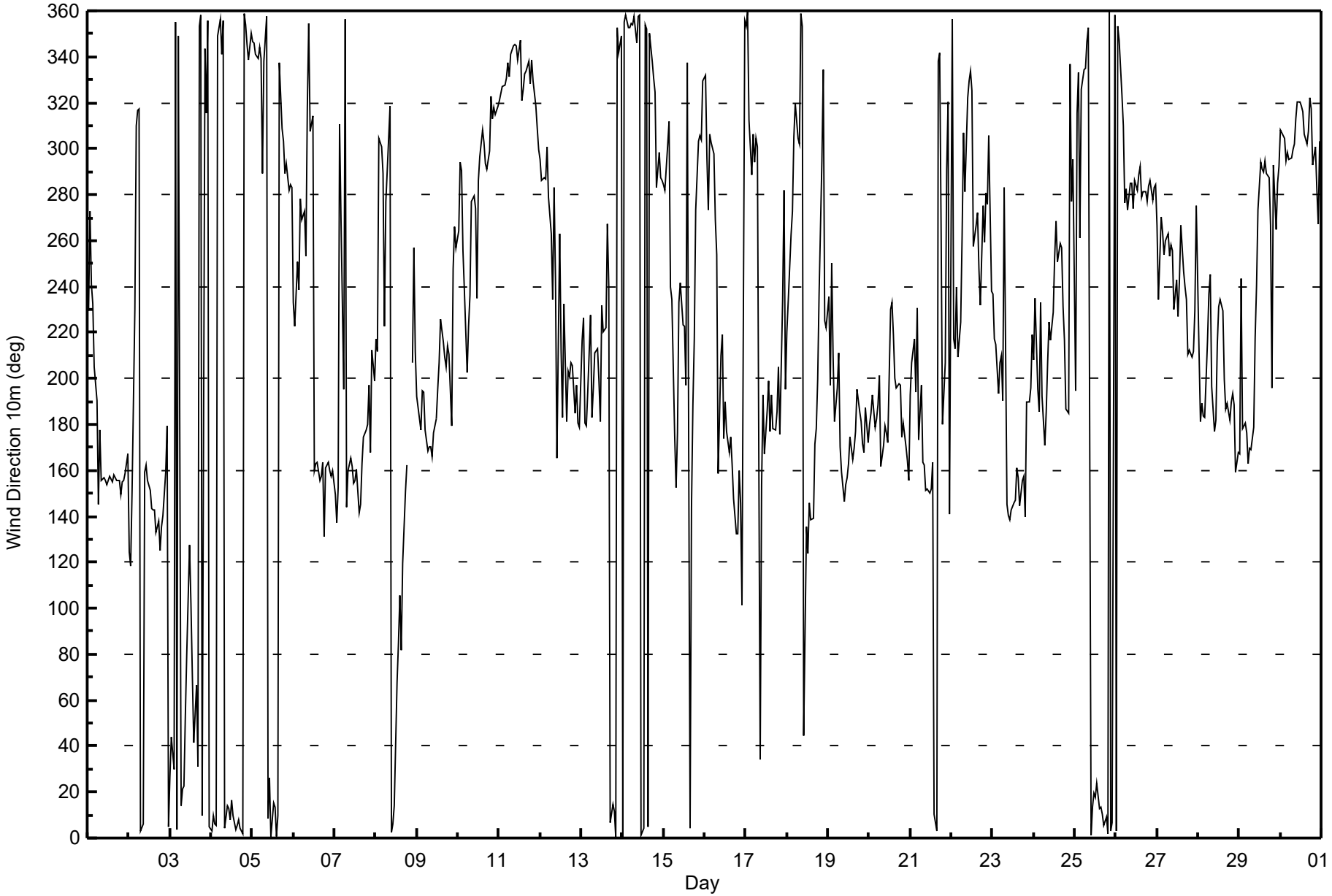
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Fort McKay - Bertha Ganter - September 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Fort McKay - Bertha Ganter - September 2026

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

Maximum Value: 100 deg on Sep 12 11:00

Minimum Value: 9 deg on Sep 21 00:00

Percentiles: P_1 = 11 P_{10} = 15 Q_1 = 17 Median = 26 Q_3 = 45 P_{90} = 59 P_{99} = 86

Hours in Service:	720
Hours of Data:	718
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-Sep	48	40	11	14	17	23	22	61	23	19	19	17	16	15	16	15	16	15	15	19	19	13	13	14	61
2-Sep	30	21	25	36	14	20	29	31	23	31	19	17	15	16	15	14	15	14	15	13	13	16	22	35	36
3-Sep	29	39	70	19	20	11	24	27	56	69	61	18	44	35	33	31	46	13	15	43	19	46	21	18	70
4-Sep	15	14	12	46	16	39	13	14	16	19	17	18	19	18	19	19	18	17	18	18	16	15	12	14	46
5-Sep	14	14	15	12	10	10	28	27	37	29	31	38	52	44	36	64	90	51	28	32	19	23	14	21	90
6-Sep	69	72	38	24	16	25	23	29	20	75	42	71	30	17	18	17	17	18	62	24	16	12	12	12	75
7-Sep	12	12	55	56	79	53	15	63	15	17	16	15	17	21	23	18	15	17	20	22	48	32	81	64	81
8-Sep	48	75	12	10	15	29	29	61	32	25	25	37	59	50	83	54	48	13	16	UO	UO	32	44	39	83
9-Sep	29	50	19	50	53	22	13	14	16	14	19	21	31	38	54	39	32	32	39	34	15	59	59	57	59
10-Sep	58	26	31	49	59	35	41	58	61	48	48	43	44	27	19	20	26	27	18	13	15	15	15	14	61
11-Sep	14	15	14	13	14	15	15	16	16	17	18	17	19	17	16	17	16	16	14	16	15	20	15	16	20
12-Sep	22	23	27	30	40	33	57	47	46	78	100	89	75	80	74	70	54	33	16	19	15	20	14	19	100
13-Sep	37	44	21	13	28	55	22	33	42	43	34	38	51	45	46	79	63	74	21	19	17	15	11	16	79
14-Sep	17	18	16	17	16	16	17	17	19	18	19	20	18	18	18	19	18	13	13	16	28	15	23	21	28
15-Sep	30	33	44	58	37	50	50	46	40	63	51	45	46	64	67	75	25	31	38	32	33	42	25	22	75
16-Sep	13	21	39	33	27	25	25	48	26	45	53	30	44	36	36	20	21	16	11	12	23	23	37	24	53
17-Sep	14	11	30	17	23	49	37	63	55	18	33	30	24	50	40	72	19	13	12	44	18	52	54	56	72
18-Sep	55	86	47	80	36	30	22	37	29	35	87	80	48	51	28	24	54	64	76	93	17	69	44	58	93
19-Sep	30	27	59	23	25	11	38	43	24	17	18	17	17	21	15	17	19	20	17	16	14	14	19	12	59
20-Sep	17	30	49	58	21	70	39	37	17	22	25	23	59	52	49	29	23	15	26	20	14	12	16	9	70
21-Sep	16	19	17	11	54	17	17	25	17	19	16	20	29	41	58	18	60	24	34	20	29	32	65	84	84
22-Sep	70	93	65	79	45	53	55	83	63	20	20	20	22	58	54	48	51	44	35	25	33	45	47	100	100
23-Sep	78	46	57	25	34	39	57	43	61	43	16	22	20	28	57	24	20	15	13	16	39	15	25	27	78
24-Sep	28	52	72	72	60	24	17	21	36	45	37	50	52	53	49	48	55	41	16	75	33	58	18	37	75
25-Sep	61	25	22	72	25	60	48	22	36	25	21	19	18	20	18	17	17	18	16	17	17	17	16	18	72
26-Sep	19	19	23	14	25	41	37	44	36	40	44	40	39	37	31	41	39	40	43	41	34	45	40	39	45
27-Sep	45	51	49	52	52	52	55	58	58	55	44	48	42	48	52	55	47	47	21	21	24	20	51	47	58
28-Sep	35	32	22	20	36	39	31	72	44	28	42	42	48	49	46	25	21	19	17	20	21	31	16	15	72
29-Sep	65	77	28	33	14	13	14	12	15	44	46	46	31	38	39	30	34	38	49	54	43	48	39	29	77
30-Sep	23	20	19	25	22	23	22	21	19	16	15	16	16	17	21	22	18	16	19	17	71	67	69	48	71
	78	93	72	80	79	70	57	83	63	78	100	89	75	80	83	79	90	74	76	93	71	69	81	100	
	Diurnal Maximum																								

UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS03
LOWER CAMP METEOROLOGY
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - LOWER CAMP MET TOWER (AMS03)
SEPTEMBER 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	659	0	61	91.53	25.3	-	18.8	-
Temperature 45 m (C) Average	659	0	61	91.53	25.5	-	19.1	-
Temperature 100 m (C) Average	659	0	61	91.53	25.5	-	19.7	-
Temperature 163 m (C) Average	659	0	61	91.53	25	-	19.4	-
Relative Humidity 20 m (%) Average	659	0	61	91.53	100	-	88.0	-
Relative Humidity 45 m (%) Average	659	0	61	91.53	100	-	87.7	-
Relative Humidity 100 m (%) Average	659	0	61	91.53	99	-	87.7	-
Relative Humidity 163 m (%) Average	659	0	61	91.53	98.6	-	87.9	-
Wind Speed 20 m (km/h) Average	659	0	61	91.53	28	-	19.0	-
Wind Speed 45 m (km/h) Average	659	0	61	91.53	37	-	27.0	-
Wind Speed 100 m (km/h) Average	0	0	720	0	--	-	--	-
Wind Speed 163 m (km/h) Average	0	0	720	0	--	-	--	-
Wind Direction 20 m (deg) Average	659	0	61	91.53	-	-	-	-
Wind Direction 45 m (deg) Average	659	0	61	91.53	-	-	-	-
Wind Direction 100 m (deg) Average	0	0	720	0	-	-	-	-
Wind Direction 163 m (deg) Average	0	0	720	0	-	-	-	-
Vertical Wind Speed 20 m (km/h) Average	659	0	61	91.53	0.4	-	0.0	-
Vertical Wind Speed 45 m (km/h) Average	659	0	61	91.53	1.2	-	0.3	-
Vertical Wind Speed 100 m (km/h) Average	0	0	720	0	--	-	--	-
Vertical Wind Speed 163 m (km/h) Average	0	0	720	0	--	-	--	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - LOWER CAMP MET TOWER (AMS03)
SEPTEMBER 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	659	12.6	4.7	-	3.6	6.9	9.1	11.7	15.9	18.8	25.3
Temperature 45 m (C) Average	659	12.62	4.7	-	3.4	7	9.1	11.8	16	18.7	25.5
Temperature 100 m (C) Average	659	12.75	4.6	-	3.1	7.2	9.5	11.9	15.9	18.7	25.5
Temperature 163 m (C) Average	659	12.22	4.7	-	2	6.4	8.9	11.6	15.6	18.2	25
Relative Humidity 20 m (%) Average	659	71.21	18	-	25.8	43.8	59.4	74.8	85.5	93.1	100
Relative Humidity 45 m (%) Average	659	69.61	17.9	-	25.4	42.7	57.9	72.4	83.6	91.1	100
Relative Humidity 100 m (%) Average	659	68.22	17.1	-	26	42.7	57.9	69.9	81.6	88.7	99
Relative Humidity 163 m (%) Average	659	66.02	16.8	-	25.6	42	54.6	66.9	79.8	86.2	98.6
Wind Speed 20 m (km/h) Average	659	10.4	6	-	0	3	5	10	15	20	28
Wind Speed 45 m (km/h) Average	659	14.6	9	-	0	4	8	13	21	27	37
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	659	-	-	-	-	-	-	-	-	-	-
Wind Direction 45 m (deg) Average	659	-	-	-	-	-	-	-	-	-	-
Wind Direction 100 m (deg) Average	0	-	-	-	-	-	-	-	-	-	-
Wind Direction 163 m (deg) Average	0	-	-	-	-	-	-	-	-	-	-
Vertical Wind Speed 20 m (km/h) Average	659	-0.4	0.4	-	-1.8	-1.1	-0.7	-0.3	0	0	0.4
Vertical Wind Speed 45 m (km/h) Average	659	-0.06	0.4	-	-1.2	-0.5	-0.3	0	0.1	0.3	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)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
ALL METEOROLOGICAL SENSORS	01 Sep 2026 01:00	03 Sep 2026 13:00	61	Station power failure
Vertical Wind Speed, Wind Speed, Wind Direction at 100m and 163m	03 Sep 2026 14:00	05 Sep 2026 22:00	57	Flat line in sensor output signal
Vertical Wind Speed, Wind Speed, Wind Direction at 100m and 163m	05 Sep 2026 23:00	05 Sep 2026 23:00	1	DAS Failure - data not recorded
Vertical Wind Speed, Wind Speed, Wind Direction at 100m and 163m	06 Sep 2026 00:00	01 Oct 2026 00:00	601	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Ambient Temperature 20m (AT20) - C

Lower Camp Met Tower - September 2026

Maximum Value: 25.3 C on Sep 20 16:00

Maximum Daily Average: 18.8 C on Sep 20

Minimum Value: 3.6 C on Sep 30 08:00

Minimum Daily Average: 6.0 C on Sep 30

Maximum Diurnal Average: 16.7 C at hour 16

Minimum Diurnal Average: 8.5 C at hour 7

Monthly Average: 12.60 C

Percentiles: P_1 = 4.7 P_{10} = 6.9 Q_1 = 9.1 Median = 11.7 Q_3 = 15.9 P_{90} = 18.8 P_{99} = 25.0

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	18.8	18.5	18.5	18.8	18.9	18.5	18.6	18.2	18.2	18.0	18.4	--	18.9
4-Sep	18.6	18.4	17.1	16.5	16.2	16.3	16.3	16.8	17.4	16.2	15.8	15.4	15.2	14.7	14.0	13.3	12.7	11.9	11.3	10.9	10.8	11.1	11.4	11.4	14.6	18.6
5-Sep	11.2	10.9	10.6	10.0	9.2	7.9	7.8	8.8	9.9	11.6	12.1	13.3	14.2	15.0	15.8	16.1	16.4	16.3	14.5	12.7	11.1	9.9	9.3	8.4	11.8	16.4
6-Sep	8.2	8.2	7.9	7.1	6.8	7.0	7.7	8.8	10.8	12.6	13.6	14.7	16.0	16.9	17.8	18.2	18.6	18.6	18.0	17.4	16.8	15.8	15.1	14.6	13.2	18.6
7-Sep	14.5	13.7	13.1	12.6	11.7	11.6	10.9	11.5	12.6	14.5	15.7	16.5	17.2	17.9	18.5	18.8	18.5	18.5	17.8	16.4	16.0	15.1	13.5	12.6	15.0	18.8
8-Sep	11.7	11.6	10.7	10.0	9.2	8.6	8.4	9.0	11.4	14.7	16.9	18.8	20.1	20.6	20.8	21.6	22.6	22.3	21.5	19.7	18.4	17.0	15.4	14.2	15.6	22.6
9-Sep	13.2	12.4	12.0	11.6	11.0	10.7	10.9	12.0	12.7	14.3	17.5	19.9	21.5	22.7	22.7	22.6	22.0	21.8	21.1	19.6	18.3	18.5	17.0	16.0	16.7	22.7
10-Sep	15.0	15.3	14.8	14.1	13.0	12.5	12.4	12.8	13.8	14.5	14.9	13.5	13.8	15.1	15.7	14.8	13.3	13.0	13.1	13.1	12.9	12.8	12.8	12.7	13.7	15.7
11-Sep	12.2	12.0	12.1	11.9	11.7	11.6	11.3	11.3	11.4	11.3	11.4	12.1	12.9	12.7	12.3	11.8	11.7	11.9	11.7	11.1	10.3	9.7	8.8	8.9	11.4	12.9
12-Sep	8.5	8.2	8.2	8.0	7.6	6.9	6.5	7.5	8.3	9.3	10.4	10.9	11.5	12.4	13.5	14.1	14.9	15.2	14.7	13.4	12.4	11.5	11.1	11.5	10.7	15.2
13-Sep	11.5	10.8	10.4	9.9	9.2	9.1	9.0	9.7	10.7	13.2	16.7	18.1	18.9	19.8	20.5	21.1	20.8	20.5	16.5	13.5	12.7	12.1	11.8	11.6	14.1	21.1
14-Sep	11.5	11.3	10.7	10.7	10.6	10.5	10.0	10.0	10.2	10.8	11.1	11.2	12.1	12.6	11.0	10.4	10.7	10.6	9.7	9.4	8.9	8.4	8.3	7.9	10.3	12.6
15-Sep	7.6	7.0	6.4	5.6	5.5	5.0	5.3	5.5	6.4	7.9	9.7	11.5	12.3	12.7	12.8	12.3	9.1	9.0	9.1	8.8	8.1	7.9	6.9	6.1	8.3	12.8
16-Sep	6.1	6.0	5.8	5.7	5.3	4.7	4.6	5.2	6.1	6.8	7.8	8.0	7.9	9.5	10.6	11.3	11.9	11.8	11.9	11.0	10.6	9.8	10.3	10.6	8.3	11.9
17-Sep	10.7	10.7	10.5	10.2	9.8	9.8	9.2	9.3	10.4	11.5	13.0	14.3	14.6	15.0	16.2	16.9	17.5	17.6	16.4	14.6	13.2	12.0	11.1	10.8	12.7	17.6
18-Sep	10.9	10.9	11.6	11.2	11.0	9.4	8.7	9.5	11.6	12.9	14.2	15.6	16.6	17.6	18.7	19.1	19.8	18.9	17.0	14.3	13.0	12.9	12.5	11.7	13.7	19.8
19-Sep	10.5	10.1	9.4	8.9	8.1	7.5	6.9	7.7	9.5	13.0	15.6	18.3	21.3	23.5	24.1	24.6	25.0	24.2	22.6	21.7	20.9	19.8	18.6	17.6	16.2	25.0
20-Sep	16.7	15.9	15.3	14.8	13.6	13.2	12.4	12.8	14.1	16.1	18.1	20.6	23.5	24.4	25.2	25.3	25.2	24.6	22.8	21.9	19.3	19.4	18.7	17.2	18.8	25.3
21-Sep	16.7	15.6	14.5	13.6	13.0	12.4	11.7	12.3	13.6	15.9	17.6	18.5	20.9	23.8	24.9	25.1	25.1	25.1	23.6	20.9	20.8	19.3	17.7	17.2	18.3	25.1
22-Sep	15.6	13.4	11.3	10.5	10.1	10.1	9.8	9.5	10.4	12.6	16.4	19.4	20.0	20.3	20.8	20.5	20.2	19.7	17.8	15.8	14.2	13.2	12.2	10.8	14.8	20.8
23-Sep	8.4	7.5	6.6	6.1	5.6	5.1	4.7	5.7	7.1	8.9	10.4	11.9	14.1	15.7	17.4	18.3	18.0	17.6	16.2	15.0	14.3	13.5	12.6	11.3	11.3	18.3
24-Sep	10.2	9.5	8.8	8.0	6.6	6.1	5.7	6.4	8.1	10.2	12.2	14.8	16.8	17.8	18.2	18.3	18.2	17.5	15.9	13.8	12.5	11.7	9.9	8.2	11.9	18.3
25-Sep	7.4	6.9	6.5	6.3	6.2	6.3	6.5	6.8	7.1	7.4	9.7	9.7	10.3	11.1	11.0	11.5	11.5	11.1	10.5	10.2	10.1	10.0	9.8	9.5	8.9	11.5
26-Sep	9.2	9.1	8.7	8.5	8.5	8.7	8.3	7.4	6.6	6.7	6.9	7.4	8.1	9.0	9.1	8.6	9.0	8.6	8.3	8.4	8.5	8.4	8.3	8.1	8.3	9.2
27-Sep	7.7	7.5	7.7	6.6	5.9	5.6	5.5	5.6	6.8	8.5	10.3	12.0	13.4	14.5	15.3	15.4	15.0	14.3	13.1	11.8	10.6	9.8	9.2	8.9	10.0	15.4
28-Sep	8.9	8.7	7.5	6.8	6.1	5.9	5.5	6.1	7.4	9.5	13.9	15.9	17.3	17.7	17.9	17.6	18.0	17.7	16.3	14.7	13.8	12.9	12.3	12.0	12.1	18.0
29-Sep	11.6	10.4	9.6	8.8	8.6	7.8	7.6	8.0	9.3	10.4	11.4	11.6	11.2	11.9	13.4	14.3	13.5	12.2	11.1	11.2	10.9	10.1	9.6	9.1	10.6	14.3
30-Sep	8.8	8.2	7.3	6.5	5.2	5.1	4.6	3.6	3.8	5.0	5.9	6.7	7.2	7.2	7.3	7.0	7.5	7.4	7.1	6.3	5.5	4.2	3.9	3.8	6.0	8.8
	11.2	10.7	10.2	9.6	9.1	8.7	8.5	8.9	9.9	11.3	12.9	14.1	15.1	16.1	16.6	16.7	16.6	16.3	15.3	14.1	13.3	12.7	12.0	11.5	Diurnal Average	
	18.6	18.4	17.1	16.5	16.2	16.3	16.3	16.8	17.4	16.2	18.1	20.6	23.5	24.4	25.2	25.3	25.2	25.1	23.6	21.9	20.9	19.8	18.7	18.4	Diurnal Maximum	

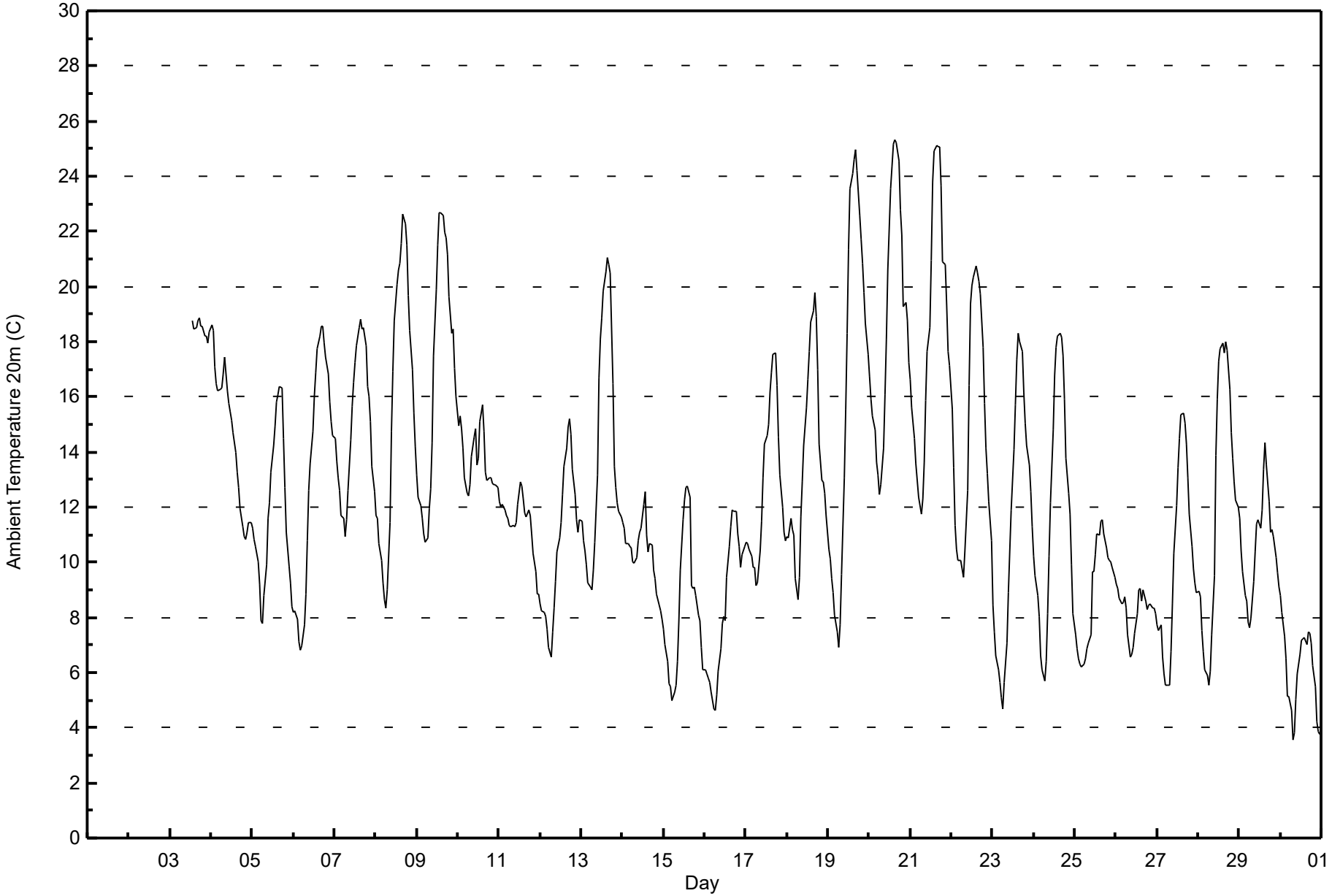
PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 20m (AT20) - C

Lower Camp Met Tower - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	211	32.02	32.02
10 - 20	398	60.39	92.41
> 20	50	7.59	100.00

Total Number of Valid Hours: 659

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Ambient Temperature 45m (AT45) - C

Lower Camp Met Tower - September 2026

Maximum Value: 25.5 C on Sep 21 18:00

Maximum Daily Average: 19.1 C on Sep 20

Minimum Value: 3.4 C on Sep 30 08:00

Minimum Daily Average: 6.0 C on Sep 30

Maximum Diurnal Average: 16.5 C at hour 16

Minimum Diurnal Average: 8.5 C at hour 7

Monthly Average: 12.62 C

Percentiles: P_1 = 4.7 P_{10} = 7.0 Q_1 = 9.1 Median = 11.8 Q_3 = 16.0 P_{90} = 18.7 P_{99} = 24.8

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	18.6	18.4	18.4	18.7	18.7	18.5	18.7	18.6	18.4	18.6	18.7	--	18.7
4-Sep	18.7	18.5	17.6	17.1	16.4	16.3	16.3	16.7	17.2	16.0	15.6	15.1	14.8	14.4	13.7	13.0	12.5	11.7	11.1	10.8	10.7	11.0	11.3	11.3	14.5	18.7
5-Sep	11.1	10.7	10.4	9.9	9.1	7.8	7.7	8.3	9.4	10.9	11.6	12.5	13.6	14.4	15.3	15.6	16.0	15.9	14.9	13.7	12.3	11.0	10.1	8.9	11.7	16.0
6-Sep	8.5	8.7	8.0	7.4	7.1	6.9	7.6	8.6	10.6	12.4	13.4	14.5	15.7	16.5	17.4	18.0	18.4	18.4	17.8	17.3	16.8	15.8	15.0	14.5	13.1	18.4
7-Sep	14.4	13.6	13.0	12.6	11.8	11.6	10.8	11.4	12.4	14.2	15.4	16.3	16.9	17.5	18.2	18.6	18.4	18.5	18.3	17.6	16.6	15.4	14.3	13.5	15.1	18.6
8-Sep	12.9	12.3	11.7	10.3	9.6	8.8	8.5	9.1	11.4	14.3	16.4	18.2	19.5	20.0	20.5	21.2	22.1	22.1	21.5	20.0	18.6	17.5	15.8	14.3	15.7	22.1
9-Sep	13.2	12.4	12.1	11.7	11.1	10.6	10.8	11.9	12.6	14.1	17.3	19.6	21.3	22.3	22.3	22.4	21.8	21.7	21.0	19.5	18.2	18.4	16.9	15.9	16.6	22.4
10-Sep	14.9	15.2	14.8	14.1	13.0	12.4	12.2	12.6	13.5	14.3	14.7	13.6	13.7	14.9	15.5	14.7	13.4	13.1	13.1	13.1	12.8	12.8	12.8	12.7	13.7	15.5
11-Sep	12.3	12.0	12.1	11.8	11.6	11.5	11.2	11.1	11.1	11.1	11.2	11.8	12.5	12.5	11.9	11.5	11.5	11.8	11.6	10.9	10.2	9.6	8.9	8.9	11.3	12.5
12-Sep	8.5	8.2	8.2	7.9	7.5	6.9	6.7	7.2	8.1	8.9	9.9	10.5	11.0	12.0	13.0	13.8	14.6	15.0	14.7	14.0	13.0	11.8	11.1	11.5	10.6	15.0
13-Sep	11.5	10.9	10.6	10.0	9.5	9.3	9.3	9.7	10.8	13.1	16.3	17.7	18.6	19.6	20.2	20.7	20.6	20.5	16.6	13.3	12.6	12.0	11.7	11.5	14.0	20.7
14-Sep	11.4	11.1	10.6	10.5	10.4	10.4	9.9	9.8	10.0	10.5	10.8	10.9	11.7	12.2	10.7	10.1	10.4	10.5	9.6	9.4	8.9	8.9	8.4	8.0	10.2	12.2
15-Sep	7.7	7.2	6.5	6.0	5.7	5.2	5.4	5.4	6.2	7.6	9.3	11.2	12.0	12.4	12.5	12.1	9.2	9.0	9.1	8.8	8.2	8.0	7.0	6.1	8.2	12.5
16-Sep	6.1	6.0	5.8	5.7	5.3	4.7	4.5	5.1	5.9	6.6	7.5	7.7	7.6	9.0	10.2	11.0	11.6	11.8	11.9	11.0	10.6	10.3	10.6	10.6	8.2	11.9
17-Sep	10.7	10.7	10.5	10.2	9.7	9.7	9.1	9.2	10.2	11.1	12.7	14.0	14.3	14.8	16.0	16.8	17.4	17.6	17.0	16.2	14.8	14.2	13.0	12.2	13.0	17.6
18-Sep	12.0	12.0	12.1	11.8	11.1	9.9	9.0	9.3	10.9	12.4	13.9	15.2	16.2	17.2	18.3	18.8	19.5	18.7	17.8	16.3	14.8	13.6	12.8	12.1	14.0	19.5
19-Sep	10.7	10.2	9.4	9.1	8.1	7.4	6.8	7.8	9.8	12.6	15.1	18.0	21.2	23.4	24.0	24.5	24.9	24.2	22.8	22.0	21.0	19.9	18.6	17.7	16.2	24.9
20-Sep	17.2	16.4	16.1	15.5	14.3	14.2	12.9	13.2	14.3	16.0	17.8	20.3	23.1	23.9	24.8	25.1	25.1	24.7	24.1	23.1	20.6	20.0	19.0	17.6	19.1	25.1
21-Sep	17.0	16.5	15.3	14.3	13.4	12.6	11.7	12.1	13.4	15.4	17.2	18.4	20.8	23.3	24.8	25.3	25.2	25.5	24.0	21.7	21.4	19.6	18.3	17.3	18.5	25.5
22-Sep	16.0	15.2	12.4	11.3	11.0	10.4	10.3	9.9	10.3	12.4	16.0	18.8	19.5	19.8	20.4	20.1	19.9	19.6	18.1	16.4	14.7	13.5	12.7	11.4	15.0	20.4
23-Sep	10.0	8.4	7.4	6.6	5.9	5.2	4.7	5.4	6.8	8.6	10.2	11.5	13.7	15.4	17.2	18.2	18.0	17.6	16.2	15.1	14.3	13.6	12.9	11.7	11.4	18.2
24-Sep	10.7	9.6	8.9	8.2	7.4	6.4	5.8	6.4	8.2	10.2	11.8	14.5	16.4	17.4	17.8	18.0	18.0	17.5	16.4	15.0	13.3	12.2	11.3	9.2	12.1	18.0
25-Sep	8.1	7.5	6.9	6.3	6.2	6.2	6.4	6.8	7.0	7.3	9.7	9.5	10.0	10.8	10.8	11.3	11.4	10.9	10.5	10.1	9.9	9.9	9.7	9.3	8.9	11.4
26-Sep	9.0	8.9	8.6	8.4	8.5	8.7	8.3	7.4	6.5	6.5	6.7	7.2	7.9	8.7	8.8	8.5	8.9	8.5	8.2	8.3	8.4	8.2	8.2	8.0	8.1	9.0
27-Sep	7.6	7.5	7.7	6.4	5.9	5.5	5.4	5.3	6.4	8.1	9.8	11.6	13.0	14.1	15.0	15.2	14.9	14.3	13.3	11.9	10.7	10.0	9.4	9.1	9.9	15.2
28-Sep	9.3	9.1	8.1	7.8	6.7	6.3	5.6	5.8	7.2	9.2	13.7	15.7	17.0	17.5	17.8	17.5	17.9	17.8	16.5	14.8	14.0	13.2	12.3	12.0	12.2	17.9
29-Sep	11.6	10.6	10.1	9.1	8.9	7.9	7.8	8.2	9.7	10.5	11.2	11.4	11.2	11.7	13.0	14.0	13.4	12.1	11.0	11.2	10.8	10.1	9.5	9.0	10.6	14.0
30-Sep	8.7	8.0	7.2	6.4	5.1	5.1	4.5	3.4	3.8	4.8	5.7	6.4	6.9	7.0	7.0	6.8	7.3	7.3	7.0	6.4	5.6	4.7	4.5	4.4	6.0	8.7
	11.5	11.0	10.4	9.9	9.3	8.8	8.5	8.8	9.8	11.1	12.6	13.8	14.8	15.8	16.3	16.5	16.5	16.2	15.4	14.5	13.7	13.0	12.3	11.7	Diurnal Average	
	18.7	18.5	17.6	17.1	16.4	16.3	16.3	16.7	17.2	16.0	17.8	20.3	23.1	23.9	24.8	25.3	25.2	25.5	24.1	23.1	21.4	20.0	19.0	18.7	Diurnal Maximum	

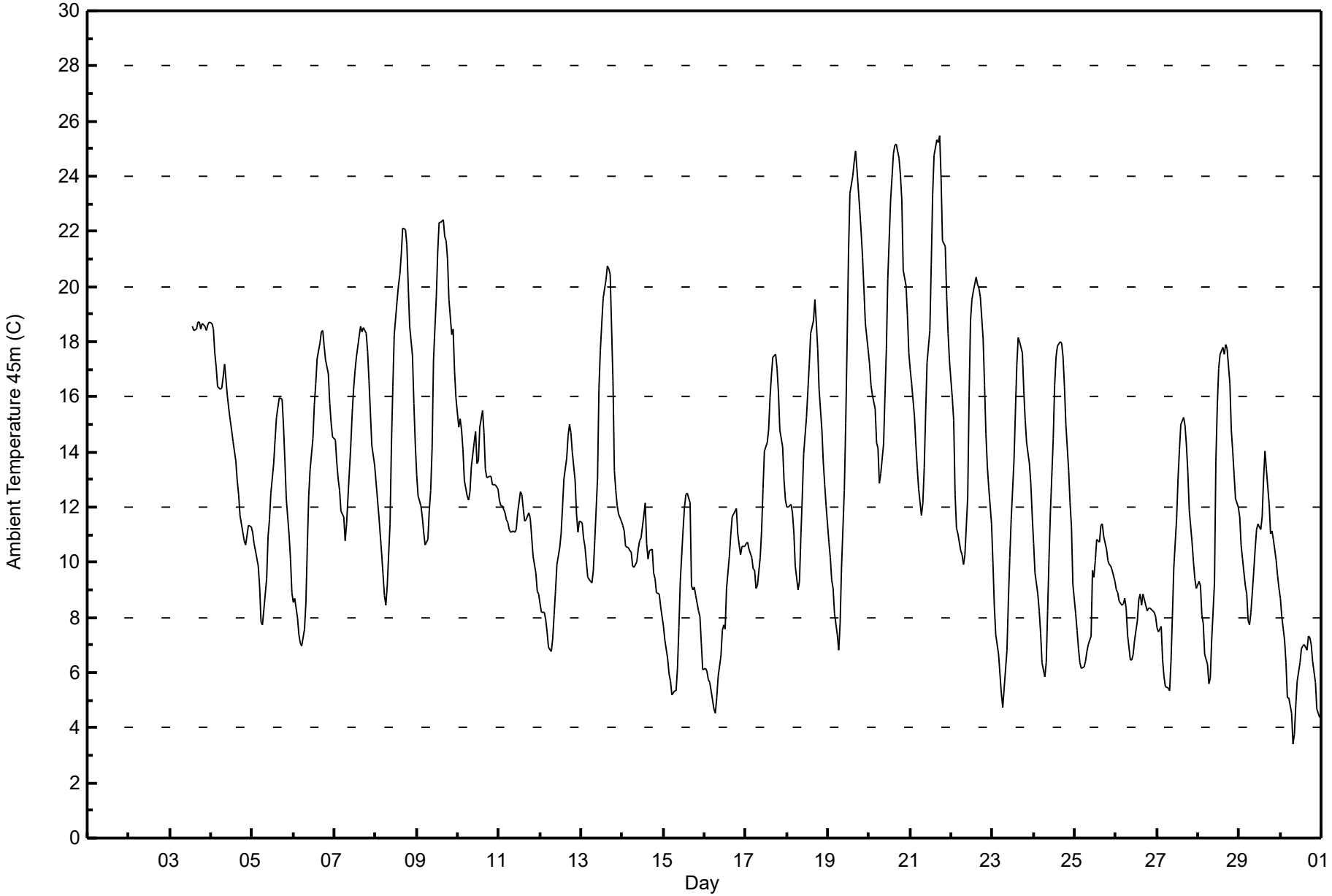
PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 45m (AT45) - C

Lower Camp Met Tower - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	208	31.56	31.56
10 - 20	403	61.15	92.72
> 20	48	7.28	100.00

Total Number of Valid Hours: 659

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Ambient Temperature 100m (AT100) - C

Lower Camp Met Tower - September 2026

Maximum Value: 25.5 C on Sep 21 18:00

Maximum Daily Average: 19.7 C on Sep 20

Minimum Value: 3.1 C on Sep 30 08:00

Minimum Daily Average: 5.9 C on Sep 30

Maximum Diurnal Average: 16.2 C at hour 17

Minimum Diurnal Average: 9.0 C at hour 7

Monthly Average: 12.75 C

Percentiles: P_1 = 4.8 P_{10} = 7.2 Q_1 = 9.5 Median = 11.9 Q_3 = 15.9 P_{90} = 18.7 P_{99} = 24.6

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	18.3	18.2	18.2	18.5	18.6	18.5	18.8	18.4	18.5	18.8	18.7	--	18.8
4-Sep	18.5	18.3	17.8	17.7	17.3	17.1	17.0	16.7	16.8	15.7	15.2	14.7	14.4	14.0	13.3	12.5	12.0	11.3	10.7	10.4	10.3	10.7	11.0	10.9	14.3	18.5
5-Sep	10.7	10.3	10.0	9.5	8.8	7.6	7.5	8.3	9.4	10.8	11.3	12.1	13.3	14.3	15.0	15.3	15.5	15.4	14.9	14.5	13.9	13.3	12.2	11.1	11.9	15.5
6-Sep	10.1	9.9	8.5	7.7	7.6	7.7	7.5	8.3	10.1	12.1	13.3	14.3	15.3	16.0	17.0	17.5	18.0	18.1	17.6	17.2	16.7	15.6	14.9	14.5	13.1	18.1
7-Sep	14.4	13.7	13.3	12.8	11.8	11.6	10.9	11.5	12.1	14.0	15.0	15.9	16.5	16.9	17.8	18.3	18.1	18.3	18.3	18.1	16.7	15.4	14.7	14.0	15.0	18.3
8-Sep	13.1	12.7	12.4	11.1	10.9	11.4	11.5	11.7	13.3	14.5	15.9	17.7	19.2	20.3	20.3	21.1	21.7	21.7	21.3	20.7	18.7	17.9	17.0	16.3	16.4	21.7
9-Sep	15.4	14.6	13.4	12.1	11.8	11.2	11.4	12.4	13.0	14.6	17.2	19.2	20.8	21.8	21.9	22.0	21.5	21.3	20.7	19.2	18.1	18.5	16.7	15.7	16.9	22.0
10-Sep	14.6	14.9	14.5	13.8	12.7	12.1	11.9	12.2	13.0	14.0	14.4	13.4	13.3	14.6	15.1	14.6	13.3	12.9	13.0	13.0	12.8	12.7	12.6	12.5	13.4	15.1
11-Sep	12.2	11.9	11.9	11.6	11.3	11.2	10.9	10.7	10.7	10.7	10.8	11.4	12.1	12.0	11.4	11.1	11.3	11.6	11.4	10.7	10.0	9.5	9.0	8.8	11.0	12.2
12-Sep	8.3	8.0	8.0	7.7	7.2	6.8	6.9	7.4	7.7	8.6	9.5	10.1	10.6	11.6	12.6	13.4	14.2	14.6	14.5	14.5	14.7	13.4	11.8	11.7	10.6	14.7
13-Sep	11.5	10.9	10.6	10.4	10.2	9.7	9.6	9.6	10.7	13.1	15.9	17.3	18.3	19.2	19.8	20.3	20.3	20.2	16.4	13.0	12.3	11.7	11.4	11.2	13.9	20.3
14-Sep	11.1	10.8	10.2	10.2	10.1	10.0	9.6	9.5	9.7	10.1	10.4	10.5	11.3	11.8	10.2	9.7	10.1	10.1	9.4	9.2	8.7	8.9	8.6	8.2	9.9	11.8
15-Sep	7.8	7.2	6.6	6.4	5.8	5.3	5.3	5.2	5.8	7.3	8.9	10.8	11.6	12.0	12.1	11.8	9.0	8.9	9.0	8.8	8.2	8.0	6.9	6.0	8.1	12.1
16-Sep	6.0	5.8	5.6	5.5	5.2	4.5	4.4	5.1	5.6	6.2	7.2	7.4	7.2	8.6	9.8	10.6	11.3	11.5	11.8	11.2	10.9	10.9	10.7	10.5	8.1	11.8
17-Sep	10.6	10.7	10.4	10.1	9.6	9.5	8.9	9.0	9.8	10.7	12.4	13.7	14.1	14.5	15.8	16.7	17.1	17.3	16.9	16.7	16.1	15.3	14.1	14.1	13.1	17.3
18-Sep	13.6	12.9	12.5	12.2	11.6	10.4	9.1	9.6	11.0	12.0	13.9	14.7	15.9	16.9	18.1	18.7	19.3	18.5	18.1	17.6	16.5	15.1	13.8	13.4	14.4	19.3
19-Sep	12.1	11.7	11.1	11.3	10.6	10.4	8.6	10.1	11.0	12.5	14.8	18.0	21.1	23.0	23.6	24.1	24.6	24.2	23.2	22.9	21.5	19.9	18.7	17.8	16.9	24.6
20-Sep	17.9	17.8	17.5	16.6	15.0	14.7	14.2	14.2	14.9	16.4	17.8	20.3	22.7	23.5	24.4	24.8	24.8	24.6	24.4	24.3	23.1	21.5	19.8	18.1	19.7	24.8
21-Sep	17.3	16.8	15.7	14.5	14.1	14.4	14.0	13.6	14.1	15.2	17.1	18.9	20.6	22.9	24.5	25.4	25.4	25.5	24.5	23.5	22.1	19.7	18.4	17.2	19.0	25.5
22-Sep	16.8	16.3	15.1	13.2	12.2	12.1	11.5	11.0	11.1	12.5	15.8	18.5	19.0	19.3	19.9	19.7	19.6	19.4	18.8	17.9	16.5	14.5	13.5	12.4	15.7	19.9
23-Sep	11.1	10.6	9.5	8.2	7.4	6.8	6.1	5.9	6.7	8.5	10.1	11.2	13.5	15.3	16.9	17.9	17.8	17.3	16.2	15.4	14.5	13.5	12.9	12.1	11.9	17.9
24-Sep	10.8	10.0	9.0	8.2	8.2	7.7	7.3	7.2	8.4	10.4	11.9	14.4	16.0	17.0	17.4	17.6	17.6	17.3	17.0	16.5	14.3	12.4	11.8	10.3	12.4	17.6
25-Sep	9.7	9.2	8.8	7.7	7.2	7.7	6.2	6.7	7.4	7.9	9.8	9.2	9.8	10.7	10.6	11.1	11.2	10.7	10.2	9.8	9.6	9.6	9.5	9.0	9.1	11.2
26-Sep	8.7	8.6	8.4	8.2	8.2	8.5	8.1	7.1	6.2	6.1	6.2	6.8	7.5	8.2	8.5	8.2	8.5	8.2	7.9	8.0	8.1	7.9	7.9	7.8	7.8	8.7
27-Sep	7.4	7.2	7.4	6.2	5.6	5.2	5.2	5.0	6.0	7.7	9.4	11.2	12.6	13.7	14.5	14.9	14.7	14.1	13.5	12.5	11.4	10.9	10.5	9.8	9.9	14.9
28-Sep	9.7	9.5	8.7	8.4	7.9	7.2	6.3	6.6	7.5	9.3	13.3	15.3	16.6	17.1	17.5	17.2	17.5	17.6	17.0	15.8	15.5	14.5	13.1	12.0	12.5	17.6
29-Sep	11.6	11.3	10.8	10.1	9.8	9.7	9.0	9.0	10.1	10.4	10.9	11.0	10.9	11.3	12.6	13.6	13.1	11.8	10.8	11.0	10.6	9.8	9.2	8.8	10.7	13.6
30-Sep	8.4	7.8	6.9	6.0	4.9	4.8	4.2	3.1	3.6	4.5	5.3	5.9	6.4	6.6	6.6	6.5	7.0	7.0	6.8	6.7	6.0	5.1	5.5	5.5	5.9	8.4
	11.8	11.5	10.9	10.3	9.7	9.4	9.0	9.1	9.8	11.0	12.4	13.5	14.5	15.4	15.9	16.2	16.2	16.0	15.5	14.9	14.1	13.4	12.7	12.1	Diurnal Average	
	18.5	18.3	17.8	17.7	17.3	17.1	17.0	16.7	16.8	16.4	17.8	20.3	22.7	23.5	24.5	25.4	25.4	25.5	24.5	24.3	23.1	21.5	19.8	18.7	Diurnal Maximum	

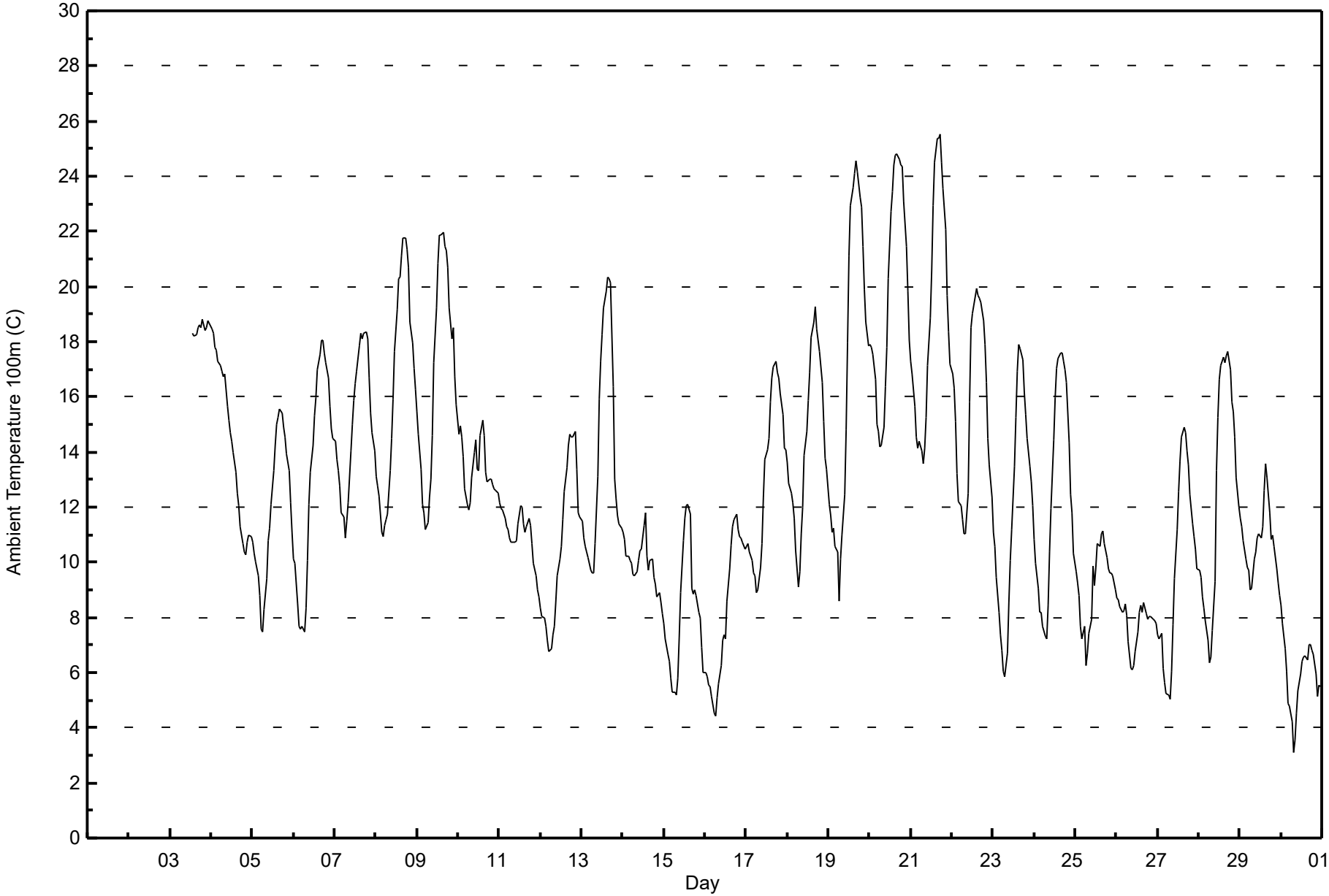
PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 100m (AT100) - C

Lower Camp Met Tower - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	195	29.59	29.59
10 - 20	418	63.43	93.02
> 20	46	6.98	100.00

Total Number of Valid Hours: 659

Total Number of Hours: 720

Maximum Value: 25.0 C on Sep 21 18:00

Maximum Daily Average: 19.4 C on Sep 20

Minimum Value: 2.0 C on Sep 30 08:00

Minimum Daily Average: 4.9 C on Sep 30

Maximum Diurnal Average: 15.3 C at hour 17

Minimum Diurnal Average: 8.8 C at hour 8

Monthly Average: 12.22 C

Percentiles: P_1 = 4.1 P_{10} = 6.4 Q_1 = 8.9 Median = 11.6 Q_3 = 15.6 P_{90} = 18.2 P_{99} = 23.9

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	17.5	17.4	17.5	17.7	18.1	18.3	18.3	17.8	18.1	18.2	17.9	--	18.3
4-Sep	17.7	17.6	17.2	17.0	16.7	16.7	16.6	16.6	16.2	14.8	14.2	13.7	13.4	12.9	12.2	11.4	11.0	10.3	9.7	9.4	9.3	9.7	10.0	9.9	13.5	17.7
5-Sep	9.6	9.3	9.0	8.5	7.7	6.8	6.4	6.9	8.1	9.6	10.1	11.1	12.1	13.1	14.0	14.3	14.5	14.4	14.0	13.6	13.5	13.2	13.2	11.7	11.0	14.5
6-Sep	10.8	10.6	9.5	7.8	9.4	9.1	7.8	8.2	9.6	11.2	12.6	13.4	14.3	15.0	16.1	16.6	17.1	17.1	16.7	16.5	15.8	14.9	14.1	13.8	12.8	17.1
7-Sep	13.8	13.1	12.9	12.7	11.5	11.1	10.9	11.5	11.9	13.1	14.0	14.9	15.6	16.0	16.9	17.5	17.3	17.5	17.5	17.3	16.1	14.8	14.5	13.8	14.4	17.5
8-Sep	13.5	13.3	12.8	12.2	11.8	11.7	12.0	12.3	12.7	14.0	15.1	16.5	18.1	19.3	19.6	20.5	20.9	20.9	20.7	20.4	19.4	18.6	16.8	16.0	16.2	20.9
9-Sep	15.0	14.3	14.4	13.0	12.9	12.4	13.0	12.9	12.8	14.1	16.4	18.3	19.9	20.9	21.0	21.1	20.6	20.4	19.8	18.3	17.5	18.0	16.0	14.9	16.6	21.1
10-Sep	13.8	14.0	13.6	13.0	11.7	11.1	10.9	11.1	12.0	13.0	13.4	12.4	12.3	13.6	14.1	13.7	12.4	12.1	12.2	12.3	12.0	11.8	11.7	11.7	12.5	14.1
11-Sep	11.3	11.0	11.0	10.6	10.3	10.2	9.9	9.7	9.7	9.7	9.7	10.3	10.9	10.9	10.3	10.0	10.3	10.6	10.4	9.7	9.0	8.6	8.1	7.9	10.0	11.3
12-Sep	7.4	7.2	7.1	6.9	6.2	5.9	6.1	6.1	6.5	7.4	8.2	9.0	9.5	10.4	11.5	12.4	13.2	13.7	13.7	13.8	14.0	13.8	11.8	11.2	9.7	14.0
13-Sep	10.8	10.1	10.0	9.9	9.6	9.1	8.9	8.7	9.8	12.4	14.9	16.3	17.3	18.3	18.9	19.4	19.4	19.3	15.5	12.1	11.3	10.7	10.4	10.3	13.1	19.4
14-Sep	10.1	9.8	9.3	9.2	9.0	8.9	8.6	8.4	8.6	8.9	9.3	9.4	10.3	10.7	9.2	8.6	9.0	9.1	8.5	8.3	7.8	8.1	8.0	7.6	8.9	10.7
15-Sep	7.3	6.7	6.0	5.7	4.8	4.7	4.6	4.4	4.9	6.2	7.8	9.7	10.5	11.0	11.0	10.7	8.2	8.0	8.2	8.0	7.5	7.1	6.0	5.2	7.2	11.0
16-Sep	5.1	4.8	4.6	4.5	4.2	4.2	4.4	4.5	4.6	5.1	6.0	6.3	6.1	7.4	8.8	9.6	10.3	10.6	10.9	11.2	10.5	10.2	9.9	9.7	7.2	11.2
17-Sep	9.8	9.9	9.6	9.3	8.9	8.7	8.2	8.1	8.8	9.8	11.4	12.8	13.3	13.8	14.9	15.8	16.2	16.4	16.7	16.8	16.5	16.8	15.5	14.4	12.6	16.8
18-Sep	13.7	14.2	13.1	12.6	12.4	10.1	9.1	9.6	10.1	11.2	12.3	13.7	14.7	15.8	17.3	17.9	18.3	17.6	17.4	17.1	16.2	14.7	13.8	14.4	14.1	18.3
19-Sep	13.3	12.9	12.3	11.9	11.6	10.4	10.1	10.2	10.7	12.1	14.4	17.4	20.4	22.0	22.7	23.3	23.8	23.6	23.0	22.5	21.3	19.8	18.7	17.7	16.9	23.8
20-Sep	17.8	17.8	17.0	16.9	15.6	14.6	14.0	13.6	14.1	15.7	17.3	19.7	21.8	22.6	23.5	23.9	24.0	24.1	23.8	23.9	23.4	22.3	20.5	18.4	19.4	24.1
21-Sep	17.6	16.9	16.3	15.3	14.7	14.2	14.2	14.5	14.8	15.7	17.3	19.2	20.1	22.2	23.8	24.8	25.0	25.0	24.0	23.3	21.8	19.5	18.1	17.1	19.0	25.0
22-Sep	16.8	16.3	15.7	14.6	14.3	13.1	12.7	12.1	11.6	13.1	15.4	17.4	18.0	18.4	18.9	18.7	18.7	18.6	18.1	17.7	17.0	15.0	13.8	13.0	15.8	18.9
23-Sep	11.9	11.4	10.4	9.0	8.4	8.4	7.8	6.4	6.4	8.1	9.6	10.9	13.0	14.8	16.1	17.0	16.9	16.5	15.4	14.7	13.7	12.7	12.2	11.8	11.8	17.0
24-Sep	11.0	10.5	9.7	8.3	7.6	7.4	7.1	6.8	7.5	9.5	11.3	13.7	15.0	16.0	16.4	16.6	16.6	16.4	16.2	16.0	15.5	13.9	13.8	10.8	12.2	16.6
25-Sep	10.8	10.8	10.7	9.2	8.7	9.3	7.7	8.0	9.1	9.1	9.5	8.3	9.1	10.2	10.0	10.2	10.6	10.0	9.3	8.8	8.7	8.7	8.6	8.0	9.3	10.8
26-Sep	7.6	7.6	7.4	7.3	7.2	7.5	7.0	6.0	5.0	4.9	5.0	5.6	6.3	7.0	7.3	7.1	7.4	7.1	6.9	6.9	7.0	6.9	6.8	6.7	6.7	7.6
27-Sep	6.4	6.2	6.4	5.2	4.8	4.4	4.3	3.9	4.9	6.6	8.3	10.1	11.5	12.6	13.5	13.9	13.8	13.1	12.8	12.3	11.6	11.6	10.9	9.8	9.1	13.9
28-Sep	9.3	8.9	8.1	7.6	7.4	6.7	6.3	6.6	7.0	8.8	12.3	14.2	15.6	16.2	16.5	16.3	16.5	16.8	16.7	16.4	15.6	15.1	13.5	11.6	12.1	16.8
29-Sep	11.4	11.0	10.8	10.3	9.8	10.1	9.3	8.9	9.5	9.5	9.8	10.0	9.9	10.2	11.5	12.5	12.0	10.8	9.9	10.1	9.6	8.8	8.2	7.7	10.1	12.5
30-Sep	7.4	6.7	5.8	4.9	3.8	3.7	3.1	2.0	2.5	3.4	4.2	4.8	5.2	5.4	5.4	5.4	5.9	6.0	5.8	5.9	5.7	5.0	5.2	5.1	4.9	7.4
	11.5	11.2	10.8	10.1	9.7	9.3	8.9	8.8	9.2	10.3	11.5	12.6	13.5	14.4	15.0	15.2	15.3	15.1	14.7	14.3	13.8	13.2	12.4	11.7	Diurnal Average	
	17.8	17.8	17.2	17.0	16.7	16.7	16.6	16.6	16.2	15.7	17.3	19.7	21.8	22.6	23.8	24.8	25.0	25.0	24.0	23.9	23.4	22.3	20.5	18.4	Diurnal Maximum	

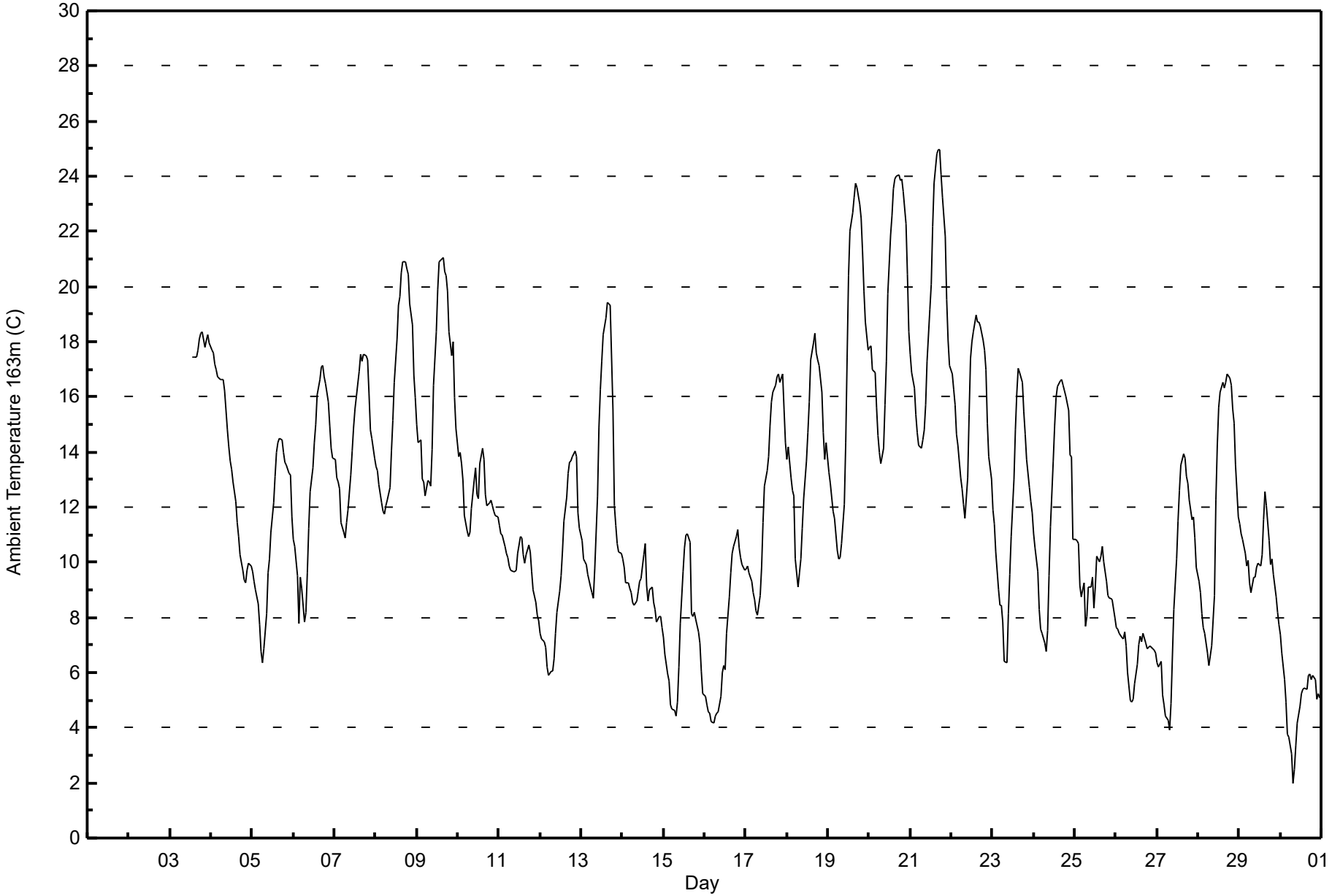
PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 163m (AT163) - C

Lower Camp Met Tower - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	240	36.42	36.42
10 - 20	380	57.66	94.08
> 20	39	5.92	100.00

Total Number of Valid Hours: 659

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 20m (RH20) - %

Lower Camp Met Tower - September 2026

Maximum Value: 100.0 % on Sep 8 06:00

Maximum Daily Average: 88.0 % on Sep 4

Minimum Value: 25.8 % on Sep 24 15:00

Minimum Daily Average: 56.1 % on Sep 20

Maximum Diurnal Average: 89.0 % at hour 7

Minimum Diurnal Average: 52.5 % at hour 16

Monthly Average: 71.21 %

Percentiles: P_1 = 29.0 P_{10} = 43.8 Q_1 = 59.4 Median = 74.8 Q_3 = 85.5 P_{90} = 93.1 P_{99} = 98.7

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	85.7	87.8	90.2	87.4	89.6	94.2	90.4	93.1	86.7	87.7	84.1	--	94.2
4-Sep	82.2	83.0	91.3	95.6	96.1	96.4	96.2	95.2	92.8	95.4	90.2	84.7	81.3	80.1	78.2	80.0	81.9	87.2	92.5	94.5	92.0	85.0	80.9	79.4	88.0	96.4
5-Sep	77.9	77.9	78.0	78.1	81.2	87.0	86.2	80.8	76.8	69.7	63.7	56.4	52.4	49.5	44.7	42.4	42.3	45.0	55.2	71.2	84.8	91.1	93.3	95.5	70.0	95.5
6-Sep	96.7	93.5	91.9	95.4	96.0	96.5	93.1	87.8	82.4	77.0	74.3	70.1	61.1	61.4	57.6	57.2	56.4	57.6	61.4	63.5	69.9	76.9	79.8	80.9	76.6	96.7
7-Sep	78.6	81.9	85.1	86.5	88.5	90.0	90.2	88.2	86.0	76.9	70.3	67.5	65.4	63.2	60.9	59.4	63.3	64.0	68.7	78.0	78.9	83.6	92.1	94.2	77.6	94.2
8-Sep	97.6	96.1	97.8	99.6	99.7	100.0	100.0	100.0	97.7	79.3	71.1	60.8	49.8	48.4	47.3	44.8	40.9	42.2	46.1	53.8	58.7	66.8	77.6	84.5	73.4	100.0
9-Sep	87.6	89.4	89.2	90.3	91.9	93.0	93.3	89.0	86.6	81.7	66.3	54.6	48.2	40.0	38.7	40.7	43.7	45.6	48.2	56.5	63.0	62.3	73.3	76.8	68.7	93.3
10-Sep	79.4	76.5	75.4	77.7	82.4	83.6	82.7	79.9	75.4	71.2	70.0	83.6	86.1	73.7	66.8	73.5	85.7	86.4	87.6	85.2	81.1	78.7	78.4	76.3	79.1	87.6
11-Sep	78.8	79.0	74.8	74.0	73.6	73.3	73.6	71.6	70.5	71.0	68.2	63.6	58.9	59.6	59.6	58.3	58.4	55.8	55.8	60.0	64.6	69.3	78.9	75.9	67.8	79.0
12-Sep	76.4	79.3	79.8	80.3	82.7	85.6	87.1	83.9	79.4	71.7	64.0	52.8	48.6	45.4	42.7	40.7	39.6	40.6	45.3	51.3	54.4	57.9	62.2	63.3	63.1	87.1
13-Sep	65.1	71.6	73.0	75.7	78.9	77.2	77.1	71.4	67.2	61.0	48.1	41.1	37.9	35.0	32.2	32.5	31.4	32.4	57.9	74.5	79.8	85.3	89.5	94.1	62.1	94.1
14-Sep	96.5	90.8	91.8	91.1	91.8	90.9	94.4	93.8	90.2	85.4	82.3	80.2	71.0	61.1	77.7	83.3	76.6	76.1	83.9	85.1	89.6	92.9	88.0	86.3	85.5	96.5
15-Sep	85.3	86.8	89.5	95.1	89.2	92.6	90.7	88.7	83.1	79.6	69.4	57.4	47.3	46.6	47.2	51.4	82.1	84.7	86.9	90.4	96.1	91.4	94.3	94.7	80.0	96.1
16-Sep	95.9	95.0	97.1	96.3	98.0	99.0	97.7	95.1	90.6	83.8	72.6	73.1	74.4	68.4	65.3	63.9	61.6	63.2	61.5	66.4	64.4	66.4	64.3	63.9	78.2	99.0
17-Sep	63.1	63.0	63.4	66.0	69.5	71.4	76.0	76.8	71.1	68.8	63.3	59.2	61.9	63.6	60.5	59.2	56.7	57.4	65.0	75.3	83.2	88.9	94.1	94.8	69.7	94.8
18-Sep	93.7	92.0	84.6	84.9	81.2	90.3	95.8	87.0	78.6	73.7	68.5	64.5	60.6	55.4	50.2	47.0	44.8	46.2	54.3	69.5	78.5	76.2	75.4	79.1	72.2	95.8
19-Sep	84.8	84.1	87.6	88.9	90.2	93.5	95.0	89.4	80.7	65.2	56.3	48.2	38.5	31.1	32.5	34.0	34.9	37.6	43.6	47.8	51.2	55.2	59.3	64.4	62.3	95.0
20-Sep	68.8	72.7	75.8	77.3	81.8	84.3	86.7	82.6	75.0	68.3	61.8	53.8	33.0	29.0	27.4	27.6	27.2	28.9	34.4	36.5	48.7	47.2	54.4	63.2	56.1	86.7
21-Sep	67.7	74.4	79.2	83.7	86.6	90.0	92.5	87.8	80.4	70.8	64.9	62.2	48.6	41.3	40.5	39.4	38.2	36.3	41.3	51.1	51.1	56.9	64.9	66.6	63.2	92.5
22-Sep	73.8	84.6	95.9	98.0	97.5	97.2	98.4	99.2	95.1	82.2	62.8	46.8	41.4	39.1	36.9	35.8	34.5	35.2	42.0	53.2	62.3	64.7	66.7	73.0	67.3	99.2
23-Sep	86.8	88.8	92.7	90.3	91.1	93.2	93.4	89.2	84.4	75.5	70.3	63.5	57.3	52.7	49.8	44.6	45.8	48.1	56.8	63.1	68.3	71.4	76.6	84.3	72.4	93.4
24-Sep	87.8	86.4	83.9	84.2	94.4	93.9	92.0	87.3	76.7	65.8	58.9	46.9	34.3	28.1	25.8	27.1	29.2	32.1	35.7	43.8	49.0	51.5	65.2	78.1	60.8	94.4
25-Sep	85.4	83.2	83.3	84.4	82.9	84.0	85.3	82.8	84.9	88.8	81.7	84.2	82.6	82.4	85.8	82.5	80.1	79.7	81.1	82.4	81.7	82.2	83.8	85.9	83.4	88.8
26-Sep	88.5	89.4	95.0	97.3	96.5	96.2	93.4	88.6	83.1	78.0	72.1	66.9	62.6	60.8	60.6	66.4	60.5	62.4	65.1	65.1	63.8	65.1	63.7	65.3	75.3	97.3
27-Sep	70.5	72.5	68.1	76.3	78.5	80.9	81.6	80.8	74.8	67.4	60.1	52.7	48.8	43.1	39.4	37.0	40.6	47.0	49.9	53.7	59.4	62.2	64.6	66.7	61.5	81.6
28-Sep	69.1	69.4	76.5	82.4	83.5	84.1	84.9	82.2	77.2	69.7	51.4	45.4	41.0	38.0	36.9	37.9	36.6	37.0	40.8	45.7	48.7	51.8	54.9	56.3	58.4	84.9
29-Sep	58.1	65.0	71.0	73.6	75.5	82.7	87.0	91.8	91.8	88.8	81.2	78.9	79.7	66.9	53.7	42.4	44.0	49.9	55.5	54.7	56.0	61.7	63.3	64.0	68.2	91.8
30-Sep	60.8	61.7	64.4	66.1	77.6	76.0	78.7	86.6	86.3	77.1	72.2	66.0	63.8	65.2	66.1	70.5	67.8	66.5	69.1	74.6	79.6	88.4	91.4	94.8	73.8	94.8
	79.9	81.0	82.8	84.8	86.6	88.2	89.0	86.6	82.2	75.7	68.0	62.4	56.9	54.1	52.6	52.5	53.3	54.8	60.0	65.6	69.7	72.1	75.7	78.1	Diurnal Average	
	97.6	96.1	97.8	99.6	99.7	100.0	100.0	100.0	97.7	95.4	90.2	84.7	86.1	85.7	87.8	90.2	87.4	89.6	94.2	94.5	96.1	92.9	94.3	95.5	Diurnal Maximum	

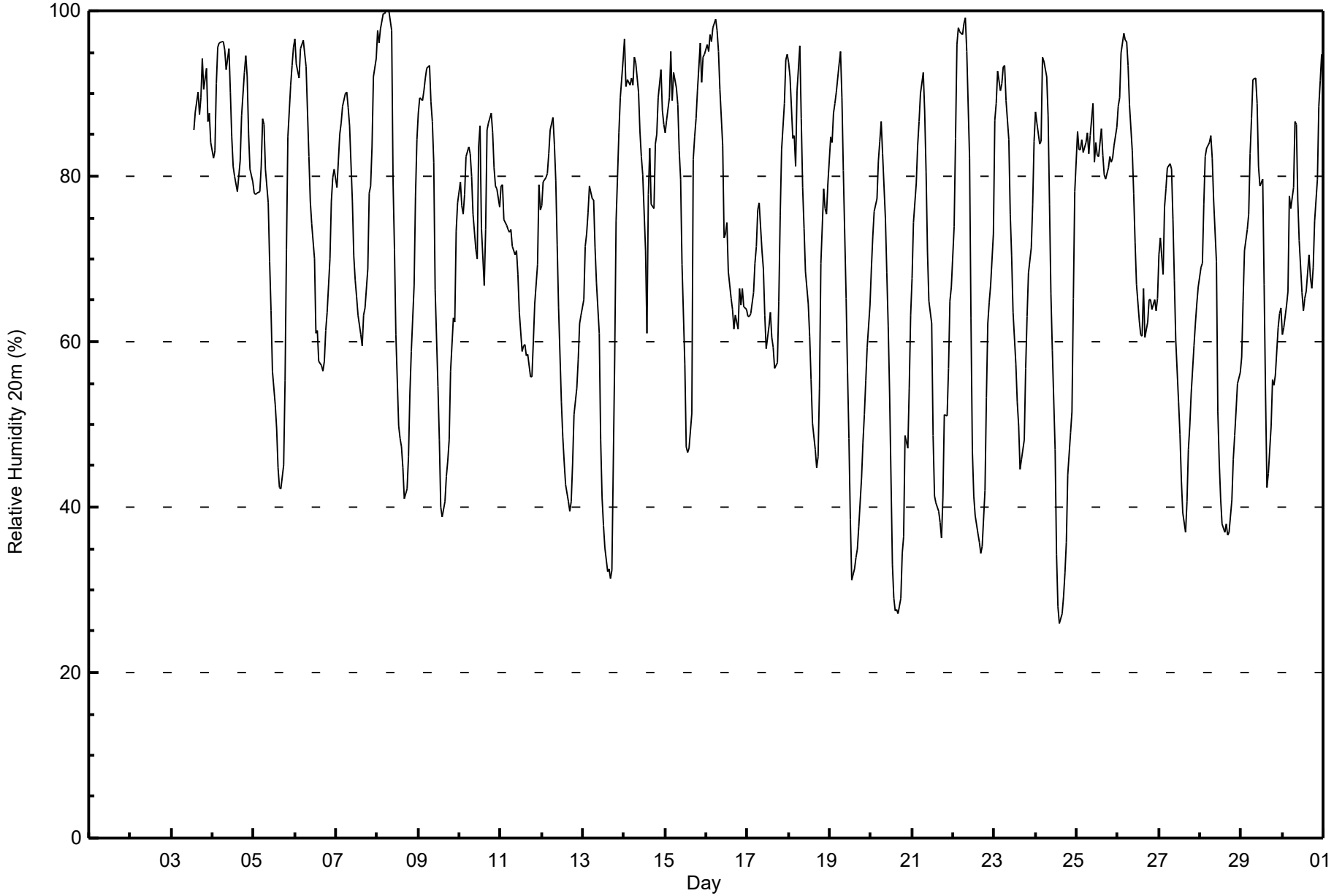
PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 20m (RH20) - %

Lower Camp Met Tower - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	45	6.83	6.83
40 - 60	124	18.82	25.64
60 - 80	235	35.66	61.31
80 - 100	252	38.24	99.54

Total Number of Valid Hours: 659

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 45m (RH45) - %

Lower Camp Met Tower - September 2026

Maximum Value: 100.0 % on Sep 8 06:00

Maximum Daily Average: 87.7 % on Sep 4

Minimum Value: 25.4 % on Sep 24 15:00

Minimum Daily Average: 52.9 % on Sep 20

Maximum Diurnal Average: 88.0 % at hour 7

Minimum Diurnal Average: 51.9 % at hour 16

Monthly Average: 69.61 %

Percentiles: P_1 = 28.2 P_{10} = 42.7 Q_1 = 57.9 Median = 72.4 Q_3 = 83.6 P_{90} = 91.1 P_{99} = 98.1

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	85.6	87.1	89.0	86.3	89.1	94.4	88.7	87.9	83.4	81.9	81.4	--	94.4
4-Sep	81.3	82.4	87.6	90.5	94.6	96.0	96.5	95.9	93.9	95.9	90.6	85.3	81.8	80.5	78.2	80.2	82.1	87.8	93.2	95.0	92.3	84.6	80.3	78.8	87.7	96.5
5-Sep	77.4	77.4	77.4	77.7	80.6	86.3	85.6	82.2	77.9	70.6	64.0	57.7	52.9	49.8	44.5	42.4	42.2	44.7	49.4	56.0	70.5	80.8	83.9	95.7	67.8	95.7
6-Sep	95.5	92.4	91.9	92.9	95.9	96.7	93.8	88.6	82.4	76.4	73.8	69.5	60.4	61.4	57.7	56.9	55.9	57.0	60.5	62.5	69.0	76.3	79.3	80.1	76.1	96.7
7-Sep	78.0	81.3	84.3	85.8	87.8	89.2	90.4	88.4	86.5	76.9	70.4	67.6	65.5	63.6	61.0	59.1	61.5	61.1	63.2	66.0	74.1	81.1	86.4	87.6	75.7	90.4
8-Sep	90.8	91.8	95.1	98.9	99.7	100.0	100.0	100.0	96.9	80.0	72.2	61.4	49.8	48.0	47.2	44.4	41.4	41.8	44.9	50.9	56.9	63.4	74.3	83.7	72.2	100.0
9-Sep	88.4	89.4	89.0	89.5	91.4	93.3	93.2	87.8	86.1	81.5	65.6	54.4	47.9	39.8	38.5	40.2	43.2	45.0	47.6	56.0	62.2	61.3	73.0	76.5	68.4	93.3
10-Sep	79.2	76.3	75.0	77.4	82.3	83.6	82.9	80.5	76.0	70.9	69.6	81.3	84.7	72.8	66.2	71.8	83.0	84.0	86.0	83.7	79.9	77.5	77.5	75.1	78.2	86.0
11-Sep	76.7	77.4	73.6	73.1	73.1	72.7	73.1	71.1	70.1	70.4	67.6	63.0	58.4	59.1	59.4	57.6	57.2	54.4	54.7	58.9	63.5	67.6	75.7	74.2	66.8	77.4
12-Sep	75.4	78.2	78.9	79.7	82.2	83.9	83.9	84.0	79.5	72.1	64.3	52.6	48.3	45.3	42.5	40.4	39.1	40.0	43.3	46.4	49.9	55.1	60.7	61.9	62.0	84.0
13-Sep	63.6	68.1	68.6	72.0	75.5	74.1	72.5	68.9	64.2	59.6	47.9	40.7	37.1	34.5	31.7	32.1	30.7	31.3	56.5	74.2	79.7	85.7	89.9	94.7	60.6	94.7
14-Sep	96.7	90.4	91.9	91.4	92.2	91.5	94.6	93.4	90.2	85.8	82.4	80.6	70.9	60.6	77.9	83.6	76.2	75.5	83.0	84.2	88.1	87.7	84.6	83.5	84.9	96.7
15-Sep	83.0	84.8	87.4	90.4	86.9	90.7	89.5	88.9	83.4	79.6	69.3	56.8	46.8	45.9	46.6	50.6	79.0	82.1	84.1	86.8	94.0	89.5	92.2	94.1	78.4	94.1
16-Sep	95.3	94.5	96.7	95.6	97.8	99.3	98.5	94.8	91.1	83.6	72.4	73.2	74.6	69.1	65.7	63.7	60.9	61.5	59.0	63.8	62.1	61.3	60.7	61.9	77.4	99.3
17-Sep	61.5	60.9	61.5	64.1	68.4	70.6	75.3	76.0	71.2	69.1	63.3	59.0	61.3	62.8	59.8	57.9	55.6	56.4	61.3	66.0	72.9	76.4	85.6	87.4	66.8	87.4
18-Sep	84.7	80.0	78.9	77.6	79.6	86.8	90.8	86.4	80.6	74.8	68.6	64.9	60.8	55.6	50.3	46.6	44.3	45.2	49.5	56.9	64.4	70.9	72.6	75.4	68.6	90.8
19-Sep	82.4	82.7	87.5	85.8	90.4	94.2	95.5	87.6	77.0	64.9	56.2	47.3	37.2	30.8	32.1	33.6	34.4	36.8	42.2	46.1	49.4	53.6	58.3	62.7	61.2	95.5
20-Sep	64.9	68.5	69.7	71.0	76.4	75.8	82.5	78.9	72.9	66.7	61.4	53.0	32.3	28.8	27.1	27.3	26.7	27.8	29.1	30.8	39.3	43.3	52.8	61.6	52.9	82.5
21-Sep	65.8	69.5	73.9	77.8	82.2	87.2	92.9	88.1	80.5	71.4	64.6	60.1	47.3	41.0	39.8	37.8	36.8	34.2	39.6	47.4	47.9	54.4	61.0	65.4	61.1	92.9
22-Sep	71.0	74.1	89.1	96.3	94.3	96.0	96.4	97.3	95.0	82.0	61.9	46.5	41.5	39.0	36.7	35.6	34.0	34.3	39.1	46.8	57.5	61.1	62.1	67.6	64.8	97.3
23-Sep	74.5	82.8	88.1	88.2	90.5	93.2	94.0	90.5	84.9	75.6	70.0	63.8	57.0	52.4	49.1	43.3	44.1	46.9	54.8	60.9	66.7	70.3	74.2	81.4	70.7	94.0
24-Sep	80.6	84.2	82.6	81.9	86.2	92.2	91.8	86.4	72.2	62.1	58.0	46.0	33.9	27.6	25.4	26.7	28.6	30.9	32.7	37.5	44.1	48.2	56.1	69.6	57.7	92.2
25-Sep	74.5	76.8	77.7	82.1	82.9	83.5	85.0	81.8	83.5	87.8	79.6	84.3	82.6	81.8	86.1	82.2	79.8	79.0	80.2	81.9	81.3	81.9	83.6	86.3	81.9	87.8
26-Sep	88.9	90.0	95.0	97.4	96.2	95.5	91.8	86.6	81.7	77.1	71.5	66.3	62.0	60.6	60.0	65.1	59.5	61.7	64.3	64.5	63.1	64.5	63.1	64.5	74.6	97.4
27-Sep	69.5	71.6	67.2	75.7	77.9	80.5	81.2	81.0	75.1	67.5	60.2	52.4	48.5	42.8	39.0	36.0	39.4	45.7	47.6	51.8	57.4	59.7	62.6	64.7	60.6	81.2
28-Sep	65.9	65.7	70.6	72.1	77.5	78.5	82.4	81.9	76.5	69.1	50.7	44.9	40.6	37.4	36.1	37.2	35.9	35.7	39.2	44.0	46.4	49.2	53.2	54.9	56.1	82.4
29-Sep	56.1	61.5	63.3	68.5	70.9	80.5	85.2	90.0	89.0	86.8	80.6	78.4	78.1	66.1	53.1	41.9	43.4	49.2	54.5	53.4	55.2	61.0	62.7	63.3	66.4	90.0
30-Sep	60.0	61.1	63.9	65.5	76.0	74.7	78.1	86.1	84.7	76.3	71.6	65.7	63.5	64.5	65.6	69.1	66.5	65.4	67.9	72.6	77.7	83.3	83.8	86.1	72.1	86.1
	77.1	78.3	80.2	82.2	84.8	86.9	88.0	86.0	81.6	75.4	67.7	62.1	56.5	53.8	52.3	51.9	52.4	53.7	57.9	61.9	66.2	69.0	72.6	75.7	Diurnal Average	
	96.7	94.5	96.7	98.9	99.7	100.0	100.0	100.0	96.9	95.9	90.6	85.3	84.7	85.6	87.1	89.0	86.3	89.1	94.4	95.0	94.0	89.5	92.2	95.7	Diurnal Maximum	

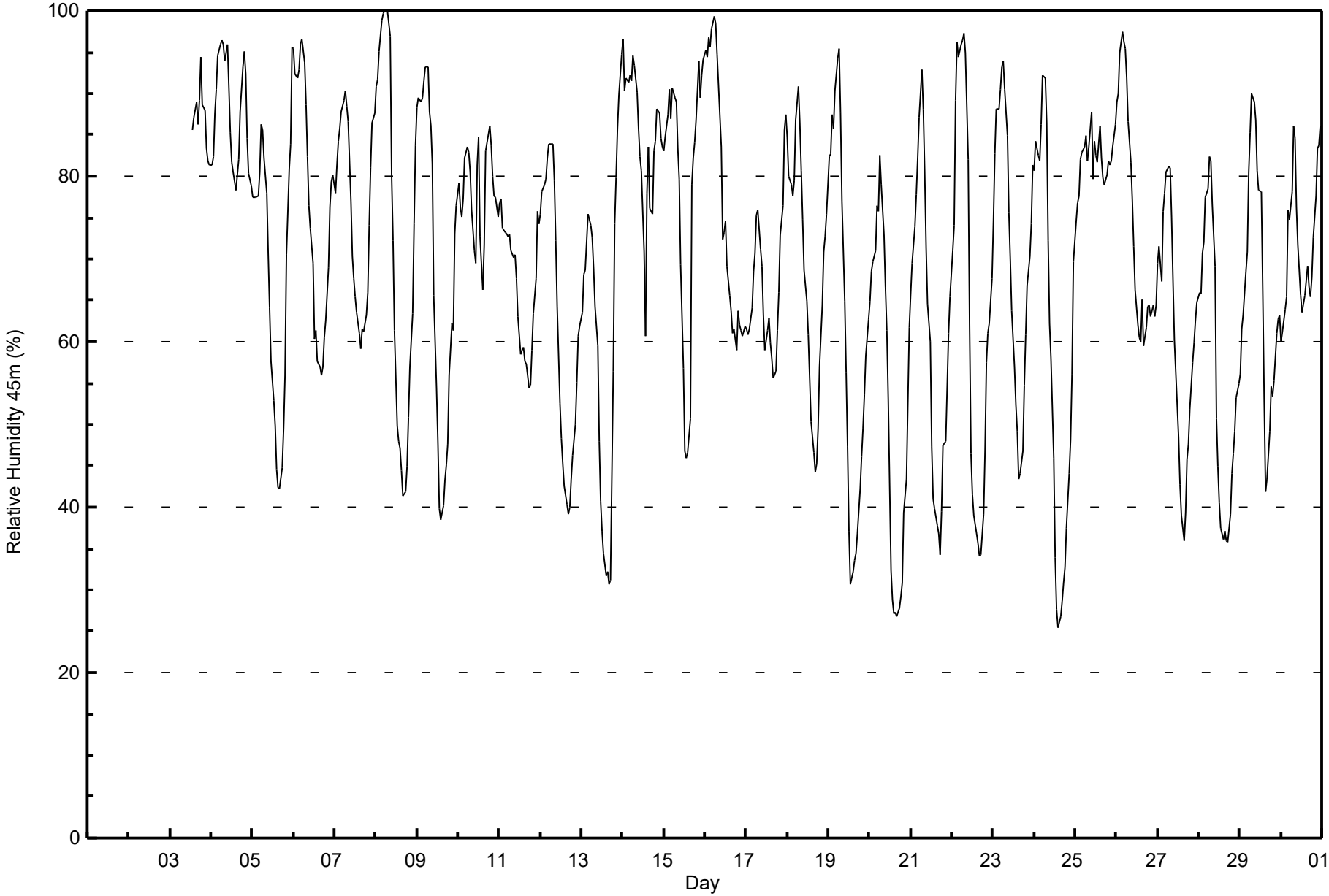
PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 45m (RH45) - %

Lower Camp Met Tower - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	53	8.04	8.04
40 - 60	126	19.12	27.16
60 - 80	247	37.48	64.64
80 - 100	230	34.90	99.54

Total Number of Valid Hours: 659

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 100m (RH100) - %

Lower Camp Met Tower - September 2026

Maximum Value: 99.0 % on Sep 16 06:00

Maximum Daily Average: 87.7 % on Sep 4

Minimum Value: 26.0 % on Sep 24 15:00

Minimum Daily Average: 49.8 % on Sep 20

Maximum Diurnal Average: 84.2 % at hour 7

Minimum Diurnal Average: 52.9 % at hour 16

Monthly Average: 68.22 %

Percentiles: P_1 = 28.1 P_{10} = 42.7 Q_1 = 57.9 Median = 69.9 Q_3 = 81.6 P_{90} = 88.7 P_{99} = 97.1

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	86.7	87.2	88.7	86.4	88.0	91.3	85.2	86.5	82.5	81.3	81.8	--	91.3
4-Sep	82.6	83.0	85.9	86.6	89.0	89.9	90.7	93.8	95.5	96.9	92.4	87.3	83.8	82.4	80.1	82.1	84.1	89.3	94.3	95.8	93.6	85.6	81.4	79.6	87.7	96.9
5-Sep	78.8	78.7	78.8	79.6	81.8	87.0	86.6	82.5	78.6	72.1	65.3	59.7	54.3	51.2	45.7	44.1	44.0	45.8	48.7	49.2	50.5	53.7	60.7	70.3	64.5	87.0
6-Sep	80.6	78.6	91.1	93.9	92.9	92.0	93.6	90.1	84.4	77.9	73.9	70.0	61.5	63.4	59.9	58.8	57.9	58.8	61.7	63.0	70.1	77.3	79.7	80.3	75.5	93.9
7-Sep	78.0	80.2	81.6	84.5	88.0	88.6	90.4	88.7	87.2	78.3	72.8	69.7	67.6	66.1	62.8	60.7	62.7	61.9	62.0	63.1	73.4	80.9	84.4	86.2	75.8	90.4
8-Sep	90.9	90.6	92.3	97.0	97.1	94.1	91.7	89.9	81.4	78.6	74.9	64.0	51.2	47.6	48.2	45.0	42.7	43.3	45.5	48.3	56.5	60.3	63.3	65.6	69.2	97.1
9-Sep	69.5	72.2	78.1	84.3	86.7	89.5	88.7	85.1	84.6	79.1	65.7	56.5	49.8	41.3	40.2	41.7	44.7	46.6	49.3	57.9	63.4	61.6	74.1	77.7	66.2	89.5
10-Sep	80.5	78.1	76.6	78.8	83.9	85.4	85.0	82.9	78.6	73.1	71.6	81.6	85.6	74.3	67.9	71.4	82.2	83.9	85.9	83.0	78.9	77.8	78.3	75.8	79.2	85.9
11-Sep	76.6	77.2	74.1	74.2	74.6	74.3	74.9	73.1	72.2	72.5	69.6	64.8	60.6	61.1	61.7	59.5	58.2	55.1	55.9	60.2	64.6	67.8	73.8	74.2	67.9	77.2
12-Sep	75.8	78.6	79.6	80.3	84.1	84.8	83.8	83.3	81.7	74.9	66.8	54.4	50.4	47.2	44.3	42.0	40.6	41.5	43.9	43.6	42.8	50.1	58.9	61.9	62.3	84.8
13-Sep	64.1	67.0	67.0	67.9	69.7	70.8	68.4	67.7	64.6	58.4	48.9	42.0	38.3	35.8	32.9	33.2	31.6	31.6	57.1	75.9	81.6	87.8	91.9	95.8	60.4	95.8
14-Sep	97.6	91.6	92.8	92.8	93.9	93.4	95.6	94.8	91.8	87.9	84.5	83.0	72.9	62.2	79.9	85.6	77.5	77.0	83.2	84.6	87.4	84.9	81.2	80.7	85.7	97.6
15-Sep	80.9	84.7	87.3	87.5	87.0	90.9	90.2	89.7	85.5	81.8	71.9	58.8	48.7	47.7	48.2	52.5	75.8	80.1	81.3	83.8	91.5	90.2	91.5	94.5	78.4	94.5
16-Sep	95.2	95.4	95.8	94.8	97.9	99.0	98.5	91.7	91.7	85.5	74.9	75.6	77.0	71.8	68.1	65.5	62.9	61.4	59.1	59.8	58.6	58.3	59.0	61.7	77.5	99.0
17-Sep	61.6	60.6	61.5	63.4	68.4	71.5	75.6	77.0	73.0	71.3	65.2	61.1	62.2	63.8	60.7	58.4	56.7	57.9	62.5	63.6	66.1	69.9	76.5	71.0	65.8	77.0
18-Sep	69.5	73.0	75.7	74.2	74.9	81.5	84.5	84.4	80.1	77.3	69.5	67.8	63.1	57.7	51.4	47.4	45.2	46.4	48.4	50.2	53.8	60.4	66.0	65.4	65.3	84.5
19-Sep	70.7	69.4	71.6	72.3	74.3	76.3	84.1	73.4	68.1	64.3	56.6	47.1	37.5	31.9	33.3	34.9	35.6	37.2	41.6	44.0	48.6	54.1	58.6	62.2	56.1	84.1
20-Sep	61.3	61.6	62.9	65.0	71.4	70.3	72.1	71.7	69.7	64.7	61.3	52.5	32.5	29.5	28.0	28.2	27.4	27.2	27.1	26.3	30.7	40.9	51.7	61.1	49.8	72.1
21-Sep	66.4	68.5	71.6	74.9	75.0	69.6	71.6	76.2	75.2	72.3	65.0	57.8	47.2	41.4	40.5	37.3	36.2	34.0	38.2	42.2	46.3	54.8	61.4	66.2	57.9	76.2
22-Sep	67.1	68.8	74.4	83.5	87.7	86.9	90.0	92.6	90.7	80.3	61.5	47.3	43.0	40.4	38.0	36.8	34.9	34.4	35.1	38.5	42.9	53.0	56.8	62.8	60.3	92.6
23-Sep	69.9	68.0	72.1	78.9	80.6	81.5	85.2	87.1	84.2	75.3	69.9	65.1	57.5	53.0	50.0	43.8	44.5	47.6	55.2	60.6	66.7	71.4	74.4	75.2	67.4	87.1
24-Sep	77.9	81.1	81.0	82.2	76.7	73.5	74.3	73.9	66.2	58.5	56.4	44.9	35.0	28.5	26.0	27.4	29.3	30.8	30.4	31.8	39.8	52.2	54.1	62.1	53.9	82.2
25-Sep	63.1	60.1	58.3	62.9	69.0	70.1	86.3	82.0	78.2	83.9	77.7	85.6	83.4	81.6	86.6	83.4	81.0	80.1	81.6	83.5	82.9	82.9	84.3	88.3	78.2	88.3
26-Sep	90.9	91.9	95.9	98.2	97.2	96.1	92.5	87.0	82.9	78.8	73.5	68.3	63.9	62.7	61.7	66.0	61.1	63.4	66.1	66.4	65.0	66.3	65.0	66.1	76.1	98.2
27-Sep	70.4	72.7	68.4	76.7	78.4	81.2	82.1	82.9	77.2	69.7	62.4	54.4	50.2	44.3	40.2	36.5	39.4	46.5	46.6	50.4	55.4	56.3	59.0	62.2	61.0	82.9
28-Sep	63.2	65.2	67.6	68.5	69.5	72.8	76.8	76.2	73.6	68.8	52.4	46.6	42.2	38.7	37.2	38.2	37.2	35.9	37.5	40.5	41.8	44.7	50.0	55.2	54.2	76.8
29-Sep	56.0	57.6	56.8	59.1	62.6	69.0	80.2	87.5	86.4	86.0	82.4	80.0	79.3	68.0	54.8	43.2	44.5	50.6	55.7	54.3	56.9	62.9	64.6	65.1	65.1	87.5
30-Sep	61.9	63.1	65.9	67.5	76.7	75.9	79.7	87.3	84.7	77.4	73.3	67.9	65.8	66.4	67.8	70.1	68.0	66.6	68.9	72.1	76.3	80.3	77.3	76.5	72.4	87.3
	74.1	74.7	76.5	78.9	81.1	82.1	84.2	83.4	80.3	75.8	68.9	63.5	57.9	55.2	53.7	52.9	53.3	54.4	57.6	59.9	63.3	66.7	70.0	72.3	Diurnal Average	
	97.6	95.4	95.9	98.2	97.9	99.0	98.5	94.8	95.5	96.9	92.4	87.3	85.6	86.7	87.2	88.7	86.4	89.3	94.3	95.8	93.6	90.2	91.9	95.8	Diurnal Maximum	

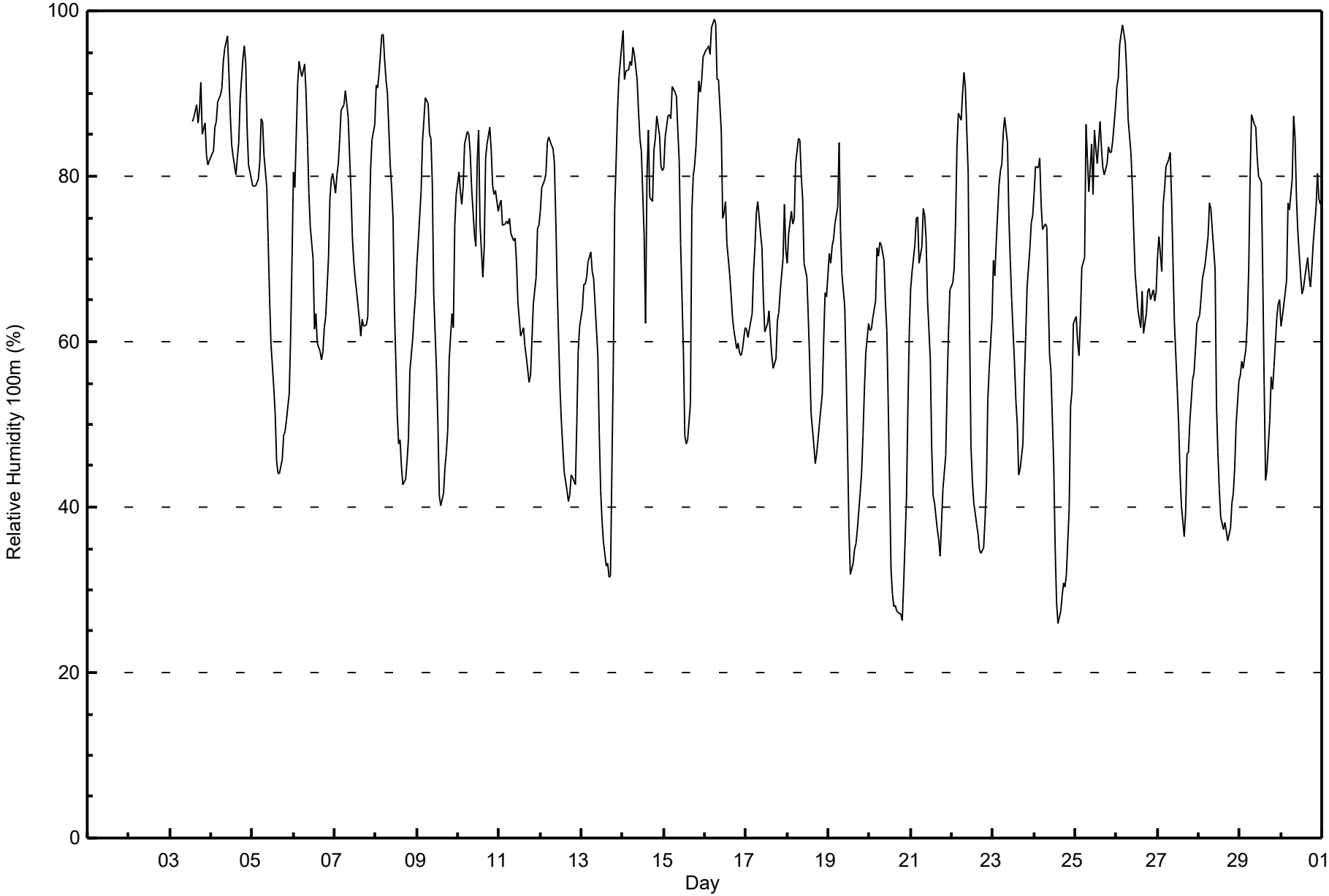
PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 100m (RH100) - %

Lower Camp Met Tower - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	48	7.28	7.28
40 - 60	139	21.09	28.38
60 - 80	275	41.73	70.11
80 - 100	197	29.89	100.00

Total Number of Valid Hours: 659

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 163m (RH163) - %

Lower Camp Met Tower - September 2026

Maximum Value: 98.6 % on Sep 26 05:00

Maximum Daily Average: 87.9 % on Sep 4

Minimum Value: 25.6 % on Sep 20 18:00

Minimum Daily Average: 47.7 % on Sep 20

Maximum Diurnal Average: 79.7 % at hour 8

Minimum Diurnal Average: 53.0 % at hour 16

Monthly Average: 66.02 %

Percentiles: P_1 = 28.1 P_{10} = 42.0 Q_1 = 54.6 Median = 66.9 Q_3 = 79.8 P_{90} = 86.2 P_{99} = 96.2

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	86.8	86.5	88.3	86.2	85.3	84.5	82.0	84.2	80.8	80.4	82.0	--	88.3
4-Sep	83.1	83.2	85.2	86.9	88.8	89.5	89.3	89.1	93.3	97.3	94.0	88.9	85.2	83.8	81.4	83.6	85.6	90.0	94.4	95.9	93.9	86.2	81.4	79.4	87.9	97.3
5-Sep	78.5	78.6	79.2	80.8	81.9	85.4	87.1	84.9	81.4	73.9	66.3	60.3	55.5	52.2	45.9	44.2	44.5	45.5	48.5	49.8	49.7	50.3	48.4	59.2	63.8	87.1
6-Sep	68.4	67.5	73.7	83.3	74.1	78.3	86.4	86.3	80.7	77.0	73.5	69.0	61.8	64.1	60.5	59.3	58.5	59.2	61.7	62.5	70.9	77.7	79.6	79.8	71.4	86.4
7-Sep	77.5	80.3	79.3	80.7	85.9	87.1	87.3	85.7	84.4	78.6	73.5	70.4	68.4	66.6	62.9	61.0	62.7	62.3	62.4	63.2	71.5	79.0	81.5	84.9	74.9	87.3
8-Sep	85.5	84.7	86.9	89.5	91.1	92.8	88.7	85.3	80.6	77.1	74.9	65.4	52.1	48.0	47.7	44.3	42.6	43.5	44.7	47.2	50.7	52.8	59.9	63.8	66.7	92.8
9-Sep	68.3	70.9	70.3	75.8	77.7	81.7	80.9	80.0	81.9	77.1	65.4	57.1	50.4	41.7	40.5	42.0	45.0	46.9	49.5	58.4	62.7	60.4	73.4	77.8	64.0	81.9
10-Sep	80.3	78.6	77.1	78.8	84.1	86.1	86.2	84.1	80.0	74.0	72.4	81.4	85.6	74.6	68.4	70.7	80.4	83.4	84.7	81.3	77.1	76.9	77.6	75.1	79.1	86.2
11-Sep	76.0	77.1	74.3	74.7	75.1	74.9	75.4	73.9	73.2	73.5	70.3	65.5	61.4	61.9	62.5	60.0	58.1	54.6	56.0	60.5	64.7	67.8	73.1	72.6	68.2	77.1
12-Sep	74.4	76.2	77.2	77.7	84.2	84.5	83.3	85.3	83.0	76.4	68.8	54.9	51.2	47.8	44.7	42.4	40.9	41.8	43.6	42.6	42.4	46.2	56.0	60.1	61.9	85.3
13-Sep	63.3	66.2	65.2	65.6	67.8	68.9	67.3	67.3	64.7	57.1	48.4	42.0	38.5	36.0	33.1	33.4	31.5	31.1	57.0	76.5	82.3	88.9	93.4	96.3	60.1	96.3
14-Sep	97.7	92.1	92.6	93.1	94.9	94.9	96.2	96.0	93.3	89.7	86.0	84.3	73.8	63.1	80.4	86.4	77.5	77.7	82.2	83.5	84.9	83.4	75.4	75.6	85.6	97.7
15-Sep	76.6	81.6	86.4	85.4	87.1	89.3	87.7	89.0	85.4	83.1	73.0	59.2	49.4	48.3	48.7	52.7	73.8	76.7	78.2	82.6	88.7	91.1	90.9	93.7	77.4	93.7
16-Sep	92.3	94.7	94.7	92.0	95.9	90.6	85.9	86.1	91.2	85.5	76.4	76.5	78.1	73.1	68.5	65.8	63.1	61.5	57.6	49.5	55.5	56.8	58.4	61.2	75.5	95.9
17-Sep	60.4	59.3	60.5	63.1	67.6	70.8	74.0	76.9	73.7	70.9	65.6	61.8	62.5	63.1	60.8	58.2	56.8	57.5	56.5	57.1	59.6	48.0	53.5	58.9	62.4	76.9
18-Sep	58.8	56.9	64.0	63.6	64.7	76.2	80.9	82.4	80.9	77.4	73.2	69.0	64.5	58.6	50.9	47.2	45.2	46.7	47.9	48.3	50.5	57.6	60.6	53.9	61.7	82.4
19-Sep	55.2	54.3	55.5	58.3	59.4	66.8	68.9	66.5	63.3	60.5	54.4	45.5	36.8	32.1	33.5	35.0	35.6	36.5	40.5	43.1	46.9	51.3	55.3	59.1	50.6	68.9
20-Sep	58.5	57.6	61.7	58.9	63.5	66.0	67.5	69.5	68.6	63.8	60.5	51.1	32.1	29.4	28.0	28.3	27.1	25.6	26.0	25.6	28.3	39.7	48.9	58.2	47.7	69.5
21-Sep	62.7	63.6	63.7	64.6	65.1	64.2	62.3	60.5	60.8	62.2	58.8	48.9	45.5	40.6	40.3	36.4	34.5	33.3	37.4	40.8	44.6	52.7	59.4	62.5	52.7	65.1
22-Sep	64.4	64.9	66.0	70.4	71.0	78.3	80.6	81.2	81.4	70.1	57.6	47.7	43.3	40.6	38.3	36.8	34.7	34.1	34.4	36.8	40.7	46.5	51.5	54.0	55.2	81.4
23-Sep	58.6	60.8	63.0	68.5	69.2	67.5	74.0	78.8	78.9	72.1	67.5	61.7	53.6	49.0	49.4	43.0	44.4	47.1	54.6	60.4	66.4	71.2	73.8	70.3	62.7	78.9
24-Sep	69.9	67.6	66.0	72.3	74.1	69.5	67.7	66.6	64.2	57.3	54.8	43.5	35.2	28.5	25.9	27.3	29.2	29.9	29.4	29.6	31.9	37.8	36.9	53.4	48.7	74.1
25-Sep	56.4	54.6	46.3	58.3	52.6	51.3	64.1	63.3	60.3	73.2	73.3	84.7	82.0	77.4	83.2	82.5	78.6	78.8	81.1	83.7	82.9	82.8	83.7	89.3	71.9	89.3
26-Sep	92.2	93.3	96.4	98.4	98.6	96.4	93.6	87.4	83.4	79.7	74.6	69.1	64.7	63.3	62.0	66.1	61.3	64.0	66.5	67.0	65.6	66.7	65.3	66.2	76.7	98.6
27-Sep	68.9	72.2	68.0	75.2	75.6	78.1	80.4	82.7	77.8	70.5	62.6	54.9	50.7	44.6	40.4	36.0	38.9	46.2	45.2	47.8	51.3	49.7	54.5	58.0	59.6	82.7
28-Sep	60.1	63.4	67.0	67.8	67.9	70.6	72.4	71.2	71.0	66.3	52.8	47.1	42.6	39.0	37.3	38.1	37.2	35.4	35.2	36.5	38.8	40.2	44.5	52.2	52.3	72.4
29-Sep	52.4	52.0	51.6	54.0	58.2	63.9	75.9	84.6	84.4	85.6	83.2	81.0	79.7	68.7	55.1	43.3	44.5	50.5	55.4	53.8	57.2	63.4	65.0	65.6	63.7	85.6
30-Sep	62.3	63.6	66.6	68.3	77.3	76.6	80.5	87.9	84.2	77.5	73.9	69.0	66.8	67.3	68.6	70.5	68.5	66.9	69.4	71.7	71.9	74.8	71.9	71.7	72.0	87.9
	70.5	71.0	71.8	74.3	76.0	77.8	79.4	79.7	78.0	74.3	68.7	63.3	58.2	55.4	53.8	53.0	53.1	54.0	56.6	58.5	61.3	63.6	66.2	69.1	Diurnal Average	
	97.7	94.7	96.4	98.4	98.6	96.4	96.2	96.0	93.3	97.3	94.0	88.9	85.6	86.8	86.5	88.3	86.2	90.0	94.4	95.9	93.9	91.1	93.4	96.3	Diurnal Maximum	

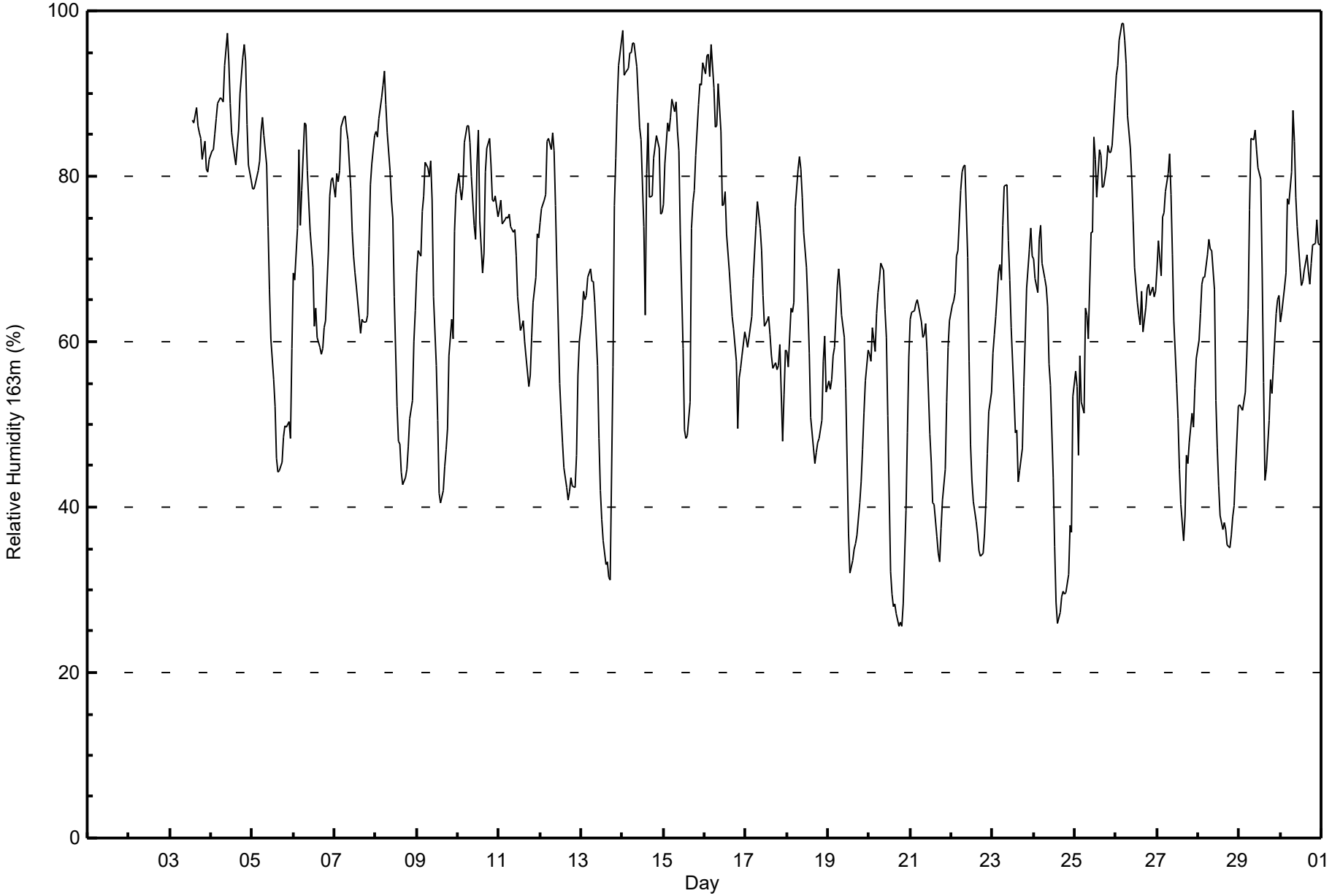
PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 163m (RH163) - %

Lower Camp Met Tower - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	53	8.04	8.04
40 - 60	170	25.80	33.84
60 - 80	272	41.27	75.11
80 - 100	164	24.89	100.00

Total Number of Valid Hours: 659

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 20m (WS20) - km/h

Lower Camp Met Tower - September 2026

Maximum Speed: 28 km/h on Sep 19 15:00

Maximum Daily Speed Average: 18.0 km/h on Sep 26

Minimum Speed Value: 0 km/h on Sep 5 23:00

Minimum Daily Speed Average: 0.9 km/h on Sep 18

Maximum Diurnal Speed Average: 6.3 km/h at hour 15

Minimum Diurnal Speed Average: 0.2 km/h at hour 2

Monthly Average Velocity: 2.6 km/h 246.9 deg

Percentiles: P_1 = 1 P_{10} = 3 Q_1 = 5 Median = 10 Q_3 = 15 P_{90} = 20 P_{99} = 25

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	----	----
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	ENE8	NE5	NE4	ENE4	N6	N5	N3	N6	NNE5	N4	ENE4	----	ENE8
4-Sep	ESE7	ESE7	NNW4	NNW5	NNW5	NNW3	NW2	NW3	NNW7	NNW15	NNW17	N18	N21	N22	N24	N23	N21	NNW20	NNW16	NNW15	NNW11	NNW9	NNW8	N10	N11.2	N24
5-Sep	NNW9	N10	NNW10	NNW7	NNW9	NNW7	NNW5	N8	NNW7	NNW9	N8	NNW5	NNW7	NNW5	N7	NW6	WNW5	NW6	NW5	NNW2	NNW1	NW1	NNE0	NNW2	NNW5.7	NNW10
6-Sep	ESE2	ESE6	E4	ENE2	E4	E4	ESE4	E1	N1	ENE0	ESE3	ESE5	SE14	SE14	SSE12	SSE7	S8	S19	SSE13	SE10	SE11	SE15	SE11	SE12	SE7.0	S19
7-Sep	SE14	SE8	SE7	ESE6	S0	SE6	ENE3	ESE9	SE3	SSE9	SSE19	SSE16	SSE12	ESE6	E4	NE3	SE6	SE6	E1	ESE3	SE9	ENE2	NW1	SSW1	SE5.7	SSE19
8-Sep	SE2	ESE2	NNW2	S1	NNW1	N1	N1	WNW0	NE1	NW4	NNW4	NNW6	NNW9	NNE8	NE3	NE4	WSW3	SSW9	S12	SSE9	E6	ESE6	SE8	ESE8	ESE1.0	S12
9-Sep	ESE8	ESE9	ESE7	SE6	SE8	SE9	SE8	SE16	SE13	SE13	SSE12	S17	SSW20	SW22	SW27	SW24	SW19	SW21	SW26	SW19	SSW9	SSW17	SW21	WSW18	SSW11.3	SW27
10-Sep	WSW21	W19	WNW16	W14	WSW17	WSW14	WSW13	WSW19	WSW18	W15	W15	W14	WSW16	WNW17	WNW18	NW14	WNW13	WNW19	WNW17	WNW15	NW14	WNW16	WNW15	NW18	W15.0	WSW21
11-Sep	NW17	NW19	NW20	NW20	NW18	NW20	NW16	NNW21	NNW22	NNW22	NNW21	NNW20	NNW19	NW17	NW20	NW18	NW10	NW12	NW14	NW14	NW9	NW9	NW7	NW12	NW16.4	NNW22
12-Sep	WNW10	WNW9	WNW8	NW7	NNW7	NW4	NNW3	NNE3	WSW3	W4	NNW6	WSW4	WSW10	WSW10	WSW8	SW11	SW10	SW12	SSW11	S14	SSW17	SSW16	SW10	SSW9	WSW5.9	SSW17
13-Sep	SSW8	SE7	SE12	SE14	SE14	ESE10	SE12	SE11	SE12	SE9	SSW3	WSW11	SW13	SW16	SW13	SW11	SW14	SW8	NNW9	NNW14	NNW10	NNW7	NNW8	NW8	SSW3.6	SW16
14-Sep	NNW9	N14	N12	NNW12	NNW12	NNW14	NNW11	NNW10	NNW9	NNW12	NNW12	NNW11	NNW13	NNW16	NNW15	N10	NNW10	NW8	NW7	NW5	NW5	NW4	NW7	NW8	NNW10.2	NNW16
15-Sep	NNW7	NNW6	NNW5	NW2	NW6	WNW2	W3	SSW7	S6	S6	SW9	SW14	SW13	SW13	SW15	SSW12	NNW5	SSE5	SSW1	SSW2	NW2	W2	NNW4	NW6	WSW3.8	SW15
16-Sep	NNW5	NW3	N2	NW2	NNW3	NNW2	NW3	SW4	S7	S7	SSW9	S14	S14	SE3	SE7	ESE6	E4	ESE4	E5	ESE6	ESE5	E4	ESE8	SE14	SSE3.1	S14
17-Sep	ESE15	ESE14	SE18	SE15	ESE11	SE6	ESE1	NNE1	SE9	SE10	SSE10	S8	ESE5	ESE4	ESE6	ESE5	S2	S6	SE7	ESE4	SSE1	ESE2	SSE1	ESE4	SE6.4	SE18
18-Sep	SE5	SE9	ESE2	SE5	WSW5	W1	NW2	NW3	NNW3	NNW4	N4	SSE1	WSW3	WSW2	ENE3	ENE4	E4	ENE5	NNE1	N1	NNW1	SSE1	ESE3	SE8	E0.9	SE9
19-Sep	SE4	SE6	SE9	SE12	SE11	ESE9	SE8	SSE11	SE7	ESE7	SE10	SE13	SE17	S27	SSE28	SSE27	SSE25	S17	S17	SSE20	SSE21	SSE20	SE10	ESE11	SSE13.6	SSE28
20-Sep	SE11	SE10	SE10	ESE11	SE7	SE11	SE8	SE12	SE13	SE9	SE11	ESE8	WSW10	WSW11	SW11	SSW14	SSW14	S12	S14	S15	SE9	SSE15	SSE12	E8	SSE8.5	SSE15
21-Sep	ESE10	SE11	SE10	SE7	SE9	SE9	ESE9	SE10	SE12	SE9	SE10	SE13	SE6	NE3	ESE9	SE11	SSE9	SSE12	S14	SSW6	S8	SE5	SE8	SSE4	SE8.3	S14
22-Sep	SSE5	E0	NNW2	SE2	SE2	ESE1	N1	NNW4	NNW4	N5	N7	NNW11	NW12	WNW12	WSW17	WSW16	W15	W13	WSW11	WSW11	WSW9	WSW3	SW5	SSW1	W4.9	WSW17
23-Sep	SE3	SE3	SE4	ESE5	ESE6	ESE7	ESE6	ESE3	ESE3	SE7	SE8	ESE6	SE8	SSE7	SE7	SE10	SE10	SE15	SE13	SE9	SSE4	S4	SSE4	SE3	SE6.2	SE15
24-Sep	SE4	SE2	SSW2	SE3	ESE9	ESE8	ESE8	ESE8	SE10	SE10	SE10	SSW6	WSW20	WSW22	WSW21	WSW14	WSW12	SW10	SW8	SW4	NW2	S1	ESE3	NE2	SSW4.9	WSW22
25-Sep	N2	N1	NNW3	NW4	NNW5	NNW6	NW5	NW8	NNW5	NNW9	N12	N12	N13	N14	NNW15	N16	N15	N15	N13	N14	NNW14	NNW14	NNW13	NNW15	NNW9.9	N16
26-Sep	NNW11	NW9	NW9	NW11	WNW10	W13	W17	W20	W22	W20	W24	W23	W24	W24	W26	WNW23	WNW24	W23	W22	W21	W21	W22	W19	W13	W18.0	W26
27-Sep	WSW16	WSW17	W17	WSW19	WSW20	W23	WSW21	WSW17	WSW19	WSW23	WSW21	WSW21	WSW20	WSW21	WSW21	WSW18	WSW17	SW18	SW12	SW13	SW11	SW12	SW12	SW10	WSW17.1	WSW23
28-Sep	SW6	S6	SE8	SE13	SE13	SE15	SE15	SE13	SE13	SE10	SSW15	SSW18	SW21	SW20	SW18	SSW16	S23	S17	SSE18	SSE20	SSE20	S19	SE9	ESE11	S11.9	S23
29-Sep	SE11	SE11	SE9	ESE7	SE10	SE12	ESE12	ESE11	SE9	S7	WSW21	WSW19	WNW17	WNW19	WNW20	W23	W24	W24	W14	W16	WNW17	WNW20	W19	W19	WSW8.0	W24
30-Sep	WNW24	NW23	NW20	WNW20	WNW19	WNW21	WNW21	WNW21	NW15	NW20	NW18	NW20	NW19	NW15	WNW17	NW11	NW8	NW11	NW6	NW7	NNW7	NW4	N1	NNW2	NW14.4	WNW24
	SW1.1	WNW0.2	NNW0.7	SSW0.4	WSW0.7	SW0.8	SW1.0	SW1.2	SSW1.5	W1.5	WSW2.9	WSW4.3	WSW5.9	W6.2	W6.3	WSW4.8	WSW4.9	WSW5.3	SW4.1	SW3.3	SW2.1	SW2.9	WSW2.4	W1.2	Diurnal Average	
	WNW24	NW23	NW20	WNW20	WSW20	WSW23	WSW21	NNW21	W22	WSW23	W24	W23	W24	S27	SSE28	SSE27	SSE25	W24	SW26	W21	W21	W22	SW21	W19	Diurnal Maximum	

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: 10 km/h on Sep 30 01:00

Minimum Value: 1 km/h on Sep 8 07:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 3 Q_3 = 5 P_{90} = 7 P_{99} = 9

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	4	2	2	2	2	2	2	1	2	2	2	4
4-Sep	3	3	2	2	2	2	2	2	3	5	6	7	7	8	9	8	7	7	6	6	5	4	4	4	9
5-Sep	4	4	4	4	4	3	2	3	3	4	5	3	3	3	4	3	2	2	2	1	1	1	1	1	5
6-Sep	1	2	1	1	1	2	1	1	1	1	2	4	6	6	3	4	3	4	4	4	4	5	3	3	6
7-Sep	5	4	2	2	1	4	2	3	2	6	4	4	4	3	2	1	2	2	1	2	4	2	1	1	6
8-Sep	2	1	1	1	1	1	1	1	1	2	2	3	3	3	1	2	3	3	2	4	2	2	3	3	4
9-Sep	2	2	3	3	3	3	4	3	3	4	4	5	5	7	6	6	4	5	5	8	3	7	5	4	8
10-Sep	5	6	5	5	5	5	7	6	6	6	6	5	5	7	6	6	5	7	6	5	4	5	5	5	7
11-Sep	5	6	6	7	6	8	6	9	9	9	8	8	8	7	8	7	4	5	6	5	4	3	3	4	9
12-Sep	3	3	3	3	2	1	2	2	3	4	3	5	4	4	5	3	3	3	2	2	3	3	3	2	5
13-Sep	2	2	2	3	3	3	2	2	3	4	4	5	4	4	5	4	4	2	7	4	4	3	3	3	7
14-Sep	4	5	5	4	5	5	6	5	4	5	5	4	5	6	5	4	4	3	2	2	2	1	2	2	6
15-Sep	2	2	2	2	2	1	2	2	2	3	3	5	4	4	6	3	5	3	2	2	1	1	2	2	6
16-Sep	2	1	1	1	2	1	2	2	2	3	3	4	4	2	3	2	2	2	2	3	3	2	3	5	5
17-Sep	5	5	5	6	5	3	2	1	4	3	3	3	2	2	3	2	2	2	2	2	1	2	1	2	6
18-Sep	2	2	2	2	2	1	1	1	2	2	2	2	3	3	2	2	2	3	2	1	1	1	2	1	3
19-Sep	3	2	3	4	2	2	4	2	2	3	3	4	7	5	5	5	5	3	3	3	3	3	4	3	7
20-Sep	3	3	3	2	2	2	3	3	2	3	3	4	6	4	5	4	3	2	2	2	3	4	4	3	6
21-Sep	2	2	2	2	3	3	3	3	3	3	4	4	3	1	5	5	4	4	4	4	4	2	3	2	5
22-Sep	1	2	1	2	2	1	1	1	2	2	3	5	5	5	7	6	6	4	2	3	4	3	2	1	7
23-Sep	2	1	1	1	1	2	3	2	2	3	3	2	2	2	2	3	3	3	3	3	2	2	4	2	4
24-Sep	2	1	2	2	2	2	2	3	2	2	3	7	5	6	5	6	4	2	2	3	1	1	3	1	7
25-Sep	1	1	1	2	2	3	3	3	3	3	5	4	4	4	6	5	5	6	5	5	5	5	4	6	6
26-Sep	4	3	3	4	4	5	6	7	8	8	9	9	10	9	9	8	9	9	8	7	8	8	8	5	10
27-Sep	4	5	6	5	6	7	7	6	7	7	7	5	5	6	6	6	5	5	2	3	2	3	3	2	7
28-Sep	3	3	3	3	3	3	3	3	4	3	5	5	5	5	5	4	4	3	3	3	2	5	3	3	5
29-Sep	2	3	3	2	3	3	2	2	2	3	6	6	7	7	8	9	10	9	5	7	7	8	7	7	10
30-Sep	10	8	7	7	7	8	7	7	5	6	6	7	7	6	6	5	3	4	2	2	2	1	1	2	10
	10	8	7	7	7	8	7	9	9	9	9	9	10	9	9	9	10	9	8	8	8	8	8	7	
	Diurnal Maximum																								

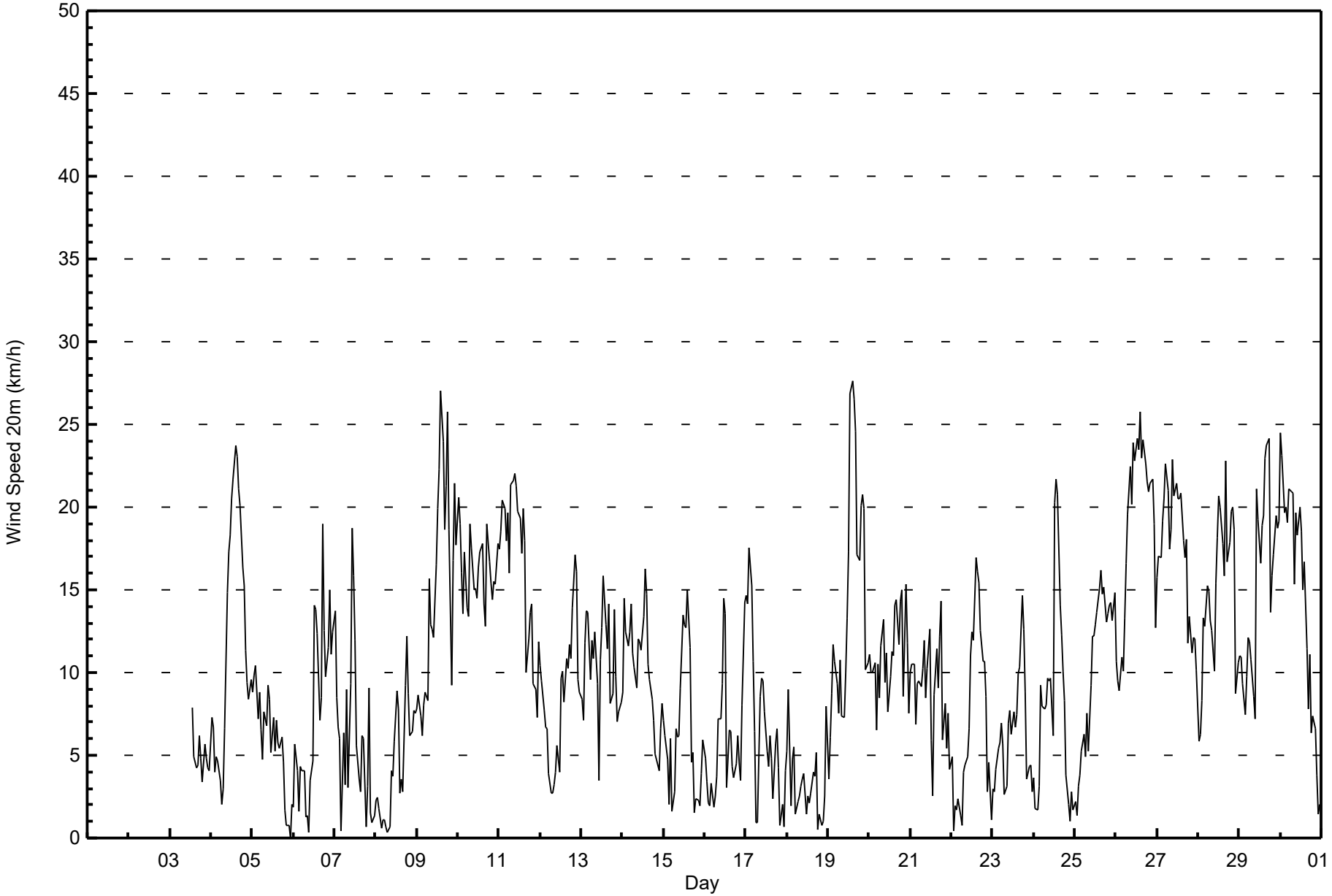
PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 20m (WS20) - km/h

Lower Camp Met Tower - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	173	26.25	26.25
6 - 11	225	34.14	60.39
12 - 19	184	27.92	88.32
20 - 28	77	11.68	100.00
29 - 38	0	0.00	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 659

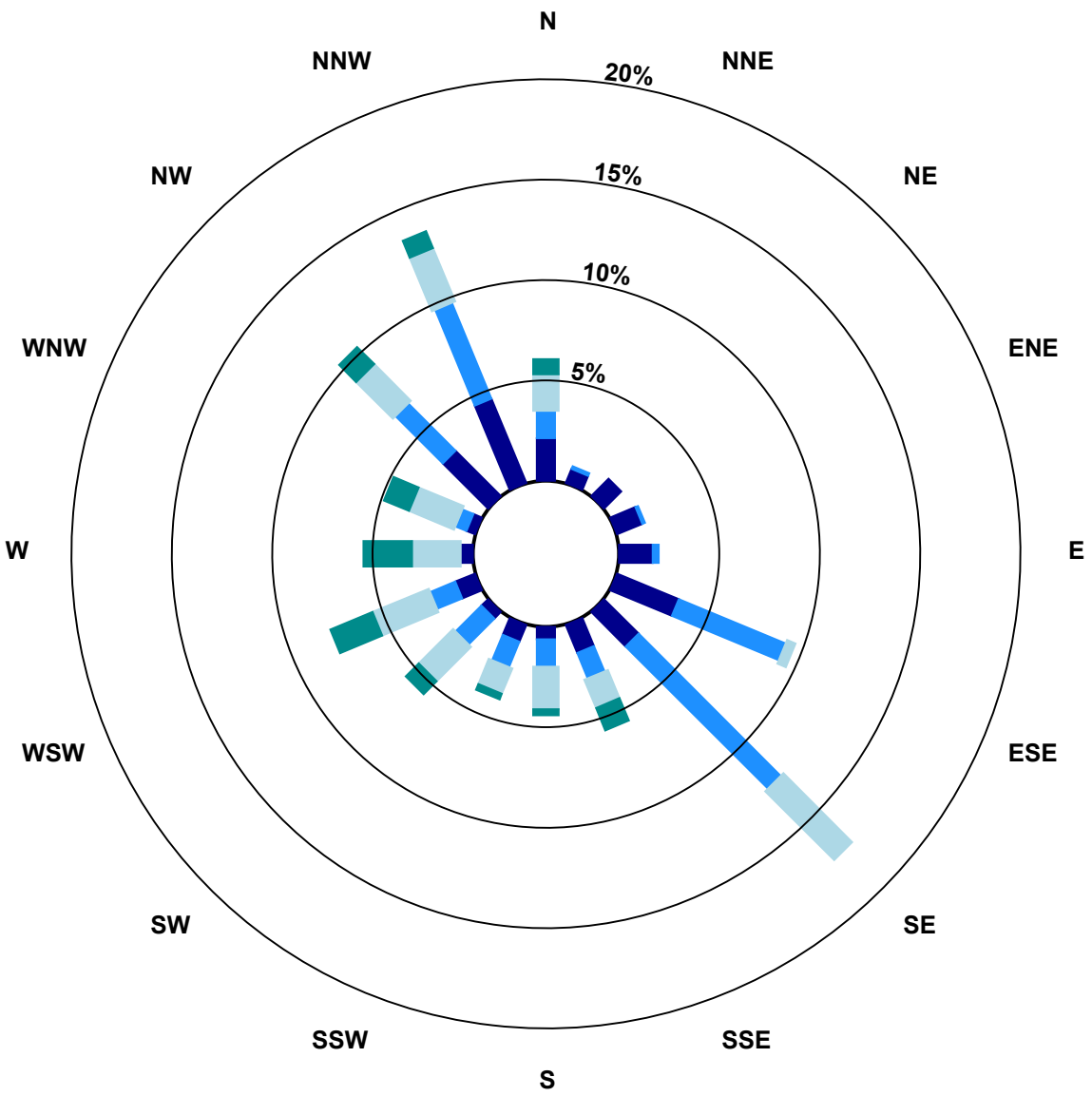
Total Number of Hours: 720

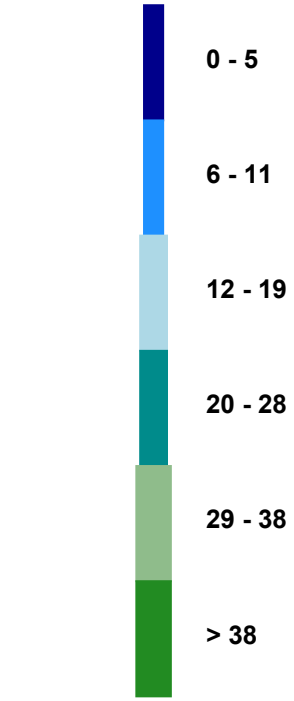
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 20m (WS20) - km/h

Lower Camp Met Tower





Total Number of Valid Hours: 659

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 45m (WS45) - km/h

Lower Camp Met Tower - September 2026

Maximum Speed: 37 km/h on Sep 26 15:00

Maximum Daily Speed Average: 25.6 km/h on Sep 26

Minimum Speed Value: 0 km/h on Sep 8 04:00

Minimum Daily Speed Average: 1.1 km/h on Sep 8

Maximum Diurnal Speed Average: 8.0 km/h at hour 15

Minimum Diurnal Speed Average: 1.0 km/h at hour 2

Monthly Average Velocity: 3.8 km/h 251.0 deg

Percentiles: P_1 = 1 P_{10} = 4 Q_1 = 8 Median = 13 Q_3 = 21 P_{90} = 27 P_{99} = 34

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	----	----
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	ENE12	ENE9	ENE7	ENE7	NNE9	N9	NNE5	N6	NE5	ENE3	E9	----	ENE12
4-Sep	ESE13	ESE13	NNE4	N5	NNW7	NNW7	NNW5	NNW5	NNW9	NNW21	N25	N27	N32	N33	N37	N36	N32	NNW29	NNW25	N22	N18	NNW16	NNW14	N15	N16.9	N37
5-Sep	N13	N14	NNW16	NNW11	NNW13	NNW11	NNW8	N10	NNW9	NNW12	N12	NNW7	NNW9	NNW7	N10	NW7	WNW6	NW9	NW11	NNW6	WSW1	NNW1	SW0	WNW2	NNW8.1	NNW16
6-Sep	SE3	SE9	ESE6	ESE2	SE5	ESE6	ESE6	ESE2	ESE1	SSE2	ESE5	ESE8	SE23	SE19	SSE14	SSE8	S10	S22	SSE15	SE14	ESE20	ESE25	SE17	SE20	SE10.5	ESE25
7-Sep	SE19	ESE15	SE12	ESE9	SSE2	SE9	ENE5	ESE15	SE6	SSE11	SSE20	SSE17	SE14	ESE8	E4	ENE3	ESE10	ESE9	ESE3	SE5	SE13	SE3	SW1	SSW5	SE8.5	SSE20
8-Sep	S5	SSW2	WNW4	E0	NW2	NNW2	NNE2	N1	NNE1	NW5	NW5	NW7	NNW12	N10	NE3	NE4	SW3	SSW11	S15	SSE14	ESE8	SE8	SE12	SE11	SSE1.1	S15
9-Sep	SE10	SE12	SE11	SE9	SE12	SE13	SE15	SE19	SE18	SE17	SSE14	S18	SSW21	SW27	SW33	SW29	SW22	SW24	SW30	SW23	SSW12	SSW22	SW27	WSW24	SSW14.2	SW33
10-Sep	SW27	W27	WNW23	W21	WSW24	WSW21	WSW18	WSW27	WSW24	W22	W21	W21	WSW24	W26	WNW25	NW20	WNW20	WNW29	WNW26	WNW23	NW21	WNW23	WNW23	WNW25	W21.7	WNW29
11-Sep	WNW25	NW26	NW29	NW29	NW26	NW29	NW25	NNW32	NNW33	NNW33	NNW33	NNW29	NNW29	NW26	NW29	NW27	NW16	NW19	NW21	NW23	NW15	NW14	NW12	WNW18	NW24.6	NNW33
12-Sep	WNW16	WNW15	WNW13	NW10	NNW9	NW6	NNW5	N4	WSW4	W5	NNW7	WSW5	WSW11	WSW12	WSW10	SW12	SW12	SW14	SSW14	SSW19	SSW24	SSW23	SW13	SW12	WSW8.2	SSW24
13-Sep	SW11	S8	SSE12	SE16	SE18	SE14	SSE12	SSE11	SE13	SE10	SSW4	WSW13	SW15	SW18	WSW16	SW14	SW16	SW10	NNW14	NNW20	NNW15	NNW12	NNW13	NNW14	SSW4.2	NNW20
14-Sep	NNW14	N23	N19	NNW18	NNW19	NNW21	NNW17	NNW16	NNW15	N18	NNW17	NNW17	NNW19	NNW24	NNW22	N15	NNW15	NNW13	NW11	NNW9	NW8	NW8	NW11	NW12	NNW15.6	NNW24
15-Sep	NW11	NNW8	NNW7	WNW5	WNW10	W4	WSW6	SSW7	S7	SSW7	SW10	SW16	SW14	SW15	SW17	SSW13	NNW7	SSE6	SW2	SW4	NNW5	WNW3	NW7	NW10	WSW5.3	SW17
16-Sep	NNW8	NW5	N4	NW2	NNW4	NNW3	NW2	SW4	S8	S9	SSW10	S15	S14	SE4	SE8	ESE9	E6	ESE6	E7	ESE10	ESE9	ESE9	SE16	SE24	SE4.5	SE24
17-Sep	ESE23	ESE24	SE28	SE26	SE19	SE11	E5	ESE2	SE11	SE11	SSE12	S8	ESE7	ESE6	SE7	ESE5	SSW4	SSW7	SE8	SE8	SSE3	SE3	SE5	SE8	SE10.0	SE28
18-Sep	SSE6	SE7	SSW2	S4	WSW9	W3	NW5	NW4	NNW4	NW4	NNW4	SSE1	W3	W3	ENE3	ENE4	E4	ENE9	E4	SE4	SE6	SE5	SE6	SE10	SE1.2	SE10
19-Sep	SE7	SE10	SE12	SE16	SE14	SE13	SE11	SE13	SE10	ESE12	SE16	SE19	SSE21	S29	SSE30	SSE29	SSE28	S21	S21	SSE26	SSE26	SSE24	SSE15	ESE15	SSE17.2	SSE30
20-Sep	SE16	SE13	SE12	SE13	SE11	SE15	SE13	SE14	SE14	SE10	SE14	ESE10	WSW13	WSW15	SW14	SSW16	SSW16	S15	S20	S22	SSE16	S21	SSE16	SE9	SSE11.4	S22
21-Sep	ESE14	SE12	SE12	SE11	SE14	SE15	SE14	SE13	SE16	SE12	SE15	SE17	SE8	ENE3	ESE15	ESE17	SSE11	SSE17	S19	S13	SSW13	SSE7	SSE9	SSW5	SE11.5	S19
22-Sep	SSW5	SW3	NNW2	S1	SE7	SE5	SSE2	NW5	NNW5	NNW6	NNW9	NW15	NW17	W16	WSW21	WSW23	W22	W18	WSW17	WSW19	WSW17	WSW7	SW7	SW5	W7.8	WSW23
23-Sep	SE7	SE8	SE9	SE9	SE9	SE9	SE9	SE3	ESE4	SE7	ESE8	ESE7	ESE9	SE8	SE10	SE12	SE15	SE18	SE18	SE16	SE8	SSE7	SSE8	SE6	SE9.2	SE18
24-Sep	S5	SSW3	SW5	SSE4	SE10	SE11	SE11	SE11	SE9	SE9	SE11	SSW8	SW25	WSW26	WSW25	WSW18	SW15	SW13	SW14	SSW10	SSW0	S3	S3	SE5	SSW7.5	WSW26
25-Sep	ESE0	NNW1	NNW4	NNW6	NNW9	NNW11	NNW8	NNW13	NNW8	NNW16	NNE20	N18	N20	N21	NNW24	N27	N24	N25	N21	N21	NNW22	NNW22	NNW20	NNW22	N15.7	N27
26-Sep	NNW17	NW14	NNW14	WNW16	WNW15	W19	W24	W29	W31	W30	W34	W33	W34	W34	W37	WNW31	WNW34	W33	W31	W29	W31	W31	W27	W18	W25.6	W37
27-Sep	WSW22	WSW24	WSW24	WSW27	WSW30	WSW33	WSW31	WSW25	WSW27	WSW30	WSW28	WSW26	WSW24	WSW25	WSW26	WSW25	WSW23	SW23	SW17	SW18	SW16	SW18	SW17	SW14	WSW23.4	WSW33
28-Sep	WSW11	SSW9	SSE9	SE15	SE15	SE17	SE18	SE19	SE18	SE12	SSW17	SSW20	SW25	SW24	SW21	SSW18	S25	S20	SSE23	S24	S26	S25	SSE12	ESE14	S14.8	S26
29-Sep	SE13	SE16	SE15	SE11	SE14	SE18	ESE15	ESE13	S11	SSW10	SW27	WSW27	W24	WNW28	WNW27	W33	W34	W35	W20	W23	W25	WNW28	W27	W28	WSW12.4	W35
30-Sep	WNW34	WNW32	NW26	WNW27	WNW26	WNW31	WNW31	WNW27	WNW21	WNW26	NW24	NW28	NW25	NW21	WNW23	NW15	NW12	NW17	NW10	NW13	NW11	NNW8	NW4	NNW4	WNW20.3	WNW34
	SW2.2	WSW1.0	WNW1.1	SW1.4	WSW1.7	SW1.6	SW1.6	WSW1.8	SW2.3	W2.5	W3.8	W5.3	W7.3	W7.7	W8.0	W6.3	WSW6.2	WSW7.0	WSW5.6	SW5.0	SW3.5	SW4.4	WSW3.8	WSW2.2	Diurnal Average	
	WNW34	WNW32	NW29	NW29	WSW30	WSW33	WSW31	NNW32	NNW33	NNW33	W34	W33	W34	W34	W37	N36	W34	W35	W31	W29	W31	W31	W27	W28	Diurnal Maximum	

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 Sep 30 01:00

Minimum Value: 1 km/h on Sep 25 01:00

Percentiles: P_1 = 1 P_{10} = 2 Q_1 = 2 Median = 3 Q_3 = 5 P_{90} = 6 P_{99} = 9

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	5	3	3	2	2	3	2	2	2	2	4	5
4-Sep	3	4	2	2	1	2	2	2	2	5	6	7	6	7	9	8	7	6	6	6	6	5	5	4	9
5-Sep	4	4	5	3	5	4	2	3	2	3	5	3	3	4	5	3	2	2	2	1	1	1	1	1	5
6-Sep	2	2	1	2	1	2	2	1	1	2	2	6	6	7	3	4	3	4	4	4	4	5	4	4	7
7-Sep	4	3	3	2	2	5	2	3	3	5	3	3	5	3	2	1	3	2	2	3	3	3	1	1	5
8-Sep	2	1	1	1	1	1	1	1	1	2	2	4	3	3	1	2	3	2	3	5	2	2	2	2	5
9-Sep	2	1	2	4	3	3	4	2	2	3	4	5	5	6	5	5	4	5	6	9	3	8	5	4	9
10-Sep	4	6	5	5	5	6	7	5	6	6	6	5	5	7	6	5	4	7	6	5	4	5	5	5	7
11-Sep	5	6	6	6	6	8	8	9	9	9	8	8	8	7	7	7	4	5	6	6	5	3	3	4	9
12-Sep	4	4	4	4	2	1	1	2	3	4	3	5	4	4	5	3	3	3	3	2	4	4	4	2	5
13-Sep	3	3	2	3	2	2	2	2	2	4	4	5	3	4	5	4	3	2	9	4	4	3	3	3	9
14-Sep	4	5	5	4	5	6	6	5	3	5	5	4	5	6	5	4	5	3	3	2	3	2	2	2	6
15-Sep	2	2	1	3	2	2	2	2	2	3	3	4	4	3	6	3	7	2	3	3	2	2	2	3	7
16-Sep	3	1	2	1	2	2	2	2	2	3	3	4	4	2	4	2	2	2	2	4	5	3	4	5	5
17-Sep	4	5	4	6	5	5	3	2	5	3	3	2	2	2	4	3	2	2	2	2	2	1	1	2	6
18-Sep	3	3	3	2	3	2	1	2	2	2	2	2	2	3	2	2	2	4	3	3	2	2	3	2	4
19-Sep	3	2	3	3	2	2	4	2	2	4	4	3	6	5	5	6	5	4	3	3	2	3	5	3	6
20-Sep	2	2	2	2	2	2	3	2	2	3	2	4	7	4	5	4	3	2	1	2	3	4	4	3	7
21-Sep	2	1	2	2	3	2	3	3	2	3	4	4	4	2	7	5	6	4	4	5	5	2	3	2	7
22-Sep	1	2	2	2	2	2	1	2	2	2	4	5	5	5	6	6	5	4	2	2	3	6	2	2	6
23-Sep	3	1	2	2	1	2	2	2	2	3	2	3	2	2	2	3	3	3	3	3	2	3	4	2	4
24-Sep	2	2	2	2	3	2	2	2	2	2	2	8	4	5	4	5	4	2	2	4	2	1	1	2	8
25-Sep	1	1	3	2	2	3	3	5	4	3	5	4	4	3	5	4	4	6	5	4	6	5	4	5	6
26-Sep	4	3	4	4	4	5	5	6	7	7	8	8	9	8	9	9	9	9	8	7	7	7	8	5	9
27-Sep	4	4	5	4	6	6	6	6	6	5	5	4	4	5	5	5	5	5	2	3	2	3	3	2	6
28-Sep	3	4	3	3	2	2	2	3	3	4	5	5	5	5	6	4	5	3	4	3	3	6	3	3	6
29-Sep	2	2	3	2	2	2	2	1	2	4	5	5	7	7	9	10	9	9	6	7	7	8	7	7	10
30-Sep	12	8	7	7	8	8	7	7	6	6	6	7	7	6	6	6	3	4	3	2	2	2	2	1	12
	12	8	7	7	8	8	8	9	9	9	8	8	9	8	9	10	9	9	9	9	7	8	8	7	
	Diurnal Maximum																								

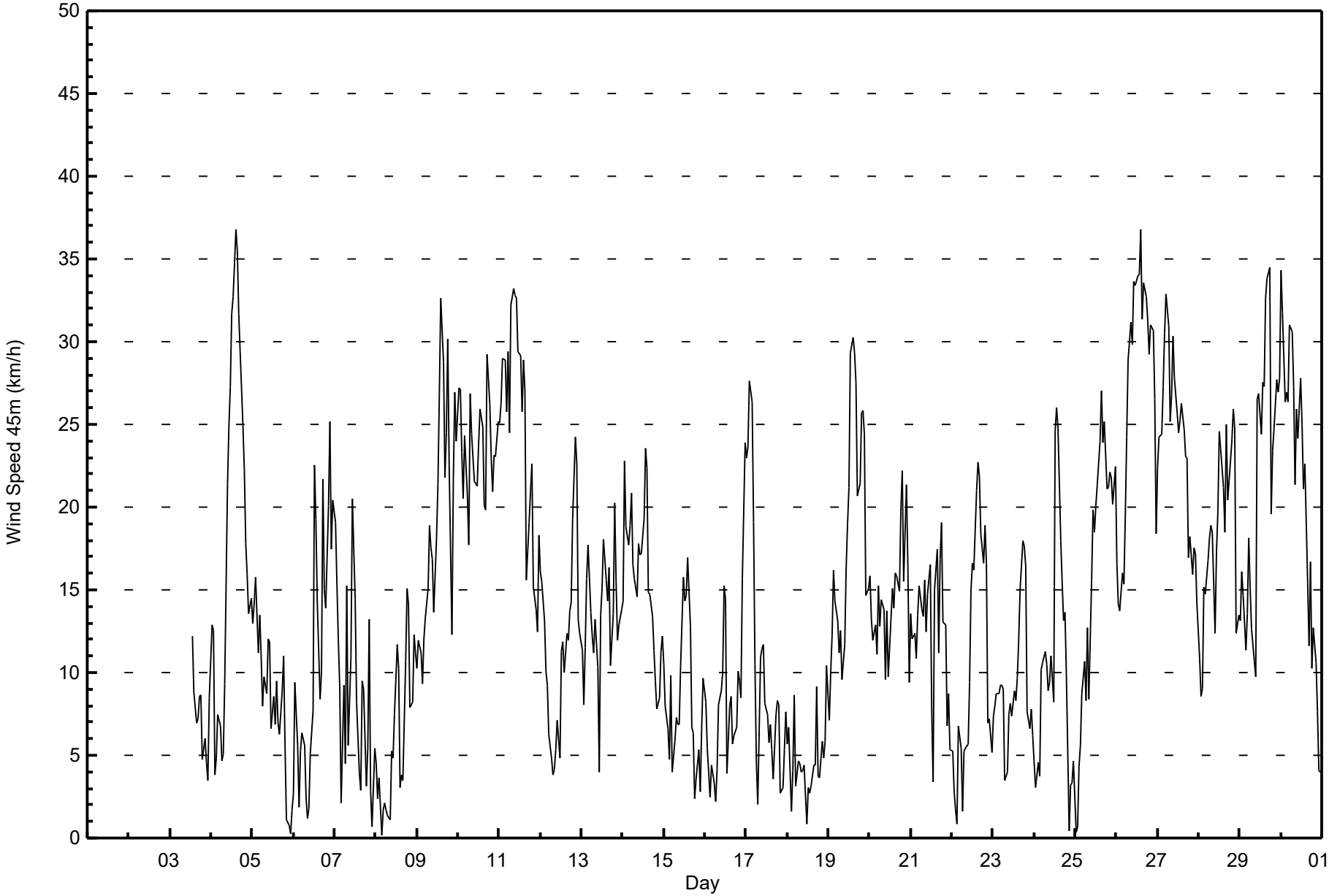
PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 45m (WS45) - km/h

Lower Camp Met Tower - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	111	16.84	16.84
6 - 11	164	24.89	41.73
12 - 19	197	29.89	71.62
20 - 28	138	20.94	92.56
29 - 38	49	7.44	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 659

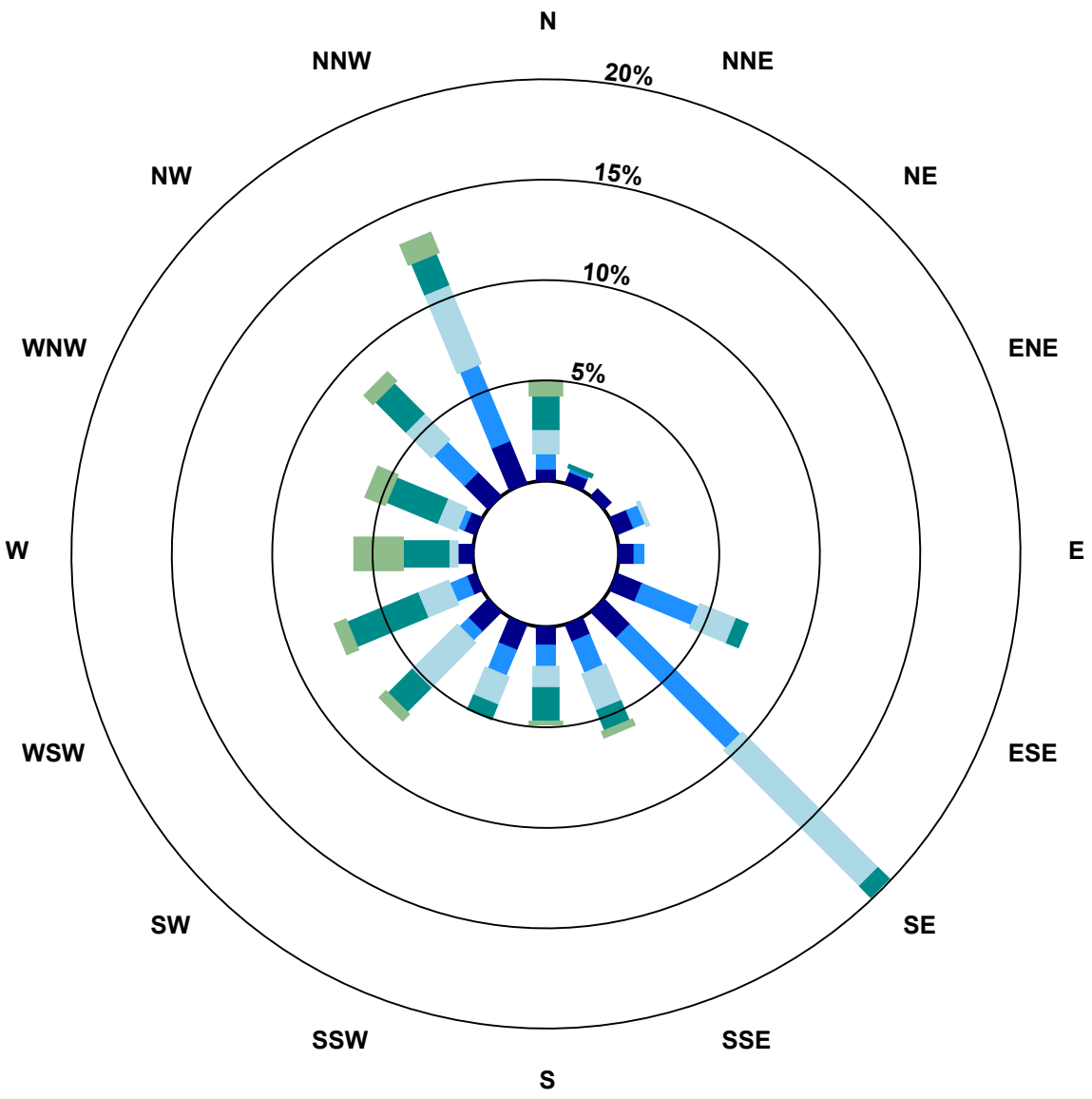
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 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: 659

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 100m (WS100) - km/h

Lower Camp Met Tower - September 2026

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

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

Minimum Speed Value: -- km/h on Sep 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: 720

Hours of Data: 0

Hours of Missing Data: 720

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	----	----
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
4-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	----	----
6-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
8-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
9-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
10-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
11-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
12-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
13-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
22-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
23-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
24-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	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 - September 2026

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

Minimum Value: -- km/h on Sep 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:	720
Hours of Data:	0
Hours of Missing Data:	720
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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
4-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	--
6-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
8-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
9-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
10-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
11-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
12-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
13-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
22-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
23-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
24-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Diurnal Maximum																								

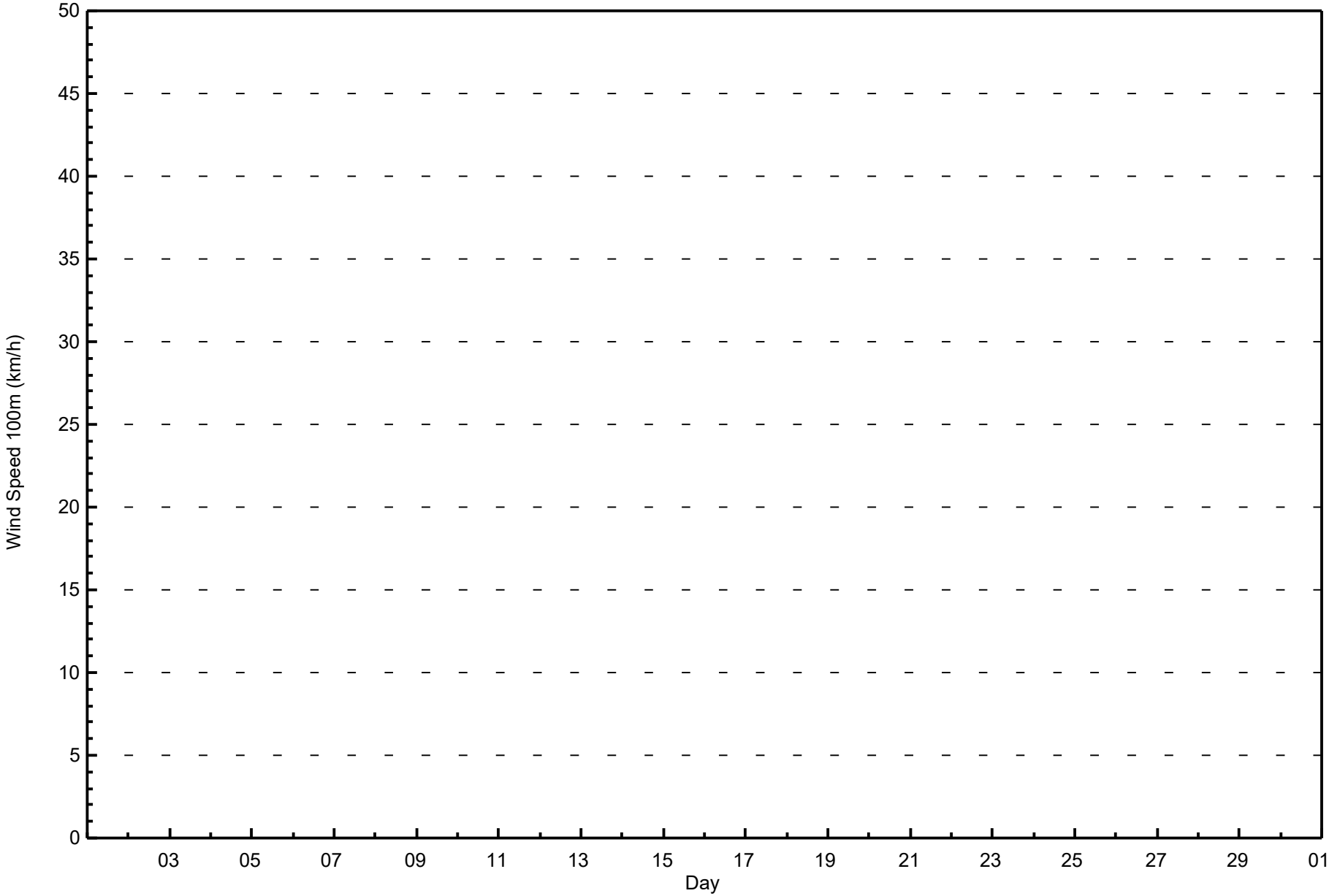
DF - DAS Failure UO - Unstable Operation PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 100m (WS100) - km/h

Lower Camp Met Tower - September 2026



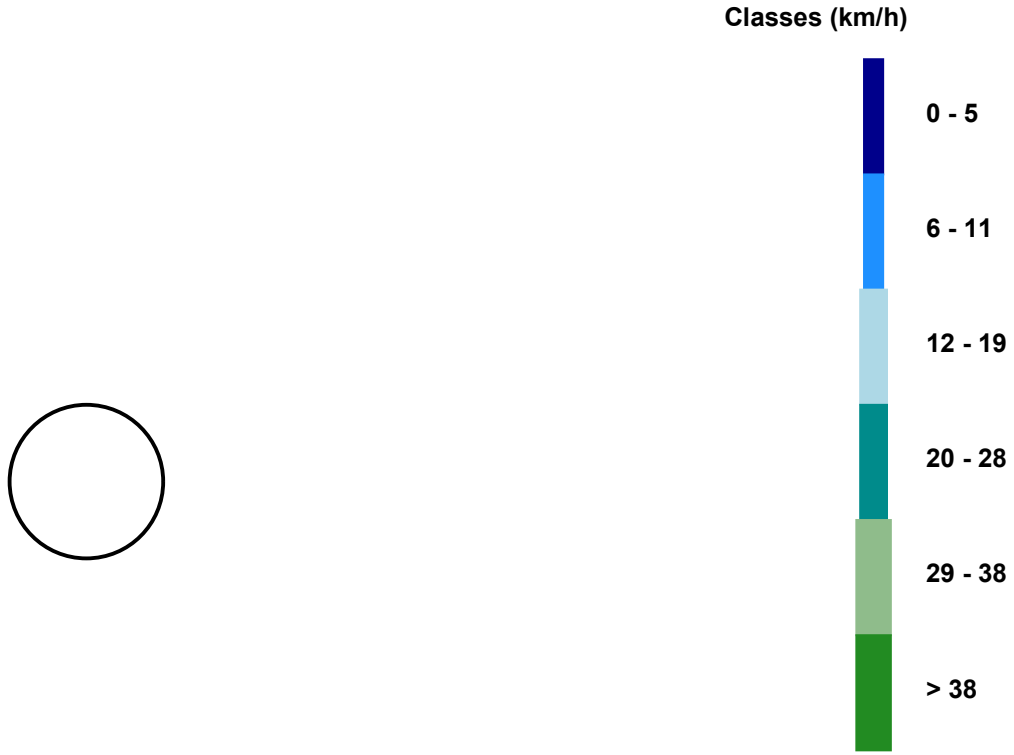
Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	0	0.00	0.00
6 - 11	0	0.00	0.00
12 - 19	0	0.00	0.00
20 - 28	0	0.00	0.00
29 - 38	0	0.00	0.00
> 38	0	0.00	0.00

Total Number of Valid Hours: 0

Total Number of Hours: 720

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 - September 2026

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

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

Minimum Speed Value: -- km/h on Sep 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: 720

Hours of Data: 0

Hours of Missing Data: 720

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	----	----
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
4-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	----	----
6-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
8-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
9-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
10-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
11-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
12-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
13-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
22-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
23-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
24-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	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 - September 2026

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

Minimum Value: -- km/h on Sep 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:	720
Hours of Data:	0
Hours of Missing Data:	720
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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
4-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	--
6-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
8-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
9-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
10-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
11-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
12-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
13-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
22-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
23-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
24-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Diurnal Maximum																								

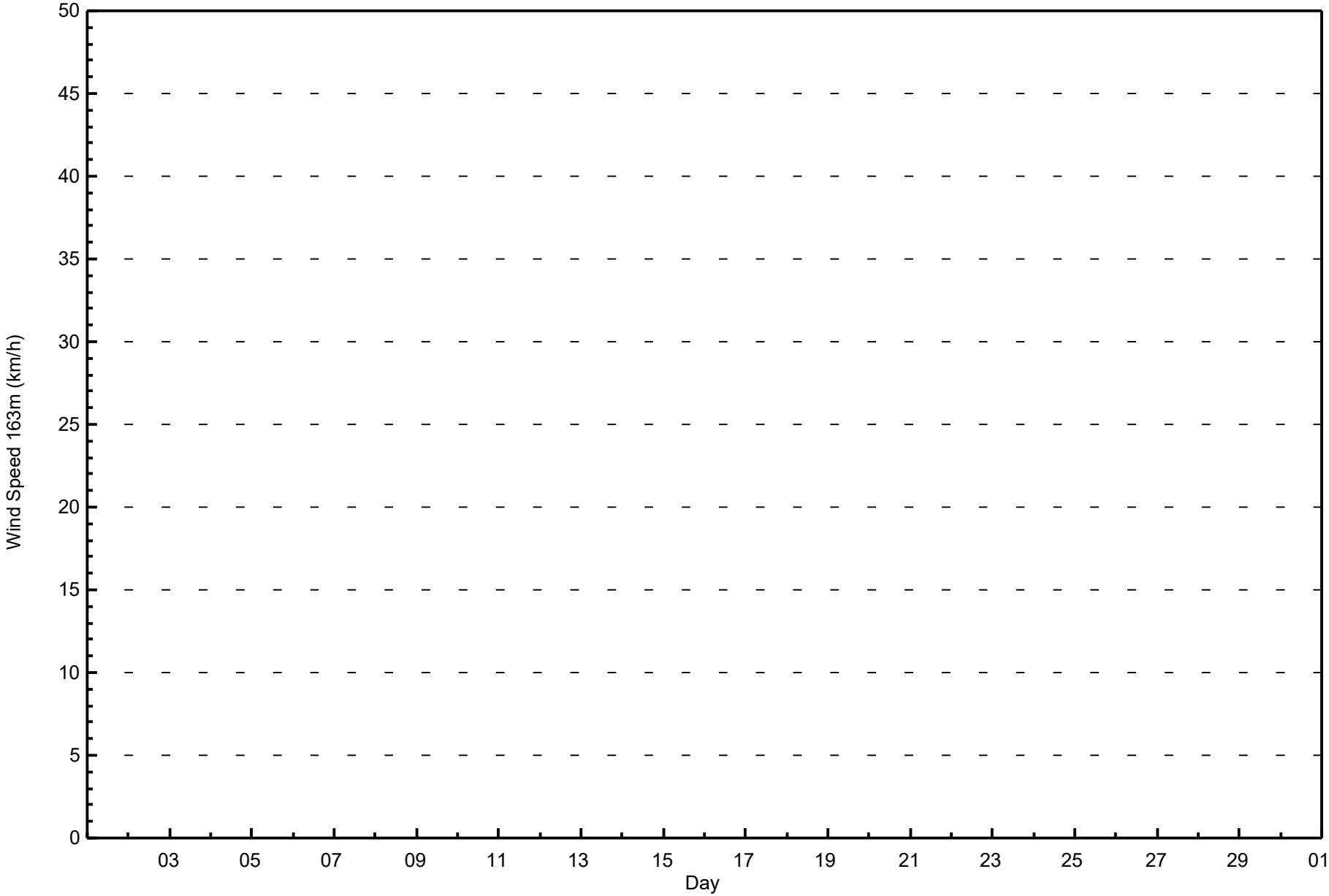
DF - DAS Failure UO - Unstable Operation PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 163m (WS163) - km/h

Lower Camp Met Tower - September 2026

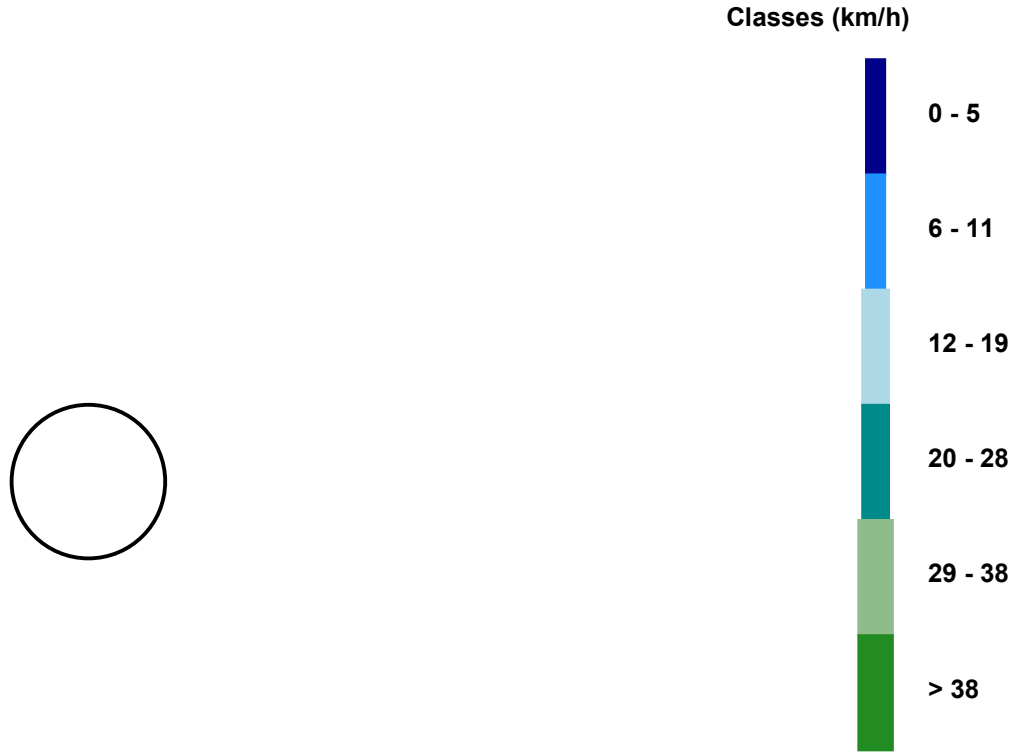


Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	0	0.00	0.00
6 - 11	0	0.00	0.00
12 - 19	0	0.00	0.00
20 - 28	0	0.00	0.00
29 - 38	0	0.00	0.00
> 38	0	0.00	0.00

Total Number of Valid Hours: 0

Total Number of Hours: 720

Wind Speed 163m (WS163) - km/h
Lower Camp Met Tower



Total Number of Valid Hours: 0

Direction of Maximum Speed: 165 deg on Sep 19 15:00
Direction of Maximum Daily Speed Average: 276.0 deg on Sep 26

Direction of Minimum Speed: 21 deg on Sep 5 23:00

Direction of Minimum Daily Speed Average: 0.9 deg on Sep 18

Monthly Average Direction: 246.9 deg

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	73	47	47	61	7	349	352	350	13	359	67	--
4-Sep	107	118	344	345	338	338	323	325	337	344	348	352	356	354	356	356	350	344	343	345	346	333	338	349	350.4
5-Sep	348	349	343	332	344	339	338	354	347	343	4	343	345	341	355	312	300	322	322	347	340	312	21	344	341.1
6-Sep	114	112	88	59	101	91	113	89	353	74	105	122	129	134	153	157	169	172	154	139	124	125	135	129	135.2
7-Sep	142	128	135	121	185	143	61	119	127	160	163	154	148	121	80	55	125	124	79	112	136	62	311	204	136.7
8-Sep	127	119	336	184	333	351	352	303	47	314	333	328	347	13	50	54	240	208	178	156	94	115	130	118	111.4
9-Sep	117	114	122	124	128	124	128	141	131	132	159	189	207	236	234	232	214	214	227	225	193	207	232	239	198.8
10-Sep	237	279	295	265	250	254	243	250	251	277	274	267	253	285	291	309	296	285	287	302	309	300	295	304	276.9
11-Sep	304	310	313	313	316	322	323	329	330	334	330	336	329	325	320	325	318	321	324	324	324	315	317	305	322.0
12-Sep	303	298	299	321	341	307	332	13	251	260	330	237	239	237	254	221	228	222	193	189	193	211	218	213	239.3
13-Sep	209	146	138	131	129	123	139	143	135	134	199	243	230	228	236	232	231	218	344	344	339	331	331	326	195.2
14-Sep	340	0	350	341	339	343	338	337	334	346	339	336	342	345	339	350	342	326	322	325	314	316	323	323	339.2
15-Sep	334	346	345	306	310	296	259	194	181	191	232	235	229	226	216	207	328	149	195	199	313	266	327	321	241.1
16-Sep	328	304	353	311	342	347	316	222	191	184	199	180	185	136	125	118	88	112	86	117	106	96	119	129	149.5
17-Sep	119	119	124	131	120	138	115	12	143	140	154	169	121	118	121	115	169	183	125	118	160	112	159	120	131.1
18-Sep	132	126	112	133	247	279	311	310	338	330	4	160	257	249	57	71	89	58	23	352	333	157	119	137	100.6
19-Sep	132	133	136	131	124	123	130	147	136	118	127	130	146	173	165	163	165	187	169	158	147	148	145	117	150.7
20-Sep	125	124	126	121	125	131	129	127	131	126	132	122	242	251	231	207	198	183	178	175	144	167	155	97	157.1
21-Sep	107	127	130	133	139	131	123	128	134	128	126	138	139	56	118	130	156	149	175	199	187	134	143	162	138.5
22-Sep	160	85	332	131	126	105	353	338	344	354	350	327	315	286	243	257	270	261	250	250	248	244	218	199	273.0
23-Sep	137	129	128	114	111	117	110	118	105	130	128	119	126	147	136	138	136	144	137	132	154	176	150	142	132.7
24-Sep	131	146	199	129	121	122	118	121	131	134	132	197	237	237	239	246	239	225	217	233	324	190	122	43	197.9
25-Sep	9	1	344	325	327	331	315	324	335	336	7	354	357	1	342	358	355	355	358	351	345	344	340	339	347.7
26-Sep	344	319	322	304	295	261	264	264	265	265	268	274	270	267	275	293	285	278	271	272	271	269	272	265	276.0
27-Sep	248	254	261	251	257	259	255	255	255	249	247	239	238	243	241	250	246	232	225	215	222	224	221	220	244.3
28-Sep	235	173	129	130	137	132	135	129	129	127	208	206	223	227	228	200	184	178	158	164	167	175	138	107	171.6
29-Sep	135	135	131	118	130	127	111	107	143	177	237	256	282	286	289	277	281	272	268	269	285	288	275	281	258.5
30-Sep	295	305	309	299	299	290	292	303	305	305	307	316	313	314	303	312	317	322	322	310	338	319	354	344	306.1
	226.3	289.4	340.8	211.8	256.4	216.2	231.6	225.4	212.9	260.3	252.5	249.0	255.0	262.8	259.0	257.0	247.4	237.4	229.9	233.5	235.6	229.2	241.0	265.8	
	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 20m (WD20) - deg

Lower Camp Met Tower - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 112 deg on Sep 6 10:00

Minimum Value: 4 deg on Sep 20 19:00

Percentiles: P_1 = 7 P_{10} = 12 Q_1 = 16 Median = 19 Q_3 = 29 P_{90} = 54 P_{99} = 93

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	33	38	33	30	16	24	38	10	22	44	39	44
4-Sep	21	25	41	43	18	27	61	32	17	16	15	19	19	19	19	18	17	16	18	17	22	21	24	21	61
5-Sep	19	18	21	21	21	22	22	21	24	20	36	67	35	56	52	43	30	17	18	71	66	76	100	40	100
6-Sep	41	20	19	51	18	31	31	65	51	112	33	47	22	22	19	34	24	8	13	19	19	19	17	16	112
7-Sep	17	21	23	23	93	52	41	20	69	24	11	15	21	39	38	24	24	16	86	43	17	73	80	64	93
8-Sep	33	49	73	86	58	57	67	100	82	34	46	40	27	19	45	53	77	24	9	32	15	18	14	16	100
9-Sep	12	11	16	30	19	18	26	10	13	15	25	20	16	17	12	15	12	11	11	12	13	14	12	12	30
10-Sep	11	25	18	22	16	23	30	18	18	26	24	20	17	22	19	17	19	18	17	16	15	16	17	15	30
11-Sep	15	15	14	16	15	18	17	18	18	18	18	20	20	18	19	19	16	17	19	18	18	18	22	15	22
12-Sep	17	19	25	26	15	30	58	46	59	82	54	86	35	30	39	19	18	19	9	6	7	11	12	11	86
13-Sep	14	28	8	10	12	15	9	13	11	23	79	24	21	19	20	32	11	18	85	16	18	19	17	17	85
14-Sep	22	19	18	17	18	18	18	19	19	19	20	19	18	17	19	20	24	16	18	16	22	14	15	18	24
15-Sep	16	16	14	77	14	63	48	17	30	39	19	18	18	20	20	19	85	29	92	84	39	42	24	20	92
16-Sep	27	33	49	25	41	50	44	36	28	36	25	17	20	61	23	21	26	29	31	24	40	50	21	17	61
17-Sep	17	17	15	19	23	34	97	86	20	18	30	31	21	27	24	23	51	27	19	16	86	41	66	21	97
18-Sep	44	16	85	37	29	78	30	29	35	43	56	87	91	90	72	31	36	41	102	69	72	85	65	12	102
19-Sep	48	18	14	13	10	13	20	11	20	23	20	16	19	14	12	10	8	8	10	6	7	8	22	16	48
20-Sep	12	15	10	13	18	12	15	11	8	13	14	26	51	21	29	21	9	10	4	6	21	15	26	19	51
21-Sep	18	8	8	15	13	15	17	13	11	19	19	10	26	47	44	29	14	15	15	34	20	23	22	46	47
22-Sep	21	89	77	83	54	78	68	20	26	23	23	29	21	28	23	20	21	17	11	12	36	101	25	76	101
23-Sep	52	24	21	15	12	16	22	36	32	19	17	23	17	19	15	16	17	11	12	17	46	49	42	50	52
24-Sep	29	54	79	54	13	13	13	15	11	11	15	65	15	14	14	22	16	13	10	78	51	89	86	47	89
25-Sep	15	69	32	22	17	22	50	23	27	17	21	21	19	17	18	17	16	18	19	18	19	17	15	16	69
26-Sep	20	23	22	18	19	20	21	19	19	21	20	21	20	21	21	19	20	21	20	19	20	19	20	20	23
27-Sep	15	16	20	14	16	17	17	19	19	15	16	12	13	14	18	17	16	10	13	11	9	10	10	10	20
28-Sep	21	46	17	10	10	10	10	14	16	16	27	15	17	15	16	15	9	10	6	7	8	8	28	15	46
29-Sep	12	14	17	17	15	15	10	9	22	32	13	17	21	21	22	22	21	19	20	22	23	21	20	20	32
30-Sep	18	17	16	17	17	17	18	15	15	14	15	15	16	19	18	20	19	16	15	12	17	26	84	49	84
	52	89	85	86	93	78	97	100	82	112	79	87	91	90	72	53	85	41	102	84	86	101	100	76	
	Diurnal Maximum																								

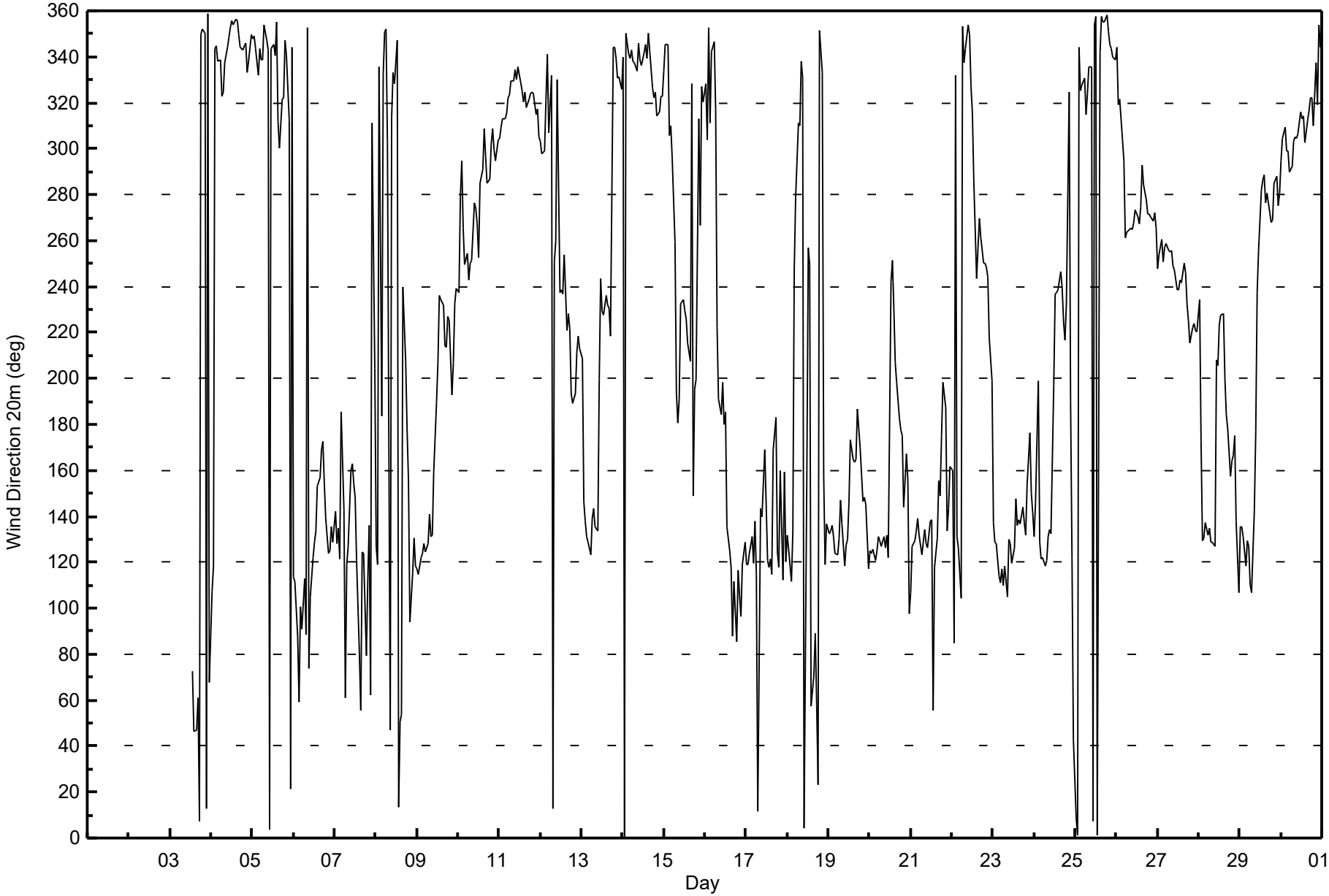
PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 20m (WD20) - deg

Lower Camp Met Tower - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 45m (WD45) - deg

Lower Camp Met Tower - September 2026

Direction of Maximum Speed: 272 deg on Sep 26 15:00
Direction of Maximum Daily Speed Average: 274.4 deg on Sep 26

Direction of Minimum Speed: 88 deg on Sep 8 04:00

Direction of Minimum Daily Speed Average: 1.1 deg on Sep 8

Monthly Average Direction: 251.0 deg

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	78	60	58	77	14	359	28	357	50	59	98	--
4-Sep	112	116	14	353	338	336	334	333	334	348	352	356	358	357	358	357	353	348	347	349	351	335	345	352	354.3
5-Sep	352	352	347	334	347	345	344	354	348	344	5	344	344	345	351	309	297	320	326	330	255	333	219	302	341.6
6-Sep	127	128	112	106	128	108	118	104	104	149	118	119	126	127	150	153	171	171	148	133	120	123	126	126	132.8
7-Sep	136	122	127	120	153	140	73	121	129	159	162	150	141	114	86	63	123	121	115	132	141	138	216	208	134.7
8-Sep	170	199	295	88	308	340	18	5	26	314	315	320	345	3	48	53	231	209	180	167	113	131	134	129	151.1
9-Sep	127	126	127	129	132	128	129	141	132	131	162	190	207	235	233	230	215	214	226	223	197	210	232	238	196.3
10-Sep	236	278	292	264	247	250	241	247	250	274	272	265	250	281	289	307	293	283	285	300	308	298	293	303	275.2
11-Sep	302	308	312	313	316	322	324	330	330	334	331	336	329	326	320	324	320	322	326	326	325	314	315	301	322.1
12-Sep	300	292	292	311	337	315	333	10	254	262	328	250	238	240	254	223	228	223	199	197	199	210	221	219	243.8
13-Sep	221	169	154	138	133	129	149	157	145	138	209	241	228	226	238	233	229	219	344	347	342	336	334	329	212.5
14-Sep	343	2	353	345	342	348	342	341	336	349	341	337	345	348	342	353	346	328	325	331	324	315	312	315	341.2
15-Sep	320	330	334	300	293	268	251	201	183	195	235	235	230	224	216	207	330	159	220	219	332	287	317	326	250.9
16-Sep	341	324	359	320	337	346	319	216	186	189	197	181	185	144	128	118	90	112	98	113	107	119	125	127	138.9
17-Sep	121	121	124	128	124	130	99	117	135	134	149	170	123	115	126	122	197	193	138	142	154	143	141	134	131.8
18-Sep	163	142	200	173	243	278	319	319	327	316	343	168	262	260	61	72	89	63	98	136	131	141	135	143	133.9
19-Sep	134	132	132	128	127	128	128	135	124	119	124	129	147	173	164	163	165	191	176	161	151	152	150	118	149.4
20-Sep	125	124	128	137	137	137	132	131	132	129	127	120	241	250	231	209	200	190	190	186	165	175	165	126	163.6
21-Sep	111	130	145	145	135	130	127	125	129	124	126	133	135	76	116	122	147	154	182	184	194	152	154	195	140.3
22-Sep	198	233	331	184	132	127	164	323	337	347	337	326	313	281	242	256	268	260	250	247	243	254	231	234	265.5
23-Sep	141	130	132	127	129	130	124	140	116	126	119	118	122	139	133	136	132	145	132	125	137	162	148	142	132.7
24-Sep	170	213	226	163	139	131	130	131	146	140	127	198	235	237	237	245	236	225	214	209	196	190	185	125	201.1
25-Sep	111	342	344	332	337	334	328	330	341	340	13	360	2	4	343	2	358	357	360	353	348	347	343	341	351.3
26-Sep	348	325	328	302	292	259	262	262	263	263	265	271	268	265	272	290	283	277	270	269	269	266	270	264	274.4
27-Sep	245	251	258	250	254	255	252	251	252	246	245	237	238	242	241	249	245	232	226	216	219	220	219	220	242.5
28-Sep	238	213	149	138	143	139	135	129	128	128	209	206	223	227	227	202	185	182	164	171	175	181	149	110	175.6
29-Sep	136	133	137	133	137	128	117	118	170	196	236	254	279	284	287	274	278	269	264	266	281	284	271	278	254.9
30-Sep	291	301	306	296	296	287	290	300	301	303	307	316	311	314	300	307	315	320	323	305	322	335	313	332	303.6
	229.2	250.8	295.8	229.5	237.1	220.2	231.8	238.2	231.6	272.9	266.2	260.1	261.4	269.3	265.6	265.3	255.9	246.4	239.6	232.6	231.2	229.6	236.4	245.4	
	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 45m (WD45) - deg

Lower Camp Met Tower - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 101 deg on Sep 5 23:00

Minimum Value: 3 deg on Sep 20 19:00

Percentiles: $P_1 = 5$ $P_{10} = 8$ $Q_1 = 10$ Median = 13 $Q_3 = 21$ $P_{90} = 40$ $P_{99} = 90$

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	24	25	21	21	14	14	38	16	39	50	21	50
4-Sep	10	14	54	28	6	12	14	18	11	10	10	13	11	11	11	10	10	10	10	12	13	13	16	13	54
5-Sep	14	11	14	13	14	15	17	16	17	13	29	52	28	47	35	36	28	10	8	8	53	90	101	33	101
6-Sep	52	12	13	52	12	17	21	34	86	85	27	28	12	15	19	29	18	7	16	16	10	10	12	9	86
7-Sep	14	11	13	14	80	36	38	10	29	18	10	16	18	26	31	26	13	9	33	28	10	84	90	15	90
8-Sep	32	42	33	100	32	28	38	72	73	25	43	40	19	13	40	35	88	21	8	17	19	13	8	8	100
9-Sep	7	6	9	16	12	10	11	9	8	10	26	18	14	13	8	11	10	9	8	10	12	12	9	7	26
10-Sep	7	21	12	16	10	16	23	11	11	21	16	15	10	17	12	14	12	10	9	11	11	10	11	10	23
11-Sep	10	10	10	11	11	12	12	11	12	11	12	12	13	12	14	12	11	11	13	14	11	13	20	9	20
12-Sep	10	10	16	24	10	16	13	37	49	63	47	85	26	26	34	18	14	17	7	5	6	8	8	10	85
13-Sep	10	30	12	10	6	8	13	17	13	23	68	18	16	16	16	27	9	11	83	10	11	11	11	9	83
14-Sep	16	12	12	11	11	11	11	13	12	13	14	14	12	11	13	12	19	11	12	8	13	7	8	11	19
15-Sep	12	19	12	29	9	39	25	17	26	33	16	13	15	15	17	17	63	24	82	74	25	51	19	12	82
16-Sep	17	22	34	19	31	38	52	40	26	25	20	15	16	56	22	15	16	16	24	16	22	17	10	8	56
17-Sep	9	9	7	9	13	23	54	81	17	16	28	29	11	16	25	34	48	14	15	13	65	32	11	13	81
18-Sep	46	29	95	46	18	59	14	17	31	37	47	96	89	86	72	30	33	27	63	41	17	29	36	12	96
19-Sep	13	10	7	7	6	7	12	8	12	13	11	10	18	13	11	8	8	7	10	6	6	7	16	10	18
20-Sep	6	11	14	12	9	5	8	6	7	14	8	18	41	14	22	19	9	8	3	6	13	9	17	19	41
21-Sep	12	7	10	12	7	6	7	7	6	10	9	5	19	42	30	18	21	10	13	11	11	28	24	32	42
22-Sep	20	68	91	70	11	25	45	37	21	16	16	27	17	24	18	14	13	11	7	4	10	70	16	20	91
23-Sep	20	6	8	7	5	11	10	30	27	16	12	15	10	16	11	11	11	11	10	7	25	42	19	13	42
24-Sep	27	65	46	56	15	7	7	10	16	16	10	63	10	11	9	15	11	11	5	29	99	29	55	19	99
25-Sep	90	86	40	14	9	9	41	11	14	9	14	14	11	10	13	8	8	9	11	12	13	10	9	11	90
26-Sep	12	16	17	13	14	14	16	12	12	13	13	13	13	14	16	15	14	14	12	13	13	12	13	15	17
27-Sep	9	10	13	8	9	9	10	11	11	9	9	7	9	10	14	11	11	6	11	7	6	7	7	7	14
28-Sep	12	33	26	8	7	8	7	6	7	14	20	14	15	12	13	14	8	8	6	5	7	7	27	11	33
29-Sep	10	8	7	11	12	6	7	10	21	23	9	10	14	15	16	16	14	13	13	15	16	15	14	13	23
30-Sep	13	14	13	13	14	11	11	11	12	11	12	11	13	14	13	14	15	12	10	8	12	14	18	26	26
	90	86	95	100	80	59	54	81	86	85	68	96	89	86	72	36	88	27	83	74	99	90	101	33	
	Diurnal Maximum																								

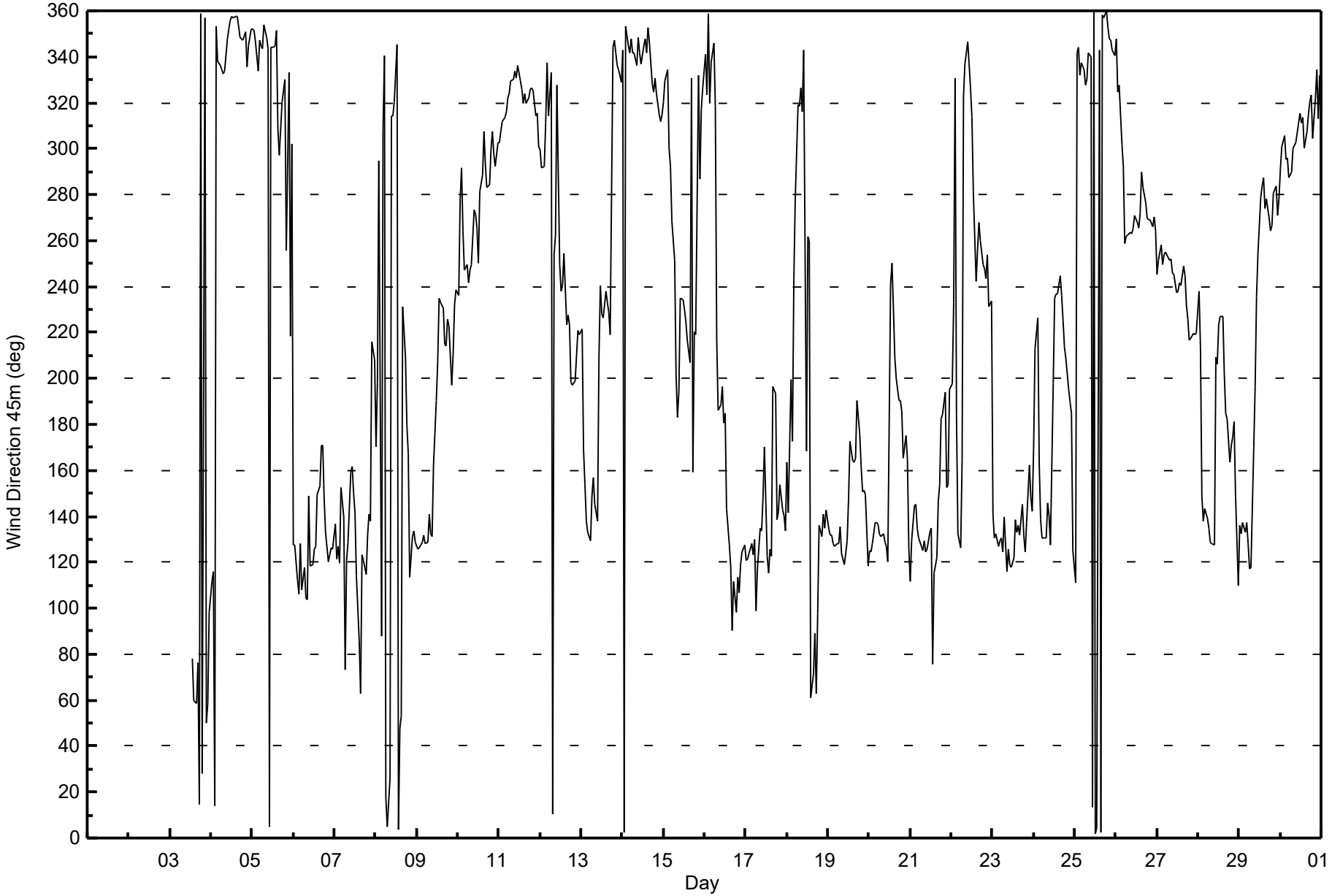
PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 45m (WD45) - deg

Lower Camp Met Tower - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 100m (WD100) - deg

Lower Camp Met Tower - September 2026

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

Direction of Minimum Speed: -- deg on Sep 1 00:00
Direction of Minimum Daily Speed Average: 0.0 deg on Jan 1

Monthly Average Direction: -- deg

Hours in Service:	720
Hours of Data:	0
Hours of Missing Data:	720
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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
4-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	--
6-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
8-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
9-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
10-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
11-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
12-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
13-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
22-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
23-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
24-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	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 - September 2026

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

Minimum Value: -- deg on Sep 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:	720
Hours of Data:	0
Hours of Missing Data:	720
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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
4-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	--
6-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
8-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
9-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
10-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
11-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
12-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
13-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
22-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
23-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
24-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Diurnal Maximum																								

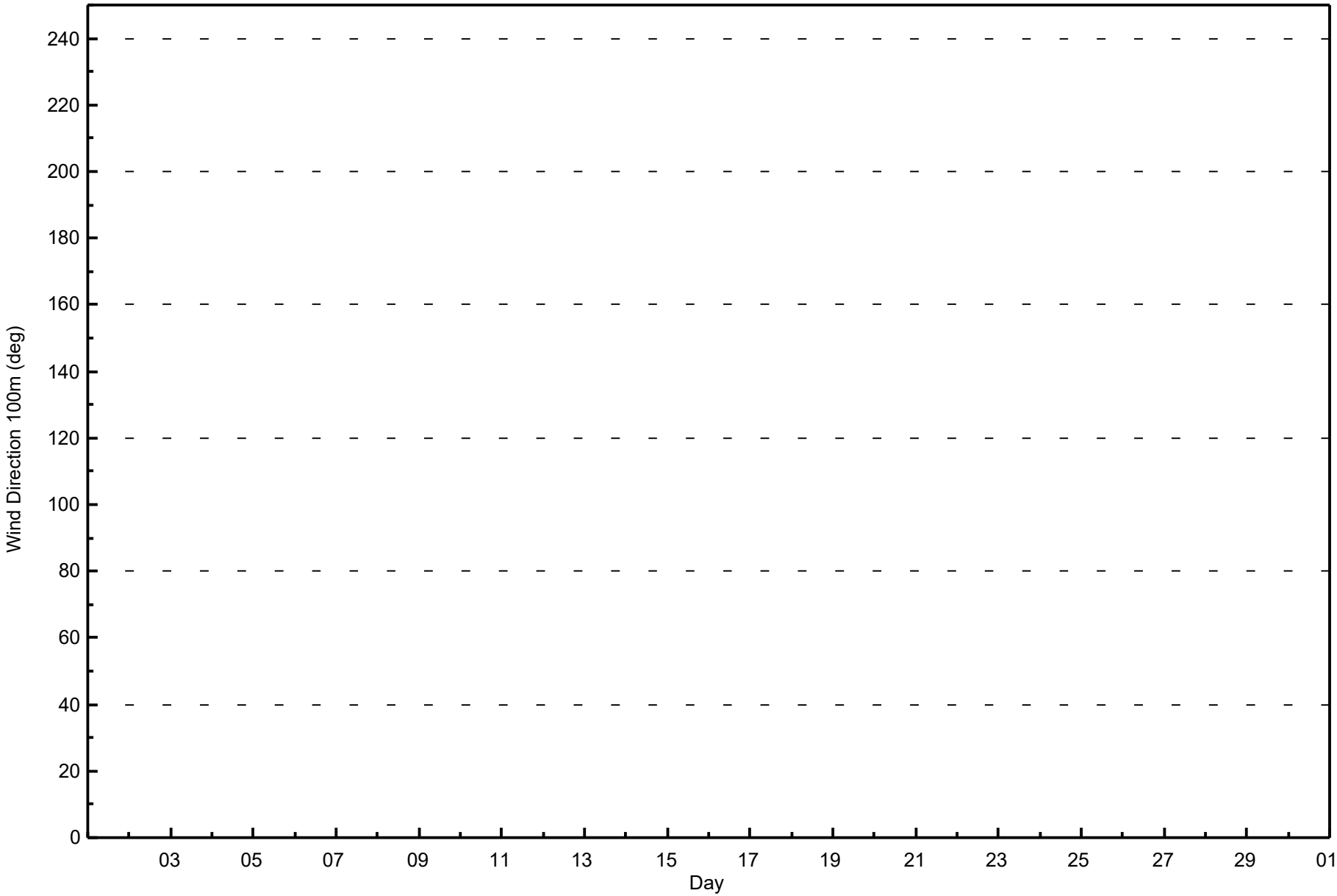
DF - DAS Failure UO - Unstable Operation PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 100m (WD100) - deg

Lower Camp Met Tower - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 163m (WD163) - deg

Lower Camp Met Tower - September 2026

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

Direction of Minimum Speed: -- deg on Sep 1 00:00
Direction of Minimum Daily Speed Average: 0.0 deg on Jan 1

Monthly Average Direction: -- deg

Hours in Service:	720
Hours of Data:	0
Hours of Missing Data:	720
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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
4-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	--
6-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
8-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
9-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
10-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
11-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
12-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
13-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
22-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
23-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
24-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
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 - September 2026

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

Minimum Value: -- deg on Sep 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:	720
Hours of Data:	0
Hours of Missing Data:	720
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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
4-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	--
6-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
8-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
9-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
10-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
11-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
12-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
13-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
22-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
23-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
24-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Diurnal Maximum																								

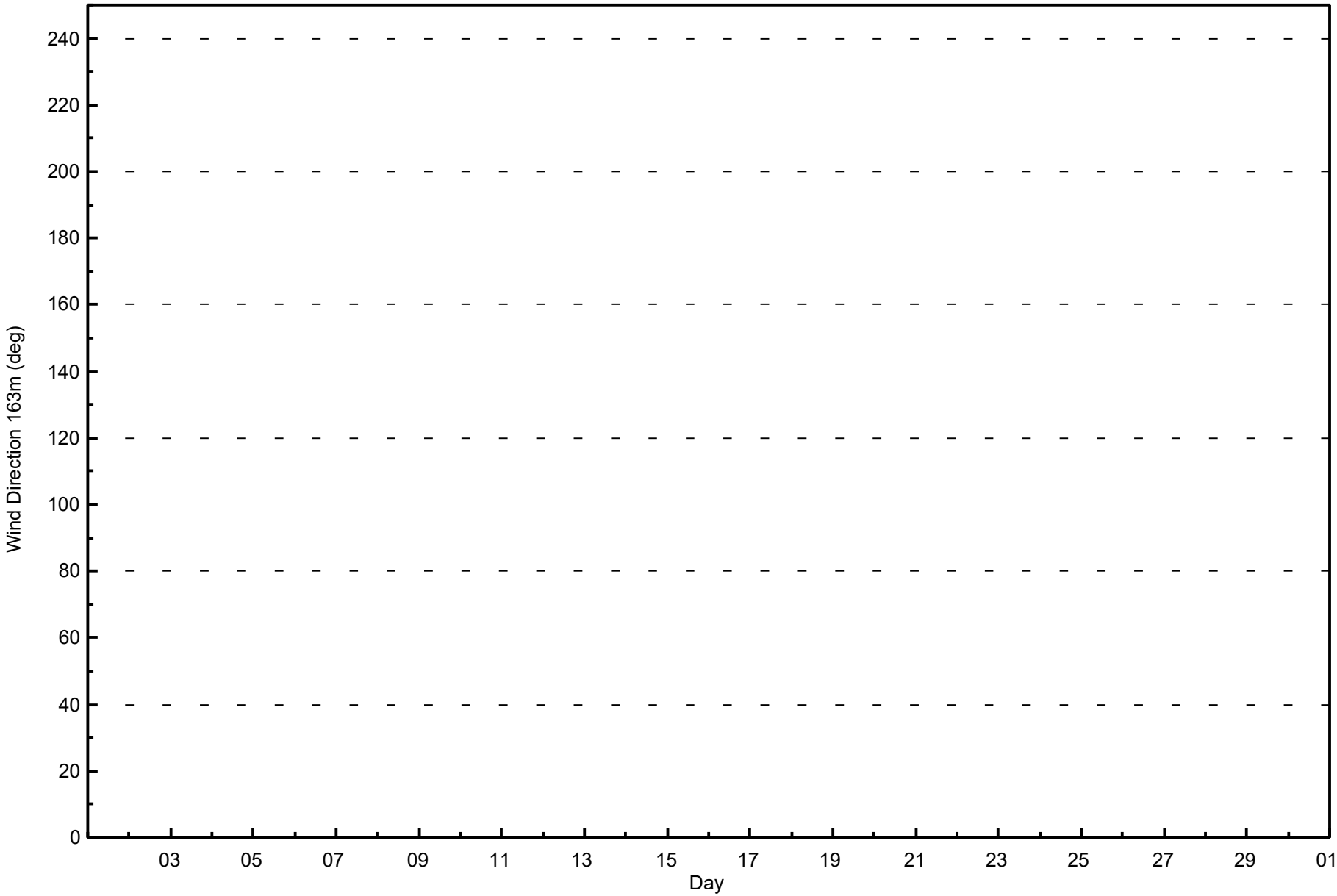
DF - DAS Failure UO - Unstable Operation PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 163m (WD163) - deg

Lower Camp Met Tower - September 2026



Maximum Value: 0.4 km/h on Sep 20 21:00

Maximum Daily Average: 0.0 km/h on Sep 18

Minimum Value: -1.8 km/h on Sep 19 16:00

Minimum Daily Average: -1.0 km/h on Sep 27

Maximum Diurnal Average: -0.2 km/h at hour 3

Minimum Diurnal Average: -0.7 km/h at hour 15

Monthly Average: -0.40 km/h

Percentiles: P_1 = -1.6 P_{10} = -1.1 Q_1 = -0.7 Median = -0.3 Q_3 = 0.0 P_{90} = 0.0 P_{99} = 0.2

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	-0.4	-0.2	-0.1	-0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	--	0.2
4-Sep	-0.3	-0.2	0.1	0.1	-0.3	0.0	0.0	0.0	-0.1	-0.4	-0.6	-0.5	-0.3	-0.6	-0.5	-0.4	-0.6	-0.6	-0.5	-0.4	-0.3	0.0	0.0	-0.2	-0.3	0.1
5-Sep	0.0	-0.3	0.0	-0.2	-0.2	-0.3	0.0	-0.2	0.0	-0.3	-0.1	0.0	-0.3	-0.1	-0.2	-0.4	-0.4	-0.1	0.0	0.0	0.0	0.0	0.1	0.0	-0.1	0.1
6-Sep	0.0	0.0	-0.1	0.1	0.0	-0.3	-0.2	0.1	-0.2	0.1	-0.1	-0.2	-0.3	-0.3	-0.9	-0.3	-0.3	-1.3	-0.7	-0.2	-0.2	-0.1	-0.2	-0.3	-0.3	0.1
7-Sep	-0.3	-0.4	-0.3	-0.2	0.0	-0.1	-0.2	-0.5	-0.1	-0.7	-1.1	-0.9	-0.7	-0.2	0.1	-0.2	-0.2	-0.2	0.0	0.1	-0.2	0.1	0.0	0.0	-0.3	0.1
8-Sep	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.4	-0.1	0.0	0.1	-0.1	0.2	-0.3	0.2	0.0	-0.5	-0.7	0.0	-0.1	0.0	0.0	0.1	0.0	0.4
9-Sep	0.1	-0.1	-0.2	-0.2	-0.3	-0.5	-0.6	-0.9	-0.8	-0.7	-0.7	-1.0	-1.0	-1.3	-1.7	-1.4	-1.1	-1.1	-1.5	-0.9	-0.5	-0.9	-1.2	-1.0	-0.8	0.1
10-Sep	-1.1	-1.1	-0.7	-0.8	-1.1	-0.9	-0.6	-1.2	-1.3	-0.9	-0.9	-0.9	-0.9	-0.5	-0.9	-0.5	-0.4	-0.8	-0.6	-0.7	-0.7	-0.8	-0.6	-0.9	-0.8	-0.4
11-Sep	-0.9	-0.8	-0.8	-0.5	-0.7	-0.3	-0.3	-0.6	-0.2	-0.4	0.0	-0.1	-0.2	-0.4	-0.4	-0.2	-0.2	-0.1	-0.3	-0.2	-0.1	-0.4	-0.3	-0.6	-0.4	0.0
12-Sep	-0.4	-0.4	-0.2	-0.3	-0.2	-0.3	-0.1	0.0	0.0	-0.4	-0.3	-0.4	-0.8	-0.7	-0.7	-0.9	-0.6	-0.6	-0.7	-0.7	-0.7	-0.5	-0.3	-0.4	-0.4	0.0
13-Sep	-0.4	-0.1	-0.1	-0.4	-0.3	-0.2	0.0	-0.4	-0.5	-0.7	-0.3	-0.6	-0.6	-1.1	-0.8	-0.7	-0.8	-0.3	-0.1	-0.6	-0.2	-0.1	0.0	0.0	-0.4	0.0
14-Sep	0.0	-0.1	-0.2	-0.2	-0.1	-0.3	-0.3	-0.3	0.1	-0.1	-0.4	-0.2	-0.3	-0.5	0.0	-0.3	0.0	-0.2	-0.1	0.0	-0.2	-0.1	-0.1	-0.2	-0.2	0.1
15-Sep	-0.2	-0.1	-0.2	-0.1	-0.2	-0.1	-0.1	-0.3	-0.6	-0.2	-0.5	-0.8	-1.0	-0.8	-0.9	-0.7	-0.2	-0.2	0.0	-0.2	-0.1	0.0	-0.1	-0.2	-0.3	0.0
16-Sep	-0.1	-0.2	-0.1	-0.1	0.0	0.0	-0.1	-0.2	-0.4	-0.2	-0.5	-0.9	-1.0	-0.2	-0.6	-0.3	-0.4	-0.2	-0.1	-0.2	-0.2	-0.1	-0.3	-0.5	-0.3	0.0
17-Sep	-0.7	-0.3	-0.9	-0.4	-0.4	-0.1	0.0	0.0	-0.6	-0.6	-0.5	-0.6	0.0	-0.1	-0.3	-0.1	0.0	-0.1	0.1	0.1	0.0	0.1	0.0	0.0	-0.2	0.1
18-Sep	0.0	0.1	-0.1	0.1	-0.4	0.0	0.0	-0.1	0.0	0.1	0.2	0.3	0.3	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.3
19-Sep	0.1	0.0	-0.2	-0.5	-0.6	-0.4	-0.3	-0.4	-0.3	0.0	-0.1	-0.6	-1.0	-1.6	-1.6	-1.8	-1.6	-1.1	-1.1	-0.9	-0.4	-0.4	-0.1	-0.6	-0.6	0.1
20-Sep	-0.2	-0.1	0.1	-0.3	-0.1	0.0	-0.1	-0.2	-0.7	-0.5	-0.6	-0.4	-0.9	-0.7	-0.4	-0.7	-0.9	-0.7	-0.6	-0.4	0.4	-0.7	-0.3	0.0	-0.4	0.4
21-Sep	-0.4	0.1	0.0	0.3	0.1	0.0	-0.2	-0.7	-0.9	-0.4	-0.4	-0.7	-0.3	0.2	-0.2	-0.6	-0.4	0.2	-0.7	-0.1	-0.3	0.0	0.0	-0.2	-0.2	0.3
22-Sep	-0.1	0.1	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	0.0	0.1	-0.5	-0.3	-0.5	-1.0	-1.1	-0.9	-0.8	-0.7	-0.5	-0.4	-0.2	-0.1	0.0	-0.3	0.1
23-Sep	-0.1	0.0	0.0	0.2	0.0	-0.1	-0.1	0.0	-0.2	-0.3	0.0	0.0	-0.2	-0.4	-0.4	-0.6	-0.3	-0.5	-0.5	-0.2	-0.3	-0.3	-0.2	0.0	-0.2	0.2
24-Sep	0.0	0.0	-0.1	-0.1	0.1	0.1	0.0	0.1	-0.4	-0.6	-0.5	-0.8	-1.4	-1.4	-1.4	-0.9	-0.8	-0.4	-0.2	-0.1	0.0	0.0	0.1	0.1	-0.4	0.1
25-Sep	0.1	0.1	-0.1	-0.2	-0.1	0.0	-0.3	0.0	-0.1	-0.1	0.2	0.0	0.1	0.2	0.0	0.3	0.1	0.2	0.1	0.0	0.0	-0.2	-0.3	-0.3	0.0	0.3
26-Sep	-0.1	-0.1	-0.2	-0.4	-0.4	-0.7	-0.9	-1.2	-1.3	-0.8	-1.5	-1.1	-1.5	-1.0	-1.7	-1.3	-1.3	-0.9	-1.2	-1.3	-1.3	-1.3	-1.2	-0.9	-1.0	-0.1
27-Sep	-1.1	-1.2	-0.9	-1.3	-1.3	-1.3	-1.5	-0.9	-1.0	-1.6	-1.2	-1.4	-1.3	-1.4	-1.3	-1.3	-1.1	-0.9	-0.5	-0.7	-0.5	-0.3	-0.3	-0.4	-1.0	-0.3
28-Sep	-0.3	-0.1	0.0	-0.1	-0.1	-0.2	-0.4	-0.4	-0.5	-0.5	-1.0	-1.2	-1.0	-1.1	-1.0	-1.0	-1.7	-1.2	-0.9	-1.4	-1.4	-1.2	-0.3	-0.7	-0.7	0.0
29-Sep	-0.4	-0.3	-0.3	-0.3	-0.3	-0.4	-0.3	0.0	0.0	-0.2	-1.2	-1.3	-0.6	-0.6	-0.7	-1.2	-1.0	-1.4	-0.9	-1.1	-0.7	-0.8	-1.1	-0.9	-0.7	0.0
30-Sep	-1.1	-1.0	-0.8	-1.0	-0.7	-0.9	-0.7	-1.2	-0.6	-1.1	-0.8	-0.7	-0.5	-0.2	-0.7	-0.4	0.0	-0.1	-0.1	-0.3	0.0	-0.1	0.0	-0.1	-0.5	0.0
	-0.3	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.5	-0.6	-0.6	-0.6	-0.7	-0.6	-0.6	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.3	Diurnal Average	
	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.4	0.1	0.2	0.3	0.3	0.2	0.1	0.3	0.1	0.2	0.1	0.1	0.4	0.1	0.2	0.1	Diurnal Maximum	

PF - Power Failure

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

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

Lower Camp Met Tower - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 1
Maximum Value: 5.1 km/h on Sep 4 15:00

Minimum Value: 0.1 km/h on Sep 17 23:00

Percentiles: P_1 = 0.2 P_{10} = 0.6 Q_1 = 1.0 Median = 1.6 Q_3 = 2.6 P_{90} = 3.5 P_{99} = 4.8

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	2.2	1.5	1.2	1.2	1.0	1.1	0.8	0.7	0.9	0.9	1.2	2.2
4-Sep	1.6	1.9	0.8	0.8	0.6	0.7	0.5	0.8	1.3	2.8	3.3	3.7	4.4	4.7	5.1	4.8	4.3	3.7	3.4	2.9	2.5	2.2	2.1	2.1	5.1
5-Sep	1.9	1.9	2.3	1.6	2.2	1.5	1.2	1.6	1.7	2.2	2.3	2.2	2.2	2.2	2.2	1.9	1.5	1.3	0.8	0.2	0.1	0.2	0.2	0.2	2.3
6-Sep	0.2	0.8	0.7	0.3	0.5	1.0	0.8	0.7	0.8	1.0	1.1	1.5	3.4	3.0	1.8	1.5	1.3	1.6	1.7	1.8	2.9	3.5	2.4	2.6	3.5
7-Sep	2.3	2.0	1.4	0.9	0.5	1.3	0.8	2.1	1.2	1.4	1.9	2.0	2.0	1.9	1.4	0.9	1.3	0.9	0.3	0.3	1.0	0.6	0.2	0.3	2.3
8-Sep	0.3	0.4	0.3	0.1	0.2	0.2	0.2	0.7	0.8	1.4	1.8	2.1	2.3	2.1	1.3	1.3	1.2	1.2	0.8	1.2	1.0	0.8	1.0	1.2	2.3
9-Sep	1.0	1.1	1.2	1.2	1.3	1.7	2.1	2.0	2.1	2.2	2.0	2.1	2.5	3.1	3.1	3.0	2.2	2.5	3.0	2.3	1.2	2.2	2.6	2.6	3.1
10-Sep	2.7	3.7	3.0	2.7	2.9	3.0	2.4	3.6	3.3	3.2	3.3	2.9	3.1	3.6	3.4	2.6	2.5	3.7	3.2	2.7	2.6	2.7	2.9	3.1	3.7
11-Sep	2.9	3.2	3.6	3.8	3.4	4.1	3.5	4.6	4.5	4.3	4.5	4.2	4.1	3.6	4.1	3.9	2.1	2.6	2.8	2.9	2.1	1.5	1.3	2.1	4.6
12-Sep	2.0	2.0	1.8	1.5	1.2	0.6	0.5	0.9	1.3	1.6	2.0	1.8	2.1	2.3	2.1	1.9	1.7	1.4	0.9	0.9	1.7	1.9	1.2	1.2	2.3
13-Sep	1.0	1.1	1.0	1.7	2.0	1.4	1.2	1.3	1.6	1.7	2.0	2.1	1.8	2.3	1.9	2.1	1.5	0.9	2.7	2.6	2.0	1.6	1.7	1.7	2.7
14-Sep	2.0	3.1	2.6	2.2	2.5	2.9	2.2	2.2	2.1	2.7	2.4	2.5	2.7	3.2	3.1	2.2	2.2	1.8	1.4	0.9	0.7	0.4	1.0	1.2	3.2
15-Sep	1.1	0.9	0.6	0.4	0.6	0.7	0.8	1.1	1.3	1.4	1.9	2.0	1.8	1.8	2.1	1.4	1.4	0.7	1.0	0.6	0.5	0.4	0.8	1.2	2.1
16-Sep	1.1	0.4	0.7	0.3	0.5	0.4	0.5	0.7	1.2	1.6	1.5	1.8	1.9	2.0	2.0	1.5	1.1	0.9	1.0	1.2	1.4	0.7	1.9	3.1	3.1
17-Sep	3.0	3.0	3.3	3.5	2.9	1.8	1.2	0.8	1.7	1.9	2.0	1.2	1.4	1.1	1.5	1.1	0.7	0.8	0.6	0.4	0.3	0.3	0.1	0.5	3.5
18-Sep	0.8	1.0	0.9	1.0	1.2	0.4	0.3	0.6	1.2	1.6	1.7	1.7	1.9	1.7	1.5	1.3	1.4	1.6	0.8	0.4	0.4	0.6	1.0	0.9	1.9
19-Sep	0.7	1.0	1.3	1.7	1.2	1.4	1.5	1.3	1.3	2.0	2.6	2.6	2.6	2.6	2.7	2.4	2.2	1.5	1.1	1.5	1.6	1.9	1.6	1.6	2.7
20-Sep	1.5	1.2	1.1	0.9	0.7	1.4	1.2	1.6	1.6	1.6	2.0	1.8	2.3	2.3	2.2	1.8	1.4	0.9	0.5	1.0	1.3	1.4	1.5	1.0	2.3
21-Sep	1.3	0.9	1.0	0.8	1.3	1.6	1.6	1.7	1.9	2.0	2.3	1.7	1.5	1.3	2.4	2.1	1.2	1.6	1.1	0.8	0.9	0.8	1.3	1.0	2.4
22-Sep	0.5	0.4	0.3	0.3	0.2	0.3	0.2	0.5	0.9	1.2	1.7	2.4	2.6	2.7	2.7	3.3	3.1	2.4	1.3	1.5	1.5	1.1	0.7	0.5	3.3
23-Sep	0.4	0.2	0.3	0.6	0.8	1.0	1.0	0.7	1.1	1.6	1.7	1.9	1.7	1.4	1.3	1.5	1.7	1.8	1.7	1.7	1.0	1.0	0.8	0.4	1.9
24-Sep	0.7	0.7	0.9	1.0	1.0	1.0	1.0	1.2	1.3	1.4	1.8	2.4	2.7	2.8	2.6	2.2	1.6	1.0	0.7	0.7	0.5	0.4	0.5	0.3	2.8
25-Sep	0.1	0.2	0.5	0.5	0.9	1.2	1.1	1.6	1.0	1.9	2.7	2.5	2.7	2.6	3.0	3.4	3.0	3.2	2.8	2.8	2.7	2.8	2.4	2.8	3.4
26-Sep	2.2	1.9	1.7	1.9	1.9	2.5	3.4	4.0	4.5	4.3	4.7	4.8	4.7	5.0	5.0	4.2	4.6	4.7	4.5	4.2	4.3	4.3	4.0	2.7	5.0
27-Sep	2.6	2.9	3.3	3.1	3.8	4.2	3.9	3.5	3.8	3.7	3.5	2.6	2.7	3.0	3.1	3.1	2.5	2.0	1.2	1.4	1.2	1.4	1.5	1.2	4.2
28-Sep	0.8	1.1	1.5	1.6	1.3	1.5	1.7	2.4	2.3	2.0	2.1	2.4	2.6	2.5	2.4	1.8	2.2	1.4	1.2	1.5	1.5	1.6	1.6	1.7	2.6
29-Sep	1.2	1.5	1.6	1.2	1.5	2.1	1.4	1.1	1.1	1.2	2.7	3.5	3.6	3.8	4.0	4.7	4.9	5.0	2.9	3.6	3.5	3.8	4.0	3.8	5.0
30-Sep	4.6	4.2	3.7	3.6	3.6	4.0	3.9	3.4	2.7	3.3	3.3	3.7	3.4	3.1	3.1	2.3	1.6	2.2	1.1	1.1	1.2	0.3	0.2	0.3	4.6
	4.6	4.2	3.7	3.8	3.8	4.2	3.9	4.6	4.5	4.3	4.7	4.8	4.7	5.0	5.1	4.8	4.9	5.0	4.5	4.2	4.3	4.3	4.0	3.8	
	Diurnal Maximum																								

PF - Power Failure

Wood Buffalo Environmental Association

Summary of Hour Averages

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

Lower Camp Met Tower - September 2026

Maximum Value: 1.2 km/h on Sep 20 21:00

Maximum Daily Average: 0.3 km/h on Sep 20

Minimum Value: -1.2 km/h on Sep 26 16:00

Minimum Daily Average: -0.6 km/h on Sep 11

Maximum Diurnal Average: 0.0 km/h at hour 23

Minimum Diurnal Average: -0.2 km/h at hour 15

Monthly Average: -0.06 km/h

Percentiles: P_1 = -1.0 P_{10} = -0.5 Q_1 = -0.3 Median = 0.0 Q_3 = 0.1 P_{90} = 0.3 P_{99} = 0.8

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	-0.4	-0.2	-0.3	-0.2	-0.1	0.2	0.1	-0.2	-0.3	0.1	0.0	--	0.2
4-Sep	-0.1	0.2	0.1	0.1	-0.5	-0.1	-0.1	0.1	-0.1	-0.3	-0.5	-0.4	-0.5	-0.7	-0.5	-0.3	-0.8	-0.4	-0.4	-0.5	-0.3	-0.2	0.1	-0.1	-0.3	0.2
5-Sep	-0.1	-0.3	-0.1	-0.1	0.0	0.1	0.1	-0.1	-0.2	-0.7	-0.4	0.0	-0.2	0.2	-0.4	-0.3	-0.4	-0.3	0.0	0.1	0.0	0.1	0.0	-0.1	-0.1	0.2
6-Sep	0.2	0.2	-0.1	0.1	0.0	-0.3	-0.2	0.1	-0.1	0.0	-0.1	0.1	0.4	0.3	-0.2	0.2	0.3	-0.5	0.3	0.5	0.4	0.3	0.3	0.3	0.1	0.5
7-Sep	0.4	0.2	0.2	0.0	0.1	0.2	-0.4	0.1	0.2	-0.2	-0.3	0.3	0.1	0.1	0.2	-0.2	0.0	-0.1	0.2	0.1	0.2	0.1	0.1	0.0	0.1	0.4
8-Sep	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.3	0.0	0.1	0.3	-0.3	-0.2	-0.4	0.0	0.4	0.2	0.1	1.0	0.1	-0.1	0.6	0.6	0.1	1.0
9-Sep	0.4	0.0	-0.3	-0.3	0.0	-0.5	-0.1	0.1	-0.6	-0.5	0.2	0.1	0.6	0.3	-0.3	0.2	-0.1	0.1	0.1	0.1	0.0	0.0	0.3	0.3	0.0	0.6
10-Sep	0.5	-0.4	-0.7	-0.1	0.1	0.1	0.3	-0.1	0.0	-0.1	0.0	-0.1	0.3	-0.2	-0.7	-0.5	-0.3	-0.4	-0.4	-0.7	-0.4	-0.6	-0.6	-0.9	-0.2	0.5
11-Sep	-1.0	-0.8	-1.0	-0.7	-0.7	-0.7	-0.3	-1.2	-0.5	-0.9	-0.7	-0.6	-0.8	-0.6	-0.4	-0.7	-0.4	-0.3	-0.6	-0.3	-0.2	-0.5	-0.4	-0.5	-0.6	-0.2
12-Sep	-0.4	-0.3	-0.1	-0.3	-0.3	-0.3	-0.1	-0.2	0.3	-0.1	0.0	0.1	-0.1	0.1	-0.1	-0.1	0.1	0.1	0.1	0.4	0.7	0.8	0.3	0.1	0.0	0.8
13-Sep	0.1	0.2	0.2	0.0	0.0	0.2	0.3	-0.1	-0.4	-0.6	0.2	0.1	0.2	-0.1	0.1	0.2	0.0	0.1	0.1	-0.4	-0.2	-0.2	-0.2	-0.2	0.0	0.3
14-Sep	0.1	-0.3	-0.2	-0.2	-0.1	-0.3	-0.4	-0.3	0.0	-0.3	-0.4	-0.4	-0.6	-0.7	-0.3	-0.3	-0.1	-0.3	-0.3	-0.1	-0.2	-0.1	-0.4	-0.5	-0.3	0.1
15-Sep	-0.6	-0.3	-0.4	0.0	-0.4	0.0	0.0	0.0	-0.2	0.5	0.0	0.1	-0.2	0.0	0.2	0.0	-0.3	0.1	0.2	0.1	0.0	0.2	-0.2	-0.3	-0.1	0.5
16-Sep	0.0	-0.1	-0.1	0.0	-0.1	0.0	-0.1	0.0	0.0	0.7	0.1	0.0	-0.3	-0.1	-0.4	0.0	-0.2	0.0	-0.1	0.1	0.2	0.1	0.1	-0.1	0.0	0.7
17-Sep	-0.2	0.0	-0.1	0.4	0.2	0.5	0.0	-0.2	-0.1	-0.2	0.2	-0.2	0.1	-0.1	-0.2	-0.1	0.1	0.3	0.2	0.3	0.1	0.1	0.1	0.3	0.1	0.5
18-Sep	0.2	0.2	-0.1	0.0	-0.4	0.0	-0.1	0.0	0.0	0.3	0.3	1.0	0.6	0.5	0.4	0.0	0.0	-0.2	0.1	0.0	0.2	-0.1	-0.1	0.2	0.1	1.0
19-Sep	0.7	0.6	0.3	-0.4	-0.6	-0.2	0.0	0.3	-0.1	0.1	0.2	-0.2	-0.2	-0.1	-0.1	-0.9	-0.7	-0.2	-0.5	-0.6	0.1	0.4	0.5	-0.5	-0.1	0.7
20-Sep	0.1	0.3	0.5	-0.1	0.4	0.9	0.6	0.4	-0.2	-0.2	-0.1	-0.2	-0.3	-0.1	0.6	0.3	0.0	-0.1	0.6	1.1	1.2	0.1	0.3	-0.1	0.3	1.2
21-Sep	-0.4	0.4	0.3	1.0	0.9	0.5	0.1	-0.5	-0.6	-0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.7	0.2	0.7	0.3	0.1	0.4	-0.1	0.2	1.0
22-Sep	0.0	0.1	0.1	0.0	0.2	0.2	0.0	-0.2	0.0	0.0	-0.2	-0.4	-0.3	-0.3	0.0	0.0	-0.1	-0.4	0.0	0.3	0.8	0.2	0.1	0.1	0.0	0.8
23-Sep	0.2	0.3	0.4	0.6	0.2	0.3	0.2	0.0	0.0	-0.1	0.1	0.1	-0.1	0.0	-0.2	0.0	0.2	0.4	0.3	0.2	-0.2	-0.2	0.1	0.1	0.1	0.6
24-Sep	0.1	0.0	0.0	-0.1	0.4	0.7	0.6	0.7	-0.1	-0.3	-0.1	0.1	-0.2	0.1	-0.1	-0.1	-0.1	0.1	0.4	0.3	0.1	-0.1	0.1	0.2	0.1	0.7
25-Sep	0.0	0.0	0.0	-0.2	-0.1	-0.1	-0.2	-0.3	-0.2	-0.2	0.2	0.0	0.0	0.1	-0.2	0.0	0.1	0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.4	-0.1	0.2
26-Sep	-0.2	-0.2	-0.3	-0.3	-0.2	-0.2	0.0	-0.3	-0.4	0.3	-0.5	-0.2	-0.6	-0.3	-0.7	-1.2	-0.6	-0.1	-0.1	-0.6	-0.5	-0.5	-0.7	-0.2	-0.4	0.3
27-Sep	-0.1	-0.2	-0.2	-0.4	-0.4	-0.6	-0.2	0.3	-0.1	-0.3	0.0	0.0	0.2	-0.3	-0.1	-0.1	0.0	0.3	0.2	0.1	0.1	0.4	0.5	0.2	0.0	0.5
28-Sep	0.1	0.3	0.2	0.6	0.7	0.4	0.3	0.2	-0.1	-0.1	0.1	0.4	0.3	0.0	0.0	0.0	-0.4	-0.3	-0.7	-0.7	-0.4	0.0	0.0	-1.0	0.0	0.7
29-Sep	-0.2	0.2	0.4	0.0	0.1	0.0	-0.4	0.1	0.4	0.3	0.1	-0.5	-0.2	-0.3	-0.4	-0.5	-0.4	-0.8	-0.4	-0.4	-0.5	-0.1	-0.4	-0.3	-0.2	0.4
30-Sep	-0.8	-0.8	-0.5	-1.1	-0.3	-0.8	-0.6	-1.2	-0.6	-1.0	-0.5	-1.1	-0.9	-0.3	-0.6	-0.4	-0.2	-0.2	-0.2	-0.5	-0.3	0.0	-0.1	-0.1	-0.6	0.0
	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	-0.1	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	Diurnal Average	
	0.7	0.6	0.5	1.0	0.9	0.9	0.6	0.7	0.4	0.7	0.3	1.0	0.6	0.5	0.6	0.3	0.4	0.7	0.6	1.1	1.2	0.8	0.6	0.6	Diurnal Maximum	

PF - Power Failure

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 1
Maximum Value: 4.9 km/h on Sep 26 18:00

Minimum Value: 0.1 km/h on Sep 5 21:00

Percentiles: P_1 = 0.2 P_{10} = 0.6 Q_1 = 1.1 Median = 1.6 Q_3 = 2.4 P_{90} = 3.3 P_{99} = 4.6

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	0
Percent Operational Time:	91.5

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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	2.0	1.6	1.2	1.1	0.8	1.0	1.0	0.9	1.1	1.2	1.4	2.0
4-Sep	1.4	1.9	1.1	0.8	0.6	0.8	0.5	0.8	1.2	2.1	2.7	3.3	3.6	3.9	4.3	4.1	3.8	3.2	2.9	2.7	2.3	2.3	2.3	2.3	4.3
5-Sep	1.9	1.7	2.2	1.6	2.0	1.7	1.4	1.7	1.7	2.0	2.4	2.3	2.3	2.1	2.1	1.8	1.4	1.3	0.6	0.3	0.1	0.2	0.2	0.2	2.4
6-Sep	0.3	0.8	0.5	0.3	0.6	0.8	0.9	0.7	0.8	1.1	1.0	1.7	2.9	2.9	2.1	1.7	1.4	1.8	1.9	2.0	2.4	3.0	2.5	2.3	3.0
7-Sep	2.2	2.0	1.5	0.9	0.7	1.5	0.7	1.7	1.3	1.6	2.2	2.3	2.0	1.7	1.4	0.8	0.9	0.5	0.4	0.5	1.3	0.8	0.5	0.4	2.3
8-Sep	0.4	0.5	0.3	0.2	0.2	0.3	0.3	0.5	0.8	1.3	1.9	2.2	2.1	1.6	1.3	1.2	1.4	1.5	0.8	1.3	1.3	1.1	0.8	1.0	2.2
9-Sep	0.9	0.8	1.3	1.2	1.3	1.7	1.8	1.4	1.5	1.8	2.3	2.8	3.3	3.1	2.6	2.9	2.5	2.9	3.3	2.4	1.6	2.5	2.3	2.0	3.3
10-Sep	2.1	3.4	2.8	2.5	2.6	2.7	2.4	3.1	3.2	3.2	3.3	2.7	2.6	3.4	3.1	2.7	2.5	3.1	2.6	2.7	2.7	2.7	2.7	2.9	3.4
11-Sep	2.8	3.2	3.7	4.1	3.4	4.3	3.5	4.4	4.7	4.2	4.4	4.0	3.9	3.8	4.4	3.9	2.1	2.8	2.9	3.1	2.1	1.3	1.2	1.9	4.7
12-Sep	1.7	1.6	1.6	1.6	1.1	0.7	0.5	0.8	1.4	1.8	1.9	1.9	2.5	2.5	2.4	2.3	2.2	1.6	0.9	1.0	1.8	2.1	1.3	1.2	2.5
13-Sep	1.1	1.2	1.0	1.4	1.6	1.2	1.4	1.6	1.6	1.7	2.0	2.2	2.0	2.3	2.1	2.3	1.6	1.0	2.4	2.1	1.7	1.5	1.5	1.7	2.4
14-Sep	1.9	2.8	2.3	2.1	2.2	2.6	2.0	1.9	2.1	2.4	2.2	2.3	2.3	2.5	2.8	1.8	2.1	1.7	1.3	1.0	0.6	0.5	1.0	0.9	2.8
15-Sep	1.0	1.1	0.6	0.5	0.6	0.8	0.9	1.2	1.5	1.5	1.9	2.2	2.2	2.0	2.3	1.8	1.3	0.8	1.1	0.7	0.6	0.6	0.9	1.2	2.3
16-Sep	1.2	0.4	0.7	0.3	0.6	0.5	0.5	0.7	1.3	1.8	1.9	2.3	2.3	2.1	1.9	1.4	1.0	1.0	1.2	1.0	1.2	1.0	1.8	2.5	2.5
17-Sep	2.4	2.4	2.4	2.8	2.7	2.0	1.4	0.9	1.6	1.6	2.0	1.5	1.2	0.8	1.5	0.9	0.9	1.0	0.8	0.8	0.5	0.3	0.3	0.6	2.8
18-Sep	0.9	0.7	1.0	1.1	1.4	0.5	0.4	0.8	1.3	1.6	1.9	1.5	1.8	1.9	1.6	1.3	1.3	1.5	1.0	0.7	0.8	1.1	1.4	1.1	1.9
19-Sep	0.9	1.1	1.1	1.5	1.1	1.1	1.4	1.0	1.1	1.9	2.4	2.2	2.7	3.2	3.3	2.8	2.5	1.8	1.4	1.5	1.8	1.9	1.9	1.4	3.3
20-Sep	1.1	1.1	1.1	1.1	0.9	0.8	1.0	1.0	0.9	1.3	1.4	1.4	2.3	2.2	2.4	2.3	1.7	1.3	0.5	0.8	1.4	1.7	1.6	1.3	2.4
21-Sep	1.4	1.0	1.1	1.2	1.2	1.4	1.2	1.2	1.2	1.7	1.5	0.9	1.4	1.3	2.0	2.3	1.7	1.9	1.3	1.1	1.4	1.3	1.7	1.4	2.3
22-Sep	0.6	0.4	0.3	0.3	0.3	0.5	0.2	0.4	0.8	1.1	1.7	2.3	2.5	2.6	2.4	2.9	3.1	2.1	1.2	0.9	1.1	1.2	0.8	0.7	3.1
23-Sep	0.4	0.4	0.5	0.5	0.5	0.8	1.0	0.7	1.0	1.5	1.5	1.7	1.4	1.1	1.3	1.6	1.5	1.9	1.7	1.4	1.2	1.2	1.1	0.6	1.9
24-Sep	1.0	0.9	1.1	1.1	1.0	0.8	1.0	1.2	1.3	1.3	1.5	2.2	2.5	2.5	2.2	2.1	1.5	1.1	0.7	0.9	0.9	0.6	0.6	0.4	2.5
25-Sep	0.2	0.2	0.3	0.4	0.8	1.1	1.2	1.4	0.8	1.6	2.6	2.4	2.4	2.1	2.6	2.8	2.3	2.6	2.5	2.1	2.1	2.3	2.0	2.6	2.8
26-Sep	1.9	1.9	1.7	1.9	1.7	2.3	3.0	3.9	4.2	4.3	4.6	4.8	4.6	4.8	4.8	4.2	4.6	4.9	4.5	4.4	4.3	4.0	4.1	2.6	4.9
27-Sep	2.1	2.5	3.4	2.5	3.2	3.6	3.5	3.5	3.4	3.2	2.9	2.2	2.4	2.6	2.7	2.5	2.1	1.7	1.1	1.6	1.2	1.5	1.5	1.3	3.6
28-Sep	1.0	1.2	1.5	1.2	1.0	1.3	1.1	1.6	1.6	1.6	2.6	2.7	3.0	2.7	2.3	2.2	2.7	1.7	1.3	1.4	1.4	1.7	1.9	1.6	3.0
29-Sep	1.5	1.0	1.1	0.9	1.0	1.3	0.9	0.9	1.4	1.5	2.3	2.9	3.5	3.5	3.8	4.4	4.8	4.7	3.1	3.7	3.3	3.8	4.1	3.8	4.8
30-Sep	4.4	4.6	3.9	3.4	3.8	3.4	3.7	3.5	2.9	3.3	3.4	3.6	3.5	3.2	3.0	2.4	1.5	2.3	1.1	0.9	1.1	0.3	0.3	0.3	4.6
	4.4	4.6	3.9	4.1	3.8	4.3	3.7	4.4	4.7	4.3	4.6	4.8	4.6	4.8	4.8	4.4	4.8	4.9	4.5	4.4	4.3	4.0	4.1	3.8	
	Diurnal Maximum																								

PF - Power Failure

Wood Buffalo Environmental Association

Summary of Hour Averages

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

Lower Camp Met Tower - September 2026

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

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

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

Minimum Daily Average: -- km/h on Aug 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:	720
Hours of Data:	0
Hours of Missing Data:	720
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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
4-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	--	--
6-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
8-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
9-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
10-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
11-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
12-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
13-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
22-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
23-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
24-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	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 - September 2026

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

Minimum Value: -- km/h on Sep 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:	720
Hours of Data:	0
Hours of Missing Data:	720
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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
4-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	--
6-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
8-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
9-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
10-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
11-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
12-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
13-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
22-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
23-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
24-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	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 - September 2026

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

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

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

Minimum Daily Average: -- km/h on Aug 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:	720
Hours of Data:	0
Hours of Missing Data:	720
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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
4-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	--	--
6-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
8-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
9-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
10-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
11-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
12-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
13-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
22-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
23-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
24-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	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 - September 2026

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

Minimum Value: -- km/h on Sep 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:	720
Hours of Data:	0
Hours of Missing Data:	720
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-Sep	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-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--
3-Sep	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
4-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	--
6-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
8-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
9-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
10-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
11-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
12-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
13-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
22-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
23-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
24-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	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
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BUFFALO VIEWPOINT (AMS04)
SEPTEMBER 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	686	34	34	100	29.6	0	2.9	0
H2S (ppb) Average	683	37	37	100	4.6	0	0.6	0
THC (ppm) Average	684	34	36	99.72	3.4	-	2.3	-
NMHC(ppm) Average	684	34	36	99.72	0.151	-	0.009	-
CH4(ppm) Average	684	34	36	99.72	3.3	-	2.3	-
O3(ppb) Average	685	35	35	100	43.5	0	27.9	-
NO2(ppb) Average	684	36	36	100	23.9	0	7.9	-
NO(ppb) Average	684	36	36	100	116.4	-	10.3	-
NOX(ppb) Average	684	36	36	100	140.3	-	18.2	-
PM2.5(ug/m3) Average	719	1	1	100	24.8	0	9.3	0
Temperature (C) Average	720	0	0	100	27.5	-	20.8	-
Relative Humidity (%) Average	720	0	0	100	97	-	87.9	-
Wind Speed 10 m (km/h) Average	715	4	5	99.86	28	-	20	-
Wind Direction 10 m (deg) Average	715	4	5	99.86	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BUFFALO VIEWPOINT (AMS04)
SEPTEMBER 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	686	0.32	1.5	-	0	0	0	0	0.1	0.3	29.6
H2S (ppb) Average	683	0.2	0.3	-	0	0.1	0.1	0.1	0.2	0.4	4.6
THC (ppm) Average	684	2.16	0.1	-	2	2.1	2.1	2.1	2.2	2.3	3.4
NMHC(ppm) Average	684	0.001	0.007	-	0	0	0	0	0	0	0.151
CH4(ppm) Average	684	2.16	0.1	-	2	2.1	2.1	2.1	2.2	2.3	3.3
O3(ppb) Average	685	19.76	9.1	-	1.1	8.1	13	19.6	26.3	31.6	43.5
NO2(ppb) Average	684	2.47	3.6	-	0	0	0.2	1	3	7.6	23.9
NO(ppb) Average	684	0.93	5.5	-	0	0	0	0	0	1	116.4
NOX(ppb) Average	684	3.4	8	-	0	0	0.2	1	3.2	8.4	140.3
PM2.5(ug/m3) Average	719	4.39	3.4	-	0.1	1.4	2.3	3.4	5.6	8.4	24.8
Temperature 2 m (C) Average	720	12.4	5.2	-	2.4	6.3	8.4	11.4	16.1	19.5	27.5
Relative Humidity (%) Average	720	71.31	17.8	-	25.1	43.7	59.5	74.4	86	93.1	97
Wind Speed 10 m (km/h) Average	715	9.8	5	-	1	4	6	8	13	18	28
Wind Direction 10 m (deg) Average	715	-	-	-	-	-	-	-	-	-	-

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

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
THC/NMHC/CH4	12 Sep 2026 12:00	12 Sep 2026 13:00	2	Maintenance - replaced support gas cylinder
Wind Speed, Wind Direction	25 Sep 2026 10:00	25 Sep 2026 10:00	1	Maintenance - replaced WS bearings

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Buffalo Viewpoint - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 29.6 ppb on Sep 8 12:00 Maximum Daily Average: 2.9 ppb on Sep 11

Minimum Value: 0.0 ppb on Sep 1 01:00
Maximum Diurnal Average: 1.5 ppb at hour 12
Monthly Average: 0.32 ppb

Minimum Daily Average: 0.0 ppb on Sep 24
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 = 0.1 P_{90} = 0.3 P_{99} = 6.3

Hours in Service:	720
Hours of Data:	686
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-Sep	0.0	0.0	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	0.4	0.4	0.4	0.3	0.1	0.0	0.0	0.1	0.1	0.1	0.4
2-Sep	0.1	0.0	0.0	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	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1
3-Sep	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	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1
4-Sep	0.0	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
5-Sep	0.0	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.9	0.3	1.3	4.7	5.3	5.9	2.0	0.3	0.1	0.0	0.0	1.1	5.9
6-Sep	0.0	0.0	0.1	Z	0.0	0.0	0.0	0.0	0.0	0.0	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	0.2
7-Sep	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	0.1	0.1	0.0	0.0	0.0	0.1
8-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.1	1.2	3.9	10.7	29.6	4.2	6.1	2.2	0.9	0.6	0.3	0.4	0.6	0.5	0.2	0.1	0.1	2.7	29.6
9-Sep	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2
10-Sep	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
11-Sep	0.0	0.0	Z	0.1	0.1	0.0	0.1	1.3	5.7	6.3	6.3	6.3	7.2	3.0	0.5	7.1	3.8	2.4	3.9	3.9	8.0	0.8	0.4	0.2	2.9	8.0
12-Sep	0.2	0.1	0.1	Z	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	0.0	0.2
13-Sep	0.0	0.0	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.2	0.2	0.4	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	0.4
14-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.1	0.3	0.1	0.1	0.0	0.0	0.1	1.1
15-Sep	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	0.6	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.6
16-Sep	0.1	Z	0.1	0.0	0.0	0.0	0.1	0.0	0.1	1.6	2.6	1.1	0.7	0.6	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.4	2.6
17-Sep	0.1	0.1	Z	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
18-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	1.0	8.7	3.4	3.4	0.3	0.2	0.1	0.1	0.8	1.5	0.9	0.3	0.1	0.1	0.1	0.9	8.7
19-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2
20-Sep	0.0	0.1	0.1	0.0	0.0	Z	0.0	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	0.1	0.1	0.1	0.1	0.1	0.3
21-Sep	Z	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	C	C	C	C	0.4	0.4	0.5	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.5
22-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
23-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.5	0.8	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.8
24-Sep	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
25-Sep	0.0	0.0	0.5	0.0	Z	0.1	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	0.0	0.0	0.0	0.0	0.1	0.5
26-Sep	0.0	0.0	0.1	0.1	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
27-Sep	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	0.1	0.2	0.3	0.0	0.3
28-Sep	0.2	Z	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	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	0.2
29-Sep	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	0.0	0.0	0.1
30-Sep	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	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.3	0.5	1.0	1.5	0.7	0.5	0.2	0.4	0.4	0.4	0.5	0.3	0.3	0.1	0.0	0.0	Diurnal Average	
	0.2	0.1	0.5	0.1	0.1	0.1	0.4	1.3	5.7	6.3	10.7	29.6	7.2	6.1	2.2	7.1	4.7	5.3	5.9	3.9	8.0	0.8	0.4	0.3	Diurnal Maximum	

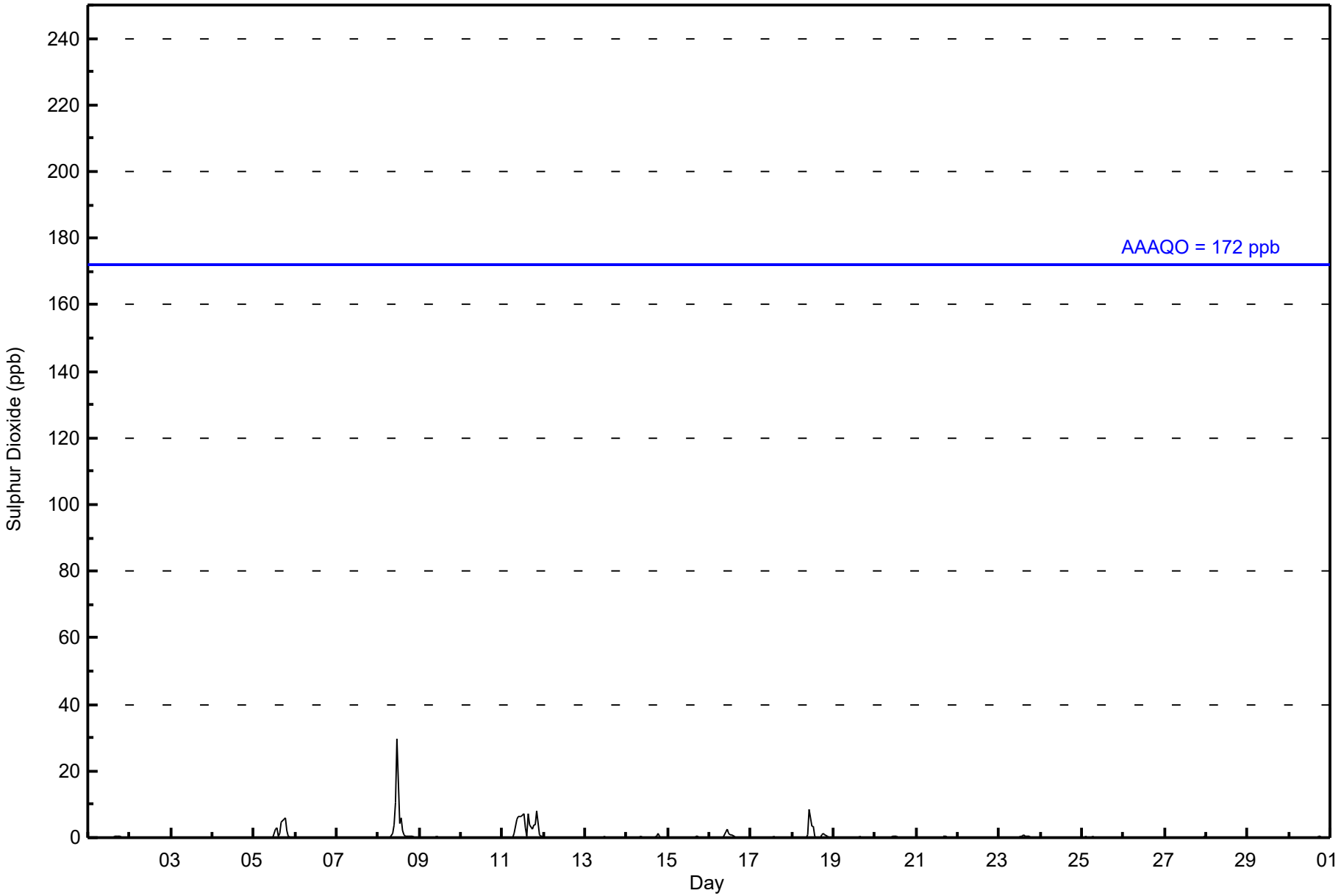
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Buffalo Viewpoint - September 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Buffalo Viewpoint - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	684	99.71	99.71
11 - 20	1	0.15	99.85
21 - 60	1	0.15	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: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Buffalo Viewpoint - September 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	65	22	2	1	10	18	58	131	64	41	43	46	60	42	44	32	679
11 - 20	1	0	0	0	0	0	0	0	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	1	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	66	22	2	1	10	18	58	131	64	41	43	46	60	42	45	32	681

Total Number of Valid Hours: 681

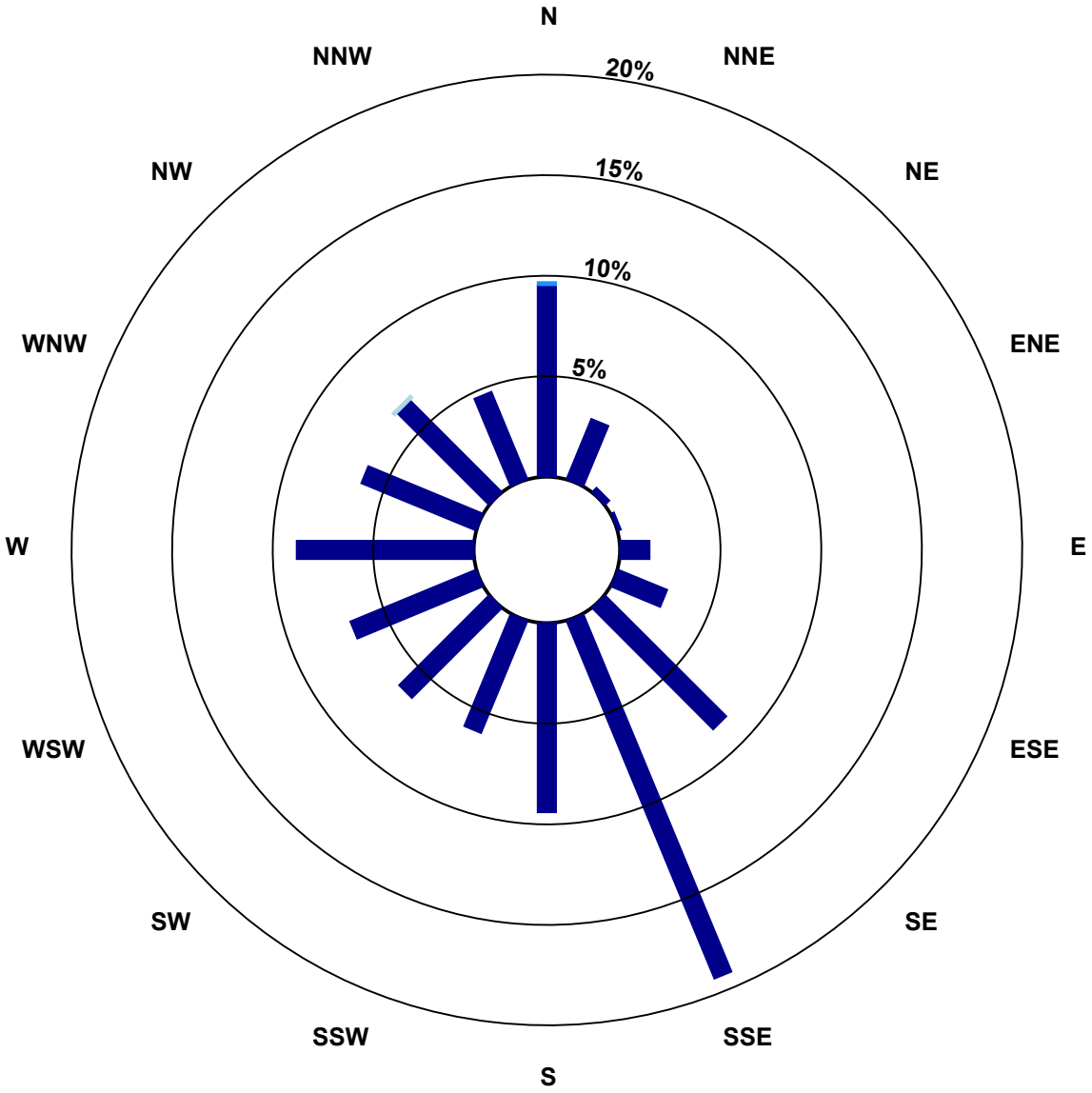
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Buffalo Viewpoint



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

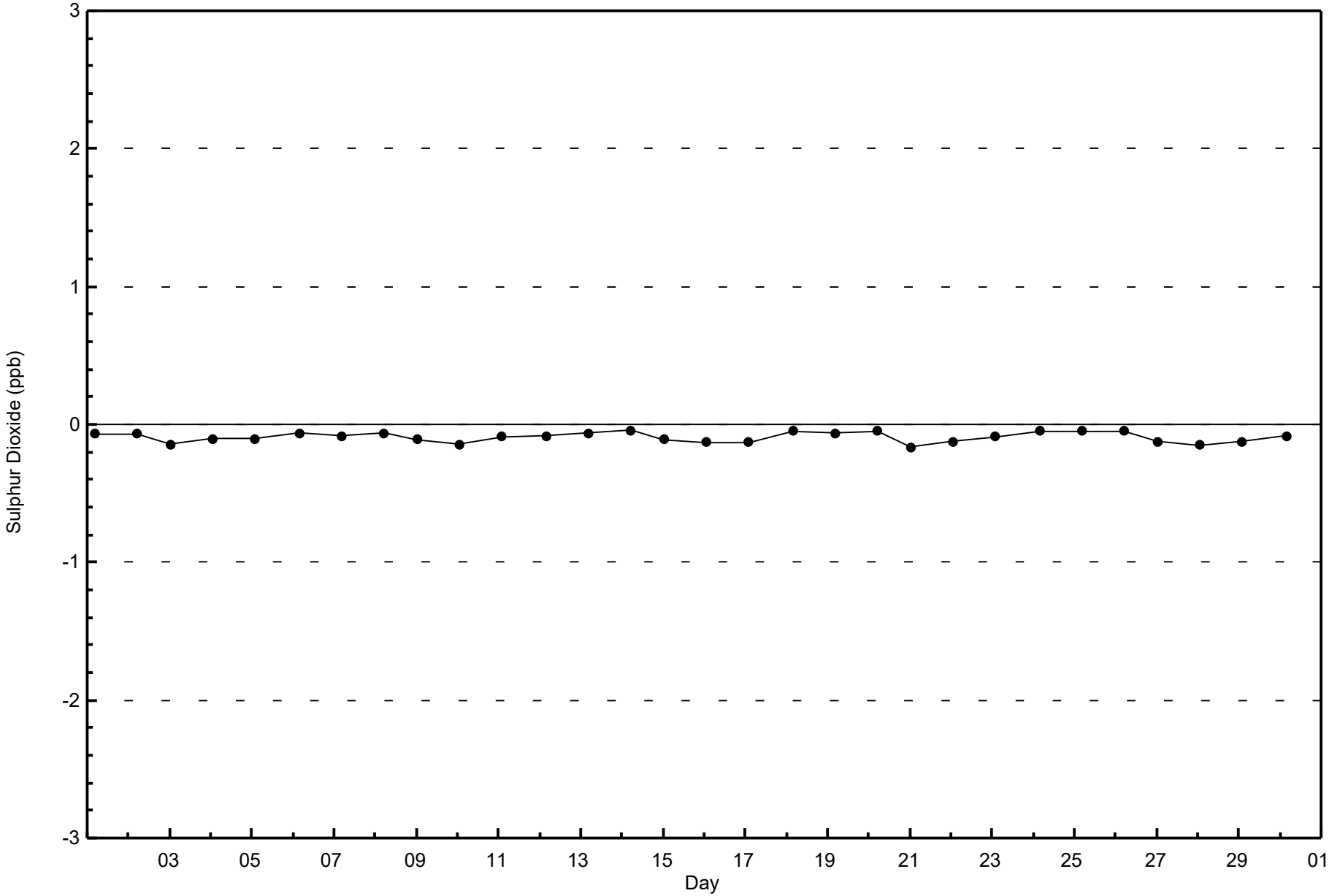
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Buffalo Viewpoint - September 2026

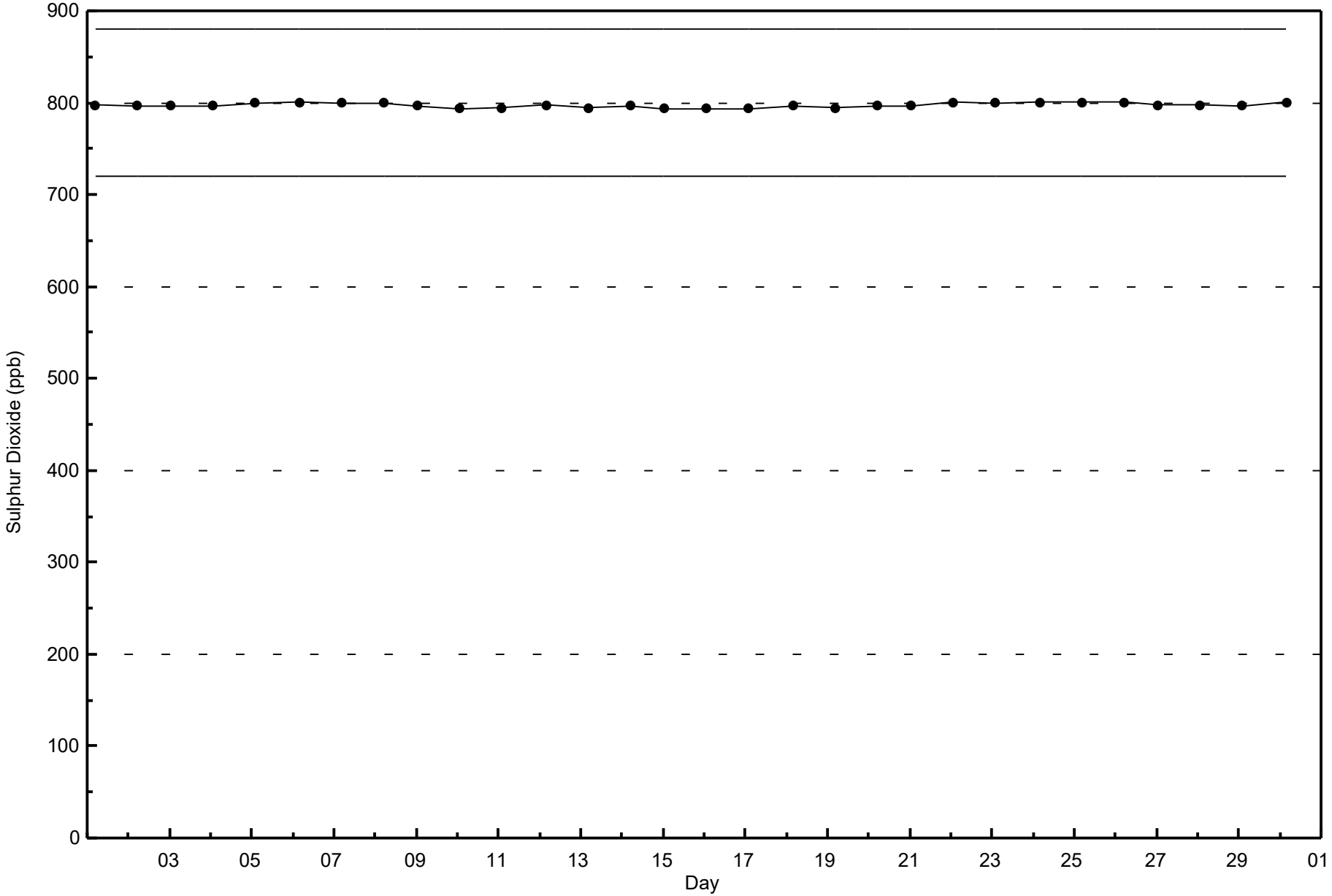


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Buffalo Viewpoint - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Buffalo Viewpoint - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.6 ppb on Sep 3 21:00 Maximum Daily Average: 0.6 ppb on Sep 11

Minimum Value: 0.0 ppb on Sep 13 17:00 Minimum Daily Average: 0.1 ppb on Sep 20
Maximum Diurnal Average: 0.3 ppb at hour 21 Minimum Diurnal Average: 0.1 ppb at hour 15
Monthly Average: 0.20 ppb Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.4 P_{99} = 1.4

Hours in Service:	720
Hours of Data:	683
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-Sep	0.9	0.4	0.4	0.2	0.6	Z	0.6	0.4	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	0.2	0.9
2-Sep	Z	0.3	0.3	0.2	0.3	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	0.1	0.1	0.1	0.3
3-Sep	0.1	Z	0.2	0.2	0.3	0.2	0.2	0.1	0.1	C	C	C	C	C	C	C	1.4	0.4	0.5	0.6	4.6	2.0	0.6	0.4	--	4.6
4-Sep	0.3	0.2	Z	0.7	0.8	0.5	0.7	0.5	0.6	0.6	0.4	0.4	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	0.8
5-Sep	0.2	0.2	0.3	Z	0.6	0.6	0.7	0.7	0.5	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.5	0.6	0.5	0.5	0.5	0.5	1.0	0.4	1.0
6-Sep	0.6	0.6	0.4	0.7	Z	0.6	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	0.3	0.7
7-Sep	0.1	0.1	0.1	0.2	0.2	Z	0.4	0.4	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.2	0.4
8-Sep	Z	0.2	0.4	0.5	0.5	0.6	0.6	0.5	0.7	0.8	0.7	0.7	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.8
9-Sep	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	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
10-Sep	0.1	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2
11-Sep	0.1	0.1	0.2	Z	0.2	0.2	0.2	0.4	1.8	2.0	1.4	1.1	0.8	0.5	0.1	0.4	0.4	0.5	1.0	1.0	1.8	0.4	0.1	0.1	0.6	2.0
12-Sep	0.1	0.2	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	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	0.1	0.2
13-Sep	0.1	0.1	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	0.1	0.1	0.1	0.1	0.2	0.4	0.1	0.4
14-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5	0.5	0.2	0.2	0.1	0.1	0.2	0.5
15-Sep	0.1	Z	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.4	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.4
16-Sep	0.3	0.2	Z	0.2	0.2	0.4	0.5	0.2	0.2	0.5	0.4	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	0.2	0.5
17-Sep	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	0.2	0.2	0.2	0.2	0.2	0.1	0.2
18-Sep	0.2	0.2	0.2	0.1	Z	0.2	0.2	1.2	0.6	0.7	0.8	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.4	0.4	0.4	0.2	0.2	0.2	0.3	1.2
19-Sep	0.2	0.1	0.1	0.2	0.1	Z	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	0.1	0.1	0.1	0.2
20-Sep	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	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1
21-Sep	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	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3
22-Sep	0.2	0.3	Z	0.3	0.3	0.2	0.2	0.5	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.2	0.3	0.2	0.2	0.5
23-Sep	0.2	0.2	0.3	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
24-Sep	0.2	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	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
25-Sep	0.2	0.2	0.7	0.4	0.9	Z	1.5	0.9	0.8	0.6	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.4	1.5
26-Sep	Z	0.2	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4
27-Sep	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
28-Sep	0.1	0.1	Z	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2
29-Sep	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
30-Sep	0.1	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	0.1	0.3	0.2	0.3	0.1	0.3	0.4	0.2	0.1	0.4
	0.2	0.2	0.2	0.2	0.3	0.2	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	0.2	0.2	0.2	Diurnal Average	
	0.9	0.6	0.7	0.7	0.9	0.6	1.5	1.2	1.8	2.0	1.4	1.1	0.8	0.5	0.2	0.4	1.4	0.5	1.0	1.0	4.6	2.0	0.6	1.0	Diurnal Maximum	

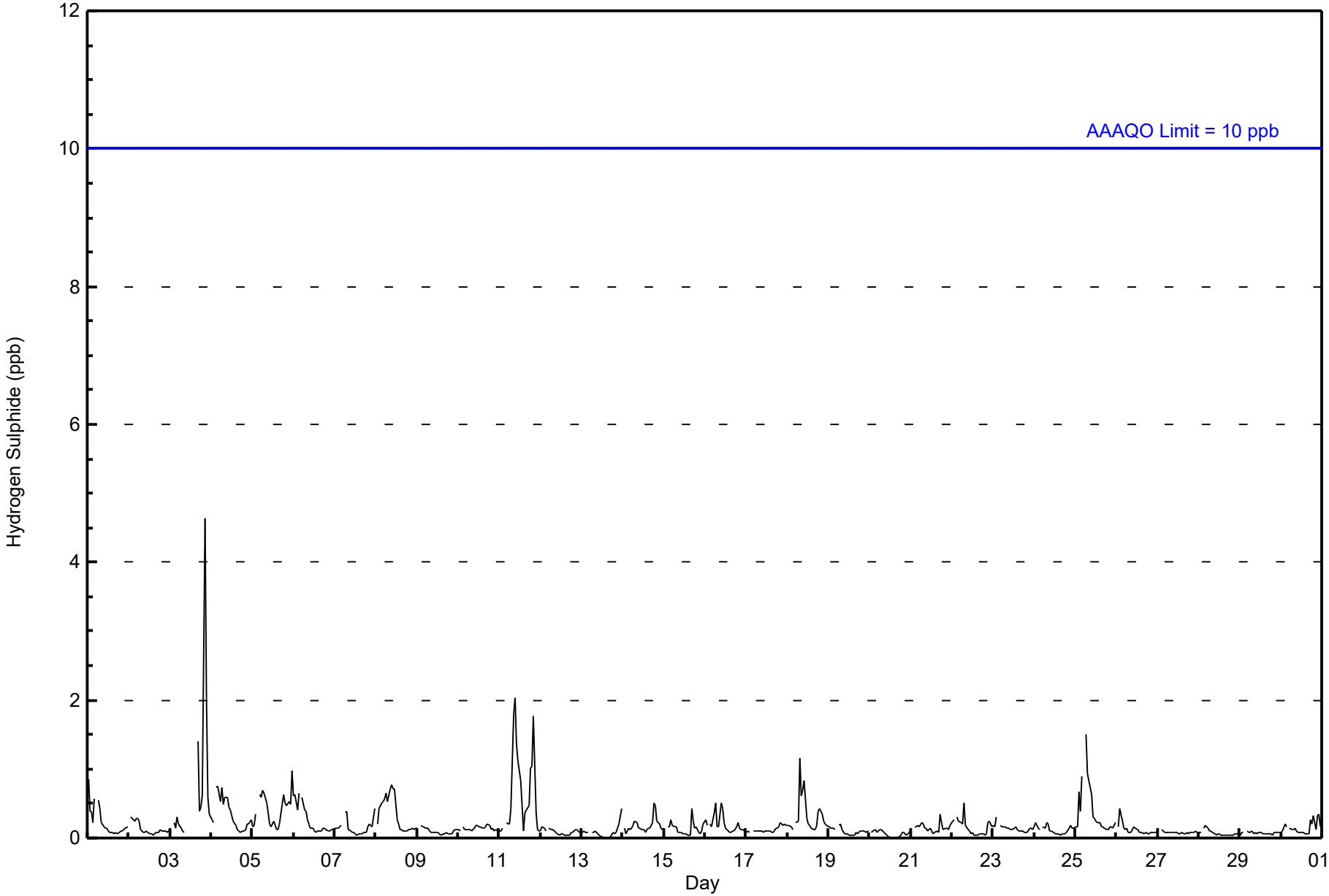
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Buffalo Viewpoint - September 2026



Hydrogen Sulphide (H_2S) - ppb
Buffalo Viewpoint - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	682	99.85	99.85
3 - 4	0	0.00	99.85
5 - 7	1	0.15	100.00
8 - 11	0	0.00	100.00
> 11	0	0.00	100.00

Total Number of Valid Hours: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Buffalo Viewpoint - September 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	64	24	2	1	3	19	63	128	63	39	44	48	58	43	46	32	677
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	1	0	0	0	0	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	64	24	2	1	4	19	63	128	63	39	44	48	58	43	46	32	678

Total Number of Valid Hours: 678

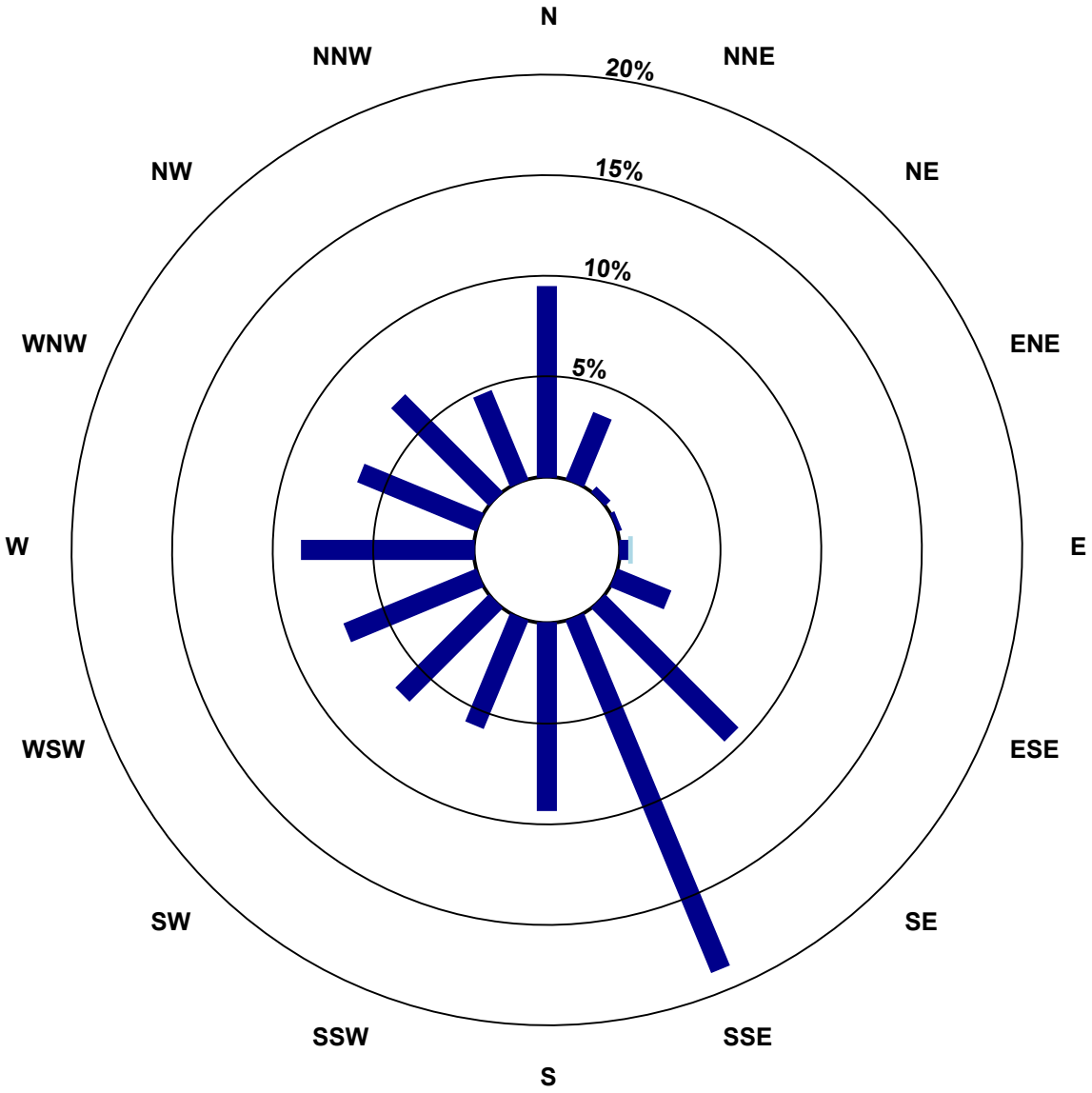
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

Buffalo Viewpoint



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

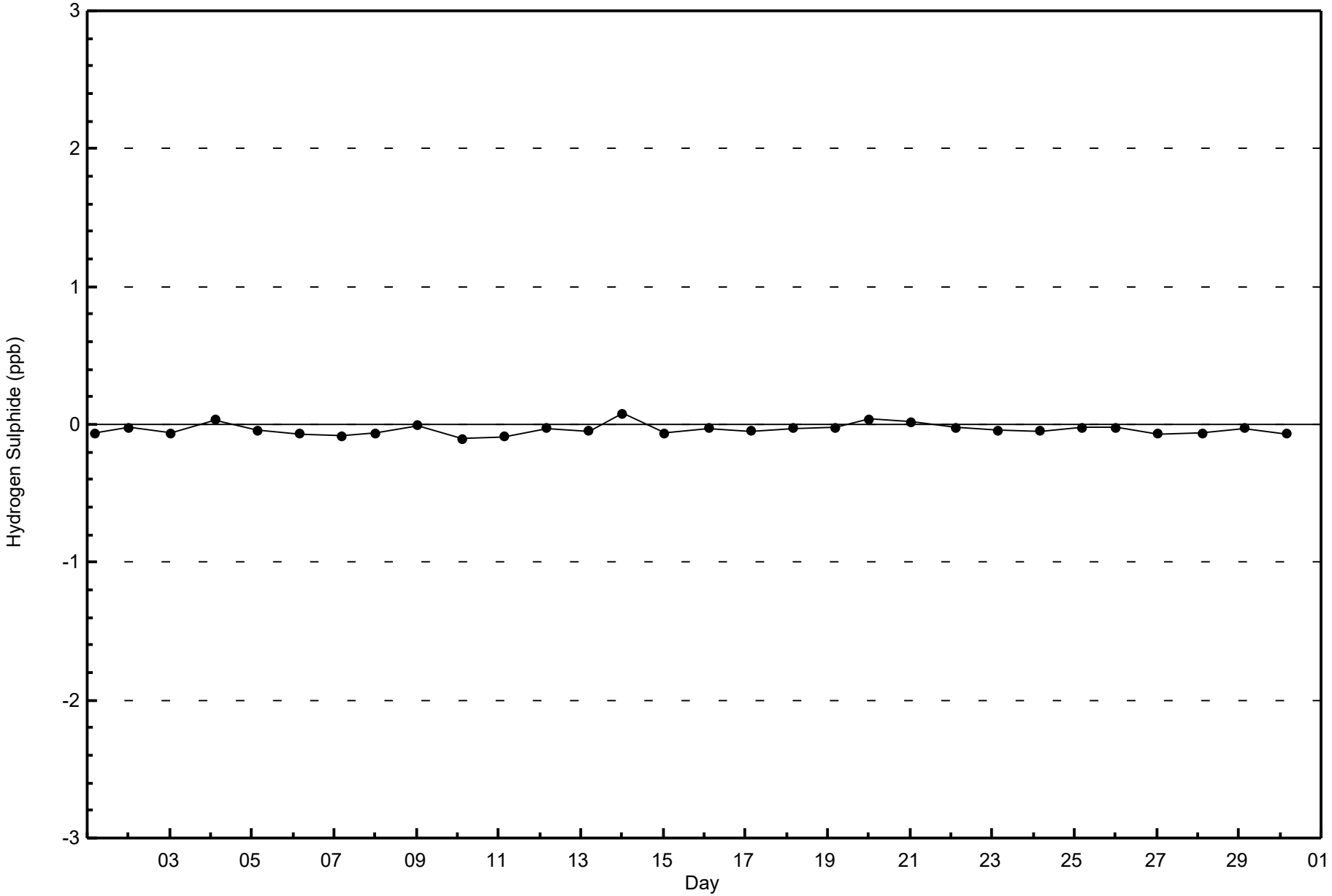
Total Number of Valid Hours: 678

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Buffalo Viewpoint - September 2026

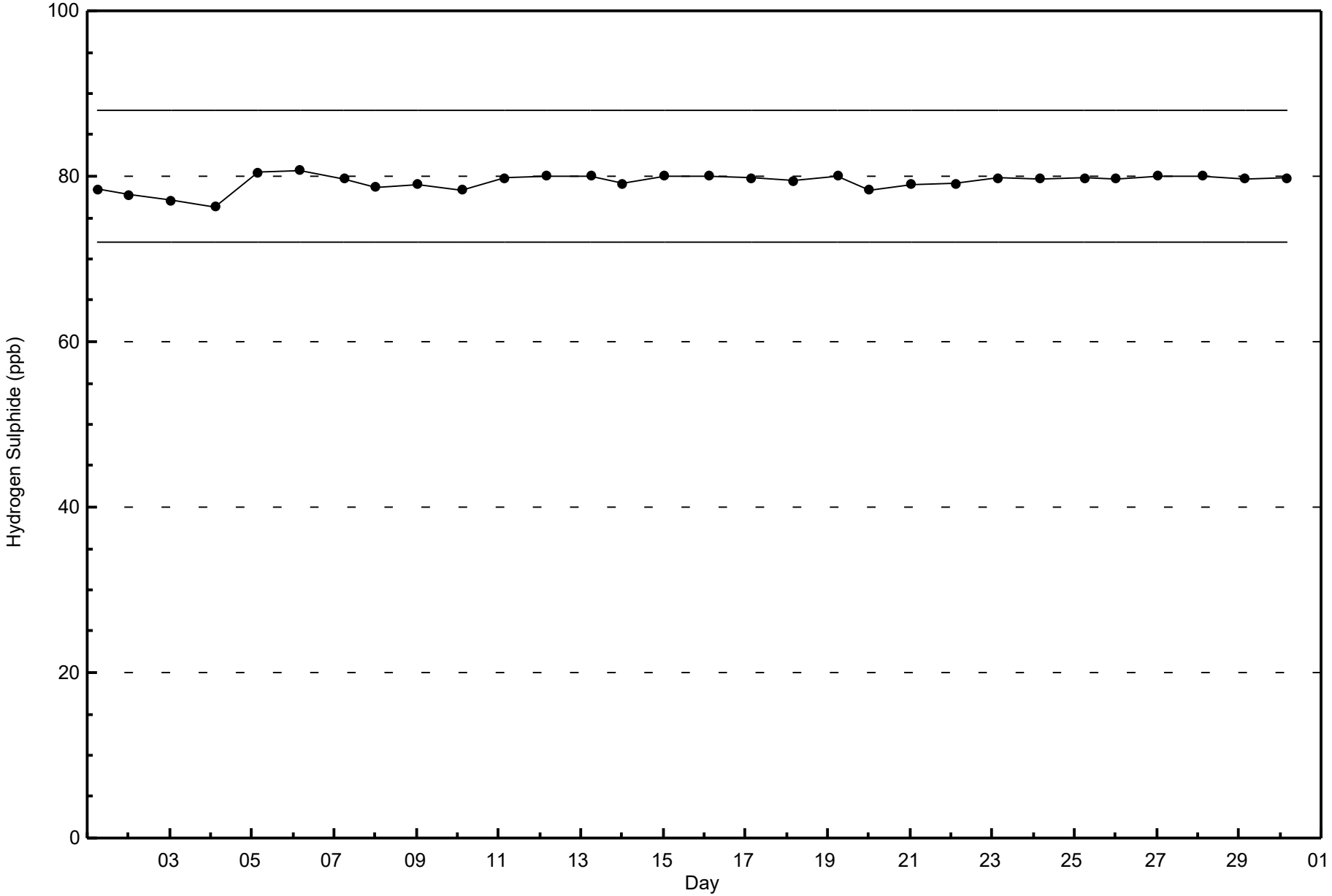


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Buffalo Viewpoint - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Buffalo Viewpoint - September 2026

Maximum Value: 3.4 ppm on Sep 25 07:00

Maximum Daily Average: 2.3 ppm on Sep 25

Minimum Value: 2.0 ppm on Sep 29 16:00

Minimum Daily Average: 2.1 ppm on Sep 27

Maximum Diurnal Average: 2.2 ppm at hour 7

Minimum Diurnal Average: 2.1 ppm at hour 15

Monthly Average: 2.16 ppm

Percentiles: P_1 = 2.0 P_{10} = 2.1 Q_1 = 2.1 Median = 2.1 Q_3 = 2.2 P_{90} = 2.3 P_{99} = 2.6

Hours in Service:	720
Hours of Data:	684
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-Sep	2.7	2.3	2.3	2.3	Z	2.3	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	2.2	2.7
2-Sep	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	2.1	2.1	2.1	2.2
3-Sep	Z	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.5	2.4	2.2	2.3	2.2	2.5
4-Sep	2.3	Z	2.2	2.2	2.3	2.3	2.3	2.3	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	2.2	2.2	2.1	2.2	2.6
5-Sep	2.2	2.2	Z	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.2	2.2	2.3	2.2	2.3	2.3	2.4	2.6	2.2	2.6
6-Sep	2.4	2.5	2.3	Z	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	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.5
7-Sep	2.2	2.2	2.2	2.2	Z	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	2.1	2.2	2.2	2.3	2.2	2.2	2.2	2.3
8-Sep	2.3	2.3	2.3	2.4	2.4	Z	2.4	2.6	2.7	2.3	2.3	2.3	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.7
9-Sep	Z	2.3	2.3	2.4	2.3	2.4	2.4	2.3	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.4
10-Sep	2.1	Z	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.2
11-Sep	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	2.2	2.1	2.1	2.1	2.1	2.2
12-Sep	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	M	M	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
13-Sep	2.1	2.1	2.1	2.1	Z	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.1	2.3
14-Sep	2.2	2.1	2.1	2.2	2.2	Z	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.1	2.2	2.3
15-Sep	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	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.1	2.3
16-Sep	2.3	Z	2.4	2.2	2.1	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	2.2	2.3	2.3	2.2	2.1	2.1	2.2	2.4
17-Sep	2.1	2.1	Z	2.1	2.1	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	2.2	2.2	2.3	2.3	2.2	2.3
18-Sep	2.4	2.4	2.3	Z	2.2	2.2	2.4	2.6	2.6	2.4	2.4	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.2	2.6
19-Sep	2.1	2.2	2.2	2.2	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	2.2	2.1	2.2
20-Sep	2.2	2.1	2.2	2.2	2.2	Z	2.2	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.3
21-Sep	Z	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.2	C	C	C	C	2.1	2.1	2.3	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.3
22-Sep	2.2	Z	2.3	2.4	2.3	2.3	2.3	2.3	2.2	2.3	2.2	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	2.2	2.4
23-Sep	2.1	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	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.2
24-Sep	2.2	2.2	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	2.1	2.2	2.2	2.1	2.2
25-Sep	2.2	2.1	2.3	2.2	Z	2.6	3.4	2.7	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	2.2	2.2	2.2	2.3	3.4
26-Sep	2.2	2.1	2.3	2.5	2.3	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	2.5
27-Sep	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	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
28-Sep	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
29-Sep	2.1	2.1	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	2.0	2.1	2.0	2.0	2.1	2.2
30-Sep	2.0	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	2.0	2.0	2.1	2.1	2.2	2.2	2.5	2.4	2.2	2.1	2.5
	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	2.2	2.2	2.2	2.2	Diurnal Average	
	2.7	2.5	2.4	2.5	2.4	2.6	3.4	2.7	2.7	2.4	2.4	2.3	2.3	2.2	2.2	2.3	2.2	2.3	2.3	2.3	2.5	2.5	2.4	2.6	Diurnal Maximum	

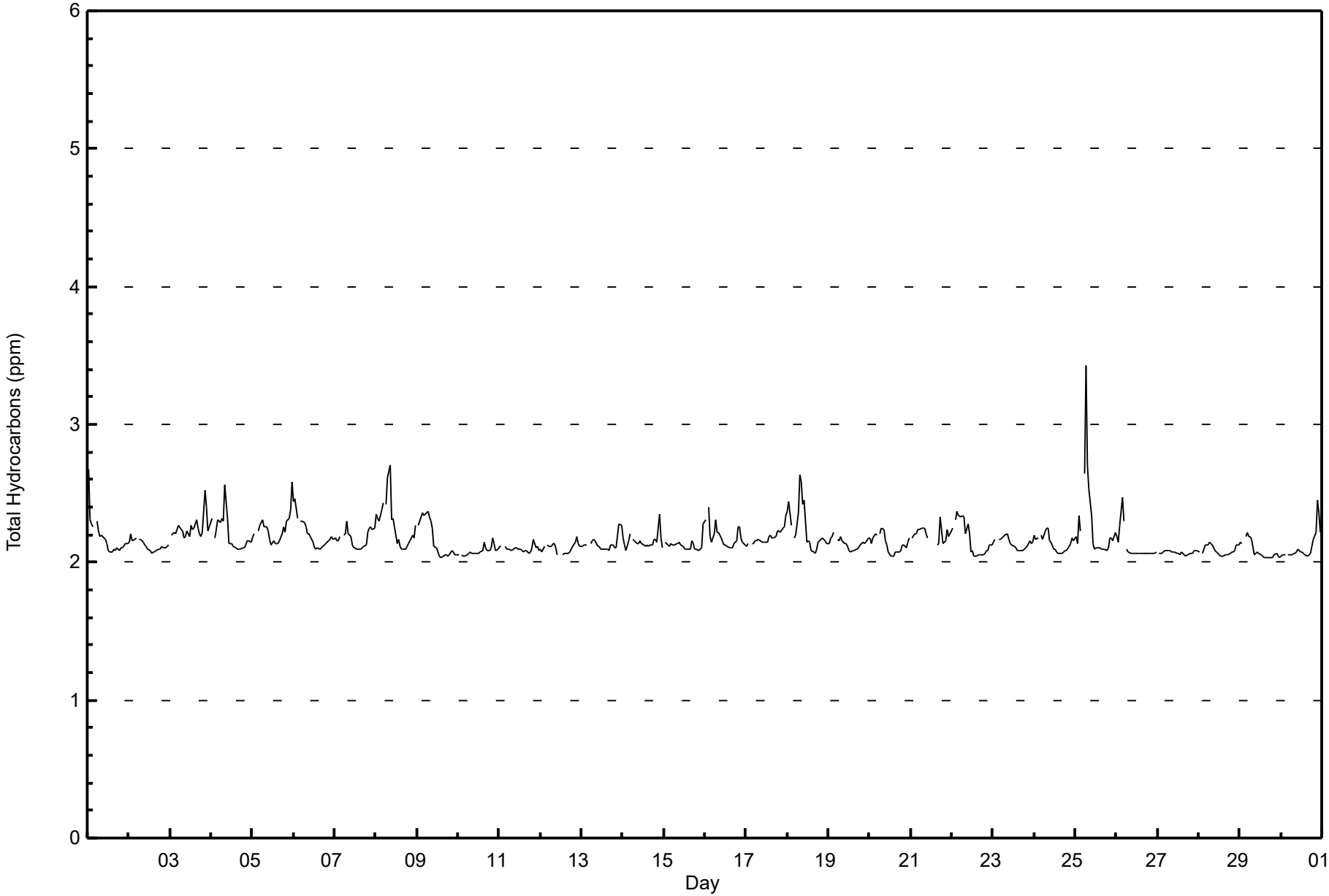
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Buffalo Viewpoint - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	30	4.39	4.39
2.1 - 3.0	653	95.47	99.85
3.1 - 10.0	1	0.15	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Buffalo Viewpoint - September 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	3	9	9	9	0	0	30
2.1 - 3.0	66	21	2	1	10	18	58	131	64	41	40	36	50	33	45	32	648
3.1 - 10.0	0	1	0	0	0	0	0	0	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	66	22	2	1	10	18	58	131	64	41	43	45	59	42	45	32	679

Total Number of Valid Hours: 679

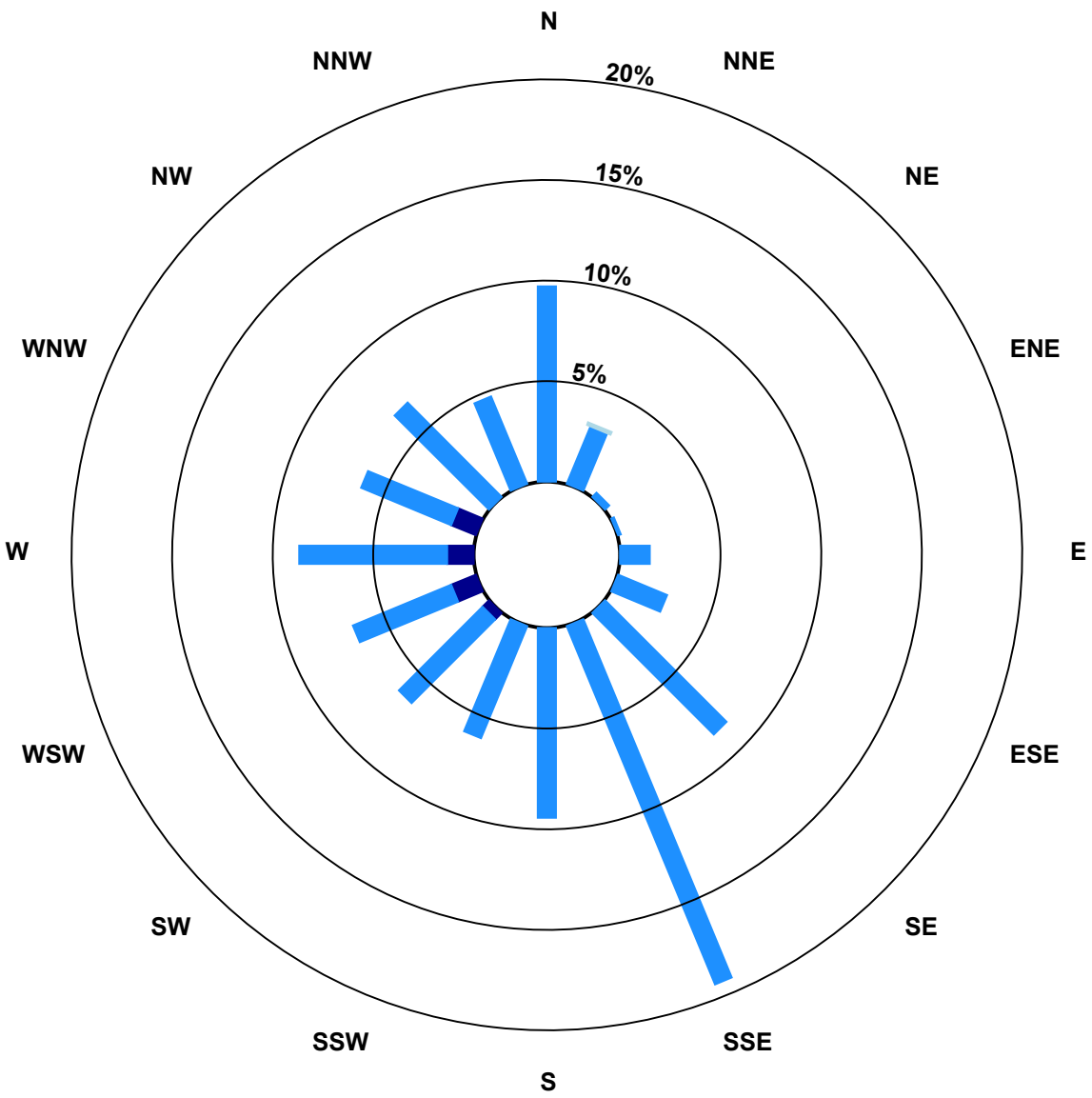
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Buffalo Viewpoint



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

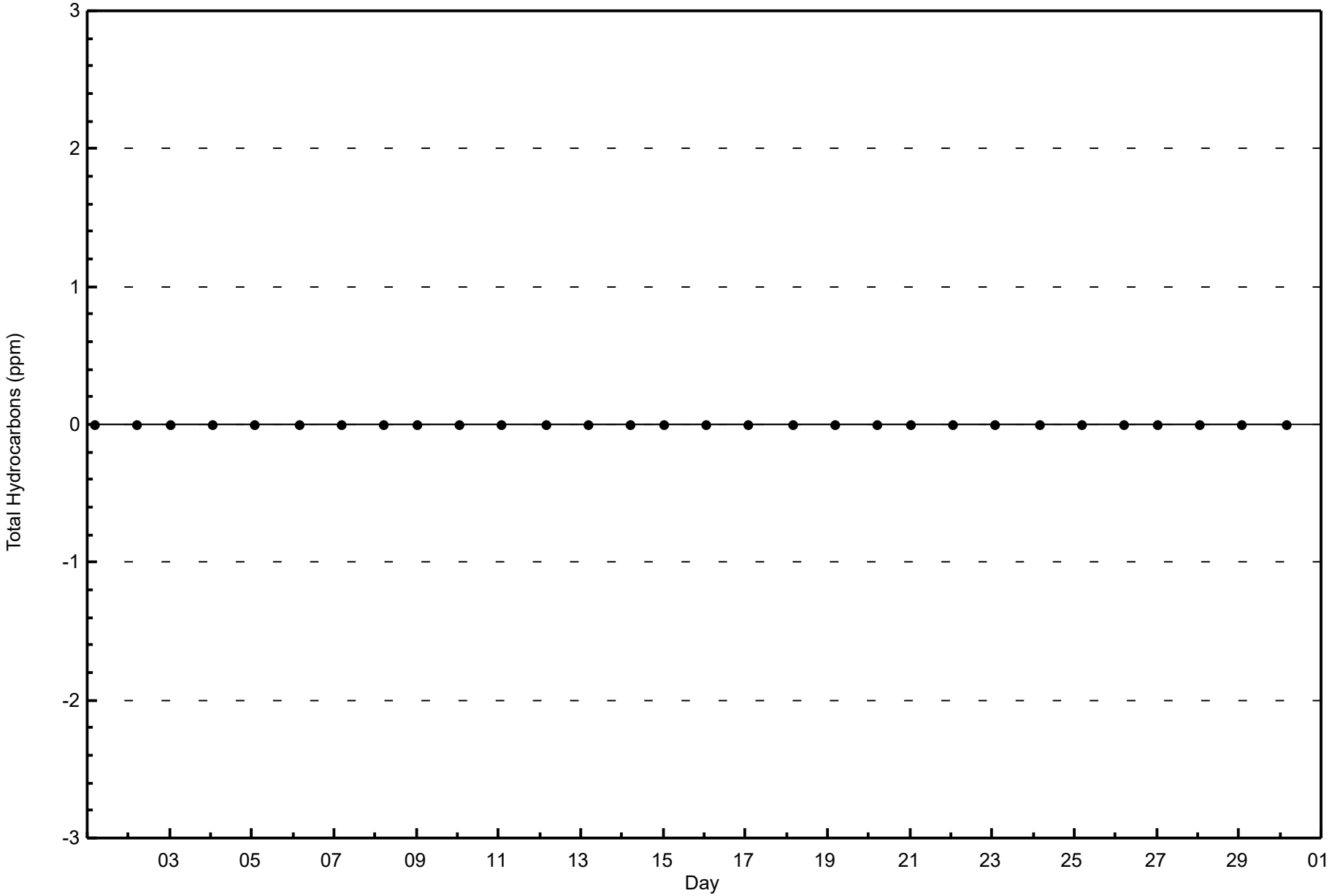
Total Number of Valid Hours: 679

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Buffalo Viewpoint - September 2026

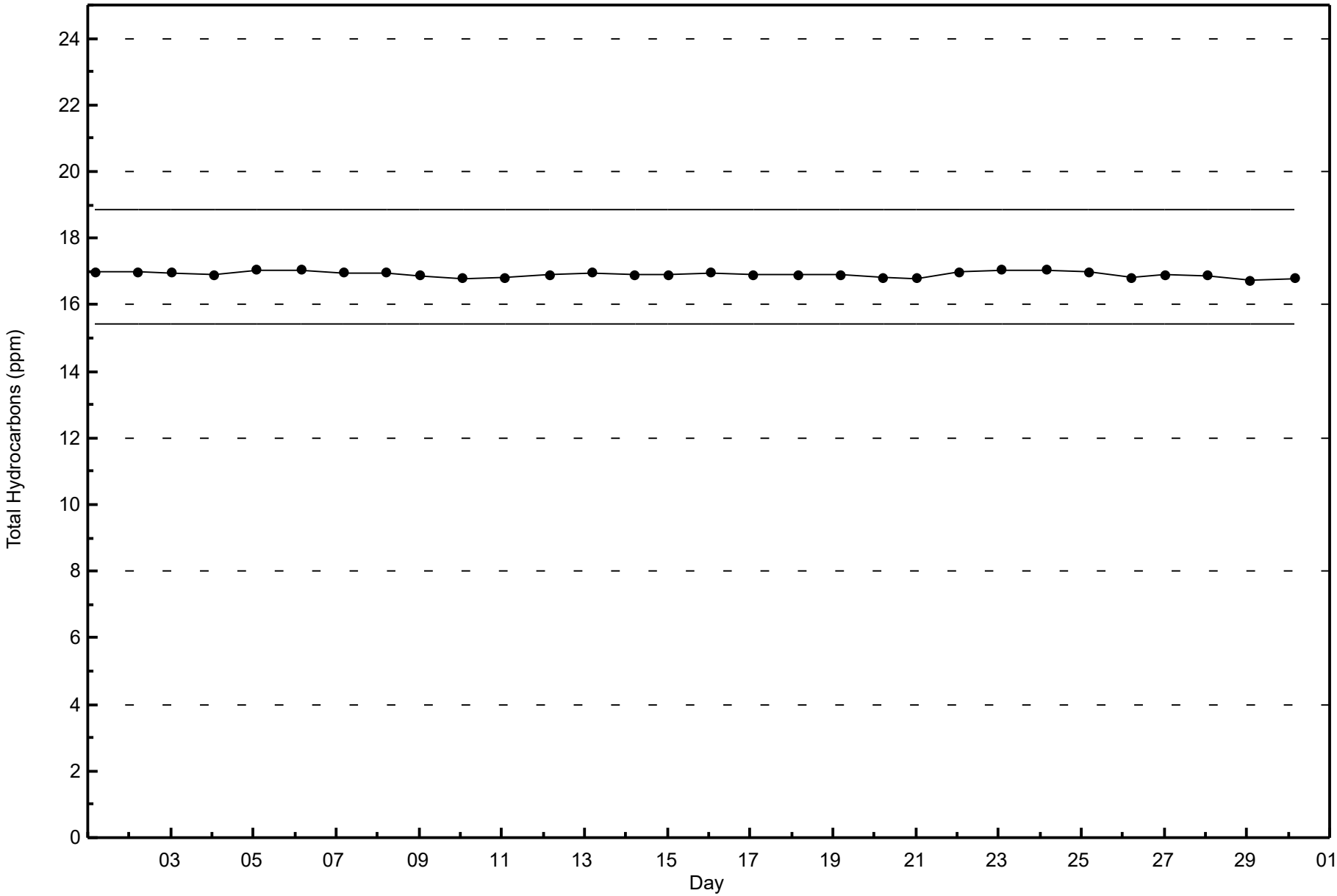


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Buffalo Viewpoint - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Buffalo Viewpoint - September 2026

Maximum Value: 0.151 ppm on Sep 25 07:00

Maximum Daily Average: 0.009 ppm on Sep 25

Minimum Value: 0.000 ppm on Sep 1 01:00

Minimum Daily Average: 0.000 ppm on Sep 1

Maximum Diurnal Average: 0.005 ppm at hour 7

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:	720
Hours of Data:	684
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-Sep	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-Sep	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-Sep	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-Sep	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.057	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.057
5-Sep	0.000	0.000	Z	0.025	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	0.000	0.000	0.000	0.000	0.000	0.002	0.025
6-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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	0.000	0.000	0.000	0.000	0.002
12-Sep	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	M	M	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
13-Sep	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-Sep	0.000	0.000	0.000	0.000	0.030	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.030
15-Sep	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-Sep	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-Sep	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-Sep	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.070	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.070
19-Sep	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-Sep	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-Sep	Z	0.000	0.000	0.000	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
22-Sep	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-Sep	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-Sep	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-Sep	0.000	0.000	0.000	0.000	Z	0.062	0.151	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.151
26-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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	0.001	0.002	0.002	0.005	0.000	0.002	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	Diurnal Average	
	0.000	0.000	0.000	0.025	0.030	0.062	0.151	0.000	0.070	0.057	0.000	0.002	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Diurnal Maximum	

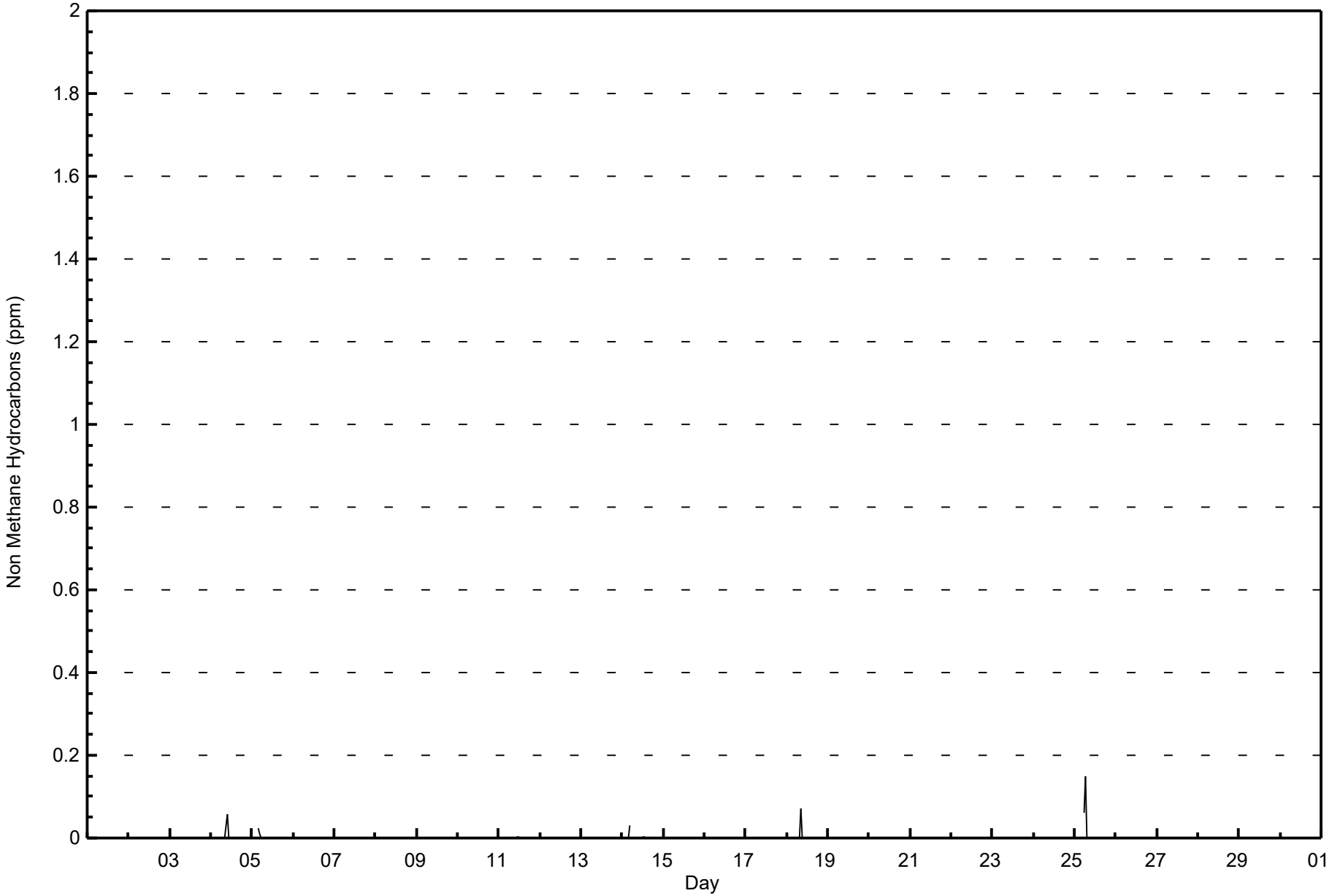
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Buffalo Viewpoint - September 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Buffalo Viewpoint - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	677	98.98	98.98
0.006 - 0.05	3	0.44	99.42
0.06 - 0.1	3	0.44	99.85
> 0.1	1	0.15	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Buffalo Viewpoint - September 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	60	21	2	1	10	18	58	131	64	41	43	45	59	42	45	32	672
0.006 - 0.05	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0.06 - 0.1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
> 0.1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Totals	66	22	2	1	10	18	58	131	64	41	43	45	59	42	45	32	679

Total Number of Valid Hours: 679

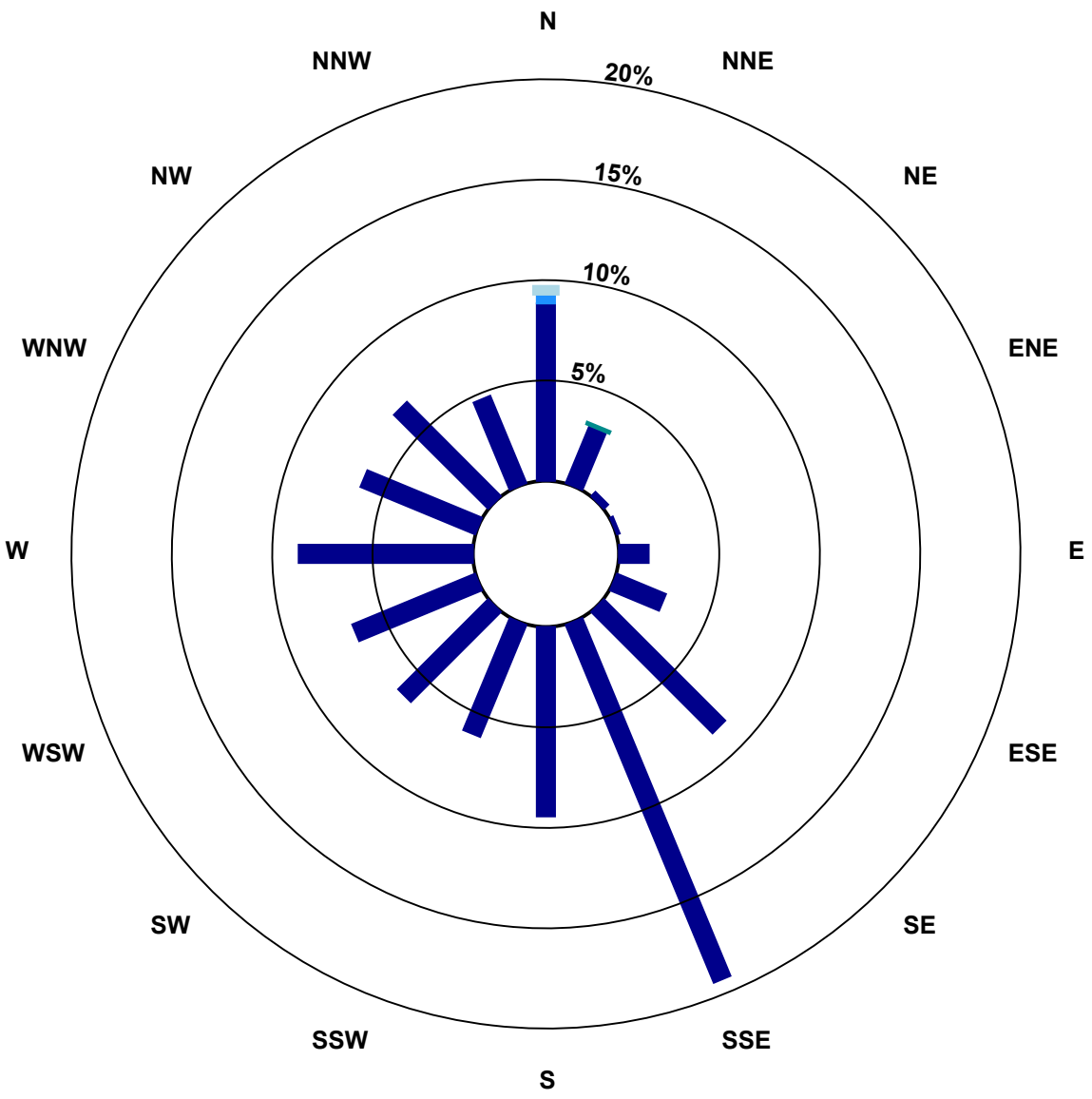
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Non Methane Hydrocarbons (NMHC) - ppm

Buffalo Viewpoint



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

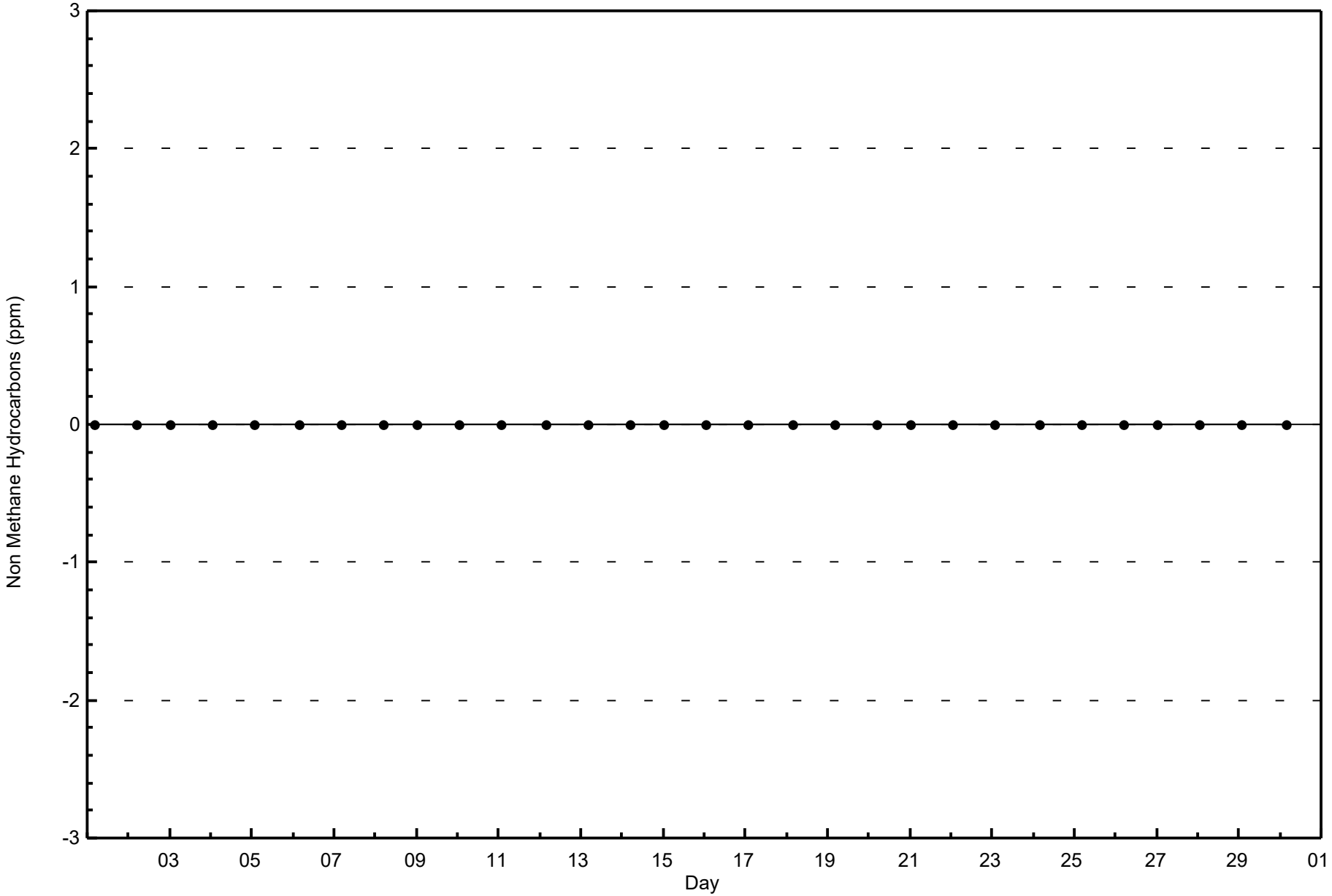
Total Number of Valid Hours: 679

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Buffalo Viewpoint - September 2026

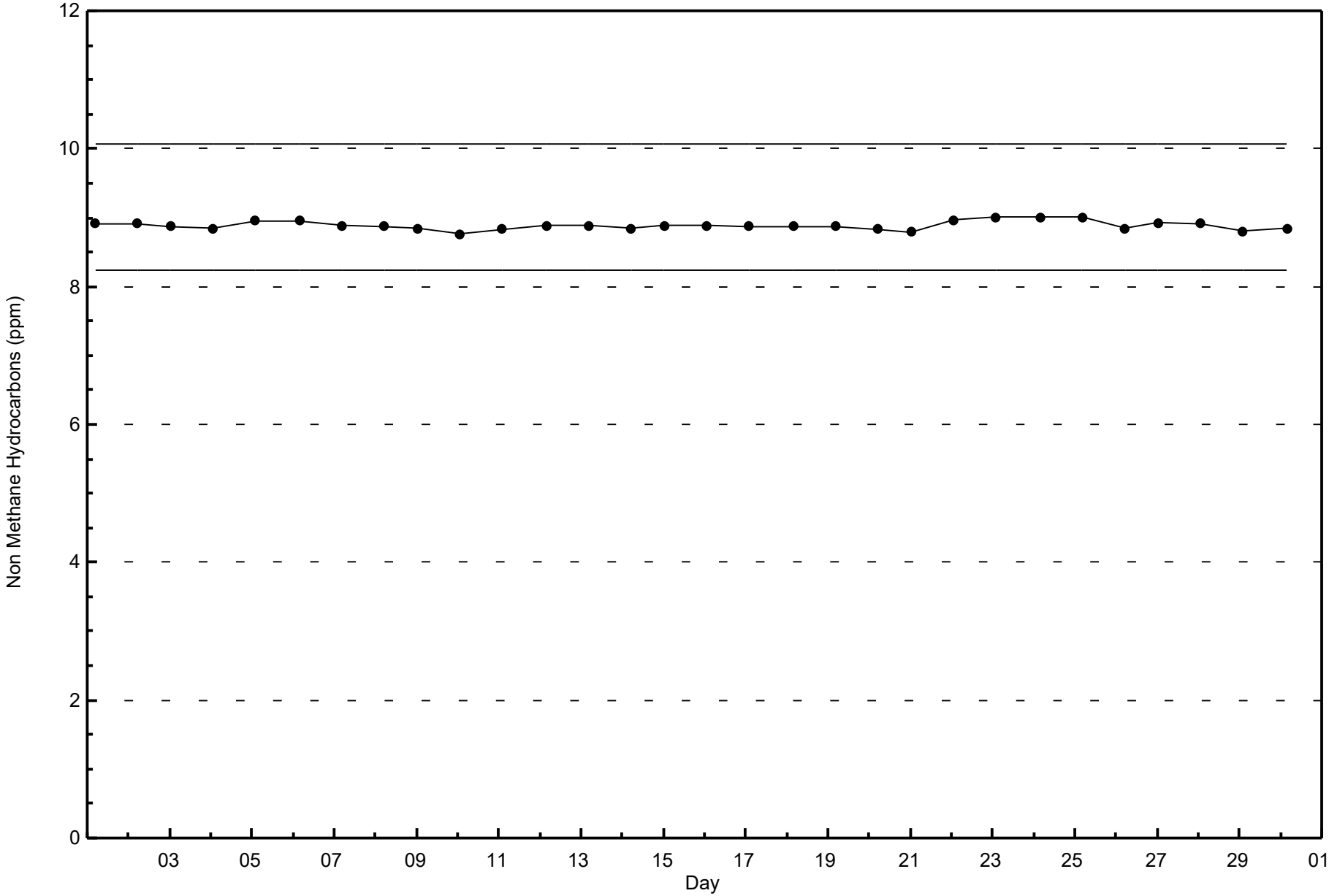


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Buffalo Viewpoint - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Buffalo Viewpoint - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.3 ppm on Sep 25 07:00
Maximum Daily Average: 2.3 ppm on Sep 8

Minimum Value: 2.0 ppm on Sep 29 16:00
Minimum Daily Average: 2.1 ppm on Sep 27
Maximum Diurnal Average: 2.2 ppm at hour 7
Minimum Diurnal Average: 2.1 ppm at hour 15
Monthly Average: 2.16 ppm
Percentiles: P_1 = 2.0 P_{10} = 2.1 Q_1 = 2.1 Median = 2.1 Q_3 = 2.2 P_{90} = 2.3 P_{99} = 2.6

Hours in Service:	720
Hours of Data:	684
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-Sep	2.7	2.3	2.3	2.3	Z	2.3	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	2.2	2.7
2-Sep	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	2.1	2.1	2.1	2.2
3-Sep	Z	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.5	2.4	2.2	2.3	2.2	2.5
4-Sep	2.3	Z	2.2	2.2	2.3	2.3	2.3	2.3	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	2.2	2.2	2.1	2.2	2.6
5-Sep	2.2	2.2	Z	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.2	2.2	2.3	2.2	2.3	2.3	2.4	2.6	2.2	2.6
6-Sep	2.4	2.5	2.3	Z	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	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.5
7-Sep	2.2	2.2	2.2	2.2	Z	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	2.1	2.2	2.2	2.3	2.2	2.2	2.2	2.3
8-Sep	2.3	2.3	2.3	2.4	2.4	Z	2.4	2.6	2.7	2.3	2.3	2.3	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.7
9-Sep	Z	2.3	2.3	2.4	2.3	2.4	2.4	2.3	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.4
10-Sep	2.1	Z	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.2
11-Sep	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	2.2	2.1	2.1	2.1	2.1	2.2
12-Sep	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	M	M	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
13-Sep	2.1	2.1	2.1	2.1	Z	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.1	2.3
14-Sep	2.2	2.1	2.1	2.2	2.2	Z	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.1	2.1	2.3
15-Sep	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	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.1	2.3
16-Sep	2.3	Z	2.4	2.2	2.1	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	2.2	2.3	2.3	2.2	2.1	2.1	2.2	2.4
17-Sep	2.1	2.1	Z	2.1	2.1	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	2.2	2.2	2.3	2.3	2.2	2.3
18-Sep	2.4	2.4	2.3	Z	2.2	2.2	2.4	2.6	2.5	2.4	2.4	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.2	2.6
19-Sep	2.1	2.2	2.2	2.2	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	2.2	2.1	2.2
20-Sep	2.2	2.1	2.2	2.2	2.2	Z	2.2	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.3
21-Sep	Z	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.2	C	C	C	C	2.1	2.1	2.3	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.3
22-Sep	2.2	Z	2.3	2.4	2.3	2.3	2.3	2.3	2.2	2.3	2.2	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	2.2	2.4
23-Sep	2.1	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	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.2
24-Sep	2.2	2.2	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	2.1	2.2	2.2	2.1	2.2
25-Sep	2.2	2.1	2.3	2.2	Z	2.6	3.3	2.7	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	2.2	2.2	2.2	2.3	3.3
26-Sep	2.2	2.1	2.3	2.5	2.3	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	2.5
27-Sep	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	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
28-Sep	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
29-Sep	2.1	2.1	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	2.0	2.1	2.0	2.0	2.1	2.2
30-Sep	2.0	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	2.0	2.0	2.1	2.1	2.2	2.2	2.5	2.4	2.2	2.1	2.5
	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	2.2	2.2	2.2	2.2	Diurnal Average	
	2.7	2.5	2.4	2.5	2.4	2.6	3.3	2.7	2.7	2.4	2.4	2.3	2.3	2.2	2.2	2.3	2.2	2.3	2.3	2.3	2.5	2.5	2.4	2.6	Diurnal Maximum	

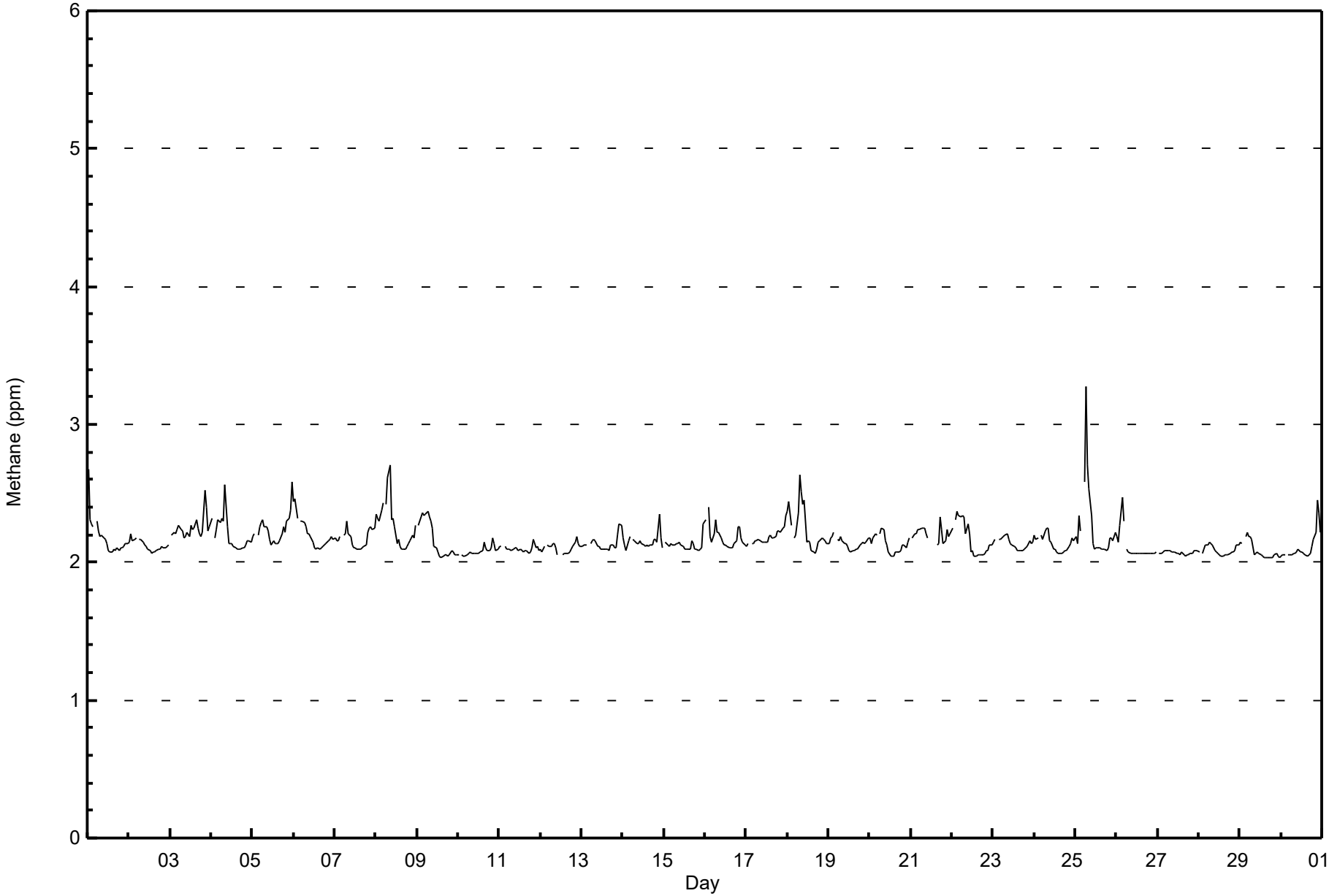
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Buffalo Viewpoint - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	30	4.39	4.39
2.1 - 3.0	653	95.47	99.85
3.1 - 10.0	1	0.15	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Buffalo Viewpoint - September 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	3	9	9	9	0	0	30
2.1 - 3.0	66	21	2	1	10	18	58	131	64	41	40	36	50	33	45	32	648
3.1 - 10.0	0	1	0	0	0	0	0	0	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	66	22	2	1	10	18	58	131	64	41	43	45	59	42	45	32	679

Total Number of Valid Hours: 679

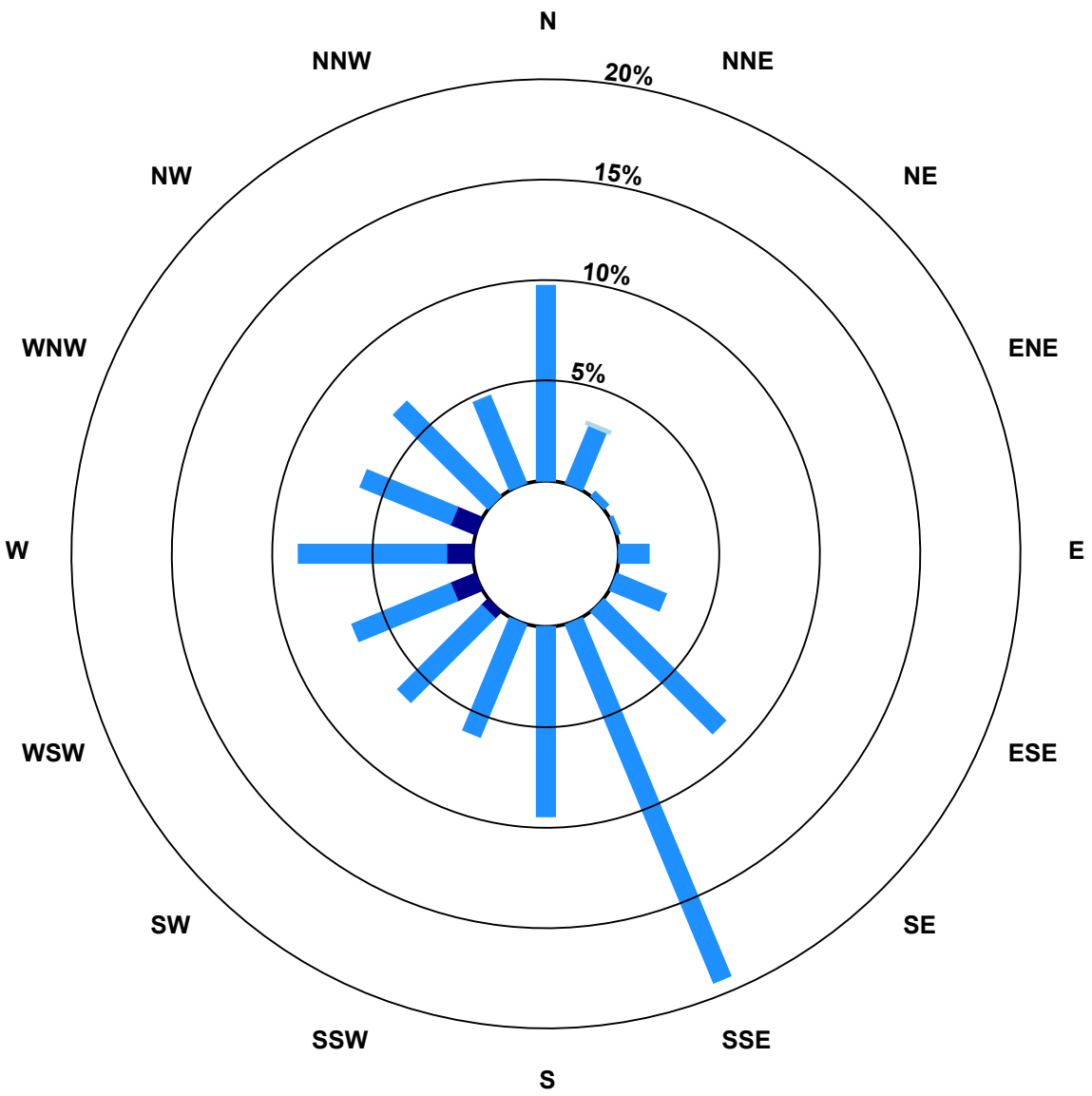
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Methane (CH_4) - ppm

Buffalo Viewpoint



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

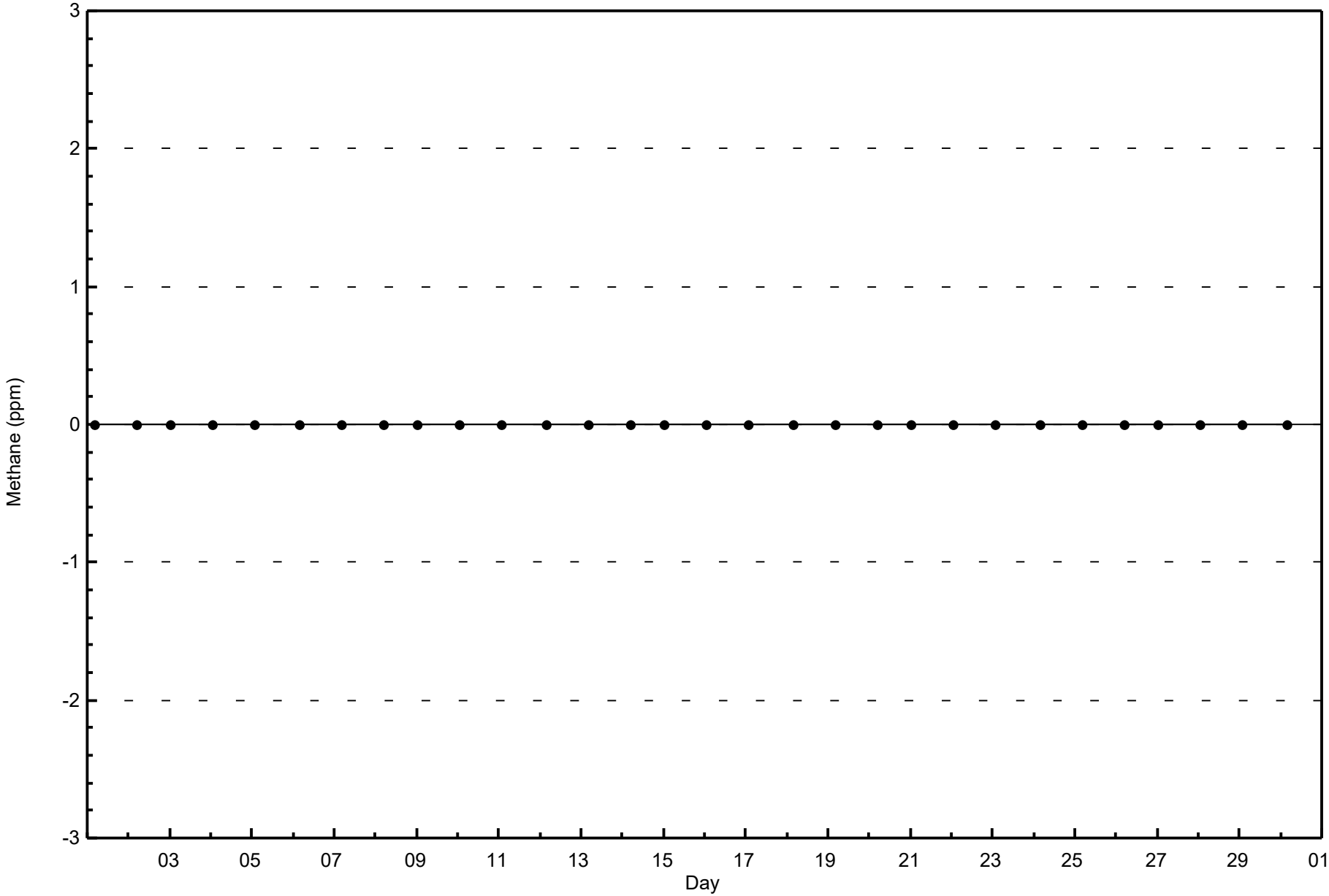
Total Number of Valid Hours: 679

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Buffalo Viewpoint - September 2026

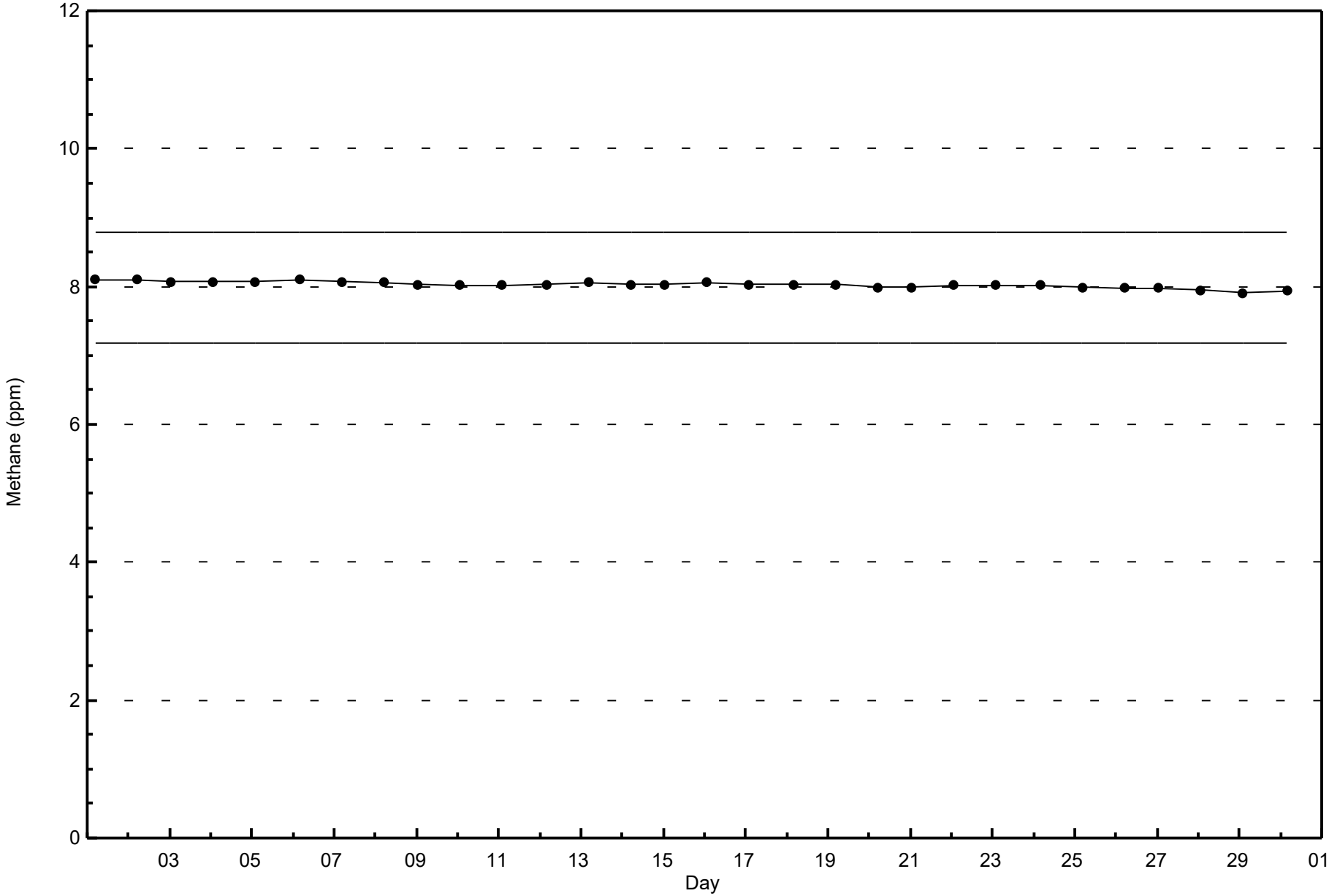


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Buffalo Viewpoint - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Buffalo Viewpoint - September 2026

Maximum Value: 116.4 ppb on Sep 25 07:00

Maximum Daily Average: 10.3 ppb on Sep 25

Minimum Value: 0.0 ppb on Sep 1 01:00

Minimum Daily Average: 0.0 ppb on Sep 26

Maximum Diurnal Average: 5.2 ppb at hour 7

Minimum Diurnal Average: 0.0 ppb at hour 20

Monthly Average: 0.93 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.0 P_{90} = 1.0 P_{99} = 21.1

Hours in Service:	720
Hours of Data:	684
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-Sep	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	0.0	0.0	0.1
2-Sep	0.0	0.0	Z	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	0.1
3-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.8
4-Sep	0.0	0.0	0.0	0.0	Z	0.0	1.6	6.2	19.2	5.3	1.2	2.4	2.6	1.6	1.0	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	19.2
5-Sep	0.0	0.0	0.2	0.6	0.3	Z	11.8	9.6	7.3	4.7	1.3	0.2	1.6	1.4	0.3	0.6	1.0	0.8	0.3	0.0	0.0	0.0	0.0	0.0	1.8	11.8
6-Sep	Z	0.4	0.0	0.0	0.0	0.0	0.0	0.1	0.6	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	0.0	0.1	0.7
7-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	1.7	0.0	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	0.1	1.7
8-Sep	0.0	0.0	Z	12.2	8.9	8.9	13.0	28.7	24.9	6.7	5.9	4.7	0.5	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	28.7
9-Sep	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-Sep	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
11-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.2	0.7	0.9	0.2	0.9	0.2	0.1	0.8	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2	0.9
12-Sep	Z	0.0	0.0	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	0.0	0.2
13-Sep	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	1.7	6.2	0.3	6.2
14-Sep	0.4	0.0	Z	0.0	0.0	0.0	0.5	0.8	2.0	2.1	1.9	1.6	1.4	1.0	0.9	0.9	0.7	0.3	0.1	0.0	0.0	1.1	1.4	0.0	0.8	2.1
15-Sep	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	0.6	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.1	1.8
16-Sep	2.0	0.3	2.9	0.0	Z	1.3	8.0	4.2	4.7	2.7	1.6	0.9	0.7	0.4	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	8.0
17-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.4	0.7	0.0	C	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.7
18-Sep	Z	0.0	0.0	0.0	0.0	0.0	4.0	20.5	24.1	14.6	14.9	2.3	3.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	24.1
19-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.9	0.6	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	0.1	0.9
20-Sep	0.0	0.0	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
21-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.7	0.6	1.0	0.4	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	0.1	1.0
22-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	2.4	2.2	0.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.4
23-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.5	1.0	0.6	0.2	0.2	0.5	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.0
24-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.1	1.4	1.9	0.4	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	0.0	0.2	1.9
25-Sep	0.0	Z	0.7	0.1	12.1	27.6	116.4	40.4	24.7	11.9	0.4	0.2	0.3	0.6	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	116.4
26-Sep	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
27-Sep	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
28-Sep	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-Sep	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.1
30-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	9.0	5.7	5.2	1.0	9.0
	0.1	0.0	0.2	0.5	0.8	1.5	5.2	3.9	3.8	1.8	1.1	0.5	0.4	0.3	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.3	0.3	0.4	Diurnal Average	
	2.0	0.4	2.9	12.2	12.1	27.6	116.4	40.4	24.9	14.6	14.9	4.7	3.4	1.8	1.0	0.9	1.0	0.8	0.3	0.0	2.3	9.0	5.7	6.2	Diurnal Maximum	

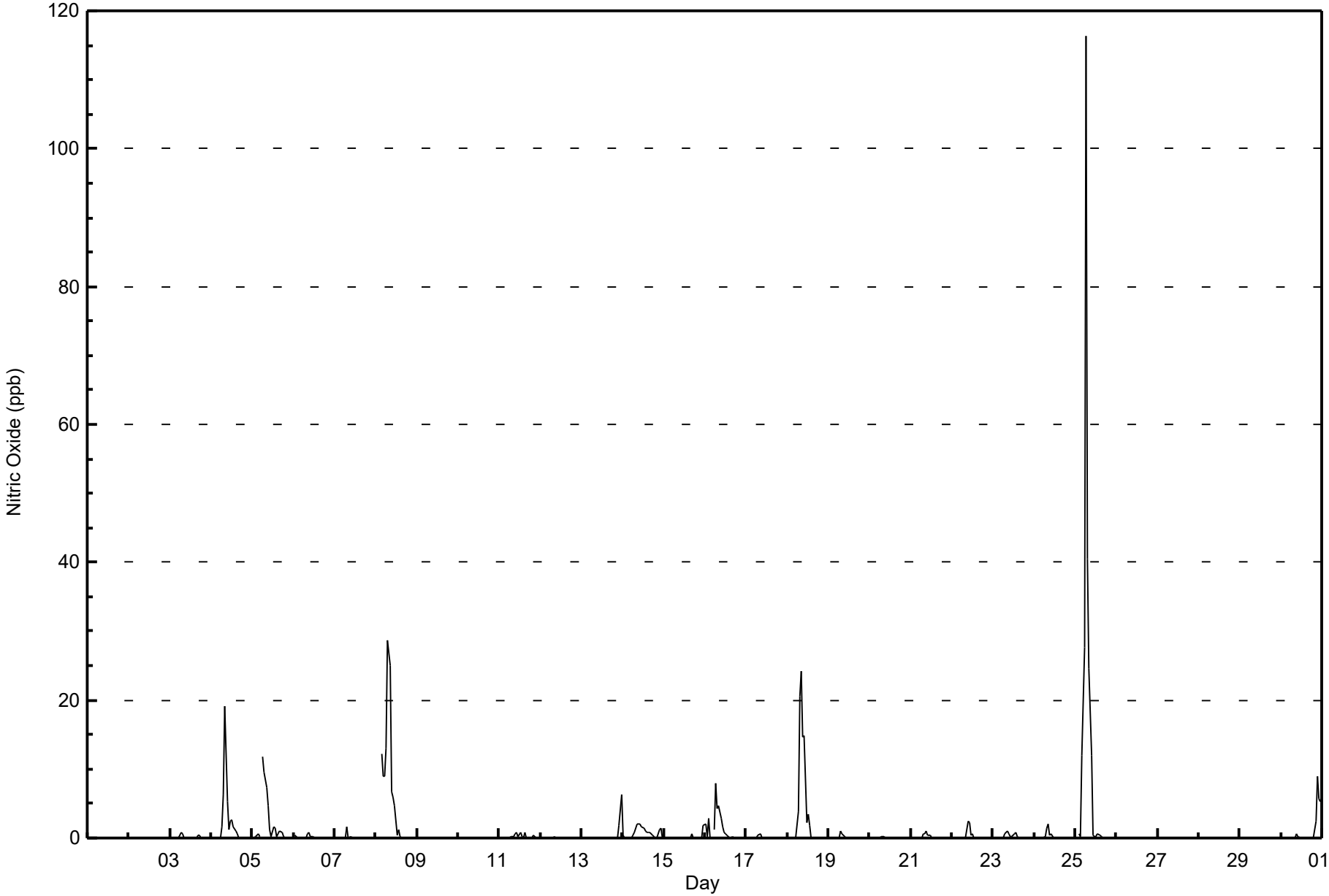
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Buffalo Viewpoint - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	676	98.83	98.83
21 - 40	7	1.02	99.85
11 - 80	0	0.00	99.85
81 - 159	1	0.15	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Buffalo Viewpoint - September 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	21	2	0	10	21	60	132	60	36	44	45	61	42	44	30	671
21 - 40	3	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1	7
11 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81 - 159	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	66	23	2	0	10	21	60	132	60	36	44	45	61	42	46	31	679

Total Number of Valid Hours: 679

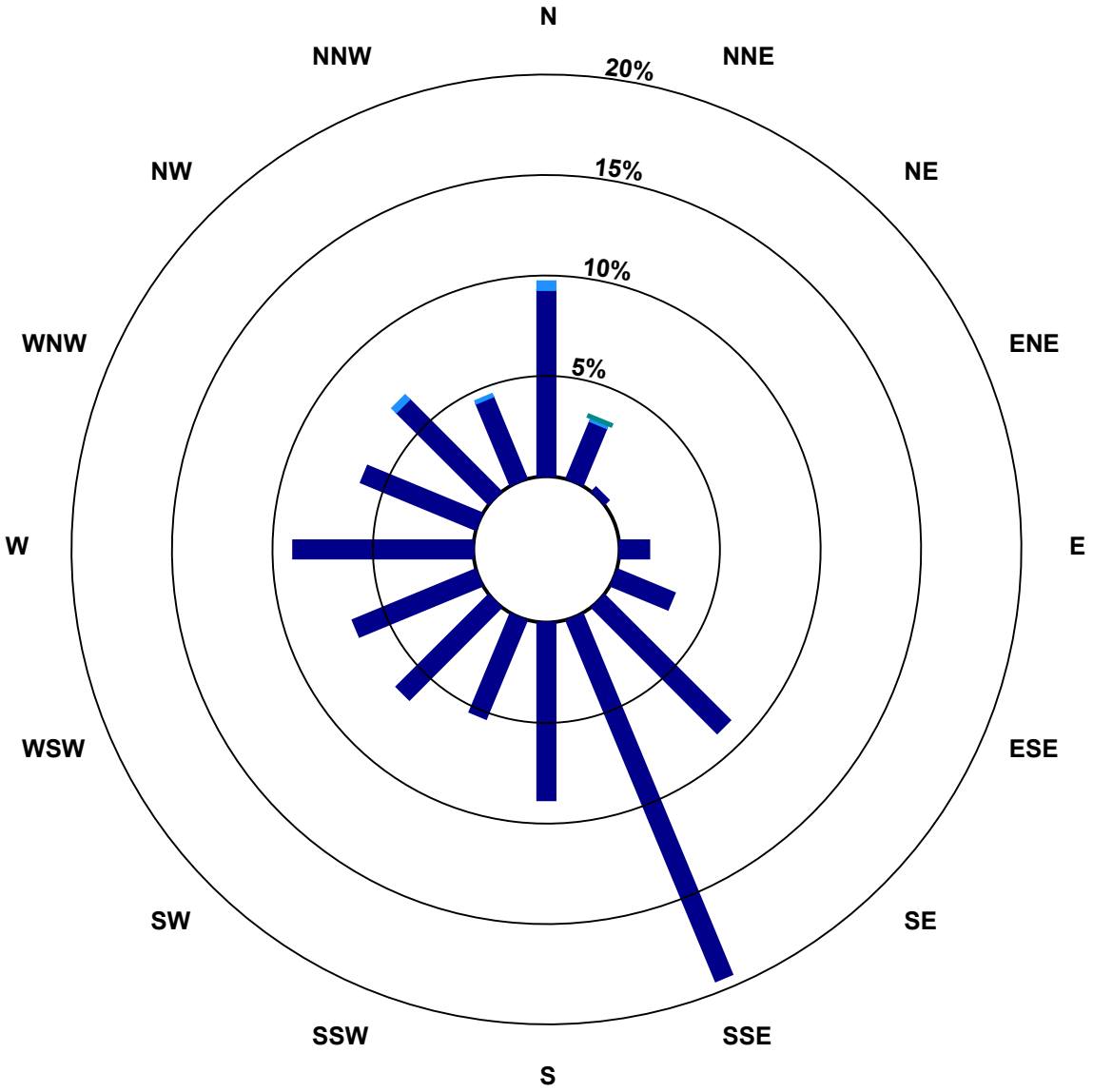
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Buffalo Viewpoint



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

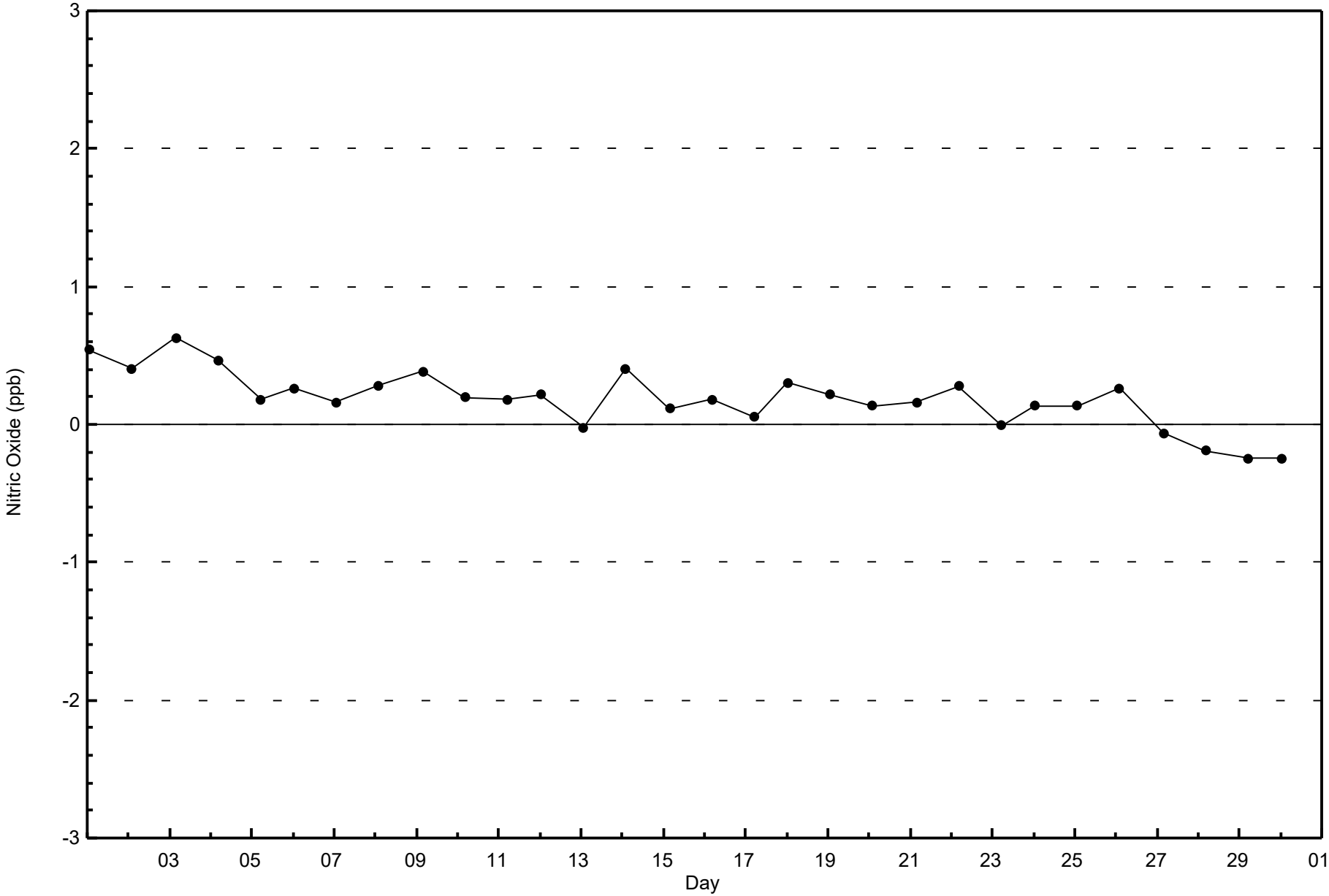
Total Number of Valid Hours: 679

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Buffalo Viewpoint - September 2026

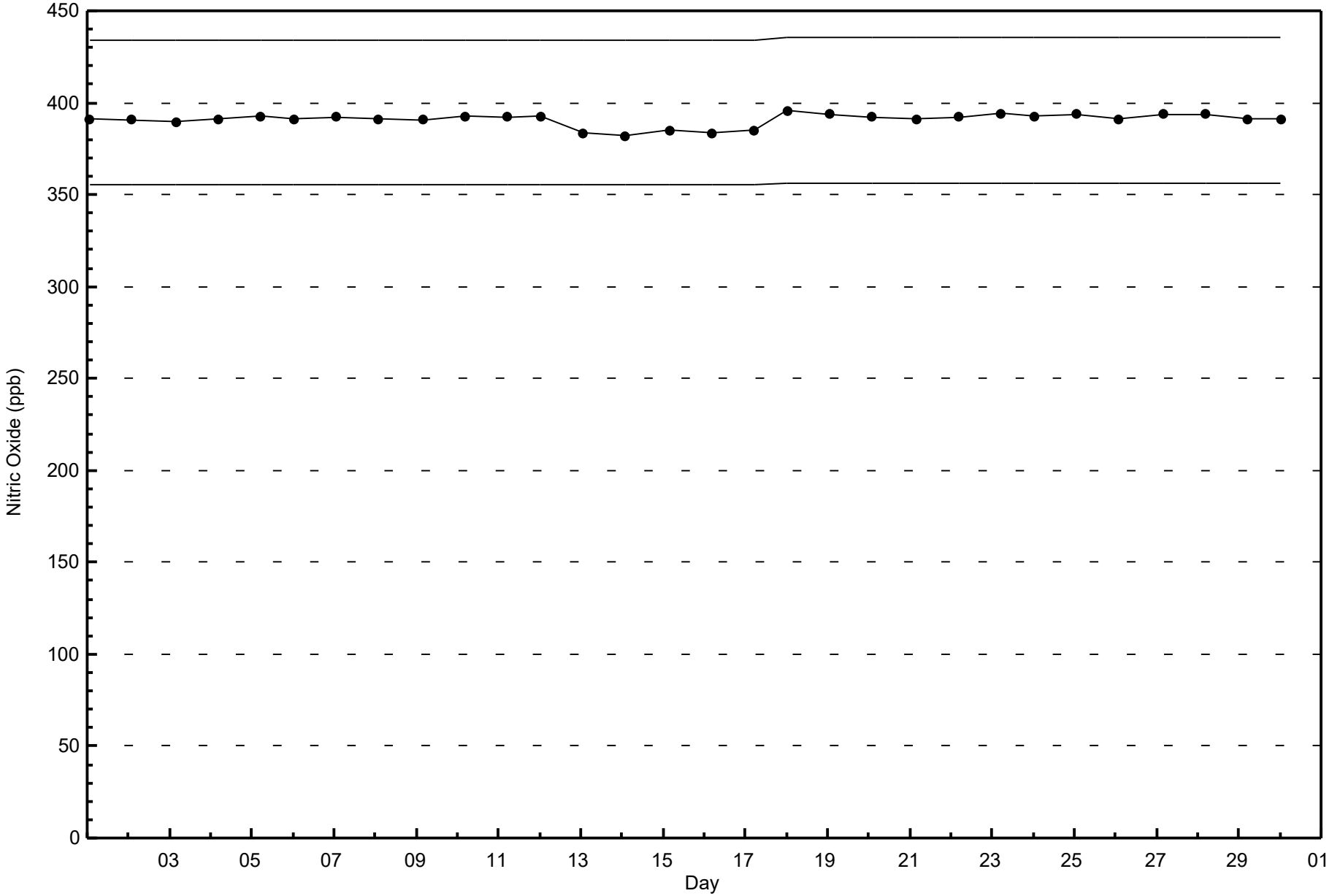


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Buffalo Viewpoint - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Buffalo Viewpoint - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 23.9 ppb on Sep 25 07:00
Maximum Daily Average: 7.9 ppb on Sep 25

Minimum Value: 0.0 ppb on Sep 2 12:00
Minimum Daily Average: 0.2 ppb on Sep 27
Maximum Diurnal Average: 4.0 ppb at hour 7
Minimum Diurnal Average: 1.0 ppb at hour 16
Monthly Average: 2.47 ppb
Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.2 Median = 1.0 Q_3 = 3.0 P_{90} = 7.6 P_{99} = 16.1

Hours in Service:	720
Hours of Data:	684
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-Sep	1.3	Z	0.4	0.6	0.4	0.8	0.9	1.1	1.1	0.8	0.8	0.4	0.1	0.1	0.1	0.3	0.3	0.5	0.5	0.3	0.3	0.4	0.6	1.1	0.6	1.3
2-Sep	0.7	0.9	Z	0.2	0.3	1.4	3.3	0.6	0.3	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.4	1.6	7.5	3.3	0.0	0.0	1.0	7.5
3-Sep	2.4	9.9	10.3	Z	12.0	9.3	8.0	4.0	0.9	0.5	2.4	2.7	1.2	1.6	3.2	2.8	4.2	7.5	4.9	2.5	1.2	1.2	2.6	3.7	4.3	12.0
4-Sep	11.3	8.9	6.7	4.5	Z	9.0	7.8	8.1	8.2	6.8	2.0	3.7	4.0	3.3	3.9	3.4	2.9	2.6	3.0	3.2	5.0	7.3	7.8	6.8	5.7	11.3
5-Sep	9.6	13.0	13.3	13.7	15.6	Z	13.2	10.7	7.9	5.6	3.1	1.1	3.2	3.2	1.6	2.5	4.5	6.1	8.0	8.2	5.8	6.7	4.6	3.4	7.2	15.6
6-Sep	Z	3.2	3.0	2.8	2.1	2.1	1.8	1.7	2.3	1.9	1.3	1.1	0.3	0.3	0.2	0.2	0.5	0.7	0.5	0.6	0.4	0.1	0.1	0.6	1.2	3.2
7-Sep	0.8	Z	0.3	0.5	0.3	0.5	0.5	3.1	0.9	0.8	0.5	0.4	0.2	0.2	0.1	0.0	0.1	0.7	1.9	4.5	5.5	3.6	2.3	2.0	1.3	5.5
8-Sep	1.3	0.5	Z	11.6	9.6	10.0	9.8	10.9	12.8	8.4	8.3	7.7	2.3	4.2	2.1	0.8	0.4	0.1	0.6	1.7	3.1	1.3	0.6	1.7	4.8	12.8
9-Sep	2.1	1.3	1.2	Z	1.0	0.5	1.5	1.0	1.0	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	0.4	2.1
10-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.3	2.4	2.2	0.1	0.0	1.1	4.7	3.6	0.4	1.2	0.7	4.7
11-Sep	2.5	3.7	2.6	2.0	1.5	Z	2.4	1.6	2.1	2.4	2.9	1.5	2.3	1.3	0.8	3.2	1.5	0.9	1.3	2.0	4.0	7.5	7.7	3.9	2.7	7.7
12-Sep	Z	0.3	0.2	2.2	0.4	0.0	0.3	0.2	0.7	0.3	0.4	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.5	1.0	0.3	0.1	0.3	2.2
13-Sep	0.0	Z	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.9	1.5	7.4	12.2	12.9	1.7	12.9
14-Sep	7.5	2.2	Z	4.9	7.2	7.6	8.9	7.6	8.7	6.2	7.2	5.5	5.1	3.7	5.8	4.1	5.2	6.0	7.3	5.2	4.8	13.7	8.8	1.8	6.3	13.7
15-Sep	1.8	0.3	0.3	Z	0.3	0.5	0.9	0.3	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	4.4	2.1	0.2	0.0	0.0	0.0	0.0	8.9	0.9	8.9
16-Sep	11.4	9.7	13.3	8.0	Z	4.9	6.4	6.4	4.3	4.6	4.1	2.2	1.4	1.1	0.8	0.4	2.2	2.3	5.8	9.9	13.0	8.6	1.5	0.4	5.3	13.3
17-Sep	0.4	0.3	0.2	0.1	0.2	Z	2.1	2.7	1.6	0.6	C	C	C	C	C	C	0.3	0.2	2.4	2.7	2.1	2.6	2.0	1.0	--	2.7
18-Sep	Z	1.9	2.1	0.3	0.1	0.5	10.2	14.6	15.9	13.2	13.3	4.0	5.4	3.9	1.0	0.3	0.1	2.5	7.5	12.3	11.1	4.8	3.3	3.7	5.7	15.9
19-Sep	2.9	Z	1.5	1.5	1.2	1.1	2.4	4.3	2.1	1.2	0.9	0.7	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.4	0.3	0.4	0.3	0.4	1.0	4.3
20-Sep	0.4	0.6	Z	1.9	0.6	0.4	1.3	2.1	1.5	0.9	0.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	2.4	1.2	0.4	0.1	0.2	0.4	0.7	2.4
21-Sep	0.6	0.6	0.6	Z	0.6	0.5	3.0	3.2	2.3	2.7	2.1	2.6	1.7	1.2	1.8	3.3	1.5	4.1	2.2	1.7	0.8	0.6	0.6	0.5	1.7	4.1
22-Sep	2.4	2.7	2.4	2.3	Z	2.1	1.3	1.6	0.5	4.3	5.5	1.9	2.5	0.7	0.2	0.2	0.1	0.1	0.1	0.2	0.4	0.5	0.6	1.1	1.5	5.5
23-Sep	2.0	1.0	1.1	1.1	1.2	Z	2.0	2.4	2.5	1.7	1.3	1.1	2.2	3.0	2.1	1.5	1.2	0.9	1.0	1.1	0.8	1.2	1.9	2.0	1.6	3.0
24-Sep	Z	0.3	0.3	0.3	1.2	1.6	4.5	3.9	2.9	1.5	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	6.5	6.8	1.9	3.3	1.8	6.8
25-Sep	3.3	Z	10.8	4.8	14.7	17.3	23.9	19.1	18.1	12.8	5.0	2.6	2.7	3.8	3.8	2.8	3.2	2.2	1.6	2.7	5.0	9.4	4.8	7.2	7.9	23.9
26-Sep	8.4	4.8	Z	8.4	5.7	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	0.0	0.0	1.2	8.4
27-Sep	0.0	0.0	0.0	Z	0.1	0.4	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.3	0.1	0.0	0.0	0.1	0.2	1.1	1.0	0.3	0.2	1.1
28-Sep	0.2	0.3	0.2	0.4	Z	1.9	0.6	0.4	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	1.9
29-Sep	0.7	1.2	1.7	2.5	1.8	Z	1.5	1.0	0.3	0.4	0.4	0.5	0.3	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.6	2.5
30-Sep	Z	0.1	0.2	1.2	0.0	0.0	0.0	1.0	1.1	2.8	1.4	0.6	1.1	1.3	1.2	0.0	0.0	1.6	2.4	3.7	19.3	19.4	13.7	19.0	4.0	19.4
	3.0	2.7	2.9	3.0	3.1	2.9	4.0	3.8	3.4	2.7	2.3	1.4	1.3	1.2	1.0	1.0	1.2	1.4	1.9	2.4	3.5	3.8	2.7	2.9	Diurnal Average	
	11.4	13.0	13.3	13.7	15.6	17.3	23.9	19.1	18.1	13.2	13.3	7.7	5.4	4.2	5.8	4.1	5.2	7.5	8.0	12.3	19.3	19.4	13.7	19.0	Diurnal Maximum	

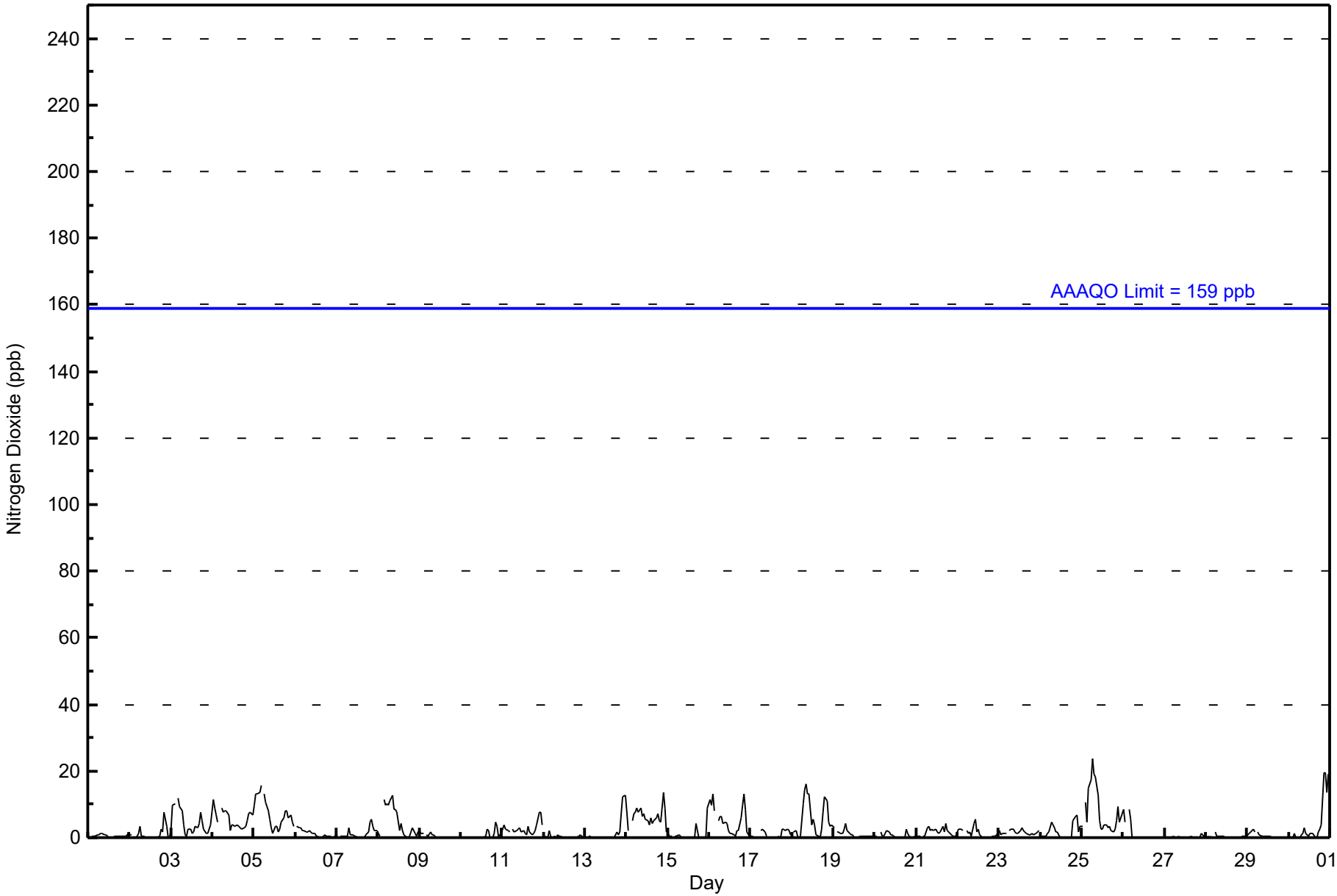
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Buffalo Viewpoint - September 2026



Nitrogen Dioxide (NO_2) - ppb
Buffalo Viewpoint - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	683	99.85	99.85
21 - 40	1	0.15	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: 684

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Buffalo Viewpoint - September 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	66	22	2	0	10	21	60	132	60	36	44	45	61	42	46	31	678
21 - 40	0	1	0	0	0	0	0	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	66	23	2	0	10	21	60	132	60	36	44	45	61	42	46	31	679

Total Number of Valid Hours: 679

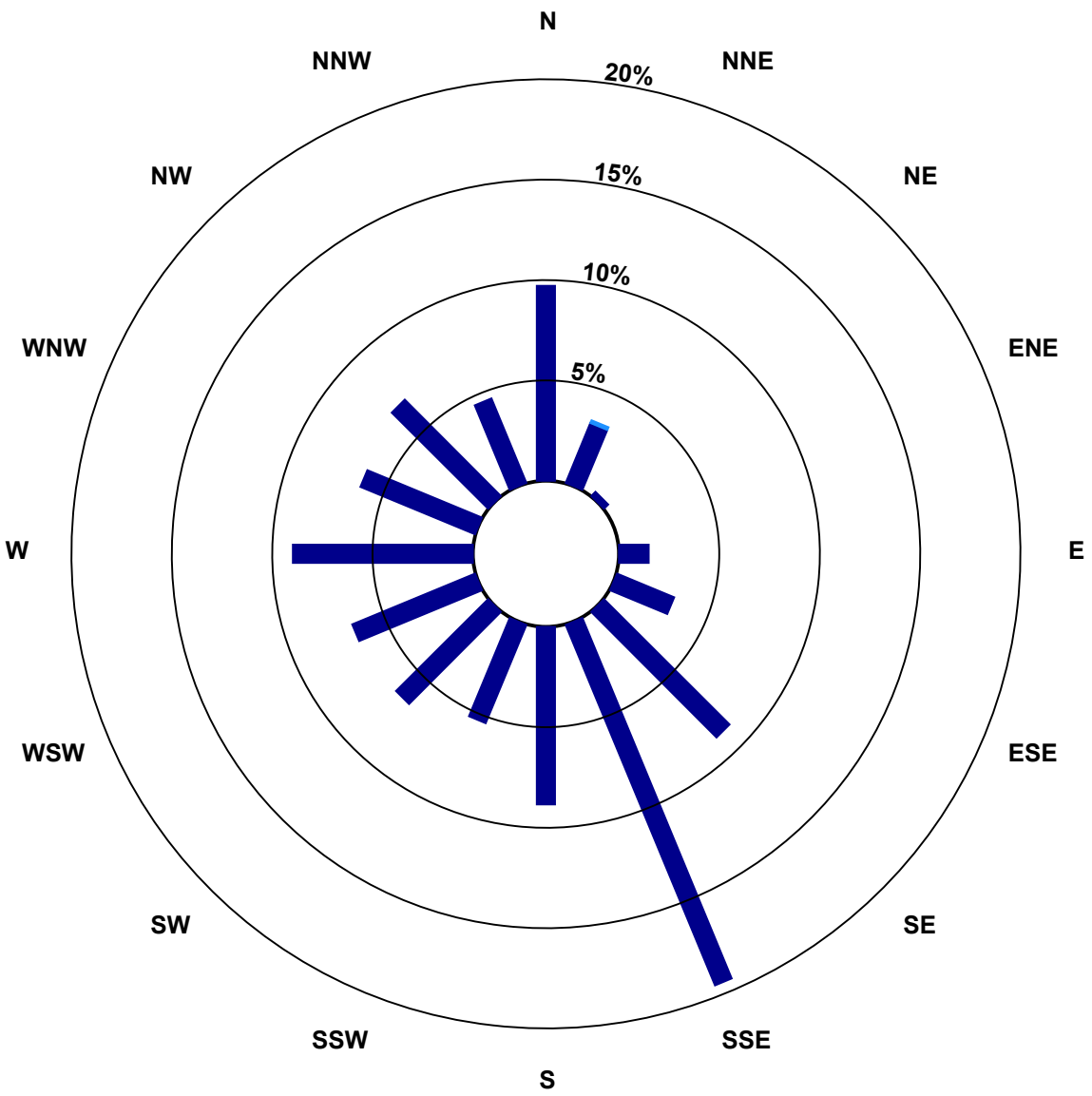
Total Number of Hours: 720

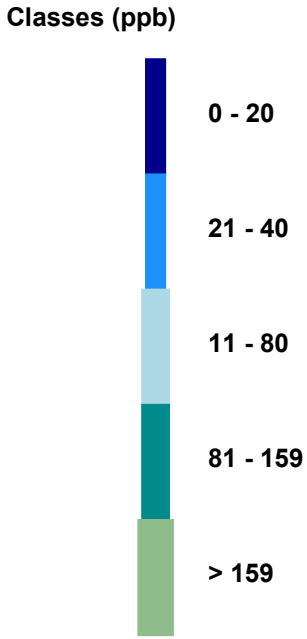
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Buffalo Viewpoint





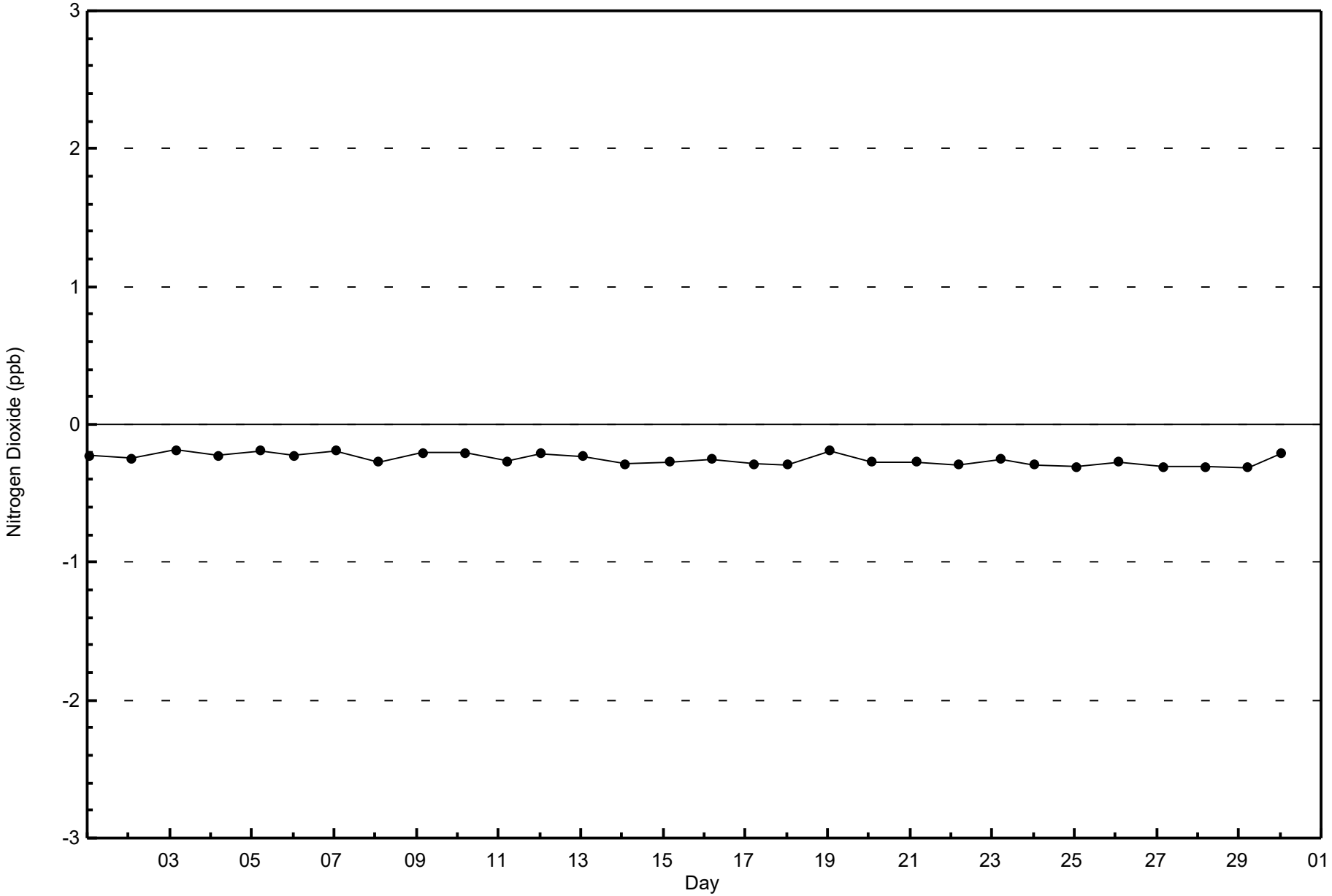
Total Number of Valid Hours: 679

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Buffalo Viewpoint - September 2026

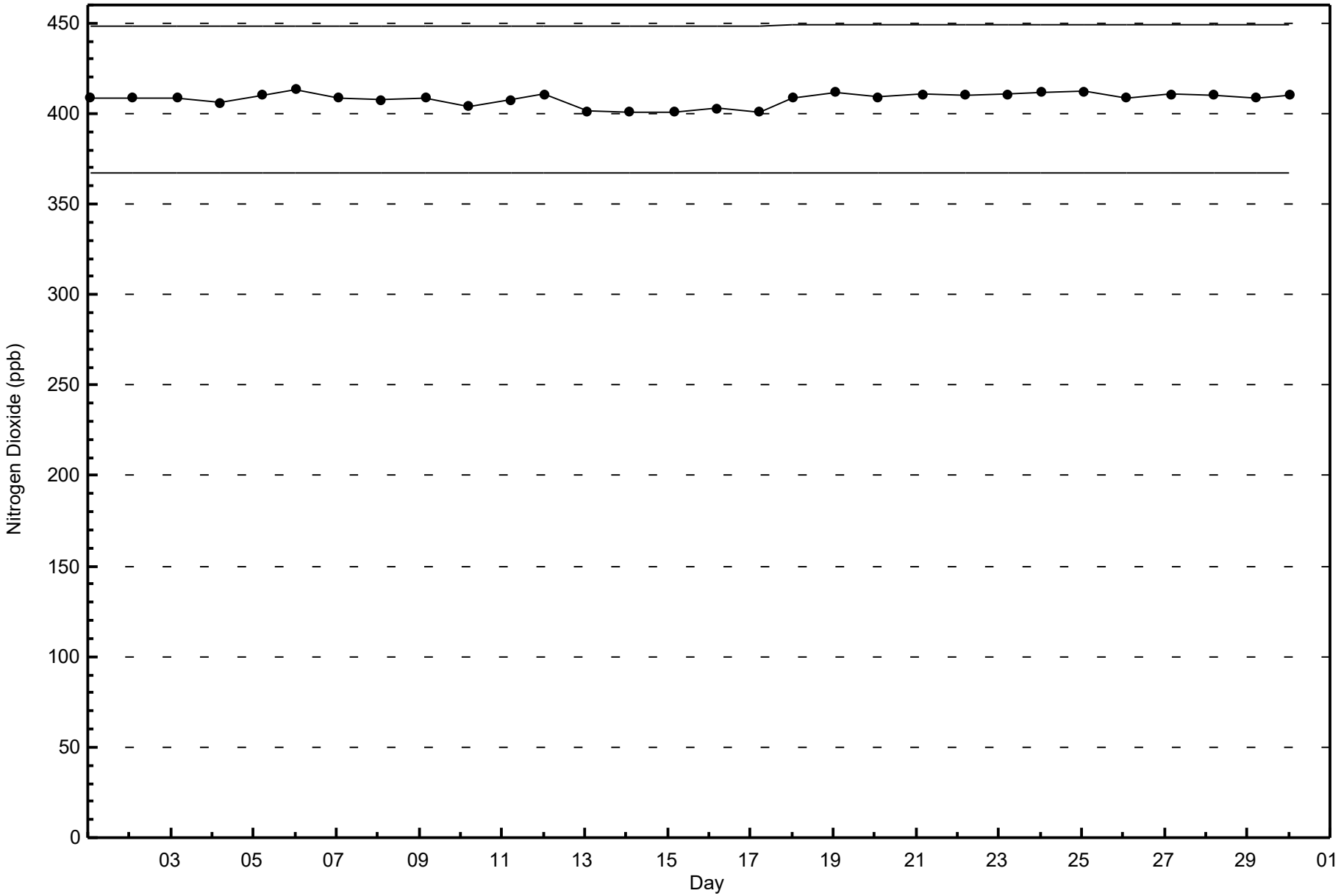


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Buffalo Viewpoint - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Buffalo Viewpoint - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 140.3 ppb on Sep 25 07:00 Maximum Daily Average: 18.2 ppb on Sep 25

Minimum Value: 0.0 ppb on Sep 2 12:00 Minimum Daily Average: 0.2 ppb on Sep 27
Maximum Diurnal Average: 9.2 ppb at hour 7 Minimum Diurnal Average: 1.1 ppb at hour 16
Monthly Average: 3.40 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.2 Median = 1.0 Q_3 = 3.2 P_{90} = 8.4 P_{99} = 35.6

Hours in Service:	720
Hours of Data:	684
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-Sep	1.3	Z	0.4	0.6	0.4	0.8	0.9	1.1	1.2	0.8	0.8	0.4	0.1	0.1	0.1	0.3	0.3	0.5	0.5	0.3	0.3	0.4	0.6	1.1	0.6	1.3
2-Sep	0.7	0.9	Z	0.2	0.3	1.4	3.4	0.6	0.3	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.4	1.6	7.5	3.3	0.0	0.0	1.0	7.5
3-Sep	2.4	9.9	10.3	Z	12.0	9.3	8.8	4.5	0.9	0.5	2.4	2.7	1.2	1.6	3.2	2.8	4.6	8.0	5.0	2.5	1.2	1.2	2.6	3.7	4.4	12.0
4-Sep	11.3	8.9	6.7	4.5	Z	9.0	9.4	14.3	27.4	12.1	3.2	6.1	6.6	4.9	4.9	3.9	3.0	2.6	3.0	3.2	5.0	7.3	7.8	6.8	7.5	27.4
5-Sep	9.6	13.0	13.5	14.3	15.9	Z	25.0	20.3	15.2	10.3	4.4	1.3	4.8	4.6	1.9	3.1	5.5	6.9	8.3	8.2	5.8	6.7	4.6	3.4	9.0	25.0
6-Sep	Z	3.6	3.0	2.8	2.1	2.1	1.8	1.8	2.9	2.6	1.5	1.3	0.3	0.3	0.2	0.2	0.5	0.7	0.5	0.6	0.4	0.1	0.1	0.6	1.3	3.6
7-Sep	0.8	Z	0.3	0.5	0.3	0.5	0.5	4.8	0.9	1.1	0.5	0.4	0.2	0.2	0.1	0.0	0.1	0.7	1.9	4.5	5.5	3.6	2.3	2.0	1.4	5.5
8-Sep	1.3	0.5	Z	23.8	18.5	18.9	22.8	39.6	37.7	15.1	14.2	12.4	2.8	5.5	2.4	0.8	0.4	0.1	0.6	1.7	3.1	1.3	0.6	1.7	9.8	39.6
9-Sep	2.1	1.3	1.2	Z	1.0	0.5	1.5	1.0	1.0	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	0.4	2.1
10-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.3	2.4	2.2	0.1	0.0	1.1	4.7	3.6	0.4	1.2	0.7	4.7
11-Sep	2.5	3.7	2.6	2.0	1.5	Z	2.4	1.7	2.3	3.1	3.8	1.7	3.2	1.5	0.9	4.0	1.5	0.9	1.3	2.0	4.4	7.5	7.7	3.9	2.9	7.7
12-Sep	Z	0.3	0.2	2.2	0.4	0.0	0.3	0.2	0.9	0.4	0.4	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.5	1.0	0.3	0.1	0.3	2.2
13-Sep	0.0	Z	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.9	1.5	7.4	13.9	19.1	2.0	19.1
14-Sep	7.9	2.2	Z	4.9	7.2	7.6	9.4	8.4	10.7	8.3	9.1	7.1	6.5	4.7	6.7	5.0	5.9	6.3	7.4	5.2	4.8	14.8	10.2	1.8	7.0	14.8
15-Sep	1.8	0.3	0.3	Z	0.3	0.5	0.9	0.3	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	5.0	2.1	0.2	0.0	0.0	0.0	0.0	10.7	1.0	10.7
16-Sep	13.4	10.0	16.2	8.0	Z	6.2	14.4	10.6	9.0	7.3	5.7	3.1	2.1	1.5	0.8	0.4	2.4	2.3	5.8	9.9	13.0	8.6	1.5	0.4	6.6	16.2
17-Sep	0.4	0.3	0.2	0.1	0.2	Z	2.1	3.1	2.3	0.6	C	C	C	C	C	C	0.3	0.2	2.4	2.7	2.1	2.6	2.0	1.0	--	3.1
18-Sep	Z	1.9	2.1	0.3	0.1	0.5	14.2	35.1	40.0	27.8	28.2	6.3	8.8	5.7	1.0	0.3	0.1	2.5	7.5	12.3	11.1	4.8	3.3	3.7	9.5	40.0
19-Sep	2.9	Z	1.5	1.5	1.2	1.1	2.4	5.2	2.7	1.4	1.0	0.7	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.4	0.3	0.4	0.3	0.4	1.1	5.2
20-Sep	0.4	0.6	Z	1.9	0.6	0.4	1.3	2.4	1.7	0.9	0.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	2.4	1.2	0.4	0.1	0.2	0.4	0.7	2.4
21-Sep	0.6	0.6	0.6	Z	0.6	0.5	3.0	3.9	2.9	3.7	2.5	2.9	1.7	1.2	1.8	3.3	1.5	4.1	2.2	1.7	0.8	0.6	0.6	0.5	1.8	4.1
22-Sep	2.4	2.7	2.4	2.3	Z	2.1	1.3	1.6	0.5	6.7	7.7	2.2	3.1	0.7	0.2	0.2	0.1	0.1	0.1	0.2	0.4	0.5	0.6	1.1	1.7	7.7
23-Sep	2.0	1.0	1.1	1.1	1.2	Z	2.0	2.9	3.5	2.3	1.5	1.3	2.7	3.8	2.3	1.5	1.2	0.9	1.0	1.1	0.8	1.2	1.9	2.0	1.7	3.8
24-Sep	Z	0.3	0.3	0.3	1.2	1.6	4.6	5.3	4.8	1.9	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	6.5	6.8	1.9	3.3	2.0	6.8
25-Sep	3.3	Z	11.5	4.9	26.8	44.9	140.3	59.5	42.8	24.7	5.4	2.8	3.0	4.4	4.3	3.0	3.2	2.2	1.6	2.7	5.0	9.4	4.8	7.2	18.2	140.3
26-Sep	8.4	4.8	Z	8.4	5.7	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	0.0	0.0	1.2	8.4
27-Sep	0.0	0.0	0.0	Z	0.1	0.4	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.3	0.1	0.0	0.0	0.1	0.2	1.1	1.0	0.3	0.2	1.1
28-Sep	0.2	0.3	0.2	0.4	Z	1.9	0.6	0.4	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	1.9
29-Sep	0.7	1.2	1.7	2.5	1.8	Z	1.5	1.0	0.3	0.4	0.4	0.6	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.6	2.5
30-Sep	Z	0.1	0.2	1.2	0.0	0.0	0.0	1.0	1.1	3.3	1.7	0.6	1.2	1.3	1.2	0.0	0.0	1.6	2.4	3.7	21.6	28.4	19.4	24.2	5.0	28.4
	3.1	2.7	3.1	3.6	4.0	4.4	9.2	7.7	7.1	4.6	3.4	1.9	1.7	1.5	1.1	1.1	1.3	1.5	2.0	2.4	3.6	4.1	3.0	3.4	Diurnal Average	
	13.4	13.0	16.2	23.8	26.8	44.9	140.3	59.5	42.8	27.8	28.2	12.4	8.8	5.7	6.7	5.0	5.9	8.0	8.3	12.3	21.6	28.4	19.4	24.2	Diurnal Maximum	

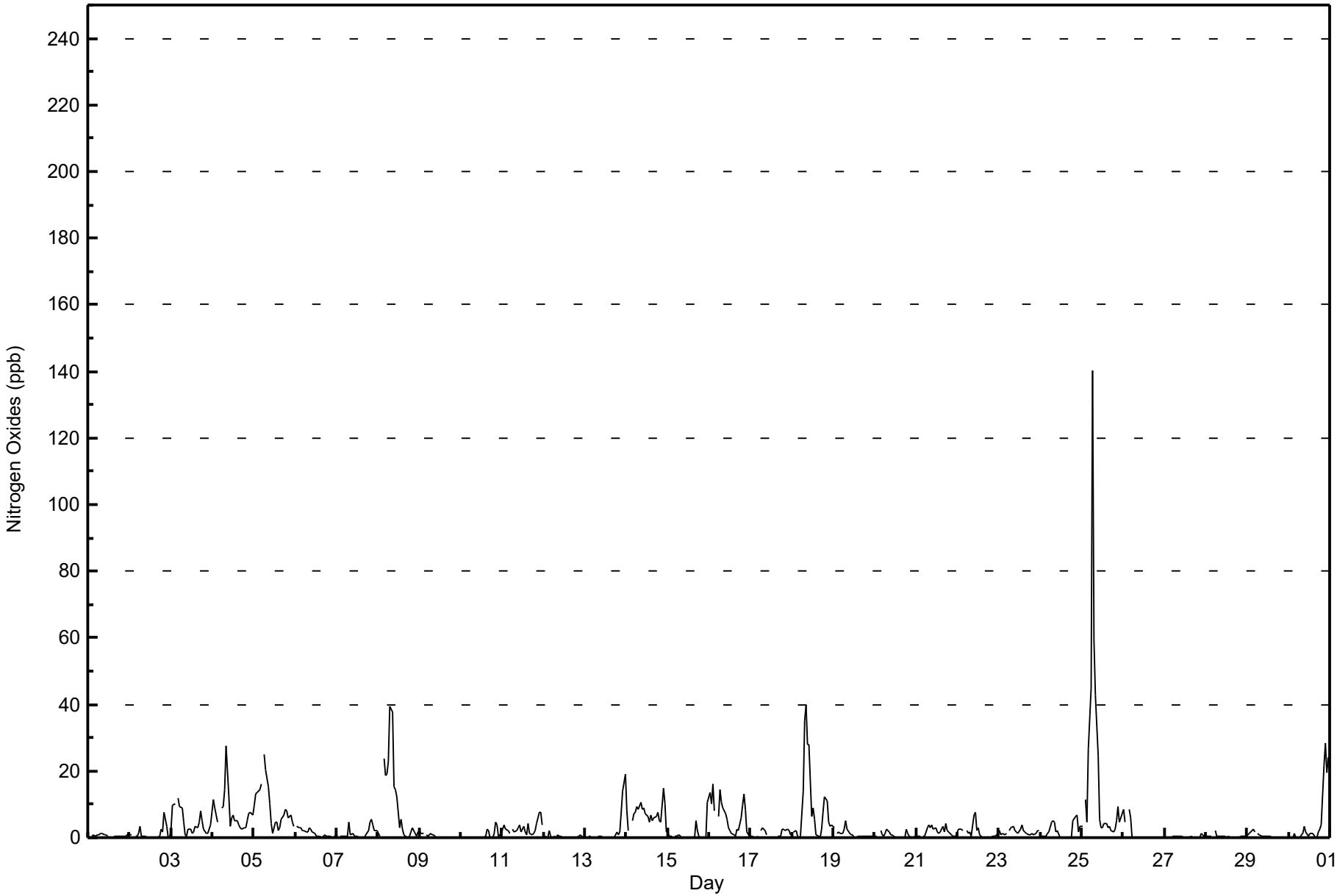
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Buffalo Viewpoint - September 2026



Nitrogen Oxides (NO_X) - ppb
Buffalo Viewpoint - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	665	97.22	97.22
21 - 40	15	2.19	99.42
11 - 80	3	0.44	99.85
81 - 159	1	0.15	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Buffalo Viewpoint - September 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	61	20	2	0	10	21	60	132	60	36	44	45	61	39	43	27	661
21 - 40	3	1	0	0	0	0	0	0	0	0	0	0	0	3	3	4	14
11 - 80	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
81 - 159	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	66	23	2	0	10	21	60	132	60	36	44	45	61	42	46	31	679

Total Number of Valid Hours: 679

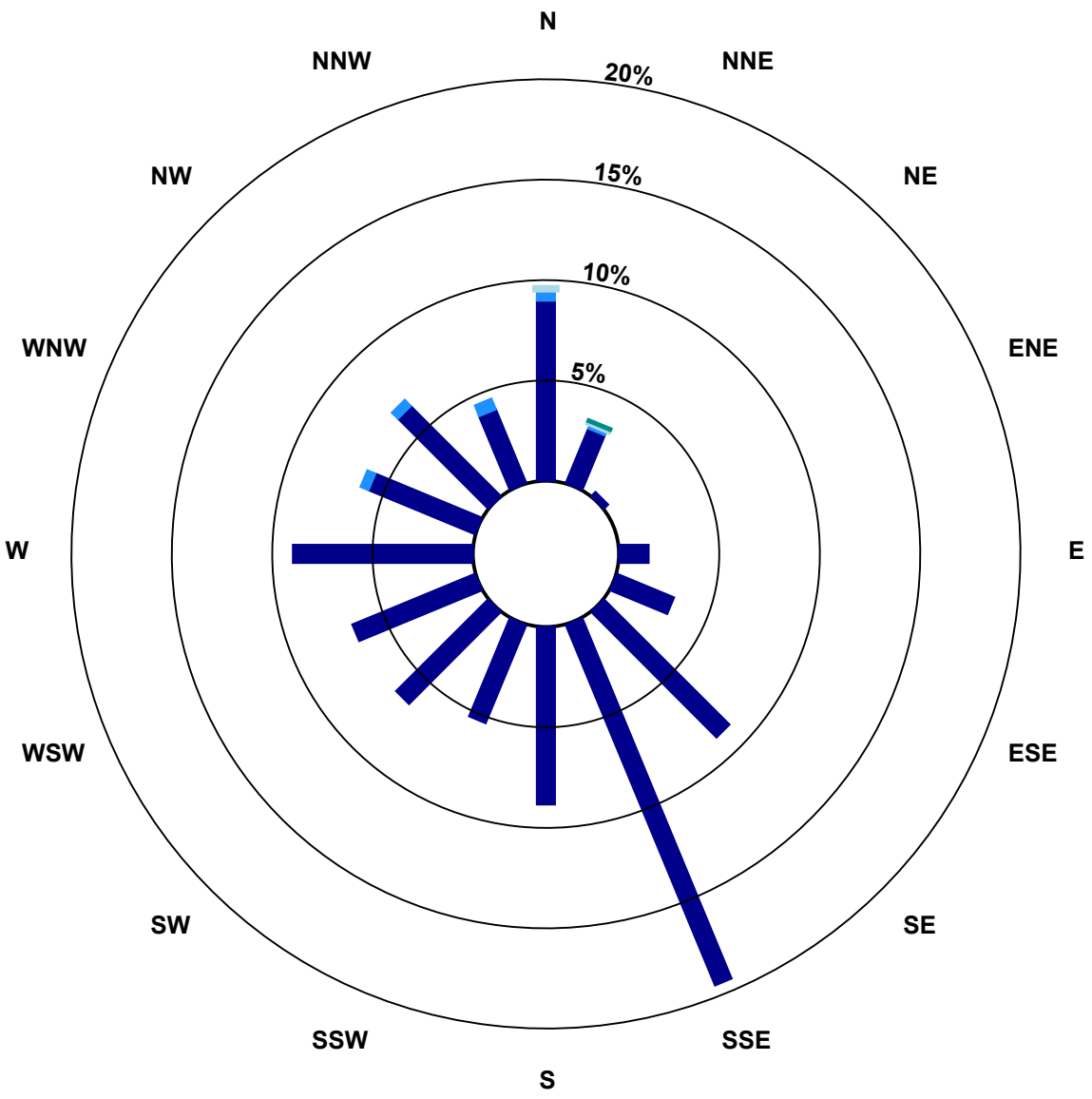
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Buffalo Viewpoint



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

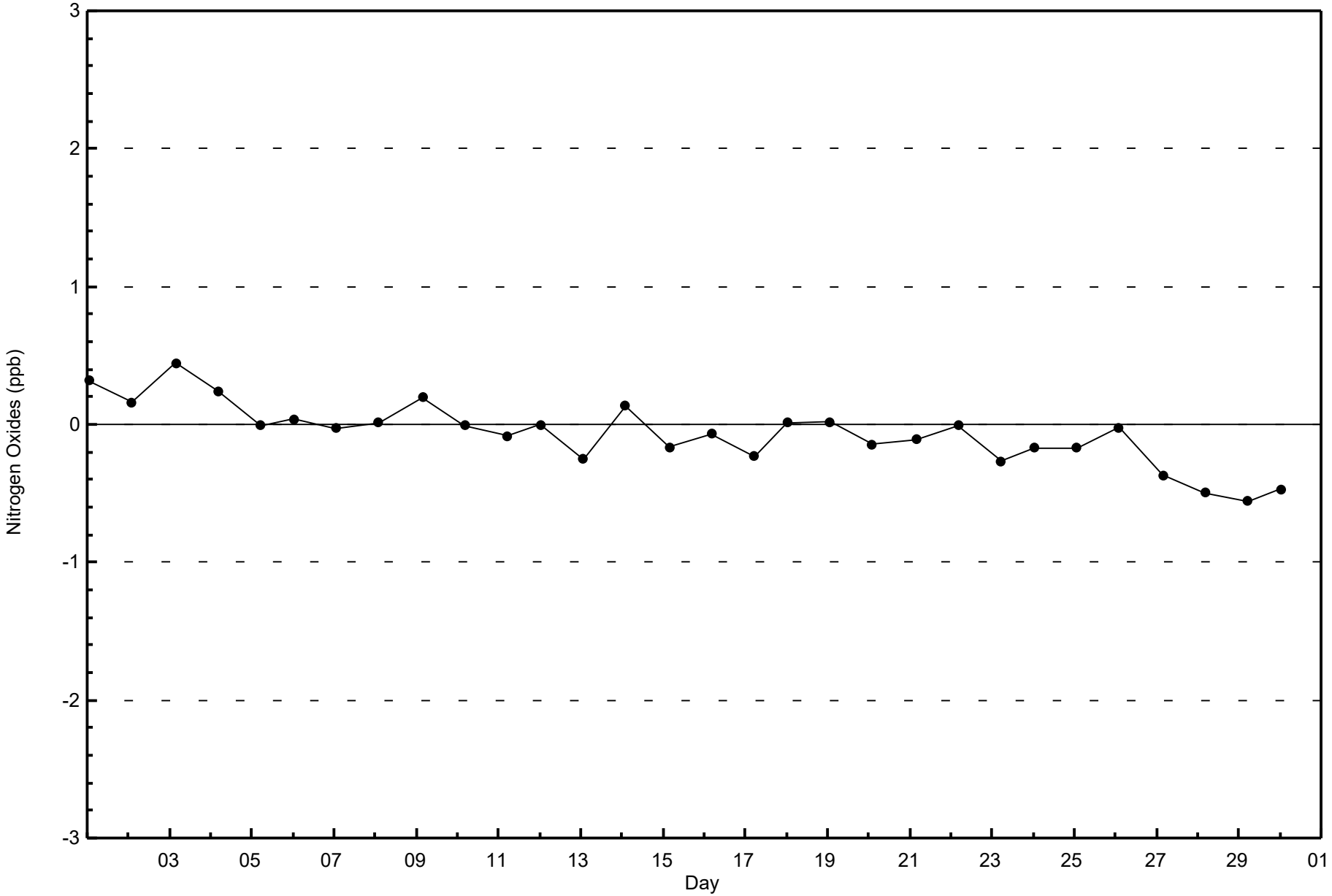
Total Number of Valid Hours: 679

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Buffalo Viewpoint - September 2026

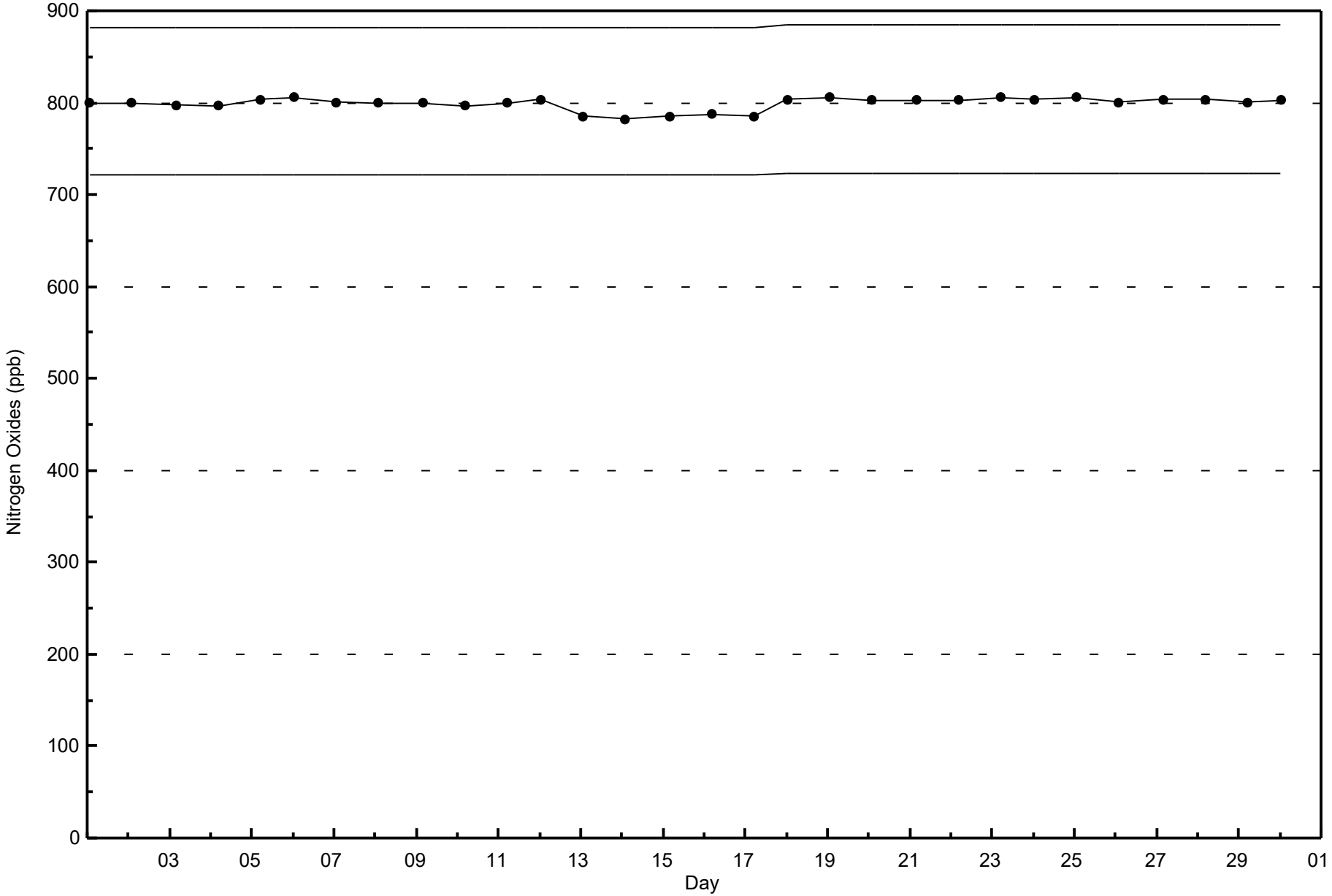


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Buffalo Viewpoint - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Buffalo Viewpoint - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 43.5 ppb on Sep 19 17:00
Maximum Daily Average: 27.9 ppb on Sep 20

Minimum Value: 1.1 ppb on Sep 8 05:00
Minimum Daily Average: 9.6 ppb on Sep 4
Maximum Diurnal Average: 28.8 ppb at hour 16
Minimum Diurnal Average: 11.4 ppb at hour 7
Monthly Average: 19.76 ppb
Percentiles: P_1 = 1.8 P_{10} = 8.1 Q_1 = 13.0 Median = 19.6 Q_3 = 26.3 P_{90} = 31.6 P_{99} = 40.2

Hours in Service:	720
Hours of Data:	685
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-Sep	Z	7.3	9.4	8.1	7.3	8.4	9.5	10.5	14.4	18.8	22.5	27.0	31.9	33.9	36.6	40.1	40.5	40.7	35.9	29.5	25.9	24.5	24.0	21.7	23.0	40.7
2-Sep	20.6	Z	18.4	17.3	16.7	15.3	14.8	18.5	21.8	C	C	C	C	C	35.4	34.0	33.0	32.5	29.9	28.7	22.7	26.8	28.3	26.2	24.5	35.4
3-Sep	21.3	12.8	Z	9.6	6.4	8.0	9.3	11.9	14.3	15.3	14.6	15.0	16.1	15.8	13.4	12.8	13.4	11.8	8.3	9.8	17.7	17.3	15.9	13.7	13.2	21.3
4-Sep	6.9	10.1	12.0	Z	5.5	4.7	3.2	5.0	5.9	4.9	8.5	8.2	8.8	11.2	12.4	15.0	16.0	16.0	14.0	12.9	11.2	9.5	9.1	9.8	9.6	16.0
5-Sep	6.7	4.4	4.7	5.9	Z	1.5	2.8	6.7	10.8	14.1	18.6	24.2	24.8	27.3	28.5	28.9	28.6	27.4	23.6	21.3	15.9	8.5	5.5	3.3	15.0	28.9
6-Sep	3.4	5.3	7.6	8.2	10.7	Z	9.2	9.6	8.8	8.6	11.8	15.4	20.8	21.1	25.2	25.8	24.7	24.4	21.4	20.1	18.7	15.6	13.4	13.8	14.9	25.8
7-Sep	Z	12.5	11.9	10.1	10.0	8.9	8.6	5.1	7.4	9.6	16.8	20.8	22.9	24.9	25.9	24.5	22.8	23.5	21.2	13.0	9.7	11.1	9.5	7.7	14.7	25.9
8-Sep	4.7	Z	2.5	1.2	1.1	1.1	2.2	2.6	5.1	12.3	15.2	20.2	28.5	29.3	31.2	31.1	30.3	27.3	23.1	23.6	21.7	17.8	18.5	14.1	15.9	31.2
9-Sep	12.9	11.4	Z	8.2	7.8	7.5	6.5	7.6	8.2	11.3	18.7	20.6	25.3	30.4	31.8	31.2	30.0	30.0	29.7	30.9	28.7	28.8	26.6	26.6	20.5	31.8
10-Sep	25.4	24.8	26.5	Z	25.6	24.1	21.6	20.1	20.2	21.0	21.0	17.3	15.6	14.4	15.0	16.0	15.9	16.7	14.4	14.1	12.9	15.0	18.0	17.9	18.8	26.5
11-Sep	16.3	14.7	14.3	14.9	Z	15.6	14.2	14.9	14.5	14.9	16.7	18.5	18.3	19.2	22.3	24.2	27.8	30.1	28.4	24.3	19.5	15.0	13.9	15.9	18.6	30.1
12-Sep	14.6	17.2	15.4	13.1	14.6	Z	13.1	11.7	11.2	14.1	19.9	24.8	28.3	29.6	30.4	31.4	30.4	28.7	24.4	21.0	18.9	17.2	19.0	20.8	20.4	31.4
13-Sep	Z	20.3	21.7	22.6	22.1	21.6	20.3	18.7	19.8	24.4	27.3	29.9	31.5	32.8	33.9	34.2	35.4	30.8	20.1	17.0	14.6	7.9	2.5	1.7	22.2	35.4
14-Sep	8.3	Z	23.7	16.7	11.2	10.0	8.6	10.6	9.9	12.3	12.4	14.9	17.0	21.9	16.9	17.2	16.8	16.9	12.9	13.5	11.0	4.0	9.2	14.4	13.5	23.7
15-Sep	13.9	14.2	Z	12.9	11.6	11.4	10.0	10.0	11.5	13.9	18.9	22.8	26.3	25.5	25.5	24.4	16.8	16.5	19.1	19.2	19.1	18.7	15.8	5.8	16.7	26.3
16-Sep	2.2	2.8	3.5	Z	12.5	6.4	2.2	3.9	6.2	15.6	19.9	19.8	20.0	21.3	22.3	23.4	21.4	18.4	15.9	9.5	7.3	11.0	18.0	21.6	13.3	23.4
17-Sep	20.1	19.6	20.6	19.8	Z	16.6	14.1	13.0	15.6	18.0	21.2	23.0	23.1	21.6	20.8	22.5	20.7	18.0	12.2	9.5	9.7	8.0	4.8	5.3	16.4	23.1
18-Sep	5.7	4.7	10.7	16.3	19.1	Z	5.3	4.5	6.6	10.5	11.5	21.5	21.1	24.1	27.9	30.0	30.1	27.2	20.6	11.4	8.6	13.2	14.6	15.4	15.7	30.1
19-Sep	Z	14.5	13.6	12.2	14.0	15.8	13.6	10.4	17.4	23.1	25.4	29.2	37.5	40.1	40.8	41.0	43.5	41.6	37.7	33.0	30.7	29.7	28.9	28.2	27.1	43.5
20-Sep	28.9	Z	28.1	22.1	24.3	21.6	17.0	14.1	19.2	22.1	25.1	32.0	38.6	38.4	37.8	37.2	38.0	36.4	29.4	23.4	26.2	27.7	26.3	27.8	27.9	38.6
21-Sep	28.2	28.9	Z	23.3	16.0	13.5	10.1	10.9	15.3	18.5	23.1	23.9	30.7	37.0	38.8	39.1	41.4	34.4	32.5	33.5	31.7	27.7	32.7	29.0	27.0	41.4
22-Sep	23.1	20.3	15.9	Z	11.3	10.6	10.3	9.3	15.8	15.4	21.7	29.5	30.1	36.0	40.0	39.7	37.6	36.0	35.1	34.4	30.8	28.1	24.7	22.4	25.1	40.0
23-Sep	14.8	15.4	10.2	17.3	Z	12.6	11.8	11.4	13.0	19.3	22.4	24.9	26.0	27.6	31.3	32.4	32.2	30.8	27.4	25.3	23.1	19.7	18.0	16.7	21.0	32.4
24-Sep	14.5	21.6	19.7	22.9	15.3	Z	10.0	9.7	12.1	19.9	22.3	30.3	30.9	35.0	37.3	36.2	35.2	34.3	31.0	22.6	16.7	14.1	17.9	16.6	22.9	37.3
25-Sep	Z	19.4	8.6	12.1	2.0	1.9	1.9	1.7	2.0	9.4	19.0	22.6	21.3	19.5	18.0	20.5	20.9	22.2	21.5	19.6	17.7	14.7	18.3	16.2	14.4	22.6
26-Sep	15.4	Z	11.5	12.3	15.0	16.3	20.4	23.9	24.9	25.1	25.3	27.3	28.1	27.8	28.9	29.5	29.7	30.3	28.7	29.2	27.9	26.1	26.8	22.2	24.0	30.3
27-Sep	20.6	19.9	Z	18.0	17.5	16.3	16.0	16.3	17.7	19.3	21.3	24.1	24.7	27.1	27.7	28.5	28.6	26.2	26.4	24.5	23.9	20.8	20.1	24.3	22.2	28.6
28-Sep	26.2	26.0	25.7	Z	16.5	15.3	16.6	17.4	18.2	24.3	27.9	31.4	34.0	34.7	34.4	34.5	34.9	34.7	31.9	32.0	31.3	29.9	26.6	26.7	27.4	34.9
29-Sep	25.4	24.5	24.4	22.9	Z	19.5	17.1	18.0	28.0	25.6	24.2	23.9	24.7	30.4	32.9	33.9	33.4	34.7	33.6	31.4	30.7	30.1	31.5	31.9	27.5	34.7
30-Sep	31.6	28.9	23.0	21.8	21.9	Z	21.2	20.2	21.0	21.0	23.9	25.6	27.1	26.6	25.2	24.2	24.7	24.3	22.5	19.5	3.8	2.6	7.0	1.6	20.4	31.6
	16.5	16.1	15.4	14.8	13.4	12.2	11.4	11.6	13.9	16.6	19.9	23.1	25.3	27.1	28.3	28.8	28.5	27.4	24.4	21.9	19.6	18.0	18.2	17.3	Diurnal Average	
	31.6	28.9	28.1	23.3	25.6	24.1	21.6	23.9	28.0	25.6	27.9	32.0	38.6	40.1	40.8	41.0	43.5	41.6	37.7	34.4	31.7	30.1	32.7	31.9	Diurnal Maximum	

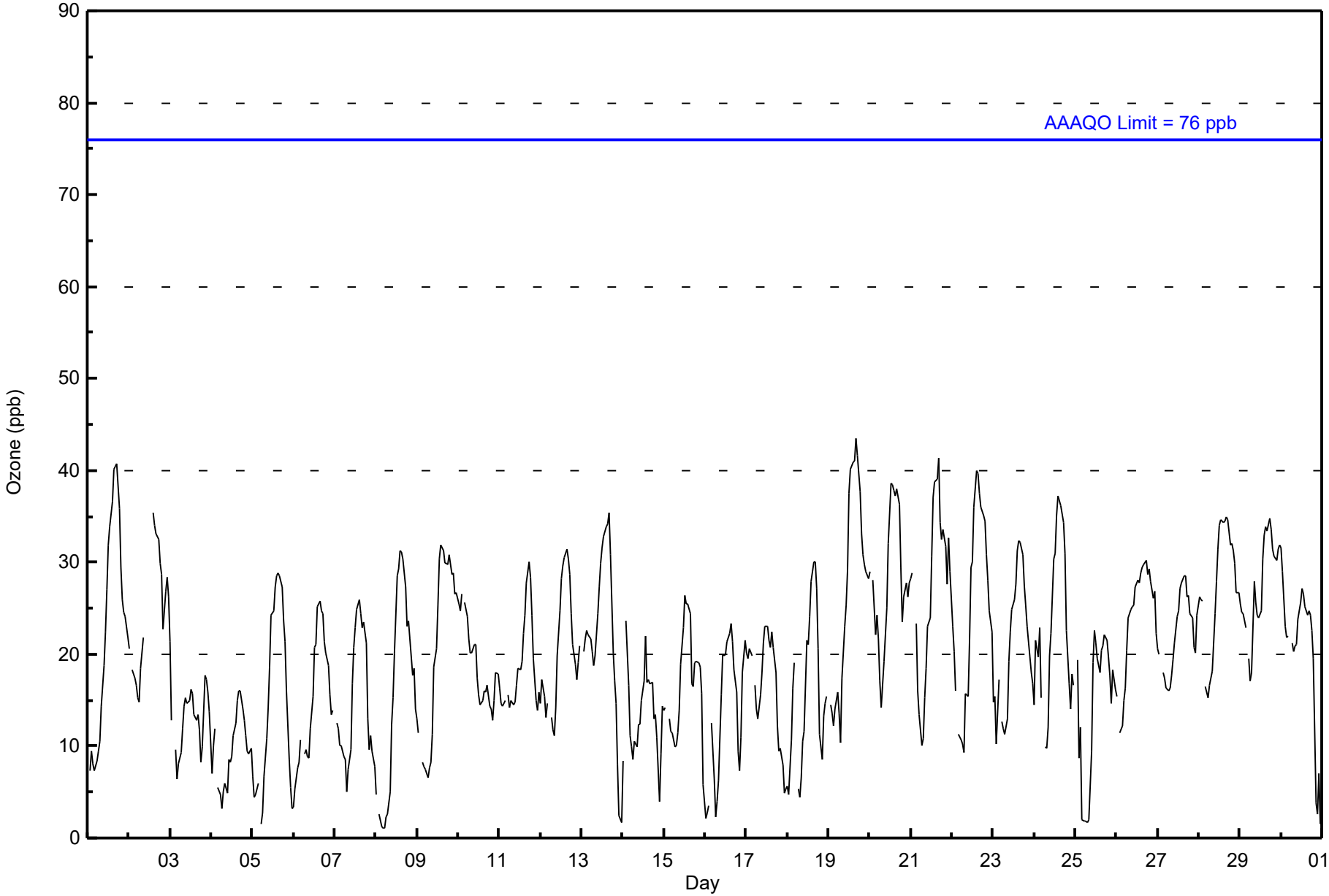
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Buffalo Viewpoint - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	365	53.28	53.28
21 - 50	320	46.72	100.00
51 - 82	0	0.00	100.00
> 83	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Ozone (O_3) - ppb

Buffalo Viewpoint - September 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	62	14	2	1	10	10	24	76	41	19	6	13	18	20	28	20	364
21 - 50	4	9	0	0	0	11	36	46	24	22	37	35	39	24	17	12	316
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	66	23	2	1	10	21	60	122	65	41	43	48	57	44	45	32	680

Total Number of Valid Hours: 680

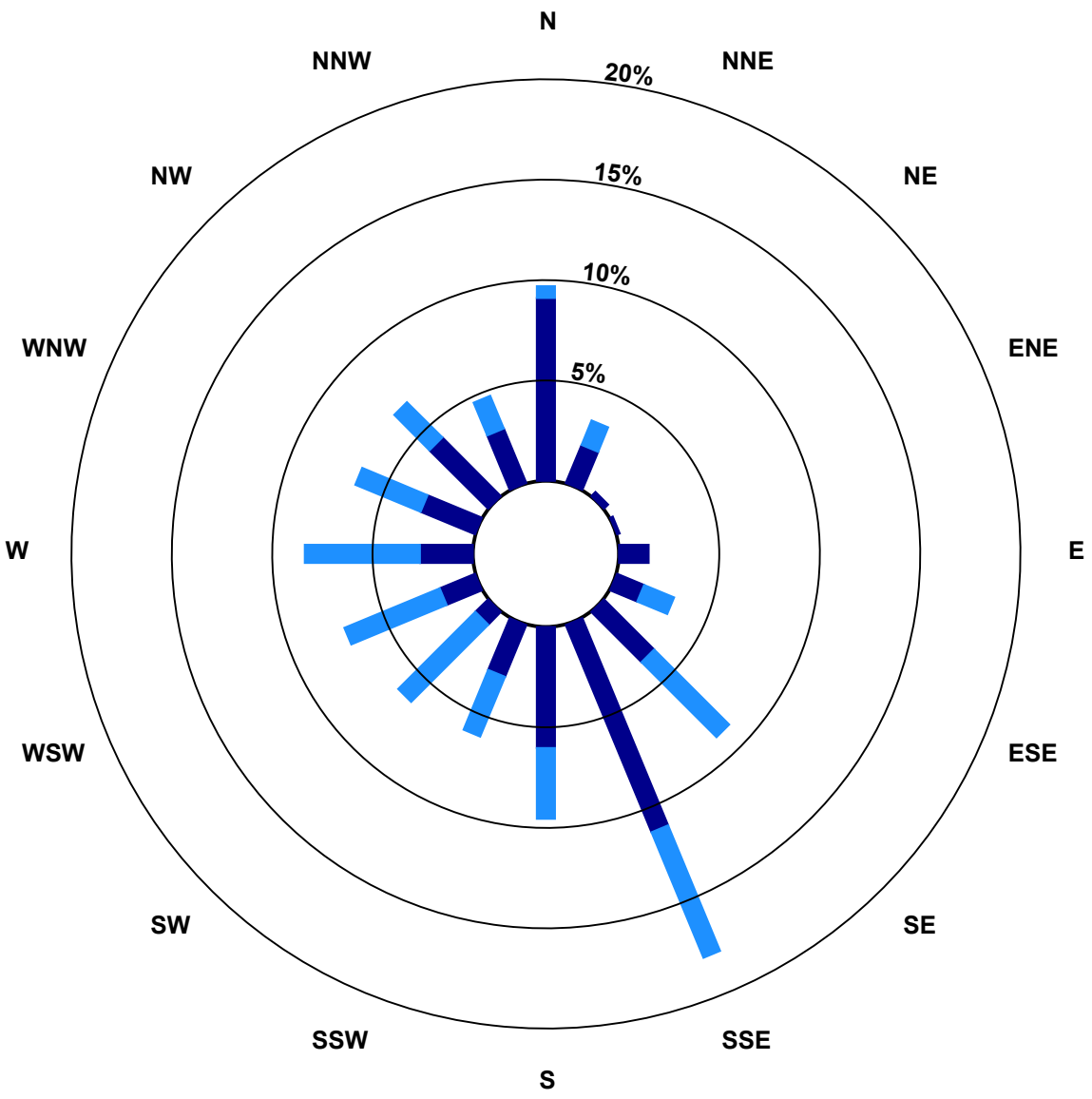
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Ozone (O_3) - ppb

Buffalo Viewpoint



Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

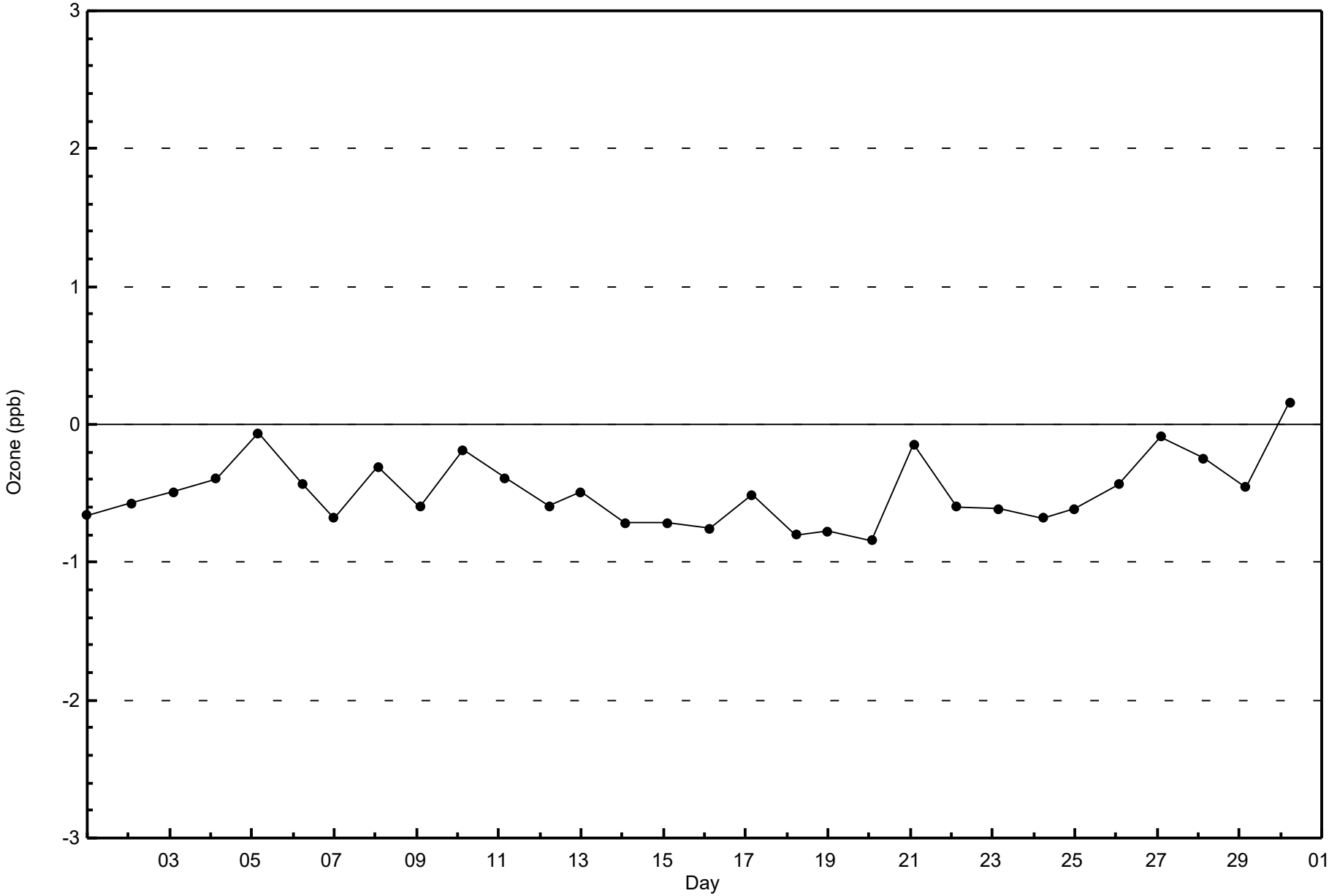
Total Number of Valid Hours: 680

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Buffalo Viewpoint - September 2026

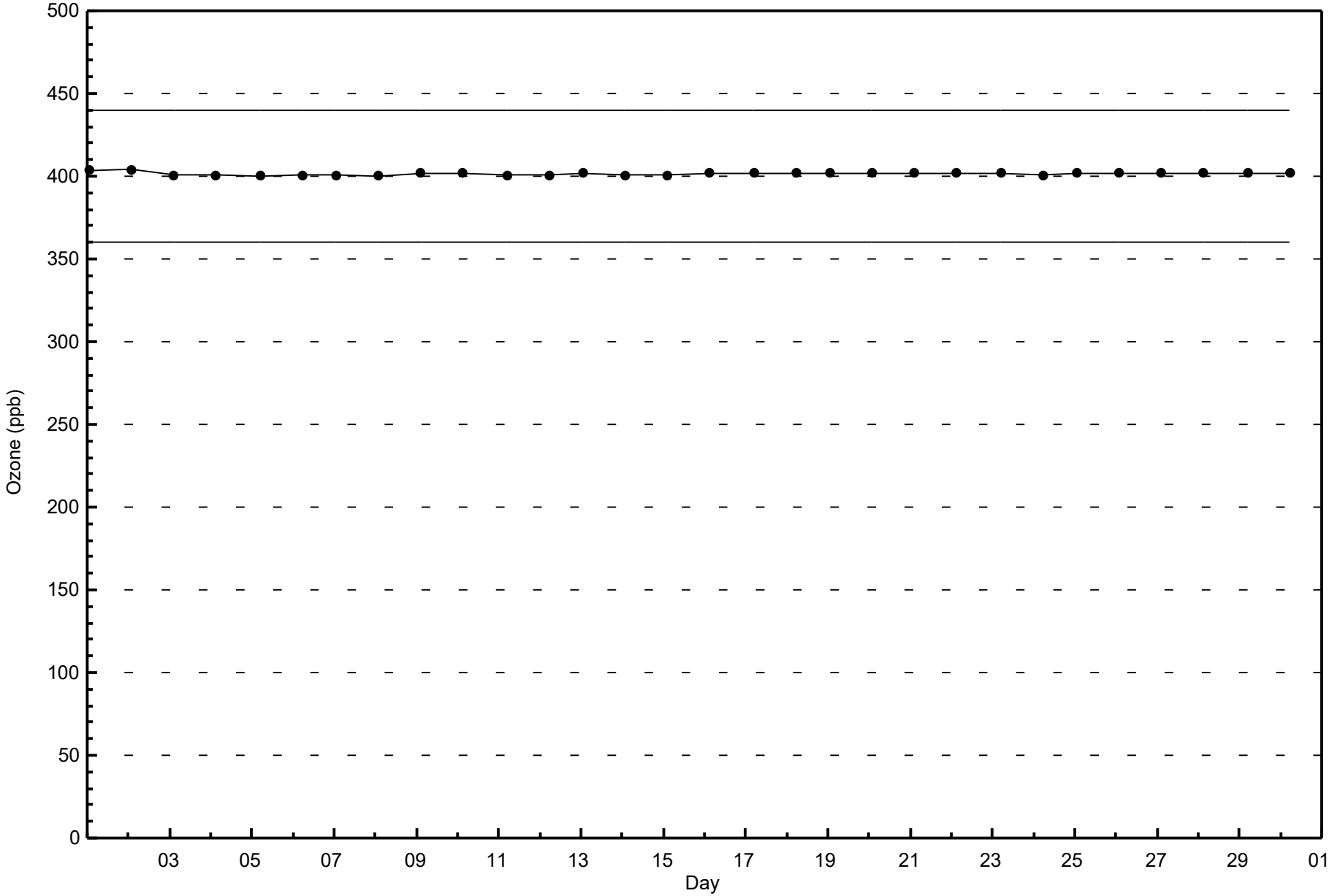


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Buffalo Viewpoint - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Buffalo Viewpoint - September 2026

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

Maximum Value: 24.8 $\mu g/m^3$ on Sep 10 11:00

Maximum Daily Average: 9.3 $\mu g/m^3$ on Sep 8

Minimum Value: 0.1 $\mu g/m^3$ on Sep 30 06:00

Minimum Daily Average: 1.0 $\mu g/m^3$ on Sep 30

Maximum Diurnal Average: 5.7 $\mu g/m^3$ at hour 7

Minimum Diurnal Average: 3.6 $\mu g/m^3$ at hour 24

Monthly Average: 4.39 $\mu g/m^3$

Percentiles: P_1 = 0.2 P_{10} = 1.4 Q_1 = 2.3 Median = 3.4 Q_3 = 5.6 P_{90} = 8.4 P_{99} = 16.1

Hours in Service:	720
Hours of Data:	719
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-Sep	4.2	3.6	3.1	3.0	4.2	6.6	5.5	4.6	3.7	3.6	5.2	3.7	3.4	3.7	3.6	4.5	5.1	5.5	4.3	4.2	4.2	3.3	3.3	3.1	4.1	6.6
2-Sep	2.9	2.9	3.5	3.9	5.1	6.9	8.9	6.9	6.2	7.4	7.4	6.8	4.9	4.3	4.5	5.0	7.0	11.0	12.6	8.9	13.7	12.4	6.0	5.9	6.9	13.7
3-Sep	6.4	8.8	7.4	7.3	7.8	7.3	6.3	6.1	5.6	5.0	6.1	5.6	4.5	4.5	4.8	4.5	4.4	4.8	5.0	4.6	5.1	5.3	5.7	5.8	5.8	8.8
4-Sep	7.8	6.3	5.9	5.9	7.0	7.2	6.8	6.8	6.9	3.9	2.8	4.6	6.4	11.4	4.9	4.5	4.7	3.3	2.7	2.6	2.6	2.9	2.6	2.6	5.1	11.4
5-Sep	2.9	3.0	3.3	3.7	6.5	6.4	12.5	8.3	5.8	5.5	5.8	8.9	12.5	10.5	7.1	9.1	9.9	14.8	16.1	13.7	10.7	11.0	11.7	11.1	8.8	16.1
6-Sep	12.3	12.4	13.1	11.0	9.8	8.9	8.8	6.2	5.3	4.9	3.7	3.1	2.4	2.4	2.6	2.6	2.7	3.6	3.8	3.4	3.0	2.7	2.4	2.4	5.6	13.1
7-Sep	2.5	2.5	2.4	2.5	2.5	3.4	3.0	3.1	2.7	2.8	2.9	3.0	3.3	3.3	3.8	4.2	4.0	4.6	5.4	6.5	7.5	6.3	5.4	4.6	3.8	7.5
8-Sep	4.2	3.8	5.1	8.1	7.2	8.4	11.9	15.7	14.3	14.1	12.5	20.9	11.2	13.3	10.9	9.1	7.2	5.8	5.2	7.1	7.4	6.9	6.1	6.3	9.3	20.9
9-Sep	6.5	6.0	5.6	5.6	5.7	7.0	8.8	7.5	6.7	6.1	4.9	4.8	4.6	5.8	5.0	4.2	3.2	2.9	3.1	2.9	2.7	2.7	2.3	2.0	4.9	8.8
10-Sep	1.6	2.5	2.5	1.8	1.4	1.4	1.7	2.0	3.6	15.3	24.8	17.5	14.4	11.5	6.5	4.7	3.9	2.2	1.4	0.7	0.9	1.0	1.2	1.3	5.2	24.8
11-Sep	1.1	0.8	0.6	0.7	0.9	0.7	1.0	1.3	1.5	2.2	3.5	3.7	3.0	2.5	2.7	4.6	5.5	4.6	4.1	3.3	2.7	3.2	3.2	2.4	2.5	5.5
12-Sep	2.4	1.3	1.7	1.8	1.3	1.8	2.0	2.2	2.4	2.0	2.2	2.3	2.4	2.7	2.9	2.6	2.5	2.5	2.5	2.4	2.5	2.6	2.6	2.4	2.3	2.9
13-Sep	2.4	2.5	2.8	3.1	3.1	3.0	2.9	2.9	3.2	3.2	2.9	3.2	3.3	2.7	2.8	2.6	2.7	2.9	15.1	10.1	3.9	6.5	5.3	4.7	4.1	15.1
14-Sep	2.2	1.4	1.3	2.1	2.9	3.3	3.2	2.9	4.1	2.9	2.8	2.5	2.8	2.4	2.3	1.7	2.1	3.1	7.3	2.9	2.6	1.7	1.7	1.6	2.7	7.3
15-Sep	1.6	1.5	1.5	1.5	1.5	1.4	1.3	1.3	1.2	1.3	1.4	1.6	2.0	1.8	1.9	1.8	3.4	3.5	2.2	1.7	1.6	1.5	1.5	1.9	1.8	3.5
16-Sep	2.6	2.6	2.8	2.7	2.3	2.4	2.6	1.9	3.1	5.9	6.9	5.3	4.2	4.2	3.7	3.3	3.9	4.2	5.2	9.8	19.6	7.7	4.1	3.7	4.8	19.6
17-Sep	4.2	3.6	4.1	3.3	3.1	3.3	3.5	3.5	3.6	3.5	3.8	4.0	4.2	4.4	3.9	3.9	3.9	3.9	4.3	4.8	4.7	4.5	4.4	4.0	3.9	4.8
18-Sep	3.9	3.8	3.4	2.7	2.7	2.7	3.5	4.8	4.8	5.6	9.1	6.0	3.9	3.8	3.2	2.7	2.1	3.6	9.7	9.8	7.8	4.9	4.4	4.6	4.7	9.8
19-Sep	4.3	4.1	3.8	3.5	3.6	3.3	3.6	3.7	3.3	2.9	2.9	2.7	2.9	3.3	3.8	4.1	4.5	4.6	4.7	4.9	4.5	4.6	4.7	4.7	3.9	4.9
20-Sep	5.0	5.1	5.5	5.5	5.3	5.3	5.2	5.3	6.2	5.2	4.8	4.2	3.1	3.2	2.7	2.7	2.6	2.6	3.7	4.1	3.2	3.4	4.1	5.1	4.3	6.2
21-Sep	5.8	5.8	6.0	6.0	6.0	6.0	6.5	6.2	6.3	6.5	6.7	7.1	7.1	6.7	7.7	10.2	7.8	16.2	10.2	7.6	7.8	7.4	7.5	7.5	7.4	16.2
22-Sep	8.4	8.6	8.3	8.0	7.9	7.9	11.2	11.4	8.3	10.8	14.1	12.5	6.4	5.9	6.1	10.4	9.3	4.9	0.7	0.9	1.0	3.6	2.3	1.6	7.1	14.1
23-Sep	2.1	2.7	2.6	2.3	3.1	7.6	6.9	4.4	3.8	4.0	3.4	2.6	3.5	3.4	2.9	3.0	2.8	5.9	5.3	3.0	2.8	2.9	3.3	3.4	3.7	7.6
24-Sep	3.2	2.4	2.1	1.9	2.3	3.1	14.5	10.1	4.5	4.6	2.9	2.0	2.1	C	3.4	3.2	1.4	2.3	1.9	2.9	4.3	6.1	2.7	2.5	3.8	14.5
25-Sep	2.6	2.8	5.7	3.3	22.3	17.7	22.0	11.6	9.7	6.5	3.3	2.8	4.8	5.8	2.7	5.0	5.7	3.3	2.7	2.6	2.8	2.9	2.7	2.9	6.4	22.3
26-Sep	3.1	3.2	4.7	4.4	3.7	1.5	1.2	0.4	0.2	0.2	0.3	0.3	0.5	0.5	0.4	0.6	0.8	0.6	0.5	0.6	0.7	0.9	1.0	1.5	1.3	4.7
27-Sep	1.6	2.0	1.9	2.2	2.3	2.1	1.8	1.6	1.6	1.6	1.8	1.7	1.8	1.8	2.1	2.4	2.4	2.2	2.2	2.0	1.7	1.6	1.6	1.0	1.9	2.4
28-Sep	1.0	1.0	1.0	1.0	1.4	1.5	1.3	1.3	1.5	1.3	1.4	1.4	1.5	1.9	1.8	1.5	1.7	1.6	1.5	1.7	1.9	1.9	2.0	2.1	1.5	2.1
29-Sep	2.3	2.6	2.7	2.7	2.8	2.8	2.4	1.8	0.5	0.6	0.9	0.9	0.5	0.9	4.8	11.3	11.5	9.9	3.8	2.3	2.4	2.3	3.3	3.2	3.3	11.5
30-Sep	2.5	3.3	3.9	3.1	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.3	0.2	0.6	1.4	1.1	1.3	1.8	1.5	1.5	1.0	3.9
	3.8	3.8	3.9	3.8	4.5	4.7	5.7	4.9	4.4	4.7	5.0	4.9	4.3	4.4	3.9	4.4	4.3	4.7	5.0	4.4	4.6	4.2	3.7	3.6	Diurnal Average	
	12.3	12.4	13.1	11.0	22.3	17.7	22.0	15.7	14.3	15.3	24.8	20.9	14.4	13.3	10.9	11.3	11.5	16.2	16.1	13.7	19.6	12.4	11.7	11.1	Diurnal Maximum	

C - Calibration

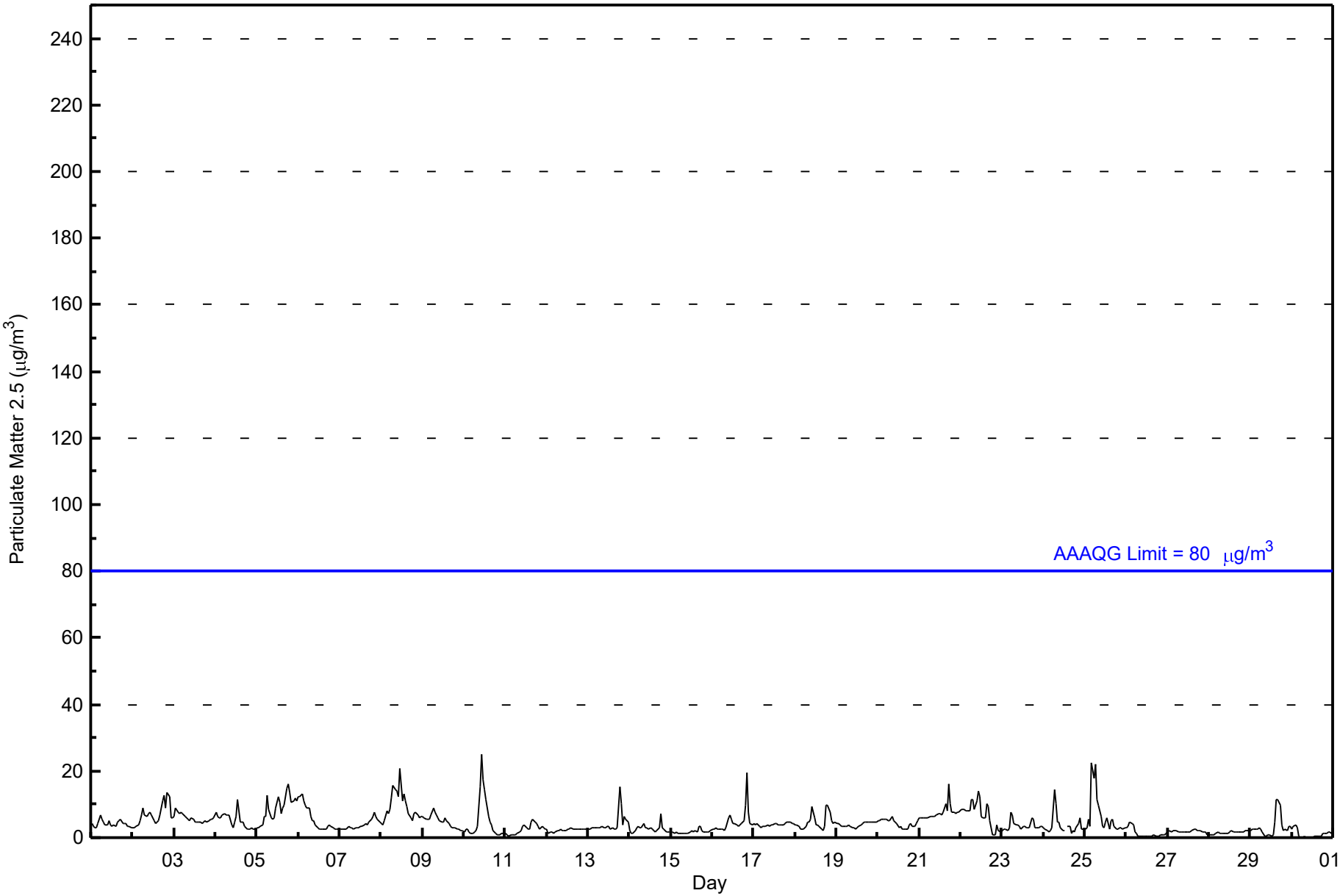
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Buffalo Viewpoint - September 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Buffalo Viewpoint - September 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	535	74.41	74.41
6 - 15	174	24.20	98.61
16 - 25	10	1.39	100.00
26 - 80	0	0.00	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Buffalo Viewpoint - September 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	50	13	2	1	6	10	35	100	46	34	45	47	49	30	36	28	532
6 - 15	18	9	0	0	4	11	29	35	21	6	0	2	10	14	9	5	173
16 - 25	1	2	0	0	0	0	0	1	0	1	0	0	2	1	2	0	10
26 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	69	24	2	1	10	21	64	136	67	41	45	49	61	45	47	33	715

Total Number of Valid Hours: 715

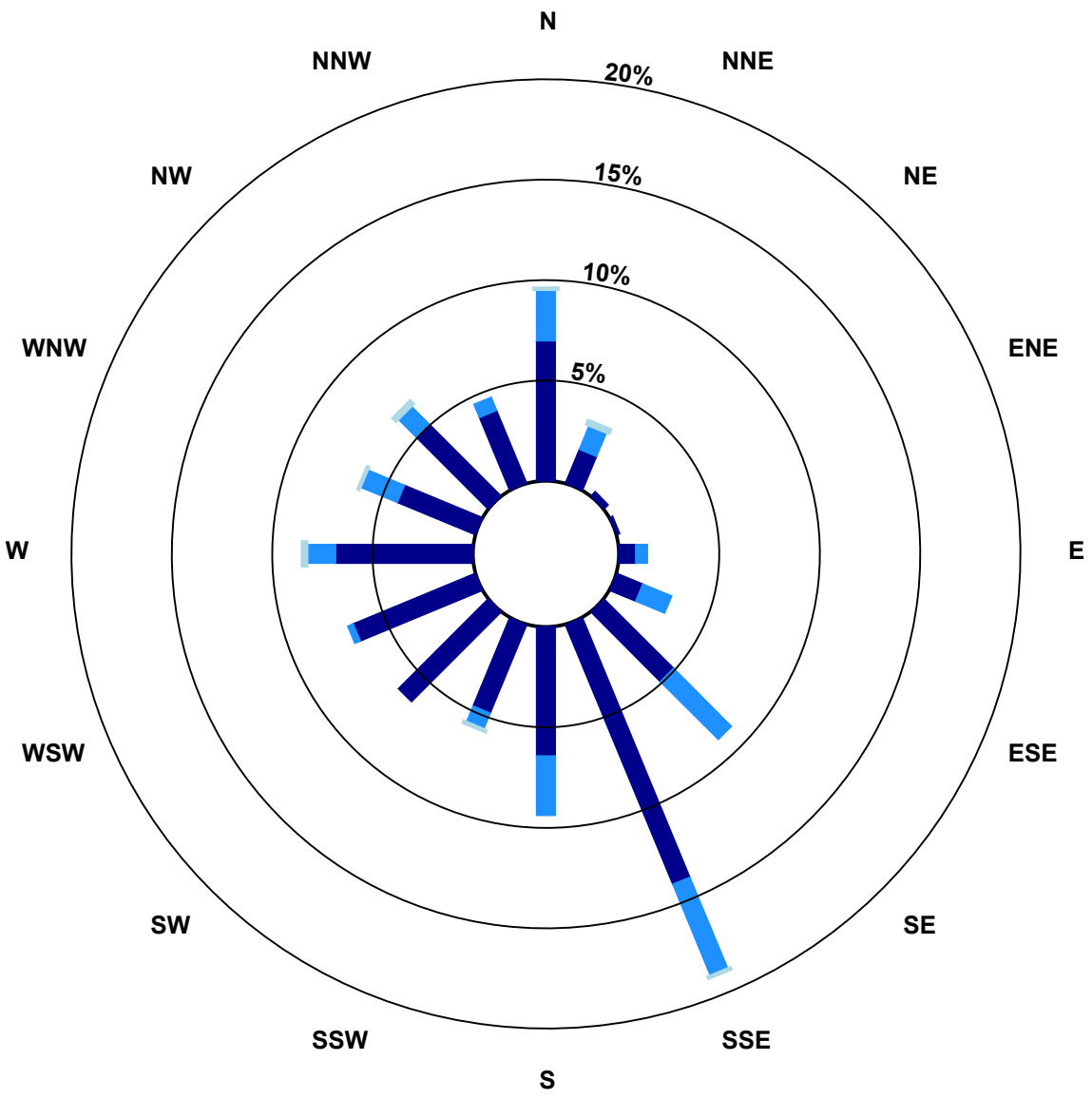
Total Number of Hours: 720

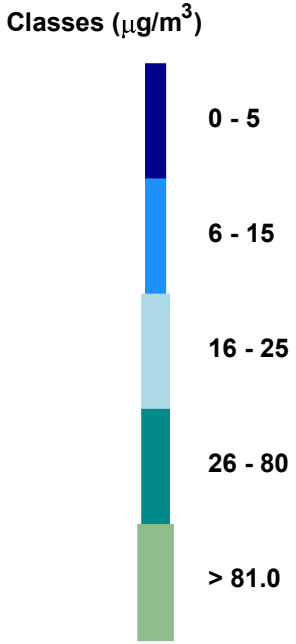
Wood Buffalo Environmental Association

Wind Rose Sep 2026

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

Buffalo Viewpoint





Total Number of Valid Hours: 715

Maximum Value: 27.5 C on Sep 2 16:00

Maximum Daily Average: 20.8 C on Sep 2

Minimum Value: 2.4 C on Sep 23 07:00

Minimum Daily Average: 5.7 C on Sep 30

Maximum Diurnal Average: 17.3 C at hour 15

Minimum Diurnal Average: 8.0 C at hour 6

Monthly Average: 12.40 C

Percentiles: P_1 = 3.5 P_{10} = 6.3 Q_1 = 8.4 Median = 11.4 Q_3 = 16.1 P_{90} = 19.5 P_{99} = 25.6

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

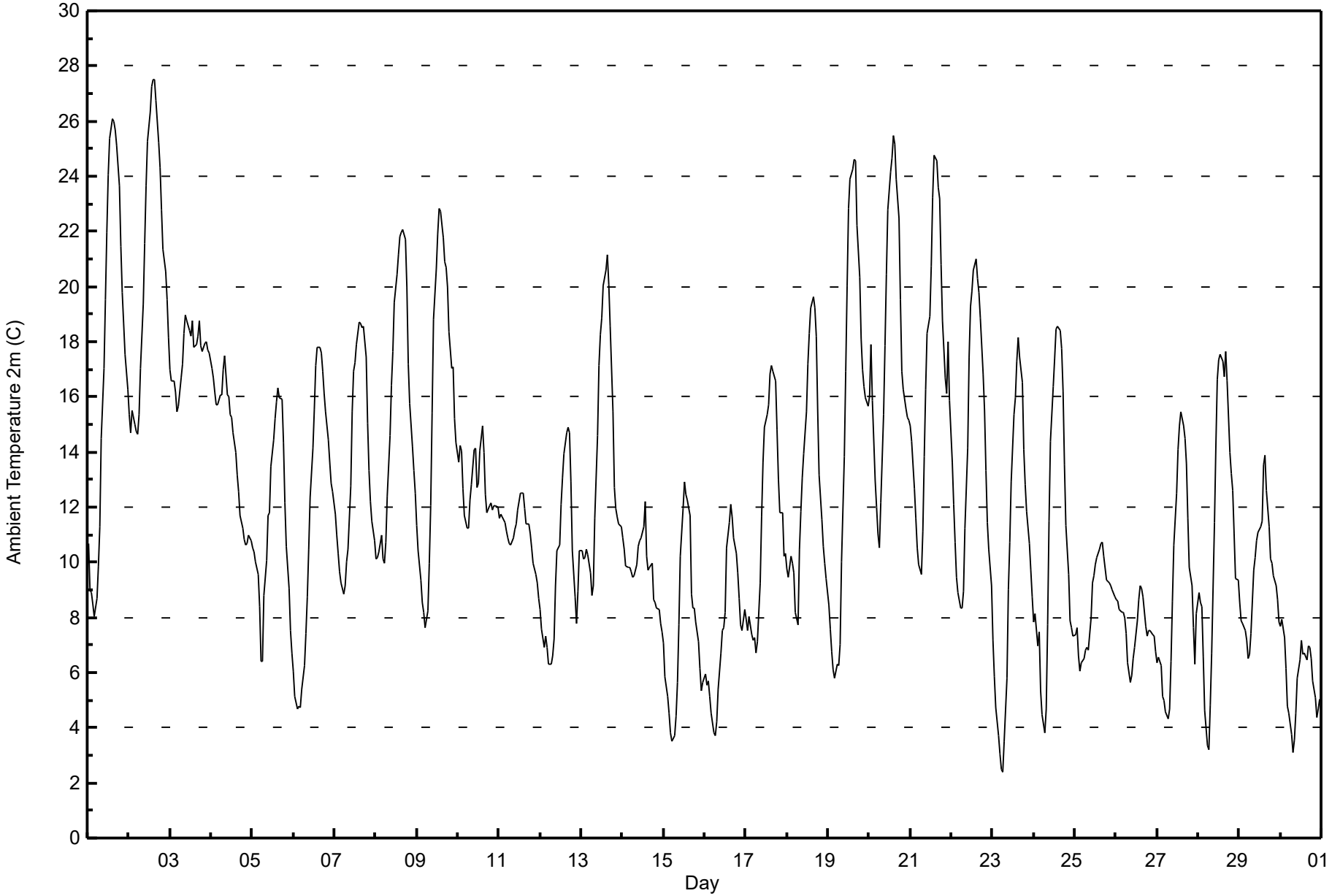
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	10.7	9.0	8.9	8.5	8.0	8.7	9.9	11.3	14.5	17.1	19.5	22.0	24.1	25.4	26.1	26.0	25.7	25.1	23.6	21.5	19.8	18.7	17.6	16.3	17.4	26.1
2-Sep	15.4	14.7	15.5	15.0	14.8	14.7	15.4	17.0	19.4	21.5	23.6	25.3	26.3	27.2	27.5	27.5	26.7	25.2	24.3	22.8	21.4	20.5	19.5	18.2	20.8	27.5
3-Sep	17.0	16.6	16.6	16.2	15.5	15.6	16.7	17.2	18.3	19.0	18.8	18.4	18.2	18.8	17.8	17.9	18.2	18.7	17.9	17.7	18.0	18.0	17.7	17.6	17.6	19.0
4-Sep	17.0	16.7	16.2	15.7	15.7	16.0	16.1	17.0	17.5	16.1	16.0	15.4	15.2	14.7	14.0	13.2	12.6	11.7	11.3	10.8	10.6	10.7	11.0	10.8	14.2	17.5
5-Sep	10.5	10.4	10.0	9.6	8.4	6.4	6.4	8.8	10.1	11.7	11.8	13.5	14.4	15.2	15.8	16.3	16.0	15.9	14.3	12.1	10.6	9.0	7.5	6.7	11.3	16.3
6-Sep	6.1	5.2	4.7	4.8	4.7	5.4	6.3	7.4	8.8	10.5	12.3	14.1	15.6	17.1	17.8	17.8	17.6	17.0	16.1	15.4	14.4	13.6	12.9	12.6	11.6	17.8
7-Sep	11.8	11.0	10.3	9.7	9.3	8.9	9.2	10.0	10.5	12.8	15.5	17.0	17.2	17.9	18.7	18.7	18.5	18.6	17.4	15.0	13.3	12.2	11.5	10.8	13.6	18.7
8-Sep	10.1	10.1	10.4	11.0	10.1	9.9	10.7	12.4	14.6	16.4	17.7	19.4	20.5	21.2	21.8	22.0	22.1	21.7	20.0	17.2	15.8	14.2	13.3	12.5	15.6	22.1
9-Sep	11.4	10.4	9.3	8.6	8.2	7.6	8.3	10.0	12.1	15.4	18.8	20.6	21.9	22.8	22.7	21.8	20.9	20.7	20.0	18.4	17.0	17.1	15.2	14.3	15.6	22.8
10-Sep	13.6	14.3	14.1	12.7	11.7	11.2	11.2	12.3	12.8	14.1	14.2	12.7	12.9	14.1	14.9	14.0	12.5	11.8	12.0	12.1	11.9	12.0	12.0	12.0	12.8	14.9
11-Sep	11.6	11.7	11.6	11.4	11.2	10.9	10.7	10.6	10.9	11.2	11.4	11.9	12.5	12.5	12.5	12.0	11.4	11.4	11.0	10.5	10.0	9.6	9.3	8.7	11.1	12.5
12-Sep	8.3	7.6	6.9	7.3	6.9	6.3	6.3	6.6	7.2	9.2	10.4	10.6	12.1	13.1	13.9	14.7	14.9	14.7	12.9	10.4	8.7	7.8	9.0	10.4	9.9	14.9
13-Sep	10.4	10.1	10.2	10.5	10.3	9.6	8.8	9.1	11.6	14.6	17.1	18.3	18.9	20.0	20.6	21.2	20.1	18.6	15.5	12.7	12.0	11.6	11.4	11.3	13.9	21.2
14-Sep	10.9	10.5	9.8	9.8	9.8	9.7	9.4	9.5	9.9	10.6	10.8	10.9	11.3	12.2	10.2	9.7	9.8	10.0	8.6	8.6	8.3	8.3	7.8	7.5	9.7	12.2
15-Sep	7.1	5.8	5.1	4.5	3.8	3.5	3.7	4.4	5.6	7.7	10.2	12.0	12.9	12.5	12.3	11.7	8.8	8.4	8.4	7.8	7.1	6.1	5.3	5.7	7.5	12.9
16-Sep	6.0	5.5	5.7	5.1	4.5	3.8	3.7	4.2	5.4	6.7	7.5	7.6	8.2	10.5	11.4	12.1	11.6	10.9	10.3	9.6	8.7	7.7	7.5	8.3	7.6	12.1
17-Sep	7.9	7.5	8.0	7.4	7.2	7.3	6.7	7.1	9.2	11.6	13.6	14.9	15.3	15.7	16.8	17.1	16.9	16.6	14.8	13.0	11.8	11.8	10.2	10.3	11.6	17.1
18-Sep	9.8	9.4	10.2	10.0	9.6	8.2	7.8	10.5	11.9	13.1	13.9	15.5	17.2	18.3	19.2	19.6	19.2	18.2	15.5	13.2	11.6	10.6	10.0	9.4	13.0	19.6
19-Sep	8.4	7.6	6.8	6.1	5.8	6.3	6.2	7.0	10.0	13.8	16.9	20.0	22.8	23.9	24.2	24.6	24.6	22.2	20.3	18.1	17.0	16.4	16.0	15.7	15.0	24.6
20-Sep	16.0	17.9	15.9	13.0	12.0	11.0	10.5	12.1	15.4	17.9	20.4	22.8	24.2	24.7	25.5	25.2	23.9	22.5	19.5	16.9	16.3	15.6	15.2	15.2	17.9	25.5
21-Sep	15.0	14.4	12.7	11.6	10.5	9.9	9.5	11.1	13.8	16.3	18.3	18.9	20.8	23.2	24.8	24.6	23.6	23.2	20.8	18.8	16.7	16.1	18.0	15.9	17.0	24.8
22-Sep	13.6	12.1	10.7	9.4	8.9	8.3	8.3	9.0	11.2	14.1	17.5	19.3	19.8	20.6	21.0	20.3	19.8	18.9	16.8	15.5	13.3	11.5	10.5	9.1	14.1	21.0
23-Sep	7.2	5.9	4.7	3.7	3.1	2.5	2.4	3.5	5.8	9.0	10.7	12.9	15.4	16.0	17.3	18.1	17.4	16.5	14.1	12.8	11.8	10.7	9.7	8.8	10.0	18.1
24-Sep	7.8	8.1	7.0	7.5	5.3	4.5	3.8	4.7	7.7	11.5	14.4	16.4	17.4	18.4	18.6	18.4	17.7	16.2	13.5	11.4	9.6	7.9	7.6	7.3	10.9	18.6
25-Sep	7.4	7.6	6.6	6.1	6.4	6.5	6.8	6.9	6.8	8.0	9.2	9.5	9.9	10.2	10.5	10.7	10.8	10.2	9.4	9.3	9.3	9.2	9.0	8.8	8.5	10.8
26-Sep	8.7	8.6	8.3	8.2	8.2	8.0	7.4	6.4	5.6	5.9	6.5	6.9	7.9	8.6	9.1	9.1	8.8	7.7	7.3	7.5	7.5	7.4	7.3	6.8	7.7	9.1
27-Sep	6.3	6.6	6.3	5.1	5.0	4.6	4.3	4.7	6.4	8.6	10.6	12.5	14.1	15.0	15.5	15.0	14.5	13.6	11.6	9.8	9.2	7.6	6.3	8.1	9.2	15.5
28-Sep	8.9	8.6	8.4	6.5	4.6	3.4	3.2	4.8	6.7	11.4	14.2	16.6	17.4	17.5	17.3	16.7	17.6	16.6	14.0	13.2	12.6	11.0	9.4	9.3	11.3	17.6
29-Sep	8.5	7.9	7.8	7.5	7.1	6.5	6.7	7.4	9.7	10.2	10.8	11.1	11.3	11.5	13.5	13.9	12.6	11.3	10.1	10.0	9.5	9.2	8.7	7.8	9.6	13.9
30-Sep	7.7	7.9	7.2	6.1	4.8	4.5	3.7	3.1	3.6	4.5	5.8	6.4	7.2	6.7	6.7	6.4	7.0	6.9	6.5	5.7	5.1	4.4	4.7	5.0	5.7	7.9
	10.4	10.0	9.5	9.0	8.4	8.0	8.0	8.9	10.4	12.3	13.9	15.1	16.1	16.8	17.3	17.2	16.7	16.0	14.6	13.3	12.3	11.5	11.0	10.7	Diurnal Average	
	17.0	17.9	16.6	16.2	15.7	16.0	16.7	17.2	19.4	21.5	23.6	25.3	26.3	27.2	27.5	27.5	26.7	25.2	24.3	22.8	21.4	20.5	19.5	18.2	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Buffalo Viewpoint - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	272	37.78	37.78
10 - 20	383	53.19	90.97
> 20	65	9.03	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 97.0 % on Sep 16 07:00
Maximum Daily Average: 87.9 % on Sep 14

Minimum Value: 25.1 % on Sep 24 15:00
Minimum Daily Average: 57.3 % on Sep 20
Maximum Diurnal Average: 88.8 % at hour 7
Minimum Diurnal Average: 51.4 % at hour 15
Monthly Average: 71.31 %
Percentiles: P_1 = 30.2 P_{10} = 43.7 Q_1 = 59.5 Median = 74.4 Q_3 = 86.0 P_{90} = 93.1 P_{99} = 96.7

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

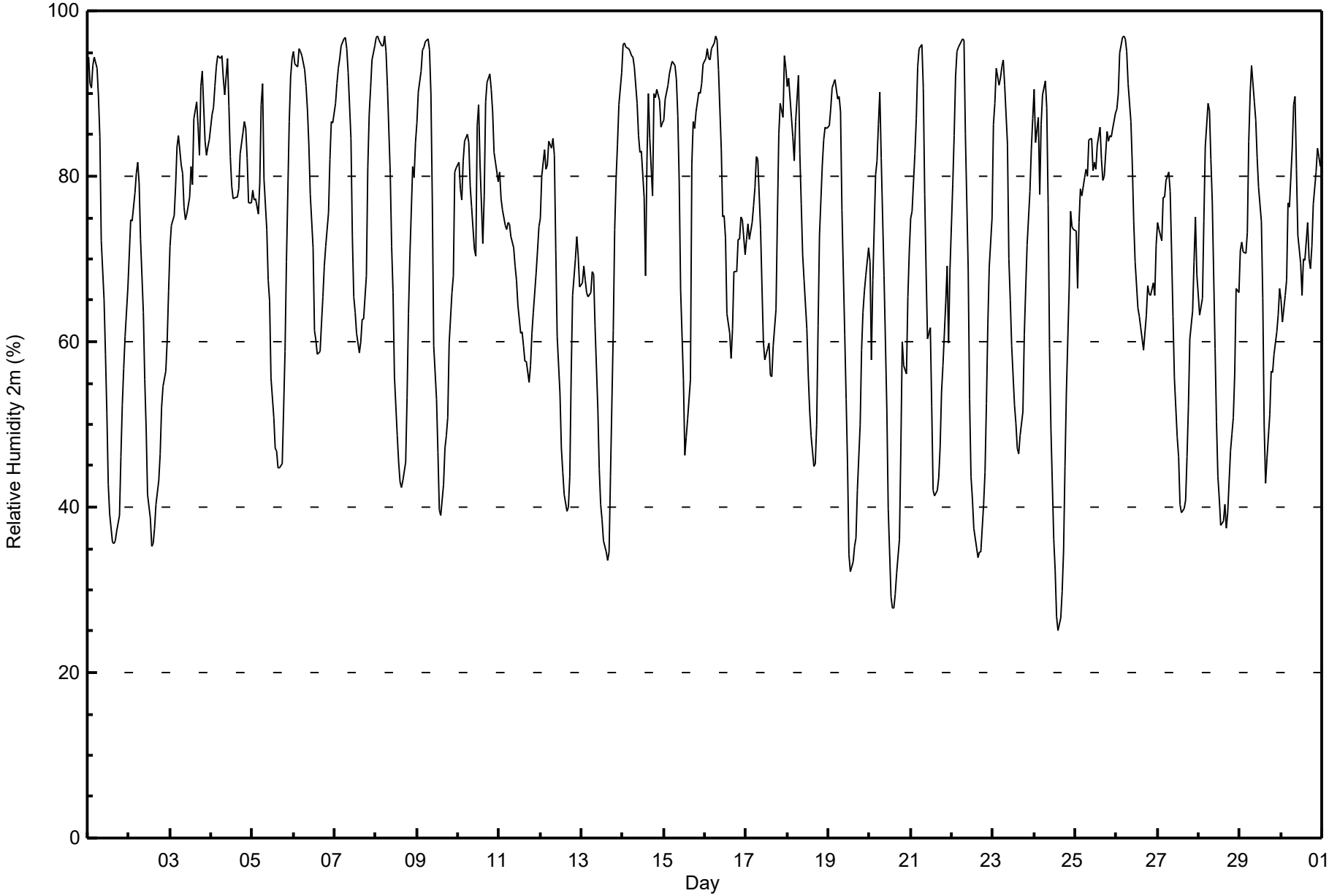
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	94.4	91.2	90.7	93.5	94.5	93.0	89.7	84.7	72.1	65.1	58.5	51.4	42.7	39.1	35.7	35.6	36.0	37.1	38.9	46.2	52.4	56.7	60.7	66.6	63.6	94.5
2-Sep	70.7	74.8	74.5	77.9	80.3	81.7	79.1	72.4	63.6	55.4	49.4	41.5	38.7	35.3	35.6	37.5	40.3	43.3	46.5	52.0	54.6	56.4	60.2	66.1	57.8	81.7
3-Sep	71.5	74.0	75.3	78.8	83.6	84.9	81.3	80.3	76.4	74.7	75.5	77.4	81.1	78.9	87.0	88.9	86.0	82.5	90.9	92.7	84.3	82.5	83.5	84.4	81.5	92.7
4-Sep	87.5	88.3	90.9	93.2	94.5	94.2	94.6	91.9	89.8	94.2	88.4	82.4	78.9	77.4	77.5	77.5	78.5	82.8	85.3	86.7	85.7	82.2	76.8	76.7	85.7	94.6
5-Sep	78.3	77.1	77.3	75.5	79.2	88.6	91.2	79.7	73.5	67.5	64.9	55.7	50.8	47.1	46.9	44.7	44.8	45.3	51.9	58.9	69.7	86.7	92.0	94.3	68.4	94.3
6-Sep	95.2	93.6	93.2	95.4	95.1	94.6	92.8	90.9	87.9	83.7	77.7	71.3	61.4	60.2	58.4	58.8	62.2	65.5	69.1	71.5	75.6	82.1	86.7	86.5	79.6	95.4
7-Sep	88.8	91.1	93.1	94.2	95.8	96.6	96.7	95.4	92.5	84.7	72.7	65.4	63.5	61.1	58.7	60.0	62.7	62.8	68.0	81.0	87.5	90.6	94.0	95.8	81.4	96.7
8-Sep	96.7	96.9	96.5	95.8	95.8	96.9	95.0	90.8	80.4	71.6	66.0	55.8	48.7	45.3	43.1	42.5	43.2	45.4	53.2	63.4	70.4	81.2	79.8	84.1	72.4	96.9
9-Sep	86.5	90.1	92.7	95.2	95.5	96.3	96.5	95.2	90.1	77.0	59.4	53.1	46.7	39.6	39.0	42.6	47.2	48.7	50.8	59.8	65.9	67.9	80.5	81.0	70.7	96.5
10-Sep	81.7	78.4	77.1	81.9	84.2	85.0	84.0	78.8	76.2	71.2	70.3	86.0	88.7	81.6	71.9	77.6	89.0	91.4	92.3	90.5	87.8	82.9	81.7	79.3	82.1	92.3
11-Sep	80.5	77.3	75.9	74.1	73.6	74.4	74.2	72.8	71.4	69.2	67.4	64.4	61.1	61.2	59.6	57.6	57.6	55.0	57.2	61.0	63.6	68.4	71.1	73.9	67.6	80.5
12-Sep	75.0	80.0	83.2	80.9	81.3	84.3	83.4	84.7	82.6	71.2	60.8	53.8	47.2	44.2	41.6	39.5	40.1	43.7	56.1	65.6	70.0	72.8	70.3	66.7	65.8	84.7
13-Sep	67.1	69.1	67.4	65.9	65.5	66.0	68.5	68.2	61.9	51.9	44.5	40.3	38.6	35.9	34.6	33.6	34.6	43.7	61.4	73.5	79.6	84.0	88.6	92.5	59.9	92.5
14-Sep	95.9	96.2	95.7	95.3	95.0	94.5	94.4	93.3	88.9	84.8	82.8	83.1	77.4	68.0	81.8	90.0	84.5	77.7	90.0	89.5	90.6	89.1	85.9	86.5	87.9	96.2
15-Sep	86.8	89.3	91.0	92.4	93.1	93.9	93.5	91.8	87.3	79.3	66.3	55.4	46.3	48.5	50.6	55.5	81.5	86.6	85.8	87.8	90.1	90.0	91.2	93.5	80.3	93.9
16-Sep	94.3	95.4	94.2	94.0	95.3	96.2	97.0	96.5	93.0	83.2	75.1	75.3	72.6	63.5	61.0	57.9	61.5	68.5	68.5	72.4	72.4	75.1	74.8	70.5	79.5	97.0
17-Sep	72.4	74.2	72.3	74.5	76.4	78.6	82.4	82.0	73.6	66.6	60.0	57.8	59.2	59.8	55.9	55.7	59.5	64.0	75.1	85.0	88.9	87.1	94.6	93.1	72.9	94.6
18-Sep	90.9	91.9	87.1	84.7	81.8	86.7	92.3	82.7	76.6	70.5	67.4	61.6	55.9	51.7	48.6	44.8	45.3	50.0	61.9	72.8	81.4	84.4	85.9	85.7	72.6	92.3
19-Sep	86.1	88.2	90.7	91.2	91.7	89.3	89.7	87.8	75.9	60.9	53.0	45.0	34.2	32.2	33.4	35.3	36.3	42.0	50.1	59.0	63.6	66.2	67.9	71.3	64.2	91.7
20-Sep	69.7	57.7	67.5	80.2	81.9	86.3	90.2	82.1	68.0	60.0	51.9	39.9	29.1	27.8	27.7	29.4	32.0	36.1	47.2	60.0	57.1	56.0	65.4	70.8	57.3	90.2
21-Sep	74.9	75.8	82.7	86.9	93.2	95.5	96.0	90.7	77.8	68.4	60.3	61.7	52.2	42.1	41.3	42.1	43.5	47.3	53.9	57.1	64.7	69.1	59.8	68.6	66.9	96.0
22-Sep	79.0	84.9	92.1	95.2	95.6	96.4	96.6	96.5	85.1	68.9	53.0	43.8	41.1	37.5	35.0	33.8	34.6	34.6	40.4	44.3	52.5	62.1	68.9	74.9	64.4	96.6
23-Sep	86.3	88.8	93.1	91.0	91.9	93.2	94.1	91.0	83.9	70.0	65.1	59.5	52.4	50.2	47.1	46.5	48.6	51.5	60.8	66.5	71.7	78.1	83.2	87.0	73.0	94.1
24-Sep	90.5	84.1	87.1	77.9	86.2	89.8	91.6	88.3	76.6	59.2	49.3	36.1	32.4	26.8	25.1	26.6	29.8	34.7	44.9	53.9	66.6	75.8	73.9	73.6	61.7	91.6
25-Sep	73.3	66.4	74.4	78.5	77.6	79.9	80.9	80.1	84.5	84.5	80.7	81.7	80.8	83.7	86.0	82.0	79.5	80.0	85.4	84.3	84.9	84.8	85.8	87.6	81.1	87.6
26-Sep	88.2	90.0	95.0	96.7	96.9	96.7	95.0	91.2	86.7	81.3	74.6	69.7	64.0	63.0	61.6	60.3	59.0	63.3	66.8	65.8	65.6	67.2	65.6	71.6	76.5	96.9
27-Sep	74.5	73.6	72.2	77.4	77.4	79.6	80.6	78.2	70.9	63.1	55.6	48.5	46.0	40.3	39.3	39.8	40.8	46.1	52.2	60.4	63.7	69.7	75.0	68.2	62.2	80.6
28-Sep	63.3	64.3	65.3	74.6	83.6	88.8	87.9	82.0	77.0	59.2	50.4	43.7	41.0	37.8	38.3	40.3	37.5	39.3	46.7	48.9	50.9	56.2	66.5	66.0	58.7	88.8
29-Sep	71.1	72.1	70.9	70.7	73.3	84.2	89.9	93.4	88.9	86.8	82.2	78.6	74.5	65.2	49.9	42.8	45.9	51.2	56.4	56.2	58.5	61.2	63.2	66.4	68.9	93.4
30-Sep	65.0	62.4	65.6	67.4	76.8	76.3	83.3	88.6	89.7	80.8	72.9	69.6	65.6	70.0	69.8	74.4	70.1	68.9	71.5	76.6	80.5	83.5	82.3	81.3	74.7	89.7
	81.2	81.2	82.8	84.4	86.2	88.1	88.8	86.1	80.1	72.2	65.2	60.3	55.8	52.5	51.4	51.8	53.7	56.3	62.6	68.1	71.7	75.0	77.2	78.8	Diurnal Average	
	96.7	96.9	96.5	96.7	96.9	96.9	97.0	96.5	93.0	94.2	88.4	86.0	88.7	83.7	87.0	90.0	89.0	91.4	92.3	92.7	90.6	90.6	94.6	95.8	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Buffalo Viewpoint - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Buffalo Viewpoint - September 2026

Maximum Speed: 28 km/h on Sep 26 16:00

Maximum Daily Speed Average: 19.6 km/h on Sep 11

Minimum Speed Value: 1 km/h on Sep 18 16:00

Minimum Daily Speed Average: 0.9 km/h on Sep 18

Maximum Diurnal Speed Average: 4.8 km/h at hour 14

Minimum Diurnal Speed Average: 1.2 km/h at hour 21

Monthly Average Velocity: 2.8 km/h 262.4 deg

Percentiles: P_1 = 2 P_{10} = 4 Q_1 = 6 Median = 8 Q_3 = 13 P_{90} = 18 P_{99} = 24

Hours in Service: 720

Hours of Data: 715

Hours of Missing Data: 5

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-Sep	SSE5	SSE7	SSE8	S7	SSE7	SSE6	SSE6	S7	SSE7	SSE7	SE9	SSE10	SSE10	SE12	SE13	SE15	SE14	SE13	SE10	SSE8	SSE6	SSE7	SSE7	SSE6	SSE8.4	SE15
2-Sep	SSE6	SE6	SE8	SSE7	SE8	SE8	SE10	SE12	SE12	SE11	SE11	SSE15	SE14	SE16	SE17	SE16	ESE15	ESE14	ESE13	SE14	SE13	SE13	SSE9	SSE7	SE11.2	SE17
3-Sep	SE5	SE5	SE7	SE4	SSE5	SE7	ESE6	SE8	SE10	ESE9	E11	E12	E10	E12	E9	E7	ESE8	ESE7	NE7	NE7	E7	ESE6	E5	ESE6	ESE6.9	E12
4-Sep	ESE6	SE5	ESE2	NW2	N1	N2	N2	NNE2	N6	N15	NNE18	NNE20	N20	N23	N22	N23	N23	N22	N20	N19	N17	N15	N14	N12	N12.1	N23
5-Sep	N9	N10	N11	N10	N9	N5	N5	N6	N6	N9	N9	NNE7	NNW7	NNE5	N7	NNW5	W6	WNW5	WNW4	NNE4	E2	ESE3	SSW4	SSW4	N5.0	N11
6-Sep	S4	SSE6	S5	SSE5	SSE6	SSE5	SSE5	SSE5	S5	S5	SSE6	SSE7	SE11	SSE9	S8	SSE6	SSE4	SSE6	SSE5	SSE7	SE8	SSE8	SSE7	SSE8	SSE6.3	SE11
7-Sep	SSE6	SSE5	SSE6	SSE4	S5	SSE5	SE3	S6	S5	S7	S9	SSE9	S9	S5	NNW1	NNW1	SSE4	SSE4	SSE4	SSE4	SSE5	SSE5	SSE5	S3	SSE4.7	SSE9
8-Sep	SSW4	WSW5	WNW7	WNW6	NW3	WNW6	WNW7	NW7	NW7	N8	N6	NW9	NW9	WNW7	WNW5	WSW4	SSW5	SSW5	S4	SSE6	SE8	SE7	SSE6	SSE6	W2.2	NW9
9-Sep	S6	S6	S6	S6	S6	SSE7	S5	S6	S6	S6	SSW9	SSW10	SW14	WSW17	WSW17	WSW15	SW13	SW14	SW16	SW12	SW8	SW13	WSW13	WSW13	SW9.1	WSW17
10-Sep	WSW17	WNW19	WNW14	W14	WSW15	WSW13	WSW12	WSW18	W19	W18	W16	W14	W17	W15	WNW16	NW17	NW16	WNW15	WNW15	NW16	NW16	NW17	NW18	NW19	WNW14.6	WNW19
11-Sep	NW20	NW21	NNW20	NNW22	NNW24	NNW24	NNW23	NNW23	NNW23	NNW24	NNW23	NNW21	NNW20	NW20	NW23	NNW20	NNW18	NNW19	NNW17	NNW17	NNW14	NW11	NW13	NW14	NNW19.6	NNW24
12-Sep	NW13	WNW10	WNW8	NW9	W9	W9	W8	W9	W8	WNW7	WNW8	W6	WSW7	WNW7	W6	WSW8	WSW7	SW6	SSW6	S6	SSE8	SSE9	SSW8	SW9	W5.7	NW13
13-Sep	SW10	SSW8	SSW9	SW11	SW12	SW13	SW11	SSW7	SSW7	SW11	SW9	WSW10	WSW10	SW12	SW8	WSW9	SW7	SSW4	NNE11	N16	N11	N9	N9	N13	WSW5.2	N16
14-Sep	N15	N14	N14	N14	N14	N14	N13	N14	N14	N13	N13	N13	N13	N16	N16	N11	N11	N11	NNW9	N7	NNW5	NW9	NW10	NW10	N11.9	N16
15-Sep	WNW9	WNW10	W9	WNW8	WNW8	W6	WSW4	SW4	SSW5	WSW7	W8	W11	WSW10	SW9	SW9	SSW6	N7	SSW3	WSW6	W6	W8	W10	WNW9	NW8	W6.3	W11
16-Sep	N5	NNE3	N5	NNE3	NNE3	S2	SW3	SW3	SSW6	S7	S7	S9	SSW6	SSW6	S3	SSE3	ESE5	ESE4	E5	SE5	SSE4	SSE4	SSE5	SSE9	SSE2.7	SSW9
17-Sep	SSE8	SSE9	SE11	SSE8	SSE8	S5	SSE5	S6	S8	S7	S7	S4	SSW2	WSW4	SW5	SW4	SSW4	SSW5	SSE6	SE8	SSE5	SW3	SSE4	SSW4	S5.3	SE11
18-Sep	SSW4	SSW5	SW4	WSW4	W8	NW6	NNW7	NNW5	N7	NNW5	WNW6	NW5	WNW6	NW5	N6	SSE1	SE4	ESE5	SSE4	SSE4	SSE4	SSE5	SSE7	SSE8	W0.9	SSE8
19-Sep	SSE7	S6	S6	S6	SSE6	SSE7	SSE7	SSE7	SSE8	SSE9	SSE9	SSE9	S13	S15	S17	S14	S12	SSW9	SSE7	SSE6	SSE7	SSE8	SE8	SE8	SSE8.3	S17
20-Sep	S7	SW9	SSW1	SSE7	SSE7	SE6	SSE6	SSE4	S5	S5	SSE5	SW6	WSW12	WSW13	SW9	SW9	SSW8	SSW6	SSE6	SSE6	SSE6	SSE7	SE8	SE7	S5.3	WSW13
21-Sep	SSE8	S8	SSE9	SE8	SE9	SE8	SE6	SSE6	SSE5	SE6	SE7	ESE9	ESE7	SE7	ESE7	SE6	SE4	SSW3	S5	SSE5	SSE6	S7	W14	WNW8	SSE5.1	W14
22-Sep	WNW2	N3	SSW1	SSE6	SSE6	SSE5	S4	WNW6	WNW7	NW11	NW14	NW16	NW11	WNW12	W15	W19	W15	W12	WSW10	WSW11	WSW6	NW6	W5	W4	W6.6	W19
23-Sep	SE5	S5	S6	SSE8	SSE8	S6	SSE7	S7	SE7	SSE8	SE5	SE6	ESE6	ESE7	ESE8	SE7	SE6	SSE7	SSE6	S6	S6	S5	SSE6	SSE5	SSE6.0	ESE8
24-Sep	WSW5	WNW7	WSW5	WSW5	SSE5	SSE6	S7	SSE5	SSE5	S5	S5	C	C	C	C	W12	WSW9	SW7	SSW6	SSE6	SSE5	S3	SW3	SE6	SSW4.0	W12
25-Sep	SSE4	ENE3	SE2	NNE2	NNE8	N9	NNE7	N8	NNE7	M	NNE15	NNE17	NNE17	NNE17	N17	NNE18	NNE15	NNE16	NNE14	NNE15	N15	N16	N16	N16	NNE11.3	NNE18
26-Sep	N14	N14	NNW11	NW12	NW12	W14	W17	W22	W23	W22	W23	W24	WNW26	W25	W25	W28	WNW25	W24	W22	W22	W22	W21	W20	W14	WNW18.6	W28
27-Sep	WSW12	W17	W17	WSW18	W21	WSW21	WSW18	WSW19	WSW19	WSW18	WSW17	W18	WSW14	W16	WSW17	WSW14	WSW15	WSW12	SW8	SW10	SW10	SSW9	S9	SW11	WSW14.2	WSW21
28-Sep	SW13	SW13	WSW14	SSE6	SE9	SE8	SSE9	SSE8	SSE7	SW10	SW11	SW12	SW15	WSW15	SW13	SW12	SSW15	SSW10	S7	SSW9	S8	SSE7	SE9	SE8	SSW8.5	WSW15
29-Sep	SE8	SE4	SSE5	S6	S6	SSE7	SSE8	SSE7	SW10	SW10	WSW14	W17	WNW16	WNW19	WNW23	W23	WNW21	W23	W15	W17	W11	WNW12	W21	W19	W10.2	WNW23
30-Sep	WNW20	WNW23	NW22	NW19	NW20	WNW19	WNW20	NW21	NW18	NW21	NW21	NNW19	NW18	NW18	NW16	WNW11	WNW9	NNW13	NNW10	NNW10	NNW10	NNW8	WNW5	NW5	NW15.2	WNW23
	WSW2.6	W3.2	W2.6	W2.3	WSW2.2	WSW2.4	WSW2.5	WSW2.8	WSW2.9	W3.1	W2.9	WNW3.6	W4.0	W4.8	W4.6	W4.3	W3.3	W3.3	W1.8	W1.4	WSW1.2	WSW1.4	WSW2.6	WSW2.4	Diurnal Average	
	NW20	WNW23	NW22	NNW22	NNW24	NNW24	NNW23	NNW23	W23	NNW24	W23	W24	WNW26	W25	W25	W28	WNW25	W24	W22	W22	W22	W21	W21	W19	Diurnal Maximum	

C - Calibration M - Maintenance

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 - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8 km/h on Sep 13 19:00

Minimum Value: 1 km/h on Sep 7 20:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 2 Q_3 = 4 P_{90} = 5 P_{99} = 7

Hours in Service:	720
Hours of Data:	715
Hours of Missing Data:	5
Hours of Calibration:	4
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-Sep	2	1	1	1	1	2	2	3	2	2	3	3	4	4	5	5	5	4	3	2	2	2	2	2	5
2-Sep	2	2	2	2	3	3	3	4	4	4	5	5	5	5	6	5	5	4	4	4	4	4	3	2	6
3-Sep	2	2	2	2	3	3	2	3	4	3	3	4	3	4	3	2	2	2	2	2	2	2	2	2	4
4-Sep	2	2	1	1	1	1	1	1	3	4	5	6	6	7	6	6	6	6	6	5	5	4	4	4	7
5-Sep	2	3	3	3	3	2	1	2	2	3	3	3	2	3	3	2	2	1	1	1	1	1	1	1	3
6-Sep	1	1	1	1	1	2	2	1	2	1	2	3	4	4	3	3	1	2	2	2	2	2	2	3	4
7-Sep	2	2	2	1	1	2	1	2	2	3	3	3	3	2	2	2	1	1	1	1	1	1	1	1	3
8-Sep	1	1	1	1	1	1	1	2	2	3	2	3	3	3	2	2	1	1	1	1	1	2	1	1	3
9-Sep	2	1	1	2	1	1	1	2	2	2	3	3	5	5	5	5	4	4	5	5	3	6	4	4	6
10-Sep	5	6	4	3	4	4	4	5	5	5	4	4	5	4	5	5	5	4	5	4	5	5	5	5	6
11-Sep	6	6	6	7	7	7	7	7	7	7	7	6	6	6	7	6	6	6	5	5	4	3	4	4	7
12-Sep	4	3	3	2	2	2	2	3	2	2	2	3	3	3	3	4	3	2	1	1	1	1	2	2	4
13-Sep	3	3	2	4	3	4	4	3	4	3	3	3	4	4	3	3	3	1	8	5	3	3	3	3	8
14-Sep	4	5	4	3	4	4	4	4	4	4	3	4	4	5	5	3	3	4	3	3	2	3	3	3	5
15-Sep	2	2	2	2	2	2	1	2	2	2	3	3	3	4	4	3	4	1	2	2	2	3	2	2	4
16-Sep	2	1	2	1	1	1	2	1	2	3	2	3	2	3	2	2	2	1	1	1	1	1	2	3	3
17-Sep	3	3	4	3	3	2	1	2	3	2	3	2	1	2	2	2	1	1	1	1	2	1	1	1	4
18-Sep	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2
19-Sep	1	1	1	1	1	2	2	2	3	3	3	3	5	5	6	5	4	3	2	2	2	2	2	2	6
20-Sep	2	3	2	2	1	2	1	1	1	2	2	4	4	4	3	3	2	1	1	1	1	2	2	1	4
21-Sep	1	1	1	1	1	1	1	2	1	1	2	2	2	2	3	2	1	2	1	1	1	2	4	2	4
22-Sep	2	2	2	1	1	2	1	2	2	4	4	5	4	4	5	5	4	3	2	3	2	2	2	1	5
23-Sep	2	2	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	2
24-Sep	2	2	1	2	2	1	1	2	1	1	2	C	C	C	C	4	3	2	1	1	1	2	2	2	4
25-Sep	1	1	1	2	1	3	3	2	2	M	4	5	5	5	5	5	4	5	4	4	4	5	4	4	5
26-Sep	4	4	4	4	3	3	4	5	6	6	7	7	7	7	7	8	8	7	6	6	6	6	5	4	8
27-Sep	3	5	5	5	5	5	5	5	6	6	5	5	4	5	5	5	5	4	2	2	2	1	1	2	6
28-Sep	4	4	4	3	2	1	1	2	2	3	3	4	5	5	4	4	5	4	2	2	2	2	2	2	5
29-Sep	2	2	1	1	2	2	1	2	3	3	4	5	5	5	7	6	7	7	4	4	4	4	6	5	7
30-Sep	6	7	7	6	6	6	6	6	6	6	6	6	6	5	5	4	3	4	3	3	2	2	2	2	7
	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	7	8	6	6	6	6	5	
	Diurnal Maximum																								

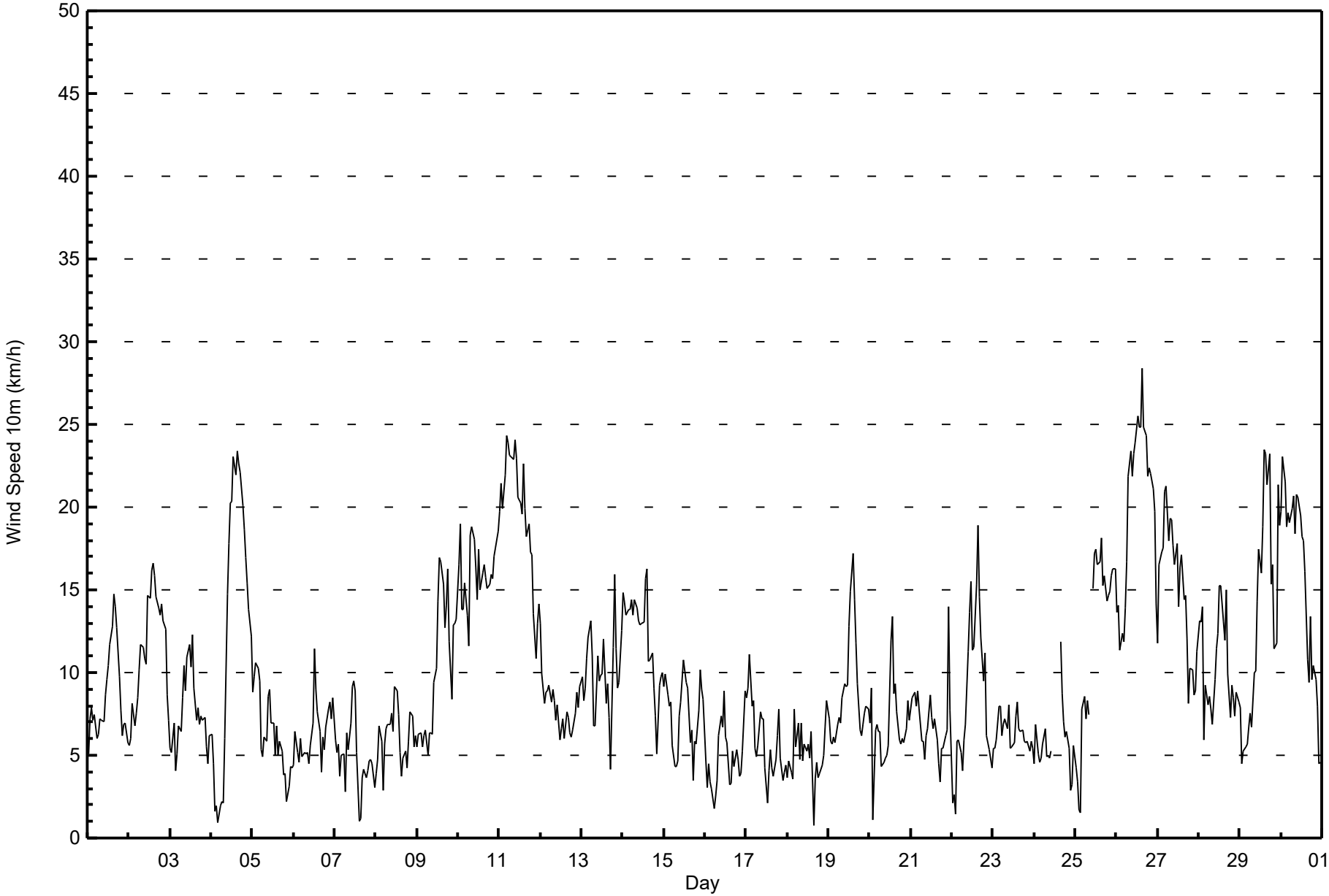
C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Buffalo Viewpoint - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	152	21.26	21.26
6 - 11	340	47.55	68.81
12 - 19	168	23.50	92.31
20 - 28	55	7.69	100.00
29 - 38	0	0.00	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 715

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Buffalo Viewpoint - September 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	0	1	3	5	11	43	23	19	6	8	2	5	5	6	152
6 - 11	25	5	2	0	5	13	39	92	39	21	24	13	17	23	14	8	340
12 - 19	30	10	0	0	2	3	14	1	5	1	15	27	24	10	19	7	168
20 - 28	6	2	0	0	0	0	0	0	0	0	0	1	18	7	9	12	55
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	69	24	2	1	10	21	64	136	67	41	45	49	61	45	47	33	715

Total Number of Valid Hours: 715

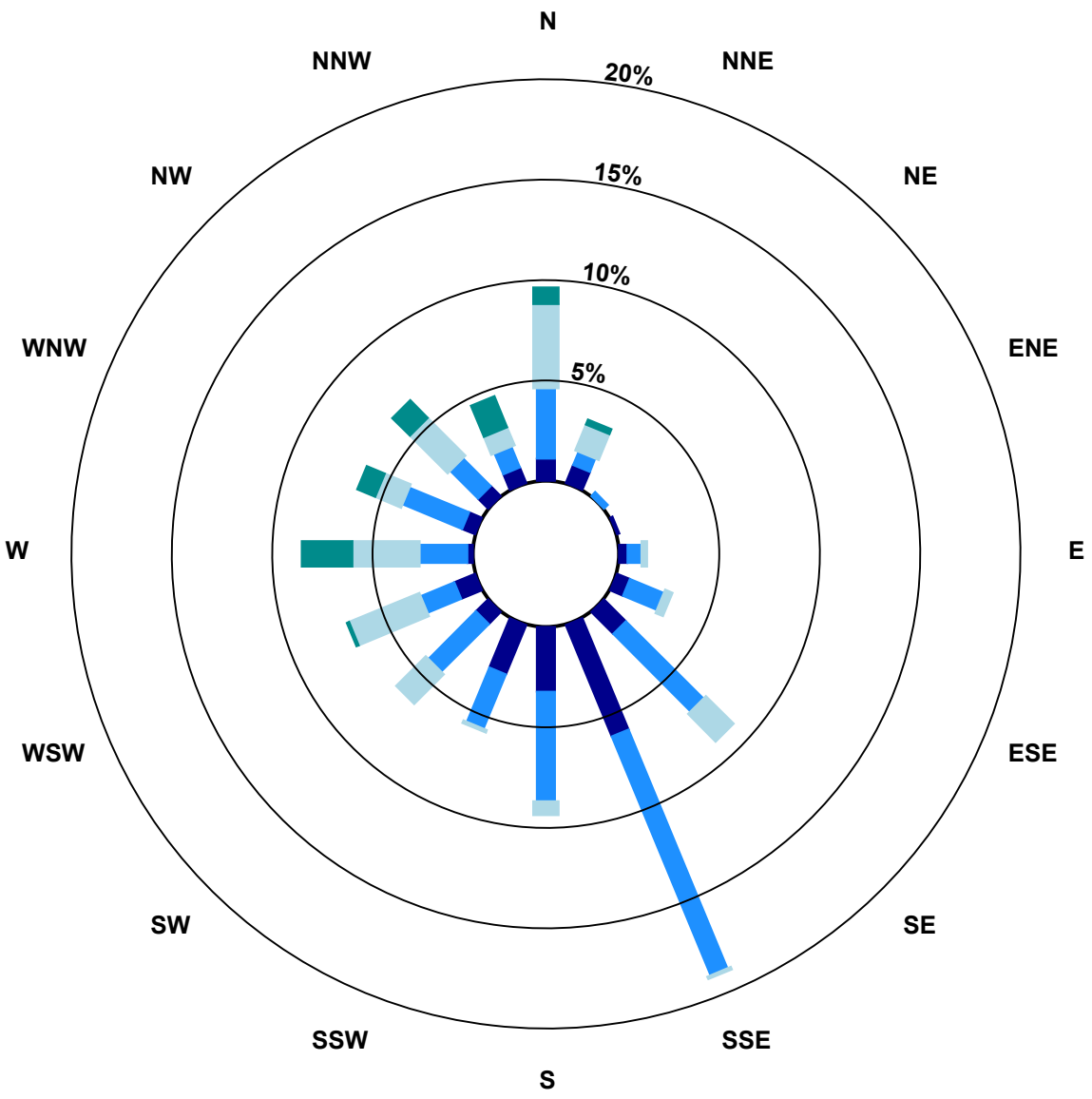
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Buffalo Viewpoint



Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 715

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Buffalo Viewpoint - September 2026

Direction of Maximum Speed: 277 deg on Sep 26 16:00
Direction of Maximum Daily Speed Average: 330.4 deg on Sep 11

Direction of Minimum Speed: 163 deg on Sep 18 16:00

Direction of Minimum Daily Speed Average: 0.9 deg on Sep 18

Monthly Average Direction: 262.4 deg

Hours in Service:	720
Hours of Data:	715
Hours of Missing Data:	5
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-Sep	162	167	153	173	158	159	164	169	163	151	141	156	148	143	141	140	139	138	142	147	150	150	165	159	150.8
2-Sep	150	146	143	147	138	140	142	140	140	146	146	149	145	145	139	132	122	123	123	126	129	132	148	157	138.1
3-Sep	141	127	134	136	147	124	123	129	135	116	96	99	85	94	90	83	110	106	45	55	81	104	101	117	105.6
4-Sep	121	133	113	318	351	1	357	13	0	4	15	12	11	5	2	2	360	359	359	0	354	352	353	352	3.7
5-Sep	353	357	351	351	357	1	350	5	349	3	358	15	344	14	358	336	280	297	295	13	80	104	192	193	351.6
6-Sep	169	166	171	152	157	157	167	156	175	178	160	148	143	155	172	167	151	168	163	156	146	158	148	158	158.8
7-Sep	160	161	160	160	187	160	129	176	173	177	175	164	170	171	346	346	167	158	153	159	161	154	156	178	165.8
8-Sep	198	241	302	293	313	299	301	320	320	4	353	325	306	286	293	254	199	203	175	147	138	142	156	165	277.7
9-Sep	180	171	170	173	169	168	173	176	170	176	211	212	223	244	241	237	223	225	234	225	216	224	241	249	217.1
10-Sep	251	284	296	264	253	254	243	258	261	273	276	269	261	279	298	323	307	291	301	315	323	318	307	314	284.7
11-Sep	319	320	328	333	332	332	331	333	334	338	338	335	335	324	326	333	332	333	334	337	335	319	321	315	330.4
12-Sep	315	300	291	307	277	275	273	272	268	296	302	271	245	299	276	248	249	230	200	174	164	157	197	217	262.3
13-Sep	222	211	211	222	229	232	220	192	203	220	223	244	239	231	235	241	235	196	24	7	354	352	351	353	246.9
14-Sep	355	360	8	355	354	352	352	353	351	359	1	2	356	356	356	11	10	353	341	349	341	321	317	315	352.7
15-Sep	301	284	279	283	293	272	241	216	194	248	268	269	249	234	223	207	4	208	237	262	268	277	284	314	265.3
16-Sep	2	12	0	23	21	183	219	221	196	186	180	191	195	206	171	163	104	122	101	132	148	156	147	149	161.0
17-Sep	158	147	144	150	157	171	168	182	171	170	181	188	197	255	217	214	210	196	148	140	168	214	160	204	171.4
18-Sep	210	196	229	241	276	311	334	331	11	336	293	306	297	313	6	163	132	103	152	154	149	151	148	148	269.4
19-Sep	162	189	190	179	159	147	149	152	150	155	147	156	182	187	189	186	187	200	168	160	153	151	141	133	168.5
20-Sep	187	231	211	150	149	144	150	150	176	175	168	226	244	252	216	215	212	198	150	160	161	148	136	142	186.3
21-Sep	156	178	162	142	135	133	134	148	151	130	125	115	116	125	114	136	136	207	187	156	159	174	259	297	151.6
22-Sep	286	359	197	163	153	155	189	294	284	316	318	314	314	284	267	270	278	273	257	257	240	307	266	265	278.1
23-Sep	146	182	172	154	154	171	165	176	146	154	134	131	120	114	118	125	134	155	148	170	180	170	165	166	151.4
24-Sep	240	285	258	256	149	148	171	164	158	184	175	C	C	C	C	263	243	230	207	156	159	182	232	139	203.9
25-Sep	154	77	143	23	16	2	13	357	27	M	27	25	26	19	2	17	17	14	18	12	8	8	8	0	15.5
26-Sep	7	353	346	323	305	265	272	270	273	272	276	281	282	274	276	277	283	280	278	277	275	276	274	261	282.5
27-Sep	256	269	259	258	259	258	252	253	254	247	256	263	246	260	257	255	251	246	229	219	214	194	178	222	249.2
28-Sep	232	233	238	166	127	142	168	155	166	220	214	228	232	241	230	217	207	199	178	193	189	164	136	145	202.0
29-Sep	142	141	157	176	170	162	154	166	224	230	248	268	290	291	285	274	283	280	271	268	280	300	278	277	264.5
30-Sep	284	300	306	314	307	301	303	317	315	320	324	327	325	322	319	294	295	330	337	334	330	339	298	307	313.6
	244.7	265.1	260.8	260.2	251.0	243.9	240.9	250.2	248.4	261.7	278.8	281.5	272.7	275.0	277.6	268.2	266.6	263.7	268.0	265.6	239.9	246.6	251.9	254.6	
	Diurnal Average																								

C - Calibration M - Maintenance

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 - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 96 deg on Sep 18 16:00

Minimum Value: 8 deg on Sep 21 05:00

Percentiles: P_1 = 12 P_{10} = 17 Q_1 = 21 Median = 24 Q_3 = 34 P_{90} = 41 P_{99} = 74

Hours in Service:	720
Hours of Data:	715
Hours of Missing Data:	5
Hours of Calibration:	4
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-Sep	10	12	18	14	17	24	34	33	39	35	33	38	37	36	37	35	34	36	35	31	36	33	31	35	39
2-Sep	39	34	34	40	42	35	35	31	34	35	38	35	37	35	34	33	30	30	30	31	33	35	37	37	42
3-Sep	35	30	36	45	43	34	46	35	34	31	22	22	20	23	19	24	27	29	17	21	19	25	23	27	46
4-Sep	33	45	71	42	59	25	26	23	21	23	23	23	24	26	24	24	25	24	25	24	23	21	21	21	71
5-Sep	21	21	22	21	20	15	15	22	33	25	26	41	38	66	43	50	37	28	25	24	58	42	31	28	66
6-Sep	27	11	16	25	24	25	24	31	29	33	38	37	33	49	40	40	43	31	31	32	32	33	34	32	49
7-Sep	33	36	34	34	30	40	63	36	47	38	37	39	36	55	95	84	32	29	17	22	32	20	40	47	95
8-Sep	38	31	21	16	19	16	16	19	22	29	33	31	29	36	48	51	32	20	24	17	13	22	25	21	51
9-Sep	19	15	19	32	26	23	24	26	27	34	25	27	25	23	22	21	20	21	20	21	26	21	20	18	34
10-Sep	19	29	25	16	19	20	21	17	19	20	19	19	16	21	26	24	25	23	23	22	22	23	23	23	29
11-Sep	22	22	21	21	21	21	21	21	22	22	23	23	24	25	23	24	23	21	21	21	20	24	23	23	25
12-Sep	24	24	25	24	18	16	16	17	20	33	33	50	56	43	49	52	34	22	15	11	14	15	23	15	56
13-Sep	17	19	18	22	21	19	21	29	47	21	24	26	25	24	31	27	20	37	53	23	22	20	19	21	53
14-Sep	22	24	23	20	21	21	21	21	21	23	23	23	23	24	24	26	24	23	22	22	25	22	23	21	26
15-Sep	23	19	16	16	18	40	30	33	33	36	39	28	31	35	41	35	73	44	20	21	19	17	18	22	73
16-Sep	29	51	29	24	27	86	55	41	26	35	37	31	50	54	70	67	24	28	15	27	31	24	39	41	86
17-Sep	35	35	35	36	37	33	33	24	30	40	42	52	72	41	48	33	22	14	20	9	39	41	23	20	72
18-Sep	50	56	48	59	18	39	16	26	21	44	30	38	41	45	32	96	62	32	34	24	25	22	17	16	96
19-Sep	15	18	15	16	21	31	36	34	39	35	37	38	35	33	29	31	32	23	34	34	37	35	25	20	39
20-Sep	38	22	95	24	15	21	23	20	28	39	47	63	30	24	25	24	20	20	21	13	21	24	21	16	95
21-Sep	17	14	12	14	8	10	16	34	32	27	26	23	26	32	30	36	39	57	24	14	16	29	21	24	57
22-Sep	78	76	74	18	21	33	23	30	26	24	24	25	26	28	22	18	20	18	15	14	23	38	48	37	78
23-Sep	28	31	26	12	14	18	18	20	21	29	37	40	39	29	25	34	36	33	33	34	31	29	21	23	40
24-Sep	44	15	29	37	41	26	13	32	28	35	47	C	C	C	C	22	21	19	16	11	25	39	55	40	55
25-Sep	31	32	71	66	14	17	32	18	16	M	20	22	22	23	24	22	22	22	21	22	22	23	21	23	71
26-Sep	22	22	24	23	28	15	19	15	18	18	19	21	22	21	20	20	22	21	20	19	19	19	19	18	28
27-Sep	17	17	18	18	16	17	20	19	20	20	21	18	23	20	20	23	21	19	21	13	13	19	20	16	23
28-Sep	18	19	21	46	15	18	15	28	30	25	24	25	22	23	21	22	23	26	32	26	29	31	21	22	46
29-Sep	21	52	20	24	38	23	16	26	21	22	21	18	25	25	23	20	23	22	17	16	23	24	20	19	52
30-Sep	22	25	25	26	25	25	24	25	25	24	24	24	24	25	24	25	23	25	21	19	18	17	39	34	39
	78	76	95	66	59	86	63	41	47	44	47	63	72	66	95	96	73	57	53	34	58	42	55	47	
	Diurnal Maximum																								

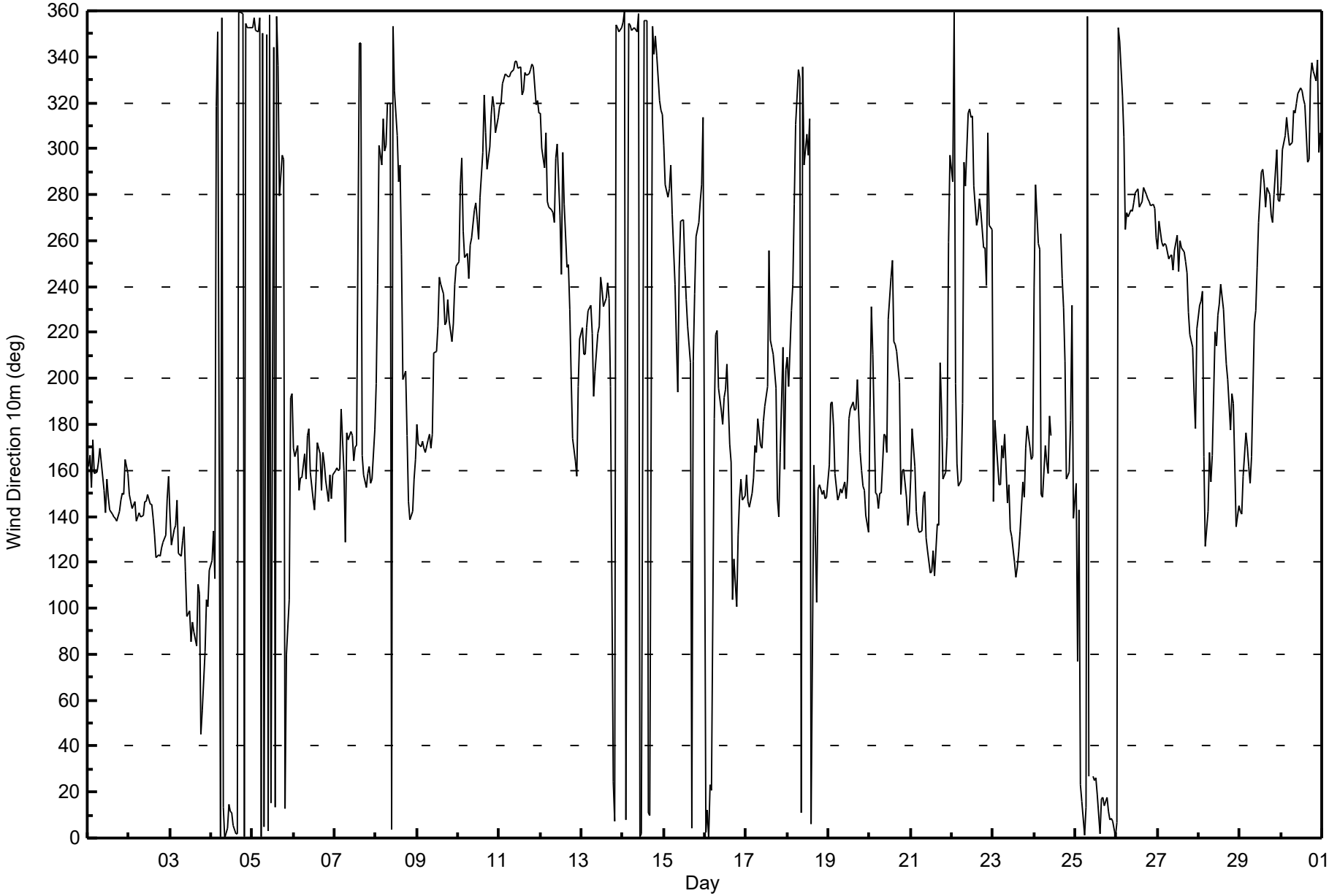
C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Buffalo Viewpoint - September 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS05
MANNIX
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MANNIX (AMS05)

SEPTEMBER 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	685	35	35	100	39.7	0	3.9	0
H2S (ppb) Average	683	36	37	99.86	7	0	1.9	0
THC (ppm) Average	685	35	35	100	3.1	-	2.3	-
NMHC(ppm) Average	685	35	35	100	0.12	-	0.031	-
CH4(ppm) Average	685	35	35	100	3.1	-	2.3	-
Temperature 2 m (C) Average	720	0	0	100	27.5	-	21.1	-
Temperature 20 m (C) Average	720	0	0	100	27.1	-	21.5	-
Temperature 45 m (C) Average	720	0	0	100	26.9	-	21.4	-
Temperature 75 m (C) Average	720	0	0	100	26.4	-	21.2	-
Temperature 90 m (C) Average	720	0	0	100	26.4	-	21.2	-
Relative Humidity 2 m (%) Average	720	0	0	100	100	-	91	-
Relative Humidity 20 m (%) Average	720	0	0	100	96	-	85	-
Relative Humidity 45 m (%) Average	720	0	0	100	96	-	86	-
Relative Humidity 75 m (%) Average	720	0	0	100	98	-	88	-
Relative Humidity 90 m (%) Average	720	0	0	100	99	-	88	-
Wind Speed 20 m (km/h) Average	720	0	0	100	36	-	25	-
Wind Speed 45 m (km/h) Average	720	0	0	100	42	-	31	-
Wind Speed 75 m (km/h) Average	720	0	0	100	45	-	35	-
Wind Speed 90 m (km/h) Average	720	0	0	100	48	-	37	-
Wind Direction 20 m (deg) Average	720	0	0	100	-	-	-	-
Wind Direction 45 m (deg) Average	720	0	0	100	-	-	-	-
Wind Direction 75 m (deg) Average	720	0	0	100	-	-	-	-
Wind Direction 90 m (deg) Average	720	0	0	100	-	-	-	-
Vertical Wind Speed 20 m (km/h) Average	720	0	0	100	1.1	-	0.6	-
Vertical Wind Speed 45 m (km/h) Average	720	0	0	100	3.1	-	1.7	-
Vertical Wind Speed 75 m (km/h) Average	720	0	0	100	2.6	-	1.6	-
Vertical Wind Speed 90 m (km/h) Average	720	0	0	100	2.4	-	0.9	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MANNIX (AMS05)
SEPTEMBER 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	685	0.64	2.3	-	0	0	0	0.1	0.3	1.3	39.7
H2S (ppb) Average	683	0.33	0.5	-	0	0.1	0.1	0.2	0.3	0.7	6.5
THC (ppm) Average	685	2.1	0.1	-	1.9	2	2	2.1	2.1	2.2	3.1
NMHC(ppm) Average	685	0.005	0.014	-	0	0	0	0	0	0	0.12
CH4(ppm) Average	685	2.09	0.1	-	1.9	2	2	2.1	2.1	2.2	3.1
Temperature 2 m (C) Average	720	12.12	5.4	-	1.8	5.8	8	11.1	16	19.5	27.5
Temperature 20 m (C) Average	720	12.67	5.1	-	3	6.5	8.9	11.7	16.5	19.5	27.1
Temperature 45 m (C) Average	720	12.7	5.1	-	2.6	6.4	9	11.8	16.5	19.3	26.9
Temperature 75 m (C) Average	720	12.87	4.9	-	2.7	6.7	9.4	12.2	16.5	19.3	26.4
Temperature 90 m (C) Average	720	12.95	4.9	-	2.6	6.7	9.4	12.4	16.6	19.3	26.4
Relative Humidity 2 m (%) Average	720	75	18	-	28	47	63	79	91	96	100
Relative Humidity 20 m (%) Average	720	68.4	17	-	25	42	57	71	81	88	96
Relative Humidity 45 m (%) Average	720	66.8	17	-	25	41	56	69	80	86	96
Relative Humidity 75 m (%) Average	720	66.5	17	-	26	42	55	68	80	87	98
Relative Humidity 90 m (%) Average	720	66.2	17	-	26	42	54	67	80	87	99
Wind Speed 20 m (km/h) Average	720	12.5	7	-	1	5	8	11	17	22	36
Wind Speed 45 m (km/h) Average	720	17.8	8	-	1	8	12	17	23	29	42
Wind Speed 75 m (km/h) Average	720	20	9	-	1	8	13	19	27	32	45
Wind Speed 90 m (km/h) Average	720	21.5	10	-	1	9	14	21	28	35	48
Wind Direction 20 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-
Wind Direction 45 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-
Wind Direction 75 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-
Wind Direction 90 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-
Vertical Wind Speed 20 m (km/h) Average	720	-0.18	0.5	-	-1.8	-0.9	-0.4	-0.1	0.1	0.4	1.1
Vertical Wind Speed 45 m (km/h) Average	720	0.41	1	-	-2.2	-0.9	-0.1	0.4	1.1	1.6	3.1
Vertical Wind Speed 75 m (km/h) Average	720	0.52	0.9	-	-2.3	-0.7	-0.1	0.6	1.2	1.7	2.6
Vertical Wind Speed 90 m (km/h) Average	720	0.22	0.5	-	-1.3	-0.4	0	0.2	0.5	0.8	2.4

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MANNIX (AMS05)

SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
H2S	11 Sep 2026 14:00	11 Sep 2026 14:00	1	Maintenance - sample manifold cleaned

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Mannix - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 39.7 ppb on Sep 18 13:00 Maximum Daily Average: 3.9 ppb on Sep 18

Minimum Value: 0.0 ppb on Sep 1 01:00 Minimum Daily Average: 0.0 ppb on Sep 28
Maximum Diurnal Average: 2.8 ppb at hour 13 Minimum Diurnal Average: 0.1 ppb at hour 4
Monthly Average: 0.64 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.3 P_{90} = 1.3 P_{99} = 9.8

Hours in Service:	720
Hours of Data:	685
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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.2	0.1	0.1	0.2	0.4	0.4	0.1	0.4
2-Sep	Z	0.2	0.1	0.1	0.1	0.0	0.0	0.0	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	0.0	0.1	0.1	0.2
3-Sep	0.1	Z	0.1	0.1	0.0	0.0	0.1	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	0.0	0.0	0.0	0.0	0.0	0.1
4-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.2	2.2	4.2	5.8	13.3	4.1	2.7	1.3	2.0	2.4	0.7	0.6	4.9	2.0	13.3
5-Sep	9.8	5.5	2.5	Z	1.2	1.0	0.8	2.6	6.8	4.2	0.7	0.2	1.7	2.9	2.1	3.1	1.0	2.0	2.9	1.8	0.6	0.4	0.3	0.9	2.4	9.8
6-Sep	0.8	0.3	0.1	0.0	Z	0.1	0.1	0.1	0.2	0.3	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.0	0.0	0.2	0.8
7-Sep	0.0	0.0	0.1	0.1	0.2	Z	0.1	0.2	0.0	0.4	0.5	0.2	0.1	0.1	0.1	0.3	1.2	1.1	1.2	1.4	0.2	0.1	0.0	0.0	0.3	1.4
8-Sep	Z	0.0	0.0	0.1	0.2	0.3	0.2	0.3	0.2	0.5	3.0	0.5	1.2	4.6	9.8	2.3	0.8	0.3	0.4	0.4	0.2	0.2	0.1	0.1	1.1	9.8
9-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
10-Sep	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	0.8	1.6	0.1	0.0	0.2	0.3	4.7	1.4	0.3	0.4	4.7
11-Sep	2.3	5.0	2.0	0.5	Z	0.3	0.2	0.2	0.1	0.1	C	C	C	C	C	0.2	0.0	0.0	0.1	0.0	0.1	0.1	1.0	1.2	0.7	5.0
12-Sep	6.3	2.0	0.4	0.3	Z	0.2	0.1	0.6	0.2	8.5	1.0	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.9	8.5
13-Sep	0.1	0.1	0.0	0.0	0.1	Z	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.4	2.6	7.5	3.1	1.1	0.3	0.7	7.5
14-Sep	Z	0.3	0.2	0.9	0.8	0.2	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	0.1	0.1	0.1	0.1	0.1	0.2	0.9
15-Sep	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	0.3	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.3
16-Sep	0.2	0.2	Z	0.1	0.0	0.0	0.1	0.1	0.1	1.2	1.4	1.1	0.8	0.7	0.4	0.3	0.2	0.2	0.1	0.1	0.3	0.2	0.2	0.2	0.4	1.4
17-Sep	0.2	0.2	0.2	Z	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.2	0.3
18-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	2.0	7.5	1.7	1.3	15.1	39.7	7.2	1.0	2.2	1.8	2.9	2.2	2.1	1.3	0.4	0.1	0.1	3.9	39.7
19-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.3
20-Sep	Z	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.2
21-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.4	0.4	0.6	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.6
22-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	12.3	5.3	23.3	6.1	0.3	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	2.1	23.3
23-Sep	0.0	0.0	0.0	Z	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.3	0.7	0.5	0.5	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.7
24-Sep	0.0	0.0	0.0	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	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2
25-Sep	0.0	0.0	0.1	0.0	0.2	Z	1.9	2.0	0.8	0.3	0.2	0.2	0.1	0.1	0.2	0.3	0.1	0.3	0.2	0.1	1.7	2.2	5.0	2.6	0.8	5.0
26-Sep	2.7	Z	0.2	0.1	1.0	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	0.0	0.0	0.0	0.2	2.7
27-Sep	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-Sep	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
29-Sep	0.0	0.0	0.1	Z	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
30-Sep	0.0	0.0	0.1	0.1	Z	0.0	0.1	0.1	0.0	0.8	8.6	7.0	10.3	5.1	0.7	0.4	0.2	0.2	0.8	0.3	1.4	0.5	0.2	0.1	1.6	10.3
	0.9	0.6	0.3	0.1	0.2	0.1	0.2	0.3	0.6	0.7	1.1	1.1	2.8	1.2	0.8	0.9	0.5	0.4	0.4	0.4	0.6	0.4	0.4	0.4	Diurnal Average	
	9.8	5.5	2.5	0.9	1.2	1.0	1.9	2.6	7.5	8.5	12.3	15.1	39.7	7.2	9.8	13.3	4.1	2.9	2.9	2.6	7.5	4.7	5.0	4.9	Diurnal Maximum	

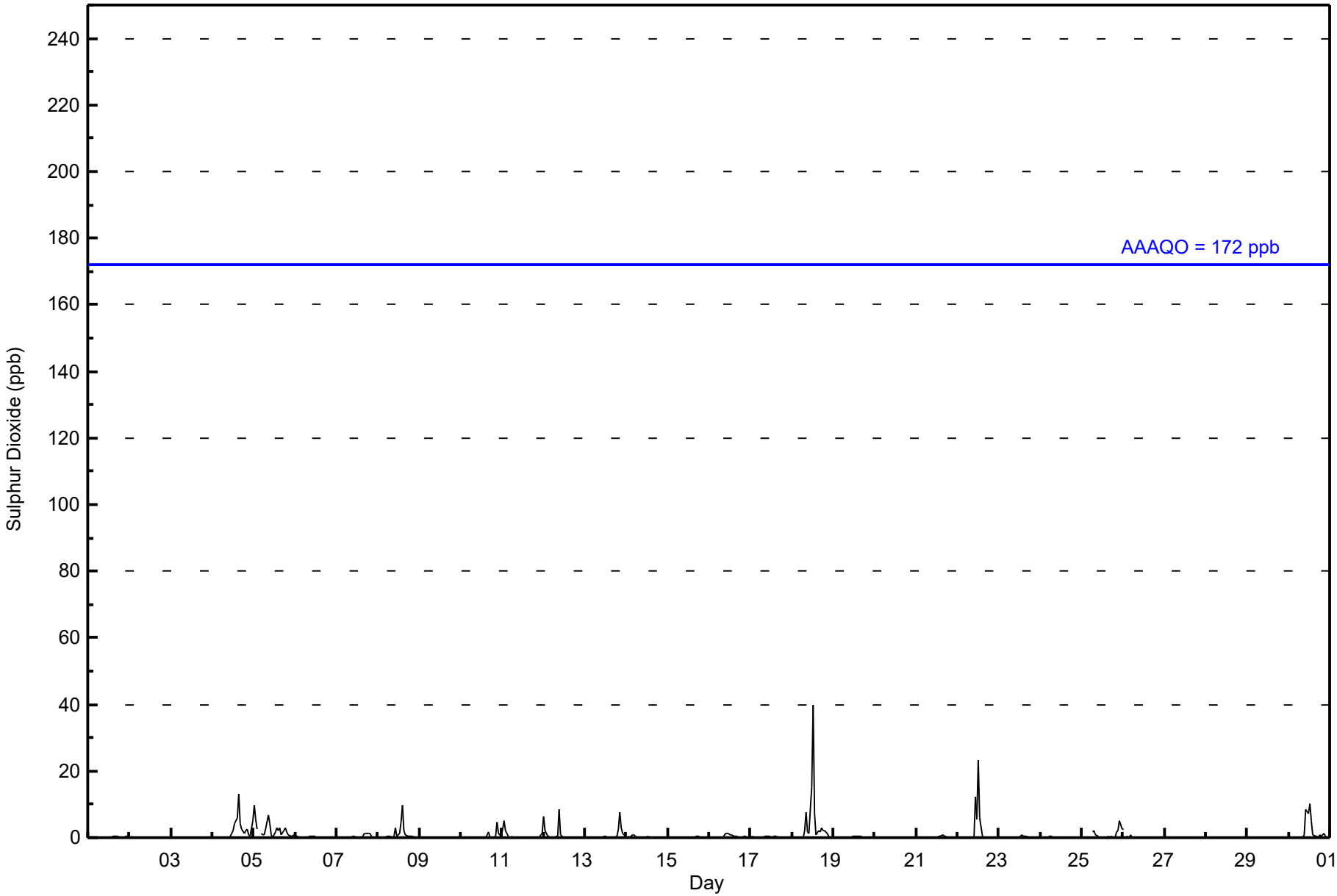
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Mannix - September 2026



Sulphur Dioxide (SO_2) - ppb

Mannix - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	680	99.27	99.27
11 - 20	3	0.44	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Mannix - September 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	30	7	3	4	15	58	129	71	38	46	59	71	47	31	38	680
11 - 20	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	3
21 - 60	0	0	0	0	0	0	0	0	0	0	0	0	1	1	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	34	30	7	3	4	15	58	129	71	38	46	59	73	48	32	38	685

Total Number of Valid Hours: 685

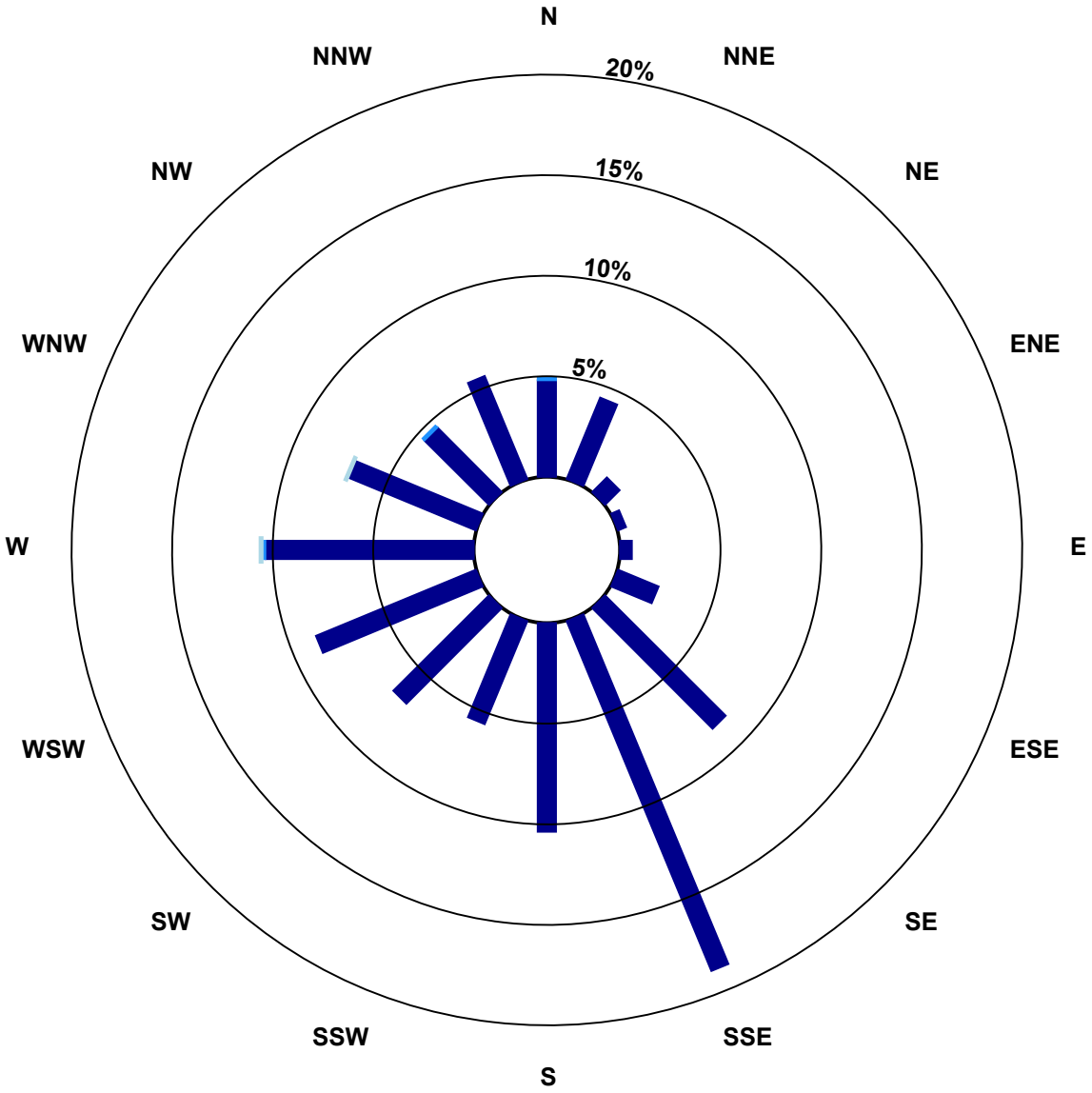
Total Number of Hours: 720

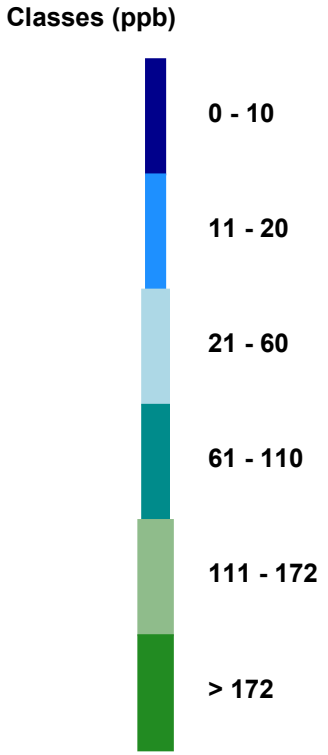
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Mannix





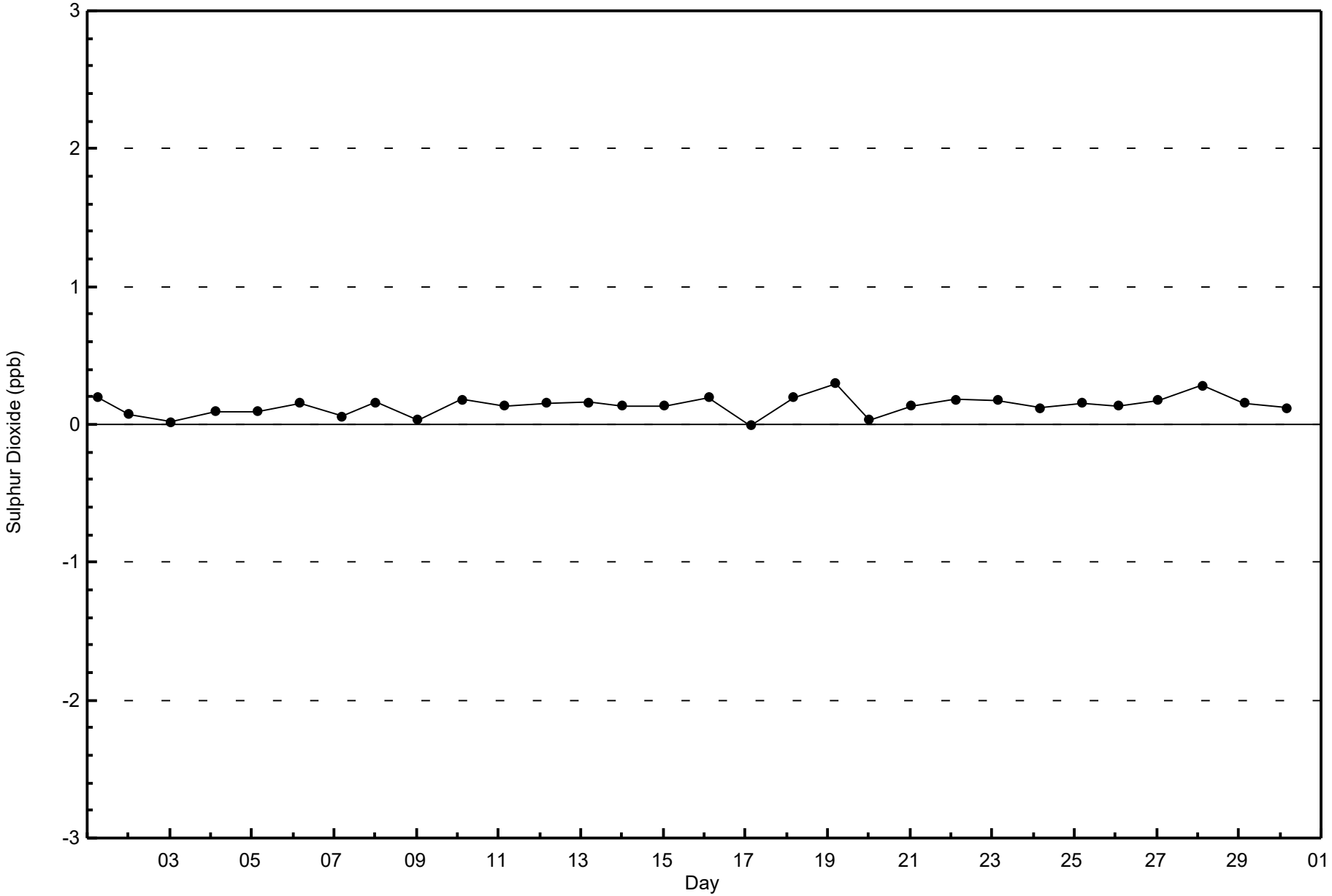
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Mannix - September 2026

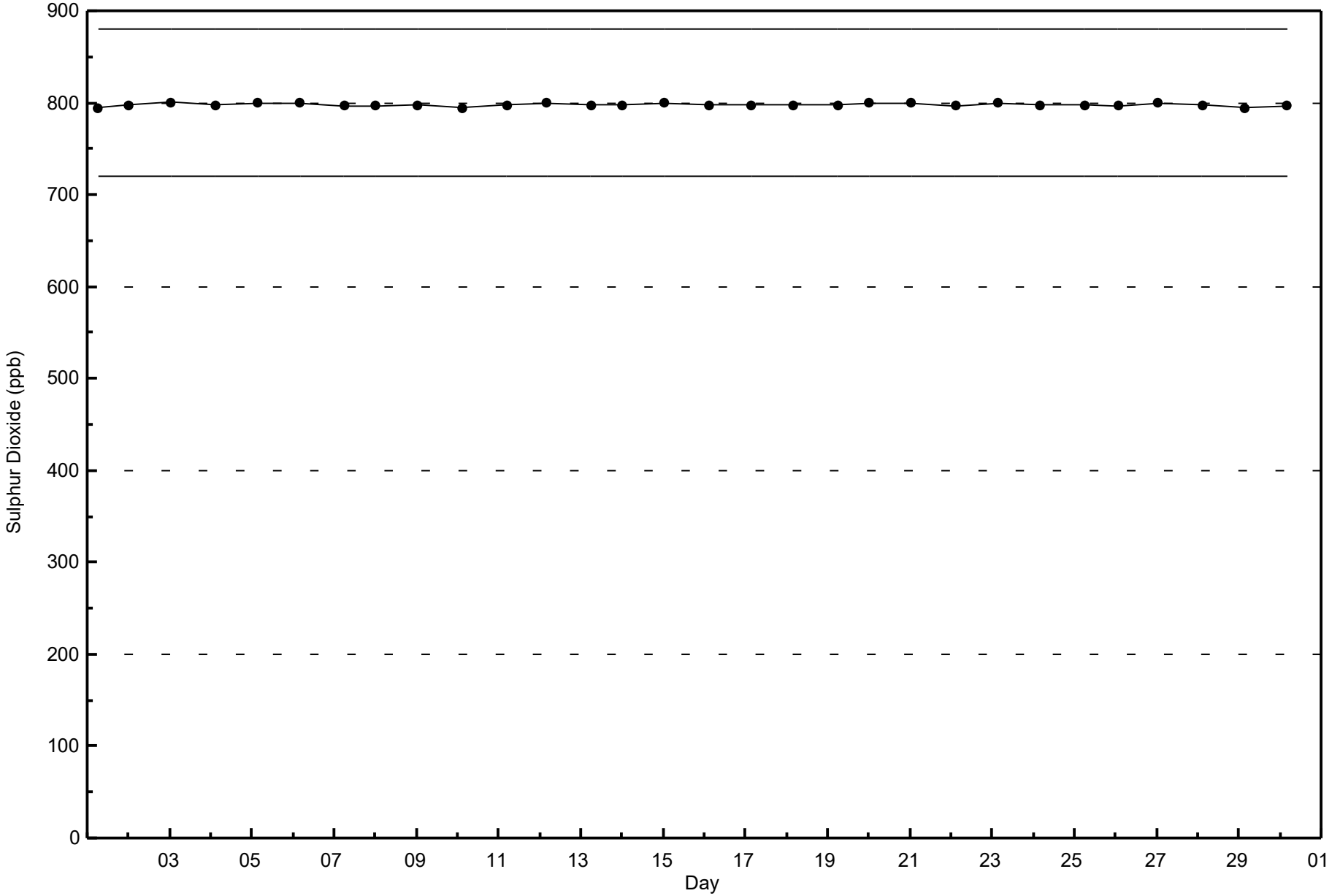


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Mannix - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Mannix - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6.5 ppb on Sep 25 03:00 Maximum Daily Average: 1.9 ppb on Sep 25

Minimum Value: 0.0 ppb on Sep 20 14:00 Minimum Daily Average: 0.1 ppb on Sep 27
Maximum Diurnal Average: 0.5 ppb at hour 3 Minimum Diurnal Average: 0.2 ppb at hour 15
Monthly Average: 0.33 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} = 3.1

Hours in Service:	720
Hours of Data:	683
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-Sep	0.9	Z	0.3	0.3	0.2	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	0.1	0.1	0.1	0.1	0.2	0.9
2-Sep	0.1	Z	0.1	0.2	0.2	0.2	0.2	0.1	0.1	C	C	C	C	C	C	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.1	0.1	--	0.3
3-Sep	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.1	1.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	3.4	2.5	0.4	0.2	0.1	0.2	0.5	3.4
4-Sep	0.3	0.2	0.3	Z	0.3	0.2	0.3	0.2	0.2	0.5	1.2	0.9	0.7	1.0	0.8	1.3	0.9	0.7	0.4	1.3	1.0	0.2	0.3	2.6	0.7	2.6
5-Sep	2.2	1.1	1.0	0.8	Z	1.0	0.7	1.6	2.7	1.0	0.2	0.2	0.3	0.5	0.4	0.5	0.2	0.3	0.5	0.5	0.5	1.0	0.8	0.4	0.8	2.7
6-Sep	0.5	0.5	0.4	0.4	0.3	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	0.1	0.1	0.1	0.1	0.2	0.5
7-Sep	Z	0.1	0.1	0.1	0.2	0.2	0.9	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.5	0.6	0.3	0.2	0.3	0.3	0.2	0.9
8-Sep	0.4	Z	0.2	0.9	1.6	1.6	2.2	1.8	0.9	0.7	1.4	0.4	0.3	0.3	0.4	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.7	2.2
9-Sep	0.3	0.2	Z	0.2	0.2	0.3	0.2	0.2	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	0.3
10-Sep	0.1	0.1	0.1	Z	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.8	0.7	0.1	0.1	0.2	0.9	0.5	0.1	0.1	0.2	0.9
11-Sep	0.2	0.4	0.5	0.3	0.2	Z	0.2	0.2	0.2	0.1	0.1	0.1	0.1	M	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.5
12-Sep	0.3	0.2	0.1	0.2	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
13-Sep	Z	0.1	0.1	0.1	0.1	0.2	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	1.2	3.2	1.0	0.4	0.2	0.3	3.2
14-Sep	0.3	Z	0.2	1.0	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.6	0.3	0.3	1.0
15-Sep	0.2	0.1	Z	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.3	0.6	0.4	0.2	0.1	0.1	0.1	0.3	0.2	0.6
16-Sep	0.4	0.3	0.2	Z	0.2	0.5	0.3	0.3	0.2	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.2	0.1	0.1	0.2	0.5
17-Sep	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.3
18-Sep	0.2	0.2	0.2	0.2	0.2	Z	0.6	1.7	3.5	0.9	0.4	0.8	0.7	0.2	0.1	0.2	0.2	0.4	0.4	0.5	0.3	0.3	0.2	0.3	0.6	3.5
19-Sep	Z	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	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.3
20-Sep	0.3	Z	0.1	0.2	0.3	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.4
21-Sep	0.2	0.2	Z	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	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
22-Sep	1.3	1.5	0.9	Z	0.4	0.5	0.4	0.5	0.4	0.5	1.3	0.3	0.6	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.4	0.2	0.4	1.5
23-Sep	0.2	0.2	0.2	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	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3
24-Sep	0.2	0.3	0.3	0.2	0.3	Z	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.5
25-Sep	Z	0.4	6.5	2.0	3.1	3.5	3.1	3.4	2.6	2.9	0.6	0.4	1.2	1.6	0.5	3.4	1.0	2.4	0.8	1.3	1.3	0.7	1.1	0.7	1.9	6.5
26-Sep	1.1	0.5	Z	0.7	0.8	0.3	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	1.1
27-Sep	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
28-Sep	0.1	0.1	0.1	Z	0.1	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	0.1	0.1	0.3
29-Sep	0.1	0.1	0.1	0.2	Z	0.2	0.4	0.5	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	0.0	0.1	0.2	0.5
30-Sep	0.0	0.0	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.7	0.8	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.6	0.3	0.1	0.2	0.2	0.8
	0.4	0.3	0.5	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.4	0.4	0.3	0.2	0.3	Diurnal Average	
	2.2	1.5	6.5	2.0	3.1	3.5	3.1	3.4	3.5	2.9	1.4	0.9	1.2	1.6	0.8	3.4	1.0	2.4	3.4	2.5	3.2	1.0	1.1	2.6	Diurnal Maximum	

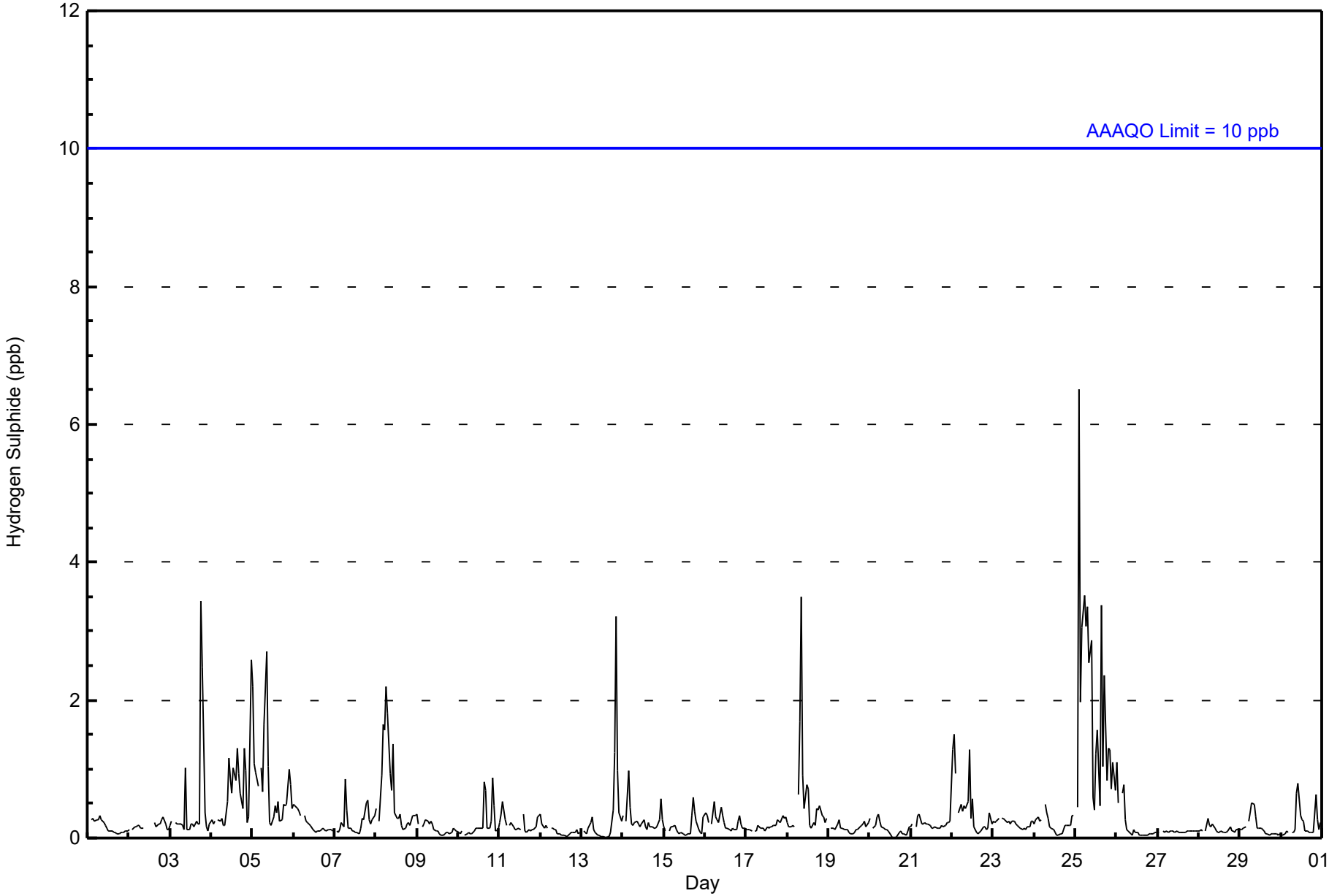
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Mannix - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	670	98.10	98.10
3 - 4	12	1.76	99.85
5 - 7	1	0.15	100.00
8 - 11	0	0.00	100.00
> 11	0	0.00	100.00

Total Number of Valid Hours: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Mannix - September 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	24	6	1	4	14	52	126	74	37	45	60	72	48	35	40	670
3 - 4	3	6	1	2	0	0	0	0	0	0	0	0	0	0	0	0	12
5 - 7	0	0	0	0	0	1	0	0	0	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	35	30	7	3	4	15	52	126	74	37	45	60	72	48	35	40	683

Total Number of Valid Hours: 683

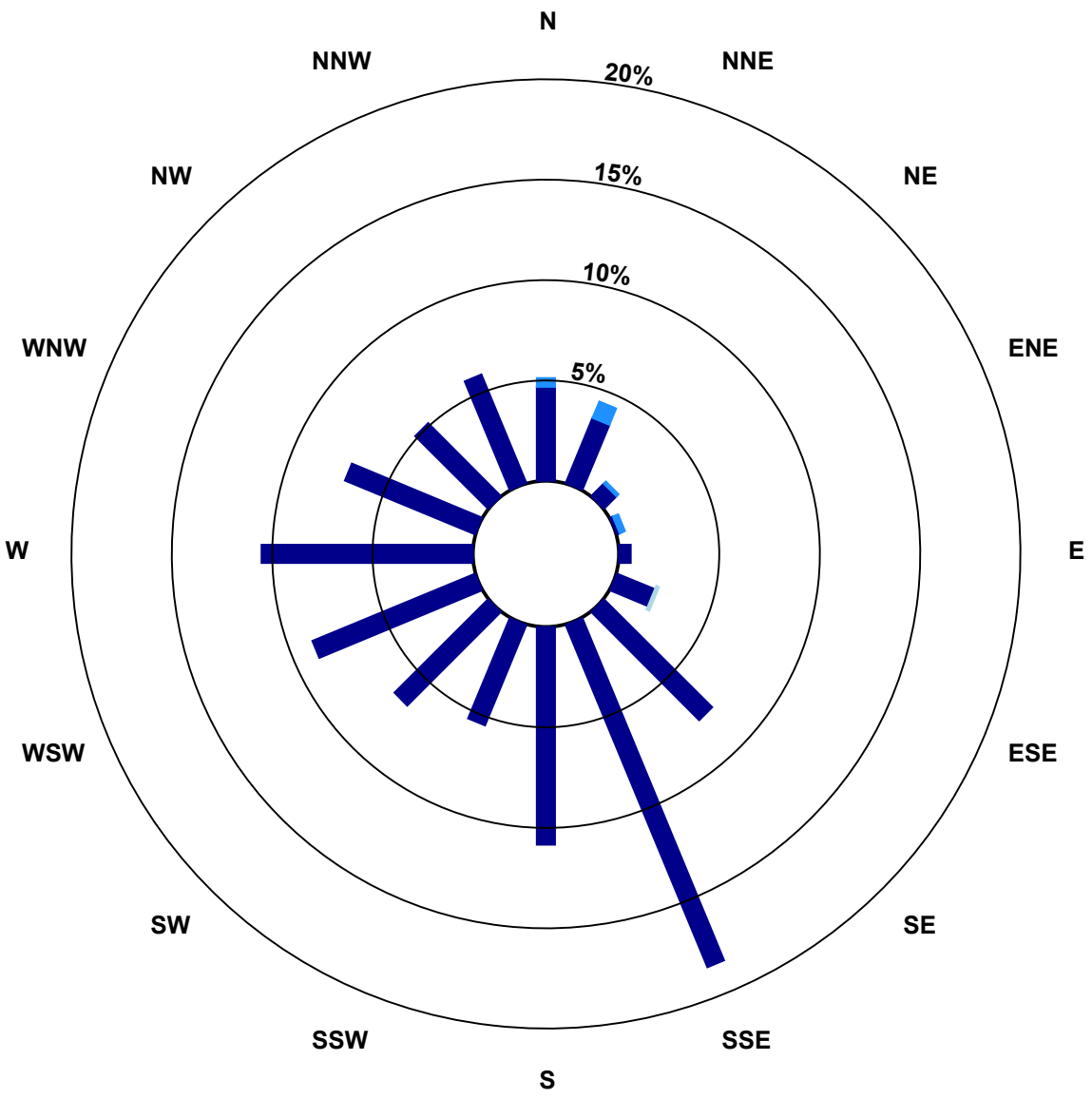
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

Mannix



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

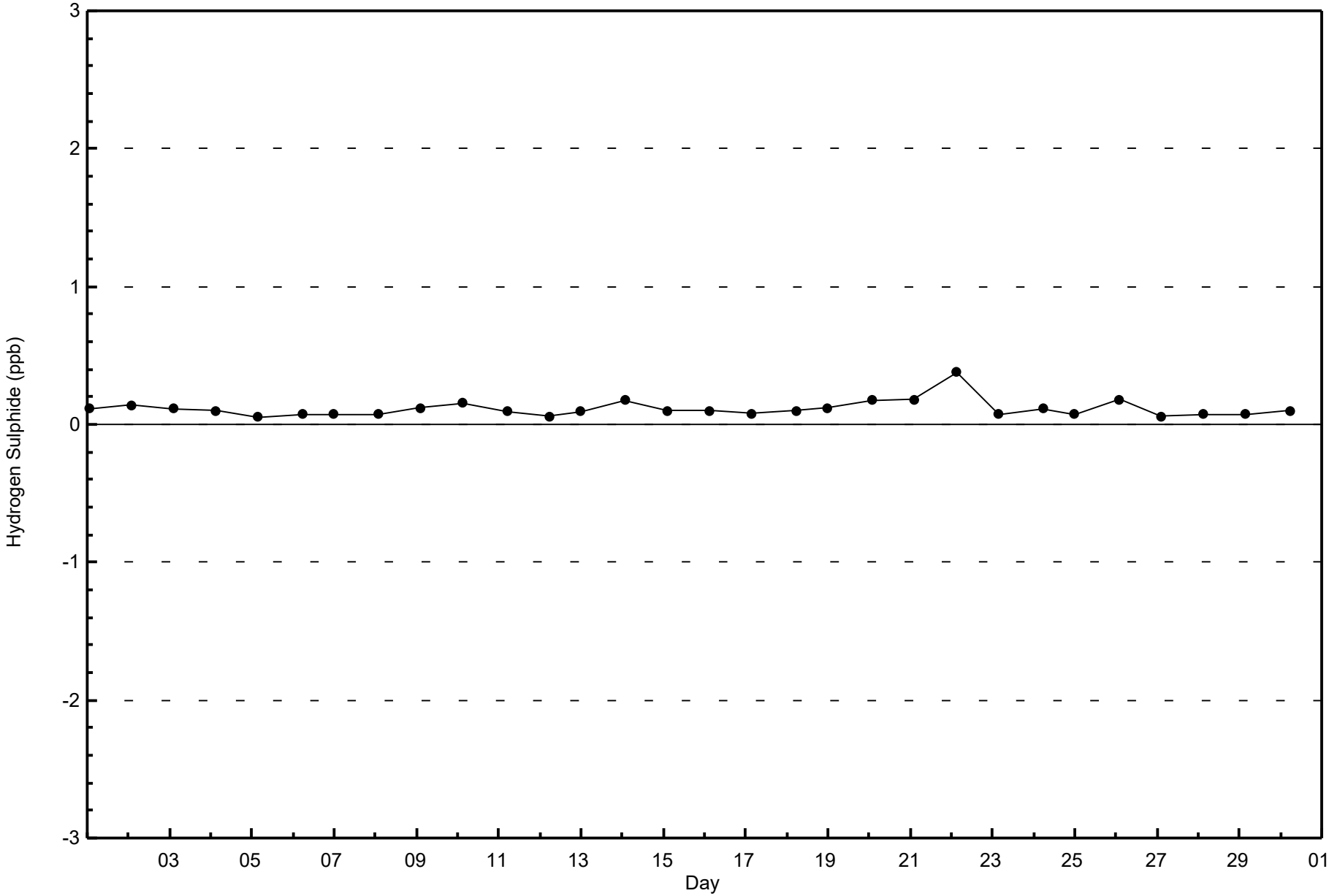
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Mannix - September 2026

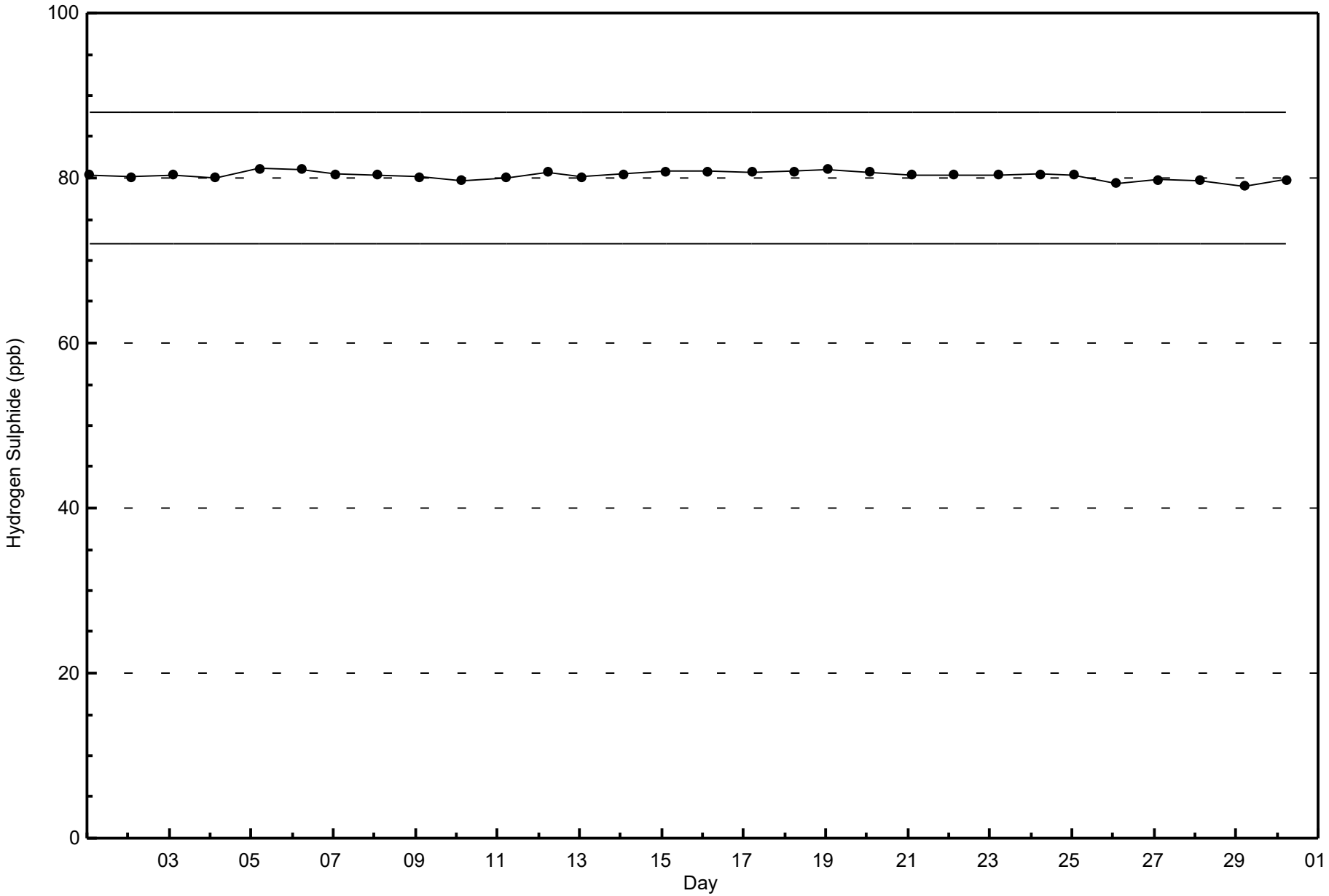


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Mannix - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Mannix - September 2026

Maximum Value: 3.1 ppm on Sep 8 06:00

Maximum Daily Average: 2.3 ppm on Sep 8

Minimum Value: 1.9 ppm on Sep 20 20:00

Minimum Daily Average: 2.0 ppm on Sep 29

Maximum Diurnal Average: 2.2 ppm at hour 8

Minimum Diurnal Average: 2.0 ppm at hour 15

Monthly Average: 2.10 ppm

Percentiles: P_1 = 1.9 P_{10} = 2.0 Q_1 = 2.0 Median = 2.1 Q_3 = 2.1 P_{90} = 2.2 P_{99} = 2.6

Hours in Service:	720
Hours of Data:	685
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-Sep	2.1	2.1	2.1	2.1	2.1	2.1	Z	2.1	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.2
2-Sep	Z	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.0	2.1	2.0	2.1	2.0	2.0	2.1	2.1	2.0	2.1	2.2	2.2	2.3	2.3	2.1	2.1	2.1	2.3
3-Sep	2.2	Z	2.3	2.3	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.2	2.1	2.1	2.2	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.3
4-Sep	2.2	2.2	Z	2.2	2.2	2.1	2.1	2.2	2.2	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	2.3
5-Sep	2.1	2.1	2.0	Z	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	2.1	2.2	2.3	2.2	2.3	2.3	2.2	2.1	2.3
6-Sep	2.2	2.2	2.2	2.2	Z	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
7-Sep	2.1	2.1	2.1	2.1	2.2	Z	2.2	2.4	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	2.1	2.4
8-Sep	Z	2.2	2.3	2.4	2.9	3.1	3.1	2.9	2.7	2.4	2.4	2.3	2.1	2.1	2.2	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.3	3.1
9-Sep	2.1	Z	2.1	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	2.1	2.1	2.1	2.0	2.1	2.1	2.2
10-Sep	2.0	2.0	Z	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.3	2.2	2.1	2.1	2.1	2.3
11-Sep	2.1	2.1	2.3	2.3	Z	2.2	2.2	2.2	2.1	2.1	C	C	C	C	C	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.3
12-Sep	2.1	2.1	2.0	2.0	Z	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1
13-Sep	2.1	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.2
14-Sep	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.2	2.2	2.1	2.1	2.3	2.2	2.1	2.1	2.3
15-Sep	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.2	2.1	2.2
16-Sep	2.2	2.1	Z	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.3	2.2	2.1	2.1	2.1	2.3
17-Sep	2.1	2.0	2.1	Z	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.2
18-Sep	2.2	2.2	2.1	2.1	Z	2.1	2.6	2.7	2.3	2.3	2.4	2.4	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.2	2.7
19-Sep	2.0	2.0	2.0	2.1	2.0	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	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1
20-Sep	Z	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.1
21-Sep	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	2.1	2.0	2.1	2.1	2.1	2.1
22-Sep	2.3	2.4	Z	2.5	2.2	2.2	2.1	2.2	2.2	2.3	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.5
23-Sep	2.0	2.1	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	2.0	2.1	2.1	2.1	2.1
24-Sep	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1
25-Sep	2.0	2.1	2.7	2.2	2.4	Z	2.5	2.5	2.4	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.2	2.7
26-Sep	2.0	Z	2.3	2.5	2.3	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	2.5
27-Sep	2.0	Z	2.0	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
28-Sep	2.0	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	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1
29-Sep	2.0	2.0	2.0	Z	2.1	2.2	2.2	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2
30-Sep	1.9	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9	2.0	2.0	2.2	2.2	2.4	2.1	2.2	2.1	2.4
	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	Diurnal Average	
	2.3	2.4	2.7	2.5	2.9	3.1	3.1	2.9	2.7	2.4	2.4	2.4	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.3	2.4	2.3	2.2	Diurnal Maximum	

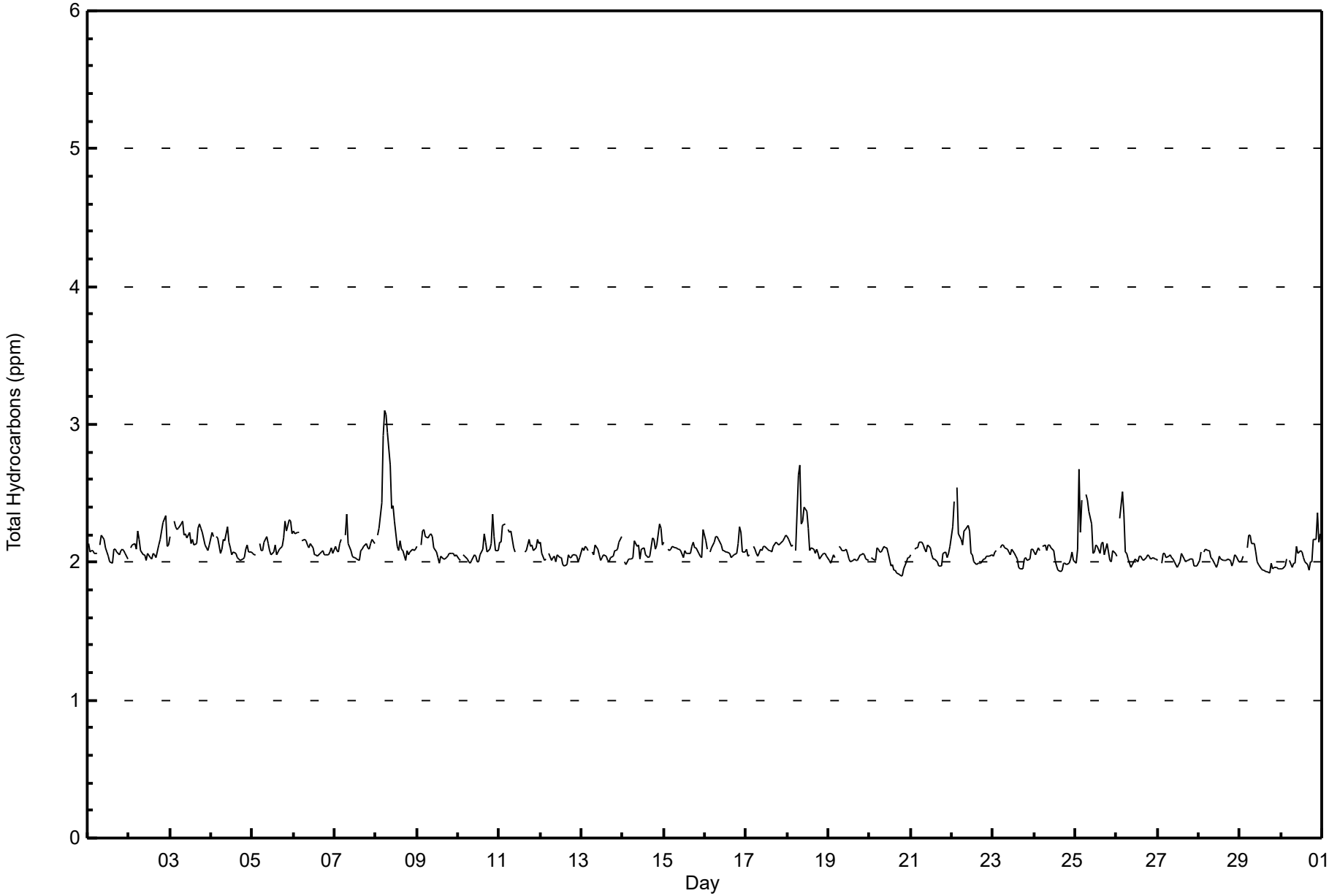
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Mannix - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	237	34.60	34.60
2.1 - 3.0	446	65.11	99.71
3.1 - 10.0	2	0.29	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Mannix - September 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	14	3	0	0	0	0	10	34	23	10	30	38	50	16	5	4	237
2.1 - 3.0	20	27	7	3	4	15	48	95	48	28	16	21	23	31	26	34	446
3.1 - 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	34	30	7	3	4	15	58	129	71	38	46	59	73	48	32	38	685

Total Number of Valid Hours: 685

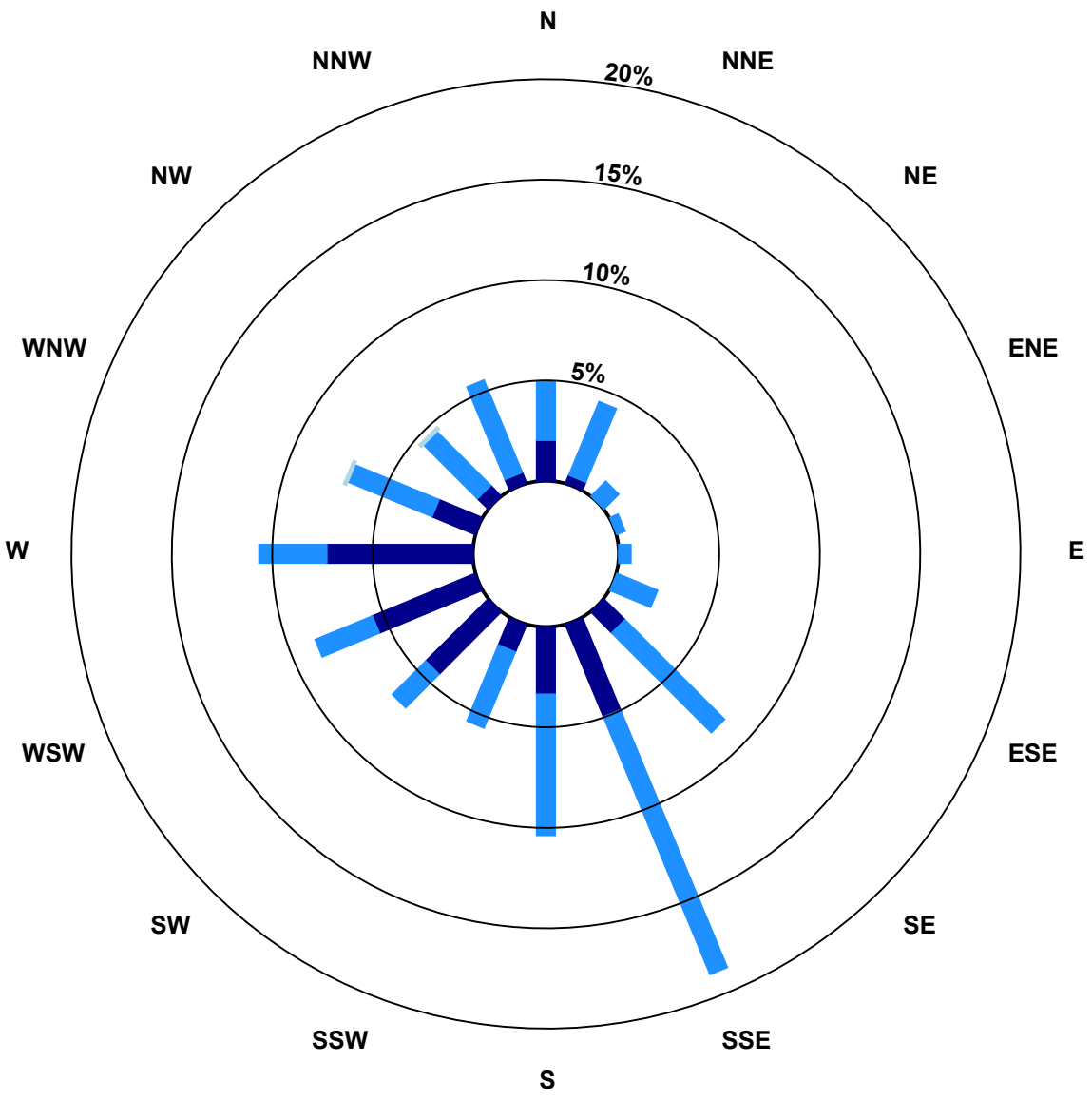
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Mannix



Classes (ppm)

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

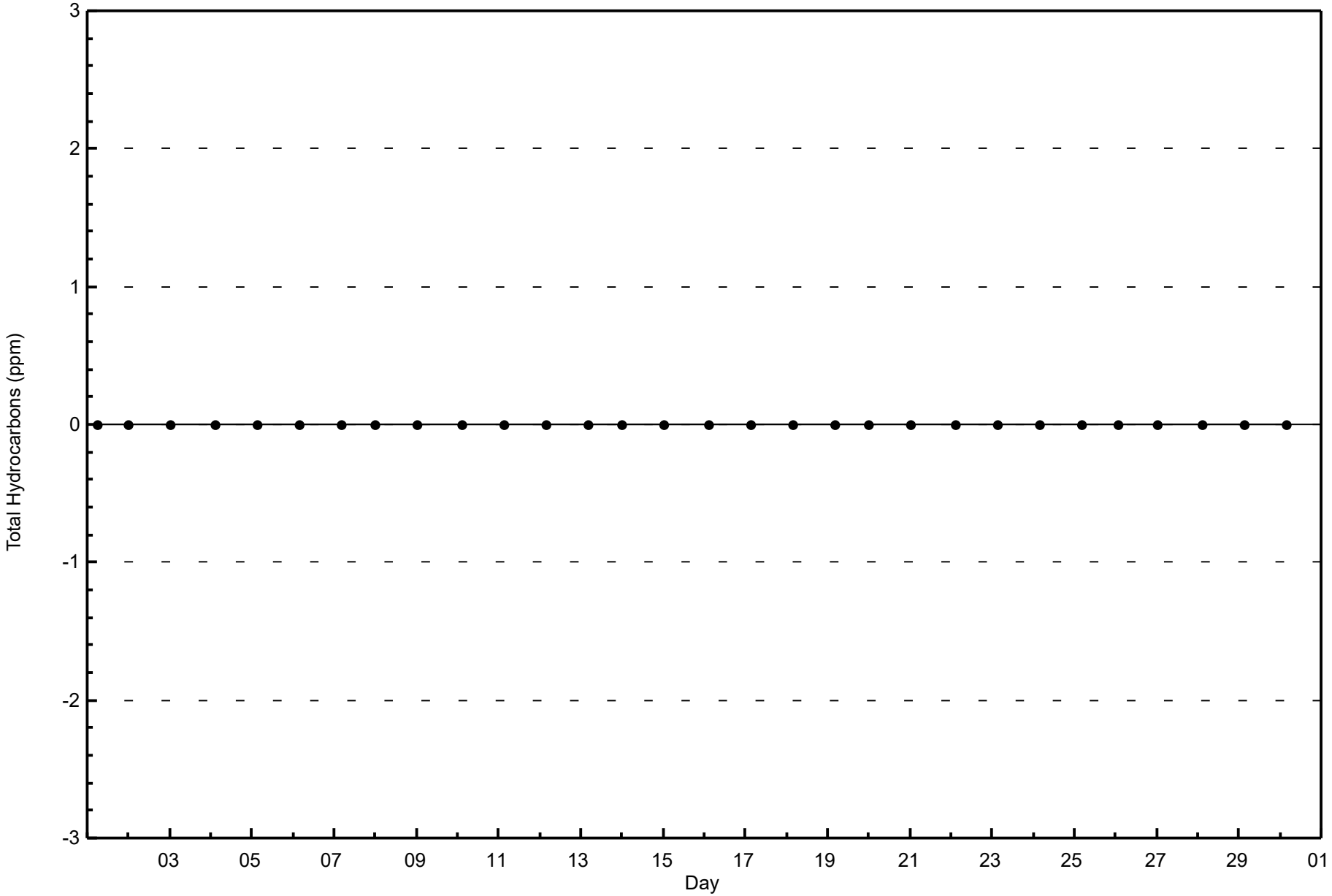
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Mannix - September 2026

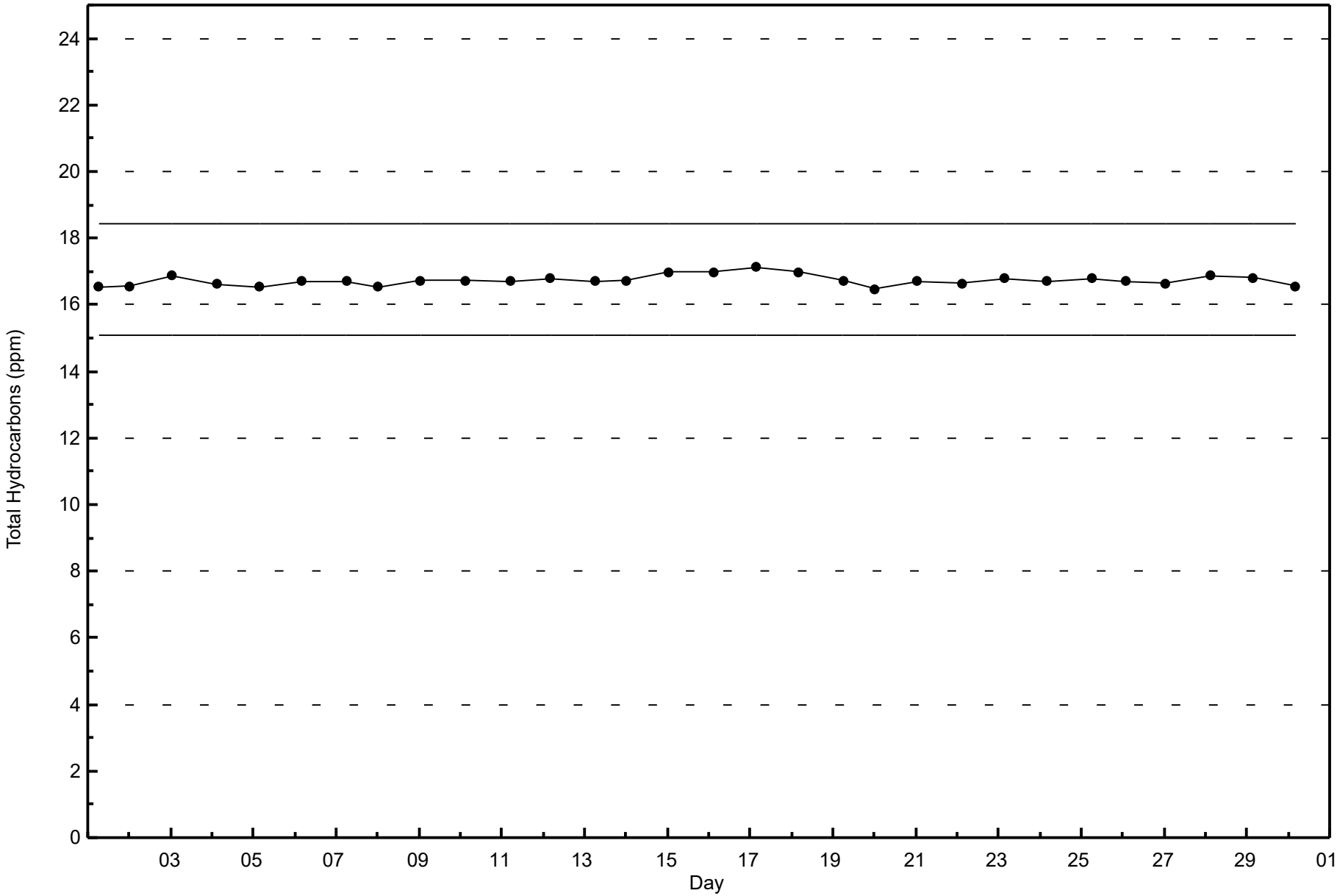


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Mannix - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Mannix - September 2026

Maximum Value: 0.120 ppm on Sep 22 02:00

Maximum Daily Average: 0.031 ppm on Sep 25

Minimum Value: 0.000 ppm on Sep 2 00:00

Minimum Daily Average: 0.000 ppm on Sep 27

Maximum Diurnal Average: 0.008 ppm at hour 17

Minimum Diurnal Average: 0.001 ppm at hour 24

Monthly Average: 0.005 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:	720
Hours of Data:	685
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-Sep	0.001	0.000	0.000	0.000	0.001	0.001	Z	0.001	0.002	0.001	0.001	0.001	0.001	0.000	0.001	0.002	0.004	0.001	0.001	0.002	0.002	0.001	0.000	0.000	0.001	0.004
2-Sep	Z	0.002	0.001	0.001	0.000	0.001	0.001	0.003	0.000	0.008	0.004	0.006	0.016	0.020	0.024	0.027	0.027	0.022	0.025	0.012	0.004	0.001	0.000	0.000	0.009	0.027
3-Sep	0.001	Z	0.008	0.003	0.008	0.013	0.015	0.012	0.004	0.006	0.005	0.058	0.005	0.006	0.020	0.046	0.098	0.002	0.014	0.032	0.029	0.005	0.001	0.002	0.017	0.098
4-Sep	0.001	0.002	Z	0.004	0.000	0.001	0.001	0.001	0.001	0.007	0.031	0.012	0.017	0.031	0.018	0.009	0.002	0.001	0.001	0.001	0.009	0.001	0.001	0.020	0.007	0.031
5-Sep	0.013	0.004	0.002	Z	0.001	0.001	0.001	0.015	0.023	0.010	0.003	0.001	0.017	0.001	0.002	0.001	0.000	0.001	0.002	0.001	0.002	0.093	0.031	0.002	0.010	0.093
6-Sep	0.003	0.002	0.000	0.001	Z	0.000	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.002	0.002	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.003
7-Sep	0.000	0.000	0.000	0.001	0.000	Z	0.040	0.001	0.000	0.001	0.000	0.000	0.001	0.001	0.001	0.028	0.001	0.001	0.002	0.001	0.001	0.001	0.003	0.000	0.004	0.040
8-Sep	Z	0.002	0.001	0.053	0.011	0.007	0.073	0.052	0.104	0.016	0.035	0.011	0.002	0.003	0.003	0.001	0.000	0.001	0.003	0.000	0.002	0.001	0.000	0.000	0.017	0.104
9-Sep	0.002	Z	0.001	0.002	0.000	0.002	0.001	0.001	0.001	0.001	0.002	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	0.001	0.002
10-Sep	0.000	0.001	Z	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.003	0.001	0.001	0.001	0.000	0.001	0.001	0.000	0.000	0.001	0.003
11-Sep	0.000	0.001	0.000	0.001	Z	0.000	0.001	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	0.000	0.000	0.001
12-Sep	0.000	0.000	0.000	0.000	Z	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	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.002
13-Sep	0.001	0.000	0.000	0.000	0.000	Z	0.001	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.001	0.002	0.015	0.021	0.003	0.000	0.001	0.002	0.021
14-Sep	Z	0.002	0.003	0.003	0.001	0.000	0.001	0.006	0.001	0.011	0.000	0.009	0.008	0.009	0.000	0.008	0.001	0.009	0.020	0.001	0.002	0.089	0.001	0.001	0.008	0.089
15-Sep	0.000	Z	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	0.001	0.038	0.001	0.001	0.000	0.000	0.000	0.001	0.002	0.038
16-Sep	0.002	0.001	Z	0.003	0.002	0.009	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.003	0.001	0.001	0.002	0.001	0.020	0.008	0.001	0.000	0.001	0.000	0.003	0.020
17-Sep	0.001	0.001	0.000	Z	0.000	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.002	0.002	0.000	0.002	0.001	0.002	0.002	0.003	0.007	0.014	0.004	0.002	0.014
18-Sep	0.001	0.002	0.001	0.003	Z	0.000	0.001	0.036	0.023	0.003	0.025	0.035	0.005	0.001	0.000	0.001	0.001	0.007	0.000	0.000	0.000	0.000	0.001	0.000	0.006	0.036
19-Sep	0.002	0.001	0.001	0.000	0.001	Z	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.000	0.001	0.002
20-Sep	Z	0.001	0.001	0.001	0.003	0.000	0.002	0.002	0.003	0.001	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.001	0.003
21-Sep	0.001	Z	0.001	0.003	0.002	0.001	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.005	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.001	0.005
22-Sep	0.099	0.120	Z	0.007	0.006	0.005	0.002	0.001	0.004	0.057	0.022	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.003	0.003	0.014	0.120
23-Sep	0.001	0.000	0.000	Z	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	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.001
24-Sep	0.001	0.000	0.001	0.000	Z	0.001	0.000	0.001	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	0.044	0.000	0.002	0.044
25-Sep	0.001	0.022	0.104	0.002	0.018	Z	0.019	0.040	0.042	0.017	0.022	0.031	0.022	0.003	0.001	0.059	0.094	0.050	0.100	0.059	0.005	0.005	0.008	0.001	0.031	0.104
26-Sep	0.016	Z	0.001	0.004	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	0.000	0.000	0.000	0.001	0.016
27-Sep	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
28-Sep	0.000	0.000	Z	0.004	0.001	0.000	0.001	0.001	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.004
29-Sep	0.000	0.001	0.000	Z	0.000	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001
30-Sep	0.000	0.000	0.000	0.000	Z	0.000	0.001	0.000	0.000	0.032	0.000	0.000	0.024	0.037	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.000	0.000	0.004	0.037
	0.006	0.007	0.005	0.004	0.002	0.002	0.006	0.006	0.007	0.006	0.005	0.006	0.004	0.004	0.003	0.006	0.008	0.005	0.007	0.005	0.003	0.007	0.004	0.001	Diurnal Average	
	0.099	0.120	0.104	0.053	0.018	0.013	0.073	0.052	0.104	0.057	0.035	0.058	0.024	0.037	0.024	0.059	0.098	0.050	0.100	0.059	0.029	0.093	0.044	0.020	Diurnal Maximum	

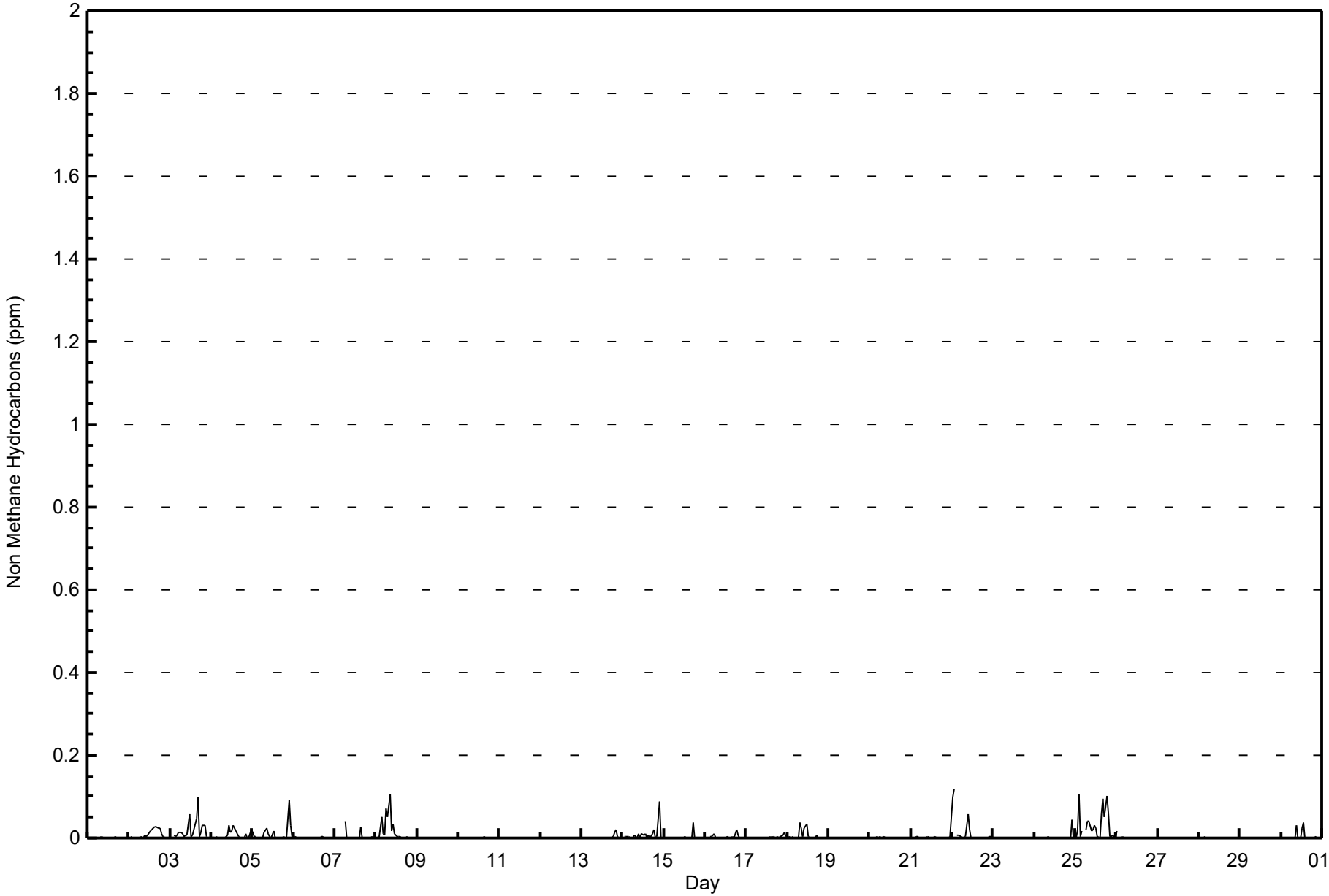
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Mannix - September 2026



Non Methane Hydrocarbons (NMHC) - ppm

Mannix - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	586	85.55	85.55
0.006 - 0.05	85	12.41	97.96
0.06 - 0.1	14	2.04	100.00
> 0.1	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Mannix - September 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	19	8	3	0	2	6	41	128	70	37	46	59	70	45	23	29	586
0.006 - 0.05	15	17	3	3	1	7	16	1	1	1	0	0	3	1	8	8	85
0.06 - 0.1	0	5	1	0	1	2	1	0	0	0	0	0	0	2	1	1	14
> 0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	34	30	7	3	4	15	58	129	71	38	46	59	73	48	32	38	685

Total Number of Valid Hours: 685

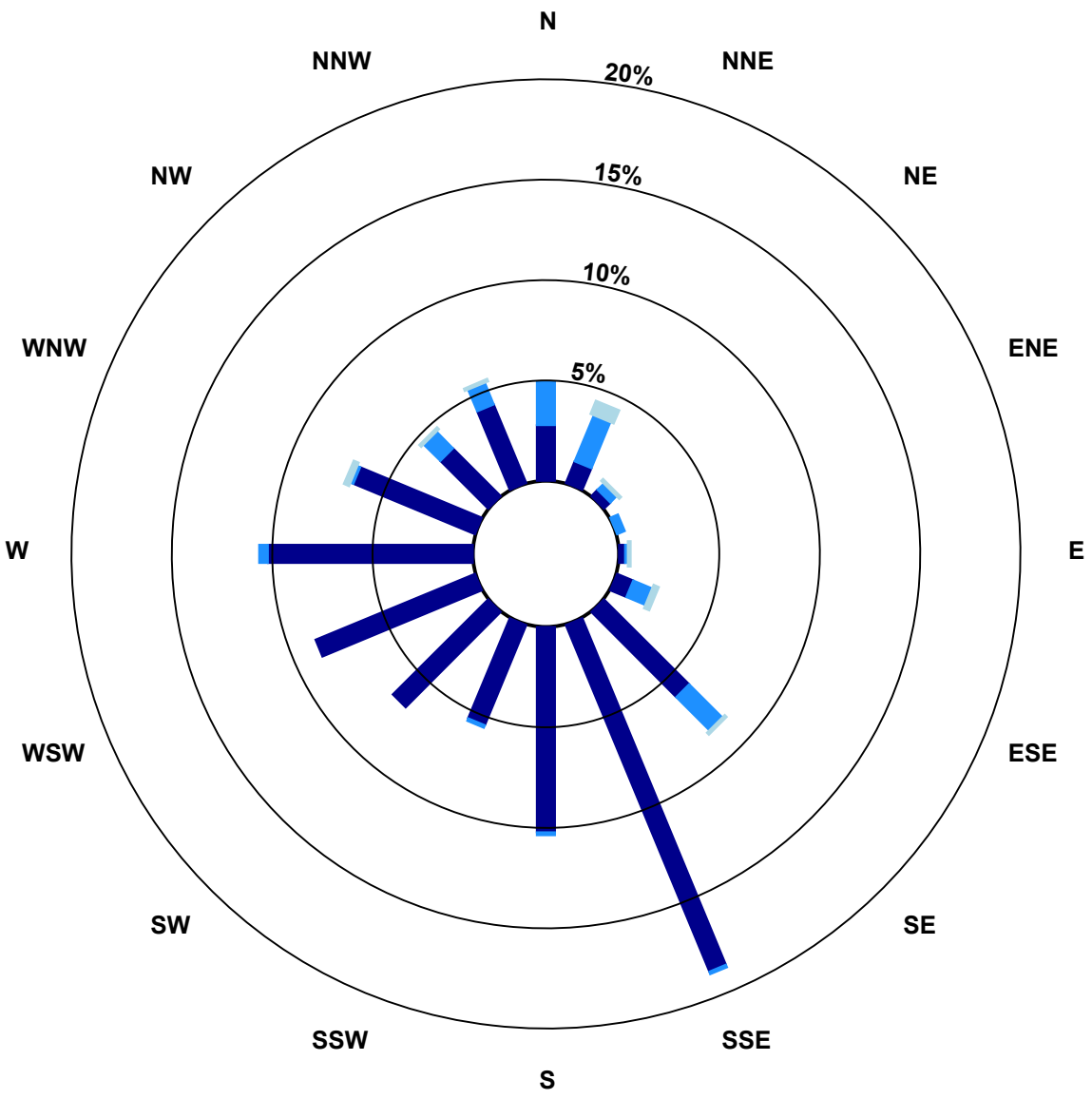
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Non Methane Hydrocarbons (NMHC) - ppm

Mannix



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

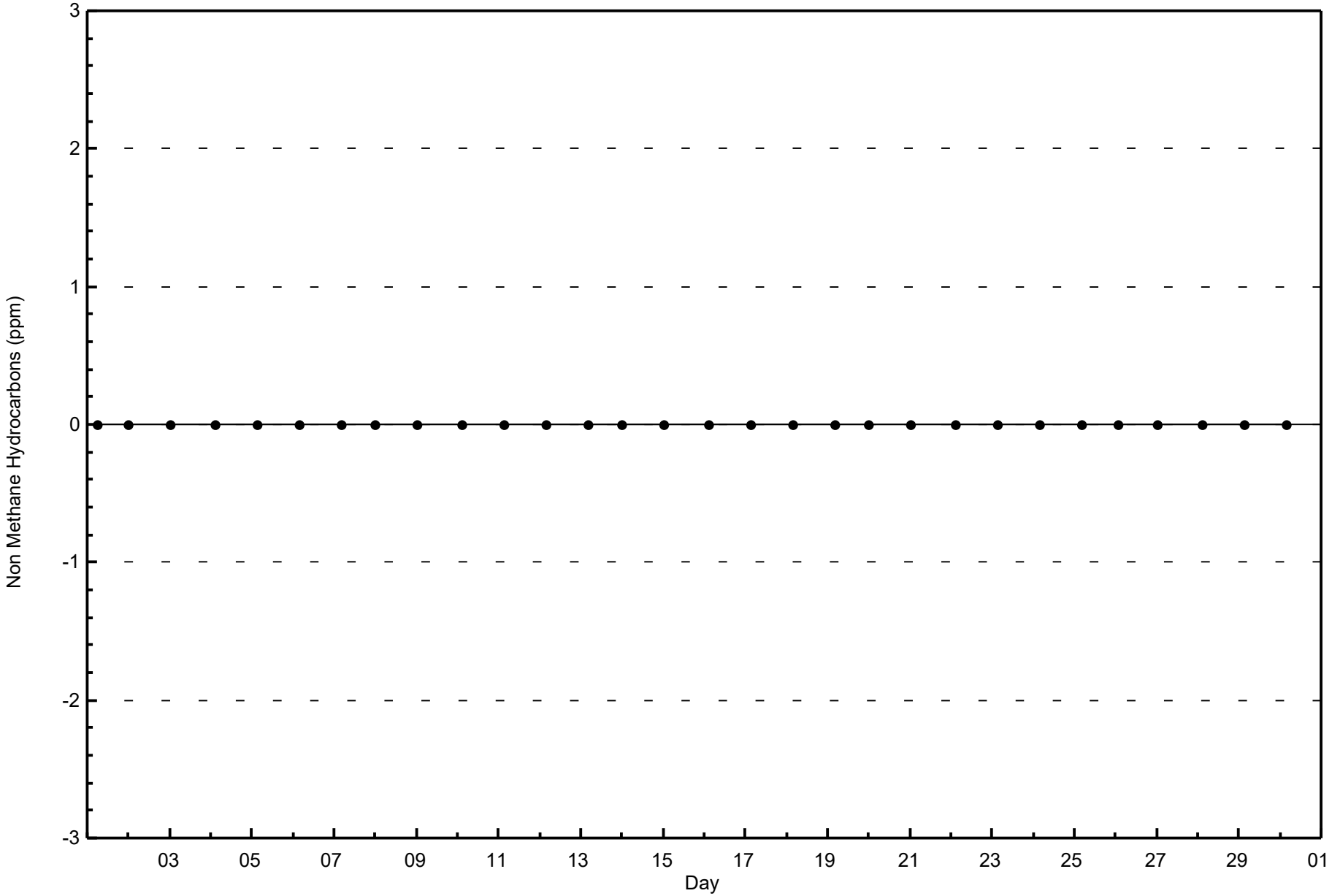
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Mannix - September 2026

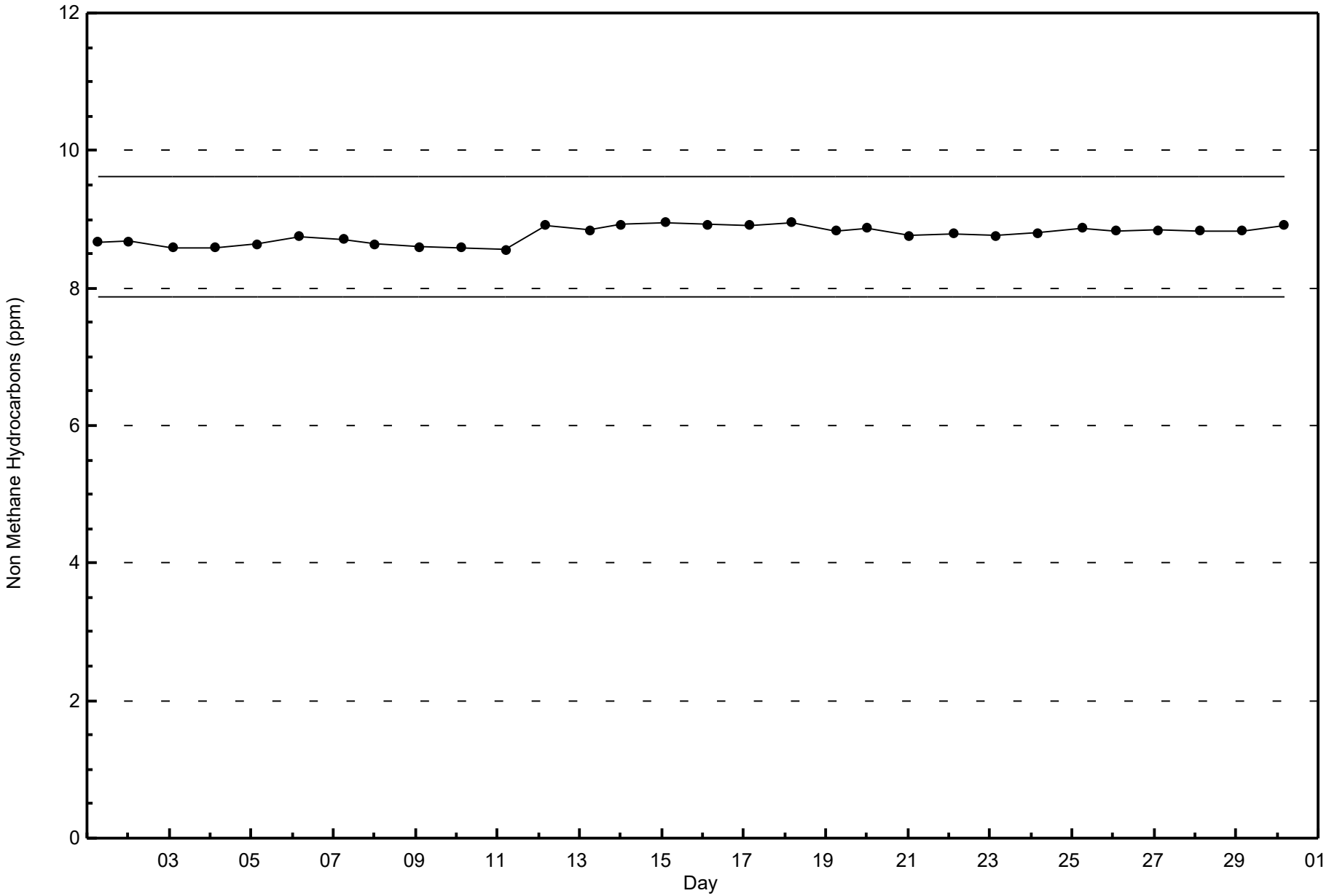


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Mannix - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Mannix - September 2026

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

Maximum Value: 3.1 ppm on Sep 8 06:00

Maximum Daily Average: 2.3 ppm on Sep 8

Minimum Value: 1.9 ppm on Sep 20 19:00

Minimum Daily Average: 2.0 ppm on Sep 29

Maximum Diurnal Average: 2.2 ppm at hour 8

Minimum Diurnal Average: 2.0 ppm at hour 16

Monthly Average: 2.09 ppm

Percentiles: P_1 = 1.9 P_{10} = 2.0 Q_1 = 2.0 Median = 2.1 Q_3 = 2.1 P_{90} = 2.2 P_{99} = 2.6

Hours in Service:	720
Hours of Data:	685
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-Sep	2.1	2.1	2.1	2.1	2.1	2.1	Z	2.1	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.2
2-Sep	Z	2.1	2.1	2.1	2.1	2.2	2.2	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	2.3	2.3	2.1	2.1	2.1	2.3
3-Sep	2.2	Z	2.3	2.3	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.3
4-Sep	2.2	2.2	Z	2.2	2.2	2.1	2.1	2.2	2.2	2.3	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
5-Sep	2.0	2.1	2.0	Z	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	2.1	2.2	2.3	2.2	2.2	2.3	2.2	2.1	2.3
6-Sep	2.2	2.2	2.2	2.2	Z	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
7-Sep	2.1	2.1	2.1	2.1	2.2	Z	2.2	2.3	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	2.1	2.3
8-Sep	Z	2.2	2.3	2.4	2.9	3.1	3.0	2.9	2.6	2.4	2.4	2.3	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.3	3.1
9-Sep	2.1	Z	2.1	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	2.1	2.1	2.1	2.0	2.1	2.1	2.2
10-Sep	2.0	2.0	Z	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.3	2.2	2.1	2.1	2.1	2.3
11-Sep	2.1	2.1	2.3	2.3	Z	2.2	2.2	2.2	2.1	2.1	C	C	C	C	C	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.3
12-Sep	2.1	2.1	2.0	2.0	Z	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1
13-Sep	2.1	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.2
14-Sep	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.2	2.2	2.1	2.1	2.2	2.2	2.1	2.1	2.2
15-Sep	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.2	2.1	2.2
16-Sep	2.2	2.1	Z	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.1	2.3	2.2	2.1	2.1	2.1	2.3
17-Sep	2.1	2.0	2.1	Z	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.2
18-Sep	2.2	2.2	2.1	2.1	Z	2.1	2.6	2.7	2.3	2.3	2.4	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.2	2.7
19-Sep	2.0	2.0	2.0	2.1	2.0	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	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1
20-Sep	Z	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.1
21-Sep	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	2.1	2.0	2.1	2.1	2.1	2.1
22-Sep	2.2	2.3	Z	2.5	2.2	2.2	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	2.1	2.1	2.5
23-Sep	2.0	2.1	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	2.0	2.1	2.1	2.1	2.1
24-Sep	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
25-Sep	2.0	2.1	2.6	2.2	2.4	Z	2.5	2.4	2.3	2.3	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.6
26-Sep	2.0	Z	2.3	2.5	2.3	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	2.5
27-Sep	2.0	Z	2.0	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
28-Sep	2.0	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	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1
29-Sep	2.0	2.0	2.0	Z	2.1	2.2	2.2	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2
30-Sep	1.9	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9	2.0	2.0	2.2	2.2	2.4	2.1	2.2	2.0	2.4
	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	Diurnal Average	
	2.2	2.3	2.6	2.5	2.9	3.1	3.0	2.9	2.6	2.4	2.4	2.3	2.2	2.2	2.1	2.2	2.1	2.3	2.2	2.3	2.3	2.4	2.3	2.2	Diurnal Maximum	

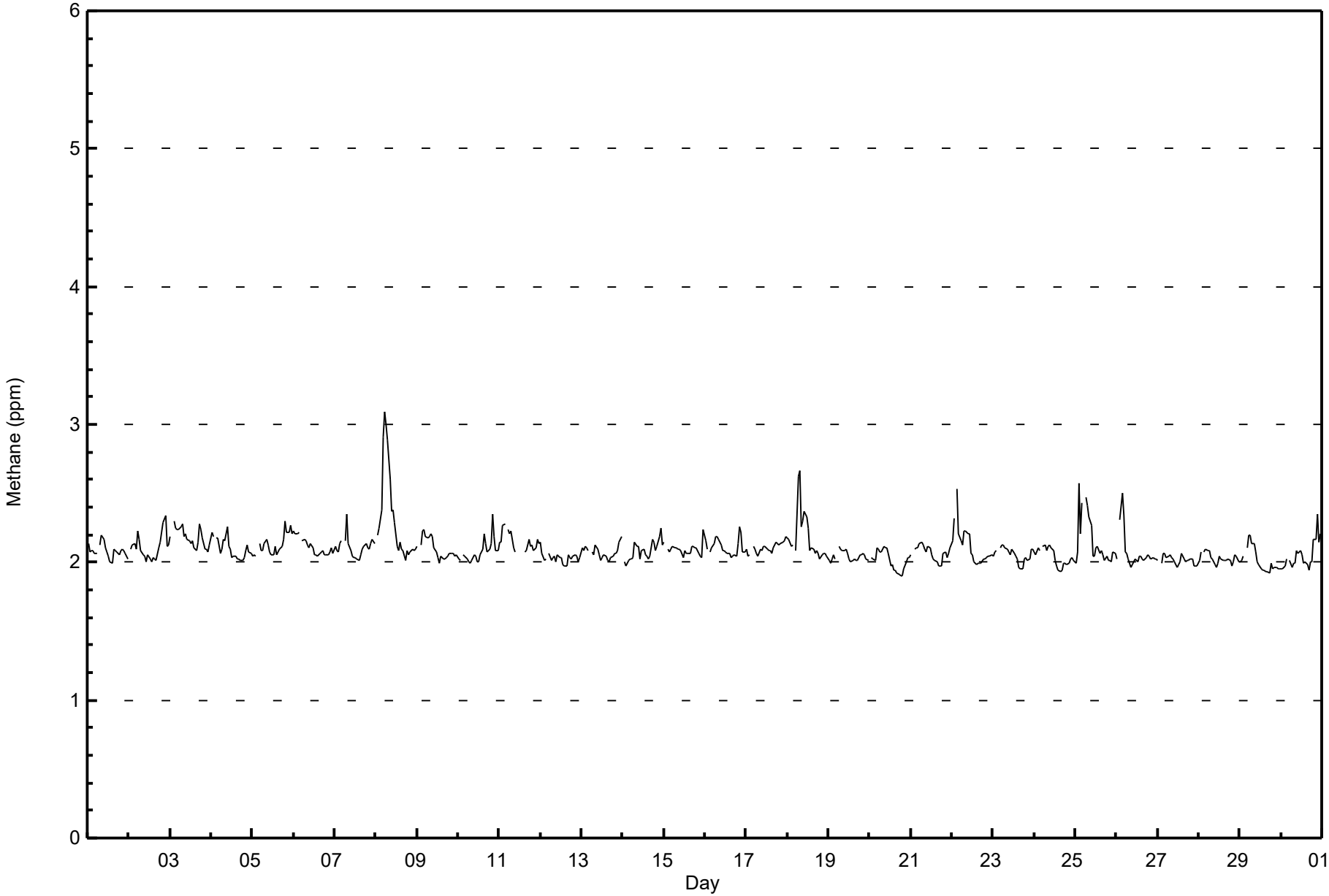
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Mannix - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	252	36.79	36.79
2.1 - 3.0	432	63.07	99.85
3.1 - 10.0	1	0.15	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Mannix - September 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	17	10	0	0	0	1	13	35	23	10	30	38	50	16	5	4	252
2.1 - 3.0	17	20	7	3	4	14	45	94	48	28	16	21	23	32	26	34	432
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	34	30	7	3	4	15	58	129	71	38	46	59	73	48	32	38	685

Total Number of Valid Hours: 685

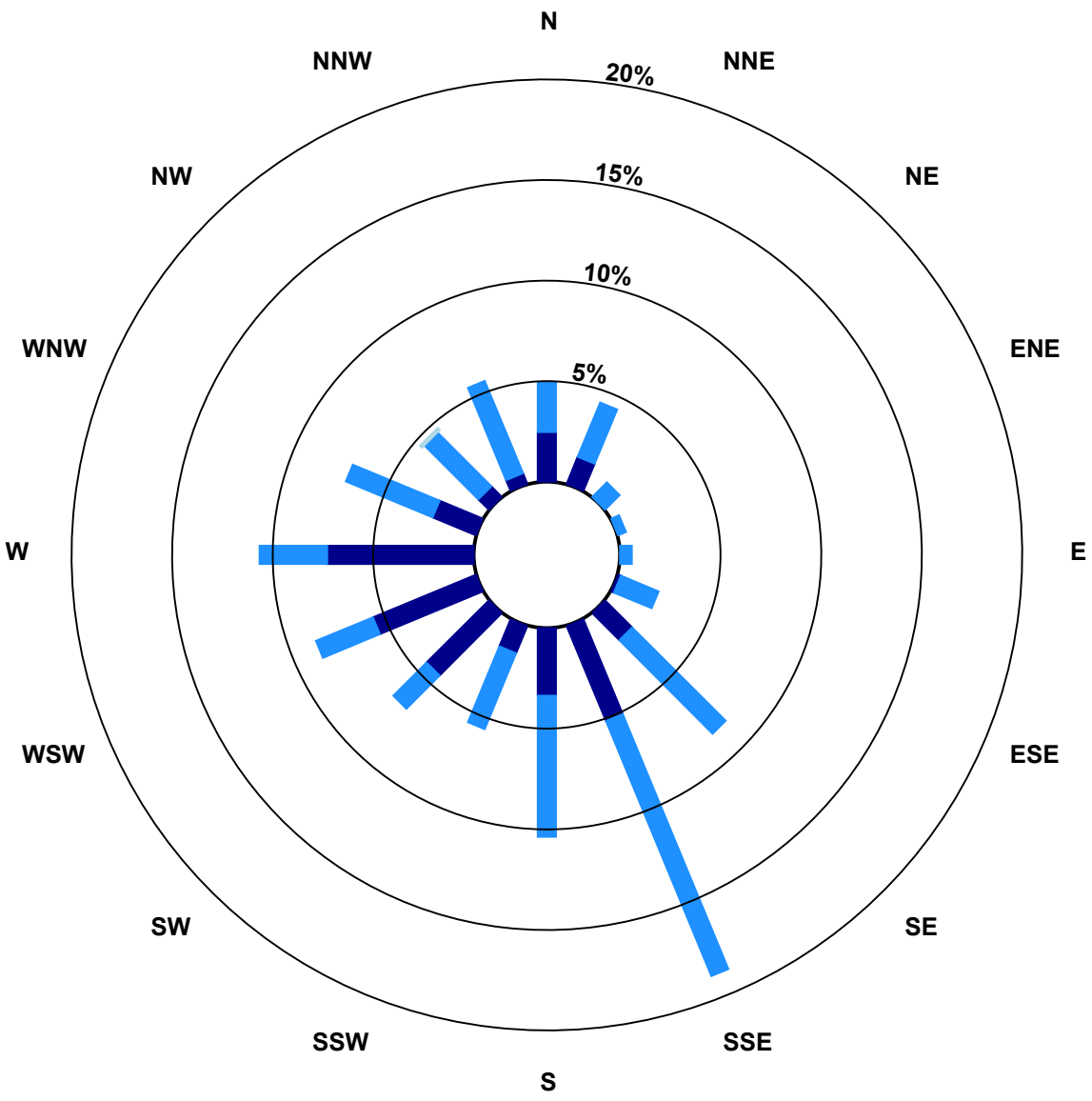
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Methane (CH_4) - ppm

Mannix



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

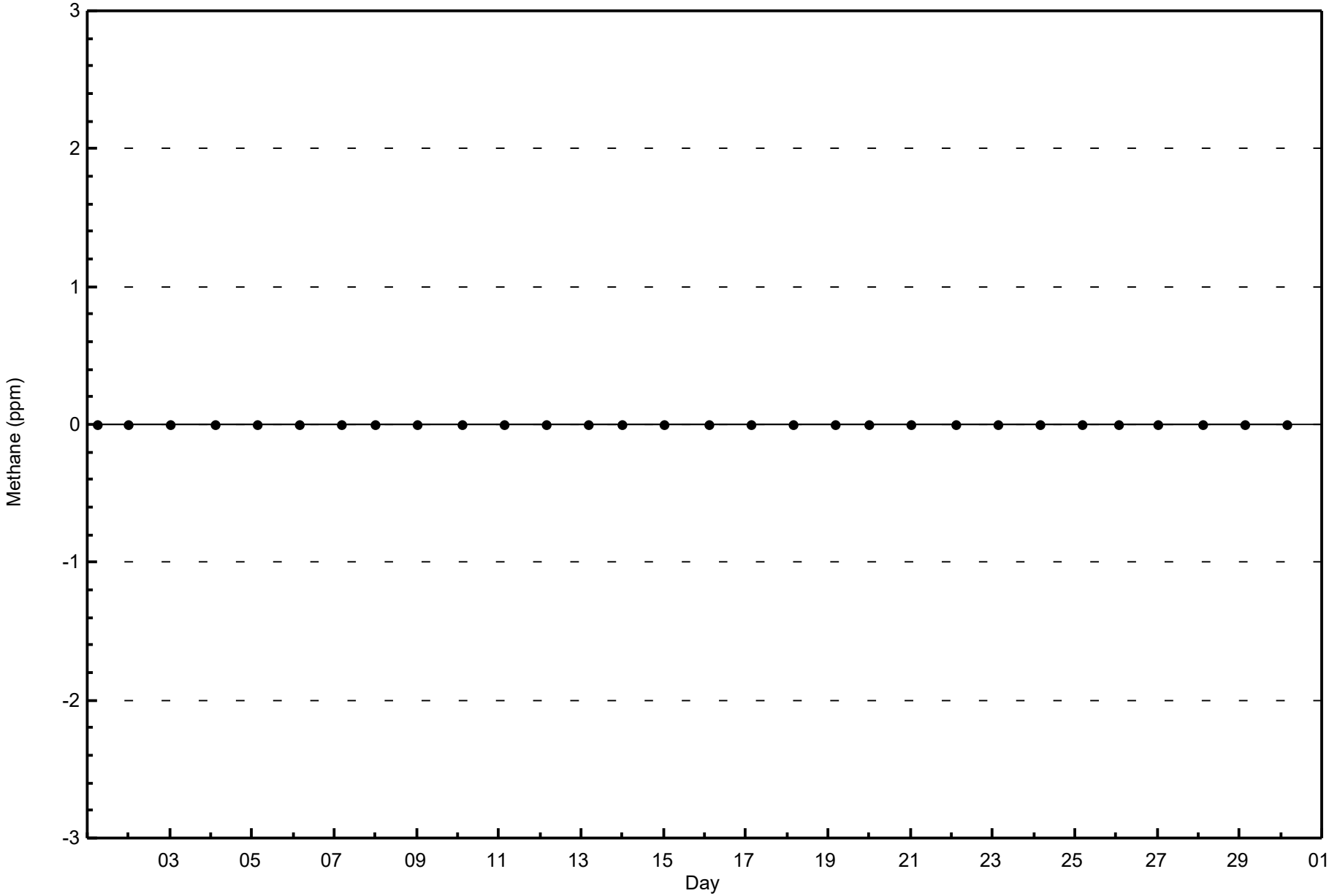
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Mannix - September 2026

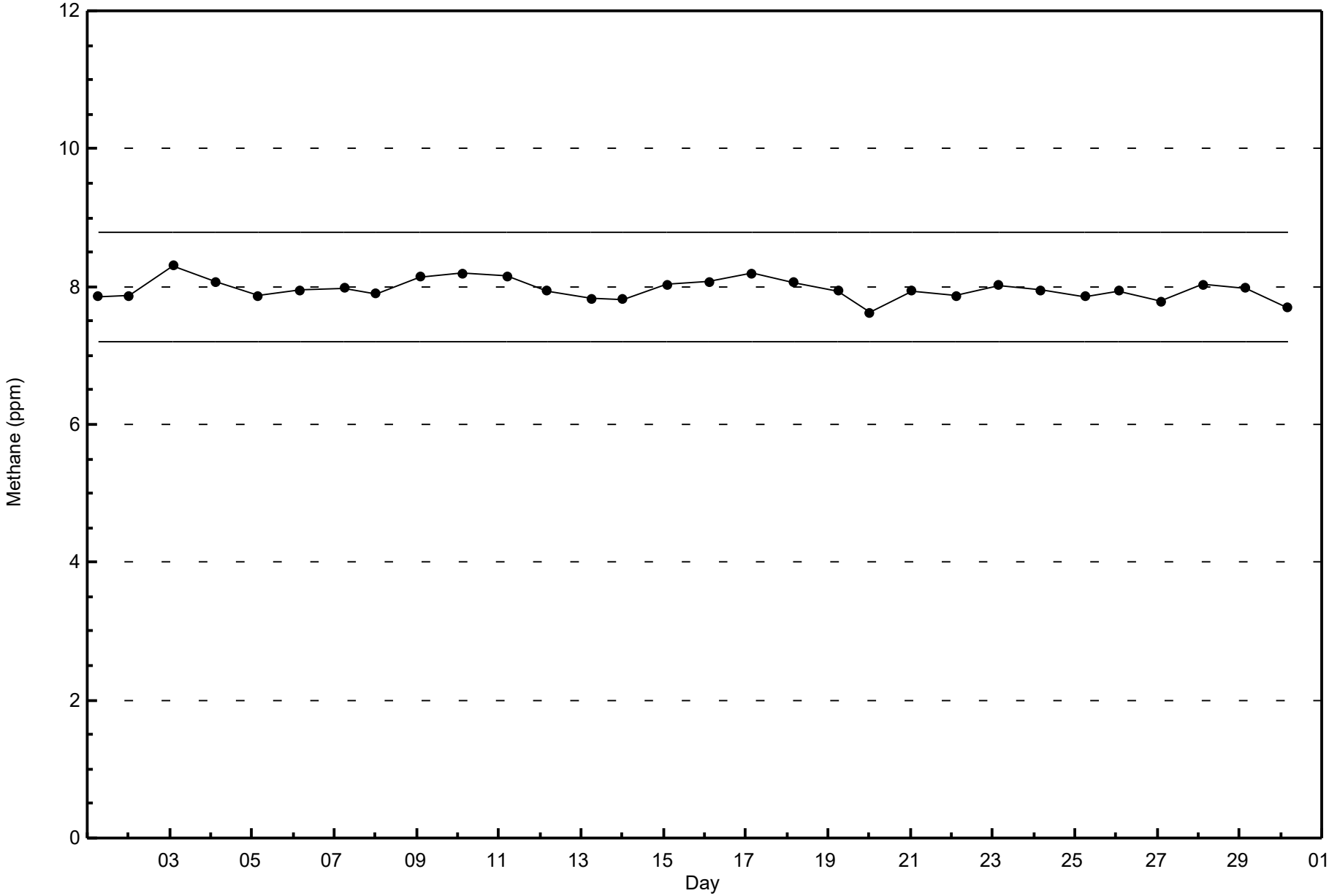


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Mannix - September 2026



Maximum Value: 27.5 C on Sep 2 15:00

Maximum Daily Average: 21.1 C on Sep 2

Minimum Value: 1.8 C on Sep 28 06:00

Minimum Daily Average: 5.3 C on Sep 30

Maximum Diurnal Average: 17.4 C at hour 15

Minimum Diurnal Average: 7.7 C at hour 6

Monthly Average: 12.12 C

Percentiles: P_1 = 2.9 P_{10} = 5.8 Q_1 = 8.0 Median = 11.1 Q_3 = 16.0 P_{90} = 19.5 P_{99} = 25.6

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

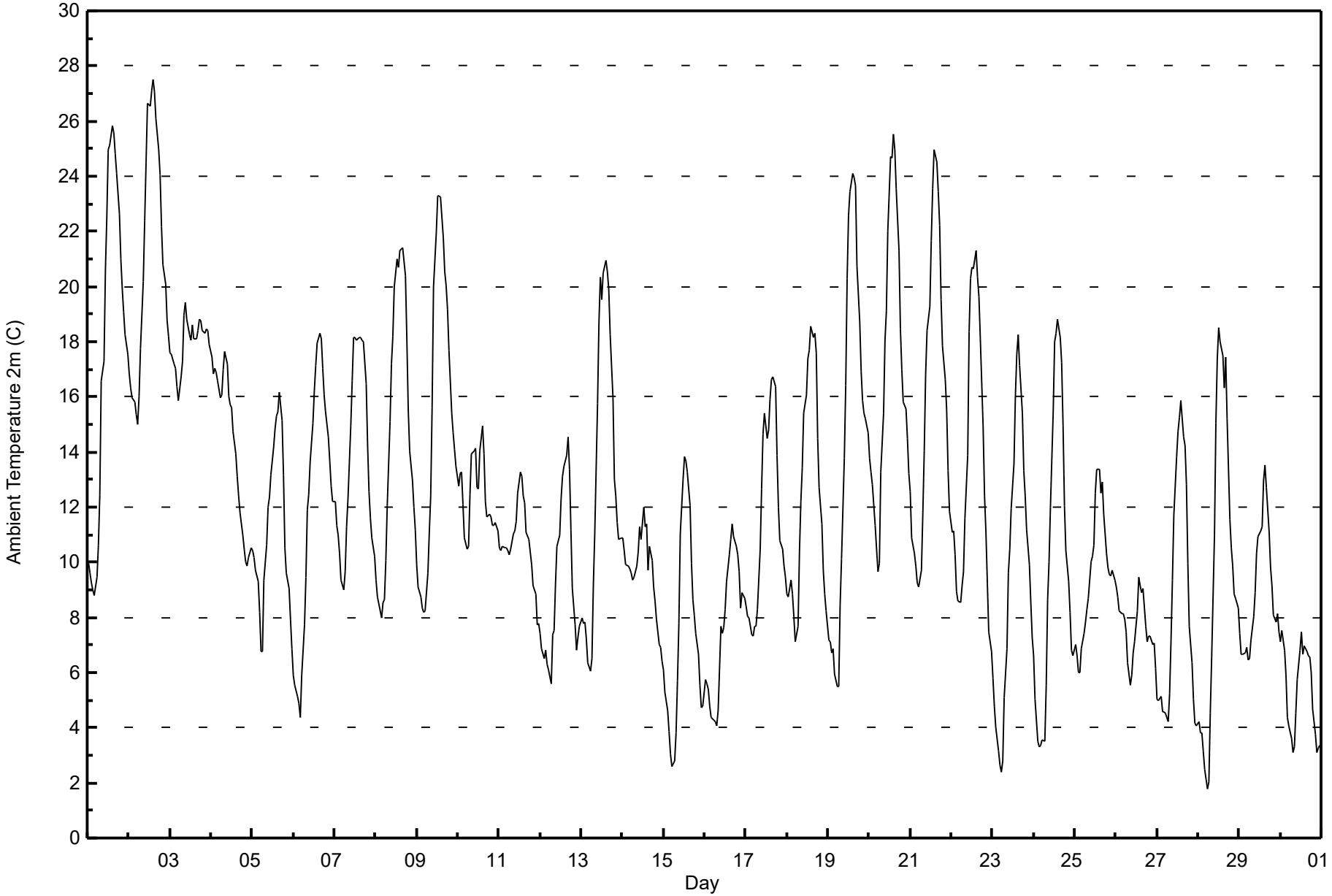
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	10.0	9.6	9.3	9.0	8.8	9.5	10.6	12.4	16.6	17.3	20.6	22.5	24.9	25.1	25.8	25.6	24.8	24.1	22.6	21.0	19.9	19.1	18.2	17.5	17.7	25.8
2-Sep	16.9	16.3	16.0	15.8	15.4	15.0	16.0	17.7	20.2	22.4	24.5	26.6	26.5	27.1	27.5	27.0	26.1	25.0	24.0	22.2	20.8	20.1	18.8	18.2	21.1	27.5
3-Sep	17.6	17.5	17.2	17.0	16.4	15.9	16.7	17.3	19.0	19.4	18.8	18.2	18.1	18.6	18.1	18.1	18.4	18.8	18.8	18.4	18.3	18.5	18.4	17.9	18.0	19.4
4-Sep	17.4	16.8	17.0	16.9	16.6	16.0	16.1	17.0	17.6	17.2	16.0	15.7	15.6	14.7	14.0	13.1	12.4	11.8	11.0	10.5	10.0	9.8	10.2	10.5	14.3	17.6
5-Sep	10.4	10.2	9.7	9.3	8.2	6.8	6.8	9.4	10.6	12.0	12.3	13.2	14.2	14.8	15.3	15.5	16.2	15.2	13.2	10.5	9.6	9.0	8.0	6.9	11.1	16.2
6-Sep	5.9	5.5	5.1	4.9	4.4	5.9	7.7	9.5	11.9	12.5	13.6	15.0	16.2	17.2	18.0	18.3	18.1	17.0	16.1	15.4	14.6	13.7	12.8	12.2	12.1	18.3
7-Sep	12.2	11.3	11.0	10.3	9.4	9.0	9.7	11.3	12.3	14.9	16.6	18.1	18.2	18.1	18.2	18.1	18.0	18.0	16.5	14.2	12.6	11.6	10.9	10.2	13.8	18.2
8-Sep	9.4	8.7	8.5	8.0	8.5	8.7	10.1	12.1	15.1	17.2	18.2	20.0	21.0	20.7	21.3	21.4	21.4	20.4	18.1	15.5	14.0	13.0	12.0	11.2	14.8	21.4
9-Sep	9.9	9.1	8.8	8.3	8.2	8.2	9.6	11.1	12.4	15.6	20.0	21.9	23.3	23.3	23.2	21.8	20.6	20.0	19.2	17.7	15.4	14.7	14.1	13.5	15.4	23.3
10-Sep	12.8	13.2	13.3	12.1	10.9	10.5	10.6	12.5	13.9	14.1	14.1	12.7	12.7	14.0	14.9	13.9	12.2	11.6	11.8	11.7	11.3	11.3	11.5	11.1	12.4	14.9
11-Sep	10.5	10.4	10.6	10.5	10.5	10.4	10.3	10.5	11.0	11.1	11.5	12.5	13.3	13.1	12.4	12.2	11.1	10.8	10.4	9.9	9.2	8.8	7.7	7.8	10.7	13.3
12-Sep	7.4	6.8	6.5	6.8	6.3	6.1	5.6	7.4	7.5	9.2	10.6	11.0	12.3	13.1	13.5	13.9	14.5	13.4	11.2	9.0	7.7	6.8	7.3	7.7	9.2	14.5
13-Sep	8.0	7.8	7.8	7.2	6.3	6.1	6.5	9.2	11.0	15.8	18.7	20.3	19.5	20.5	21.0	20.5	19.9	18.2	15.9	13.0	12.4	11.5	10.8	10.9	13.3	21.0
14-Sep	10.9	10.4	9.9	9.9	9.7	9.6	9.4	9.5	9.9	10.4	11.3	10.8	12.0	11.3	11.4	9.7	10.6	10.0	9.1	8.6	7.9	7.0	6.9	6.4	9.7	12.0
15-Sep	6.1	5.3	4.6	3.8	3.1	2.6	2.8	3.8	5.7	7.8	11.0	13.0	13.8	13.7	13.3	12.1	10.0	8.7	8.1	7.4	6.7	5.5	4.7	4.8	7.4	13.8
16-Sep	5.7	5.6	5.4	4.8	4.4	4.3	4.2	4.1	4.6	7.7	7.4	7.6	8.3	9.3	10.3	10.8	11.4	10.9	10.6	10.3	9.6	8.4	8.9	8.7	7.6	11.4
17-Sep	8.4	8.0	8.0	7.4	7.3	7.7	7.7	8.3	10.5	12.7	14.6	15.4	14.5	14.8	15.9	16.6	16.7	16.3	13.9	12.0	10.8	10.5	9.9	9.5	11.6	16.7
18-Sep	8.8	8.8	9.3	8.8	8.0	7.1	7.7	10.4	12.2	13.4	15.4	16.1	17.4	17.7	18.5	18.2	18.3	17.6	14.5	12.7	11.4	9.7	8.8	8.2	12.5	18.5
19-Sep	7.2	7.1	6.7	6.9	5.9	5.5	5.5	8.4	10.1	13.8	16.4	20.3	22.6	23.5	24.1	24.0	23.6	20.7	18.7	16.9	15.9	15.4	15.2	14.7	14.6	24.1
20-Sep	13.8	13.3	12.8	11.3	10.5	9.7	10.0	13.3	15.4	18.0	19.1	22.0	24.7	24.7	25.5	25.0	23.6	21.3	18.5	17.0	15.8	15.6	14.5	13.2	17.0	25.5
21-Sep	12.5	10.9	10.3	9.9	9.2	9.1	9.7	11.8	14.0	16.8	18.4	19.3	21.7	23.5	25.0	24.5	23.4	22.2	19.6	17.8	16.6	15.5	13.3	11.9	16.1	25.0
22-Sep	11.1	11.1	10.3	9.0	8.6	8.6	9.1	9.6	11.6	13.9	18.3	20.3	20.7	20.6	21.3	20.4	19.6	18.1	14.9	12.4	11.1	9.2	7.5	6.8	13.5	21.3
23-Sep	5.8	4.8	4.0	3.2	2.6	2.4	2.8	5.1	6.9	9.6	10.5	12.0	13.6	16.0	17.5	18.3	17.1	15.4	13.3	12.4	11.2	9.9	8.5	7.3	9.6	18.3
24-Sep	6.6	5.1	3.5	3.3	3.4	3.5	3.5	5.5	8.7	10.0	12.0	15.5	18.0	18.3	18.8	18.1	17.2	14.9	12.1	10.4	9.3	8.2	6.8	6.6	10.0	18.8
25-Sep	7.0	6.6	6.0	6.0	6.8	7.4	7.8	8.3	8.7	10.0	10.2	10.6	12.5	13.4	13.4	12.5	12.9	11.8	10.3	9.8	9.5	9.5	9.7	9.4	9.6	13.4
26-Sep	9.1	8.8	8.2	8.1	8.1	8.0	7.5	6.3	5.5	5.9	6.7	7.1	8.2	9.4	9.2	8.9	9.1	7.7	7.1	7.3	7.3	7.0	7.0	6.2	7.7	9.4
27-Sep	5.1	5.0	5.2	4.6	4.6	4.5	4.2	5.2	7.2	9.3	11.7	13.9	14.7	15.2	15.9	14.5	14.2	12.8	9.9	7.7	6.3	5.1	4.2	4.1	8.5	15.9
28-Sep	4.2	3.8	3.8	3.2	2.5	1.8	2.0	4.5	6.6	11.0	15.1	17.4	18.5	18.0	17.5	16.3	17.4	15.2	11.5	10.5	9.9	8.8	8.7	8.3	9.9	18.5
29-Sep	7.4	6.7	6.7	6.7	6.9	6.5	6.5	7.2	8.0	8.9	10.3	10.9	11.1	11.3	13.0	13.5	12.7	11.1	9.8	9.2	8.1	7.8	8.1	7.5	9.0	13.5
30-Sep	7.1	7.5	6.8	5.9	4.4	4.1	3.6	3.1	3.3	4.5	5.8	6.8	7.5	6.7	7.0	6.8	6.6	6.6	6.0	4.7	3.8	3.1	3.3	3.4	5.3	7.5
	9.5	9.1	8.7	8.3	7.9	7.7	8.0	9.4	10.9	12.7	14.3	15.6	16.5	16.9	17.4	17.0	16.6	15.5	13.9	12.5	11.6	10.8	10.2	9.7	Diurnal Average	
	17.6	17.5	17.2	17.0	16.6	16.0	16.7	17.7	20.2	22.4	24.5	26.6	26.5	27.1	27.5	27.0	26.1	25.0	24.0	22.2	20.8	20.1	18.8	18.2	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Mannix - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	294	40.83	40.83
10 - 20	360	50.00	90.83
> 20	66	9.17	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 27.1 C on Sep 2 16:00
Maximum Daily Average: 21.5 C on Sep 2

Minimum Value: 3.0 C on Sep 30 08:00
Minimum Daily Average: 5.5 C on Sep 30
Maximum Diurnal Average: 16.7 C at hour 16
Minimum Diurnal Average: 8.7 C at hour 7
Monthly Average: 12.67 C
Percentiles: P_1 = 3.7 P_{10} = 6.5 Q_1 = 8.9 Median = 11.7 Q_3 = 16.5 P_{90} = 19.5 P_{99} = 25.4

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

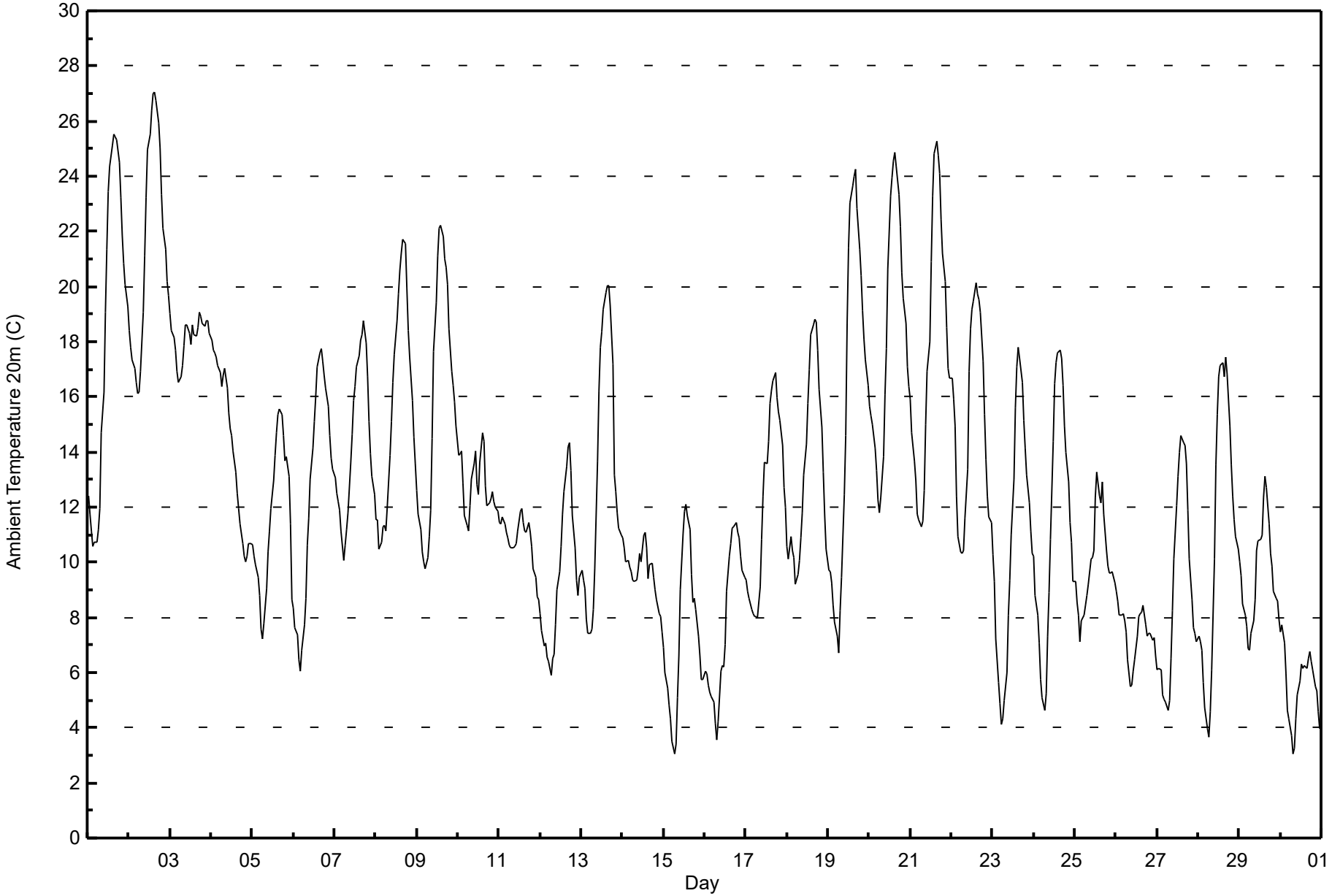
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	12.4	11.8	11.1	10.6	10.7	10.7	11.2	11.9	14.7	16.1	19.1	21.3	23.5	24.4	25.1	25.5	25.4	25.3	24.5	23.2	21.9	20.9	20.1	19.3	18.4	25.5
2-Sep	18.4	17.8	17.4	17.0	16.5	16.1	16.2	16.9	19.1	21.1	23.3	25.0	25.5	26.4	27.0	27.1	26.8	25.9	25.0	23.4	22.1	21.3	20.2	19.7	21.5	27.1
3-Sep	19.0	18.4	18.1	17.7	16.9	16.5	16.7	17.1	17.9	18.6	18.6	18.3	17.9	18.6	18.3	18.2	18.5	19.1	18.9	18.6	18.6	18.8	18.8	18.3	18.2	19.1
4-Sep	18.1	17.7	17.6	17.4	17.2	16.9	16.4	16.8	17.1	16.3	15.4	14.9	14.6	14.0	13.3	12.5	12.0	11.4	10.7	10.2	10.0	10.2	10.7	10.7	14.2	18.1
5-Sep	10.6	10.2	9.9	9.4	8.8	7.6	7.2	7.8	9.1	10.4	11.1	11.9	13.0	13.9	14.7	15.3	15.6	15.3	14.6	13.7	13.8	13.1	11.4	8.6	11.5	15.6
6-Sep	8.4	7.6	7.4	6.5	6.1	6.8	7.7	8.7	10.6	11.6	13.0	14.2	15.1	16.0	17.1	17.6	17.7	17.3	16.8	16.3	15.7	14.6	13.8	13.4	12.5	17.7
7-Sep	13.0	12.5	12.2	11.9	11.1	10.1	10.7	11.2	11.8	13.7	14.6	15.9	16.4	17.1	17.5	18.0	18.2	18.8	18.0	16.7	15.1	13.9	13.1	12.4	14.3	18.8
8-Sep	11.6	11.5	10.5	10.7	11.3	11.4	11.1	12.0	13.9	15.1	16.5	17.5	18.8	19.8	20.6	21.2	21.7	21.6	19.9	18.4	17.4	15.9	14.6	13.6	15.7	21.7
9-Sep	12.6	11.8	11.2	10.4	10.0	9.8	10.2	10.9	11.9	14.5	17.6	19.4	21.1	22.1	22.2	21.8	21.0	20.7	20.1	18.5	16.9	16.4	15.8	15.0	15.9	22.2
10-Sep	13.9	13.9	14.0	12.9	11.7	11.4	11.1	12.1	13.0	13.6	14.0	12.8	12.5	13.7	14.7	14.4	12.8	12.0	12.1	12.3	12.6	12.2	12.0	11.9	12.8	14.7
11-Sep	11.5	11.4	11.7	11.4	11.1	10.9	10.6	10.5	10.6	10.6	10.7	11.1	11.8	11.9	11.5	11.1	11.1	11.4	11.1	10.6	9.8	9.5	8.7	8.6	10.8	11.9
12-Sep	8.2	7.5	7.0	7.1	6.5	6.4	5.9	6.5	6.7	7.7	9.0	9.7	10.6	11.8	12.6	13.5	14.2	14.4	13.3	11.7	10.5	9.3	8.8	9.5	9.5	14.4
13-Sep	9.7	9.4	9.0	7.9	7.4	7.4	7.6	8.3	9.7	13.7	16.2	17.8	18.3	19.2	19.8	20.0	20.0	19.3	17.2	13.2	12.6	11.8	11.2	11.0	13.2	20.0
14-Sep	10.9	10.5	10.0	10.1	9.8	9.7	9.3	9.3	9.4	9.8	10.3	10.0	11.0	11.1	10.5	9.4	9.9	9.9	9.4	9.0	8.6	8.2	8.0	7.5	9.7	11.1
15-Sep	6.9	6.0	5.4	4.8	4.3	3.5	3.0	3.4	5.1	6.6	9.0	11.0	11.9	12.1	11.7	11.2	9.5	8.6	8.7	8.3	7.3	6.6	5.8	5.7	7.4	12.1
16-Sep	6.0	6.0	5.5	5.3	5.1	4.9	4.2	3.6	4.2	6.0	6.2	6.2	7.0	8.9	10.2	10.7	11.2	11.3	11.5	11.1	10.9	10.2	9.7	9.4	7.7	11.5
17-Sep	9.3	8.9	8.7	8.3	8.1	8.0	8.1	8.0	9.1	10.8	12.4	13.6	13.6	14.4	15.8	16.2	16.6	16.9	16.0	15.4	15.2	14.2	12.7	12.0	12.2	16.9
18-Sep	10.6	10.1	10.9	10.4	10.2	9.2	9.5	10.1	10.9	11.8	13.2	14.3	15.8	17.0	18.2	18.6	18.8	18.7	17.7	16.3	14.9	13.3	11.7	10.5	13.4	18.8
19-Sep	9.7	9.7	9.2	8.4	7.8	7.3	6.7	8.3	9.4	12.5	14.6	18.7	21.4	23.0	23.7	24.0	24.3	22.8	21.3	20.4	19.1	18.1	17.4	16.4	15.6	24.3
20-Sep	15.6	15.3	15.0	14.1	13.3	12.3	11.8	12.4	13.8	16.1	17.7	20.7	23.3	24.0	24.5	24.8	24.4	23.3	22.2	20.5	19.6	18.7	17.1	16.4	18.2	24.8
21-Sep	15.9	14.7	13.7	13.0	11.8	11.5	11.3	11.5	12.6	15.0	16.9	18.0	20.9	23.3	24.8	25.2	24.8	24.1	22.4	21.2	20.2	18.5	17.0	16.7	17.7	25.2
22-Sep	16.7	15.9	15.0	12.4	10.9	10.4	10.3	10.4	11.6	13.4	16.9	18.5	19.1	19.5	20.1	19.7	19.5	19.1	17.3	15.4	13.7	12.4	11.7	11.4	15.1	20.1
23-Sep	10.3	9.3	7.2	5.6	4.9	4.1	4.3	5.0	6.0	8.1	9.4	11.0	13.0	15.6	17.1	17.8	17.4	16.5	15.1	14.1	13.2	12.1	11.2	10.3	10.8	17.8
24-Sep	10.2	8.8	8.1	7.1	5.7	5.1	4.6	5.2	7.3	8.9	10.9	14.4	16.5	17.2	17.6	17.7	17.4	16.4	15.0	14.0	12.9	11.4	10.7	9.3	11.3	17.7
25-Sep	9.3	8.5	8.1	7.1	7.9	8.1	8.4	8.8	9.2	10.1	10.2	10.4	12.4	13.2	12.4	12.1	12.9	11.7	10.4	9.9	9.6	9.6	9.7	9.3	10.0	13.2
26-Sep	8.9	8.6	8.1	8.1	8.1	7.9	7.5	6.5	5.5	5.5	6.0	6.5	7.3	8.0	8.1	8.2	8.4	7.7	7.3	7.4	7.4	7.2	7.3	6.6	7.4	8.9
27-Sep	6.1	6.1	6.1	5.2	5.1	5.0	4.6	5.0	6.5	8.2	10.1	12.0	13.1	14.0	14.6	14.3	14.2	13.6	11.9	10.1	8.6	7.6	7.4	7.1	9.0	14.6
28-Sep	7.3	7.1	6.8	5.6	4.7	4.0	3.7	4.6	6.1	10.1	13.5	15.4	16.7	17.1	17.2	16.7	17.4	16.8	14.9	13.5	12.4	11.6	10.9	10.5	11.0	17.4
29-Sep	10.0	9.5	8.5	8.1	7.7	6.9	6.8	7.4	7.9	8.6	10.4	10.8	10.9	11.0	12.4	13.1	12.7	11.4	10.3	9.9	9.0	8.7	8.6	7.9	9.5	13.1
30-Sep	7.5	7.7	7.1	6.0	4.6	4.3	3.7	3.0	3.3	4.3	5.2	5.7	6.3	6.2	6.3	6.1	6.5	6.8	6.4	6.1	5.5	5.3	4.6	4.0	5.5	7.7
	11.3	10.8	10.4	9.7	9.2	8.8	8.7	9.1	10.1	11.6	13.1	14.2	15.3	16.1	16.6	16.7	16.7	16.3	15.3	14.3	13.5	12.7	12.0	11.4	Diurnal Average	
	19.0	18.4	18.1	17.7	17.2	16.9	16.7	17.1	19.1	21.1	23.3	25.0	25.5	26.4	27.0	27.1	26.8	25.9	25.0	23.4	22.1	21.3	20.2	19.7	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 20m (AT20) - C

Mannix - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	235	32.64	32.64
10 - 20	419	58.19	90.83
> 20	66	9.17	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 26.9 C on Sep 2 16:00 | Maximum Daily Average: 21.4 C on Sep 2

Minimum Value: 2.6 C on Sep 30 08:00 | Minimum Daily Average: 5.2 C on Sep 30

Maximum Diurnal Average: 16.4 C at hour 17 | Minimum Diurnal Average: 9.0 C at hour 7

Monthly Average: 12.70 C | Percentiles: P_1 = 3.9 P_{10} = 6.4 Q_1 = 9.0 Median = 11.8 Q_3 = 16.5 P_{90} = 19.3 P_{99} = 25.3

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

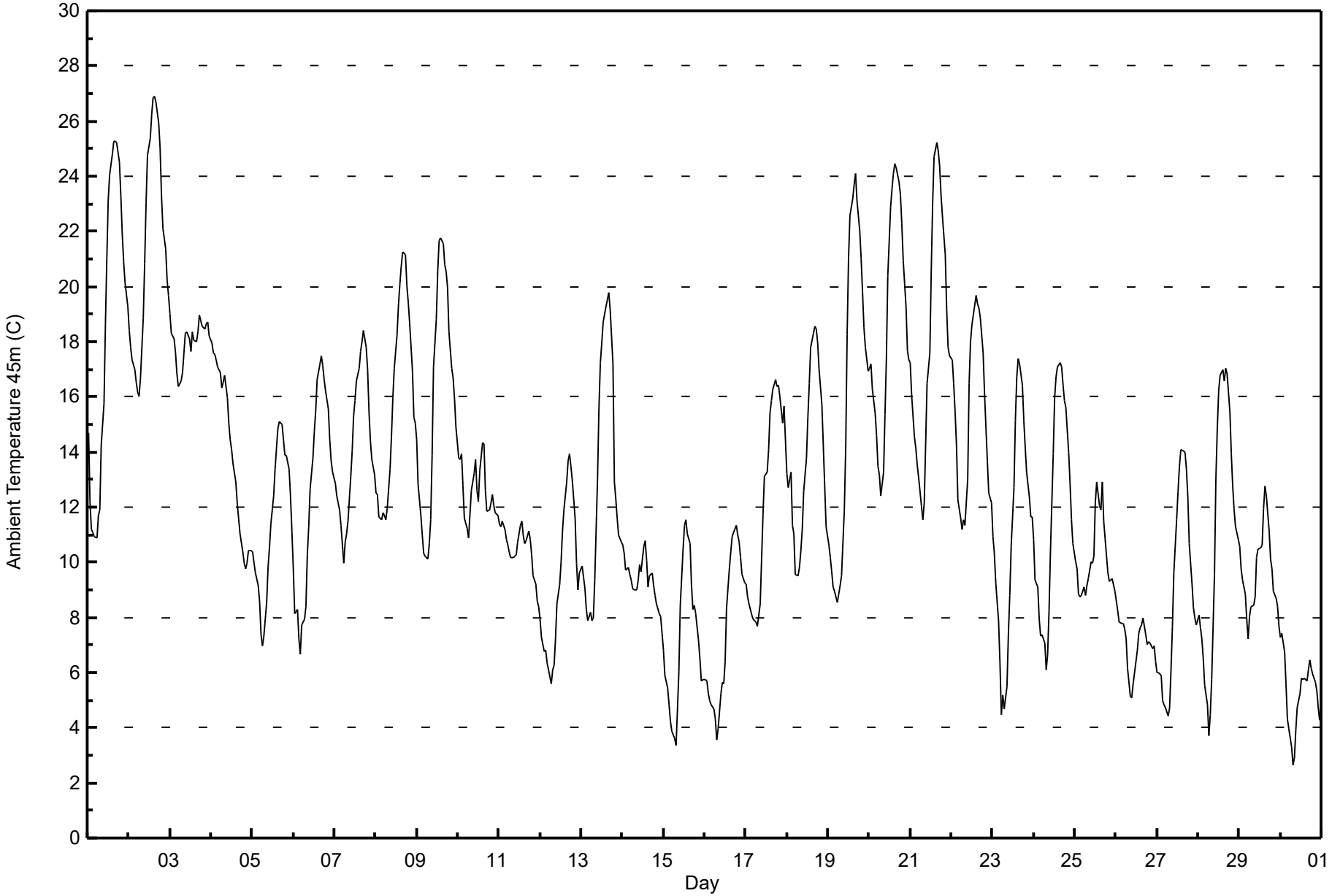
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	14.7	12.2	11.2	11.1	10.9	10.9	11.7	11.9	14.2	15.8	18.6	21.0	23.1	24.0	24.8	25.3	25.3	25.2	24.5	23.3	21.9	20.9	20.1	19.3	18.4	25.3
2-Sep	18.4	17.8	17.4	17.0	16.5	16.2	16.0	16.7	18.8	20.8	23.0	24.8	25.4	26.2	26.9	26.9	26.7	25.9	25.0	23.3	22.1	21.3	20.2	19.7	21.4	26.9
3-Sep	19.0	18.3	18.1	17.6	16.8	16.4	16.6	16.9	17.6	18.3	18.3	18.1	17.6	18.4	18.1	18.0	18.3	19.0	18.8	18.6	18.4	18.7	18.7	18.2	18.0	19.0
4-Sep	18.0	17.6	17.5	17.3	17.1	16.9	16.3	16.5	16.8	16.0	15.1	14.5	14.1	13.6	12.9	12.1	11.6	11.0	10.4	10.0	9.8	10.0	10.4	10.4	14.0	18.0
5-Sep	10.4	10.0	9.6	9.2	8.5	7.4	7.0	7.3	8.5	9.8	10.6	11.4	12.4	13.4	14.1	14.8	15.1	15.0	14.5	13.9	13.9	13.4	12.4	11.1	11.4	15.1
6-Sep	9.8	8.1	8.3	7.2	6.7	7.7	7.9	8.4	10.3	11.3	12.7	13.8	14.8	15.5	16.6	17.2	17.5	17.1	16.6	16.2	15.5	14.4	13.7	13.3	12.5	17.5
7-Sep	12.9	12.4	12.2	11.9	11.3	10.0	10.7	11.0	11.5	13.1	14.1	15.3	15.9	16.6	17.1	17.7	18.0	18.4	17.8	17.0	15.5	14.4	13.8	13.1	14.2	18.4
8-Sep	12.5	12.4	11.6	11.6	11.8	11.7	11.6	12.0	13.4	14.5	15.9	17.0	18.3	19.3	20.1	20.7	21.3	21.1	20.0	19.4	18.7	16.9	15.3	15.1	15.9	21.3
9-Sep	14.4	12.8	11.7	11.0	10.3	10.2	10.1	10.7	11.6	13.9	17.1	18.8	20.5	21.7	21.8	21.6	20.8	20.5	20.0	18.3	17.0	16.7	15.9	14.9	15.9	21.8
10-Sep	13.8	13.8	13.9	12.7	11.6	11.2	10.9	11.7	12.6	13.2	13.7	12.6	12.2	13.3	14.4	14.3	12.6	11.8	11.9	12.2	12.4	12.0	11.8	11.7	12.6	14.4
11-Sep	11.4	11.3	11.5	11.2	10.8	10.6	10.4	10.2	10.2	10.2	10.3	10.7	11.4	11.5	11.0	10.7	10.8	11.1	10.8	10.3	9.5	9.2	8.6	8.4	10.5	11.5
12-Sep	7.9	7.3	6.8	6.8	6.3	6.1	5.6	6.1	6.2	7.2	8.5	9.2	10.0	11.1	11.9	12.9	13.7	14.0	13.5	12.9	11.6	10.0	9.0	9.6	9.3	14.0
13-Sep	9.9	9.5	9.1	8.3	7.9	8.2	7.9	8.0	9.3	13.0	15.6	17.3	17.9	18.7	19.2	19.5	19.8	19.2	17.2	12.9	12.3	11.6	11.0	10.7	13.1	19.8
14-Sep	10.6	10.3	9.7	9.8	9.5	9.4	9.0	9.0	9.0	9.4	9.9	9.7	10.6	10.8	10.1	9.1	9.5	9.6	9.1	8.8	8.5	8.2	8.0	7.4	9.4	10.8
15-Sep	6.8	5.9	5.4	4.8	4.2	3.9	3.6	3.4	4.7	6.0	8.4	10.5	11.3	11.5	11.0	10.7	9.1	8.3	8.5	8.2	7.2	6.5	5.7	5.8	7.1	11.5
16-Sep	5.7	5.7	5.2	5.0	4.8	4.7	4.3	3.6	4.0	5.2	5.7	5.6	6.4	8.4	9.7	10.3	10.9	11.1	11.4	11.0	10.7	10.1	9.5	9.2	7.4	11.4
17-Sep	9.2	8.8	8.5	8.1	7.9	7.9	7.8	7.7	8.5	10.1	11.7	13.1	13.3	14.1	15.4	15.9	16.3	16.6	16.4	16.4	16.0	15.1	15.7	14.5	12.3	16.6
18-Sep	13.2	12.7	13.3	11.4	11.0	9.6	9.5	9.8	10.4	11.2	12.6	13.8	15.3	16.5	17.8	18.3	18.6	18.5	17.9	17.0	15.7	14.2	12.8	11.3	13.8	18.6
19-Sep	10.6	10.2	9.7	9.1	9.0	8.5	8.8	9.1	9.5	11.9	14.2	18.3	21.0	22.6	23.2	23.7	24.1	23.1	22.0	21.0	19.8	18.5	17.8	16.9	15.9	24.1
20-Sep	17.1	17.2	16.3	15.4	14.6	13.5	13.2	12.4	13.3	15.4	17.4	20.4	22.9	23.5	24.1	24.4	24.3	23.8	23.4	22.3	20.9	19.3	17.7	17.3	18.7	24.4
21-Sep	17.2	16.1	14.6	14.1	13.5	13.1	12.1	11.5	12.1	14.3	16.5	17.6	20.6	23.1	24.7	25.2	24.9	24.3	23.3	22.5	21.1	19.2	17.8	17.5	18.2	25.2
22-Sep	17.4	16.5	15.4	14.2	12.3	11.6	11.2	11.6	11.3	13.0	16.5	18.0	18.6	19.0	19.7	19.4	19.2	18.9	17.6	16.1	14.9	13.7	12.5	12.2	15.4	19.7
23-Sep	10.9	10.3	9.3	7.9	6.4	4.5	5.2	4.7	5.5	7.4	8.8	10.6	12.7	15.2	16.7	17.4	17.2	16.4	15.1	14.2	13.3	12.4	11.6	11.7	11.0	17.4
24-Sep	10.8	9.4	9.1	7.9	7.3	7.4	7.1	6.1	6.7	8.2	10.4	14.0	15.9	16.7	17.1	17.3	17.1	16.4	15.8	15.6	14.0	12.9	11.5	10.7	11.9	17.3
25-Sep	10.0	9.7	8.9	8.8	8.8	9.1	8.8	9.1	9.4	10.0	10.0	10.2	12.1	12.9	12.0	11.9	12.9	11.5	10.2	9.6	9.3	9.3	9.4	9.0	10.1	12.9
26-Sep	8.6	8.2	7.8	7.8	7.8	7.6	7.2	6.1	5.1	5.1	5.6	6.0	6.8	7.4	7.6	7.7	8.0	7.4	7.0	7.1	7.1	6.9	7.0	6.4	7.1	8.6
27-Sep	6.0	6.0	5.9	5.0	4.8	4.7	4.4	4.7	6.1	7.7	9.6	11.5	12.6	13.5	14.1	14.0	14.0	13.4	12.4	10.7	9.2	8.3	8.0	7.7	8.9	14.1
28-Sep	8.1	7.6	7.2	6.5	5.5	4.8	3.7	4.5	5.8	9.6	13.0	14.8	16.2	16.8	17.0	16.6	17.0	16.8	15.5	14.0	12.8	11.9	11.3	10.8	11.2	17.0
29-Sep	10.6	9.8	9.4	8.8	7.9	7.2	8.0	8.4	8.4	8.7	10.2	10.5	10.5	10.6	12.0	12.8	12.4	11.1	10.1	9.8	9.0	8.7	8.4	7.7	9.6	12.8
30-Sep	7.2	7.4	6.8	5.6	4.3	4.0	3.3	2.6	2.9	3.9	4.7	5.2	5.8	5.8	5.8	5.7	6.1	6.4	6.2	6.0	5.6	5.4	4.8	4.3	5.2	7.4
	11.8	11.2	10.7	10.1	9.5	9.2	9.0	9.1	9.8	11.1	12.6	13.8	14.9	15.7	16.2	16.4	16.4	16.1	15.4	14.6	13.8	13.0	12.3	11.9	Diurnal Average	
	19.0	18.3	18.1	17.6	17.1	16.9	16.6	16.9	18.8	20.8	23.0	24.8	25.4	26.2	26.9	26.9	26.7	25.9	25.0	23.3	22.1	21.3	20.2	19.7	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 45m (AT45) - C

Mannix - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	242	33.61	33.61
10 - 20	414	57.50	91.11
> 20	64	8.89	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 26.4 C on Sep 2 16:00
Maximum Daily Average: 21.2 C on Sep 2

Minimum Value: 2.7 C on Sep 30 08:00
Minimum Daily Average: 5.3 C on Sep 30
Maximum Diurnal Average: 16.2 C at hour 17
Minimum Diurnal Average: 9.5 C at hour 7
Monthly Average: 12.87 C
Percentiles: P_1 = 4.2 P_{10} = 6.7 Q_1 = 9.4 Median = 12.2 Q_3 = 16.5 P_{90} = 19.3 P_{99} = 24.8

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

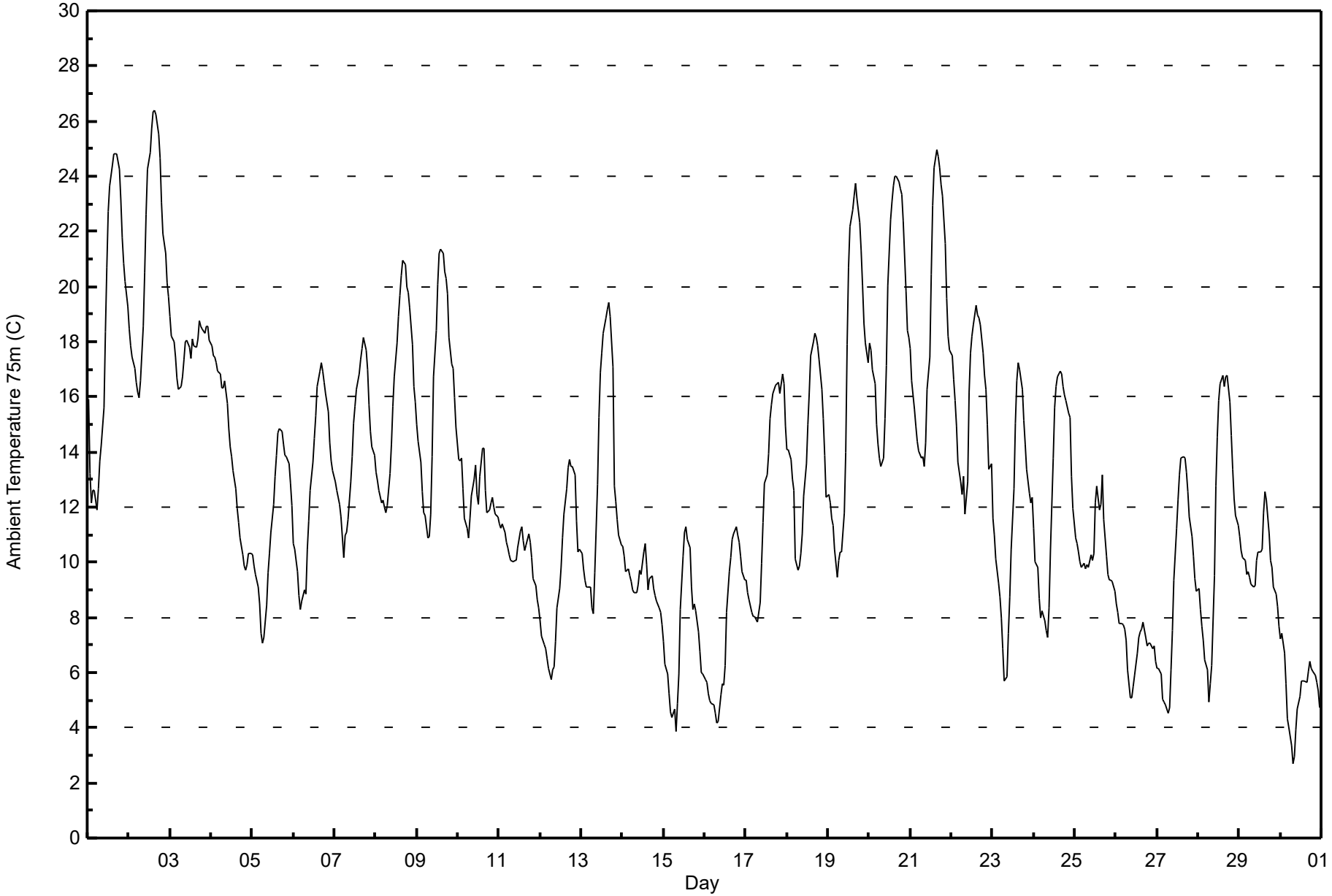
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	15.9	13.2	12.2	12.6	12.6	11.9	12.7	13.7	14.2	15.6	18.3	20.7	22.7	23.7	24.4	24.8	24.8	24.8	24.3	23.1	21.8	20.9	20.2	19.3	18.7	24.8
2-Sep	18.5	17.8	17.4	17.1	16.6	16.2	16.0	16.6	18.6	20.5	22.6	24.3	24.9	25.7	26.4	26.4	26.3	25.5	24.7	23.0	21.9	21.2	20.1	19.6	21.2	26.4
3-Sep	18.9	18.2	18.0	17.4	16.7	16.3	16.4	16.7	17.3	18.0	18.1	17.8	17.4	18.1	17.8	17.8	18.1	18.8	18.6	18.5	18.3	18.5	18.5	18.1	17.8	18.9
4-Sep	17.8	17.5	17.4	17.2	16.9	16.8	16.3	16.3	16.6	15.8	14.8	14.2	13.8	13.3	12.7	11.9	11.4	10.9	10.3	9.9	9.7	9.9	10.3	10.3	13.8	17.8
5-Sep	10.3	9.9	9.6	9.1	8.5	7.4	7.1	7.3	8.4	9.6	10.3	11.1	12.1	13.1	13.9	14.7	14.8	14.8	14.3	13.9	13.8	13.6	12.9	12.0	11.3	14.8
6-Sep	10.7	10.5	9.7	8.8	8.3	8.6	9.0	8.9	10.5	11.5	12.6	13.6	14.5	15.3	16.4	16.9	17.2	16.9	16.5	16.1	15.4	14.4	13.7	13.3	12.9	17.2
7-Sep	12.9	12.6	12.4	12.1	11.7	10.2	11.0	11.1	11.6	12.9	13.8	15.0	15.6	16.3	16.8	17.4	17.7	18.2	17.7	17.0	15.7	14.8	14.2	13.9	14.3	18.2
8-Sep	13.3	13.0	12.6	12.2	12.2	12.0	11.8	12.0	13.2	14.3	15.6	16.7	17.9	18.9	19.7	20.4	20.9	20.8	20.0	19.8	19.2	17.9	16.4	15.8	16.1	20.9
9-Sep	15.0	14.4	13.6	12.6	11.8	11.7	10.9	10.9	11.7	13.8	16.7	18.4	20.1	21.2	21.4	21.2	20.5	20.3	19.7	18.1	17.2	17.1	15.9	14.9	16.2	21.4
10-Sep	13.7	13.7	13.8	12.7	11.6	11.2	10.9	11.6	12.4	13.0	13.5	12.5	12.1	13.1	14.1	14.1	12.6	11.8	11.9	12.2	12.4	12.0	11.7	11.7	12.5	14.1
11-Sep	11.4	11.2	11.4	11.1	10.7	10.5	10.3	10.1	10.0	10.1	10.1	10.5	11.1	11.3	10.8	10.4	10.6	11.0	10.7	10.2	9.4	9.1	8.6	8.3	10.4	11.4
12-Sep	7.9	7.3	7.0	6.9	6.5	6.2	5.8	6.1	6.2	7.1	8.4	9.1	9.8	10.9	11.7	12.7	13.4	13.7	13.5	13.5	13.2	11.5	10.4	10.5	9.5	13.7
13-Sep	10.3	9.8	9.3	9.1	9.1	9.1	8.3	8.1	9.6	12.8	15.3	16.9	17.6	18.3	18.9	19.2	19.4	18.9	17.1	12.8	12.2	11.5	11.0	10.6	13.1	19.4
14-Sep	10.6	10.2	9.7	9.7	9.5	9.3	9.0	8.9	8.9	9.2	9.7	9.6	10.4	10.7	9.9	9.0	9.4	9.5	9.1	8.8	8.6	8.3	8.2	7.7	9.3	10.7
15-Sep	7.1	6.3	5.9	5.2	4.6	4.3	4.7	3.9	4.9	5.9	8.3	10.2	11.1	11.3	10.8	10.5	9.1	8.3	8.5	8.2	7.5	6.8	6.0	6.0	7.3	11.3
16-Sep	5.7	5.7	5.2	5.0	4.9	4.8	4.5	4.2	4.2	5.2	5.6	5.5	6.3	8.2	9.6	10.2	10.8	11.1	11.3	11.0	10.7	10.2	9.6	9.4	7.5	11.3
17-Sep	9.4	8.9	8.6	8.2	8.0	8.0	7.9	7.8	8.6	10.0	11.5	12.9	13.2	13.9	15.2	15.7	16.1	16.4	16.5	16.5	16.1	16.8	16.5	15.0	12.4	16.8
18-Sep	14.1	14.1	13.7	13.0	12.6	10.1	9.7	9.9	10.3	11.0	12.4	13.6	15.0	16.2	17.5	18.0	18.3	18.2	17.8	17.3	16.3	15.2	13.9	12.4	14.2	18.3
19-Sep	12.4	12.2	11.6	11.4	10.5	9.5	10.1	10.4	10.4	11.8	14.0	17.9	20.7	22.1	22.8	23.3	23.8	23.2	22.3	21.3	20.0	18.7	18.0	17.2	16.5	23.8
20-Sep	17.9	17.7	17.0	16.5	15.0	14.3	13.8	13.5	13.8	15.2	17.1	20.0	22.4	23.1	23.6	24.0	24.0	23.8	23.5	23.4	22.4	19.8	18.4	18.2	19.1	24.0
21-Sep	17.8	16.6	15.6	14.9	14.4	14.0	13.8	13.8	13.5	14.3	16.2	17.5	20.4	22.9	24.3	24.9	24.7	24.3	23.7	23.3	21.5	19.6	18.2	17.7	18.7	24.9
22-Sep	17.5	16.6	15.9	15.0	13.6	12.9	12.5	13.1	11.7	12.9	16.2	17.6	18.2	18.6	19.3	19.0	18.9	18.6	17.6	16.8	16.3	15.0	13.4	13.6	15.9	19.3
23-Sep	11.6	11.0	10.1	9.3	8.8	8.0	6.9	5.7	5.8	7.4	8.7	10.5	12.7	15.1	16.6	17.2	17.0	16.3	15.1	14.3	13.4	12.5	12.2	12.4	11.6	17.2
24-Sep	11.3	10.0	9.8	8.7	8.0	8.2	7.9	7.5	7.3	8.3	10.4	13.8	15.6	16.4	16.8	16.9	16.8	16.4	16.1	15.9	15.4	15.2	13.1	12.0	12.4	16.9
25-Sep	10.9	10.7	10.4	10.0	9.8	10.0	9.8	9.9	9.8	10.3	10.0	10.3	12.1	12.8	11.9	12.1	13.2	11.5	10.2	9.5	9.4	9.3	9.3	9.0	10.5	13.2
26-Sep	8.5	8.2	7.8	7.8	7.7	7.6	7.2	6.1	5.1	5.1	5.5	5.9	6.7	7.3	7.5	7.6	7.9	7.3	7.0	7.1	7.1	6.8	6.9	6.4	7.0	8.5
27-Sep	6.1	6.1	5.9	5.1	4.9	4.9	4.5	4.8	6.1	7.5	9.4	11.2	12.3	13.2	13.8	13.8	13.8	13.3	12.6	11.7	10.9	10.2	9.4	8.9	9.2	13.8
28-Sep	9.0	8.3	7.7	7.2	6.5	6.1	4.9	5.6	6.2	9.5	12.7	14.5	15.9	16.5	16.8	16.4	16.7	16.8	15.8	14.6	13.4	12.3	11.7	11.3	11.5	16.8
29-Sep	10.9	10.4	10.2	10.1	9.5	9.7	9.5	9.2	9.1	9.2	10.1	10.4	10.4	10.5	11.8	12.6	12.3	11.0	10.1	9.8	9.1	8.8	8.4	7.7	10.0	12.6
30-Sep	7.2	7.4	6.7	5.6	4.3	4.0	3.3	2.7	3.0	3.9	4.7	5.1	5.7	5.7	5.7	5.6	6.1	6.4	6.2	6.0	5.9	5.6	5.3	4.7	5.3	7.4
	12.2	11.6	11.2	10.7	10.2	9.8	9.5	9.5	10.0	11.1	12.4	13.6	14.6	15.4	16.0	16.2	16.2	16.0	15.4	14.8	14.1	13.5	12.7	12.3	Diurnal Average	
	18.9	18.2	18.0	17.4	16.9	16.8	16.4	16.7	18.6	20.5	22.6	24.3	24.9	25.7	26.4	26.4	26.3	25.5	24.7	23.4	22.4	21.2	20.2	19.6	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 75m (AT75) - C

Mannix - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	220	30.56	30.56
10 - 20	437	60.69	91.25
> 20	63	8.75	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 26.4 C on Sep 2 16:00

Maximum Daily Average: 21.2 C on Sep 2

Minimum Value: 2.6 C on Sep 30 08:00

Minimum Daily Average: 5.3 C on Sep 30

Maximum Diurnal Average: 16.2 C at hour 17

Minimum Diurnal Average: 9.7 C at hour 8

Monthly Average: 12.95 C

Percentiles: P_1 = 4.3 P_{10} = 6.7 Q_1 = 9.4 Median = 12.4 Q_3 = 16.6 P_{90} = 19.3 P_{99} = 24.8

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

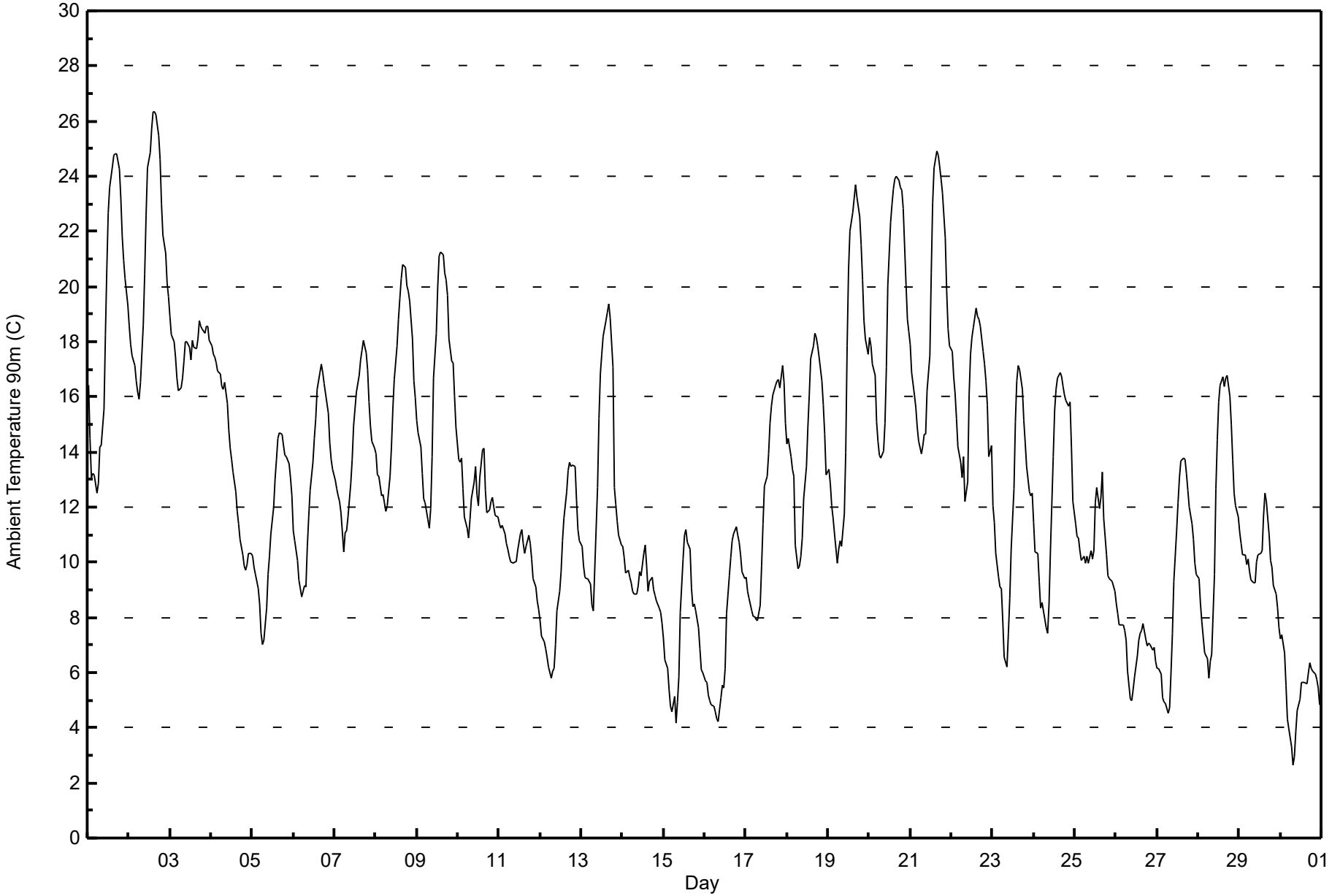
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	16.4	14.5	13.0	13.2	13.2	12.5	12.9	14.2	14.2	15.6	18.2	20.6	22.7	23.6	24.4	24.8	24.8	24.8	24.3	23.2	21.8	20.9	20.3	19.3	18.9	24.8
2-Sep	18.6	17.9	17.5	17.1	16.6	16.2	15.9	16.5	18.6	20.4	22.6	24.3	24.8	25.7	26.3	26.4	26.2	25.5	24.6	23.0	21.9	21.2	20.2	19.6	21.2	26.4
3-Sep	18.9	18.2	18.0	17.4	16.7	16.2	16.3	16.7	17.3	18.0	18.0	17.8	17.3	18.1	17.8	17.8	18.1	18.7	18.6	18.5	18.3	18.5	18.6	18.1	17.8	18.9
4-Sep	17.8	17.5	17.4	17.2	16.9	16.8	16.4	16.3	16.5	15.7	14.8	14.1	13.8	13.3	12.6	11.9	11.4	10.8	10.3	9.8	9.7	9.9	10.3	10.3	13.8	17.8
5-Sep	10.2	9.8	9.5	9.1	8.5	7.4	7.0	7.2	8.3	9.5	10.2	11.0	12.0	13.0	13.7	14.5	14.7	14.7	14.2	13.9	13.8	13.6	13.1	12.4	11.3	14.7
6-Sep	11.1	10.8	10.1	9.3	9.0	8.8	9.2	9.1	10.6	11.6	12.6	13.6	14.5	15.2	16.3	16.9	17.2	16.9	16.5	16.1	15.4	14.4	13.7	13.4	13.0	17.2
7-Sep	13.0	12.7	12.4	12.2	11.8	10.4	11.1	11.2	11.6	12.8	13.7	15.0	15.6	16.2	16.8	17.3	17.7	18.0	17.6	17.0	15.8	15.0	14.4	14.2	14.3	18.0
8-Sep	13.9	13.2	13.1	12.4	12.4	12.1	11.8	12.0	13.1	14.2	15.5	16.6	17.8	18.8	19.6	20.3	20.8	20.7	20.0	19.8	19.5	18.1	16.6	15.9	16.2	20.8
9-Sep	15.1	14.7	14.2	13.2	12.3	12.1	11.6	11.2	11.9	13.9	16.7	18.3	20.0	21.1	21.3	21.2	20.5	20.2	19.7	18.1	17.3	17.2	16.0	14.9	16.4	21.3
10-Sep	13.7	13.6	13.8	12.7	11.6	11.2	10.9	11.5	12.3	12.9	13.5	12.4	12.0	13.1	14.1	14.1	12.6	11.8	11.9	12.2	12.4	12.0	11.7	11.7	12.5	14.1
11-Sep	11.4	11.2	11.4	11.0	10.7	10.5	10.2	10.0	10.0	10.0	10.0	10.4	11.0	11.2	10.7	10.3	10.6	11.0	10.7	10.1	9.4	9.1	8.6	8.3	10.3	11.4
12-Sep	7.9	7.3	7.1	6.9	6.5	6.2	5.8	6.1	6.2	7.0	8.3	9.0	9.7	10.8	11.6	12.6	13.3	13.6	13.5	13.5	13.5	12.2	11.2	10.8	9.6	13.6
13-Sep	10.6	9.9	9.5	9.4	9.4	9.2	8.5	8.2	9.8	12.7	15.2	16.8	17.5	18.2	18.8	19.1	19.4	18.9	17.1	12.7	12.1	11.5	11.0	10.6	13.2	19.4
14-Sep	10.6	10.2	9.6	9.7	9.5	9.3	9.0	8.9	8.8	9.2	9.7	9.5	10.3	10.6	9.9	8.9	9.3	9.5	9.0	8.8	8.6	8.4	8.2	7.8	9.3	10.6
15-Sep	7.2	6.5	6.1	5.4	4.8	4.6	5.1	4.2	4.9	5.9	8.2	10.1	11.0	11.2	10.7	10.5	9.1	8.4	8.5	8.2	7.6	6.9	6.1	6.0	7.4	11.2
16-Sep	5.7	5.6	5.2	5.0	4.8	4.8	4.6	4.3	4.2	5.1	5.5	5.5	6.1	8.1	9.5	10.1	10.8	11.1	11.3	11.0	10.7	10.3	9.7	9.4	7.4	11.3
17-Sep	9.4	9.0	8.7	8.2	8.1	8.0	7.9	7.9	8.4	9.8	11.4	12.8	13.1	13.9	15.0	15.7	16.1	16.4	16.6	16.6	16.3	17.1	16.5	15.0	12.4	17.1
18-Sep	14.3	14.5	13.9	13.4	13.1	10.6	9.8	9.8	10.2	10.9	12.3	13.5	14.9	16.1	17.4	17.9	18.3	18.2	17.9	17.5	16.6	15.7	14.6	13.2	14.3	18.3
19-Sep	13.4	12.9	12.0	11.6	11.1	10.0	10.5	10.8	10.6	11.8	14.0	17.9	20.6	22.0	22.7	23.2	23.7	23.3	22.5	21.5	20.3	18.7	18.1	17.6	16.7	23.7
20-Sep	18.2	17.9	17.2	16.8	15.1	14.4	13.9	13.8	14.0	15.1	17.1	20.0	22.3	23.0	23.5	23.9	24.0	23.8	23.6	23.5	22.8	20.1	18.8	18.4	19.2	24.0
21-Sep	17.9	16.9	16.1	15.6	14.9	14.4	14.0	14.2	14.6	14.7	16.2	17.5	20.5	23.1	24.3	24.9	24.7	24.4	23.9	23.4	21.7	19.8	18.5	17.8	18.9	24.9
22-Sep	17.6	16.7	16.1	15.2	14.2	13.6	13.1	13.8	12.2	12.9	16.1	17.5	18.1	18.5	19.2	18.9	18.8	18.6	17.7	17.2	16.6	15.7	13.9	14.2	16.1	19.2
23-Sep	12.1	11.4	10.3	9.5	9.1	9.0	7.9	6.5	6.2	7.4	8.7	10.5	12.6	15.1	16.6	17.1	17.0	16.3	15.2	14.4	13.5	12.6	12.4	12.5	11.8	17.1
24-Sep	11.5	10.4	10.3	9.3	8.3	8.5	8.0	7.6	7.4	8.5	10.4	13.8	15.5	16.3	16.7	16.9	16.7	16.4	16.1	15.9	15.7	15.8	14.1	12.2	12.6	16.9
25-Sep	11.4	10.9	10.9	10.4	10.1	10.2	10.0	10.2	10.0	10.4	10.1	10.4	12.1	12.7	11.9	12.4	13.3	11.6	10.3	9.5	9.4	9.4	9.3	8.9	10.7	13.3
26-Sep	8.5	8.1	7.8	7.7	7.7	7.5	7.1	6.1	5.0	5.0	5.4	5.8	6.6	7.2	7.4	7.5	7.8	7.2	6.9	7.0	7.0	6.8	6.9	6.4	6.9	8.5
27-Sep	6.2	6.2	5.9	5.1	4.9	4.9	4.5	4.7	6.0	7.4	9.3	11.2	12.2	13.1	13.7	13.8	13.7	13.2	12.6	12.0	11.4	10.8	10.0	9.6	9.3	13.8
28-Sep	9.4	8.5	7.8	7.3	6.7	6.5	5.8	6.4	6.7	9.5	12.7	14.4	15.8	16.4	16.7	16.3	16.7	16.8	16.0	15.0	13.8	12.5	12.1	11.7	11.7	16.8
29-Sep	11.1	10.7	10.3	10.3	9.9	10.1	9.7	9.4	9.3	9.3	10.0	10.3	10.3	10.4	11.7	12.5	12.2	11.0	10.1	9.8	9.2	8.8	8.4	7.6	10.1	12.5
30-Sep	7.2	7.4	6.7	5.5	4.3	4.0	3.3	2.6	2.9	3.8	4.6	5.1	5.6	5.6	5.6	5.6	6.0	6.4	6.1	6.0	5.9	5.7	5.5	4.8	5.3	7.4
	12.3	11.8	11.4	10.9	10.4	10.0	9.7	9.7	10.1	11.0	12.4	13.5	14.6	15.4	15.9	16.1	16.2	15.9	15.4	14.8	14.3	13.6	12.9	12.4	Diurnal Average	
	18.9	18.2	18.0	17.4	16.9	16.8	16.4	16.7	18.6	20.4	22.6	24.3	24.8	25.7	26.3	26.4	26.2	25.5	24.6	23.5	22.8	21.2	20.3	19.6	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 90m (AT90) - C

Mannix - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	217	30.14	30.14
10 - 20	438	60.83	90.97
> 20	65	9.03	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity (RH) - %

Mannix - September 2026

Maximum Value: 100 % on Sep 8 07:00

Maximum Daily Average: 90.7 % on Sep 14

Minimum Value: 28 % on Sep 24 15:00

Minimum Daily Average: 59.2 % on Sep 2

Maximum Diurnal Average: 92.6 % at hour 6

Minimum Diurnal Average: 53.8 % at hour 15

Monthly Average: 75.0 %

Percentiles: P_1 = 33 P_{10} = 47 Q_1 = 63 Median = 79 Q_3 = 91 P_{90} = 96 P_{99} = 99

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

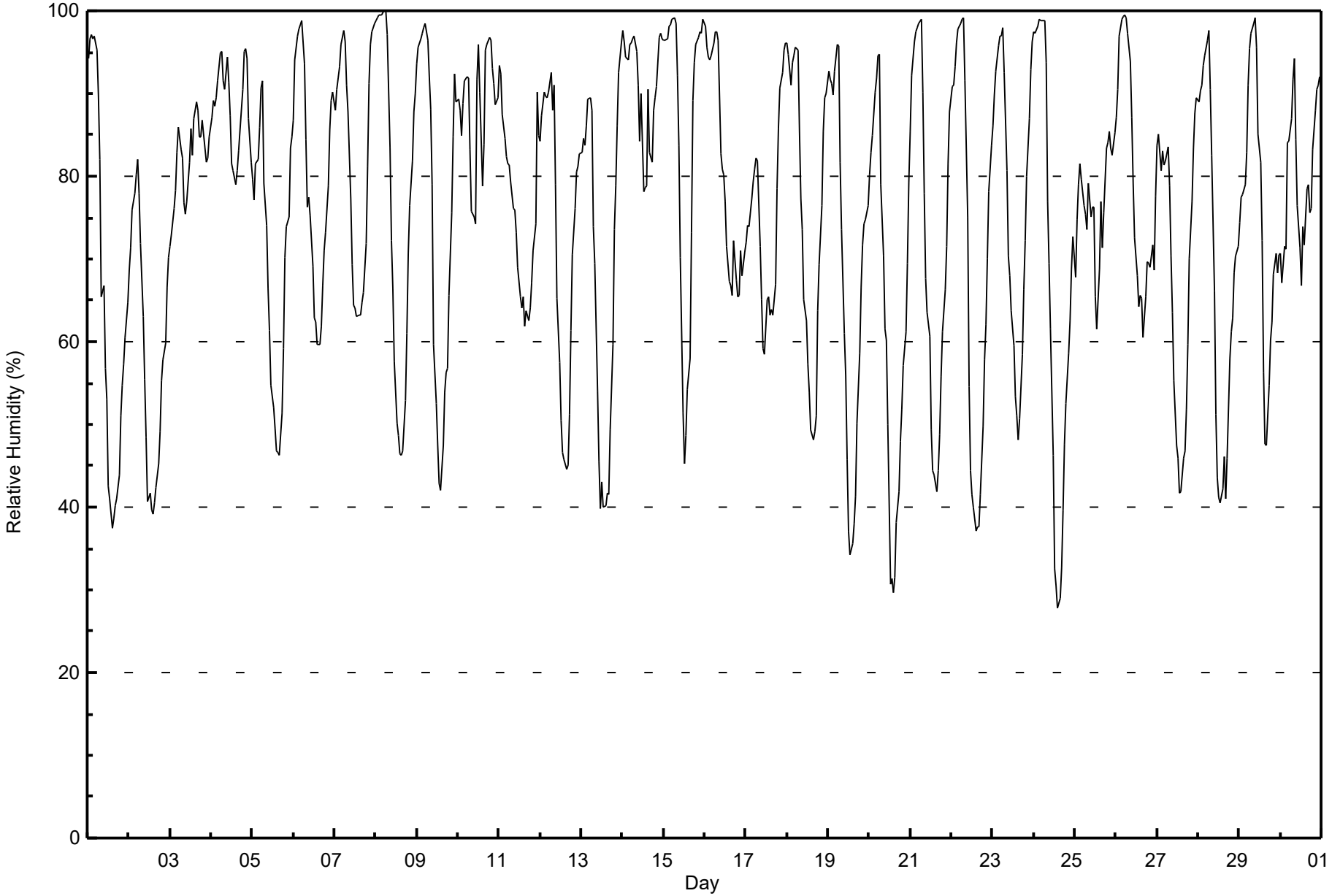
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	94	97	97	97	97	95	90	82	65	67	57	53	43	41	38	39	40	41	44	51	55	57	60	65	65.2	97
2-Sep	69	71	76	78	80	82	78	72	63	55	48	41	42	40	39	40	42	45	49	55	58	60	67	70	59.2	82
3-Sep	72	73	76	78	83	86	83	82	77	75	77	82	86	83	87	89	88	85	85	87	83	82	82	85	81.9	89
4-Sep	87	89	88	90	91	95	95	92	91	94	91	87	82	81	79	81	83	86	91	95	95	94	87	82	88.5	95
5-Sep	80	77	82	82	86	91	91	79	74	66	61	55	52	49	47	47	46	51	59	70	74	75	83	85	69.3	91
6-Sep	87	94	97	98	98	99	94	84	76	78	75	69	63	62	60	60	62	67	71	73	79	86	89	90	79.6	99
7-Sep	88	91	92	93	96	98	96	91	88	77	69	64	64	63	63	63	65	66	72	81	91	96	97	98	81.8	98
8-Sep	99	99	99	100	100	100	100	97	83	72	66	58	50	49	46	46	47	53	61	71	76	82	88	90	76.3	100
9-Sep	93	96	97	97	98	98	96	92	88	79	60	53	47	43	42	47	54	56	57	66	76	85	92	89	75.1	98
10-Sep	89	88	85	89	92	92	92	83	76	75	74	92	96	90	79	84	95	96	97	96	93	91	89	90	88.4	97
11-Sep	93	92	88	85	82	82	81	79	76	76	73	69	66	64	65	62	64	62	64	67	71	74	90	85	75.5	93
12-Sep	84	87	90	90	89	90	92	88	91	79	65	57	51	47	46	45	45	51	61	71	76	81	81	83	72.5	92
13-Sep	83	85	84	86	89	89	88	74	69	54	46	40	43	40	40	42	42	49	60	74	79	86	92	96	67.9	96
14-Sep	98	96	94	94	96	96	97	97	95	91	84	90	78	79	79	91	83	82	88	90	91	97	97	97	90.7	98
15-Sep	96	96	97	98	98	99	99	98	92	84	70	51	45	49	54	58	73	89	94	96	97	97	97	99	84.5	99
16-Sep	98	96	94	94	95	96	97	97	96	83	81	80	77	72	67	67	66	72	68	65	66	71	68	71	80.7	98
17-Sep	72	74	74	77	79	81	82	82	71	65	59	58	65	65	63	64	63	67	78	86	91	93	95	96	75.1	96
18-Sep	96	95	91	94	95	96	95	86	77	73	65	63	57	54	49	48	49	51	64	69	76	85	90	90	75.4	96
19-Sep	93	92	91	90	93	96	96	82	74	61	56	46	37	34	36	38	41	50	59	67	72	74	75	76	67.8	96
20-Sep	80	83	85	90	92	95	95	79	70	61	60	50	31	31	30	31	38	42	48	52	57	61	69	79	62.9	95
21-Sep	85	92	96	97	98	98	99	90	78	68	63	61	49	44	44	42	44	49	56	61	66	72	82	88	71.8	99
22-Sep	91	91	93	96	98	98	99	99	91	75	55	44	41	40	37	38	38	42	50	58	62	70	78	84	69.5	99
23-Sep	86	90	93	96	97	97	98	92	81	70	68	64	59	53	51	48	51	58	66	72	80	87	93	96	77.0	98
24-Sep	97	97	98	99	99	99	99	94	77	69	61	46	32	31	28	29	33	40	48	53	59	63	69	73	66.3	99
25-Sep	68	75	79	82	80	76	75	74	79	75	76	76	65	61	69	77	71	76	83	84	85	83	83	85	76.6	85
26-Sep	87	91	97	99	99	99	99	97	94	87	79	73	68	64	66	65	60	65	70	70	69	72	69	78	79.9	99
27-Sep	84	85	81	83	81	82	84	79	70	64	55	47	46	42	42	46	47	52	60	70	77	83	88	89	68.2	89
28-Sep	89	90	91	93	95	96	98	91	83	66	51	44	41	41	42	46	41	46	58	61	63	68	70	71	68.1	98
29-Sep	74	78	78	79	83	91	95	97	99	99	96	85	82	72	56	48	47	55	60	62	68	71	68	70	75.6	99
30-Sep	71	67	71	71	84	84	87	92	94	84	76	71	67	74	72	79	79	76	76	83	88	91	91	92	80.0	94
	86.1	87.5	88.5	89.8	91.4	92.6	92.4	87.4	81.3	74.2	67.4	62.3	57.5	55.2	53.8	55.3	56.6	60.7	66.5	71.9	75.8	79.5	82.7	84.7	Diurnal Average	
	99	99	99	100	100	100	100	99	99	99	96	92	96	90	87	91	95	96	97	96	97	97	97	99	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity (RH) - %

Mannix - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	24	3.33	3.33
40 - 60	131	18.19	21.53
60 - 80	228	31.67	53.19
80 - 100	337	46.81	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 96 % on Sep 26 06:00

Maximum Daily Average: 85.4 % on Sep 4

Minimum Value: 25 % on Sep 24 15:00

Minimum Daily Average: 54.5 % on Sep 2

Maximum Diurnal Average: 84.9 % at hour 7

Minimum Diurnal Average: 51.4 % at hour 15

Monthly Average: 68.4 %

Percentiles: P_1 = 29 P_{10} = 42 Q_1 = 57 Median = 71 Q_3 = 81 P_{90} = 88 P_{99} = 94

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

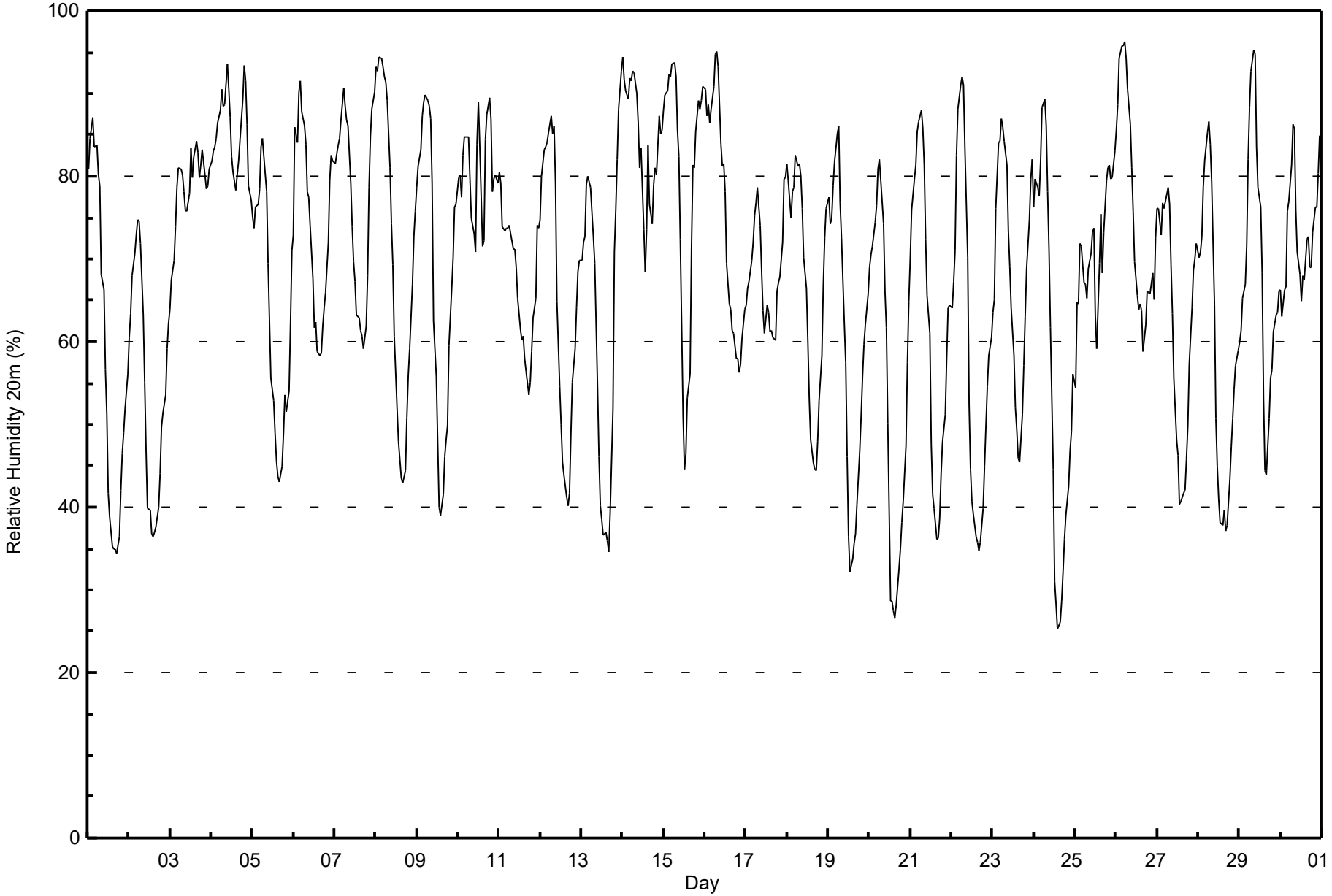
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	81	84	86	87	84	84	80	79	68	66	57	51	42	39	35	35	35	34	36	42	46	49	52	56	58.7	87
2-Sep	61	63	68	71	73	75	75	72	63	55	47	40	40	37	36	37	38	40	44	50	51	54	59	62	54.5	75
3-Sep	64	67	70	74	79	81	81	80	78	76	76	78	83	80	82	84	83	80	81	83	80	78	79	81	78.3	84
4-Sep	82	83	84	85	86	88	90	89	89	94	91	87	82	81	78	80	82	84	89	93	92	86	79	77	85.4	94
5-Sep	75	74	76	77	79	84	85	82	78	70	62	56	53	49	46	44	43	45	49	54	52	54	62	71	63.2	85
6-Sep	73	86	84	90	92	88	86	84	78	77	74	68	62	62	59	58	59	62	64	66	72	80	82	82	74.5	92
7-Sep	82	83	84	85	87	91	89	87	86	79	74	70	67	63	63	61	61	59	62	68	79	85	88	90	76.7	91
8-Sep	93	93	94	94	93	92	91	89	81	74	69	61	52	48	46	44	43	44	51	56	59	67	73	76	70.1	94
9-Sep	79	81	83	87	89	90	89	89	87	79	63	56	48	40	39	42	46	48	50	60	66	70	76	77	68.0	90
10-Sep	80	80	78	82	85	85	85	80	75	73	71	84	89	84	71	72	84	87	89	87	78	80	80	79	80.8	89
11-Sep	80	79	74	73	74	74	74	73	71	71	69	65	62	60	61	58	56	54	55	59	63	65	74	74	67.4	80
12-Sep	75	80	83	84	84	85	87	85	86	79	65	55	50	45	44	41	40	42	49	55	59	64	68	70	65.7	87
13-Sep	70	72	73	79	80	79	76	73	70	54	46	40	38	37	37	36	35	39	52	71	76	82	88	93	62.3	93
14-Sep	94	92	90	89	92	92	93	93	90	86	81	83	74	68	74	84	77	74	79	81	80	87	85	86	84.3	94
15-Sep	88	90	90	92	92	94	94	92	86	82	72	51	45	46	53	56	71	81	81	85	89	88	89	91	79.2	94
16-Sep	91	87	89	86	88	91	95	95	93	84	81	82	78	69	65	64	61	61	58	58	56	57	60	64	75.5	95
17-Sep	64	66	67	70	72	75	77	79	74	69	64	61	64	64	61	61	61	60	66	67	68	72	80	80	68.4	80
18-Sep	82	80	75	78	79	82	81	82	80	76	70	66	60	53	48	45	45	44	48	53	58	67	73	76	66.7	82
19-Sep	78	74	75	79	82	85	86	77	73	62	57	46	36	32	34	36	37	40	47	51	56	60	62	66	59.6	86
20-Sep	69	71	71	74	76	81	82	79	74	66	62	50	29	29	27	27	28	33	35	38	41	47	58	65	54.7	82
21-Sep	70	76	80	81	85	87	88	86	81	72	66	61	48	41	40	36	36	39	44	48	51	58	64	64	62.6	88
22-Sep	64	67	71	82	88	91	92	91	83	70	52	45	41	39	36	36	35	36	40	45	50	55	58	61	59.5	92
23-Sep	64	65	76	84	84	87	86	84	81	73	69	64	58	52	49	46	45	51	57	63	69	75	80	82	68.6	87
24-Sep	76	80	79	78	82	88	89	86	78	71	62	45	31	28	25	26	29	32	36	39	43	47	49	56	56.5	89
25-Sep	54	65	65	72	72	67	67	65	69	71	73	74	63	59	70	75	68	73	80	81	81	80	80	83	71.1	83
26-Sep	86	89	94	96	96	96	94	91	86	81	76	70	66	64	65	64	59	62	66	66	66	68	65	73	76.5	96
27-Sep	76	76	73	77	76	77	79	77	69	63	56	48	46	40	41	42	42	46	50	57	64	69	70	72	61.9	79
28-Sep	70	71	73	79	82	85	87	84	79	65	51	45	41	38	38	40	37	38	43	47	51	54	57	59	58.9	87
29-Sep	60	61	65	67	72	82	88	93	95	95	84	79	76	68	53	44	44	51	56	57	61	63	63	66	68.5	95
30-Sep	66	63	66	67	76	77	81	86	86	76	71	68	65	68	67	72	73	69	69	73	76	76	80	85	73.2	86
	74.8	76.6	77.9	80.6	82.5	84.4	84.9	83.3	79.6	73.7	67.0	61.6	56.3	52.8	51.4	51.5	51.7	53.7	57.5	61.8	64.4	67.9	71.1	73.8	Diurnal Average	
	94	93	94	96	96	96	95	95	95	95	91	87	89	84	82	84	84	87	89	93	92	88	89	93	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 20m (RH20) - %

Mannix - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	56	7.78	7.78
40 - 60	148	20.56	28.33
60 - 80	303	42.08	70.42
80 - 100	213	29.58	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 45m (RH45) - %

Mannix - September 2026

Maximum Value: 96 % on Sep 26 06:00

Maximum Daily Average: 85.8 % on Sep 4

Minimum Value: 25 % on Sep 24 15:00

Minimum Daily Average: 50.9 % on Sep 24

Maximum Diurnal Average: 81.8 % at hour 8

Minimum Diurnal Average: 51.4 % at hour 17

Monthly Average: 66.8 %

Percentiles: P_1 = 29 P_{10} = 41 Q_1 = 56 Median = 69 Q_3 = 80 P_{90} = 86 P_{99} = 94

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

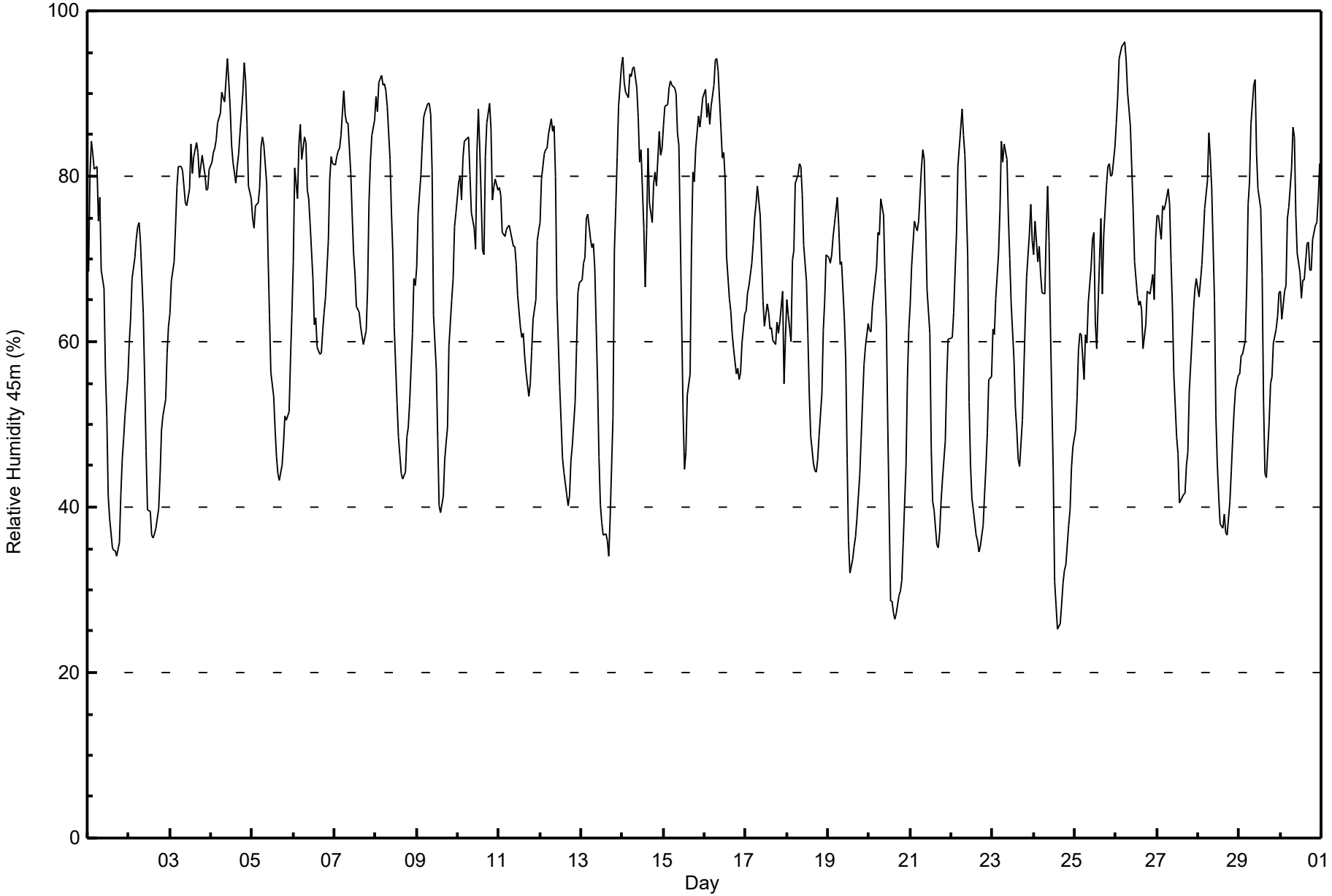
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	68	80	84	83	81	81	74	78	69	66	57	51	41	39	35	35	35	34	36	41	46	48	51	56	57.1	84
2-Sep	60	63	68	70	72	74	74	72	63	55	47	40	39	37	36	37	37	40	44	49	51	53	59	62	54.3	74
3-Sep	63	67	70	74	79	81	81	81	79	77	76	78	84	80	82	84	83	80	81	83	80	78	79	81	78.4	84
4-Sep	82	83	83	84	86	88	90	89	89	94	91	88	84	82	79	81	83	85	90	94	92	86	79	77	85.8	94
5-Sep	75	74	76	77	79	84	85	84	79	70	63	56	53	49	46	44	43	45	48	51	50	52	58	63	62.7	85
6-Sep	70	81	77	84	86	82	85	84	78	77	74	68	62	63	59	58	59	61	64	65	72	80	82	82	73.1	86
7-Sep	81	82	83	83	85	90	88	86	86	80	75	71	68	64	64	62	61	60	61	66	77	82	85	87	76.2	90
8-Sep	90	88	91	92	91	91	90	88	82	76	71	62	53	48	46	44	43	44	49	50	53	61	68	67	68.2	92
9-Sep	69	75	80	84	87	88	89	89	87	81	63	57	48	40	39	41	46	48	50	59	65	68	74	76	66.8	89
10-Sep	79	80	77	82	84	85	85	80	76	74	71	83	88	83	71	71	82	86	89	86	77	79	80	78	80.3	89
11-Sep	79	78	73	73	74	74	74	73	72	72	69	66	62	60	61	58	56	53	55	59	63	65	72	73	67.2	79
12-Sep	74	80	83	83	83	85	87	85	86	80	65	54	50	46	44	41	40	41	46	47	53	59	66	67	64.5	87
13-Sep	67	70	70	75	75	72	71	72	69	55	46	40	38	37	37	36	34	39	51	71	76	82	89	93	61.1	93
14-Sep	94	91	90	90	92	92	93	93	91	87	82	83	74	67	74	83	77	74	79	80	79	85	82	83	84.0	94
15-Sep	86	89	89	91	92	91	91	90	85	84	73	51	45	47	54	56	71	81	79	83	87	86	88	89	78.2	92
16-Sep	91	87	89	86	89	91	94	94	93	86	82	83	79	70	65	64	61	59	56	57	55	56	60	63	75.4	94
17-Sep	64	66	67	70	72	75	77	79	75	70	65	62	65	64	62	62	60	60	62	61	62	66	55	61	65.8	79
18-Sep	65	63	60	70	71	79	80	81	81	78	72	67	61	54	49	45	44	44	46	49	54	61	65	71	62.9	81
19-Sep	70	69	70	73	74	77	74	69	70	63	58	46	36	32	34	35	36	39	44	48	53	57	59	62	56.2	77
20-Sep	61	61	64	67	69	73	73	77	75	68	62	50	29	29	27	26	27	29	30	31	36	45	55	62	51.2	77
21-Sep	65	69	75	74	73	75	81	83	82	74	66	61	47	41	40	35	35	37	41	43	48	55	60	60	59.2	83
22-Sep	61	64	68	73	81	86	88	85	83	70	53	45	41	40	37	36	35	35	38	42	45	49	55	56	56.8	88
23-Sep	61	61	65	71	76	84	82	84	82	75	70	64	58	52	49	46	45	50	56	62	68	73	77	72	66.0	84
24-Sep	71	75	70	71	68	66	66	73	79	72	62	44	31	28	25	26	28	31	32	33	38	40	45	47	50.9	79
25-Sep	49	53	59	61	61	55	61	60	65	69	72	73	62	59	70	75	66	73	79	81	82	80	80	84	67.9	84
26-Sep	86	90	94	96	96	96	94	90	86	81	76	70	66	64	65	64	59	62	66	66	66	68	65	72	76.6	96
27-Sep	75	75	72	77	76	77	78	77	70	64	56	48	46	41	41	42	42	45	47	54	60	64	66	68	60.8	78
28-Sep	65	67	69	73	76	80	85	82	79	65	51	45	41	38	37	39	37	37	41	44	48	52	54	56	56.8	85
29-Sep	56	58	58	60	67	77	79	86	91	92	83	78	76	68	53	44	44	50	55	56	60	62	63	66	65.9	92
30-Sep	66	63	66	67	75	76	81	86	85	75	71	68	65	67	67	72	72	69	69	72	74	74	77	82	72.5	86
	71.5	73.4	74.8	77.1	79.0	80.8	81.7	81.8	79.5	74.4	67.4	61.8	56.4	52.9	51.6	51.4	51.4	53.1	56.0	59.5	62.3	65.6	68.3	70.5	Diurnal Average	
	94	91	94	96	96	96	94	94	93	94	91	88	88	83	82	84	83	86	90	94	92	86	89	93	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 45m (RH45) - %

Mannix - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	60	8.33	8.33
40 - 60	160	22.22	30.56
60 - 80	315	43.75	74.31
80 - 100	185	25.69	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 75m (RH75) - %

Mannix - September 2026

Maximum Value: 98 % on Sep 26 06:00

Maximum Daily Average: 87.8 % on Sep 4

Minimum Value: 26 % on Sep 24 15:00

Minimum Daily Average: 47.9 % on Sep 24

Maximum Diurnal Average: 80.3 % at hour 8

Minimum Diurnal Average: 52.3 % at hour 17

Monthly Average: 66.5 %

Percentiles: $P_1 = 28$ $P_{10} = 42$ $Q_1 = 55$ Median = 68 $Q_3 = 80$ $P_{90} = 87$ $P_{99} = 96$

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

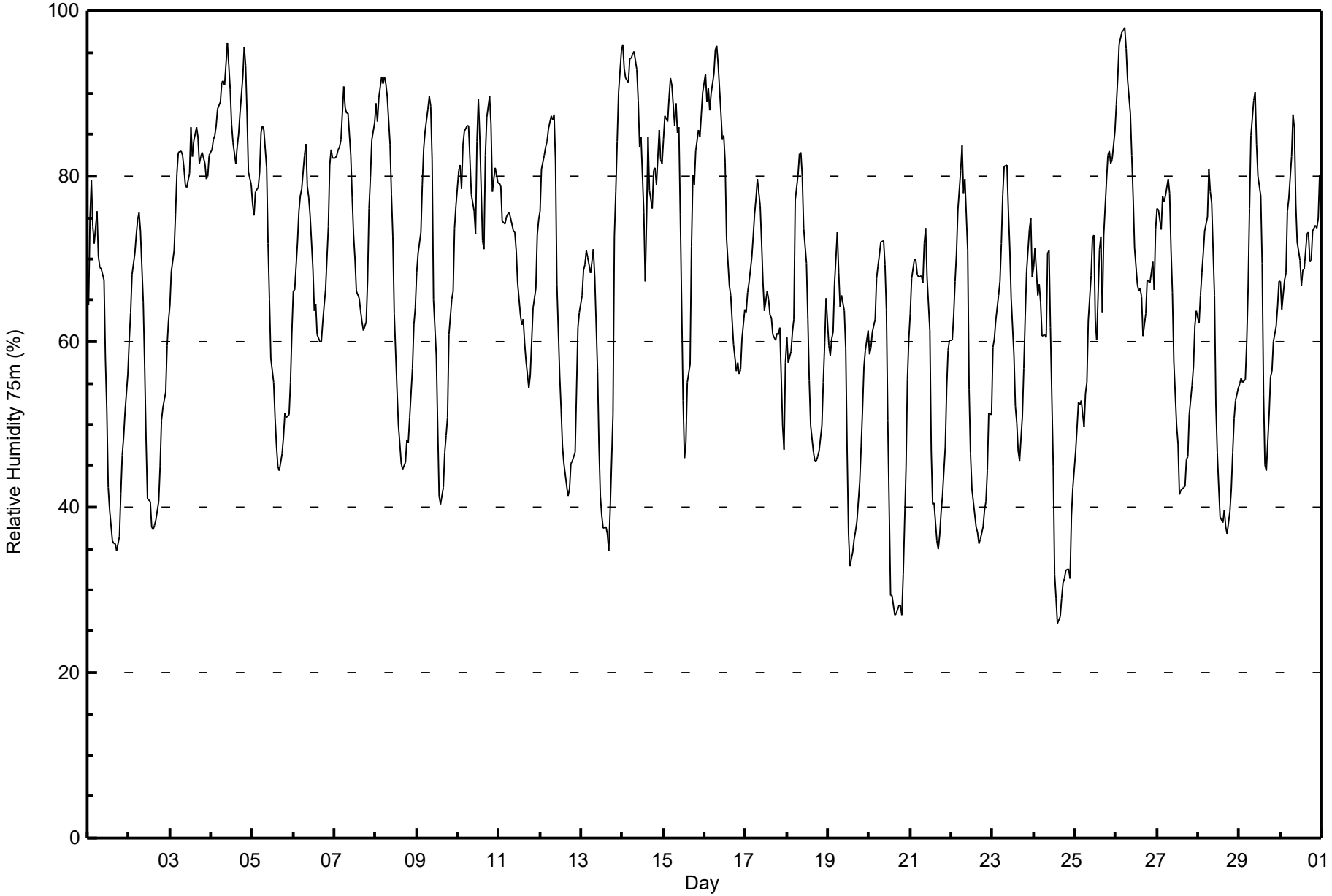
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	64	75	79	74	72	76	70	69	69	67	58	52	42	40	36	36	36	35	36	42	46	49	51	56	55.4	79
2-Sep	60	64	68	71	73	75	76	73	65	57	48	41	41	38	37	38	38	41	45	51	52	54	59	63	55.3	76
3-Sep	64	68	71	76	80	83	83	83	81	79	79	80	86	82	84	86	85	82	82	83	81	80	80	82	80.0	86
4-Sep	83	84	85	86	88	89	91	91	91	96	93	91	86	84	82	84	85	88	92	96	93	88	81	79	87.8	96
5-Sep	77	75	78	79	81	85	86	86	81	72	65	58	55	51	47	45	44	46	49	51	51	51	55	61	63.7	86
6-Sep	66	66	72	76	78	79	82	84	79	77	75	69	64	65	61	60	60	62	64	66	74	81	83	82	71.9	84
7-Sep	82	83	83	84	84	91	88	88	88	82	78	73	70	66	65	64	62	61	62	67	76	80	84	86	77.0	91
8-Sep	89	87	89	92	91	92	91	90	84	78	73	63	54	50	48	45	45	45	48	48	51	57	62	64	68.2	92
9-Sep	68	71	73	79	83	85	88	90	89	82	65	58	50	41	40	42	47	49	51	61	65	66	74	76	66.4	90
10-Sep	81	81	79	84	85	86	86	82	78	76	73	84	89	85	72	71	83	87	90	86	78	80	81	79	81.5	90
11-Sep	79	79	74	74	75	75	76	75	73	73	71	67	63	62	63	60	58	54	56	60	64	66	73	75	68.6	79
12-Sep	76	81	83	84	84	86	87	87	87	82	67	56	52	47	45	43	41	42	45	46	47	54	62	64	64.4	87
13-Sep	66	69	69	71	70	68	70	71	68	56	47	41	39	37	38	37	35	40	51	73	78	84	90	95	61.0	95
14-Sep	96	93	92	91	94	94	95	95	93	89	84	85	76	67	75	85	78	76	81	81	79	86	82	81	85.3	96
15-Sep	84	87	87	89	92	91	86	89	85	86	75	53	46	48	55	57	72	80	79	83	86	85	87	90	78.0	92
16-Sep	92	89	91	88	90	92	95	96	94	88	84	85	82	73	67	66	63	60	57	57	56	57	60	64	76.8	96
17-Sep	63	66	67	70	73	75	77	80	77	72	67	64	66	65	63	63	61	60	61	61	62	50	47	57	65.3	80
18-Sep	61	57	59	61	63	77	80	83	83	80	74	70	63	55	50	47	46	46	46	47	50	55	60	65	61.5	83
19-Sep	59	58	60	61	67	73	68	64	66	64	59	47	37	33	35	36	37	38	43	47	52	57	59	61	53.4	73
20-Sep	58	59	61	63	68	69	70	72	72	69	64	50	29	29	28	27	27	28	28	27	32	45	55	60	49.7	72
21-Sep	63	68	70	70	68	68	68	67	72	74	68	61	47	40	41	36	35	37	39	41	47	54	59	60	56.4	74
22-Sep	60	63	67	71	76	81	84	78	80	71	54	46	42	41	38	37	36	36	38	40	41	44	51	51	55.2	84
23-Sep	59	60	63	66	67	72	78	81	81	76	71	65	58	52	50	47	46	51	57	63	69	74	75	68	64.5	81
24-Sep	69	71	66	67	65	61	61	60	71	71	62	45	32	29	26	27	29	31	31	32	33	31	39	42	47.9	71
25-Sep	47	50	53	52	53	50	54	55	63	68	73	73	63	60	71	73	64	73	80	83	83	82	82	85	66.1	85
26-Sep	89	92	96	97	98	98	95	92	88	83	78	71	67	66	66	65	61	63	67	67	67	70	66	73	78.2	98
27-Sep	76	76	74	78	77	78	80	78	71	66	58	50	48	42	42	42	43	46	46	51	55	57	62	64	60.7	80
28-Sep	62	66	68	71	73	75	81	78	77	66	52	47	43	39	38	40	38	37	39	42	47	51	53	54	55.6	81
29-Sep	55	56	55	55	60	67	76	85	89	90	84	80	78	69	54	45	44	51	56	56	60	62	64	67	65.0	90
30-Sep	67	64	67	68	76	77	82	87	86	77	72	70	67	69	69	73	73	70	70	73	74	74	75	80	73.4	87
	70.6	71.9	73.3	74.9	76.8	78.9	80.2	80.3	79.2	75.6	69.0	63.2	57.8	54.2	52.9	52.5	52.3	53.8	56.3	59.4	61.6	64.0	67.1	69.6	Diurnal Average	
	96	93	96	97	98	98	95	96	94	96	93	91	89	85	84	86	85	88	92	96	93	88	90	95	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 75m (RH75) - %

Mannix - September 2026



Relative Humidity 75m (RH75) - %

Mannix - September 2026

Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	58	8.06	8.06
40 - 60	172	23.89	31.94
60 - 80	308	42.78	74.72
80 - 100	182	25.28	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 99 % on Sep 26 06:00

Maximum Daily Average: 88.3 % on Sep 4

Minimum Value: 26 % on Sep 24 15:00

Minimum Daily Average: 46.6 % on Sep 24

Maximum Diurnal Average: 79.7 % at hour 8

Minimum Diurnal Average: 52.4 % at hour 17

Monthly Average: 66.2 %

Percentiles: P_1 = 29 P_{10} = 42 Q_1 = 54 Median = 67 Q_3 = 80 P_{90} = 87 P_{99} = 96

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

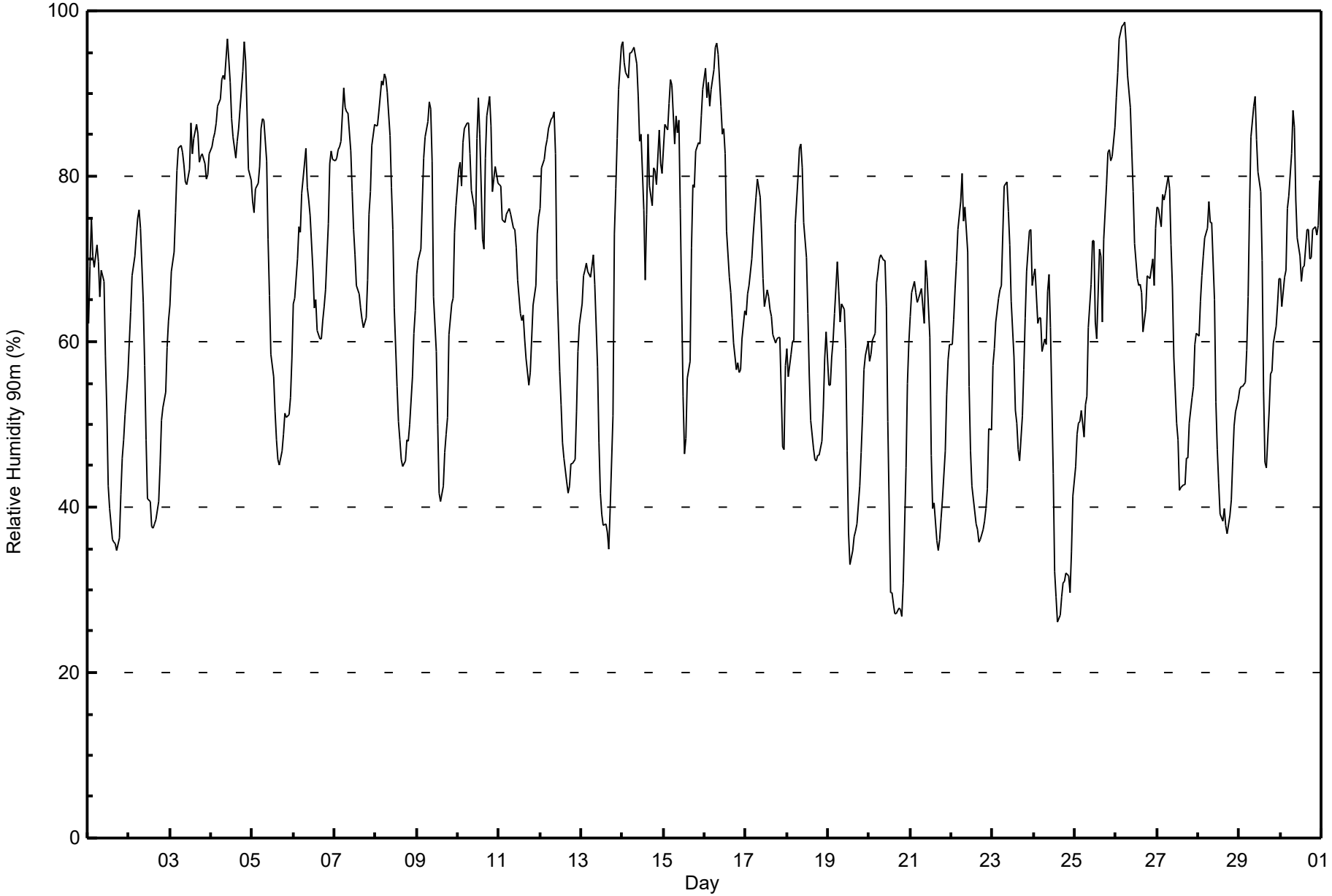
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	62	69	75	70	69	72	70	65	69	67	58	52	43	40	36	36	36	35	36	42	46	48	51	56	54.2	75
2-Sep	60	63	68	70	73	75	76	74	65	57	48	41	41	38	37	38	38	41	45	51	52	54	59	62	55.3	76
3-Sep	64	68	71	76	81	83	84	83	81	79	79	81	86	83	85	86	85	82	82	83	82	80	80	83	80.3	86
4-Sep	84	85	85	86	89	89	92	92	92	97	94	91	87	85	82	84	86	88	93	96	94	88	81	79	88.3	97
5-Sep	77	76	78	79	81	86	87	87	82	72	66	58	56	52	48	46	45	47	49	51	51	51	53	58	64.0	87
6-Sep	65	65	70	74	73	78	82	83	79	77	75	69	64	65	61	60	60	63	64	66	74	82	83	82	71.4	83
7-Sep	82	82	83	84	84	91	88	88	88	83	78	74	70	67	66	64	63	62	63	67	75	78	84	86	77.1	91
8-Sep	86	86	88	92	91	92	92	90	85	79	74	64	55	50	48	46	45	46	48	48	50	56	61	64	68.1	92
9-Sep	68	70	71	77	82	85	87	89	88	82	65	59	50	42	41	43	47	49	51	61	65	65	73	76	66.0	89
10-Sep	81	82	79	84	86	86	86	83	78	76	74	85	90	85	72	71	82	87	90	86	78	80	81	79	81.7	90
11-Sep	79	79	75	74	75	76	76	75	74	74	71	67	63	63	63	60	58	55	56	60	64	67	73	75	68.9	79
12-Sep	76	81	82	83	84	86	87	87	88	83	68	56	52	48	46	43	42	43	45	45	46	51	59	62	64.3	88
13-Sep	65	68	69	69	69	68	69	70	67	57	48	42	39	38	38	37	35	40	51	73	79	85	91	96	60.8	96
14-Sep	96	94	92	92	95	95	95	96	93	90	84	85	76	67	76	85	79	76	81	81	79	86	81	80	85.6	96
15-Sep	83	86	86	89	92	91	84	87	85	87	76	53	46	48	56	58	71	79	79	83	84	84	87	91	77.7	92
16-Sep	93	90	91	89	91	93	96	96	95	89	85	86	83	73	68	66	63	60	57	58	56	57	60	64	77.3	96
17-Sep	63	66	67	70	73	75	77	80	77	73	68	64	66	65	64	63	61	60	60	60	60	47	47	57	65.2	80
18-Sep	59	56	59	60	60	74	80	83	84	81	74	70	63	56	50	47	46	46	46	46	48	52	58	61	60.9	84
19-Sep	55	55	58	60	63	70	66	62	65	64	59	47	37	33	35	36	37	38	43	47	51	57	58	60	52.3	70
20-Sep	58	58	60	61	67	68	70	71	70	70	64	50	30	30	28	27	27	28	28	27	31	45	55	60	49.2	71
21-Sep	63	66	67	66	65	65	66	64	62	70	68	61	46	40	41	36	35	36	39	41	47	54	58	60	54.8	70
22-Sep	60	63	66	70	74	77	80	75	76	71	55	47	43	41	38	37	36	36	37	38	40	42	49	49	54.1	80
23-Sep	57	59	62	65	66	67	73	79	79	76	72	65	58	52	50	47	46	51	57	63	68	73	74	67	63.6	79
24-Sep	68	69	62	63	63	59	60	60	66	68	62	44	32	29	26	27	29	31	31	32	32	30	35	41	46.6	69
25-Sep	45	49	50	50	52	49	52	53	62	67	72	72	62	60	71	70	62	72	79	83	83	82	82	86	65.3	86
26-Sep	89	93	97	98	98	99	96	92	88	83	78	72	68	67	67	66	61	64	68	68	68	70	67	74	78.7	99
27-Sep	76	76	74	78	77	78	80	79	72	67	58	50	48	42	42	43	43	46	46	50	53	55	60	61	60.5	80
28-Sep	61	65	68	70	73	74	77	74	74	65	53	47	43	39	38	40	38	37	39	41	46	50	52	53	54.8	77
29-Sep	54	55	55	55	59	65	76	85	89	90	84	80	78	70	54	45	45	52	56	57	60	62	65	68	64.9	90
30-Sep	68	64	68	69	76	78	83	88	86	77	73	70	67	69	69	73	74	70	70	74	74	73	74	80	73.6	88
	69.9	71.2	72.6	74.1	76.0	78.1	79.6	79.7	78.6	75.6	69.4	63.4	58.1	54.5	53.2	52.7	52.4	53.9	56.3	59.3	61.2	63.3	66.4	69.0	Diurnal Average	
	96	94	97	98	98	99	96	96	95	97	94	91	90	85	85	86	86	88	93	96	94	88	91	96	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 90m (RH90) - %

Mannix - September 2026



Relative Humidity 90m (RH90) - %

Mannix - September 2026

Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	60	8.33	8.33
40 - 60	181	25.14	33.47
60 - 80	302	41.94	75.42
80 - 100	177	24.58	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 20m (WS20) - km/h

Mannix - September 2026

Maximum Speed: 36 km/h on Sep 26 17:00

Maximum Daily Speed Average: 23.6 km/h on Sep 26

Minimum Speed Value: 1 km/h on Sep 15 18:00

Minimum Daily Speed Average: 2.3 km/h on Sep 8

Maximum Diurnal Speed Average: 6.4 km/h at hour 15

Minimum Diurnal Speed Average: 2.2 km/h at hour 3

Monthly Average Velocity: 3.8 km/h 237.6 deg

Percentiles: P_1 = 2 P_{10} = 5 Q_1 = 8 Median = 11 Q_3 = 17 P_{90} = 22 P_{99} = 32

Hours in Service:	720
Hours of Data:	720
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-Sep	S6	SSE7	SSE10	SSE10	SSE10	SSE8	SSE9	S7	S9	SSE8	SSE10	SSE12	SSE14	SSE17	SSE20	SSE19	SE19	SSE17	SSE14	SE16	SE16	SE15	SSE15	SE15	SSE12.5	SSE20
2-Sep	SE14	SE15	SE17	SE17	SE17	SE15	SE18	SE19	SE18	SE18	SE21	SE22	SE21	SE23	SE21	SE23	SE23	SE20	SE23	SE17	SE18	SE19	SSE15	SE15	SE18.6	SE23
3-Sep	SE14	SE13	SE14	SE11	SE16	SE17	SE17	SE13	SE19	SE15	ESE17	ESE17	E13	ESE17	ESE14	ESE12	SE9	ESE10	ENE8	ENE8	E11	E11	ESE12	ESE12	ESE12.6	SE19
4-Sep	SE12	SE14	SE10	SE9	SSE8	S6	SW4	WNW2	W3	N13	NNE22	NNE21	NNE25	NNE27	N28	N25	N24	N21	N20	N16	N16	NNW14	N13	N15	NNE10.4	N28
5-Sep	N12	NNE17	N12	N11	N12	N11	N10	N11	NNE9	NNE10	NNE11	NE8	NNE6	N5	N5	NW3	WNW6	WNW9	WNW7	NW4	NNW5	NE6	WNW2	WSW8	N6.8	NNE17
6-Sep	SW3	SSE8	SSE6	SSW5	SSE7	SSE8	SSE7	SSE7	SSE7	SSE8	SSE10	SSE10	SSE14	SSE13	SSE9	S8	S9	S12	SSE10	SSE11	SSE14	SSE14	SSE13	SSE12	SSE9.2	SSE14
7-Sep	SSE12	SE13	SSE12	SSE10	S9	SSE8	ESE3	SSE9	SSE8	S9	S14	SSE11	SSE11	S6	SSE5	ESE5	SE5	SSW2	S5	SSE6	S9	SSW5	SW6	WSW4	SSE7.2	S14
8-Sep	WSW5	W5	WNW5	NNE1	NNW3	NW3	WNW2	NW1	NNW6	NNW7	NNW5	NW9	NNW10	NNW6	WNW6	W5	WSW4	SW6	S8	S9	S10	SSE7	SSE8	SSE9	W2.3	NNW10
9-Sep	SSE10	SSE10	SSE11	S10	SSE9	SSE12	SSE12	SSE12	SSE11	SSE8	SSW11	SSW14	SW18	WSW23	SW24	WSW22	SW15	SW18	WSW24	SW17	SW10	SW13	WSW19	WSW18	SW12.2	WSW24
10-Sep	WSW20	W22	WNW20	W17	WSW17	WSW17	WSW13	WSW18	W22	W24	W22	W19	W18	W22	WNW20	NW17	WNW18	WNW22	WNW20	WNW19	NW19	NW18	WNW21	WNW21	W18.3	W24
11-Sep	NW22	NW21	NW25	NW26	NW23	NNW23	NNW20	NNW22	NNW26	NNW24	NNW24	NNW22	NNW21	NNW19	NW24	NNW22	NNW16	NNW18	NNW16	NNW18	NNW15	NNW12	NW12	NW13	NNW19.9	NW26
12-Sep	NW13	WNW12	WNW11	WNW9	W10	W9	W8	W7	W8	W6	W9	W9	WSW10	W10	WNW6	WSW7	WSW10	WSW9	SSW8	SSW11	SSW11	SW9	SW9	SW8	W7.9	NW13
13-Sep	SW7	SSW8	SSW7	S7	SSE9	S8	S6	S6	S7	SSW10	SSW10	SW13	SW14	SW15	SW12	SW13	WSW8	SW5	N5	NNE25	NNE19	NNW8	NNW8	NNW12	SW3.8	NNE25
14-Sep	N12	NNE21	NNE19	N17	N13	N16	NNW16	NNW13	NNW15	NNW14	NNW13	NNW14	N13	N13	N17	N11	NNW12	NNW13	NNW11	NNW9	NNW9	WNW6	WNW9	WNW10	N12.5	NNE21
15-Sep	W10	W13	WNW12	W10	W6	W9	WSW9	SW7	SW6	SW6	SW8	WNW11	WSW11	SW11	SW13	SSW9	ESE1	N1	SW3	WSW8	WSW9	W12	WNW12	NW8	WSW7.4	W13
16-Sep	NNE9	N8	NNE9	NNE5	NE4	NNE2	WSW4	WSW6	SSW6	S8	S8	S9	S7	SE6	SE5	SE5	SE5	SSE7	ESE7	SE9	SE11	SSE12	SE17	SE16	SE4.3	SE17
17-Sep	SE18	SE18	SE19	SE16	SE14	SSE11	SSE12	S8	SSE10	SSE9	S9	S7	SSE6	SSE2	SSW2	SSE4	WSW2	SW4	S6	S7	SSW7	W6	W6	WSW5	SSE7.4	SE19
18-Sep	WSW8	WSW7	W9	WSW7	W11	W6	NNW6	N5	NNE6	NW5	NW5	W7	W7	WNW8	WNW3	E4	SE7	ESE6	SSE9	S10	S11	S13	S10	SSE7	SW2.8	S13
19-Sep	SSE9	SSE9	SSE10	SSE11	SSE9	SSE10	SSE12	SSE13	SSE13	SSE14	SE10	SSE11	S17	S21	S21	S22	S16	SSW12	S11	S14	SSE13	S12	S13	SSE11	SSE12.7	S22
20-Sep	S8	SSE9	SSE9	S11	S9	SSE9	SSE9	SSE7	SSE6	SSE7	SE8	SSE7	WSW16	WSW14	SW14	SW12	SW9	SSW8	S9	S10	S13	S12	S12	S10	S8.8	WSW16
21-Sep	SSW10	SSW8	SSW7	SSW7	S9	SSE9	SSE9	SSE11	SSE10	SSE8	SSE9	SSE10	S5	SSE6	SE15	SSE14	SSE12	SSE11	SSW12	SSW11	SSW10	SW8	S6	SSE5	S8.5	SE15
22-Sep	E1	NNE3	NW1	SSW6	S7	S6	W4	WNW7	WNW8	NW11	NW14	WNW20	WNW17	WNW17	W18	W21	W19	W12	W9	WSW10	WSW10	W9	W5	WNW6	W8.5	W21
23-Sep	SW5	SSW5	S7	S7	S9	SSE7	S7	SSW6	S5	S6	S6	SSE5	SE5	SSE6	SSE8	SSE10	SSE11	SSE11	SSE12	SSE12	SSE10	S7	SSW5	SSW7	S7.1	SSE12
24-Sep	WSW8	WSW7	WSW8	SSW6	S9	SSE8	SSE8	SSE7	SSE6	SSE7	SSE7	WSW11	WSW21	WSW20	WSW21	W16	WSW13	SW9	SW9	SW8	WSW8	W8	SSE3	SSE8	SW7.8	WSW21
25-Sep	SSE7	NE4	ESE3	WNW5	N7	NNE11	N8	NNE8	ENE7	NE15	NNE15	NNE17	NE17	NE19	NNE14	NNE17	NNE12	NNE18	NNE17	NNE18	N16	N19	N20	N17	NNE11.4	N20
26-Sep	NNE16	NNW11	NNW12	NW13	WNW12	W16	W19	W23	W28	W31	W30	W32	W32	W33	W32	W35	W36	W33	W31	W28	W31	W30	W27	W16	W23.6	W36
27-Sep	WSW13	WSW15	WSW16	W20	W25	W26	W24	W21	W22	WSW21	WSW22	WSW20	WSW20	WSW22	WSW21	WSW22	WSW19	WSW18	SW10	SW12	SW12	SW11	SW10	SW11	WSW17.7	W26
28-Sep	WSW9	SSW5	SSE6	SSE8	SSE9	SSE11	SSE8	S11	SSE13	SSW10	SW15	SW18	SW23	WSW19	SW20	SW14	SSW15	SSW12	S12	S11	SSW11	S11	S12	S11	SSW10.7	SW23
29-Sep	S12	SSE9	SSE11	S9	S10	SSE9	SSE10	S8	S9	SSW9	WSW19	W21	W23	WNW25	WNW30	W31	W34	W29	W22	W18	WSW10	W11	W26	W26	WSW12.9	W34
30-Sep	W22	WNW23	WNW22	NW20	WNW25	WNW24	WNW25	NW24	NW22	NW24	NW24	NW23	NW22	NW20	WNW22	WNW17	WNW12	NW11	NNW10	NW10	NW11	NNW8	WNW5	WNW3	WNW17.5	WNW25
	SW3.4	SW2.3	SW2.2	SW2.9	SSW3.4	SW3.6	SW3.5	SW3.4	SW3.4	WSW3.2	WSW3.6	WSW4.7	WSW5.7	WSW5.9	WSW6.4	WSW5.5	WSW5.2	WSW5.0	WSW3.9	SW3.2	SW3.4	SW3.7	SW4.1	SW3.7	Diurnal Average	
	NW22	WNW23	NW25	NW26	W25	W26	WNW25	NW24	W28	W31	W30	W32	W32	W33	W32	W35	W36	W33	W31	W28	W31	W30	W27	W26	Diurnal Maximum	

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

Wind Speed 20m (WS20) - km/h
Mannix - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10 km/h on Sep 13 19:00

Minimum Value: 1 km/h on Sep 17 22:00

Percentiles: P_1 = 1 P_{10} = 2 Q_1 = 2 Median = 4 Q_3 = 5 P_{90} = 7 P_{99} = 9

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

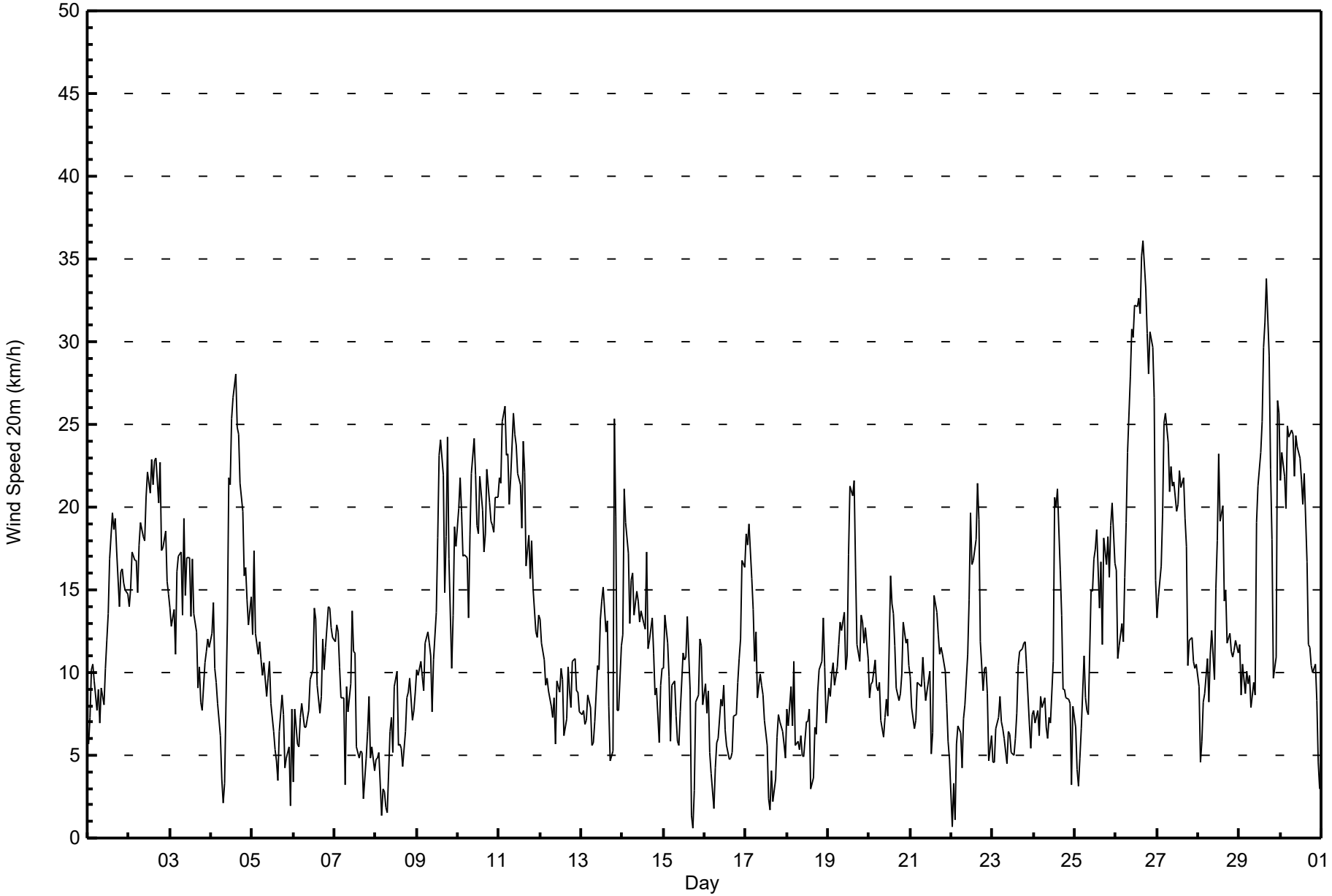
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	3	2	3	3	3	3	3	2	4	3	4	5	6	6	6	7	7	7	5	5	5	6	5	5	7
2-Sep	5	5	5	5	5	4	5	6	6	6	7	7	7	7	8	8	7	7	7	7	6	6	5	5	8
3-Sep	5	5	5	4	6	6	6	6	7	5	5	5	3	5	5	4	4	4	3	3	3	3	3	4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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 20m (WS20) - km/h

Mannix - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	73	10.14	10.14
6 - 11	317	44.03	54.17
12 - 19	213	29.58	83.75
20 - 28	101	14.03	97.78
29 - 38	16	2.22	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 20m (WS20) - km/h

Mannix - September 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	5	2	0	2	4	5	6	3	8	5	6	5	8	7	3	73
6 - 11	8	9	2	3	1	4	9	96	57	26	21	24	22	16	6	13	317
12 - 19	18	12	3	0	1	7	39	32	13	5	18	16	13	10	8	18	213
20 - 28	6	6	0	0	0	0	9	1	3	0	2	15	21	15	14	9	101
29 - 38	0	0	0	0	0	0	0	0	0	0	0	0	15	1	0	0	16
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	36	32	7	3	4	15	62	135	76	39	46	61	76	50	35	43	720

Total Number of Valid Hours: 720

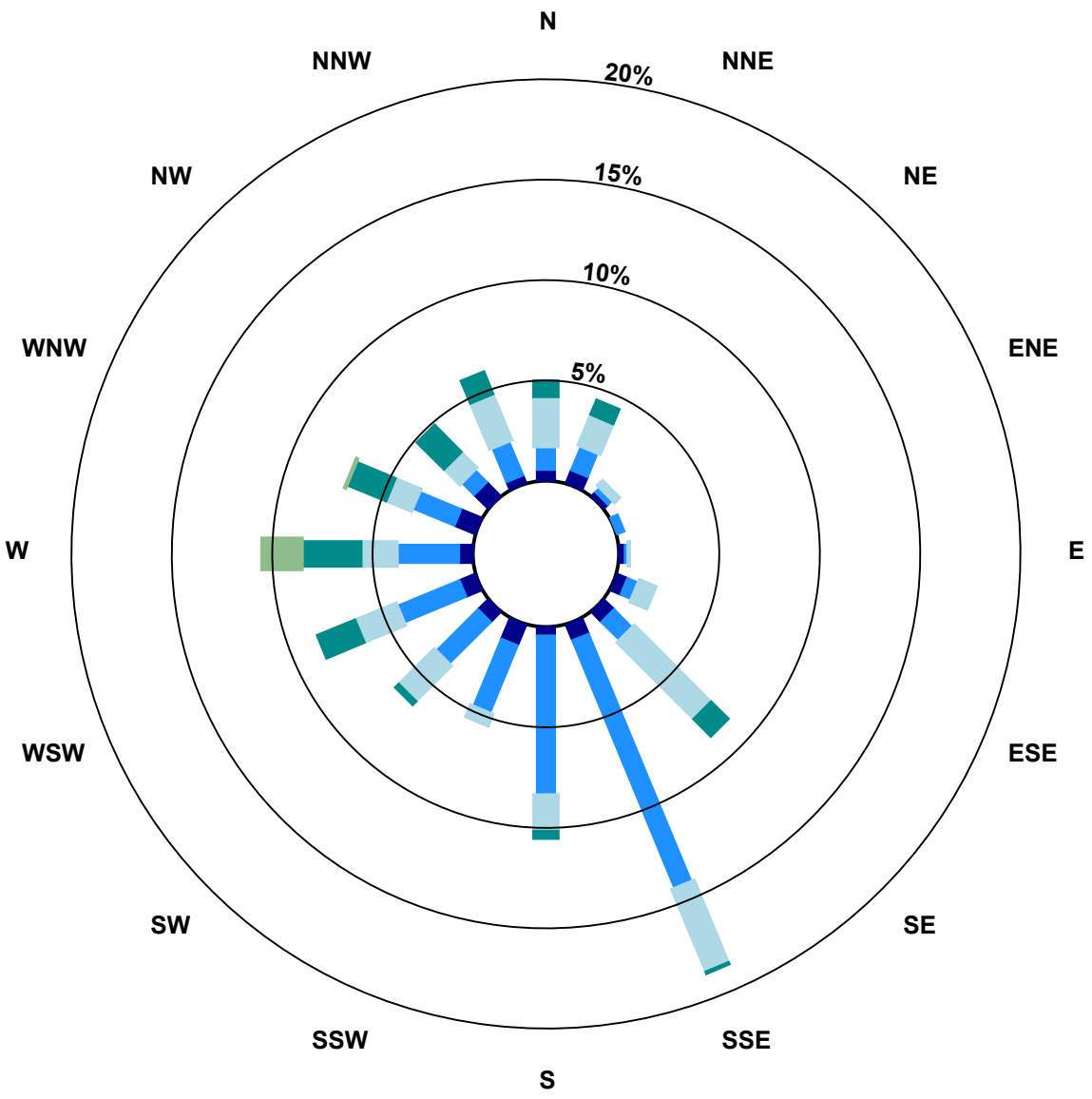
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 20m (WS20) - km/h

Mannix



Classes (km/h)

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

Total Number of Valid Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 45m (WS45) - km/h

Mannix - September 2026

Maximum Speed: 42 km/h on Sep 26 17:00

Maximum Daily Speed Average: 30.2 km/h on Sep 11

Minimum Speed Value: 1 km/h on Sep 15 18:00

Minimum Daily Speed Average: 3.3 km/h on Sep 8

Maximum Diurnal Speed Average: 8.0 km/h at hour 15

Minimum Diurnal Speed Average: 3.4 km/h at hour 3

Monthly Average Velocity: 5.3 km/h 227.9 deg

Percentiles: P_1 = 3 P_{10} = 8 Q_1 = 12 Median = 17 Q_3 = 23 P_{90} = 29 P_{99} = 39

Hours in Service: 720

Hours of Data: 720

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-Sep	SSE13	SSE14	SSE17	SSE19	SSE17	SSE14	SE17	SSE10	SSE12	SSE11	SSE14	SSE16	SSE18	SSE22	SE25	SE25	SE25	SE24	SE20	SE24	SE23	SE23	SE23	SE22	SE18.6	SE25
2-Sep	SE21	SE21	SE23	SE23	SE23	SE19	SE23	SE24	SE23	SE22	SE27	SE28	SE26	SE28	SE26	SE28	SE28	SE24	SE27	SE21	SE21	SE24	SE22	SE21	SE24.0	SE28
3-Sep	SE18	ESE15	SE17	ESE14	ESE19	SE21	SE22	SE17	SE24	ESE18	E20	ESE20	E16	E20	E16	E15	ESE11	ESE14	ENE11	ENE10	E13	E14	E15	ESE14	ESE15.6	SE24
4-Sep	SE16	SE19	ESE14	SE13	SE12	SE10	S6	W3	WNW4	N20	N29	N29	N34	N36	N39	N34	N34	NNW30	N29	N23	N23	NNW22	NNW20	N21	N15.1	N39
5-Sep	N18	N25	N17	N16	NNW17	N16	NNW16	N14	N10	N12	NNE13	NNE10	N9	N7	N6	NW4	WNW9	W10	W10	NNW8	NNW7	NNE8	NE4	SSW5	N9.7	N25
6-Sep	SSE7	SSE15	SSE12	S11	SSE13	SE15	SSE11	SE9	SE10	SSE11	SSE13	SE13	SE18	SE18	SSE12	SSE11	SSE12	SSE17	SE15	SE17	SE20	SE21	SE19	SE19	SSE14.0	SE21
7-Sep	SE18	SE20	SE19	SE16	SSE14	SSE13	E6	SE12	SSE11	SSE13	SSE17	SSE15	SSE15	SSE8	SE5	E6	SE7	S3	SSE7	SSE11	SSE15	S11	S11	SSW6	SSE11.0	SE20
8-Sep	WSW7	W9	NW11	NNW6	NNW8	NW7	NW6	NNW5	NNW10	NW11	NW8	NW13	NNW15	NW8	WNW7	W7	WSW6	SSW9	S16	S20	S20	SSE14	SSE13	SSE14	WSW3.3	S20
9-Sep	SSE14	SSE16	SSE18	SSE18	SSE16	SSE20	SSE19	SSE18	SSE15	SSE11	SSW16	SSW20	SSW25	SW29	SW30	SW28	SW20	SW25	SW32	SW24	SSW18	SW23	WSW27	WSW24	SSW17.8	SW32
10-Sep	WSW27	W28	WNW27	WSW22	WSW23	WSW23	SW19	WSW24	WSW27	W28	W26	W22	WSW23	W25	W26	WNW26	WNW27	W30	WNW27	WNW27	NW30	WNW27	WNW28	WNW30	W24.3	NW30
11-Sep	WNW32	WNW33	NW40	NW41	NW36	NW35	NW32	NW33	NNW37	NNW35	NNW34	NNW32	NNW31	NW28	NW36	NW34	NW25	NW28	NNW23	NNW28	NNW22	NNW19	NW20	WNW22	NW30.2	NW41
12-Sep	WNW21	WNW17	WNW16	WNW14	W13	W12	W11	W9	W10	WSW7	W11	W11	WSW12	W11	WNW8	WSW9	WSW13	SW12	SSW14	SSW21	SSW22	SSW19	SW17	SW16	WSW11.4	SSW22
13-Sep	SW15	SSW15	SSW14	S14	S15	S15	SSW11	S9	S10	SSW16	SSW15	SW18	SW19	SW20	SSW18	SSW19	WSW10	SSW6	N6	N34	N27	NNW13	NNW13	NNW18	SW6.6	N34
14-Sep	N18	N30	N26	N24	N18	NNW23	NNW24	NNW20	NNW22	NNW21	NNW19	NNW21	NNW18	N19	NNW25	N17	NNW18	NNW20	NNW17	NNW13	NNW15	NW9	WNW16	WNW17	NNW18.7	N30
15-Sep	WNW15	W18	W18	W15	W11	W13	W13	WSW10	SW7	SSW7	SW9	W13	WSW14	SW14	SSW19	S14	SE2	N1	SW4	WSW12	WSW12	W17	W17	NW14	WSW10.2	SSW19
16-Sep	N13	N10	N12	N7	NNE5	NNE3	W4	WSW7	SSW10	S12	S11	SSE12	S8	SE7	SE6	SE6	SE6	SE10	E11	ESE13	SE15	SE17	SE24	SE23	SE5.7	SE24
17-Sep	SE25	SE26	SE28	SE23	SE20	SE16	SE18	SSE12	SSE13	SSE12	SSE11	S9	SE7	SE3	S3	SSE5	SW3	SW5	S10	S12	S10	W10	WNW12	W8	SSE9.6	SE28
18-Sep	W12	WSW12	W17	WSW13	W17	WNW9	NNW10	N9	N7	NW7	NW7	W8	W8	WNW10	WNW4	ENE4	ESE8	ESE7	SE13	SSE16	SSE18	SSE21	SSE19	SSE15	SW3.8	SSE21
19-Sep	SSE17	SSE16	SSE18	SSE21	SE19	SE19	SE20	SE23	SSE19	SSE18	SE13	SSE15	SSE23	SSE29	S30	SSE29	S22	SSW21	S21	SSE22	SSE21	SSE20	S21	SSE17	SSE20.1	S30
20-Sep	S14	S12	SSE14	S19	S14	SSE13	SSE10	SSE11	SSE8	SSE9	SE10	SSE10	SW20	SW18	SSW18	SSW17	SW14	SSW16	SSW18	S21	S24	S22	S19	S20	S14.3	S24
21-Sep	SSW21	SSW18	SSW16	SSW15	SSW12	SSE13	SSE15	SSE16	SSE12	SSE10	SE11	SE13	SSE7	SE10	SE19	SE20	SSE18	SSE18	SSW23	S23	SSW18	SSW17	SSW10	S4	S13.4	S23
22-Sep	NNW2	NNW5	N2	S7	SSE12	SSE13	SSW6	WNW12	WNW12	WNW17	NW21	WNW26	WNW23	W21	WSW22	W25	W23	W15	WSW14	WSW16	WSW17	W16	W10	WNW11	W11.8	WNW26
23-Sep	WSW5	SW5	S7	S12	SSE16	SSE14	SE14	S11	SSE6	SSE8	S8	SSE7	SE6	SE8	SE9	SSE13	SE15	SE16	SE19	SE18	SSE16	SSE13	S12	SSW11	SSE10.5	SE19
24-Sep	WSW13	W14	W14	WSW8	SSW11	S9	S10	SSE11	SSE8	SSE9	SE9	SW14	WSW25	WSW24	WSW26	WSW20	WSW17	SW14	SW16	SW17	SW16	WSW14	WSW4	SSE13	SW11.7	WSW26
25-Sep	SE13	ENE4	ESE5	N1	NNE11	N17	N15	NNE12	ENE12	NE22	NNE22	NNE24	NE23	NE25	N19	N23	NNE17	N26	N24	N25	N23	N27	N28	N25	NNE16.5	N28
26-Sep	N23	NNW16	NNW18	NW20	WNW16	WSW20	WSW24	WSW28	W32	W35	W36	W37	W38	W39	W37	W40	W42	W39	W35	W33	W35	W35	W32	WSW20	W28.2	W42
27-Sep	WSW19	WSW20	WSW22	WSW26	W30	WSW32	WSW30	WSW26	WSW27	WSW27	WSW26	WSW23	WSW24	WSW26	WSW26	WSW27	WSW25	WSW23	SW18	SW21	SW22	SW21	SW20	SW21	WSW23.8	WSW32
28-Sep	SW19	SW12	SSW9	SSE11	SSE13	SSE17	SSE14	SSE18	SSE17	SSW14	SW20	SW24	SW30	WSW24	SW26	SSW22	S24	S21	S22	S23	S22	S20	S20	S20	SSW17.5	SW30
29-Sep	S20	SSE15	SSE19	SSE17	SSE17	SSE16	S17	SSW15	S15	SSW14	WSW24	W25	W28	W30	W36	W36	W39	W35	W27	W23	WSW15	W16	W32	W30	WSW16.8	W39
30-Sep	W27	W31	WNW30	WNW29	WNW34	WNW32	WNW33	WNW34	WNW31	WNW35	WNW34	NW33	WNW31	WNW29	WNW31	WNW22	W15	NW17	NNW17	NW17	NW19	NNW15	NW11	WNW6	WNW24.9	WNW35
	SW5.2	SW4.0	SW3.4	SSW4.6	SSW4.9	SSW4.9	SSW4.5	SW4.5	SW4.4	WSW4.0	WSW4.4	WSW5.6	WSW7.1	WSW6.9	WSW8.0	WSW6.7	WSW6.4	WSW6.7	SW5.9	SW5.6	SSW5.7	SW6.0	SW6.2	SW5.5	Diurnal Average	
	WNW32	WNW33	NW40	NW41	NW36	NW35	WNW33	WNW34	NNW37	NNW35	W36	W37	W38	WSW39	N39	W40	W42	W39	W35	N34	W35	W35	W32	W30	Diurnal Maximum	

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

Wind Speed 45m (WS45) - km/h
Mannix - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 12 km/h on Sep 13 19:00

Minimum Value: 1 km/h on Sep 17 19:00

Percentiles: P_1 = 1 P_{10} = 2 Q_1 = 2 Median = 3 Q_3 = 5 P_{90} = 6 P_{99} = 8

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

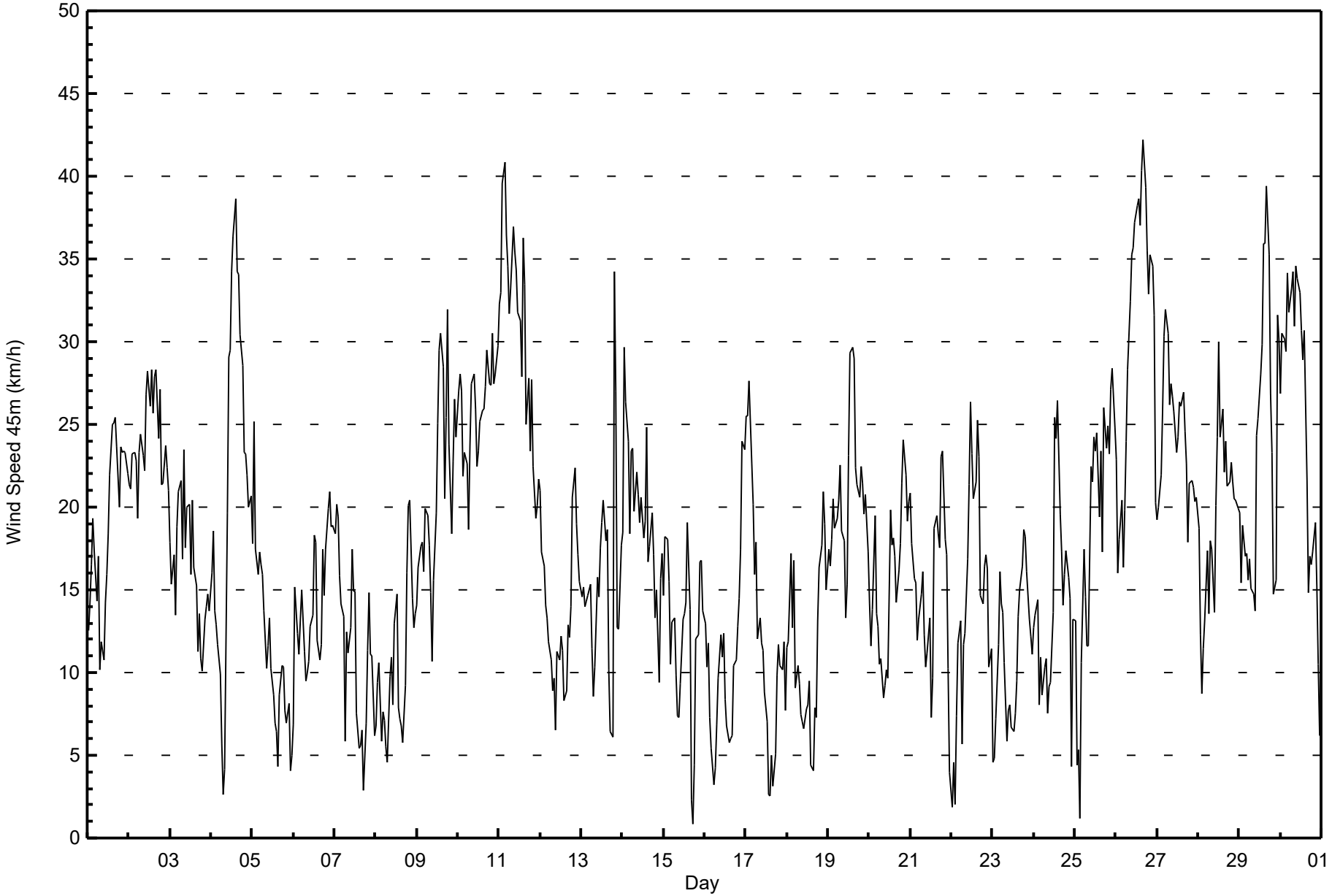
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	3	2	3	3	3	4	2	2	3	3	3	4	5	4	5	5	6	6	4	3	4	5	4	4	6
2-Sep	4	4	4	5	4	4	5	5	6	5	7	7	6	7	8	7	7	7	7	7	6	5	4	4	8
3-Sep	5	5	6	5	6	7	6	6	7	4	5	5	4	6	5	4	4	4	2	3	3	4	4	4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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 45m (WS45) - km/h

Mannix - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	31	4.31	4.31
6 - 11	140	19.44	23.75
12 - 19	271	37.64	61.39
20 - 28	203	28.19	89.58
29 - 38	67	9.31	98.89
> 38	8	1.11	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 45m (WS45) - km/h

Mannix - September 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	2	1	2	0	1	3	1	3	1	4	2	2	2	1	3	31
6 - 11	9	3	0	2	3	3	17	26	17	11	2	8	16	7	10	6	140
12 - 19	15	3	0	1	6	8	37	76	16	24	18	15	19	11	5	17	271
20 - 28	16	3	3	0	2	1	49	9	18	8	15	34	13	13	5	14	203
29 - 38	9	0	0	0	0	0	0	2	1	0	4	2	20	15	8	6	67
> 38	1	0	0	0	0	0	0	0	0	0	0	1	4	0	2	0	8
Totals	53	11	4	5	11	13	106	114	55	44	43	62	74	48	31	46	720

Total Number of Valid Hours: 720

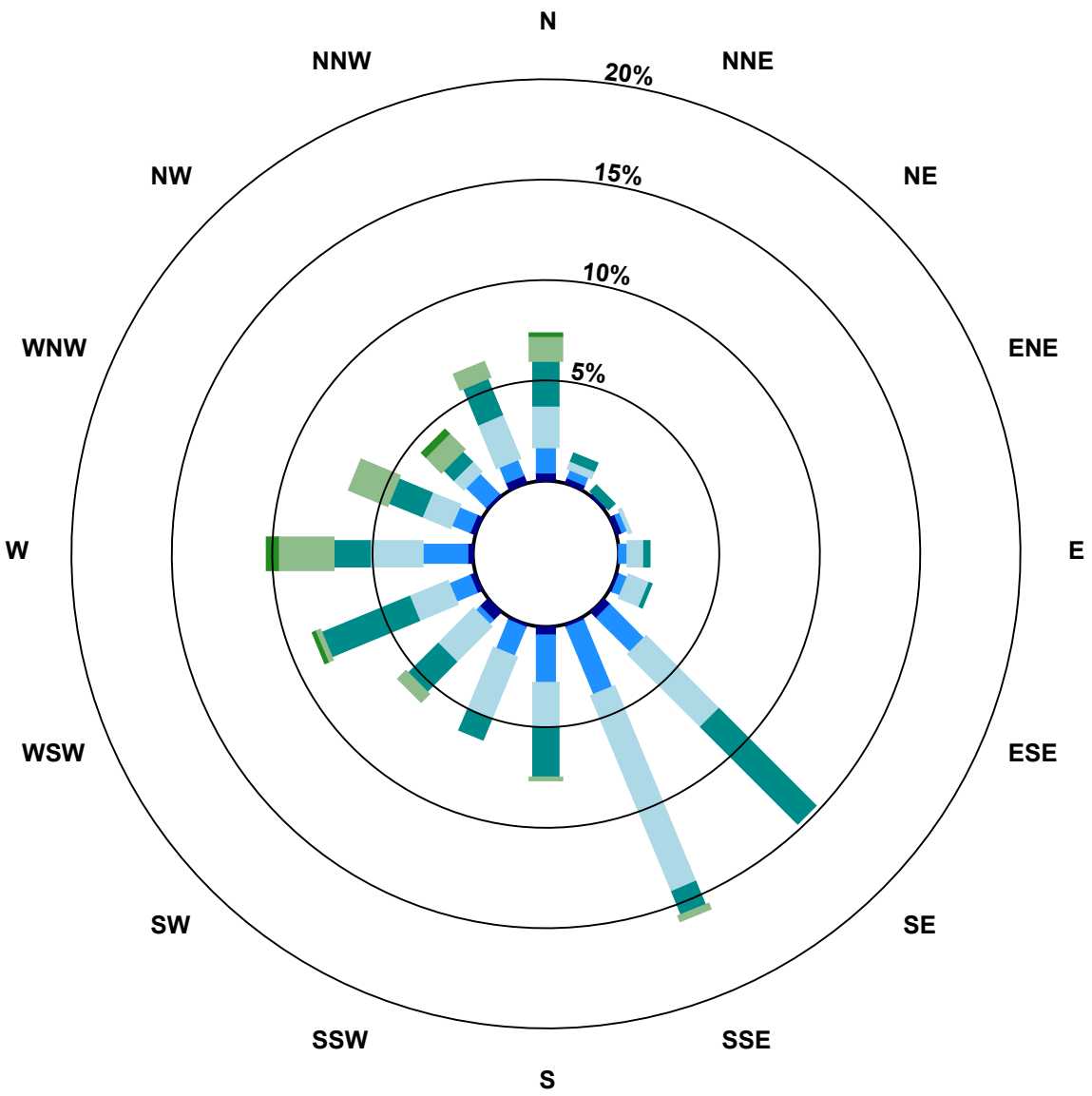
Total Number of Hours: 720

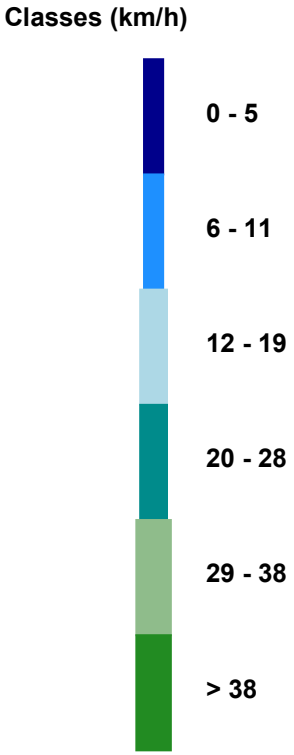
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 45m (WS45) - km/h

Mannix





Total Number of Valid Hours: 720

Maximum Speed: 45 km/h on Sep 11 04:00

Maximum Daily Speed Average: 34.0 km/h on Sep 11

Minimum Speed Value: 1 km/h on Sep 15 18:00

Minimum Daily Speed Average: 3.7 km/h on Sep 18

Maximum Diurnal Speed Average: 8.7 km/h at hour 15

Minimum Diurnal Speed Average: 4.5 km/h at hour 10

Monthly Average Velocity: 6.4 km/h 239.1 deg

Percentiles: P_1 = 4 P_{10} = 8 Q_1 = 13 Median = 19 Q_3 = 27 P_{90} = 32 P_{99} = 42

Hours in Service:	720
Hours of Data:	720
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-Sep	SSE14	SSE23	SSE23	SSE20	SSE25	SSE23	SSE23	SSE18	SSE14	SSE12	SSE15	SSE17	SSE19	SSE23	SSE27	SSE27	SE25	SE26	SE23	SE27	SE26	SE28	SSE30	SE27	SSE22.2	SSE30
2-Sep	SE24	SE17	SE16	SE18	SE15	SE13	SE17	SE20	SE21	SE16	SE24	SE26	SE21	SE22	SE20	SE21	SE20	SE18	SE18	SE15	SE15	SE18	SE24	SE19	SE19.0	SE26
3-Sep	SE13	ESE12	SE12	ESE10	ESE13	SE14	SE15	SE13	SE19	ESE13	E17	ESE16	E16	ESE17	ESE14	E14	ESE10	ESE11	ENE13	E11	E13	ESE13	ESE12	ESE11	ESE12.9	SE19
4-Sep	SE11	SE13	ESE11	SE10	SE12	SE12	SSE9	W2	WNW4	N22	NNE32	N34	NNE38	NNE41	N45	N39	N38	N35	N33	N27	N27	NNW26	N23	N24	N18.1	N45
5-Sep	N21	NNE29	N20	N18	N19	N19	N18	N14	N11	NNE13	NNE15	NE11	NNE9	N8	NNE7	NW4	WNW8	WNW11	WNW11	NNW9	NNW7	NNE10	ENE7	SSE4	N10.9	NNE29
6-Sep	S9	SSE20	SSE16	SSE12	SSE18	SE20	SSE18	SE11	SE9	SSE12	SSE15	SSE15	SE18	SSE19	SSE13	SSE12	S13	SSE21	SSE18	SE21	SE21	SE24	SE23	SE24	SSE16.6	SE24
7-Sep	SE23	SE25	SE22	SE15	SSE17	SSE17	E6	SE12	SSE13	S14	SSE18	SSE16	SSE15	SSE8	SSE5	E5	SE6	S3	SSE7	SSE13	SSE19	SSE17	S14	SSW11	SSE12.6	SE25
8-Sep	WSW10	W12	NW16	NNW11	NNW12	NNW12	NNW9	NNW8	NNW10	NNW11	NNW8	NW13	NNW15	NNW9	WNW8	W7	WSW6	SW10	S19	S24	S23	S17	S14	SSW10	W4.4	S24
9-Sep	SSW10	S11	SSE16	S19	S20	SSE21	SSE26	S23	S18	S13	SSW17	SSW21	SW27	SW32	SW33	SW32	SW24	SW30	SW36	SW28	SW25	SW30	WSW32	WSW30	SSW21.1	SW36
10-Sep	WSW32	W32	WNW30	W25	WSW28	WSW27	WSW22	WSW27	WSW30	W30	W28	W25	WSW27	W28	WNW28	NW29	WNW32	WNW33	WNW32	WNW32	NW35	NW31	WNW32	WNW34	W27.5	NW35
11-Sep	WNW37	NW37	NW44	NW45	NW41	NNW39	NNW36	NNW37	NNW42	NNW41	NNW39	NNW36	NNW35	NNW31	NW40	NNW38	NNW28	NNW31	NNW27	NNW31	NNW26	NNW22	NW23	NW24	NNW34.0	NW45
12-Sep	NW23	WNW20	WNW20	WNW17	W15	WNW14	W14	W10	W10	WSW7	W12	W11	WSW13	W12	WNW8	WSW9	WSW14	SW13	SSW16	SW22	SW31	SW31	SW28	SW25	WSW13.9	SW31
13-Sep	WSW22	SW21	SSW19	SSW20	SSW20	SW20	SSW16	SSW13	SSW13	SSW17	SSW16	SW19	SW21	SW22	SSW20	SSW20	WSW11	SSW7	NNE6	NNE38	N31	N16	N16	NNW21	SW8.8	NNE38
14-Sep	N22	NNE34	NNE31	N27	N21	N27	NNW28	NNW23	NNW25	NNW24	NNW22	NNW23	N20	N22	N28	N20	NNW20	NNW22	NNW19	N16	NNW18	NW12	NW18	NW21	N21.8	NNE34
15-Sep	WNW18	WNW21	WNW24	WNW21	WNW14	WNW15	WNW16	W12	SW8	SSW8	SW10	W14	WSW14	SW15	SSW21	S15	SE3	WNW1	WSW6	W15	W16	W21	WNW20	NW16	W11.9	WNW24
16-Sep	N15	N12	N13	NNE8	NE6	NE4	NW2	WSW6	SSW10	S13	S12	SSE13	S9	SE6	SE6	SE5	SE5	SE11	E9	ESE9	SE9	SE14	SE24	SE23	SE5.2	SE24
17-Sep	SE23	SE23	SE29	SE22	SE19	SE18	SE19	SSE15	SSE14	SSE12	S12	S9	SSE7	SSE2	SSW2	SSE5	WSW4	SW7	SSW10	SSW11	SW10	WNW14	NW12	NW8	SSE8.9	SE29
18-Sep	WNW12	WNW13	WNW18	WSW16	WNW18	NW13	NNW14	N12	N8	NW7	NW7	W7	W8	WNW10	WNW5	ENE4	SE6	ESE7	SE14	SSE20	SSE24	SSE27	SSE27	SSE24	SW3.7	SSE27
19-Sep	S25	S23	SSE22	SSE25	SSE24	SSE26	SSE27	SSE30	SSE26	SSE20	SSE15	SSE18	SSE26	S33	S33	SSE32	S26	SSW29	S28	S30	S29	S25	S27	S22	S25.3	S33
20-Sep	SW18	SW13	S8	SSW19	SSW16	SSW12	SSW10	S14	S11	SSE10	SSE10	SSE11	WSW22	SW19	SW20	SSW18	SW18	SSW21	SSW21	SSW24	S32	SSW31	SSW26	SSW26	SSW16.9	S32
21-Sep	SSW25	SW24	SW24	SW24	SW17	SSW14	S11	SSE12	SSE13	SSE11	SSE12	SSE15	SSE8	SE9	SE16	SE22	SSE23	SSE23	SSW30	SSW29	SW23	SW25	SW14	WSW5	S15.2	SSW30
22-Sep	NW4	NW6	NNE5	SSE5	S10	SSE15	S8	NW14	WNW17	NW19	NW22	WNW27	WNW25	WNW21	W23	W27	W25	W16	W18	W24	W25	W24	W17	NW15	W13.8	WNW27
23-Sep	W7	W6	WSW6	SSW6	S9	SSE14	SE14	SSE16	SSE9	SSE9	S8	SSE8	SSE8	SSE9	SSE10	SSE14	SE16	SSE20	SE24	SE23	SSE21	S18	S17	SW11	SSE11.2	SE24
24-Sep	W18	W19	W20	W15	SW11	SW9	SSW9	SSW10	S8	S10	SSE10	SW17	WSW28	WSW26	WSW28	WSW21	WSW19	SW17	WSW19	SW19	SW22	WSW22	W13	SSE11	WSW14.8	WSW28
25-Sep	SSE16	E6	E6	E4	NE9	NNE19	NNE16	NE13	E14	NE29	NE28	NE31	NE28	NE28	NNE23	NNE26	NE21	NNE30	NNE28	NNE29	N28	N31	N32	N29	NNE19.4	N32
26-Sep	NNE27	NNW18	NNW21	NW23	WNW18	W23	W27	W32	W35	W38	W39	W40	W41	W42	W40	W43	W44	W42	W38	W36	W38	W38	W34	W24	W30.4	W44
27-Sep	WSW24	WSW24	WSW26	W30	W35	W37	WSW36	WSW31	WSW32	WSW30	WSW28	WSW25	WSW26	WSW28	WSW29	WSW30	WSW28	WSW26	WSW23	SW30	SW31	SW31	SW31	SW30	WSW28.8	W37
28-Sep	WSW28	SW20	SW14	SSW13	S12	S16	S20	S24	S21	SSW17	SW22	SW26	SW33	WSW27	SW29	SSW26	SSW27	SSW26	S30	S33	S32	S28	S27	S26	SSW22.6	S33
29-Sep	S24	SSE20	SSE23	S17	S20	S18	SSW18	SW19	SSW19	SSW18	WSW27	W27	W29	W31	W38	W38	W42	W38	W29	W27	W19	WNW19	W35	W33	WSW20.4	W42
30-Sep	W29	WNW34	WNW33	WNW32	WNW37	WNW35	WNW36	WNW37	WNW35	NW38	NW37	NW35	NW33	NW31	WNW33	WNW23	WNW16	NW19	NNW20	NW21	NW23	NNW20	NNW14	NW9	WNW27.5	NW38
	SW6.8	WSW5.9	WSW4.7	WSW5.8	SW5.8	SW5.6	SW5.4	SW5.4	SW5.5	WSW4.5	WSW4.6	WSW5.9	WSW7.5	WSW7.5	WSW8.7	WSW7.1	WSW7.1	WSW7.7	SW7.1	SW6.8	SW7.6	SW8.3	SW8.3	WSW7.0	Diurnal Average	
	WNW37	NW37	NW44	NW45	NW41	NNW39	WNW36	WNW37	NNW42	NNW41	NNW39	W40	W41	W42	N45	W43	W44	W42	W38	NNE38	W38	W38	W35	WNW34	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: 13 km/h on Sep 13 19:00

Minimum Value: 1 km/h on Sep 22 21:00

Percentiles: P_1 = 1 P_{10} = 2 Q_1 = 2 Median = 4 Q_3 = 5 P_{90} = 6 P_{99} = 9

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

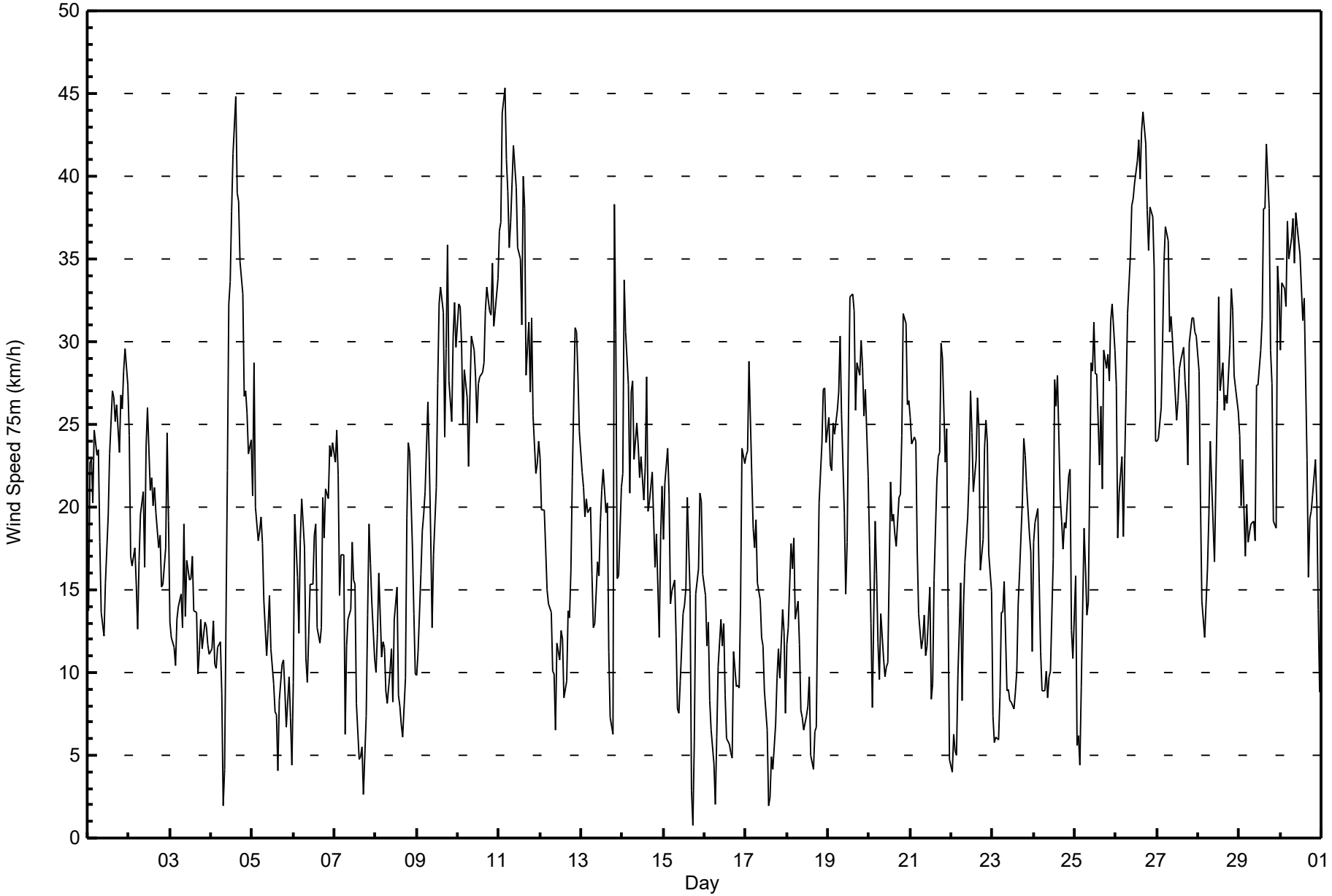
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	4	2	2	2	2	4	2	2	3	3	4	4	6	6	6	6	7	7	5	5	6	6	5	4	7
2-Sep	6	7	7	7	6	5	7	8	8	7	9	10	9	9	9	9	8	8	8	7	7	8	6	7	10
3-Sep	6	4	5	4	5	6	6	6	8	5	5	5	4	6	5	4	4	4	2	3	4	4	4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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 75m (WS75) - km/h

Mannix - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	24	3.33	3.33
6 - 11	121	16.81	20.14
12 - 19	216	30.00	50.14
20 - 28	224	31.11	81.25
29 - 38	115	15.97	97.22
> 38	20	2.78	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 75m (WS75) - km/h

Mannix - September 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	0	1	1	1	2	0	3	5	1	1	0	2	1	3	3	0	24
6 - 11	3	5	3	1	5	7	11	17	13	12	8	8	8	6	5	9	121
12 - 19	10	5	1	1	5	8	33	44	19	18	14	6	17	15	11	9	216
20 - 28	16	4	4	0	0	0	35	33	17	16	21	25	17	11	8	17	224
29 - 38	8	8	2	0	0	0	1	3	8	4	14	11	22	17	9	8	115
> 38	2	1	0	0	0	0	0	0	0	0	0	0	9	0	4	4	20
Totals	39	24	11	3	12	15	83	102	58	51	57	52	74	52	40	47	720

Total Number of Valid Hours: 720

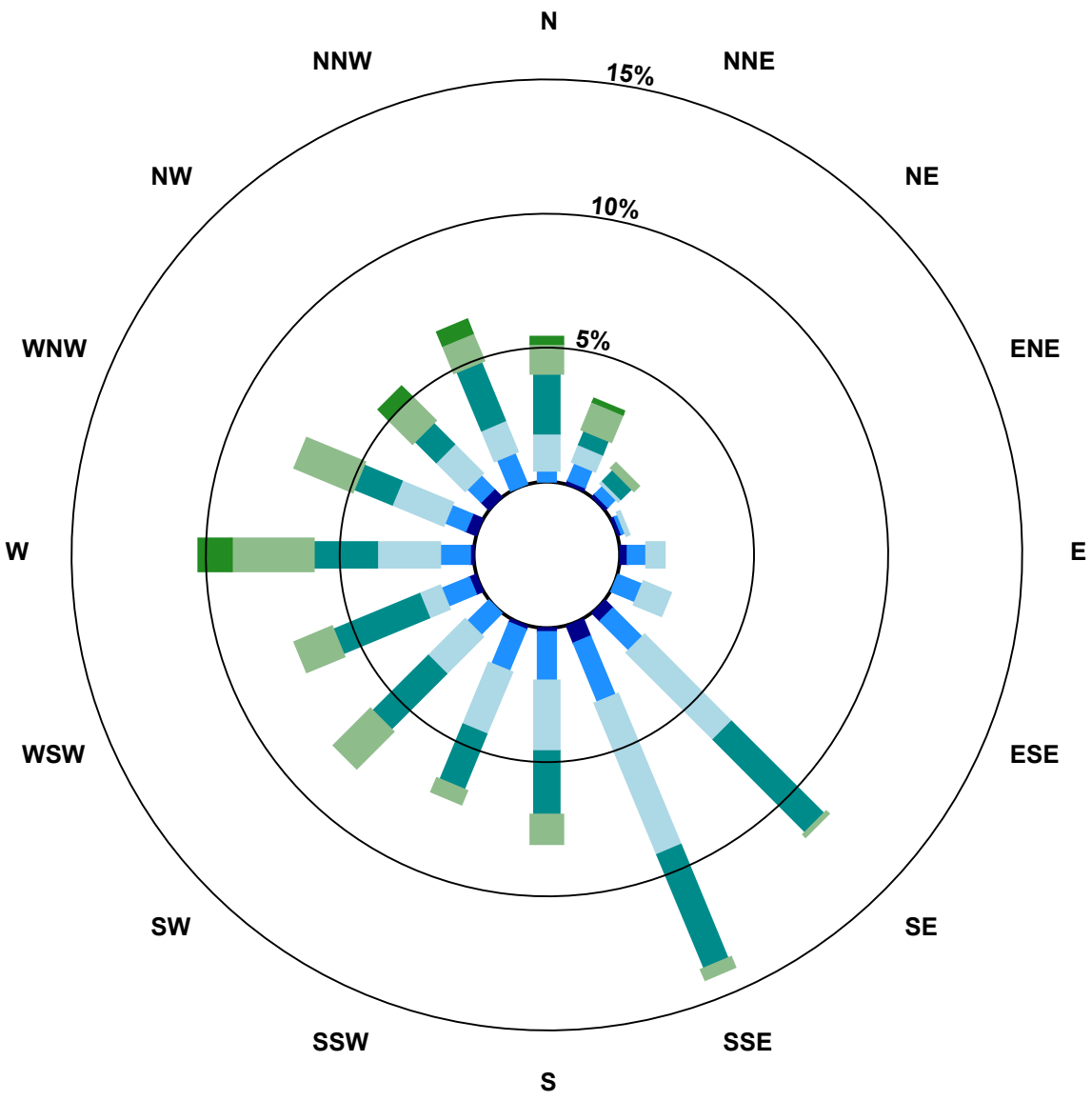
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 75m (WS75) - km/h

Mannix



Classes (km/h)

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

Total Number of Valid Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 90m (WS90) - km/h

Mannix - September 2026

Maximum Speed: 48 km/h on Sep 11 04:00

Maximum Daily Speed Average: 36.2 km/h on Sep 11

Minimum Speed Value: 1 km/h on Sep 15 18:00

Minimum Daily Speed Average: 3.7 km/h on Sep 18

Maximum Diurnal Speed Average: 9.2 km/h at hour 22

Minimum Diurnal Speed Average: 4.8 km/h at hour 11

Monthly Average Velocity: 6.9 km/h 233.3 deg

Percentiles: P_1 = 4 P_{10} = 9 Q_1 = 14 Median = 21 Q_3 = 28 P_{90} = 35 P_{99} = 44

Hours in Service:	720
Hours of Data:	720
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-Sep	SSE13	SSE24	SSE22	SSE16	SSE22	SSE26	SE26	SE21	SSE14	SSE13	SSE16	SSE18	SSE20	SE24	SE28	SE28	SE28	SE28	SE25	SE30	SE29	SE31	SE32	SE29	SE23.2	SE32
2-Sep	SE28	SE23	ESE22	ESE23	ESE21	ESE18	ESE23	SE25	SE24	SE21	SE28	SE29	SE27	SE28	ESE26	ESE28	ESE27	ESE25	ESE26	ESE22	ESE22	ESE24	SE28	SE24	SE24.6	SE29
3-Sep	ESE18	ESE18	ESE17	ESE15	ESE20	ESE21	ESE22	ESE17	SE23	ESE18	E23	ESE23	E18	E23	E19	E17	ESE13	ESE15	ENE15	E14	E17	E19	ESE18	ESE16	ESE17.8	E23
4-Sep	ESE16	ESE18	ESE14	ESE13	SE13	SE13	SSE10	WSW2	WNW4	N23	N33	N35	N39	N43	N47	N40	N40	NNW37	N35	N28	N29	NNW28	NNW25	N25	N18.6	N47
5-Sep	N22	N29	N21	N19	N19	N21	NNW18	N14	N11	N13	NNE15	NNE12	N9	N7	N8	NW4	WNW8	W11	WNW11	NNW9	NNW6	NNE10	NE8	SE5	N11.1	N29
6-Sep	SSE11	SSE20	SSE16	SE14	SE21	SE22	SE19	SE13	SE11	SE13	SE16	SE16	SE20	SE19	SSE13	SSE12	SSE13	SSE21	SE19	SE23	SE24	SE27	SE25	SE26	SE17.9	SE27
7-Sep	SE25	SE27	SE25	SE19	SE20	SE19	ESE9	SE15	SE15	SSE14	SSE18	SSE16	SSE15	SSE9	SSE5	E5	SE6	S3	SSE7	SSE14	SSE19	SSE19	S16	SSW13	SSE13.9	SE27
8-Sep	SW12	W14	NW19	NNW13	NNW14	NNW13	NW11	NNW10	NNW10	NNW11	NW8	NW14	NNW16	NW9	W8	W7	SW7	SSW10	S19	S23	S23	S17	S12	SSW10	W5.5	S23
9-Sep	SSW9	S10	SSE13	S14	SSE17	SSE18	S25	S24	S20	S14	SSW18	SSW21	SSW28	SW33	SW34	SW33	SW26	SW31	SW38	SW29	SSW28	SW33	WSW35	WSW32	SSW21.9	SW38
10-Sep	WSW35	W34	WNW32	WSW27	WSW31	WSW29	SW24	WSW29	WSW31	W31	W29	W27	WSW29	W29	W30	WNW31	WNW35	W36	WNW35	WNW34	NW37	WNW33	WNW34	WNW36	W29.5	NW37
11-Sep	WNW40	WNW40	NW47	NW48	NW44	NW42	NW38	NW40	NNW45	NNW43	NNW42	NNW38	NW37	NW33	NW42	NW40	NW30	NW33	NNW29	NW33	NNW27	NW23	NW24	WNW25	NW36.2	NW48
12-Sep	NW24	WNW22	WNW21	WNW19	W16	W15	W15	W11	W10	WSW7	W12	W11	WSW13	W13	W9	WSW10	WSW14	SW14	SSW17	SSW22	SSW32	SW35	SW32	SW29	WSW15.2	SW35
13-Sep	SW26	SW24	SSW21	SSW22	SSW21	SW21	SW17	SSW14	SSW15	SSW17	SSW16	SW19	SW22	SSW23	SSW20	SSW21	WSW12	SSW8	N6	N39	N32	N17	NNW17	NNW23	SW9.9	N39
14-Sep	N24	N35	N32	N29	N22	NNW28	NNW30	NNW24	NNW26	NNW25	NNW23	NNW24	NNW21	N24	NNW29	N21	NNW21	NNW23	NW20	NNW18	NNW19	NW13	NW19	WNW23	NNW23.0	N35
15-Sep	WNW20	W23	WNW26	WNW23	WNW16	W15	WNW16	WSW14	SW8	SSW8	SW10	W14	WSW15	SW15	SSW21	S15	SE3	SW1	SW7	WSW16	W18	W23	WNW22	NW17	W12.8	WNW26
16-Sep	N15	N12	N13	N8	NNE7	NE5	NNW2	SW6	S11	S13	S12	SSE13	S9	SE7	SE7	SE6	ESE6	SE12	E11	ESE13	ESE13	SE18	SE27	SE27	ESE6.4	SE27
17-Sep	SE28	SE28	SE33	SE27	SE23	SE20	SE22	SE17	SSE15	SSE12	SSE12	S9	SE7	SE2	SSW3	SSE5	SW5	SW8	SSW10	SSW12	SW10	WNW15	WNW13	NW8	SSE9.9	SE33
18-Sep	WNW13	WNW13	W18	WSW15	W17	WNW16	NNW16	N12	N8	NW7	WNW6	W7	W8	W10	WNW5	ENE4	ESE8	E8	SE14	SE21	SSE25	SSE29	SSE29	SSE25	SW3.7	SSE29
19-Sep	S24	S23	SSE20	SSE24	SSE24	SSE27	SSE29	SSE32	SSE27	SSE20	SSE16	SSE18	SSE26	SSE32	S33	SSE32	S27	SSW31	S30	S32	S31	S27	S29	S23	SSE26.0	S33
20-Sep	SW20	SW15	S6	SSW17	SSW17	SSW13	SSW11	SSW15	S12	SSE10	SE11	SSE11	SW22	SW20	SSW20	SSW19	SSW19	SSW22	SSW22	SSW24	S33	SSW34	SSW29	SSW29	SSW17.9	SSW34
21-Sep	SSW28	SW27	SW29	SW29	SW21	SSW15	S11	SSE10	SE12	SSE11	SSE12	SE16	SE10	SE12	SE20	SE24	SE25	SSE25	SSW31	SSW29	SSW25	SW28	SW16	WSW7	S16.0	SSW31
22-Sep	WNW5	NW8	N6	SE5	SSE9	SE14	S7	NW15	WNW20	WNW21	NW23	WNW28	WNW25	W22	WSW24	W27	W26	W17	W20	W27	W27	W27	W20	NW15	W15.0	WNW28
23-Sep	WNW7	W5	WSW6	SSW5	S6	SSE9	SE12	SSE15	SSE11	SSE10	SSE9	SSE10	SE9	SE10	SE11	SE14	SE17	SE21	SE25	SE24	SE23	SSE20	S18	SW12	SSE11.2	SE25
24-Sep	WSW21	W22	W23	WSW19	SW13	SW11	SW10	SW11	SSW9	S10	SSE10	SW18	WSW28	SW27	SW29	WSW21	WSW20	SW19	SW20	SW19	SW24	WSW23	W16	SE9	WSW16.3	SW29
25-Sep	SE15	ESE8	E7	E7	NE9	NNE19	NNE16	NE14	E18	NE31	NNE31	NNE34	NE29	NE29	N23	NNE27	NE23	N30	NNE30	N30	N29	N33	N34	N31	NNE20.2	NNE34
26-Sep	N28	NNW19	NNW22	NW24	WNW19	WSW24	WSW29	WSW33	W37	W40	WSW40	W41	W43	WSW44	W42	W45	W46	W44	W40	W37	W40	W40	W36	WSW26	W32.0	W46
27-Sep	WSW26	WSW26	WSW28	WSW32	WSW38	WSW39	WSW38	WSW33	WSW33	WSW31	WSW29	WSW26	WSW27	WSW29	WSW30	WSW31	WSW29	WSW28	SW24	SW33	SW35	SW36	SW34	SW34	WSW31.0	WSW39
28-Sep	SW32	SW24	SW17	SSW15	SSW13	SSW17	SSW22	S23	S22	SSW19	SW23	SW27	SW34	SW28	SW30	SSW27	S27	S28	S33	S37	S36	S30	S29	S27	SSW24.5	S37
29-Sep	S26	SSE19	SSE22	S14	S17	S17	SSW20	SW21	SSW21	SSW20	WSW28	WSW29	W31	W33	W40	W40	W44	W40	W32	W30	W21	W21	W37	W35	WSW22.2	W44
30-Sep	W32	W36	WNW36	WNW34	WNW40	W38	WNW39	WNW40	WNW37	WNW40	WNW39	NW37	WNW35	WNW33	WNW34	WNW24	W17	NW21	NNW22	NW23	NW25	NNW22	NW15	NW10	WNW29.4	WNW40
	SW7.6	WSW6.5	WSW5.2	WSW6.0	SW6.2	SW6.0	SW5.8	SW5.9	SW6.1	WSW4.9	WSW4.8	WSW6.1	WSW7.8	WSW7.6	WSW8.8	WSW7.3	WSW7.4	SW8.2	SW7.7	SW7.3	SW8.3	SW9.2	SW9.2	SW7.7	Diurnal Average	
	WNW40	WNW40	NW47	NW48	NW44	NW42	WNW39	WNW40	NNW45	NNW43	NNW42	W41	W43	WSW44	N47	W45	W46	W44	W40	N39	W40	W40	W37	WNW36	Diurnal Maximum	

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

Wind Speed 90m (WS90) - km/h
Mannix - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 13 km/h on Sep 13 19:00

Minimum Value: 1 km/h on Sep 20 20:00

Percentiles: P_1 = 1 P_{10} = 2 Q_1 = 2 Median = 4 Q_3 = 5 P_{90} = 6 P_{99} = 8

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

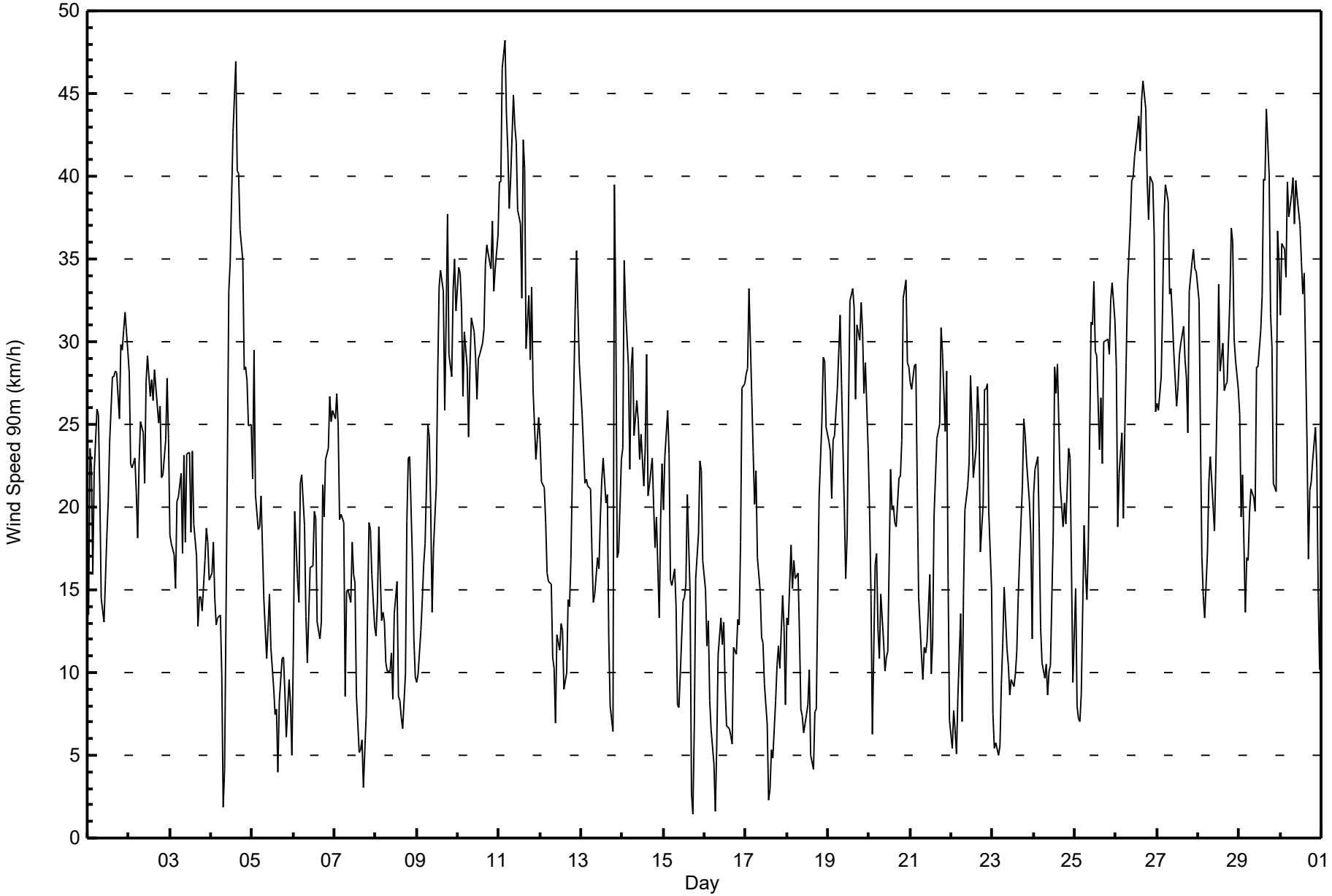
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	2	1	3	3	2	2	1	2	3	3	4	4	5	5	5	5	6	6	4	4	4	5	4	3	6
2-Sep	4	6	5	5	5	4	5	6	6	5	7	7	7	6	7	7	6	6	7	6	5	6	5	6	7
3-Sep	5	5	5	5	5	5	5	5	6	4	4	5	4	5	5	4	4	4	2	3	3	4	4	5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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 90m (WS90) - km/h

Mannix - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	21	2.92	2.92
6 - 11	104	14.44	17.36
12 - 19	189	26.25	43.61
20 - 28	226	31.39	75.00
29 - 38	140	19.44	94.44
> 38	40	5.56	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 90m (WS90) - km/h

Mannix - September 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	0	0	1	1	1	0	4	2	1	2	2	1	1	3	1	1	21
6 - 11	8	2	2	0	4	4	12	15	9	8	10	4	10	4	7	5	104
12 - 19	9	4	1	1	7	17	24	31	14	19	13	8	14	9	8	10	189
20 - 28	12	1	1	0	2	16	47	21	14	22	20	17	15	13	8	17	226
29 - 38	15	3	3	0	0	0	7	6	11	7	21	22	18	14	8	5	140
> 38	6	0	0	0	0	0	0	0	0	0	0	3	14	7	7	3	40
Totals	50	10	8	2	14	37	94	75	49	58	66	55	72	50	39	41	720

Total Number of Valid Hours: 720

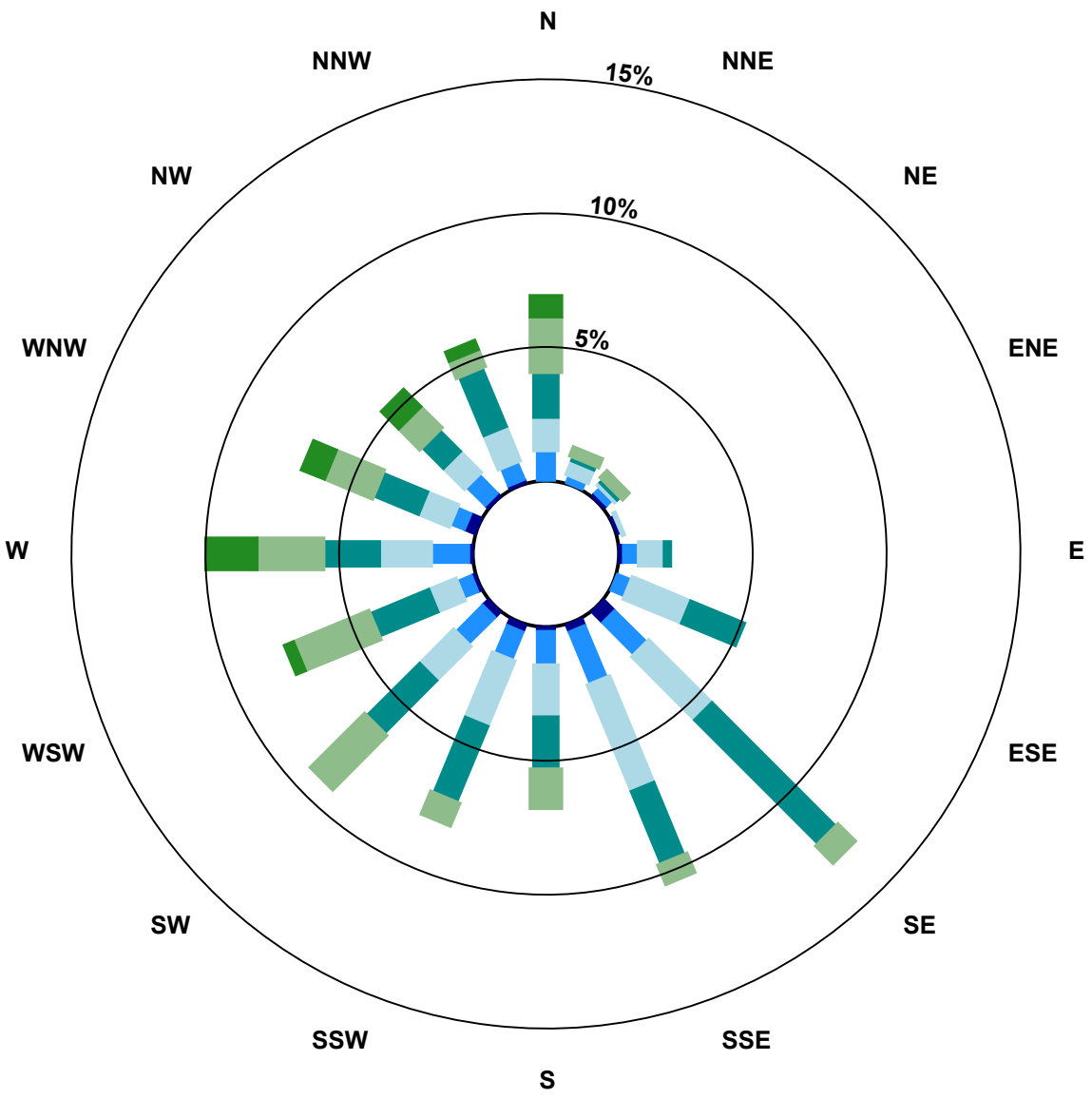
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 90m (WS90) - km/h

Mannix



Classes (km/h)

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

Total Number of Valid Hours: 720

Direction of Maximum Speed: 280 deg on Sep 26 17:00
Direction of Maximum Daily Speed Average: 277.3 deg on Sep 26

Direction of Minimum Speed: 359 deg on Sep 15 18:00
Direction of Minimum Daily Speed Average: 2.3 deg on Sep 8

Monthly Average Direction: 237.6 deg

Hours in Service:	720
Hours of Data:	720
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-Sep	178	163	163	167	158	151	160	170	171	159	162	160	159	158	156	154	146	149	151	145	146	144	147	145	154.6
2-Sep	140	142	141	142	142	143	142	142	144	141	142	146	140	140	139	140	139	138	141	139	142	144	151	142	141.6
3-Sep	144	128	138	125	134	139	137	137	144	127	106	110	96	109	106	102	130	122	68	73	91	101	105	120	119.4
4-Sep	139	142	135	142	154	174	226	287	278	358	18	12	15	16	6	7	1	355	354	358	359	344	352	11	11.4
5-Sep	9	15	1	358	353	353	355	4	14	23	28	45	19	358	11	316	294	287	285	326	341	37	287	248	356.2
6-Sep	216	158	162	192	164	160	168	161	162	166	168	156	151	155	164	176	174	171	156	151	149	147	148	147	159.8
7-Sep	150	146	148	150	171	167	111	151	167	176	175	165	160	169	154	111	145	192	183	168	171	206	217	239	163.3
8-Sep	243	265	285	31	342	319	290	312	342	333	333	315	338	330	293	279	247	223	183	185	185	168	162	164	261.1
9-Sep	164	158	161	169	162	163	163	166	166	157	211	208	224	239	236	237	231	229	241	235	217	226	249	255	214.1
10-Sep	252	268	291	265	254	251	241	252	259	274	274	272	260	271	289	306	299	287	289	301	318	305	294	301	278.6
11-Sep	304	310	320	322	324	328	327	332	343	343	343	339	334	333	325	334	335	331	339	336	338	337	321	308	329.5
12-Sep	309	291	293	289	264	277	263	274	269	261	278	280	251	273	291	253	253	242	206	201	208	221	235	225	260.1
13-Sep	231	206	194	173	164	176	180	173	181	207	213	231	233	228	217	221	250	214	6	16	12	348	344	346	231.3
14-Sep	359	14	16	9	357	352	346	344	338	343	343	339	355	6	354	4	346	340	333	348	342	298	300	298	349.2
15-Sep	281	276	284	279	267	261	254	236	223	214	233	282	251	235	217	195	114	359	226	257	257	276	282	316	258.0
16-Sep	12	8	14	17	40	22	256	242	202	190	186	171	184	131	140	140	137	155	108	129	142	148	146	144	143.4
17-Sep	145	143	145	144	144	152	149	170	156	165	175	187	150	157	196	158	238	219	185	184	195	261	272	248	163.7
18-Sep	251	247	273	254	269	269	334	356	14	315	322	268	267	290	302	90	127	116	157	170	170	171	172	167	228.4
19-Sep	162	157	153	149	153	163	162	157	161	164	146	156	169	177	181	172	177	210	184	173	168	172	171	167	168.2
20-Sep	170	163	162	186	175	166	157	158	155	166	141	162	244	240	221	220	223	198	190	187	179	185	171	183	187.3
21-Sep	193	194	203	201	169	159	156	158	159	158	152	153	171	153	141	149	155	162	200	199	207	215	172	152	170.6
22-Sep	99	16	306	202	170	180	268	298	295	307	316	300	302	286	267	272	278	277	259	257	258	265	268	283	278.5
23-Sep	217	204	191	175	174	166	172	193	171	172	180	162	144	158	154	158	151	155	151	155	163	181	195	195	168.8
24-Sep	240	256	258	193	178	167	165	166	158	157	153	243	252	248	245	263	254	236	225	217	241	259	167	162	226.1
25-Sep	163	38	121	284	1	14	5	15	61	43	31	31	52	55	13	15	27	12	20	19	357	3	10	357	21.7
26-Sep	17	340	337	312	294	263	262	266	269	269	269	275	274	268	269	273	280	280	277	276	276	275	276	264	277.3
27-Sep	248	254	258	262	271	268	263	264	260	254	252	256	256	258	251	248	248	247	233	229	230	230	229	230	253.3
28-Sep	239	209	162	153	154	165	159	170	164	209	229	226	235	246	236	219	201	198	178	189	194	186	177	176	201.4
29-Sep	172	149	156	169	172	161	168	175	171	194	247	270	280	282	283	273	279	278	278	266	258	276	276	276	257.8
30-Sep	281	289	299	305	297	292	293	305	304	308	309	317	311	310	303	296	284	314	339	324	308	334	300	295	303.2
	221.7	226.5	226.3	219.8	212.4	214.7	217.7	224.9	221.2	240.6	249.5	257.5	256.0	253.8	253.6	248.0	248.4	249.4	236.6	230.5	224.3	232.0	234.4	231.8	
	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: 90 deg on Sep 15 18:00

Minimum Value: 5 deg on Sep 9 01:00

Percentiles: P_1 = 7 P_{10} = 10 Q_1 = 12 Median = 14 Q_3 = 19 P_{90} = 30 P_{99} = 79

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

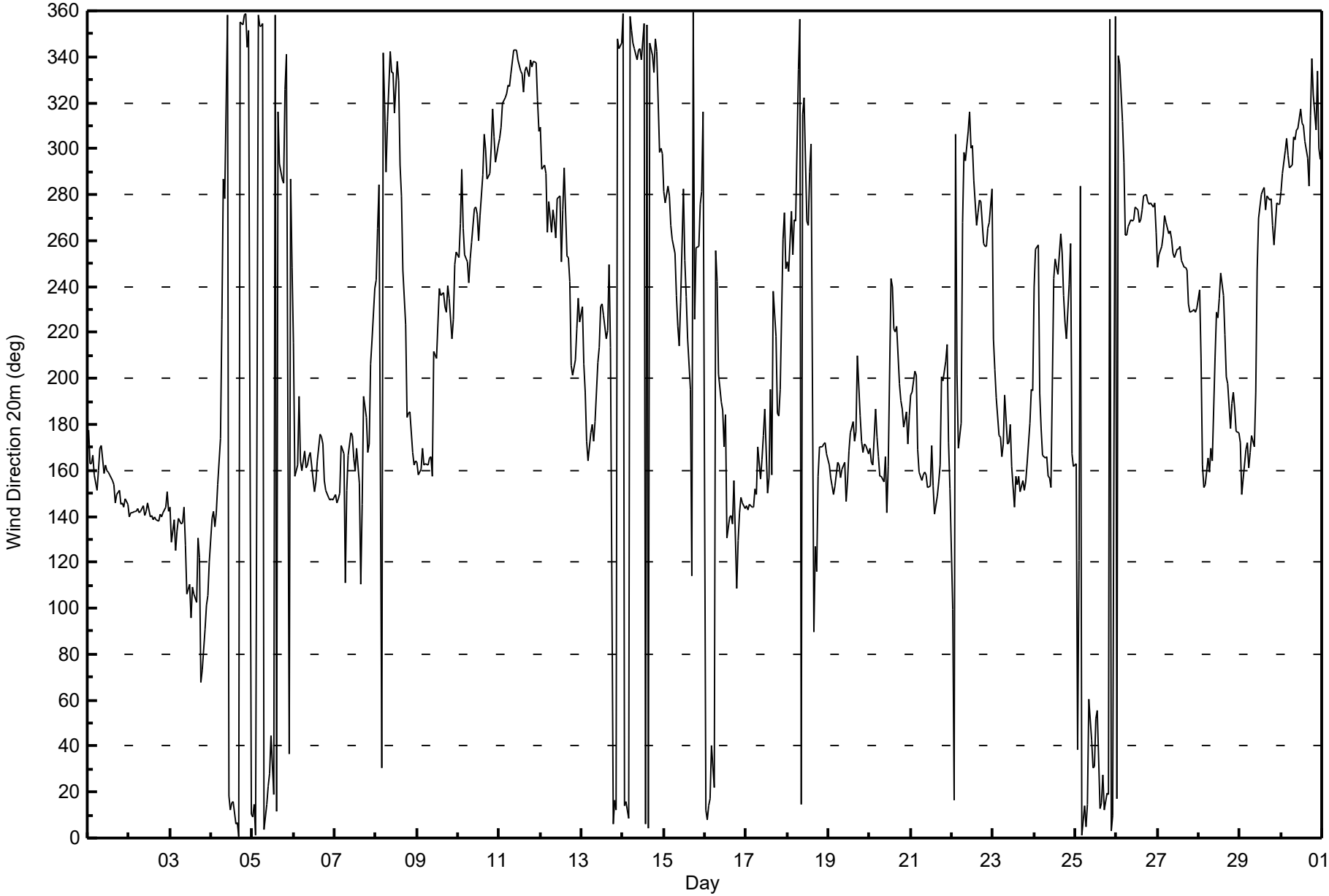
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	24	10	12	12	12	15	14	16	20	18	19	15	20	17	15	16	13	13	12	11	11	12	12	12	24
2-Sep	11	11	10	11	10	11	11	11	12	12	12	13	12	12	14	12	12	14	12	14	13	12	12	11	14
3-Sep	12	15	13	16	14	13	14	17	12	21	11	12	13	16	12	12	17	22	24	30	13	14	11	15	30
4-Sep	15	12	19	17	16	14	35	34	27	20	13	16	14	15	15	16	15	15	16	17	19	16	17	17	35
5-Sep	18	12	15	15	13	17	14	21	19	29	24	32	46	59	57	82	30	19	17	22	19	13	63	9	82
6-Sep	60	11	35	27	14	12	13	18	18	14	14	14	15	17	26	26	17	13	12	12	11	12	11	12	60
7-Sep	14	11	11	10	19	14	56	17	18	22	17	23	21	43	44	28	28	55	19	31	9	33	8	23	56
8-Sep	20	53	29	53	17	25	53	65	25	25	46	24	25	61	59	73	66	23	13	11	10	11	9	6	73
9-Sep	5	8	10	12	14	10	10	14	12	19	28	22	19	14	15	14	15	15	12	18	17	22	11	11	28
10-Sep	12	19	12	13	11	13	12	14	14	11	12	12	11	11	14	18	13	11	10	13	15	13	11	11	19
11-Sep	12	13	14	14	15	15	15	16	15	16	17	18	18	17	17	16	16	15	17	17	15	19	19	14	19
12-Sep	14	14	13	14	14	12	11	18	16	32	24	22	33	34	44	47	24	26	12	10	11	12	10	12	47
13-Sep	14	16	19	12	12	10	24	18	25	24	22	24	22	18	23	19	16	30	86	12	16	20	17	16	86
14-Sep	18	13	13	16	15	16	15	16	15	16	18	16	23	24	19	19	18	15	14	19	14	25	12	11	25
15-Sep	11	7	8	11	44	13	7	17	24	26	25	27	25	27	23	21	89	90	48	10	18	10	11	25	90
16-Sep	13	16	16	28	24	73	18	18	17	21	24	27	38	46	48	19	25	11	19	19	13	12	12	11	73
17-Sep	10	12	11	11	13	13	12	15	18	21	25	28	21	52	81	23	54	21	10	8	20	12	8	41	81
18-Sep	13	42	18	45	11	37	14	28	29	43	33	23	26	26	80	49	26	22	11	8	7	8	11	12	80
19-Sep	9	10	9	9	8	10	8	9	12	14	14	19	18	18	20	14	15	15	16	9	9	10	10	9	20
20-Sep	13	10	9	16	11	8	8	15	18	22	14	35	19	18	22	21	15	12	9	11	9	13	8	11	35
21-Sep	10	10	12	9	10	7	8	10	14	17	16	14	35	39	13	14	13	13	13	12	18	12	19	17	39
22-Sep	87	50	80	33	19	18	36	12	18	18	18	16	19	19	18	15	13	11	10	7	7	11	42	46	87
23-Sep	26	28	19	10	10	17	23	24	27	24	27	27	22	25	20	17	12	11	11	10	10	16	20	9	28
24-Sep	10	10	12	37	20	12	7	14	20	16	20	59	16	16	14	18	15	11	7	10	7	22	61	13	61
25-Sep	10	37	57	28	16	12	21	51	32	18	15	14	18	15	23	12	16	13	13	12	14	15	14	17	57
26-Sep	17	23	21	16	17	11	14	11	10	10	11	11	12	13	11	10	11	11	9	11	9	10	12	11	23
27-Sep	10	11	12	10	9	10	10	12	12	12	13	14	15	16	15	13	12	10	13	9	8	9	9	9	16
28-Sep	9	31	14	9	9	7	10	13	11	28	18	18	15	17	13	21	19	16	10	13	14	13	11	11	31
29-Sep	10	12	9	16	12	10	10	9	10	29	13	14	12	11	12	10	10	12	10	13	12	16	12	10	29
30-Sep	11	14	13	15	12	12	11	13	12	11	13	15	14	14	14	16	13	23	17	15	12	14	43	77	77
	87	53	80	53	44	73	56	65	32	43	46	59	46	61	81	82	89	90	86	31	20	33	63	77	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 20m (WD20) - deg

Mannix - September 2026



Direction of Maximum Speed: 270 deg on Sep 26 17:00
Direction of Maximum Daily Speed Average: 321.4 deg on Sep 11

Direction of Minimum Speed: 349 deg on Sep 15 18:00

Direction of Minimum Daily Speed Average: 3.3 deg on Sep 8

Monthly Average Direction: 227.9 deg

Hours in Service:	720
Hours of Data:	720
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-Sep	156	153	152	155	151	148	143	159	161	151	154	150	150	148	146	144	136	140	141	137	137	136	142	138	145.5
2-Sep	132	130	129	130	129	128	129	131	134	130	133	135	130	129	127	128	127	125	127	126	127	130	139	132	129.9
3-Sep	129	117	125	114	121	126	124	126	132	118	98	102	87	101	99	93	119	115	62	69	87	97	99	113	109.7
4-Sep	126	129	123	128	139	146	185	278	282	351	9	3	7	7	360	360	354	348	349	352	353	336	344	3	5.1
5-Sep	4	6	355	351	348	349	347	356	2	9	20	31	5	358	0	304	286	278	281	329	335	22	52	211	351.5
6-Sep	166	150	148	170	147	137	150	146	146	153	155	145	141	146	157	166	167	161	145	141	137	138	139	139	147.8
7-Sep	140	137	136	135	151	155	99	137	150	168	165	157	151	160	146	95	137	183	163	158	162	174	191	207	151.6
8-Sep	244	272	306	343	338	325	318	342	334	324	324	313	331	322	283	267	238	211	173	174	171	162	155	165	254.3
9-Sep	165	153	150	160	154	154	156	160	164	156	202	197	213	229	227	228	221	220	231	225	209	217	241	249	203.1
10-Sep	246	261	284	258	248	245	234	244	251	265	266	263	251	262	281	300	293	279	282	294	311	299	287	294	272.4
11-Sep	297	302	313	315	316	319	319	324	334	335	335	331	327	325	316	326	326	323	330	327	330	329	313	302	321.4
12-Sep	303	286	288	287	266	276	265	271	263	255	270	272	246	270	285	247	243	231	200	201	205	211	225	222	250.8
13-Sep	228	206	196	181	172	189	193	180	178	197	202	220	221	215	207	210	242	204	1	7	4	345	340	339	221.6
14-Sep	350	5	8	2	350	345	339	337	333	336	336	331	346	359	345	358	339	333	327	340	337	306	300	296	341.7
15-Sep	282	274	278	279	276	267	267	243	218	204	223	274	242	223	206	186	128	349	227	253	254	271	278	314	255.9
16-Sep	3	1	5	9	31	33	274	252	198	181	175	161	176	125	136	131	125	142	95	117	128	134	135	133	130.3
17-Sep	133	132	135	133	132	140	138	157	148	157	168	178	141	143	189	153	235	215	183	181	189	277	289	278	154.1
18-Sep	259	257	271	245	268	285	331	349	1	308	313	262	266	283	293	76	119	102	142	154	160	160	157	155	222.8
19-Sep	154	154	148	147	145	146	136	144	152	157	141	151	161	168	173	164	169	200	178	165	163	165	169	167	160.1
20-Sep	185	183	155	186	184	166	165	158	154	161	135	155	233	230	212	210	214	195	193	185	172	182	173	185	185.7
21-Sep	196	203	203	211	192	165	152	149	151	149	146	146	158	139	130	140	147	154	193	191	201	212	197	175	172.7
22-Sep	329	331	353	180	161	153	202	292	291	300	309	292	296	279	258	263	268	268	256	257	255	263	273	282	271.4
23-Sep	252	220	191	172	164	157	146	176	167	163	171	155	139	146	145	147	141	145	142	143	151	168	175	198	159.1
24-Sep	253	265	260	240	197	188	177	165	157	154	145	233	243	239	238	254	244	230	225	214	226	250	246	148	225.5
25-Sep	145	64	112	356	12	9	4	17	64	38	27	25	42	44	8	8	25	5	11	9	351	357	2	352	17.6
26-Sep	9	335	331	306	290	256	254	257	261	261	261	266	265	259	262	266	270	272	268	267	267	265	269	257	270.2
27-Sep	243	250	251	255	262	258	255	254	251	245	244	246	247	249	243	239	241	239	229	223	224	225	222	224	243.9
28-Sep	231	222	200	162	156	162	164	168	159	200	218	217	225	237	226	208	190	189	176	181	184	181	173	173	194.2
29-Sep	169	147	152	167	167	159	172	192	180	194	238	260	272	273	274	265	271	268	268	260	257	275	268	267	243.2
30-Sep	274	281	291	297	289	284	285	297	297	301	301	309	303	303	296	290	275	307	330	317	305	327	308	303	296.9
	216.1	224.2	222.9	212.0	204.3	200.1	205.4	215.9	213.9	236.5	243.9	250.6	249.8	246.5	247.4	239.5	238.9	237.8	223.1	215.7	212.9	221.5	225.7	224.5	
	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: 89 deg on Sep 13 19:00

Minimum Value: 2 deg on Sep 8 21:00

Percentiles: P_1 = 3 P_{10} = 6 Q_1 = 7 Median = 10 Q_3 = 14 P_{90} = 23 P_{99} = 62

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

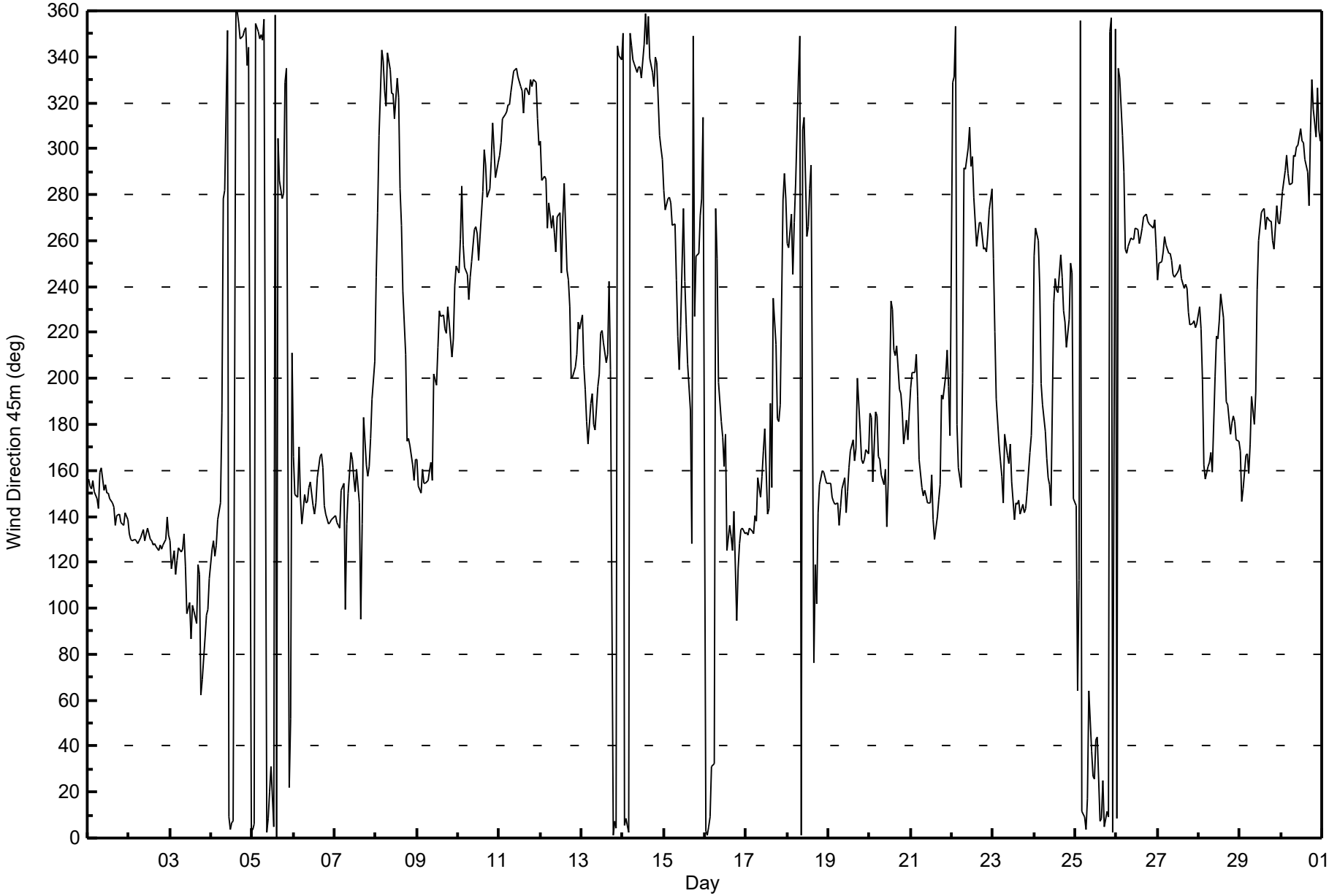
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	5	5	7	5	6	9	7	14	11	12	12	9	14	12	11	11	9	9	7	6	7	7	7	6	14
2-Sep	6	6	5	5	5	7	6	7	8	7	7	9	9	8	11	9	8	10	8	11	9	8	7	6	11
3-Sep	8	11	10	13	11	9	11	13	8	18	10	9	11	14	11	11	16	19	21	28	11	12	10	12	28
4-Sep	11	7	15	13	12	7	37	28	26	12	7	10	9	10	10	11	10	10	10	11	15	10	11	11	37
5-Sep	12	6	10	10	7	12	7	16	14	23	18	22	35	48	47	70	21	17	13	21	13	10	29	34	70
6-Sep	29	5	7	16	6	5	9	13	11	8	8	8	10	9	18	17	14	8	6	6	6	7	6	7	29
7-Sep	8	5	5	6	14	12	30	13	12	16	10	17	13	30	37	24	17	45	8	14	6	16	6	14	45
8-Sep	23	13	23	21	6	12	14	28	13	14	33	15	17	45	51	47	45	20	5	3	2	6	7	6	51
9-Sep	4	5	4	6	8	4	5	8	9	14	17	15	14	11	11	10	11	10	8	14	12	16	8	7	17
10-Sep	7	17	8	10	7	10	8	11	11	9	10	9	7	8	11	14	9	7	7	10	9	8	7	7	17
11-Sep	7	8	7	8	9	10	9	10	10	10	11	13	14	12	11	11	10	9	11	11	9	14	14	7	14
12-Sep	6	10	9	9	9	8	6	12	12	27	19	18	25	28	35	38	18	23	9	6	3	7	5	5	38
13-Sep	7	8	10	7	11	6	17	13	18	11	13	20	17	13	17	12	14	29	89	7	9	13	10	10	89
14-Sep	12	7	8	9	10	10	9	10	9	10	12	10	18	19	15	13	11	9	8	13	9	19	8	7	19
15-Sep	8	4	5	5	28	8	5	17	20	16	19	25	21	23	16	12	85	75	28	7	16	5	8	21	85
16-Sep	9	10	12	22	14	57	27	13	9	11	18	22	33	37	37	13	22	6	16	15	8	7	7	6	57
17-Sep	6	6	6	6	7	9	7	9	10	14	15	23	12	53	62	22	41	14	7	4	15	18	6	15	62
18-Sep	16	16	15	26	5	24	10	17	21	33	25	17	19	18	65	49	22	20	6	3	4	3	4	4	65
19-Sep	4	4	4	3	4	3	6	5	8	9	9	12	13	12	13	8	10	7	10	5	6	6	5	5	13
20-Sep	18	18	5	19	14	12	13	9	10	14	8	31	15	13	16	13	10	5	5	6	4	7	4	7	31
21-Sep	5	4	7	5	11	13	4	4	7	8	11	7	24	23	9	9	9	10	6	5	14	6	13	47	47
22-Sep	70	38	61	26	16	10	28	26	11	10	12	11	15	15	16	12	11	8	6	5	5	10	6	8	70
23-Sep	21	25	16	14	4	11	10	21	23	15	18	16	18	15	12	11	7	7	6	5	5	9	8	22	25
24-Sep	7	7	3	28	16	15	14	10	13	9	9	51	12	13	10	15	12	6	6	6	4	16	49	7	51
25-Sep	7	41	46	85	9	7	10	20	28	13	10	8	12	10	18	6	12	9	8	8	9	10	9	11	85
26-Sep	12	19	17	10	13	8	12	8	8	7	9	9	9	11	9	8	8	8	7	8	7	8	10	8	19
27-Sep	6	8	8	7	7	7	7	9	9	9	9	10	10	14	12	9	8	7	8	5	3	4	4	4	14
28-Sep	4	11	18	13	6	5	8	6	6	22	12	13	11	13	9	15	10	7	5	5	6	6	5	6	22
29-Sep	6	7	7	9	6	6	11	7	9	21	11	10	9	8	9	8	8	10	8	10	9	11	9	7	21
30-Sep	9	11	9	11	8	8	7	7	8	7	8	9	9	9	10	13	9	20	13	9	4	9	32	52	52
	70	41	61	85	28	57	37	28	28	33	33	51	35	53	65	70	85	75	89	28	16	19	49	52	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 45m (WD45) - deg

Mannix - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 75m (WD75) - deg

Mannix - September 2026

Direction of Maximum Speed: 322 deg on Sep 11 04:00
Direction of Maximum Daily Speed Average: 328.0 deg on Sep 11

Direction of Minimum Speed: 287 deg on Sep 15 18:00

Direction of Minimum Daily Speed Average: 3.7 deg on Sep 18

Monthly Average Direction: 239.1 deg

Hours in Service:	720
Hours of Data:	720
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-Sep	157	161	162	168	162	158	148	149	161	162	159	155	154	152	151	149	143	145	145	142	142	145	147	145	151.5
2-Sep	142	135	133	134	133	130	133	136	139	135	138	140	136	135	133	133	131	129	129	127	128	132	142	138	134.8
3-Sep	131	121	125	121	122	126	125	127	137	122	101	107	92	105	102	97	122	118	73	81	97	103	106	118	111.7
4-Sep	125	132	123	128	139	141	165	278	296	359	15	9	13	13	7	6	1	356	357	360	359	346	352	9	10.4
5-Sep	10	12	3	359	358	1	355	3	6	13	27	36	12	8	15	324	293	283	290	339	347	27	59	153	2.0
6-Sep	171	164	154	156	149	146	149	142	143	149	154	147	145	150	160	166	169	163	147	144	141	142	145	145	150.6
7-Sep	146	143	142	139	149	156	101	141	148	170	167	160	156	167	156	96	144	191	160	159	163	168	184	208	155.3
8-Sep	239	276	321	341	342	334	331	348	343	335	333	322	338	329	287	272	239	215	177	178	182	181	178	196	270.0
9-Sep	193	175	155	176	169	168	168	171	177	173	205	200	217	233	231	232	225	223	234	227	217	224	244	252	211.0
10-Sep	250	266	289	264	253	250	241	249	255	269	271	268	256	266	285	306	298	284	289	302	319	306	293	300	277.6
11-Sep	303	308	320	322	323	327	327	331	340	341	342	338	334	331	322	332	332	330	337	333	336	336	319	308	328.0
12-Sep	311	294	297	296	280	287	277	280	272	258	274	277	251	274	288	254	247	235	211	215	215	219	234	234	256.6
13-Sep	237	219	210	203	203	215	213	200	196	201	206	223	222	218	209	213	244	202	13	14	11	358	353	347	230.7
14-Sep	357	12	15	9	357	353	348	345	341	344	344	339	353	6	352	4	347	340	335	349	347	321	311	307	349.5
15-Sep	297	286	287	288	290	282	286	260	234	210	228	277	248	226	208	191	134	287	241	263	265	279	288	325	267.6
16-Sep	8	9	11	16	37	49	317	254	199	183	177	167	181	134	145	139	125	145	99	116	126	136	139	138	131.0
17-Sep	138	138	140	139	137	142	141	153	153	161	173	184	147	147	207	163	245	221	208	202	217	300	308	312	160.2
18-Sep	295	297	283	252	284	305	339	0	3	319	316	272	274	288	303	76	126	102	144	151	163	165	163	163	226.4
19-Sep	169	173	167	167	160	153	148	154	158	166	154	160	167	173	177	168	174	204	186	172	172	174	180	182	169.7
20-Sep	215	219	176	198	207	196	205	189	178	168	148	166	238	233	215	213	219	207	210	204	184	194	192	204	202.0
21-Sep	212	217	218	223	220	199	182	155	155	155	154	150	155	139	135	145	153	159	203	206	214	220	226	251	189.9
22-Sep	311	320	15	168	169	154	180	312	300	306	317	298	303	282	261	267	272	272	266	267	264	268	279	304	279.2
23-Sep	276	259	239	204	171	162	146	167	165	164	173	164	147	148	148	150	145	148	146	145	153	169	176	228	163.1
24-Sep	263	272	266	263	229	230	213	209	187	173	155	235	246	242	242	256	247	235	237	222	234	255	271	150	239.3
25-Sep	152	91	88	81	44	30	28	47	80	52	37	38	51	52	17	23	41	15	21	16	1	4	10	1	30.9
26-Sep	15	345	339	314	297	261	260	262	265	265	264	270	269	262	266	270	274	277	273	272	271	270	273	262	275.3
27-Sep	250	256	255	259	264	262	258	258	254	248	247	248	249	253	248	243	245	244	238	234	236	236	232	232	248.2
28-Sep	237	234	226	196	190	191	189	184	172	207	221	220	228	239	229	210	192	192	186	186	191	191	186	187	203.6
29-Sep	181	164	168	176	174	186	204	220	205	213	243	263	277	278	278	269	275	272	272	265	267	285	272	271	248.6
30-Sep	278	286	295	302	294	288	290	302	301	305	307	315	309	308	300	296	282	313	337	325	315	336	328	321	303.2
	235.7	244.9	251.3	239.3	227.0	220.7	222.8	226.7	223.4	246.4	252.0	256.2	255.7	253.4	254.7	246.4	245.9	242.0	232.0	227.1	226.0	231.7	233.9	239.3	
	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: 97 deg on Sep 15 18:00

Minimum Value: 1 deg on Sep 27 21:00

Percentiles: P_1 = 2 P_{10} = 5 Q_1 = 7 Median = 9 Q_3 = 13 P_{90} = 20 P_{99} = 47

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

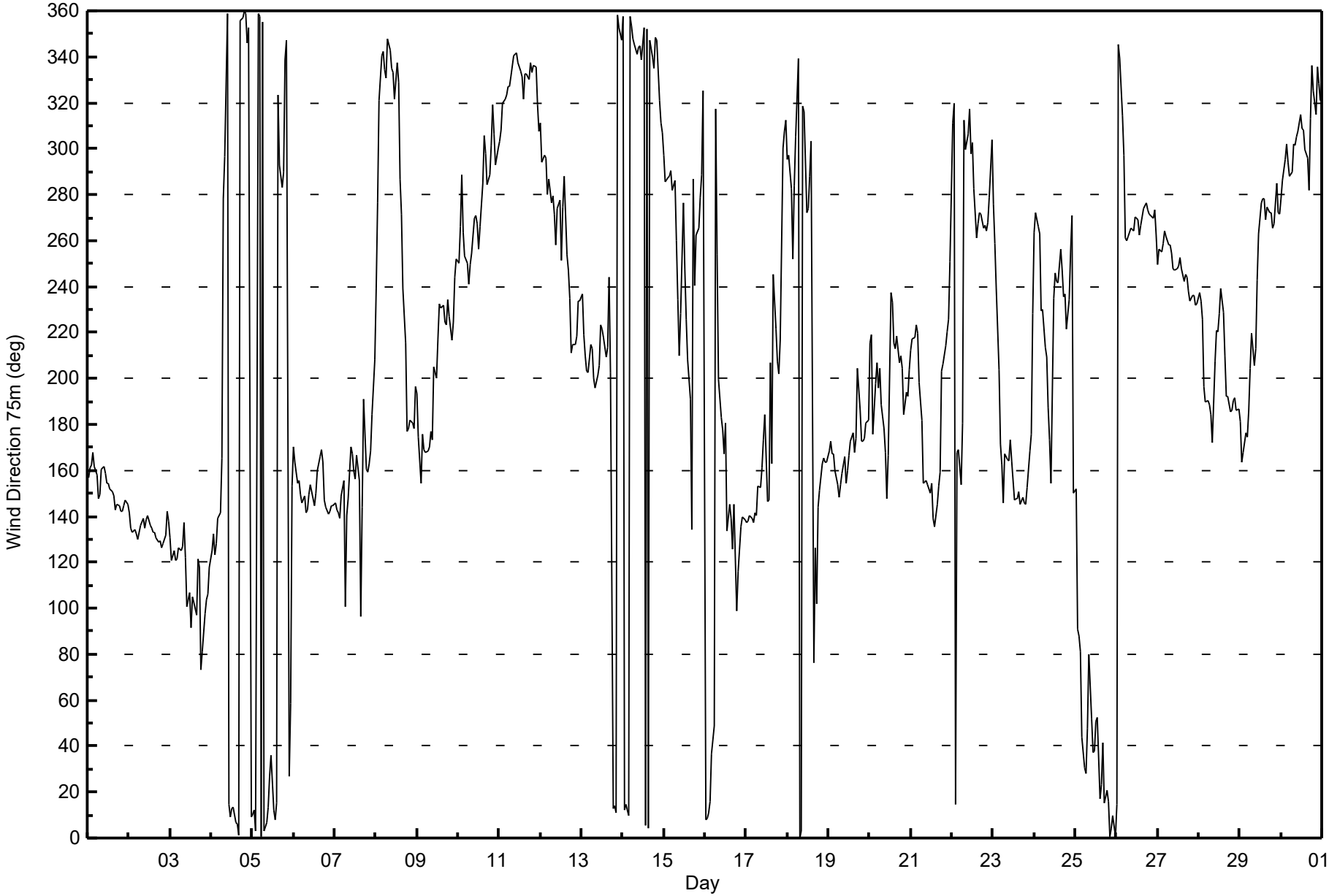
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	6	4	5	4	3	5	4	9	9	12	10	9	12	10	9	10	9	7	6	4	6	5	5	5	12
2-Sep	6	10	11	10	11	12	11	10	10	10	9	9	11	11	13	11	11	13	12	14	13	12	7	10	14
3-Sep	13	13	14	14	13	14	14	15	10	19	10	11	11	14	12	12	17	19	16	24	11	13	12	14	24
4-Sep	15	12	16	15	13	7	18	44	28	12	5	8	7	8	8	9	9	8	9	9	13	9	10	10	44
5-Sep	10	4	9	9	8	11	4	14	12	20	16	18	32	42	34	79	20	16	13	17	11	7	13	37	79
6-Sep	12	4	11	12	9	3	6	10	12	10	7	7	9	8	14	14	12	6	5	5	6	6	5	4	14
7-Sep	6	4	4	8	11	10	19	14	11	15	8	14	11	26	36	25	24	45	6	9	4	9	7	16	45
8-Sep	10	13	15	9	5	7	10	14	11	13	28	14	14	40	45	45	36	19	5	2	8	7	6	8	45
9-Sep	10	9	6	7	10	8	4	7	8	14	14	13	12	10	10	9	9	9	7	12	12	13	8	6	14
10-Sep	6	17	8	9	6	9	7	10	9	8	9	9	7	7	11	15	9	6	6	9	9	8	7	6	17
11-Sep	6	8	6	6	7	8	8	8	9	9	10	11	12	12	10	9	9	7	10	10	8	14	13	7	14
12-Sep	6	8	8	7	7	6	5	10	12	25	16	19	22	27	29	35	16	21	7	4	2	5	3	3	35
13-Sep	4	5	6	5	7	5	10	9	11	10	11	19	15	12	15	10	13	28	89	5	8	12	8	8	89
14-Sep	11	5	6	8	10	8	7	8	7	8	10	9	16	17	14	11	10	7	6	11	8	15	8	6	17
15-Sep	8	3	3	4	14	6	6	15	24	16	19	23	19	21	15	14	83	97	18	7	14	3	8	19	97
16-Sep	8	10	10	18	12	29	48	19	9	8	16	21	30	35	30	21	21	7	17	15	14	11	7	7	48
17-Sep	8	8	6	7	9	8	7	7	8	11	13	20	12	60	61	28	26	9	5	5	16	14	5	14	61
18-Sep	16	20	14	12	5	20	7	11	17	29	27	19	20	17	46	46	23	21	5	4	2	3	2	3	46
19-Sep	5	4	3	2	6	2	3	3	8	8	10	11	12	10	11	7	9	5	10	4	4	5	5	6	12
20-Sep	13	12	26	18	10	13	17	9	10	13	10	28	15	13	15	13	7	4	5	6	6	5	4	6	28
21-Sep	4	3	4	3	5	16	9	5	6	9	11	6	16	13	12	9	8	10	5	4	10	4	15	37	37
22-Sep	62	42	31	38	15	8	42	12	10	8	12	10	15	14	16	12	10	8	4	3	3	7	3	8	62
23-Sep	13	33	17	20	12	9	10	16	14	16	16	14	17	13	11	9	7	5	4	4	4	7	9	24	33
24-Sep	5	3	6	6	16	17	14	11	16	13	9	38	11	13	10	15	11	5	5	7	4	11	29	9	38
25-Sep	7	36	35	33	14	11	9	17	22	10	8	7	9	8	16	7	11	8	7	6	7	7	8	8	36
26-Sep	10	18	15	10	12	8	11	7	8	7	8	9	9	10	9	7	8	8	7	8	7	8	9	7	18
27-Sep	5	7	7	6	6	6	6	8	8	7	7	9	9	12	11	8	7	6	7	5	1	2	2	2	12
28-Sep	3	5	11	11	11	9	8	5	6	19	11	12	10	12	9	14	8	6	4	4	5	4	5	7	19
29-Sep	6	6	6	8	5	10	11	5	8	14	10	9	9	8	9	8	8	9	7	9	9	9	8	7	14
30-Sep	9	10	8	11	8	7	7	7	7	6	8	9	9	9	9	13	8	20	11	8	5	6	24	38	38
	62	42	35	38	16	29	48	44	28	29	28	38	32	60	61	79	83	97	89	24	16	15	29	38	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 75m (WD75) - deg

Mannix - September 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 90m (WD90) - deg

Mannix - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 89 deg on Sep 13 19:00

Minimum Value: 1 deg on Sep 28 00:00

Percentiles: P_1 = 2 P_{10} = 4 Q_1 = 6 Median = 9 Q_3 = 12 P_{90} = 19 P_{99} = 55

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

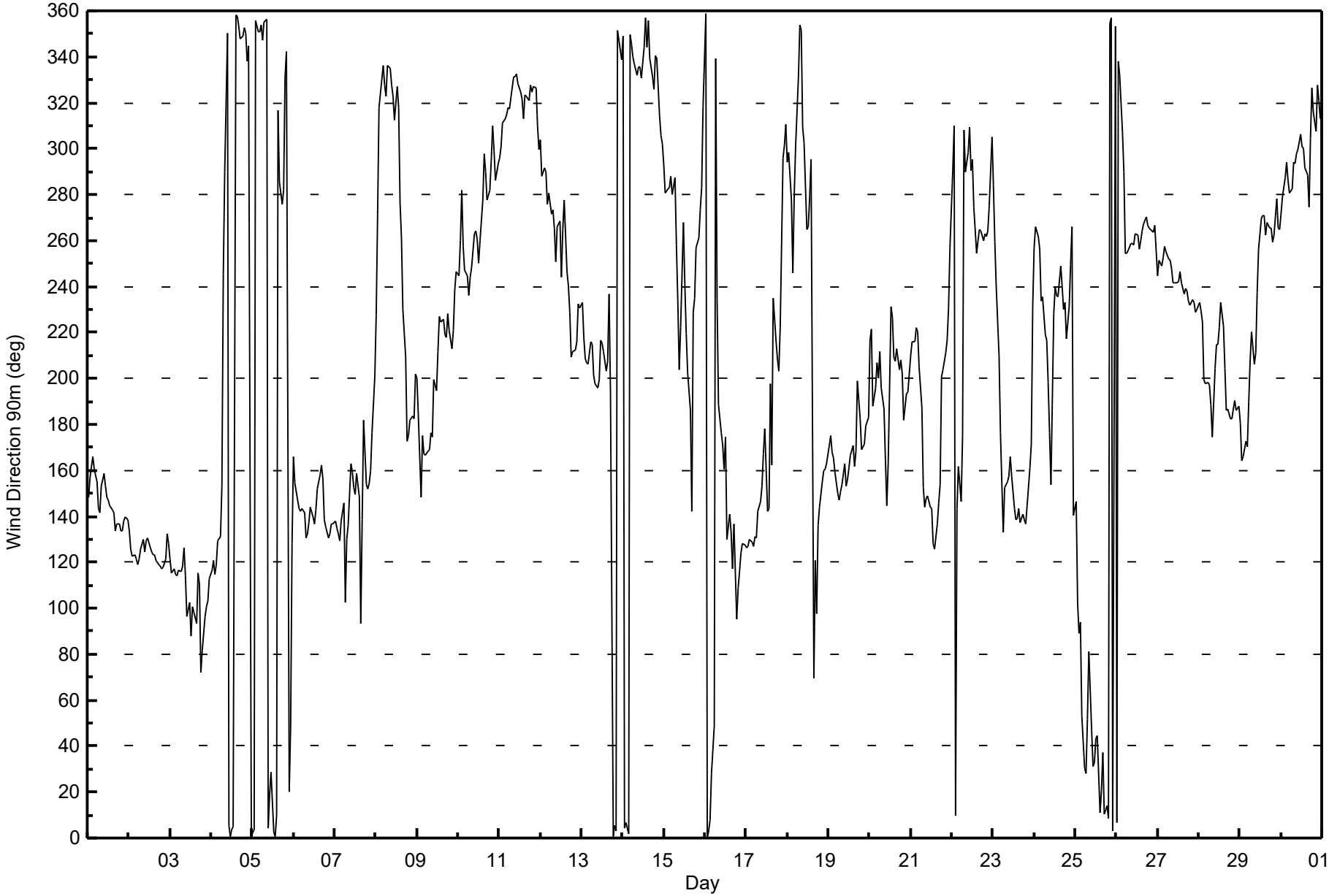
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	8	3	5	5	3	6	4	5	9	11	10	9	12	10	9	9	8	7	6	4	5	5	5	5	12
2-Sep	5	6	5	5	6	8	7	6	8	7	7	8	8	8	10	8	7	9	8	10	9	8	5	7	10
3-Sep	8	9	10	10	9	9	9	11	7	15	8	8	11	12	9	11	14	15	16	23	9	9	9	11	23
4-Sep	11	8	11	11	11	4	10	56	30	12	5	8	7	7	8	9	9	8	8	10	13	9	10	9	56
5-Sep	10	4	9	9	9	11	5	13	13	21	14	19	36	44	35	79	19	15	13	15	12	7	11	36	79
6-Sep	8	6	13	9	7	3	6	8	11	9	6	7	8	8	13	14	11	6	5	4	5	5	4	5	14
7-Sep	6	3	2	3	10	8	16	11	11	13	7	13	11	24	35	26	25	40	6	8	3	7	6	14	40
8-Sep	10	14	13	8	7	6	8	12	11	15	31	13	14	43	42	42	32	18	5	2	8	8	7	8	43
9-Sep	9	11	9	12	13	12	3	7	8	13	14	12	12	9	9	9	9	8	7	12	12	11	7	5	14
10-Sep	5	16	8	9	5	8	7	9	9	8	9	8	6	7	10	14	8	6	5	9	8	7	6	6	16
11-Sep	5	7	6	5	7	8	8	8	9	9	9	11	11	11	9	9	9	7	10	10	8	14	12	6	14
12-Sep	6	7	8	6	7	5	4	9	12	22	16	19	22	26	28	33	15	19	6	4	2	5	2	2	33
13-Sep	3	5	5	4	5	6	9	9	10	10	11	18	15	11	14	10	12	26	89	4	8	11	8	7	89
14-Sep	10	4	5	8	11	8	7	8	6	7	10	9	16	17	13	12	10	7	6	10	8	12	7	5	17
15-Sep	8	4	3	5	11	7	6	13	24	17	17	22	17	19	14	15	86	87	14	7	12	3	9	19	87
16-Sep	8	10	10	17	13	24	62	22	9	8	15	21	27	33	26	20	18	7	15	11	10	8	5	4	62
17-Sep	5	4	4	5	6	5	4	7	7	10	13	19	12	63	58	33	20	7	4	6	15	12	6	12	63
18-Sep	15	19	13	13	9	17	8	11	18	24	28	19	25	16	51	49	22	19	6	4	2	3	3	4	51
19-Sep	6	3	4	3	5	3	3	3	7	8	10	11	12	10	11	7	9	5	9	3	4	5	5	7	12
20-Sep	12	10	32	18	9	12	13	7	10	14	10	28	14	13	14	12	7	4	5	5	6	4	3	5	32
21-Sep	4	2	4	3	5	16	9	9	4	9	12	6	14	9	9	9	8	12	5	4	8	4	15	22	22
22-Sep	44	31	27	36	14	7	48	6	9	7	11	9	14	14	14	11	9	7	4	3	4	6	8	8	48
23-Sep	13	33	18	17	19	13	9	17	12	15	15	12	13	12	10	8	6	5	3	4	3	6	13	21	33
24-Sep	4	4	7	6	12	14	13	11	17	15	10	32	10	12	9	14	11	5	4	7	5	9	13	28	32
25-Sep	7	30	27	20	17	13	10	18	21	10	7	7	8	8	16	9	10	8	6	6	7	7	7	8	30
26-Sep	9	18	15	9	12	7	11	7	7	6	7	8	8	9	8	7	8	8	7	7	7	7	8	7	18
27-Sep	4	7	7	6	6	5	5	7	7	6	6	8	8	11	10	8	7	6	6	5	2	3	1	1	11
28-Sep	3	4	9	10	10	9	7	6	8	16	10	11	10	12	9	13	8	6	4	3	4	4	5	7	16
29-Sep	6	6	5	11	6	13	10	4	8	11	9	9	9	7	8	7	7	9	7	8	9	9	7	7	13
30-Sep	9	9	8	10	7	6	6	6	7	5	7	8	8	8	8	12	8	19	11	7	4	6	20	35	35
	44	33	32	36	19	24	62	56	30	24	31	32	36	63	58	79	86	87	89	23	15	14	20	36	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 90m (WD90) - deg

Mannix - September 2026



Maximum Value: 1.1 km/h on Sep 3 02:00

Maximum Daily Average: 0.6 km/h on Sep 3

Minimum Value: -1.8 km/h on Sep 13 20:00

Minimum Daily Average: -1.2 km/h on Sep 11

Maximum Diurnal Average: -0.1 km/h at hour 9

Minimum Diurnal Average: -0.3 km/h at hour 20

Monthly Average: -0.18 km/h

Percentiles: P_1 = -1.5 P_{10} = -0.9 Q_1 = -0.4 Median = -0.1 Q_3 = 0.1 P_{90} = 0.4 P_{99} = 0.8

Hours in Service:	720
Hours of Data:	720
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-Sep	-0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.0	0.2	0.1	0.3	0.4	0.5	0.6	0.7	0.8	0.6	0.6	0.4	0.4	0.4	0.4	0.5	0.4	0.3	0.8
2-Sep	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.6	0.7	0.4	0.7	0.9	0.8	0.6	0.7	0.8	0.7	0.4	0.4	0.3	0.2	0.5	0.9
3-Sep	0.3	1.1	0.7	0.9	1.0	0.6	0.9	0.5	0.6	0.6	0.7	0.7	0.4	0.9	0.6	0.6	0.5	0.6	-0.3	-0.2	0.0	0.4	0.6	1.0	0.6	1.1
4-Sep	0.7	0.2	0.5	0.4	0.2	-0.1	-0.4	-0.2	-0.3	-0.8	-1.5	-1.2	-1.7	-1.5	-1.6	-1.6	-1.6	-1.3	-1.2	-1.1	-1.3	-0.9	-0.7	-1.1	-0.8	0.7
5-Sep	-0.7	-1.1	-0.9	-0.8	-0.8	-0.8	-0.7	-0.8	-0.5	-0.8	-0.6	-0.4	-0.3	-0.4	-0.3	-0.5	-0.3	-0.4	-0.3	-0.7	-0.6	-0.4	-0.4	-0.7	-0.6	-0.3
6-Sep	-0.2	0.1	0.0	-0.2	0.0	0.1	0.1	0.0	0.1	0.1	0.2	0.2	0.5	0.5	0.1	0.0	0.1	0.3	0.3	0.2	0.2	0.4	0.2	0.3	0.2	0.5
7-Sep	0.3	0.3	0.3	0.0	0.0	0.1	-0.1	0.3	0.0	0.1	0.1	0.3	0.3	0.1	0.0	0.2	0.0	0.0	-0.1	0.1	0.2	-0.2	-0.3	-0.3	0.1	0.3
8-Sep	-0.2	-0.2	-0.3	-0.3	-0.5	-0.4	-0.3	-0.1	-0.3	-0.3	0.1	-0.6	-0.6	-0.6	-0.1	-0.1	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	-0.2	0.1
9-Sep	0.1	0.2	0.3	0.3	0.2	0.4	0.4	0.4	0.3	0.2	-0.1	-0.2	0.1	0.0	0.0	0.1	-0.1	-0.1	0.2	0.1	-0.1	0.0	-0.1	-0.1	0.1	0.4
10-Sep	0.0	-0.3	-0.5	-0.2	-0.1	-0.1	0.0	0.1	0.0	-0.4	-0.4	-0.2	0.0	-0.1	-0.5	-0.9	-0.8	-0.1	-0.3	-0.9	-1.0	-1.0	-0.7	-1.0	-0.4	0.1
11-Sep	-1.1	-1.1	-1.4	-1.5	-1.1	-1.5	-1.2	-1.2	-1.5	-1.3	-1.5	-1.3	-1.3	-1.1	-1.2	-1.1	-1.1	-1.3	-1.0	-1.1	-1.1	-0.8	-0.8	-0.7	-1.2	-0.7
12-Sep	-0.7	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.2	-0.1	-0.4	-0.3	-0.3	-0.2	-0.4	-0.3	-0.3	0.0	-0.1	-0.2	-0.3	-0.2	-0.2	-0.1	-0.2	-0.3	0.0
13-Sep	-0.2	-0.2	-0.1	0.1	0.1	0.0	-0.1	0.1	0.0	-0.1	-0.1	0.0	0.1	0.0	-0.1	0.0	0.0	-0.2	-0.8	-1.8	-1.4	-0.5	-0.6	-0.7	-0.3	0.1
14-Sep	-0.9	-1.5	-1.2	-1.2	-0.9	-0.9	-1.0	-0.9	-1.0	-0.9	-0.9	-1.0	-0.9	-0.7	-1.1	-0.7	-0.8	-1.0	-0.9	-0.7	-0.7	-0.4	-0.6	-0.6	-0.9	-0.4
15-Sep	-0.3	-0.3	-0.3	-0.3	-0.2	-0.4	-0.4	-0.3	-0.3	-0.2	-0.3	-0.5	-0.2	0.1	0.0	0.0	-0.2	-0.2	-0.3	-0.2	-0.1	-0.2	-0.3	-0.6	-0.2	0.1
16-Sep	-0.7	-0.7	-0.8	-0.5	-0.4	-0.4	-0.4	-0.4	-0.3	-0.1	0.0	0.3	-0.2	0.3	0.0	-0.1	0.1	0.0	0.2	0.4	0.5	0.1	0.4	0.4	-0.1	0.5
17-Sep	0.3	0.4	0.5	0.3	0.3	0.1	0.1	0.1	0.3	0.2	0.1	-0.1	0.1	-0.1	-0.1	0.0	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.3	0.1	0.5
18-Sep	-0.3	-0.2	-0.3	-0.2	-0.3	-0.4	-0.6	-0.3	-0.2	-0.1	-0.3	-0.5	-0.3	-0.4	-0.1	-0.2	0.1	0.2	0.3	0.2	0.4	0.5	0.3	0.0	-0.1	0.5
19-Sep	0.2	0.2	0.0	0.1	-0.1	0.1	0.2	0.2	0.0	0.4	0.2	0.5	0.5	0.6	0.4	0.6	0.2	-0.1	0.0	0.4	0.4	0.4	0.4	0.4	0.3	0.6
20-Sep	0.0	-0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	-0.1	-0.1	0.0	-0.1	-0.2	-0.1	-0.1	0.2	0.0	0.3	0.0	0.0	0.3
21-Sep	-0.2	-0.2	-0.3	-0.3	-0.1	0.0	0.0	0.1	0.2	0.3	0.2	0.3	0.0	0.1	0.3	0.4	0.3	0.3	-0.1	-0.3	-0.3	-0.2	-0.2	-0.2	0.0	0.4
22-Sep	-0.2	-0.3	-0.3	-0.2	0.0	0.0	-0.4	-0.5	-0.5	-0.6	-0.8	-0.8	-0.5	-0.4	-0.3	-0.3	-0.4	-0.3	-0.2	-0.3	-0.3	-0.2	-0.1	-0.3	-0.3	0.0
23-Sep	-0.3	-0.2	-0.3	0.0	0.1	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.1	0.0	-0.1	0.3	0.2	0.4	0.3	0.2	0.3	0.0	-0.2	-0.2	0.0	0.4
24-Sep	-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	-0.1	0.0	-0.1	-0.3	-0.3	-0.2	-0.3	-0.2	0.1	-0.1	0.1
25-Sep	0.1	-0.4	-0.2	-0.5	-0.8	-0.9	-0.7	-0.7	-0.2	-0.8	-1.0	-1.0	-0.8	-0.7	-0.9	-1.0	-0.6	-1.2	-1.0	-1.3	-1.1	-1.3	-1.4	-1.1	-0.8	0.1
26-Sep	-1.0	-0.8	-0.8	-0.8	-0.4	-0.2	0.0	0.0	-0.1	-0.4	-0.3	-0.4	-0.3	-0.2	-0.3	-0.4	-0.4	-0.4	-0.3	-0.1	-0.4	-0.3	-0.4	-0.2	-0.4	0.0
27-Sep	0.0	-0.2	-0.1	-0.1	-0.2	-0.3	-0.2	-0.3	-0.3	0.2	0.1	-0.1	0.1	-0.2	0.2	0.1	-0.1	0.0	-0.2	-0.2	-0.3	-0.1	-0.2	-0.2	-0.1	0.2
28-Sep	-0.2	-0.2	-0.2	-0.1	0.0	0.3	0.1	0.3	0.4	0.0	0.1	0.0	0.0	0.1	0.1	-0.1	0.0	0.0	0.1	0.0	-0.1	0.0	0.2	0.2	0.0	0.4
29-Sep	0.3	0.2	0.3	0.1	0.2	0.2	0.2	0.0	0.1	0.0	0.0	-0.3	-0.3	-0.4	-0.5	-0.4	-0.6	-0.3	-0.3	-0.2	-0.2	-0.3	-0.3	-0.4	-0.1	0.3
30-Sep	-0.4	-0.4	-0.6	-0.7	-0.8	-0.6	-0.6	-1.0	-1.0	-1.1	-1.0	-1.2	-1.0	-1.1	-1.0	-0.7	-0.2	-0.6	-0.6	-0.6	-0.7	-0.7	-0.2	-0.3	-0.7	-0.2
	-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	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2	Diurnal Average	
	0.7	1.1	0.7	0.9	1.0	0.6	0.9	0.5	0.6	0.6	0.7	0.7	0.5	0.9	0.9	0.8	0.6	0.7	0.8	0.7	0.5	0.5	0.6	1.0	Diurnal Maximum	

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.5 km/h on Sep 4 15:00

Minimum Value: 0.1 km/h on Sep 8 00:00

Percentiles: P_1 = 0.3 P_{10} = 0.6 Q_1 = 1.0 Median = 1.6 Q_3 = 2.4 P_{90} = 3.0 P_{99} = 4.0

Hours in Service:	720
Hours of Data:	720
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-Sep	0.5	0.8	1.4	1.4	1.2	1.1	1.2	1.0	1.6	1.4	1.8	1.9	2.2	2.5	2.6	2.6	2.8	2.6	2.0	2.3	2.4	2.3	2.3	2.2	2.8
2-Sep	2.0	2.1	2.3	2.3	2.3	2.2	2.5	2.7	2.5	2.4	2.8	2.9	2.9	3.1	3.1	3.2	3.2	3.1	3.2	2.9	2.7	2.7	2.1	2.1	3.2
3-Sep	2.1	2.3	2.3	2.0	2.4	2.7	2.8	2.3	2.4	2.1	2.1	2.3	1.8	2.4	1.8	1.7	1.6	1.7	1.3	1.3	1.5	1.8	1.6	2.0	2.8
4-Sep	2.0	2.0	1.7	1.6	1.2	0.6	0.5	0.7	0.7	2.5	3.0	3.4	3.7	4.0	4.5	4.1	4.0	3.7	3.5	2.9	2.9	2.6	2.4	2.4	4.5
5-Sep	2.2	2.7	2.0	1.9	1.8	1.9	1.7	1.9	1.7	1.8	2.2	2.0	2.0	2.0	1.8	1.5	1.5	1.3	0.8	0.4	0.4	0.3	0.3	0.3	2.7
6-Sep	0.5	0.8	0.5	0.6	0.9	0.8	0.8	1.0	1.2	1.1	1.4	1.5	2.1	2.1	1.7	1.5	1.4	1.7	1.3	1.7	1.9	2.1	1.7	1.8	2.1
7-Sep	1.8	1.9	1.8	1.3	1.1	1.2	0.7	1.6	1.3	1.7	2.0	2.1	2.0	1.6	1.5	1.5	1.1	0.9	0.5	0.7	0.7	0.6	0.3	0.1	2.1
8-Sep	0.2	0.3	0.4	0.3	0.4	0.4	0.5	0.9	1.6	1.7	1.6	2.0	2.2	1.9	1.8	1.5	1.2	1.2	1.2	1.1	1.1	0.6	0.6	0.5	2.2
9-Sep	0.6	0.8	1.1	1.1	1.1	1.3	1.6	1.7	1.5	1.4	2.2	2.6	3.0	3.3	3.3	3.0	2.2	2.7	3.2	2.5	1.8	2.1	2.4	2.4	3.3
10-Sep	2.7	2.8	2.7	1.8	2.3	2.1	1.8	2.6	3.0	2.5	2.3	1.9	2.4	2.3	2.7	2.8	2.6	2.8	2.6	2.7	3.2	2.7	2.6	2.7	3.2
11-Sep	3.0	3.2	4.1	4.3	3.9	3.7	3.5	3.8	4.2	4.1	4.0	3.7	3.7	3.3	3.8	3.7	3.0	3.0	2.7	3.1	2.6	2.2	2.2	2.2	4.3
12-Sep	2.1	1.5	1.4	1.4	1.0	1.0	0.7	1.1	1.2	1.3	1.6	1.6	2.0	2.0	1.8	1.6	1.7	1.4	1.0	1.1	1.3	1.1	1.1	1.0	2.1
13-Sep	0.9	1.2	1.2	0.9	1.0	0.9	0.7	0.9	1.4	2.1	2.2	2.3	2.3	2.6	2.4	2.3	1.3	0.6	2.0	3.4	3.1	1.6	1.5	2.1	3.4
14-Sep	2.3	3.1	2.9	2.8	2.2	2.9	2.7	2.3	2.5	2.5	2.4	2.4	2.5	2.4	3.0	2.1	2.4	2.3	1.8	1.5	1.5	0.8	1.3	1.3	3.1
15-Sep	1.0	0.9	1.1	0.9	1.1	0.6	0.6	0.9	1.1	1.3	1.7	2.0	1.9	2.1	2.5	1.8	1.5	0.5	0.4	0.9	0.9	0.9	1.0	1.2	2.5
16-Sep	1.4	1.1	1.3	0.8	0.6	0.6	0.6	0.7	1.0	1.8	1.5	1.7	1.8	1.8	1.5	1.1	1.0	0.8	1.0	1.5	1.8	1.6	2.4	2.4	2.4
17-Sep	2.5	2.5	2.7	2.3	2.1	1.5	1.6	1.2	1.7	1.6	1.7	1.6	1.1	0.9	1.1	0.9	0.6	0.5	0.6	0.6	0.5	0.2	0.3	0.3	2.7
18-Sep	0.5	0.5	0.7	0.4	0.6	0.5	0.9	1.2	1.5	1.5	1.5	1.6	1.6	1.7	1.5	1.2	1.2	1.0	1.0	0.8	1.0	1.3	1.2	0.8	1.7
19-Sep	0.8	0.9	1.1	1.3	0.9	1.0	1.0	1.4	1.6	1.9	1.7	2.0	2.5	3.0	3.2	2.9	2.3	2.0	1.4	1.5	1.4	1.3	1.4	1.1	3.2
20-Sep	0.7	0.6	0.9	1.1	0.7	0.7	0.7	1.0	1.2	1.4	1.4	1.7	2.4	2.2	2.3	2.1	1.5	1.1	0.8	1.0	1.4	1.6	1.1	1.1	2.4
21-Sep	1.1	0.8	0.6	0.5	0.6	0.6	0.8	1.3	1.3	1.4	1.5	1.6	1.3	1.4	2.2	2.0	1.6	1.4	1.6	1.3	1.3	1.1	0.6	0.5	2.2
22-Sep	0.5	0.4	0.3	0.4	0.6	0.6	0.4	1.0	1.3	2.1	2.6	2.9	2.7	2.5	2.5	2.5	2.2	1.3	0.6	0.6	0.4	0.3	0.2	0.4	2.9
23-Sep	0.2	0.3	0.4	0.6	0.9	0.9	0.8	1.2	1.0	1.4	1.3	1.1	1.1	1.4	1.3	1.5	1.5	1.4	1.7	1.4	1.1	1.0	0.4	0.5	1.7
24-Sep	0.5	0.5	0.4	0.5	0.6	0.5	0.5	0.7	1.0	1.2	1.3	2.1	2.8	2.7	2.7	2.1	1.9	1.1	0.6	0.6	0.3	0.4	0.5	0.7	2.8
25-Sep	0.6	0.4	0.6	0.5	0.7	1.2	1.2	1.1	1.3	2.4	2.4	2.6	2.6	2.7	2.5	2.3	1.8	2.7	2.4	2.4	2.7	3.0	3.0	2.9	3.0
26-Sep	2.7	2.1	2.1	2.2	1.7	1.9	2.3	2.6	2.8	2.9	3.2	3.1	3.4	3.8	3.4	3.3	3.5	3.3	2.8	2.9	2.9	2.7	2.8	1.9	3.8
27-Sep	1.6	1.8	2.2	2.4	2.5	2.7	2.9	2.8	2.9	3.1	2.7	2.6	2.7	2.7	2.9	2.7	2.5	2.1	0.9	1.1	1.2	1.0	1.1	1.0	3.1
28-Sep	0.7	0.6	0.5	0.8	0.8	0.9	0.9	1.5	1.6	1.8	2.5	2.8	3.2	2.6	2.6	2.4	2.8	2.0	1.3	1.7	1.7	1.5	1.4	1.3	3.2
29-Sep	1.2	1.0	1.0	0.9	1.2	1.0	1.1	0.8	1.2	1.4	2.4	2.5	2.5	2.6	3.2	3.1	3.1	3.1	2.3	2.2	1.1	1.4	2.8	2.5	3.2
30-Sep	2.5	3.2	3.0	2.9	3.2	3.2	3.2	3.4	3.0	3.3	3.3	3.4	3.2	3.0	3.1	2.2	1.6	2.0	1.8	1.7	1.5	1.3	1.1	0.7	3.4
	3.0	3.2	4.1	4.3	3.9	3.7	3.5	3.8	4.2	4.1	4.0	3.7	3.7	4.0	4.5	4.1	4.0	3.7	3.5	3.4	3.2	3.0	3.0	2.9	
	Diurnal Maximum																								

Maximum Value: 3.1 km/h on Sep 3 02:00

Maximum Daily Average: 1.7 km/h on Sep 19

Minimum Value: -2.2 km/h on Sep 11 11:00

Minimum Daily Average: -1.5 km/h on Sep 11

Maximum Diurnal Average: 0.5 km/h at hour 4

Minimum Diurnal Average: 0.3 km/h at hour 22

Monthly Average: 0.41 km/h

Percentiles: P_1 = -1.9 P_{10} = -0.9 Q_1 = -0.1 Median = 0.4 Q_3 = 1.1 P_{90} = 1.6 P_{99} = 2.3

Hours in Service:	720
Hours of Data:	720
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-Sep	1.0	1.2	1.5	1.8	1.6	1.4	1.4	0.8	1.1	1.0	1.6	1.9	2.1	2.3	2.1	2.2	2.0	2.3	1.8	1.8	1.7	1.9	1.9	1.8	1.7	2.3
2-Sep	1.7	1.4	1.4	1.8	1.4	1.2	1.2	1.5	1.5	1.1	1.6	1.8	1.5	1.5	2.2	1.9	1.5	2.0	1.5	1.8	1.3	1.1	1.5	1.1	1.5	2.2
3-Sep	0.9	3.1	1.9	2.8	2.5	1.9	2.3	1.7	1.3	1.1	0.9	1.0	0.5	1.1	0.9	0.9	2.2	1.4	0.1	0.1	0.3	0.6	1.0	2.7	1.4	3.1
4-Sep	2.2	0.9	1.5	1.8	1.1	0.5	0.1	0.2	-0.1	-1.1	-1.6	-1.3	-1.8	-1.7	-1.8	-1.7	-2.0	-1.6	-1.6	-1.1	-1.4	-1.3	-0.9	-1.0	-0.6	2.2
5-Sep	-0.3	-1.6	-1.0	-0.9	-1.1	-0.8	-1.0	-1.0	-0.4	-0.6	-0.4	-0.4	0.1	0.3	0.2	-0.5	0.0	0.0	0.1	-0.4	-0.4	-0.3	0.1	0.0	-0.4	0.3
6-Sep	0.5	1.2	1.2	0.7	1.0	1.2	0.9	0.9	0.9	0.9	1.2	1.3	1.8	1.8	0.9	0.9	1.0	1.6	1.2	1.4	1.3	1.6	1.4	1.7	1.2	1.8
7-Sep	1.5	1.5	1.6	1.2	1.0	1.2	0.4	1.0	0.9	1.3	1.2	1.6	1.5	0.7	0.4	0.8	0.8	0.6	0.5	1.1	1.1	0.7	0.5	0.1	1.0	1.6
8-Sep	0.1	-0.1	-0.5	-0.4	-0.6	-0.4	-0.3	0.1	-0.4	0.3	1.1	-0.4	-0.8	-0.3	0.5	0.9	0.5	0.4	1.1	1.5	1.4	1.0	0.9	0.8	0.3	1.5
9-Sep	0.9	1.2	1.6	1.7	1.4	1.7	1.8	1.7	1.3	1.4	1.4	1.0	1.3	0.8	0.8	0.7	0.5	0.7	0.7	0.5	0.7	0.5	0.2	0.2	1.0	1.8
10-Sep	0.3	0.1	-0.3	0.1	0.1	0.2	0.5	0.5	0.5	0.1	-0.1	0.2	0.3	0.5	-0.1	-0.8	-0.5	-0.1	-0.1	-0.6	-1.1	-1.0	-0.4	-0.7	-0.1	0.5
11-Sep	-0.8	-0.9	-1.8	-2.1	-1.5	-1.7	-1.5	-2.0	-2.1	-2.0	-2.2	-1.7	-1.8	-1.4	-1.4	-1.5	-1.4	-1.7	-1.4	-1.7	-1.6	-0.7	-0.8	-0.5	-1.5	-0.5
12-Sep	-0.6	-0.2	-0.3	0.0	0.1	0.0	-0.1	0.1	0.2	0.1	0.1	0.3	0.8	0.3	-0.1	-0.1	0.3	0.2	0.5	0.6	0.5	0.5	0.4	0.4	0.2	0.8
13-Sep	0.4	0.6	0.7	1.2	1.1	0.9	0.4	0.7	0.8	0.6	0.8	0.9	0.8	1.0	1.1	1.0	0.6	0.3	-0.5	-2.1	-1.5	-0.4	-0.7	-0.9	0.3	1.2
14-Sep	-1.0	-1.9	-1.6	-1.3	-1.0	-1.4	-1.5	-1.1	-1.2	-0.9	-0.8	-1.2	-0.9	-0.7	-1.3	-0.4	-0.8	-1.3	-1.1	-0.7	-0.7	-0.2	-0.4	-0.3	-1.0	-0.2
15-Sep	-0.2	-0.1	-0.1	-0.1	0.0	-0.2	-0.2	-0.1	0.2	0.5	0.3	0.0	0.8	1.0	1.1	0.8	0.6	0.0	0.2	0.1	0.0	0.0	-0.1	-0.6	0.2	1.1
16-Sep	-0.8	-0.8	-0.7	-0.3	-0.3	0.0	0.0	-0.1	0.3	0.7	1.0	1.2	0.6	0.9	1.0	0.5	0.7	0.6	0.8	1.7	1.5	1.1	1.6	1.7	0.5	1.7
17-Sep	1.8	1.9	1.9	1.6	1.3	1.2	1.2	1.1	1.4	1.2	1.1	0.5	0.8	0.3	0.5	0.4	0.1	0.2	0.6	0.8	0.5	-0.3	-0.2	-0.1	0.8	1.9
18-Sep	0.0	0.1	-0.1	0.0	-0.1	-0.4	-0.8	-0.1	0.0	0.2	0.2	-0.3	-0.2	0.1	0.2	0.5	0.8	1.0	1.4	1.4	1.6	1.8	2.0	1.2	0.4	2.0
19-Sep	1.6	1.4	1.3	1.7	1.3	1.6	1.8	2.0	1.6	1.7	1.2	1.7	2.2	2.5	2.4	2.7	2.1	0.7	1.3	1.8	1.7	1.7	1.6	1.5	1.7	2.7
20-Sep	0.7	0.5	1.3	1.0	0.6	0.9	0.7	0.8	0.9	0.9	0.6	0.9	0.8	0.7	0.6	0.9	0.5	0.6	0.7	1.1	1.7	1.3	1.4	1.1	0.9	1.7
21-Sep	0.9	0.6	0.3	0.2	0.4	0.8	1.0	1.2	1.4	1.1	0.9	1.4	0.5	0.9	1.3	1.6	1.5	1.5	0.9	1.0	0.6	0.4	0.3	0.3	0.9	1.6
22-Sep	0.0	-0.1	-0.1	0.4	0.8	1.2	0.1	-0.3	-0.2	-0.5	-0.8	-0.3	-0.2	0.4	0.2	0.3	0.1	0.2	0.1	0.0	-0.1	-0.1	0.0	-0.2	0.0	1.2
23-Sep	0.0	0.2	0.3	0.7	1.1	1.2	1.1	0.7	0.2	0.5	0.7	0.5	0.5	0.7	0.4	1.2	1.0	1.6	1.6	1.6	1.6	1.1	0.8	0.4	0.8	1.6
24-Sep	0.0	0.0	0.1	0.1	0.4	0.2	0.3	0.5	0.7	1.0	0.9	0.4	0.3	0.7	0.4	0.2	0.3	0.3	0.2	0.3	0.2	0.0	0.0	1.3	0.4	1.3
25-Sep	1.2	0.0	0.4	0.1	-0.5	-1.0	-0.9	-0.4	0.3	-0.6	-0.5	-0.6	-0.2	-0.4	-0.9	-1.2	-0.3	-1.6	-0.9	-1.6	-1.3	-1.6	-1.8	-1.3	-0.6	1.2
26-Sep	-1.1	-0.9	-1.0	-0.6	-0.2	0.3	0.2	0.6	0.3	0.0	0.1	0.2	0.0	0.5	0.0	0.0	-0.1	0.5	0.2	0.3	0.1	0.1	-0.1	0.1	0.0	0.6
27-Sep	0.1	0.0	0.3	0.0	0.3	0.2	0.2	0.1	0.1	0.7	0.4	0.4	1.0	0.1	0.9	0.4	0.4	0.5	0.3	0.3	0.4	0.5	0.5	0.5	0.4	1.0
28-Sep	0.3	0.2	0.3	0.8	0.9	1.4	1.1	1.5	1.7	1.0	1.0	1.0	0.8	0.5	0.7	0.9	1.3	1.2	1.5	1.5	1.3	1.3	1.5	1.6	1.1	1.7
29-Sep	1.7	1.5	1.7	1.3	1.3	1.2	1.2	0.7	1.0	0.9	0.3	0.2	0.2	0.1	-0.1	0.1	-0.2	0.3	0.0	0.2	0.1	0.0	0.3	0.0	0.6	1.7
30-Sep	-0.1	-0.3	-0.3	-0.6	-0.8	-0.4	-0.5	-0.8	-0.6	-0.9	-0.7	-1.3	-0.9	-1.0	-0.9	-0.5	0.0	-0.5	-0.9	-0.6	-0.8	-0.9	0.0	-0.1	-0.6	0.0
	0.4	0.3	0.4	0.5	0.5	0.5	0.4	0.4	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	0.3	0.4	0.4	Diurnal Average	
	2.2	3.1	1.9	2.8	2.5	1.9	2.3	2.0	1.7	1.7	1.6	1.9	2.2	2.5	2.4	2.7	2.2	2.3	1.8	1.8	1.7	1.9	2.0	2.7	Diurnal Maximum	

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

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

Mannix - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.9 km/h on Sep 11 09:00

Minimum Value: 0.1 km/h on Sep 8 00:00

Percentiles: P_1 = 0.3 P_{10} = 0.6 Q_1 = 0.9 Median = 1.8 Q_3 = 2.5 P_{90} = 3.1 P_{99} = 4.1

Hours in Service:	720
Hours of Data:	720
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-Sep	0.4	0.8	1.2	0.9	1.3	1.2	1.0	1.0	1.6	1.5	2.0	2.3	2.6	2.8	2.8	3.0	3.0	3.1	2.2	1.9	2.4	2.4	2.3	2.1	3.1
2-Sep	1.7	2.0	1.9	1.9	2.0	2.3	2.5	2.7	2.6	2.6	3.0	3.2	3.3	3.3	3.5	3.6	3.5	3.6	3.6	3.7	3.3	3.0	2.1	1.9	3.7
3-Sep	2.3	2.6	2.8	2.4	3.1	3.1	3.4	2.8	2.6	2.4	2.3	2.7	2.1	3.0	2.2	1.9	2.1	2.1	1.5	1.4	1.8	2.2	2.1	2.5	3.4
4-Sep	2.6	2.2	2.1	2.0	1.4	0.8	0.7	0.9	0.8	2.4	2.5	3.3	3.2	3.9	4.5	4.2	4.2	3.8	3.9	3.3	3.0	2.8	2.6	2.5	4.5
5-Sep	2.5	2.1	2.1	2.0	1.6	1.8	1.3	1.8	1.9	2.1	2.5	2.5	2.7	2.6	2.3	2.0	1.8	1.8	0.8	0.4	0.3	0.4	0.3	0.3	2.7
6-Sep	0.6	0.8	0.6	0.5	0.8	0.7	0.8	1.1	1.4	1.1	1.5	2.0	2.4	2.4	2.1	1.7	1.5	1.4	1.4	1.5	1.8	2.1	1.7	1.5	2.4
7-Sep	1.7	1.6	1.4	1.2	1.0	1.2	1.0	1.7	1.5	1.8	1.9	2.4	2.4	2.2	2.0	1.7	1.5	1.1	0.5	0.8	0.6	0.6	0.3	0.1	2.4
8-Sep	0.2	0.4	0.6	0.5	0.4	0.5	0.7	1.2	1.7	1.8	2.2	2.5	2.6	2.6	2.4	2.0	1.6	1.2	0.7	0.4	0.4	0.5	0.7	0.5	2.6
9-Sep	0.5	0.7	1.0	0.7	0.9	0.9	1.4	1.4	1.2	1.5	2.5	2.5	3.2	3.4	3.2	2.8	2.0	2.6	3.3	2.2	1.6	2.0	2.3	2.5	3.4
10-Sep	2.8	2.8	2.4	1.8	2.4	2.2	1.8	2.8	3.3	2.8	2.4	2.0	2.6	2.6	2.5	2.4	2.4	2.3	2.3	2.3	2.7	2.6	2.6	2.7	3.3
11-Sep	2.7	3.0	3.6	4.0	3.9	3.9	3.5	3.9	4.9	4.5	4.4	4.2	3.9	3.5	4.0	4.1	3.0	3.1	2.8	3.2	2.6	2.2	2.0	1.7	4.9
12-Sep	1.6	1.4	0.9	1.3	0.8	0.8	0.6	1.1	1.1	1.8	2.1	2.0	2.5	2.6	2.4	2.1	2.1	1.5	0.6	0.4	0.5	0.8	0.9	0.9	2.6
13-Sep	0.8	1.1	1.1	0.9	0.8	0.9	0.7	1.0	1.5	2.1	2.4	2.8	2.4	2.7	2.5	2.2	1.6	0.7	2.1	2.9	2.8	2.0	1.6	2.3	2.9
14-Sep	2.3	2.6	2.6	2.6	2.5	3.0	3.0	2.6	2.6	2.6	2.5	2.4	2.6	2.6	3.1	2.5	2.7	2.2	1.7	1.6	1.6	0.8	0.9	1.0	3.1
15-Sep	0.9	0.7	0.8	0.8	1.1	0.3	0.3	0.8	1.1	1.6	2.1	2.3	2.5	2.5	2.5	1.5	1.7	0.6	0.6	0.8	0.8	0.8	0.8	0.9	2.5
16-Sep	1.4	1.1	1.3	0.9	0.8	0.8	0.6	0.5	0.8	1.8	1.6	2.0	2.1	2.4	2.0	1.4	1.1	0.7	0.9	1.7	2.0	1.7	2.3	2.2	2.4
17-Sep	2.5	2.3	2.6	2.1	2.1	1.5	1.6	1.1	1.7	2.0	2.0	2.0	1.3	1.1	1.6	1.0	0.7	0.6	0.3	0.3	0.5	0.3	0.3	0.5	2.6
18-Sep	0.4	0.5	0.4	0.6	0.2	0.6	1.0	1.1	1.6	1.7	2.1	2.0	2.0	2.4	2.1	1.7	1.7	1.2	0.8	0.3	0.5	0.7	0.8	0.7	2.4
19-Sep	0.7	0.7	0.9	0.8	0.6	0.7	0.9	1.0	1.5	1.7	1.7	2.3	2.6	3.1	2.9	2.8	2.3	1.7	1.0	1.2	1.2	1.3	1.3	0.8	3.1
20-Sep	0.7	0.6	0.8	0.9	0.9	0.9	0.7	0.7	1.0	1.6	1.4	1.9	2.8	2.7	2.4	2.2	1.4	0.7	0.4	0.5	0.7	1.5	0.9	0.8	2.8
21-Sep	0.7	0.6	0.6	0.6	0.6	0.7	0.6	1.0	1.2	1.5	1.6	1.7	1.5	1.4	2.3	2.2	1.6	1.3	0.9	0.8	1.3	1.0	0.8	0.8	2.3
22-Sep	0.9	0.5	0.3	0.4	0.5	0.4	0.4	0.5	1.2	2.0	2.5	2.8	2.6	2.4	2.7	2.6	2.3	1.3	0.7	0.4	0.3	0.3	0.3	0.4	2.8
23-Sep	0.2	0.4	0.4	0.4	0.5	0.7	0.9	1.0	1.0	1.5	1.4	1.3	1.3	1.6	1.7	1.8	1.2	1.4	1.7	1.3	1.0	1.0	0.5	0.6	1.8
24-Sep	0.6	0.5	0.2	0.7	0.5	0.3	0.5	0.6	1.0	1.1	1.3	2.3	2.9	3.1	2.8	2.1	1.9	0.9	0.3	0.2	0.3	0.2	0.9	0.7	3.1
25-Sep	0.5	0.6	0.7	0.5	0.5	0.9	1.1	1.3	1.7	2.1	2.5	2.5	2.6	2.4	2.2	1.8	1.8	2.1	2.2	2.2	2.6	2.6	2.6	3.0	3.0
26-Sep	2.7	2.0	2.1	2.0	1.5	1.9	2.4	2.9	3.1	3.1	3.5	3.5	3.6	4.1	3.6	3.7	3.8	3.7	3.2	3.3	3.2	3.0	3.0	2.0	4.1
27-Sep	1.7	1.8	2.2	2.4	2.7	2.9	3.0	3.2	3.2	3.4	3.0	2.8	3.2	2.8	3.4	2.7	2.7	2.3	0.7	0.8	0.7	0.8	0.8	0.8	3.4
28-Sep	0.8	0.8	0.9	0.9	0.7	0.7	0.8	1.2	1.2	1.9	2.6	3.0	3.3	2.8	2.7	2.3	2.6	1.8	1.2	1.5	1.6	1.3	1.1	1.0	3.3
29-Sep	0.9	0.9	0.7	0.7	0.9	1.0	0.8	0.7	0.9	1.2	2.4	2.5	2.6	2.6	3.3	3.5	3.4	3.1	2.3	2.3	1.2	1.8	3.2	2.6	3.5
30-Sep	2.8	3.4	3.1	2.8	3.0	3.0	3.0	3.0	2.9	3.0	3.1	3.1	3.1	2.7	2.8	1.9	1.4	2.1	1.8	1.7	1.1	1.3	1.3	0.9	3.4
	2.8	3.4	3.6	4.0	3.9	3.9	3.5	3.9	4.9	4.5	4.4	4.2	3.9	4.1	4.5	4.2	4.2	3.8	3.9	3.7	3.3	3.0	3.2	3.0	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Summary of Hour Averages

Vertical Wind Speed 75m (VW75) - km/h

Mannix - September 2026

Maximum Value: 2.6 km/h on Sep 26 18:00

Maximum Daily Average: 1.6 km/h on Sep 27

Minimum Value: -2.3 km/h on Sep 13 20:00

Minimum Daily Average: -1.0 km/h on Sep 25

Maximum Diurnal Average: 0.7 km/h at hour 23

Minimum Diurnal Average: 0.3 km/h at hour 7

Monthly Average: 0.52 km/h

Percentiles: P_1 = -1.7 P_{10} = -0.7 Q_1 = -0.1 Median = 0.6 Q_3 = 1.2 P_{90} = 1.7 P_{99} = 2.3

Hours in Service:	720
Hours of Data:	720
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-Sep	0.6	1.4	1.4	1.5	1.7	1.4	0.3	0.5	0.7	0.6	1.0	1.1	1.2	1.1	0.4	0.6	-0.1	0.4	0.1	-0.3	-0.1	0.2	0.3	0.2	0.7	1.7
2-Sep	-0.1	-0.2	-0.4	-0.1	-0.5	-0.6	-0.8	-0.5	-0.5	-0.5	-0.7	-0.4	-0.7	-0.6	0.0	-0.3	-0.4	0.1	-0.5	0.6	-0.2	-0.9	-0.5	-0.7	-0.4	0.6
3-Sep	-0.5	2.4	0.7	2.2	1.1	0.4	0.7	0.6	-0.6	-0.6	-1.3	-1.1	-1.1	-0.9	-1.0	-0.4	2.1	0.7	-0.6	-0.8	-1.0	-1.0	-0.4	2.2	0.1	2.4
4-Sep	0.9	-0.7	0.7	1.2	0.1	-0.5	0.2	0.1	-0.1	-0.9	-1.9	-0.9	-1.9	-1.8	-1.1	-1.0	-1.7	-1.2	-1.1	-0.4	-0.9	-1.1	-0.2	-0.8	-0.6	1.2
5-Sep	0.0	-1.7	-0.8	-0.9	-0.7	-0.4	-1.1	-1.1	-0.5	-0.9	-1.0	-1.0	-0.2	0.5	0.1	-0.5	0.5	0.6	0.5	-0.2	-0.3	-0.5	-0.2	0.3	-0.4	0.6
6-Sep	0.5	1.2	0.6	0.5	0.3	0.1	0.3	0.1	0.2	0.2	0.5	0.2	0.5	0.5	0.6	0.7	0.8	1.2	0.0	-0.2	-0.5	-0.4	-0.1	0.0	0.3	1.2
7-Sep	0.1	-0.1	-0.1	-0.2	0.2	0.7	-0.2	0.1	0.3	1.0	0.4	1.1	0.9	0.4	0.1	0.6	0.5	0.6	0.4	0.9	1.2	1.1	0.9	0.5	0.5	1.2
8-Sep	0.6	0.5	-0.1	-0.5	-0.5	-0.4	-0.2	0.1	-0.2	1.1	2.3	-0.1	-0.5	-0.3	1.0	1.2	0.7	0.5	1.4	2.0	1.7	1.2	0.8	0.4	0.5	2.3
9-Sep	0.4	0.6	0.8	1.6	1.3	1.3	1.5	1.5	1.2	1.3	1.8	1.1	1.7	2.1	1.9	1.7	1.2	1.5	2.0	1.5	1.1	1.4	1.6	1.5	1.4	2.1
10-Sep	1.8	1.7	1.2	1.3	1.3	1.4	1.4	1.5	1.8	1.3	1.1	1.3	1.4	1.7	1.2	0.7	0.7	1.2	1.0	0.7	0.0	0.4	1.0	1.0	1.2	1.8
11-Sep	0.8	0.5	-0.3	-0.5	0.1	-0.5	-0.3	-0.5	-1.1	-1.0	-1.4	-0.8	-1.0	-0.1	0.2	-0.5	-0.3	-0.8	-0.4	-0.8	-0.8	-0.1	0.2	0.5	-0.4	0.8
12-Sep	0.4	0.7	0.5	0.9	0.7	0.5	0.3	0.4	0.7	0.4	0.6	1.0	1.3	1.1	0.1	0.1	0.8	0.5	0.6	0.9	1.3	1.4	1.7	1.4	0.8	1.7
13-Sep	1.3	1.2	1.0	1.2	1.1	1.1	0.7	0.7	0.8	0.6	0.9	1.2	1.4	1.3	1.6	1.3	1.3	0.4	-0.3	-2.3	-1.6	-0.4	-0.6	-0.6	0.5	1.6
14-Sep	-0.6	-2.1	-1.7	-1.3	-0.6	-0.9	-1.2	-0.8	-1.0	-0.6	-0.5	-0.8	-0.6	-0.5	-0.8	-0.2	-0.4	-1.0	-0.7	-0.5	-0.5	0.1	0.3	0.5	-0.7	0.5
15-Sep	0.5	0.8	0.9	0.9	0.7	0.3	0.1	0.2	0.4	0.6	0.6	0.8	1.5	1.2	1.5	0.8	0.4	0.1	0.2	0.8	0.7	0.9	0.8	-0.2	0.6	1.5
16-Sep	-0.8	-0.9	-0.8	-0.5	-0.5	-0.2	0.0	0.2	0.4	0.5	0.9	0.7	0.5	0.4	0.8	0.1	0.1	-0.3	0.1	1.2	0.4	-0.5	-0.4	-0.4	0.0	1.2
17-Sep	-0.4	-0.3	-0.4	-0.1	-0.5	-0.1	-0.5	0.6	0.8	1.0	1.0	0.3	0.2	0.1	0.5	0.2	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.0	0.2	1.0
18-Sep	0.3	0.4	0.7	0.8	0.6	-0.2	-0.8	-0.2	0.0	0.5	0.6	0.0	0.1	0.7	0.3	0.1	0.3	0.8	0.2	0.5	1.7	1.7	2.1	1.4	0.5	2.1
19-Sep	1.6	1.6	1.3	1.6	1.0	0.7	0.5	1.2	1.2	1.2	0.7	1.3	1.6	2.2	2.5	2.3	1.9	1.1	1.6	1.8	1.8	1.7	1.7	1.5	1.5	2.5
20-Sep	0.9	0.6	0.5	1.0	0.7	0.6	0.4	0.6	0.7	0.6	0.0	0.7	1.8	1.4	0.8	1.3	0.9	0.8	0.8	1.0	2.2	1.6	1.5	1.1	0.9	2.2
21-Sep	1.2	1.2	0.9	0.9	0.7	0.6	0.5	0.3	0.7	0.5	0.3	0.5	0.0	0.1	-0.1	0.1	0.7	1.2	1.1	1.1	1.0	1.3	0.7	0.4	0.7	1.3
22-Sep	0.0	-0.1	-0.3	0.3	0.7	0.7	0.3	0.2	0.6	0.5	0.7	1.2	1.1	1.6	1.3	1.6	1.2	0.9	0.9	0.9	1.0	0.9	0.8	0.4	0.7	1.6
23-Sep	0.3	0.4	0.3	0.4	0.5	0.9	0.2	0.8	0.3	0.4	0.5	0.2	0.1	0.0	-0.3	0.4	-0.2	0.4	0.2	0.1	0.8	1.3	1.2	0.6	0.4	1.3
24-Sep	0.8	0.8	1.1	0.7	0.5	0.3	0.3	0.3	0.5	0.7	0.2	0.9	1.6	1.9	1.2	1.4	1.3	1.0	0.8	0.8	1.0	0.9	0.6	0.5	0.8	1.9
25-Sep	0.7	-0.4	-0.2	-0.1	-0.4	-1.1	-1.0	-0.7	-0.7	-1.5	-1.3	-1.3	-1.0	-1.3	-1.0	-1.2	-0.5	-1.6	-1.3	-1.7	-1.1	-1.6	-1.6	-1.1	-1.0	0.7
26-Sep	-1.5	-0.6	-0.7	0.2	0.8	1.4	1.6	2.1	2.1	2.0	1.8	2.3	2.2	2.5	2.1	2.3	2.1	2.6	2.1	1.8	2.0	2.1	1.7	1.1	1.5	2.6
27-Sep	1.2	1.1	1.4	1.5	1.7	2.0	1.8	1.8	1.4	2.0	1.6	1.5	2.2	1.4	2.2	1.6	1.4	1.5	1.1	1.5	1.7	1.8	1.9	1.8	1.6	2.2
28-Sep	1.6	1.2	0.7	0.7	0.5	1.0	1.2	1.8	1.5	1.2	1.2	1.7	1.9	1.7	1.6	1.3	1.7	1.5	1.8	2.0	2.0	1.5	1.7	1.7	1.4	2.0
29-Sep	1.7	1.3	1.5	1.1	1.4	1.2	1.0	1.0	0.8	0.9	1.4	1.5	1.9	1.7	1.8	1.9	1.9	2.2	1.4	1.5	1.0	0.9	2.1	1.6	1.4	2.2
30-Sep	1.5	1.5	1.6	1.0	0.9	1.3	1.5	0.8	0.8	0.8	1.0	0.3	0.8	0.2	0.7	0.5	0.9	0.4	-0.6	-0.1	0.1	-0.5	0.6	0.1	0.7	1.6
	0.5	0.5	0.4	0.6	0.5	0.4	0.3	0.5	0.4	0.5	0.4	0.5	0.6	0.7	0.7	0.6	0.7	0.6	0.4	0.5	0.5	0.5	0.7	0.6	Diurnal Average	
	1.8	2.4	1.6	2.2	1.7	2.0	1.8	2.1	2.1	2.0	2.3	2.3	2.2	2.5	2.5	2.3	2.1	2.6	2.1	2.0	2.2	2.1	2.1	2.2	Diurnal Maximum	

Summary of Hour Standard Deviations

Mannix - September 2026

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

Maximum Value: 5.0 km/h on Sep 11 09:00

Minimum Value: 0.2 km/h on Sep 8 00:00

Percentiles: P_1 = 0.3 P_{10} = 0.6 Q_1 = 0.9 Median = 1.9 Q_3 = 2.7 P_{90} = 3.2 P_{99} = 4.2

Hours in Service:	720
Hours of Data:	720
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-Sep	0.4	0.7	0.7	0.6	0.9	1.3	0.7	0.8	1.5	1.4	2.0	2.5	3.1	3.2	3.0	3.0	3.1	3.1	2.2	1.9	2.3	2.4	2.0	2.1	3.2
2-Sep	1.9	2.2	2.1	2.1	2.1	2.9	2.6	2.6	2.8	2.7	2.9	3.2	3.2	3.2	3.8	3.6	3.5	4.2	4.0	4.2	3.8	3.2	2.2	1.9	4.2
3-Sep	2.8	3.7	3.4	3.4	4.2	3.7	4.2	3.5	2.8	3.1	3.5	4.1	2.7	4.5	3.4	2.7	2.9	3.0	1.7	1.9	2.7	3.3	3.2	3.5	4.5
4-Sep	3.5	2.5	3.0	2.8	1.9	1.0	0.7	1.0	1.0	1.9	2.1	3.0	2.8	3.4	4.1	4.2	4.0	3.6	3.8	3.4	3.1	2.9	2.8	2.6	4.2
5-Sep	2.9	1.7	2.1	2.2	1.8	2.0	1.0	1.7	1.8	2.2	2.8	3.0	3.4	3.2	3.0	2.6	2.2	2.3	0.9	0.5	0.4	0.4	0.5	0.5	3.4
6-Sep	0.4	0.4	0.9	0.8	0.8	0.6	0.8	1.3	1.4	1.1	1.4	2.0	2.5	2.4	2.5	1.9	1.6	1.2	1.3	1.4	1.9	2.2	1.5	1.2	2.5
7-Sep	1.4	1.2	1.2	1.3	1.2	1.2	1.4	1.8	1.6	2.0	1.9	2.8	2.7	2.6	2.4	2.1	1.8	1.3	0.5	0.7	0.4	0.5	0.3	0.2	2.8
8-Sep	0.3	0.5	0.8	0.6	0.5	0.5	0.9	1.4	1.9	2.2	2.5	3.0	3.1	3.0	2.8	2.6	1.9	1.3	0.6	0.3	0.6	0.7	0.7	0.5	3.1
9-Sep	0.5	0.6	0.8	0.7	0.7	0.7	1.0	1.2	1.0	1.6	2.9	2.7	3.3	3.4	3.4	2.9	2.0	2.6	3.2	2.3	1.5	2.2	2.2	2.3	3.4
10-Sep	2.5	2.8	2.4	1.8	2.2	2.3	1.9	2.7	3.3	3.1	2.2	1.9	2.4	2.5	2.5	2.4	2.3	2.3	2.2	2.5	2.7	2.8	2.5	2.6	3.3
11-Sep	2.8	3.0	3.4	3.6	3.6	3.8	3.4	4.0	5.0	4.4	4.3	4.1	3.6	3.4	3.8	3.8	2.9	2.8	3.0	3.0	2.5	2.3	1.9	1.7	5.0
12-Sep	1.6	1.3	0.8	1.2	0.8	0.8	0.6	1.2	1.2	2.2	2.6	2.5	2.9	3.2	3.0	2.3	2.3	1.4	0.5	0.2	0.2	0.7	0.6	0.6	3.2
13-Sep	0.7	0.9	0.8	0.9	0.9	1.0	0.6	1.0	1.5	2.2	2.5	3.1	2.7	3.0	2.9	2.4	1.7	0.9	2.1	2.5	2.5	2.2	1.4	2.0	3.1
14-Sep	2.3	2.1	2.5	2.6	2.5	2.9	2.8	2.4	2.5	2.5	2.5	2.3	2.6	2.5	2.9	2.3	2.7	1.8	1.6	1.7	1.5	0.9	1.1	0.9	2.9
15-Sep	0.8	0.5	0.6	0.7	1.1	0.4	0.3	0.9	1.2	1.6	2.5	2.6	2.9	2.9	2.6	1.5	1.8	0.7	0.8	0.6	0.7	0.6	0.7	1.1	2.9
16-Sep	1.5	1.3	1.4	0.9	0.8	1.0	0.7	0.5	0.8	2.0	1.9	2.1	2.4	2.7	2.5	1.6	1.4	0.9	1.3	2.7	2.7	2.0	2.3	2.2	2.7
17-Sep	2.3	2.3	2.4	2.1	2.1	1.5	1.6	1.1	1.7	2.2	2.3	2.3	1.4	1.1	1.8	1.0	0.7	0.6	0.3	0.4	0.4	0.4	0.4	0.7	2.4
18-Sep	0.6	0.7	0.6	0.6	0.3	0.8	1.1	1.1	1.6	1.9	2.5	2.3	2.4	2.9	2.6	2.0	2.0	1.7	1.1	0.4	0.4	0.4	0.7	0.8	2.9
19-Sep	0.6	0.5	0.4	0.3	0.5	0.6	0.8	0.6	1.5	1.5	1.7	2.4	2.7	3.2	3.1	2.9	2.3	1.4	0.8	1.1	1.2	1.4	1.4	0.9	3.2
20-Sep	0.9	0.8	0.9	0.7	1.1	1.0	0.9	0.7	0.8	1.6	1.4	2.0	3.0	2.9	2.8	2.3	1.3	0.6	0.4	0.3	0.6	1.4	0.9	0.8	3.0
21-Sep	0.7	0.6	0.8	0.8	0.7	0.8	0.7	0.4	0.7	1.1	1.3	1.4	1.5	1.8	2.8	2.2	1.8	1.3	0.7	0.7	1.6	1.2	1.0	1.1	2.8
22-Sep	1.5	0.7	0.5	0.6	0.4	0.4	0.5	0.4	1.0	2.0	2.6	3.2	2.7	2.8	2.7	2.9	2.3	1.4	0.7	0.4	0.3	0.3	0.4	0.5	3.2
23-Sep	0.4	0.5	0.4	0.3	0.3	0.7	0.9	0.9	1.0	1.4	1.4	1.3	1.2	1.6	1.7	2.1	1.3	1.1	1.3	1.0	0.8	1.0	0.5	0.7	2.1
24-Sep	0.7	0.3	0.3	0.7	0.7	0.4	0.7	0.7	0.8	0.9	1.0	2.1	3.0	3.3	2.7	2.3	1.9	0.9	0.3	0.2	0.3	0.2	0.9	0.6	3.3
25-Sep	0.6	0.8	0.9	0.9	0.6	1.2	1.2	1.6	2.3	2.0	2.4	2.3	2.6	2.4	1.9	1.5	1.9	1.5	1.7	1.7	2.3	2.1	2.4	2.6	2.6
26-Sep	2.2	1.9	1.9	1.9	1.5	1.8	2.4	2.8	3.4	3.3	3.5	3.8	3.8	4.2	3.7	4.0	4.1	4.1	3.5	3.8	3.5	3.2	3.4	2.0	4.2
27-Sep	1.5	1.9	2.4	2.3	2.8	2.8	2.8	3.2	3.2	3.1	2.8	2.6	3.0	3.1	3.5	2.8	2.5	2.3	0.7	0.5	0.4	0.4	0.5	0.6	3.5
28-Sep	0.8	1.0	1.1	1.1	0.8	0.9	0.8	1.0	1.0	2.0	2.6	3.1	3.5	2.9	2.8	2.4	2.9	1.8	1.3	1.3	1.6	1.2	1.0	0.9	3.5
29-Sep	0.9	0.7	0.7	0.7	1.0	1.2	1.0	0.8	1.1	1.4	2.4	2.6	2.9	2.8	3.5	3.8	3.7	3.4	2.5	2.4	1.4	2.0	3.3	3.0	3.8
30-Sep	3.1	3.6	3.4	3.0	3.0	3.1	3.1	3.2	3.1	3.2	3.1	3.1	3.2	2.6	2.6	2.0	1.6	2.1	1.8	1.6	1.0	1.2	1.2	1.3	3.6
	3.5	3.7	3.4	3.6	4.2	3.8	4.2	4.0	5.0	4.4	4.3	4.1	3.8	4.5	4.1	4.2	4.1	4.2	4.0	4.2	3.8	3.3	3.4	3.5	
	Diurnal Maximum																								

Maximum Value: 2.4 km/h on Sep 8 11:00

Maximum Daily Average: 0.9 km/h on Sep 19

Minimum Value: -1.3 km/h on Sep 2 07:00

Minimum Daily Average: -0.6 km/h on Sep 2

Maximum Diurnal Average: 0.4 km/h at hour 23

Minimum Diurnal Average: 0.1 km/h at hour 7

Monthly Average: 0.22 km/h

Percentiles: P_1 = -1.1 P_{10} = -0.4 Q_1 = 0.0 Median = 0.2 Q_3 = 0.5 P_{90} = 0.8 P_{99} = 1.4

Hours in Service:	720
Hours of Data:	720
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-Sep	0.4	0.9	0.7	0.5	0.9	1.3	1.2	1.3	0.6	0.3	0.7	1.0	1.0	1.1	0.7	0.9	0.3	1.0	0.7	0.7	0.8	1.3	1.3	1.3	0.9	1.3
2-Sep	0.9	-0.4	-1.3	-1.0	-1.3	-0.7	-1.3	-0.8	-0.2	-0.9	-0.4	-0.1	-0.8	-1.1	-0.3	-0.8	-1.1	0.0	-0.7	0.6	-0.4	-1.1	0.1	-0.5	-0.6	0.9
3-Sep	-0.9	1.8	0.5	2.0	1.0	0.4	0.6	0.5	-0.7	-0.3	-0.2	0.0	-0.4	0.0	-0.4	-0.1	2.3	1.0	0.1	-0.3	-0.4	-0.3	0.0	2.2	0.3	2.3
4-Sep	0.9	-1.1	0.6	1.3	0.1	-0.3	0.1	0.0	-0.3	-0.4	-0.9	0.4	-0.6	-0.4	0.4	0.4	-0.7	-0.2	-0.3	0.4	-0.2	-0.7	0.3	0.0	-0.1	1.3
5-Sep	0.7	-0.9	-0.2	-0.5	-0.2	0.2	-0.8	-0.8	-0.2	-0.4	-0.6	-0.6	0.2	0.8	0.4	-0.5	0.2	0.4	0.2	-0.2	-0.2	-0.2	0.0	0.1	-0.1	0.8
6-Sep	0.2	0.7	0.5	0.5	0.9	0.8	0.7	0.3	0.2	0.2	0.5	0.4	0.6	0.5	0.4	0.3	0.4	0.7	0.4	0.6	-0.1	0.4	0.8	1.0	0.5	1.0
7-Sep	0.9	1.0	1.0	0.1	0.6	0.7	0.0	0.1	0.3	0.5	-0.1	0.9	0.7	0.2	0.0	0.9	0.5	0.4	0.2	0.7	0.6	0.7	0.4	0.0	0.5	1.0
8-Sep	0.1	0.1	-0.3	-0.4	-0.4	-0.3	-0.3	0.0	-0.2	1.3	2.4	-0.2	-0.4	-0.3	0.7	0.9	0.4	0.1	0.3	0.7	0.7	0.4	0.2	-0.1	0.2	2.4
9-Sep	-0.1	0.1	0.5	0.5	0.5	0.4	0.5	0.8	0.5	0.9	1.2	0.3	0.6	0.6	0.4	0.2	0.0	0.1	0.2	0.3	0.1	0.2	0.2	0.2	0.4	1.2
10-Sep	0.3	0.5	0.3	0.2	0.1	0.2	0.3	0.2	0.5	0.3	0.1	0.5	0.3	0.5	0.3	0.2	0.1	0.4	0.3	0.2	0.0	0.0	0.3	0.4	0.3	0.5
11-Sep	0.2	0.3	-0.2	-0.2	0.1	-0.4	-0.1	-0.2	-0.8	-0.5	-0.9	-0.6	-0.6	0.0	0.4	-0.3	-0.2	-0.7	-0.4	-0.7	-0.7	0.1	0.0	0.3	-0.2	0.4
12-Sep	0.3	0.2	0.2	0.5	0.3	0.2	-0.1	0.1	0.3	0.0	0.1	0.5	0.7	0.9	-0.1	-0.4	0.1	-0.2	0.0	-0.1	0.0	0.2	0.5	0.4	0.2	0.9
13-Sep	0.4	0.3	0.2	0.4	0.4	0.3	0.0	0.2	0.2	-0.2	0.2	0.2	0.4	0.2	0.7	0.4	0.9	-0.1	-0.2	-1.0	-0.6	-0.2	-0.2	-0.2	0.1	0.9
14-Sep	0.0	-1.2	-0.8	-0.4	-0.1	0.0	-0.6	-0.2	-0.6	-0.2	-0.2	-0.8	-0.3	0.1	-0.2	0.3	-0.3	-0.9	-0.6	-0.1	-0.3	0.1	0.3	0.3	-0.3	0.3
15-Sep	0.2	0.2	0.4	0.5	0.5	-0.2	-0.2	-0.3	0.0	0.2	0.0	0.3	0.8	0.5	0.5	0.2	0.3	0.1	-0.1	0.1	0.1	0.3	0.2	-0.2	0.2	0.8
16-Sep	-0.4	-0.7	-0.5	-0.3	-0.3	-0.1	0.0	-0.2	0.0	0.0	0.5	0.4	0.1	0.4	0.8	0.0	0.1	-0.4	0.4	1.5	0.5	-0.6	-0.1	-0.3	0.0	1.5
17-Sep	-0.6	-0.4	0.4	0.3	-0.5	0.3	0.0	0.7	0.7	0.9	0.6	0.0	0.2	0.0	0.3	0.1	0.1	0.0	0.0	-0.1	0.0	0.0	0.1	-0.2	0.1	0.9
18-Sep	0.0	0.1	0.2	0.1	0.1	-0.4	-0.8	0.1	0.2	0.5	0.4	-0.2	-0.2	0.4	0.4	0.4	0.5	1.2	0.5	0.8	1.0	0.9	1.4	0.8	0.3	1.4
19-Sep	0.7	0.8	0.3	0.6	0.7	1.0	1.4	1.5	1.2	0.7	0.7	1.2	0.9	1.3	1.4	1.4	1.2	0.2	0.6	0.7	0.8	0.8	0.7	0.6	0.9	1.5
20-Sep	0.1	0.0	0.2	0.1	0.0	0.1	-0.1	0.0	0.3	0.3	0.0	0.5	0.7	0.6	-0.2	0.5	0.0	-0.1	-0.1	0.1	0.9	0.4	0.5	0.2	0.2	0.9
21-Sep	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.4	0.2	0.6	-0.2	0.3	-0.2	0.5	0.8	1.1	0.0	-0.1	0.1	0.3	0.2	0.2	0.2	1.1
22-Sep	0.1	-0.1	-0.2	0.2	0.3	0.7	0.0	0.1	0.4	0.2	0.7	0.7	0.7	1.0	0.4	0.6	0.3	0.4	0.3	0.1	0.1	0.1	0.3	0.1	0.3	1.0
23-Sep	0.0	0.1	0.0	0.0	0.0	0.3	0.1	0.4	0.1	0.2	0.1	-0.1	0.1	-0.1	-0.4	0.3	0.2	0.9	1.2	1.0	1.1	0.8	0.5	0.1	0.3	1.2
24-Sep	0.2	0.3	0.4	0.3	0.0	0.0	0.0	-0.1	0.0	0.2	0.0	0.0	0.2	0.6	-0.2	0.5	0.4	0.2	0.0	0.0	0.0	0.0	0.3	0.5	0.2	0.6
25-Sep	0.8	-0.1	0.0	0.0	-0.1	-0.4	-0.4	-0.2	0.0	-0.2	0.1	0.2	0.3	-0.2	-0.2	-0.1	0.5	-0.7	-0.3	-0.7	-0.4	-0.7	-0.7	-0.5	-0.2	0.8
26-Sep	-0.6	-0.4	-0.4	0.1	0.5	0.5	0.4	1.0	0.7	0.5	0.4	0.9	0.7	0.8	0.7	0.8	0.6	1.3	0.9	0.5	0.8	0.6	0.6	0.2	0.5	1.3
27-Sep	0.2	0.1	0.2	0.3	0.4	0.6	0.4	0.6	0.1	0.7	0.1	0.2	0.9	0.1	0.8	0.1	0.1	0.2	0.0	0.1	0.3	0.4	0.5	0.4	0.3	0.9
28-Sep	0.4	0.3	0.1	0.1	0.0	0.2	0.2	0.6	0.7	0.5	0.1	0.3	0.3	0.3	0.2	0.2	0.7	0.4	0.7	0.9	1.0	0.5	0.7	0.6	0.4	1.0
29-Sep	0.6	0.6	0.7	0.3	0.4	0.5	0.3	0.2	0.1	0.1	0.2	0.4	0.9	0.7	0.5	0.4	0.5	1.0	0.3	0.5	0.3	0.4	1.0	0.5	0.5	1.0
30-Sep	0.6	0.8	1.0	0.7	0.1	0.6	0.7	0.3	0.3	0.3	0.8	0.2	0.6	0.1	0.2	0.1	0.4	0.2	-0.4	-0.1	0.0	-0.4	0.6	0.0	0.3	1.0
	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.1	0.2	0.2	0.2	0.4	0.3	Diurnal Average	
	0.9	1.8	1.0	2.0	1.0	1.3	1.4	1.5	1.2	1.3	2.4	1.2	1.0	1.3	1.4	1.4	2.3	1.3	1.2	1.5	1.1	1.3	1.4	2.2	Diurnal Maximum	

Summary of Hour Standard Deviations

Mannix - September 2026

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

Maximum Value: 4.8 km/h on Sep 11 09:00

Minimum Value: 0.1 km/h on Sep 12 21:00

Percentiles: P_1 = 0.2 P_{10} = 0.5 Q_1 = 0.8 Median = 1.8 Q_3 = 2.7 P_{90} = 3.2 P_{99} = 4.1

Hours in Service:	720
Hours of Data:	720
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-Sep	0.3	0.5	0.6	0.6	0.7	1.0	0.7	0.7	1.6	1.2	2.1	2.6	3.2	3.4	3.2	3.1	3.2	3.2	2.4	1.7	2.4	2.5	2.2	2.0	3.4
2-Sep	1.8	2.1	1.9	1.9	2.0	2.8	2.5	2.5	2.9	2.7	3.1	3.4	3.4	3.2	3.8	3.6	3.4	4.1	4.0	4.1	3.7	3.2	2.1	1.8	4.1
3-Sep	2.7	3.2	3.3	3.0	3.7	3.6	3.8	3.5	3.0	2.7	2.2	2.7	2.4	3.3	2.4	2.1	2.7	2.7	1.6	1.5	2.1	2.5	2.5	3.0	3.8
4-Sep	3.4	2.5	2.9	2.9	1.9	0.9	0.5	0.9	0.9	1.6	2.1	2.8	2.9	3.4	4.2	4.2	4.1	3.6	3.8	3.6	3.3	2.9	2.7	2.8	4.2
5-Sep	2.9	1.7	2.3	2.1	1.9	2.1	1.0	1.7	1.8	2.2	2.9	2.9	3.2	3.1	2.9	2.4	2.2	2.2	0.9	0.4	0.4	0.4	0.5	0.3	3.2
6-Sep	0.3	0.3	0.7	0.6	0.5	0.5	0.7	1.1	1.4	1.1	1.3	1.9	2.6	2.5	2.7	2.0	1.7	1.2	1.3	1.3	1.8	2.1	1.4	0.9	2.7
7-Sep	1.2	0.9	0.7	1.0	0.6	0.9	1.1	1.6	1.5	2.0	2.0	2.9	2.8	2.6	2.3	2.0	1.8	1.2	0.6	0.6	0.3	0.5	0.3	0.2	2.9
8-Sep	0.3	0.5	0.7	0.6	0.5	0.5	0.9	1.4	1.8	2.1	2.4	2.9	3.0	2.9	2.7	2.6	1.9	1.3	0.4	0.3	0.5	0.7	0.7	0.5	3.0
9-Sep	0.5	0.5	0.6	0.6	0.7	0.6	0.8	1.1	0.9	1.6	3.0	2.6	3.5	3.5	3.3	2.8	1.8	2.6	3.1	2.2	1.3	2.3	2.1	2.4	3.5
10-Sep	2.6	2.8	2.4	1.8	2.2	2.3	1.9	2.7	3.4	3.2	2.3	2.0	2.4	2.5	2.5	2.4	2.2	2.4	2.1	2.5	2.7	2.7	2.4	2.5	3.4
11-Sep	2.6	3.0	3.3	3.4	3.5	3.8	3.4	3.9	4.8	4.2	4.1	3.8	3.6	3.3	3.7	3.7	2.8	2.7	2.7	2.9	2.4	2.2	1.9	1.6	4.8
12-Sep	1.6	1.2	0.8	1.0	0.8	0.7	0.5	1.2	1.1	2.0	2.8	2.6	2.9	3.2	3.0	2.3	2.3	1.4	0.5	0.2	0.1	0.5	0.3	0.5	3.2
13-Sep	0.6	0.8	0.8	0.7	0.8	1.0	0.6	1.0	1.4	2.1	2.5	3.1	2.9	2.8	3.0	2.3	1.8	1.0	1.7	2.5	2.5	2.1	1.3	1.9	3.1
14-Sep	2.1	2.1	2.6	2.8	2.6	2.8	2.5	2.3	2.2	2.3	2.5	2.2	2.5	2.5	2.7	2.3	2.6	1.8	1.5	1.6	1.4	0.9	1.1	0.9	2.8
15-Sep	0.8	0.5	0.5	0.7	0.9	0.4	0.3	0.9	1.1	1.5	2.4	2.6	2.8	2.9	2.6	1.5	1.7	0.7	0.8	0.6	0.5	0.4	0.6	1.2	2.9
16-Sep	1.5	1.4	1.4	0.9	0.7	1.0	0.6	0.5	0.8	2.0	1.9	2.2	2.4	2.6	2.4	1.6	1.4	1.0	1.1	2.3	2.5	2.0	2.3	2.1	2.6
17-Sep	2.3	2.2	2.2	2.0	2.1	1.5	1.3	1.1	1.7	2.2	2.3	2.4	1.3	1.0	1.6	1.0	0.7	0.6	0.2	0.4	0.3	0.4	0.5	0.7	2.4
18-Sep	0.5	0.6	0.5	0.6	0.3	0.8	1.0	1.1	1.5	1.9	2.4	2.1	2.3	2.9	2.5	2.0	1.8	1.6	1.3	0.3	0.3	0.4	0.6	0.7	2.9
19-Sep	0.5	0.4	0.3	0.3	0.4	0.5	0.8	0.6	1.5	1.6	1.7	2.6	2.7	3.2	3.2	3.0	2.3	1.3	0.7	1.1	1.1	1.3	1.3	0.8	3.2
20-Sep	1.0	0.8	0.9	0.6	1.0	1.1	0.9	0.7	0.8	1.5	1.3	1.9	3.0	2.9	2.9	2.3	1.2	0.6	0.4	0.3	0.5	1.1	0.8	0.8	3.0
21-Sep	0.7	0.6	0.8	0.6	0.7	0.8	0.7	0.4	0.4	1.0	1.2	1.3	1.5	1.9	2.7	2.3	1.8	1.1	0.5	0.6	1.6	1.2	1.0	1.2	2.7
22-Sep	1.6	0.8	0.5	0.6	0.3	0.4	0.3	0.4	0.9	1.8	2.6	3.2	2.7	2.8	2.8	3.0	2.4	1.4	0.7	0.3	0.2	0.2	0.4	0.5	3.2
23-Sep	0.4	0.5	0.4	0.2	0.2	0.3	0.7	0.8	1.0	1.4	1.3	1.3	1.2	1.5	1.7	2.2	1.3	0.9	1.3	1.0	0.7	1.0	0.5	0.7	2.2
24-Sep	0.8	0.3	0.3	0.5	0.7	0.5	0.8	0.7	0.8	0.8	1.0	2.2	3.1	3.4	2.7	2.6	1.9	0.9	0.2	0.2	0.2	0.2	0.8	0.7	3.4
25-Sep	0.4	0.6	0.5	0.8	0.7	1.2	1.3	1.8	1.9	2.1	2.2	2.3	2.6	2.3	1.9	1.6	2.0	1.4	1.8	1.6	2.1	2.0	2.4	2.5	2.6
26-Sep	2.1	1.9	1.8	1.8	1.4	1.8	2.4	3.0	3.5	3.5	3.7	3.9	3.8	4.3	4.0	4.1	4.4	4.2	3.6	4.0	3.6	3.2	3.4	2.1	4.4
27-Sep	1.4	2.0	2.4	2.6	3.0	2.9	2.8	3.2	3.4	3.0	2.6	2.7	3.3	3.2	3.6	2.8	2.5	2.3	0.7	0.4	0.2	0.3	0.3	0.3	3.6
28-Sep	0.7	1.0	1.2	1.1	0.9	0.8	0.5	0.7	0.9	2.0	2.5	3.1	3.5	2.9	2.7	2.3	2.8	1.7	1.1	1.0	1.4	1.0	0.8	0.8	3.5
29-Sep	0.8	0.7	0.7	0.7	0.9	1.3	1.1	0.8	1.1	1.3	2.4	2.8	3.0	3.0	3.6	4.1	3.8	3.7	2.8	2.6	1.4	2.0	3.5	3.1	4.1
30-Sep	3.1	3.8	3.5	2.9	3.0	3.1	3.1	3.1	2.9	3.1	3.2	3.0	3.3	2.5	2.5	1.9	1.6	2.0	1.8	1.6	1.1	1.1	1.0	1.1	3.8
	3.4	3.8	3.5	3.4	3.7	3.8	3.8	3.9	4.8	4.2	4.1	3.9	3.8	4.3	4.2	4.2	4.4	4.2	4.0	4.1	3.7	3.2	3.5	3.1	
	Diurnal Maximum																								

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS06
PATRICIA MCINNES
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - PATRICIA McINNES (AMS06)
SEPTEMBER 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	685	35	35	100	-	-	12.3	0	1.8	0
TRS (ppb) Average	684	36	36	100	1.5	0	1.3	0	0.4	0
THC (ppm) Average	685	35	35	100	-	-	2.9	-	2.3	-
NMHC(ppm) Average	685	35	35	100	-	-	0.064	-	0.005	-
CH4(ppm) Average	685	35	35	100	-	-	2.9	-	2.3	-
O3 (ppb) Average	685	35	35	100	-	-	46.7	0	31	-
NO2 (ppb) Average	684	36	36	100	-	-	13.7	0	4.8	-
NO (ppb) Average	684	36	36	100	-	-	25	-	2.9	-
NOX (ppb) Average	684	36	36	100	-	-	33.8	-	7.6	-
NH3 (ppb) Average	614	41	106	90.97	-	-	0	0	0	-
PM2.5 (ug/m3) Average	718	2	2	100	-	-	31.2	0	7.5	0
Temperature 2 m (C) Average	720	0	0	100	-	-	28.2	-	20.8	-
Relative Humidity (%) Average	703	0	17	97.64	-	-	100	-	89.1	-
Wind Speed 10 m (km/h) Average	720	0	0	100	-	-	31	-	22	-
Wind Direction 10 m (deg) Average	720	0	0	100	-	-	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - PATRICIA McINNES (AMS06)
SEPTEMBER 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	685	0.32	0.9	-	0	0	0	0.1	0.3	0.6	12.3
TRS (ppb) Average	684	0.19	0.1	-	0	0.1	0.1	0.2	0.2	0.3	1.3
THC (ppm) Average	685	2.09	0.1	-	2	2	2	2.1	2.1	2.2	2.9
NMHC(ppm) Average	685	0	0.003	-	0	0	0	0	0	0	0.064
CH4(ppm) Average	685	2.09	0.1	-	2	2	2	2.1	2.1	2.2	2.9
O3 (ppb) Average	685	20.62	8.6	-	1.8	9.3	14.5	20	26.5	32.1	46.7
NO2 (ppb) Average	684	2.17	2.4	-	0	0.1	0.4	1.4	3	5.4	13.7
NO (ppb) Average	684	0.77	1.7	-	0	0	0.1	0.3	0.8	1.8	25
NOX (ppb) Average	684	2.94	3.5	-	0	0.1	0.6	2	3.9	6.9	33.8
NH3 (ppb) Average	614	0	0	-	0	0	0	0	0	0	0
PM2.5 (ug/m3) Average	718	3.83	2.8	-	0.1	1.2	2	3.2	5.2	6.9	31.2
Temperature 2 m (C) Average	720	12.02	5.7	-	1	5.1	7.5	11.2	16.1	19.6	28.2
Relative Humidity (%) Average	703	71.45	18.8	-	25	42.4	58.8	75.3	86.2	94.2	100
Wind Speed 10 m (km/h) Average	720	11.2	6	-	0	4	6	10	16	21	31
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - PATRICIA MCINNES (AMS06)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
NH3	01 Sep 2026 04:00	30 Sep 2026 04:00	65	Stabilization after daily QA check
Relative Humidity	07 Sep 2026 07:00	07 Sep 2026 07:00	1	Sensor operated out of range
Relative Humidity	07 Sep 2026 23:00	08 Sep 2026 02:00	4	Sensor operated out of range
Relative Humidity	08 Sep 2026 05:00	08 Sep 2026 07:00	3	Sensor operated out of range
Relative Humidity	14 Sep 2026 02:00	14 Sep 2026 02:00	1	Sensor operated out of range
Relative Humidity	16 Sep 2026 06:00	16 Sep 2026 09:00	4	Sensor operated out of range
Relative Humidity	22 Sep 2026 07:00	22 Sep 2026 08:00	2	Sensor operated out of range
Relative Humidity	26 Sep 2026 04:00	26 Sep 2026 05:00	2	Sensor operated out of range

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Patricia McInnes - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 12.3 ppb on Sep 18 10:00 Maximum Daily Average: 1.8 ppb on Sep 8

Minimum Value: 0.0 ppb on Sep 2 22:00 Minimum Daily Average: 0.0 ppb on Sep 3
Maximum Diurnal Average: 1.0 ppb at hour 10 Minimum Diurnal Average: 0.1 ppb at hour 6
Monthly Average: 0.32 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} = 2.8

Hours in Service:	720
Hours of Data:	685
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-Sep	0.1	0.1	0.0	0.1	0.1	Z	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.7	0.7	0.7	0.7	0.8	0.5	0.2	0.2	0.3	0.3	0.3	0.8
2-Sep	Z	0.3	0.1	0.1	0.1	0.0	0.1	0.2	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.2	0.5
3-Sep	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	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2
4-Sep	0.1	0.0	Z	0.1	0.1	0.1	0.0	0.1	0.0	0.3	0.7	0.5	0.5	0.0	1.0	1.8	1.3	1.2	0.6	0.4	0.2	0.3	0.0	0.1	0.4	1.8
5-Sep	0.2	0.4	0.4	Z	0.4	0.1	0.4	0.6	1.7	1.4	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.6	0.8	1.3	0.9	0.5	0.5	1.7
6-Sep	0.6	0.5	0.4	0.2	Z	0.0	0.2	0.3	0.4	0.5	0.7	0.7	0.5	0.5	0.6	0.4	0.4	0.5	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.7
7-Sep	0.3	0.1	0.1	0.1	0.0	Z	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.4	1.4	0.0	0.0	0.0	0.0	0.0	0.2	1.4
8-Sep	Z	0.0	0.0	0.0	0.0	0.1	0.5	1.9	9.2	7.9	2.0	2.9	10.4	0.5	1.0	0.6	2.1	1.2	0.6	0.3	0.1	0.2	0.1	0.3	1.8	10.4
9-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.3
10-Sep	0.0	0.1	Z	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2
11-Sep	0.1	0.1	0.0	Z	0.0	0.0	0.1	0.0	0.1	0.0	0.2	1.0	0.0	0.0	0.1	0.0	0.4	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	1.0
12-Sep	0.0	0.0	0.1	0.0	Z	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	0.1	0.0	0.0	0.0	0.1	0.1
13-Sep	0.0	0.1	0.0	0.0	0.1	Z	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.6	0.2	0.5	0.1	0.6
14-Sep	Z	0.1	0.1	0.1	0.2	0.2	0.1	0.6	0.7	1.9	0.5	0.5	0.5	0.9	0.6	0.5	0.5	0.4	0.4	2.0	0.7	0.4	0.4	0.4	0.6	2.0
15-Sep	0.4	Z	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.2	0.5
16-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.8	0.7	0.7	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8
17-Sep	0.0	0.0	0.0	Z	0.1	0.2	0.0	0.1	0.1	0.2	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.3
18-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.4	2.4	12.3	2.7	8.6	4.8	2.5	0.2	0.0	0.2	0.4	0.3	0.3	0.2	0.2	0.1	0.1	1.6	12.3
19-Sep	0.0	0.1	0.1	0.1	0.1	Z	0.1	0.2	0.2	0.3	0.3	0.5	0.6	0.4	0.5	0.4	0.2	0.3	0.2	0.2	0.3	0.4	0.4	0.1	0.3	0.6
20-Sep	Z	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	0.2	0.1	0.3	0.3	0.2	0.1	0.1	0.2	0.2	0.4	0.1	0.4
21-Sep	0.2	Z	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.4	0.6	0.8	0.9	0.9	1.0	0.6	0.4	0.5	0.4	0.3	0.2	0.4	0.5	0.4	1.0
22-Sep	0.4	0.3	Z	0.2	0.2	0.2	0.2	0.3	1.3	0.6	0.5	0.1	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.1	0.4	0.5	0.3	0.3	1.3
23-Sep	0.2	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.6	1.0	1.0	0.9	1.0	0.8	0.8	0.6	0.7	0.4	0.2	0.2	0.4	1.0
24-Sep	0.2	0.3	0.4	0.4	Z	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.4
25-Sep	0.3	0.2	0.2	0.2	0.1	Z	0.2	0.1	0.0	0.0	C	C	C	C	C	0.0	0.1	0.0	0.0	0.2	0.3	1.8	1.6	2.0	0.4	2.0
26-Sep	Z	0.3	0.3	1.0	0.3	0.2	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.2	0.2	0.2	0.3	0.3	0.1	0.2	1.0
27-Sep	0.1	Z	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.3
28-Sep	0.2	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	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.3
29-Sep	0.3	0.3	0.3	Z	0.4	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	0.1	0.1	0.1	0.1	0.2	0.4
30-Sep	0.2	0.2	0.1	0.1	Z	0.2	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	0.0	0.0	0.0	0.2
	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.6	1.0	0.4	0.6	0.8	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	Diurnal Average	
	0.6	0.5	0.4	1.0	0.4	0.3	0.5	1.9	9.2	12.3	2.7	8.6	10.4	2.5	1.0	1.8	2.1	1.2	1.4	2.0	0.8	1.8	1.6	2.0	Diurnal Maximum	

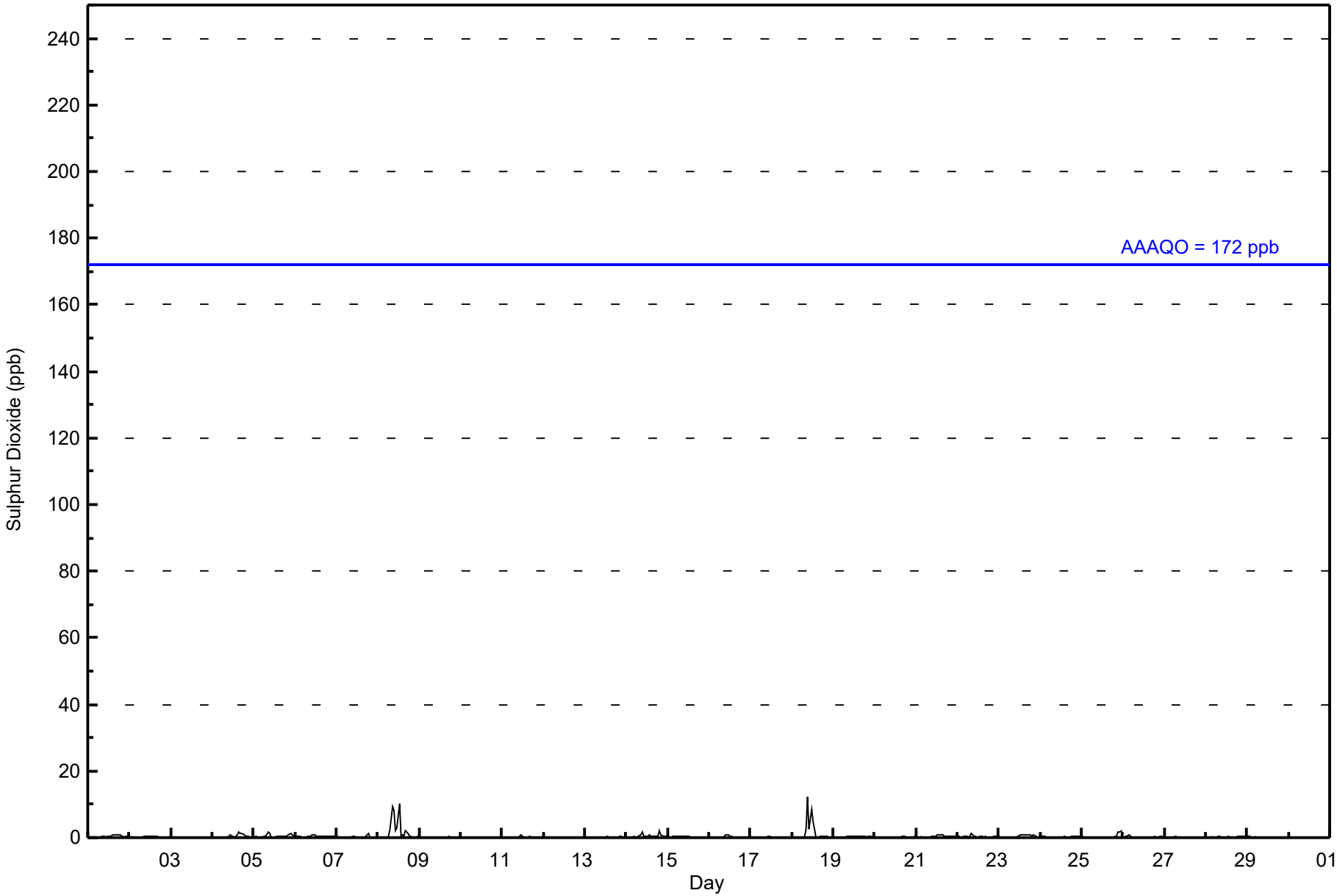
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Patricia McInnes - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	684	99.85	99.85
11 - 20	1	0.15	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Patricia McInnes - September 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	37	8	5	4	17	60	67	23	43	62	88	73	60	58	31	48	684
11 - 20	1	0	0	0	0	0	0	0	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	38	8	5	4	17	60	67	23	43	62	88	73	60	58	31	48	685

Total Number of Valid Hours: 685

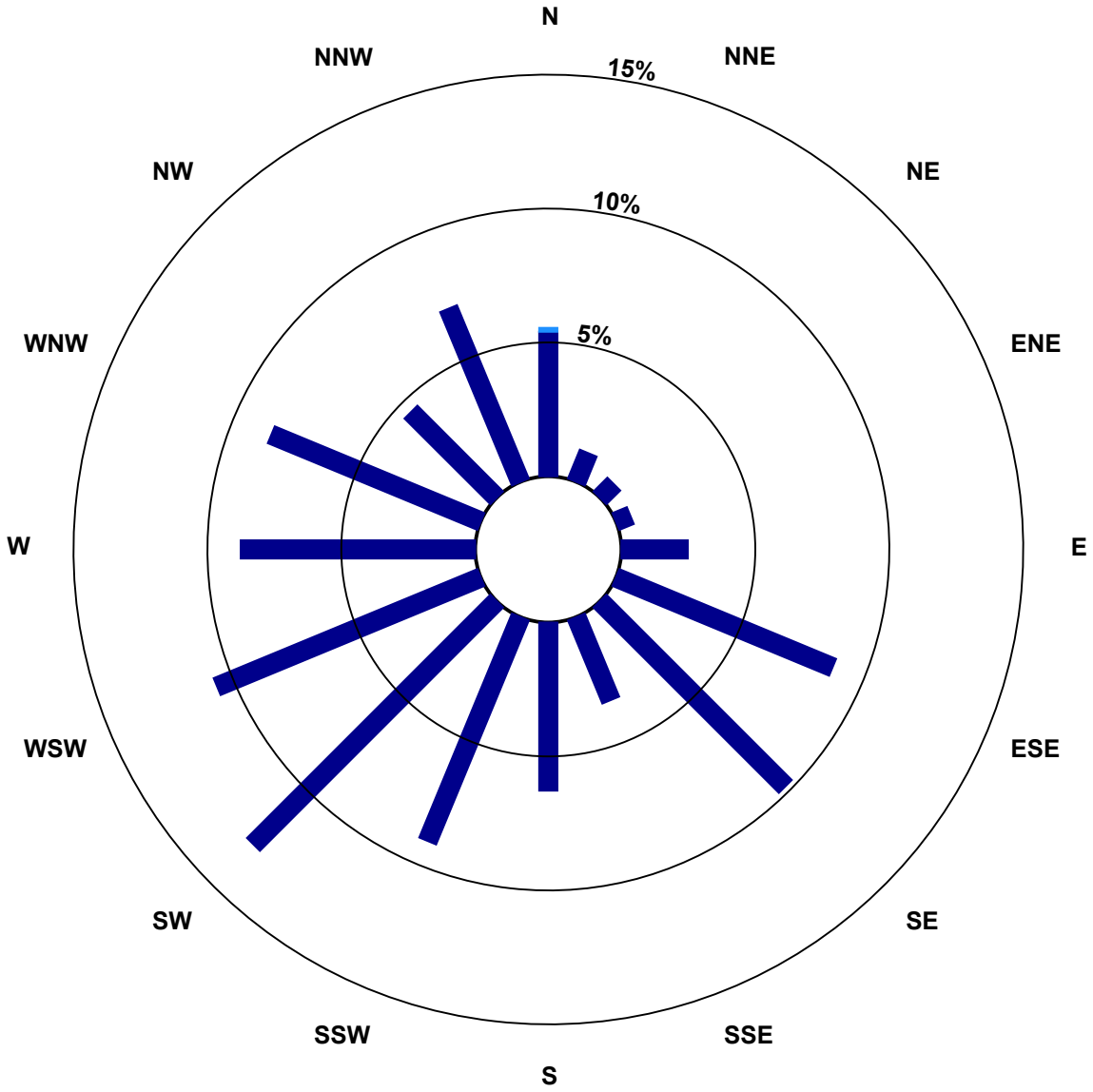
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Patricia McInnes



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

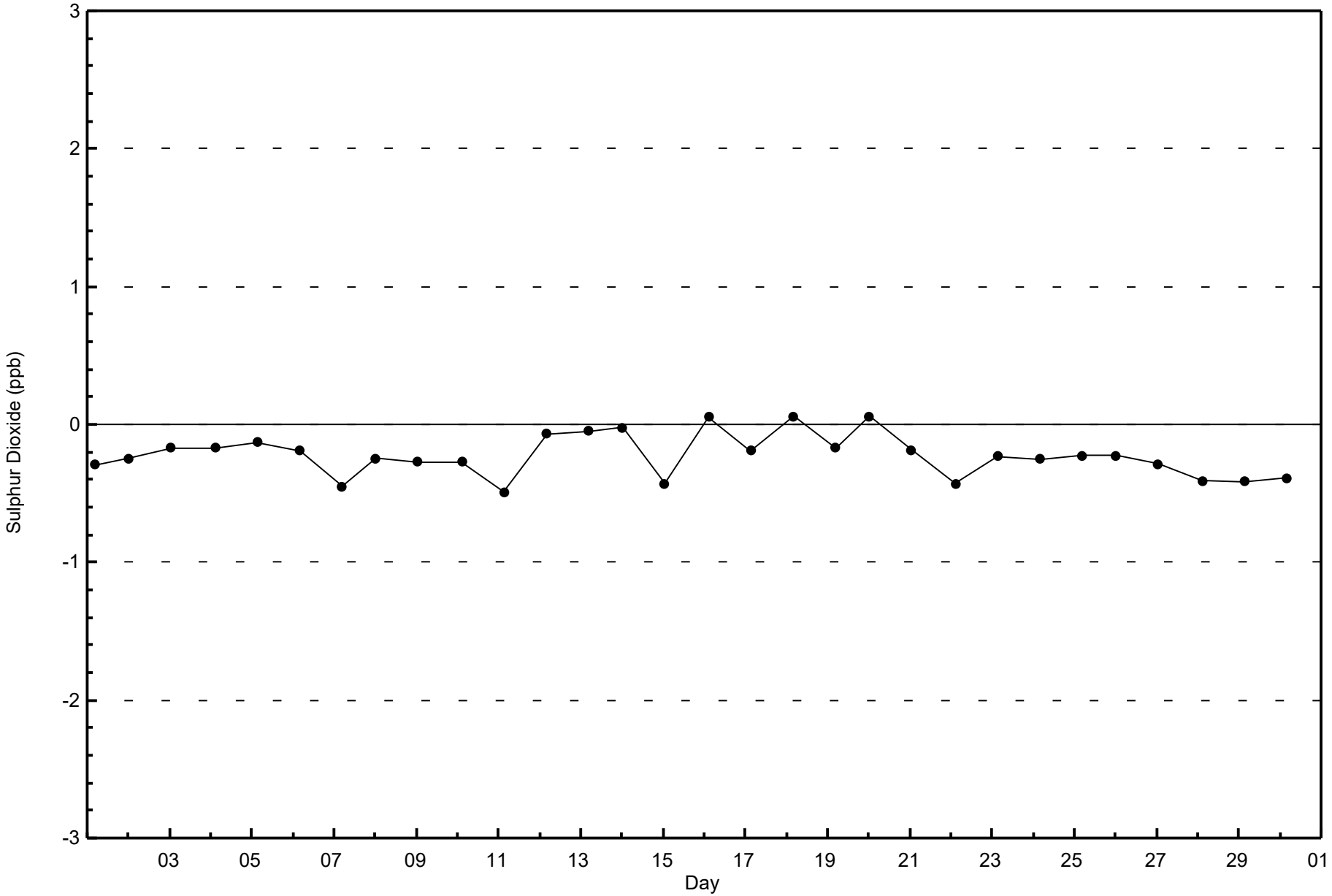
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Patricia McInnes - September 2026

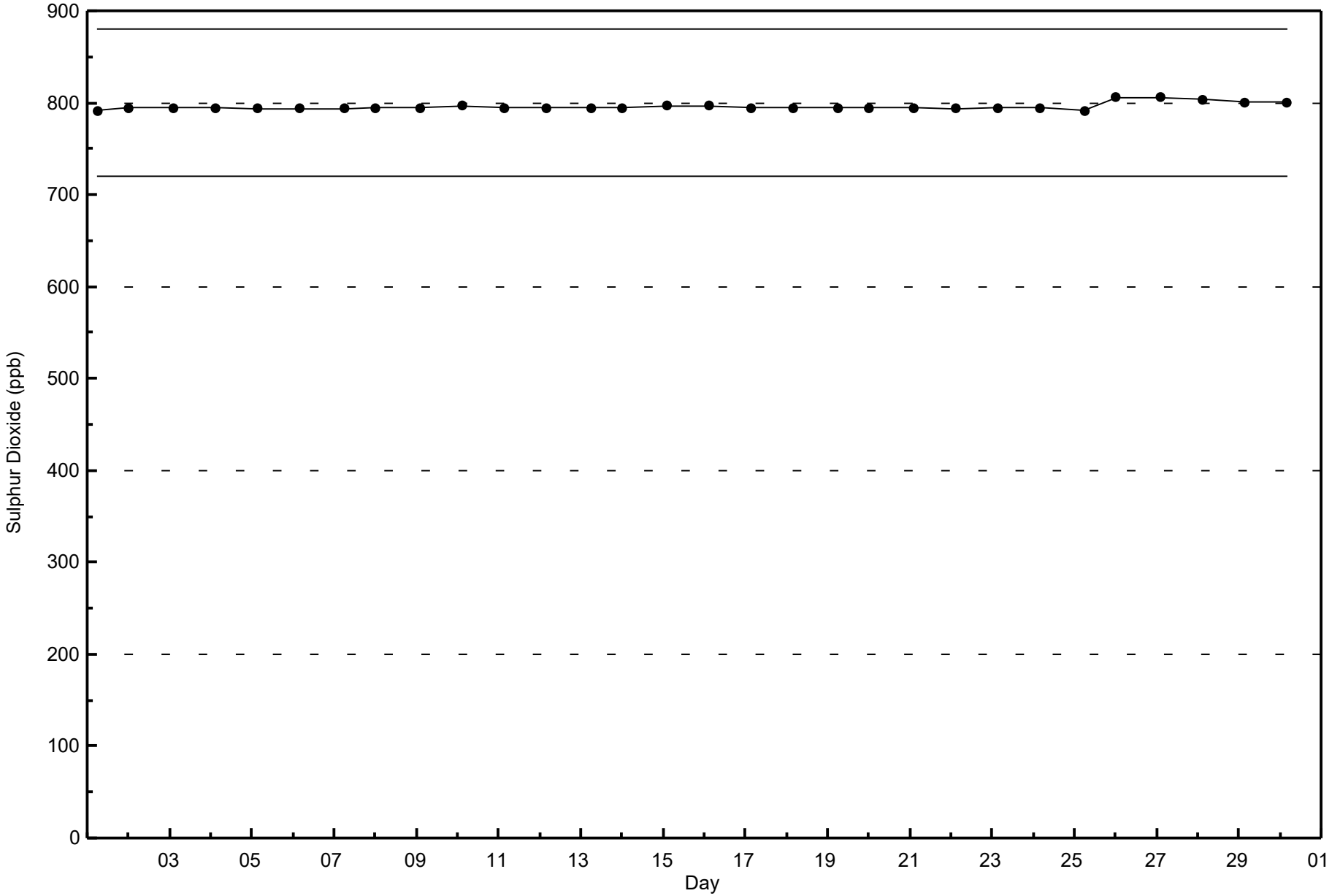


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Patricia McInnes - September 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Patricia McInnes - September 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 1.5 ppb on Sep 25 20:00 Maximum Daily Average: 0.4 ppb on Sep 5

Minimum Value: 0.0 ppb on Sep 29 01:00 Minimum Daily Average: 0.1 ppb on Sep 12

Maximum Diurnal Average: 0.3 ppb at hour 9 Minimum Diurnal Average: 0.2 ppb at hour 18

Monthly Average: 0.19 ppb Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.2 P_{90} = 0.3 P_{99} = 0.9

Periods in Service:	1440
Periods of Valid Data:	1369
Periods of Invalid Data:	71
Periods of Calibration:	71
Percent Operational Time:	100.0

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-Sep	Z	0.2	0.3	0.3	0.3	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	0.2	0.2	0.2	0.2	0.2	0.4
	SP	0.2	0.2	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	0.2	0.3		
2-Sep	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	0.1	0.1	0.1	0.1	0.1	0.2	0.2
	0.2	SP	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1		
3-Sep	0.1	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	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2
	0.1	0.2	SP	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2		
4-Sep	0.2	0.2	0.2	Z	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.8	0.5	0.9	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.3	0.9
	0.2	0.2	0.2	SP	0.3	0.3	0.2	0.2	0.2	0.2	0.6	0.6	0.7	0.8	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2		
5-Sep	0.4	0.4	0.2	0.3	Z	0.3	0.5	0.8	1.0	0.7	0.4	0.3	0.4	0.3	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.4	1.0
	0.3	0.3	0.2	0.3	SP	0.3	0.7	0.9	0.8	0.6	0.6	0.5	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.2	0.3		
6-Sep	0.3	0.2	0.3	0.3	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	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3
	0.2	0.3	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	0.2	0.1	0.2	0.1		
7-Sep	Z	0.2	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	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3
	SP	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
8-Sep	0.1	Z	0.2	0.4	0.3	0.4	0.4	0.3	0.8	1.1	0.8	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.3	1.4
	0.2	SP	0.2	0.3	0.4	0.4	0.4	0.4	1.4	1.0	0.6	0.4	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1		
9-Sep	0.1	0.1	Z	0.1	0.1	0.2	0.1	0.2	0.1	0.1	C	C	C	C	C	C	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	--	0.2
	0.1	0.1	SP	0.1	0.2	0.2	0.2	0.1	0.1	C	C	C	C	C	C	C	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2		
10-Sep	0.2	0.2	0.2	Z	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	0.1	0.1	0.1	0.1	0.1	0.2	0.3
	0.2	0.2	0.2	SP	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	0.1	0.2	0.1	0.1	0.1	0.1	0.1		
11-Sep	0.1	0.1	0.1	0.1	Z	0.2	0.2	0.1	0.2	0.2	0.1	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	0.1	0.3
	0.1	0.1	0.1	0.1	SP	0.2	0.2	0.2	0.2	0.1	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		
12-Sep	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	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
13-Sep	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	0.3	0.5	0.3	0.3	0.1	0.6
	SP	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.5	0.4	0.2	0.6		
14-Sep	0.4	Z	0.3	1.0	0.3	0.3	0.2	0.2	0.4	0.5	0.3	0.2	0.2	0.3	0.4	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	1.0
	0.4	SP	0.5	1.0	0.4	0.2	0.2	0.4	0.3	0.3	0.3	0.2	0.2	0.4	0.4	0.8	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2		
15-Sep	0.2	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
	0.2	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	0.1	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

Patricia McInnes - September 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-Sep	0.1	0.1	0.2	Z	0.2	0.2	0.2	0.1	0.3	0.3	0.2	0.2	0.2	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4
	0.1	0.1	0.2	SP	0.1	0.1	0.1	0.1	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
17-Sep	0.1	0.1	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	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2
	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	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2		
18-Sep	0.1	0.2	0.1	0.2	0.1	Z	0.2	0.1	0.6	1.4	0.5	0.4	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	1.4
	0.2	0.1	0.1	0.2	0.1	SP	0.1	0.3	0.6	1.0	0.4	0.3	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
19-Sep	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	0.1	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	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
20-Sep	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	0.2	0.2	0.1	0.2	0.2	0.1	0.2
	0.1	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	0.2	0.1	0.2	0.2		
21-Sep	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	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	0.2	0.2	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	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
22-Sep	0.2	0.2	0.2	Z	0.2	0.2	0.4	0.2	0.4	0.3	0.3	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	0.5
	0.2	0.3	0.2	SP	0.2	0.3	0.2	0.2	0.5	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2		
23-Sep	0.2	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
	0.1	0.1	0.2	0.2	SP	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	0.1		
24-Sep	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	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2
	0.1	0.1	0.1	0.1	0.1	SP	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		
25-Sep	Z	0.3	0.3	0.3	0.2	0.1	0.7	0.9	0.4	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	1.0	1.2	0.6	0.7	0.7	0.4	1.5
	SP	0.3	0.3	0.2	0.2	0.5	0.7	0.6	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	1.3	1.5	1.0	0.6	0.8	0.4		
26-Sep	0.3	Z	0.2	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
	0.3	SP	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
27-Sep	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	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
28-Sep	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	0.1	0.2
	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
29-Sep	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
	0.0	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
30-Sep	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
	0.1	0.1	0.1	0.1	0.1	SP	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	0.2	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Diurnal Average	
	0.4	0.4	0.5	1.0	0.4	0.5	0.7	0.9	1.4	1.4	0.8	0.8	0.7	0.9	0.5	0.8	0.4	0.4	1.3	1.5	1.2	0.6	0.8	0.7	Diurnal Maximum	

Z - zerospan C - Calibration 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 - September 2026

Maximum Value: 1.3 ppb on Sep 25 20:00

Maximum Daily Average: 0.4 ppb on Sep 5

Minimum Value: 0.0 ppb on Sep 29 01:00

Minimum Daily Average: 0.1 ppb on Sep 12

Maximum Diurnal Average: 0.3 ppb at hour 9

Minimum Diurnal Average: 0.2 ppb at hour 18

Monthly Average: 0.19 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.2 P_{90} = 0.3 P_{99} = 0.9

Hours in Service:	720
Hours of Data:	684
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-Sep	Z	0.2	0.3	0.3	0.3	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	0.2	0.2	0.2	0.2	0.2	0.2	0.4
2-Sep	0.2	Z	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	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
3-Sep	0.1	0.1	Z	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	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2
4-Sep	0.2	0.2	0.2	Z	0.3	0.3	0.2	0.2	0.2	0.2	0.4	0.7	0.6	0.9	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.9
5-Sep	0.3	0.3	0.2	0.3	Z	0.3	0.6	0.8	0.9	0.6	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.4	0.9
6-Sep	0.2	0.2	0.3	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	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.3
7-Sep	Z	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
8-Sep	0.1	Z	0.2	0.3	0.3	0.4	0.4	0.4	1.1	1.0	0.7	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.3	1.1
9-Sep	0.1	0.1	Z	0.1	0.1	0.2	0.1	0.2	0.1	C	C	C	C	C	C	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	--	0.2
10-Sep	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	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2
11-Sep	0.1	0.1	0.1	0.1	Z	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
12-Sep	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	0.1	0.1	0.1
13-Sep	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	0.2	0.4	0.4	0.2	0.4	0.1	0.4
14-Sep	0.4	Z	0.4	1.0	0.4	0.2	0.2	0.3	0.4	0.4	0.3	0.2	0.2	0.3	0.4	0.5	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	1.0
15-Sep	0.2	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
16-Sep	0.1	0.1	0.2	Z	0.2	0.2	0.2	0.1	0.3	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	0.3
17-Sep	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	0.1	0.2	0.1	0.2
18-Sep	0.2	0.1	0.1	0.2	0.1	Z	0.2	0.2	0.6	1.2	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	0.2	0.3	1.2
19-Sep	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	0.2	0.2	0.2
20-Sep	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	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2
21-Sep	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	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
22-Sep	0.2	0.2	0.2	Z	0.2	0.2	0.3	0.2	0.5	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	0.2	0.2	0.2	0.5
23-Sep	0.1	0.1	0.1	0.2	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	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.3
24-Sep	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	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
25-Sep	Z	0.3	0.3	0.3	0.2	0.3	0.7	0.8	0.4	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.7	1.3	1.1	0.6	0.7	0.5	0.4	1.3
26-Sep	0.3	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
27-Sep	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
28-Sep	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
29-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
30-Sep	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
	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Diurnal Average	
	0.4	0.3	0.4	1.0	0.4	0.4	0.7	0.8	1.1	1.2	0.7	0.7	0.6	0.9	0.5	0.5	0.4	0.4	0.7	1.3	1.1	0.6	0.7	0.5	Diurnal Maximum	

Z - zerospan C - Calibration

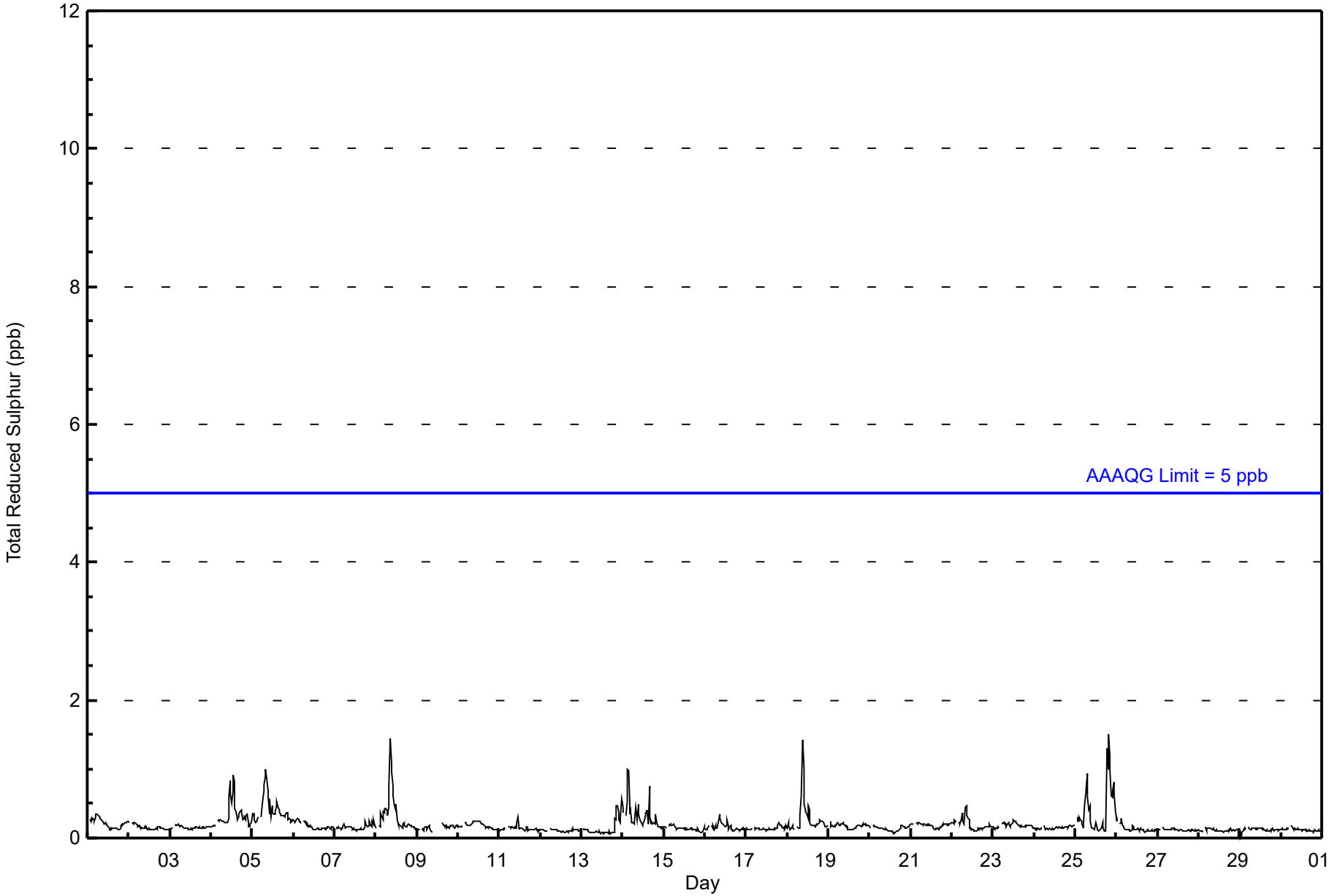
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Patricia McInnes - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

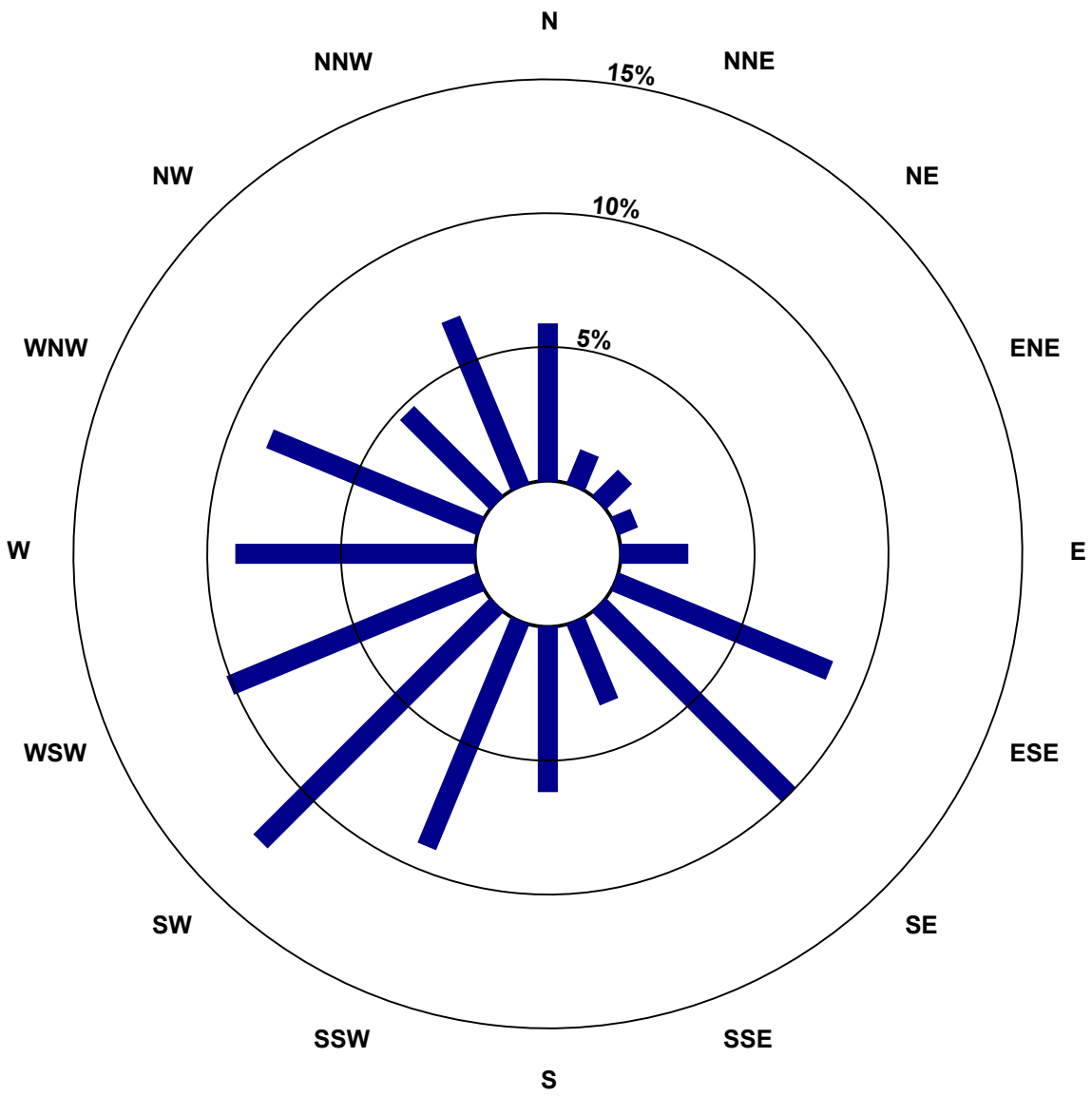
Total Reduced Sulphur (TRS) - ppb

Patricia McInnes - September 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	40	9	9	5	17	59	68	22	42	62	85	69	61	58	32	46	684
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	40	9	9	5	17	59	68	22	42	62	85	69	61	58	32	46	684

Total Number of Valid Hours: 684

Total Number of Hours: 720



Classes (ppb)

0 - 2
3 - 4
5 - 7
8 - 11
> 11

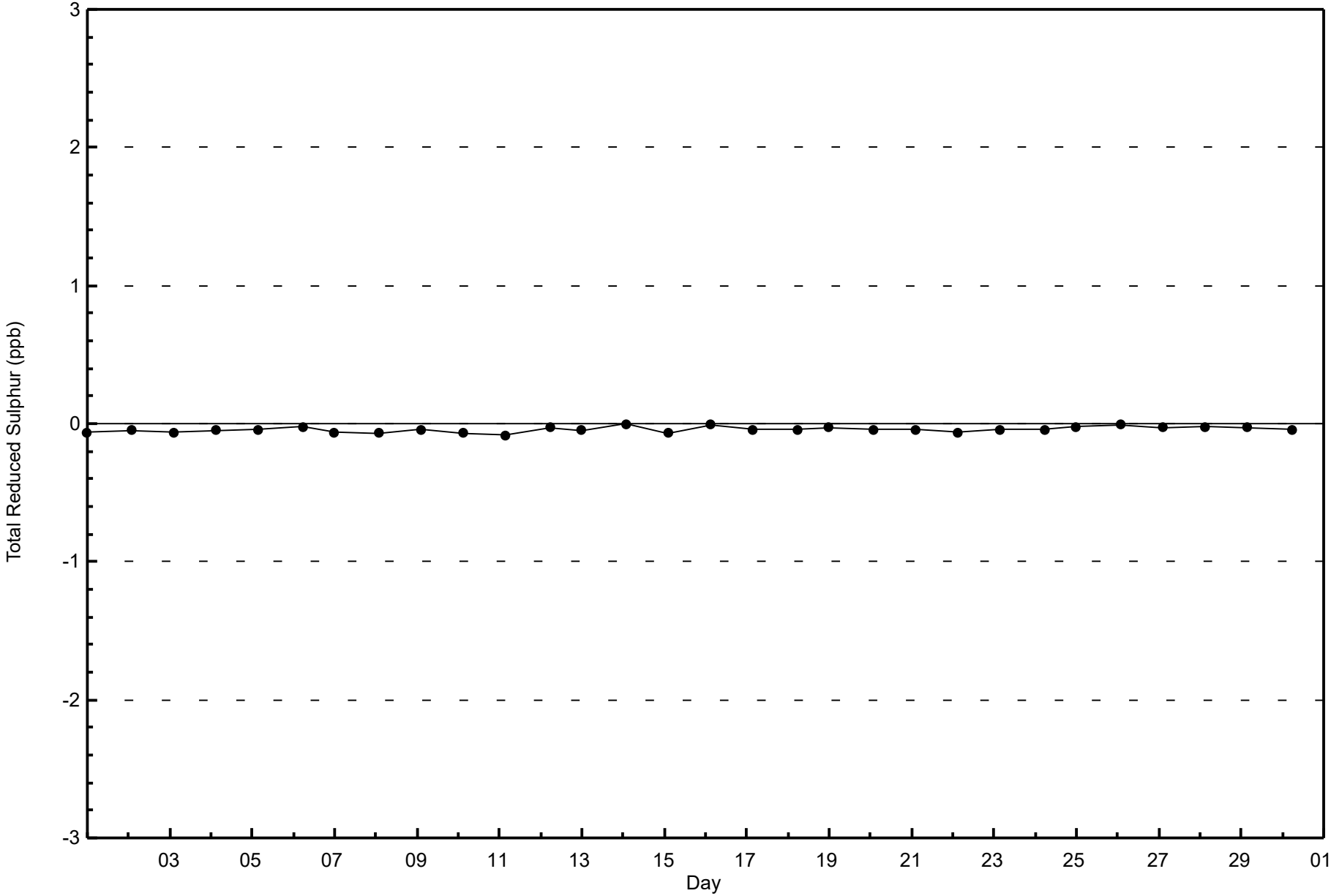
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Patricia McInnes - September 2026

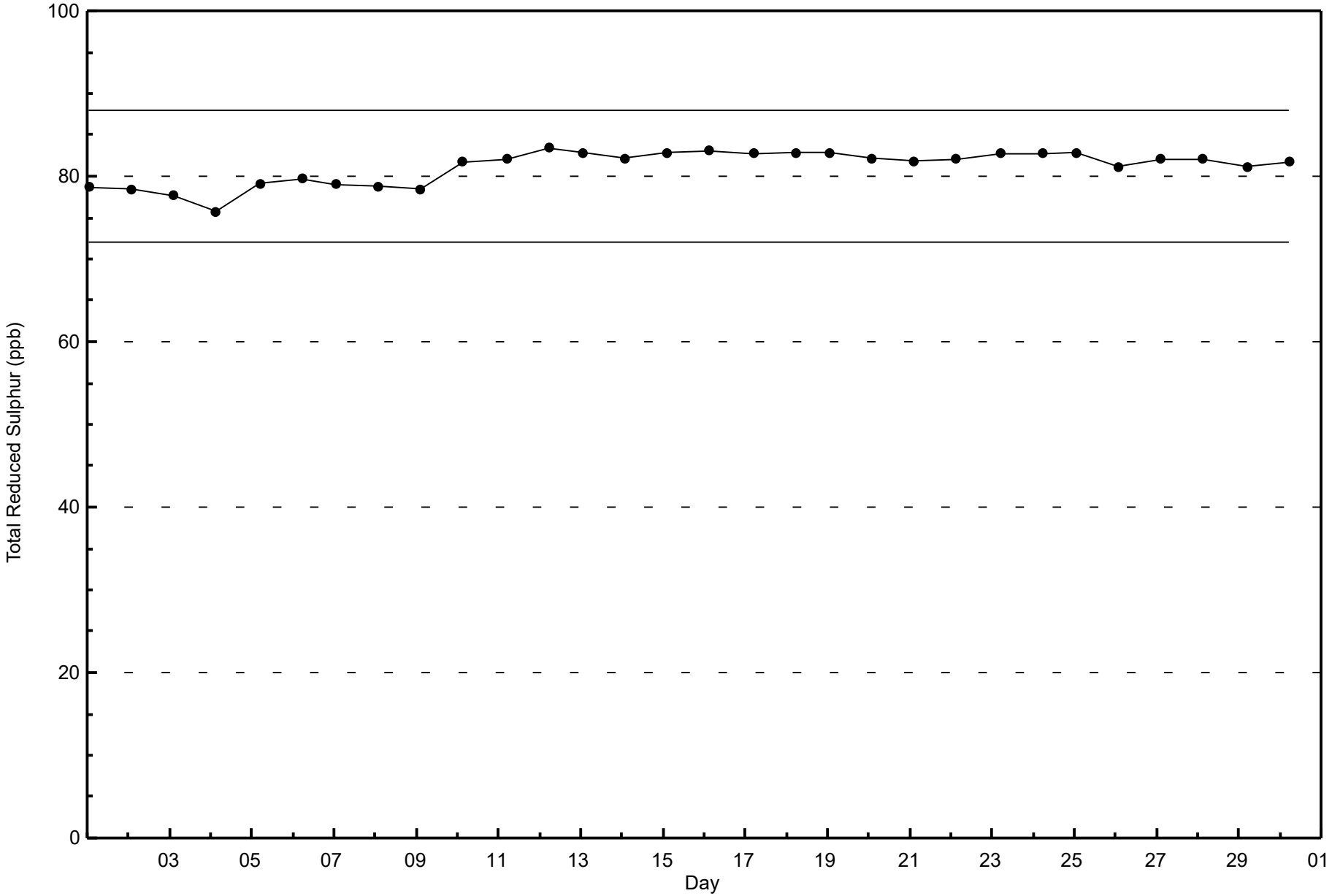


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Patricia McInnes - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Patricia McInnes - September 2026

Maximum Value: 2.9 ppm on Sep 8 05:00

Maximum Daily Average: 2.3 ppm on Sep 8

Minimum Value: 2.0 ppm on Sep 22 14:00

Minimum Daily Average: 2.0 ppm on Sep 27

Maximum Diurnal Average: 2.1 ppm at hour 7

Minimum Diurnal Average: 2.0 ppm at hour 15

Monthly Average: 2.09 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} = 2.6

Hours in Service:	720
Hours of Data:	685
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-Sep	2.3	2.3	2.2	2.2	2.3	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	2.0	2.0	2.1	2.1	2.1	2.1	2.3
2-Sep	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	2.0	2.1	2.1	2.1	2.1	2.1
3-Sep	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	2.1
4-Sep	2.1	2.1	Z	2.1	2.1	2.1	2.1	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	2.1	2.1	2.1	2.1	2.1	2.2
5-Sep	2.1	2.1	2.1	Z	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	2.2	2.5	2.6	2.3	2.4	2.4	2.2	2.6
6-Sep	2.3	2.4	2.4	2.3	Z	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.4
7-Sep	2.1	2.1	2.1	2.1	2.1	Z	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.7	2.4	2.8	2.7	2.2	2.8
8-Sep	Z	2.3	2.4	2.8	2.9	2.8	2.6	2.4	2.4	2.4	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.1	2.3	2.9
9-Sep	2.1	Z	2.2	2.2	2.3	2.3	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	2.0	2.0	2.0	2.0	2.1	2.3
10-Sep	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
11-Sep	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	2.0
12-Sep	2.0	2.0	2.0	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	2.0	2.0	2.0	2.0	2.1	2.0	2.1
13-Sep	2.1	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	2.1	2.1	2.1	2.1	2.2	2.1	2.2
14-Sep	Z	2.2	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	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	2.0	2.1	2.2
15-Sep	2.0	Z	2.0	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	2.0	2.1	2.1	2.1
16-Sep	2.1	2.1	Z	2.1	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	2.1	2.2
17-Sep	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	2.2	2.2	2.6	2.5	2.5	2.3	2.4	2.2	2.6
18-Sep	2.4	2.2	2.1	2.1	Z	2.1	2.2	2.2	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.4	2.3	2.2	2.1	2.2	2.4
19-Sep	2.1	2.1	2.1	2.1	2.1	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	2.1	2.1	2.1	2.1	2.2
20-Sep	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	2.0	2.1	2.1	2.0	2.1
21-Sep	2.1	Z	2.1	2.1	2.1	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	2.1	2.1	2.1	2.1	2.1	2.2
22-Sep	2.2	2.3	Z	2.3	2.3	2.4	2.5	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	2.2	2.1	2.1	2.1	2.1	2.5
23-Sep	2.1	2.1	2.1	Z	2.1	2.1	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	2.1	2.1	2.1	2.1	2.2
24-Sep	2.0	2.1	2.1	2.1	Z	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	2.2	2.2	2.1	2.1	2.1	2.2
25-Sep	2.1	2.3	2.2	2.2	2.1	Z	2.2	2.2	2.1	2.0	C	C	C	C	C	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3
26-Sep	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
27-Sep	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	2.0
28-Sep	2.0	2.0	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	2.0	2.0	2.0	2.1	2.0	2.1
29-Sep	2.1	2.1	2.2	Z	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
30-Sep	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	2.0	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	2.1	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	Diurnal Average
	2.4	2.4	2.4	2.8	2.9	2.8	2.6	2.4	2.4	2.4	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.6	2.7	2.5	2.8	2.7		Diurnal Maximum

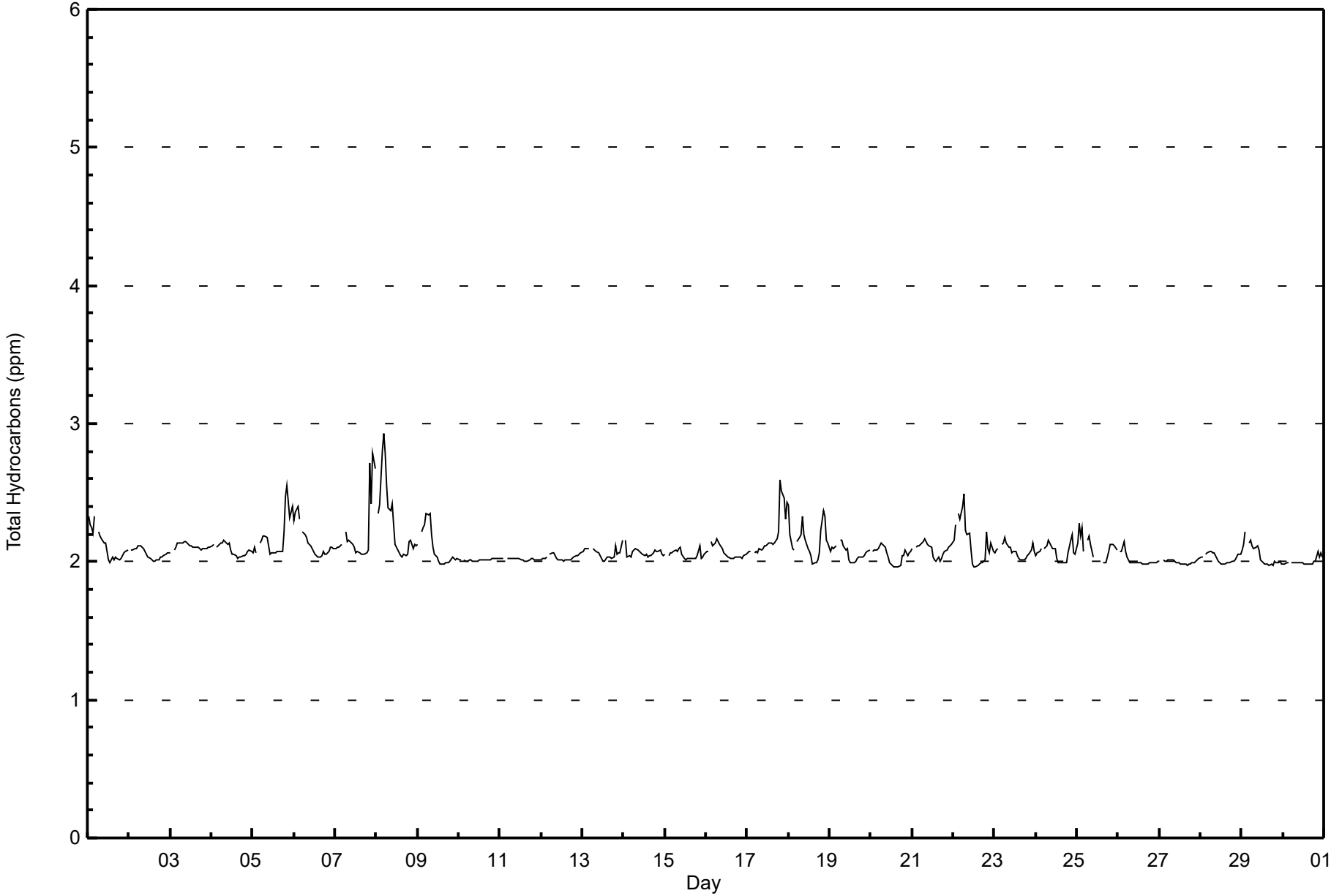
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Patricia McInnes - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	306	44.67	44.67
2.1 - 3.0	379	55.33	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Patricia McInnes - September 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	16	0	2	3	5	19	21	4	10	22	34	50	49	41	19	11	306
2.1 - 3.0	22	8	3	1	12	41	46	19	33	40	54	23	11	17	12	37	379
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	38	8	5	4	17	60	67	23	43	62	88	73	60	58	31	48	685

Total Number of Valid Hours: 685

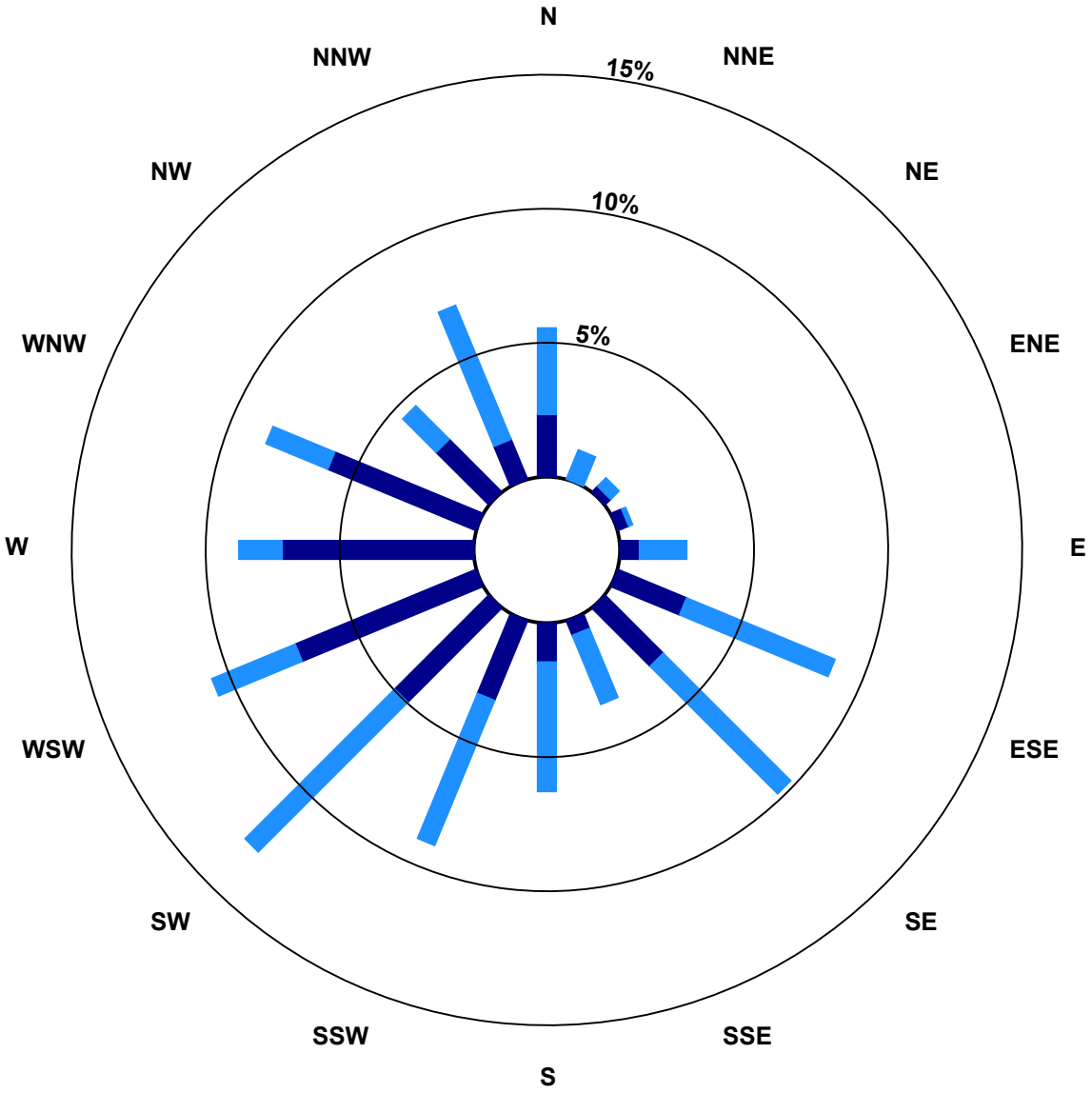
Total Number of Hours: 720

Wood Buffalo Environmental Association

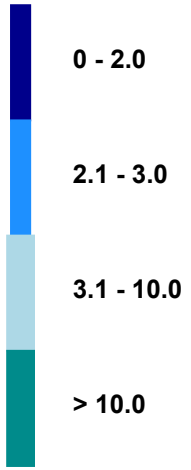
Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Patricia McInnes



Classes (ppm)



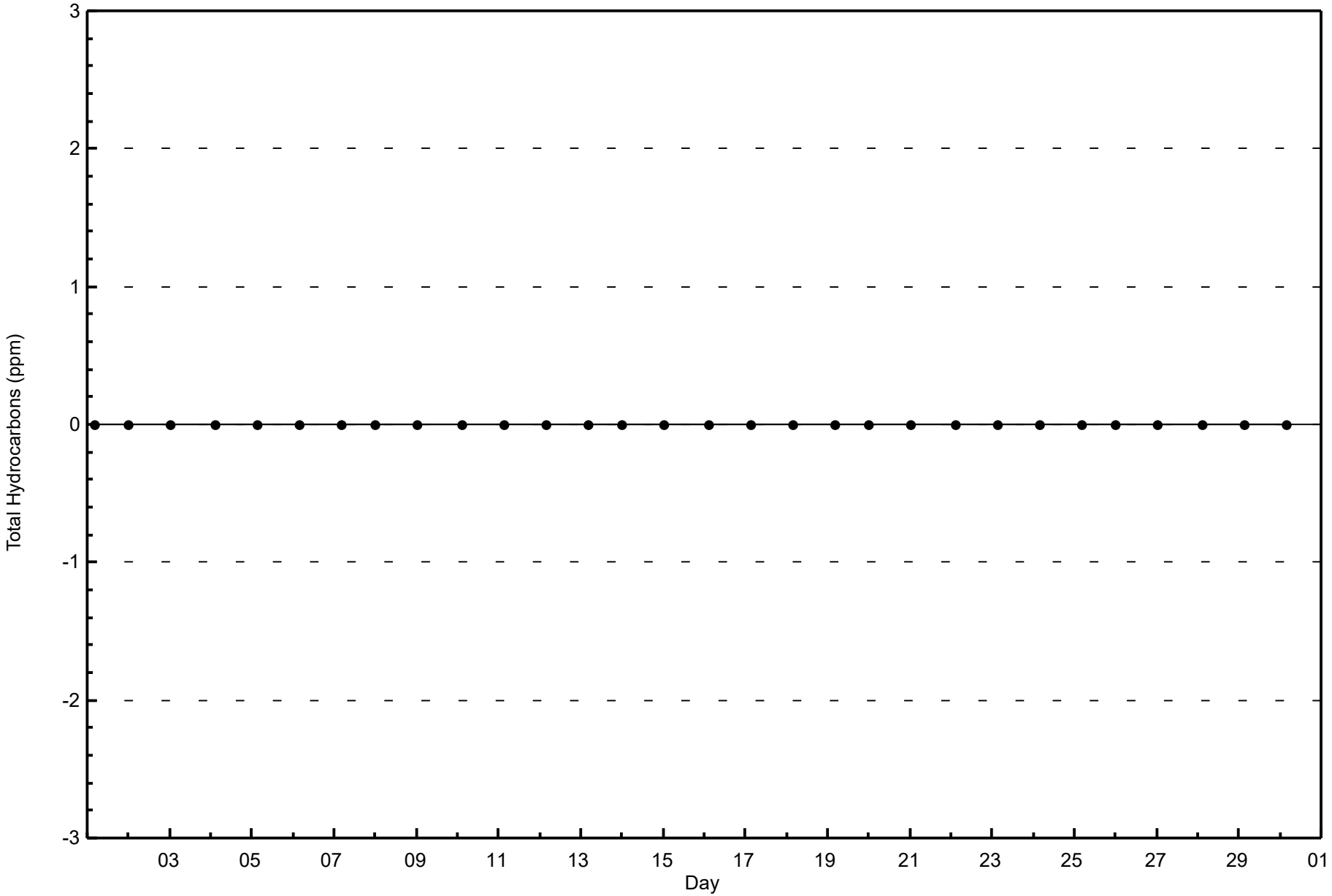
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Patricia McInnes - September 2026

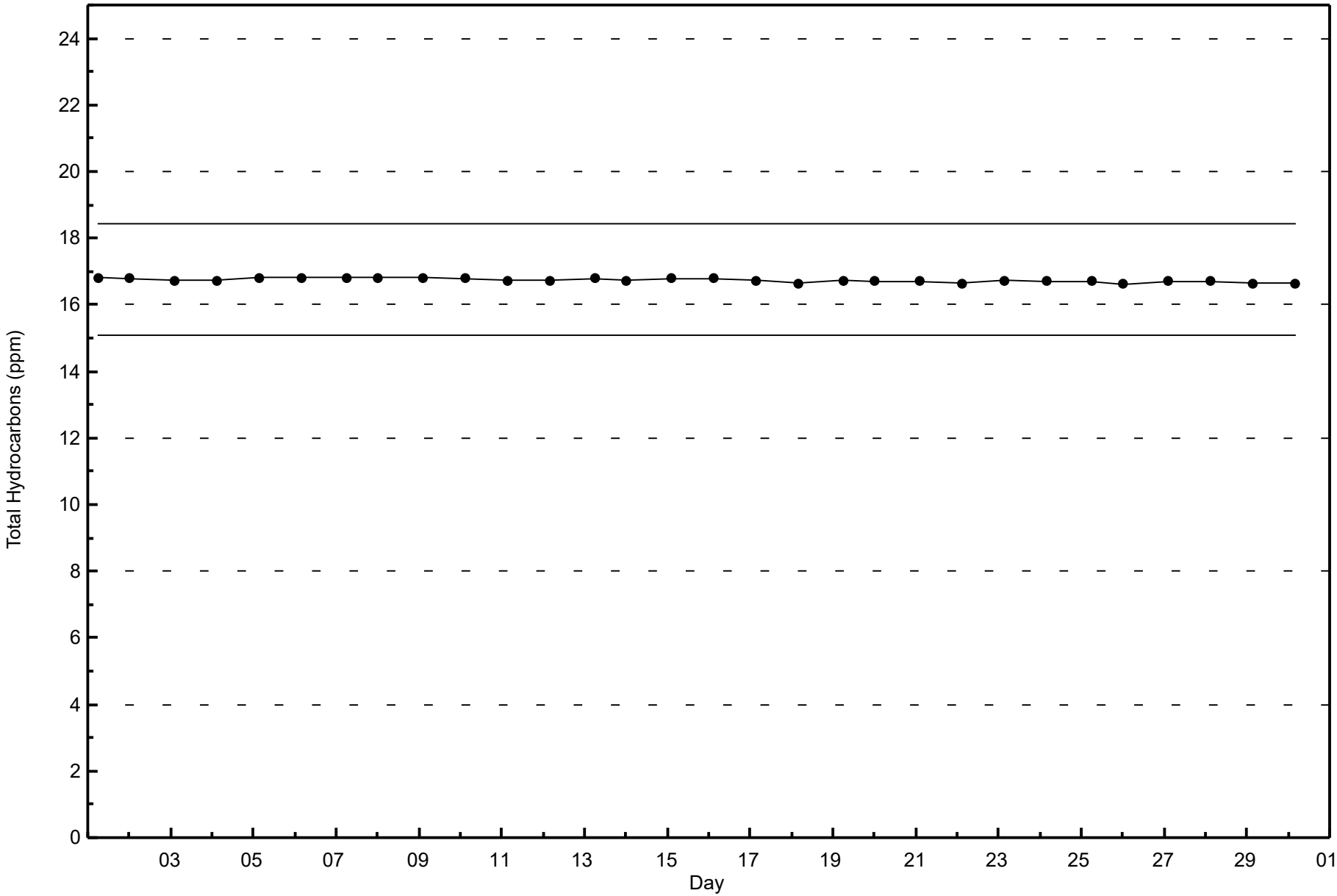


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Patricia McInnes - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Patricia McInnes - September 2026

Maximum Value: 0.064 ppm on Sep 8 10:00

Maximum Daily Average: 0.005 ppm on Sep 8

Minimum Value: 0.000 ppm on Sep 1 01:00

Minimum Daily Average: 0.000 ppm on Sep 1

Maximum Diurnal Average: 0.002 ppm at hour 9

Minimum Diurnal Average: 0.000 ppm at hour 2

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:	720
Hours of Data:	685
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-Sep	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
2-Sep	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	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.011
3-Sep	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	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
4-Sep	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
5-Sep	0.000	0.000	0.000	Z	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	0.000	0.000	0.000	0.001
6-Sep	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
7-Sep	0.000	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	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
8-Sep	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.024	0.033	0.064	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.064
9-Sep	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
10-Sep	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
11-Sep	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-Sep	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
13-Sep	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
14-Sep	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
15-Sep	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
16-Sep	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
17-Sep	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.018	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	0.001	0.018
18-Sep	0.001	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.031
19-Sep	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
20-Sep	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	0.000	0.000	0.000	0.000	0.000	0.000	0.003
21-Sep	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
22-Sep	0.000	0.000	Z	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	0.000	0.000	0.000	0.000	0.000	0.001
23-Sep	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
24-Sep	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	0.002	0.000	0.000	0.000	0.002
25-Sep	0.000	0.000	0.000	0.000	0.000	Z	0.000	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	0.000	0.000	0.000
26-Sep	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
27-Sep	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
28-Sep	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
29-Sep	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
30-Sep	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	0.007	0.000	0.000	0.000	0.000	0.007
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002	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	Diurnal Average	
	0.001	0.000	0.000	0.000	0.000	0.001	0.002	0.024	0.033	0.064	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.011	0.004	0.007	0.002	0.000	0.000	Diurnal Maximum	

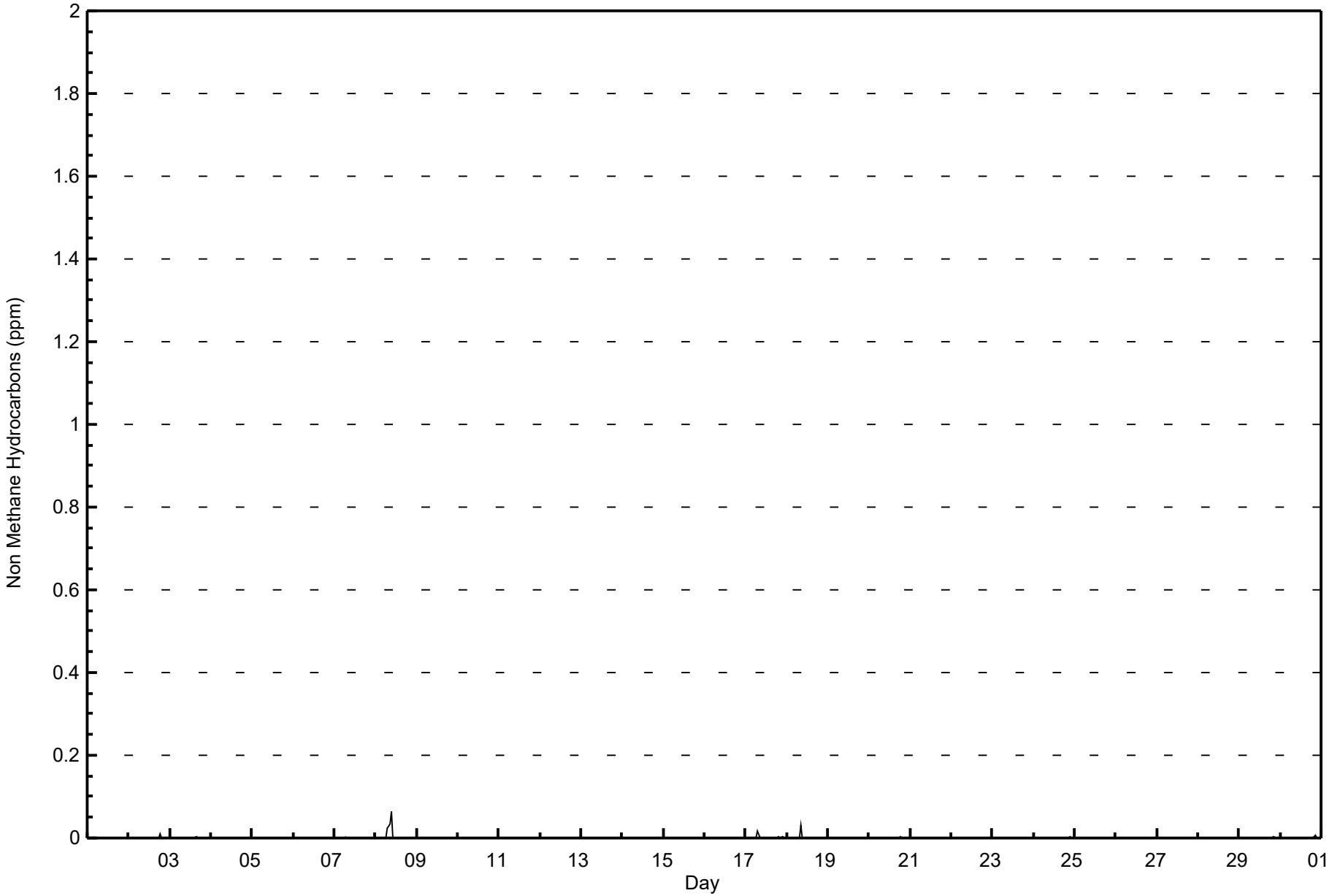
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Patricia McInnes - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	678	98.98	98.98
0.006 - 0.05	6	0.88	99.85
0.06 - 0.1	1	0.15	100.00
> 0.1	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

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	8	5	4	17	59	66	23	43	62	88	73	60	57	31	47	678
0.006 - 0.05	2	0	0	0	0	1	1	0	0	0	0	0	0	1	0	1	6
0.06 - 0.1	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	0	0	0	0	0	0	0	0	0	0
Totals	38	8	5	4	17	60	67	23	43	62	88	73	60	58	31	48	685

Total Number of Valid Hours: 685

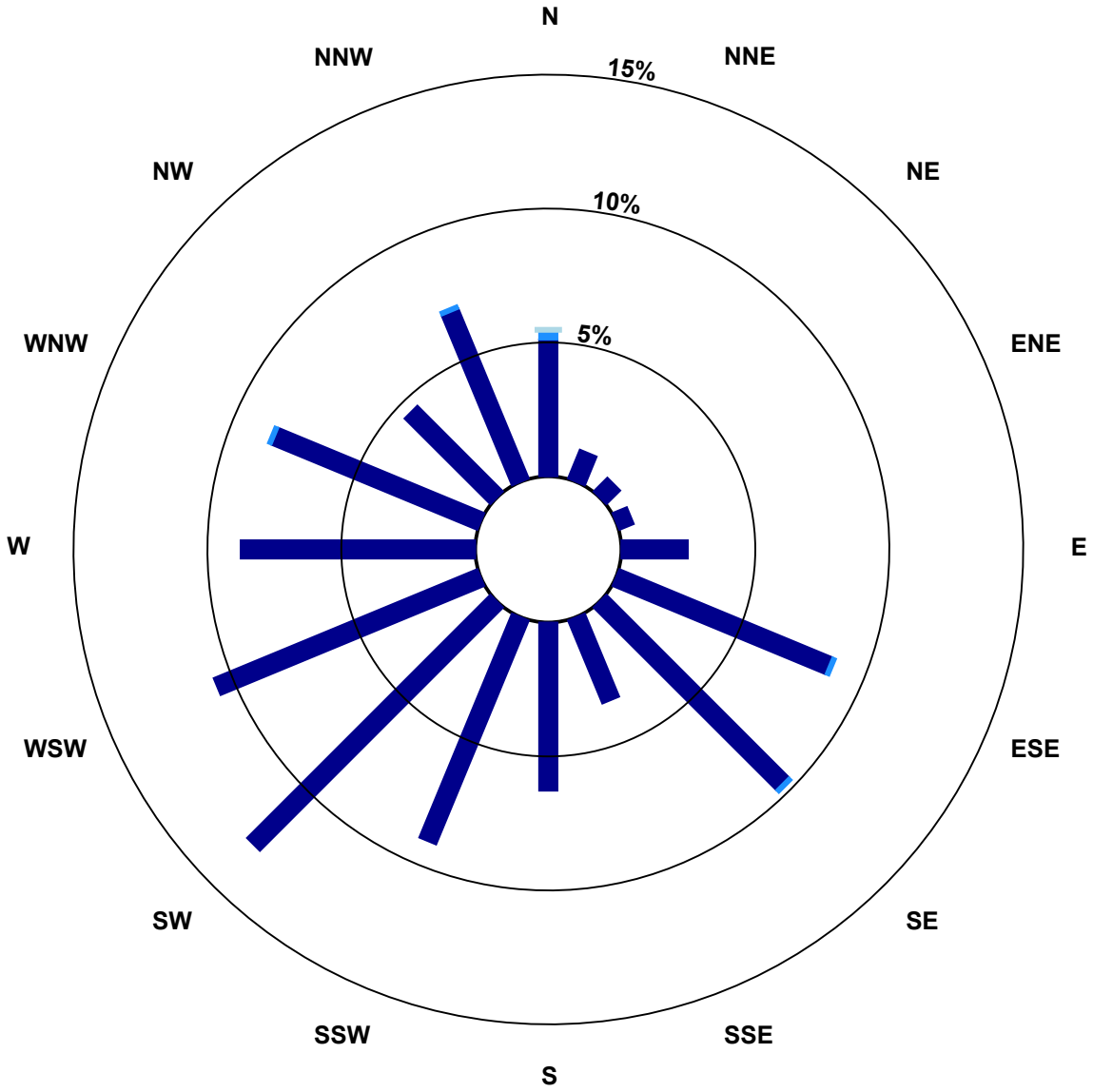
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Non Methane Hydrocarbons (NMHC) - ppm

Patricia McInnes



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

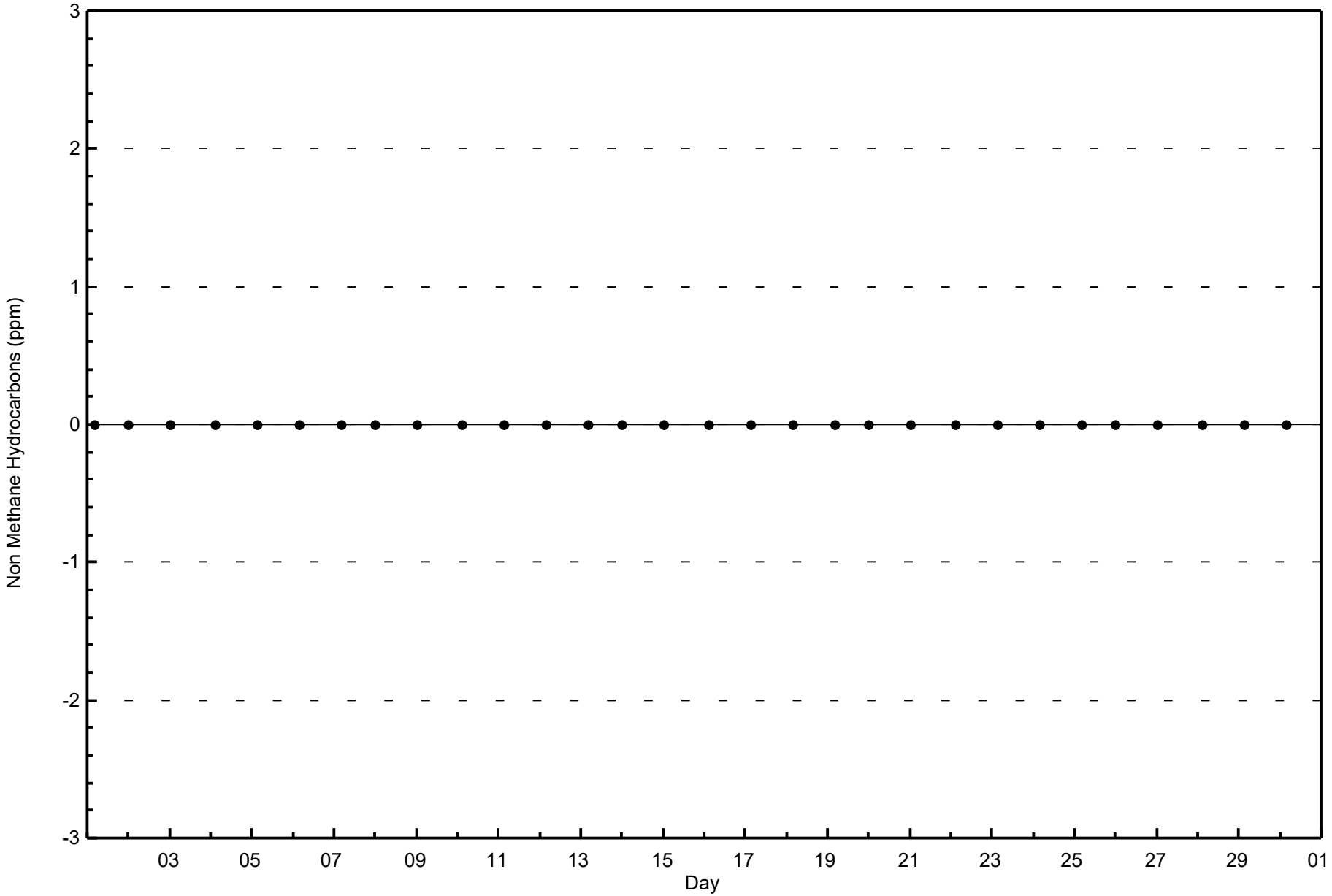
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Patricia McInnes - September 2026

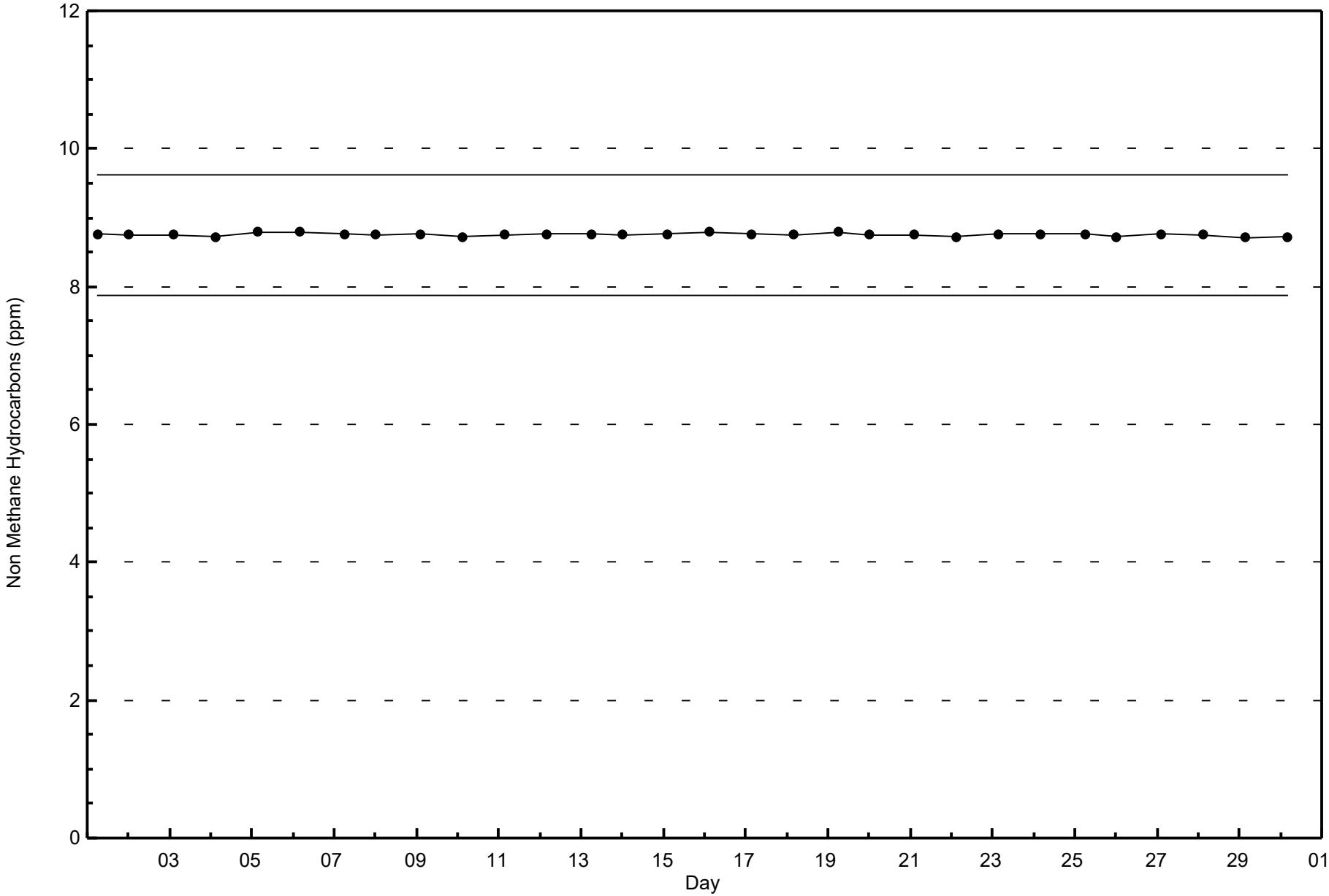


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Patricia McInnes - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Patricia McInnes - September 2026

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

Maximum Value: 2.9 ppm on Sep 8 05:00

Maximum Daily Average: 2.3 ppm on Sep 8

Minimum Value: 2.0 ppm on Sep 22 14:00

Minimum Daily Average: 2.0 ppm on Sep 27

Maximum Diurnal Average: 2.1 ppm at hour 7

Minimum Diurnal Average: 2.0 ppm at hour 16

Monthly Average: 2.09 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} = 2.6

Hours in Service:	720
Hours of Data:	685
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-Sep	2.3	2.3	2.2	2.2	2.3	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	2.0	2.0	2.1	2.1	2.1	2.1	2.3
2-Sep	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	2.0	2.1	2.1	2.1	2.1	2.1
3-Sep	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	2.1
4-Sep	2.1	2.1	Z	2.1	2.1	2.1	2.1	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	2.1	2.1	2.1	2.1	2.1	2.2
5-Sep	2.1	2.1	2.1	Z	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	2.2	2.5	2.6	2.3	2.4	2.4	2.2	2.6
6-Sep	2.3	2.4	2.4	2.3	Z	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.4
7-Sep	2.1	2.1	2.1	2.1	2.1	Z	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.7	2.4	2.8	2.7	2.2	2.8
8-Sep	Z	2.3	2.4	2.8	2.9	2.8	2.6	2.4	2.3	2.4	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.1	2.3	2.9
9-Sep	2.1	Z	2.2	2.2	2.3	2.3	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	2.0	2.0	2.0	2.0	2.1	2.3
10-Sep	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
11-Sep	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	2.0
12-Sep	2.0	2.0	2.0	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	2.0	2.0	2.0	2.0	2.1	2.0	2.1
13-Sep	2.1	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	2.1	2.1	2.1	2.1	2.2	2.1	2.2
14-Sep	Z	2.2	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	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	2.0	2.1	2.2
15-Sep	2.0	Z	2.0	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	2.0	2.1	2.1	2.1
16-Sep	2.1	2.1	Z	2.1	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	2.1	2.2
17-Sep	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	2.2	2.2	2.6	2.5	2.5	2.3	2.4	2.2	2.6
18-Sep	2.4	2.2	2.1	2.1	Z	2.1	2.2	2.2	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.4	2.3	2.2	2.1	2.1	2.4
19-Sep	2.1	2.1	2.1	2.1	2.1	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	2.1	2.1	2.1	2.1	2.2
20-Sep	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	2.0	2.1	2.1	2.0	2.1
21-Sep	2.1	Z	2.1	2.1	2.1	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	2.1	2.1	2.1	2.1	2.1	2.2
22-Sep	2.2	2.3	Z	2.3	2.3	2.4	2.5	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	2.2	2.1	2.1	2.1	2.1	2.5
23-Sep	2.1	2.1	2.1	Z	2.1	2.1	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	2.1	2.1	2.1	2.1	2.2
24-Sep	2.0	2.1	2.1	2.1	Z	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	2.1	2.2	2.2	2.1	2.1	2.2
25-Sep	2.1	2.3	2.2	2.2	2.1	Z	2.2	2.2	2.1	2.0	C	C	C	C	C	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3
26-Sep	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
27-Sep	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	2.0
28-Sep	2.0	2.0	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	2.0	2.0	2.0	2.1	2.0	2.1
29-Sep	2.1	2.1	2.2	Z	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
30-Sep	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	2.0	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	2.1	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	Diurnal Average
	2.4	2.4	2.4	2.8	2.9	2.8	2.6	2.4	2.3	2.4	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.6	2.7	2.5	2.8	2.7		Diurnal Maximum

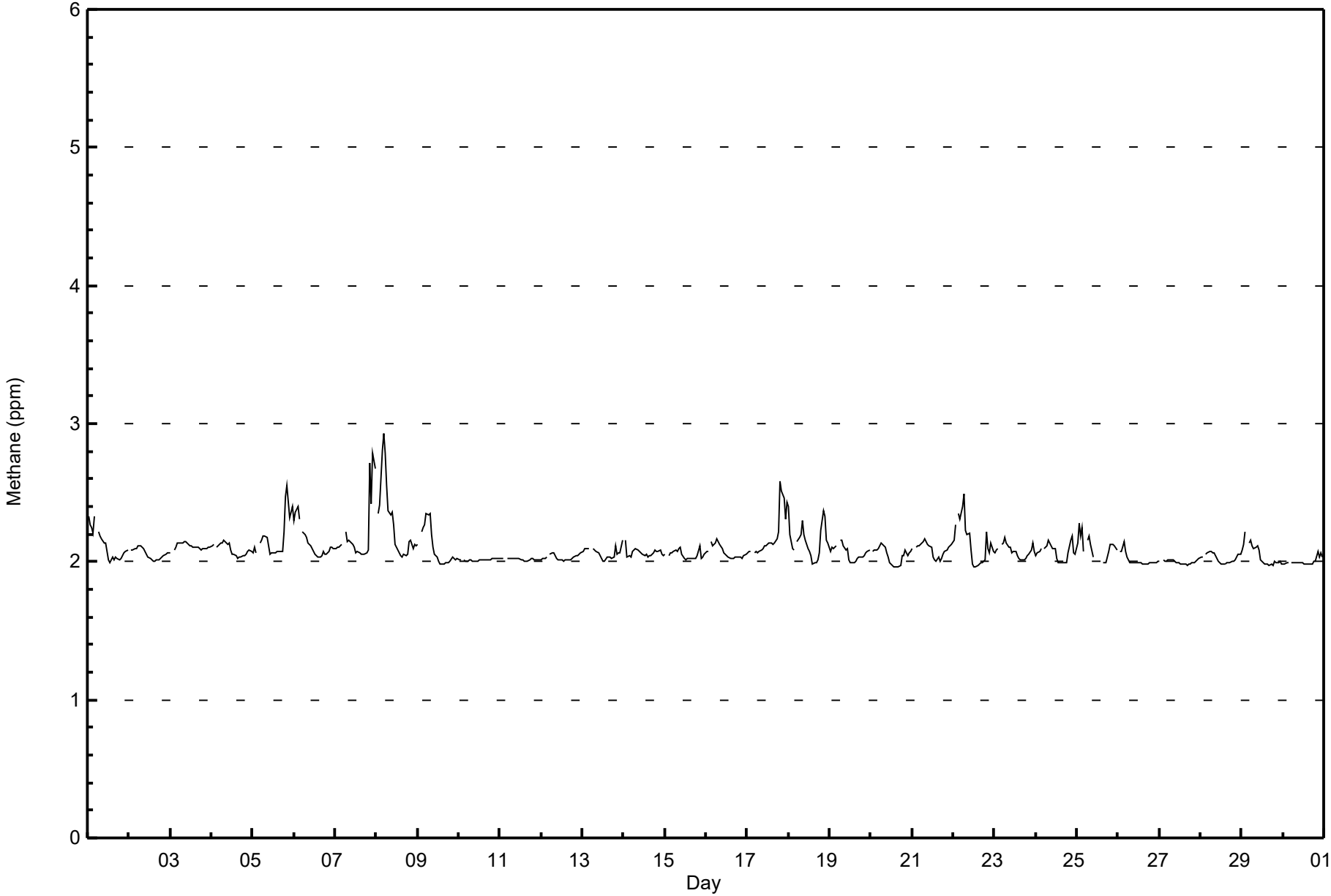
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Patricia McInnes - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	306	44.67	44.67
2.1 - 3.0	379	55.33	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

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	16	0	2	3	5	19	21	4	10	22	34	50	49	41	19	11	306
2.1 - 3.0	22	8	3	1	12	41	46	19	33	40	54	23	11	17	12	37	379
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	38	8	5	4	17	60	67	23	43	62	88	73	60	58	31	48	685

Total Number of Valid Hours: 685

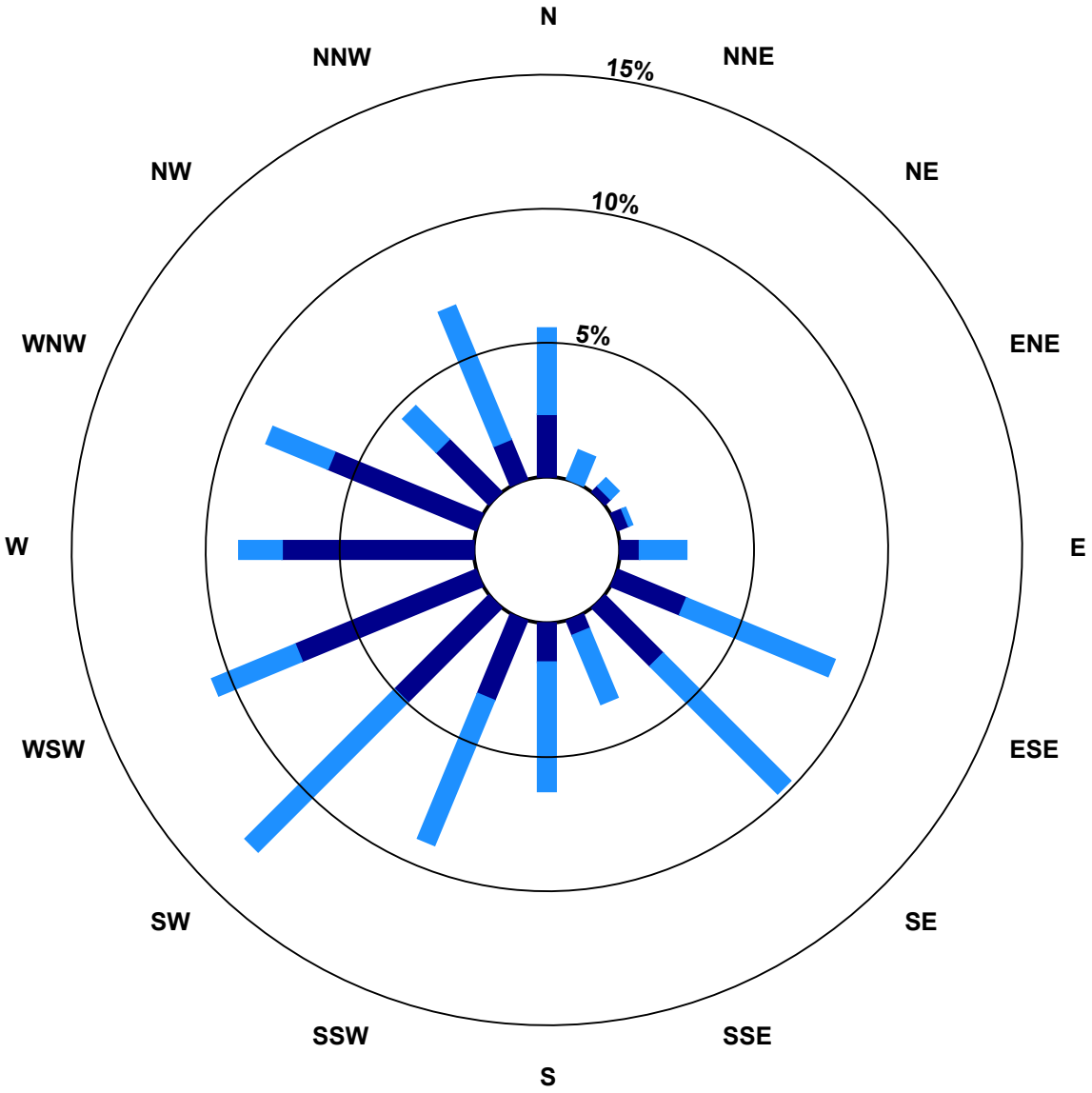
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Methane (CH_4) - ppm

Patricia McInnes



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

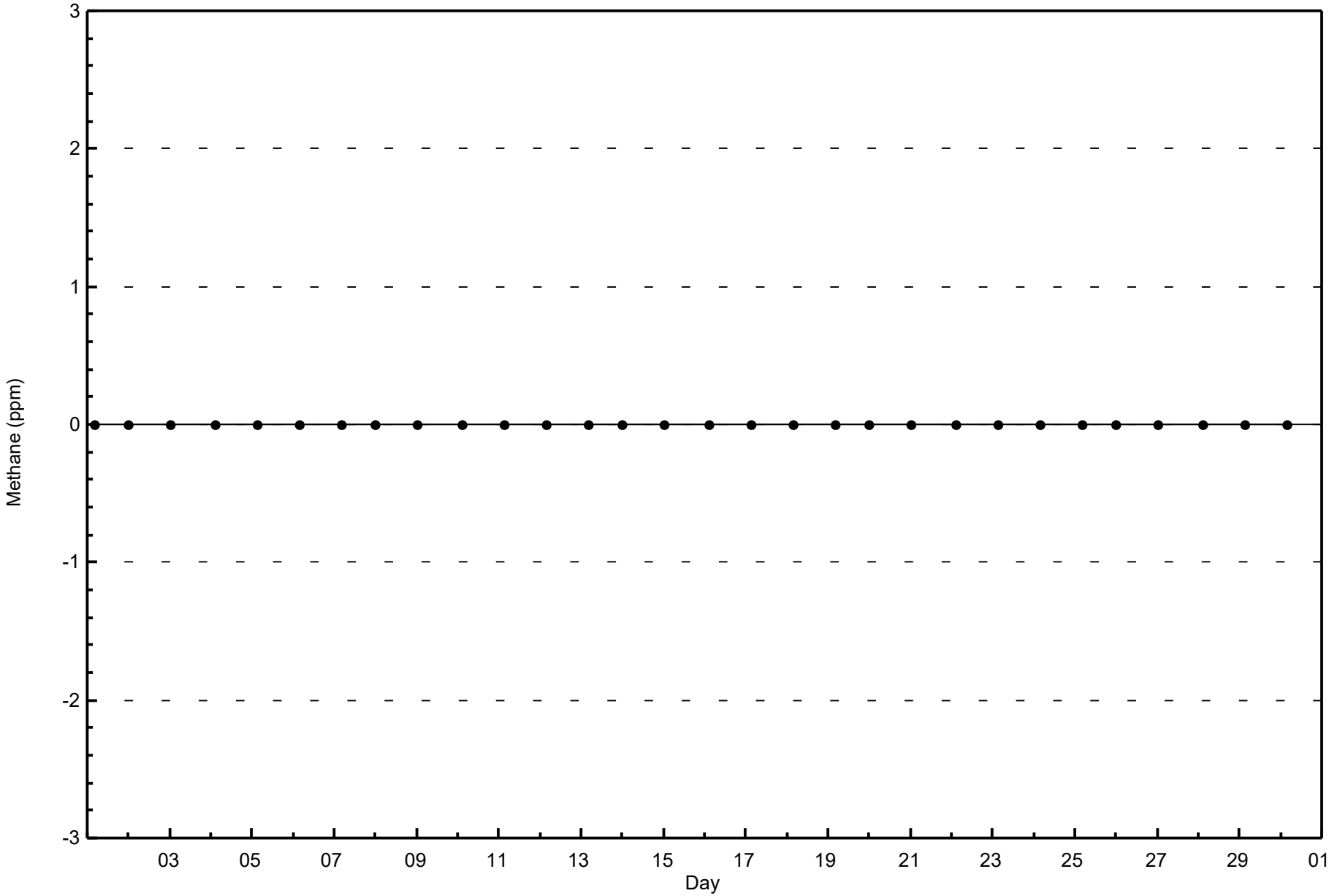
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Patricia McInnes - September 2026

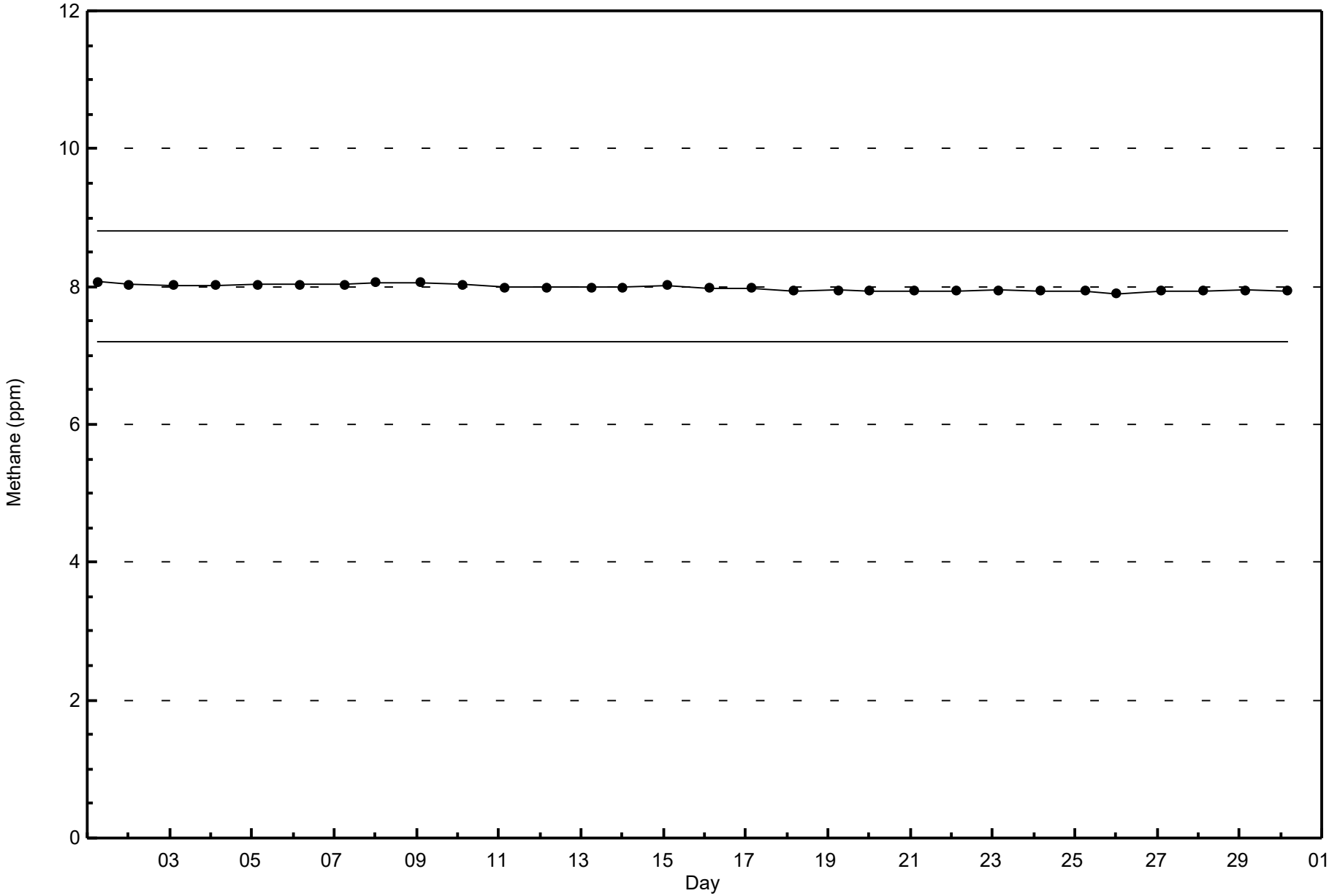


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Patricia McInnes - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Patricia McInnes - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 46.7 ppb on Sep 21 16:00 Maximum Daily Average: 31.0 ppb on Sep 21

Minimum Value: 1.8 ppb on Sep 19 06:00 Minimum Daily Average: 13.0 ppb on Sep 7
Maximum Diurnal Average: 29.8 ppb at hour 16 Minimum Diurnal Average: 12.6 ppb at hour 7
Monthly Average: 20.62 ppb Percentiles: P_1 = 3.1 P_{10} = 9.3 Q_1 = 14.5 Median = 20.0 Q_3 = 26.5 P_{90} = 32.1 P_{99} = 41.5

Hours in Service:	720
Hours of Data:	685
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-Sep	7.8	Z	7.6	8.6	3.8	3.1	5.7	9.6	12.9	16.7	19.6	26.5	32.0	34.3	38.0	38.8	41.5	42.1	38.4	32.2	25.3	23.2	23.0	21.3	22.3	42.1
2-Sep	21.3	19.9	Z	18.1	17.2	16.4	17.0	17.8	20.1	23.9	28.2	31.2	33.4	35.3	36.1	35.2	33.3	30.4	30.3	29.8	29.7	29.7	28.8	27.1	26.5	36.1
3-Sep	25.8	24.7	22.9	Z	18.7	16.0	14.1	13.8	13.5	13.3	15.3	16.7	16.2	17.2	17.2	18.0	18.3	19.6	23.8	20.4	19.7	21.3	21.4	20.2	18.6	25.8
4-Sep	19.0	16.9	19.1	19.3	Z	12.6	12.7	10.9	12.5	16.5	14.0	9.9	11.2	12.4	14.3	17.0	17.6	17.6	17.1	15.4	14.0	12.0	9.8	12.9	14.6	19.3
5-Sep	14.1	11.5	14.5	13.6	9.0	Z	8.8	11.9	14.3	18.6	25.2	25.2	27.5	29.7	32.3	34.8	35.6	35.3	29.1	17.6	13.2	9.1	5.5	5.4	19.2	35.6
6-Sep	Z	5.5	5.5	5.2	5.0	6.9	7.5	8.7	9.2	10.1	11.7	15.1	16.8	19.0	26.1	28.3	26.0	22.4	20.7	18.4	15.7	13.7	14.0	14.0	14.2	28.3
7-Sep	13.3	Z	12.8	11.0	8.4	6.4	6.7	8.4	7.8	9.1	11.7	14.4	19.6	20.1	22.8	25.8	25.6	24.6	18.1	13.4	4.1	5.3	6.1	4.2	13.0	25.8
8-Sep	3.7	3.9	Z	3.1	2.4	3.1	3.7	7.6	9.3	9.4	15.0	22.4	27.1	31.2	32.7	30.6	32.2	31.0	26.0	13.7	11.1	17.0	17.5	17.6	16.2	32.7
9-Sep	17.4	15.5	14.3	Z	9.9	4.5	4.7	4.1	11.3	17.0	20.7	23.3	27.1	30.5	31.7	31.4	30.8	30.2	29.7	29.0	25.2	30.3	29.9	28.4	21.6	31.7
10-Sep	30.6	26.6	24.8	25.2	Z	23.2	21.7	20.4	22.6	23.2	22.8	20.6	17.7	17.9	18.7	17.0	18.9	18.1	15.9	14.5	16.6	17.8	18.2	19.1	20.5	30.6
11-Sep	19.2	19.0	17.4	16.5	17.2	Z	16.6	16.1	15.6	15.5	17.7	19.8	20.3	19.9	22.7	25.2	26.5	24.7	26.7	25.5	23.3	21.4	19.0	18.0	20.2	26.7
12-Sep	Z	16.7	14.8	13.6	13.3	10.8	9.8	11.2	13.3	16.6	20.3	26.2	29.6	32.1	31.6	32.4	31.3	28.7	24.2	19.9	19.0	19.4	20.2	19.0	20.6	32.4
13-Sep	17.3	Z	17.6	17.5	17.8	17.6	16.6	17.0	19.4	22.2	25.2	28.7	32.0	34.9	33.9	32.2	32.9	32.0	27.6	20.0	16.4	14.5	12.8	6.0	22.3	34.9
14-Sep	2.3	5.7	Z	26.0	23.3	17.1	13.6	12.2	13.0	14.1	16.7	18.4	21.0	20.6	24.1	20.9	21.2	19.2	13.7	14.6	14.1	12.4	13.8	15.2	16.2	26.0
15-Sep	14.2	14.1	15.1	Z	14.0	13.3	8.7	8.9	9.5	12.7	15.4	23.0	25.8	24.6	25.3	21.5	19.7	23.1	21.3	19.3	16.4	21.7	19.7	16.3	17.5	25.8
16-Sep	14.8	10.6	5.6	5.3	Z	5.3	3.9	5.1	9.2	13.9	17.3	18.7	20.2	20.2	23.1	24.8	25.6	22.3	20.4	19.6	21.1	22.0	20.7	19.4	16.0	25.6
17-Sep	18.9	18.7	18.5	17.8	17.3	Z	14.9	14.3	14.1	C	C	C	C	C	20.0	21.2	19.0	17.3	11.5	2.9	3.1	3.2	4.4	5.8	13.5	21.2
18-Sep	Z	13.6	16.3	18.4	17.7	15.5	11.7	9.2	9.7	13.5	15.4	19.8	21.6	24.4	30.2	30.8	29.4	24.6	16.4	8.6	7.4	7.6	8.4	10.7	16.6	30.8
19-Sep	12.4	Z	10.5	10.2	6.6	1.8	2.4	5.1	11.5	18.3	19.0	33.3	38.8	38.8	39.7	42.0	43.5	38.1	32.8	31.4	31.8	28.9	27.8	26.9	24.0	43.5
20-Sep	29.0	28.8	Z	26.3	23.8	22.1	21.1	21.5	22.9	25.0	27.6	32.3	36.5	38.6	40.4	40.3	38.8	32.2	27.1	17.8	19.6	27.3	30.4	32.3	28.8	40.4
21-Sep	30.5	30.4	29.1	Z	25.3	23.1	20.4	18.3	19.3	21.8	21.6	28.5	34.3	38.1	45.0	46.7	43.5	41.6	34.4	32.0	32.9	32.3	31.8	33.0	31.0	46.7
22-Sep	27.1	23.6	16.7	10.8	Z	5.7	8.8	15.3	14.3	11.5	22.2	29.2	32.5	35.1	38.7	39.1	38.1	35.2	31.5	23.4	18.6	24.1	22.1	20.7	23.7	39.1
23-Sep	21.6	19.1	16.2	12.4	10.6	Z	3.1	7.9	9.7	13.2	20.9	21.1	22.7	25.8	27.8	29.1	28.8	25.4	23.5	21.6	18.0	14.2	12.3	17.5	18.4	29.1
24-Sep	Z	23.2	21.3	21.3	16.3	18.0	16.6	13.9	18.4	20.9	22.8	23.4	30.2	33.4	34.4	36.6	35.3	32.6	28.7	25.5	20.8	13.1	18.8	17.7	23.6	36.6
25-Sep	11.7	Z	16.8	12.7	16.9	16.9	13.5	9.6	14.1	22.8	26.5	28.5	27.9	26.7	25.7	28.8	29.8	29.1	19.5	16.5	15.9	14.8	16.7	18.0	20.0	29.8
26-Sep	19.1	19.1	Z	12.4	14.3	16.0	20.3	23.6	24.7	24.9	25.2	25.8	26.4	26.2	27.4	27.8	28.1	27.9	28.3	27.8	25.8	24.3	22.1	19.5	23.3	28.3
27-Sep	17.1	16.9	15.9	Z	15.7	14.8	15.6	16.0	16.4	19.0	20.8	22.7	24.4	26.1	28.5	28.1	27.5	26.6	23.2	22.4	22.6	22.3	23.2	22.8	21.2	28.5
28-Sep	22.0	21.6	20.1	18.8	Z	14.9	13.5	11.5	15.0	22.7	28.1	31.0	34.0	33.1	33.7	32.2	33.9	32.5	27.4	29.3	29.5	28.1	28.0	26.8	25.6	34.0
29-Sep	23.7	20.0	16.9	14.5	19.7	Z	21.6	22.1	21.5	23.4	23.8	24.8	24.6	28.8	31.8	32.4	32.9	32.5	31.2	17.0	26.0	27.0	26.1	30.4	24.9	32.9
30-Sep	Z	30.4	29.2	26.0	22.3	21.3	21.8	21.3	22.6	23.5	25.0	27.2	26.4	26.0	24.8	25.3	26.5	26.4	24.0	20.4	14.1	13.8	15.8	14.4	23.0	30.4
	18.1	18.2	16.8	15.4	14.7	13.1	12.6	13.1	14.9	17.7	20.5	23.7	26.1	27.6	29.3	29.8	29.7	28.1	24.8	20.7	19.0	19.1	18.9	18.7	Diurnal Average	
	30.6	30.4	29.2	26.3	25.3	23.2	21.8	23.6	24.7	25.0	28.2	33.3	38.8	38.8	45.0	46.7	43.5	42.1	38.4	32.2	32.9	32.3	31.8	33.0	Diurnal Maximum	

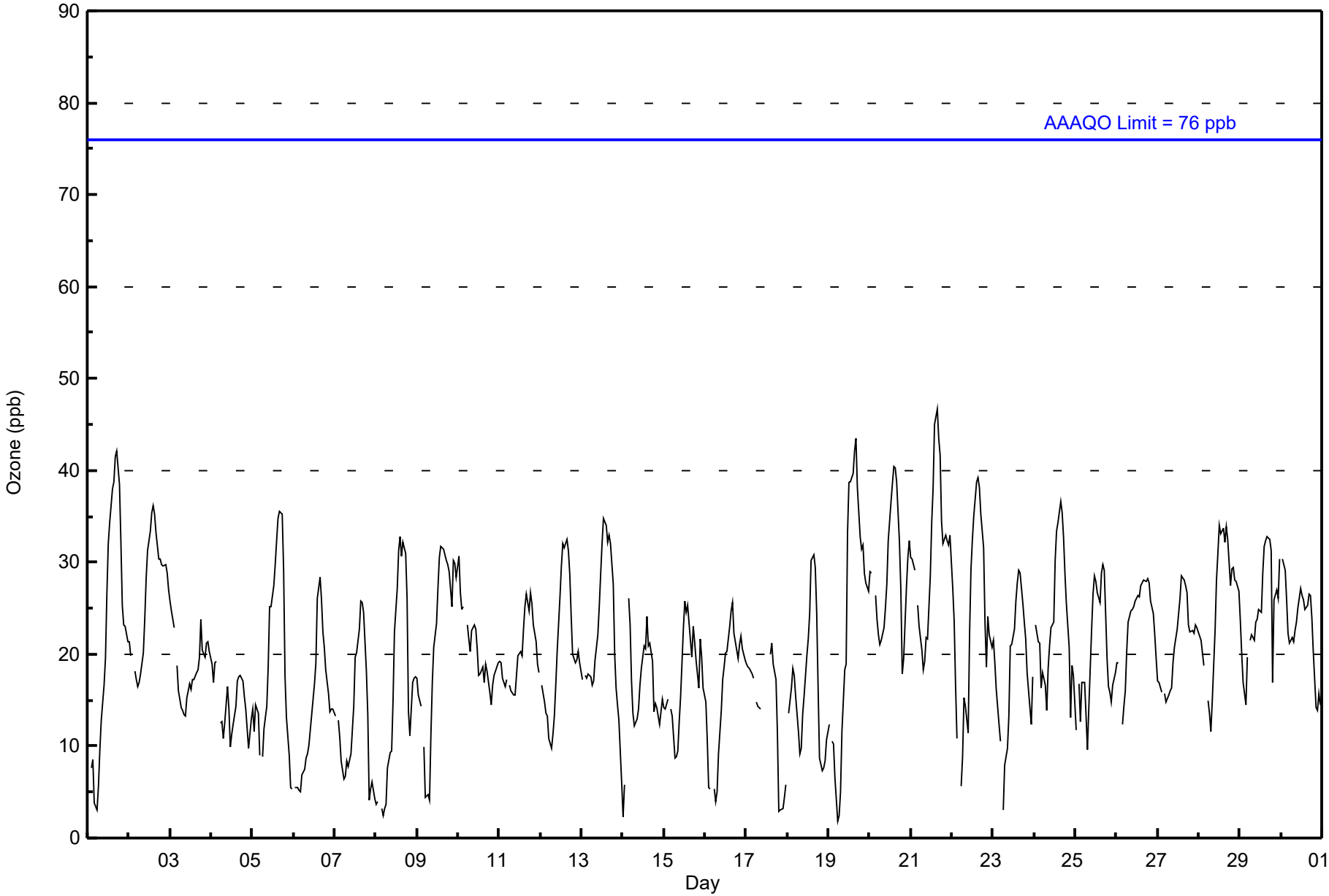
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Patricia McInnes - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	358	52.26	52.26
21 - 50	327	47.74	100.00
51 - 82	0	0.00	100.00
> 83	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Ozone (O_3) - ppb

Patricia McInnes - September 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	4	1	1	10	36	37	15	26	31	38	22	17	36	17	38	358
21 - 50	10	5	8	4	7	23	31	6	17	28	52	47	44	21	13	11	327
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	39	9	9	5	17	59	68	21	43	59	90	69	61	57	30	49	685

Total Number of Valid Hours: 685

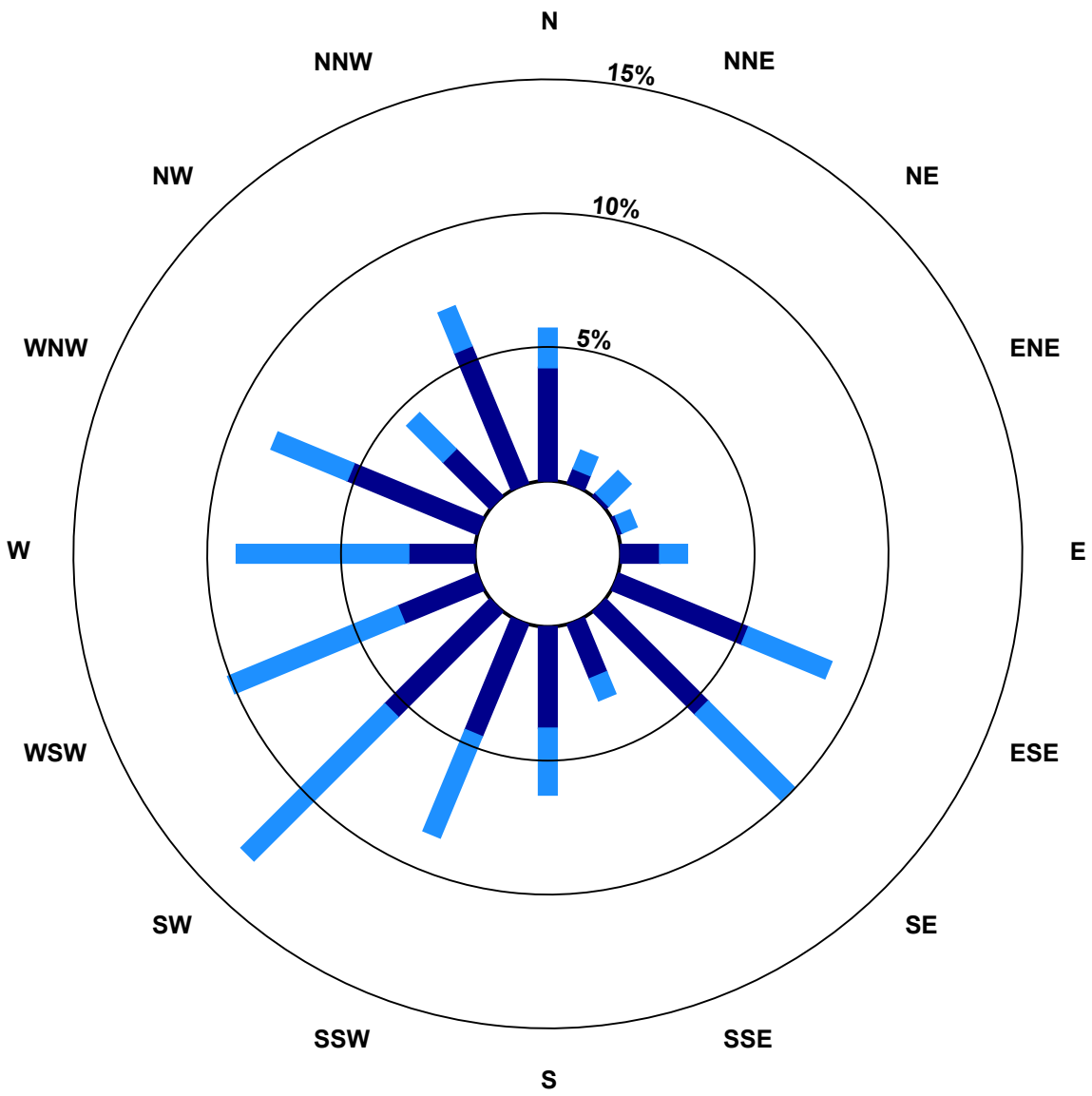
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Ozone (O_3) - ppb

Patricia McInnes



Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

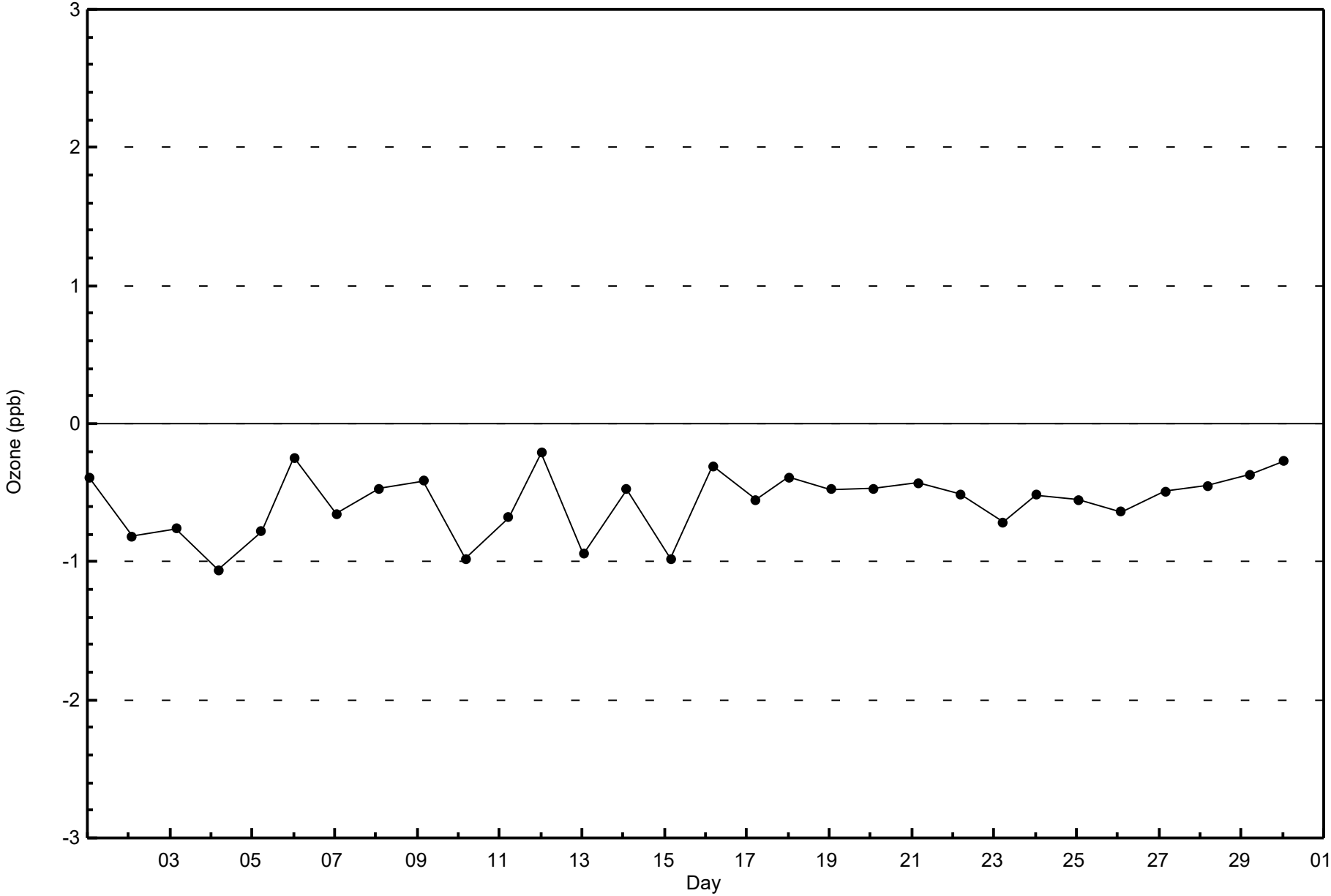
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Patricia McInnes - September 2026

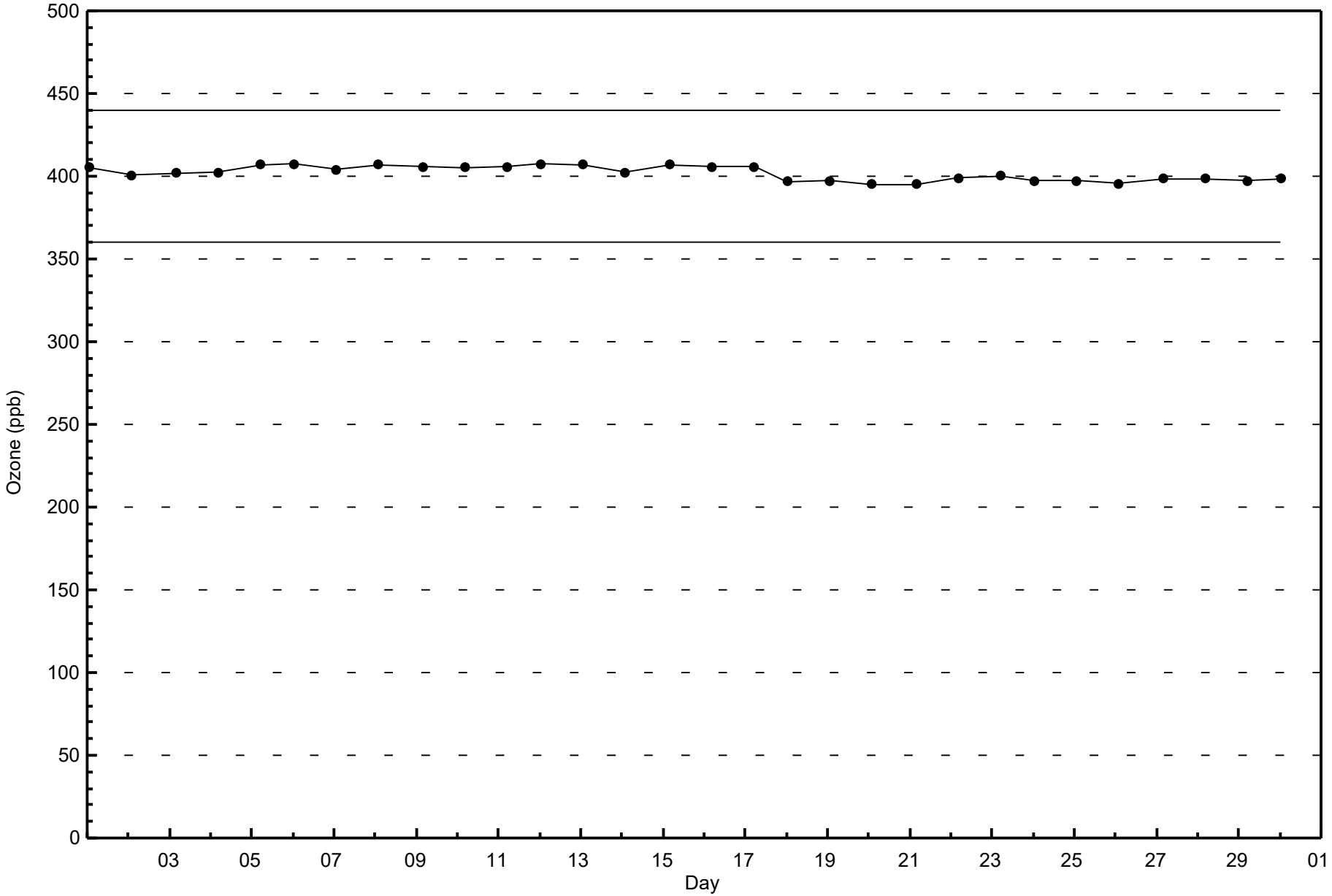


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Patricia McInnes - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Patricia McInnes - September 2026

Maximum Value: 25.0 ppb on Sep 8 07:00

Maximum Daily Average: 2.9 ppb on Sep 18

Minimum Value: 0.0 ppb on Sep 2 03:00

Minimum Daily Average: 0.1 ppb on Sep 26

Maximum Diurnal Average: 2.3 ppb at hour 7

Minimum Diurnal Average: 0.1 ppb at hour 24

Monthly Average: 0.77 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.3 Q_3 = 0.8 P_{90} = 1.8 P_{99} = 8.3

Hours in Service:	720
Hours of Data:	684
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-Sep	0.1	0.1	0.2	Z	3.8	4.2	4.7	2.4	2.2	1.6	1.3	1.4	1.2	0.6	0.6	0.8	0.8	0.5	0.3	0.7	0.5	0.2	0.1	0.0	1.2	4.7
2-Sep	0.0	0.1	0.0	0.0	Z	0.5	0.5	0.9	0.9	0.7	0.3	0.3	0.4	0.4	0.5	0.5	0.8	0.6	0.6	0.7	0.4	0.2	0.1	0.1	0.4	0.9
3-Sep	0.1	0.0	0.0	0.0	0.6	Z	1.3	1.1	1.0	2.0	1.1	1.0	0.8	1.0	2.3	1.6	2.9	2.6	1.0	1.4	1.1	0.3	0.1	0.1	1.0	2.9
4-Sep	Z	0.2	0.0	0.0	0.5	1.5	1.6	2.8	1.3	0.7	1.6	1.1	0.7	0.6	0.2	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.0	0.6	2.8
5-Sep	0.0	Z	0.0	0.0	0.1	0.2	2.5	3.9	3.9	2.0	1.1	1.1	0.8	0.8	0.7	0.4	0.4	0.2	0.1	0.2	0.4	1.1	0.8	0.5	0.9	3.9
6-Sep	0.1	0.3	Z	1.1	0.7	0.9	1.0	1.0	1.0	1.0	1.1	0.9	1.1	0.6	0.7	0.4	0.7	0.4	0.8	1.2	0.9	0.5	0.3	0.1	0.7	1.2
7-Sep	0.1	0.0	0.1	Z	0.9	0.9	1.4	1.1	1.9	2.1	2.2	1.1	0.9	0.4	0.2	0.6	0.2	1.3	1.8	1.9	5.7	0.6	0.0	0.0	1.1	5.7
8-Sep	0.2	0.7	0.1	0.1	Z	1.1	25.0	6.4	12.1	C	C	C	C	C	C	0.0	3.0	0.8	0.7	0.8	1.5	0.6	0.0	0.0	--	25.0
9-Sep	0.0	0.0	0.0	0.0	0.9	Z	2.8	8.3	1.4	0.5	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.7	8.3
10-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.4	1.1	0.9	1.1	1.5	0.5	0.2	0.2	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.3	1.5
11-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.6	0.1	0.1	0.2	0.2	0.3	0.4	0.1	0.1	0.8	0.7	0.5	0.3	1.0	0.1	0.0	0.0	0.0	0.2	1.0
12-Sep	0.0	0.0	Z	0.1	0.2	0.0	0.3	0.1	0.3	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.4	0.6	0.3	0.1	0.2	0.6
13-Sep	0.0	0.2	0.2	Z	0.3	0.2	0.2	0.5	0.4	0.2	0.2	0.3	0.1	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.2	0.5
14-Sep	0.5	0.3	0.0	0.0	Z	0.3	0.4	0.9	1.1	1.7	3.1	1.4	1.3	1.2	0.4	1.0	0.7	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.6	3.1
15-Sep	0.0	0.0	0.0	0.0	0.0	Z	3.2	2.0	1.7	0.9	1.5	0.2	0.7	1.0	0.8	1.6	1.8	0.2	0.5	0.3	0.2	0.4	0.2	0.3	0.8	3.2
16-Sep	Z	0.4	0.3	0.2	0.3	1.7	3.0	3.9	2.4	1.8	1.0	1.5	1.9	2.5	1.2	0.7	0.4	2.4	1.6	1.2	0.6	0.1	0.0	0.1	1.3	3.9
17-Sep	0.0	Z	0.1	0.1	0.3	0.5	0.8	1.0	1.9	1.7	0.6	0.3	0.0	0.1	0.2	0.1	0.6	0.0	0.2	4.9	0.9	1.0	1.3	0.2	0.7	4.9
18-Sep	0.2	0.6	Z	0.0	0.0	0.3	0.4	8.8	14.5	10.2	8.4	5.5	3.6	2.9	0.0	0.2	0.8	2.6	2.5	1.5	1.4	0.6	0.3	0.4	2.9	14.5
19-Sep	0.2	0.2	0.4	Z	2.9	6.5	5.2	4.6	3.4	1.4	2.1	0.4	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	1.2	6.5
20-Sep	0.0	0.0	0.0	0.0	Z	0.2	0.1	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.4	0.1	0.6	0.3	0.6	0.3	0.2	0.1	0.6
21-Sep	0.1	0.0	0.0	0.0	0.0	Z	0.3	0.9	0.6	0.3	1.1	0.9	0.4	0.6	0.4	0.3	0.3	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.3	1.1
22-Sep	Z	0.0	0.0	0.0	1.5	1.4	0.9	0.7	3.2	5.5	1.2	0.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.3	0.0	0.7	5.5
23-Sep	0.1	Z	0.7	0.7	0.9	2.3	10.6	3.8	2.4	2.8	0.7	1.4	1.8	1.8	1.6	1.2	1.4	1.8	1.2	0.6	0.7	0.5	0.2	0.2	1.7	10.6
24-Sep	0.1	0.0	Z	0.2	0.6	0.6	1.0	1.6	1.0	0.4	0.4	0.5	0.1	0.2	0.5	0.5	0.5	0.2	0.4	0.6	0.7	0.8	0.4	0.4	0.5	1.6
25-Sep	0.6	0.5	0.3	Z	0.3	0.3	0.6	4.5	2.0	0.5	0.6	0.6	0.8	1.1	0.7	1.1	0.8	0.6	0.0	0.1	0.1	0.3	0.2	0.1	0.7	4.5
26-Sep	0.0	0.0	0.2	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.0	0.0	0.0	0.3	0.1	0.1	0.1	0.3
27-Sep	0.3	0.3	0.2	0.0	0.1	Z	0.2	0.2	0.2	0.1	0.3	0.4	0.3	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.2	0.0	0.1	0.2	0.4
28-Sep	Z	0.1	0.1	0.1	0.8	1.0	1.3	3.8	2.4	0.6	0.6	0.7	0.9	0.2	0.1	0.4	0.3	0.3	2.0	0.3	0.3	0.1	0.1	0.0	0.7	3.8
29-Sep	0.0	Z	0.1	0.8	0.2	0.3	0.2	0.3	0.4	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.1	0.2	0.3	0.1	0.3	2.5
30-Sep	0.3	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.1	0.1	0.3	0.1	0.8
	0.1	0.2	0.1	0.1	0.6	1.0	2.3	2.2	2.2	1.4	1.1	0.8	0.7	0.6	0.4	0.4	0.6	0.6	0.5	0.7	0.6	0.3	0.2	0.1	Diurnal Average	
	0.6	0.7	0.7	1.1	3.8	6.5	25.0	8.8	14.5	10.2	8.4	5.5	3.6	2.9	2.3	1.6	3.0	2.6	2.5	4.9	5.7	1.1	1.3	0.5	Diurnal Maximum	

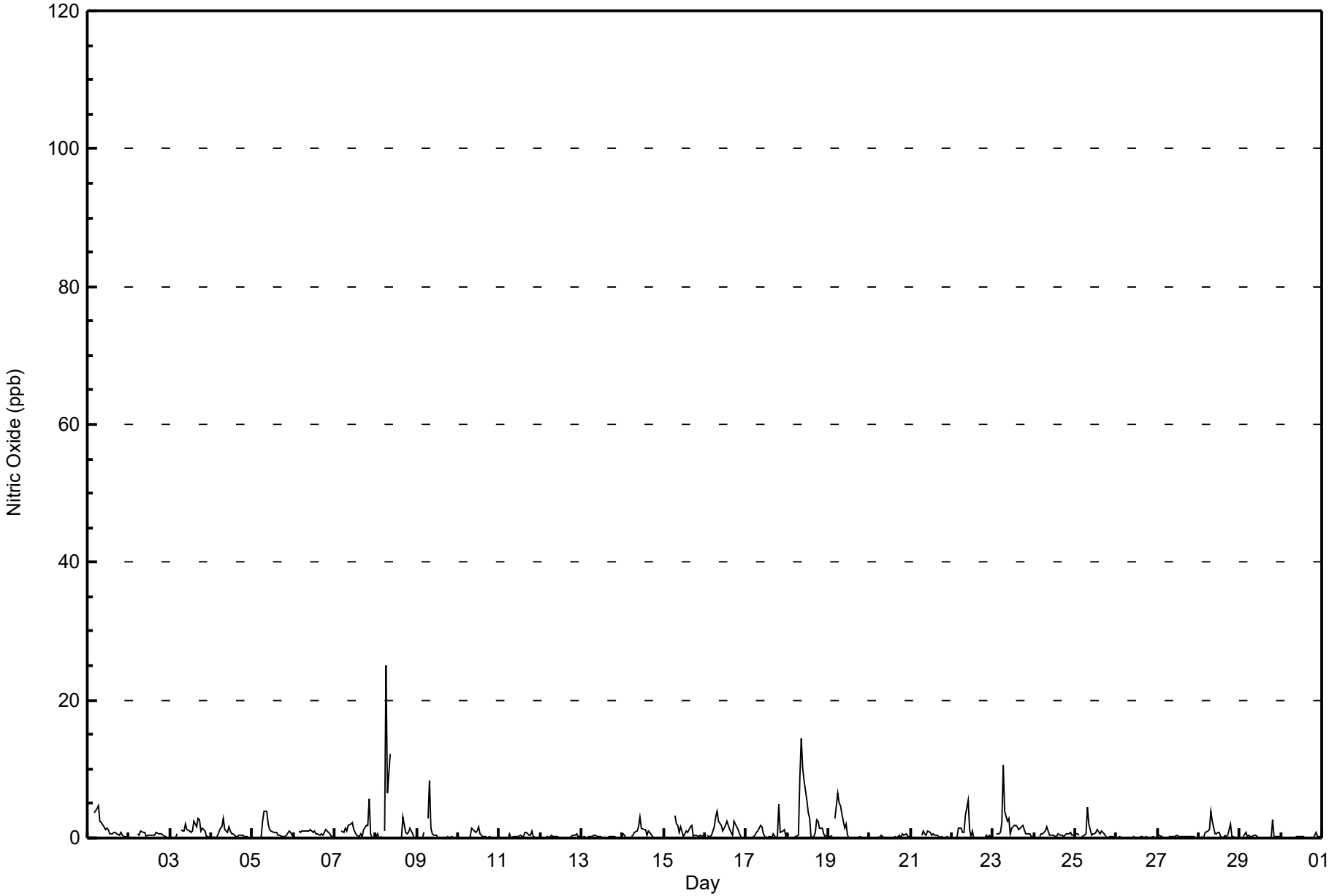
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Patricia McInnes - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	683	99.85	99.85
21 - 40	1	0.15	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

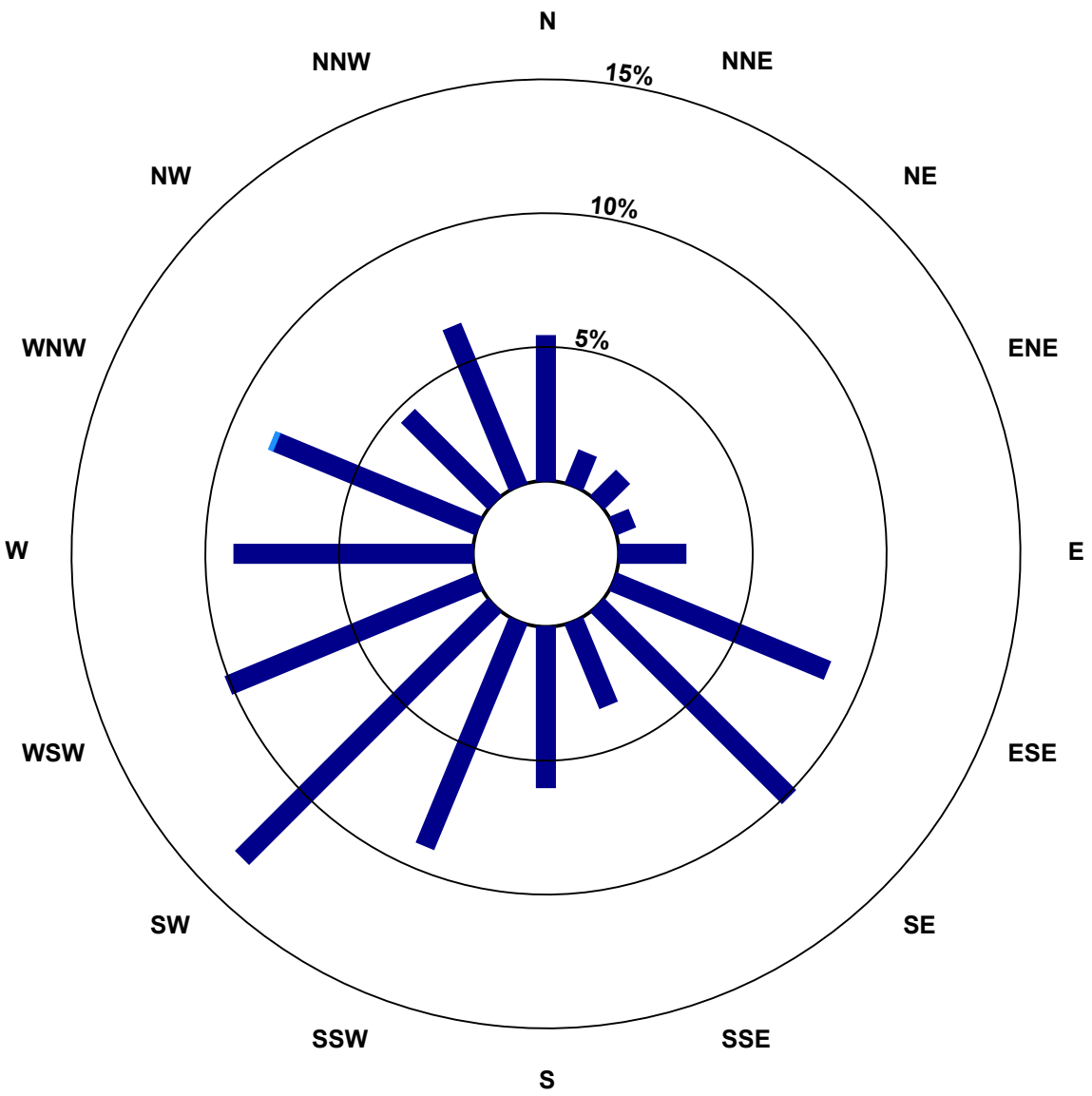
Nitric Oxide (NO) - ppb

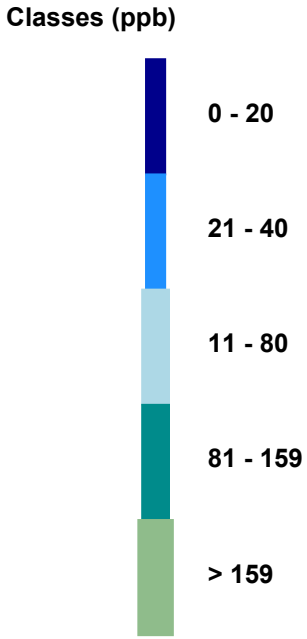
Patricia McInnes - September 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	37	9	9	5	17	59	69	23	41	62	91	69	61	56	31	44	683
21 - 40	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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	37	9	9	5	17	59	69	23	41	62	91	69	61	57	31	44	684

Total Number of Valid Hours: 684

Total Number of Hours: 720





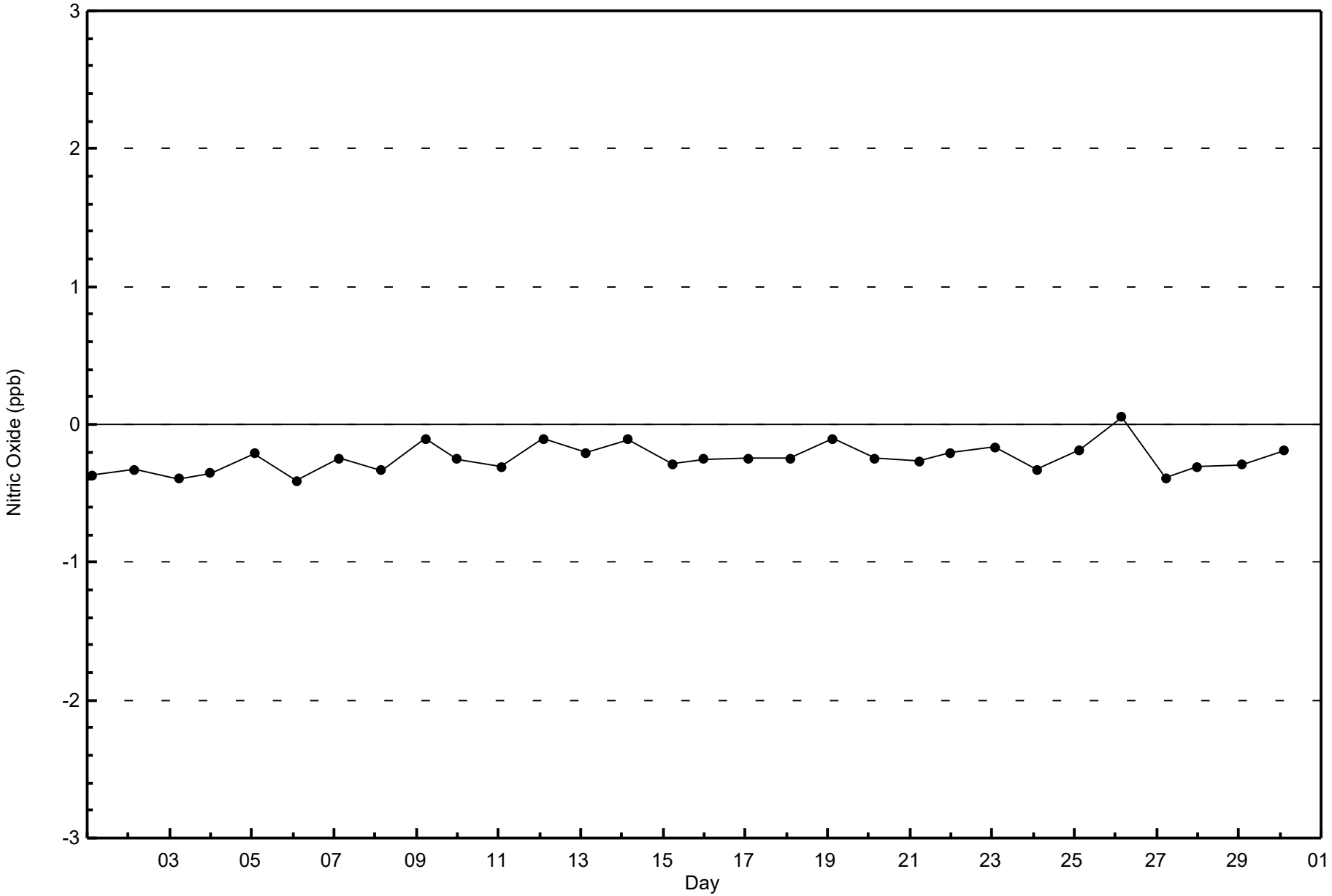
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Patricia McInnes - September 2026

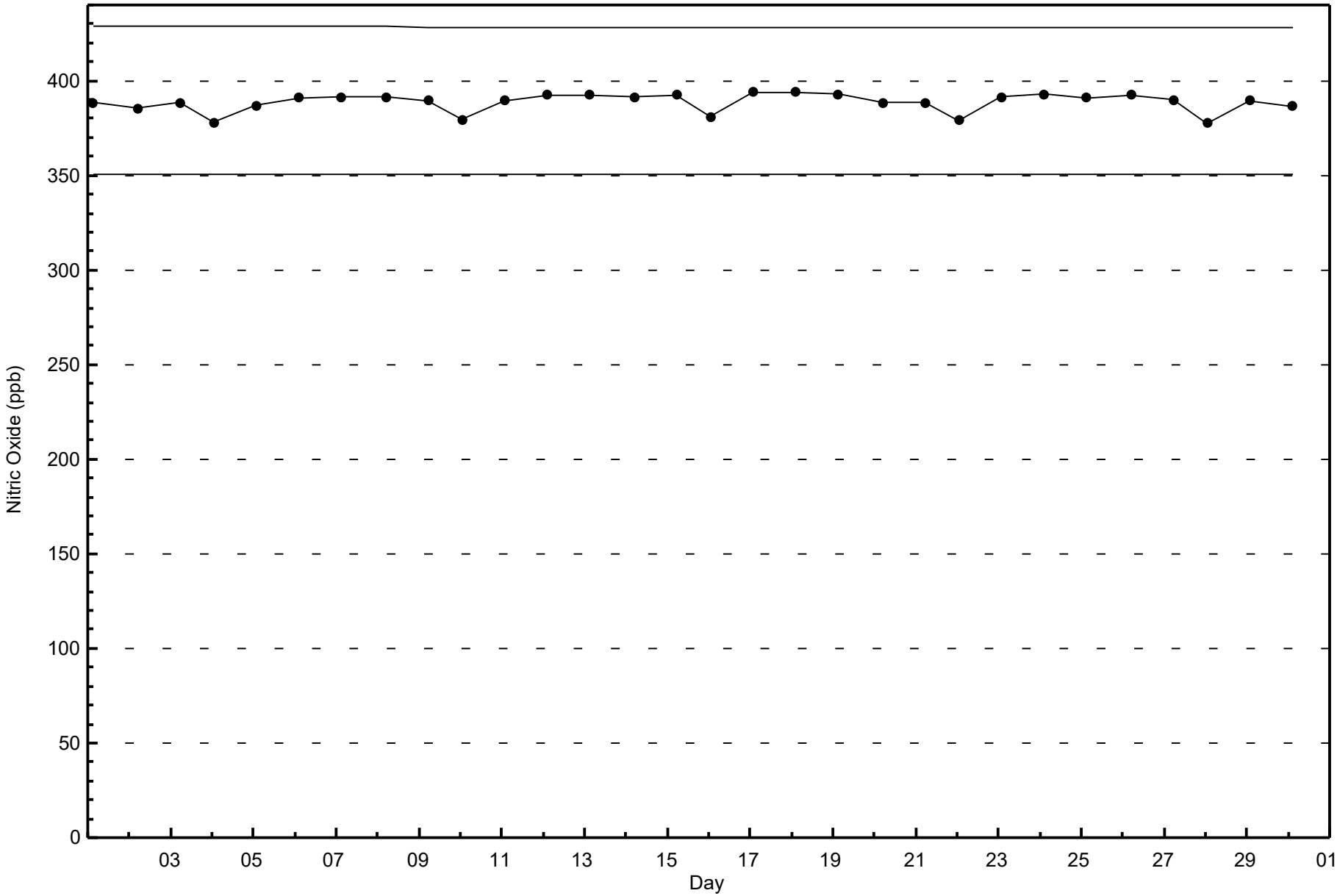


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Patricia McInnes - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Patricia McInnes - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 13.7 ppb on Sep 25 08:00
Maximum Daily Average: 4.8 ppb on Sep 18

Minimum Value: 0.0 ppb on Sep 9 01:00
Minimum Daily Average: 0.3 ppb on Sep 10
Maximum Diurnal Average: 4.2 ppb at hour 20
Minimum Diurnal Average: 0.8 ppb at hour 15
Monthly Average: 2.17 ppb
Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.4 Median = 1.4 Q_3 = 3.0 P_{90} = 5.4 P_{99} = 11.3

Hours in Service:	720
Hours of Data:	684
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-Sep	1.3	1.3	0.8	Z	6.2	6.3	5.4	2.8	2.3	2.5	2.7	2.7	1.6	0.9	1.4	1.4	2.0	2.5	3.3	4.6	3.0	1.9	1.3	1.5	2.6	6.3
2-Sep	1.1	1.0	0.6	0.5	Z	1.2	0.9	0.9	1.3	1.5	1.0	1.1	0.8	0.8	0.9	1.0	1.6	2.1	2.0	2.0	1.5	0.8	0.7	0.6	1.1	2.1
3-Sep	0.4	0.2	0.3	0.7	2.0	Z	2.7	1.8	1.0	2.4	1.3	0.9	0.8	0.9	1.8	1.7	2.1	3.4	2.5	3.2	2.2	1.3	1.0	0.9	1.5	3.4
4-Sep	Z	1.1	0.7	0.7	1.7	5.7	3.8	4.0	2.1	1.5	2.2	1.3	0.7	0.6	0.7	0.9	1.4	1.7	1.8	1.5	1.7	3.5	5.6	3.3	2.1	5.7
5-Sep	1.5	Z	1.6	2.3	6.5	8.0	8.3	6.0	4.5	3.0	2.0	2.1	1.6	1.9	2.2	2.1	2.0	2.2	2.7	3.1	2.7	5.2	3.6	3.4	3.4	8.3
6-Sep	3.3	3.7	Z	4.3	4.8	5.2	3.3	1.8	1.2	1.2	1.2	1.3	1.2	0.9	1.2	0.9	1.5	3.0	3.5	3.3	3.0	1.8	1.5	1.7	2.4	5.2
7-Sep	1.4	1.5	1.4	Z	3.8	4.5	3.2	2.3	2.2	2.5	2.1	1.4	1.0	0.7	0.9	1.5	0.9	3.1	7.5	6.2	7.0	2.5	0.7	0.6	2.6	7.5
8-Sep	1.1	1.4	0.9	0.3	Z	3.2	8.8	7.6	10.7	C	C	C	C	C	C	0.4	4.4	3.3	5.3	11.7	6.5	2.4	0.4	0.3	--	11.7
9-Sep	0.0	0.1	0.5	1.1	3.5	Z	5.1	6.7	2.0	0.4	0.4	0.4	0.3	0.2	0.2	0.3	0.6	0.3	0.4	1.3	2.2	0.3	0.2	0.0	1.2	6.7
10-Sep	Z	0.1	0.0	0.0	0.0	0.2	0.1	0.1	1.3	1.0	1.0	1.1	1.4	0.7	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.4
11-Sep	0.0	Z	0.1	0.0	0.0	0.1	0.6	0.2	1.0	1.1	0.8	0.8	0.9	0.2	0.1	0.8	1.9	2.6	2.7	2.6	0.1	0.0	0.0	0.0	0.7	2.7
12-Sep	0.0	0.0	Z	0.2	0.2	0.1	0.5	0.3	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.4	2.4	4.3	3.5	1.9	0.5	0.3	0.7	4.3
13-Sep	0.2	0.4	0.6	Z	0.6	0.7	0.8	0.5	0.4	0.5	0.6	0.4	0.3	0.4	0.1	0.6	1.1	2.2	4.0	4.2	2.0	2.9	2.3	8.0	1.5	8.0
14-Sep	11.5	9.5	1.2	2.1	Z	3.2	4.3	6.2	5.6	4.9	4.6	4.0	3.1	3.9	2.0	3.1	2.7	3.9	4.1	5.0	2.6	2.4	0.2	0.0	3.9	11.5
15-Sep	0.1	0.0	0.0	0.0	0.0	Z	4.5	2.7	1.6	0.3	0.9	0.2	0.5	0.6	0.6	2.3	3.3	0.3	0.5	0.4	0.3	0.1	0.1	0.4	0.9	4.5
16-Sep	Z	3.0	7.5	6.8	4.6	4.7	4.8	7.0	5.9	4.4	2.7	2.0	1.9	2.4	1.4	1.8	1.6	5.3	4.9	4.8	3.0	1.0	0.9	0.7	3.6	7.5
17-Sep	0.5	Z	0.7	0.7	1.1	2.0	2.8	2.6	2.5	2.2	1.3	0.9	0.8	0.8	0.5	0.7	2.0	0.6	1.8	3.9	1.5	1.9	2.5	0.7	1.5	3.9
18-Sep	1.8	3.5	Z	0.7	0.3	0.7	2.2	5.6	12.0	9.3	8.4	6.9	6.2	4.6	0.3	0.8	2.2	7.2	11.8	11.6	5.3	3.1	3.3	2.5	4.8	12.0
19-Sep	2.9	1.9	2.9	Z	7.0	8.9	7.3	5.3	3.8	2.2	2.6	1.0	0.6	0.7	0.7	0.9	1.2	2.7	4.8	3.4	1.6	3.1	3.5	2.0	3.1	8.9
20-Sep	0.5	0.4	0.8	0.6	Z	1.3	0.8	1.1	0.6	0.5	0.5	0.3	0.1	0.2	0.2	0.2	0.8	5.7	4.6	10.4	6.4	1.3	1.1	1.4	1.7	10.4
21-Sep	1.6	0.9	0.8	0.9	1.0	Z	2.0	2.1	1.5	1.3	2.8	2.6	1.9	2.5	1.4	2.7	2.7	2.3	5.2	5.1	2.1	1.2	1.0	1.2	2.0	5.2
22-Sep	Z	1.3	2.1	2.2	6.9	7.2	1.7	2.8	6.8	6.6	2.4	0.3	0.8	0.2	0.0	0.0	0.0	0.0	0.7	1.0	2.1	2.1	2.0	2.2	2.2	7.2
23-Sep	0.8	Z	2.1	3.0	5.3	8.4	11.2	5.4	3.3	3.2	1.2	2.9	3.4	3.4	4.0	3.2	3.9	5.6	5.9	3.9	4.7	5.1	3.4	2.0	4.1	11.2
24-Sep	1.3	0.7	Z	1.1	3.0	1.9	3.4	2.9	1.5	0.6	0.4	0.7	0.2	0.1	0.2	0.0	0.3	1.4	3.5	2.4	2.6	8.2	2.8	4.4	1.9	8.2
25-Sep	5.6	2.5	1.9	Z	2.7	5.0	10.3	13.7	10.4	3.8	2.5	1.5	1.5	1.6	2.2	3.2	2.9	2.4	5.8	6.3	5.4	7.6	6.1	4.5	4.8	13.7
26-Sep	3.0	3.1	3.5	7.7	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	0.1	0.1	0.8	7.7
27-Sep	0.6	0.4	0.4	0.1	0.1	Z	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.6	2.4	3.0	2.1	1.3	0.9	0.4	0.7	3.0
28-Sep	Z	0.8	0.8	1.4	4.4	5.1	6.1	9.9	5.6	1.4	0.6	0.6	0.3	0.4	0.4	1.3	1.0	1.8	7.8	3.1	2.1	2.2	2.0	2.2	2.7	9.9
29-Sep	4.4	Z	2.6	8.4	5.8	3.5	1.7	1.7	2.3	1.8	0.5	0.3	0.1	0.0	0.1	0.1	0.1	0.0	1.0	11.8	1.7	1.3	0.9	0.1	2.2	11.8
30-Sep	0.1	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.1	0.5	1.4	3.9	1.2	0.9	2.3	0.5	3.9
	1.8	1.6	1.4	1.8	2.9	3.5	3.6	3.5	3.1	2.1	1.6	1.3	1.1	1.0	0.8	1.1	1.5	2.2	3.4	4.2	2.8	2.3	1.7	1.6	Diurnal Average	
	11.5	9.5	7.5	8.4	7.0	8.9	11.2	13.7	12.0	9.3	8.4	6.9	6.2	4.6	4.0	3.2	4.4	7.2	11.8	11.8	7.0	8.2	6.1	8.0	Diurnal Maximum	

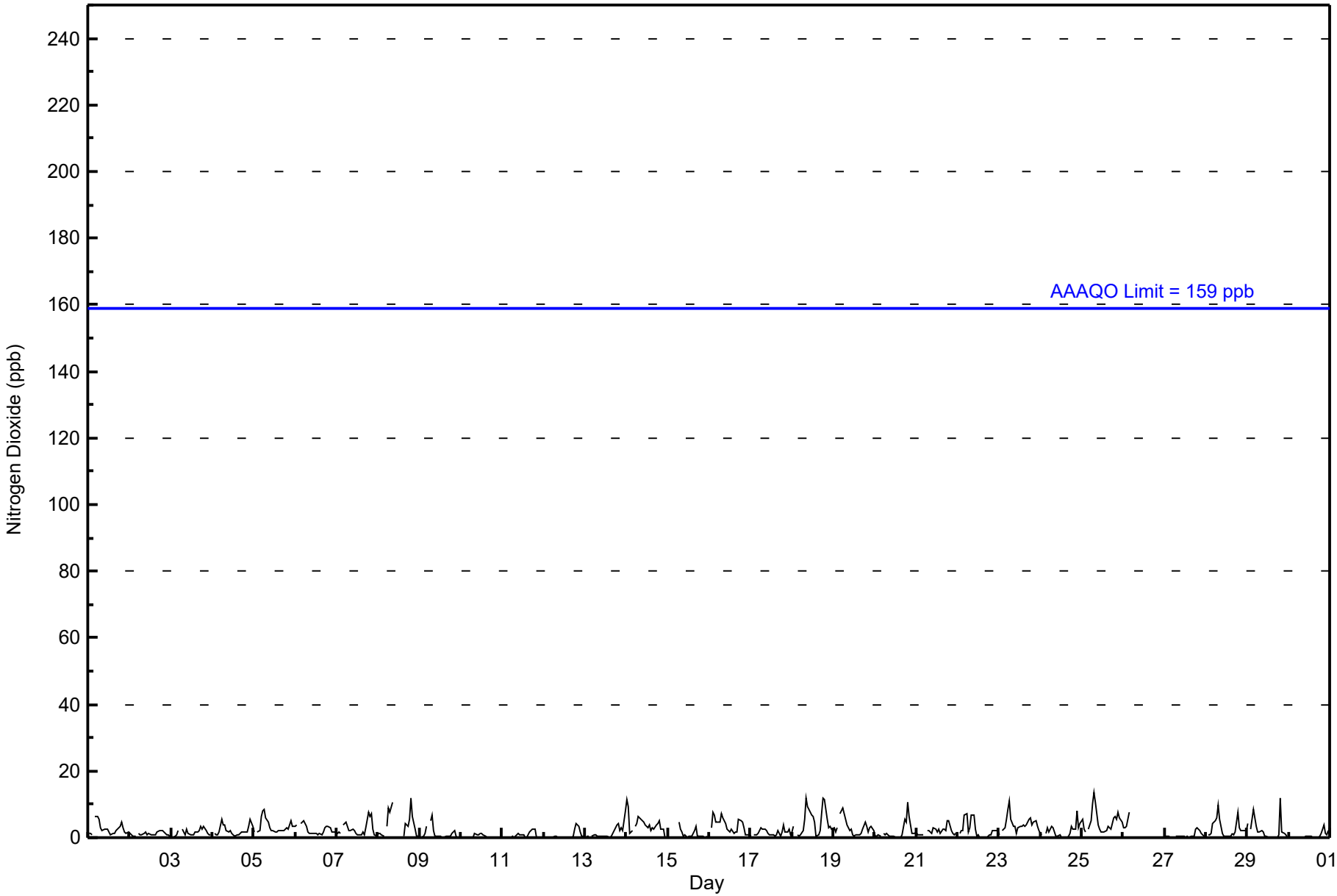
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Patricia McInnes - September 2026



Nitrogen Dioxide (NO_2) - ppb

Patricia McInnes - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

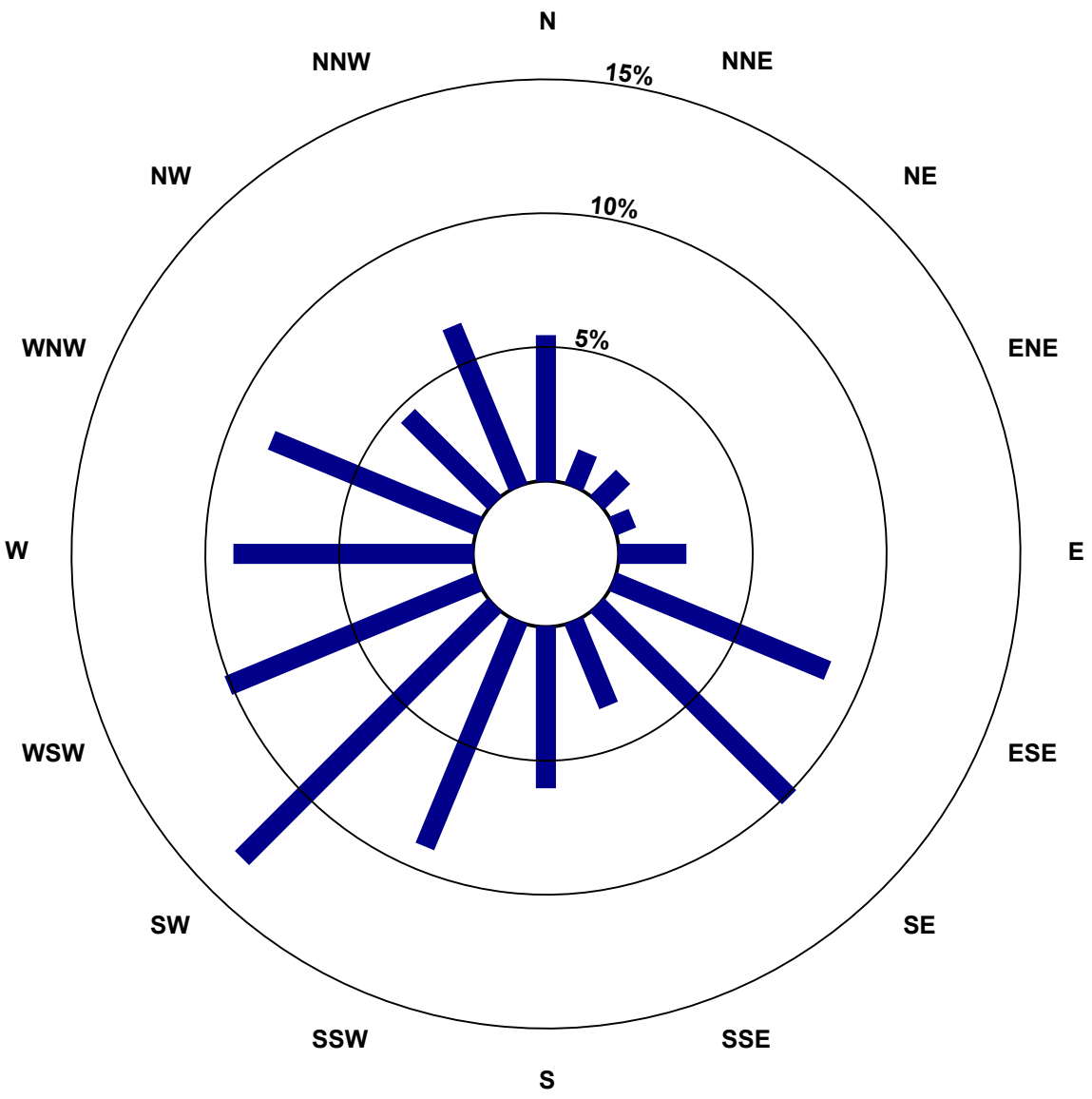
Nitrogen Dioxide (NO_2) - ppb

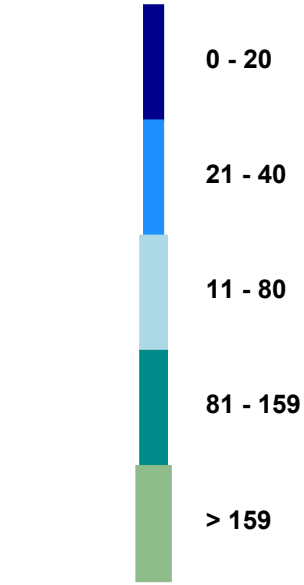
Patricia McInnes - September 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	37	9	9	5	17	59	69	23	41	62	91	69	61	57	31	44	684
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	37	9	9	5	17	59	69	23	41	62	91	69	61	57	31	44	684

Total Number of Valid Hours: 684

Total Number of Hours: 720





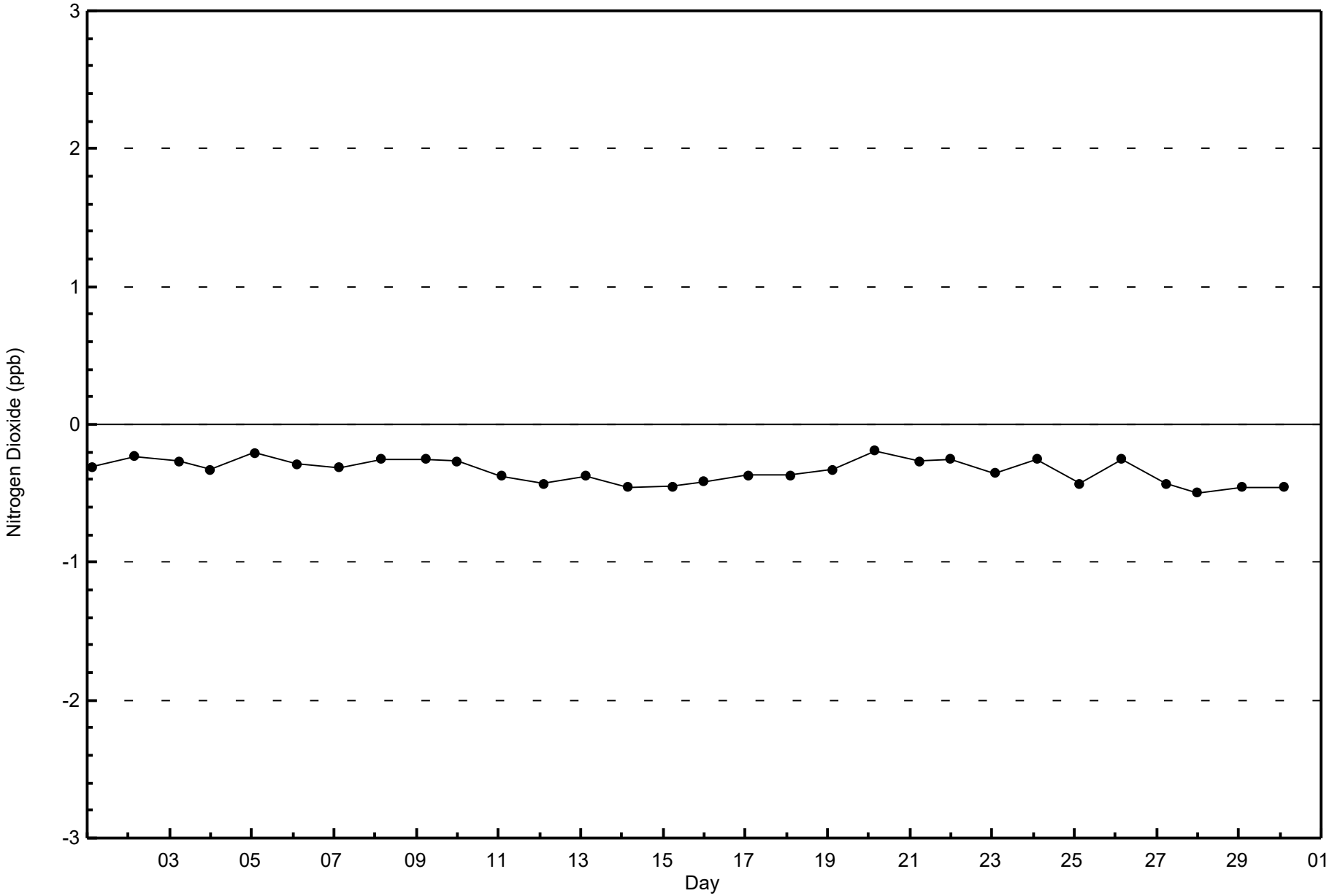
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Patricia McInnes - September 2026

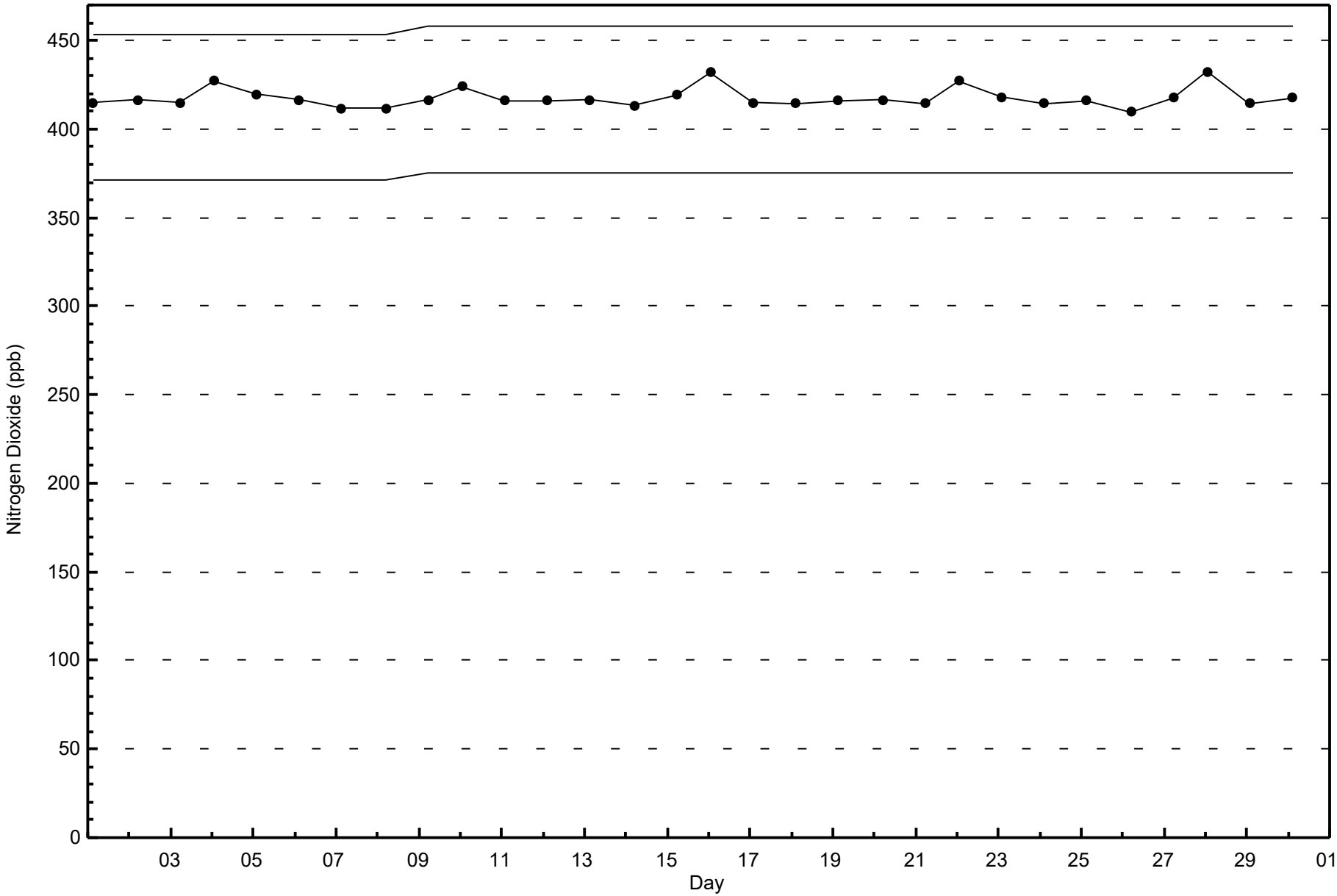


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Patricia McInnes - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Patricia McInnes - September 2026

Maximum Value: 33.8 ppb on Sep 8 07:00

Maximum Daily Average: 7.6 ppb on Sep 18

Minimum Value: 0.0 ppb on Sep 9 01:00

Minimum Daily Average: 0.7 ppb on Sep 30

Maximum Diurnal Average: 5.9 ppb at hour 7

Minimum Diurnal Average: 1.2 ppb at hour 15

Monthly Average: 2.94 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.6$ Median = 2.0 $Q_3 = 3.9$ $P_{90} = 6.9$ $P_{99} = 15.6$

Hours in Service:	720
Hours of Data:	684
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-Sep	1.4	1.4	1.0	Z	10.0	10.5	10.1	5.2	4.5	4.1	4.0	4.1	2.8	1.5	2.0	2.2	2.8	3.0	3.6	5.3	3.5	2.1	1.4	1.5	3.8	10.5
2-Sep	1.1	1.1	0.6	0.5	Z	1.7	1.4	1.8	2.2	2.2	1.3	1.4	1.2	1.2	1.4	1.5	2.4	2.7	2.6	2.7	1.9	1.0	0.8	0.7	1.5	2.7
3-Sep	0.5	0.2	0.3	0.7	2.6	Z	4.0	2.9	2.0	4.4	2.4	1.9	1.6	1.9	4.1	3.3	5.0	6.0	3.5	4.6	3.3	1.6	1.1	1.0	2.6	6.0
4-Sep	Z	1.3	0.7	0.7	2.2	7.2	5.4	6.8	3.4	2.2	3.8	2.4	1.4	1.2	0.9	1.2	1.7	2.0	2.1	1.7	1.8	3.6	5.7	3.3	2.7	7.2
5-Sep	1.5	Z	1.6	2.3	6.6	8.2	10.8	9.9	8.4	5.0	3.1	3.2	2.4	2.7	2.9	2.5	2.4	2.4	2.8	3.3	3.1	6.3	4.4	3.9	4.3	10.8
6-Sep	3.4	4.0	Z	5.4	5.5	6.1	4.3	2.8	2.2	2.2	2.3	2.2	2.3	1.5	1.9	1.3	2.2	3.4	4.3	4.5	3.9	2.3	1.8	1.8	3.1	6.1
7-Sep	1.5	1.5	1.5	Z	4.7	5.4	4.6	3.4	4.1	4.6	4.3	2.5	1.9	1.1	1.1	2.1	1.1	4.4	9.3	8.1	12.7	3.1	0.7	0.6	3.7	12.7
8-Sep	1.3	2.1	1.0	0.4	Z	4.3	33.8	14.0	22.8	C	C	C	C	C	C	0.4	7.4	4.1	6.0	12.5	8.0	3.0	0.4	0.3	--	33.8
9-Sep	0.0	0.1	0.5	1.1	4.4	Z	7.9	15.0	3.4	0.9	0.7	0.7	0.4	0.3	0.3	0.4	0.7	0.4	0.5	1.4	2.4	0.4	0.2	0.1	1.8	15.0
10-Sep	Z	0.1	0.0	0.0	0.0	0.2	0.1	0.3	2.7	2.1	1.9	2.2	2.9	1.2	0.6	0.3	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.7	2.9
11-Sep	0.0	Z	0.1	0.0	0.0	0.1	1.2	0.3	1.1	1.3	1.0	1.1	1.3	0.3	0.2	1.6	2.6	3.1	3.0	3.6	0.2	0.0	0.0	0.0	1.0	3.6
12-Sep	0.0	0.0	Z	0.3	0.4	0.1	0.8	0.4	0.4	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.4	2.7	4.7	3.9	2.5	0.8	0.4	0.8	4.7
13-Sep	0.2	0.6	0.8	Z	0.9	0.9	1.0	1.0	0.8	0.7	0.8	0.7	0.4	0.4	0.1	0.6	1.3	2.4	4.2	4.4	2.1	2.9	2.3	8.0	1.6	8.0
14-Sep	12.0	9.8	1.2	2.1	Z	3.5	4.7	7.1	6.7	6.6	7.7	5.4	4.4	5.1	2.4	4.1	3.4	4.2	4.2	5.0	2.6	2.4	0.2	0.1	4.6	12.0
15-Sep	0.1	0.0	0.0	0.0	0.0	Z	7.7	4.7	3.3	1.2	2.4	0.4	1.2	1.6	1.4	3.9	5.1	0.5	1.0	0.7	0.5	0.5	0.3	0.7	1.6	7.7
16-Sep	Z	3.4	7.8	7.0	4.9	6.4	7.8	10.9	8.3	6.2	3.7	3.5	3.8	4.9	2.6	2.5	2.0	7.7	6.5	6.0	3.6	1.1	0.9	0.8	4.9	10.9
17-Sep	0.5	Z	0.8	0.8	1.4	2.5	3.6	3.6	4.4	3.9	1.9	1.2	0.8	0.9	0.7	0.8	2.6	0.6	2.0	8.8	2.4	2.9	3.8	0.9	2.3	8.8
18-Sep	2.0	4.1	Z	0.7	0.3	1.0	2.6	14.4	26.5	19.5	16.8	12.4	9.8	7.5	0.3	1.0	3.0	9.8	14.3	13.1	6.7	3.7	3.6	2.9	7.6	26.5
19-Sep	3.1	2.1	3.3	Z	9.9	15.4	12.5	9.9	7.2	3.6	4.7	1.4	0.6	0.7	0.7	0.9	1.3	2.8	5.0	3.4	1.6	3.1	3.5	2.0	4.3	15.4
20-Sep	0.5	0.4	0.8	0.6	Z	1.5	0.9	1.4	0.7	0.6	0.5	0.3	0.1	0.2	0.2	0.4	0.8	6.1	4.7	11.0	6.7	1.9	1.4	1.6	1.9	11.0
21-Sep	1.7	0.9	0.8	0.9	1.0	Z	2.3	3.0	2.1	1.6	3.9	3.5	2.3	3.1	1.8	3.0	3.0	2.3	5.4	5.1	2.1	1.4	1.0	1.2	2.3	5.4
22-Sep	Z	1.3	2.1	2.2	8.4	8.6	2.6	3.5	10.0	12.1	3.6	0.5	1.8	0.2	0.0	0.0	0.0	0.0	0.7	1.0	2.6	2.1	2.3	2.2	2.9	12.1
23-Sep	0.9	Z	2.8	3.7	6.2	10.7	21.8	9.2	5.7	6.0	1.9	4.3	5.2	5.2	5.6	4.4	5.3	7.4	7.1	4.5	5.4	5.6	3.6	2.2	5.9	21.8
24-Sep	1.4	0.7	Z	1.3	3.6	2.5	4.4	4.5	2.5	1.0	0.8	1.2	0.3	0.3	0.7	0.5	0.8	1.6	3.9	3.0	3.3	9.0	3.2	4.8	2.4	9.0
25-Sep	6.2	3.0	2.2	Z	3.0	5.3	10.9	18.2	12.4	4.3	3.1	2.1	2.3	2.7	2.9	4.3	3.7	3.0	5.8	6.4	5.5	7.9	6.3	4.6	5.5	18.2
26-Sep	3.0	3.1	3.7	7.7	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.0	0.0	0.0	0.4	0.2	0.2	0.8	7.7
27-Sep	0.9	0.7	0.6	0.1	0.2	Z	0.5	0.5	0.5	0.4	0.6	0.7	0.5	0.4	0.3	0.4	0.4	0.8	2.7	3.3	2.4	1.5	0.9	0.5	0.9	3.3
28-Sep	Z	0.9	0.9	1.5	5.2	6.1	7.4	13.7	8.0	2.0	1.2	1.3	1.2	0.6	0.5	1.7	1.3	2.1	9.8	3.4	2.4	2.3	2.1	2.2	3.4	13.7
29-Sep	4.4	Z	2.7	9.2	6.0	3.8	1.9	2.0	2.7	2.3	0.6	0.3	0.1	0.0	0.1	0.1	0.1	0.0	1.0	14.3	1.8	1.5	1.2	0.2	2.5	14.3
30-Sep	0.4	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.5	0.6	0.4	0.2	0.2	0.2	0.1	0.5	1.4	4.7	1.3	1.0	2.6	0.7	4.7
	1.9	1.7	1.5	2.0	3.5	4.5	5.9	5.7	5.3	3.5	2.8	2.1	1.8	1.6	1.2	1.5	2.1	2.8	4.0	4.9	3.4	2.6	1.8	1.7	Diurnal Average	
	12.0	9.8	7.8	9.2	10.0	15.4	33.8	18.2	26.5	19.5	16.8	12.4	9.8	7.5	5.6	4.4	7.4	9.8	14.3	14.3	12.7	9.0	6.3	8.0	Diurnal Maximum	

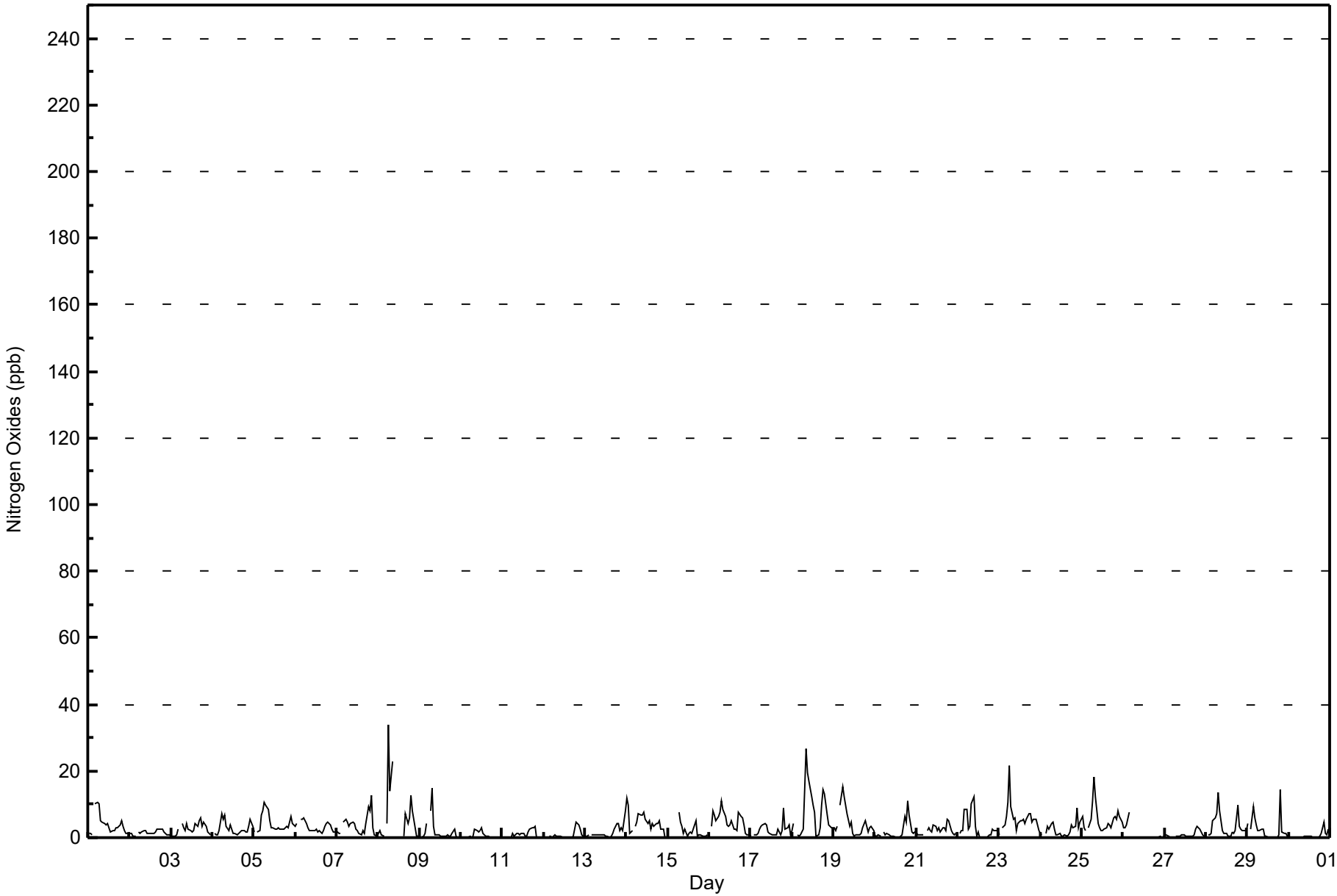
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Patricia McInnes - September 2026



Nitrogen Oxides (NO_X) - ppb

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	680	99.42	99.42
21 - 40	4	0.58	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: 684

Total Number of Hours: 720

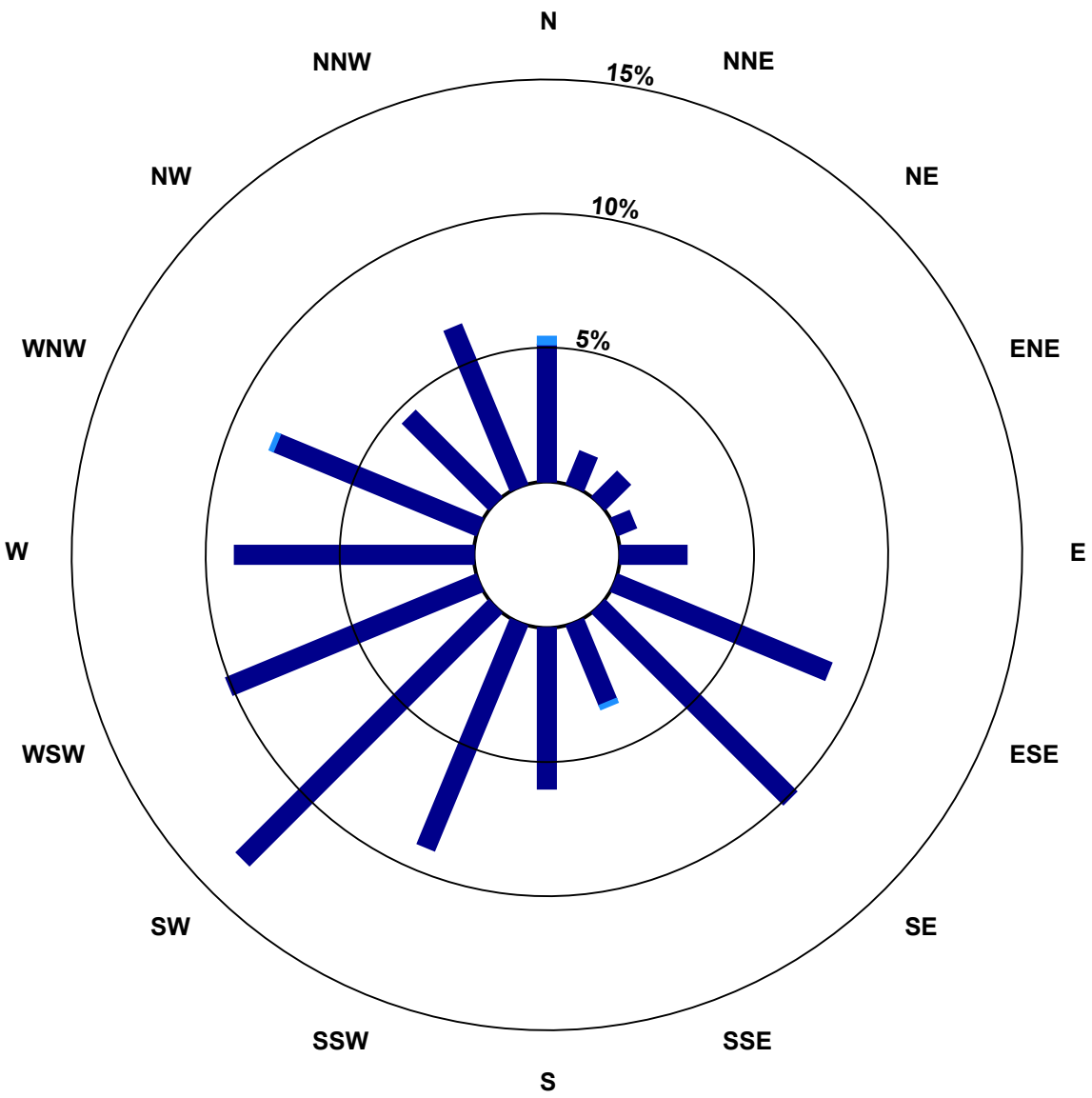
Nitrogen Oxides (NO_X) - ppb

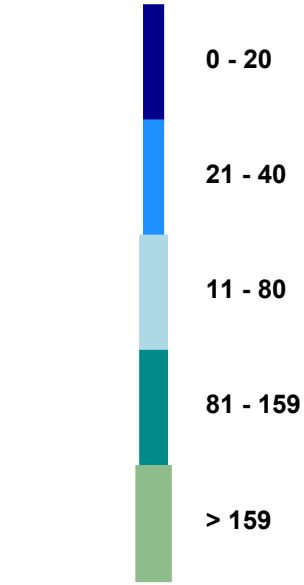
Patricia McInnes - September 2026

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	9	9	5	17	59	69	22	41	62	91	69	61	56	31	44	680
21 - 40	2	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	4
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	37	9	9	5	17	59	69	23	41	62	91	69	61	57	31	44	684

Total Number of Valid Hours: 684

Total Number of Hours: 720





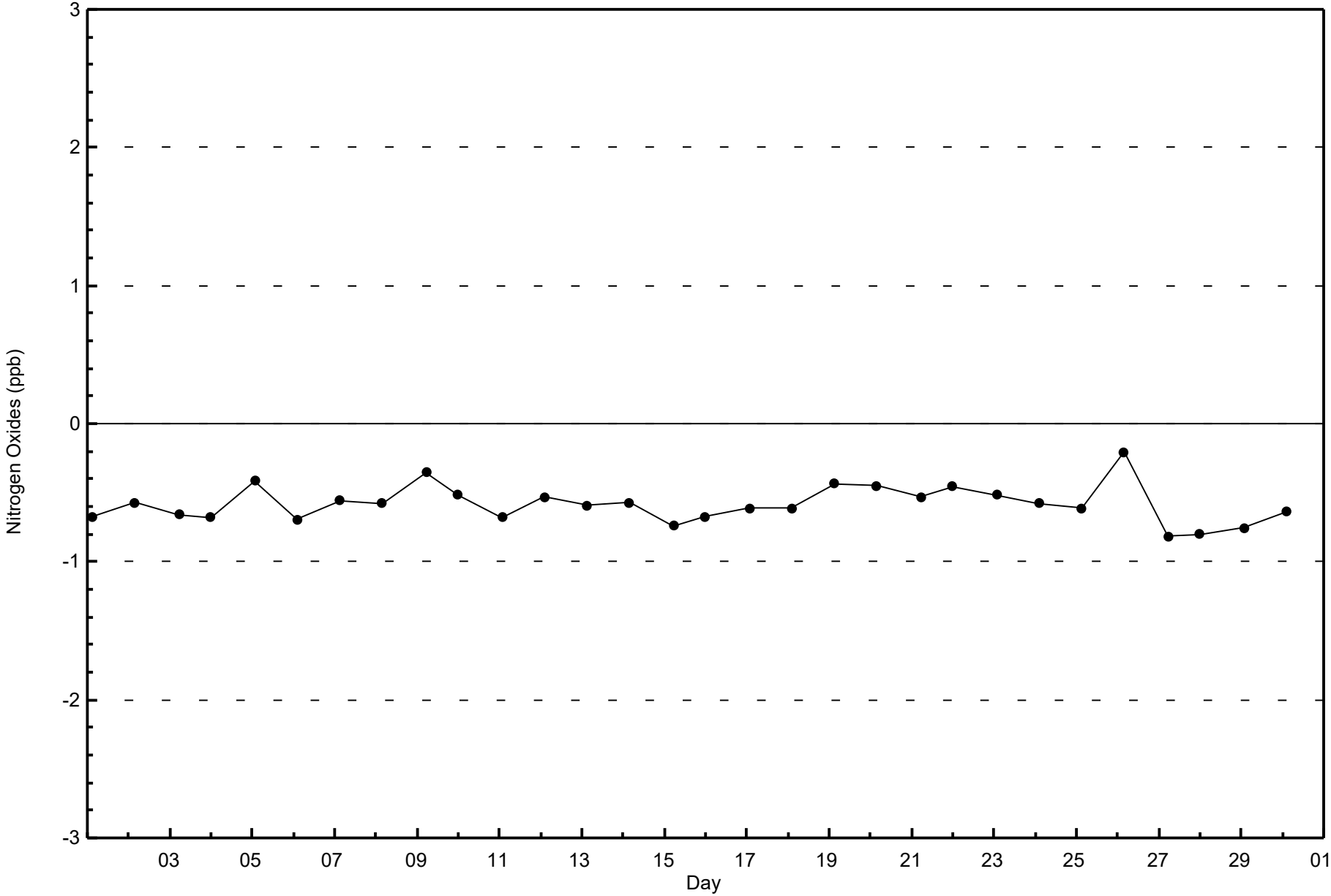
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Patricia McInnes - September 2026

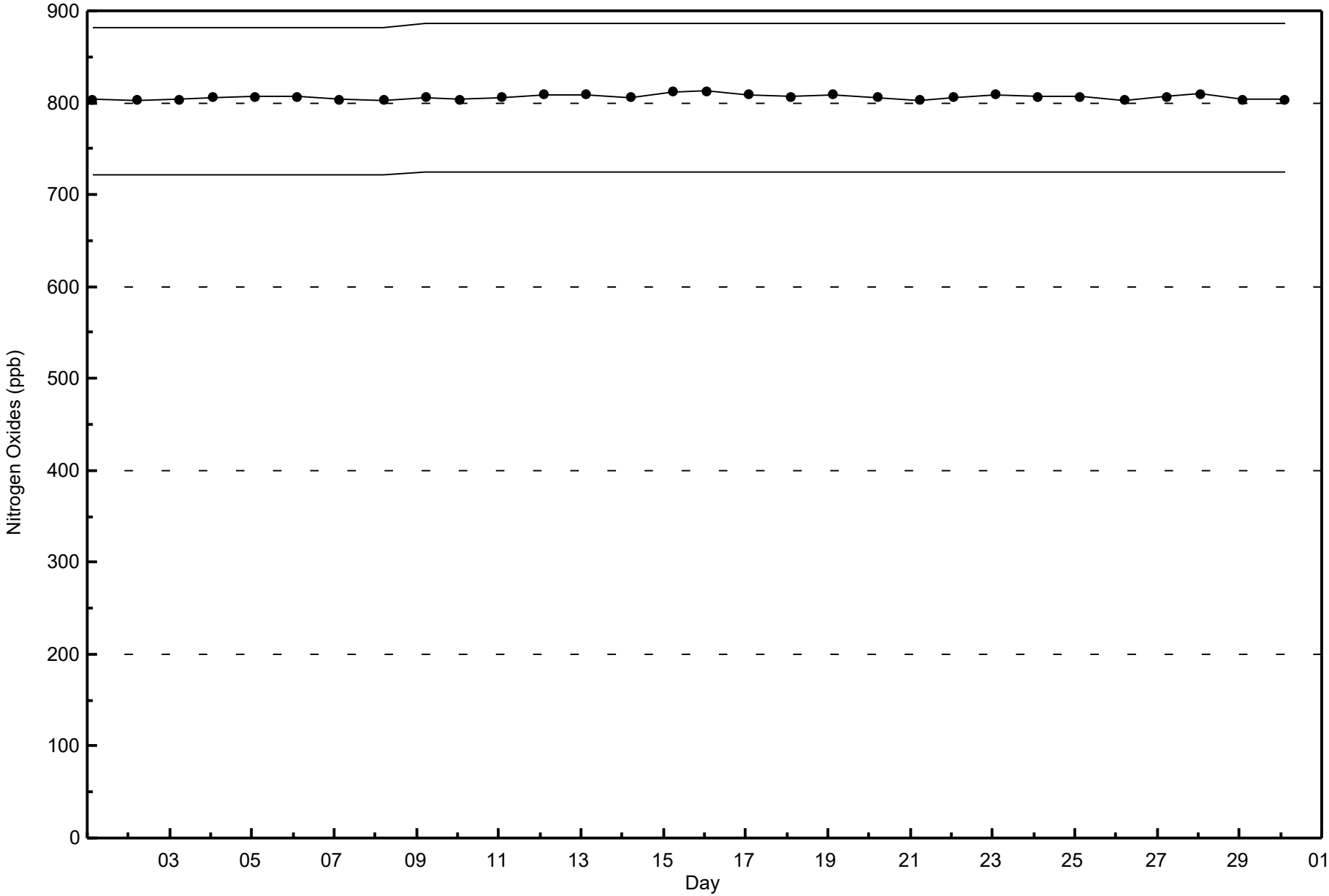


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Patricia McInnes - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ammonia (NH_3) - ppb

Patricia McInnes - September 2026

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

Maximum Value: 0.0 ppb on Sep 1 01:00

Maximum Daily Average: 0.0 ppb on Sep 1

Minimum Value: 0.0 ppb on Sep 1 01:00

Minimum Daily Average: 0.0 ppb on Sep 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:	720
Hours of Data:	614
Hours of Missing Data:	106
Hours of Calibration:	41
Percent Operational Time:	91.0

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-Sep	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
2-Sep	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
3-Sep	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
4-Sep	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
5-Sep	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
6-Sep	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
7-Sep	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
8-Sep	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
9-Sep	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
10-Sep	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
11-Sep	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
12-Sep	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
13-Sep	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
14-Sep	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
15-Sep	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
16-Sep	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
17-Sep	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
18-Sep	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
19-Sep	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
20-Sep	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
21-Sep	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
22-Sep	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
23-Sep	Z	RE	RE	0.0	0.0	0.0	0.0	C	C	C	C	C	C	C	C	C	C	C	RE	RE	RE	RE	0.0	0.0	--	0.0
24-Sep	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
25-Sep	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
26-Sep	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
27-Sep	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
28-Sep	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
29-Sep	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
30-Sep	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 RE - Recovery

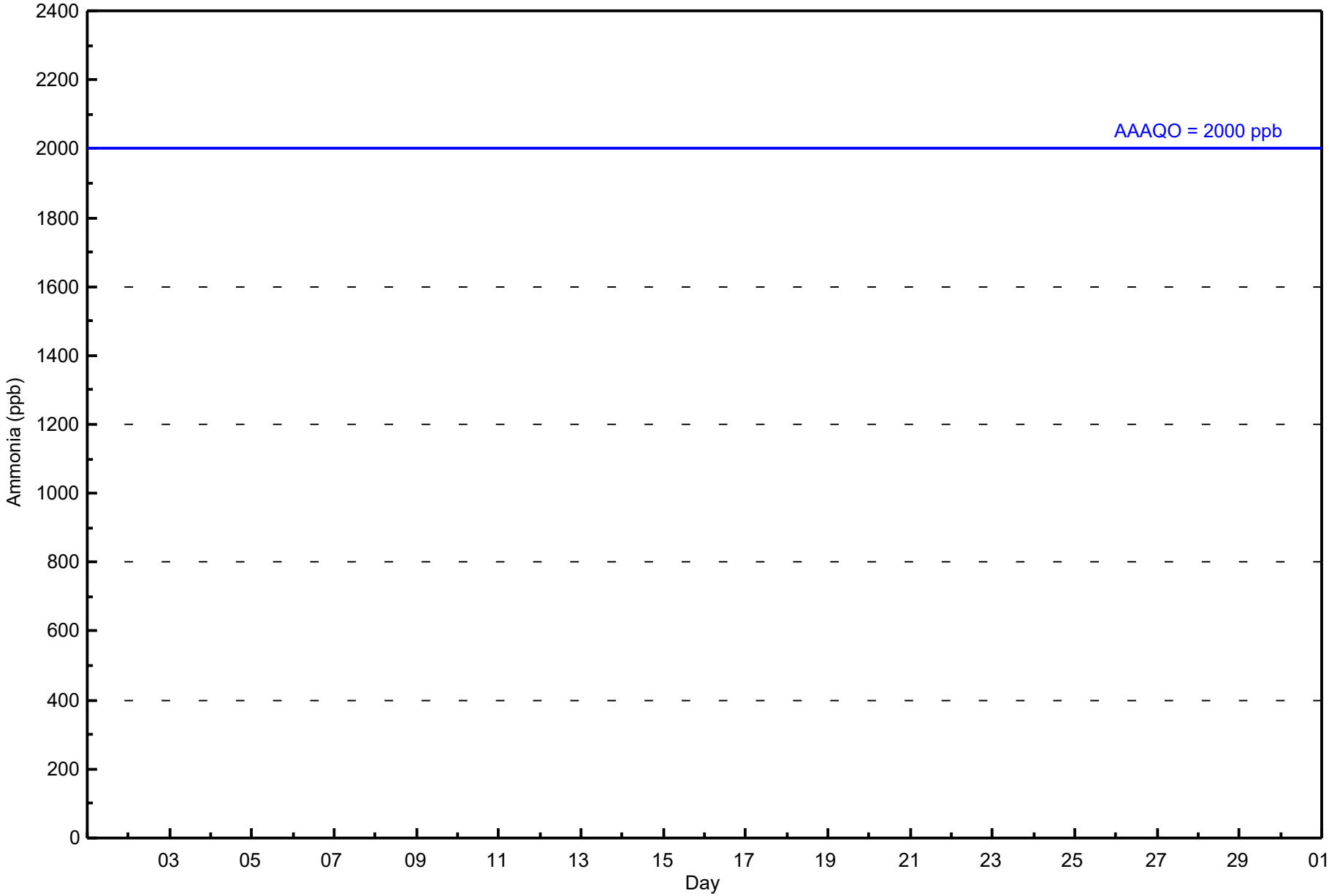
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 2000 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ammonia (NH_3) - ppb

Patricia McInnes - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 5	614	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: 614

Total Number of Hours: 720

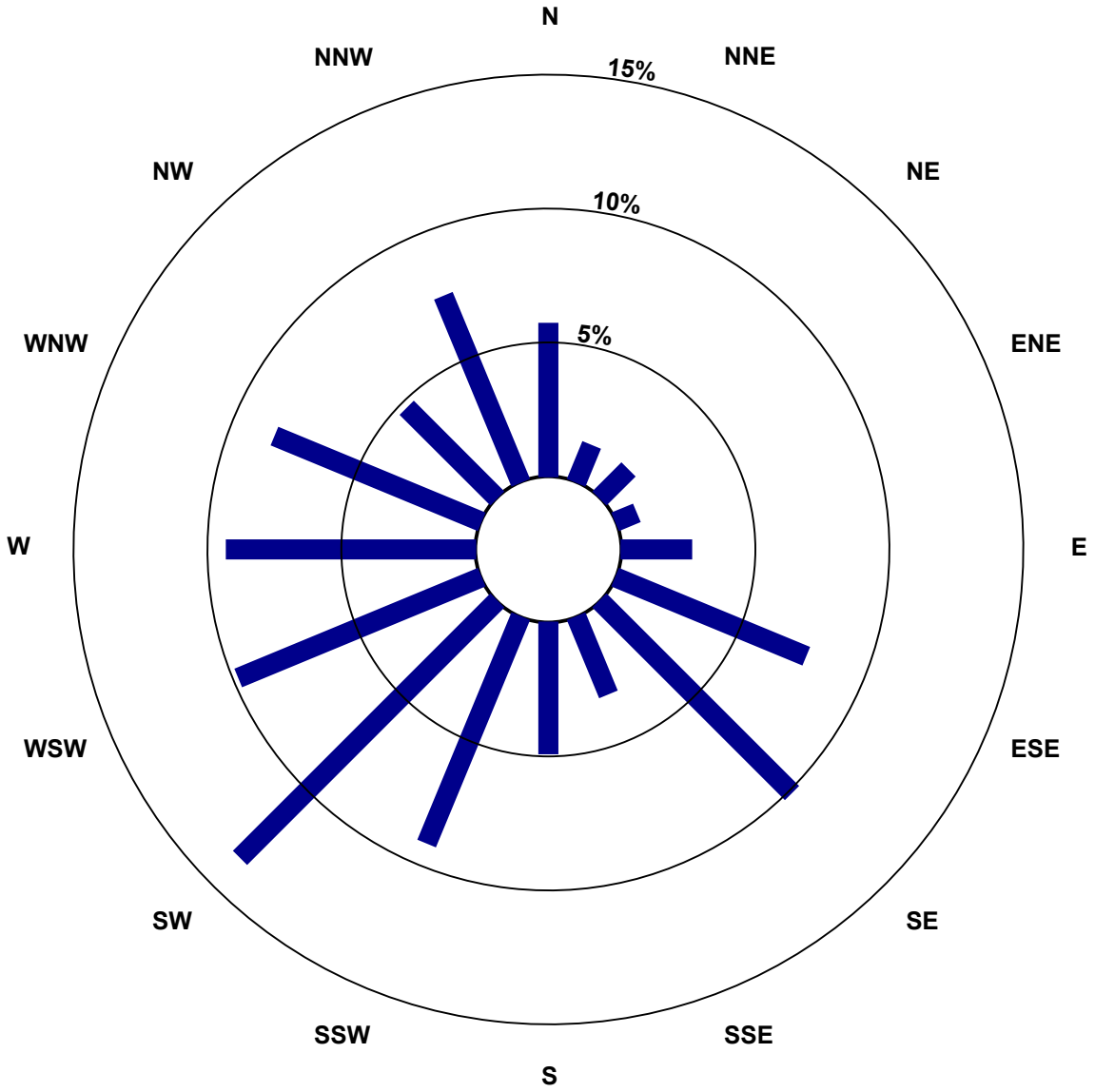
Ammonia (NH_3) - ppb

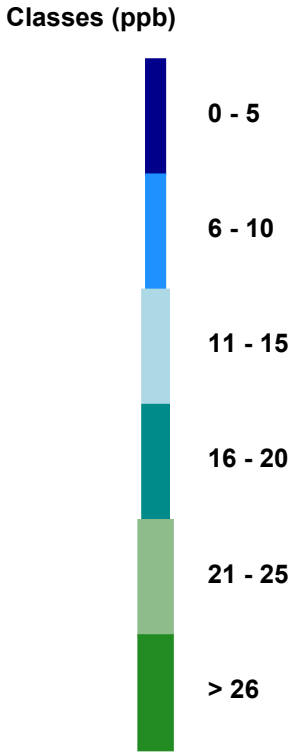
Patricia McInnes - September 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 5	35	9	9	5	16	47	62	19	30	56	83	60	57	51	29	46	614
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	35	9	9	5	16	47	62	19	30	56	83	60	57	51	29	46	614

Total Number of Valid Hours: 614

Total Number of Hours: 720





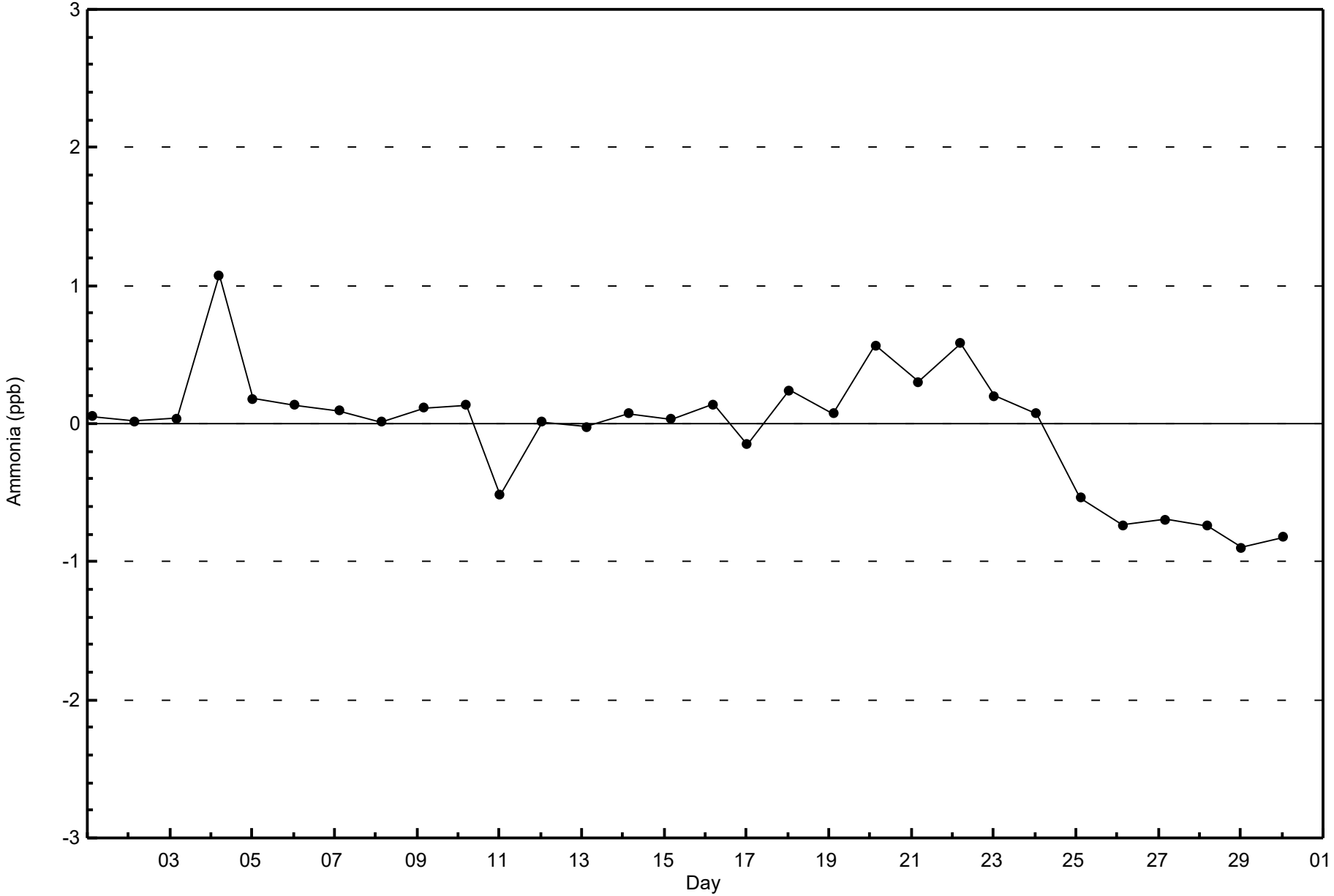
Total Number of Valid Hours: 614

Wood Buffalo Environmental Association

Zero Responses

Ammonia (NH_3) - ppb

Patricia McInnes - September 2026

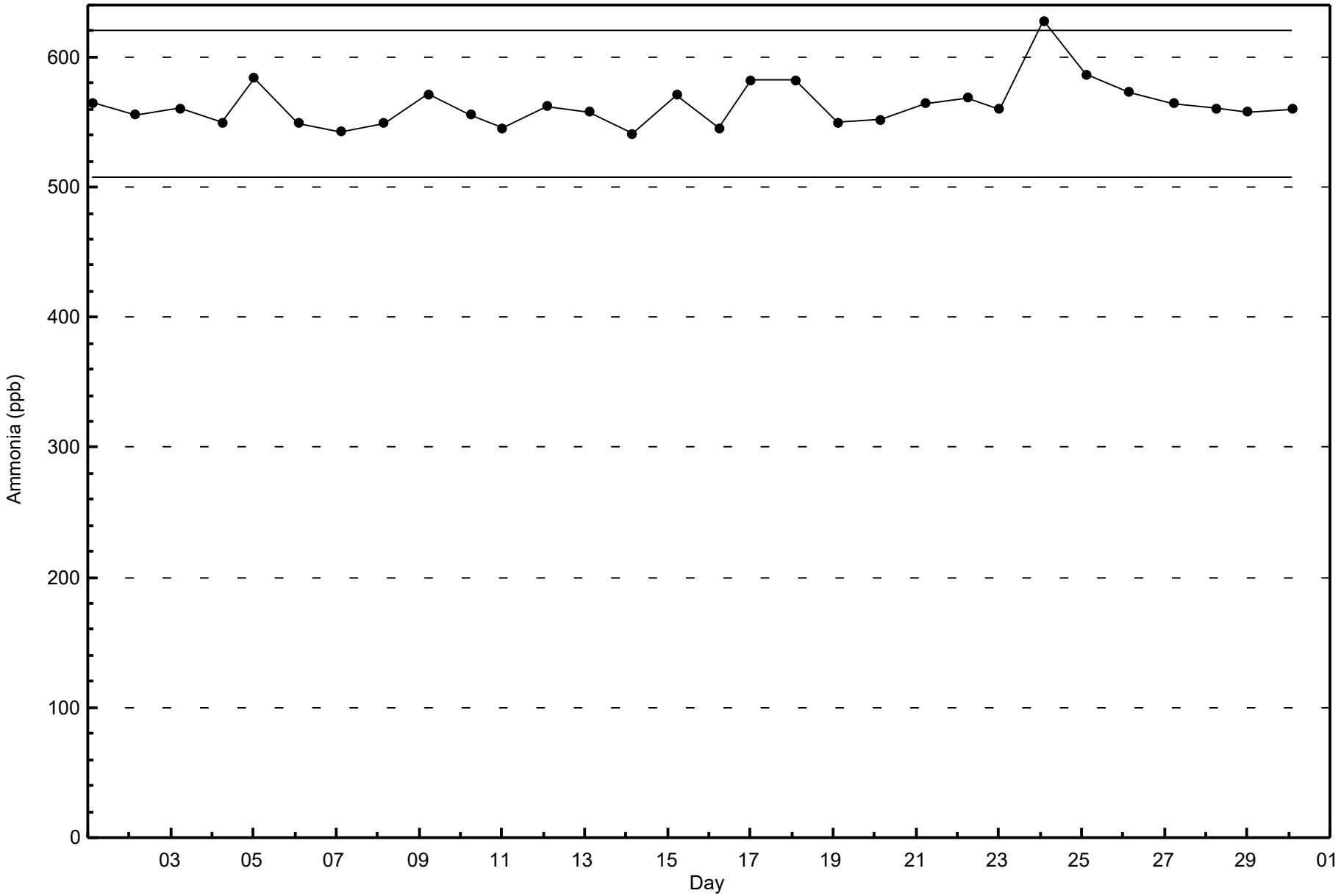


Wood Buffalo Environmental Association

Span Responses

Ammonia (NH_3) - ppb

Patricia McInnes - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Patricia McInnes - September 2026

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

Maximum Value: 31.2 $\mu g/m^3$ on Sep 30 21:00

Maximum Daily Average: 7.5 $\mu g/m^3$ on Sep 21

Minimum Value: 0.1 $\mu g/m^3$ on Sep 30 10:00

Minimum Daily Average: 1.2 $\mu g/m^3$ on Sep 26

Maximum Diurnal Average: 5.2 $\mu g/m^3$ at hour 21

Minimum Diurnal Average: 3.4 $\mu g/m^3$ at hour 5

Monthly Average: 3.83 $\mu g/m^3$

Percentiles: P_1 = 0.2 P_{10} = 1.2 Q_1 = 2.0 Median = 3.2 Q_3 = 5.2 P_{90} = 6.9 P_{99} = 13.3

Hours in Service:	720
Hours of Data:	718
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-Sep	3.9	3.3	2.9	2.8	3.5	3.8	4.3	4.1	3.7	3.7	4.2	4.2	3.6	3.2	3.0	2.9	3.1	3.5	3.4	4.1	3.0	2.9	2.9	3.0	3.5	4.3
2-Sep	3.0	3.3	3.7	4.2	4.7	5.4	5.9	6.3	6.4	6.2	5.5	5.3	5.1	4.7	4.7	4.7	5.2	5.7	6.3	6.7	7.6	6.8	6.1	6.0	5.4	7.6
3-Sep	5.8	5.5	5.3	5.2	5.2	5.4	5.8	5.6	5.4	6.2	5.4	4.6	4.0	4.3	4.7	4.2	4.4	4.8	4.3	5.1	5.2	5.2	5.1	5.4	5.1	6.2
4-Sep	5.3	5.3	5.3	5.0	5.1	5.5	5.3	5.4	5.6	5.8	6.0	2.8	2.3	2.8	2.4	2.6	2.3	2.1	2.3	2.0	1.9	2.7	2.9	2.6	3.8	6.0
5-Sep	2.4	2.6	2.5	2.7	3.2	3.8	6.5	5.2	4.9	3.9	4.6	6.0	6.0	6.7	7.8	8.8	9.3	9.8	11.6	12.1	11.4	14.8	13.3	17.5	7.4	17.5
6-Sep	12.8	11.3	10.3	7.1	7.3	6.7	5.0	4.3	4.1	3.8	3.3	2.8	2.5	2.6	3.1	3.9	3.8	7.1	5.5	5.7	4.7	4.0	4.4	4.6	5.5	12.8
7-Sep	5.6	5.8	5.3	5.3	4.5	3.5	3.9	3.2	3.5	3.3	3.6	3.6	3.5	3.2	3.4	3.8	3.6	4.3	6.0	4.7	6.9	5.7	4.4	3.9	4.4	6.9
8-Sep	4.2	3.2	2.5	3.0	3.6	4.9	6.7	7.0	7.6	8.2	7.6	7.5	11.1	7.8	8.0	6.1	8.9	8.8	7.4	11.7	6.9	5.9	5.1	4.9	6.6	11.7
9-Sep	5.1	5.2	5.3	5.5	5.9	5.8	5.8	6.2	5.8	4.9	4.8	4.8	4.4	4.4	3.8	3.4	3.1	2.7	2.7	3.1	4.2	2.9	2.5	2.1	4.4	6.2
10-Sep	1.5	1.2	1.0	1.2	1.1	1.2	1.5	1.7	3.0	12.9	17.1	15.7	15.9	14.6	13.0	10.1	4.4	2.9	1.9	1.1	0.6	0.6	1.0	1.3	5.3	17.1
11-Sep	1.3	1.1	0.8	0.4	0.4	0.3	0.3	0.3	0.6	0.9	1.4	2.6	1.9	1.0	1.1	2.7	4.6	5.1	5.3	5.1	3.1	2.4	2.4	1.9	2.0	5.3
12-Sep	2.0	1.9	2.3	2.6	2.1	2.6	2.5	2.5	2.2	1.7	1.3	1.7	2.4	2.9	2.8	2.6	2.2	2.1	3.5	4.1	4.6	4.7	2.6	2.6	2.6	4.7
13-Sep	2.7	2.8	2.9	2.9	2.9	2.9	3.1	3.2	3.2	3.0	3.0	2.8	2.7	2.7	2.7	3.0	3.1	3.2	3.7	5.8	5.6	5.0	3.8	5.0	3.4	5.8
14-Sep	4.7	3.3	1.4	1.9	2.0	2.8	3.5	3.9	3.8	4.1	2.9	2.8	2.4	2.7	2.6	2.1	1.9	2.0	2.1	2.7	1.5	1.4	1.2	1.4	2.5	4.7
15-Sep	1.4	1.3	1.3	1.3	1.3	1.2	1.9	1.6	1.4	1.4	1.7	1.6	1.7	2.1	1.8	2.8	2.7	2.3	2.2	1.9	1.8	1.3	1.4	1.6	1.7	2.8
16-Sep	1.4	2.0	3.0	2.7	2.3	2.5	3.4	4.0	5.5	5.2	4.6	4.6	4.4	4.9	3.5	3.5	3.1	3.6	4.0	3.7	3.5	3.1	3.1	3.1	3.5	5.5
17-Sep	3.1	3.0	3.1	3.1	3.2	3.3	3.7	3.7	3.9	4.1	3.9	4.0	4.2	4.5	4.1	4.0	4.5	4.1	4.2	5.3	5.3	5.3	5.9	3.9	4.1	5.9
18-Sep	4.4	3.1	2.8	2.3	2.7	3.3	3.6	3.7	4.2	3.8	3.8	6.1	5.3	4.5	2.0	2.2	3.2	6.2	8.7	7.7	6.1	4.7	5.6	5.7	4.4	8.7
19-Sep	5.1	4.9	4.0	3.4	2.9	3.0	3.1	3.1	3.5	3.2	3.6	3.0	3.1	3.5	4.0	4.4	4.7	5.8	8.2	5.8	5.5	7.0	8.8	7.2	4.6	8.8
20-Sep	5.4	5.2	5.3	5.4	5.5	5.8	5.6	5.7	5.4	4.9	4.7	3.7	3.2	2.9	2.7	2.6	3.2	4.5	4.1	6.4	7.3	5.2	5.7	6.7	4.9	7.3
21-Sep	6.8	6.1	6.2	6.4	6.5	6.6	6.8	6.5	6.6	6.7	7.1	7.6	6.6	8.4	8.7	8.5	7.1	7.3	11.9	9.8	7.7	7.5	8.3	9.0	7.5	11.9
22-Sep	9.4	8.8	8.8	8.6	8.5	8.5	8.4	8.7	10.1	10.4	6.6	2.9	2.1	1.9	1.9	0.8	0.8	0.7	0.8	1.6	1.7	1.9	3.0	2.3	5.0	10.4
23-Sep	1.2	1.4	1.5	1.4	1.6	2.0	2.9	2.7	1.5	2.3	2.0	2.3	2.8	3.3	3.5	3.3	3.3	3.5	3.6	5.8	4.1	5.2	3.9	3.5	2.9	5.8
24-Sep	3.0	2.3	5.2	1.8	1.9	2.0	1.9	2.2	1.9	1.5	1.3	1.6	0.9	0.8	0.7	0.7	0.9	1.5	1.4	1.3	1.4	8.2	1.8	2.9	2.1	8.2
25-Sep	3.1	2.1	1.8	1.8	2.5	2.7	4.9	5.8	4.1	2.4	1.8	1.9	2.1	2.3	2.3	3.3	3.0	2.8	6.5	5.6	4.4	3.3	3.3	2.9	3.2	6.5
26-Sep	2.9	3.1	3.9	7.3	3.1	0.8	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.4	0.7	0.9	1.2	1.7	1.2	7.3
27-Sep	1.8	1.9	2.0	2.1	1.9	1.7	1.3	1.4	1.4	1.5	1.5	1.9	1.7	1.7	1.7	1.8	1.8	2.0	2.3	3.1	2.2	1.5	1.2	1.1	1.8	3.1
28-Sep	1.2	1.2	1.2	1.2	1.4	1.7	2.3	2.8	2.6	1.6	1.3	1.5	1.4	1.6	1.6	2.0	2.1	2.2	3.6	3.7	2.7	3.0	2.9	2.5	2.1	3.7
29-Sep	2.7	4.2	2.9	4.7	3.1	2.6	2.0	1.5	1.3	1.1	C	C	0.6	0.5	0.8	1.0	1.0	1.1	1.3	7.7	2.6	2.6	2.8	2.0	2.3	7.7
30-Sep	1.2	1.2	1.3	2.2	0.9	0.1	0.2	0.1	0.7	0.1	0.1	0.1	0.2	0.6	0.2	0.2	0.3	0.3	0.4	1.3	31.2	1.1	1.0	0.9	1.9	31.2
	3.8	3.6	3.5	3.5	3.4	3.4	3.8	3.8	3.8	4.0	4.0	3.8	3.6	3.6	3.4	3.4	3.4	3.7	4.3	4.8	5.2	4.2	3.9	4.0	Diurnal Average	
	12.8	11.3	10.3	8.6	8.5	8.5	8.4	8.7	10.1	12.9	17.1	15.7	15.9	14.6	13.0	10.1	9.3	9.8	11.9	12.1	31.2	14.8	13.3	17.5	Diurnal Maximum	

C - Calibration

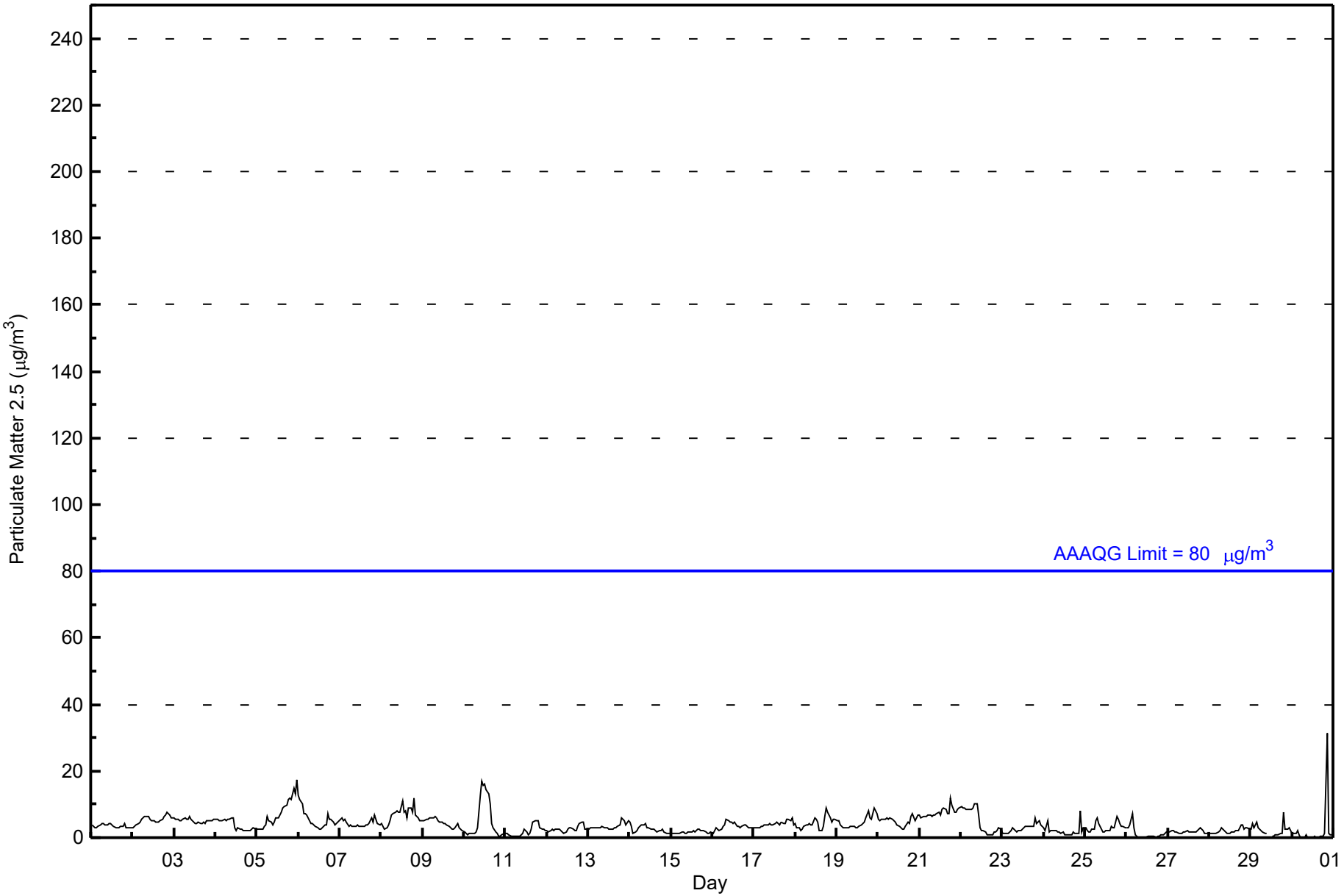
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Patricia McInnes - September 2026



Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	574	79.94	79.94
6 - 15	139	19.36	99.30
16 - 25	4	0.56	99.86
26 - 80	1	0.14	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 718

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

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

Patricia McInnes - September 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	34	4	8	5	16	44	58	13	31	44	76	67	54	54	32	34	574
6 - 15	6	5	1	0	1	18	13	10	14	20	18	6	6	4	1	16	139
16 - 25	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	0	4
26 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	40	9	9	5	17	62	71	23	45	65	94	73	62	60	33	50	718

Total Number of Valid Hours: 718

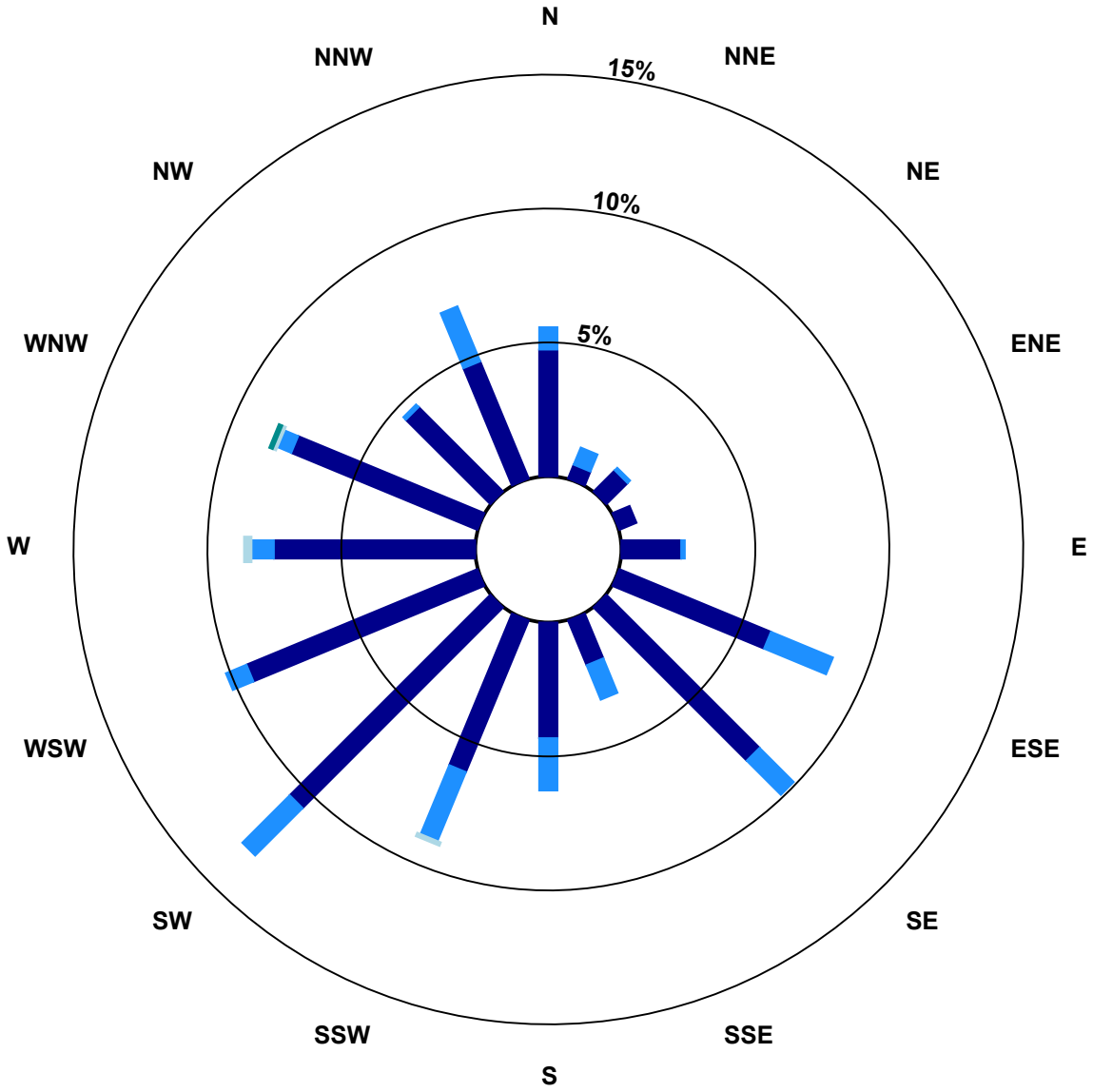
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 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: 718

Maximum Value: 28.2 C on Sep 2 16:00

Maximum Daily Average: 20.8 C on Sep 2

Minimum Value: 1.0 C on Sep 30 22:00

Minimum Daily Average: 4.8 C on Sep 30

Maximum Diurnal Average: 17.6 C at hour 15

Minimum Diurnal Average: 7.4 C at hour 6

Monthly Average: 12.02 C

Percentiles: P_1 = 1.9 P_{10} = 5.1 Q_1 = 7.5 Median = 11.2 Q_3 = 16.1 P_{90} = 19.6 P_{99} = 26.5

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

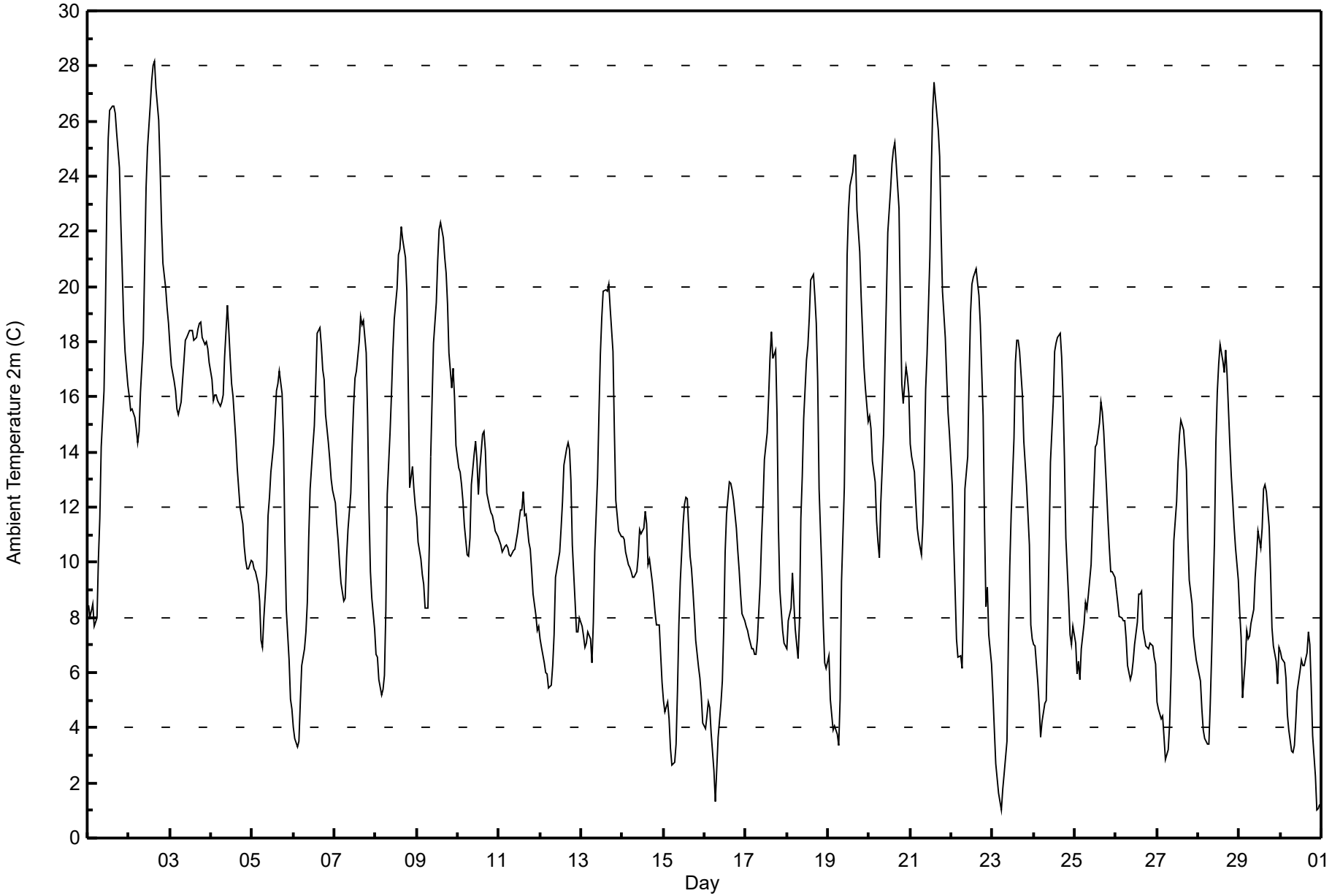
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	8.4	8.0	8.2	8.5	7.7	8.0	10.1	11.6	14.2	16.2	19.1	23.1	25.4	26.4	26.6	26.5	26.3	25.6	24.3	22.3	20.6	18.8	17.6	16.4	17.5	26.6
2-Sep	16.0	15.5	15.6	15.3	14.9	14.4	14.7	16.1	18.0	20.8	23.6	25.0	26.6	27.5	28.0	28.2	27.2	26.0	24.4	22.3	20.8	19.9	19.2	18.7	20.8	28.2
3-Sep	17.8	17.1	16.6	16.2	15.5	15.4	15.8	16.6	17.3	18.1	18.2	18.4	18.4	18.4	18.0	18.2	18.5	18.7	18.7	18.2	17.9	18.0	17.8	17.2	17.5	18.7
4-Sep	16.6	15.9	16.1	16.1	15.9	15.7	15.8	16.1	17.4	19.3	18.4	17.4	16.5	16.0	14.4	13.4	12.7	12.0	11.4	10.6	10.1	9.8	9.8	10.1	14.5	19.3
5-Sep	10.0	9.8	9.6	9.2	8.6	7.2	6.9	8.0	9.6	11.7	12.3	13.3	14.3	15.2	16.2	16.5	16.9	16.1	14.4	10.8	8.3	6.4	5.1	4.7	10.9	16.9
6-Sep	4.0	3.6	3.3	3.5	4.9	6.2	6.9	7.5	8.5	10.9	12.7	14.2	15.0	16.5	18.3	18.5	17.9	17.0	16.6	15.4	14.4	13.7	13.0	12.6	11.5	18.5
7-Sep	12.2	11.4	10.8	9.9	9.2	8.6	8.7	10.2	11.2	12.5	14.3	15.7	16.7	16.9	18.0	18.9	18.6	18.8	17.6	15.3	11.9	9.7	8.7	7.6	13.1	18.9
8-Sep	6.7	6.6	5.7	5.2	5.4	5.9	8.2	12.5	14.7	16.1	17.7	18.8	19.9	21.1	21.4	22.2	21.7	21.1	19.8	16.4	12.7	13.5	12.7	12.1	14.1	22.2
9-Sep	11.7	10.7	10.1	9.5	9.2	8.4	8.3	10.6	13.8	15.9	18.0	19.4	20.9	22.0	22.3	21.7	21.0	20.5	19.4	17.6	16.3	17.0	16.0	14.2	15.6	22.3
10-Sep	13.4	13.3	12.8	12.2	11.4	10.3	10.2	10.9	12.8	13.9	14.4	13.7	12.5	13.3	14.6	14.8	14.0	12.5	12.0	11.8	11.7	11.4	11.1	11.0	12.5	14.8
11-Sep	10.8	10.6	10.4	10.6	10.6	10.5	10.3	10.2	10.4	10.5	10.8	11.1	11.9	11.9	12.6	11.7	11.7	10.7	10.5	9.7	8.8	8.1	7.6	7.7	10.4	12.6
12-Sep	7.2	6.9	6.3	6.0	5.9	5.5	5.5	6.3	7.4	9.4	9.8	10.4	11.3	12.2	13.5	14.1	14.4	14.1	13.0	10.6	8.5	7.5	7.5	8.0	9.2	14.4
13-Sep	7.7	7.3	6.9	7.1	7.5	7.2	6.3	7.8	10.4	13.0	15.4	17.6	18.8	19.9	19.9	19.8	20.1	19.2	17.7	14.7	12.3	11.7	11.1	10.9	12.9	20.1
14-Sep	10.9	10.8	10.4	9.9	9.8	9.7	9.5	9.4	9.7	10.2	11.2	11.0	11.2	11.8	11.4	9.9	10.1	9.3	8.8	8.2	7.7	7.7	6.6	5.6	9.6	11.8
15-Sep	5.0	4.6	4.9	4.3	3.3	2.6	2.8	3.4	5.4	7.7	9.3	11.4	12.1	12.3	12.3	10.2	9.8	9.0	8.2	7.2	6.2	5.8	5.1	4.2	7.0	12.3
16-Sep	4.0	4.4	4.9	4.7	3.8	2.4	1.3	2.5	3.6	4.9	5.7	7.6	10.4	11.7	12.9	12.8	12.6	12.3	11.2	10.4	9.7	8.8	8.1	7.9	7.5	12.9
17-Sep	7.7	7.5	7.3	6.9	6.9	6.7	6.6	7.2	9.2	10.9	12.1	13.7	14.7	16.0	17.5	18.4	17.4	17.7	15.4	11.2	9.0	7.5	7.1	7.0	10.9	18.4
18-Sep	6.9	7.9	8.3	9.6	8.5	7.6	6.5	7.8	11.6	13.1	15.2	17.3	17.8	18.8	20.2	20.4	19.6	18.7	16.6	12.7	9.6	7.7	6.4	6.2	12.3	20.4
19-Sep	6.6	5.0	4.5	3.9	4.0	3.7	3.4	5.1	9.3	12.7	16.6	21.2	22.8	23.6	24.2	24.7	24.8	22.8	21.3	19.6	18.4	17.1	16.3	15.1	14.4	24.8
20-Sep	15.3	14.8	13.7	12.9	11.5	10.8	10.2	12.1	14.6	17.2	19.6	22.0	23.6	24.4	24.9	25.2	24.5	22.8	19.3	16.5	15.8	17.1	16.7	16.1	17.6	25.2
21-Sep	14.3	13.8	13.3	12.2	11.2	10.8	10.3	11.4	13.5	16.3	17.5	21.1	24.1	26.4	27.4	26.2	25.7	24.7	22.0	19.8	18.1	16.7	15.4	14.7	17.8	27.4
22-Sep	12.8	10.7	9.0	7.2	6.6	6.6	6.2	8.7	12.7	13.8	16.6	19.0	20.1	20.4	20.7	20.2	19.7	18.6	15.3	11.3	8.4	9.1	7.4	6.3	12.8	20.7
23-Sep	5.2	3.9	2.7	1.6	1.3	1.0	1.8	2.3	3.5	7.1	9.9	11.8	14.5	17.3	18.0	18.0	17.6	16.1	14.4	13.6	12.7	10.6	7.7	7.2	9.2	18.0
24-Sep	7.0	7.0	5.6	4.8	3.7	4.2	4.9	5.0	7.5	10.4	13.6	15.8	17.6	17.9	18.1	18.3	17.4	16.0	13.7	10.9	8.6	7.4	7.0	7.7	10.4	18.3
25-Sep	7.1	5.9	6.4	5.8	6.9	7.8	8.5	8.3	8.8	9.9	11.4	12.8	14.2	14.3	15.0	15.8	15.5	14.7	12.7	11.5	10.5	9.6	9.7	9.4	10.5	15.8
26-Sep	9.0	8.5	8.0	8.0	7.9	7.9	7.2	6.2	5.7	5.9	6.4	7.0	7.8	8.9	8.9	9.0	7.6	7.0	6.9	6.9	7.1	7.0	6.6	6.3	7.4	9.0
27-Sep	5.0	4.7	4.3	4.4	3.7	2.8	3.2	4.1	6.0	8.6	10.8	12.2	13.6	14.6	15.2	14.8	14.1	13.3	10.9	9.4	8.5	7.3	6.8	6.5	8.5	15.2
28-Sep	5.9	5.7	4.7	3.9	3.6	3.4	3.4	4.9	6.7	10.8	14.3	16.2	17.2	17.9	17.3	16.9	17.7	16.8	14.2	13.1	12.3	11.3	10.5	9.4	10.7	17.9
29-Sep	8.2	7.3	5.1	6.4	7.5	7.2	7.3	7.8	8.3	9.5	10.2	11.1	10.5	11.2	12.7	12.8	12.5	11.3	9.6	7.6	6.9	6.4	5.6	6.9	8.8	12.8
30-Sep	6.8	6.5	6.4	5.8	4.5	3.9	3.1	3.1	3.3	4.3	5.3	6.0	6.5	6.3	6.3	6.7	7.5	7.0	5.5	3.7	2.2	1.0	1.1	1.2	4.8	7.5
	9.3	8.9	8.4	8.1	7.7	7.4	7.5	8.5	10.2	12.1	13.7	15.2	16.2	17.0	17.6	17.5	17.2	16.3	14.9	13.0	11.5	10.8	10.0	9.6	Diurnal Average	
	17.8	17.1	16.6	16.2	15.9	15.7	15.8	16.6	18.0	20.8	23.6	25.0	26.6	27.5	28.0	28.2	27.2	26.0	24.4	22.3	20.8	19.9	19.2	18.7	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Patricia McInnes - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	296	41.11	41.11
10 - 20	361	50.14	91.25
> 20	63	8.75	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Patricia McInnes - September 2026

Maximum Value: 100.0 % on Sep 8 03:00

Maximum Daily Average: 89.1 % on Sep 14

Minimum Value: 25.0 % on Sep 24 16:00

Minimum Daily Average: 57.1 % on Sep 20

Maximum Diurnal Average: 89.2 % at hour 6

Minimum Diurnal Average: 49.6 % at hour 15

Monthly Average: 71.45 %

Percentiles: P_1 = 28.4 P_{10} = 42.4 Q_1 = 58.8 Median = 75.3 Q_3 = 86.2 P_{90} = 94.2 P_{99} = 99.2

Hours in Service:	720
Hours of Data:	703
Hours of Missing Data:	17
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-Sep	92.1	94.7	98.7	97.4	96.3	95.1	87.6	78.1	69.2	63.9	59.0	47.9	37.8	33.2	32.6	33.1	34.4	35.5	36.8	42.4	51.9	58.9	62.7	67.6	62.8	98.7
2-Sep	69.9	72.8	75.5	78.4	80.9	83.8	81.9	75.9	68.6	58.9	48.8	43.0	38.6	35.7	34.9	35.9	39.3	44.7	48.2	54.9	59.0	61.4	63.5	66.0	59.2	83.8
3-Sep	69.5	72.6	76.2	79.1	83.9	90.2	89.3	85.6	82.2	79.6	80.0	78.4	80.0	80.5	85.0	85.2	82.6	80.5	77.7	81.1	82.3	81.2	82.6	86.9	81.3	90.2
4-Sep	92.9	97.0	96.2	95.6	97.0	98.5	98.2	96.8	88.3	78.0	83.7	82.5	79.1	75.3	77.2	77.2	79.2	81.0	84.7	95.2	99.1	98.8	93.7	86.0	88.8	99.1
5-Sep	85.1	86.1	82.1	84.9	87.6	89.6	89.6	84.8	78.5	67.3	54.7	52.7	49.3	46.2	42.5	41.7	41.4	44.2	55.5	75.3	82.6	84.8	89.0	90.8	70.3	90.8
6-Sep	90.3	91.7	93.6	99.6	96.3	91.4	89.5	87.4	86.3	79.8	75.6	69.1	67.7	63.9	57.1	55.9	59.5	63.7	65.4	71.6	78.9	83.4	84.2	85.6	78.7	99.6
7-Sep	87.6	90.6	93.9	97.4	99.6	99.6	OR	95.9	91.2	84.1	77.4	73.2	66.0	67.1	62.9	57.9	59.7	59.1	65.5	78.7	91.3	99.2	OR	OR	80.8	99.6
8-Sep	OR	OR	100.0	100.0	OR	OR	OR	90.3	80.8	73.8	66.3	57.7	50.8	45.7	44.1	41.7	43.3	45.5	50.9	64.5	79.8	77.0	78.0	78.5	66.8	100.0
9-Sep	79.4	83.0	86.8	92.5	96.4	96.7	97.9	92.6	83.1	69.6	60.0	54.3	47.8	41.3	40.8	42.9	46.5	48.2	53.5	63.1	68.2	65.7	74.5	80.1	69.4	97.9
10-Sep	78.5	80.1	86.2	86.9	86.6	91.9	90.2	86.6	77.3	71.2	68.2	74.7	89.4	86.3	75.5	72.7	77.8	87.5	91.5	92.7	89.4	86.9	87.5	86.5	83.4	92.7
11-Sep	85.4	84.5	86.4	81.6	77.1	76.2	76.9	75.4	73.3	73.4	70.8	68.5	62.6	65.0	58.9	59.0	57.5	62.2	60.2	65.5	74.3	79.5	81.6	81.0	72.4	86.4
12-Sep	81.6	82.3	84.3	86.2	88.6	92.1	92.0	87.2	80.6	67.6	61.9	53.5	49.5	44.6	42.4	40.1	40.3	43.6	49.7	59.4	68.3	72.2	72.7	74.7	67.3	92.1
13-Sep	77.9	79.8	81.3	79.6	75.5	75.5	78.4	73.2	64.1	55.3	48.5	40.3	35.6	34.2	35.2	38.4	38.0	39.9	47.4	62.8	76.2	80.8	86.8	91.9	62.4	91.9
14-Sep	96.4	OR	97.4	92.8	93.3	96.1	98.8	98.2	94.0	88.6	78.5	76.5	74.5	69.3	69.2	85.2	81.4	85.7	94.3	95.4	97.1	97.8	95.0	93.4	89.1	98.8
15-Sep	95.1	94.3	92.6	93.8	95.3	96.8	95.7	93.1	89.4	81.2	73.5	55.1	46.5	50.0	50.3	70.5	76.6	78.1	86.4	94.2	97.5	91.0	93.7	95.5	82.8	97.5
16-Sep	96.5	97.7	99.2	98.7	98.9	OR	OR	OR	OR	93.5	86.8	78.0	66.1	61.7	54.3	52.6	51.2	52.3	59.7	62.4	63.6	67.5	71.7	74.9	74.4	99.2
17-Sep	76.6	74.8	75.4	77.3	78.8	81.1	82.7	81.1	73.3	69.1	65.1	62.0	61.8	59.5	56.9	53.4	59.7	63.0	77.0	95.3	99.0	98.8	98.2	95.7	75.6	99.0
18-Sep	92.1	83.0	82.5	84.1	84.2	87.4	93.0	89.2	78.1	72.9	65.0	56.7	55.3	50.8	42.4	40.2	43.1	46.4	55.1	73.1	84.3	89.2	93.6	97.3	72.5	97.3
19-Sep	91.3	91.4	96.5	97.2	99.1	99.1	99.6	94.4	75.5	62.4	54.3	36.1	30.8	32.3	33.8	34.6	35.9	42.8	48.6	54.1	58.1	62.8	66.1	70.4	65.3	99.6
20-Sep	68.7	70.6	75.4	78.0	82.1	84.0	86.6	80.6	70.0	58.8	49.9	39.8	32.5	28.2	25.5	25.5	28.9	34.1	47.2	56.8	59.4	57.8	63.0	67.7	57.1	86.6
21-Sep	76.6	78.7	81.2	85.4	90.2	91.9	93.6	89.0	81.6	70.6	65.7	51.8	40.6	35.8	28.4	33.8	31.5	35.5	43.9	49.8	55.7	61.4	67.1	70.1	62.9	93.6
22-Sep	76.9	85.7	94.0	95.7	98.9	97.5	OR	OR	79.6	74.7	58.2	44.9	38.7	37.9	35.8	33.2	35.1	37.2	46.3	62.4	70.3	64.1	72.3	75.0	64.3	98.9
23-Sep	78.0	82.2	87.5	91.3	92.7	93.6	95.6	93.5	92.6	77.3	69.8	62.5	55.4	49.0	47.9	47.5	48.4	54.5	60.7	65.9	71.1	79.4	89.5	92.1	74.1	95.6
24-Sep	87.1	78.5	77.6	81.5	86.5	83.3	83.1	83.7	72.9	59.9	48.9	42.3	31.0	27.3	26.6	25.0	27.9	32.7	39.5	50.2	60.8	64.3	67.9	67.2	58.6	87.1
25-Sep	73.1	79.8	73.5	80.1	70.5	65.2	62.5	69.0	75.0	71.0	62.4	58.1	52.5	53.4	53.3	51.4	52.3	56.0	68.8	74.8	79.0	81.5	80.9	82.5	67.8	82.5
26-Sep	85.8	91.6	100.0	OR	OR	99.2	94.6	90.5	86.1	80.8	75.2	70.8	68.6	65.2	64.6	63.8	68.6	70.9	68.8	70.1	69.8	70.9	73.9	76.9	77.6	100.0
27-Sep	82.2	81.8	83.1	82.2	84.6	87.4	86.3	82.8	75.9	65.2	58.0	53.3	47.5	43.7	39.3	40.4	42.1	45.6	54.6	60.7	64.5	70.1	72.3	74.6	65.8	87.4
28-Sep	77.2	78.2	82.1	84.8	87.1	89.7	90.2	84.1	78.3	62.4	48.2	42.6	39.7	36.9	37.6	39.2	35.3	37.6	44.6	49.0	52.4	56.2	58.9	63.0	60.6	90.2
29-Sep	67.2	70.1	79.8	74.9	71.1	79.3	90.8	94.8	98.6	95.8	89.5	81.0	83.7	69.3	55.2	47.2	44.8	51.2	58.0	67.2	66.7	67.4	70.5	68.3	72.6	98.6
30-Sep	69.3	70.6	71.8	80.0	85.4	84.5	89.9	90.3	89.8	84.3	77.1	74.2	73.4	77.5	77.5	72.8	67.5	67.5	74.3	82.8	90.2	91.8	94.0	92.1	80.4	94.0
	82.1	83.0	86.4	87.5	88.0	89.2	89.0	86.6	80.5	73.0	66.0	59.4	55.1	52.2	49.6	49.9	51.0	54.2	60.5	69.0	74.7	76.7	78.8	80.4	Diurnal Average	
	96.5	97.7	100.0	100.0	99.6	99.6	99.6	98.2	98.6	95.8	89.5	82.5	89.4	86.3	85.0	85.2	82.6	87.5	94.3	95.4	99.1	99.2	98.2	97.3	Diurnal Maximum	

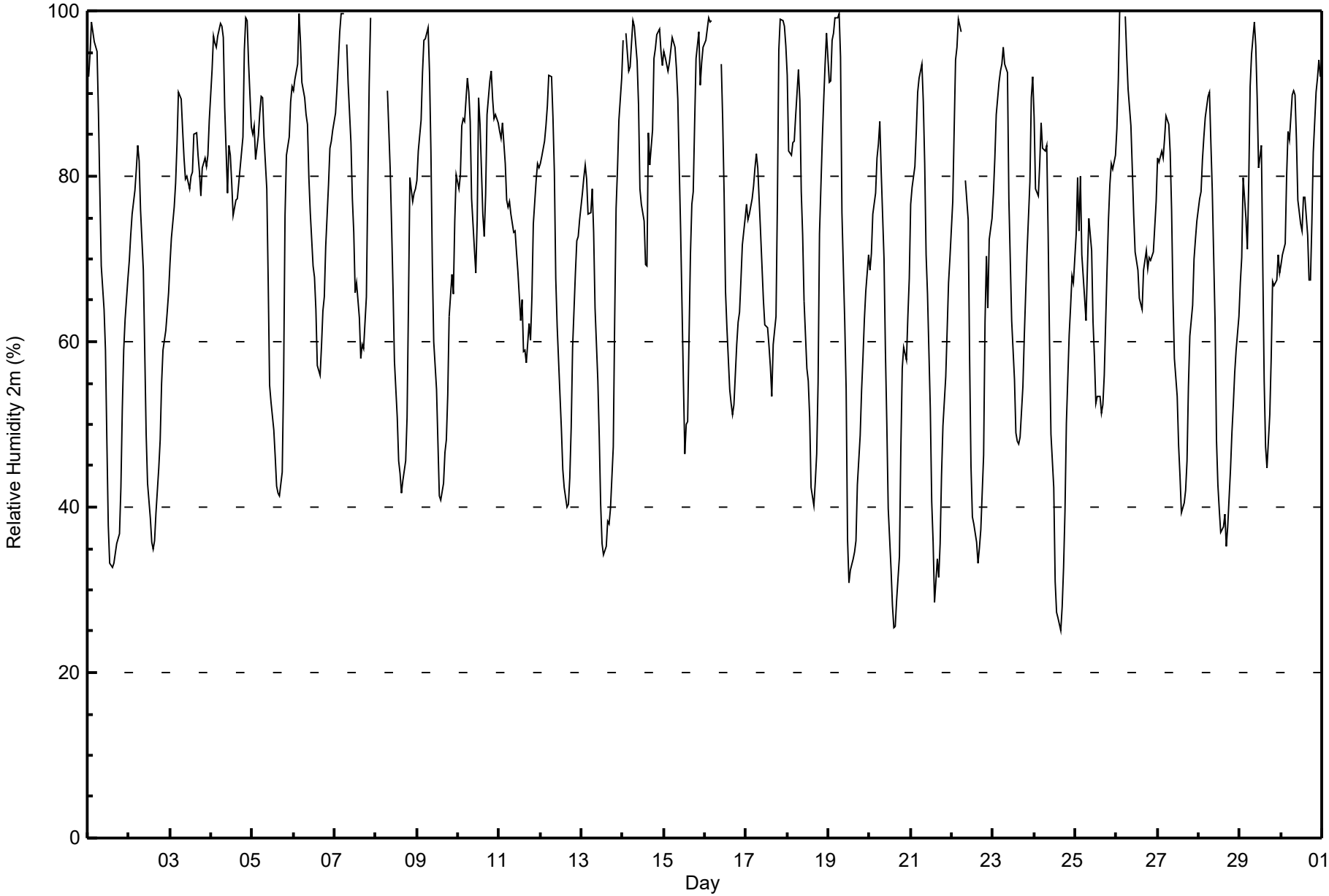
OR - Out of Range

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Patricia McInnes - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Patricia McInnes - September 2026

Maximum Speed: 31 km/h on Sep 26 13:00

Maximum Daily Speed Average: 20.7 km/h on Sep 26

Minimum Speed Value: 0 km/h on Sep 18 14:00

Minimum Daily Speed Average: 1.3 km/h on Sep 18

Maximum Diurnal Speed Average: 5.9 km/h at hour 15

Minimum Diurnal Speed Average: 2.1 km/h at hour 20

Monthly Average Velocity: 3.7 km/h 256.3 deg

Percentiles: $P_1 = 2$ $P_{10} = 4$ $Q_1 = 6$ Median = 10 $Q_3 = 16$ $P_{90} = 21$ $P_{99} = 29$

Hours in Service:	720
Hours of Data:	720
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-Sep	S3	S4	S4	S4	S4	SE4	SE5	SSE7	SE8	SE5	ESE6	ESE11	SE13	SE18	SE19	SE19	SE20	SE18	SE14	SE11	SE12	SE10	SE10	ESE8	SE9.4	SE20
2-Sep	ESE10	ESE12	ESE14	ESE16	ESE15	ESE15	ESE17	ESE19	SE20	ESE18	SE20	SE20	SE21	SE22	SE23	SE21	ESE20	ESE18	ESE17	ESE16	ESE13	SE13	SE13	SE12	ESE16.8	SE23
3-Sep	SE10	SE10	ESE7	ESE7	ESE8	ESE12	ESE12	SE11	ESE9	ESE9	E13	ESE17	ESE17	ESE18	E16	E14	ESE13	E10	E9	E8	E10	E10	ESE10	ESE10	ESE11.2	ESE18
4-Sep	ESE9	ENE4	SE9	ESE8	ESE5	SE5	SE5	SSW3	S3	NNE6	N16	N20	N24	N28	N28	N29	N26	N23	N18	N16	N15	N13	NNW13	N11	N10.9	N29
5-Sep	N8	NNW9	N12	NNW11	NNW9	NNW10	NNW13	NNW12	N13	NNW9	NNE12	NNE9	NNE8	NNE6	NE5	NNW4	NNW6	WNW5	WNW4	NNW5	NNW4	W3	WSW2	SSW2	NNW6.5	N13
6-Sep	SSW2	S3	SSW3	SSE4	SE5	SE6	SE7	SE8	SE8	SE7	ESE10	ESE14	ESE14	ESE11	SE12	SE12	SSE10	SSE9	SE8	ESE8	SE10	SE13	SE11	SE10	SE8.2	ESE14
7-Sep	SE6	SE9	SE8	SE4	SSE5	NE1	ESE3	SE8	SE5	SE6	SE9	SSE8	SE7	SE4	NNW2	E5	NE8	NE6	ESE6	SE5	SSE2	SW3	WNW4	SW1	ESE3.9	SE9
8-Sep	SW3	SSE2	SW2	WNW2	W0	NW4	WNW4	NNW7	N11	N10	NNW9	NNW11	NNW12	NNW11	N8	NNW4	ESE7	SSE7	SSE6	S4	SW5	SW7	SW9	SW9	NW2.3	NNW12
9-Sep	SW11	SSW7	SSW7	SSW5	SSW6	S4	S3	SSE4	SSW9	SW16	SW18	SW18	SW22	WSW25	SW24	SW21	SW18	SW19	WSW19	SW11	SSW7	SW15	WSW16	WSW16	SW12.9	WSW25
10-Sep	WSW18	WSW19	W17	W16	WSW15	WSW13	WSW17	WSW14	W24	W23	W24	WNW19	W15	W16	W21	W21	WNW19	WNW19	WNW19	WNW19	NW19	WNW21	WNW20	WNW23	W17.8	W24
11-Sep	WNW24	WNW23	WNW22	NW21	NW23	NW24	NW21	NW24	NNW22	NNW22	NNW24	NNW25	NNW24	NW23	NW29	NNW26	NNW18	NW11	NW12	NW10	NW12	WNW12	WNW13	WNW13	NW19.4	NW29
12-Sep	WNW13	WNW10	WNW10	WNW9	W9	W8	W6	W6	WNW7	NW6	WNW9	W12	W13	W10	WNW11	W11	WSW9	WSW9	SSW6	SW6	SW7	SW9	SW13	WSW11	W8.2	W13
13-Sep	WSW10	SW12	SW12	SW14	SW14	SW14	WSW12	SW15	SW17	SW17	SW14	SW16	WSW19	SW17	WSW16	SSW10	SSW8	SSW7	SW6	NNW8	NNW15	NNW14	NNW12	NNW13	WSW9.7	WSW19
14-Sep	NNW14	NNW13	N17	N16	N15	NNW14	NNW14	NNW14	NNW16	NNW16	N17	NNW17	NNW16	N15	N16	N18	N13	NNW10	NW10	NW11	WNW8	NW6	WNW9	WNW12	NNW12.9	N18
15-Sep	WNW10	WNW11	WNW13	WNW10	NW9	NW8	SSE2	SSW5	SSW6	SW11	SW11	WSW13	W9	WSW11	SW14	ENE6	SSE4	W9	W8	WSW6	W7	W10	W10	WNW7	W6.8	SW14
16-Sep	NW8	NW8	NW7	NNW7	NW5	W4	SW2	WSW4	SW5	S6	SSE5	SE5	E3	E5	E2	N1	S2	E5	E8	E8	ESE12	ESE14	ESE13	ESE16	ESE2.2	ESE16
17-Sep	ESE18	SE16	SE17	ESE15	SE15	SE11	ESE10	SE11	SE8	SSE7	SSW7	SSW7	WSW9	W7	WNW5	SW3	SSW5	WNW3	WSW2	SW3	SW4	SSW3	SW3	WNW4	SSE5.0	ESE18
18-Sep	WNW5	WSW3	WSW7	W5	WSW10	WSW8	SW4	NW5	N9	N6	N4	NNW5	E4	SSW0	N7	N7	SE4	ESE6	ESE4	SSE4	SSW3	S2	SSW4	SSW4	WNW1.3	WSW10
19-Sep	S5	SSW4	S4	SSW4	S4	S4	S4	S4	SSE6	SE7	SE6	S13	S18	S19	S18	S16	SSW15	SSW9	S8	S7	SSW7	S6	S5	SSW6	S8.0	S19
20-Sep	SW9	SW11	SW8	WSW10	SW11	SW10	SW11	SW9	SW10	SW12	SSW11	SW10	WSW14	WSW15	SW14	SW15	SW10	SW5	SSW4	SSW5	SSW5	SSW7	SSW8	SSW6	SW9.4	SW15
21-Sep	SW5	SW10	WSW14	WSW13	WSW13	SW13	SSW8	S6	S7	S7	SSE8	SE7	ESE9	ESE13	SSE16	SE13	S12	SSW11	SSW6	SSW7	SW9	SW11	SW9	SW9	SSW7.4	SSE16
22-Sep	S4	WSW5	W1	WSW4	SSE3	SW2	NW4	NNW8	E2	ESE5	NW10	NW21	NW19	WNW17	W18	W20	W16	W10	W7	W7	WSW7	WSW7	WSW4	S4	WNW6.4	NW21
23-Sep	SW5	SSW4	SSW3	SSW3	S3	S3	SSE3	SSW5	S3	S4	S4	E3	SE4	ESE10	SE7	ESE10	ESE12	ESE9	ESE10	SE9	SE7	S4	SSW3	SW8	SSE4.4	ESE12
24-Sep	WSW11	WSW8	WSW5	SW6	SSW6	SW9	SSW6	SSW6	SW9	SW10	SW11	SSW12	WSW15	WSW19	W18	W17	WSW14	WSW8	WSW7	WSW8	W7	SSW2	SSW4	SE4	WSW8.4	WSW19
25-Sep	S2	SE3	ESE2	NNW3	N6	N9	NNE9	NNE2	NNE9	NE12	NE14	NE18	ENE17	NE15	NNE10	ENE15	ENE15	NE11	N12	N14	N16	N15	N16	NNW16	NNE9.1	NE18
26-Sep	N14	NNW14	NW12	WNW11	W11	WSW13	W19	W23	W25	W27	W29	W30	W31	W30	W30	W30	W27	W25	W22	W24	W24	W24	W16	WSW13	W20.7	W31
27-Sep	SW10	SW13	SW12	WSW17	WSW17	WSW16	WSW21	WSW23	WSW24	WSW24	WSW20	WSW23	WSW22	WSW23	WSW24	WSW21	WSW23	WSW15	WSW9	WSW8	WSW9	SW8	SW10	WSW13	WSW16.8	WSW24
28-Sep	WSW13	SW13	SW12	SW9	SW7	SSW7	S6	SSE5	SSE4	SW10	SW16	SW19	WSW24	SW22	SW21	SSW14	SSW16	SSW11	S8	S9	SSW10	SSW7	SSW7	SSW6	SW10.6	WSW24
29-Sep	S6	S5	SW3	S4	SSW6	SSW7	SW9	SW10	SSW7	SW10	WSW17	W20	WNW20	WNW24	WNW23	WNW23	WNW25	W11	SW4	SW11	WSW9	WSW12	W21	W11.0	WNW25
30-Sep	W21	W17	W17	W14	WNW21	WNW20	WNW21	WNW20	WNW20	NW22	NW23	NW24	NW21	WNW19	WNW20	WNW20	WNW14	NW12	NW7	WNW5	WNW7	W6	WNW6	WNW4	WNW15.3	NW24
	WSW3.9	WSW4.0	WSW3.6	W3.7	WSW3.7	WSW3.8	WSW3.3	WSW3.4	WSW3.4	WSW3.9	W3.9	W4.4	W5.1	W5.1	W5.9	W4.0	WSW3.4	WSW3.4	WSW2.5	WSW2.1	W2.7	WSW3.4	WSW3.9	WSW3.9	Diurnal Average	
	WNW24	WNW23	WNW22	NW21	NW23	NW24	WNW21	NNW24	W25	W27	W29	W30	W31	W30	W30	W30	W27	WNW25	W22	W24	W24	W24	WNW20	WNW23	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 Sep 26 13:00

Minimum Value: 0 km/h on Sep 6 01:00

Percentiles: $P_1 = 1$ $P_{10} = 1$ $Q_1 = 2$ Median = 2 $Q_3 = 4$ $P_{90} = 5$ $P_{99} = 7$

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

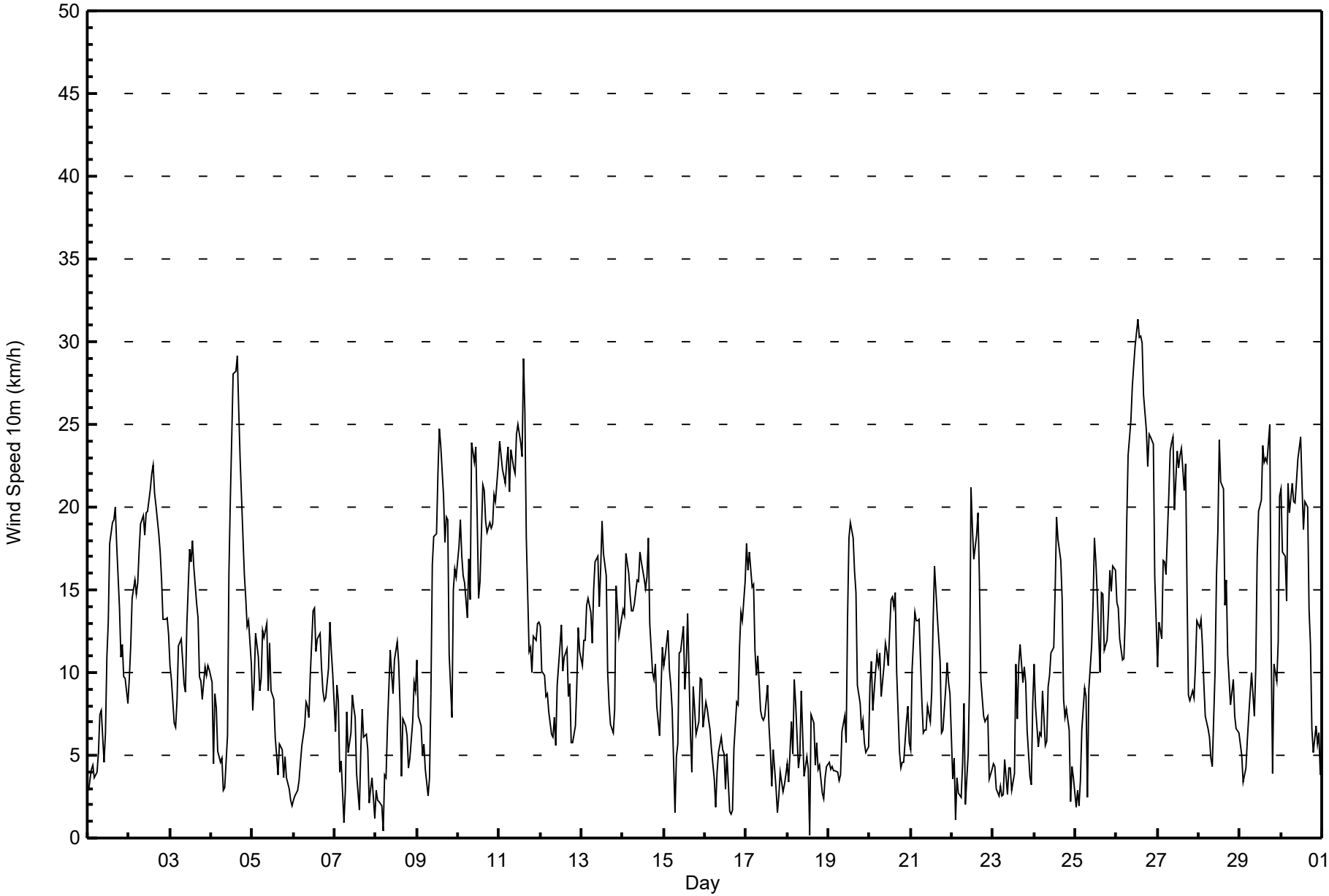
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	1	1	1	1	1	2	2	2	2	2	2	3	4	5	5	4	5	5	4	2	2	2	2	2	5
2-Sep	2	3	4	4	4	4	4	4	5	5	5	5	6	6	5	5	5	4	4	4	3	3	3	3	6
3-Sep	2	3	2	2	2	3	3	3	4	2	4	5	4	5	4	3	4	3	2	2	3	3	2	2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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Patricia McInnes - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	154	21.39	21.39
6 - 11	268	37.22	58.61
12 - 19	203	28.19	86.81
20 - 28	87	12.08	98.89
29 - 38	8	1.11	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Patricia McInnes - September 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	2	1	2	1	8	5	15	13	29	25	18	8	4	12	4	7	154
6 - 11	11	7	3	1	6	26	33	9	10	36	42	22	20	15	12	15	268
12 - 19	20	1	4	3	3	29	16	1	6	4	29	31	15	14	6	21	203
20 - 28	6	0	0	0	0	2	7	0	0	0	5	13	18	19	10	7	87
29 - 38	1	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	8
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	40	9	9	5	17	62	71	23	45	65	94	74	63	60	33	50	720

Total Number of Valid Hours: 720

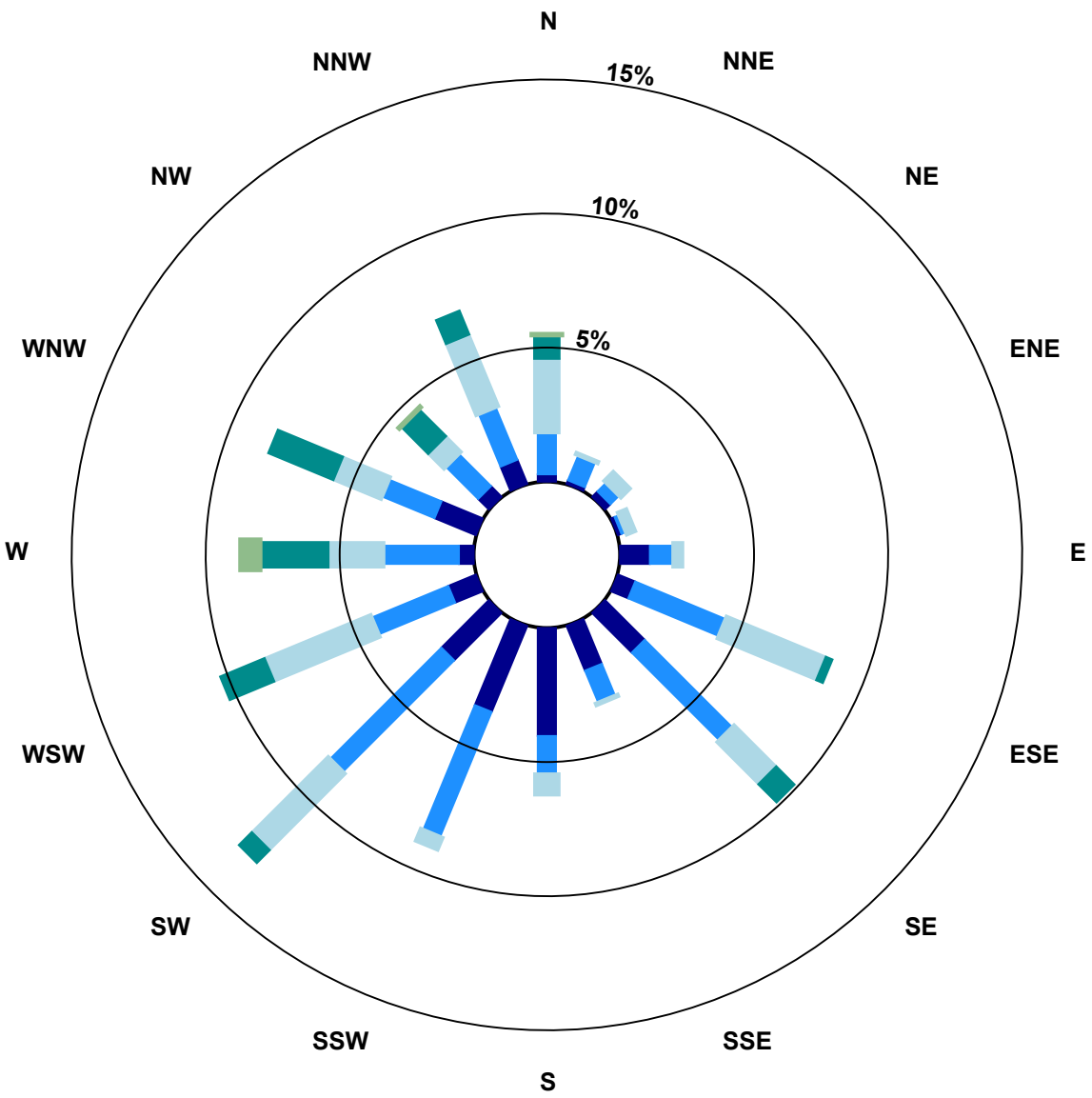
Total Number of Hours: 720

Wood Buffalo Environmental Association

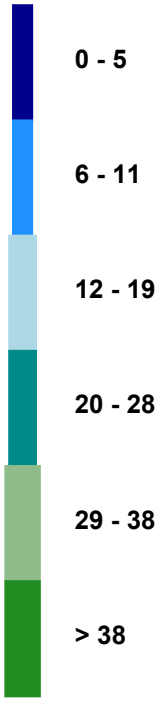
Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Patricia McInnes



Classes (km/h)



Total Number of Valid Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Patricia McInnes - September 2026

Direction of Maximum Speed: 272 deg on Sep 26 13:00
Direction of Maximum Daily Speed Average: 275.0 deg on Sep 26

Direction of Minimum Speed: 193 deg on Sep 18 14:00

Direction of Minimum Daily Speed Average: 1.3 deg on Sep 18

Monthly Average Direction: 256.3 deg

Hours in Service:	720
Hours of Data:	720
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-Sep	191	189	190	190	177	146	139	148	134	134	108	118	132	127	135	133	134	131	137	135	126	126	130	121	135.1
2-Sep	115	108	114	119	119	116	119	121	124	120	129	128	133	137	132	124	120	123	122	118	119	128	133	129	123.6
3-Sep	130	126	116	108	110	121	112	124	114	104	99	102	109	104	98	101	107	99	88	90	97	101	102	111	106.7
4-Sep	122	78	128	117	111	128	140	198	188	17	357	358	6	7	6	6	3	5	357	5	357	355	347	355	10.3
5-Sep	352	339	350	348	343	333	337	342	352	347	28	12	24	27	50	345	330	282	295	337	331	272	238	210	347.9
6-Sep	196	171	200	167	139	133	137	129	130	127	119	120	117	116	143	145	155	148	126	123	133	135	134	125	133.7
7-Sep	131	127	127	136	157	41	112	134	124	143	128	147	134	146	346	84	36	48	107	126	154	228	297	236	123.4
8-Sep	222	168	230	301	281	312	303	332	349	7	347	344	327	338	359	341	116	157	167	189	219	222	223	229	309.8
9-Sep	227	212	194	200	197	187	175	166	209	226	229	221	231	240	234	234	234	234	245	234	209	234	242	243	228.8
10-Sep	251	257	268	270	255	246	253	255	264	267	275	282	271	271	280	278	299	300	291	296	308	300	298	301	277.9
11-Sep	301	302	303	309	323	324	324	326	333	330	335	339	332	323	322	328	342	320	324	313	311	300	293	295	320.5
12-Sep	295	295	287	290	271	273	266	275	287	325	288	275	267	276	285	276	254	254	210	214	219	230	235	239	267.7
13-Sep	240	231	228	232	232	229	238	235	235	231	217	225	237	235	239	213	209	211	231	330	347	345	340	341	244.6
14-Sep	346	346	360	3	351	342	344	342	344	345	353	345	346	359	4	350	351	336	307	318	301	310	301	302	342.8
15-Sep	303	297	298	301	304	305	168	211	197	226	235	240	268	246	232	58	165	266	262	253	277	268	276	296	265.5
16-Sep	310	322	320	328	319	264	226	245	226	180	168	142	89	79	97	2	180	97	96	101	114	119	122	122	117.7
17-Sep	123	125	124	122	124	127	119	127	140	159	192	208	237	275	301	218	201	300	248	234	230	213	220	296	150.9
18-Sep	294	245	244	279	254	244	231	311	353	9	350	327	84	193	352	3	128	109	123	158	197	190	193	196	281.6
19-Sep	186	192	186	192	182	177	173	171	148	146	138	184	190	186	187	180	196	200	170	185	197	179	185	206	182.9
20-Sep	232	235	220	237	235	231	228	220	223	230	203	225	239	238	224	221	229	214	206	193	193	207	200	211	223.9
21-Sep	221	233	241	241	240	234	213	184	182	174	152	130	120	123	148	138	173	212	203	206	224	226	230	232	197.8
22-Sep	175	249	277	242	167	236	324	346	100	123	326	315	319	297	273	277	276	269	265	272	253	245	242	170	283.4
23-Sep	219	207	198	192	191	177	147	208	187	177	169	98	124	120	131	113	118	114	123	130	146	187	211	233	149.4
24-Sep	239	255	245	233	195	230	210	196	220	222	216	206	253	256	260	267	251	245	245	257	277	200	207	143	239.3
25-Sep	171	134	104	342	354	2	12	30	22	36	47	53	68	47	24	71	67	38	4	357	349	358	353	346	26.2
26-Sep	353	339	323	285	269	255	264	266	263	268	273	274	272	269	271	276	278	274	273	275	277	276	262	250	275.0
27-Sep	233	232	228	255	255	252	249	250	249	257	244	240	245	249	254	248	247	247	239	241	240	233	234	239	246.1
28-Sep	239	235	235	228	219	206	189	157	147	222	233	235	245	232	232	213	204	200	189	191	195	192	192	198	218.8
29-Sep	169	172	219	175	196	204	226	227	206	222	247	270	283	286	284	284	284	282	271	223	233	244	237	270	259.0
30-Sep	265	261	259	281	300	291	289	296	302	305	308	316	309	299	297	300	301	313	319	285	287	272	301	287	294.7
	251.1	251.4	252.5	259.9	254.7	251.8	249.5	248.2	254.3	253.9	264.3	269.3	267.0	262.8	263.6	268.0	247.2	255.3	243.4	251.5	259.4	247.6	247.5	254.3	
	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 Sep 18 14:00

Minimum Value: 6 deg on Sep 24 19:00

Percentiles: P_1 = 8 P_{10} = 10 Q_1 = 13 Median = 16 Q_3 = 22 P_{90} = 37 P_{99} = 81

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

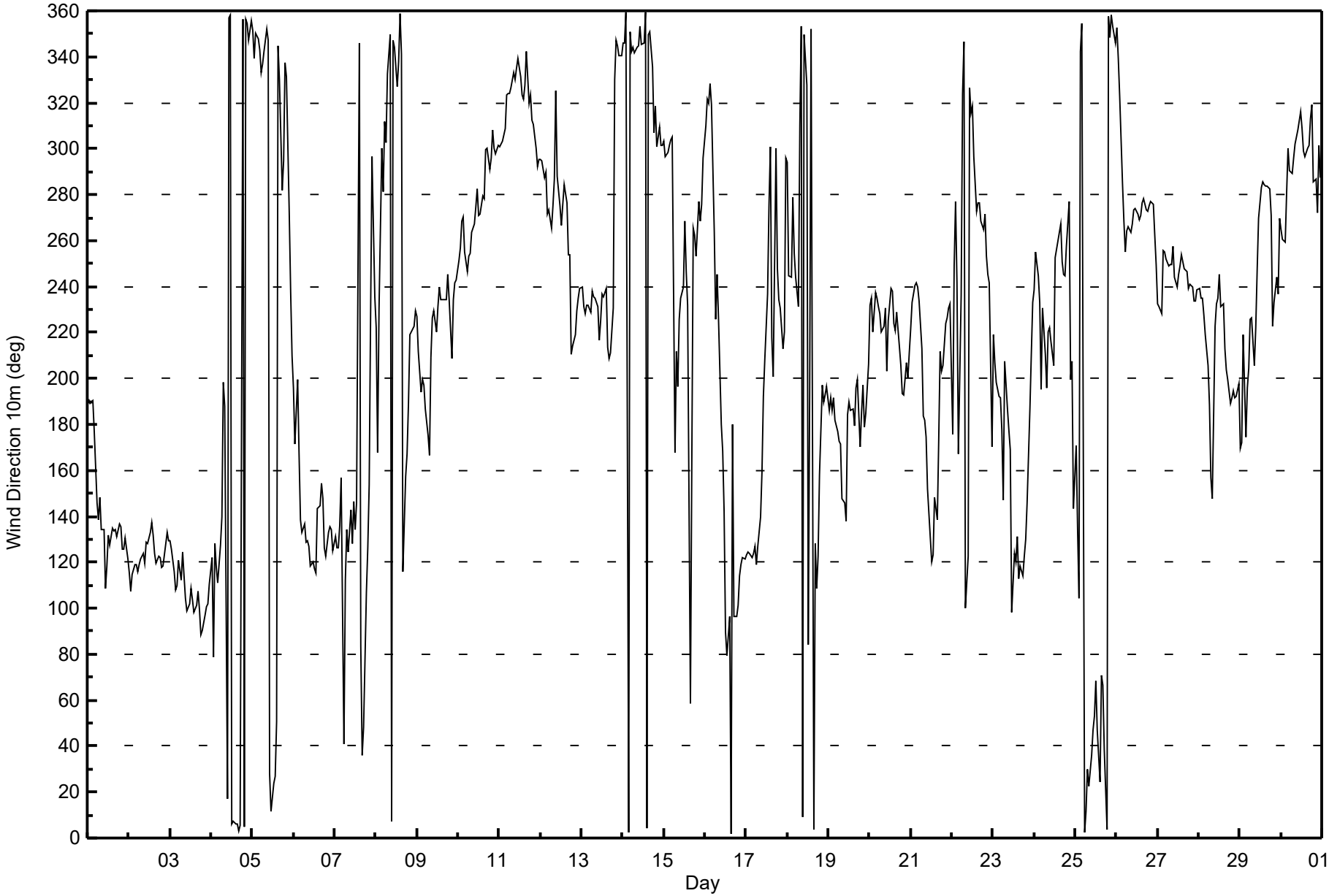
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	21	16	19	19	16	25	14	16	19	32	27	20	26	19	18	16	15	15	14	13	11	11	11	12	32
2-Sep	14	14	14	14	14	14	14	14	15	14	17	18	17	16	17	16	14	13	14	12	13	14	12	12	18
3-Sep	12	13	18	15	13	12	14	19	24	15	16	16	16	16	15	16	16	17	15	14	17	15	13	14	24
4-Sep	12	34	15	17	24	30	17	40	50	40	16	16	16	18	16	17	17	17	16	15	16	15	14	15	50
5-Sep	14	13	14	13	11	8	10	14	16	26	26	39	38	56	62	73	49	38	35	14	13	20	23	20	73
6-Sep	21	22	24	27	13	16	17	14	18	20	16	15	15	20	25	22	21	17	14	11	14	13	14	13	27
7-Sep	18	12	14	18	18	81	72	19	21	27	17	24	27	58	78	75	31	29	35	17	48	22	28	70	81
8-Sep	26	41	45	47	71	29	20	15	16	26	25	23	26	24	46	64	26	21	14	13	10	12	12	10	71
9-Sep	12	18	16	17	17	17	30	23	27	16	15	18	16	14	15	13	12	12	14	17	19	12	14	11	30
10-Sep	12	15	11	12	14	13	11	12	12	15	13	13	12	14	14	13	21	12	11	11	11	10	11	11	21
11-Sep	11	11	10	11	12	11	11	12	13	11	13	13	15	12	13	14	16	13	11	18	11	10	10	10	18
12-Sep	10	11	10	11	15	11	13	21	18	42	22	29	21	32	29	24	27	14	15	14	12	11	9	9	42
13-Sep	9	10	11	10	10	11	10	10	11	13	20	17	16	20	24	24	26	16	14	58	12	12	11	12	58
14-Sep	13	14	16	16	15	12	13	12	13	17	15	14	14	18	19	18	16	19	10	12	10	17	10	9	19
15-Sep	10	9	8	9	9	9	87	21	25	21	21	22	40	29	35	68	52	17	20	32	20	12	9	13	87
16-Sep	10	12	10	10	20	39	54	43	24	22	38	53	86	55	103	83	84	22	14	13	13	13	13	13	103
17-Sep	14	15	14	13	13	14	14	14	21	21	24	25	18	27	42	61	32	29	40	18	10	17	60	51	61
18-Sep	48	50	30	43	9	12	19	36	19	23	70	46	68	103	41	36	72	12	18	24	24	13	9	10	103
19-Sep	13	15	12	12	13	13	13	19	17	17	28	24	20	19	20	20	22	22	15	21	18	16	16	25	28
20-Sep	13	10	16	12	9	11	11	21	18	15	21	24	21	18	20	17	14	14	11	12	15	17	17	18	24
21-Sep	14	9	8	8	8	10	19	18	18	21	26	27	23	23	23	23	18	26	17	15	13	12	11	18	27
22-Sep	43	30	97	24	37	45	19	22	63	24	76	16	20	21	15	15	16	10	8	11	7	12	39	39	97
23-Sep	27	33	31	36	25	22	45	33	49	26	38	47	42	15	27	16	15	13	13	14	20	31	34	9	49
24-Sep	8	13	33	30	25	14	28	23	16	16	19	23	30	19	19	17	11	12	6	7	19	62	20	32	62
25-Sep	64	74	56	18	16	14	13	73	20	15	15	16	18	18	22	22	21	19	19	18	13	15	15	13	74
26-Sep	18	16	22	22	25	12	12	12	12	12	14	14	14	14	14	14	13	12	13	13	13	13	16	14	25
27-Sep	10	10	11	11	9	10	10	10	11	12	14	13	14	15	14	16	12	12	8	8	8	8	8	10	16
28-Sep	9	9	8	13	10	14	15	19	32	25	16	18	17	21	16	20	19	18	15	19	18	16	13	14	32
29-Sep	12	21	45	26	21	16	12	13	17	20	13	17	14	13	15	13	13	12	19	29	9	9	9	16	45
30-Sep	12	12	10	14	13	11	13	11	11	11	13	14	14	13	13	12	14	12	12	8	7	20	7	54	54
	64	74	97	47	71	81	87	73	63	42	76	53	86	103	103	83	84	38	40	58	48	62	60	70	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Patricia McInnes - September 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS07
ATHABASCA VALLEY
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ATHABASCA VALLEY (AMS07)
SEPTEMBER 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	686	33	34	99.86	-	-	5.8	0	1.5	0
TRS (ppb) Average	684	35	36	99.86	2.8	0	2.2	0	0.7	0
THC (ppm) Average	686	33	34	99.86	-	-	2.7	-	2.2	-
NMHC (ppm) Average	686	33	34	99.86	-	-	0.276	-	0.012	-
CH4(ppm) Average	686	33	34	99.86	-	-	2.6	-	2.2	-
O3 (ppb) Average	685	34	35	99.86	-	-	42.3	0	23.1	-
NO2 (ppb) Average	684	35	36	99.86	-	-	21.6	0	8	-
NO (ppb) Average	684	35	36	99.86	-	-	23.8	-	6	-
NOX (ppb) Average	684	35	36	99.86	-	-	37	-	12.6	-
PM2.5 (ug/m3) Average	718	1	2	99.86	-	-	17.1	0	7.9	0
CO(ppm) Average	685	34	35	99.86	-	-	0.3	0	0.2	-
Temperature 2 m (C) Average	719	0	1	99.86	-	-	28.7	-	21.2	-
Relative Humidity (%) Average	710	0	10	98.61	-	-	100	-	85	-
Barometric Pressure (inHg) Average	719	0	1	99.86	-	-	29.3	-	29.3	-
Wind Speed 10 m (km/h) Average	718	1	2	99.86	-	-	37	-	24	-
Wind Direction 10 m (deg) Average	718	1	2	99.86	-	-	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ATHABASCA VALLEY (AMS07)
SEPTEMBER 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	686	0.2	0.6	-	0	0	0	0.1	0.1	0.3	5.8
TRS (ppb) Average	684	0.25	0.3	-	0	0.1	0.1	0.2	0.3	0.4	2.2
THC (ppm) Average	686	2.12	0.1	-	2	2	2	2.1	2.2	2.2	2.7
NMHC (ppm) Average	686	0.002	0.015	-	0	0	0	0	0	0	0.276
CH4(ppm) Average	686	2.12	0.1	-	2	2	2	2.1	2.2	2.2	2.6
O3 (ppb) Average	685	16.65	8.9	-	1	4.8	9.7	16.2	23.1	28.9	42.3
NO2 (ppb) Average	684	4.14	3.6	-	0.3	0.8	1.6	3	5.5	9.2	21.6
NO (ppb) Average	684	1.86	3	-	0	0.1	0.3	0.7	2	4.9	23.8
NOX (ppb) Average	684	6	5.8	-	0.3	1.1	2.1	4	7.7	14.1	37
PM2.5 (ug/m3) Average	718	4.22	2.6	-	0.2	1.4	2.4	3.6	5.6	7.7	17.1
CO(ppm) Average	685	0.13	0	-	0	0.1	0.1	0.1	0.2	0.2	0.3
Temperature 2 m (C) Average	719	12.83	5.4	-	2.3	6.5	8.6	12	16.3	19.9	28.7
Relative Humidity (%) Average	710	70.88	17.5	-	24.8	43	59.6	75.4	84.2	91.7	100
Barometric Pressure (inHg) Average	719	28.95	0.2	-	26.2	28.6	28.8	29	29.1	29.2	29.3
Wind Speed 10 m (km/h) Average	718	10.8	7	-	0	3	5	8	16	22	37
Wind Direction 10 m (deg) Average	718	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ATHABASCA VALLEY (AMS07)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
CO, NO2, NMHC,O3,TRS,SO2	21 Sep 2026 15:00	21 Sep 2026 15:00	1	Maintenance - station logger/modem reset
PM2.5	21 Sep 2026 15:00	21 Sep 2026 15:00	1	Maintenance - station logger/modem reset
ALL METEOROLOGICAL SENSORS	21 Sep 2026 15:00	21 Sep 2026 15:00	1	Maintenance - station logger/modem reset
Relative Humidity	08 Sep 2026 01:00	08 Sep 2026 09:00	9	Sensor operated out of range

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Athabasca Valley - September 2026

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

Maximum Value: 5.8 ppb on Sep 8 14:00 Maximum Daily Average: 1.5 ppb on Sep 8

Minimum Value: 0.0 ppb on Sep 2 14:00 Minimum Daily Average: 0.0 ppb on Sep 3

Maximum Diurnal Average: 0.5 ppb at hour 14 Minimum Diurnal Average: 0.0 ppb at hour 3

Monthly Average: 0.20 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.1 P_{90} = 0.3 P_{99} = 3.8

Hours in Service:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	33
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-Sep	0.1	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.2	0.4	0.6	0.5	0.6	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.6
2-Sep	0.1	0.1	0.0	0.0	0.0	Z	0.0	0.0	0.1	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	0.0	0.1
3-Sep	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
4-Sep	0.0	Z	0.0	0.0	0.0	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	0.0	0.0	0.0	0.1	0.3	0.1	0.1	0.3
5-Sep	0.1	0.0	Z	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.1	0.2	0.1	0.2	0.2	0.4
6-Sep	0.1	0.1	0.1	Z	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.3	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.3
7-Sep	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	0.0	0.0	0.0	1.0	0.4	0.0	0.0	0.0	0.0	0.0	0.1	1.0
8-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	1.8	5.5	3.6	5.0	5.8	4.2	3.2	1.9	1.0	0.5	0.3	0.1	0.2	0.1	0.1	1.5	5.8
9-Sep	Z	0.1	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	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1
10-Sep	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	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
11-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	1.2	1.6	0.8	0.6	1.2	1.1	0.1	0.1	4.2	0.6	1.0	2.4	1.2	0.2	0.1	0.1	0.7	4.2
12-Sep	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1
13-Sep	0.0	0.0	0.0	0.0	Z	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	0.1	0.1	0.1	0.2	0.3	0.1	0.3
14-Sep	0.3	0.1	0.1	0.0	0.0	Z	0.2	0.2	0.1	0.3	0.2	0.4	0.3	0.3	0.2	0.1	0.1	0.3	0.4	1.0	1.3	0.3	0.1	0.1	0.3	1.3
15-Sep	Z	0.1	0.0	0.0	0.0	0.0	0.1	0.0	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	0.2
16-Sep	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.4	0.2	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	0.2	0.4
17-Sep	0.1	0.0	Z	0.1	0.1	0.0	0.0	0.1	0.1	0.2	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	0.2
18-Sep	0.0	0.0	0.0	Z	0.0	0.1	0.1	0.1	0.2	0.3	2.9	3.7	4.6	5.0	3.2	0.9	0.3	0.3	0.2	0.2	0.1	0.2	0.3	0.1	1.0	5.0
19-Sep	0.1	0.1	0.1	0.1	Z	0.2	0.2	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.3	0.4	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.4
20-Sep	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	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2
21-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.6	M	0.7	0.6	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.7
22-Sep	0.1	Z	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.3	0.5	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.5
23-Sep	0.0	0.0	Z	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.4	1.1	0.7	0.8	0.8	0.4	0.2	0.3	0.2	0.1	0.1	0.3	1.1
24-Sep	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	0.2	0.1	0.1	0.1	0.1	0.1	0.2
25-Sep	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	0.1
26-Sep	0.3	0.1	0.1	0.6	0.3	Z	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	0.1	0.1	0.1	0.0	0.0	0.1	0.6
27-Sep	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	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
28-Sep	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	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.5	0.4	0.4	0.2	0.1	0.5
29-Sep	0.2	0.2	Z	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	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	0.1	0.2
30-Sep	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	0.1	0.0	0.0	0.0	0.0	0.0	0.1
	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.4	0.5	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	Diurnal Average	
	0.3	0.2	0.2	0.6	0.3	0.2	0.2	0.3	1.2	1.8	5.5	3.7	5.0	5.8	4.2	3.2	4.2	1.0	1.0	2.4	1.3	0.4	0.4	0.3	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

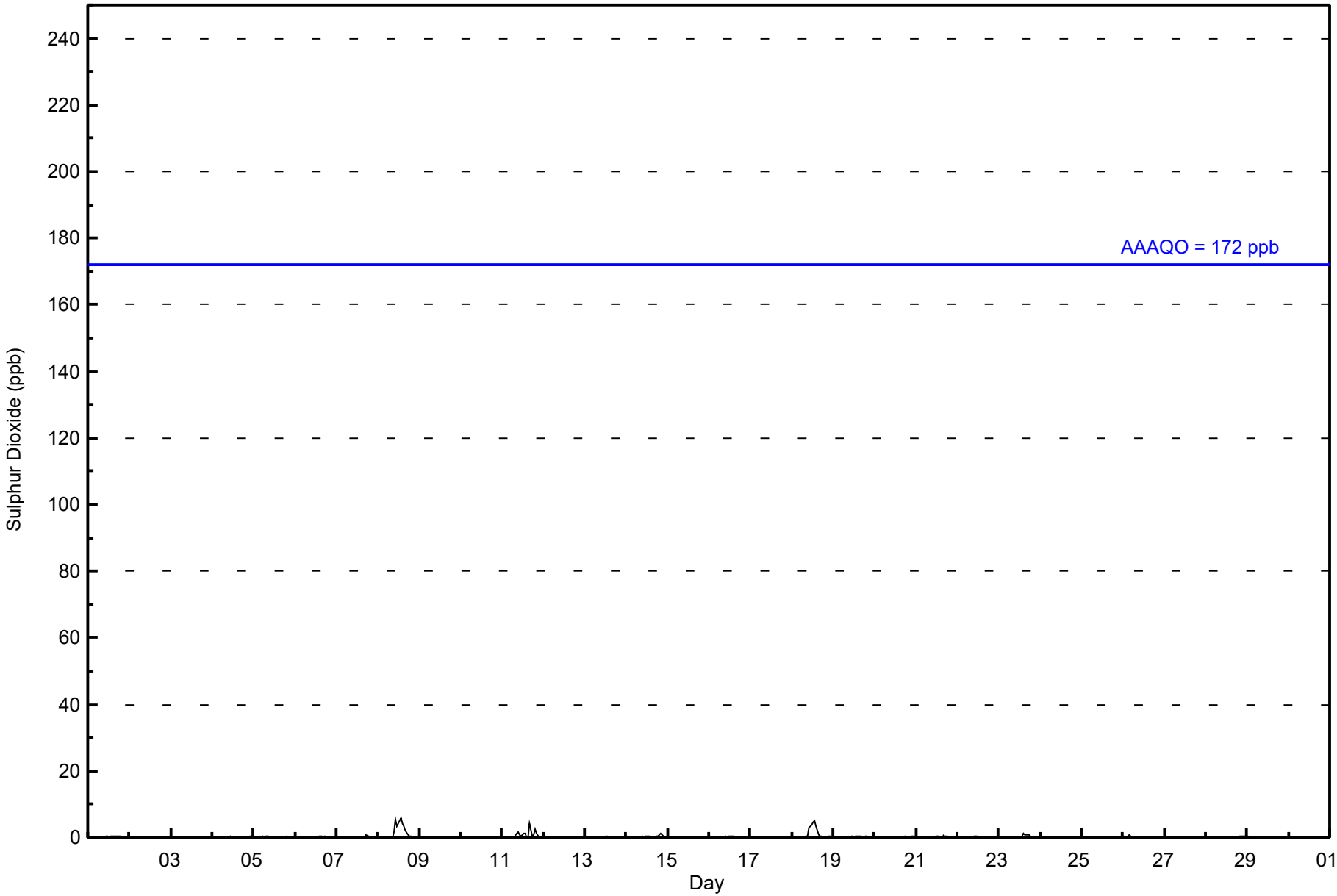
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Athabasca Valley - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	686	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: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Athabasca Valley - September 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	9	6	9	23	45	138	80	37	23	36	40	56	56	37	65	25	685
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	9	6	9	23	45	138	80	37	23	36	40	56	56	37	65	25	685

Total Number of Valid Hours: 685

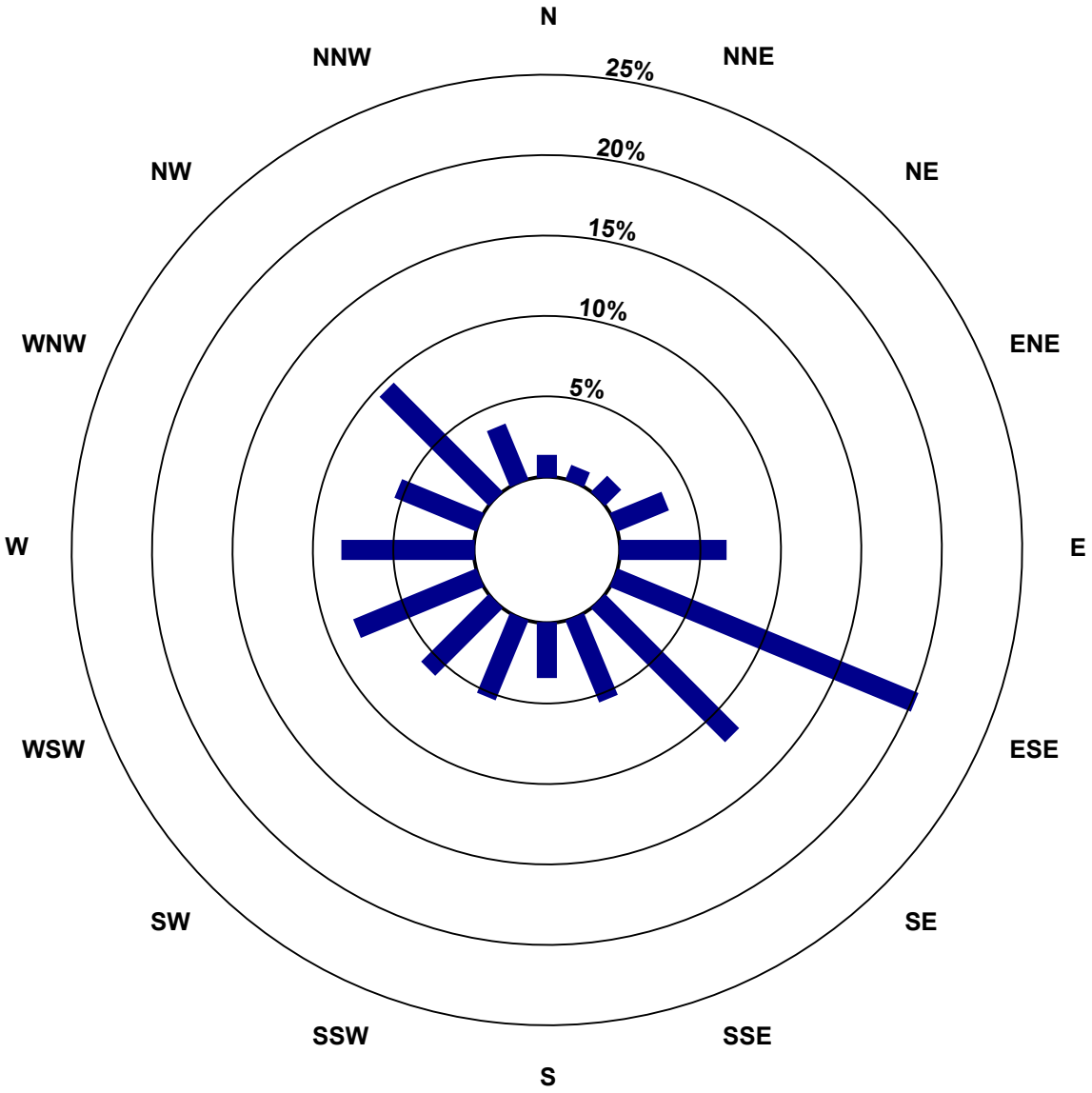
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Athabasca Valley



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

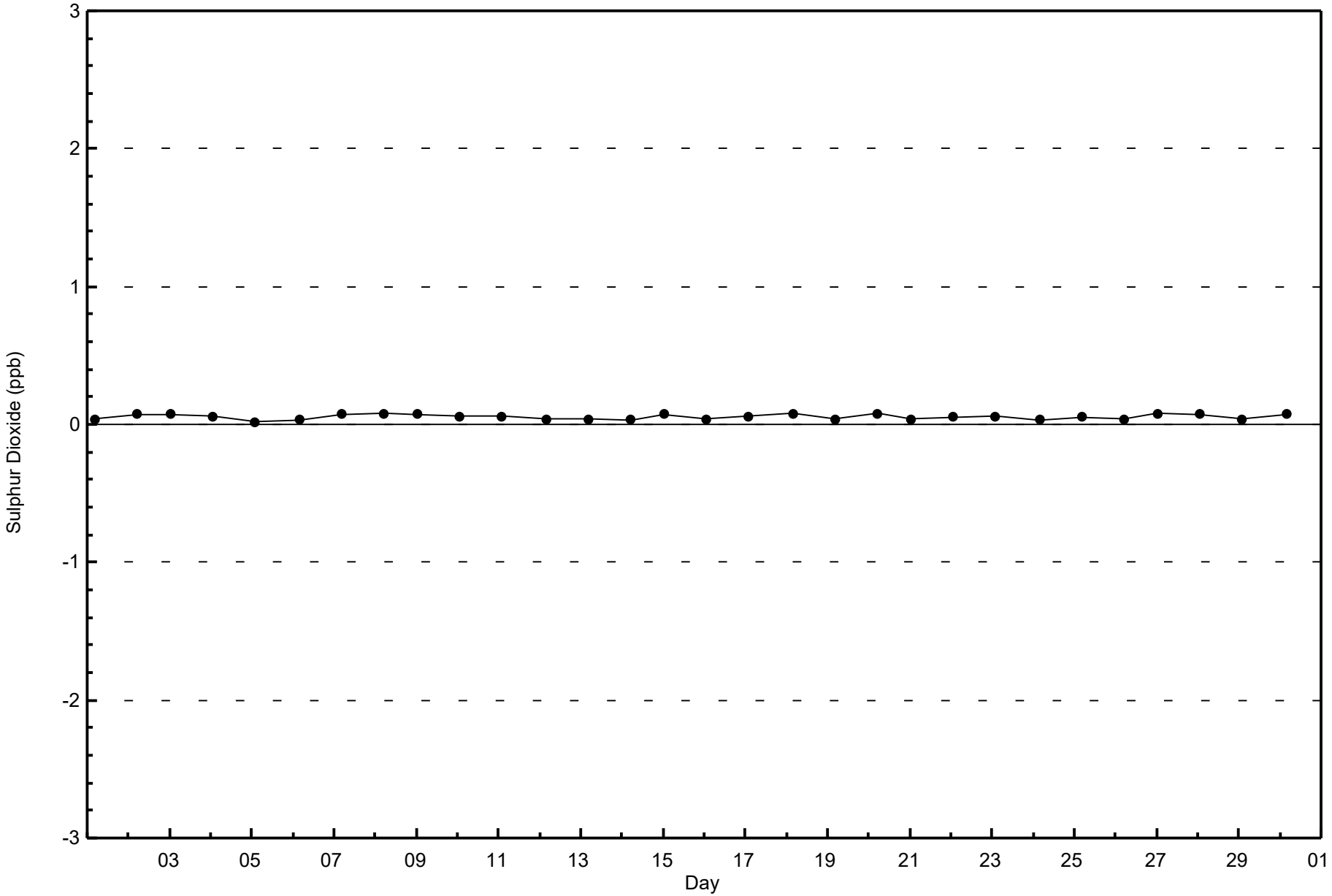
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Athabasca Valley - September 2026

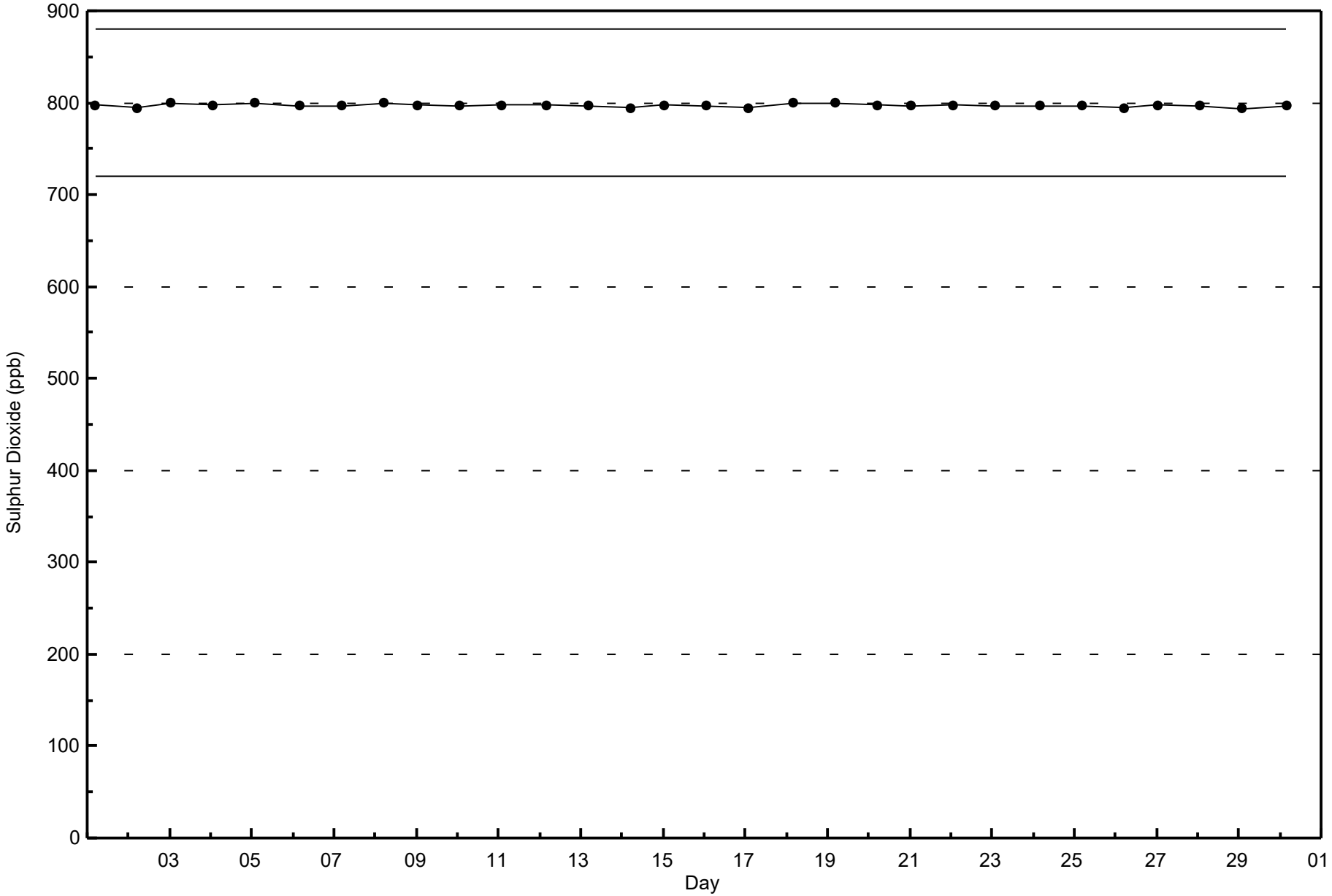


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Athabasca Valley - September 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Athabasca Valley - September 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 2.8 ppb on Sep 25 21:00 Maximum Daily Average: 0.7 ppb on Sep 5

Minimum Value: 0.0 ppb on Sep 20 14:30 Minimum Daily Average: 0.1 ppb on Sep 30

Maximum Diurnal Average: 0.3 ppb at hour 21 Minimum Diurnal Average: 0.2 ppb at hour 19

Monthly Average: 0.25 ppb Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.2 P_{90} = 0.4 P_{99} = 1.7

Periods in Service:	1440
Periods of Valid Data:	1369
Periods of Invalid Data:	71
Periods of Calibration:	69
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-Sep	0.3	0.2	0.2	0.2	0.3	Z	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.2	0.4
	0.2	0.2	0.2	0.2	0.3	SP	0.4	0.4	0.3	0.3	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		
2-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	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	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2		
3-Sep	0.2	Z	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	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3
	0.2	SP	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2		
4-Sep	0.2	0.2	Z	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.3	1.0	1.8	1.0	1.4	1.1	1.5	1.2	0.7	0.5	0.9	0.5	0.4	0.9	0.7	1.8
	0.2	0.3	SP	0.3	0.3	0.3	0.3	0.3	0.2	0.3	1.2	1.6	1.7	0.8	1.4	0.7	1.5	1.4	0.1	1.2	0.7	0.4	0.4	1.0		
5-Sep	0.2	1.4	1.0	Z	1.1	0.7	0.6	1.9	1.9	1.8	1.2	0.6	0.5	0.3	0.4	0.5	0.3	0.3	0.3	0.6	0.3	0.3	0.3	0.3	0.7	1.9
	0.4	1.0	1.2	SP	1.0	0.5	1.4	1.8	1.8	1.5	0.9	0.4	0.4	0.3	0.5	0.4	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3		
6-Sep	0.3	0.2	0.2	0.3	Z	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.4
	0.2	0.2	0.2	0.3	SP	0.4	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	0.2	0.2	0.1	0.1	0.1		
7-Sep	0.1	0.1	0.2	0.2	0.2	Z	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	0.1	0.1	0.2	0.2	0.1	0.2	0.4
	0.1	0.1	0.2	0.2	0.3	SP	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	0.1	0.1		
8-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.4	1.5	0.7	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	1.5
	SP	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	1.0	1.1	0.7	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2		
9-Sep	0.2	Z	0.3	0.3	0.3	0.3	0.4	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	0.2	0.1	0.2	0.2	0.4
	0.2	SP	0.3	0.3	0.3	0.4	0.3	0.4	0.4	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	0.2	0.2		
10-Sep	0.2	0.2	Z	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	0.1	0.1	0.1	0.1	0.1	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	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1		
11-Sep	0.1	0.1	0.1	Z	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.3	0.3	0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.5
	0.1	0.1	0.2	SP	0.2	0.2	0.2	0.2	0.5	0.3	0.2	0.3	0.3	0.2	0.1	0.1	0.4	0.1	0.2	0.4	0.1	0.1	0.1	0.1		
12-Sep	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	0.2	0.1	0.1	0.1	0.1	0.2
	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	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1		
13-Sep	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	2.6	1.6	1.5	0.6	0.4	2.6
	0.1	0.1	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	0.1	0.1	0.1	0.1	1.8	1.7	1.7	0.8	0.4		
14-Sep	Z	0.5	0.8	0.1	1.4	0.9	0.5	0.4	0.6	0.6	0.4	0.4	0.4	0.5	0.5	0.6	1.9	0.5	0.2	0.2	0.3	0.3	0.2	0.2	0.5	1.9
	SP	0.6	0.6	0.1	1.1	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.6	0.8	1.0	0.8	0.5	0.2	0.3	0.2	0.3	0.1	0.3		
15-Sep	0.4	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4
	0.2	SP	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		

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Athabasca Valley - September 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-Sep	0.2	0.2	Z	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.5
	0.3	0.4	SP	0.5	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	0.1	0.1	0.1	0.2	0.2		
17-Sep	0.2	0.1	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.2	C	C	C	C	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	0.2	SP	0.2	0.2	0.2	0.2	0.2	C	C	C	C	C	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
18-Sep	0.2	0.1	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.4	0.5	0.7	0.6	0.5	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.7
	0.2	0.2	0.1	0.2	SP	0.2	0.2	0.2	0.5	0.5	0.7	0.7	0.6	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2		
19-Sep	0.2	0.2	0.2	0.2	0.2	Z	0.4	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	0.2	0.2	0.2	0.3	0.2	0.4
	0.2	0.2	0.2	0.2	0.3	SP	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2		
20-Sep	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	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3	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	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.3	0.3	0.3	0.2	0.2	0.2		
21-Sep	0.2	Z	0.2	0.2	0.3	0.3	0.2	0.2	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.4
	0.2	SP	0.2	0.2	0.3	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.2	M	0.2	0.2	0.2	0.3	0.4	0.2	0.2	0.2	0.2		
22-Sep	0.3	0.3	Z	0.3	0.2	0.2	0.2	1.4	0.5	0.3	0.3	0.3	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	1.4
	0.3	0.3	SP	0.3	0.3	0.3	0.3	M	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	0.2	0.2		
23-Sep	0.2	0.2	0.2	Z	0.3	0.2	0.2	0.2	0.3	0.4	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	0.4
	0.2	0.2	0.2	SP	0.2	0.2	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	0.2	0.2	0.2	0.1		
24-Sep	0.2	0.2	0.1	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	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3
	0.2	0.2	0.1	0.2	SP	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	0.2	0.2	0.2		
25-Sep	0.2	0.2	0.3	0.3	0.4	Z	0.8	1.1	0.9	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.7	1.6	1.4	1.8	2.1	0.6	2.8
	0.2	0.2	0.3	0.4	0.8	SP	1.0	0.4	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	1.5	2.8	1.1	1.9	1.2		
26-Sep	Z	1.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.1
	SP	0.6	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		
27-Sep	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	0.2
	0.1	SP	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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		
28-Sep	0.1	0.1	Z	0.1	0.1	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	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2
	0.1	0.1	SP	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	0.1	0.1	0.1	0.1		
29-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
30-Sep	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
	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	0.1	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	0.3	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	0.3	0.3	0.3	Diurnal Average	
	0.4	1.4	1.2	0.5	1.4	0.9	1.4	1.9	1.9	1.8	1.5	1.6	1.8	1.0	1.4	1.1	1.9	1.4	0.7	1.8	2.8	1.7	1.9	2.1	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

Athabasca Valley - September 2026

Maximum Value: 2.2 ppb on Sep 25 21:00

Maximum Daily Average: 0.7 ppb on Sep 5

Minimum Value: 0.0 ppb on Sep 20 15:00

Minimum Daily Average: 0.1 ppb on Sep 30

Maximum Diurnal Average: 0.3 ppb at hour 21

Minimum Diurnal Average: 0.2 ppb at hour 19

Monthly Average: 0.25 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.3 P_{90} = 0.4 P_{99} = 1.6

Hours in Service:	720
Hours of Data:	684
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-Sep	0.2	0.2	0.2	0.2	0.3	Z	0.4	0.4	0.4	0.3	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	0.3	0.2	0.4
2-Sep	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3
3-Sep	0.2	Z	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	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3
4-Sep	0.2	0.3	Z	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.8	1.3	1.7	0.9	1.4	0.9	1.5	1.3	0.4	0.8	0.8	0.4	0.4	0.9	0.7	1.7
5-Sep	0.3	1.2	1.1	Z	1.0	0.6	1.0	1.8	1.9	1.6	1.0	0.5	0.4	0.3	0.5	0.5	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.7	1.9
6-Sep	0.3	0.2	0.2	0.3	Z	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.3
7-Sep	0.1	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	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3
8-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.7	1.3	0.7	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	1.3
9-Sep	0.2	Z	0.3	0.3	0.3	0.4	0.4	0.4	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	0.2	0.2	0.2	0.2	0.4
10-Sep	0.2	0.2	Z	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	0.1	0.1	0.1	0.1	0.1	0.2	0.3
11-Sep	0.1	0.1	0.2	Z	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.1	0.1	0.3	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.2	0.3
12-Sep	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
13-Sep	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	1.0	2.2	1.7	1.2	0.5	0.4	2.2
14-Sep	Z	0.5	0.7	0.1	1.2	0.8	0.5	0.4	0.5	0.6	0.4	0.4	0.4	0.6	0.6	0.8	1.3	0.5	0.2	0.2	0.3	0.3	0.2	0.3	0.5	1.3
15-Sep	0.3	Z	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
16-Sep	0.2	0.3	Z	0.5	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	0.1	0.1	0.1	0.2	0.2	0.2	0.5
17-Sep	0.1	0.1	0.2	Z	0.2	0.2	0.2	0.2	0.2	C	C	C	C	C	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-Sep	0.2	0.1	0.2	0.2	Z	0.2	0.2	0.2	0.4	0.5	0.6	0.7	0.6	0.5	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.7
19-Sep	0.2	0.2	0.2	0.2	0.3	Z	0.4	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	0.2	0.3	0.2	0.2	0.2	0.4
20-Sep	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	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3
21-Sep	0.2	Z	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.3	0.3	0.2	0.2	0.2	M	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.4
22-Sep	0.3	0.3	Z	0.3	0.2	0.2	0.3	1.2	0.4	0.3	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	0.2	0.3	1.2
23-Sep	0.2	0.2	0.2	Z	0.2	0.2	0.2	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	0.2	0.2	0.2	0.2	0.3
24-Sep	0.2	0.2	0.1	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	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25-Sep	0.2	0.2	0.3	0.3	0.6	Z	0.9	0.7	0.9	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	1.1	2.2	1.3	1.8	1.6	0.6	2.2
26-Sep	Z	0.8	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	0.1	0.1	0.1	0.1	0.1	0.1	0.8
27-Sep	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
28-Sep	0.1	0.1	Z	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	0.1	0.1	0.1	0.2	0.1	0.1	0.2
29-Sep	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
30-Sep	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
	0.2	0.3	0.2	0.2	0.3	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	0.3	0.3	0.3	Diurnal Average	
	0.3	1.2	1.1	0.5	1.2	0.8	1.0	1.8	1.9	1.6	1.3	1.3	1.7	0.9	1.4	0.9	1.5	1.3	0.4	1.1	2.2	1.7	1.8	1.6	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

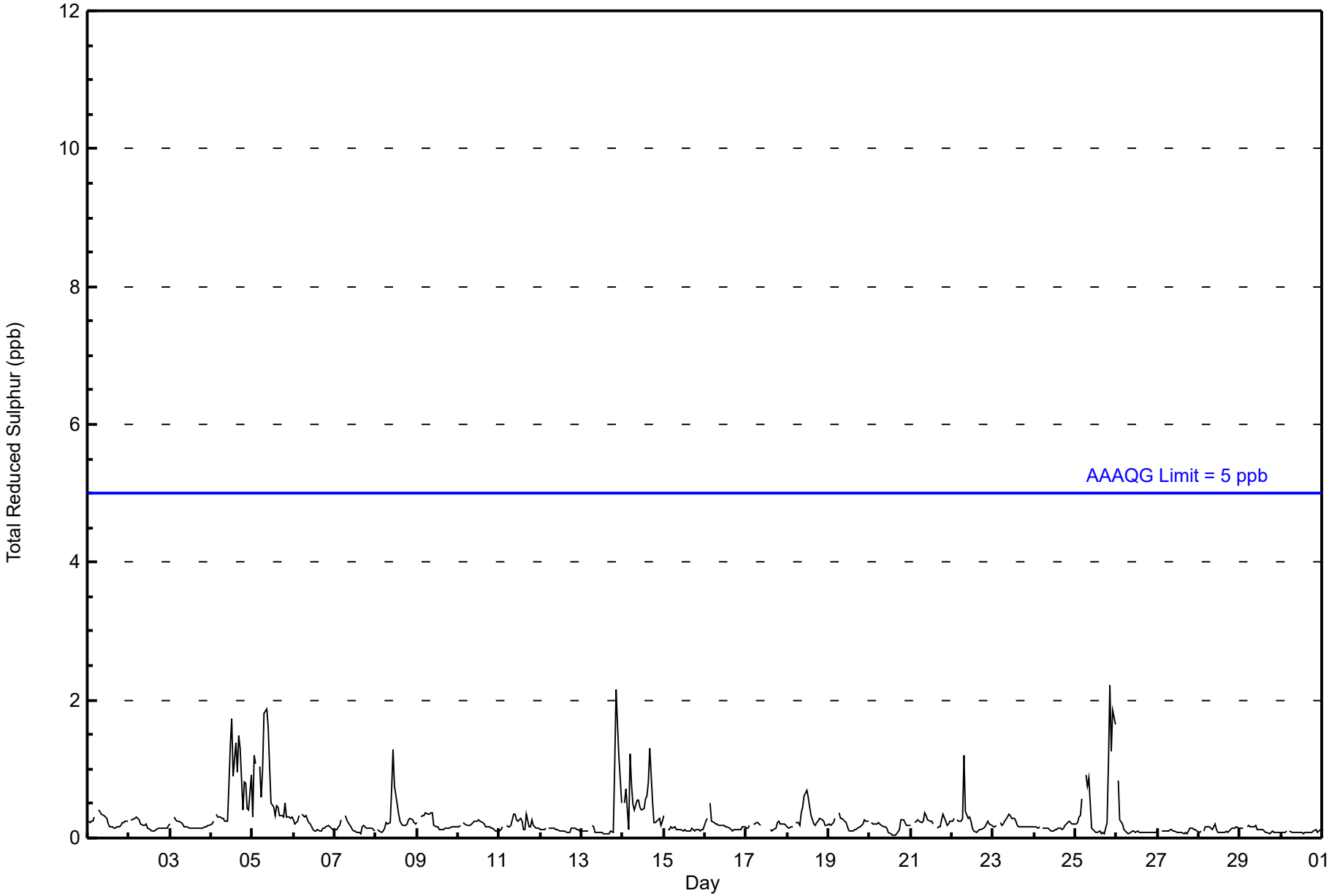
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Athabasca Valley - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Reduced Sulphur (TRS) - ppb

Athabasca Valley - September 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	8	6	9	23	45	143	77	37	23	33	38	57	57	38	65	24	683
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	8	6	9	23	45	143	77	37	23	33	38	57	57	38	65	24	683

Total Number of Valid Hours: 683

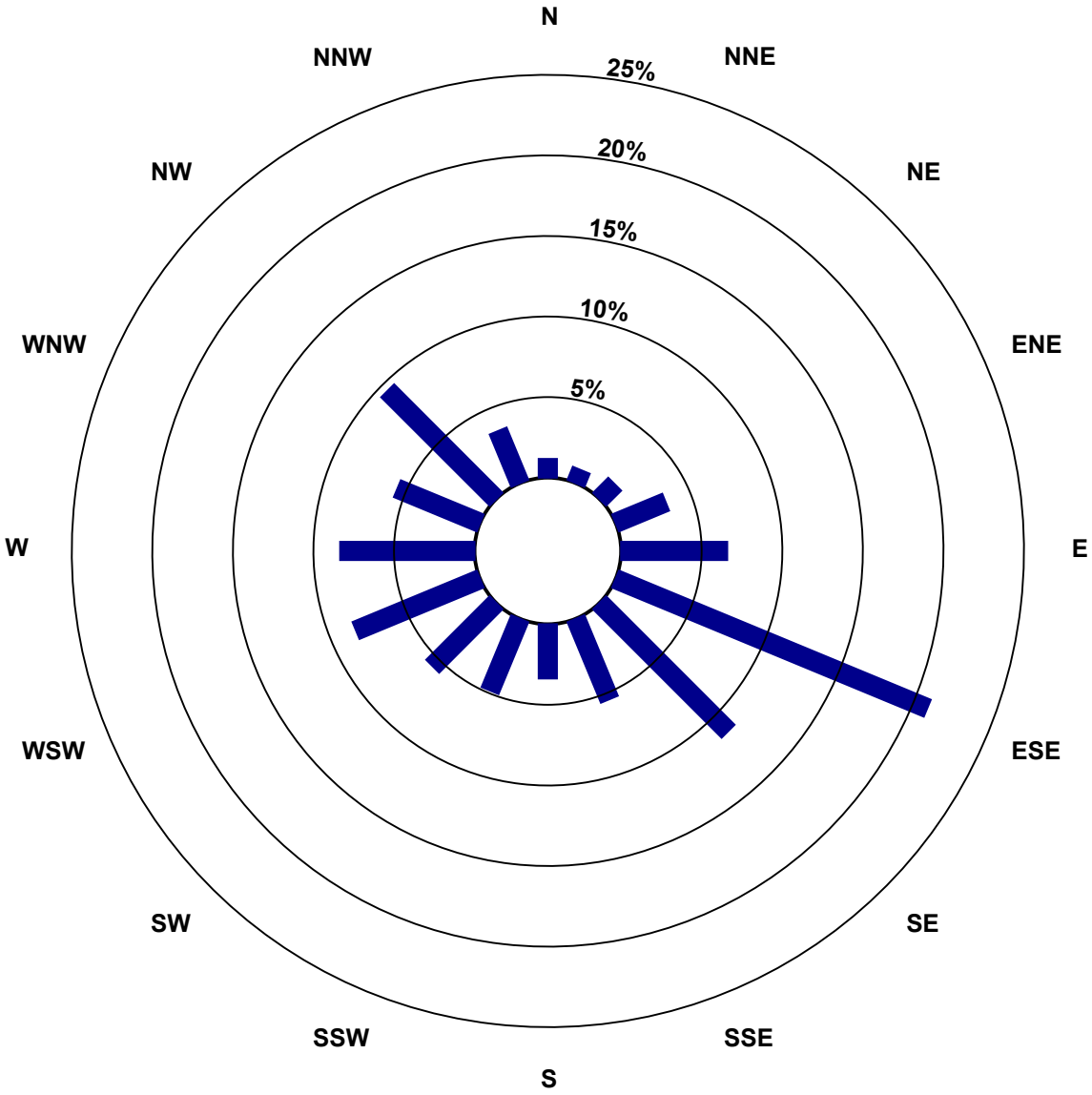
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Reduced Sulphur (TRS) - ppb

Athabasca Valley



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

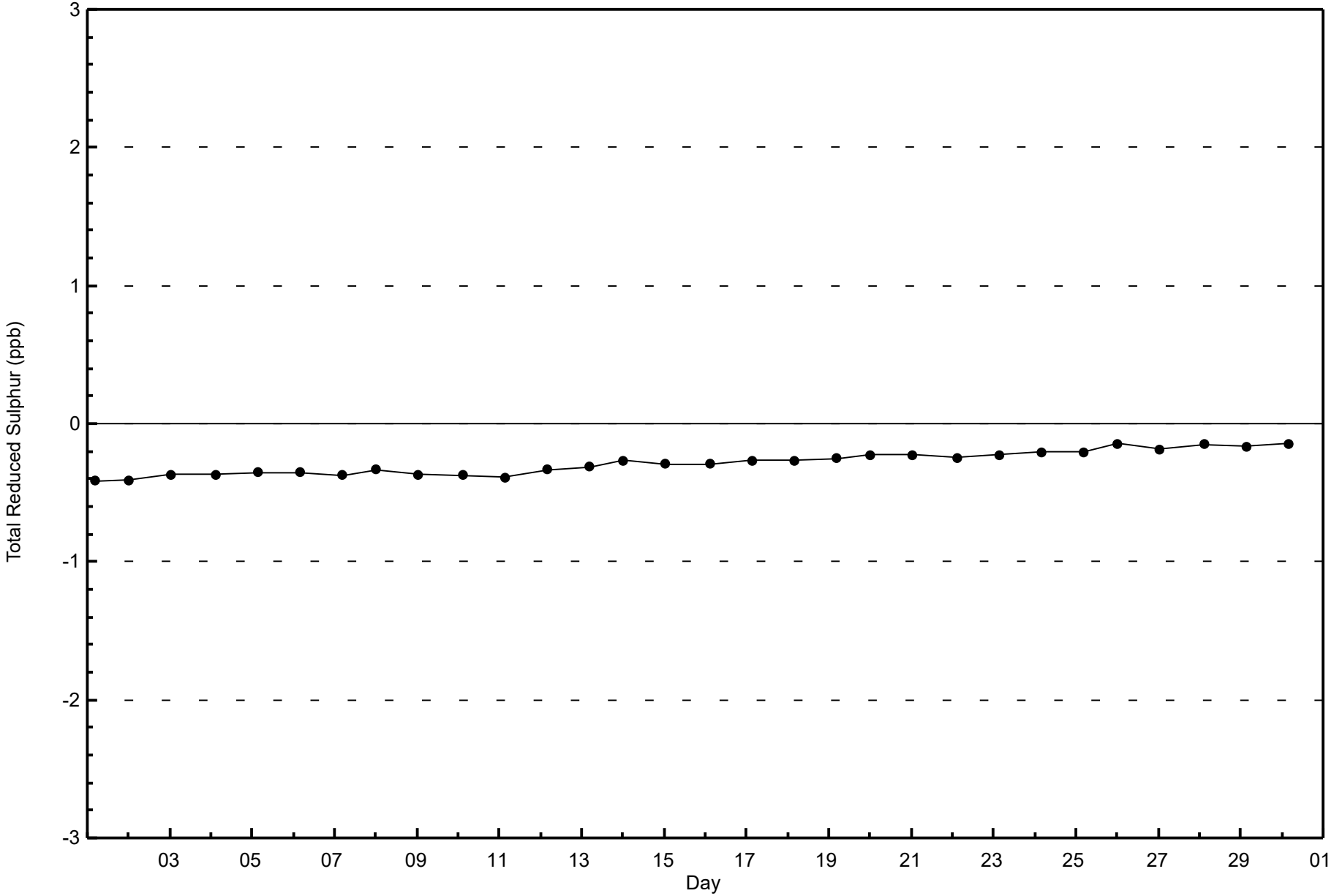
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Athabasca Valley - September 2026

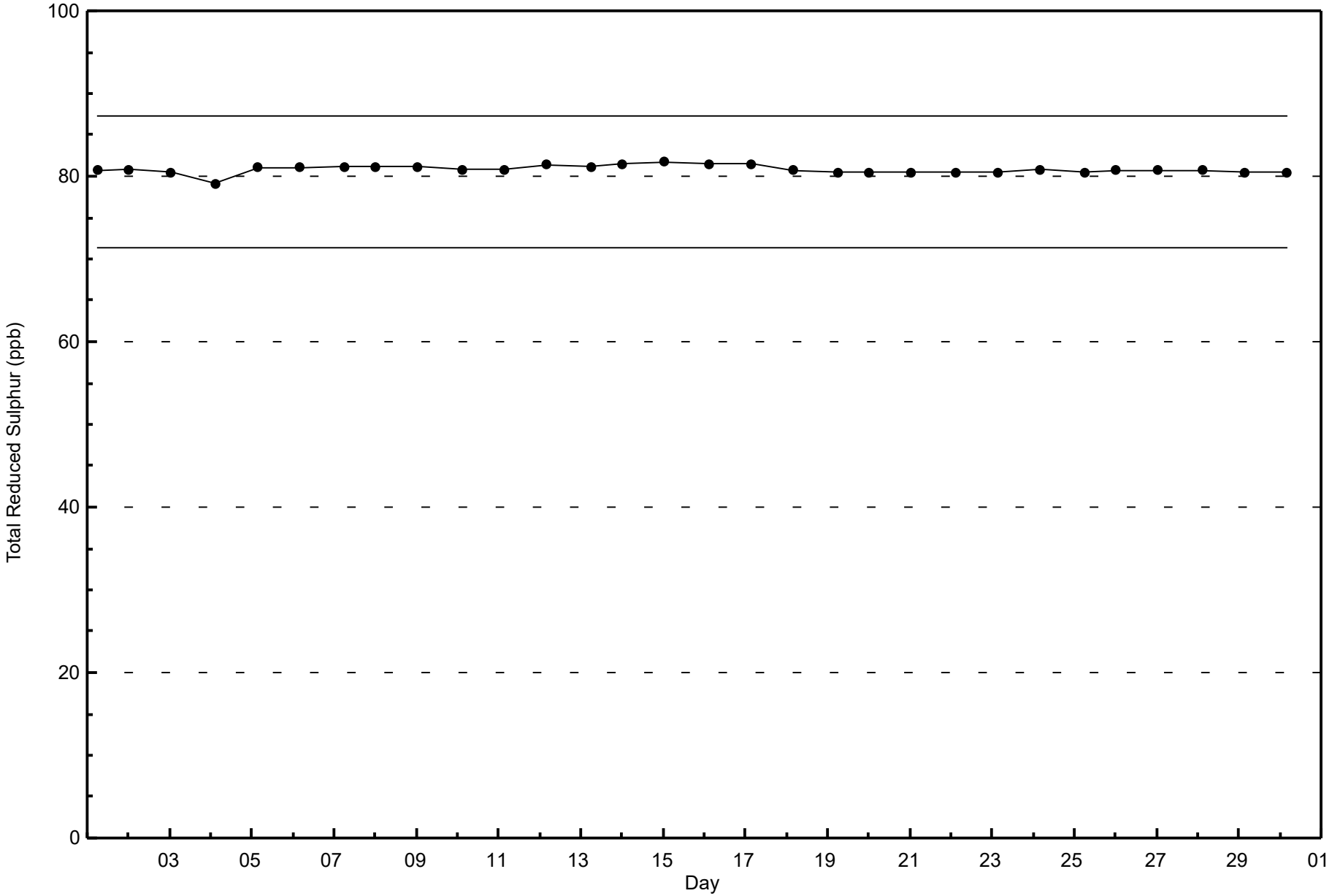


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Athabasca Valley - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Athabasca Valley - September 2026

Maximum Value: 2.7 ppm on Sep 29 10:00

Maximum Daily Average: 2.2 ppm on Sep 8

Minimum Value: 2.0 ppm on Sep 20 15:00

Minimum Daily Average: 2.0 ppm on Sep 30

Maximum Diurnal Average: 2.2 ppm at hour 7

Minimum Diurnal Average: 2.0 ppm at hour 16

Monthly Average: 2.12 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} = 2.5

Hours in Service:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	33
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-Sep	2.2	2.2	2.2	2.2	Z	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2
2-Sep	2.1	2.1	2.1	2.1	2.1	Z	2.2	2.2	2.1	C	C	C	2.2	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.2
3-Sep	Z	2.2	2.2	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	2.2	2.2	2.2
4-Sep	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	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2
5-Sep	2.1	2.1	Z	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	2.2	2.3	2.1	2.3
6-Sep	2.3	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	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3
7-Sep	2.1	2.1	2.1	2.1	Z	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2
8-Sep	2.2	2.2	2.3	2.2	2.4	Z	2.2	2.3	2.3	2.3	2.4	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.4	2.4	2.2	2.2	2.4
9-Sep	Z	2.2	2.2	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	2.0	2.0	2.0	2.1	2.2
10-Sep	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	2.0
11-Sep	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	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	2.1
12-Sep	2.0	2.0	2.0	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1
13-Sep	2.1	2.1	2.1	2.1	Z	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2
14-Sep	2.2	2.1	2.1	2.0	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	2.2
15-Sep	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	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1
16-Sep	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	2.1
17-Sep	2.1	2.1	Z	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	2.3	2.3	2.4	2.5	2.2	2.5
18-Sep	2.5	2.6	2.6	Z	2.4	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.6
19-Sep	2.2	2.3	2.2	2.3	Z	2.3	2.3	2.2	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	2.2	2.2	2.2	2.2	2.3
20-Sep	2.1	2.2	2.2	2.2	2.2	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	2.2	2.2	2.3	2.3	2.2	2.2	2.1	2.3
21-Sep	Z	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.1	M	2.1	2.1	2.1	2.2	2.3	2.1	2.1	2.1	2.2	2.2	2.3
22-Sep	2.2	Z	2.3	2.4	2.4	2.3	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	2.1	2.1	2.1	2.2	2.2	2.4
23-Sep	2.2	2.2	Z	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	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3
24-Sep	2.2	2.2	2.2	Z	2.3	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	2.3	2.2	2.2	2.3
25-Sep	2.2	2.2	2.1	2.1	Z	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.2	2.3	2.2	2.2	2.2	2.1	2.3
26-Sep	2.1	2.1	2.1	2.2	2.1	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	2.1	2.2
27-Sep	Z	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	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.1
28-Sep	2.1	Z	2.1	2.1	2.1	2.2	2.6	2.3	2.2	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	2.3	2.1	2.6
29-Sep	2.3	2.4	Z	2.4	2.5	2.6	2.5	2.4	2.5	2.7	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	2.2	2.7
30-Sep	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	2.1	2.0	2.1
	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	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	Diurnal Average	
	2.5	2.6	2.6	2.4	2.5	2.6	2.6	2.4	2.5	2.7	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.5	Diurnal Maximum	

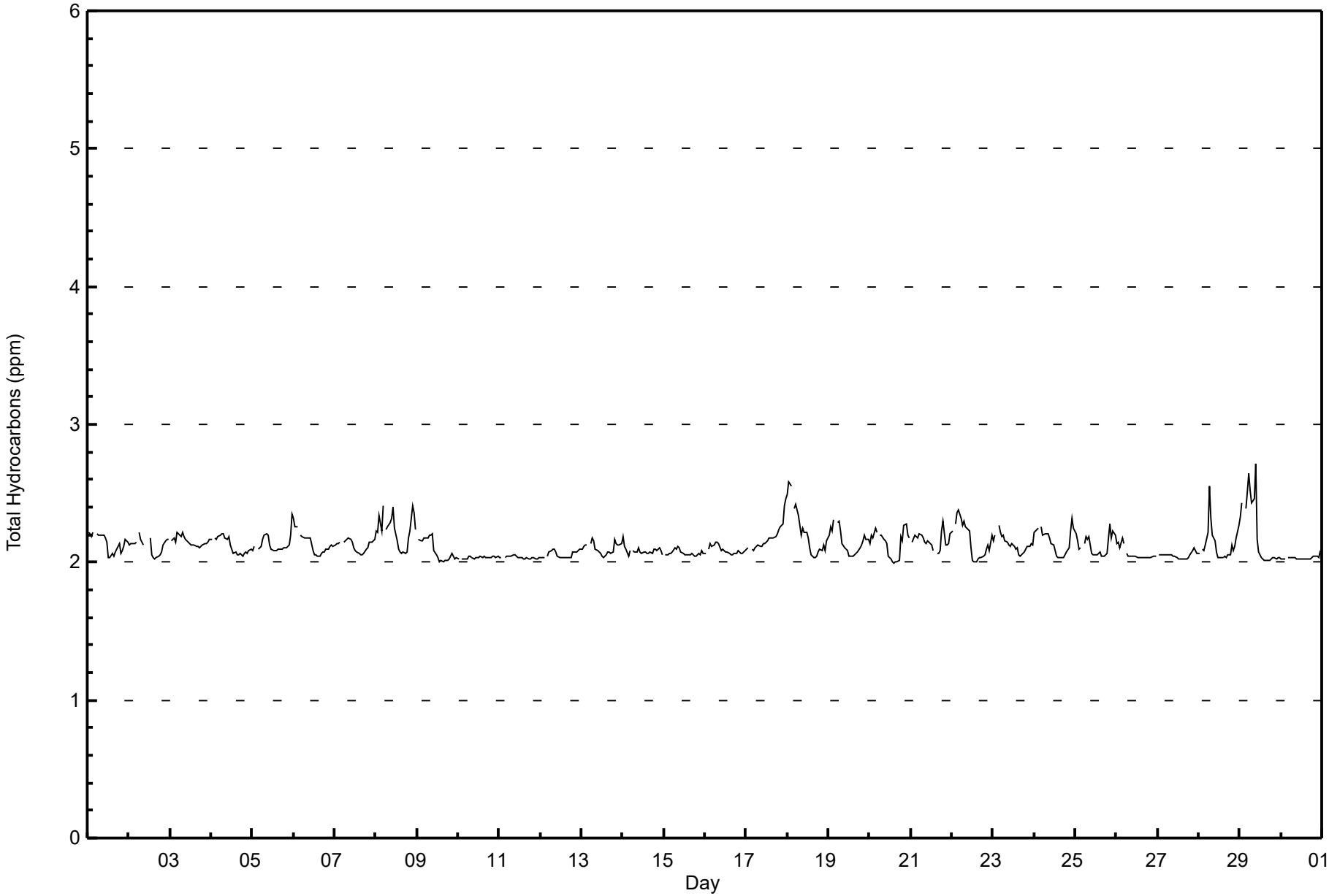
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Athabasca Valley - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	182	26.53	26.53
2.1 - 3.0	504	73.47	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Athabasca Valley - September 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	2	0	1	6	6	1	3	2	10	23	42	44	26	14	2	182
2.1 - 3.0	9	4	9	22	39	132	79	34	21	26	17	14	12	11	51	23	503
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	9	6	9	23	45	138	80	37	23	36	40	56	56	37	65	25	685

Total Number of Valid Hours: 685

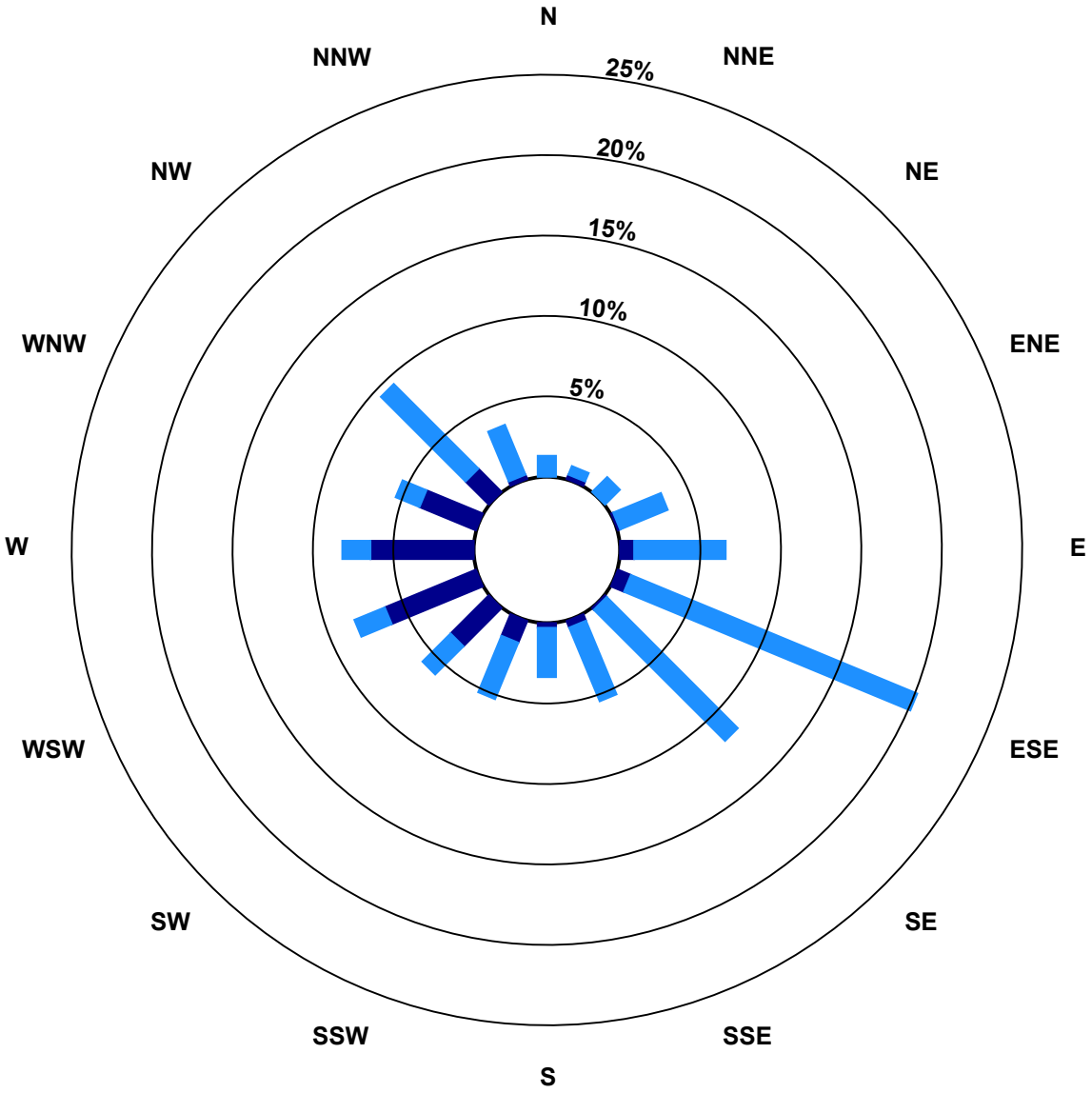
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Athabasca Valley



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

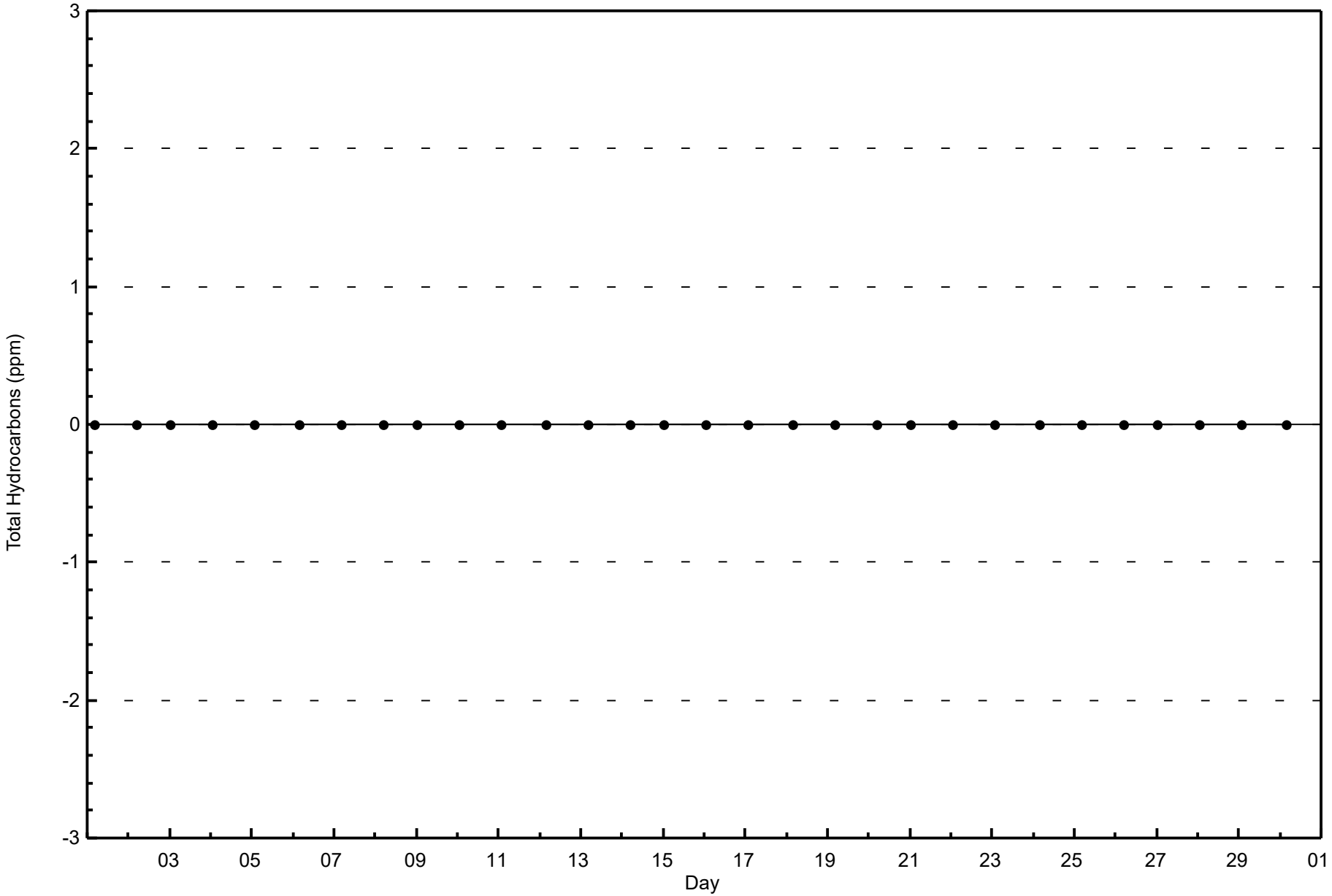
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Athabasca Valley - September 2026

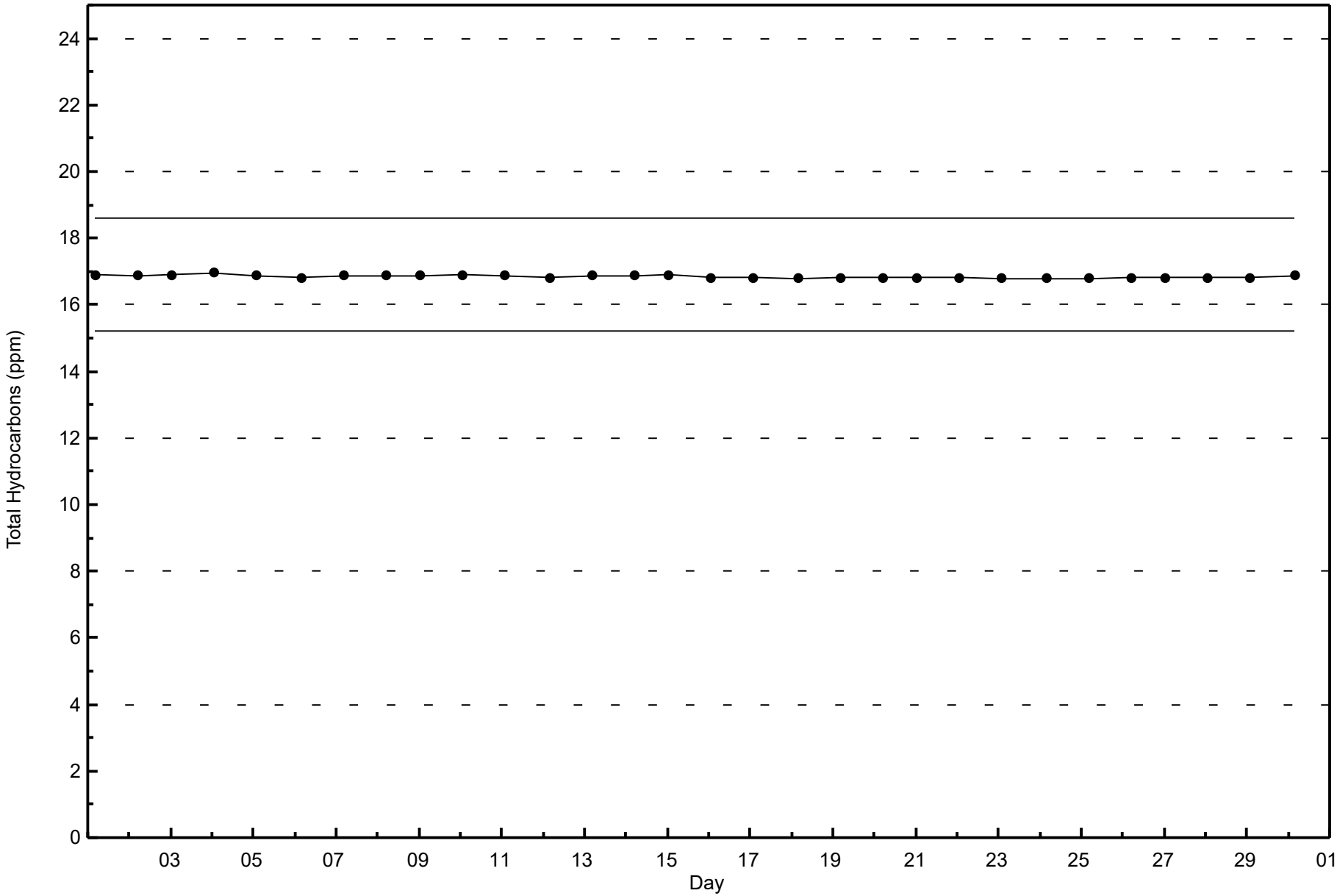


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Athabasca Valley - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Athabasca Valley - September 2026

Maximum Value: 0.276 ppm on Sep 29 10:00

Maximum Daily Average: 0.012 ppm on Sep 28

Minimum Value: 0.000 ppm on Sep 1 01:00

Minimum Daily Average: 0.000 ppm on Sep 5

Maximum Diurnal Average: 0.010 ppm at hour 10

Minimum Diurnal Average: 0.000 ppm at hour 3

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:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	33
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-Sep	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.036	0.086	0.000	0.000	0.000	0.001	0.000	0.005	0.086
2-Sep	0.000	0.000	0.000	0.000	0.000	Z	0.001	0.000	0.000	C	C	C	0.129	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.129
3-Sep	Z	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
4-Sep	0.001	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	0.001
5-Sep	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-Sep	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-Sep	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-Sep	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.001	0.000	0.000	0.005
9-Sep	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-Sep	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-Sep	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-Sep	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	0.000	0.001
13-Sep	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-Sep	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-Sep	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	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
16-Sep	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-Sep	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	0.024	0.005	0.001	0.024
18-Sep	0.000	0.000	0.000	Z	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.008
19-Sep	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.018	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.001	0.001	0.018
20-Sep	0.000	0.003	0.000	0.003	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	0.001	0.000	0.007	0.011	0.006	0.000	0.002	0.011
21-Sep	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.005	0.002	M	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
22-Sep	0.000	Z	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	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
23-Sep	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	0.044	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.044
24-Sep	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-Sep	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	0.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.031
26-Sep	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	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	0.003
27-Sep	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-Sep	0.000	Z	0.000	0.000	0.000	0.068	0.213	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.006	0.000	0.012	0.213
29-Sep	0.000	0.000	Z	0.000	0.002	0.000	0.000	0.000	0.000	0.276	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.276
30-Sep	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	0.003	0.007	0.000	0.001	0.010	0.000	0.000	0.004	0.001	0.003	0.000	0.000	0.001	0.003	0.000	0.000	0.000	0.001	0.000	Diurnal Average	
	0.001	0.003	0.000	0.003	0.005	0.068	0.213	0.000	0.018	0.276	0.005	0.005	0.129	0.016	0.044	0.000	0.003	0.036	0.086	0.000	0.007	0.011	0.024	0.005	Diurnal Maximum	

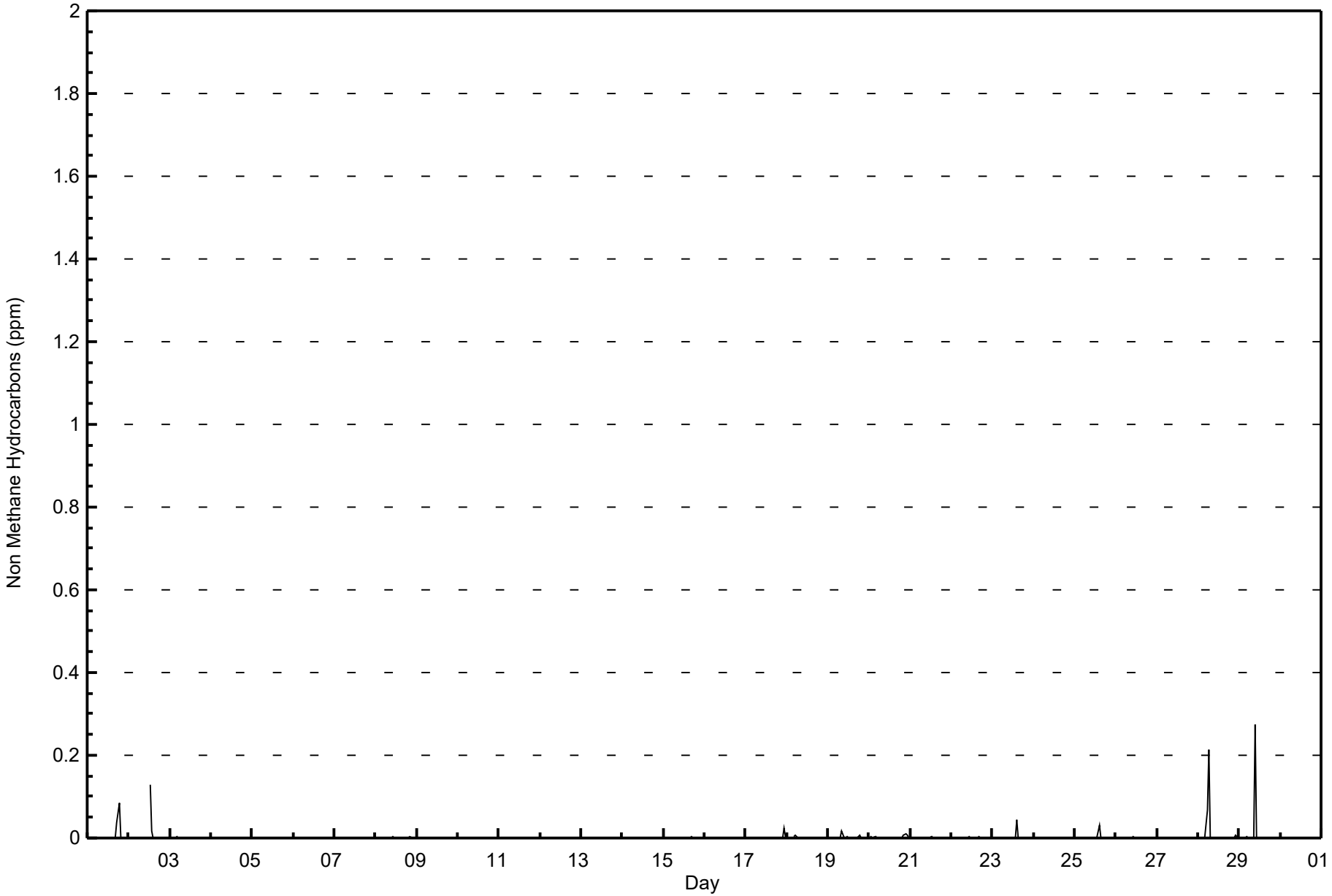
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Athabasca Valley - September 2026



Non Methane Hydrocarbons (NMHC) - ppm
Athabasca Valley - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	669	97.52	97.52
0.006 - 0.05	12	1.75	99.27
0.06 - 0.1	3	0.44	99.71
> 0.1	2	0.29	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Athabasca Valley - September 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	6	9	23	42	131	75	35	23	36	40	56	56	37	65	25	668
0.006 - 0.05	0	0	0	0	3	3	5	1	0	0	0	0	0	0	0	0	12
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	1	0	1	0	0	0	0	0	0	0	0	2
Totals	9	6	9	23	45	138	80	37	23	36	40	56	56	37	65	25	685

Total Number of Valid Hours: 685

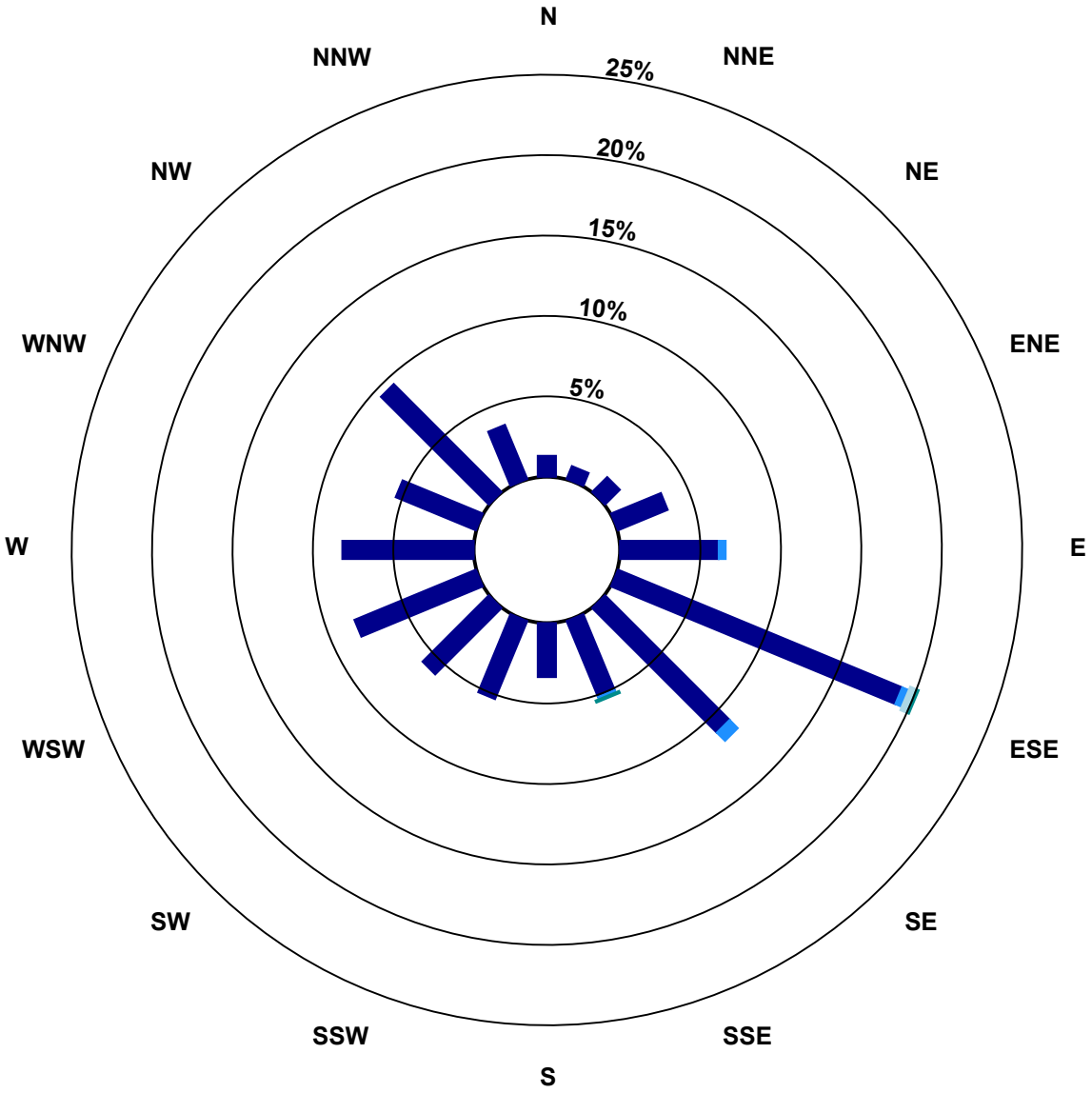
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Non Methane Hydrocarbons (NMHC) - ppm

Athabasca Valley



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

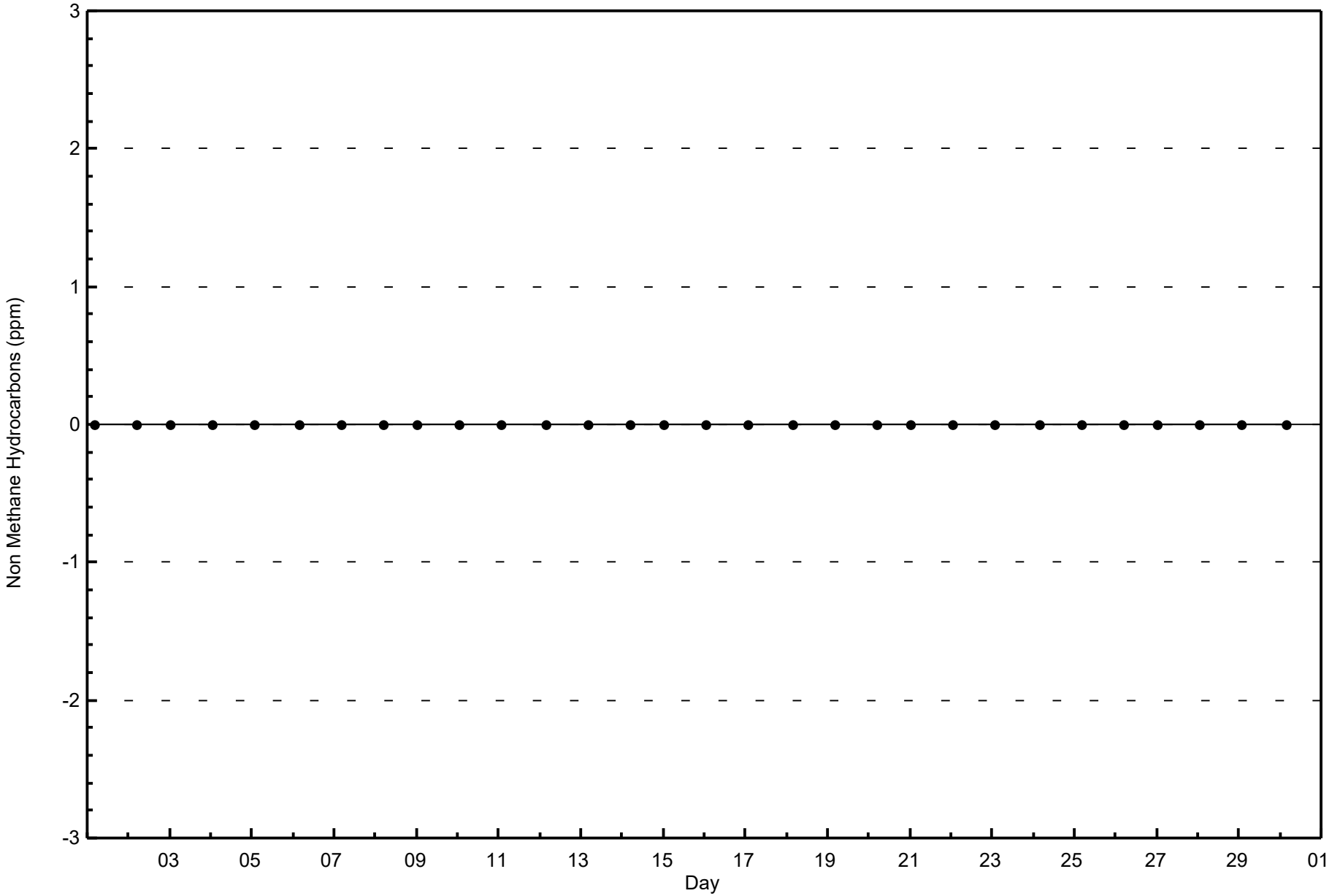
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Athabasca Valley - September 2026

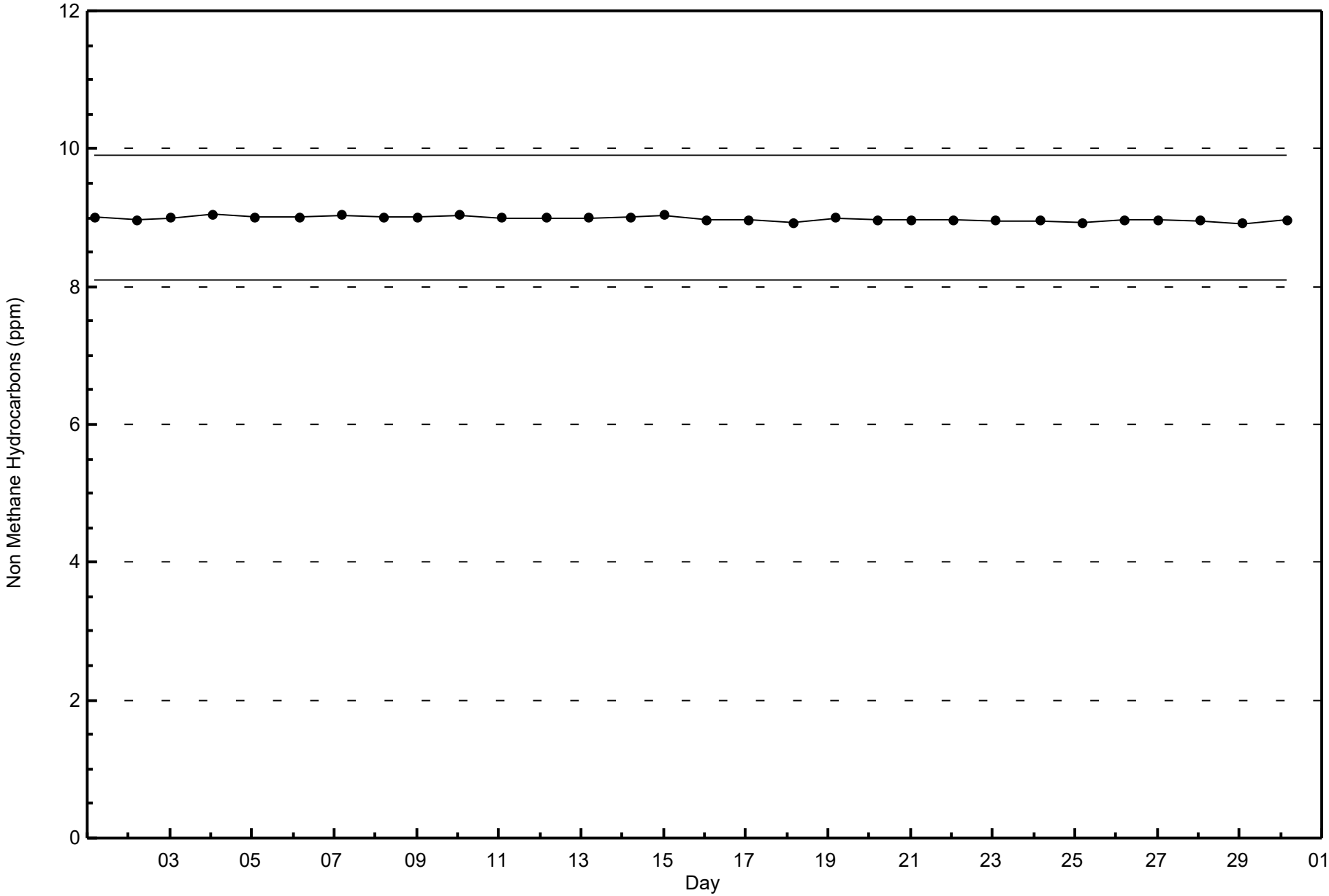


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Athabasca Valley - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Athabasca Valley - September 2026

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

Maximum Value: 2.6 ppm on Sep 29 06:00

Maximum Daily Average: 2.2 ppm on Sep 8

Minimum Value: 2.0 ppm on Sep 20 15:00

Minimum Daily Average: 2.0 ppm on Sep 30

Maximum Diurnal Average: 2.2 ppm at hour 7

Minimum Diurnal Average: 2.0 ppm at hour 16

Monthly Average: 2.12 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} = 2.5

Hours in Service:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	33
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-Sep	2.2	2.2	2.2	2.2	Z	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2
2-Sep	2.1	2.1	2.1	2.1	2.1	Z	2.2	2.2	2.1	C	C	C	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.2
3-Sep	Z	2.2	2.2	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	2.2	2.2	2.2
4-Sep	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	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2
5-Sep	2.1	2.1	Z	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	2.2	2.3	2.1	2.3
6-Sep	2.3	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	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3
7-Sep	2.1	2.1	2.1	2.1	Z	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2
8-Sep	2.2	2.2	2.3	2.2	2.4	Z	2.2	2.3	2.3	2.3	2.4	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.4	2.4	2.2	2.2	2.4
9-Sep	Z	2.2	2.2	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	2.0	2.0	2.0	2.1	2.2
10-Sep	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	2.0
11-Sep	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	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	2.1
12-Sep	2.0	2.0	2.0	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1
13-Sep	2.1	2.1	2.1	2.1	Z	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2
14-Sep	2.2	2.1	2.1	2.0	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	2.2
15-Sep	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	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1
16-Sep	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	2.1
17-Sep	2.1	2.1	Z	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	2.3	2.3	2.4	2.5	2.2	2.5
18-Sep	2.5	2.6	2.6	Z	2.4	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.6
19-Sep	2.2	2.3	2.2	2.3	Z	2.3	2.3	2.2	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	2.2	2.2	2.2	2.1	2.3
20-Sep	2.1	2.2	2.2	2.2	2.2	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	2.2	2.2	2.3	2.3	2.2	2.2	2.1	2.3
21-Sep	Z	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.1	M	2.1	2.1	2.1	2.2	2.3	2.1	2.1	2.1	2.2	2.2	2.3
22-Sep	2.2	Z	2.3	2.4	2.4	2.3	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	2.1	2.1	2.1	2.2	2.2	2.4
23-Sep	2.2	2.2	Z	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	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3
24-Sep	2.2	2.2	2.2	Z	2.3	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	2.3	2.2	2.2	2.3
25-Sep	2.2	2.2	2.1	2.1	Z	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.3	2.2	2.2	2.2	2.1	2.3
26-Sep	2.1	2.1	2.1	2.2	2.1	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	2.1	2.2
27-Sep	Z	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	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.1
28-Sep	2.1	Z	2.1	2.1	2.1	2.1	2.3	2.3	2.2	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	2.3	2.1	2.3
29-Sep	2.3	2.4	Z	2.4	2.5	2.6	2.5	2.4	2.5	2.4	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	2.2	2.6
30-Sep	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	2.1	2.0	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	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	Diurnal Average	
	2.5	2.6	2.6	2.4	2.5	2.6	2.5	2.4	2.5	2.4	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.5	Diurnal Maximum	

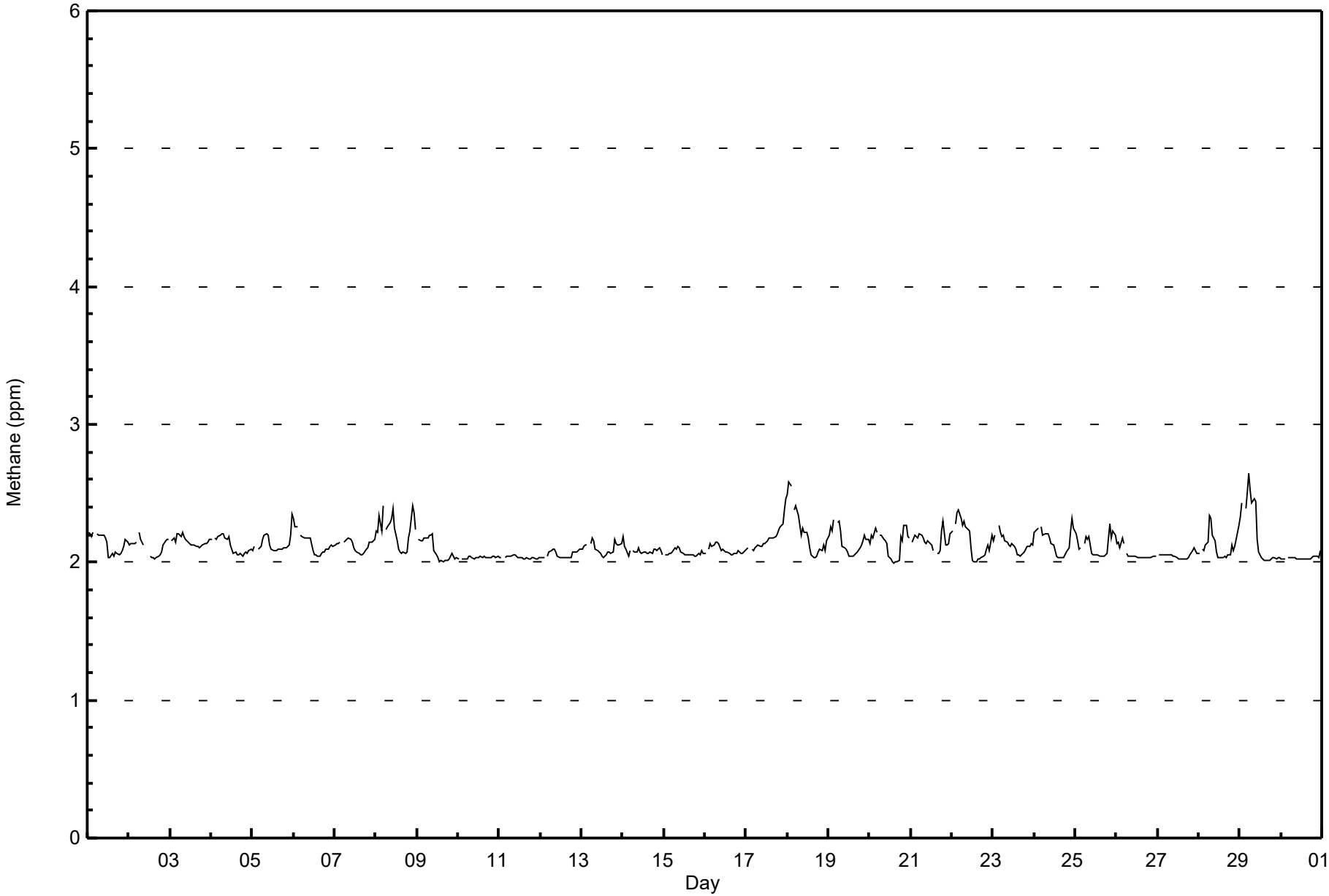
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Athabasca Valley - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	185	26.97	26.97
2.1 - 3.0	501	73.03	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Athabasca Valley - September 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	2	0	1	7	8	1	3	2	10	23	42	44	26	14	2	185
2.1 - 3.0	9	4	9	22	38	130	79	34	21	26	17	14	12	11	51	23	500
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	9	6	9	23	45	138	80	37	23	36	40	56	56	37	65	25	685

Total Number of Valid Hours: 685

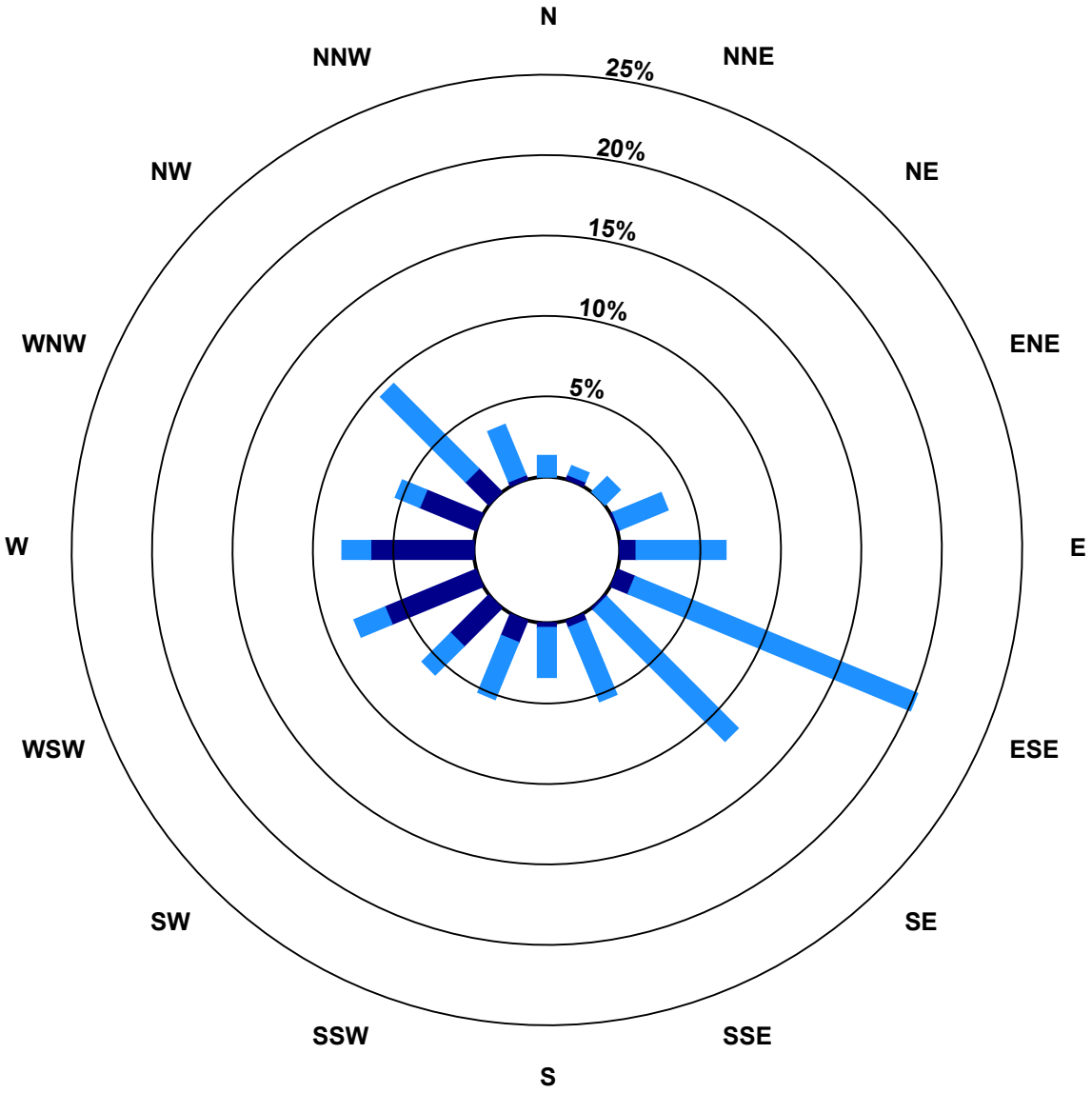
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Methane (CH_4) - ppm

Athabasca Valley



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

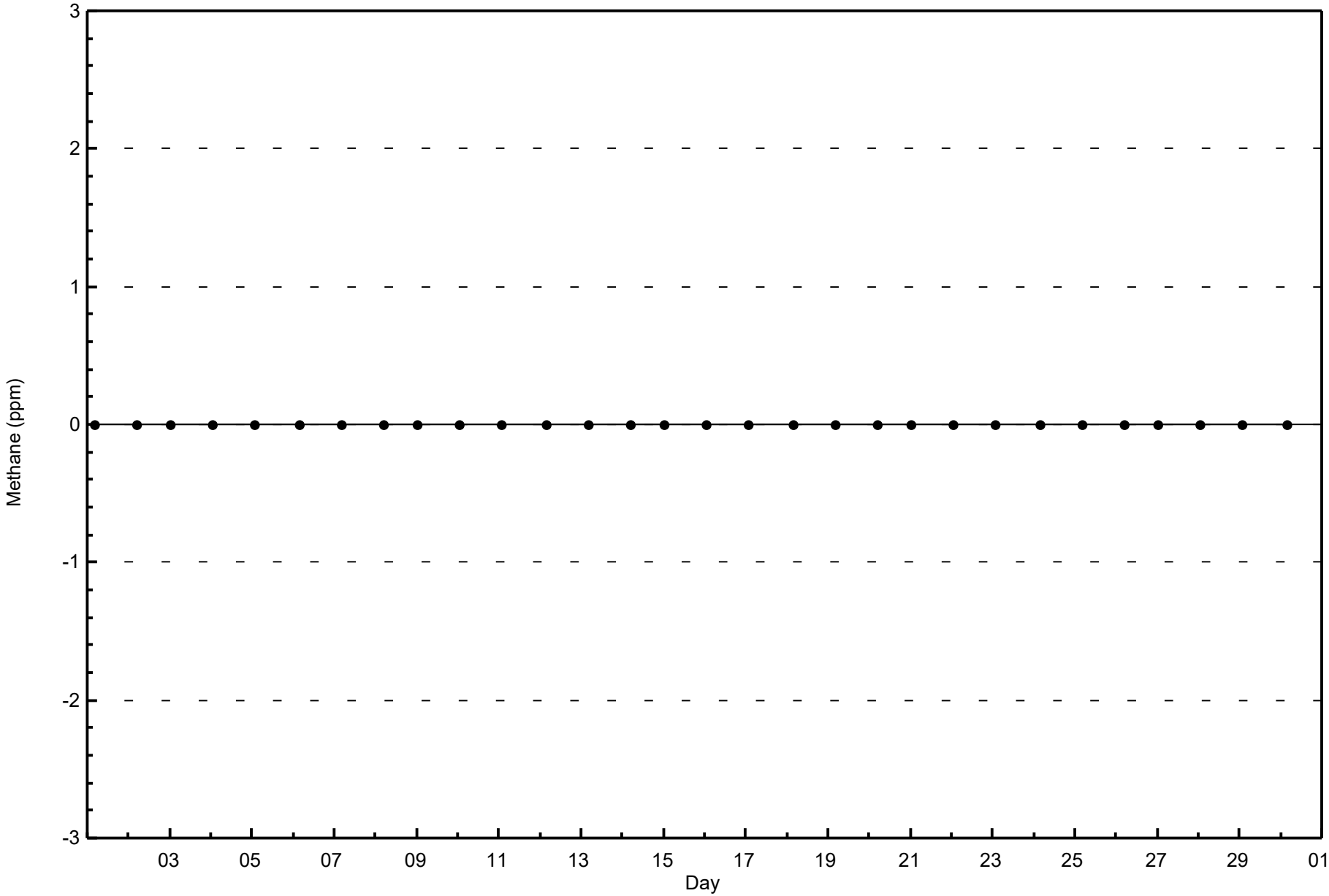
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Athabasca Valley - September 2026

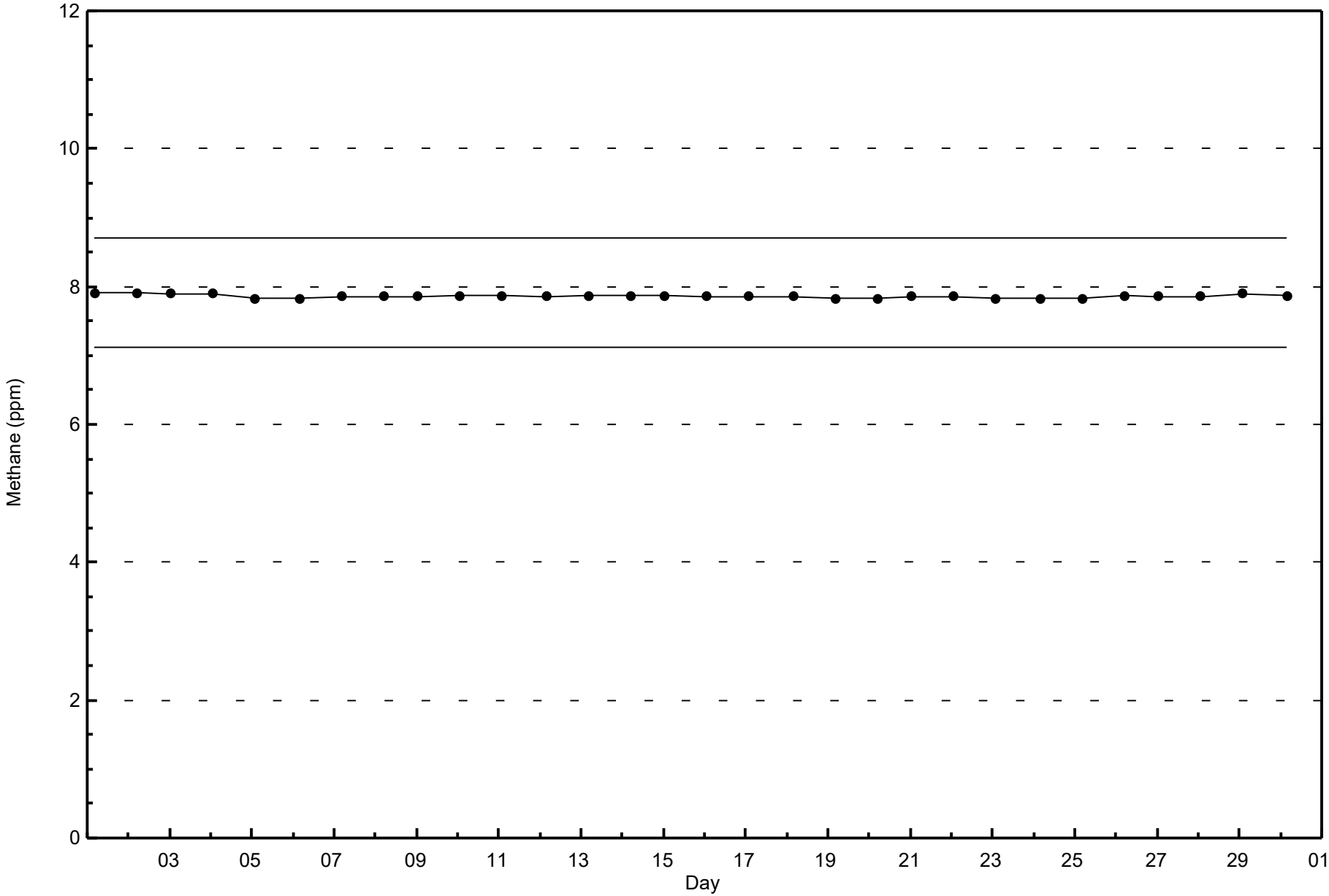


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Athabasca Valley - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Athabasca Valley - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 42.3 ppb on Sep 21 16:00
Maximum Daily Average: 23.1 ppb on Sep 2

Minimum Value: 1.0 ppb on Sep 17 23:00
Minimum Daily Average: 10.4 ppb on Sep 18
Maximum Diurnal Average: 28.3 ppb at hour 16
Minimum Diurnal Average: 7.6 ppb at hour 7
Monthly Average: 16.65 ppb
Percentiles: P_1 = 1.4 P_{10} = 4.8 Q_1 = 9.7 Median = 16.2 Q_3 = 23.1 P_{90} = 28.9 P_{99} = 36.9

Hours in Service:	720
Hours of Data:	685
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-Sep	Z	6.0	5.1	4.0	3.4	3.3	3.3	4.2	7.0	9.5	12.2	18.7	30.6	33.8	36.9	37.3	39.7	37.0	32.4	26.5	19.6	18.5	18.5	18.8	18.5	39.7
2-Sep	18.4	Z	14.7	13.8	12.7	11.8	11.3	15.8	19.4	22.7	25.6	29.3	31.3	32.4	33.0	32.4	30.2	28.4	28.5	27.4	24.4	24.4	23.8	20.3	23.1	33.0
3-Sep	16.7	17.2	Z	14.0	8.0	6.4	9.2	8.8	11.6	13.6	15.6	16.1	15.9	16.4	17.3	18.1	19.1	22.3	24.0	20.3	15.2	17.3	14.9	14.8	15.3	24.0
4-Sep	14.2	12.1	14.7	Z	13.0	7.6	7.6	7.9	9.4	11.3	15.2	10.1	11.0	11.8	13.6	16.2	17.4	17.4	18.1	15.5	14.2	14.4	11.8	14.2	13.0	18.1
5-Sep	13.1	13.5	13.7	14.8	Z	11.3	9.1	12.1	14.0	15.0	19.5	22.7	24.5	26.4	28.5	30.8	32.0	31.3	25.5	18.9	12.3	11.2	5.8	5.3	17.9	32.0
6-Sep	4.1	4.0	4.7	5.9	4.9	Z	5.8	5.1	5.7	6.6	7.6	15.0	16.9	19.1	25.7	27.9	23.9	20.0	18.5	14.1	10.6	10.2	11.3	10.8	12.1	27.9
7-Sep	Z	8.1	7.9	6.7	4.8	4.6	3.2	4.2	5.4	8.2	10.7	15.8	17.6	19.7	23.1	26.2	24.0	22.0	15.4	10.6	10.0	5.6	3.7	4.3	11.4	26.2
8-Sep	4.6	Z	5.2	4.6	3.4	1.8	2.6	2.2	3.9	7.2	9.7	16.6	22.4	29.3	32.6	33.2	30.3	21.1	11.5	6.7	5.3	1.9	5.6	6.6	11.7	33.2
9-Sep	6.7	7.0	Z	7.1	5.2	4.2	3.8	4.1	3.9	4.7	17.4	19.9	23.0	27.3	28.4	29.0	26.2	27.7	28.5	25.8	18.5	25.5	29.5	27.9	17.5	29.5
10-Sep	28.0	25.5	24.0	Z	24.6	23.0	21.3	18.9	21.3	22.3	21.7	19.9	16.4	15.6	17.8	16.7	17.3	17.0	15.4	14.0	16.3	16.9	17.8	18.7	19.6	28.0
11-Sep	18.8	18.6	17.3	16.1	Z	16.1	15.0	14.5	13.7	C	C	C	C	19.0	20.6	23.5	25.4	25.2	27.9	25.6	22.7	21.4	19.6	17.8	19.9	27.9
12-Sep	17.4	16.8	15.8	14.2	11.0	Z	9.0	8.4	9.2	12.4	17.0	22.8	26.3	29.5	29.8	30.1	29.0	26.2	13.9	13.7	11.6	15.1	16.6	16.8	17.9	30.1
13-Sep	Z	16.3	16.2	16.2	14.0	7.5	3.4	6.0	16.5	19.7	22.8	25.4	30.2	31.9	31.5	28.7	27.9	22.8	20.1	11.6	13.3	13.2	12.4	9.9	18.2	31.9
14-Sep	6.3	Z	18.3	23.0	19.4	17.3	14.3	14.8	14.9	11.0	18.0	17.9	17.0	20.7	21.9	20.8	19.9	18.5	14.5	14.0	14.1	13.0	12.5	13.8	16.3	23.0
15-Sep	12.9	11.9	Z	11.1	9.1	6.4	5.5	8.5	8.4	11.1	13.9	19.0	23.1	23.0	22.6	22.2	19.8	19.7	21.7	19.2	15.2	18.5	14.4	15.6	15.3	23.1
16-Sep	13.6	10.7	8.8	Z	5.8	3.4	2.4	2.9	4.7	13.9	14.9	17.6	18.8	20.0	21.8	24.5	24.0	21.2	20.0	19.2	16.7	15.2	14.1	14.3	14.3	24.5
17-Sep	14.4	14.9	14.3	12.5	Z	10.5	7.5	7.6	11.5	11.9	16.2	18.2	17.1	17.4	20.4	19.4	15.2	14.5	5.2	2.9	3.1	1.9	1.0	1.4	11.3	20.4
18-Sep	1.4	1.1	1.1	1.8	1.3	Z	1.3	2.5	5.9	10.4	13.3	14.2	17.6	23.4	27.5	29.0	26.8	15.5	10.9	5.9	5.8	6.3	10.6	5.0	10.4	29.0
19-Sep	Z	3.3	2.8	1.8	1.1	1.2	1.5	3.3	7.3	11.1	14.8	26.4	35.6	35.4	35.0	38.3	38.6	34.9	26.1	21.1	19.7	16.6	14.0	16.9	17.7	38.6
20-Sep	16.6	Z	15.7	10.6	9.5	4.0	5.1	7.6	13.0	16.4	20.7	28.5	33.4	35.7	36.6	36.1	32.5	16.6	14.0	9.3	7.0	9.7	10.6	12.8	17.5	36.6
21-Sep	14.2	13.9	Z	8.1	7.6	5.3	6.1	6.8	9.1	12.0	15.1	18.5	21.7	32.9	M	42.3	33.0	26.2	14.6	8.1	18.0	24.4	24.5	18.5	17.3	42.3
22-Sep	14.0	12.5	8.8	Z	4.3	4.1	4.8	2.5	7.3	11.5	12.6	21.7	31.3	33.6	36.4	37.3	36.5	32.5	24.8	17.8	12.6	9.0	11.7	6.6	17.1	37.3
23-Sep	10.5	9.8	4.9	2.6	Z	3.2	2.4	4.1	3.2	6.4	6.8	8.2	12.4	16.9	26.0	27.7	26.9	24.3	16.8	9.8	13.8	11.9	11.6	11.4	11.8	27.7
24-Sep	6.0	5.0	4.1	2.8	2.6	Z	3.8	4.3	7.3	15.4	21.1	22.0	25.2	30.2	31.0	33.5	32.8	28.0	18.4	14.0	8.5	7.4	6.3	7.6	14.7	33.5
25-Sep	Z	9.1	11.5	10.2	8.2	2.6	4.7	3.2	6.5	24.5	26.5	27.0	27.8	26.3	29.3	30.9	29.7	28.5	21.7	13.5	13.1	16.2	13.9	16.9	17.5	30.9
26-Sep	18.2	Z	18.5	13.0	11.9	14.2	18.4	21.3	22.8	23.9	23.8	24.9	25.3	25.2	26.4	26.3	26.7	26.0	26.1	26.2	24.9	23.3	22.2	19.7	22.1	26.7
27-Sep	18.9	18.1	Z	16.3	15.5	15.7	15.9	16.4	16.6	18.2	19.3	21.5	23.8	25.4	26.4	26.8	26.4	25.3	16.1	11.1	10.2	14.2	17.8	20.4	19.0	26.8
28-Sep	20.1	19.7	19.6	Z	8.9	8.0	3.5	5.4	8.8	11.4	22.1	28.1	31.7	30.5	30.4	28.0	29.5	29.0	19.5	19.6	20.3	12.2	13.3	18.0	19.0	31.7
29-Sep	16.0	12.7	15.0	14.3	Z	3.7	5.4	5.6	5.9	8.4	21.2	23.0	23.6	26.9	30.5	30.9	31.5	31.3	29.7	24.7	27.7	28.5	27.0	27.6	20.5	31.5
30-Sep	29.1	29.0	28.3	25.1	21.6	Z	21.2	20.1	20.8	22.2	23.2	26.4	26.0	25.1	24.5	24.2	25.1	24.6	22.8	16.4	14.5	16.9	13.6	8.7	22.1	29.1
	14.2	12.7	12.4	10.8	9.3	7.9	7.6	8.3	10.5	13.5	17.2	20.5	23.4	25.4	27.1	28.3	27.2	24.5	20.1	16.1	14.6	14.7	14.3	14.1	Diurnal Average	
	29.1	29.0	28.3	25.1	24.6	23.0	21.3	21.3	22.8	24.5	26.5	29.3	35.6	35.7	36.9	42.3	39.7	37.0	32.4	27.4	27.7	28.5	29.5	27.9	Diurnal Maximum	

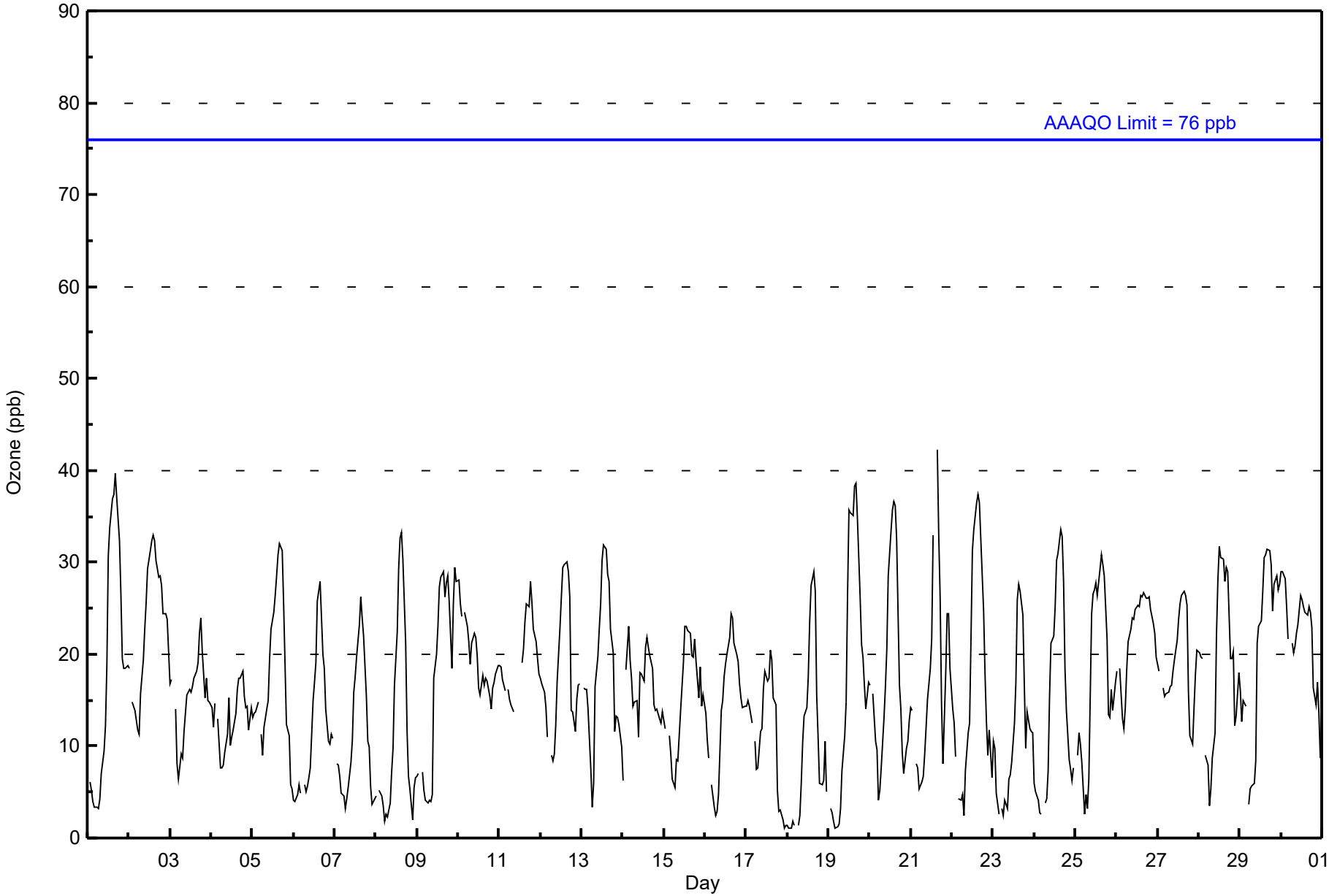
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Athabasca Valley - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	465	67.88	67.88
21 - 50	220	32.12	100.00
51 - 82	0	0.00	100.00
> 83	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	5	5	5	17	35	122	67	28	19	22	12	23	26	16	41	21	464
21 - 50	4	2	4	6	8	23	11	8	3	13	29	34	31	21	19	4	220
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	9	7	9	23	43	145	78	36	22	35	41	57	57	37	60	25	684

Total Number of Valid Hours: 684

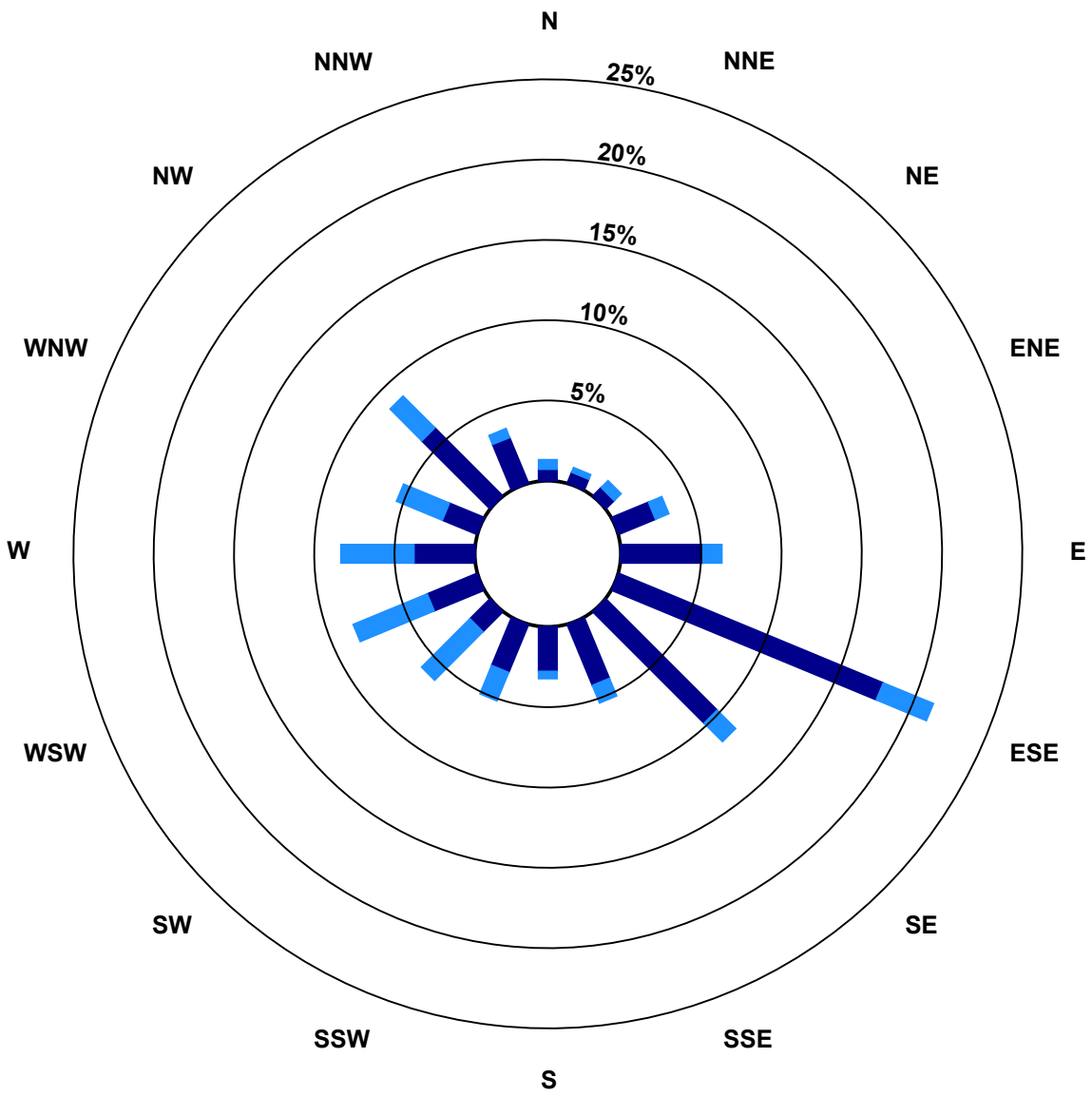
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Ozone (O_3) - ppb

Athabasca Valley



Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

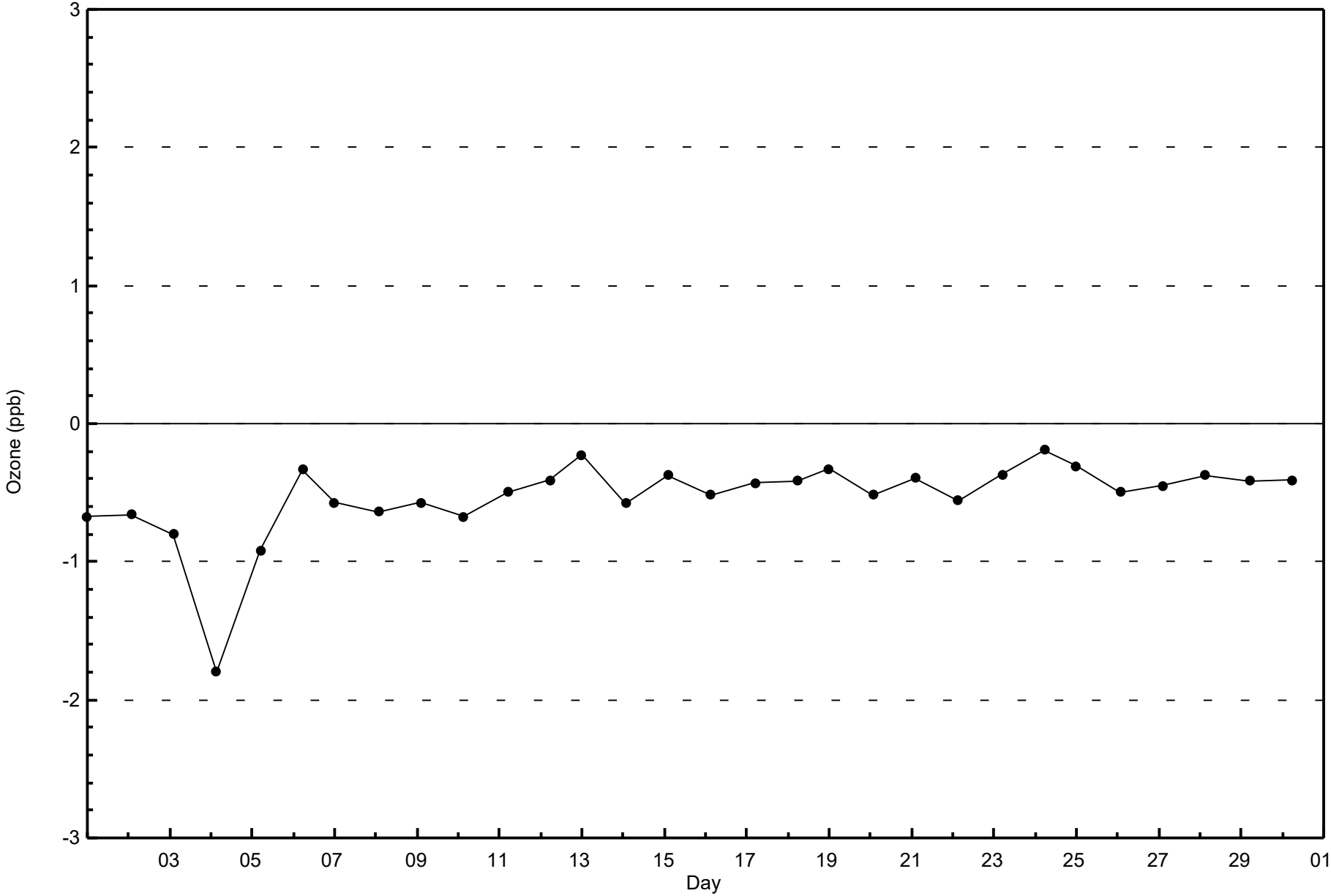
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Athabasca Valley - September 2026

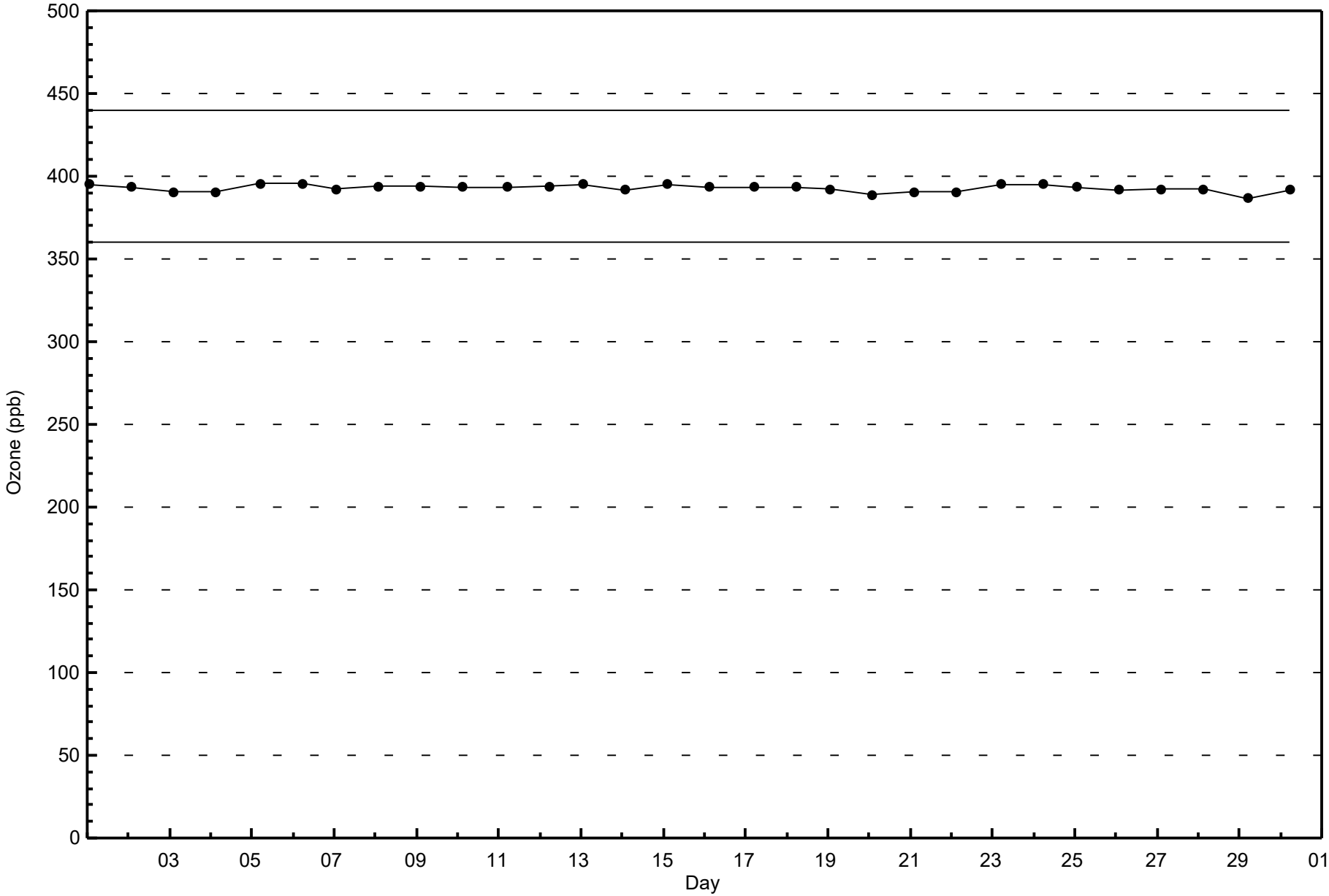


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Athabasca Valley - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Athabasca Valley - September 2026

Maximum Value: 23.8 ppb on Sep 19 07:00

Maximum Daily Average: 6.0 ppb on Sep 18

Minimum Value: 0.0 ppb on Sep 2 01:00

Minimum Daily Average: 0.2 ppb on Sep 30

Maximum Diurnal Average: 5.6 ppb at hour 8

Minimum Diurnal Average: 0.3 ppb at hour 2

Monthly Average: 1.86 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.3 Median = 0.7 Q_3 = 2.0 P_{90} = 4.9 P_{99} = 14.9

Hours in Service:	720
Hours of Data:	684
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-Sep	0.8	0.5	Z	1.0	1.6	2.1	4.9	5.6	4.8	4.9	3.5	2.8	0.7	0.9	1.0	0.7	0.7	0.7	1.1	0.6	0.4	0.2	0.1	0.0	1.7	5.6
2-Sep	0.0	0.0	0.1	Z	0.2	0.6	1.7	1.5	0.8	0.7	0.7	0.7	0.5	0.6	0.5	1.1	0.6	0.3	0.3	0.4	0.2	0.1	0.1	0.0	0.5	1.7
3-Sep	0.0	0.0	0.1	1.3	Z	4.6	1.9	5.0	2.3	1.5	1.6	1.4	1.5	1.3	1.3	1.1	0.3	0.3	0.2	0.4	0.5	0.3	0.4	0.1	1.2	5.0
4-Sep	0.1	0.1	0.2	0.2	0.1	Z	1.6	2.9	5.2	3.4	2.0	2.2	1.3	1.2	0.9	0.5	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	1.0	5.2
5-Sep	Z	0.0	0.0	0.0	0.1	0.2	2.2	3.2	3.2	2.9	2.0	1.3	1.0	1.0	0.9	0.7	0.6	0.5	0.4	0.3	0.6	0.6	0.4	1.6	1.0	3.2
6-Sep	1.6	Z	1.9	0.6	1.0	1.2	1.0	1.8	2.1	2.0	2.0	0.8	0.6	0.5	0.7	0.7	0.8	0.7	0.5	0.6	0.6	0.4	0.3	0.2	1.0	2.1
7-Sep	0.2	0.5	Z	0.3	1.4	1.0	4.6	3.4	3.4	2.1	1.7	0.8	0.7	0.5	0.3	0.0	0.3	0.7	1.2	1.7	0.9	2.0	0.8	0.2	1.2	4.6
8-Sep	0.4	0.3	0.4	Z	0.4	2.5	4.4	14.3	17.6	11.0	12.5	6.5	3.1	1.1	0.7	0.3	0.6	5.2	5.4	5.0	3.0	13.4	2.4	0.7	4.8	17.6
9-Sep	0.6	0.5	0.4	0.6	Z	2.2	3.5	4.8	6.5	12.2	2.8	1.7	1.4	1.2	1.2	0.8	1.1	0.5	0.3	0.4	1.9	0.3	0.0	0.0	2.0	12.2
10-Sep	0.0	0.0	0.0	0.1	0.4	Z	0.7	1.1	0.8	0.5	0.3	0.4	0.9	1.1	0.5	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.3	1.1
11-Sep	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.5	0.7	0.5	0.5	0.6	0.5	0.2	0.3	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7
12-Sep	0.0	Z	0.0	0.0	0.8	2.7	1.8	2.7	2.3	1.9	0.7	0.4	0.4	0.3	0.1	0.4	0.4	0.6	5.5	3.8	3.2	1.0	0.2	0.1	1.3	5.5
13-Sep	0.1	0.1	Z	0.2	0.7	1.4	4.4	5.8	1.6	0.9	0.6	0.5	0.4	0.5	0.7	0.6	1.3	4.6	1.8	0.4	0.0	0.0	0.0	0.0	1.2	5.8
14-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.2	0.3	0.6	3.5	1.2	0.8	2.2	0.8	0.7	0.6	0.6	0.4	0.3	0.1	0.0	0.0	0.1	0.1	0.5	3.5
15-Sep	0.2	0.3	0.6	0.5	Z	4.0	11.7	3.4	4.2	2.4	1.3	1.2	1.3	1.2	1.1	0.6	1.1	0.9	0.5	0.7	0.4	0.2	0.4	0.1	1.7	11.7
16-Sep	0.1	0.0	0.3	0.4	0.9	Z	12.9	12.4	6.6	2.8	2.1	1.8	1.9	1.6	1.7	0.6	0.9	0.6	0.7	0.7	0.6	0.7	0.4	0.3	2.2	12.9
17-Sep	Z	0.3	0.3	0.5	0.8	1.3	2.3	4.8	2.8	3.6	2.6	1.6	2.2	2.3	1.1	1.4	2.3	0.5	5.4	4.3	1.6	1.8	5.2	3.7	2.3	5.4
18-Sep	4.0	Z	5.9	4.2	6.4	14.9	22.0	14.8	11.5	9.2	7.2	8.4	6.3	2.7	1.0	0.3	1.3	2.9	2.0	2.2	2.1	3.9	1.0	3.1	6.0	22.0
19-Sep	0.6	2.7	Z	3.9	11.6	15.1	23.8	8.9	4.1	3.6	3.8	2.1	0.8	0.9	1.1	0.8	0.7	0.5	0.9	0.6	0.5	0.5	0.6	0.3	3.8	23.8
20-Sep	0.1	0.4	0.7	Z	1.6	5.2	4.7	4.8	3.4	3.0	1.8	1.0	0.8	0.6	0.5	0.8	0.9	9.8	1.1	1.1	2.8	2.3	1.0	0.4	2.1	9.8
21-Sep	0.5	0.2	0.5	1.2	Z	3.4	3.2	5.6	4.3	3.9	3.4	2.8	3.2	1.3	M	0.4	1.1	1.7	5.5	7.1	6.0	0.7	0.5	0.1	2.6	7.1
22-Sep	0.3	0.0	0.5	2.5	7.2	Z	2.8	15.1	7.5	3.5	5.5	2.3	0.1	0.1	0.2	0.1	0.2	0.2	0.3	1.3	0.5	1.7	1.5	1.5	2.4	15.1
23-Sep	Z	0.3	1.7	6.5	7.4	4.3	7.6	7.0	C	C	C	C	C	3.8	1.6	1.0	1.4	0.7	3.1	4.3	0.8	1.4	0.7	1.0	3.0	7.6
24-Sep	0.9	Z	1.9	4.9	5.3	5.4	7.8	12.0	11.8	4.3	1.7	1.6	1.6	0.7	1.0	0.6	0.7	1.2	2.4	1.2	5.7	2.9	3.1	2.3	3.5	12.0
25-Sep	0.8	0.7	Z	0.4	0.8	4.5	2.8	7.3	10.2	0.5	0.4	0.4	0.4	0.5	0.6	0.4	0.6	0.5	0.2	0.2	0.1	0.0	0.0	0.0	1.4	10.2
26-Sep	0.0	0.0	0.0	Z	0.5	0.8	0.4	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.2	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.3	0.8
27-Sep	0.1	0.1	0.2	0.1	Z	0.4	0.8	0.7	0.7	0.7	0.8	0.8	0.6	0.5	0.6	0.5	0.3	0.2	3.0	6.4	6.4	0.5	0.3	0.0	1.1	6.4
28-Sep	0.2	0.2	0.1	0.2	15.9	Z	18.6	14.8	9.9	6.6	3.1	1.7	0.9	1.4	1.0	1.4	1.8	1.0	1.8	1.2	1.8	4.6	1.9	0.4	3.9	18.6
29-Sep	Z	0.8	0.3	1.1	1.9	9.6	4.3	4.2	5.1	8.9	1.1	0.7	0.3	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	1.7	9.6
30-Sep	0.1	Z	0.1	0.1	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.2	0.3	0.3	0.2	0.3	0.2	0.3
	0.5	0.3	0.7	1.2	2.7	3.5	5.3	5.6	4.6	3.5	2.3	1.6	1.2	1.0	0.7	0.6	0.7	1.2	1.5	1.5	1.4	1.3	0.7	0.6	Diurnal Average	
	4.0	2.7	5.9	6.5	15.9	15.1	23.8	15.1	17.6	12.2	12.5	8.4	6.3	3.8	1.7	1.4	2.3	9.8	5.5	7.1	6.4	13.4	5.2	3.7	Diurnal Maximum	

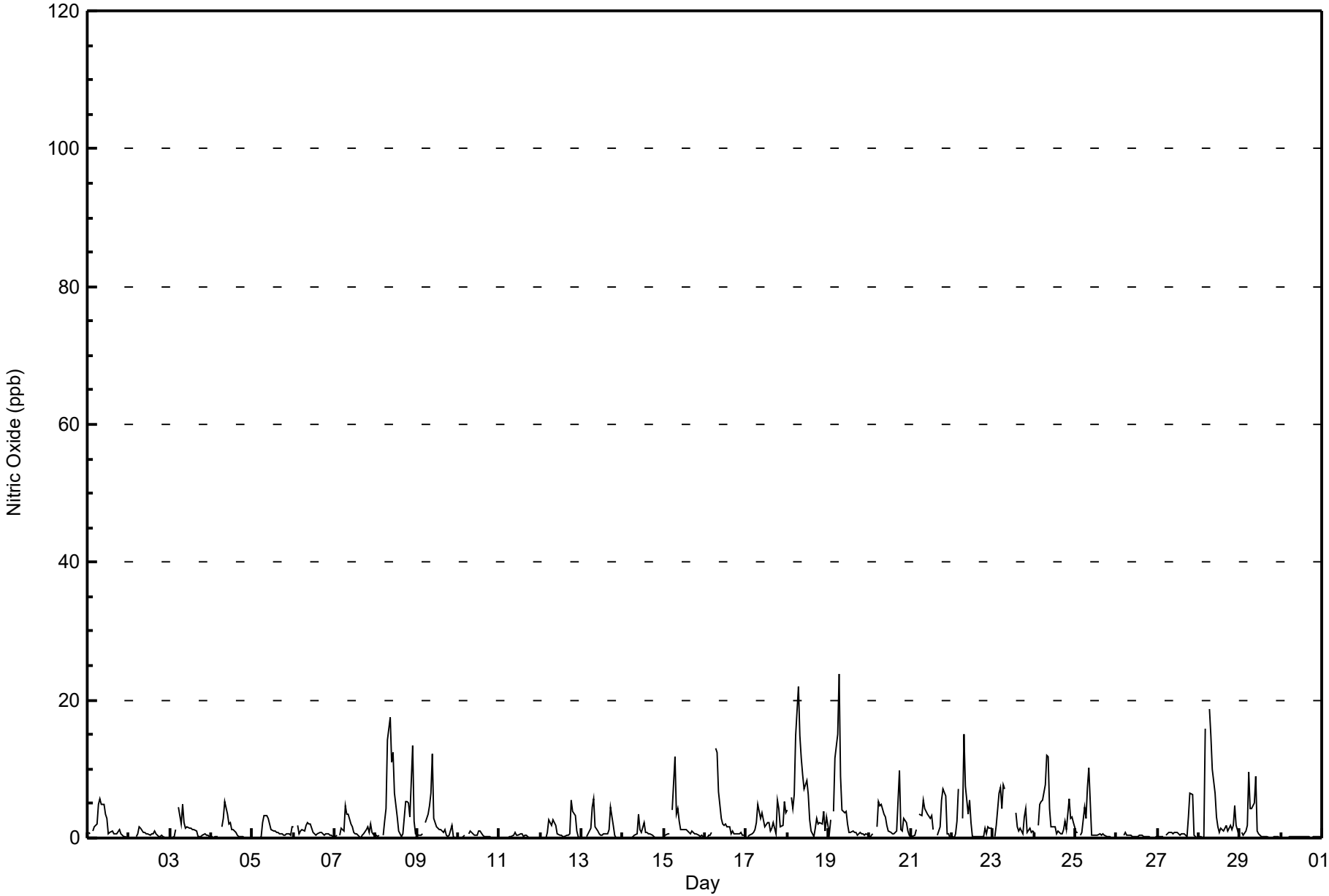
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Athabasca Valley - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	682	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: 684

Total Number of Hours: 720

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	9	7	9	23	42	142	78	35	23	36	40	56	55	39	65	23	682
21 - 40	0	0	0	0	1	0	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	9	7	9	23	43	142	79	35	23	36	40	56	55	39	65	23	684

Total Number of Valid Hours: 684

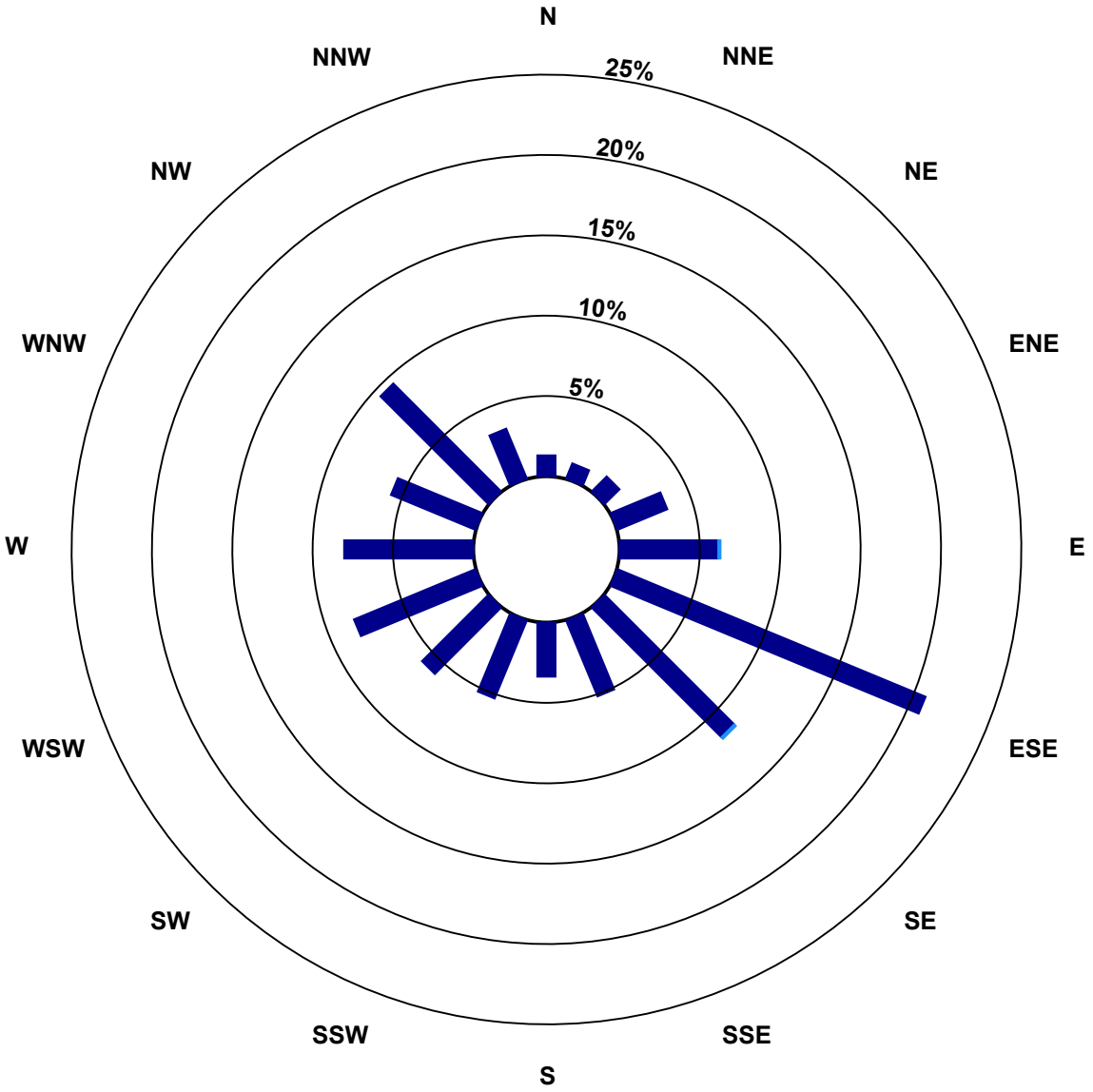
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Athabasca Valley



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

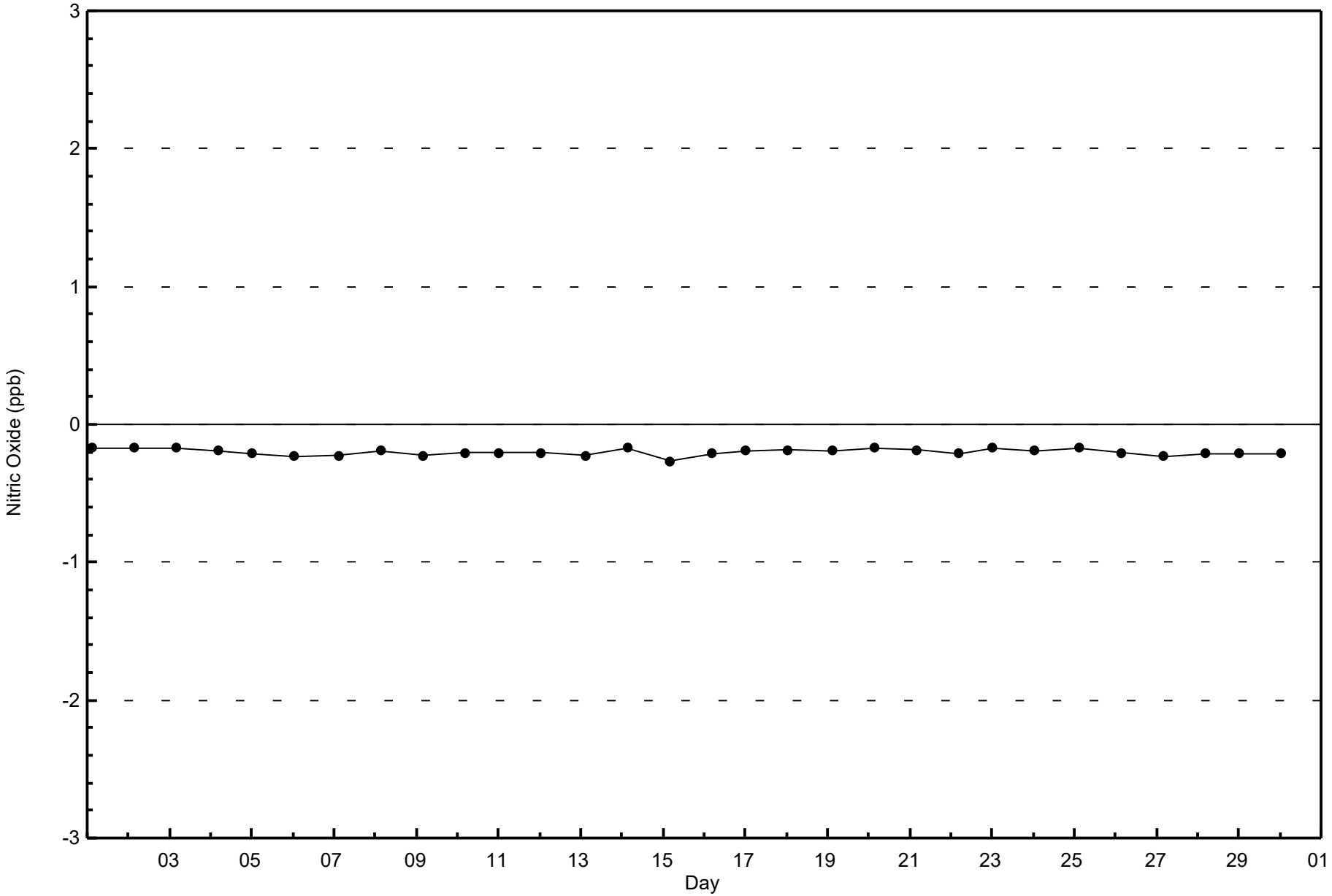
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Athabasca Valley - September 2026

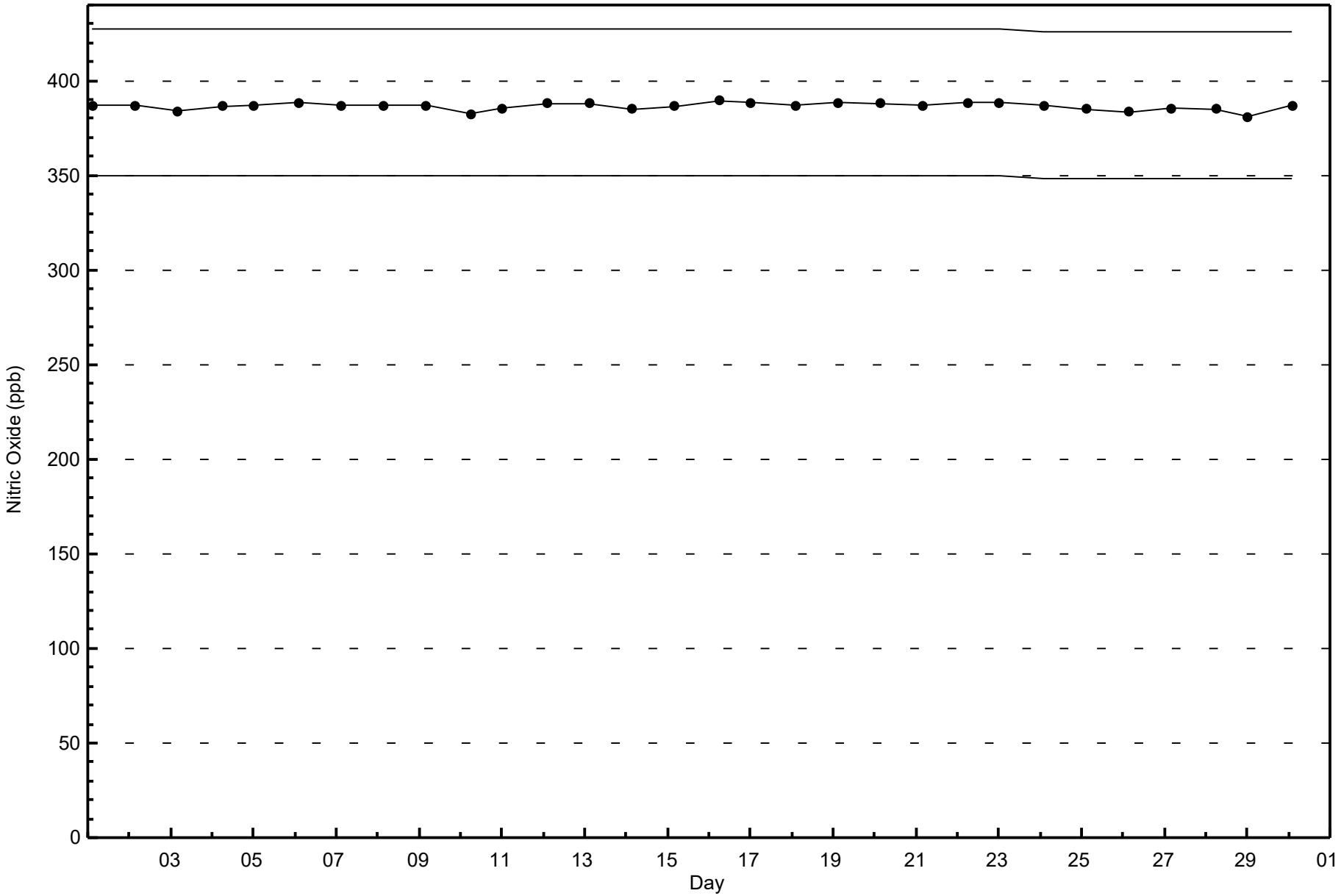


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Athabasca Valley - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Athabasca Valley - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 21.6 ppb on Sep 20 18:00
Maximum Daily Average: 8.0 ppb on Sep 21

Minimum Value: 0.3 ppb on Sep 10 02:00
Maximum Diurnal Average: 7.2 ppb at hour 20
Monthly Average: 4.14 ppb
Minimum Daily Average: 1.1 ppb on Sep 10
Minimum Diurnal Average: 1.8 ppb at hour 15
Percentiles: P_1 = 0.4 P_{10} = 0.8 Q_1 = 1.6 Median = 3.0 Q_3 = 5.5 P_{90} = 9.2 P_{99} = 16.6

Hours in Service:	720
Hours of Data:	684
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-Sep	4.3	3.3	Z	2.9	3.1	3.0	2.8	2.5	2.8	4.2	4.4	4.3	1.5	2.1	2.7	2.5	2.8	3.9	5.6	5.6	5.0	3.9	3.8	2.4	3.5	5.6
2-Sep	1.5	1.5	1.4	Z	1.8	2.7	4.3	2.9	1.7	1.6	1.5	1.6	1.6	1.6	1.3	1.8	2.0	2.0	2.1	2.4	4.2	3.2	2.6	2.9	2.2	4.3
3-Sep	1.6	1.2	2.2	4.6	Z	8.1	4.9	6.0	2.7	2.0	1.8	1.1	1.4	1.7	1.0	1.3	0.8	1.0	0.5	1.9	5.6	3.6	4.4	3.2	2.7	8.1
4-Sep	2.4	2.3	2.0	2.2	1.6	Z	5.9	4.9	4.8	3.3	2.3	1.8	1.2	1.3	1.5	1.2	1.0	1.4	1.8	1.7	2.1	1.6	4.4	3.0	2.4	5.9
5-Sep	Z	3.2	2.8	2.4	4.9	5.5	8.1	5.3	4.0	4.4	4.1	2.4	2.0	2.3	2.6	2.8	2.9	3.9	7.0	8.6	5.2	4.8	6.8	9.5	4.6	9.5
6-Sep	9.5	Z	4.5	3.8	3.6	3.6	2.0	2.0	2.0	2.1	2.3	1.6	1.3	1.0	1.4	1.9	3.1	5.6	3.8	5.5	6.2	3.2	2.0	2.2	3.2	9.5
7-Sep	2.7	3.6	Z	1.8	3.9	3.1	5.2	3.4	3.6	2.5	1.6	1.1	1.2	1.1	0.9	0.6	1.4	3.7	5.4	6.8	3.3	5.7	4.9	1.9	3.0	6.8
8-Sep	2.1	1.6	2.3	Z	3.5	4.5	3.3	4.9	5.9	6.3	11.2	8.2	6.0	3.5	2.8	2.0	3.6	11.0	16.7	13.9	9.8	16.1	10.4	6.5	6.8	16.7
9-Sep	4.2	3.1	2.4	2.7	Z	3.9	3.8	3.3	3.5	5.2	2.6	2.4	2.2	1.9	1.9	1.6	3.8	1.7	1.1	3.2	9.5	2.5	0.7	0.5	2.9	9.5
10-Sep	0.4	0.3	0.4	0.6	1.1	Z	1.4	2.0	1.4	1.3	1.4	1.7	2.7	2.2	1.2	0.9	1.0	1.4	0.9	0.7	0.8	0.6	0.3	0.3	1.1	2.7
11-Sep	Z	0.4	0.3	0.5	0.8	1.3	1.6	1.6	2.4	2.5	1.3	1.4	1.8	1.7	0.7	1.2	3.1	2.6	2.1	3.0	2.3	1.1	0.6	0.5	1.5	3.1
12-Sep	0.4	Z	0.7	0.8	2.1	3.2	2.2	2.2	2.0	1.6	0.9	0.9	0.8	0.6	0.5	1.2	1.2	2.1	11.9	8.9	8.9	4.3	1.8	1.4	2.6	11.9
13-Sep	1.2	1.3	Z	1.1	3.3	4.5	4.8	4.4	2.0	1.1	1.0	1.1	0.9	1.2	1.6	2.4	3.2	8.7	9.2	6.4	4.2	4.4	3.9	4.3	3.3	9.2
14-Sep	7.1	2.2	2.4	Z	4.6	5.1	4.2	2.7	2.7	7.7	2.1	3.3	4.3	2.2	2.5	3.0	2.9	4.6	7.0	6.7	5.7	5.7	3.2	1.4	4.1	7.7
15-Sep	1.4	1.0	1.5	2.0	Z	4.1	5.3	2.1	2.9	1.5	1.0	1.0	1.6	1.5	1.6	1.1	2.7	3.3	2.6	2.8	3.7	2.3	4.5	1.6	2.3	5.3
16-Sep	1.7	3.6	4.0	7.5	8.2	Z	7.9	7.7	6.0	4.3	4.9	2.6	2.2	2.1	2.3	1.7	2.5	1.9	2.4	3.9	4.2	3.6	2.7	2.5	3.9	8.2
17-Sep	Z	1.8	2.0	3.0	3.4	5.0	6.0	7.1	3.3	3.6	3.6	3.0	4.0	4.0	2.4	3.7	6.6	3.8	9.9	6.8	2.7	3.9	5.4	4.0	4.3	9.9
18-Sep	3.6	Z	4.1	4.9	4.9	6.0	5.5	4.7	6.9	7.6	7.4	8.7	8.2	5.2	2.7	1.2	3.2	10.5	10.3	11.9	8.8	10.9	5.3	9.5	6.6	11.9
19-Sep	6.4	6.4	Z	4.7	5.1	6.2	6.5	5.2	2.8	2.9	3.9	3.9	2.3	2.4	3.3	3.3	4.1	4.8	10.3	11.6	8.5	5.5	11.0	6.2	5.5	11.6
20-Sep	3.9	7.7	6.1	Z	8.2	11.8	10.7	6.5	4.6	4.6	3.4	2.2	2.1	1.7	2.1	3.0	5.6	21.6	11.0	10.4	12.5	15.8	12.7	7.3	7.6	21.6
21-Sep	4.5	3.4	4.1	5.6	Z	8.6	7.8	6.0	4.2	3.9	4.2	4.5	6.2	4.1	M	4.4	12.2	17.2	20.9	20.7	15.6	6.1	4.9	6.7	8.0	20.9
22-Sep	7.8	3.1	4.7	7.5	7.4	Z	3.9	9.2	7.9	5.4	6.9	3.4	0.6	0.6	0.7	0.8	1.3	2.7	6.9	5.1	5.9	10.9	6.7	11.1	5.2	11.1
23-Sep	Z	6.3	8.0	10.3	8.1	6.4	6.4	6.0	C	C	C	C	C	5.4	4.3	3.7	4.7	4.5	10.4	14.9	7.1	7.0	5.7	3.2	6.8	14.9
24-Sep	7.2	Z	7.3	8.7	10.7	12.3	11.3	9.2	7.1	5.0	2.1	2.1	2.1	1.3	2.0	1.8	2.4	5.4	10.2	6.6	12.9	12.3	13.4	9.5	7.1	13.4
25-Sep	7.4	4.9	Z	3.1	5.2	12.1	14.3	14.0	13.5	1.5	1.0	0.8	0.5	0.8	1.7	0.7	1.0	1.5	5.6	9.2	7.9	4.4	7.7	5.4	5.4	14.3
26-Sep	4.1	3.8	2.9	Z	6.1	1.6	1.0	1.3	1.0	0.7	0.8	0.6	0.5	0.6	0.7	0.8	0.8	1.1	1.2	1.2	0.7	0.6	0.6	0.6	1.4	6.1
27-Sep	0.5	0.5	0.5	0.4	Z	0.7	1.0	0.8	0.7	0.7	0.9	0.9	0.9	0.8	0.8	1.1	0.9	1.0	9.6	13.6	11.7	4.2	3.2	1.6	2.5	13.6
28-Sep	1.6	2.0	1.6	2.0	12.8	Z	18.4	16.6	12.9	5.9	3.2	1.9	1.5	2.1	2.7	5.0	4.7	5.2	14.5	10.8	9.4	15.4	14.0	7.2	7.5	18.4
29-Sep	Z	7.7	5.5	6.4	10.0	18.0	13.6	12.4	10.9	11.1	2.0	1.4	0.9	0.8	0.7	0.9	1.1	0.8	1.9	4.2	0.8	0.7	0.7	0.5	4.9	18.0
30-Sep	0.4	Z	0.6	0.7	0.8	1.1	1.0	1.1	1.1	1.0	0.7	0.7	0.6	0.9	0.7	0.7	0.9	2.0	3.0	7.4	7.1	3.1	2.5	4.1	1.8	7.4
	3.5	3.0	3.0	3.6	5.0	5.7	5.8	5.3	4.4	3.6	2.9	2.4	2.2	2.0	1.8	1.9	2.9	4.7	6.9	7.2	6.4	5.6	5.0	4.0	Diurnal Average	
	9.5	7.7	8.0	10.3	12.8	18.0	18.4	16.6	13.5	11.1	11.2	8.7	8.2	5.4	4.3	5.0	12.2	21.6	20.9	20.7	15.6	16.1	14.0	11.1	Diurnal Maximum	

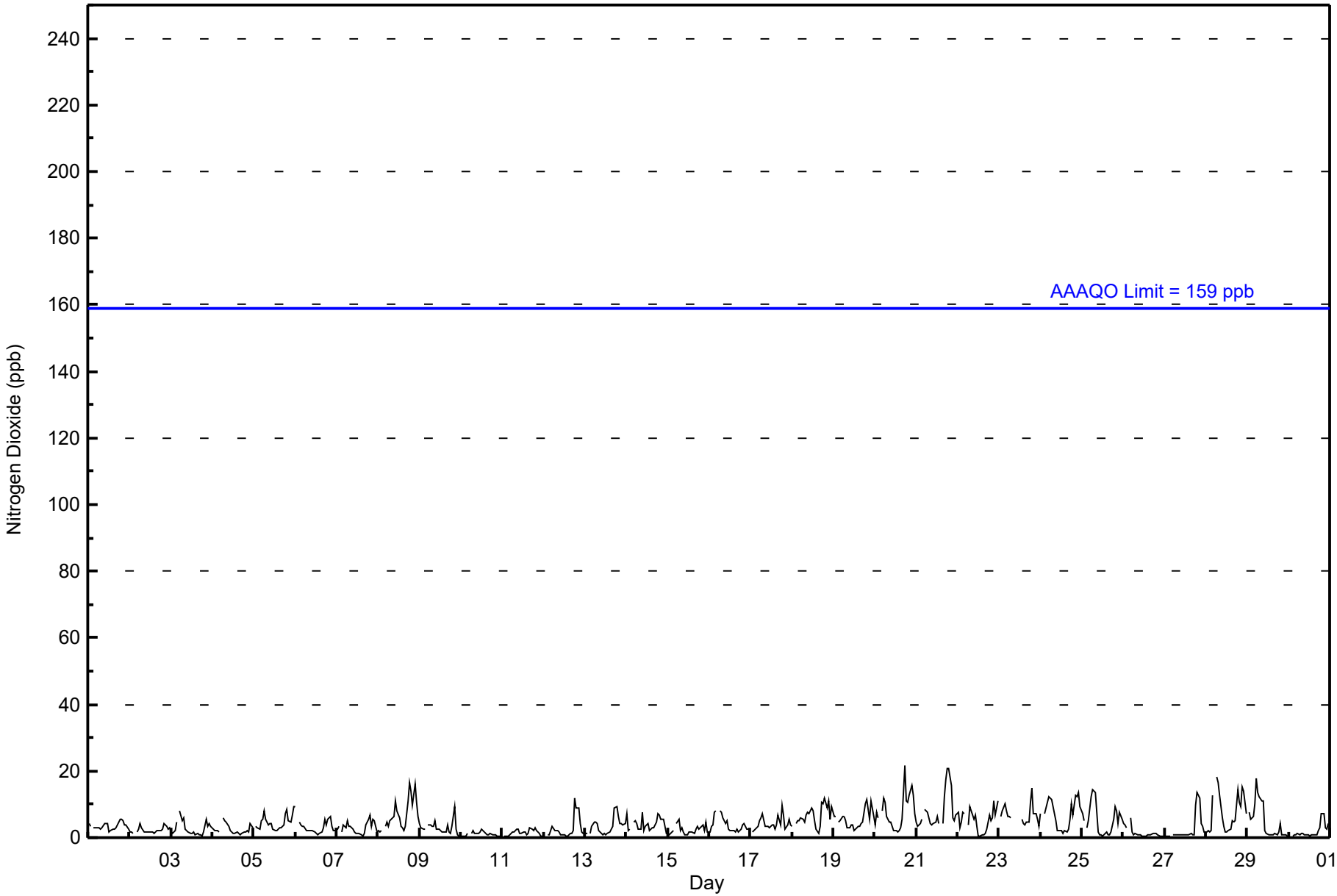
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Athabasca Valley - September 2026



Nitrogen Dioxide (NO_2) - ppb
Athabasca Valley - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	681	99.56	99.56
21 - 40	3	0.44	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: 684

Total Number of Hours: 720

Nitrogen Dioxide (NO_2) - ppb
Athabasca Valley - September 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	9	7	9	23	43	142	78	34	22	36	40	56	55	39	65	23	681
21 - 40	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	3
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	9	7	9	23	43	142	79	35	23	36	40	56	55	39	65	23	684

Total Number of Valid Hours: 684

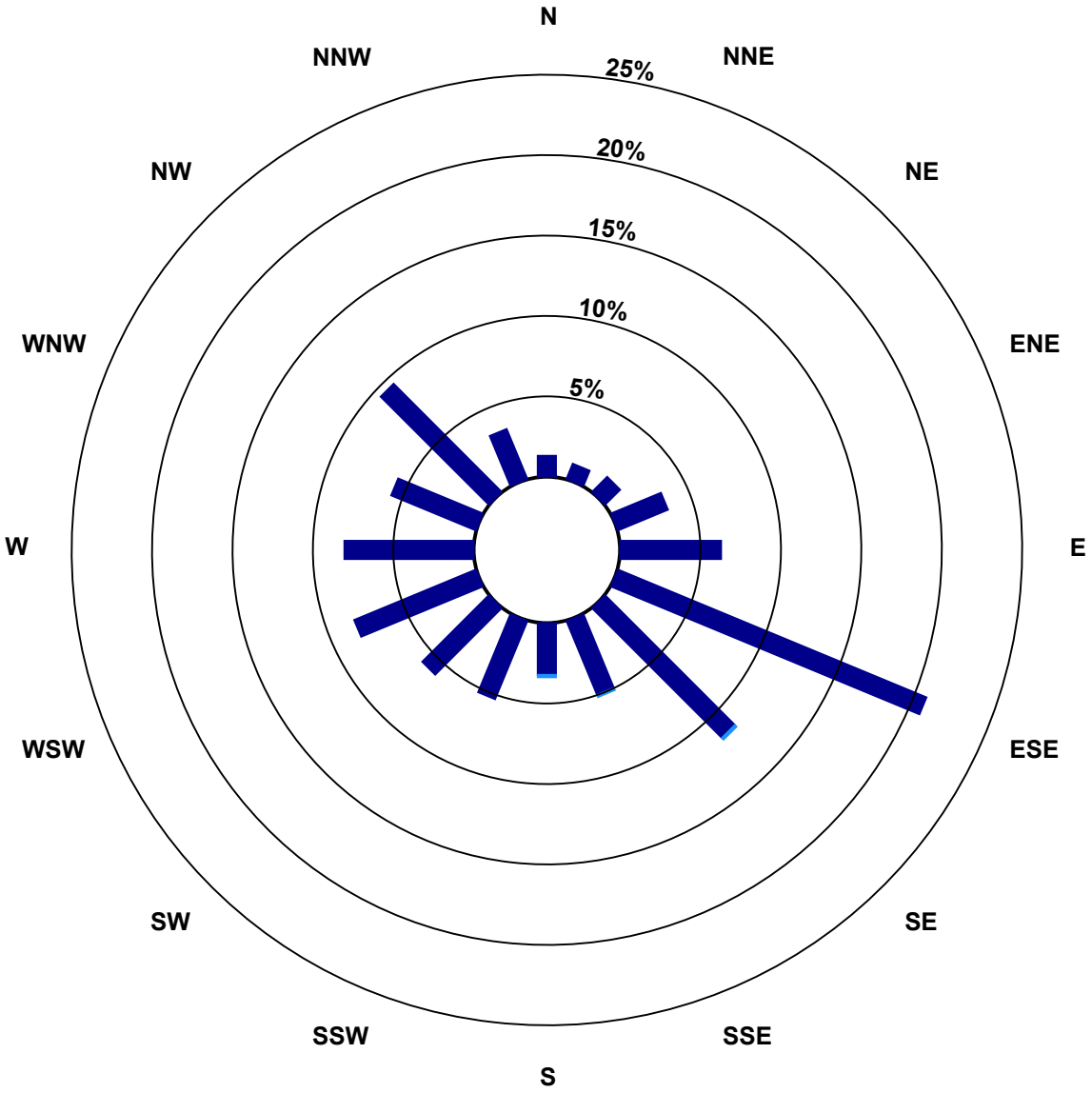
Total Number of Hours: 720

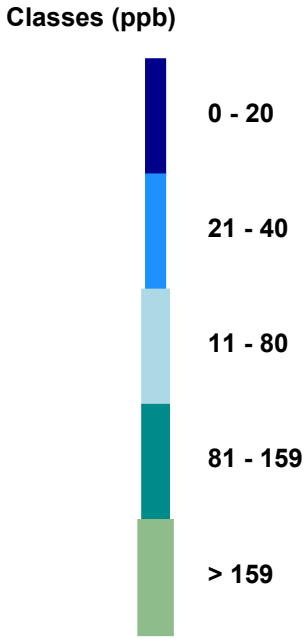
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Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Athabasca Valley





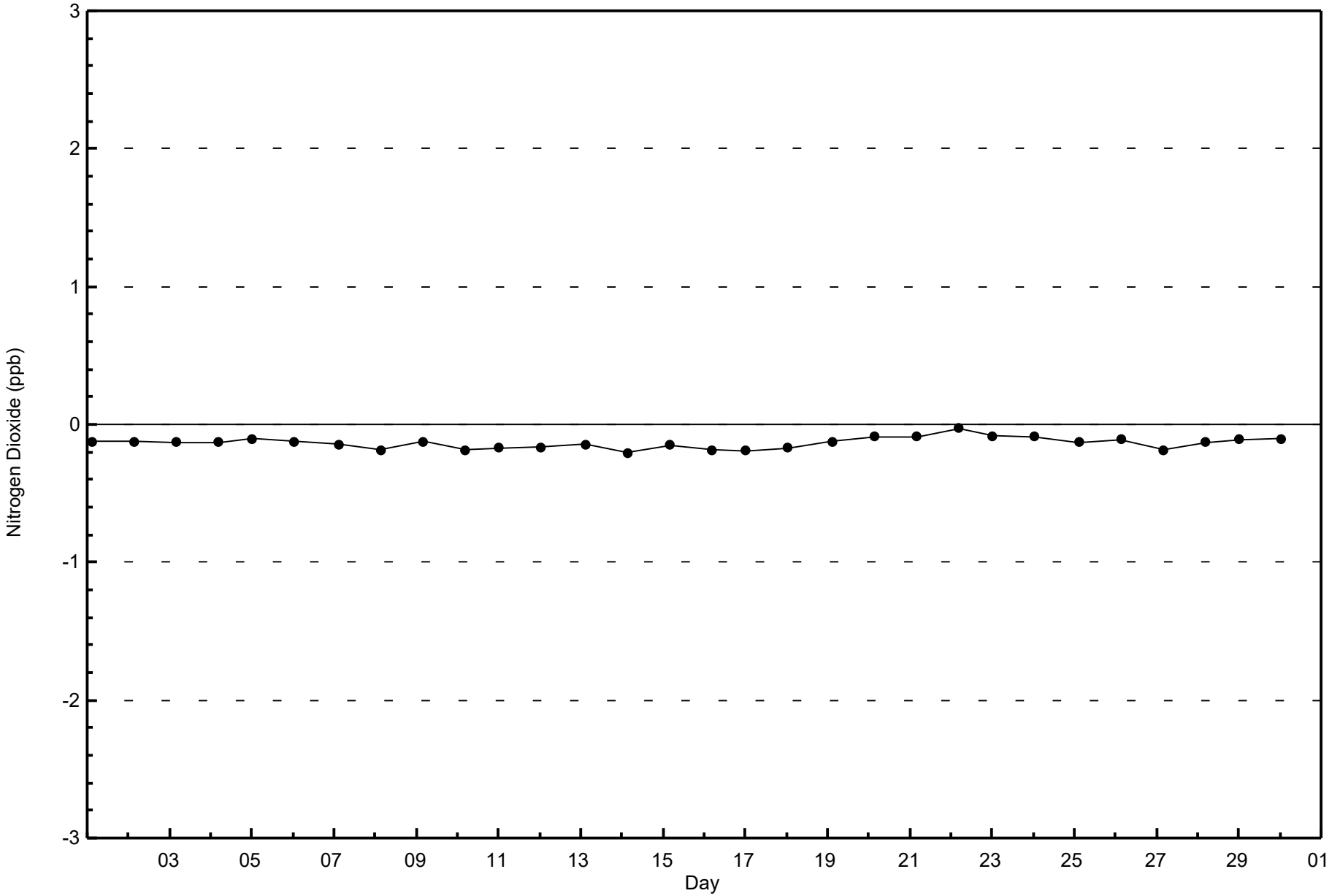
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Athabasca Valley - September 2026

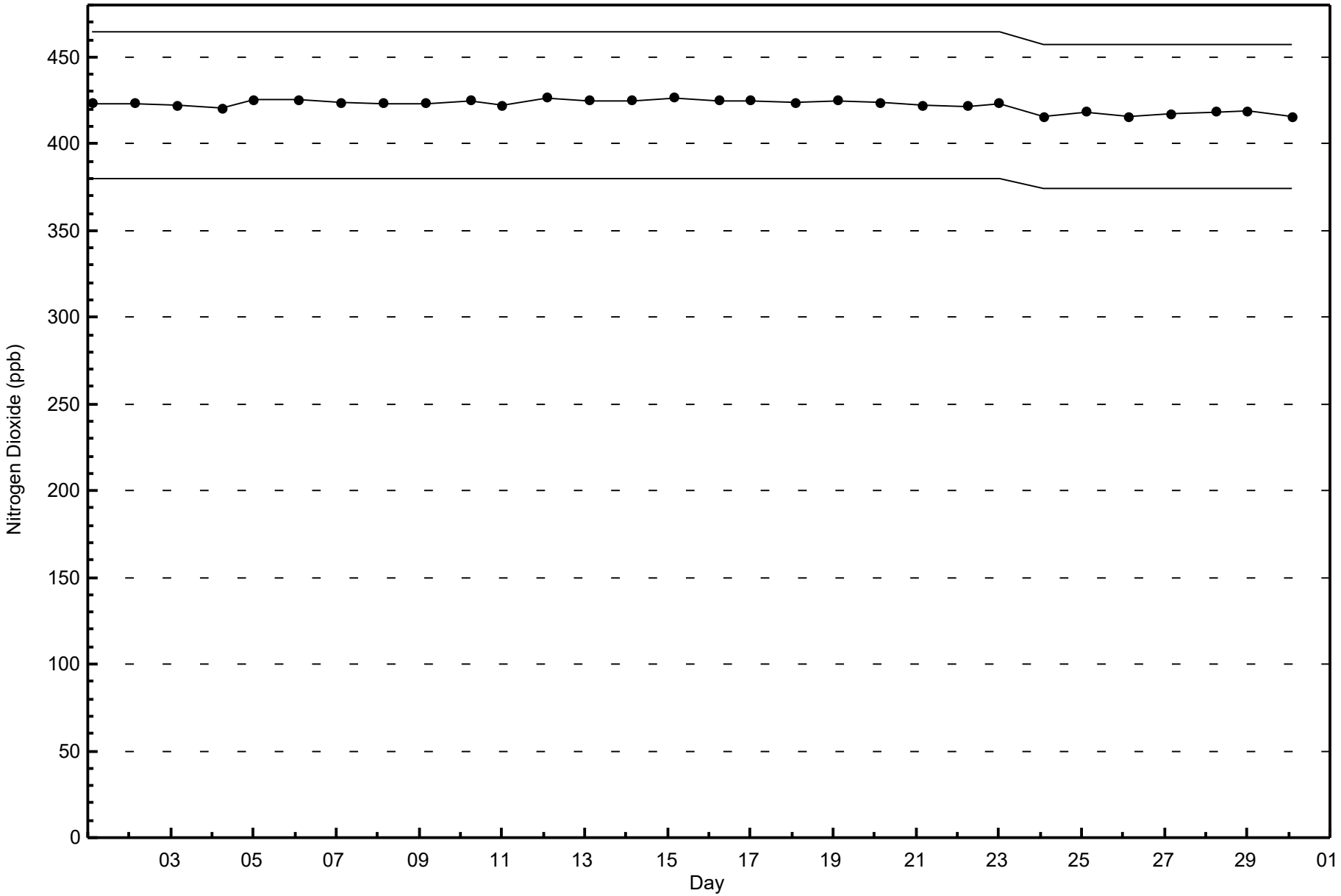


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Athabasca Valley - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Athabasca Valley - September 2026

Maximum Value: 37.0 ppb on Sep 28 07:00

Maximum Daily Average: 12.6 ppb on Sep 18

Minimum Value: 0.3 ppb on Sep 10 02:00

Minimum Daily Average: 1.4 ppb on Sep 10

Maximum Diurnal Average: 11.1 ppb at hour 7

Minimum Diurnal Average: 2.5 ppb at hour 16

Monthly Average: 6.00 ppb

Percentiles: P_1 = 0.4 P_{10} = 1.1 Q_1 = 2.1 Median = 4.0 Q_3 = 7.7 P_{90} = 14.1 P_{99} = 27.6

Hours in Service:	720
Hours of Data:	684
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-Sep	5.1	3.8	Z	3.9	4.7	5.1	7.7	8.1	7.6	9.1	7.9	7.1	2.2	3.0	3.7	3.2	3.5	4.6	6.7	6.2	5.4	4.1	3.9	2.4	5.2	9.1
2-Sep	1.5	1.5	1.5	Z	2.0	3.3	6.0	4.4	2.5	2.3	2.2	2.3	2.1	2.2	1.8	2.9	2.6	2.3	2.4	2.8	4.4	3.3	2.7	2.9	2.7	6.0
3-Sep	1.6	1.2	2.3	5.9	Z	12.7	6.8	11.0	5.0	3.5	3.4	2.5	2.9	3.0	2.3	2.4	1.1	1.3	0.7	2.3	6.1	3.9	4.8	3.3	3.9	12.7
4-Sep	2.5	2.4	2.2	2.4	1.7	Z	7.5	7.8	10.0	6.7	4.3	4.0	2.5	2.5	2.4	1.7	1.2	1.5	1.9	1.7	2.2	1.6	4.4	3.0	3.4	10.0
5-Sep	Z	3.2	2.8	2.4	5.0	5.7	10.3	8.5	7.2	7.3	6.1	3.7	3.0	3.3	3.5	3.5	3.5	4.4	7.4	8.9	5.8	5.4	7.2	11.1	5.6	11.1
6-Sep	11.1	Z	6.4	4.4	4.6	4.8	3.0	3.8	4.1	4.1	4.3	2.4	1.9	1.5	2.1	2.6	3.9	6.3	4.3	6.1	6.8	3.6	2.3	2.4	4.2	11.1
7-Sep	2.9	4.1	Z	2.1	5.3	4.1	9.8	6.8	7.0	4.6	3.3	1.9	1.9	1.6	1.2	0.6	1.7	4.4	6.6	8.5	4.2	7.7	5.7	2.1	4.3	9.8
8-Sep	2.5	1.9	2.7	Z	3.9	7.0	7.7	19.2	23.5	17.3	23.7	14.7	9.1	4.6	3.5	2.3	4.2	16.2	22.1	18.9	12.8	29.5	12.8	7.2	11.6	29.5
9-Sep	4.8	3.6	2.8	3.3	Z	6.1	7.3	8.1	10.0	17.4	5.4	4.1	3.6	3.1	3.1	2.4	4.9	2.2	1.4	3.6	11.4	2.8	0.7	0.5	4.9	17.4
10-Sep	0.4	0.3	0.4	0.7	1.5	Z	2.1	3.1	2.2	1.8	1.7	2.1	3.6	3.3	1.7	1.2	1.2	1.6	1.0	0.8	0.8	0.6	0.3	0.3	1.4	3.6
11-Sep	Z	0.4	0.3	0.5	0.8	1.4	1.7	1.8	2.9	3.2	1.8	1.9	2.4	2.2	0.9	1.5	3.5	2.7	2.1	3.0	2.3	1.1	0.6	0.5	1.7	3.5
12-Sep	0.4	Z	0.7	0.8	2.9	5.9	4.0	4.9	4.3	3.5	1.6	1.3	1.2	0.9	0.6	1.6	1.6	2.7	17.4	12.7	12.1	5.3	2.0	1.5	3.9	17.4
13-Sep	1.3	1.4	Z	1.3	4.0	5.9	9.2	10.2	3.6	2.0	1.6	1.6	1.3	1.7	2.3	3.0	4.5	13.3	11.0	6.8	4.2	4.4	3.9	4.3	4.5	13.3
14-Sep	7.1	2.2	2.4	Z	4.6	5.1	4.4	3.0	3.3	11.2	3.3	4.1	6.5	3.0	3.2	3.6	3.5	5.0	7.3	6.8	5.7	5.7	3.3	1.5	4.6	11.2
15-Sep	1.6	1.3	2.1	2.5	Z	8.1	17.0	5.5	7.1	3.9	2.3	2.2	2.9	2.7	2.7	1.7	3.8	4.2	3.1	3.5	4.1	2.5	4.9	1.7	4.0	17.0
16-Sep	1.8	3.6	4.3	7.9	9.1	Z	20.8	20.1	12.6	7.1	7.0	4.4	4.1	3.7	4.0	2.3	3.4	2.5	3.1	4.6	4.8	4.3	3.1	2.8	6.2	20.8
17-Sep	Z	2.1	2.3	3.5	4.2	6.3	8.3	11.9	6.1	7.2	6.2	4.6	6.2	6.3	3.5	5.1	8.9	4.3	15.3	11.1	4.3	5.7	10.6	7.7	6.6	15.3
18-Sep	7.6	Z	10.0	9.1	11.3	20.9	27.5	19.5	18.4	16.8	14.6	17.1	14.5	7.9	3.7	1.5	4.5	13.4	12.3	14.1	10.9	14.8	6.3	12.6	12.6	27.5
19-Sep	7.0	9.1	Z	8.6	16.7	21.3	30.3	14.1	6.9	6.5	7.7	6.0	3.1	3.3	4.4	4.1	4.8	5.3	11.2	12.2	9.0	6.0	11.6	6.5	9.4	30.3
20-Sep	4.0	8.1	6.8	Z	9.8	17.0	15.4	11.3	8.0	7.6	5.2	3.2	2.9	2.3	2.6	3.8	6.5	31.4	12.1	11.5	15.3	18.1	13.7	7.7	9.8	31.4
21-Sep	5.0	3.6	4.6	6.8	Z	12.0	11.0	11.6	8.5	7.8	7.6	7.3	9.4	5.4	M	4.8	13.3	18.9	26.4	27.8	21.6	6.8	5.4	6.8	10.6	27.8
22-Sep	8.1	3.1	5.2	10.0	14.6	Z	6.7	24.3	15.4	8.9	12.4	5.7	0.7	0.7	0.9	0.9	1.5	2.9	7.2	6.4	6.4	12.6	8.2	12.6	7.6	24.3
23-Sep	Z	6.6	9.7	16.8	15.5	10.7	14.0	13.0	C	C	C	C	C	9.2	5.9	4.7	6.1	5.2	13.5	19.2	7.9	8.4	6.4	4.2	9.8	19.2
24-Sep	8.1	Z	9.2	13.6	16.0	17.7	19.1	21.2	18.9	9.3	3.8	3.7	3.7	2.0	3.0	2.4	3.1	6.6	12.6	7.8	18.6	15.2	16.5	11.8	10.6	21.2
25-Sep	8.2	5.6	Z	3.5	6.0	16.6	17.1	21.3	23.7	2.0	1.4	1.2	0.9	1.3	2.3	1.1	1.6	2.0	5.8	9.4	8.0	4.4	7.7	5.4	6.8	23.7
26-Sep	4.1	3.8	2.9	Z	6.6	2.4	1.4	1.8	1.5	1.0	1.1	0.9	0.8	0.9	1.1	1.2	1.0	1.3	1.3	1.3	0.8	0.6	0.7	0.7	1.7	6.6
27-Sep	0.6	0.6	0.7	0.5	Z	1.1	1.8	1.5	1.4	1.4	1.7	1.7	1.5	1.3	1.4	1.6	1.2	1.2	12.6	20.0	18.1	4.7	3.5	1.6	3.6	20.0
28-Sep	1.8	2.2	1.7	2.2	28.7	Z	37.0	31.4	22.8	12.5	6.3	3.6	2.4	3.5	3.7	6.4	6.5	6.2	16.3	12.0	11.2	20.0	15.9	7.6	11.4	37.0
29-Sep	Z	8.5	5.8	7.5	11.9	27.6	17.9	16.6	16.0	20.0	3.1	2.1	1.2	0.9	0.9	1.1	1.3	0.9	2.0	4.3	1.0	0.9	0.8	0.6	6.6	27.6
30-Sep	0.5	Z	0.7	0.8	0.8	1.2	1.2	1.3	1.3	1.2	0.9	0.8	0.8	1.1	0.9	0.9	1.0	2.1	3.0	7.6	7.4	3.4	2.7	4.4	2.0	7.6
	4.0	3.4	3.6	4.8	7.7	9.2	11.1	10.9	9.0	7.1	5.2	4.1	3.4	3.0	2.5	2.5	3.6	5.9	8.3	8.7	7.8	6.9	5.8	4.6	Diurnal Average	
	11.1	9.1	10.0	16.8	28.7	27.6	37.0	31.4	23.7	20.0	23.7	17.1	14.5	9.2	5.9	6.4	13.3	31.4	26.4	27.8	21.6	29.5	16.5	12.6	Diurnal Maximum	

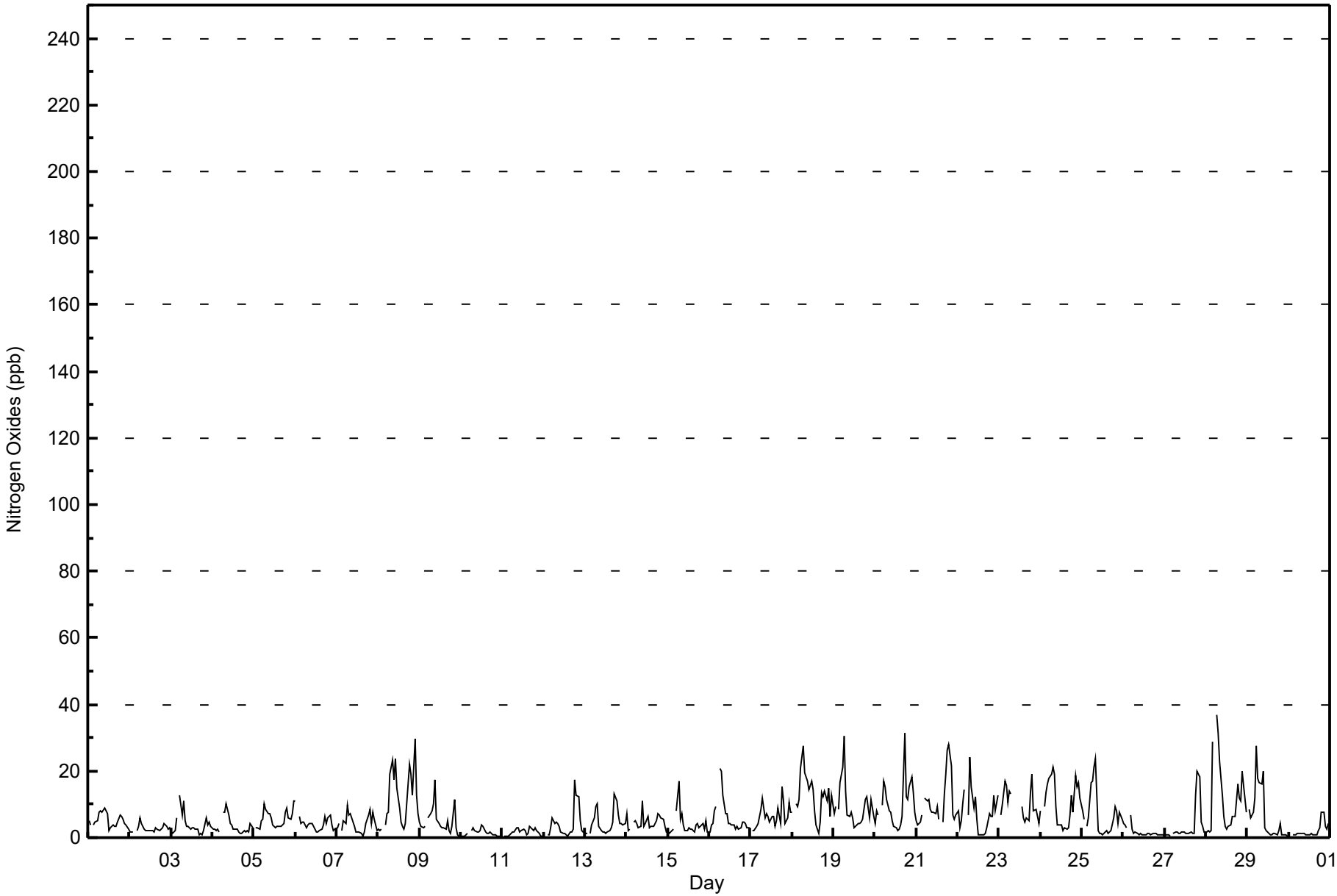
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Athabasca Valley - September 2026



Nitrogen Oxides (NO_X) - ppb
Athabasca Valley - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	662	96.78	96.78
21 - 40	22	3.22	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: 684

Total Number of Hours: 720

Nitrogen Oxides (NO_X) - ppb
Athabasca Valley - September 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	8	7	9	22	40	140	71	32	21	36	40	56	55	39	64	22	662
21 - 40	1	0	0	1	3	2	8	3	2	0	0	0	0	0	1	1	22
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	9	7	9	23	43	142	79	35	23	36	40	56	55	39	65	23	684

Total Number of Valid Hours: 684

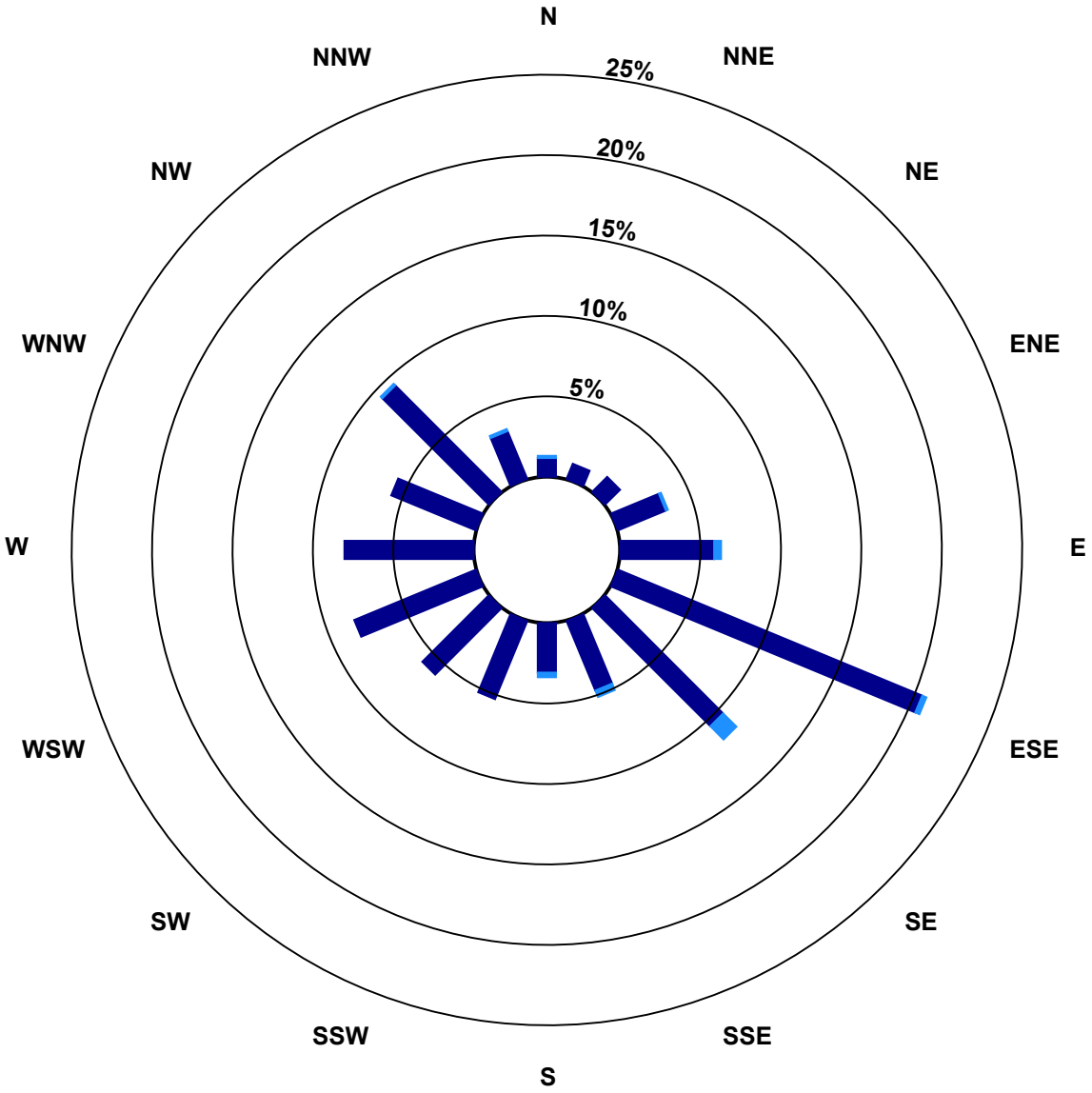
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Athabasca Valley



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

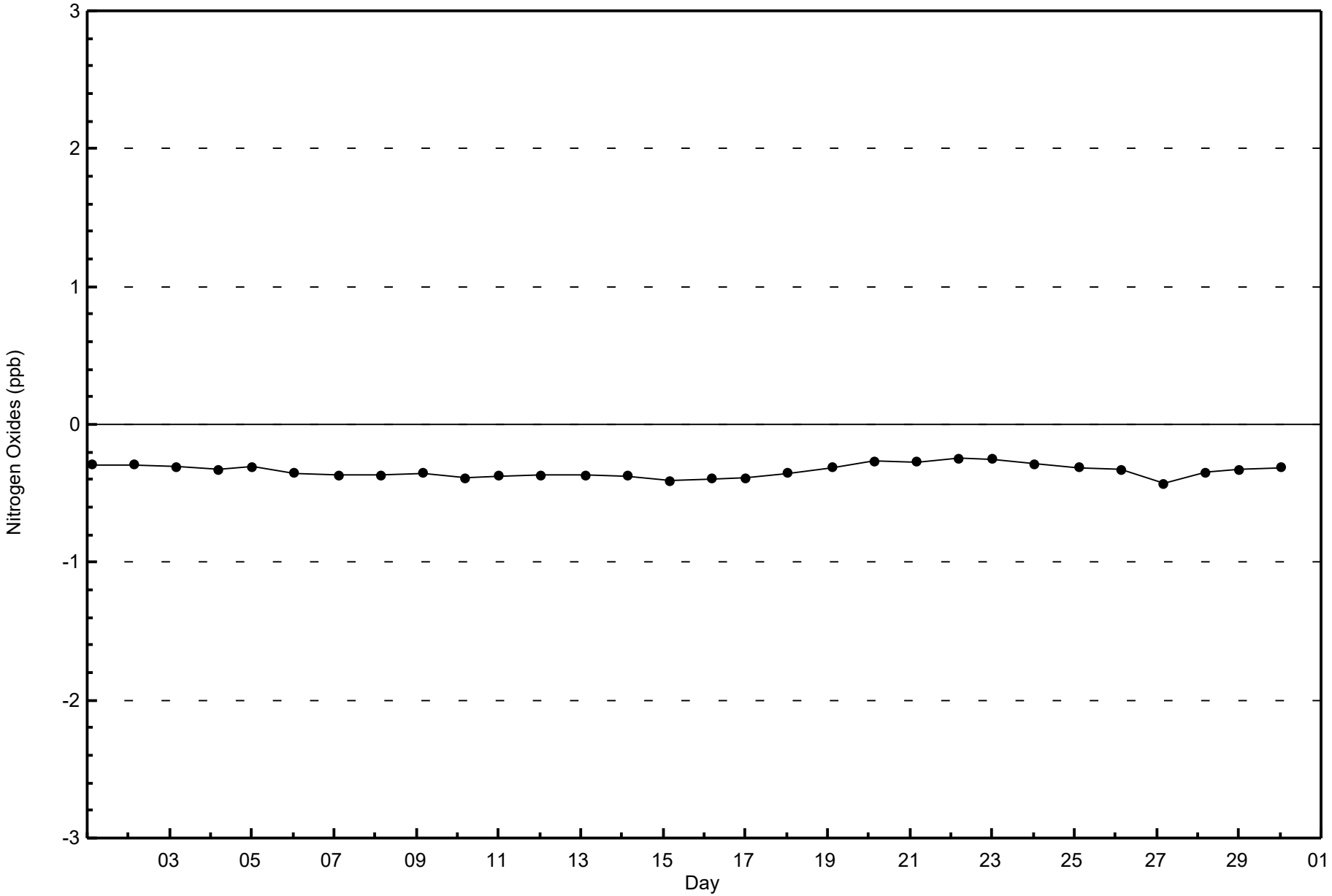
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Athabasca Valley - September 2026

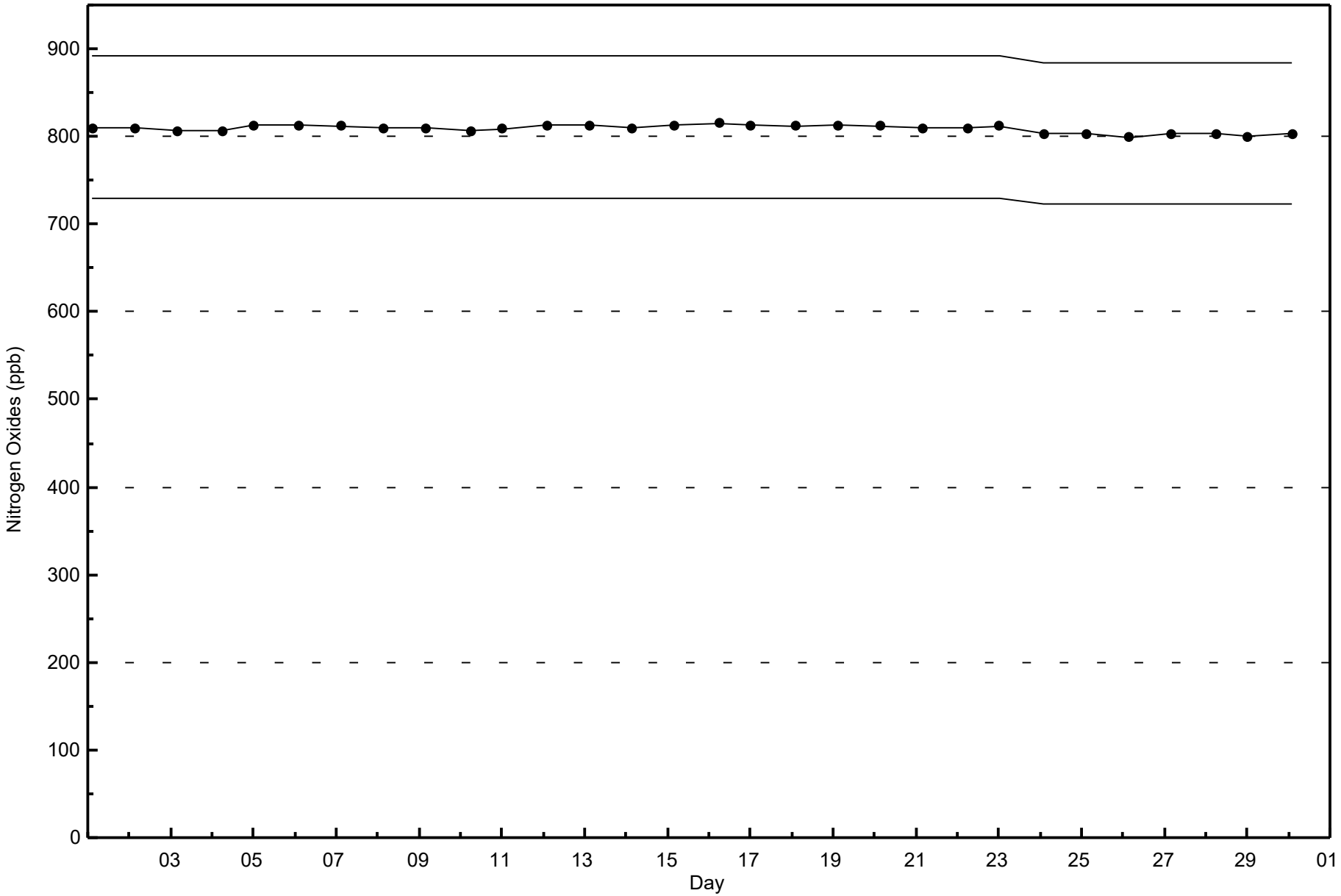


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Athabasca Valley - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Athabasca Valley - September 2026

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

Maximum Value: 17.1 $\mu g/m^3$ on Sep 10 11:00

Maximum Daily Average: 7.9 $\mu g/m^3$ on Sep 21

Minimum Value: 0.2 $\mu g/m^3$ on Sep 30 11:00

Minimum Daily Average: 0.9 $\mu g/m^3$ on Sep 30

Maximum Diurnal Average: 5.0 $\mu g/m^3$ at hour 21

Minimum Diurnal Average: 3.8 $\mu g/m^3$ at hour 17

Monthly Average: 4.22 $\mu g/m^3$

Percentiles: P_1 = 0.3 P_{10} = 1.4 Q_1 = 2.4 Median = 3.6 Q_3 = 5.6 P_{90} = 7.7 P_{99} = 12.2

Hours in Service:	720
Hours of Data:	718
Hours of Missing Data:	2
Hours of Calibration:	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-Sep	4.3	4.2	4.5	4.2	4.0	4.2	4.1	4.6	4.8	4.5	4.7	5.4	4.4	5.2	5.3	5.6	4.9	4.6	3.6	4.3	3.6	3.5	3.3	3.2	4.4	5.6
2-Sep	3.2	3.3	3.7	4.2	4.7	5.3	6.8	7.4	7.5	7.4	7.6	7.1	7.0	7.4	7.0	7.7	8.9	6.3	5.7	6.8	8.1	7.5	6.7	6.8	6.4	8.9
3-Sep	7.2	6.9	6.1	5.9	6.1	6.3	7.0	6.2	5.9	5.7	5.3	4.6	4.3	4.5	4.7	4.0	4.2	4.6	3.9	4.8	5.5	5.6	5.6	5.8	5.4	7.2
4-Sep	5.9	5.9	5.6	5.7	5.7	5.9	5.9	5.9	6.2	5.8	7.4	3.6	4.1	8.7	9.8	10.5	4.5	3.4	4.9	2.6	2.3	2.2	2.6	2.6	5.3	10.5
5-Sep	3.1	2.9	3.1	2.9	3.3	3.5	4.4	4.7	5.0	4.9	5.1	5.7	6.1	6.9	8.0	9.0	9.2	9.2	8.7	9.5	10.0	10.0	11.3	10.0	6.5	11.3
6-Sep	9.8	9.0	7.8	7.4	7.4	6.3	5.7	5.4	4.8	4.4	4.1	2.8	2.4	2.6	2.9	3.1	3.6	4.5	3.7	4.4	5.1	3.9	3.2	2.8	4.9	9.8
7-Sep	3.0	3.0	3.2	3.3	3.2	3.1	3.2	3.1	3.4	3.5	3.3	3.2	3.3	3.5	3.4	3.4	3.4	4.4	5.0	5.3	5.2	5.3	5.7	4.9	3.8	5.7
8-Sep	4.7	3.2	3.5	3.3	3.6	3.7	3.4	4.8	6.6	7.1	8.8	7.7	9.3	11.7	10.4	9.5	8.6	8.0	8.6	11.2	11.6	10.0	7.9	7.6	7.3	11.7
9-Sep	7.6	8.4	8.1	8.0	7.9	7.8	7.8	7.5	7.1	7.9	5.6	5.0	4.9	4.5	4.2	3.6	3.3	2.9	3.0	3.1	3.8	3.0	2.5	2.2	5.4	8.4
10-Sep	1.5	1.3	1.2	1.2	1.3	1.4	1.7	1.9	2.5	12.4	17.1	15.8	16.4	16.1	13.8	11.3	5.2	3.3	2.3	1.4	0.8	0.8	1.0	1.3	5.5	17.1
11-Sep	1.3	1.1	0.8	0.5	0.4	0.5	0.5	0.6	1.7	2.3	1.6	1.9	3.5	2.8	1.2	2.4	5.5	4.9	5.3	5.4	4.0	2.8	2.7	2.4	2.3	5.5
12-Sep	2.3	2.2	2.2	2.5	2.7	2.9	2.8	2.7	2.8	2.5	1.7	1.7	2.4	3.0	3.0	2.7	2.6	2.6	3.2	4.5	5.5	3.3	3.0	2.8	2.8	5.5
13-Sep	2.9	3.0	3.1	3.0	3.0	3.3	3.9	4.3	3.6	3.3	3.2	2.9	2.8	2.8	2.9	3.1	3.3	3.9	3.6	5.8	6.4	5.1	4.4	4.0	3.6	6.4
14-Sep	4.3	3.3	2.0	1.5	2.6	2.6	2.9	2.7	2.9	3.3	2.9	2.7	2.7	3.0	2.9	2.9	2.5	2.6	2.5	3.0	2.9	2.3	1.7	1.5	2.7	4.3
15-Sep	1.5	1.5	1.6	1.8	1.7	2.1	3.3	1.6	1.8	1.9	1.9	1.8	1.9	2.0	1.9	1.9	2.7	2.4	2.3	2.7	2.7	2.0	2.0	1.8	2.0	3.3
16-Sep	1.8	2.0	2.4	2.8	2.8	3.1	3.6	4.4	4.7	4.7	5.1	4.9	4.7	4.5	4.2	3.4	3.5	3.7	4.5	6.8	4.1	3.8	3.5	3.4	3.8	6.8
17-Sep	3.3	3.4	3.5	3.4	3.5	3.7	4.2	4.9	4.3	4.3	4.4	4.2	4.3	4.5	4.9	4.9	5.2	5.2	5.7	6.4	6.4	6.8	7.5	7.2	4.8	7.5
18-Sep	6.4	5.7	5.3	4.7	4.4	4.9	4.8	4.7	4.7	4.4	4.0	4.4	5.8	5.8	4.6	3.1	2.6	3.4	4.0	6.1	6.3	6.4	5.1	4.9	4.8	6.4
19-Sep	5.1	4.7	4.9	4.2	4.0	4.6	4.7	4.6	4.0	3.9	3.9	3.6	3.1	3.4	3.9	4.6	5.0	8.1	7.9	6.8	6.8	7.3	8.3	7.2	5.2	8.3
20-Sep	6.7	7.2	6.5	6.5	6.8	7.2	7.0	6.7	6.5	6.7	7.0	4.3	3.4	3.1	2.8	2.7	2.8	4.1	6.7	6.9	8.3	6.6	6.3	6.6	5.8	8.3
21-Sep	6.0	6.2	6.5	6.3	6.3	6.8	7.0	7.3	6.7	6.8	7.1	7.8	7.6	7.8	M	8.3	9.3	9.0	12.3	12.8	9.3	8.2	8.5	8.8	7.9	12.8
22-Sep	9.9	9.7	9.5	9.2	9.1	8.4	8.0	10.9	10.5	9.5	10.0	7.0	2.0	1.8	2.0	1.0	0.9	1.2	1.8	2.3	3.9	10.5	4.1	3.5	6.1	10.9
23-Sep	2.4	2.3	2.8	2.9	3.1	3.2	3.3	3.2	3.6	3.8	C	4.2	3.5	3.4	3.7	3.5	3.5	3.6	4.2	4.8	3.7	3.9	3.8	3.5	3.5	4.8
24-Sep	4.7	4.9	3.6	3.6	3.5	3.6	3.8	4.5	4.0	2.6	1.6	1.5	1.3	1.0	1.1	1.0	1.1	1.6	2.4	3.5	8.7	7.4	5.3	3.8	3.3	8.7
25-Sep	3.3	2.7	2.2	2.6	2.6	3.4	5.0	5.2	5.5	1.7	1.6	1.9	1.9	2.2	2.9	2.9	2.8	2.9	5.1	6.2	4.9	3.4	4.8	4.4	3.4	6.2
26-Sep	3.3	3.9	3.6	6.2	4.9	1.5	0.7	0.4	0.3	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.8	1.0	1.3	1.6	1.4	6.2
27-Sep	1.8	2.0	2.1	2.1	1.9	1.7	1.6	1.5	1.6	1.8	1.7	1.9	1.7	1.8	1.9	1.9	2.0	2.0	2.9	3.4	3.9	4.4	3.1	2.2	2.2	4.4
28-Sep	1.6	1.7	1.7	1.7	2.3	3.0	3.6	3.8	4.1	3.6	2.2	1.6	1.7	1.7	1.9	2.0	2.0	2.3	3.2	3.9	3.0	3.3	3.7	2.9	2.6	4.1
29-Sep	2.9	3.1	3.2	3.1	3.2	3.8	3.9	3.7	3.4	3.3	1.4	1.1	1.0	0.7	1.0	1.0	1.1	1.3	1.6	2.4	1.4	1.4	1.5	1.8	2.2	3.9
30-Sep	1.3	1.2	1.4	2.3	1.1	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3	0.4	0.7	0.9	1.9	2.4	1.4	1.2	3.4	0.9	3.4
	4.1	4.0	3.9	3.9	3.9	3.9	4.2	4.3	4.4	4.5	4.5	4.0	3.9	4.2	4.0	4.1	3.8	3.9	4.3	5.0	5.0	4.8	4.4	4.2	Diurnal Average	
	9.9	9.7	9.5	9.2	9.1	8.4	8.0	10.9	10.5	12.4	17.1	15.8	16.4	16.1	13.8	11.3	9.3	9.2	12.3	12.8	11.6	10.5	11.3	10.0	Diurnal Maximum	

C - Calibration M - Maintenance

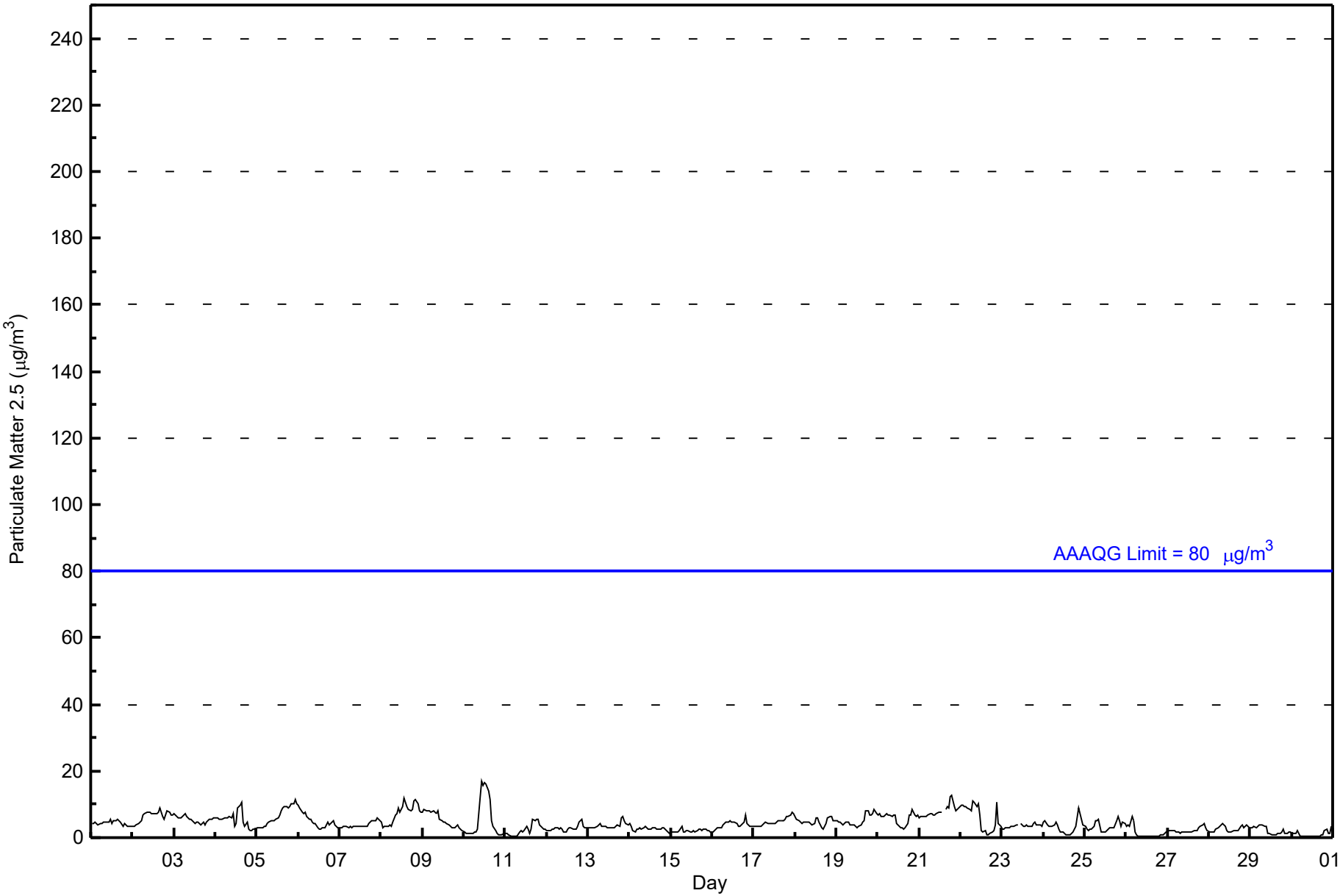
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Athabasca Valley - September 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Athabasca Valley - September 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	536	74.65	74.65
6 - 15	178	24.79	99.44
16 - 25	4	0.56	100.00
26 - 80	0	0.00	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 718

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Athabasca Valley - September 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	6	6	7	14	34	82	52	31	18	34	39	52	50	34	58	18	535
6 - 15	3	1	2	9	12	71	31	7	5	3	2	5	6	5	9	7	178
16 - 25	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	4
26 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	9	7	9	23	46	153	83	38	23	37	41	59	58	39	67	25	717

Total Number of Valid Hours: 717

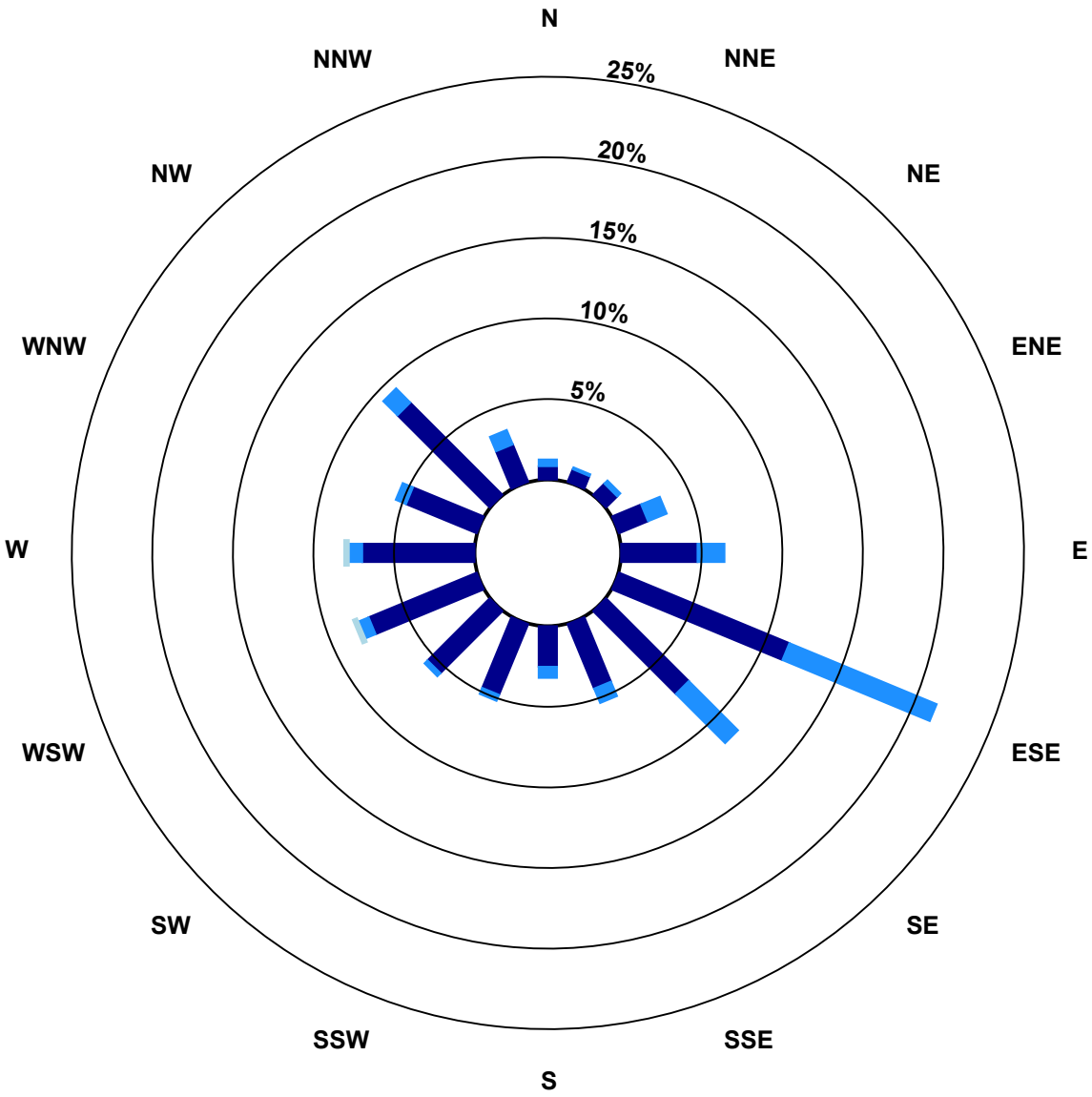
Total Number of Hours: 720

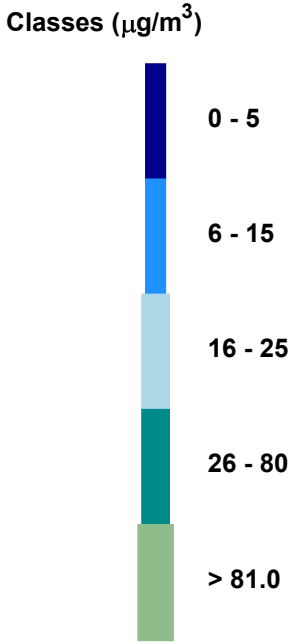
Wood Buffalo Environmental Association

Wind Rose Sep 2026

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

Athabasca Valley





Total Number of Valid Hours: 717

Wood Buffalo Environmental Association

Summary of Hour Averages

Carbon Monoxide (CO) - ppm

Athabasca Valley - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.3 ppm on Sep 21 20:00 Maximum Daily Average: 0.2 ppm on Sep 17

Minimum Value: 0.0 ppm on Sep 1 16:00 Minimum Daily Average: 0.1 ppm on Sep 2
Maximum Diurnal Average: 0.2 ppm at hour 20 Minimum Diurnal Average: 0.1 ppm at hour 13
Monthly Average: 0.13 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} = 0.3

Hours in Service:	720
Hours of Data:	685
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-Sep	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.0	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	0.1
2-Sep	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	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
3-Sep	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	0.1	0.1	0.1
4-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
5-Sep	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	0.2	0.2	0.2	0.2	0.2	0.1	0.2
6-Sep	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	0.2	0.1	0.1	0.1	0.1	0.2
7-Sep	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	0.1	0.1	0.2
8-Sep	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	0.2	0.3	0.2	0.3	0.2	0.2	0.1	0.3
9-Sep	0.1	0.2	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2
10-Sep	Z	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	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
11-Sep	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
12-Sep	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	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3
13-Sep	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	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2
14-Sep	0.2	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	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2
15-Sep	0.2	0.2	0.1	0.1	0.1	Z	0.2	0.1	0.2	C	C	C	C	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
16-Sep	Z	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	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
17-Sep	0.2	Z	0.1	0.2	0.2	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	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3
18-Sep	0.2	0.2	Z	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
19-Sep	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	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2
20-Sep	0.1	0.2	0.1	0.2	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	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2
21-Sep	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	M	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.3
22-Sep	Z	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2
23-Sep	0.1	Z	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	0.2	0.1	0.2	0.1	0.1	0.1	0.2
24-Sep	0.2	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	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3
25-Sep	0.2	0.1	0.1	Z	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	0.2	0.2	0.1	0.1	0.1	0.1	0.2
26-Sep	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
27-Sep	0.1	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	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2
28-Sep	Z	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	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
29-Sep	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	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2
30-Sep	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	0.2	0.2	0.1	0.2	0.1	0.2
	0.1	0.1	0.1	0.1	0.1	0.1	0.2	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	0.1	Diurnal Average	
	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	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	Diurnal Maximum	

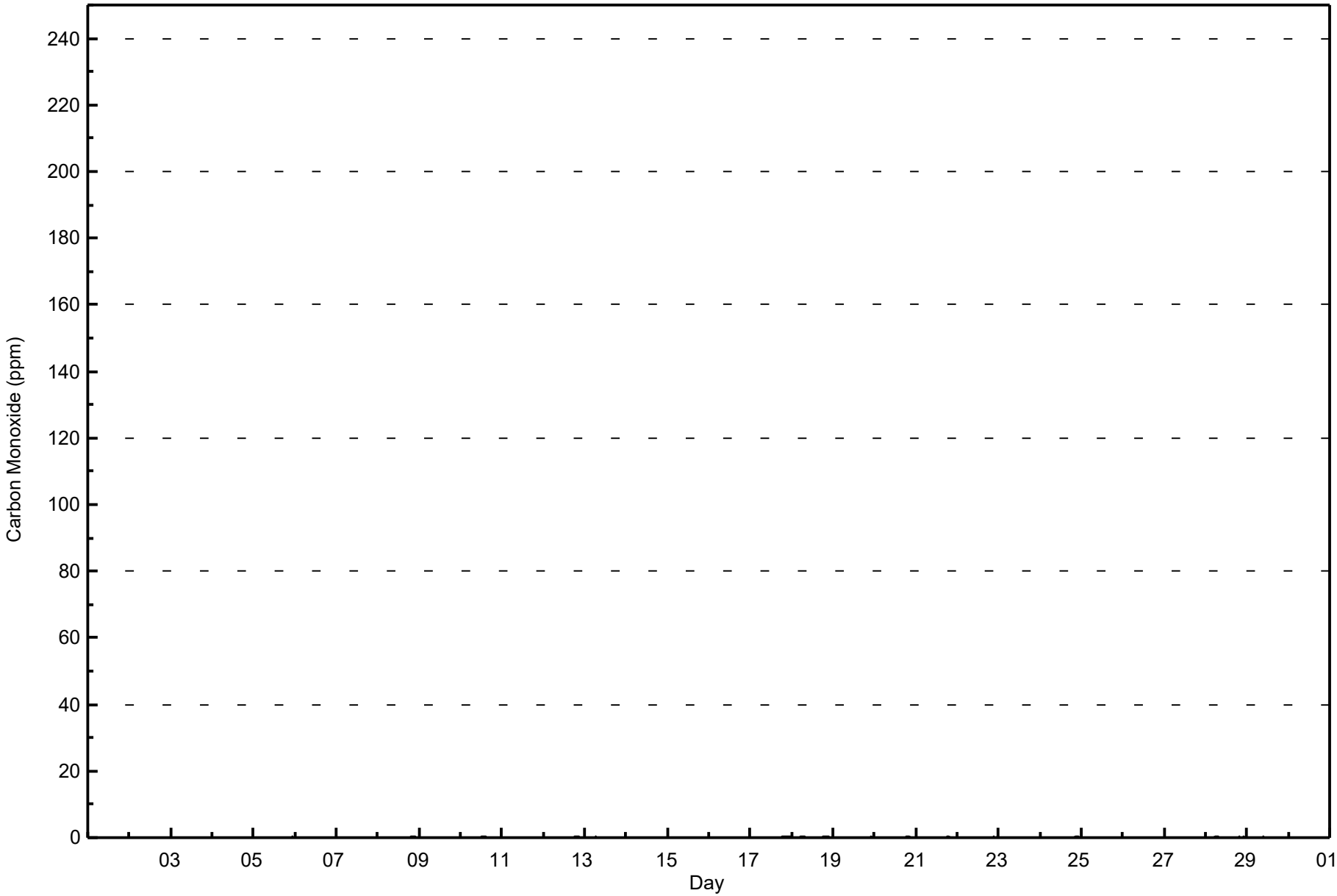
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm

Wood Buffalo Environmental Association

Hourly Averages

Carbon Monoxide (CO) - ppm

Athabasca Valley - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.3	685	100.00	100.00
0.4 - 0.5	0	0.00	100.00
0.6 - 0.7	0	0.00	100.00
0.8 - 1.4	0	0.00	100.00
1.5 - 10	0	0.00	100.00
> 10	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

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	9	7	9	22	46	144	77	37	21	32	40	57	54	39	65	25	684
0.4 - 0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.6 - 0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.8 - 1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	9	7	9	22	46	144	77	37	21	32	40	57	54	39	65	25	684

Total Number of Valid Hours: 684

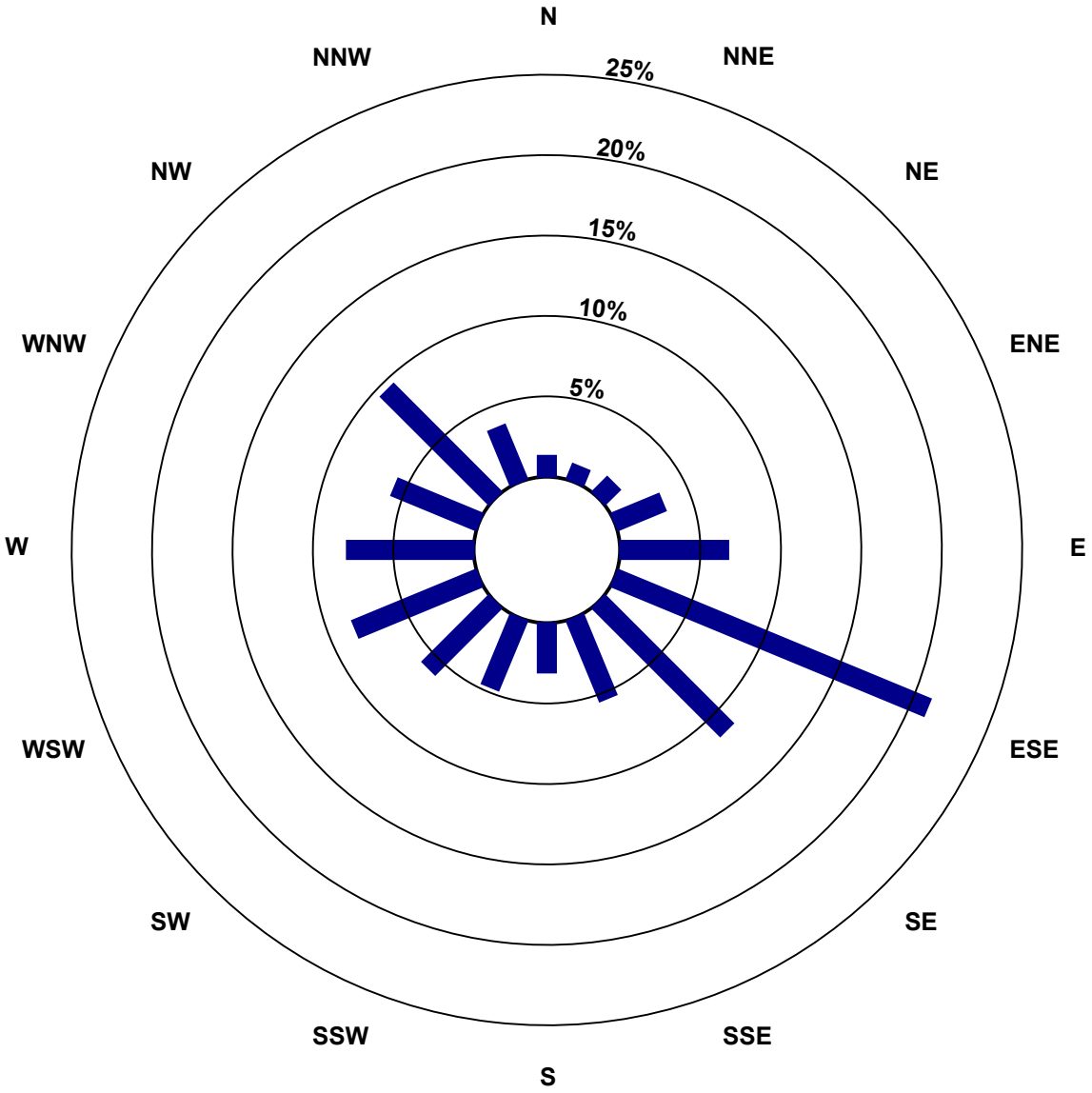
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Carbon Monoxide (CO) - ppm

Athabasca Valley



Classes (ppm)

0 - 0.3

0.4 - 0.5

0.6 - 0.7

0.8 - 1.4

1.5 - 10

> 10

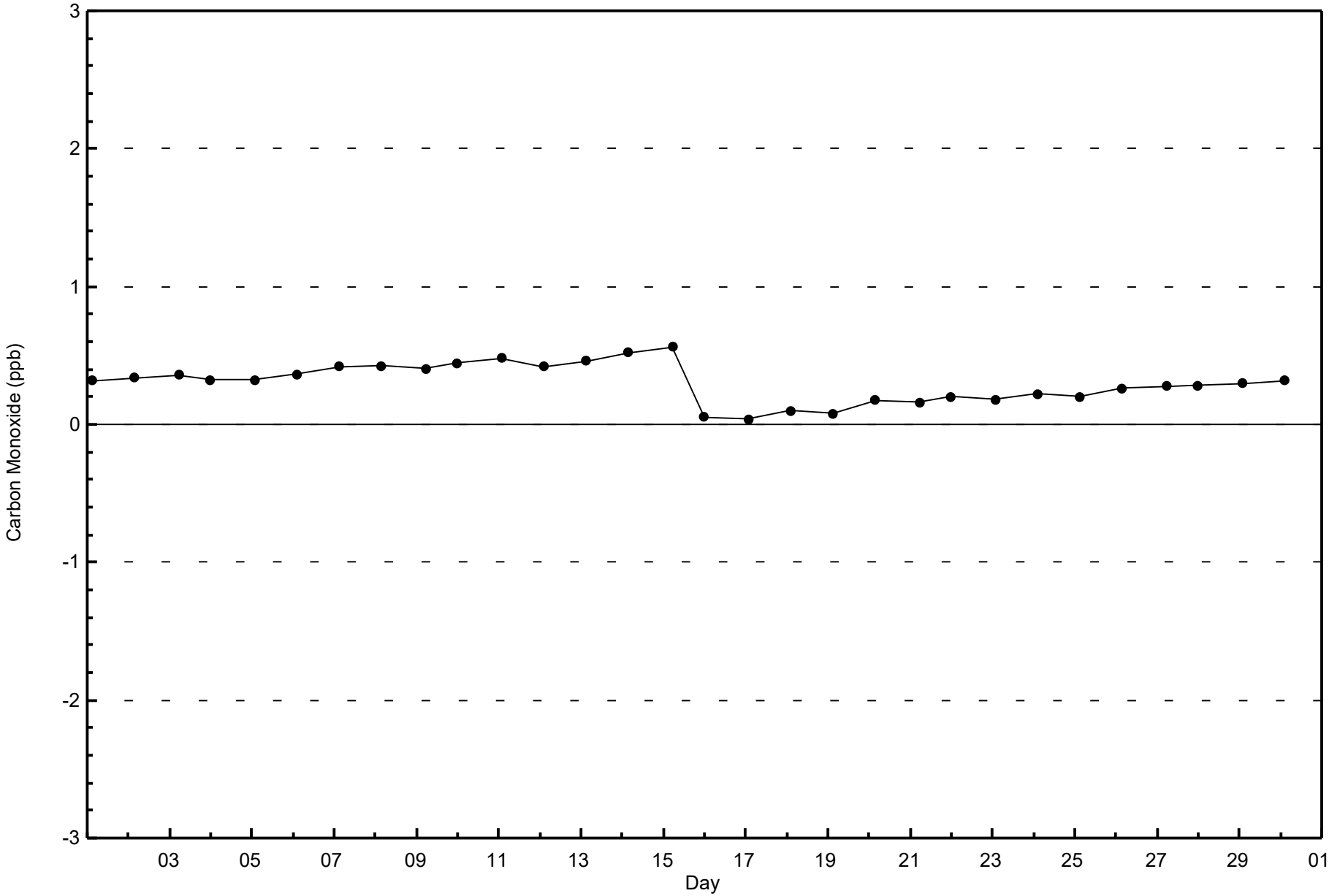
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Carbon Monoxide (CO) - ppb

Athabasca Valley - September 2026

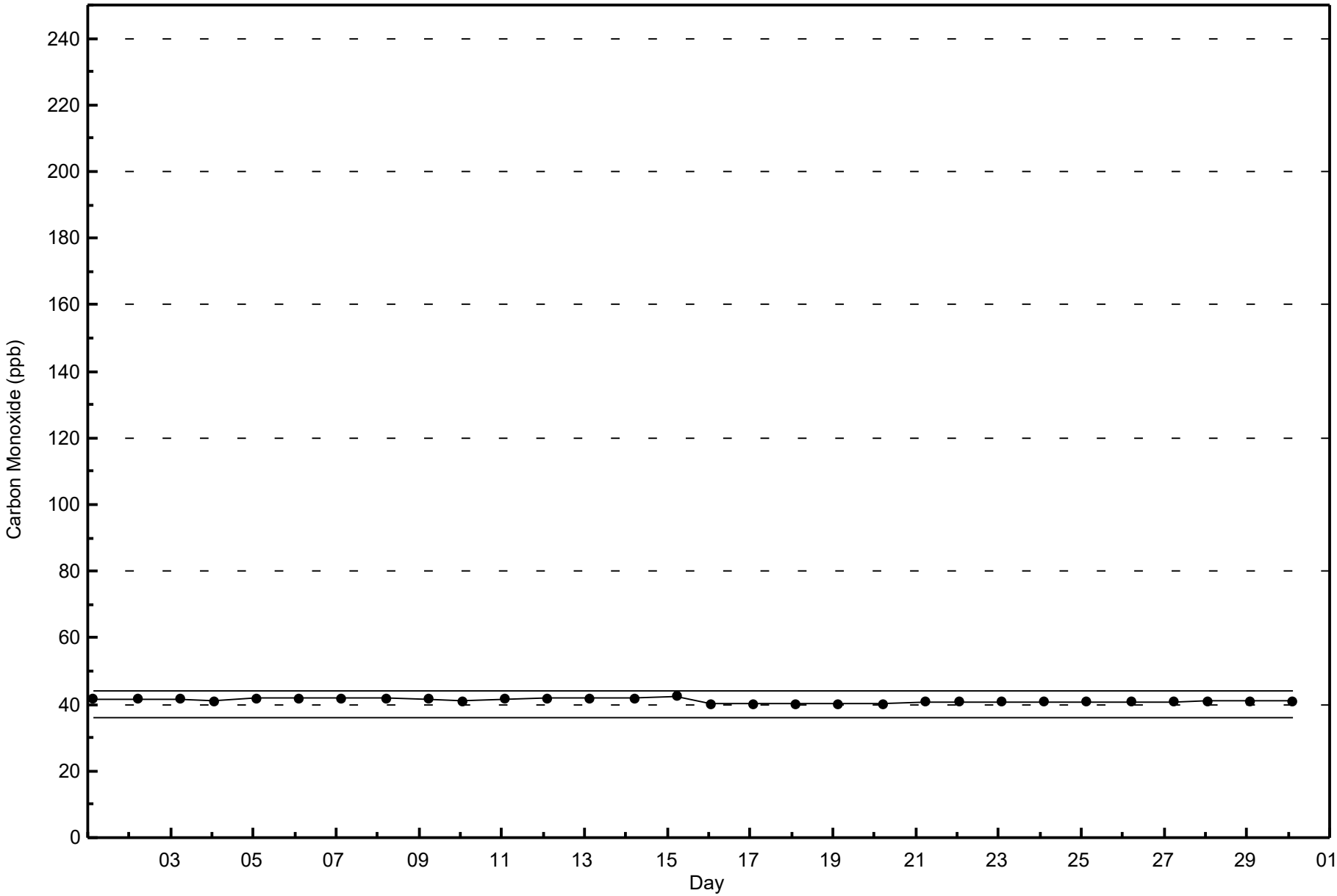


Wood Buffalo Environmental Association

Span Responses

Carbon Monoxide (CO) - ppb

Athabasca Valley - September 2026



Maximum Value: 28.7 C on Sep 2 16:00

Maximum Daily Average: 21.2 C on Sep 2

Minimum Value: 2.3 C on Sep 23 07:00

Minimum Daily Average: 6.4 C on Sep 30

Maximum Diurnal Average: 18.3 C at hour 16

Minimum Diurnal Average: 8.1 C at hour 7

Monthly Average: 12.83 C

Percentiles: P_1 = 3.8 P_{10} = 6.5 Q_1 = 8.6 Median = 12.0 Q_3 = 16.3 P_{90} = 19.9 P_{99} = 26.9

Hours in Service:	720
Hours of Data:	719
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-Sep	11.9	11.1	10.7	9.7	9.0	8.4	8.2	9.6	12.8	16.2	18.7	22.2	25.4	26.4	26.7	26.9	27.0	26.6	25.3	23.0	20.8	19.2	18.2	17.1	18.0	27.0
2-Sep	16.2	15.5	15.2	15.1	14.7	14.3	15.0	17.2	19.2	21.5	23.9	25.7	26.9	28.0	28.5	28.7	28.0	26.8	25.1	23.3	21.6	20.3	19.4	17.9	21.2	28.7
3-Sep	16.7	16.0	16.0	15.5	15.3	15.2	15.8	16.9	18.1	19.2	19.3	19.4	19.5	19.4	19.2	19.4	19.6	19.8	19.8	19.0	18.5	18.7	18.0	17.4	18.0	19.8
4-Sep	17.0	16.4	16.6	16.4	16.3	16.2	16.3	16.7	18.3	18.6	19.6	18.3	17.4	16.9	15.7	14.7	13.7	13.1	12.9	12.2	11.9	11.6	11.6	12.0	15.4	19.6
5-Sep	11.9	11.8	11.5	11.1	10.7	9.8	9.0	9.1	10.0	11.2	12.6	13.5	14.3	15.3	16.1	16.8	17.2	17.0	15.9	13.8	11.3	10.2	9.2	8.6	12.4	17.2
6-Sep	7.8	7.0	6.2	6.1	5.6	5.6	5.3	5.8	7.6	10.2	12.7	15.1	15.9	17.3	19.3	19.8	19.0	18.4	17.8	16.3	14.9	14.0	13.7	13.1	12.3	19.8
7-Sep	12.5	11.7	11.1	10.4	10.0	9.6	9.8	10.0	11.6	12.8	14.5	16.1	16.7	18.0	18.9	19.0	19.2	19.6	18.4	16.4	14.6	13.3	12.3	11.4	14.1	19.6
8-Sep	10.6	10.3	9.5	9.1	8.9	8.7	8.6	8.9	10.2	13.0	15.9	18.2	19.8	21.0	21.6	22.1	22.3	22.1	20.2	17.1	14.8	13.9	13.5	12.3	14.7	22.3
9-Sep	11.2	10.5	10.2	9.5	9.0	8.5	8.4	9.0	10.5	13.5	18.4	20.3	21.4	22.7	23.0	22.5	21.8	21.3	20.8	19.3	18.2	17.7	17.2	16.1	15.9	23.0
10-Sep	14.6	14.4	14.4	13.6	12.9	12.4	12.0	12.4	13.7	14.8	15.4	15.1	13.7	14.1	15.6	15.8	15.4	13.8	13.4	13.3	13.4	13.1	12.7	12.6	13.9	15.8
11-Sep	12.3	12.2	11.9	12.0	12.1	11.9	11.8	11.6	11.7	11.9	12.4	12.0	12.8	13.1	13.0	12.8	12.5	12.2	12.2	11.5	10.8	10.3	9.7	9.4	11.8	13.1
12-Sep	9.2	8.8	8.4	7.9	7.5	7.1	7.0	7.2	8.2	9.8	10.9	11.5	11.9	13.0	14.0	14.6	15.3	15.4	13.7	11.8	10.4	9.6	9.0	9.2	10.5	15.4
13-Sep	9.3	9.0	8.6	8.6	8.8	7.3	6.0	7.8	10.9	13.2	15.9	18.5	19.5	20.5	20.4	20.2	21.3	20.1	18.4	15.0	13.8	13.3	12.9	12.4	13.8	21.3
14-Sep	12.2	12.0	11.7	11.3	11.2	11.2	10.8	10.8	11.0	11.3	12.1	12.0	11.8	12.6	12.2	11.3	11.1	11.0	10.8	10.0	9.6	9.4	9.0	7.9	11.0	12.6
15-Sep	7.1	6.3	6.4	6.2	5.6	4.7	3.9	4.9	6.3	8.6	10.5	11.9	13.0	13.3	13.4	11.6	10.3	11.0	10.2	9.0	8.5	8.0	6.8	6.3	8.5	13.4
16-Sep	5.9	6.2	5.9	6.1	5.7	4.7	4.0	4.5	5.3	6.1	6.8	8.1	9.9	11.3	13.0	13.9	13.6	12.9	11.8	11.5	10.4	9.1	8.2	7.9	8.5	13.9
17-Sep	7.7	7.7	7.3	6.6	6.4	6.5	6.1	7.2	8.9	11.2	13.0	14.4	15.3	16.7	18.4	19.0	18.3	17.1	15.9	13.5	11.5	10.1	9.3	8.7	11.5	19.0
18-Sep	8.1	7.3	7.1	7.7	7.3	7.0	7.0	9.0	10.5	12.5	14.3	16.0	17.5	18.5	19.6	20.5	20.4	19.0	16.0	13.8	12.0	11.2	10.1	8.7	12.5	20.5
19-Sep	7.6	6.6	5.7	4.6	3.7	4.1	4.2	5.3	7.8	11.1	15.5	21.5	23.9	24.7	25.4	25.7	25.8	24.4	22.6	20.1	17.7	15.6	15.7	15.0	14.8	25.8
20-Sep	14.3	13.7	13.6	12.8	12.0	10.8	10.4	11.4	13.4	16.6	19.3	22.4	24.2	25.2	26.0	26.4	25.3	23.7	18.8	16.2	15.3	17.1	16.1	14.5	17.5	26.4
21-Sep	13.4	12.4	11.4	10.5	9.8	9.5	9.2	10.1	11.3	13.1	15.6	19.8	22.3	25.7	M	27.2	26.5	25.1	21.1	18.0	18.7	17.6	17.0	15.1	16.5	27.2
22-Sep	13.3	11.8	10.8	10.0	9.3	9.0	8.8	9.3	10.5	12.5	14.6	18.2	20.0	20.7	21.2	20.9	20.5	19.9	17.4	13.5	11.3	10.3	9.2	7.7	13.8	21.2
23-Sep	7.0	5.8	4.7	3.8	2.9	2.6	2.3	2.8	3.8	6.3	8.3	10.4	12.7	15.9	18.2	18.1	18.2	17.0	15.0	14.0	13.8	12.5	11.0	9.5	9.9	18.2
24-Sep	8.3	7.6	6.0	4.7	4.2	4.7	4.6	5.3	7.8	10.4	12.8	15.2	17.8	18.7	19.1	19.3	18.6	17.4	14.7	11.2	9.8	8.4	7.9	7.4	10.9	19.3
25-Sep	6.8	6.4	6.1	6.2	6.5	7.3	8.2	7.9	8.5	11.4	12.8	14.2	15.6	15.7	17.3	17.0	16.5	15.9	14.4	12.8	12.0	11.0	10.9	11.0	11.4	17.3
26-Sep	10.7	10.2	9.2	9.3	9.1	8.9	8.6	7.7	7.1	7.3	7.8	7.9	8.7	9.5	9.8	9.9	9.2	8.5	8.3	8.2	8.5	8.4	8.0	7.6	8.7	10.7
27-Sep	7.3	7.1	6.9	6.1	5.6	5.1	4.9	5.9	7.4	9.5	11.3	13.1	14.5	15.5	16.1	15.8	15.3	14.8	12.8	11.3	9.5	7.9	7.8	7.6	10.0	16.1
28-Sep	7.3	7.2	6.7	6.5	5.7	5.3	5.2	6.0	7.5	8.2	13.9	16.8	17.9	18.6	18.1	18.0	19.1	18.2	16.1	13.5	12.8	11.3	10.8	9.4	11.7	19.1
29-Sep	8.3	7.2	7.2	7.0	7.2	7.5	7.0	7.0	7.6	9.2	11.0	12.0	11.7	12.2	13.3	13.8	13.8	12.8	11.4	10.4	9.5	9.3	8.5	8.2	9.7	13.8
30-Sep	8.1	7.9	7.8	7.1	6.0	5.4	4.6	4.6	4.5	5.5	6.5	7.1	7.6	7.6	7.6	7.8	8.5	8.3	7.6	6.8	5.5	4.7	3.5	2.4	6.4	8.5
	10.5	9.9	9.5	9.0	8.6	8.3	8.1	8.7	10.1	11.9	13.9	15.6	16.7	17.6	18.0	18.3	18.1	17.4	16.0	14.2	13.0	12.2	11.6	10.8	Diurnal Average	
	17.0	16.4	16.6	16.4	16.3	16.2	16.3	17.2	19.2	21.5	23.9	25.7	26.9	28.0	28.5	28.7	28.0	26.8	25.3	23.3	21.6	20.3	19.4	17.9	Diurnal Maximum	

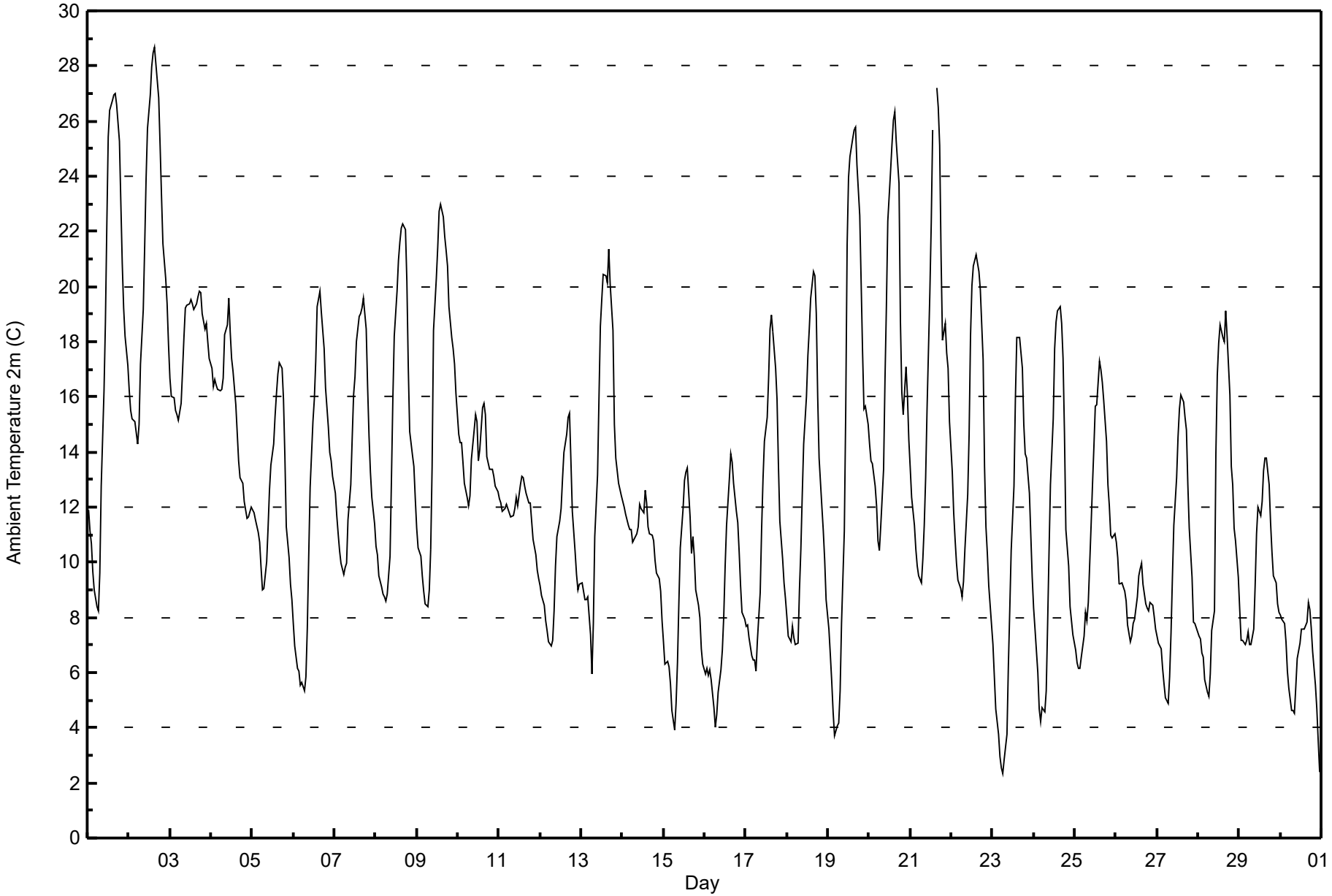
M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Athabasca Valley - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	250	34.77	34.77
10 - 20	398	55.35	90.13
> 20	71	9.87	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Barometric Pressure (BP) - inHg

Athabasca Valley - September 2026

Maximum Value: 29.3 inHg on Sep 5 12:00

Maximum Daily Average: 29.3 inHg on Sep 5

Minimum Value: 26.2 inHg on Sep 22 08:00

Minimum Daily Average: 28.5 inHg on Sep 29

Maximum Diurnal Average: 29.0 inHg at hour 10

Minimum Diurnal Average: 28.9 inHg at hour 8

Monthly Average: 28.95 inHg

Percentiles: P_1 = 28.5 P_{10} = 28.6 Q_1 = 28.8 Median = 29.0 Q_3 = 29.1 P_{90} = 29.2 P_{99} = 29.3

Hours in Service:	720
Hours of Data:	719
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-Sep	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
2-Sep	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	28.8	28.9
3-Sep	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	28.7	28.7	28.8	28.8	28.7	28.7	28.8	28.7	28.7	28.7	28.8	28.8
4-Sep	28.7	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	29.0	29.0	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	28.9	29.2
5-Sep	29.2	29.2	29.2	29.2	29.2	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	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
6-Sep	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	29.2	29.2	29.3
7-Sep	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	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.2
8-Sep	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	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	28.9	28.9	29.0	29.1
9-Sep	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	28.7	28.7	28.7	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.7	28.9
10-Sep	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	28.6	28.6	28.7	28.7	28.7	28.7	28.7	28.6	28.7
11-Sep	28.8	28.8	28.8	28.8	28.8	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	29.2	29.2	29.2	29.2	29.0	29.2
12-Sep	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	29.0	29.0	29.0	29.1	29.2
13-Sep	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	28.9	28.9	28.8	28.8	28.8	28.8	28.8	28.8	28.9	28.9	28.9	29.0
14-Sep	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	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1	29.1	29.0	29.1
15-Sep	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	29.2	29.2	29.2	29.2	29.2	29.2
16-Sep	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.3	29.3	29.3	29.3	29.3	29.3	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.2	29.3
17-Sep	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	29.1	29.1	29.1	29.1	29.1	29.1	29.1
18-Sep	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	29.2	29.2
19-Sep	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	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.2
20-Sep	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	29.0	28.9	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1
21-Sep	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	28.8	M	28.5	28.8	28.7	28.8	28.8	28.8	28.8	28.8	28.8	28.9	29.0
22-Sep	28.8	28.8	28.8	28.8	28.8	28.8	28.8	26.2	28.6	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	28.8	29.0
23-Sep	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	29.0	29.0	29.1	29.0	29.1	29.1	29.1
24-Sep	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
25-Sep	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	28.9	28.9	28.9	28.8	28.8	28.8	28.8	28.8	28.7	28.7	28.7	28.6	28.6	28.6	28.6	28.9	29.1
26-Sep	28.6	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	28.7	28.8	28.8	28.8	28.8	28.8	28.8	28.9	28.7	28.9
27-Sep	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	28.8	28.8	28.8	28.8	28.8	28.8	28.9	28.9
28-Sep	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	28.7	28.6	28.6	28.6	28.6	28.6	28.6	28.5	28.5	28.7	28.8
29-Sep	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.4	28.4	28.4	28.4	28.4	28.4	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.6	28.6	28.6	28.5	28.6
30-Sep	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	29.0	29.0	29.1	29.1	29.1	29.1	29.1	28.9	29.1
	28.9	29.0	29.0	29.0	29.0	29.0	29.0	28.9	29.0	29.0	29.0	29.0	29.0	28.9	28.9	28.9	28.9	28.9	28.9	28.9	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	29.3	29.3	29.3	29.3	29.3	29.3	29.3	Diurnal Maximum	

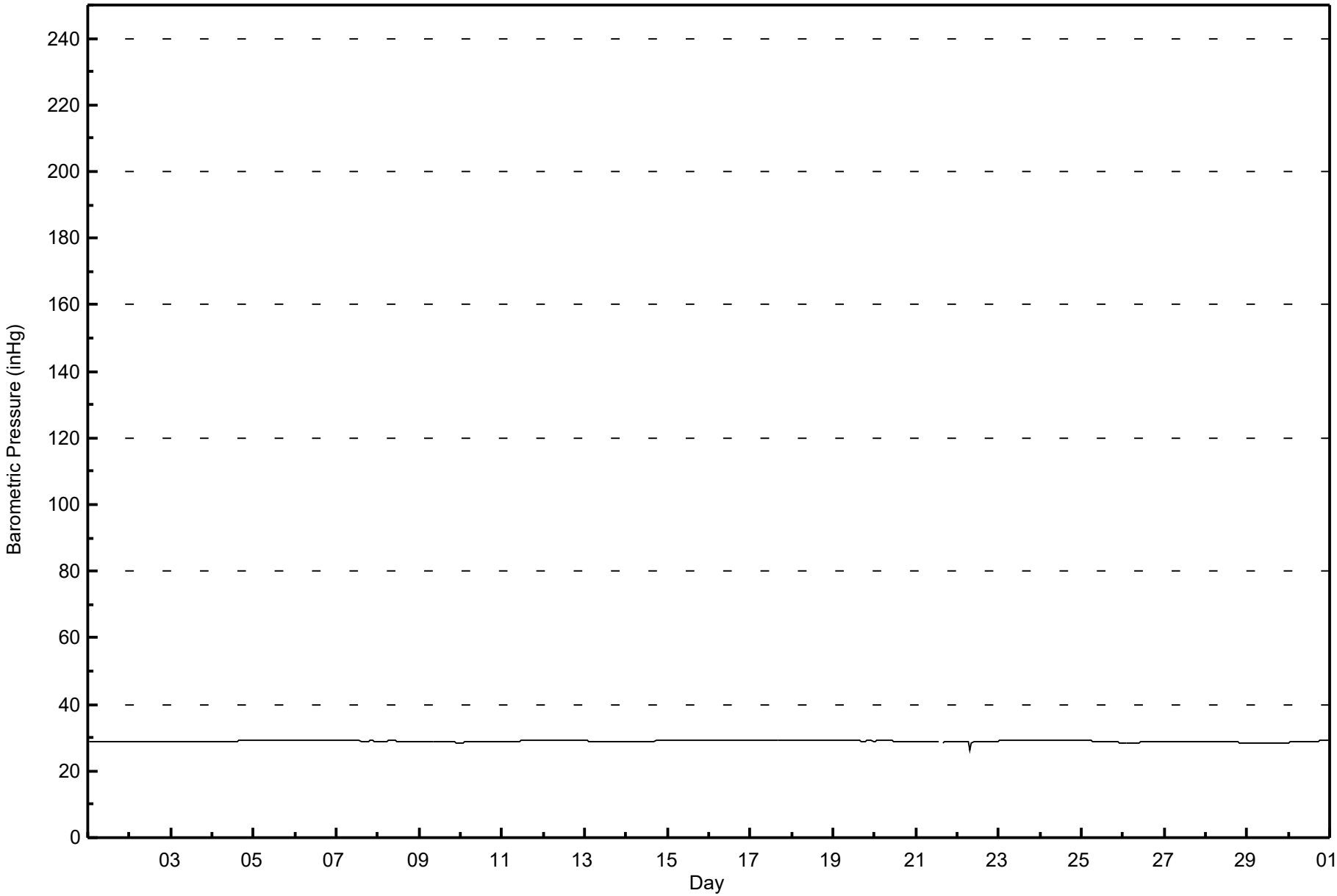
M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Barometric Pressure (BP) - inHg

Athabasca Valley - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Athabasca Valley - September 2026

Maximum Value: 100.0 % on Sep 17 23:00

Maximum Daily Average: 85.0 % on Sep 4

Minimum Value: 24.8 % on Sep 24 16:00

Minimum Daily Average: 58.2 % on Sep 28

Maximum Diurnal Average: 88.1 % at hour 7

Minimum Diurnal Average: 48.5 % at hour 16

Monthly Average: 70.88 %

Percentiles: P_1 = 28.7 P_{10} = 43.0 Q_1 = 59.6 Median = 75.4 Q_3 = 84.2 P_{90} = 91.7 P_{99} = 97.2

Hours in Service:	720
Hours of Data:	710
Hours of Missing Data:	10
Hours of Calibration:	0
Percent Operational Time:	98.6

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-Sep	85.9	87.1	88.3	90.7	92.7	94.6	95.9	90.1	77.9	68.3	64.3	55.2	38.3	33.8	33.8	32.8	33.3	33.6	35.7	43.4	54.3	59.6	62.1	66.3	63.3	95.9
2-Sep	70.3	75.0	79.1	80.9	83.1	85.4	82.5	73.2	65.2	56.8	48.8	41.2	37.2	35.3	34.5	35.1	38.7	43.1	46.9	53.2	58.9	62.4	65.8	73.8	59.4	85.4
3-Sep	82.4	82.4	82.2	84.7	87.1	89.5	88.4	83.8	79.7	76.9	76.3	76.3	76.7	78.0	80.6	80.1	78.8	76.5	75.7	79.1	81.5	80.2	83.9	87.1	81.2	89.5
4-Sep	89.0	92.7	91.0	91.7	92.9	93.6	93.0	92.3	84.4	83.7	80.5	82.1	80.1	76.2	77.2	76.3	79.5	82.1	76.9	87.6	87.3	87.7	85.0	78.1	85.0	93.6
5-Sep	76.1	76.4	77.0	77.8	79.6	81.3	83.6	82.2	79.7	73.9	62.5	56.7	53.7	50.7	48.5	45.3	43.9	45.0	53.6	65.7	83.2	86.6	87.9	82.1	68.9	87.9
6-Sep	85.9	88.2	91.8	91.9	95.0	92.9	94.8	94.1	88.8	82.2	76.9	66.2	64.5	61.7	53.6	51.6	55.2	58.3	62.6	71.3	78.6	84.1	84.1	86.1	77.5	95.0
7-Sep	87.6	89.8	92.2	94.3	95.2	95.4	95.1	93.0	88.1	83.6	78.2	70.2	69.0	64.8	60.1	58.9	61.4	61.7	66.9	77.1	87.9	92.5	94.5	98.2	81.5	98.2
8-Sep	OR	OR	OR	OR	OR	OR	OR	OR	OR	93.6	77.4	66.1	55.9	47.9	44.6	43.9	44.2	45.4	55.1	74.9	84.5	79.8	78.0	81.9	--	93.6
9-Sep	86.5	89.4	90.2	91.7	92.2	92.6	92.1	90.4	87.6	79.8	61.2	54.9	49.6	42.0	41.4	42.9	46.9	48.5	50.6	58.3	62.6	66.0	71.9	73.9	69.3	92.6
10-Sep	76.0	77.2	80.1	83.3	81.9	83.1	81.9	79.5	74.0	68.9	66.6	69.6	83.4	84.2	73.9	69.9	72.9	82.4	85.2	84.9	81.7	80.3	80.7	79.9	78.4	85.2
11-Sep	80.1	79.0	80.8	78.0	73.1	72.8	72.7	71.8	71.3	70.3	67.7	68.1	62.9	61.8	60.0	58.4	56.6	58.3	56.0	60.9	66.3	70.6	73.2	74.8	68.6	80.8
12-Sep	75.2	75.8	76.9	78.0	81.2	85.1	84.5	83.2	79.0	69.5	60.9	53.1	50.1	44.3	42.4	39.9	39.2	40.3	50.5	58.1	66.3	68.0	70.9	69.9	64.3	85.1
13-Sep	71.6	73.1	72.9	71.4	69.7	78.3	86.8	78.1	63.9	56.3	48.5	41.1	35.6	34.6	35.6	38.4	37.2	41.7	48.4	73.0	73.4	75.5	78.8	84.2	61.2	86.8
14-Sep	88.4	92.5	91.4	86.5	87.7	86.9	91.7	89.9	87.4	85.2	76.7	76.1	80.5	71.0	71.4	77.5	78.7	77.4	79.1	84.7	86.0	86.1	87.5	86.1	83.6	92.5
15-Sep	86.7	88.7	86.8	88.8	90.0	92.5	92.3	89.9	84.0	75.9	68.7	57.4	44.7	46.0	48.0	59.1	75.1	68.6	72.8	84.4	88.4	84.8	88.0	88.6	77.1	92.5
16-Sep	90.0	89.8	91.2	92.5	91.7	93.6	97.2	95.2	92.4	85.0	82.3	76.9	69.9	64.3	55.4	48.5	49.5	58.4	61.3	59.7	65.0	72.1	77.0	77.4	76.5	97.2
17-Sep	78.6	76.7	77.5	80.0	81.2	82.1	86.2	82.9	75.7	69.0	63.6	60.9	60.3	58.6	53.8	53.4	58.4	69.2	77.3	89.8	95.7	98.8	100.0	99.6	76.2	100.0
18-Sep	98.4	96.2	93.0	94.2	95.0	96.4	95.8	88.8	82.5	75.9	71.2	64.2	58.5	54.4	48.4	42.9	42.6	53.3	68.5	79.3	85.5	82.1	82.7	87.6	76.6	98.4
19-Sep	91.1	92.8	93.3	94.4	95.9	96.0	94.9	90.7	82.7	71.7	59.9	39.7	29.0	30.3	31.5	32.8	34.6	39.2	45.7	54.6	65.5	76.3	72.5	75.2	66.3	96.0
20-Sep	79.5	80.6	80.0	84.6	84.8	90.0	88.9	83.8	75.1	64.7	56.9	41.5	32.7	28.1	25.6	25.0	28.6	34.0	61.2	72.3	74.3	58.9	63.5	70.5	61.9	90.0
21-Sep	75.5	81.2	86.3	88.9	90.4	91.2	91.9	87.1	83.6	78.6	70.9	57.6	51.3	41.8	M	33.1	33.7	38.2	55.0	67.2	57.0	61.2	64.7	74.1	67.8	91.9
22-Sep	82.6	91.0	93.4	93.4	93.9	94.4	97.9	99.0	92.2	81.4	73.3	54.9	41.7	38.9	38.1	33.2	35.1	36.8	44.7	67.7	79.2	75.9	80.0	77.9	70.7	99.0
23-Sep	77.2	81.1	86.0	87.2	90.0	91.1	92.1	90.4	90.0	80.8	75.6	68.1	65.5	56.1	47.8	46.9	47.2	52.9	61.3	66.2	69.1	75.4	81.2	88.6	73.7	92.1
24-Sep	89.7	90.2	91.6	92.1	90.5	85.8	85.5	82.1	73.9	61.6	50.9	44.7	35.0	28.4	27.1	24.8	26.4	31.7	45.9	69.5	69.7	70.9	69.2	70.8	62.8	92.1
25-Sep	74.9	78.2	78.8	79.7	79.5	81.2	70.2	75.3	81.2	65.5	58.1	54.5	49.4	51.0	47.7	49.3	50.4	54.1	63.7	73.1	77.0	80.0	79.0	77.4	67.9	81.2
26-Sep	79.1	83.5	92.2	92.2	92.6	92.9	88.6	85.3	81.7	76.4	72.1	68.0	65.9	63.7	62.7	61.9	64.5	67.5	66.1	66.5	65.9	67.0	68.6	72.3	74.9	92.9
27-Sep	72.6	72.3	73.9	76.4	78.0	78.8	79.5	76.1	70.2	62.5	57.4	51.7	45.1	41.3	38.7	38.8	40.2	43.0	51.7	59.0	68.4	77.6	73.6	72.9	62.5	79.5
28-Sep	74.6	74.6	75.4	76.0	78.5	80.2	80.7	76.6	71.7	69.2	51.1	41.7	38.7	36.6	37.3	37.6	33.3	34.5	40.0	50.3	52.6	60.2	60.9	64.9	58.2	80.7
29-Sep	70.0	75.9	75.6	75.0	76.7	79.5	86.2	90.1	93.3	92.5	85.7	78.3	77.6	67.8	54.2	46.9	43.1	48.2	53.7	59.5	58.1	57.7	60.8	64.0	69.6	93.3
30-Sep	65.3	65.8	66.7	74.7	79.8	79.5	83.0	83.3	84.5	79.1	72.9	68.8	67.8	71.1	71.3	68.1	64.3	63.8	66.9	72.9	78.8	80.2	86.1	92.7	74.5	92.7
	80.7	82.7	84.0	85.2	86.2	87.5	88.1	85.5	80.7	74.6	67.2	60.2	55.7	52.2	49.8	48.5	49.8	52.9	59.3	68.8	73.4	75.3	77.1	79.2	Diurnal Average	
	98.4	96.2	93.4	94.4	95.9	96.4	97.9	99.0	93.3	93.6	85.7	82.1	83.4	84.2	80.6	80.1	79.5	82.4	85.2	89.8	95.7	98.8	100.0	99.6	Diurnal Maximum	

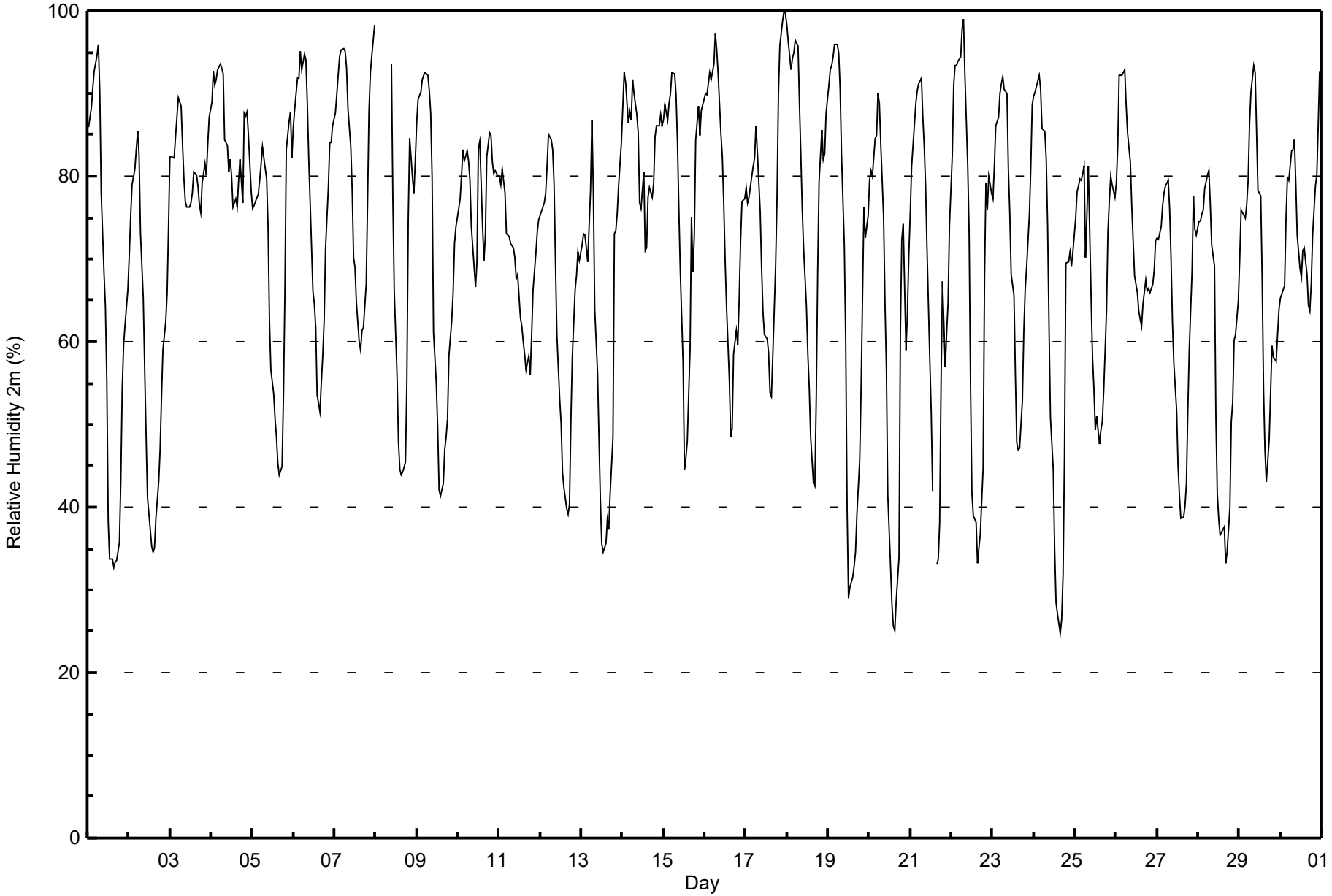
M - Maintenance OR - Out of Range

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Athabasca Valley - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Athabasca Valley - September 2026

Maximum Speed: 37 km/h on Sep 26 12:00

Maximum Daily Speed Average: 23.2 km/h on Sep 26

Minimum Speed Value: 0 km/h on Sep 7 23:00

Minimum Daily Speed Average: 0.9 km/h on Sep 8

Maximum Diurnal Speed Average: 6.3 km/h at hour 15

Minimum Diurnal Speed Average: 1.3 km/h at hour 5

Monthly Average Velocity: 2.7 km/h 251.1 deg

Percentiles: P_1 = 1 P_{10} = 3 Q_1 = 5 Median = 8 Q_3 = 16 P_{90} = 22 P_{99} = 31

Hours in Service: 720

Hours of Data: 718

Hours of Missing Data: 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-Sep	ESE7	ESE9	ESE7	ESE9	ESE9	ESE8	ESE10	ESE8	ESE8	SE6	NE3	ENE6	E15	ESE17	ESE18	ESE19	ESE19	ESE14	ESE12	ESE9	ESE9	ESE10	SE7	ESE7	ESE10.1	ESE19
2-Sep	ESE8	E7	E7	E7	ESE8	ESE8	ESE6	ESE10	ESE15	ESE18	ESE19	ESE19	ESE22	ESE19	ESE21	ESE20	E17	E13	ESE11	ESE13	ESE9	SE9	SE7	SE2	ESE12.2	ESE22
3-Sep	E3	ENE4	SE2	S5	SSE5	ESE4	E5	SSE7	ESE6	ENE8	E15	E18	E16	E17	E17	E14	E12	E9	ENE9	E4	SE3	ESE5	ESE4	ESE6	E7.7	E18
4-Sep	SE2	ESE5	SE7	ENE2	NE3	ESE2	E4	ENE4	WSW1	W4	NNW16	NW23	NW27	NNW25	NNW25	NNW23	NNW22	NNW21	N16	NW18	NW19	NW20	NW16	NNW15	NNW11.3	NW27
5-Sep	NNW10	NW15	NW16	NW16	NW15	NW12	NW15	NW15	NW14	NW11	NW11	NW11	NW9	WNW7	NW9	WNW6	W4	SW5	WSW4	WNW4	SSW4	S3	ENE2	ESE5	NW7.9	NW16
6-Sep	ESE6	ESE6	SE5	ESE7	SE9	ESE8	ESE9	SE8	SE7	E4	NE2	ESE12	E14	E11	ESE12	SE12	SE10	SE9	ESE7	ESE6	ESE8	ESE11	ESE9	ESE7	ESE8.2	E14
7-Sep	ESE6	SE5	ESE7	ENE3	ESE5	NNE2	ESE5	SE7	ESE4	ESE8	ESE9	ESE11	ESE11	ENE7	NNW5	NW8	NW8	NW5	ESE8	ESE5	ENE2	SE3	E0	S3	ESE3.3	ESE11
8-Sep	SSE3	S3	ESE5	E4	ENE4	ESE1	SSW4	SSE2	ENE4	NW5	NNW7	NW8	NNW8	N10	N8	NNW3	WSW4	S5	SSE3	SE2	ESE2	SE3	ESE7	ESE8	NE0.9	N10
9-Sep	ESE9	ESE11	ESE12	ESE13	ESE11	ESE13	ESE12	ESE12	ESE11	ESE7	SSW13	SW11	SSW15	SSW21	SW22	SW20	SW12	SW16	SW21	SSW7	SSE7	SSW8	SW15	SW19	S8.9	SSW22
10-Sep	SW19	SW21	WSW22	WSW16	SW17	WSW15	SW17	SW10	WSW21	WSW22	W25	W24	WSW13	WSW12	W26	W28	WNW23	WNW19	W24	W24	W25	W23	W26	W28	WSW20.0	W28
11-Sep	W27	W28	W27	W24	WNW29	WNW27	WNW26	NW27	NW27	NW26	NW26	NW26	NW26	NW26	WNW31	NW31	NW24	WNW17	WNW19	NW16	WNW16	W17	W14	W15	WNW22.9	NW31
12-Sep	W19	W17	W14	WNW4	SSW6	SSW6	SW8	SSW6	S3	NE1	SSW5	WSW12	W12	W10	WNW8	WSW14	WSW12	SW9	S6	SSE4	SE4	SSE3	ENE2	SSE3	WSW6.2	W19
13-Sep	SE4	ESE4	SSE6	S9	SE5	E8	E8	ESE7	S11	SSW16	SSW12	SW10	SW17	SSW16	SW15	SW5	SSW2	SE4	S5	NW9	NW21	NW19	NW14	NW15	SW3.8	NW21
14-Sep	NW13	NW17	NNW17	NNW15	NW17	NW19	NW17	NW16	NNW15	NW17	NNW16	NW17	NW15	NW17	NW17	NW20	NW17	NW14	WNW13	WNW15	W11	NW9	W6	NW6	NW14.5	NW20
15-Sep	WSW4	SW6	SSW6	SW4	SW7	SSW4	S5	SSW8	SSE5	S8	SSW11	SSW14	SSW14	SSW15	SSW14	N3	ENE3	SW8	WSW11	SW7	WNW5	WSW7	SSW1	WSW5	SW6.2	SSW15
16-Sep	W6	WNW6	SW6	W6	WNW6	SSW5	SSE3	SE2	S2	S5	E5	N3	NNE5	NW4	ENE3	SSE1	ENE2	ENE6	E7	E8	ESE10	ESE10	ESE8	ESE7	ESE1.6	ESE10
17-Sep	ESE10	ESE9	SE9	ESE11	ESE13	ESE12	E5	ESE8	SE10	ESE8	SSW5	SW5	SSW6	SSW4	ENE1	SSE3	NNE1	NNW3	SSW2	SSE1	ENE2	E3	E3	E3	ESE4.3	ESE13
18-Sep	E3	SE4	ESE6	ESE5	ESE5	E5	E3	N1	W3	NNW5	NW5	NE4	WNW1	WNW5	WNW5	NNE3	E4	E1	ESE1	E2	ESE4	ESE6	ESE9	SSE4	E1.7	ESE9
19-Sep	E2	SSE4	SSE5	SSE6	SSE6	SE4	SE5	SE6	ESE8	SE8	E7	SSE6	SSE17	SSE17	SSE16	SSE18	SSE14	SSE11	SE10	SE4	ESE7	ESE6	SE6	SE8	SE7.9	SSE18
20-Sep	ESE4	SE5	ESE8	ESE5	ESE6	ESE5	ESE7	ESE6	ESE7	ESE6	NE5	SSW9	SW11	SW13	SW9	SW10	SW7	S5	SE2	SSE2	SE4	SE7	SE8	SE12	SSE4.5	SW13
21-Sep	ESE11	ESE8	ESE7	ESE8	ESE9	SE9	ESE9	ESE9	ESE10	ESE10	ESE8	ESE6	W2	ESE9	M	ESE15	SE9	SE6	SE4	SSE4	S7	S9	SE4	ESE6	SE7.1	ESE15
22-Sep	SE3	ENE1	ESE4	ESE3	SE5	ESE4	NNE3	NW10	WSW6	SW4	ENE2	NW9	NW21	WNW19	W19	W27	W22	WSW14	WSW9	S2	SE4	SE4	SSE3	ESE5	W4.7	W27
23-Sep	SE4	ESE5	ESE4	SE4	ESE5	ESE8	ESE7	ESE8	E8	C	ENE6	NW2	NW4	W1	SE10	ESE13	ESE11	ESE8	ESE5	SE4	SE7	SSE5	SSW5	S5	ESE4.8	ESE13
24-Sep	SE4	SE5	SE6	ESE5	SE5	SE8	SE9	SE8	ESE6	SSW8	SW12	SW14	SW16	WSW17	WSW14	WSW15	WSW14	WSW9	SSW3	SSE1	ESE3	SE3	SE4	SE5	SSW5.3	WSW17
25-Sep	SSE4	SE6	ESE5	ESE4	NNE2	N6	NNW10	E5	N8	NE8	NE10	ENE13	E20	NE13	E13	E20	ENE13	NNE9	N11	N13	NNW17	NNW21	NNW24	NNW23	NNE7.7	NNW24
26-Sep	NNW14	NW14	WNW13	W14	W15	WSW16	WSW20	W22	WSW22	W29	W29	W37	W35	W36	W36	W32	W32	W28	W23	W25	W29	W26	W16	WSW17	W23.2	W37
27-Sep	WSW18	WSW20	WSW17	WSW15	WSW21	WSW25	WSW22	WSW25	WSW27	WSW25	SW20	WSW21	WSW22	WSW22	WSW24	WSW22	WSW21	WSW14	SW6	S5	S3	ESE3	E2	SE3	WSW15.9	WSW27
28-Sep	SSW6	SSW7	E2	SE3	ESE4	ESE5	ESE7	SE7	SE7	SE11	SW11	SW16	WSW20	SW18	SW15	SW12	SSW13	S11	S5	SE3	SSE3	SSE5	SSE7	SE10	S6.3	WSW20
29-Sep	SE8	SE6	SE6	SE7	SE6	SE6	SE8	SE8	SE7	SSE5	WSW15	W20	W25	WNW27	WNW29	WNW26	WNW26	W33	W14	W8	WSW16	WSW17	WSW18	WSW19	WSW9.9	W33
30-Sep	WSW19	WSW17	WSW15	W15	WNW24	W23	W28	WNW26	WNW22	WNW24	NW24	NW28	NW25	WNW21	WNW24	WNW24	WNW18	NW15	NW13	WNW7	WSW7	WSW9	WSW4	SE3	WNW16.8	W28
	SW2.1	SW2.4	SSW2.2	SSW1.5	SSW1.3	SSW1.6	SW1.5	SSW1.6	SW1.4	WSW2.4	W3.4	W5.1	W5.2	W5.7	W6.3	W5.1	W4.4	W3.9	WSW2.7	W2.2	W2.4	WSW2.3	WSW1.9	SW2.1	Diurnal Average	
	W27	W28	W27	W24	WNW29	WNW27	W28	WNW27	NW27	W29	W29	W37	W35	W36	W36	W32	W32	W33	W24	W25	W29	W26	W26	W28	Diurnal Maximum	

C - Calibration M - Maintenance

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 - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10 km/h on Sep 13 20:00

Minimum Value: 1 km/h on Sep 8 04:00

Percentiles: $P_1 = 1$ $P_{10} = 1$ $Q_1 = 2$ Median = 2 $Q_3 = 4$ $P_{90} = 5$ $P_{99} = 7$

Hours in Service:	720
Hours of Data:	718
Hours of Missing Data:	2
Hours of Calibration:	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	Maximum
1-Sep	2	2	2	2	2	2	2	2	2	2	1	4	4	4	4	5	5	4	3	2	2	2	3	2	5
2-Sep	2	2	2	3	2	2	2	4	4	4	5	6	6	5	5	5	5	3	3	3	3	2	2	1	6
3-Sep	1	1	2	1	1	1	2	2	2	3	3	4	4	4	4	3	3	2	2	2	2	2	2	2	4
4-Sep	1	1	2	1	1	1	1	1	1	2	5	4	5	7	7	7	6	6	6	3	4	3	3	4	7
5-Sep	3	3	3	4	2	2	3	3	3	2	2	3	3	3	3	2	2	2	1	2	2	2	1	1	4
6-Sep	2	1	1	3	2	2	2	2	2	1	1	4	3	3	4	3	3	3	2	2	2	3	2	2	4
7-Sep	2	2	1	1	1	2	2	2	1	2	2	2	3	2	2	2	1	2	3	3	1	1	1	2	3
8-Sep	2	1	1	1	1	1	1	1	1	2	1	2	3	3	2	1	1	1	2	1	2	1	1	1	3
9-Sep	2	2	3	2	2	2	2	2	3	2	4	3	5	5	5	5	4	5	5	4	1	3	3	5	5
10-Sep	4	4	5	3	3	3	3	5	6	6	6	5	3	3	5	5	7	4	3	4	4	4	4	4	7
11-Sep	4	5	5	4	5	5	4	4	5	6	6	6	5	5	7	5	6	3	3	4	4	2	4	4	7
12-Sep	3	2	5	2	2	1	1	1	1	1	2	4	5	4	4	3	4	2	1	2	2	3	2	2	5
13-Sep	2	2	3	4	2	3	1	1	4	3	5	5	4	4	4	2	1	2	1	10	3	3	3	2	10
14-Sep	3	3	4	4	4	3	3	3	4	3	4	3	4	4	5	5	4	3	2	3	2	2	2	2	5
15-Sep	2	1	2	2	1	2	3	2	1	3	2	2	4	4	5	3	2	4	4	5	4	3	2	2	5
16-Sep	2	2	2	2	2	3	2	2	1	1	2	2	2	2	2	2	1	1	2	3	2	2	2	2	3
17-Sep	2	3	2	2	3	3	3	2	2	3	2	1	1	1	1	2	1	1	2	1	1	1	1	1	3
18-Sep	2	1	1	2	3	1	1	1	1	2	1	2	2	2	2	2	1	1	1	1	1	2	2	1	3
19-Sep	1	1	1	1	1	1	1	1	2	2	2	5	5	5	4	4	4	3	2	2	2	1	2	3	5
20-Sep	3	2	2	1	2	1	2	1	2	2	2	2	3	3	3	2	2	1	1	1	2	1	2	2	3
21-Sep	2	2	1	2	1	1	2	2	2	2	2	2	1	7	M	5	2	3	1	1	2	3	3	2	7
22-Sep	1	1	2	1	2	2	1	2	2	2	1	9	5	4	5	5	4	3	1	2	1	2	2	1	9
23-Sep	1	1	1	1	1	2	2	2	1	C	2	1	1	2	3	3	3	2	2	2	2	2	2	1	3
24-Sep	1	2	2	2	1	2	2	1	2	3	3	3	4	5	5	5	3	2	2	2	1	1	2	2	5
25-Sep	1	3	2	1	2	3	3	3	4	3	4	4	5	5	5	4	4	3	3	4	4	5	3	4	5
26-Sep	4	4	3	4	4	3	5	5	5	7	6	7	7	7	7	7	6	6	4	5	5	5	6	3	7
27-Sep	4	3	3	3	4	5	4	5	5	5	4	6	5	6	5	6	5	4	2	1	2	1	1	2	6
28-Sep	3	3	2	2	1	1	1	1	2	2	6	4	6	5	5	4	4	3	2	1	2	1	2	2	6
29-Sep	2	2	2	3	2	2	1	2	1	2	4	6	5	6	6	6	5	6	8	2	3	3	3	4	8
30-Sep	4	3	3	4	6	4	4	4	4	4	5	5	6	4	6	4	4	3	3	2	2	2	2	2	6
	4	5	5	4	6	5	5	5	6	7	6	9	7	7	7	7	7	6	8	10	5	5	6	5	
	Diurnal Maximum																								

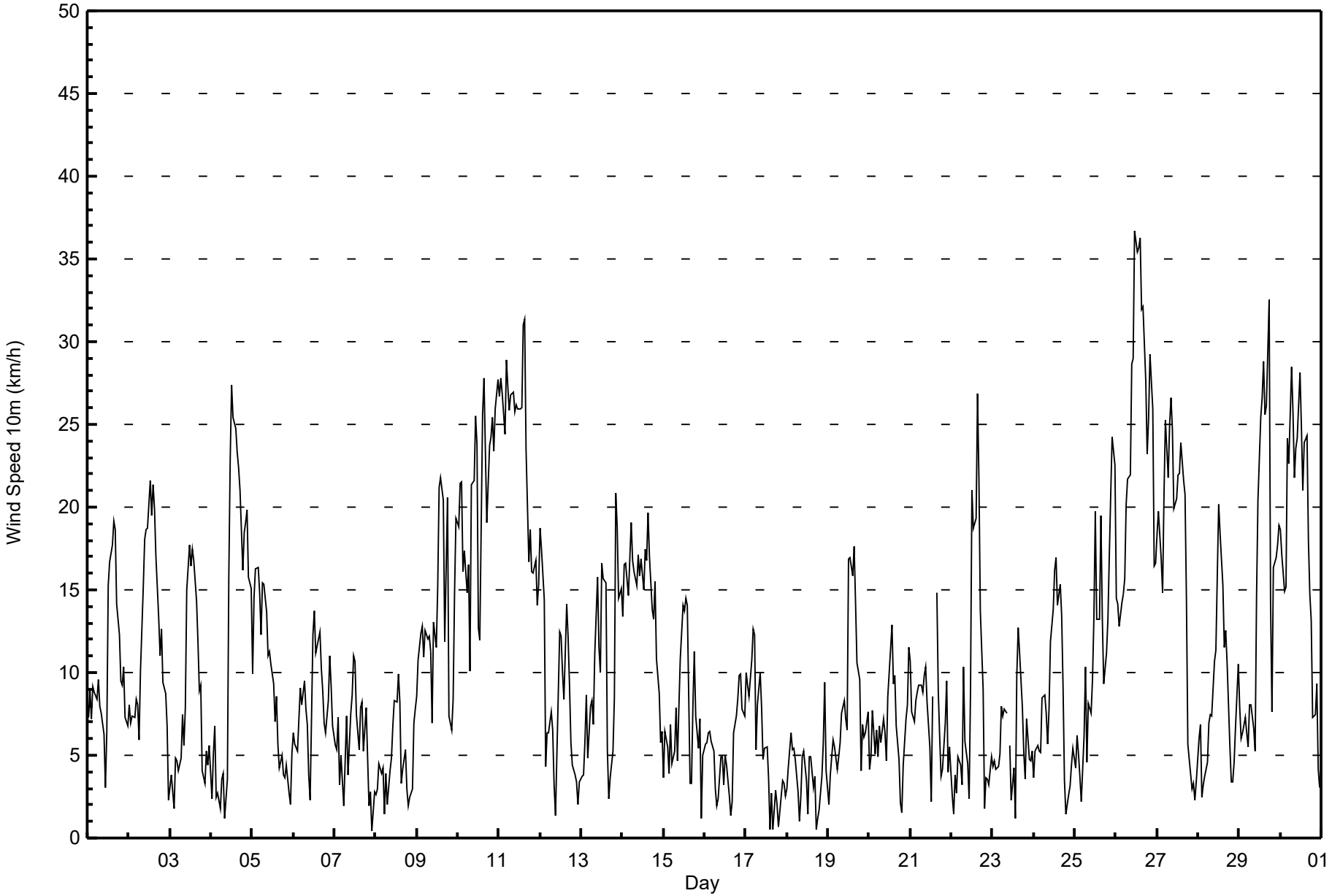
C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Athabasca Valley - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	213	29.67	29.67
6 - 11	237	33.01	62.67
12 - 19	161	22.42	85.10
20 - 28	93	12.95	98.05
29 - 38	14	1.95	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 718

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Athabasca Valley - September 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	6	6	16	21	37	39	25	16	12	5	6	5	6	6	4	213
6 - 11	5	1	2	6	11	90	42	8	7	13	16	7	6	6	13	4	237
12 - 19	1	0	1	2	12	23	2	5	0	10	17	26	13	9	31	9	161
20 - 28	0	0	0	0	2	3	0	0	0	2	3	20	24	15	16	8	93
29 - 38	0	0	0	0	0	0	0	0	0	0	0	0	10	3	1	0	14
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	9	7	9	24	46	153	83	38	23	37	41	59	58	39	67	25	718

Total Number of Valid Hours: 718

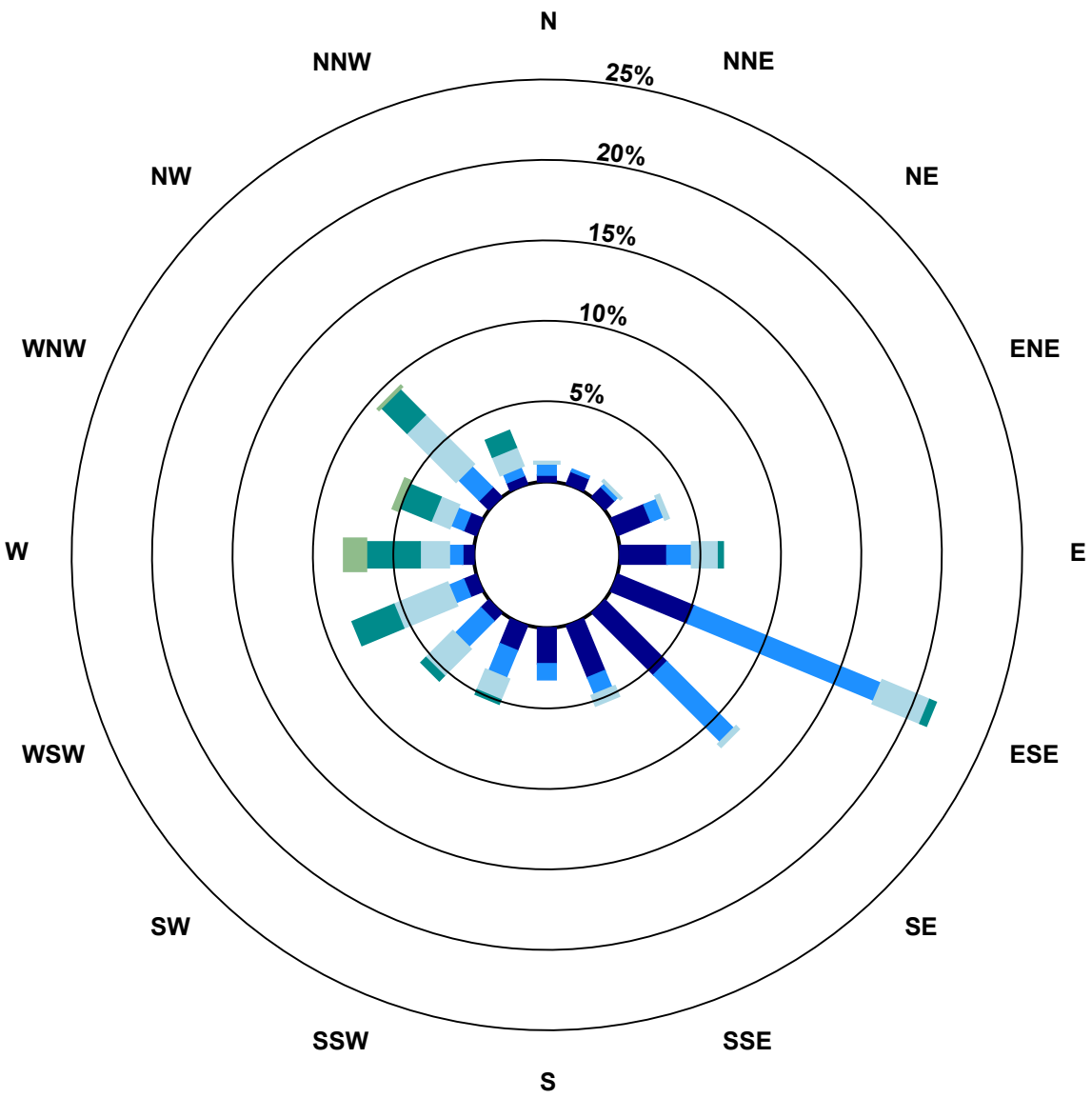
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Athabasca Valley



Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 718

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Athabasca Valley - September 2026

Direction of Maximum Speed: 274 deg on Sep 26 12:00
Direction of Maximum Daily Speed Average: 270.8 deg on Sep 26

Direction of Minimum Speed: 95 deg on Sep 7 23:00

Direction of Minimum Daily Speed Average: 0.9 deg on Sep 8

Monthly Average Direction: 251.1 deg

Hours in Service:	720
Hours of Data:	718
Hours of Missing Data:	2
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-Sep	121	121	115	107	116	112	122	121	107	130	54	65	101	106	110	109	113	117	117	114	112	117	124	107	111.6
2-Sep	103	93	90	99	104	121	123	118	109	108	109	110	111	107	106	104	98	100	106	113	119	137	136	139	108.9
3-Sep	92	75	140	171	150	115	101	147	109	77	82	80	90	81	82	83	85	79	74	81	124	110	118	111	92.5
4-Sep	141	107	138	74	38	106	90	59	252	274	333	325	326	333	337	342	339	341	349	320	321	319	322	339	334.9
5-Sep	341	321	321	321	320	311	319	314	323	322	319	320	319	296	316	301	281	231	249	292	213	182	69	120	314.2
6-Sep	123	115	138	118	125	123	111	125	125	101	54	103	100	100	123	134	129	130	109	109	117	106	117	115	116.1
7-Sep	122	125	115	70	121	29	106	139	120	123	121	116	113	78	339	316	317	312	123	116	76	138	95	176	107.9
8-Sep	164	170	111	80	73	110	212	148	65	321	327	326	339	352	3	334	245	190	164	136	116	141	117	122	46.9
9-Sep	119	116	118	117	118	119	116	119	119	116	210	215	209	213	214	223	217	223	231	213	157	211	226	230	187.0
10-Sep	229	234	244	240	231	240	233	233	246	253	263	266	249	243	265	263	282	283	263	264	280	272	267	270	257.4
11-Sep	274	273	272	279	298	299	299	304	314	311	321	318	312	305	301	305	313	296	297	306	288	278	274	265	297.3
12-Sep	267	264	264	296	197	201	215	207	176	42	212	256	261	266	295	245	251	228	178	147	142	147	67	158	242.1
13-Sep	127	119	152	171	140	84	101	108	190	201	212	217	216	213	215	221	196	138	177	324	313	321	314	316	225.2
14-Sep	321	322	328	337	322	320	318	322	328	318	331	321	324	324	323	321	322	315	292	296	280	311	280	308	318.3
15-Sep	238	219	213	217	221	209	189	204	157	188	207	198	197	213	203	7	63	226	251	233	286	251	203	252	215.0
16-Sep	267	289	220	277	300	213	149	142	182	174	92	350	21	325	74	151	64	71	86	92	113	117	111	107	111.6
17-Sep	111	123	136	121	110	110	80	104	125	112	211	214	201	211	78	163	33	348	194	154	69	88	96	81	123.4
18-Sep	94	138	109	116	112	99	88	354	272	337	325	36	283	293	302	13	89	95	120	101	106	117	122	155	94.2
19-Sep	96	147	164	150	148	126	142	133	119	127	101	153	159	158	162	156	161	152	124	135	110	113	126	129	143.1
20-Sep	120	125	113	109	114	114	122	109	109	110	56	202	216	220	219	221	219	175	127	159	140	131	134	131	153.5
21-Sep	123	113	112	120	119	129	118	106	107	116	115	114	263	103	M	114	131	139	133	168	169	184	126	109	123.9
22-Sep	126	73	107	122	129	114	24	316	247	216	69	306	313	289	275	267	268	258	251	180	130	128	154	119	272.5
23-Sep	128	108	111	136	120	118	112	115	83	C	76	317	307	277	127	122	116	109	112	134	146	157	192	191	122.0
24-Sep	129	145	141	113	129	136	133	130	121	200	216	223	220	245	243	245	243	245	207	153	115	126	134	141	198.2
25-Sep	148	135	117	103	29	1	348	99	350	47	50	61	80	54	98	80	70	32	1	350	347	341	335	337	29.2
26-Sep	337	322	301	271	259	244	255	261	254	267	270	274	271	270	273	272	277	271	268	270	274	271	260	243	270.8
27-Sep	241	241	241	245	250	247	248	248	247	249	236	239	243	253	248	247	251	254	219	188	177	106	101	139	243.7
28-Sep	200	192	101	146	113	116	113	128	127	138	219	227	238	230	235	214	207	172	180	146	164	158	149	140	189.4
29-Sep	131	134	125	133	135	144	138	135	131	155	241	262	278	285	285	287	284	281	271	260	246	247	245	253	258.5
30-Sep	253	251	251	267	297	281	279	286	298	300	309	311	304	299	293	300	297	312	308	286	257	242	240	139	288.6
	216.9	221.2	205.8	198.7	213.6	205.9	218.3	210.6	220.2	240.7	272.4	273.0	263.7	266.1	264.5	264.7	270.5	262.2	249.5	269.2	264.1	248.5	236.5	225.1	
	Diurnal Average																								

C - Calibration M - Maintenance

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

Athabasca Valley - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 110 deg on Sep 17 15:00

Minimum Value: 7 deg on Sep 13 21:00

Percentiles: P_1 = 9 P_{10} = 11 Q_1 = 14 Median = 19 Q_3 = 33 P_{90} = 59 P_{99} = 87

Hours in Service:	720
Hours of Data:	718
Hours of Missing Data:	2
Hours of Calibration:	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	Maximum
1-Sep	18	14	18	17	15	16	20	17	16	31	66	45	21	21	20	17	17	18	15	15	15	15	23	28	66
2-Sep	17	19	20	27	21	15	23	21	19	16	15	19	18	20	17	16	17	17	19	15	17	19	25	62	62
3-Sep	46	40	63	12	20	42	40	20	33	24	15	14	18	15	14	16	16	17	12	52	54	32	38	25	63
4-Sep	76	30	20	52	44	81	37	15	83	44	17	12	12	18	20	21	20	20	21	9	11	10	17	20	83
5-Sep	22	13	10	13	11	11	9	11	14	13	14	21	23	30	20	42	36	40	42	50	33	71	71	19	71
6-Sep	19	23	21	19	13	15	18	16	21	40	58	22	18	22	28	26	28	23	23	21	15	17	19	28	58
7-Sep	35	27	20	36	27	73	59	18	40	18	19	18	22	47	55	12	12	25	52	35	54	49	96	63	96
8-Sep	55	43	27	19	10	66	17	57	25	46	15	17	26	24	24	58	20	25	73	54	57	44	13	14	73
9-Sep	13	11	12	13	15	13	13	12	10	24	22	15	16	16	14	13	17	13	13	34	20	20	18	12	34
10-Sep	11	12	11	12	13	14	12	20	16	18	13	13	15	17	11	10	20	14	9	9	12	10	10	10	20
11-Sep	12	11	11	11	11	10	9	11	13	11	15	16	11	13	11	13	12	10	10	13	12	12	37	14	37
12-Sep	9	9	14	68	24	17	11	12	59	85	40	19	30	29	29	18	19	17	16	48	52	86	104	81	104
13-Sep	75	70	66	53	65	26	20	27	38	13	19	24	18	16	12	19	58	47	17	73	7	9	9	8	75
14-Sep	12	11	17	18	12	9	9	13	17	10	18	14	14	13	14	14	11	13	9	10	14	14	30	35	35
15-Sep	51	17	23	69	16	58	55	13	37	40	17	11	14	17	15	87	67	41	29	50	66	31	79	46	87
16-Sep	32	33	26	28	35	56	51	59	61	32	38	58	52	50	75	98	74	12	20	20	19	16	19	20	98
17-Sep	17	24	21	15	14	14	33	23	16	32	56	23	21	44	110	78	92	43	62	80	80	33	31	69	110
18-Sep	72	35	25	45	29	26	40	73	29	41	32	63	84	33	35	66	35	94	75	69	46	21	18	32	94
19-Sep	59	33	25	18	20	27	24	20	25	21	22	64	20	20	20	15	20	18	14	50	15	15	19	30	64
20-Sep	57	25	22	33	12	24	20	23	15	30	51	18	16	15	17	15	17	19	45	79	43	10	12	9	79
21-Sep	10	16	17	12	11	10	15	14	15	14	15	30	73	76	M	21	17	50	35	21	14	21	69	23	76
22-Sep	49	70	43	41	32	37	46	12	45	24	86	76	13	19	16	10	10	15	14	87	45	41	68	29	87
23-Sep	22	29	22	23	27	16	21	20	14	C	14	56	19	77	20	15	18	22	29	48	21	41	43	22	77
24-Sep	28	21	22	38	26	12	15	18	35	40	16	12	12	19	22	18	13	20	63	81	52	46	33	21	81
25-Sep	31	23	22	32	60	31	26	51	43	30	34	21	17	23	26	13	20	30	17	19	18	13	8	9	60
26-Sep	22	20	24	16	26	12	13	12	13	12	12	13	15	12	12	12	11	11	13	12	11	11	20	10	26
27-Sep	9	9	11	13	10	10	12	12	12	13	14	14	16	17	15	16	15	12	19	21	46	43	82	75	82
28-Sep	62	55	77	75	33	28	16	13	16	13	56	16	18	15	17	27	22	16	19	43	60	17	15	13	77
29-Sep	19	29	51	37	36	28	13	11	18	26	12	16	11	13	12	13	11	11	16	14	10	10	10	15	51
30-Sep	14	13	11	14	18	10	9	11	12	11	13	14	14	14	15	13	16	11	9	14	23	15	69	69	69
	76	70	77	75	65	81	59	73	83	85	86	76	84	77	110	98	92	94	75	87	80	86	104	81	
	Diurnal Maximum																								

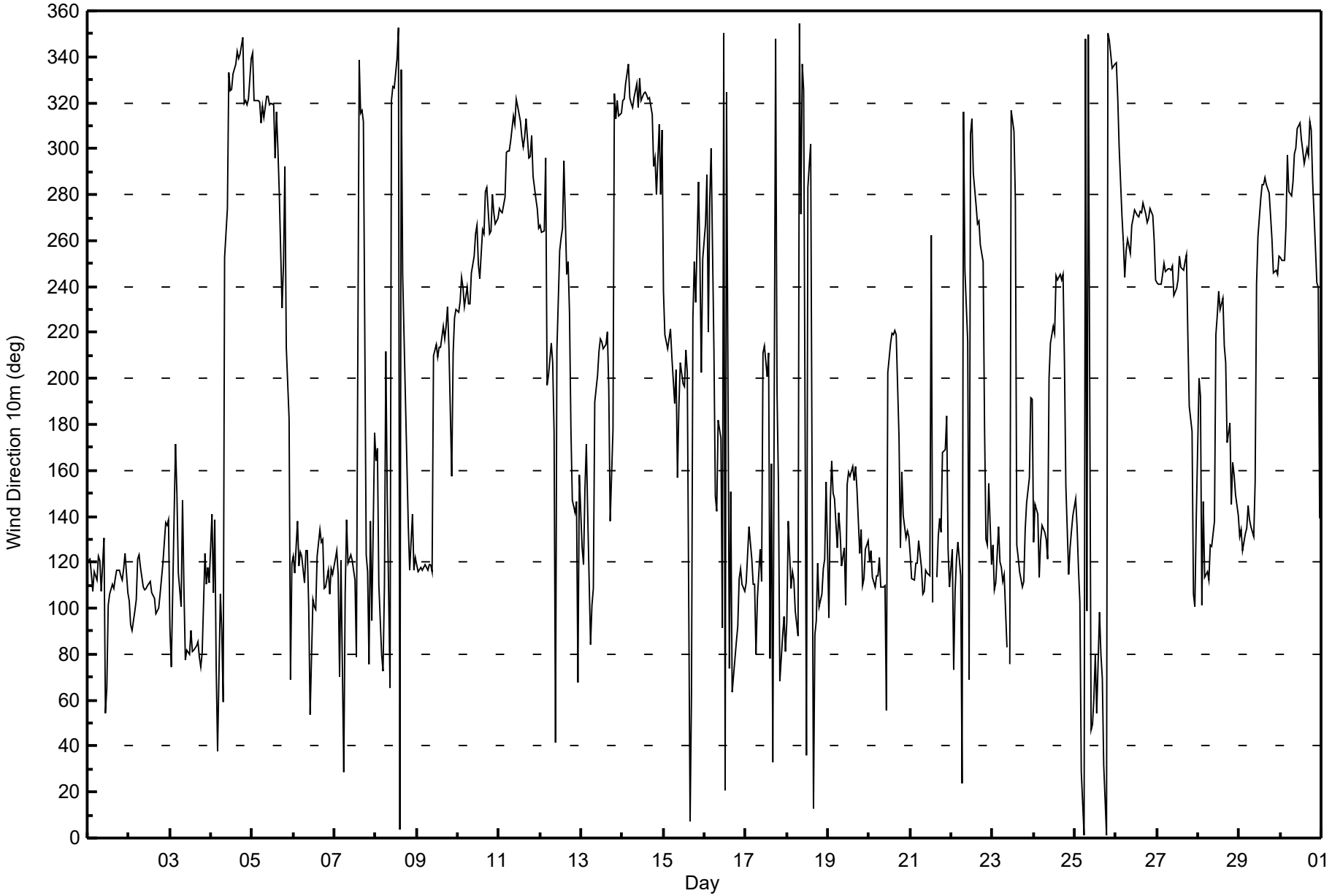
C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Athabasca Valley - September 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS08
FORT CHIPEWYAN
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT CHIPEWYAN (AMS08)
SEPTEMBER 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	684	33	36	99.58	-	-	4	0	0.8	0
TRS (ppb) Average	608	28	112	88.33	0.9	0	0.9	-	0.4	-
O3(ppb) Average	684	33	36	99.58	-	-	42.6	0	32.2	-
NO2(ppb) Average	682	35	38	99.58	-	-	12.6	0	3.5	-
NO(ppb) Average	682	35	38	99.58	-	-	12.4	-	2.2	-
NOX(ppb) Average	682	35	38	99.58	-	-	25	-	5.7	-
PM2.5(ug/m3) Average	705	1	15	98.06	-	-	11.7	0	7.7	0
Temperature 2 m (C) Average	719	0	1	99.86	-	-	25.4	-	20.5	-
Relative Humidity (%) Average	719	0	1	99.86	-	-	100	-	95.8	-
Wind Speed 10 m (km/h) Average	719	0	1	99.86	-	-	49	-	30	-
Wind Direction 10 m (deg) Average	719	0	1	99.86	-		-	-	-	-
PC(mm) Total	716	0	4	99.44	-	-	6.8	-	29.7	-
Leaf Wetness (% of range) Average	719	0	1	99.86	-	-	51.3	-	24.8	-
Global Solar Radiation (W/m2) Average	719	0	1	99.86	-	-	655.2	-	208.3	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT CHIPEWYAN (AMS08)
SEPTEMBER 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	684	0.16	0.4	-	0	0	0	0	0.1	0.3	4
TRS (ppb) Average	608	0.22	0.1	-	0	0.1	0.2	0.2	0.2	0.3	0.9
O3(ppb) Average	684	25.29	6.3	-	8.1	17.3	20.7	25.2	30.2	33.1	42.6
NO2(ppb) Average	682	0.79	1.3	-	0.1	0.2	0.2	0.3	0.7	1.9	12.6
NO(ppb) Average	682	0.25	0.9	-	0	0	0	0	0.1	0.3	12.4
NOX(ppb) Average	682	1.04	2.2	-	0.1	0.2	0.3	0.4	0.8	2.2	25
PM2.5(ug/m3) Average	705	3.49	2	-	0.2	1.1	2	3.1	5	6.3	11.7
Temperature 2 m (C) Average	719	11.63	4.9	-	1.8	5.2	8.4	11.2	14.6	18.8	25.4
Relative Humidity (%) Average	719	78.24	14.6	-	40	57	67.4	78.8	91.3	97.1	100
Wind Speed 10 m (km/h) Average	719	13.5	7	-	1	6	8	12	18	22	49
Wind Direction 10 m (deg) Average	719	-	-	-	-	-	-	-	-	-	-
Precipitation (mm) Total	716	-	-	90.71	-	-	-	0	0	0.2	6.8
Leaf Wetness (% of range) Average	719	7.07	10.6	-	0.3	1	1.2	1.6	7.9	23.7	51.3
Global Solar Radiation (W/m2) Average	719	121.47	174	-	0	0	0	15.3	219.1	431.7	655.2

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT CHIPEWYAN (AMS08)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
Air Quality Analyzers	25 Sep 2026 21:00	25 Sep 2026 22:00	2	Station power failure
TRS	01 Sep 2026 01:00	04 Sep 2026 09:00	81	Analyzer Failure - TRS converter failure
Air Quality Analyzers	10 Sep 2026 00:00	10 Sep 2026 00:00	1	DAS Failure - data not recorded
PM2.5	18 Sep 2026 00:00	18 Sep 2026 10:00	11	Unstable Operation - flatline in analyzer output signal
AT, GR, LW, PC, RH, WS, WD	10 Sep 2026 00:00	10 Sep 2026 00:00	1	DAS Failure - data not recorded
Precipitation Collector	06 Sep 2026 10:00	06 Sep 2026 10:00	1	DAS Failure - data not recorded
Precipitation Collector	25 Sep 2026 21:00	25 Sep 2026 22:00	2	Station power failure

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Fort Chipewyan - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.0 ppb on Sep 6 12:00 Maximum Daily Average: 0.8 ppb on Sep 1

Minimum Value: 0.0 ppb on Sep 4 07:00 Minimum Daily Average: 0.0 ppb on Sep 5
Maximum Diurnal Average: 0.4 ppb at hour 12 Minimum Diurnal Average: 0.1 ppb at hour 6
Monthly Average: 0.16 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} = 2.5

Hours in Service:	720
Hours of Data:	684
Hours of Missing Data:	36
Hours of Calibration:	33
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-Sep	0.0	0.1	0.0	0.0	Z	0.1	0.1	0.1	2.7	3.8	2.4	2.5	2.6	1.3	0.9	1.1	0.5	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.8	3.8
2-Sep	0.1	0.1	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	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.2
3-Sep	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	0.0	0.1
4-Sep	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
5-Sep	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
6-Sep	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.0	0.1	0.2	1.3	4.0	1.3	0.8	0.6	0.9	0.8	0.9	1.1	1.1	0.8	0.6	0.4	0.1	0.7	4.0
7-Sep	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.6	1.3	2.8	2.6	2.0	1.0	0.6	0.7	0.7	0.4	0.3	0.6	0.2	0.1	0.1	0.0	0.6	2.8
8-Sep	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	0.1	0.0	0.1	0.0	0.0	0.1
9-Sep	Z	0.1	0.0	0.1	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.8	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	DF	0.2	0.8
10-Sep	0.0	Z	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1
11-Sep	0.1	0.1	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	0.0	0.0	0.0	0.1
12-Sep	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	0.1	0.1	0.0	0.1
13-Sep	0.1	0.0	0.1	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	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1
14-Sep	0.0	0.1	0.0	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	C	C	C	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2
15-Sep	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	0.0	0.0	0.1
16-Sep	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	0.0	0.0	0.0	0.0	0.0	0.1	0.8	0.8	0.1	0.8
17-Sep	0.5	0.3	Z	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.7	1.3	1.2	1.0	0.8	0.4	0.3	0.3	0.3	0.3	0.2	0.1	0.0	0.0	0.4	1.3
18-Sep	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	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
19-Sep	0.0	0.1	0.0	0.0	Z	0.1	0.1	0.6	0.7	0.8	0.9	1.0	1.7	1.4	0.6	0.7	2.2	2.8	1.6	0.5	0.3	0.3	0.3	0.3	0.7	2.8
20-Sep	0.2	0.2	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	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2
21-Sep	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	0.3	0.5	0.4	0.3	1.2	0.8	0.2	1.2
22-Sep	0.2	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	0.0	0.0	0.0	0.2
23-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
24-Sep	0.2	0.3	0.3	Z	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	0.0	0.0	0.0	0.0	0.1	0.3
25-Sep	0.0	0.0	0.0	0.0	Z	0.1	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	PF	PF	0.0	0.0	0.0	0.1
26-Sep	0.1	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
27-Sep	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	0.0	0.1
28-Sep	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
29-Sep	0.0	0.0	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
30-Sep	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	0.1	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	0.2	0.3	0.4	0.4	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.5	0.3	0.3	0.2	0.3	0.2	0.2	0.6	2.7	3.8	2.8	4.0	2.6	1.4	0.9	1.1	2.2	2.8	1.6	1.1	0.8	0.6	1.2	0.8	Diurnal Maximum	

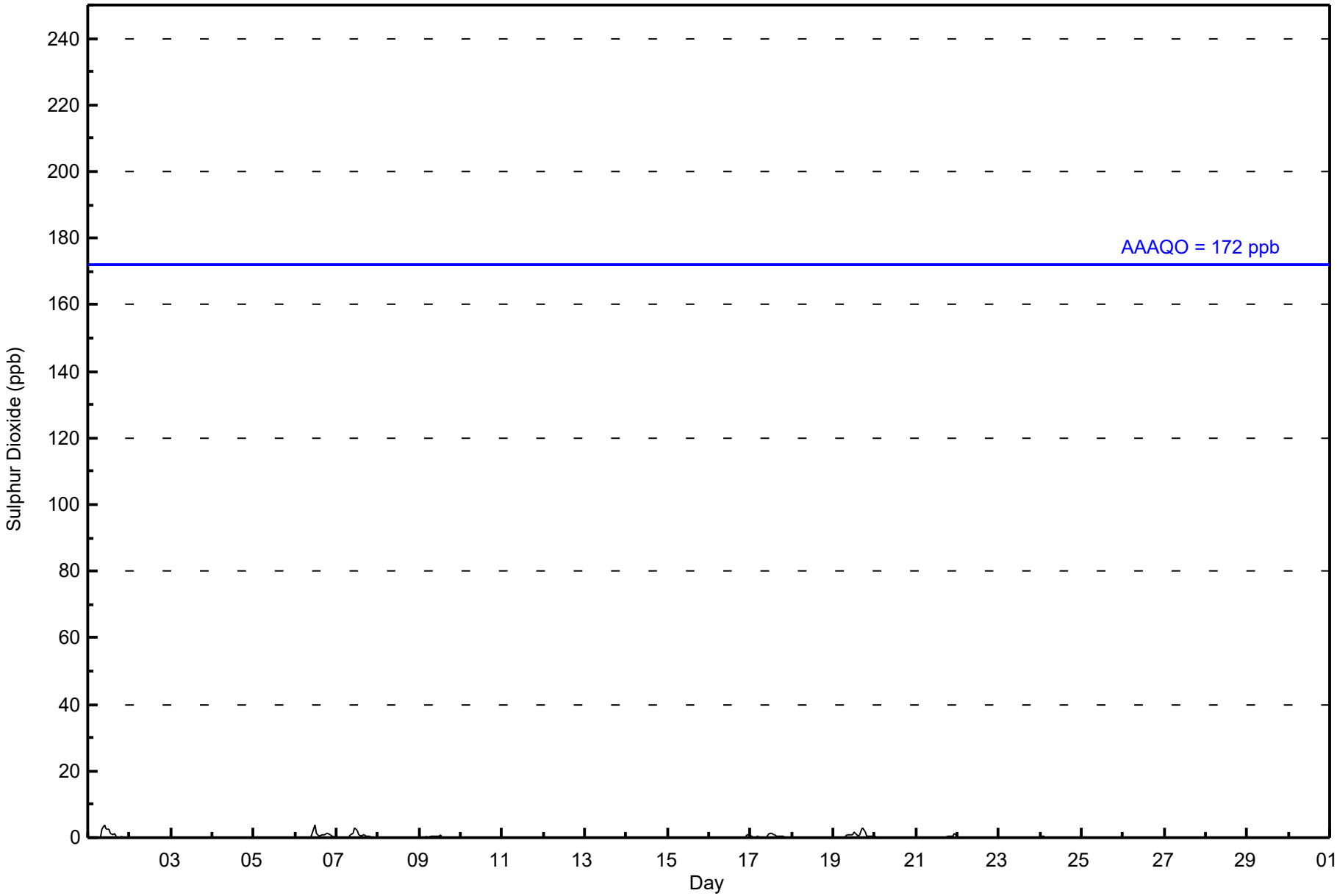
Z - zerospan C - Calibration DF - DAS Failure PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Fort Chipewyan - September 2026



Sulphur Dioxide (SO_2) - ppb
Fort Chipewyan - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Fort Chipewyan - September 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	9	4	21	24	63	44	53	39	28	22	41	49	93	60	68	66	684
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	9	4	21	24	63	44	53	39	28	22	41	49	93	60	68	66	684

Total Number of Valid Hours: 684

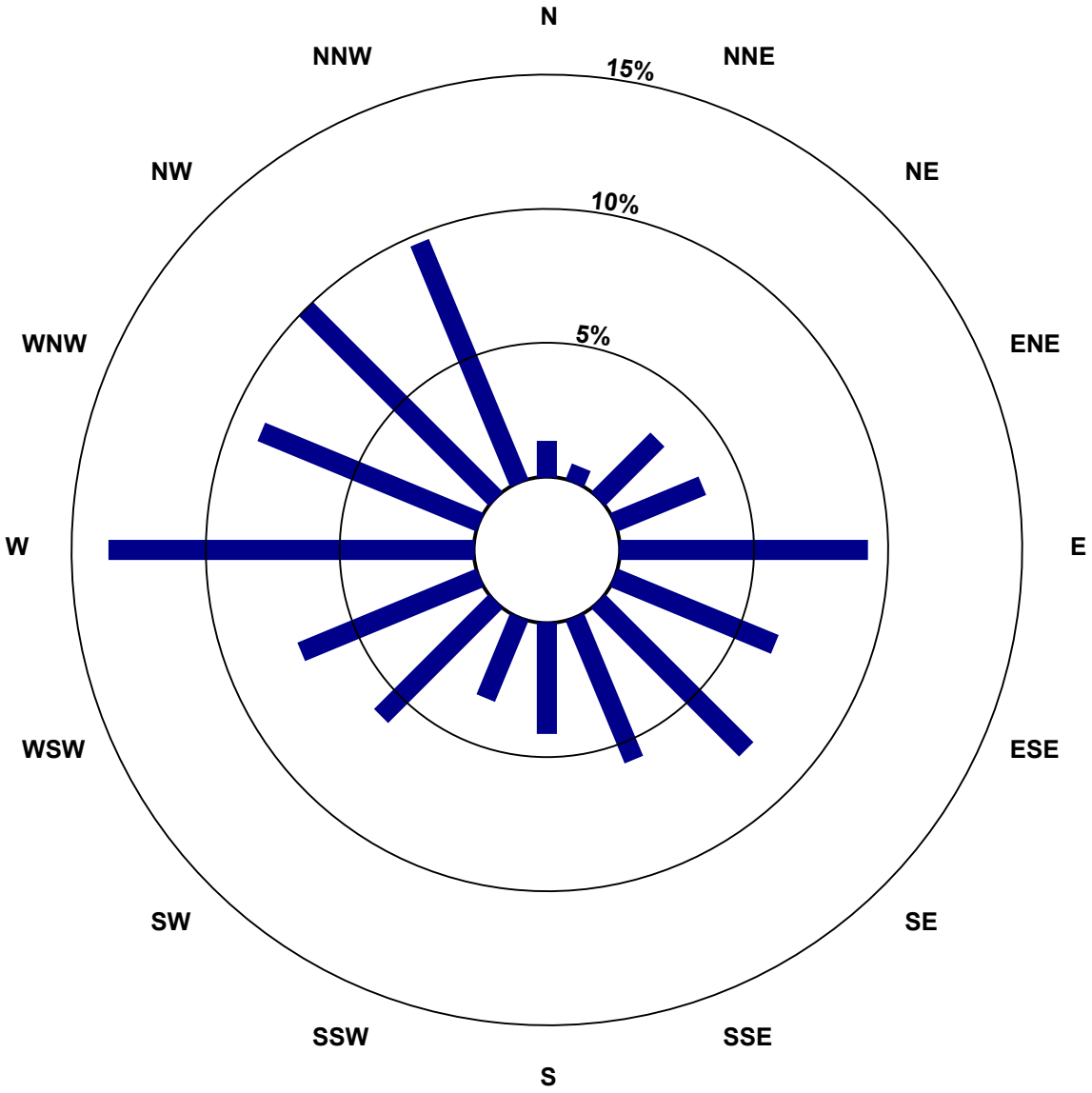
Total Number of Hours: 720

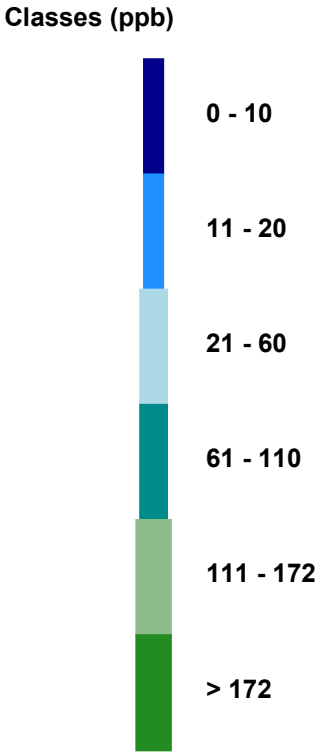
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Fort Chipewyan





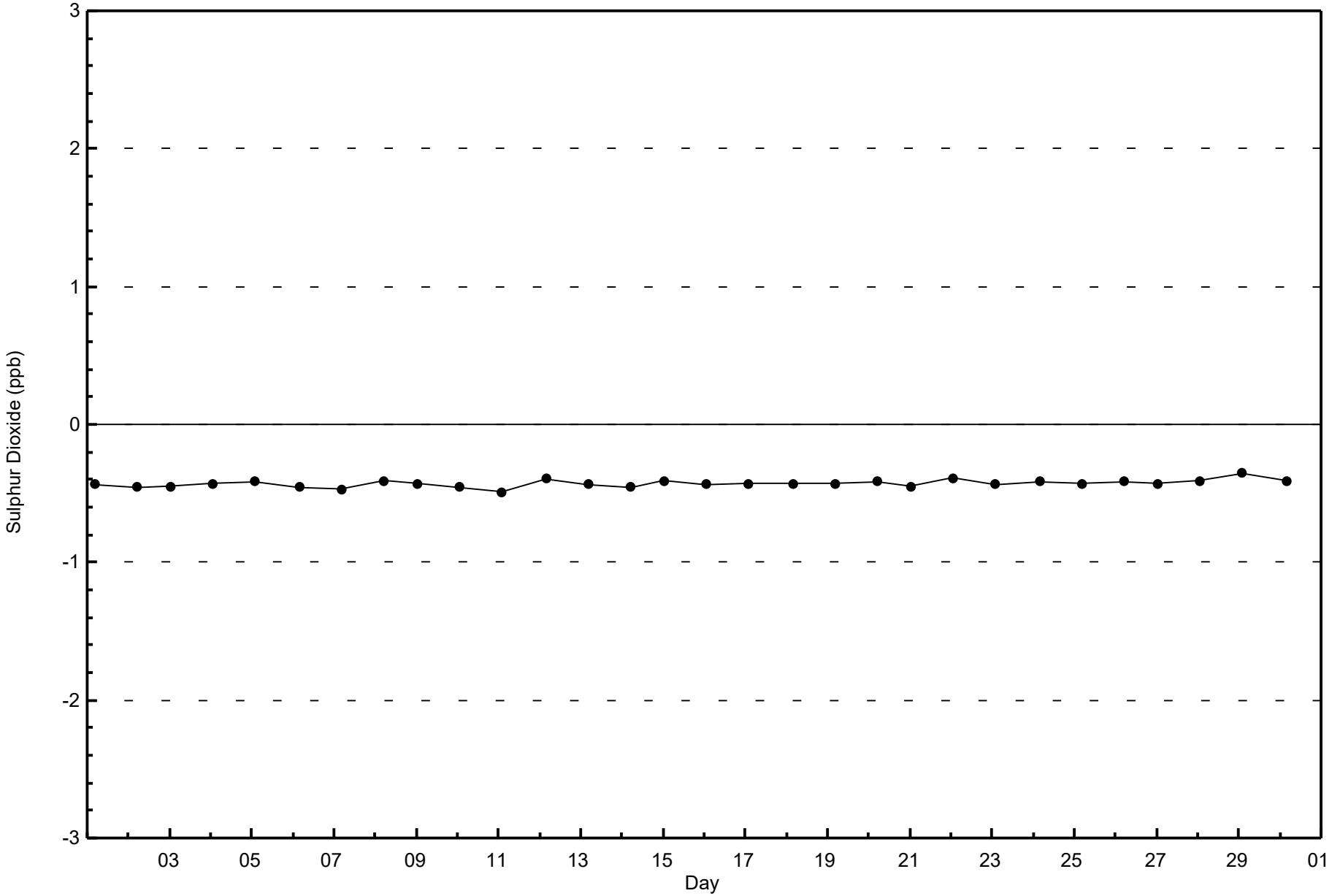
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Fort Chipewyan - September 2026

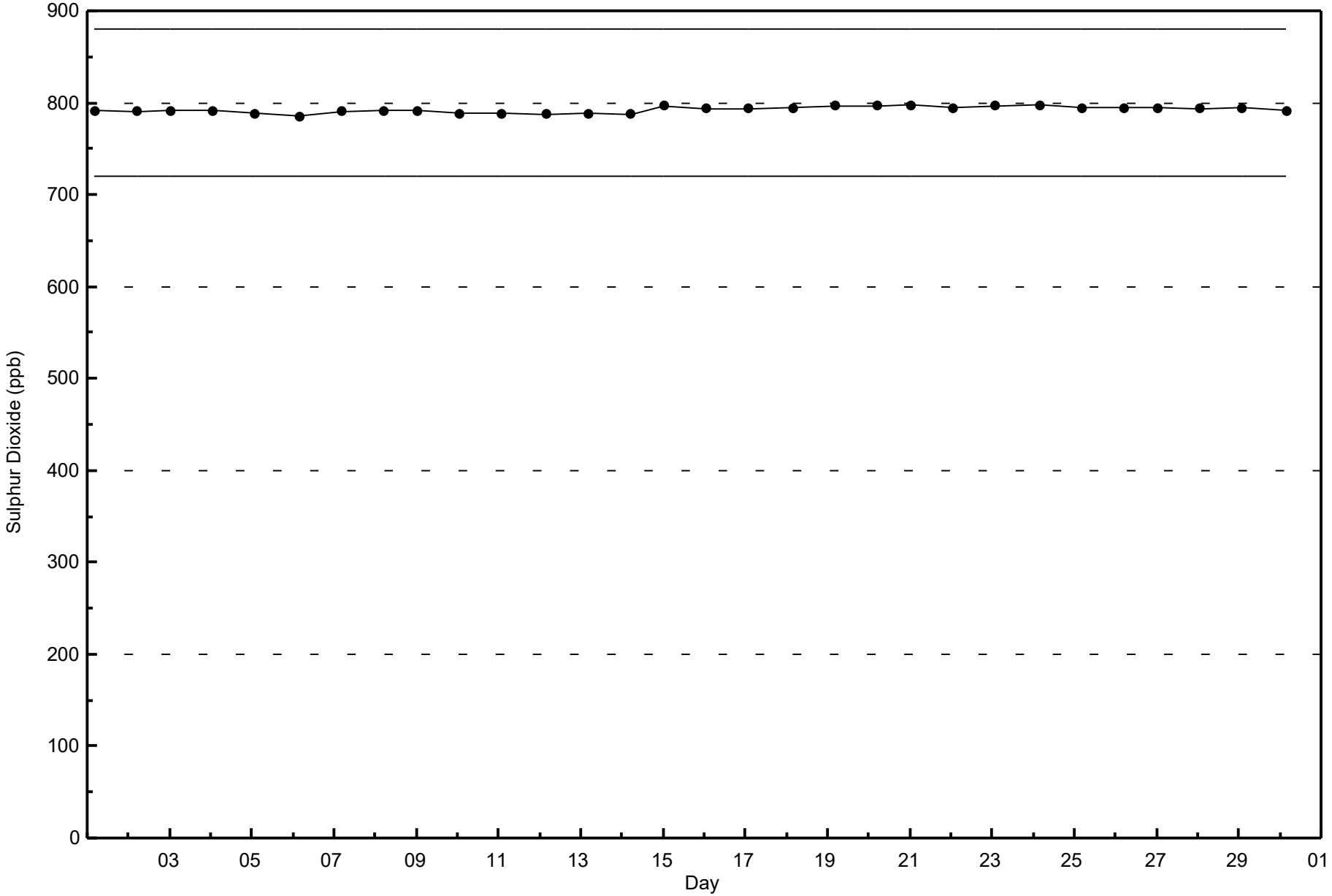


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Fort Chipewyan - September 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Fort Chipewyan - September 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 0.9 ppb on Sep 9 08:00

Maximum Daily Average: 0.4 ppb on Sep 9

Minimum Value: 0.0 ppb on Sep 4 13:00

Minimum Daily Average: 0.1 ppb on Sep 26

Maximum Diurnal Average: 0.3 ppb at hour 8

Minimum Diurnal Average: 0.2 ppb at hour 17

Monthly Average: 0.22 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.2 Median = 0.2 Q_3 = 0.2 P_{90} = 0.3 P_{99} = 0.6

Periods in Service:	1440
Periods of Valid Data:	1214
Periods of Invalid Data:	226
Periods of Calibration:	57
Percent Operational Time:	88.3

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-Sep	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	--	--
2-Sep	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	--	--
3-Sep	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	--	--
4-Sep	AF AF	AF AF	AF AF	AF AF	AF AF	AF AF	AF AF	AF AF	AF C	C C	C C	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	0.1 0.1	0.1 0.3	0.2 0.2	--	0.3
5-Sep	0.2 0.2	0.2 0.2	0.2 0.2	Z SP	0.3 0.3	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.1	0.1 0.1	0.2 0.1	0.2 0.1	0.1 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	0.1 0.1	0.1 0.1	0.1 0.2	0.2 0.2	0.2 0.2	0.2	0.3
6-Sep	0.2 0.2	0.3 0.5	0.3 0.3	0.3 0.3	Z SP	0.5 0.5	0.4 0.3	0.4 0.4	0.4 0.4	0.3 0.3	0.3 0.3	0.5 0.5	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 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.3	0.5
7-Sep	0.2 0.2	0.1 0.1	0.2 0.2	0.2 0.2	0.2 0.2	Z SP	0.2 0.2	0.2 0.2	0.3 0.3	0.3 0.4	0.4 0.3	0.2 0.2	0.2 0.2	0.1 0.2	0.2 0.1	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	0.4
8-Sep	Z 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 0.1	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 0.2	0.1 0.2	0.1 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
9-Sep	0.2 0.2	Z SP	0.4 0.4	0.3 0.3	0.3 0.4	0.4 0.4	0.4 0.7	0.9 0.9	0.8 0.8	0.8 0.8	0.8 0.7	0.7 0.6	0.6 0.6	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 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 DF	0.4	0.9
10-Sep	DF 0.2	0.2 0.3	Z SP	0.4 0.4	0.4 0.4	0.3 0.3	0.3 0.3	0.4 0.3	0.3 0.3	0.3 0.4	0.4 0.4	0.3 0.3	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 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.2 0.2	0.1 0.1	0.3	0.4
11-Sep	0.2 0.1	0.1 0.2	0.2 0.1	Z 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	0.1 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 0.2	0.2	0.2
12-Sep	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.3	Z SP	0.3 0.3	0.3 0.3	0.2 0.2	0.2 0.2	0.2 0.2	0.3 0.2	0.2 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 0.2	0.2 0.2	0.2 0.1	0.2 0.2	0.2	0.3
13-Sep	0.2 0.2	0.2 0.2	0.2 0.3	0.2 0.2	0.2 0.2	Z SP	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	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2	0.3
14-Sep	Z 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	0.2 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	0.1 0.1	0.1 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2	0.3
15-Sep	0.2 0.2	Z 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	0.2 0.2	0.3 0.2	0.2 0.2	0.2 0.2	0.1 0.1	0.1 0.2	0.1 0.2	0.2 0.2	0.1 0.2	0.1 0.2	0.1 0.2	PF 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2	0.3

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Fort Chipewyan - September 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-Sep	0.2	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	0.3
	0.2	0.1	SP	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	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
17-Sep	0.2	0.2	0.2	Z	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	0.3
	0.3	0.2	0.2	SP	0.2	0.2	0.2	0.2	0.1	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		
18-Sep	0.2	0.2	0.2	0.2	Z	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	0.2	0.2	0.2	0.2	0.1	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	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2		
19-Sep	0.2	0.2	0.3	0.3	0.4	Z	0.4	0.5	0.7	0.5	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.7
	0.2	0.2	0.3	0.3	0.4	SP	0.4	0.6	0.6	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3		
20-Sep	Z	0.3	0.2	0.3	0.2	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	0.2	0.2	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	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2		
21-Sep	0.2	Z	0.3	0.3	0.3	0.2	0.4	0.4	0.3	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	0.3	0.3	0.4
	0.3	SP	0.3	0.3	0.4	0.2	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3		
22-Sep	0.3	0.3	Z	0.4	0.4	0.3	0.5	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5
	0.3	0.3	SP	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
23-Sep	0.3	0.3	0.2	Z	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.3
	0.3	0.2	0.2	SP	0.3	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	0.3	0.2	0.3	0.2	0.3		
24-Sep	0.3	0.4	0.3	0.4	Z	0.7	0.5	0.4	0.3	0.2	0.3	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	0.7
	0.3	0.4	0.4	0.4	SP	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
25-Sep	0.3	0.3	0.3	0.2	0.2	Z	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	PF	PF	0.2	0.2	0.2	0.3
	0.3	0.3	0.2	0.2	0.3	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	PF	PF	0.2	0.2		
26-Sep	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	0.2	0.2	DF	0.2	0.2	0.1	0.2	0.2	0.1	0.2
	SP	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	0.2	0.2	0.2	0.2	0.1	0.1		
27-Sep	0.2	Z	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	0.1	SP	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
28-Sep	0.2	0.1	Z	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.6
	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	0.1	0.1	0.1	0.1		
29-Sep	0.1	0.2	0.2	Z	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3
	0.2	0.2	0.2	SP	0.2	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	0.3	0.3		
30-Sep	0.3	0.2	0.2	0.1	Z	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.3
	0.2	0.2	0.2	0.1	SP	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2		
	0.2	0.2	0.2	0.2	0.2	0.3	0.3	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	Diurnal Average	
	0.3	0.5	0.4	0.4	0.4	0.7	0.7	0.9	0.8	0.8	0.8	0.7	0.6	0.5	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	Diurnal Maximum	

Z - zerospan C - Calibration DF - DAS Failure 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 Chipewyan - September 2026

Maximum Value: 0.9 ppb on Sep 9 08:00

Maximum Daily Average: 0.4 ppb on Sep 9

Minimum Value: 0.0 ppb on Sep 4 13:00

Minimum Daily Average: 0.2 ppb on Sep 26

Maximum Diurnal Average: 0.3 ppb at hour 8

Minimum Diurnal Average: 0.2 ppb at hour 17

Monthly Average: 0.22 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.2 Median = 0.2 Q_3 = 0.2 P_{90} = 0.3 P_{99} = 0.6

Hours in Service:	720
Hours of Data:	608
Hours of Missing Data:	112
Hours of Calibration:	28
Percent Operational Time:	88.3

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-Sep	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	--	--
2-Sep	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	--	--
3-Sep	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	--	--
4-Sep	AF	AF	AF	AF	AF	AF	AF	AF	AF	C	C	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	--	0.2
5-Sep	0.2	0.2	0.2	Z	0.3	0.2	0.2	0.2	0.2	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	0.2	0.2	0.2	0.3
6-Sep	0.2	0.4	0.3	0.3	Z	0.5	0.4	0.4	0.4	0.3	0.3	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5
7-Sep	0.2	0.1	0.2	0.2	0.2	Z	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4
8-Sep	Z	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	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
9-Sep	0.2	Z	0.4	0.3	0.4	0.4	0.6	0.9	0.8	0.8	0.7	0.6	0.6	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	DF	0.4	0.9
10-Sep	0.2	0.2	Z	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.4
11-Sep	0.1	0.2	0.1	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
12-Sep	0.2	0.2	0.2	0.2	Z	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	0.2	0.2	0.2	0.1	0.2	0.2	0.3
13-Sep	0.2	0.2	0.3	0.2	0.2	Z	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
14-Sep	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	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3
15-Sep	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	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
16-Sep	0.2	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	0.2
17-Sep	0.2	0.2	0.2	Z	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
18-Sep	0.2	0.2	0.2	0.2	Z	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
19-Sep	0.2	0.2	0.3	0.3	0.4	Z	0.4	0.6	0.6	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.6
20-Sep	Z	0.3	0.3	0.3	0.2	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	0.2	0.2	0.3	0.2	0.3
21-Sep	0.2	Z	0.3	0.3	0.3	0.2	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4
22-Sep	0.3	0.3	Z	0.4	0.4	0.4	0.5	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5
23-Sep	0.3	0.3	0.2	Z	0.3	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	0.3	0.2	0.2	0.3	0.2	0.3
24-Sep	0.3	0.4	0.4	0.4	Z	0.7	0.5	0.3	0.3	0.2	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	0.3	0.7
25-Sep	0.3	0.3	0.2	0.2	0.2	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	PF	PF	0.2	0.2	0.2	0.3
26-Sep	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	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2
27-Sep	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
28-Sep	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	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
29-Sep	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3
30-Sep	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	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	0.2	0.2	0.2	0.2	0.2	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	Diurnal Average	
	0.3	0.4	0.4	0.4	0.4	0.7	0.6	0.9	0.8	0.8	0.7	0.6	0.6	0.5	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	Diurnal Maximum	

Z - zerospan C - Calibration DF - DAS Failure AF - Analyzer Failure PF - Power Failure

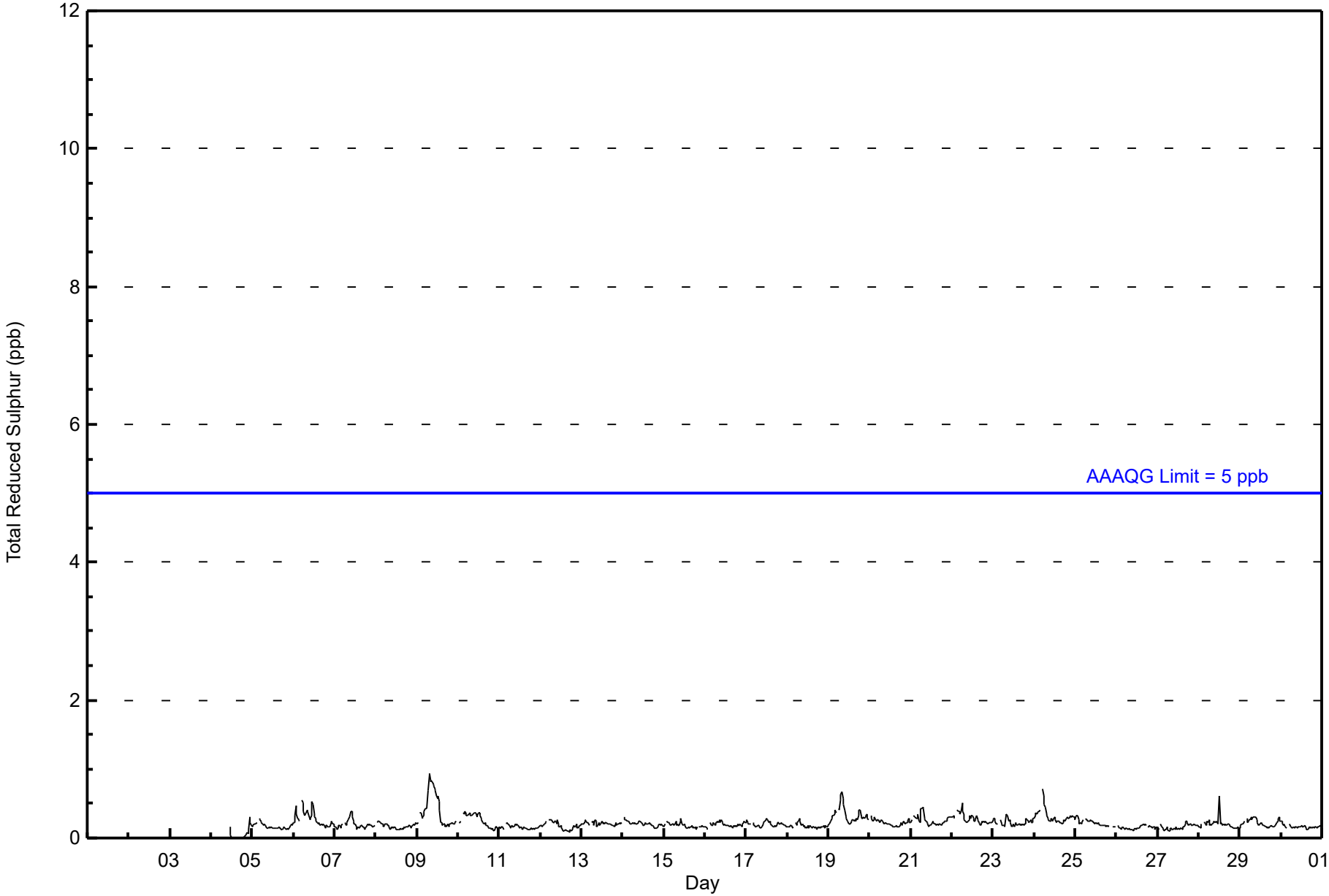
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Fort Chipewyan - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	608	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: 608

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Reduced Sulphur (TRS) - ppb

Fort Chipewyan - September 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	17	19	54	23	32	28	29	21	41	49	92	66	66	58	608
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	17	19	54	23	32	28	29	21	41	49	92	66	66	58	608

Total Number of Valid Hours: 608

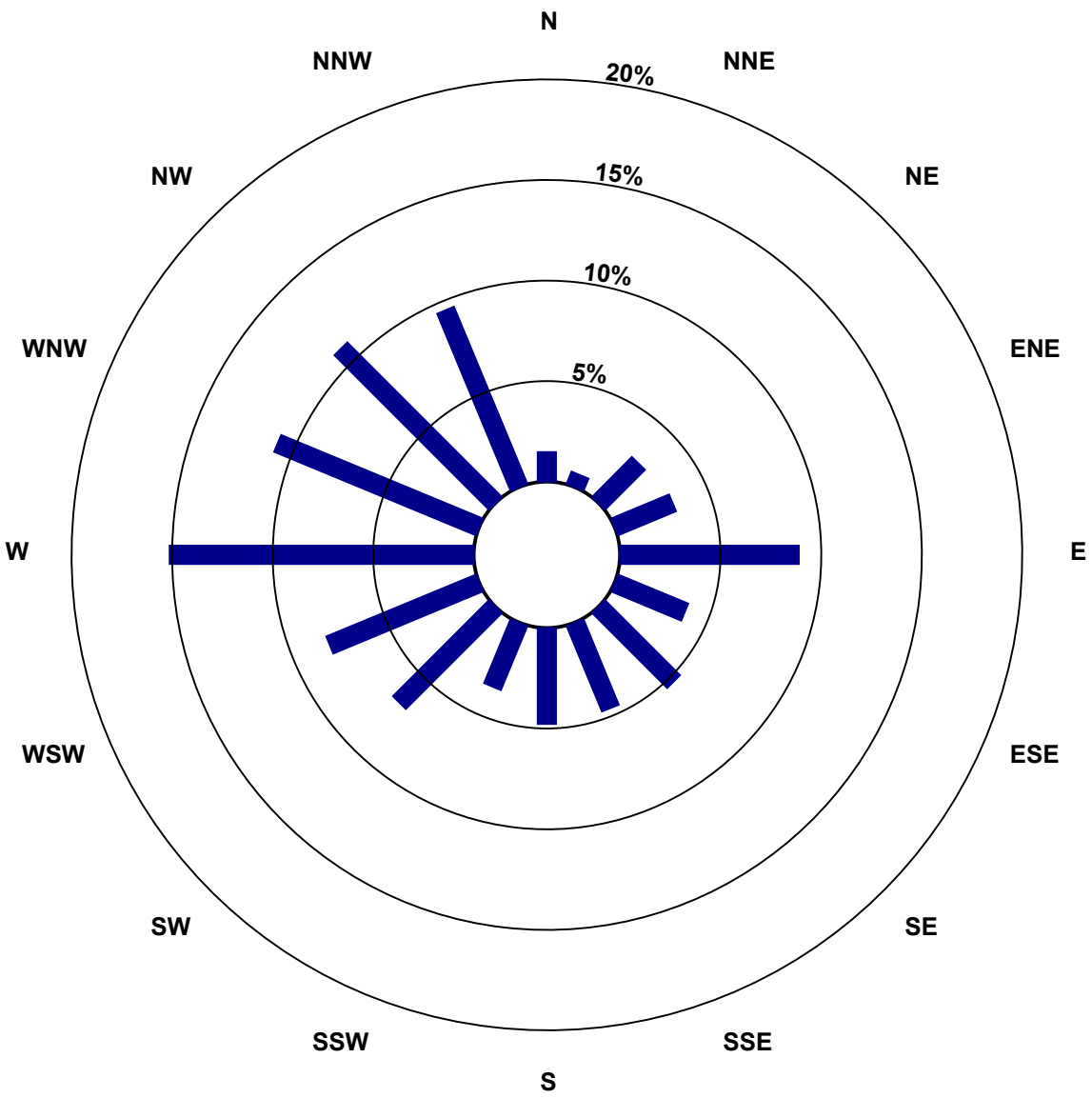
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Reduced Sulphur (TRS) - ppb

Fort Chipewyan



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

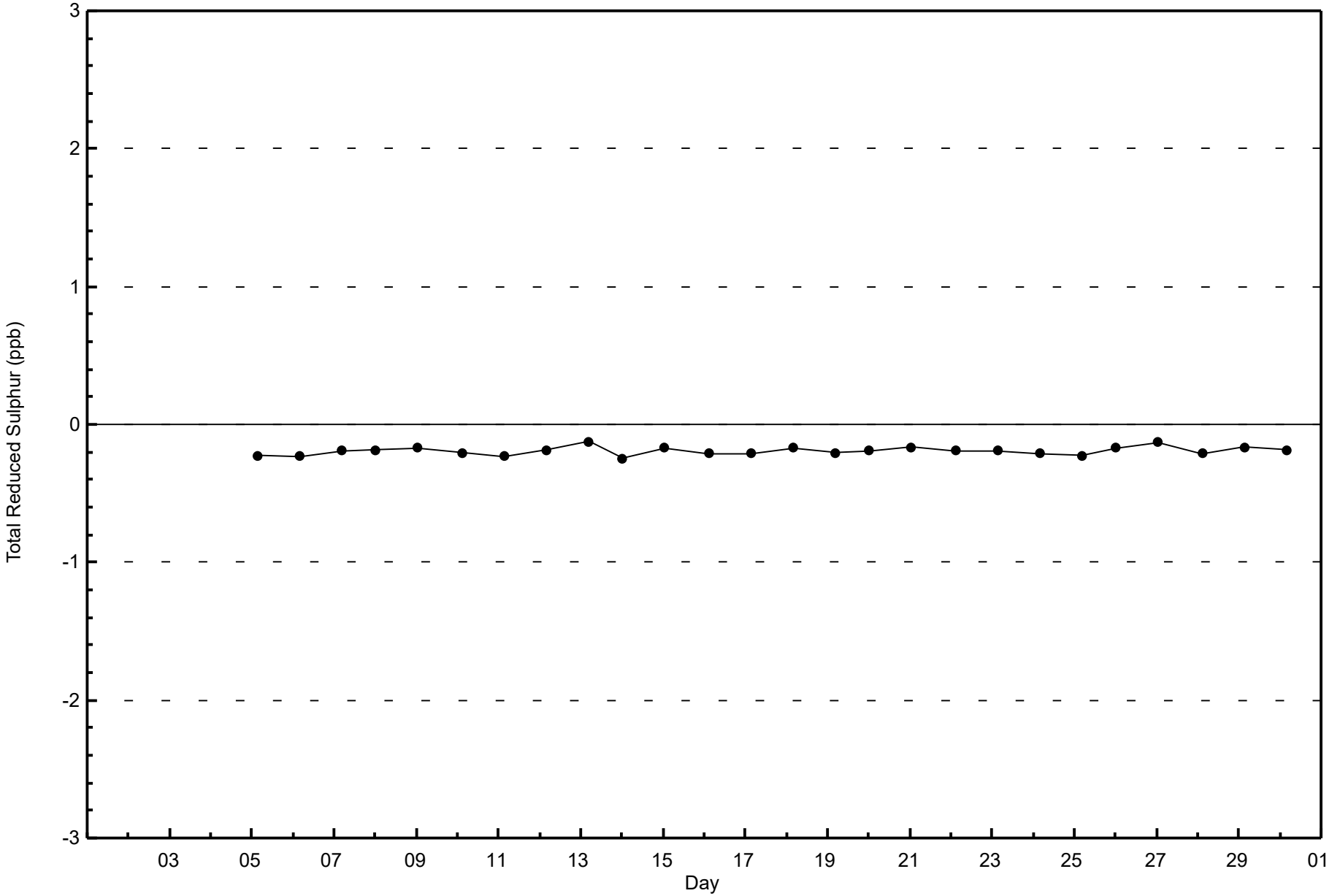
Total Number of Valid Hours: 608

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Fort Chipewyan - September 2026

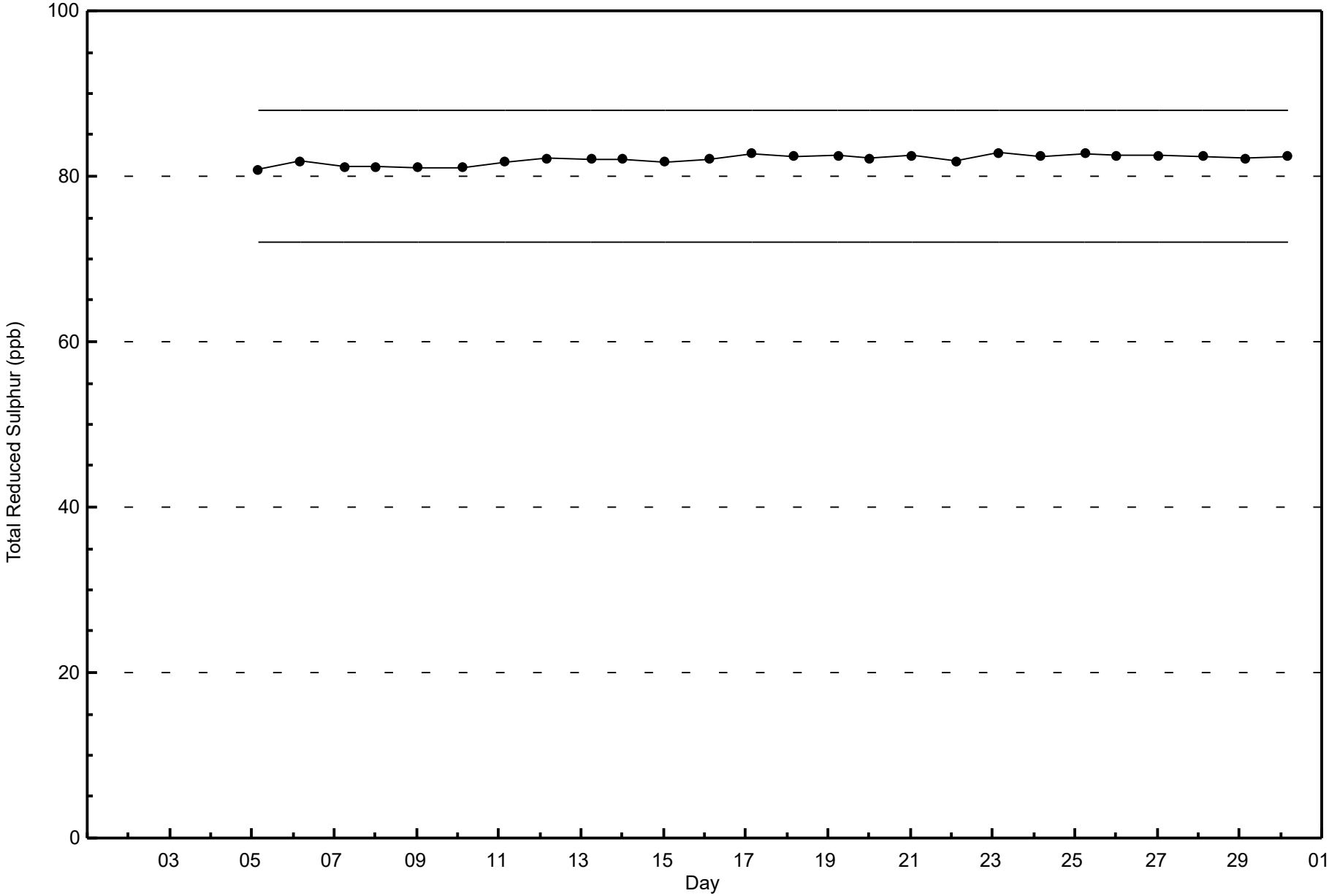


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Fort Chipewyan - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Fort Chipewyan - September 2026

Maximum Value: 12.4 ppb on Sep 9 08:00

Maximum Daily Average: 2.2 ppb on Sep 9

Minimum Value: 0.0 ppb on Sep 1 01:00

Minimum Daily Average: 0.0 ppb on Sep 24

Maximum Diurnal Average: 0.9 ppb at hour 9

Minimum Diurnal Average: 0.0 ppb at hour 22

Monthly Average: 0.25 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} = 4.9

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	35
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-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.2	4.7	4.0	1.8	0.8	0.4	0.1	0.1	0.1	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.6	4.7
2-Sep	0.3	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3
3-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.3	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	0.1	0.3
4-Sep	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.1	0.0	0.0	0.1
5-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
6-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.6	1.5	2.6	3.6	1.1	0.6	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.5	3.6
7-Sep	0.0	0.1	Z	0.1	0.1	0.1	0.0	0.1	1.3	2.7	1.9	0.9	0.5	0.3	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.4	2.7
8-Sep	0.0	0.0	0.0	Z	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	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2
9-Sep	0.0	0.0	0.0	0.0	Z	0.1	6.9	12.4	9.6	6.8	4.3	2.9	2.1	3.1	0.3	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	DF	2.2	12.4
10-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.2	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.4
11-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	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	0.1	0.3
12-Sep	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	0.0	0.0	0.0	0.0	0.0	0.4	0.1	1.3	0.0	0.1	0.0	0.1	1.3
13-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
14-Sep	0.1	0.0	0.0	Z	0.1	0.1	0.1	0.2	0.2	0.2	0.8	0.1	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.8
15-Sep	0.1	0.1	0.1	0.0	Z	0.2	0.1	0.1	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
16-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.8	0.2	0.7	0.3	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	0.8
17-Sep	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	1.0	1.7	1.6	0.9	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	1.7
18-Sep	0.1	Z	0.1	0.1	0.1	0.1	0.2	1.5	0.2	0.5	0.2	0.0	0.1	0.1	0.2	0.3	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.2	1.5
19-Sep	0.0	0.0	Z	0.1	0.1	0.0	0.9	7.6	5.5	3.0	2.1	0.9	0.4	0.3	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.0	7.6
20-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2
21-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.4	0.6	0.2	0.0	0.0	0.2	2.6	0.5	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.6
22-Sep	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.1
23-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
24-Sep	0.0	Z	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	0.0	0.1
25-Sep	0.0	0.0	Z	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	0.0	PF	PF	0.2	0.1	0.0	0.2
26-Sep	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	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1
27-Sep	0.1	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	0.1	0.1	0.1	0.1	0.1	0.2
28-Sep	0.0	0.1	0.0	0.1	0.1	Z	0.1	0.1	0.3	0.6	1.3	1.9	6.6	1.1	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.6	6.6
29-Sep	Z	0.1	0.1	0.2	0.1	0.1	0.1	0.5	1.4	2.1	0.9	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	0.3	2.1
30-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.8	0.3	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	0.8
	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.9	0.9	0.8	0.6	0.5	0.5	0.3	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	Diurnal Average	
	0.3	0.1	0.1	0.2	0.1	0.2	6.9	12.4	9.6	6.8	4.3	3.6	6.6	3.1	0.5	0.4	0.3	0.3	0.4	0.1	1.3	0.1	0.2	0.1	Diurnal Maximum	

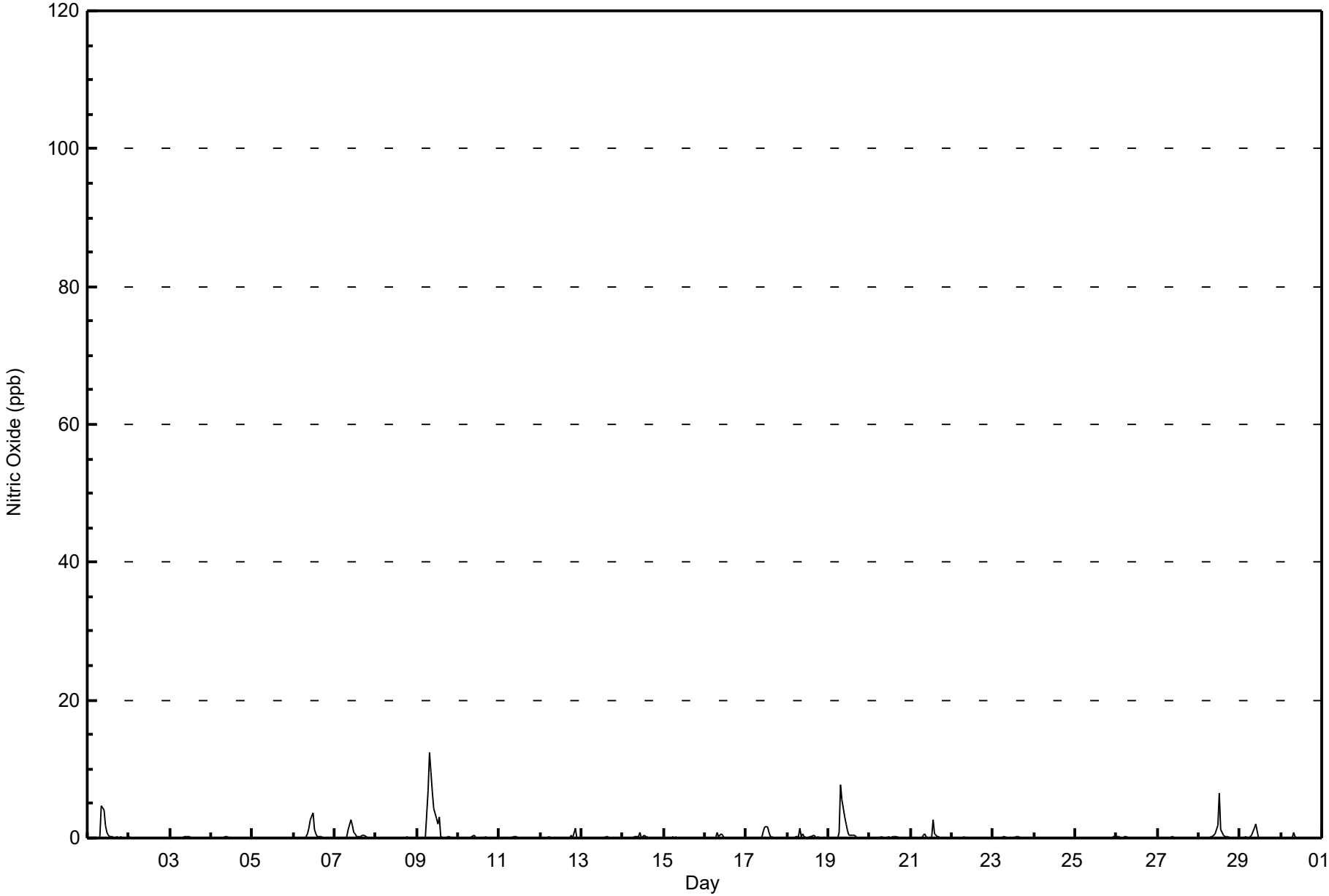
Z - zerospan C - Calibration DF - DAS Failure PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Fort Chipewyan - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	682	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: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Fort Chipewyan - September 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	9	4	20	26	63	43	51	41	29	21	39	51	84	66	68	67	682
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	9	4	20	26	63	43	51	41	29	21	39	51	84	66	68	67	682

Total Number of Valid Hours: 682

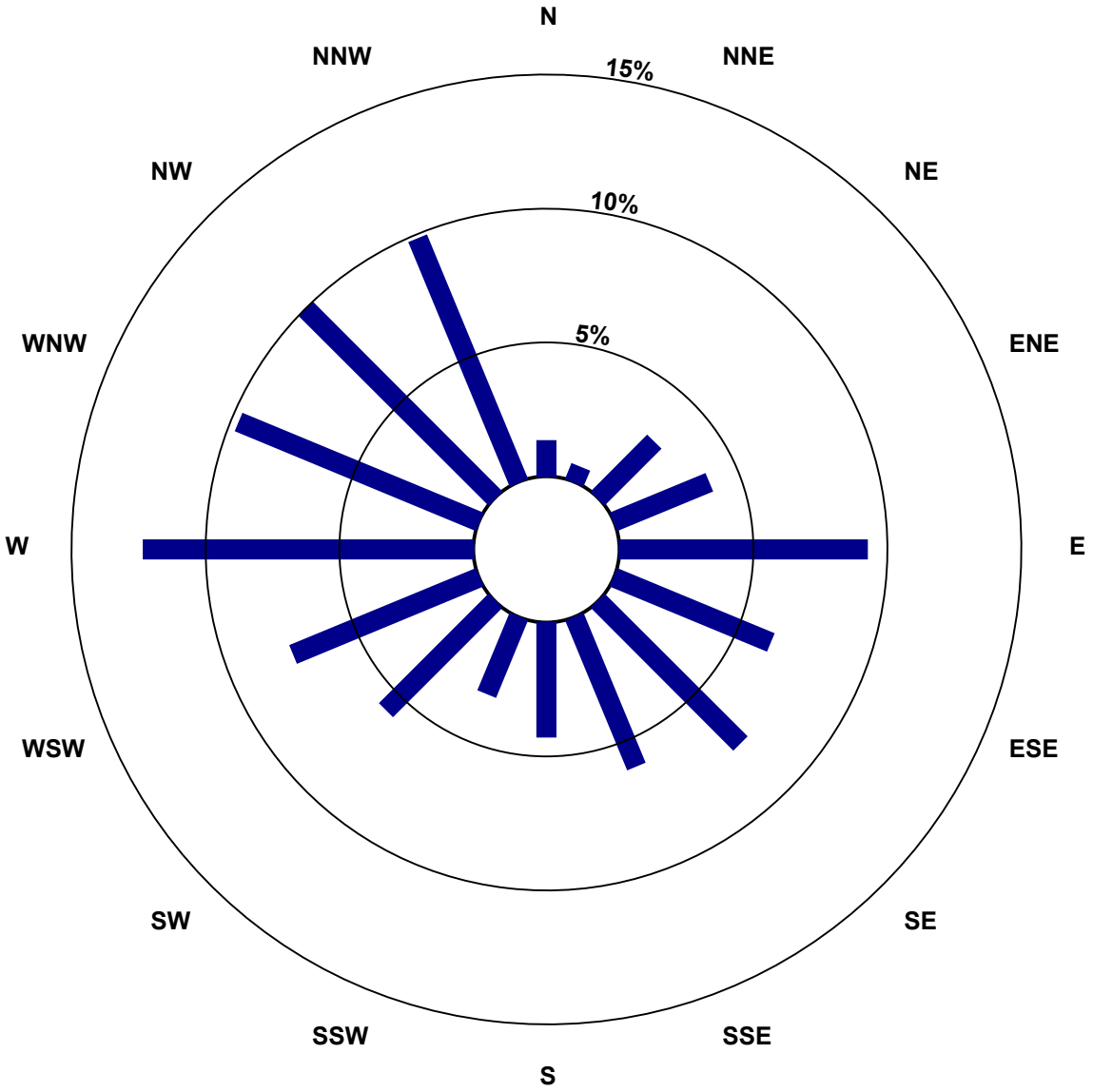
Total Number of Hours: 720

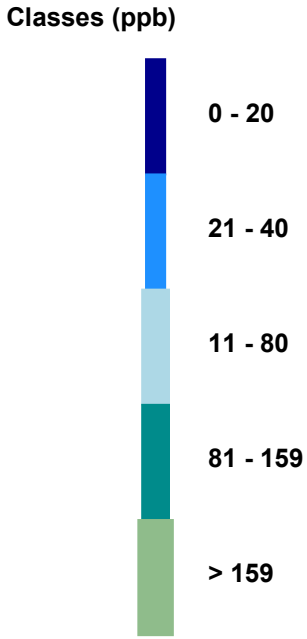
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Fort Chipewyan





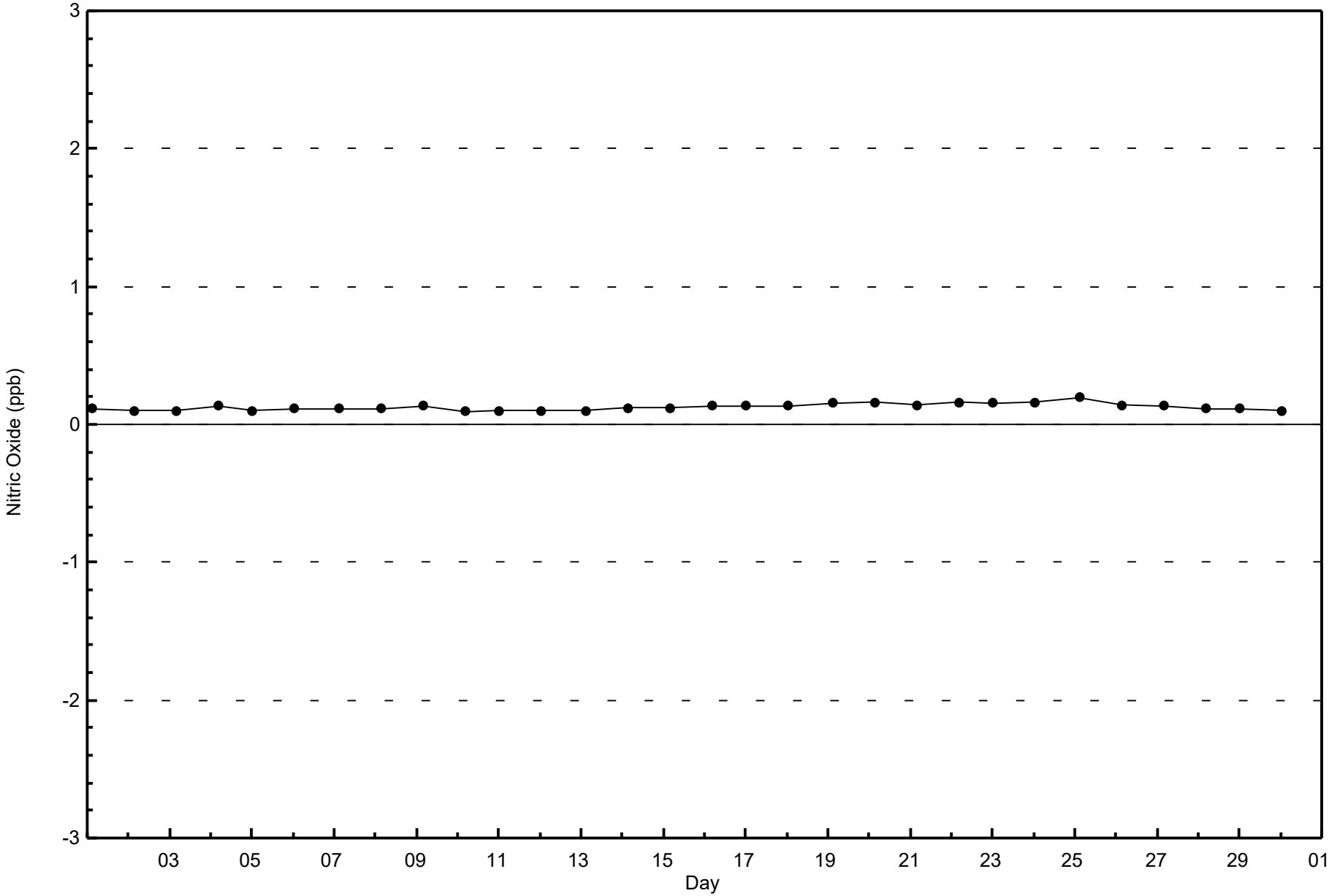
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Fort Chipewyan - September 2026

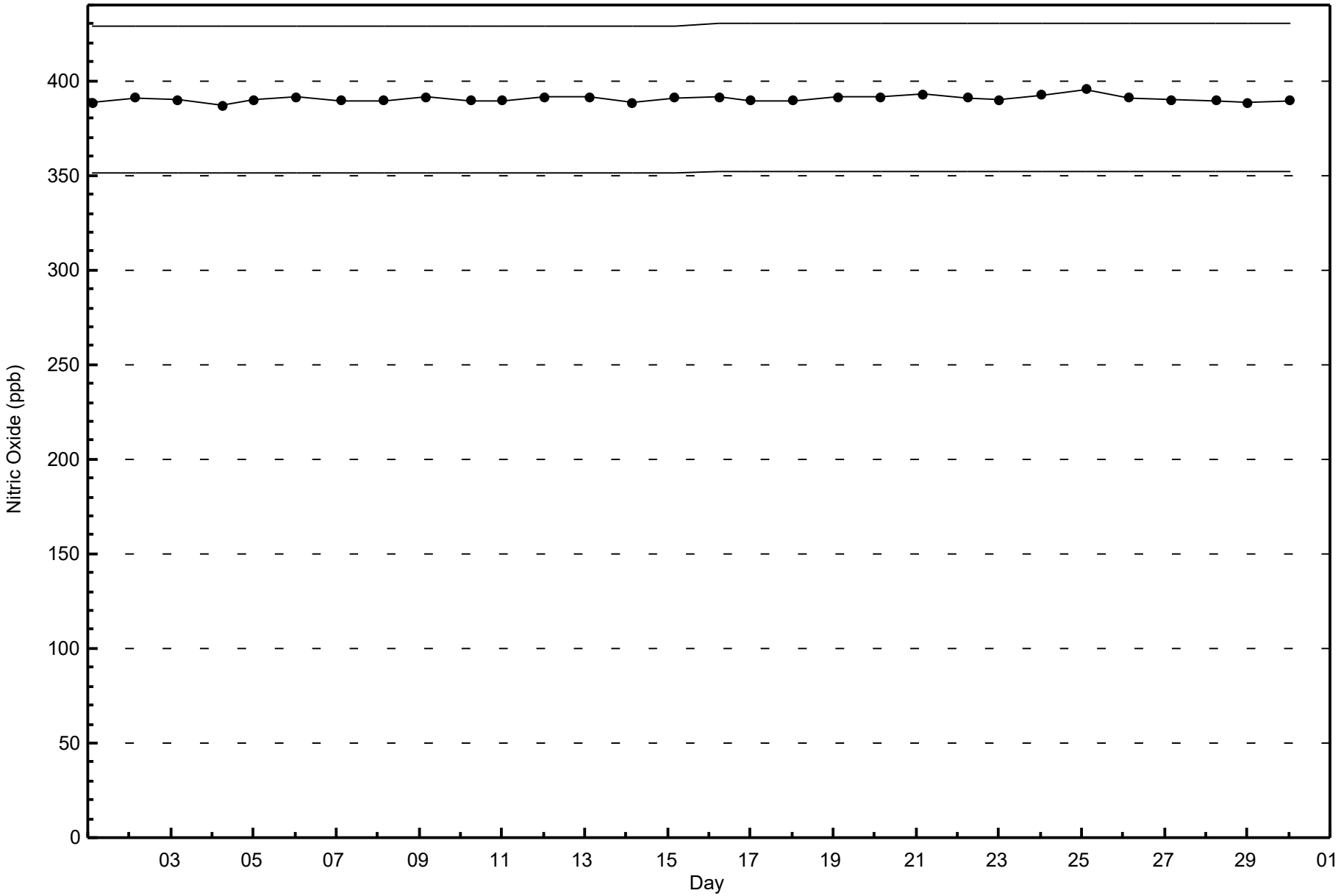


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Fort Chipewyan - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Fort Chipewyan - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 12.6 ppb on Sep 9 07:00 Maximum Daily Average: 3.5 ppb on Sep 9

Minimum Value: 0.1 ppb on Sep 3 08:00
Maximum Diurnal Average: 1.5 ppb at hour 8
Monthly Average: 0.79 ppb

Minimum Daily Average: 0.2 ppb on Sep 27
Minimum Diurnal Average: 0.4 ppb at hour 22
Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.7$ $P_{90} = 1.9$ $P_{99} = 6.3$

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	35
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-Sep	0.5	0.3	Z	0.3	0.3	0.3	0.2	0.7	5.0	5.4	4.3	2.7	1.8	1.2	1.3	0.9	0.6	1.3	0.6	0.6	0.3	0.3	0.3	0.2	1.3	5.4
2-Sep	0.4	0.3	0.3	Z	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.4	0.3	0.2	0.3	0.2	0.2	0.3	0.4
3-Sep	0.2	0.2	0.2	0.2	Z	0.3	0.2	0.1	0.3	0.5	0.4	0.4	0.3	0.2	0.3	0.1	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.5
4-Sep	0.3	0.3	0.3	0.2	0.2	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	0.3	0.4	0.3	0.3	0.3	0.4
5-Sep	Z	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	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3
6-Sep	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.3	1.0	2.1	3.4	5.8	3.5	2.4	1.4	1.5	1.2	1.1	1.1	1.3	1.2	1.1	1.6	1.2	1.4	5.8
7-Sep	0.5	0.3	Z	0.5	0.3	0.3	0.3	0.6	2.1	4.1	2.4	1.6	1.4	1.2	1.5	1.3	2.2	2.7	1.6	2.1	1.1	0.8	0.6	0.5	1.3	4.1
8-Sep	0.5	0.5	0.5	Z	0.5	0.5	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.4	1.7	1.6	1.0	0.3	0.3	0.3	0.5	1.7
9-Sep	0.3	0.3	0.3	1.9	Z	3.5	12.6	12.6	10.0	7.5	5.4	6.2	4.8	5.4	1.0	0.5	0.4	0.5	0.9	1.2	0.5	0.5	0.4	DF	3.5	12.6
10-Sep	0.3	0.3	0.3	0.3	0.3	Z	0.2	0.3	0.7	0.5	0.3	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	0.7
11-Sep	Z	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3
12-Sep	0.2	Z	0.2	0.2	0.2	0.6	0.3	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.6	0.2	1.3	0.5	1.0	1.1	0.4	1.3
13-Sep	0.8	0.5	Z	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.8
14-Sep	0.2	0.3	0.3	Z	0.2	0.2	0.2	0.3	0.4	0.4	0.7	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.5	0.3	0.2	0.3	0.4	0.3	0.7
15-Sep	0.2	0.1	0.2	0.2	Z	0.9	0.4	0.4	C	C	C	C	C	0.1	0.1	0.1	0.2	0.2	0.3	0.6	0.3	0.2	0.2	0.2	0.3	0.9
16-Sep	0.2	0.2	0.2	0.2	0.2	Z	0.1	1.8	0.3	0.3	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.2	0.1	0.4	1.9	2.4	0.5	2.4
17-Sep	Z	2.1	1.5	0.8	0.5	0.4	0.3	0.2	0.2	0.7	2.1	4.2	3.6	2.2	1.1	0.8	0.6	0.6	0.7	0.8	0.6	0.2	0.2	0.2	1.1	4.2
18-Sep	0.2	Z	0.2	0.2	0.2	1.1	0.4	2.5	0.4	0.7	0.3	0.2	0.2	0.3	0.5	0.8	0.4	0.4	0.5	0.4	0.2	0.2	0.2	0.2	0.5	2.5
19-Sep	0.2	0.2	Z	0.7	0.6	0.9	3.0	9.3	5.9	3.9	3.1	2.0	1.6	1.6	2.4	2.7	2.2	2.0	1.5	1.2	1.2	1.4	1.4	1.2	2.2	9.3
20-Sep	1.1	0.9	0.5	Z	0.4	0.3	0.6	0.7	0.3	0.3	0.3	0.5	0.3	0.4	1.3	1.5	1.4	1.1	2.6	1.2	0.5	0.6	0.6	0.6	0.8	2.6
21-Sep	0.9	0.7	1.2	2.6	Z	0.8	1.4	2.4	1.8	0.9	0.4	0.4	0.8	3.3	2.1	2.3	3.4	2.1	2.1	1.5	1.2	1.1	1.5	1.9	1.6	3.4
22-Sep	1.6	1.3	1.0	1.0	0.8	Z	0.5	0.6	0.5	0.5	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.5	1.6
23-Sep	Z	0.3	0.3	0.2	0.2	0.7	4.0	1.3	0.2	0.2	0.2	0.3	0.2	0.3	0.5	0.7	0.3	0.3	0.4	0.7	0.8	1.0	0.9	1.2	0.7	4.0
24-Sep	1.9	Z	2.5	1.0	0.5	0.3	0.4	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	0.4	0.2	0.2	0.5	2.5
25-Sep	0.2	0.2	Z	0.3	0.4	0.7	0.7	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	PF	PF	0.6	0.7	0.4	0.7
26-Sep	0.6	0.4	0.6	Z	0.5	0.7	0.5	0.6	0.4	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.7
27-Sep	0.1	0.1	0.2	0.2	Z	0.1	0.2	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3
28-Sep	0.1	0.3	1.4	1.2	0.6	Z	0.1	0.2	0.2	0.6	1.6	2.4	2.0	2.0	1.5	1.6	2.4	2.3	1.9	1.6	0.8	0.7	0.7	1.2	1.2	2.4
29-Sep	Z	3.8	4.0	5.3	6.9	6.0	6.6	5.6	5.7	5.9	2.9	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	2.4	6.9
30-Sep	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.8	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.8
	0.5	0.6	0.7	0.7	0.6	0.8	1.2	1.5	1.3	1.3	1.1	1.1	0.9	0.8	0.6	0.6	0.7	0.6	0.7	0.6	0.5	0.4	0.5	0.6	Diurnal Average	
	1.9	3.8	4.0	5.3	6.9	6.0	12.6	12.6	10.0	7.5	5.4	6.2	4.8	5.4	2.4	2.7	3.4	2.7	2.6	2.1	1.3	1.4	1.9	2.4	Diurnal Maximum	

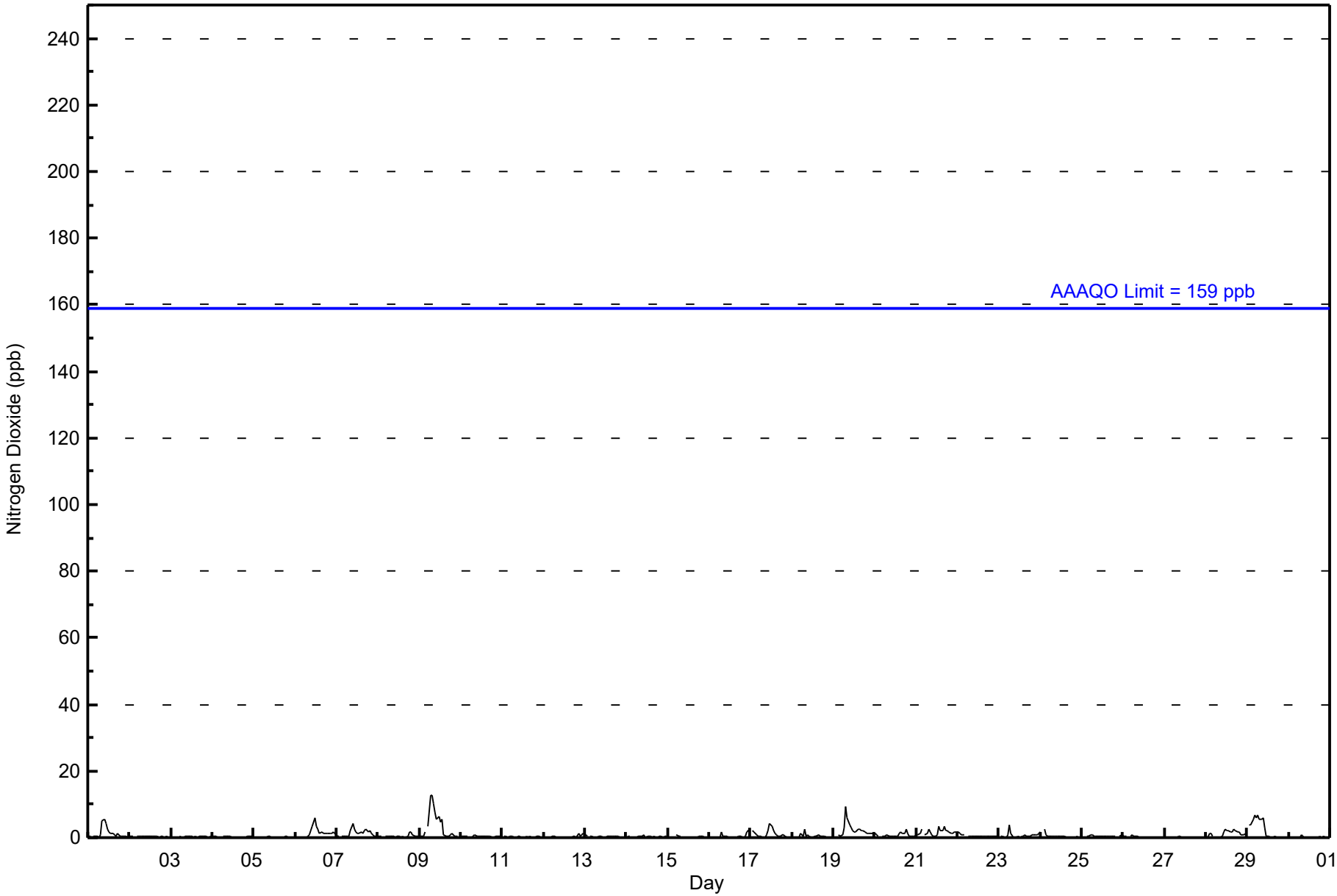
Z - zerospan C - Calibration DF - DAS Failure PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Fort Chipewyan - September 2026



Nitrogen Dioxide (NO_2) - ppb
Fort Chipewyan - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	682	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: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Fort Chipewyan - September 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	9	4	20	26	63	43	51	41	29	21	39	51	84	66	68	67	682
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	9	4	20	26	63	43	51	41	29	21	39	51	84	66	68	67	682

Total Number of Valid Hours: 682

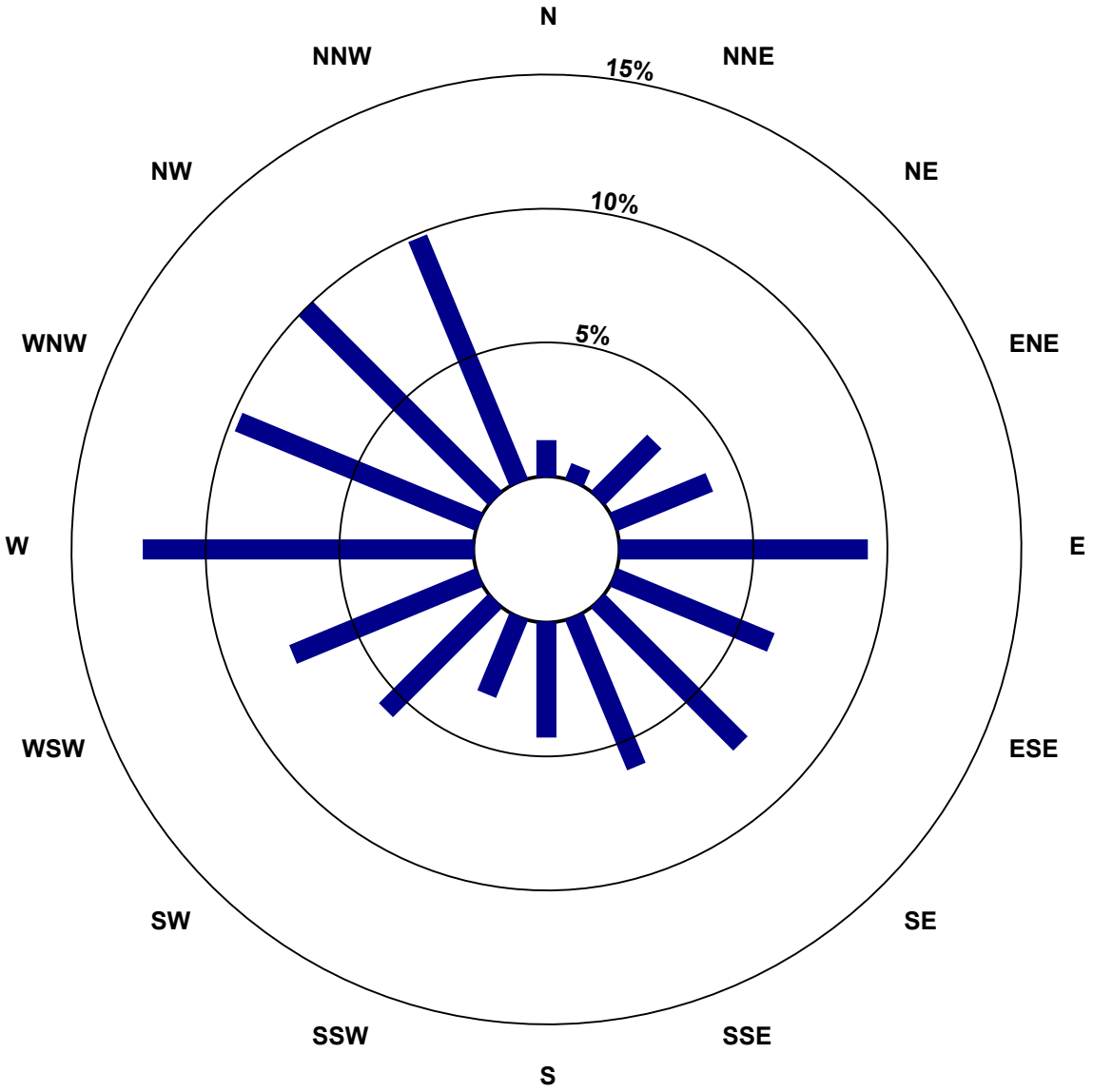
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Fort Chipewyan



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

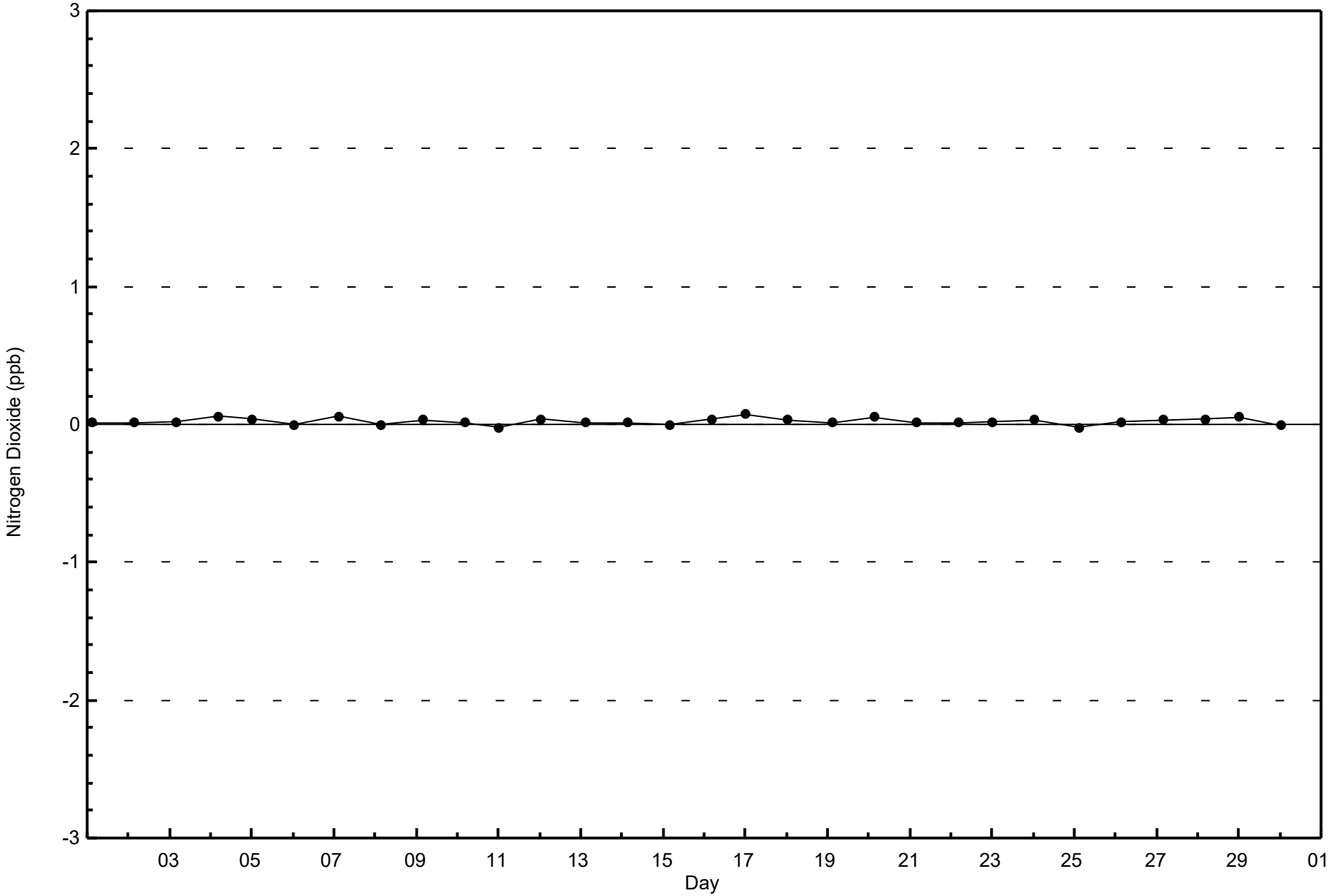
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Fort Chipewyan - September 2026

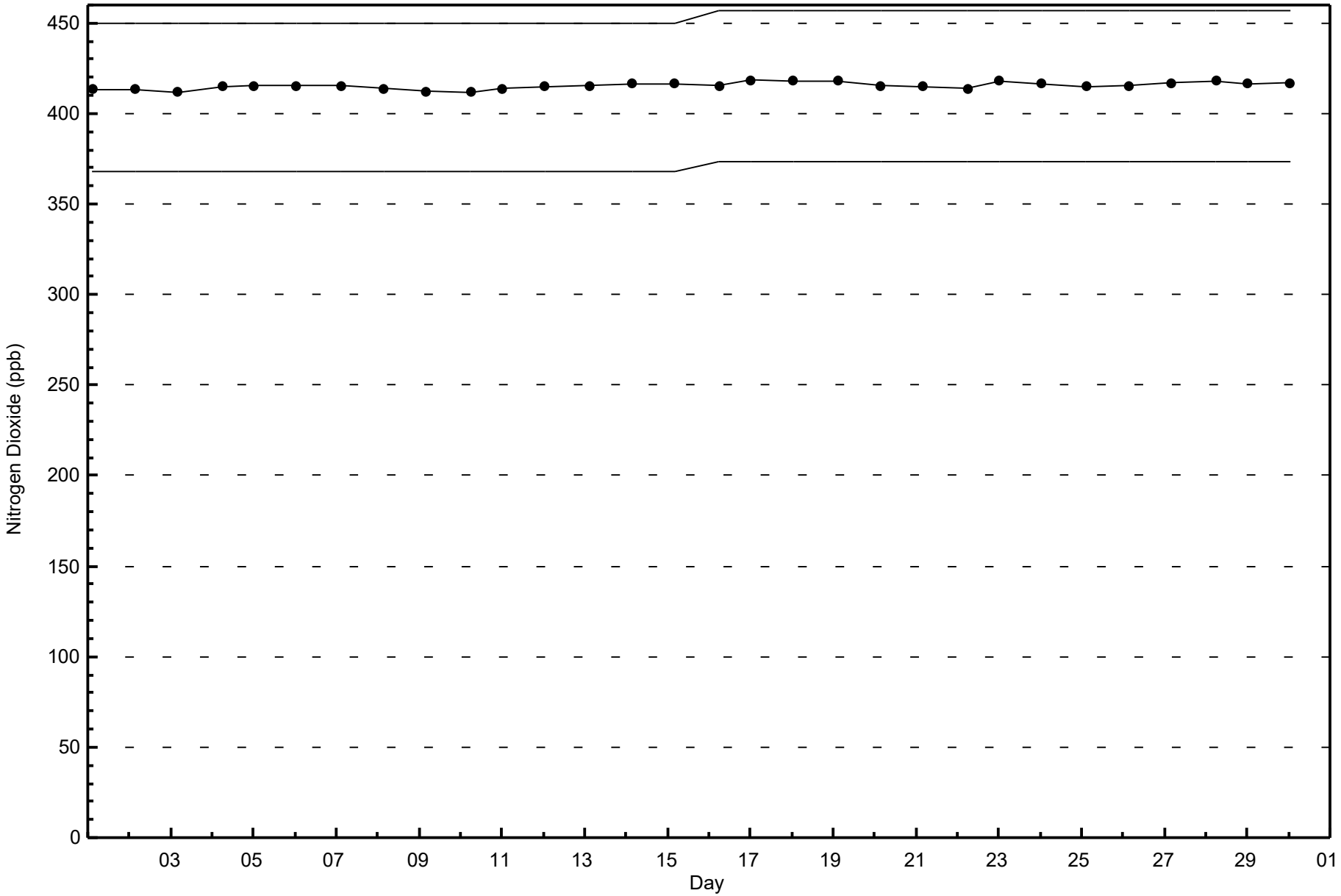


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Fort Chipewyan - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Fort Chipewyan - September 2026

Maximum Value: 25.0 ppb on Sep 9 08:00

Maximum Daily Average: 5.7 ppb on Sep 9

Minimum Value: 0.1 ppb on Sep 15 14:00

Minimum Daily Average: 0.2 ppb on Sep 5

Maximum Diurnal Average: 2.3 ppb at hour 8

Minimum Diurnal Average: 0.5 ppb at hour 22

Monthly Average: 1.04 ppb

Percentiles: P_1 = 0.2 P_{10} = 0.2 Q_1 = 0.3 Median = 0.4 Q_3 = 0.8 P_{90} = 2.2 P_{99} = 9.7

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	35
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-Sep	0.5	0.3	Z	0.3	0.3	0.3	0.2	0.9	9.7	9.4	6.1	3.5	2.2	1.3	1.4	1.0	0.6	1.5	0.6	0.7	0.3	0.3	0.3	0.2	1.8	9.7
2-Sep	0.7	0.3	0.3	Z	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.3	0.3	0.2	0.4	0.3	0.2	0.4	0.2	0.2	0.4	0.7
3-Sep	0.2	0.2	0.2	0.2	Z	0.3	0.2	0.2	0.4	0.8	0.5	0.5	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.8
4-Sep	0.3	0.3	0.3	0.2	0.2	Z	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	0.4	0.4	0.3	0.3	0.4
5-Sep	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	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	0.2	0.4
6-Sep	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.4	1.6	3.6	6.0	9.4	4.6	3.0	1.7	1.7	1.3	1.2	1.2	1.3	1.2	1.2	1.7	1.2	1.9	9.4
7-Sep	0.5	0.4	Z	0.6	0.4	0.4	0.3	0.7	3.4	6.8	4.3	2.5	1.9	1.5	1.7	1.5	2.5	3.0	1.8	2.2	1.2	0.8	0.6	0.5	1.7	6.8
8-Sep	0.5	0.5	0.5	Z	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.4	1.9	1.6	1.0	0.3	0.3	0.3	0.5	1.9
9-Sep	0.3	0.3	0.3	1.9	Z	3.6	19.5	25.0	19.6	14.3	9.7	9.1	6.9	8.5	1.3	0.5	0.4	0.5	1.0	1.3	0.5	0.5	0.4	DF	5.7	25.0
10-Sep	0.3	0.3	0.3	0.3	0.3	Z	0.3	0.4	0.9	0.9	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.9
11-Sep	Z	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.6	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.6
12-Sep	0.2	Z	0.3	0.3	0.3	0.7	0.4	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	1.0	0.3	2.6	0.5	1.1	1.1	0.5	2.6
13-Sep	0.8	0.5	Z	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.8
14-Sep	0.3	0.3	0.3	Z	0.3	0.3	0.3	0.5	0.6	0.6	1.5	0.3	0.7	0.4	0.4	0.3	0.4	0.3	0.3	0.6	0.4	0.3	0.3	0.4	0.4	1.5
15-Sep	0.3	0.2	0.3	0.2	Z	1.1	0.5	0.5	C	C	C	C	C	0.1	0.1	0.1	0.2	0.2	0.3	0.6	0.3	0.2	0.2	0.2	0.3	1.1
16-Sep	0.2	0.2	0.2	0.2	0.2	Z	0.2	2.6	0.5	1.0	0.8	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.5	0.2	0.1	0.4	1.9	2.4	0.6	2.6
17-Sep	Z	2.2	1.5	0.8	0.5	0.4	0.3	0.3	0.3	0.9	3.1	5.9	5.2	3.1	1.4	0.9	0.7	0.7	0.8	0.9	0.7	0.3	0.3	0.3	1.4	5.9
18-Sep	0.3	Z	0.3	0.3	0.3	1.2	0.6	4.0	0.6	1.2	0.5	0.2	0.3	0.4	0.7	1.1	0.5	0.5	0.7	0.5	0.3	0.2	0.2	0.2	0.7	4.0
19-Sep	0.2	0.2	Z	0.8	0.7	0.9	3.9	16.9	11.4	6.9	5.2	2.9	2.0	1.9	2.9	3.1	2.4	2.1	1.5	1.2	1.2	1.4	1.4	1.2	3.1	16.9
20-Sep	1.1	0.9	0.5	Z	0.4	0.3	0.6	0.8	0.3	0.3	0.3	0.6	0.4	0.5	1.5	1.6	1.5	1.2	2.7	1.2	0.5	0.6	0.6	0.6	0.8	2.7
21-Sep	0.9	0.7	1.2	2.6	Z	0.8	1.5	2.8	2.4	1.1	0.4	0.4	1.0	5.9	2.6	2.5	3.7	2.2	2.1	1.5	1.2	1.1	1.5	1.9	1.8	5.9
22-Sep	1.6	1.3	1.0	1.0	0.8	Z	0.6	0.7	0.6	0.6	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.6	1.6
23-Sep	Z	0.3	0.3	0.2	0.2	0.7	4.1	1.5	0.3	0.3	0.3	0.3	0.3	0.4	0.7	1.0	0.3	0.3	0.4	0.7	0.8	1.0	0.9	1.2	0.7	4.1
24-Sep	1.9	Z	2.5	1.0	0.5	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.5	2.5
25-Sep	0.2	0.2	Z	0.3	0.4	0.7	0.8	0.4	0.4	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	PF	PF	0.8	0.8	0.4	0.8
26-Sep	0.7	0.5	0.7	Z	0.6	0.8	0.6	0.7	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	0.2	0.4	0.8
27-Sep	0.2	0.2	0.2	0.2	Z	0.2	0.3	0.3	0.4	0.5	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.5
28-Sep	0.1	0.4	1.4	1.3	0.7	Z	0.2	0.3	0.5	1.2	2.9	4.3	8.6	3.1	1.9	1.9	2.6	2.4	2.0	1.7	0.9	0.8	0.8	1.3	1.8	8.6
29-Sep	Z	3.9	4.1	5.5	7.0	6.1	6.7	6.1	7.1	8.0	3.8	0.4	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.7	8.0
30-Sep	0.2	Z	0.2	0.2	0.2	0.2	0.3	1.6	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.3	1.6
	0.5	0.6	0.7	0.8	0.6	0.9	1.5	2.3	2.2	2.1	1.7	1.5	1.4	1.2	0.8	0.7	0.7	0.7	0.8	0.7	0.6	0.5	0.6	0.6	Diurnal Average	
	1.9	3.9	4.1	5.5	7.0	6.1	19.5	25.0	19.6	14.3	9.7	9.4	8.6	8.5	2.9	3.1	3.7	3.0	2.7	2.2	2.6	1.4	1.9	2.4	Diurnal Maximum	

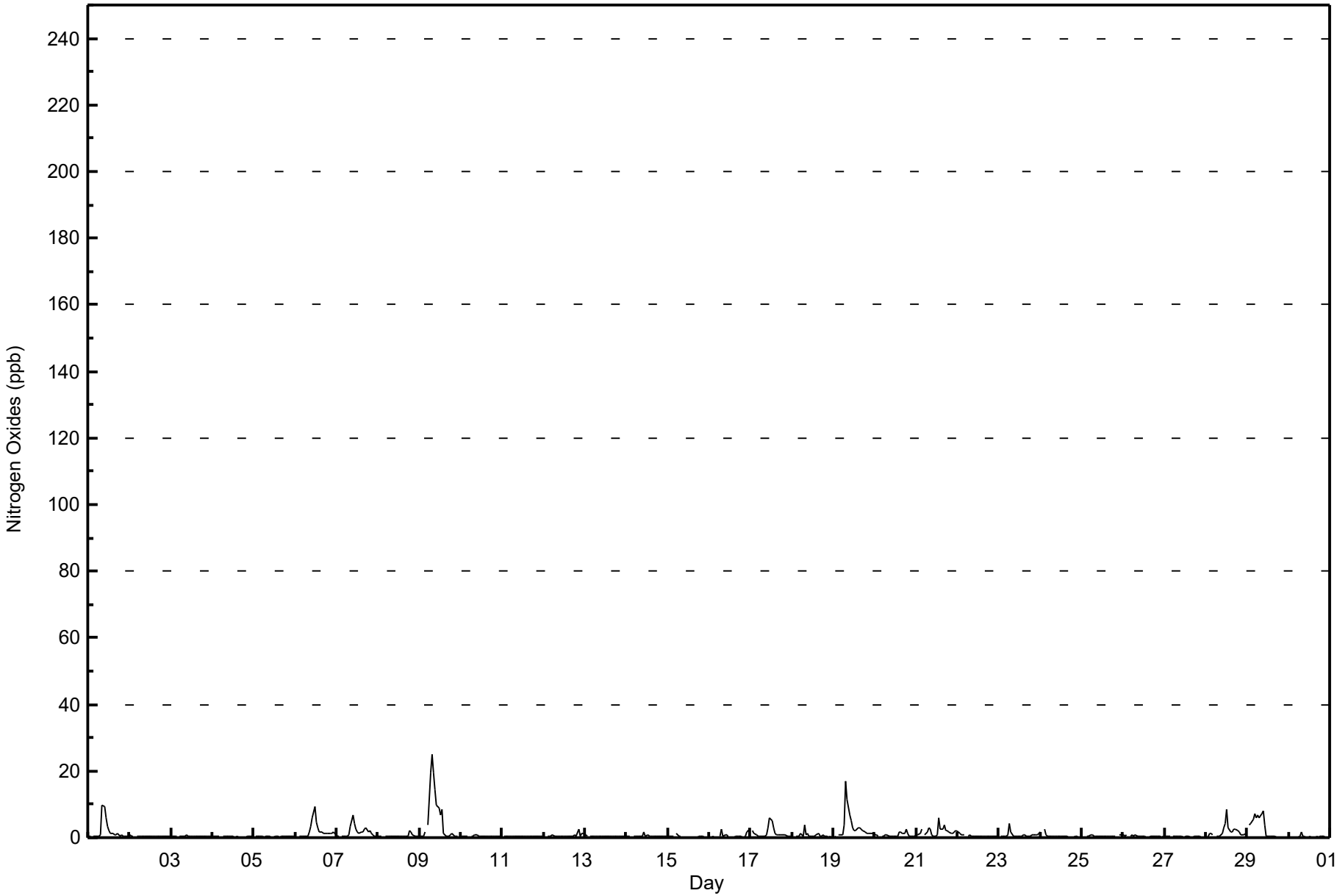
Z - zerospan C - Calibration DF - DAS Failure PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Fort Chipewyan - September 2026



Nitrogen Oxides (NO_X) - ppb
Fort Chipewyan - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	681	99.85	99.85
21 - 40	1	0.15	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: 682

Total Number of Hours: 720

Nitrogen Oxides (NO_X) - ppb
Fort Chipewyan - September 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	9	4	20	26	63	43	51	41	29	20	39	51	84	66	68	67	681
21 - 40	0	0	0	0	0	0	0	0	0	1	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	9	4	20	26	63	43	51	41	29	21	39	51	84	66	68	67	682

Total Number of Valid Hours: 682

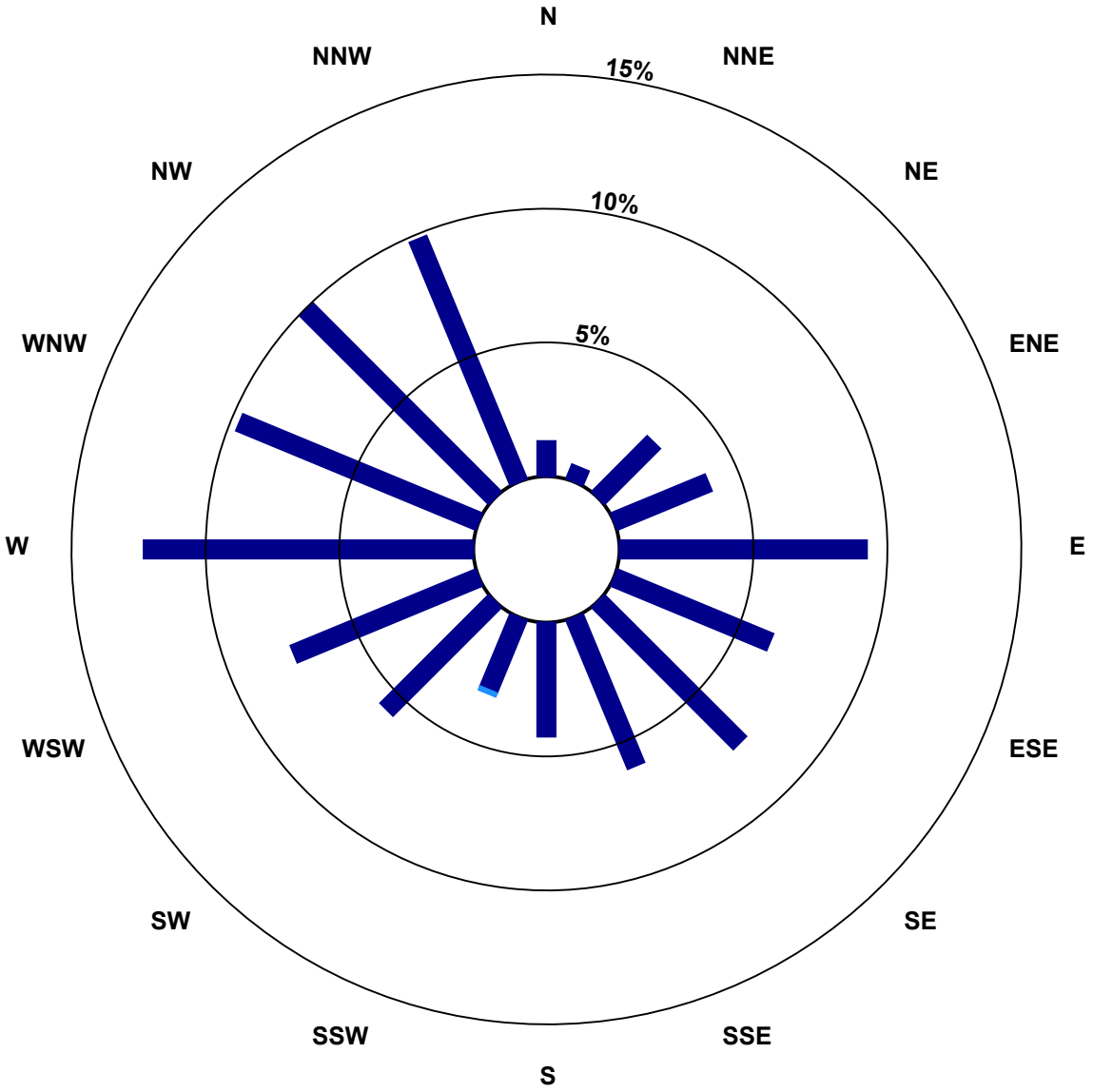
Total Number of Hours: 720

Wood Buffalo Environmental Association

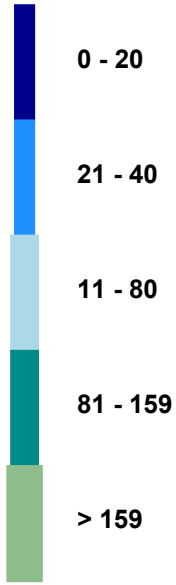
Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Fort Chipewyan



Classes (ppb)



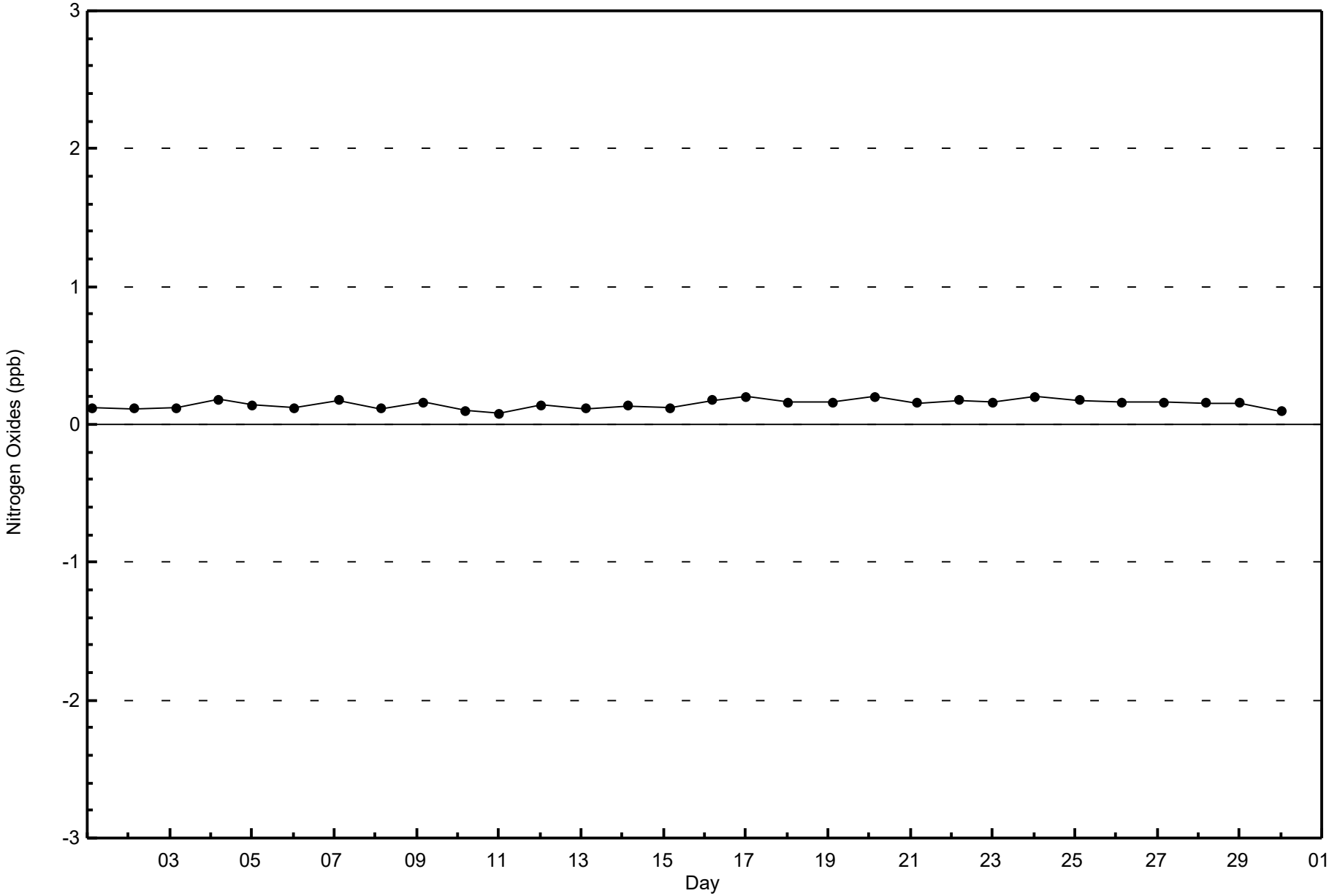
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Fort Chipewyan - September 2026

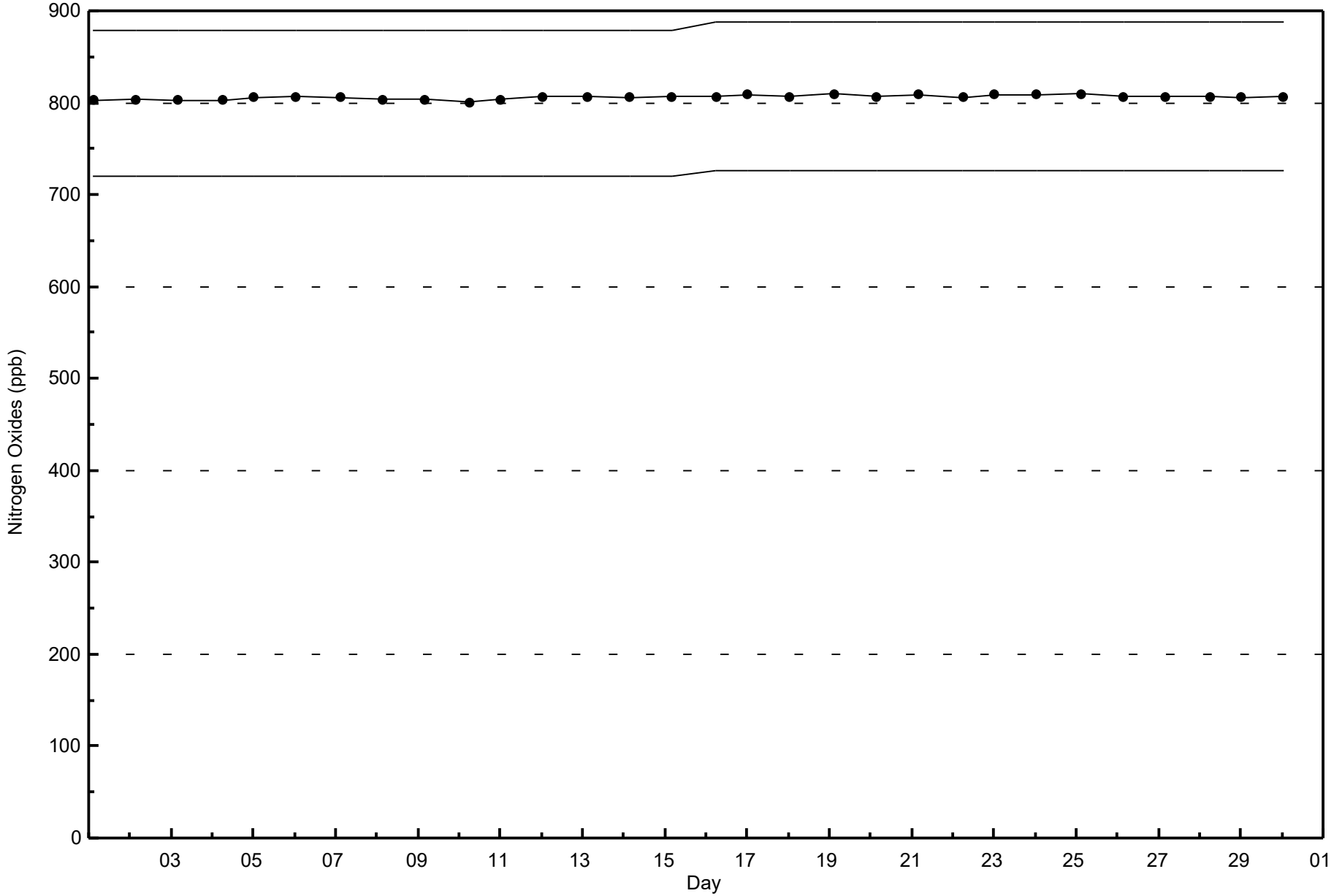


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Fort Chipewyan - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Fort Chipewyan - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 42.6 ppb on Sep 1 16:00 Maximum Daily Average: 32.2 ppb on Sep 25

Minimum Value: 8.1 ppb on Sep 9 08:00 Minimum Daily Average: 17.7 ppb on Sep 9
Maximum Diurnal Average: 30.1 ppb at hour 18 Minimum Diurnal Average: 19.6 ppb at hour 8
Monthly Average: 25.29 ppb Percentiles: P_1 = 11.8 P_{10} = 17.3 Q_1 = 20.7 Median = 25.2 Q_3 = 30.2 P_{90} = 33.1 P_{99} = 40.5

Hours in Service:	720
Hours of Data:	684
Hours of Missing Data:	36
Hours of Calibration:	33
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-Sep	Z	14.9	16.0	14.6	13.8	11.8	11.5	11.8	11.1	13.5	19.4	26.0	31.7	39.5	42.4	42.6	40.5	37.6	32.3	32.2	30.7	29.5	28.4	27.6	25.2	42.6
2-Sep	25.7	Z	21.5	21.5	20.0	19.9	20.8	23.4	24.7	28.8	31.4	33.7	34.5	34.4	35.1	34.6	36.9	38.0	37.0	35.3	34.1	32.6	30.1	29.3	29.7	38.0
3-Sep	28.5	27.8	Z	25.9	24.4	22.5	20.6	19.7	19.5	19.6	20.9	21.8	23.4	26.8	27.1	28.0	28.7	28.0	28.8	29.1	28.0	27.1	25.6	24.3	25.0	29.1
4-Sep	23.6	22.8	21.5	Z	18.0	16.2	13.5	14.3	12.0	12.3	13.8	15.9	17.9	18.8	19.0	18.6	21.0	21.8	20.8	20.7	21.0	19.7	17.1	15.9	18.1	23.6
5-Sep	19.5	19.1	18.4	17.5	Z	17.2	16.6	17.8	21.8	31.6	33.2	33.5	33.2	33.5	32.9	33.0	33.1	33.2	33.3	33.5	33.3	31.7	29.8	29.2	27.7	33.5
6-Sep	28.0	27.0	25.6	25.0	24.6	Z	21.6	20.5	20.1	20.7	22.3	25.8	28.5	30.1	33.8	34.2	34.3	34.5	34.7	34.2	33.1	30.8	22.3	19.2	27.4	34.7
7-Sep	Z	19.4	18.4	18.3	18.1	17.8	18.2	17.8	17.5	18.9	20.9	24.8	28.8	31.5	32.4	32.9	32.5	29.2	28.6	27.6	24.3	22.5	22.1	20.7	23.6	32.9
8-Sep	19.3	Z	17.4	17.2	15.9	14.5	13.9	13.7	15.5	16.6	17.7	21.1	24.2	26.8	29.6	30.6	30.4	27.9	24.6	22.5	22.8	24.7	24.5	23.0	21.5	30.6
9-Sep	21.5	22.8	Z	21.4	17.3	17.0	9.1	8.1	10.3	13.6	17.2	18.1	19.7	21.6	24.8	22.9	22.3	21.6	18.3	15.7	14.6	13.6	17.4	DF	17.7	24.8
10-Sep	23.4	23.3	26.4	Z	24.3	23.8	22.8	21.5	19.0	18.1	18.9	17.7	16.8	18.1	17.9	18.9	19.3	20.9	21.2	22.5	23.7	23.8	23.2	23.6	21.3	26.4
11-Sep	22.2	22.1	21.8	21.4	Z	17.6	15.9	16.9	20.8	20.1	18.7	22.1	25.8	28.5	32.2	31.8	31.2	30.5	30.7	30.5	29.3	25.1	22.2	20.9	24.3	32.2
12-Sep	20.6	19.9	19.0	15.6	14.2	Z	13.7	14.6	17.7	23.1	25.6	30.5	33.1	34.5	35.4	33.7	33.2	31.3	27.4	26.1	24.9	26.0	25.6	23.4	24.7	35.4
13-Sep	Z	19.3	17.1	16.3	16.6	16.3	17.3	19.2	23.3	23.0	20.8	19.3	18.6	17.4	15.5	15.4	16.8	20.3	21.6	20.9	19.8	22.1	21.3	20.4	19.1	23.3
14-Sep	20.5	Z	18.8	18.1	18.0	17.7	17.1	16.0	C	C	C	20.9	21.6	23.0	25.7	25.7	25.0	26.7	22.2	20.6	21.4	20.9	20.2	18.3	20.9	26.7
15-Sep	17.8	17.2	Z	17.8	16.8	16.9	17.7	18.5	18.6	19.8	20.8	21.2	23.7	25.6	25.2	26.3	23.9	26.9	25.0	22.0	21.7	21.1	19.7	20.9	21.1	26.9
16-Sep	21.9	22.3	19.3	Z	22.6	18.7	19.6	20.9	25.4	25.2	30.4	32.9	32.0	31.4	31.5	30.5	29.5	30.2	28.6	30.2	29.0	26.5	23.2	21.7	26.2	32.9
17-Sep	20.4	20.9	22.1	24.3	Z	25.7	25.2	24.5	25.2	24.9	23.6	22.2	22.7	25.9	28.8	28.6	27.2	26.3	26.0	24.7	22.5	28.3	28.2	23.7	24.9	28.8
18-Sep	24.3	22.2	20.7	19.7	20.2	Z	16.6	15.8	23.1	27.5	29.6	30.8	30.7	30.2	30.5	31.1	32.5	33.7	32.5	32.7	32.4	30.8	29.1	27.5	27.1	33.7
19-Sep	Z	21.6	18.3	15.6	15.3	15.0	14.2	11.2	15.7	20.3	22.4	27.1	36.8	39.1	41.3	40.7	41.4	41.1	41.4	39.3	36.3	33.8	31.2	32.0	28.3	41.4
20-Sep	31.0	Z	29.2	27.5	27.5	26.1	25.9	25.8	26.3	28.3	29.7	31.5	29.1	31.4	36.6	39.3	35.8	33.1	34.9	33.2	31.5	32.7	30.5	29.5	30.7	39.3
21-Sep	29.0	28.1	Z	24.6	24.7	29.2	25.9	23.5	25.0	29.2	30.4	31.0	29.6	26.9	30.9	30.7	30.9	33.1	32.7	32.7	32.3	30.0	29.9	27.2	29.0	33.1
22-Sep	23.1	19.5	18.0	Z	16.2	14.9	15.3	14.2	17.8	17.3	22.3	24.9	24.5	26.4	21.4	26.6	27.9	26.4	26.1	24.9	25.0	24.2	23.9	24.4	22.0	27.9
23-Sep	19.8	21.6	22.1	24.2	Z	27.0	23.6	19.4	21.8	20.7	22.3	23.1	22.5	24.6	26.6	28.1	30.6	31.1	31.4	28.5	28.2	29.4	28.9	27.5	25.4	31.4
24-Sep	24.3	21.9	23.1	25.8	27.6	Z	27.3	26.8	27.5	28.0	27.5	27.1	28.5	31.1	31.3	30.8	32.9	32.8	33.5	32.6	31.4	29.9	28.8	28.8	28.7	33.5
25-Sep	Z	27.1	29.8	32.0	29.0	26.3	30.7	31.0	30.4	30.7	31.2	29.4	28.4	27.1	29.0	32.7	36.7	38.9	39.5	39.4	PF	PF	37.6	40.1	32.2	40.1
26-Sep	39.5	Z	37.6	35.6	33.8	32.0	31.6	29.7	30.3	29.1	28.1	29.7	33.4	34.3	32.6	29.4	28.2	29.6	30.8	31.1	32.6	32.8	33.9	35.4	32.2	39.5
27-Sep	36.5	35.0	Z	30.2	30.3	30.7	28.9	28.8	29.4	30.9	31.1	27.4	30.2	31.6	28.6	27.7	27.3	27.0	25.8	25.9	24.8	24.2	22.5	28.1	28.8	36.5
28-Sep	30.9	24.0	23.1	Z	20.5	16.3	17.3	17.5	18.4	18.8	22.0	23.4	25.2	28.7	29.4	28.3	26.8	25.9	27.6	26.7	25.2	24.0	25.5	25.0	23.9	30.9
29-Sep	23.2	21.1	22.1	19.5	Z	18.8	18.6	21.2	20.6	22.1	26.4	28.1	27.0	28.5	30.8	32.5	32.0	32.1	31.2	29.4	26.9	20.7	21.4	22.0	25.1	32.5
30-Sep	22.1	22.3	22.0	23.6	23.7	Z	23.7	23.4	25.1	26.5	25.6	25.7	26.6	27.1	28.9	33.5	32.4	32.6	30.4	29.3	27.5	26.5	25.5	24.4	26.5	33.5
	24.7	22.5	22.0	22.1	21.3	20.4	19.8	19.6	21.2	22.7	24.3	25.5	27.0	28.5	29.6	30.0	30.0	30.1	29.3	28.5	27.2	26.4	25.7	25.3	Diurnal Average	
	39.5	35.0	37.6	35.6	33.8	32.0	31.6	31.0	30.4	31.6	33.2	33.7	36.8	39.5	42.4	42.6	41.4	41.1	41.4	39.4	36.3	33.8	37.6	40.1	Diurnal Maximum	

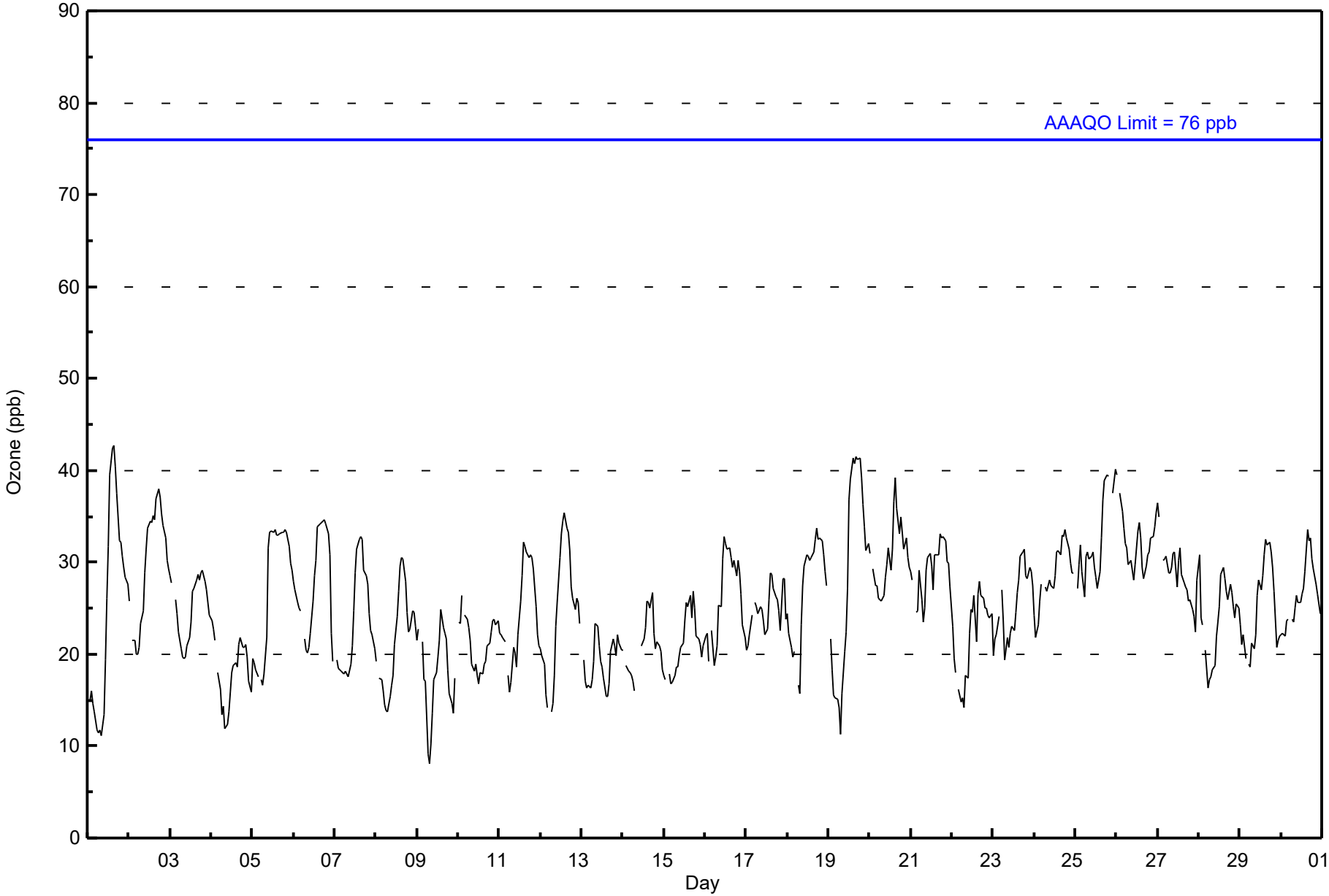
Z - zerospan C - Calibration DF - DAS Failure PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Fort Chipewyan - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	164	23.98	23.98
21 - 50	520	76.02	100.00
51 - 82	0	0.00	100.00
> 83	0	0.00	100.00

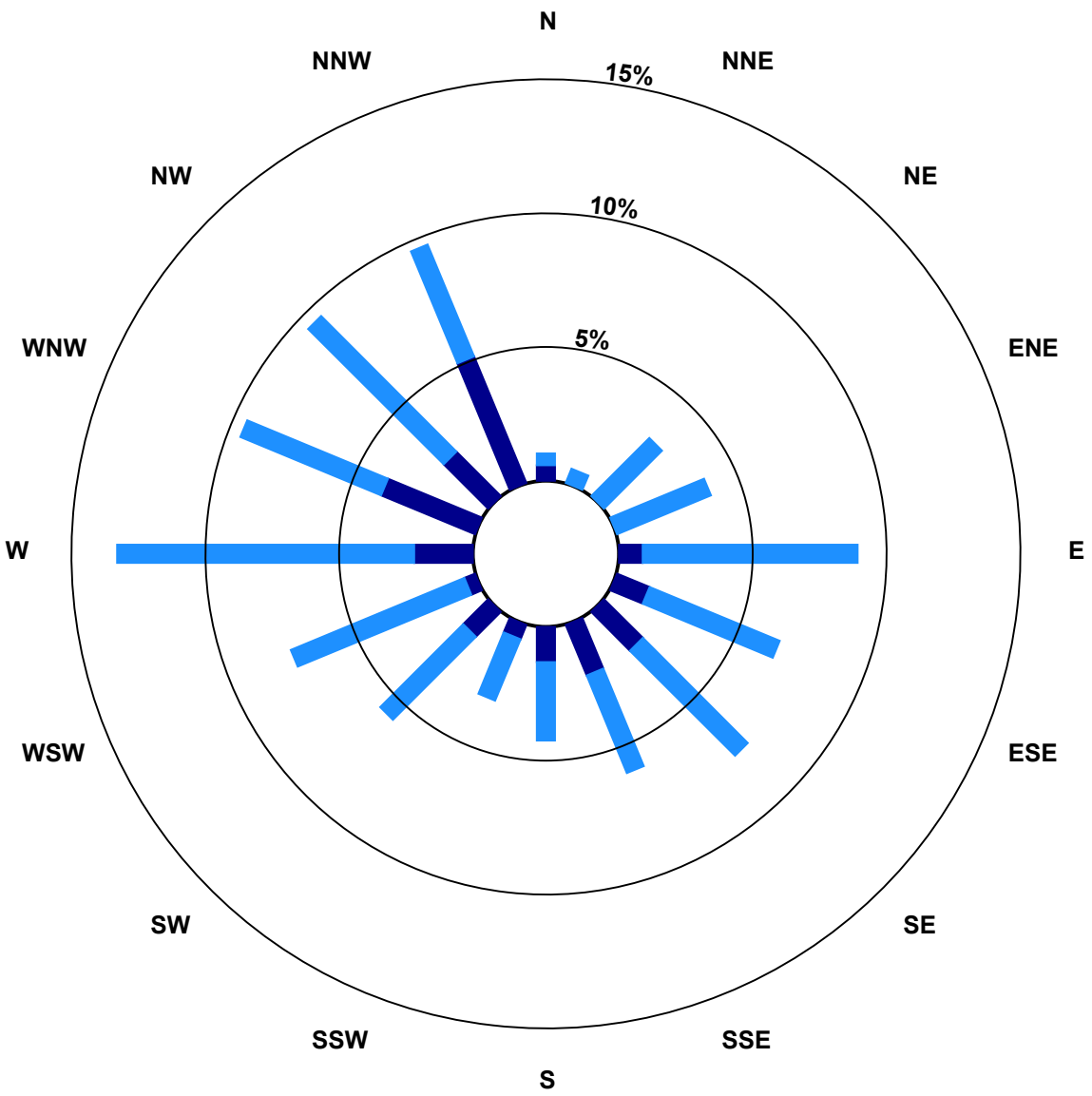
Total Number of Valid Hours: 684

Total Number of Hours: 720

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	0	0	0	6	9	14	14	9	4	9	3	15	26	16	35	164
21 - 50	3	4	21	26	55	36	38	27	20	17	30	48	76	39	49	31	520
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	7	4	21	26	61	45	52	41	29	21	39	51	91	65	65	66	684

Total Number of Valid Hours: 684

Total Number of Hours: 720



Classes (ppb)

- 0 - 20
- 21 - 50
- 51 - 82
- > 83

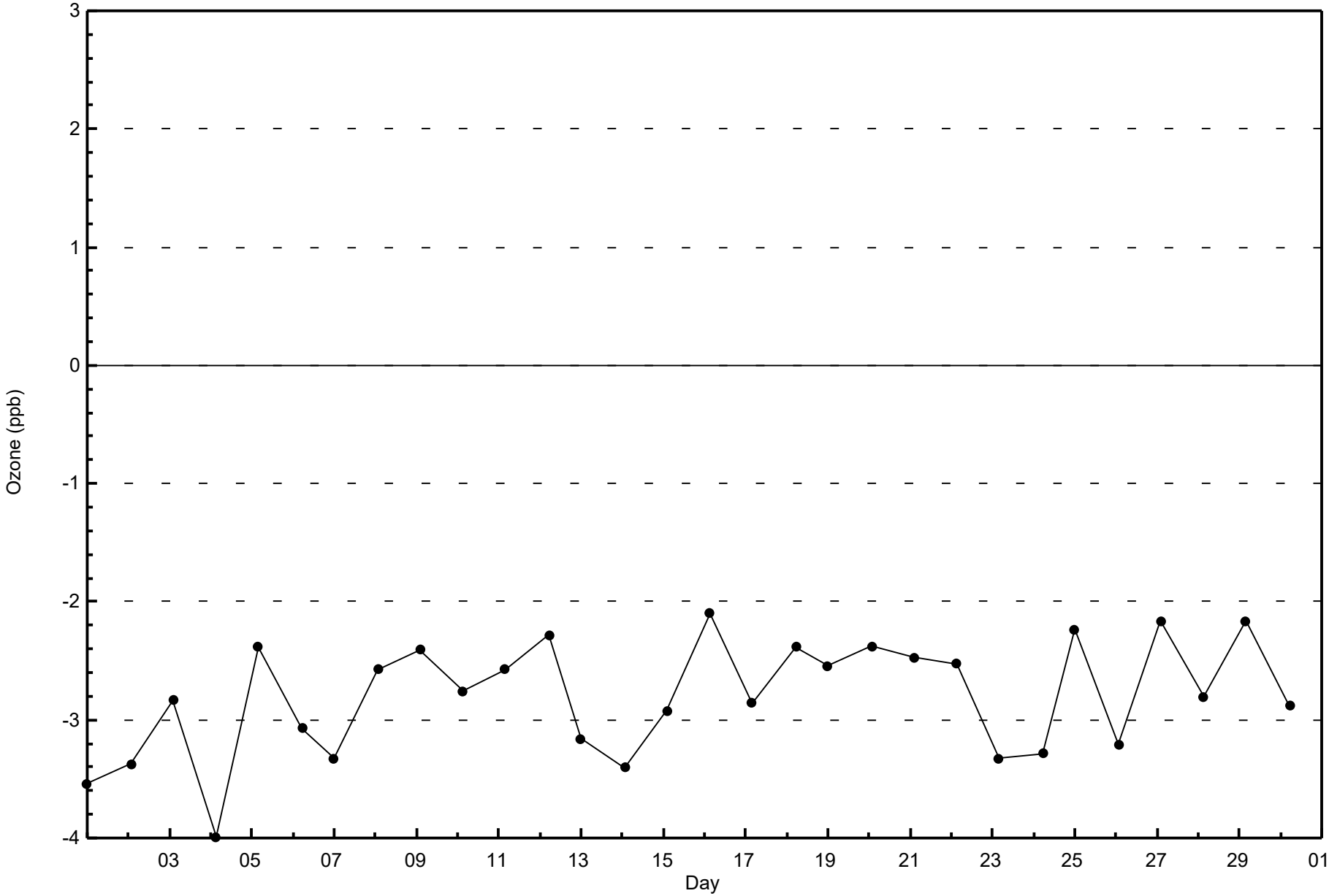
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Fort Chipewyan - September 2026

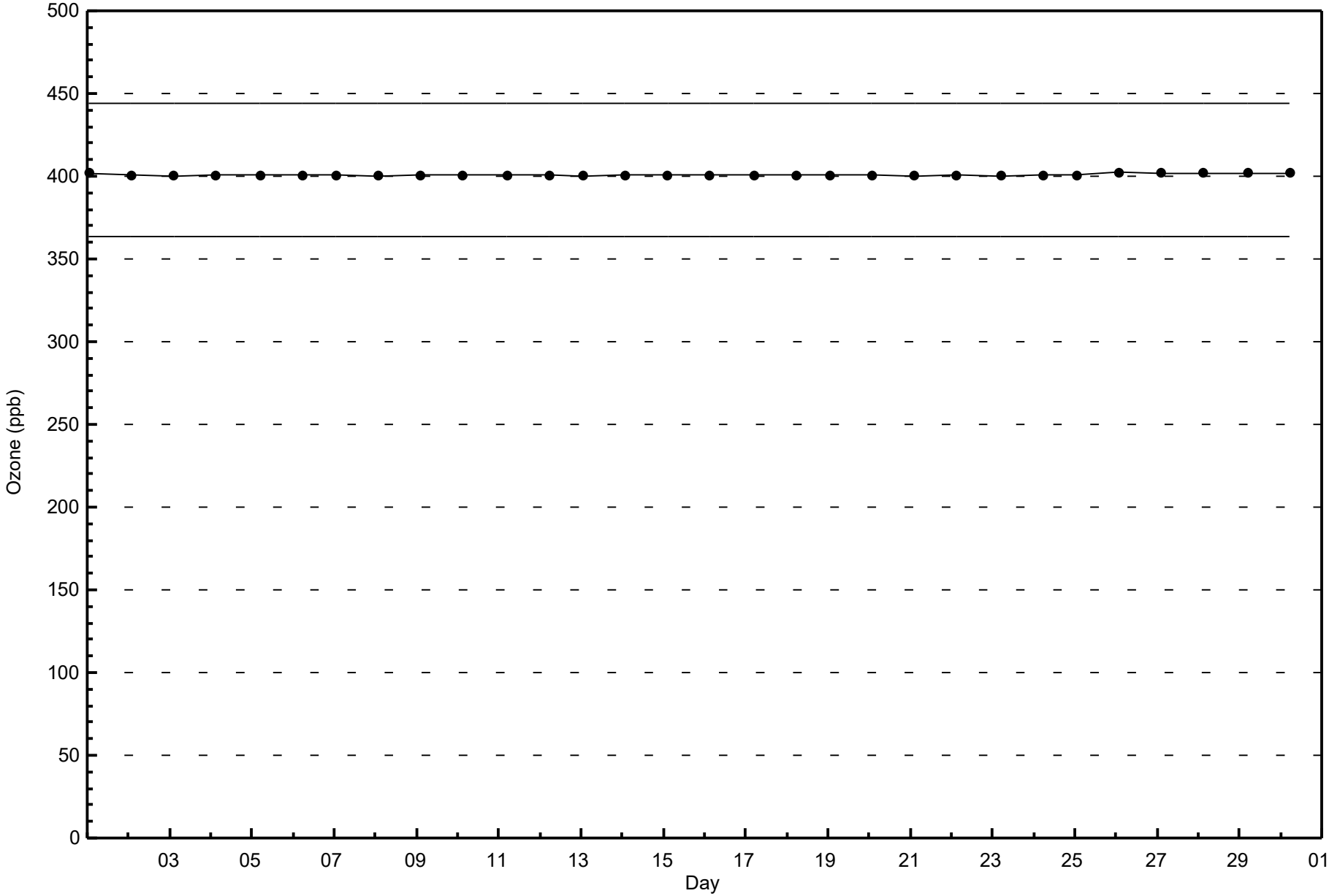


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Fort Chipewyan - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Fort Chipewyan - September 2026

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

Maximum Value: 11.7 $\mu g/m^3$ on Sep 9 08:00

Maximum Daily Average: 7.7 $\mu g/m^3$ on Sep 9

Minimum Value: 0.2 $\mu g/m^3$ on Sep 30 04:00

Minimum Daily Average: 0.5 $\mu g/m^3$ on Sep 30

Maximum Diurnal Average: 3.9 $\mu g/m^3$ at hour 8

Minimum Diurnal Average: 3.2 $\mu g/m^3$ at hour 13

Monthly Average: 3.49 $\mu g/m^3$

Percentiles: P_1 = 0.2 P_{10} = 1.1 Q_1 = 2.0 Median = 3.1 Q_3 = 5.0 P_{90} = 6.3 P_{99} = 8.9

Hours in Service:	720
Hours of Data:	705
Hours of Missing Data:	15
Hours of Calibration:	1
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-Sep	8.9	6.9	5.9	6.0	6.2	6.5	6.1	6.2	8.1	10.0	6.8	5.4	4.6	3.5	3.9	3.8	3.2	3.3	3.0	2.7	2.7	2.9	3.1	3.1	5.1	10.0
2-Sep	3.1	3.2	3.4	3.8	4.0	4.5	5.2	6.4	7.0	7.1	6.1	5.4	4.9	4.8	5.0	5.4	6.1	6.5	5.8	5.5	5.8	6.4	6.2	6.5	5.3	7.1
3-Sep	5.8	5.4	5.5	5.8	5.9	6.4	6.5	6.4	5.9	5.7	5.4	5.2	4.9	4.9	4.6	4.4	5.1	5.0	4.6	4.6	4.9	4.5	4.7	4.9	5.3	6.5
4-Sep	5.0	5.5	5.6	5.2	5.1	5.4	2.3	0.8	0.8	0.8	1.0	0.9	1.5	1.6	2.3	2.4	2.3	2.1	1.9	1.9	2.1	3.0	2.7	2.7	2.7	5.6
5-Sep	3.3	3.6	3.7	3.8	3.8	3.6	3.5	3.3	2.8	2.6	2.8	3.1	3.0	3.0	3.1	3.2	3.1	3.0	2.9	2.9	2.9	2.9	3.0	3.0	3.2	3.8
6-Sep	3.0	3.1	3.3	3.4	3.5	3.4	3.5	3.7	4.3	4.7	5.5	8.2	6.9	6.6	6.3	7.0	6.6	6.8	7.0	7.3	6.5	5.8	5.6	3.8	5.2	8.2
7-Sep	2.8	2.6	2.6	2.4	2.4	2.5	2.6	2.7	3.1	3.4	3.7	3.8	3.9	4.4	4.7	5.1	5.1	5.1	5.4	6.4	6.7	6.2	5.8	5.9	4.1	6.7
8-Sep	6.2	6.2	6.4	6.5	6.2	5.9	5.3	5.0	4.4	4.1	3.8	3.2	2.9	2.7	2.7	2.4	2.9	4.5	4.3	5.5	6.2	6.6	5.7	5.8	4.8	6.6
9-Sep	6.1	6.5	6.3	7.5	10.1	8.8	10.5	11.7	10.7	9.6	8.7	8.8	8.2	8.1	6.7	5.9	6.0	5.9	6.1	6.3	6.1	6.3	6.0	DF	7.7	11.7
10-Sep	4.4	4.0	3.2	3.2	3.0	3.1	4.1	6.7	5.1	4.7	6.1	5.0	4.8	9.0	8.0	2.7	2.4	1.9	1.9	1.5	1.9	2.1	1.8	1.4	3.8	9.0
11-Sep	1.0	0.9	0.9	1.0	0.8	0.8	0.7	0.8	0.9	0.9	1.0	0.8	1.1	2.3	3.8	4.3	4.3	4.1	3.9	3.9	3.9	3.3	1.7	1.6	2.0	4.3
12-Sep	1.9	2.2	2.3	2.5	2.5	2.3	2.2	2.1	2.2	2.5	2.6	2.5	2.8	3.1	3.1	2.9	2.9	2.8	2.8	2.8	2.8	3.2	4.0	4.0	2.7	4.0
13-Sep	3.8	3.5	3.6	3.5	3.3	3.3	3.3	3.4	3.6	3.5	3.5	3.6	3.7	3.6	3.7	3.7	3.2	2.9	2.8	2.9	3.0	2.9	2.7	2.8	3.3	3.8
14-Sep	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.8	2.6	2.3	2.7	2.7	2.7	2.6	2.1	1.5	1.9	4.1	2.1	2.0	3.3	3.8	2.7	4.1
15-Sep	2.0	2.0	2.1	2.0	2.0	2.2	2.3	2.6	3.0	3.1	3.2	2.6	2.6	2.7	2.3	1.5	1.5	2.1	2.0	2.0	2.2	2.5	3.2	2.6	2.3	3.2
16-Sep	2.5	2.6	2.9	2.7	3.3	3.9	4.1	4.0	2.9	2.9	2.7	2.4	2.1	1.9	1.5	1.6	1.3	1.7	2.9	1.6	1.8	2.2	3.9	4.7	2.7	4.7
17-Sep	5.0	4.6	4.3	3.7	3.6	3.6	3.4	3.3	3.3	3.5	4.2	4.9	5.1	5.1	5.4	5.3	5.1	5.1	5.5	6.0	5.8	3.1	2.7	UO	4.4	6.0
18-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	2.6	1.9	1.8	1.8	1.8	1.7	1.6	1.5	1.6	1.4	1.5	1.5	1.8	1.9	--	2.6
19-Sep	2.2	2.4	2.7	3.2	3.3	3.6	4.6	6.9	6.0	5.1	5.1	4.7	4.2	4.8	5.9	6.7	6.2	6.5	7.1	7.7	6.9	7.4	7.6	7.1	5.3	7.7
20-Sep	6.6	6.2	5.0	4.6	4.6	4.6	4.7	4.4	4.2	4.3	4.1	4.0	4.0	3.9	5.4	5.6	5.2	5.0	7.6	5.1	3.7	3.6	3.8	3.9	4.8	7.6
21-Sep	4.2	4.6	5.1	6.3	6.1	5.1	5.6	6.4	5.9	5.0	4.4	4.1	4.2	4.6	6.1	6.4	7.5	7.6	7.3	6.6	6.0	6.2	7.1	8.8	5.9	8.8
22-Sep	7.6	7.2	6.4	6.2	6.2	6.1	5.0	5.8	5.3	5.2	4.0	3.5	3.3	3.0	3.8	3.4	3.1	3.6	3.1	3.1	3.1	2.9	2.6	2.5	4.4	7.6
23-Sep	2.5	2.3	2.2	1.8	1.7	1.7	1.8	1.9	2.0	1.9	1.5	2.0	2.0	2.2	2.1	2.1	1.7	1.8	1.9	2.2	2.7	2.9	2.9	3.3	2.1	3.3
24-Sep	4.1	4.7	5.0	3.1	2.1	1.7	1.5	1.5	1.6	2.1	2.4	2.2	1.7	1.4	1.6	1.6	1.8	1.5	1.1	1.2	1.1	1.2	1.1	1.2	2.0	5.0
25-Sep	1.3	1.5	1.5	2.3	2.5	2.2	2.2	2.7	2.9	2.6	3.0	2.5	2.4	2.2	2.3	2.2	2.1	2.3	2.2	2.0	PF	PF	1.9	1.4	2.2	3.0
26-Sep	1.4	1.5	1.4	1.8	2.9	2.8	2.8	1.8	1.0	0.3	0.3	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.9	2.9
27-Sep	0.3	0.2	0.6	0.8	1.1	1.4	1.5	1.5	1.6	1.5	1.5	1.5	1.4	1.5	1.9	2.1	2.1	2.1	1.9	2.0	2.1	2.0	1.9	1.8	1.5	2.1
28-Sep	2.0	2.0	3.0	2.6	2.5	2.5	2.5	2.2	1.9	1.9	2.0	2.2	2.7	2.4	2.4	2.6	3.2	3.5	3.1	3.4	2.9	2.9	2.8	3.5	2.6	3.5
29-Sep	4.5	5.4	5.1	5.0	4.9	4.4	4.3	3.9	3.8	C	2.2	1.2	1.3	1.4	1.3	1.5	1.5	1.3	1.2	0.9	0.7	0.5	0.4	0.5	2.5	5.4
30-Sep	0.3	0.4	0.2	0.2	0.2	0.2	0.6	1.0	0.6	0.4	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.7	0.7	0.8	1.0	0.5	1.0
	3.6	3.6	3.6	3.6	3.7	3.6	3.6	3.9	3.7	3.7	3.4	3.3	3.2	3.3	3.5	3.4	3.3	3.4	3.5	3.5	3.4	3.4	3.4	3.3	Diurnal Average	
	8.9	7.2	6.4	7.5	10.1	8.8	10.5	11.7	10.7	10.0	8.7	8.8	8.2	9.0	8.0	7.0	7.5	7.6	7.6	7.7	6.9	7.4	7.6	8.8	Diurnal Maximum	

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

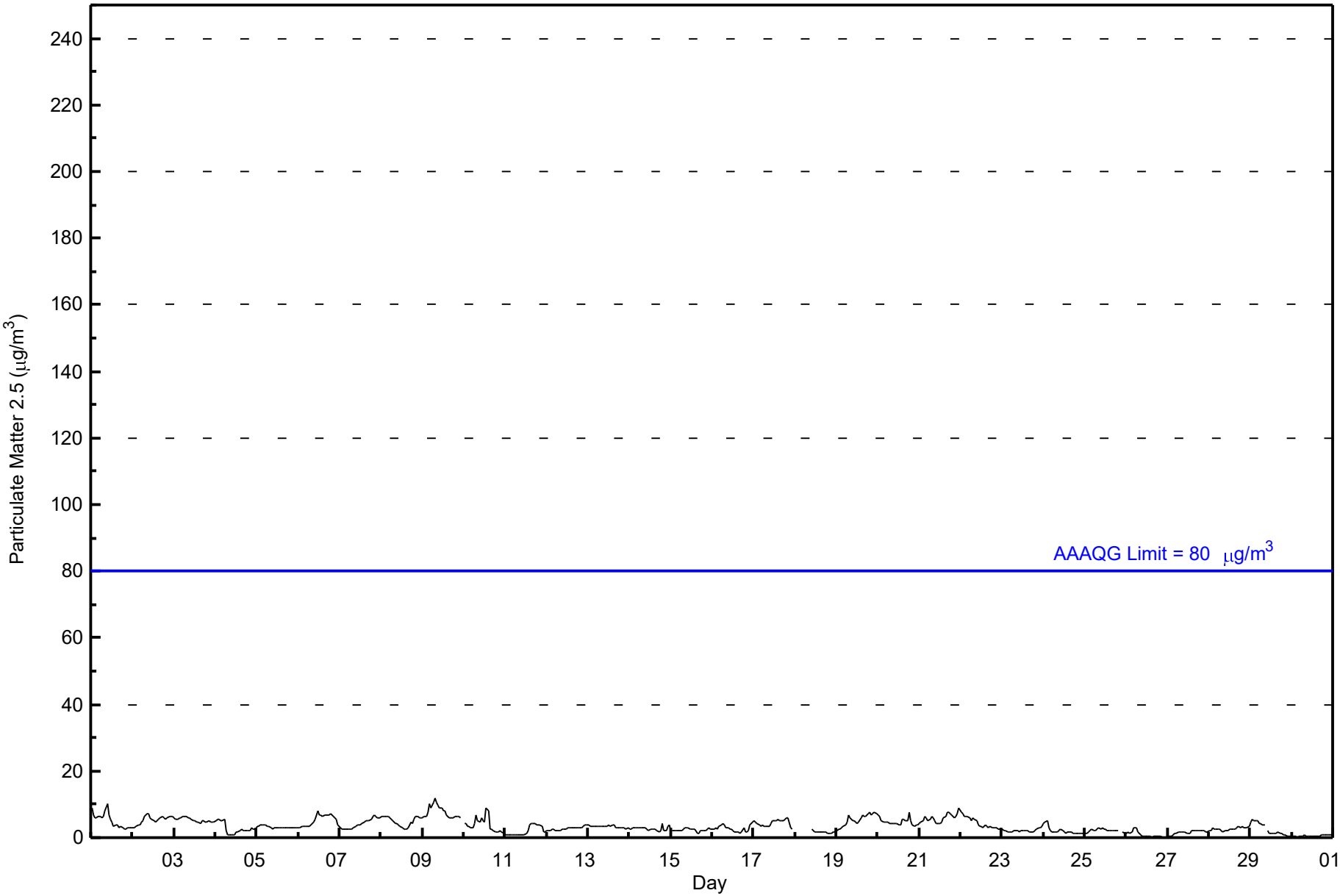
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Fort Chipewyan - September 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Fort Chipewyan - September 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	577	81.84	81.84
6 - 15	128	18.16	100.00
16 - 25	0	0.00	100.00
26 - 80	0	0.00	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 705

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Fort Chipewyan - September 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	9	4	21	21	50	31	39	33	14	13	32	46	86	54	63	61	577
6 - 15	0	0	1	5	13	15	17	10	15	8	10	5	6	10	3	10	128
16 - 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	9	4	22	26	63	46	56	43	29	21	42	51	92	64	66	71	705

Total Number of Valid Hours: 705

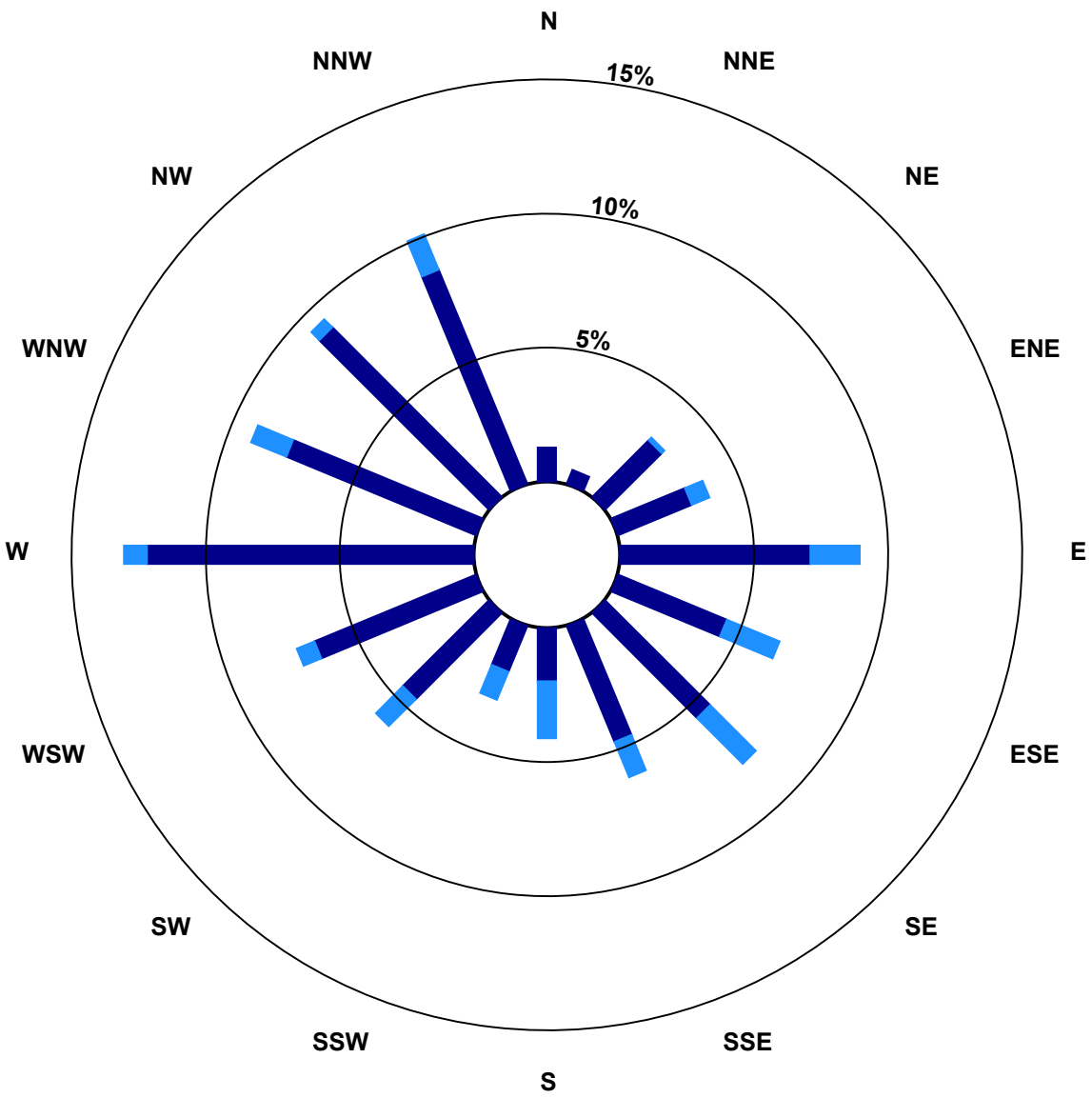
Total Number of Hours: 720

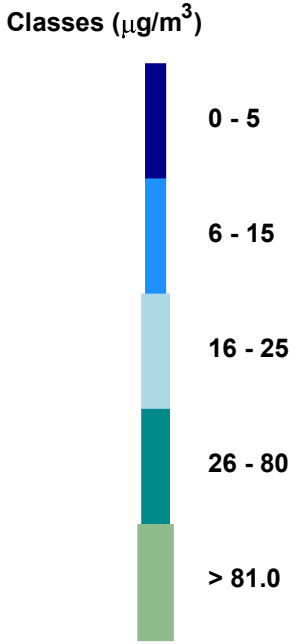
Wood Buffalo Environmental Association

Wind Rose Sep 2026

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

Fort Chipewyan





Total Number of Valid Hours: 705

Maximum Value: 25.4 C on Sep 1 17:00

Maximum Daily Average: 20.5 C on Sep 2

Minimum Value: 1.8 C on Sep 30 08:00

Minimum Daily Average: 3.8 C on Sep 30

Maximum Diurnal Average: 14.4 C at hour 15

Minimum Diurnal Average: 9.0 C at hour 7

Monthly Average: 11.63 C

Percentiles: P_1 = 2.4 P_{10} = 5.2 Q_1 = 8.4 Median = 11.2 Q_3 = 14.6 P_{90} = 18.8 P_{99} = 23.6

Hours in Service:	720
Hours of Data:	719
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-Sep	14.7	14.9	14.8	14.4	14.2	13.9	14.3	14.8	16.7	17.1	18.2	19.2	20.7	23.7	24.6	25.1	25.4	23.2	22.8	22.7	21.8	20.6	19.6	18.8	19.0	25.4
2-Sep	18.3	17.3	16.8	17.1	16.2	16.1	16.6	17.6	18.9	21.1	22.6	23.2	23.1	23.4	23.7	23.1	23.8	24.9	23.7	21.8	21.2	20.8	19.8	19.7	20.5	24.9
3-Sep	19.1	18.5	18.1	17.3	16.7	16.5	16.8	17.9	19.2	19.9	20.3	20.9	21.6	22.3	22.3	21.9	22.8	22.6	22.0	21.5	21.3	20.5	19.9	19.7	20.0	22.8
4-Sep	19.5	19.3	18.8	16.9	16.6	16.4	15.4	15.1	14.2	13.2	12.3	11.2	10.5	10.7	11.1	10.5	10.7	11.4	11.1	10.9	9.8	8.7	7.6	7.0	12.9	19.5
5-Sep	6.8	5.9	5.4	5.3	5.2	4.8	5.3	7.3	10.3	11.5	11.7	12.0	12.0	12.6	12.8	13.0	13.2	13.1	13.2	13.5	13.5	12.9	12.4	11.9	10.2	13.5
6-Sep	11.2	10.8	10.0	9.5	9.4	9.0	8.7	9.5	10.4	11.9	13.8	15.6	15.6	15.6	16.9	16.2	16.4	15.9	15.7	15.6	15.7	16.2	15.6	15.2	13.3	16.9
7-Sep	14.7	14.4	14.3	13.5	13.3	13.1	12.8	12.6	14.2	16.5	17.1	18.7	20.1	19.7	19.8	20.9	20.1	18.9	17.9	17.3	16.5	15.6	14.8	14.0	16.3	20.9
8-Sep	13.1	12.5	11.7	11.1	10.5	9.9	9.6	10.7	13.0	14.5	15.5	16.9	18.2	18.8	19.5	19.5	19.4	19.2	17.5	16.0	15.5	15.4	15.2	14.5	14.9	19.5
9-Sep	13.3	13.1	12.6	12.7	12.4	12.1	12.1	12.2	13.2	15.0	16.8	17.2	17.6	18.8	19.3	18.6	17.6	16.9	15.4	14.8	14.5	14.0	13.5	DF	14.9	19.3
10-Sep	12.9	12.8	12.6	12.6	12.5	12.6	12.4	12.4	12.0	12.2	12.4	12.6	12.5	12.7	13.2	13.1	13.0	12.3	11.8	11.4	11.3	11.3	10.8	10.9	12.3	13.2
11-Sep	10.5	9.8	9.6	9.5	9.2	9.1	8.5	8.8	9.4	10.1	9.3	9.8	9.8	10.8	11.8	11.4	10.6	10.0	9.2	8.5	8.3	8.1	7.7	7.4	9.5	11.8
12-Sep	7.1	6.7	5.8	4.8	4.4	4.7	4.8	5.5	6.1	7.5	9.3	10.2	11.2	12.1	12.3	12.9	13.2	12.2	11.2	10.5	10.0	10.2	10.0	9.4	8.8	13.2
13-Sep	9.3	9.8	9.5	9.4	9.7	9.5	9.6	10.9	11.8	11.8	12.2	13.1	13.7	13.3	12.5	12.0	11.8	11.7	11.4	11.2	11.1	10.5	9.8	9.5	11.0	13.7
14-Sep	9.2	8.7	8.1	7.8	7.8	7.5	7.4	7.4	7.8	7.9	8.3	9.0	9.6	10.4	10.3	8.4	9.2	7.4	7.6	7.0	6.4	6.7	6.5	5.7	8.0	10.4
15-Sep	4.9	4.5	4.1	4.4	4.4	4.7	5.3	6.2	6.4	8.2	9.4	10.4	11.1	11.7	10.0	9.0	7.9	6.2	5.8	5.3	4.7	4.8	4.5	4.4	6.6	11.7
16-Sep	4.0	3.5	3.1	3.0	2.1	2.0	1.9	3.7	5.5	6.5	7.5	8.1	8.3	9.2	9.3	9.0	8.6	8.2	7.8	8.6	8.5	7.8	8.0	7.9	6.3	9.3
17-Sep	7.7	7.8	8.0	8.2	8.3	8.3	8.1	8.6	10.1	10.8	12.2	12.8	13.7	15.0	16.0	16.3	17.1	16.3	15.2	13.5	12.7	12.6	11.6	10.6	11.7	17.1
18-Sep	9.7	8.8	8.5	8.3	7.4	6.3	5.8	6.9	8.7	10.3	11.6	13.3	13.4	13.6	13.7	13.9	13.9	12.9	12.6	12.6	12.4	11.9	11.5	11.1	10.8	13.9
19-Sep	10.0	9.0	8.3	7.8	8.1	8.0	8.1	8.9	10.0	11.9	12.3	13.8	17.8	19.2	20.3	20.3	19.7	19.1	18.7	17.9	16.9	16.1	15.4	15.7	13.9	20.3
20-Sep	15.5	14.5	14.0	13.0	12.4	11.3	11.2	12.2	14.2	16.1	17.6	19.8	19.2	20.0	20.3	22.4	18.7	17.2	18.6	17.6	16.2	16.1	14.8	13.9	16.1	22.4
21-Sep	13.4	13.1	12.8	12.1	11.6	12.9	12.0	12.2	14.2	17.0	17.9	18.9	19.0	19.1	17.8	16.9	17.4	16.8	17.0	17.1	16.5	14.9	15.7	14.7	15.5	19.1
22-Sep	13.3	12.0	11.3	11.0	10.6	10.3	9.7	9.8	11.6	12.0	12.7	13.2	13.6	13.3	12.9	14.5	15.3	14.5	12.9	12.0	11.1	10.1	9.2	8.5	11.9	15.3
23-Sep	7.5	7.6	7.3	7.4	7.8	7.9	8.4	9.3	9.8	9.4	10.1	12.1	12.7	13.5	13.6	14.1	14.3	13.8	13.8	14.0	13.8	13.3	12.5	11.4	11.1	14.3
24-Sep	9.8	9.1	9.2	8.8	8.6	8.3	7.9	8.5	9.9	10.7	11.5	12.8	14.0	14.6	15.4	16.0	15.7	14.5	12.8	11.6	10.6	9.9	8.9	8.3	11.2	16.0
25-Sep	8.0	7.9	8.8	8.8	8.4	8.6	10.5	10.3	10.5	10.8	10.7	10.7	10.6	9.7	9.0	9.0	8.6	8.7	9.0	8.9	8.9	8.9	8.8	8.6	9.3	10.8
26-Sep	8.5	8.7	9.0	9.2	9.2	9.2	9.5	9.4	8.6	6.6	5.5	5.2	4.1	2.4	2.5	2.9	3.2	3.2	2.9	2.8	2.9	3.1	3.2	2.9	5.6	9.5
27-Sep	3.5	3.2	4.1	4.1	4.2	4.0	3.6	3.3	3.6	4.2	5.5	6.5	7.8	9.3	10.4	11.0	11.2	10.6	8.6	7.8	7.1	6.4	5.7	6.4	6.3	11.2
28-Sep	5.9	4.5	4.5	4.6	4.8	4.1	3.9	5.0	6.7	8.3	10.2	11.8	13.0	13.9	13.7	12.8	12.6	12.0	10.7	9.9	9.5	9.6	10.0	9.3	8.8	13.9
29-Sep	8.7	8.4	8.7	8.6	8.5	8.5	8.3	8.4	8.5	9.8	10.8	9.9	10.0	10.1	9.4	9.3	9.3	9.3	8.6	8.4	8.4	7.7	6.1	4.4	8.7	10.8
30-Sep	4.0	3.4	3.3	3.0	2.9	2.4	2.2	1.8	1.9	2.4	3.0	3.9	5.0	6.0	6.5	6.3	6.2	5.8	4.7	4.1	3.2	2.9	3.3	3.3	3.8	6.5
	10.5	10.0	9.8	9.5	9.2	9.1	9.0	9.6	10.6	11.5	12.3	13.1	13.6	14.2	14.4	14.3	14.2	13.6	13.0	12.5	12.0	11.6	11.1	10.5	Diurnal Average	
	19.5	19.3	18.8	17.3	16.7	16.5	16.8	17.9	19.2	21.1	22.6	23.2	23.1	23.7	24.6	25.1	25.4	24.9	23.7	22.7	21.8	20.8	19.9	19.7	Diurnal Maximum	

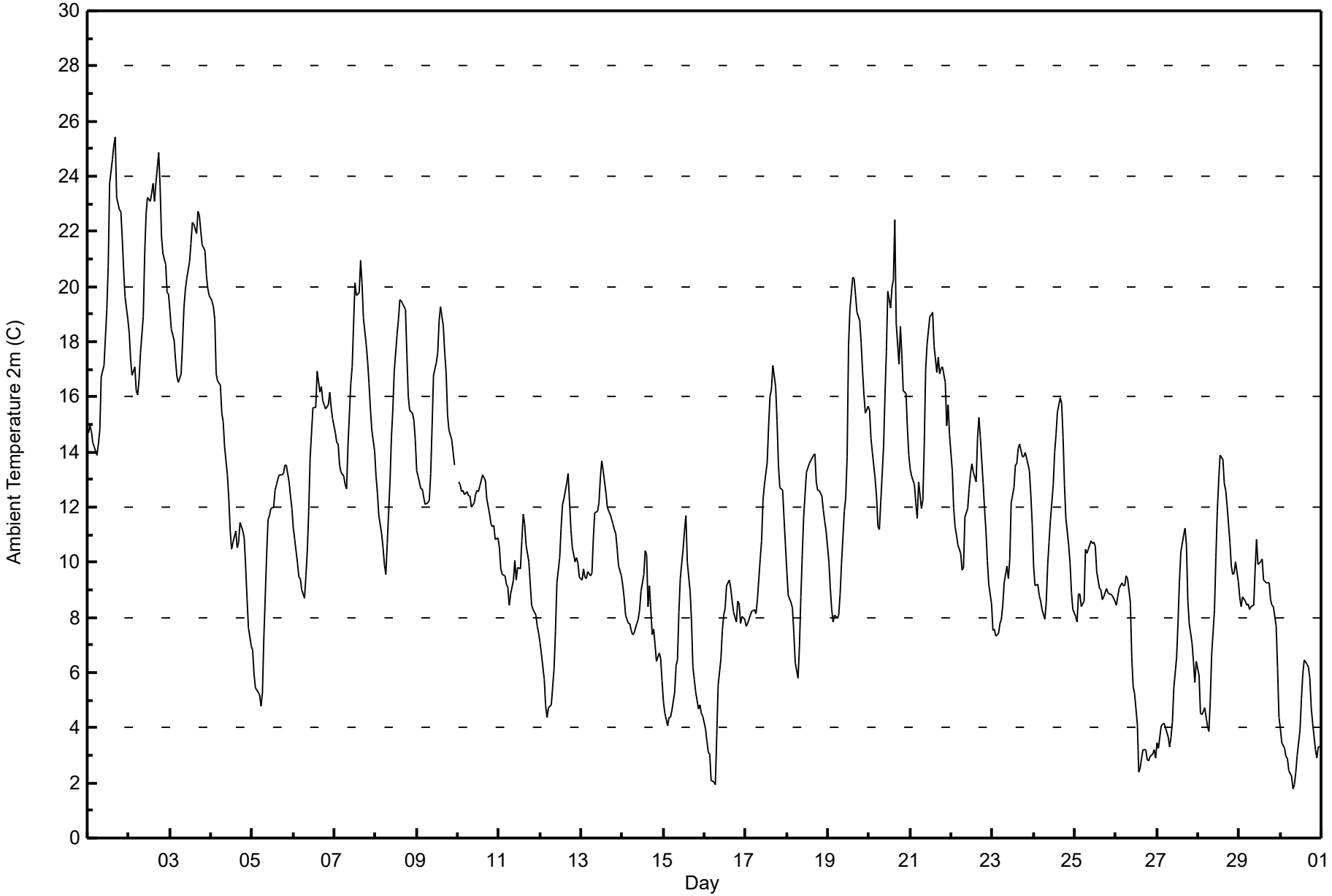
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Fort Chipewyan - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	296	41.17	41.17
10 - 20	381	52.99	94.16
> 20	42	5.84	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Fort Chipewyan - September 2026

Maximum Value: 100.0 % on Sep 4 11:00

Maximum Daily Average: 95.8 % on Sep 26

Minimum Value: 40.0 % on Sep 1 17:00

Minimum Daily Average: 65.1 % on Sep 2

Maximum Diurnal Average: 89.5 % at hour 6

Minimum Diurnal Average: 65.8 % at hour 15

Monthly Average: 78.24 %

Percentiles: P_1 = 47.0 P_{10} = 57.0 Q_1 = 67.4 Median = 78.8 Q_3 = 91.3 P_{90} = 97.1 P_{99} = 99.4

Hours in Service:	720
Hours of Data:	719
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-Sep	93.6	91.1	89.7	91.1	92.2	94.6	92.7	89.8	81.9	77.3	69.5	64.3	61.1	48.0	44.9	42.2	40.0	53.2	55.9	50.7	52.8	54.2	58.2	60.6	68.7	94.6
2-Sep	62.5	68.5	73.0	72.4	77.6	79.7	80.8	77.0	72.7	61.8	56.8	55.6	60.1	59.8	57.2	61.7	56.7	47.9	51.9	62.3	64.2	63.2	71.1	67.9	65.1	80.8
3-Sep	72.1	76.3	77.7	81.3	83.8	85.5	85.2	80.5	77.5	77.7	77.6	73.5	70.7	63.7	65.1	67.1	56.9	56.9	59.7	62.8	65.5	76.0	82.6	82.9	73.3	85.5
4-Sep	82.8	82.7	83.8	89.1	91.6	93.9	94.1	93.4	95.6	99.7	100.0	100.0	99.4	95.4	91.3	93.3	84.3	74.2	73.1	72.8	74.2	80.9	88.9	91.5	88.6	100.0
5-Sep	85.4	87.7	89.5	91.0	89.6	90.4	88.7	81.7	72.0	59.6	51.5	48.9	49.5	47.4	49.8	48.5	47.7	50.2	54.6	55.4	55.0	57.3	59.4	60.2	65.5	91.0
6-Sep	63.8	64.1	68.9	71.6	71.6	74.6	78.2	77.5	75.9	71.2	67.1	59.1	63.8	66.7	58.0	66.0	65.9	70.2	71.3	73.4	77.1	75.6	76.3	78.3	70.3	78.3
7-Sep	82.0	84.0	84.1	86.4	86.7	86.4	85.3	85.0	78.6	72.1	70.4	65.1	60.9	62.7	63.2	59.0	62.5	73.0	77.0	77.4	80.4	81.4	80.6	84.2	76.2	86.7
8-Sep	87.6	90.8	93.8	95.0	95.9	96.9	96.7	92.2	79.5	72.2	68.5	60.5	54.1	50.4	47.3	46.4	47.9	52.8	65.5	73.3	77.7	74.4	73.5	79.1	73.8	96.9
9-Sep	86.0	80.8	81.1	80.6	85.3	86.8	86.5	87.4	83.8	76.6	70.2	71.5	73.6	66.4	62.8	66.8	71.4	76.4	91.1	95.7	97.6	99.2	99.1	DF	81.6	99.2
10-Sep	98.9	98.7	98.4	98.4	97.9	96.7	95.5	94.6	98.0	99.1	98.6	98.5	98.6	97.6	96.3	95.8	93.9	94.2	94.8	91.5	88.5	87.1	90.9	88.2	95.4	99.1
11-Sep	90.7	95.2	94.2	91.8	92.8	91.9	96.3	89.9	80.1	77.0	85.4	78.1	74.5	64.2	55.9	56.8	59.9	62.2	64.0	66.3	69.0	76.1	83.5	86.3	78.4	96.3
12-Sep	87.2	89.0	92.2	96.7	97.9	97.3	97.5	96.7	92.8	83.6	74.9	64.1	56.0	50.5	48.1	48.1	50.0	57.9	68.3	70.9	73.4	73.3	73.0	78.0	75.7	97.9
13-Sep	82.2	82.5	86.7	86.8	86.6	88.5	87.0	80.5	75.1	73.8	74.0	73.6	72.3	78.2	91.5	96.6	98.4	99.0	99.4	99.8	99.6	98.6	98.4	97.8	87.8	99.8
14-Sep	97.1	97.1	98.1	98.7	98.2	98.2	98.6	98.5	98.1	98.1	97.0	93.4	87.6	81.6	77.7	94.1	89.8	94.2	97.1	97.8	99.3	99.0	98.2	98.2	95.2	99.3
15-Sep	97.3	97.9	98.1	96.6	96.9	95.4	94.3	90.7	87.2	80.7	76.0	72.5	66.2	60.9	68.9	73.2	83.7	95.2	97.4	98.5	98.8	98.7	98.5	96.1	88.3	98.8
16-Sep	94.4	93.6	96.5	92.4	94.3	96.9	95.5	90.8	83.3	79.5	68.8	60.9	58.2	56.5	53.3	55.9	59.9	60.0	65.2	65.3	70.1	77.4	78.6	76.1	76.0	96.9
17-Sep	77.7	77.1	76.0	73.5	73.0	73.4	74.8	73.7	68.8	68.7	65.5	63.8	63.1	59.2	57.0	58.6	58.3	62.7	68.8	75.9	79.5	76.3	79.8	82.0	70.3	82.0
18-Sep	81.8	86.0	88.0	89.7	91.1	93.3	95.8	91.3	80.6	70.4	64.8	60.1	62.6	65.7	66.8	68.9	66.3	76.6	77.7	75.4	73.2	73.2	75.1	75.9	77.1	95.8
19-Sep	79.9	85.7	92.6	96.1	95.5	94.6	92.4	88.5	85.6	80.7	82.6	76.4	52.2	50.1	48.5	48.5	51.2	53.7	54.4	58.4	63.5	68.4	73.2	70.8	72.6	96.1
20-Sep	70.5	74.7	74.3	78.7	79.4	82.5	82.4	78.3	71.5	63.8	57.0	49.7	57.0	55.3	54.6	45.6	61.1	72.6	63.1	62.9	66.4	62.0	66.0	69.2	66.6	82.5
21-Sep	70.6	71.2	71.8	75.5	77.1	67.3	74.1	74.7	68.2	56.7	53.1	50.2	52.4	56.5	63.8	68.6	64.2	68.3	68.2	67.4	69.6	78.3	68.4	76.0	67.2	78.3
22-Sep	88.0	94.3	95.7	96.3	98.2	98.7	98.3	95.7	87.4	88.0	84.8	81.6	79.7	80.8	84.9	71.6	65.3	67.9	75.1	79.7	82.5	87.5	92.3	96.1	86.3	98.7
23-Sep	98.3	99.1	98.8	98.9	97.2	94.7	92.6	93.8	95.3	98.5	100.0	92.6	89.9	83.1	79.4	77.9	77.4	81.5	83.4	79.3	71.0	71.4	76.1	79.1	87.9	100.0
24-Sep	84.4	88.1	84.5	83.6	81.9	80.0	79.9	76.4	71.5	66.2	66.2	62.4	56.2	49.4	46.5	46.9	43.9	47.8	53.7	59.1	64.3	69.2	73.5	75.2	67.1	88.1
25-Sep	74.7	77.9	61.6	62.2	72.2	83.2	79.4	79.4	80.5	77.3	73.4	74.3	76.5	84.5	89.4	89.1	89.2	90.5	87.1	88.1	90.6	93.6	94.2	95.4	81.8	95.4
26-Sep	96.3	94.3	94.1	94.3	97.7	98.5	98.9	99.1	99.4	99.5	99.1	98.3	97.3	95.7	95.0	95.1	94.8	93.4	94.4	94.3	93.9	92.0	90.5	94.1	95.8	99.5
27-Sep	92.3	92.4	89.1	88.4	84.6	81.4	81.9	79.9	76.2	72.8	64.3	63.8	53.9	48.9	52.9	54.6	55.8	61.5	70.3	74.5	77.3	78.9	84.5	69.9	72.9	92.4
28-Sep	63.4	81.5	83.8	89.3	90.9	97.1	92.3	86.8	80.9	78.4	70.3	65.0	60.5	56.1	58.6	67.1	66.9	71.3	79.8	81.9	91.0	93.8	85.8	77.7	77.9	97.1
29-Sep	78.6	78.5	76.4	78.8	84.2	90.0	92.8	93.3	94.2	89.8	78.3	82.3	83.3	82.6	83.9	79.7	74.5	71.6	74.3	76.4	74.3	75.8	83.6	89.8	82.0	94.2
30-Sep	88.2	93.7	96.8	96.9	97.1	95.9	94.7	93.8	90.2	83.7	80.4	74.0	67.3	63.0	62.8	62.9	66.0	69.7	78.7	78.5	83.1	84.3	82.3	83.4	82.0	97.1
	83.6	85.8	86.3	87.4	88.6	89.5	89.4	87.0	82.8	78.5	74.9	71.1	68.6	66.0	65.8	66.9	66.8	70.2	73.8	75.5	77.4	79.2	81.2	81.4	Diurnal Average	
	98.9	99.1	98.8	98.9	98.2	98.7	98.9	99.1	99.4	99.7	100.0	100.0	99.4	97.6	96.3	96.6	98.4	99.0	99.4	99.8	99.6	99.2	99.1	98.2	Diurnal Maximum	

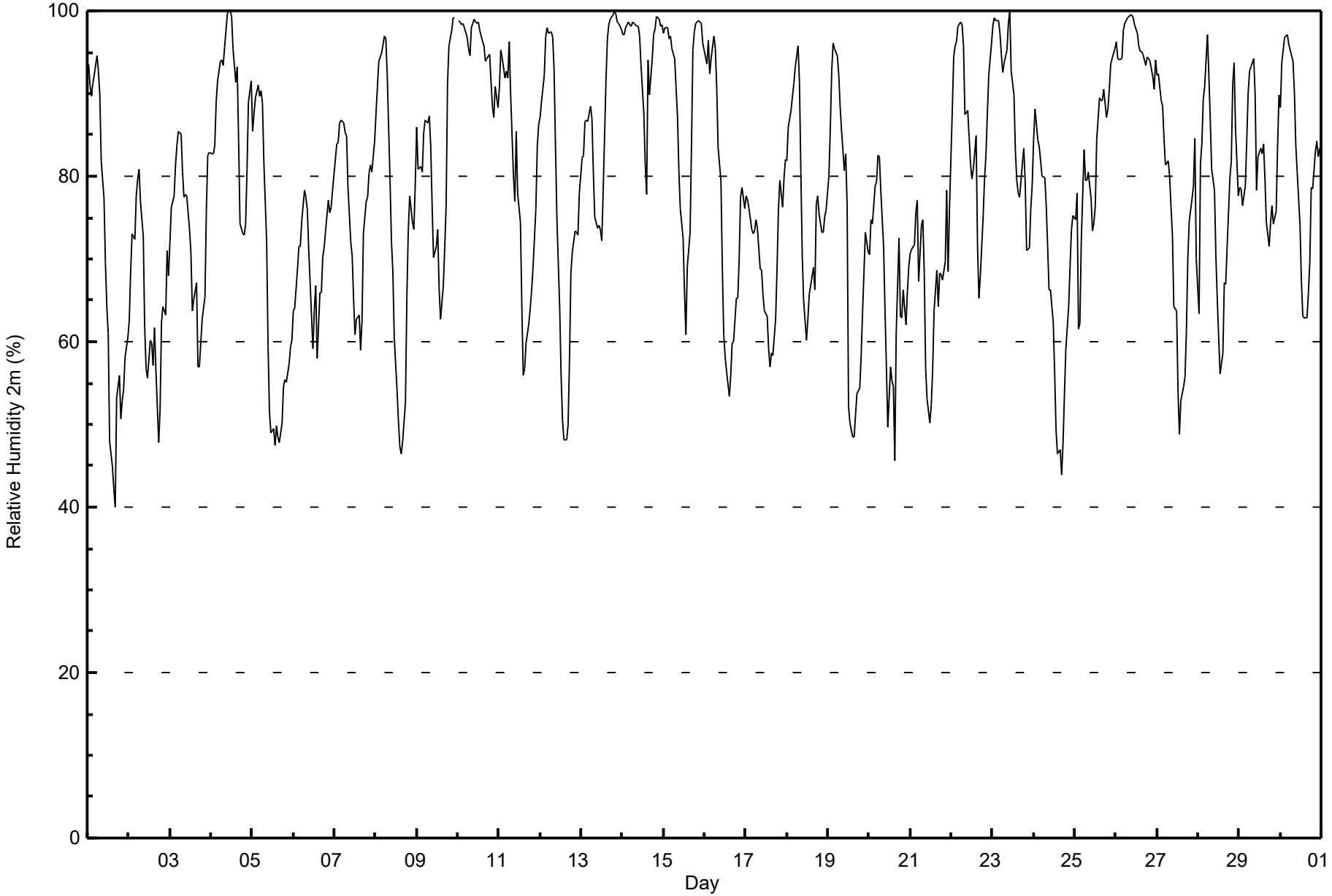
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Fort Chipewyan - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	1	0.14	0.14
40 - 60	95	13.21	13.35
60 - 80	284	39.50	52.85
80 - 100	336	46.73	99.58

Total Number of Valid Hours: 719

Total Number of Hours: 720

Maximum Value: 51.3 % on Sep 19 06:00

Maximum Daily Average: 24.8 % on Sep 26

Minimum Value: 0.3 % on Sep 20 12:00

Minimum Daily Average: 1.1 % on Sep 2

Maximum Diurnal Average: 14.1 % at hour 6

Minimum Diurnal Average: 3.6 % at hour 13

Monthly Average: 7.07 %

Percentiles: P_1 = 0.6 P_{10} = 1.0 Q_1 = 1.2 Median = 1.6 Q_3 = 7.9 P_{90} = 23.7 P_{99} = 43.1

Hours in Service:	720
Hours of Data:	719
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-Sep	27.8	40.7	33.3	20.4	11.9	9.6	1.7	1.5	1.2	2.1	2.2	1.4	1.1	0.9	0.9	0.8	0.8	1.0	1.0	1.0	1.0	1.0	1.1	1.1	6.9	40.7
2-Sep	1.1	1.2	1.3	1.3	1.4	1.4	1.3	1.2	1.0	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	0.9	0.9	1.1	1.1	1.1	1.2	1.2	1.1	1.4
3-Sep	1.2	1.3	1.4	1.4	1.5	1.5	1.3	1.2	1.0	0.9	1.1	1.1	1.0	1.0	1.0	1.1	1.0	1.0	1.5	1.1	1.1	1.2	1.3	1.4	1.2	1.5
4-Sep	2.2	1.5	1.5	1.6	1.6	1.6	6.3	2.4	22.9	43.8	39.8	38.6	10.2	5.9	6.4	24.7	5.3	2.0	1.5	1.5	1.6	2.0	5.1	11.0	10.0	43.8
5-Sep	4.0	2.0	2.0	2.0	2.0	2.3	1.6	1.3	0.9	1.0	0.9	0.8	0.9	1.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.4	4.0
6-Sep	1.3	1.3	1.3	1.4	1.4	1.5	1.4	1.2	1.0	0.9	0.8	0.8	1.0	1.1	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.4	1.2	1.5
7-Sep	1.4	1.5	1.5	1.6	1.6	1.6	1.5	1.5	1.2	0.8	0.8	0.7	0.7	1.0	1.0	1.0	1.1	1.2	1.4	1.5	1.7	1.7	1.7	2.0	1.3	2.0
8-Sep	2.2	2.4	6.2	11.3	18.3	26.4	29.4	7.8	0.8	0.5	0.5	0.4	0.5	0.9	0.9	0.9	0.9	1.0	1.3	1.4	1.5	1.4	1.4	1.5	5.0	29.4
9-Sep	1.8	1.6	1.6	1.6	1.6	1.6	1.6	1.4	1.3	1.1	0.9	1.1	1.1	1.0	1.1	1.1	1.2	4.4	21.5	20.9	33.6	42.4	26.7	DF	7.5	42.4
10-Sep	15.8	14.0	19.4	16.1	13.0	6.8	5.0	5.1	30.8	27.9	31.9	27.2	37.2	19.2	14.8	7.5	5.9	6.4	7.7	2.4	1.7	3.5	13.8	5.0	14.1	37.2
11-Sep	11.7	22.6	18.2	11.9	12.6	7.1	18.0	3.4	1.5	1.4	1.5	1.9	1.4	1.3	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.6	1.6	5.3	22.6
12-Sep	1.7	1.7	3.6	13.2	29.1	40.3	42.2	36.3	13.2	1.5	1.1	1.0	0.9	1.2	1.2	1.2	1.2	1.3	1.4	1.4	1.5	1.5	1.5	1.6	8.4	42.2
13-Sep	1.6	1.6	1.7	1.9	1.8	1.8	2.1	1.5	1.3	1.2	1.2	1.2	1.2	7.7	30.7	44.5	48.3	46.7	32.0	23.4	27.4	40.4	20.3	16.5	14.9	48.3
14-Sep	13.2	11.6	15.2	15.9	13.4	14.0	12.3	6.6	8.3	17.2	20.6	4.4	1.7	1.5	11.2	12.5	14.8	28.3	17.4	21.8	18.8	17.7	17.3	18.9	13.9	28.3
15-Sep	19.4	19.3	18.8	16.6	15.8	16.2	12.7	6.6	4.4	1.2	1.0	1.0	1.0	1.2	1.3	1.4	14.4	40.6	34.3	17.3	18.3	18.2	18.7	15.5	13.1	40.6
16-Sep	13.9	10.8	13.0	11.8	15.0	19.0	18.4	5.9	2.4	1.0	0.9	0.9	1.1	1.2	1.2	1.3	1.3	1.4	1.5	1.5	1.5	1.5	1.6	1.6	5.4	19.0
17-Sep	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.4	1.2	1.2	1.0	1.2	1.1	1.1	1.2	1.2	1.3	1.4	1.6	1.7	1.7	1.6	1.7	1.7	1.4	1.7
18-Sep	1.8	2.1	1.8	1.8	3.8	11.8	17.7	1.6	1.0	0.7	0.6	0.6	0.8	1.2	1.2	1.3	1.3	1.4	1.5	1.9	1.5	1.5	1.5	1.5	2.6	17.7
19-Sep	1.6	1.9	6.3	20.3	42.0	51.3	41.6	6.2	1.2	1.1	1.2	1.2	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.3	1.3	1.4	1.4	7.9	51.3
20-Sep	1.4	1.7	1.6	1.6	1.6	1.8	1.6	1.2	0.8	0.5	0.4	0.3	0.6	0.9	1.0	0.9	1.1	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.2	1.8
21-Sep	1.4	1.4	1.5	1.6	1.6	1.5	1.4	1.2	0.9	0.6	0.7	0.7	0.9	0.9	1.0	1.2	1.2	1.2	1.3	1.3	1.3	1.7	1.5	1.5	1.2	1.7
22-Sep	2.1	7.6	18.6	29.1	36.4	36.6	27.8	19.1	5.2	2.6	1.4	1.4	1.3	8.9	4.3	1.5	1.4	1.5	1.7	1.8	1.9	2.9	10.0	22.6	10.3	36.6
23-Sep	37.7	43.8	42.1	30.7	26.9	25.2	20.0	7.4	5.1	5.3	3.8	1.4	1.4	1.5	1.5	1.4	1.5	1.5	1.6	1.6	1.5	1.5	1.6	1.8	11.1	43.8
24-Sep	3.7	10.6	18.3	20.8	15.0	6.0	1.7	1.3	1.0	0.8	0.7	0.7	0.8	1.1	1.1	1.1	1.1	1.2	1.2	1.3	1.4	1.5	1.8	1.6	4.0	20.8
25-Sep	1.7	1.9	1.5	1.4	1.5	1.6	1.5	1.5	1.5	1.4	1.4	2.3	6.9	25.9	36.9	28.9	39.1	29.6	25.3	21.6	24.7	28.7	24.7	31.3	14.3	39.1
26-Sep	31.2	12.5	13.3	8.4	38.9	36.3	43.3	31.5	36.2	33.5	31.2	26.8	21.3	17.3	17.9	21.6	26.2	22.8	26.5	25.1	19.3	13.3	11.4	28.5	24.8	43.3
27-Sep	21.1	18.3	6.7	4.7	2.0	1.7	1.7	1.7	1.4	1.2	1.1	1.0	1.1	1.2	1.2	1.3	1.3	1.4	1.6	1.7	1.7	1.9	1.9	2.8	3.4	21.1
28-Sep	1.6	2.9	3.7	8.8	16.9	39.4	47.8	20.2	1.2	1.0	0.8	1.0	1.1	1.2	1.2	1.3	1.4	1.4	1.6	1.6	2.6	3.5	2.1	1.7	6.9	47.8
29-Sep	1.7	1.7	1.7	2.0	24.9	30.1	22.5	15.5	8.0	4.6	1.9	13.9	7.6	4.7	12.6	8.0	6.1	1.6	1.6	1.6	1.6	1.6	1.6	1.8	7.4	30.1
30-Sep	1.7	2.1	2.6	3.9	16.7	24.6	11.8	17.9	8.4	3.6	1.6	1.5	1.4	1.3	1.3	1.4	1.4	2.1	1.9	1.6	1.8	1.9	1.7	1.7	4.8	24.6
	7.7	8.2	8.7	8.9	12.4	14.1	13.3	7.1	5.5	5.4	5.1	4.6	3.6	3.8	5.3	5.8	6.2	7.0	6.6	5.5	5.9	6.7	6.0	6.3	Diurnal Average	
	37.7	43.8	42.1	30.7	42.0	51.3	47.8	36.3	36.2	43.8	39.8	38.6	37.2	25.9	36.9	44.5	48.3	46.7	34.3	25.1	33.6	42.4	26.7	31.3	Diurnal Maximum	

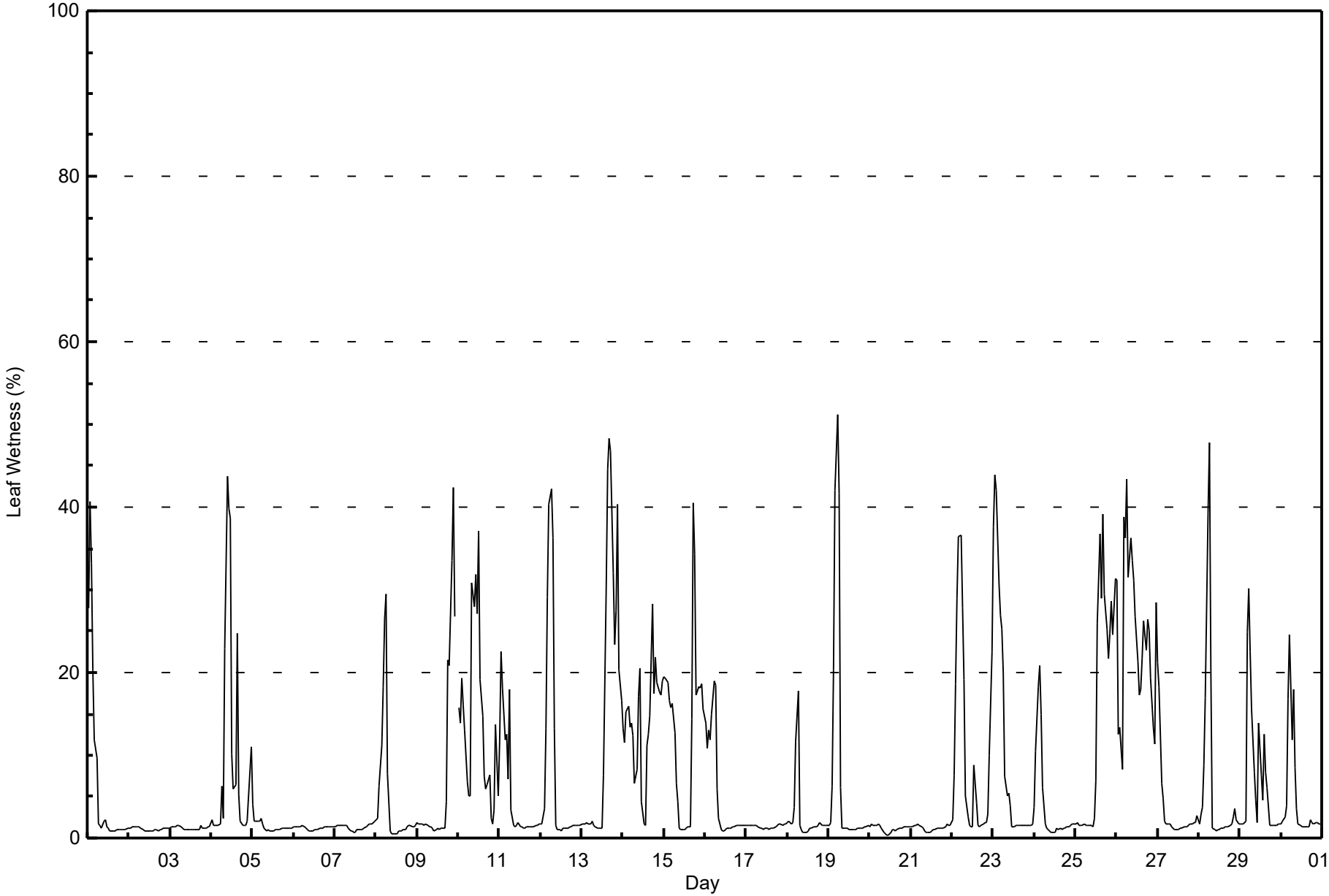
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Leaf Wetness (LW) - %

Fort Chipewyan - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 0.3	1	0.14	0.14
0.4 - 0.5	6	0.83	0.97
0.6 - 0.7	11	1.53	2.50
0.8 - 1.4	279	38.80	41.31
1.5 - 10	218	30.32	71.63
> 10	171	23.78	95.41

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Precipitation (PC) - mm

Fort Chipewyan - September 2026

Maximum Value: 6.8 mm on Sep 4 10:00

Maximum Daily Total: 29.7 mm on Sep 26

Minimum Value: 0.0 mm on Sep 1 01:00

Minimum Daily Total: 0.0 mm on Sep 1

Maximum Diurnal Total: 10.7 mm at hour 10

Minimum Diurnal Total: 0.1 mm at hour 4

Monthly Total: 90.71 mm

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.0 P_{90} = 0.2 P_{99} = 2.4

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	2.6	6.8	5.4	2.3	0.0	0.0	0.1	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.3	6.8
5-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
7-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.6	1.2	0.4	DF	2.6	1.2
10-Sep	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	1.8	0.9	1.7	1.0	1.7	0.3	0.7	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	9.0	1.8
11-Sep	0.2	0.3	0.2	0.0	0.1	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	0.0	0.0	0.0	1.1	0.4
12-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.7	1.7	1.5	0.5	0.2	0.3	1.1	0.1	0.1	7.9	1.7
14-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.0	0.0	0.0	2.5	1.1	1.6	1.3	0.0	0.1	0.0	0.0	0.0	0.0	7.2	2.5
15-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	4.2	0.6	0.0	0.0	0.0	0.0	0.0	5.6	4.2
16-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	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
24-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.9	0.2	1.4	1.1	0.6	0.2	PF	PF	0.7	0.6	5.9	1.4
26-Sep	0.5	0.1	0.0	0.0	1.9	3.6	5.3	2.1	2.0	2.8	2.3	1.7	0.3	0.2	0.2	0.5	0.8	0.6	1.2	1.5	0.5	0.2	0.2	1.3	29.7	5.3
27-Sep	0.8	0.5	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.8
28-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.4	0.4	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.4
30-Sep	0.0	0.0	0.0	0.0	0.1	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	0.0	0.0	0.5	0.3
	1.5	1.0	0.4	0.1	2.5	4.3	6.1	2.3	6.3	10.7	9.8	5.1	1.9	0.7	5.1	4.6	6.8	8.8	3.2	2.1	1.5	2.5	1.5	2.0	Diurnal Average	
	0.8	0.5	0.2	0.1	1.9	3.6	5.3	2.1	2.6	6.8	5.4	2.3	1.7	0.3	2.5	1.7	1.7	4.2	1.2	1.5	0.6	1.2	0.7	1.3	Diurnal Maximum	

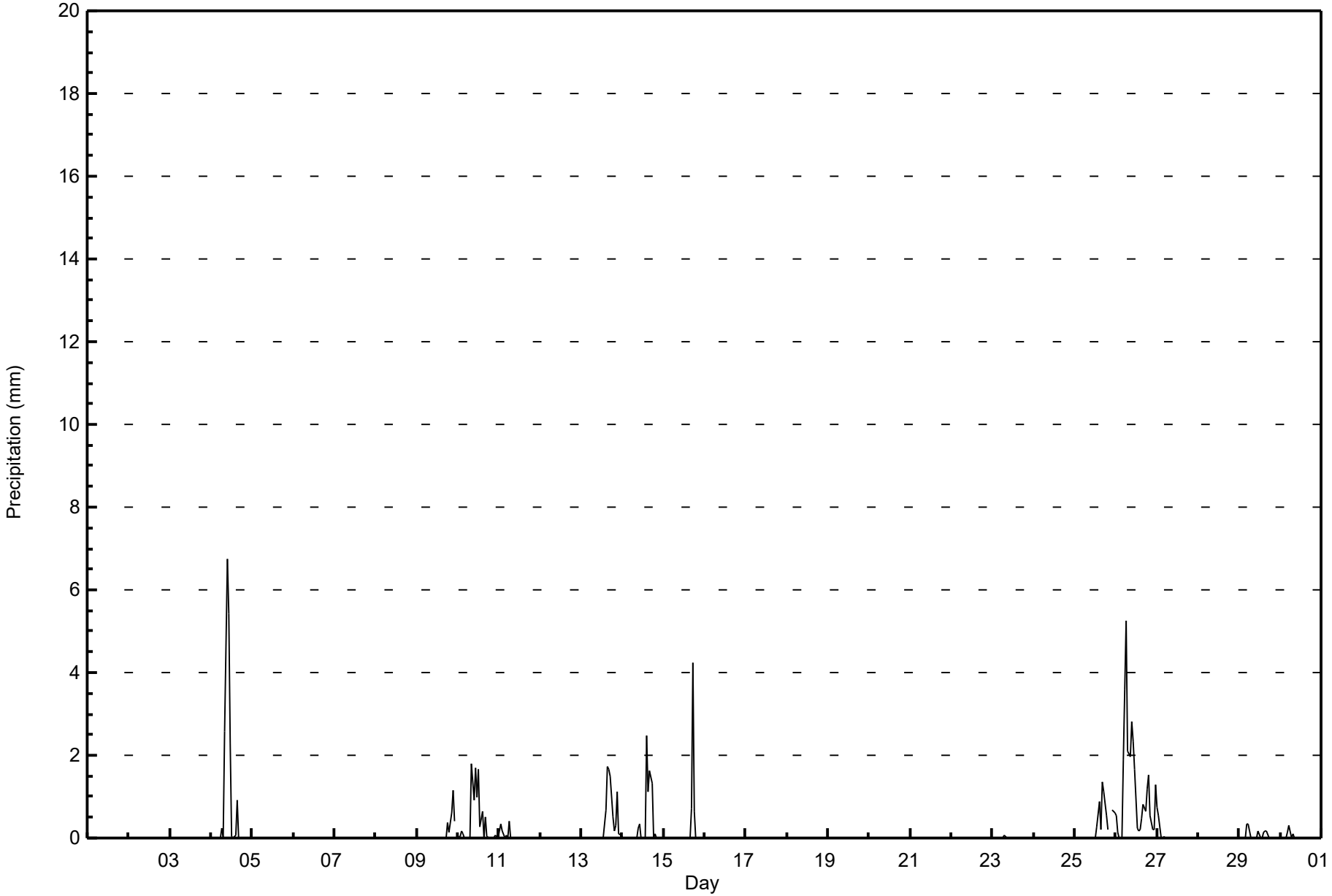
DF - DAS Failure PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Precipitation (PC) - mm

Fort Chipewyan - September 2026



Concentration Ranges (mm)	Number of Hours	%	Cumulative %
0 - 0.3	662	92.46	92.46
0.4 - 0.5	9	1.26	93.72
0.6 - 0.7	9	1.26	94.97
0.8 - 1.4	14	1.96	96.93
1.5 - 10	22	3.07	100.00
> 10	0	0.00	100.00

Total Number of Valid Hours: 716

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Global Radiation (GR) - W/m2

Fort Chipewyan - September 2026

Maximum Value: 655.2 W/m2 on Sep 1 14:00

Maximum Daily Average: 208.3 W/m2 on Sep 5

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

Minimum Daily Average: 23.3 W/m2 on Sep 4

Maximum Diurnal Average: 381.7 W/m2 at hour 14

Minimum Diurnal Average: 0.0 W/m2 at hour 2

Monthly Average: 121.47 W/m2

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 15.3 Q_3 = 219.1 P_{90} = 431.7 P_{99} = 608.9

Hours in Service:	720
Hours of Data:	719
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-Sep	0.0	0.0	0.0	0.0	0.0	21.9	132.2	140.9	294.8	302.8	268.5	274.4	380.5	655.2	549.3	452.0	344.0	199.8	70.5	5.7	0.0	0.0	0.0	0.0	170.5	655.2
2-Sep	0.0	0.0	0.0	0.0	0.0	18.1	109.1	233.5	337.3	522.0	513.0	339.4	419.5	410.7	370.4	293.0	219.7	132.7	47.1	3.2	0.0	0.0	0.0	0.0	165.4	522.0
3-Sep	0.0	0.0	0.0	0.0	0.0	16.6	129.3	271.0	358.7	398.9	357.3	360.9	484.0	512.4	410.9	261.9	142.4	36.6	7.4	0.3	0.0	0.0	0.0	0.0	156.2	512.4
4-Sep	0.0	0.0	0.0	0.0	0.0	2.1	12.9	48.9	22.1	16.9	27.8	59.9	55.9	66.5	37.7	48.6	51.2	69.9	36.3	1.8	0.0	0.0	0.0	0.0	23.3	69.9
5-Sep	0.0	0.0	0.0	0.0	0.0	5.4	111.6	236.7	371.6	513.0	578.7	622.9	494.5	632.9	557.7	441.7	296.2	103.2	29.7	2.4	0.0	0.0	0.0	0.0	208.3	632.9
6-Sep	0.0	0.0	0.0	0.0	0.0	4.5	95.3	232.1	359.6	470.6	557.8	558.8	367.9	331.4	366.2	302.4	289.6	72.1	32.5	0.6	0.0	0.0	0.0	0.0	168.4	558.8
7-Sep	0.0	0.0	0.0	0.0	0.0	2.1	17.2	63.0	282.2	487.4	546.9	609.5	637.0	488.5	246.7	341.4	177.7	97.0	40.9	3.0	0.0	0.0	0.0	0.0	168.4	637.0
8-Sep	0.0	0.0	0.0	0.0	0.0	7.6	43.1	229.2	371.0	469.6	557.5	614.8	633.1	606.2	531.9	430.0	298.2	154.8	35.9	1.1	0.0	0.0	0.0	0.0	207.7	633.1
9-Sep	0.0	0.0	0.0	0.0	0.0	5.5	46.6	134.0	194.6	271.7	392.8	230.1	274.0	452.0	453.2	255.3	75.1	16.8	13.1	0.3	0.0	0.0	0.0	DF	122.4	453.2
10-Sep	0.0	0.0	0.0	0.0	0.0	1.3	30.1	55.0	38.4	82.8	72.6	119.8	69.4	129.6	130.2	110.7	85.7	54.2	14.1	0.0	0.0	0.0	0.0	0.0	41.4	130.2
11-Sep	0.0	0.0	0.0	0.0	0.0	1.0	15.3	92.4	226.9	255.4	320.1	312.9	335.0	380.9	442.5	271.0	124.3	55.4	16.2	0.3	0.0	0.0	0.0	0.0	118.7	442.5
12-Sep	0.0	0.0	0.0	0.0	0.0	1.7	26.4	55.8	98.8	227.2	442.3	491.3	570.4	588.7	511.4	402.1	270.3	69.4	15.6	0.2	0.0	0.0	0.0	0.0	157.1	588.7
13-Sep	0.0	0.0	0.0	0.0	0.0	1.3	54.0	121.3	175.4	266.7	240.8	260.9	251.6	117.9	61.4	42.2	31.4	21.5	6.0	0.0	0.0	0.0	0.0	0.0	68.9	266.7
14-Sep	0.0	0.0	0.0	0.0	0.0	1.4	31.7	37.9	60.3	119.3	191.4	316.9	268.9	311.4	244.5	155.4	90.7	24.2	19.9	0.0	0.0	0.0	0.0	0.0	78.1	316.9
15-Sep	0.0	0.0	0.0	0.0	0.0	0.8	44.2	75.8	197.3	406.3	466.9	522.5	626.1	545.0	253.6	172.5	29.2	16.3	5.0	0.1	0.0	0.0	0.0	0.0	140.1	626.1
16-Sep	0.0	0.0	0.0	0.0	0.0	1.4	52.1	180.1	317.2	440.9	503.6	450.0	363.2	382.4	346.5	201.1	119.1	56.0	11.4	0.0	0.0	0.0	0.0	0.0	142.7	503.6
17-Sep	0.0	0.0	0.0	0.0	0.0	0.5	21.0	151.5	260.3	275.6	359.5	251.0	281.1	373.6	348.2	305.6	207.2	98.9	12.0	0.1	0.0	0.0	0.0	0.0	122.7	373.6
18-Sep	0.0	0.0	0.0	0.0	0.0	1.0	76.4	205.0	305.7	411.3	496.6	555.4	568.0	545.8	461.9	354.0	224.0	85.3	6.8	0.0	0.0	0.0	0.0	0.0	179.1	568.0
19-Sep	0.0	0.0	0.0	0.0	0.0	0.7	54.3	169.5	292.9	403.9	466.2	465.8	481.9	504.3	425.8	271.6	95.0	21.9	3.7	0.0	0.0	0.0	0.0	0.0	152.4	504.3
20-Sep	0.0	0.0	0.0	0.0	0.0	0.5	41.7	160.1	291.0	394.6	492.0	528.8	506.8	494.4	438.4	184.4	117.3	56.4	8.0	0.0	0.0	0.0	0.0	0.0	154.8	528.8
21-Sep	0.0	0.0	0.0	0.0	0.0	0.5	40.5	128.0	277.6	341.4	335.9	346.7	178.9	225.0	248.4	79.8	51.4	43.7	5.7	0.0	0.0	0.0	0.0	0.0	96.0	346.7
22-Sep	0.0	0.0	0.0	0.0	0.0	0.3	18.4	99.9	151.7	112.9	229.4	178.9	148.9	130.9	275.6	329.8	200.1	70.7	5.0	0.0	0.0	0.0	0.0	0.0	81.4	329.8
23-Sep	0.0	0.0	0.0	0.0	0.0	0.4	32.9	129.9	141.7	172.5	360.9	467.1	481.4	473.8	218.5	204.0	148.6	50.3	8.9	0.0	0.0	0.0	0.0	0.0	120.5	481.4
24-Sep	0.0	0.0	0.0	0.0	0.0	0.1	26.5	139.8	268.3	379.7	466.4	523.7	539.8	504.9	426.5	318.7	188.7	63.2	3.3	0.0	0.0	0.0	0.0	0.0	160.4	539.8
25-Sep	0.0	0.0	0.0	0.0	0.0	0.1	13.3	50.9	85.3	105.4	66.3	46.2	68.6	48.9	37.6	30.7	10.9	3.7	0.1	0.0	0.0	0.0	0.0	0.0	23.7	105.4
26-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.5	5.3	7.9	40.4	42.2	74.1	98.0	119.3	137.5	83.4	27.7	8.8	0.8	0.0	0.0	0.0	0.0	0.0	26.9	137.5
27-Sep	0.0	0.0	0.0	0.0	0.0	0.0	5.6	49.3	246.0	377.2	460.6	513.7	528.2	489.1	407.6	296.5	165.7	46.1	2.0	0.0	0.0	0.0	0.0	0.0	149.5	528.2
28-Sep	0.0	0.0	0.0	0.0	0.0	0.1	27.6	136.7	245.9	351.3	438.9	491.4	490.2	442.9	231.4	89.6	39.1	56.5	1.7	0.0	0.0	0.0	0.0	0.0	126.8	491.4
29-Sep	0.0	0.0	0.0	0.0	0.0	0.0	2.8	26.9	109.9	193.5	208.0	134.7	136.9	157.1	79.2	43.2	60.6	32.6	0.8	0.0	0.0	0.0	0.0	0.0	49.4	208.0
30-Sep	0.0	0.0	0.0	0.0	0.0	0.0	1.6	15.0	40.0	88.2	139.8	195.9	292.1	329.7	202.7	136.2	62.5	14.1	0.8	0.0	0.0	0.0	0.0	0.0	63.3	329.7
	0.0	0.0	0.0	0.0	0.0	3.2	43.8	122.5	214.3	296.6	353.4	363.9	367.7	381.7	315.1	230.3	141.5	61.1	15.4	0.6	0.0	0.0	0.0	0.0	Diurnal Average	
	0.0	0.0	0.0	0.0	0.0	21.9	132.2	271.0	371.6	522.0	578.7	622.9	637.0	655.2	557.7	452.0	344.0	199.8	70.5	5.7	0.0	0.0	0.0	0.0	Diurnal Maximum	

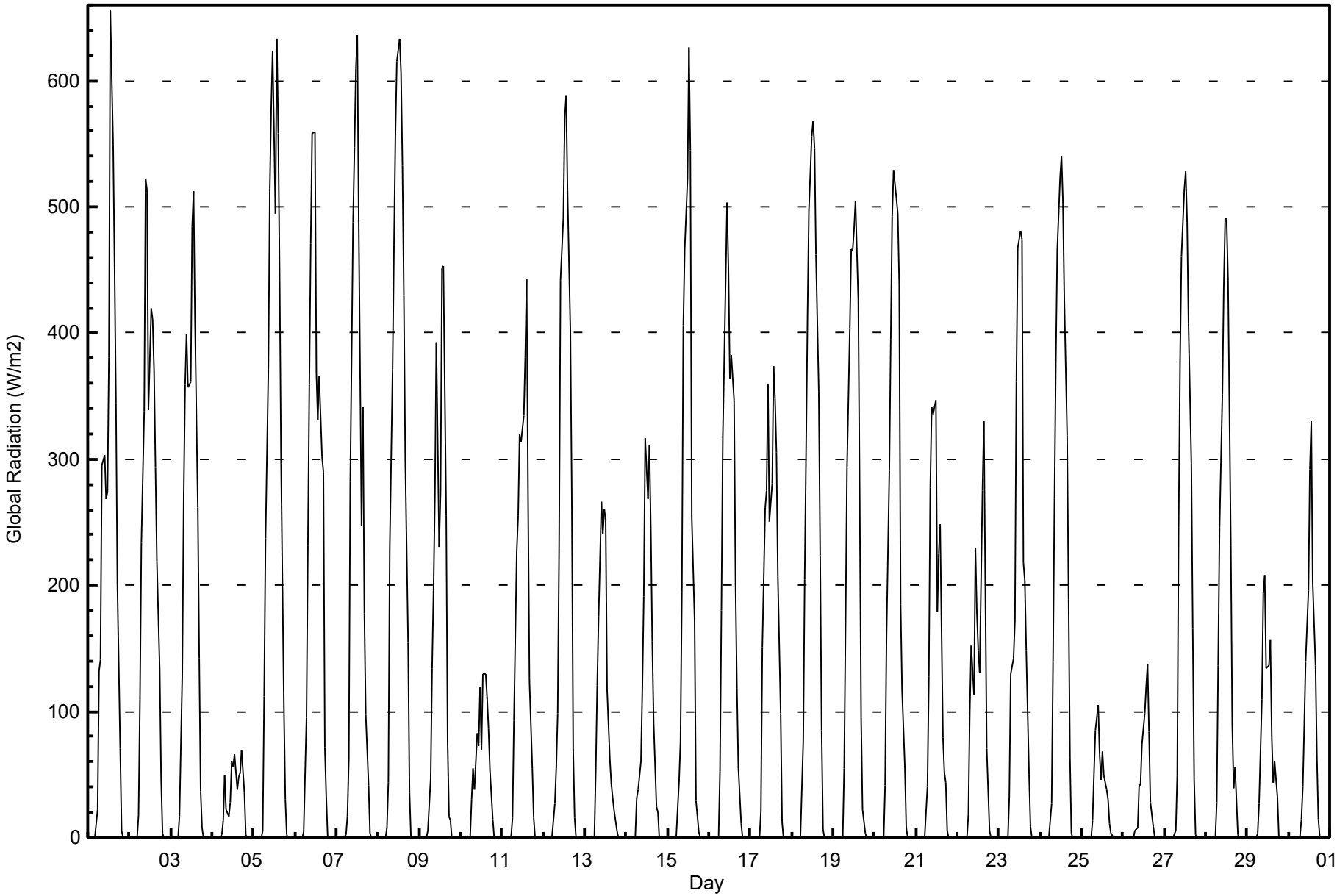
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Global Radiation (GR) - W/m2

Fort Chipewyan - September 2026



Concentration Ranges (W/m2)	Number of Hours	%	Cumulative %
0 - 20	370	51.46	51.46
21 - 100	102	14.19	65.65
101 - 300	118	16.41	82.06
301 - 600	120	16.69	98.75
601 - 900	9	1.25	100.00
> 900	0	0.00	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Fort Chipewyan - September 2026

Maximum Speed: 49 km/h on Sep 25 21:00

Maximum Daily Speed Average: 24.1 km/h on Sep 25

Minimum Speed Value: 1 km/h on Sep 25 02:00

Minimum Daily Speed Average: 1.2 km/h on Sep 16

Maximum Diurnal Speed Average: 3.2 km/h at hour 15

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

Monthly Average Velocity: 1.1 km/h 256.7 deg

Percentiles: $P_1 = 2$ $P_{10} = 6$ $Q_1 = 8$ Median = 12 $Q_3 = 18$ $P_{90} = 22$ $P_{99} = 38$

Hours in Service:	720
Hours of Data:	719
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-Sep	SE5	E4	SE10	SSE11	SSE10	E8	ESE10	SSE11	SSE13	SE16	SSE18	SE20	SE18	SSE21	SSE21	SSE19	SSE15	ESE13	SE13	SE20	SE22	SSE22	SE23	SSE23	SE14.7	SSE23
2-Sep	SSE23	SSE21	SSE19	SSE22	SE17	SE19	ESE20	ESE22	SE20	SE21	SE22	SE19	ESE21	ESE22	SE24	ESE19	ESE24	SE24	SE23	SE23	ESE22	ESE24	ESE22	SE25	SE20.9	SE25
3-Sep	SE22	ESE17	E17	ESE18	ESE21	ESE21	ESE18	SE16	ESE16	E17	ESE19	E21	E20	ESE24	ESE16	E18	ENE19	NE16	NE19	NE19	ENE20	E17	ENE13	ENE12	E16.4	ESE24
4-Sep	ENE13	ENE10	NE3	NNW12	NNW13	NNW14	NNW17	NNW18	NNW19	NNW19	NNW20	NNW22	NNW25	NNW24	NNW19	NW15	NNW17	NNW17	NNW11	NNW12	NNW6	NW6	WNW8	NW9	NNW13.3	NNW25
5-Sep	NNW9	NNW10	NNW12	NNW11	N11	N11	NNW11	N11	NE8	E19	E19	E15	E13	E11	E12	E10	E11	E12	E15	ESE18	ESE22	SE18	SE17	SE16	ENE8.2	ESE22
6-Sep	SE16	SE18	SSE15	SSE13	ESE11	SE12	SE14	SE11	ESE12	ESE12	E13	SE13	ESE15	E14	SE11	ENE15	E15	ENE14	ENE16	ENE12	E10	ESE11	SE16	SSE18	ESE12.1	SSE18
7-Sep	SSE18	SSE18	SE13	SE13	SE14	SE16	SE13	SSE14	SSE12	SSE14	SSE24	S19	SSE12	SE16	S12	SSW5	ESE3	E1	NE3	NW6	NNW7	NNW8	NNW7	NNW6	SSE8.1	SSE24
8-Sep	NNW9	NNW9	NNW9	NNW11	NNW11	NNW10	NNW10	NNW9	N5	SW4	SW10	W10	W9	W9	WSW10	WSW11	WSW9	WSW5	SSW4	E4	SE6	SSE13	SSE16	S17	W3.5	S17
9-Sep	S13	SSW13	SSW11	S8	SSE10	S7	SSE7	SSW10	S11	SSW12	S6	S2	S5	SSW9	WSW15	W13	WSW8	W7	WNW9	WNW7	WNW5	NW3	WNW5	DF	SW6.3	WSW15
10-Sep	WNW10	WNW15	W14	W15	W15	W16	W16	WNW16	WNW13	WNW12	WNW15	WNW14	WNW12	WNW13	WNW15	WNW17	WNW19	NW21	NW22	NW20	NW20	NW21	NW19	NW21	WNW15.6	NW22
11-Sep	NW22	NNW18	NNW19	NNW20	NW21	NW17	NW17	NNW18	NNW21	NW19	NW21	NW20	NW19	NW16	NW19	NNW17	NNW14	NNW14	NNW11	NW9	NW8	WNW10	NW12	NW10	NW16.2	NW22
12-Sep	NW10	NW7	WNW7	WNW8	NW7	NW7	WNW6	W5	W8	W8	W12	W14	WSW14	WSW16	WSW16	WSW13	SW16	SW11	SW11	SW14	SSW15	SSW14	SW9	SW10	WSW9.3	WSW16
13-Sep	SW9	SW10	SW10	SW8	SW9	SW10	SW10	WSW12	W15	W15	WSW11	WSW9	W10	W9	W7	NW6	NNW4	NNW4	NNW5	NNW5	NNW8	NNW9	NNW9	NNW9	W6.6	W15
14-Sep	NNW8	NNW9	NNW9	NNW10	NNW11	NNW12	NNW12	NNW11	NNW10	NW10	NW9	NW12	NW9	WNW7	W11	W7	WNW9	NW5	NNW5	NW5	NW7	NW7	WNW7	WNW7	NW8.0	NNW12
15-Sep	WNW8	WNW9	WNW9	WNW8	W7	W7	W8	WNW10	W9	W10	W12	W11	W12	WNW12	NNW11	N11	N8	NNW7	NW3	NW5	WNW8	WNW8	NW8	NNW7	WNW7.6	WNW12
16-Sep	NNW7	NNW6	NW7	NW7	NW7	WNW7	WNW8	WNW9	WNW9	WNW7	W10	WSW11	W9	WSW10	WSW8	W6	W4	NNE2	ESE7	ESE19	ESE27	ESE24	SE20	SE22	SSW1.2	ESE27
17-Sep	SE21	SE22	SE21	SE23	SE23	SE27	SE19	SE13	SSE17	S18	SSW13	SW10	SSW6	SSW7	WSW9	SW9	WSW9	WSW7	SW6	WSW4	WNW8	NNW11	NW9	NW9	SSE7.7	SE27
18-Sep	NW6	WNW5	WNW6	NW5	NW6	WNW5	W6	W6	W5	WNW6	NW3	S5	SE7	ESE9	E11	E11	E14	E17	E16	E14	E13	E13	E12	ESE11	E3.9	E17
19-Sep	ESE9	ESE7	ESE5	E5	ESE6	ESE9	ESE9	SE13	ESE14	E17	E23	E17	SSE21	SSE21	SSE21	S24	S20	S20	S25	S19	S14	SSW8	SW12	SW11	SSE11.2	S25
20-Sep	WSW8	SW9	W11	W13	W13	WNW8	W9	WNW10	WSW8	SW12	SW12	SW11	ESE10	SE10	E6	SW8	E7	E6	S8	S17	S19	SSW15	SW17	SW15	SW6.9	S19
21-Sep	WSW10	WSW11	SW11	SW11	SW10	SW9	SW9	SW9	SSW11	SW11	WSW12	SW13	WSW8	S3	E9	E12	ENE11	E13	E12	E13	E10	SE4	WSW11	W13	SSW4.1	E13
22-Sep	W11	W8	W7	WNW9	SW2	SSW3	WNW8	NW6	N5	W6	W12	W8	W8	NW2	W14	WSW10	SW9	WSW5	W3	W7	W8	WNW8	WNW6	WNW6	W6.4	WSW14
23-Sep	W6	WNW8	WNW5	NNW6	N6	NNE5	ENE5	SSE5	SE10	E12	E14	E16	E17	E18	E20	E20	E17	E17	E14	ESE14	SSE16	S19	S15	SW10	ESE7.4	E20
24-Sep	SW9	SW7	WSW7	WSW8	W9	W10	W10	W11	W14	WSW15	WSW12	WSW11	SW14	WSW13	WSW13	WSW12	WSW14	WSW12	WSW14	W11	W9	W9	WSW7	W8	WSW10.5	WSW15
25-Sep	W6	WSW1	NE8	NE9	ENE8	ENE10	E24	ENE23	ENE22	ENE25	ENE26	ENE24	NE21	NE22	NNE21	NE24	NE26	NE33	ENE45	ENE47	NE49	NE44	NE43	NE44	ENE24.1	NE49
26-Sep	NE37	NE38	NE40	NE39	NE35	NE32	NE29	NNE14	NW11	NW19	NW22	W21	W25	W28	W31	W33	W31	W36	W36	WNW36	WNW36	W37	W35	WNW29	NW14.8	NE40
27-Sep	W34	WNW29	W31	WNW30	W29	W31	W26	W28	WNW30	WNW26	W23	W21	W23	W22	W17	WSW13	WSW10	W7	WNW8	W6	WNW4	W2	SW4	N3	W18.7	WNW34
28-Sep	NE5	SSE2	E2	E2	E4	ESE2	S6	SSW6	S6	SSE6	SSE8	SSE12	SSE13	SSW15	SSW13	SSE6	E6	ENE6	ENE10	ENE9	ENE11	E14	E11	ESE7	SE5.1	SSW15
29-Sep	SE6	SSW7	SSE5	SE7	SE5	S7	S16	S15	SSW14	SSW13	WSW14	WSW14	WSW15	WSW19	WSW20	W23	W25	W23	W20	W21	W21	W20	W21	WNW21	WSW12.6	W25
30-Sep	W21	W19	WNW20	WNW19	NW18	NW18	NW18	NW16	NW16	NW16	NW16	NW17	NW19	NW16	NW15	NW16	NW11	NW13	NW9	NW11	NW9	WNW8	WNW7	WNW8	NW14.3	W21
	WSW1.8	WSW1.9	W1.7	WNW1.8	NNW1.2	NNW0.9	NNW0.5	W1.8	WSW2.2	WSW2.0	WSW2.4	WSW2.6	WSW2.2	SW2.4	WSW3.2	W2.1	WNW1.2	N1.7	ENE1.5	E1.3	E1.5	SE0.8	SW1.5	SW1.4	Diurnal Average	
	NE37	NE38	NE40	NE39	ENE35	NE32	NE29	W28	WNW30	WNW26	ENE26	ENE24	W25	W28	W31	W33	W31	W36	ENE45	ENE47	NE49	NE44	NE43	NE44	Diurnal Maximum	

DF - DAS 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

Fort Chipewyan - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10 km/h on Sep 25 21:00

Minimum Value: 1 km/h on Sep 8 20:00

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

Hours in Service:	720
Hours of Data:	719
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-Sep	2	2	1	3	3	1	2	2	3	3	4	3	3	4	4	3	3	1	2	2	3	3	3	3	4
2-Sep	3	3	3	3	3	2	2	2	2	3	2	2	3	2	2	2	3	3	2	2	2	2	2	3	3
3-Sep	3	1	2	2	2	3	2	2	2	1	4	2	3	3	2	3	3	2	3	3	3	4	2	1	4
4-Sep	3	2	3	3	3	4	5	6	6	7	7	7	8	8	7	5	6	6	4	4	3	1	2	2	8
5-Sep	2	2	2	2	2	2	2	2	3	3	2	3	2	2	2	2	2	2	2	3	2	2	2	2	3
6-Sep	3	2	2	2	4	2	2	2	2	1	2	4	3	3	2	2	2	2	2	2	2	1	3	2	4
7-Sep	3	2	2	2	2	2	2	3	2	4	4	4	3	3	2	2	1	2	2	2	1	1	1	1	4
8-Sep	2	2	2	3	2	2	2	3	2	2	2	3	3	3	3	3	3	1	1	1	2	2	3	3	3
9-Sep	3	2	2	2	2	2	2	2	2	3	3	2	3	2	4	3	3	1	2	2	1	1	1	DF	4
10-Sep	3	4	3	4	3	4	4	4	4	3	4	4	4	4	5	5	6	7	7	7	7	7	7	7	7
11-Sep	8	7	6	7	7	6	6	6	8	7	7	7	7	6	7	6	6	5	4	3	3	3	4	3	8
12-Sep	3	2	1	2	1	1	1	1	2	2	3	4	4	4	5	4	3	3	3	2	2	2	2	1	5
13-Sep	1	2	2	2	2	2	2	3	5	4	3	2	2	2	1	2	2	1	2	1	3	3	3	2	5
14-Sep	2	2	2	3	2	3	3	3	3	3	3	4	3	3	5	2	3	1	1	2	1	2	2	1	5
15-Sep	2	2	2	2	2	1	2	3	2	3	3	3	4	4	3	4	3	2	2	1	2	2	2	2	4
16-Sep	2	1	2	2	1	1	1	2	3	2	3	3	3	3	3	2	2	1	4	2	3	3	2	3	4
17-Sep	2	2	2	2	2	3	4	3	3	2	2	2	2	2	2	2	2	2	1	1	4	3	2	3	4
18-Sep	2	1	1	1	1	2	1	1	2	2	2	2	1	2	1	1	2	2	1	2	2	2	2	2	2
19-Sep	1	1	1	1	1	1	2	2	2	2	2	2	4	4	3	5	3	3	2	2	3	3	3	2	5
20-Sep	2	1	2	2	2	3	2	3	2	3	2	3	2	2	2	4	1	2	2	2	2	2	2	2	4
21-Sep	1	2	2	2	2	2	2	2	2	3	3	3	2	2	3	2	3	3	2	1	5	1	4	3	5
22-Sep	3	2	3	2	2	3	3	3	3	4	3	2	4	2	4	3	2	1	2	2	3	2	2	1	4
23-Sep	1	2	2	3	2	3	2	2	2	2	1	2	2	1	2	2	2	2	2	2	2	2	2	2	3
24-Sep	1	1	1	2	2	2	2	3	4	4	3	3	3	3	3	4	4	2	3	2	1	1	1	1	4
25-Sep	1	2	3	2	2	5	3	3	3	3	3	3	3	4	4	5	4	8	8	9	10	8	9	9	10
26-Sep	8	8	7	7	7	8	6	7	5	6	6	6	6	7	8	9	8	9	9	9	9	9	9	9	9
27-Sep	8	9	8	8	7	8	7	7	7	7	6	5	6	6	5	3	3	2	1	1	2	2	1	1	9
28-Sep	2	2	2	2	1	2	1	3	1	1	3	3	2	3	3	2	2	1	2	1	2	3	2	1	3
29-Sep	2	2	1	2	2	6	2	2	2	3	3	4	4	5	5	6	6	6	5	5	5	6	6	6	6
30-Sep	5	5	5	5	6	7	7	6	6	5	6	6	6	6	5	6	4	5	3	3	2	2	2	3	7
	8	9	8	8	7	8	7	7	8	7	7	7	8	8	8	9	8	9	9	9	10	9	9	9	
	Diurnal Maximum																								

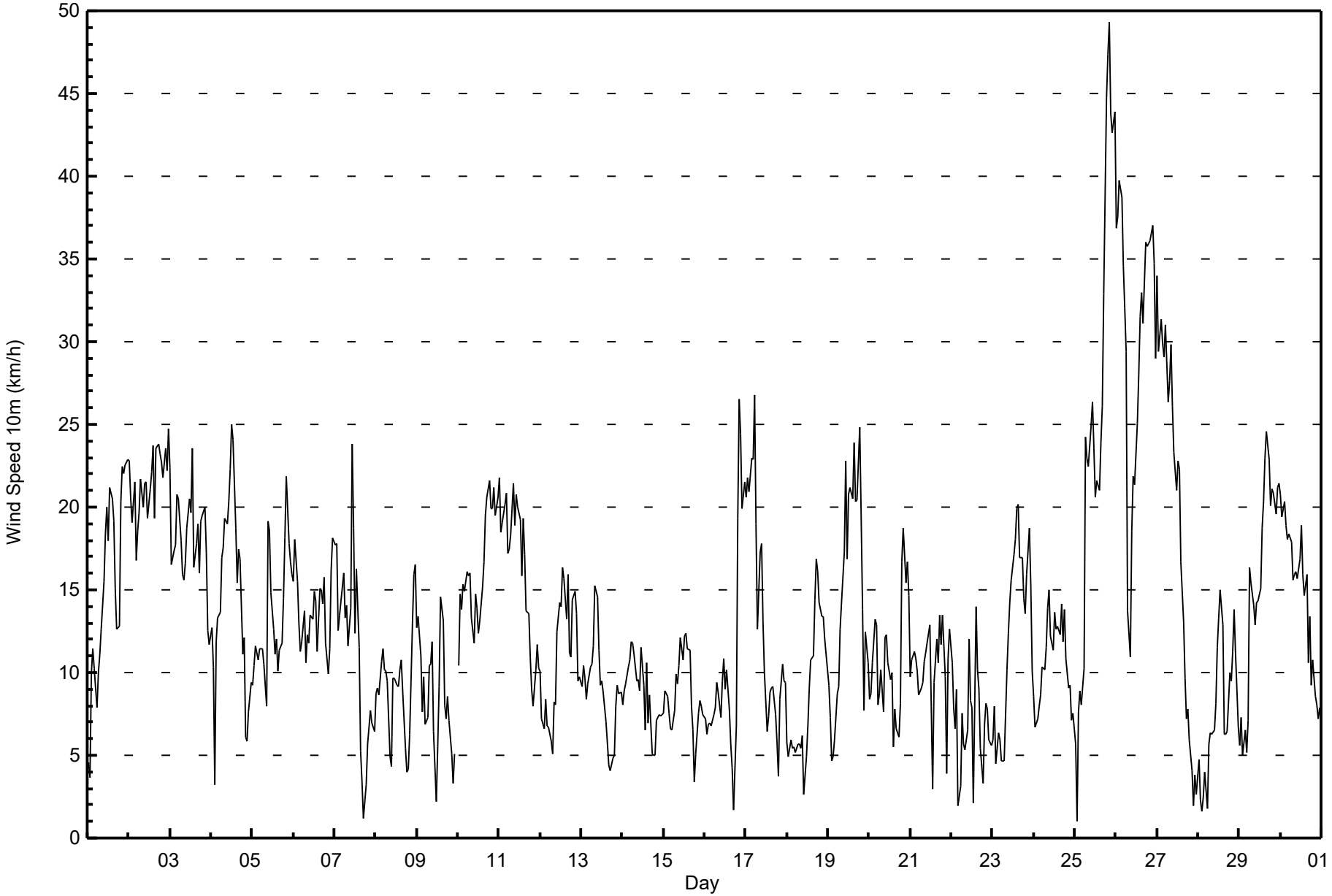
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Fort Chipewyan - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	63	8.76	8.76
6 - 11	282	39.22	47.98
12 - 19	237	32.96	80.95
20 - 28	106	14.74	95.69
29 - 38	23	3.20	98.89
> 38	8	1.11	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Fort Chipewyan - September 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	2	3	1	7	3	3	3	4	3	3	4	5	6	7	6	63
6 - 11	6	0	3	8	14	13	8	9	8	9	30	25	43	39	30	37	282
12 - 19	0	1	3	8	36	15	25	20	13	10	9	21	19	13	24	20	237
20 - 28	0	1	4	6	6	15	20	11	4	0	0	1	18	3	9	8	106
29 - 38	0	0	5	1	0	0	0	0	0	0	0	0	10	7	0	0	23
> 38	0	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8
Totals	9	4	24	26	63	46	56	43	29	22	42	51	95	68	70	71	719

Total Number of Valid Hours: 719

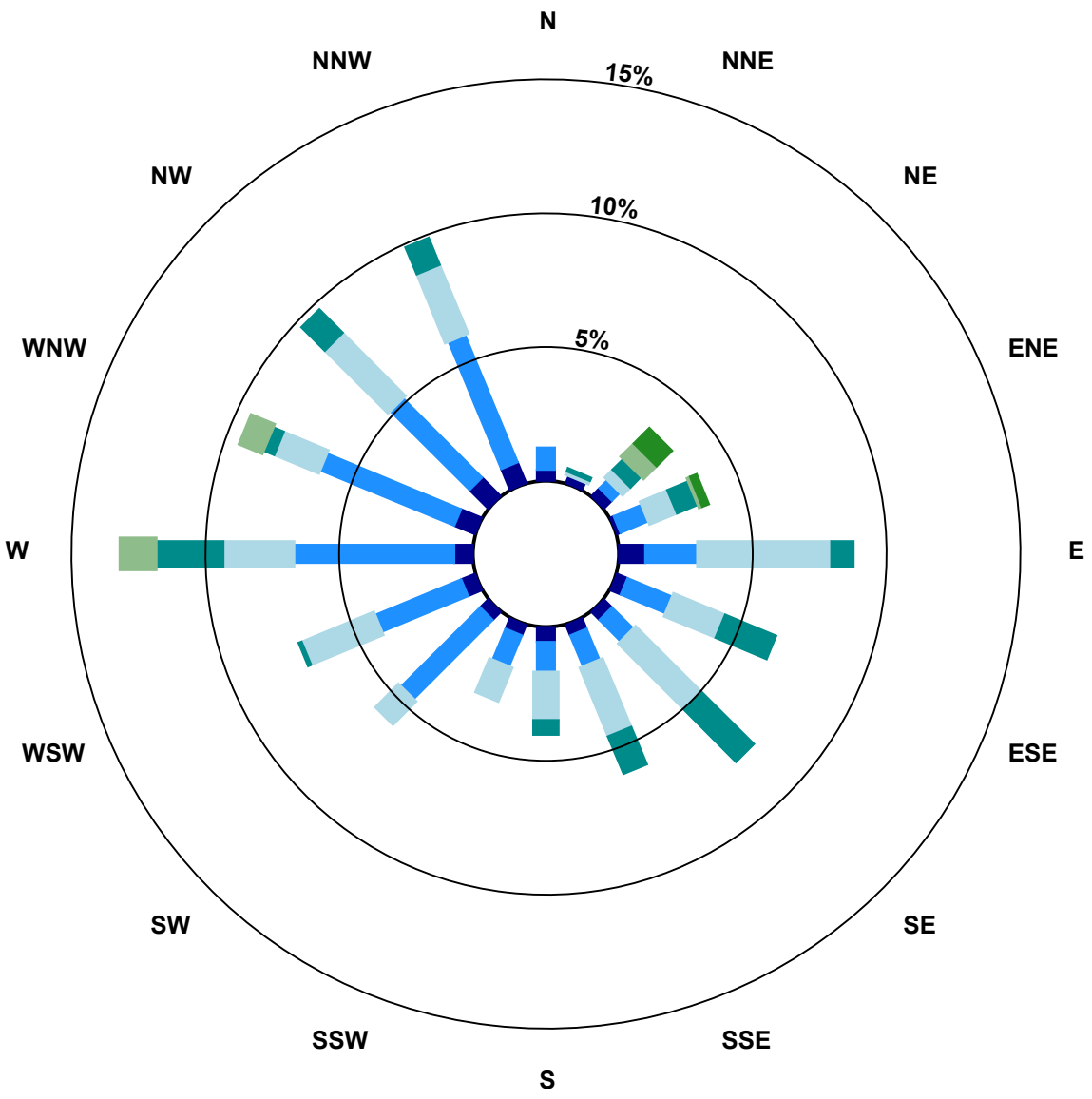
Total Number of Hours: 720

Wood Buffalo Environmental Association

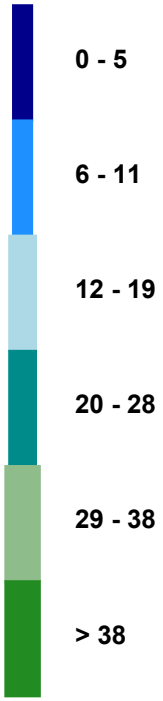
Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Fort Chipewyan



Classes (km/h)



Total Number of Valid Hours: 719

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Fort Chipewyan - September 2026

Direction of Maximum Speed: 55 deg on Sep 25 21:00
Direction of Maximum Daily Speed Average: 57.3 deg on Sep 25

Direction of Minimum Speed: 237 deg on Sep 25 02:00

Direction of Minimum Daily Speed Average: 1.2 deg on Sep 16

Monthly Average Direction: 256.7 deg

Hours in Service:	720
Hours of Data:	719
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-Sep	126	100	143	154	162	96	111	150	153	146	154	140	139	153	158	154	156	102	129	144	142	152	146	148	144.2
2-Sep	154	149	149	156	145	129	110	121	127	136	134	131	113	116	125	113	121	132	130	125	120	109	118	130	128.6
3-Sep	124	108	100	102	113	120	119	134	121	99	105	86	81	120	106	79	67	47	51	53	66	82	76	73	94.0
4-Sep	77	72	34	342	346	342	343	344	336	332	341	339	340	341	330	326	331	338	329	333	332	312	298	319	339.9
5-Sep	331	337	337	342	349	352	347	359	37	88	86	86	87	86	92	85	83	85	95	108	115	133	136	133	76.8
6-Sep	141	143	147	156	115	127	124	127	110	107	99	128	107	83	128	78	84	77	71	66	84	117	145	156	114.7
7-Sep	163	166	145	145	134	129	143	157	166	160	168	173	162	142	171	200	113	92	54	318	330	332	330	330	156.1
8-Sep	328	329	331	342	343	339	330	338	356	233	215	270	271	273	249	246	245	244	198	98	128	154	164	183	270.3
9-Sep	189	196	201	177	162	171	162	196	189	193	188	180	180	206	239	263	256	264	283	303	287	320	285	DF	213.9
10-Sep	282	283	279	277	271	275	277	282	289	293	284	291	298	297	297	300	302	313	314	321	317	321	324	325	298.8
11-Sep	324	327	328	329	326	325	326	328	331	325	319	326	320	323	322	337	335	329	343	326	311	303	310	311	325.0
12-Sep	308	311	295	294	311	306	285	268	262	262	265	261	252	240	248	250	230	220	215	214	210	212	228	227	249.2
13-Sep	226	229	224	228	225	222	229	245	262	264	258	258	267	272	272	313	335	328	341	338	339	341	337	339	267.5
14-Sep	341	337	336	333	340	337	343	336	327	322	320	316	306	295	277	260	287	326	347	309	312	304	297	290	318.5
15-Sep	295	290	294	293	280	275	273	282	281	274	266	264	275	296	343	358	3	348	326	306	292	294	314	332	297.8
16-Sep	329	329	314	319	310	295	302	286	287	292	267	256	262	249	257	271	276	22	109	121	112	114	126	137	208.0
17-Sep	143	143	140	134	132	129	129	138	163	177	194	216	209	213	237	223	251	257	236	258	294	335	311	324	166.3
18-Sep	316	296	293	305	320	294	266	281	275	282	315	179	146	115	94	86	81	86	100	94	94	101	94	113	90.7
19-Sep	114	115	108	84	107	116	116	126	106	96	87	96	153	164	160	175	179	178	176	186	188	204	219	227	150.8
20-Sep	237	233	264	280	276	283	279	282	248	231	229	220	120	124	101	227	88	94	181	181	182	203	218	222	220.3
21-Sep	238	242	232	229	229	222	214	217	212	230	239	231	241	188	92	85	73	82	84	83	86	133	242	267	204.8
22-Sep	274	268	260	286	226	196	299	320	359	259	274	274	273	318	259	254	235	242	260	266	275	295	296	289	272.6
23-Sep	268	282	298	337	5	20	78	153	143	99	94	85	87	85	82	81	82	79	91	121	153	175	184	215	104.0
24-Sep	228	232	249	258	263	263	271	266	267	257	258	246	231	258	252	248	250	251	252	263	273	274	249	280	255.7
25-Sep	273	237	46	48	61	75	80	75	70	71	70	73	53	38	32	42	46	56	64	59	55	53	51	51	57.3
26-Sep	46	45	51	56	56	51	55	27	319	316	306	275	264	267	272	276	274	279	280	282	282	281	281	286	315.8
27-Sep	281	288	280	282	280	279	271	275	283	288	280	268	273	276	275	254	258	259	290	269	296	259	223	8	277.6
28-Sep	36	152	96	80	101	120	175	192	186	155	163	155	160	193	195	150	80	69	75	70	74	85	99	116	129.3
29-Sep	144	198	159	140	145	176	188	189	212	208	239	248	249	251	257	263	265	265	263	262	267	276	281	282	246.9
30-Sep	281	277	282	293	314	323	324	318	319	317	318	318	316	320	312	318	314	314	316	304	304	290	294	286	307.6
	251.0	253.0	271.6	301.5	332.5	344.4	346.0	262.5	257.1	238.1	237.8	238.3	238.2	226.9	244.4	271.2	303.2	3.8	61.3	83.2	98.1	134.9	218.6	236.0	
	Diurnal Average																								

DF - DAS 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: 89 deg on Sep 7 18:00

Minimum Value: 4 deg on Sep 2 22:00

Percentiles: P_1 = 5 P_{10} = 7 Q_1 = 11 Median = 16 Q_3 = 22 P_{90} = 28 P_{99} = 72

Hours in Service:	720
Hours of Data:	719
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-Sep	22	25	9	10	18	17	20	16	14	11	12	10	14	13	11	10	16	19	20	5	6	8	6	8	25
2-Sep	9	8	9	9	9	8	7	7	8	8	8	7	9	5	6	7	8	6	6	6	8	4	6	6	9
3-Sep	8	6	7	6	8	8	11	11	13	11	17	12	7	9	21	6	10	9	11	9	13	5	6	7	21
4-Sep	7	13	65	18	20	21	22	23	23	23	24	25	24	23	27	26	25	26	28	26	30	16	7	15	65
5-Sep	18	13	14	17	18	18	19	19	31	11	10	11	11	10	10	12	11	13	11	7	7	8	6	8	31
6-Sep	7	9	8	9	18	9	9	14	10	7	10	27	26	9	30	11	5	5	7	8	19	12	9	9	30
7-Sep	11	10	12	13	8	7	9	14	14	16	12	12	15	11	27	28	33	89	24	13	12	14	13	14	89
8-Sep	16	17	18	18	15	13	15	24	44	55	26	28	26	25	25	22	20	19	20	21	19	7	11	9	55
9-Sep	8	9	11	19	15	21	31	14	12	13	38	73	50	14	19	17	16	16	14	17	19	22	15	DF	73
10-Sep	16	15	15	16	15	16	15	15	17	18	16	17	20	20	20	20	20	23	23	26	27	26	28	26	28
11-Sep	25	28	27	26	27	29	26	26	29	28	25	28	27	29	26	25	28	25	25	25	22	18	22	23	29
12-Sep	21	23	17	17	15	16	12	12	18	20	19	18	20	19	22	20	13	12	9	8	9	8	18	10	23
13-Sep	10	10	10	10	11	11	10	13	17	15	16	19	19	16	15	27	23	24	22	19	22	23	20	21	27
14-Sep	21	17	17	17	16	16	17	17	20	22	25	24	27	28	22	14	27	22	21	24	12	16	16	13	28
15-Sep	14	14	17	19	16	15	14	17	17	20	19	22	21	33	26	24	30	21	32	14	12	15	17	19	33
16-Sep	16	16	12	18	10	10	9	14	22	40	27	22	21	25	29	24	16	42	36	6	5	6	7	9	42
17-Sep	7	7	7	7	7	6	8	12	12	11	15	15	26	21	25	15	19	14	15	51	23	20	16	25	51
18-Sep	36	22	17	20	20	26	13	14	21	29	82	72	41	13	7	4	4	7	6	8	10	10	15	8	82
19-Sep	6	8	25	16	19	16	13	14	6	8	5	17	11	10	11	10	8	7	5	7	6	17	12	9	25
20-Sep	17	10	18	13	12	17	16	18	32	19	14	12	36	25	37	39	7	34	21	4	5	13	9	10	39
21-Sep	14	11	12	13	12	13	9	12	9	16	16	12	14	56	9	6	13	7	9	7	54	36	26	15	56
22-Sep	15	22	22	25	85	66	36	71	48	55	18	18	28	84	18	20	19	18	35	25	18	11	25	15	85
23-Sep	23	25	34	28	25	49	23	36	10	10	7	5	5	4	5	6	7	5	12	18	9	8	8	16	49
24-Sep	12	11	16	15	12	12	13	15	15	15	19	24	16	20	20	21	16	13	12	14	12	11	16	13	24
25-Sep	17	74	5	9	19	12	6	7	8	8	8	9	10	13	12	12	11	12	10	10	11	11	10	10	74
26-Sep	11	11	11	11	10	13	13	21	26	23	20	18	16	15	15	15	16	15	15	15	15	14	15	16	26
27-Sep	15	17	15	15	15	15	16	16	16	17	15	16	16	16	17	17	15	14	16	12	52	71	20	60	71
28-Sep	34	72	66	33	28	51	28	27	20	28	28	19	16	16	13	39	15	9	8	10	8	8	14	15	72
29-Sep	33	18	24	20	31	39	8	9	9	11	17	15	15	16	16	15	15	15	15	15	16	16	16	15	39
30-Sep	16	15	15	18	24	26	27	26	26	24	26	27	25	25	26	24	25	22	26	18	17	16	17	17	27
	36	74	66	33	85	66	36	71	48	55	82	73	50	84	37	39	33	89	36	51	54	71	28	60	
	Diurnal Maximum																								

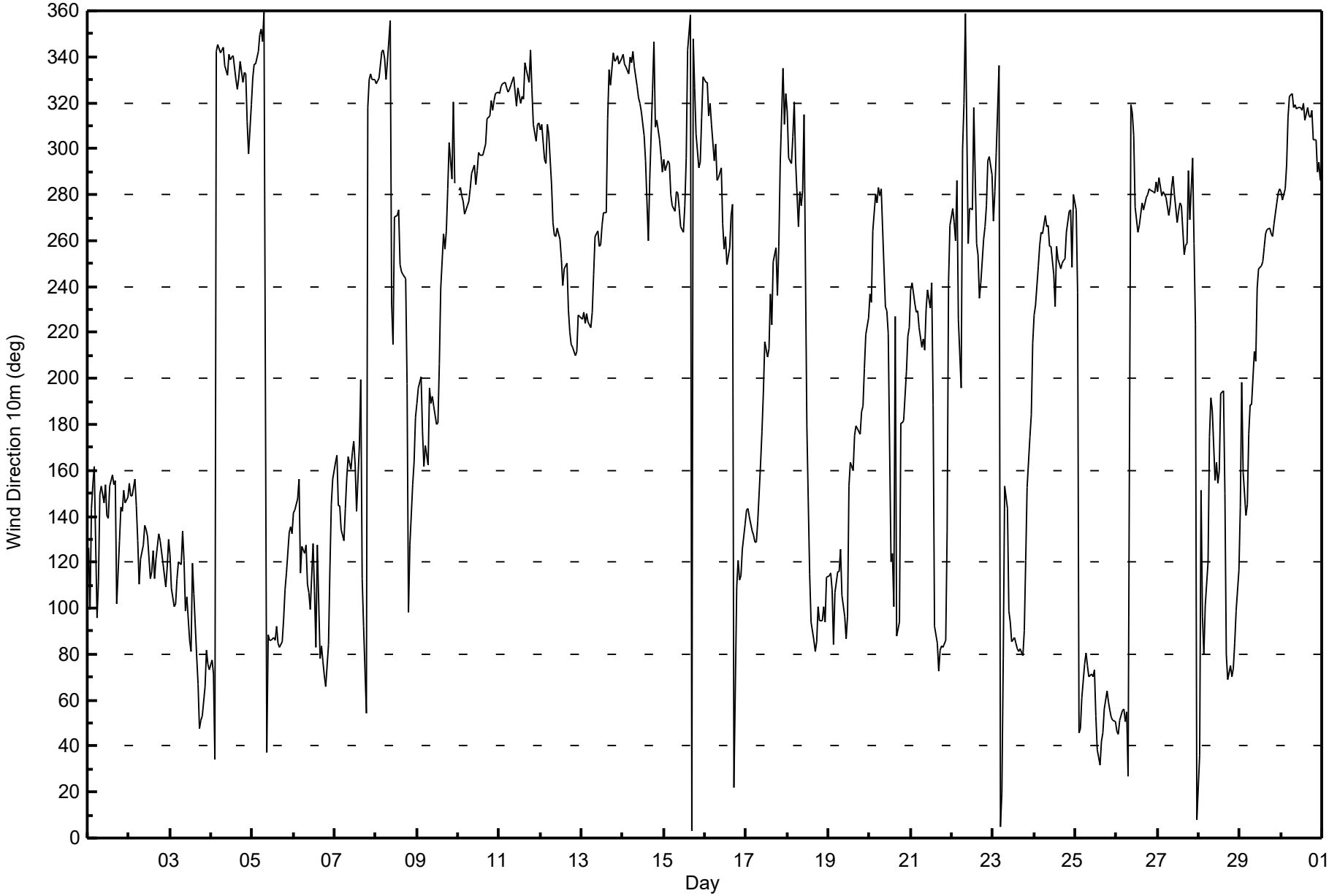
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Fort Chipewyan - September 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS09
BARGE LANDING
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BARGE LANDING (AMS09)
SEPTEMBER 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	685	35	35	100	-	-	11.9	0	2.3	0
TRS(ppb) Average	684	36	36	100	4.1	0	3.8	0	1.2	0
THC(ppm) Average	685	35	35	100	-	-	3.2	-	2.5	-
NMHC(ppm) Average	685	35	35	100	-	-	0.42	-	0.093	-
CH4(ppm) Average	685	35	35	100	-	-	3	-	2.4	0
NO2 (ppb) Average	684	36	36	100	-	-	30.2	0	16.4	-
NO (ppb) Average	684	36	36	100	-	-	118	-	15	-
NOX (ppb) Average	684	36	36	100	-	-	127.1	-	26.7	-
PM2.5(ug/m3) Average	718	2	2	100	-	-	36.3	0	18	0
Temperature (C) Average	720	0	0	100	-	-	28.3	-	20.7	-
Relative Humidity (%) Average	720	0	0	100	-	-	100	-	90.7	-
Barometric Pressure (inHg) Average	720	0	0	100	-	-	29.2	-	29.2	-
Wind Speed 20 m (km/h) Average	720	0	0	100	-	-	31	-	20	-
Wind Direction 20 m (deg) Average	720	0	0	100	-	-	0	-	0	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BARGE LANDING (AMS09)
SEPTEMBER 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	685	0.38	1.2	-	0	0	0	0.1	0.2	0.4	11.9
TRS(ppb) Average	684	0.48	0.5	-	0.1	0.2	0.2	0.3	0.5	1	3.8
THC(ppm) Average	685	2.22	0.2	-	2	2	2.1	2.2	2.3	2.5	3.2
NMHC(ppm) Average	685	0.021	0.048	-	0	0	0	0	0	0.1	0.42
CH4(ppm) Average	685	2.19	0.2	-	2	2	2.1	2.1	2.3	2.5	3
NO2 (ppb) Average	684	5.84	5.2	-	0	0.1	1.2	4.9	9.1	13	30.2
NO (ppb) Average	684	4.62	10.5	-	0	0	0.1	0.8	4.3	12.8	118
NOX (ppb) Average	684	10.46	13.6	-	0	0.2	1.3	6.6	13.9	24.5	127.1
PM2.5(ug/m3) Average	718	6.54	5.8	-	0.1	1.2	2.6	4.9	8.4	14.1	36.3
Temperature (C) Average	720	11.95	5.8	-	1.1	4.9	7.6	11.1	15.9	19.9	28.3
Relative Humidity (%) Average	720	75.05	20.2	-	25.4	43.9	60.6	78.8	93.6	99.3	100
Barometric Pressure (inHg) Average	720	28.84	0.2	-	28.3	28.5	28.7	28.9	29	29.1	29.2
Wind Speed 20 m (km/h) Average	720	11	6	-	0	4	6	10	15	20	31
Wind Direction 20 m (deg) Average	720	237.1	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BARGE LANDING (AMS09)
SEPTEMBER 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

Barge Landing - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 11.9 ppb on Sep 21 13:00 Maximum Daily Average: 2.3 ppb on Sep 21

Minimum Value: 0.0 ppb on Sep 1 06:00 Minimum Daily Average: 0.0 ppb on Sep 26
Maximum Diurnal Average: 1.3 ppb at hour 13 Minimum Diurnal Average: 0.1 ppb at hour 4
Monthly Average: 0.38 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} = 6.3

Hours in Service:	720
Hours of Data:	685
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-Sep	0.1	0.1	Z	0.1	0.1	0.0	0.0	0.1	0.3	2.5	C	C	C	C	C	1.9	0.9	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.4	2.5
2-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.3
3-Sep	0.2	0.2	0.3	0.2	Z	0.3	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3
4-Sep	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.2
5-Sep	Z	0.1	0.0	0.0	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	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2
6-Sep	0.0	Z	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.2	0.2	0.3	0.0	0.5	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
7-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.7	4.8	5.8	3.4	1.6	1.3	2.0	1.0	0.7	0.4	0.2	0.0	1.0	5.8
8-Sep	0.1	0.1	0.1	Z	0.1	0.3	0.4	0.1	0.0	0.1	0.0	0.0	5.4	3.9	0.9	0.2	0.2	0.0	0.2	0.5	0.2	0.1	0.0	0.0	0.6	5.4
9-Sep	0.0	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	0.1
10-Sep	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
11-Sep	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
12-Sep	0.0	Z	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2
13-Sep	0.1	0.2	Z	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.4
14-Sep	0.2	0.2	0.1	Z	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.1	0.1	0.2
15-Sep	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
16-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.1	7.3	4.0	5.8	1.4	1.0	0.5	1.4	3.4	1.5	0.6	0.3	0.2	0.1	0.1	1.2	7.3
17-Sep	Z	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.9	8.0	2.8	2.2	0.5	0.3	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.7	8.0
18-Sep	0.0	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
19-Sep	0.1	0.1	Z	0.1	0.0	0.2	0.3	0.3	0.6	1.3	3.7	5.0	4.6	6.2	4.3	6.3	2.8	0.8	0.4	0.8	0.9	1.0	0.8	0.8	1.8	6.3
20-Sep	0.7	0.4	0.3	Z	0.2	0.2	0.1	0.2	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.5	0.4	0.3	0.7
21-Sep	0.2	0.1	0.0	0.0	Z	0.1	0.2	0.1	0.1	0.4	0.6	8.3	11.9	6.3	5.3	4.1	3.5	3.2	3.1	1.9	1.8	0.7	0.4	0.3	2.3	11.9
22-Sep	0.1	0.0	0.1	0.1	0.1	Z	0.4	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	0.1	0.4
23-Sep	Z	0.0	0.0	0.0	0.1	0.1	0.3	0.1	0.1	0.1	0.7	2.7	4.1	9.8	11.6	5.2	1.2	0.5	0.2	0.2	0.0	0.1	0.0	0.0	1.6	11.6
24-Sep	0.0	Z	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	0.0	0.0	0.0	0.0	0.0	0.1
25-Sep	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
26-Sep	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
27-Sep	0.0	0.0	0.0	0.1	Z	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	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2
28-Sep	0.2	0.1	0.3	0.1	0.2	Z	0.4	0.2	0.2	0.4	0.2	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.4	0.0	0.1	0.0	0.3	0.2	0.4
29-Sep	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	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1
30-Sep	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	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	0.3	0.8	0.9	1.3	1.2	1.1	0.8	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	Diurnal Average	
	0.7	0.4	0.3	0.2	0.2	0.3	0.4	0.3	0.6	2.5	8.0	8.3	11.9	9.8	11.6	6.3	3.5	3.4	3.1	1.9	1.8	1.0	0.8	0.8	Diurnal Maximum	

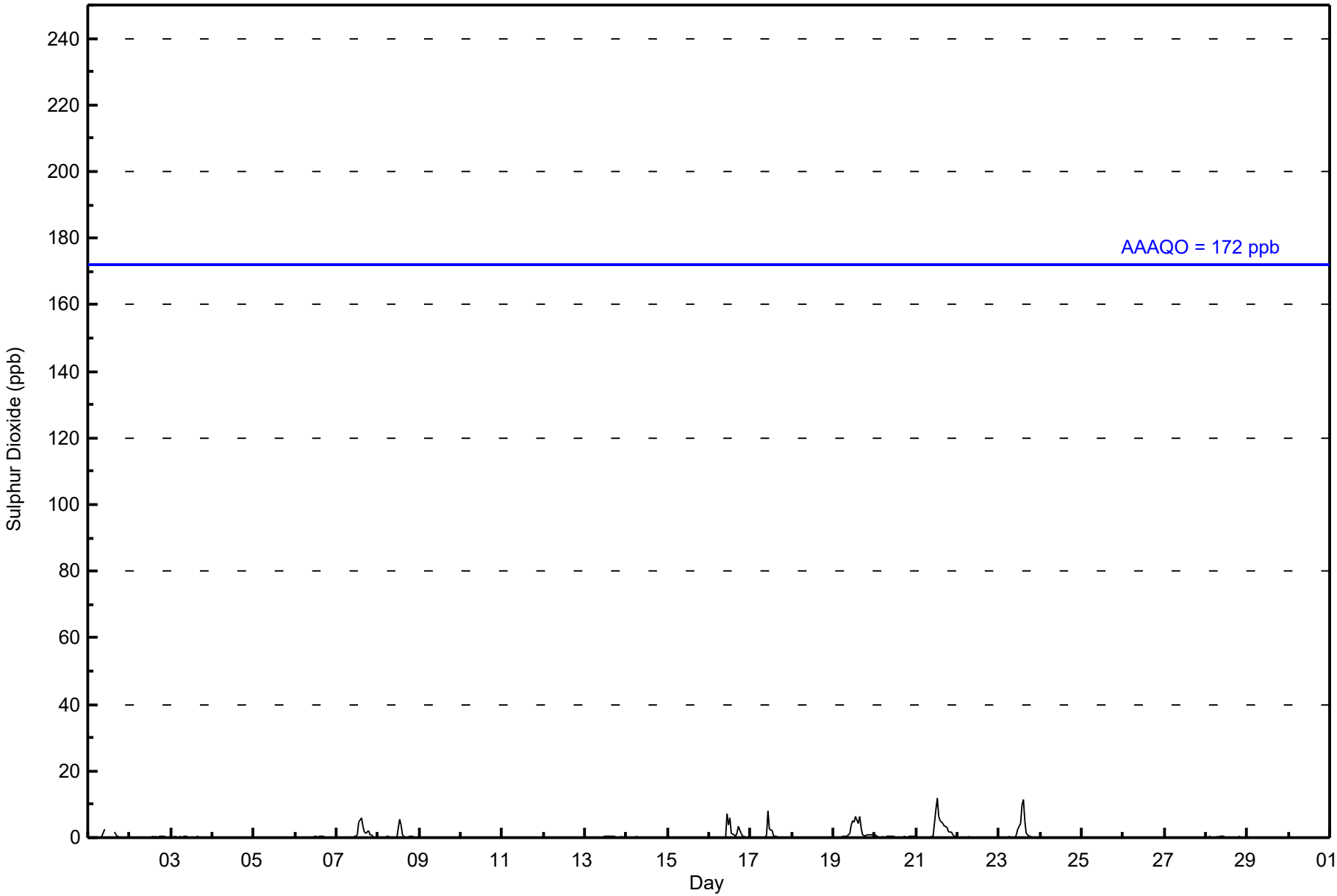
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Barge Landing - September 2026



Sulphur Dioxide (SO_2) - ppb
Barge Landing - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	683	99.71	99.71
11 - 20	2	0.29	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Barge Landing - September 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	15	10	5	4	19	62	77	78	46	54	63	63	40	46	57	683
11 - 20	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
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	15	10	5	4	19	62	79	78	46	54	63	63	40	46	57	685

Total Number of Valid Hours: 685

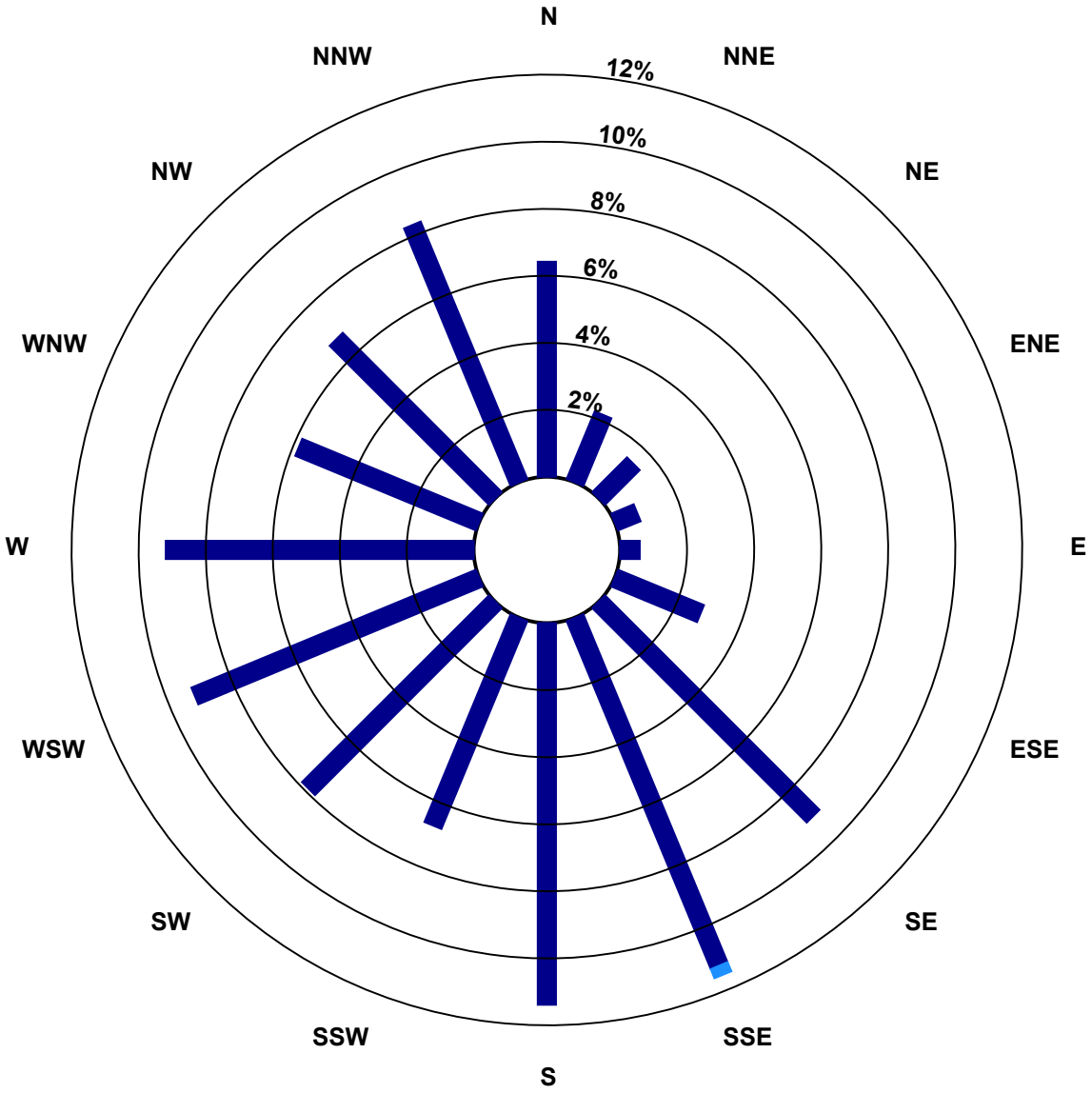
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Barge Landing



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

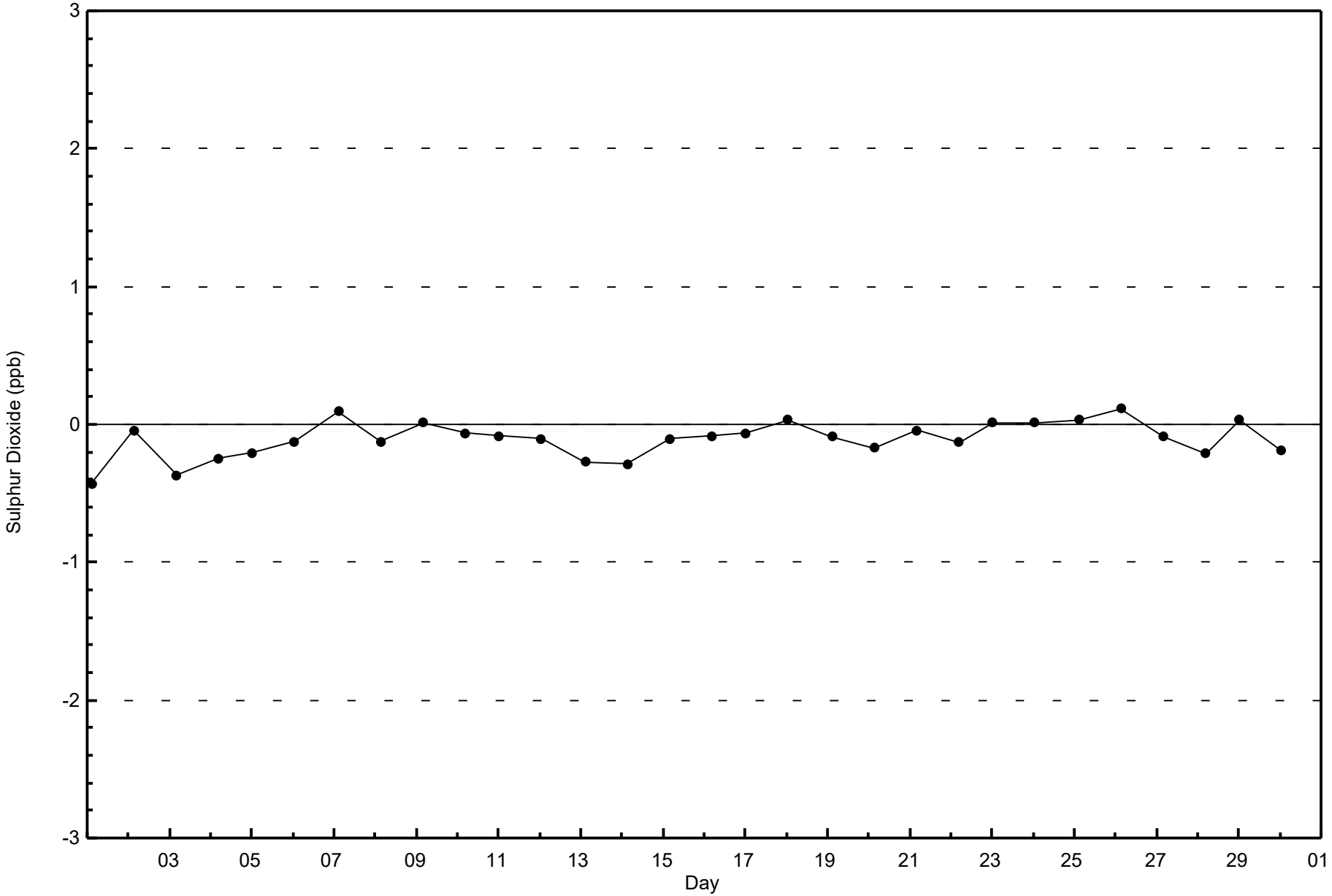
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Barge Landing - September 2026

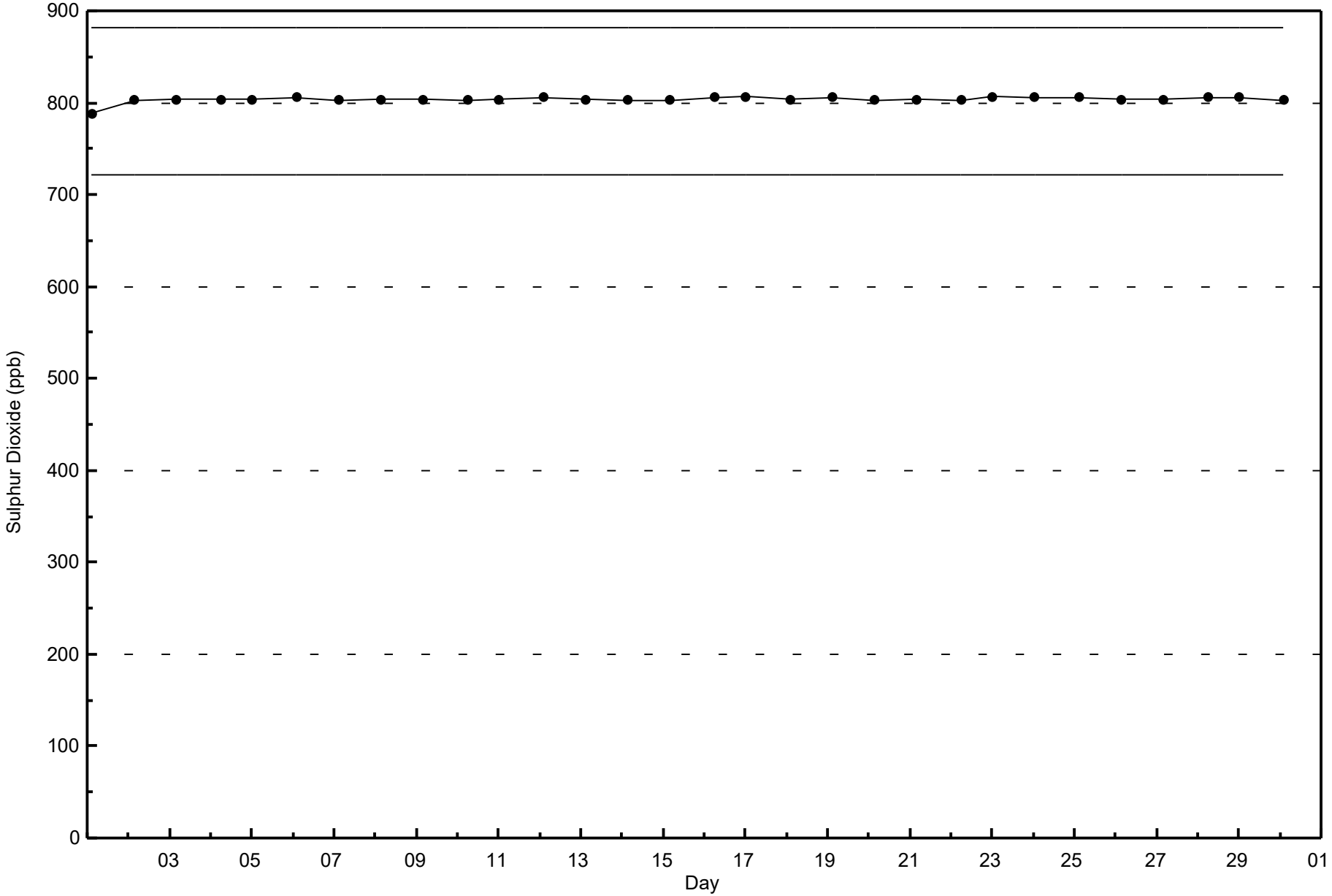


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Barge Landing - September 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Barge Landing - September 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 4.1 ppb on Sep 19 08:30 Maximum Daily Average: 1.2 ppb on Sep 23

Minimum Value: 0.1 ppb on Sep 22 15:30 Minimum Daily Average: 0.2 ppb on Sep 15

Maximum Diurnal Average: 0.8 ppb at hour 7 Minimum Diurnal Average: 0.3 ppb at hour 18

Monthly Average: 0.48 ppb Percentiles: $P_1 = 0.2$ $P_{10} = 0.2$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.5$ $P_{90} = 1.0$ $P_{99} = 2.5$

Periods in Service:	1440
Periods of Valid Data:	1367
Periods of Invalid Data:	73
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-Sep	0.6	0.5	0.4	Z	1.6	1.2	1.6	3.8	1.1	1.9	1.0	0.7	0.6	0.5	0.7	0.9	0.9	0.6	0.3	0.3	0.3	0.2	0.3	0.3	0.9	3.8
	0.5	0.4	0.4	SP	1.7	1.2	3.1	2.8	2.1	1.3	0.7	0.6	0.5	0.5	0.8	1.2	0.7	0.4	0.3	0.3	0.3	0.2	0.3	0.3		
2-Sep	0.3	0.3	0.3	0.3	Z	0.4	0.5	0.6	0.5	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.7
	0.3	0.3	0.3	0.3	SP	0.4	0.6	0.7	0.5	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.3	0.3	0.3		
3-Sep	0.3	0.3	0.3	0.3	0.4	Z	0.8	0.6	0.6	0.6	C	C	C	C	C	C	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.5	--	0.9
	0.3	0.3	0.3	0.3	0.4	SP	0.9	0.6	0.6	C	C	C	C	C	C	0.3	0.3	0.5	0.5	0.5	0.4	0.4	0.4	0.6		
4-Sep	Z	0.4	0.4	0.4	0.5	0.9	1.2	1.2	0.9	0.7	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.5	0.5	1.2
	SP	0.3	0.4	0.5	0.7	1.1	1.2	1.1	0.8	0.6	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.6		
5-Sep	0.5	Z	0.3	0.6	1.0	1.7	1.1	0.9	1.0	0.7	0.4	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.5	1.9
	0.4	SP	0.5	0.7	1.6	1.9	0.7	1.1	0.8	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3		
6-Sep	0.3	0.5	Z	0.3	1.5	0.8	0.5	0.5	1.1	1.2	2.2	1.9	1.7	0.4	1.4	0.5	0.3	0.4	0.4	0.4	0.4	0.3	0.2	0.3	0.8	2.2
	0.3	0.7	SP	0.7	0.9	0.7	0.4	0.8	1.2	1.6	1.8	1.9	2.1	0.7	0.9	0.4	0.4	0.4	0.4	0.6	0.3	0.2	0.3	0.2		
7-Sep	0.3	0.2	0.2	Z	0.3	0.3	0.3	0.5	0.3	1.9	1.3	0.3	0.4	0.4	0.4	0.5	0.4	0.4	0.6	1.2	1.3	1.7	1.9	1.3	0.7	2.8
	0.3	0.2	0.2	SP	0.3	0.3	0.5	0.3	0.6	2.8	0.3	0.3	0.5	0.4	0.4	0.4	0.4	0.4	1.0	1.3	1.5	1.4	1.6	1.1		
8-Sep	0.9	0.7	0.6	0.5	Z	0.6	0.8	0.8	0.4	0.4	0.7	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.5	1.0	0.5	1.0
	0.8	0.5	0.6	0.5	SP	0.6	0.7	0.6	0.4	0.6	0.6	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.4	0.5	0.4	0.5	0.5	0.9		
9-Sep	0.7	0.3	1.2	1.6	1.8	Z	2.4	2.4	1.6	1.7	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.8	2.6
	0.6	0.5	1.4	1.9	2.1	SP	2.6	1.7	1.4	1.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3		
10-Sep	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2		
11-Sep	0.2	Z	0.3	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4
	0.2	SP	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	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.2		
12-Sep	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	0.7	0.4	0.3	0.3	0.8
	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	0.3	0.8	0.5	0.3	0.4		
13-Sep	0.4	0.3	0.3	Z	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.4	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
	0.3	0.3	0.3	SP	0.3	0.2	0.3	0.2	0.3	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4		
14-Sep	0.4	0.3	0.3	0.3	Z	0.3	0.5	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	0.3	0.2	0.2	0.3	0.5
	0.3	0.3	0.3	0.4	SP	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2		
15-Sep	0.2	0.2	0.2	0.2	0.2	Z	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	0.3	0.2	0.4
	0.2	0.2	0.2	0.2	0.2	SP	0.2	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	0.4		

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Barge Landing - September 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-Sep	Z	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.6	0.4	0.6	0.4	0.4	0.3	0.4	0.3	0.6	0.4	0.2	0.2	0.2	0.2	0.3	0.6
	SP	0.4	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.6	0.5	0.5	0.6	0.5	0.5	0.4	0.4	0.3	0.6	0.3	0.2	0.2	0.2	0.2		
17-Sep	0.2	Z	0.2	0.3	0.4	0.8	0.7	0.7	0.6	0.4	0.5	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.8	0.7	0.7	0.6	0.5	0.4	0.5	1.0
	0.2	SP	0.2	0.3	0.6	0.7	0.7	0.7	0.8	0.5	0.6	0.2	0.3	0.2	0.3	0.2	0.2	0.4	1.0	0.7	0.6	0.6	0.5	0.4		
18-Sep	0.4	0.3	Z	0.3	0.3	0.4	0.9	0.6	0.4	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.7	0.4	0.9
	0.3	0.3	SP	0.3	0.3	0.4	0.9	0.4	0.4	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.3	0.5	0.8		
19-Sep	0.8	0.7	0.7	Z	1.1	3.1	2.2	2.4	4.1	2.2	0.8	0.8	0.6	0.3	0.3	0.3	0.3	1.0	0.3	1.3	0.3	0.3	0.5	0.7	1.1	4.1
	0.6	0.6	0.8	SP	2.2	2.4	2.5	2.8	3.4	1.2	0.8	0.8	0.5	0.3	0.3	0.3	0.3	0.5	1.7	0.4	0.3	0.3	0.6	0.7		
20-Sep	0.6	0.5	0.4	0.5	Z	1.1	1.2	1.5	0.9	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.9	0.7	0.4	1.1	0.8	0.6	1.5
	0.6	0.5	0.4	0.5	SP	1.3	1.2	1.5	0.7	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	1.2	0.6	0.6	1.1	0.5		
21-Sep	0.4	0.3	0.3	0.4	0.4	Z	0.6	0.6	1.8	1.2	M	0.9	1.3	1.3	1.3	1.0	0.9	0.8	0.7	0.6	0.7	1.1	1.2	0.9	0.9	1.8
	0.4	0.3	0.4	0.4	0.5	SP	0.5	1.0	1.5	1.3	1.0	0.8	1.8	1.4	1.2	1.0	0.9	0.8	0.6	0.7	0.7	1.0	0.9	0.8		
22-Sep	Z	0.3	0.4	0.4	0.4	0.5	0.8	0.7	0.3	0.2	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	0.8
	SP	0.4	0.4	0.3	0.3	0.6	0.8	0.5	0.3	0.2	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		
23-Sep	0.3	Z	0.3	0.3	0.5	2.3	2.9	3.2	1.3	1.6	2.2	1.7	1.0	0.9	1.4	1.2	1.7	1.1	0.7	0.5	0.3	0.4	0.4	0.4	1.2	3.2
	0.3	SP	0.3	0.3	1.3	3.1	3.2	1.9	1.3	1.9	1.8	1.2	0.9	1.4	1.3	1.8	1.1	1.0	0.6	0.3	0.3	0.5	0.4	0.4		
24-Sep	0.4	0.4	Z	0.3	0.3	0.3	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.8	1.0	0.4	1.0
	0.4	0.3	SP	0.2	0.3	0.4	0.7	0.3	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.9	0.4	0.9		
25-Sep	0.7	0.7	0.7	Z	0.5	0.6	0.9	0.8	0.8	0.6	0.8	0.6	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.5	1.0
	0.7	0.7	0.7	SP	0.5	0.8	1.0	0.9	0.7	0.6	0.8	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		
26-Sep	0.3	0.3	0.3	0.2	Z	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	0.2	0.2	0.2	0.2	0.3
	0.3	0.3	0.3	0.2	SP	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		
27-Sep	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	0.3	0.3	0.2	0.3
	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	0.3	0.3	0.3		
28-Sep	Z	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.8	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.9
	SP	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.9	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.4		
29-Sep	0.5	Z	0.6	1.1	0.9	0.6	1.2	0.8	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	1.2
	0.6	SP	0.9	1.1	0.7	0.7	1.2	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.2	0.2		
30-Sep	0.2	0.2	Z	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
	0.2	0.2	SP	0.2	0.2	0.3	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	0.2	0.2	0.2	0.2		
	0.4	0.4	0.4	0.4	0.6	0.7	0.8	0.8	0.7	0.7	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	Diurnal Average	
	0.9	0.7	1.4	1.9	2.2	3.1	3.2	3.8	4.1	2.8	2.2	1.9	2.1	1.4	1.4	1.8	1.7	1.1	1.7	1.3	1.5	1.7	1.9	1.3	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

Barge Landing - September 2026

Maximum Value: 3.8 ppb on Sep 19 09:00

Maximum Daily Average: 1.2 ppb on Sep 23

Minimum Value: 0.1 ppb on Sep 22 15:00

Minimum Daily Average: 0.2 ppb on Sep 15

Maximum Diurnal Average: 0.8 ppb at hour 7

Minimum Diurnal Average: 0.3 ppb at hour 18

Monthly Average: 0.48 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.2$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.5$ $P_{90} = 1.0$ $P_{99} = 2.5$

Hours in Service:	720
Hours of Data:	684
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-Sep	0.5	0.5	0.4	Z	1.6	1.2	2.4	3.3	1.6	1.6	0.9	0.6	0.5	0.5	0.7	1.0	0.8	0.5	0.3	0.3	0.3	0.2	0.3	0.3	0.9	3.3
2-Sep	0.3	0.3	0.3	0.3	Z	0.4	0.5	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.7
3-Sep	0.3	0.3	0.3	0.3	0.4	Z	0.8	0.6	0.6	0.5	C	C	C	C	C	C	0.3	0.5	0.5	0.5	0.4	0.4	0.4	0.5	--	0.8
4-Sep	Z	0.3	0.4	0.5	0.6	1.0	1.2	1.1	0.9	0.6	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.5	0.5	1.2
5-Sep	0.5	Z	0.4	0.6	1.3	1.8	0.9	1.0	0.9	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.5	1.8
6-Sep	0.3	0.6	Z	0.5	1.2	0.8	0.5	0.7	1.2	1.4	2.0	1.9	1.9	0.5	1.1	0.4	0.4	0.4	0.4	0.5	0.4	0.3	0.2	0.3	0.8	2.0
7-Sep	0.3	0.2	0.2	Z	0.3	0.3	0.4	0.4	0.5	2.3	0.8	0.3	0.4	0.4	0.4	0.5	0.4	0.4	0.8	1.3	1.4	1.5	1.7	1.2	0.7	2.3
8-Sep	0.8	0.6	0.6	0.5	Z	0.6	0.7	0.7	0.4	0.5	0.6	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.5	0.5	0.5	0.9	0.5	0.9
9-Sep	0.7	0.4	1.3	1.8	1.9	Z	2.5	2.0	1.5	1.5	0.4	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	0.8	2.5
10-Sep	Z	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	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.4
11-Sep	0.2	Z	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	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4
12-Sep	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	0.5	0.6	0.4	0.3	0.3	0.6
13-Sep	0.3	0.3	0.3	Z	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.3	0.4
14-Sep	0.4	0.3	0.3	0.3	Z	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	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.4
15-Sep	0.2	0.2	0.2	0.2	0.2	Z	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	0.2	0.3
16-Sep	Z	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.4	0.4	0.3	0.4	0.3	0.6	0.3	0.2	0.2	0.2	0.2	0.3	0.6
17-Sep	0.2	Z	0.2	0.3	0.5	0.8	0.7	0.7	0.7	0.5	0.6	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.9	0.7	0.6	0.6	0.5	0.4	0.5	0.9
18-Sep	0.3	0.3	Z	0.3	0.3	0.4	0.9	0.5	0.4	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.7	0.4	0.9
19-Sep	0.7	0.6	0.7	Z	1.7	2.7	2.4	2.6	3.8	1.7	0.8	0.8	0.5	0.3	0.3	0.3	0.3	0.7	1.0	0.9	0.3	0.3	0.5	0.7	1.1	3.8
20-Sep	0.6	0.5	0.4	0.5	Z	1.2	1.2	1.5	0.8	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	1.1	0.7	0.5	1.1	0.7	0.6	1.5
21-Sep	0.4	0.3	0.3	0.4	0.4	Z	0.5	0.8	1.6	1.3	1.1	0.9	1.5	1.4	1.2	1.0	0.9	0.8	0.7	0.7	0.7	1.0	1.0	0.9	0.9	1.6
22-Sep	Z	0.3	0.4	0.4	0.4	0.5	0.8	0.6	0.3	0.2	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	0.8
23-Sep	0.3	Z	0.3	0.3	0.9	2.7	3.1	2.6	1.3	1.7	2.0	1.4	0.9	1.1	1.3	1.5	1.4	1.1	0.6	0.4	0.3	0.4	0.4	0.4	1.2	3.1
24-Sep	0.4	0.3	Z	0.3	0.3	0.4	0.6	0.4	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.7	0.6	1.0	0.4	1.0
25-Sep	0.7	0.7	0.7	Z	0.5	0.7	0.9	0.9	0.8	0.6	0.8	0.6	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.9
26-Sep	0.3	0.3	0.3	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	0.2	0.2	0.2	0.2	0.2	0.2	0.3
27-Sep	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	0.3	0.3	0.3	0.2	0.3
28-Sep	Z	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.7	0.6	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.7
29-Sep	0.5	Z	0.7	1.1	0.8	0.6	1.2	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	0.3	0.3	0.3	0.2	0.4	1.2
30-Sep	0.2	0.2	Z	0.2	0.2	0.3	0.2	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	0.3
	0.4	0.4	0.4	0.4	0.6	0.7	0.8	0.8	0.7	0.7	0.6	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	Diurnal Average	
	0.8	0.7	1.3	1.8	1.9	2.7	3.1	3.3	3.8	2.3	2.0	1.9	1.9	1.4	1.3	1.5	1.4	1.1	1.0	1.3	1.4	1.5	1.7	1.2	Diurnal Maximum	

Z - zerospan C - Calibration

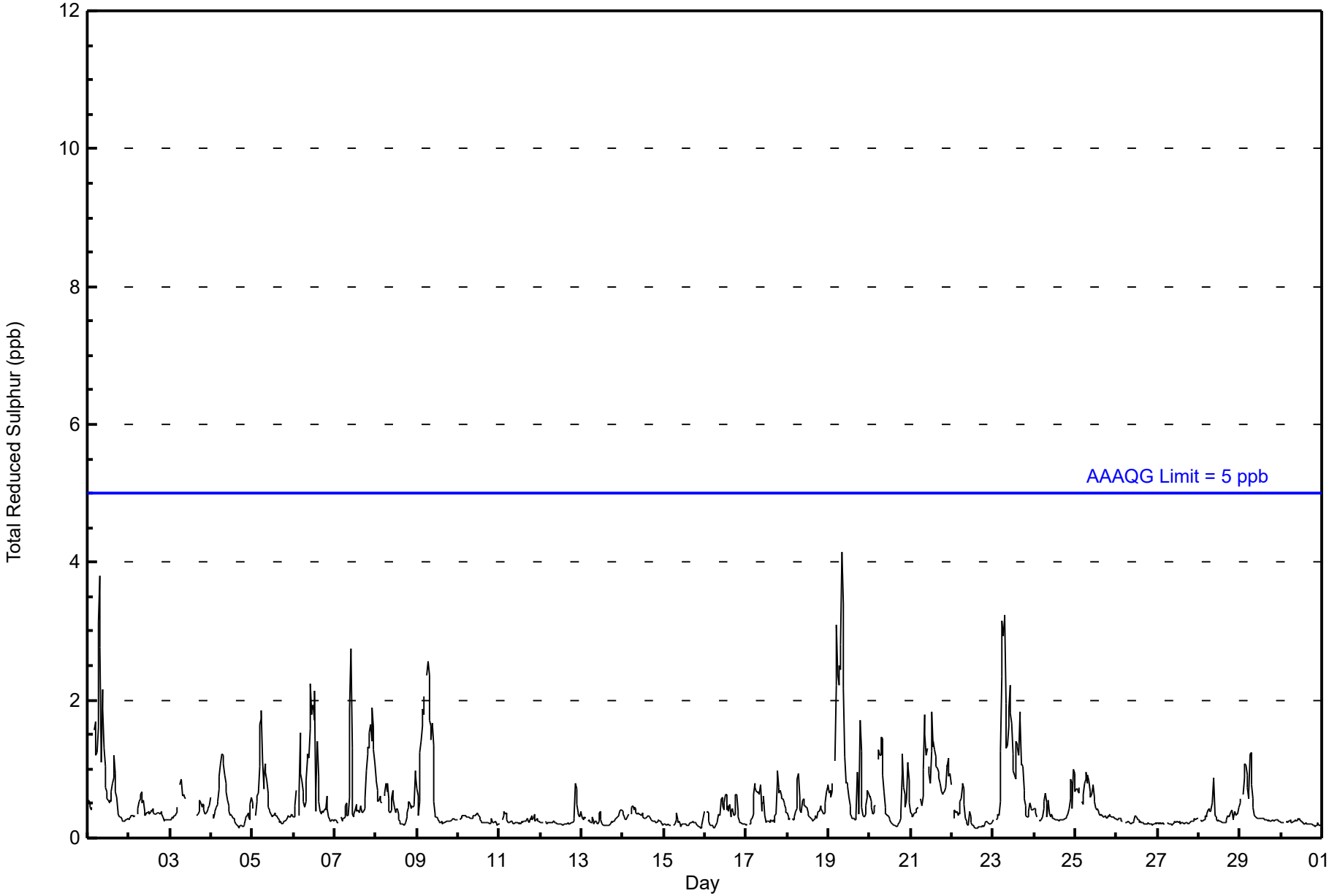
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Barge Landing - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	677	98.98	98.98
3 - 4	7	1.02	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Reduced Sulphur (TRS) - ppb

Barge Landing - September 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	43	16	10	2	3	17	63	80	77	46	53	60	64	38	47	58	677
3 - 4	0	0	0	0	0	0	1	2	3	0	1	0	0	0	0	0	7
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	43	16	10	2	3	17	64	82	80	46	54	60	64	38	47	58	684

Total Number of Valid Hours: 684

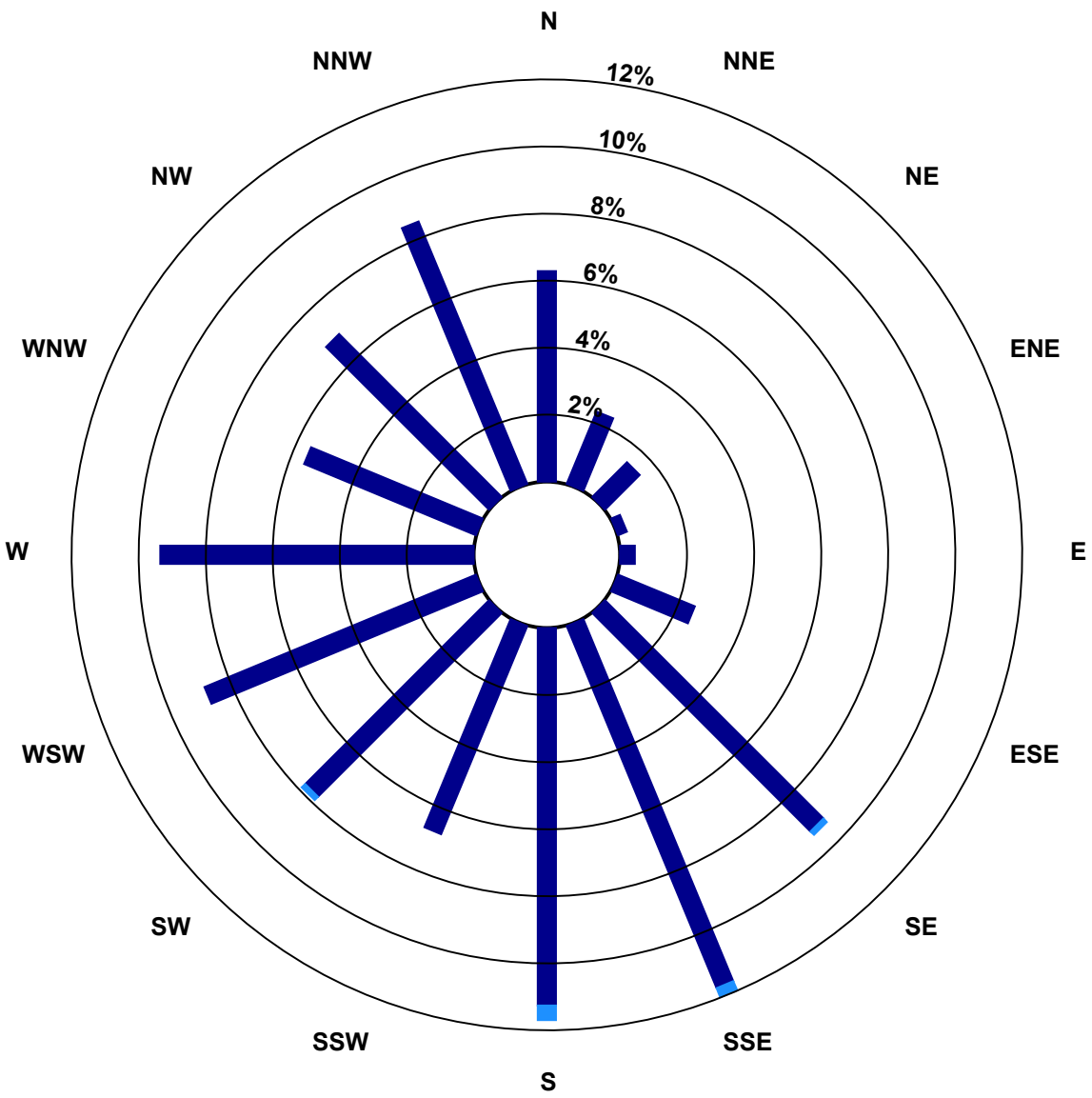
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Reduced Sulphur (TRS) - ppb

Barge Landing



Classes (ppb)

- 0 - 2
- 3 - 4
- 5 - 7
- 8 - 11
- > 11

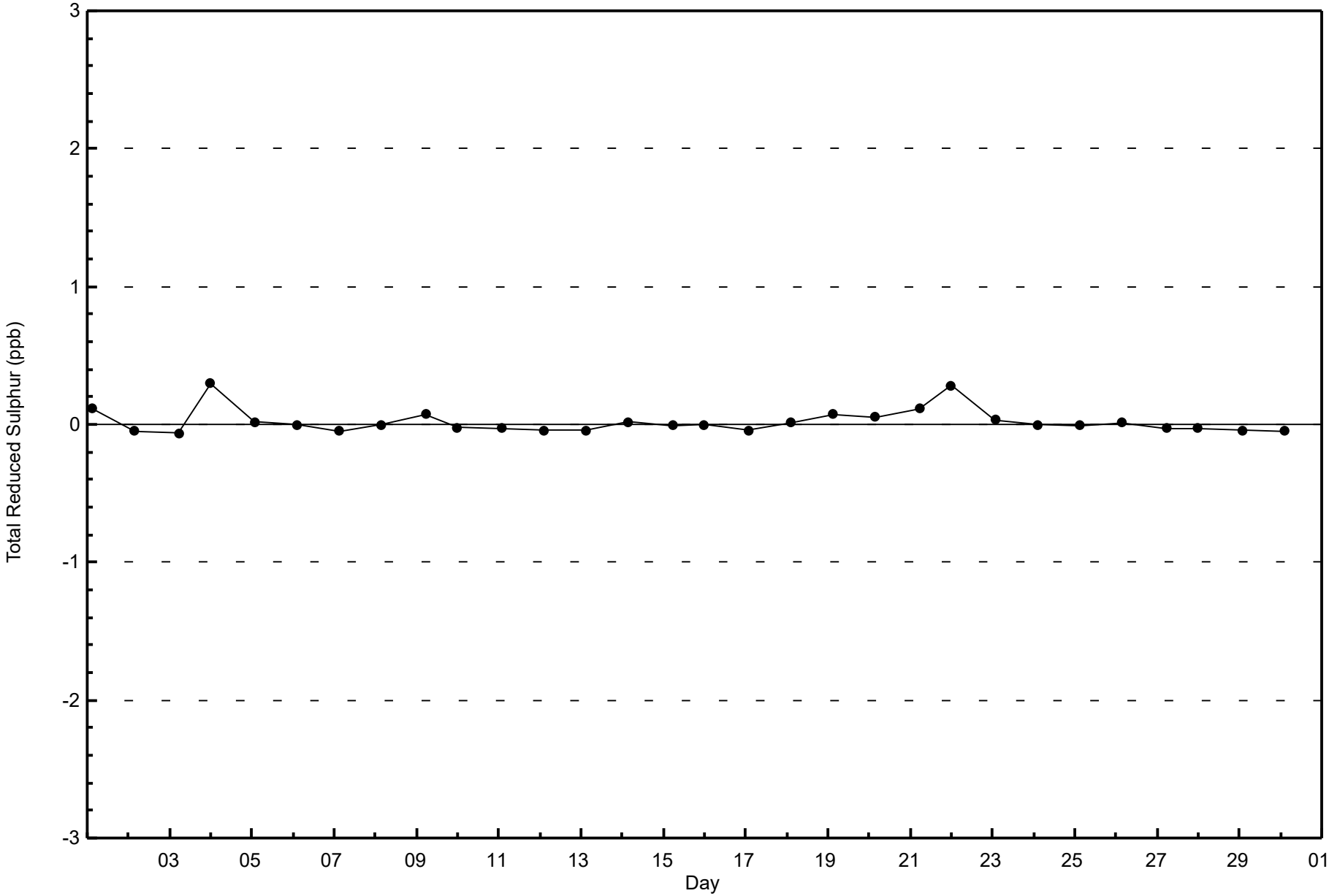
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Barge Landing - September 2026

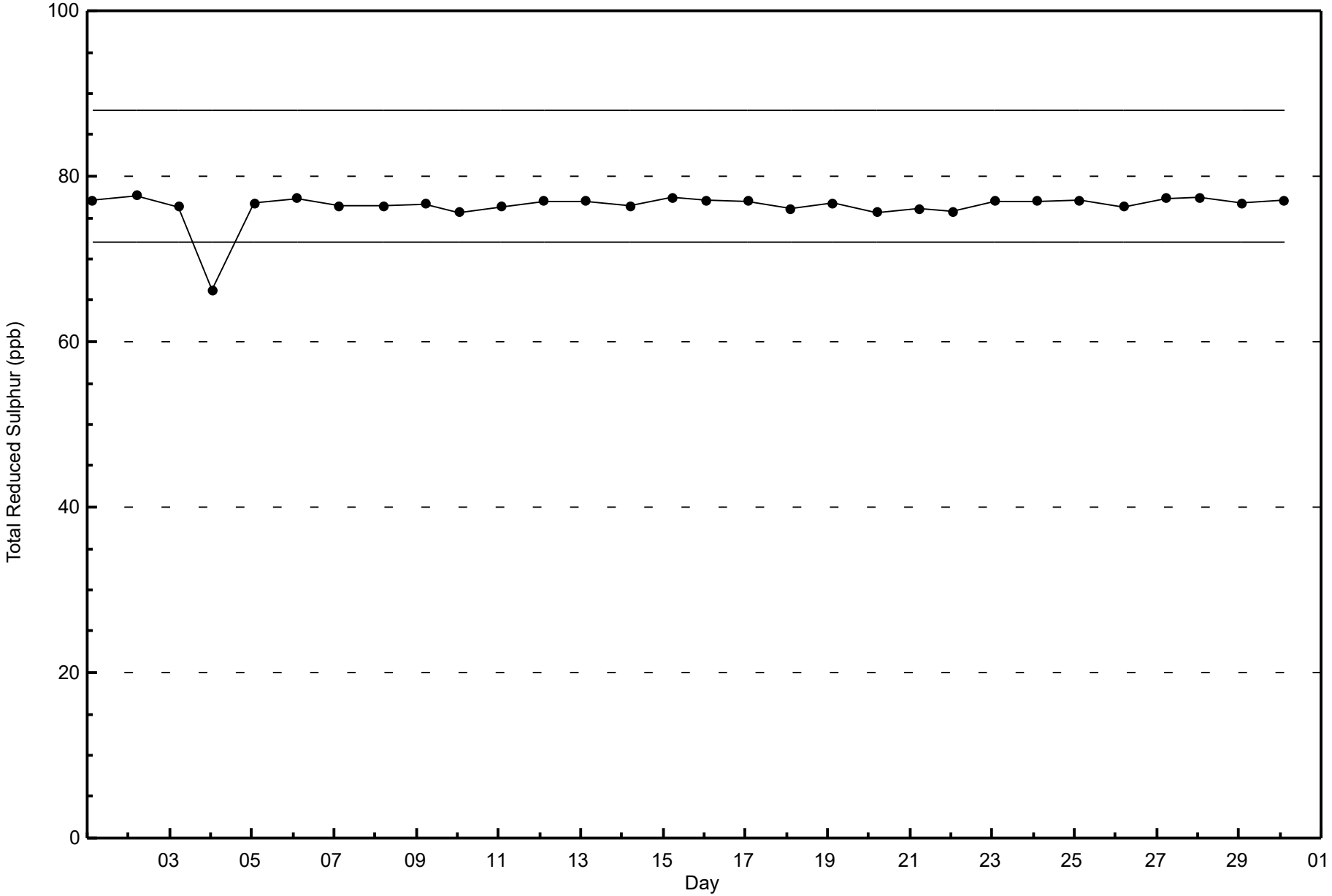


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Barge Landing - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Barge Landing - September 2026

Maximum Value: 3.2 ppm on Sep 21 23:00

Maximum Daily Average: 2.5 ppm on Sep 21

Minimum Value: 2.0 ppm on Sep 10 03:00

Minimum Daily Average: 2.0 ppm on Sep 10

Maximum Diurnal Average: 2.4 ppm at hour 7

Minimum Diurnal Average: 2.1 ppm at hour 15

Monthly Average: 2.22 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:	720
Hours of Data:	685
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-Sep	2.7	2.6	Z	2.6	2.5	2.5	2.6	2.6	2.3	2.3	C	C	C	C	C	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.7
2-Sep	2.2	2.2	2.2	Z	2.2	2.2	2.2	2.3	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	2.3
3-Sep	2.1	2.1	2.2	2.2	Z	2.3	2.5	2.5	2.6	2.5	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.5	2.4	2.3	2.4	2.5	2.8	2.3	2.8
4-Sep	3.0	2.5	2.4	2.6	2.7	Z	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	2.1	2.2	2.2	2.2	2.3	3.0
5-Sep	Z	2.1	2.1	2.2	2.4	2.4	2.3	2.3	2.5	2.4	2.2	2.2	2.2	2.3	2.3	2.2	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.3	2.5
6-Sep	2.6	Z	2.5	2.5	2.6	2.5	2.7	2.5	2.5	2.4	2.5	2.5	2.5	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.2	2.3	2.7
7-Sep	2.2	2.2	Z	2.1	2.2	2.2	2.2	2.3	2.2	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.4	2.4	2.5	2.5	2.4	2.2	2.5
8-Sep	2.5	2.4	2.5	Z	2.5	2.6	2.6	2.5	2.4	2.5	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.3	2.6
9-Sep	2.4	2.3	2.5	2.6	Z	2.6	2.6	2.5	2.5	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	2.0	2.0	2.2	2.6
10-Sep	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	2.1	2.1	2.1	2.1	2.1	2.0	2.1
11-Sep	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	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1
12-Sep	2.1	Z	2.1	2.1	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	2.1	2.3	2.4	2.3	2.3	2.1	2.4
13-Sep	2.2	2.2	Z	2.2	2.2	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	2.2	2.1	2.5	2.2	2.2	2.2	2.2	2.5
14-Sep	2.5	2.3	2.2	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	2.2	2.3	2.1	2.2	2.5
15-Sep	2.1	2.1	2.1	2.1	Z	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	2.1	2.2	2.2	2.1	2.3
16-Sep	2.2	2.2	2.2	2.3	2.2	Z	2.2	2.2	2.3	2.4	2.4	2.2	2.3	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.1	2.2	2.4
17-Sep	Z	2.2	2.1	2.2	2.3	2.4	2.5	2.4	2.3	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.7	2.5	2.5	2.4	2.4	2.3	2.3	2.7
18-Sep	2.4	Z	2.2	2.1	2.1	2.2	2.3	2.4	2.3	2.8	2.4	2.4	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.4	2.3	2.3	2.3	2.5	2.3	2.8
19-Sep	2.4	2.3	Z	2.3	2.4	2.7	2.6	2.6	2.6	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.5	2.4	2.1	2.2	2.3	2.3	2.3	2.7
20-Sep	2.3	2.3	2.3	Z	2.4	2.5	2.5	2.8	2.5	2.3	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.6	2.4	2.2	2.4	2.4	2.3	2.8
21-Sep	2.2	2.2	2.2	2.3	Z	2.3	2.3	2.5	2.6	2.8	2.6	2.5	2.2	2.2	2.2	2.4	2.5	2.7	2.3	2.5	2.6	3.1	3.2	2.9	2.5	3.2
22-Sep	2.6	2.5	2.4	2.4	2.5	Z	2.5	2.5	2.4	2.2	2.5	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	2.6
23-Sep	Z	2.1	2.2	2.2	2.4	2.7	2.7	2.7	2.6	2.7	2.7	2.6	2.3	2.2	2.2	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.2	2.1	2.3	2.7
24-Sep	2.2	Z	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.4	2.4	2.6	2.2	2.6
25-Sep	2.5	2.5	Z	2.4	2.4	2.5	2.6	2.7	2.6	2.6	2.3	2.3	2.2	2.2	2.1	2.1	2.2	2.3	2.3	2.4	2.1	2.1	2.3	2.1	2.3	2.7
26-Sep	2.1	2.2	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	2.0	2.0	2.0	2.1	2.2
27-Sep	2.0	2.0	2.0	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	2.2	2.2	2.2	2.2	2.2	2.1	2.2
28-Sep	2.2	2.1	2.1	2.1	2.2	Z	2.3	2.3	2.4	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.5	2.1	2.3	2.3	2.2	2.2	2.5
29-Sep	Z	2.3	2.3	2.3	2.5	2.4	2.4	2.4	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	2.1	2.5
30-Sep	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.2	2.1	2.2
	2.3	2.2	2.2	2.2	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	2.2	2.3	2.3	Diurnal Average	
	3.0	2.6	2.5	2.6	2.7	2.7	2.7	2.8	2.6	2.8	2.7	2.6	2.5	2.3	2.3	2.4	2.5	2.7	2.7	2.6	2.6	3.1	3.2	2.9	Diurnal Maximum	

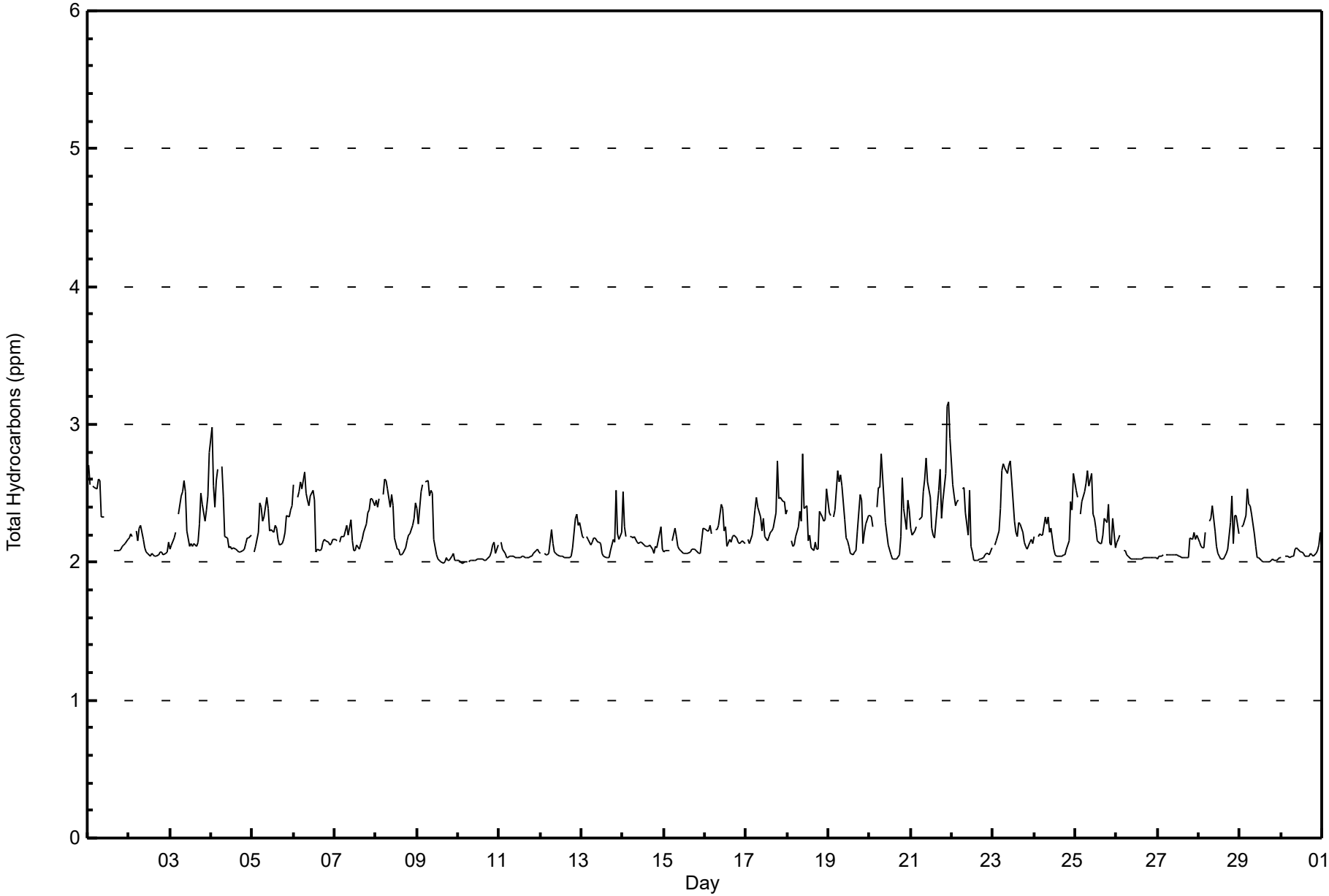
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Barge Landing - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	131	19.12	19.12
2.1 - 3.0	552	80.58	99.71
3.1 - 10.0	2	0.29	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Barge Landing - September 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	3	0	2	6	18	31	40	15	5	11	131
2.1 - 3.0	44	15	10	5	4	19	59	79	76	40	35	31	23	25	41	46	552
3.1 - 10.0	0	0	0	0	0	0	0	0	0	0	1	1	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	44	15	10	5	4	19	62	79	78	46	54	63	63	40	46	57	685

Total Number of Valid Hours: 685

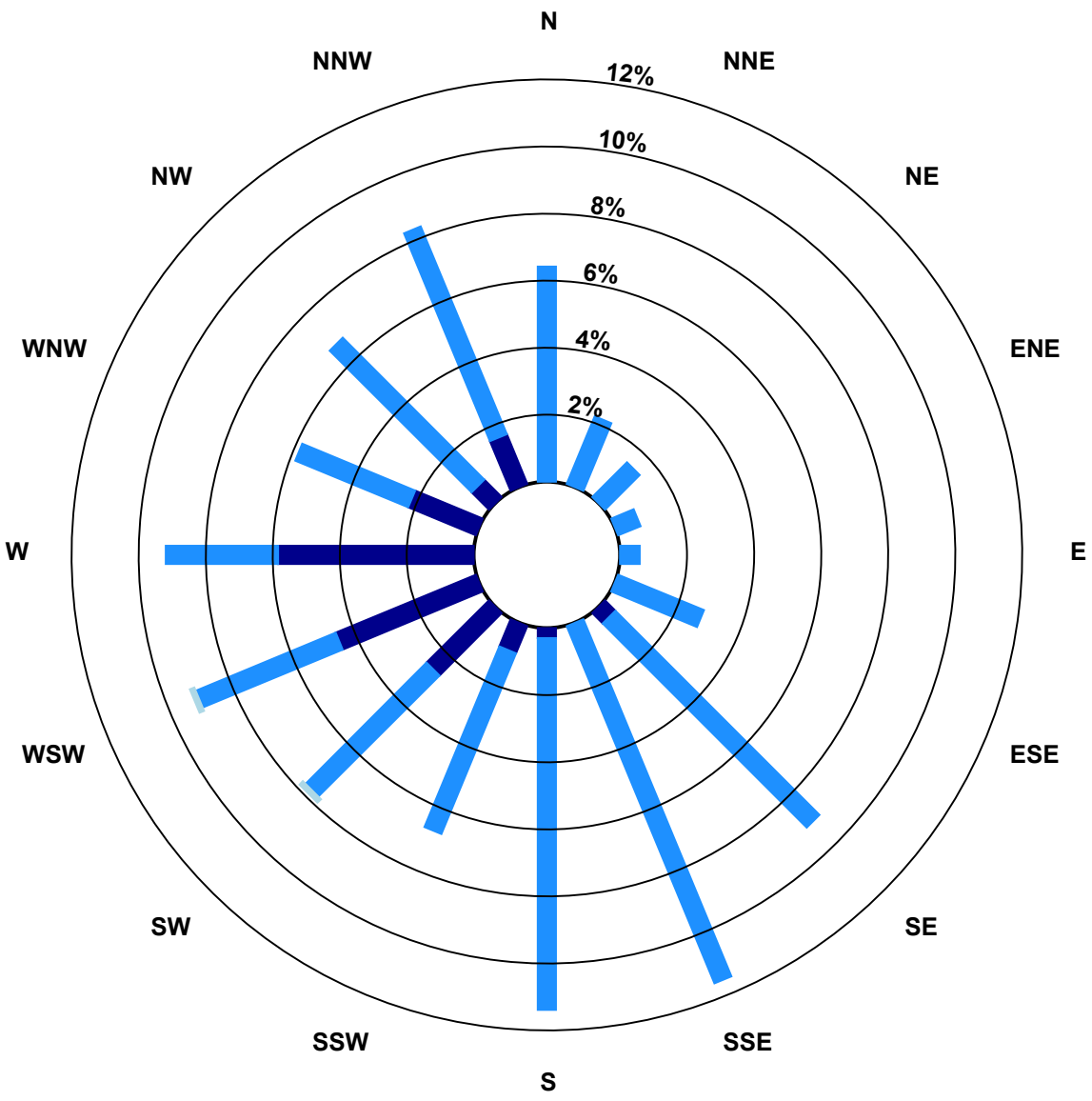
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Barge Landing



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

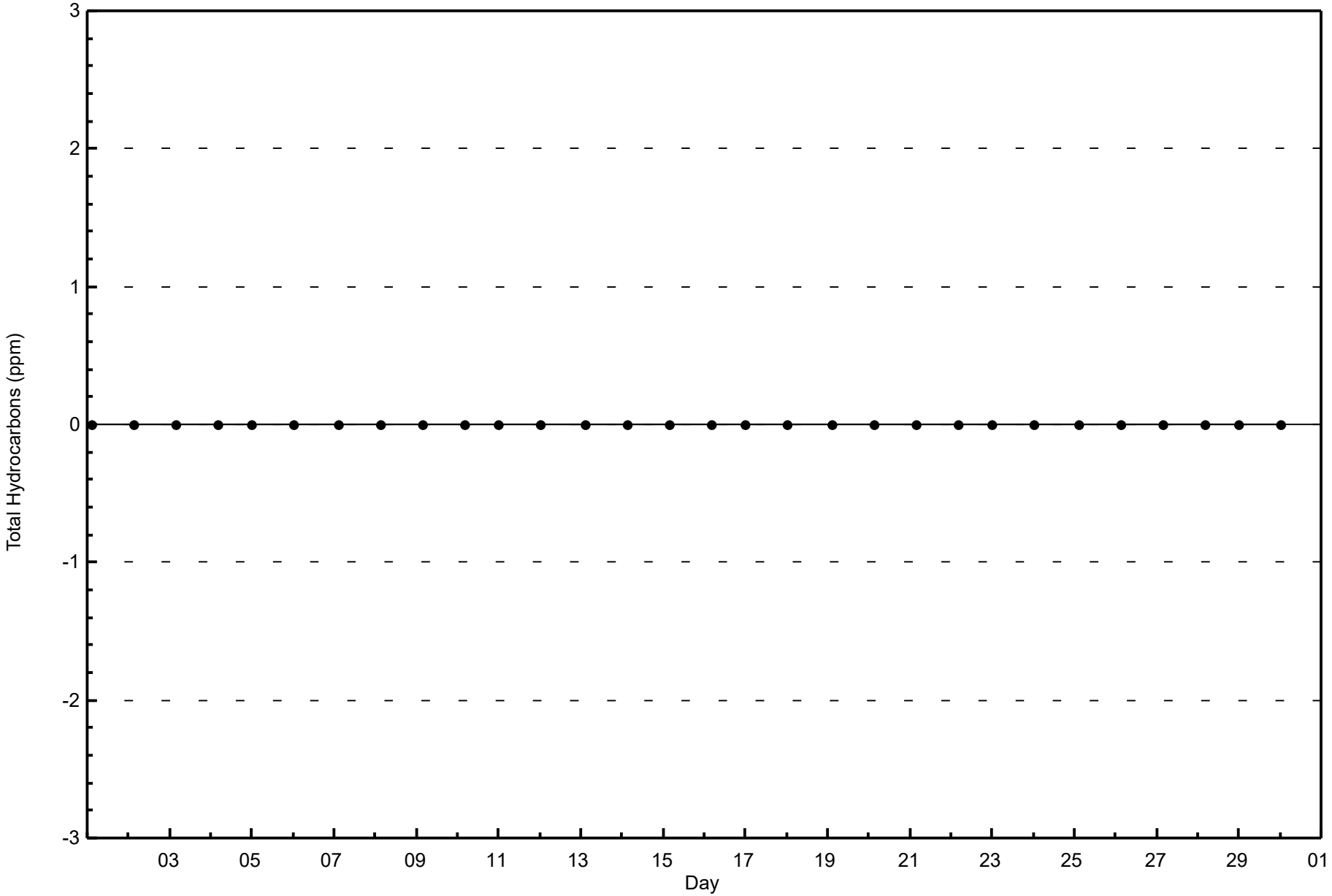
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Barge Landing - September 2026

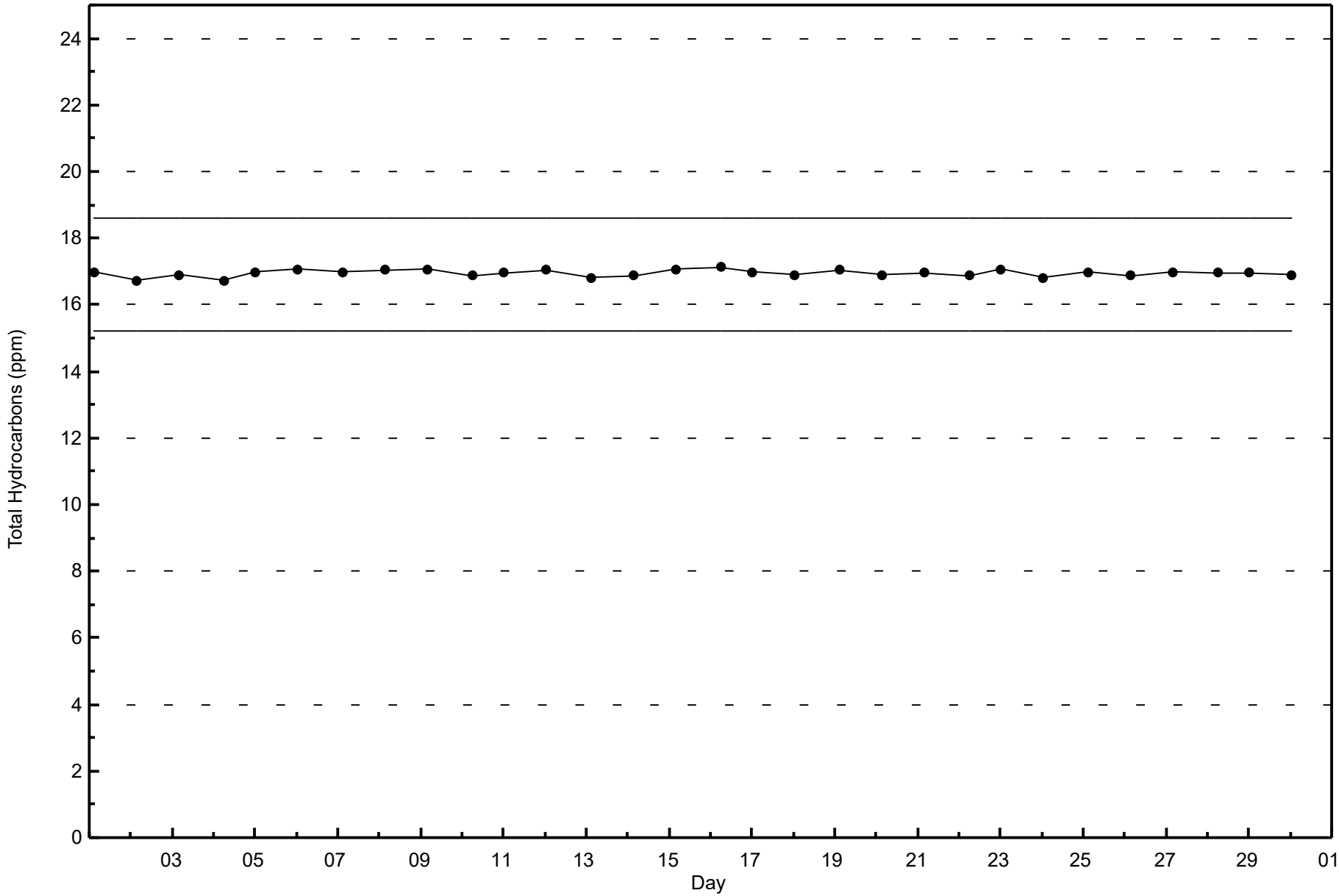


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Barge Landing - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Barge Landing - September 2026

Maximum Value: 0.420 ppm on Sep 14 01:00

Maximum Daily Average: 0.093 ppm on Sep 21

Minimum Value: 0.000 ppm on Sep 1 16:00

Minimum Daily Average: 0.000 ppm on Sep 27

Maximum Diurnal Average: 0.051 ppm at hour 1

Minimum Diurnal Average: 0.008 ppm at hour 15

Monthly Average: 0.021 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:	720
Hours of Data:	685
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-Sep	0.250	0.142	Z	0.064	0.059	0.022	0.065	0.122	0.059	0.061	C	C	C	C	C	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.047	0.250
2-Sep	0.000	0.000	0.000	Z	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
3-Sep	0.000	0.000	0.003	0.006	Z	0.010	0.039	0.011	0.001	0.013	0.010	0.001	0.000	0.000	0.000	0.000	0.000	0.006	0.204	0.099	0.010	0.017	0.011	0.129	0.025	0.204
4-Sep	0.295	0.131	0.077	0.075	0.022	Z	0.002	0.001	0.003	0.097	0.036	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.032	0.295
5-Sep	Z	0.003	0.000	0.000	0.001	0.001	0.001	0.002	0.147	0.177	0.059	0.122	0.082	0.139	0.106	0.001	0.000	0.002	0.047	0.058	0.064	0.078	0.088	0.076	0.054	0.177
6-Sep	0.048	Z	0.046	0.044	0.030	0.021	0.002	0.003	0.046	0.024	0.060	0.063	0.061	0.000	0.000	0.000	0.000	0.000	0.001	0.008	0.005	0.001	0.000	0.003	0.020	0.063
7-Sep	0.001	0.000	Z	0.000	0.000	0.005	0.001	0.000	0.000	0.031	0.004	0.000	0.000	0.024	0.020	0.019	0.022	0.013	0.032	0.066	0.068	0.086	0.095	0.066	0.024	0.095
8-Sep	0.052	0.032	0.022	Z	0.020	0.026	0.018	0.016	0.019	0.014	0.001	0.000	0.000	0.002	0.000	0.001	0.000	0.000	0.006	0.021	0.030	0.033	0.036	0.044	0.017	0.052
9-Sep	0.031	0.006	0.018	0.009	Z	0.006	0.011	0.039	0.086	0.050	0.005	0.002	0.000	0.001	0.002	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.086
10-Sep	0.000	0.000	0.000	0.000	0.000	Z	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
11-Sep	Z	0.023	0.027	0.003	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	0.000	0.000	0.000	0.002	0.027
12-Sep	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	0.000	0.003	0.000	0.000	0.000	0.014	0.008	0.000	0.000	0.001	0.014
13-Sep	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	0.001	0.047	0.036	0.377	0.071	0.000	0.000	0.023	0.377
14-Sep	0.420	0.180	0.087	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.054	0.031	0.000	0.000	0.000	0.000	0.005	0.028	0.000	0.000	0.000	0.000	0.035	0.420
15-Sep	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	0.002	0.000	0.002
16-Sep	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.003	0.080	0.103	0.058	0.077	0.002	0.008	0.001	0.020	0.044	0.009	0.000	0.000	0.000	0.000	0.000	0.018	0.103
17-Sep	Z	0.000	0.000	0.000	0.010	0.053	0.064	0.077	0.058	0.005	0.078	0.014	0.001	0.000	0.000	0.000	0.000	0.010	0.060	0.050	0.050	0.039	0.030	0.006	0.026	0.078
18-Sep	0.020	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.028	0.326	0.103	0.134	0.043	0.071	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.009	0.032	0.326
19-Sep	0.003	0.003	Z	0.004	0.012	0.038	0.018	0.018	0.047	0.018	0.008	0.010	0.000	0.000	0.000	0.000	0.002	0.009	0.038	0.066	0.008	0.021	0.036	0.047	0.018	0.066
20-Sep	0.028	0.016	0.002	Z	0.022	0.040	0.052	0.071	0.044	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.064	0.060	0.025	0.080	0.058	0.024	0.080
21-Sep	0.005	0.000	0.000	0.001	Z	0.002	0.001	0.016	0.050	0.079	0.067	0.070	0.050	0.043	0.040	0.229	0.253	0.388	0.061	0.144	0.158	0.209	0.158	0.117	0.093	0.388
22-Sep	0.065	0.036	0.020	0.002	0.001	Z	0.014	0.017	0.002	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	0.007	0.065
23-Sep	Z	0.000	0.000	0.000	0.023	0.076	0.073	0.043	0.009	0.016	0.062	0.083	0.056	0.055	0.046	0.145	0.107	0.091	0.038	0.010	0.001	0.025	0.013	0.003	0.042	0.145
24-Sep	0.003	Z	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	0.000	0.000	0.000	0.023	0.024	0.075	0.006	0.075
25-Sep	0.051	0.043	Z	0.005	0.001	0.000	0.002	0.011	0.001	0.093	0.008	0.041	0.047	0.010	0.011	0.001	0.040	0.180	0.156	0.298	0.031	0.031	0.207	0.001	0.055	0.298
26-Sep	0.005	0.058	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	0.003	0.058
27-Sep	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
28-Sep	0.001	0.000	0.000	0.000	0.000	Z	0.002	0.009	0.075	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.105	0.000	0.048	0.038	0.017	0.015	0.105
29-Sep	Z	0.026	0.028	0.020	0.066	0.063	0.073	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.073
30-Sep	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
	0.051	0.028	0.013	0.009	0.011	0.014	0.015	0.016	0.023	0.037	0.021	0.021	0.016	0.013	0.008	0.013	0.015	0.025	0.024	0.035	0.029	0.024	0.027	0.022	Diurnal Average	
	0.420	0.180	0.087	0.075	0.066	0.076	0.073	0.122	0.147	0.326	0.103	0.134	0.082	0.139	0.106	0.229	0.253	0.388	0.204	0.298	0.377	0.209	0.207	0.129	Diurnal Maximum	

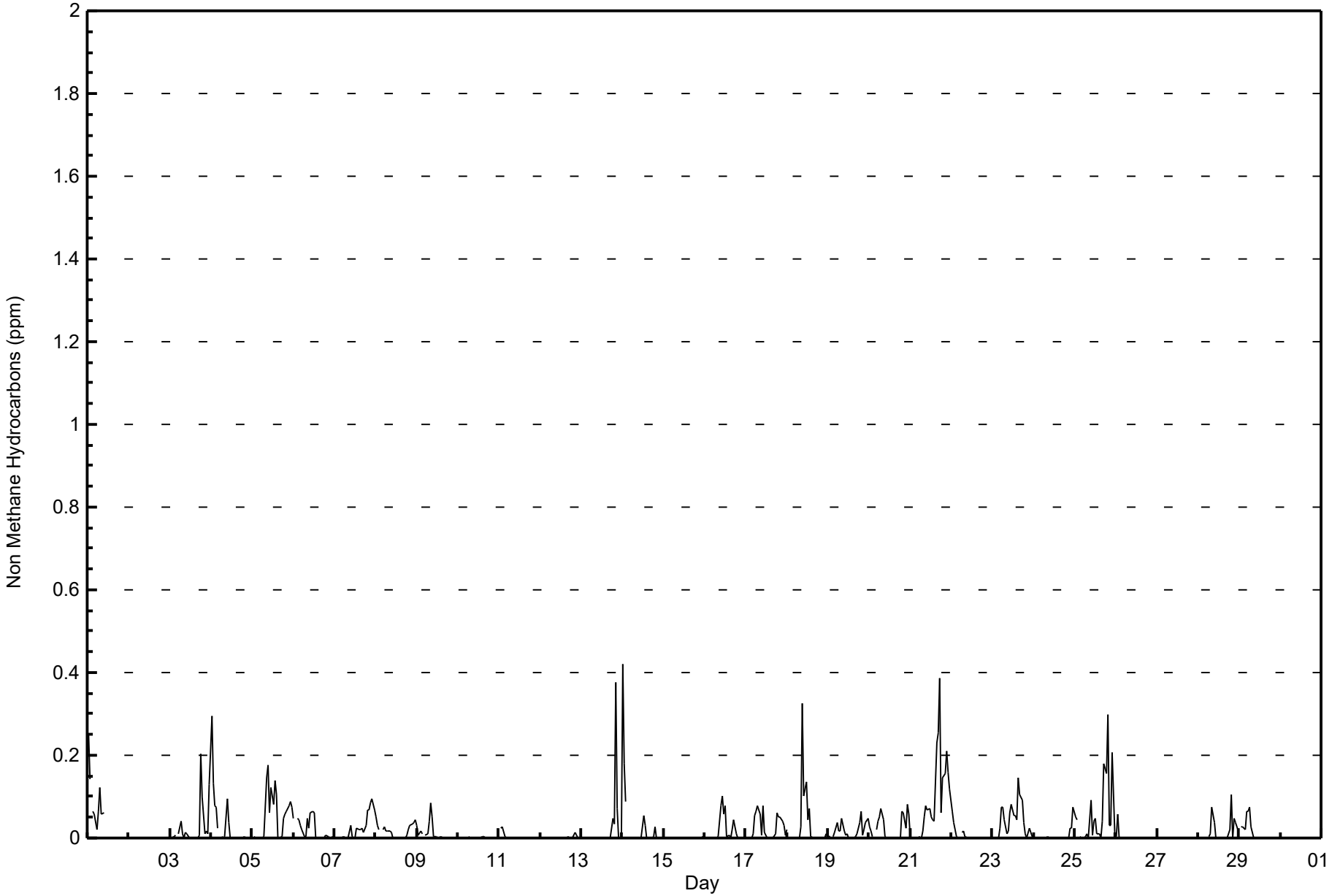
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Barge Landing - September 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Barge Landing - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	451	65.84	65.84
0.006 - 0.05	139	20.29	86.13
0.06 - 0.1	77	11.24	97.37
> 0.1	18	2.63	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Barge Landing - September 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	22	2	2	3	3	13	43	21	43	34	45	55	55	30	36	44	451
0.006 - 0.05	7	9	2	1	0	4	15	36	22	6	7	3	5	8	8	6	139
0.06 - 0.1	6	4	5	1	1	2	4	22	11	6	1	4	3	2	2	3	77
> 0.1	9	0	1	0	0	0	0	0	2	0	1	1	0	0	0	4	18
Totals	44	15	10	5	4	19	62	79	78	46	54	63	63	40	46	57	685

Total Number of Valid Hours: 685

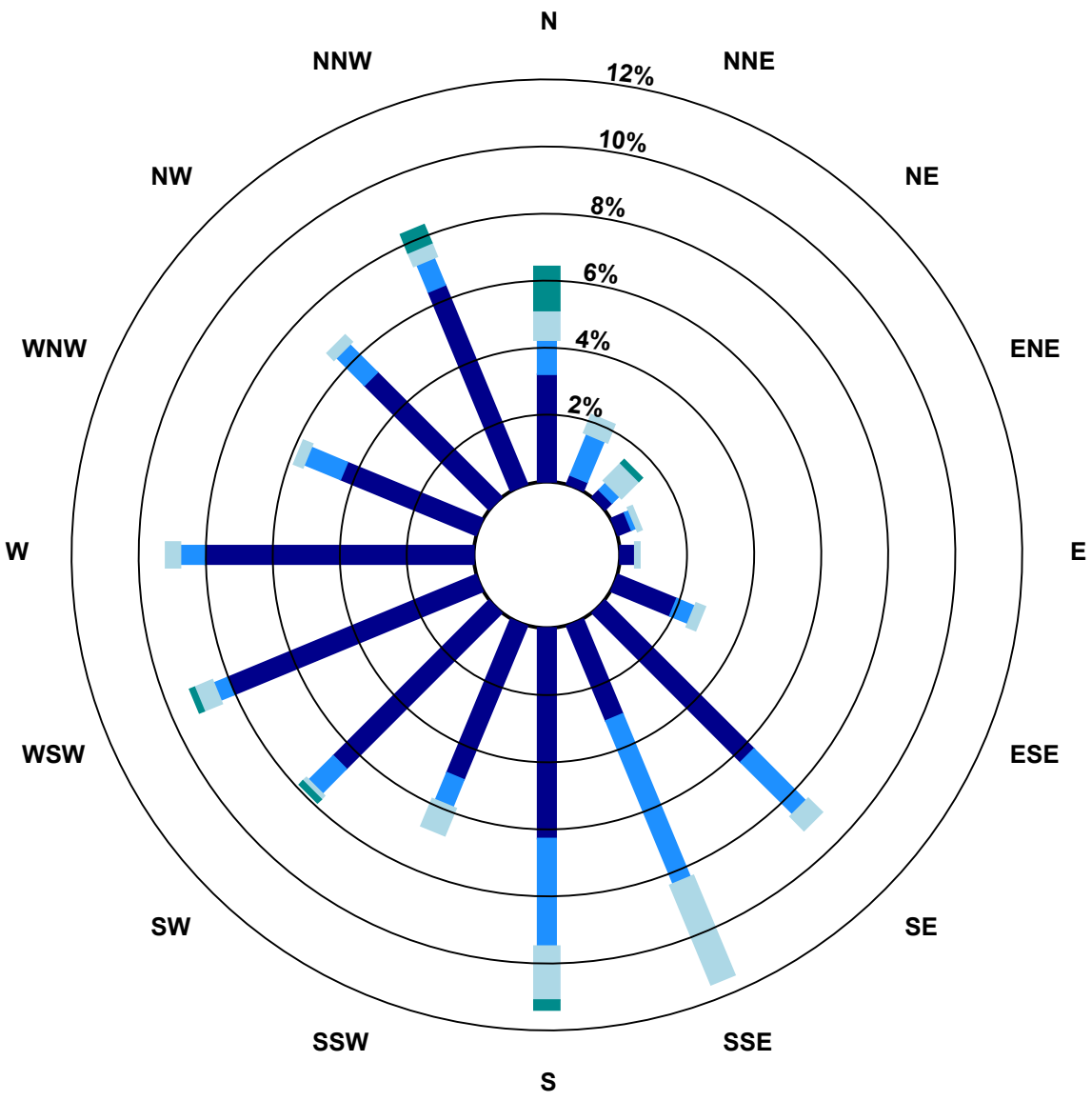
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Non Methane Hydrocarbons (NMHC) - ppm

Barge Landing



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

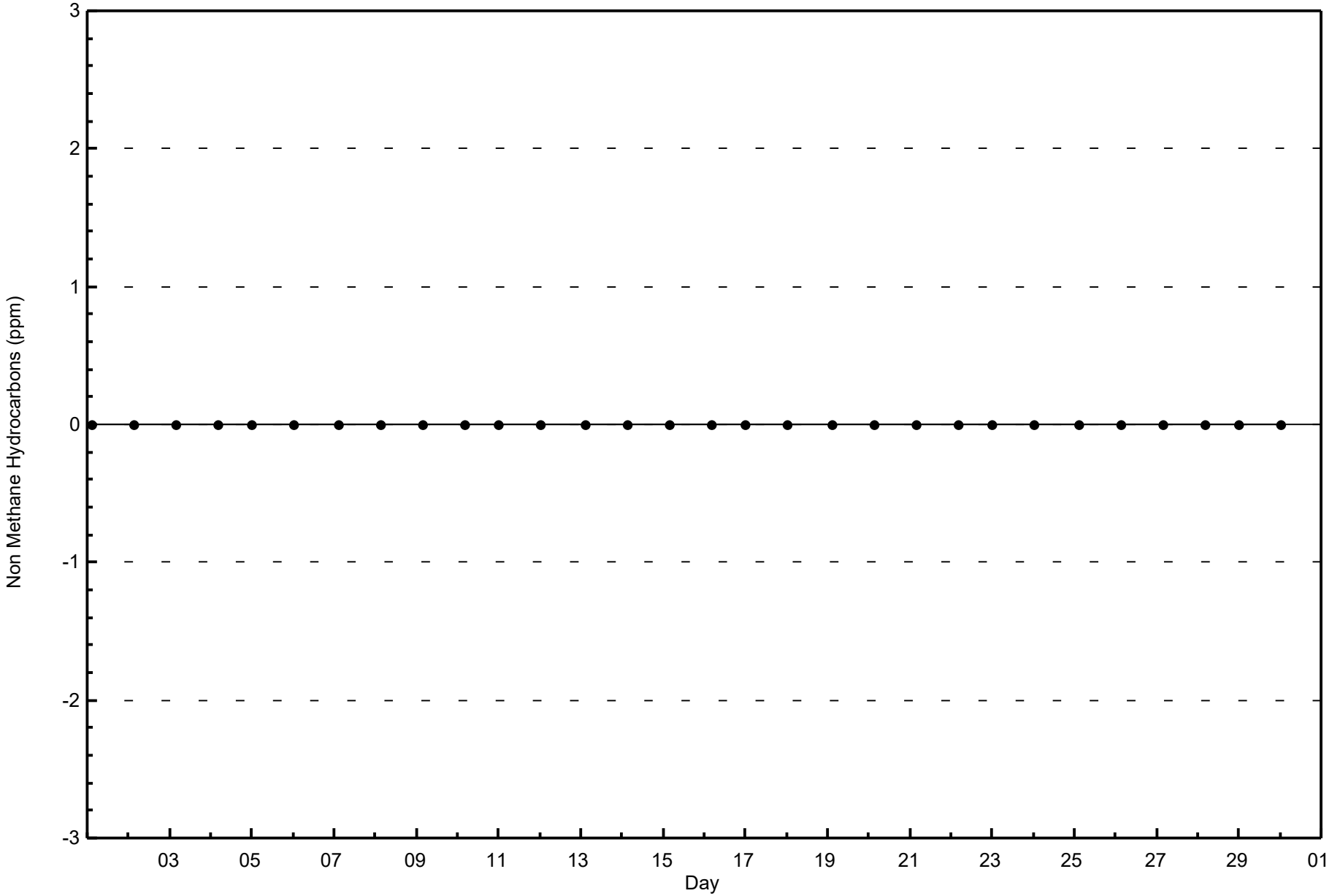
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Barge Landing - September 2026

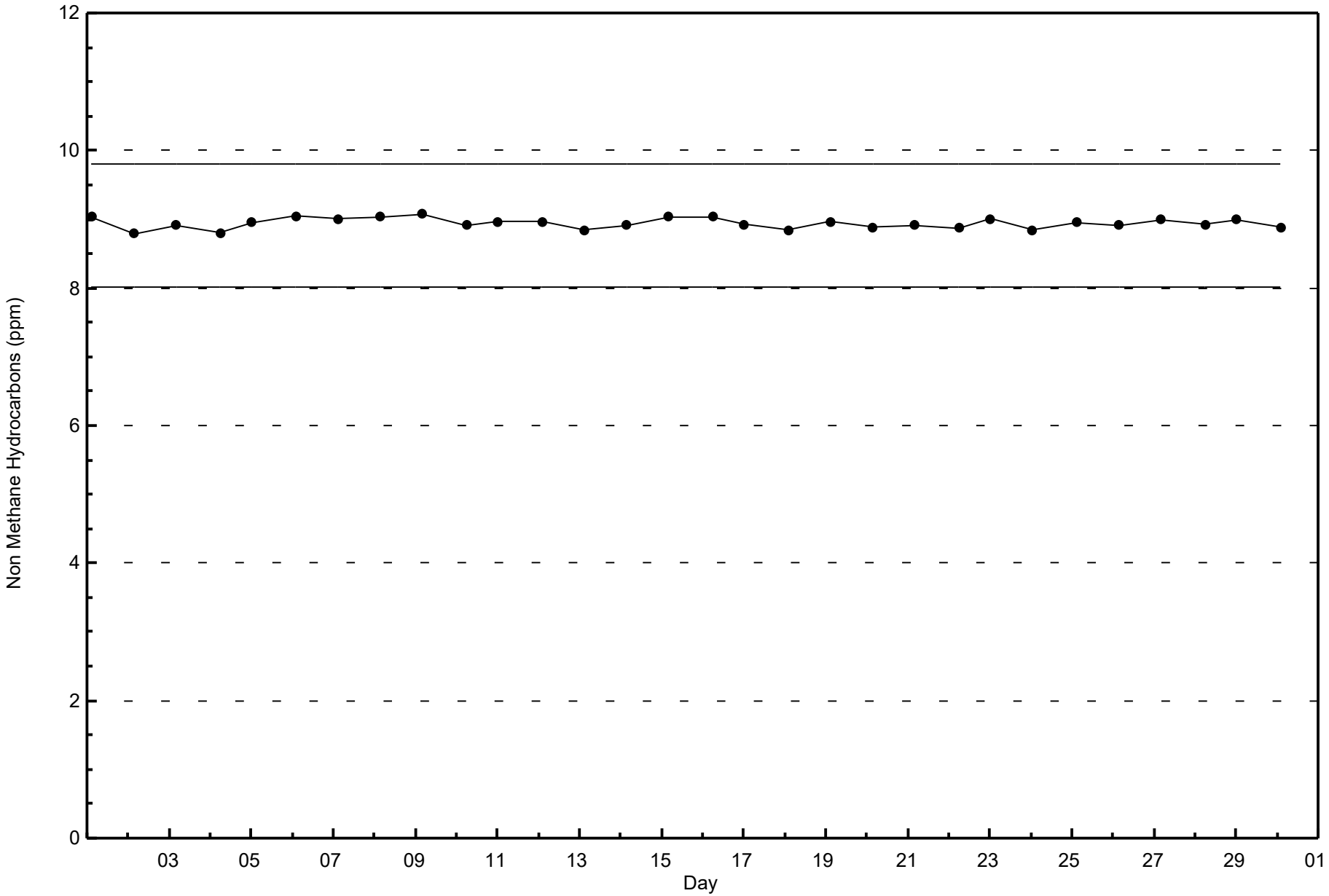


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Barge Landing - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Barge Landing - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.0 ppm on Sep 21 23:00 Maximum Daily Average: 2.4 ppm on Sep 21

Minimum Value: 2.0 ppm on Sep 10 03:00 Minimum Daily Average: 2.0 ppm on Sep 10
Maximum Diurnal Average: 2.3 ppm at hour 7 Minimum Diurnal Average: 2.1 ppm at hour 15
Monthly Average: 2.19 ppm Percentiles: P_1 = 2.0 P_{10} = 2.0 Q_1 = 2.1 Median = 2.1 Q_3 = 2.3 P_{90} = 2.5 P_{99} = 2.7

Hours in Service:	720
Hours of Data:	685
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-Sep	2.5	2.4	Z	2.5	2.5	2.5	2.5	2.5	2.3	2.3	C	C	C	C	C	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.5
2-Sep	2.2	2.2	2.2	Z	2.2	2.2	2.2	2.3	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	2.3
3-Sep	2.1	2.1	2.2	2.2	Z	2.3	2.4	2.5	2.6	2.5	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.3	2.3	2.3	2.4	2.5	2.7	2.3	2.7
4-Sep	2.7	2.4	2.3	2.5	2.7	Z	2.7	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	2.2	2.2	2.2	2.2	2.7
5-Sep	Z	2.1	2.1	2.2	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.2	2.3	2.2	2.3	2.3	2.2	2.4
6-Sep	2.5	Z	2.4	2.5	2.6	2.5	2.7	2.5	2.4	2.4	2.4	2.5	2.4	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.2	2.3	2.7
7-Sep	2.2	2.2	Z	2.1	2.2	2.2	2.2	2.3	2.2	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.3	2.2	2.4
8-Sep	2.4	2.4	2.4	Z	2.5	2.6	2.6	2.5	2.4	2.5	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.4	2.3	2.6
9-Sep	2.4	2.3	2.5	2.5	Z	2.6	2.6	2.4	2.4	2.4	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	2.0	2.2	2.6
10-Sep	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	2.1	2.1	2.1	2.1	2.1	2.0	2.1
11-Sep	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	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1
12-Sep	2.1	Z	2.1	2.1	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	2.1	2.3	2.3	2.3	2.3	2.1	2.3
13-Sep	2.2	2.2	Z	2.2	2.2	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	2.2	2.2	2.1	2.2
14-Sep	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	2.2	2.3	2.1	2.1	2.3
15-Sep	2.1	2.1	2.1	2.1	Z	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	2.1	2.2	2.2	2.1	2.3
16-Sep	2.2	2.2	2.2	2.3	2.2	Z	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.1	2.2	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.1	2.2	2.3
17-Sep	Z	2.2	2.1	2.2	2.3	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	2.7	2.4	2.4	2.4	2.4	2.3	2.3	2.7
18-Sep	2.4	Z	2.2	2.1	2.1	2.2	2.3	2.4	2.3	2.5	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.4	2.3	2.3	2.3	2.5	2.2	2.5
19-Sep	2.4	2.3	Z	2.3	2.4	2.6	2.6	2.6	2.5	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.5	2.4	2.1	2.2	2.2	2.3	2.3	2.6
20-Sep	2.3	2.3	2.3	Z	2.4	2.5	2.5	2.7	2.4	2.3	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.6	2.3	2.2	2.4	2.3	2.3	2.7
21-Sep	2.2	2.2	2.2	2.3	Z	2.3	2.3	2.5	2.6	2.7	2.5	2.4	2.2	2.2	2.1	2.2	2.3	2.3	2.3	2.3	2.5	2.9	3.0	2.8	2.4	3.0
22-Sep	2.5	2.4	2.4	2.4	2.4	Z	2.5	2.5	2.4	2.2	2.5	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	2.5
23-Sep	Z	2.1	2.2	2.2	2.4	2.6	2.6	2.6	2.6	2.7	2.7	2.5	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.3	2.7
24-Sep	2.2	Z	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.4	2.4	2.6	2.2	2.6
25-Sep	2.5	2.4	Z	2.3	2.4	2.5	2.6	2.7	2.5	2.6	2.3	2.3	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.7
26-Sep	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	2.0	2.0	2.0	2.1	2.2
27-Sep	2.0	2.0	2.0	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	2.2	2.2	2.2	2.2	2.2	2.1	2.2
28-Sep	2.2	2.1	2.1	2.1	2.2	Z	2.3	2.3	2.3	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.4	2.1	2.3	2.3	2.2	2.2	2.4
29-Sep	Z	2.2	2.2	2.3	2.5	2.4	2.3	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.5
30-Sep	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.2	2.1	2.2
	2.3	2.2	2.2	2.2	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	2.1	2.1	2.2	2.2	2.2	2.2	2.2	Diurnal Average	
	2.7	2.4	2.5	2.5	2.7	2.6	2.7	2.7	2.6	2.7	2.7	2.5	2.4	2.2	2.2	2.2	2.3	2.4	2.7	2.6	2.5	2.9	3.0	2.8	Diurnal Maximum	

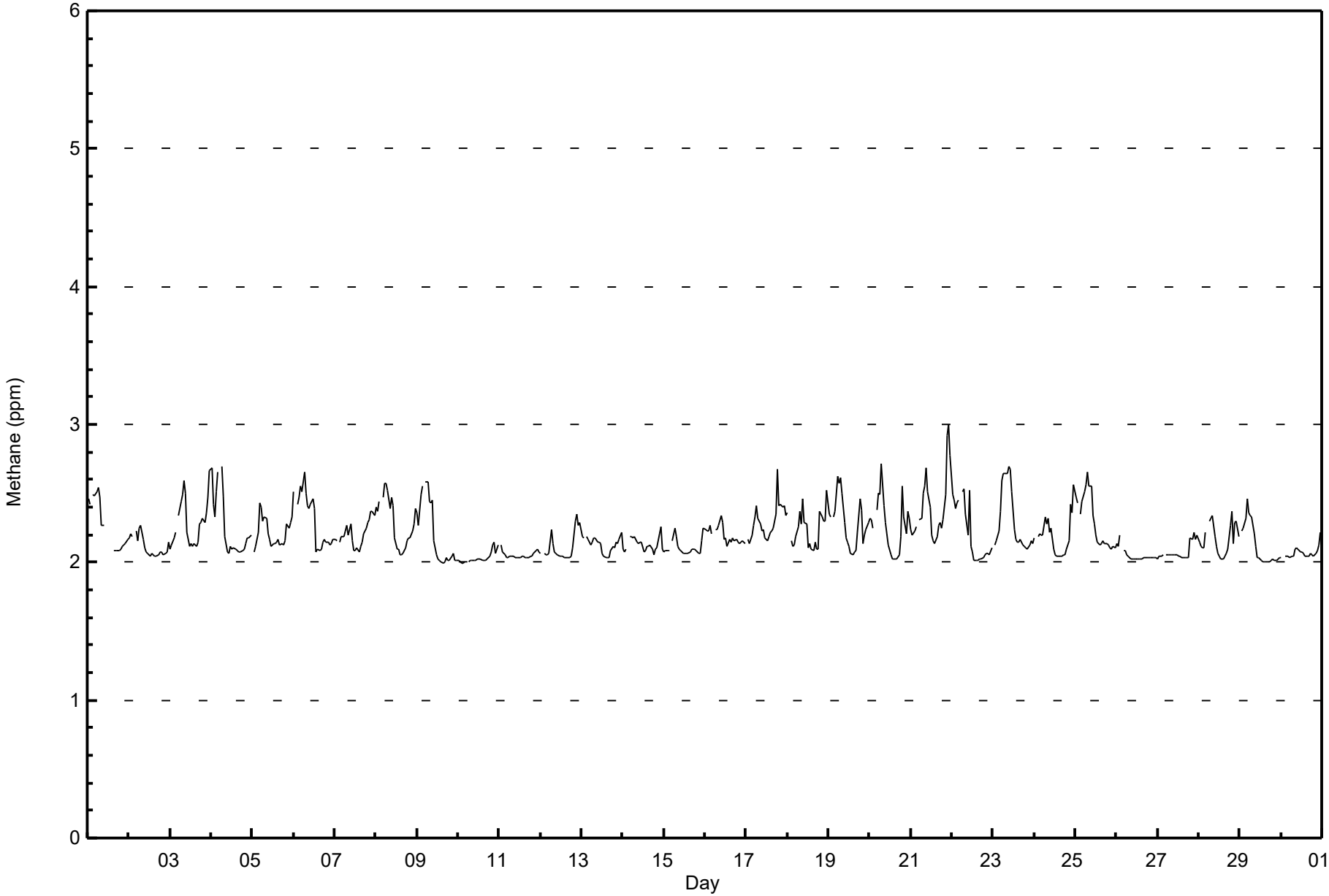
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Barge Landing - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	131	19.12	19.12
2.1 - 3.0	554	80.88	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Barge Landing - September 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	3	0	2	6	18	31	40	15	5	11	131
2.1 - 3.0	44	15	10	5	4	19	59	79	76	40	36	32	23	25	41	46	554
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	44	15	10	5	4	19	62	79	78	46	54	63	63	40	46	57	685

Total Number of Valid Hours: 685

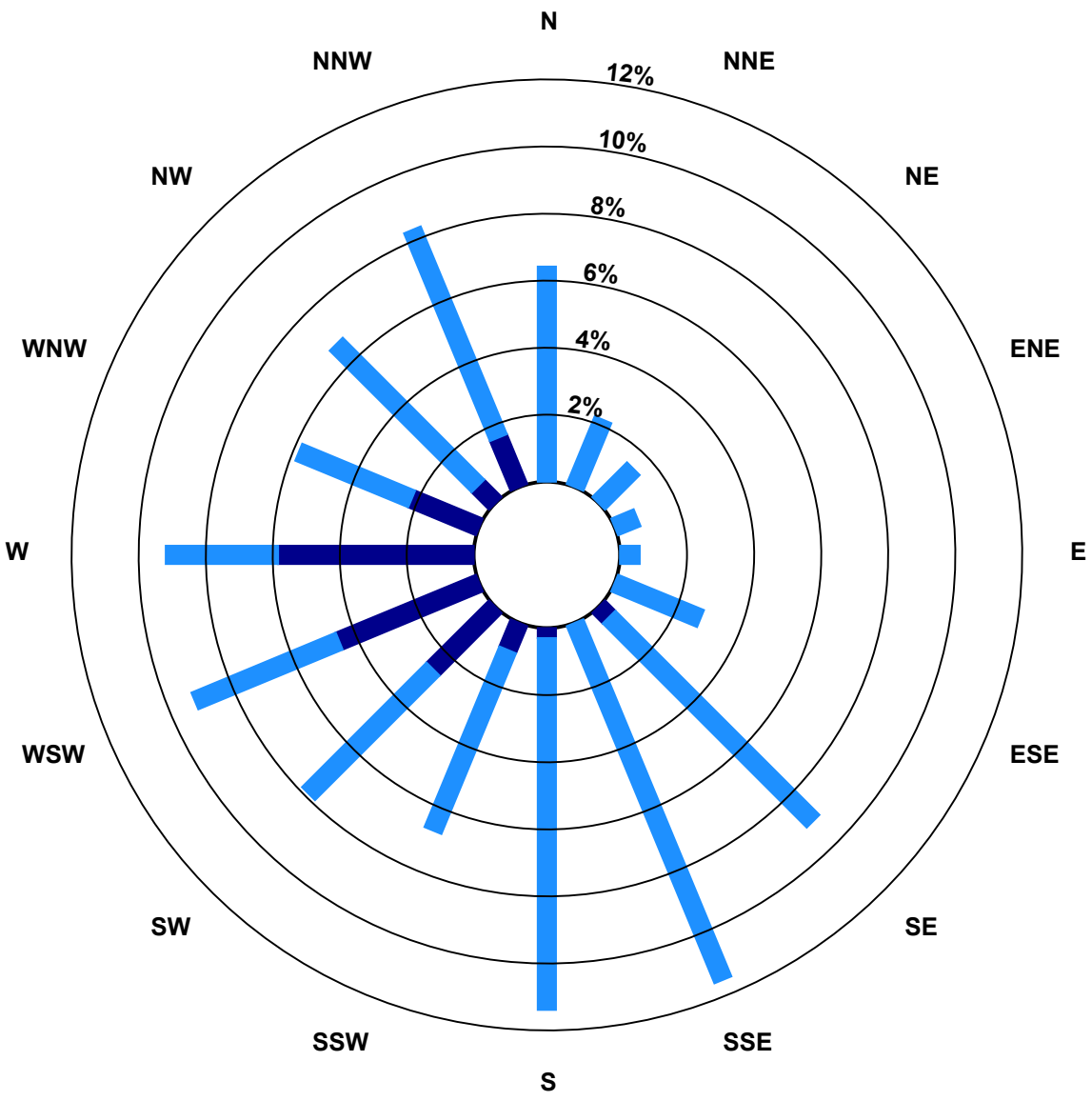
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Methane (CH_4) - ppm

Barge Landing



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

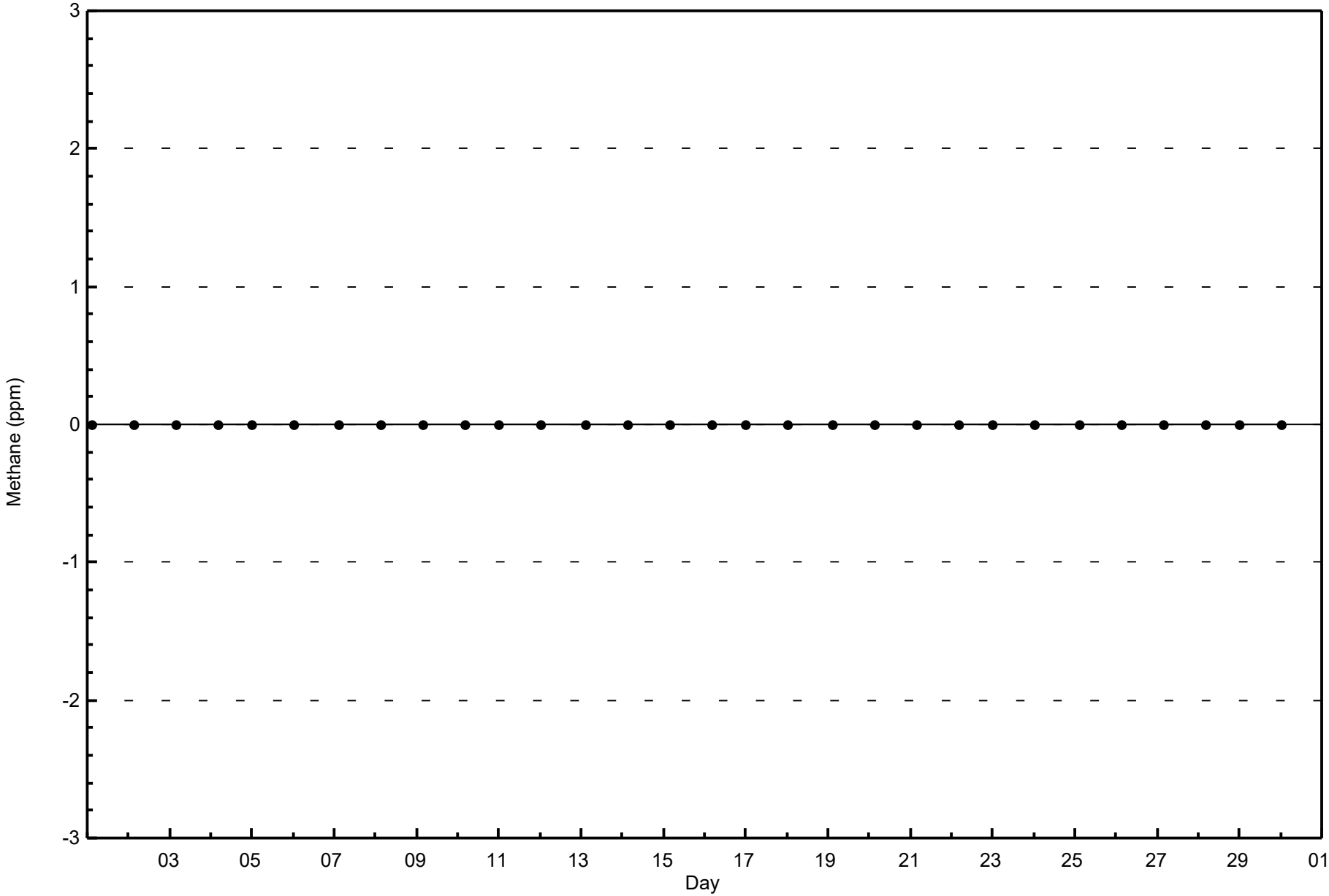
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Barge Landing - September 2026

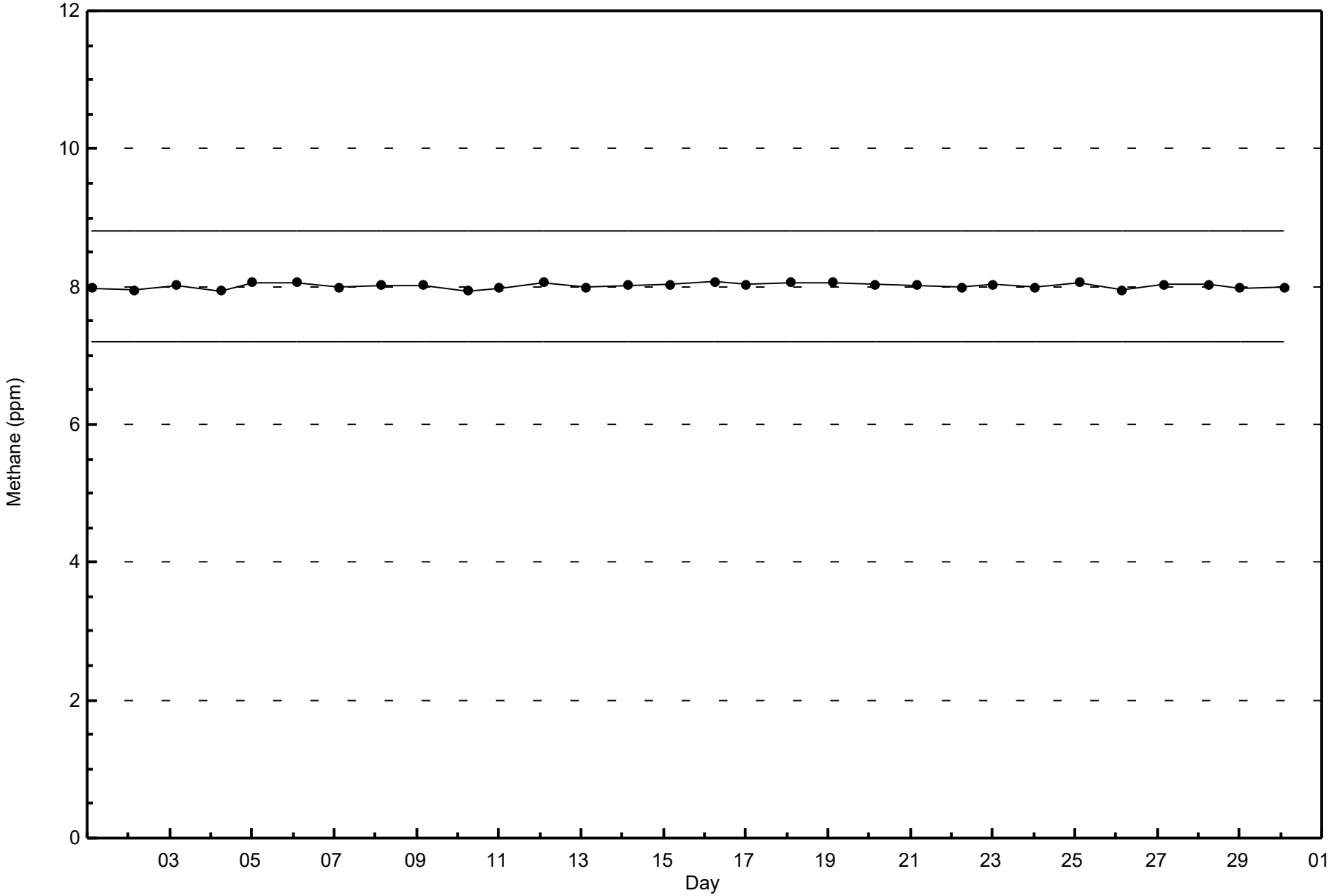


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Barge Landing - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Barge Landing - September 2026

Maximum Value: 118.0 ppb on Sep 8 07:00

Maximum Daily Average: 15.0 ppb on Sep 8

Minimum Value: 0.0 ppb on Sep 1 15:00

Minimum Daily Average: 0.0 ppb on Sep 10

Maximum Diurnal Average: 21.6 ppb at hour 7

Minimum Diurnal Average: 0.7 ppb at hour 16

Monthly Average: 4.62 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.8 Q_3 = 4.3 P_{90} = 12.8 P_{99} = 51.9

Hours in Service:	720
Hours of Data:	684
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-Sep	Z	10.3	11.0	16.0	20.8	9.4	18.3	19.5	5.6	5.0	4.3	3.1	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	5.4	20.8
2-Sep	0.0	Z	0.1	0.1	11.4	0.9	13.4	1.0	1.2	0.8	0.6	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	1.3	13.4
3-Sep	0.2	0.2	Z	0.7	2.9	3.3	7.5	20.8	27.4	23.5	4.5	0.8	1.9	0.6	0.6	0.5	0.9	5.3	2.1	2.5	3.2	1.5	4.1	9.7	5.4	27.4
4-Sep	9.5	2.4	2.1	Z	17.2	31.0	35.8	16.6	4.5	3.0	2.7	4.4	4.3	4.2	2.4	1.4	1.0	0.7	0.4	0.3	0.7	0.8	0.8	2.4	6.5	35.8
5-Sep	1.9	0.1	0.7	4.2	Z	22.8	8.3	15.5	15.0	8.7	3.0	2.8	2.8	2.7	2.5	2.4	0.8	1.0	2.2	0.2	5.6	3.9	0.6	0.4	4.7	22.8
6-Sep	7.5	9.7	5.1	13.5	22.7	Z	10.5	31.9	17.1	7.9	8.0	10.0	10.4	1.1	1.5	0.7	0.6	0.7	0.7	0.6	0.3	0.2	0.1	0.2	7.0	31.9
7-Sep	Z	0.7	0.3	0.8	5.7	9.7	5.6	9.5	4.8	8.8	5.5	1.4	1.3	2.0	1.1	0.5	1.3	1.0	1.9	3.6	2.5	2.3	1.8	2.5	3.2	9.7
8-Sep	6.7	Z	3.3	6.4	16.1	98.1	118.0	28.9	5.2	11.8	16.4	5.1	1.0	0.7	0.1	0.1	0.1	0.6	1.1	6.2	5.5	10.1	0.4	4.0	15.0	118.0
9-Sep	7.3	3.3	Z	12.3	17.6	29.1	23.6	13.3	7.2	5.0	1.5	0.3	0.4	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	5.3	29.1
10-Sep	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	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1
11-Sep	0.0	0.2	0.2	0.3	Z	0.4	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.4	0.5	0.5	0.2	0.3	0.2	0.5	0.4	0.6	0.6	0.4	0.3	0.6
12-Sep	0.5	0.4	0.4	0.5	0.4	Z	0.6	0.4	0.5	0.6	0.3	0.4	0.5	0.4	0.3	0.1	0.2	0.1	0.1	1.6	6.3	0.6	0.2	0.2	0.7	6.3
13-Sep	Z	0.6	0.5	0.1	0.0	0.0	0.4	1.4	2.7	2.3	1.7	1.6	0.3	0.1	0.0	0.0	0.0	0.3	0.5	0.0	1.1	2.2	3.5	5.1	1.1	5.1
14-Sep	0.0	Z	0.2	0.2	0.3	0.4	0.9	4.0	3.0	3.4	2.7	3.7	1.6	1.5	1.7	2.3	2.0	0.6	0.0	0.0	0.0	0.0	0.2	0.0	1.3	4.0
15-Sep	0.0	0.0	Z	0.0	0.0	0.0	10.7	14.8	6.3	0.4	0.1	0.0	0.0	0.0	0.0	0.4	2.1	0.9	0.7	0.2	0.1	0.2	0.7	1.3	1.7	14.8
16-Sep	2.1	1.9	2.1	Z	0.6	2.4	5.9	4.7	13.6	12.8	11.2	3.4	3.4	1.7	1.6	1.1	1.4	2.8	2.2	0.9	0.8	1.2	0.3	0.0	3.4	13.6
17-Sep	0.3	0.2	0.4	0.4	Z	2.5	18.0	5.4	4.9	7.6	6.3	2.7	1.6	1.7	2.8	3.2	3.1	5.7	4.7	8.2	4.8	11.5	6.6	2.7	4.6	18.0
18-Sep	4.4	0.9	0.0	0.3	6.4	Z	1.7	10.2	11.4	28.8	16.1	14.2	2.9	2.5	1.1	0.7	1.9	0.8	16.1	8.5	14.8	6.3	6.6	12.4	7.4	28.8
19-Sep	Z	8.9	4.2	5.4	14.6	51.9	58.5	27.1	21.9	8.5	3.6	2.0	1.1	1.0	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	58.5
20-Sep	0.0	Z	0.2	0.7	8.3	8.1	8.2	12.8	4.8	3.0	3.4	1.3	0.5	0.0	0.0	0.0	0.0	0.0	1.7	2.1	1.1	0.1	0.4	0.1	2.5	12.8
21-Sep	0.2	0.1	Z	3.6	14.0	22.2	44.6	37.0	6.6	5.0	2.7	3.4	5.6	4.0	2.7	2.0	4.6	3.6	0.9	8.0	15.6	19.0	21.1	10.9	10.3	44.6
22-Sep	5.8	3.3	3.8	Z	17.4	51.9	72.5	22.8	8.7	1.2	22.3	3.8	0.9	0.0	0.2	0.0	0.0	0.0	0.0	4.7	9.8	0.1	0.0	0.1	10.0	72.5
23-Sep	3.5	0.4	2.3	11.5	Z	65.8	78.5	39.5	35.3	32.5	18.2	14.5	5.4	3.9	4.5	2.8	1.6	1.0	0.8	0.7	0.0	1.6	1.1	0.5	14.2	78.5
24-Sep	0.5	0.7	1.7	3.3	1.6	Z	37.9	5.6	4.1	4.7	5.5	0.9	0.3	0.2	0.2	0.2	0.3	0.0	0.2	4.2	5.8	1.2	1.8	7.8	3.9	37.9
25-Sep	Z	10.2	2.2	0.7	13.2	25.6	28.1	39.3	27.2	10.1	6.0	3.0	2.5	1.2	0.7	0.8	1.7	0.5	0.5	0.4	0.3	0.2	0.2	0.3	7.6	39.3
26-Sep	0.4	Z	0.4	0.3	0.2	0.0	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	0.0	0.0	0.0	0.1	0.4
27-Sep	0.0	0.1	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	0.1	0.0	0.0	0.2	0.2	1.9	1.5	2.4	0.3	2.4
28-Sep	2.6	0.5	0.0	Z	12.1	19.2	35.7	9.5	3.0	3.4	C	C	C	C	C	C	0.2	0.0	1.2	0.0	0.0	0.0	0.5	0.0	--	35.7
29-Sep	0.5	0.1	1.3	1.9	Z	5.1	5.4	10.1	1.3	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.0	0.0	0.0	0.0	1.2	10.1
30-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.0	0.2	0.5	0.7	0.7	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.5	0.2	0.7
	2.2	2.2	1.7	3.3	8.1	18.4	21.6	13.4	8.1	6.7	5.1	2.9	1.7	1.1	0.9	0.7	0.8	0.9	1.3	1.8	2.6	2.2	1.8	2.1	Diurnal Average	
	9.5	10.3	11.0	16.0	22.7	98.1	118.0	39.5	35.3	32.5	22.3	14.5	10.4	4.2	4.5	3.2	4.6	5.7	16.1	8.5	15.6	19.0	21.1	12.4	Diurnal Maximum	

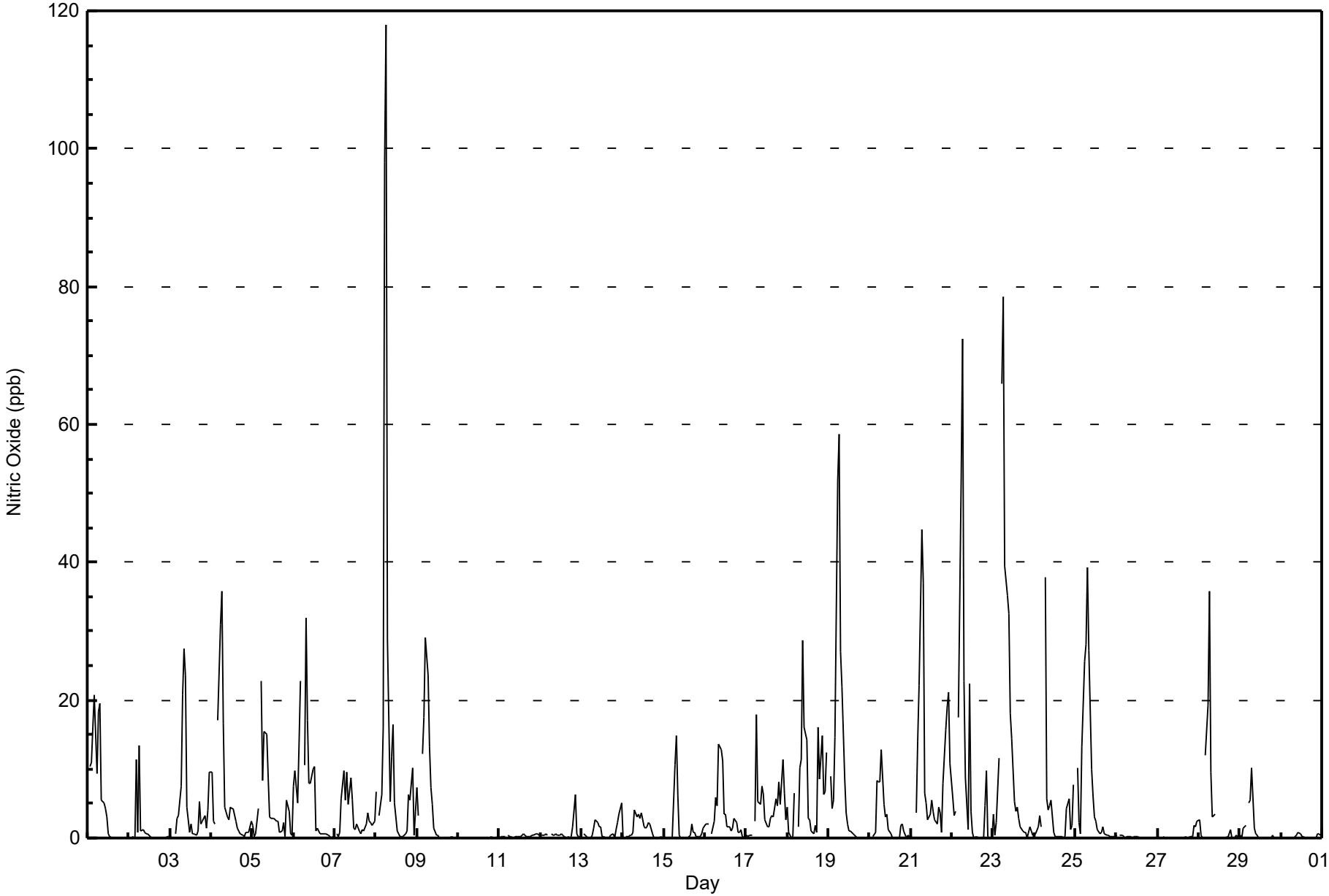
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Barge Landing - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	646	94.44	94.44
21 - 40	29	4.24	98.68
11 - 80	7	1.02	99.71
81 - 159	2	0.29	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

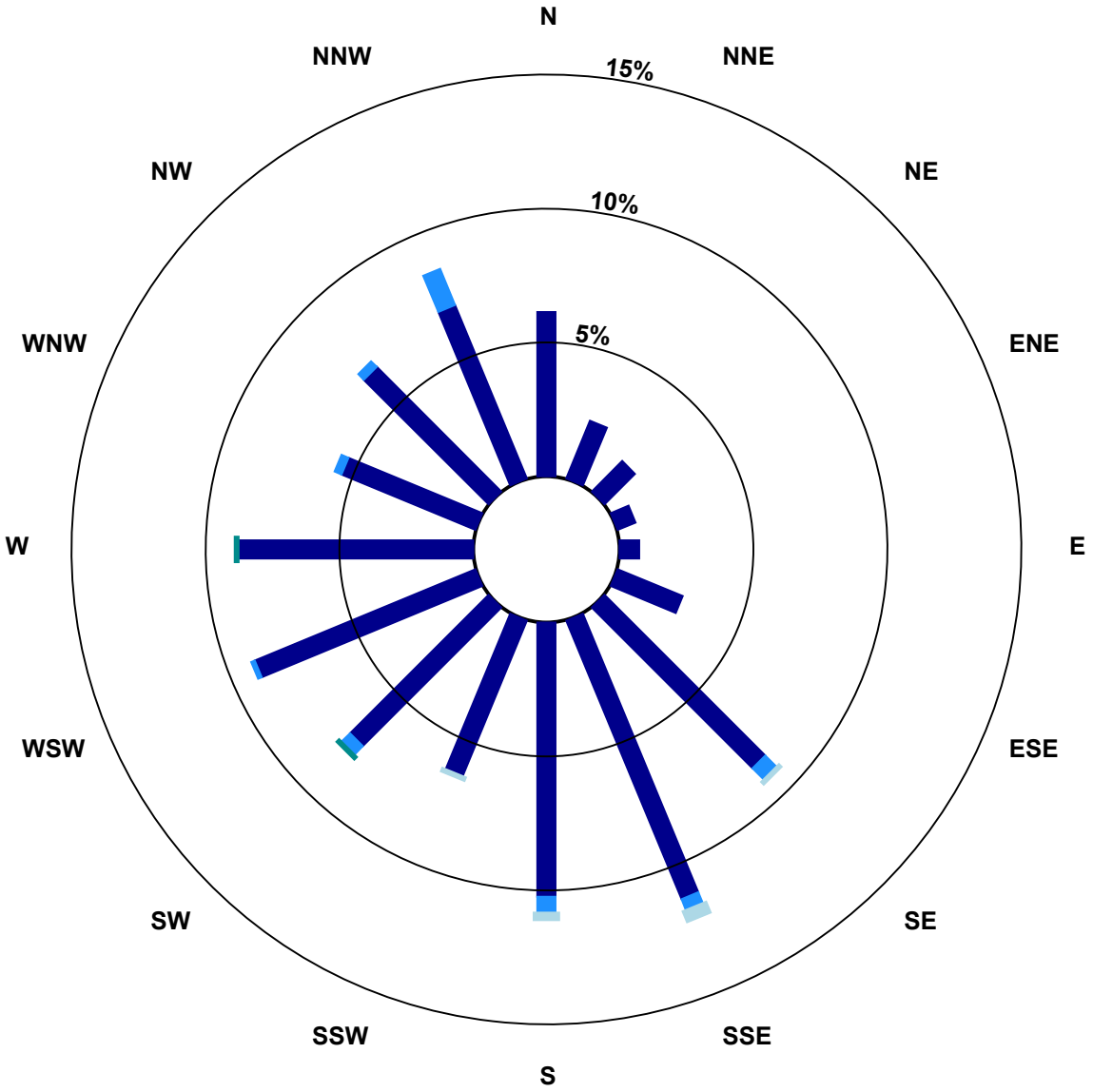
Nitric Oxide (NO) - ppb

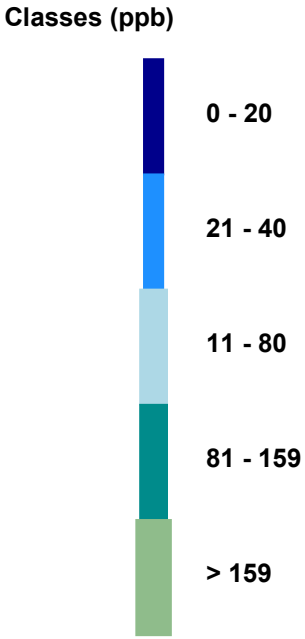
Barge Landing - September 2026

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	16	11	5	5	18	58	77	70	43	50	61	60	37	45	48	646
21 - 40	0	0	0	0	0	0	4	3	4	0	3	1	0	2	2	10	29
11 - 80	0	0	0	0	0	0	1	3	2	1	0	0	0	0	0	0	7
81 - 159	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	42	16	11	5	5	18	63	83	76	44	54	62	61	39	47	58	684

Total Number of Valid Hours: 684

Total Number of Hours: 720





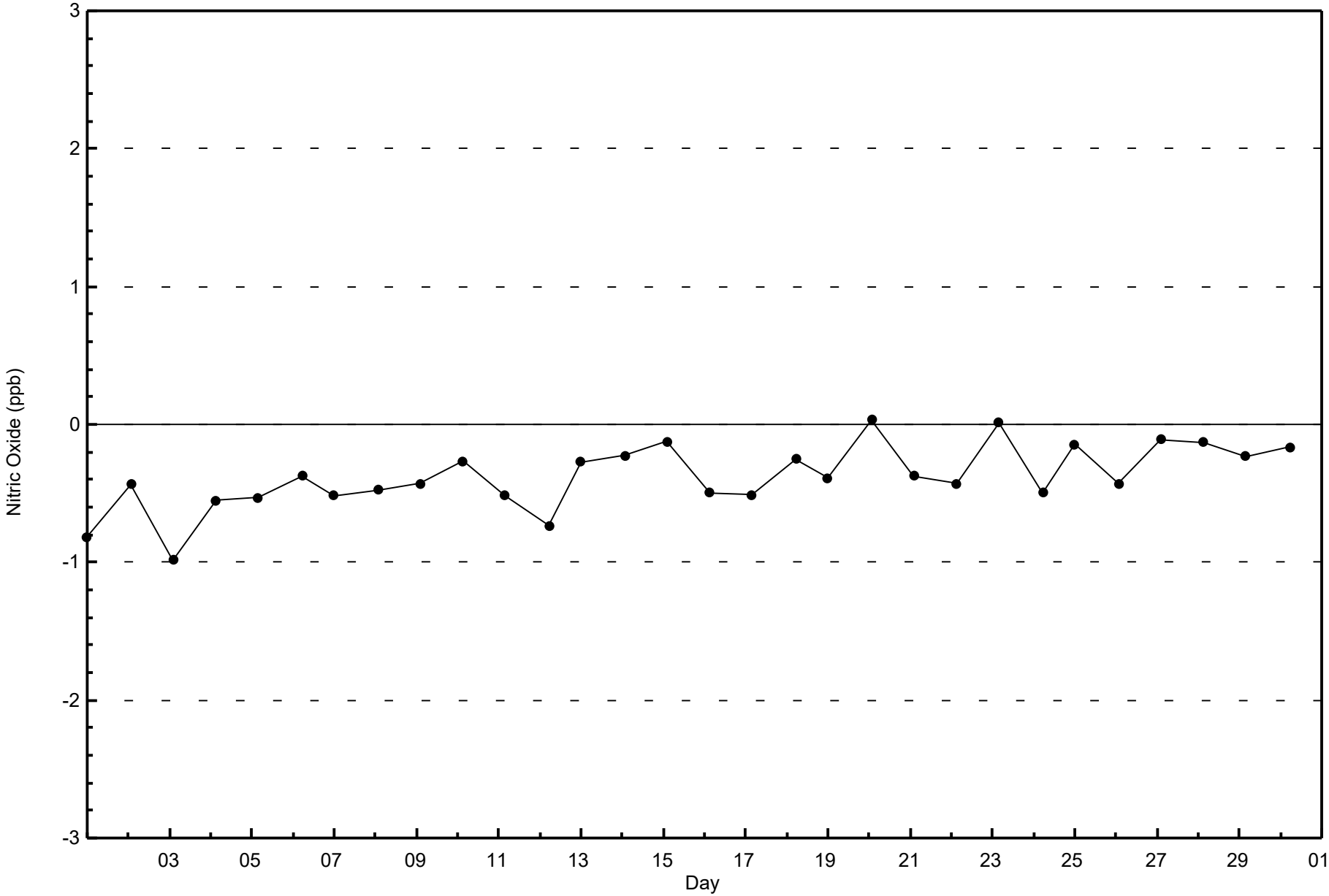
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Barge Landing - September 2026

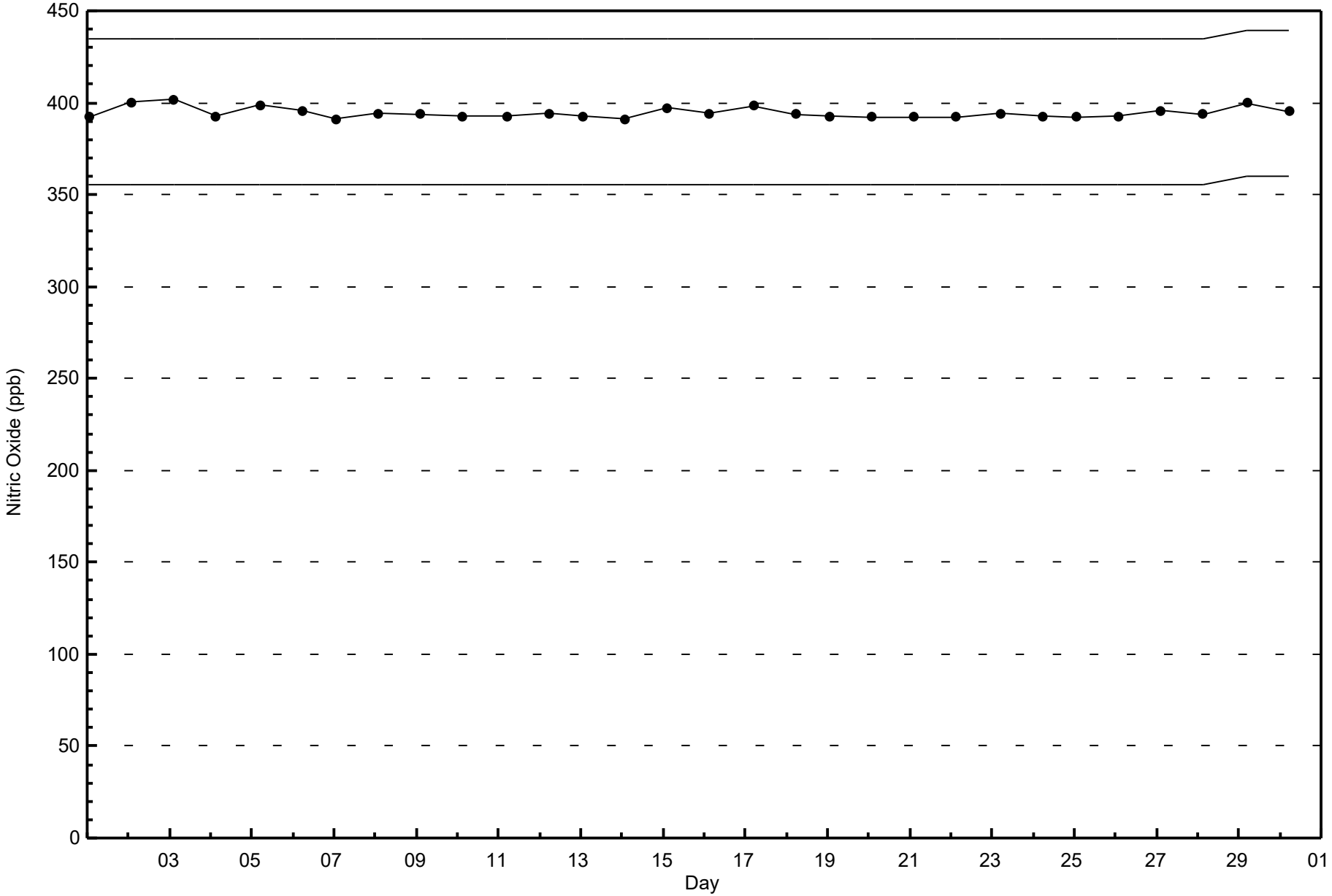


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Barge Landing - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Barge Landing - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 30.2 ppb on Sep 21 21:00
Maximum Daily Average: 16.4 ppb on Sep 21

Minimum Value: 0.0 ppb on Sep 10 00:00
Minimum Daily Average: 1.1 ppb on Sep 10
Maximum Diurnal Average: 8.5 ppb at hour 21
Minimum Diurnal Average: 2.8 ppb at hour 14
Monthly Average: 5.84 ppb
Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 1.2 Median = 4.9 Q_3 = 9.1 P_{90} = 13.0 P_{99} = 21.0

Hours in Service:	720
Hours of Data:	684
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-Sep	Z	5.1	4.6	5.9	6.8	6.6	7.3	9.1	7.5	7.9	7.3	6.3	2.5	2.6	2.7	3.4	4.1	4.0	2.4	6.6	1.6	0.2	0.5	0.8	4.6	9.1
2-Sep	1.3	Z	3.0	1.6	9.8	5.0	7.1	1.6	2.3	2.2	2.0	2.6	2.0	1.3	1.7	1.2	0.9	1.2	1.0	0.9	1.1	1.0	0.7	0.7	2.3	9.8
3-Sep	1.9	1.6	Z	2.8	3.8	6.6	6.4	11.5	12.7	14.5	6.4	2.2	4.0	1.7	2.1	2.4	3.6	7.8	6.2	7.4	10.6	6.9	7.9	11.2	6.2	14.5
4-Sep	9.5	9.8	7.3	Z	7.3	7.3	7.8	9.0	8.3	5.2	4.2	5.4	5.3	5.9	5.6	5.2	4.7	5.4	4.9	5.5	8.8	12.5	12.4	14.3	7.5	14.3
5-Sep	13.3	3.5	5.9	14.7	Z	17.6	10.9	13.2	12.9	9.0	4.0	4.8	4.9	5.6	6.1	5.9	2.9	4.1	5.8	5.2	10.0	10.0	6.3	4.1	7.9	17.6
6-Sep	7.2	5.6	4.0	4.7	6.9	Z	3.4	5.9	7.5	5.3	7.4	7.8	7.7	2.4	3.5	2.1	2.3	4.5	6.1	7.4	2.0	0.7	1.3	3.6	4.8	7.8
7-Sep	Z	2.4	1.2	3.4	5.6	7.0	6.1	6.8	4.6	6.0	4.4	2.1	2.6	4.3	2.7	2.8	5.5	6.5	10.4	12.4	12.8	10.9	9.8	6.9	6.0	12.8
8-Sep	6.9	Z	5.5	3.5	4.5	6.8	9.1	3.5	3.6	10.1	13.7	7.3	2.5	1.8	0.4	0.6	0.9	3.9	11.2	18.0	17.7	13.0	6.8	10.0	7.0	18.0
9-Sep	10.2	9.6	Z	8.3	8.7	9.7	7.8	6.6	6.9	5.0	1.9	0.9	0.9	0.5	0.1	0.1	1.4	3.0	2.1	1.4	2.4	3.8	0.3	0.0	4.0	10.2
10-Sep	0.0	0.0	0.0	Z	1.0	0.7	1.0	0.2	0.2	0.0	0.1	0.2	0.3	0.1	0.0	0.2	0.1	0.2	0.2	3.0	5.2	6.3	1.2	4.4	1.1	6.3
11-Sep	3.2	5.6	3.6	3.5	Z	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.6	0.9	0.6	0.8	0.3	1.2	1.2	3.0	7.2	5.5	1.4	1.7	7.2
12-Sep	0.3	0.1	0.0	0.0	0.0	Z	0.3	0.3	0.2	0.1	0.3	0.2	0.5	0.3	0.0	0.3	0.5	0.7	1.7	7.2	15.7	10.6	10.1	10.0	2.6	15.7
13-Sep	Z	7.7	9.9	7.7	5.2	3.9	3.4	4.2	4.3	3.6	3.8	3.3	1.0	0.7	0.6	0.4	0.5	3.2	6.4	5.1	11.9	12.3	11.8	11.5	5.3	12.3
14-Sep	5.1	Z	5.6	8.1	11.3	11.6	10.2	11.7	10.1	8.0	8.8	7.5	4.5	5.2	6.3	6.1	7.9	5.3	1.1	4.1	3.0	10.1	8.4	1.8	7.0	11.7
15-Sep	0.6	0.0	Z	0.2	0.4	0.4	2.8	4.8	4.4	0.7	0.3	0.2	0.5	0.5	0.7	1.3	5.7	4.7	5.8	3.9	0.8	0.7	5.7	13.3	2.5	13.3
16-Sep	15.6	14.0	7.2	Z	2.1	3.1	4.2	3.6	7.2	10.3	11.8	6.4	6.1	2.6	2.5	2.8	4.2	9.4	10.1	8.5	6.0	4.6	2.2	0.7	6.3	15.6
17-Sep	1.8	0.9	1.7	2.1	Z	3.5	4.7	3.7	4.1	7.2	6.9	4.8	5.0	4.2	7.2	7.3	7.6	11.8	13.5	11.8	10.9	10.0	7.9	8.3	6.4	13.5
18-Sep	5.6	4.5	2.0	2.8	5.3	Z	4.0	7.7	10.3	17.9	15.9	14.6	4.9	5.3	3.0	2.7	9.0	6.1	17.1	16.7	16.6	10.4	9.9	13.6	9.0	17.9
19-Sep	Z	10.1	8.9	8.1	10.7	15.4	13.3	11.0	12.3	8.8	6.3	4.7	3.7	3.9	2.8	3.9	3.6	2.5	4.1	8.1	7.4	5.1	7.1	7.3	7.4	15.4
20-Sep	6.3	Z	9.3	10.6	14.3	14.9	11.5	12.7	9.0	5.7	6.6	3.5	1.9	0.2	0.5	1.1	1.5	4.0	11.7	15.2	14.2	7.1	8.1	7.0	7.7	15.2
21-Sep	6.1	4.1	Z	9.9	17.6	16.5	17.1	15.4	10.0	8.9	6.0	9.1	13.4	12.9	13.0	15.0	22.9	25.2	21.5	27.5	30.2	27.3	25.9	20.9	16.4	30.2
22-Sep	13.8	10.5	6.9	Z	8.5	11.3	9.8	6.2	4.5	1.1	17.3	5.5	2.9	0.0	0.0	0.0	0.0	0.4	0.5	11.5	19.0	3.1	0.5	2.1	5.9	19.0
23-Sep	9.9	5.8	11.6	9.1	Z	13.0	15.2	11.1	12.5	13.8	12.4	11.7	10.5	11.1	14.1	11.5	14.3	12.0	10.5	9.8	2.9	11.0	8.4	5.4	10.8	15.2
24-Sep	6.6	5.9	3.6	4.4	5.9	Z	15.9	6.8	5.4	6.4	7.3	1.5	0.2	0.0	0.0	0.0	0.0	0.5	2.5	18.0	18.7	15.3	17.7	15.9	6.9	18.7
25-Sep	Z	12.6	12.5	10.5	10.1	13.2	18.0	19.0	18.1	16.3	18.5	13.5	10.7	6.0	4.9	6.0	12.4	10.6	10.8	10.8	9.4	8.6	8.3	9.9	11.8	19.0
26-Sep	11.5	Z	11.0	7.9	4.2	1.8	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	0.0	0.0	0.0	1.6	11.5
27-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.2	0.0	0.0	0.3	0.2	2.3	9.2	9.1	14.9	13.2	11.9	2.7	14.9
28-Sep	9.7	3.8	3.7	Z	12.1	13.0	15.1	8.6	6.6	5.7	C	C	C	C	C	C	1.3	1.2	10.8	6.4	2.9	4.8	7.9	4.5	--	15.1
29-Sep	6.1	5.0	8.8	13.7	Z	12.0	11.5	16.0	7.9	4.1	1.5	0.3	0.2	0.2	0.2	0.0	0.0	0.0	0.2	4.8	0.2	0.1	0.1	0.1	4.0	16.0
30-Sep	0.1	0.1	0.1	0.0	0.1	Z	0.4	0.5	2.3	2.7	4.2	3.0	2.6	1.3	0.5	0.1	0.3	0.9	0.1	0.2	0.9	3.1	6.0	7.4	1.6	7.4
	6.1	5.1	5.5	5.7	6.5	8.1	7.5	7.0	6.5	6.2	6.2	4.5	3.5	2.8	2.8	2.9	4.0	4.7	6.1	8.3	8.5	7.7	7.1	7.0	Diurnal Average	
	15.6	14.0	12.5	14.7	17.6	17.6	18.0	19.0	18.1	17.9	18.5	14.6	13.4	12.9	14.1	15.0	22.9	25.2	21.5	27.5	30.2	27.3	25.9	20.9	Diurnal Maximum	

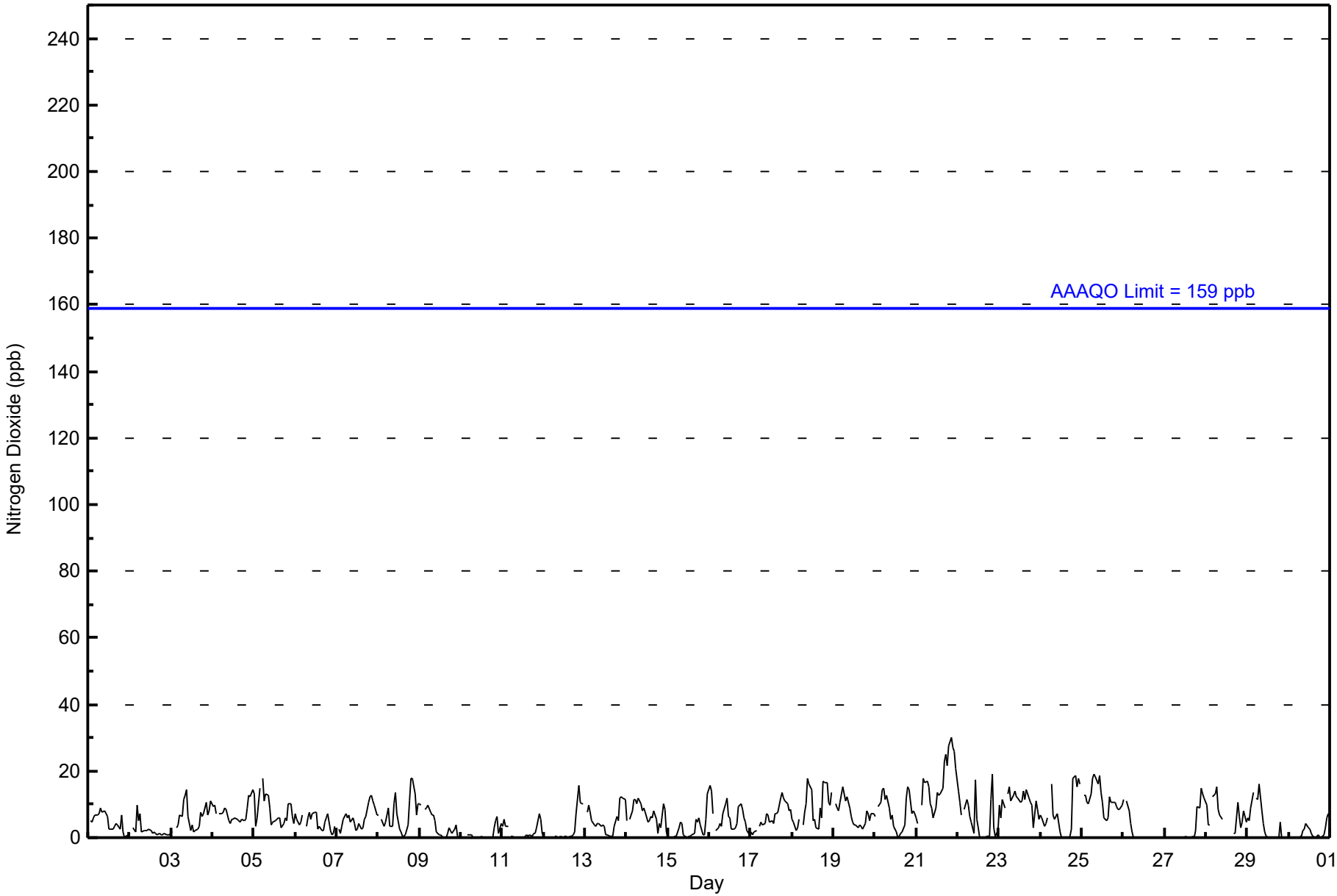
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Barge Landing - September 2026



Nitrogen Dioxide (NO_2) - ppb
Barge Landing - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	676	98.83	98.83
21 - 40	8	1.17	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Barge Landing - September 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	16	11	5	5	18	63	83	74	43	53	61	61	38	47	56	676
21 - 40	0	0	0	0	0	0	0	0	2	1	1	1	0	1	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	42	16	11	5	5	18	63	83	76	44	54	62	61	39	47	58	684

Total Number of Valid Hours: 684

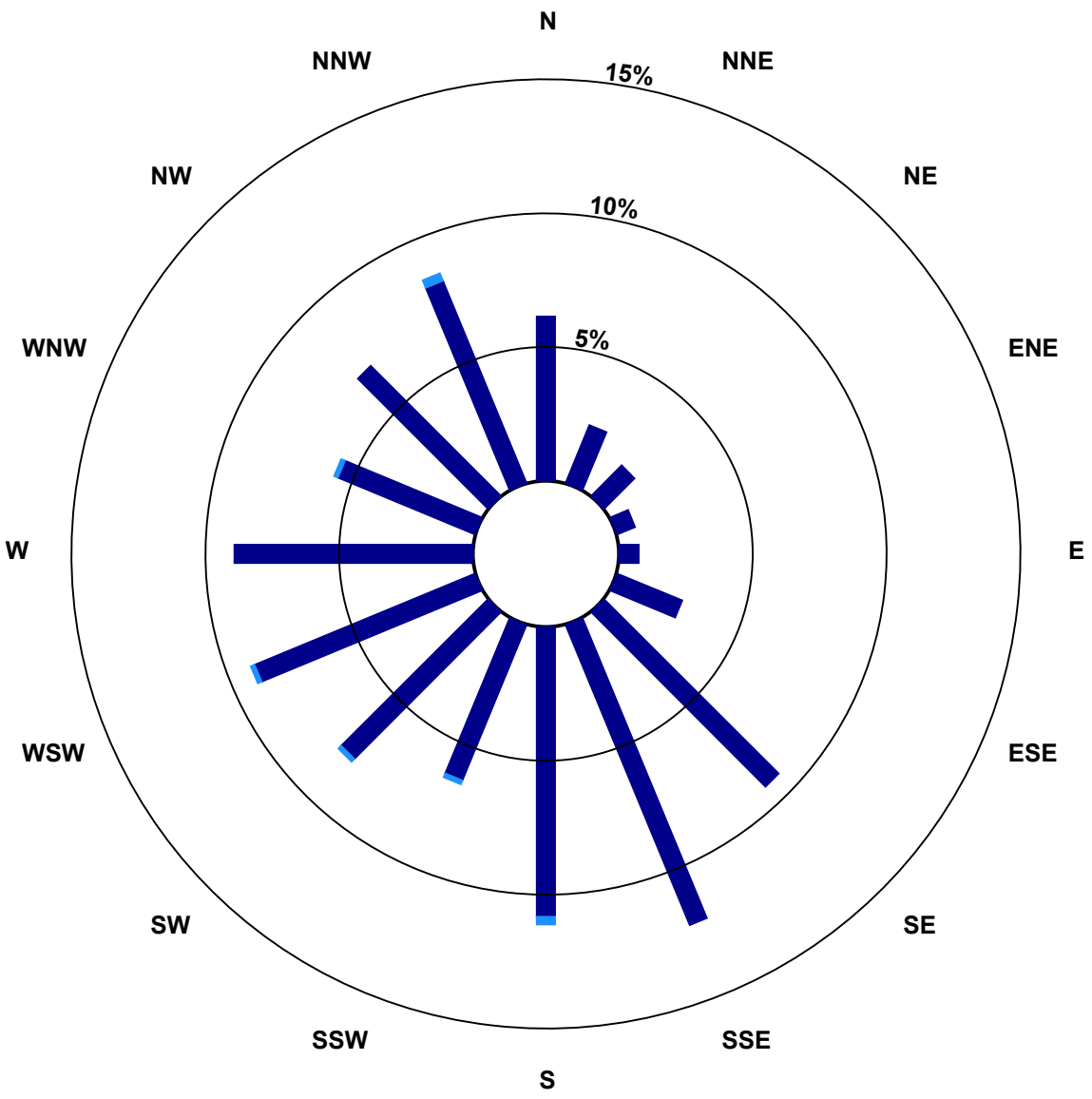
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Barge Landing



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

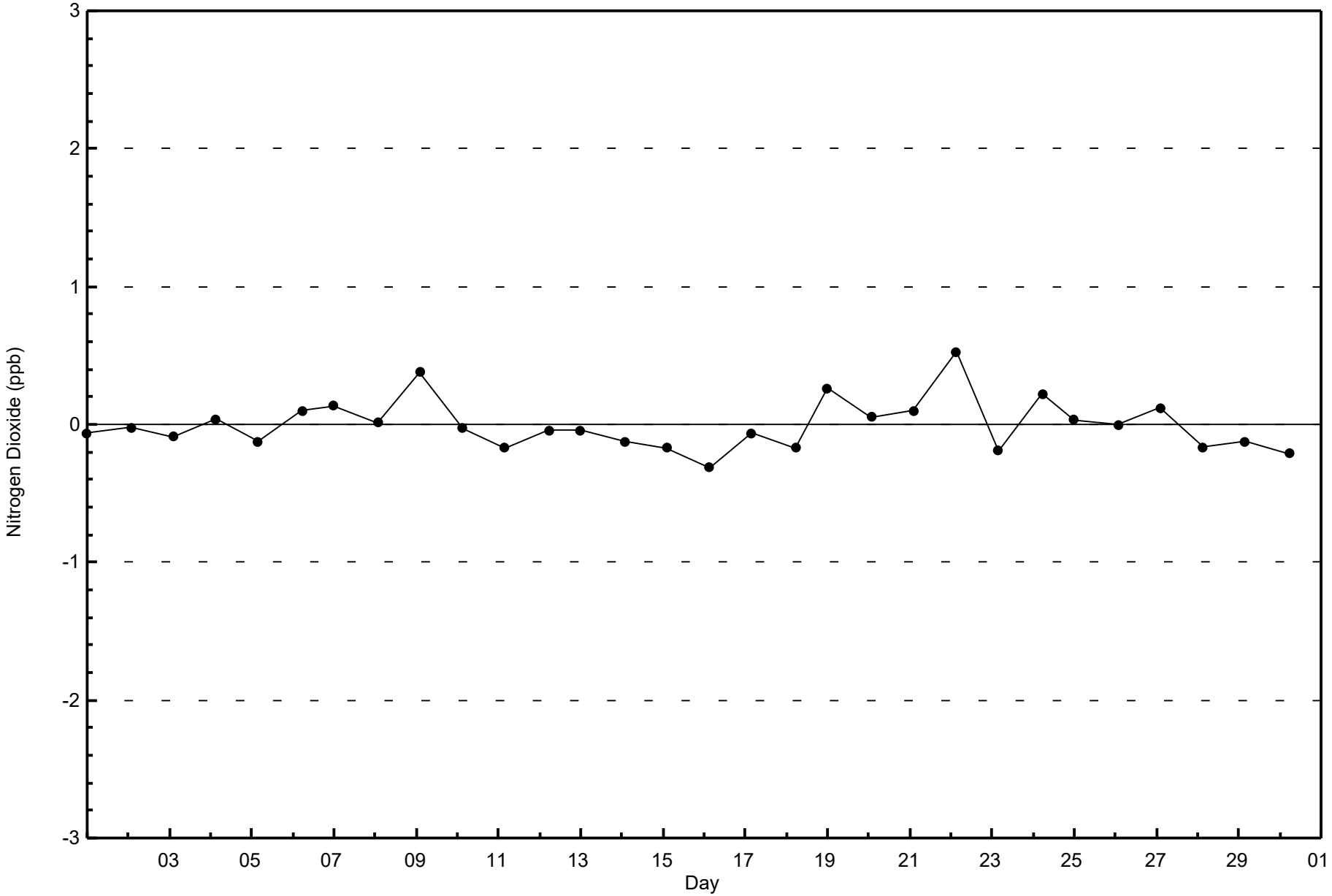
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Barge Landing - September 2026

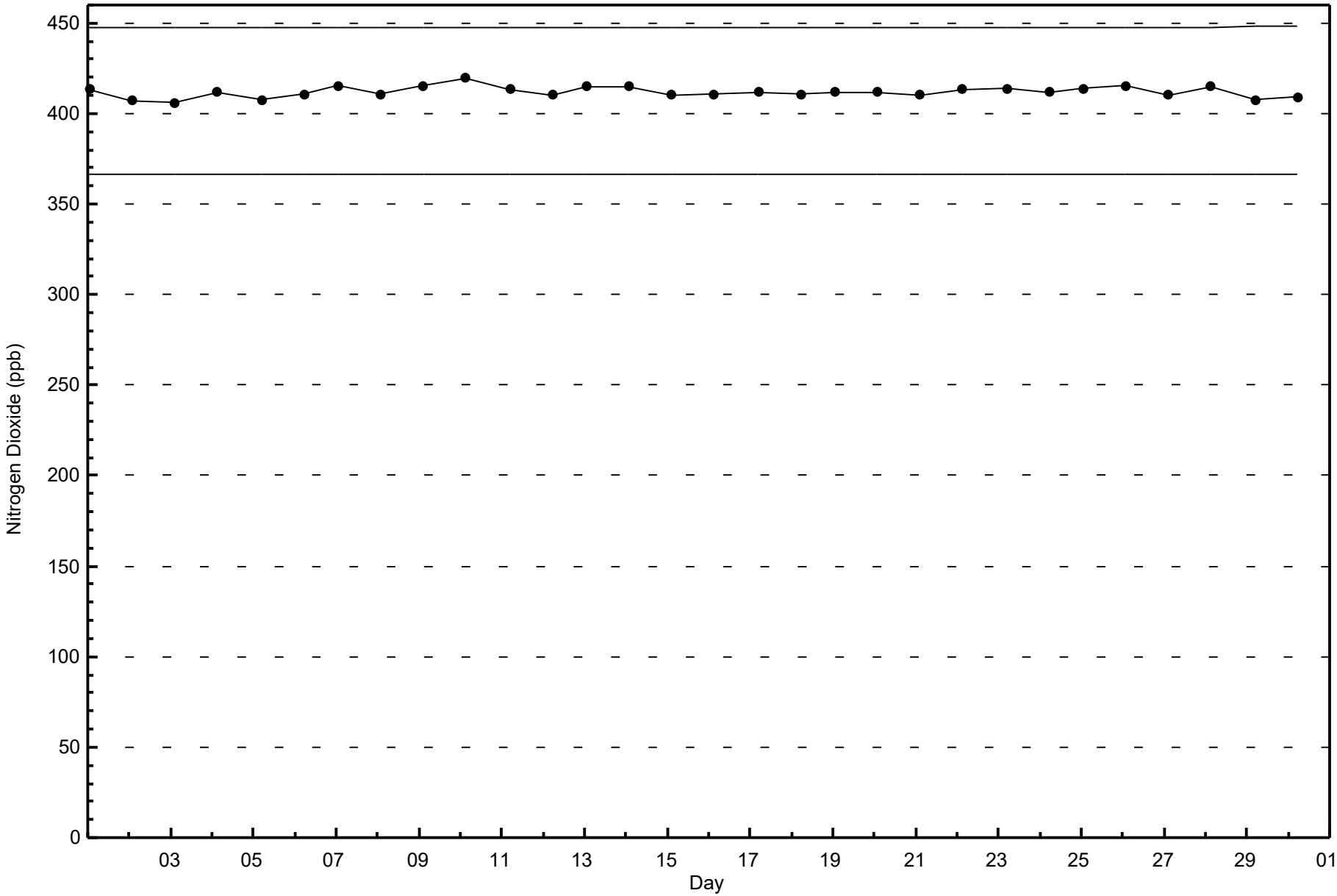


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Barge Landing - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Barge Landing - September 2026

Maximum Value: 127.1 ppb on Sep 8 07:00

Maximum Daily Average: 26.7 ppb on Sep 21

Minimum Value: 0.0 ppb on Sep 10 00:00

Minimum Daily Average: 1.1 ppb on Sep 10

Maximum Diurnal Average: 29.1 ppb at hour 7

Minimum Diurnal Average: 3.5 ppb at hour 16

Monthly Average: 10.46 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.2 Q_1 = 1.3 Median = 6.6 Q_3 = 13.9 P_{90} = 24.5 P_{99} = 63.9

Hours in Service:	720
Hours of Data:	684
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-Sep	Z	15.4	15.6	21.9	27.6	16.0	25.6	28.6	13.1	12.9	11.6	9.4	3.2	2.9	2.7	3.4	4.1	4.0	2.4	6.6	1.6	0.2	0.5	0.9	10.0	28.6
2-Sep	1.3	Z	3.1	1.7	21.2	5.9	20.5	2.6	3.5	3.0	2.6	3.2	2.3	1.3	1.7	1.2	0.9	1.2	1.0	0.9	1.1	1.1	0.9	0.9	3.6	21.2
3-Sep	2.1	1.8	Z	3.5	6.7	9.9	13.9	32.3	40.1	38.0	10.9	3.0	5.9	2.3	2.7	2.9	4.5	13.1	8.3	9.9	13.8	8.4	12.0	20.9	11.6	40.1
4-Sep	19.0	12.2	9.4	Z	24.5	38.3	43.6	25.6	12.8	8.2	6.9	9.8	9.6	10.1	8.0	6.6	5.7	6.1	5.3	5.8	9.5	13.3	13.2	16.7	13.9	43.6
5-Sep	15.2	3.6	6.6	18.9	Z	40.4	19.2	28.7	27.9	17.7	7.0	7.6	7.7	8.3	8.6	8.3	3.7	5.1	8.0	5.4	15.6	13.9	6.9	4.5	12.6	40.4
6-Sep	14.7	15.3	9.1	18.2	29.6	Z	13.9	37.8	24.6	13.2	15.4	17.8	18.1	3.5	5.0	2.8	2.9	5.2	6.8	8.0	2.3	0.9	1.4	3.8	11.7	37.8
7-Sep	Z	3.1	1.5	4.2	11.3	16.7	11.7	16.3	9.4	14.8	9.9	3.5	3.9	6.3	3.8	3.3	6.8	7.5	12.3	16.0	15.3	13.2	11.6	9.4	9.2	16.7
8-Sep	13.6	Z	8.8	9.9	20.6	104.9	127.1	32.4	8.8	21.9	30.1	12.4	3.5	2.5	0.5	0.7	1.0	4.5	12.3	24.2	23.2	23.1	7.2	14.0	22.1	127.1
9-Sep	17.6	12.9	Z	20.6	26.3	38.8	31.4	19.9	14.1	10.0	3.4	1.2	1.3	0.5	0.2	0.2	1.4	3.0	2.1	1.5	2.6	3.8	0.3	0.0	9.3	38.8
10-Sep	0.0	0.0	0.0	Z	1.0	0.7	1.0	0.2	0.2	0.0	0.1	0.2	0.3	0.2	0.0	0.2	0.1	0.3	0.2	3.1	5.2	6.3	1.2	4.5	1.1	6.3
11-Sep	3.2	5.8	3.8	3.8	Z	0.8	0.5	0.4	0.2	0.3	0.2	0.3	0.3	1.0	1.4	1.1	1.0	0.6	1.4	1.7	3.4	7.8	6.1	1.8	2.0	7.8
12-Sep	0.8	0.5	0.4	0.5	0.4	Z	0.9	0.7	0.7	0.7	0.6	0.6	1.0	0.7	0.3	0.4	0.7	0.8	1.8	8.8	22.0	11.2	10.3	10.2	3.3	22.0
13-Sep	Z	8.3	10.4	7.8	5.2	3.9	3.8	5.6	7.0	5.9	5.5	4.9	1.3	0.8	0.6	0.4	0.5	3.5	6.9	5.1	13.0	14.5	15.3	16.6	6.4	16.6
14-Sep	5.1	Z	5.8	8.3	11.6	12.0	11.1	15.7	13.1	11.4	11.5	11.2	6.1	6.7	8.0	8.4	9.9	5.9	1.1	4.1	3.0	10.1	8.6	1.8	8.3	15.7
15-Sep	0.6	0.0	Z	0.2	0.4	0.4	13.5	19.6	10.7	1.1	0.4	0.2	0.5	0.5	0.7	1.7	7.8	5.6	6.5	4.1	0.9	0.9	6.4	14.6	4.2	19.6
16-Sep	17.7	15.9	9.3	Z	2.7	5.5	10.1	8.3	20.8	23.1	23.0	9.8	9.5	4.3	4.1	3.9	5.6	12.2	12.3	9.4	6.8	5.8	2.5	0.7	9.7	23.1
17-Sep	2.1	1.1	2.1	2.5	Z	6.0	22.7	9.1	9.0	14.8	13.2	7.5	6.6	5.9	10.0	10.5	10.7	17.5	18.2	20.0	15.7	21.5	14.5	11.0	11.0	22.7
18-Sep	10.0	5.4	2.0	3.1	11.7	Z	5.7	17.9	21.7	46.7	32.0	28.8	7.8	7.8	4.1	3.4	10.9	6.9	33.2	25.2	31.4	16.7	16.5	26.0	16.3	46.7
19-Sep	Z	19.0	13.1	13.5	25.3	67.3	71.8	38.1	34.2	17.3	9.9	6.7	4.8	4.9	3.3	4.2	3.7	2.5	4.1	8.1	7.4	5.1	7.1	7.3	16.5	71.8
20-Sep	6.3	Z	9.5	11.3	22.6	23.0	19.7	25.5	13.8	8.7	10.0	4.8	2.4	0.2	0.5	1.1	1.5	4.0	13.4	17.3	15.3	7.2	8.5	7.1	10.2	25.5
21-Sep	6.3	4.2	Z	13.5	31.6	38.7	61.7	52.4	16.6	13.9	8.7	12.5	19.0	16.9	15.7	17.0	27.5	28.8	22.4	35.5	45.8	46.3	47.0	31.8	26.7	61.7
22-Sep	19.6	13.8	10.7	Z	25.9	63.2	82.3	29.0	13.2	2.3	39.6	9.3	3.8	0.0	0.2	0.0	0.0	0.4	0.5	16.2	28.8	3.2	0.5	2.2	15.9	82.3
23-Sep	13.4	6.2	13.9	20.6	Z	78.8	93.7	50.6	47.8	46.3	30.6	26.2	15.9	15.0	18.6	14.3	15.9	13.0	11.3	10.5	2.9	12.6	9.5	5.9	24.9	93.7
24-Sep	7.1	6.6	5.3	7.7	7.5	Z	53.8	12.4	9.5	11.1	12.8	2.4	0.5	0.2	0.2	0.2	0.3	0.5	2.7	22.2	24.5	16.5	19.5	23.7	10.7	53.8
25-Sep	Z	22.8	14.7	11.2	23.3	38.8	46.1	58.3	45.3	26.4	24.5	16.5	13.2	7.2	5.6	6.8	14.1	11.1	11.3	11.2	9.7	8.8	8.5	10.2	19.4	58.3
26-Sep	11.9	Z	11.4	8.2	4.4	1.8	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	0.0	0.0	0.0	1.7	11.9
27-Sep	0.0	0.1	Z	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.2	0.0	0.0	0.4	0.2	2.3	9.4	9.3	16.8	14.7	14.3	3.0	16.8
28-Sep	12.3	4.3	3.7	Z	24.2	32.2	50.8	18.1	9.6	9.1	C	C	C	C	C	C	1.5	1.2	12.0	6.4	2.9	4.8	8.4	4.5	--	50.8
29-Sep	6.6	5.1	10.1	15.6	Z	17.1	16.9	26.1	9.2	4.8	1.8	0.3	0.2	0.2	0.2	0.0	0.0	0.0	0.3	5.3	0.2	0.1	0.1	0.1	5.2	26.1
30-Sep	0.1	0.1	0.1	0.0	0.1	Z	0.5	0.5	2.5	3.2	4.9	3.7	2.9	1.4	0.5	0.1	0.3	0.9	0.1	0.2	0.9	3.7	6.6	7.9	1.8	7.9
	8.3	7.3	7.2	9.1	14.6	26.4	29.1	20.4	14.6	12.9	11.3	7.4	5.2	3.9	3.7	3.5	4.8	5.5	7.3	10.1	11.1	9.9	8.9	9.1	Diurnal Average	
	19.6	22.8	15.6	21.9	31.6	104.9	127.1	58.3	47.8	46.7	39.6	28.8	19.0	16.9	18.6	17.0	27.5	28.8	33.2	35.5	45.8	46.3	47.0	31.8	Diurnal Maximum	

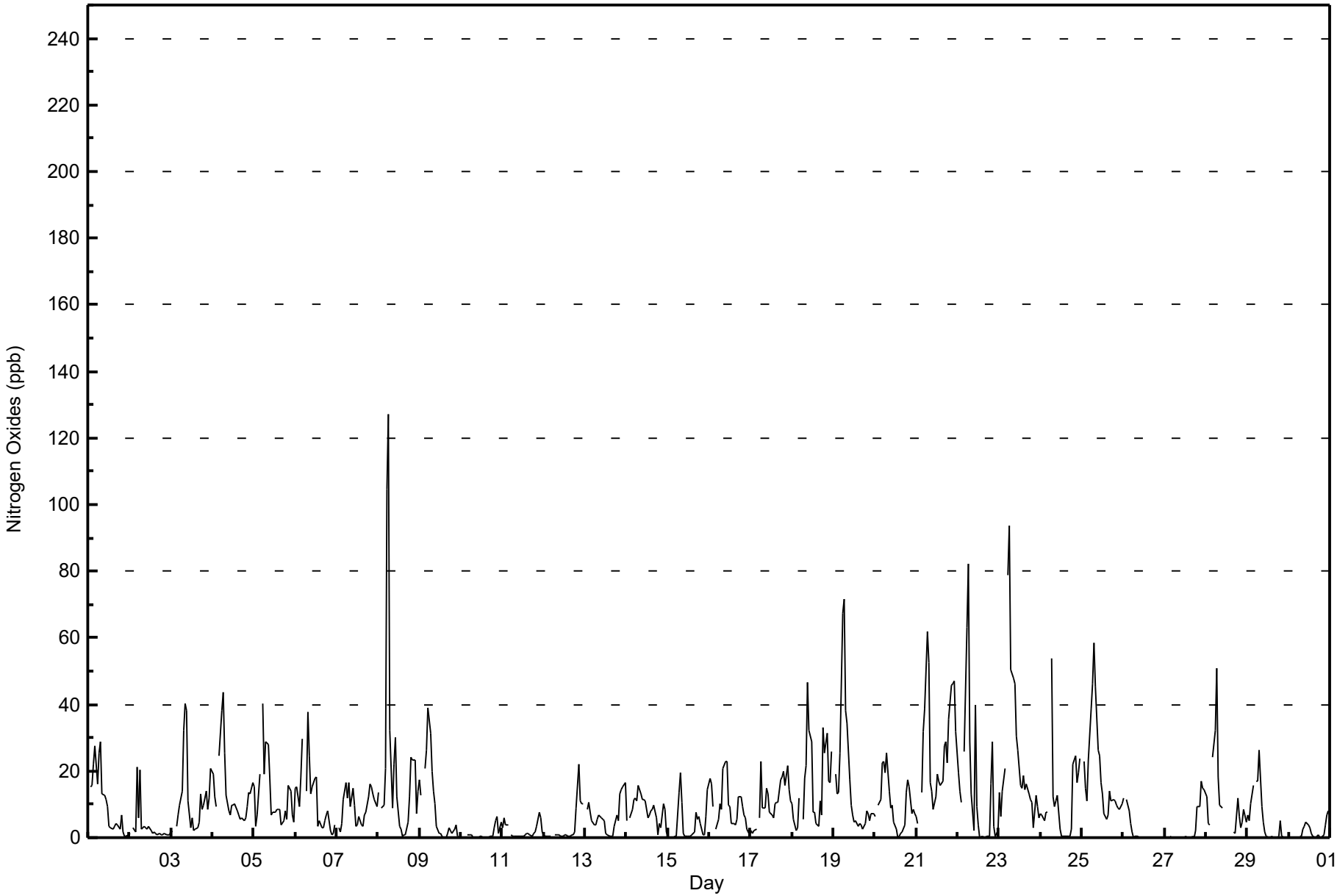
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Barge Landing - September 2026



Nitrogen Oxides (NO_X) - ppb
Barge Landing - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	588	85.96	85.96
21 - 40	73	10.67	96.64
11 - 80	19	2.78	99.42
81 - 159	4	0.58	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Barge Landing - September 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	14	11	5	4	14	56	62	63	36	48	60	57	35	40	42	588
21 - 40	1	2	0	0	1	4	5	17	8	7	2	1	3	4	7	11	73
11 - 80	0	0	0	0	0	0	1	4	5	0	3	1	0	0	0	5	19
81 - 159	0	0	0	0	0	0	1	0	0	1	1	0	1	0	0	0	4
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	42	16	11	5	5	18	63	83	76	44	54	62	61	39	47	58	684

Total Number of Valid Hours: 684

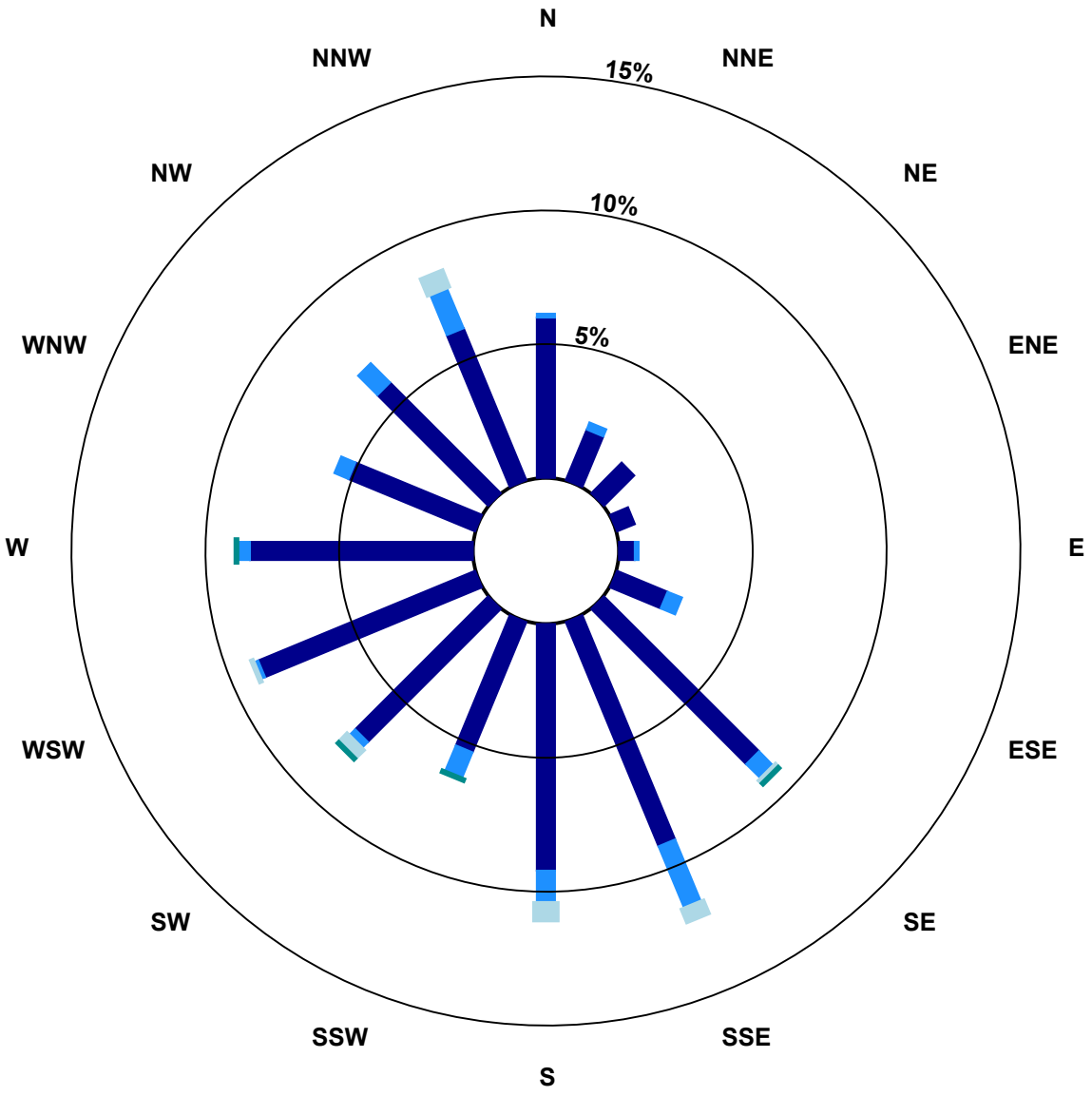
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Barge Landing



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

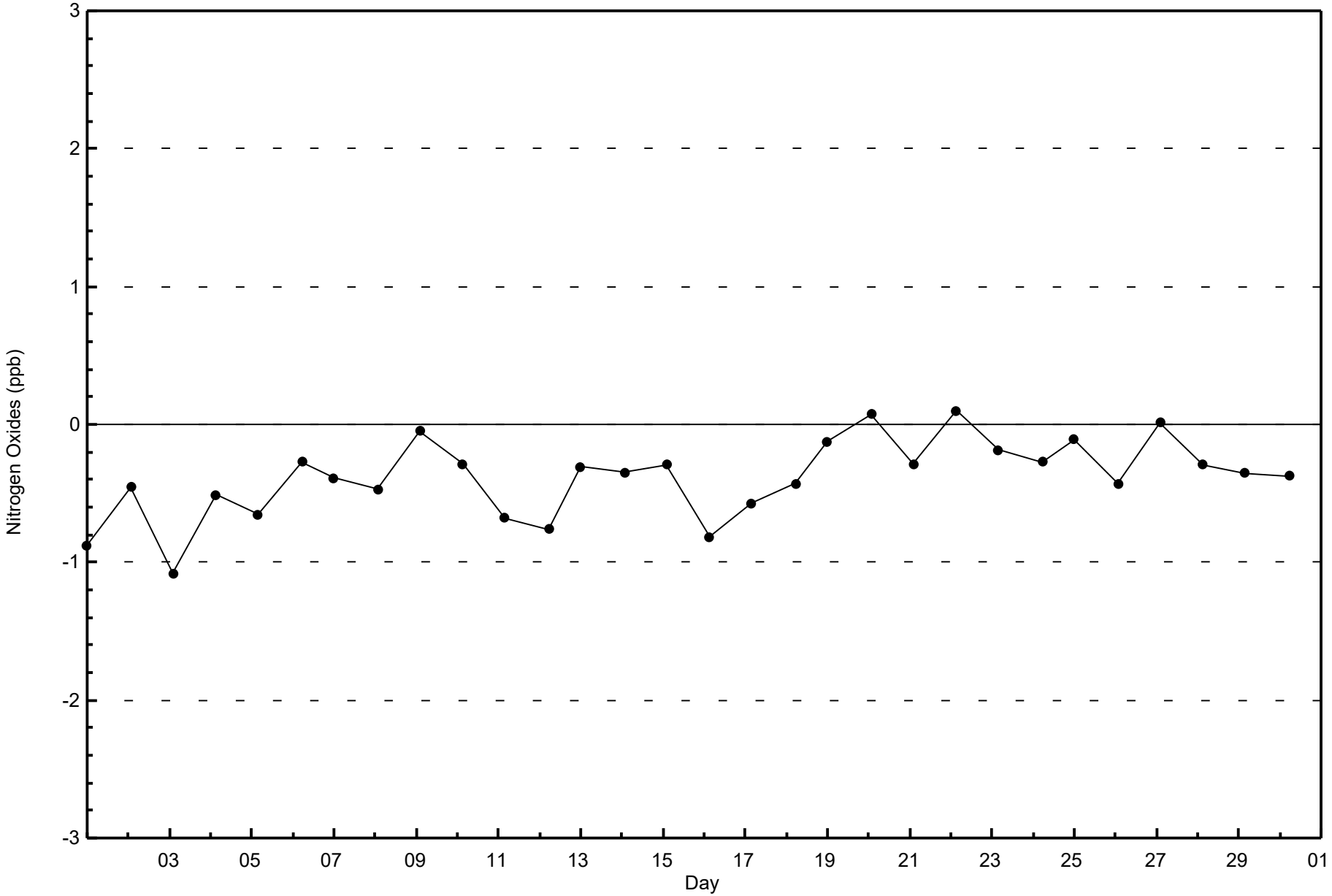
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Barge Landing - September 2026

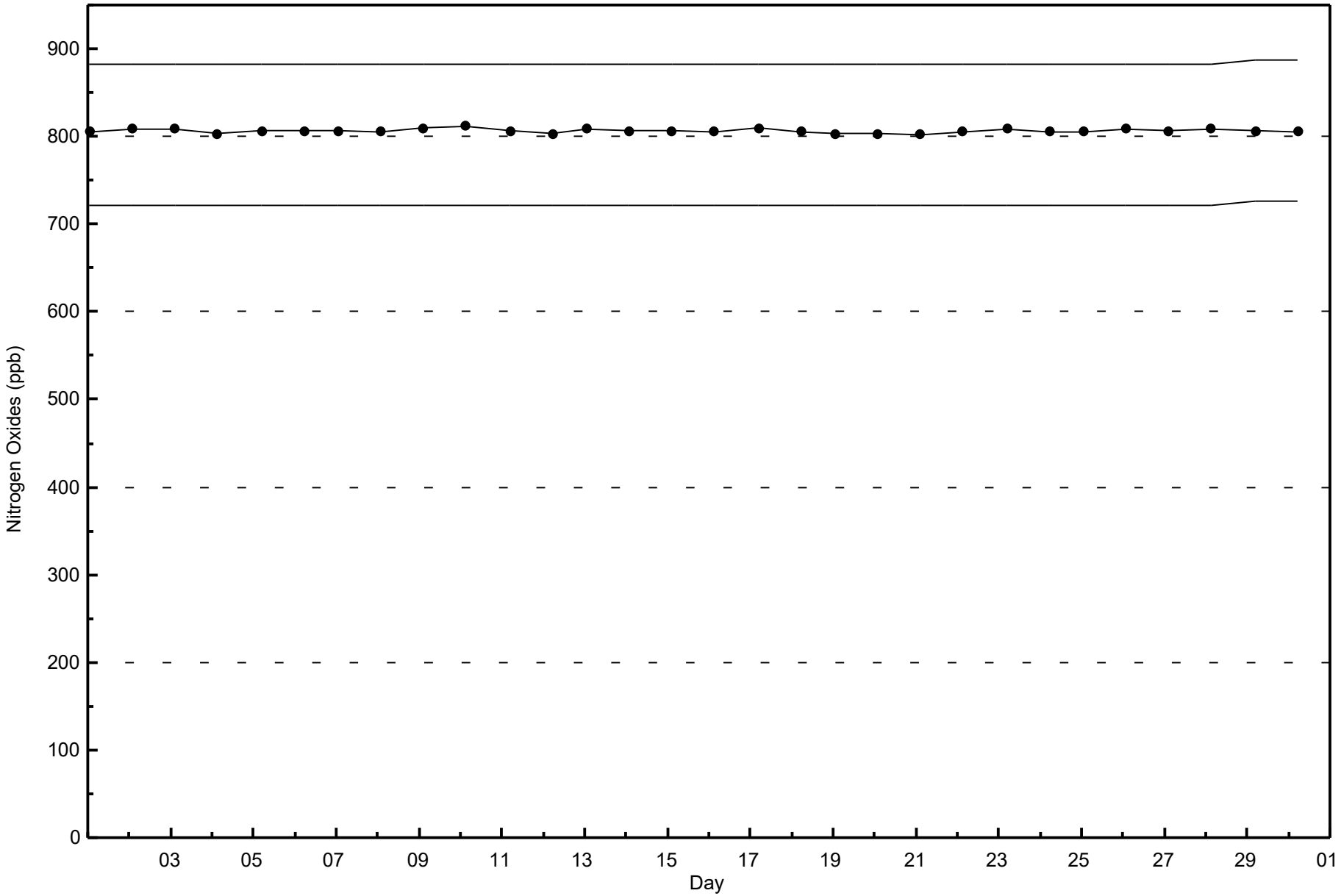


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Barge Landing - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Barge Landing - September 2026

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

Maximum Value: 36.3 $\mu g/m^3$ on Sep 8 07:00

Maximum Daily Average: 18.0 $\mu g/m^3$ on Sep 21

Minimum Value: 0.1 $\mu g/m^3$ on Sep 30 06:00

Minimum Daily Average: 0.8 $\mu g/m^3$ on Sep 30

Maximum Diurnal Average: 9.8 $\mu g/m^3$ at hour 7

Minimum Diurnal Average: 4.7 $\mu g/m^3$ at hour 17

Monthly Average: 6.54 $\mu g/m^3$

Percentiles: P_1 = 0.2 P_{10} = 1.2 Q_1 = 2.6 Median = 4.9 Q_3 = 8.4 P_{90} = 14.1 P_{99} = 27.0

Hours in Service:	720
Hours of Data:	718
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-Sep	13.8	11.2	11.2	19.6	22.5	15.7	11.8	10.3	8.7	13.1	15.5	16.9	5.7	4.6	5.9	7.0	7.9	7.2	4.4	5.5	3.5	2.6	2.6	2.8	9.6	22.5
2-Sep	3.2	4.9	4.6	3.7	7.5	8.1	9.9	7.0	8.0	8.0	7.4	7.5	7.6	6.4	7.8	7.9	6.8	6.4	8.3	12.7	11.0	7.1	5.9	6.0	7.2	12.7
3-Sep	6.7	7.0	7.3	10.3	7.4	17.2	8.2	9.3	11.2	10.4	7.0	5.3	5.7	4.7	5.0	4.8	4.8	5.0	5.5	5.4	5.2	5.3	5.5	5.7	7.1	17.2
4-Sep	5.8	5.6	5.5	6.1	7.1	6.1	5.9	5.4	2.8	1.6	1.2	1.5	1.5	1.8	1.7	2.0	2.6	2.9	2.9	2.7	2.6	2.7	2.7	2.8	3.5	7.1
5-Sep	2.9	2.9	3.3	4.0	4.8	5.0	4.5	4.6	5.0	5.5	5.0	5.7	6.3	8.4	7.7	6.7	6.1	6.9	12.8	10.2	12.0	13.4	9.8	8.9	6.8	13.4
6-Sep	9.4	10.0	10.2	12.1	10.4	20.0	13.6	15.2	12.4	9.3	10.5	11.3	11.1	4.7	5.8	4.3	4.2	6.9	5.0	5.5	4.4	3.5	2.9	3.3	8.6	20.0
7-Sep	3.2	3.1	2.9	4.1	5.2	8.5	5.3	6.9	5.2	5.7	5.0	4.6	4.7	9.6	7.6	9.7	7.4	9.0	12.3	16.1	17.6	18.0	16.7	12.2	8.4	18.0
8-Sep	10.7	9.0	6.5	4.5	6.1	25.4	36.3	10.2	6.4	8.9	12.2	9.5	6.9	7.8	7.0	6.7	6.5	9.6	13.9	22.9	23.2	26.6	13.0	14.3	12.7	36.3
9-Sep	14.6	9.4	12.4	13.5	15.9	16.4	12.5	10.8	9.8	9.9	8.0	7.4	8.7	9.3	11.1	11.1	5.0	7.2	7.4	4.3	3.9	3.9	2.8	2.4	9.1	16.4
10-Sep	2.2	1.9	1.5	1.7	2.3	2.6	2.6	2.4	4.8	15.3	18.8	16.9	12.8	5.4	4.9	5.1	3.8	2.7	1.3	0.9	1.3	1.3	1.5	1.4	4.8	18.8
11-Sep	1.1	1.0	0.8	0.7	0.7	0.6	0.5	0.5	0.5	0.7	0.7	0.7	0.8	1.9	2.4	3.8	4.4	4.0	3.7	2.4	2.3	3.1	3.0	2.0	1.8	4.4
12-Sep	1.5	1.3	1.2	1.1	1.0	0.9	0.9	1.0	1.1	1.3	1.6	1.8	2.3	2.6	2.8	3.0	2.9	2.9	3.3	5.3	8.8	5.9	5.8	6.4	2.8	8.8
13-Sep	4.8	4.4	4.6	3.9	3.7	3.6	3.5	3.5	3.6	3.9	5.7	6.7	3.6	3.2	3.2	3.1	3.5	14.6	22.3	5.7	4.6	4.5	4.1	2.9	5.3	22.3
14-Sep	1.6	1.6	2.4	2.6	2.9	2.7	2.7	2.7	2.6	2.7	2.6	2.7	2.6	2.2	1.7	2.4	3.0	2.3	1.5	2.3	2.0	2.0	2.0	1.7	2.3	3.0
15-Sep	1.6	1.6	1.7	1.6	1.6	1.6	4.2	4.9	5.1	1.4	1.3	1.6	1.9	2.1	2.8	2.5	3.0	2.9	3.2	2.9	1.9	1.6	1.9	1.7	2.4	5.1
16-Sep	1.6	1.8	4.3	1.9	1.5	1.6	4.3	2.1	4.7	3.6	7.7	7.8	9.4	6.0	5.5	5.4	5.6	11.5	8.7	8.8	14.0	6.4	4.9	3.4	5.5	14.0
17-Sep	4.5	3.6	4.5	4.5	4.4	4.3	6.3	4.5	4.6	5.8	9.5	5.5	6.3	5.5	6.0	6.0	6.1	8.1	8.7	9.1	8.0	8.0	7.0	5.9	6.1	9.5
18-Sep	6.1	5.1	3.5	3.0	4.7	3.3	3.3	3.7	3.6	5.2	5.3	5.2	3.4	3.8	3.5	3.8	5.5	6.5	21.0	21.5	26.3	18.7	18.7	20.6	8.6	26.3
19-Sep	12.6	11.5	11.0	10.2	14.8	23.6	27.9	11.3	10.2	9.0	10.1	7.0	6.0	6.8	7.2	8.3	7.1	13.7	12.8	9.2	8.0	7.2	6.6	7.1	10.8	27.9
20-Sep	7.3	7.4	7.5	9.3	10.9	13.9	14.4	13.5	9.5	7.0	8.3	8.3	7.2	3.9	3.6	5.8	5.2	8.3	16.7	17.2	11.1	5.9	7.8	8.4	9.1	17.2
21-Sep	8.4	7.3	7.3	8.0	11.8	13.2	30.0	18.1	13.1	12.6	13.6	20.5	15.6	11.4	14.5	16.9	19.1	24.7	24.5	25.7	27.1	32.8	31.4	25.5	18.0	32.8
22-Sep	18.9	18.3	14.4	19.6	21.3	27.1	30.8	17.7	10.7	11.5	10.9	13.0	5.6	3.0	3.3	2.6	2.1	5.9	3.1	5.9	5.5	3.1	1.6	2.6	10.8	30.8
23-Sep	6.0	4.9	6.5	9.8	16.5	20.7	22.4	10.8	9.0	9.7	13.6	19.3	13.4	14.6	17.1	11.4	7.2	9.1	6.9	5.8	3.8	6.6	5.6	5.0	10.7	22.4
24-Sep	4.9	3.8	3.8	4.1	3.5	8.1	7.7	3.2	3.3	3.5	5.4	6.0	5.0	4.5	1.8	2.4	1.2	5.5	7.2	11.4	16.4	16.7	15.2	21.8	6.9	21.8
25-Sep	20.7	17.2	12.5	7.7	8.2	11.2	7.4	11.0	13.4	7.7	4.0	3.1	3.1	3.0	2.5	2.6	2.7	2.9	3.0	3.0	3.0	2.8	2.8	2.9	6.6	20.7
26-Sep	3.2	3.5	4.0	3.8	2.0	2.1	1.5	1.0	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.3	0.5	0.6	0.7	0.8	1.1	4.0
27-Sep	0.8	1.1	1.8	1.9	2.2	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.6	1.6	1.4	1.5	1.6	2.1	3.1	3.6	3.3	4.4	5.3	4.2	2.3	5.3
28-Sep	2.8	1.8	1.3	1.9	6.1	7.5	7.8	4.4	3.3	3.0	2.9	2.2	2.2	2.1	C	C	3.5	4.1	6.9	4.8	3.3	4.2	3.8	4.6	3.8	7.8
29-Sep	3.8	3.9	6.1	7.3	7.3	4.9	4.3	4.4	2.1	0.7	0.8	0.9	0.6	0.8	1.1	1.1	1.2	1.1	1.0	3.8	1.8	1.6	1.1	0.7	2.6	7.3
30-Sep	0.5	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.5	0.5	0.6	0.4	0.3	0.4	0.8	0.7	0.7	1.0	2.7	5.2	3.1	0.8	5.2
	6.2	5.5	5.5	6.1	7.1	9.3	9.8	6.8	5.9	6.0	6.6	6.7	5.4	4.8	5.0	5.1	4.7	6.5	7.7	7.9	7.9	7.4	6.6	6.4	Diurnal Average	
	20.7	18.3	14.4	19.6	22.5	27.1	36.3	18.1	13.4	15.3	18.8	20.5	15.6	14.6	17.1	16.9	19.1	24.7	24.5	25.7	27.1	32.8	31.4	25.5	Diurnal Maximum	

C - Calibration

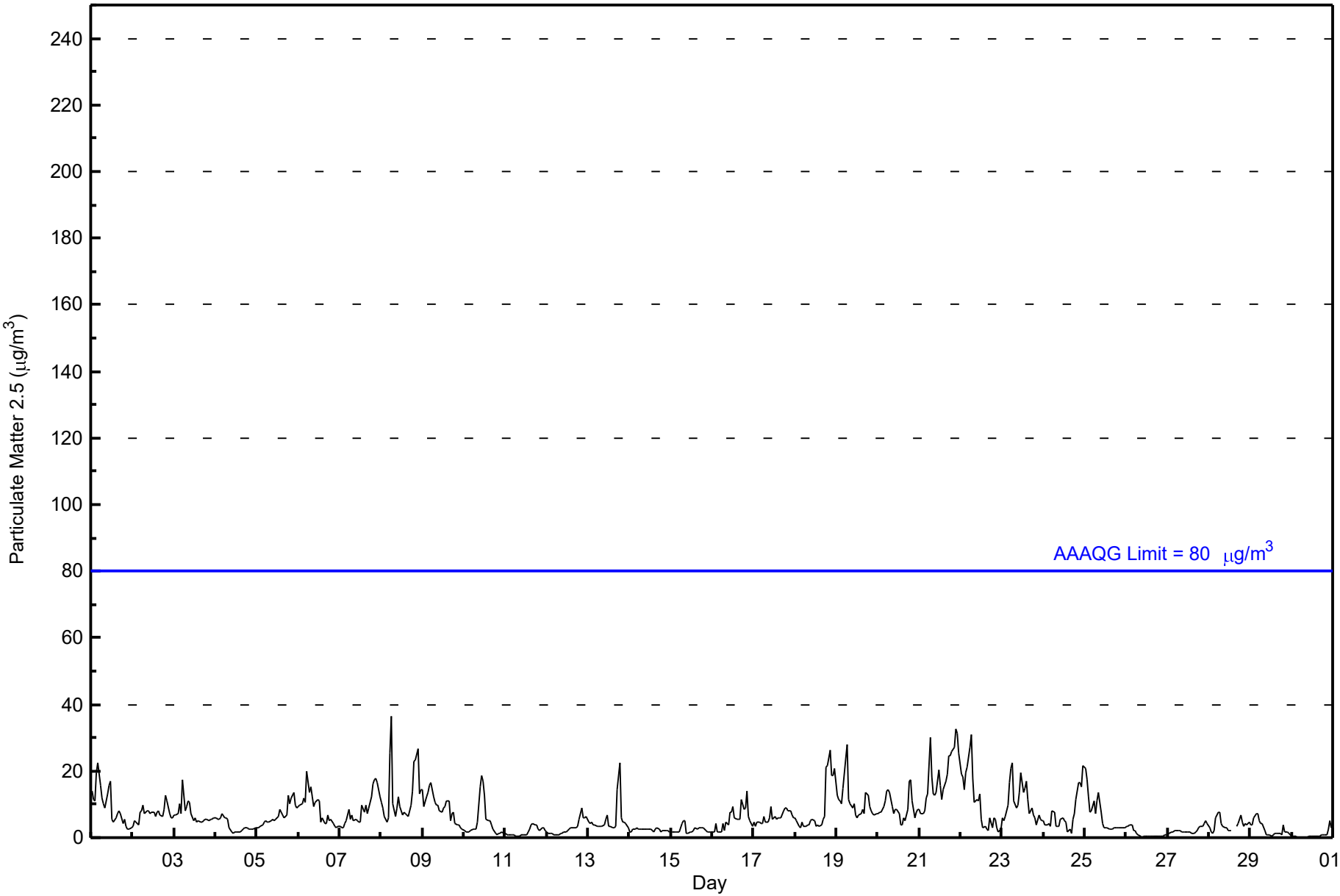
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Barge Landing - September 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Barge Landing - September 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	396	55.15	55.15
6 - 15	261	36.35	91.50
16 - 25	50	6.96	98.47
26 - 80	11	1.53	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 718

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Barge Landing - September 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	38	10	5	3	3	5	24	13	20	26	35	55	51	30	36	42	396
6 - 15	6	5	5	2	2	11	35	53	51	19	19	7	9	9	12	16	261
16 - 25	1	1	1	0	0	3	7	18	7	0	1	2	4	2	1	2	50
26 - 80	0	0	0	0	0	0	0	3	3	2	1	1	1	0	0	0	11
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	45	16	11	5	5	19	66	87	81	47	56	65	65	41	49	60	718

Total Number of Valid Hours: 718

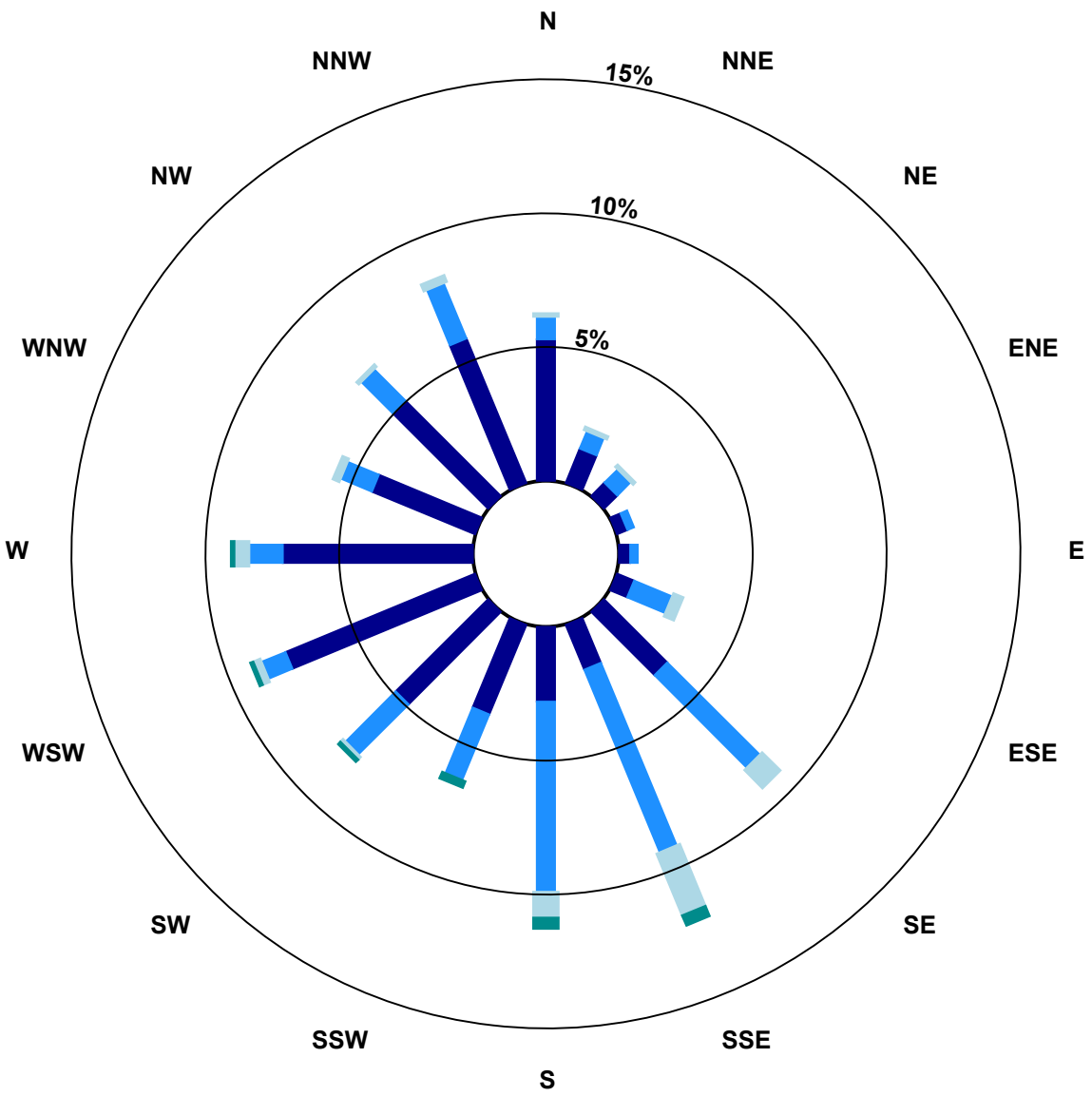
Total Number of Hours: 720

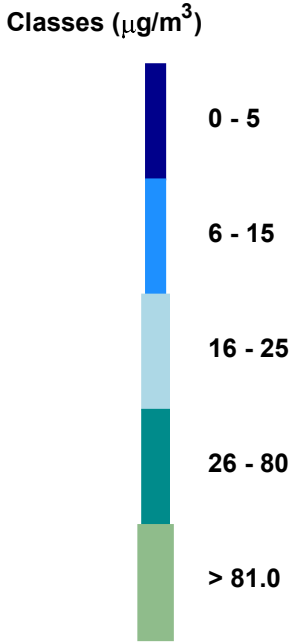
Wood Buffalo Environmental Association

Wind Rose Sep 2026

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

Barge Landing





Total Number of Valid Hours: 718

Maximum Value: 28.3 C on Sep 2 14:00
Maximum Daily Average: 20.7 C on Sep 2

Minimum Value: 1.1 C on Sep 15 05:00
Minimum Daily Average: 5.1 C on Sep 30
Maximum Diurnal Average: 17.4 C at hour 15
Minimum Diurnal Average: 6.8 C at hour 6
Monthly Average: 11.95 C
Percentiles: P_1 = 1.8 P_{10} = 4.9 Q_1 = 7.6 Median = 11.1 Q_3 = 15.9 P_{90} = 19.9 P_{99} = 27.0

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

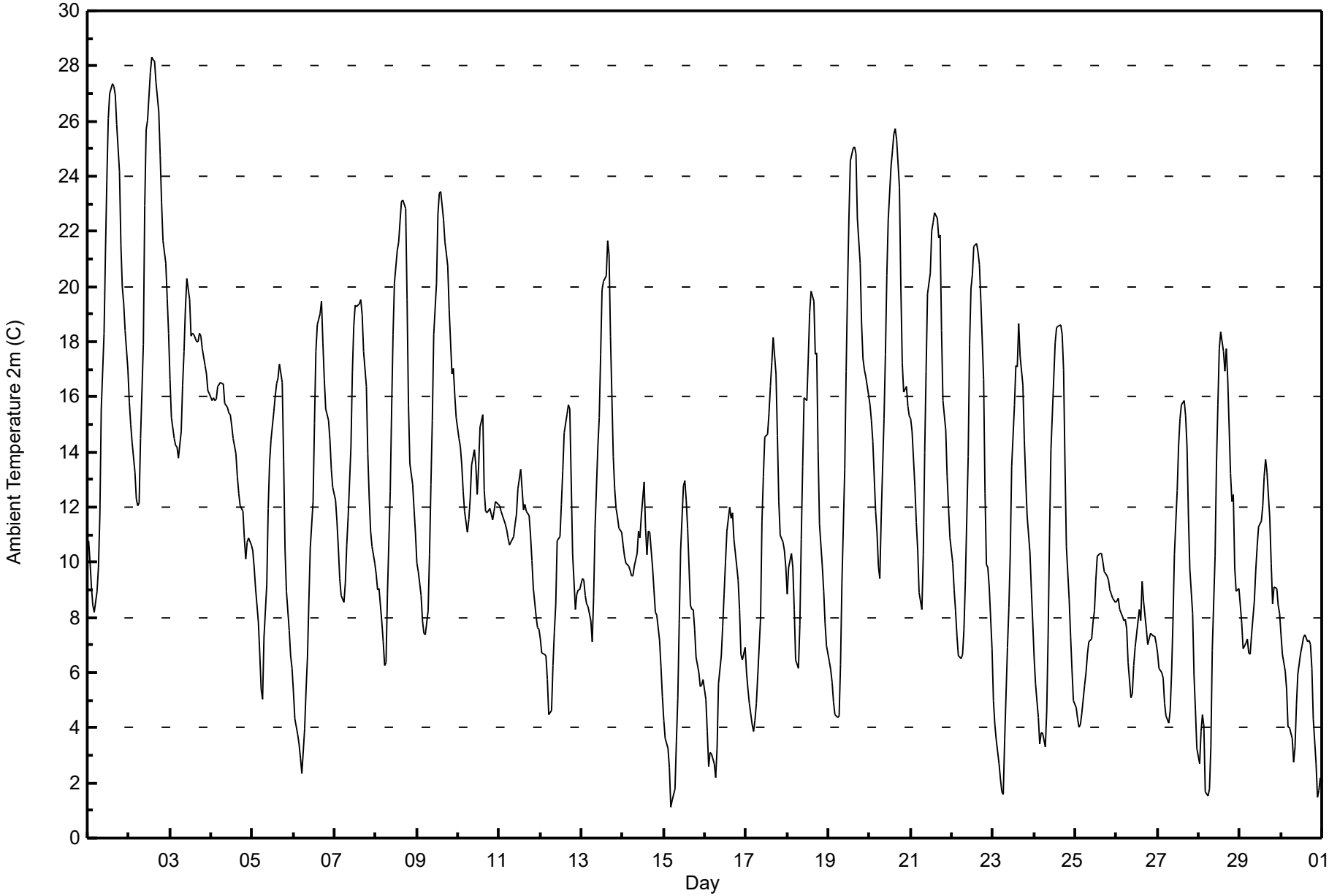
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	10.8	10.0	9.1	8.5	8.2	8.9	9.8	11.7	15.6	18.3	21.2	23.9	26.1	27.0	27.4	27.3	26.9	25.9	24.2	21.5	20.0	19.4	18.4	17.0	18.2	27.4
2-Sep	15.8	15.0	14.3	13.2	12.3	12.1	12.2	14.5	17.9	22.9	25.7	26.0	27.8	28.3	28.2	28.2	27.4	26.3	24.8	23.1	21.7	20.8	19.6	18.3	20.7	28.3
3-Sep	16.6	15.3	14.5	14.2	14.2	13.8	14.8	16.4	17.7	19.2	20.3	19.5	18.2	18.3	18.2	18.0	18.0	18.3	18.2	17.8	17.1	16.8	16.2	16.1	17.0	20.3
4-Sep	15.9	16.0	15.9	15.9	16.4	16.5	16.5	16.5	15.8	15.6	15.4	15.4	14.9	14.5	13.9	13.1	12.5	12.0	11.9	10.9	10.1	10.7	10.9	10.6	14.1	16.5
5-Sep	10.4	9.8	9.1	7.8	6.7	5.4	5.1	7.3	9.2	12.0	13.6	14.4	15.5	16.0	16.4	16.7	17.2	16.5	13.7	10.5	9.0	7.5	6.6	6.2	10.9	17.2
6-Sep	5.3	4.3	3.8	3.4	2.9	2.3	4.0	5.4	6.5	8.6	10.5	12.2	15.1	17.6	18.6	19.0	19.5	17.9	16.6	15.6	15.2	14.4	13.4	12.7	11.0	19.5
7-Sep	12.2	11.5	10.5	9.4	8.8	8.6	9.3	10.6	11.6	14.2	16.9	18.5	19.3	19.3	19.4	19.5	19.0	17.6	16.4	13.9	12.4	11.2	10.6	10.0	13.8	19.5
8-Sep	9.6	9.0	9.0	7.9	7.1	6.2	6.3	8.9	12.6	15.6	18.3	20.1	21.3	21.6	22.4	23.1	23.2	22.8	19.5	15.7	13.6	12.8	11.9	11.1	14.6	23.2
9-Sep	10.0	9.7	8.8	7.9	7.4	7.4	8.2	10.3	12.8	15.2	18.3	20.2	22.6	23.4	23.5	22.4	21.6	21.2	20.7	19.2	16.8	17.0	16.1	15.2	15.7	23.5
10-Sep	14.5	14.2	13.6	12.6	11.8	11.1	11.5	12.3	13.5	14.1	13.5	12.5	13.5	14.9	15.3	12.6	11.9	11.8	11.9	11.7	11.5	11.8	12.2	12.1	12.8	15.3
11-Sep	12.0	11.9	11.7	11.4	11.2	10.9	10.6	10.7	10.9	11.4	11.7	12.7	13.4	12.7	11.9	12.1	11.8	11.7	11.0	10.1	9.0	8.1	7.6	7.6	11.0	13.4
12-Sep	7.2	6.7	6.7	6.6	5.8	4.5	4.6	6.3	7.5	8.5	10.8	10.9	12.1	13.3	14.7	15.4	15.7	15.5	13.0	10.3	8.3	8.8	9.0	9.0	9.6	15.7
13-Sep	9.4	9.4	8.8	8.5	8.4	7.9	7.1	8.8	11.2	14.2	15.2	17.5	19.9	20.2	20.4	21.6	21.1	18.2	13.9	12.6	11.9	11.6	11.2	11.1	13.3	21.6
14-Sep	10.6	10.2	10.0	9.8	9.7	9.5	9.5	9.9	10.3	11.2	10.9	11.7	12.9	11.2	10.3	11.1	11.1	9.8	9.0	8.2	8.1	7.2	6.2	5.1	9.7	12.9
15-Sep	4.3	3.6	3.2	2.6	1.1	1.4	1.8	3.5	5.1	7.8	10.4	12.8	13.0	12.2	11.2	8.4	8.3	8.3	7.6	6.6	6.0	5.5	5.5	5.7	6.5	13.0
16-Sep	5.1	3.9	2.6	3.1	3.0	2.7	2.2	3.2	5.6	6.6	7.7	8.9	10.0	11.1	12.0	11.6	11.8	10.8	9.9	9.3	8.3	6.6	6.4	6.9	7.1	12.0
17-Sep	6.0	5.4	4.9	4.1	3.9	4.3	4.9	5.9	8.0	11.5	13.1	14.5	14.7	15.4	16.4	17.2	18.2	16.9	14.6	12.2	11.0	10.7	10.4	9.8	10.6	18.2
18-Sep	8.9	9.8	10.3	9.8	8.3	6.5	6.2	7.7	10.9	13.5	15.9	15.8	17.4	19.1	19.9	19.5	17.6	17.6	14.0	11.4	9.9	8.9	7.8	7.0	12.2	19.9
19-Sep	6.4	6.1	5.6	4.9	4.5	4.4	4.4	6.3	9.3	13.4	16.9	19.9	22.5	24.6	25.0	25.1	24.8	22.5	20.9	18.7	17.4	17.0	16.7	16.1	14.7	25.1
20-Sep	15.7	15.1	14.4	11.9	11.1	9.8	9.4	11.6	15.2	17.5	20.4	22.4	24.3	24.9	25.5	25.7	25.3	23.6	20.0	17.2	16.2	16.4	15.6	15.3	17.7	25.7
21-Sep	15.2	14.7	12.8	11.4	10.5	8.9	8.3	10.3	14.0	16.9	19.7	20.5	22.0	22.3	22.7	22.4	21.8	21.9	18.4	15.9	14.8	13.1	12.0	10.9	15.9	22.7
22-Sep	10.0	9.0	8.2	7.3	6.6	6.5	6.6	7.6	9.3	13.8	17.9	19.9	20.4	21.4	21.5	21.2	20.8	19.5	16.6	12.5	9.9	9.8	9.1	6.8	13.0	21.5
23-Sep	5.0	4.1	3.6	2.7	2.2	1.7	1.6	3.5	6.9	8.3	10.3	13.5	15.7	17.1	17.1	18.7	17.5	16.4	14.4	13.0	11.7	10.4	9.1	7.8	9.7	18.7
24-Sep	6.6	5.6	4.4	3.4	3.8	3.8	3.3	4.6	7.4	11.0	14.1	16.7	17.9	18.5	18.6	18.6	18.2	17.0	13.6	10.6	8.7	7.3	6.1	5.0	10.2	18.6
25-Sep	4.7	4.3	4.0	4.1	4.5	5.5	6.0	6.6	7.1	7.2	7.8	8.2	9.4	10.2	10.3	10.3	10.0	9.7	9.5	9.3	9.0	8.9	8.7	8.5	7.7	10.3
26-Sep	8.6	8.7	8.3	8.0	7.9	7.9	7.6	6.3	5.1	5.2	6.2	6.9	7.9	8.3	7.9	9.3	8.6	7.6	7.0	7.2	7.4	7.3	7.3	7.1	7.5	9.3
27-Sep	6.7	6.2	6.0	5.8	4.9	4.4	4.2	4.6	6.0	7.9	10.3	12.6	14.2	15.2	15.7	15.9	15.3	14.2	11.7	9.8	8.1	5.9	4.6	3.3	8.9	15.9
28-Sep	2.7	3.9	4.5	4.1	1.7	1.5	1.8	3.3	6.8	10.2	13.6	15.7	17.8	18.3	17.6	16.9	17.8	16.7	13.2	12.2	12.5	9.8	8.9	9.0	10.0	18.3
29-Sep	8.4	7.8	6.8	7.1	7.2	6.7	6.7	7.4	8.6	9.7	10.6	11.3	11.5	12.0	13.1	13.7	13.3	11.6	10.0	8.5	9.1	9.0	8.4	8.2	9.4	13.7
30-Sep	7.4	6.7	6.0	5.4	4.0	4.0	3.6	2.8	3.3	4.8	5.9	6.7	7.0	7.3	7.4	7.1	7.1	7.0	6.2	4.3	2.7	1.5	1.7	2.2	5.1	7.4
	9.4	8.9	8.4	7.8	7.2	6.8	6.9	8.2	10.1	12.2	14.1	15.4	16.6	17.2	17.4	17.4	17.1	16.2	14.4	12.7	11.6	10.9	10.3	9.7	Diurnal Average	
	16.6	16.0	15.9	15.9	16.4	16.5	16.5	16.5	17.9	22.9	25.7	26.0	27.8	28.3	28.2	28.2	27.4	26.3	24.8	23.1	21.7	20.8	19.6	18.3	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Barge Landing - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	306	42.50	42.50
10 - 20	344	47.78	90.28
> 20	70	9.72	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 100.0 % on Sep 1 05:00

Maximum Daily Average: 90.7 % on Sep 3

Minimum Value: 25.4 % on Sep 20 16:00

Minimum Daily Average: 58.4 % on Sep 20

Maximum Diurnal Average: 94.8 % at hour 7

Minimum Diurnal Average: 52.2 % at hour 15

Monthly Average: 75.05 %

Percentiles: P_1 = 28.6 P_{10} = 43.9 Q_1 = 60.6 Median = 78.8 Q_3 = 93.6 P_{90} = 99.3 P_{99} = 100.0

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

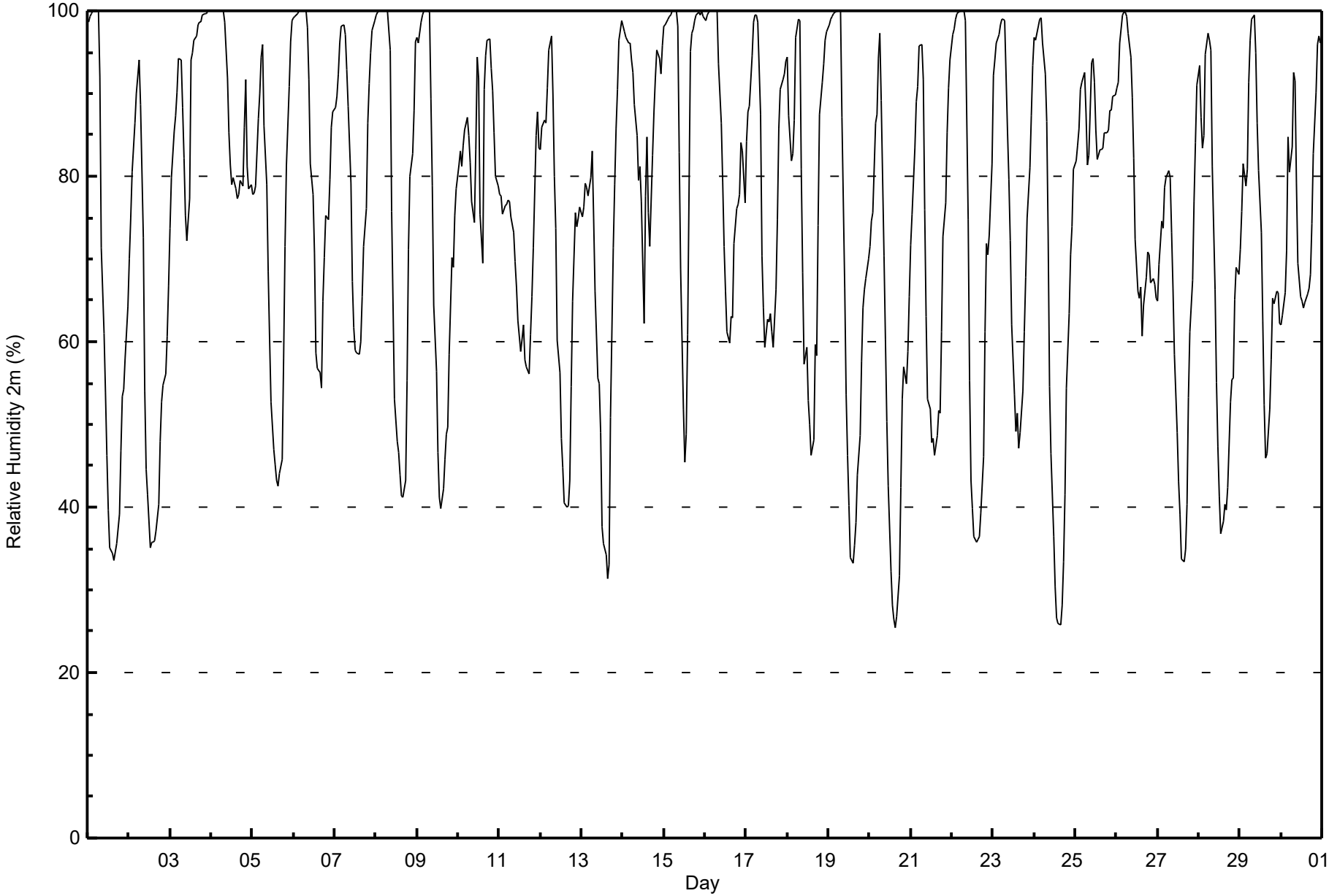
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	98.6	99.3	99.6	99.9	100.0	100.0	100.0	92.1	71.3	61.0	53.8	46.2	39.7	35.1	34.4	33.5	34.6	35.6	39.2	46.8	53.4	54.2	58.0	64.2	64.6	100.0
2-Sep	70.0	75.0	80.5	86.5	90.0	92.1	94.1	88.6	72.6	54.0	44.6	41.5	35.1	35.7	35.8	35.9	37.0	40.3	48.0	52.7	54.8	56.1	60.8	66.8	60.4	94.1
3-Sep	73.7	79.8	85.5	87.4	90.2	94.3	94.1	88.3	82.2	75.2	72.2	77.3	94.0	94.8	96.5	97.0	98.4	98.7	98.7	99.6	99.6	99.7	100.0	100.0	90.7	100.0
4-Sep	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.7	91.8	85.2	81.4	79.0	79.9	78.5	77.3	77.8	79.6	78.8	85.9	91.6	81.2	78.4	79.0	88.5	100.0
5-Sep	77.8	78.0	78.8	86.9	90.0	94.3	95.9	86.0	79.0	68.6	60.3	52.7	47.0	45.0	43.2	42.5	44.0	45.7	58.0	71.5	81.4	90.8	96.2	98.8	71.3	98.8
6-Sep	99.2	99.3	99.6	100.0	100.0	100.0	100.0	100.0	98.0	91.6	81.5	77.8	70.7	58.7	56.8	56.2	54.3	64.9	70.2	75.3	74.7	79.7	85.9	87.8	82.6	100.0
7-Sep	88.3	89.6	92.4	96.0	98.1	98.3	97.2	92.9	88.4	79.1	67.3	61.7	59.0	58.7	58.4	60.1	65.4	71.6	76.0	86.4	91.2	94.8	97.6	98.8	82.0	98.8
8-Sep	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	95.3	75.8	64.4	53.0	48.0	46.7	43.8	41.3	41.1	43.3	55.3	71.2	79.9	82.7	87.9	96.2	76.1	100.0
9-Sep	96.7	96.1	98.6	99.5	99.9	100.0	100.0	99.8	89.4	78.8	64.4	56.4	46.7	41.2	39.8	42.3	45.8	48.8	49.7	58.4	70.2	69.0	75.2	78.5	72.7	100.0
10-Sep	81.4	83.1	81.2	83.7	85.6	87.1	84.9	81.7	77.0	74.5	83.2	94.4	91.8	75.5	69.5	90.5	94.6	96.5	96.6	93.0	90.4	85.2	80.0	78.7	85.0	96.6
11-Sep	77.8	77.7	75.4	76.4	76.7	77.1	76.9	75.0	73.3	69.7	66.7	62.6	58.8	60.3	62.0	57.9	56.9	56.1	60.8	65.4	71.3	85.0	87.7	83.5	70.5	87.7
12-Sep	83.2	86.0	86.7	86.5	90.7	95.2	96.9	89.8	80.0	73.8	60.2	56.3	48.3	44.7	40.5	40.0	40.2	43.2	54.6	64.9	75.7	73.8	74.9	76.3	69.3	96.9
13-Sep	75.1	76.2	79.1	78.7	77.6	79.8	83.0	74.9	66.1	55.7	54.9	48.9	37.6	35.6	34.2	31.4	33.0	50.8	71.3	79.0	85.8	90.6	96.4	98.8	66.4	98.8
14-Sep	98.1	97.5	96.8	96.1	96.0	94.1	92.5	88.6	84.9	79.6	81.2	77.0	62.2	77.6	84.8	75.6	71.4	82.6	87.7	91.8	95.2	94.3	92.3	95.8	87.2	98.1
15-Sep	98.2	98.2	99.1	99.3	99.5	100.0	100.0	100.0	98.1	82.9	68.8	51.9	45.4	48.7	60.8	95.1	97.3	97.8	98.8	99.5	99.8	99.5	100.0	99.4	89.1	100.0
16-Sep	98.7	99.4	99.8	100.0	100.0	100.0	100.0	100.0	93.6	86.5	79.3	71.5	66.2	61.2	59.8	63.0	62.8	71.9	76.1	76.6	77.7	84.0	83.1	76.8	82.8	100.0
17-Sep	84.3	87.8	88.6	94.6	98.6	99.4	99.4	98.7	87.5	70.3	64.1	59.3	62.6	62.3	63.4	61.2	59.4	66.2	74.8	85.8	90.5	91.7	92.3	93.8	80.7	99.4
18-Sep	94.4	87.2	81.9	82.7	86.8	96.8	99.0	98.8	80.9	68.3	57.2	59.3	53.0	50.0	46.2	48.1	59.6	58.3	74.0	87.4	91.4	93.6	96.4	97.5	77.0	99.0
19-Sep	98.2	99.1	99.4	99.7	99.8	100.0	100.0	100.0	87.1	66.5	53.5	46.2	40.2	33.9	33.2	35.4	38.2	43.9	48.7	57.7	64.1	66.2	67.7	70.0	68.7	100.0
20-Sep	71.5	74.5	75.6	86.5	87.4	94.3	97.3	89.1	70.4	60.4	50.3	42.5	32.1	28.1	26.5	25.4	26.8	31.8	42.4	53.0	56.9	54.9	58.8	65.5	58.4	97.3
21-Sep	71.7	75.4	83.3	88.9	90.9	95.8	95.9	91.6	76.0	63.0	53.0	51.8	47.8	48.3	46.2	48.6	51.7	51.4	61.2	72.7	76.8	85.2	90.6	94.1	71.3	95.9
22-Sep	97.2	97.9	99.0	99.6	99.9	100.0	100.0	100.0	98.8	74.8	55.3	43.2	39.9	36.4	35.8	36.1	36.5	39.3	46.1	61.2	71.9	70.5	72.9	81.5	70.6	100.0
23-Sep	92.1	94.0	96.2	97.2	98.4	98.9	99.0	98.7	85.6	79.6	72.2	62.1	53.6	49.1	51.4	47.2	49.0	54.1	61.2	67.8	74.9	81.1	87.3	93.4	76.8	99.0
24-Sep	96.8	96.4	98.1	99.0	99.1	96.1	92.4	86.6	72.8	54.5	46.4	36.5	30.3	26.6	25.9	25.8	28.2	33.5	41.5	54.4	63.4	70.5	73.9	80.9	63.7	99.1
25-Sep	81.9	83.8	85.8	90.6	91.4	92.5	87.6	81.4	82.5	93.7	94.2	91.4	85.6	82.1	83.2	83.2	83.4	85.3	85.3	85.7	88.0	88.0	89.7	89.8	86.9	94.2
26-Sep	90.6	91.4	96.1	99.4	99.8	99.8	99.3	97.2	94.4	89.5	82.2	72.4	66.1	65.2	66.6	60.7	64.5	67.7	70.8	70.6	67.2	67.7	66.9	65.2	79.6	99.8
27-Sep	64.9	69.4	74.6	73.7	78.7	79.8	80.6	79.8	73.2	66.4	58.5	49.0	43.1	39.1	33.7	33.4	35.0	40.3	53.2	61.1	67.4	77.0	84.1	91.0	62.8	91.0
28-Sep	93.3	87.1	83.3	84.9	94.8	97.2	96.5	95.3	81.2	66.2	55.2	47.3	41.4	36.8	38.3	40.3	39.6	42.3	52.6	55.3	55.5	65.1	68.9	68.2	66.1	97.2
29-Sep	71.1	75.7	81.5	78.8	80.9	91.3	96.4	99.0	99.5	95.0	86.5	80.6	73.3	62.5	52.3	46.0	46.4	51.9	57.8	65.2	64.5	66.1	66.0	62.2	72.9	99.5
30-Sep	62.1	63.3	66.0	71.0	84.8	80.4	83.6	92.5	91.5	79.1	69.5	65.4	64.9	64.1	64.7	65.8	66.5	68.1	74.2	82.8	90.2	96.0	97.0	96.1	76.6	97.0
	86.2	87.3	88.8	90.8	92.8	94.5	94.8	92.2	84.3	74.2	66.2	60.6	55.4	52.8	52.2	53.2	54.6	58.7	65.5	72.6	77.2	79.8	82.2	84.3	Diurnal Average	
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5	95.0	94.2	94.4	94.0	94.8	96.5	97.0	98.4	98.7	98.8	99.6	99.8	99.7	100.0	100.0	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Barge Landing - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Barometric Pressure (BP) - inHg

Barge Landing - September 2026

Maximum Value: 29.2 inHg on Sep 5 10:00

Maximum Daily Average: 29.2 inHg on Sep 5

Minimum Value: 28.3 inHg on Sep 29 10:00

Minimum Daily Average: 28.4 inHg on Sep 29

Maximum Diurnal Average: 28.9 inHg at hour 10

Minimum Diurnal Average: 28.8 inHg at hour 17

Monthly Average: 28.84 inHg

Percentiles: P_1 = 28.3 P_{10} = 28.5 Q_1 = 28.7 Median = 28.9 Q_3 = 29.0 P_{90} = 29.1 P_{99} = 29.2

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

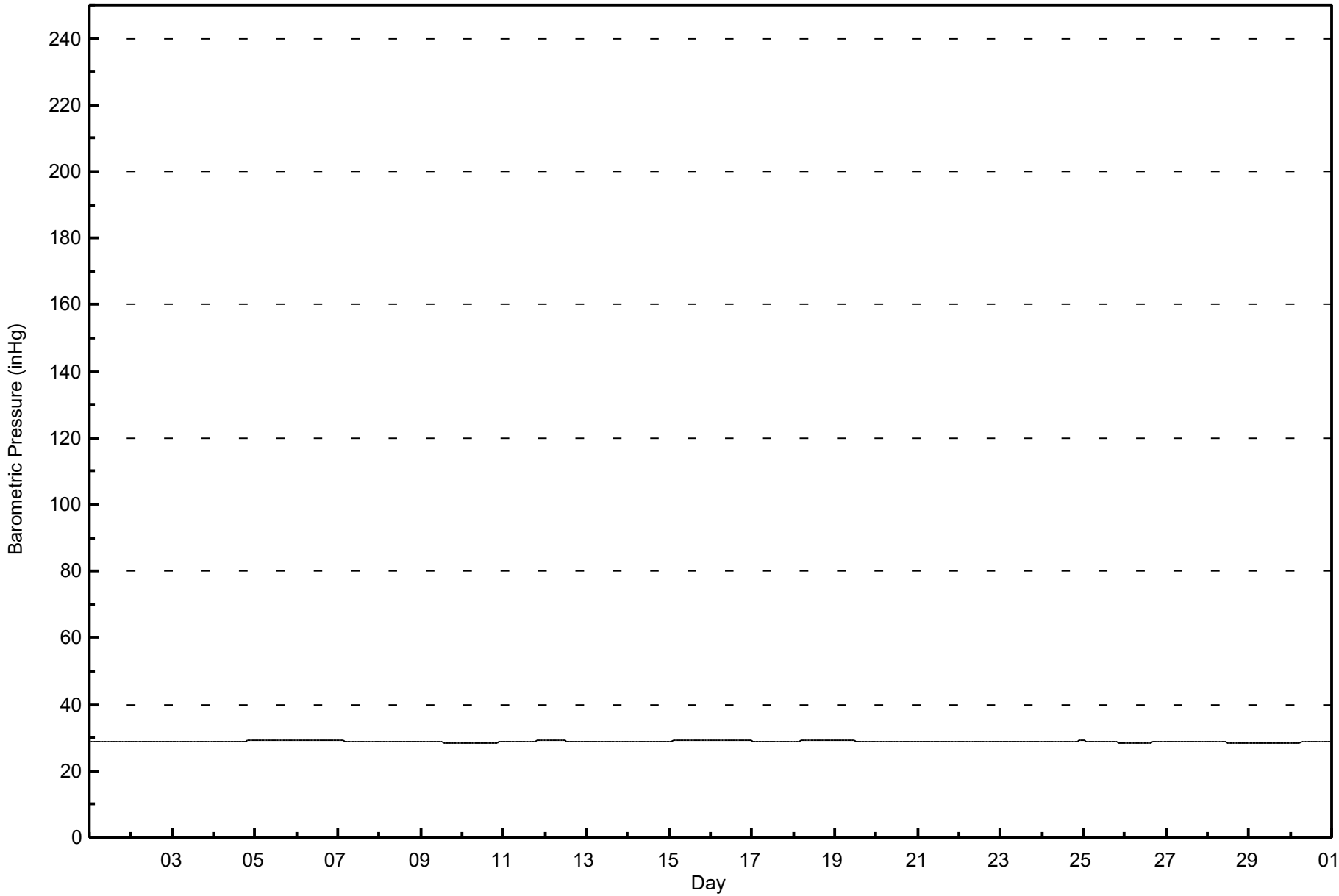
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.7	28.7	28.7	28.7	28.7	28.7	28.8	28.8	28.8	28.8	28.8
2-Sep	28.8	28.8	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	28.7	28.7	28.7	28.8
3-Sep	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	28.7	28.7	28.7	28.7	28.7
4-Sep	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	28.9	29.0	29.0	29.0	29.1	29.1	29.1	29.1	29.1	28.9	29.1
5-Sep	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	29.2	29.2	29.2	29.2	29.2
6-Sep	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	29.1	29.1	29.1	29.2
7-Sep	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	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
8-Sep	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	28.8	28.8	28.8	28.8	28.8	28.8	28.9	28.9
9-Sep	28.8	28.8	28.8	28.8	28.8	28.7	28.7	28.7	28.7	28.7	28.6	28.6	28.6	28.6	28.6	28.5	28.5	28.5	28.5	28.5	28.5	28.4	28.4	28.4	28.6	28.8
10-Sep	28.4	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	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	28.6	28.5	28.6
11-Sep	28.7	28.7	28.7	28.7	28.8	28.8	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	29.1	29.1	29.1	29.1	28.9	29.1
12-Sep	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	28.9	28.9	28.9	28.9	28.9	28.9	28.9	29.0	29.1
13-Sep	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	28.7	28.7	28.7	28.7	28.7	28.8	28.8	28.8	28.8	28.8	28.8	28.9
14-Sep	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	28.9	28.9	28.9	28.9	28.9	29.0	29.0	29.0	29.0	29.0	28.9	29.0
15-Sep	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	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1	29.1	29.0	29.1
16-Sep	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.1	29.2
17-Sep	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	29.0	29.0	29.0	28.9	29.0
18-Sep	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	29.1	29.1	29.1	29.1	29.1	29.1
19-Sep	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	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	29.0	29.1
20-Sep	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	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.9	28.9
21-Sep	28.8	28.8	28.9	28.9	28.8	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	28.6	28.7	28.7	28.7	28.7	28.7	28.8	28.9
22-Sep	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	28.8	28.8	28.9	28.9	28.9	28.9	28.8	28.9
23-Sep	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	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	29.0
24-Sep	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	29.0
25-Sep	29.0	29.0	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	28.7	28.7	28.7	28.6	28.6	28.6	28.6	28.5	28.5	28.8	29.0
26-Sep	28.5	28.5	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.5	28.5	28.5	28.5	28.5	28.6	28.6	28.6	28.6	28.6	28.7	28.7	28.7	28.7	28.7	28.5	28.7
27-Sep	28.7	28.7	28.7	28.7	28.7	28.7	28.7	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	28.7	28.8
28-Sep	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	28.6	28.5	28.5	28.5	28.5	28.5	28.5	28.4	28.4	28.4	28.4	28.6	28.7
29-Sep	28.4	28.4	28.4	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
30-Sep	28.5	28.5	28.5	28.5	28.6	28.6	28.6	28.6	28.7	28.7	28.8	28.8	28.8	28.8	28.9	28.9	28.9	28.9	28.9	29.0	29.0	29.0	29.0	29.0	28.8	29.0
	28.8	28.8	28.8	28.8	28.8	28.8	28.9	28.9	28.9	28.9	28.9	28.9	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	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 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 20m (WS20) - km/h

Barge Landing - September 2026

Maximum Speed: 31 km/h on Sep 25 13:00

Maximum Daily Speed Average: 19.5 km/h on Sep 11

Minimum Speed Value: 0 km/h on Sep 17 06:00

Minimum Daily Speed Average: 1.6 km/h on Sep 8

Maximum Diurnal Speed Average: 5.8 km/h at hour 15

Minimum Diurnal Speed Average: 1.9 km/h at hour 20

Monthly Average Velocity: 3.2 km/h 244.3 deg

Percentiles: P_1 = 2 P_{10} = 4 Q_1 = 6 Median = 10 Q_3 = 15 P_{90} = 20 P_{99} = 26

Hours in Service: 720

Hours of Data: 720

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-Sep	S4	WSW3	SE5	SSE6	SSE9	SE9	ESE8	S5	SSE10	SSE12	SE11	SSE12	SSE16	SSE18	SSE18	SE21	SE21	SE20	SE16	SE13	SE16	SE17	SE16	SE14	SE12.1	SE21
2-Sep	SE11	ESE12	SE11	SSE8	SSE8	SSE6	SSE3	NNW6	NW6	SSE10	SE14	SE18	SE24	SE26	SE26	SE26	SE24	ESE18	ESE16	ESE18	ESE18	SE16	SSE11	SE8	SE13.1	SE26
3-Sep	ESE7	ESE7	SE9	ENE3	NE5	NE4	NNW7	NNW5	NW6	NW6	ESE6	ESE13	E6	ENE8	ENE7	ENE10	NNE4	NNW6	NNW6	NNE4	NE7	NNE5	N6	N7	NE3.8	ESE13
4-Sep	N6	NE7	NE6	NNW4	NNW7	NNW6	NNW6	NNW10	N14	N16	N21	N19	N20	N21	N21	N24	N25	N19	N20	N17	N13	NNW12	NNW14	N15	N14.0	N25
5-Sep	NNW15	NNW14	NNW12	NNW8	NNW11	NNW10	NW5	NW4	N4	NE9	NE11	NNE9	NE8	NE9	NNE8	N6	SSE2	W5	WNW6	NW5	N4	ENE6	NW3	WNW4	N5.8	NNW15
6-Sep	WSW6	SSW5	SSE3	SE6	SE4	SSE2	NW2	SE3	W2	NW6	W3	WSW3	SSE6	SE16	S11	SSE10	SSE8	SSE6	SE8	SE9	SE10	SE13	SE13	SE11	SSE5.3	SE16
7-Sep	SE11	SE12	SE10	SE5	SE9	SE8	NE4	SE4	SE8	SSE14	S15	SSE13	SSE11	S9	SW3	S5	SSE8	SSE7	SSE8	SE9	S8	SSE7	SSE7	S6	SSE7.8	S15
8-Sep	SSW6	WSW5	WNW6	NW4	WNW2	SW4	W4	WNW2	WNW4	NW6	NW8	NNW8	NNW6	N3	WSW3	S4	S4	SE6	SE7	ESE7	SSE6	SSE9	S4	SW8	SW1.6	SSE9
9-Sep	SSW7	S8	SE9	SSE7	SE8	SSE10	SE11	SSE11	SSE11	S12	S15	S15	SSW17	SW20	SW19	SW19	SW16	SW16	SW17	SW17	S11	WSW11	WSW13	WSW17	SSW11.1	SW20
10-Sep	WSW17	W14	W12	WSW13	WSW13	SW11	SW15	WSW15	WSW14	W18	W15	WSW12	W14	W20	WNW19	WNW15	W15	W12	WNW10	NW15	NW12	NW16	WNW19	NW17	W13.2	W20
11-Sep	NW19	NW19	NW21	NW20	NW22	NNW24	NNW23	NNW25	NNW25	NNW26	NNW26	NNW24	NNW22	NW24	NW23	NW19	NW20	NNW20	NNW16	NNW18	NW8	NW10	NW8	WNW9	NW19.5	NNW26
12-Sep	WNW7	W6	W5	W6	NW5	W6	WSW3	SW4	WSW4	WSW6	SSW3	WNW5	S3	SW3	WSW5	SSW9	SSW8	SW9	SSW9	S10	S11	S10	S8	S9	SW4.8	S11
13-Sep	SSW11	SSW9	S10	S10	SSW10	SSW9	SSW8	SSW10	SSW13	SW11	SSW10	S11	WSW16	SW17	SW13	WSW12	WSW8	N9	NNE20	N15	N11	N9	NNW10	NNW13	WSW4.6	NNE20
14-Sep	N16	N16	N14	N13	N16	NNW15	NNW15	NNW13	NNW13	N15	NNW14	N15	N16	N18	NNW14	N15	NNW13	NNW11	NNW9	NW6	WNW5	NW7	WNW6	W7	NNW11.8	N18
15-Sep	W8	W8	WNW8	W9	WSW7	WSW8	WSW7	S5	S6	SW8	SW9	SW14	SW14	SW9	NW8	NE8	ESE7	S6	S5	W5	WNW8	NW8	NW7	N11	WSW4.7	SW14
16-Sep	NNW9	NNW6	WSW6	W5	WNW4	NNW4	WSW3	SW4	SSW5	SSW6	SSW7	SSW10	S10	S10	S11	S8	S7	SE7	ESE10	E11	ESE8	SSE8	SE9	SE10	S3.8	S11
17-Sep	E8	E7	ESE6	SE4	N3	SE0	ESE1	NNW2	WSW2	SSE11	SSW10	SSW8	S8	SW5	S7	SW5	S8	S10	S9	S8	S6	SW5	W6	WSW6	S4.2	SSE11
18-Sep	SW8	SW7	SW7	WSW5	WNW6	NW9	NNW7	NW4	NW5	NNW4	E2	W6	WSW5	SW2	SW5	SE5	SSE6	SE4	SSE5	ESE8	SSE4	SE2	SE7	SSE7	SW1.8	NW9
19-Sep	S6	S7	SSE8	SE10	SSE10	SSE8	SSE7	S5	S6	SSE10	SSE12	SSE13	SSE15	SSE20	SSE21	S21	S18	SSW13	S14	SSE13	SSE14	SSE13	SSE13	SSE11	SSE11.8	S21
20-Sep	S10	SSE6	SSW6	S7	SSE10	SE8	SE8	SSE6	S8	SSW9	S11	SSW12	SW13	WSW16	WSW11	SW14	SSW10	SSW9	S10	SSE11	SSE13	S14	SSE12	SSE12	S9.0	WSW16
21-Sep	S12	S11	S9	S8	SSW5	SW6	S6	SSE4	SSE6	S7	S7	S6	SSE6	WNW3	NNW8	N7	NNW9	NNW5	WNW6	SSW8	S9	SW4	WSW6	S3	SSW3.8	S12
22-Sep	WSW4	W5	W2	W0	S6	S6	SSW4	WNW5	W5	NW8	NNW12	NW15	WNW10	W12	WSW16	WSW18	WSW16	WSW11	WSW10	SW6	WSW8	WSW6	W6	W5	W6.6	WSW18
23-Sep	W3	SSW7	SSW6	S5	SSE7	SSE7	SE7	SW2	SE3	SW3	SSW6	SSE6	SSE4	SSE5	SSE3	SSE6	SE9	SE10	SE13	SE11	SSE10	S10	SSE10	S7	SSE5.8	SE13
24-Sep	SSW7	SW5	WSW4	SW7	SW7	SSW8	S9	S10	SSW8	SW11	SW10	SW16	WSW18	WSW20	WSW19	WSW17	WSW15	WSW9	SW9	SSW7	S7	ESE1	WNW5	W5	SW8.8	WSW20
25-Sep	S2	NW3	NNE6	NW4	NNW6	NNW8	NNW9	NNW14	NNW8	NNE13	NNE19	NNE24	NNE31	NNE27	NNE23	NNE26	NNE26	N22	N23	N19	N18	N22	N19	N21	N15.5	NNE31
26-Sep	N16	N14	NNW12	NW12	WNW8	WSW12	W11	W16	W20	W19	W20	W25	W25	W25	W26	W29	W27	W24	W21	W20	W22	W24	W22	W20	W17.8	W29
27-Sep	W18	WSW15	W21	WSW24	WSW23	WSW22	WSW20	WSW18	WSW20	WSW19	SW20	WSW18	SW20	WSW20	WSW22	WSW19	WSW19	WSW15	SW11	SW11	SW10	SSW9	SSW8	SSW3	WSW16.4	WSW24
28-Sep	SW8	SW9	SSW11	SSW8	SSE7	SSE9	S9	S7	S10	S12	S12	SW16	SW18	WSW25	SW19	SSW16	SSW17	SSW14	SSE12	S14	S10	SSE11	SSE10	SE11	SSW10.6	WSW25
29-Sep	SSE10	SSW3	SSE8	SSE9	SSE10	SSE13	SSE12	SSE11	S10	SW12	WSW16	W15	W19	W19	W20	W23	W25	W21	W15	SW8	W15	W20	W20	WNW25	WSW10.3	W25
30-Sep	WNW20	WNW19	WNW19	W17	WNW18	W18	WNW16	WNW14	WNW12	NW16	NW20	NW20	NW19	WNW19	WNW17	WNW13	WNW9	NW12	WNW11	WNW7	NNW7	NW6	NW4	WNW4	WNW13.7	NW20
	WSW3.0	W2.6	WSW2.5	WSW3.2	WSW2.6	WSW2.8	WSW2.6	WSW3.2	WSW3.5	WSW3.7	WSW3.5	WSW4.2	WSW4.4	WSW5.3	WSW5.8	WSW4.4	SW4.1	WSW3.4	SW1.9	SSW1.9	SSW2.4	SW2.5	WSW2.4	W2.8	Diurnal Average	
	WNW20	NW19	W21	WSW24	WSW23	NNW24	NNW23	NNW25	NNW25	NNW26	NNW26	W25	NNE31	NNE27	W26	W29	W27	W24	N23	W20	W22	W24	W22	WNW25	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: 9 km/h on Sep 13 18:00

Minimum Value: 1 km/h on Sep 6 04:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 2 Q_3 = 4 P_{90} = 6 P_{99} = 8

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

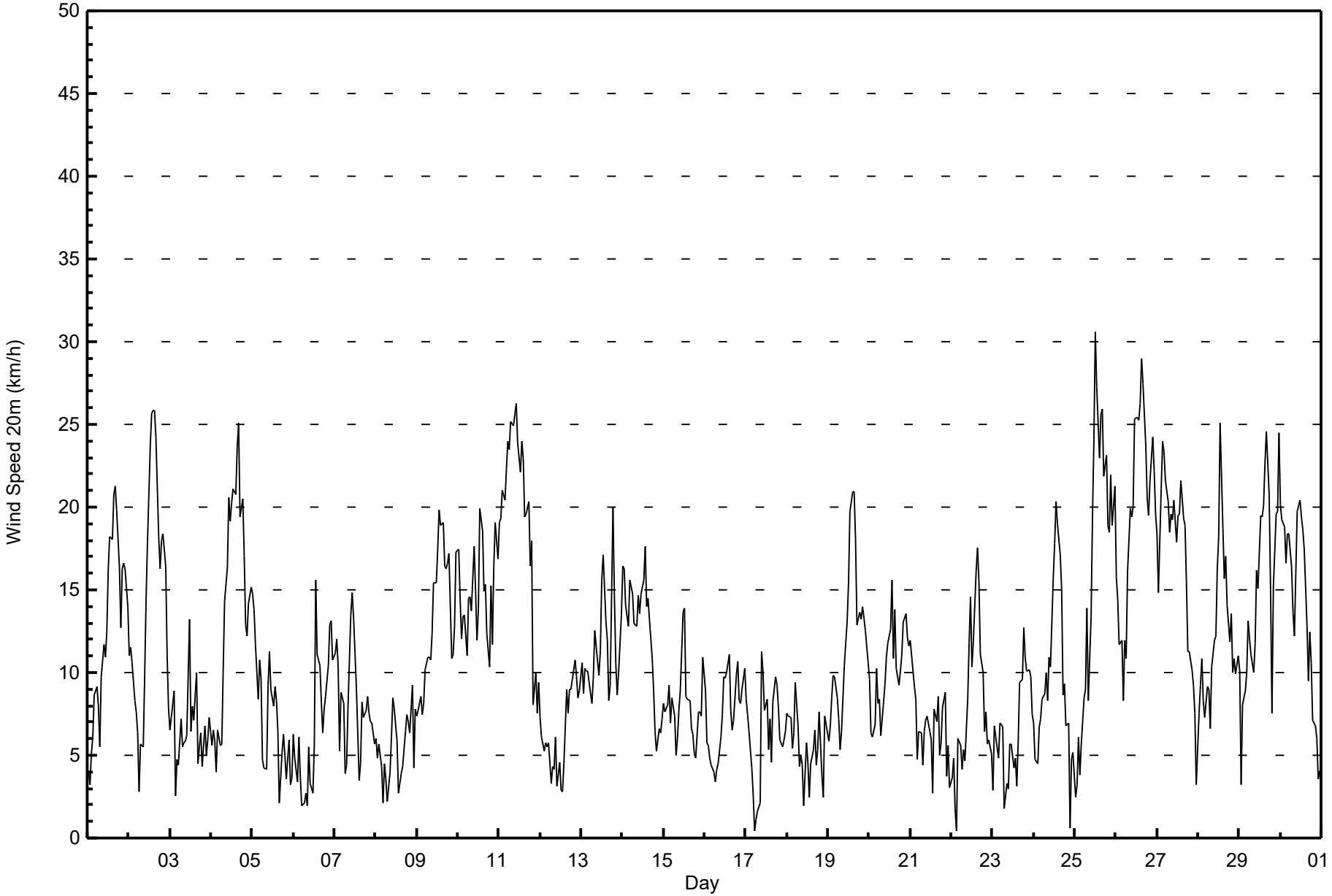
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	1	2	2	1	1	1	3	3	3	3	3	4	5	5	5	5	5	5	3	2	2	3	3	2	5
2-Sep	1	1	2	1	2	1	2	1	1	5	4	6	6	6	6	7	5	5	4	4	3	4	3	2	7
3-Sep	2	1	1	2	1	1	2	1	1	2	5	4	2	2	2	2	3	1	2	3	1	2	1	2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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 20m (WS20) - km/h

Barge Landing - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	125	17.36	17.36
6 - 11	324	45.00	62.36
12 - 19	188	26.11	88.47
20 - 28	81	11.25	99.72
29 - 38	2	0.28	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 20m (WS20) - km/h

Barge Landing - September 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	1	1	2	11	10	13	7	14	13	14	11	12	7	125
6 - 11	9	3	8	4	4	11	33	55	56	34	22	16	11	15	17	26	324
12 - 19	22	3	0	0	0	6	14	20	11	7	18	27	17	13	12	18	188
20 - 28	11	6	0	0	0	0	8	2	1	0	3	9	22	2	8	9	81
29 - 38	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	45	16	11	5	5	19	66	87	81	48	57	65	65	41	49	60	720

Total Number of Valid Hours: 720

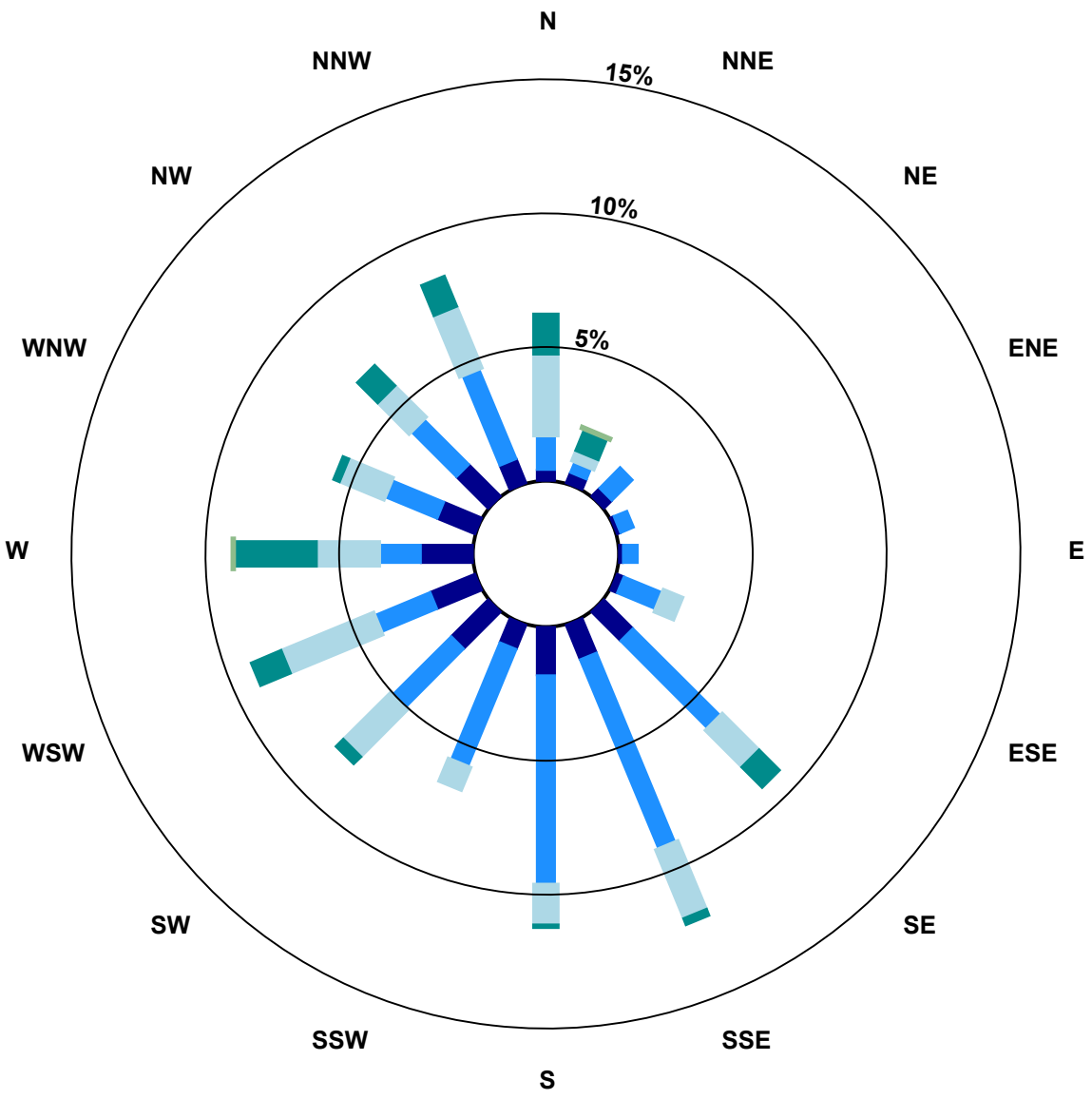
Total Number of Hours: 720

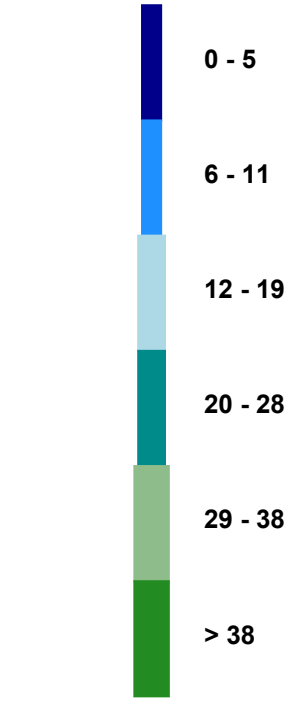
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 20m (WS20) - km/h

Barge Landing





Total Number of Valid Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 20m (WD20) - deg

Barge Landing - September 2026

Direction of Maximum Speed: 21 deg on Sep 25 13:00
Direction of Maximum Daily Speed Average: 326.1 deg on Sep 11

Direction of Minimum Speed: 136 deg on Sep 17 06:00

Direction of Minimum Daily Speed Average: 1.6 deg on Sep 8

Monthly Average Direction: 244.3 deg

Hours in Service:	720
Hours of Data:	720
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-Sep	187	244	141	152	149	143	121	182	156	148	144	161	153	148	155	141	142	138	135	128	131	130	132	132	143.3
2-Sep	127	119	132	152	151	150	165	334	319	162	145	142	142	134	133	130	126	122	113	118	121	136	147	124	132.5
3-Sep	114	108	127	78	38	48	343	336	326	323	112	122	90	65	62	67	31	346	335	19	42	18	355	349	47.6
4-Sep	10	55	35	342	340	345	329	346	351	4	6	2	7	3	356	359	358	359	359	353	350	348	345	349	357.9
5-Sep	346	340	339	331	345	346	318	325	349	35	43	26	53	42	31	2	160	266	302	304	349	69	318	286	356.4
6-Sep	241	192	156	139	133	157	321	130	281	323	262	237	164	136	173	162	153	155	132	136	135	143	133	133	152.1
7-Sep	125	131	145	140	134	141	48	137	145	160	176	162	163	170	230	173	148	149	150	141	170	163	156	177	152.6
8-Sep	198	238	293	314	296	220	265	288	301	321	321	328	346	354	249	175	170	146	136	119	151	163	191	222	230.9
9-Sep	193	183	137	152	137	151	144	154	168	170	189	188	205	220	225	227	220	219	228	223	187	239	256	249	202.8
10-Sep	253	280	276	253	240	224	224	239	254	264	260	241	259	281	295	287	274	272	295	318	305	308	300	308	272.8
11-Sep	306	314	321	324	326	328	328	331	334	336	336	336	335	315	323	325	326	332	327	327	322	326	305	298	326.1
12-Sep	296	273	274	278	309	267	246	228	239	237	197	286	187	219	239	198	204	220	208	187	172	178	177	180	220.2
13-Sep	213	200	179	186	197	203	195	206	199	219	196	188	241	235	233	256	242	6	17	11	358	355	346	343	237.2
14-Sep	3	355	356	354	349	347	344	348	347	352	345	353	5	356	346	356	348	337	335	320	284	307	295	269	346.0
15-Sep	269	273	284	268	257	254	239	178	173	217	220	235	230	222	317	45	118	178	175	265	295	319	315	352	254.0
16-Sep	345	338	255	276	292	331	239	232	203	206	192	199	177	188	180	185	171	137	108	100	123	150	126	124	170.7
17-Sep	96	87	116	138	5	136	121	327	237	166	207	210	191	226	174	217	189	173	171	180	174	220	276	258	182.0
18-Sep	233	224	232	256	294	326	328	321	325	332	82	260	247	236	235	143	148	143	151	117	159	141	130	150	220.2
19-Sep	189	170	148	145	149	148	147	186	180	167	158	150	151	162	167	171	170	193	177	163	160	162	164	164	164.0
20-Sep	171	160	208	176	161	140	140	154	175	194	185	194	224	241	237	219	212	198	182	160	163	169	167	168	185.6
21-Sep	182	185	175	176	208	229	180	148	168	177	181	171	161	283	330	354	332	347	292	212	188	222	255	189	200.5
22-Sep	242	273	265	275	176	172	208	289	276	324	334	308	302	271	248	257	245	239	256	235	240	250	277	271	264.2
23-Sep	261	212	209	180	161	165	140	216	146	235	204	168	154	149	152	162	134	129	135	138	158	176	162	177	162.4
24-Sep	212	226	237	215	221	208	189	184	196	225	224	231	249	258	245	250	247	238	218	193	179	120	289	267	229.8
25-Sep	172	324	19	308	327	334	337	337	339	19	30	24	21	24	14	14	12	7	9	2	352	357	1	351	6.5
26-Sep	2	353	343	323	301	258	269	259	267	272	262	267	272	273	274	266	270	267	264	265	272	264	269	272	275.4
27-Sep	259	246	261	258	251	252	248	245	247	243	234	242	232	238	255	248	242	241	225	223	225	205	194	200	243.2
28-Sep	220	214	211	203	151	168	172	174	170	182	186	221	236	241	232	210	196	199	165	184	175	148	148	137	195.8
29-Sep	150	205	168	156	160	148	147	163	185	220	238	259	276	277	279	278	273	268	264	221	279	260	279	282	249.2
30-Sep	294	297	290	281	284	281	283	285	295	310	316	320	308	303	291	285	292	304	296	302	335	308	305	287	297.2
	251.6	260.0	248.0	244.3	246.2	239.4	244.9	258.2	251.4	250.9	238.4	243.7	246.6	252.5	258.3	249.0	234.7	239.8	229.9	198.4	195.8	215.5	244.3	260.0	
	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

Barge Landing - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 99 deg on Sep 18 14:00

Minimum Value: 5 deg on Sep 3 03:00

Percentiles: P_1 = 6 P_{10} = 10 Q_1 = 14 Median = 18 Q_3 = 25 P_{90} = 39 P_{99} = 88

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

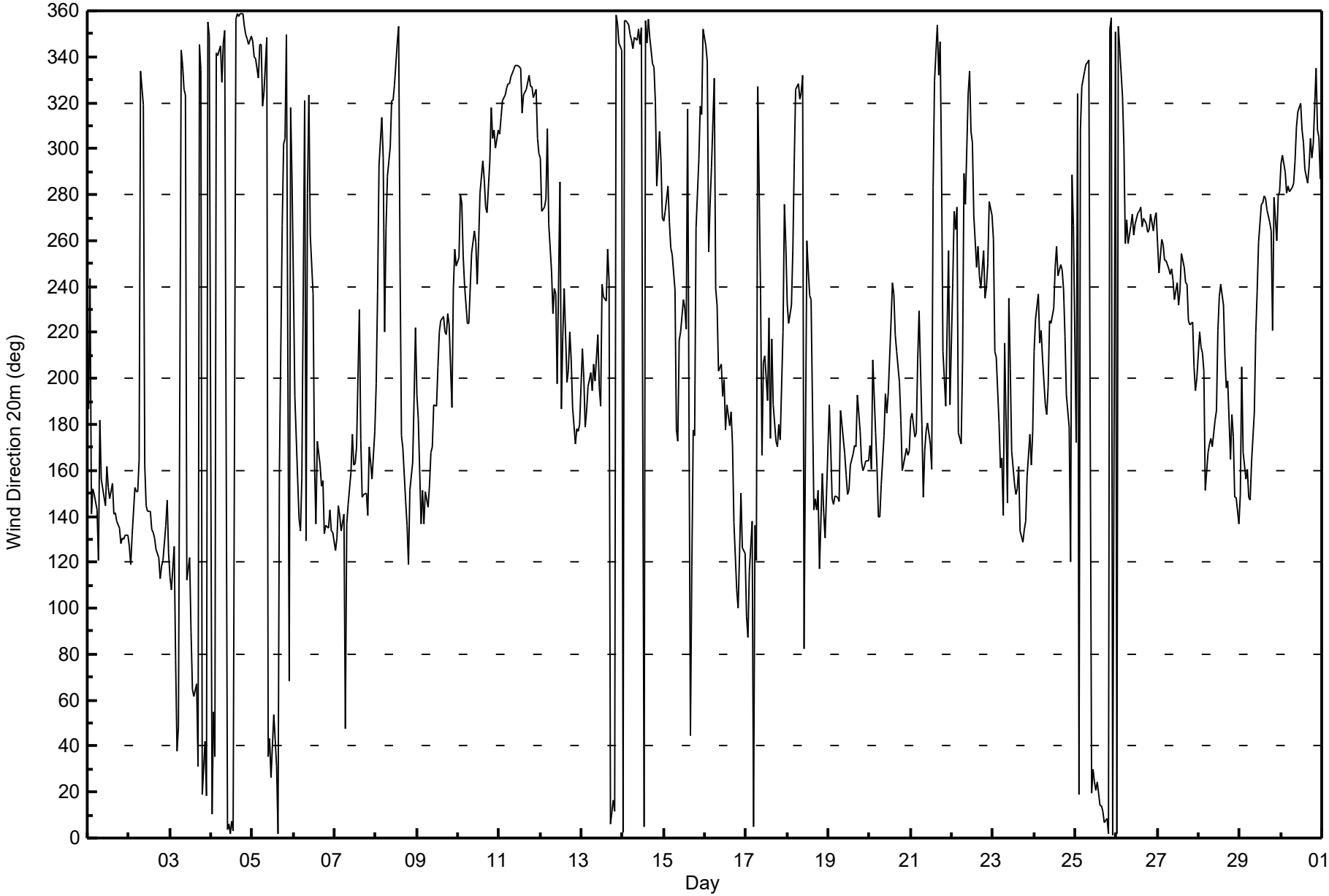
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	26	33	33	16	13	15	27	50	25	17	18	22	20	19	21	17	16	13	11	8	8	9	9	8	50
2-Sep	8	6	10	10	10	9	75	9	21	63	20	17	15	16	16	13	12	11	10	10	9	14	13	14	75
3-Sep	22	9	5	48	48	40	14	13	17	31	86	12	19	19	19	12	38	19	10	45	15	35	16	19	86
4-Sep	20	9	19	29	28	20	13	12	16	17	18	17	17	18	19	19	19	19	18	18	15	15	13	15	29
5-Sep	15	13	13	17	16	16	33	26	42	35	27	43	35	27	37	48	81	39	14	17	28	25	44	24	81
6-Sep	12	17	43	10	13	72	65	28	73	22	31	42	57	17	24	26	22	16	8	7	12	12	9	9	73
7-Sep	7	7	11	30	7	11	38	61	16	15	20	20	28	32	73	37	13	11	8	8	22	23	12	19	73
8-Sep	32	14	14	14	33	33	31	26	32	22	21	36	54	96	69	64	40	17	9	7	13	8	42	16	96
9-Sep	9	22	9	33	26	21	11	14	17	16	22	22	21	20	21	16	18	16	20	18	15	35	15	14	35
10-Sep	16	18	17	18	18	16	17	18	18	16	15	18	21	16	18	16	15	17	17	15	16	17	15	16	21
11-Sep	16	16	17	17	17	16	17	16	17	16	16	21	25	22	18	19	17	19	17	16	17	20	17	15	25
12-Sep	18	19	30	31	22	14	21	24	35	22	91	59	89	92	72	31	33	19	13	11	9	10	9	9	92
13-Sep	18	23	12	12	14	15	14	21	18	28	26	25	22	18	18	22	23	72	15	16	17	16	13	16	72
14-Sep	18	18	17	18	16	15	15	17	18	18	17	19	20	19	16	19	18	16	18	14	16	13	19	13	20
15-Sep	11	14	16	9	20	10	14	35	25	28	27	24	20	25	65	35	32	36	25	26	10	13	14	14	65
16-Sep	11	19	13	19	14	40	65	25	39	30	25	24	35	41	28	28	27	12	9	9	15	8	13	10	65
17-Sep	11	11	18	22	67	90	89	41	68	20	31	39	25	26	33	39	20	11	9	18	13	42	14	13	90
18-Sep	14	21	16	16	19	12	13	39	29	53	88	31	51	99	68	49	43	33	26	6	25	60	7	6	99
19-Sep	13	12	7	6	10	7	15	17	24	23	20	18	16	16	19	18	18	15	14	9	7	10	9	10	24
20-Sep	12	24	35	24	14	15	7	16	20	26	22	22	33	22	20	22	17	14	16	9	6	9	9	10	35
21-Sep	11	12	11	11	44	15	22	21	26	26	33	28	31	60	16	19	16	21	38	26	16	32	20	47	60
22-Sep	33	15	82	87	26	39	46	30	37	23	19	22	23	31	20	17	19	14	14	16	9	16	29	23	87
23-Sep	62	30	20	24	12	18	14	66	41	56	34	39	42	38	52	39	13	12	8	6	13	10	13	12	66
24-Sep	14	29	19	21	26	17	14	14	22	20	20	20	20	19	21	19	16	13	8	17	13	93	39	25	93
25-Sep	84	70	29	35	45	12	17	12	34	14	14	14	13	14	15	15	15	16	16	19	17	19	18	17	84
26-Sep	17	19	22	19	19	19	22	16	17	17	17	17	17	17	17	18	16	16	15	16	16	15	17	16	22
27-Sep	14	15	16	15	15	14	14	16	16	17	14	16	19	19	19	18	15	16	12	11	12	14	14	56	56
28-Sep	15	13	15	28	18	13	12	18	15	22	26	20	21	18	19	17	20	18	13	15	23	6	12	6	28
29-Sep	8	56	10	16	10	7	8	9	16	20	15	17	18	18	18	18	20	16	16	30	20	17	20	19	56
30-Sep	17	15	17	18	15	16	16	17	19	18	17	18	18	17	18	18	17	17	16	30	19	18	35	33	35
	84	70	82	87	67	90	89	66	73	63	91	59	89	99	73	64	81	72	38	45	28	93	44	56	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 20m (WD20) - deg

Barge Landing - September 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS11
LOWER CAMP
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - LOWER CAMP (AMS11)
SEPTEMBER 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	685	34	35	99.86	41.2	0	6.7	0
H2S (ppb) Average	649	37	71	95.28	13.5	10	7.5	2
THC (ppm) Average	686	33	34	99.86	3.5	-	2.4	-
CH4(ppm) Average	686	33	34	99.86	3.5	-	2.4	-
NMHC(ppm) Average	686	33	34	99.86	0.042	-	0.004	-
Temperature (C) Average	720	0	0	100	26.8	-	21.5	-
Relative Humidity (%) Average	720	0	0	100	99.5	-	88.4	-
Barometric Pressure (inHg) Average	720	0	0	100	29.4	-	29.4	-
Wind Speed 10 m (km/h) Average	720	0	0	100	31	-	23	-
Wind Direction 10 m (deg) Average	720	0	0	100	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - LOWER CAMP (AMS11)
SEPTEMBER 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	685	1.28	3.6	-	0	0	0	0.2	0.7	2.8	41.2
H2S (ppb) Average	649	0.95	1.9	-	0	0.1	0.1	0.3	0.8	1.9	13.5
THC (ppm) Average	686	2.19	0.2	-	2	2	2	2.1	2.2	2.5	3.5
CH4(ppm) Average	686	2.19	0.2	-	2	2	2	2.1	2.2	2.5	3.5
NMHC(ppm) Average	686	0	0.002	-	0	0	0	0	0	0	0.042
Temperature 2 m (C) Average	720	13.06	5.2	-	3.3	7.1	9.2	12	16.9	20.3	26.8
Relative Humidity (%) Average	720	72.96	18.4	-	24.2	45.2	60.8	76.4	88.6	95.2	99.5
Barometric Pressure (inHg) Average	720	29.02	0.2	-	28.5	28.7	28.9	29	29.2	29.3	29.4
Wind Speed 10 m (km/h) Average	720	10.6	7	-	0	3	5	9	14	21	31
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - LOWER CAMP (AMS11)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
SO2, THC/NMHC/CH4	02 Sep 2026 09:00	02 Sep 2026 09:00	1	Maintenance - verify daily QA response
H2S	21 Sep 2026 02:00	22 Sep 2026 10:00	33	Analyzer Failure- UV lamp failure
H2S	29 Sep 2026 12:00	29 Sep 2026 12:00	1	Maintenance - sample manifold cleaned

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Lower Camp - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 41.2 ppb on Sep 18 14:00 Maximum Daily Average: 6.7 ppb on Sep 29

Minimum Value: 0.0 ppb on Sep 1 01:00 Minimum Daily Average: 0.0 ppb on Sep 11
Maximum Diurnal Average: 3.3 ppb at hour 17 Minimum Diurnal Average: 0.2 ppb at hour 5
Monthly Average: 1.28 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.2 Q_3 = 0.7 P_{90} = 2.8 P_{99} = 19.2

Hours in Service:	720
Hours of Data:	685
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-Sep	0.0	0.2	0.3	Z	0.1	0.1	0.0	0.0	0.1	0.1	0.3	0.5	1.2	2.0	1.5	2.3	1.2	5.6	3.2	1.1	0.2	0.1	0.0	0.0	0.9	5.6
2-Sep	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	M	Z	0.1	2.4	1.2	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	2.4
3-Sep	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.2	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.2
4-Sep	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	0.0	0.1
5-Sep	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	0.1	0.1	0.1	1.0	2.5	0.6	0.3	0.2	0.2	2.5
6-Sep	0.1	0.2	Z	0.4	0.3	0.2	0.2	0.3	0.3	0.3	0.6	0.5	0.7	2.4	1.0	0.6	0.3	0.3	0.5	0.2	0.1	0.2	0.2	0.2	0.4	2.4
7-Sep	0.2	0.1	0.1	Z	0.1	0.1	0.0	0.1	0.1	0.3	0.5	1.5	1.0	0.2	0.3	18.3	6.4	3.6	3.2	1.0	0.4	0.1	0.0	0.1	1.6	18.3
8-Sep	0.0	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.3	1.3	2.4	8.7	15.5	0.9	1.0	0.9	0.9	0.3	0.1	0.1	1.4	15.5
9-Sep	0.1	0.1	0.0	0.0	0.1	Z	0.1	0.2	0.3	0.2	0.3	0.8	1.4	0.6	1.4	1.1	7.5	8.3	1.2	5.2	2.3	4.0	0.9	0.2	1.6	8.3
10-Sep	Z	0.9	0.6	2.2	0.1	0.0	0.0	0.0	0.0	2.1	2.9	3.6	0.2	2.2	0.8	0.2	0.0	6.8	2.9	0.2	0.0	0.0	0.0	0.0	1.1	6.8
11-Sep	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
12-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	1.9	20.0	24.0	1.1	0.7	2.4	4.6	0.5	0.5	3.0	5.1	2.1	1.4	0.7	12.3	11.8	4.0	24.0
13-Sep	2.5	0.8	0.7	Z	0.5	0.5	0.4	0.4	0.5	0.5	0.7	0.4	1.2	1.2	0.8	0.4	0.6	2.1	0.4	0.1	0.1	0.1	0.0	0.0	0.6	2.5
14-Sep	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
15-Sep	0.0	0.0	0.0	0.2	0.0	Z	1.4	1.8	2.2	1.4	0.4	0.1	0.1	0.6	1.2	1.0	0.4	0.5	0.6	1.3	0.6	2.4	0.5	0.2	0.7	2.4
16-Sep	Z	0.1	0.1	0.0	0.0	0.0	0.0	0.8	1.2	4.6	9.4	2.3	1.1	1.9	2.5	0.9	1.3	0.4	0.2	0.1	0.1	0.1	0.0	0.1	1.2	9.4
17-Sep	0.0	Z	0.0	0.0	0.2	0.3	0.2	0.1	1.1	0.4	0.5	0.3	0.2	0.3	1.8	3.0	4.6	1.2	0.4	0.2	0.2	0.1	0.2	0.2	0.7	4.6
18-Sep	0.2	0.3	Z	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	1.4	17.2	41.2	22.2	13.8	9.9	6.6	2.1	1.1	0.5	0.4	0.6	0.7	5.2	41.2
19-Sep	0.7	0.9	0.5	Z	0.8	0.8	0.4	0.3	0.4	1.2	0.8	0.7	0.6	0.5	0.3	0.3	0.3	2.0	0.8	0.2	0.2	0.2	0.1	0.1	0.6	2.0
20-Sep	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	0.0	1.5	1.2	5.1	1.1	2.1	1.6	0.2	0.1	0.0	0.1	0.6	5.1
21-Sep	0.0	0.2	0.1	0.4	0.2	Z	0.0	0.0	0.1	0.1	0.0	0.1	0.8	0.4	0.3	0.7	0.8	0.4	0.7	1.5	0.9	0.1	0.1	1.1	0.4	1.5
22-Sep	Z	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	10.2	0.1	0.1	2.0	0.1	0.0	0.0	0.1	0.1	1.6	0.2	0.6	10.2
23-Sep	0.0	Z	0.3	0.2	0.1	0.0	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.6	0.7	0.4	0.4	0.3	0.1	0.2	0.2	0.3	0.2	0.2	0.7
24-Sep	0.2	0.4	Z	2.4	0.2	0.1	0.0	0.2	0.2	0.5	0.4	0.8	0.6	0.0	0.0	0.0	0.5	10.1	2.8	2.7	0.9	0.4	0.3	0.2	1.0	10.1
25-Sep	0.1	0.2	0.1	Z	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	0.2
26-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.6	0.8	0.5	0.3	0.1	4.4	3.9	3.1	9.3	11.3	18.9	13.1	5.1	7.8	9.6	4.5	4.0	2.4	4.3	18.9
27-Sep	0.6	0.3	0.3	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	4.7	0.9	5.4	19.0	11.5	14.4	2.5	19.0
28-Sep	Z	5.4	0.6	0.3	0.2	0.1	0.0	0.5	0.3	0.6	1.4	0.8	1.6	3.5	3.8	5.9	0.8	0.8	0.2	0.1	0.2	0.4	0.2	0.2	1.2	5.9
29-Sep	0.4	Z	0.3	0.3	0.3	0.1	0.0	0.0	0.1	C	C	C	C	16.5	23.7	7.2	21.1	4.2	0.6	0.8	8.4	23.4	8.7	10.7	6.7	23.7
30-Sep	13.0	0.4	Z	0.2	0.1	2.9	1.4	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.3	0.0	0.8	13.0
	0.7	0.4	0.2	0.3	0.2	0.2	0.2	0.2	0.4	1.2	1.5	0.8	1.2	3.0	2.7	2.6	3.3	2.4	1.3	1.0	1.2	1.9	1.4	1.5	Diurnal Average	
	13.0	5.4	0.7	2.4	0.8	2.9	1.4	1.8	2.2	20.0	24.0	4.4	17.2	41.2	23.7	18.3	21.1	13.1	5.1	7.8	9.6	23.4	12.3	14.4	Diurnal Maximum	

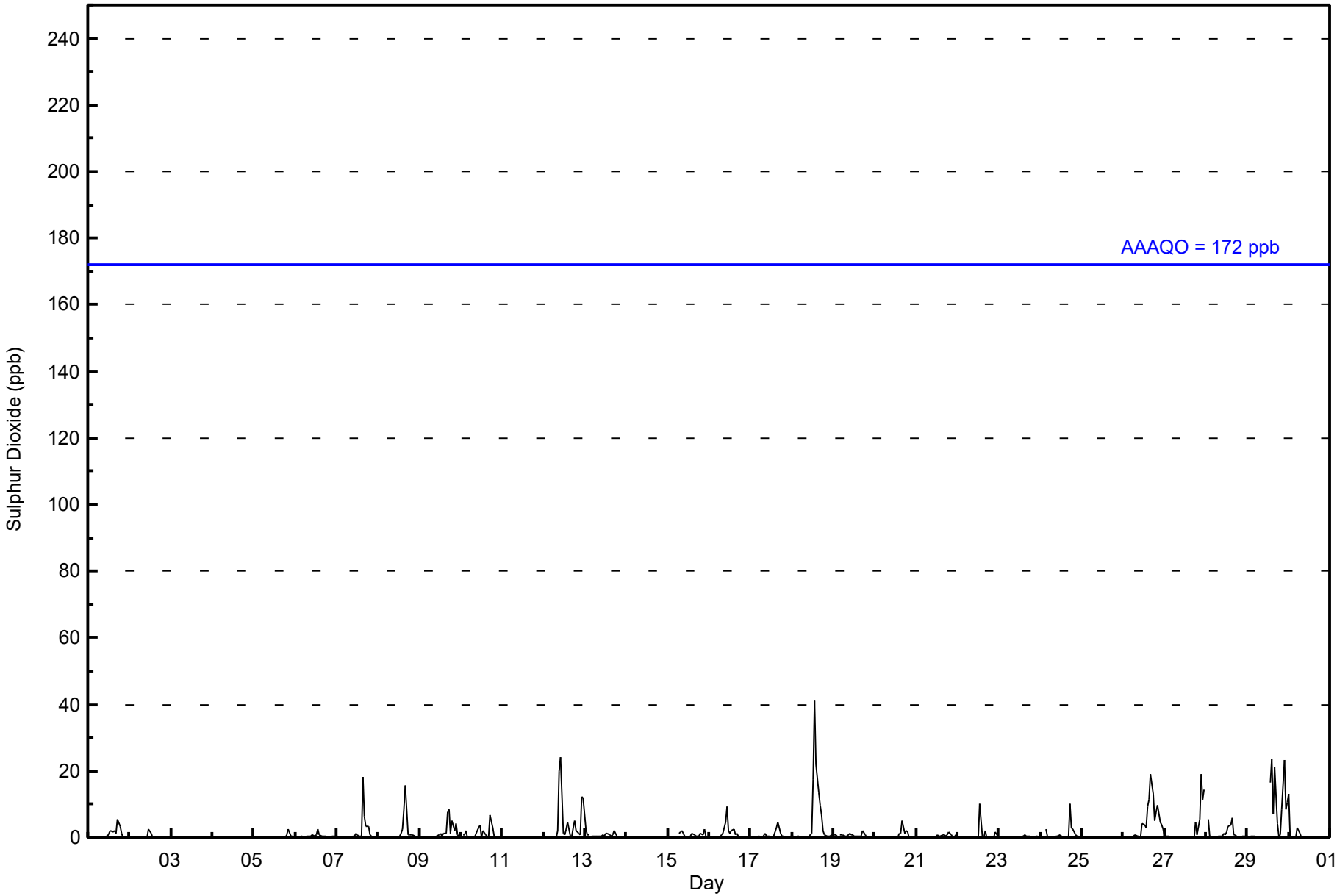
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Lower Camp - September 2026



Sulphur Dioxide (SO_2) - ppb
Lower Camp - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	663	96.79	96.79
11 - 20	16	2.34	99.12
21 - 60	6	0.88	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Lower Camp - September 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	52	22	10	8	13	32	168	61	27	14	17	33	51	47	57	51	663
11 - 20	1	0	1	1	0	0	0	0	0	0	3	2	0	7	1	0	16
21 - 60	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	2	6
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	53	22	11	10	13	32	168	61	27	14	20	35	51	57	58	53	685

Total Number of Valid Hours: 685

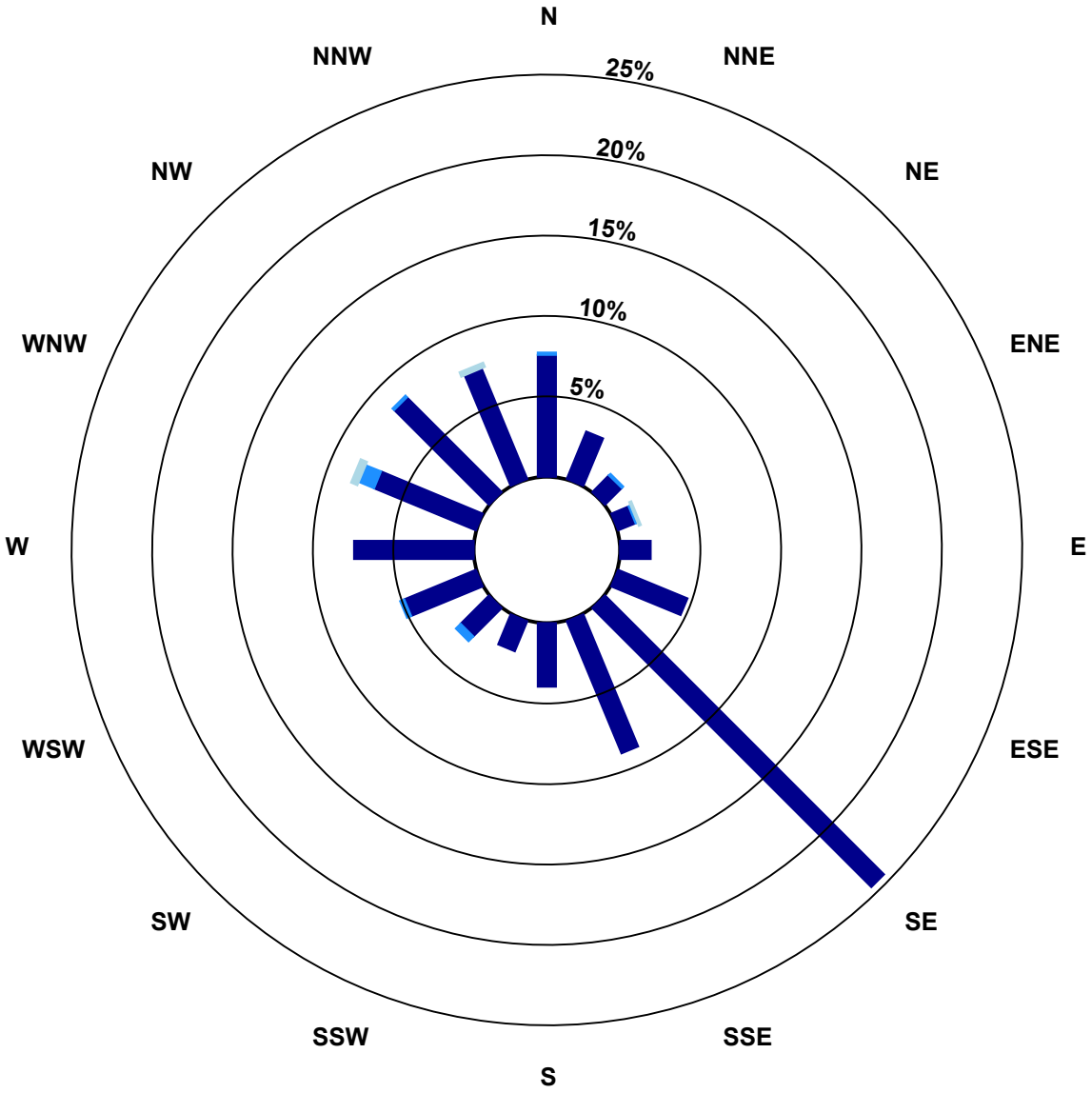
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Lower Camp



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

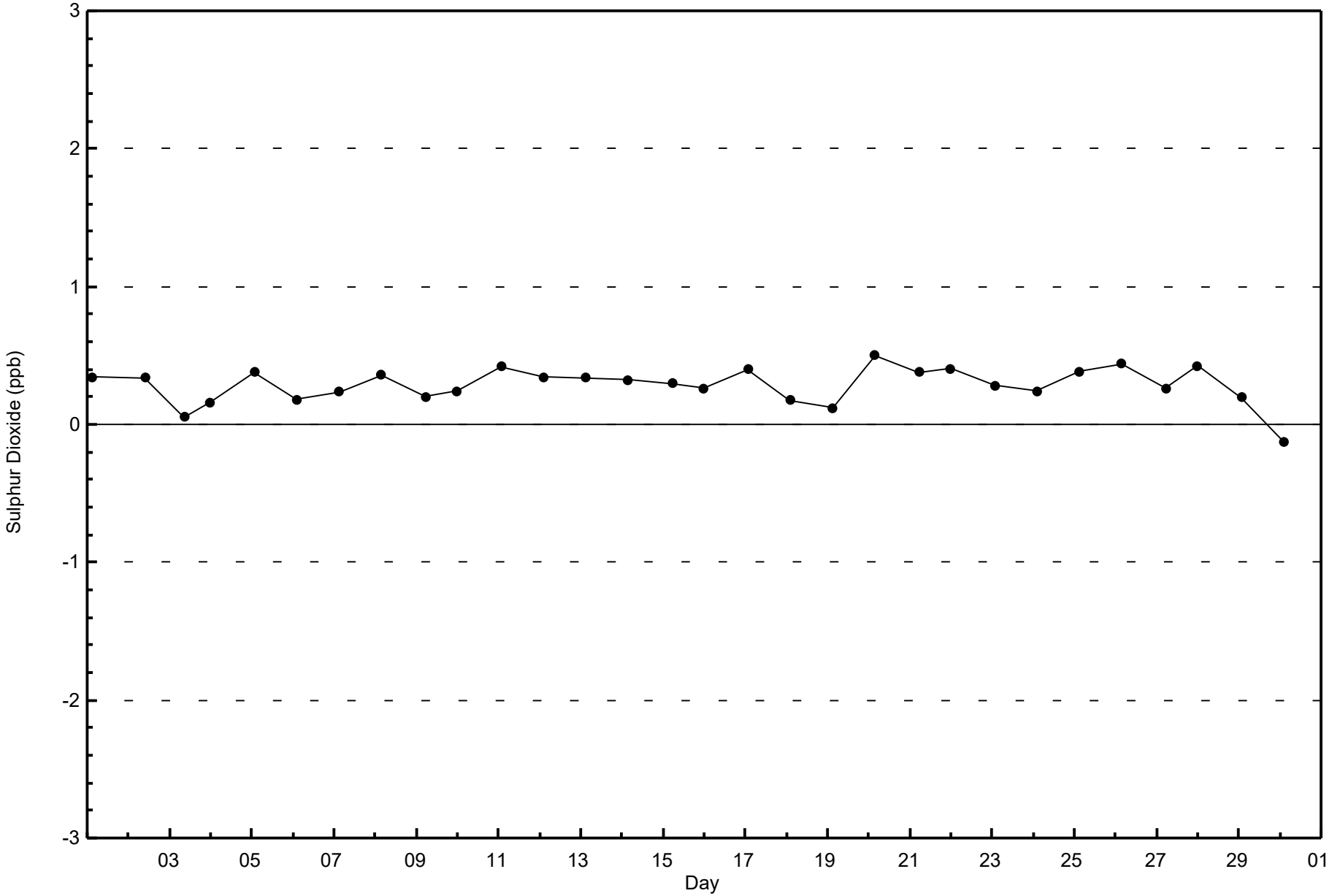
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Lower Camp - September 2026

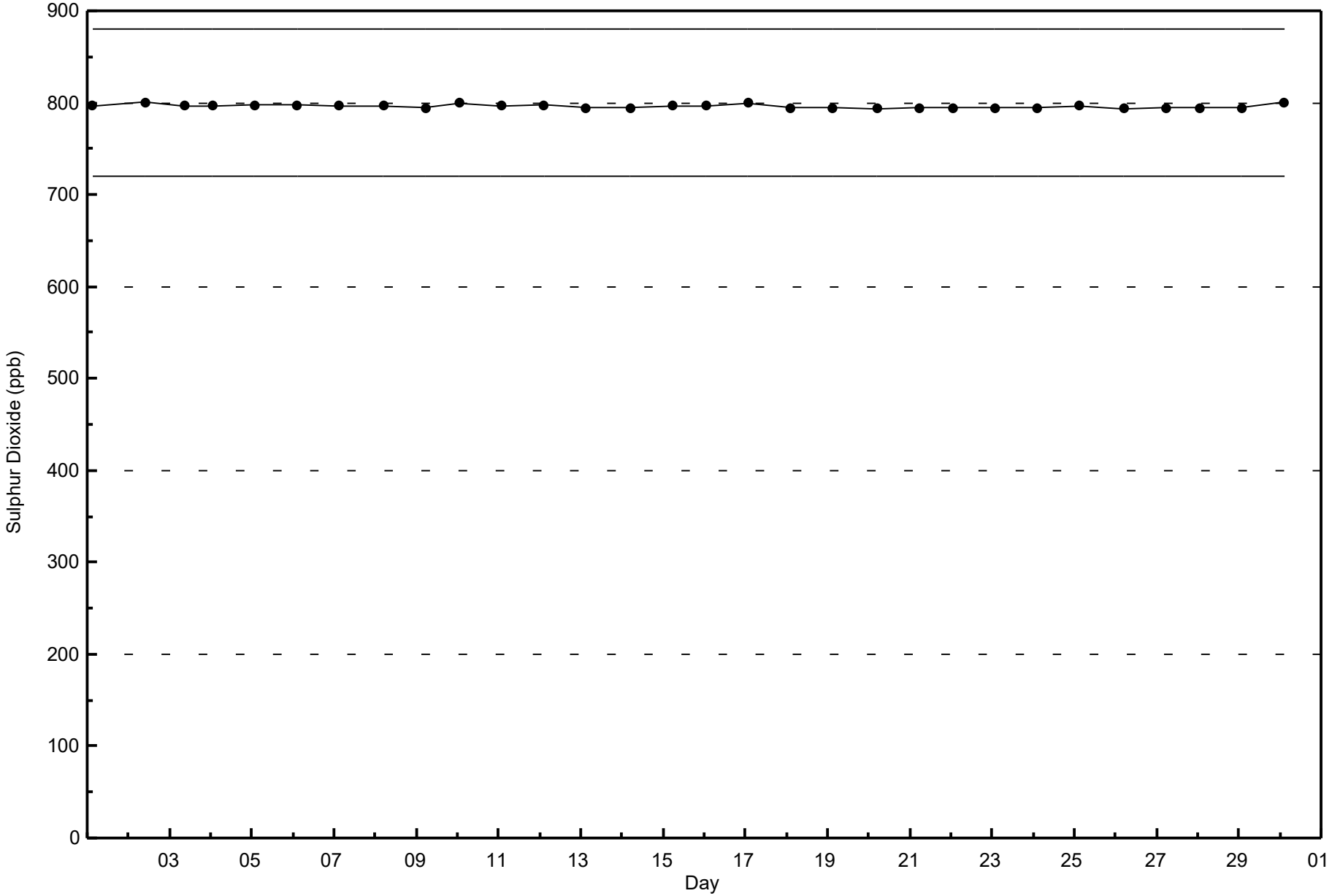


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Lower Camp - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Lower Camp - September 2026

Number of Exceedances (AAAQO): 1-hr: 10 24-hr: 2
Maximum Value: 13.5 ppb on Sep 2 03:00 Maximum Daily Average: 7.5 ppb on Sep 2

Minimum Value: 0.0 ppb on Sep 19 15:00 Minimum Daily Average: 0.1 ppb on Sep 27
Maximum Diurnal Average: 2.1 ppb at hour 3 Minimum Diurnal Average: 0.3 ppb at hour 12
Monthly Average: 0.95 ppb Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.1 Median = 0.3 Q_3 = 0.8 P_{90} = 1.9 P_{99} = 10.8

Hours in Service:	720
Hours of Data:	649
Hours of Missing Data:	71
Hours of Calibration:	37
Percent Operational Time:	95.3

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-Sep	1.4	1.5	1.4	1.6	Z	2.3	1.9	2.9	1.3	0.8	0.4	0.2	0.3	0.3	0.3	0.4	0.5	0.9	0.6	1.0	7.2	7.0	3.6	1.2	1.7	7.2
2-Sep	1.4	5.1	13.5	10.9	9.7	10.9	9.7	5.0	4.1	5.0	Z	2.4	5.7	7.7	7.4	7.6	8.6	13.0	9.0	2.2	7.2	9.6	10.4	6.4	7.5	13.5
3-Sep	Z	11.9	12.2	10.7	9.8	10.4	7.1	6.1	3.0	2.0	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.5	0.2	1.1	0.6	3.3	12.2
4-Sep	3.9	Z	3.5	1.1	0.6	0.9	0.6	0.8	0.5	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.2	0.2	0.7	3.9
5-Sep	0.2	0.1	Z	0.6	0.4	0.5	1.0	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.3	0.8	0.7	0.6	0.5	0.3	1.0
6-Sep	0.6	1.2	1.7	Z	1.6	1.5	3.0	4.3	11.8	8.6	2.1	0.9	0.3	1.4	0.3	0.2	0.1	0.1	0.6	0.3	1.9	1.5	0.5	1.3	2.0	11.8
7-Sep	0.8	0.9	0.7	1.0	Z	0.9	1.0	2.7	0.9	2.2	0.2	0.4	0.1	0.0	0.1	0.1	4.8	3.0	3.1	3.3	1.3	1.0	0.7	1.6	1.3	4.8
8-Sep	0.7	0.8	1.1	0.8	0.8	Z	1.2	1.3	1.0	0.4	0.4	0.3	0.1	0.1	0.1	0.5	0.6	0.0	0.1	0.2	0.6	0.9	1.4	1.1	0.6	1.4
9-Sep	Z	0.8	0.8	0.9	1.9	1.5	2.0	2.0	0.7	0.4	0.2	0.1	0.1	0.0	0.0	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.6	2.0
10-Sep	0.1	Z	2.8	0.3	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.4	0.2	0.8	1.5	0.7	2.8	1.5	2.3	1.5	0.1	0.2	2.2	0.2	0.8	2.8
11-Sep	0.1	0.1	Z	0.1	0.2	0.3	0.3	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	0.3	0.2	0.2	0.1	0.2	0.3
12-Sep	0.1	1.0	1.3	Z	0.4	0.4	0.7	0.7	0.4	0.5	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.1	0.4	0.3	0.3	1.3
13-Sep	0.8	0.8	1.1	1.6	Z	0.7	0.8	0.9	0.6	0.3	0.4	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.3	0.2	0.3	0.6	0.7	0.8	0.5	1.6
14-Sep	0.7	0.1	0.1	0.2	0.2	Z	0.4	0.4	0.5	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.5	0.2	0.7	0.4	0.2	0.6	1.0	0.3	1.0
15-Sep	Z	1.8	1.4	0.7	0.6	1.0	0.2	0.2	0.2	0.4	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.5	0.5	0.6	0.5	0.3	0.4	1.8
16-Sep	0.3	Z	0.2	0.3	0.2	0.5	0.2	0.4	0.4	C	C	C	C	C	0.4	0.3	0.9	1.8	0.9	0.3	0.3	2.3	4.1	1.6	0.9	4.1
17-Sep	3.8	2.3	Z	0.4	1.4	1.9	0.7	0.5	0.2	0.1	0.1	0.2	0.2	0.3	0.5	0.3	0.2	0.1	0.2	0.4	0.4	0.7	1.5	1.9	0.8	3.8
18-Sep	1.4	1.5	1.1	Z	0.4	0.4	1.6	1.2	0.5	0.2	0.1	0.1	0.4	0.4	0.3	0.1	0.2	0.1	0.6	2.0	0.9	2.4	0.9	1.2	0.8	2.4
19-Sep	1.1	1.1	1.7	0.9	Z	0.8	0.6	0.7	1.0	0.9	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.4	0.7	0.1	0.6	0.5	1.7
20-Sep	0.6	0.9	0.6	0.9	0.7	Z	0.7	0.5	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.4	0.2	0.3	0.2	0.2	0.3	0.3	0.9
21-Sep	Z	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	--	--
22-Sep	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	C	C	C	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	--	0.3
23-Sep	0.2	0.9	Z	1.4	0.7	0.5	0.9	2.7	1.2	0.6	1.5	0.3	0.8	1.5	1.8	0.5	0.1	0.6	0.6	0.6	0.7	0.3	0.5	0.6	0.8	2.7
24-Sep	0.4	0.4	0.3	Z	0.8	0.4	0.3	0.3	0.5	0.3	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.3	0.4	1.1	2.2	0.4	2.2
25-Sep	1.3	1.7	1.1	1.1	Z	0.9	0.9	0.9	1.0	1.1	0.2	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.5	1.7
26-Sep	0.2	0.3	0.3	0.1	0.1	Z	0.1	0.1	0.1	0.1	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	0.2	0.3
27-Sep	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	0.0	0.0	0.0	0.2	0.1	0.2	0.6	0.3	0.4	0.1	0.6
28-Sep	0.4	Z	0.8	1.9	0.8	0.4	0.4	0.5	0.3	0.6	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.4	0.3	1.9
29-Sep	0.6	0.9	Z	1.1	0.7	1.0	0.5	0.7	0.6	0.3	0.2	M	0.3	0.3	0.2	0.1	0.3	0.1	0.0	0.0	0.1	0.2	0.1	0.2	0.4	1.1
30-Sep	0.2	0.2	0.1	Z	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.4	0.1	0.4	0.3	0.3	0.5	0.2	0.5
	0.9	1.5	2.1	1.7	1.4	1.6	1.3	1.3	1.1	1.0	0.3	0.3	0.4	0.5	0.5	0.4	0.7	0.8	0.7	0.5	0.9	1.1	1.1	0.9	Diurnal Average	
	3.9	11.9	13.5	10.9	9.8	10.9	9.7	6.1	11.8	8.6	2.1	2.4	5.7	7.7	7.4	7.6	8.6	13.0	9.0	3.3	7.2	9.6	10.4	6.4	Diurnal Maximum	

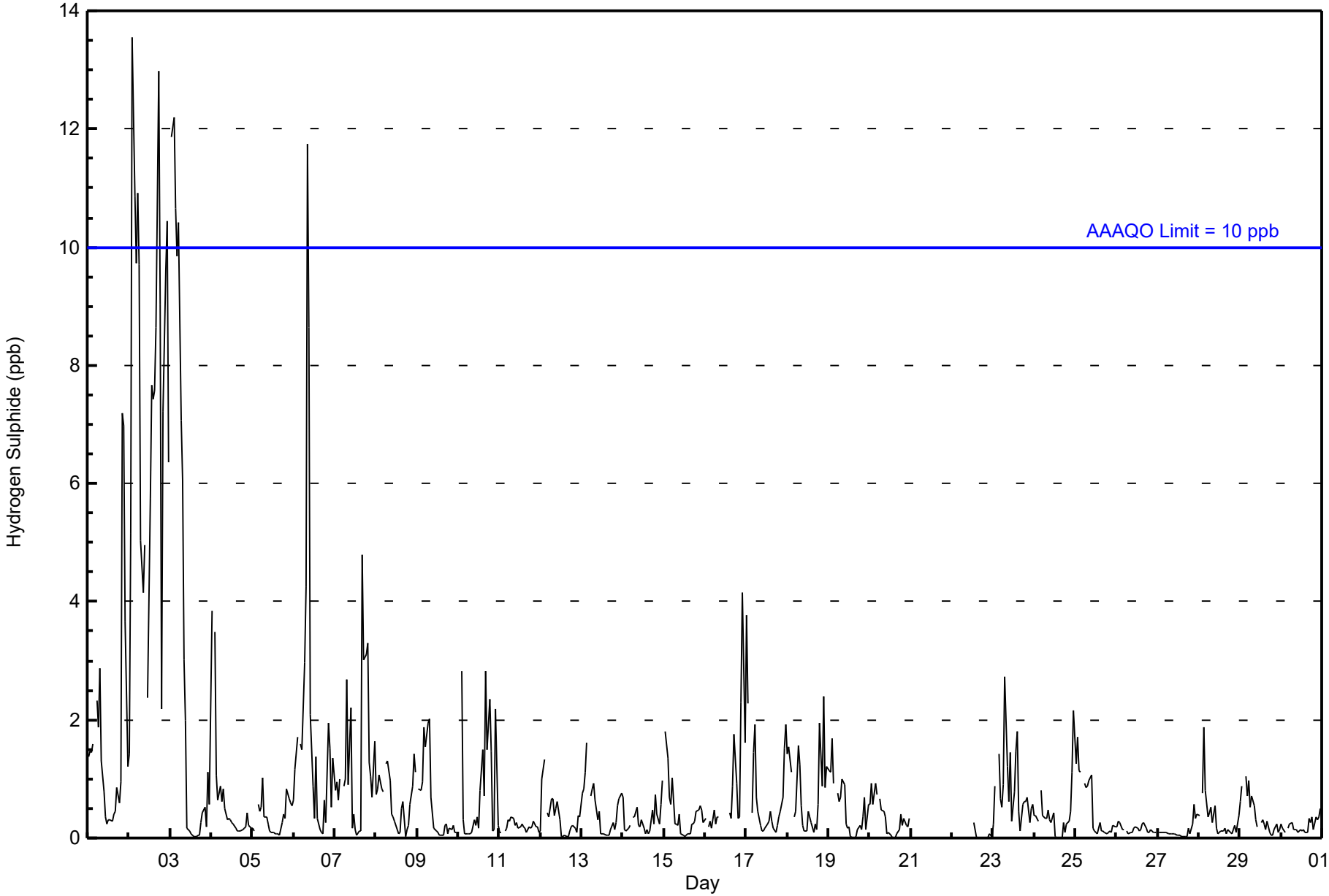
Z - zerospan C - Calibration M - Maintenance AF - Analyzer Failure
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Lower Camp - September 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Lower Camp - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	601	92.60	92.60
3 - 4	17	2.62	95.22
5 - 7	12	1.85	97.07
8 - 11	11	1.69	98.77
> 11	8	1.23	100.00

Total Number of Valid Hours: 649

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Lower Camp - September 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	51	22	10	7	13	24	122	53	22	9	20	37	51	57	54	49	601
3 - 4	0	0	0	1	0	5	8	0	0	0	0	0	0	2	1	0	17
5 - 7	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	12
8 - 11	0	0	0	0	0	1	10	0	0	0	0	0	0	0	0	0	11
> 11	0	0	0	0	0	1	7	0	0	0	0	0	0	0	0	0	8
Totals	51	22	10	8	13	31	159	53	22	9	20	37	51	59	55	49	649

Total Number of Valid Hours: 649

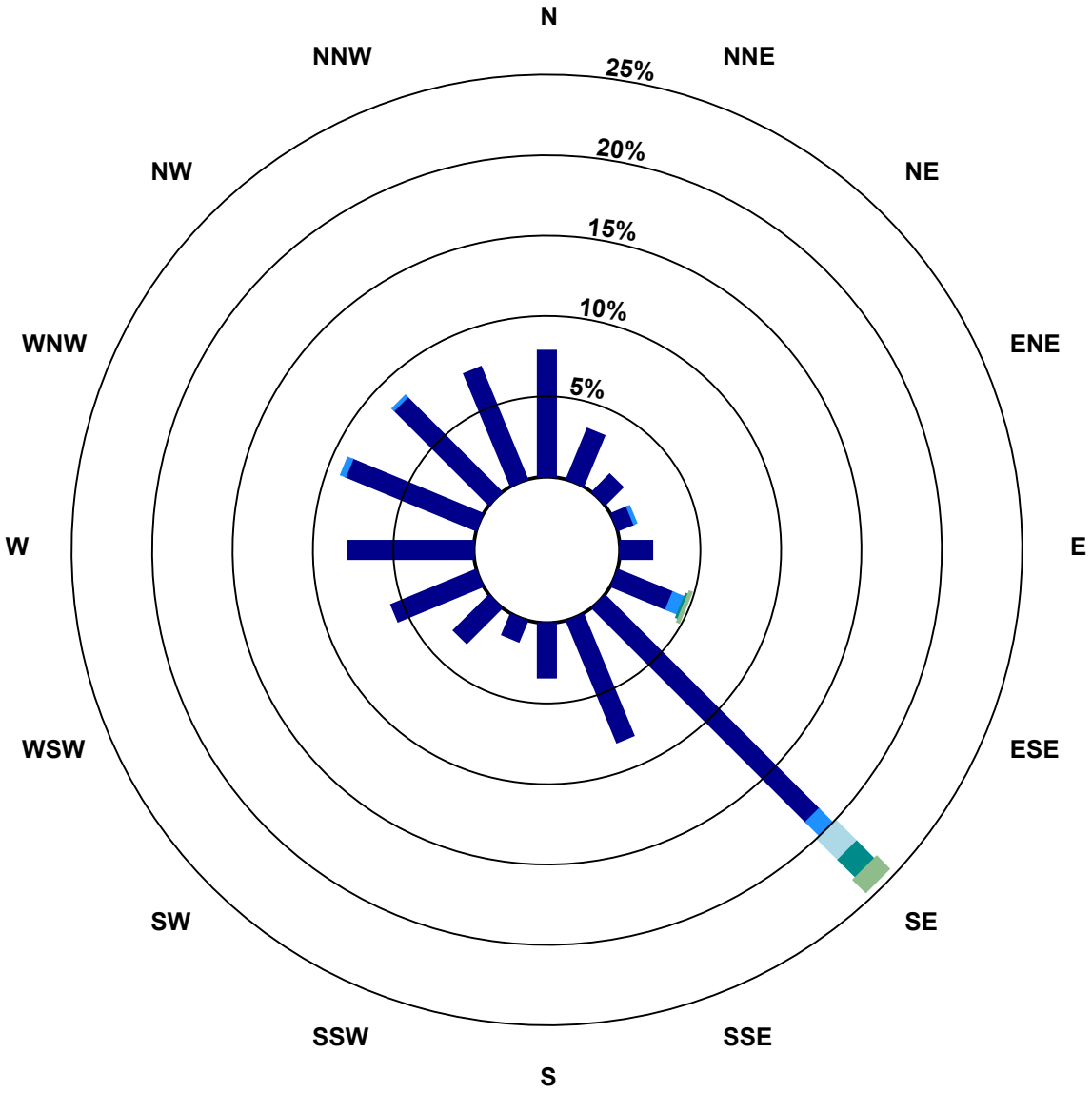
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

Lower Camp



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

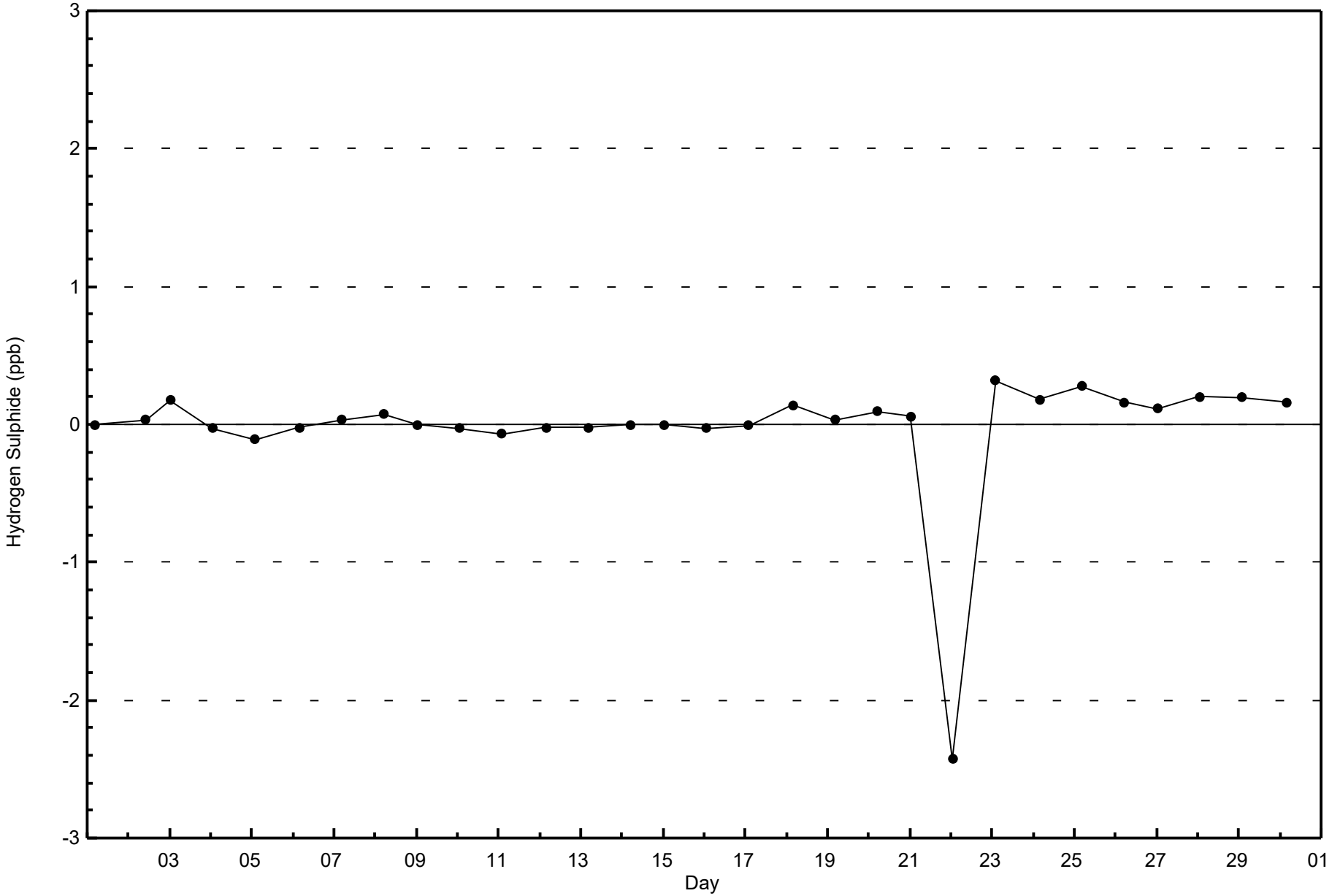
Total Number of Valid Hours: 649

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Lower Camp - September 2026

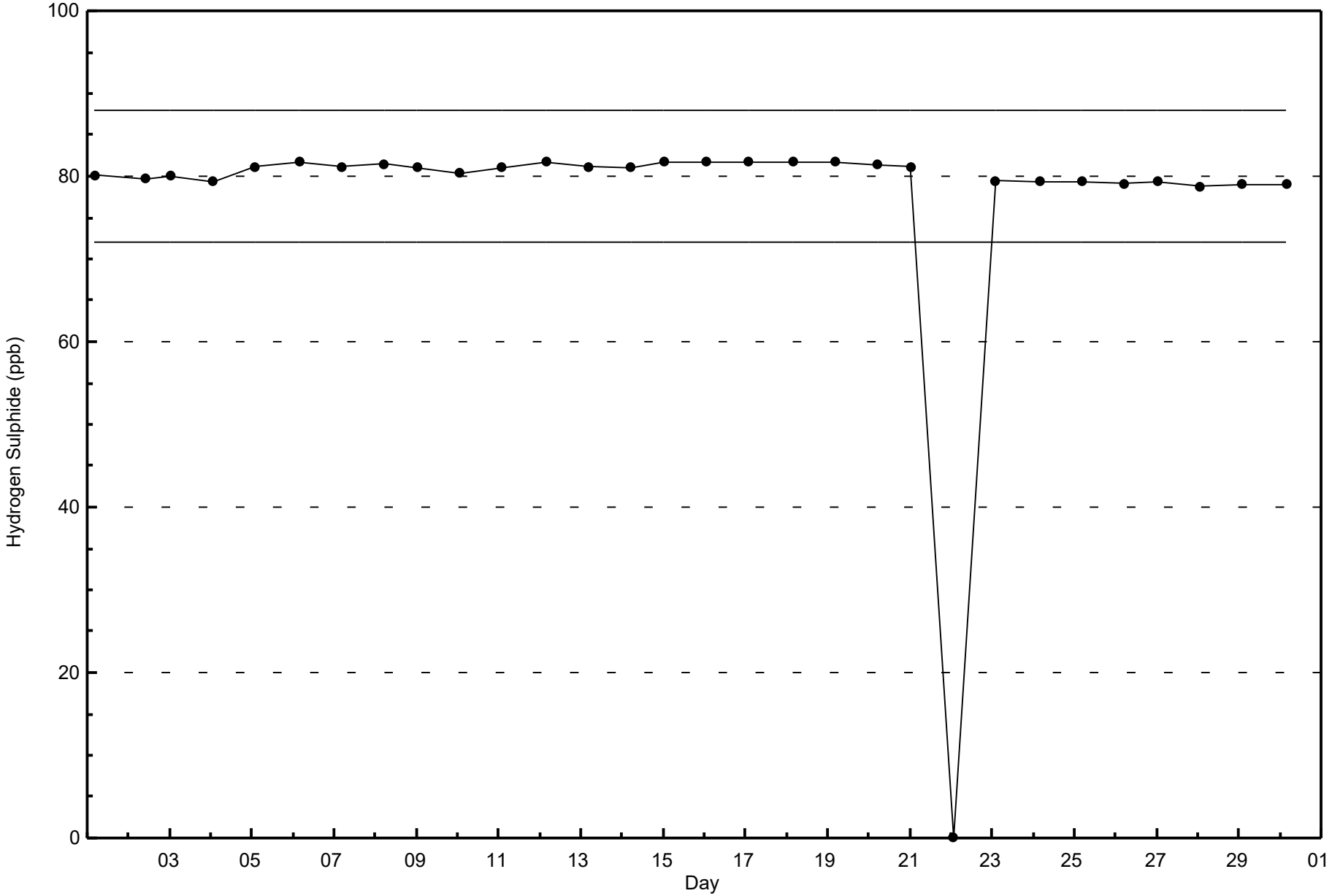


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Lower Camp - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Lower Camp - September 2026

Maximum Value: 3.5 ppm on Sep 20 19:00

Maximum Daily Average: 2.4 ppm on Sep 8

Minimum Value: 2.0 ppm on Sep 22 15:00

Minimum Daily Average: 2.0 ppm on Sep 27

Maximum Diurnal Average: 2.3 ppm at hour 2

Minimum Diurnal Average: 2.1 ppm at hour 14

Monthly Average: 2.19 ppm

Percentiles: P_1 = 2.0 P_{10} = 2.0 Q_1 = 2.0 Median = 2.1 Q_3 = 2.2 P_{90} = 2.5 P_{99} = 3.0

Hours in Service:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	33
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-Sep	2.4	2.2	2.2	Z	2.2	2.3	2.2	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	2.2	2.2	2.3	2.2	2.2	2.4
2-Sep	2.2	2.3	2.4	2.3	2.2	2.3	2.3	2.1	M	Z	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.4	2.3	2.1	2.2	2.3	2.2	2.3	2.2	2.4
3-Sep	2.4	2.5	2.5	2.5	2.3	2.3	2.3	2.2	Z	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.4	2.4	2.2	2.5
4-Sep	Z	2.4	2.5	2.5	2.5	2.5	2.5	2.6	2.5	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	2.2	2.6
5-Sep	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.3	2.4	2.5	2.4	2.1	2.5
6-Sep	2.5	2.4	Z	2.8	2.7	2.4	2.7	2.6	3.0	2.7	2.3	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.2	2.2	2.3	3.0
7-Sep	2.2	2.2	2.3	Z	2.4	2.3	2.2	2.4	2.3	2.2	2.0	2.1	2.1	2.1	2.1	2.1	2.4	2.2	2.3	2.5	2.3	2.3	2.4	2.6	2.3	2.6
8-Sep	2.7	2.7	2.7	2.9	Z	2.8	2.8	2.8	2.5	2.3	2.3	2.3	2.1	2.0	2.1	2.1	2.0	2.0	2.3	2.5	2.5	2.3	2.3	2.2	2.4	2.9
9-Sep	2.2	2.2	2.2	2.3	2.4	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	2.1	2.0	2.0	2.0	2.1	2.4
10-Sep	Z	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	2.1	2.1	2.1	2.1	2.1	2.2	2.0	2.2	2.2	2.2	2.1	2.2
11-Sep	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	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1
12-Sep	2.2	2.3	Z	2.4	2.3	2.2	2.3	2.5	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6	2.3	2.0	2.1	2.1	2.2	2.6
13-Sep	2.2	2.3	2.2	Z	2.2	2.2	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.2	2.1	2.3
14-Sep	2.2	2.0	2.0	2.0	Z	2.1	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	2.1	2.1	2.1	2.3	2.6	2.1	2.6
15-Sep	2.7	2.6	2.5	2.3	2.2	Z	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	2.2	2.2	2.3	2.2	2.2	2.7
16-Sep	Z	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.0	2.1	2.2	2.2	2.2	2.3	2.3	2.2	2.1	2.1	2.3
17-Sep	2.1	Z	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.1	2.4	2.8	2.8	2.8	2.8	3.1	2.3	3.1
18-Sep	2.6	2.8	Z	2.5	2.3	2.3	2.5	2.5	2.4	2.2	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.2	2.2	2.3	2.2	2.4	2.3	2.8
19-Sep	2.4	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	2.1	2.3	2.6	2.2	2.1	2.1	2.1	2.2	2.2	2.6
20-Sep	2.2	2.3	2.2	2.4	Z	2.4	2.3	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.7	3.5	2.8	2.2	2.3	2.2	2.1	2.3	3.5
21-Sep	2.2	2.3	2.3	2.3	2.5	Z	2.2	2.3	2.2	2.2	2.1	2.2	2.2	2.2	2.4	2.3	2.1	2.0	2.8	3.5	3.2	2.6	2.3	2.2	2.4	3.5
22-Sep	Z	2.6	2.8	3.0	3.1	3.0	2.9	3.3	2.9	2.7	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.4	3.3
23-Sep	2.2	Z	2.7	2.6	2.3	2.3	2.4	2.7	2.3	2.2	2.1	2.1	2.2	2.3	2.2	2.1	2.0	2.0	2.1	2.2	2.3	2.1	2.1	2.3	2.3	2.7
24-Sep	2.2	2.3	Z	2.2	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	2.1	2.1	2.2	2.3	2.5	2.2	2.5
25-Sep	2.5	2.7	2.5	Z	2.3	2.3	2.7	2.6	2.5	2.5	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.0	2.2	2.7
26-Sep	2.0	2.1	2.2	2.2	Z	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	2.0	2.0	2.2
27-Sep	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
28-Sep	Z	2.1	2.2	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	2.2	2.4	2.2	2.3	2.4	2.6	2.2	2.2	2.2	2.6
29-Sep	2.1	Z	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.2	C	C	C	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.3
30-Sep	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.2	2.1	2.1	2.1	2.1	2.2
	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	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	Diurnal Average	
	2.7	2.8	2.8	3.0	3.1	3.0	2.9	3.3	3.0	2.7	2.3	2.3	2.2	2.3	2.4	2.3	2.4	2.7	3.5	3.5	3.2	2.8	2.8	3.1	Diurnal Maximum	

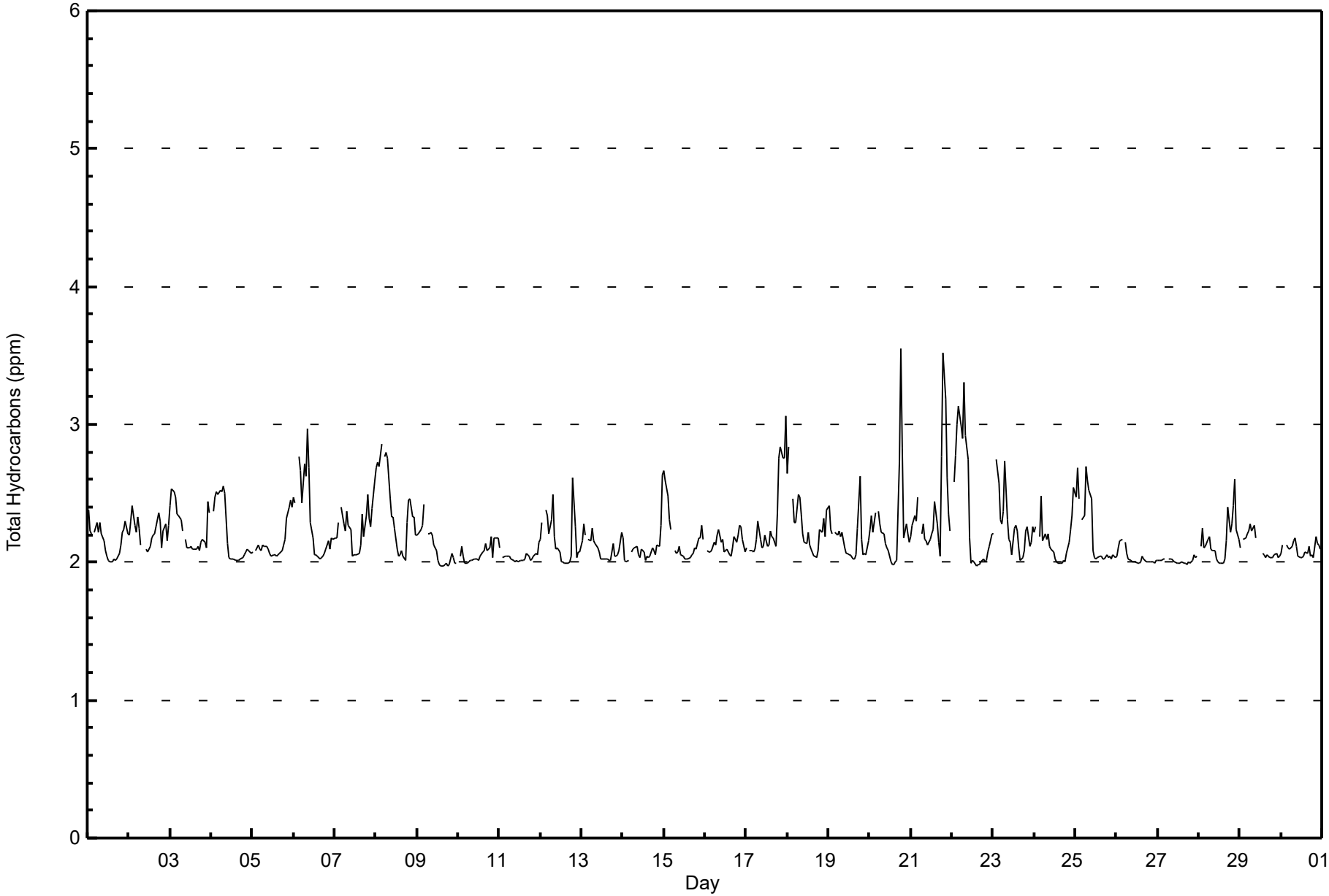
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Lower Camp - September 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Total Hydrocarbons (THC) - ppm

Lower Camp - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	202	29.45	29.45
2.1 - 3.0	478	69.68	99.13
3.1 - 10.0	6	0.87	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Lower Camp - September 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	9	0	2	0	1	7	8	4	1	16	31	43	25	12	18	202
2.1 - 3.0	28	13	11	7	13	30	161	53	21	13	4	4	8	32	45	35	478
3.1 - 10.0	0	0	0	1	0	1	0	0	3	0	0	0	0	0	1	0	6
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	53	22	11	10	13	32	168	61	28	14	20	35	51	57	58	53	686

Total Number of Valid Hours: 686

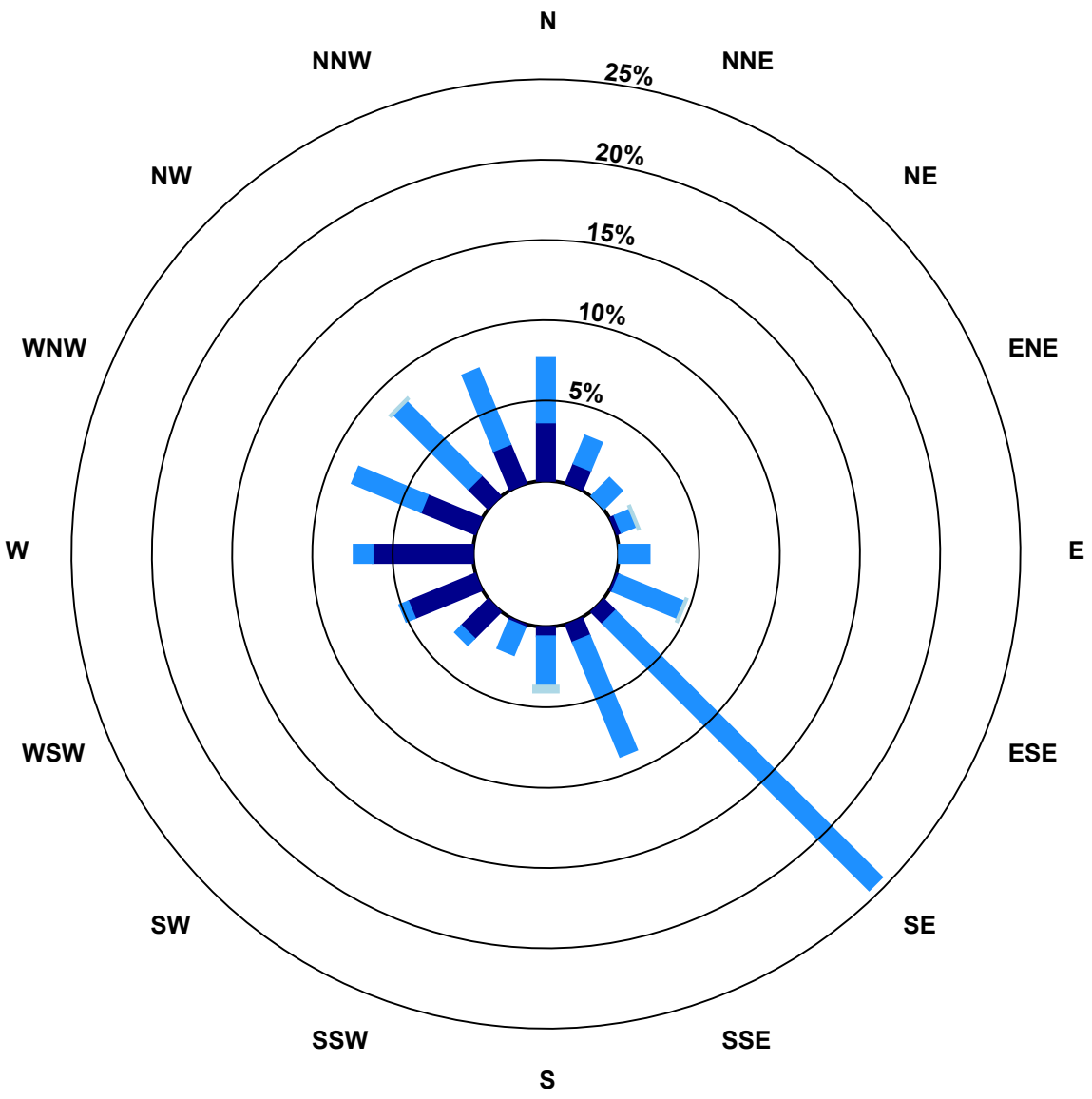
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Lower Camp



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

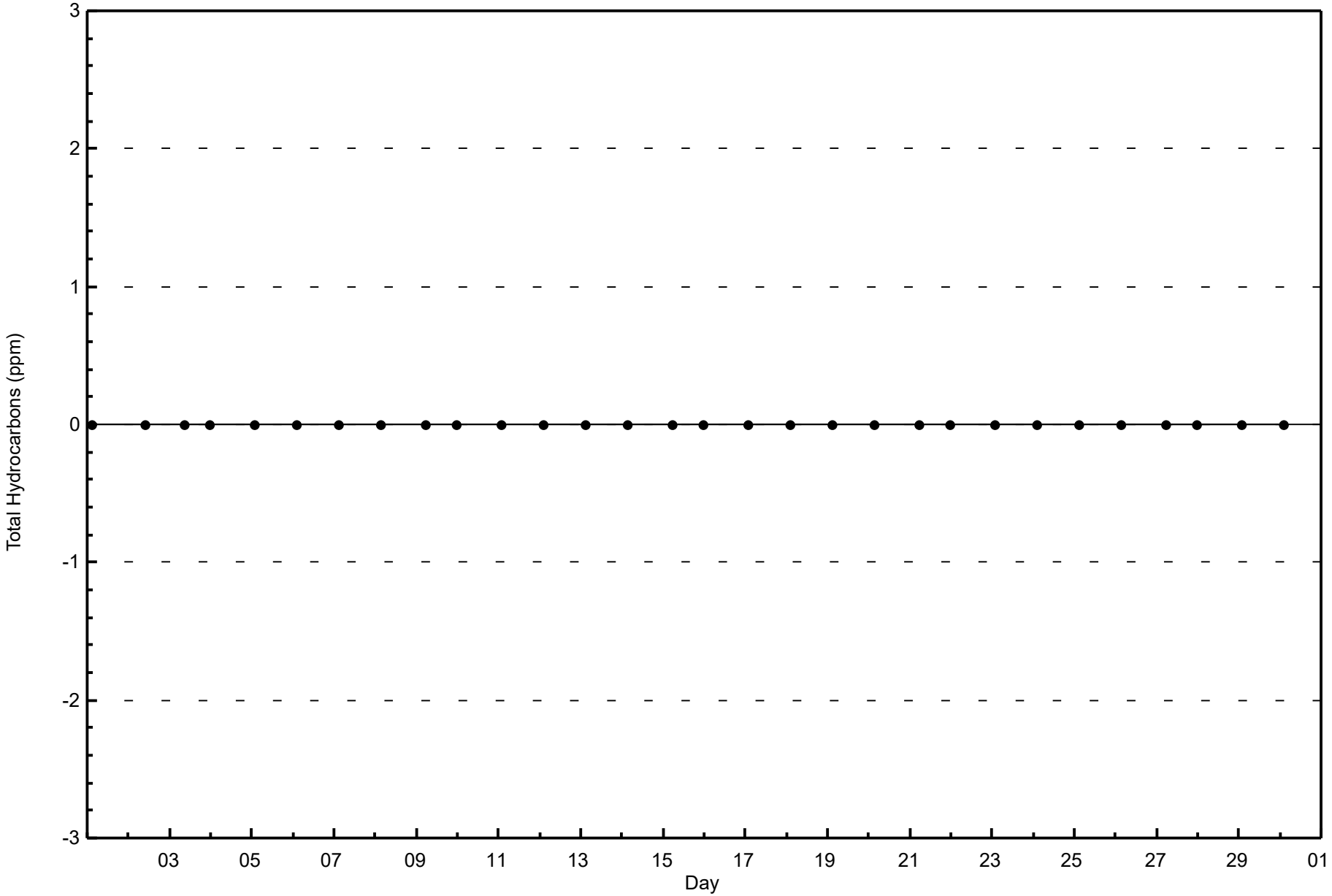
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Lower Camp - September 2026

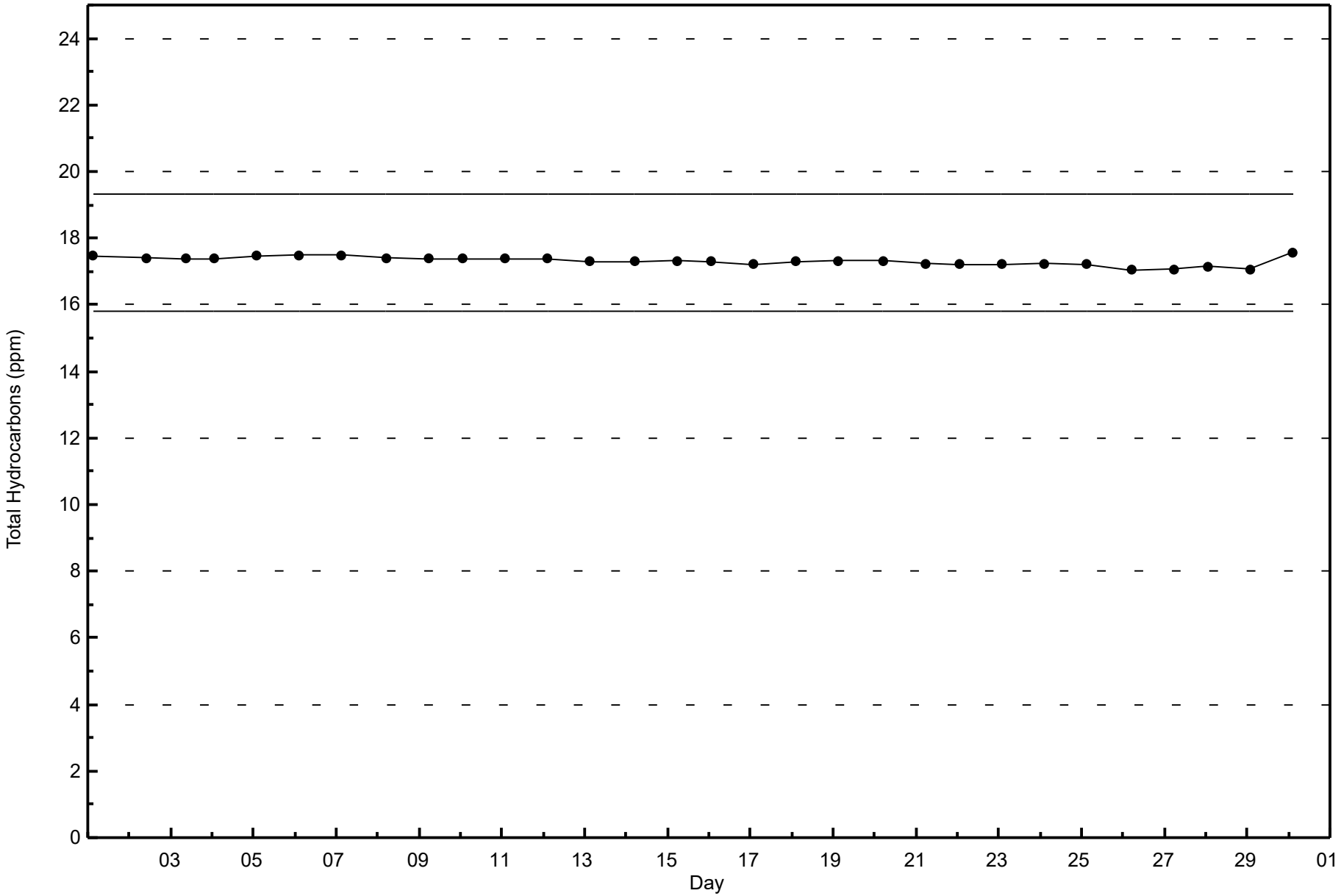


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Lower Camp - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Lower Camp - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.5 ppm on Sep 20 19:00
Maximum Daily Average: 2.4 ppm on Sep 8

Minimum Value: 2.0 ppm on Sep 22 15:00
Minimum Daily Average: 2.0 ppm on Sep 27
Maximum Diurnal Average: 2.3 ppm at hour 2
Minimum Diurnal Average: 2.1 ppm at hour 14
Monthly Average: 2.19 ppm
Percentiles: P_1 = 2.0 P_{10} = 2.0 Q_1 = 2.0 Median = 2.1 Q_3 = 2.2 P_{90} = 2.5 P_{99} = 3.0

Hours in Service:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	33
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-Sep	2.4	2.2	2.2	Z	2.2	2.3	2.2	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	2.2	2.2	2.3	2.2	2.2	2.4
2-Sep	2.2	2.3	2.4	2.3	2.2	2.3	2.3	2.1	M	Z	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.4	2.3	2.1	2.2	2.3	2.2	2.3	2.2	2.4
3-Sep	2.4	2.5	2.5	2.5	2.3	2.3	2.3	2.2	Z	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.4	2.4	2.2	2.5
4-Sep	Z	2.4	2.5	2.5	2.5	2.5	2.5	2.6	2.5	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	2.2	2.6
5-Sep	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.3	2.4	2.5	2.4	2.1	2.5
6-Sep	2.5	2.4	Z	2.8	2.7	2.4	2.7	2.6	3.0	2.7	2.3	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.2	2.2	2.3	3.0
7-Sep	2.2	2.2	2.3	Z	2.4	2.3	2.2	2.4	2.3	2.2	2.0	2.1	2.1	2.1	2.1	2.1	2.4	2.2	2.3	2.5	2.3	2.3	2.4	2.6	2.3	2.6
8-Sep	2.7	2.7	2.7	2.9	Z	2.8	2.8	2.8	2.5	2.3	2.3	2.2	2.1	2.0	2.1	2.1	2.0	2.0	2.3	2.5	2.5	2.3	2.3	2.2	2.4	2.9
9-Sep	2.2	2.2	2.2	2.3	2.4	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	2.1	2.0	2.0	2.0	2.1	2.4
10-Sep	Z	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	2.1	2.1	2.1	2.1	2.1	2.2	2.0	2.2	2.2	2.2	2.1	2.2
11-Sep	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	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1
12-Sep	2.2	2.3	Z	2.4	2.3	2.2	2.3	2.5	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6	2.3	2.0	2.1	2.1	2.2	2.6
13-Sep	2.2	2.3	2.2	Z	2.2	2.2	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.2	2.1	2.3
14-Sep	2.2	2.0	2.0	2.0	Z	2.1	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	2.1	2.1	2.1	2.3	2.6	2.1	2.6
15-Sep	2.7	2.6	2.5	2.3	2.2	Z	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	2.2	2.2	2.3	2.2	2.2	2.7
16-Sep	Z	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.2	2.2	2.2	2.3	2.3	2.2	2.1	2.1	2.3
17-Sep	2.1	Z	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.1	2.4	2.8	2.8	2.8	2.8	3.1	2.3	3.1
18-Sep	2.6	2.8	Z	2.5	2.3	2.3	2.5	2.5	2.4	2.2	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.2	2.2	2.3	2.2	2.4	2.3	2.8
19-Sep	2.4	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	2.1	2.3	2.6	2.2	2.1	2.1	2.1	2.2	2.2	2.6
20-Sep	2.2	2.3	2.2	2.4	Z	2.4	2.3	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.7	3.5	2.8	2.2	2.3	2.2	2.1	2.3	3.5
21-Sep	2.2	2.3	2.3	2.3	2.5	Z	2.2	2.3	2.2	2.2	2.1	2.2	2.2	2.2	2.4	2.3	2.1	2.0	2.8	3.5	3.2	2.6	2.3	2.2	2.4	3.5
22-Sep	Z	2.6	2.8	3.0	3.1	3.0	2.9	3.3	2.9	2.7	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.4	3.3
23-Sep	2.2	Z	2.7	2.6	2.3	2.3	2.4	2.7	2.3	2.2	2.1	2.1	2.2	2.3	2.2	2.1	2.0	2.0	2.1	2.2	2.3	2.1	2.1	2.3	2.3	2.7
24-Sep	2.2	2.3	Z	2.2	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	2.1	2.1	2.2	2.3	2.5	2.2	2.5
25-Sep	2.5	2.7	2.5	Z	2.3	2.3	2.7	2.6	2.5	2.5	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.0	2.2	2.7
26-Sep	2.0	2.1	2.2	2.2	Z	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	2.0	2.0	2.2
27-Sep	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
28-Sep	Z	2.1	2.2	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	2.2	2.4	2.2	2.3	2.4	2.6	2.2	2.2	2.2	2.6
29-Sep	2.1	Z	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.2	C	C	C	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.3
30-Sep	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.2	2.1	2.1	2.1	2.1	2.2
	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	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	Diurnal Average	
	2.7	2.8	2.8	3.0	3.1	3.0	2.9	3.3	3.0	2.7	2.3	2.2	2.2	2.3	2.4	2.3	2.4	2.7	3.5	3.5	3.2	2.8	2.8	3.1	Diurnal Maximum	

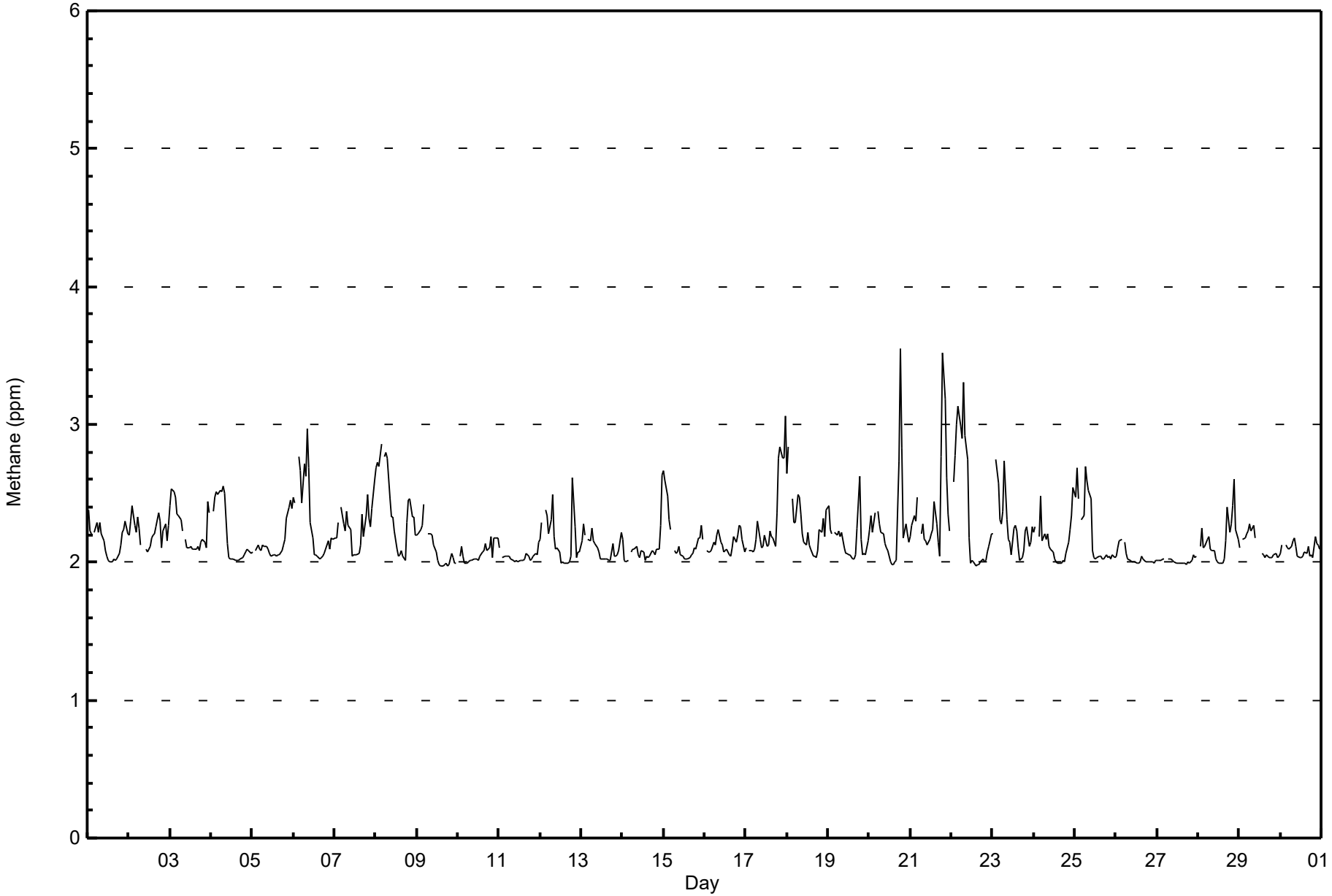
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Lower Camp - September 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Methane (CH_4) - ppm

Lower Camp - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	202	29.45	29.45
2.1 - 3.0	478	69.68	99.13
3.1 - 10.0	6	0.87	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Lower Camp - September 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	9	0	2	0	1	7	8	4	1	16	31	43	25	12	18	202
2.1 - 3.0	28	13	11	7	13	30	161	53	21	13	4	4	8	32	45	35	478
3.1 - 10.0	0	0	0	1	0	1	0	0	3	0	0	0	0	0	1	0	6
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	53	22	11	10	13	32	168	61	28	14	20	35	51	57	58	53	686

Total Number of Valid Hours: 686

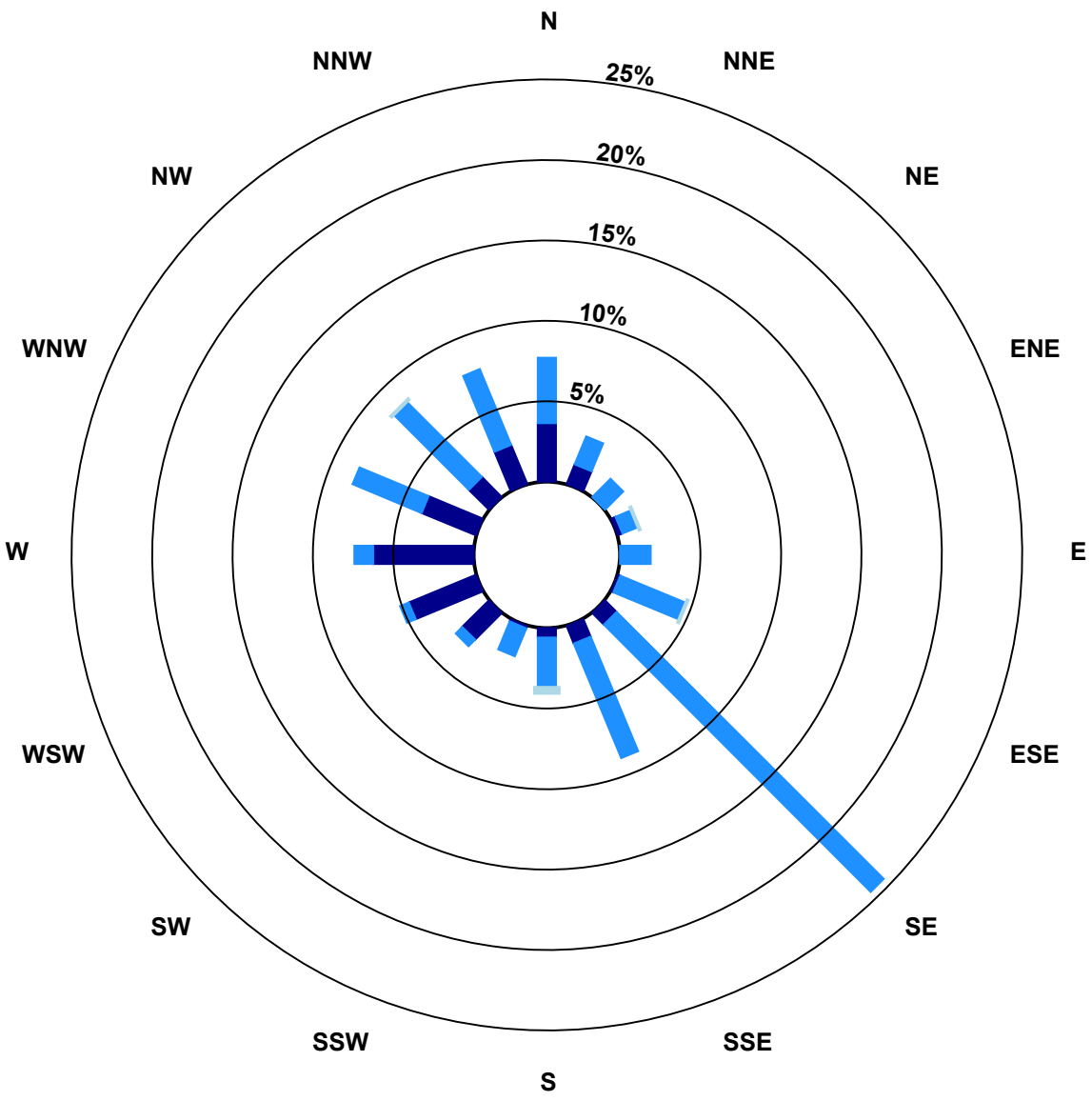
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Methane (CH_4) - ppm

Lower Camp



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

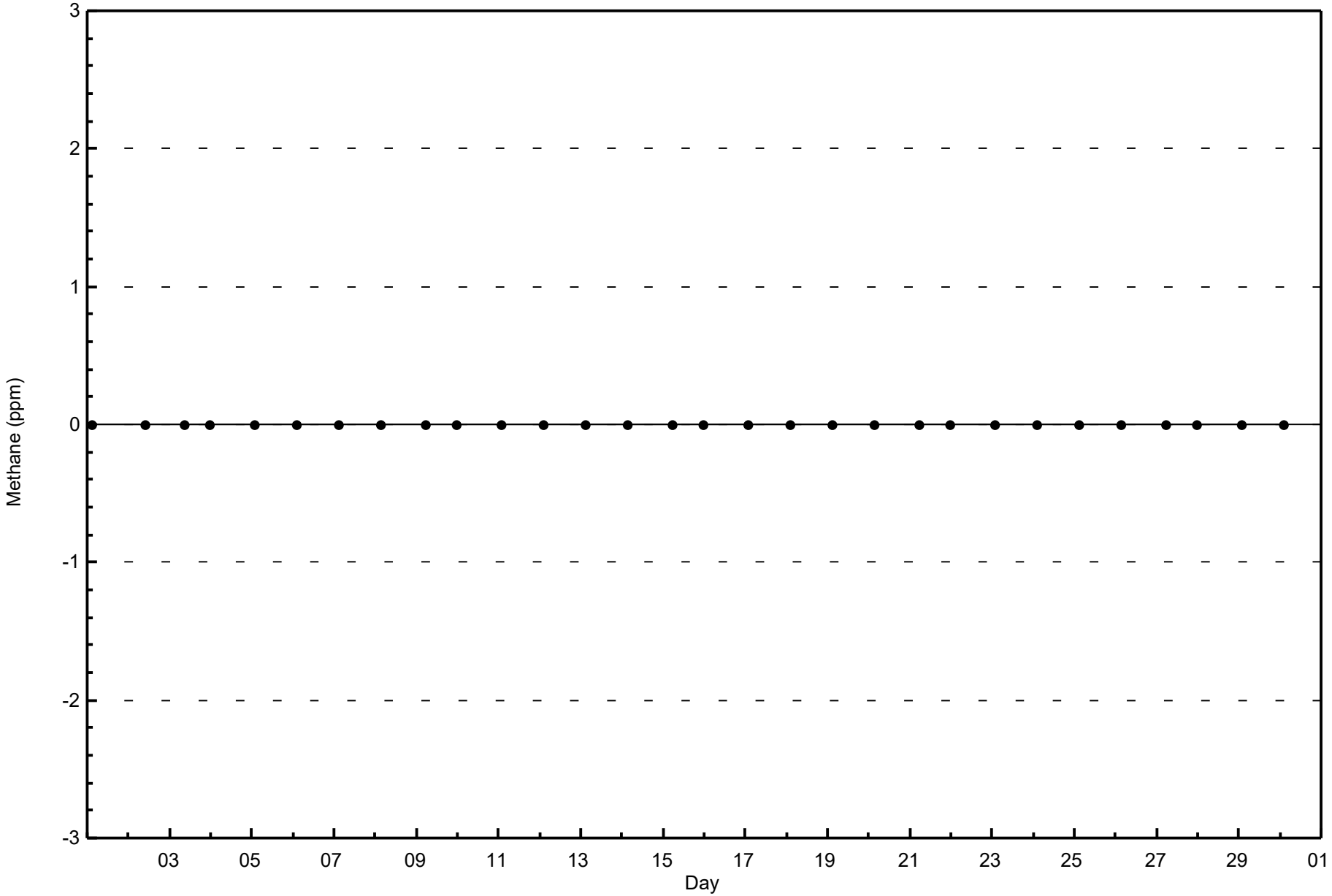
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Lower Camp - September 2026

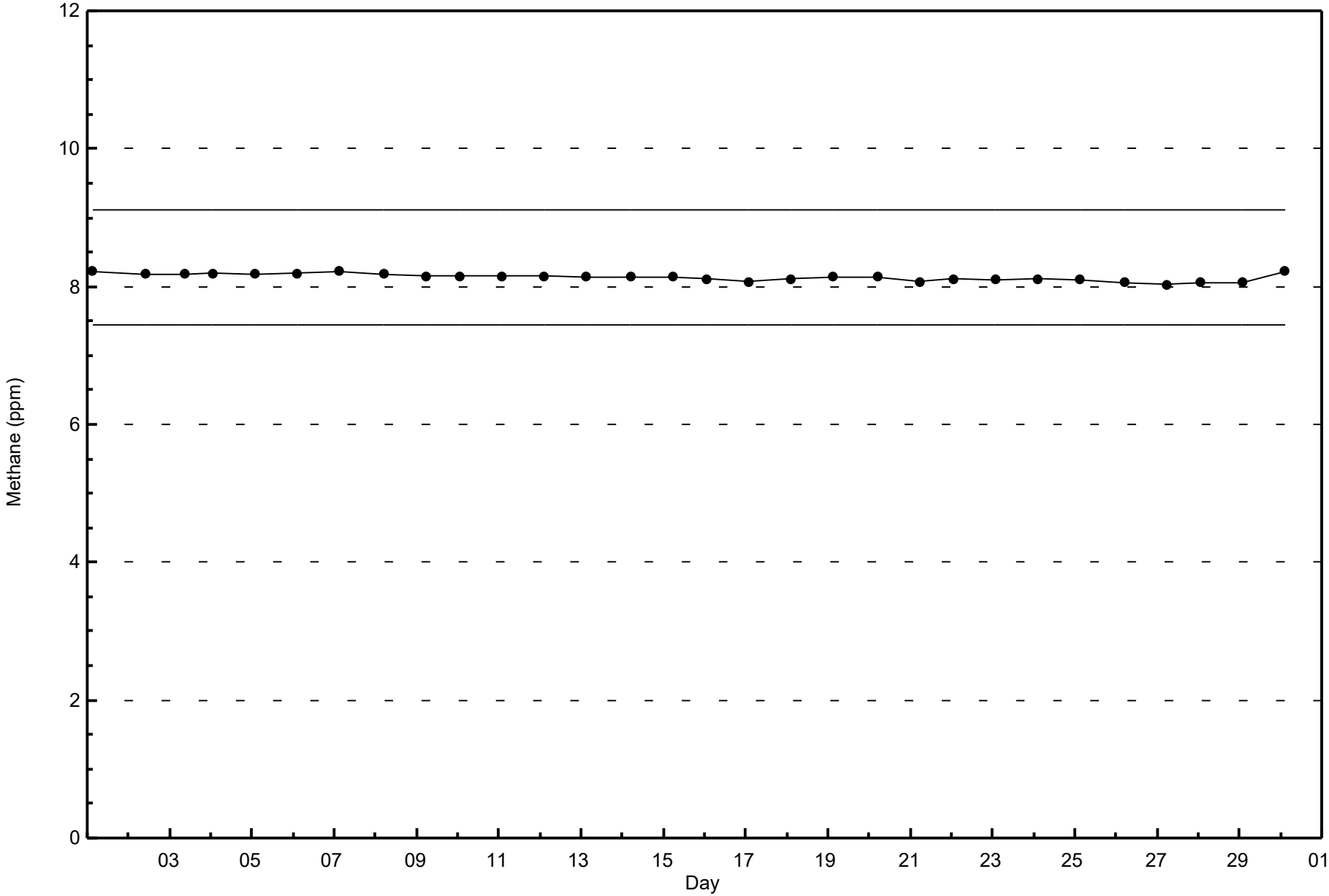


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Lower Camp - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Lower Camp - September 2026

Maximum Value: 0.042 ppm on Sep 16 11:00

Maximum Daily Average: 0.004 ppm on Sep 14

Minimum Value: 0.000 ppm on Sep 1 01:00

Minimum Daily Average: 0.000 ppm on Sep 17

Maximum Diurnal Average: 0.002 ppm at hour 12

Minimum Diurnal Average: 0.000 ppm at hour 9

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:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	33
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-Sep	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
2-Sep	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	M	Z	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	0.000	0.002
3-Sep	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4-Sep	Z	0.000	0.000	0.001	0.001	0.001	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	0.001	0.000	0.000	0.000	0.000	0.001
5-Sep	0.000	Z	0.000	0.003	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.002	0.000	0.001	0.001	0.000	0.003
6-Sep	0.002	0.000	Z	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	0.002
7-Sep	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-Sep	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.003	0.019	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.019
9-Sep	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.001	0.000	0.001	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.011
10-Sep	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-Sep	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-Sep	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-Sep	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001
14-Sep	0.003	0.000	0.000	0.000	Z	0.000	0.000	0.004	0.000	0.002	0.000	0.018	0.001	0.000	0.000	0.000	0.007	0.016	0.002	0.000	0.022	0.021	0.000	0.000	0.004	0.022
15-Sep	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-Sep	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.042	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.042
17-Sep	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-Sep	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	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	0.003
19-Sep	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	0.001	0.000	0.000	0.000	0.001
20-Sep	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-Sep	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	0.000	0.000	0.000	0.000	0.000	0.001
22-Sep	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
23-Sep	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
24-Sep	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-Sep	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-Sep	0.000	0.000	0.002	0.005	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	0.005
27-Sep	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	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001
28-Sep	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-Sep	0.000	Z	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
30-Sep	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	0.002	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.000	0.000	Diurnal Average	
	0.003	0.000	0.002	0.005	0.001	0.001	0.001	0.004	0.000	0.002	0.042	0.019	0.003	0.001	0.001	0.001	0.007	0.016	0.002	0.000	0.022	0.021	0.001	0.001	Diurnal Maximum	

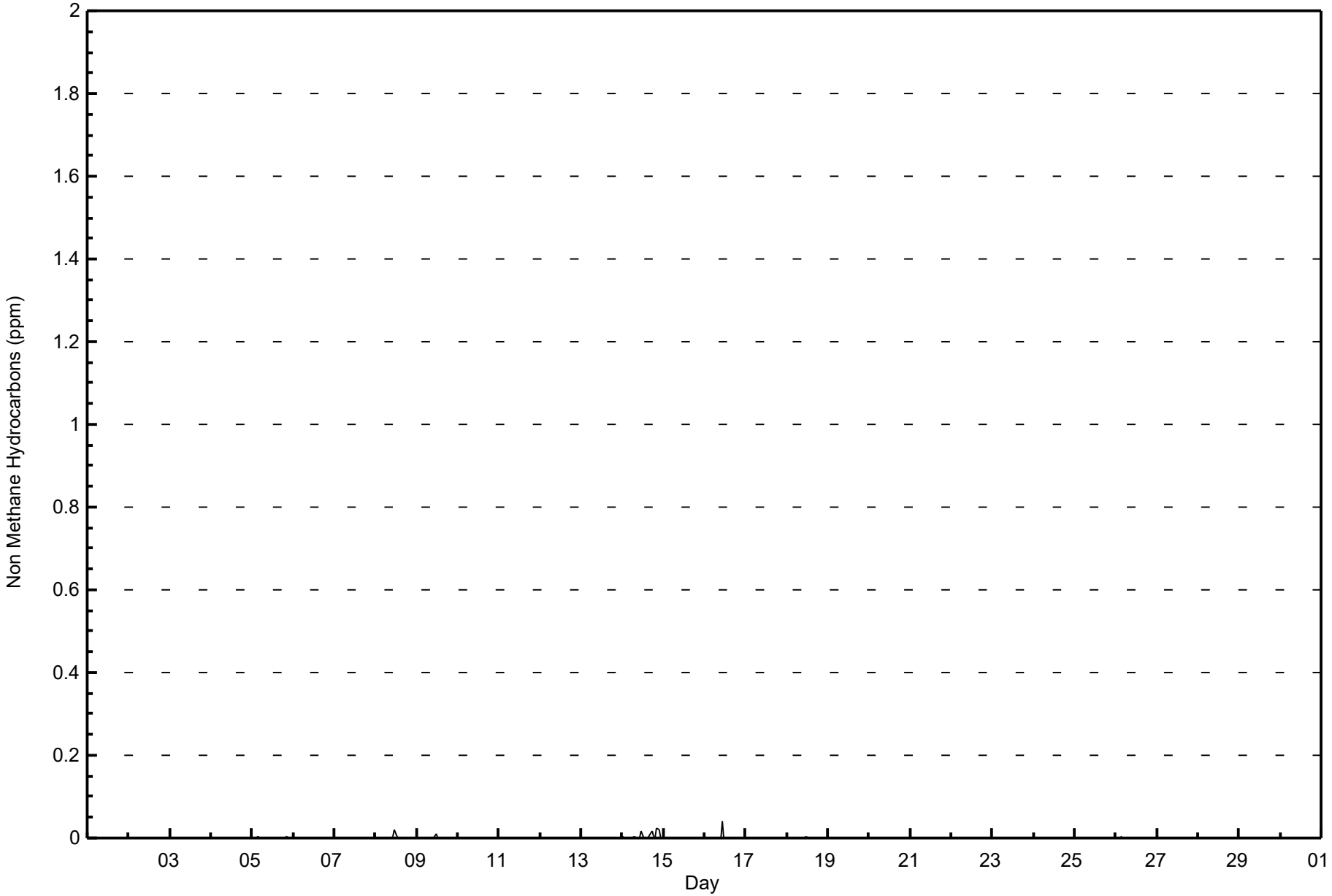
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Lower Camp - September 2026



Non Methane Hydrocarbons (NMHC) - ppm
Lower Camp - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	678	98.83	98.83
0.006 - 0.05	8	1.17	100.00
0.06 - 0.1	0	0.00	100.00
> 0.1	0	0.00	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Lower Camp - September 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	52	22	11	10	13	32	168	61	28	12	20	35	51	57	56	50	678
0.006 - 0.05	1	0	0	0	0	0	0	0	0	2	0	0	0	0	2	3	8
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	53	22	11	10	13	32	168	61	28	14	20	35	51	57	58	53	686

Total Number of Valid Hours: 686

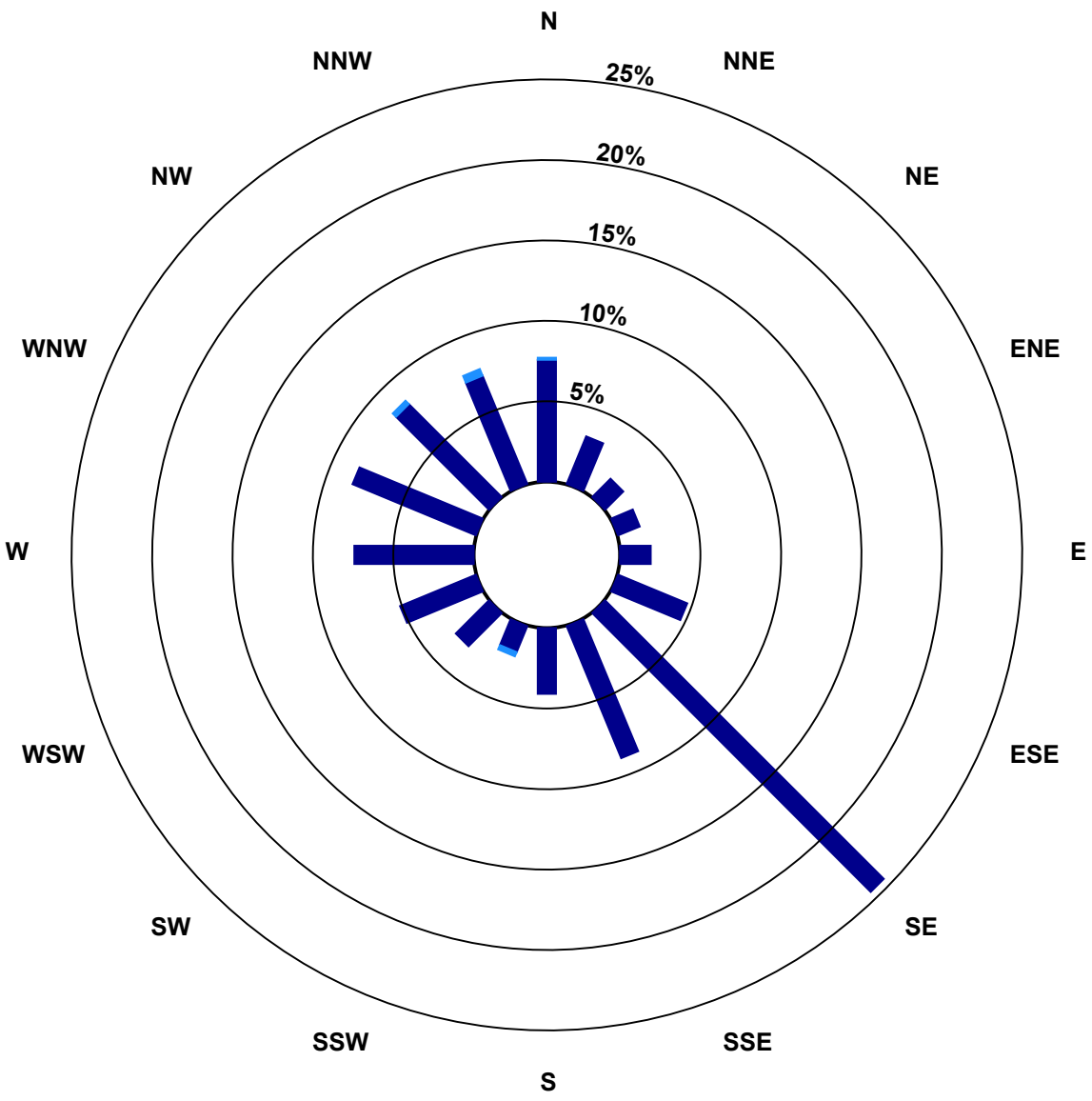
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Non Methane Hydrocarbons (NMHC) - ppm

Lower Camp



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

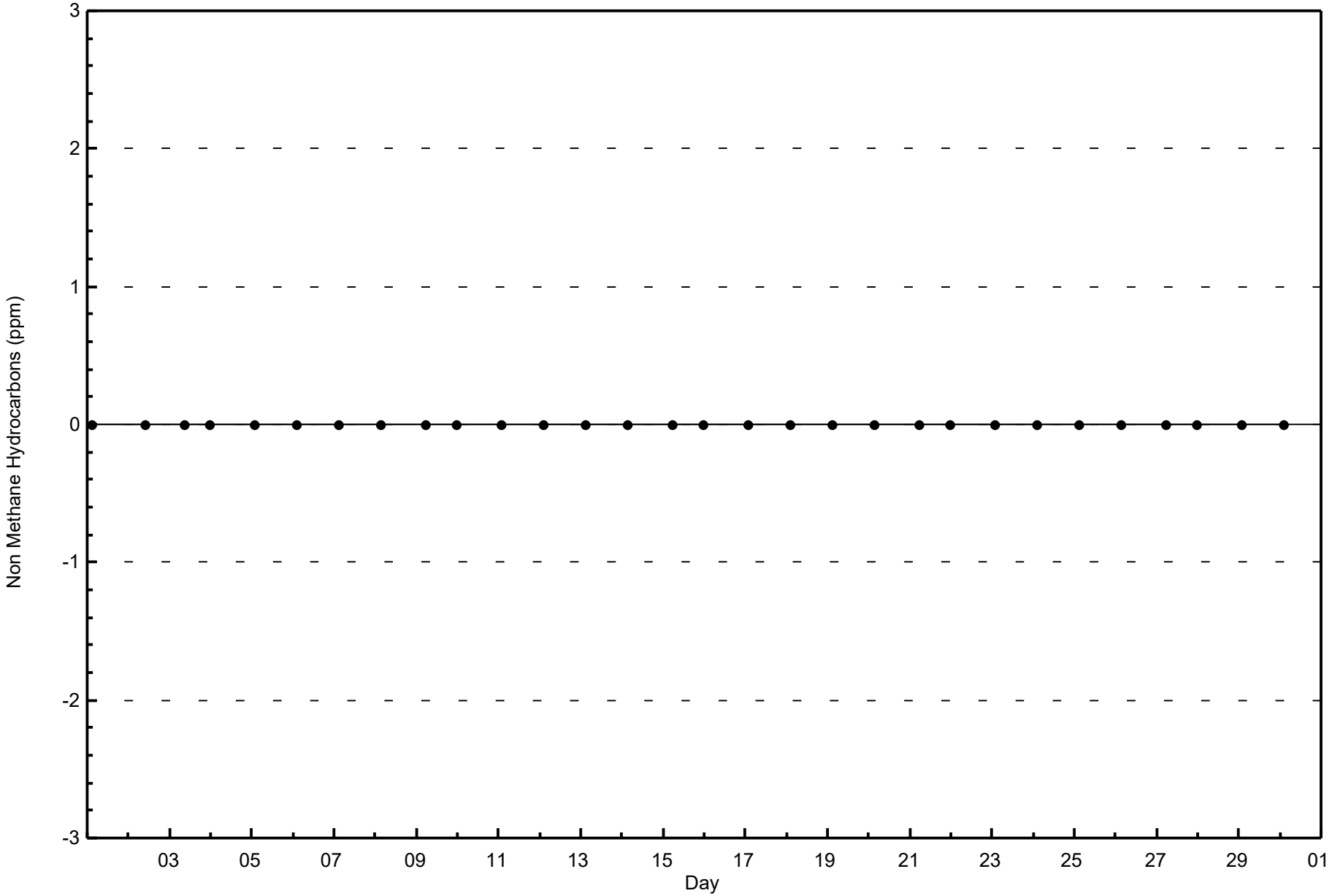
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Lower Camp - September 2026

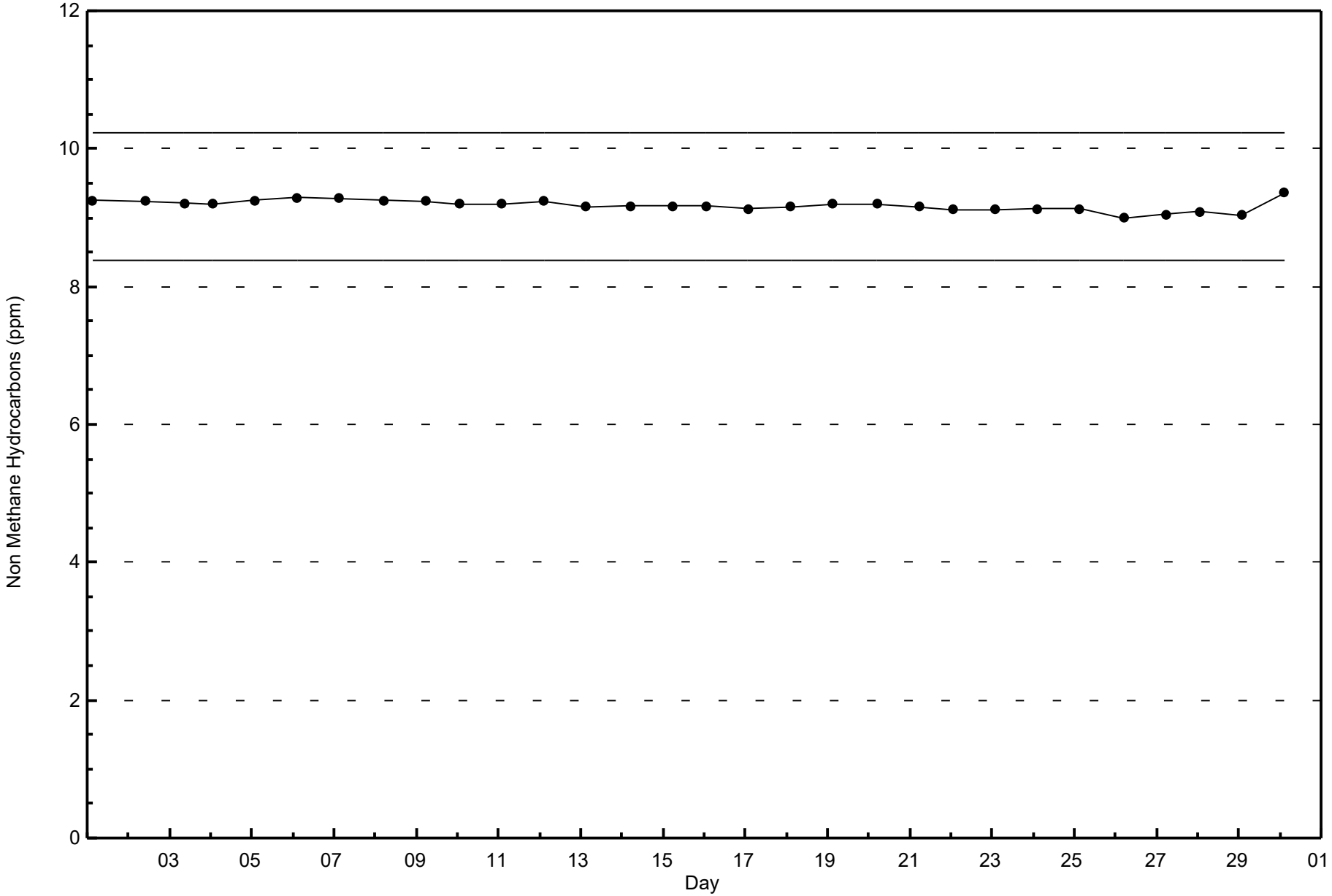


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Lower Camp - September 2026



Maximum Value: 26.8 C on Sep 2 15:00

Maximum Daily Average: 21.5 C on Sep 2

Minimum Value: 3.3 C on Sep 30 23:00

Minimum Daily Average: 6.2 C on Sep 30

Maximum Diurnal Average: 17.7 C at hour 15

Minimum Diurnal Average: 8.9 C at hour 6

Monthly Average: 13.06 C

Percentiles: P_1 = 4.4 P_{10} = 7.1 Q_1 = 9.2 Median = 12.0 Q_3 = 16.9 P_{90} = 20.3 P_{99} = 26.2

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

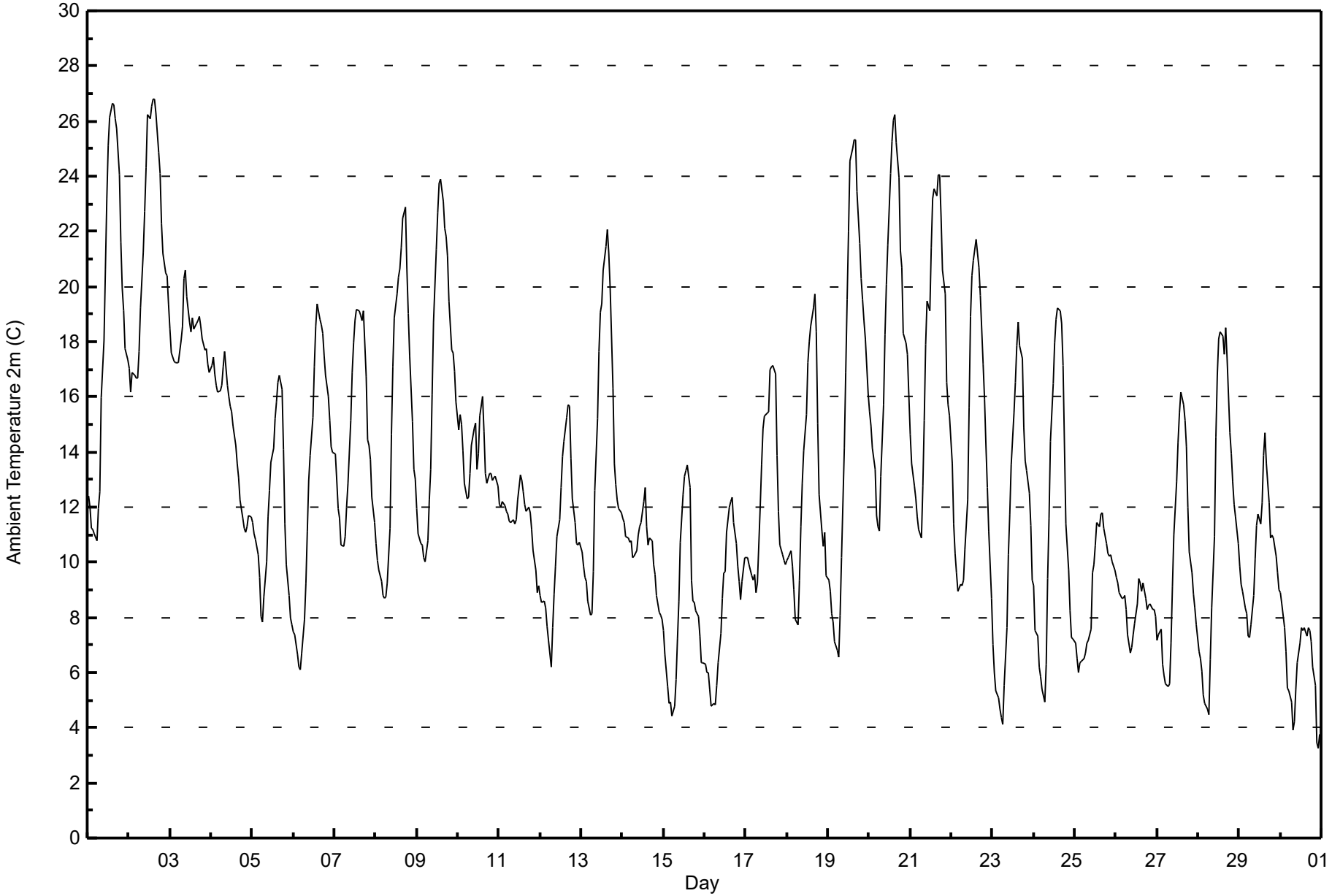
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	12.4	12.0	11.3	11.2	11.0	10.8	11.9	12.6	16.0	18.0	20.6	23.2	25.1	26.1	26.6	26.6	26.1	25.7	24.0	21.6	19.9	19.1	17.7	17.4	18.6	26.6
2-Sep	17.0	16.2	16.9	16.8	16.7	16.7	17.6	19.2	21.3	22.7	24.3	26.3	26.1	26.5	26.8	26.8	26.3	24.9	24.1	22.3	21.2	20.5	20.4	19.4	21.5	26.8
3-Sep	18.4	17.6	17.3	17.3	17.3	17.2	18.1	18.6	20.3	20.6	19.6	18.7	18.4	18.9	18.5	18.6	18.8	18.9	18.6	18.1	17.7	17.7	17.2	16.9	18.3	20.6
4-Sep	17.1	17.4	16.8	16.4	16.2	16.2	16.4	17.1	17.6	16.4	16.0	15.7	15.5	15.0	14.3	13.6	13.1	12.3	11.6	11.2	11.1	11.3	11.7	11.6	14.6	17.6
5-Sep	11.5	11.0	10.8	10.3	9.4	8.0	7.8	8.8	10.0	11.6	12.6	13.7	14.2	15.2	15.8	16.5	16.8	16.3	14.1	11.4	9.9	8.8	8.0	7.7	11.7	16.8
6-Sep	7.5	7.4	6.7	6.2	6.1	6.7	7.9	9.3	11.1	13.0	13.9	15.2	17.1	18.6	19.3	18.8	18.6	18.3	17.5	16.8	16.0	15.2	14.2	14.0	13.1	19.3
7-Sep	13.9	13.0	11.9	11.6	10.6	10.6	10.9	12.0	12.9	15.2	16.9	18.0	18.8	19.2	19.1	19.0	18.8	19.1	16.7	14.4	14.3	13.7	12.4	11.4	14.8	19.2
8-Sep	10.7	10.1	9.7	9.3	8.8	8.7	8.7	9.3	11.2	14.6	17.1	18.9	19.7	20.3	20.6	21.4	22.5	22.9	20.6	19.0	17.5	15.1	13.4	13.0	15.1	22.9
9-Sep	12.0	11.0	10.7	10.6	10.2	10.0	10.8	12.2	13.4	16.1	18.7	21.3	22.7	23.7	23.9	23.1	22.1	21.8	21.1	19.5	17.7	17.6	16.9	15.8	16.8	23.9
10-Sep	14.8	15.4	15.0	14.0	12.9	12.3	12.4	13.2	14.2	14.9	15.1	13.4	13.9	15.3	16.0	14.8	13.2	12.8	13.2	13.2	13.0	13.0	13.1	12.8	13.8	16.0
11-Sep	12.1	12.0	12.2	12.0	11.9	11.7	11.5	11.4	11.5	11.4	11.5	12.3	13.2	13.0	12.6	12.1	11.8	12.0	11.8	11.2	10.4	9.7	8.9	9.1	11.6	13.2
12-Sep	8.8	8.6	8.6	8.4	7.7	7.2	6.2	7.6	8.8	9.9	10.9	11.6	12.7	13.9	14.4	15.2	15.7	15.7	13.8	12.3	11.5	10.7	10.6	10.8	10.9	15.7
13-Sep	10.4	9.8	9.5	9.3	8.6	8.1	8.1	9.7	12.6	15.2	17.7	19.0	19.4	20.6	21.5	22.1	21.2	19.9	16.3	13.6	12.8	12.2	11.9	11.8	14.2	22.1
14-Sep	11.6	11.4	10.9	10.9	10.7	10.8	10.2	10.2	10.4	11.0	11.3	11.4	12.2	12.7	11.3	10.6	10.9	10.8	9.9	9.6	8.8	8.2	8.1	7.9	10.5	12.7
15-Sep	7.5	6.7	5.5	4.9	4.9	4.4	4.8	5.8	7.2	8.6	10.7	12.4	13.1	13.3	13.5	12.7	9.3	8.6	8.5	8.2	8.0	7.3	6.3	6.4	8.3	13.5
16-Sep	6.3	6.0	6.0	5.4	4.8	4.9	4.8	5.5	6.4	7.4	8.7	9.6	9.7	11.1	12.0	12.2	12.3	11.4	10.7	9.9	9.3	8.6	9.3	10.2	8.4	12.3
17-Sep	10.2	10.2	9.9	9.5	9.3	9.6	8.9	9.3	12.0	13.6	14.8	15.3	15.4	15.4	17.0	17.1	17.1	16.8	13.9	11.9	10.6	10.3	10.1	9.9	12.4	17.1
18-Sep	10.1	10.1	10.4	9.9	9.0	7.9	7.7	9.3	11.3	12.9	14.0	15.3	17.2	18.0	18.6	19.2	19.7	18.4	15.1	12.5	11.2	10.6	11.1	9.5	12.9	19.7
19-Sep	9.4	8.9	8.1	7.8	7.1	6.8	6.6	8.1	10.1	14.1	16.9	19.5	22.0	24.6	25.0	25.3	25.3	23.4	21.5	20.3	19.5	18.7	18.1	16.1	16.0	25.3
20-Sep	15.5	15.0	14.1	13.4	11.7	11.3	11.2	13.1	15.7	18.3	20.1	21.5	24.1	25.3	26.0	26.2	25.2	23.9	21.3	20.7	18.3	18.0	17.5	16.1	18.5	26.2
21-Sep	14.6	13.6	12.7	12.3	11.6	11.2	10.9	12.8	15.1	17.9	19.5	19.1	21.4	23.2	23.6	23.3	24.0	24.0	22.5	20.6	19.7	16.5	15.7	15.3	17.6	24.0
22-Sep	13.6	11.4	10.3	9.6	9.0	9.2	9.1	9.3	10.5	12.3	15.6	18.9	20.4	20.9	21.7	21.2	20.7	19.7	17.2	15.9	14.2	12.7	11.2	8.7	14.3	21.7
23-Sep	7.0	6.0	5.3	5.1	4.7	4.4	4.1	5.6	7.6	10.3	11.7	13.5	15.4	16.5	17.9	18.7	17.8	17.4	14.9	13.7	13.3	12.5	11.3	9.4	11.0	18.7
24-Sep	9.1	7.5	7.3	6.2	5.8	5.4	4.9	6.3	9.4	11.6	14.4	16.5	17.9	18.8	19.2	19.1	18.7	17.1	14.3	11.4	9.7	8.3	7.3	7.2	11.4	19.2
25-Sep	7.1	6.5	6.0	6.4	6.4	6.5	6.7	7.1	7.2	7.6	9.6	9.9	10.6	11.4	11.3	11.8	11.8	11.2	10.7	10.3	10.2	10.3	10.0	9.7	9.0	11.8
26-Sep	9.4	9.3	8.9	8.7	8.7	8.8	8.3	7.4	6.7	6.9	7.3	7.8	8.5	9.4	9.2	8.9	9.3	8.7	8.3	8.4	8.5	8.3	8.3	8.0	8.4	9.4
27-Sep	7.2	7.4	7.6	6.3	5.9	5.6	5.5	5.6	7.1	9.1	11.0	12.9	14.4	15.4	16.2	15.7	15.1	14.2	12.0	10.4	9.6	8.8	8.3	7.7	10.0	16.2
28-Sep	6.8	6.5	6.1	5.2	4.9	4.7	4.5	6.5	8.3	11.0	14.6	16.8	18.1	18.4	18.2	17.5	18.5	17.4	14.7	13.9	12.9	12.1	11.7	10.7	11.7	18.5
29-Sep	9.9	9.2	9.0	8.3	8.1	7.3	7.3	7.7	8.8	10.1	11.3	11.7	11.4	12.1	13.9	14.7	13.6	12.2	10.9	11.0	10.9	10.2	9.6	9.0	10.3	14.7
30-Sep	8.9	8.5	7.6	6.8	5.5	5.3	4.9	3.9	4.2	5.4	6.3	7.1	7.6	7.5	7.6	7.3	7.6	7.5	7.1	6.2	5.5	3.5	3.3	3.7	6.2	8.9
	11.0	10.5	10.1	9.7	9.2	8.9	9.0	9.8	11.3	12.9	14.4	15.6	16.5	17.4	17.7	17.7	17.4	16.8	15.2	14.0	13.1	12.3	11.8	11.2	Diurnal Average	
	18.4	17.6	17.3	17.3	17.3	17.2	18.1	19.2	21.3	22.7	24.3	26.3	26.1	26.5	26.8	26.8	26.3	25.7	24.1	22.3	21.2	20.5	20.4	19.4	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Lower Camp - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	228	31.67	31.67
10 - 20	416	57.78	89.44
> 20	76	10.56	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 99.5 % on Sep 8 08:00

Maximum Daily Average: 88.4 % on Sep 4

Minimum Value: 24.2 % on Sep 24 15:00

Minimum Daily Average: 59.5 % on Sep 20

Maximum Diurnal Average: 89.9 % at hour 6

Minimum Diurnal Average: 52.4 % at hour 15

Monthly Average: 72.96 %

Percentiles: P_1 = 29.3 P_{10} = 45.2 Q_1 = 60.8 Median = 76.4 Q_3 = 88.6 P_{90} = 95.2 P_{99} = 98.9

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

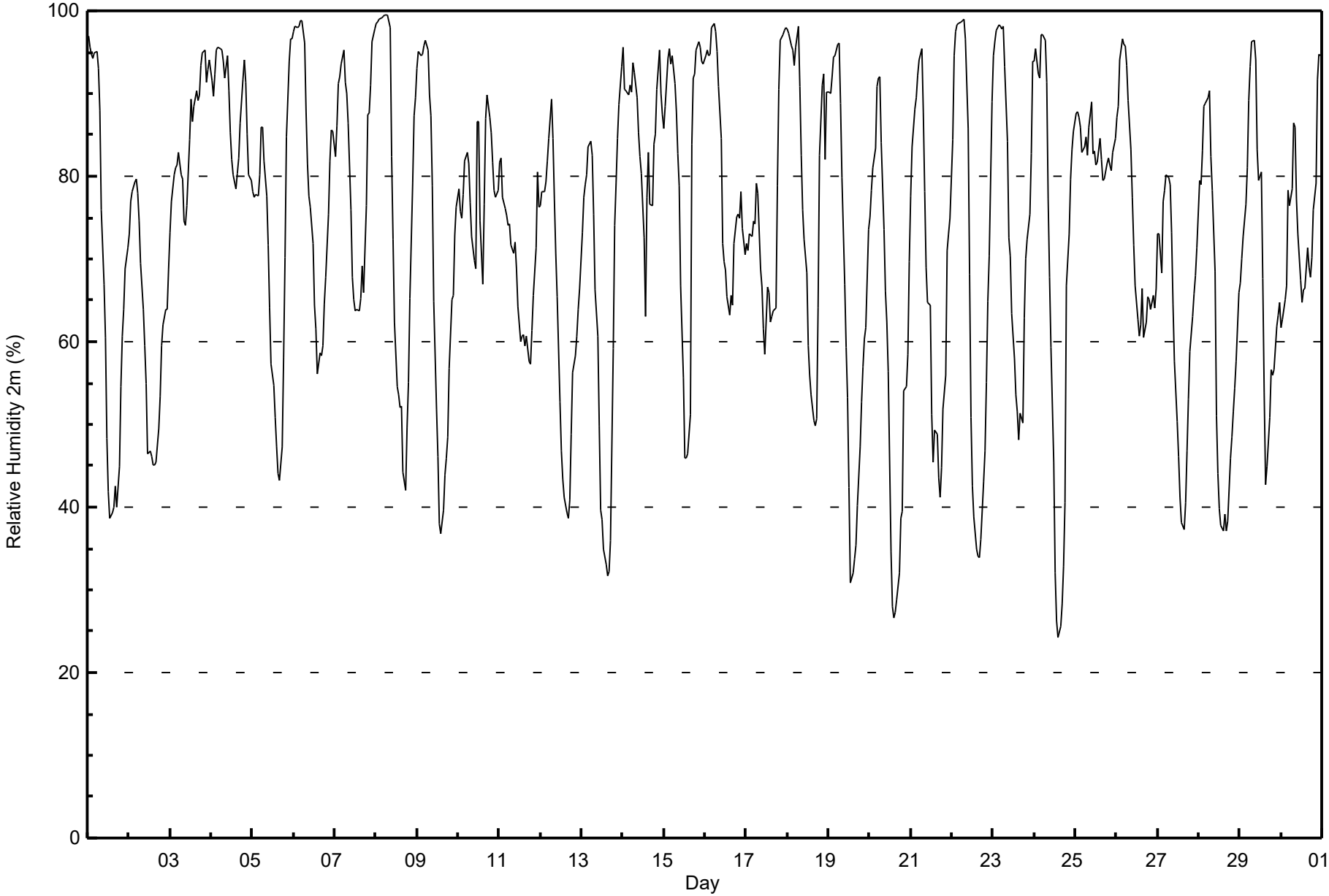
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	97.0	95.7	94.8	94.3	94.9	95.1	93.1	88.0	76.0	67.0	60.6	48.3	41.9	38.7	39.3	40.0	42.6	40.0	45.0	54.5	60.7	64.0	68.9	71.4	67.1	97.0
2-Sep	73.0	77.0	78.1	79.3	79.7	78.0	74.5	69.5	63.9	59.5	55.0	46.4	46.7	46.1	45.2	45.1	45.4	49.5	53.4	59.5	62.0	63.9	64.0	68.8	61.8	79.7
3-Sep	73.1	77.0	80.1	80.9	81.4	82.8	80.1	79.6	74.6	74.1	76.4	84.4	89.3	86.6	88.6	90.4	89.1	89.9	93.4	94.8	95.3	91.4	93.0	94.1	85.0	95.3
4-Sep	91.6	89.6	92.4	95.2	95.7	95.4	95.3	93.9	91.9	94.6	90.3	85.3	82.0	80.2	78.4	80.4	82.1	86.5	91.7	94.0	91.4	85.0	80.2	79.5	88.4	95.7
5-Sep	78.1	77.5	77.8	77.6	80.1	86.0	85.9	81.8	77.7	71.7	64.1	57.3	54.8	50.8	47.3	44.0	43.2	47.3	58.2	70.1	84.8	93.8	96.6	96.6	71.0	96.6
6-Sep	97.5	98.1	97.9	98.2	98.7	98.9	96.1	87.9	81.6	77.6	76.3	71.8	64.4	61.5	56.1	58.6	58.3	59.4	64.6	67.9	75.4	81.8	85.6	85.4	79.1	98.9
7-Sep	82.4	86.1	91.2	92.0	93.6	95.3	91.3	89.9	86.5	75.9	67.8	65.0	63.8	63.9	63.8	65.3	69.1	66.0	76.5	87.5	87.7	91.1	96.3	97.8	81.1	97.8
8-Sep	98.5	98.7	99.0	99.1	99.2	99.4	99.5	99.5	98.0	82.4	72.3	62.4	54.6	53.6	52.1	52.2	44.3	42.0	49.7	55.0	65.2	79.2	87.2	89.5	76.4	99.5
9-Sep	93.1	95.1	94.6	94.7	95.7	96.5	95.3	89.8	87.2	78.9	64.9	51.9	46.1	38.0	36.7	39.7	43.9	46.0	48.5	56.8	65.1	65.6	72.9	76.2	69.7	96.5
10-Sep	78.5	75.7	74.9	77.8	81.8	82.9	81.6	76.9	72.7	69.9	68.8	86.6	86.7	74.5	67.0	76.6	86.9	89.8	87.1	85.3	81.8	78.3	77.4	78.3	79.1	89.8
11-Sep	81.7	82.2	77.4	76.1	75.2	74.0	74.3	71.7	70.7	72.0	68.8	64.3	59.9	60.6	60.8	59.5	60.7	57.7	57.3	61.4	65.6	71.3	80.6	76.2	69.2	82.2
12-Sep	76.5	78.1	78.1	79.3	81.8	84.7	89.4	84.7	77.4	70.7	65.4	52.7	46.8	43.5	41.2	39.3	38.6	40.9	48.9	56.2	58.4	60.7	63.8	66.5	63.5	89.4
13-Sep	73.2	77.5	79.0	80.1	83.6	84.3	82.5	75.5	66.3	60.7	49.8	39.7	38.4	34.9	33.1	31.7	32.2	35.9	59.1	74.1	79.1	84.6	88.6	93.2	64.0	93.2
14-Sep	95.6	90.6	90.3	89.9	91.0	90.2	93.7	92.5	89.5	85.3	82.4	80.3	72.6	63.1	77.5	82.9	76.5	76.4	83.8	85.0	90.5	95.3	90.0	87.5	85.5	95.6
15-Sep	85.7	88.5	94.3	95.4	93.5	94.6	91.2	87.9	82.7	78.9	66.8	55.6	45.9	45.9	46.5	51.2	83.9	91.8	92.3	95.2	96.3	95.6	93.9	93.6	81.1	96.3
16-Sep	94.5	95.2	94.7	94.7	98.0	98.5	97.5	95.2	90.9	84.5	71.8	69.6	68.7	65.5	63.2	65.5	64.5	71.9	75.1	75.5	74.9	78.2	73.8	70.4	80.5	98.5
17-Sep	71.8	70.9	73.1	72.8	74.7	74.2	79.1	78.0	68.8	66.6	61.6	58.4	66.7	65.9	62.3	63.0	63.8	64.1	78.9	90.6	96.5	97.2	97.6	97.9	74.8	97.9
18-Sep	97.8	97.2	95.8	95.2	93.4	95.6	98.2	90.9	82.5	76.0	72.5	68.3	59.5	56.0	53.5	50.5	49.8	50.7	64.0	82.6	91.0	92.3	82.0	90.1	78.6	98.2
19-Sep	90.1	90.1	92.0	94.5	94.7	95.9	96.1	88.8	79.8	67.0	59.4	53.2	42.3	30.9	32.0	33.8	35.4	40.1	47.3	52.7	57.0	60.3	61.6	73.6	65.4	96.1
20-Sep	75.1	78.2	81.0	83.4	90.8	91.9	92.1	84.0	73.5	66.1	62.4	56.5	34.6	28.0	26.6	27.2	28.9	32.0	38.7	39.4	54.1	54.5	58.4	69.7	59.5	92.1
21-Sep	77.7	83.6	88.1	89.5	92.1	94.0	95.4	87.8	78.1	68.9	64.7	64.4	51.2	45.5	49.4	48.9	43.5	41.1	44.8	51.8	55.9	71.0	73.0	75.0	68.1	95.4
22-Sep	84.4	94.6	97.4	98.3	98.5	98.7	98.9	98.9	96.6	85.8	68.2	50.9	42.6	38.8	34.9	34.0	33.8	36.1	43.0	46.7	55.0	64.9	70.4	89.1	69.2	98.9
23-Sep	94.5	96.2	97.7	98.3	98.2	97.7	98.1	93.3	84.3	72.5	70.3	63.4	57.9	53.6	51.5	48.1	51.4	50.1	62.8	70.0	72.3	75.5	82.7	93.9	76.4	98.3
24-Sep	93.9	95.5	92.3	91.9	97.2	97.0	96.5	91.4	77.3	67.8	59.2	45.5	32.0	26.3	24.2	25.7	28.3	33.0	40.5	66.7	73.0	79.6	83.2	85.4	66.8	97.2
25-Sep	87.7	87.7	87.2	85.9	82.9	83.6	84.7	82.6	86.0	89.0	82.8	83.0	81.3	81.6	84.6	82.0	79.5	79.6	81.5	82.3	81.4	80.7	82.9	84.6	83.5	89.0
26-Sep	87.1	88.4	94.1	96.7	95.9	95.7	93.4	89.2	83.3	77.5	71.7	66.8	62.7	60.6	62.1	66.4	60.5	62.3	65.4	65.0	63.9	65.5	64.0	66.4	75.2	96.7
27-Sep	73.1	73.1	68.3	77.0	78.4	80.2	79.9	79.0	73.1	64.7	57.6	50.3	46.1	41.2	38.1	37.2	40.6	46.8	53.1	58.8	63.0	65.8	67.9	71.4	61.9	80.2
28-Sep	79.5	78.9	83.1	88.5	88.8	89.6	90.4	82.4	78.4	68.5	51.0	44.1	39.8	37.7	37.0	39.1	37.1	38.3	45.9	48.4	51.6	54.5	57.7	65.9	61.5	90.4
29-Sep	67.1	70.0	72.8	76.6	80.9	89.1	93.3	96.2	96.4	94.1	83.2	79.5	80.6	67.7	53.9	42.6	45.0	50.8	56.6	55.9	56.7	61.8	63.3	64.7	70.8	96.4
30-Sep	61.7	62.7	65.2	66.8	78.3	76.5	78.4	86.5	85.9	77.2	73.1	67.4	64.7	66.2	66.5	71.3	69.0	67.8	70.2	75.9	79.2	91.8	94.8	94.6	74.7	94.8
	83.7	85.0	86.1	87.3	89.0	89.9	89.9	86.4	81.0	74.8	68.0	62.4	57.5	53.6	52.4	53.1	54.3	56.1	62.6	68.7	72.8	76.5	78.4	81.6	Diurnal Average	
	98.5	98.7	99.0	99.1	99.2	99.4	99.5	99.5	98.0	94.6	90.3	86.6	89.3	86.6	88.6	90.4	89.1	91.8	93.4	95.2	96.5	97.2	97.6	97.9	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Lower Camp - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Barometric Pressure (BP) - inHg

Lower Camp - September 2026

Maximum Value: 29.4 inHg on Sep 5 09:00

Maximum Daily Average: 29.4 inHg on Sep 5

Minimum Value: 28.5 inHg on Sep 29 11:00

Minimum Daily Average: 28.5 inHg on Sep 29

Maximum Diurnal Average: 29.0 inHg at hour 9

Minimum Diurnal Average: 29.0 inHg at hour 17

Monthly Average: 29.02 inHg

Percentiles: P_1 = 28.5 P_{10} = 28.7 Q_1 = 28.9 Median = 29.0 Q_3 = 29.2 P_{90} = 29.3 P_{99} = 29.4

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

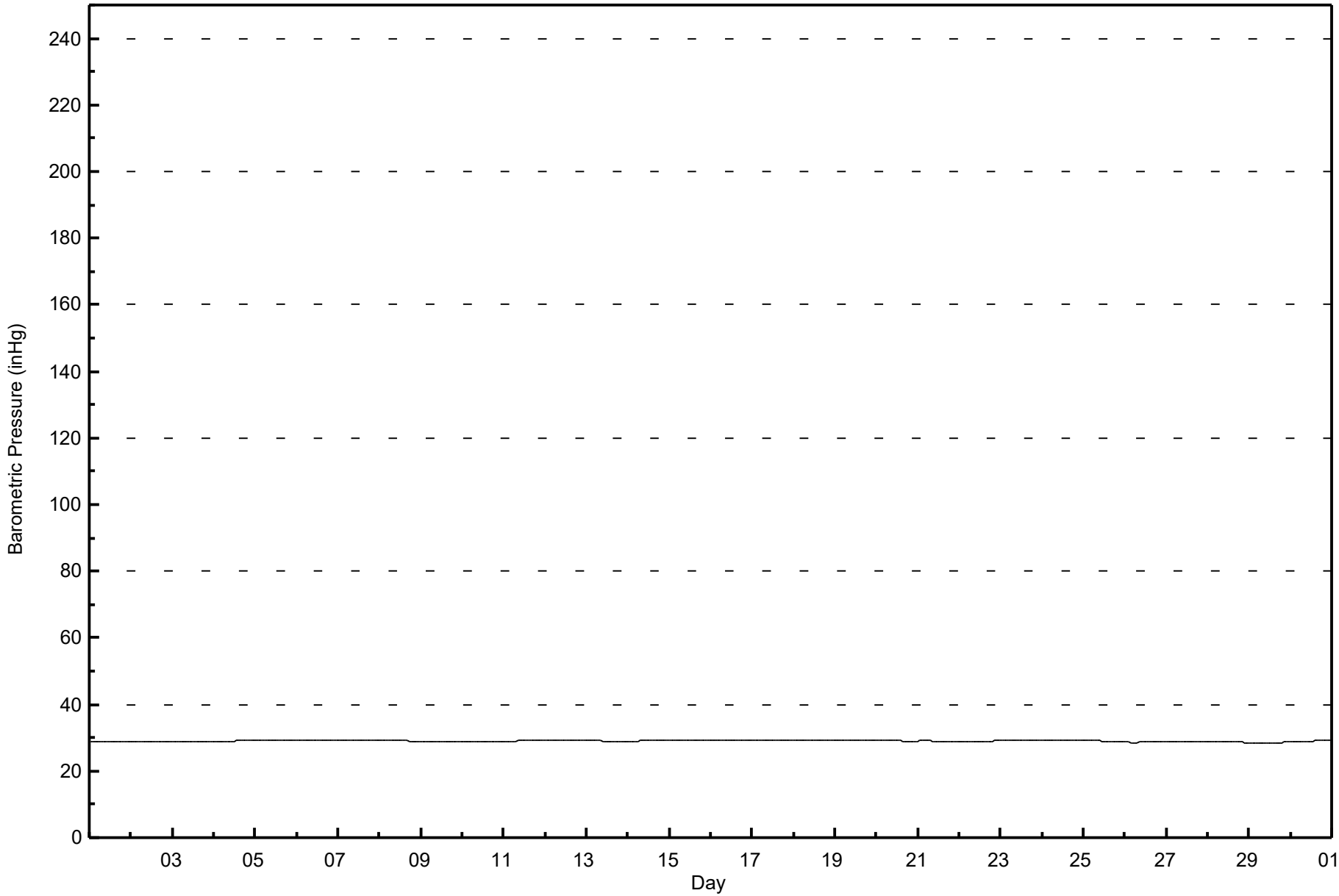
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	29.0
2-Sep	28.9	28.9	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	28.9	28.9	28.9	28.9	28.9	28.9	28.9
3-Sep	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	28.8	28.8	28.8	28.8	28.8	28.8	28.9
4-Sep	28.8	28.8	28.8	28.8	28.9	28.9	28.9	28.9	28.9	28.9	29.0	29.0	29.0	29.0	29.1	29.1	29.1	29.2	29.2	29.2	29.3	29.3	29.3	29.3	29.0	29.3
5-Sep	29.3	29.3	29.3	29.3	29.3	29.3	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.3	29.3	29.3	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4
6-Sep	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.3	29.3	29.3	29.3	29.3	29.3	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.3	29.4
7-Sep	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
8-Sep	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	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1
9-Sep	29.0	29.0	29.0	28.9	28.9	28.9	28.9	28.9	28.9	28.8	28.8	28.8	28.8	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.6	28.6	28.6	28.6	28.8	29.0
10-Sep	28.6	28.6	28.6	28.7	28.7	28.7	28.7	28.7	28.6	28.6	28.6	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	28.7	28.8
11-Sep	28.8	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	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.2
12-Sep	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	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2
13-Sep	29.1	29.1	29.1	29.1	29.1	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	29.0	29.1
14-Sep	28.9	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	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.1	29.2
15-Sep	29.2	29.2	29.2	29.2	29.2	29.2	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	29.3	29.2	29.3
16-Sep	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	29.2	29.2	29.2	29.2	29.2	29.3	29.3
17-Sep	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	29.1	29.1	29.1	29.1	29.1	29.2	29.1	29.2
18-Sep	29.2	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	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3
19-Sep	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	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.3
20-Sep	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	29.1	29.1
21-Sep	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	28.8	28.8	28.8	28.8	28.8	28.8	28.9	28.9	28.9	28.9	29.0
22-Sep	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	29.1	28.9	29.1
23-Sep	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	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2
24-Sep	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	29.2	29.2	29.2	29.2
25-Sep	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.0	29.0	28.9	28.9	28.9	28.9	28.8	28.8	28.8	28.8	28.7	28.7	28.7	28.6	29.0	29.2
26-Sep	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	28.8	28.8	28.8	28.8	28.9	28.9	28.9	28.9	28.9	28.7	28.9
27-Sep	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
28-Sep	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	28.7	28.6	28.6	28.6	28.6	28.6	28.8	28.9
29-Sep	28.6	28.6	28.5	28.5	28.5	28.5	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	28.6	28.6	28.6	28.6	28.5	28.6
30-Sep	28.6	28.7	28.7	28.7	28.7	28.8	28.8	28.8	28.9	28.9	28.9	29.0	29.0	29.0	29.0	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	28.9	29.2
	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	
	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.3	29.3	29.3	29.4	29.4	29.4	29.4	29.4	29.4	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Barometric Pressure (BP) - inHg

Lower Camp - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Lower Camp - September 2026

Maximum Speed: 31 km/h on Sep 30 02:00

Maximum Daily Speed Average: 22.0 km/h on Sep 26

Minimum Speed Value: 0 km/h on Sep 25 02:00

Minimum Daily Speed Average: 0.7 km/h on Sep 8

Maximum Diurnal Speed Average: 4.7 km/h at hour 15

Minimum Diurnal Speed Average: 0.3 km/h at hour 3

Monthly Average Velocity: 1.8 km/h 260.5 deg

Percentiles: P_1 = 1 P_{10} = 3 Q_1 = 5 Median = 9 Q_3 = 14 P_{90} = 21 P_{99} = 29

Hours in Service: 720

Hours of Data: 720

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-Sep	SE2	SSE4	SE6	SSE5	SE8	ESE4	ESE9	ESE9	SE9	SE11	SE11	SSE10	SSE11	SSE13	SE14	SE18	SE20	SE18	SE14	SE9	SE9	SE8	SE8	SE10	SE9.9	SE20
2-Sep	SE11	SE13	SE16	SE16	SE14	SE19	SE21	SE21	SE20	SE22	SE24	SE26	SE27	SE30	SE30	SE29	SE29	SE25	SE21	SE19	SE17	SE17	SE18	SE14	SE20.8	SE30
3-Sep	SE16	SE10	SE11	SE11	SE14	SE18	SE12	SE16	SE20	SE18	ESE15	ESE16	E9	E13	E9	ENE6	E7	NE7	NNW4	NNW3	N4	NNE5	NNW3	ENE3	ESE8.3	SE20
4-Sep	ESE8	SE10	WNW2	WNW4	WNW4	WNW3	WNW4	NW4	NNW7	N14	N17	NNE21	NNE22	N24	N26	NNE27	N21	N20	N16	N15	N12	NNW10	N11	N10	N11.3	NNE27
5-Sep	N10	N9	N11	N9	N10	N8	N7	N9	N8	N10	NNE9	NNE5	NNW8	N7	N9	NW7	WNW7	NNW8	NW6	WNW2	NNE0	E0	ESE1	NW1	N6.2	N11
6-Sep	SE1	SE5	SE2	S1	SSE3	SE3	ESE6	ESE4	ESE3	ESE4	SE5	ESE6	SE17	SE15	SSE9	SE6	S4	S8	SSE7	SE8	SE15	SE18	SE10	SE11	SE6.8	SE18
7-Sep	SE10	SE9	SE6	SE5	SSW2	SSE6	E5	SE12	SE8	SSE6	SSE9	SSE9	SE9	SE10	ESE5	NE3	SE7	SE6	ENE0	ESE2	SSE6	SE1	NNE1	E1	SE5.3	SE12
8-Sep	ESE2	E2	ENE1	E0	NW0	NW1	W1	NW1	NE1	NW5	NNW5	NNW7	N9	NNE7	NE4	NE5	N1	SW6	S5	S6	SE4	ESE3	SE6	SE8	NE0.7	N9
9-Sep	SE7	SE7	SE9	SE8	SE7	SE10	SE12	SSE12	SE14	SE14	SSE8	SSW9	SW13	WSW19	WSW20	WSW18	SW13	SW13	WSW17	WSW12	SSW5	SW8	WSW18	WSW16	SSW7.9	WSW20
10-Sep	WSW18	WNW23	WNW20	W16	W18	W14	W12	W19	W19	WNW18	WNW20	WNW18	W19	WNW21	NW22	NW17	NW19	WNW18	WNW22	NW19	NW17	NW19	WNW20	NW19	WNW17.8	WNW23
11-Sep	NW20	NW19	NW23	NW23	NW21	NNW24	NNW20	NNW23	NNW24	NNW22	NNW24	NNW20	NNW22	NNW20	NW26	NNW21	NW14	NW16	NNW16	NNW17	NNW12	NW10	NW8	NW15	NNW18.8	NNW26
12-Sep	NW13	WNW13	WNW11	NNW9	NNW7	NW5	WNW3	NNE4	W5	WNW7	NNW5	NW5	WSW10	W9	W10	WSW9	WSW10	WSW9	SSW6	SSW7	SSW9	SW11	SW7	SW4	W5.9	NW13
13-Sep	SSE4	SSE6	SSE7	SSE10	SE11	SE8	SSE8	SSE8	SE11	SE10	S6	W11	WSW11	WSW13	WSW10	WSW10	WSW10	WSW6	N8	N12	NNW9	NNW8	NNW9	NNW10	SW2.5	WSW13
14-Sep	N9	NNE15	N13	N11	N12	N14	N10	N11	NNW10	N13	N12	NNW13	N13	N15	N14	N11	N11	NNW10	NNW9	NW7	NW6	NW4	NNW7	NNW8	N10.5	NNE15
15-Sep	NNW8	NNW6	NNW2	WNW6	NW6	WNW3	W4	S3	S4	SSE4	W9	W13	W11	WSW10	WSW11	SW8	NNW5	S4	WSW3	SW3	W3	WSW6	W5	NW8	W4.3	W13
16-Sep	NNW6	WNW4	NNE5	N2	NNE1	NE2	NNW2	WSW3	SW4	SSW2	SSW5	SSW8	SSW8	SE6	SE8	SE9	ESE5	SE4	ESE5	SE6	ESE5	ESE3	SE11	SE19	SE2.9	SE19
17-Sep	SE19	SE20	SE20	SE20	SE19	SE10	ESE5	NNW1	SE9	SE11	SE8	S5	SE7	SE5	SE7	SE5	ESE3	S2	SE3	SE2	E0	ESE2	ENE1	ESE3	SE7.5	SE20
18-Sep	SE5	SE7	SE3	SSE5	WNW2	WNW2	NW3	NW5	NNW4	NW5	NNE5	NE4	NW6	NNW5	ENE4	ENE4	ESE7	ENE8	S1	NE1	N1	SSW1	SE6	SSE4	ENE1.0	ENE8
19-Sep	SSE3	SE5	SSE6	SE11	SE8	SE9	SE9	SSE9	SSE9	SE13	SE16	SE14	SSE11	S12	S13	SSE12	S10	SSW7	S6	SSE7	SSE9	SSE10	SSE9	SE9	SSE9.1	SE16
20-Sep	SE11	SE9	SE8	SE7	SSE4	SE8	SE8	SE10	SE11	SE10	SE12	SE10	W8	W13	WSW10	SW8	SW7	S5	S5	S6	SSE8	SSE8	SSE8	SE6	SSE6.1	W13
21-Sep	SE5	SE7	SSE6	SSE5	SSE9	SE11	SE10	SE12	SE13	SE11	SE12	SSE11	SE6	ENE3	SE10	SE12	S4	SSE7	S6	S5	S3	SE4	SSE6	S4	SE7.2	SE13
22-Sep	SSE4	E1	WNW2	ESE2	ENE1	NE1	NNW0	NW5	NNW5	N5	N6	NNW12	NW14	WNW14	W16	W20	WNW18	W12	WSW10	W11	W10	WNW5	WSW3	E3	WNW5.6	W20
23-Sep	ESE3	E1	ESE2	ESE3	SE3	SE4	SE6	SE2	ESE6	SE8	SE11	SE10	SE9	SSE8	SE7	SE8	SE9	SSE8	SSE8	SE8	SSE5	S2	SSE1	E1	SE5.5	SE11
24-Sep	SSE3	SE2	SE3	SSE4	SE8	SSE6	SE8	SE8	SE10	SE9	SE11	SSW8	WSW17	W19	W18	W14	W11	WSW7	SW5	NE2	NE3	ESE2	ESE1	NNE1	SSW3.7	W19
25-Sep	NW1	NE0	WNW2	WNW5	NW6	NW7	NW7	NW9	NW5	NW9	NNE9	N12	NNE14	NNE14	N15	NNE18	N15	N15	NNE11	N12	N13	N13	NNW11	NNW13	N9.0	NNE18
26-Sep	N10	NW11	NW10	WNW13	WNW13	W16	W20	W23	W26	W26	WNW28	WNW29	WNW29	WNW30	WNW29	WNW27	WNW29	WNW30	WNW27	WNW26	WNW27	W25	WNW23	W16	WNW22.0	WNW30
27-Sep	WSW13	W18	W20	W19	W23	W25	W23	W21	W21	W22	W22	W19	W19	W18	W20	W18	W15	WSW16	WSW9	SW8	SW8	WSW10	SW8	SW5	W16.2	W25
28-Sep	WSW3	SSE5	SE8	SE10	SSE8	SSE11	SE12	SE15	SE16	SE13	SW10	SW13	WSW17	WSW15	WSW13	SW9	SSW9	S7	SSE7	SSE9	SSE9	S9	SSE8	E9	S7.4	WSW17
29-Sep	SE6	SE9	SSE9	SE9	SE9	SE12	SE11	SE9	SSE7	S5	WSW17	W19	WNW21	WNW22	WNW22	WNW28	WNW29	WNW29	W16	WNW18	WNW20	WNW23	WNW24	WNW23	W10.4	WNW29
30-Sep	WNW29	NW31	NW26	NW23	NW25	WNW24	WNW25	NW26	NW21	NW23	NW20	NW23	NW22	NW20	NW21	NW14	NNW10	NNW13	NW8	NW8	N8	WNW4	NNE1	NW1	NW17.5	NW31
	SW0.6	SW0.4	WNW0.3	SW1.2	SW1.1	SSW1.4	SSW1.4	SSW1.1	S1.7	S0.8	WSW1.2	W2.5	W4.3	WNW4.5	W4.7	WNW3.5	W3.3	W3.5	W2.8	W2.2	W1.4	WSW2.1	WSW2.1	W0.9	Diurnal Average	
	WNW29	NW31	NW26	NW23	NW25	W25	WNW25	NW26	W26	W26	WNW28	WNW29	WNW29	SE30	SE30	SE29	SE29	WNW30	WNW27	WNW26	WNW27	W25	WNW24	WNW23	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

Lower Camp - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9 km/h on Sep 30 01:00

Minimum Value: 1 km/h on Sep 25 02:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 3 Q_3 = 4 P_{90} = 5 P_{99} = 7

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

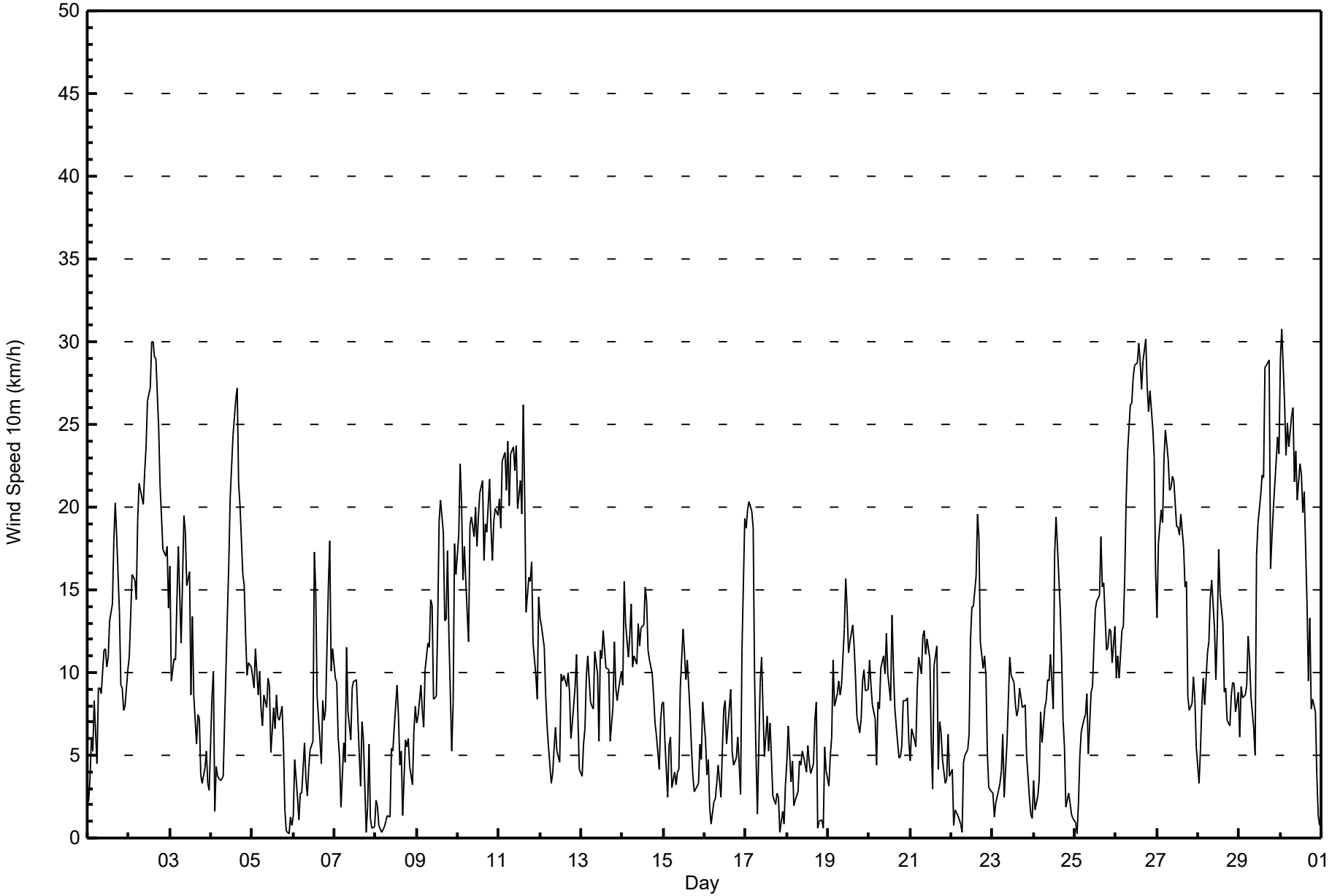
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	1	1	3	3	3	2	2	2	2	2	2	4	4	5	5	5	4	5	4	3	3	3	3	3	5
2-Sep	3	4	3	3	3	5	4	3	3	4	4	5	5	5	5	5	5	5	5	4	3	3	4	3	5
3-Sep	3	5	3	2	5	4	4	4	5	4	3	4	2	5	3	2	2	1	1	1	1	1	2	2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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Lower Camp - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	188	26.11	26.11
6 - 11	282	39.17	65.28
12 - 19	150	20.83	86.11
20 - 28	86	11.94	98.06
29 - 38	14	1.94	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Lower Camp - September 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	11	10	8	9	24	24	16	17	5	5	4	5	16	15	14	188
6 - 11	25	4	1	2	4	7	94	46	9	9	11	18	9	5	16	22	282
12 - 19	21	4	0	0	1	2	44	3	2	0	4	15	24	10	13	7	150
20 - 28	4	3	0	0	0	0	14	0	0	0	0	1	15	22	16	11	86
29 - 38	0	0	0	0	0	0	4	0	0	0	0	0	0	9	1	0	14
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	55	22	11	10	14	33	180	65	28	14	20	38	53	62	61	54	720

Total Number of Valid Hours: 720

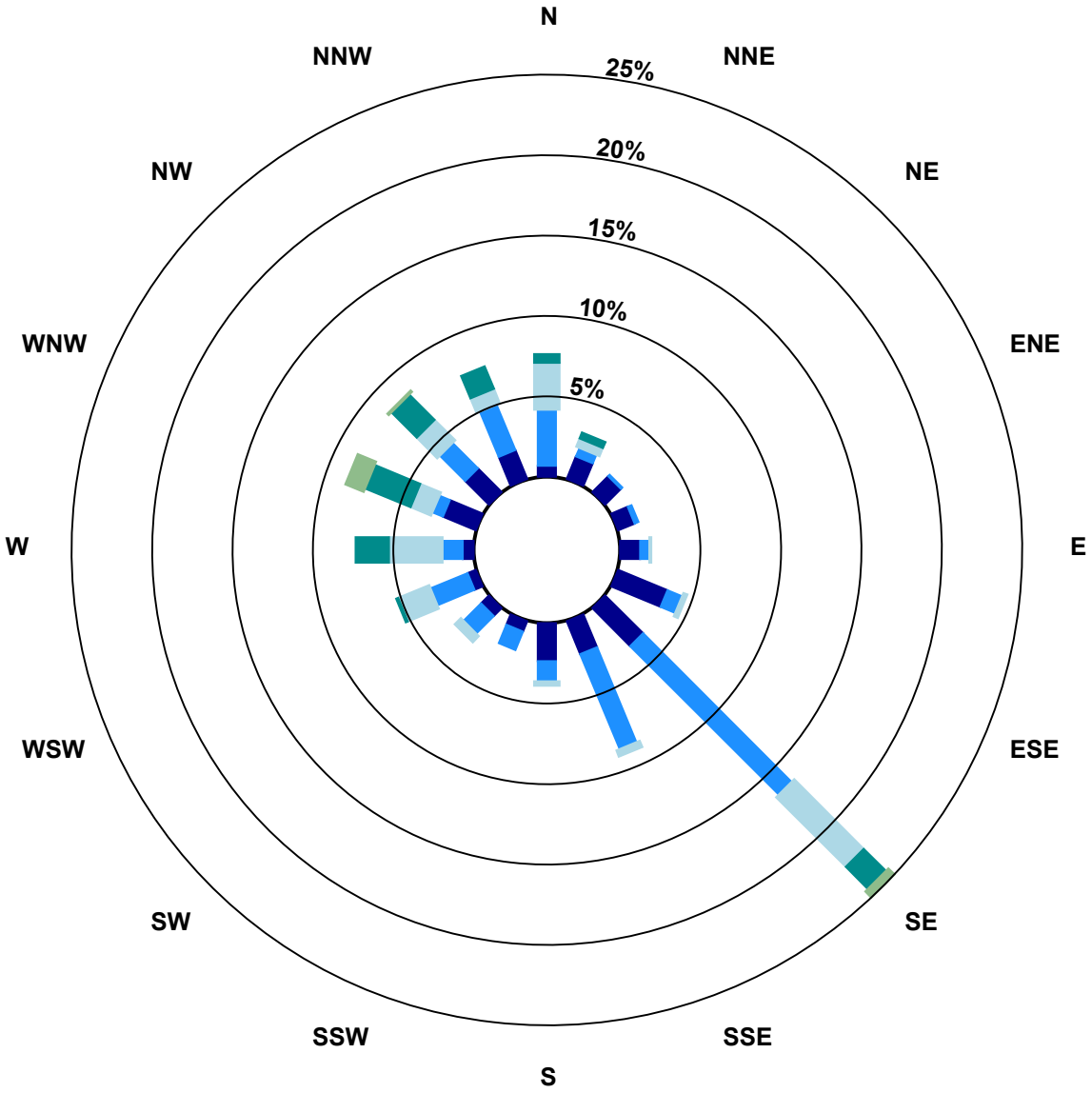
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Lower Camp



Classes (km/h)

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

Total Number of Valid Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Lower Camp - September 2026

Direction of Maximum Speed: 311 deg on Sep 30 02:00
Direction of Maximum Daily Speed Average: 286.6 deg on Sep 26

Direction of Minimum Speed: 40 deg on Sep 25 02:00

Direction of Minimum Daily Speed Average: 0.7 deg on Sep 8

Monthly Average Direction: 260.5 deg

Hours in Service:	720
Hours of Data:	720
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-Sep	128	147	140	150	141	115	112	111	138	141	135	161	156	152	145	143	140	145	142	138	138	137	132	137	140.2
2-Sep	132	124	128	130	132	141	142	141	132	129	133	136	133	133	132	133	131	131	132	136	136	133	142	133	133.6
3-Sep	136	133	130	137	143	141	131	127	137	130	117	120	89	101	82	75	82	39	337	328	6	19	327	73	116.9
4-Sep	115	126	290	300	292	291	285	317	341	358	8	12	19	10	10	13	9	3	0	7	5	345	358	9	6.4
5-Sep	8	0	1	351	358	355	352	8	356	353	12	25	347	354	352	325	303	331	310	292	27	101	110	317	352.0
6-Sep	137	130	134	178	148	126	120	104	114	115	126	118	138	140	154	144	178	191	154	141	131	135	140	139	139.1
7-Sep	146	134	145	141	194	148	83	134	142	150	167	153	144	126	119	39	137	143	72	119	147	145	12	90	138.9
8-Sep	105	101	57	91	314	307	266	315	41	315	333	328	7	22	42	54	350	234	189	173	130	109	143	144	55.6
9-Sep	145	144	145	142	143	142	142	148	132	138	161	206	231	256	254	250	235	235	246	243	200	220	251	258	209.0
10-Sep	256	289	302	276	265	271	261	265	270	288	283	282	268	291	305	311	304	291	295	305	310	305	302	309	288.5
11-Sep	308	312	315	317	321	328	329	336	337	341	337	345	336	332	326	331	321	326	330	329	327	316	321	309	327.0
12-Sep	307	299	301	329	343	326	303	18	275	285	328	305	251	262	267	250	253	246	208	200	205	218	236	219	271.0
13-Sep	158	151	152	147	143	140	147	150	142	141	180	265	250	249	239	252	252	237	358	355	343	331	333	329	219.7
14-Sep	353	15	6	354	352	1	352	352	347	3	352	345	356	4	353	5	353	332	327	326	311	310	332	333	351.4
15-Sep	332	329	331	284	304	288	266	186	169	154	264	265	264	250	240	222	344	175	243	231	281	250	277	320	267.5
16-Sep	332	297	19	351	25	34	345	253	214	198	211	206	212	125	128	131	109	127	108	133	120	109	130	136	142.4
17-Sep	130	134	131	141	139	144	121	332	140	136	146	184	141	143	134	138	118	169	129	128	99	119	76	119	136.6
18-Sep	136	143	129	151	295	283	311	320	328	317	31	40	310	335	59	66	122	77	181	48	356	213	140	149	68.4
19-Sep	152	139	148	143	141	142	145	151	147	136	137	140	149	176	171	168	172	196	170	160	154	154	154	127	152.4
20-Sep	143	143	146	142	147	146	144	141	140	139	141	140	262	276	253	223	221	183	188	187	153	161	154	140	165.1
21-Sep	125	146	148	154	148	145	145	142	139	138	143	147	143	65	128	136	172	158	180	183	182	127	155	170	145.8
22-Sep	152	81	301	122	78	54	339	312	339	351	9	337	322	299	261	271	282	277	258	262	259	283	255	98	288.9
23-Sep	112	82	104	122	134	138	126	134	123	135	136	136	140	148	143	146	144	153	147	140	150	187	154	93	138.7
24-Sep	151	144	141	164	146	149	145	140	142	140	138	201	258	265	265	267	260	245	219	43	34	117	106	16	208.9
25-Sep	312	40	302	300	309	318	305	316	322	322	17	9	14	18	352	17	10	10	14	5	1	357	343	344	354.7
26-Sep	355	321	324	303	300	273	274	276	278	280	282	285	283	282	285	302	291	287	285	283	284	281	284	276	286.6
27-Sep	257	271	274	268	273	274	271	271	272	270	267	265	265	263	260	266	265	254	242	222	234	240	236	224	263.8
28-Sep	253	167	145	145	154	149	144	142	137	141	229	226	246	245	243	220	192	183	161	165	165	170	148	100	177.3
29-Sep	138	144	149	143	142	144	137	136	153	183	258	272	286	288	294	286	288	285	281	283	292	292	286	287	272.5
30-Sep	302	311	313	305	309	299	301	310	310	310	313	325	321	322	306	316	328	330	326	310	351	289	19	321	312.3
	215.4	230.9	291.6	217.8	228.8	206.0	199.2	208.0	181.4	179.6	243.9	269.2	276.5	283.4	279.5	283.9	274.9	268.4	265.3	268.4	265.4	254.1	252.2	271.3	
	Diurnal Average																								

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

Wind Direction 10m (WD10) - deg
Lower Camp - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 104 deg on Sep 18 22:00

Minimum Value: 10 deg on Sep 20 11:00

Percentiles: P_1 = 11 P_{10} = 13 Q_1 = 15 Median = 22 Q_3 = 33 P_{90} = 57 P_{99} = 89

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

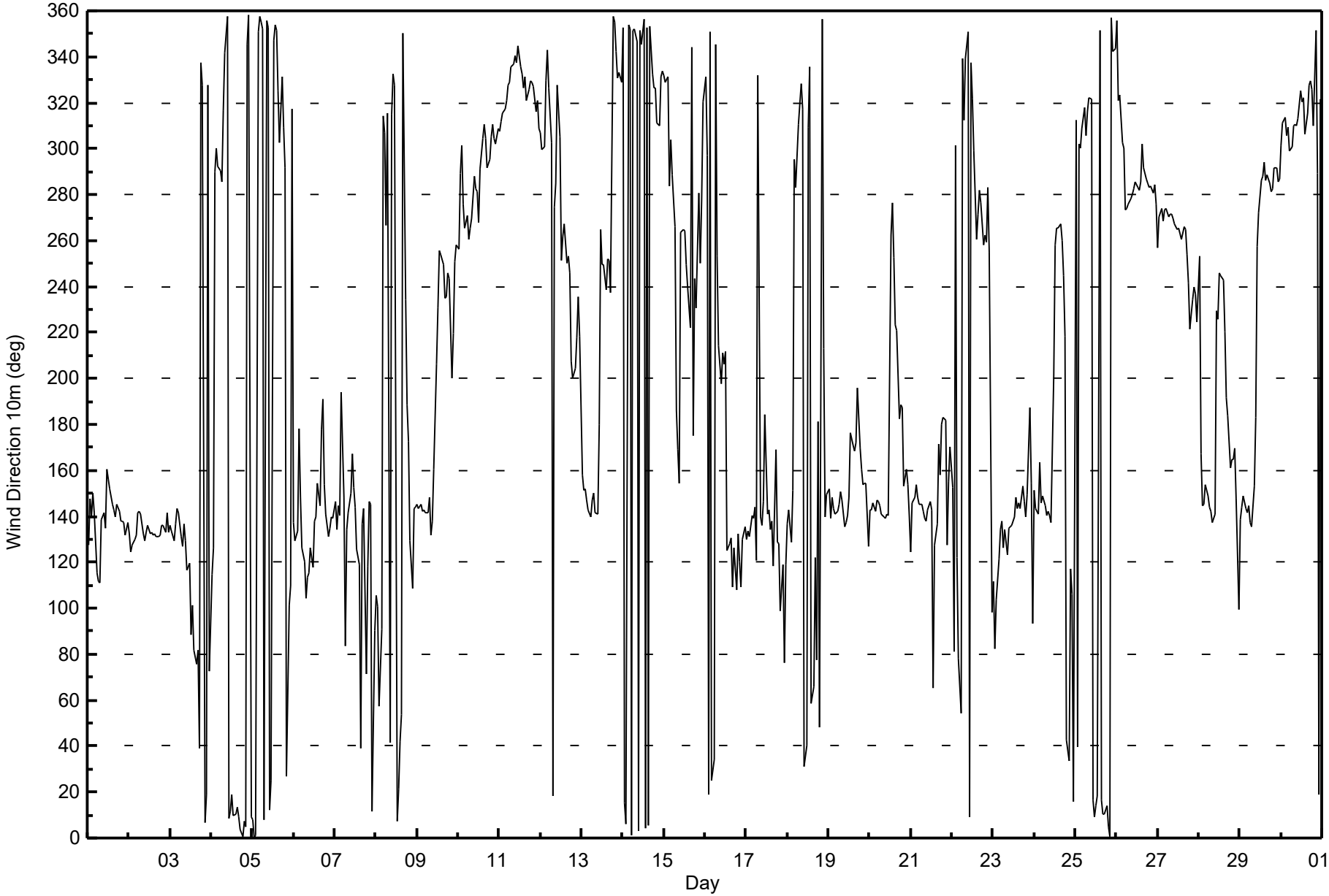
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	26	39	34	45	32	47	22	18	16	15	14	35	32	28	25	21	14	18	20	27	26	27	29	22	47
2-Sep	23	18	13	14	17	15	12	11	12	11	11	11	12	11	10	10	10	11	12	13	13	13	14	15	23
3-Sep	14	24	16	19	19	13	26	15	12	13	16	15	21	24	31	25	22	15	40	34	19	33	51	62	62
4-Sep	19	19	87	25	29	31	24	18	18	20	19	20	17	19	20	16	20	21	21	20	24	24	22	20	87
5-Sep	21	20	22	25	22	22	27	19	26	26	35	60	42	43	36	29	27	21	27	62	78	89	86	69	89
6-Sep	62	28	56	59	35	64	22	31	57	58	27	52	15	17	35	39	43	33	31	33	17	16	26	21	64
7-Sep	29	24	34	22	78	33	41	16	19	34	38	33	29	18	26	25	13	14	85	66	19	97	67	66	97
8-Sep	37	49	37	54	76	68	43	62	82	26	31	36	24	16	24	24	77	34	27	38	48	43	22	17	82
9-Sep	24	22	16	36	46	18	17	17	14	14	42	48	34	19	20	20	24	26	19	25	32	36	16	13	48
10-Sep	14	18	13	15	14	16	19	15	15	20	13	15	13	19	13	15	12	12	12	12	12	12	12	12	20
11-Sep	11	13	13	13	13	16	15	17	18	19	19	22	19	17	15	18	12	15	18	18	15	19	27	12	27
12-Sep	11	12	21	26	15	24	38	35	44	37	58	80	35	37	31	26	22	25	23	24	29	28	27	31	80
13-Sep	25	19	20	17	17	21	18	25	15	18	60	23	26	27	32	35	22	28	89	21	20	17	16	14	89
14-Sep	25	18	21	22	20	20	22	22	21	22	22	25	24	22	26	21	28	15	13	14	21	27	19	23	28
15-Sep	16	22	53	50	21	45	43	45	50	53	24	20	24	29	37	32	69	36	65	62	39	31	47	16	69
16-Sep	26	44	33	70	94	66	57	47	43	90	50	47	43	72	18	15	30	45	39	23	52	63	17	13	94
17-Sep	14	14	11	12	13	32	59	88	17	16	68	54	12	16	13	36	33	69	30	21	94	45	40	26	94
18-Sep	29	20	78	41	80	65	47	17	23	20	19	28	37	48	23	28	23	30	94	66	76	104	31	40	104
19-Sep	34	25	28	13	16	16	14	21	16	13	13	12	26	39	31	33	32	26	25	22	19	20	24	25	39
20-Sep	13	14	16	23	41	19	21	13	12	12	10	19	70	19	30	40	33	29	31	41	25	21	18	22	70
21-Sep	29	16	13	19	16	12	14	12	12	13	11	12	21	40	44	23	33	28	30	48	68	34	31	34	68
22-Sep	34	66	80	70	49	82	72	30	28	26	23	33	20	19	17	15	14	15	11	12	16	62	84	41	84
23-Sep	27	38	41	27	46	37	33	77	18	14	12	13	12	17	15	17	20	24	21	18	26	67	92	60	92
24-Sep	28	83	57	46	16	32	16	24	15	19	11	60	21	17	16	17	18	21	27	80	50	66	77	74	83
25-Sep	56	25	65	25	21	21	26	18	27	20	51	23	17	17	23	15	17	21	22	23	24	21	19	21	65
26-Sep	23	18	25	14	14	15	14	13	13	13	14	14	14	14	13	15	15	13	12	13	13	13	13	14	25
27-Sep	16	13	15	12	13	13	13	14	15	14	14	15	16	17	16	15	15	14	23	27	28	22	26	29	29
28-Sep	61	36	14	12	22	15	15	12	11	17	40	31	22	25	25	32	37	29	20	22	21	27	34	22	61
29-Sep	25	16	16	12	14	12	14	17	24	42	17	14	13	14	15	14	13	13	13	14	16	14	13	13	42
30-Sep	16	12	12	13	12	13	13	12	13	11	13	14	14	14	13	14	20	15	17	16	19	48	87	85	87
	62	83	87	70	94	82	72	88	82	90	68	80	70	72	44	40	77	69	94	80	94	104	92	85	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Lower Camp - September 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS13
FORT MCKAY SOUTH
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT McKAY SOUTH (AMS13)
SEPTEMBER 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	685	35	35	100	-	-	18.5	0	2.7	0
TRS(ppb) Average	686	34	34	100	7.2	1	4.5	0	1.4	0
THC(ppm) Average	605	33	115	88.61	-	-	3.2	-	2.4	-
NMHC(ppm) Average	605	33	115	88.61	-	-	0.315	-	0.097	-
CH4(ppm) Average	605	33	115	88.61	-	-	3	-	2.4	-
O3(ppb) Average	687	33	33	100	-	-	39	0	23.1	-
NO2(ppb) Average	685	35	35	100	-	-	21.8	0	10.1	-
NO(ppb) Average	685	35	35	100	-	-	53.7	-	7.4	-
NOX(ppb) Average	685	35	35	100	-	-	68.3	-	17.2	-
PM2.5(ug/m3) Average	717	1	3	99.72	-	-	27.6	0	11.9	0
ET(C) Average	720	0	0	100	-	-	27.9	-	19.3	-
RH(%) Average	720	0	0	100	-	-	100	-	89.8	-
WS(km/h) Average	720	0	0	100	-	-	22	-	15	-
WD(deg) Average	720	0	0	100	-	-	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT McKAY SOUTH (AMS13)
SEPTEMBER 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	685	0.38	1.5	-	0	0	0	0	0.1	0.5	18.5
TRS(ppb) Average	686	0.53	0.5	-	0.1	0.2	0.3	0.4	0.5	1	4.5
THC(ppm) Average	605	2.21	0.2	-	2	2	2	2.2	2.3	2.5	3.2
NMHC(ppm) Average	605	0.038	0.059	-	0	0	0	0	0.1	0.1	0.315
CH4(ppm) Average	605	2.17	0.2	-	2	2	2	2.1	2.2	2.4	3
O3(ppb) Average	687	13.99	10.8	-	0	0.7	3	13.3	22.5	29.2	39
NO2(ppb) Average	685	3.92	3.9	-	0	0.3	1	2.6	5.7	9	21.8
NO(ppb) Average	685	2	4.6	-	0	0	0.1	0.3	1.7	5.9	53.7
NOX(ppb) Average	685	5.91	7.2	-	0	0.3	1.2	3.5	8.1	13.9	68.3
PM2.5(ug/m3) Average	717	4.84	3.7	-	0.1	1.2	2.1	4.2	6.4	8.9	27.6
Temperature 2 m (C) Average	720	11.53	5.9	-	-1	4.3	7.2	11	15.6	19.9	27.9
Relative Humidity (%) Average	720	75.61	19.5	-	25.9	45.1	62.1	79.1	93.2	97.8	100
Wind Speed 10 m (km/h) Average	720	7.2	5	-	0	2	3	6	10	14	22
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT McKAY SOUTH (AMS13)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
THC/NMHC/CH4	01 Sep 2026 16:00	02 Sep 2026 13:00	22	Maintenance - stabilization post maintenance
THC/NMHC/CH4	19 Sep 2026 02:00	21 Sep 2026 10:00	57	Unstable Operation - inconsistent response
THC/NMHC/CH4	21 Sep 2026 11:00	21 Sep 2026 13:00	3	Maintenance - station operator activities
PM2.5	06 Sep 2026 11:00	06 Sep 2026 11:00	1	DAS Failure - data not recorded

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Fort McKay South - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 18.5 ppb on Sep 7 14:00 Maximum Daily Average: 2.7 ppb on Sep 7

Minimum Value: 0.0 ppb on Sep 2 04:00
Maximum Diurnal Average: 1.5 ppb at hour 14
Monthly Average: 0.38 ppb

Minimum Daily Average: 0.0 ppb on Sep 14
Minimum Diurnal Average: 0.0 ppb at hour 3
Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.1 P_{90} = 0.5 P_{99} = 6.2

Hours in Service:	720
Hours of Data:	685
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-Sep	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.6	8.6	C	C	C	C	C	0.5	0.8	2.2	2.1	1.9	2.0	0.6	0.4	0.3	0.2	1.1	8.6
2-Sep	0.1	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.2	1.4	0.7	0.8	1.2	0.6	0.4	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.6	0.3	1.4
3-Sep	0.1	0.1	Z	0.1	0.0	0.0	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	0.0	0.0	0.0	0.2
4-Sep	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	0.0	0.0	0.1
5-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
6-Sep	0.0	0.0	0.0	0.1	0.1	Z	0.1	0.0	0.1	0.1	0.1	0.2	0.4	1.5	1.9	12.0	2.3	0.5	0.7	0.3	0.2	0.2	0.3	0.3	0.9	12.0
7-Sep	Z	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.3	17.3	7.4	3.4	18.5	6.0	0.8	3.6	3.3	0.9	0.4	0.2	0.1	0.1	0.1	2.7	18.5
8-Sep	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	2.6	3.6	1.5	0.5	0.2	0.7	0.2	0.1	0.1	0.0	0.1	0.1	0.5	3.6
9-Sep	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.4	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	0.4
10-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
11-Sep	0.0	0.0	0.0	0.0	Z	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	0.0	0.1
12-Sep	0.0	0.0	0.0	0.0	0.0	Z	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	0.0	0.1	0.0	0.0	0.1
13-Sep	Z	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
14-Sep	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
15-Sep	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
16-Sep	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.0	0.1	2.1	1.9	3.6	1.3	0.5	0.3	0.2	2.5	2.5	0.3	0.1	0.1	0.1	0.0	0.1	0.7	3.6
17-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.2	4.8	4.1	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.5	4.8
18-Sep	0.0	0.1	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
19-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.4	1.6	2.5	3.6	0.6	4.1	3.0	3.7	0.4	0.3	0.3	0.7	1.0	0.4	0.2	1.0	4.1
20-Sep	0.1	Z	0.1	0.1	0.1	0.0	0.0	0.1	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
21-Sep	0.3	0.1	Z	0.1	0.0	0.0	0.0	0.1	0.2	0.4	0.5	2.7	4.0	2.3	4.0	4.1	4.1	2.2	0.5	0.5	0.2	0.2	0.2	0.2	1.2	4.1
22-Sep	0.1	0.0	0.0	Z	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	0.0	0.0	0.1
23-Sep	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.2	0.2	0.6	1.8	2.2	14.0	9.5	3.7	0.9	0.6	0.4	0.2	0.7	2.8	0.4	0.2	1.7	14.0
24-Sep	0.1	0.1	0.1	0.0	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	0.0	0.0	0.1	0.1
25-Sep	Z	0.1	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
26-Sep	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-Sep	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
28-Sep	0.0	0.0	0.0	Z	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	0.5	0.0	0.5
29-Sep	0.1	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
30-Sep	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
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.4	1.0	0.7	0.7	1.5	1.0	0.9	0.7	0.4	0.2	0.1	0.1	0.2	0.1	0.1	Diurnal Average	
	0.3	0.2	0.1	0.1	0.1	0.2	0.1	0.6	8.6	4.8	17.3	7.4	4.0	18.5	9.5	12.0	4.1	3.3	1.9	2.0	0.7	2.8	0.4	0.6	Diurnal Maximum	

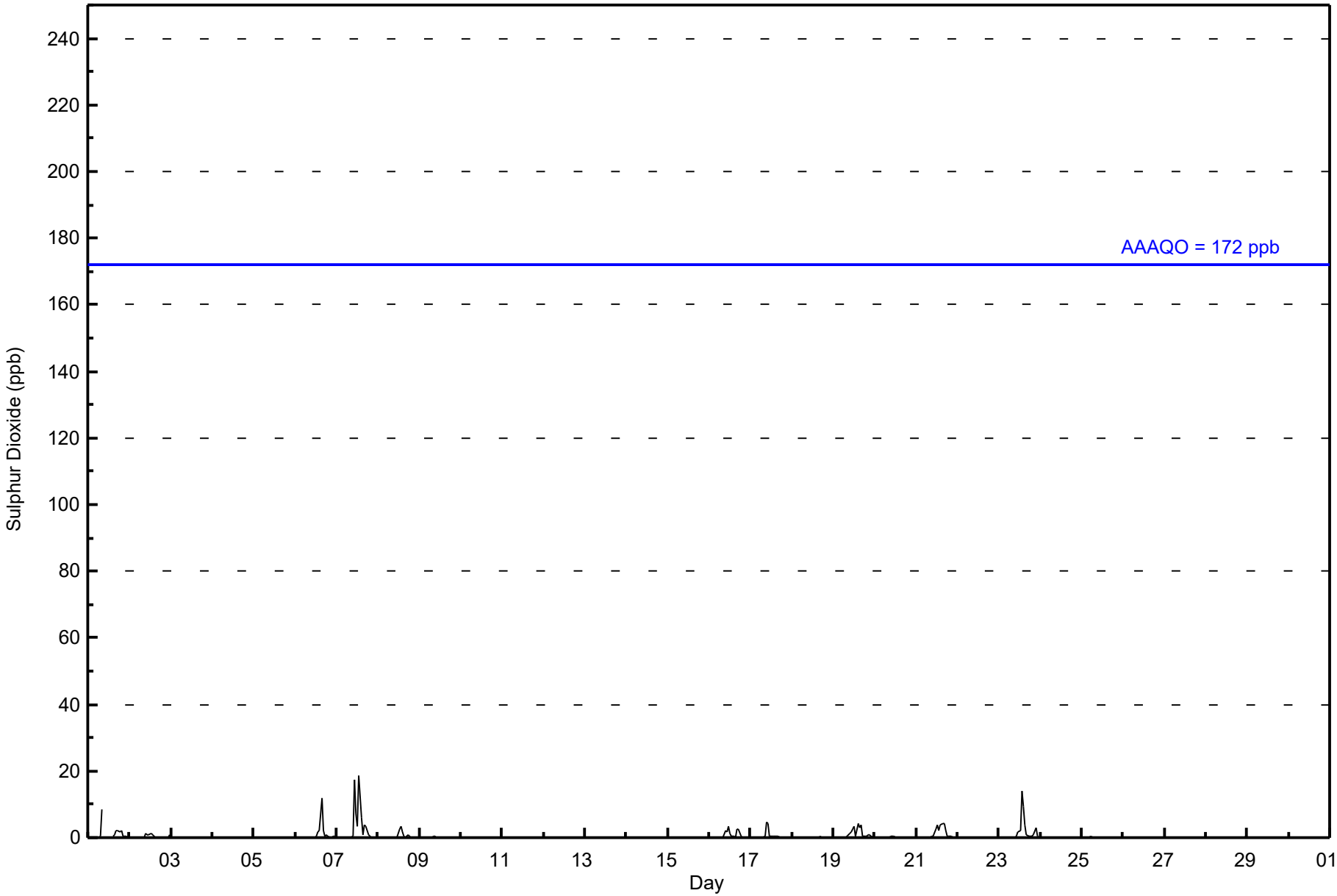
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Fort McKay South - September 2026



Sulphur Dioxide (SO_2) - ppb
Fort McKay South - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	681	99.42	99.42
11 - 20	4	0.58	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Fort McKay South - September 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	65	23	11	4	4	5	22	38	68	78	89	76	61	48	42	47	681
11 - 20	0	0	0	0	0	0	0	1	3	0	0	0	0	0	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	65	23	11	4	4	5	22	39	71	78	89	76	61	48	42	47	685

Total Number of Valid Hours: 685

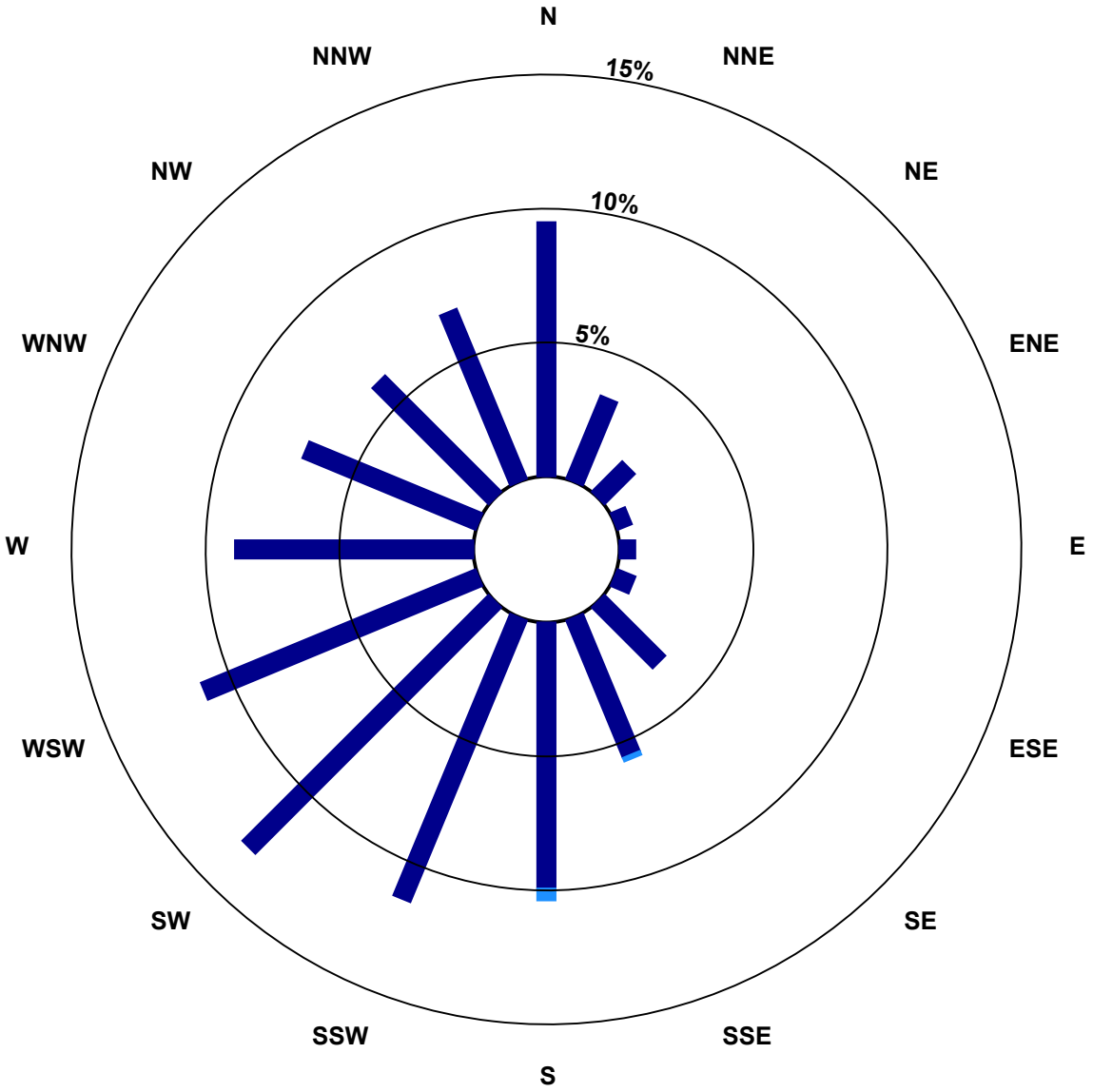
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Fort McKay South



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

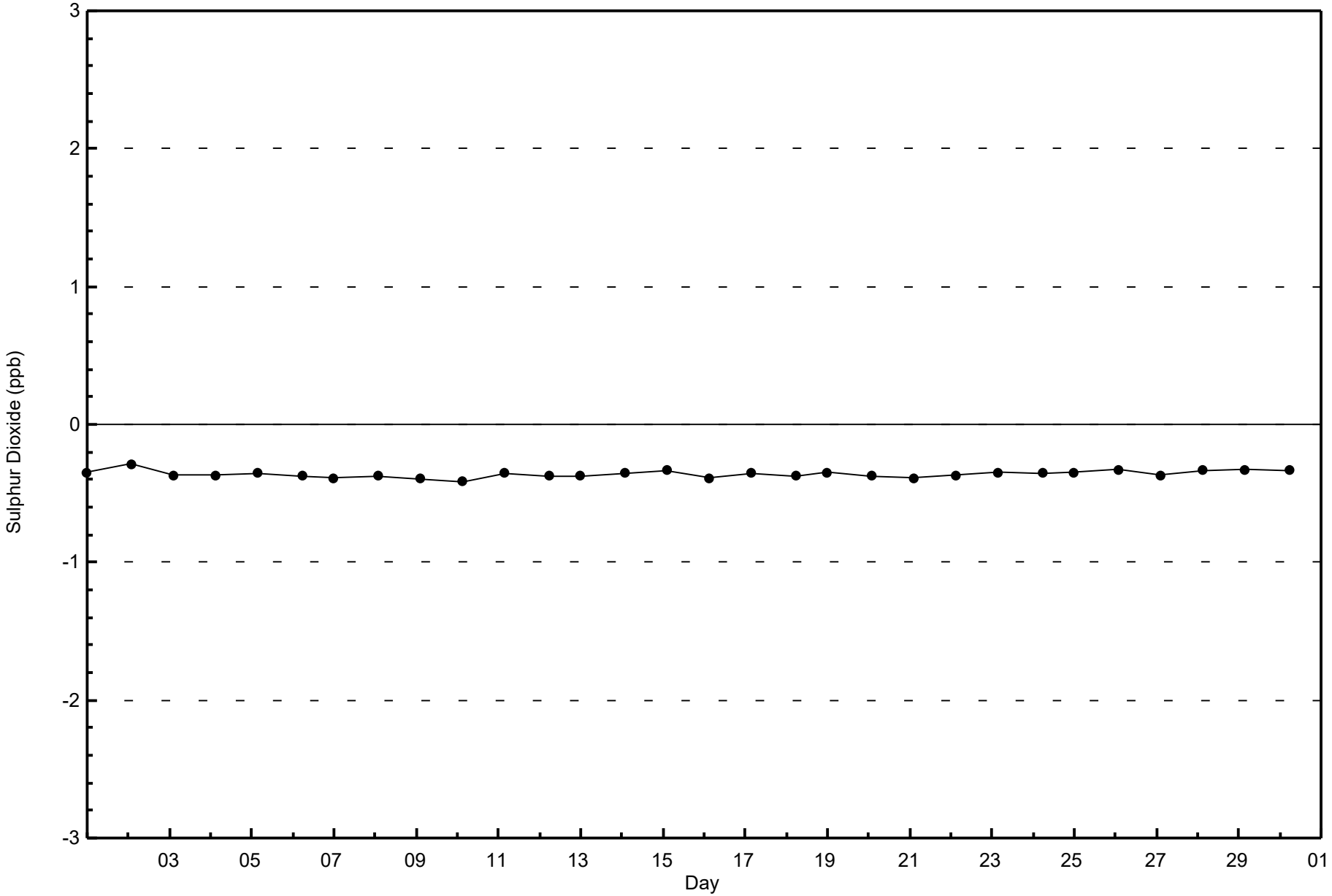
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Fort McKay South - September 2026

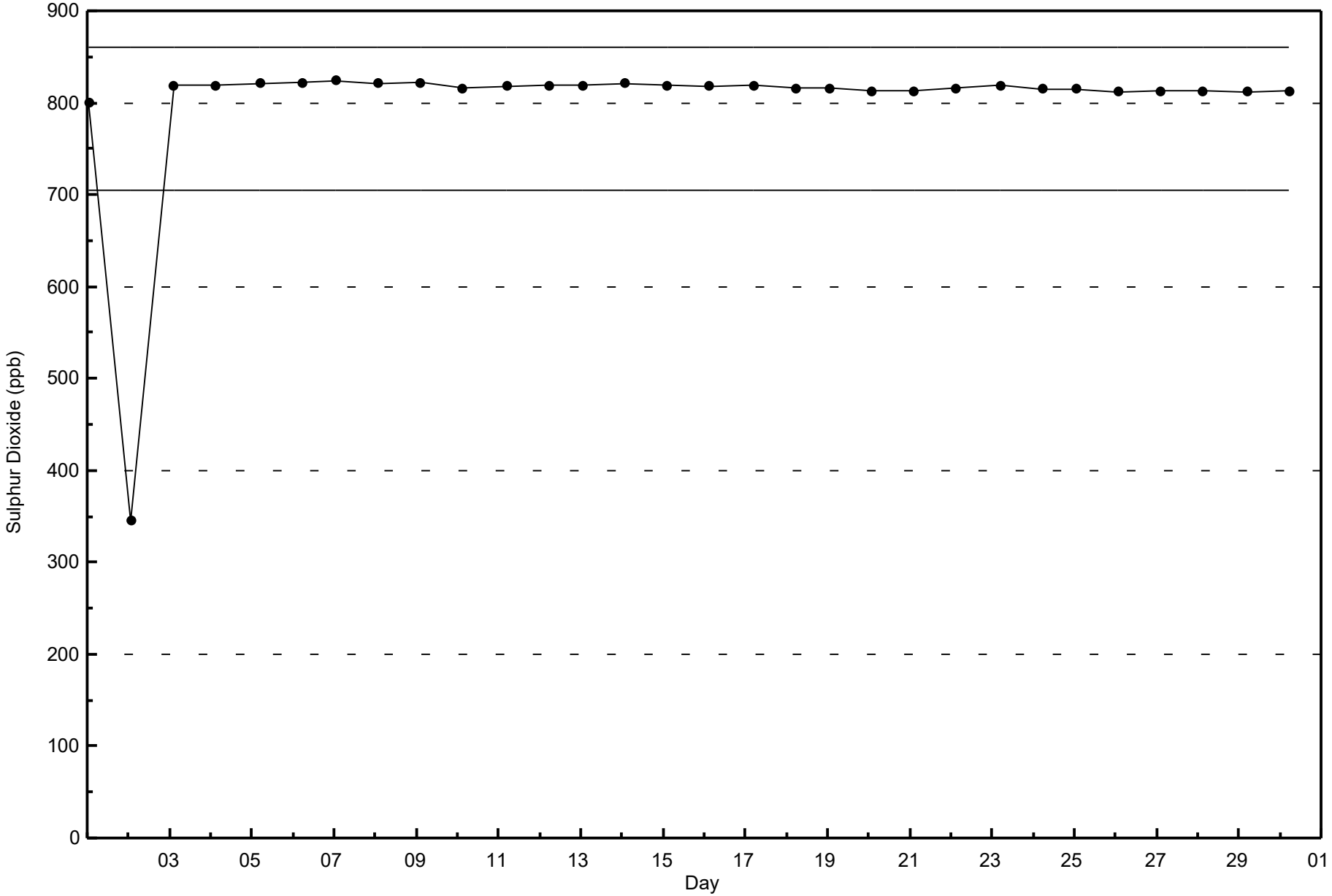


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Span Responses

Sulphur Dioxide (SO_2) - ppb

Fort McKay South - September 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Fort McKay South - September 2026

Number of Exceedences (AAAQG): 30-Min: 1

Maximum Value: 7.2 ppb on Sep 1 08:30

Maximum Daily Average: 1.4 ppb on Sep 19

Minimum Value: 0.1 ppb on Sep 30 21:30

Minimum Daily Average: 0.1 ppb on Sep 30

Maximum Diurnal Average: 0.9 ppb at hour 9

Minimum Diurnal Average: 0.4 ppb at hour 3

Monthly Average: 0.53 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.3 Median = 0.4 Q_3 = 0.5 P_{90} = 1.0 P_{99} = 3.0

Periods in Service:	1440
Periods of Valid Data:	1371
Periods of Invalid Data:	69
Periods of Calibration:	69
Percent Operational Time:	100.0

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-Sep	0.5	Z	0.5	0.5	0.4	0.5	1.0	0.9	7.2	0.9	0.8	0.7	0.6	0.5	0.5	0.5	0.6	1.4	0.7	1.4	1.3	1.8	3.0	4.4	1.3	7.2
	0.5	SP	0.5	0.5	0.5	0.7	1.2	1.8	1.8	0.9	0.9	0.7	0.5	0.5	0.5	0.5	1.0	1.4	1.3	1.0	1.3	2.1	4.3	2.8		
2-Sep	2.2	3.0	Z	1.7	1.0	0.8	0.8	0.8	0.8	2.7	2.2	2.4	2.2	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	3.9	1.2	3.9
	2.4	2.9	SP	1.2	0.9	0.9	0.8	0.8	1.5	2.3	2.0	2.0	1.1	0.9	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	1.4	2.6		
3-Sep	2.4	1.7	1.1	Z	0.7	0.6	0.6	0.6	0.6	1.4	0.5	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.4	0.3	0.4	0.3	0.3	0.4	0.6	2.4
	1.9	1.3	0.8	SP	0.6	0.6	0.6	0.6	0.6	1.1	0.4	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.4		
4-Sep	0.5	0.6	0.5	0.4	Z	0.3	0.4	0.6	0.8	0.8	0.7	0.6	0.5	0.4	0.4	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.8
	0.5	0.6	0.5	0.4	SP	0.3	0.4	0.7	0.8	0.7	0.7	0.5	0.5	0.4	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4		
5-Sep	0.4	0.4	0.7	0.6	0.5	Z	0.5	0.6	0.8	0.8	0.6	0.5	0.5	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.9
	0.4	0.5	0.7	0.6	0.5	SP	0.5	0.7	0.9	0.8	0.5	0.5	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3		
6-Sep	Z	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.6	1.1	1.3	1.2	1.4	1.7	0.4	1.2	0.3	0.3	0.6	0.5	0.5	0.9	2.4	0.7	0.7	2.4
	SP	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.9	1.3	1.1	1.4	1.6	0.8	0.5	0.7	0.5	0.3	0.3	0.4	0.5	2.0	1.5	0.5		
7-Sep	0.5	Z	0.4	0.5	0.4	0.6	0.7	1.0	0.9	2.3	0.6	1.0	0.4	1.0	0.7	0.2	0.2	0.3	0.5	1.2	1.3	1.8	1.1	0.7	0.8	2.3
	0.5	SP	0.4	0.4	0.4	0.7	0.9	0.8	1.7	0.6	2.1	0.4	0.4	0.6	0.4	0.2	0.3	0.4	0.8	1.6	1.1	1.9	0.9	0.6		
8-Sep	0.5	0.4	Z	0.3	0.3	0.3	0.2	0.3	0.4	0.5	0.6	0.5	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.7	1.4	0.8	0.4	1.4
	0.4	0.4	SP	0.3	0.3	0.2	0.2	0.4	0.4	0.5	0.6	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.4	1.2	1.2	0.7		
9-Sep	0.6	0.4	0.4	Z	2.6	3.9	2.4	1.1	2.7	1.3	0.6	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.8	3.9
	0.5	0.4	0.4	SP	3.0	2.9	1.5	1.4	2.8	0.6	0.5	0.4	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.4		
10-Sep	0.4	0.4	0.4	0.5	Z	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.6
	0.4	0.4	0.5	0.5	SP	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4		
11-Sep	0.4	0.4	0.4	0.4	0.4	Z	0.5	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.6
	0.4	0.4	0.4	0.4	0.4	SP	0.5	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4		
12-Sep	Z	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4
	SP	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4		
13-Sep	0.4	Z	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.6	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.6
	0.4	SP	0.4	0.5	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5		
14-Sep	0.5	0.5	Z	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.4	0.5	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.5
	0.5	0.5	SP	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	0.5	0.4	0.4	0.5	0.4	0.4	0.4		
15-Sep	0.4	0.4	0.3	Z	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.3	0.3	0.4	0.5
	0.4	0.4	0.3	SP	0.4	0.4	0.4	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	0.4	0.4	0.4	0.4		

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Fort McKay South - September 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-Sep	0.3	0.3	0.4	0.4	Z	0.3	0.3	0.4	0.5	0.9	0.6	0.8	0.8	0.7	0.6	0.6	0.9	0.6	0.5	0.6	0.5	0.5	0.4	0.3	0.5	0.9
	0.3	0.3	0.4	0.4	SP	0.3	0.3	0.4	0.6	0.7	0.6	0.8	0.8	0.6	0.5	0.7	0.7	0.6	0.5	0.6	0.5	0.4	0.3	0.2		
17-Sep	0.3	0.3	0.3	0.3	0.3	Z	0.4	0.3	0.7	C	C	C	C	0.3	0.3	0.4	0.3	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.7
	0.2	0.3	0.3	0.3	0.3	SP	0.3	0.5	C	C	C	C	C	0.3	0.3	0.3	0.3	0.5	0.3	0.2	0.2	0.2	0.2	0.2		
18-Sep	Z	0.3	0.3	0.3	0.3	0.2	0.2	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.8	0.3	0.4	0.8
	SP	0.3	0.3	0.2	0.3	0.2	0.3	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.6	0.4	0.4		
19-Sep	0.3	Z	0.2	0.6	0.3	1.1	2.2	1.2	3.2	2.0	0.9	0.8	0.7	0.6	0.8	1.2	0.9	0.4	0.6	1.3	4.0	3.7	1.1	2.2	1.4	4.4
	0.2	SP	0.4	0.5	0.6	1.9	1.7	1.5	3.0	1.2	0.8	0.8	0.7	0.8	0.8	1.1	1.6	0.4	0.4	3.8	4.4	3.1	1.9	1.5		
20-Sep	1.0	0.7	Z	0.5	0.5	0.6	0.4	0.3	0.8	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.4	0.6	0.9	0.5	0.4	0.5	1.0
	0.8	0.6	SP	0.4	0.6	0.5	0.4	0.4	0.6	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.4	0.5		
21-Sep	0.4	0.4	0.4	Z	0.4	0.4	0.5	0.4	1.0	2.0	0.6	1.3	1.5	1.0	1.2	1.4	1.2	1.1	0.9	0.9	0.9	1.0	0.8	0.5	0.8	2.0
	0.4	0.4	0.4	SP	0.3	0.4	0.5	0.5	1.6	1.0	1.5	0.9	1.0	1.0	1.3	1.3	1.1	0.9	0.9	0.8	0.9	0.9	0.6	0.4		
22-Sep	0.4	0.6	0.4	0.4	Z	0.2	0.2	0.4	0.5	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	0.7
	0.7	0.5	0.4	0.3	SP	0.2	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		
23-Sep	0.3	0.3	0.3	0.3	0.6	Z	0.5	0.5	0.8	1.7	2.0	1.3	0.7	1.2	1.4	1.6	0.7	0.8	0.7	0.4	0.4	2.7	1.5	0.8	0.9	2.7
	0.3	0.3	0.3	0.6	0.6	SP	0.4	0.5	1.2	1.9	2.2	0.9	0.8	1.4	1.9	0.9	0.7	0.6	0.4	0.4	1.5	1.8	1.2	0.5		
24-Sep	Z	0.3	0.3	0.3	0.4	0.4	0.3	0.3	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	0.3	0.3	0.6
	SP	0.3	0.3	0.3	0.5	0.3	0.5	0.5	0.5	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
25-Sep	0.3	Z	0.3	0.3	0.3	0.6	0.6	0.6	0.7	0.6	0.6	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.7
	0.3	SP	0.3	0.3	0.5	0.5	0.6	0.7	0.6	0.5	0.5	0.5	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2		
26-Sep	0.2	0.3	Z	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	0.2	0.2	0.1	0.2	0.2	0.1	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	0.3	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		
27-Sep	0.1	0.1	0.1	Z	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
	0.2	0.1	0.1	SP	0.1	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		
28-Sep	0.2	0.3	0.2	0.2	Z	0.2	0.3	0.3	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.2	0.7
	0.3	0.2	0.2	0.2	SP	0.3	0.3	0.4	0.7	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2		
29-Sep	0.2	0.2	0.2	0.2	0.2	Z	0.4	0.4	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	0.4
	0.2	0.2	0.2	0.2	0.3	SP	0.4	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		
30-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
	SP	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2		
	0.5	0.5	0.4	0.4	0.5	0.6	0.5	0.5	0.9	0.8	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.6	0.6	Diurnal Average	
	2.4	3.0	1.1	1.7	3.0	3.9	2.4	1.8	7.2	2.7	2.2	2.4	2.2	1.7	1.9	1.6	1.6	1.4	1.3	3.8	4.4	3.7	4.3	4.4	Diurnal Maximum	

Z - zerospan C - Calibration 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 - September 2026

Maximum Value: 4.5 ppb on Sep 1 09:00

Maximum Daily Average: 1.4 ppb on Sep 19

Minimum Value: 0.1 ppb on Sep 30 22:00

Minimum Daily Average: 0.1 ppb on Sep 30

Maximum Diurnal Average: 0.9 ppb at hour 9

Minimum Diurnal Average: 0.4 ppb at hour 3

Monthly Average: 0.53 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.3 Median = 0.4 Q_3 = 0.5 P_{90} = 1.0 P_{99} = 3.1

Hours in Service:	720
Hours of Data:	686
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-Sep	0.5	Z	0.5	0.5	0.5	0.6	1.1	1.4	4.5	0.9	0.9	0.7	0.5	0.5	0.5	0.5	0.8	1.4	1.0	1.2	1.3	1.9	3.6	3.6	1.3	4.5
2-Sep	2.3	2.9	Z	1.5	0.9	0.8	0.8	0.8	1.2	2.5	2.1	2.2	1.7	0.8	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.9	3.3	1.2	3.3
3-Sep	2.2	1.5	0.9	Z	0.6	0.6	0.6	0.6	0.6	1.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.4	0.6	2.2
4-Sep	0.5	0.6	0.5	0.4	Z	0.3	0.4	0.7	0.8	0.7	0.7	0.5	0.5	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.8
5-Sep	0.4	0.5	0.7	0.6	0.5	Z	0.5	0.7	0.8	0.8	0.6	0.5	0.5	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.8
6-Sep	Z	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.8	1.2	1.2	1.3	1.5	1.3	0.5	0.9	0.4	0.3	0.5	0.5	0.5	1.5	1.9	0.6	0.7	1.9
7-Sep	0.5	Z	0.4	0.4	0.4	0.6	0.8	0.9	1.3	1.4	1.3	0.7	0.4	0.8	0.6	0.2	0.3	0.3	0.6	1.4	1.2	1.8	1.0	0.6	0.8	1.8
8-Sep	0.5	0.4	Z	0.3	0.3	0.2	0.2	0.3	0.4	0.5	0.6	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.4	0.4	0.3	1.0	1.3	0.7	0.4	1.3
9-Sep	0.5	0.4	0.4	Z	2.8	3.4	2.0	1.2	2.7	1.0	0.5	0.4	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.8	3.4
10-Sep	0.4	0.4	0.5	0.5	Z	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6
11-Sep	0.4	0.4	0.4	0.4	0.4	Z	0.5	0.5	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	0.4	0.4	0.4	0.4	0.6
12-Sep	Z	0.4	0.4	0.4	0.4	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	0.4	0.4	0.4	0.4	0.4	0.4
13-Sep	0.4	Z	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.5
14-Sep	0.5	0.5	Z	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.5
15-Sep	0.4	0.4	0.3	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5
16-Sep	0.3	0.3	0.4	0.4	Z	0.3	0.3	0.4	0.5	0.8	0.6	0.8	0.8	0.6	0.6	0.6	0.8	0.6	0.5	0.6	0.5	0.5	0.3	0.3	0.5	0.8
17-Sep	0.2	0.3	0.3	0.3	0.3	Z	0.3	0.4	0.8	C	C	C	C	0.3	0.3	0.4	0.3	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.8
18-Sep	Z	0.3	0.3	0.2	0.3	0.2	0.3	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.4	0.6	0.4	0.4	0.6
19-Sep	0.2	Z	0.3	0.5	0.5	1.5	1.9	1.3	3.1	1.6	0.8	0.8	0.7	0.7	0.8	1.1	1.2	0.4	0.5	2.6	4.2	3.4	1.5	1.8	1.4	4.2
20-Sep	0.9	0.7	Z	0.5	0.6	0.6	0.4	0.4	0.7	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.8	0.5	0.4	0.5	0.9
21-Sep	0.4	0.4	0.4	Z	0.3	0.4	0.5	0.5	1.3	1.5	1.0	1.1	1.2	1.0	1.2	1.3	1.2	1.0	0.9	0.9	0.9	0.9	0.7	0.4	0.8	1.5
22-Sep	0.5	0.6	0.4	0.3	Z	0.2	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	0.3	0.3	0.3	0.6
23-Sep	0.3	0.3	0.3	0.5	0.6	Z	0.5	0.5	1.0	1.8	2.1	1.1	0.8	1.3	1.7	1.3	0.7	0.7	0.6	0.4	0.9	2.3	1.4	0.7	0.9	2.3
24-Sep	Z	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5
25-Sep	0.3	Z	0.3	0.3	0.4	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.4	0.6
26-Sep	0.2	0.2	Z	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	0.1	0.2	0.2	0.2	0.3
27-Sep	0.1	0.1	0.1	Z	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
28-Sep	0.3	0.2	0.2	0.2	Z	0.3	0.3	0.3	0.6	0.4	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.2	0.6
29-Sep	0.2	0.2	0.2	0.2	0.2	Z	0.4	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	0.4
30-Sep	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
	0.5	0.5	0.4	0.4	0.5	0.6	0.5	0.5	0.9	0.8	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.6	0.6	Diurnal Average	
	2.3	2.9	0.9	1.5	2.8	3.4	2.0	1.4	4.5	2.5	2.1	2.2	1.7	1.3	1.7	1.3	1.2	1.4	1.0	2.6	4.2	3.4	3.6	3.6	Diurnal Maximum	

Z - zerospan C - Calibration

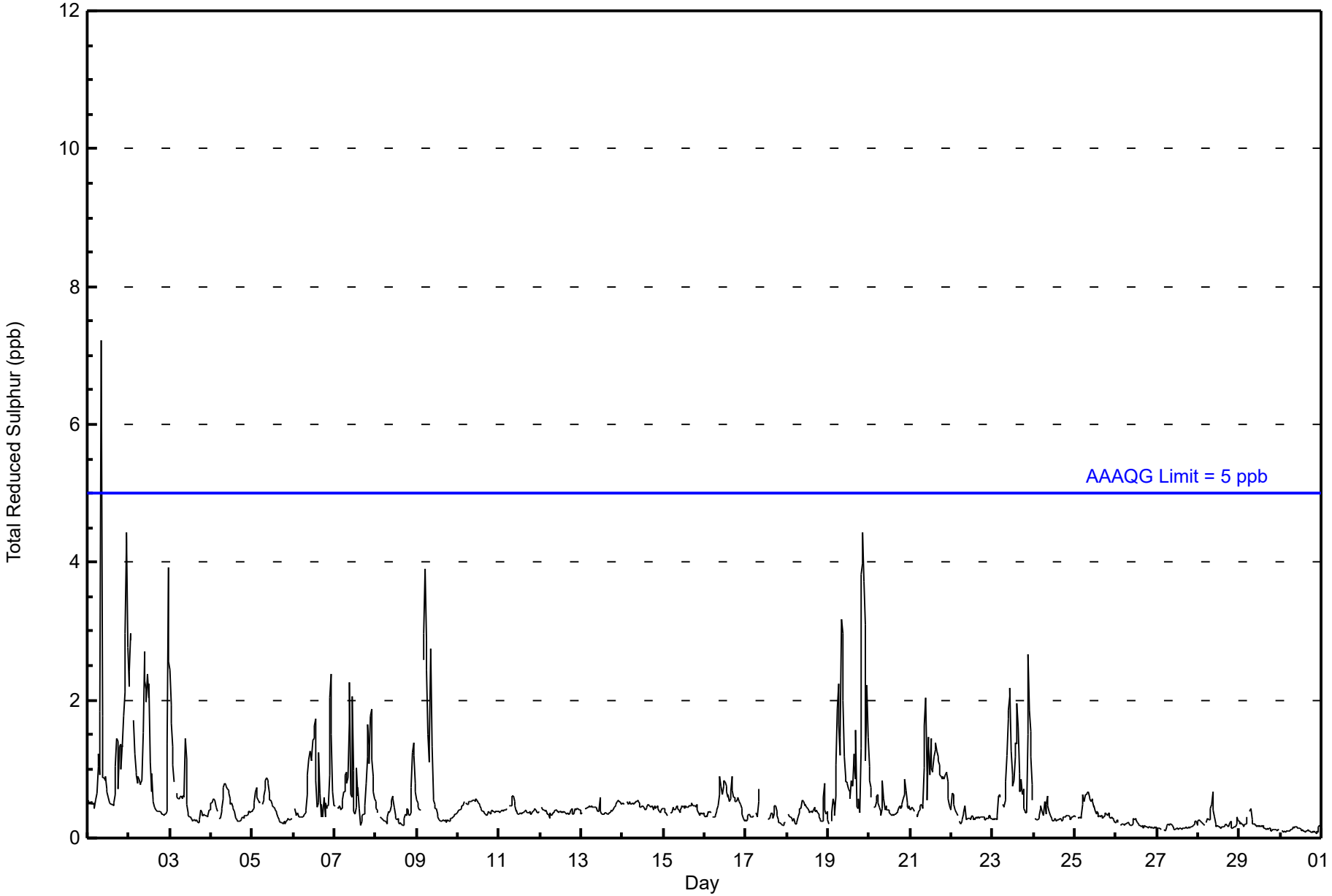
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Fort McKay South - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	674	98.25	98.25
3 - 4	11	1.60	99.85
5 - 7	1	0.15	100.00
8 - 11	0	0.00	100.00
> 11	0	0.00	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Reduced Sulphur (TRS) - ppb

Fort McKay South - September 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	23	11	4	4	5	22	40	67	70	90	78	58	47	41	48	674
3 - 4	0	0	0	0	0	0	0	2	3	5	1	0	0	0	0	0	11
5 - 7	0	0	0	0	0	0	0	1	0	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	66	23	11	4	4	5	22	43	70	75	91	78	58	47	41	48	686

Total Number of Valid Hours: 686

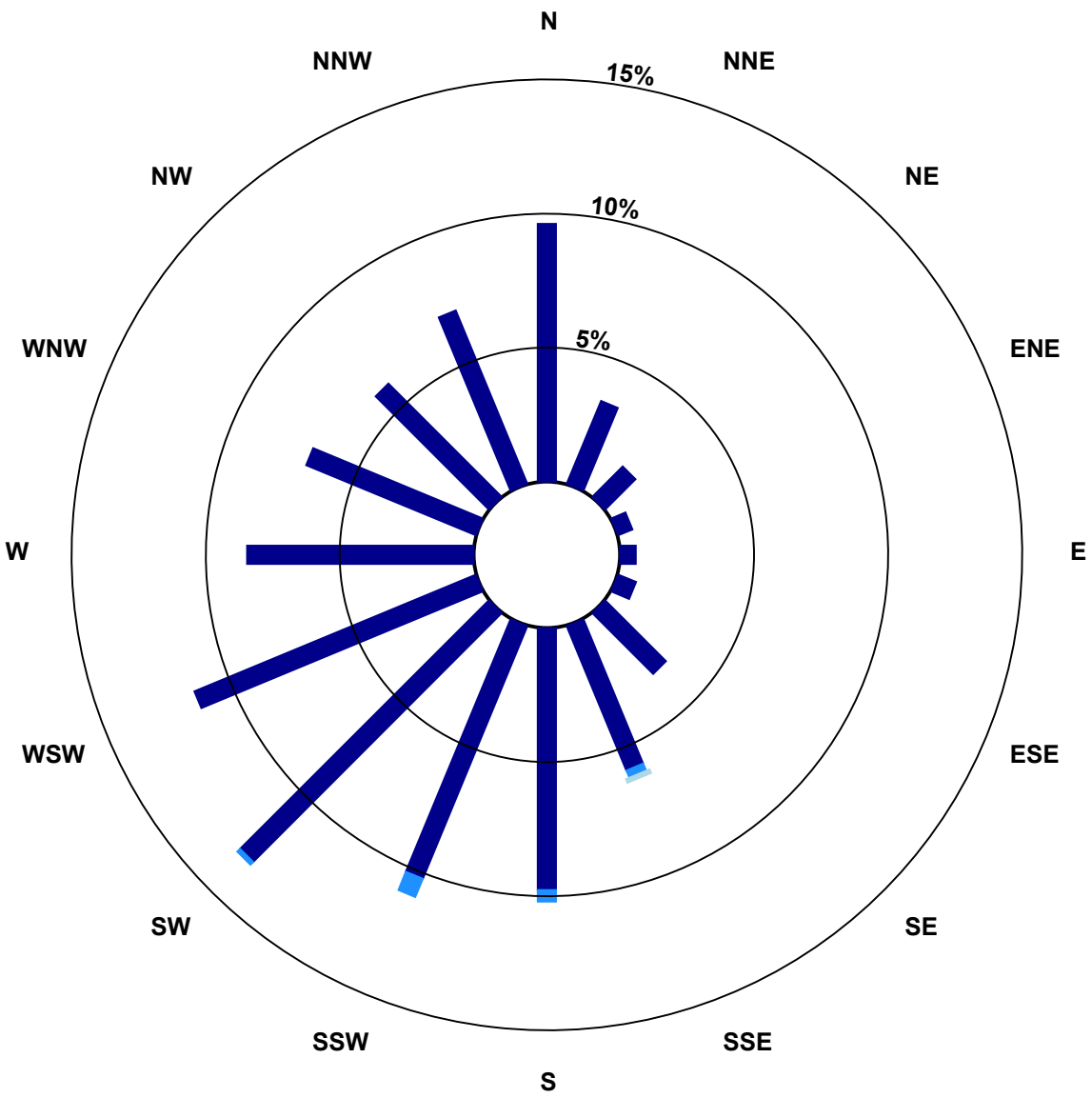
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Reduced Sulphur (TRS) - ppb

Fort McKay South



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

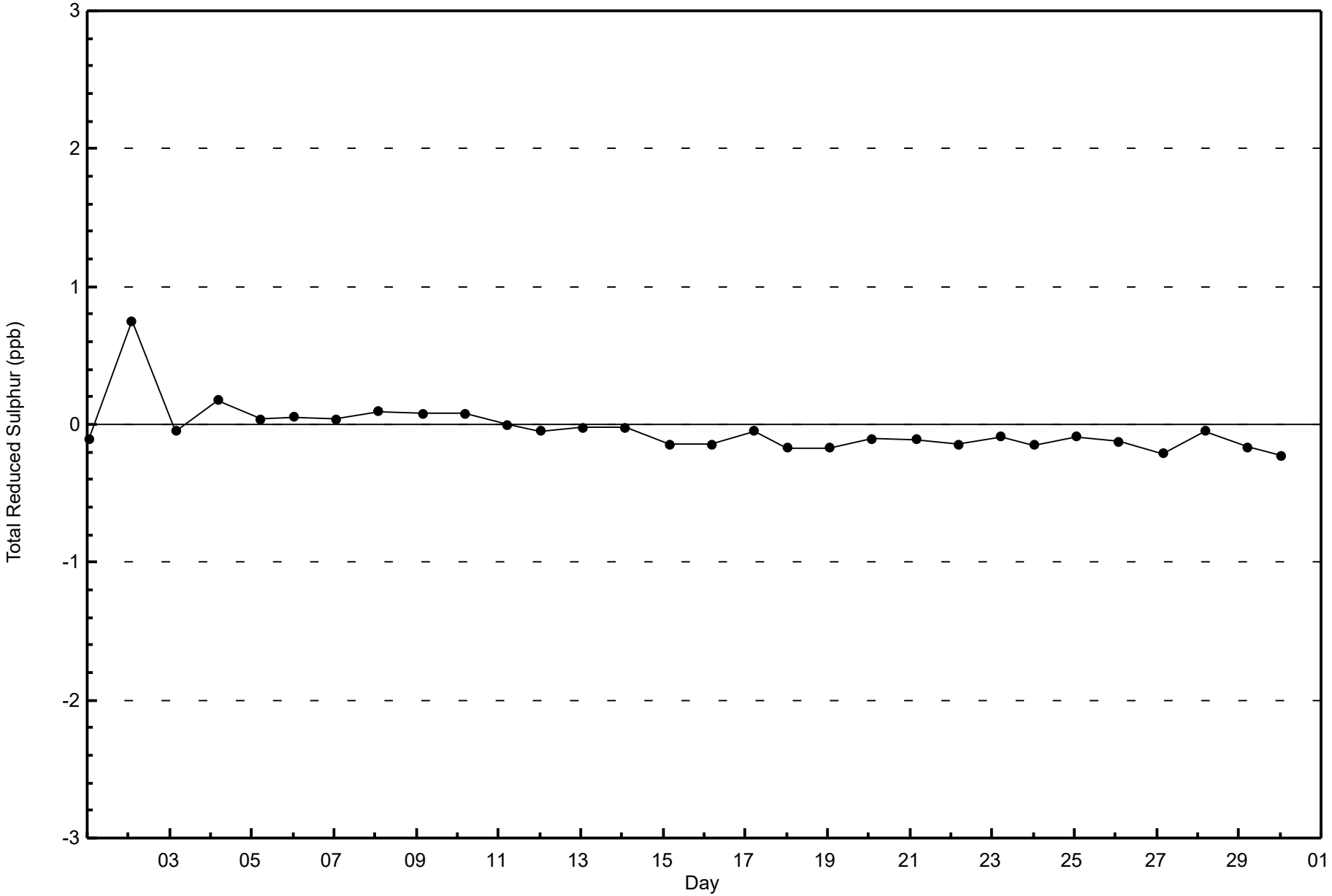
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Fort McKay South - September 2026

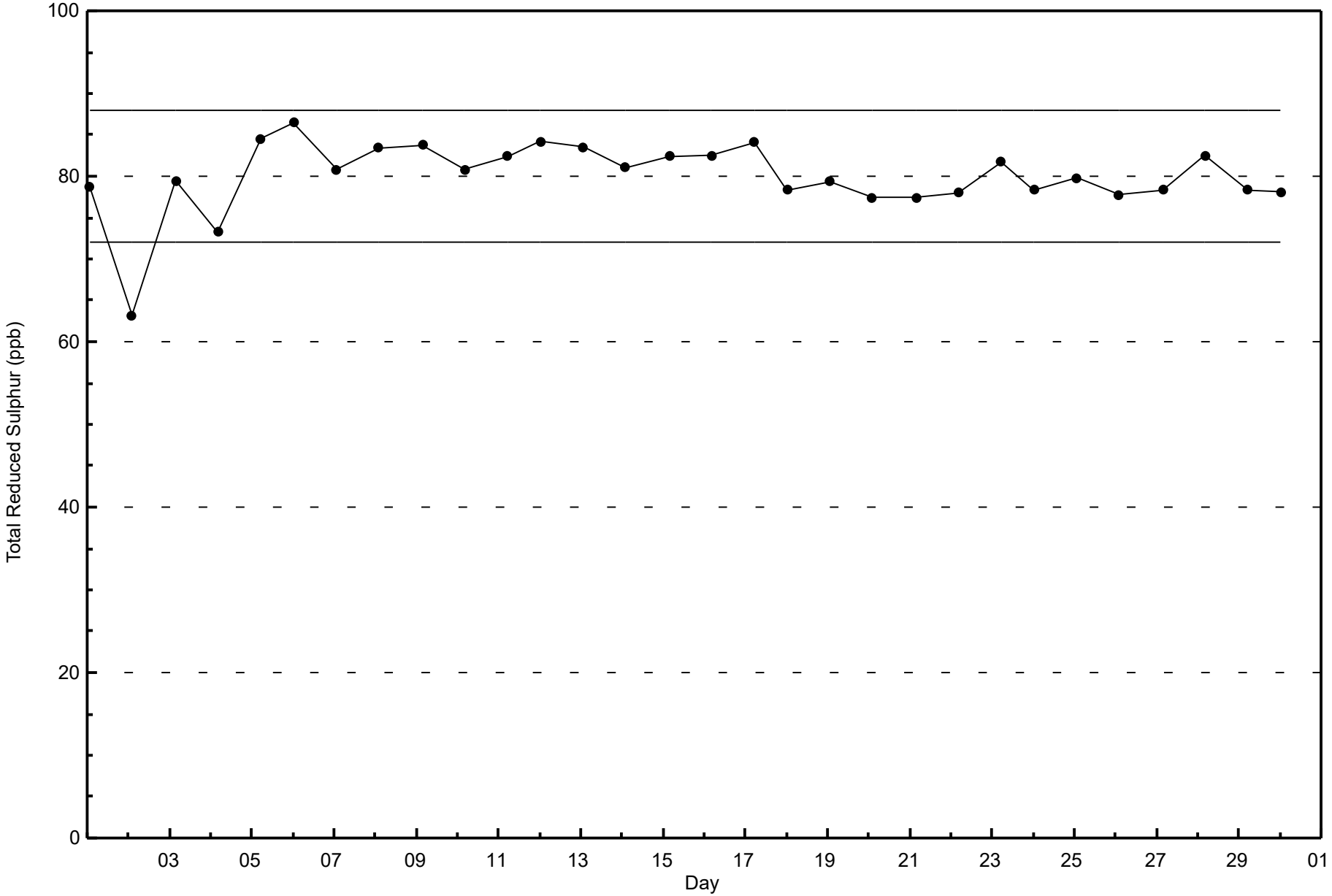


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Fort McKay South - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Fort McKay South - September 2026

Maximum Value: 3.2 ppm on Sep 17 09:00

Maximum Daily Average: 2.4 ppm on Sep 17

Minimum Value: 2.0 ppm on Sep 10 03:00

Minimum Daily Average: 2.0 ppm on Sep 30

Maximum Diurnal Average: 2.3 ppm at hour 9

Minimum Diurnal Average: 2.1 ppm at hour 16

Monthly Average: 2.21 ppm

Percentiles: P_1 = 2.0 P_{10} = 2.0 Q_1 = 2.0 Median = 2.2 Q_3 = 2.3 P_{90} = 2.5 P_{99} = 2.8

Hours in Service:	720
Hours of Data:	605
Hours of Missing Data:	115
Hours of Calibration:	33
Percent Operational Time:	88.6

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-Sep	Z	2.3	2.4	2.4	2.4	2.5	2.6	2.5	2.7	C	C	C	C	C	C	M	M	M	M	M	M	M	M	M	--	2.7
2-Sep	M	M	M	M	M	M	M	M	M	M	M	M	M	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.4	--	2.4
3-Sep	2.3	2.3	Z	2.2	2.2	2.2	2.3	2.5	2.4	2.3	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.4	2.6	2.5	2.5	2.5	2.6	2.3	2.6
4-Sep	2.7	2.8	2.7	Z	2.6	2.7	2.8	2.7	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	2.0	2.0	2.0	2.3	2.8
5-Sep	2.1	2.0	2.1	2.1	Z	2.1	2.1	2.1	2.4	2.5	2.4	2.3	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.5
6-Sep	2.3	2.3	2.3	2.3	2.4	Z	2.3	2.3	2.4	2.5	2.6	2.7	2.4	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.7
7-Sep	Z	2.1	2.2	2.2	2.2	2.4	2.5	2.3	2.3	2.4	2.3	2.1	2.1	2.2	2.2	2.1	2.2	2.3	2.4	2.4	2.5	2.8	2.5	2.4	2.3	2.8
8-Sep	2.4	Z	2.3	2.2	2.2	2.2	2.2	2.4	2.3	2.4	2.5	2.2	2.2	2.2	2.2	2.1	2.2	2.3	2.3	2.3	2.3	2.3	2.4	2.5	2.3	2.5
9-Sep	2.5	2.4	Z	2.5	2.8	3.0	2.8	2.5	2.7	2.4	2.1	2.1	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	3.0
10-Sep	2.0	2.0	2.0	Z	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	2.0	2.0	2.0	2.0	2.0	2.1
11-Sep	2.0	2.0	2.0	2.1	Z	2.1	2.0	2.0	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	2.0	2.0	2.0	2.0	2.1
12-Sep	2.0	2.1	2.1	2.0	2.0	Z	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.2
13-Sep	Z	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	2.0	2.1	2.0	2.2	2.2	2.3	2.3	2.2	2.3	2.2	2.2	2.3
14-Sep	2.1	Z	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
15-Sep	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	2.2	2.1	2.2
16-Sep	2.2	2.2	2.1	Z	2.1	2.1	2.1	2.2	2.4	2.6	2.2	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.6
17-Sep	2.2	2.2	2.2	2.2	Z	2.2	2.3	2.7	3.2	2.4	2.5	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.6	2.5	2.5	2.5	2.6	2.6	2.4	3.2
18-Sep	2.4	2.2	2.2	2.3	2.3	Z	2.4	2.6	2.6	2.9	2.7	2.6	2.5	2.3	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.4	2.7	2.7	2.4	2.9
19-Sep	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
20-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	M	M	2.2	2.2	2.2	2.5	2.6	2.6	2.5	2.8	3.1	2.7	2.2	--	3.1
22-Sep	2.6	2.7	2.3	Z	2.2	2.2	2.3	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	2.0	2.1	2.1	2.2	2.7
23-Sep	2.1	2.1	2.1	2.1	Z	2.4	2.3	2.3	2.5	2.7	2.8	2.4	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.2	2.3	2.8
24-Sep	2.2	2.1	2.1	2.2	2.4	Z	2.4	2.2	2.5	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	2.2	2.2	2.5
25-Sep	Z	2.2	2.2	2.2	2.4	2.7	2.5	2.5	2.5	2.5	2.3	2.2	2.2	2.1	2.2	2.2	2.3	2.2	2.2	2.2	2.1	2.2	2.1	2.1	2.3	2.7
26-Sep	2.1	Z	2.1	2.0	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	2.0	2.0	2.1
27-Sep	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	2.3	2.2	2.3	2.3	2.1	2.3
28-Sep	2.3	2.3	2.2	Z	2.2	2.2	2.1	2.2	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.1	2.1	2.3	2.6	2.2	2.6
29-Sep	2.5	2.5	2.5	2.8	Z	2.7	2.5	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.8
30-Sep	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
	2.2	2.2	2.2	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	2.2	2.2	2.2	2.2	2.2	2.2	2.2	Diurnal Average	
	2.7	2.8	2.7	2.8	2.8	3.0	2.8	2.7	3.2	2.9	2.8	2.7	2.5	2.4	2.4	2.4	2.5	2.6	2.6	2.6	2.8	3.1	2.7	2.7	Diurnal Maximum	

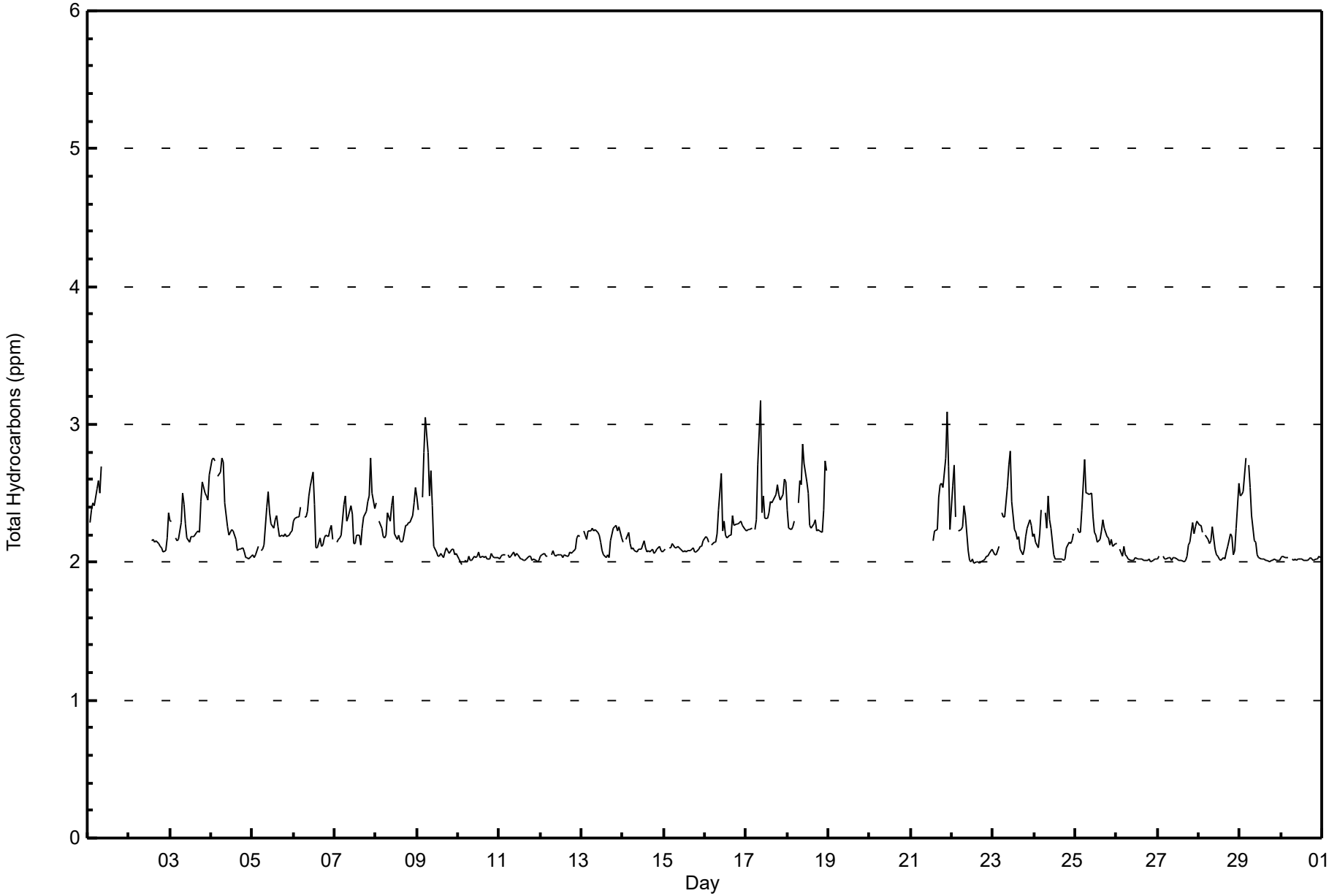
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Fort McKay South - September 2026



Total Hydrocarbons (THC) - ppm
Fort McKay South - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	155	25.62	25.62
2.1 - 3.0	448	74.05	99.67
3.1 - 10.0	2	0.33	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 605

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Fort McKay South - September 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	0	0	0	0	0	0	0	4	15	34	28	29	22	20	155
2.1 - 3.0	61	22	10	4	3	5	16	25	50	60	63	38	28	17	20	26	448
3.1 - 10.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	64	22	11	4	3	5	16	25	50	64	78	72	56	46	42	47	605

Total Number of Valid Hours: 605

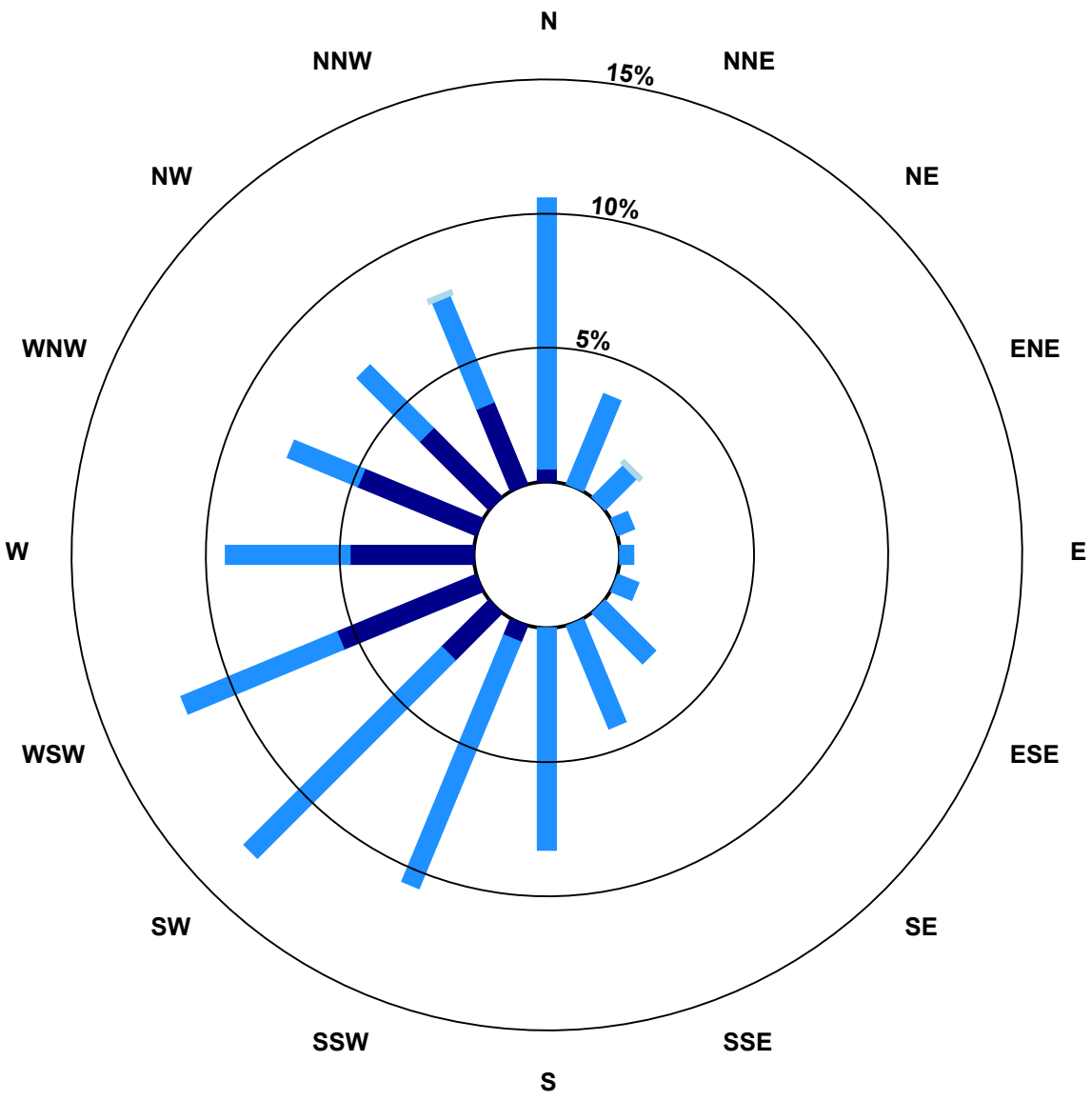
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Fort McKay South



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

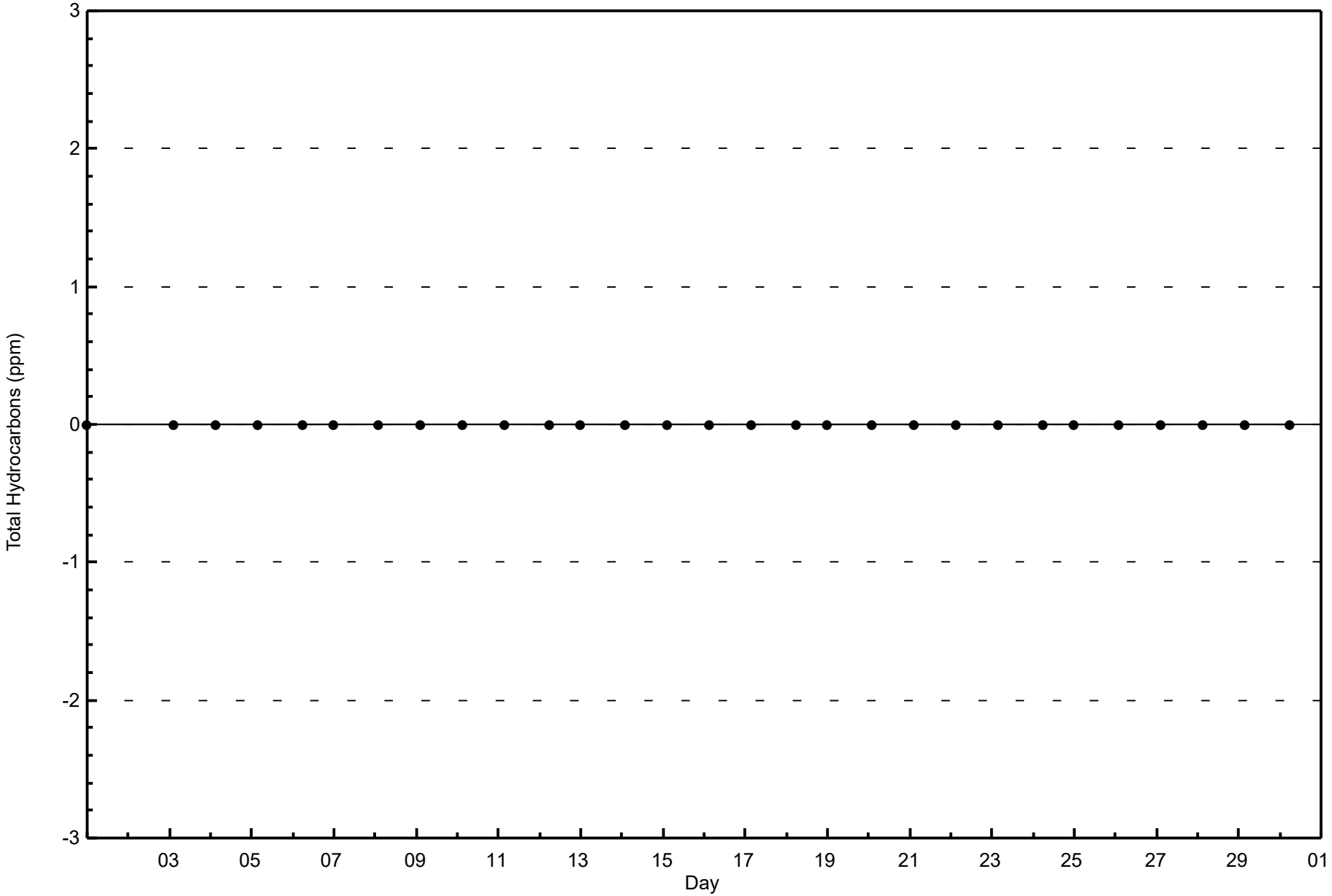
Total Number of Valid Hours: 605

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Fort McKay South - September 2026

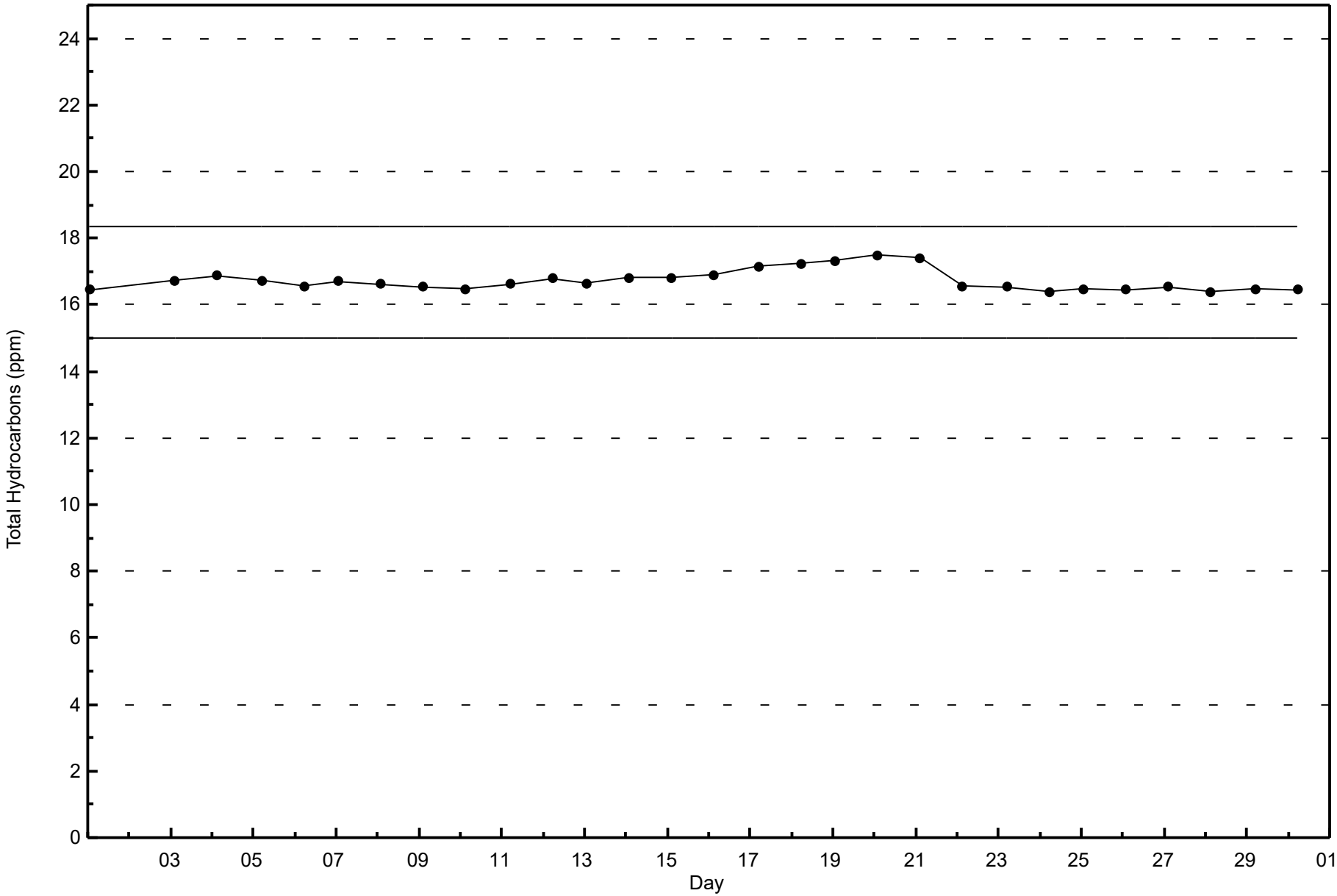


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Fort McKay South - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay South - September 2026

Maximum Value: 0.315 ppm on Sep 5 10:00

Maximum Daily Average: 0.097 ppm on Sep 5

Minimum Value: 0.000 ppm on Sep 4 21:00

Minimum Daily Average: 0.000 ppm on Sep 30

Maximum Diurnal Average: 0.067 ppm at hour 9

Minimum Diurnal Average: 0.020 ppm at hour 4

Monthly Average: 0.038 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:	720
Hours of Data:	605
Hours of Missing Data:	115
Hours of Calibration:	33
Percent Operational Time:	88.6

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-Sep	Z	0.021	0.032	0.042	0.049	0.088	0.169	0.135	0.312	C	C	C	C	C	C	M	M	M	M	M	M	M	M	M	--	0.312
2-Sep	M	M	M	M	M	M	M	M	M	M	M	M	M	0.073	0.071	0.065	0.061	0.053	0.033	0.014	0.007	0.008	0.049	0.141	--	0.141
3-Sep	0.120	0.105	Z	0.070	0.052	0.028	0.069	0.130	0.095	0.079	0.030	0.012	0.041	0.047	0.043	0.047	0.055	0.062	0.130	0.223	0.173	0.155	0.133	0.187	0.091	0.223
4-Sep	0.261	0.248	0.217	Z	0.172	0.177	0.219	0.221	0.127	0.098	0.085	0.073	0.068	0.065	0.037	0.001	0.003	0.006	0.004	0.001	0.000	0.000	0.000	0.001	0.091	0.261
5-Sep	0.001	0.000	0.000	0.004	Z	0.000	0.000	0.004	0.177	0.315	0.222	0.188	0.158	0.191	0.247	0.119	0.058	0.058	0.070	0.070	0.076	0.087	0.094	0.098	0.097	0.315
6-Sep	0.107	0.095	0.086	0.080	0.074	Z	0.075	0.074	0.094	0.116	0.128	0.151	0.110	0.020	0.013	0.052	0.018	0.028	0.038	0.062	0.057	0.088	0.080	0.027	0.073	0.151
7-Sep	Z	0.009	0.013	0.013	0.021	0.069	0.087	0.043	0.083	0.097	0.127	0.032	0.049	0.082	0.044	0.015	0.050	0.083	0.100	0.137	0.135	0.133	0.092	0.069	0.069	0.137
8-Sep	0.067	Z	0.022	0.007	0.004	0.001	0.002	0.046	0.073	0.087	0.137	0.051	0.027	0.046	0.023	0.011	0.010	0.069	0.091	0.090	0.076	0.077	0.091	0.098	0.052	0.137
9-Sep	0.084	0.058	Z	0.071	0.147	0.244	0.185	0.123	0.154	0.052	0.004	0.002	0.010	0.002	0.002	0.002	0.008	0.023	0.011	0.006	0.012	0.005	0.000	0.001	0.053	0.244
10-Sep	0.002	0.000	0.000	Z	0.000	0.000	0.001	0.000	0.000	0.004	0.004	0.010	0.017	0.003	0.000	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.002	0.017
11-Sep	0.000	0.001	0.000	0.001	Z	0.000	0.000	0.000	0.011	0.004	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.011
12-Sep	0.001	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	0.001	0.001	0.001	0.017	0.037	0.012	0.003	0.037
13-Sep	Z	0.037	0.041	0.003	0.001	0.001	0.001	0.002	0.005	0.038	0.022	0.005	0.000	0.000	0.001	0.000	0.000	0.089	0.122	0.133	0.152	0.069	0.076	0.030	0.036	0.152
14-Sep	0.044	Z	0.034	0.047	0.003	0.000	0.001	0.000	0.000	0.000	0.003	0.000	0.013	0.008	0.000	0.000	0.001	0.002	0.000	0.001	0.005	0.001	0.000	0.000	0.007	0.047
15-Sep	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	0.001	0.000	0.001	0.000	0.001
16-Sep	0.004	0.000	0.000	Z	0.000	0.000	0.000	0.001	0.063	0.134	0.058	0.091	0.019	0.002	0.001	0.000	0.056	0.054	0.060	0.049	0.049	0.039	0.013	0.002	0.030	0.134
17-Sep	0.000	0.000	0.000	0.002	Z	0.000	0.010	0.102	0.176	0.041	0.092	0.009	0.010	0.015	0.034	0.031	0.043	0.054	0.069	0.045	0.030	0.043	0.071	0.064	0.041	0.176
18-Sep	0.016	0.001	0.002	0.000	0.000	Z	0.047	0.089	0.121	0.289	0.218	0.181	0.145	0.009	0.001	0.010	0.027	0.012	0.024	0.009	0.005	0.044	0.121	0.096	0.064	0.289
19-Sep	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
20-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	M	M	0.060	0.072	0.076	0.252	0.307	0.315	0.258	0.199	0.188	0.126	0.044	--	0.315
22-Sep	0.098	0.125	0.061	Z	0.011	0.009	0.009	0.037	0.028	0.003	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	0.017	0.125
23-Sep	0.000	0.000	0.000	0.001	Z	0.026	0.010	0.010	0.055	0.083	0.109	0.082	0.074	0.069	0.063	0.069	0.011	0.005	0.016	0.028	0.044	0.055	0.044	0.016	0.038	0.109
24-Sep	0.016	0.005	0.001	0.003	0.021	Z	0.021	0.006	0.024	0.002	0.003	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	0.005	0.024
25-Sep	Z	0.001	0.000	0.001	0.040	0.102	0.079	0.126	0.102	0.150	0.070	0.041	0.055	0.023	0.058	0.120	0.185	0.134	0.084	0.079	0.020	0.018	0.017	0.010	0.066	0.185
26-Sep	0.004	Z	0.002	0.001	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	0.000	0.000	0.000	0.000	0.000	0.000	0.004
27-Sep	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	0.002	0.001	0.002	0.000	0.002
28-Sep	0.003	0.000	0.000	Z	0.001	0.000	0.000	0.004	0.046	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.008	0.004	0.000	0.000	0.011	0.059	0.006	0.059
29-Sep	0.057	0.066	0.065	0.083	Z	0.073	0.070	0.048	0.003	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	0.020	0.083
30-Sep	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
	0.040	0.034	0.026	0.020	0.029	0.039	0.040	0.046	0.067	0.064	0.053	0.037	0.032	0.026	0.026	0.023	0.031	0.039	0.044	0.045	0.039	0.038	0.039	0.036	Diurnal Average	
	0.261	0.248	0.217	0.083	0.172	0.244	0.219	0.221	0.312	0.315	0.222	0.188	0.158	0.191	0.247	0.120	0.252	0.307	0.315	0.258	0.199	0.188	0.133	0.187	Diurnal Maximum	

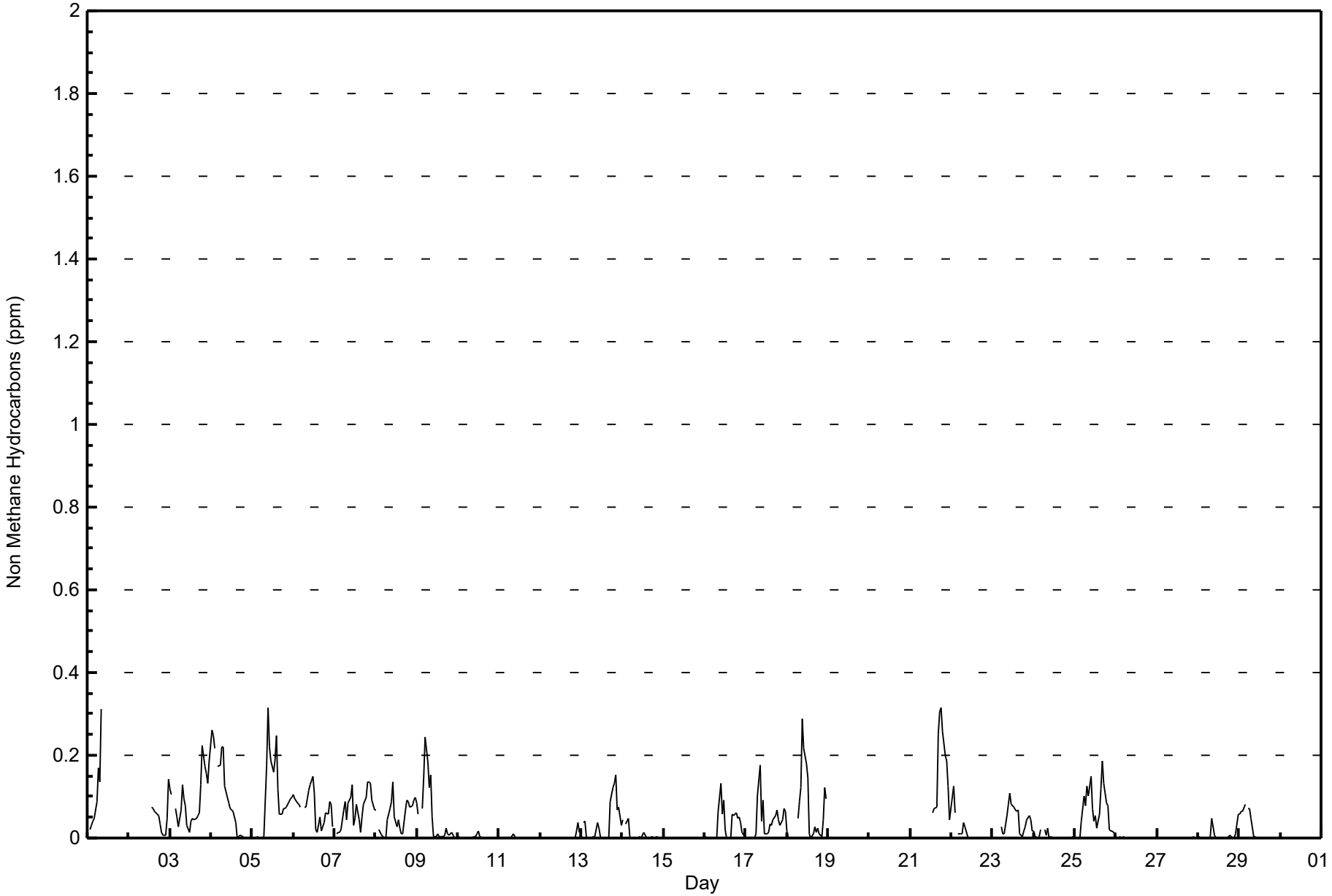
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay South - September 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay South - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	309	51.07	51.07
0.006 - 0.05	130	21.49	72.56
0.06 - 0.1	130	21.49	94.05
> 0.1	36	5.95	100.00

Total Number of Valid Hours: 605

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay South - September 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	22	0	0	2	0	0	1	3	8	29	40	47	50	42	35	30	309
0.006 - 0.05	11	7	6	1	2	0	9	11	22	18	18	15	3	1	2	4	130
0.06 - 0.1	18	13	2	1	1	4	6	8	18	15	19	9	3	3	4	6	130
> 0.1	13	2	3	0	0	1	0	3	2	2	1	1	0	0	1	7	36
Totals	64	22	11	4	3	5	16	25	50	64	78	72	56	46	42	47	605

Total Number of Valid Hours: 605

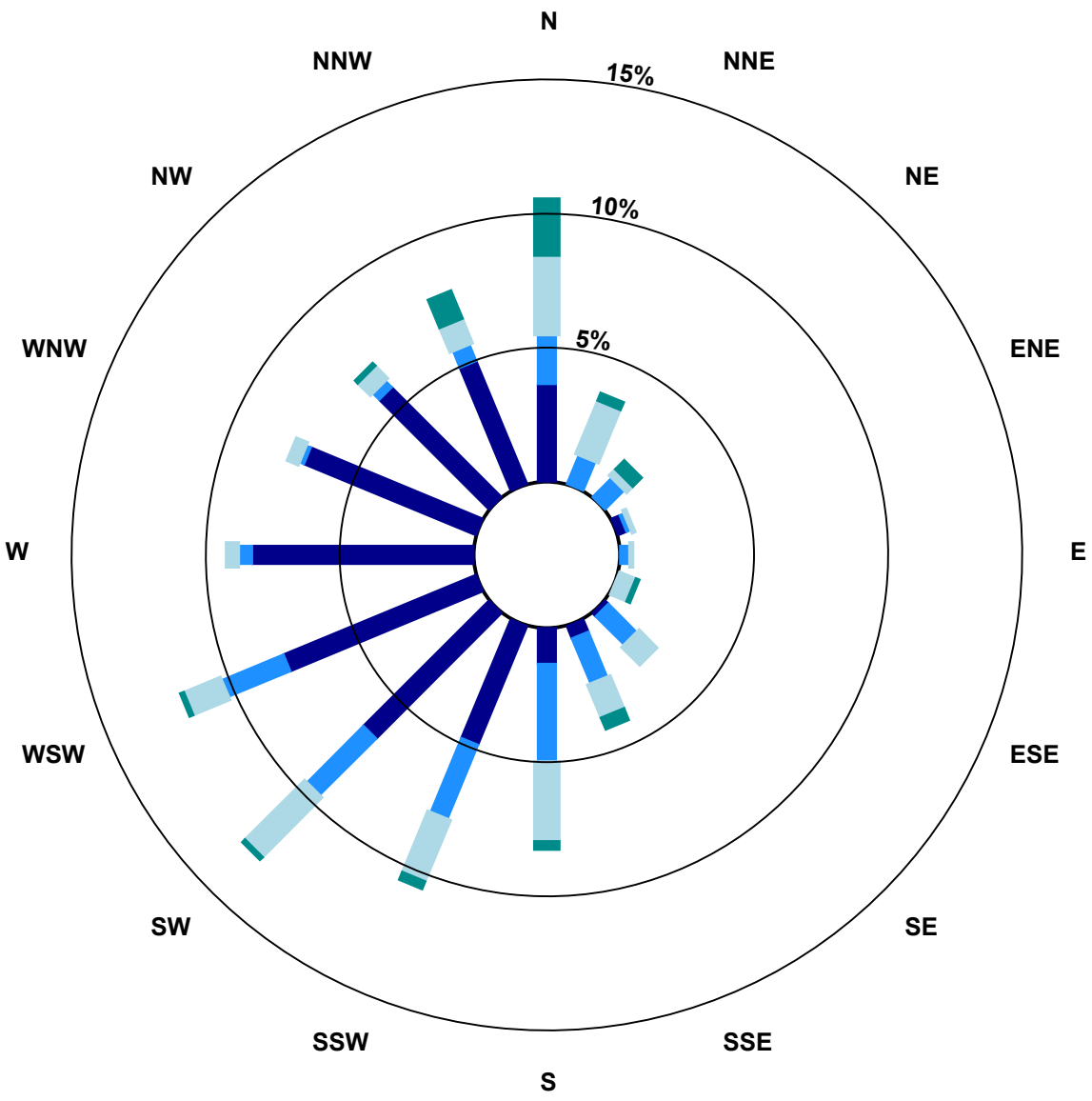
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay South



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

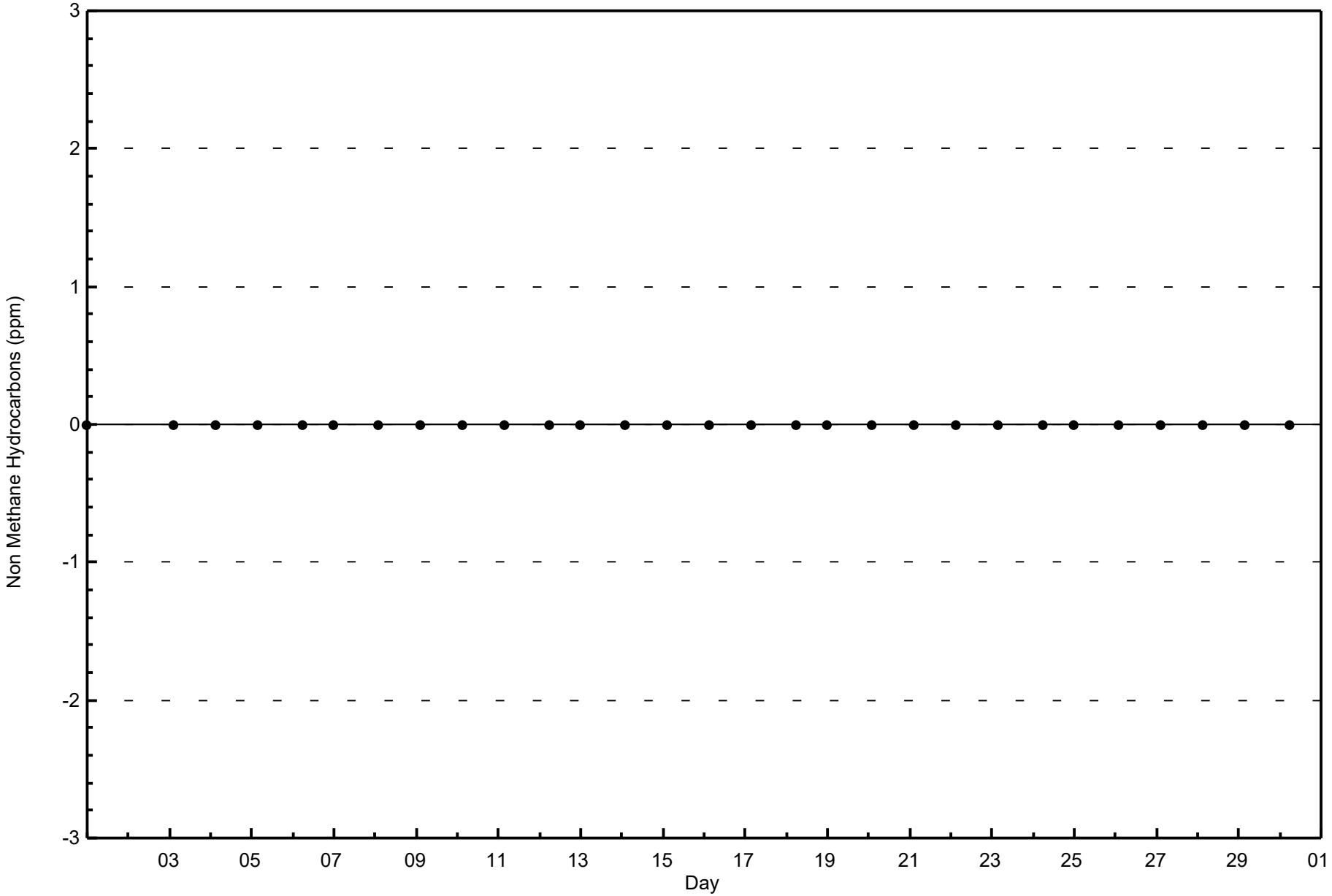
Total Number of Valid Hours: 605

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay South - September 2026

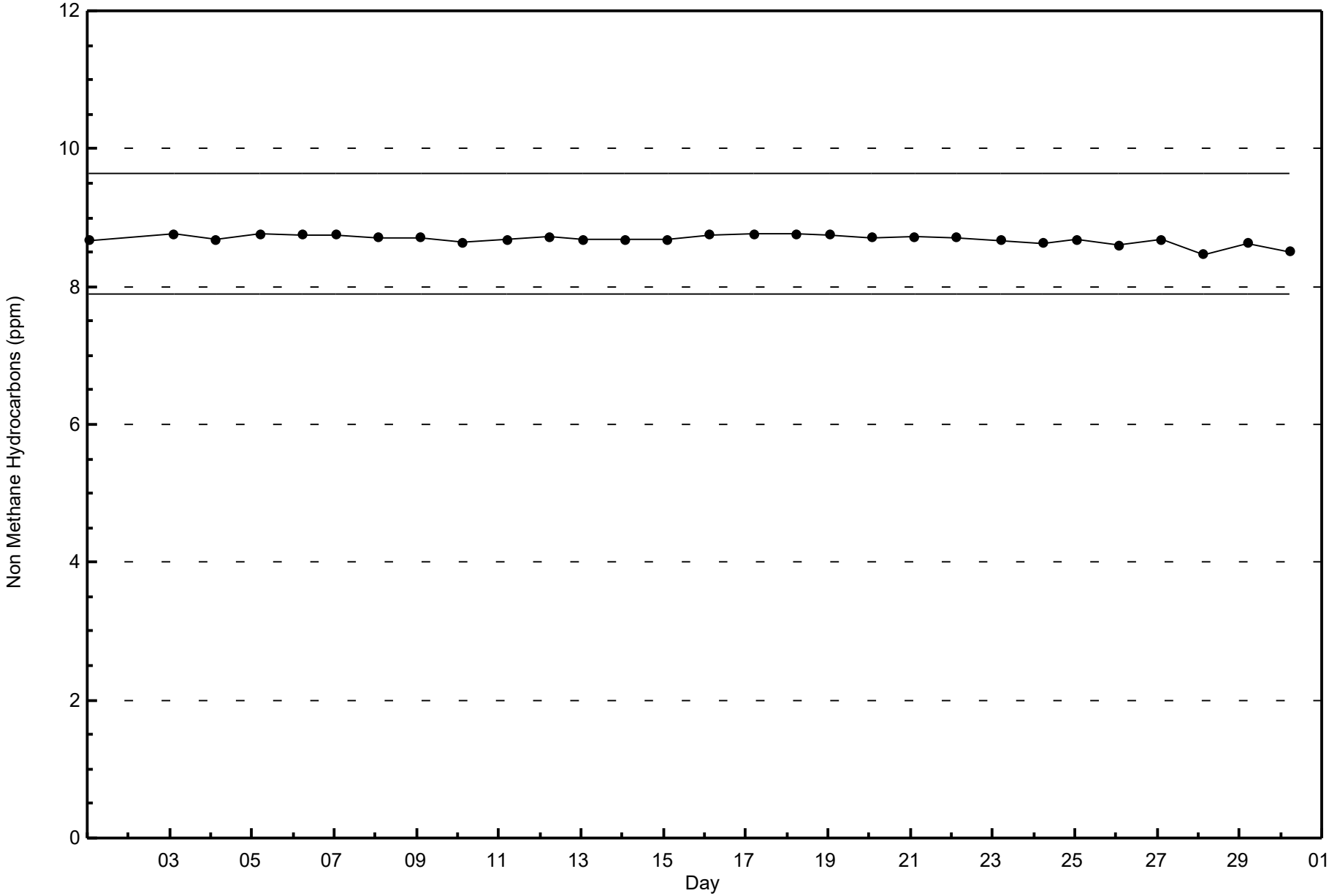


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay South - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Fort McKay South - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.0 ppm on Sep 17 09:00 Maximum Daily Average: 2.4 ppm on Sep 17

Minimum Value: 2.0 ppm on Sep 10 03:00 Minimum Daily Average: 2.0 ppm on Sep 30
Maximum Diurnal Average: 2.3 ppm at hour 9 Minimum Diurnal Average: 2.1 ppm at hour 14
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} = 2.6

Hours in Service:	720
Hours of Data:	605
Hours of Missing Data:	115
Hours of Calibration:	33
Percent Operational Time:	88.6

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-Sep	Z	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	C	C	C	C	C	C	M	M	M	M	M	M	M	M	M	--	2.4
2-Sep	M	M	M	M	M	M	M	M	M	M	M	M	M	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	--	2.2
3-Sep	2.2	2.2	Z	2.1	2.1	2.1	2.2	2.4	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.4	2.3	2.3	2.3	2.4	2.2	2.4
4-Sep	2.5	2.5	2.5	Z	2.4	2.5	2.5	2.5	2.3	2.2	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.2	2.5
5-Sep	2.1	2.0	2.1	2.1	Z	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
6-Sep	2.2	2.2	2.2	2.3	2.3	Z	2.3	2.3	2.3	2.4	2.4	2.5	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.5
7-Sep	Z	2.1	2.2	2.2	2.2	2.3	2.4	2.3	2.2	2.3	2.2	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.3	2.3	2.3	2.6	2.4	2.3	2.2	2.6
8-Sep	2.4	Z	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.2	2.4
9-Sep	2.4	2.3	Z	2.4	2.6	2.8	2.6	2.4	2.5	2.4	2.1	2.1	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.8
10-Sep	2.0	2.0	2.0	Z	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	2.0	2.0	2.0	2.0	2.0	2.1
11-Sep	2.0	2.0	2.0	2.1	Z	2.1	2.0	2.0	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	2.0	2.0	2.0	2.0	2.1
12-Sep	2.0	2.1	2.1	2.0	2.0	Z	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.2
13-Sep	Z	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	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.2
14-Sep	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	2.1	2.1	2.2
15-Sep	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	2.2	2.1	2.2
16-Sep	2.2	2.2	2.1	Z	2.1	2.1	2.1	2.2	2.3	2.5	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.5
17-Sep	2.2	2.2	2.2	2.2	Z	2.2	2.3	2.6	3.0	2.3	2.4	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.5	2.4	2.4	2.5	2.5	2.5	2.4	3.0
18-Sep	2.4	2.2	2.2	2.3	2.3	Z	2.4	2.5	2.4	2.6	2.5	2.4	2.4	2.3	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.6	2.6	2.3	2.6
19-Sep	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
20-Sep	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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	M	M	2.1	2.2	2.2	2.2	2.3	2.3	2.3	2.6	2.9	2.6	2.2	--	2.9
22-Sep	2.5	2.6	2.3	Z	2.2	2.2	2.3	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	2.0	2.1	2.1	2.1	2.6
23-Sep	2.1	2.1	2.1	2.1	Z	2.3	2.3	2.3	2.5	2.6	2.7	2.4	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	2.7
24-Sep	2.2	2.1	2.1	2.2	2.4	Z	2.3	2.2	2.5	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	2.2	2.2	2.5
25-Sep	Z	2.2	2.2	2.2	2.3	2.6	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	2.2	2.6
26-Sep	2.1	Z	2.1	2.0	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	2.0	2.0	2.1
27-Sep	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	2.3	2.2	2.3	2.3	2.1	2.3
28-Sep	2.3	2.3	2.2	Z	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.1	2.1	2.2	2.5	2.1	2.5
29-Sep	2.4	2.4	2.4	2.7	Z	2.6	2.5	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.7
30-Sep	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
	2.2	2.2	2.2	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	2.1	2.2	2.2	2.2	2.2	Diurnal Average	
	2.5	2.6	2.5	2.7	2.6	2.8	2.6	2.6	3.0	2.6	2.7	2.5	2.4	2.3	2.4	2.4	2.4	2.4	2.5	2.4	2.6	2.9	2.6	2.6	Diurnal Maximum	

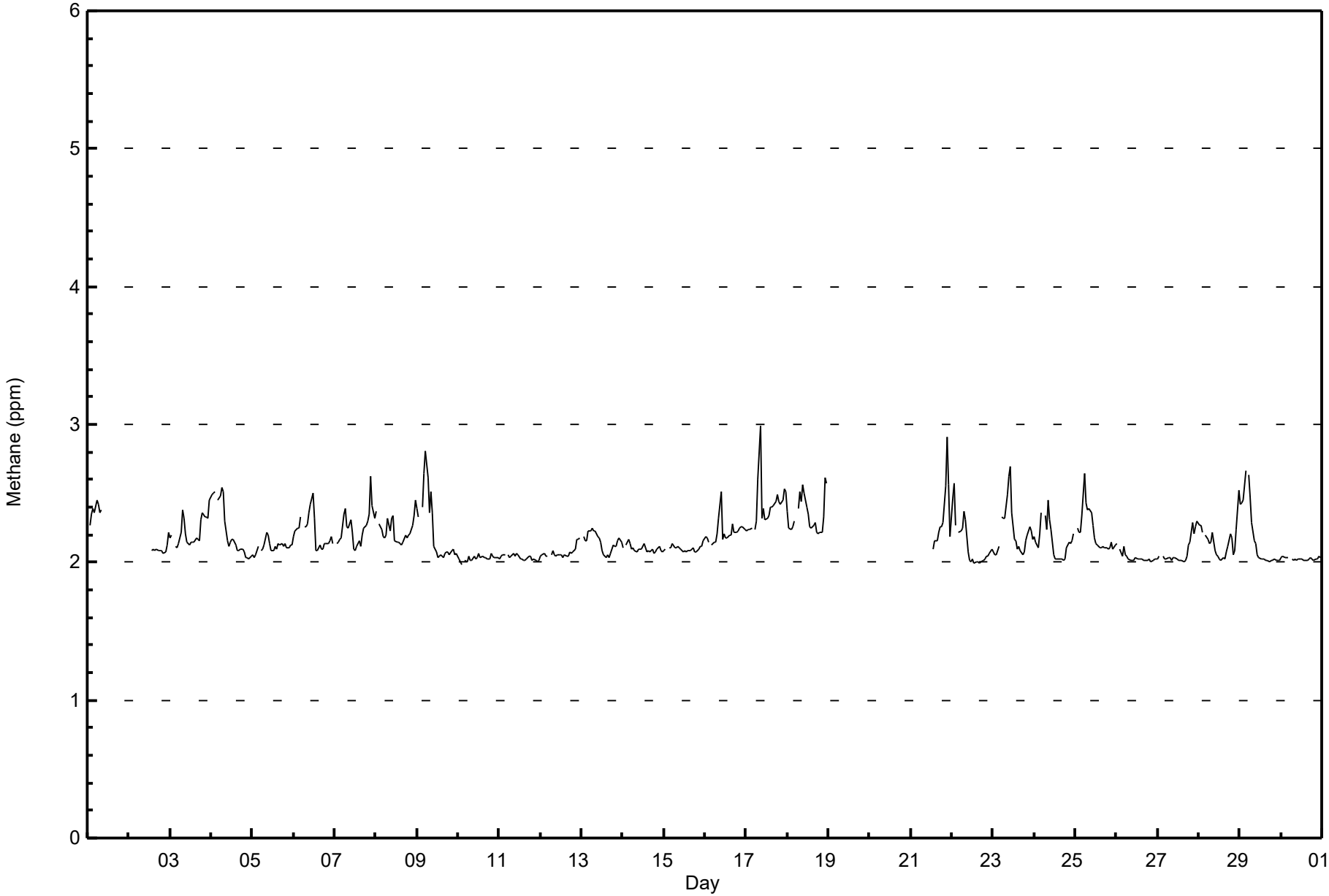
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Fort McKay South - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	155	25.62	25.62
2.1 - 3.0	450	74.38	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 605

Total Number of Hours: 720

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	0	0	0	0	0	0	0	4	15	34	28	29	22	20	155
2.1 - 3.0	61	22	11	4	3	5	16	25	50	60	63	38	28	17	20	27	450
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	64	22	11	4	3	5	16	25	50	64	78	72	56	46	42	47	605

Total Number of Valid Hours: 605

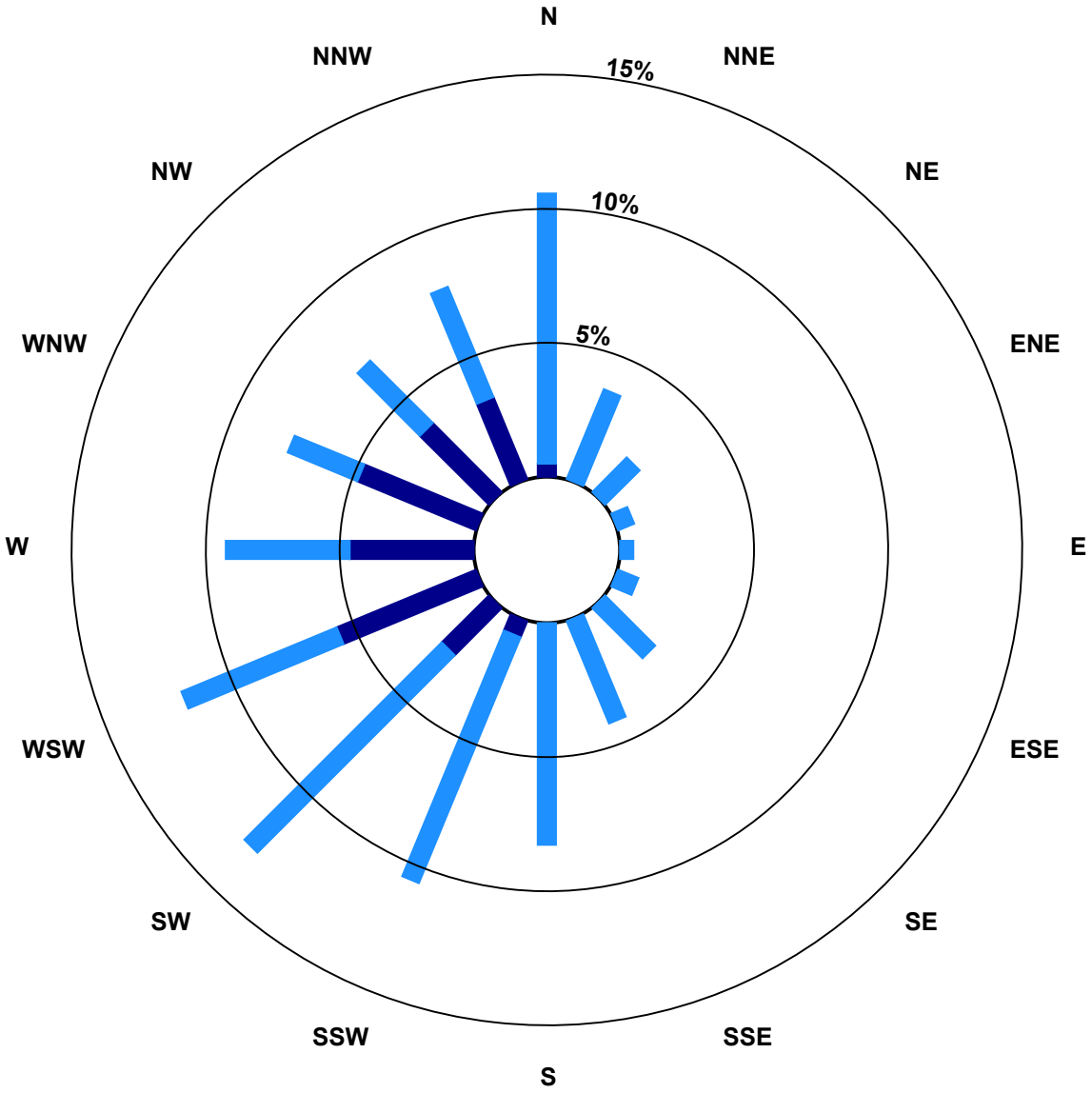
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Methane (CH_4) - ppm

Fort McKay South



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

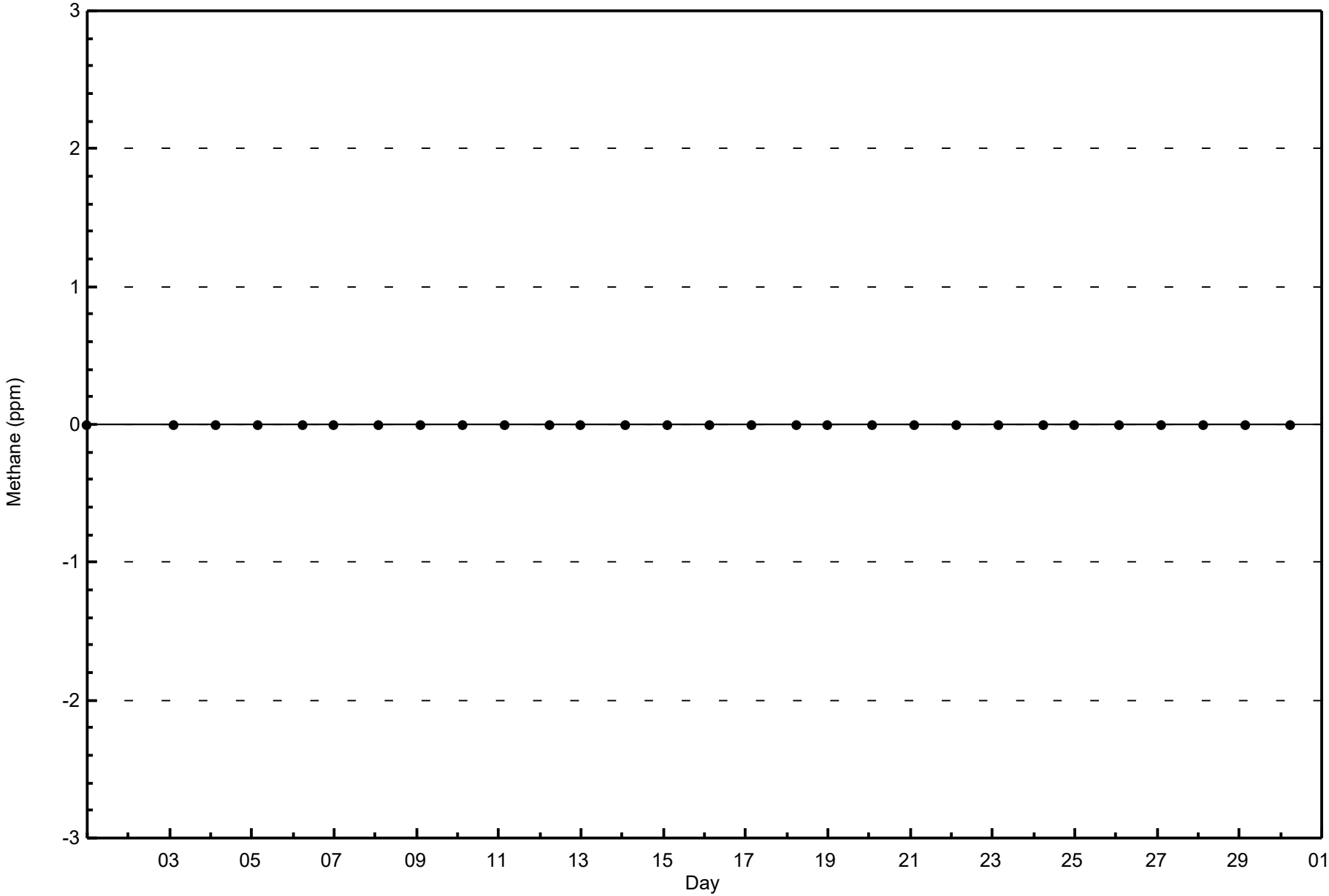
Total Number of Valid Hours: 605

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Fort McKay South - September 2026

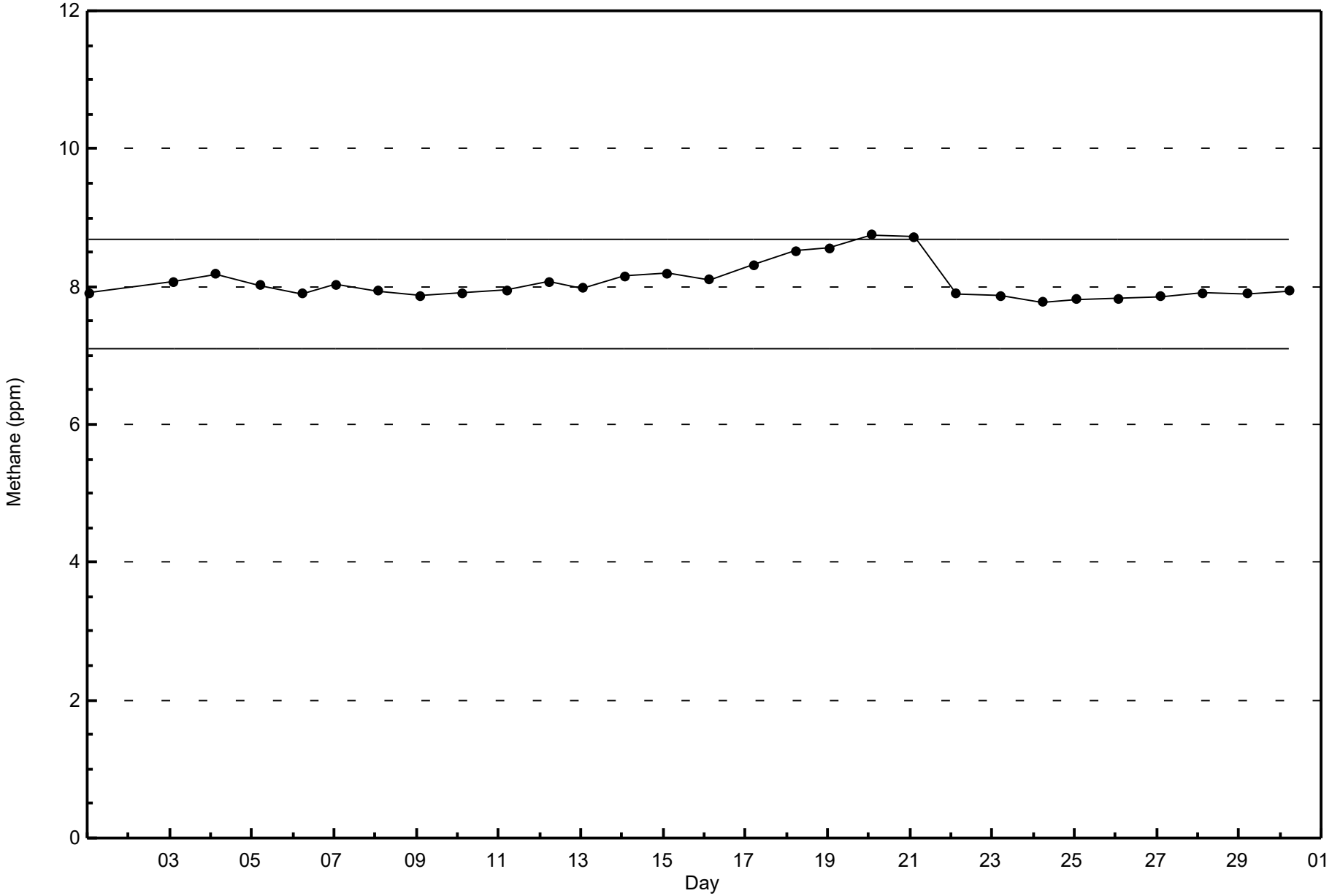


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Fort McKay South - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Fort McKay South - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 39.0 ppb on Sep 1 17:00 Maximum Daily Average: 23.1 ppb on Sep 26

Minimum Value: 0.0 ppb on Sep 23 05:00 Minimum Daily Average: 6.2 ppb on Sep 17
Maximum Diurnal Average: 26.7 ppb at hour 16 Minimum Diurnal Average: 4.8 ppb at hour 6
Monthly Average: 13.99 ppb Percentiles: P_1 = 0.2 P_{10} = 0.7 Q_1 = 3.0 Median = 13.3 Q_3 = 22.5 P_{90} = 29.2 P_{99} = 37.8

Hours in Service:	720
Hours of Data:	687
Hours of Missing Data:	33
Hours of Calibration:	33
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-Sep	0.3	0.2	Z	0.3	0.2	0.3	1.3	4.9	10.3	12.8	18.4	22.0	30.1	33.9	35.6	37.8	39.0	37.6	30.3	17.7	7.8	6.9	4.4	3.5	15.5	39.0
2-Sep	1.5	1.1	0.3	Z	0.4	0.0	0.3	3.7	13.8	24.7	29.0	31.8	34.6	35.3	35.1	35.5	34.9	33.5	31.8	30.9	31.2	29.2	25.2	12.7	20.7	35.5
3-Sep	4.1	3.0	2.0	1.9	Z	2.6	3.2	4.2	8.2	14.7	15.8	16.5	12.5	11.0	9.3	8.9	7.3	5.7	2.9	2.8	1.0	1.4	2.9	0.8	6.2	16.5
4-Sep	0.7	0.8	0.7	0.8	0.8	Z	1.5	1.2	3.0	5.2	6.4	6.8	7.1	7.6	12.3	16.6	16.7	15.3	12.0	11.9	13.1	14.8	13.5	12.3	7.9	16.7
5-Sep	Z	15.9	16.2	9.3	11.0	5.6	7.3	12.6	9.9	11.9	18.2	21.5	25.3	26.3	26.7	26.3	25.6	22.1	7.0	3.0	2.0	1.7	1.1	0.8	13.4	26.7
6-Sep	0.5	Z	0.4	0.4	0.3	0.4	0.4	1.3	2.9	2.4	2.3	3.2	9.4	18.5	22.5	22.4	24.7	16.2	15.2	7.2	6.8	4.3	2.9	4.4	7.3	24.7
7-Sep	8.0	4.5	Z	0.8	0.4	0.6	1.2	2.7	2.3	5.3	12.7	19.1	21.4	22.7	24.4	23.4	20.7	11.8	4.1	2.5	1.8	0.9	0.5	0.5	8.4	24.4
8-Sep	0.4	0.5	0.5	Z	0.7	0.5	0.5	1.3	8.8	9.9	13.0	21.8	27.5	28.8	29.7	28.8	28.1	25.4	8.4	5.3	2.3	1.3	0.6	0.5	10.6	29.7
9-Sep	0.5	0.5	0.4	0.5	Z	1.1	1.2	2.5	4.1	9.3	16.6	20.4	24.0	27.9	30.1	28.9	25.6	25.5	25.5	25.0	19.5	19.2	22.2	22.0	15.3	30.1
10-Sep	23.2	23.7	26.8	24.0	23.9	Z	17.2	19.3	20.0	19.5	17.5	13.5	13.0	12.6	17.3	16.8	15.6	13.3	11.4	13.6	15.6	15.9	17.1	17.7	17.8	26.8
11-Sep	Z	16.3	16.2	16.0	15.7	14.6	14.8	13.8	12.8	16.3	18.4	18.4	19.1	20.1	23.7	26.8	28.6	28.9	27.9	22.8	19.1	16.6	16.7	17.0	19.2	28.9
12-Sep	16.2	Z	13.3	11.7	10.5	4.7	6.6	6.6	10.3	11.6	19.1	23.5	26.0	29.1	30.1	30.5	28.8	23.8	8.5	3.9	7.1	9.2	4.2	4.3	14.8	30.5
13-Sep	1.0	2.6	Z	10.4	13.3	11.6	10.9	12.3	13.5	16.9	18.6	24.8	31.1	32.7	33.2	36.2	34.6	17.4	11.5	11.5	5.7	3.7	1.7	4.4	15.7	36.2
14-Sep	17.2	20.4	18.7	Z	10.1	16.1	15.0	17.4	17.1	16.0	C	C	C	20.7	19.5	19.6	20.1	16.8	13.5	7.4	5.5	9.5	10.2	8.8	15.0	20.7
15-Sep	9.2	9.4	9.5	7.7	Z	1.0	1.9	5.7	6.5	9.9	16.2	22.1	25.0	23.8	23.6	20.7	14.1	10.9	5.6	6.1	1.7	3.0	7.6	4.4	10.7	25.0
16-Sep	1.0	1.9	4.2	4.5	4.1	Z	2.2	5.2	6.7	6.6	15.3	16.8	20.8	21.7	20.6	20.8	19.0	11.9	2.3	1.3	1.2	1.2	0.8	0.9	8.3	21.7
17-Sep	Z	1.0	0.8	0.7	0.7	0.6	0.6	1.0	2.5	12.2	16.6	19.5	17.6	15.5	12.1	13.3	12.0	10.1	1.8	1.2	0.8	0.5	0.5	0.7	6.2	19.5
18-Sep	6.9	Z	9.0	2.2	3.6	2.7	1.8	5.5	9.9	8.6	11.6	15.4	18.9	25.8	26.8	25.0	22.4	13.4	1.9	1.4	0.8	0.7	0.7	0.6	9.4	26.8
19-Sep	0.5	0.4	Z	0.5	0.5	0.5	0.6	1.0	4.2	10.7	19.0	23.9	30.6	37.7	37.5	38.1	38.4	32.9	30.8	29.4	29.2	19.6	13.2	7.5	17.7	38.4
20-Sep	7.6	5.3	2.1	Z	2.4	1.3	1.5	2.6	14.0	17.6	21.2	28.3	34.6	36.7	38.1	38.4	37.4	19.3	10.2	4.5	5.5	9.1	21.8	21.5	16.6	38.4
21-Sep	22.9	22.6	14.7	20.0	Z	1.2	1.2	2.5	8.3	17.5	24.3	23.2	23.2	29.5	28.1	23.1	14.8	8.2	3.9	2.8	0.5	0.4	4.3	18.4	13.7	29.5
22-Sep	10.6	0.9	1.0	0.7	0.8	Z	0.6	1.0	5.5	18.6	26.2	29.7	31.4	36.4	38.8	37.8	36.7	32.3	26.7	18.2	13.1	17.5	7.7	5.3	17.3	38.8
23-Sep	Z	2.1	1.1	0.2	0.0	0.1	0.1	0.5	1.5	2.5	4.3	13.3	21.8	18.1	20.3	23.6	24.3	25.3	14.8	12.9	8.9	8.2	4.3	2.6	9.2	25.3
24-Sep	1.1	Z	10.1	9.5	2.3	0.3	1.2	9.2	6.1	11.2	16.4	26.2	32.2	34.2	34.2	34.3	31.9	23.3	13.9	5.1	2.3	2.4	1.5	0.4	13.4	34.3
25-Sep	0.2	0.2	Z	0.2	0.3	0.3	0.4	0.7	1.2	2.4	10.8	15.3	19.9	20.8	22.0	19.6	17.9	18.3	16.2	18.6	18.5	16.7	18.9	18.2	11.2	22.0
26-Sep	16.7	14.1	15.7	Z	13.4	11.8	17.7	22.5	23.4	23.6	23.5	25.7	26.4	27.6	28.2	28.1	28.1	28.3	27.0	27.1	26.5	25.1	25.5	26.4	23.1	28.3
27-Sep	25.7	18.0	17.4	14.4	Z	13.8	14.2	13.9	14.0	15.7	18.5	21.8	24.9	26.7	30.2	29.9	29.4	25.3	16.1	9.7	2.6	2.1	1.6	1.5	16.8	30.2
28-Sep	5.3	2.2	0.9	0.5	0.4	Z	2.5	6.8	13.3	18.3	21.3	27.7	33.7	33.3	30.7	31.3	31.0	28.5	21.0	24.1	23.6	19.5	22.3	16.3	18.0	33.7
29-Sep	Z	5.9	3.6	4.4	6.5	10.5	6.9	8.7	19.8	18.9	21.3	21.4	24.4	31.2	31.3	32.6	32.6	33.9	28.8	22.9	29.8	29.3	29.4	27.5	20.9	33.9
30-Sep	25.1	Z	23.3	22.1	19.3	18.7	18.9	18.3	17.7	19.4	22.9	25.5	27.6	27.3	25.1	24.5	24.1	25.3	21.2	17.0	11.7	3.4	4.5	8.7	19.6	27.6
	8.3	6.9	8.4	6.5	5.7	4.8	5.1	7.0	9.7	13.0	17.1	20.6	23.9	25.8	26.6	26.7	25.5	21.3	15.1	12.3	10.5	9.8	9.6	9.0	Diurnal Average	
	25.7	23.7	26.8	24.0	23.9	18.7	18.9	22.5	23.4	24.7	29.0	31.8	34.6	37.7	38.8	38.4	39.0	37.6	31.8	30.9	31.2	29.3	29.4	27.5	Diurnal Maximum	

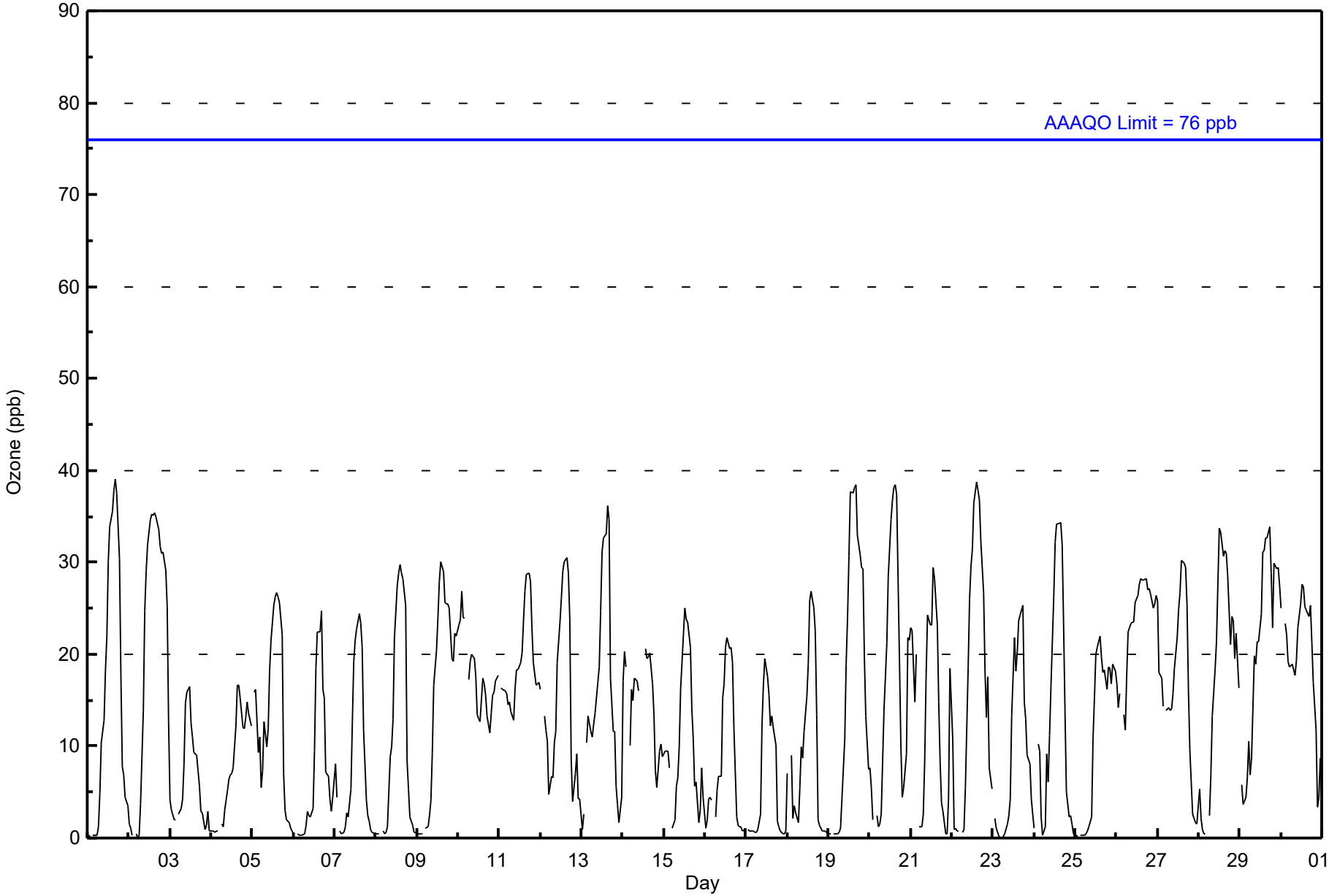
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Fort McKay South - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	483	70.31	70.31
21 - 50	204	29.69	100.00
51 - 82	0	0.00	100.00
> 83	0	0.00	100.00

Total Number of Valid Hours: 687

Total Number of Hours: 720

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	57	17	9	1	4	3	9	21	49	58	70	47	38	32	31	37	483
21 - 50	7	5	2	3	0	1	13	23	22	19	23	29	20	16	10	11	204
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	64	22	11	4	4	4	22	44	71	77	93	76	58	48	41	48	687

Total Number of Valid Hours: 687

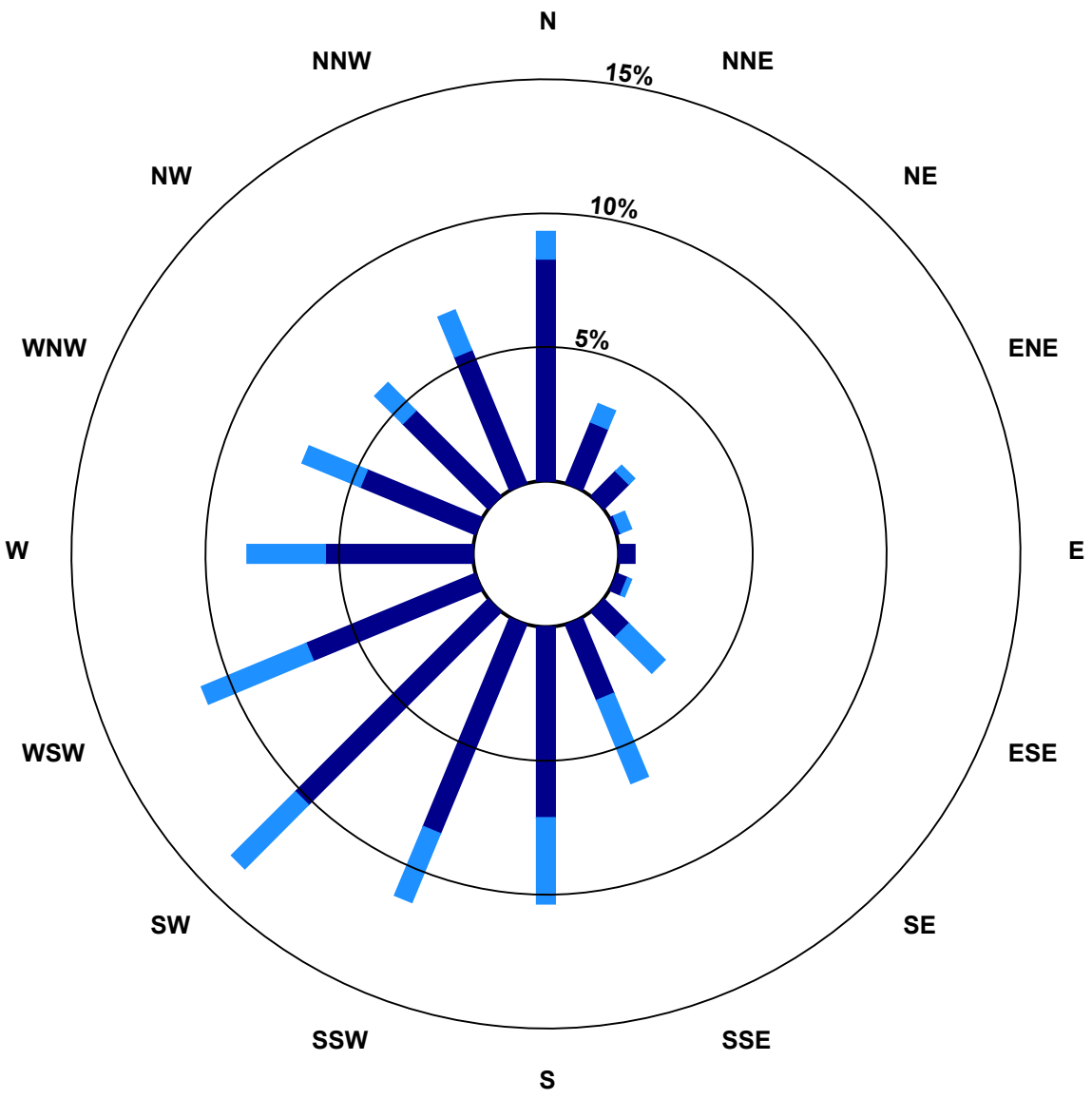
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Ozone (O_3) - ppb

Fort McKay South



Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

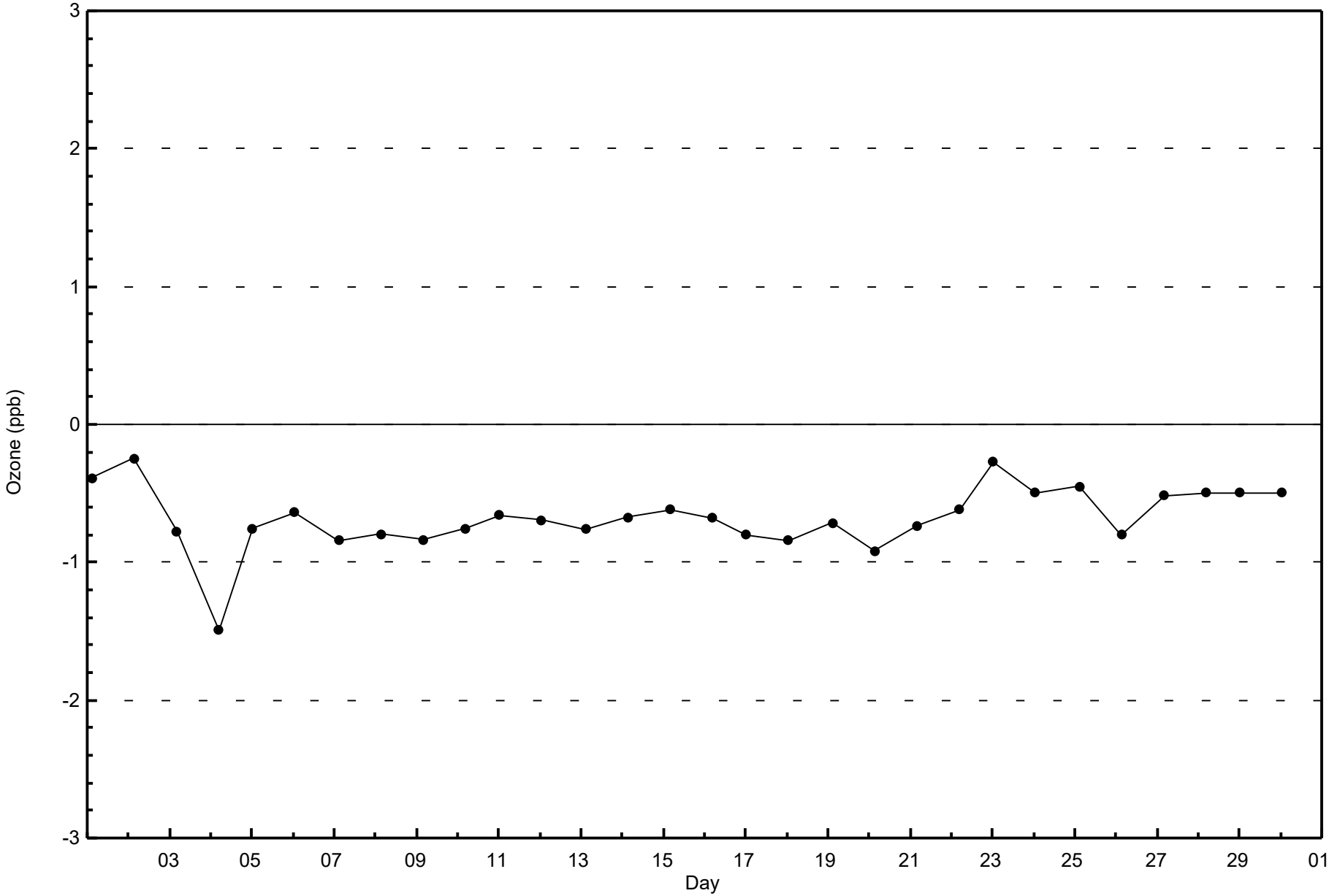
Total Number of Valid Hours: 687

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Fort McKay South - September 2026

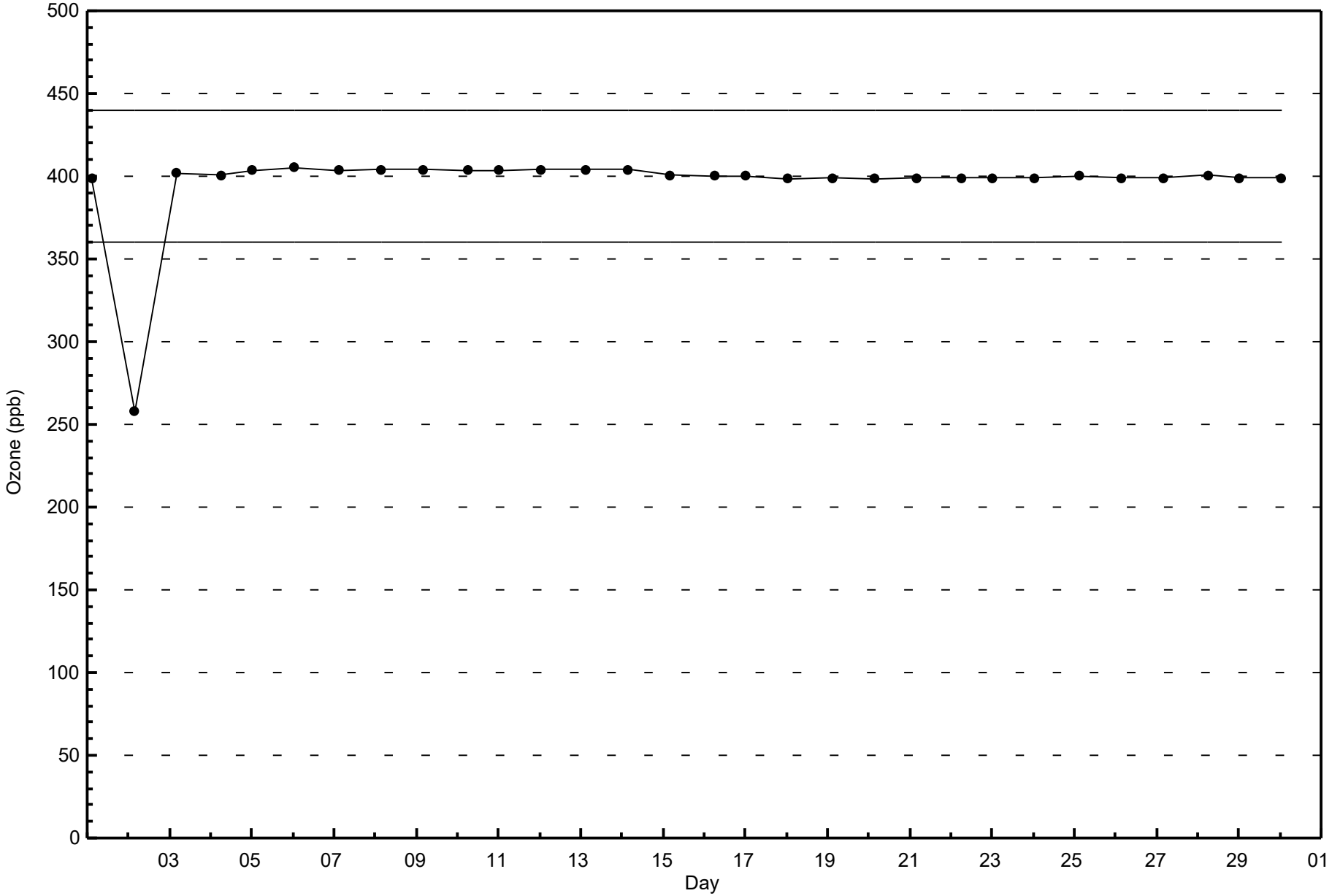


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Fort McKay South - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Fort McKay South - September 2026

Maximum Value: 53.7 ppb on Sep 25 06:00

Maximum Daily Average: 7.4 ppb on Sep 23

Minimum Value: 0.0 ppb on Sep 2 17:00

Minimum Daily Average: 0.0 ppb on Sep 30

Maximum Diurnal Average: 7.8 ppb at hour 9

Minimum Diurnal Average: 0.1 ppb at hour 20

Monthly Average: 2.00 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.3 Q_3 = 1.7 P_{90} = 5.9 P_{99} = 21.3

Hours in Service:	720
Hours of Data:	685
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-Sep	0.0	4.1	6.3	4.8	Z	8.5	5.3	4.9	6.1	4.4	3.4	4.2	0.9	0.2	0.1	0.0	0.2	0.3	0.2	0.1	0.1	0.2	0.3	0.3	2.4	8.5
2-Sep	0.4	0.5	0.7	0.5	0.5	Z	0.7	4.7	1.7	1.5	0.7	0.5	0.5	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.6	4.7
3-Sep	Z	0.3	0.2	0.2	0.2	0.3	5.7	8.7	6.4	0.9	0.4	0.2	0.4	0.8	0.8	0.9	0.5	1.5	2.6	0.8	0.6	0.6	0.3	2.0	1.5	8.7
4-Sep	5.2	Z	9.3	5.1	3.1	5.5	14.6	16.2	4.4	2.9	2.5	3.6	4.1	4.4	1.8	0.4	0.5	0.3	0.4	0.1	0.1	0.1	0.1	0.1	3.7	16.2
5-Sep	0.1	0.0	Z	0.2	0.1	0.1	0.3	2.7	12.2	12.1	4.3	2.7	2.1	2.4	2.4	2.0	1.1	0.7	0.2	0.0	0.0	0.0	0.1	0.1	2.0	12.2
6-Sep	1.2	2.6	6.8	Z	14.5	14.3	10.1	4.4	3.6	8.5	9.6	7.0	6.7	1.9	0.8	1.4	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.3	4.1	14.5
7-Sep	0.0	0.1	0.7	1.3	Z	0.3	5.1	5.2	8.8	11.0	7.2	1.8	1.6	1.9	0.6	0.4	0.8	0.7	0.6	0.1	0.0	0.1	0.3	0.4	2.1	11.0
8-Sep	2.3	4.0	2.7	1.3	0.4	Z	0.3	7.7	3.4	4.9	9.5	3.0	0.7	0.4	0.0	0.0	0.2	0.3	0.0	0.0	0.0	0.0	0.6	5.8	2.1	9.5
9-Sep	Z	7.4	7.1	10.1	7.1	6.0	8.0	11.8	10.3	2.4	0.7	0.3	0.5	0.2	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	3.1	11.8
10-Sep	0.0	Z	0.1	0.1	0.1	0.1	0.3	0.2	0.3	0.2	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.3
11-Sep	0.0	0.0	Z	0.1	0.1	0.2	0.2	0.7	1.1	0.5	0.4	0.5	0.4	0.1	0.1	0.4	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	1.1
12-Sep	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.8	0.9	1.5	0.5	0.3	0.5	0.1	0.1	0.2	0.3	0.3	0.1	0.1	0.2	0.4	0.5	0.3	0.3	1.5
13-Sep	0.6	0.5	0.2	0.1	Z	0.1	0.9	2.8	4.4	3.7	2.1	0.8	0.2	0.1	0.3	0.1	0.0	0.5	0.6	0.1	0.2	0.3	1.0	0.6	0.9	4.4
14-Sep	0.1	0.0	0.1	0.1	0.2	Z	0.2	0.2	0.3	1.9	0.5	1.0	2.1	0.8	0.5	0.6	0.7	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.4	2.1
15-Sep	Z	0.0	0.0	0.0	0.3	3.5	2.4	0.7	2.0	2.3	1.0	0.4	0.2	0.1	0.2	0.1	0.8	0.6	0.3	0.1	0.1	0.1	0.1	0.3	0.7	3.5
16-Sep	0.4	Z	0.1	0.1	0.1	0.1	0.2	2.3	10.9	24.0	2.6	3.6	1.4	1.0	0.8	0.5	0.8	0.6	0.3	0.2	0.2	0.1	0.1	0.1	2.2	24.0
17-Sep	0.1	0.0	Z	0.1	0.1	0.2	1.9	14.3	33.1	C	C	C	C	C	4.2	3.4	2.7	1.1	0.7	0.2	0.2	0.7	2.1	3.1	3.8	33.1
18-Sep	0.8	0.1	0.1	Z	0.9	0.3	4.6	7.2	8.1	20.7	15.5	9.2	5.5	1.7	1.2	1.5	0.6	0.4	0.2	0.1	0.1	0.1	0.2	0.2	3.4	20.7
19-Sep	0.3	3.1	8.3	7.7	Z	1.9	1.0	1.5	16.6	8.7	3.0	1.9	1.1	0.1	0.5	0.4	0.4	0.2	0.1	0.0	0.1	0.1	0.1	0.1	2.5	16.6
20-Sep	0.1	0.1	0.2	0.2	0.3	Z	0.6	3.5	3.3	4.0	3.0	1.1	0.4	0.1	0.3	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.8	4.0
21-Sep	Z	0.0	0.1	0.0	0.1	1.8	3.7	4.7	9.3	4.7	1.8	2.3	2.8	2.0	2.1	1.8	4.6	4.4	1.5	0.5	8.1	18.2	8.1	0.1	3.6	18.2
22-Sep	0.7	Z	0.3	0.3	0.2	0.2	0.6	8.9	8.9	0.2	0.1	0.0	0.2	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.3	0.1	0.9	8.9
23-Sep	0.2	0.2	Z	1.5	7.6	13.8	16.7	20.1	36.5	27.1	21.0	7.7	2.8	5.6	3.9	3.4	1.1	0.4	0.1	0.1	0.1	0.1	0.1	0.0	7.4	36.5
24-Sep	0.2	0.3	0.1	Z	3.8	6.3	5.7	4.7	17.6	13.1	7.8	1.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.2	0.3	4.9	2.9	17.6
25-Sep	6.6	6.6	4.8	3.6	Z	53.7	23.4	22.6	21.0	12.9	2.5	0.9	1.1	1.1	0.5	1.0	0.9	0.3	0.2	0.1	0.1	0.1	0.0	0.0	7.1	53.7
26-Sep	0.1	0.1	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	0.1
27-Sep	Z	0.1	0.0	0.1	0.1	0.1	0.1	0.5	1.3	0.6	0.5	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.4	2.5	2.7	1.5	0.6	2.7
28-Sep	0.5	Z	0.5	0.6	0.6	0.4	0.5	1.4	2.4	2.1	1.6	0.8	0.4	0.1	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.6	2.4
29-Sep	0.1	0.1	Z	0.1	0.1	0.1	0.2	2.0	0.5	0.9	0.4	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	2.0
30-Sep	0.0	0.0	0.0	Z	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	0.0	0.0	0.1
	0.8	1.2	2.0	1.5	1.6	4.7	3.8	5.5	7.8	6.1	3.6	1.9	1.3	0.9	0.7	0.6	0.6	0.5	0.3	0.1	0.4	0.8	0.6	0.7	Diurnal Average	
	6.6	7.4	9.3	10.1	14.5	53.7	23.4	22.6	36.5	27.1	21.0	9.2	6.7	5.6	4.2	3.4	4.6	4.4	2.6	0.8	8.1	18.2	8.1	5.8	Diurnal Maximum	

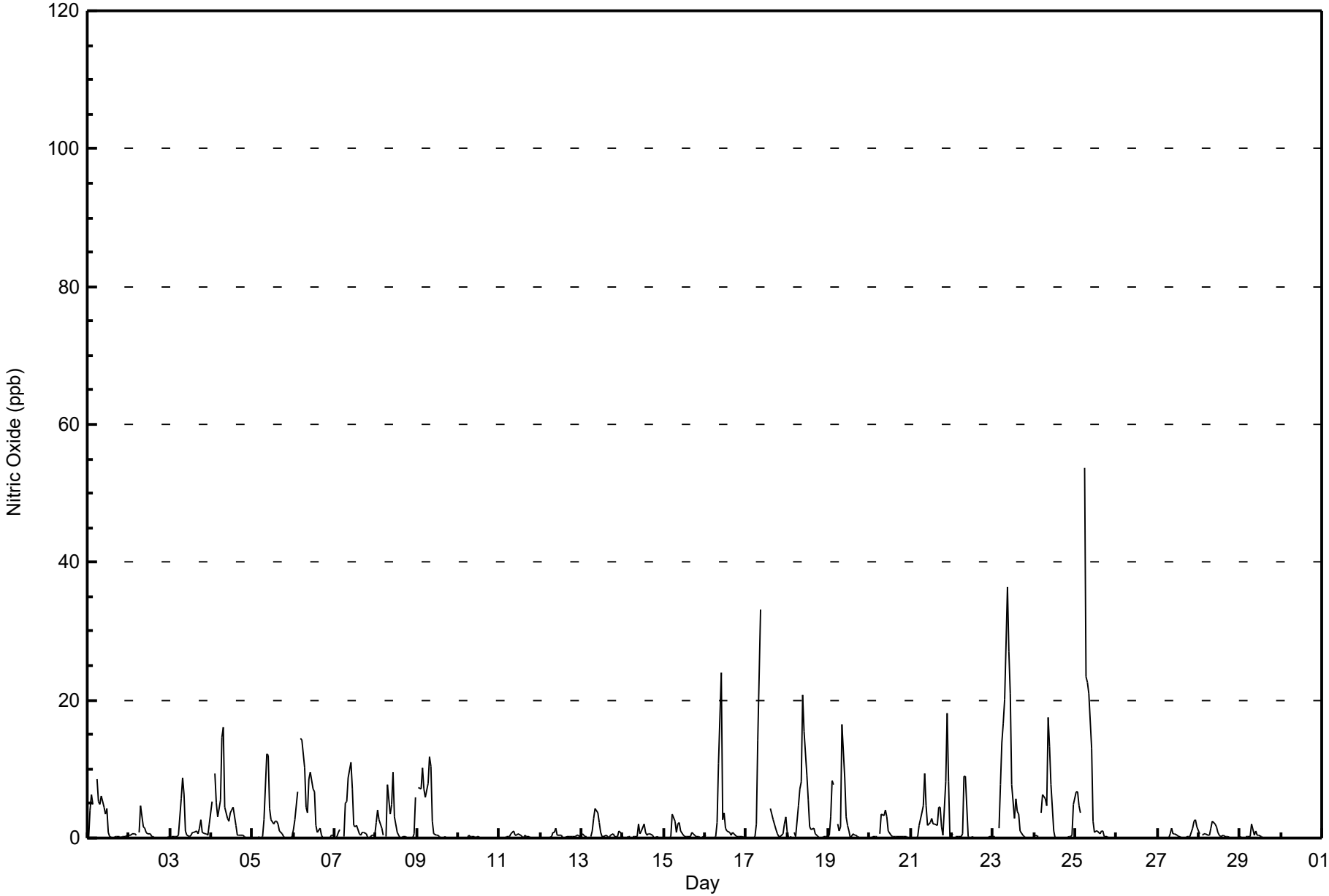
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Fort McKay South - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	675	98.54	98.54
21 - 40	9	1.31	99.85
11 - 80	1	0.15	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Fort McKay South - September 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	64	23	9	3	3	4	22	43	74	72	89	78	55	47	44	45	675
21 - 40	1	0	2	1	1	1	0	0	0	1	0	0	0	0	0	2	9
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	65	23	11	4	4	5	22	43	74	73	89	78	55	47	44	48	685

Total Number of Valid Hours: 685

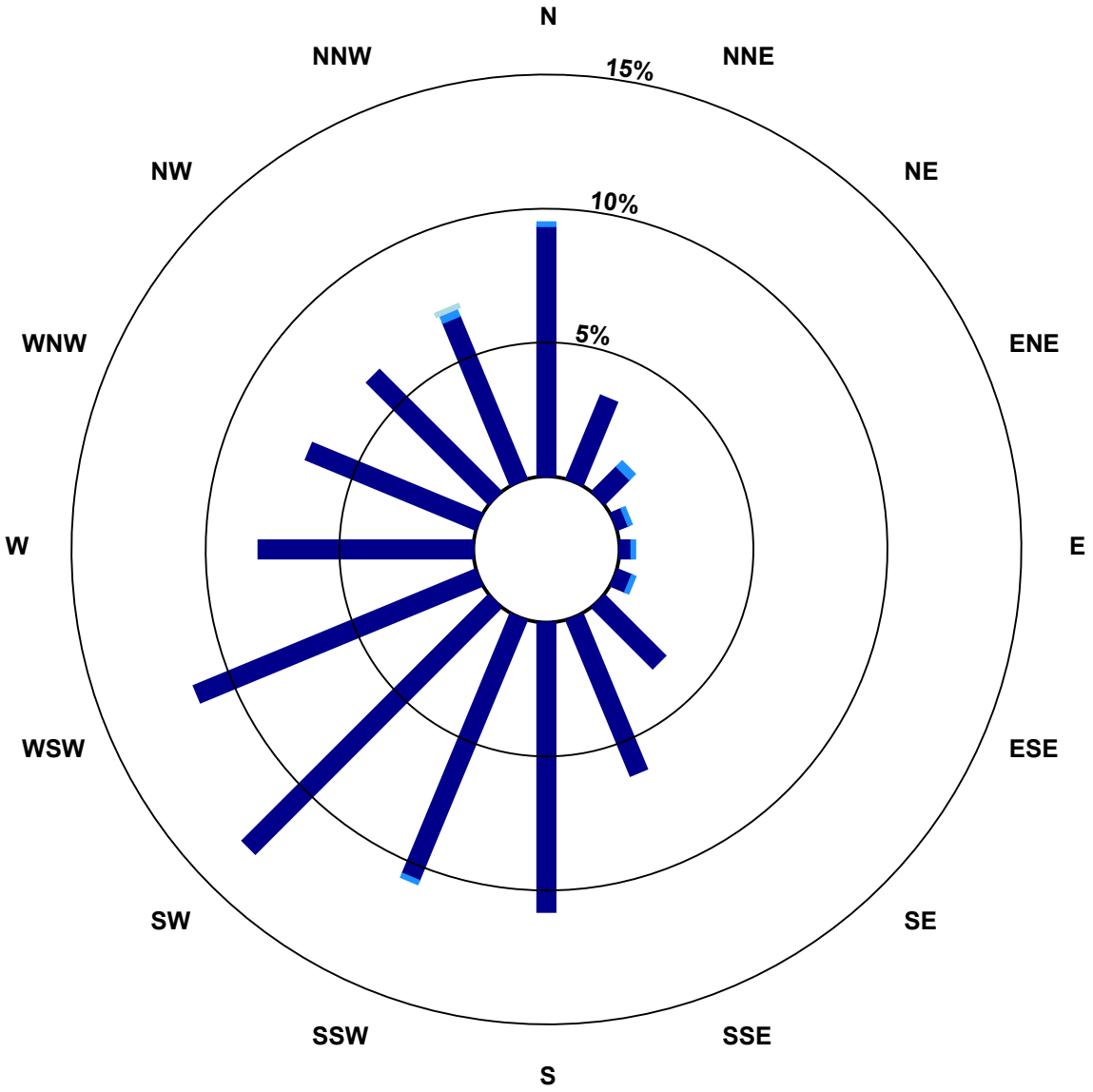
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Fort McKay South



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

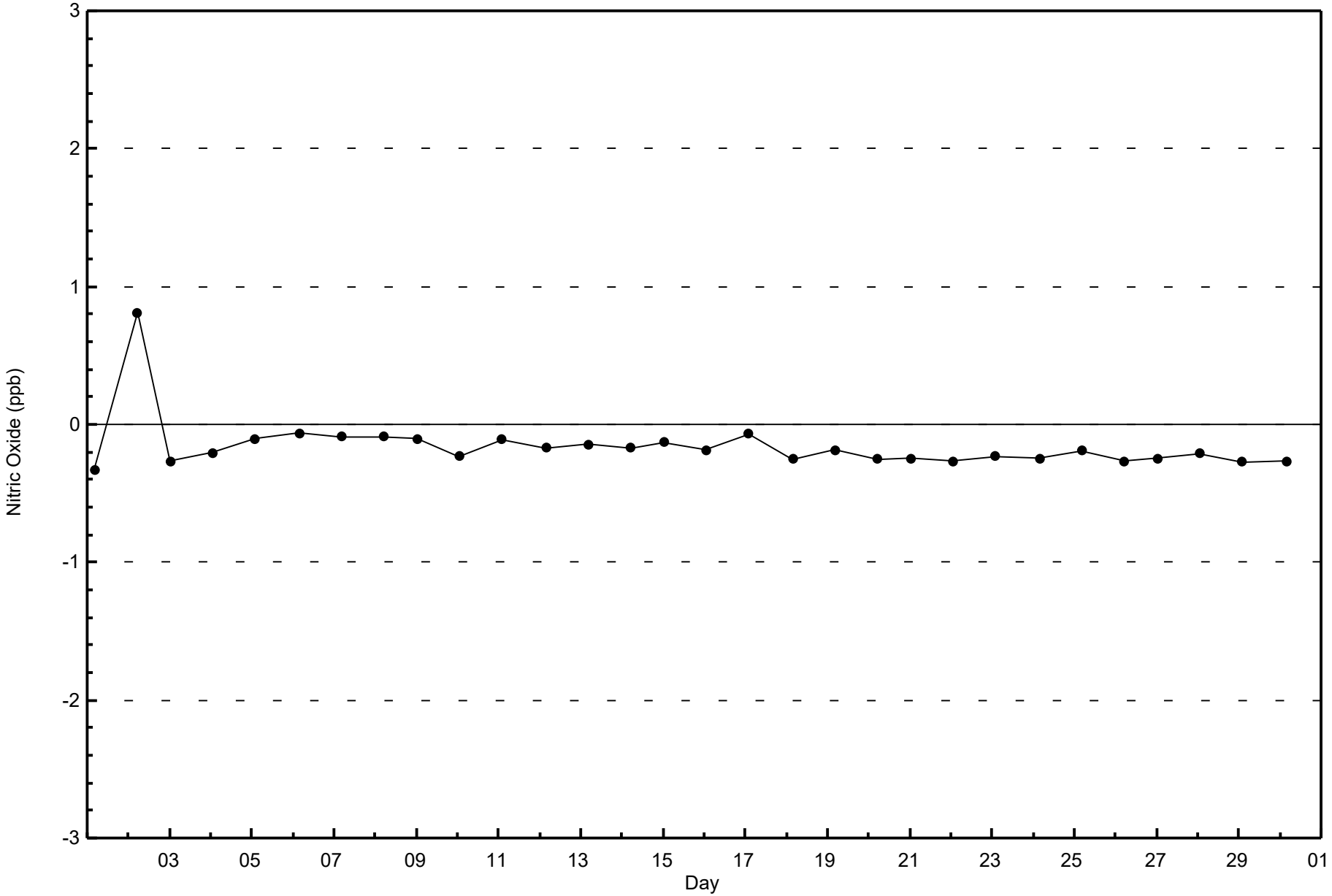
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Fort McKay South - September 2026

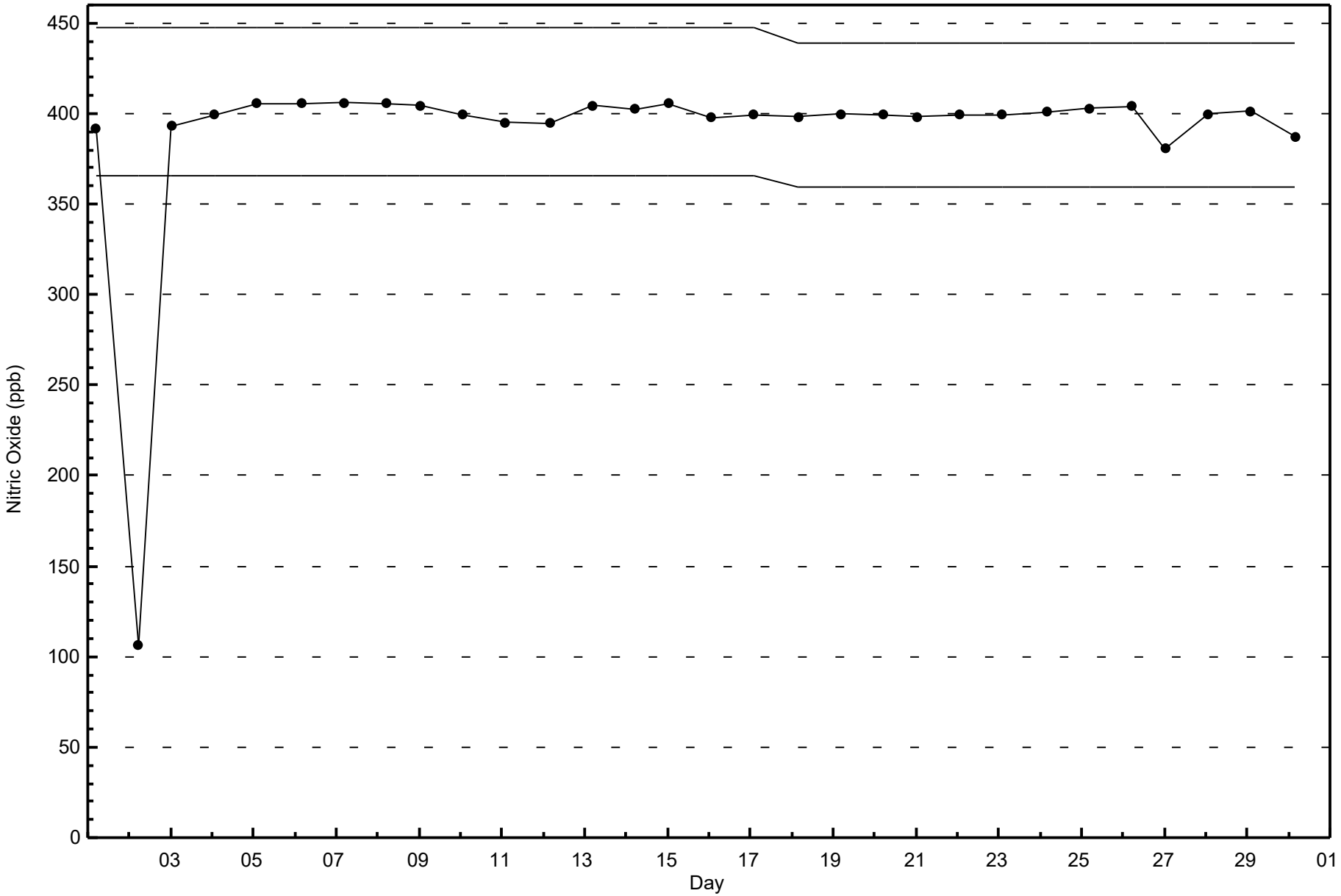


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Fort McKay South - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Fort McKay South - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 21.8 ppb on Sep 21 17:00 Maximum Daily Average: 10.1 ppb on Sep 25

Minimum Value: 0.0 ppb on Sep 12 02:00 Minimum Daily Average: 0.3 ppb on Sep 30
Maximum Diurnal Average: 5.9 ppb at hour 9 Minimum Diurnal Average: 2.4 ppb at hour 14
Monthly Average: 3.92 ppb Percentiles: P_1 = 0.1 P_{10} = 0.3 Q_1 = 1.0 Median = 2.6 Q_3 = 5.7 P_{90} = 9.0 P_{99} = 18.4

Hours in Service:	720
Hours of Data:	685
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-Sep	0.5	1.0	1.3	1.1	Z	1.3	3.8	4.6	8.3	7.6	5.8	7.2	3.0	1.4	1.1	1.4	2.8	4.0	6.2	9.4	7.9	7.9	8.3	8.4	4.5	9.4
2-Sep	6.8	7.6	4.5	3.0	2.0	Z	0.7	3.1	2.9	3.7	2.7	2.7	2.5	2.0	1.6	1.4	1.1	1.0	0.7	0.4	0.5	0.9	3.2	5.2	2.6	7.6
3-Sep	Z	3.6	1.5	0.9	0.6	1.2	7.6	9.1	7.1	2.5	1.4	0.9	1.1	2.1	2.8	2.9	2.1	4.0	8.9	8.1	5.5	3.2	4.4	8.6	3.9	9.1
4-Sep	9.1	Z	6.4	1.4	1.5	2.3	4.1	7.8	8.5	5.9	4.5	4.7	5.5	6.2	4.0	2.2	3.2	3.9	5.6	5.0	2.5	0.6	1.8	3.2	4.3	9.1
5-Sep	4.4	0.8	Z	7.9	3.8	0.7	0.8	4.3	10.5	11.1	6.0	5.1	4.0	5.0	5.7	5.3	4.3	4.3	2.5	1.6	1.3	1.3	1.1	1.7	4.1	11.1
6-Sep	4.1	2.5	2.0	Z	1.3	1.7	1.5	2.3	3.6	4.5	4.7	4.5	6.5	4.3	2.5	5.0	2.5	2.1	2.2	1.3	2.8	3.5	7.8	9.9	3.6	9.9
7-Sep	5.8	6.8	4.7	3.2	Z	1.0	3.4	5.1	6.9	7.3	7.1	2.7	3.0	4.7	2.6	2.4	4.5	4.2	3.3	3.8	2.4	1.8	2.4	2.3	4.0	7.3
8-Sep	2.5	1.7	1.2	0.7	0.1	Z	0.3	1.4	2.1	5.0	9.8	4.8	2.5	2.1	1.2	0.6	2.0	4.2	2.6	2.3	2.2	2.8	3.5	4.4	2.6	9.8
9-Sep	Z	3.5	2.6	3.2	3.2	5.1	5.7	7.2	8.0	3.1	1.2	1.1	1.2	0.9	0.7	1.6	3.7	3.1	2.9	3.3	4.9	6.2	2.4	2.5	3.4	8.0
10-Sep	1.5	Z	0.2	1.3	1.7	2.1	4.0	0.8	0.7	0.5	0.4	0.6	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.3	0.2	0.2	0.7	4.0
11-Sep	0.2	0.2	Z	0.7	1.2	2.0	1.2	2.1	3.2	1.1	1.2	1.5	1.0	0.4	0.2	1.6	1.8	2.3	0.7	1.5	1.7	0.8	0.1	0.1	1.2	3.2
12-Sep	0.1	0.0	0.0	Z	0.2	0.2	0.3	1.3	1.4	1.7	0.7	0.9	1.0	0.3	0.4	0.7	1.2	1.7	1.1	2.2	6.3	11.9	13.4	9.8	2.5	13.4
13-Sep	4.5	10.5	9.9	9.2	Z	7.7	7.5	5.9	5.6	5.1	4.3	2.2	1.0	1.0	1.6	0.9	0.7	3.3	7.0	6.4	9.4	9.6	9.5	7.2	5.7	10.5
14-Sep	3.4	3.8	4.7	6.6	7.5	Z	3.1	1.0	1.0	4.5	2.2	2.3	5.2	3.0	1.5	1.9	2.4	3.4	1.6	1.8	1.8	0.9	0.2	0.2	2.8	7.5
15-Sep	Z	0.5	0.4	0.7	1.5	6.7	4.5	1.4	2.3	2.2	1.5	0.9	0.6	0.5	0.9	1.1	3.3	3.8	3.1	1.4	0.4	0.2	0.1	3.5	1.8	6.7
16-Sep	3.7	Z	2.1	0.5	0.2	0.4	0.6	2.2	7.8	12.4	5.8	6.1	2.7	1.8	1.4	1.5	4.0	4.5	1.8	2.0	2.0	1.9	0.6	0.5	2.9	12.4
17-Sep	0.3	0.3	Z	0.3	0.3	0.5	1.0	3.2	9.9	C	C	C	C	C	8.9	6.9	7.3	4.8	2.5	1.9	1.5	1.4	2.2	2.9	3.1	9.9
18-Sep	1.6	6.4	8.9	Z	7.8	2.2	5.4	7.4	8.2	14.8	12.8	10.1	7.6	3.2	3.1	5.2	5.8	1.9	0.8	0.5	0.4	0.7	1.3	1.0	5.1	14.8
19-Sep	1.4	1.8	1.6	1.7	Z	0.8	0.5	0.6	8.4	8.1	4.9	4.0	2.9	0.7	2.4	2.5	3.1	4.1	4.1	2.7	1.8	3.2	4.8	3.1	3.0	8.4
20-Sep	2.5	3.2	4.6	7.4	6.4	Z	2.8	2.5	5.1	6.4	5.3	2.8	1.4	0.6	1.1	0.8	1.7	2.7	5.7	7.2	7.0	7.5	7.1	4.5	4.2	7.5
21-Sep	Z	3.9	3.7	2.5	2.8	9.8	7.6	3.3	9.7	8.0	4.6	7.6	8.7	8.4	11.9	12.6	21.8	20.1	16.2	13.0	14.2	15.0	14.9	7.7	9.9	21.8
22-Sep	7.5	Z	4.7	2.9	1.8	1.1	1.3	2.8	3.4	0.6	0.4	0.4	0.8	0.4	0.5	0.4	0.4	0.8	3.3	4.7	7.0	8.3	13.7	10.4	3.4	13.7
23-Sep	6.5	7.2	Z	5.7	4.7	4.2	2.7	3.3	10.7	11.0	11.8	9.0	7.6	13.8	12.9	13.4	10.1	5.5	5.1	6.9	4.9	3.7	2.6	1.8	7.2	13.8
24-Sep	3.3	11.1	8.2	Z	16.7	11.9	9.2	7.6	12.6	12.6	9.0	2.0	0.4	0.2	0.4	0.4	0.7	1.0	3.0	8.4	9.6	7.2	6.0	10.6	6.6	16.7
25-Sep	11.6	9.0	7.0	5.3	Z	14.6	18.3	18.7	18.4	17.6	11.9	8.8	7.6	6.3	4.4	7.9	9.7	9.0	9.4	6.1	6.6	8.8	6.8	7.5	10.1	18.7
26-Sep	8.1	9.6	6.4	4.8	5.4	Z	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	0.2	0.2	1.7	9.6
27-Sep	Z	2.4	0.5	2.6	2.4	2.6	1.6	1.4	2.2	1.0	0.9	0.8	0.4	0.4	0.3	0.4	0.7	2.2	7.2	10.6	20.5	20.6	21.5	20.5	5.4	21.5
28-Sep	16.8	Z	7.0	5.4	4.4	3.2	2.6	2.6	5.0	3.1	2.9	1.7	1.1	0.6	2.2	2.0	1.5	2.9	4.6	4.1	4.1	8.6	5.2	5.4	4.2	16.8
29-Sep	3.9	3.7	Z	4.6	9.6	6.6	7.3	8.7	4.5	5.4	1.9	1.3	0.6	0.2	0.1	0.2	0.2	0.2	0.4	1.1	0.2	0.5	0.2	0.2	2.7	9.6
30-Sep	0.2	0.2	0.2	Z	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.4	0.4	0.1	0.1	0.1	0.0	0.3	0.0	0.0	0.0	0.0	1.8	1.7	0.3	1.8
	4.4	4.1	3.8	3.3	3.5	3.6	3.7	4.1	5.9	5.8	4.3	3.4	2.8	2.4	2.6	2.8	3.4	3.5	3.8	3.9	4.3	4.7	4.9	4.8	Diurnal Average	
	16.8	11.1	9.9	9.2	16.7	14.6	18.3	18.7	18.4	17.6	12.8	10.1	8.7	13.8	12.9	13.4	21.8	20.1	16.2	13.0	20.5	20.6	21.5	20.5	Diurnal Maximum	

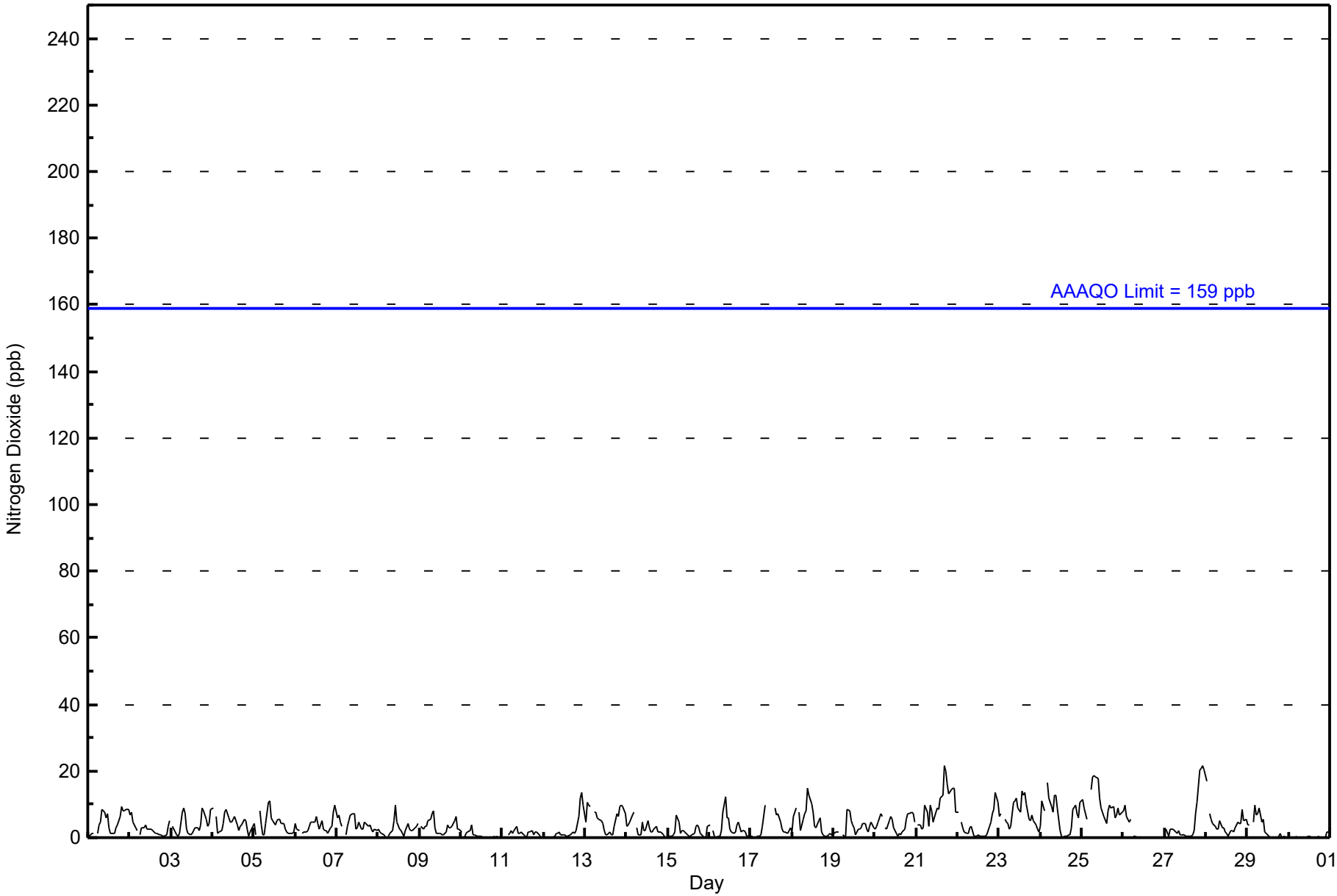
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Fort McKay South - September 2026



Nitrogen Dioxide (NO_2) - ppb
Fort McKay South - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	680	99.27	99.27
21 - 40	5	0.73	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Fort McKay South - September 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	23	11	4	4	5	22	43	74	73	85	78	55	47	44	47	680
21 - 40	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	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	65	23	11	4	4	5	22	43	74	73	89	78	55	47	44	48	685

Total Number of Valid Hours: 685

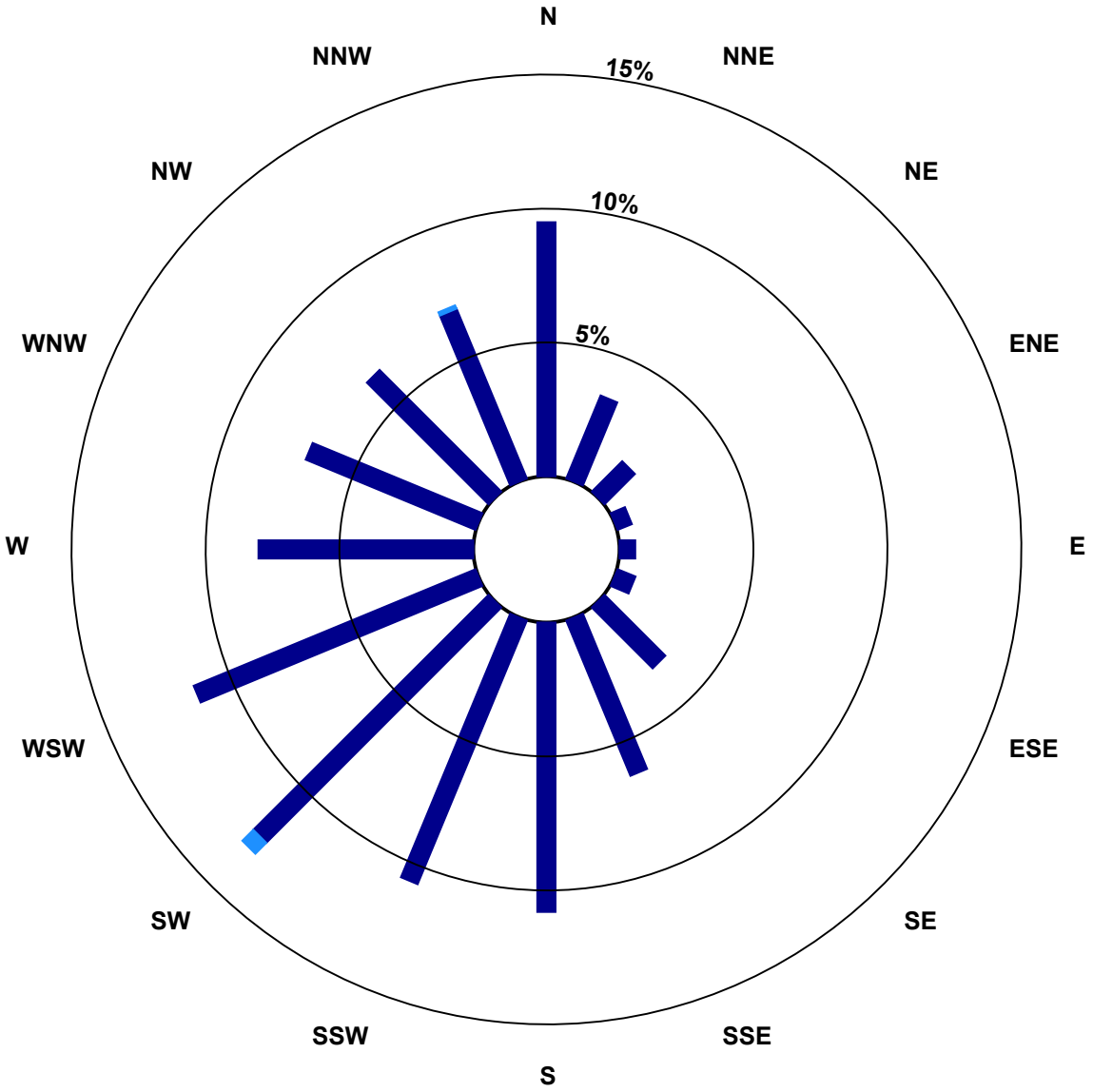
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Fort McKay South



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

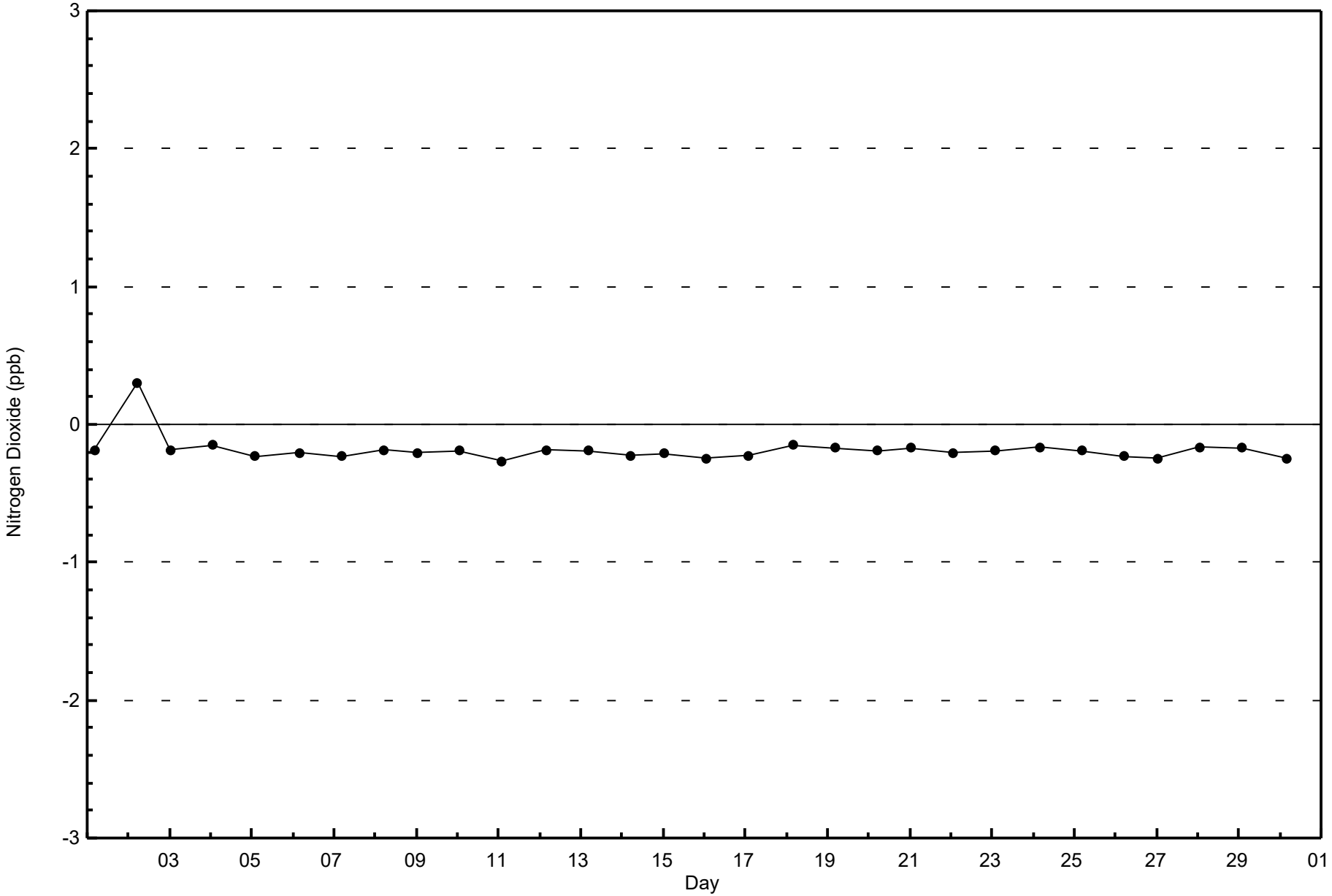
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Fort McKay South - September 2026

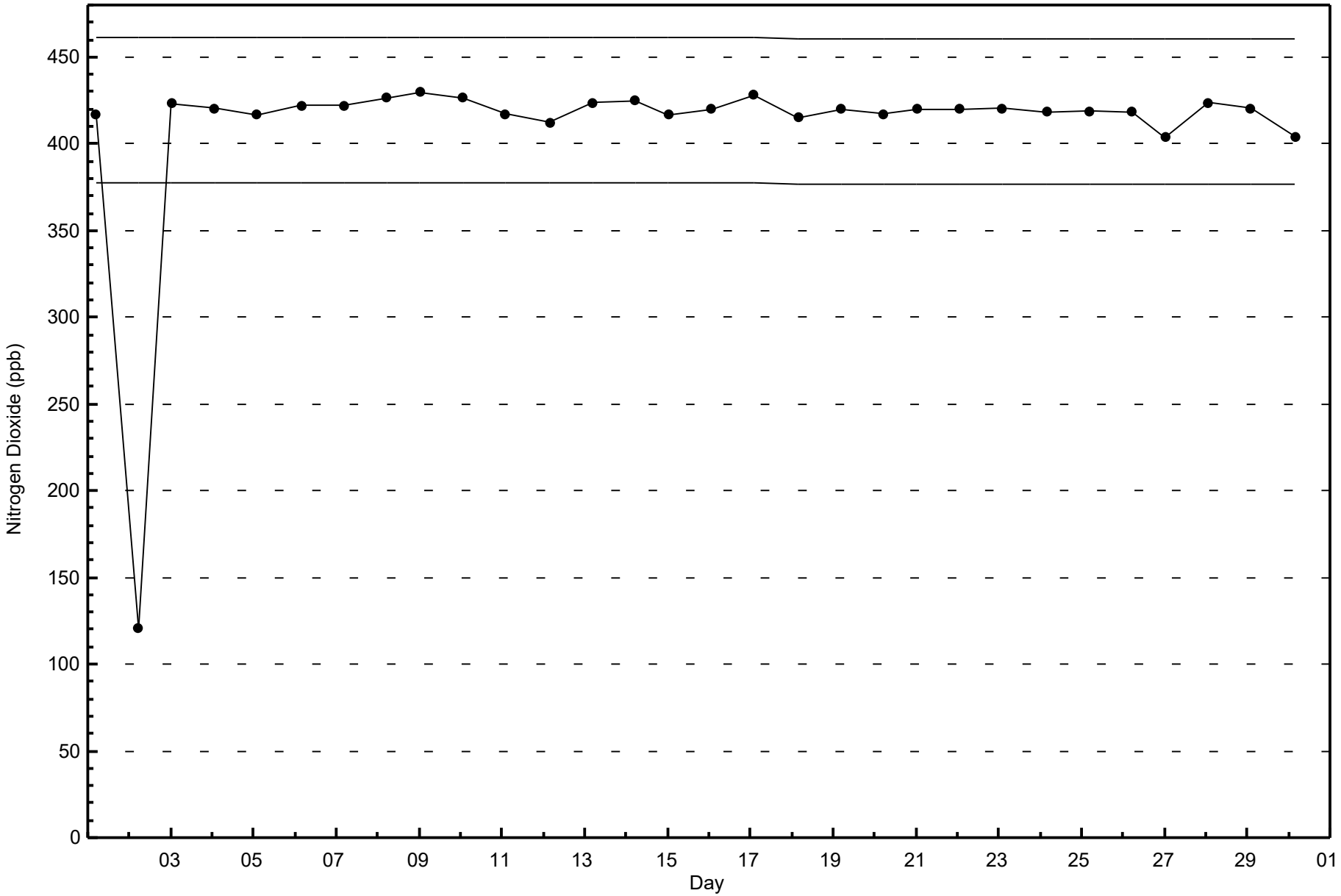


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Fort McKay South - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Fort McKay South - September 2026

Maximum Value: 68.3 ppb on Sep 25 06:00

Maximum Daily Average: 17.2 ppb on Sep 25

Minimum Value: 0.0 ppb on Sep 30 20:00

Minimum Daily Average: 0.3 ppb on Sep 30

Maximum Diurnal Average: 13.8 ppb at hour 9

Minimum Diurnal Average: 3.3 ppb at hour 15

Monthly Average: 5.91 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.3 Q_1 = 1.2 Median = 3.5 Q_3 = 8.1 P_{90} = 13.9 P_{99} = 36.7

Hours in Service:	720
Hours of Data:	685
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-Sep	0.5	5.1	7.6	5.9	Z	9.8	9.1	9.5	14.4	12.0	9.2	11.4	3.9	1.6	1.2	1.4	3.0	4.3	6.4	9.5	8.0	8.1	8.6	8.7	6.9	14.4
2-Sep	7.2	8.1	5.2	3.5	2.5	Z	1.4	7.8	4.6	5.2	3.4	3.2	3.0	2.2	1.8	1.5	1.1	1.0	0.7	0.4	0.5	0.9	3.3	5.3	3.2	8.1
3-Sep	Z	3.9	1.7	1.1	0.8	1.5	13.3	17.8	13.5	3.4	1.8	1.1	1.5	2.9	3.6	3.8	2.6	5.5	11.5	8.9	6.1	3.8	4.7	10.6	5.4	17.8
4-Sep	14.3	Z	15.7	6.5	4.6	7.8	18.7	24.0	12.9	8.8	7.0	8.3	9.6	10.6	5.8	2.6	3.7	4.2	6.0	5.1	2.6	0.7	1.9	3.3	8.0	24.0
5-Sep	4.5	0.8	Z	8.1	3.9	0.8	1.1	7.0	22.7	23.2	10.3	7.8	6.1	7.4	8.1	7.3	5.4	5.0	2.7	1.6	1.3	1.3	1.2	1.8	6.1	23.2
6-Sep	5.3	5.1	8.8	Z	15.8	16.0	11.6	6.7	7.2	13.0	14.3	11.5	13.2	6.2	3.3	6.4	2.8	2.1	2.2	1.3	2.8	3.5	8.1	10.2	7.7	16.0
7-Sep	5.8	6.9	5.4	4.5	Z	1.3	8.5	10.3	15.7	18.3	14.3	4.5	4.6	6.6	3.2	2.8	5.3	4.9	3.9	3.9	2.4	1.9	2.7	2.7	6.1	18.3
8-Sep	4.8	5.7	3.9	2.0	0.5	Z	0.6	9.1	5.5	9.9	19.3	7.8	3.2	2.5	1.2	0.6	2.2	4.5	2.6	2.3	2.2	2.8	4.1	10.2	4.7	19.3
9-Sep	Z	10.9	9.7	13.3	10.3	11.1	13.7	19.0	18.3	5.5	1.9	1.4	1.7	1.1	0.7	1.6	4.0	3.2	2.9	3.3	4.9	6.2	2.4	2.5	6.5	19.0
10-Sep	1.5	Z	0.3	1.4	1.8	2.2	4.3	1.0	1.0	0.7	0.5	0.8	0.8	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.2	0.2	0.8	4.3
11-Sep	0.2	0.2	Z	0.8	1.3	2.2	1.4	2.8	4.3	1.6	1.6	2.0	1.4	0.5	0.3	2.0	2.0	2.4	0.8	1.5	1.8	0.9	0.2	0.2	1.4	4.3
12-Sep	0.2	0.1	0.1	Z	0.3	0.3	0.4	2.1	2.3	3.2	1.2	1.2	1.5	0.4	0.5	0.9	1.5	2.0	1.2	2.3	6.5	12.3	13.9	10.1	2.8	13.9
13-Sep	5.1	11.0	10.1	9.3	Z	7.8	8.4	8.7	10.0	8.8	6.4	3.0	1.2	1.1	1.9	1.0	0.7	3.8	7.6	6.5	9.6	9.9	10.5	7.8	6.5	11.0
14-Sep	3.5	3.8	4.8	6.7	7.7	Z	3.3	1.2	1.3	6.4	2.7	3.3	7.3	3.8	2.0	2.5	3.1	3.7	1.7	1.9	1.9	0.9	0.2	0.2	3.2	7.7
15-Sep	Z	0.5	0.4	0.7	1.8	10.2	6.9	2.1	4.3	4.5	2.5	1.3	0.8	0.6	1.1	1.2	4.1	4.4	3.4	1.5	0.5	0.3	0.2	3.8	2.5	10.2
16-Sep	4.1	Z	2.2	0.6	0.3	0.5	0.8	4.5	18.7	36.4	8.4	9.7	4.1	2.8	2.2	2.0	4.8	5.1	2.1	2.2	2.2	2.0	0.7	0.6	5.1	36.4
17-Sep	0.4	0.3	Z	0.4	0.4	0.7	2.9	17.5	43.0	C	C	C	C	C	13.1	10.3	10.0	5.9	3.2	2.1	1.7	2.1	4.3	6.0	6.9	43.0
18-Sep	2.4	6.5	9.0	Z	8.7	2.5	10.0	14.6	16.3	35.5	28.3	19.3	13.1	4.9	4.3	6.7	6.4	2.3	1.0	0.6	0.5	0.8	1.5	1.2	8.5	35.5
19-Sep	1.7	4.9	9.9	9.4	Z	2.7	1.5	2.1	25.0	16.8	7.9	5.9	4.0	0.8	2.9	2.9	3.5	4.3	4.2	2.7	1.9	3.3	4.9	3.2	5.5	25.0
20-Sep	2.6	3.3	4.8	7.6	6.7	Z	3.4	6.0	8.4	10.4	8.3	3.9	1.8	0.7	1.4	0.9	1.9	2.9	5.9	7.4	7.1	7.6	7.2	4.5	5.0	10.4
21-Sep	Z	3.9	3.8	2.5	2.9	11.6	11.3	8.0	19.0	12.7	6.4	9.9	11.5	10.4	14.0	14.4	26.4	24.5	17.7	13.5	22.3	33.2	23.0	7.8	13.5	33.2
22-Sep	8.2	Z	5.0	3.2	2.0	1.3	1.9	11.7	12.3	0.8	0.5	0.4	1.0	0.4	0.6	0.5	0.5	0.9	3.3	4.8	7.1	8.4	14.0	10.5	4.3	14.0
23-Sep	6.7	7.4	Z	7.2	12.3	18.0	19.4	23.4	47.2	38.1	32.8	16.7	10.4	19.4	16.8	16.8	11.2	5.9	5.2	7.0	5.0	3.8	2.7	1.8	14.6	47.2
24-Sep	3.5	11.4	8.3	Z	20.5	18.2	14.9	12.3	30.2	25.7	16.8	3.1	0.5	0.2	0.4	0.4	0.8	1.1	3.0	8.5	9.8	7.4	6.3	15.5	9.5	30.2
25-Sep	18.2	15.6	11.8	8.9	Z	68.3	41.7	41.3	39.4	30.5	14.4	9.7	8.7	7.4	4.9	8.9	10.6	9.3	9.6	6.2	6.7	8.9	6.8	7.5	17.2	68.3
26-Sep	8.2	9.7	6.4	4.8	5.4	Z	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	0.2	0.2	1.7	9.7
27-Sep	Z	2.5	0.5	2.7	2.5	2.7	1.7	1.9	3.5	1.6	1.4	1.2	0.6	0.5	0.4	0.5	0.8	2.3	7.3	10.7	21.9	23.1	24.2	22.0	5.9	24.2
28-Sep	17.3	Z	7.5	6.0	5.0	3.6	3.1	4.0	7.4	5.2	4.5	2.5	1.5	0.7	2.5	2.2	1.7	3.1	4.7	4.2	4.2	8.7	5.3	5.5	4.8	17.3
29-Sep	4.0	3.8	Z	4.7	9.7	6.7	7.5	10.7	5.0	6.3	2.3	1.6	0.7	0.2	0.2	0.2	0.2	0.2	0.4	1.1	0.2	0.5	0.2	0.2	2.9	10.7
30-Sep	0.2	0.2	0.2	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.4	0.1	0.1	0.1	0.0	0.3	0.0	0.0	0.0	0.0	1.8	1.7	0.3	1.8
	5.2	5.3	5.7	4.9	5.1	8.3	7.4	9.6	13.8	11.9	7.9	5.3	4.1	3.3	3.3	3.4	4.0	4.0	4.0	4.1	4.7	5.5	5.5	5.5	Diurnal Average	
	18.2	15.6	15.7	13.3	20.5	68.3	41.7	41.3	47.2	38.1	32.8	19.3	13.2	19.4	16.8	16.8	26.4	24.5	17.7	13.5	22.3	33.2	24.2	22.0	Diurnal Maximum	

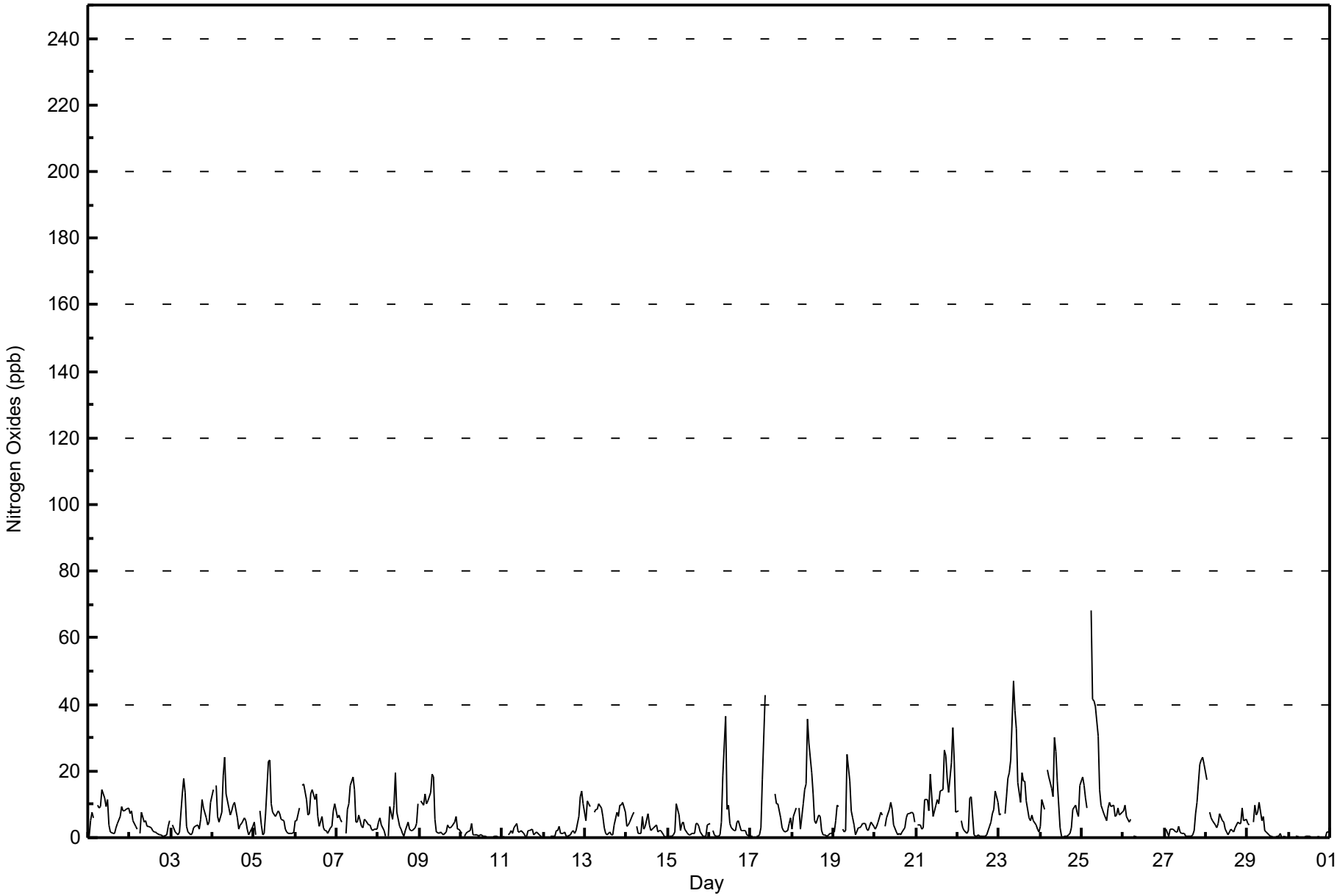
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Fort McKay South - September 2026



Nitrogen Oxides (NO_X) - ppb
Fort McKay South - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	656	95.77	95.77
21 - 40	24	3.50	99.27
11 - 80	5	0.73	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Fort McKay South - September 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	62	22	9	3	3	4	22	42	72	71	83	76	55	47	43	42	656
21 - 40	3	1	1	1	0	1	0	1	2	2	6	2	0	0	1	3	24
11 - 80	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3	5
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	65	23	11	4	4	5	22	43	74	73	89	78	55	47	44	48	685

Total Number of Valid Hours: 685

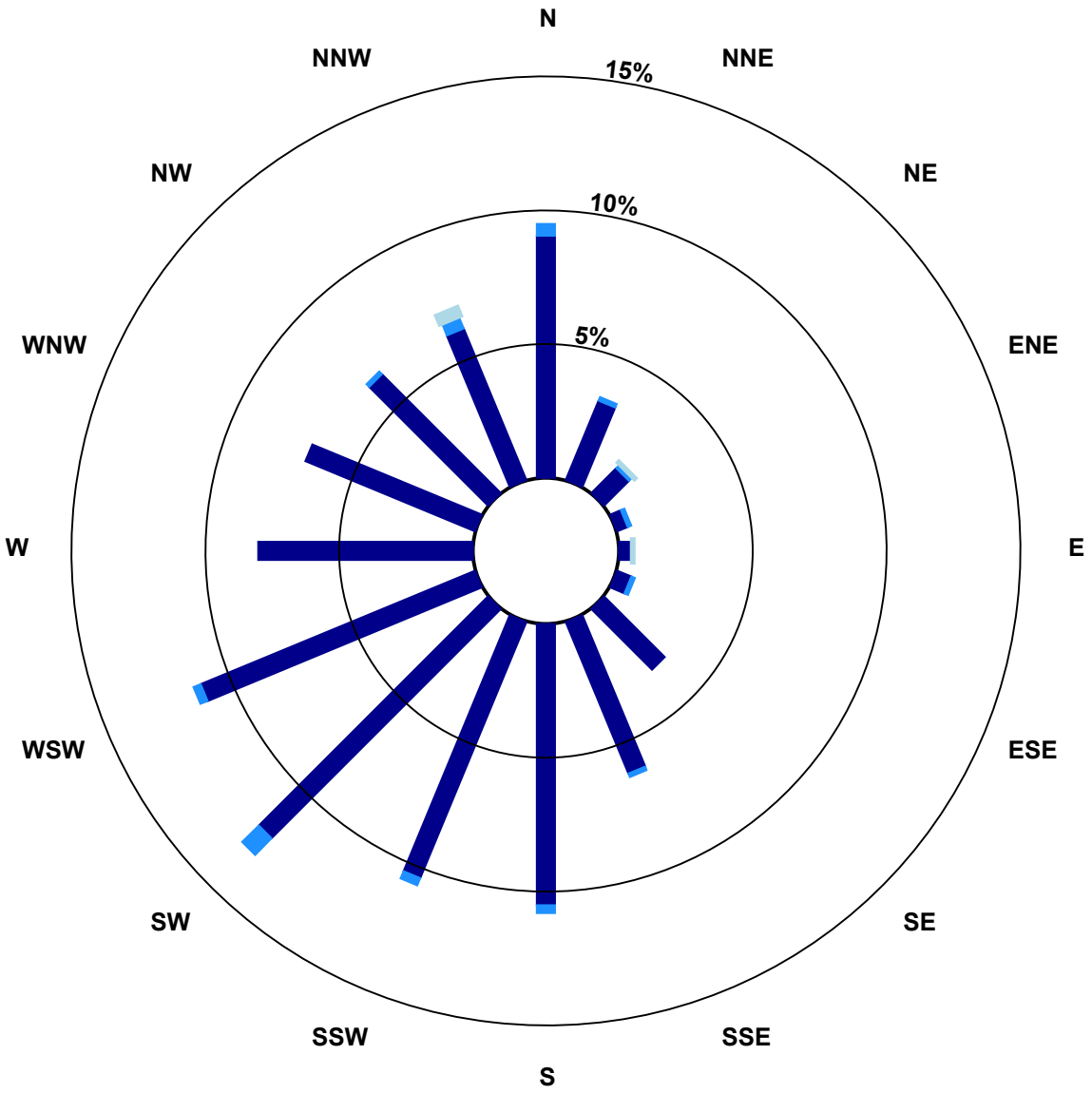
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Fort McKay South



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

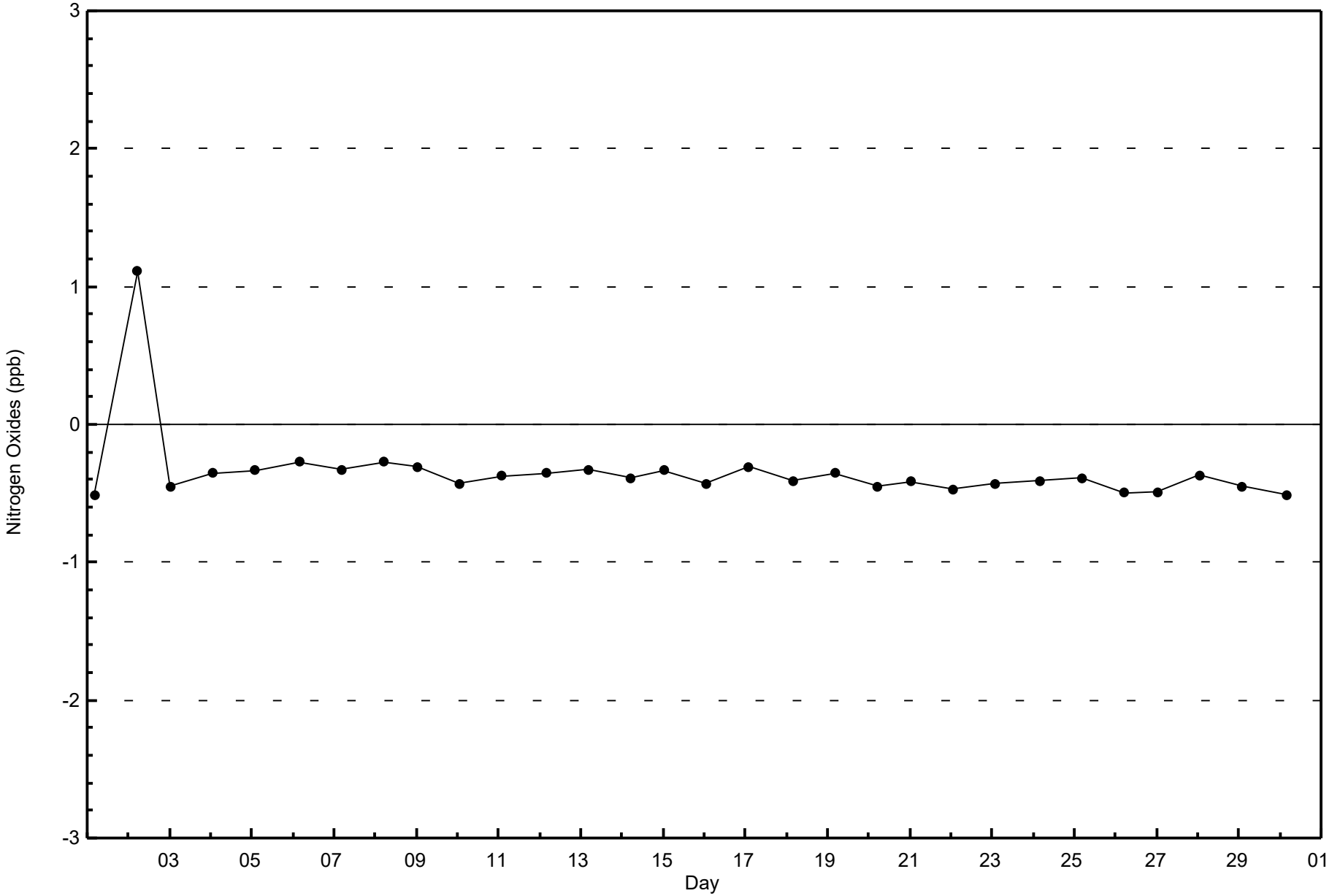
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Fort McKay South - September 2026

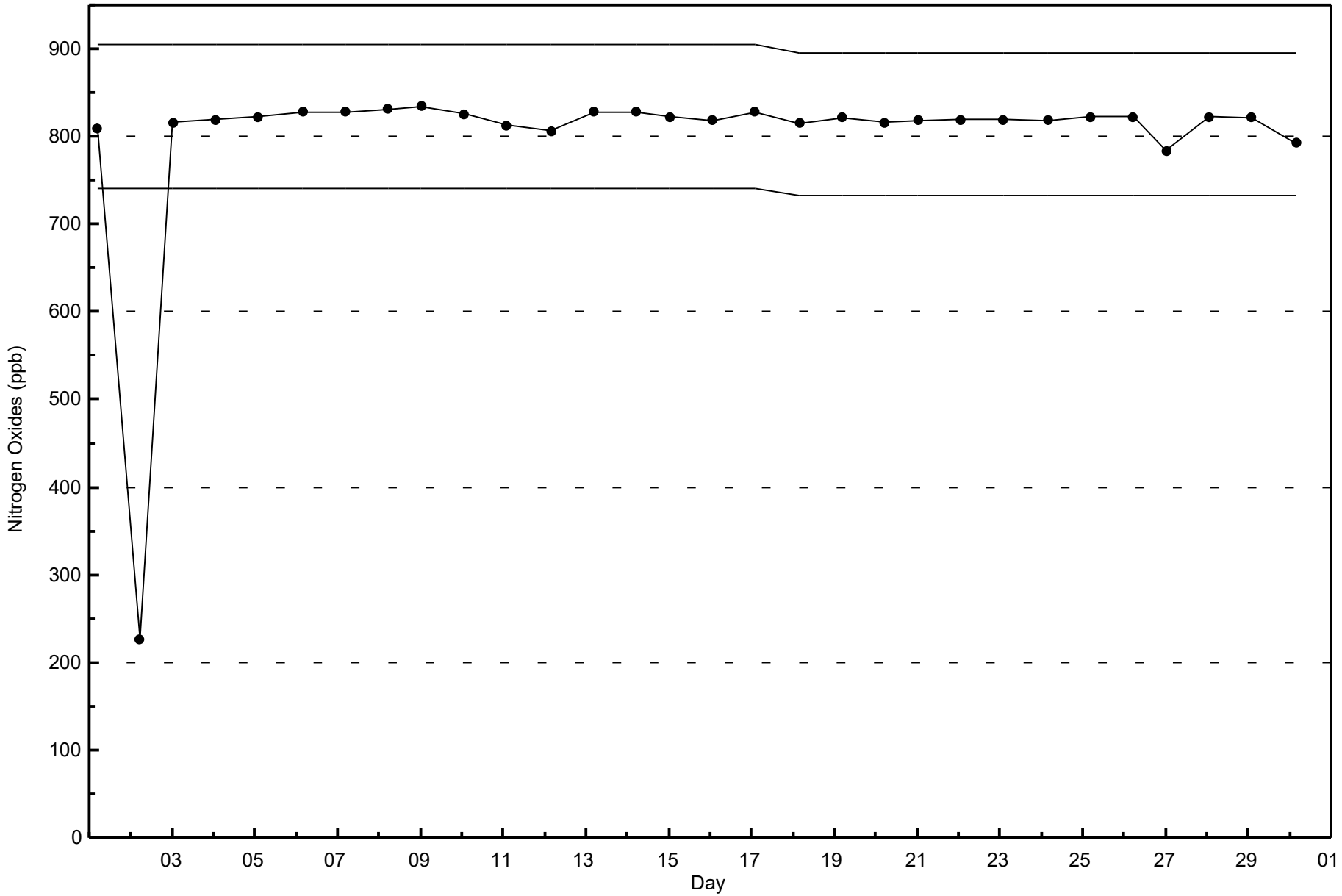


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Fort McKay South - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Fort McKay South - September 2026

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

Maximum Value: 27.6 $\mu g/m^3$ on Sep 21 22:00

Maximum Daily Average: 11.9 $\mu g/m^3$ on Sep 21

Minimum Value: 0.1 $\mu g/m^3$ on Sep 30 10:00

Minimum Daily Average: 0.4 $\mu g/m^3$ on Sep 30

Maximum Diurnal Average: 6.0 $\mu g/m^3$ at hour 11

Minimum Diurnal Average: 3.9 $\mu g/m^3$ at hour 7

Monthly Average: 4.84 $\mu g/m^3$

Percentiles: P_1 = 0.2 P_{10} = 1.2 Q_1 = 2.1 Median = 4.2 Q_3 = 6.4 P_{90} = 8.9 P_{99} = 18.1

Hours in Service:	720
Hours of Data:	717
Hours of Missing Data:	3
Hours of Calibration:	1
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-Sep	4.5	6.7	7.8	6.5	6.6	6.6	5.8	10.6	25.9	21.4	14.9	18.8	9.1	5.6	4.2	4.7	5.9	8.9	9.7	9.6	7.6	6.8	7.7	8.4	9.3	25.9
2-Sep	6.7	6.8	6.1	5.0	4.2	4.1	3.7	4.3	6.8	11.5	10.5	13.4	16.8	13.0	10.3	8.6	7.4	6.2	5.4	6.4	6.7	6.8	7.8	8.1	7.8	16.8
3-Sep	8.9	7.9	6.8	6.4	6.0	5.9	6.4	7.1	7.0	7.6	6.5	5.1	4.9	5.3	5.3	5.3	5.0	5.2	5.5	6.0	5.8	5.8	5.7	5.9	6.1	8.9
4-Sep	6.4	6.4	6.4	5.6	5.3	5.3	5.5	5.8	3.7	1.8	1.2	1.1	1.5	1.8	1.4	1.1	1.8	2.4	2.5	2.5	2.3	1.9	2.1	2.3	3.3	6.4
5-Sep	2.4	2.6	2.9	3.4	3.6	3.5	3.4	3.6	4.4	5.2	4.8	5.5	6.1	7.0	7.4	7.1	6.3	6.2	5.6	5.5	5.7	5.9	6.2	6.2	5.0	7.4
6-Sep	7.8	8.3	8.3	8.7	8.0	7.7	6.8	6.3	6.7	7.5	DF	8.5	8.0	6.2	5.2	7.7	5.7	4.0	4.9	4.6	5.1	5.4	4.7	3.6	6.5	8.7
7-Sep	3.1	3.4	3.1	3.2	3.4	4.0	4.6	4.0	4.5	5.4	23.6	9.2	8.2	10.8	7.7	5.7	8.2	10.0	9.4	11.4	11.7	9.5	7.8	6.9	7.4	23.6
8-Sep	5.7	5.2	4.8	5.1	5.1	5.2	4.6	4.3	4.5	5.3	6.9	6.1	6.4	7.1	6.5	6.3	7.9	12.5	10.0	11.0	10.8	11.1	11.2	12.1	7.3	12.5
9-Sep	9.7	7.7	7.0	7.5	7.3	7.5	7.7	8.4	9.8	8.0	6.4	6.9	7.5	6.3	5.6	6.5	9.2	8.8	6.7	4.4	4.9	4.1	3.3	2.9	6.8	9.8
10-Sep	2.4	1.8	1.5	2.0	1.9	1.9	2.1	2.3	4.6	14.8	17.9	16.3	11.0	6.6	4.9	4.6	3.9	2.7	1.4	0.7	0.9	0.9	1.3	1.2	4.6	17.9
11-Sep	0.8	0.6	0.9	0.8	0.7	0.7	0.6	0.7	1.3	1.2	1.5	1.9	1.3	1.7	2.9	4.1	4.5	4.3	3.6	2.7	2.4	2.2	1.9	1.7	1.9	4.5
12-Sep	1.3	1.2	1.1	1.1	1.0	1.1	1.0	1.3	1.5	1.8	1.9	2.0	2.5	2.5	3.1	3.0	3.0	3.1	3.1	4.2	6.5	4.9	5.5	4.4	2.6	6.5
13-Sep	3.4	3.5	4.5	3.7	3.5	3.7	3.4	3.8	4.1	4.8	5.5	4.9	3.3	3.1	3.5	3.1	2.8	6.3	17.1	6.5	4.4	3.7	3.4	2.8	4.5	17.1
14-Sep	1.5	1.8	2.1	2.6	2.7	2.4	2.4	2.2	2.2	2.3	2.1	2.2	2.5	2.1	1.3	1.4	1.4	1.8	1.5	1.6	1.8	1.6	1.4	1.5	1.9	2.7
15-Sep	1.6	1.6	1.6	1.6	1.5	1.8	1.7	1.4	1.4	1.3	1.3	1.5	1.9	1.9	2.4	2.4	3.2	3.1	3.0	2.7	2.6	2.3	1.8	1.8	2.0	3.2
16-Sep	1.9	1.8	1.8	1.6	1.5	1.5	1.5	1.6	2.6	4.7	5.2	8.1	6.0	4.4	4.3	4.0	5.1	6.5	5.5	6.2	6.5	6.4	5.2	4.8	4.1	8.1
17-Sep	4.4	4.0	3.9	4.0	3.9	4.4	4.5	4.8	6.2	8.7	M	C	5.0	5.0	5.4	6.0	5.9	6.9	6.1	5.8	5.6	5.4	5.2	4.6	5.3	8.7
18-Sep	3.8	2.9	2.9	3.1	3.6	3.1	3.2	3.2	3.2	4.2	4.3	3.8	3.7	3.2	3.4	4.9	5.1	3.5	3.3	3.3	3.5	4.2	5.4	5.0	3.7	5.4
19-Sep	4.9	5.2	4.9	4.7	4.4	4.4	4.3	3.9	7.0	9.0	6.3	4.9	5.5	7.7	8.1	10.6	10.3	14.7	14.4	7.0	5.7	6.3	6.3	5.9	6.9	14.7
20-Sep	5.9	6.1	6.1	6.3	6.5	6.4	6.3	5.9	6.6	5.8	7.5	7.4	4.4	3.3	3.5	3.1	3.5	5.2	12.3	13.7	15.3	13.1	7.7	7.0	7.0	15.3
21-Sep	7.2	6.0	6.1	5.8	5.9	6.5	6.1	5.8	11.2	11.5	10.8	12.1	11.8	9.3	12.4	10.7	16.2	18.1	16.0	16.0	23.7	27.6	18.8	9.4	11.9	27.6
22-Sep	10.5	12.4	9.2	8.5	7.9	7.5	7.6	8.6	7.8	4.3	2.9	2.0	2.4	2.1	2.2	1.9	1.7	2.1	3.4	5.7	4.1	3.7	4.7	4.8	5.3	12.4
23-Sep	4.4	4.4	3.7	3.7	4.4	4.7	4.5	4.6	7.0	11.9	13.3	12.2	8.8	17.7	6.7	6.8	6.2	6.6	6.1	6.4	5.9	5.3	4.8	4.2	6.8	17.7
24-Sep	4.3	3.4	2.8	2.9	3.3	3.6	3.4	2.7	4.7	4.1	4.6	3.0	1.9	1.2	1.6	1.7	2.4	2.7	5.1	7.9	7.8	6.9	6.4	9.4	4.1	9.4
25-Sep	8.5	6.9	5.8	4.9	5.6	8.3	6.2	7.8	9.5	8.2	4.0	2.8	2.8	2.8	2.5	2.5	2.6	2.7	2.8	2.8	2.8	2.7	2.7	2.7	4.6	9.5
26-Sep	2.9	3.2	3.5	3.1	2.7	2.0	1.4	0.8	0.3	0.2	0.2	0.3	0.4	0.5	0.5	0.4	0.4	0.3	0.3	0.4	0.4	0.5	0.7	0.8	1.1	3.5
27-Sep	0.8	1.4	1.8	2.0	2.2	2.1	2.2	2.0	1.7	1.6	1.6	1.5	1.5	1.5	1.3	1.4	1.8	2.4	2.7	3.5	3.8	3.4	2.9	2.5	2.1	3.8
28-Sep	1.9	1.9	1.9	1.7	1.7	1.7	1.5	2.0	2.2	2.3	2.3	2.3	2.2	2.1	2.8	2.8	3.9	4.0	5.4	3.8	2.9	3.7	3.1	4.6	2.7	5.4
29-Sep	4.4	4.2	4.0	4.6	4.0	3.6	3.5	2.6	0.7	0.7	0.8	0.8	0.6	0.7	0.9	1.1	1.1	1.1	1.0	1.9	2.0	1.6	1.2	1.0	2.0	4.6
30-Sep	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.7	0.8	1.2	1.2	0.9	0.4	1.2
	4.4	4.3	4.1	4.0	4.0	4.0	3.9	4.1	5.3	5.9	6.0	5.7	4.9	4.8	4.2	4.3	4.8	5.4	5.8	5.5	5.7	5.5	4.9	4.6	Diurnal Average	
	10.5	12.4	9.2	8.7	8.0	8.3	7.7	10.6	25.9	21.4	23.6	18.8	16.8	17.7	12.4	10.7	16.2	18.1	17.1	16.0	23.7	27.6	18.8	12.1	Diurnal Maximum	

C - Calibration M - Maintenance DF - DAS Failure

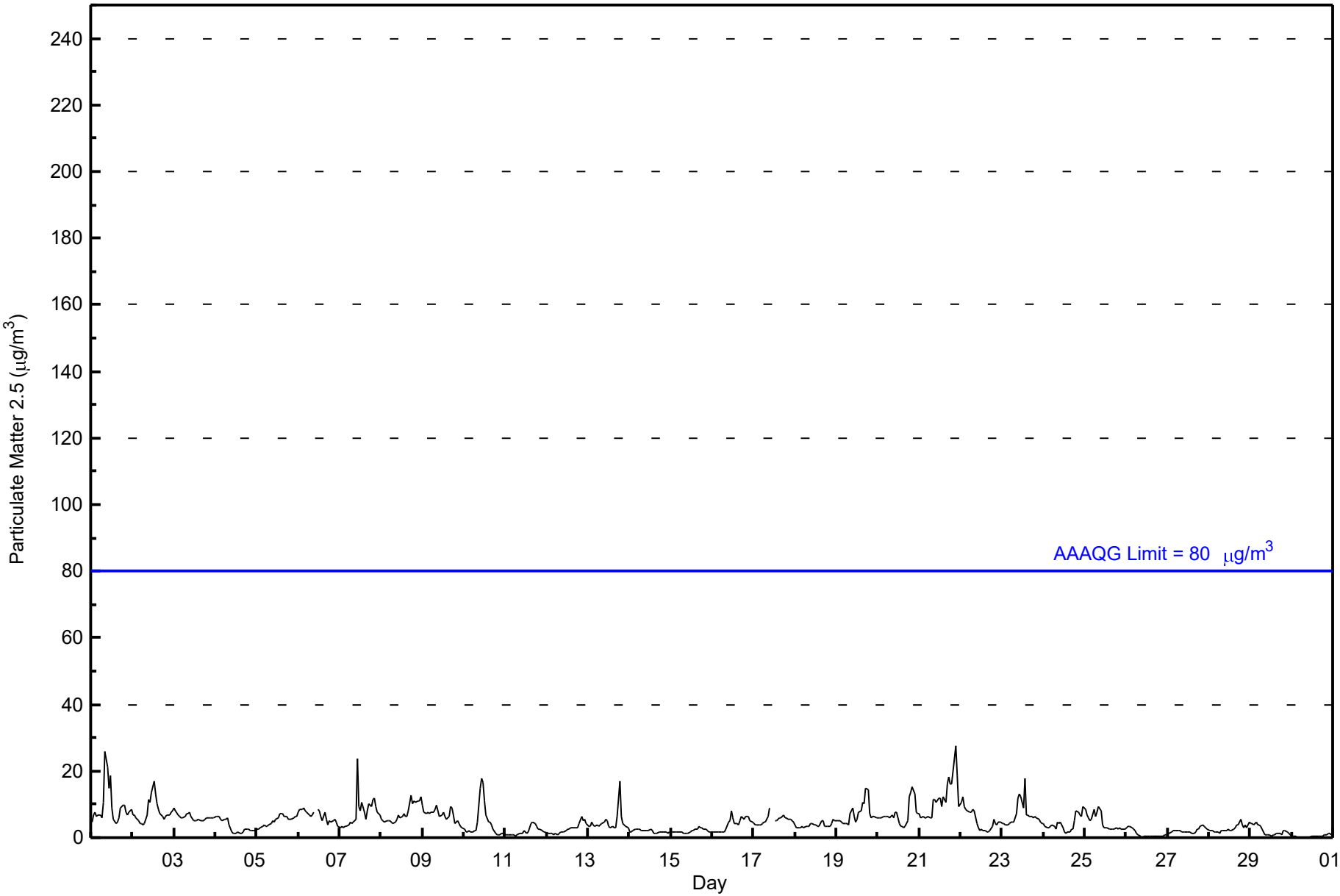
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Fort McKay South - September 2026



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

Fort McKay South - September 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	459	64.02	64.02
6 - 15	242	33.75	97.77
16 - 25	14	1.95	99.72
26 - 80	2	0.28	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 717

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

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

Fort McKay South - September 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	45	18	6	2	1	3	6	9	32	44	62	60	52	44	37	38	459
6 - 15	22	4	4	2	3	2	15	31	41	35	32	19	8	7	6	11	242
16 - 25	0	1	0	0	0	0	1	3	1	1	1	3	1	0	1	1	14
26 - 80	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	67	23	10	4	4	5	22	44	74	80	95	82	61	51	44	51	717

Total Number of Valid Hours: 717

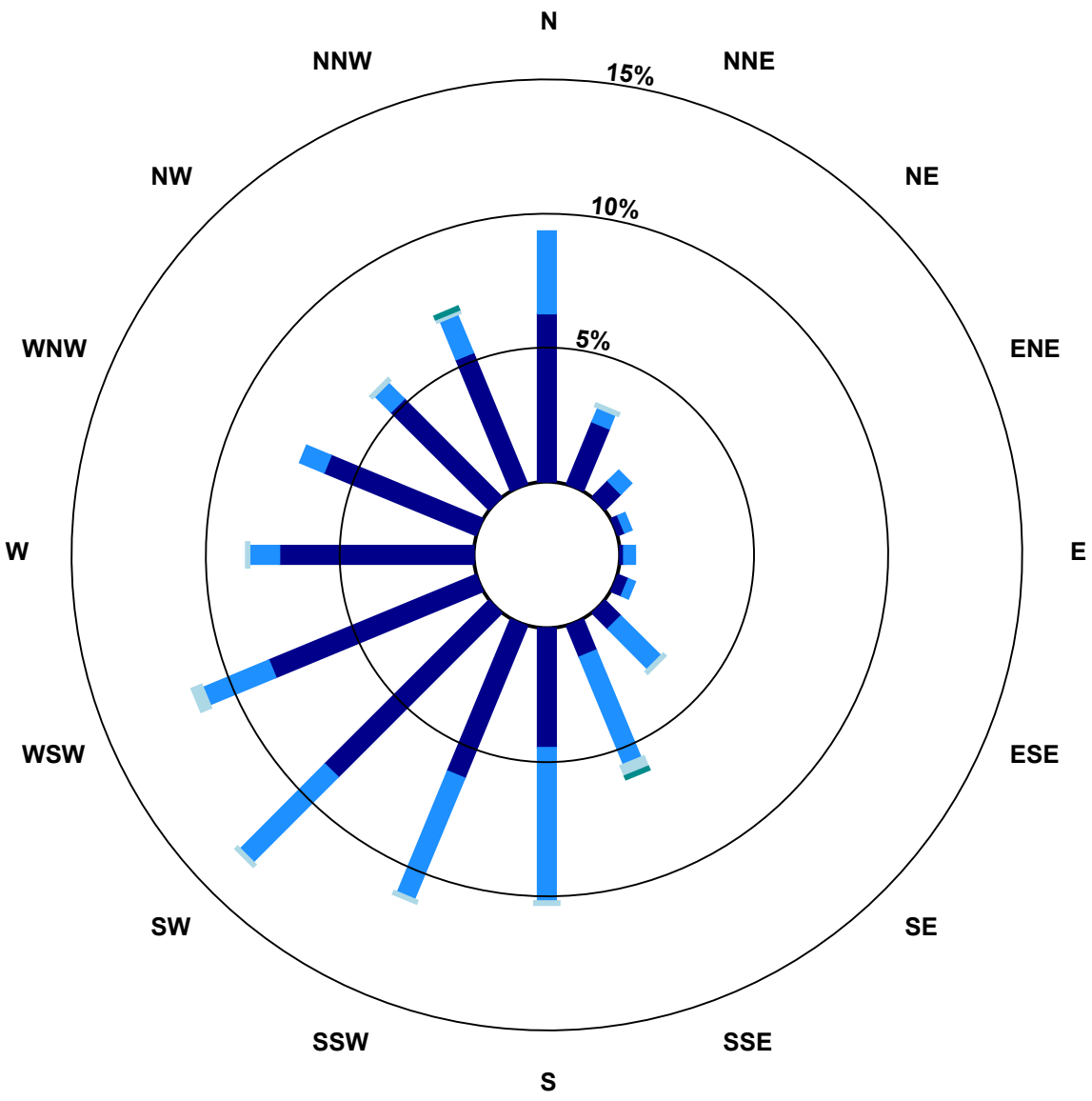
Total Number of Hours: 720

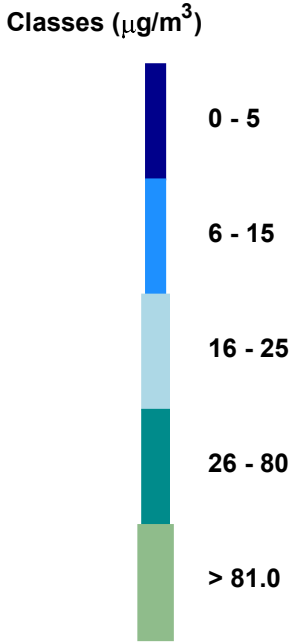
Wood Buffalo Environmental Association

Wind Rose Sep 2026

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

Fort McKay South





Total Number of Valid Hours: 717

Maximum Value: 27.9 C on Sep 2 15:00

Maximum Daily Average: 19.3 C on Sep 2

Minimum Value: -1.0 C on Sep 28 05:00

Minimum Daily Average: 5.1 C on Sep 30

Maximum Diurnal Average: 17.5 C at hour 15

Minimum Diurnal Average: 5.7 C at hour 6

Monthly Average: 11.53 C

Percentiles: P_1 = 0.0 P_{10} = 4.3 Q_1 = 7.2 Median = 11.0 Q_3 = 15.6 P_{90} = 19.9 P_{99} = 26.4

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

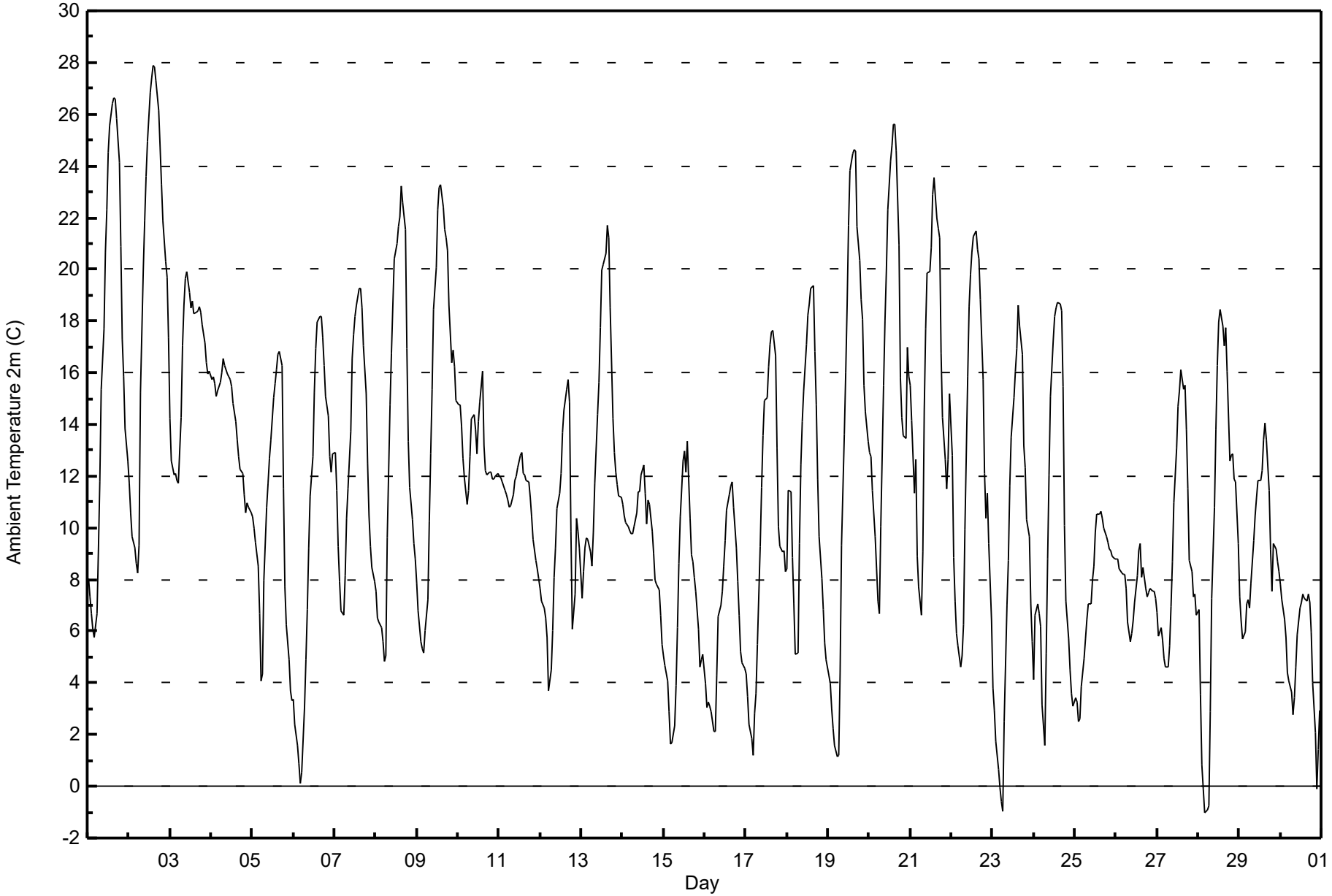
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	8.0	7.3	6.7	6.1	5.7	6.7	9.1	11.8	15.4	17.7	20.7	22.3	24.5	25.6	26.4	26.7	26.6	25.9	24.1	20.9	17.3	15.8	13.9	12.6	16.6	26.7
2-Sep	11.7	10.6	9.7	9.2	8.7	8.2	9.3	15.3	19.9	21.9	23.6	25.0	26.8	27.4	27.9	27.8	27.3	26.2	24.8	23.2	21.9	20.3	19.7	17.3	19.3	27.9
3-Sep	14.2	12.6	12.1	12.1	11.8	11.7	14.3	17.1	18.6	19.6	19.9	19.1	18.5	18.8	18.3	18.4	18.4	18.6	18.3	17.8	17.1	16.4	16.0	16.0	16.5	19.9
4-Sep	15.8	15.9	15.6	15.1	15.3	15.6	16.0	16.5	16.3	16.0	15.9	15.7	15.5	14.8	14.1	13.4	12.8	12.2	12.1	11.3	10.6	11.0	10.8	10.6	14.1	16.5
5-Sep	10.4	10.0	9.4	8.5	6.7	4.1	4.4	8.0	10.8	11.7	12.7	13.4	15.0	15.6	16.1	16.7	16.8	16.3	11.5	7.7	6.2	4.9	3.7	3.3	10.2	16.8
6-Sep	3.4	2.4	1.6	0.9	0.1	0.6	3.1	4.9	6.8	9.2	11.3	12.8	15.3	16.9	18.0	18.2	18.2	17.4	16.3	15.1	14.3	12.8	12.1	12.8	10.2	18.2
7-Sep	12.9	11.4	9.3	7.9	6.8	6.6	8.1	10.4	11.5	13.7	16.5	17.5	18.2	18.6	19.3	19.2	18.5	17.1	15.2	12.5	10.5	9.3	8.5	7.9	12.8	19.3
8-Sep	7.6	6.5	6.4	6.1	5.6	4.8	5.1	9.6	14.8	16.8	18.6	20.4	21.0	21.6	22.0	23.2	22.6	21.5	16.9	13.4	11.6	10.3	9.4	8.8	13.5	23.2
9-Sep	7.9	6.8	5.6	5.3	5.1	6.0	7.2	10.3	12.8	15.4	18.5	20.1	22.3	23.2	23.3	22.4	21.6	21.2	20.7	18.6	16.4	16.9	16.2	14.9	14.9	23.3
10-Sep	14.7	14.8	14.0	12.7	11.9	10.9	11.5	12.8	14.2	14.4	13.8	12.8	14.1	14.8	16.0	13.2	12.2	12.0	12.2	12.1	11.9	11.9	12.0	12.1	13.0	16.0
11-Sep	12.0	11.9	11.8	11.5	11.3	11.0	10.8	10.9	11.3	11.8	12.0	12.3	12.8	12.9	12.1	12.0	11.8	11.8	11.2	10.4	9.6	8.7	8.4	8.0	11.2	12.9
12-Sep	7.6	7.2	6.9	6.5	5.7	3.7	4.5	6.0	8.1	9.2	10.7	11.3	12.1	13.7	14.6	15.4	15.7	14.9	9.9	6.1	7.4	10.4	9.9	9.2	9.4	15.7
13-Sep	7.3	8.3	9.2	9.6	9.6	9.1	8.5	9.8	11.7	14.4	15.6	17.7	20.0	20.2	20.6	21.7	21.2	18.5	14.2	12.9	12.1	11.7	11.2	11.2	13.6	21.7
14-Sep	10.9	10.5	10.2	10.0	9.9	9.8	9.8	10.0	10.6	11.4	11.4	12.1	12.4	11.3	10.2	11.1	10.9	9.9	9.0	8.0	7.8	7.6	6.6	5.5	9.9	12.4
15-Sep	5.0	4.7	4.1	2.9	1.6	1.7	2.4	3.9	6.2	8.6	10.4	12.6	13.0	12.2	13.4	10.4	8.9	8.7	8.1	7.6	6.1	4.6	4.9	5.1	6.9	13.4
16-Sep	3.9	3.0	3.3	3.1	2.9	2.1	2.1	4.3	6.6	7.0	7.5	8.5	9.5	10.7	11.3	11.6	11.8	10.8	9.2	8.0	6.6	5.2	4.8	4.6	6.6	11.8
17-Sep	4.3	3.5	2.4	1.9	1.2	2.8	3.6	5.5	9.3	11.6	13.5	14.9	15.0	16.2	17.1	17.6	17.6	16.7	13.1	10.1	9.3	9.1	9.1	8.3	9.7	17.6
18-Sep	8.4	11.4	11.4	8.9	7.0	5.1	5.1	9.4	12.4	14.1	15.3	17.1	18.2	18.7	19.3	19.4	16.8	14.8	11.9	9.6	8.0	6.8	5.5	4.9	11.7	19.4
19-Sep	4.3	4.0	3.0	2.3	1.6	1.1	1.2	4.4	9.3	13.6	16.0	18.6	21.7	23.8	24.5	24.7	24.6	21.7	20.4	18.8	18.1	15.5	14.5	13.3	13.4	24.7
20-Sep	12.9	12.8	11.5	9.6	8.4	7.1	6.7	10.0	15.5	18.0	20.0	22.3	24.2	24.8	25.6	25.6	24.6	21.0	15.8	14.3	13.6	13.5	17.0	15.9	16.3	25.6
21-Sep	15.5	14.1	11.3	12.7	8.9	7.7	6.6	9.1	14.6	17.7	19.9	19.9	20.8	22.9	23.5	22.0	21.6	21.2	16.7	14.3	12.6	11.5	12.6	15.2	15.5	23.5
22-Sep	12.8	8.9	7.2	5.9	5.4	4.6	5.1	6.3	9.9	15.9	18.6	19.8	20.7	21.3	21.5	20.8	20.4	18.8	15.7	12.1	10.4	11.3	9.4	6.4	12.9	21.5
23-Sep	3.8	2.9	1.8	0.7	0.0	-0.6	-0.9	2.5	7.0	8.7	11.6	13.5	15.0	16.1	16.9	18.6	17.8	16.7	13.2	12.3	10.3	9.7	7.1	5.6	8.8	18.6
24-Sep	4.1	6.6	7.0	6.7	6.2	3.1	1.6	5.1	8.8	12.0	15.1	17.3	18.2	18.5	18.7	18.7	18.4	15.5	10.1	7.2	5.7	4.5	3.6	3.1	9.8	18.7
25-Sep	3.4	3.2	2.5	2.6	3.9	4.9	5.7	6.4	7.1	7.0	8.0	8.5	9.8	10.5	10.5	10.6	10.4	10.0	9.7	9.4	9.2	9.1	8.9	8.8	7.5	10.6
26-Sep	8.8	8.8	8.4	8.2	8.2	8.2	7.7	6.4	5.6	5.9	6.4	7.1	8.1	9.1	9.4	8.1	8.5	7.7	7.3	7.5	7.6	7.5	7.5	7.3	7.7	9.4
27-Sep	6.7	5.8	6.1	5.6	4.9	4.6	4.6	5.4	7.0	8.7	11.0	13.1	14.7	15.3	16.1	15.4	15.5	13.8	11.5	8.7	8.3	7.3	7.4	6.6	9.3	16.1
28-Sep	6.9	3.5	0.8	-0.1	-1.0	-0.9	-0.8	2.9	7.3	10.8	13.8	16.3	18.0	18.5	17.8	17.0	17.8	16.1	12.6	12.8	12.8	11.9	11.8	9.4	9.8	18.5
29-Sep	7.3	6.4	5.7	6.0	7.0	7.2	6.9	7.8	9.5	10.5	11.2	11.8	11.8	12.2	13.4	14.1	13.4	11.5	9.2	7.6	9.4	9.2	8.7	8.3	9.4	14.1
30-Sep	7.8	7.2	6.5	5.7	4.4	4.1	3.6	2.8	3.4	4.6	5.8	6.9	7.1	7.4	7.3	7.1	7.4	7.1	6.0	4.0	2.1	-0.1	1.4	3.0	5.1	7.8
	8.7	8.1	7.4	6.8	6.2	5.7	6.1	8.2	10.7	12.6	14.2	15.4	16.5	17.1	17.5	17.4	17.0	15.8	13.6	11.8	10.8	10.1	9.8	9.2	Diurnal Average	
	15.8	15.9	15.6	15.1	15.3	15.6	16.0	17.1	19.9	21.9	23.6	25.0	26.8	27.4	27.9	27.8	27.3	26.2	24.8	23.2	21.9	20.3	19.7	17.3	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Fort McKay South - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	8	1.11	1.11
0 - 10	310	43.06	44.17
10 - 20	335	46.53	90.69
> 20	67	9.31	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 100.0 % on Sep 19 08:00

Maximum Daily Average: 89.8 % on Sep 3

Minimum Value: 25.9 % on Sep 20 16:00

Minimum Daily Average: 61.7 % on Sep 27

Maximum Diurnal Average: 93.8 % at hour 7

Minimum Diurnal Average: 51.8 % at hour 15

Monthly Average: 75.61 %

Percentiles: P_1 = 29.3 P_{10} = 45.1 Q_1 = 62.1 Median = 79.1 Q_3 = 93.2 P_{90} = 97.8 P_{99} = 99.6

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

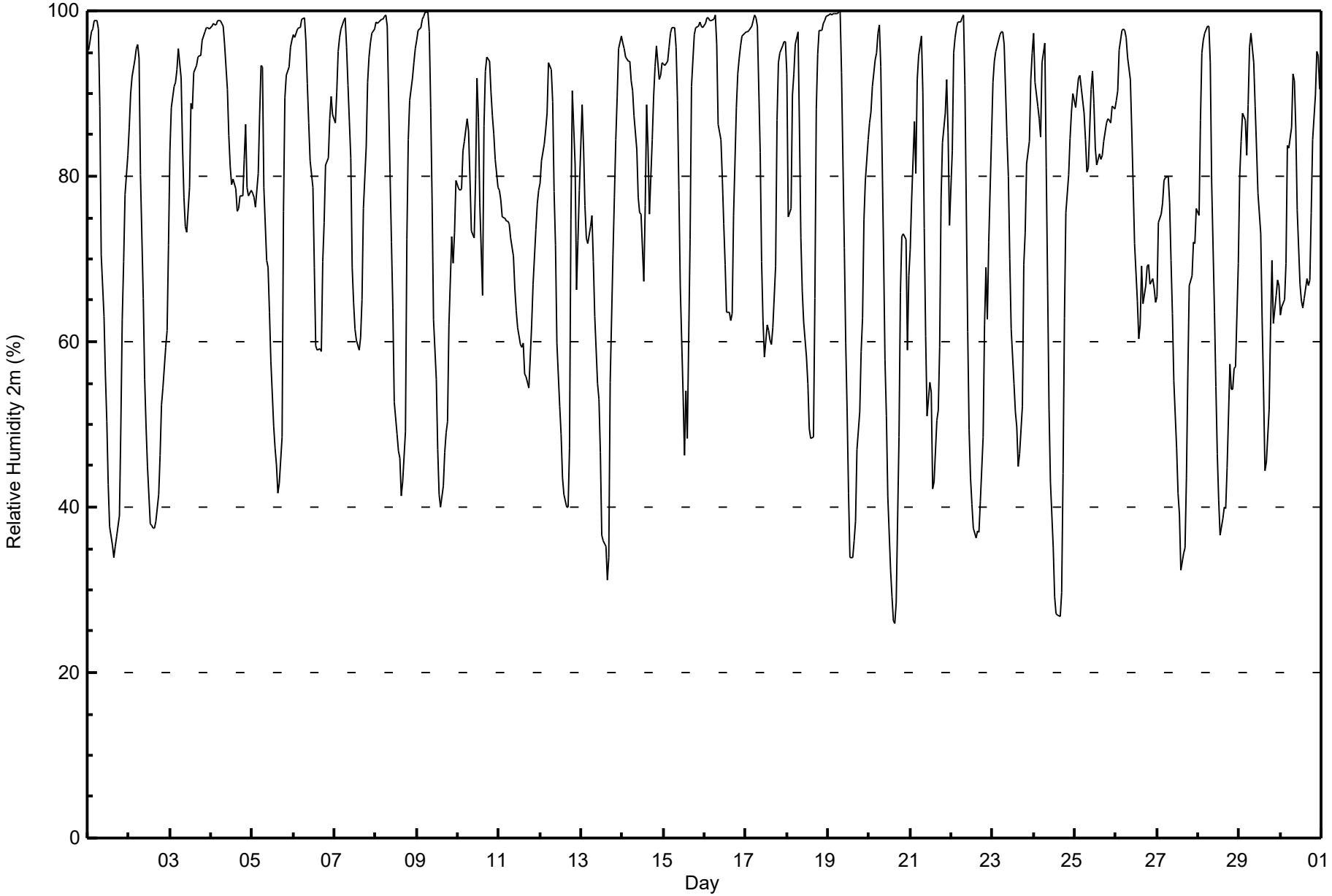
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	95.2	96.3	97.4	97.8	98.7	98.8	97.8	88.5	70.6	63.1	56.0	50.3	42.7	37.6	35.4	33.9	35.2	36.4	39.0	49.7	62.8	69.6	77.7	82.6	67.2	98.8
2-Sep	85.9	90.1	92.1	94.0	95.4	96.0	94.2	80.2	65.2	55.3	49.6	45.0	37.9	37.7	37.4	37.4	38.2	41.5	46.3	52.4	54.5	59.3	61.3	71.7	63.3	96.0
3-Sep	83.1	88.4	90.8	91.4	92.8	95.4	91.9	83.5	77.4	73.9	73.2	78.6	88.8	88.1	92.6	93.4	94.5	94.5	94.6	96.4	97.4	98.0	97.9	97.8	89.8	98.0
4-Sep	98.2	98.5	98.4	98.4	98.8	98.8	98.6	98.1	95.9	90.5	85.0	81.2	79.0	79.6	78.5	75.8	76.1	77.7	77.6	82.1	86.3	78.7	77.6	78.3	87.0	98.8
5-Sep	78.0	77.5	76.3	80.3	87.4	93.4	93.2	78.6	69.9	68.9	63.5	57.7	49.7	47.2	45.1	41.8	42.9	48.5	75.7	89.5	92.2	93.3	95.6	96.5	72.6	96.5
6-Sep	97.1	96.8	97.8	97.9	98.0	99.1	99.1	96.2	91.2	86.5	81.8	78.7	68.9	59.5	58.9	59.2	58.8	69.7	74.4	81.4	82.1	87.0	89.7	87.5	83.2	99.1
7-Sep	86.5	90.1	95.2	96.7	97.8	98.8	99.2	95.7	91.0	82.2	69.0	64.8	61.6	60.1	59.1	60.5	65.1	76.1	83.5	91.4	94.5	96.0	97.2	97.8	83.7	99.2
8-Sep	98.6	98.5	98.7	98.9	99.0	99.3	99.5	98.1	80.4	72.1	64.1	52.7	48.8	46.9	46.0	41.4	43.0	49.2	72.4	84.4	89.2	91.9	93.7	95.5	77.6	99.5
9-Sep	96.5	97.6	98.0	99.0	99.4	99.8	99.9	97.4	88.4	77.0	62.8	55.4	47.0	41.5	40.0	42.5	46.6	48.9	50.3	62.0	72.7	69.4	73.3	79.4	72.7	99.9
10-Sep	78.4	78.3	78.4	83.0	84.3	86.9	85.5	79.6	73.4	72.6	79.7	91.8	87.1	76.8	65.6	86.2	92.7	94.4	93.9	90.1	87.3	85.1	82.1	78.7	83.0	94.4
11-Sep	78.2	77.2	75.1	74.9	74.6	74.6	74.3	72.5	70.4	66.4	63.7	61.7	59.7	59.4	59.8	56.1	55.8	54.4	58.1	62.0	66.9	73.5	76.6	78.3	67.7	78.3
12-Sep	79.2	81.9	84.0	85.6	87.6	93.7	93.0	89.0	78.1	71.7	59.8	52.3	48.8	43.6	41.6	40.0	40.0	47.0	74.8	90.4	81.4	66.2	72.3	78.3	70.0	93.7
13-Sep	88.6	83.5	76.5	72.5	71.8	73.9	75.2	69.7	63.1	55.0	53.0	46.6	36.6	35.9	35.3	31.2	33.8	55.1	70.5	77.5	84.3	89.7	95.4	96.9	65.5	96.9
14-Sep	96.1	95.5	94.4	93.8	93.9	91.5	90.4	87.2	83.3	77.5	75.7	75.4	67.4	76.5	88.7	83.5	75.4	84.4	89.6	93.3	95.8	91.8	92.1	93.8	87.0	96.1
15-Sep	93.6	93.5	94.0	95.7	97.2	98.0	97.9	95.5	89.2	78.3	66.7	53.8	46.2	54.1	48.3	72.4	90.9	94.1	97.0	98.1	98.2	98.7	98.1	97.9	85.3	98.7
16-Sep	98.4	99.2	99.2	98.8	98.8	99.1	99.5	95.9	86.2	84.4	79.6	74.3	69.2	63.6	63.6	62.6	63.4	75.3	88.4	92.4	94.3	95.8	96.9	97.3	86.5	99.5
17-Sep	97.4	97.4	97.7	98.2	98.8	99.4	99.1	98.2	82.9	69.7	62.6	58.2	62.1	61.3	60.2	59.6	61.7	69.2	86.7	93.7	94.9	95.8	96.3	96.2	83.2	99.4
18-Sep	92.3	75.0	76.1	89.8	92.3	96.0	97.5	85.7	72.5	66.1	62.3	58.2	54.9	49.4	48.2	48.4	65.3	88.2	94.7	97.7	97.7	98.5	98.8	99.3	79.4	99.3
19-Sep	99.5	99.6	99.5	99.6	99.7	99.7	99.8	100.0	92.5	71.3	59.8	51.6	41.7	34.0	33.8	36.0	38.4	47.0	51.5	58.7	62.9	74.8	79.5	84.4	71.5	100.0
20-Sep	86.5	87.9	90.8	94.1	95.0	97.2	98.4	93.2	70.8	57.8	51.0	41.4	32.3	29.1	26.3	25.9	28.5	48.4	66.0	72.6	73.1	72.4	59.0	67.9	65.2	98.4
21-Sep	71.2	77.1	86.5	80.3	91.7	94.6	96.9	90.1	73.8	60.7	50.9	55.0	53.9	42.3	43.1	50.5	51.7	59.3	77.4	84.0	87.6	91.8	85.2	74.1	72.1	96.9
22-Sep	83.0	94.9	96.8	98.0	98.7	98.7	99.1	99.4	91.1	61.2	49.3	43.5	40.4	37.4	36.2	37.1	36.9	40.6	48.4	62.0	69.1	62.8	72.0	84.9	68.4	99.4
23-Sep	91.3	93.9	95.1	96.4	97.1	97.5	97.5	95.9	84.7	80.1	70.0	61.5	54.9	51.5	49.7	45.0	46.4	52.2	69.4	73.2	81.5	84.2	91.7	94.9	77.3	97.5
24-Sep	97.4	91.3	88.5	86.9	84.8	93.7	96.2	81.1	66.7	51.8	43.0	35.2	29.2	27.1	26.9	26.7	29.6	44.0	62.9	75.6	80.1	84.5	87.9	89.9	65.9	97.4
25-Sep	88.3	90.2	91.9	92.2	90.7	87.6	84.5	80.6	81.0	90.6	92.7	88.8	83.4	81.3	82.8	82.0	82.6	84.3	86.5	87.0	86.9	86.5	88.4	88.2	86.6	92.7
26-Sep	89.1	90.3	95.3	97.6	97.7	97.6	96.8	94.5	91.8	85.5	78.8	71.8	64.9	60.4	62.0	69.1	64.7	66.8	69.1	69.4	67.0	67.6	66.5	64.7	78.3	97.7
27-Sep	65.4	74.3	75.4	76.8	79.5	79.8	80.0	76.7	69.8	63.5	55.3	47.2	41.7	39.2	32.4	34.5	35.1	43.5	56.0	66.8	68.0	72.0	71.8	76.1	61.7	80.0
28-Sep	75.3	86.8	94.9	96.4	97.2	98.2	98.2	93.7	79.1	63.6	54.5	46.4	40.9	36.6	38.6	40.0	39.9	44.7	57.2	54.3	54.2	56.8	57.0	69.5	65.6	98.2
29-Sep	80.1	84.2	87.7	86.7	82.6	88.6	95.6	97.3	93.7	88.5	83.3	77.9	73.1	62.5	54.1	44.4	45.4	51.8	61.8	69.8	62.2	65.5	67.5	66.7	73.8	97.3
30-Sep	63.3	64.2	65.0	69.5	83.7	83.3	85.9	92.4	91.6	85.8	75.9	67.0	65.0	64.1	65.3	67.6	66.8	67.4	75.6	84.3	89.8	95.1	94.6	90.5	77.2	95.1
	87.1	88.3	89.6	90.7	92.2	93.6	93.8	89.5	80.5	72.4	65.8	60.8	55.9	52.8	51.8	52.8	54.8	61.8	71.6	78.1	80.5	81.7	83.1	85.2	Diurnal Average	
	99.5	99.6	99.5	99.6	99.7	99.8	99.9	100.0	95.9	90.6	92.7	91.8	88.8	88.1	92.6	93.4	94.5	94.5	97.0	98.1	98.2	98.7	98.8	99.3	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Fort McKay South - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Fort McKay South - September 2026

Maximum Speed: 22 km/h on Sep 4 17:00

Maximum Daily Speed Average: 14.3 km/h on Sep 11

Minimum Speed Value: 0 km/h on Sep 17 08:00

Minimum Daily Speed Average: 0.1 km/h on Sep 8

Maximum Diurnal Speed Average: 3.4 km/h at hour 3

Minimum Diurnal Speed Average: 1.5 km/h at hour 9

Monthly Average Velocity: 2.4 km/h 261.1 deg

Percentiles: P_1 = 1 P_{10} = 2 Q_1 = 3 Median = 6 Q_3 = 10 P_{90} = 14 P_{99} = 19

Hours in Service: 720

Hours of Data: 720

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-Sep	WSW3	WSW3	SW3	SW3	SW3	SSW3	S4	SSW5	SSE9	SSE10	SSE10	SSE12	SSE14	SSE17	SSE18	SSE18	SSE15	SSE14	SSE12	S7	S5	S5	SSW3	SSW4	SSE7.7	SSE18
2-Sep	WSW3	SW1	W2	W2	W1	W2	WNW2	NNE5	E4	SSE14	SSE14	SSE13	SE17	SSE19	SSE18	SSE18	SE14	SE12	SE8	SE9	SE9	SSE9	SSE9	S2	SSE7.5	SSE19
3-Sep	WNW2	NNW3	WNW2	WNW2	NNW3	N5	N5	N5	SE1	SE7	SE8	SE8	E4	NE6	NE5	NE5	N3	N3	N4	N4	NNW4	N3	N3	N6	NNE2.2	SE8
4-Sep	N6	N5	N5	NW1	NNW3	NNW4	NNW3	NNW7	N11	NNE12	NNE14	NNE14	NNE14	NNE16	NNE19	N21	N22	N17	N17	N15	N11	NNW10	NNW10	NNW10	N10.8	N22
5-Sep	NNW10	N8	NNW9	NNW7	NNW6	NW4	NW5	NNW7	NNE5	N10	N10	N8	N9	N9	N8	NNE5	WNW3	NW4	W3	WSW3	W2	WSW2	WSW3	SW2	NNW4.9	N10
6-Sep	SSW2	WSW2	SW2	SW3	WSW1	WSW2	WSW0	SW1	NW1	N3	NE3	NE3	SSE8	SSE14	S9	S8	SSE7	SSE2	S5	SSW3	S4	S4	S6	S9	S3.2	SSE14
7-Sep	S9	S5	SW2	WSW1	SW2	SSW2	N3	SE1	S4	S9	S14	SSE13	SSE12	S7	WSW2	S3	SSE7	S3	SW3	SSW3	SSW2	SSW3	SW3	SW2	S4.3	S14
8-Sep	S3	SW1	SW1	S1	SSW1	SSW1	NW1	NE2	NW4	NNE6	NE7	NNE8	NE4	NNW1	ENE5	SW1	S7	SSE5	SW3	SW4	WSW1	SW3	SW3	SW3	SSE0.1	NNE8
9-Sep	SSW5	S3	SW2	S3	SSW4	SSW4	S6	S8	SSE7	S13	S15	SSW15	SW14	SW14	SW15	SW14	SW12	SSW12	SSW13	SW9	S8	SW5	WSW6	SW7	SSW8.3	SW15
10-Sep	WSW9	WNW11	WNW8	WSW7	SW8	SSW4	SW8	WSW10	W10	W11	W8	WSW6	W8	WNW9	NW13	NW8	WNW8	W8	WNW8	NW9	NW9	NW10	NW10	NW12	WNW7.6	NW13
11-Sep	NW11	NW14	NNW16	NNW16	NNW17	NNW15	NNW16	NNW17	N17	N21	N21	NNW20	NNW16	NNW18	NNW19	NNW17	NNW14	NNW14	NNW13	NNW13	NNW7	WNW4	NW6	NW7	NNW14.3	N21
12-Sep	WNW7	W5	W6	W6	WNW4	WSW2	W4	W4	W5	WSW5	SW5	WSW5	SSW8	WNW2	ENE4	SSW4	SW7	SW5	SW4	SW6	SSW7	SSW8	SSW6	SSW5	WSW4.1	SSW8
13-Sep	SW2	SSW5	SSW6	SSW8	SW10	SW12	SW9	SW9	SSW11	SSW10	S10	SSW11	WSW13	SW10	SW8	SW9	WSW5	N4	NNE15	N12	N11	N8	NNW7	NNW11	WSW4.1	NNE15
14-Sep	N13	N14	N11	N11	N13	N11	N11	N11	N10	N14	N12	N12	NNE11	N13	N12	N9	N10	NNW7	NW6	WNW3	WNW4	WNW7	W6	W6	N9.1	N14
15-Sep	W8	W8	W6	W3	W3	WSW3	SSE1	SSW3	SW5	W5	WSW10	WSW9	WSW7	ENE2	SSW6	N7	SE3	SSW1	SSW2	W3	WNW2	W3	NW6	NW4	W3.3	WSW10
16-Sep	W3	W3	W5	NNW1	NW1	WNW2	SW2	SW2	SSE5	SSW6	SW5	SSW8	S10	S9	S10	SSW6	SSE4	SSE4	S2	SW1	SW2	SW2	W2	WNW2	SSW3.3	S10
17-Sep	NW3	WNW3	WNW2	W1	NW2	WNW1	NW2	SW0	NE2	SSE10	SSW8	SSW7	SSW7	SSW5	S5	SSW6	SSW6	S6	SSW3	WSW2	WSW2	WSW3	SW2	SW3	SSW2.8	SSE10
18-Sep	W4	WSW7	W6	WSW4	NW3	NNW4	NW4	NNW4	NNE5	NE4	SSE1	ESE2	ESE3	WSW3	SSE6	SE7	NE4	WSW2	WSW4	SW4	W2	SW1	SW2	SW2	W1.1	WSW7
19-Sep	SW3	WSW3	WSW1	SW2	SW3	SW2	SW1	WNW1	S3	SE5	SE8	SE10	SSE13	S19	S21	S20	S15	SSW9	S10	S10	S9	SSE3	SSE2	S4	S6.7	S21
20-Sep	SW1	SSW2	WSW2	S3	SSW4	SW2	SSW2	N1	S5	SSW8	S11	S12	SSW12	SW11	SW10	SW10	SSW8	SSW5	SW5	S3	SSE5	S6	S9	S5	SSW5.5	S12
21-Sep	SSW9	S7	SSW5	SSW5	SSW1	W3	SW3	SSW2	SE3	SSE5	S7	SE6	SE5	SE5	NNE4	N8	NNW5	NW2	WSW4	SSW4	SW4	NNW2	W5	WSW9	SSW2.2	SSW9
22-Sep	NW1	W1	WSW2	SSW3	SSW2	WSW2	SW0	NNE2	WNW4	NW10	NW10	NW11	NNW8	WNW8	WSW11	WSW12	WSW9	WSW6	WSW6	WSW7	WSW7	W7	WNW3	N2	W4.4	WSW12
23-Sep	SSW1	SW3	SSW2	SSW2	SW2	SW3	WSW2	WSW0	E2	ESE1	ENE3	E4	ESE4	SSE6	SE4	SE8	SE6	SSE7	S6	S5	SSW5	SSW5	SSW3	WSW3	S2.7	SE8
24-Sep	S3	WSW8	WSW9	WSW6	SW4	S3	S6	S7	S5	SSW8	SSW9	SW10	WSW13	W13	WSW11	WSW10	WSW6	WSW4	SW6	WSW6	SW1	NW2	W2	NNW1	SW5.5	WSW13
25-Sep	SSW4	NW2	WNW2	W2	NNW5	NNW4	NNW6	NNW8	N6	N11	NNE12	NNE16	NNE18	NNE18	NNE16	NNE19	NNE17	N17	N15	N15	N17	N18	N19	N18	N11.2	NNE19
26-Sep	N13	N13	N11	NW9	WNW5	W8	W9	W11	W12	W12	W15	W15	WNW16	W17	WNW15	WNW15	WNW16	W15	W12	W11	W11	W11	W13	W9	WNW10.8	W17
27-Sep	WSW7	SW6	WSW11	WSW12	WSW13	WSW11	WSW12	WSW13	WSW12	WSW13	WSW13	WSW12	WSW12	WSW13	WSW13	WSW11	WSW11	SW8	SW7	SSW6	SW6	SW7	SW7	SW6	WSW9.9	WSW13
28-Sep	SW7	WSW2	N2	WSW2	SW3	S4	S3	S7	S9	S12	S11	SSW13	SW14	SW15	SW13	SSW12	SSW15	SSW10	SSW7	SSW9	SSW9	SSW9	S6	S4	SSW7.6	SSW15
29-Sep	ESE0	SW3	SSW3	S4	S7	S8	S5	SSE6	SSW8	SW9	WSW9	W9	WNW11	WNW12	W14	WNW15	WNW14	W13	WSW4	SW6	W6	W11	W9	WNW11	WSW6.4	WNW15
30-Sep	WNW11	WNW9	NW12	WNW10	WNW9	WNW10	WNW10	WNW10	NW8	NW10	NW12	NNW15	NNW14	NW12	NW13	NW7	NW6	NNW10	NW5	WNW6	WNW5	W1	W3	WNW2	NW8.5	NNW15
	W2.7	WNW3.1	WNW3.4	W2.8	W2.8	W2.7	W2.4	W2.2	W1.5	SW1.8	SW2.1	WSW2.0	SW2.6	WSW3.2	WSW3.0	WSW2.5	WSW2.5	WSW2.2	WSW2.1	W2.4	W2.2	W2.6	W2.8	W2.8	Diurnal Average	
	N13	NW14	NNW16	NNW16	NNW17	NNW15	NNW16	NNW17	N17	N21	NW21	NNW20	NNE18	S19	S21	N21	N22	N17	N17	N15	N17	N18	N19	N18	Diurnal Maximum	

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

Wind Speed 10m (WS10) - km/h
Fort McKay South - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 7 km/h on Sep 26 17:00

Minimum Value: 0 km/h on Sep 6 04:00

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

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

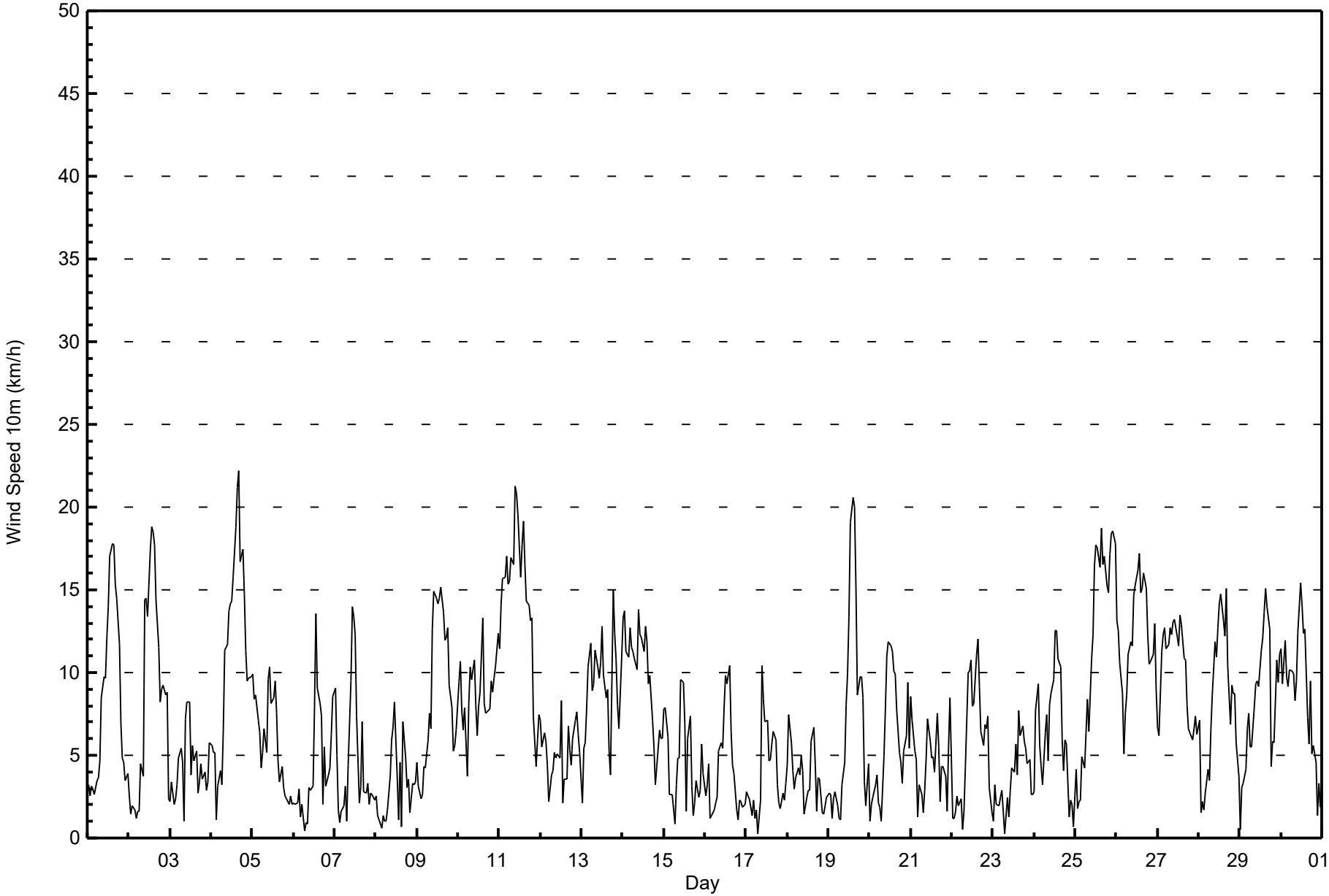
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	1	1	1	1	1	1	1	2	3	2	3	3	4	4	4	5	4	4	3	2	1	1	1	1	5
2-Sep	1	1	1	1	1	1	1	1	3	4	4	4	5	5	5	5	5	4	3	3	3	2	2	2	5
3-Sep	1	1	1	1	1	2	1	1	2	3	3	4	2	2	2	2	1	1	1	1	1	2	2	1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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Fort McKay South - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	322	44.72	44.72
6 - 11	256	35.56	80.28
12 - 19	135	18.75	99.03
20 - 28	7	0.97	100.00
29 - 38	0	0.00	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Fort McKay South - September 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	6	9	4	4	5	7	12	32	43	59	39	26	25	19	15	322
6 - 11	25	3	2	0	0	0	12	14	33	32	27	29	24	19	18	18	256
12 - 19	22	14	0	0	0	0	3	18	7	7	9	14	11	7	7	16	135
20 - 28	3	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	7
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	67	23	11	4	4	5	22	44	74	82	95	82	61	51	44	51	720

Total Number of Valid Hours: 720

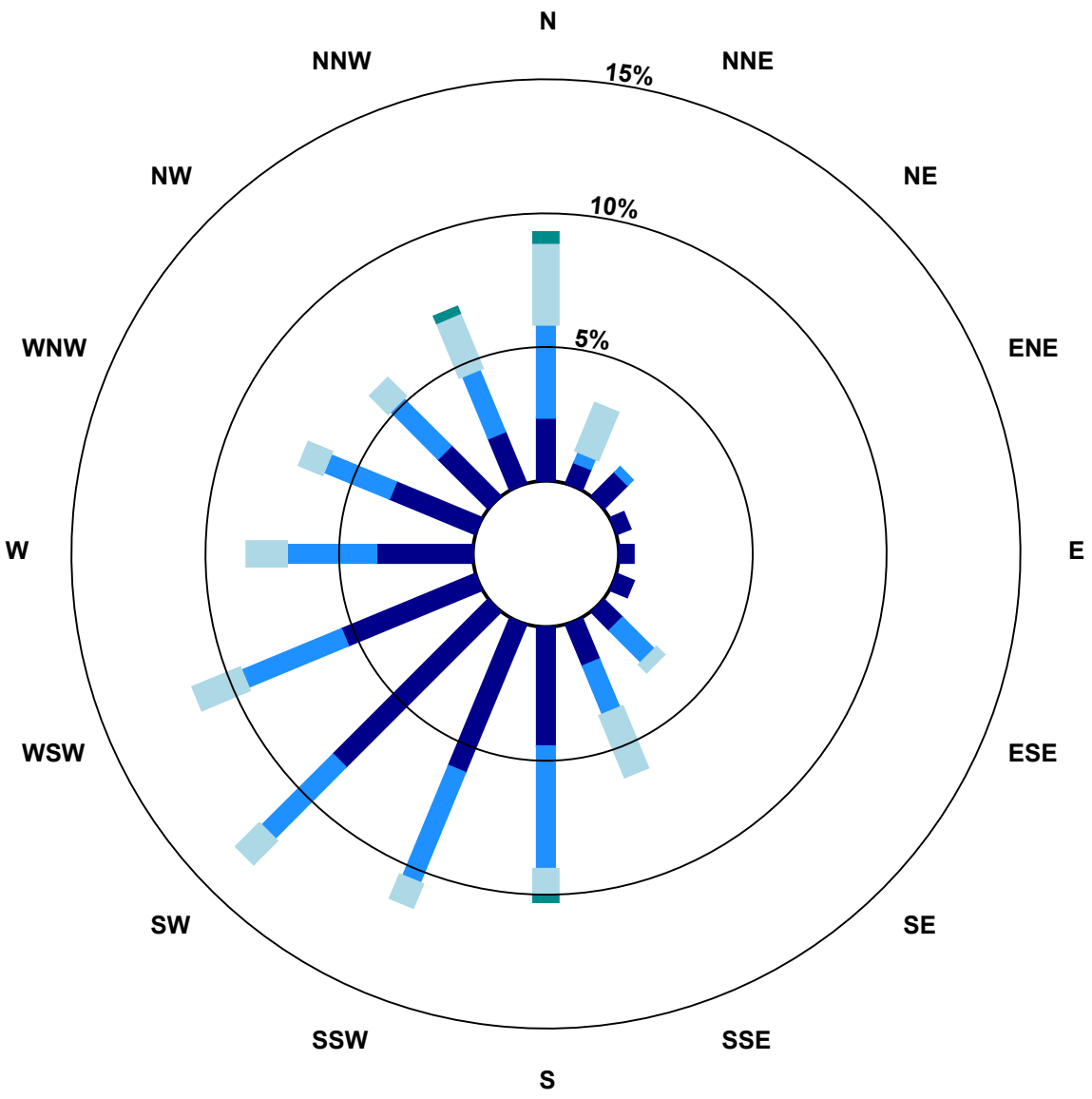
Total Number of Hours: 720

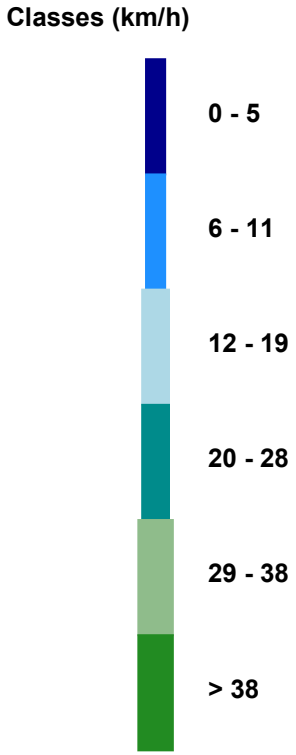
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Fort McKay South





Total Number of Valid Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Fort McKay South - September 2026

Direction of Maximum Speed: 9 deg on Sep 4 17:00
Direction of Maximum Daily Speed Average: 335.8 deg on Sep 11

Direction of Minimum Speed: 226 deg on Sep 17 08:00
Direction of Minimum Daily Speed Average: 0.1 deg on Sep 8

Monthly Average Direction: 261.1 deg

Hours in Service:	720
Hours of Data:	720
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-Sep	246	249	226	215	218	211	178	199	156	166	150	158	157	158	160	156	153	157	161	170	171	183	192	205	166.8
2-Sep	249	232	264	263	273	272	302	12	100	155	156	151	145	150	150	148	143	144	135	141	146	158	165	171	150.7
3-Sep	299	329	300	290	348	355	1	3	125	140	136	124	94	39	45	42	358	350	8	9	330	359	8	6	26.0
4-Sep	4	4	356	324	333	340	327	348	4	15	19	14	20	17	13	8	9	8	9	3	353	341	340	346	4.7
5-Sep	348	352	347	331	336	306	311	346	14	9	2	6	4	9	5	15	293	308	279	246	264	242	252	232	344.2
6-Sep	203	252	231	223	243	258	258	219	317	11	38	35	149	159	172	171	165	168	171	198	175	176	173	187	174.9
7-Sep	179	185	218	255	215	203	359	141	172	172	176	158	162	177	245	186	161	183	217	209	212	196	222	226	180.0
8-Sep	190	235	220	176	200	209	318	47	325	26	41	24	42	336	75	224	186	149	232	222	243	223	221	219	167.9
9-Sep	198	185	216	191	196	192	188	174	161	183	189	197	221	228	224	222	214	208	212	217	186	232	246	235	207.0
10-Sep	248	292	294	247	236	206	217	241	271	274	274	244	264	295	312	305	290	279	290	317	312	309	312	320	282.2
11-Sep	317	325	329	330	335	335	333	341	350	356	349	342	347	328	330	337	339	342	333	339	328	300	305	305	335.8
12-Sep	296	277	281	279	292	245	264	262	270	249	226	256	207	287	61	204	220	229	224	227	207	205	197	196	240.1
13-Sep	225	199	192	207	223	231	223	218	213	199	188	195	238	236	222	227	252	350	17	10	359	353	337	347	241.2
14-Sep	360	355	358	353	351	357	353	358	352	1	0	9	14	359	352	357	356	343	317	297	283	298	277	265	350.1
15-Sep	269	272	281	266	270	244	147	205	214	265	251	247	246	60	209	359	131	192	208	261	296	281	305	315	260.5
16-Sep	280	278	261	342	310	287	226	226	166	209	225	211	190	184	189	197	156	167	174	233	218	233	280	296	208.0
17-Sep	310	294	282	265	318	283	311	226	55	162	193	203	200	204	179	200	193	182	213	241	244	249	226	234	208.2
18-Sep	261	258	265	252	323	331	317	339	12	38	167	123	114	245	150	138	43	242	248	227	272	232	234	236	262.2
19-Sep	227	238	251	218	228	234	230	292	174	140	143	138	160	176	174	178	183	198	191	191	186	164	152	186	178.4
20-Sep	230	212	258	180	201	218	211	350	173	193	181	189	207	235	228	214	203	211	216	186	164	189	187	183	201.5
21-Sep	192	190	192	197	205	265	223	193	146	155	171	146	124	146	28	10	336	318	248	205	223	331	259	256	202.7
22-Sep	322	263	239	203	202	241	236	24	300	322	324	310	343	283	246	248	245	240	254	253	258	262	288	355	275.9
23-Sep	195	225	195	202	232	229	239	251	99	109	72	100	116	151	145	145	141	163	181	188	208	194	210	244	169.1
24-Sep	186	255	258	243	231	183	176	189	183	195	206	235	256	267	252	248	257	245	231	243	215	314	260	342	235.7
25-Sep	211	317	295	266	340	331	346	343	353	356	18	16	16	24	17	15	16	7	9	4	4	5	7	3	6.1
26-Sep	6	356	349	324	292	265	267	267	272	272	275	280	282	271	292	289	285	277	273	278	278	268	274	275	286.4
27-Sep	257	227	258	246	247	247	246	246	252	246	238	245	243	239	253	248	246	232	215	210	219	214	226	225	241.4
28-Sep	225	247	10	245	219	181	178	174	171	181	186	212	223	231	220	204	195	194	193	205	202	197	173	173	201.4
29-Sep	118	217	199	188	181	183	170	167	199	222	238	263	284	287	280	290	283	280	245	234	264	262	280	282	255.1
30-Sep	303	301	310	295	291	292	293	300	305	307	325	335	327	320	312	305	305	331	320	297	283	262	281	285	308.7
	278.9	286.6	290.5	270.0	275.9	269.3	273.5	279.8	261.1	233.2	225.1	238.1	234.8	245.8	248.6	246.0	237.8	254.3	258.1	259.4	259.6	259.7	267.0	278.9	
	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 10m (WD10) - deg

Fort McKay South - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 105 deg on Sep 8 14:00

Minimum Value: 5 deg on Sep 24 20:00

Percentiles: P_1 = 9 P_{10} = 16 Q_1 = 19 Median = 27 Q_3 = 38 P_{90} = 58 P_{99} = 90

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

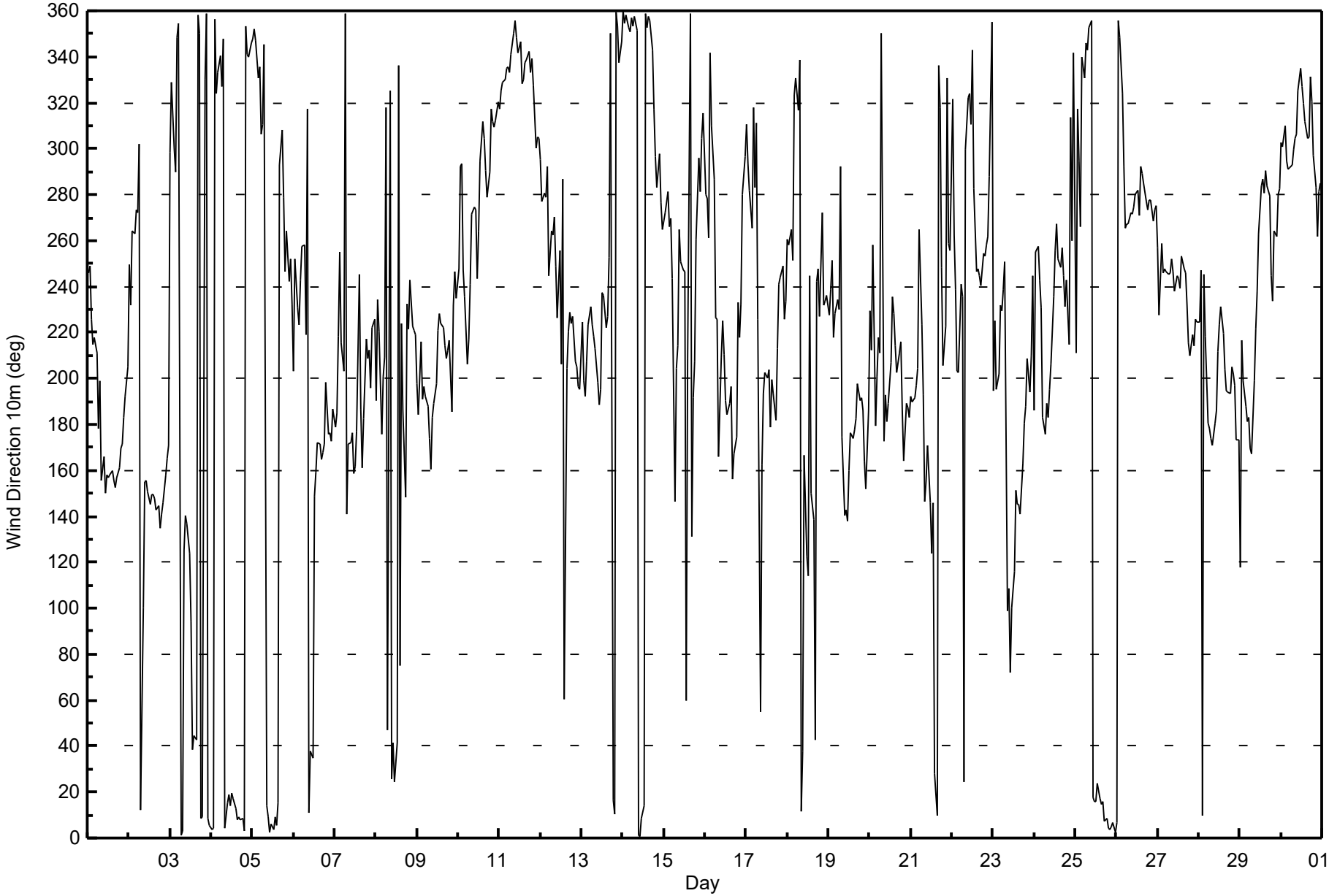
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	22	43	24	23	26	21	22	36	19	16	23	20	24	20	19	18	19	16	13	9	14	13	11	14	43
2-Sep	16	37	31	25	46	24	27	15	51	18	18	20	21	18	18	19	21	19	22	19	18	15	12	74	74
3-Sep	37	17	20	37	18	10	10	16	92	30	28	25	41	23	23	29	34	20	28	39	15	54	65	12	92
4-Sep	14	12	10	21	14	9	20	14	19	20	20	20	20	19	20	20	20	21	18	20	18	16	15	16	21
5-Sep	18	16	17	16	12	17	18	26	39	22	25	33	35	28	37	64	50	20	16	18	50	14	24	58	64
6-Sep	60	36	30	16	58	49	53	71	55	31	31	27	29	21	26	22	17	47	15	33	22	18	16	12	71
7-Sep	11	17	65	76	43	52	62	73	20	16	19	20	23	30	71	39	15	57	28	35	49	51	31	40	76
8-Sep	50	59	39	82	43	70	36	37	44	29	29	37	69	105	58	97	24	24	33	24	45	35	36	32	105
9-Sep	22	13	19	62	30	30	11	17	29	15	18	21	27	29	28	24	22	21	22	24	12	43	31	27	62
10-Sep	30	29	29	36	32	50	25	30	40	30	33	34	36	29	30	29	27	28	21	20	18	20	22	21	50
11-Sep	21	20	21	21	21	18	19	18	21	21	22	21	23	23	23	21	21	20	20	18	19	27	18	18	27
12-Sep	19	22	25	23	43	57	20	45	31	48	55	54	28	84	63	86	32	25	13	12	12	15	10	16	86
13-Sep	49	19	20	24	23	21	24	28	24	23	19	29	31	30	27	35	34	58	21	19	17	17	16	18	58
14-Sep	17	19	18	18	17	18	19	19	18	20	19	22	23	22	19	23	20	25	18	37	24	17	19	21	37
15-Sep	22	23	32	61	45	56	92	73	40	63	30	37	50	93	71	32	54	82	40	25	34	39	23	32	93
16-Sep	34	19	26	68	67	60	47	51	27	34	25	26	30	35	28	35	34	19	34	63	35	37	39	32	68
17-Sep	18	17	21	38	33	78	64	94	53	20	36	38	20	30	54	28	19	8	17	51	56	42	49	46	94
18-Sep	66	20	22	28	50	20	24	23	29	58	90	71	73	77	47	38	78	71	7	21	45	40	21	16	90
19-Sep	29	54	38	13	9	37	38	54	38	49	21	22	24	17	15	16	16	12	11	8	13	26	72	19	72
20-Sep	75	68	50	45	29	45	48	69	35	23	19	20	27	35	32	24	18	19	12	28	16	12	14	22	75
21-Sep	12	11	24	33	72	23	35	54	44	48	29	38	31	47	62	21	46	42	16	31	20	65	42	25	72
22-Sep	87	70	70	47	69	37	72	85	56	27	25	31	39	42	31	30	31	23	17	10	13	18	73	73	87
23-Sep	88	50	58	62	23	20	50	91	46	81	60	50	50	26	33	24	18	13	13	19	29	25	38	33	91
24-Sep	42	26	28	41	61	39	13	26	38	26	31	42	37	35	39	37	33	24	9	5	74	51	52	88	88
25-Sep	35	54	33	36	11	39	18	19	34	17	20	19	19	22	20	19	19	19	19	19	20	20	18	19	54
26-Sep	19	20	23	21	34	31	31	31	35	36	31	32	33	36	38	33	33	31	31	34	34	35	33	35	38
27-Sep	36	30	34	24	28	24	27	27	32	28	27	32	34	31	37	31	28	26	15	13	13	13	14	14	37
28-Sep	17	79	52	56	27	31	17	16	12	16	24	26	30	32	25	19	17	12	10	13	13	14	39	42	79
29-Sep	74	39	25	22	11	13	13	20	18	25	30	35	36	32	35	33	35	36	48	44	37	36	39	31	74
30-Sep	30	32	28	29	29	26	29	27	26	24	23	23	24	26	26	28	26	19	16	16	32	76	40	87	87
	88	79	70	82	72	78	92	94	92	81	90	71	73	105	71	97	78	82	48	63	74	76	73	88	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Fort McKay South - September 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS14
ANZAC
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ANZAC (AMS14)
SEPTEMBER 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	687	33	33	100	-	-	4.6	0	0.8	0
TRS(ppb) Average	685	35	35	100	2.6	0	2.2	-	0.6	-
THC(ppm) Average	687	33	33	100	-	-	2.3	-	2.1	-
NMHC(ppm) Average	687	33	33	100	-	-	0.006	-	0	-
CH4(ppm) Average	687	33	33	100	-	-	2.3	-	2.1	-
NO2(ppb) Average	685	35	35	100	-	-	9.8	0	3.1	-
NO(ppb) Average	685	35	35	100	-	-	16.2	-	1.8	-
NOX(ppb) Average	685	35	35	100	-	-	23.4	-	4	-
O3(ppb) Average	687	33	33	100	-	-	48.3	0	35.5	-
PM2.5(ug/m3) Average	719	1	1	100	-	-	15.3	0	7.1	0
AT 2m(C) Average	720	0	0	100	-	-	26.7	-	18.9	-
RH(%) Average	720	0	0	100	-	-	99.8	-	89.2	-
WS(km/h) Average	720	0	0	100	-	-	31	-	25	-
WD(deg) Average	720	0	0	100	-	-	-	-	-	-
Leaf Wetness (% of range) Average	720	0	0	100	-	-	53.5	-	15.5	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ANZAC (AMS14)
SEPTEMBER 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	687	0.29	0.5	-	0	0	0	0.1	0.3	0.7	4.6
TRS(ppb) Average	685	0.4	0.2	-	0.1	0.3	0.3	0.4	0.4	0.5	2.2
THC(ppm) Average	687	2.06	0.1	-	2	2	2	2	2.1	2.1	2.3
NMHC (ppm) Average	687	0	0	-	0	0	0	0	0	0	0.006
CH4(ppm) Average	687	2.06	0.1	-	2	2	2	2	2.1	2.1	2.3
NO2(ppb) Average	685	1.14	1.3	-	0.1	0.3	0.4	0.8	1.3	2.2	9.8
NO(ppb) Average	685	0.33	1.2	-	0	0	0	0.1	0.2	0.6	16.2
NOX(ppb) Average	685	1.47	2.2	-	0.1	0.3	0.5	0.8	1.6	3	23.4
O3(ppb) Average	687	21.92	9	-	1.9	10.8	15.1	22	28.2	33.4	48.3
PM2.5(ug/m3) Average	719	3.52	2.3	-	0.1	1.3	2.1	3	4.6	6.4	15.3
Temperature 2 m (C) Average	720	11.59	5.4	-	0.4	5.2	7.3	10.8	15.4	18.8	26.7
Relative Humidity (%) Average	720	75.1	18.7	-	25.2	46.8	61.3	79.2	91.6	96	99.8
Wind Speed 20 m (km/h) Average	720	12.9	6	-	0	6	8	11	17	22	31
Wind Direction 20 m (deg) Average	720	234.2	-	-	-	-	-	-	-	-	-
Leaf Wetness (% of range) Average	720	6.39	11.7	-	0	0	0	0	8.1	26.2	53.5

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ANZAC (AMS14)
SEPTEMBER 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

Anzac - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.6 ppb on Sep 18 10:00 Maximum Daily Average: 0.8 ppb on Sep 8

Minimum Value: 0.0 ppb on Sep 1 01:00 Minimum Daily Average: 0.0 ppb on Sep 5
Maximum Diurnal Average: 0.6 ppb at hour 10 Minimum Diurnal Average: 0.1 ppb at hour 4
Monthly Average: 0.29 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} = 3.0

Hours in Service:	720
Hours of Data:	687
Hours of Missing Data:	33
Hours of Calibration:	33
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-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.4	0.1	0.2	0.4	0.6	0.4	0.6	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.6
2-Sep	0.1	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.1	1.4	0.2	0.0	0.6	0.6	0.1	0.1	0.1	0.1	2.5	3.5	3.1	0.6	3.5
3-Sep	0.4	0.1	0.1	0.1	Z	0.1	0.1	0.1	1.3	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	0.1	1.3
4-Sep	0.4	0.1	0.1	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.3	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
5-Sep	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
6-Sep	0.1	Z	0.1	0.0	0.0	0.1	0.1	0.3	0.2	0.1	0.9	2.2	0.2	2.7	0.2	0.0	0.1	0.1	0.0	0.3	0.1	0.0	0.1	0.0	0.3	2.7
7-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.8	0.3	2.3	0.7	0.5	0.4	0.4	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.3	2.3
8-Sep	0.2	0.3	0.3	Z	0.8	1.3	0.7	0.6	0.7	0.9	0.8	0.4	1.0	0.9	3.6	3.9	1.0	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.8	3.9
9-Sep	0.3	0.1	0.2	0.4	Z	0.4	0.3	0.3	0.3	0.4	0.4	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.0	0.2	0.4
10-Sep	0.0	0.1	0.0	0.1	0.0	Z	0.2	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.2
11-Sep	Z	0.1	0.1	0.1	0.0	0.1	0.4	0.7	1.0	1.4	2.0	2.8	1.5	1.6	0.4	0.1	0.9	2.3	1.2	0.5	1.0	0.7	0.0	0.0	0.8	2.8
12-Sep	0.0	Z	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	0.1	0.0	0.1	0.1	0.2	0.3	0.0	0.3
13-Sep	0.3	0.3	Z	0.2	0.2	0.3	0.2	0.3	0.4	0.4	0.4	0.6	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.2	0.1	0.1	0.2	0.6
14-Sep	0.2	0.2	0.1	Z	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.8	0.8	0.2	0.1	0.8
15-Sep	0.0	0.1	0.2	0.2	Z	0.1	0.4	1.9	4.4	3.9	2.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.6	4.4
16-Sep	0.0	0.4	0.4	0.1	0.1	Z	0.7	0.3	0.6	0.4	0.6	0.8	0.3	0.0	0.1	0.1	0.1	0.2	0.4	0.2	0.1	0.1	0.1	0.1	0.3	0.8
17-Sep	Z	0.0	0.1	0.0	0.0	0.1	0.1	1.0	1.2	0.5	0.4	0.4	0.5	0.4	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	1.2
18-Sep	0.0	Z	0.1	0.1	0.1	0.0	0.0	0.2	1.1	4.6	3.0	1.1	1.5	1.5	0.5	0.7	0.8	0.6	0.4	0.3	0.3	0.4	0.4	0.4	0.8	4.6
19-Sep	0.5	0.4	Z	0.3	0.4	0.3	0.4	0.6	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.5	0.5	0.4	0.3	0.4	0.4	0.6
20-Sep	0.4	0.2	0.2	Z	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.2	0.7	0.6	0.4	0.3	0.3	0.4	0.3	0.2	0.2	0.4	0.2	0.2	0.3	0.7
21-Sep	0.2	0.3	0.4	0.7	Z	0.4	0.3	0.6	0.6	0.4	0.7	1.1	1.2	1.7	0.7	0.7	0.8	0.5	0.3	0.3	0.4	0.4	0.2	0.2	0.6	1.7
22-Sep	0.2	0.1	0.1	0.0	0.1	Z	0.0	0.0	0.1	0.8	0.7	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
23-Sep	Z	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.2	1.0	1.7	2.5	0.2	0.1	0.1	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.3	2.5
24-Sep	0.2	Z	0.2	0.2	0.3	0.2	0.2	0.1	0.5	0.4	0.4	0.5	0.5	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.5
25-Sep	0.2	0.2	Z	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.2	0.3
26-Sep	0.2	0.1	0.2	Z	1.5	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	0.1	0.0	0.0	0.0	0.1	0.1	1.5
27-Sep	0.0	0.0	0.0	0.1	Z	0.1	0.1	0.1	0.1	0.0	0.0	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.5	0.3	0.2	0.3	0.1	0.5
28-Sep	0.6	0.2	0.2	0.2	0.2	Z	0.5	0.5	0.6	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.3	0.4	0.7	0.8	0.7	0.4	0.8
29-Sep	Z	0.3	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.2	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	0.3
30-Sep	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	0.2	0.0	0.3	0.4	0.1	0.4
	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.5	0.6	0.5	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.3	0.3	0.2	Diurnal Average	
	0.6	0.4	0.4	0.7	1.5	1.3	0.7	1.9	4.4	4.6	3.0	2.8	2.3	2.7	3.6	3.9	1.0	2.3	1.2	0.5	1.0	2.5	3.5	3.1	Diurnal Maximum	

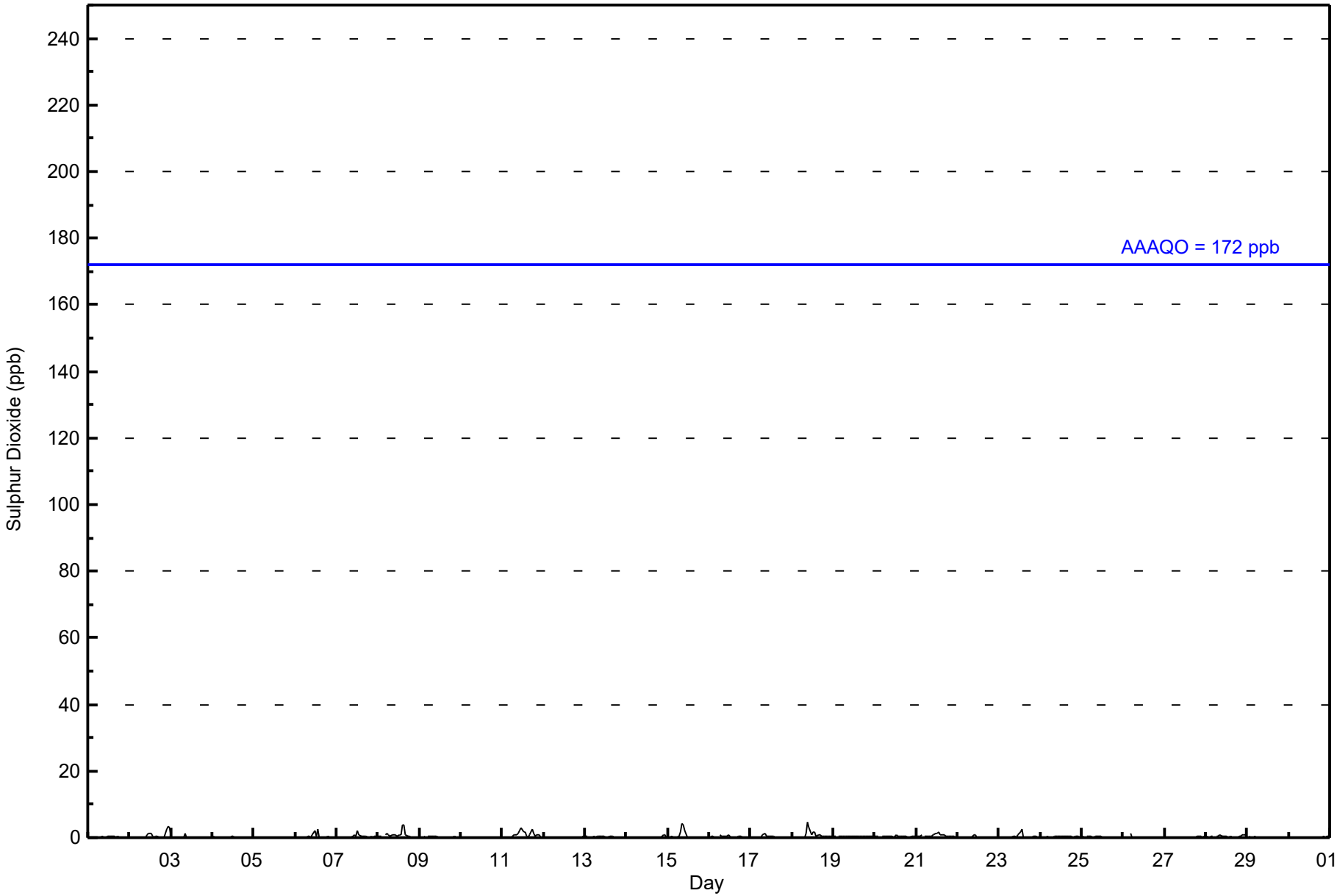
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Anzac - September 2026



Sulphur Dioxide (SO_2) - ppb

Anzac - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	687	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: 687

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Anzac - September 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	17	3	0	5	18	42	54	62	53	33	42	48	91	93	82	44	687
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	17	3	0	5	18	42	54	62	53	33	42	48	91	93	82	44	687

Total Number of Valid Hours: 687

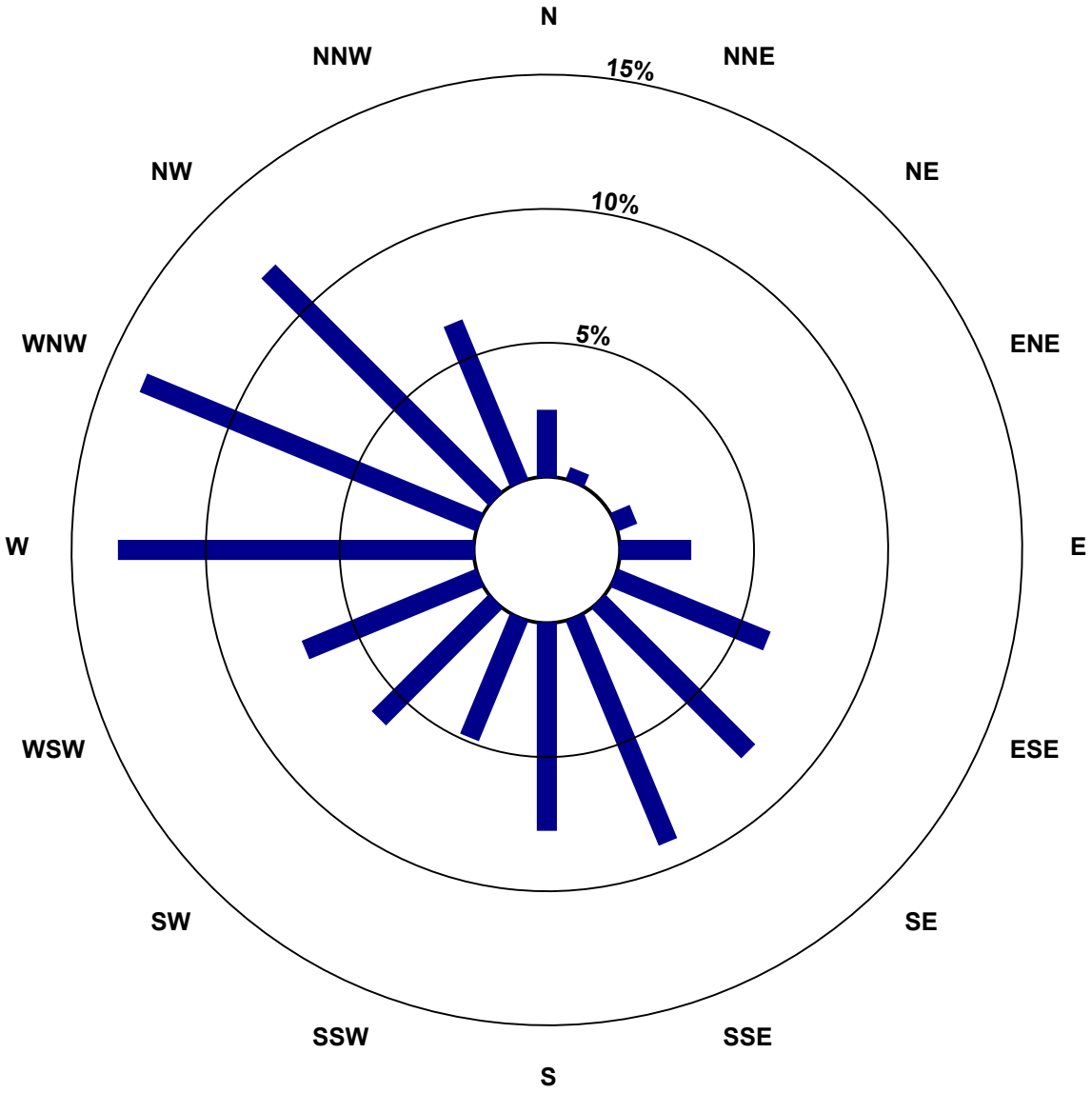
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Anzac



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

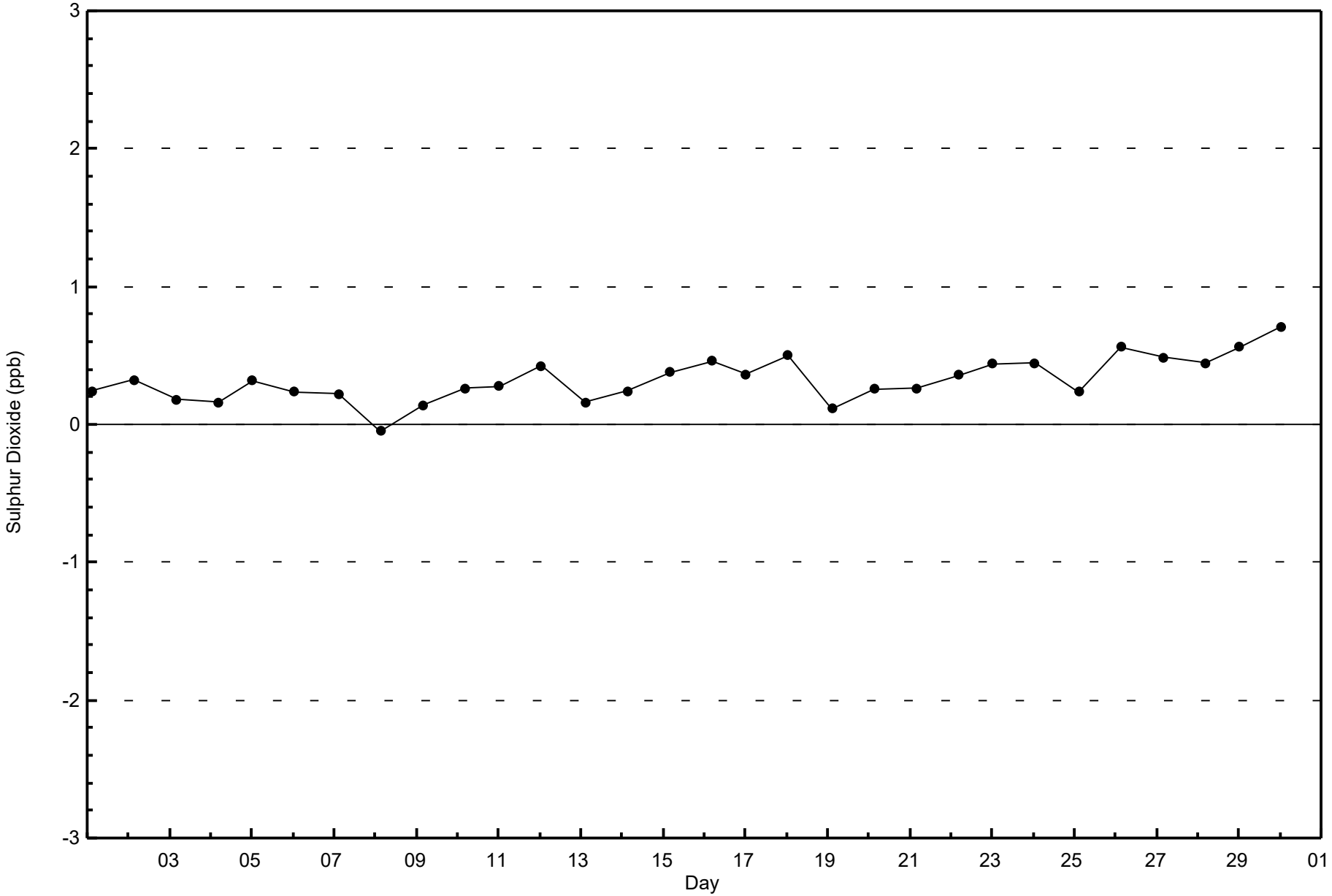
Total Number of Valid Hours: 687

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Anzac - September 2026

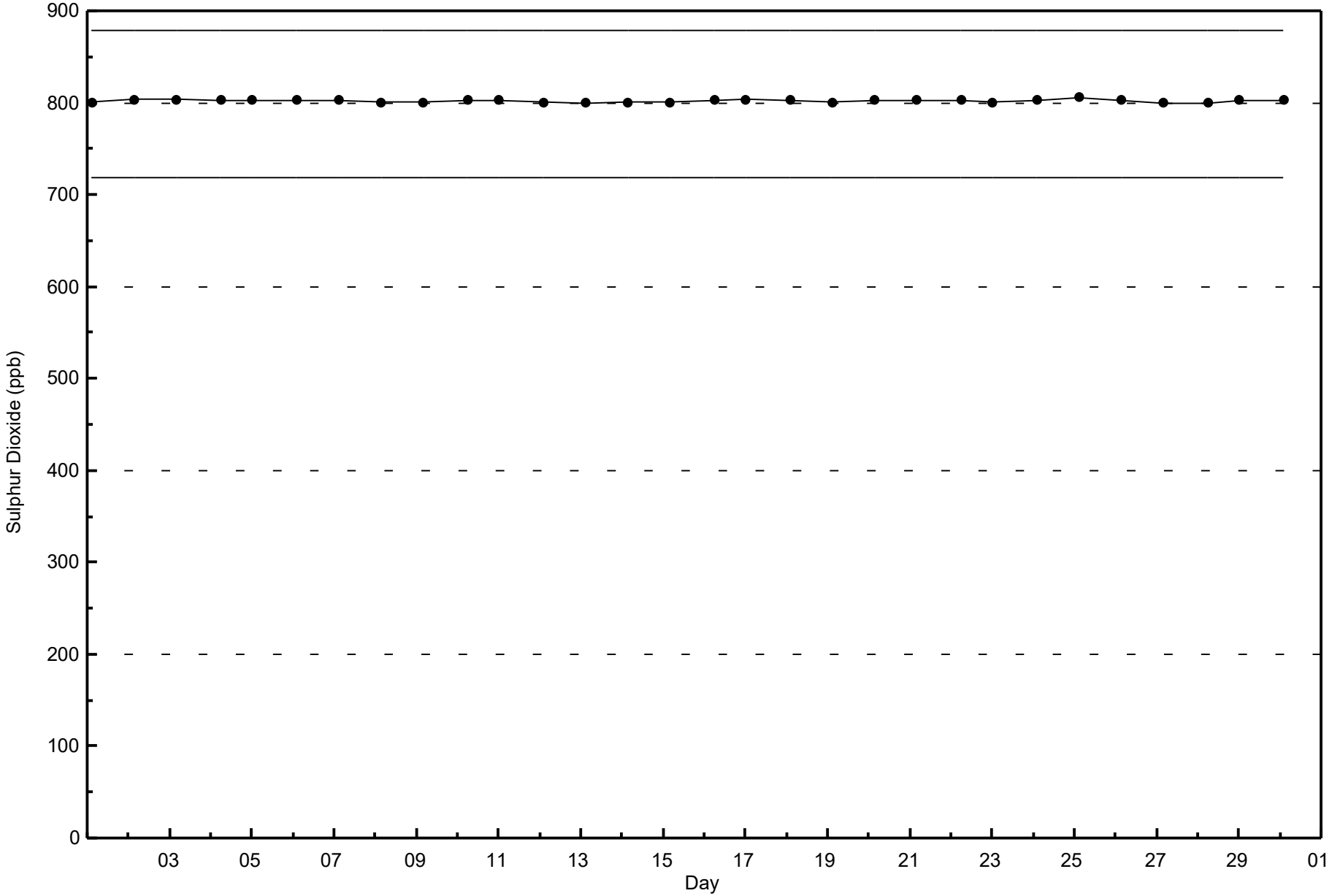


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Anzac - September 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Anzac - September 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 2.6 ppb on Sep 11 11:30 Maximum Daily Average: 0.6 ppb on Sep 11

Minimum Value: 0.1 ppb on Sep 6 01:30 Minimum Daily Average: 0.3 ppb on Sep 7

Maximum Diurnal Average: 0.5 ppb at hour 12 Minimum Diurnal Average: 0.4 ppb at hour 21

Monthly Average: 0.40 ppb Percentiles: P_1 = 0.2 P_{10} = 0.3 Q_1 = 0.3 Median = 0.4 Q_3 = 0.4 P_{90} = 0.5 P_{99} = 1.0

Periods in Service:	1440
Periods of Valid Data:	1370
Periods of Invalid Data:	70
Periods of Calibration:	70
Percent Operational Time:	100.0

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-Sep	0.2	0.2	0.2	Z	0.2	0.3	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	0.5
	0.2	0.3	0.3	SP	0.2	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		
2-Sep	0.4	0.4	0.4	0.5	Z	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.5	0.5	0.4	0.5	0.6	0.4	0.4	0.4	0.4	0.5	1.0	1.3	0.5	1.7
	0.4	0.4	0.4	0.4	SP	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.4	0.4	0.6	0.4	0.4	0.4	0.4	0.4	0.9	1.7	1.1		
3-Sep	0.4	0.5	0.4	0.4	0.3	Z	0.3	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	0.4	0.5	0.4	0.4	0.5
	0.4	0.5	0.4	0.3	0.4	SP	0.4	0.4	0.5	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	0.5	0.5		
4-Sep	Z	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.5	1.5
	SP	0.5	0.5	0.5	1.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4		
5-Sep	0.4	Z	0.3	0.3	0.4	0.3	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.5
	0.3	SP	0.3	0.4	0.3	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2		
6-Sep	0.2	0.1	Z	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.5	0.3	0.6
	0.2	0.2	SP	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.3	0.3	0.6	0.3		
7-Sep	0.3	0.3	0.3	Z	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	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.5
	0.3	0.3	0.3	SP	0.3	0.2	0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.2	0.3	0.2	0.2		
8-Sep	0.2	0.2	0.3	0.3	Z	0.6	0.9	0.9	1.0	0.7	0.6	0.6	0.8	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.5	1.0
	0.2	0.3	0.3	0.3	SP	0.6	1.0	1.0	0.8	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3		
9-Sep	0.4	0.3	0.3	0.4	0.4	Z	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	0.4	0.4	0.4	0.4	0.4	0.4	0.6
	0.4	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	0.4	0.4	0.4	0.4		
10-Sep	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	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4
	SP	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	0.4	0.3	0.3	0.3	0.3	0.3		
11-Sep	0.3	Z	0.3	0.4	0.3	0.3	0.4	0.5	0.5	0.9	2.1	2.6	1.1	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.6	2.6
	0.3	SP	0.3	0.4	0.3	0.4	0.5	0.5	0.7	1.1	1.2	1.8	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4		
12-Sep	0.4	0.4	Z	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.4
	0.3	0.4	SP	0.3	0.4	0.4	0.3	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	0.2	0.3	0.3	0.3		
13-Sep	0.3	0.3	0.3	Z	0.3	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	0.4	0.3	0.3	0.3	1.1	0.9	0.4	1.1
	0.2	0.3	0.2	SP	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	0.3	0.3	0.3	0.5	1.1	0.8		
14-Sep	0.7	1.0	1.0	0.5	Z	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.5	0.4	0.5	0.4	0.5	1.1
	0.9	1.1	0.7	0.4	SP	0.3	0.4	0.5	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.4	0.5	0.4	0.4		
15-Sep	0.3	0.3	0.3	0.4	0.3	Z	0.3	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	0.3	0.3	0.3	0.3	0.4	0.5
	0.3	0.3	0.4	0.3	0.4	SP	0.3	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3		

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Anzac - September 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-Sep	Z	0.4	0.4	0.6	0.7	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.7
	SP	0.3	0.5	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4		
17-Sep	0.6	Z	0.3	0.3	0.3	0.8	0.7	0.9	0.7	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.4	1.2
	0.4	SP	0.3	0.3	0.4	0.9	0.8	1.2	0.6	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2		
18-Sep	0.2	0.2	Z	0.3	0.3	0.3	0.3	0.4	0.4	0.9	0.8	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.9
	0.2	0.2	SP	0.3	0.3	0.3	0.4	0.4	0.6	0.8	0.6	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.5		
19-Sep	0.4	0.4	0.3	Z	0.3	0.3	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	0.4	0.4	0.4	0.4	0.4	0.4
	0.4	0.4	0.3	SP	0.3	0.3	0.4	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		
20-Sep	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	0.4	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	0.4	SP	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	0.4	0.5	0.5	0.5		
21-Sep	0.5	0.5	0.5	0.5	0.5	Z	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5
	0.5	0.5	0.5	0.5	0.5	SP	0.4	0.5	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	0.5	0.4	0.4		
22-Sep	Z	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.5
	SP	0.4	0.4	0.4	0.5	0.3	0.4	0.3	0.4	0.5	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3		
23-Sep	0.3	Z	0.4	0.3	0.3	0.3	0.3	0.3	0.8	1.0	0.4	0.7	0.5	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.0
	0.4	SP	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.9	0.4	0.6	0.5	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4		
24-Sep	0.3	0.4	Z	0.4	0.4	0.3	0.3	0.3	0.3	C	C	C	C	C	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4
	0.4	0.4	SP	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	0.3	0.3		
25-Sep	0.3	0.3	0.4	Z	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.6	0.4	1.0
	0.3	0.3	0.4	SP	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	1.0		
26-Sep	1.0	0.9	0.9	0.7	Z	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	0.4	0.3	0.3	0.3	0.4	1.0
	1.0	0.8	0.8	0.6	SP	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
27-Sep	0.3	0.3	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	0.3	0.3	0.3	0.3	0.3	0.4
	0.3	0.3	0.3	0.3	0.3	SP	0.3	0.4	0.4	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		
28-Sep	Z	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	SP	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4		
29-Sep	0.4	Z	0.4	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	0.3	0.3	0.3	0.4	0.3	0.4	0.4
	0.4	SP	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	0.3	0.4	0.3	0.3	0.3	0.3		
30-Sep	0.3	0.3	Z	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	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	0.4	SP	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.3		
	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	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	Diurnal Average	
	1.0	1.1	1.0	0.7	1.5	0.9	1.0	1.2	1.0	1.1	2.1	2.6	1.1	0.7	0.6	0.6	0.6	0.5	0.5	0.6	0.5	0.9	1.7	1.3	Diurnal Maximum	

Z - zerospan C - Calibration 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 - September 2026

Maximum Value: 2.2 ppb on Sep 11 12:00

Maximum Daily Average: 0.6 ppb on Sep 11

Minimum Value: 0.1 ppb on Sep 6 02:00

Minimum Daily Average: 0.3 ppb on Sep 7

Maximum Diurnal Average: 0.5 ppb at hour 12

Minimum Diurnal Average: 0.4 ppb at hour 21

Monthly Average: 0.40 ppb

Percentiles: P_1 = 0.2 P_{10} = 0.3 Q_1 = 0.3 Median = 0.4 Q_3 = 0.4 P_{90} = 0.5 P_{99} = 1.0

Hours in Service:	720
Hours of Data:	685
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-Sep	0.2	0.2	0.2	Z	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
2-Sep	0.4	0.4	0.4	0.5	Z	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.7	1.3	1.2	0.5	1.3
3-Sep	0.4	0.5	0.4	0.4	0.3	Z	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	0.4	0.5	0.5	0.4	0.5
4-Sep	Z	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.5	1.0
5-Sep	0.4	Z	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.5
6-Sep	0.2	0.1	Z	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.4	0.3	0.4
7-Sep	0.3	0.3	0.3	Z	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.4
8-Sep	0.2	0.2	0.3	0.3	Z	0.6	0.9	1.0	0.9	0.7	0.6	0.6	0.7	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.5	1.0
9-Sep	0.4	0.3	0.3	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	0.4	0.4	0.4	0.4	0.4	0.5
10-Sep	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	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4
11-Sep	0.3	Z	0.3	0.4	0.3	0.4	0.5	0.5	0.6	1.0	1.6	2.2	1.0	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	2.2
12-Sep	0.4	0.4	Z	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.4
13-Sep	0.3	0.3	0.2	Z	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	0.3	0.3	0.3	0.4	1.1	0.9	0.4	1.1
14-Sep	0.8	1.1	0.8	0.4	Z	0.4	0.4	0.5	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.5	0.4	0.4	0.4	0.5	1.1
15-Sep	0.3	0.3	0.4	0.3	0.3	Z	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4
16-Sep	Z	0.3	0.4	0.6	0.7	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.7
17-Sep	0.5	Z	0.3	0.3	0.3	0.8	0.8	1.0	0.6	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.4	1.0
18-Sep	0.2	0.2	Z	0.3	0.3	0.3	0.3	0.4	0.5	0.9	0.7	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	0.4	0.9
19-Sep	0.4	0.4	0.3	Z	0.3	0.3	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	0.4	0.4	0.4	0.4	0.4	0.4
20-Sep	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	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.5
21-Sep	0.5	0.5	0.5	0.5	0.5	Z	0.4	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	0.5	0.4	0.4	0.5
22-Sep	Z	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.5
23-Sep	0.3	Z	0.4	0.3	0.3	0.3	0.3	0.3	0.6	0.9	0.4	0.6	0.5	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9
24-Sep	0.3	0.4	Z	0.4	0.4	0.3	0.3	0.3	C	C	C	C	C	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4
25-Sep	0.3	0.3	0.4	Z	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.8	0.4	0.8
26-Sep	1.0	0.9	0.9	0.7	Z	0.3	0.3	0.3	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	1.0
27-Sep	0.3	0.3	0.3	0.3	0.3	Z	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	0.3	0.3	0.3	0.4
28-Sep	Z	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	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
29-Sep	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	0.3	0.3	0.3	0.3	0.4	0.4
30-Sep	0.3	0.3	Z	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.3	0.4	0.4
	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	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	Diurnal Average	
	1.0	1.1	0.9	0.7	1.0	0.8	0.9	1.0	0.9	1.0	1.6	2.2	1.0	0.6	0.6	0.6	0.5	0.4	0.5	0.6	0.5	0.7	1.3	1.2	Diurnal Maximum	

Z - zerospan C - Calibration

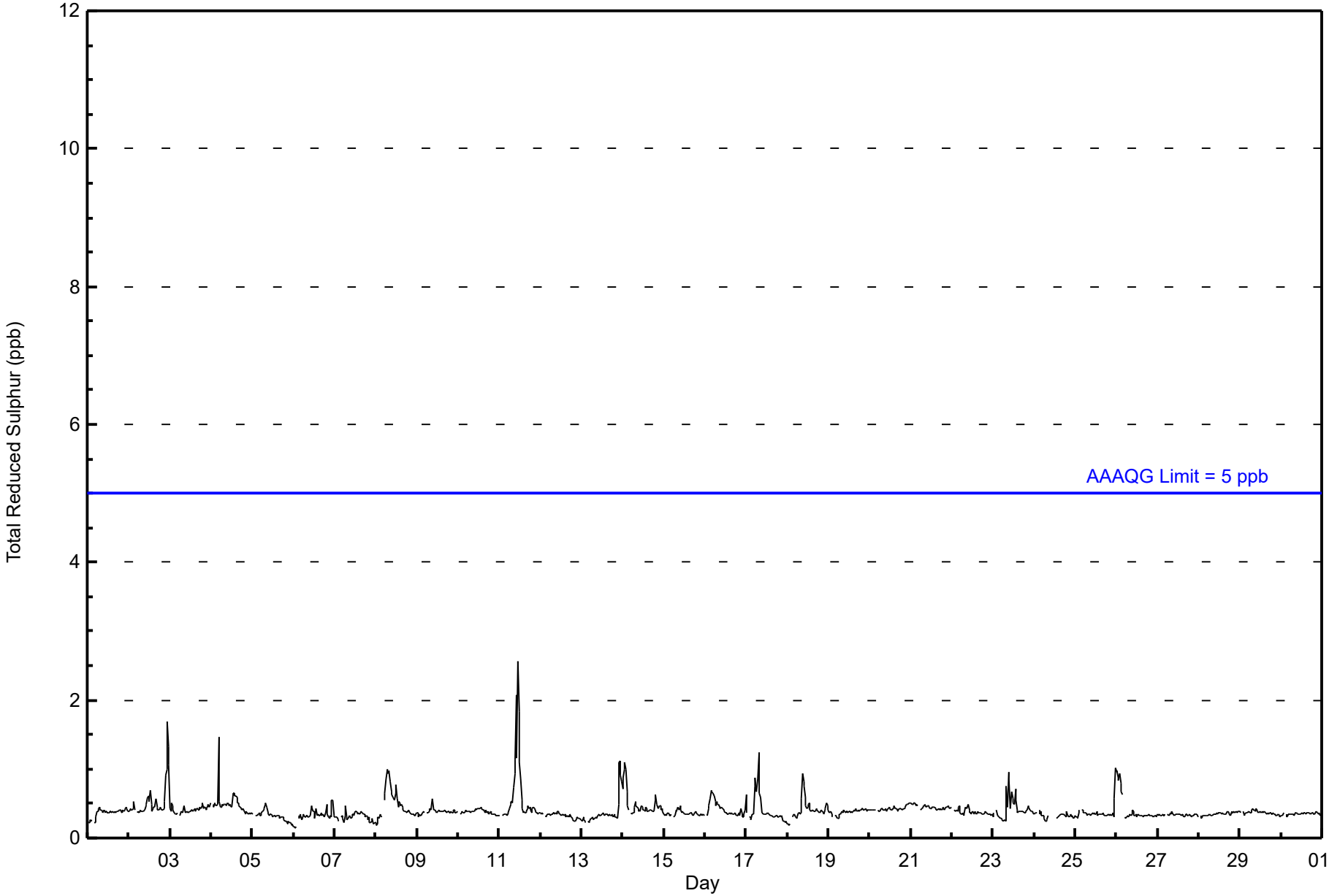
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Anzac - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	685	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Reduced Sulphur (TRS) - ppb

Anzac - September 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	17	3	0	5	18	42	54	63	54	31	42	50	89	91	82	44	685
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	17	3	0	5	18	42	54	63	54	31	42	50	89	91	82	44	685

Total Number of Valid Hours: 685

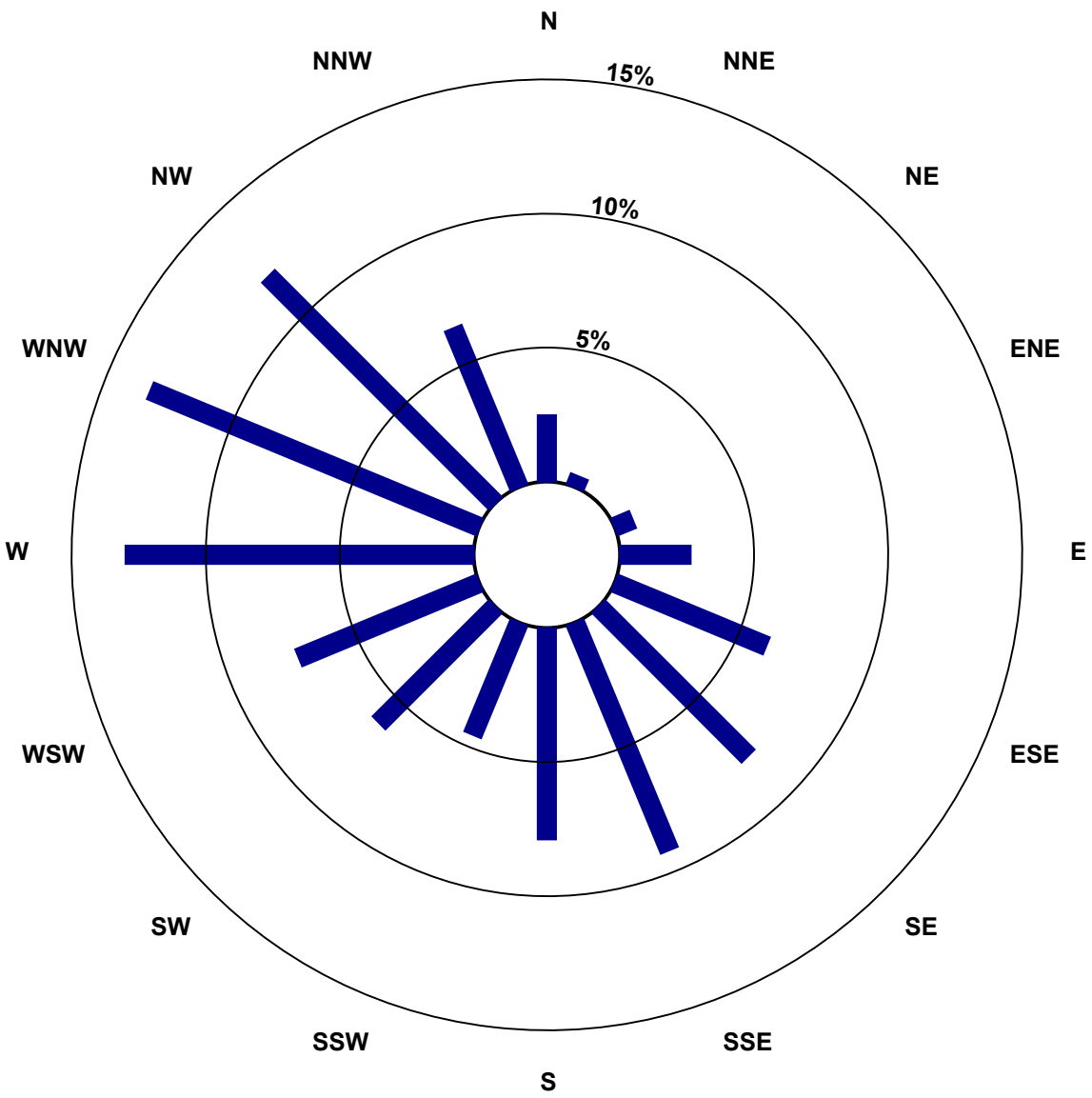
Total Number of Hours: 720

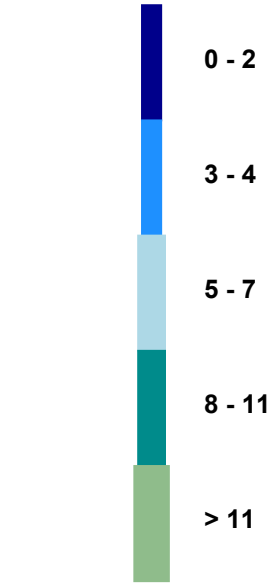
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Reduced Sulphur (TRS) - ppb

Anzac





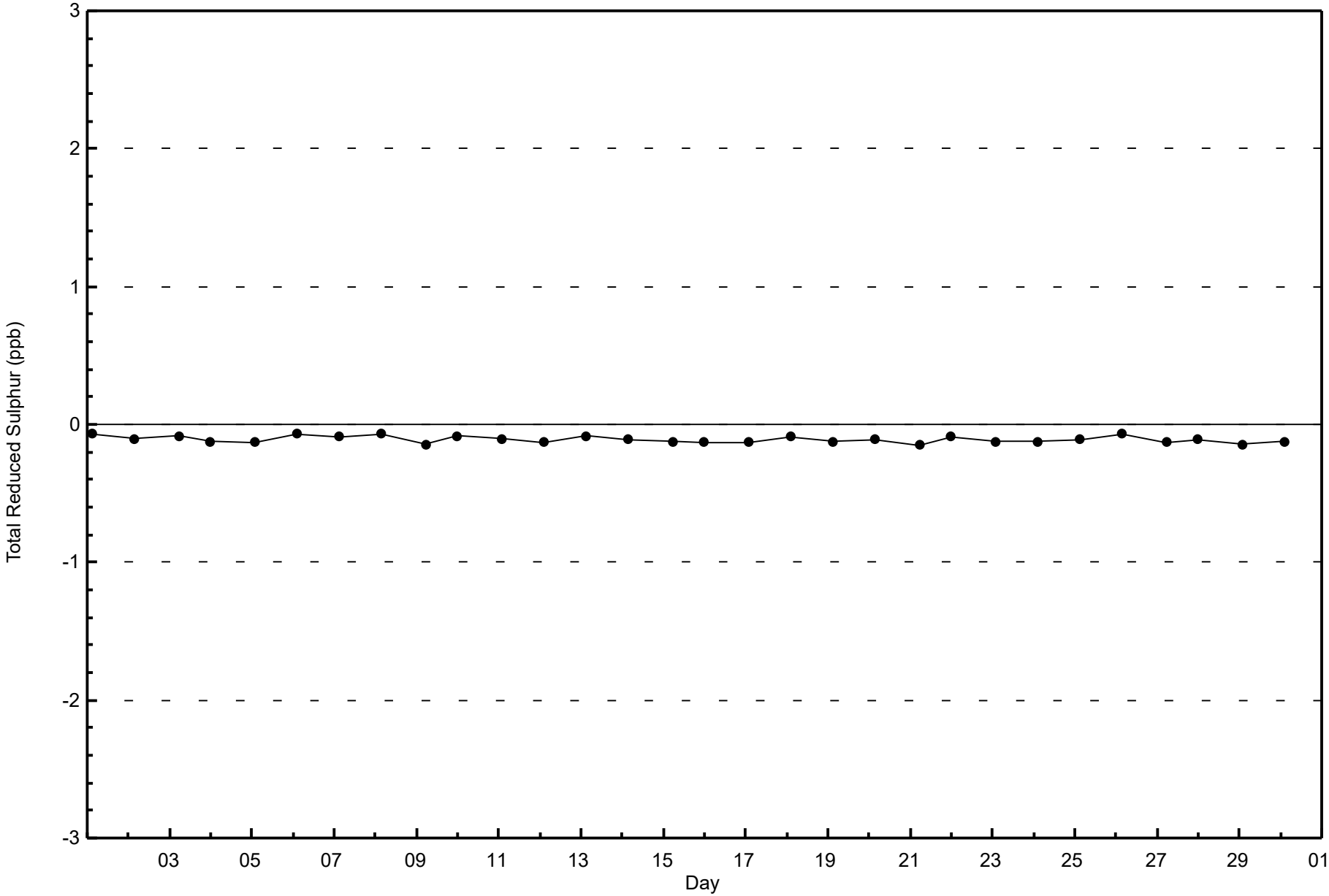
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Anzac - September 2026

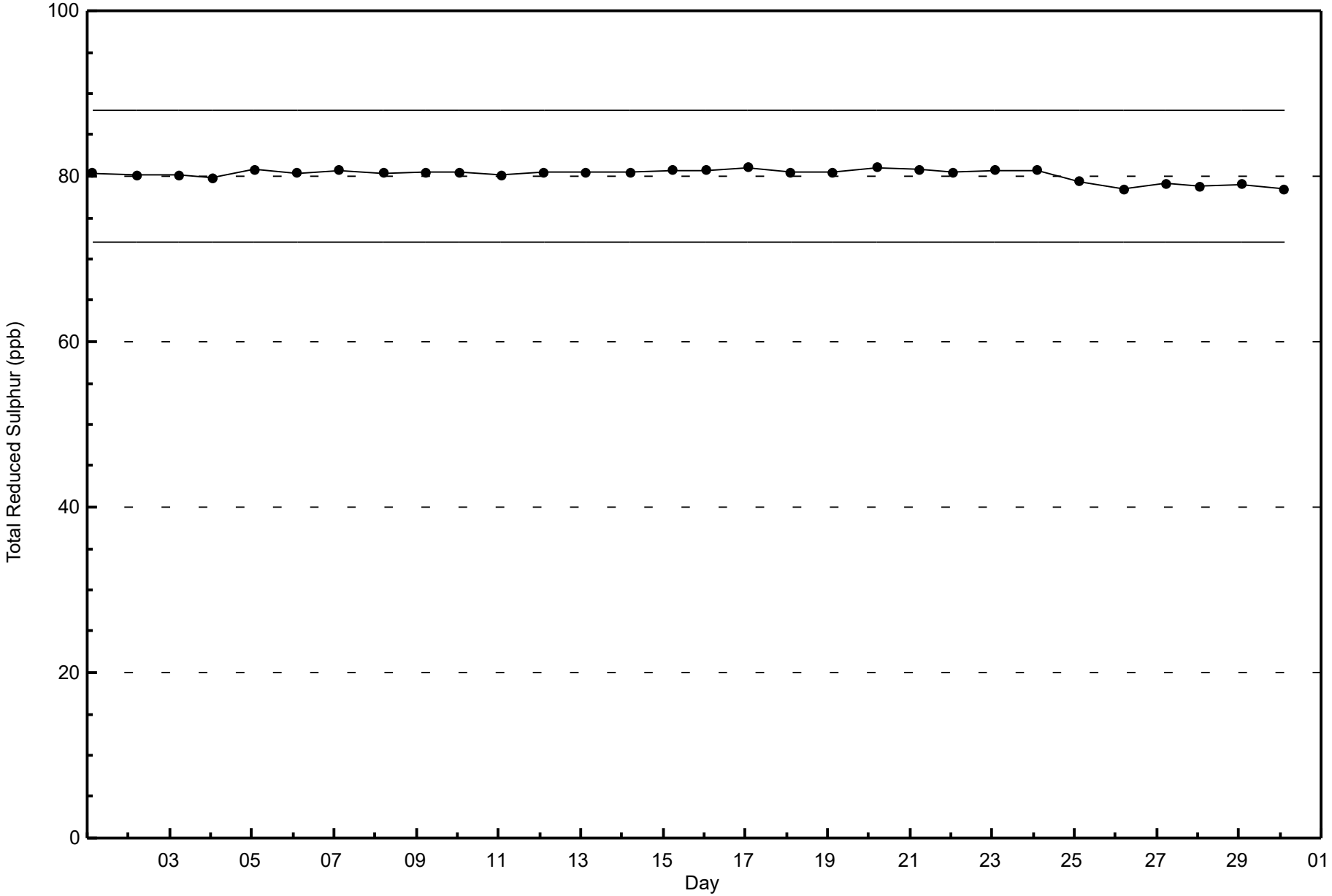


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Anzac - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Anzac - September 2026

Maximum Value: 2.3 ppm on Sep 8 02:00

Maximum Daily Average: 2.1 ppm on Sep 8

Minimum Value: 2.0 ppm on Sep 20 16:00

Minimum Daily Average: 2.0 ppm on Sep 10

Maximum Diurnal Average: 2.1 ppm at hour 8

Minimum Diurnal Average: 2.0 ppm at hour 15

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} = 2.1 P_{99} = 2.3

Hours in Service:	720
Hours of Data:	687
Hours of Missing Data:	33
Hours of Calibration:	33
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-Sep	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	2.1	2.1
2-Sep	2.1	2.1	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
3-Sep	2.1	2.1	2.1	2.1	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	2.1	2.2
4-Sep	2.1	2.1	2.1	2.2	2.1	Z	2.3	2.2	2.2	2.1	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	2.1	2.3
5-Sep	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
6-Sep	2.1	Z	2.1	2.2	2.1	2.2	2.3	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	2.1	2.1	2.1	2.1	2.1	2.3
7-Sep	2.1	2.1	Z	2.1	2.1	2.1	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
8-Sep	2.2	2.3	2.1	Z	2.1	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.3
9-Sep	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	2.0	2.0	2.0	2.2
10-Sep	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
11-Sep	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
12-Sep	2.0	Z	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	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1
13-Sep	2.1	2.0	Z	2.1	2.0	2.0	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
14-Sep	2.1	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	2.1	2.1	2.1	2.1	2.0	2.1	2.1
15-Sep	2.0	2.0	2.0	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	2.1	2.0	2.0	2.0	2.0	2.0	2.1
16-Sep	2.0	2.0	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	2.1	2.1	2.1	2.1	2.0	2.1
17-Sep	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	2.2	2.2	2.1	2.2
18-Sep	2.1	Z	2.1	2.1	2.0	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	2.0	2.0	2.1	2.1	2.1	2.1
19-Sep	2.0	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	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1
20-Sep	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	2.1	2.1	2.1	2.1	2.0	2.1
21-Sep	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.2
22-Sep	2.2	2.2	2.1	2.1	2.1	Z	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	2.1	2.1	2.0	2.1	2.2
23-Sep	Z	2.0	2.0	2.1	2.1	2.1	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	2.1	2.1	2.1	2.1
24-Sep	2.1	Z	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
25-Sep	2.0	2.0	Z	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	2.1	2.1	2.1	2.2
26-Sep	2.2	2.2	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	2.0	2.0	2.0	2.0	2.0	2.0	2.2
27-Sep	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
28-Sep	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	2.1	2.1	2.1	2.1	2.0	2.1
29-Sep	Z	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	C	C	C	2.0	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-Sep	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	2.0
	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	2.0	2.1	2.1	2.1	2.1	Diurnal Average	
	2.2	2.3	2.1	2.2	2.2	2.2	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	2.2	2.2	Diurnal Maximum	

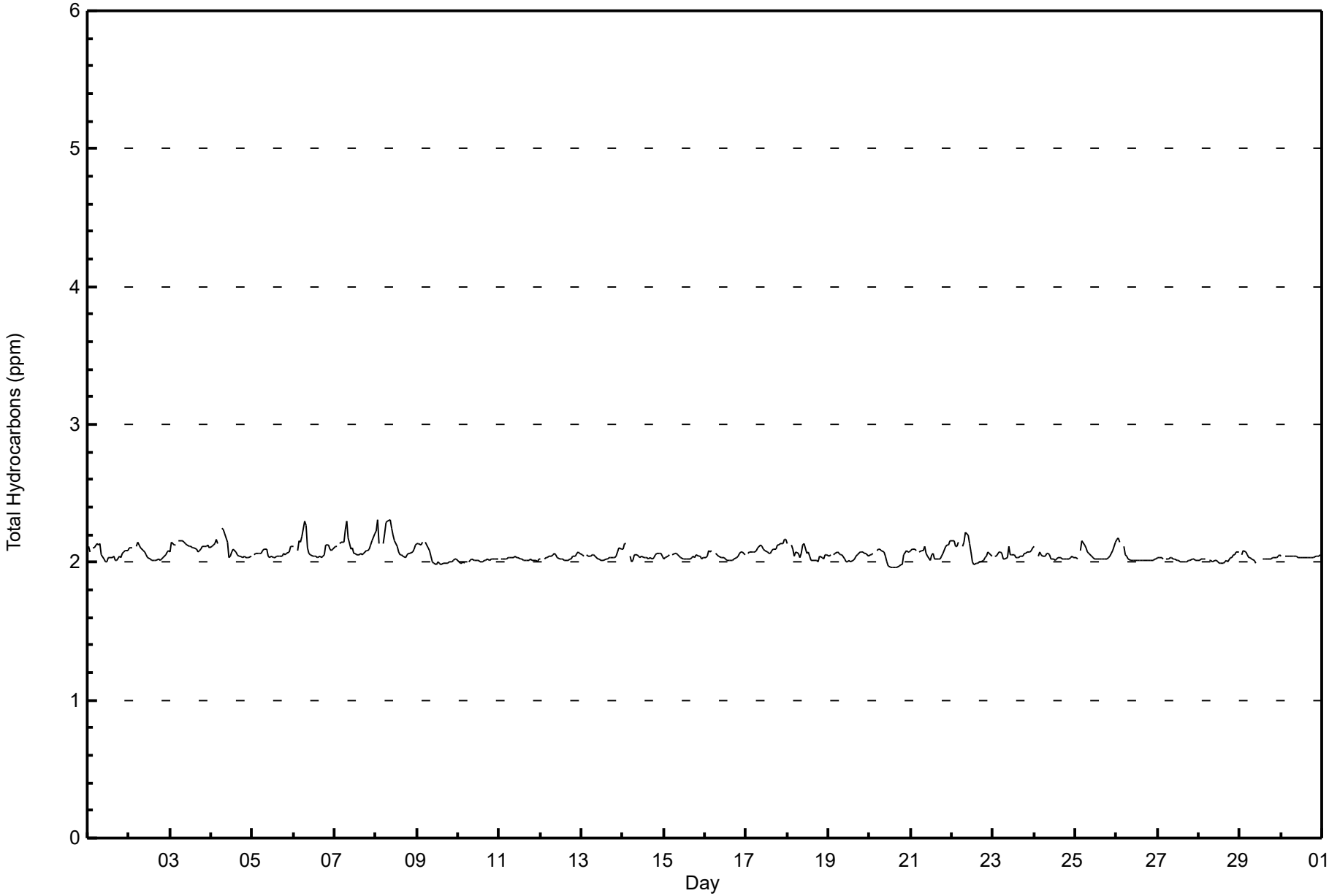
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Anzac - September 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Total Hydrocarbons (THC) - ppm

Anzac - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	381	55.46	55.46
2.1 - 3.0	306	44.54	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 687

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Anzac - September 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	3	0	0	10	14	18	20	18	16	21	31	72	63	59	24	381
2.1 - 3.0	5	0	0	5	8	28	36	42	35	17	21	17	19	30	23	20	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	17	3	0	5	18	42	54	62	53	33	42	48	91	93	82	44	687

Total Number of Valid Hours: 687

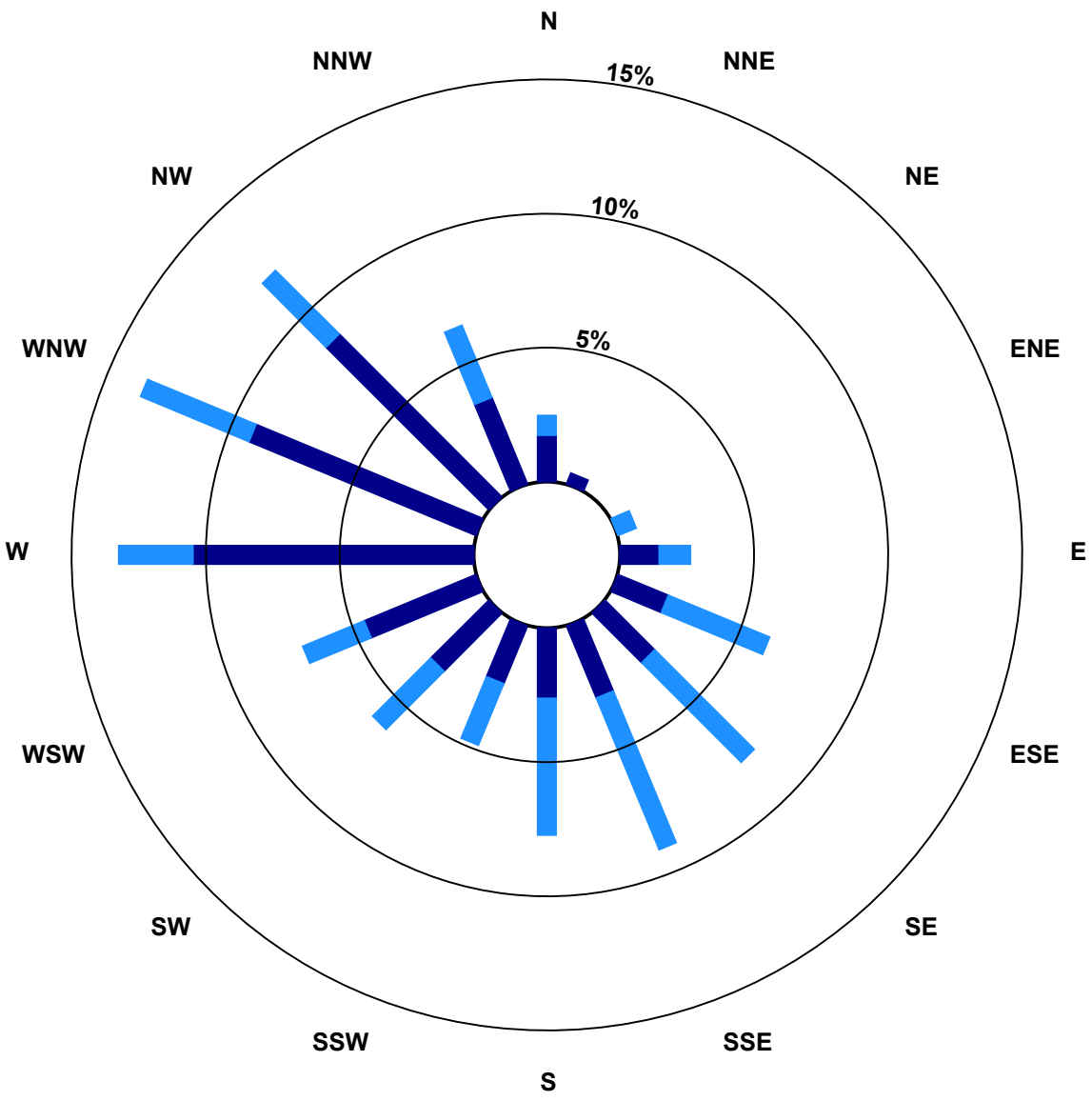
Total Number of Hours: 720

Wood Buffalo Environmental Association

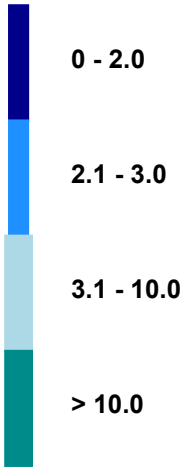
Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Anzac



Classes (ppm)



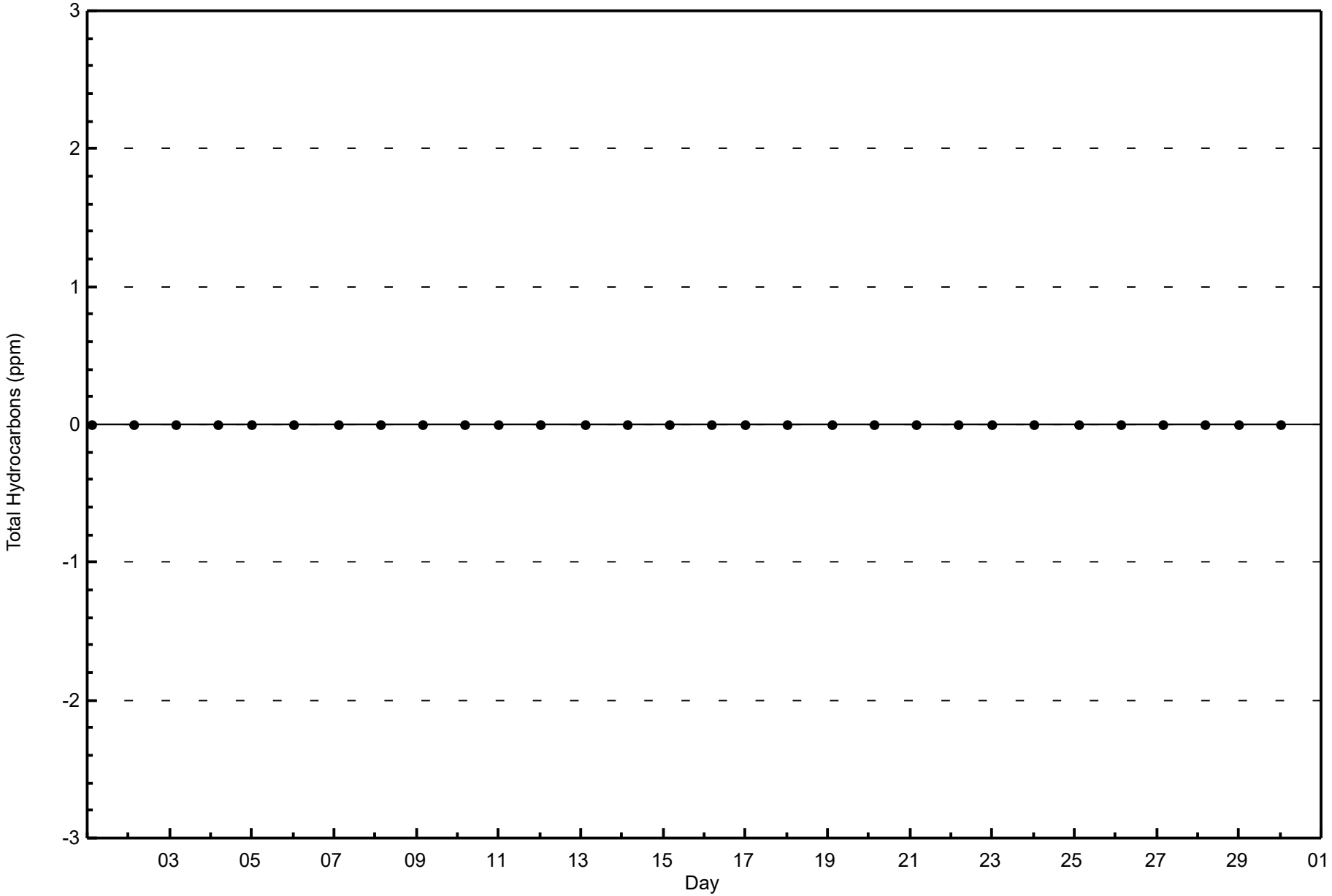
Total Number of Valid Hours: 687

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Anzac - September 2026

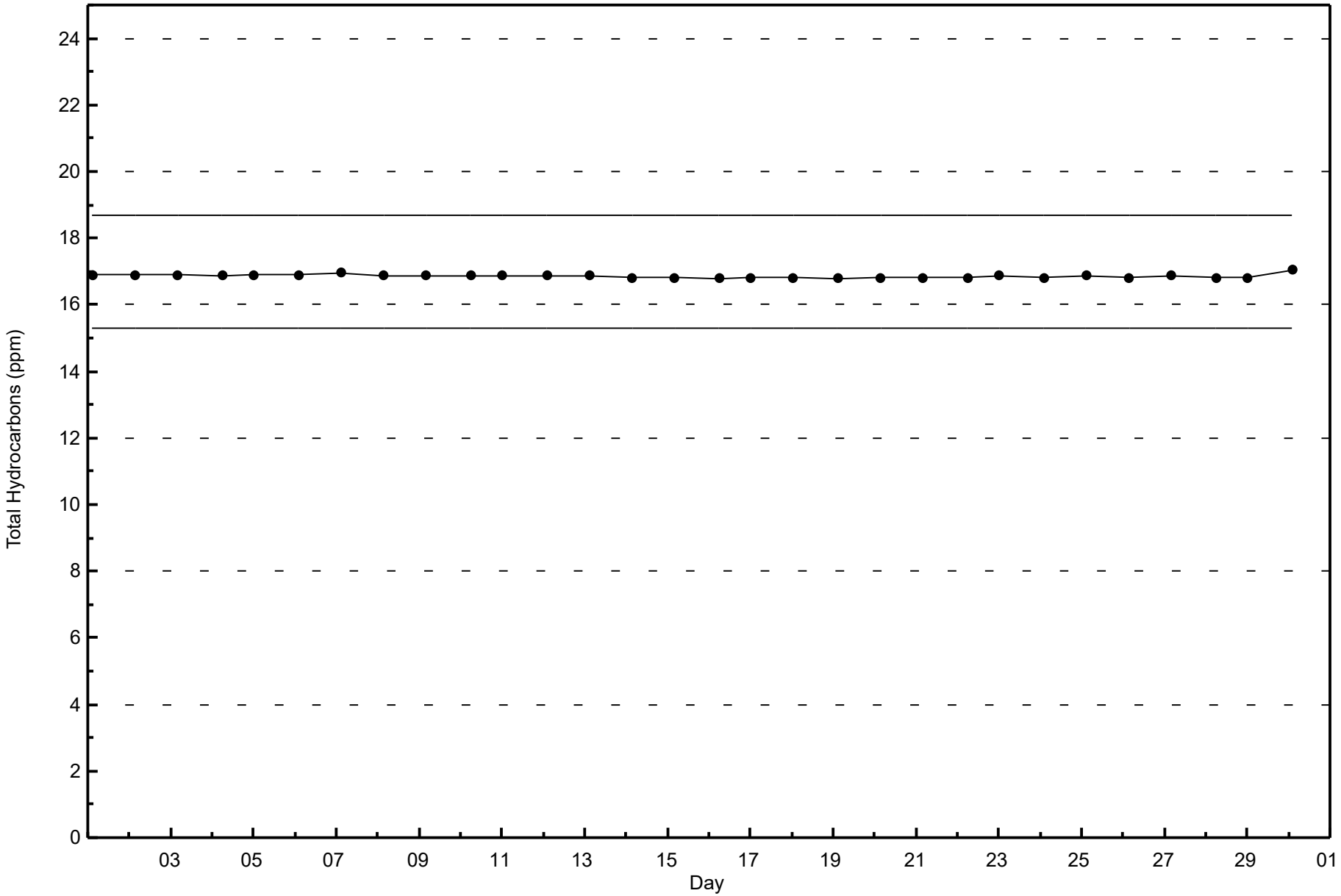


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Anzac - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Anzac - September 2026

Maximum Value: 0.006 ppm on Sep 26 23:00

Maximum Daily Average: 0.000 ppm on Sep 26

Minimum Value: 0.000 ppm on Sep 1 01:00

Minimum Daily Average: 0.000 ppm on Sep 1

Maximum Diurnal Average: 0.000 ppm at hour 6

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:	720
Hours of Data:	687
Hours of Missing Data:	33
Hours of Calibration:	33
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-Sep	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
2-Sep	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
3-Sep	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-Sep	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
5-Sep	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
6-Sep	0.000	Z	0.000	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
7-Sep	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
8-Sep	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
9-Sep	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
10-Sep	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
11-Sep	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
12-Sep	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
13-Sep	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
14-Sep	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
15-Sep	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
16-Sep	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
17-Sep	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
18-Sep	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
19-Sep	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
20-Sep	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
21-Sep	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
22-Sep	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
23-Sep	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
24-Sep	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
25-Sep	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
26-Sep	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	0.006	0.000	0.000	0.006
27-Sep	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
28-Sep	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
29-Sep	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
30-Sep	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	0.005	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	0.006	0.000	Diurnal Maximum	

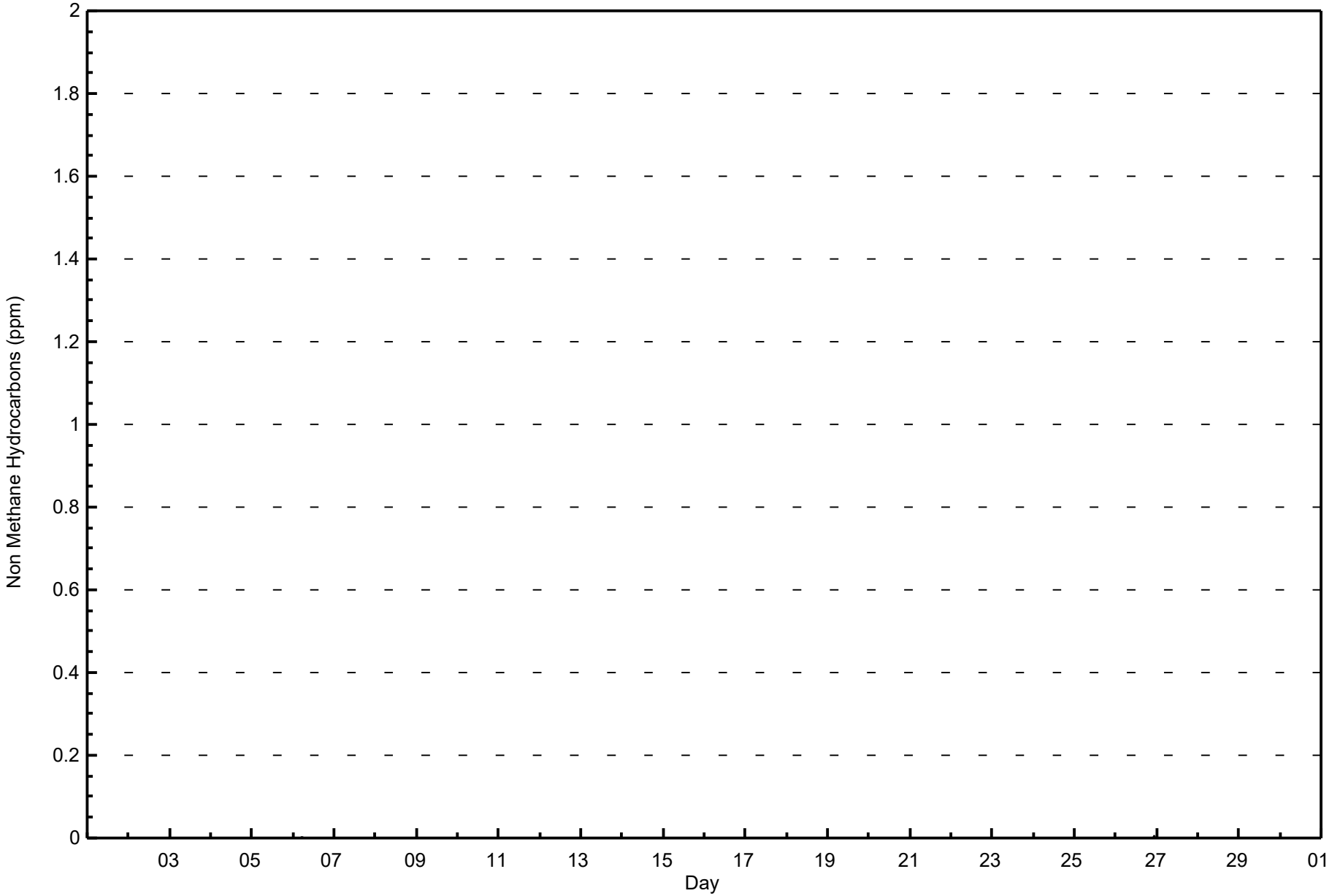
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Anzac - September 2026



Non Methane Hydrocarbons (NMHC) - ppm

Anzac - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	686	99.85	99.85
0.006 - 0.05	1	0.15	100.00
0.06 - 0.1	0	0.00	100.00
> 0.1	0	0.00	100.00

Total Number of Valid Hours: 687

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Anzac - September 2026

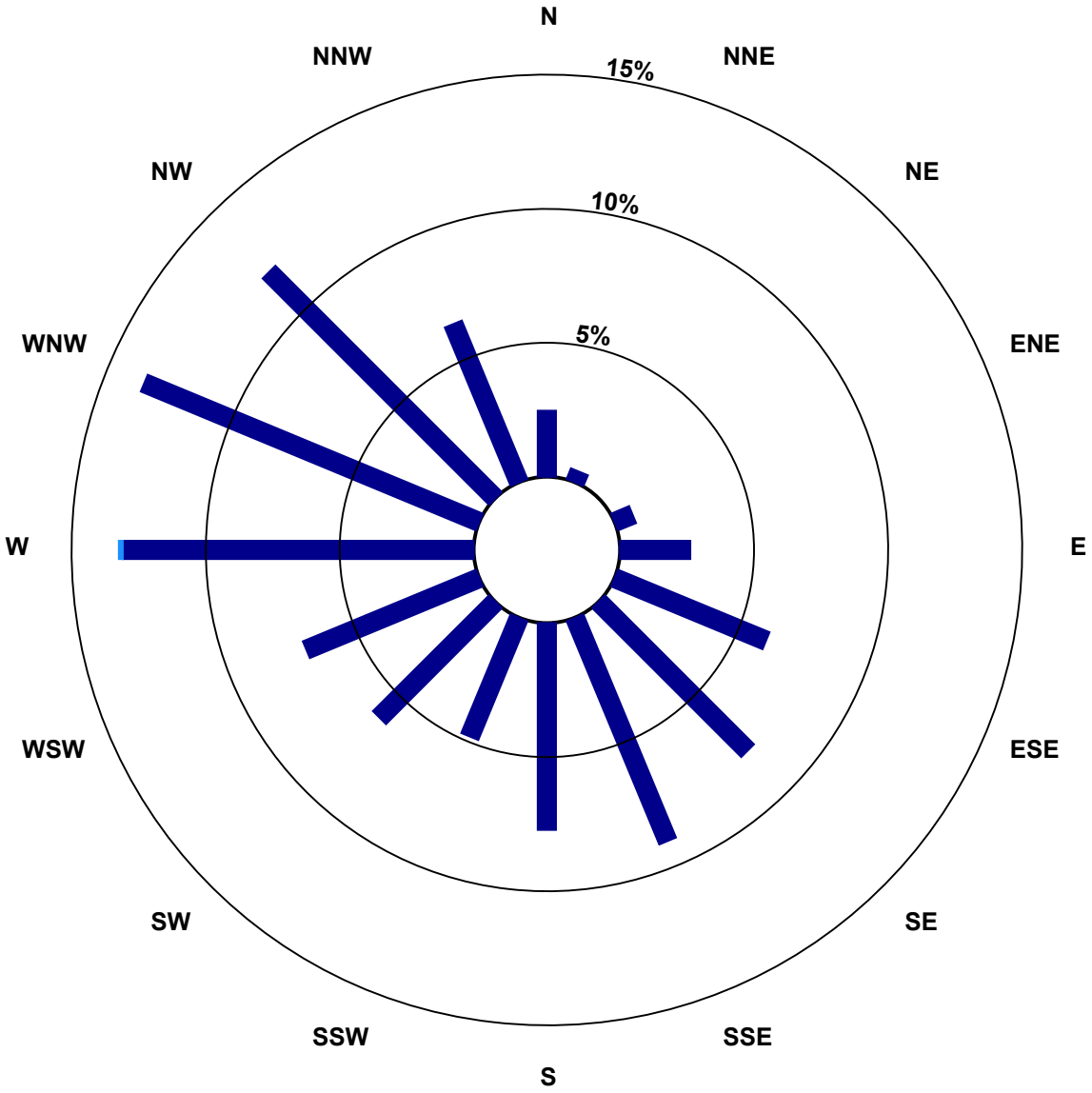
Concentration Ranges (ppm)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 0.005	17	3	0	5	18	42	54	62	53	33	42	48	90	93	82	44	686
0.006 - 0.05	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
0.06 - 0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	17	3	0	5	18	42	54	62	53	33	42	48	91	93	82	44	687

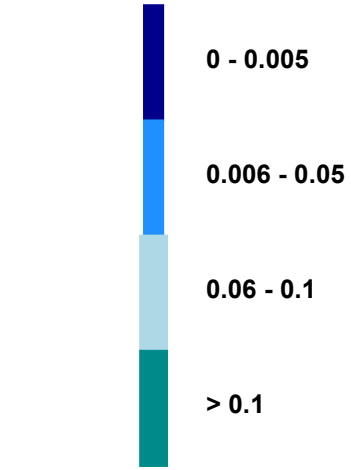
Total Number of Valid Hours: 687

Total Number of Hours: 720

Non Methane Hydrocarbons (NMHC) - ppm

Anzac





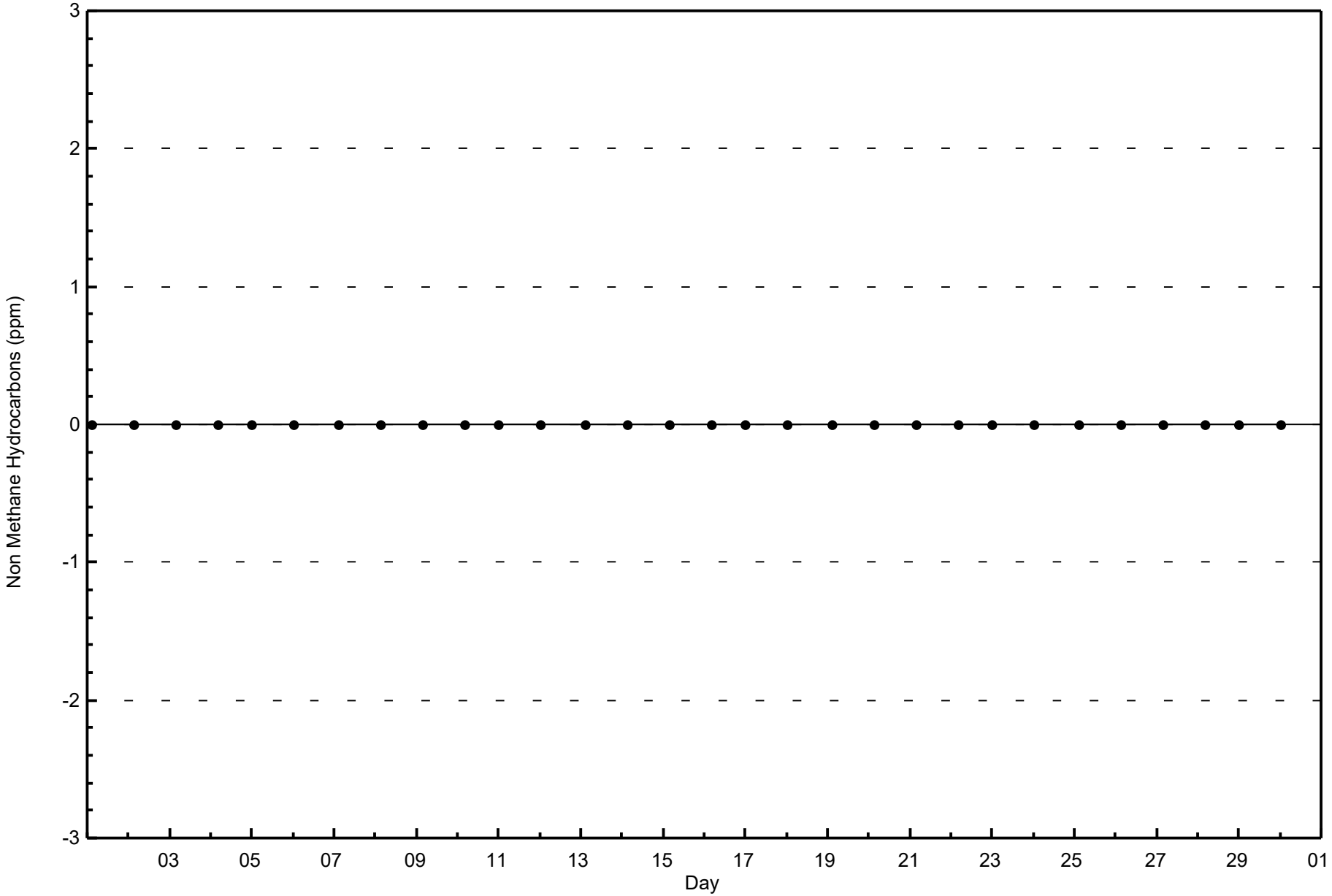
Total Number of Valid Hours: 687

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Anzac - September 2026

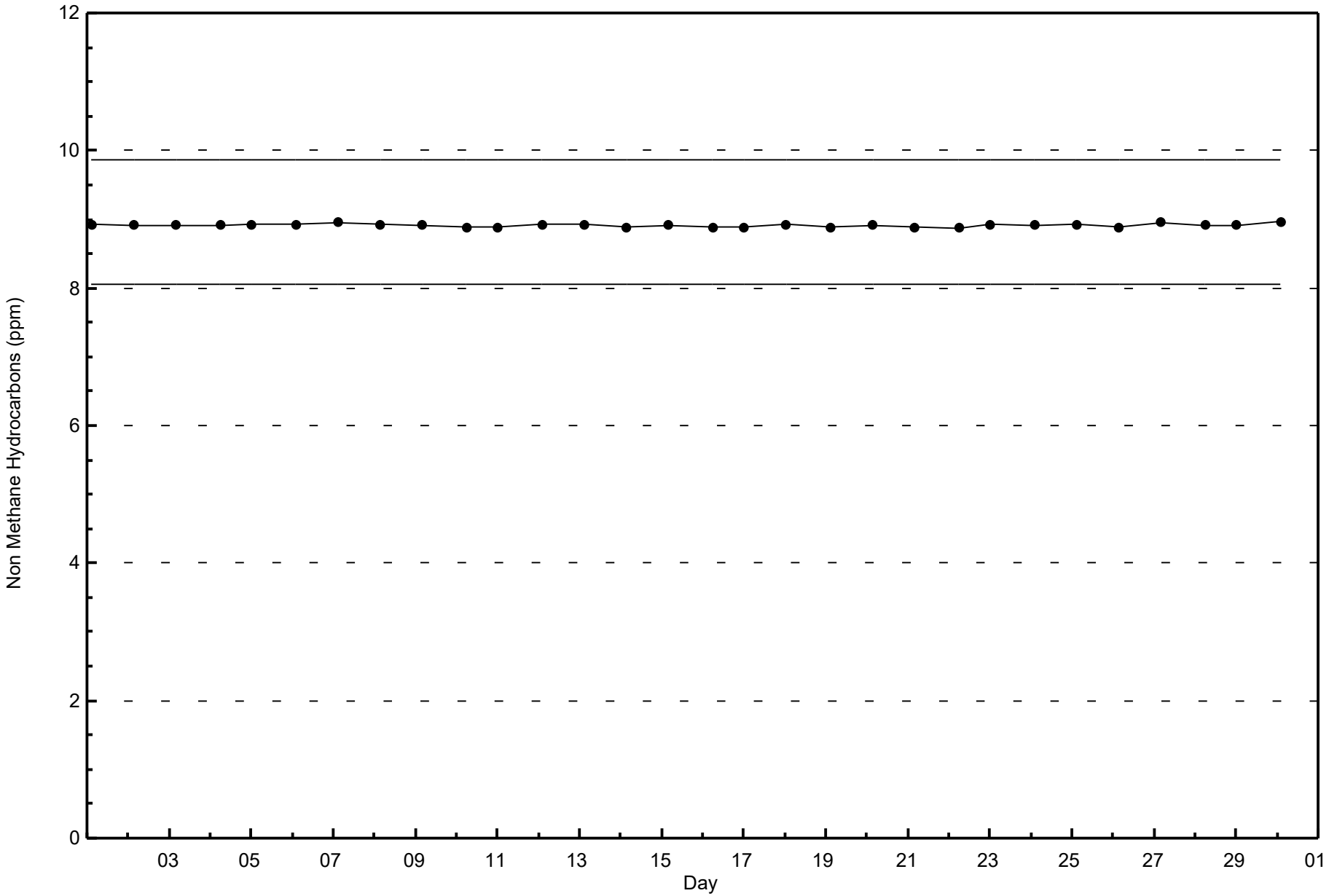


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Anzac - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Anzac - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.3 ppm on Sep 8 02:00 Maximum Daily Average: 2.1 ppm on Sep 8

Minimum Value: 2.0 ppm on Sep 20 16:00 Minimum Daily Average: 2.0 ppm on Sep 10
Maximum Diurnal Average: 2.1 ppm at hour 8 Minimum Diurnal Average: 2.0 ppm at hour 15
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} = 2.1 P_{99} = 2.3

Hours in Service:	720
Hours of Data:	687
Hours of Missing Data:	33
Hours of Calibration:	33
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-Sep	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	2.1	2.1
2-Sep	2.1	2.1	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
3-Sep	2.1	2.1	2.1	2.1	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	2.1	2.2
4-Sep	2.1	2.1	2.1	2.2	2.1	Z	2.3	2.2	2.2	2.1	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	2.1	2.3
5-Sep	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
6-Sep	2.1	Z	2.1	2.2	2.1	2.2	2.3	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	2.1	2.1	2.1	2.1	2.1	2.3
7-Sep	2.1	2.1	Z	2.1	2.1	2.1	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
8-Sep	2.2	2.3	2.1	Z	2.1	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.3
9-Sep	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	2.0	2.0	2.0	2.2
10-Sep	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
11-Sep	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
12-Sep	2.0	Z	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	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1
13-Sep	2.1	2.0	Z	2.1	2.0	2.0	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
14-Sep	2.1	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	2.1	2.1	2.1	2.1	2.0	2.1	2.1
15-Sep	2.0	2.0	2.0	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	2.1	2.0	2.0	2.0	2.0	2.0	2.1
16-Sep	2.0	2.0	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	2.1	2.1	2.1	2.1	2.0	2.1
17-Sep	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	2.2	2.2	2.1	2.2
18-Sep	2.1	Z	2.1	2.1	2.0	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	2.0	2.0	2.1	2.1	2.1	2.1
19-Sep	2.0	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	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1
20-Sep	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	2.1	2.1	2.1	2.1	2.0	2.1
21-Sep	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.2
22-Sep	2.2	2.2	2.1	2.1	2.1	Z	2.1	2.1	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.2
23-Sep	Z	2.0	2.0	2.1	2.1	2.1	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	2.1	2.1	2.1	2.1
24-Sep	2.1	Z	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
25-Sep	2.0	2.0	Z	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	2.1	2.1	2.1	2.2
26-Sep	2.2	2.2	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	2.0	2.0	2.0	2.0	2.0	2.0	2.2
27-Sep	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
28-Sep	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	2.1	2.1	2.1	2.1	2.0	2.1
29-Sep	Z	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	C	C	C	2.0	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-Sep	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	2.0
	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	2.0	2.1	2.1	2.1	2.1	Diurnal Average	
	2.2	2.3	2.1	2.2	2.2	2.2	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	2.2	2.2	Diurnal Maximum	

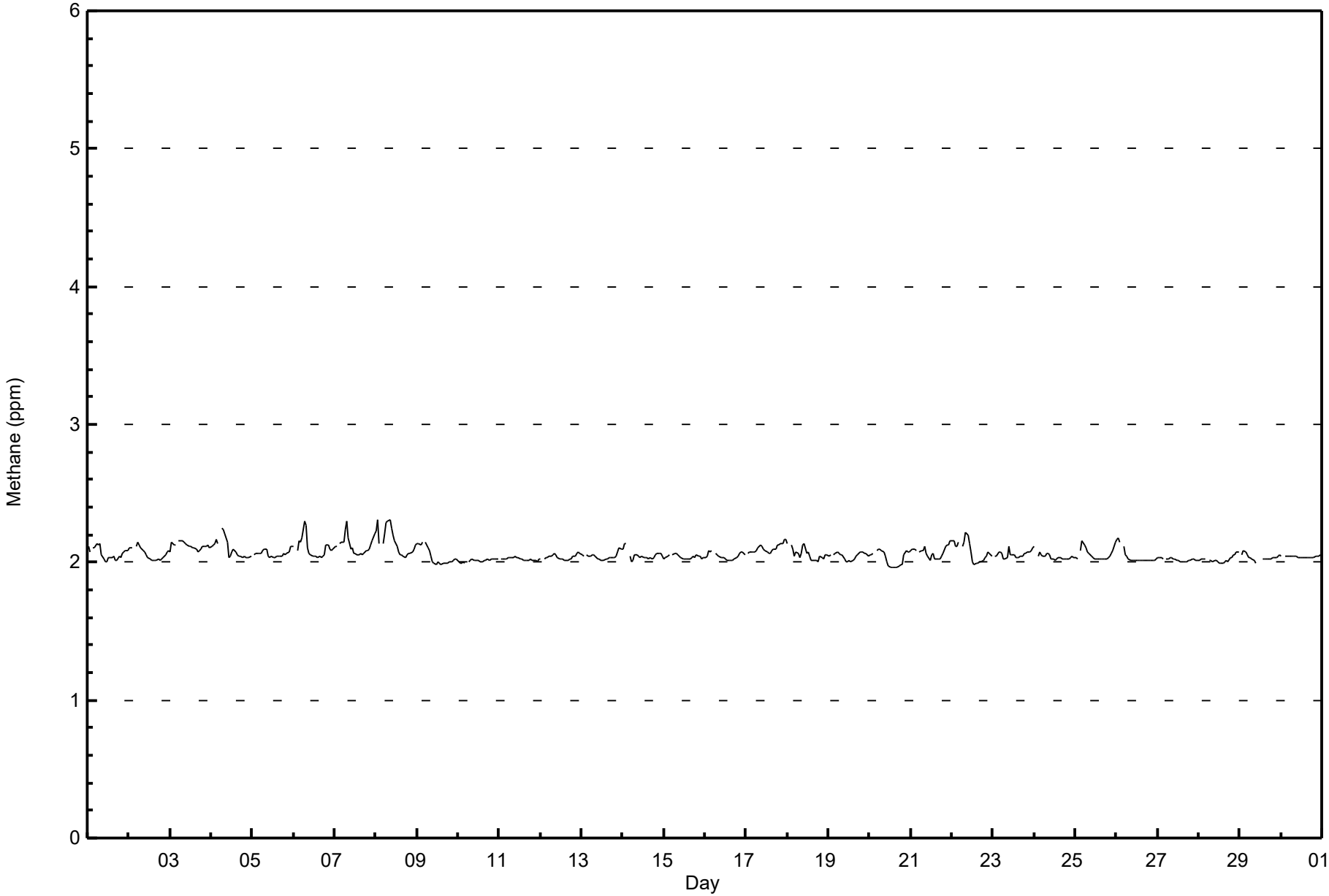
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Anzac - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	382	55.60	55.60
2.1 - 3.0	305	44.40	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 687

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Anzac - September 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	3	0	0	10	14	18	20	19	16	21	31	72	63	59	24	382
2.1 - 3.0	5	0	0	5	8	28	36	42	34	17	21	17	19	30	23	20	305
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	17	3	0	5	18	42	54	62	53	33	42	48	91	93	82	44	687

Total Number of Valid Hours: 687

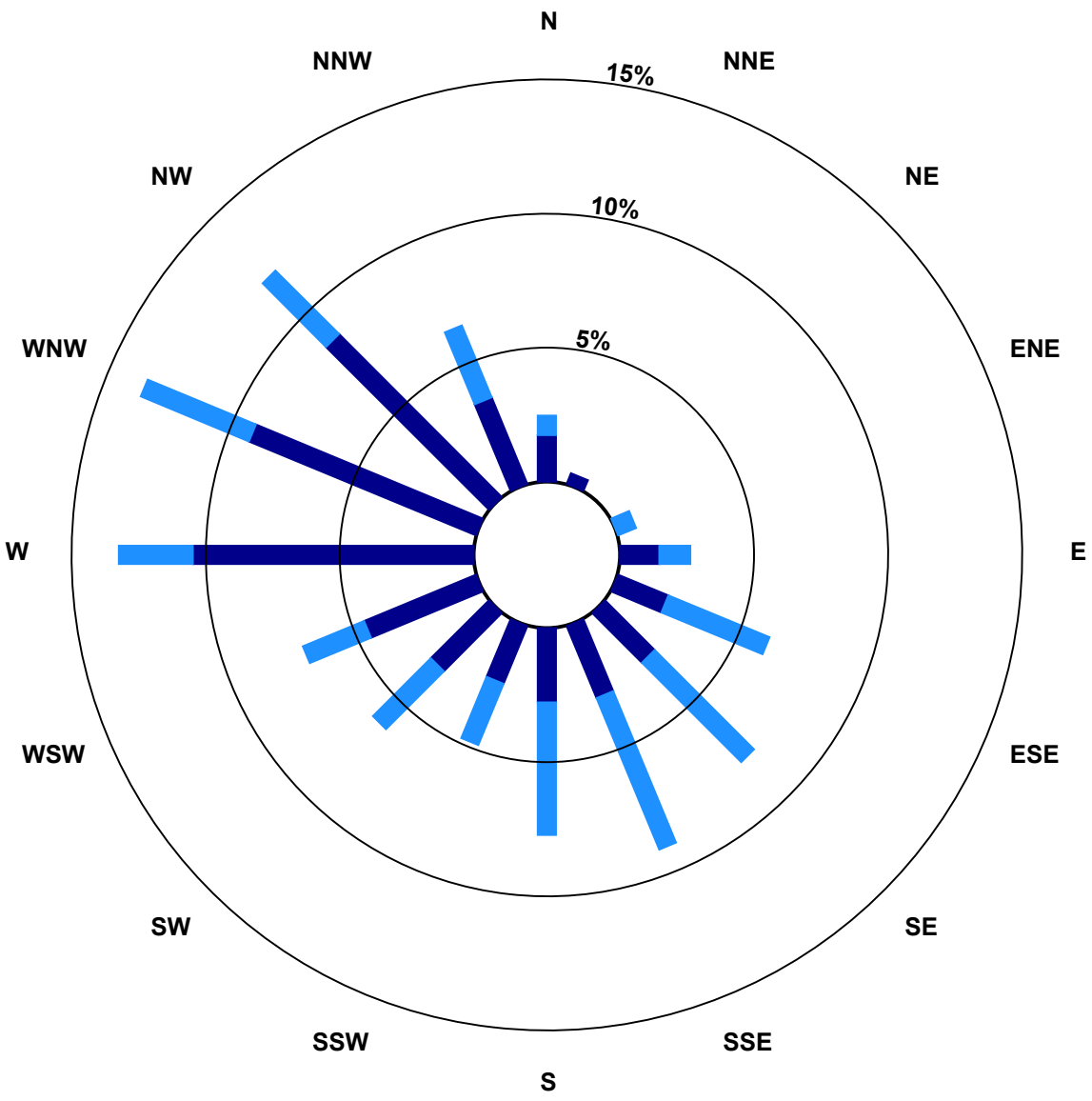
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Methane (CH_4) - ppm

Anzac



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

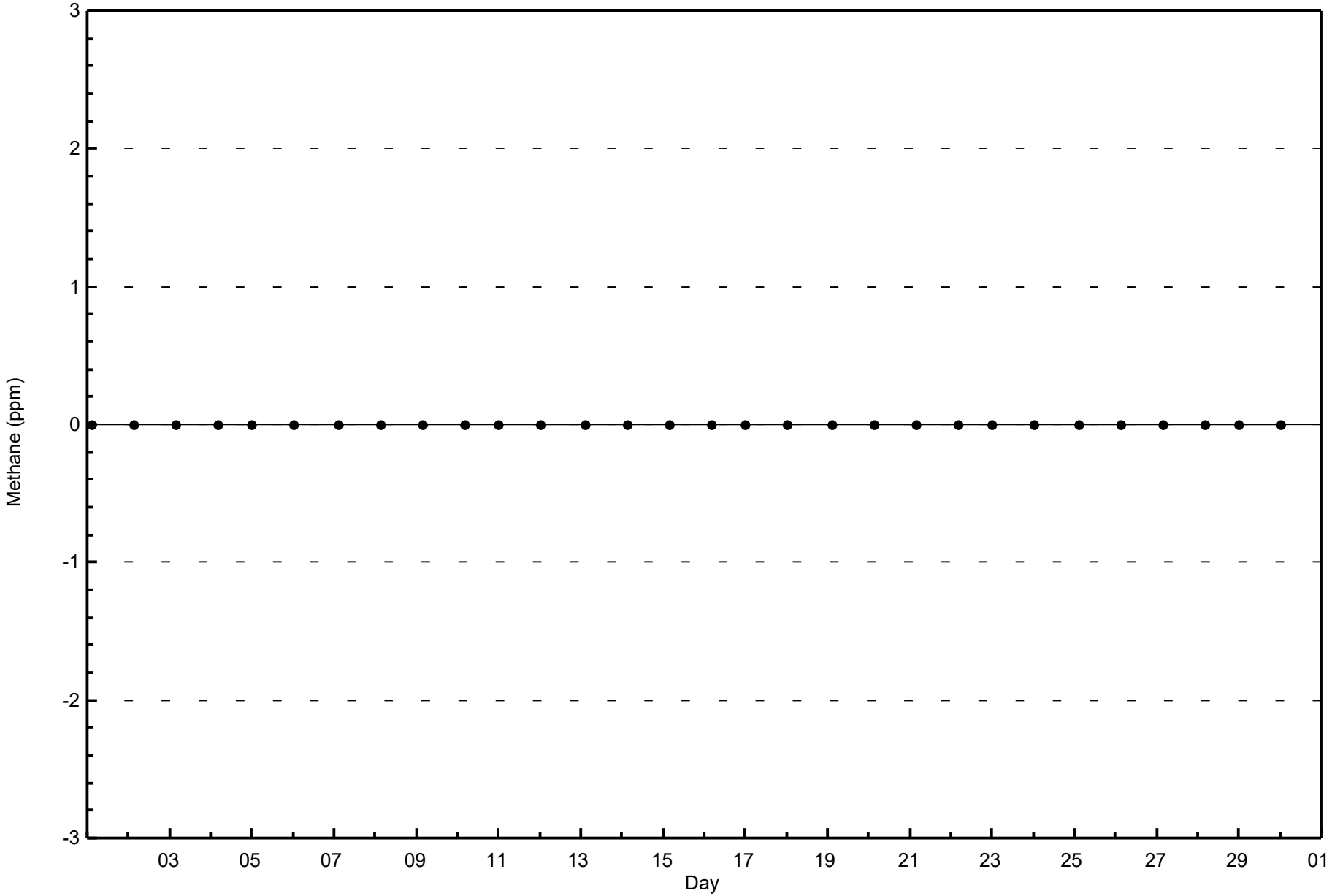
Total Number of Valid Hours: 687

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Anzac - September 2026

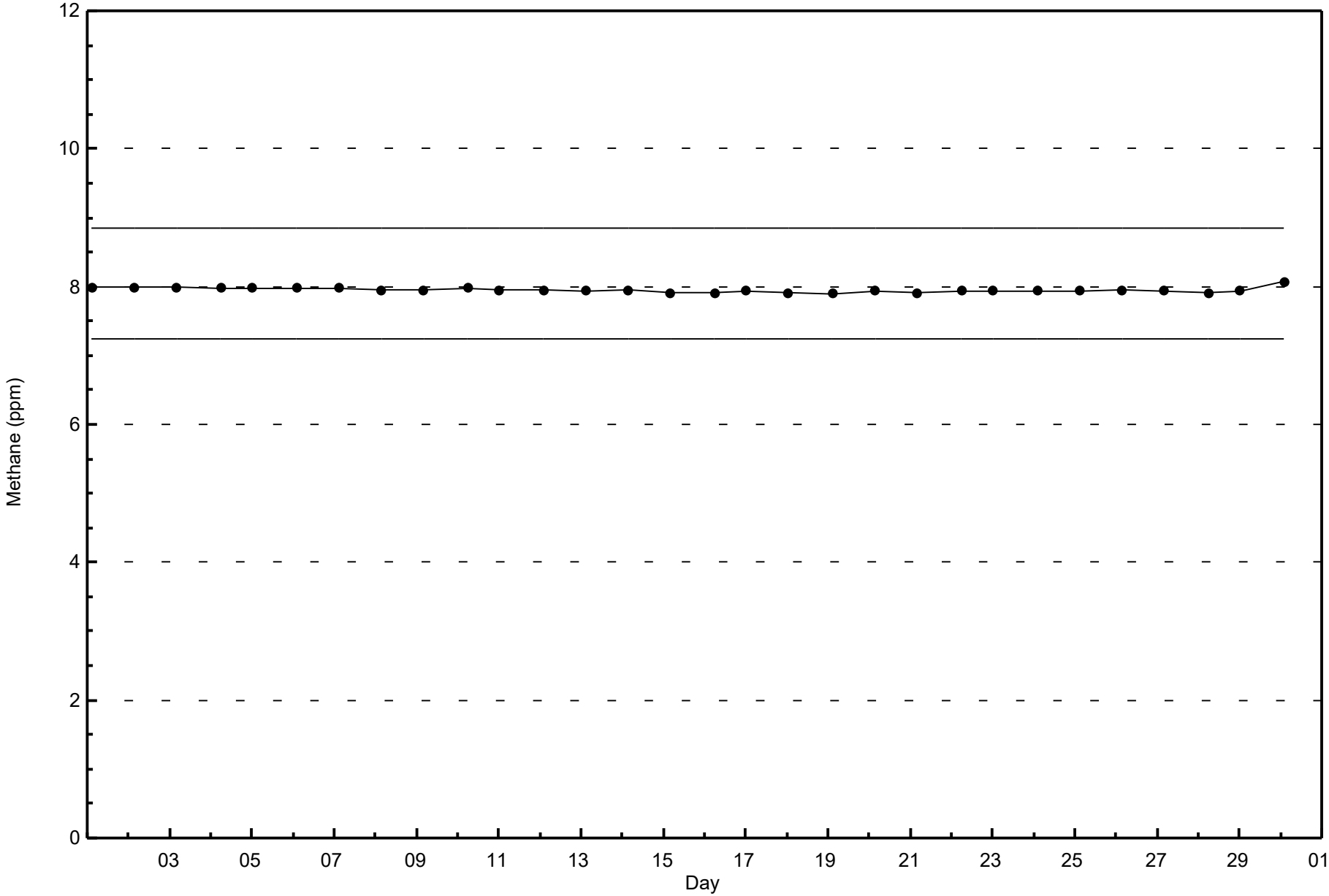


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Anzac - September 2026



Maximum Value: 16.2 ppb on Sep 24 05:00

Maximum Daily Average: 1.8 ppb on Sep 23

Minimum Value: 0.0 ppb on Sep 2 06:00

Minimum Daily Average: 0.0 ppb on Sep 25

Maximum Diurnal Average: 1.0 ppb at hour 3

Minimum Diurnal Average: 0.1 ppb at hour 20

Monthly Average: 0.33 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.2 P_{90} = 0.6 P_{99} = 4.5

Hours in Service:	720
Hours of Data:	685
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-Sep	Z	0.0	0.1	0.1	0.1	0.1	0.3	0.4	0.5	0.1	0.1	0.1	0.1	2.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	2.0
2-Sep	0.0	Z	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.6	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	2.2
3-Sep	0.7	0.0	Z	0.0	0.0	1.7	0.0	0.1	0.5	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.2	1.7
4-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.4	0.4	0.4	0.1	0.1	0.3	0.4	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
5-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.2	0.7	0.8	0.1	0.0	1.5	0.1	0.1	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.5
6-Sep	0.0	0.0	0.1	0.3	0.2	Z	0.5	0.4	0.3	1.5	0.6	0.8	0.2	1.8	0.1	0.0	0.1	0.1	0.0	0.0	0.2	0.0	0.0	0.6	0.3	1.8
7-Sep	Z	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.3	0.4	0.6	0.1	0.5	0.3	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.8	0.2	0.8
8-Sep	0.0	Z	0.0	0.0	0.0	0.2	2.0	3.8	3.9	2.8	2.3	1.6	1.6	0.7	0.7	0.4	0.1	0.0	0.0	0.0	1.3	0.0	0.0	0.1	1.0	3.9
9-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.3	1.6	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.6
10-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
11-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.1	0.3	0.5	0.6	0.7	0.4	0.4	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.7
12-Sep	0.0	0.0	0.1	0.1	0.2	Z	0.1	0.2	0.4	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.3	0.4	0.0	0.0	0.2	0.5
13-Sep	Z	1.9	0.7	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	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.2	1.9
14-Sep	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.3	0.6	0.3	0.5	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
15-Sep	0.0	0.0	Z	0.0	0.1	0.0	0.2	0.6	1.0	2.0	0.6	0.5	0.6	0.3	0.6	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.0
16-Sep	0.0	0.0	0.1	Z	0.0	0.0	0.2	0.8	1.0	0.8	0.6	0.5	0.2	0.1	0.1	0.1	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.3	1.5
17-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.1	1.2	1.7	0.7	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.1	0.1	0.0	0.2	1.7
18-Sep	0.1	0.1	0.0	0.0	0.0	Z	0.6	0.3	1.2	3.4	4.1	1.6	2.1	1.4	0.3	0.2	0.1	0.1	0.2	0.9	0.1	2.5	6.3	0.0	1.1	6.3
19-Sep	Z	6.8	3.9	3.5	0.0	0.5	0.0	0.2	0.2	0.1	0.1	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	0.7	6.8
20-Sep	0.1	Z	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.2	0.0	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.1	0.4
21-Sep	0.0	0.0	Z	0.4	0.1	0.0	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.4
22-Sep	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.1	0.4	0.6	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.6
23-Sep	8.1	10.0	15.3	2.5	Z	0.8	0.0	0.6	0.6	0.7	0.1	0.7	0.6	0.8	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	1.8	15.3
24-Sep	0.0	0.0	1.5	12.9	16.2	Z	0.2	0.4	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.6	0.0	0.0	1.5	16.2
25-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	C	C	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	0.5
26-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.2
27-Sep	0.2	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.4
28-Sep	0.0	0.1	0.0	Z	0.7	1.1	0.9	0.3	0.1	0.1	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	0.2	1.1
29-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.1	0.1	0.3	0.6	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	0.1	0.6
30-Sep	0.0	0.0	0.0	0.1	0.1	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	0.4	0.8	1.0	0.8	0.7	0.2	0.2	0.5	0.5	0.6	0.5	0.4	0.3	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	Diurnal Average	
	8.1	10.0	15.3	12.9	16.2	1.7	2.0	3.8	3.9	3.4	4.1	1.6	2.1	2.0	0.7	0.5	0.2	0.3	1.5	0.9	1.3	2.5	6.3	0.8	Diurnal Maximum	

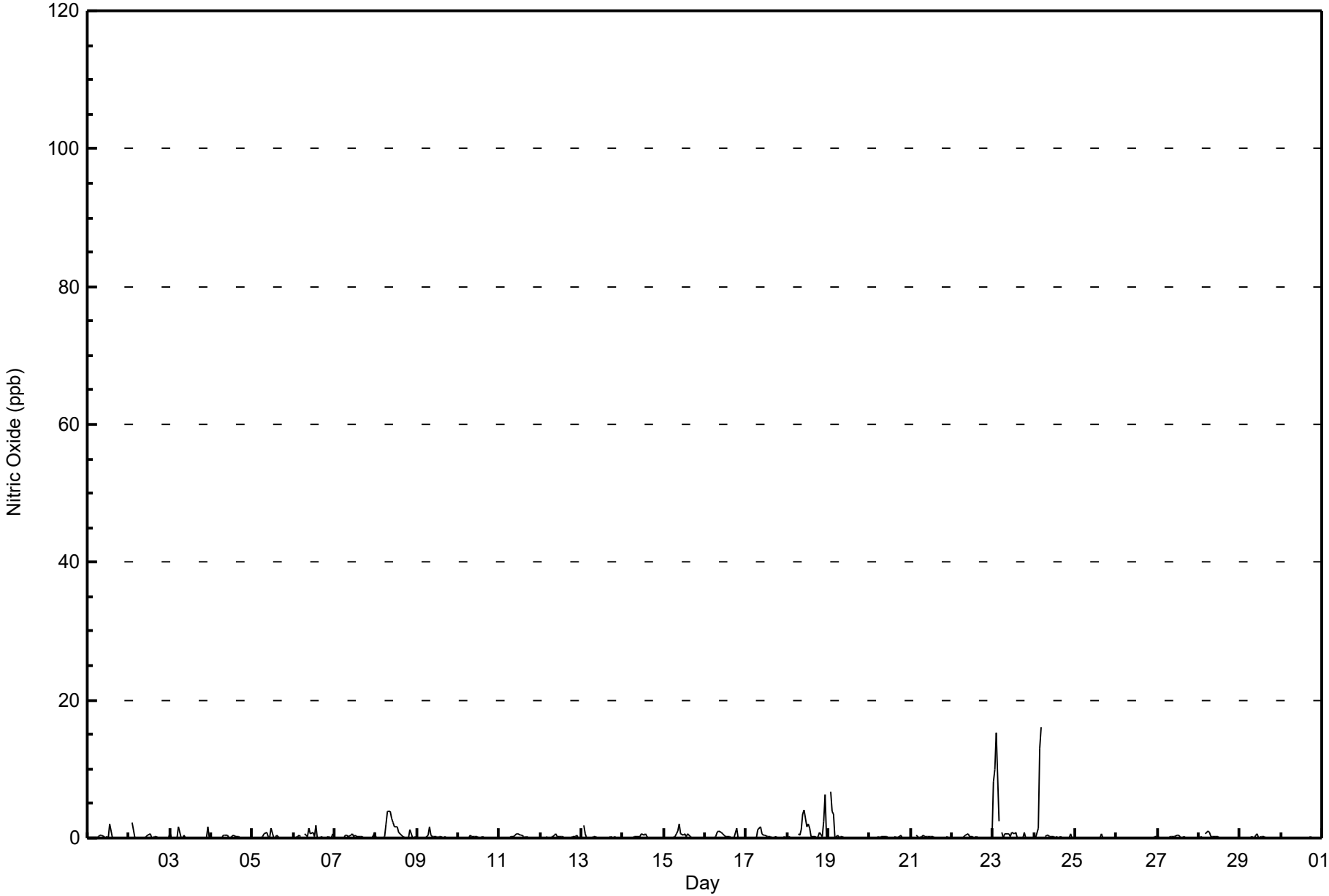
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Anzac - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	685	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Anzac - September 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	18	3	0	5	14	42	56	60	53	32	41	49	96	92	80	44	685
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	18	3	0	5	14	42	56	60	53	32	41	49	96	92	80	44	685

Total Number of Valid Hours: 685

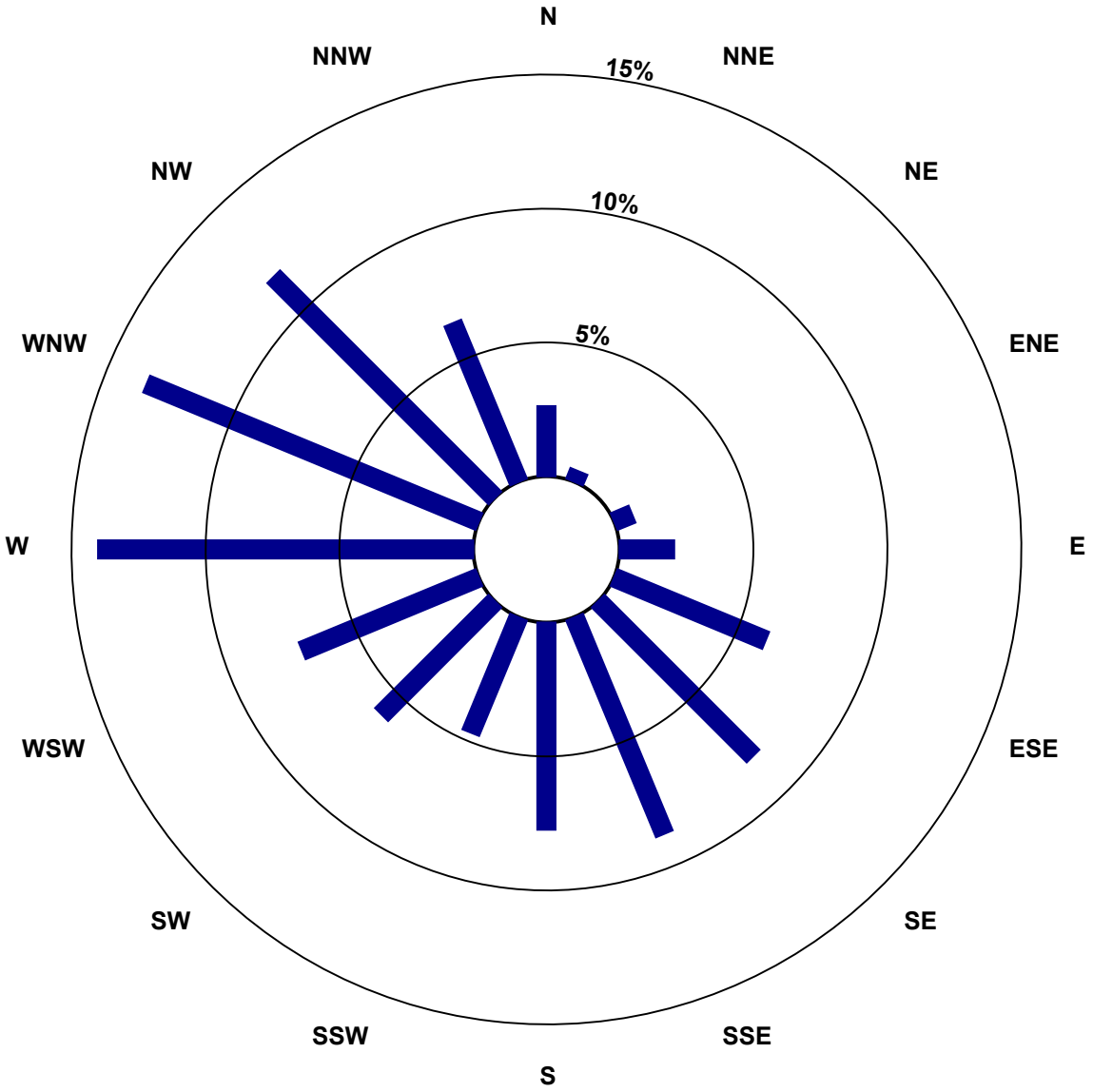
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Anzac



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

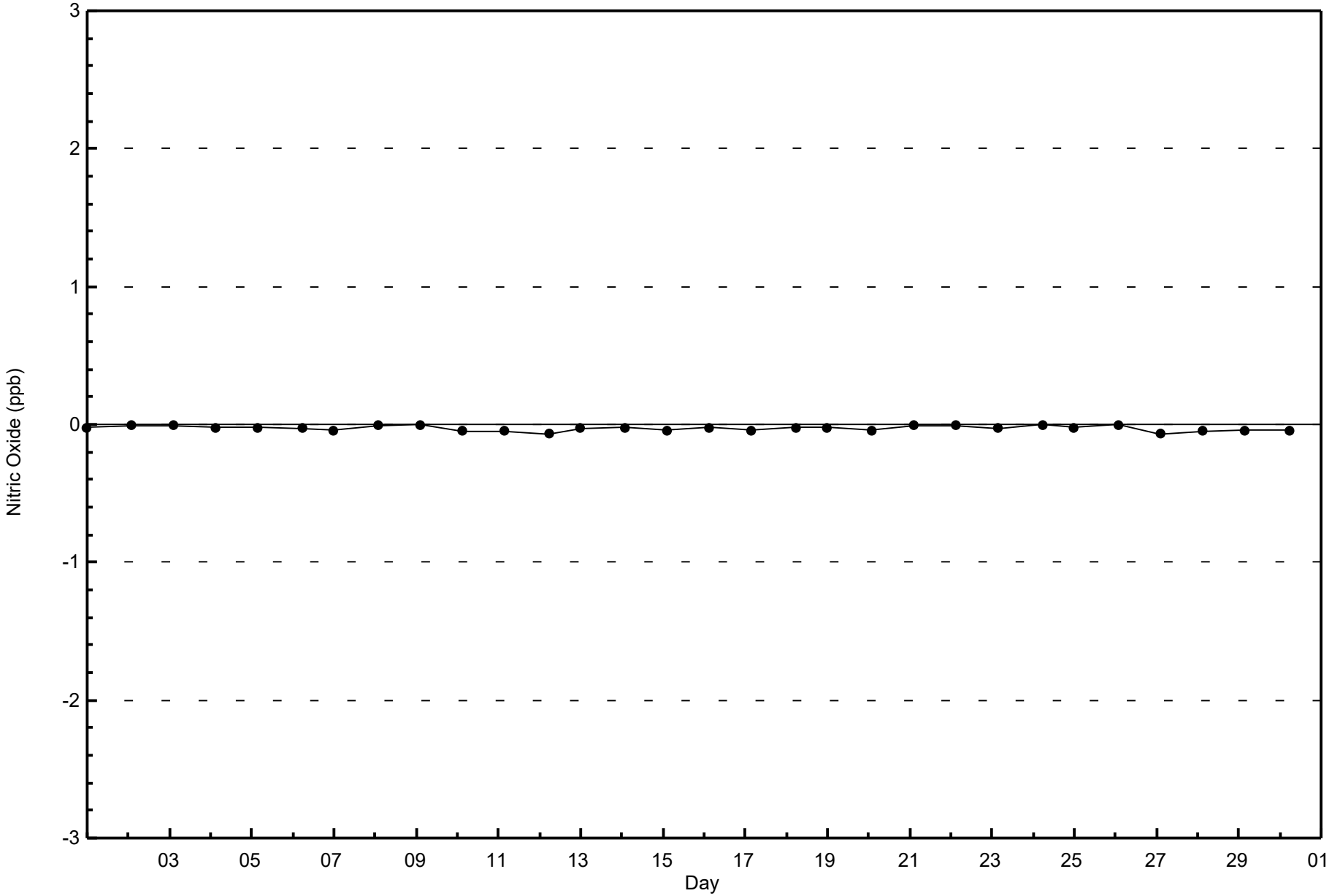
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Anzac - September 2026

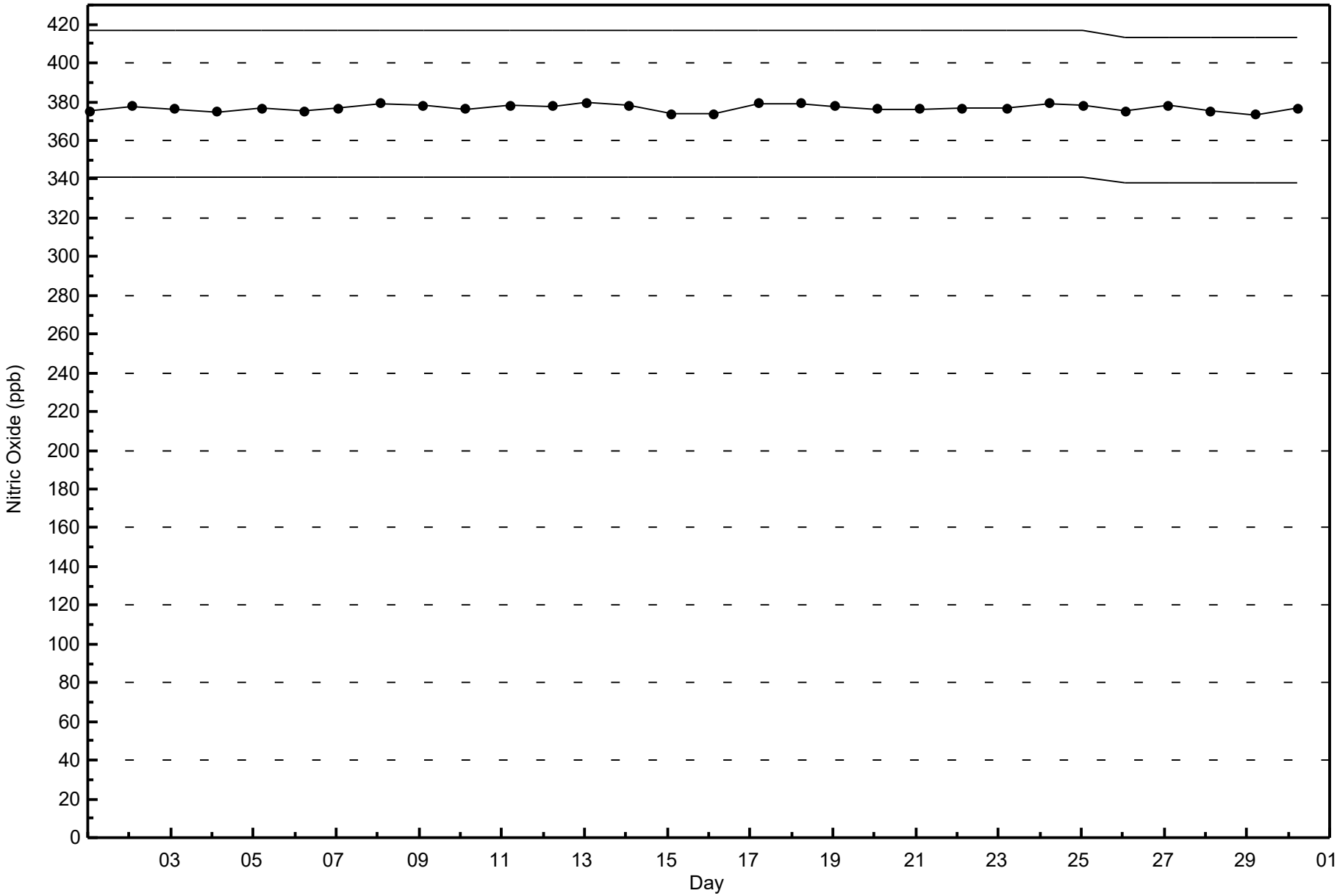


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Anzac - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Anzac - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9.8 ppb on Sep 3 00:00 Maximum Daily Average: 3.1 ppb on Sep 8

Minimum Value: 0.1 ppb on Sep 10 23:00 Minimum Daily Average: 0.3 ppb on Sep 10
Maximum Diurnal Average: 1.7 ppb at hour 3 Minimum Diurnal Average: 0.6 ppb at hour 17
Monthly Average: 1.14 ppb Percentiles: P_1 = 0.2 P_{10} = 0.3 Q_1 = 0.4 Median = 0.8 Q_3 = 1.3 P_{90} = 2.2 P_{99} = 7.0

Hours in Service: 720
Hours of Data: 685
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-Sep	Z	1.1	1.1	0.5	0.3	1.0	1.3	1.3	1.5	0.6	0.6	0.8	1.0	1.7	0.8	0.9	0.6	0.4	0.5	0.3	0.4	1.4	1.5	1.3	0.9	1.7
2-Sep	0.3	Z	1.4	0.5	0.4	0.3	0.3	0.3	0.4	0.4	1.0	1.5	1.8	0.5	0.3	1.0	1.0	0.3	0.4	0.6	0.6	5.2	9.2	9.8	1.6	9.8
3-Sep	1.5	0.2	Z	0.5	0.3	0.5	0.3	0.4	1.7	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.2	0.5	0.5	1.7
4-Sep	2.0	0.5	0.6	Z	0.9	0.7	0.7	1.3	1.0	0.9	0.7	0.6	1.5	1.6	0.7	0.8	0.7	0.9	0.4	0.8	0.4	0.5	0.3	0.4	0.8	2.0
5-Sep	0.9	0.8	1.1	1.6	Z	1.8	2.3	2.6	1.7	0.5	0.3	1.2	0.2	0.4	0.8	0.5	0.3	0.3	0.3	0.4	0.4	0.8	1.6	1.2	1.0	2.6
6-Sep	0.6	0.4	1.2	4.5	5.8	Z	2.5	1.4	0.8	1.5	1.5	2.0	0.5	3.3	0.4	0.3	0.6	0.4	0.4	1.2	0.5	0.4	1.2	1.7	1.4	5.8
7-Sep	Z	1.1	0.5	0.8	0.8	0.6	1.5	1.6	0.9	1.3	1.4	0.7	1.2	0.9	0.8	0.7	1.0	0.6	0.3	0.3	0.3	0.3	0.4	0.7	0.8	1.6
8-Sep	0.6	Z	1.1	0.8	2.2	6.2	9.2	9.1	8.1	4.9	3.8	3.7	3.8	2.8	2.9	2.4	1.5	1.0	0.9	0.9	2.1	0.8	0.6	0.9	3.1	9.2
9-Sep	0.8	0.5	Z	1.0	1.2	1.3	2.4	2.3	1.3	1.0	0.8	0.6	0.5	0.6	0.5	0.5	0.7	0.5	0.6	0.9	0.6	0.5	0.5	0.3	0.9	2.4
10-Sep	0.2	0.2	0.2	Z	0.5	0.5	0.5	0.8	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.3	0.8
11-Sep	0.2	0.2	0.2	0.2	Z	0.7	1.2	1.3	1.4	1.6	1.3	1.4	1.1	1.3	0.5	0.3	0.8	1.4	1.5	1.2	1.3	0.8	0.2	0.3	0.9	1.6
12-Sep	0.3	0.2	0.2	0.2	0.3	Z	0.6	0.8	0.7	1.2	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.3	0.6	0.9	1.1	1.5	0.7	0.6	0.5	1.5
13-Sep	Z	2.1	1.0	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.6	0.6	1.0	1.1	2.2	0.8	1.1	4.6	4.2	1.1	4.6
14-Sep	3.8	Z	7.2	4.2	1.0	0.2	1.2	2.7	1.2	1.0	0.8	1.6	1.0	1.4	0.7	0.6	0.5	0.5	1.8	3.3	3.8	4.1	2.6	1.7	2.0	7.2
15-Sep	0.3	0.3	Z	0.7	0.5	0.5	0.9	1.7	2.2	1.1	0.9	0.7	0.7	0.9	1.4	0.7	0.5	0.5	0.6	0.5	0.6	0.6	0.4	0.3	0.8	2.2
16-Sep	0.3	0.8	4.1	Z	3.9	4.5	3.5	2.7	2.1	1.7	1.3	1.1	0.7	0.6	0.7	0.6	0.7	0.8	1.8	0.6	0.6	0.7	0.4	0.3	1.5	4.5
17-Sep	1.4	0.3	0.2	0.2	Z	1.0	1.3	3.3	2.7	1.4	1.4	1.5	1.5	1.7	1.3	0.9	0.8	1.6	0.9	0.6	1.3	1.4	1.3	1.3	1.3	3.3
18-Sep	0.6	0.7	1.3	1.5	0.8	Z	3.8	1.7	2.5	5.1	5.8	3.1	4.3	3.3	1.0	0.8	1.1	1.0	0.9	1.6	1.2	2.5	7.0	2.5	2.4	7.0
19-Sep	Z	3.5	1.8	1.8	0.8	1.1	0.9	1.3	1.0	0.4	0.4	0.3	0.4	0.6	0.4	0.6	0.9	1.0	1.0	1.3	1.3	1.3	1.3	1.1	1.1	3.5
20-Sep	1.0	Z	1.4	1.1	1.2	1.7	1.3	1.2	1.1	0.9	1.0	0.4	0.4	0.4	0.4	0.8	0.6	2.3	1.8	1.3	0.7	0.9	0.9	0.9	1.0	2.3
21-Sep	1.0	0.9	Z	2.4	1.8	1.5	2.2	1.9	1.5	1.5	1.6	1.5	1.6	1.8	1.0	1.0	1.3	1.6	1.4	1.0	1.4	1.8	1.2	1.2	1.5	2.4
22-Sep	1.7	1.3	1.0	Z	1.3	1.1	1.0	0.8	2.1	2.0	1.1	0.8	0.5	0.4	0.7	0.6	0.5	0.4	0.7	1.4	1.6	1.2	0.8	0.8	1.0	2.1
23-Sep	1.3	3.1	8.1	3.8	Z	1.2	0.6	0.8	1.5	2.1	1.2	2.8	2.8	3.2	0.5	0.4	0.4	0.3	1.0	0.5	2.0	1.9	1.4	1.2	1.8	8.1
24-Sep	0.9	0.8	2.2	6.8	4.6	Z	1.8	1.6	1.6	1.2	1.2	1.1	0.5	0.6	0.5	0.6	0.5	0.8	0.8	1.3	1.4	1.9	1.1	0.5	1.5	6.8
25-Sep	Z	0.7	0.5	0.9	0.9	1.0	0.5	C	C	C	C	C	0.1	0.1	0.1	0.7	0.2	0.2	0.2	0.2	0.2	0.3	0.2	6.2	0.7	6.2
26-Sep	6.4	Z	4.6	5.7	5.1	0.7	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	0.1	0.1	0.2	0.3	1.1	6.4
27-Sep	0.2	0.3	Z	0.4	0.3	0.4	0.6	0.5	0.4	0.4	0.4	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.9	0.6	0.7	0.8	0.5	0.6	0.5	0.9
28-Sep	0.6	1.5	0.6	Z	1.4	1.7	1.4	1.0	0.7	0.6	0.6	0.5	0.3	0.3	0.4	0.5	0.6	0.9	0.6	0.7	1.1	1.7	2.2	2.0	1.0	2.2
29-Sep	1.9	1.6	1.7	1.6	Z	1.1	1.1	1.3	1.1	1.0	0.9	0.5	0.5	0.4	0.4	0.2	0.2	0.2	0.2	0.5	0.3	0.3	0.3	0.2	0.8	1.9
30-Sep	0.2	0.2	0.3	0.3	0.2	Z	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.6	0.3	0.3	1.0	1.0	1.4	1.2	0.4	1.4
	1.2	0.9	1.7	1.7	1.5	1.3	1.5	1.6	1.5	1.2	1.1	1.1	1.0	1.0	0.6	0.6	0.6	0.7	0.8	0.9	0.9	1.2	1.5	1.5	Diurnal Average	
	6.4	3.5	8.1	6.8	5.8	6.2	9.2	9.1	8.1	5.1	5.8	3.7	4.3	3.3	2.9	2.4	1.5	2.3	1.8	3.3	3.8	5.2	9.2	9.8	Diurnal Maximum	

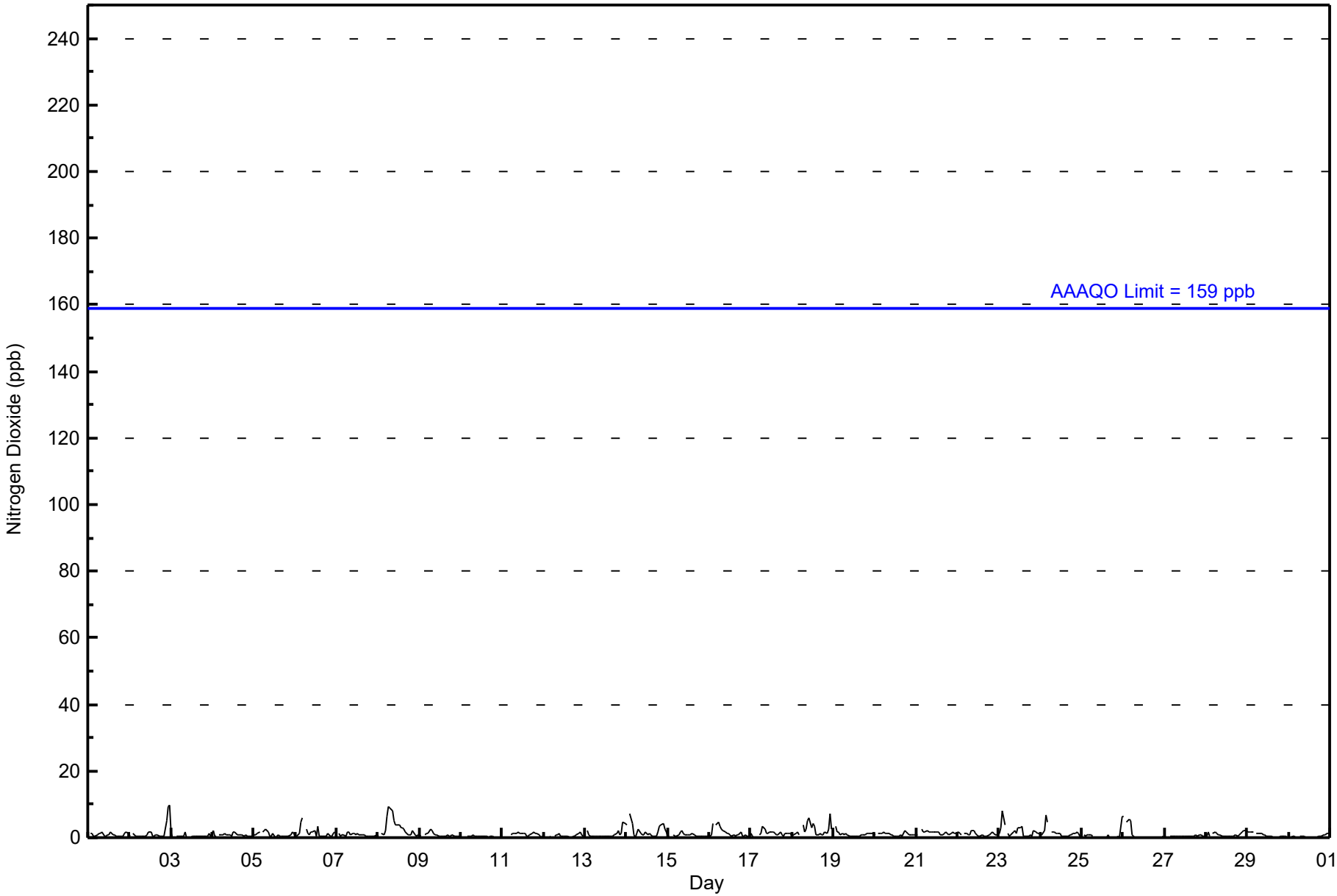
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Anzac - September 2026



Nitrogen Dioxide (NO_2) - ppb
Anzac - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	685	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Anzac - September 2026

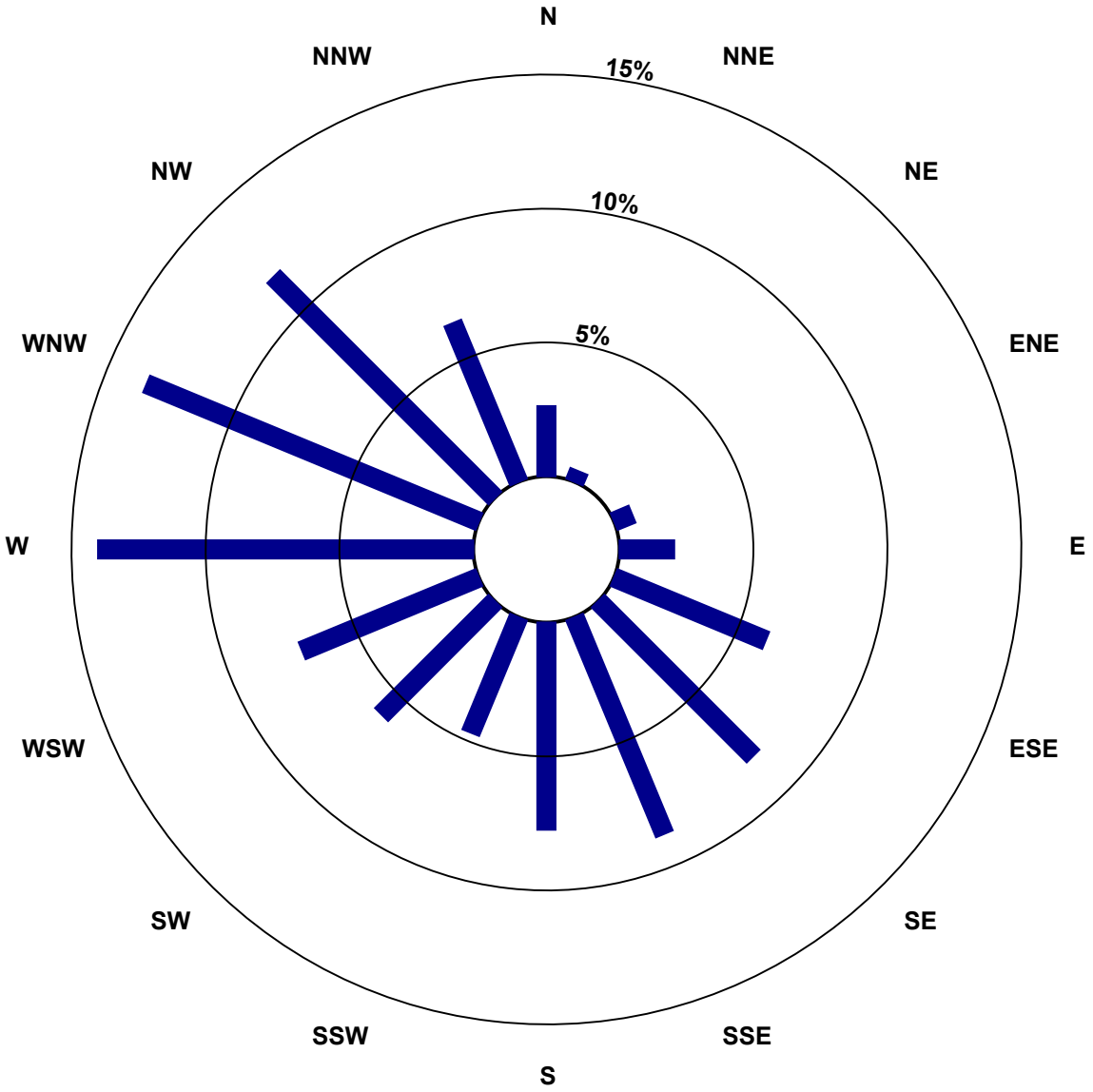
Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	18	3	0	5	14	42	56	60	53	32	41	49	96	92	80	44	685
21 - 40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81 - 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	18	3	0	5	14	42	56	60	53	32	41	49	96	92	80	44	685

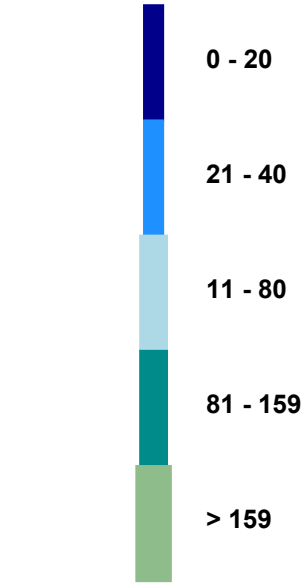
Total Number of Valid Hours: 685

Total Number of Hours: 720

Nitrogen Dioxide (NO_2) - ppb

Anzac





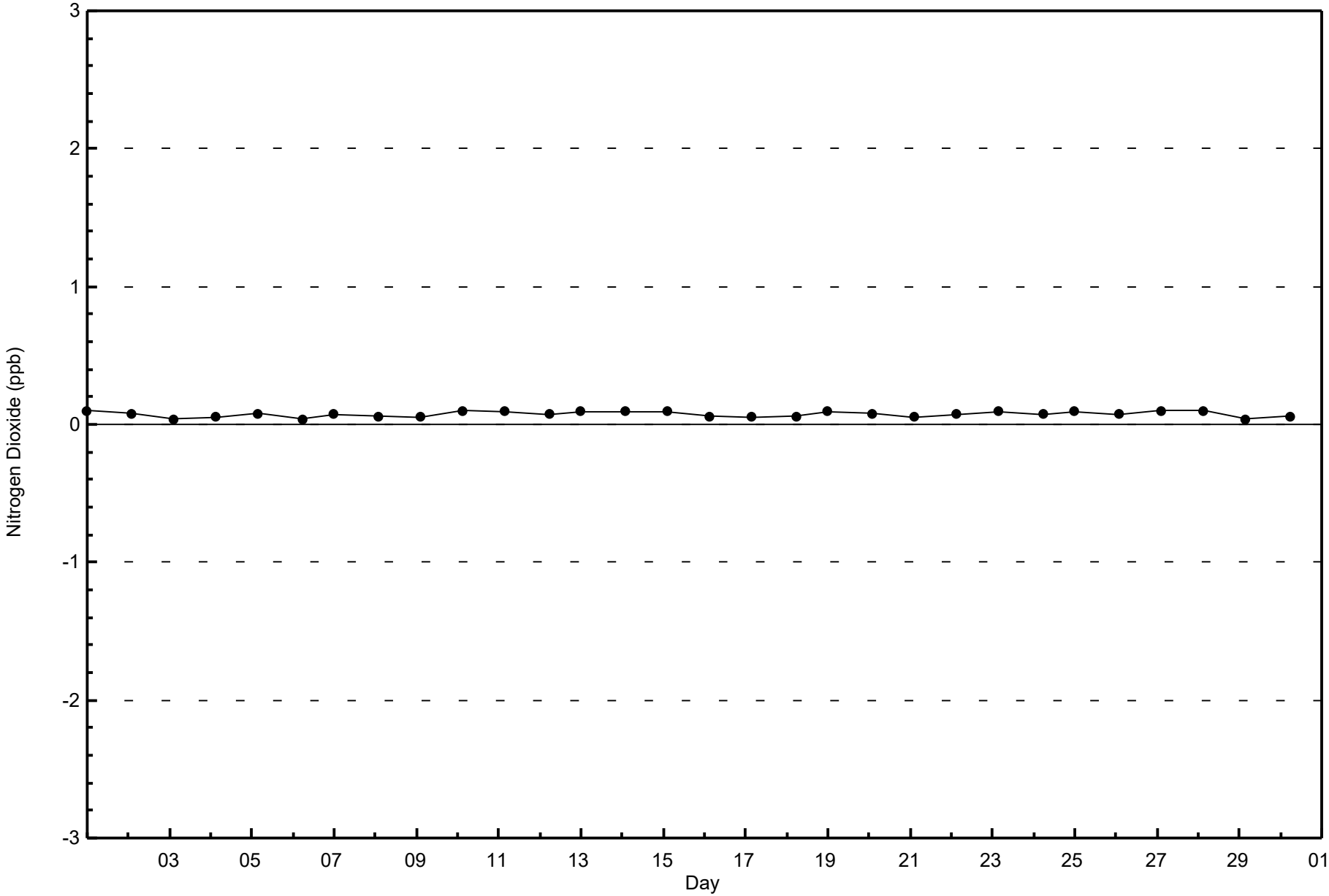
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Anzac - September 2026

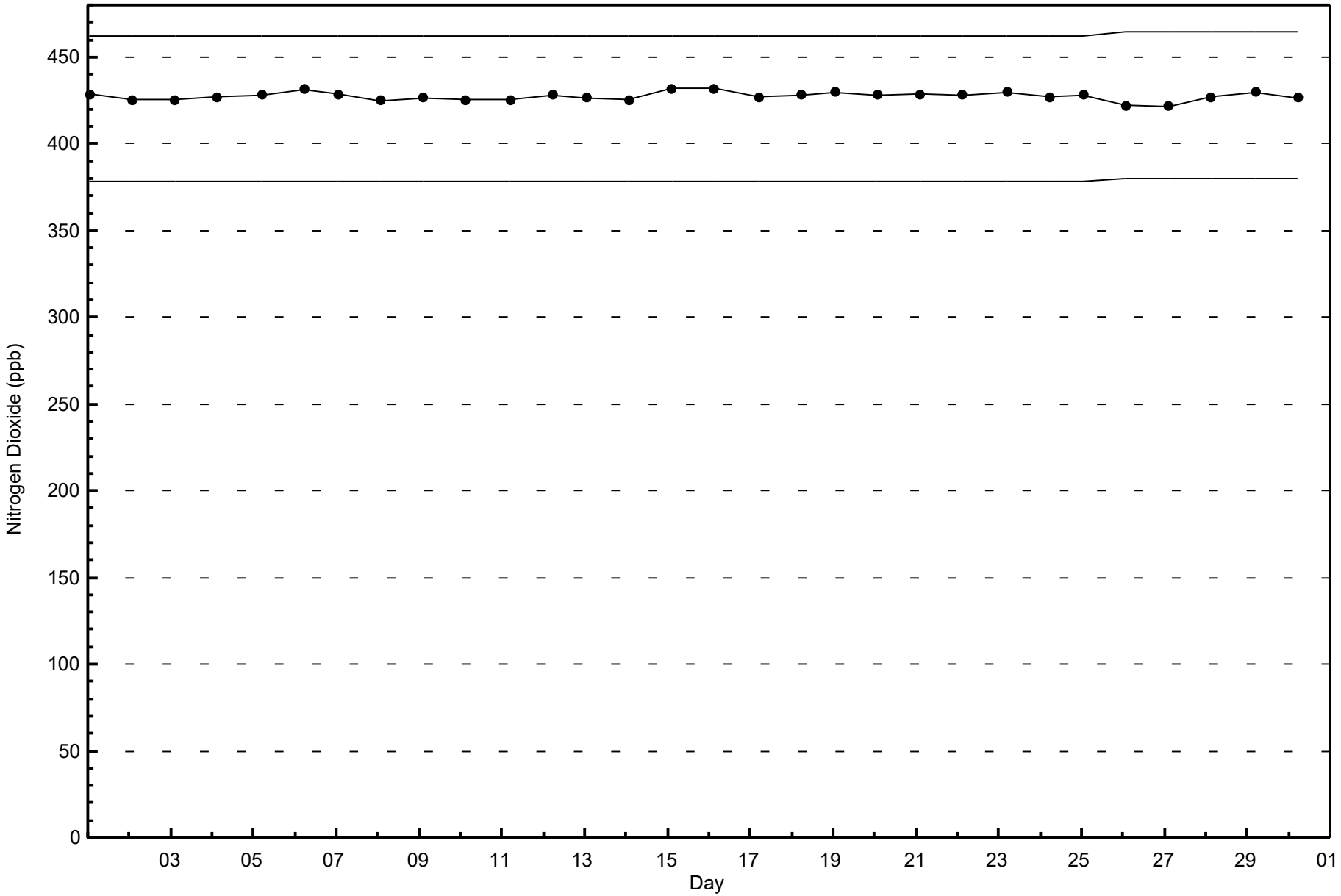


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Anzac - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Anzac - September 2026

Maximum Value: 23.4 ppb on Sep 23 03:00

Maximum Daily Average: 4.0 ppb on Sep 8

Minimum Value: 0.1 ppb on Sep 25 14:00

Minimum Daily Average: 0.4 ppb on Sep 10

Maximum Diurnal Average: 2.7 ppb at hour 3

Minimum Diurnal Average: 0.7 ppb at hour 17

Monthly Average: 1.47 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.5$ Median = 0.8 $Q_3 = 1.6$ $P_{90} = 3.0$ $P_{99} = 11.3$

Hours in Service:	720
Hours of Data:	685
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-Sep	Z	1.1	1.2	0.6	0.4	1.1	1.6	1.7	2.0	0.7	0.7	0.9	1.1	3.7	0.9	1.0	0.7	0.5	0.6	0.3	0.4	1.4	1.5	1.3	1.1	3.7
2-Sep	0.3	Z	3.6	0.5	0.4	0.3	0.3	0.3	0.4	0.4	1.3	1.9	2.4	0.6	0.4	1.2	1.2	0.3	0.4	0.6	0.6	5.3	9.3	9.9	1.8	9.9
3-Sep	2.2	0.2	Z	0.5	0.3	2.2	0.3	0.5	2.2	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2.9	0.5	0.7	2.9
4-Sep	2.0	0.5	0.6	Z	0.9	0.7	0.7	1.7	1.4	1.3	0.8	0.7	1.8	2.0	0.8	1.0	0.8	1.0	0.4	0.8	0.4	0.5	0.3	0.4	0.9	2.0
5-Sep	0.9	0.8	1.1	1.6	Z	1.8	2.5	3.3	2.5	0.6	0.3	2.7	0.3	0.5	1.2	0.7	0.3	0.3	0.3	0.4	0.4	0.8	1.6	1.2	1.1	3.3
6-Sep	0.6	0.4	1.3	4.8	6.0	Z	3.0	1.8	1.1	3.0	2.1	2.8	0.7	5.1	0.5	0.3	0.7	0.5	0.4	1.2	0.7	0.4	1.2	2.3	1.8	6.0
7-Sep	Z	1.1	0.5	0.8	0.8	0.7	1.8	2.0	1.2	1.7	2.0	0.8	1.7	1.2	1.0	0.9	1.2	0.7	0.3	0.3	0.3	0.3	0.4	1.5	1.0	2.0
8-Sep	0.6	Z	1.1	0.8	2.2	6.4	11.2	12.9	12.0	7.7	6.1	5.3	5.4	3.5	3.6	2.8	1.6	1.0	0.9	0.9	3.4	0.8	0.6	1.0	4.0	12.9
9-Sep	0.8	0.5	Z	1.0	1.2	1.3	2.7	3.9	1.7	1.2	1.0	0.7	0.6	0.7	0.6	0.5	0.8	0.6	0.6	0.9	0.6	0.5	0.5	0.3	1.0	3.9
10-Sep	0.2	0.2	0.2	Z	0.5	0.5	0.6	1.1	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.4	0.3	0.4	0.3	0.2	0.2	0.2	0.1	0.2	0.4	1.1
11-Sep	0.2	0.2	0.2	0.2	Z	0.7	1.3	1.4	1.7	2.1	1.9	2.1	1.5	1.7	0.7	0.4	0.9	1.5	1.6	1.2	1.3	0.8	0.2	0.3	1.0	2.1
12-Sep	0.3	0.2	0.3	0.3	0.5	Z	0.7	1.0	1.1	1.7	0.8	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.7	1.1	1.4	1.9	0.7	0.6	0.7	1.9
13-Sep	Z	4.0	1.7	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.7	0.6	1.1	1.2	2.3	0.8	1.2	4.6	4.2	1.3	4.6
14-Sep	3.8	Z	7.3	4.2	1.0	0.2	1.2	2.9	1.4	1.2	1.1	2.2	1.3	1.9	0.8	0.7	0.5	0.5	1.8	3.3	3.8	4.1	2.6	1.7	2.2	7.3
15-Sep	0.3	0.3	Z	0.7	0.6	0.5	1.1	2.3	3.2	3.1	1.5	1.2	1.3	1.2	2.0	0.9	0.6	0.5	0.6	0.5	0.6	0.6	0.4	0.3	1.1	3.2
16-Sep	0.3	0.8	4.2	Z	3.9	4.5	3.7	3.5	3.1	2.5	1.9	1.6	0.9	0.7	0.8	0.7	0.7	0.8	3.3	0.6	0.6	0.7	0.4	0.3	1.8	4.5
17-Sep	1.4	0.3	0.2	0.2	Z	1.0	1.4	4.5	4.4	2.1	1.8	1.8	1.7	1.9	1.4	1.0	0.9	1.8	1.0	0.6	1.3	1.5	1.4	1.3	1.5	4.5
18-Sep	0.7	0.8	1.3	1.5	0.8	Z	4.4	2.0	3.7	8.5	9.9	4.7	6.4	4.7	1.3	1.0	1.2	1.1	1.1	2.5	1.3	5.0	13.3	2.5	3.5	13.3
19-Sep	Z	10.3	5.7	5.3	0.8	1.6	0.9	1.5	1.2	0.5	0.5	0.3	0.4	0.6	0.5	0.7	1.0	1.1	1.0	1.3	1.3	1.3	1.3	1.1	1.7	10.3
20-Sep	1.1	Z	1.4	1.1	1.2	1.8	1.3	1.3	1.3	1.0	1.2	0.5	0.5	0.5	0.4	1.0	0.6	2.6	2.2	1.3	0.7	0.9	0.9	0.9	1.1	2.6
21-Sep	1.0	0.9	Z	2.8	1.9	1.5	2.4	2.2	1.8	1.7	1.8	1.7	1.7	1.9	1.1	1.1	1.3	1.6	1.4	1.0	1.4	1.9	1.2	1.2	1.6	2.8
22-Sep	1.7	1.3	1.0	Z	1.4	1.1	1.0	0.9	2.5	2.6	1.4	1.0	0.6	0.5	0.8	0.7	0.6	0.4	0.7	1.4	1.7	1.2	0.8	0.8	1.1	2.6
23-Sep	9.4	13.1	23.4	6.3	Z	2.0	0.6	1.4	2.1	2.8	1.3	3.5	3.4	4.0	0.5	0.4	0.4	0.3	1.7	0.5	2.0	1.9	1.4	1.2	3.6	23.4
24-Sep	0.9	0.8	3.7	19.7	20.8	Z	2.0	2.0	2.0	1.4	1.4	1.3	0.6	0.7	0.6	0.7	0.5	0.8	0.8	1.4	1.4	2.5	1.1	0.5	2.9	20.8
25-Sep	Z	0.7	0.5	0.9	0.9	1.0	0.5	C	C	C	C	C	0.1	0.1	0.1	1.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	6.2	0.8	6.2
26-Sep	6.4	Z	4.6	5.7	5.1	0.7	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.3	0.5	1.2	6.4
27-Sep	0.4	0.4	Z	0.5	0.4	0.5	0.7	0.6	0.6	0.6	0.6	0.9	0.8	0.6	0.4	0.4	0.4	0.4	1.0	0.6	0.8	0.8	0.5	0.6	0.6	1.0
28-Sep	0.6	1.6	0.6	Z	2.1	2.8	2.3	1.3	0.8	0.7	0.8	0.6	0.4	0.3	0.4	0.6	0.7	1.0	0.6	0.7	1.1	1.7	2.2	2.0	1.1	2.8
29-Sep	1.9	1.6	1.7	1.6	Z	1.1	1.2	1.4	1.2	1.3	1.5	0.6	0.7	0.5	0.5	0.2	0.2	0.2	0.2	0.5	0.3	0.3	0.3	0.2	0.8	1.9
30-Sep	0.2	0.2	0.3	0.4	0.3	Z	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.8	0.3	0.3	1.0	1.0	1.4	1.2	0.4	1.4
	1.5	1.7	2.7	2.5	2.2	1.5	1.8	2.1	2.0	1.8	1.6	1.4	1.3	1.4	0.8	0.7	0.7	0.8	0.9	0.9	1.0	1.3	1.8	1.5	Diurnal Average	
	9.4	13.1	23.4	19.7	20.8	6.4	11.2	12.9	12.0	8.5	9.9	5.3	6.4	5.1	3.6	2.8	1.6	2.6	3.3	3.3	3.8	5.3	13.3	9.9	Diurnal Maximum	

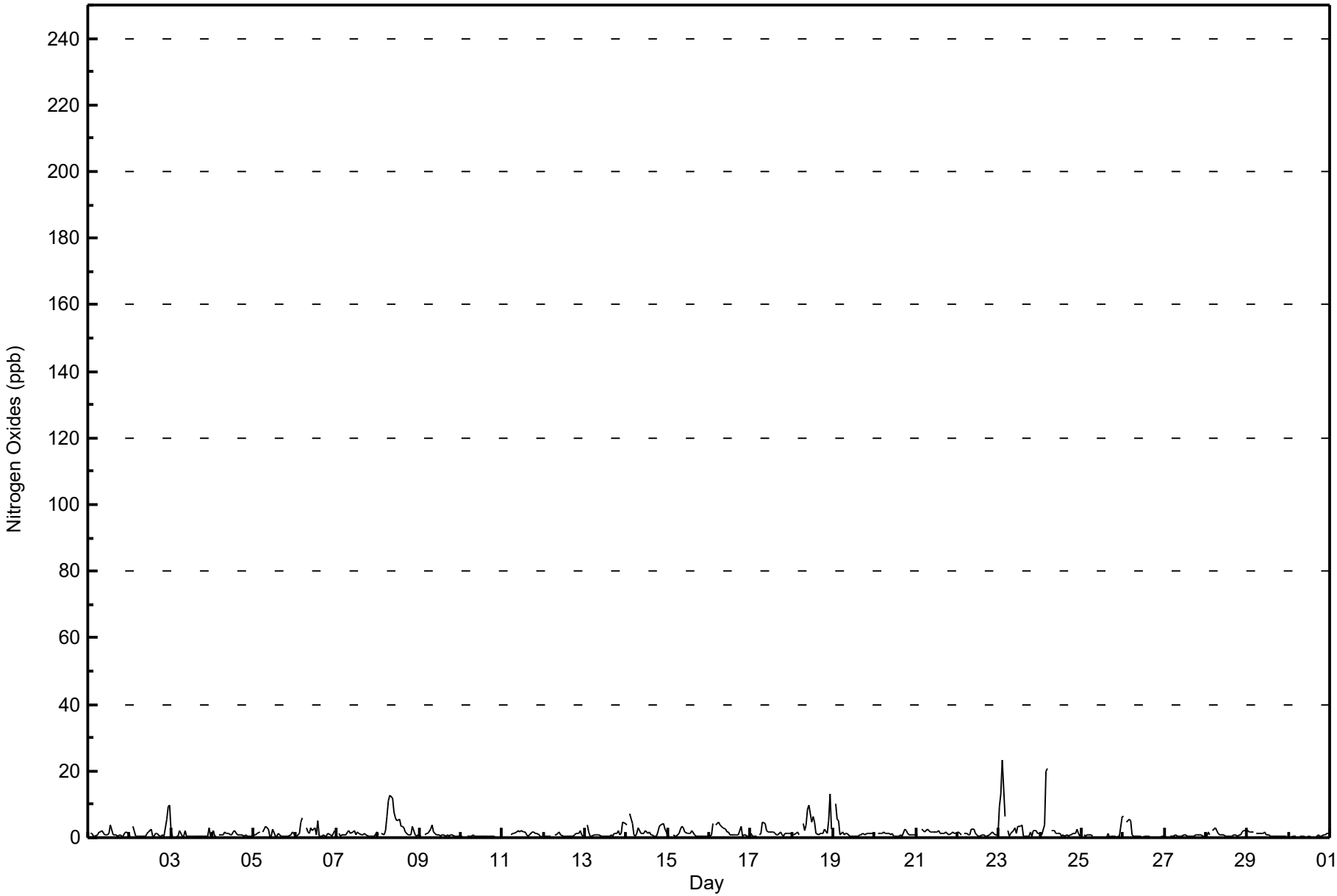
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Anzac - September 2026



Nitrogen Oxides (NO_X) - ppb
Anzac - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	683	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: 685

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Anzac - September 2026

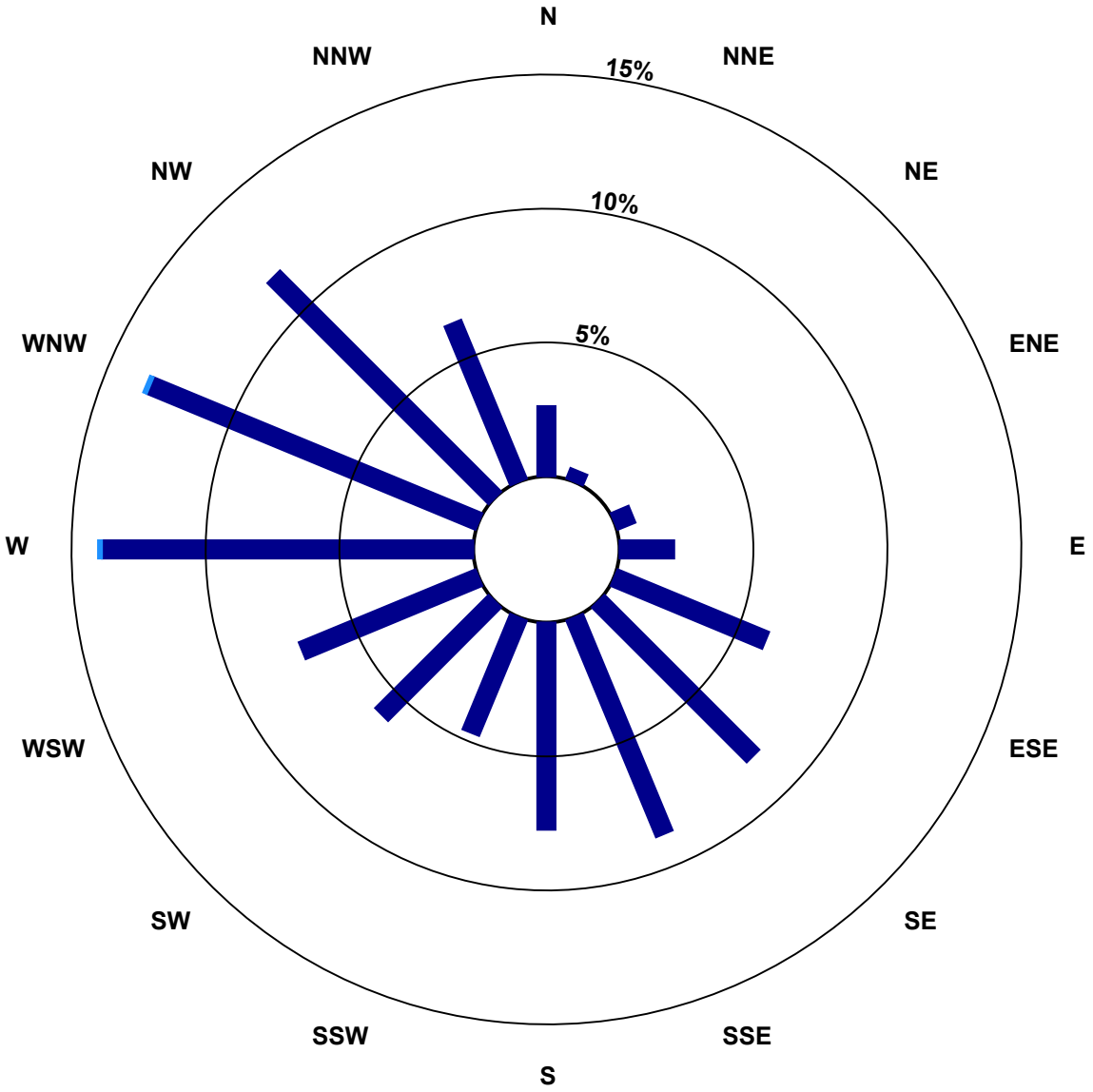
Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	18	3	0	5	14	42	56	60	53	32	41	49	95	91	80	44	683
21 - 40	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
11 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81 - 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	18	3	0	5	14	42	56	60	53	32	41	49	96	92	80	44	685

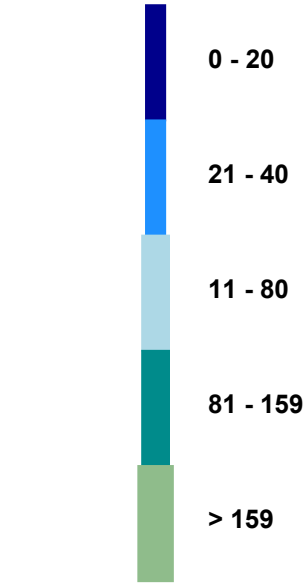
Total Number of Valid Hours: 685

Total Number of Hours: 720

Nitrogen Oxides (NO_X) - ppb

Anzac





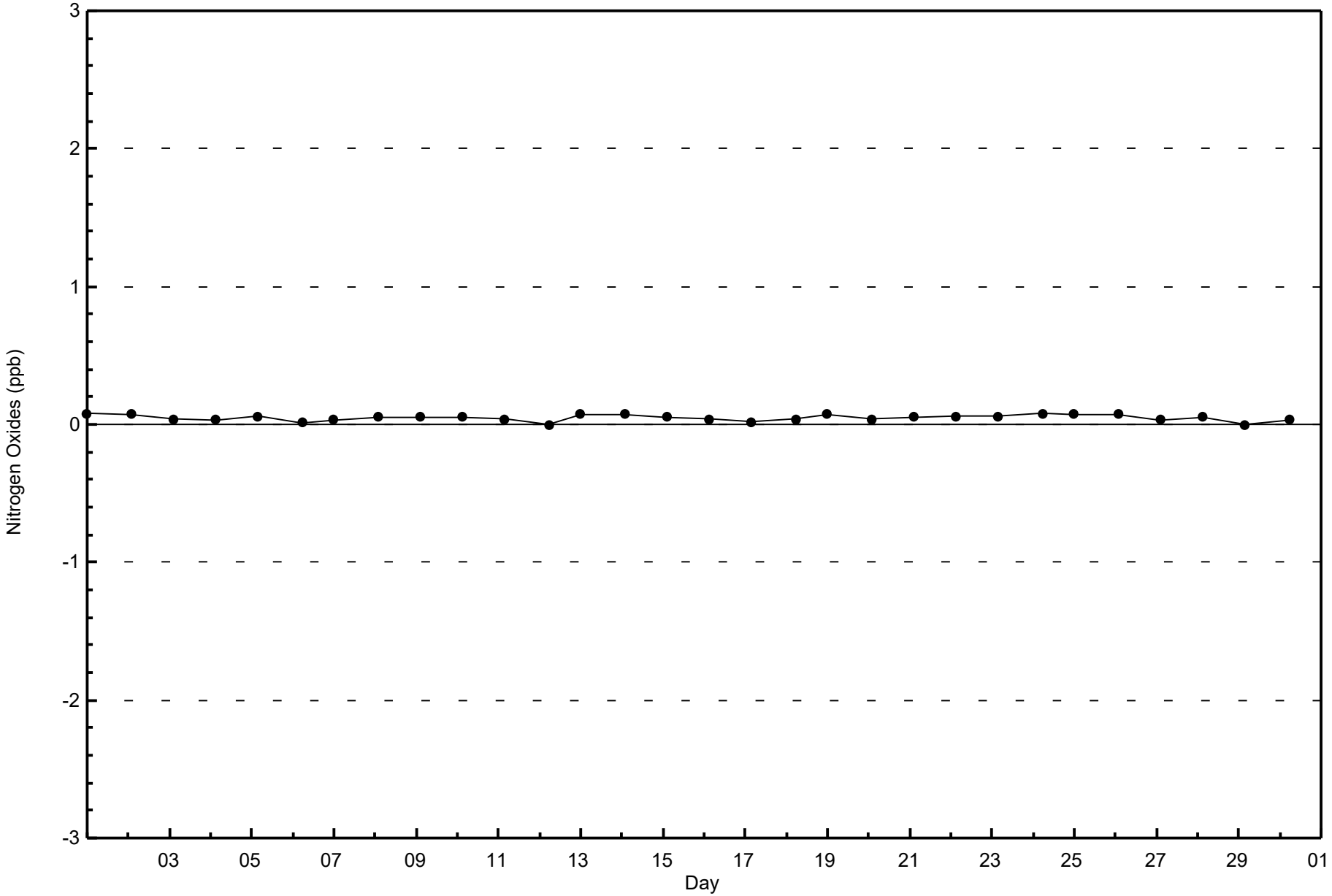
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Anzac - September 2026

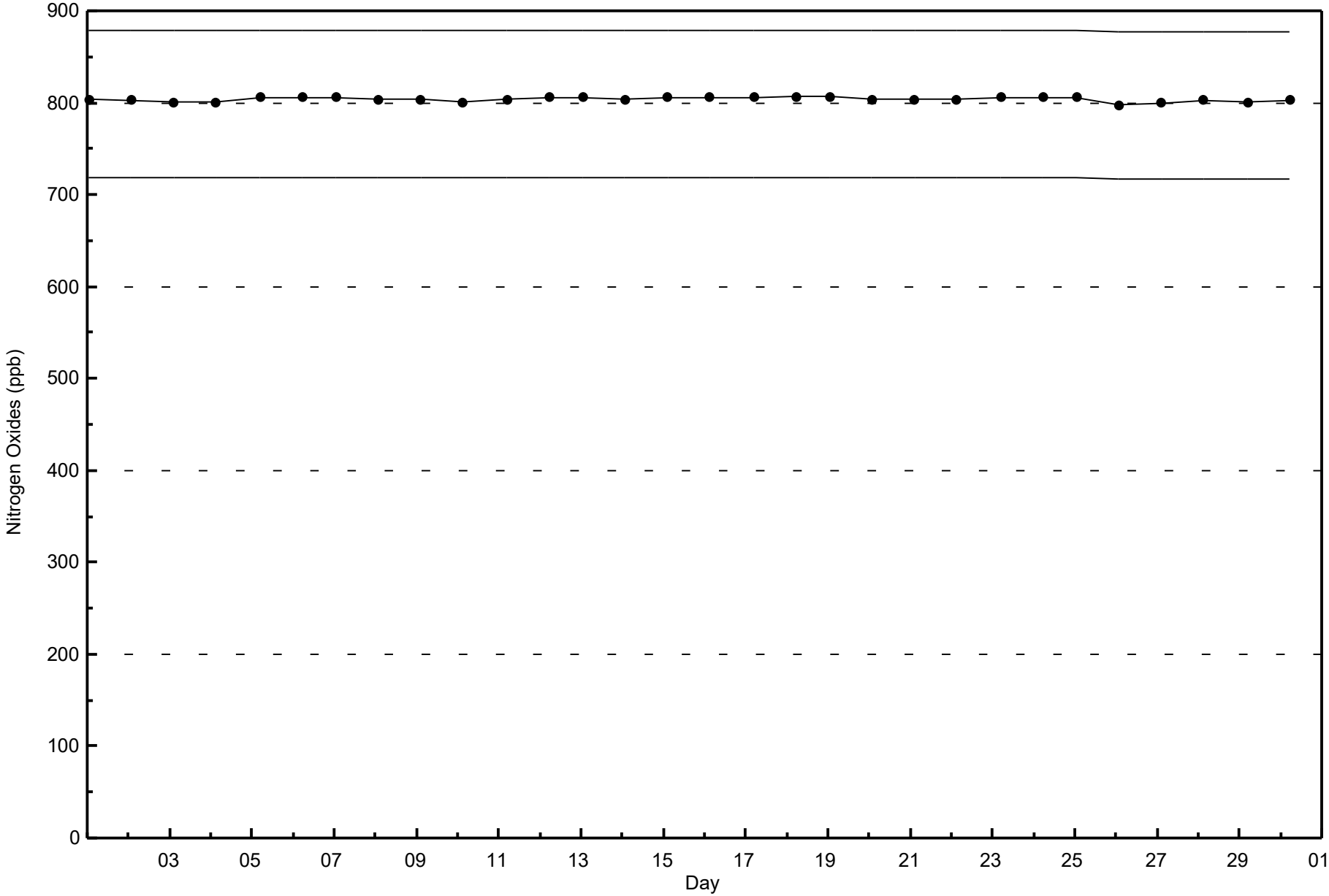


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Anzac - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Anzac - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 48.3 ppb on Sep 21 14:00 Maximum Daily Average: 35.5 ppb on Sep 21

Minimum Value: 1.9 ppb on Sep 8 00:00 Minimum Daily Average: 11.6 ppb on Sep 7
Maximum Diurnal Average: 29.8 ppb at hour 16 Minimum Diurnal Average: 15.9 ppb at hour 6
Monthly Average: 21.92 ppb Percentiles: P_1 = 3.0 P_{10} = 10.8 Q_1 = 15.1 Median = 22.0 Q_3 = 28.2 P_{90} = 33.4 P_{99} = 42.4

Hours in Service:	720
Hours of Data:	687
Hours of Missing Data:	33
Hours of Calibration:	33
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-Sep	3.1	4.1	3.9	2.8	Z	15.4	15.7	17.7	22.5	28.2	31.2	32.7	36.8	35.6	39.8	41.5	41.0	38.1	29.7	27.3	24.9	21.9	20.6	19.9	24.1	41.5
2-Sep	20.4	17.2	15.4	16.2	15.0	Z	15.7	16.7	19.6	23.0	25.7	28.7	31.6	34.0	35.2	33.6	30.8	30.6	31.4	31.9	29.6	22.3	17.3	14.8	24.2	35.2
3-Sep	Z	22.5	20.7	20.2	18.6	16.0	14.4	13.4	13.5	14.8	16.0	16.5	16.6	16.7	18.3	20.5	23.2	23.8	22.8	19.5	18.6	18.7	18.3	17.6	18.3	23.8
4-Sep	14.9	Z	13.2	14.0	13.5	11.3	9.7	8.4	9.5	19.1	35.3	32.5	31.5	18.6	14.8	11.9	13.9	15.1	16.6	16.1	17.0	17.8	17.9	16.9	16.9	35.3
5-Sep	14.9	13.1	Z	12.2	12.0	12.0	11.3	10.3	13.8	20.6	22.4	22.8	24.9	25.8	27.6	27.3	27.2	26.6	18.2	8.6	7.6	7.5	5.4	3.8	16.3	27.6
6-Sep	2.8	2.8	5.7	Z	3.9	3.1	5.8	7.4	12.9	15.1	15.6	15.6	17.5	23.6	27.7	25.3	25.4	20.9	17.8	13.2	12.7	15.1	14.7	12.5	13.8	27.7
7-Sep	12.4	12.4	9.2	7.5	Z	5.1	6.0	5.2	7.2	11.4	12.8	18.1	19.1	20.6	20.5	20.6	20.8	20.7	16.3	6.9	5.3	2.6	4.4	1.9	11.6	20.8
8-Sep	2.2	8.6	14.4	16.5	13.4	Z	6.1	7.6	9.0	13.7	18.3	21.1	25.0	30.0	33.4	35.1	34.9	31.7	14.6	14.2	10.8	8.3	7.0	11.0	16.8	35.1
9-Sep	Z	10.5	14.3	17.4	16.2	14.9	14.5	16.1	17.9	21.0	24.2	27.5	28.6	30.1	32.0	32.6	32.1	31.8	30.9	29.5	30.9	30.7	28.8	32.3	24.6	32.6
10-Sep	34.2	Z	29.1	26.9	28.0	29.6	27.0	25.0	23.8	24.0	23.4	23.9	23.1	20.7	22.0	20.4	18.5	16.8	17.5	16.1	14.9	15.5	17.1	18.3	22.4	34.2
11-Sep	18.4	18.6	Z	17.0	16.0	15.2	14.7	13.9	13.2	12.9	14.1	16.3	17.9	18.9	18.6	21.1	24.0	25.9	23.7	24.7	25.8	22.9	21.0	19.4	18.9	25.9
12-Sep	17.4	16.5	16.0	Z	15.3	14.5	14.3	14.4	14.7	16.3	18.8	22.5	23.8	25.2	26.6	29.0	30.7	28.9	19.9	12.3	9.9	15.6	15.4	13.9	18.8	30.7
13-Sep	14.4	14.8	14.1	15.3	Z	22.0	20.5	20.1	24.3	28.2	29.2	31.4	33.4	34.9	36.3	36.5	36.1	34.5	24.8	16.1	12.5	19.8	11.3	11.3	23.6	36.5
14-Sep	11.3	7.5	4.8	8.1	16.7	Z	20.4	15.9	16.0	16.6	18.4	19.5	21.0	21.1	21.6	22.3	23.5	22.6	20.1	17.7	14.0	13.0	14.7	14.7	16.6	23.5
15-Sep	Z	15.4	15.7	15.6	14.2	13.8	13.8	14.4	15.4	18.2	21.2	24.4	26.3	26.1	25.0	23.9	21.9	18.6	18.7	13.9	15.5	19.2	25.4	23.6	19.1	26.3
16-Sep	20.5	Z	12.9	12.1	10.8	11.2	14.1	16.1	18.6	20.3	21.3	23.2	24.7	26.5	28.2	28.3	25.9	20.5	20.5	16.9	15.9	15.2	16.3	18.9	19.1	28.3
17-Sep	18.1	18.4	Z	17.4	17.6	17.4	15.8	13.2	13.4	18.8	23.3	25.3	27.1	27.1	25.8	24.0	23.2	18.4	13.4	10.5	6.1	4.2	2.6	4.1	16.8	27.1
18-Sep	3.1	3.8	14.0	Z	18.3	7.2	14.4	23.8	20.6	17.4	19.1	24.8	25.3	28.7	30.4	31.6	32.6	26.0	17.0	13.5	12.6	11.4	9.0	15.0	18.2	32.6
19-Sep	18.1	13.6	7.8	9.1	Z	12.8	18.8	23.9	26.7	33.0	36.3	37.6	37.9	39.2	39.2	40.6	42.8	41.2	37.0	35.5	36.2	36.0	34.9	36.2	30.2	42.8
20-Sep	35.4	34.3	32.1	30.7	28.2	Z	26.2	27.5	28.2	30.6	33.8	39.1	40.6	41.4	42.3	42.3	40.7	33.6	24.5	23.8	26.3	34.4	36.2	35.8	33.4	42.3
21-Sep	Z	31.2	33.3	34.0	28.6	27.0	19.4	26.0	27.1	30.7	34.5	39.7	43.6	48.3	46.3	46.1	46.2	44.9	40.5	34.3	36.8	35.8	33.3	29.7	35.5	48.3
22-Sep	23.4	Z	14.5	11.2	8.3	7.2	9.0	9.6	17.7	21.7	24.0	25.0	29.1	33.2	34.4	38.4	37.8	36.4	29.5	20.6	21.7	22.1	14.2	14.5	21.9	38.4
23-Sep	7.9	10.2	Z	5.2	5.7	6.0	6.6	5.7	11.2	21.8	27.3	25.0	24.7	27.4	30.2	28.1	26.7	26.5	22.0	21.3	19.9	17.4	13.3	16.1	17.7	30.2
24-Sep	22.9	25.8	26.6	Z	13.1	12.7	10.9	10.8	23.7	25.3	28.9	30.6	32.4	32.6	32.6	32.4	32.0	30.3	24.5	19.4	18.0	12.5	10.2	11.0	22.6	32.6
25-Sep	11.0	8.4	11.4	23.1	Z	18.4	25.3	25.6	26.9	28.6	30.0	31.7	32.0	31.5	31.3	30.7	30.6	29.5	28.5	26.8	26.4	24.5	22.5	14.2	24.7	32.0
26-Sep	13.8	12.4	14.4	13.8	14.3	Z	19.6	23.8	24.6	25.4	25.9	25.1	25.3	25.2	25.9	27.4	28.3	28.6	28.6	28.8	27.2	24.7	23.9	22.3	23.0	28.8
27-Sep	Z	20.0	19.3	21.2	22.6	22.1	21.3	20.0	20.3	22.1	22.7	24.3	26.3	27.8	28.1	27.7	27.9	27.9	27.0	25.8	25.8	26.1	28.2	25.1	24.3	28.2
28-Sep	24.2	Z	22.6	23.6	24.0	24.6	24.8	25.9	28.6	26.5	28.0	31.7	34.9	36.9	37.5	34.8	33.5	33.7	31.8	30.5	31.1	30.5	30.3	30.3	29.6	37.5
29-Sep	29.5	31.1	Z	27.8	30.3	32.8	32.8	C	C	C	29.1	26.3	25.3	26.3	30.3	32.3	33.4	33.0	31.6	30.0	33.4	31.5	30.0	28.3	30.3	33.4
30-Sep	28.3	29.2	28.5	Z	26.2	24.0	23.6	23.2	23.0	24.0	25.2	26.0	26.6	27.0	27.5	26.7	26.6	26.4	26.7	25.3	24.1	23.8	21.8	19.1	25.3	29.2
	16.9	16.1	16.6	16.7	17.2	15.9	16.4	16.6	18.8	21.7	24.5	26.3	27.8	28.7	29.6	29.8	29.7	28.1	24.2	21.0	20.4	20.0	18.9	18.4	Diurnal Average	
	35.4	34.3	33.3	34.0	30.3	32.8	32.8	27.5	28.6	33.0	36.3	39.7	43.6	48.3	46.3	46.1	46.2	44.9	40.5	35.5	36.8	36.0	36.2	36.2	Diurnal Maximum	

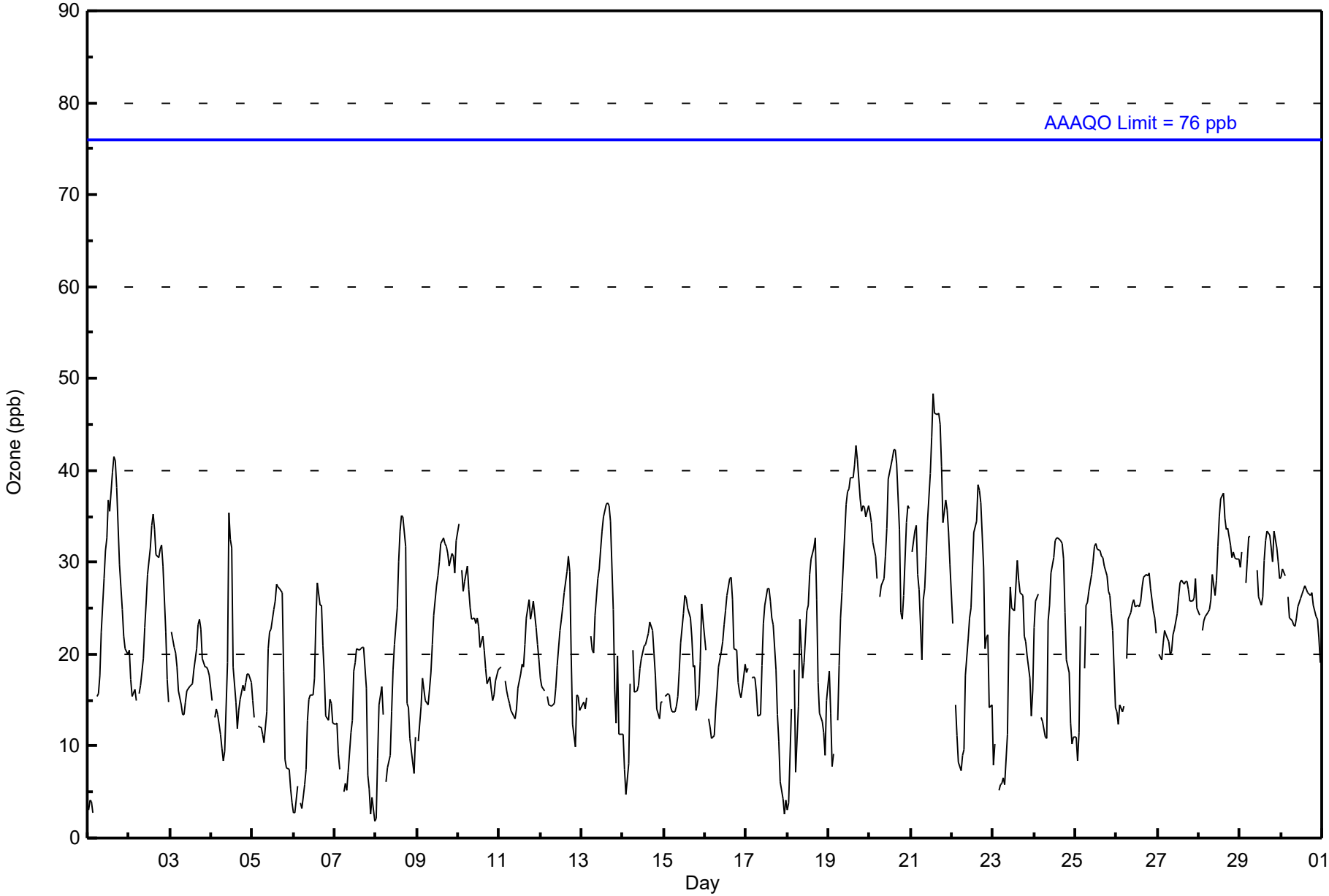
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Anzac - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	310	45.12	45.12
21 - 50	377	54.88	100.00
51 - 82	0	0.00	100.00
> 83	0	0.00	100.00

Total Number of Valid Hours: 687

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Ozone (O_3) - ppb

Anzac - September 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	1	0	2	5	22	32	37	30	12	22	9	21	36	43	27	310
21 - 50	7	2	0	3	12	21	23	25	24	18	20	39	71	59	37	16	377
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	18	3	0	5	17	43	55	62	54	30	42	48	92	95	80	43	687

Total Number of Valid Hours: 687

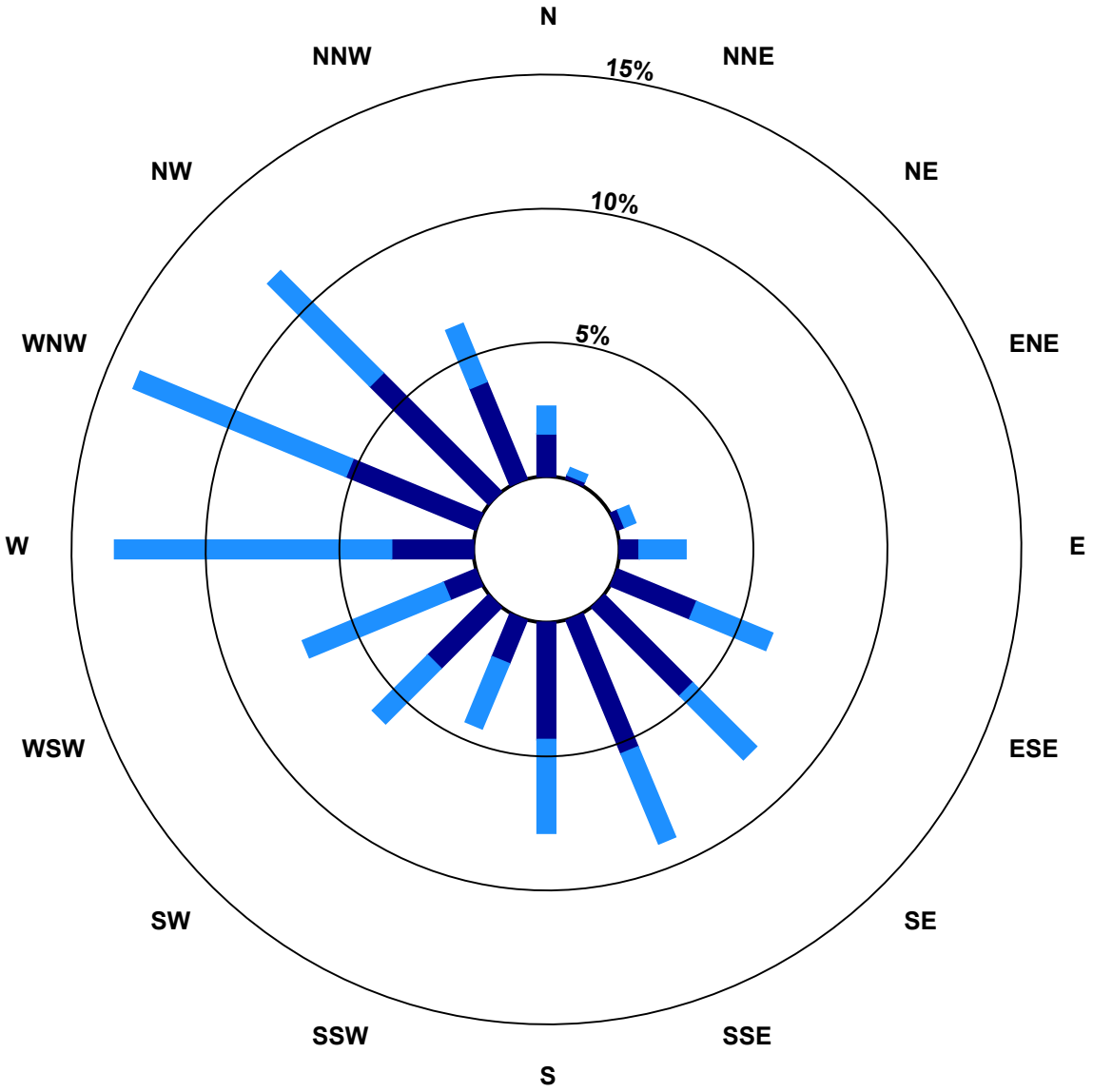
Total Number of Hours: 720

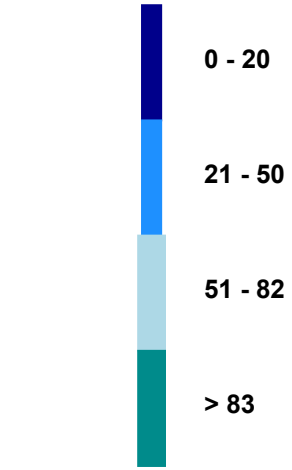
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Ozone (O_3) - ppb

Anzac





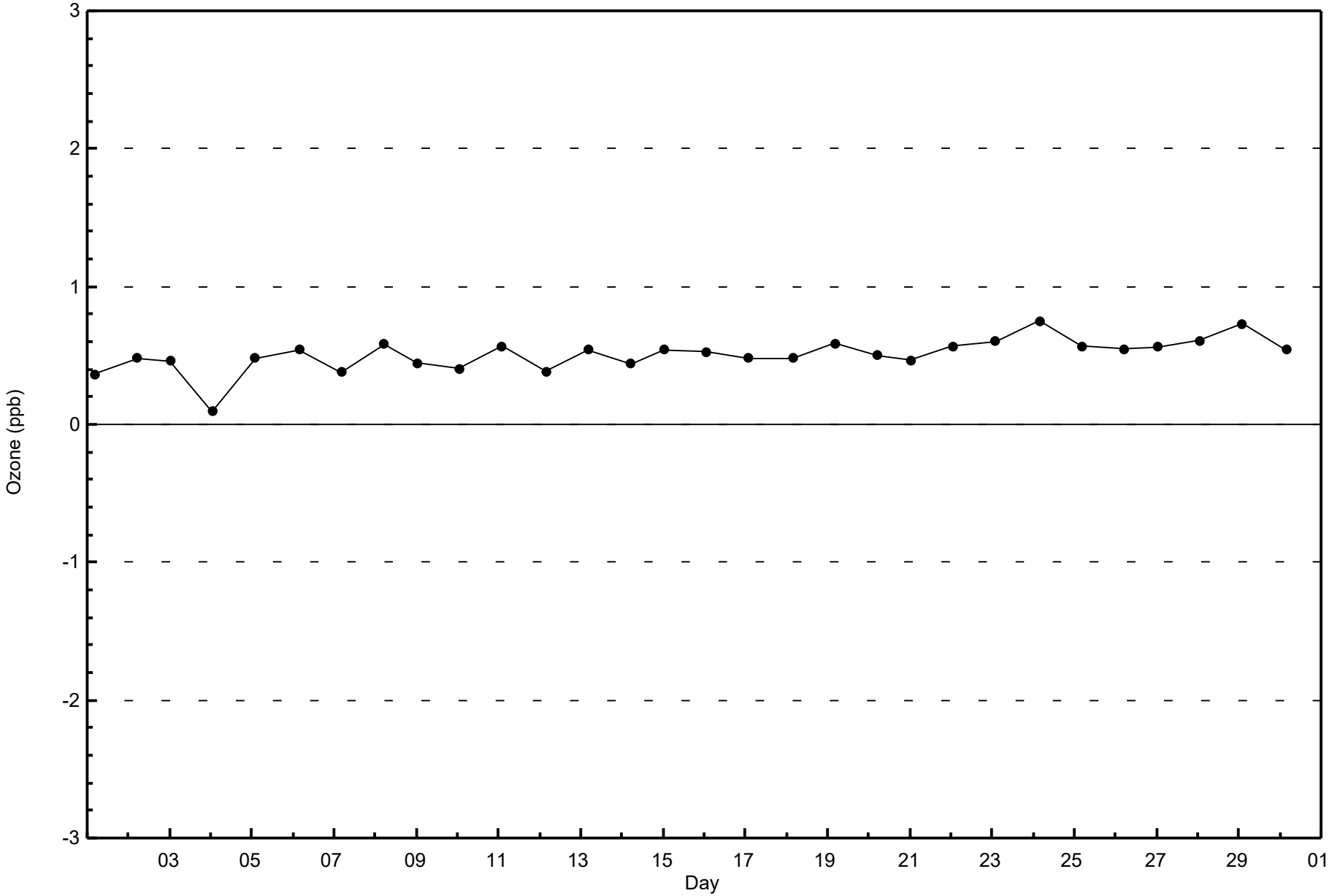
Total Number of Valid Hours: 687

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Anzac - September 2026

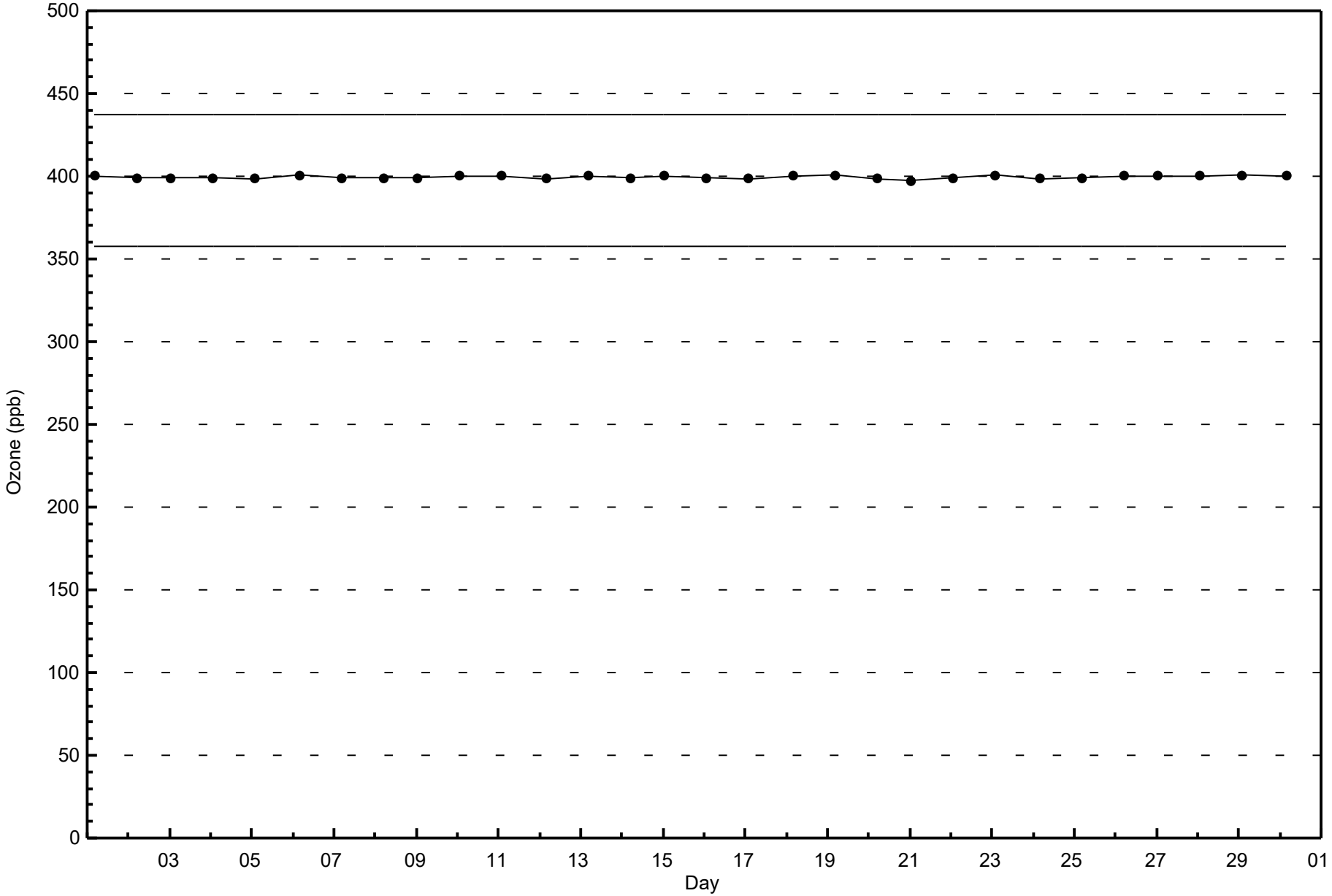


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Anzac - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Anzac - September 2026

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

Maximum Value: 15.3 $\mu g/m^3$ on Sep 10 13:00

Maximum Daily Average: 7.1 $\mu g/m^3$ on Sep 21

Minimum Value: 0.1 $\mu g/m^3$ on Sep 30 11:00

Minimum Daily Average: 0.8 $\mu g/m^3$ on Sep 30

Maximum Diurnal Average: 4.2 $\mu g/m^3$ at hour 23

Minimum Diurnal Average: 3.0 $\mu g/m^3$ at hour 17

Monthly Average: 3.52 $\mu g/m^3$

Percentiles: P_1 = 0.2 P_{10} = 1.3 Q_1 = 2.1 Median = 3.0 Q_3 = 4.6 P_{90} = 6.4 P_{99} = 11.7

Hours in Service:	720
Hours of Data:	719
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-Sep	4.8	3.0	5.0	3.7	3.0	3.1	3.0	3.4	3.2	2.9	2.8	3.1	2.9	2.8	2.8	2.7	2.7	2.2	2.5	2.4	2.6	2.9	3.1	3.0	3.1	5.0
2-Sep	2.9	3.5	3.8	4.3	4.7	5.4	6.1	6.4	6.1	5.5	5.1	4.5	4.3	4.0	3.8	4.0	5.1	5.2	5.3	5.1	5.3	5.8	6.0	5.9	4.9	6.4
3-Sep	5.8	5.6	5.3	5.0	5.0	5.2	5.2	5.0	4.9	4.5	4.2	3.8	4.2	4.6	4.3	3.4	3.8	3.8	4.1	4.8	5.0	5.1	5.3	5.2	4.7	5.8
4-Sep	5.4	5.4	5.1	4.5	5.2	4.8	4.6	4.5	4.9	4.6	3.6	4.1	5.3	5.4	3.2	1.6	1.3	1.3	1.1	1.3	1.5	1.6	2.0	2.3	3.5	5.4
5-Sep	2.7	2.7	2.6	2.6	2.6	2.6	2.8	3.0	3.1	2.5	2.5	2.7	2.7	3.0	3.6	3.6	3.6	3.6	3.7	4.1	4.3	5.3	6.6	5.3	3.4	6.6
6-Sep	4.9	5.1	4.6	3.9	3.5	3.5	4.1	3.7	3.2	3.1	2.5	2.4	2.3	3.0	2.9	2.8	2.8	4.0	3.8	2.4	2.5	2.7	2.5	2.6	3.3	5.1
7-Sep	2.7	2.6	2.8	2.9	2.8	2.6	3.3	3.1	3.1	3.2	3.4	3.0	3.5	3.8	3.8	3.8	4.0	3.6	2.8	2.9	3.3	3.6	2.6	5.6	3.3	5.6
8-Sep	3.4	4.1	3.9	3.9	5.3	6.8	10.2	10.7	10.7	8.2	7.2	6.3	5.8	5.4	9.1	10.1	7.7	6.5	6.1	6.5	6.4	6.0	5.8	5.4	6.7	10.7
9-Sep	5.8	4.9	5.1	5.4	5.2	5.4	5.2	5.3	4.9	6.9	4.6	4.3	4.3	4.0	3.7	3.4	3.1	2.9	2.8	3.5	2.9	2.7	2.7	1.9	4.2	6.9
10-Sep	1.2	1.1	0.9	1.1	1.0	1.3	1.5	1.9	2.1	2.7	11.7	15.1	15.3	13.4	11.3	11.6	8.8	6.7	2.9	1.7	1.3	0.8	0.8	1.2	4.9	15.3
11-Sep	1.5	1.5	1.4	1.0	0.6	0.7	1.1	1.6	1.7	2.7	2.8	3.7	2.1	3.2	1.8	1.5	2.7	4.9	4.8	4.3	4.3	3.6	2.6	2.5	2.4	4.9
12-Sep	2.2	2.3	2.3	2.4	2.5	2.6	2.6	9.5	13.5	9.8	8.7	8.7	3.4	2.2	2.4	3.0	2.7	2.5	3.5	3.3	3.5	2.9	3.0	2.6	4.2	13.5
13-Sep	2.7	3.0	2.8	2.9	2.8	3.0	3.1	3.0	2.9	2.8	2.8	2.9	2.9	2.9	2.8	2.8	2.7	2.8	3.6	3.6	3.6	3.9	7.4	5.6	3.3	7.4
14-Sep	5.0	5.8	6.5	3.6	1.4	0.7	1.5	3.0	2.5	2.5	2.5	2.8	2.7	2.7	2.2	2.2	1.3	0.9	2.5	3.0	2.7	2.9	2.7	2.2	2.7	6.5
15-Sep	1.3	1.5	1.9	1.5	1.5	1.5	1.8	2.6	3.9	3.1	2.0	1.6	1.7	1.8	1.9	1.5	1.9	2.2	2.3	2.4	2.3	2.1	1.9	2.0	2.0	3.9
16-Sep	1.9	2.3	3.6	4.9	5.6	5.4	4.8	3.9	3.9	3.3	3.0	2.9	2.5	2.2	2.5	2.6	2.6	2.7	2.8	2.8	2.8	2.8	2.8	2.7	3.2	5.6
17-Sep	2.8	2.8	3.0	3.1	3.2	3.4	3.4	3.6	3.8	3.8	4.1	4.2	4.5	4.6	4.4	4.3	4.3	4.4	4.5	4.4	13.6	8.7	10.0	10.6	5.0	13.6
18-Sep	5.5	6.8	4.0	3.4	2.9	2.7	2.5	2.6	2.8	3.3	3.6	3.2	3.0	3.2	2.4	2.7	2.7	2.8	3.0	4.0	3.7	3.3	3.5	3.4	3.4	6.8
19-Sep	3.3	4.5	3.3	4.6	2.8	2.7	2.7	2.5	2.5	2.3	2.4	2.5	2.8	3.2	3.6	3.8	4.1	4.1	4.3	4.7	5.0	5.4	5.4	5.4	3.7	5.4
20-Sep	5.4	5.5	5.6	5.3	5.4	5.4	5.3	5.0	4.6	4.5	3.7	3.2	3.1	2.9	2.7	2.5	3.2	3.8	5.5	4.6	5.3	6.4	6.0	6.6	4.7	6.6
21-Sep	7.6	6.3	6.5	7.5	6.5	6.6	14.8	6.8	6.5	6.0	6.6	6.5	8.0	7.8	6.9	6.5	6.3	6.5	7.0	6.4	6.9	6.9	6.8	7.1	7.1	14.8
22-Sep	7.6	8.0	8.2	7.9	8.0	8.1	7.9	7.1	7.8	8.9	6.4	3.6	3.8	2.5	4.5	3.0	1.3	0.8	1.0	6.5	6.1	3.9	6.3	4.5	5.6	8.9
23-Sep	2.7	1.9	2.0	2.6	2.1	2.1	1.9	2.0	4.6	3.5	3.2	3.1	2.6	2.6	2.6	2.6	2.7	2.7	2.6	2.8	3.2	3.2	4.0	6.3	2.9	6.3
24-Sep	3.1	3.3	2.0	2.2	5.8	2.6	2.4	2.3	1.5	1.5	2.4	2.3	2.0	1.5	1.3	1.4	1.4	1.7	2.6	3.8	4.1	8.6	12.2	6.5	3.3	12.2
25-Sep	3.2	2.1	2.0	1.8	1.7	1.8	1.6	1.6	1.5	1.4	1.5	2.1	2.9	2.9	3.2	3.2	3.0	3.1	3.4	3.4	3.6	3.9	3.9	4.9	2.7	4.9
26-Sep	5.2	5.4	4.8	5.4	6.0	0.9	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.9	2.2	2.2	1.6	6.0
27-Sep	1.8	1.9	2.0	1.7	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.6	1.8	1.8	1.8	1.9	1.9	1.8	2.2	3.3	2.9	1.8	1.4	1.5	1.8	3.3
28-Sep	1.4	1.2	1.2	1.7	1.6	1.3	1.3	1.3	1.2	1.2	1.5	1.3	1.4	1.3	1.5	1.8	1.6	1.9	1.7	1.8	2.3	2.6	2.8	2.8	1.7	2.8
29-Sep	2.8	2.7	2.7	2.6	2.3	1.7	0.9	1.0	C	0.4	1.0	1.4	1.0	0.6	0.8	1.0	1.0	1.2	1.7	1.7	1.2	1.3	1.8	1.6	1.5	2.8
30-Sep	1.9	1.8	1.9	2.1	2.2	0.9	0.6	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.4	0.3	0.4	0.5	0.5	0.7	0.8	1.0	1.5	0.8	2.2
	3.6	3.6	3.6	3.5	3.5	3.2	3.6	3.6	3.9	3.6	3.6	3.6	3.4	3.3	3.3	3.2	3.0	3.0	3.2	3.4	3.8	3.8	4.2	4.0	Diurnal Average	
	7.6	8.0	8.2	7.9	8.0	8.1	14.8	10.7	13.5	9.8	11.7	15.1	15.3	13.4	11.3	11.6	8.8	6.7	7.0	6.5	13.6	8.7	12.2	10.6	Diurnal Maximum	

C - Calibration

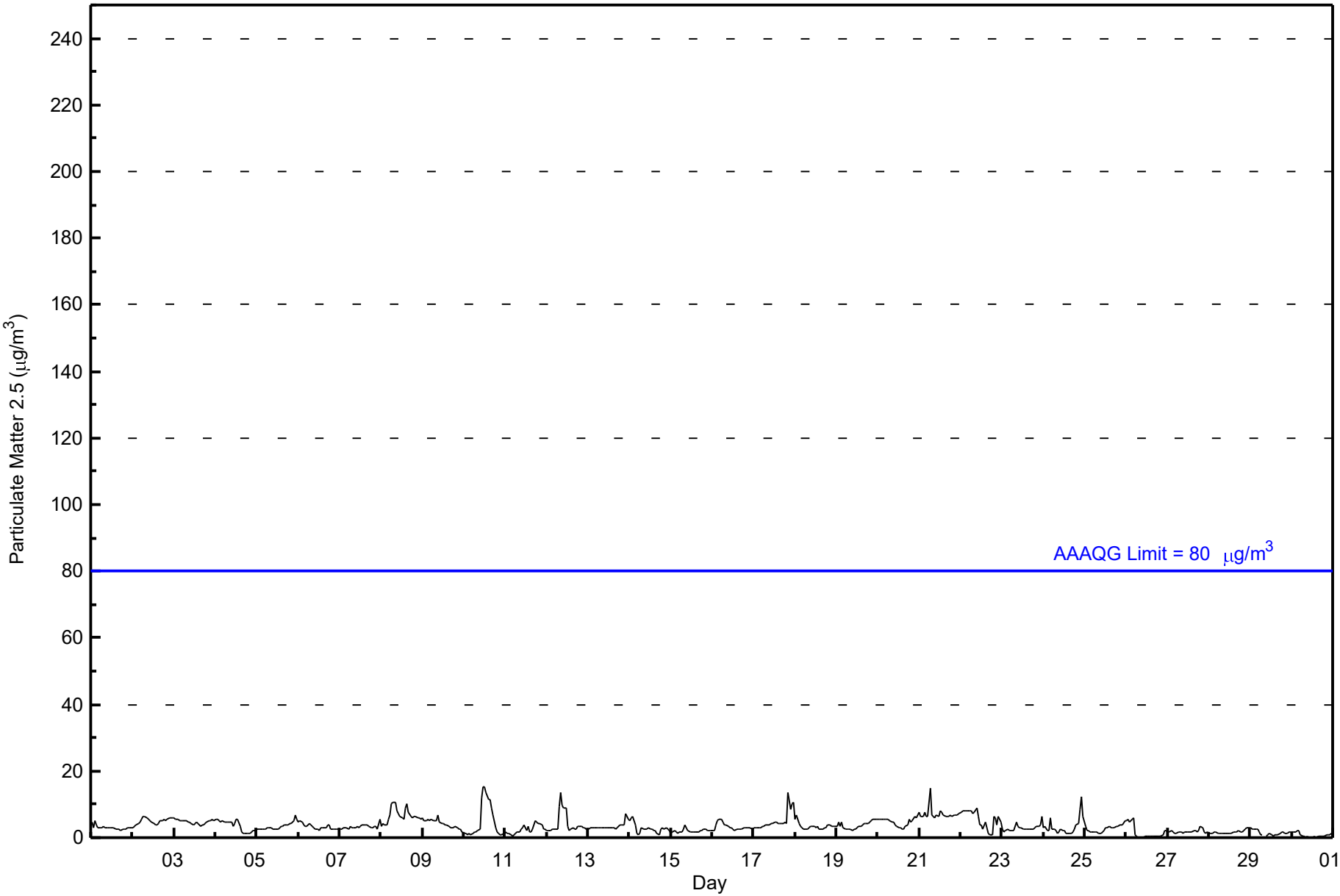
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Anzac - September 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Anzac - September 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	619	86.09	86.09
6 - 15	100	13.91	100.00
16 - 25	0	0.00	100.00
26 - 80	0	0.00	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

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

Anzac - September 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	3	0	5	17	43	51	54	45	22	37	42	88	82	70	42	619
6 - 15	0	0	0	0	1	1	6	11	11	11	8	8	10	15	15	3	100
16 - 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	18	3	0	5	18	44	57	65	56	33	45	50	98	97	85	45	719

Total Number of Valid Hours: 719

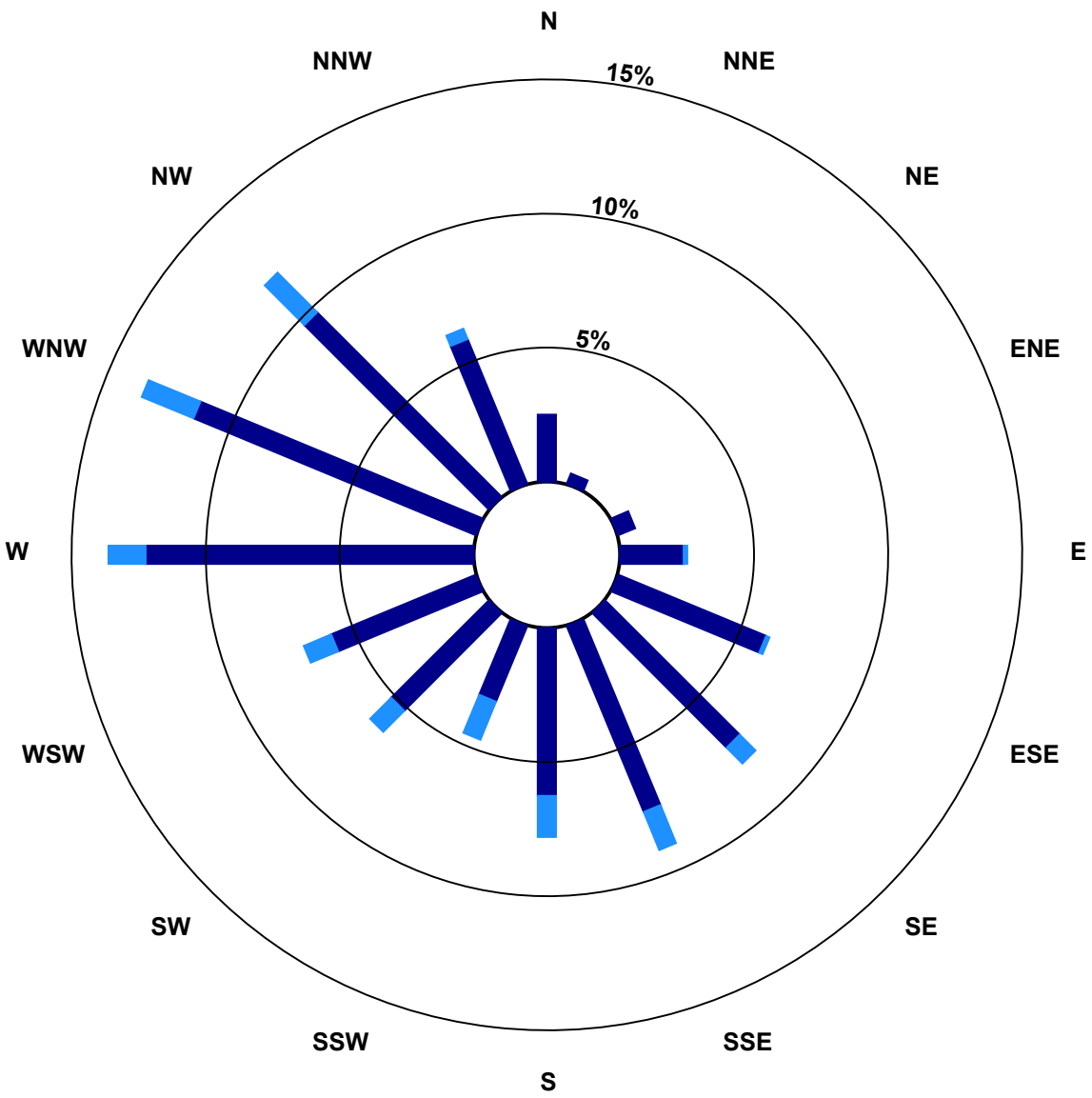
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 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: 719

Maximum Value: 26.7 C on Sep 2 16:00

Maximum Daily Average: 18.9 C on Sep 2

Minimum Value: 0.4 C on Sep 23 06:00

Minimum Daily Average: 4.6 C on Sep 30

Maximum Diurnal Average: 16.6 C at hour 15

Minimum Diurnal Average: 7.6 C at hour 6

Monthly Average: 11.59 C

Percentiles: P_1 = 2.1 P_{10} = 5.2 Q_1 = 7.3 Median = 10.8 Q_3 = 15.4 P_{90} = 18.8 P_{99} = 25.0

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

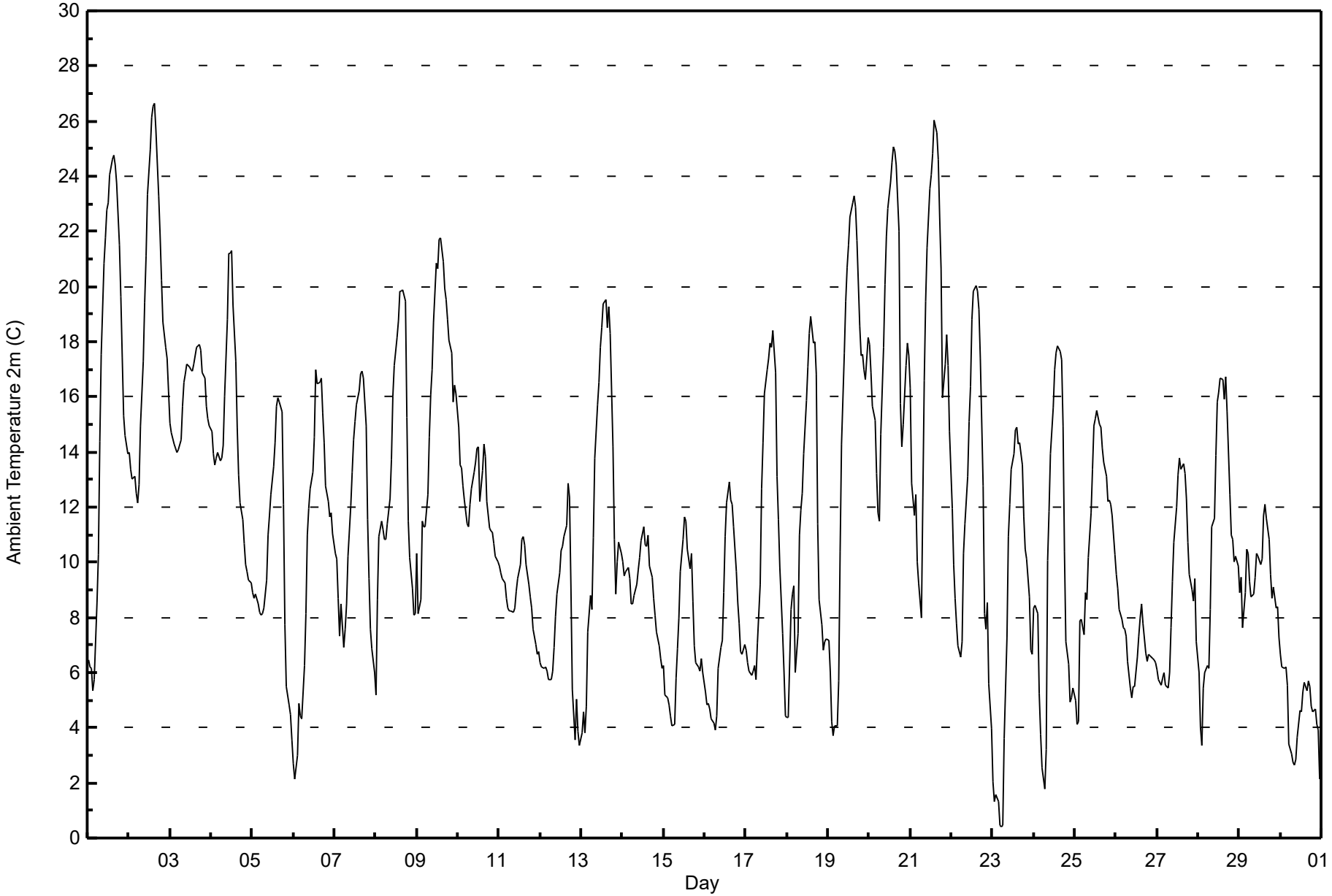
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	6.5	6.2	6.1	5.3	5.7	8.6	10.2	14.4	17.5	20.8	21.8	22.8	23.1	24.1	24.6	24.8	24.4	23.8	21.5	19.6	17.4	15.3	14.6	13.9	16.4	24.8
2-Sep	14.0	13.4	13.0	13.1	12.5	12.2	12.8	15.0	17.3	19.4	21.1	23.3	25.0	26.1	26.5	26.7	25.7	23.3	21.9	20.2	18.7	17.8	17.4	16.2	18.9	26.7
3-Sep	15.0	14.7	14.3	14.1	14.0	14.1	14.5	15.6	16.5	16.8	17.2	17.1	17.0	16.9	17.2	17.8	17.9	17.9	17.7	16.9	16.7	15.7	15.2	15.0	16.1	17.9
4-Sep	14.7	13.9	13.5	13.8	14.0	13.7	13.8	14.2	16.0	18.8	21.2	21.2	21.3	19.3	17.3	14.9	13.2	12.1	11.5	10.7	9.9	9.6	9.4	9.2	14.5	21.3
5-Sep	8.9	8.7	8.8	8.5	8.2	8.1	8.2	8.3	9.4	11.0	11.7	12.5	13.5	14.3	15.7	16.0	15.8	15.5	12.1	7.7	5.5	4.8	4.5	3.6	10.0	16.0
6-Sep	2.7	2.1	3.0	4.9	4.4	4.3	6.3	8.1	11.0	11.9	12.6	13.3	14.5	17.0	16.5	16.5	16.7	15.4	14.3	12.8	12.2	11.7	11.8	11.1	10.6	17.0
7-Sep	10.3	10.1	8.7	7.3	8.5	6.9	7.6	8.5	10.2	12.0	13.3	14.4	15.1	15.7	16.2	16.8	16.9	16.7	15.0	11.5	9.4	7.6	6.9	6.0	11.3	16.9
8-Sep	5.2	8.6	11.0	11.5	11.2	10.8	10.8	11.4	12.3	13.7	16.0	17.1	18.1	18.7	19.8	19.8	19.9	19.5	15.3	11.5	10.2	9.1	8.1	8.1	13.2	19.9
9-Sep	10.3	8.1	8.7	11.5	11.3	11.3	12.4	14.5	16.1	17.0	18.7	20.9	20.7	21.7	21.8	20.9	19.9	19.5	18.8	18.0	17.6	15.8	16.4	16.1	16.2	21.8
10-Sep	14.9	13.5	13.4	12.7	12.3	11.4	11.3	12.1	12.7	13.3	13.6	14.1	14.2	12.2	13.3	14.3	13.8	12.2	11.2	11.1	11.1	10.7	10.2	10.0	12.5	14.9
11-Sep	9.9	9.6	9.4	9.2	8.7	8.4	8.2	8.3	8.2	8.3	9.0	9.4	9.9	10.8	10.9	10.6	9.9	9.2	8.8	8.3	7.6	7.0	6.7	6.7	8.9	10.9
12-Sep	6.3	6.2	6.2	6.2	6.0	5.7	5.7	6.0	6.9	8.0	8.9	9.6	10.4	10.6	10.9	11.4	12.8	12.4	9.1	5.4	3.5	5.1	3.8	3.4	7.5	12.8
13-Sep	3.8	4.6	3.8	4.8	7.5	8.8	8.3	10.9	13.8	15.7	16.5	17.8	18.5	19.4	19.5	18.5	19.3	18.3	14.2	10.8	8.9	10.0	10.7	10.3	12.3	19.5
14-Sep	10.0	9.5	9.6	9.8	9.4	8.5	8.5	8.8	9.2	9.7	10.1	10.8	11.3	10.6	10.6	11.0	9.9	9.5	8.7	8.1	7.5	7.0	6.5	6.2	9.2	11.3
15-Sep	6.3	5.2	5.1	4.8	4.4	4.1	4.1	5.8	6.9	8.0	9.6	10.8	11.6	11.5	10.5	9.7	10.3	8.6	7.0	6.4	6.2	6.0	6.5	6.0	7.3	11.6
16-Sep	5.3	4.8	4.9	4.7	4.3	4.2	3.9	4.4	6.1	6.9	7.2	8.9	10.9	12.2	12.9	12.3	12.1	11.3	9.7	8.6	7.8	6.8	6.7	7.0	7.6	12.9
17-Sep	6.8	6.4	6.1	5.9	6.1	6.2	5.8	7.1	9.2	12.6	14.3	16.1	17.0	17.4	17.9	17.8	18.4	16.9	13.1	11.5	9.8	7.4	6.0	4.4	10.8	18.4
18-Sep	4.4	4.4	8.3	8.9	9.2	6.0	7.4	11.0	11.9	12.5	14.0	15.9	17.1	18.3	18.9	17.9	18.0	16.8	11.4	8.6	7.7	6.8	7.1	7.2	11.2	18.9
19-Sep	7.2	6.0	4.2	3.7	4.1	4.1	5.7	10.4	14.3	17.6	19.5	20.7	21.5	22.5	23.0	23.3	22.9	21.7	18.6	17.5	17.5	17.0	16.7	18.2	14.9	23.3
20-Sep	17.9	16.9	15.6	15.2	13.2	11.8	11.5	14.7	17.8	20.1	21.8	22.8	23.8	24.5	25.1	24.9	24.4	22.0	15.8	14.2	15.0	17.1	17.9	17.5	18.4	25.1
21-Sep	16.3	12.9	11.7	12.5	10.0	9.3	8.0	12.3	16.6	19.5	21.4	23.6	24.1	24.8	26.0	25.6	24.6	22.5	20.7	16.0	17.2	18.3	17.1	14.7	17.7	26.0
22-Sep	12.0	9.9	8.7	7.8	7.0	6.6	7.1	10.3	11.4	13.1	15.1	16.4	18.8	19.8	20.1	19.8	19.2	17.4	12.7	8.2	7.6	8.5	5.6	3.9	12.0	20.1
23-Sep	2.1	1.3	1.6	1.3	0.5	0.4	0.5	3.6	7.3	10.9	12.1	13.4	13.9	14.8	14.9	14.3	14.3	13.5	11.7	10.5	10.1	8.8	6.8	6.7	8.1	14.9
24-Sep	8.4	8.4	8.1	5.2	3.8	2.6	1.8	3.2	10.0	11.8	13.9	15.6	17.0	17.6	17.9	17.7	17.4	14.9	10.4	7.1	6.3	4.9	5.1	5.4	9.8	17.9
25-Sep	5.0	4.1	4.2	7.9	7.9	7.4	8.9	8.7	10.2	11.8	13.4	15.0	15.2	15.5	15.0	14.9	14.1	13.6	13.1	12.2	12.3	12.1	11.7	10.3	11.0	15.5
26-Sep	9.6	9.0	8.3	7.9	7.6	7.6	7.3	6.4	5.4	5.1	5.5	5.5	6.6	7.3	8.0	8.5	7.8	6.7	6.4	6.6	6.6	6.5	6.5	6.3	7.0	9.6
27-Sep	6.1	5.8	5.5	5.8	6.0	5.5	5.4	6.0	7.6	9.3	10.7	12.0	13.2	13.8	13.4	13.6	13.2	12.3	10.7	9.5	9.0	8.6	9.4	7.1	9.2	13.8
28-Sep	6.0	4.0	3.4	5.4	6.0	6.3	6.1	8.3	11.3	11.6	13.9	15.8	16.2	16.7	16.6	15.9	16.7	15.5	12.5	11.0	10.9	10.0	10.2	9.9	10.8	16.7
29-Sep	8.9	9.5	7.6	8.9	10.5	10.3	9.3	8.7	8.9	9.5	10.3	10.2	9.9	10.1	11.7	12.1	11.6	10.9	9.6	8.7	9.1	8.3	8.4	7.3	9.6	12.1
30-Sep	6.6	6.2	6.1	6.2	5.6	3.4	3.0	2.7	2.6	2.8	3.6	4.6	4.6	5.3	5.6	5.3	5.7	5.5	4.8	4.6	4.7	4.1	3.9	2.1	4.6	6.6
	8.7	8.1	8.0	8.2	8.0	7.6	7.8	9.3	11.2	12.7	13.9	15.1	15.8	16.3	16.6	16.5	16.2	15.2	12.9	11.1	10.5	9.9	9.6	9.0	Diurnal Average	
	17.9	16.9	15.6	15.2	14.0	14.1	14.5	15.6	17.8	20.8	21.8	23.6	25.0	26.1	26.5	26.7	25.7	23.8	21.9	20.2	18.7	18.3	17.9	18.2	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Anzac - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	316	43.89	43.89
10 - 20	350	48.61	92.50
> 20	54	7.50	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 99.8 % on Sep 4 07:00

Maximum Daily Average: 89.2 % on Sep 7

Minimum Value: 25.2 % on Sep 20 16:00

Minimum Daily Average: 53.2 % on Sep 20

Maximum Diurnal Average: 90.4 % at hour 6

Minimum Diurnal Average: 54.8 % at hour 16

Monthly Average: 75.10 %

Percentiles: P_1 = 31.7 P_{10} = 46.8 Q_1 = 61.3 Median = 79.2 Q_3 = 91.6 P_{90} = 96.0 P_{99} = 99.2

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

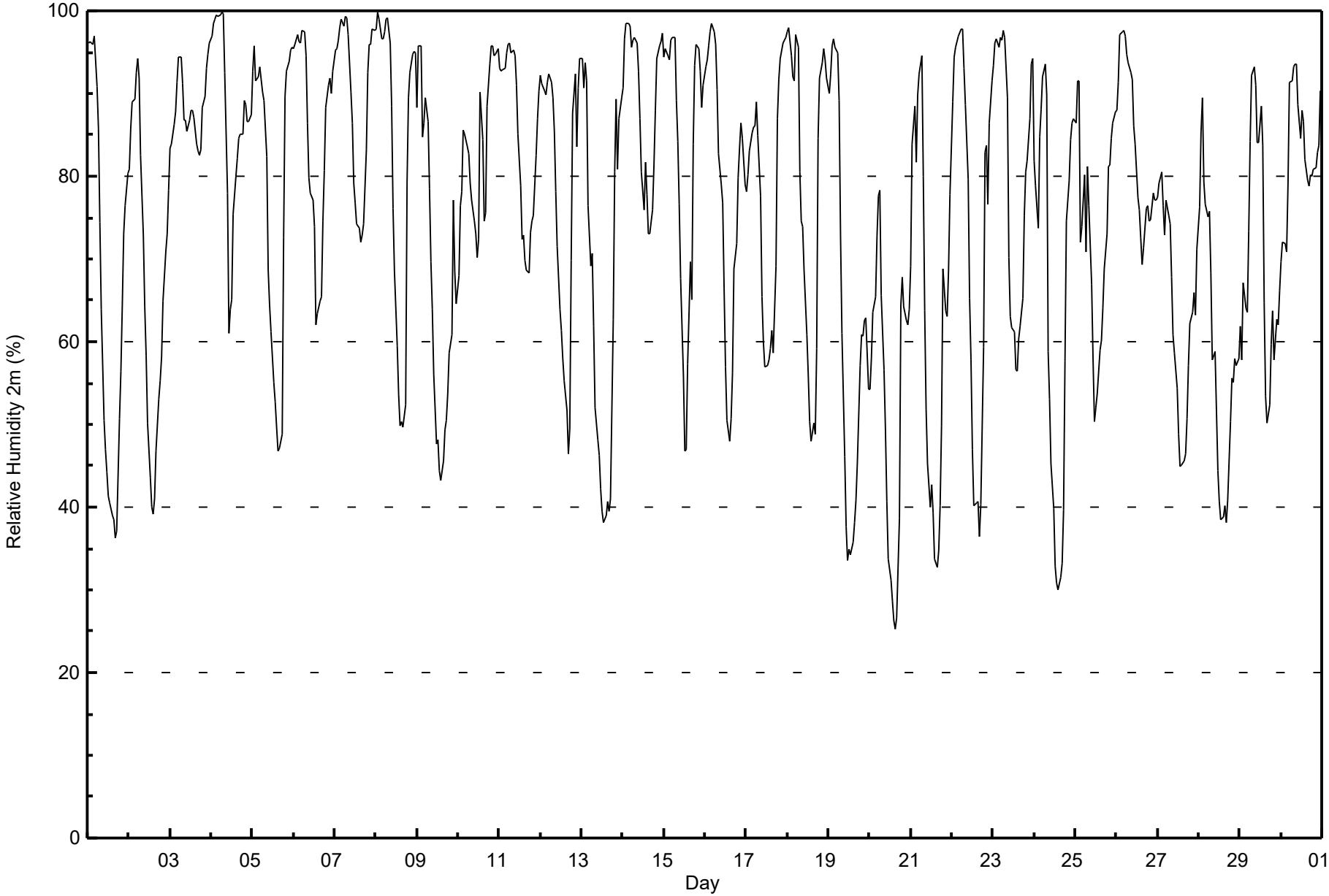
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	96.1	96.2	96.1	96.0	97.0	90.9	85.8	74.5	63.9	50.5	47.0	44.3	41.3	40.5	39.0	38.5	36.3	37.1	50.7	56.4	64.4	73.1	76.4	80.3	65.5	97.0
2-Sep	80.8	85.8	89.1	89.3	92.6	94.2	91.9	82.5	72.8	64.2	58.4	50.1	43.5	40.0	39.2	41.0	46.8	53.0	55.3	58.1	64.9	70.8	73.0	78.3	67.3	94.2
3-Sep	83.4	83.9	86.3	87.9	91.4	94.5	94.3	91.1	86.8	86.8	85.4	86.7	88.0	87.9	87.1	83.9	83.0	82.6	83.2	88.4	89.7	93.1	94.8	96.2	88.2	96.2
4-Sep	96.9	98.5	99.1	99.5	99.3	99.5	99.8	99.7	92.6	77.9	61.1	63.9	65.1	75.4	80.0	82.2	84.6	85.1	85.0	89.2	88.6	86.6	86.6	87.4	86.8	99.8
5-Sep	92.7	95.8	91.6	92.0	93.2	91.7	90.2	89.2	82.3	68.6	64.4	61.1	55.1	52.7	49.6	46.9	47.2	48.8	72.6	89.7	92.8	94.0	95.2	95.6	77.2	95.8
6-Sep	95.4	96.0	97.1	96.2	96.1	97.6	97.5	94.7	86.5	79.8	77.9	77.1	73.9	62.0	63.4	64.9	65.4	74.6	80.6	88.2	91.1	91.8	90.0	92.7	84.6	97.6
7-Sep	95.3	95.5	96.4	98.0	99.0	98.2	99.3	99.2	97.2	90.2	86.5	79.1	76.8	74.2	73.7	72.0	72.8	74.3	83.2	92.5	96.0	95.9	97.7	97.6	89.2	99.3
8-Sep	97.7	99.8	98.9	96.6	96.6	97.4	98.9	99.2	96.0	88.5	76.1	68.4	59.6	53.5	49.9	50.4	49.7	52.4	79.4	89.5	92.5	94.8	95.2	94.9	82.3	99.8
9-Sep	88.3	95.7	95.8	84.8	86.4	89.4	86.7	78.4	69.7	63.9	56.1	47.6	48.2	44.4	43.2	45.6	49.3	50.5	53.7	58.6	60.8	77.1	68.5	64.6	67.0	95.8
10-Sep	68.0	76.4	78.1	85.7	85.0	83.5	82.7	79.2	77.2	74.5	73.1	70.2	72.3	90.1	84.4	74.6	75.7	88.5	93.6	95.8	95.7	94.6	94.7	95.4	82.9	95.8
11-Sep	93.1	92.7	92.8	93.1	95.0	95.9	96.1	95.0	95.3	94.6	91.0	85.1	78.8	72.4	72.8	69.8	68.6	68.2	73.3	74.5	75.2	82.5	87.0	90.3	84.7	96.1
12-Sep	92.2	91.2	90.4	89.9	91.3	92.3	91.4	89.5	85.5	78.2	71.5	63.9	61.4	58.0	55.2	51.7	46.5	49.5	69.8	87.6	92.3	83.5	90.7	94.3	77.8	94.3
13-Sep	94.2	90.7	93.8	91.5	76.5	69.1	70.6	61.9	52.1	48.2	46.3	42.3	39.4	38.1	38.9	40.7	39.5	41.0	62.7	80.6	89.3	80.9	86.9	89.5	65.2	94.2
14-Sep	90.6	96.6	98.5	98.4	98.2	95.6	96.4	96.8	96.1	92.8	86.9	80.5	75.9	81.6	77.8	73.0	73.0	75.9	81.4	88.1	94.2	95.8	96.3	97.3	89.1	98.5
15-Sep	94.4	95.4	94.6	94.1	96.4	96.8	96.8	89.2	84.2	76.6	67.7	55.9	46.8	46.9	57.3	69.6	65.1	83.9	93.4	95.9	95.5	92.8	88.3	91.1	82.0	96.8
16-Sep	93.2	94.1	95.8	97.5	98.4	97.4	95.9	90.5	82.7	78.9	76.8	66.5	57.0	50.6	48.0	50.7	56.3	68.8	71.8	79.9	83.4	86.4	84.6	78.9	78.5	98.4
17-Sep	78.1	80.2	83.0	85.2	85.9	86.1	89.1	84.9	77.6	65.4	59.9	56.9	57.1	57.9	59.1	61.3	58.7	69.1	87.0	91.8	94.3	96.1	96.4	96.7	77.4	96.7
18-Sep	97.5	98.0	94.6	92.0	91.6	97.1	95.6	80.5	74.6	73.9	68.7	60.9	55.9	50.3	48.1	50.2	48.8	59.2	84.6	91.9	93.8	95.4	94.1	91.9	78.7	98.0
19-Sep	90.0	92.3	95.7	96.6	95.7	94.9	89.1	72.8	61.1	46.2	37.6	33.5	34.8	34.3	35.8	38.1	40.8	45.5	57.1	60.8	60.7	62.6	62.9	54.3	62.2	96.6
20-Sep	54.3	57.9	63.6	65.5	72.7	77.6	78.3	65.6	56.6	49.5	40.6	33.7	31.2	28.7	26.2	25.2	26.6	38.7	64.4	67.7	64.2	62.5	62.0	63.9	53.2	78.3
21-Sep	69.2	83.9	88.5	81.7	89.8	92.4	94.5	80.1	63.6	51.8	45.2	39.9	42.7	39.3	33.7	32.7	34.8	40.1	49.9	68.9	63.8	63.1	68.6	77.8	62.3	94.5
22-Sep	89.0	94.4	95.6	96.2	96.9	97.8	97.9	93.1	88.6	79.6	65.2	57.7	46.9	40.1	40.6	40.7	36.4	40.3	59.3	82.8	83.7	76.6	86.5	91.5	74.1	97.9
23-Sep	93.4	96.1	96.6	95.5	96.8	96.5	97.6	96.7	89.5	70.2	63.0	61.6	61.2	56.6	56.4	60.4	61.9	65.3	75.3	80.6	81.9	87.0	93.6	94.2	80.3	97.6
24-Sep	81.9	78.9	73.7	84.7	88.2	92.1	93.5	89.8	58.9	53.1	45.2	39.8	32.8	30.8	30.0	31.5	33.3	39.7	57.7	74.6	79.4	84.5	86.4	86.9	64.5	93.5
25-Sep	86.5	91.6	91.5	72.0	74.0	80.2	70.8	81.3	76.4	66.9	57.9	50.4	52.0	53.8	59.0	60.1	64.0	68.7	73.0	81.2	81.3	84.6	86.4	87.8	73.0	91.6
26-Sep	87.9	91.4	97.1	97.4	97.7	96.9	94.8	93.8	92.6	91.7	86.1	83.9	77.4	76.0	72.5	69.2	71.3	76.0	76.5	74.5	74.8	78.0	77.1	77.1	83.8	97.7
27-Sep	77.5	79.2	80.4	76.4	73.0	77.1	75.2	74.3	67.8	60.9	58.6	54.5	48.9	45.0	45.1	45.6	46.4	50.6	57.1	62.1	63.6	65.9	63.3	71.2	63.3	80.4
28-Sep	76.3	85.4	89.5	79.3	76.6	75.1	75.8	68.3	57.8	58.8	51.6	44.4	40.7	38.5	38.8	40.2	38.1	40.9	50.4	55.7	55.0	57.9	57.1	57.9	58.8	89.5
29-Sep	61.9	57.8	67.1	64.0	63.5	73.4	84.2	92.2	93.2	91.0	84.1	84.1	88.4	83.8	64.7	53.5	50.1	52.4	59.6	63.8	57.8	62.7	62.0	66.1	70.1	93.2
30-Sep	69.7	72.0	71.8	70.9	79.1	91.3	91.6	93.2	93.5	93.6	88.7	84.6	88.0	86.6	82.0	79.5	78.8	80.2	79.9	80.9	81.0	82.8	83.8	90.4	83.1	93.6
	85.5	88.1	89.4	88.3	89.1	90.4	90.1	85.9	79.1	72.2	66.0	61.0	58.0	56.3	55.1	54.8	55.0	60.0	70.7	78.3	80.0	81.8	82.9	84.4	Diurnal Average	
	97.7	99.8	99.1	99.5	99.3	99.5	99.8	99.7	97.2	94.6	91.0	86.7	88.4	90.1	87.1	83.9	84.6	88.5	93.6	95.9	96.0	96.1	97.7	97.6	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Anzac - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	38	5.28	5.28
40 - 60	131	18.19	23.47
60 - 80	201	27.92	51.39
80 - 100	350	48.61	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 53.5 % on Sep 1 01:00

Maximum Daily Average: 15.5 % on Sep 7

Minimum Value: 0.0 % on Sep 1 08:00

Minimum Daily Average: 0.0 % on Sep 2

Maximum Diurnal Average: 15.4 % at hour 6

Minimum Diurnal Average: 0.2 % at hour 17

Monthly Average: 6.39 %

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 8.1 P_{90} = 26.2 P_{99} = 43.8

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

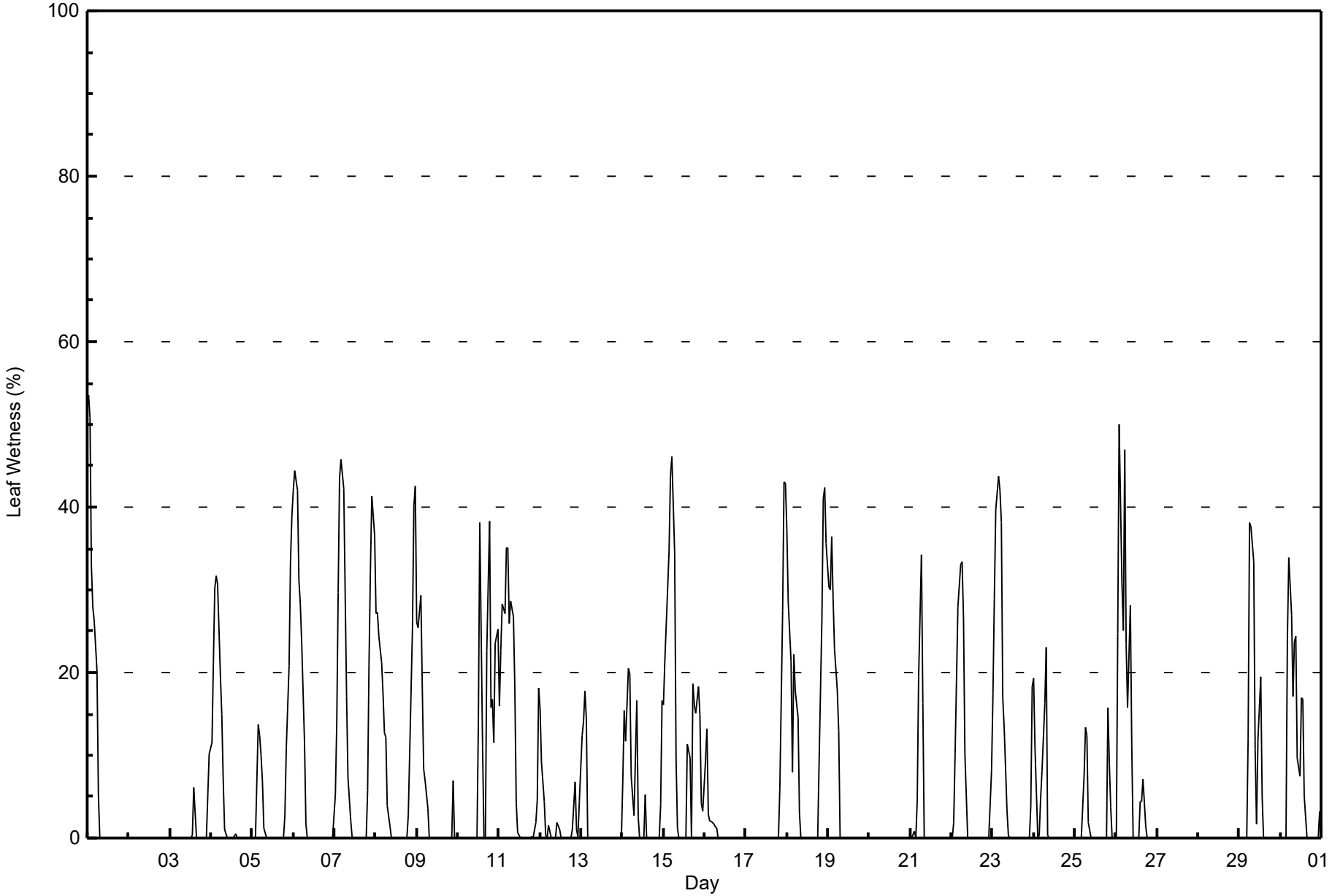
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	53.5	50.9	32.9	28.0	26.2	20.1	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	53.5
2-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	10.1	0.9	10.1
4-Sep	11.5	21.2	30.2	31.6	30.7	19.6	15.0	7.1	1.0	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	7.0	31.6
5-Sep	0.0	0.0	0.0	13.7	12.4	10.0	6.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	10.9	20.9	33.3	39.0	6.3	39.0
6-Sep	42.1	44.3	42.0	31.2	28.3	23.6	11.5	1.8	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	0.0	9.4	44.3
7-Sep	5.2	13.9	29.6	43.5	45.7	42.2	29.4	17.1	7.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	20.9	32.4	41.4	36.6	15.5	45.7
8-Sep	27.0	27.3	24.4	21.2	17.5	12.8	12.3	3.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	10.2	25.4	40.2	42.5	11.2	42.5
9-Sep	26.0	25.4	29.4	18.1	8.4	7.0	3.6	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	6.9	0.0	0.0	5.2	29.4
10-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.1	38.2	11.1	0.0	0.0	22.8	38.3	15.8	16.7	11.5	23.6	25.2	9.1	38.3
11-Sep	16.0	22.7	28.4	27.1	35.0	35.0	25.9	28.7	26.9	18.1	4.2	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.8	4.6	18.2	12.2	35.0
12-Sep	15.6	9.2	4.4	0.4	0.0	1.6	0.0	0.0	0.0	0.0	1.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	6.7	1.1	0.2	4.3	2.0	15.6
13-Sep	12.3	14.0	17.9	14.5	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	0.0	0.0	0.0	2.4	17.9
14-Sep	7.0	15.4	11.6	20.6	19.8	7.5	5.1	2.8	16.6	2.6	0.0	0.0	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	16.7	5.6	20.6
15-Sep	16.1	21.5	30.2	34.7	43.8	46.1	34.5	9.4	1.2	0.0	0.0	0.0	0.0	0.0	11.4	9.7	0.0	18.6	16.2	15.0	18.2	14.9	4.2	3.3	14.5	46.1
16-Sep	9.2	13.2	2.9	2.1	2.0	1.6	1.4	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	1.4	13.2
17-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	27.5	43.0	42.8	5.0	43.0
18-Sep	37.2	28.4	21.3	8.0	22.3	17.8	14.6	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.2	26.4	41.1	42.3	35.6	12.8	42.3
19-Sep	30.3	30.0	36.4	28.8	22.9	17.8	12.8	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	0.0	0.0	7.5	36.4
20-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.8	0.0	4.5	19.5	34.2	16.3	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	3.1	34.2
22-Sep	0.0	1.8	10.1	19.0	28.0	33.1	33.4	26.6	10.2	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	8.1	7.1	33.4
23-Sep	17.4	28.9	39.6	43.7	42.1	38.1	17.0	13.3	3.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	18.3	11.1	43.7
24-Sep	19.3	10.8	0.0	0.3	4.8	8.2	16.3	23.0	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	3.5	23.0
25-Sep	0.0	0.0	0.0	0.0	0.0	7.4	13.4	12.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.7	9.0	3.8	0.0	0.0	2.7	15.7
26-Sep	0.0	24.7	50.0	30.8	25.1	46.9	23.4	15.8	28.1	11.1	0.0	0.0	0.0	0.0	4.3	4.5	7.2	1.4	0.0	0.0	0.0	0.0	0.0	0.0	11.4	50.0
27-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	12.0	38.1	37.7	33.4	10.6	1.8	11.9	19.6	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	38.1
30-Sep	0.0	0.0	0.0	0.0	24.0	33.9	26.9	17.2	23.7	24.4	9.7	7.5	17.0	16.9	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	8.7	33.9
	11.5	13.5	14.7	13.9	14.8	15.4	12.7	7.9	5.2	2.3	0.6	0.7	1.7	2.2	1.3	0.5	0.2	1.4	1.8	2.3	4.2	6.2	8.2	10.1	Diurnal Average	
	53.5	50.9	50.0	43.7	45.7	46.9	38.1	37.7	33.4	24.4	9.7	11.9	19.6	38.2	11.4	9.7	7.2	22.8	38.3	15.8	26.4	41.1	43.0	42.8	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Leaf Wetness (LW) - %

Anzac - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 0.3	468	65.00	65.00
0.4 - 0.5	3	0.42	65.42
0.6 - 0.7	2	0.28	65.69
0.8 - 1.4	11	1.53	67.22
1.5 - 10	66	9.17	76.39
> 10	170	23.61	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 20m (WS20) - km/h

Anzac - September 2026

Maximum Speed: 31 km/h on Sep 26 13:00

Maximum Daily Speed Average: 24.9 km/h on Sep 26

Minimum Speed Value: 0 km/h on Sep 5 18:00

Minimum Daily Speed Average: 1.3 km/h on Sep 16

Maximum Diurnal Speed Average: 6.6 km/h at hour 15

Minimum Diurnal Speed Average: 2.2 km/h at hour 19

Monthly Average Velocity: 4.8 km/h 263.8 deg

Percentiles: $P_1 = 2$ $P_{10} = 6$ $Q_1 = 8$ Median = 11 $Q_3 = 17$ $P_{90} = 22$ $P_{99} = 29$

Hours in Service:	720
Hours of Data:	720
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-Sep	S6	S7	S8	S7	S9	S10	SSE11	SSE11	SSE10	S11	SSE12	SSE14	SSE19	SSE19	SSE17	SSE18	SSE19	SSE16	SE11	SE14	SSE13	SSE12	SSE13	SSE12	SSE12.2	SSE19
2-Sep	SE13	SSE13	SSE13	SE14	SSE14	SSE16	SE17	SE16	SE18	SE20	SE19	SE20	SE22	SE21	SE22	SE19	SE18	ESE17	ESE17	SE16	ESE16	SE16	SE14	SE10	SE16.4	SE22
3-Sep	E10	ESE11	ESE11	ESE13	ESE15	ESE15	ESE10	SE13	SE14	ESE15	ESE19	ESE19	ESE20	ESE17	ESE16	ESE18	ESE16	ESE14	ESE13	E10	E10	E9	ESE10	SE10	ESE13.4	ESE20
4-Sep	SE8	ESE7	SSE8	SSE10	SE8	SSE11	SSE7	S7	ESE2	NNW3	WNW5	NNW11	NNW16	NNW22	N21	NNW25	NNW24	NNW20	N19	NNW20	NNW20	N21	N18	N14	N8.4	NNW25
5-Sep	N14	NNW11	NNW12	NNW11	NNW11	NNW10	NNW11	NNW11	N11	N11	N11	N12	N8	NW5	W9	W6	WNW5	ESE0	NNW4	N4	N4	WSW3	SSW6	SSW6	NNW6.5	N14
6-Sep	S6	SSE7	SSE9	S9	SSE9	SSE7	SSE10	SSE11	SSE10	SSE13	SE13	SE15	SE13	SE10	SSE11	SE11	SE9	SE7	SE8	SE10	SSE12	SE13	SE11	SSE9	SE9.8	SE15
7-Sep	SSE10	SSE11	SE8	SE9	SSE10	ENE5	SSE8	S2	ESE2	SE4	ENE6	ESE4	ESE6	SE4	ESE5	ESE5	ENE6	ENE8	ESE8	SE7	SSE7	S4	SW3	W4	SE4.7	SSE11
8-Sep	WNW8	WNW10	WNW12	WNW13	WNW12	NW11	NW11	NW12	NW11	NW14	NW12	NNW14	NW15	NNW15	NW14	NNW11	NW9	NW3	S5	S7	S7	S7	SSW7	SW8	WNW7.6	NW15
9-Sep	SW8	SW6	SW8	SW9	SW9	SW8	SW9	SW11	SW11	WSW9	WSW10	WSW17	WSW17	W18	WSW19	WSW20	WSW16	WSW19	WSW16	SW12	SW12	W10	WSW17	W19	WSW12.4	WSW20
10-Sep	WNW28	W25	W22	WNW20	W19	WSW15	W17	W22	W21	WNW23	W23	WNW26	WNW23	NW16	WNW21	WNW23	WNW23	NW21	NW19	WNW19	NW20	NW20	NW21	WNW23	WNW20.6	WNW28
11-Sep	NW23	NW26	NW26	NW24	NW24	NW22	NW22	NW22	NW23	NW22	NNW26	NNW29	NW24	NW24	NW23	NNW25	NNW25	NNW18	NW15	NW16	NW17	NW16	NW15	NW15	NW21.5	NNW29
12-Sep	NW14	NW13	NW12	NW12	WNW14	WNW12	WNW12	NW11	WNW10	WNW9	WNW11	WNW11	WNW13	WNW8	NW8	WNW8	WNW10	WNW8	SW6	SSW8	SSW8	SW9	SW7	SSW6	WNW8.4	WNW14
13-Sep	SW7	SW7	SW7	SSW7	SW10	WSW11	SW10	SW7	SW8	W11	WNW14	W14	WSW17	W15	W13	W10	W10	WSW9	SW7	S8	SSW8	W7	WNW11	WNW12	WSW8.7	WSW17
14-Sep	NW11	NW12	NNW13	NNW14	N16	NNW15	NNW15	NNW17	NNW16	NNW16	NNW19	NNW20	NNW20	N17	NNW16	NNW18	N20	NNW15	NNW12	NW12	NW13	NW11	NW11	NW12	NNW14.5	NNW20
15-Sep	NW13	WNW12	WNW12	WNW12	WNW11	WNW11	WNW12	WNW12	W11	W10	W10	WNW12	W11	W6	W10	SSE3	SSW7	WNW8	SSW7	WNW2	W5	W10	WNW16	WNW15	WNW9.1	WNW16
16-Sep	NW13	NW12	NW12	NW11	NW10	NW8	NW6	N5	W2	NNE2	NNE3	NNE2	NW8	WNW7	WNW8	NW5	E3	E6	ESE10	ESE11	ESE11	SE11	SSE16	SE15	NNW1.3	SSE16
17-Sep	SE16	SE17	SE16	SE17	SE17	SE13	SSE12	SE8	SE8	SSE3	WSW2	WSW4	WNW6	WNW5	NW7	NNW11	NW7	W3	NNW7	NNW3	WSW5	SW5	WSW7	W7	SSE3.3	SE17
18-Sep	WNW7	W9	W12	WNW9	W7	WNW7	WNW10	WNW12	WNW13	WNW12	WNW10	WNW11	WNW11	NW11	NW9	N10	NNW7	N3	E6	SSE6	S9	S9	S10	S10	W5.6	WNW13
19-Sep	S11	S9	S8	S9	SSE11	S10	S12	S11	S13	S15	S18	S23	S21	S20	S19	S18	SSW17	SSW14	S12	S14	S17	S15	SSE12	SW17	S14.2	S23
20-Sep	SW20	WSW12	SW9	SW9	WSW9	WSW9	WSW9	WSW8	W4	SW3	W7	WNW10	WNW13	WNW12	W13	W11	W12	WSW8	SW7	S9	SSW11	SSW12	SSW13	SSW13	WSW8.7	SW20
21-Sep	SSW10	SSW6	SW7	SW8	SW7	SW8	SW7	S9	SSE7	SSE7	SSE10	SSE15	SSE17	SSE19	SSE20	SSE22	S16	SSW11	SSW9	S9	SSW11	SW13	WSW9	W8	S9.2	SSE22
22-Sep	W5	WSW3	WSW4	S4	S6	SSE7	SSE8	SSE4	WNW18	WNW15	WNW21	WNW19	NW20	NW20	WNW17	WNW16	WNW17	NW12	WNW7	W7	WNW8	W10	W8	SW7	WNW8.6	WNW21
23-Sep	W8	WNW8	WNW6	SSW5	SSW4	S6	SSE5	SSE6	ESE4	SE7	SE7	ESE6	ESE10	SE10	SE12	SE11	SE11	SE10	SE9	SSE11	SSE11	SSE9	S6	WSW9	SSE5.6	SE12
24-Sep	W10	W10	W8	W9	W8	WSW7	WSW7	WSW7	W8	W7	W8	WNW12	W13	WNW15	W15	W13	W10	WSW8	W6	W5	SW4	S5	SSW5	S5	W7.8	W15
25-Sep	SSE7	SSE7	ESE8	ESE9	SE6	E9	E12	E13	E17	E16	E21	ESE27	ESE29	ESE25	ESE17	ESE22	E19	E15	E10	E12	E11	ENE7	NNW10	WNW14	E12.0	ESE29
26-Sep	NW11	NW8	WNW15	WNW19	W20	W24	W27	W30	W30	W28	W29	W30	W31	W29	W28	W30	WNW30	WNW31	WNW27	WNW28	WNW26	W26	W24	W26	W24.9	W31
27-Sep	W22	W21	W20	W24	W21	W16	W16	W16	W17	W17	W18	W21	W24	W24	W22	W21	WSW22	WSW18	WSW13	SW11	SW11	SW10	WSW12	SW7	W17.3	W24
28-Sep	SW9	SSW7	SSW7	SW11	WSW11	WSW11	WSW11	SW9	SW10	SSW9	SW10	WSW13	WSW17	WSW17	WSW15	SSW13	SSW15	SSW13	S14	SSE14	S12	S10	S11	S12	SW10.5	WSW17
29-Sep	S11	SSW8	SSW6	WSW10	W12	WNW12	W10	W8	WSW9	SW10	W18	W20	WNW23	WNW24	WNW26	WNW22	WNW25	WNW25	WNW18	W13	W23	WNW18	WNW22	WNW22	W14.9	WNW26
30-Sep	W24	W23	W23	W27	WNW25	NW27	NW27	NW28	NW27	NW25	NW23	NW24	NW23	NW20	WNW23	NW23	NW18	NW14	NW14	NW11	NW10	NW11	NW11	NW10	WNW20.0	NW28
	W5.8	W5.2	W5.5	W5.5	W5.3	W4.6	WSW4.9	W4.8	W5.0	W4.5	W5.2	W5.6	W6.0	W5.9	W6.6	W5.1	W4.9	W3.8	WSW2.2	SW2.4	SW3.7	WSW4.1	WSW5.3	WSW6.2	Diurnal Average	
	WNW28	NW26	NW26	W27	WNW25	NW27	NW27	W30	W30	W28	W29	W30	W31	W29	W28	W30	WNW30	WNW31	WNW27	WNW28	WNW26	W26	W24	W26	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: 9 km/h on Sep 26 13:00

Minimum Value: 1 km/h on Sep 5 19:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 3 Q_3 = 5 P_{90} = 6 P_{99} = 8

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

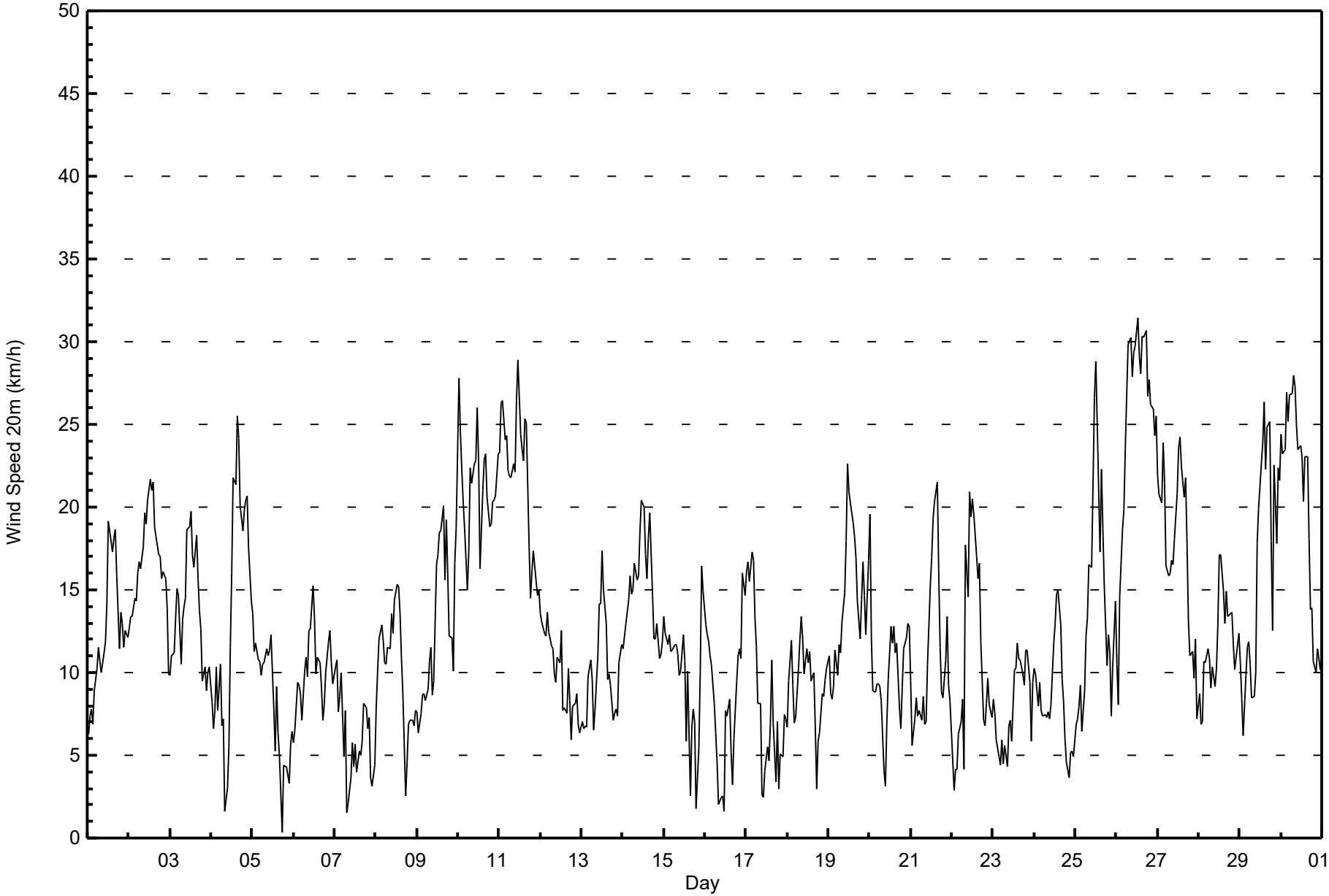
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	1	2	1	1	1	1	1	2	2	4	3	4	4	4	4	5	4	4	2	2	2	2	2	2	5
2-Sep	2	2	2	2	2	3	3	3	4	4	4	5	5	6	5	5	5	4	4	3	3	3	3	2	6
3-Sep	2	2	2	3	3	3	2	4	4	4	5	5	5	5	5	5	5	3	4	2	2	2	2	2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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 20m (WS20) - km/h

Anzac - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	58	8.06	8.06
6 - 11	309	42.92	50.97
12 - 19	229	31.81	82.78
20 - 28	113	15.69	98.47
29 - 38	11	1.53	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 20m (WS20) - km/h

Anzac - September 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	3	0	1	1	7	2	4	6	3	3	7	7	4	3	3	58
6 - 11	5	0	0	4	9	15	25	34	33	21	38	24	35	30	24	12	309
12 - 19	6	0	0	0	7	17	25	25	14	9	3	18	20	38	29	18	229
20 - 28	3	0	0	0	1	4	5	2	3	0	1	2	29	23	29	11	113
29 - 38	0	0	0	0	0	1	0	0	0	0	0	0	7	2	0	1	11
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	18	3	0	5	18	44	57	65	56	33	45	51	98	97	85	45	720

Total Number of Valid Hours: 720

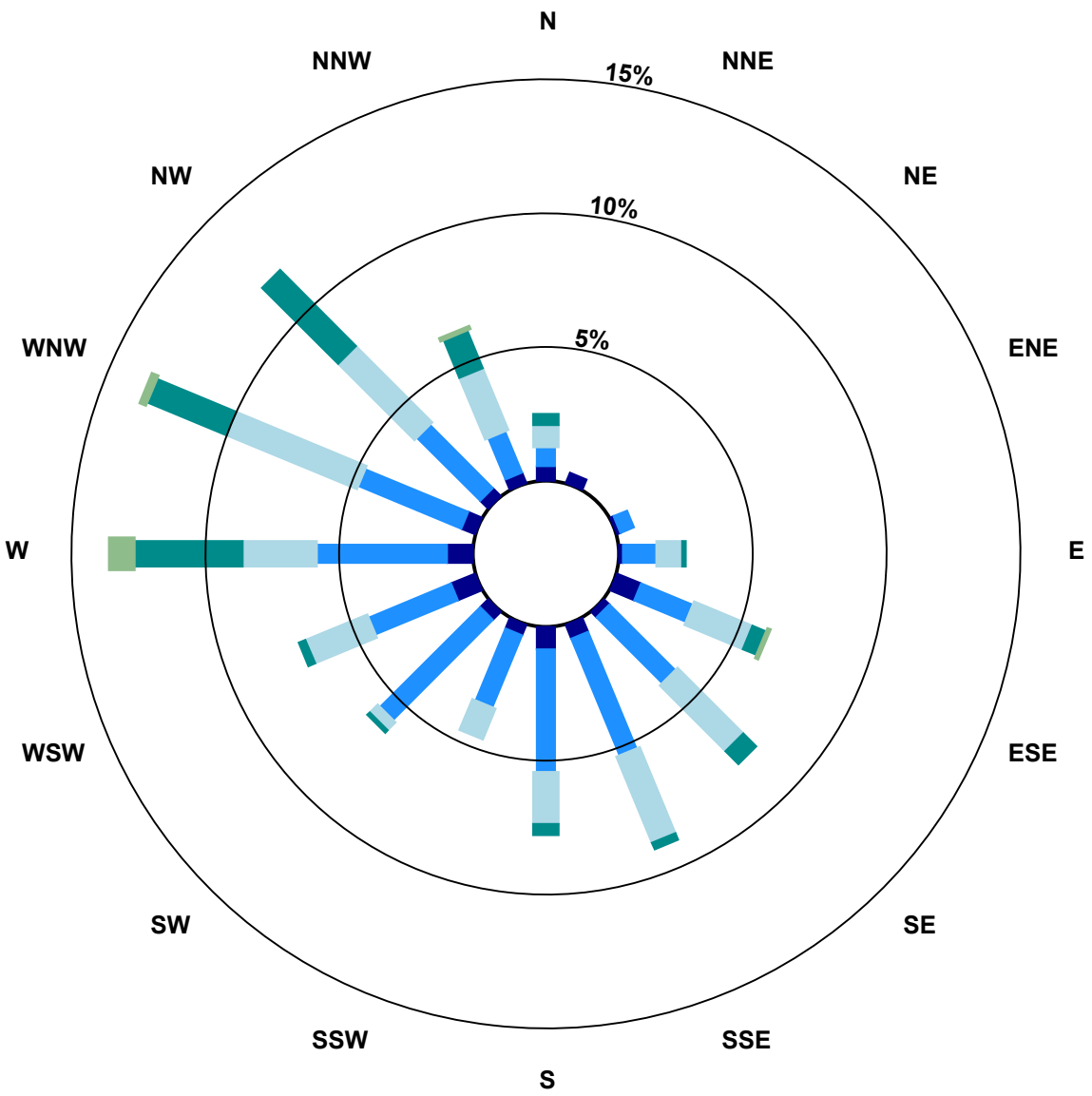
Total Number of Hours: 720

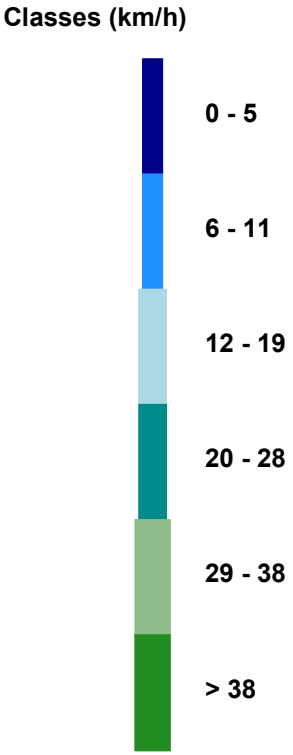
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 20m (WS20) - km/h

Anzac





Total Number of Valid Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 20m (WD20) - deg

Anzac - September 2026

Direction of Maximum Speed: 273 deg on Sep 26 13:00
Direction of Maximum Daily Speed Average: 279.9 deg on Sep 26

Direction of Minimum Speed: 116 deg on Sep 5 18:00

Direction of Minimum Daily Speed Average: 1.3 deg on Sep 16

Monthly Average Direction: 263.8 deg

Hours in Service:	720
Hours of Data:	720
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-Sep	189	177	181	181	178	172	162	160	164	171	158	152	151	157	155	156	158	156	141	140	150	147	157	149	158.4
2-Sep	146	151	149	146	149	150	146	145	144	141	141	137	136	141	138	141	126	117	122	124	122	126	134	128	137.3
3-Sep	99	107	114	112	110	116	123	124	129	106	110	112	111	116	109	117	114	104	105	81	85	89	113	124	110.7
4-Sep	127	106	153	148	141	157	161	176	112	343	303	342	341	346	350	348	346	347	358	345	348	353	353	353	354.3
5-Sep	349	343	343	341	339	340	342	329	352	5	358	357	3	314	269	274	300	116	331	350	9	246	205	192	336.6
6-Sep	175	157	160	171	166	154	158	156	150	148	135	135	137	146	148	145	124	126	129	129	147	143	142	152	146.0
7-Sep	147	147	140	130	150	73	151	180	111	128	68	111	107	134	123	104	60	64	105	133	152	172	224	263	127.2
8-Sep	290	291	294	292	302	314	312	311	311	313	320	333	322	334	318	339	323	318	177	181	182	191	198	225	303.5
9-Sep	232	218	229	221	217	222	232	234	232	248	244	245	252	259	253	247	240	244	248	235	230	270	257	273	244.4
10-Sep	289	277	277	287	276	255	264	276	273	286	280	287	292	304	294	298	293	311	305	300	308	311	312	303	290.1
11-Sep	307	306	307	309	313	321	324	325	324	325	328	332	325	326	324	327	330	333	319	325	323	316	314	311	320.8
12-Sep	313	312	306	306	297	294	301	307	299	294	288	287	287	291	304	300	283	288	220	197	212	223	224	212	285.8
13-Sep	216	229	225	212	231	238	227	218	220	278	284	261	249	259	276	268	271	241	219	187	206	275	297	298	250.7
14-Sep	307	313	330	346	349	341	342	338	341	339	341	341	345	349	344	341	356	348	329	313	312	311	309	307	335.5
15-Sep	306	302	296	301	297	300	297	286	277	271	281	284	280	275	273	154	207	293	206	298	261	259	284	294	283.5
16-Sep	304	313	306	308	319	316	318	7	277	31	22	32	309	291	300	314	80	91	110	110	121	144	152	142	329.1
17-Sep	141	140	144	138	139	138	149	135	143	160	237	254	287	290	310	332	312	267	345	334	257	222	244	281	165.6
18-Sep	289	281	274	283	272	284	288	287	291	291	289	292	283	308	316	350	344	359	86	168	176	170	172	175	280.6
19-Sep	172	170	176	182	162	170	178	174	178	186	188	183	174	175	179	189	193	193	178	174	174	171	165	214	180.1
20-Sep	225	237	230	236	237	245	237	240	269	236	267	295	291	288	276	267	259	250	220	185	198	195	212	212	240.9
21-Sep	200	207	231	236	236	233	231	184	152	155	155	153	153	155	154	156	172	194	192	178	195	222	246	268	184.2
22-Sep	267	248	241	178	170	159	165	151	293	292	293	295	304	309	291	288	300	309	295	278	284	272	275	235	284.2
23-Sep	263	285	283	211	203	176	152	150	120	145	129	109	112	138	140	137	138	132	144	159	164	159	191	256	158.0
24-Sep	271	267	271	273	264	250	239	256	262	261	281	294	281	284	269	260	273	251	259	279	226	186	192	172	263.4
25-Sep	165	148	112	116	132	84	99	84	80	91	100	103	111	111	111	102	95	89	91	97	90	75	337	289	99.4
26-Sep	315	315	294	289	280	276	278	279	276	275	277	273	273	271	269	275	285	291	285	289	284	278	278	273	279.9
27-Sep	270	268	273	274	273	279	261	260	265	272	273	266	267	265	263	261	255	248	254	236	232	233	253	227	262.5
28-Sep	228	205	213	235	241	238	239	228	232	209	226	241	250	250	240	211	203	200	175	168	185	187	188	183	216.7
29-Sep	184	192	207	246	281	288	271	267	249	231	264	277	285	287	288	294	290	303	299	268	277	283	282	286	277.5
30-Sep	281	281	276	275	290	311	306	305	309	311	316	314	313	309	301	305	310	306	319	316	312	312	314	316	302.8
	258.8	260.6	261.2	259.3	258.9	263.2	255.9	262.9	269.8	272.4	278.5	279.9	276.4	275.7	271.5	275.5	278.0	279.3	253.0	220.7	228.2	237.8	251.0	255.5	
	Diurnal Average																								

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

Wind Direction 20m (WD20) - deg

Anzac - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 96 deg on Sep 5 18:00

Minimum Value: 4 deg on Sep 6 01:00

Percentiles: P_1 = 6 P_{10} = 10 Q_1 = 13 Median = 16 Q_3 = 19 P_{90} = 27 P_{99} = 76

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

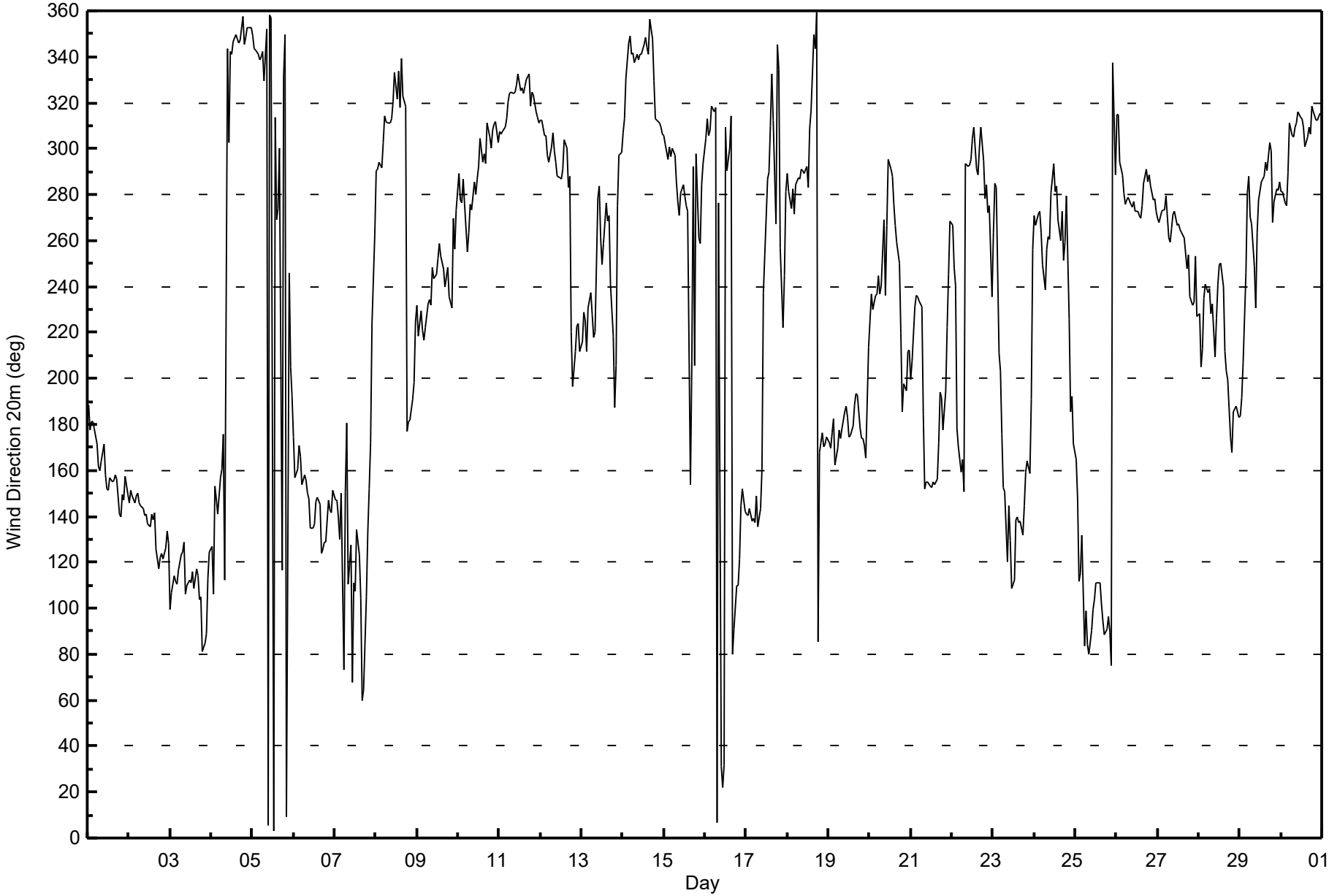
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	11	6	7	6	5	6	6	10	13	23	18	20	17	17	17	16	14	13	10	10	10	8	8	8	23
2-Sep	10	10	10	11	12	11	11	12	13	14	14	16	16	16	15	17	17	14	14	14	13	13	14	14	17
3-Sep	14	13	10	12	12	13	14	16	17	15	16	16	16	16	17	15	16	16	14	14	12	11	13	10	17
4-Sep	11	23	9	10	19	11	15	13	56	55	43	24	22	17	18	16	15	17	16	14	14	15	15	15	56
5-Sep	13	12	12	14	14	13	15	14	21	23	21	30	43	62	24	40	53	96	12	21	30	13	8	10	96
6-Sep	4	15	7	5	7	12	10	12	16	14	17	14	20	33	17	19	20	12	19	11	10	10	17	12	33
7-Sep	9	11	12	13	11	39	24	80	46	41	22	54	37	59	38	47	25	24	14	13	10	51	35	38	80
8-Sep	8	9	11	13	14	14	14	17	16	17	26	22	21	20	25	27	26	58	7	6	8	12	17	16	58
9-Sep	14	15	14	15	13	13	14	16	17	24	25	21	21	23	22	18	19	18	18	19	20	24	23	18	25
10-Sep	17	17	18	18	17	18	18	17	17	18	17	17	17	15	16	17	18	21	16	17	15	15	15	15	21
11-Sep	14	14	14	15	15	12	12	13	12	14	13	13	15	14	15	15	15	14	12	14	12	13	13	14	15
12-Sep	14	14	15	16	16	16	16	15	21	21	24	32	32	47	28	33	22	25	22	8	16	13	15	15	47
13-Sep	17	17	17	14	18	16	16	21	22	21	17	21	21	24	25	31	28	18	15	12	10	53	12	11	53
14-Sep	12	14	16	13	14	12	13	13	14	14	16	18	16	18	20	16	15	15	13	14	13	14	12	13	20
15-Sep	14	12	14	14	13	11	14	18	17	19	25	18	27	45	37	69	27	68	17	78	44	16	17	16	78
16-Sep	14	15	13	15	15	16	23	26	85	94	78	86	32	34	21	27	22	16	9	8	13	10	9	11	94
17-Sep	11	12	11	11	12	13	15	17	18	69	78	47	23	26	21	15	21	35	8	46	13	13	10	14	78
18-Sep	10	9	10	12	31	11	10	15	14	16	19	21	27	30	41	28	32	37	14	11	6	7	5	6	41
19-Sep	7	6	5	8	6	7	9	11	15	18	20	19	18	19	20	21	20	19	11	11	11	12	15	21	21
20-Sep	18	18	23	19	14	11	14	13	59	59	34	18	17	17	19	24	17	16	22	12	13	16	19	17	59
21-Sep	16	23	14	12	9	9	11	12	13	16	19	18	18	17	16	15	19	17	17	16	19	17	23	9	23
22-Sep	55	51	35	21	10	5	10	60	16	15	15	16	17	21	18	17	18	14	17	19	10	9	9	18	60
23-Sep	13	10	16	15	20	9	34	9	27	21	17	28	17	18	16	15	14	14	13	10	9	10	19	14	34
24-Sep	9	14	14	9	9	14	11	13	12	17	18	16	19	18	20	22	20	14	22	18	43	16	16	16	43
25-Sep	10	8	12	21	26	18	21	14	14	16	16	16	16	16	19	16	16	19	48	22	41	32	30	17	48
26-Sep	38	49	18	20	25	16	16	16	16	17	16	17	17	17	17	16	17	16	17	16	17	16	16	16	49
27-Sep	17	17	16	16	17	19	18	19	19	18	18	18	17	17	17	19	17	16	13	15	15	19	15	24	24
28-Sep	18	15	21	15	15	14	14	17	21	19	25	23	19	19	21	20	21	19	11	12	13	13	15	11	25
29-Sep	14	18	31	13	19	16	17	17	16	19	21	16	17	16	17	18	16	18	18	18	17	16	15	16	31
30-Sep	15	16	16	16	20	15	15	15	15	14	15	15	15	17	18	16	15	15	13	12	12	12	12	10	20
	55	51	35	21	31	39	34	80	85	94	78	86	43	62	41	69	53	96	48	78	44	53	35	38	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 20m (WD20) - deg

Anzac - September 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS17
WAPASU
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WAPASU (AMS17)
SEPTEMBER 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	684	34	36	99.72	39.1	0	4.1	0
H2S (ppb) Average	684	35	36	99.86	1.1	0	0.3	0
THC (ppm) Average	684	35	36	99.86	2.9	-	2.4	-
O3 (ppb) Average	686	33	34	99.86	40.4	0	32.7	-
NO2 (ppb) Average	684	36	36	100	12.8	0	4.1	-
NO (ppb) Average	684	36	36	100	16	-	2	-
NOX (ppb) Average	684	36	36	100	26.7	-	5.9	-
PM2.5 (ug/m3) Average	717	2	3	99.86	27.6	0	7.2	0
Temperature 2 m (C) Average	720	0	0	100	25.8	-	20.6	-
Relative Humidity (%) Average	720	0	0	100	100	-	95.4	-
Wind Speed 10 m (km/h) Average	717	0	3	99.58	24	-	18	-
Wind Direction 10 m (deg) Average	717	0	3	99.58	-	-	-	-
Precipitation (mm) Total	720	0	0	100	2.8	-	12	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WAPASU (AMS17)
SEPTEMBER 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	684	0.65	2.3	-	0	0	0	0	0.2	1.7	39.1
H2S (ppb) Average	684	0.12	0.1	-	0	0	0	0.1	0.1	0.3	1.1
THC (ppm) Average	684	2.25	0.1	-	2.1	2.1	2.2	2.2	2.3	2.4	2.9
O3 (ppb) Average	686	20.58	8.5	-	0.5	9.3	15.2	20.5	26.4	32	40.4
NO2 (ppb) Average	684	2.07	2.4	-	0	0.1	0.4	1.3	2.9	5.2	12.8
NO (ppb) Average	684	0.37	1.3	-	0	0	0	0	0.1	0.9	16
NOX (ppb) Average	684	2.44	3.2	-	0	0.1	0.4	1.3	3.1	6.2	26.7
PM2.5 (ug/m3) Average	717	3.7	2.4	-	0.1	1.2	2.2	3.2	4.8	6.3	27.6
Temperature 2 m (C) Average	720	11.18	5.4	-	0.7	4.7	7.2	10.3	15.5	18.6	25.8
Relative Humidity (%) Average	720	75.54	18.7	-	29.2	48.2	62	78.7	91.6	98.3	100
Wind Speed 10 m (km/h) Average	717	9.7	4	-	1	5	7	9	13	16	24
Wind Direction 10 m (deg) Average	717	-	-	-	-	-	-	-	-	-	-
Precipitation (mm) Total	720	-	-	44.13	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WAPASU (AMS17)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Start	End	(Hours)	Notes
H2S, O3, SO2, THC	22 Sep 2026 12:00	22 Sep 2026 12:00	1	Maintenance - sample manifold cleaned
SO2	15 Sep 2026 10:00	15 Sep 2026 10:00	1	DAS Failure
PM2.5	07 Sep 2026 12:00	07 Sep 2026 12:00	1	DAS Failure
Wind Speed, Wind Direction	05 Sep 2026 07:00	05 Sep 2026 07:00	1	Flat line in sensor output signal
Wind Speed, Wind Direction	08 Sep 2026 03:00	08 Sep 2026 03:00	1	Flat line in sensor output signal
Wind Speed, Wind Direction	18 Sep 2026 18:00	18 Sep 2026 18:00	1	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Wapasu - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 39.1 ppb on Sep 21 09:00
Maximum Daily Average: 4.1 ppb on Sep 21

Minimum Value: 0.0 ppb on Sep 1 01:00
Minimum Daily Average: 0.0 ppb on Sep 2
Maximum Diurnal Average: 2.4 ppb at hour 9
Minimum Diurnal Average: 0.2 ppb at hour 22
Monthly Average: 0.65 ppb
Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.2 P_{90} = 1.7 P_{99} = 8.3

Hours in Service:	720
Hours of Data:	684
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-Sep	0.0	0.1	Z	0.1	0.0	0.0	0.1	0.1	0.2	0.1	0.0	0.2	0.3	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
2-Sep	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
3-Sep	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
4-Sep	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
5-Sep	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-Sep	0.0	Z	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	0.2
7-Sep	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	0.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.2
8-Sep	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	1.1	0.2	0.0	0.0	0.4	0.2	0.2	0.1	1.1
9-Sep	0.2	0.2	0.1	0.1	Z	0.2	0.1	0.1	0.2	2.5	0.5	0.1	0.5	0.7	2.7	4.2	1.4	1.1	1.0	3.9	4.3	1.9	2.0	0.5	1.2	4.3
10-Sep	0.2	0.1	0.1	0.2	0.1	Z	0.1	0.1	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	0.0	0.1	0.2
11-Sep	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
12-Sep	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	0.0	1.2	2.0	0.5	0.1	0.1	0.4	3.5	0.3	3.5
13-Sep	4.6	4.3	Z	1.8	1.3	1.1	1.0	3.5	9.4	8.4	6.7	5.7	1.8	3.2	3.7	1.9	0.2	0.6	0.1	0.0	0.1	0.0	0.0	0.0	2.6	9.4
14-Sep	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
15-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	DF	C	C	C	C	0.0	1.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	1.2
16-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.1	0.0	0.0	0.4	7.5	5.1	3.0	0.7	1.3	0.7	0.3	0.0	0.0	0.0	0.0	0.8	7.5
17-Sep	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	5.3	4.5	5.6	5.4	9.5	2.6	0.7	0.2	0.0	0.0	1.5	9.5
18-Sep	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	1.2	2.7	1.8	0.3	2.7
19-Sep	1.1	0.8	Z	0.3	0.5	0.3	0.3	0.3	0.3	0.2	0.2	0.0	0.1	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.3	1.1
20-Sep	0.7	1.5	1.7	Z	0.7	1.3	3.5	4.6	8.3	8.4	8.6	5.0	7.8	5.5	3.1	2.8	1.3	0.2	0.1	0.1	0.1	0.1	0.0	0.2	2.9	8.6
21-Sep	0.3	1.1	0.9	1.5	Z	4.6	4.7	6.3	39.1	26.3	8.1	0.0	0.4	0.2	0.0	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.1	1.3	4.1	39.1
22-Sep	1.5	0.6	0.1	0.0	0.0	Z	0.0	0.0	0.1	0.6	0.2	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	0.1	1.5
23-Sep	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.2
24-Sep	0.6	Z	0.8	0.2	0.2	0.3	1.4	4.1	5.8	5.9	7.7	6.2	5.9	2.9	0.3	0.1	0.2	0.2	0.3	0.4	0.4	0.3	0.3	0.2	1.9	7.7
25-Sep	0.2	0.2	Z	0.7	4.0	3.7	2.1	1.0	1.4	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	0.6	4.0
26-Sep	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
27-Sep	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	0.1	0.6	0.8	1.0	1.4	1.2	0.2	1.4
28-Sep	1.2	1.1	1.2	1.8	1.2	Z	0.6	0.9	2.8	5.8	5.2	2.7	1.3	2.3	2.5	1.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	5.8
29-Sep	Z	0.3	0.2	0.2	0.4	1.8	3.5	1.4	3.9	2.3	1.0	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	0.7	3.9
30-Sep	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
	0.4	0.4	0.2	0.3	0.3	0.5	0.6	0.8	2.4	2.1	1.3	0.7	0.6	0.8	0.8	0.7	0.3	0.4	0.5	0.3	0.2	0.2	0.2	0.3	Diurnal Average	
	4.6	4.3	1.7	1.8	4.0	4.6	4.7	6.3	39.1	26.3	8.6	6.2	7.8	7.5	5.3	4.5	5.6	5.4	9.5	3.9	4.3	1.9	2.7	3.5	Diurnal Maximum	

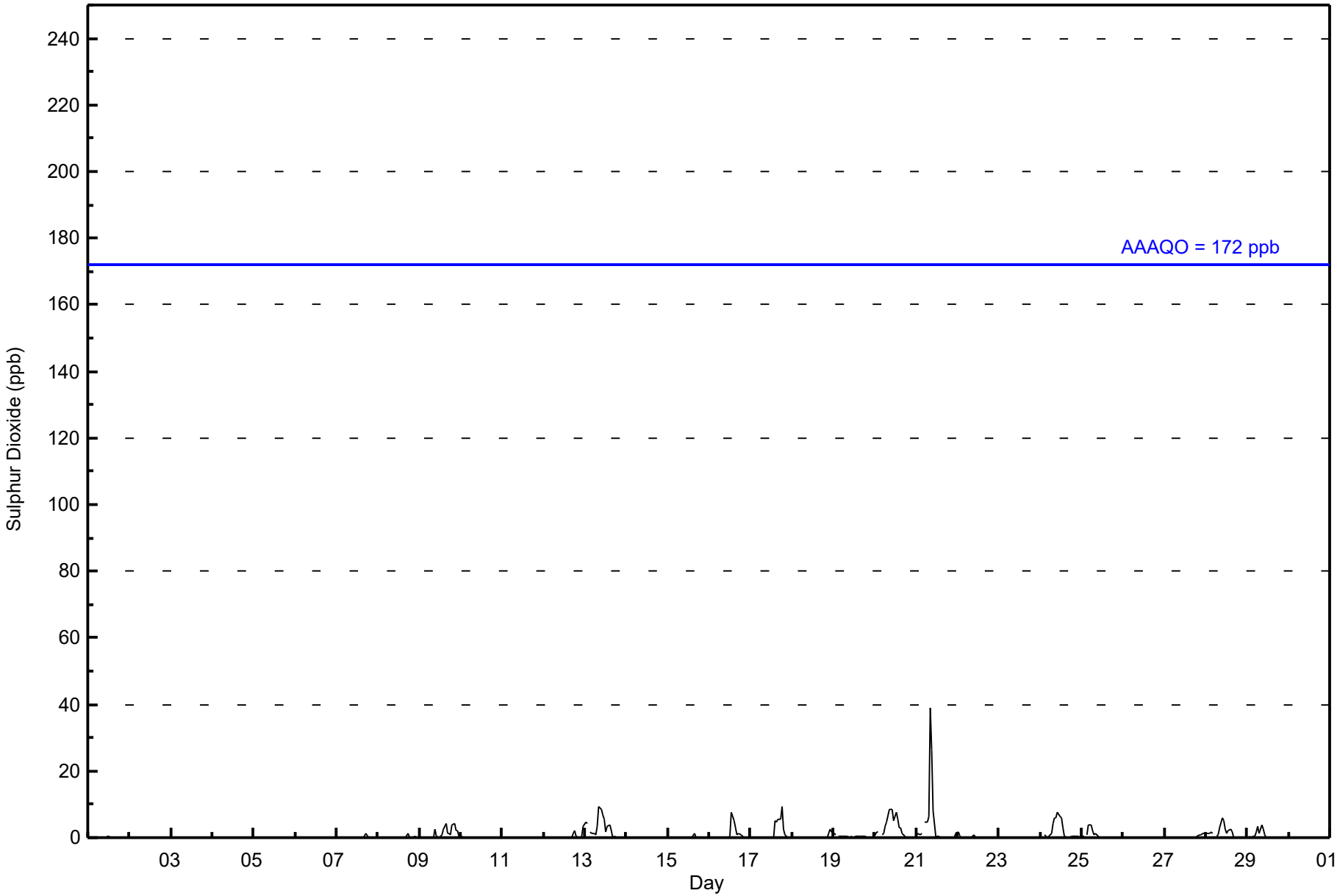
Z - zerospan C - Calibration M - Maintenance DF - DAS Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Wapasu - September 2026



Sulphur Dioxide (SO_2) - ppb
Wapasu - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	682	99.71	99.71
11 - 20	0	0.00	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Wapasu - September 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	45	32	10	6	6	21	57	103	98	54	49	43	39	34	21	61	679
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	2	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	45	32	10	6	6	21	57	103	98	56	49	43	39	34	21	61	681

Total Number of Valid Hours: 681

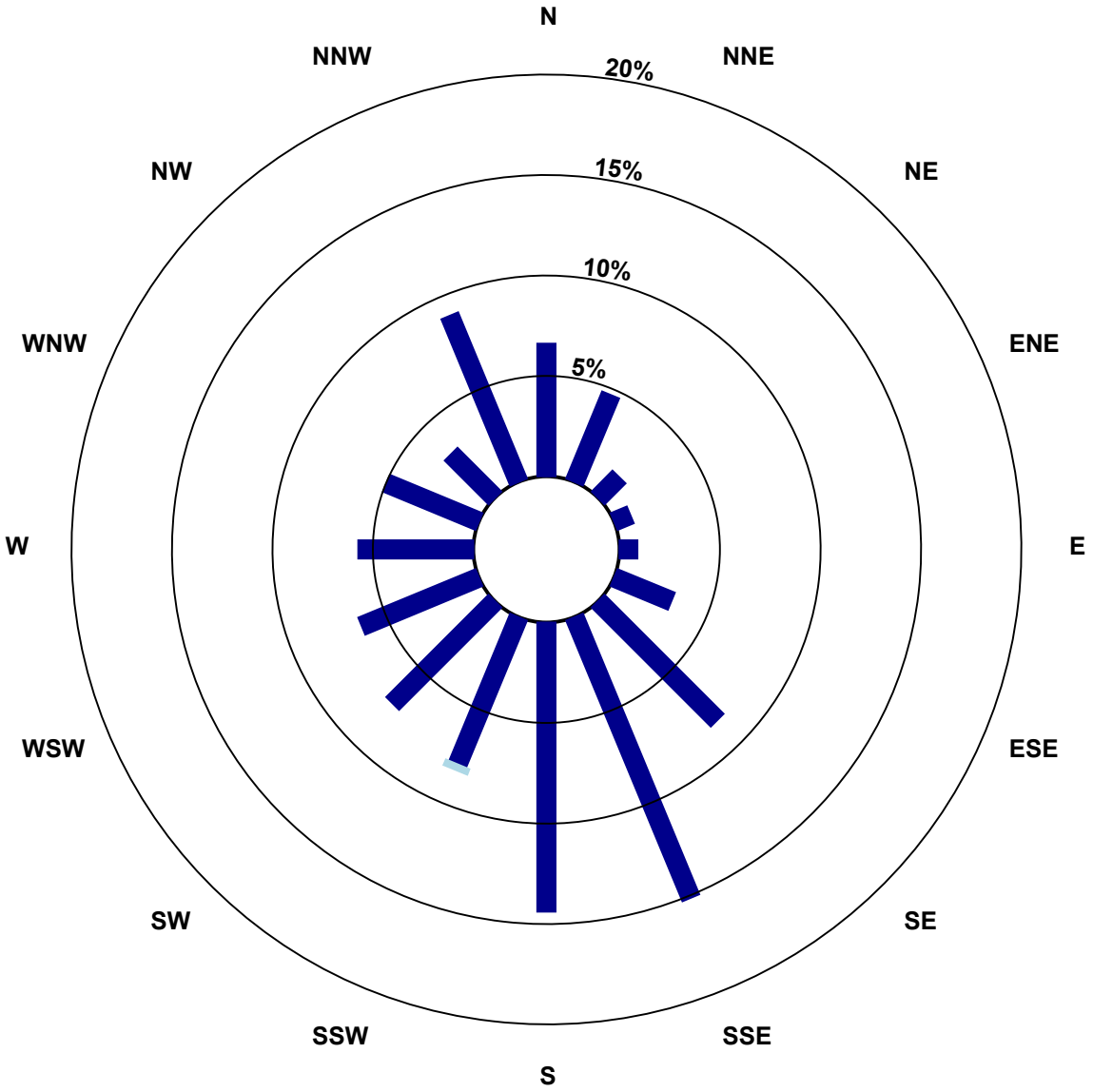
Total Number of Hours: 720

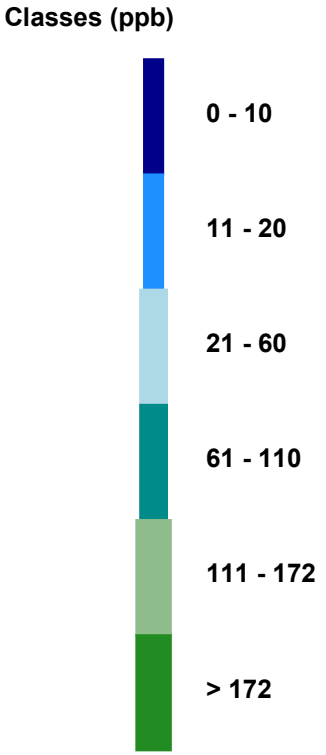
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Wapasu





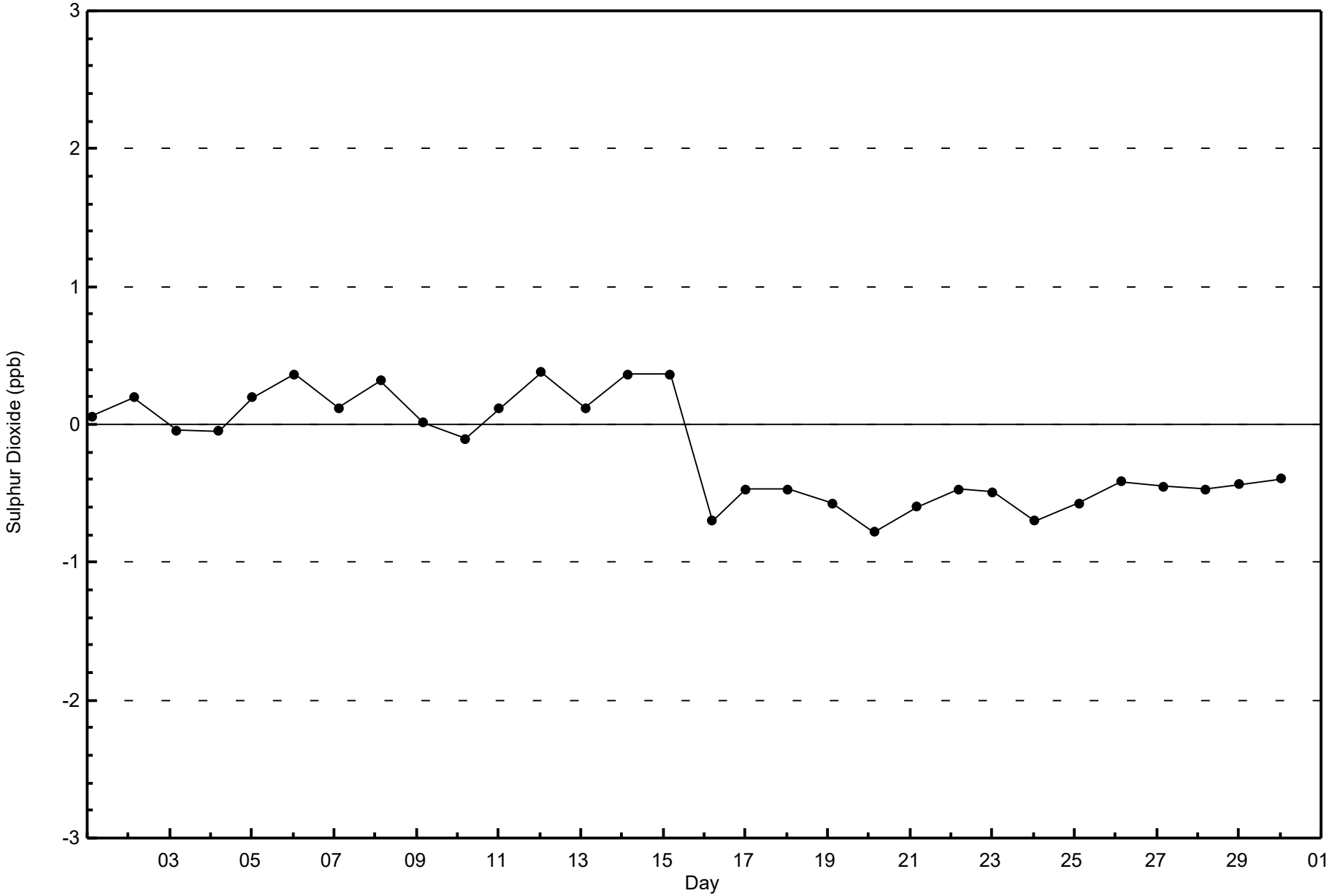
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Wapasu - September 2026

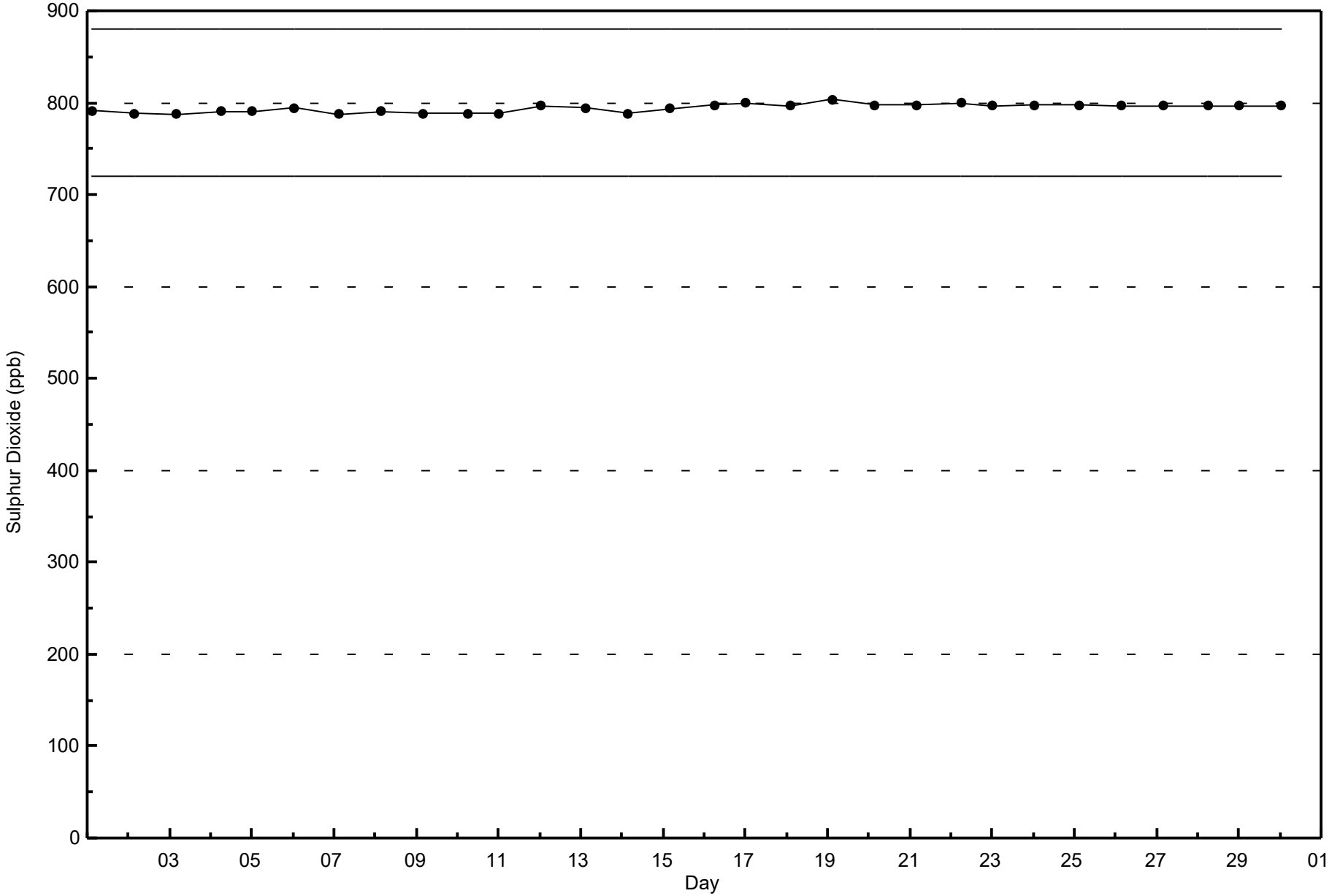


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Wapasu - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Wapasu - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.1 ppb on Sep 17 15:00 Maximum Daily Average: 0.3 ppb on Sep 24

Minimum Value: 0.0 ppb on Sep 16 21:00 Minimum Daily Average: 0.0 ppb on Sep 7
Maximum Diurnal Average: 0.2 ppb at hour 9 Minimum Diurnal Average: 0.1 ppb at hour 16
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} = 0.3 P_{99} = 0.7

Hours in Service:	720
Hours of Data:	684
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-Sep	0.1	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2-Sep	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1
3-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
4-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.3	0.4	0.3	0.3	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.4
5-Sep	0.0	Z	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2
6-Sep	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	0.0	0.0	0.0	0.0	0.0	0.1	0.1
7-Sep	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	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1
8-Sep	0.0	0.1	0.1	0.1	Z	0.2	0.2	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	0.1	0.2	0.1	0.1	0.1	0.3
9-Sep	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	0.5	0.2	0.2	0.2	0.2	0.9	0.1	0.2	1.0	0.7	0.2	0.2	1.0
10-Sep	Z	0.1	0.2	0.2	0.2	0.1	0.1	0.7	0.5	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	0.7
11-Sep	0.1	Z	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
12-Sep	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	0.1	0.1	0.2	0.1	0.1	0.2	0.4	0.1	0.4
13-Sep	0.6	0.7	0.6	Z	0.2	0.2	0.2	0.4	0.6	0.6	0.5	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	0.3	0.7
14-Sep	0.1	0.1	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.2
15-Sep	0.0	0.0	0.0	0.1	0.2	Z	0.3	0.4	0.3	0.2	0.4	0.6	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.6
16-Sep	Z	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	C	C	C	C	C	0.4	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.4
17-Sep	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	1.1	0.3	0.3	0.4	0.7	0.5	0.2	0.2	0.2	0.2	0.2	1.1
18-Sep	0.2	0.2	Z	0.3	0.2	0.2	0.2	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	0.1	0.1	0.2	0.2	0.2	0.4
19-Sep	0.1	0.1	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	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
20-Sep	0.1	0.1	0.2	0.2	Z	0.1	0.2	0.2	0.4	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.3	0.4	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.4
21-Sep	0.1	0.1	0.2	0.2	0.2	Z	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	0.1	0.2	0.1	0.2
22-Sep	Z	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.9	0.5	M	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.2	0.9
23-Sep	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	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1
24-Sep	0.1	0.2	Z	0.4	0.4	0.9	0.7	0.5	0.4	0.4	0.6	0.5	0.3	0.2	0.0	0.1	0.0	0.1	0.1	0.2	0.6	0.5	0.2	0.2	0.3	0.9
25-Sep	0.2	0.1	0.1	Z	0.3	0.5	0.4	0.5	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.5
26-Sep	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1
27-Sep	0.1	0.1	0.0	0.1	0.0	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	0.0	0.3	0.7	0.7	0.1	0.7
28-Sep	Z	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.4	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
29-Sep	0.0	Z	0.0	0.0	0.1	0.1	0.1	0.2	0.5	0.4	0.3	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
30-Sep	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	0.0	0.1	0.1	0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.2
	0.1	0.1	0.1	0.1	0.1	0.1	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	Diurnal Average	
	0.6	0.7	0.6	0.4	0.4	0.9	0.7	0.7	0.6	0.9	0.6	0.6	0.4	0.5	1.1	0.4	0.3	0.4	0.9	0.5	0.6	1.0	0.7	0.7	Diurnal Maximum	

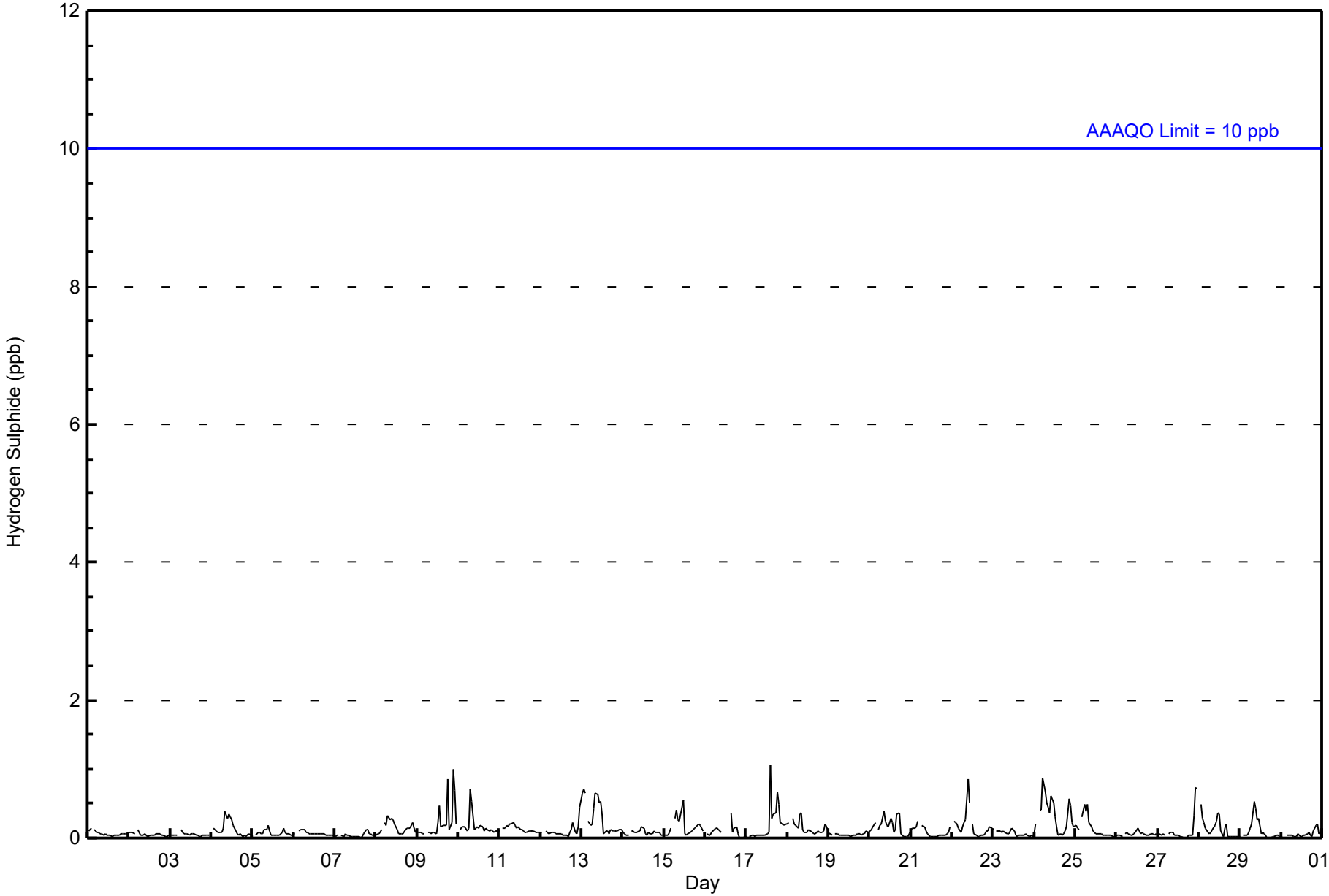
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Wapasu - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Wapasu - September 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	43	33	10	7	6	22	58	101	99	55	49	42	40	33	20	63	681
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	43	33	10	7	6	22	58	101	99	55	49	42	40	33	20	63	681

Total Number of Valid Hours: 681

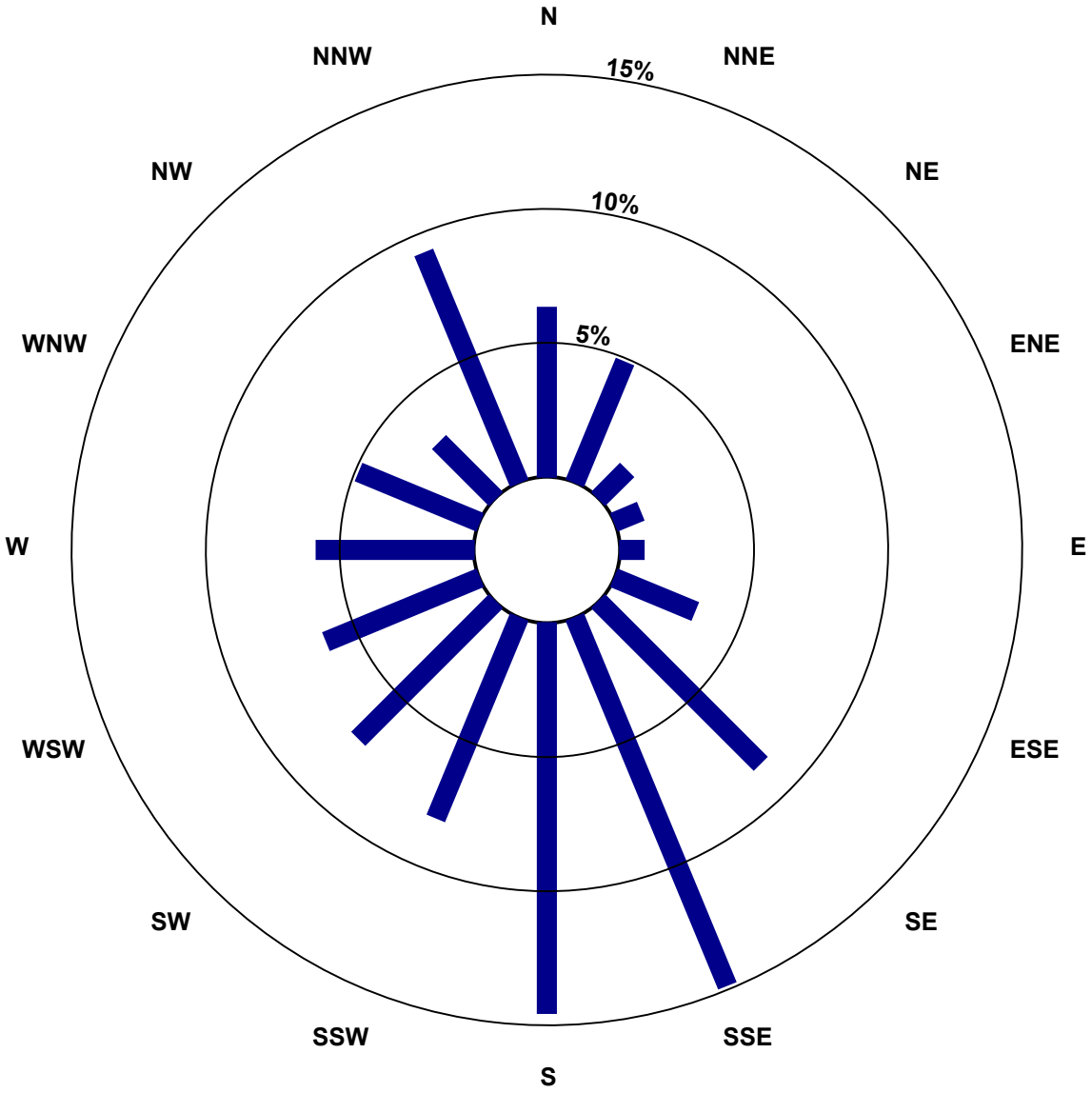
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

Wapasu



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

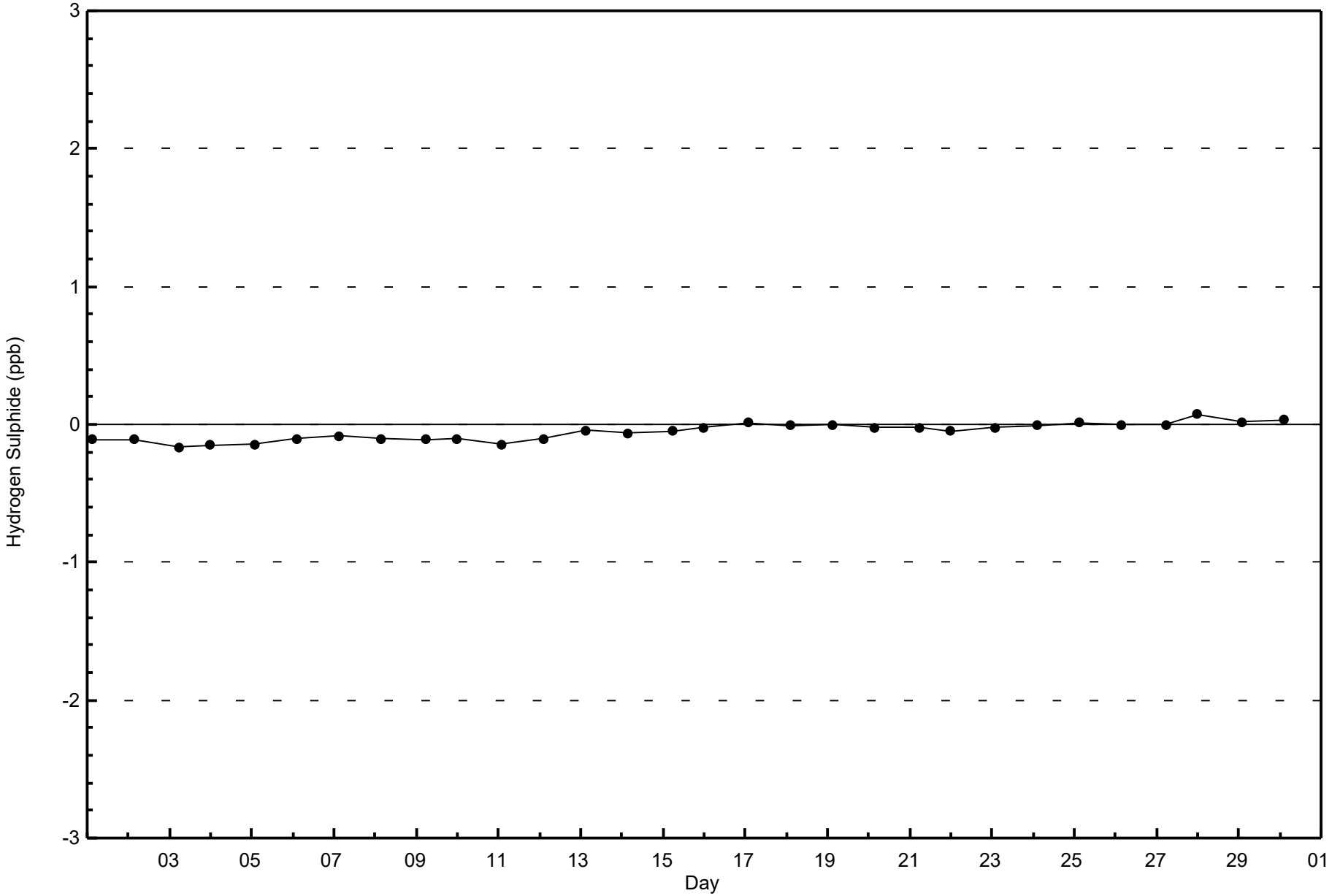
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Wapasu - September 2026

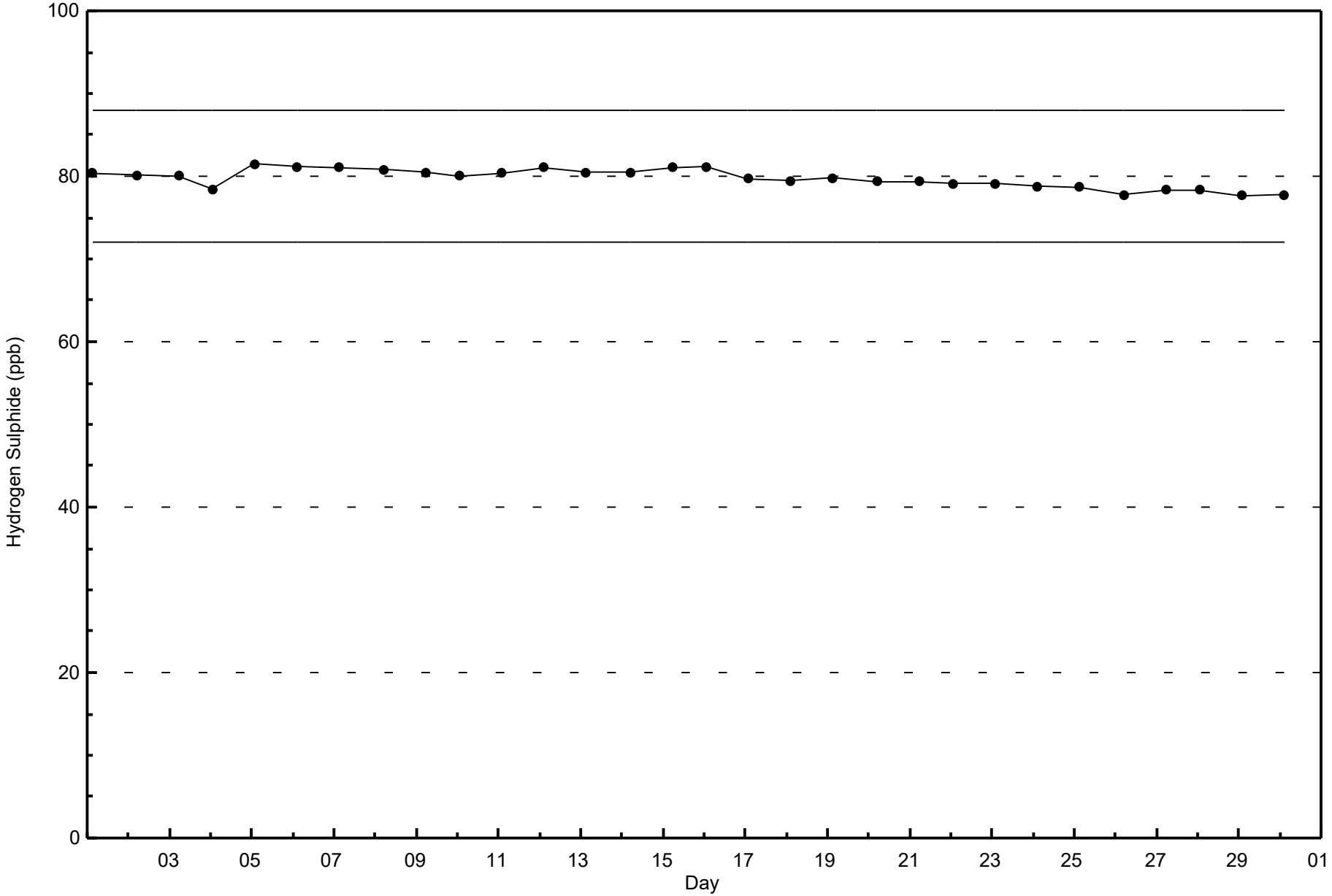


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Wapasu - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Wapasu - September 2026

Maximum Value: 2.9 ppm on Sep 22 11:00

Maximum Daily Average: 2.4 ppm on Sep 18

Minimum Value: 2.1 ppm on Sep 9 17:00

Minimum Daily Average: 2.2 ppm on Sep 2

Maximum Diurnal Average: 2.3 ppm at hour 6

Minimum Diurnal Average: 2.2 ppm at hour 16

Monthly Average: 2.25 ppm

Percentiles: P_1 = 2.1 P_{10} = 2.1 Q_1 = 2.2 Median = 2.2 Q_3 = 2.3 P_{90} = 2.4 P_{99} = 2.7

Hours in Service:	720
Hours of Data:	684
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-Sep	2.5	2.4	Z	2.3	2.2	2.2	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	2.2	2.2	2.2	2.2	2.2	2.2	2.5
2-Sep	2.2	2.2	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	2.2	2.2	2.2	2.2	2.2
3-Sep	2.2	2.2	2.2	2.2	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	2.2	2.3	2.2	2.3	2.2	2.2	2.3
4-Sep	2.2	2.2	2.2	2.3	2.3	Z	2.3	2.4	2.9	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	2.3	2.9
5-Sep	Z	2.2	2.2	2.2	2.2	2.2	2.4	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.4	2.3	2.3	2.3	2.4
6-Sep	2.3	Z	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3
7-Sep	2.2	2.2	Z	2.2	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.6	2.4	2.3	2.3	2.3	2.2	2.6
8-Sep	2.3	2.5	2.4	Z	2.5	2.5	2.4	2.6	2.5	2.6	2.5	2.4	2.3	2.2	2.1	2.1	2.1	2.2	2.3	2.4	2.5	2.3	2.3	2.3	2.4	2.6
9-Sep	2.3	2.3	2.3	2.3	Z	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	2.2	2.1	2.1	2.2	2.2	2.1	2.2	2.3
10-Sep	2.1	2.2	2.4	2.3	2.2	Z	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.4
11-Sep	Z	2.1	2.1	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	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
12-Sep	2.2	Z	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	2.3	2.3	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.4
13-Sep	2.3	2.3	Z	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.4
14-Sep	2.2	2.2	2.2	Z	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.4
15-Sep	2.3	2.2	2.3	2.4	Z	2.7	2.7	2.4	2.1	C	C	C	C	C	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.7
16-Sep	2.2	2.2	2.2	2.3	2.2	Z	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.4	2.3	2.2	2.2	2.3	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.4
17-Sep	Z	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.3	2.4	2.3	2.4	2.4	2.5	2.5	2.5	2.5	2.6	2.6	2.3	2.6
18-Sep	2.6	Z	2.7	2.7	2.7	2.7	2.8	2.9	2.6	2.3	2.2	2.2	2.4	2.3	2.3	2.2	2.2	2.3	2.4	2.3	2.3	2.3	2.3	2.3	2.4	2.9
19-Sep	2.2	2.2	Z	2.2	2.2	2.2	2.2	2.2	2.2	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	2.2	2.3
20-Sep	2.2	2.2	2.3	Z	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	2.2	2.2	2.2	2.2	2.2	2.2	2.3
21-Sep	2.2	2.3	2.3	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	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.2	2.4
22-Sep	2.4	2.4	2.4	2.4	2.3	Z	2.3	2.4	2.3	2.6	2.9	M	2.7	2.3	2.4	2.2	2.2	2.2	2.3	2.3	2.4	2.5	2.4	2.5	2.4	2.9
23-Sep	Z	2.5	2.5	2.6	2.5	2.5	2.3	2.2	2.2	2.2	2.3	2.4	2.3	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.2	2.2	2.3	2.6
24-Sep	2.2	Z	2.4	2.4	2.5	2.6	2.6	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.6
25-Sep	2.4	2.3	Z	2.3	2.3	2.4	2.2	2.2	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	2.2	2.2	2.2	2.2	2.4
26-Sep	2.3	2.2	2.2	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	2.2	2.3	2.2	2.2	2.3
27-Sep	2.2	2.2	2.1	2.1	Z	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	2.2	2.1	2.2	2.3	2.3	2.2	2.3
28-Sep	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	2.2	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.3
29-Sep	Z	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.2	2.4	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.4
30-Sep	2.2	Z	2.2	2.2	2.2	2.2	2.2	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	2.4	2.3	2.3	2.2	2.4
	2.3	2.3	2.3	2.3	2.3	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	2.3	2.3	2.3	2.3	2.3	Diurnal Average	
	2.6	2.5	2.7	2.7	2.7	2.7	2.8	2.9	2.9	2.6	2.9	2.4	2.7	2.4	2.4	2.3	2.4	2.4	2.5	2.6	2.5	2.5	2.6	2.6	Diurnal Maximum	

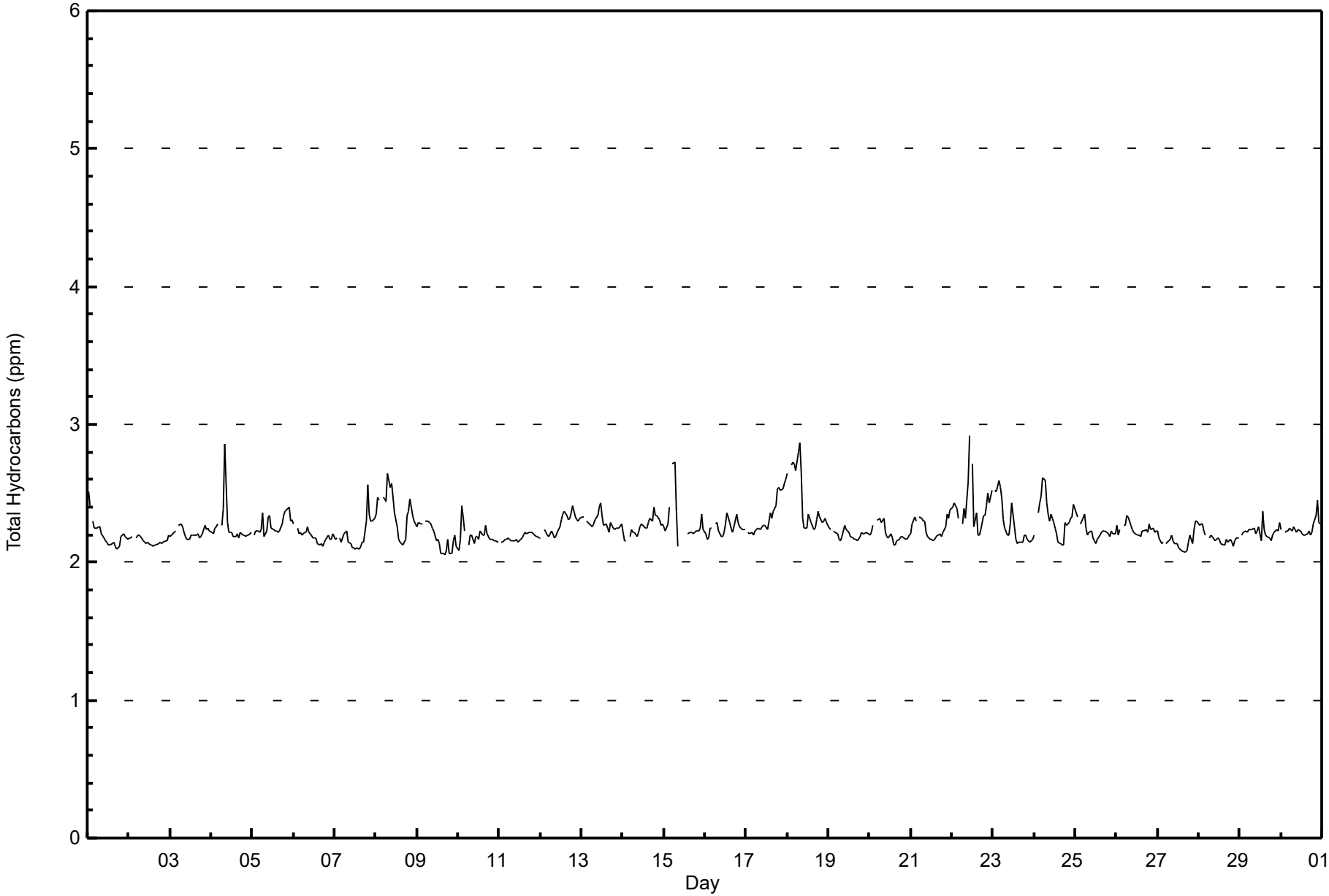
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Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Wapasu - September 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Total Hydrocarbons (THC) - ppm

Wapasu - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	0	0.00	0.00
2.1 - 3.0	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Wapasu - September 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	45	32	10	6	6	21	57	103	98	56	49	43	39	34	21	61	681
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	45	32	10	6	6	21	57	103	98	56	49	43	39	34	21	61	681

Total Number of Valid Hours: 681

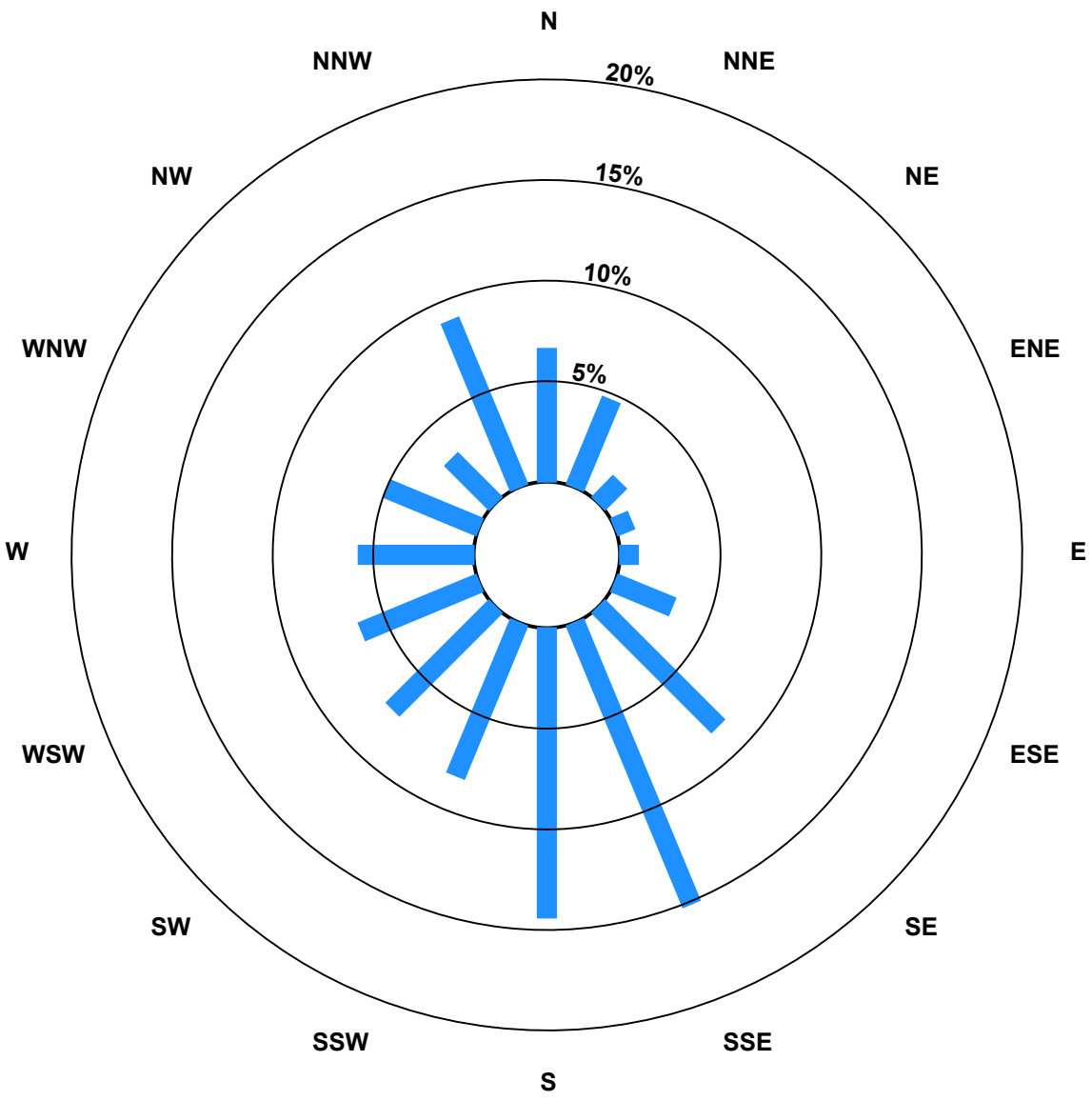
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Wapasu



Classes (ppm)

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

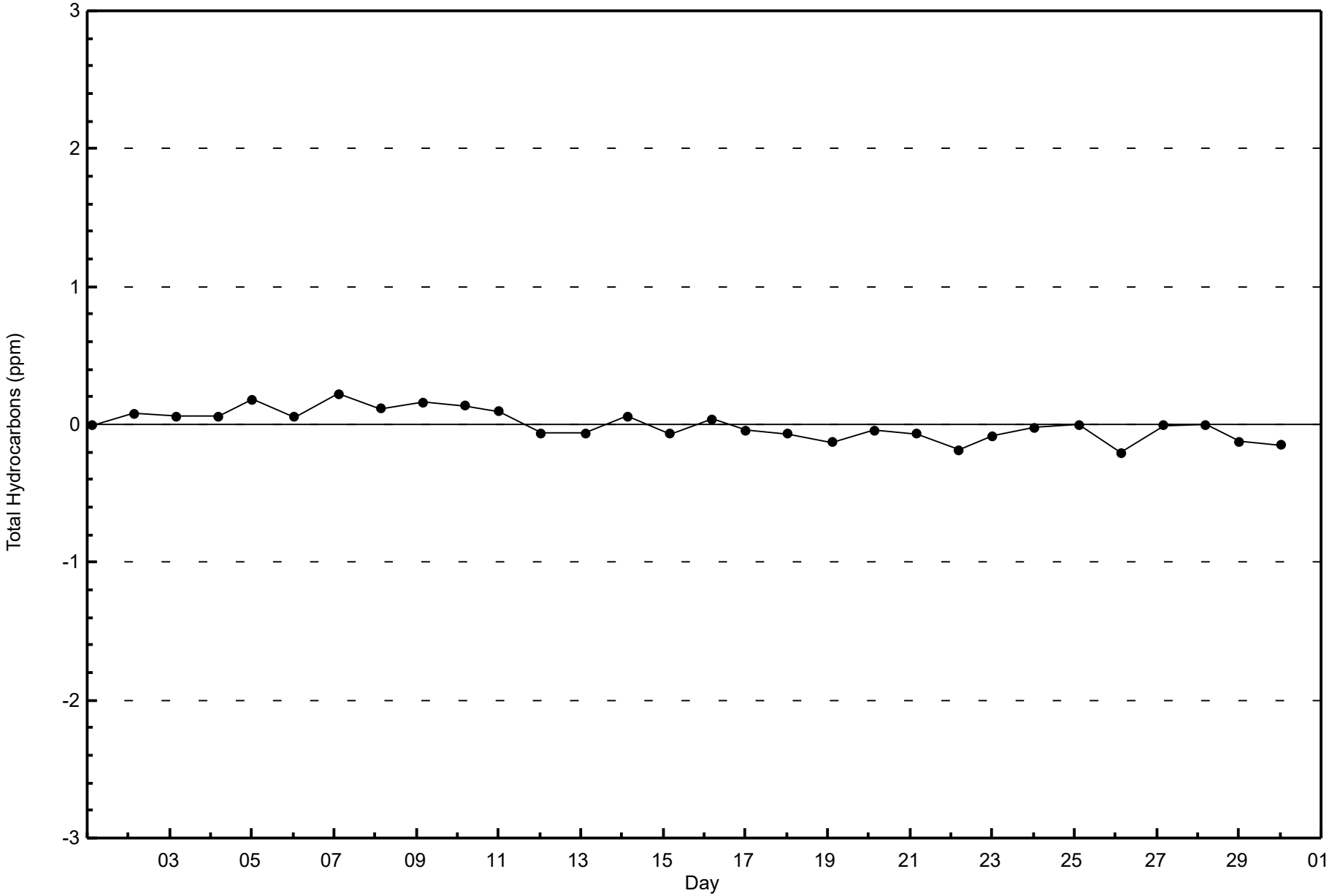
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Wapasu - September 2026

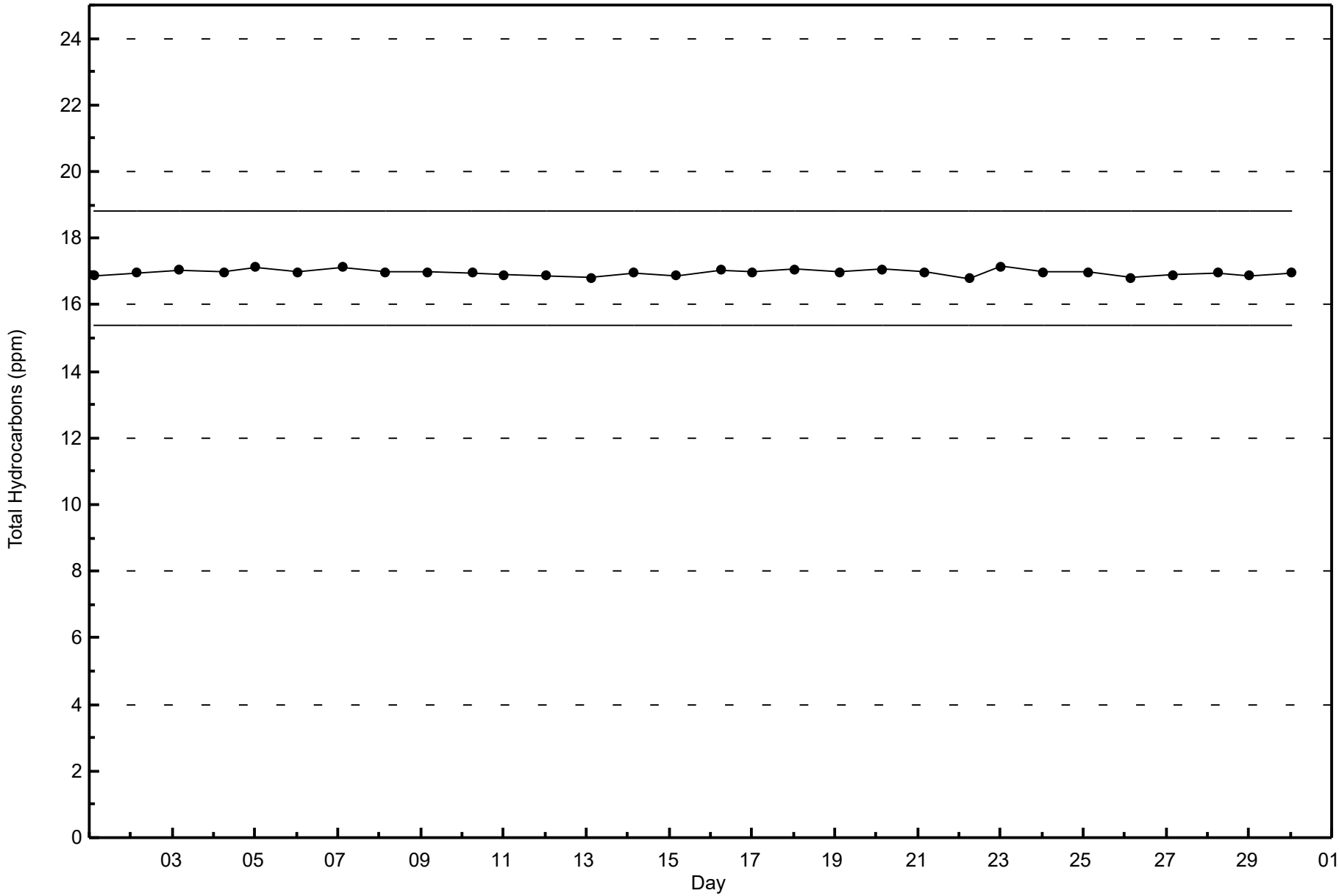


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Wapasu - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Wapasu - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 40.4 ppb on Sep 19 16:00
Maximum Daily Average: 32.7 ppb on Sep 19

Minimum Value: 0.5 ppb on Sep 8 04:00
Minimum Daily Average: 12.2 ppb on Sep 15
Maximum Diurnal Average: 28.2 ppb at hour 16
Minimum Diurnal Average: 14.2 ppb at hour 5
Monthly Average: 20.58 ppb
Percentiles: P_1 = 1.1 P_{10} = 9.3 Q_1 = 15.2 Median = 20.5 Q_3 = 26.4 P_{90} = 32.0 P_{99} = 38.6

Hours in Service:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	33
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-Sep	2.7	6.3	8.1	12.2	Z	19.2	21.1	24.2	24.9	29.3	30.0	34.4	36.3	35.1	36.2	33.0	32.4	32.4	29.6	26.2	24.6	22.8	22.9	23.6	24.7	36.3
2-Sep	22.0	21.3	21.8	22.4	23.2	Z	25.9	27.3	31.1	33.9	36.4	37.0	35.5	34.5	33.9	32.7	33.0	33.4	33.2	34.2	33.8	31.6	29.3	26.2	30.1	37.0
3-Sep	Z	24.7	21.8	19.8	18.3	16.1	15.2	16.0	17.9	20.2	20.7	20.2	15.8	16.4	16.2	17.2	18.5	24.1	25.6	22.2	19.4	19.5	19.8	21.3	19.4	25.6
4-Sep	23.5	Z	22.0	19.4	16.9	13.1	8.4	9.0	2.9	7.1	7.8	8.8	9.0	11.4	14.1	14.9	16.6	16.0	17.0	16.9	15.1	11.6	12.8	12.1	13.3	23.5
5-Sep	15.4	14.3	Z	12.9	8.1	5.0	1.8	11.2	14.2	13.9	18.3	23.5	25.7	26.7	27.4	27.7	26.9	23.8	18.4	13.9	6.6	3.5	15.6	21.7	16.4	27.7
6-Sep	19.0	17.1	16.6	Z	17.5	18.4	16.4	16.6	18.9	20.9	22.4	21.9	21.2	22.7	27.7	28.6	29.3	28.2	24.7	20.8	20.1	17.7	18.0	16.7	20.9	29.3
7-Sep	16.5	17.6	16.2	17.2	Z	15.4	12.5	13.2	16.4	21.6	23.1	23.2	22.8	22.5	22.5	22.6	24.9	24.5	11.3	4.5	10.2	12.9	13.0	10.1	17.2	24.9
8-Sep	6.6	2.3	0.8	0.5	0.6	Z	9.9	5.0	7.6	8.5	13.3	20.5	24.4	28.8	29.4	29.0	31.0	30.7	15.6	5.9	8.3	20.9	22.0	21.7	14.9	31.0
9-Sep	Z	18.3	16.4	15.7	15.7	14.8	15.8	15.0	14.9	13.8	15.1	20.1	22.4	25.2	30.3	30.2	28.2	25.6	24.7	26.9	26.0	23.5	24.1	26.1	21.3	30.3
10-Sep	26.8	Z	8.6	15.6	21.7	23.1	21.3	19.3	17.1	19.1	17.2	15.2	13.9	10.4	10.7	15.2	13.6	13.9	15.1	17.1	18.4	18.3	19.2	18.9	16.9	26.8
11-Sep	18.1	16.9	Z	17.3	16.7	16.1	14.1	14.0	13.4	14.1	16.1	16.8	17.1	17.4	19.7	22.6	23.2	25.8	24.6	19.7	17.9	17.9	17.4	16.7	18.0	25.8
12-Sep	14.8	13.2	12.2	Z	7.9	8.4	7.7	10.3	15.1	18.0	20.3	21.9	23.2	25.9	27.4	29.9	30.0	27.4	20.4	15.6	16.6	15.9	11.9	11.4	17.6	30.0
13-Sep	11.3	11.6	10.4	10.9	Z	13.2	12.6	12.3	12.1	16.0	19.5	20.8	27.6	31.7	32.0	33.6	36.0	23.8	18.0	17.3	15.7	14.1	11.3	7.5	18.2	36.0
14-Sep	15.5	27.7	24.4	21.6	16.9	Z	14.9	13.1	15.5	14.9	15.7	14.8	18.7	21.7	23.0	22.2	21.3	19.2	9.2	11.2	3.0	13.8	13.2	13.5	16.7	27.7
15-Sep	Z	13.4	7.8	2.2	0.7	0.6	1.1	3.7	9.3	12.6	14.2	16.8	24.7	25.3	25.2	24.0	21.0	15.5	13.0	12.9	9.6	7.4	7.1	11.6	12.2	25.3
16-Sep	14.4	Z	17.2	8.7	7.1	10.8	11.6	13.7	17.2	20.3	21.7	21.3	20.3	17.4	20.5	23.5	23.7	19.4	11.6	13.4	17.4	21.0	21.9	23.5	17.3	23.7
17-Sep	23.5	22.4	Z	24.4	24.4	22.8	21.4	20.3	19.1	19.6	22.6	24.7	24.7	20.3	19.3	18.8	17.8	14.8	8.9	7.1	4.3	2.8	1.9	1.2	16.8	24.7
18-Sep	0.9	1.2	2.3	Z	1.3	1.1	0.9	2.6	9.4	20.7	C	C	C	26.4	29.2	29.9	28.4	22.6	12.6	14.1	18.3	18.9	19.3	21.5	14.1	29.9
19-Sep	25.4	24.9	23.9	23.9	Z	23.9	26.7	28.3	30.6	32.3	33.1	35.9	37.1	38.4	38.7	40.4	40.1	38.6	37.2	36.3	35.3	34.9	33.8	33.4	32.7	40.4
20-Sep	33.1	29.8	26.1	24.2	22.7	Z	19.0	19.0	21.6	25.2	29.0	31.1	34.9	38.5	39.2	38.4	36.1	34.7	30.5	29.5	31.9	32.0	30.9	29.8	29.9	39.2
21-Sep	Z	29.9	26.3	23.5	21.7	19.6	19.4	19.6	21.2	27.1	30.3	34.3	36.0	37.6	37.1	36.8	39.5	37.1	37.1	36.9	34.5	31.8	31.6	29.3	30.4	39.5
22-Sep	23.8	Z	12.9	5.9	9.9	14.7	12.7	9.9	17.7	18.7	15.4	M	24.7	34.6	34.4	38.8	38.6	35.4	23.2	21.5	9.9	7.0	11.5	6.0	19.4	38.8
23-Sep	5.1	3.3	Z	5.0	3.2	9.2	14.9	20.0	24.2	27.9	26.5	16.9	27.9	35.3	36.0	34.2	32.4	31.4	28.5	25.8	26.2	28.2	27.9	24.8	22.4	36.0
24-Sep	21.4	15.8	10.3	Z	7.5	7.0	6.8	11.1	15.7	18.6	22.5	26.0	27.8	30.8	35.3	35.7	35.0	30.5	17.5	18.7	21.3	18.0	10.5	6.3	19.6	35.7
25-Sep	7.0	9.7	20.5	23.4	Z	15.4	21.7	18.1	25.0	23.1	28.2	28.3	31.0	31.2	30.0	29.3	29.4	26.8	24.2	22.9	25.4	20.5	20.5	19.5	23.1	31.2
26-Sep	19.1	20.7	17.3	16.2	14.7	Z	15.7	16.8	21.3	23.2	24.1	23.6	25.3	24.8	26.0	26.4	26.5	25.8	25.0	22.4	23.1	22.5	22.1	22.1	22.0	26.5
27-Sep	Z	24.8	21.9	18.3	19.1	18.4	16.5	16.3	15.4	17.6	18.7	23.1	27.0	28.1	28.5	29.5	29.5	28.9	24.3	20.8	21.4	17.1	13.2	14.4	21.4	29.5
28-Sep	13.6	Z	14.1	15.3	15.5	15.7	16.2	16.9	16.9	19.8	23.4	25.9	30.7	34.3	33.1	29.5	29.5	29.4	27.8	28.0	30.6	28.9	28.8	27.9	24.0	34.3
29-Sep	27.6	27.6	Z	28.0	26.0	20.8	17.0	18.9	19.5	21.3	21.7	19.4	19.1	16.9	23.9	27.2	29.2	30.3	32.8	28.2	27.5	26.2	23.7	20.2	24.0	32.8
30-Sep	20.8	20.5	18.5	Z	17.9	17.1	20.2	23.6	28.6	27.5	26.1	28.1	30.0	29.0	28.8	24.5	22.9	24.1	22.1	16.2	11.3	11.1	13.4	10.1	21.4	30.0
	17.1	17.4	15.9	16.2	14.2	14.4	14.7	15.5	17.8	20.2	21.8	23.4	25.3	26.6	27.9	28.2	28.2	26.5	22.1	20.2	19.5	19.1	19.0	18.3	Diurnal Average	
	33.1	29.9	26.3	28.0	26.0	23.9	26.7	28.3	31.1	33.9	36.4	37.0	37.1	38.5	39.2	40.4	40.1	38.6	37.2	36.9	35.3	34.9	33.8	33.4	Diurnal Maximum	

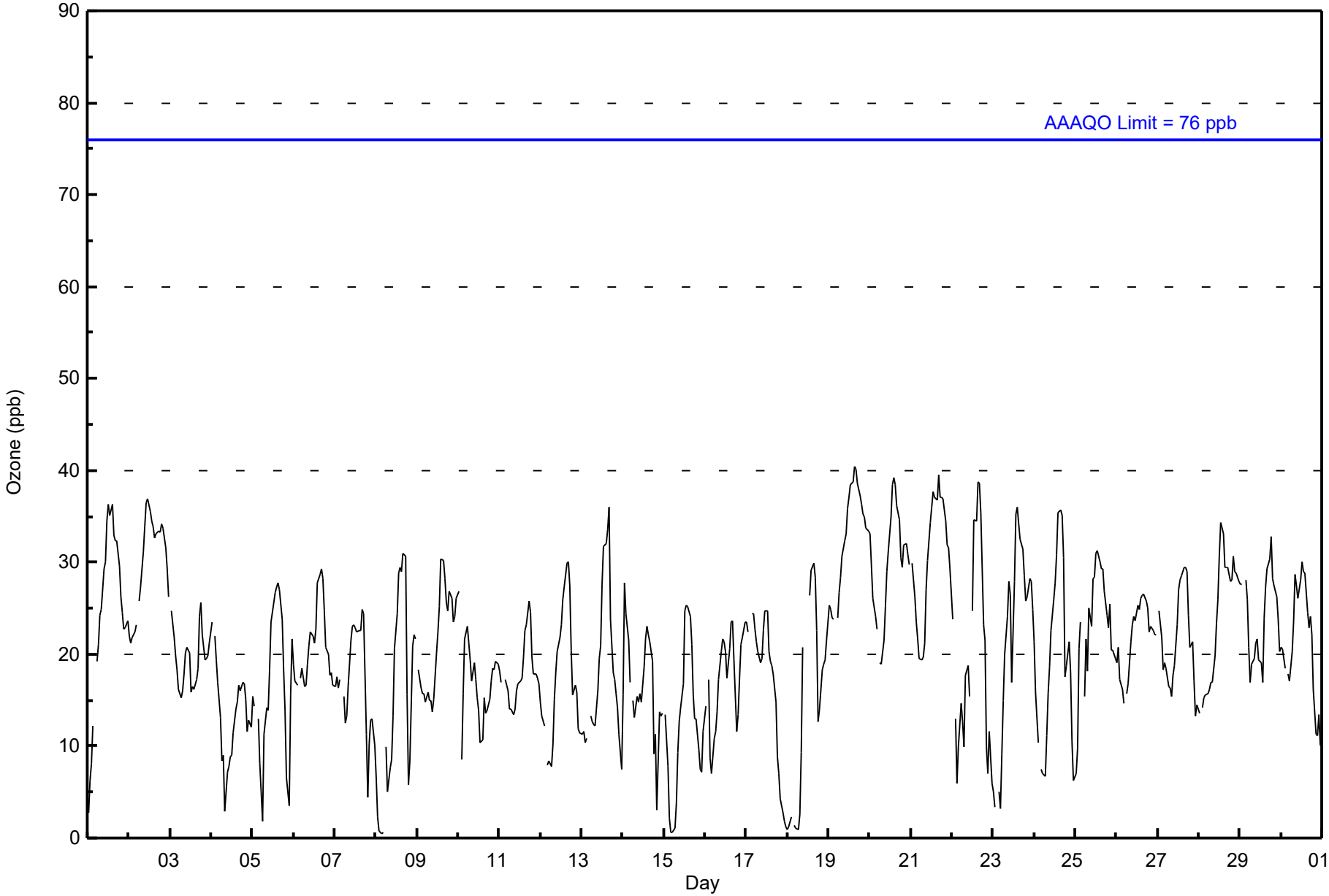
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Wapasu - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	339	49.42	49.42
21 - 50	347	50.58	100.00
51 - 82	0	0.00	100.00
> 83	0	0.00	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Ozone (O_3) - ppb

Wapasu - September 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	22	7	1	3	17	33	56	29	24	16	15	12	15	15	37	337
21 - 50	7	10	3	6	3	5	25	46	69	31	34	33	27	18	4	25	346
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	42	32	10	7	6	22	58	102	98	55	50	48	39	33	19	62	683

Total Number of Valid Hours: 683

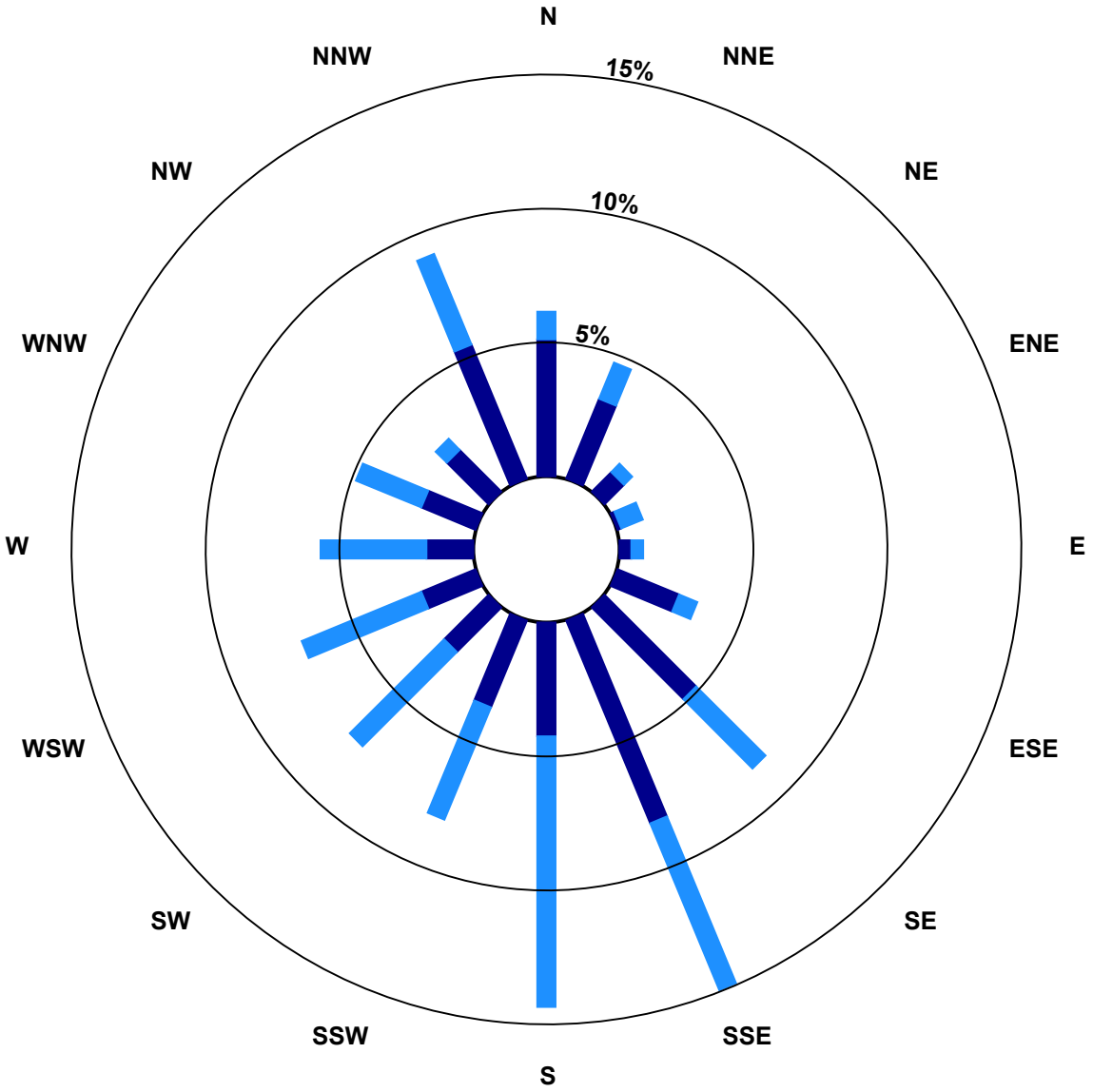
Total Number of Hours: 720

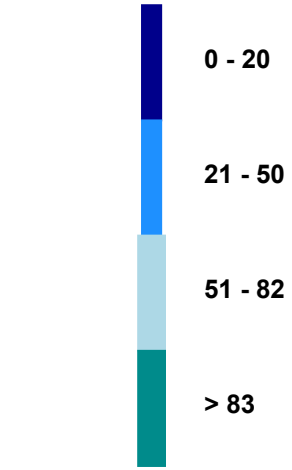
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Ozone (O_3) - ppb

Wapasu





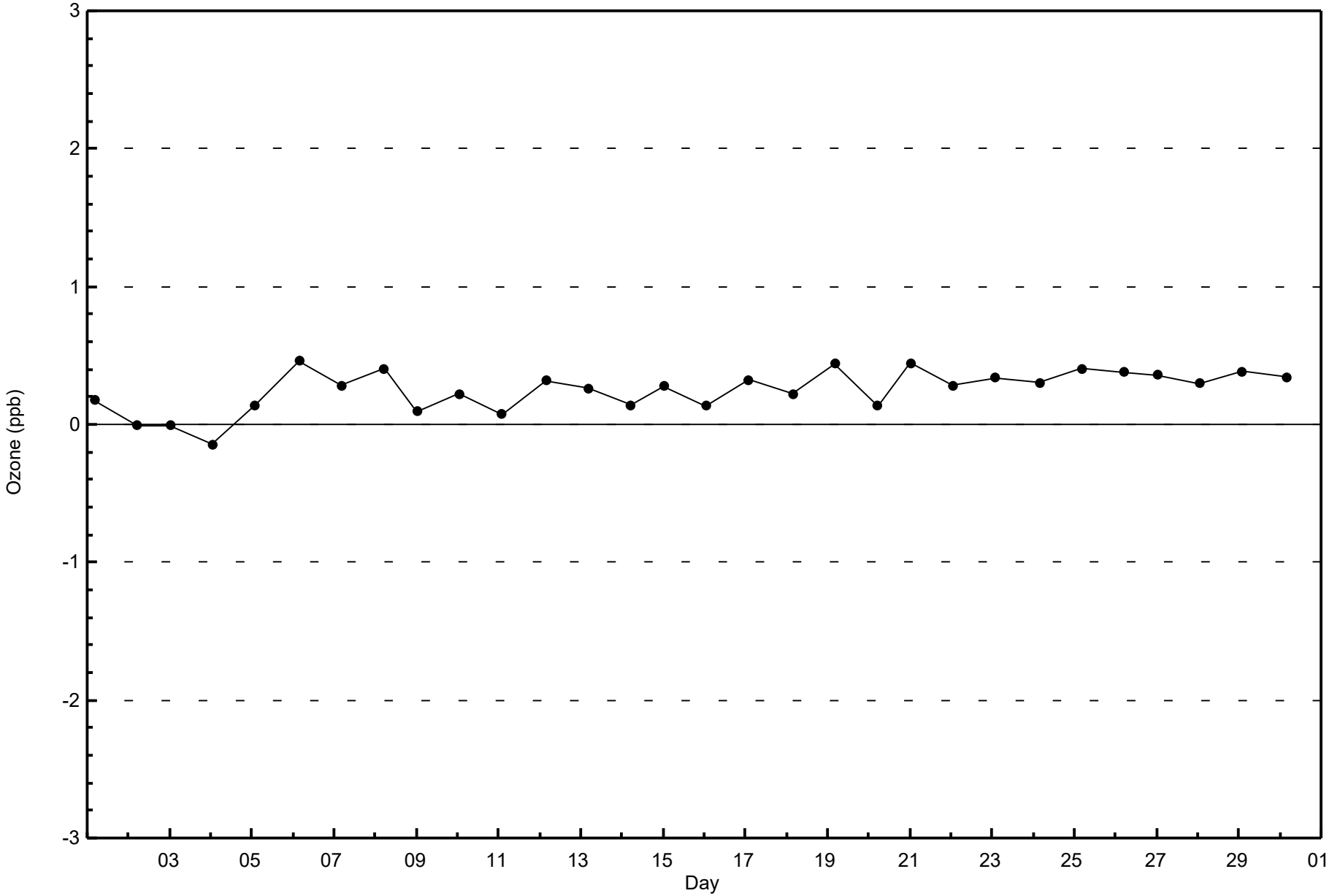
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Wapasu - September 2026

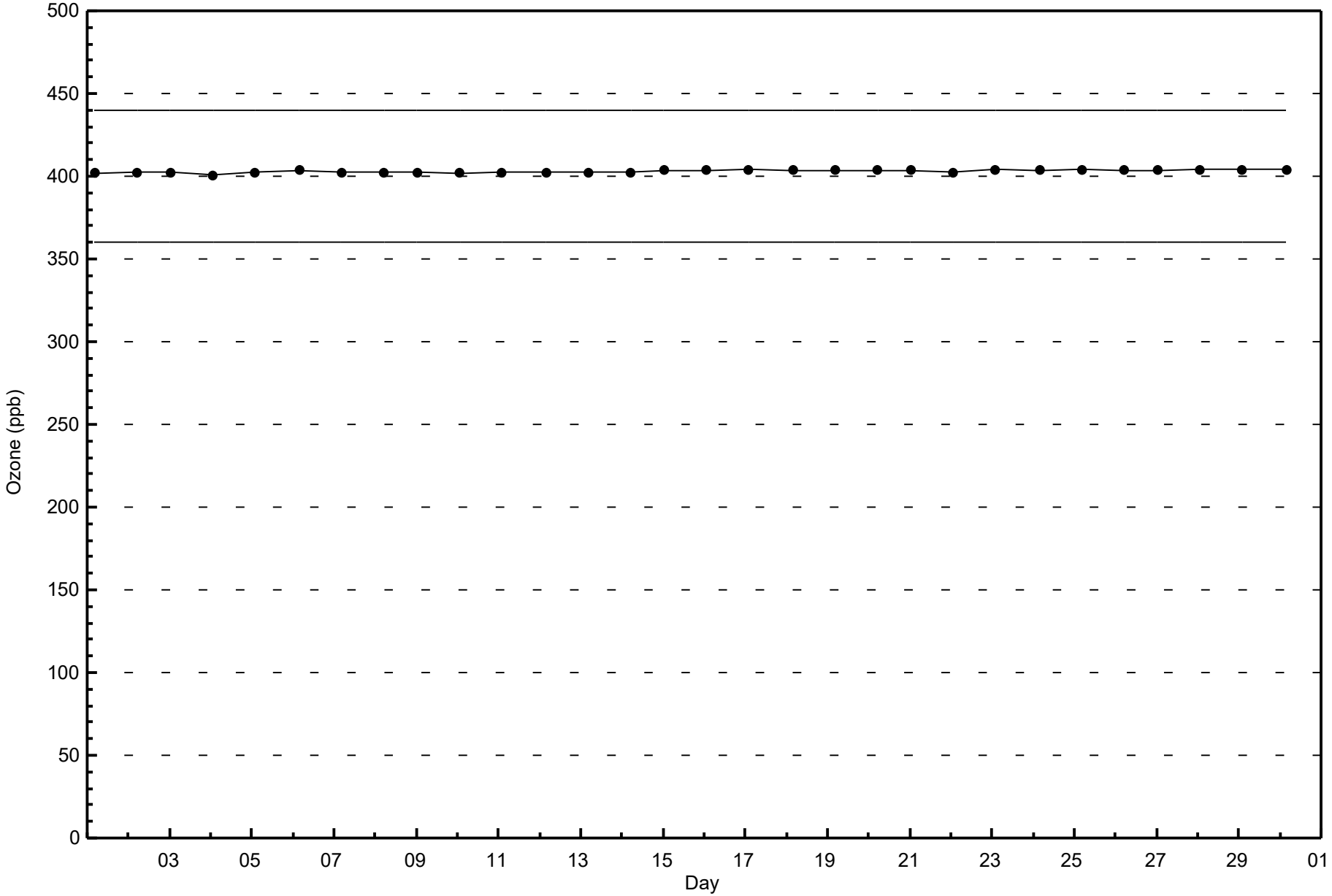


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Wapasu - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Wapasu - September 2026

Maximum Value: 16.0 ppb on Sep 18 09:00

Maximum Daily Average: 2.0 ppb on Sep 15

Minimum Value: 0.0 ppb on Sep 1 02:00

Minimum Daily Average: 0.0 ppb on Sep 2

Maximum Diurnal Average: 1.8 ppb at hour 9

Minimum Diurnal Average: 0.0 ppb at hour 1

Monthly Average: 0.37 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.1 P_{90} = 0.9 P_{99} = 5.9

Hours in Service:	720
Hours of Data:	684
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-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2-Sep	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
3-Sep	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
4-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	3.0	8.9	0.9	1.1	1.1	0.9	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	8.9
5-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.3	2.9	1.5	0.1	0.1	0.3	0.2	0.3	0.4	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.3	2.9
6-Sep	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
7-Sep	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
8-Sep	0.0	Z	0.0	0.0	0.6	0.0	0.1	5.7	4.2	7.2	5.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	7.2
9-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.7	1.1	0.5	0.7	0.4	0.3	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.1
10-Sep	0.0	0.0	0.2	Z	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.6	0.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
11-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.3	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	0.0	0.4
12-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.3	0.0	0.0	0.0	0.3	0.6	0.2	0.3	0.3	0.2	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.6
13-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.2	1.4	5.3	4.7	2.9	2.2	0.9	0.3	0.4	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.8	5.3
14-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.5	1.3	0.9	1.2	0.4	0.4	1.1	0.6	0.3	0.6	0.0	0.1	0.0	0.0	0.0	0.3	1.3
15-Sep	0.0	0.0	Z	1.4	5.7	7.7	9.3	6.6	4.7	3.3	3.3	2.0	0.3	0.0	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	9.3
16-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.3	1.3	1.5	0.6	0.3	0.7	0.9	4.1	3.0	1.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	4.1
17-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.1	0.9	2.2	1.4	1.6	1.4	0.7	0.0	0.0	0.0	0.0	0.0	0.4	2.2
18-Sep	0.0	0.0	0.1	0.0	0.0	Z	0.3	15.8	16.0	0.8	0.0	0.7	4.5	2.1	0.6	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	16.0
19-Sep	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
20-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.9	1.6	1.0	0.6	1.1	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.6
21-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.7	2.0	1.1	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	0.2	2.0
22-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.2	C	C	C	C	C	C	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	1.0
23-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.1	2.2	3.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.7
24-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.7	3.0	4.0	4.4	3.9	2.0	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	4.4
25-Sep	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
26-Sep	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	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
27-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.3	0.8	0.8	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.2	0.9
28-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.4	0.9	2.6	2.5	2.0	0.9	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.6
29-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	1.1	1.0	0.5	0.3	0.3	2.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.0
30-Sep	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.1	0.3	0.3	0.4	1.3	1.8	1.1	1.0	0.7	0.5	0.4	0.4	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	Diurnal Average	
	0.0	0.0	0.2	1.4	5.7	7.7	9.3	15.8	16.0	7.2	5.5	3.7	4.5	4.1	3.0	1.4	1.6	1.4	0.7	0.1	0.1	0.1	0.2	0.0	Diurnal Maximum	

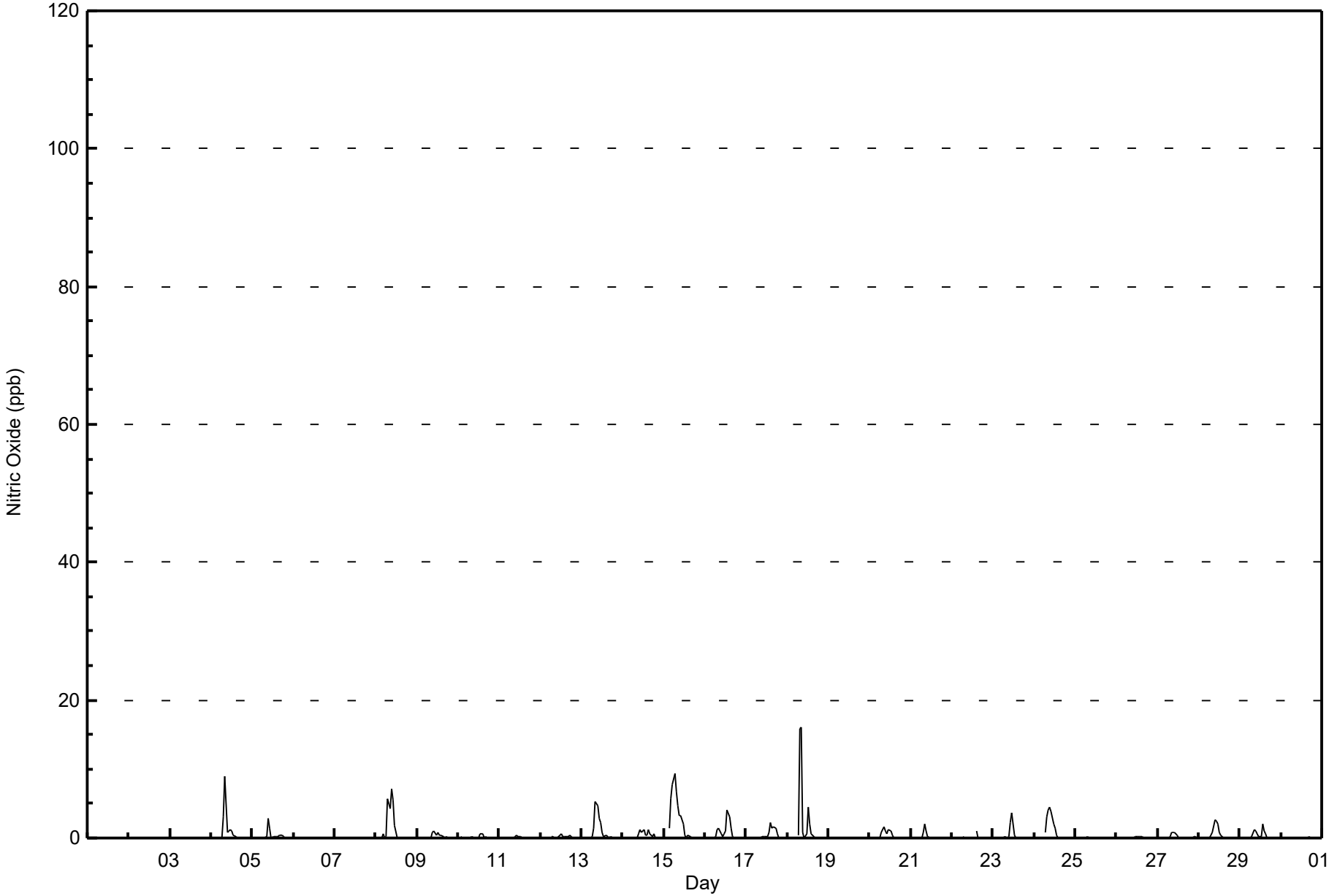
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Wapasu - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Wapasu - September 2026

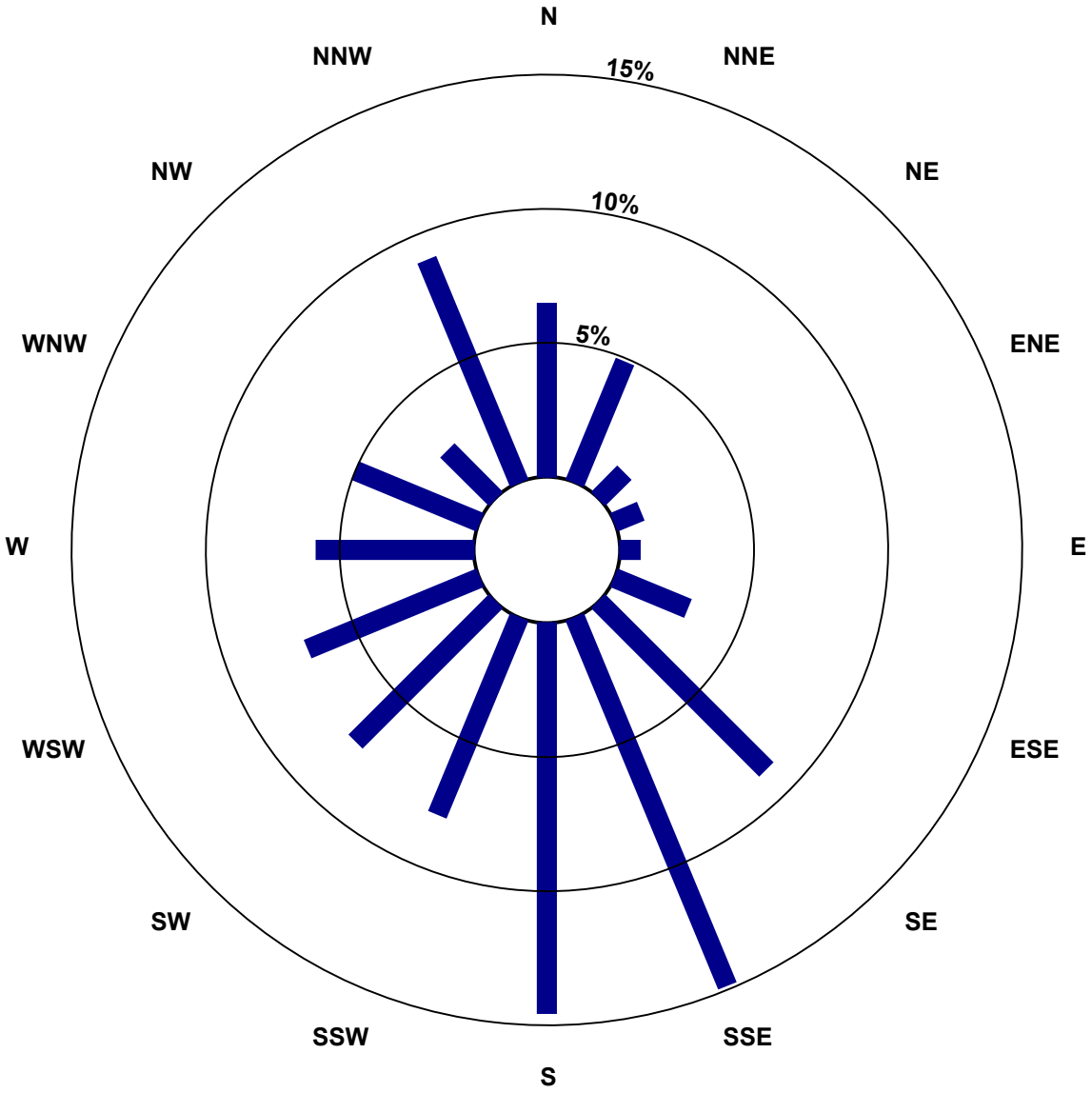
Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	44	33	9	7	5	20	60	101	99	54	50	47	40	34	17	61	681
21 - 40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81 - 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	44	33	9	7	5	20	60	101	99	54	50	47	40	34	17	61	681

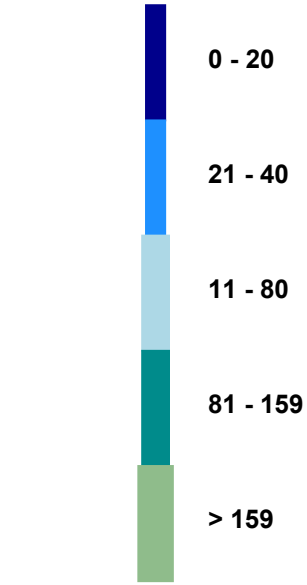
Total Number of Valid Hours: 681

Total Number of Hours: 720

Nitric Oxide (NO) - ppb

Wapasu





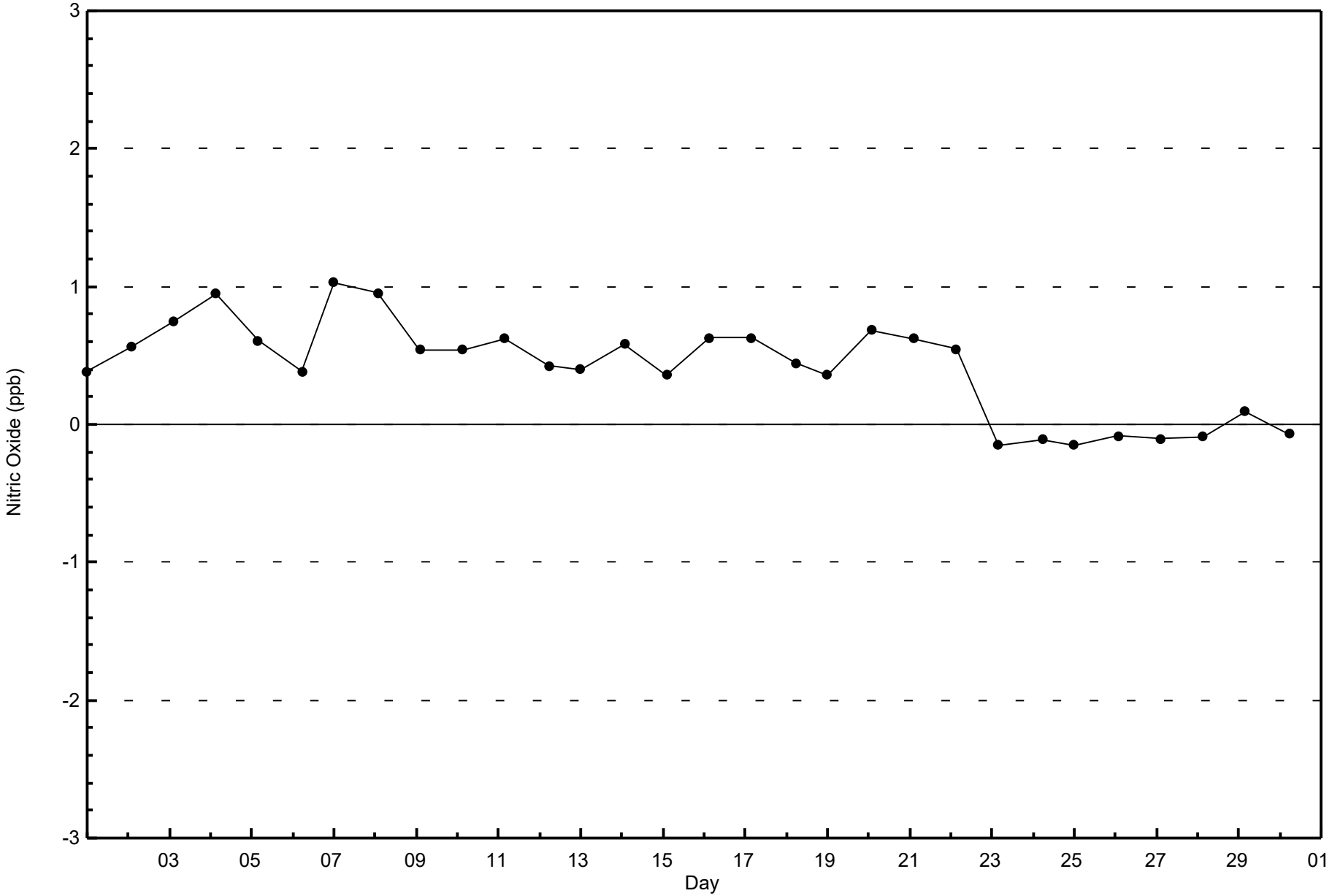
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Wapasu - September 2026

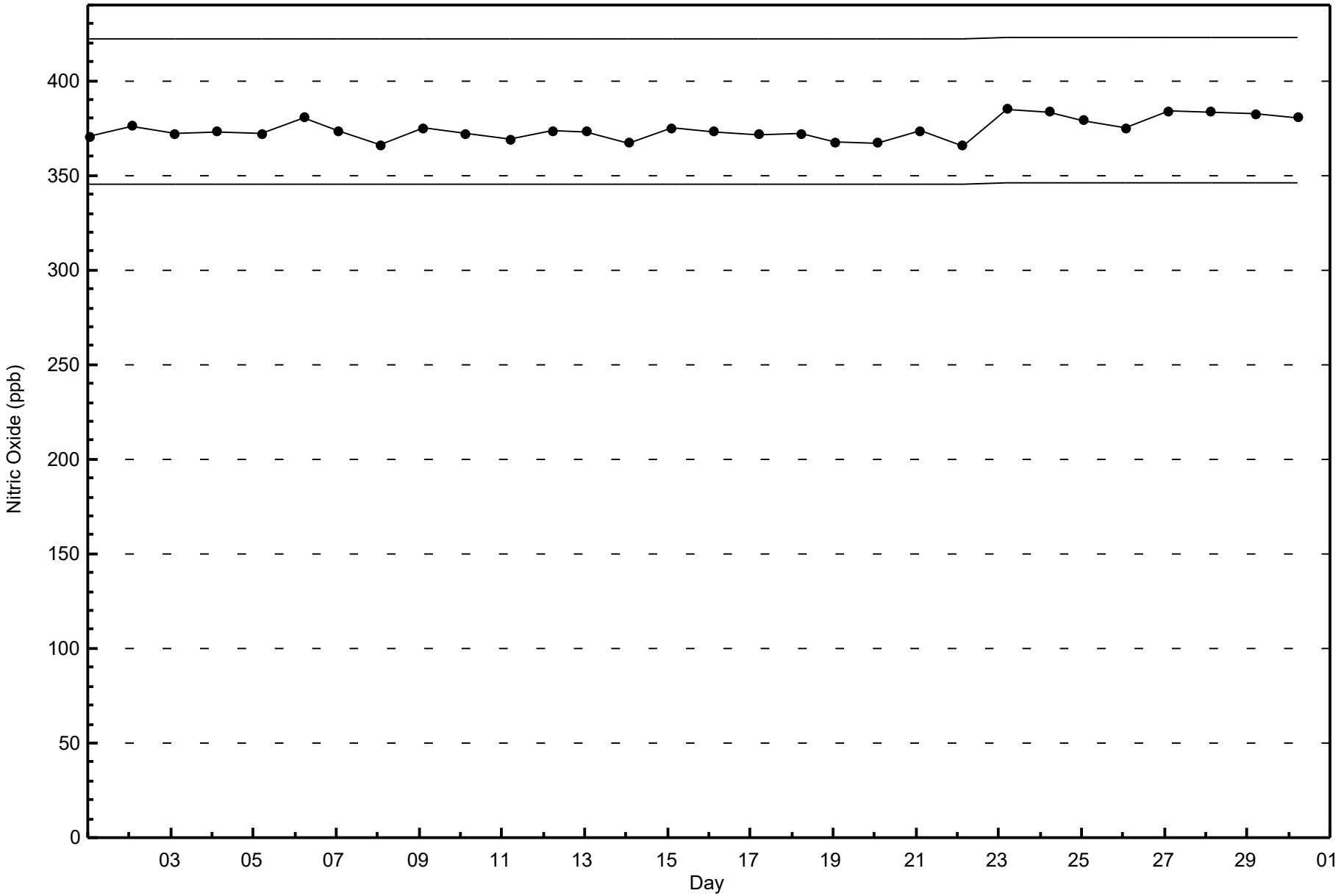


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Wapasu - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Wapasu - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 12.8 ppb on Sep 17 19:00 Maximum Daily Average: 4.1 ppb on Sep 24

Minimum Value: 0.0 ppb on Sep 2 20:00 Minimum Daily Average: 0.2 ppb on Sep 2
Maximum Diurnal Average: 3.3 ppb at hour 9 Minimum Diurnal Average: 1.4 ppb at hour 16
Monthly Average: 2.07 ppb Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.4 Median = 1.3 Q_3 = 2.9 P_{90} = 5.2 P_{99} = 11.3

Hours in Service:	720
Hours of Data:	684
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-Sep	Z	2.7	2.4	1.4	0.6	0.4	0.5	0.4	0.9	0.7	0.4	0.6	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.6	2.7
2-Sep	0.1	Z	0.2	0.2	0.2	0.2	0.3	0.5	0.3	0.3	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	0.2	0.5
3-Sep	0.0	0.0	Z	0.2	0.2	0.4	0.5	0.7	0.3	0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.2	0.3	0.2	0.7
4-Sep	0.3	0.4	0.5	Z	0.2	0.2	0.6	4.8	9.6	2.8	1.9	1.6	1.8	1.4	1.6	1.8	1.1	1.4	0.5	0.0	0.7	3.2	1.6	3.1	1.8	9.6
5-Sep	1.3	1.3	1.0	0.2	Z	0.4	0.0	0.0	0.7	3.4	2.6	0.5	0.7	1.1	1.0	1.2	1.6	3.3	4.2	1.4	0.2	0.2	0.2	0.5	1.2	4.2
6-Sep	1.1	0.8	0.9	1.1	1.7	Z	1.0	0.7	0.2	0.3	0.2	0.2	0.3	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.0	0.0	0.0	0.1	0.4	1.7
7-Sep	Z	0.0	0.1	0.1	0.2	0.1	0.2	0.3	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.7	1.3	0.6	0.2	1.4	0.0	0.4	0.0	0.3	1.4
8-Sep	0.4	Z	0.3	0.5	3.6	7.6	3.2	10.1	7.9	9.0	6.4	3.4	1.2	0.0	0.0	0.1	0.5	1.5	1.2	0.6	1.4	2.3	2.6	2.2	2.9	10.1
9-Sep	2.2	2.2	Z	0.8	0.5	0.6	0.6	0.7	0.9	2.0	2.1	1.5	2.3	1.7	1.9	2.3	2.1	4.5	4.8	1.9	3.3	4.8	3.0	1.2	2.1	4.8
10-Sep	0.5	3.3	10.8	Z	4.1	1.3	2.3	1.8	2.1	0.8	1.4	1.0	0.6	2.0	2.2	1.1	3.9	1.4	0.0	0.0	0.0	0.0	0.1	0.0	1.8	10.8
11-Sep	0.0	0.0	0.0	0.4	Z	2.4	1.8	1.4	1.4	1.7	2.0	1.2	0.9	0.6	0.7	1.1	0.2	0.5	0.6	3.0	0.7	0.0	0.0	0.0	0.9	3.0
12-Sep	0.0	0.0	0.4	1.2	1.0	Z	2.9	2.0	0.7	0.2	0.2	0.9	1.1	0.6	0.7	0.6	0.4	2.6	2.9	3.0	2.8	2.5	6.0	6.0	1.7	6.0
13-Sep	Z	4.3	4.9	4.8	5.0	3.8	3.5	4.6	8.0	6.8	5.9	5.3	2.5	1.6	1.9	1.4	0.7	3.3	0.3	0.1	0.0	0.0	0.2	4.3	3.2	8.0
14-Sep	1.6	Z	0.0	0.0	2.5	3.0	1.7	3.0	1.0	2.3	2.8	3.2	2.5	1.0	1.5	3.7	3.7	4.7	11.2	8.2	12.0	1.4	0.3	0.9	3.1	12.0
15-Sep	1.4	1.1	Z	11.8	11.9	7.1	5.3	7.3	5.6	4.9	4.6	3.1	1.0	0.7	1.3	1.7	1.0	1.3	1.7	2.6	1.8	1.6	6.7	5.6	4.0	11.9
16-Sep	3.4	0.0	0.0	Z	3.7	5.1	7.4	5.3	3.5	2.0	1.7	2.4	3.2	6.9	5.4	3.6	2.7	3.3	2.5	1.5	1.1	0.3	0.1	0.2	2.8	7.4
17-Sep	0.2	0.1	0.1	0.1	Z	0.2	0.3	0.4	0.5	0.9	0.8	1.0	1.1	4.2	7.8	6.6	7.7	8.7	12.8	11.1	12.0	6.2	3.6	2.0	3.8	12.8
18-Sep	1.7	3.8	7.6	3.5	1.7	Z	0.9	6.4	10.7	1.8	0.4	1.5	6.7	4.2	2.0	1.2	1.4	1.3	0.8	0.9	1.2	2.9	3.9	2.9	3.0	10.7
19-Sep	Z	1.8	1.6	1.0	1.5	2.5	1.3	1.0	0.8	0.7	0.6	0.4	0.4	0.3	0.5	0.6	0.6	0.9	0.7	0.6	0.5	0.6	0.7	0.8	0.9	2.5
20-Sep	1.2	Z	2.8	3.0	2.9	3.2	5.0	5.1	5.1	3.3	2.5	3.9	3.8	2.5	1.2	1.8	1.9	1.4	1.6	2.6	1.3	0.8	1.2	0.9	2.6	5.1
21-Sep	1.6	3.0	Z	3.5	4.6	5.6	4.1	4.8	6.2	3.6	1.5	0.3	0.7	0.8	0.5	0.4	0.8	0.6	0.3	1.0	1.5	2.6	2.3	2.9	2.3	6.2
22-Sep	3.7	2.3	2.0	Z	1.7	1.5	2.2	2.5	C	C	C	C	C	C	4.2	0.6	0.7	3.0	1.5	2.3	1.7	2.4	2.4	1.4	--	4.2
23-Sep	1.6	1.9	2.1	2.8	Z	5.3	2.0	1.9	0.9	0.8	3.1	5.7	1.8	0.5	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.6	1.1	1.5	5.7
24-Sep	1.0	3.4	5.2	6.6	8.3	Z	10.6	9.0	7.6	7.4	6.8	4.4	3.3	1.7	0.7	0.6	0.6	0.8	0.7	1.1	2.5	4.6	4.7	2.1	4.1	10.6
25-Sep	Z	1.2	1.7	3.4	3.7	12.1	6.9	12.1	4.0	2.7	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	2.7	0.3	2.0	2.4	12.1
26-Sep	4.1	Z	0.1	0.1	2.7	0.4	4.0	3.3	1.7	0.9	0.7	1.2	1.4	1.2	1.5	2.0	2.2	2.5	2.4	4.2	3.6	3.1	3.1	3.9	2.2	4.2
27-Sep	4.9	1.9	Z	0.9	1.2	0.9	1.2	1.4	1.7	1.4	1.5	0.9	0.4	0.4	0.4	0.3	0.4	0.5	1.5	2.1	2.1	6.5	9.0	7.8	2.1	9.0
28-Sep	7.3	5.3	5.2	Z	3.8	3.1	2.6	2.9	3.5	4.8	4.7	4.4	2.9	2.1	1.6	3.0	2.4	2.1	1.3	0.2	0.4	0.6	1.0	1.1	2.9	7.3
29-Sep	1.1	1.4	1.4	1.3	Z	3.8	5.5	5.6	10.7	7.8	3.7	3.1	2.0	7.0	5.2	3.4	2.2	2.1	0.8	2.4	2.3	3.3	3.2	4.3	3.6	10.7
30-Sep	2.4	0.3	0.8	0.4	0.5	Z	0.7	0.1	0.3	0.3	0.4	0.2	0.2	0.2	0.5	0.9	2.0	0.4	0.3	4.0	8.7	6.5	1.4	3.7	1.5	8.7
	1.7	1.7	2.1	2.0	2.7	2.8	2.6	3.3	3.3	2.5	2.1	1.8	1.5	1.5	1.5	1.4	1.4	1.8	1.9	1.9	2.1	2.0	2.0	2.0	Diurnal Average	
	7.3	5.3	10.8	11.8	11.9	12.1	10.6	12.1	10.7	9.0	6.8	5.7	6.7	7.0	7.8	6.6	7.7	8.7	12.8	11.1	12.0	6.5	9.0	7.8	Diurnal Maximum	

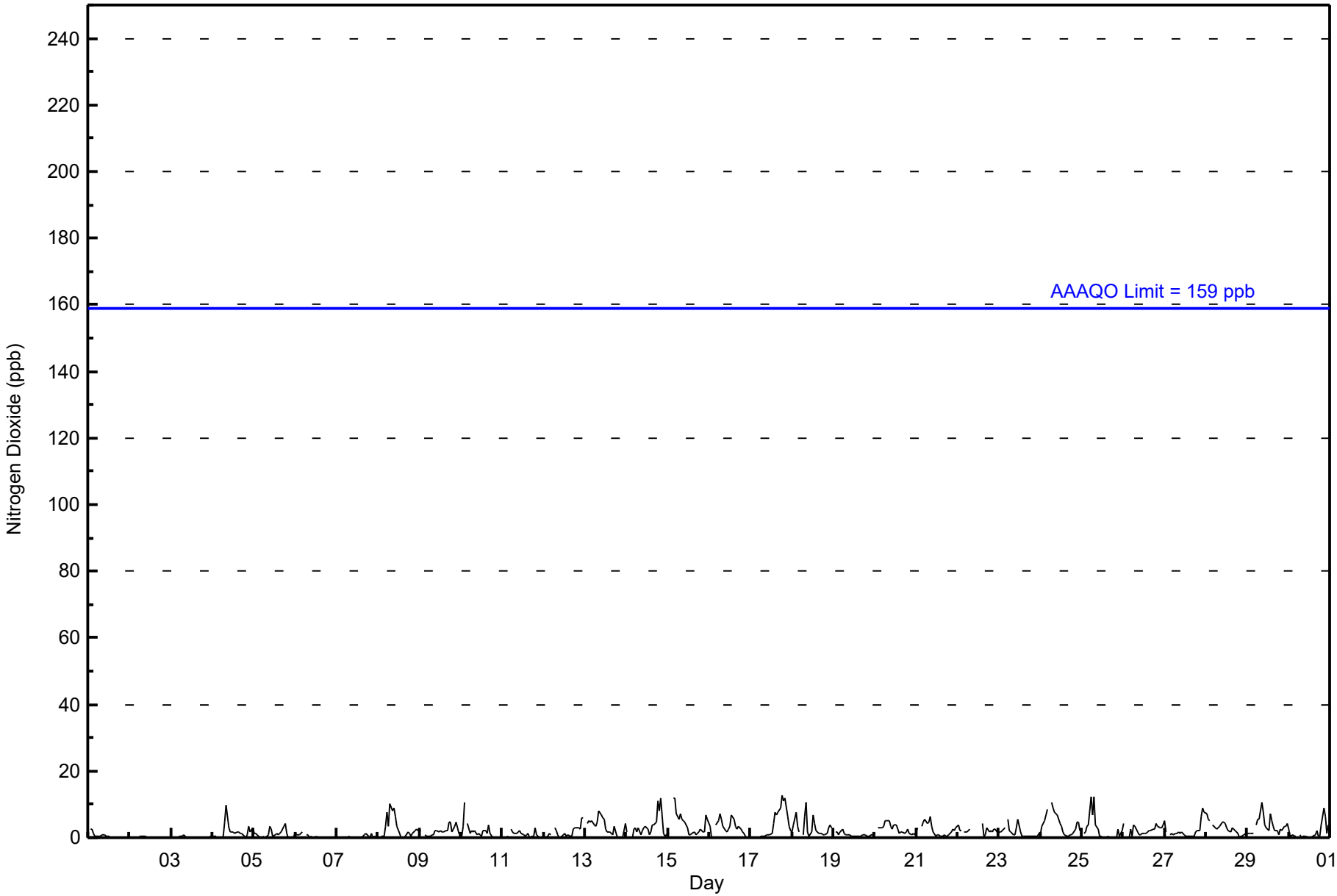
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Wapasu - September 2026



Nitrogen Dioxide (NO_2) - ppb
Wapasu - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Wapasu - September 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	33	9	7	5	20	60	101	99	54	50	47	40	34	17	61	681
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	33	9	7	5	20	60	101	99	54	50	47	40	34	17	61	681

Total Number of Valid Hours: 681

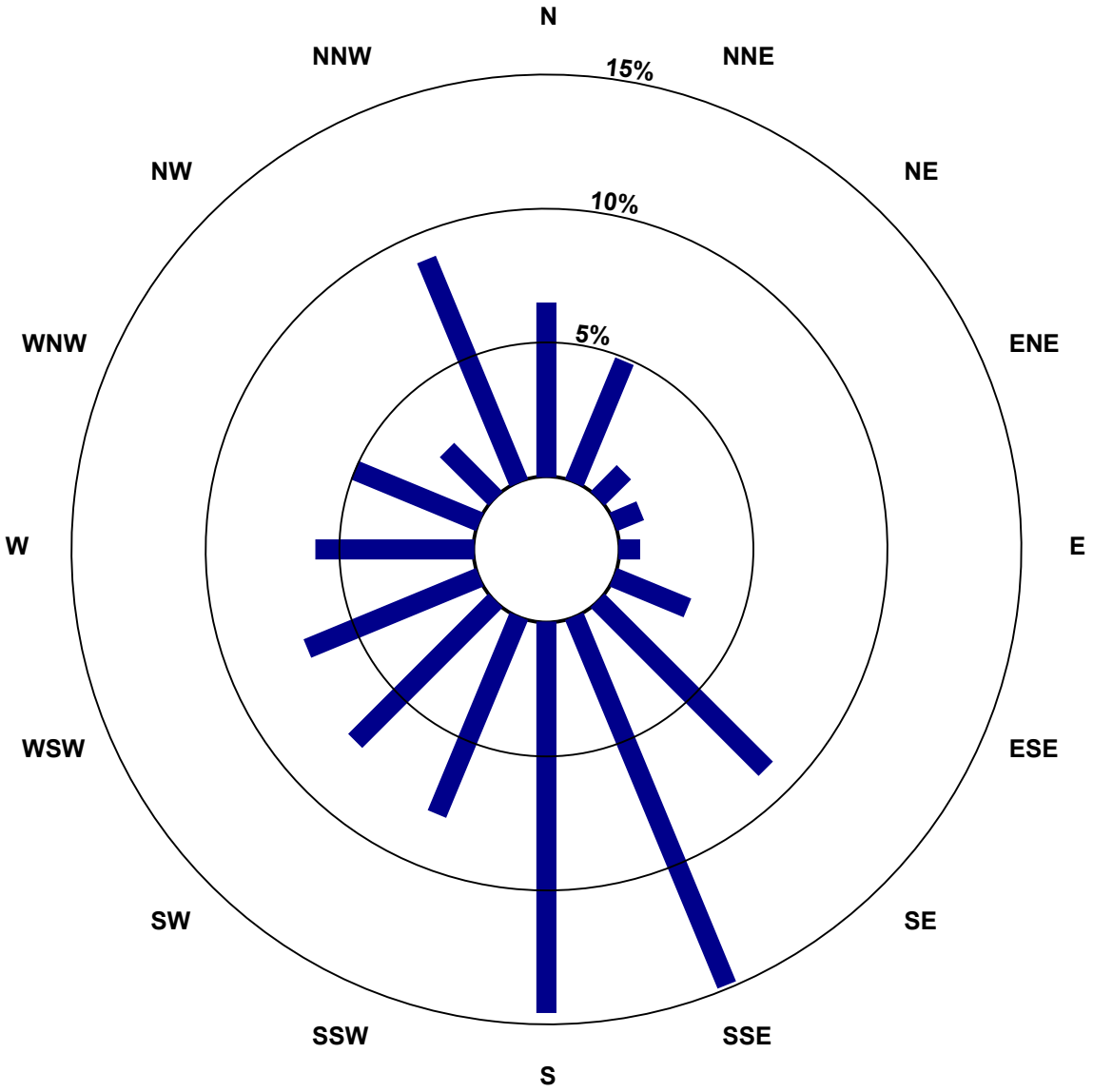
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Wapasu



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

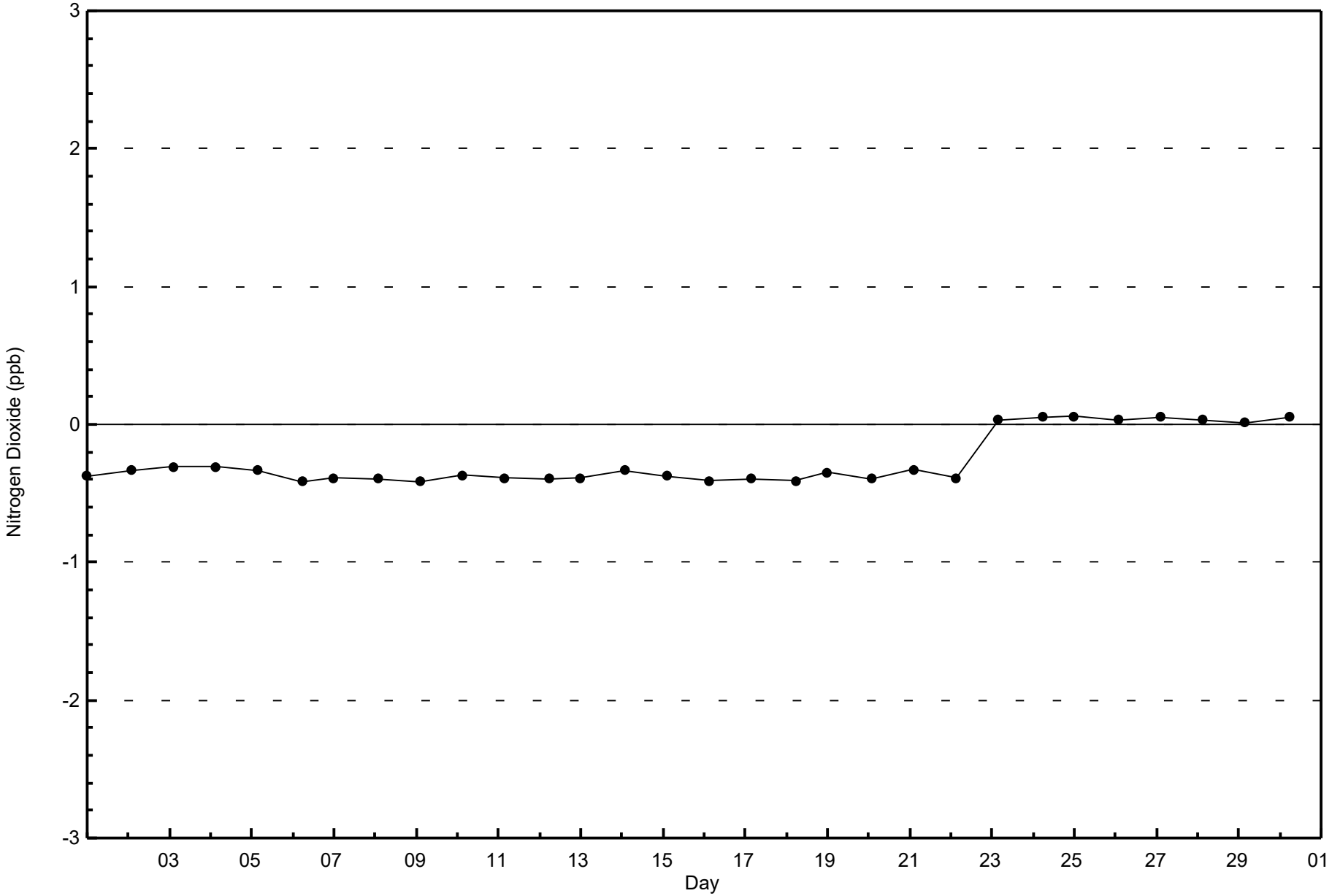
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Wapasu - September 2026

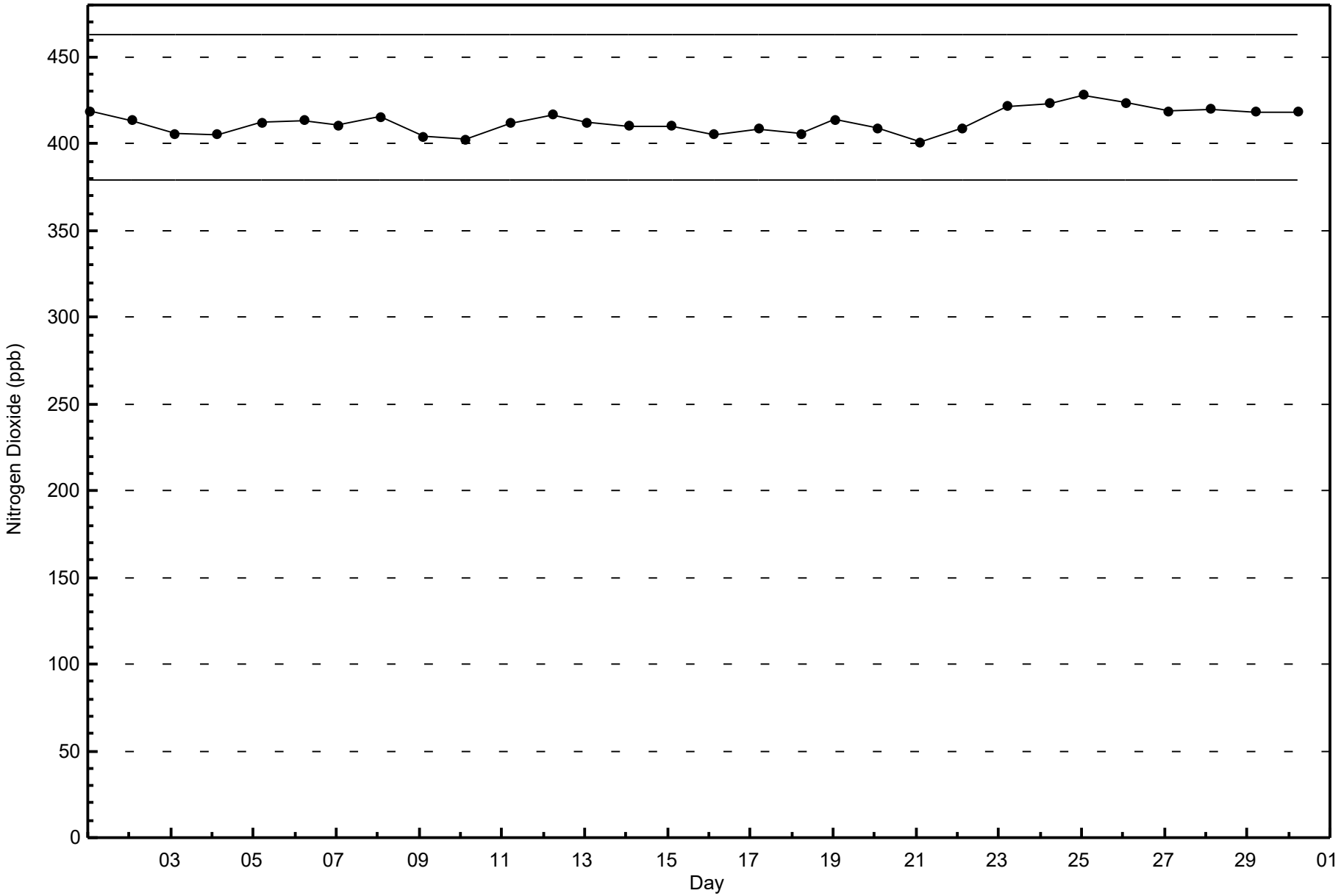


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Wapasu - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Wapasu - September 2026

Maximum Value: 26.7 ppb on Sep 18 09:00

Maximum Daily Average: 5.9 ppb on Sep 15

Minimum Value: 0.0 ppb on Sep 3 11:00

Minimum Daily Average: 0.2 ppb on Sep 2

Maximum Diurnal Average: 5.1 ppb at hour 9

Minimum Diurnal Average: 1.5 ppb at hour 17

Monthly Average: 2.44 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.4 Median = 1.3 Q_3 = 3.1 P_{90} = 6.2 P_{99} = 14.7

Hours in Service:	720
Hours of Data:	684
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-Sep	Z	2.7	2.4	1.4	0.6	0.4	0.5	0.4	1.0	0.7	0.4	0.6	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.6	2.7
2-Sep	0.1	Z	0.2	0.2	0.2	0.2	0.3	0.5	0.3	0.3	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	0.2	0.5
3-Sep	0.0	0.0	Z	0.2	0.2	0.4	0.5	0.7	0.3	0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.2	0.3	0.2	0.7
4-Sep	0.3	0.4	0.5	Z	0.2	0.2	0.6	7.8	18.5	3.7	3.0	2.7	2.7	1.8	1.8	1.9	1.1	1.4	0.5	0.0	0.7	3.2	1.6	3.1	2.5	18.5
5-Sep	1.3	1.3	1.0	0.2	Z	0.4	0.0	0.0	1.0	6.3	4.1	0.6	0.8	1.4	1.2	1.5	2.0	3.8	4.4	1.4	0.2	0.2	0.2	0.5	1.5	6.3
6-Sep	1.1	0.8	0.9	1.1	1.7	Z	1.0	0.7	0.2	0.3	0.2	0.2	0.3	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.0	0.0	0.0	0.1	0.4	1.7
7-Sep	Z	0.0	0.1	0.1	0.2	0.1	0.2	0.3	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.7	1.3	0.6	0.2	1.4	0.0	0.4	0.0	0.3	1.4
8-Sep	0.4	Z	0.3	0.5	4.2	7.6	3.3	15.8	12.1	16.2	11.9	5.2	1.2	0.0	0.0	0.1	0.5	1.5	1.2	0.6	1.4	2.3	2.6	2.2	4.0	16.2
9-Sep	2.2	2.2	Z	0.8	0.5	0.6	0.6	0.7	1.0	2.7	3.2	2.0	3.0	2.1	2.2	2.6	2.1	4.8	4.8	1.9	3.3	4.8	3.0	1.2	2.3	4.8
10-Sep	0.5	3.3	11.0	Z	4.1	1.3	2.3	1.9	2.4	0.8	1.4	1.0	0.6	2.6	2.8	1.1	4.0	1.4	0.0	0.0	0.0	0.0	0.1	0.0	1.9	11.0
11-Sep	0.0	0.0	0.0	0.4	Z	2.4	1.8	1.4	1.5	2.0	2.4	1.4	1.0	0.6	0.7	1.1	0.2	0.5	0.6	3.0	0.7	0.0	0.0	0.0	0.9	3.0
12-Sep	0.0	0.0	0.4	1.2	1.0	Z	3.0	2.3	0.7	0.2	0.2	1.2	1.7	0.8	1.0	0.9	0.6	3.0	3.1	3.1	2.8	2.5	6.0	6.0	1.8	6.0
13-Sep	Z	4.3	4.9	4.8	5.0	3.8	3.7	6.0	13.3	11.5	8.8	7.5	3.4	1.9	2.3	1.5	0.7	3.5	0.3	0.1	0.0	0.0	0.2	4.3	4.0	13.3
14-Sep	1.6	Z	0.0	0.0	2.5	3.0	1.7	3.1	1.0	2.8	4.1	4.1	3.7	1.4	1.9	4.8	4.3	5.0	11.8	8.2	12.1	1.4	0.3	0.9	3.5	12.1
15-Sep	1.4	1.1	Z	13.2	17.6	14.8	14.6	13.9	10.3	8.2	7.9	5.1	1.3	0.7	1.7	1.9	1.0	1.3	1.7	2.6	1.8	1.6	6.7	5.6	5.9	17.6
16-Sep	3.4	0.0	0.0	Z	3.7	5.1	7.7	6.6	5.0	2.6	2.0	3.1	4.1	11.0	8.4	5.0	2.9	3.3	2.5	1.5	1.1	0.3	0.1	0.2	3.5	11.0
17-Sep	0.2	0.1	0.1	0.1	Z	0.2	0.3	0.4	0.5	1.0	1.0	1.3	1.2	5.1	10.0	8.0	9.3	10.1	13.5	11.1	12.0	6.2	3.6	2.0	4.2	13.5
18-Sep	1.7	3.8	7.7	3.5	1.7	Z	1.2	22.2	26.7	2.6	0.4	2.2	11.2	6.3	2.6	1.3	1.5	1.3	0.8	0.9	1.2	2.9	3.9	2.9	4.8	26.7
19-Sep	Z	1.8	1.6	1.0	1.5	2.5	1.3	1.0	0.8	0.7	0.6	0.4	0.4	0.3	0.5	0.6	0.6	0.9	0.7	0.6	0.5	0.6	0.7	0.8	0.9	2.5
20-Sep	1.2	Z	2.8	3.0	2.9	3.2	5.0	6.0	6.7	4.3	3.1	5.0	4.7	2.9	1.2	1.8	1.9	1.4	1.6	2.6	1.3	0.8	1.2	0.9	2.8	6.7
21-Sep	1.6	3.0	Z	3.5	4.6	5.6	4.1	5.5	8.2	4.7	1.8	0.3	0.7	0.8	0.5	0.4	0.8	0.6	0.3	1.0	1.5	2.6	2.3	2.9	2.5	8.2
22-Sep	3.7	2.3	2.0	Z	1.7	1.5	2.2	2.7	C	C	C	C	C	C	5.2	0.6	0.7	3.0	1.5	2.3	1.7	2.4	2.4	1.4	--	5.2
23-Sep	1.6	1.9	2.1	2.8	Z	5.3	2.0	2.0	0.9	0.9	5.3	9.4	2.2	0.5	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.6	1.1	1.8	9.4
24-Sep	1.0	3.4	5.2	6.6	8.3	Z	11.3	12.0	11.6	11.8	10.7	6.4	4.6	2.1	0.7	0.6	0.6	0.8	0.7	1.1	2.5	4.6	4.7	2.1	4.9	12.0
25-Sep	Z	1.2	1.7	3.4	3.7	12.1	6.9	12.3	4.0	2.7	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	2.7	0.3	2.0	2.4	12.3
26-Sep	4.1	Z	0.1	0.1	2.7	0.4	4.0	3.3	1.7	0.9	0.7	1.3	1.6	1.4	1.8	2.1	2.2	2.5	2.4	4.2	3.6	3.1	3.1	3.9	2.2	4.2
27-Sep	4.9	1.9	Z	0.9	1.2	0.9	1.2	1.7	2.5	2.2	2.4	1.2	0.4	0.4	0.4	0.3	0.4	0.5	1.5	2.1	2.1	6.6	9.2	7.8	2.3	9.2
28-Sep	7.3	5.3	5.2	Z	3.8	3.1	2.6	3.3	4.4	7.4	7.2	6.4	3.8	2.4	1.7	3.1	2.4	2.1	1.3	0.2	0.4	0.6	1.0	1.1	3.3	7.4
29-Sep	1.1	1.4	1.4	1.3	Z	3.8	5.5	5.7	11.8	8.8	4.2	3.4	2.3	9.0	6.2	3.9	2.2	2.1	0.8	2.4	2.3	3.3	3.2	4.3	3.9	11.8
30-Sep	2.4	0.3	0.8	0.4	0.5	Z	0.7	0.1	0.3	0.3	0.4	0.2	0.2	0.2	0.5	0.9	2.1	0.4	0.3	4.0	8.7	6.5	1.4	3.7	1.5	8.7
	1.7	1.7	2.1	2.0	3.0	3.2	3.0	4.7	5.1	3.7	3.0	2.5	2.0	2.0	1.9	1.6	1.5	1.9	1.9	1.9	2.1	2.0	2.0	2.1	Diurnal Average	
	7.3	5.3	11.0	13.2	17.6	14.8	14.6	22.2	26.7	16.2	11.9	9.4	11.2	11.0	10.0	8.0	9.3	10.1	13.5	11.1	12.1	6.6	9.2	7.8	Diurnal Maximum	

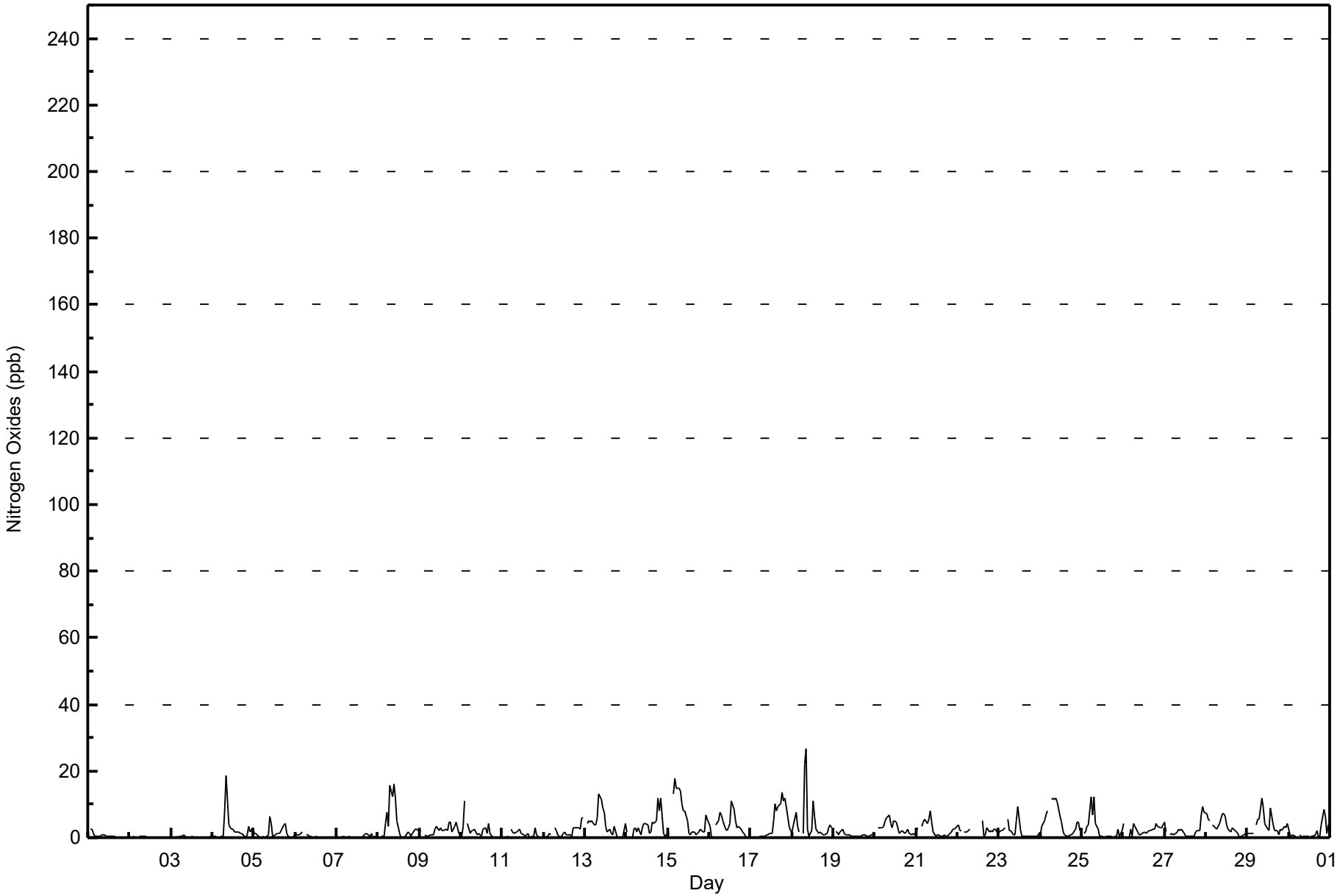
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Wapasu - September 2026



Nitrogen Oxides (NO_X) - ppb
Wapasu - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	682	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Wapasu - September 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	32	8	7	5	20	60	101	99	54	50	47	40	34	17	61	679
21 - 40	0	1	1	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	44	33	9	7	5	20	60	101	99	54	50	47	40	34	17	61	681

Total Number of Valid Hours: 681

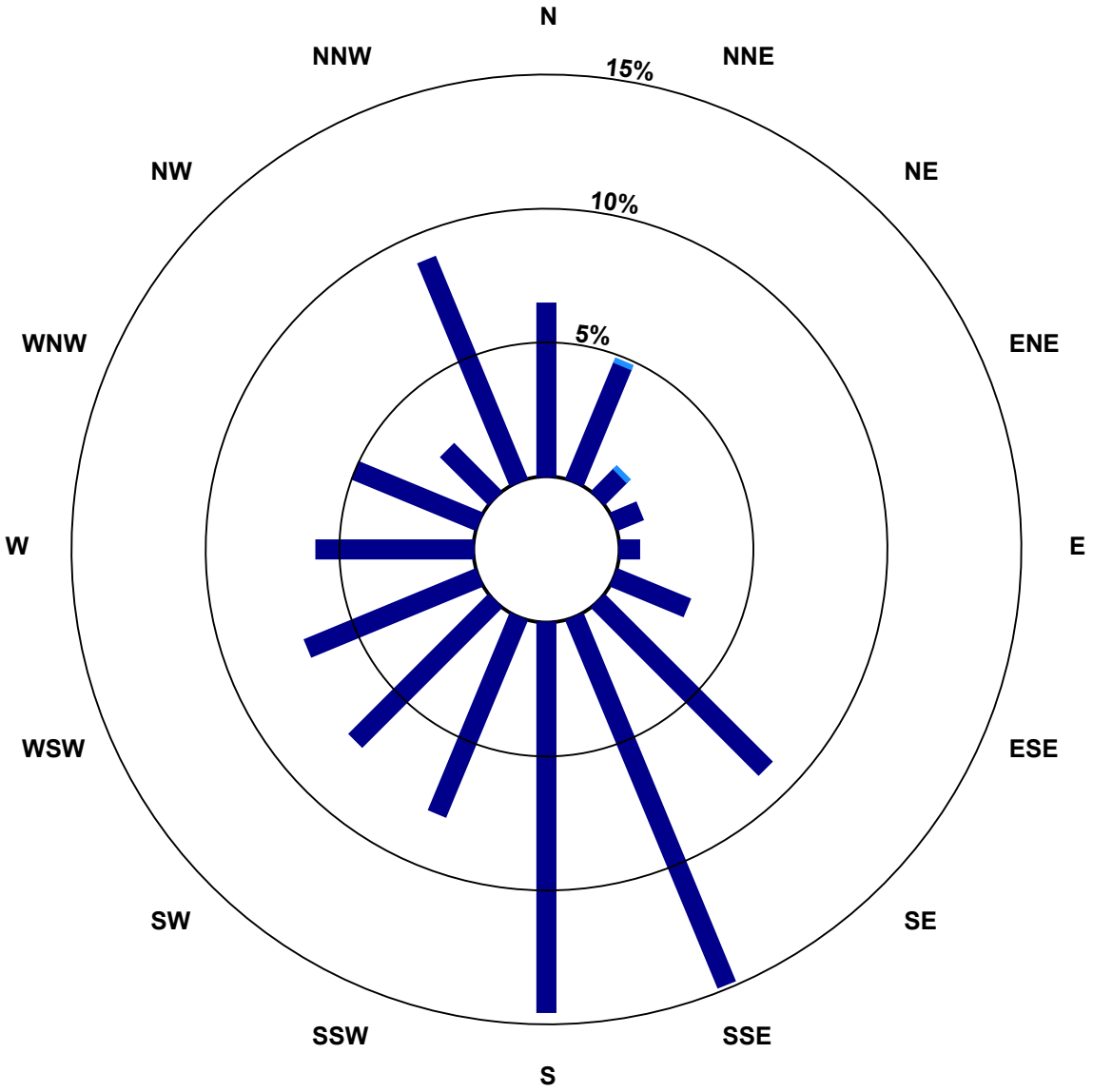
Total Number of Hours: 720

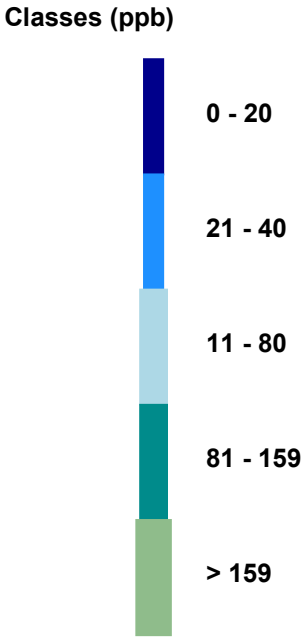
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Wapasu





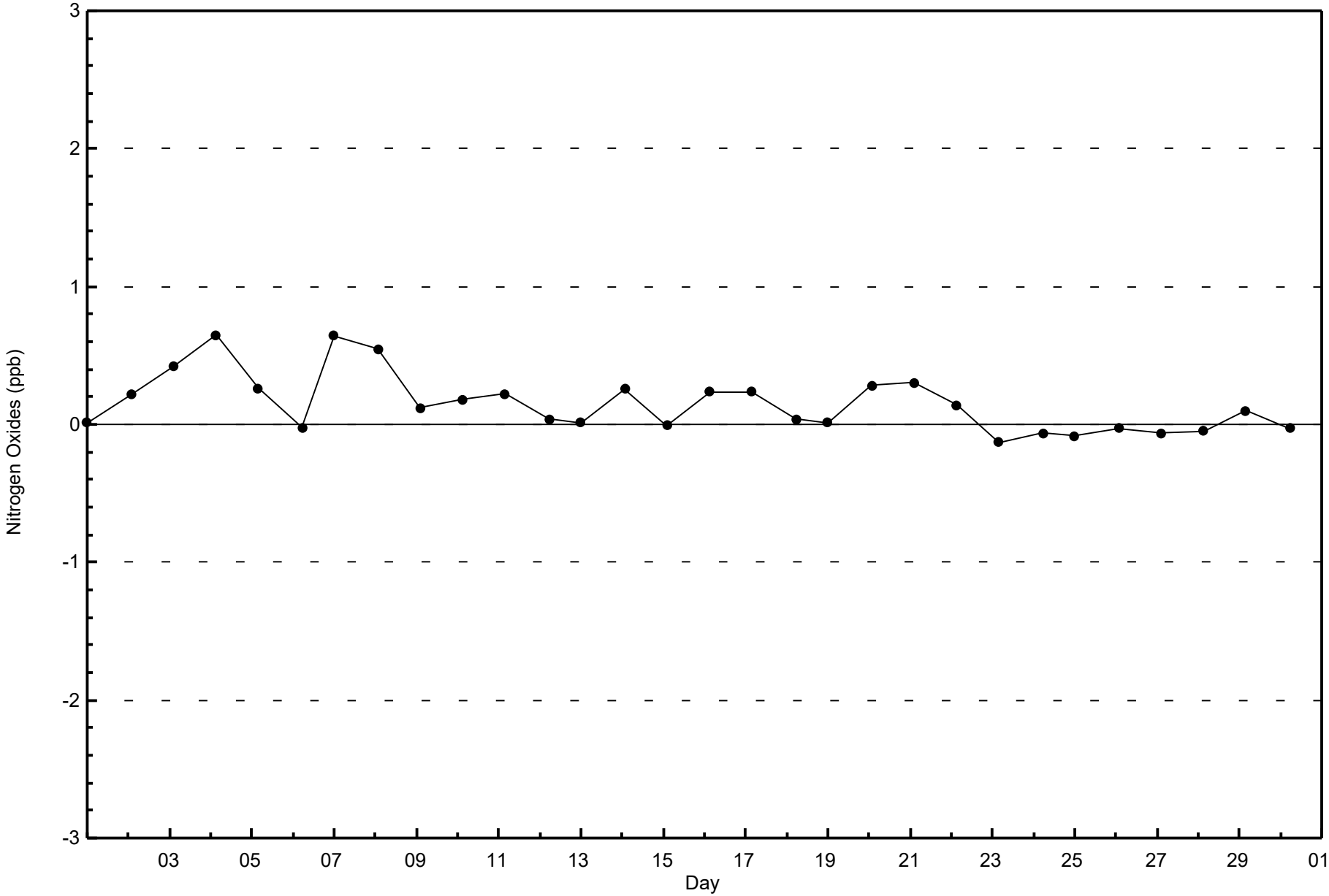
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Wapasu - September 2026

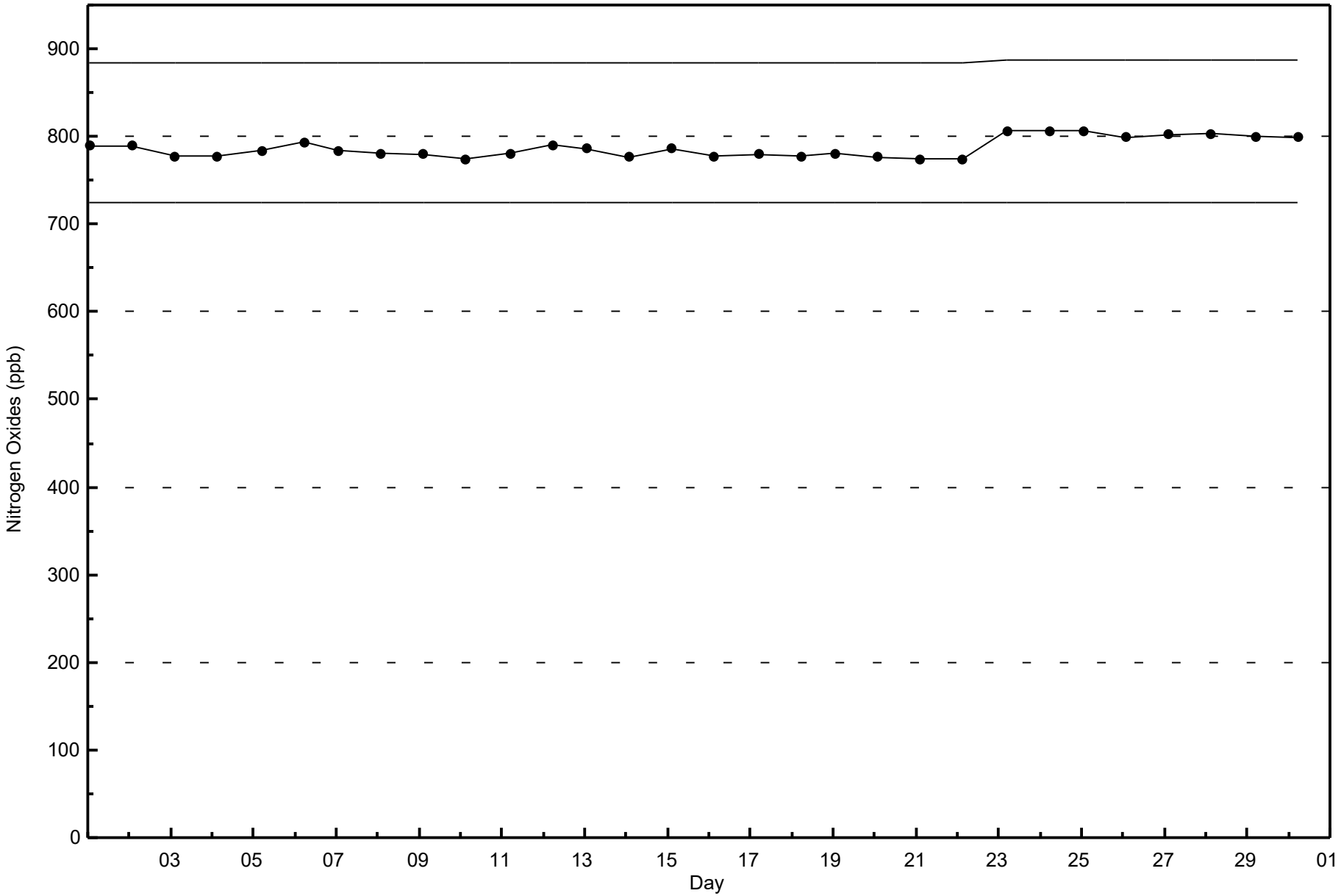


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Wapasu - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Wapasu - September 2026

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

Maximum Value: 27.6 $\mu g/m^3$ on Sep 8 21:00

Maximum Daily Average: 7.2 $\mu g/m^3$ on Sep 8

Minimum Value: 0.1 $\mu g/m^3$ on Sep 11 09:00

Maximum Diurnal Average: 4.6 $\mu g/m^3$ at hour 21

Monthly Average: 3.70 $\mu g/m^3$

Minimum Daily Average: 0.6 $\mu g/m^3$ on Sep 30

Minimum Diurnal Average: 3.4 $\mu g/m^3$ at hour 2

Percentiles: P_1 = 0.2 P_{10} = 1.2 Q_1 = 2.2 Median = 3.2 Q_3 = 4.8 P_{90} = 6.3 P_{99} = 11.6

Hours in Service:	720
Hours of Data:	717
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-Sep	5.3	5.6	5.7	4.1	3.0	3.0	3.3	3.5	5.6	3.9	3.1	3.1	2.6	2.7	2.8	2.9	2.6	2.9	3.1	3.5	3.3	2.6	2.9	2.9	3.5	5.7
2-Sep	3.0	3.6	3.8	4.3	4.8	5.4	5.6	5.4	5.0	4.9	4.1	4.2	4.7	5.0	5.6	6.0	6.4	6.1	6.0	6.3	5.3	4.7	4.6	4.7	5.0	6.4
3-Sep	4.5	4.4	4.8	4.8	4.8	5.0	4.8	4.8	4.4	4.3	4.4	4.4	4.3	4.1	4.1	4.0	4.0	4.0	4.0	4.3	4.7	4.7	4.7	4.6	4.4	5.0
4-Sep	4.5	4.2	4.2	4.4	4.4	4.6	4.6	4.7	5.0	1.4	0.5	0.4	0.4	0.5	0.6	1.0	1.8	2.0	2.0	2.0	2.1	2.3	2.2	2.1	2.6	5.0
5-Sep	2.1	2.3	2.5	2.5	2.6	2.8	3.2	3.4	3.4	4.1	4.7	4.7	5.1	5.6	5.6	5.7	5.9	6.7	6.4	5.2	4.1	4.1	3.7	3.7	4.2	6.7
6-Sep	5.5	5.0	5.1	5.5	6.5	5.8	4.2	3.1	2.7	2.7	2.9	2.9	2.8	2.6	2.8	2.9	2.7	2.9	3.5	3.1	2.6	1.9	1.9	2.2	3.5	6.5
7-Sep	2.1	1.9	2.0	2.4	2.2	2.5	2.8	2.8	2.4	2.5	2.7	DF	2.6	2.2	2.4	2.8	3.3	3.7	3.5	4.0	8.2	4.6	3.3	2.9	3.0	8.2
8-Sep	3.0	2.9	2.9	4.5	5.8	6.8	5.2	5.7	6.7	7.9	7.5	7.0	5.5	3.9	4.7	4.5	6.0	7.2	6.9	7.4	27.6	16.9	9.2	7.2	7.2	27.6
9-Sep	6.6	6.1	5.8	5.8	5.6	5.8	5.9	6.0	5.6	5.4	5.7	5.8	6.8	7.9	9.1	10.4	7.9	4.2	3.9	4.7	5.4	3.8	4.1	3.4	5.9	10.4
10-Sep	2.6	2.4	2.7	2.2	2.3	2.0	2.2	2.6	3.4	8.0	15.3	15.2	14.4	11.7	5.1	5.0	4.5	2.9	0.9	1.2	1.6	1.8	1.6	1.4	4.7	15.3
11-Sep	1.3	0.7	0.5	0.5	0.7	0.9	0.4	0.2	0.1	0.3	0.6	0.4	0.6	0.6	0.8	2.9	3.6	3.6	3.3	3.0	2.3	1.3	1.5	1.5	1.3	3.6
12-Sep	1.5	1.5	1.7	2.6	2.8	2.3	2.1	1.6	0.9	0.9	1.2	1.5	1.7	2.2	2.8	3.2	3.0	3.8	4.6	4.2	4.8	4.0	4.8	5.4	2.7	5.4
13-Sep	4.4	4.1	4.1	3.6	3.6	3.7	3.6	4.1	5.2	5.1	5.2	4.7	4.7	4.3	4.5	4.1	3.8	8.7	4.6	3.1	3.3	3.3	3.4	3.4	4.3	8.7
14-Sep	1.9	1.0	1.5	1.8	2.7	2.0	1.8	2.0	2.6	2.6	2.6	2.4	2.0	1.3	1.1	1.2	1.3	1.1	1.8	2.0	2.3	2.0	1.8	1.7	1.9	2.7
15-Sep	2.0	1.8	1.8	2.2	2.6	2.7	2.7	2.7	2.2	2.0	2.4	2.5	1.8	1.8	2.3	3.0	2.7	2.8	3.5	2.9	3.0	3.9	3.5	2.0	2.5	3.9
16-Sep	1.9	1.2	1.4	1.5	2.0	2.9	3.2	3.1	2.9	2.6	2.4	2.1	3.5	C	C	5.5	4.0	4.6	5.2	4.3	3.6	3.1	2.8	2.8	3.0	5.5
17-Sep	2.9	2.9	2.7	2.8	3.0	3.1	3.2	3.3	3.4	3.5	3.8	3.7	3.8	4.8	7.6	7.4	8.9	8.9	12.6	10.7	9.1	8.0	6.8	5.7	5.5	12.6
18-Sep	5.2	4.9	5.0	4.5	4.2	3.9	3.7	4.3	4.4	2.7	2.3	2.6	3.9	3.4	3.1	3.0	3.0	2.9	3.1	4.6	4.3	5.9	5.8	4.9	4.0	5.9
19-Sep	3.9	3.5	3.2	3.1	3.0	3.0	2.8	3.1	2.7	2.6	2.6	2.6	2.8	3.0	3.3	3.5	3.8	4.4	4.3	4.2	4.3	4.5	4.8	4.7	3.5	4.8
20-Sep	5.1	5.7	6.1	6.4	6.1	6.0	6.2	6.4	7.5	5.1	4.4	5.2	5.8	5.1	5.1	5.9	11.9	7.4	5.4	6.0	4.6	3.6	5.2	5.1	5.9	11.9
21-Sep	5.9	6.5	6.5	6.3	6.5	7.9	7.8	8.1	10.9	7.0	5.2	4.2	4.6	5.8	6.3	6.3	7.0	6.6	5.8	5.5	6.2	6.8	8.1	8.6	6.7	10.9
22-Sep	10.0	9.1	8.4	8.1	7.1	5.3	6.3	7.4	7.1	9.6	9.1	10.5	8.2	4.1	4.7	3.3	2.6	6.3	3.0	3.4	4.5	6.8	5.7	4.9	6.5	10.5
23-Sep	4.1	3.8	3.8	3.5	3.4	2.7	2.2	2.1	1.5	1.6	1.9	3.5	3.1	2.3	2.3	1.5	1.9	2.9	3.4	4.5	3.3	2.8	2.8	3.1	2.8	4.5
24-Sep	3.1	3.7	4.0	4.0	4.1	4.6	5.7	6.5	7.5	6.4	7.8	5.2	4.6	4.8	3.6	2.8	2.6	3.2	5.2	3.9	5.0	5.7	5.5	4.0	4.7	7.8
25-Sep	3.3	2.9	2.6	2.9	3.5	4.3	3.1	2.7	2.7	2.2	2.3	2.5	2.4	2.4	2.4	2.4	2.5	2.5	2.3	2.3	2.5	2.6	2.5	2.5	2.7	4.3
26-Sep	2.8	2.8	2.9	2.3	1.5	0.5	1.2	0.8	1.1	0.3	0.2	0.2	0.3	0.3	0.3	1.0	1.4	0.8	0.7	0.5	0.5	0.7	0.7	0.9	1.0	2.9
27-Sep	1.0	0.9	1.1	1.6	2.0	1.9	1.8	1.9	2.0	2.1	1.8	1.6	2.1	2.7	2.6	2.6	2.9	1.5	2.2	3.7	4.0	3.9	4.6	4.3	2.4	4.6
28-Sep	3.3	2.9	2.5	2.4	1.9	1.6	1.7	1.8	2.0	2.4	2.8	2.7	2.8	3.1	4.0	3.8	3.8	3.3	2.8	1.8	1.8	1.9	2.1	2.3	2.6	4.0
29-Sep	2.2	2.2	2.5	2.6	2.8	3.2	3.6	2.0	3.6	1.5	2.5	2.3	1.0	1.2	1.1	1.7	2.8	3.3	3.1	1.9	1.4	1.4	1.4	2.0	2.2	3.6
30-Sep	1.4	0.8	0.4	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.7	0.3	0.3	0.4	1.0	0.7	0.6	0.9	1.6	0.8	0.6	1.0	0.6	1.6
	3.5	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.8	3.5	3.7	3.7	3.7	3.4	3.5	3.7	4.0	4.1	3.9	3.8	4.6	4.0	3.8	3.5	Diurnal Average	
	10.0	9.1	8.4	8.1	7.1	7.9	7.8	8.1	10.9	9.6	15.3	15.2	14.4	11.7	9.1	10.4	11.9	8.9	12.6	10.7	27.6	16.9	9.2	8.6	Diurnal Maximum	

C - Calibration DF - DAS Failure

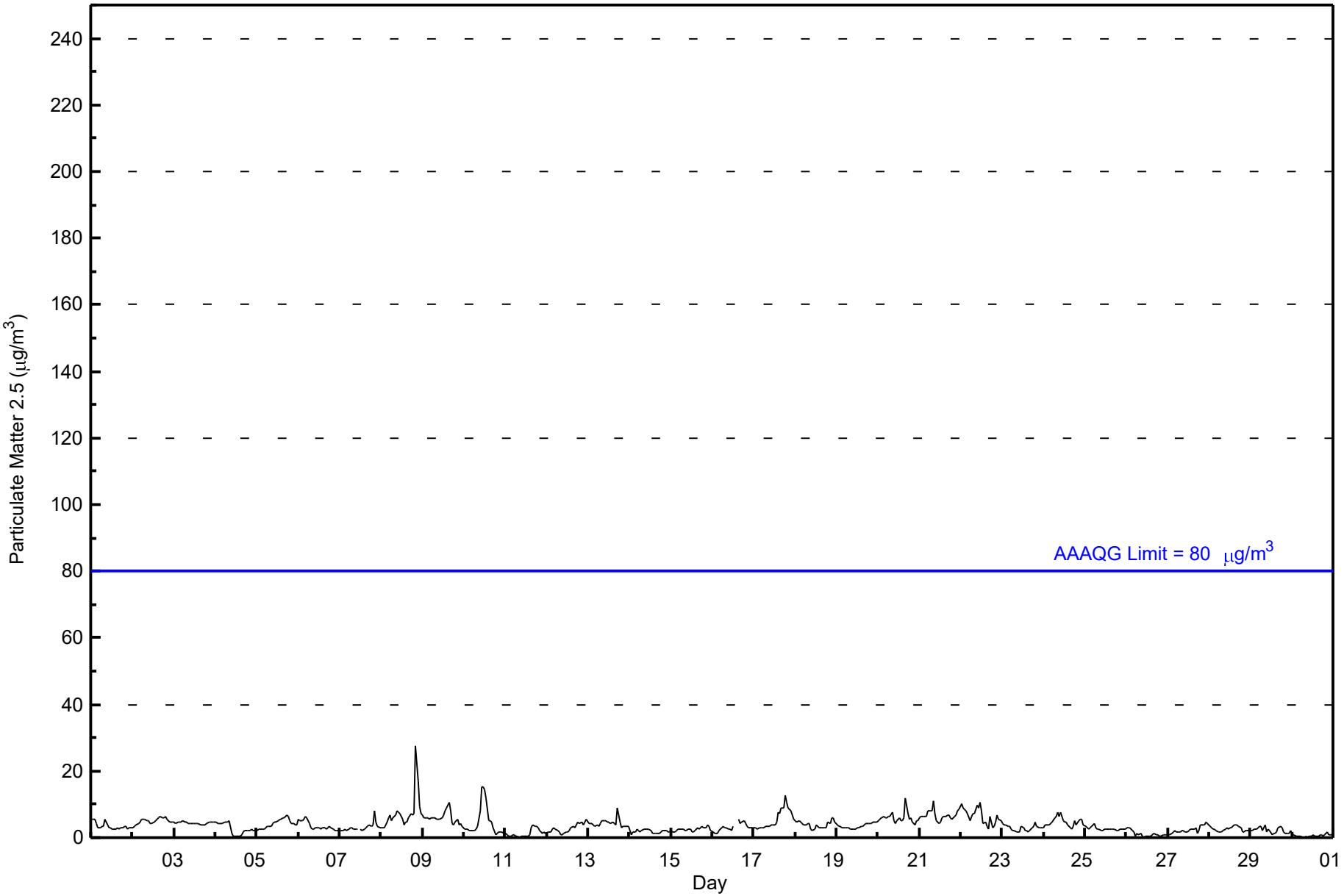
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Wapasu - September 2026



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

Wapasu - September 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	594	82.85	82.85
6 - 15	121	16.88	99.72
16 - 25	1	0.14	99.86
26 - 80	1	0.14	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 717

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Wapasu - September 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	38	31	10	7	4	22	48	80	79	45	38	42	38	31	19	59	591
6 - 15	7	4	0	0	2	1	14	26	24	12	12	4	3	4	2	6	121
16 - 25	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
26 - 80	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	45	35	10	7	6	23	62	108	103	57	50	46	41	35	21	65	714

Total Number of Valid Hours: 714

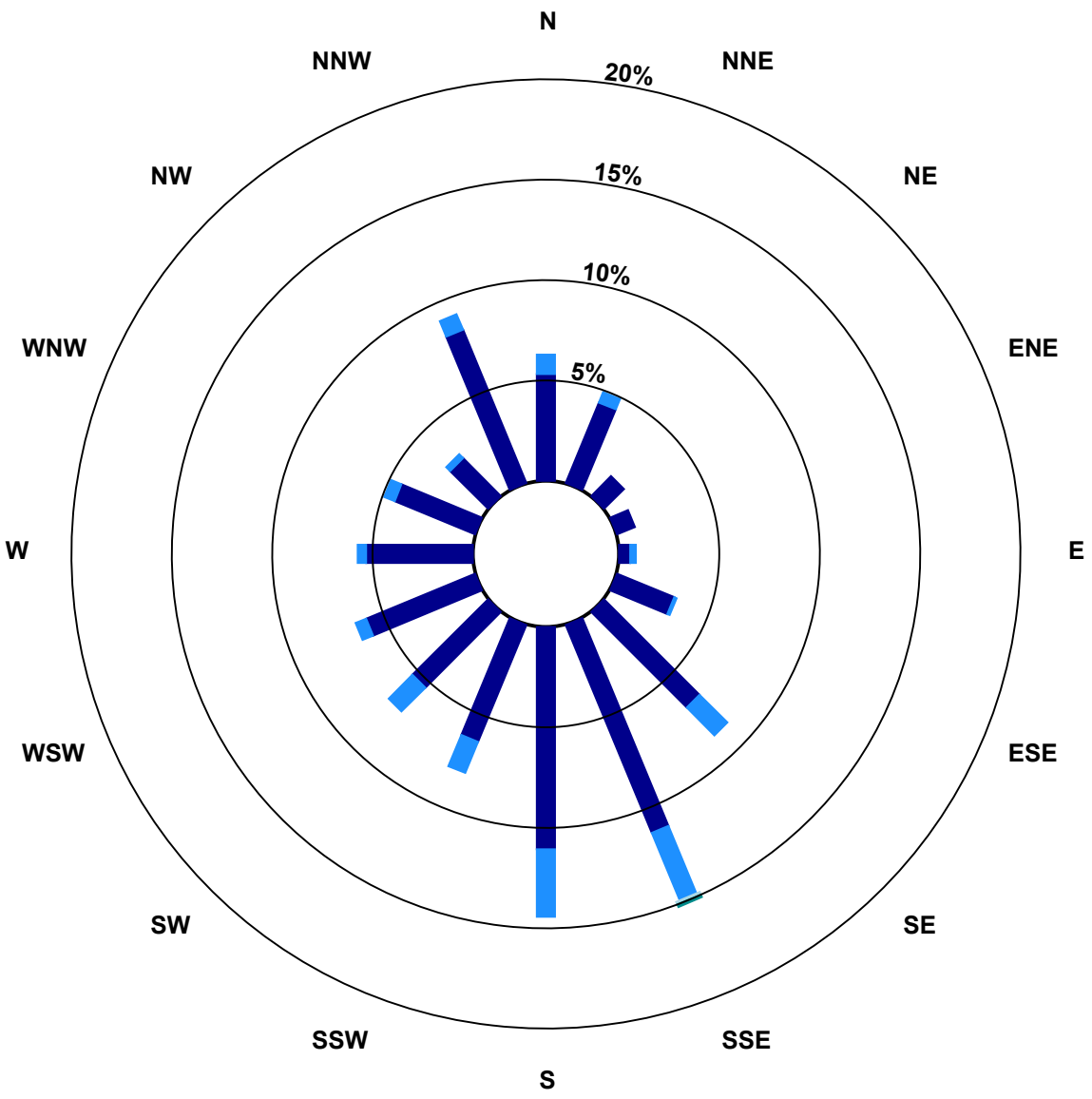
Total Number of Hours: 720

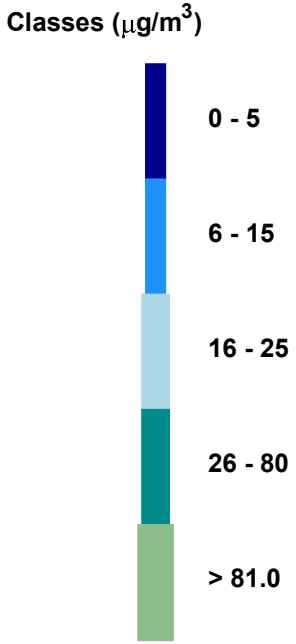
Wood Buffalo Environmental Association

Wind Rose Sep 2026

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

Wapasu





Total Number of Valid Hours: 714

Maximum Value: 25.8 C on Sep 2 14:00
Maximum Daily Average: 20.6 C on Sep 2

Minimum Value: 0.7 C on Oct 1 00:00
Minimum Daily Average: 3.2 C on Sep 30
Maximum Diurnal Average: 15.4 C at hour 16
Minimum Diurnal Average: 7.8 C at hour 6
Monthly Average: 11.18 C
Percentiles: P_1 = 1.4 P_{10} = 4.7 Q_1 = 7.2 Median = 10.3 Q_3 = 15.5 P_{90} = 18.6 P_{99} = 24.4

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

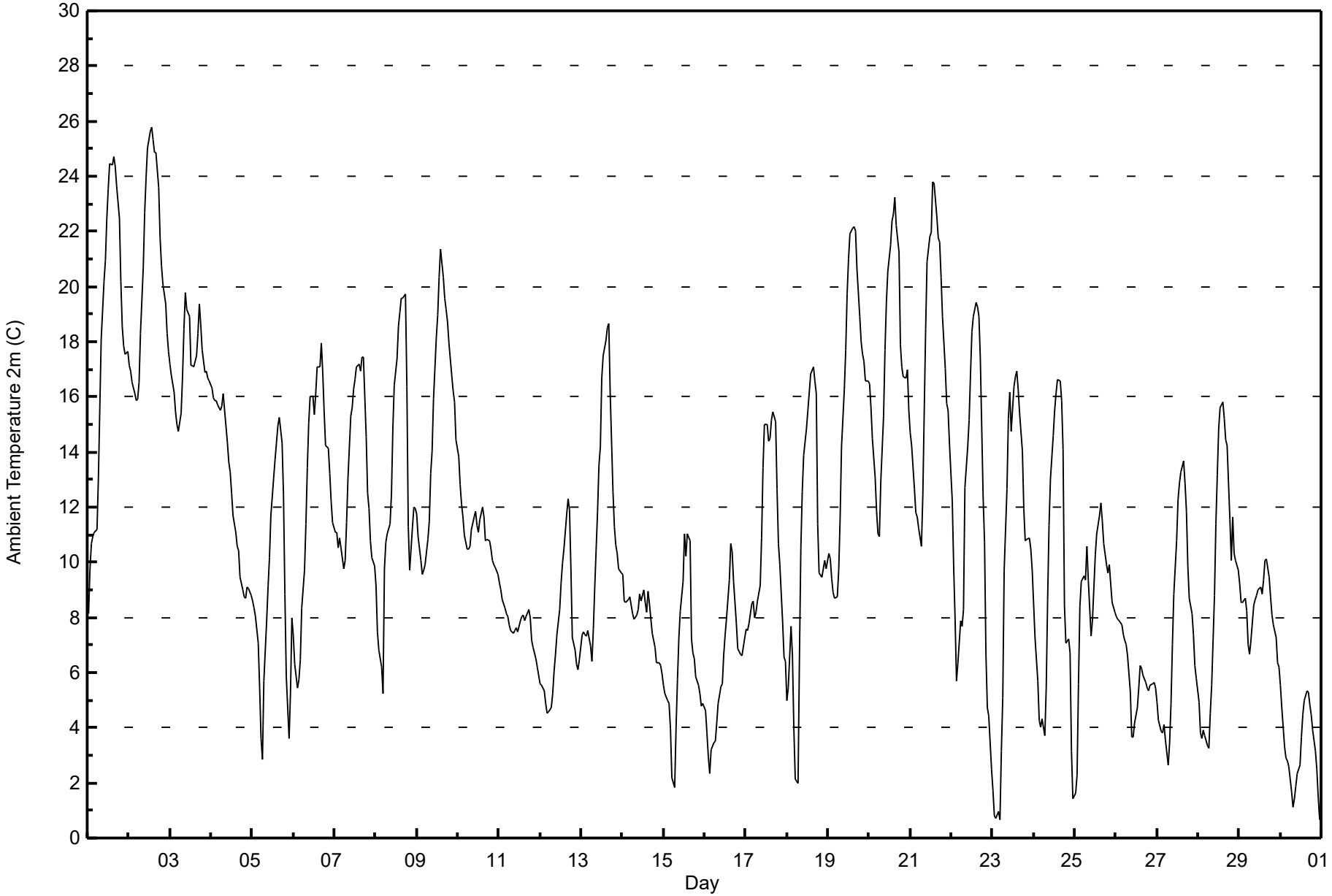
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	8.1	9.8	10.7	10.9	11.1	11.2	13.1	15.6	18.1	20.2	20.9	22.5	23.5	24.4	24.4	24.7	24.3	23.6	22.5	20.2	18.6	17.8	17.6	17.6	18.0	24.7
2-Sep	17.1	17.0	16.5	16.1	15.9	15.9	16.5	18.3	20.7	22.7	23.9	25.0	25.6	25.8	25.3	24.9	24.9	23.6	21.8	20.7	20.1	19.4	18.3	17.6	20.6	25.8
3-Sep	17.2	16.8	16.2	15.5	15.0	14.8	15.4	16.7	18.4	19.8	19.1	18.9	17.1	17.2	17.1	17.5	18.3	19.4	18.6	17.7	16.9	16.9	16.7	16.6	17.2	19.8
4-Sep	16.3	16.0	15.8	15.9	15.7	15.5	15.7	16.1	15.5	14.3	13.6	13.3	12.5	11.7	11.1	10.6	10.4	9.5	9.0	8.7	8.7	9.1	9.0	8.8	12.6	16.3
5-Sep	8.6	8.3	8.1	7.1	5.5	3.6	2.8	5.7	7.9	9.1	10.2	11.7	13.1	13.7	14.3	15.0	15.2	14.3	12.5	8.9	5.9	3.6	5.3	8.0	9.1	15.2
6-Sep	7.3	6.3	5.4	5.7	6.5	8.3	9.7	11.4	13.4	15.0	16.0	16.0	15.4	16.1	17.1	17.1	18.0	16.9	15.5	14.2	14.1	13.2	12.2	11.5	12.6	18.0
7-Sep	11.1	11.1	10.5	10.9	10.5	9.7	10.1	11.4	13.1	15.3	15.6	16.3	16.6	17.1	17.2	16.9	17.4	17.5	14.5	12.5	12.0	10.8	10.2	9.9	13.3	17.5
8-Sep	9.1	7.5	6.8	6.2	5.3	9.8	10.8	11.1	11.4	12.5	14.9	16.4	17.4	18.6	19.0	19.6	19.6	19.7	16.4	11.3	9.7	11.3	12.0	11.9	12.8	19.7
9-Sep	11.7	11.0	10.1	9.5	9.7	9.9	10.8	11.5	13.2	14.0	15.9	18.2	19.0	20.3	21.3	20.3	19.6	19.2	18.7	17.9	16.8	16.2	15.8	14.5	15.2	21.3
10-Sep	13.8	12.8	12.1	11.6	11.0	10.5	10.5	10.6	11.2	11.6	11.8	11.3	11.1	11.5	12.0	11.6	10.8	10.8	10.8	10.5	10.1	9.9	9.8	9.5	11.1	13.8
11-Sep	9.3	9.0	8.6	8.3	8.2	8.0	7.7	7.5	7.4	7.5	7.6	7.5	7.9	8.0	8.1	7.9	8.0	8.3	8.0	7.2	6.9	6.5	6.2	5.9	7.7	9.3
12-Sep	5.6	5.5	5.3	4.9	4.5	4.6	4.7	5.2	6.1	6.7	7.4	8.3	9.3	10.0	10.5	11.7	12.3	11.9	9.7	7.3	6.8	6.3	6.1	6.4	7.4	12.3
13-Sep	7.4	7.5	7.4	7.3	7.5	6.9	6.4	7.6	9.1	11.8	13.5	14.2	16.7	17.5	18.1	18.5	18.7	16.2	12.6	11.3	10.6	10.3	9.8	9.6	11.5	18.7
14-Sep	9.6	8.6	8.6	8.6	8.8	8.5	8.2	7.9	8.1	8.3	8.8	8.6	9.0	8.6	8.2	9.0	8.5	7.4	7.2	6.9	6.4	6.4	6.2	5.9	8.0	9.6
15-Sep	5.6	5.3	5.0	4.9	4.0	2.2	1.8	4.0	5.7	7.3	8.2	9.3	11.0	10.2	11.0	10.8	7.2	6.7	6.5	5.8	5.5	5.2	4.8	4.9	6.4	11.0
16-Sep	4.6	3.8	3.0	2.3	3.2	3.5	3.5	4.2	4.9	5.5	5.6	6.7	7.4	8.0	9.3	10.7	10.4	9.3	7.8	6.9	6.8	6.6	6.6	7.3	6.2	10.7
17-Sep	7.6	7.5	7.8	8.5	8.6	8.0	8.2	8.6	9.1	10.9	13.4	15.0	15.0	14.4	14.5	15.2	15.4	15.1	12.7	10.7	9.9	7.8	6.5	6.4	10.7	15.4
18-Sep	5.0	5.4	7.7	6.6	3.9	2.1	2.0	6.6	10.6	12.5	13.9	14.8	15.5	16.2	16.8	17.1	16.6	16.1	11.4	9.6	9.4	9.8	10.1	9.7	10.4	17.1
19-Sep	10.3	10.1	9.4	8.9	8.7	8.7	9.7	11.6	14.2	16.3	17.7	19.7	21.0	21.9	22.1	22.2	22.0	20.6	18.9	18.0	17.5	17.3	16.6	16.6	15.8	22.2
20-Sep	16.5	15.6	14.5	13.1	11.9	11.0	10.9	12.9	15.3	17.7	19.4	20.5	21.5	22.4	22.6	23.2	22.2	21.2	17.9	17.1	16.7	16.7	17.0	15.5	17.2	23.2
21-Sep	14.7	14.2	12.7	11.8	11.7	11.2	10.6	12.5	15.5	18.4	20.9	21.8	22.0	23.8	23.7	22.5	21.7	21.6	20.3	18.9	17.0	15.8	15.5	14.3	17.2	23.8
22-Sep	12.2	9.8	7.9	5.7	6.4	7.9	7.7	8.3	12.7	14.2	15.2	16.8	18.3	18.9	19.4	19.3	18.9	17.4	12.4	10.8	6.7	4.7	4.4	2.5	11.6	19.4
23-Sep	1.7	0.8	0.7	1.0	0.7	3.2	5.1	9.7	12.7	15.2	16.2	14.7	16.4	16.7	16.9	16.2	15.4	14.0	11.9	10.8	10.8	10.9	10.5	9.7	10.1	16.9
24-Sep	8.5	7.3	5.7	4.3	4.0	4.3	3.7	5.5	8.7	11.4	13.0	14.6	15.5	16.1	16.7	16.6	15.9	14.1	8.5	7.1	7.2	6.7	3.2	1.4	9.2	16.7
25-Sep	1.6	2.3	5.6	8.4	9.3	9.5	9.4	10.6	9.4	7.3	8.0	9.1	10.3	11.1	11.7	12.1	11.5	10.7	9.9	9.6	9.9	9.2	8.6	8.2	8.9	12.1
26-Sep	8.0	8.0	7.9	7.7	7.4	7.2	7.0	6.6	5.3	3.7	3.7	4.1	4.8	5.5	6.3	6.1	5.9	5.6	5.5	5.4	5.5	5.6	5.6	5.5	6.0	8.0
27-Sep	4.9	4.2	3.9	3.8	4.1	3.6	2.7	3.4	4.9	7.0	8.9	10.8	12.3	12.9	13.3	13.7	12.8	11.8	9.9	8.7	8.2	7.4	6.2	5.8	7.7	13.7
28-Sep	4.9	3.8	3.6	3.9	3.7	3.3	3.3	4.5	5.6	8.8	11.4	13.2	14.8	15.6	15.8	15.2	14.4	14.2	11.5	10.0	11.6	10.3	10.1	9.7	9.3	15.8
29-Sep	9.2	8.5	8.5	8.7	8.2	7.0	6.7	7.2	8.4	8.6	8.8	9.0	9.1	8.8	9.4	10.1	10.1	9.5	8.7	8.1	7.7	7.3	6.3	6.2	8.3	10.1
30-Sep	5.5	4.7	3.3	2.9	2.8	2.6	1.7	1.1	1.4	1.9	2.3	2.7	3.6	4.5	5.0	5.3	5.3	4.8	4.4	3.9	3.1	2.5	1.5	0.7	3.2	5.5
	9.1	8.6	8.3	8.0	7.8	7.8	7.9	9.1	10.6	11.9	12.9	13.7	14.4	14.9	15.3	15.4	15.1	14.4	12.5	11.2	10.6	10.1	9.6	9.3	Diurnal Average	
	17.2	17.0	16.5	16.1	15.9	15.9	16.5	18.3	20.7	22.7	23.9	25.0	25.6	25.8	25.3	24.9	24.9	23.6	22.5	20.7	20.1	19.4	18.3	17.6	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Wapasu - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	347	48.19	48.19
10 - 20	324	45.00	93.19
> 20	49	6.81	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Wapasu - September 2026

Maximum Value: 100.0 % on Sep 8 03:00

Maximum Daily Average: 95.4 % on Sep 14

Minimum Value: 29.2 % on Sep 24 16:00

Minimum Daily Average: 56.2 % on Sep 20

Maximum Diurnal Average: 89.0 % at hour 7

Minimum Diurnal Average: 56.9 % at hour 16

Monthly Average: 75.54 %

Percentiles: P_1 = 34.9 P_{10} = 48.2 Q_1 = 62.0 Median = 78.7 Q_3 = 91.6 P_{90} = 98.3 P_{99} = 100.0

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

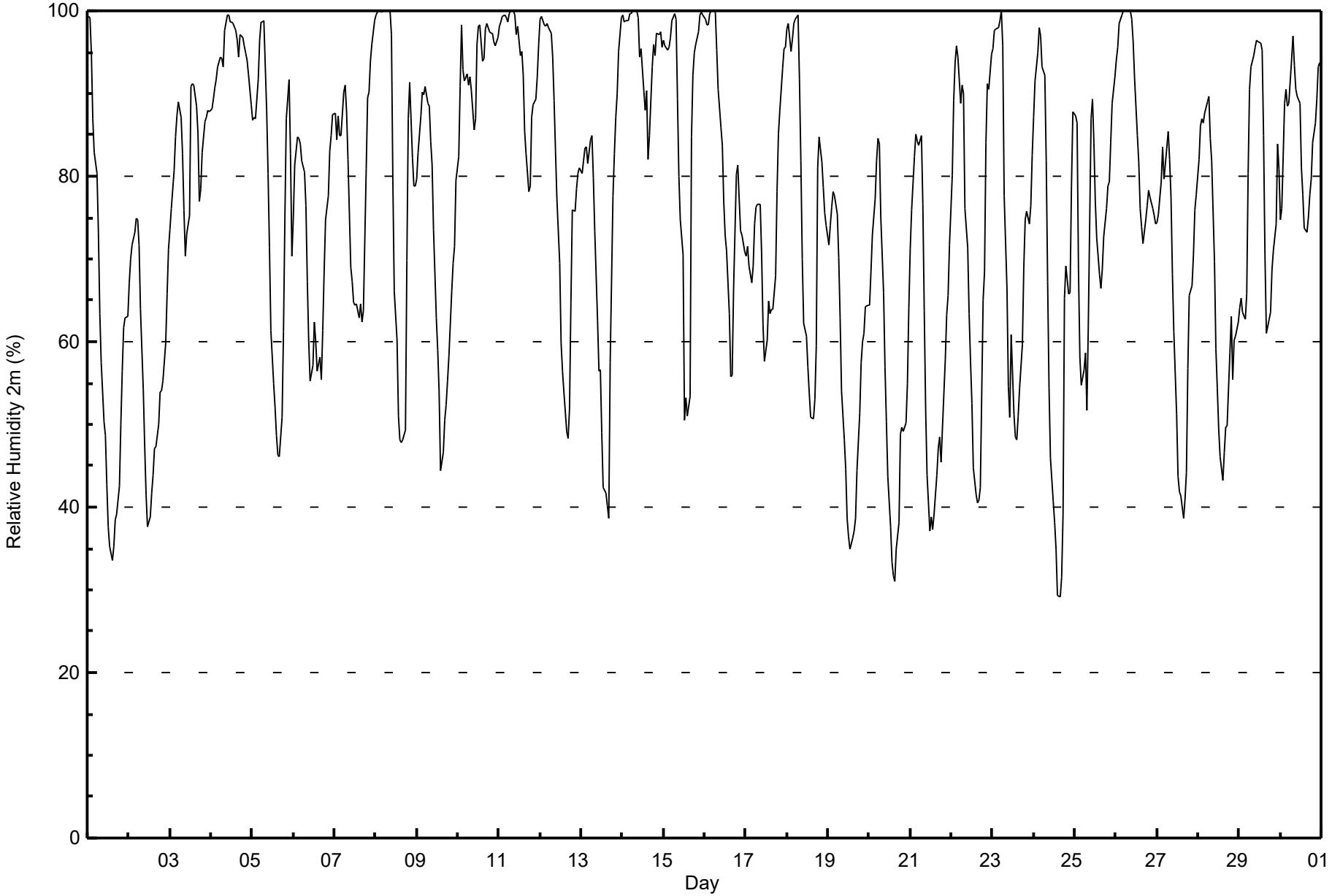
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	99.4	99.1	94.7	87.0	82.9	80.4	73.1	63.4	57.5	50.3	48.7	42.7	37.7	35.3	33.5	35.3	38.5	39.2	42.5	50.0	56.4	61.7	62.9	63.1	59.8	99.4
2-Sep	67.2	70.0	71.8	73.3	74.8	74.7	71.7	63.9	54.2	47.4	41.4	37.6	38.9	41.7	43.9	47.1	47.3	50.0	53.8	54.1	55.3	59.9	65.8	71.1	57.4	74.8
3-Sep	73.6	76.2	80.7	84.7	87.2	89.0	87.0	82.7	76.0	70.3	73.0	75.2	90.8	91.2	91.0	88.4	85.2	77.0	78.5	82.8	86.6	87.1	87.9	87.8	82.9	91.2
4-Sep	88.2	89.3	90.6	91.8	93.2	94.4	94.2	93.2	97.7	99.5	99.5	98.6	98.7	98.5	97.6	96.4	94.3	97.1	96.7	95.8	94.9	94.1	92.3	88.6	94.8	99.5
5-Sep	86.8	87.2	86.9	91.6	96.5	98.7	98.7	98.9	88.0	80.3	71.3	61.3	54.9	52.0	48.7	46.3	46.0	50.8	61.2	74.8	86.9	91.7	82.8	70.4	75.5	98.9
6-Sep	75.0	81.4	84.8	84.5	84.0	81.9	80.6	76.5	67.3	60.0	55.3	57.1	62.3	60.0	56.5	58.2	55.4	61.3	68.5	74.7	77.6	83.1	84.9	87.4	71.6	87.4
7-Sep	87.7	84.5	87.3	84.9	85.0	90.2	91.1	87.9	82.0	68.9	67.3	64.7	64.4	64.6	62.8	64.6	62.4	63.7	80.9	89.5	90.2	93.9	95.9	98.7	79.7	98.7
8-Sep	99.5	99.8	100.0	99.9	100.0	100.0	100.0	100.0	100.0	97.2	79.6	66.2	60.1	51.1	48.2	47.8	48.1	49.3	69.8	87.0	91.4	82.3	78.7	78.7	80.6	100.0
9-Sep	79.7	82.9	87.2	90.1	89.9	90.8	88.8	88.5	84.2	81.3	73.5	63.0	59.1	53.9	44.4	46.6	50.5	52.3	55.3	58.4	66.0	69.6	71.4	79.5	71.1	90.8
10-Sep	82.4	90.9	98.3	92.8	91.6	92.3	91.0	92.1	90.4	85.6	86.9	96.0	98.1	98.3	93.9	94.2	97.7	98.6	97.5	97.2	97.2	96.3	95.7	96.8	93.8	98.6
11-Sep	98.1	98.6	99.4	99.5	99.2	98.6	99.7	100.0	100.0	99.5	97.1	98.2	94.6	95.1	92.2	85.5	82.7	78.1	78.9	87.1	88.6	89.4	92.0	95.9	93.7	100.0
12-Sep	99.0	99.3	98.3	98.1	98.5	98.1	97.2	94.5	89.2	83.0	77.2	69.5	59.9	56.4	53.9	49.1	48.2	51.8	64.8	75.9	75.8	78.5	80.3	81.0	78.2	99.3
13-Sep	80.4	81.9	83.3	83.6	81.5	84.3	85.0	79.9	73.4	62.5	56.5	56.7	49.0	42.5	41.6	40.3	38.7	57.5	77.6	82.6	87.1	89.9	95.1	99.2	71.3	99.2
14-Sep	99.6	98.7	98.8	98.9	99.6	99.7	100.0	100.0	100.0	99.2	94.4	95.5	90.3	87.9	90.3	82.0	84.9	93.3	95.9	94.6	97.3	97.1	97.5	95.6	95.4	100.0
15-Sep	96.4	95.8	95.3	95.5	96.7	98.9	99.6	98.9	89.3	80.0	74.8	70.5	50.4	53.3	51.0	53.4	84.8	92.3	94.8	95.9	97.5	99.6	99.8	99.4	86.0	99.8
16-Sep	99.1	98.2	98.3	99.7	100.0	100.0	99.8	95.3	90.4	85.9	83.8	77.0	72.9	71.0	63.4	55.8	56.0	66.3	80.3	81.3	77.3	73.4	72.8	70.8	82.0	100.0
17-Sep	70.3	71.5	69.2	67.2	69.1	74.3	76.2	76.7	76.6	70.6	62.0	57.6	60.2	64.9	63.3	63.9	63.8	68.0	78.1	85.1	87.9	93.0	95.5	95.6	73.4	95.6
18-Sep	97.8	98.5	95.0	96.7	98.5	99.1	99.5	91.7	81.9	69.9	62.1	60.7	57.0	53.7	50.8	50.7	53.1	59.5	81.0	84.8	81.7	78.6	75.6	74.1	77.2	99.5
19-Sep	71.7	74.0	76.3	78.1	77.7	75.5	70.1	62.9	54.1	48.2	44.6	38.7	36.4	34.9	36.2	37.1	38.6	44.4	51.3	57.5	60.0	61.0	64.2	64.4	56.6	78.1
20-Sep	64.4	68.4	73.0	77.2	81.8	84.6	83.9	75.2	66.0	56.9	50.4	43.7	37.6	33.5	31.8	31.0	35.0	38.2	48.8	49.7	49.1	50.2	54.9	64.1	56.2	84.6
21-Sep	71.2	75.9	82.4	85.1	84.2	83.8	84.9	76.6	63.7	51.9	43.9	37.2	38.8	37.3	39.2	43.9	47.2	48.4	45.5	49.7	57.8	63.2	65.5	71.7	60.4	85.1
22-Sep	80.1	89.1	93.7	95.7	94.5	88.9	91.1	90.0	76.2	71.4	63.4	57.6	52.6	44.7	41.5	40.5	40.8	42.4	65.1	68.4	84.1	91.2	90.6	94.7	72.8	95.7
23-Sep	95.4	97.7	97.9	98.0	98.9	99.9	95.8	77.6	66.4	54.6	50.8	60.8	51.1	48.4	48.2	50.9	54.3	59.6	69.1	74.8	75.7	74.2	76.5	82.6	73.3	99.9
24-Sep	87.1	91.5	94.9	98.0	97.0	93.3	92.3	81.9	67.3	54.4	46.0	40.7	38.1	34.9	29.4	29.2	31.5	39.2	65.3	69.1	65.7	65.9	78.8	87.8	65.8	98.0
25-Sep	87.3	86.4	68.9	58.1	54.7	56.6	58.6	51.7	61.8	86.9	89.3	84.1	77.0	72.5	68.1	66.5	68.9	72.8	76.0	78.8	79.4	84.0	88.9	92.1	73.7	92.1
26-Sep	94.1	95.6	98.4	99.6	100.0	100.0	100.0	100.0	100.0	99.0	96.2	91.9	84.9	81.7	76.2	73.9	71.9	74.8	76.4	78.4	77.5	76.1	75.2	74.2	87.3	100.0
27-Sep	74.5	75.4	79.4	83.5	79.6	81.5	85.5	82.0	77.4	68.1	61.2	51.3	43.7	41.8	41.4	38.6	41.0	44.3	56.8	65.6	66.9	70.5	76.0	77.8	65.2	85.5
28-Sep	82.1	86.1	87.0	86.4	87.6	88.9	89.7	84.6	81.9	69.6	59.1	54.5	49.5	46.1	43.2	46.6	49.6	49.9	58.6	63.0	55.4	60.3	60.7	62.4	66.8	89.7
29-Sep	64.1	65.2	63.6	62.6	65.7	80.3	90.5	93.2	94.5	95.5	96.5	96.2	96.0	95.3	84.9	70.5	60.9	62.7	63.5	68.7	71.0	74.3	83.9	80.8	78.4	96.5
30-Sep	74.7	76.1	88.8	90.6	88.5	88.8	94.0	97.0	93.5	90.5	89.7	88.8	81.1	77.8	73.8	73.2	75.1	77.7	79.6	84.1	86.5	89.2	93.2	93.7	85.2	97.0
	84.2	86.2	87.5	87.7	87.9	88.9	89.0	85.2	80.0	74.6	69.9	66.4	62.9	60.7	58.0	56.9	58.4	62.0	70.4	75.3	77.5	79.3	81.2	82.7	Diurnal Average	
	99.6	99.8	100.0	99.9	100.0	100.0	100.0	100.0	100.0	99.5	99.5	98.6	98.7	98.5	97.6	96.4	97.7	98.6	97.5	97.2	97.5	99.6	99.8	99.4	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Wapasu - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	32	4.44	4.44
40 - 60	134	18.61	23.06
60 - 80	207	28.75	51.81
80 - 100	329	45.69	97.50

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 2.8 mm on Sep 26 08:00

Maximum Daily Total: 12.0 mm on Sep 26

Minimum Value: 0.0 mm on Sep 1 01:00

Minimum Daily Total: 0.0 mm on Sep 1

Maximum Diurnal Total: 4.9 mm at hour 8

Minimum Diurnal Total: 0.2 mm at hour 15

Monthly Total: 44.13 mm

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} = 1.3

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

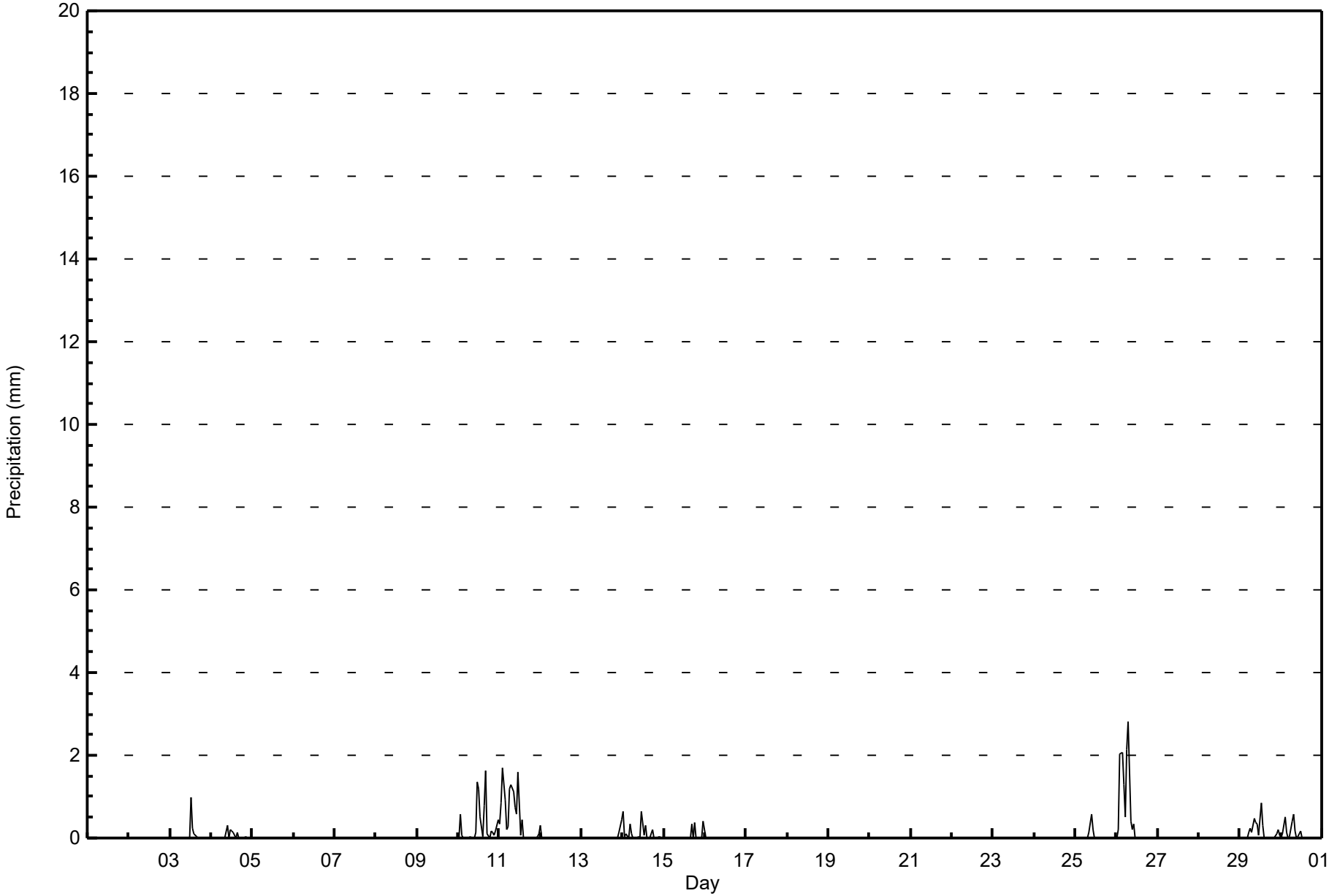
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	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	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.0
4-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.2	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.0	0.3
5-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.6	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	1.4	1.2	0.5	0.1	0.8	1.6	0.1	0.0	0.2	0.1	0.1	0.2	0.4	7.5	1.6
11-Sep	0.3	0.9	1.7	0.9	0.2	0.3	1.2	1.3	1.1	0.7	0.6	1.6	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	11.4	1.7
12-Sep	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	0.0	0.0	0.3	0.3
13-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.6	0.4
14-Sep	0.7	0.1	0.1	0.0	0.3	0.1	0.0	0.0	0.0	0.1	0.0	0.7	0.1	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	2.6	0.7
15-Sep	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.4	1.1	0.4
16-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	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	0.0	0.9	0.6
26-Sep	0.0	0.2	2.0	2.1	1.3	0.5	2.1	2.8	0.4	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	12.0	2.8
27-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.5	0.4	0.4	0.1	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	3.3	0.9
30-Sep	0.1	0.1	0.5	0.2	0.0	0.1	0.4	0.6	0.2	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	2.2	0.6
	1.3	1.8	4.4	3.1	1.8	1.1	4.0	4.9	2.3	2.2	1.7	4.1	3.3	1.9	0.2	1.0	2.0	0.3	0.4	0.2	0.2	0.2	0.6	1.4	Diurnal Average	
	0.7	0.9	2.0	2.1	1.3	0.5	2.1	2.8	1.1	0.7	0.6	1.6	1.2	0.5	0.1	0.8	1.6	0.2	0.4	0.2	0.1	0.1	0.2	0.4	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Precipitation (PC) - mm

Wapasu - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Wapasu - September 2026

Maximum Speed: 24 km/h on Sep 11 10:00

Maximum Daily Speed Average: 17.9 km/h on Sep 11

Minimum Speed Value: 1 km/h on Sep 7 19:00

Minimum Daily Speed Average: 0.9 km/h on Sep 18

Maximum Diurnal Speed Average: 4.9 km/h at hour 13

Minimum Diurnal Speed Average: 1.5 km/h at hour 19

Monthly Average Velocity: 2.8 km/h 210.5 deg

Percentiles: P_1 = 2 P_{10} = 5 Q_1 = 7 Median = 9 Q_3 = 13 P_{90} = 16 P_{99} = 22

Hours in Service: 720

Hours of Data: 717

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-Sep	SSE5	SSE6	SSE6	SSE8	SSE9	SSE7	SSE8	SSE10	S9	SSW10	SSW11	S13	S13	S13	S16	S14	SSE15	SSE16	SSE14	SSE12	SE12	SSE13	SSE14	SSE15	SSE10.8	SSE16
2-Sep	SSE14	SSE14	SE14	SE15	SE15	SE17	SE17	SSE18	SSE17	SSE19	SSE21	SSE21	SSE20	SE21	SE19	SE19	SE19	SE19	SE16	SE17	SE18	SE17	SE16	SSE15	SSE17.3	SSE21
3-Sep	SSE12	SSE13	SE16	SE14	SE15	SE14	SE16	SE18	SE18	SSE15	SE13	SE11	SE6	ESE8	ESE8	SE7	ESE8	SE11	SE10	ESE6	ESE8	SE11	SE12	SE13	SE11.5	SE18
4-Sep	SE12	SE11	SE9	SE8	SE6	SE3	WNW2	NW3	NNW7	NNW13	N14	N15	N15	N18	N16	N16	N16	N17	NNE14	NNE12	NNE9	N9	N10	NNE8	NNE7.4	N18
5-Sep	NNE8	NNE5	NNE5	NNE4	NNE4	NNE3	UO	NNE3	NNE5	NNE7	NNE7	NNE5	N4	NNE6	N6	N7	WNW2	NNW7	N6	NE4	ESE3	ESE5	ESE7	SE8	NNE3.8	NNE8
6-Sep	SE6	SE6	SSE6	SSE7	SSE7	SSE9	SSE8	SSE8	SSE10	S8	S9	S9	S11	S12	SSW8	SSW8	SSW7	S6	S6	SSE7	SSE12	SSE13	SSE12	SSE11	SSE8.3	SSE13
7-Sep	SSE11	SSE12	SSE11	SSE12	SSE10	SSE10	SE6	SSE11	SSE11	S10	S10	S10	S9	SSW8	W7	NW5	SW3	SSW3	ESE1	SSE3	SSE5	SSE5	SSE5	SSE6	SSE6.6	SSE12
8-Sep	SSE5	S3	UO	ENE2	NNE4	NNE5	NNE4	N6	N7	NNW7	N8	NNW9	NNW9	N8	NNW8	NW6	NW5	WNW3	SE2	SE3	SSE6	SSE7	S8	S7	N2.0	NNW9
9-Sep	S7	SSE7	SSE7	SSE7	SSE8	SSE9	S10	S11	SSW10	SSW11	SSW12	SSW14	SW16	SW15	SW17	SW17	SW14	SW15	SW15	SW16	SW12	SW11	WSW11	WSW13	SSW10.5	SW17
10-Sep	WSW13	WNW11	WNW7	W9	WSW12	WSW14	WSW14	WSW13	WSW13	WSW13	W12	W12	WSW12	W10	WNW9	WNW11	WNW10	NW11	NNW14	NNW16	NNW16	NNW15	NNW19	NNW18	WNW10.1	NNW19
11-Sep	NNW20	NNW22	NNW22	NNW24	NNW23	NNW23	NNW22	NNW22	NNW20	NNW24	N20	NNW23	N20	N19	NNW20	NNW13	NNW10	NNW15	NNW13	N13	NNW10	NNW11	NNW10	NNW9	NNW17.9	NNW24
12-Sep	NNW8	NNW6	NW5	NW2	NW2	NW3	WNW2	NW3	NW4	NNW5	NW5	W6	W9	W10	WNW7	W9	WSW8	SW8	SSW4	S6	S7	S7	S7	S7	W3.5	W10
13-Sep	SSW6	SSW7	SSW8	SSW8	SSW10	SSW9	SSW10	SSW9	SW11	SW12	SW12	SW11	SW14	WSW16	WSW15	SW12	W8	NNW6	NNE10	NE7	NE6	NE5	NNE5	N7	SW5.4	WSW16
14-Sep	NNE10	NNE11	NNE11	NNE9	N11	N12	N11	N10	N10	N11	N11	N12	N13	NNE11	N11	N13	N11	N9	N7	N7	NNW3	NW5	NW4	NNW6	N9.2	N13
15-Sep	NW4	NW4	NW4	WNW4	W3	SW3	S3	SSW5	SW8	SW7	WSW8	WSW11	WSW10	WSW13	SW10	WSW10	SSW5	S4	SSW4	SW5	W3	WNW2	NNW6	N9	WSW4.5	WSW13
16-Sep	N7	NNE7	NE5	ESE1	NNW2	NNW5	N4	SSW2	SW5	SSW7	WSW8	WSW7	WSW7	WSW8	WSW8	WSW7	SW6	SSW5	SSE4	SE6	SE7	SE10	SSE11	SSE14	SSW2.5	SSE14
17-Sep	SSE17	SE15	SE17	SSE17	SSE15	SSE14	SSE13	SSE12	SSE10	S9	S9	WSW9	SW7	WSW9	SW7	SW5	SW7	SW6	S5	SSE6	SSE5	SE4	SE3	SE3	S7.9	SSE17
18-Sep	SSE4	SSE5	SSE4	SE3	ESE3	E3	SE3	NNE2	NE4	NNE5	N5	N7	NNW5	WNW5	NW5	NNW6	NNW4	UO	SE4	SSE5	SSE6	SSE6	SSE7	SSE8	ESE0.9	SSE8
19-Sep	S9	S9	S8	S7	S7	S8	S8	S11	S12	SSW13	SSW14	SSW15	SSW15	S15	S16	S16	S15	S11	S11	S10	S12	SSW10	S9	S8	S11.1	S16
20-Sep	SSW10	SSW8	S6	S7	S7	S7	S7	S6	SSW7	SSW7	SW9	SW13	WSW14	WSW14	WSW12	SW11	SSW8	SSW6	S7	S7	S8	S8	SSW10	S8	SSW7.9	WSW14
21-Sep	SSW8	SSW8	S7	S8	S7	S8	S7	S8	SSW8	SSW7	SSW10	SSW11	S8	S11	SSE11	SSE11	SSE11	SSE10	SSE11	S10	S8	S7	S7	S7	S8.4	SSE11
22-Sep	SSE6	SSE6	SE4	ESE4	E5	ESE5	E3	NNE2	NW4	WNW6	N10	N11	NNW10	NNW9	WNW10	W10	W9	WNW6	SSW3	SW5	SSE5	SSE6	SE6	SSE6	WNW0.9	NNW11
23-Sep	SE4	SSE7	SSE6	SSE6	SSE6	SE7	SE7	SE7	SSE6	S5	SSW8	WNW7	SW6	S9	S9	S8	SSE9	SSE9	SSE9	SSE10	SSE10	SSE9	SSE9	S7	SSE6.6	SSE10
24-Sep	S6	S5	S6	S6	S6	S6	S7	S7	SSW8	SW9	SW14	WSW15	WSW14	WSW15	WSW15	WSW13	WSW10	WSW5	S4	SSE6	S6	SSE7	ESE4	SE4	SSW6.4	WSW15
25-Sep	ESE4	ESE5	ESE7	ESE8	ESE8	ESE8	ESE10	ESE12	ESE13	E9	ENE13	ENE16	ENE17	ENE17	E14	E13	ENE13	NE9	NE8	ENE8	NNE9	NNE9	NNE8	N11	ENE8.9	ENE17
26-Sep	NNE8	NE7	NE5	NNE8	WNW6	W6	W10	W10	W14	WSW16	W17	W14	W18	W16	W18	WNW17	WNW18	WNW16	W16	W14	W15	W16	W16	W14	W11.4	W18
27-Sep	W12	WSW11	WSW15	W13	W15	W14	WSW13	WSW13	WSW13	WSW13	WSW14	W14	W14	W16	W15	W15	WSW13	WSW11	SW10	SW11	SW10	SW8	SSW7	SSW7	WSW11.9	W16
28-Sep	SSW7	S6	S8	S8	S9	S9	S9	SSW11	SSW8	SW15	SW17	SW18	SW17	SW20	WSW16	SW11	SSW9	SSW9	S7	SSE10	S11	S8	S10	S9	SSW9.9	SW20
29-Sep	S8	S8	S8	S8	SSW8	S7	S7	SSW8	SW12	SW13	SW13	WSW12	W12	WNW11	WNW11	WNW10	WNW14	WNW14	WNW14	W8	WNW11	W14	WNW12	WNW12	WSW7.7	W14
30-Sep	WNW14	WNW13	WNW11	WNW10	WNW11	NW11	NNW13	NNW14	NNW17	NNW19	NNW18	NNW17	NNW17	NNW15	NNW15	NNW14	NNW13	NNW10	NNW8	NNW8	NNW7	NNW5	NNW6	NW4	NNW11.5	NNW19
	S2.7	SSE2.9	SSE3.1	SSE3.2	S3.1	S2.9	S3.2	S3.5	SSW3.7	SW4.0	WSW4.4	WSW4.7	WSW4.9	WSW4.8	WSW4.7	WSW4.4	WSW3.4	WSW2.5	SSW1.5	S2.1	S2.7	S3.1	S2.8	S2.5	Diurnal Average	
	NNW20	NNW22	NNW22	NNW24	NNW23	NNW23	NNW22	NNW22	NNW20	NNW24	SSE21	NNW23	N20	SE21	NNW20	SE19	SE19	SE19	W16	SE17	SE18	SE17	NNW19	NNW18	Diurnal Maximum	

UO - Unstable Operation

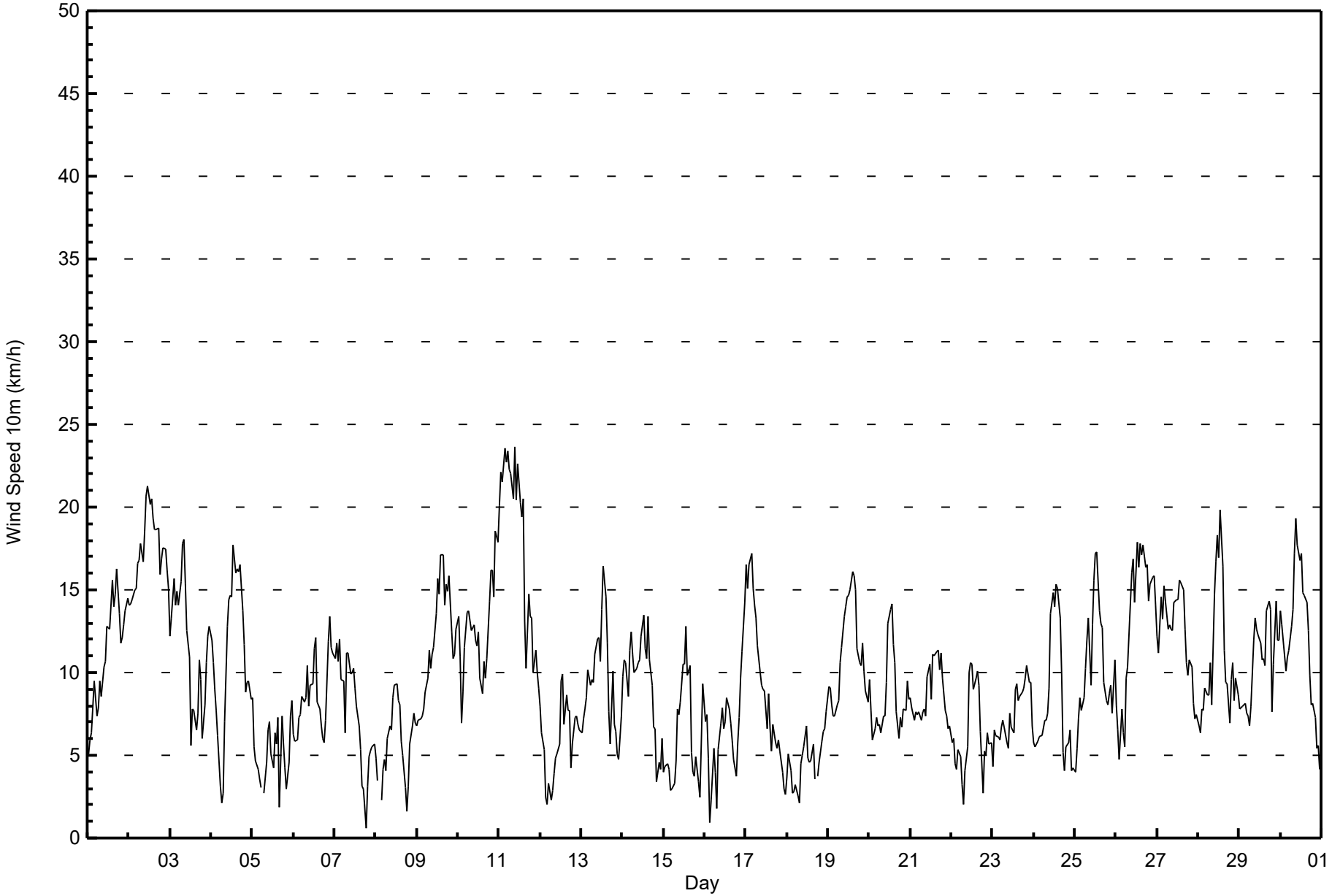
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Wapasu - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	118	16.46	16.46
6 - 11	373	52.02	68.48
12 - 19	207	28.87	97.35
20 - 28	19	2.65	100.00
29 - 38	0	0.00	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 717

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Wapasu - September 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	15	5	1	3	10	12	13	7	8	6	1	2	7	18	7	118
6 - 11	26	18	5	1	1	11	21	64	85	43	21	17	14	18	3	25	373
12 - 19	14	2	0	5	2	2	28	28	12	6	22	30	25	10	0	21	207
20 - 28	2	0	0	0	0	0	1	3	0	0	1	0	0	0	0	12	19
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	35	10	7	6	23	62	108	104	57	50	48	41	35	21	65	717

Total Number of Valid Hours: 717

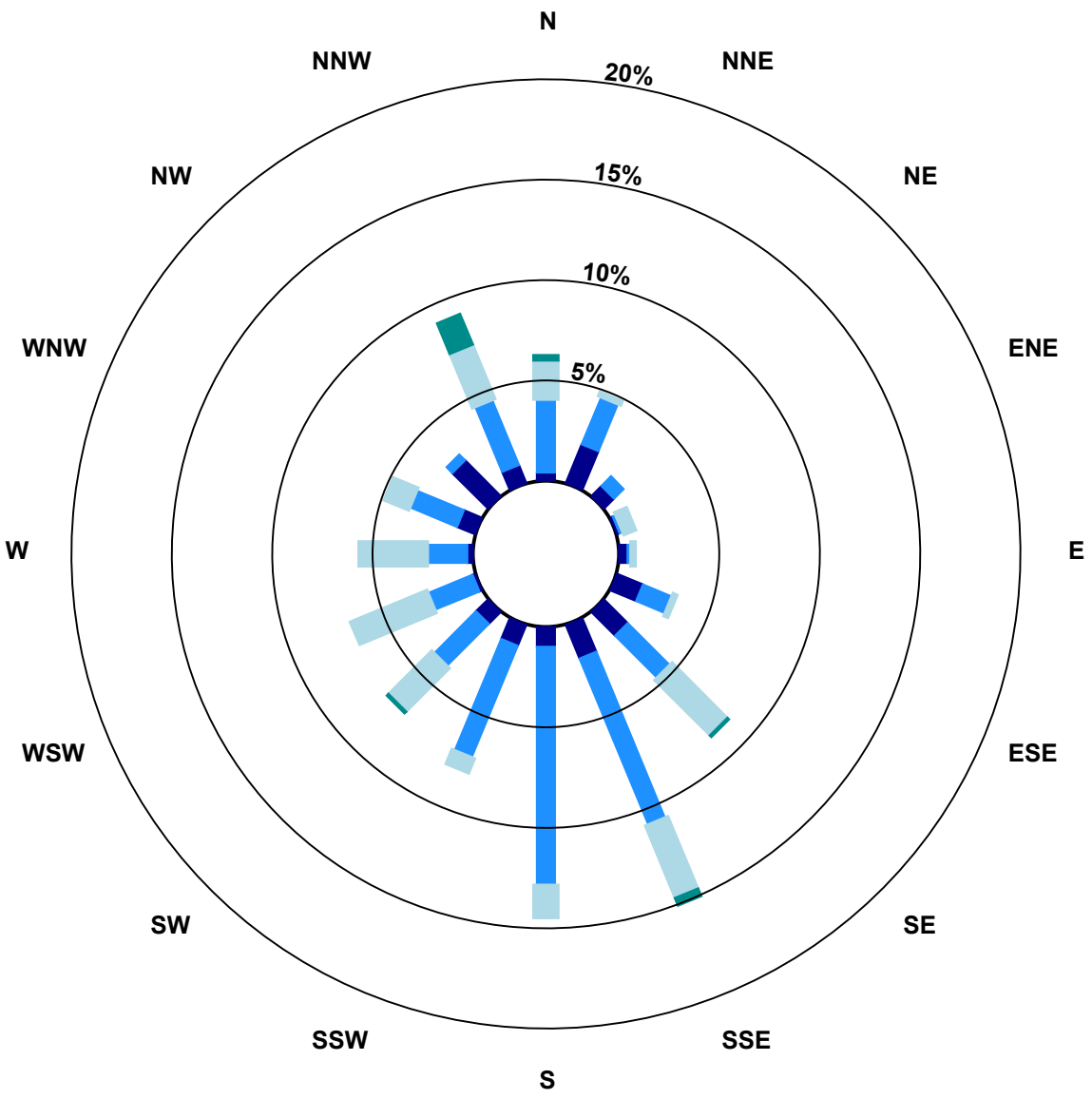
Total Number of Hours: 720

Wood Buffalo Environmental Association

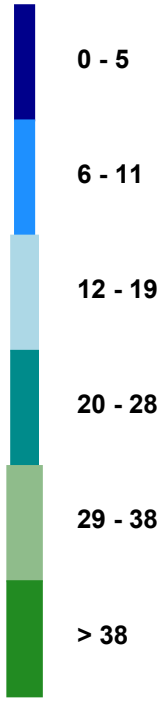
Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Wapasu



Classes (km/h)



Total Number of Valid Hours: 717

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

Maximum Value: 7 km/h on Sep 11 12:00

Minimum Value: 0 km/h on Sep 5 21:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 3 Q_3 = 4 P_{90} = 5 P_{99} = 6

Hours in Service:	720
Hours of Data:	717
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-Sep	1	1	1	2	2	2	2	2	3	4	3	4	4	5	5	5	5	5	4	3	3	3	3	4	5
2-Sep	3	4	4	4	4	4	4	5	5	5	6	7	6	6	6	6	6	6	4	5	5	4	4	4	7
3-Sep	3	4	4	3	4	4	4	5	5	5	4	4	3	3	3	3	4	4	3	2	2	3	3	3	5
4-Sep	3	3	3	2	2	2	1	2	2	4	4	4	4	6	6	6	6	6	5	4	3	4	4	3	6
5-Sep	3	2	2	1	1	2	UO	1	2	2	2	2	3	3	3	3	2	2	1	1	0	1	2	2	3
6-Sep	1	1	1	1	1	2	2	2	3	3	3	3	4	4	3	3	3	2	2	2	4	3	3	3	4
7-Sep	2	3	2	3	3	2	2	3	4	3	3	3	3	3	2	2	1	1	1	2	1	1	1	1	4
8-Sep	1	1	UO	1	1	1	1	2	2	2	3	3	3	3	3	3	2	2	1	1	1	1	1	1	3
9-Sep	2	1	2	1	2	2	3	3	3	4	4	4	5	5	5	5	4	4	4	5	3	4	4	5	5
10-Sep	4	4	2	3	3	4	3	3	4	4	4	3	3	3	3	4	3	4	4	4	4	5	6	5	6
11-Sep	6	7	6	7	6	7	6	6	5	7	6	7	6	6	6	5	3	4	4	4	3	3	3	3	7
12-Sep	2	2	2	1	1	1	1	1	1	2	2	2	3	4	3	3	3	2	1	1	2	2	2	2	4
13-Sep	2	2	2	2	3	3	3	3	4	4	4	4	5	5	4	3	3	4	3	3	2	2	2	2	5
14-Sep	4	4	4	3	4	3	3	3	3	3	3	3	4	4	3	4	3	3	2	2	2	1	1	2	4
15-Sep	1	1	1	1	1	1	1	2	2	2	3	3	3	4	3	3	4	2	2	2	1	1	2	2	4
16-Sep	2	2	2	2	1	2	2	1	2	2	2	3	2	3	3	2	2	2	1	1	2	2	2	4	4
17-Sep	4	4	4	4	4	3	3	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	4
18-Sep	2	1	1	1	1	1	1	2	1	2	2	2	2	2	2	2	1	UO	1	1	1	1	1	1	2
19-Sep	2	2	2	2	2	2	2	3	4	5	5	5	5	6	6	6	5	4	3	3	4	3	3	2	6
20-Sep	3	3	2	2	2	2	1	2	2	2	3	3	5	4	4	3	3	2	2	1	2	2	3	3	5
21-Sep	3	2	2	2	2	2	1	2	2	3	3	3	3	4	3	3	3	2	3	3	1	1	2	1	4
22-Sep	1	1	2	1	1	1	1	2	2	3	3	3	3	4	3	4	3	3	1	2	1	1	2	2	4
23-Sep	1	1	1	1	1	1	1	1	2	3	3	2	3	3	3	3	3	2	2	2	2	2	2	2	3
24-Sep	1	1	1	1	1	1	1	2	2	3	3	4	4	4	5	4	3	2	1	1	1	1	1	1	5
25-Sep	1	1	1	2	2	2	3	3	4	3	4	5	6	6	6	5	4	3	3	3	4	3	3	3	6
26-Sep	3	3	2	3	3	4	3	3	5	5	5	5	6	5	6	6	7	6	6	5	5	5	5	5	7
27-Sep	4	3	4	4	5	4	3	3	4	3	4	4	5	5	5	5	4	3	2	2	3	2	2	2	5
28-Sep	2	2	2	2	3	2	3	3	3	6	5	6	5	6	5	4	3	3	2	2	4	3	3	3	6
29-Sep	2	2	2	2	2	2	2	3	4	4	3	3	4	4	4	4	5	5	5	3	5	5	4	5	5
30-Sep	5	5	4	3	4	4	4	4	5	5	5	5	5	4	4	4	3	4	2	2	2	1	1	2	5
	6	7	6	7	6	7	6	6	5	7	6	7	6	6	6	6	7	6	6	5	5	5	6	5	
	Diurnal Maximum																								

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Wapasu - September 2026

Direction of Maximum Speed: 347 deg on Sep 11 10:00
Direction of Maximum Daily Speed Average: 344.3 deg on Sep 11

Direction of Minimum Speed: 103 deg on Sep 7 19:00
Direction of Minimum Daily Speed Average: 0.9 deg on Sep 18

Monthly Average Direction: 210.5 deg

Hours in Service:	720
Hours of Data:	717
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-Sep	148	156	160	165	163	160	165	165	183	193	197	178	185	181	170	176	158	160	158	148	141	148	157	160	165.8
2-Sep	155	148	146	144	146	142	145	152	154	158	159	154	148	145	144	144	145	146	141	140	143	146	143	148	147.5
3-Sep	156	148	141	134	130	139	138	137	140	147	145	140	130	119	110	126	119	130	130	118	121	128	132	134	135.2
4-Sep	136	137	133	138	131	140	289	321	336	348	351	359	355	1	9	5	11	7	15	19	22	8	10	13	14.9
5-Sep	16	28	25	28	26	31	UO	27	12	14	15	17	351	33	6	350	303	330	349	39	102	104	122	139	25.0
6-Sep	144	146	155	149	153	154	150	162	167	179	177	184	177	170	195	200	203	191	179	161	159	157	157	151	167.0
7-Sep	155	157	154	153	161	157	138	157	164	173	173	180	184	203	280	305	228	211	103	151	154	155	160	159	168.1
8-Sep	162	169	UO	66	28	33	19	354	359	348	349	336	346	351	330	318	307	299	126	124	149	161	169	169	355.3
9-Sep	173	167	158	158	157	161	172	179	193	195	198	206	218	214	234	236	231	230	229	233	230	217	241	256	211.2
10-Sep	256	282	287	279	252	244	243	242	244	251	264	260	254	271	291	297	293	316	332	335	335	328	337	338	287.3
11-Sep	336	337	338	345	345	348	348	346	345	347	349	348	351	350	347	347	337	342	346	349	338	333	336	336	344.3
12-Sep	329	330	325	315	313	323	299	321	316	337	313	269	266	262	299	274	242	229	202	185	186	180	184	189	264.7
13-Sep	197	194	193	195	205	203	201	203	220	227	227	218	223	238	238	235	265	330	18	40	37	39	16	7	225.4
14-Sep	17	33	29	28	7	359	2	4	10	4	359	350	3	13	4	358	357	354	354	351	339	323	322	331	3.0
15-Sep	307	318	318	285	280	217	187	210	229	230	238	242	251	242	228	243	210	175	192	216	270	291	338	349	248.6
16-Sep	3	23	41	119	328	336	8	193	217	210	247	237	241	251	245	243	227	200	168	144	137	144	148	151	201.1
17-Sep	149	146	146	149	155	155	158	160	165	174	178	241	231	240	224	215	223	216	187	163	155	141	136	132	169.7
18-Sep	147	154	160	136	122	79	131	19	43	30	349	355	330	290	315	340	327	UO	146	157	155	164	167	162	117.7
19-Sep	171	176	173	180	179	171	171	173	186	201	202	203	197	191	185	183	181	175	183	189	190	192	183	187	185.7
20-Sep	201	200	181	187	178	180	179	184	196	193	215	230	238	237	247	235	207	194	180	186	177	182	195	186	204.4
21-Sep	199	198	183	173	180	175	169	174	195	202	207	206	185	173	166	157	155	158	161	177	171	171	184	172	177.7
22-Sep	162	157	141	110	91	108	84	33	310	296	349	349	345	348	288	271	273	294	211	232	153	156	143	149	295.8
23-Sep	141	153	153	158	152	142	140	145	168	175	210	301	231	190	175	171	164	155	151	153	155	158	166	181	165.8
24-Sep	180	186	171	171	181	184	173	178	194	216	234	244	241	242	253	257	257	247	180	166	177	152	104	130	213.5
25-Sep	109	110	106	121	119	120	106	109	118	99	76	74	69	67	83	81	72	55	45	72	24	21	27	3	78.2
26-Sep	16	42	42	25	289	280	264	273	261	256	261	270	268	269	270	289	287	282	278	276	274	269	273	277	277.8
27-Sep	270	253	254	260	261	261	243	239	242	249	250	261	269	263	263	262	257	253	233	231	231	220	203	202	250.6
28-Sep	198	178	180	184	180	190	187	195	197	225	232	230	235	233	240	229	205	201	175	168	191	182	181	172	206.6
29-Sep	177	170	172	180	196	186	181	204	227	228	236	250	271	291	288	286	292	295	300	276	293	275	282	285	254.8
30-Sep	291	295	302	291	291	311	328	330	337	339	340	339	339	338	340	342	346	331	327	347	346	348	340	325	328.4
	181.7	167.6	160.4	162.0	176.4	174.8	174.9	183.7	206.2	227.3	240.2	250.0	252.4	247.2	254.6	256.5	241.8	240.4	206.3	181.9	178.7	177.9	178.8	181.4	
	Diurnal Average																								

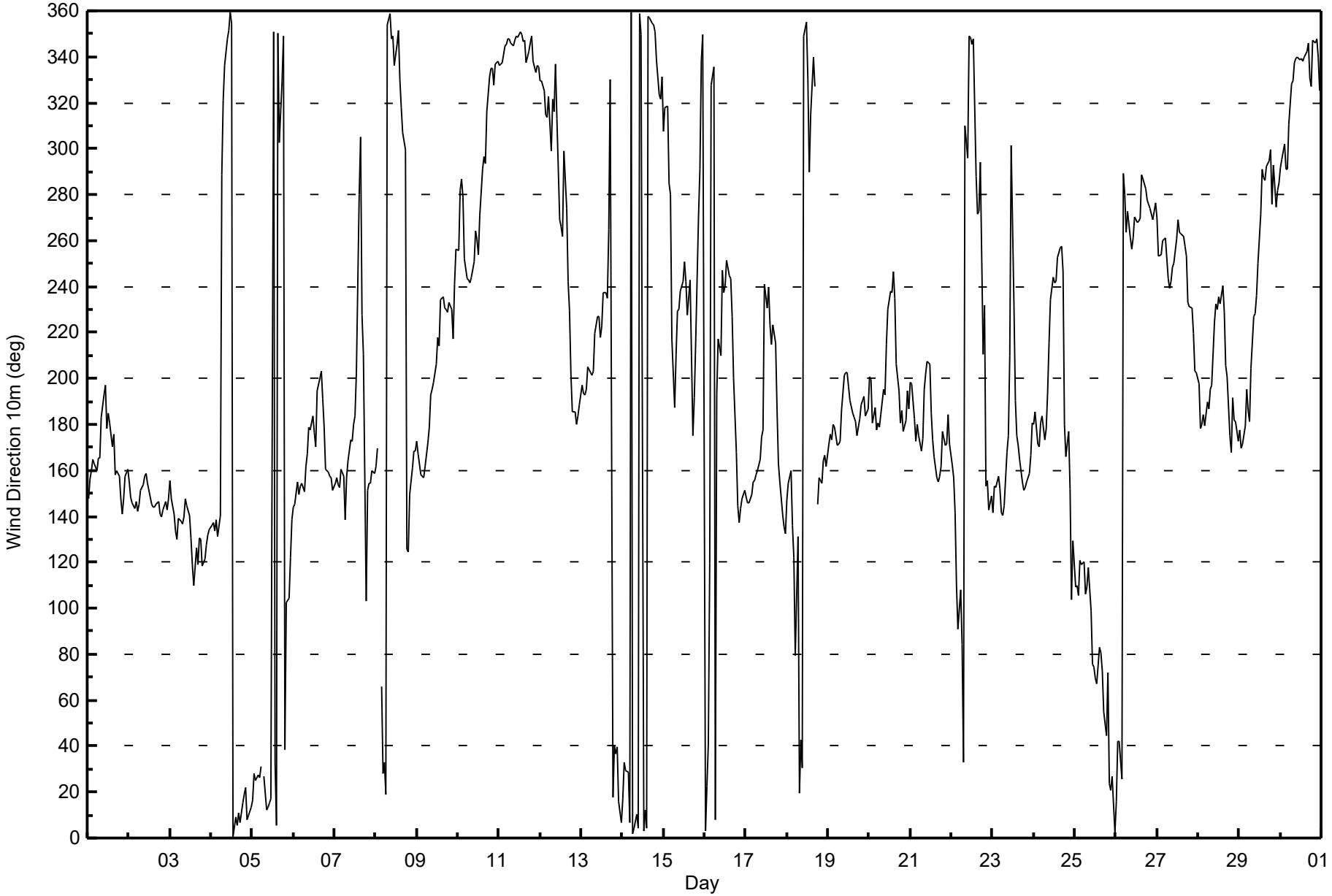
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Wapasu - September 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Wapasu - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 87 deg on Sep 5 17:00

Minimum Value: 6 deg on Sep 23 04:00

Percentiles: P_1 = 8 P_{10} = 16 Q_1 = 19 Median = 24 Q_3 = 29 P_{90} = 34 P_{99} = 69

Hours in Service:	720
Hours of Data:	717
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-Sep	9	8	14	17	17	16	18	22	28	31	30	31	33	33	28	31	24	21	20	16	16	17	19	18	33
2-Sep	19	19	18	18	18	19	19	19	22	22	23	23	23	23	23	21	22	20	20	19	19	18	19	20	23
3-Sep	19	19	17	18	20	19	19	20	21	24	22	25	28	25	26	26	26	24	23	22	17	19	18	19	28
4-Sep	18	18	18	21	19	68	34	48	21	22	20	24	23	24	30	26	29	29	30	30	33	30	29	30	68
5-Sep	30	33	33	25	22	23	UO	37	37	37	40	58	77	56	75	41	87	22	22	17	15	11	14	15	87
6-Sep	10	7	7	11	14	16	16	22	23	33	34	32	29	29	37	35	35	31	27	16	19	19	19	17	37
7-Sep	17	18	16	17	21	18	21	17	22	30	31	28	36	36	39	40	41	47	72	18	16	10	9	7	72
8-Sep	10	12	UO	33	16	23	33	24	24	29	28	31	34	43	42	51	53	45	50	21	6	11	15	14	53
9-Sep	18	19	14	12	18	20	26	27	29	28	31	29	24	27	21	19	19	18	20	17	19	24	18	25	31
10-Sep	25	32	30	28	21	18	17	19	19	21	26	26	23	28	30	30	30	28	21	20	21	23	22	21	32
11-Sep	20	22	21	21	21	21	20	20	20	21	22	21	23	21	21	19	19	19	19	19	18	20	19	21	23
12-Sep	22	21	21	28	36	26	41	28	30	33	38	42	28	30	42	37	29	25	23	17	19	18	23	22	42
13-Sep	25	26	26	26	26	26	27	28	27	23	23	25	29	20	21	21	34	58	31	30	29	30	31	25	58
14-Sep	30	32	30	31	26	23	26	25	29	26	22	20	26	30	23	24	23	20	17	19	21	24	26	20	32
15-Sep	28	23	28	28	30	21	17	22	23	25	29	23	32	25	27	25	47	38	45	31	30	35	20	18	47
16-Sep	29	29	21	85	55	20	42	81	32	32	23	36	34	33	33	41	35	24	22	21	15	15	16	18	85
17-Sep	18	19	18	19	20	19	19	20	21	26	35	31	32	21	29	38	25	25	21	13	9	20	21	23	38
18-Sep	17	13	19	28	24	28	30	70	39	44	39	40	60	74	64	44	51	UO	10	18	11	12	15	15	74
19-Sep	22	21	19	19	16	16	21	25	29	28	30	30	32	31	29	29	29	24	26	28	29	31	27	28	32
20-Sep	27	28	22	20	21	18	15	22	31	30	26	25	23	25	26	24	29	29	19	21	18	23	28	27	31
21-Sep	31	25	22	18	21	17	14	24	27	30	26	29	34	28	27	20	18	19	18	21	16	16	20	12	34
22-Sep	12	7	18	18	14	10	20	65	36	39	26	24	31	42	33	30	30	30	40	23	11	8	26	8	65
23-Sep	22	6	10	6	8	8	9	12	42	55	49	30	48	31	29	26	23	17	14	15	17	17	20	25	55
24-Sep	15	17	11	9	18	17	11	19	27	26	20	21	23	23	26	24	26	25	24	10	15	9	20	26	27
25-Sep	16	14	13	17	18	18	21	21	22	28	23	25	24	25	29	25	23	25	28	25	41	33	34	26	41
26-Sep	29	38	58	34	45	51	28	29	27	23	25	30	28	27	27	30	28	30	28	28	28	28	27	28	58
27-Sep	28	25	23	26	26	25	19	19	21	24	24	28	32	30	28	28	25	23	17	16	17	21	25	24	32
28-Sep	25	19	19	23	23	26	26	27	30	26	21	20	20	18	21	22	27	29	24	21	28	26	27	28	30
29-Sep	26	19	22	27	30	26	21	26	24	21	18	22	30	29	27	31	30	29	30	30	32	30	31	31	32
30-Sep	31	30	30	28	30	29	23	22	20	21	21	21	20	22	22	23	19	21	22	16	15	23	14	30	31
	31	38	58	85	55	68	42	81	42	55	49	58	77	74	75	51	87	58	72	31	41	35	34	31	
	Diurnal Maximum																								

UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS18
STONY MOUNTAIN
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - STONY MOUNTAIN (AMS18)
SEPTEMBER 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	682	35	38	99.58	-	-	1.8	0	0.5	0
TRS(ppb) Average	682	35	38	99.58	0.4	0	0.4	-	0.3	-
THC(ppm) Average	682	35	38	99.58	-	-	2.5	-	2.2	-
NMHC(ppm) Average	682	35	38	99.58	-	-	0.064	-	0.003	-
CH4(ppm) Average	682	35	38	99.58	-	-	2.5	-	2.2	-
O3 (ppb) Average	683	34	37	99.58	-	-	46.9	0	35.8	-
NO2 (ppb) Average	618	35	102	90.69	-	-	3.7	0	1.3	-
NO (ppb) Average	618	35	102	90.69	-	-	0.7	-	0.1	-
NOX (ppb) Average	618	35	102	90.69	-	-	3.8	-	1.4	-
PM2.5 (ug/m3) Average	689	1	31	95.83	-	-	12.9	0	4.8	0
Temperature 2 m (C) Average	717	0	3	99.58	-	-	26.4	-	18.8	-
Relative Humidity (%) Average	717	0	3	99.58	-	-	100	-	93.8	-
Wind Speed 20 m (km/h) Average	717	0	3	99.58	-	-	22	-	17	-
Wind Direction 20 m (deg) Average	717	0	3	99.58	-	-	-	-	-	-
Precipitation (mm) Total	717	0	3	99.58	-	-	2.3	-	7.2	-
Leaf Wetness (% of range) Average	717	0	3	99.58	-	-	51.1	-	14.1	-
Global Solar Radiation (W/m2) Average	717	0	3	99.58	-	-	757.1	-	227.1	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - STONY MOUNTAIN (AMS18)
SEPTEMBER 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	682	0.16	0.2	-	0	0	0	0.1	0.2	0.4	1.8
TRS (ppb) Average	682	0.2	0	-	0.1	0.2	0.2	0.2	0.2	0.2	0.4
THC (ppm) Average	682	2.15	0.1	-	2	2.1	2.1	2.1	2.2	2.2	2.5
NMHC(ppm) Average	682	0	0.003	-	0	0	0	0	0	0	0.064
CH4(ppm) Average	682	2.15	0.1	-	2	2.1	2.1	2.1	2.2	2.2	2.5
O3 (ppb) Average	683	25.46	8.2	-	6.6	14.2	19	25.8	32	35.7	46.9
NO2 (ppb) Average	618	0.61	0.5	-	0.1	0.2	0.2	0.5	0.8	1.2	3.7
NO (ppb) Average	618	0.06	0.1	-	0	0	0	0	0.1	0.1	0.7
NOX (ppb) Average	618	0.66	0.5	-	0.1	0.2	0.3	0.5	0.9	1.4	3.8
PM2.5 (ug/m3) Average	689	2.37	1.5	-	0.1	0.7	1.1	2.3	3.3	4.1	12.9
Temperature 2 m (C) Average	717	11.42	4.9	-	1.4	5.1	8	10.9	14.5	18.4	26.4
Relative Humidity (%) Average	717	75.64	17.6	-	32.7	47.8	63.8	77.9	89.7	98	100
Wind Speed 20 m (km/h) Average	717	11.2	4	-	0	6	8	11	14	17	22
Wind Direction 20 m (deg) Average	717	-	-	-	-	-	-	-	-	-	-
Precipitation (mm) Total	717	-	-	18.12	-	-	-	-	-	-	-
Surface Wetness (% of range) Average	717	4.49	7.9	-	0	0.6	1	1.3	2.4	15.7	51.1
Global Solar Radiation (W/m2) Average	717	132.2	189.8	-	0	0	0	14.6	224.3	451.8	757.1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - STONY MOUNTAIN (AMS18)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
All parameters except PM2.5	10 Sep 2026 00:00	10 Sep 2026 02:00	3	DAS Failure - data not recorded
NO2	28 Sep 2026 07:00	01 Oct 2026 00:00	64	Unstable Operation - span outside AMD criteria
PM2.5	05 Sep 2026 00:00	05 Sep 2026 13:00	14	Unstable Operation - flatline in analyzer output signal
PM2.5	12 Sep 2026 18:00	13 Sep 2026 06:00	13	Unstable Operation - flatline in analyzer output signal
PM2.5	25 Sep 2026 07:00	25 Sep 2026 09:00	3	Unstable Operation - flatline in analyzer output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Stony Mountain - September 2026

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

Maximum Value: 1.8 ppb on Sep 2 23:00 Maximum Daily Average: 0.5 ppb on Sep 2

Minimum Value: 0.0 ppb on Sep 1 01:00 Minimum Daily Average: 0.0 ppb on Sep 5

Maximum Diurnal Average: 0.2 ppb at hour 11 Minimum Diurnal Average: 0.1 ppb at hour 18

Monthly Average: 0.16 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} = 1.0

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	35
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-Sep	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	0.1	0.0	0.1	0.1	0.1	0.7	0.5	0.7	1.0	0.5	0.3	0.2	1.0
2-Sep	Z	0.2	0.3	0.3	0.4	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.7	0.6	0.3	0.3	0.2	0.5	0.9	0.7	1.8	0.5	0.5	1.8
3-Sep	0.7	Z	0.7	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.4	0.4	0.3	0.5	0.4	0.5	0.4	0.3	0.5	0.6	0.5	0.4	0.7
4-Sep	0.3	0.3	Z	0.1	0.2	0.2	0.1	0.1	0.3	0.2	0.2	0.2	0.1	0.5	0.4	0.5	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5
5-Sep	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	0.2	0.0	0.0	0.0	0.2
6-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.2	0.3	0.5	0.9	1.4	0.8	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.8	0.1	0.3	1.4
7-Sep	0.1	0.1	0.2	0.1	0.1	Z	0.2	0.1	0.7	1.5	0.8	1.7	0.7	0.4	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.3	1.7
8-Sep	Z	0.1	0.3	0.2	0.3	0.3	0.2	0.2	0.3	0.1	0.0	0.0	0.0	0.1	0.3	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.4
9-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	C	C	0.0	0.0	0.0	0.0	0.1	0.1	0.0	DF	--	0.1
10-Sep	DF	DF	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
11-Sep	0.0	0.0	0.1	Z	0.0	0.1	0.1	0.1	0.2	0.2	0.3	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	0.3
12-Sep	0.0	0.0	0.1	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	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1
13-Sep	0.1	0.0	0.1	0.1	0.1	Z	0.1	0.1	0.3	0.7	0.7	0.3	0.5	0.5	0.6	0.5	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.7
14-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.4	0.5	0.5	0.2	0.1	0.1	0.3	0.4	0.5	0.4	0.4	0.2	0.5
15-Sep	0.4	Z	0.3	0.4	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.4
16-Sep	0.1	0.2	Z	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.5	0.2	0.7	0.1	0.1	0.2	0.7
17-Sep	0.2	0.1	0.0	Z	0.3	0.6	0.8	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.5	0.6	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.8
18-Sep	0.1	0.0	0.0	0.1	Z	0.0	0.1	0.0	0.0	0.2	0.0	0.2	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
19-Sep	0.0	0.1	0.0	0.3	0.2	Z	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.3	0.1	0.1	0.0	0.1	0.1	0.3	0.2	0.3
20-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.2	0.2	0.2	0.3	0.3	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.3
21-Sep	0.1	Z	0.0	0.1	0.0	0.2	0.0	0.1	0.1	0.4	0.7	0.4	0.4	0.9	0.4	0.2	0.3	0.0	0.0	0.0	0.0	0.1	0.5	1.1	0.3	1.1
22-Sep	0.1	0.1	Z	0.2	0.2	0.1	0.0	0.1	0.3	0.6	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	0.1	1.0
23-Sep	0.8	0.0	0.0	Z	0.1	0.4	0.7	0.8	0.9	0.7	0.8	0.3	0.1	0.0	0.9	1.2	0.5	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.4	1.2
24-Sep	0.8	0.4	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.8
25-Sep	0.3	0.5	0.6	0.7	0.1	Z	0.1	0.1	0.0	0.3	0.2	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.7
26-Sep	Z	0.2	0.3	0.4	0.3	0.1	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
27-Sep	0.0	Z	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
28-Sep	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	0.2	0.0	0.0	0.0	0.0	0.2
29-Sep	0.0	0.4	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	0.0	0.0	0.0	0.0	0.0	0.0	0.4
30-Sep	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	0.1	0.3	0.1	0.0	0.0	0.0	0.1	0.0	0.3
	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	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	Diurnal Average	
	0.8	0.5	0.7	0.7	0.4	0.6	0.8	0.8	0.9	1.5	1.0	1.7	0.8	0.9	0.9	1.2	0.5	0.4	0.7	0.5	0.9	1.0	1.8	1.1	Diurnal Maximum	

Z - zerospan C - Calibration DF - DAS Failure

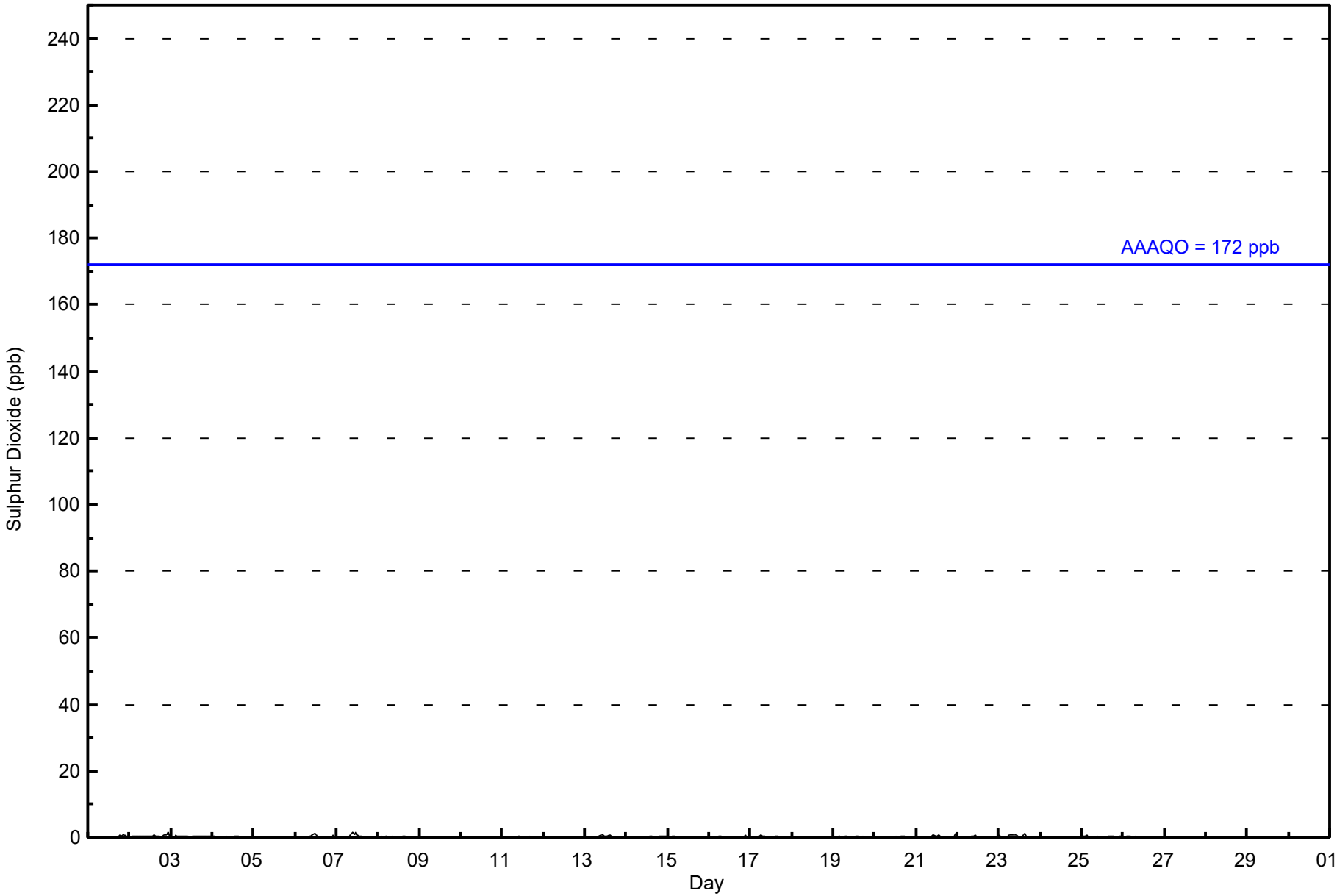
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Stony Mountain - September 2026



Sulphur Dioxide (SO_2) - ppb
Stony Mountain - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	682	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: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Stony Mountain - September 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	16	15	12	15	28	24	36	41	36	80	74	55	62	70	80	38	682
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	16	15	12	15	28	24	36	41	36	80	74	55	62	70	80	38	682

Total Number of Valid Hours: 682

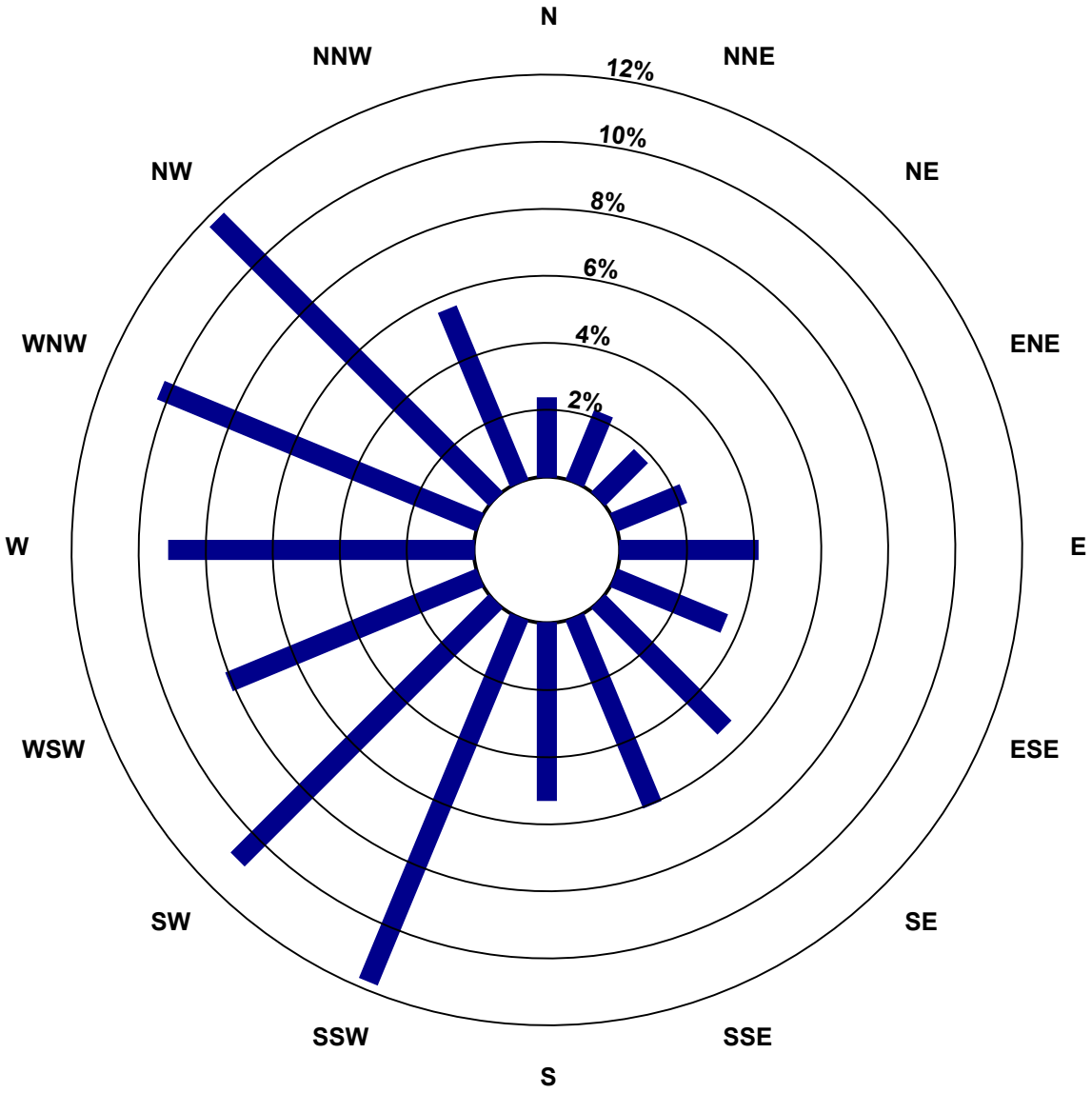
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Stony Mountain



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

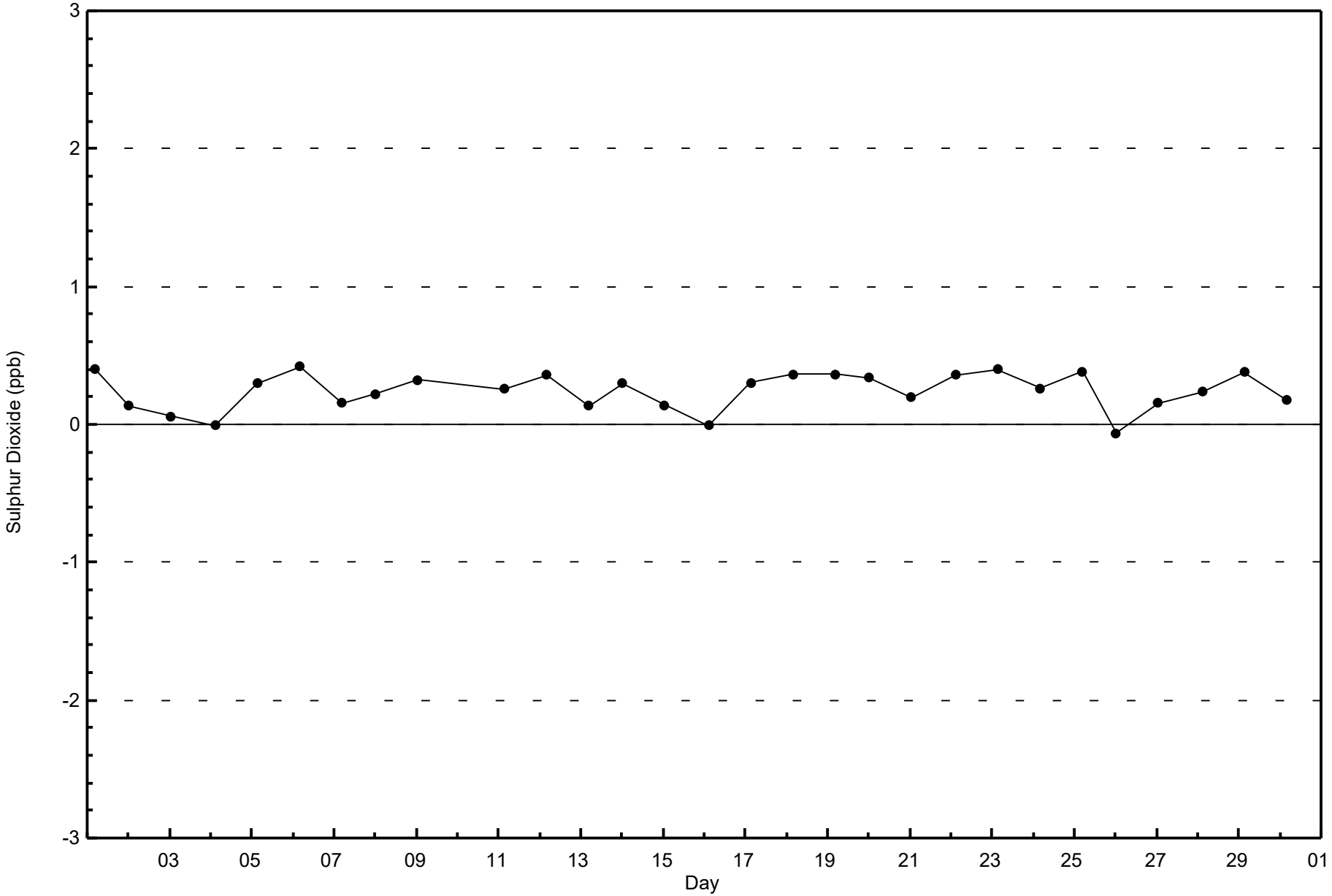
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Stony Mountain - September 2026

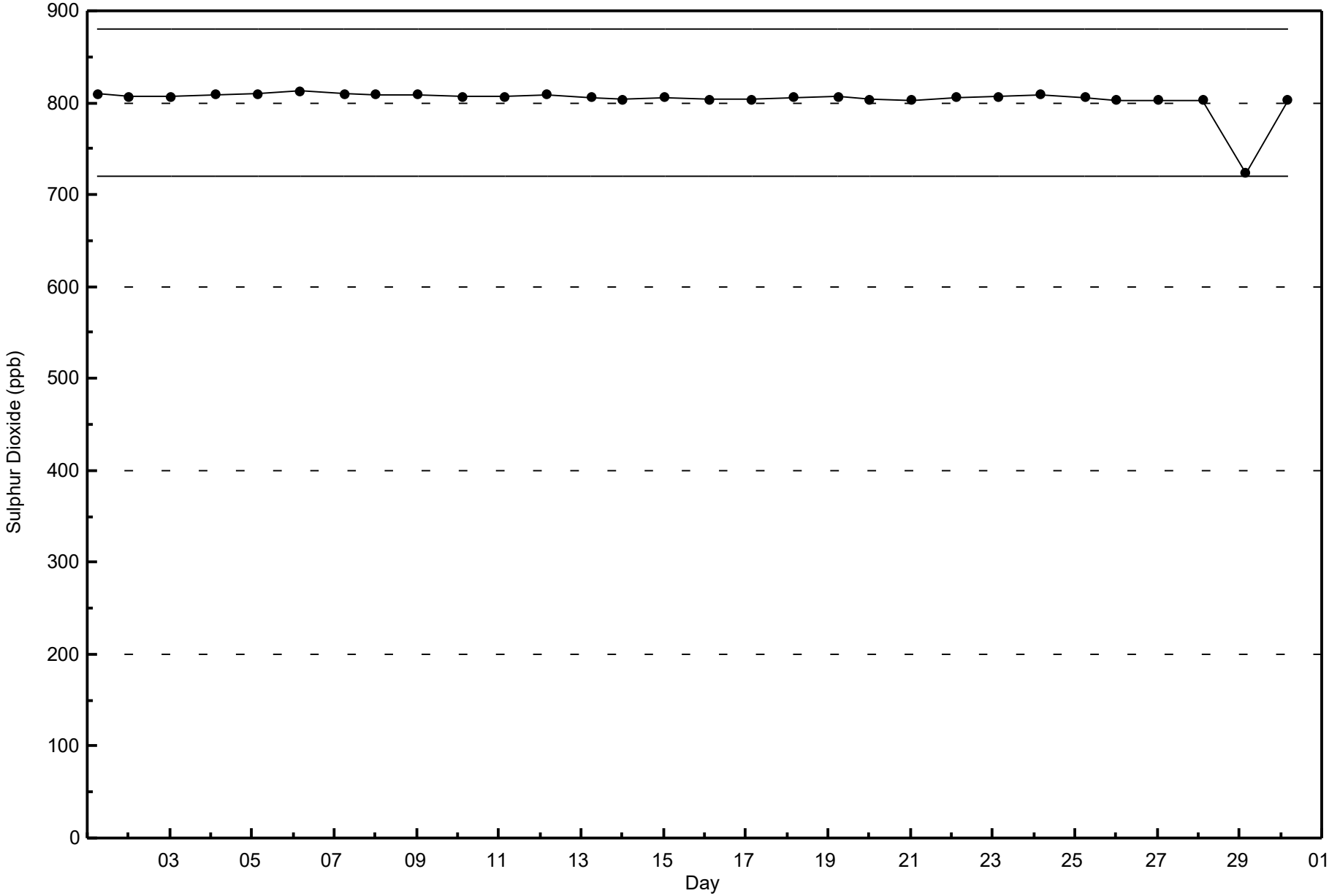


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Stony Mountain - September 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Stony Mountain - September 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 0.4 ppb on Sep 22 02:30 Maximum Daily Average: 0.3 ppb on Sep 4

Minimum Value: 0.1 ppb on Sep 15 09:30 Minimum Daily Average: 0.2 ppb on Sep 5

Maximum Diurnal Average: 0.2 ppb at hour 23 Minimum Diurnal Average: 0.2 ppb at hour 4

Monthly Average: 0.20 ppb Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.2 Median = 0.2 Q_3 = 0.2 P_{90} = 0.2 P_{99} = 0.3

Periods in Service:	1440
Periods of Valid Data:	1364
Periods of Invalid Data:	76
Periods of Calibration:	70
Percent Operational Time:	99.6

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-Sep	Z 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 0.2	0.2 0.2	0.2 0.2	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	0.2 0.2	0.2	0.3
2-Sep	0.2 0.2	Z 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	0.3 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 0.2	0.3 0.3	0.2 0.3	0.3 0.3	0.3 0.3	0.2	0.3
3-Sep	0.3 0.3	0.2 0.2	Z 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 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 0.3	0.3 0.3	0.2	0.3
4-Sep	0.3 0.3	0.3 0.3	0.3 0.3	Z SP	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.2 0.3	0.3 0.2	0.2 0.2	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 0.3	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	0.3
5-Sep	0.1 0.1	0.2 0.2	0.1 0.1	0.1 0.1	Z 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	0.2 0.2	0.2 0.2	0.1 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 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2	0.2
6-Sep	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	Z 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 0.2	0.2 0.2	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-Sep	Z 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	0.3 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	0.1 0.2	0.1 0.1	0.1 0.2	0.1 0.2	0.2	0.3
8-Sep	0.2 0.2	Z 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 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	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-Sep	0.2 0.2	0.2 0.2	Z 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 0.2	0.2 0.2	0.2 0.2	0.2 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
10-Sep	DF DF	DF DF	DF 0.2	Z 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 0.2	0.2 0.2	0.2 0.2	0.2 0.2	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-Sep	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	Z 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 0.2	0.2 0.2	0.2 0.2	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-Sep	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	Z 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 0.2	0.2 0.2	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-Sep	Z 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 0.2	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 0.2	0.2 0.2	0.2	0.3
14-Sep	0.2 0.2	Z SP	0.2 0.2	0.2 0.2	0.2 0.2	0.3 0.3	0.3 0.3	0.3 0.2	0.2 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	0.2 0.2	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-Sep	0.2 0.2	0.2 0.2	Z SP	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	C C	C C	C 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	0.3

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Stony Mountain - September 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-Sep	0.2	0.2	0.2	Z	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	0.2	0.2	0.2	0.2	0.2
	0.2	0.2	0.2	SP	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	0.1	0.2	0.2	0.2	0.2	0.2	0.2		
17-Sep	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	0.3
	0.2	0.2	0.2	0.2	SP	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		
18-Sep	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		
19-Sep	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	0.2		
20-Sep	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	0.3
	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	0.3	0.2	0.2	0.2	0.2	0.2	0.2		
21-Sep	0.2	0.2	Z	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	0.3	0.3	0.3	0.3	0.3
	0.2	0.2	SP	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	0.3	0.2	0.3	0.3	0.3	0.3	0.3		
22-Sep	0.3	0.3	0.4	Z	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	0.2	0.2	0.2	0.4
	0.3	0.3	0.4	SP	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		
23-Sep	0.2	0.2	0.2	0.2	Z	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.3	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		
24-Sep	0.2	0.2	0.2	0.2	0.2	Z	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	0.2	0.2	0.2	0.2
	0.2	0.2	0.1	0.1	0.2	SP	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	0.2	0.2		
25-Sep	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	0.2	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		
26-Sep	0.2	Z	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	0.3
	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
27-Sep	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	0.2		
28-Sep	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		
29-Sep	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		
30-Sep	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	0.1		
	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Diurnal Average	
	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	0.2	0.3	0.3	0.2	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 - September 2026

Maximum Value: 0.4 ppb on Sep 22 03:00

Maximum Daily Average: 0.3 ppb on Sep 4

Minimum Value: 0.1 ppb on Sep 15 09:00

Minimum Daily Average: 0.2 ppb on Sep 5

Maximum Diurnal Average: 0.2 ppb at hour 23

Minimum Diurnal Average: 0.2 ppb at hour 4

Monthly Average: 0.20 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.2 Median = 0.2 Q_3 = 0.2 P_{90} = 0.2 P_{99} = 0.3

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	35
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-Sep	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	0.3	0.2	0.2	0.3
2-Sep	0.2	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	0.3	0.3	0.3	0.3	0.2	0.3
3-Sep	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	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
4-Sep	0.3	0.3	0.3	Z	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.3	0.3
5-Sep	0.1	0.2	0.1	0.1	Z	0.2	0.2	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	0.2	0.2	0.2	0.2	0.2	0.2
6-Sep	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
7-Sep	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	0.1	0.1	0.2	0.2	0.2
8-Sep	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
9-Sep	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	DF	0.2	0.2
10-Sep	DF	DF	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
11-Sep	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
12-Sep	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
13-Sep	Z	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	0.2	0.2	0.2	0.2	0.3
14-Sep	0.2	Z	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	0.3
15-Sep	0.2	0.2	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.1	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	0.3
16-Sep	0.2	0.2	0.2	Z	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	0.2	0.2	0.2	0.2	0.2
17-Sep	0.2	0.2	0.2	0.2	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	0.3
18-Sep	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
19-Sep	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
20-Sep	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
21-Sep	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	0.3	0.3	0.3	0.3	0.3	0.2	0.3
22-Sep	0.3	0.3	0.4	Z	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	0.2	0.2	0.2	0.4
23-Sep	0.2	0.2	0.2	0.2	Z	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
24-Sep	0.2	0.2	0.2	0.2	0.2	Z	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	0.2	0.2	0.2	0.2
25-Sep	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	0.2	0.2	0.2	0.2	0.3
26-Sep	0.2	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
27-Sep	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
28-Sep	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
29-Sep	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
30-Sep	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	0.1	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	0.2	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	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	Diurnal Maximum	

Z - zerospan C - Calibration DF - DAS Failure

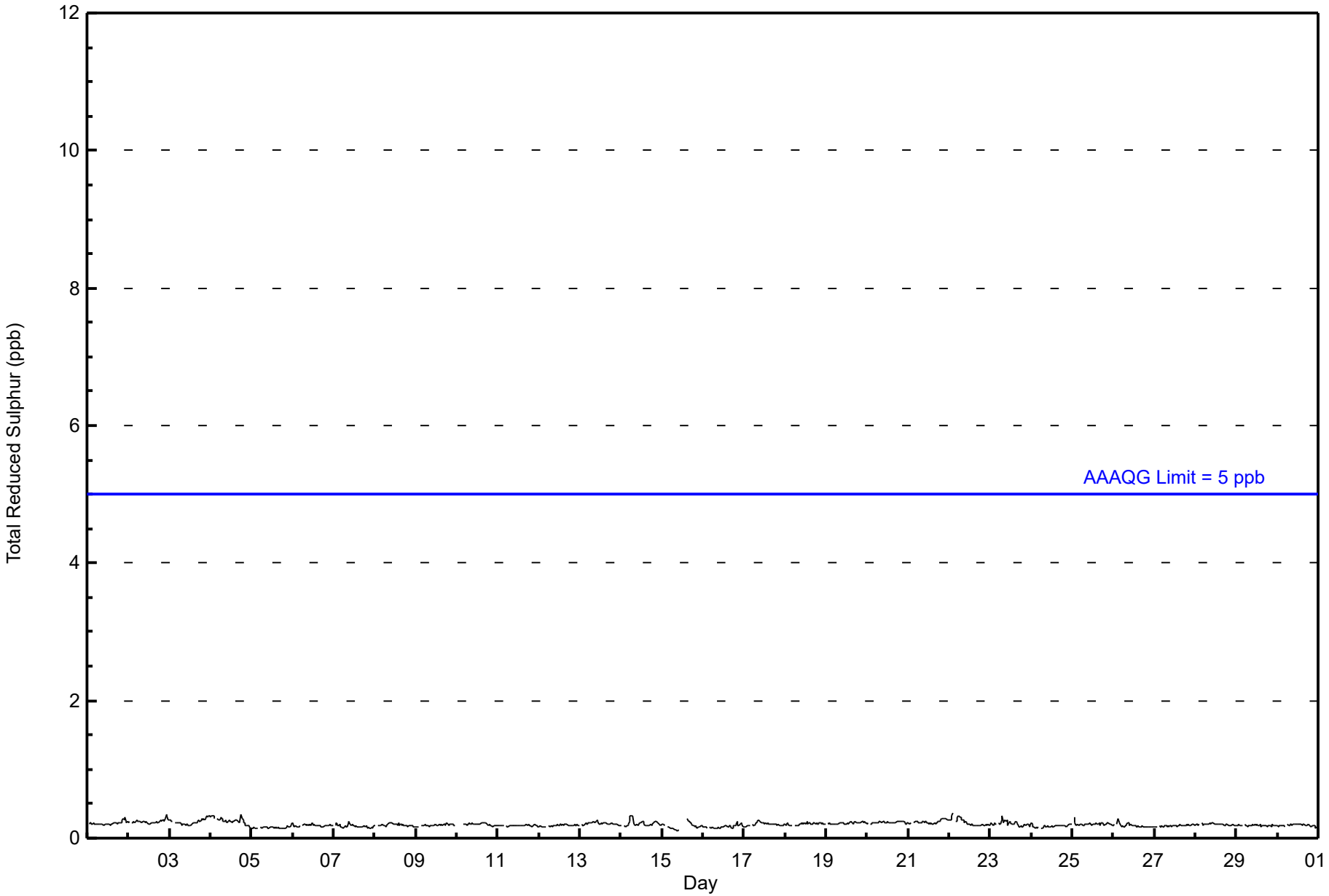
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Stony Mountain - September 2026



Total Reduced Sulphur (TRS) - ppb
Stony Mountain - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	682	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: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Reduced Sulphur (TRS) - ppb

Stony Mountain - September 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	16	16	11	15	27	25	37	42	34	81	75	57	62	66	81	37	682
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	16	16	11	15	27	25	37	42	34	81	75	57	62	66	81	37	682

Total Number of Valid Hours: 682

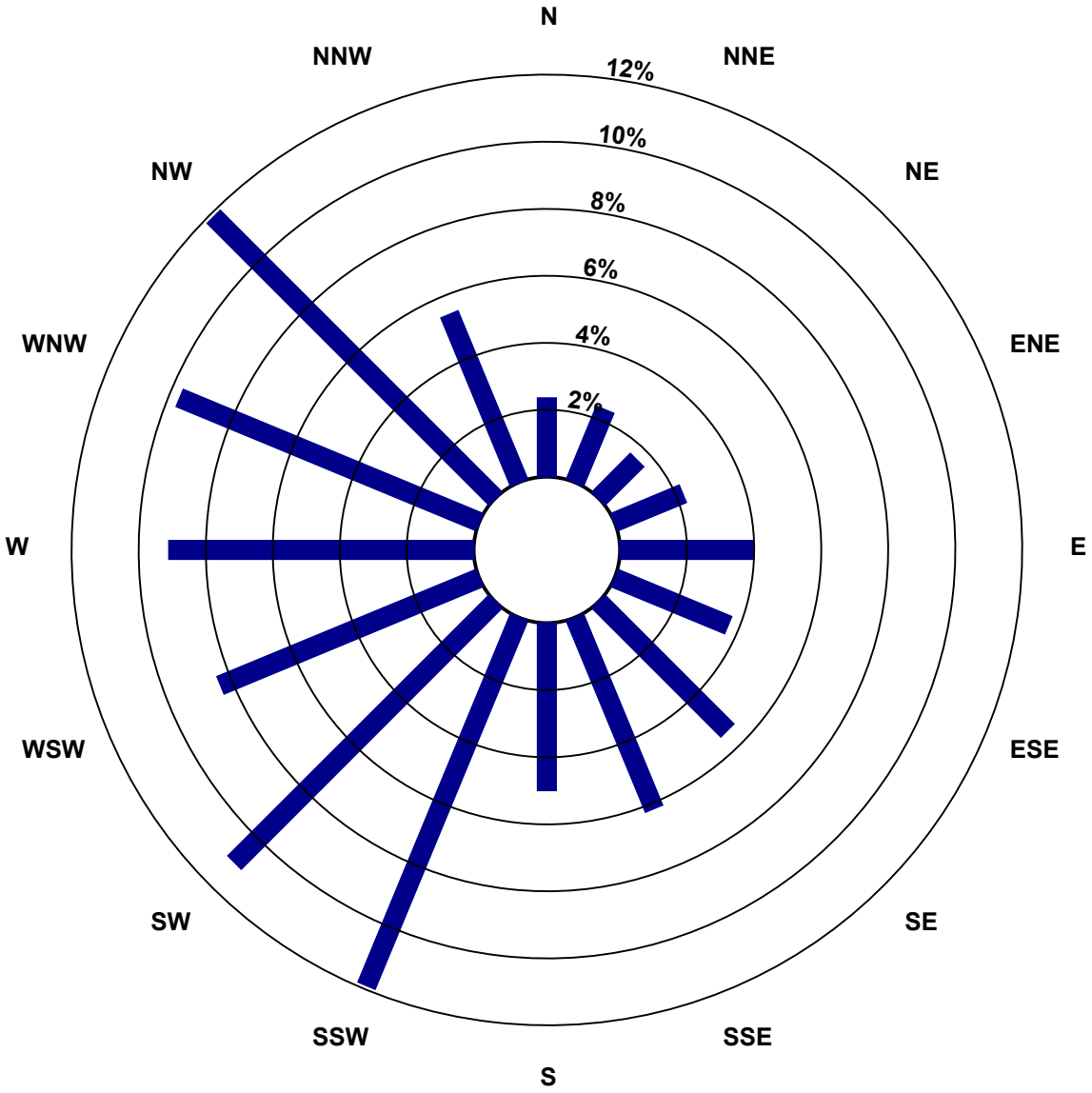
Total Number of Hours: 720

Wood Buffalo Environmental Association

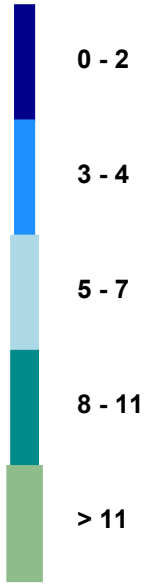
Wind Rose Sep 2026

Total Reduced Sulphur (TRS) - ppb

Stony Mountain



Classes (ppb)



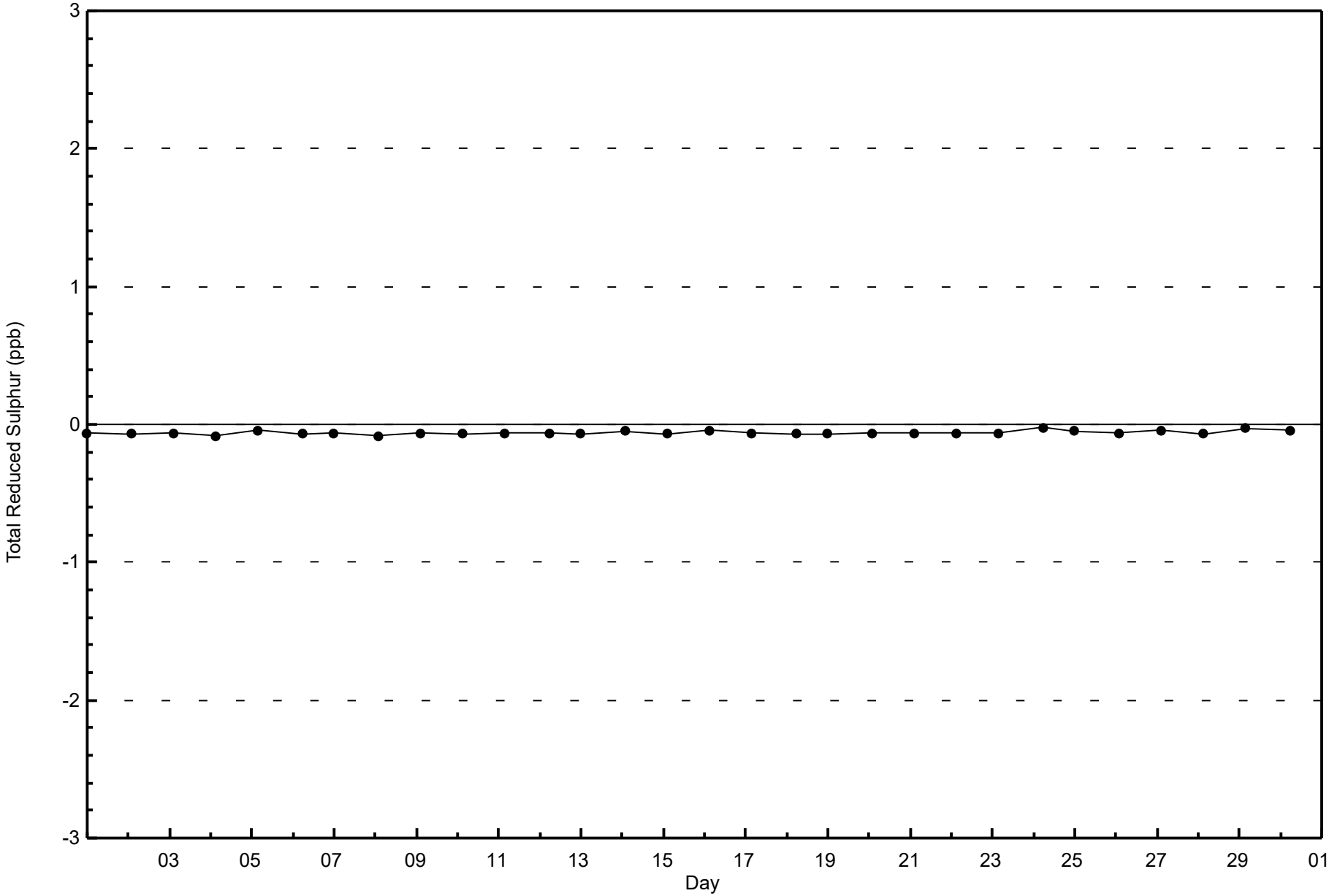
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Stony Mountain - September 2026

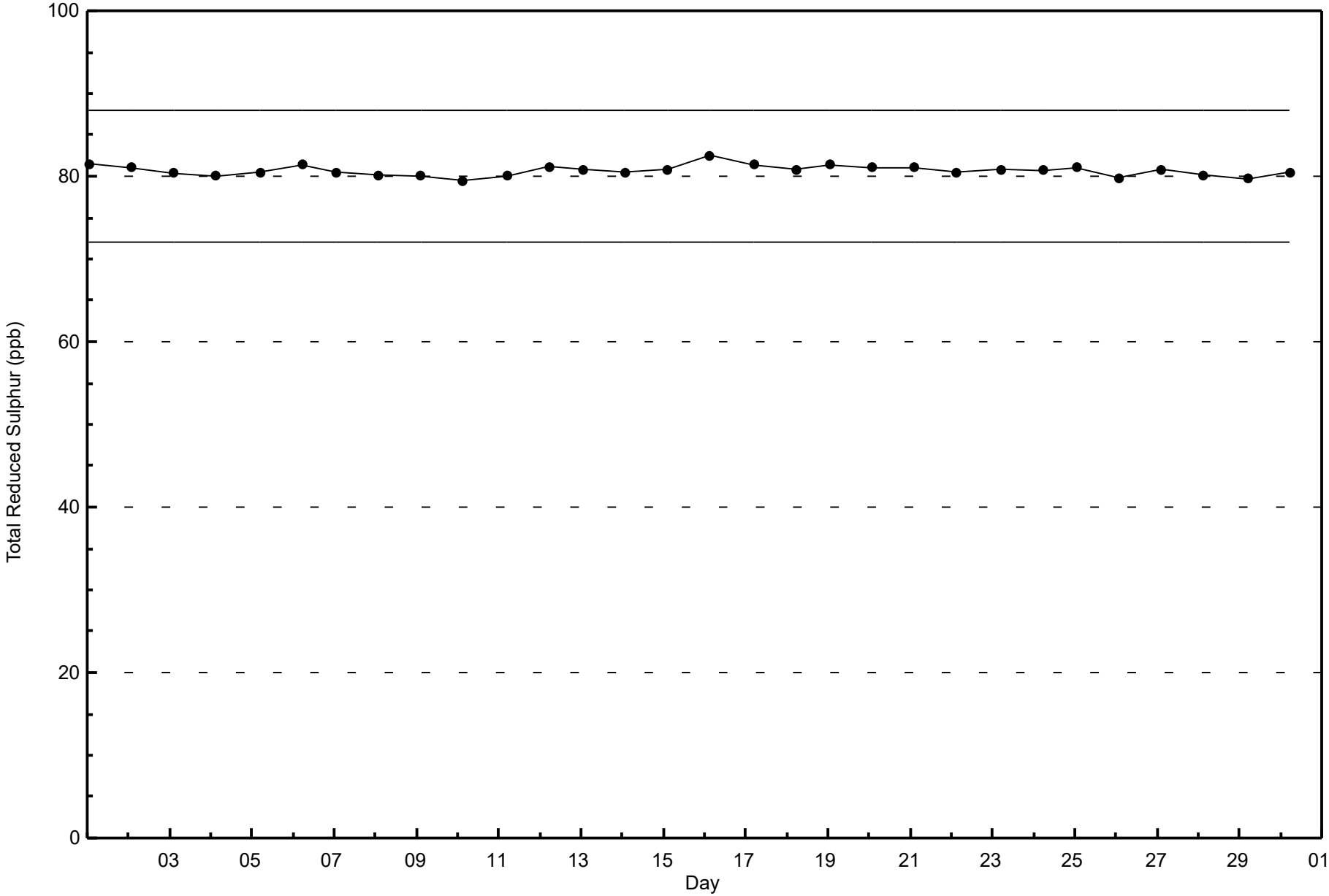


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Stony Mountain - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Stony Mountain - September 2026

Maximum Value: 2.5 ppm on Sep 6 10:00

Maximum Daily Average: 2.2 ppm on Sep 6

Minimum Value: 2.0 ppm on Sep 22 15:00

Minimum Daily Average: 2.1 ppm on Sep 10

Maximum Diurnal Average: 2.2 ppm at hour 7

Minimum Diurnal Average: 2.1 ppm at hour 15

Monthly Average: 2.15 ppm

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

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	35
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-Sep	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
2-Sep	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	2.1	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-Sep	2.1	Z	2.1	2.2	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	2.1	2.1	2.2	2.2	2.2	2.2	2.3
4-Sep	2.2	2.2	Z	2.2	2.2	2.2	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	2.1	2.1	2.1	2.2	2.2	2.2	2.3
5-Sep	2.2	2.2	2.1	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	2.2	2.2	2.2	2.2	2.2	2.2
6-Sep	2.2	2.2	2.2	2.2	Z	2.3	2.4	2.3	2.5	2.5	2.3	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	2.5
7-Sep	2.2	2.2	2.2	2.3	2.3	Z	2.3	2.3	2.2	2.2	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3
8-Sep	Z	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	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.2	2.3
9-Sep	2.3	Z	2.3	2.3	2.3	2.4	2.4	2.4	2.3	2.2	2.1	C	C	C	C	C	2.1	2.1	2.1	2.1	2.1	2.1	2.1	DF	--	2.4
10-Sep	DF	DF	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
11-Sep	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	2.1	2.1	2.1	2.1	2.1	2.1
12-Sep	2.2	2.2	2.2	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	2.2	2.1	2.2
13-Sep	2.2	2.2	2.2	2.2	2.3	Z	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	2.2	2.2	2.2	2.2	2.2	2.2	2.3
14-Sep	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	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2
15-Sep	2.1	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	2.2	2.1	2.2	2.2	2.1	2.2	2.2
16-Sep	2.1	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	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.2	2.2	2.3
17-Sep	2.2	2.2	2.2	Z	2.2	2.2	2.2	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	2.2	2.3
18-Sep	2.2	2.2	2.1	2.1	Z	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
19-Sep	2.1	2.2	2.1	2.2	2.1	Z	2.1	2.1	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	2.1	2.1	2.2	2.1	2.2
20-Sep	Z	2.1	2.1	2.1	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	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.2
21-Sep	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	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
22-Sep	2.2	2.2	Z	2.2	2.2	2.3	2.3	2.3	2.2	2.3	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	2.1	2.2	2.3
23-Sep	2.1	2.1	2.1	Z	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	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3
24-Sep	2.2	2.2	2.2	2.2	Z	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	2.2	2.1	2.2
25-Sep	2.2	2.2	2.2	2.2	2.2	Z	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	2.2	2.2	2.2	2.2	2.2	2.2
26-Sep	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	2.1	2.1	2.1	2.1	2.2
27-Sep	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	2.1
28-Sep	2.1	2.1	Z	2.1	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
29-Sep	2.2	2.2	2.2	Z	2.1	2.2	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
30-Sep	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	2.1	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	2.2	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	
	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.3	Diurnal Maximum	

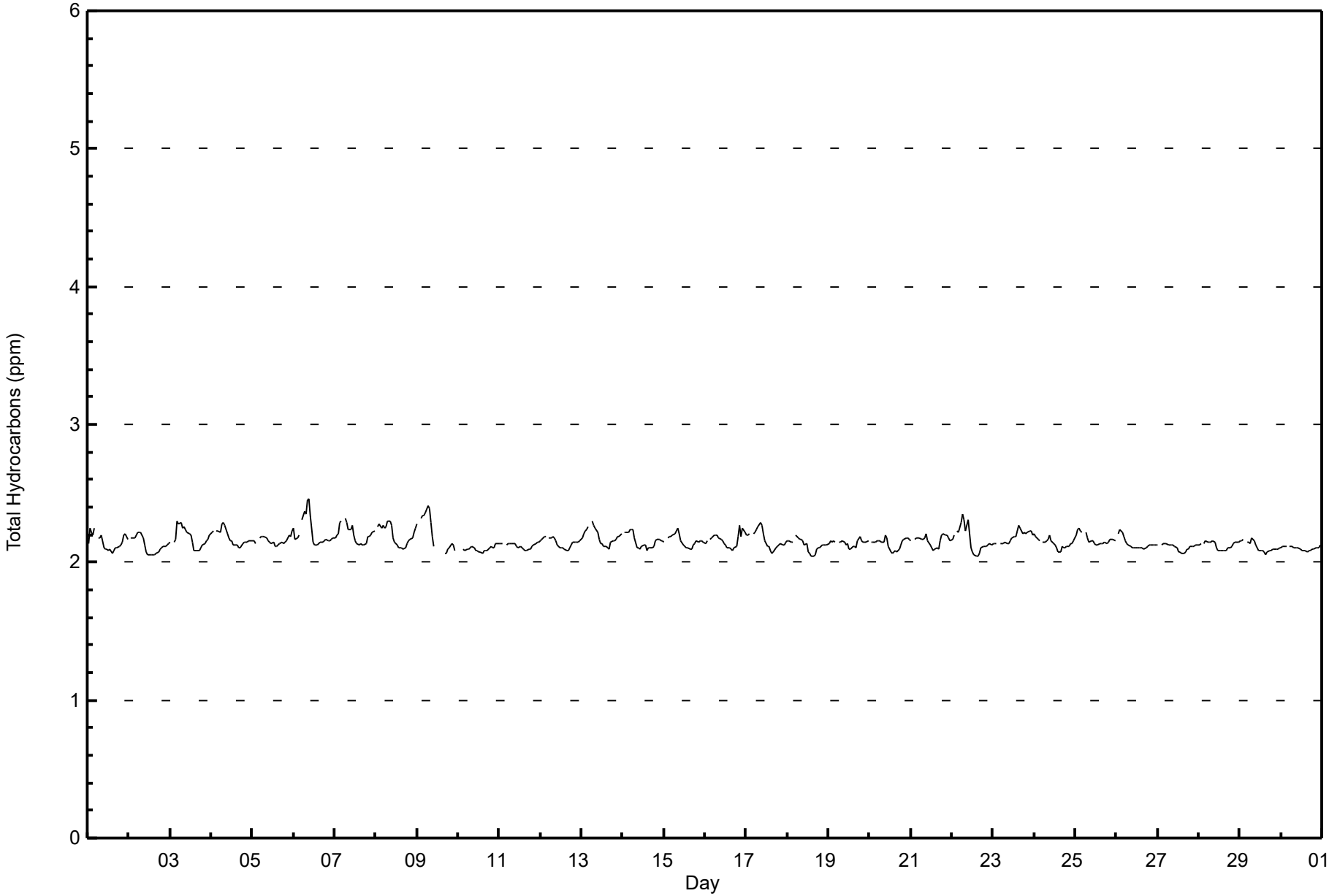
Z - zerospan C - Calibration DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Stony Mountain - September 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Total Hydrocarbons (THC) - ppm

Stony Mountain - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	4	0.59	0.59
2.1 - 3.0	678	99.41	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Stony Mountain - September 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	1	1	2	4
2.1 - 3.0	16	15	12	15	28	24	36	41	36	80	74	55	62	69	79	36	678
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	16	15	12	15	28	24	36	41	36	80	74	55	62	70	80	38	682

Total Number of Valid Hours: 682

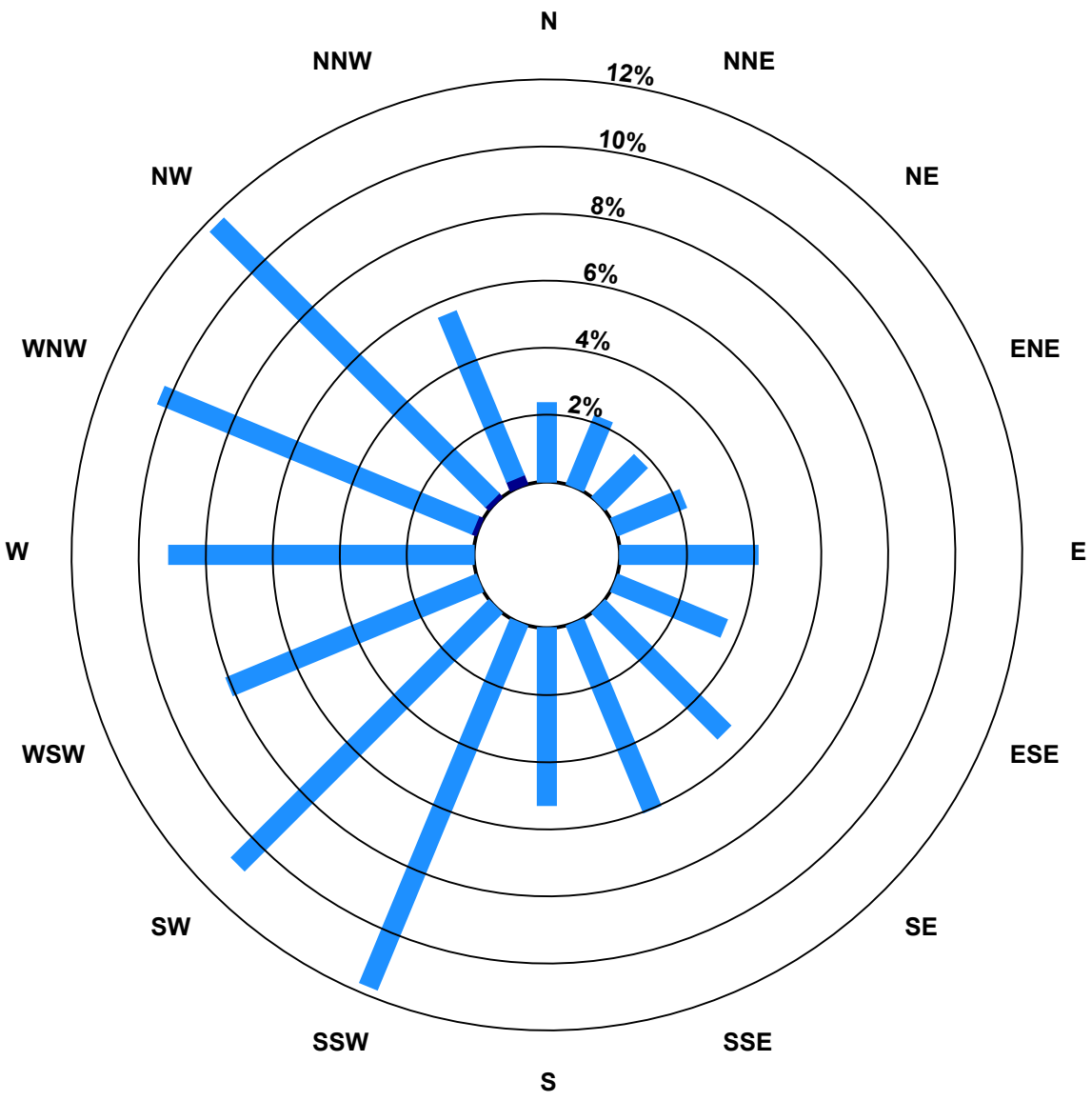
Total Number of Hours: 720

Wood Buffalo Environmental Association

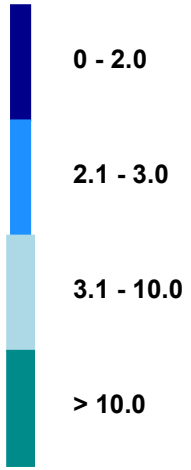
Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Stony Mountain



Classes (ppm)



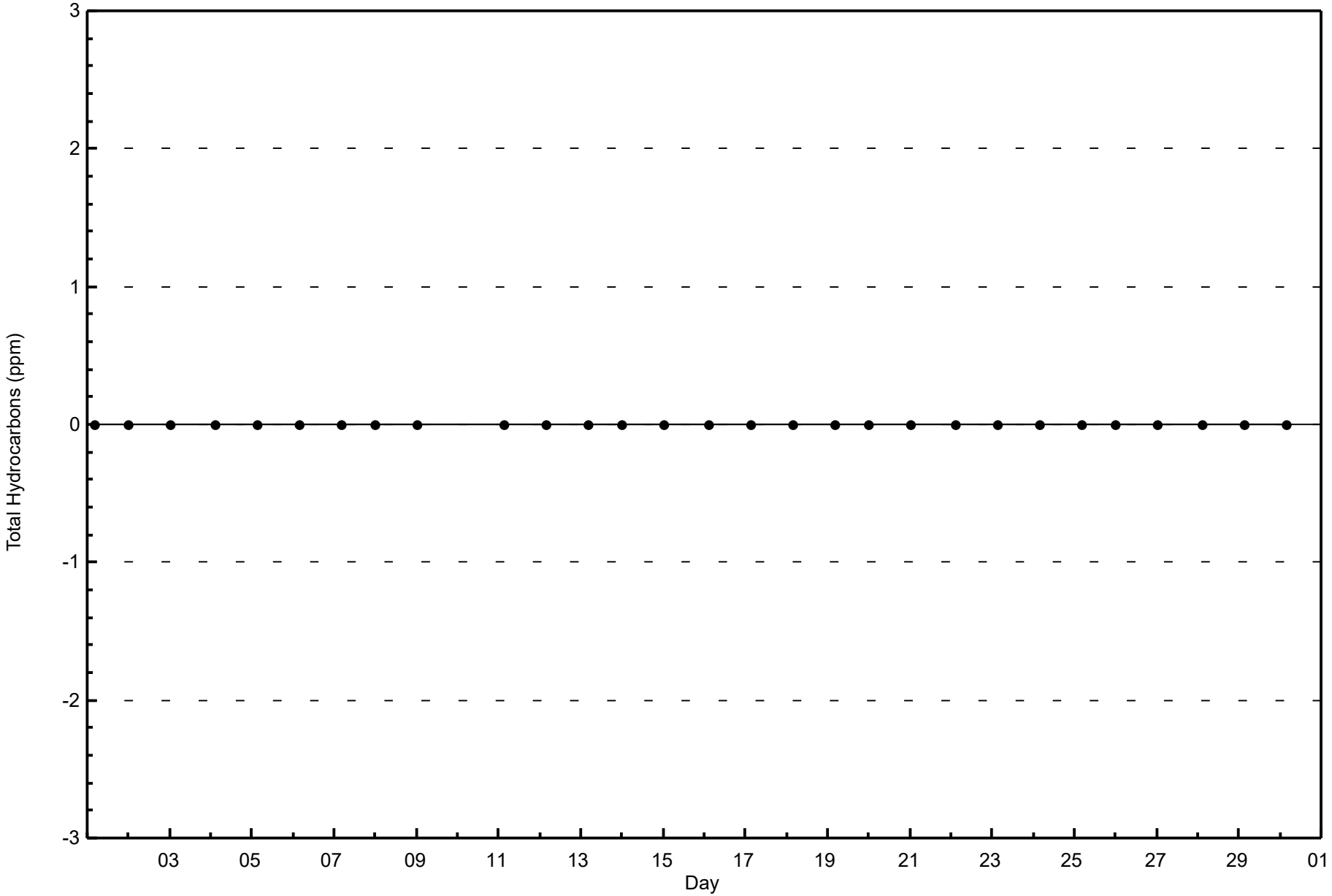
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Stony Mountain - September 2026

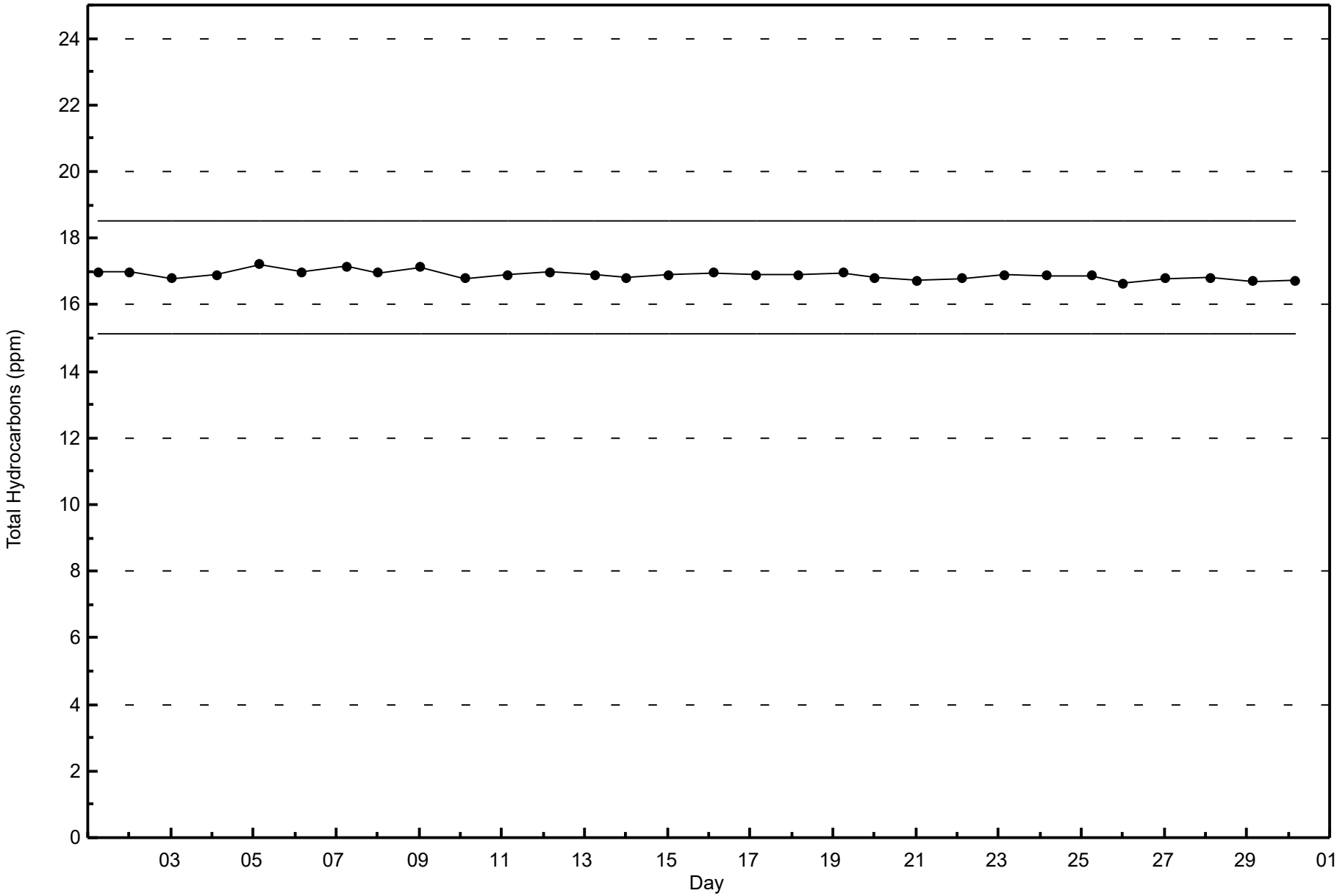


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Stony Mountain - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Stony Mountain - September 2026

Maximum Value: 0.064 ppm on Sep 6 01:00

Maximum Daily Average: 0.003 ppm on Sep 6

Minimum Value: 0.000 ppm on Sep 1 01:00

Minimum Daily Average: 0.000 ppm on Sep 1

Maximum Diurnal Average: 0.003 ppm at hour 1

Minimum Diurnal Average: 0.000 ppm at hour 2

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:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	35
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-Sep	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
2-Sep	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
3-Sep	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
4-Sep	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
5-Sep	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	0.037	0.002	0.037
6-Sep	0.064	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	0.003	0.064
7-Sep	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
8-Sep	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
9-Sep	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	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	DF	--	0.000
10-Sep	DF	DF	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
11-Sep	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-Sep	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
13-Sep	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
14-Sep	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
15-Sep	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
16-Sep	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
17-Sep	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
18-Sep	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
19-Sep	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
20-Sep	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
21-Sep	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
22-Sep	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
23-Sep	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
24-Sep	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
25-Sep	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
26-Sep	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
27-Sep	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
28-Sep	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
29-Sep	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
30-Sep	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
	0.003	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	Diurnal Average	
	0.064	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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	0.037	Diurnal Maximum	

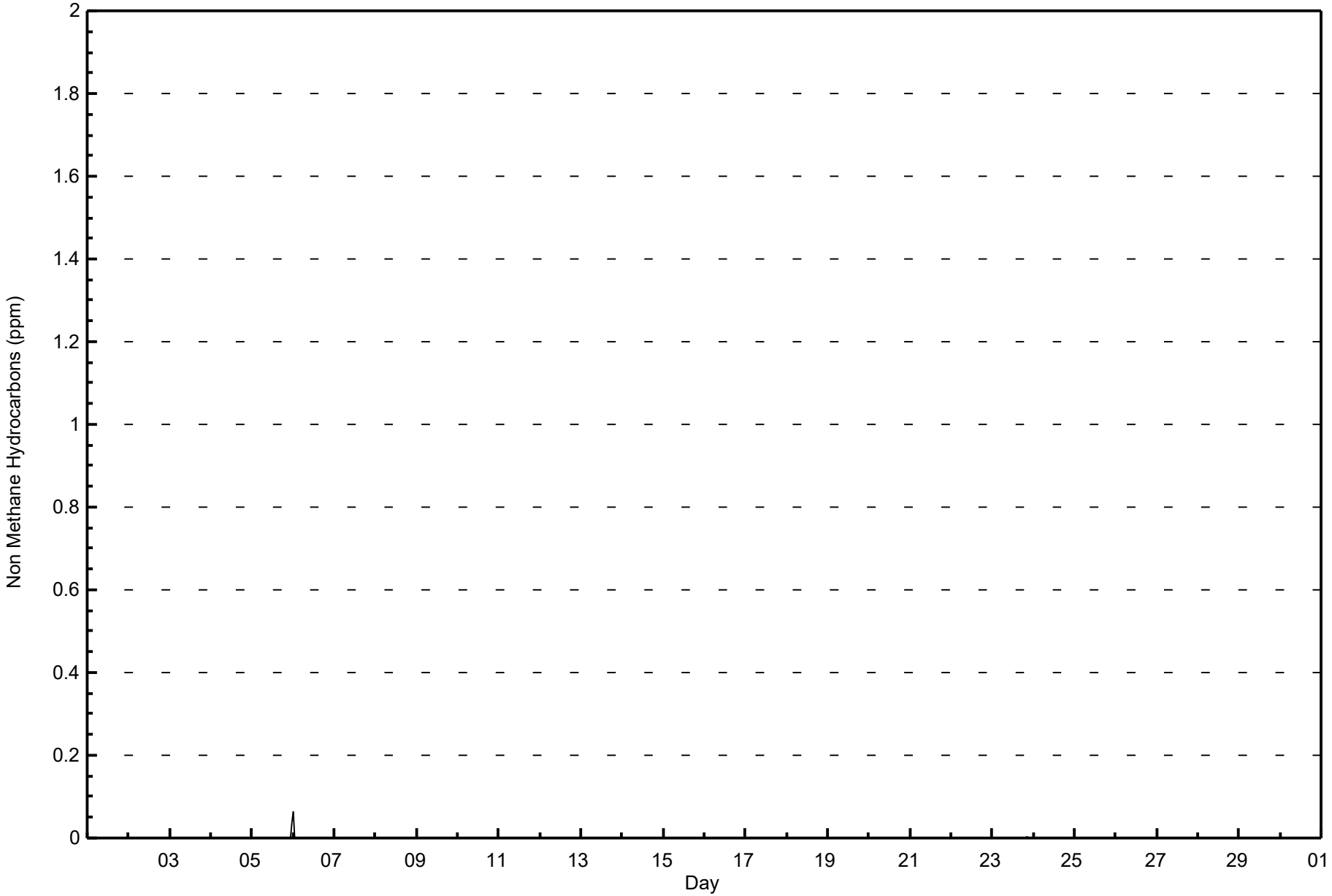
Z - zerospan C - Calibration DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Stony Mountain - September 2026



Non Methane Hydrocarbons (NMHC) - ppm
Stony Mountain - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	680	99.71	99.71
0.006 - 0.05	1	0.15	99.85
0.06 - 0.1	1	0.15	100.00
> 0.1	0	0.00	100.00

Total Number of Valid Hours: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Stony Mountain - September 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	16	15	12	15	28	24	36	41	36	78	74	55	62	70	80	38	680
0.006 - 0.05	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
0.06 - 0.1	0	0	0	0	0	0	0	0	0	1	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	16	15	12	15	28	24	36	41	36	80	74	55	62	70	80	38	682

Total Number of Valid Hours: 682

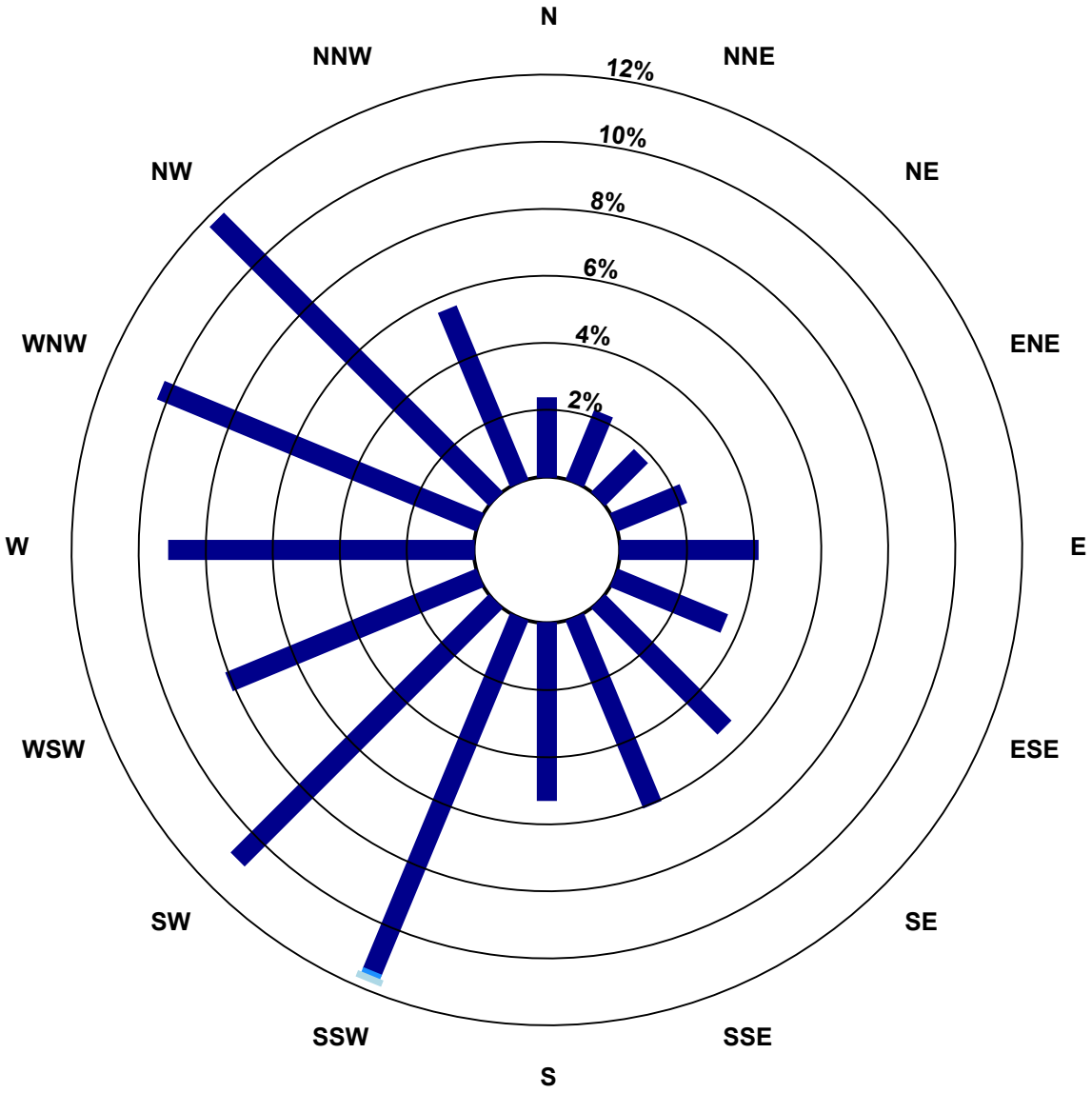
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Non Methane Hydrocarbons (NMHC) - ppm

Stony Mountain



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

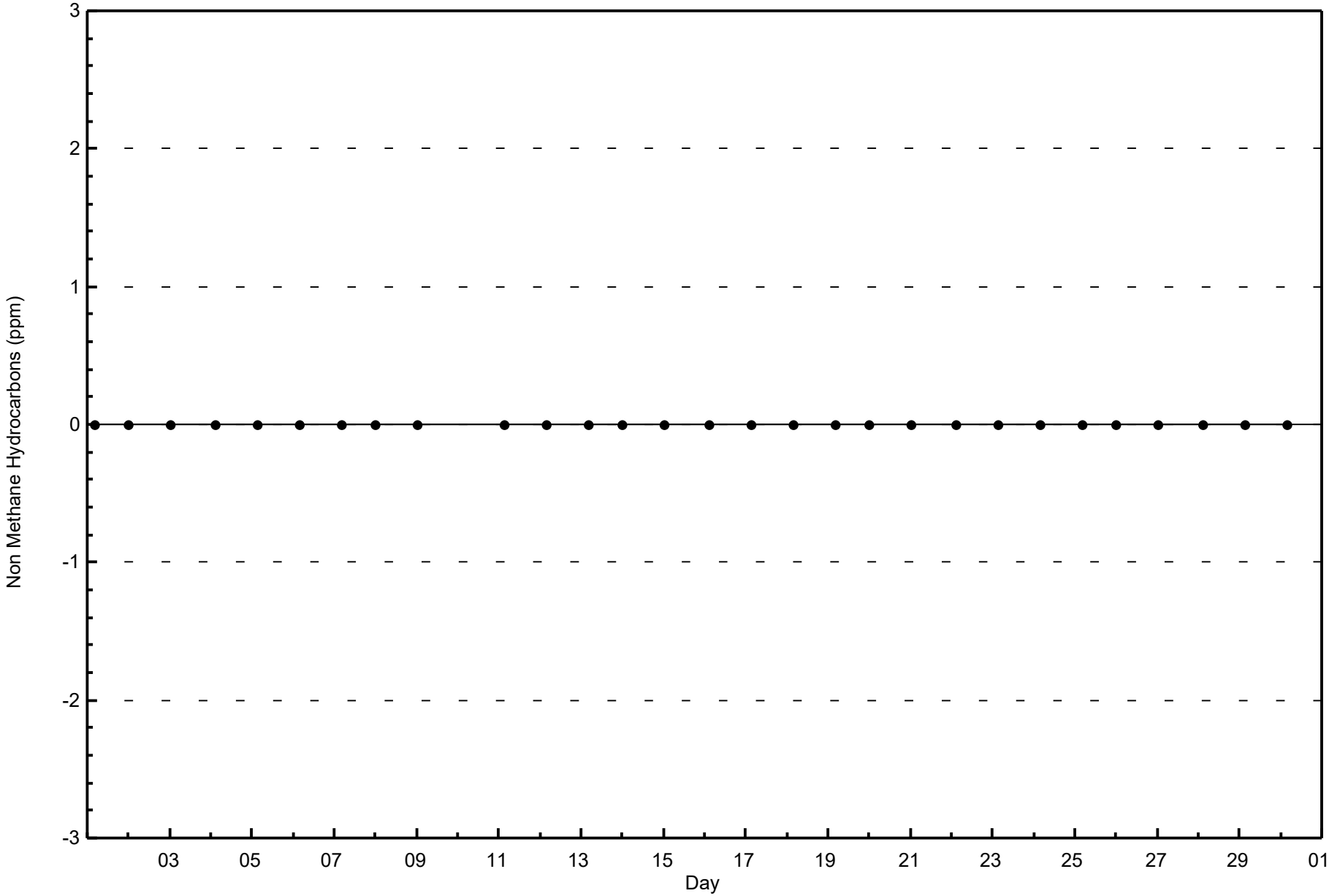
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Stony Mountain - September 2026

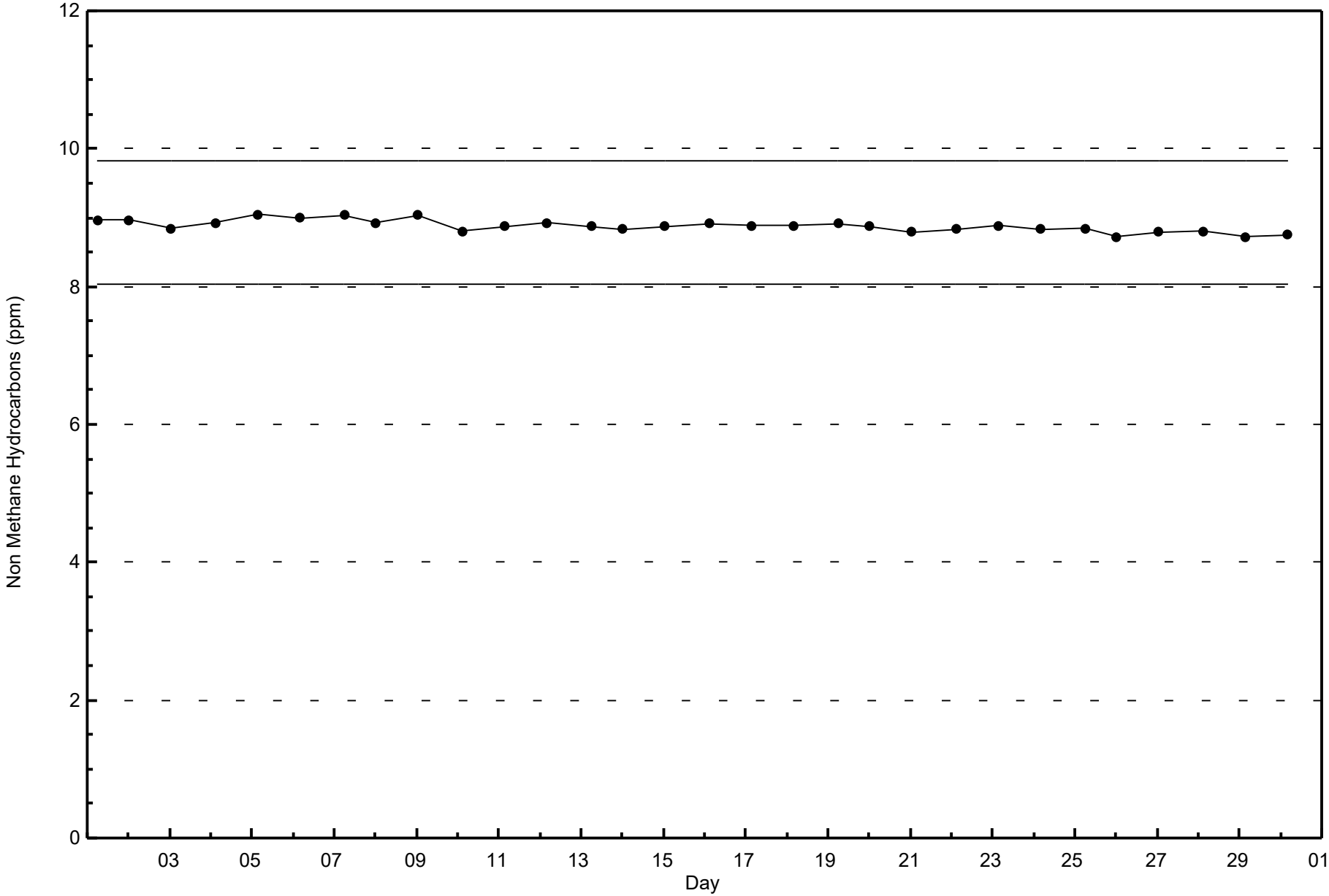


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Stony Mountain - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Stony Mountain - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.5 ppm on Sep 6 10:00 Maximum Daily Average: 2.2 ppm on Sep 6

Minimum Value: 2.0 ppm on Sep 22 15:00 Minimum Daily Average: 2.1 ppm on Sep 10
Maximum Diurnal Average: 2.2 ppm at hour 7 Minimum Diurnal Average: 2.1 ppm at hour 15
Monthly Average: 2.15 ppm Percentiles: P_1 = 2.1 P_{10} = 2.1 Q_1 = 2.1 Median = 2.1 Q_3 = 2.2 P_{90} = 2.2 P_{99} = 2.3

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	35
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-Sep	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
2-Sep	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	2.1	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-Sep	2.1	Z	2.1	2.2	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	2.1	2.1	2.2	2.2	2.2	2.2	2.3
4-Sep	2.2	2.2	Z	2.2	2.2	2.2	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	2.1	2.1	2.1	2.2	2.2	2.2	2.3
5-Sep	2.2	2.2	2.1	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	2.2	2.2	2.2	2.2	2.2	2.2
6-Sep	2.2	2.2	2.2	2.2	Z	2.3	2.4	2.3	2.5	2.5	2.3	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	2.5
7-Sep	2.2	2.2	2.2	2.3	2.3	Z	2.3	2.3	2.2	2.2	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3
8-Sep	Z	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	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.2	2.3
9-Sep	2.3	Z	2.3	2.3	2.3	2.4	2.4	2.4	2.3	2.2	2.1	C	C	C	C	C	2.1	2.1	2.1	2.1	2.1	2.1	2.1	DF	--	2.4
10-Sep	DF	DF	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
11-Sep	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	2.1	2.1	2.1	2.1	2.1	2.1
12-Sep	2.2	2.2	2.2	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	2.2	2.1	2.2
13-Sep	2.2	2.2	2.2	2.2	2.3	Z	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	2.2	2.2	2.2	2.2	2.2	2.2	2.3
14-Sep	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	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2
15-Sep	2.1	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	2.2	2.1	2.2	2.2	2.1	2.2	2.2
16-Sep	2.1	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	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.2	2.2	2.3
17-Sep	2.2	2.2	2.2	Z	2.2	2.2	2.2	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	2.2	2.3
18-Sep	2.2	2.2	2.1	2.1	Z	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
19-Sep	2.1	2.2	2.1	2.2	2.1	Z	2.1	2.1	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	2.1	2.1	2.2	2.1	2.2
20-Sep	Z	2.1	2.1	2.1	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	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.2
21-Sep	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	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
22-Sep	2.2	2.2	Z	2.2	2.2	2.3	2.3	2.3	2.2	2.3	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	2.1	2.2	2.3
23-Sep	2.1	2.1	2.1	Z	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	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3
24-Sep	2.2	2.2	2.2	2.2	Z	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	2.2	2.1	2.2
25-Sep	2.2	2.2	2.2	2.2	2.2	Z	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	2.2	2.2	2.2	2.2	2.2	2.2
26-Sep	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	2.1	2.1	2.1	2.1	2.2
27-Sep	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	2.1
28-Sep	2.1	2.1	Z	2.1	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
29-Sep	2.2	2.2	2.2	Z	2.1	2.2	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
30-Sep	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	2.1	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	2.2	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	
	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.3	Diurnal Maximum	

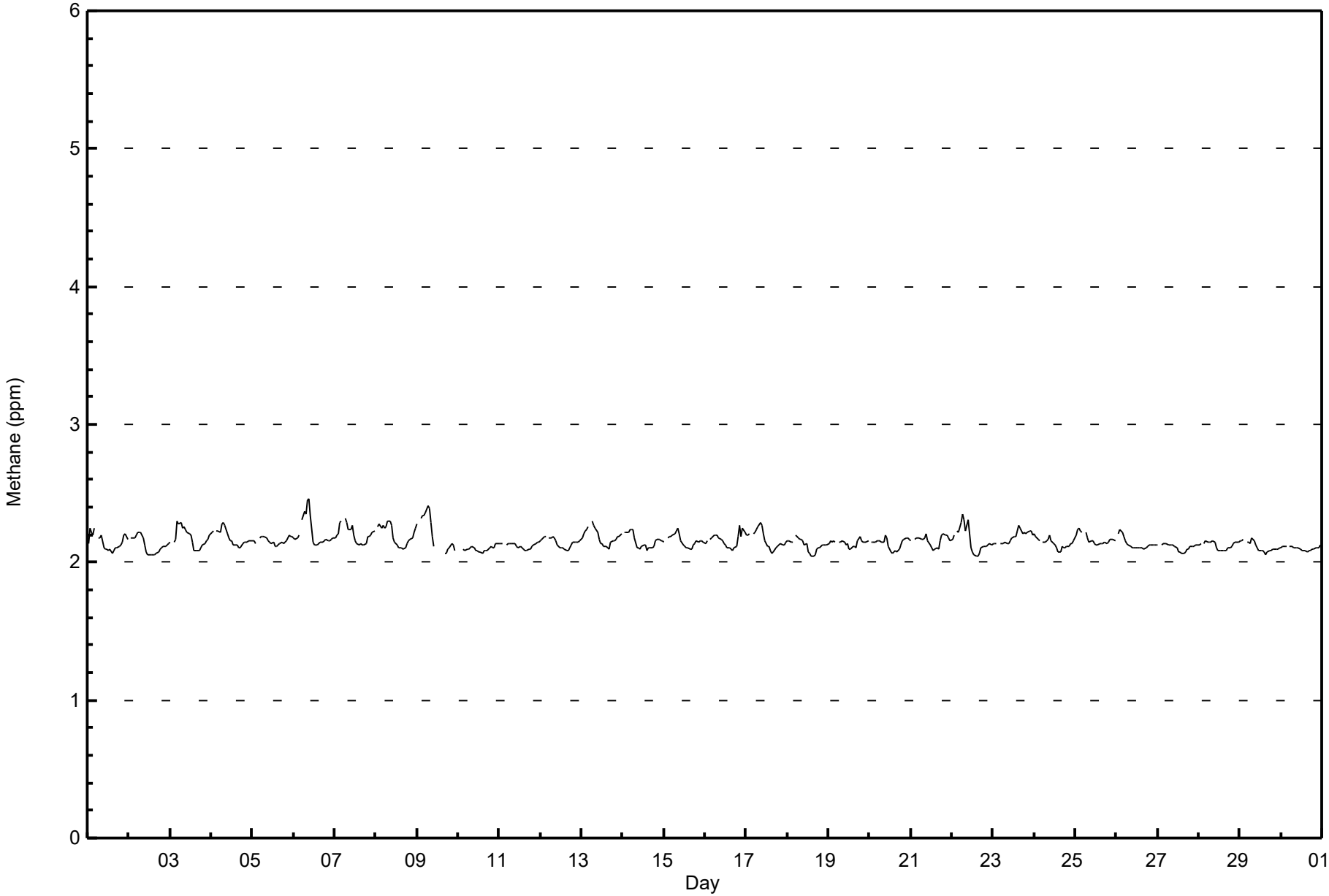
Z - zerospan C - Calibration DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Stony Mountain - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	4	0.59	0.59
2.1 - 3.0	678	99.41	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Stony Mountain - September 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	1	1	2	4
2.1 - 3.0	16	15	12	15	28	24	36	41	36	80	74	55	62	69	79	36	678
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	16	15	12	15	28	24	36	41	36	80	74	55	62	70	80	38	682

Total Number of Valid Hours: 682

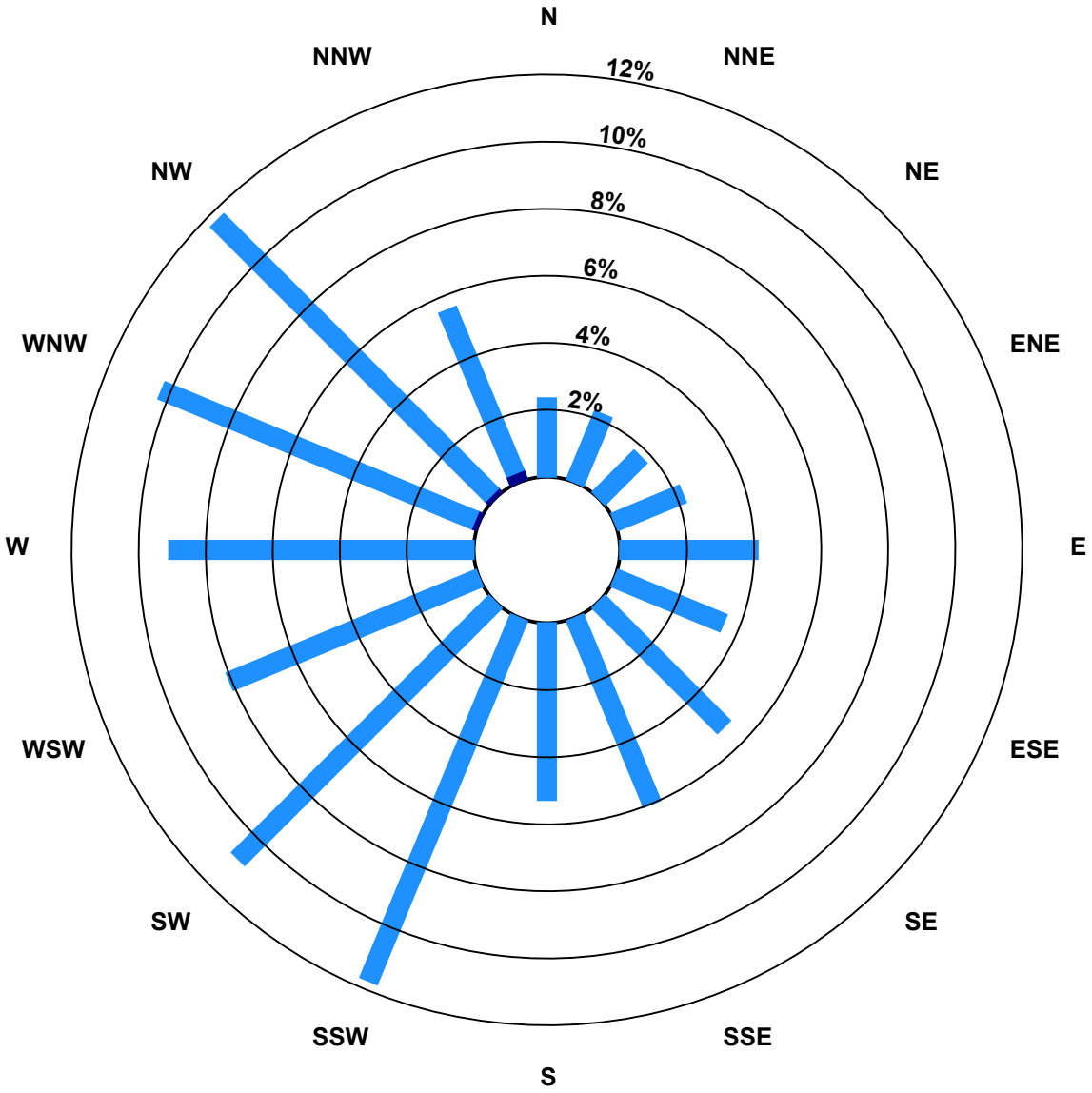
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Methane (CH_4) - ppm

Stony Mountain



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

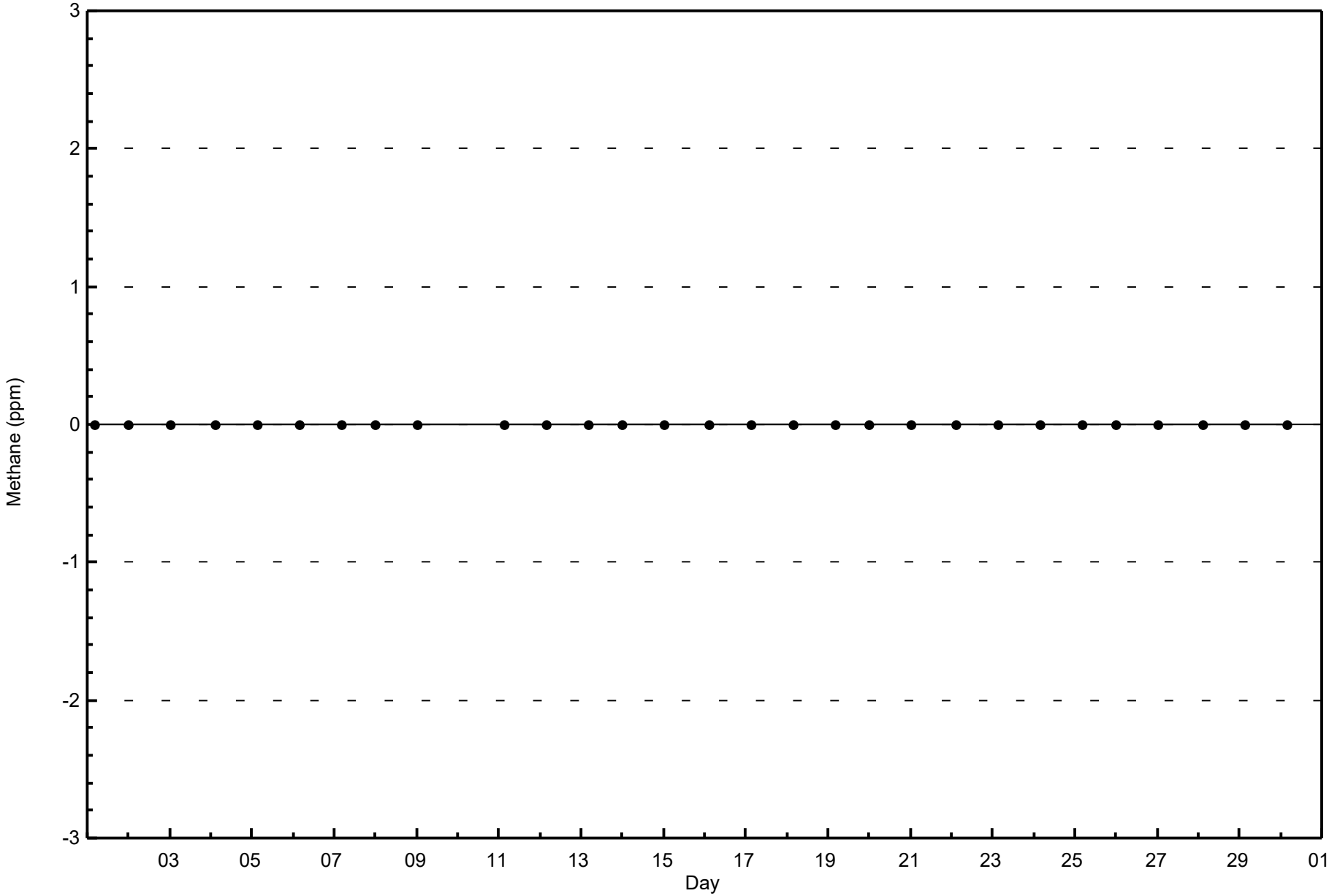
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Stony Mountain - September 2026

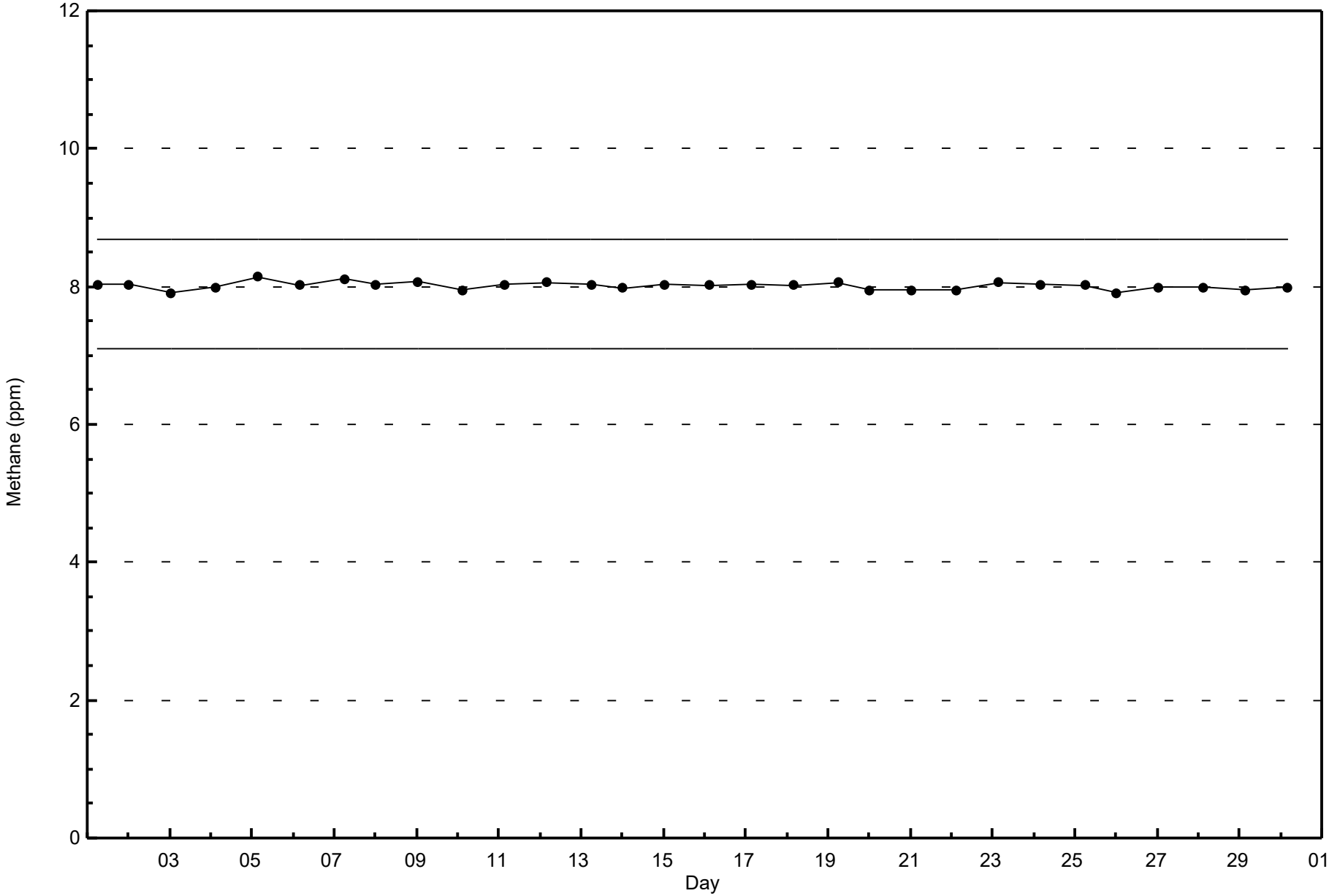


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Stony Mountain - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Stony Mountain - September 2026

Maximum Value: 0.7 ppb on Sep 22 12:00

Maximum Daily Average: 0.1 ppb on Sep 7

Minimum Value: 0.0 ppb on Sep 1 01:00

Minimum Daily Average: 0.0 ppb on Sep 2

Maximum Diurnal Average: 0.2 ppb at hour 10

Minimum Diurnal Average: 0.0 ppb at hour 3

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:	720
Hours of Data:	618
Hours of Missing Data:	102
Hours of Calibration:	35
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-Sep	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	0.0	0.2
2-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.1	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	0.1
3-Sep	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2
4-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.2	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	0.0	0.0	0.1	0.4
5-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
6-Sep	0.0	Z	0.0	0.0	0.0	0.1	0.0	0.1	0.4	0.7	0.4	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7
7-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.4
8-Sep	0.0	0.1	0.1	Z	0.0	0.0	0.1	0.2	0.4	0.4	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	0.4
9-Sep	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	DF	0.0	0.1
10-Sep	DF	DF	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
11-Sep	Z	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	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
12-Sep	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
13-Sep	0.1	0.0	Z	0.1	0.1	0.0	0.1	0.2	0.3	0.4	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	0.1	0.4
14-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.3	0.4	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
15-Sep	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	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
16-Sep	0.0	0.0	0.0	0.0	0.0	Z	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	0.1	0.2
17-Sep	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.6	0.5	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	0.1	0.6
18-Sep	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
19-Sep	0.0	0.0	Z	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	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
20-Sep	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.2
21-Sep	0.0	0.0	0.0	0.0	Z	0.0	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
22-Sep	0.1	0.1	0.0	0.1	0.0	Z	0.1	0.2	0.4	0.3	0.1	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7
23-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.2	0.4	0.6	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
24-Sep	0.0	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25-Sep	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	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.1
26-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1
27-Sep	0.1	0.1	0.1	0.1	Z	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	0.0	0.0	0.0	0.0	0.0	0.1	0.2
28-Sep	0.0	0.0	0.0	0.0	0.0	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	0.0
29-Sep	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
30-Sep	UO	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	0.0	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	0.1	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	0.4	0.6	0.7	0.4	0.7	0.3	0.4	0.6	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Maximum	

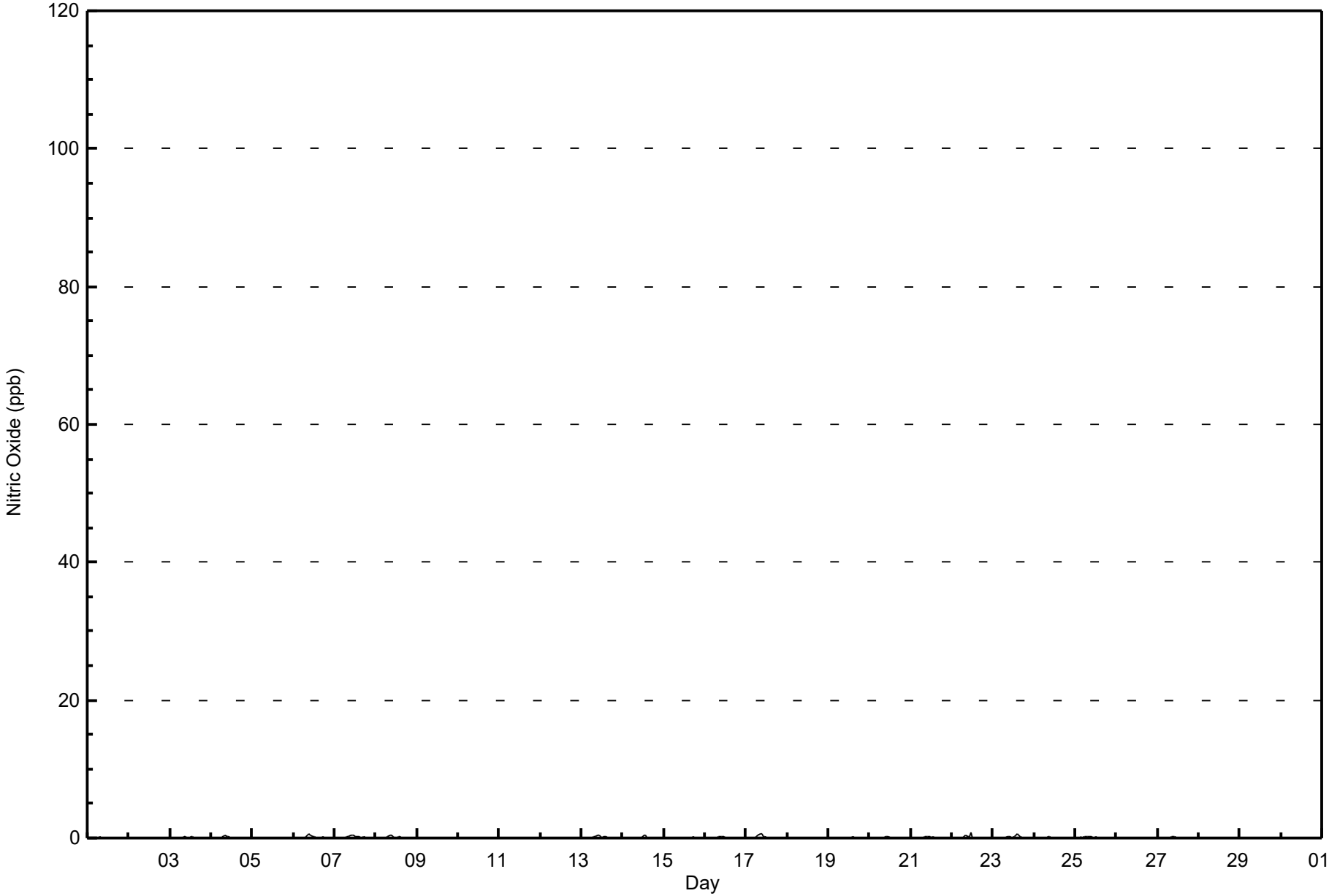
Z - zerospan C - Calibration DF - DAS Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Stony Mountain - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	618	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: 618

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Stony Mountain - September 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	16	16	12	15	27	25	31	42	34	67	68	52	45	63	67	38	618
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	16	16	12	15	27	25	31	42	34	67	68	52	45	63	67	38	618

Total Number of Valid Hours: 618

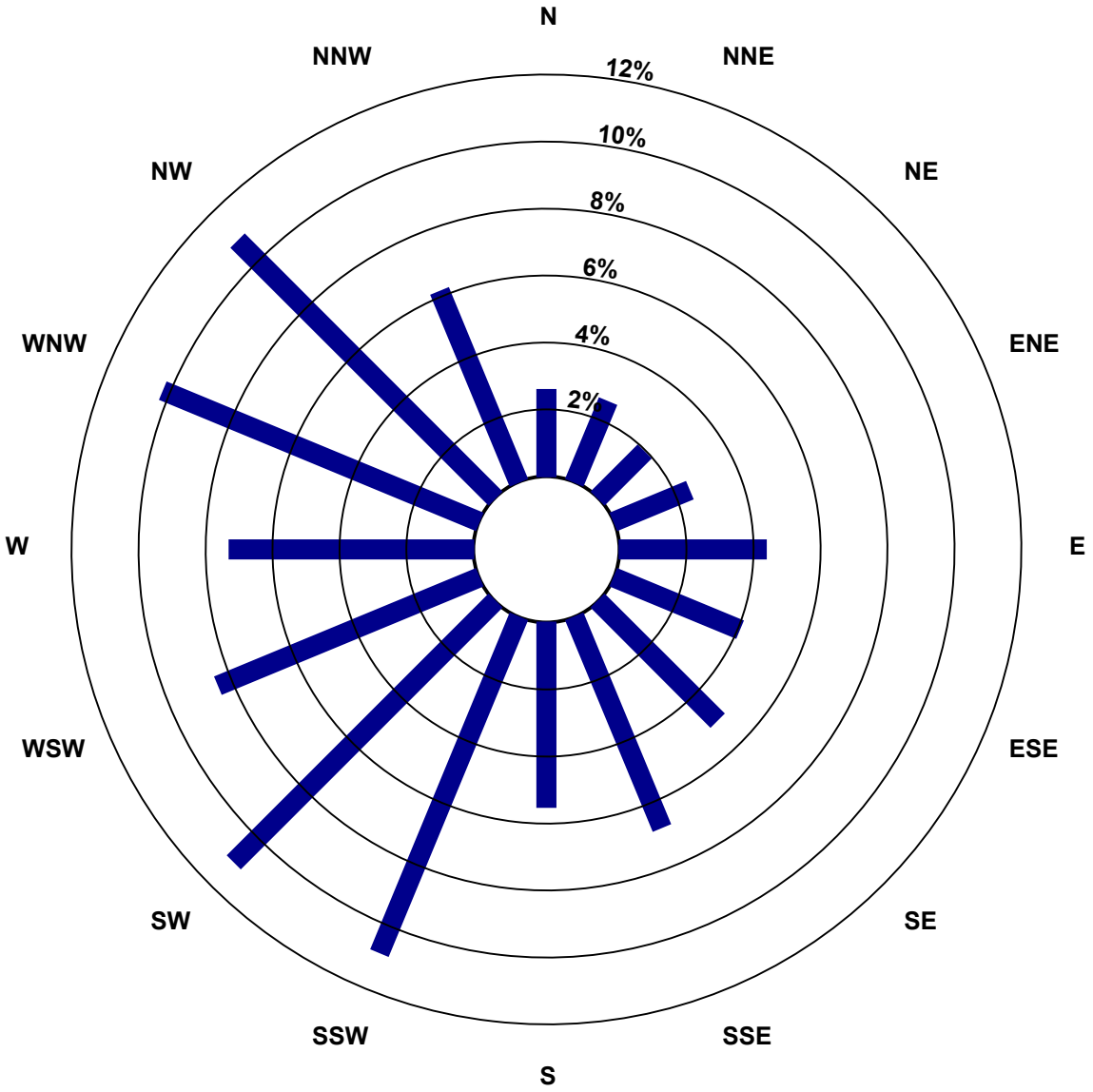
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Stony Mountain



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

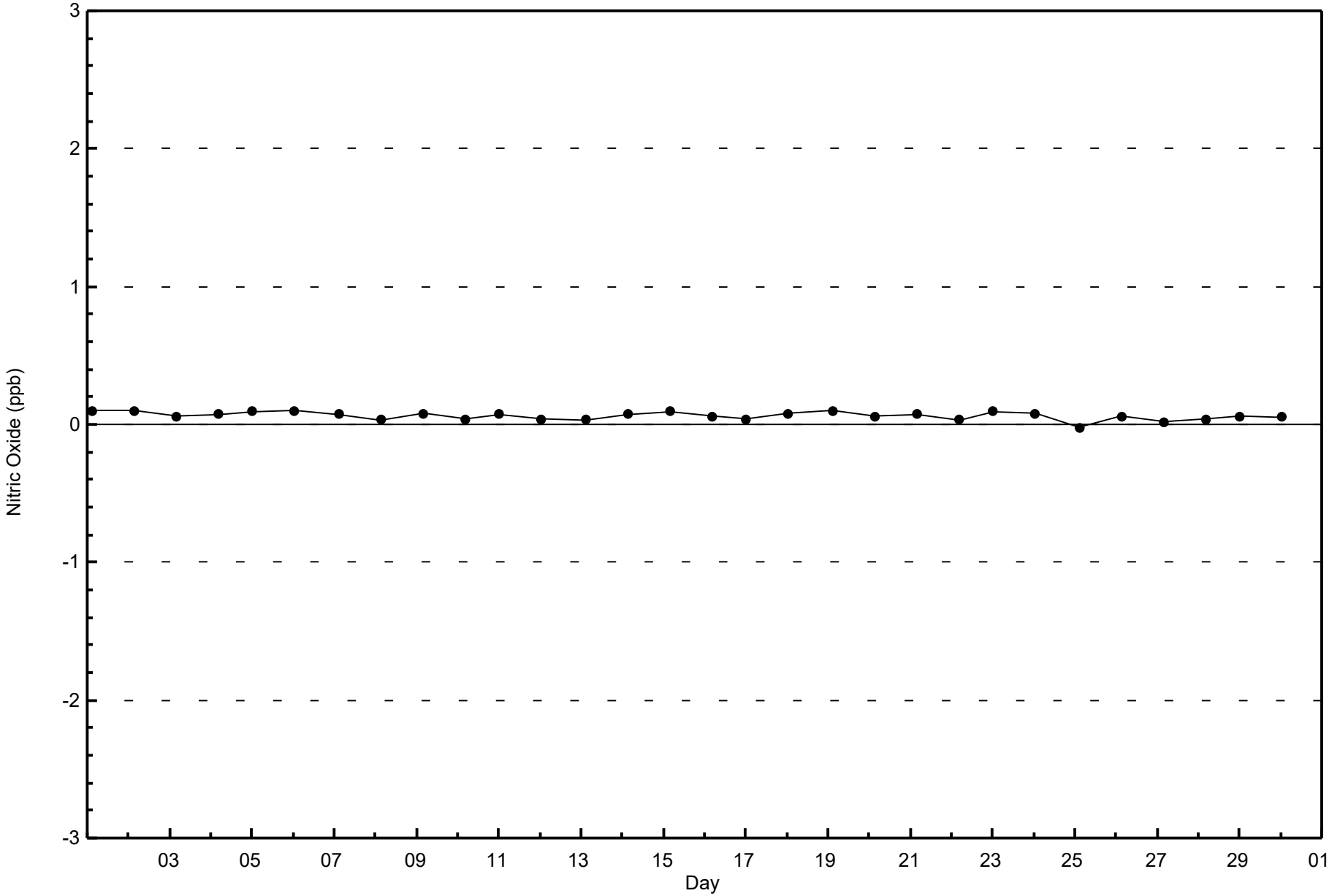
Total Number of Valid Hours: 618

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Stony Mountain - September 2026

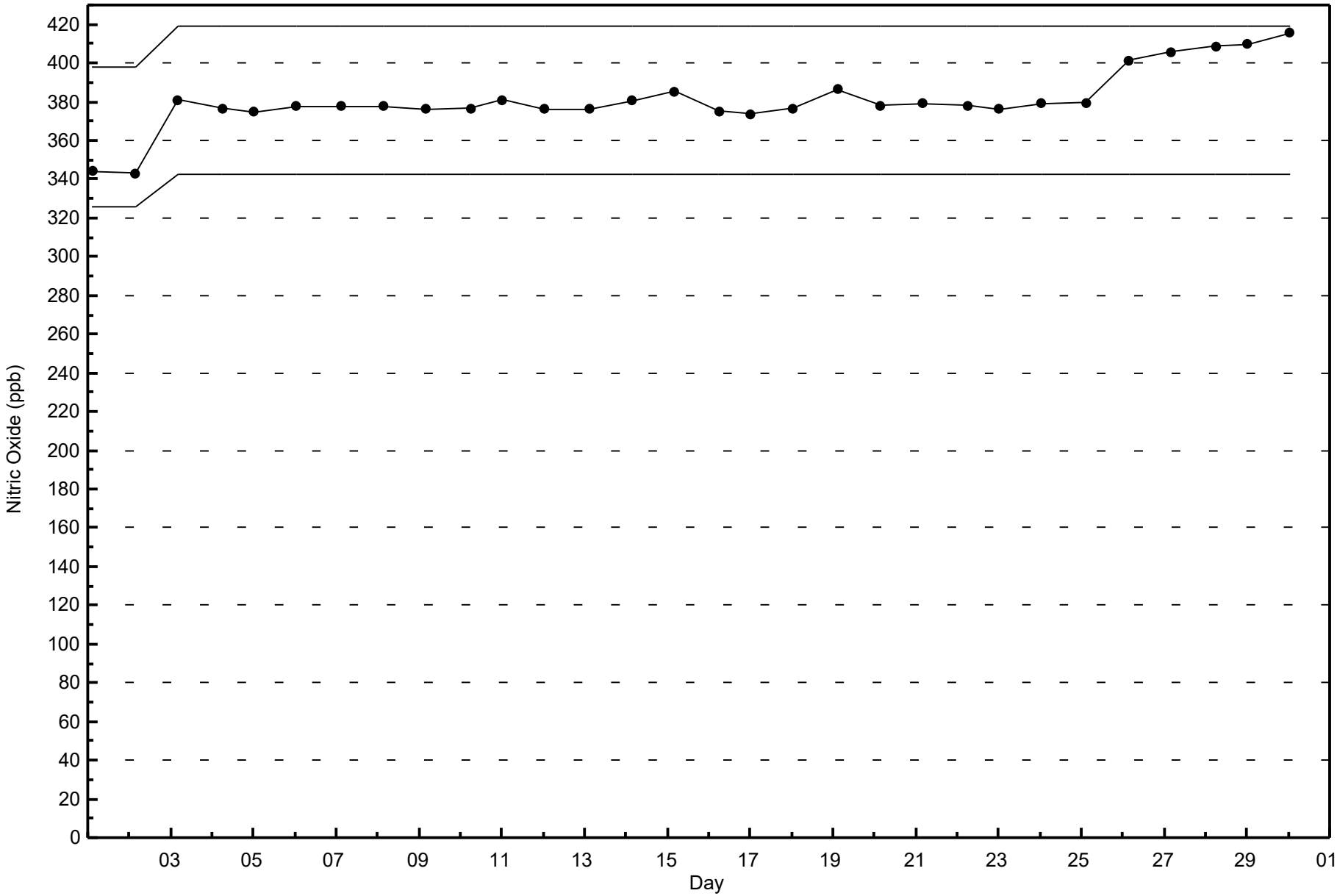


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Stony Mountain - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Stony Mountain - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.7 ppb on Sep 14 07:00 Maximum Daily Average: 1.3 ppb on Sep 23

Minimum Value: 0.1 ppb on Sep 10 05:00 Minimum Daily Average: 0.1 ppb on Sep 12
Maximum Diurnal Average: 1.0 ppb at hour 7 Minimum Diurnal Average: 0.4 ppb at hour 17
Monthly Average: 0.61 ppb Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.2 Median = 0.5 Q_3 = 0.8 P_{90} = 1.2 P_{99} = 2.3

Hours in Service:	720
Hours of Data:	618
Hours of Missing Data:	102
Hours of Calibration:	35
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-Sep	0.3	0.6	Z	0.6	0.6	0.7	0.8	0.9	0.5	0.3	0.3	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.5	0.6	0.7	0.5	0.7	1.3	0.6	1.3
2-Sep	1.0	0.8	0.8	Z	0.9	1.0	1.1	0.8	0.6	0.6	C	C	C	C	C	0.4	0.3	0.3	0.3	0.5	0.8	0.8	1.0	0.5	0.7	1.1
3-Sep	0.9	1.0	1.2	1.0	Z	1.4	2.0	1.0	1.2	0.7	0.4	0.4	0.5	0.6	0.3	0.4	0.5	0.5	1.1	1.0	1.1	1.1	1.0	0.7	0.9	2.0
4-Sep	0.7	0.6	0.6	0.6	0.7	Z	1.1	1.0	1.2	0.8	0.8	0.6	0.5	0.6	0.6	0.5	0.5	0.8	1.3	1.1	0.7	0.8	0.8	0.6	0.8	1.3
5-Sep	Z	0.7	0.6	0.7	0.9	0.9	0.7	0.6	0.5	0.3	0.3	0.4	0.5	0.3	0.3	0.4	0.4	0.5	0.6	0.4	0.7	1.0	0.7	1.4	0.6	1.4
6-Sep	0.8	Z	0.6	0.4	0.5	0.4	0.6	0.8	1.0	1.0	0.9	0.6	0.5	0.2	0.3	0.3	0.4	0.7	0.7	0.2	0.3	0.2	0.6	0.2	0.5	1.0
7-Sep	0.2	0.2	Z	0.4	0.4	0.7	0.8	0.5	0.7	0.9	0.7	1.3	1.0	0.7	0.5	0.4	0.3	0.5	0.4	0.3	0.3	0.5	0.3	0.3	0.5	1.3
8-Sep	0.8	0.5	1.2	Z	1.5	1.0	0.6	0.8	0.8	0.9	0.7	0.6	0.5	0.8	0.8	0.6	0.5	0.4	0.5	0.5	0.3	0.3	0.3	0.3	0.7	1.5
9-Sep	0.4	0.7	0.6	0.6	Z	0.9	0.8	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	0.4	0.3	DF	0.4	0.9
10-Sep	DF	DF	0.2	0.2	0.1	Z	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	0.2	0.1	0.1	0.1	0.1	0.2	0.4
11-Sep	Z	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3
12-Sep	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	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.3
13-Sep	0.1	0.2	Z	0.4	0.4	0.4	0.6	0.6	0.7	1.1	1.3	0.6	0.6	0.6	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.6	1.3
14-Sep	0.4	0.5	0.5	Z	1.0	2.3	3.7	1.5	0.4	0.3	0.4	0.5	1.1	1.2	0.6	0.9	0.4	0.4	0.7	1.6	2.2	1.9	1.1	0.7	1.1	3.7
15-Sep	0.6	0.3	0.2	0.4	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	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6
16-Sep	0.2	0.2	0.2	0.2	0.2	Z	0.5	0.3	0.3	0.2	0.4	0.4	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.6	0.9	1.3	0.5	0.9	0.4	1.3
17-Sep	Z	1.7	1.6	1.6	1.9	2.1	2.3	1.7	1.7	1.4	0.9	0.6	0.5	0.5	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	1.0	2.3
18-Sep	0.5	Z	0.6	0.5	0.8	0.6	0.4	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	0.8	0.7	0.4	0.8
19-Sep	0.6	1.3	Z	1.0	0.8	0.9	1.0	0.9	0.6	0.5	0.4	0.4	0.4	0.6	1.0	0.9	0.8	0.9	1.0	1.0	1.0	1.1	2.1	1.5	0.9	2.1
20-Sep	1.2	1.0	0.9	Z	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.5	0.4	0.5	0.6	0.6	0.7	0.7	0.8	1.0	0.9	0.8	0.7	0.7	1.2
21-Sep	0.7	0.7	0.7	0.8	Z	1.1	0.8	1.0	1.4	1.4	1.3	1.0	1.0	1.2	0.9	0.8	1.0	1.2	1.3	1.4	1.4	1.4	1.8	2.1	1.1	2.1
22-Sep	1.4	1.3	1.7	2.2	2.2	Z	2.4	1.9	1.7	1.2	0.7	0.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.9	2.4
23-Sep	Z	0.5	0.4	0.4	0.3	0.5	1.1	2.0	2.0	1.5	1.1	0.8	1.1	1.2	2.6	2.8	2.0	1.5	1.5	1.6	1.4	1.6	1.4	1.2	1.3	2.8
24-Sep	2.4	Z	0.7	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.4	0.3	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.5	0.5	1.0	0.5	2.4
25-Sep	1.3	1.8	Z	1.9	1.0	1.1	1.9	1.0	0.6	0.5	0.3	0.3	0.3	0.3	0.4	0.6	0.4	0.7	0.5	0.7	0.7	0.9	0.7	0.5	0.8	1.9
26-Sep	0.4	0.6	1.6	Z	0.9	0.4	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	0.3	1.6
27-Sep	0.2	0.3	0.3	0.3	Z	0.4	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4
28-Sep	0.3	0.3	0.4	0.4	0.4	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	0.4
29-Sep	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
30-Sep	UO	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
	0.7	0.7	0.7	0.7	0.7	0.8	1.0	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	Diurnal Average	
	2.4	1.8	1.7	2.2	2.2	2.3	3.7	2.0	2.0	1.5	1.3	1.3	1.1	1.2	2.6	2.8	2.0	1.5	1.5	1.6	2.2	1.9	2.1	2.1	Diurnal Maximum	

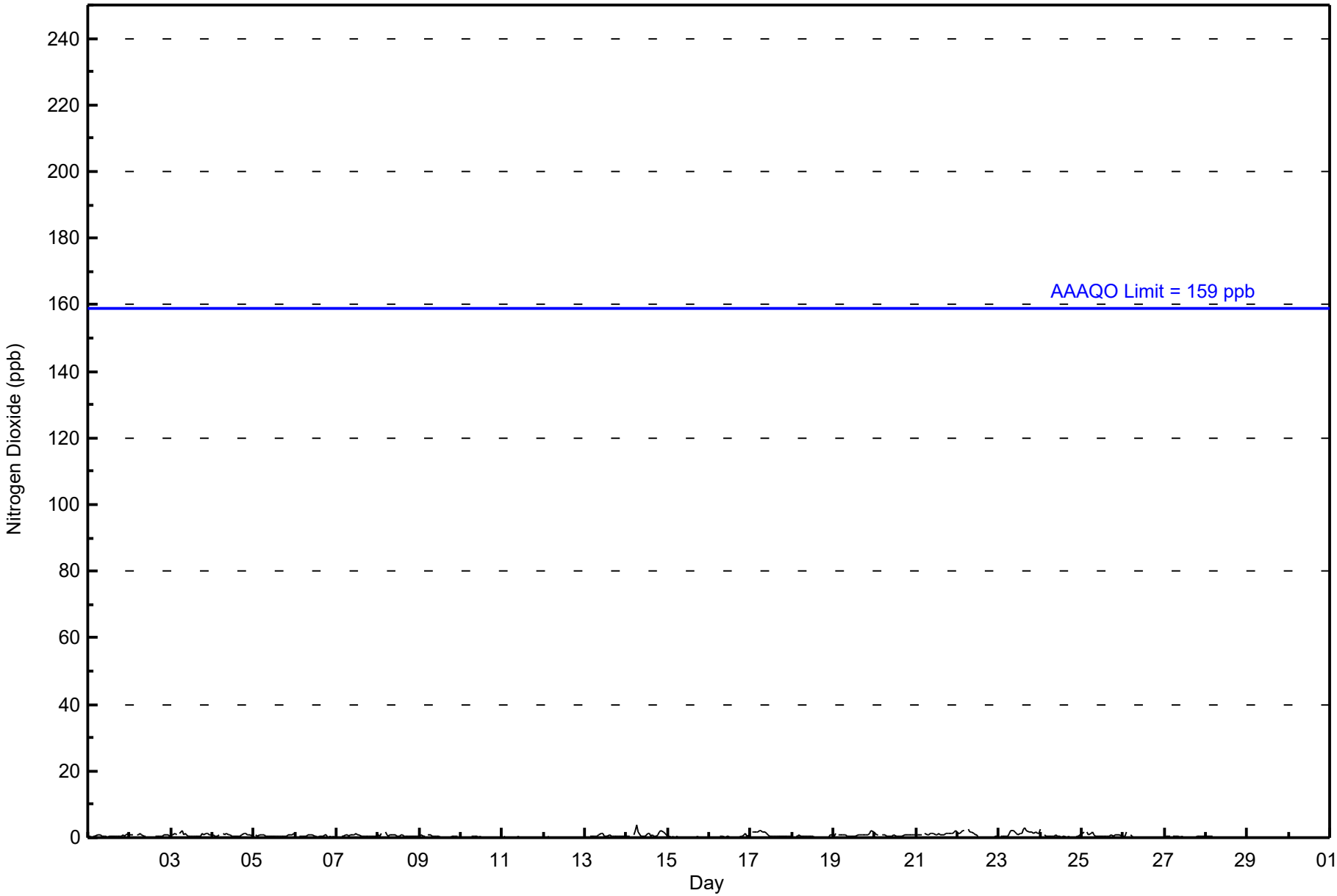
Z - zerospan C - Calibration DF - DAS Failure UO - Unstable Operation
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Stony Mountain - September 2026



Nitrogen Dioxide (NO_2) - ppb
Stony Mountain - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	618	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: 618

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Stony Mountain - September 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	16	16	12	15	27	25	31	42	34	67	68	52	45	63	67	38	618
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	16	16	12	15	27	25	31	42	34	67	68	52	45	63	67	38	618

Total Number of Valid Hours: 618

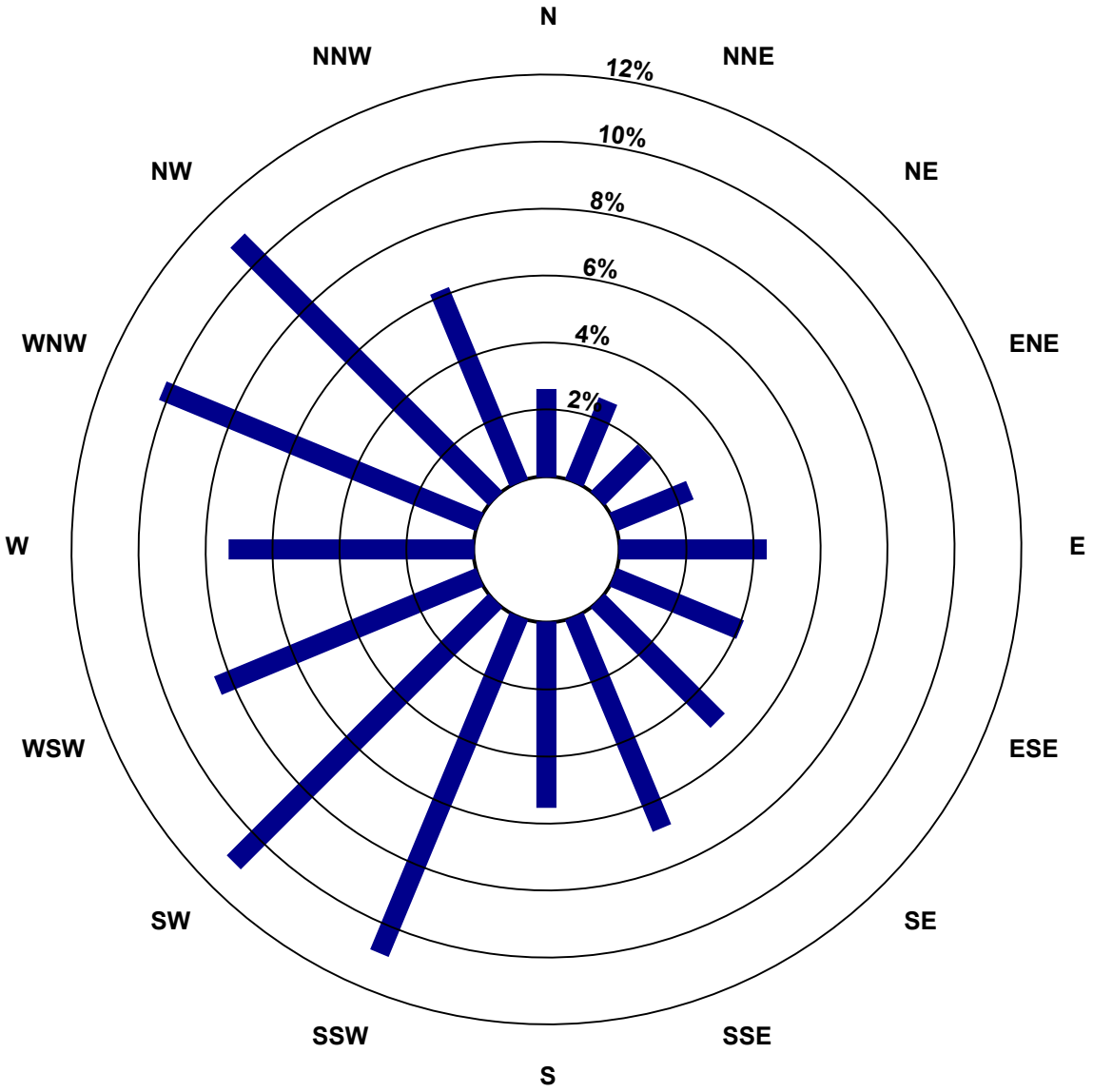
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Stony Mountain



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

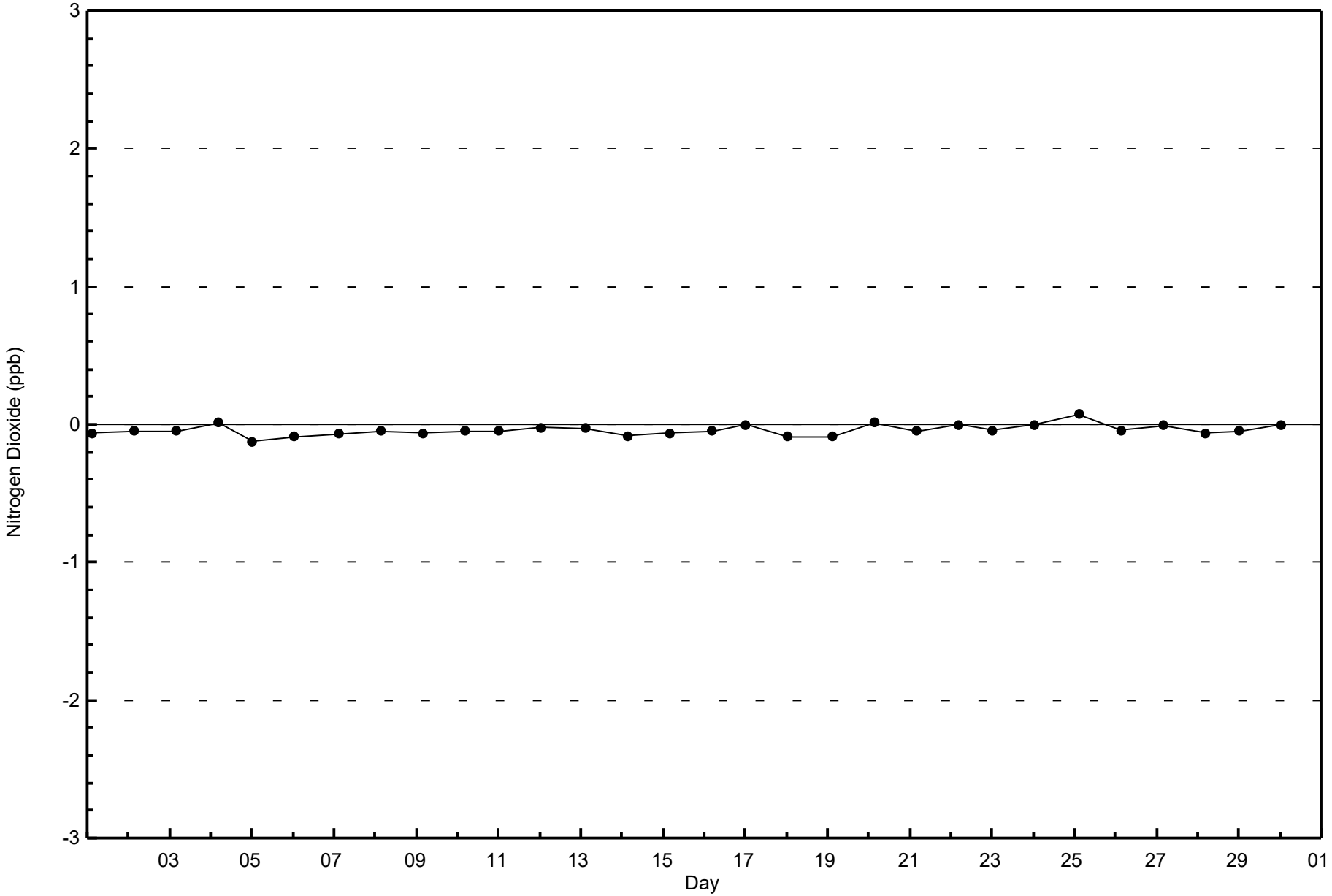
Total Number of Valid Hours: 618

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Stony Mountain - September 2026

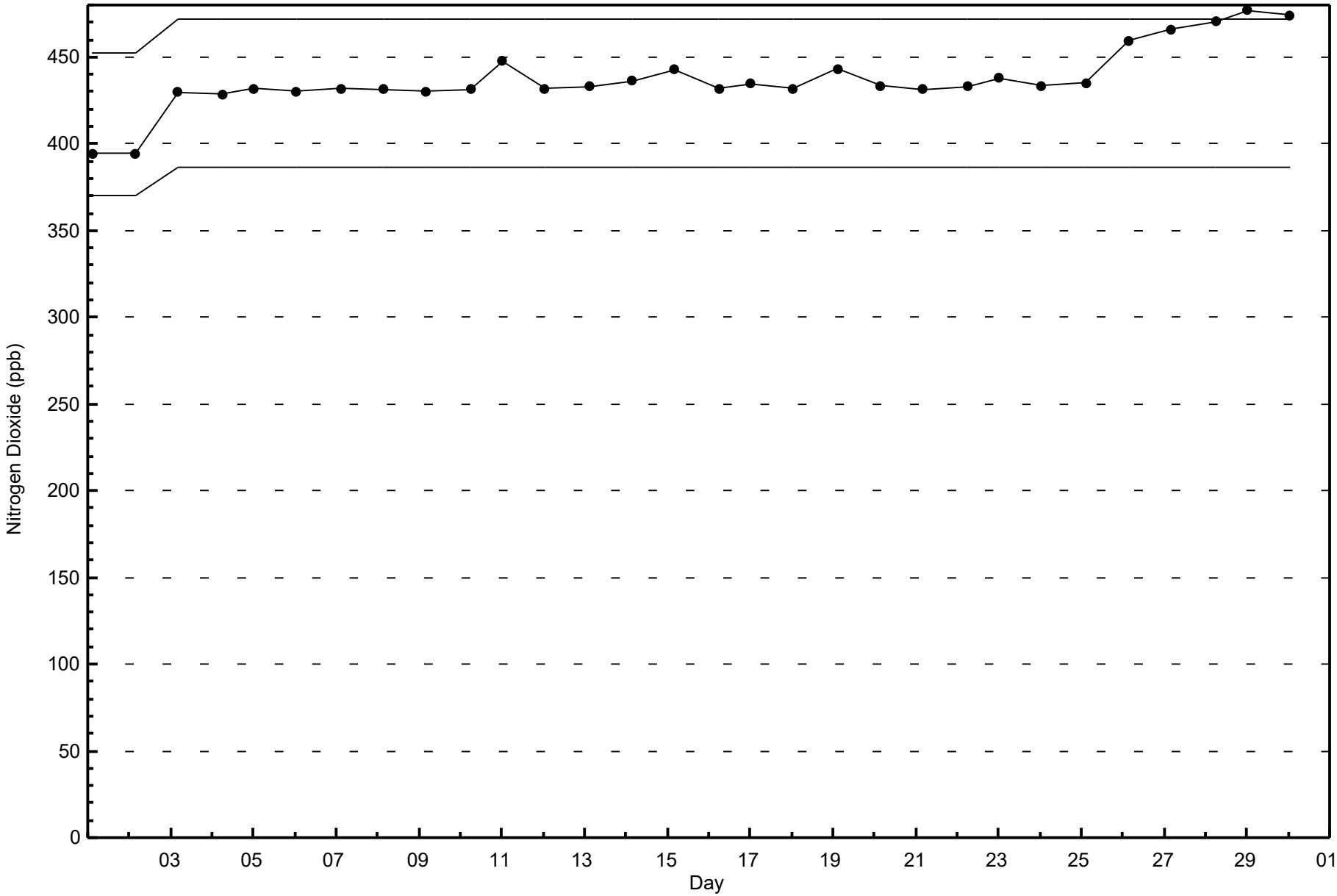


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Stony Mountain - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Stony Mountain - September 2026

Maximum Value: 3.8 ppb on Sep 14 07:00

Maximum Daily Average: 1.4 ppb on Sep 23

Minimum Value: 0.1 ppb on Sep 12 01:00

Minimum Daily Average: 0.1 ppb on Sep 12

Maximum Diurnal Average: 1.0 ppb at hour 7

Minimum Diurnal Average: 0.5 ppb at hour 17

Monthly Average: 0.66 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.3$ Median = 0.5 $Q_3 = 0.9$ $P_{90} = 1.4$ $P_{99} = 2.3$

Hours in Service:	720
Hours of Data:	618
Hours of Missing Data:	102
Hours of Calibration:	35
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-Sep	0.3	0.6	Z	0.6	0.6	0.7	0.9	1.1	0.5	0.3	0.3	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.5	0.6	0.7	0.5	0.7	1.3	0.6	1.3
2-Sep	1.0	0.8	0.8	Z	0.9	1.0	1.1	0.9	0.7	0.7	C	C	C	C	C	0.4	0.3	0.3	0.3	0.5	0.8	0.8	1.0	0.5	0.7	1.1
3-Sep	0.9	1.0	1.2	1.0	Z	1.5	2.1	1.1	1.3	0.8	0.5	0.5	0.7	0.7	0.4	0.5	0.6	0.5	1.2	1.0	1.1	1.1	1.0	0.7	0.9	2.1
4-Sep	0.7	0.6	0.6	0.6	0.7	Z	1.2	1.2	1.6	0.9	0.9	0.7	0.6	0.6	0.6	0.5	0.5	0.9	1.3	1.1	0.7	0.8	0.8	0.6	0.8	1.6
5-Sep	Z	0.7	0.6	0.7	0.9	0.9	0.7	0.6	0.5	0.3	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.6	0.4	0.7	1.0	0.7	1.4	0.6	1.4
6-Sep	0.8	Z	0.6	0.4	0.5	0.5	0.6	0.9	1.4	1.7	1.3	0.8	0.6	0.2	0.3	0.3	0.5	0.8	0.7	0.2	0.3	0.2	0.6	0.2	0.6	1.7
7-Sep	0.2	0.2	Z	0.4	0.4	0.7	0.9	0.6	1.0	1.3	1.1	1.7	1.3	0.9	0.6	0.5	0.3	0.6	0.5	0.3	0.3	0.5	0.3	0.3	0.6	1.7
8-Sep	0.8	0.6	1.3	Z	1.5	1.0	0.7	1.0	1.2	1.3	0.8	0.7	0.6	0.9	0.9	0.7	0.5	0.4	0.5	0.5	0.3	0.3	0.3	0.3	0.7	1.5
9-Sep	0.4	0.7	0.6	0.6	Z	0.9	0.8	0.5	0.4	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	0.3	DF	0.4	0.9
10-Sep	DF	DF	0.2	0.2	0.1	Z	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	0.2	0.1	0.1	0.1	0.1	0.2	0.4
11-Sep	Z	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3
12-Sep	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	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.3
13-Sep	0.2	0.2	Z	0.5	0.5	0.4	0.7	0.8	1.0	1.5	1.7	0.7	0.7	0.7	0.8	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.7	1.7
14-Sep	0.4	0.5	0.5	Z	1.0	2.3	3.8	1.6	0.4	0.4	0.5	0.6	1.4	1.6	0.7	1.0	0.5	0.4	0.7	1.6	2.2	1.9	1.1	0.7	1.1	3.8
15-Sep	0.6	0.3	0.2	0.4	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	0.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7
16-Sep	0.2	0.2	0.2	0.2	0.2	Z	0.6	0.4	0.4	0.3	0.6	0.6	0.2	0.1	0.1	0.1	0.1	0.2	0.4	0.6	0.9	1.3	0.5	0.9	0.4	1.3
17-Sep	Z	1.7	1.6	1.6	1.9	2.2	2.4	2.1	2.3	1.9	1.2	0.8	0.6	0.5	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	1.1	2.4
18-Sep	0.5	Z	0.6	0.5	0.8	0.6	0.4	0.3	0.3	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	0.8	0.7	0.4	0.8
19-Sep	0.6	1.3	Z	1.0	0.8	0.9	1.0	1.0	0.7	0.6	0.5	0.5	0.5	0.7	1.1	1.0	0.8	0.9	1.0	1.0	1.0	1.2	2.2	1.6	1.0	2.2
20-Sep	1.2	1.0	0.9	Z	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.6	0.4	0.5	0.7	0.6	0.7	0.7	0.8	1.1	0.9	0.8	0.7	0.8	1.2
21-Sep	0.7	0.7	0.7	0.8	Z	1.1	0.9	1.1	1.6	1.6	1.4	1.1	1.1	1.3	1.0	0.9	1.1	1.3	1.4	1.5	1.5	1.5	1.9	2.2	1.2	2.2
22-Sep	1.5	1.4	1.7	2.3	2.2	Z	2.5	2.1	2.1	1.5	0.8	1.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	1.0	2.5
23-Sep	Z	0.5	0.4	0.4	0.3	0.5	1.1	2.1	2.1	1.7	1.3	0.9	1.3	1.6	3.2	3.2	2.2	1.6	1.5	1.6	1.4	1.6	1.4	1.2	1.4	3.2
24-Sep	2.4	Z	0.7	0.5	0.5	0.5	0.5	0.7	0.7	0.8	0.5	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.6	0.6	1.1	0.6	2.4
25-Sep	1.4	1.9	Z	2.0	1.1	1.2	2.0	1.1	0.7	0.6	0.4	0.4	0.4	0.4	0.5	0.7	0.5	0.8	0.5	0.8	0.8	0.9	0.8	0.5	0.9	2.0
26-Sep	0.5	0.6	1.6	Z	0.9	0.4	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	0.3	1.6
27-Sep	0.3	0.4	0.4	0.4	Z	0.5	0.4	0.4	0.4	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	0.3	0.3	0.3	0.5
28-Sep	0.3	0.3	0.4	0.4	0.4	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	0.4
29-Sep	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
30-Sep	UO	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
	0.7	0.7	0.7	0.7	0.8	0.8	1.0	0.9	0.8	0.8	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.7	Diurnal Average	
	2.4	1.9	1.7	2.3	2.2	2.3	3.8	2.1	2.3	1.9	1.7	1.7	1.4	1.6	3.2	3.2	2.2	1.6	1.5	1.6	2.2	1.9	2.2	2.2	Diurnal Maximum	

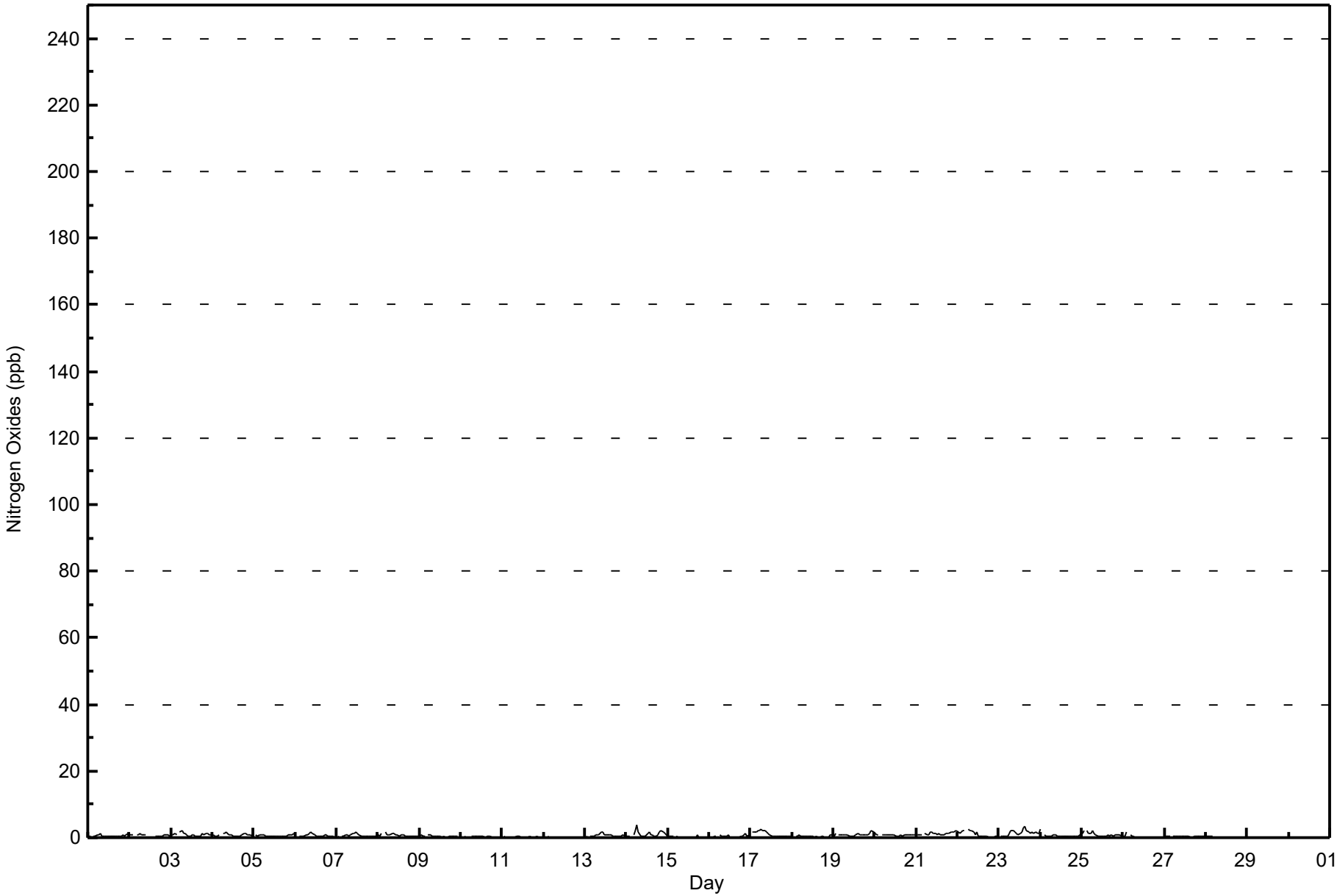
Z - zerospan C - Calibration DF - DAS Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Stony Mountain - September 2026



Nitrogen Oxides (NO_X) - ppb
Stony Mountain - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	618	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: 618

Total Number of Hours: 720

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	16	16	12	15	27	25	31	42	34	67	68	52	45	63	67	38	618
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	16	16	12	15	27	25	31	42	34	67	68	52	45	63	67	38	618

Total Number of Valid Hours: 618

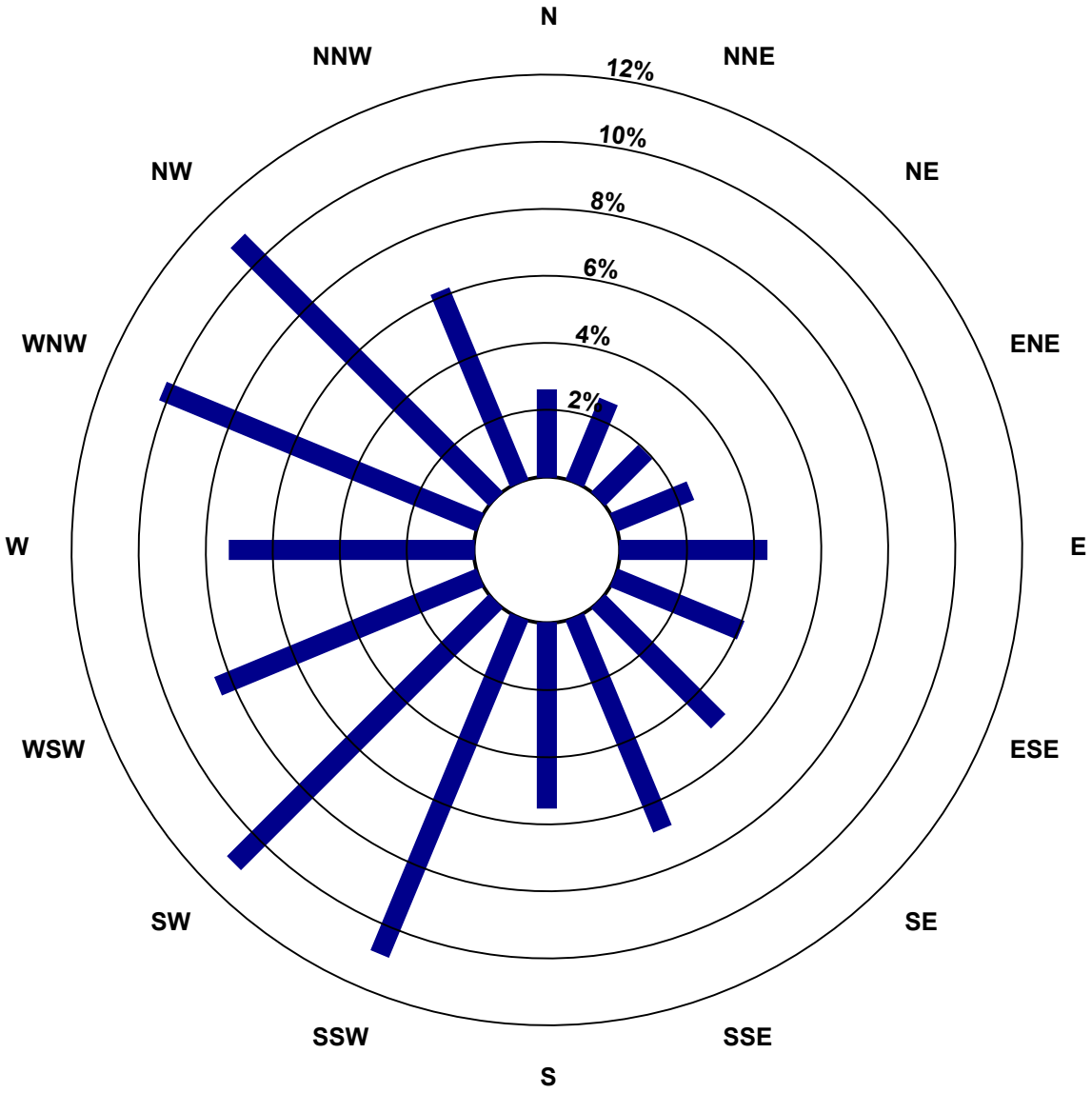
Total Number of Hours: 720

Wood Buffalo Environmental Association

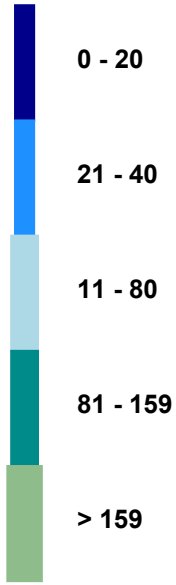
Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Stony Mountain



Classes (ppb)



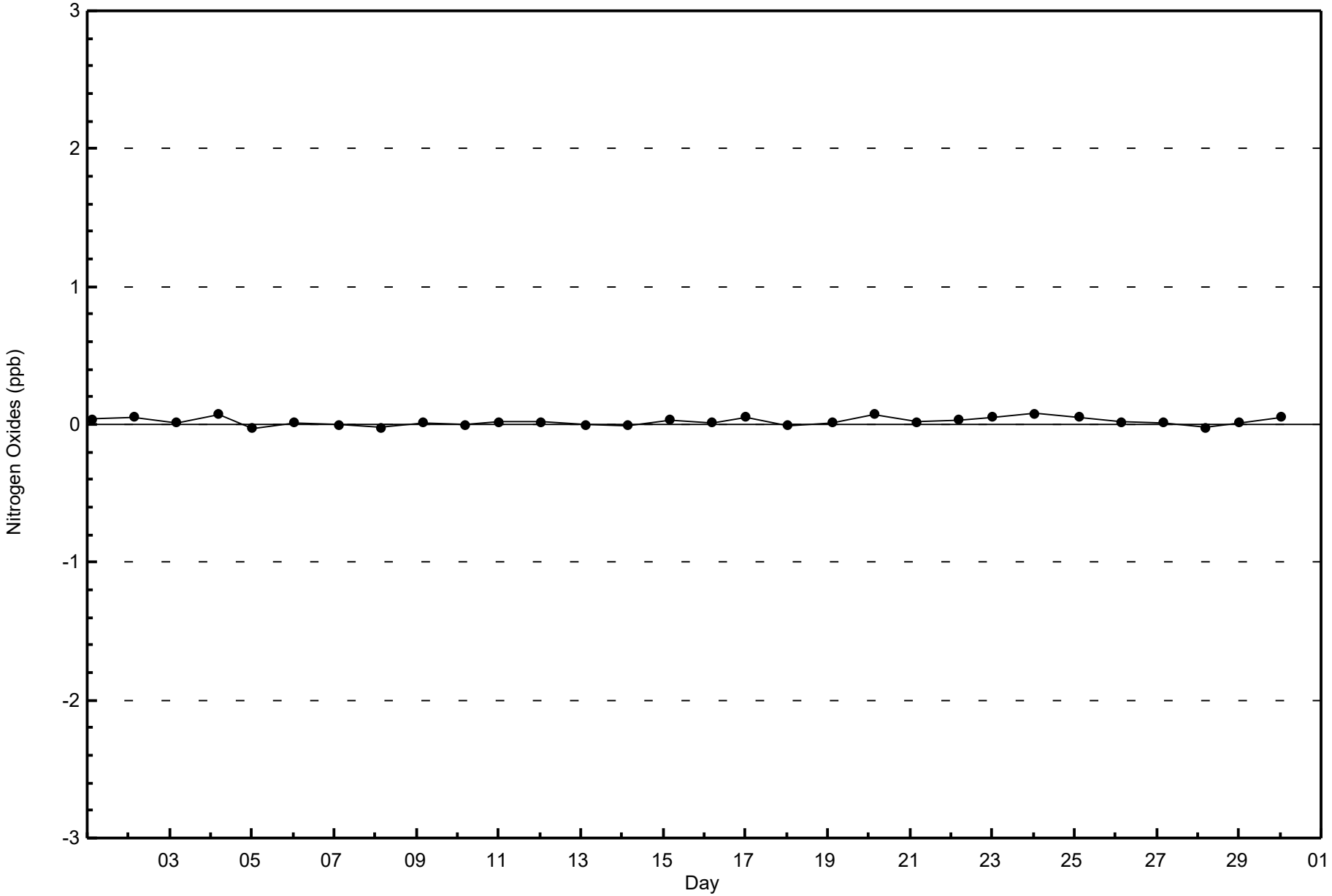
Total Number of Valid Hours: 618

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Stony Mountain - September 2026

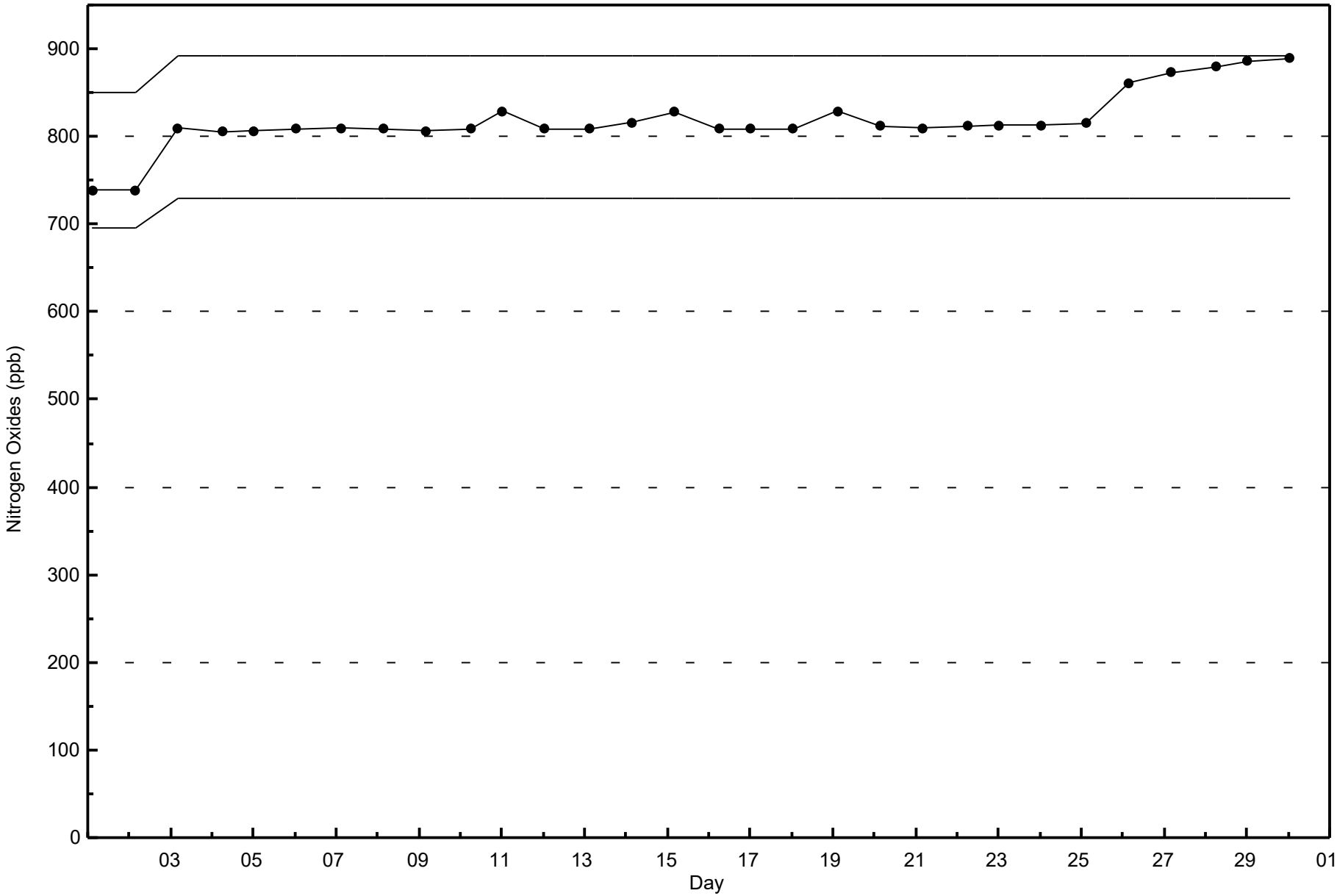


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Stony Mountain - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Stony Mountain - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 46.9 ppb on Sep 21 16:00 Maximum Daily Average: 35.8 ppb on Sep 21

Minimum Value: 6.6 ppb on Sep 7 06:00 Minimum Daily Average: 13.3 ppb on Sep 7
Maximum Diurnal Average: 32.1 ppb at hour 16 Minimum Diurnal Average: 20.0 ppb at hour 6
Monthly Average: 25.46 ppb Percentiles: P_1 = 8.3 P_{10} = 14.2 Q_1 = 19.0 Median = 25.8 Q_3 = 32.0 P_{90} = 35.7 P_{99} = 42.4

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	34
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-Sep	23.2	Z	21.5	21.4	18.3	19.2	20.9	21.1	23.4	29.4	31.2	31.9	35.5	38.0	38.9	41.4	42.1	40.9	36.5	32.3	28.4	26.8	24.1	23.3	29.1	42.1
2-Sep	24.0	23.6	Z	23.8	22.7	24.3	24.4	24.5	26.7	31.5	36.7	40.2	40.1	40.2	39.6	39.5	37.8	35.1	34.4	34.0	31.7	29.6	28.5	27.7	31.3	40.2
3-Sep	25.8	24.7	22.9	Z	16.5	15.0	11.3	12.3	11.6	11.8	11.6	12.1	12.4	18.6	32.4	31.3	30.3	30.9	24.9	23.0	21.3	19.5	17.7	16.1	19.7	32.4
4-Sep	13.4	12.1	12.6	11.2	Z	14.9	15.1	17.4	22.3	27.0	30.7	31.2	28.1	29.5	31.6	35.1	38.2	25.6	13.9	13.9	15.2	15.3	14.6	15.4	21.1	38.2
5-Sep	15.6	14.1	15.4	15.1	14.5	Z	13.5	13.9	14.4	16.6	17.0	18.2	19.6	20.2	20.5	20.9	20.9	18.5	13.9	13.5	13.4	12.2	13.1	12.3	16.0	20.9
6-Sep	Z	12.1	12.3	11.9	7.6	6.7	6.9	9.0	7.6	8.2	11.1	16.9	21.1	19.8	20.4	17.9	14.4	11.2	11.5	18.4	19.7	19.7	19.2	18.4	14.0	21.1
7-Sep	17.1	Z	13.3	11.8	8.9	6.6	8.3	8.1	11.4	11.3	10.7	13.8	16.2	18.5	19.4	16.7	18.4	20.1	17.1	14.5	13.6	9.1	10.0	10.8	13.3	20.1
8-Sep	10.7	9.8	Z	12.0	12.2	13.1	13.8	13.6	14.7	17.1	22.4	26.6	29.5	31.7	32.3	32.7	30.4	25.7	20.9	25.0	26.0	25.3	23.8	22.2	21.4	32.7
9-Sep	21.3	19.5	17.7	Z	17.9	14.2	12.2	11.9	13.7	18.6	24.2	29.2	31.8	33.6	34.9	33.6	31.3	30.6	29.0	27.2	26.5	29.7	32.4	DF	24.6	34.9
10-Sep	DF	DF	33.4	33.3	Z	31.3	33.0	31.4	29.6	32.1	35.3	35.4	34.8	33.7	29.6	26.1	24.9	22.4	18.8	17.9	18.2	16.9	18.0	18.6	27.4	35.4
11-Sep	20.0	20.7	20.4	20.3	19.9	Z	19.0	18.8	18.4	18.7	19.4	20.0	20.5	22.4	24.4	23.4	22.0	21.6	23.8	23.7	22.7	21.4	20.9	19.1	20.9	24.4
12-Sep	Z	17.1	16.5	16.7	16.9	16.0	15.4	15.2	16.6	19.5	26.3	28.6	30.1	28.0	30.6	31.6	32.3	29.4	25.6	27.0	26.8	26.3	26.3	23.6	23.6	32.3
13-Sep	21.9	Z	18.8	18.3	18.0	16.7	17.4	19.0	22.4	26.4	31.4	33.7	34.1	36.0	38.3	39.5	38.3	36.5	32.6	29.2	26.6	26.1	25.0	23.7	27.4	39.5
14-Sep	24.1	22.1	Z	21.6	17.1	11.2	8.4	15.6	22.8	23.9	24.2	22.7	21.9	22.8	25.7	24.1	24.4	22.6	17.5	15.5	14.7	15.7	16.3	15.7	19.6	25.7
15-Sep	15.8	15.2	14.5	Z	13.4	12.9	14.2	13.8	13.2	14.1	17.4	19.9	23.2	24.2	25.1	26.3	24.2	21.7	18.6	20.4	18.3	17.5	20.8	26.0	18.7	26.3
16-Sep	27.7	27.4	25.2	22.2	Z	16.4	12.8	15.9	15.0	14.1	16.2	18.6	24.7	28.2	27.5	27.9	28.0	17.8	22.9	23.9	22.7	21.1	20.7	18.7	21.5	28.2
17-Sep	19.2	20.3	19.6	20.6	20.2	Z	19.7	19.3	19.8	21.4	26.1	28.7	30.7	29.7	31.6	31.1	27.6	24.3	23.7	26.2	26.4	23.9	23.1	24.9	24.3	31.6
18-Sep	Z	24.4	24.5	23.3	17.9	19.7	24.3	24.8	24.8	29.2	30.9	34.1	37.5	38.8	39.5	38.3	36.3	32.4	32.0	34.6	34.5	34.9	33.7	32.3	30.6	39.5
19-Sep	33.6	Z	29.9	29.1	27.5	27.5	26.6	27.1	29.5	33.4	37.6	39.3	39.8	41.8	44.9	44.8	44.1	42.2	40.4	38.0	36.1	34.1	32.4	34.4	35.4	44.9
20-Sep	34.1	34.3	Z	34.8	33.8	32.9	32.4	31.4	30.8	30.0	30.9	35.8	39.3	40.6	41.1	42.8	42.3	39.3	36.0	32.6	30.8	31.5	30.4	32.0	34.8	42.8
21-Sep	33.7	33.1	32.0	Z	33.2	34.8	31.8	32.6	31.9	32.5	45.5	C	C	C	C	46.9	46.4	42.0	37.3	34.8	33.4	32.3	33.2	32.1	35.8	46.9
22-Sep	28.9	25.8	25.2	23.0	Z	17.9	16.9	17.2	21.9	23.2	28.3	30.9	36.1	39.4	39.9	39.6	39.0	36.8	35.3	36.6	36.8	36.5	34.9	34.0	30.6	39.9
23-Sep	31.6	32.2	32.2	32.0	33.1	Z	30.8	25.8	24.0	25.5	21.6	24.4	20.9	21.8	21.8	22.4	20.9	18.7	16.4	16.1	15.6	15.1	16.4	21.6	23.5	33.1
24-Sep	Z	28.1	31.6	33.0	33.0	33.2	33.5	31.7	31.1	29.1	32.5	34.6	36.6	37.9	39.5	41.1	38.5	35.4	32.9	34.2	34.9	34.7	34.2	32.4	34.1	41.1
25-Sep	29.6	Z	24.4	25.7	26.3	25.4	24.2	27.9	29.9	30.3	30.3	29.3	29.0	28.2	27.0	26.6	26.0	24.7	23.6	21.6	18.6	18.2	16.0	14.9	25.1	30.3
26-Sep	13.0	16.3	Z	14.7	18.0	19.2	21.4	21.8	23.8	26.1	26.1	26.6	26.1	27.0	27.3	26.6	26.8	27.2	28.5	27.4	27.2	26.3	27.2	23.1	23.8	28.5
27-Sep	21.1	20.3	20.8	Z	19.9	19.9	19.5	19.4	20.6	21.4	23.6	26.4	29.8	30.9	31.5	32.1	29.9	28.6	27.8	29.9	30.6	28.6	29.0	29.1	25.7	32.1
28-Sep	27.8	24.9	25.8	24.2	Z	24.3	23.7	23.9	25.0	27.4	32.9	35.7	35.6	34.9	34.7	35.8	37.2	37.7	34.0	30.1	31.1	32.3	33.1	32.7	30.6	37.7
29-Sep	32.1	31.6	30.4	30.5	33.0	Z	26.6	19.8	27.3	32.0	30.7	35.9	30.5	30.3	33.7	35.6	36.0	35.2	35.0	35.2	34.6	33.8	32.8	32.0	31.9	36.0
30-Sep	Z	30.1	28.3	26.2	26.1	25.4	26.3	28.2	28.6	31.5	33.6	34.8	36.0	33.9	32.0	32.2	32.1	31.6	29.4	27.6	27.3	29.0	30.5	26.1	29.9	36.0
	23.6	22.5	22.8	22.3	21.0	20.0	20.1	20.4	21.8	23.8	26.5	28.1	29.4	30.4	31.6	32.1	31.4	28.9	26.5	26.1	25.5	24.8	24.6	23.9	Diurnal Average	
	34.1	34.3	33.4	34.8	33.8	34.8	33.5	32.6	31.9	33.4	45.5	40.2	40.1	41.8	44.9	46.9	46.4	42.2	40.4	38.0	36.8	36.5	34.9	34.4	Diurnal Maximum	

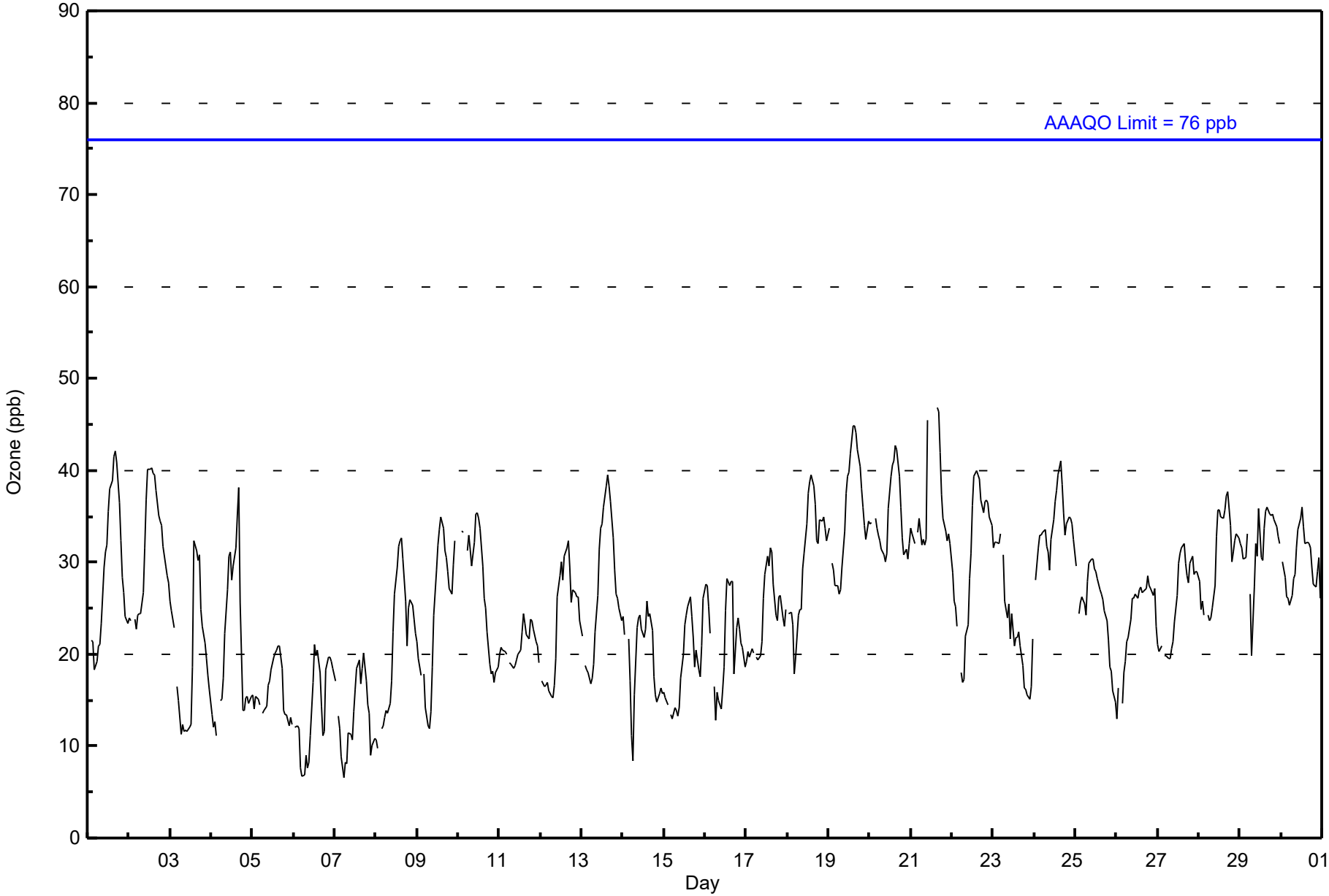
Z - zerospan C - Calibration DF - DAS Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Stony Mountain - September 2026



Ozone (O_3) - ppb
Stony Mountain - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	210	30.75	30.75
21 - 50	473	69.25	100.00
51 - 82	0	0.00	100.00
> 83	0	0.00	100.00

Total Number of Valid Hours: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Ozone (O_3) - ppb

Stony Mountain - September 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	10	8	6	9	8	18	17	9	12	18	5	10	22	32	12	210
21 - 50	2	6	4	9	17	17	17	23	26	67	58	55	52	46	48	26	473
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	16	16	12	15	26	25	35	40	35	79	76	60	62	68	80	38	683

Total Number of Valid Hours: 683

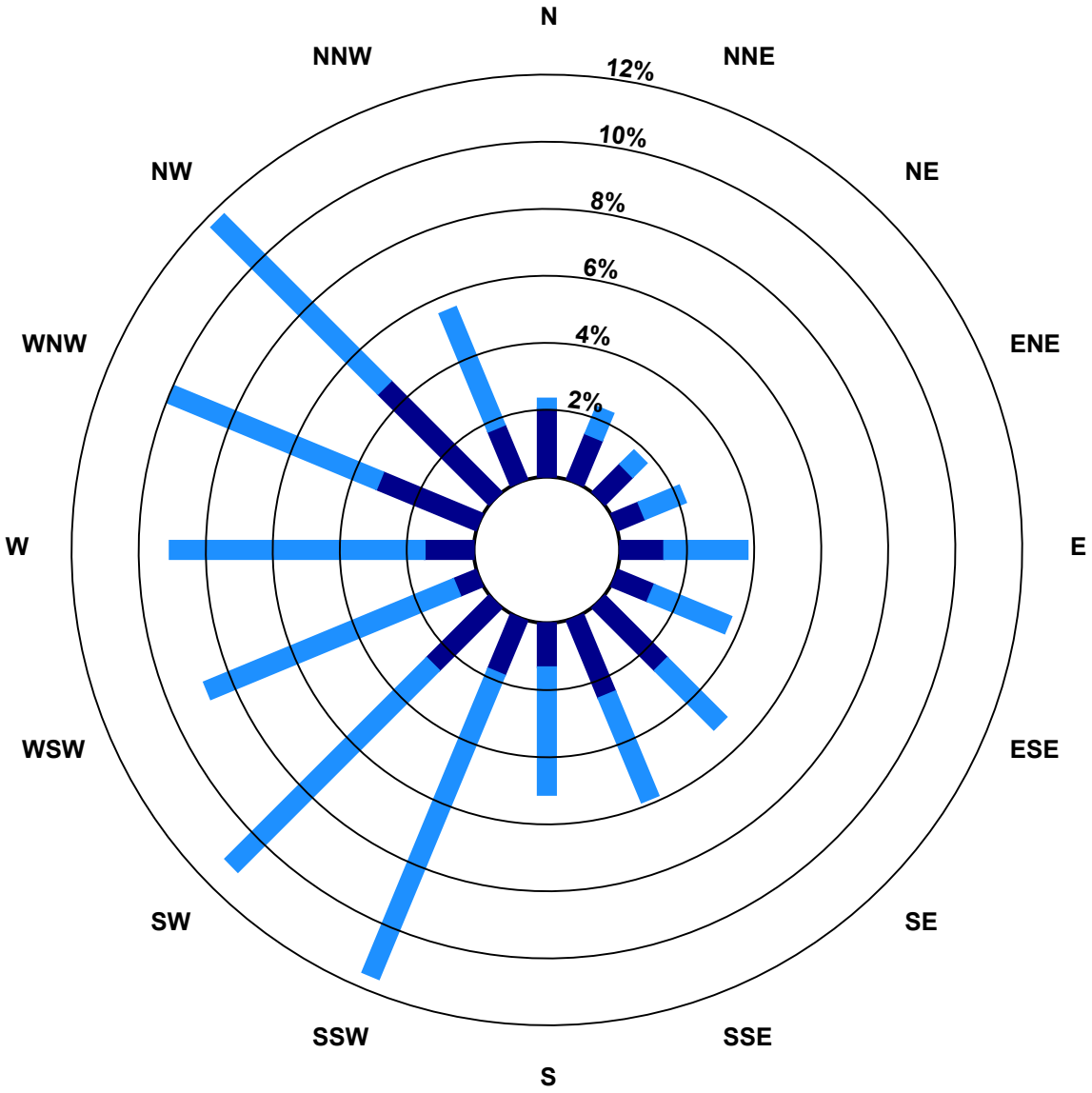
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Ozone (O_3) - ppb

Stony Mountain



Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

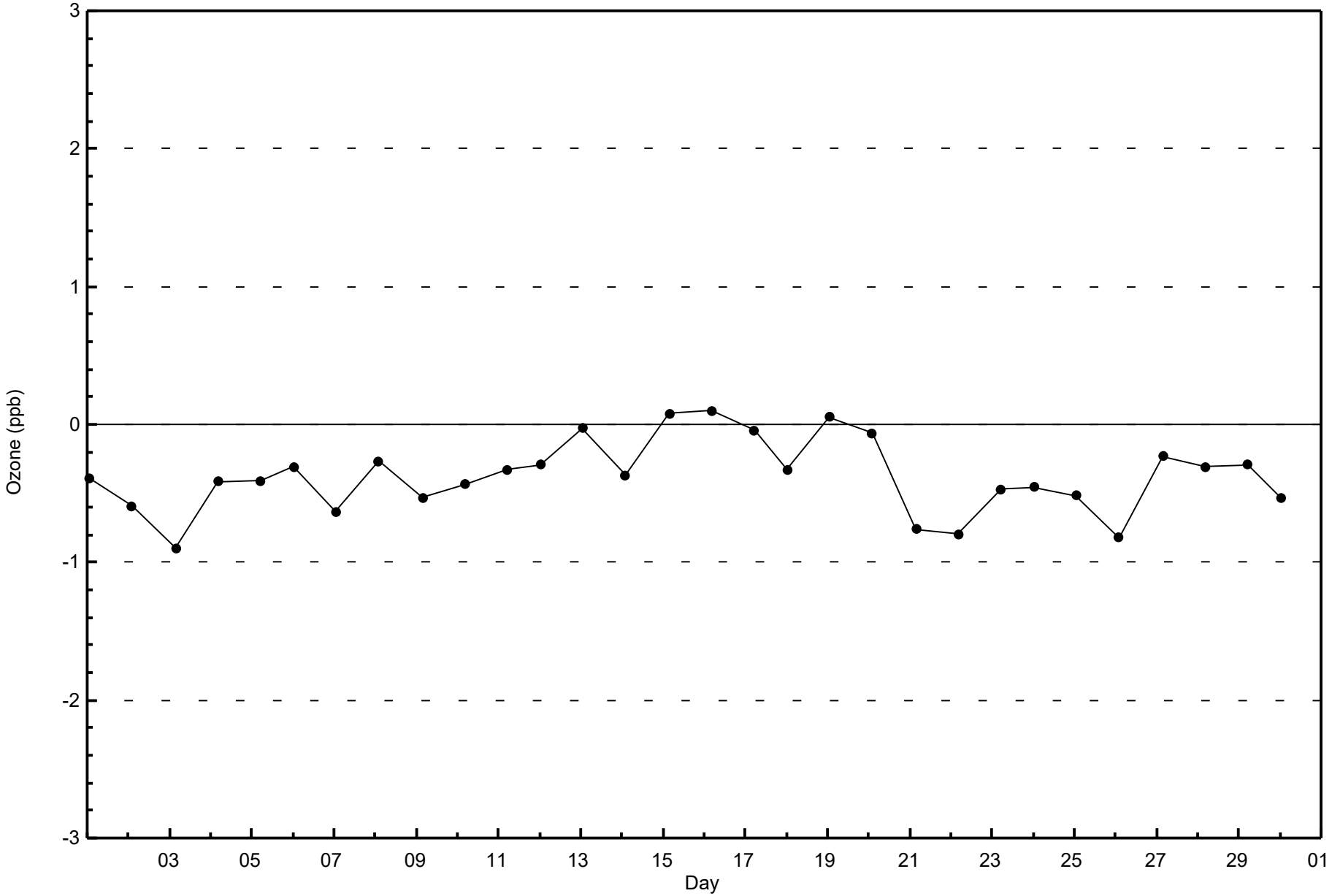
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Stony Mountain - September 2026

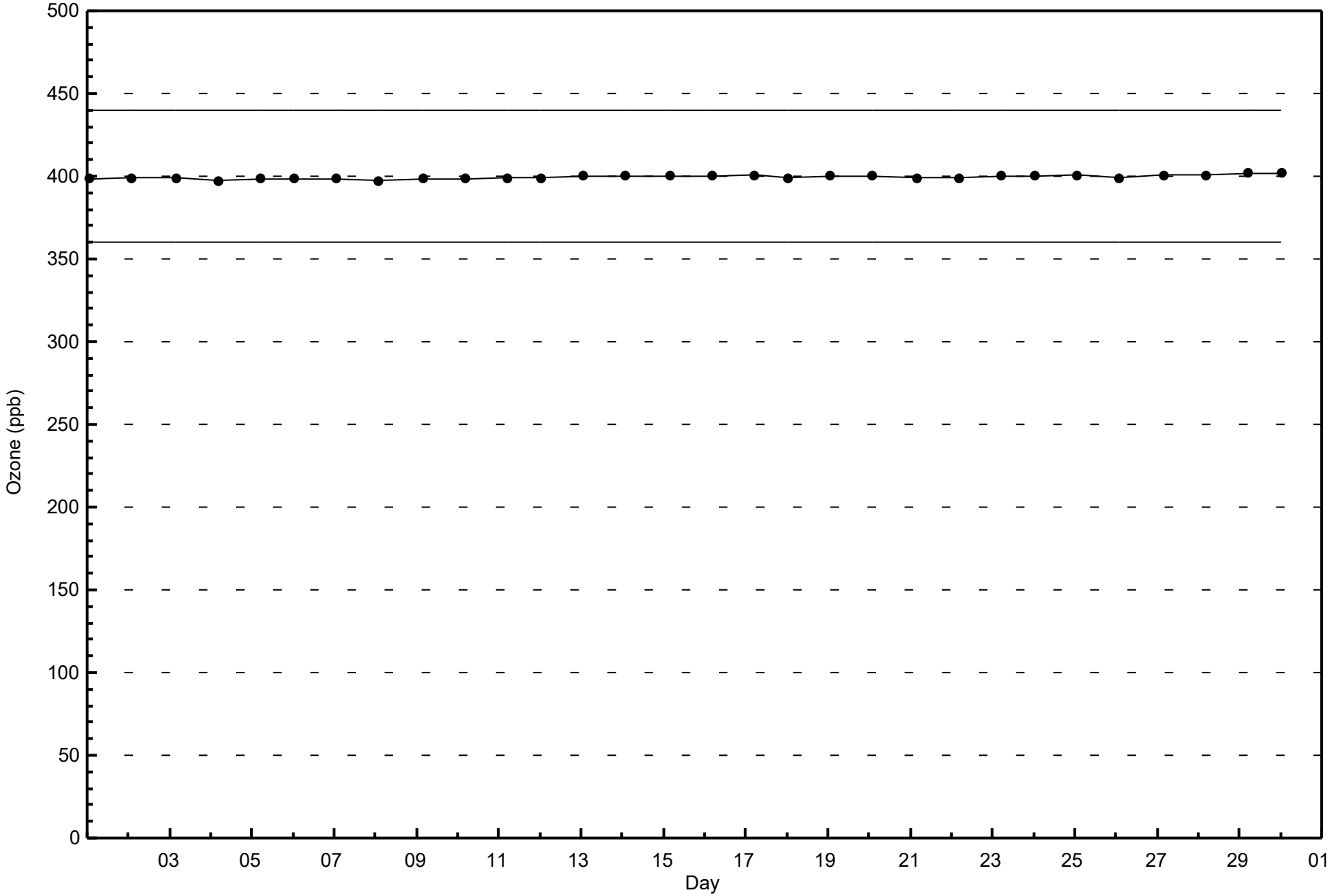


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Stony Mountain - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Stony Mountain - September 2026

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

Maximum Value: 12.9 $\mu g/m^3$ on Sep 23 14:00

Maximum Daily Average: 4.8 $\mu g/m^3$ on Sep 21

Minimum Value: 0.1 $\mu g/m^3$ on Sep 30 13:00

Minimum Daily Average: 0.6 $\mu g/m^3$ on Sep 30

Maximum Diurnal Average: 2.5 $\mu g/m^3$ at hour 16

Minimum Diurnal Average: 2.1 $\mu g/m^3$ at hour 12

Monthly Average: 2.37 $\mu g/m^3$

Percentiles: P_1 = 0.2 P_{10} = 0.7 Q_1 = 1.1 Median = 2.3 Q_3 = 3.3 P_{90} = 4.1 P_{99} = 6.2

Hours in Service:	720
Hours of Data:	689
Hours of Missing Data:	31
Hours of Calibration:	1
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-Sep	2.0	2.2	2.3	2.5	2.7	2.9	2.9	2.8	2.6	2.5	2.4	2.3	1.8	1.8	1.9	2.1	2.0	2.4	2.6	2.6	2.8	3.1	2.7	2.7	2.4	3.1
2-Sep	2.7	2.7	2.8	2.8	2.9	3.0	3.2	3.3	3.4	3.2	3.0	2.9	2.9	2.9	2.9	2.8	3.1	3.5	3.7	4.0	3.9	4.1	4.0	4.1	3.3	4.1
3-Sep	3.9	4.0	3.8	3.9	4.1	4.1	4.3	4.2	3.9	3.8	3.5	4.0	4.0	3.5	3.0	2.9	3.1	3.5	3.8	3.9	4.0	4.1	4.1	4.2	3.8	4.3
4-Sep	4.2	4.3	4.4	4.4	4.3	4.1	4.1	4.0	3.1	3.1	3.0	2.8	3.1	4.6	5.3	5.7	4.9	4.4	5.5	5.2	2.6	2.2	1.7	UO	4.0	5.7
5-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	1.5	1.5	1.6	1.5	1.8	2.2	1.9	1.8	2.2	2.2	2.1	--	2.2
6-Sep	2.0	1.9	1.9	2.0	2.4	2.4	2.2	2.5	2.9	3.0	2.9	1.4	1.6	1.5	1.8	2.1	2.4	2.6	2.7	1.9	1.9	2.1	2.0	2.0	2.2	3.0
7-Sep	1.8	2.0	2.0	2.3	2.5	2.6	2.5	2.7	2.7	2.6	2.9	2.8	3.2	3.7	3.4	3.0	2.8	2.6	2.0	1.6	1.6	2.2	2.4	2.2	2.5	3.7
8-Sep	2.4	2.7	2.6	2.6	2.6	2.8	3.2	3.7	3.7	4.1	4.5	4.5	4.7	5.3	5.6	5.1	4.9	4.1	4.3	3.7	3.6	3.4	3.7	3.8	3.8	5.6
9-Sep	4.0	4.2	4.1	4.1	3.8	4.1	4.0	3.9	3.9	3.6	3.4	3.2	3.0	2.8	2.6	2.4	2.3	2.3	2.2	2.6	2.8	2.6	1.7	1.5	3.1	4.2
10-Sep	1.5	1.5	1.2	0.9	0.7	0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.7	1.9	5.3	8.5	9.5	6.7	4.5	3.3	2.2	1.3	0.6	0.6	2.5	9.5
11-Sep	0.8	1.0	1.2	0.9	0.7	0.6	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.7	0.8	0.4	0.6	1.2	1.5	1.5	1.4	1.6	1.6	0.8	1.6
12-Sep	1.6	1.6	1.7	1.8	2.0	2.1	2.0	2.0	1.9	1.8	1.2	1.3	1.5	1.5	1.8	2.3	2.4	UO	UO	UO	UO	UO	UO	UO	--	2.4
13-Sep	UO	UO	UO	UO	UO	UO	2.6	2.7	2.7	2.8	2.8	2.6	2.6	2.5	2.5	2.4	2.4	2.4	2.4	2.3	2.5	2.6	2.5	2.6	2.5	2.8
14-Sep	2.6	3.0	2.8	2.8	3.0	3.5	3.6	2.3	0.6	0.8	1.3	1.1	2.1	3.2	3.1	2.7	1.2	1.0	1.1	1.6	2.5	2.4	1.5	0.8	2.1	3.6
15-Sep	0.6	0.7	0.9	0.9	1.0	0.9	0.7	0.8	1.0	1.1	0.9	0.8	0.9	1.0	1.1	1.4	1.4	1.4	1.4	1.6	1.7	1.5	1.6	1.3	1.1	1.7
16-Sep	1.1	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.6	1.4	1.5	1.5	1.7	1.8	2.0	2.3	2.7	2.4	2.3	2.6	2.7	1.7	2.7
17-Sep	2.9	2.9	2.9	3.0	3.2	3.1	3.0	3.2	3.2	3.3	3.3	3.2	3.1	3.2	3.2	3.1	3.3	3.2	3.2	3.1	3.2	3.2	3.2	3.4	3.1	3.4
18-Sep	3.4	3.5	3.3	3.4	3.4	3.3	2.4	1.9	1.9	1.6	1.4	1.4	1.0	0.8	1.0	1.4	1.4	2.7	3.4	2.1	1.5	1.3	1.4	1.5	2.1	3.5
19-Sep	1.5	1.8	1.8	1.7	1.8	1.9	2.0	2.0	1.7	2.0	2.2	2.3	2.4	2.8	3.0	3.4	3.3	3.6	4.1	4.1	3.9	4.0	4.1	3.9	2.7	4.1
20-Sep	4.0	3.9	3.9	3.8	3.9	3.8	3.9	3.8	3.7	3.8	3.6	3.5	3.1	2.9	3.2	3.8	3.8	3.8	3.9	4.0	4.1	4.1	4.1	4.3	3.8	4.3
21-Sep	4.2	4.4	4.5	4.7	4.9	4.9	5.1	5.0	5.0	5.0	5.7	5.4	4.5	C	4.4	4.4	4.1	4.5	5.0	5.1	4.7	4.6	4.6	4.7	4.8	5.7
22-Sep	4.8	4.9	5.1	5.1	6.0	6.8	7.6	7.3	5.5	5.9	4.4	2.0	1.3	1.1	1.2	1.5	1.6	0.8	0.6	0.5	0.5	0.6	0.6	0.6	3.2	7.6
23-Sep	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	1.1	1.1	1.4	2.0	6.1	12.9	5.1	3.3	3.3	2.4	2.1	3.1	2.6	2.7	2.6	2.7	2.5	12.9
24-Sep	3.0	2.4	1.6	1.2	1.1	1.1	1.0	1.2	1.1	1.1	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	1.1	2.4	2.1	1.9	1.4	2.5	1.4	3.0
25-Sep	3.3	2.5	3.3	2.5	1.6	1.5	UO	UO	UO	1.8	2.7	2.7	2.8	3.1	3.3	3.5	3.5	3.6	3.6	3.7	3.6	3.8	3.9	3.6	3.0	3.9
26-Sep	3.6	3.4	3.3	3.1	1.3	0.7	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.2	0.3	0.3	0.3	0.4	0.6	0.7	0.8	0.9	3.6
27-Sep	0.9	0.9	0.9	0.8	0.9	0.9	1.1	1.0	1.0	1.1	1.2	1.2	1.2	1.2	1.0	0.7	0.9	0.9	1.0	0.9	0.8	0.8	0.8	0.7	0.9	1.2
28-Sep	0.9	0.9	1.0	0.9	1.0	1.0	0.9	0.9	0.9	1.0	0.8	0.7	0.8	0.8	0.7	0.9	1.1	1.2	1.3	1.3	1.5	1.9	2.2	2.4	1.1	2.4
29-Sep	2.5	2.6	2.6	2.6	2.3	2.5	1.9	2.1	1.6	0.7	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.9	0.9	1.1	1.4	2.6
30-Sep	1.1	1.1	1.2	1.2	1.3	1.2	1.1	1.1	0.7	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.6	1.3
	2.4	2.5	2.5	2.4	2.4	2.4	2.5	2.4	2.3	2.2	2.2	2.1	2.2	2.4	2.4	2.5	2.5	2.4	2.5	2.5	2.3	2.3	2.3	2.3	Diurnal Average	
	4.8	4.9	5.1	5.1	6.0	6.8	7.6	7.3	5.5	5.9	5.7	5.4	6.1	12.9	5.6	8.5	9.5	6.7	5.5	5.2	4.7	4.6	4.6	4.7	Diurnal Maximum	

C - Calibration UO - Unstable Operation

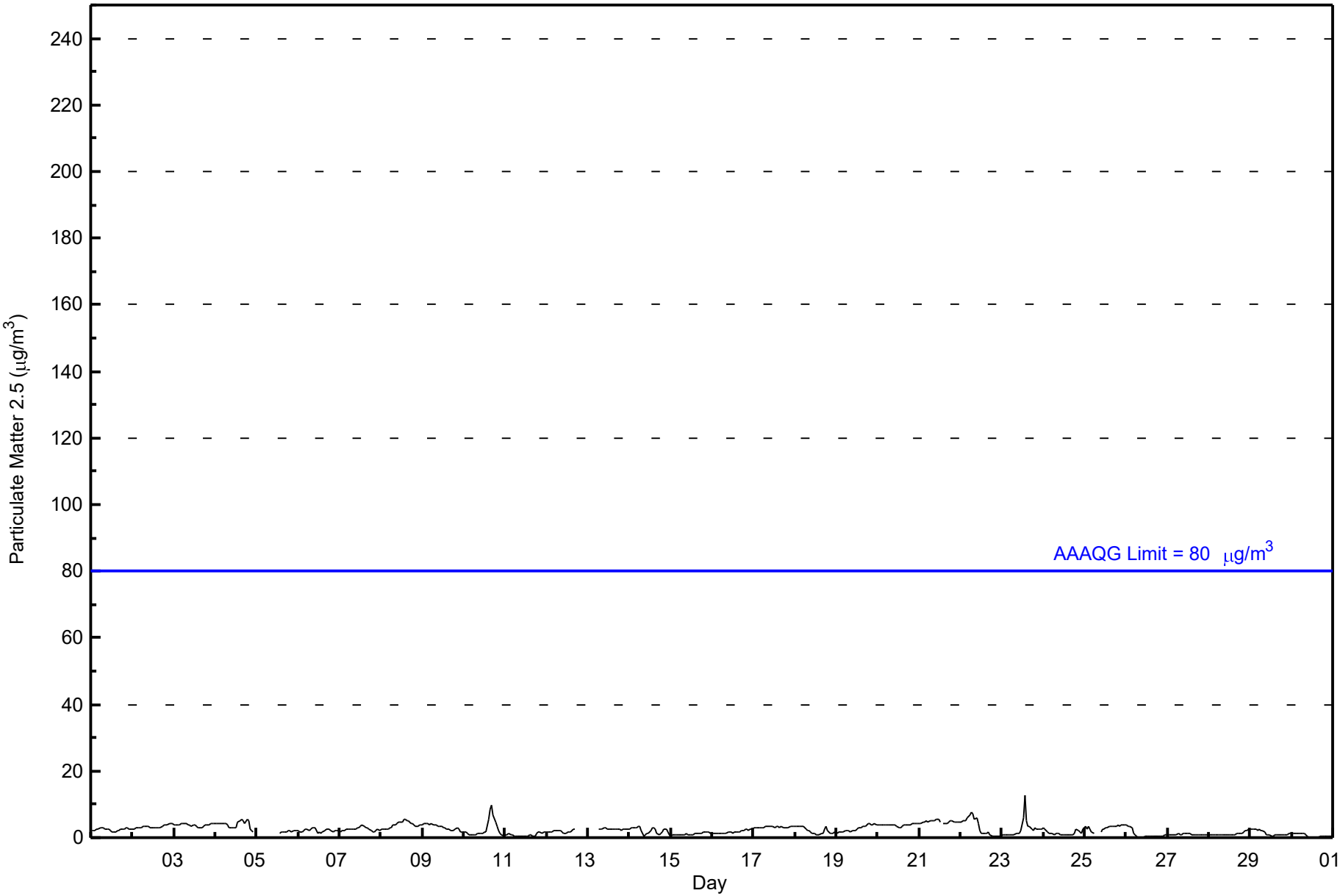
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Stony Mountain - September 2026



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

Stony Mountain - September 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	675	97.97	97.97
6 - 15	14	2.03	100.00
16 - 25	0	0.00	100.00
26 - 80	0	0.00	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 689

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Stony Mountain - September 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	9	12	9	14	27	25	35	42	36	83	72	56	64	71	82	35	672
6 - 15	0	1	0	0	0	0	2	2	0	1	0	1	0	3	1	3	14
16 - 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	9	13	9	14	27	25	37	44	36	84	72	57	64	74	83	38	686

Total Number of Valid Hours: 686

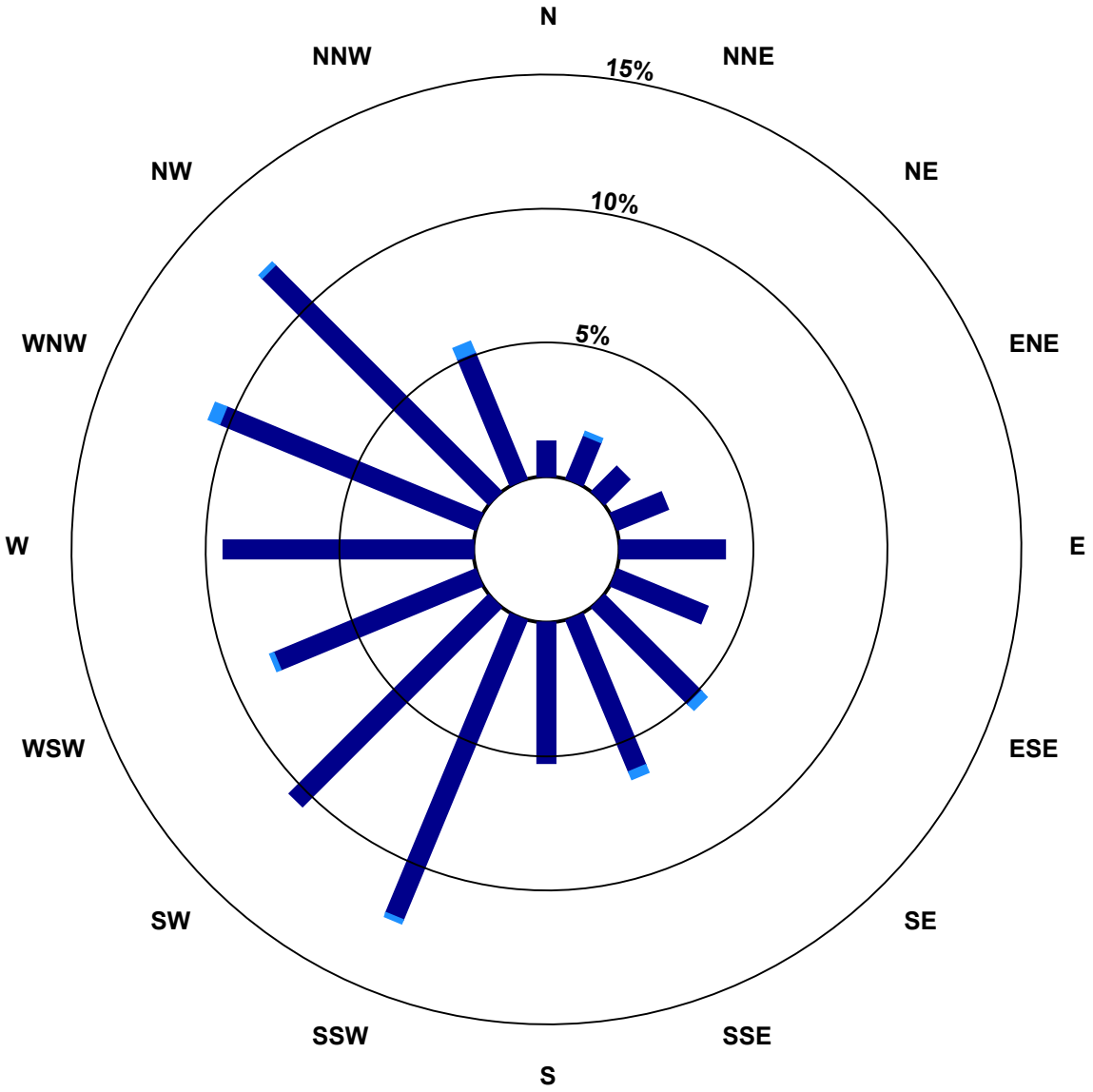
Total Number of Hours: 720

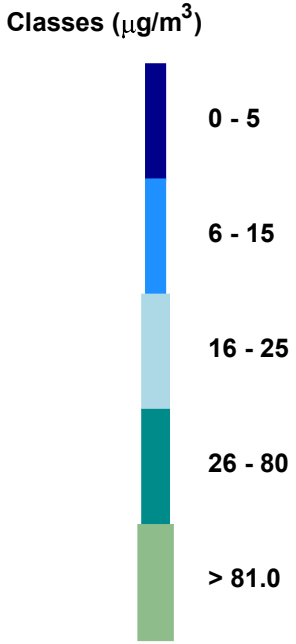
Wood Buffalo Environmental Association

Wind Rose Sep 2026

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

Stony Mountain





Total Number of Valid Hours: 686

Maximum Value: 26.4 C on Sep 2 15:00

Maximum Daily Average: 18.8 C on Sep 2

Minimum Value: 1.4 C on Oct 1 00:00

Minimum Daily Average: 4.5 C on Sep 30

Maximum Diurnal Average: 16.0 C at hour 15

Minimum Diurnal Average: 8.0 C at hour 6

Monthly Average: 11.42 C

Percentiles: P_1 = 2.8 P_{10} = 5.1 Q_1 = 8.0 Median = 10.9 Q_3 = 14.5 P_{90} = 18.4 P_{99} = 24.1

Hours in Service:	720
Hours of Data:	717
Hours of Missing Data:	3
Hours of Calibration:	0
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-Sep	12.5	11.7	11.8	11.4	10.7	10.3	10.8	12.6	15.9	18.9	20.3	21.4	22.6	23.6	24.1	23.9	23.4	22.0	19.7	17.1	15.0	14.7	14.3	14.3	16.8	24.1
2-Sep	14.2	13.8	13.7	12.7	11.9	11.9	12.4	14.4	17.6	20.9	23.3	24.9	26.0	26.1	26.4	25.3	24.0	21.8	20.3	19.1	18.3	17.8	17.6	16.9	18.8	26.4
3-Sep	16.0	15.8	15.1	14.7	13.9	13.5	13.1	13.5	13.8	14.3	14.4	14.7	15.8	18.0	19.9	19.5	18.8	18.4	17.0	15.9	15.8	15.2	14.6	14.1	15.6	19.9
4-Sep	14.0	13.9	13.5	12.9	12.4	12.0	12.0	13.0	15.7	17.9	19.7	19.2	18.6	16.8	16.8	17.4	18.2	17.3	14.4	12.2	11.1	10.6	10.0	9.0	14.5	19.7
5-Sep	8.7	8.4	7.8	7.8	7.8	7.6	7.6	7.8	8.3	8.7	9.4	10.7	11.8	12.7	12.5	13.3	13.2	12.6	11.0	8.8	8.3	8.0	8.6	8.5	9.6	13.3
6-Sep	8.4	7.6	8.2	9.1	9.1	9.0	9.1	10.1	10.7	12.5	13.5	14.5	16.0	16.1	15.4	15.5	15.1	14.2	13.7	13.4	13.0	12.5	12.1	10.9	12.1	16.1
7-Sep	9.8	9.2	8.8	8.4	8.0	7.2	8.8	9.9	10.9	12.2	12.4	13.2	13.5	14.1	14.5	14.0	14.1	14.5	12.9	12.3	12.2	10.5	10.1	10.9	11.3	14.5
8-Sep	10.2	9.7	9.2	9.6	9.7	9.5	9.7	10.7	12.9	14.9	16.1	17.4	18.9	19.1	18.8	19.6	19.2	16.8	13.6	12.1	12.6	12.8	12.6	12.0	13.7	19.6
9-Sep	11.9	11.4	11.0	10.9	11.0	10.9	10.7	11.5	12.9	14.4	16.5	18.3	19.1	19.7	19.4	19.1	17.9	17.5	16.5	15.4	14.8	15.9	16.2	DF	14.9	19.7
10-Sep	DF	DF	12.3	11.3	10.9	9.7	9.7	10.6	12.3	14.5	15.2	15.2	15.0	14.6	10.9	12.3	13.5	12.0	10.8	10.5	9.9	9.7	9.5	9.2	11.8	15.2
11-Sep	9.1	8.6	8.6	8.8	8.6	8.5	8.3	8.1	8.0	9.0	9.3	9.3	9.0	9.5	11.1	10.7	10.0	8.9	8.2	6.9	6.4	6.1	5.5	5.0	8.4	11.1
12-Sep	4.5	4.0	4.0	4.0	4.1	4.1	4.3	4.5	5.5	6.6	7.6	8.1	8.9	9.3	10.3	11.2	11.0	9.2	6.9	6.9	7.1	6.7	6.8	5.8	6.7	11.2
13-Sep	5.1	3.7	3.5	3.3	3.7	3.6	4.2	5.6	8.1	11.0	13.4	14.6	15.5	16.2	17.2	17.0	16.4	14.9	12.6	11.4	10.5	10.5	10.4	10.0	10.1	17.2
14-Sep	9.6	8.7	8.2	8.3	7.9	8.0	8.4	8.3	8.1	9.3	10.7	9.9	10.3	11.2	11.9	10.2	10.1	7.8	7.1	7.0	6.8	6.1	5.7	5.5	8.5	11.9
15-Sep	5.3	5.2	4.8	4.2	3.0	1.9	2.4	3.4	4.6	5.9	6.8	8.1	9.8	9.3	10.2	10.7	9.9	8.4	7.0	6.5	4.8	4.8	5.7	5.4	6.2	10.7
16-Sep	4.9	4.6	3.9	3.1	2.7	2.6	2.4	2.8	4.3	6.0	7.9	9.6	11.1	12.5	13.4	13.3	13.0	10.9	9.1	7.8	7.7	7.0	6.5	6.0	7.2	13.4
17-Sep	6.5	6.6	7.2	7.1	6.9	7.3	6.9	7.6	9.4	11.9	15.6	18.3	18.7	18.7	20.1	19.8	18.4	15.9	13.8	12.2	12.0	11.7	10.7	10.2	12.2	20.1
18-Sep	10.3	9.9	9.9	9.6	7.9	7.1	7.3	8.5	11.2	15.0	16.4	17.9	18.6	19.2	19.5	19.0	17.5	13.7	11.4	10.6	10.3	10.4	9.8	9.4	12.5	19.5
19-Sep	9.6	8.8	8.7	8.5	8.2	8.2	8.0	9.2	12.0	15.5	17.6	18.9	20.4	21.3	21.8	21.6	20.9	19.5	17.6	16.3	15.2	14.6	14.8	14.9	14.7	21.8
20-Sep	14.5	14.4	14.2	13.7	12.7	12.0	11.7	12.1	13.7	16.4	18.7	20.9	22.4	23.2	24.3	23.7	22.1	19.8	17.6	16.0	15.1	14.8	13.8	14.0	16.7	24.3
21-Sep	14.4	13.9	13.2	12.9	12.8	12.5	11.8	12.8	15.0	19.0	21.7	23.1	23.8	24.4	24.1	23.7	23.1	20.7	17.7	16.4	15.4	14.5	15.2	15.9	17.4	24.4
22-Sep	13.2	12.0	12.3	11.8	10.7	10.0	9.6	10.4	12.6	14.5	14.9	15.6	18.4	19.1	20.1	19.0	17.5	15.1	12.8	12.6	12.1	11.2	9.9	8.4	13.5	20.1
23-Sep	7.3	7.1	6.7	6.9	8.1	8.2	8.1	8.5	9.3	9.9	10.9	11.9	12.4	14.6	14.6	14.2	13.6	12.1	10.7	9.6	9.1	8.3	8.3	9.0	10.0	14.6
24-Sep	9.8	9.4	9.2	8.8	7.8	7.4	8.1	8.7	10.0	12.1	13.9	16.0	16.9	16.3	17.2	16.5	15.2	13.3	11.8	10.9	10.6	10.2	11.0	10.9	11.8	17.2
25-Sep	10.5	10.0	9.5	9.3	8.8	8.5	8.0	9.1	10.4	12.3	13.3	13.3	15.7	15.4	15.0	15.1	15.0	14.0	13.3	12.3	11.6	11.9	11.6	11.2	11.9	15.7
26-Sep	10.9	9.7	8.4	7.5	6.8	6.7	6.5	5.3	4.6	4.6	5.1	5.3	5.2	6.2	6.8	6.9	6.4	5.5	4.6	4.6	4.4	4.1	3.8	3.7	6.0	10.9
27-Sep	3.9	3.6	3.3	3.4	3.4	3.5	3.6	4.0	5.5	7.6	9.4	11.3	12.5	12.3	12.2	12.1	11.7	10.7	9.5	8.9	8.4	7.1	7.1	7.1	7.6	12.5
28-Sep	6.6	4.4	5.1	4.4	4.0	4.6	4.2	4.7	7.2	10.4	13.1	14.6	14.7	14.5	14.5	15.1	14.8	13.5	10.7	9.3	8.3	8.6	8.6	8.0	9.3	15.1
29-Sep	7.5	7.9	7.8	8.1	9.2	8.2	7.0	6.1	7.3	8.8	8.9	9.6	8.1	9.2	11.5	11.5	11.3	10.5	9.1	7.8	7.3	7.2	7.0	6.5	8.5	11.5
30-Sep	5.9	5.4	4.7	4.0	4.3	4.2	4.1	4.1	3.5	3.9	4.4	5.1	5.4	6.2	6.5	6.6	6.6	6.1	4.8	3.2	2.0	2.9	3.4	1.4	4.5	6.6
	9.5	9.0	8.8	8.5	8.2	8.0	8.0	8.6	10.0	12.0	13.3	14.4	15.2	15.6	16.0	15.9	15.4	13.9	12.2	11.1	10.5	10.2	10.0	9.4	Diurnal Average	
	16.0	15.8	15.1	14.7	13.9	13.5	13.1	14.4	17.6	20.9	23.3	24.9	26.0	26.1	26.4	25.3	24.0	22.0	20.3	19.1	18.3	17.8	17.6	16.9	Diurnal Maximum	

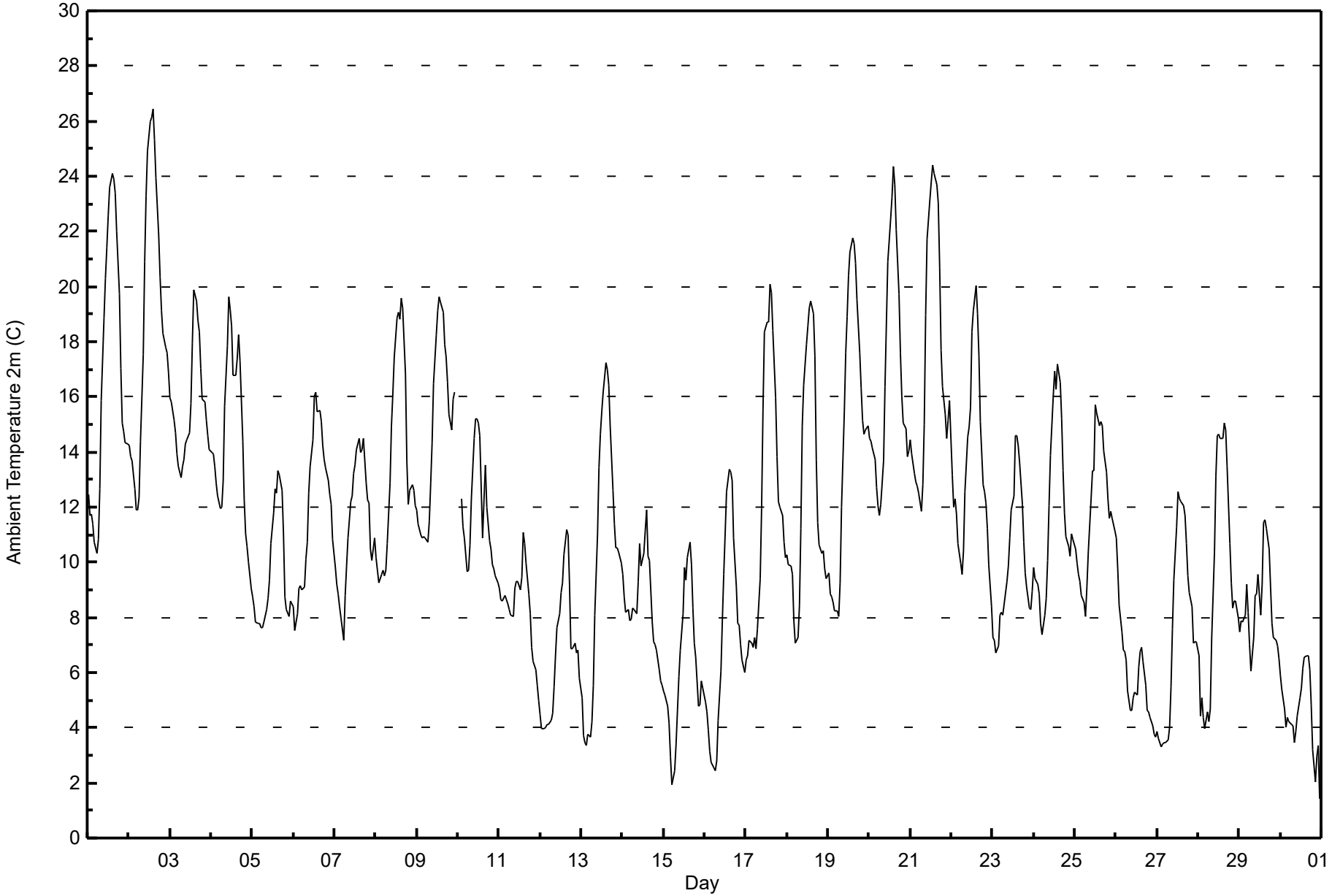
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Stony Mountain - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	313	43.65	43.65
10 - 20	365	50.91	94.56
> 20	39	5.44	100.00

Total Number of Valid Hours: 717

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Stony Mountain - September 2026

Maximum Value: 100.0 % on Sep 4 03:00

Maximum Daily Average: 93.8 % on Sep 7

Minimum Value: 32.7 % on Sep 24 13:00

Minimum Daily Average: 58.9 % on Sep 24

Maximum Diurnal Average: 89.0 % at hour 7

Minimum Diurnal Average: 56.3 % at hour 15

Monthly Average: 75.64 %

Percentiles: P_1 = 36.9 P_{10} = 47.8 Q_1 = 63.8 Median = 77.9 Q_3 = 89.7 P_{90} = 98.0 P_{99} = 100.0

Hours in Service:	720
Hours of Data:	717
Hours of Missing Data:	3
Hours of Calibration:	0
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-Sep	75.2	82.9	82.9	83.9	88.5	87.7	82.9	77.2	67.4	54.4	49.2	45.2	40.0	38.8	38.5	40.8	42.6	48.6	56.8	65.6	74.7	73.6	76.8	77.5	64.7	88.5
2-Sep	78.2	79.8	79.6	84.2	87.8	86.8	85.4	78.8	67.7	55.9	45.1	37.4	36.6	36.9	37.2	39.9	44.5	50.1	54.9	59.7	66.3	71.7	74.4	78.2	63.2	87.8
3-Sep	82.5	83.0	86.9	89.7	90.7	93.3	98.0	99.0	99.7	99.9	99.7	99.1	96.4	86.9	71.7	73.9	76.5	76.7	86.4	91.7	92.2	95.1	97.6	98.7	90.2	99.9
4-Sep	99.8	99.9	100.0	100.0	100.0	100.0	100.0	98.6	84.4	72.2	63.8	67.8	70.5	77.2	76.7	73.2	68.5	77.1	85.2	88.8	90.8	91.9	93.9	95.1	86.5	100.0
5-Sep	94.1	97.0	99.0	98.8	98.0	99.0	98.9	98.0	97.4	94.6	90.5	84.0	77.1	72.7	72.4	68.4	68.9	74.0	85.3	94.2	97.1	98.6	96.7	96.6	89.6	99.0
6-Sep	96.6	98.7	99.5	98.1	99.1	99.5	99.7	98.8	95.3	89.5	86.1	79.4	71.6	71.2	75.9	79.3	85.2	91.2	91.8	88.0	88.5	89.6	88.5	92.5	89.7	99.7
7-Sep	96.4	98.6	99.2	99.5	99.5	100.0	100.0	100.0	97.6	90.6	89.9	86.2	86.3	84.4	83.3	87.0	86.8	83.9	91.8	96.5	95.8	98.6	100.0	100.0	93.8	100.0
8-Sep	100.0	100.0	100.0	100.0	100.0	99.7	99.6	98.0	90.3	80.5	73.0	63.8	55.3	53.3	54.2	51.7	53.2	66.8	83.6	84.4	81.7	78.1	77.9	80.2	80.2	100.0
9-Sep	82.0	86.7	90.6	92.6	93.6	96.6	96.7	93.9	87.3	77.4	64.1	53.8	50.2	47.7	48.2	51.0	58.1	61.3	66.5	72.3	75.6	68.9	64.8	DF	73.0	96.7
10-Sep	DF	DF	74.7	79.0	81.8	87.3	84.2	80.7	74.6	63.8	58.6	59.2	60.7	62.5	87.0	81.5	72.1	79.5	87.8	90.2	95.2	97.0	94.8	94.6	79.4	97.0
11-Sep	92.9	93.8	91.6	88.4	87.0	85.7	85.0	86.7	87.8	81.0	78.5	81.2	88.1	82.1	68.0	68.1	73.0	78.7	75.6	81.6	85.5	89.4	90.2	91.3	83.8	93.8
12-Sep	93.0	93.7	93.9	93.8	93.5	94.0	93.5	92.8	87.8	79.2	62.7	59.2	59.2	60.4	54.4	51.7	51.2	61.1	74.8	70.4	68.5	69.1	69.3	77.3	75.2	94.0
13-Sep	80.4	86.3	88.1	89.7	90.9	93.2	90.6	84.6	74.5	64.0	54.6	48.3	46.0	43.5	43.3	43.0	44.4	51.9	65.8	73.5	78.1	78.2	80.9	82.7	69.9	93.2
14-Sep	82.9	86.7	90.5	89.1	94.1	98.9	99.9	100.0	100.0	95.5	85.3	92.6	88.1	78.6	70.8	76.8	74.4	91.4	97.2	98.0	98.5	98.1	99.0	98.9	91.1	100.0
15-Sep	98.1	98.6	97.8	97.7	98.7	99.6	100.0	99.2	95.8	90.2	84.5	76.4	63.0	61.6	56.5	52.9	62.1	73.4	82.6	88.4	97.7	96.9	92.7	90.2	85.6	100.0
16-Sep	88.3	88.7	90.9	95.3	98.0	99.1	99.4	99.5	95.4	88.7	80.4	72.7	62.4	53.2	51.9	51.7	53.2	77.1	74.2	76.9	79.5	81.2	83.7	88.1	80.4	99.5
17-Sep	87.3	87.4	86.1	85.9	85.8	82.1	82.9	80.3	75.2	68.0	57.6	50.4	47.5	50.9	44.2	45.6	56.1	69.3	77.5	80.9	81.2	83.3	86.9	89.4	72.6	89.4
18-Sep	87.8	90.3	89.5	88.5	93.9	94.3	88.9	84.3	74.8	60.3	53.8	47.5	42.1	38.8	37.4	39.0	45.2	63.4	71.6	70.0	70.9	68.8	70.4	71.2	68.4	94.3
19-Sep	68.2	72.5	73.7	76.1	79.4	79.0	80.7	76.0	65.8	53.6	44.8	40.1	38.7	40.1	40.8	43.1	45.8	52.4	61.4	65.0	68.4	70.3	68.6	65.9	61.3	80.7
20-Sep	66.9	66.8	66.9	67.4	71.0	72.4	72.8	70.8	66.1	59.6	54.1	45.7	37.8	35.9	36.3	40.5	45.0	56.1	66.7	73.7	77.3	77.7	81.1	79.1	62.0	81.1
21-Sep	76.6	78.8	81.9	82.4	83.0	83.0	86.1	82.0	74.1	62.4	50.3	42.4	38.2	34.0	35.7	39.6	39.3	52.4	66.4	72.6	77.4	81.8	78.8	74.8	65.6	86.1
22-Sep	87.8	94.3	92.9	92.6	96.0	97.8	98.5	94.1	83.8	75.3	63.4	53.4	45.2	41.8	40.0	44.0	45.4	49.8	56.4	52.0	51.6	54.4	60.6	68.0	68.3	98.5
23-Sep	74.7	75.6	78.0	75.8	69.0	69.9	71.3	75.1	74.5	71.8	71.7	71.4	72.2	64.4	65.1	68.2	73.3	80.1	88.0	93.3	95.1	98.3	98.7	93.2	77.9	98.7
24-Sep	87.0	78.9	71.0	71.0	74.4	75.2	67.4	69.8	65.2	56.5	43.1	32.7	32.7	39.3	37.1	38.2	45.6	57.1	63.5	64.0	61.2	62.4	57.2	62.7	58.9	87.0
25-Sep	66.0	69.1	73.0	71.7	72.7	73.9	78.8	77.3	70.4	64.6	66.0	67.0	62.7	66.8	70.3	73.2	74.9	79.3	84.5	93.4	97.8	98.9	98.8	98.5	77.1	98.9
26-Sep	99.2	98.9	98.5	98.5	98.2	97.7	95.4	94.5	94.7	94.3	87.8	83.7	84.4	78.0	72.4	74.7	77.8	84.2	87.4	84.4	82.8	85.1	86.8	89.2	88.7	99.2
27-Sep	88.0	88.0	88.3	90.5	92.0	90.4	89.5	87.2	79.1	71.0	63.0	53.1	45.8	46.8	47.9	48.1	51.8	56.5	61.5	61.6	62.7	68.8	68.5	67.4	69.5	92.0
28-Sep	69.5	79.0	76.0	78.8	81.7	80.2	81.9	78.5	69.2	58.1	47.2	41.9	42.3	42.5	42.9	40.5	40.7	44.0	54.6	59.6	62.7	60.4	59.8	61.2	60.6	81.9
29-Sep	62.5	60.2	60.6	60.2	59.6	72.4	87.8	93.3	91.2	88.4	88.1	76.0	89.8	78.8	54.0	45.5	43.5	44.7	51.2	57.8	60.7	60.1	59.1	58.4	66.8	93.3
30-Sep	60.8	63.5	67.8	72.0	71.6	73.2	73.5	79.1	85.9	77.5	75.1	73.9	74.7	75.6	75.8	74.3	71.8	73.4	79.3	84.9	88.1	80.6	76.6	84.6	75.6	88.1
	83.5	85.4	85.6	86.4	87.7	88.7	89.0	87.6	82.4	74.6	67.7	62.8	60.2	58.2	56.3	56.9	59.0	66.9	74.3	77.8	80.1	80.9	81.1	82.9	Diurnal Average	
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.7	99.1	96.4	86.9	87.0	87.0	86.8	91.4	97.2	98.0	98.5	98.9	100.0	100.0	Diurnal Maximum	

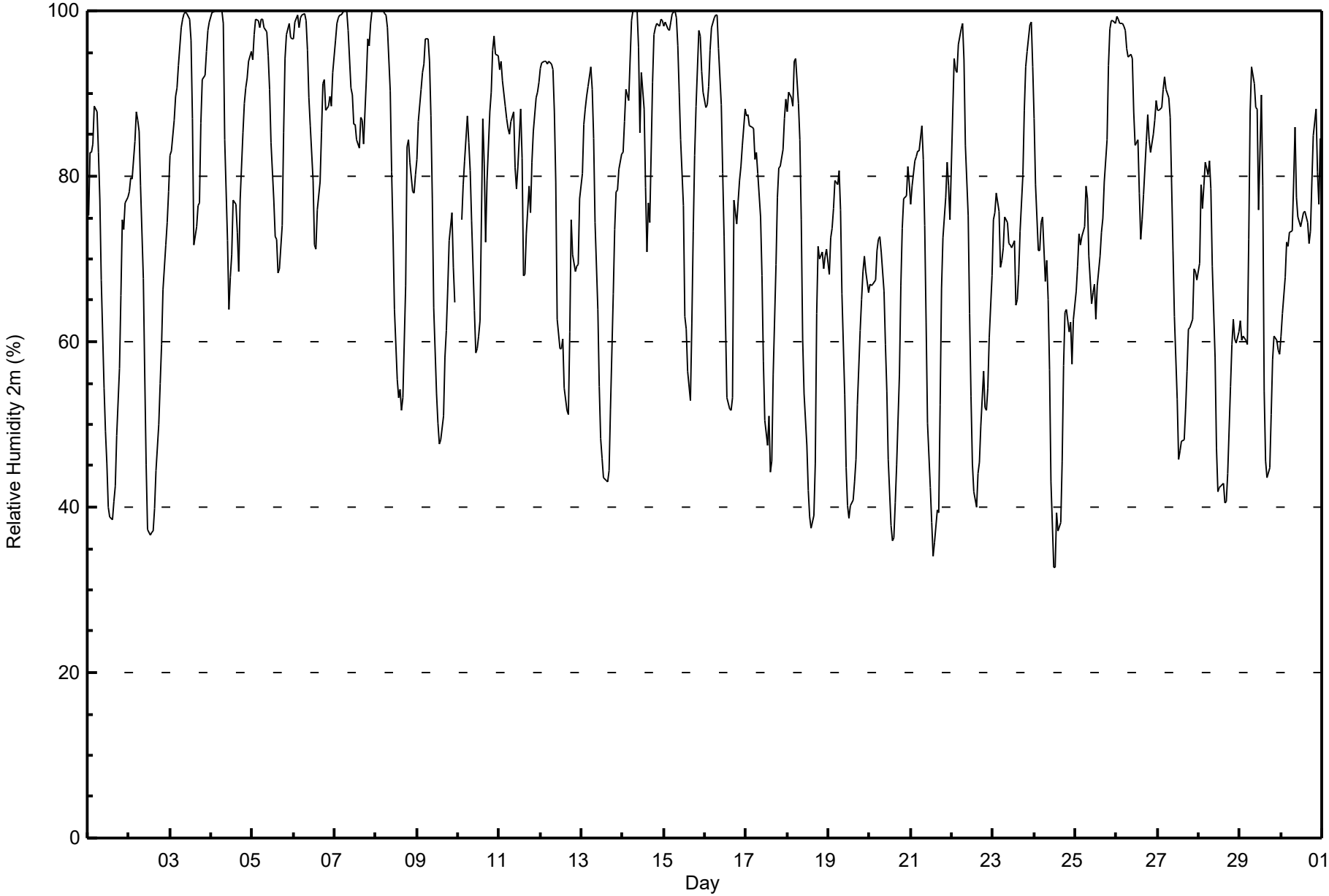
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Stony Mountain - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Precipitation (PC) - mm

Stony Mountain - September 2026

Maximum Value: 2.3 mm on Sep 26 04:00

Maximum Daily Total: 7.2 mm on Sep 26

Minimum Value: 0.0 mm on Sep 1 01:00

Minimum Daily Total: 0.0 mm on Sep 1

Maximum Diurnal Total: 2.3 mm at hour 20

Minimum Diurnal Total: 0.0 mm at hour 10

Monthly Total: 18.12 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} = 0.8

Hours in Service:	720
Hours of Data:	717
Hours of Missing Data:	3
Hours of Calibration:	0
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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.1	0.6	0.8	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	1.8	0.8
4-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.1	0.0	0.0	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	0.0	0.0	0.0	0.0	0.4	0.2
6-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	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	DF	0.1	0.1
10-Sep	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	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.2
11-Sep	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	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2
12-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.1	0.8	1.5	0.1	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.1	0.0	0.2	0.0	3.6	1.5
15-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	1.7	1.7
16-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.1	0.0	0.0	0.0	0.7	0.6
26-Sep	0.9	1.8	0.4	2.3	1.3	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	7.2	2.3
27-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.1	0.0	0.5	0.0	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.5
30-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.9	1.9	0.4	2.3	1.7	1.3	2.2	1.0	0.7	0.0	0.5	0.3	0.8	0.3	0.2	0.1	0.0	0.7	0.2	2.3	0.3	0.0	0.2	0.0	Diurnal Average	
	0.9	1.8	0.4	2.3	1.3	0.8	1.5	0.8	0.3	0.0	0.5	0.2	0.5	0.2	0.2	0.1	0.0	0.6	0.2	1.7	0.1	0.0	0.2	0.0	Diurnal Maximum	

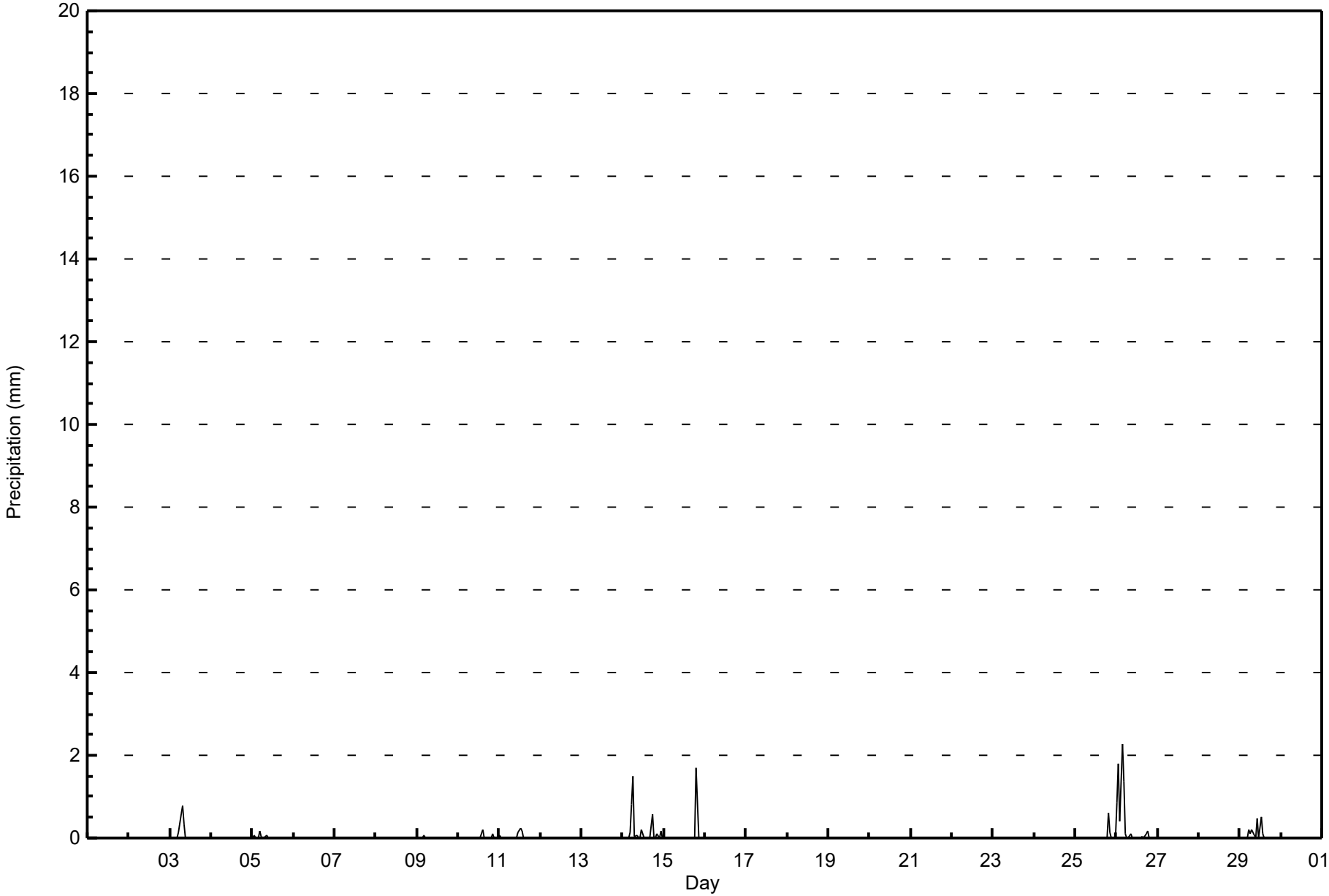
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Precipitation (PC) - mm

Stony Mountain - September 2026



Concentration Ranges (mm)	Number of Hours	%	Cumulative %
0 - 0.3	703	98.05	98.05
0.4 - 0.5	3	0.42	98.47
0.6 - 0.7	3	0.42	98.88
0.8 - 1.4	4	0.56	99.44
1.5 - 10	4	0.56	100.00
> 10	0	0.00	100.00

Total Number of Valid Hours: 717

Total Number of Hours: 720

Maximum Value: 51.1 % on Sep 4 08:00

Maximum Daily Average: 14.1 % on Sep 4

Minimum Value: 0.0 % on Sep 1 16:00

Minimum Daily Average: 0.8 % on Sep 20

Maximum Diurnal Average: 9.2 % at hour 7

Minimum Diurnal Average: 0.8 % at hour 17

Monthly Average: 4.49 %

Percentiles: P_1 = 0.1 P_{10} = 0.6 Q_1 = 1.0 Median = 1.3 Q_3 = 2.4 P_{90} = 15.7 P_{99} = 35.6

Hours in Service:	720
Hours of Data:	717
Hours of Missing Data:	3
Hours of Calibration:	0
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-Sep	1.3	1.4	1.4	1.4	1.8	2.2	1.7	1.4	1.2	1.0	0.8	0.6	0.4	0.2	0.1	0.0	0.0	0.4	0.8	1.0	1.2	1.2	1.3	1.3	1.0	2.2
2-Sep	1.3	1.4	1.4	2.1	3.4	3.7	2.5	1.4	1.1	1.0	0.7	0.4	0.2	0.1	0.0	0.0	0.0	0.5	0.6	0.8	0.9	1.0	1.0	1.1	1.1	3.7
3-Sep	1.2	1.2	1.4	1.5	1.5	2.4	12.6	15.7	19.9	15.7	10.6	9.7	5.7	1.2	0.8	0.9	1.0	1.0	1.4	2.0	2.2	4.9	9.3	13.6	5.7	19.9
4-Sep	17.1	20.6	26.8	31.8	39.3	44.0	48.0	51.1	36.6	6.3	1.1	0.9	0.9	1.0	1.0	0.8	0.6	1.0	1.2	1.4	1.4	1.5	1.6	1.7	14.1	51.1
5-Sep	1.6	2.8	4.6	3.5	3.4	4.9	3.1	2.4	2.1	1.6	1.4	1.2	1.0	1.0	0.9	0.8	0.9	1.0	1.5	4.7	9.6	15.8	23.3	27.0	5.0	27.0
6-Sep	27.6	31.6	34.0	34.4	33.8	33.3	32.5	30.0	22.3	6.7	1.8	1.2	1.0	1.0	1.1	1.2	1.3	1.5	1.6	1.5	1.5	1.5	1.6	3.1	12.8	34.4
7-Sep	6.7	9.7	12.9	18.0	21.9	26.3	26.3	23.4	13.8	4.0	1.5	1.3	1.3	1.2	1.2	1.3	1.3	1.2	2.0	2.4	2.9	9.1	15.9	18.7	9.4	26.3
8-Sep	26.0	33.0	35.0	36.8	35.8	32.2	32.6	30.9	20.4	11.0	4.9	1.0	0.8	0.7	0.7	0.3	0.3	0.9	1.6	1.9	1.8	1.6	1.4	1.4	13.0	36.8
9-Sep	1.4	1.5	1.6	1.7	2.5	2.9	2.6	1.7	1.4	1.2	1.1	0.8	0.7	0.6	0.6	0.6	0.8	0.9	1.0	1.1	1.2	1.1	1.0	DF	1.3	2.9
10-Sep	DF	DF	1.2	1.2	1.2	1.4	1.4	1.3	1.2	1.1	1.0	0.9	0.9	1.1	8.7	2.1	0.9	1.3	1.4	1.6	9.6	8.4	3.7	2.0	2.4	9.6
11-Sep	8.8	14.1	7.1	2.4	1.5	1.4	1.4	1.4	1.4	1.3	1.2	3.6	15.5	8.9	3.0	0.9	1.0	1.3	1.2	1.3	1.4	1.5	1.5	1.5	3.5	15.5
12-Sep	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.4	1.3	1.1	1.0	1.0	0.9	0.8	0.5	0.4	1.0	1.4	1.4	1.3	1.3	1.2	1.3	1.3	1.7
13-Sep	1.4	1.5	1.6	1.6	1.6	1.8	1.6	1.5	1.3	1.2	1.1	0.8	0.6	0.5	0.5	0.3	0.3	0.8	1.1	1.3	1.4	1.3	1.3	1.4	1.2	1.8
14-Sep	1.4	1.4	1.6	1.5	3.3	19.8	28.3	22.5	17.2	7.0	1.7	11.3	3.5	1.1	1.0	1.2	1.1	17.7	18.7	17.1	18.3	17.3	19.4	18.8	10.5	28.3
15-Sep	17.1	16.7	15.9	15.8	19.4	23.0	19.9	13.3	6.9	3.2	1.4	1.2	1.0	1.0	0.9	0.6	0.8	1.2	1.4	18.8	23.2	24.0	19.5	17.0	11.0	24.0
16-Sep	15.6	13.8	12.2	11.8	12.2	11.9	12.6	10.9	7.3	2.4	1.4	1.1	0.9	0.7	0.7	0.5	0.5	1.1	1.2	1.4	1.5	1.6	1.7	1.9	5.3	15.6
17-Sep	2.1	2.2	1.7	1.8	2.1	1.6	1.5	1.4	1.3	1.2	1.1	0.7	0.6	0.7	0.5	0.5	0.7	1.0	1.3	1.4	1.4	1.5	2.5	3.6	1.4	3.6
18-Sep	2.4	3.5	5.2	2.3	4.1	5.9	5.0	2.0	1.4	1.2	1.1	0.7	0.5	0.3	0.3	0.1	0.2	0.9	1.2	1.2	1.3	1.3	1.3	1.3	1.9	5.9
19-Sep	1.3	1.4	1.3	1.3	1.4	1.4	1.4	1.3	1.2	1.0	0.9	0.6	0.4	0.3	0.3	0.2	0.4	0.7	0.9	1.0	1.1	1.1	1.1	1.1	1.0	1.4
20-Sep	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.0	1.0	0.9	0.5	0.3	0.2	0.2	0.0	0.2	0.7	0.9	1.1	1.2	1.2	1.2	1.2	0.8	1.2
21-Sep	1.2	1.2	1.3	1.3	1.4	1.4	1.6	1.4	1.2	1.0	0.9	0.4	0.3	0.1	0.2	0.1	0.2	0.6	0.9	1.1	1.2	1.4	1.4	1.3	1.0	1.6
22-Sep	2.5	5.3	5.8	6.7	8.9	11.9	15.6	16.0	2.9	1.2	1.0	0.8	0.6	0.4	0.4	0.2	0.4	0.7	0.9	0.9	0.8	0.9	0.9	1.1	3.6	16.0
23-Sep	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.7	0.8	0.8	1.0	1.1	1.5	2.8	4.4	8.2	14.4	16.2	2.8	16.2
24-Sep	9.0	1.8	1.4	1.3	1.4	1.4	1.2	1.2	1.1	1.0	0.8	0.5	0.3	0.4	0.4	0.3	0.6	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.3	9.0
25-Sep	1.0	1.1	1.1	1.1	1.1	1.2	1.3	1.2	1.1	1.0	0.9	0.9	0.8	0.9	1.0	1.0	1.0	1.1	1.3	10.8	13.6	13.7	14.2	9.7	3.4	14.2
26-Sep	15.2	27.6	25.5	32.5	36.8	21.9	11.8	14.8	17.0	16.9	7.2	1.5	1.4	1.2	1.2	5.6	5.2	11.7	11.2	1.6	1.4	1.5	1.5	1.5	11.4	36.8
27-Sep	1.5	1.5	1.5	1.6	1.7	1.6	1.6	1.5	1.4	1.3	1.2	0.9	0.7	0.7	0.6	0.6	0.7	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.7
28-Sep	1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.1	1.0	0.9	0.7	0.6	0.6	0.6	0.4	0.5	0.7	0.9	1.0	1.1	1.0	1.0	1.0	1.0	1.3
29-Sep	1.1	1.0	1.0	1.0	1.1	3.1	2.4	5.1	5.9	2.0	20.2	10.8	20.8	5.5	0.8	0.6	0.7	0.8	0.9	0.9	1.0	1.0	1.0	1.0	3.7	20.8
30-Sep	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.9	2.1	1.2	1.1	1.3	1.2	1.2	1.2	1.7	1.1	1.2	1.3	1.7	3.2	1.4	1.4	2.0	1.4	3.2
	5.9	7.0	7.0	7.4	8.3	9.0	9.2	8.7	6.5	3.3	2.4	1.9	2.2	1.1	1.0	0.8	0.8	1.9	2.1	2.9	3.8	4.3	5.0	5.3	Diurnal Average	
	27.6	33.0	35.0	36.8	39.3	44.0	48.0	51.1	36.6	16.9	20.2	11.3	20.8	8.9	8.7	5.6	5.2	17.7	18.7	18.8	23.2	24.0	23.3	27.0	Diurnal Maximum	

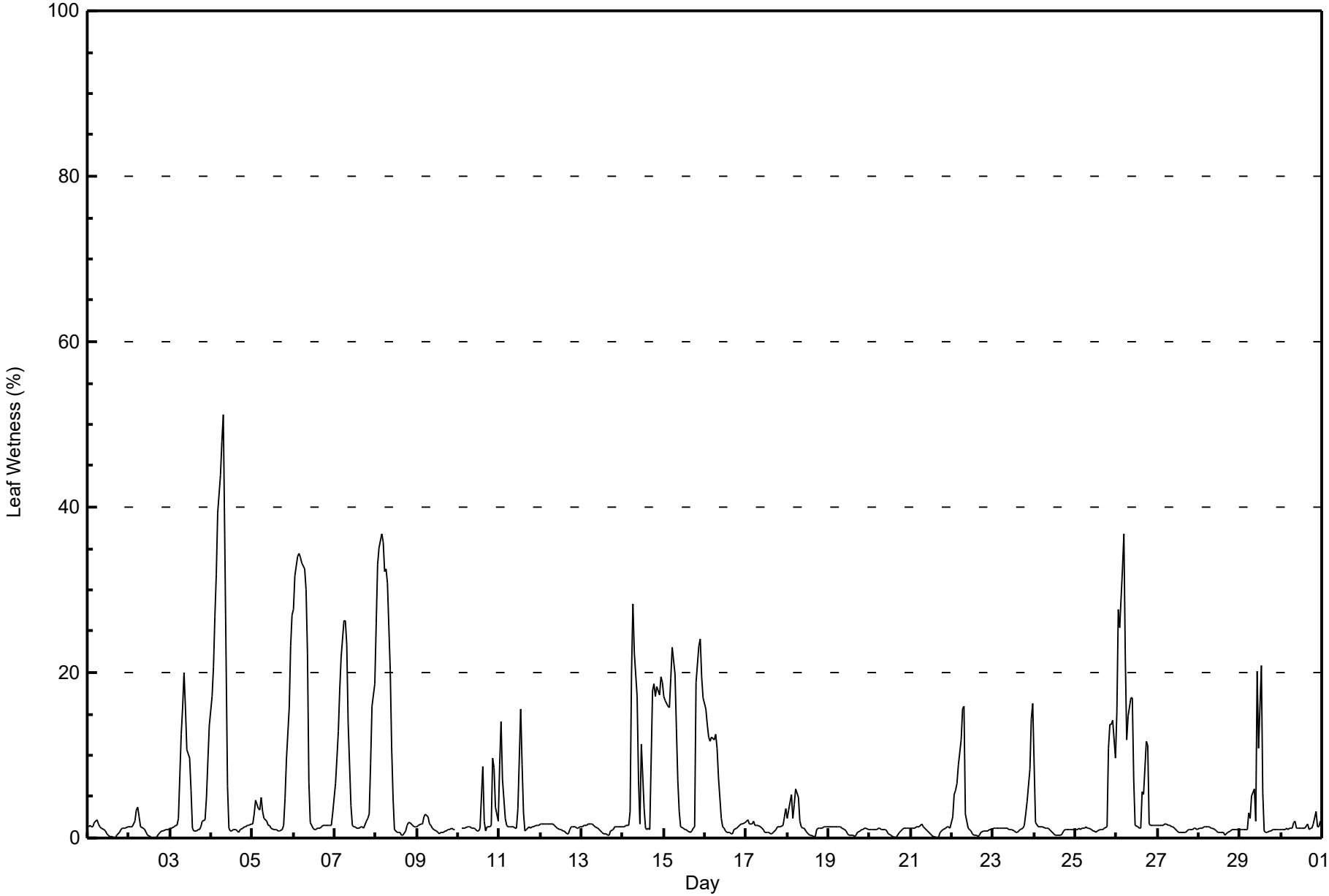
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Leaf Wetness (LW) - %

Stony Mountain - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 0.3	33	4.60	4.60
0.4 - 0.5	25	3.49	8.09
0.6 - 0.7	39	5.44	13.53
0.8 - 1.4	347	48.40	61.92
1.5 - 10	160	22.32	84.24
> 10	105	14.64	98.88

Total Number of Valid Hours: 717

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Global Radiation (GR) - W/m2

Stony Mountain - September 2026

Maximum Value: 757.1 W/m2 on Sep 1 13:00

Maximum Daily Average: 227.1 W/m2 on Sep 1

Minimum Value: 0.0 W/m2 on Sep 1 22:00

Minimum Daily Average: 64.0 W/m2 on Sep 30

Maximum Diurnal Average: 457.6 W/m2 at hour 13

Minimum Diurnal Average: 0.0 W/m2 at hour 24

Monthly Average: 132.20 W/m2

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 14.6 Q_3 = 224.3 P_{90} = 451.8 P_{99} = 666.8

Hours in Service:	720
Hours of Data:	717
Hours of Missing Data:	3
Hours of Calibration:	0
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-Sep	0.2	0.2	0.2	0.1	0.3	7.3	29.1	112.9	416.7	550.8	597.5	721.6	757.1	586.4	594.6	520.3	375.7	149.4	25.8	3.0	0.1	0.0	0.0	0.0	227.1	757.1
2-Sep	0.0	0.0	0.0	0.0	0.0	5.8	33.9	111.2	349.7	454.1	594.5	709.9	680.5	557.2	552.0	415.8	279.6	91.7	28.3	2.0	0.0	0.0	0.0	0.0	202.8	709.9
3-Sep	0.0	0.0	0.0	0.0	0.0	1.2	20.8	54.5	43.4	65.4	59.2	68.7	214.6	323.8	486.6	273.6	183.9	97.0	33.5	2.3	0.0	0.0	0.0	0.0	80.3	486.6
4-Sep	0.0	0.0	0.0	0.1	0.1	4.4	25.8	81.1	325.5	507.0	623.3	658.3	612.4	327.5	288.4	346.8	292.3	125.5	20.8	0.4	0.0	0.0	0.0	0.0	176.7	658.3
5-Sep	0.0	0.0	0.0	0.0	0.0	1.1	16.1	25.7	106.8	101.5	128.7	263.7	364.7	325.7	337.7	276.6	182.6	101.6	30.2	2.0	0.4	0.3	0.4	0.1	94.4	364.7
6-Sep	0.1	0.1	0.0	0.0	0.0	1.2	18.2	84.6	107.7	222.5	187.7	291.7	383.6	275.4	96.5	98.5	47.4	34.7	14.9	0.5	0.0	0.0	0.0	0.0	77.7	383.6
7-Sep	0.0	0.0	0.0	0.0	0.0	1.6	14.1	62.4	141.4	171.8	190.1	163.2	170.9	208.8	143.6	76.0	108.9	118.5	30.2	1.2	0.0	0.0	0.0	0.0	66.8	208.8
8-Sep	0.0	0.0	0.0	0.0	0.0	2.6	34.1	78.1	283.9	381.6	482.4	587.9	678.9	484.6	437.1	450.8	344.9	106.5	17.1	1.0	0.4	0.6	0.2	0.1	182.2	678.9
9-Sep	0.1	0.1	0.1	0.2	0.1	3.1	43.7	117.2	203.8	260.8	532.6	629.0	667.9	551.3	385.3	301.4	148.7	75.2	14.5	0.4	0.0	0.0	0.0	DF	171.1	667.9
10-Sep	DF	DF	0.0	0.0	0.0	2.1	25.5	66.0	304.8	485.7	495.5	423.7	325.6	217.3	102.2	213.1	285.4	46.1	20.1	0.2	0.0	0.0	0.0	0.0	137.0	495.5
11-Sep	0.0	0.0	0.0	0.0	0.0	0.5	12.7	39.0	97.3	244.2	219.7	220.8	297.2	384.6	452.6	278.6	221.5	50.2	15.7	0.3	0.1	0.0	0.0	0.0	105.6	452.6
12-Sep	0.0	0.0	0.0	0.0	0.0	0.5	9.4	48.9	128.9	219.4	274.7	333.1	438.5	301.2	413.3	410.5	306.5	58.2	13.4	0.4	0.1	0.1	0.1	0.0	123.2	438.5
13-Sep	0.0	0.0	0.0	0.1	0.0	1.3	20.1	44.5	308.0	485.9	592.0	660.9	687.3	551.8	542.9	457.1	306.0	47.0	11.9	0.3	0.0	0.0	0.0	0.0	196.6	687.3
14-Sep	0.0	0.0	0.0	0.0	0.0	0.0	2.1	11.6	99.1	235.9	341.4	280.6	328.8	349.9	352.1	82.1	175.7	48.7	10.2	0.0	0.0	0.0	0.0	0.0	96.6	352.1
15-Sep	0.0	0.0	0.0	0.0	0.0	0.7	15.2	63.0	171.1	232.5	273.0	357.9	416.1	290.5	319.0	408.4	258.3	55.8	12.7	0.0	0.1	0.0	0.0	0.0	119.8	416.1
16-Sep	0.0	0.0	0.0	0.0	0.0	0.2	20.9	108.8	185.8	242.2	352.7	385.9	465.1	463.7	393.3	363.2	222.1	70.8	10.9	0.0	0.0	0.0	0.0	0.0	136.9	465.1
17-Sep	0.0	0.0	0.0	0.0	0.0	0.5	21.8	63.1	222.3	395.7	505.9	631.0	472.1	342.7	476.7	315.8	177.8	39.0	8.2	0.0	0.0	0.0	0.0	0.0	153.0	631.0
18-Sep	0.0	0.0	0.0	0.0	0.0	0.5	15.6	47.2	248.5	457.0	584.9	653.2	679.8	535.4	532.4	426.8	259.8	33.0	8.1	0.1	0.1	0.1	0.1	0.0	186.8	679.8
19-Sep	0.1	0.0	0.1	0.0	0.0	0.5	15.6	36.1	239.4	451.2	554.6	622.7	639.4	510.6	500.0	398.8	226.9	36.3	5.4	0.0	0.0	0.0	0.0	0.0	176.6	639.4
20-Sep	0.0	0.0	0.0	0.0	0.0	0.2	14.6	39.1	216.1	441.0	544.6	605.5	617.5	507.5	496.2	394.2	169.0	41.8	6.8	0.0	0.0	0.0	0.0	0.0	170.6	617.5
21-Sep	0.0	0.0	0.0	0.1	0.0	0.5	15.2	56.9	224.3	432.5	539.2	576.1	577.9	517.6	426.7	358.7	209.1	32.1	4.2	0.0	0.1	0.1	0.1	0.0	165.5	577.9
22-Sep	0.0	0.0	0.1	0.0	0.0	0.5	18.4	74.2	190.2	374.0	369.2	461.7	616.6	427.7	428.1	388.2	212.5	28.1	4.6	0.0	0.0	0.0	0.0	0.0	149.8	616.6
23-Sep	0.0	0.0	0.0	0.0	0.0	0.0	16.1	43.8	65.0	119.5	170.7	149.6	210.5	388.8	248.0	148.9	80.1	35.9	3.1	0.0	0.0	0.0	0.0	0.0	70.0	388.8
24-Sep	0.0	0.0	0.1	0.1	0.0	0.0	17.3	49.9	194.7	413.5	463.6	597.6	569.2	356.8	421.3	283.6	75.1	19.8	1.2	0.0	0.0	0.0	0.0	0.0	144.3	597.6
25-Sep	0.0	0.0	0.0	0.0	0.0	0.0	12.1	47.9	123.5	230.0	229.5	224.3	356.8	128.1	86.0	104.5	75.6	18.1	0.4	0.0	0.0	0.0	0.0	0.0	68.2	356.8
26-Sep	0.0	0.0	0.0	0.0	0.0	0.0	9.8	38.3	54.8	121.7	220.4	214.1	173.8	316.0	229.1	219.9	117.0	27.3	1.7	0.0	0.0	0.0	0.0	0.0	72.7	316.0
27-Sep	0.0	0.0	0.0	0.0	0.0	0.0	9.3	33.5	199.9	418.5	518.0	586.6	624.6	370.7	359.9	271.8	111.0	22.4	1.9	0.0	0.0	0.0	0.0	0.0	147.0	624.6
28-Sep	0.0	0.0	0.0	0.0	0.0	0.0	11.7	59.6	159.0	384.0	474.3	501.7	308.0	234.2	216.7	362.1	147.6	19.7	1.5	0.0	0.1	0.1	0.0	0.0	120.0	501.7
29-Sep	0.1	0.0	0.0	0.0	0.0	0.0	2.3	17.5	78.0	180.1	220.5	202.0	187.8	253.5	432.9	290.0	143.7	30.4	1.6	0.0	0.0	0.1	0.0	0.0	85.0	432.9
30-Sep	0.0	0.0	0.0	0.0	0.0	0.0	7.8	32.9	78.6	121.2	187.7	189.2	204.2	235.8	217.2	139.1	89.2	30.9	1.5	0.1	0.1	0.1	0.1	0.0	64.0	235.8
	0.0	0.0	0.0	0.0	0.0	1.2	17.6	58.3	185.6	313.4	384.3	432.4	457.6	377.5	365.6	302.5	194.5	56.4	12.0	0.5	0.1	0.1	0.0	0.0	Diurnal Average	
	0.2	0.2	0.2	0.2	0.3	7.3	43.7	117.2	416.7	550.8	623.3	721.6	757.1	586.4	594.6	520.3	375.7	149.4	33.5	3.0	0.4	0.6	0.4	0.1	Diurnal Maximum	

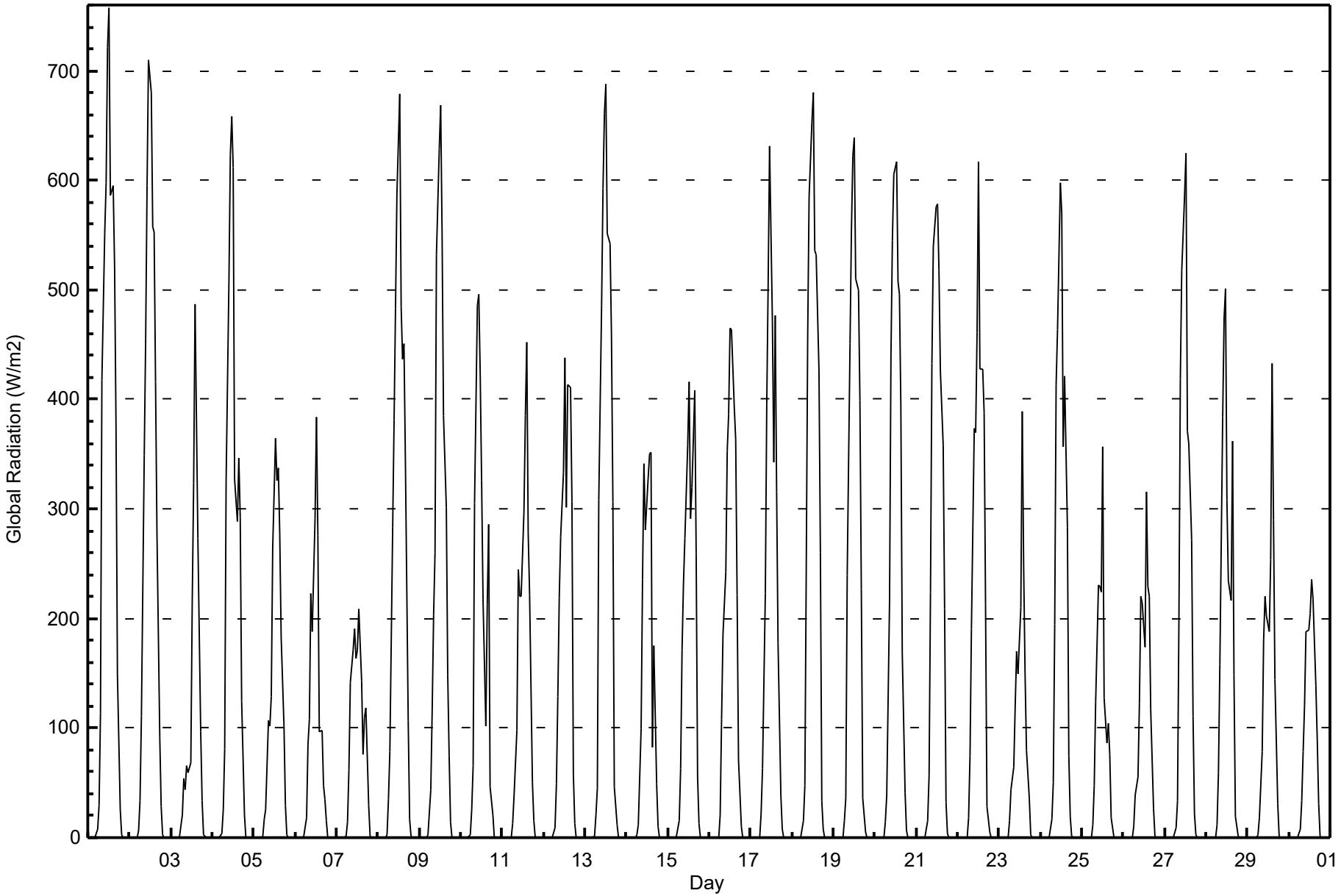
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Global Radiation (GR) - W/m2

Stony Mountain - September 2026



Concentration Ranges (W/m2)	Number of Hours	%	Cumulative %
0 - 20	377	52.58	52.58
21 - 100	81	11.30	63.88
101 - 300	116	16.18	80.06
301 - 600	122	17.02	97.07
601 - 900	21	2.93	100.00
> 900	0	0.00	100.00

Total Number of Valid Hours: 717

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 20m (WS20) - km/h

Stony Mountain - September 2026

Maximum Speed: 22 km/h on Sep 29 16:00

Maximum Daily Speed Average: 16.9 km/h on Sep 26

Minimum Speed Value: 0 km/h on Sep 16 12:00

Minimum Daily Speed Average: 1.9 km/h on Sep 23

Maximum Diurnal Speed Average: 6.1 km/h at hour 3

Minimum Diurnal Speed Average: 2.8 km/h at hour 18

Monthly Average Velocity: 4.8 km/h 246.7 deg

Percentiles: P_1 = 2 P_{10} = 6 Q_1 = 8 Median = 11 Q_3 = 14 P_{90} = 17 P_{99} = 21

Hours in Service:	720
Hours of Data:	717
Hours of Missing Data:	3
Percent Operational Time:	99.6

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-Sep	SW10	SSW11	SSW11	SSW11	SSW12	SSW11	SSW10	SSW11	S10	S12	SSE12	SSE14	S13	SSE10	SSE12	SSE13	SSE12	SE12	SSE10	SSE9	SSE9	SSE10	SSE10	SSE11	S10.1	SSE14
2-Sep	SSE10	S11	SSE11	SSE10	SE10	SSE9	SE8	SE9	SE12	SE13	SE17	SE21	SE17	SE16	SE14	ESE14	ESE15	ESE14	ESE14	SE12	SE12	SE12	SE11	ESE11	SE12.2	SE21
3-Sep	ESE9	ESE11	E7	ENE7	ENE8	ENE7	NNE6	NE7	NE12	ENE13	E15	E14	E13	E14	ESE20	ESE18	ESE15	ESE13	E11	E11	ESE12	ESE10	ESE8	SE7	E10.4	ESE20
4-Sep	SE6	SSE5	SSE5	SSE6	S6	SSE7	SSE8	S8	WSW5	SSW6	SSW10	SSW11	SW12	W12	W8	WSW9	W8	NNW8	NNW11	NNW11	N12	N9	N10	N10	W2.3	W12
5-Sep	N9	N8	N11	N9	N10	N10	N9	NNE8	NNE8	NNE11	NE8	NE7	NE9	NE8	NE7	ESE4	ESE3	SE4	SSE4	S6	SSW6	SSW6	SSW7	SSW7	NNE3.6	NNE11
6-Sep	SSW7	S7	SSE8	SSE8	SSE5	SSE5	SE5	ESE7	SE5	ESE7	ESE8	SE12	SE10	SSE9	SE8	ESE4	E3	NNE3	ESE5	SE8	SE10	SE9	SSE8	SSE8	SE6.4	SE12
7-Sep	SSE7	SE6	SE7	SSE6	N4	SE7	SSE4	E2	SE4	N3	N6	NNW5	NNE7	NNE5	NE6	NNE6	NNE5	ENE8	ENE6	ENE5	NNE4	NNW5	NNW5	NNW7	NE2.6	ENE8
8-Sep	NW8	NW8	NW9	NW9	NW11	NW11	NW9	NW9	NW9	NW10	NNW10	NNW11	NW12	NNW12	NNW9	NNW8	NW7	NW4	WNW4	WSW7	WSW8	SW10	SW12	SW13	WNW7.3	SW13
9-Sep	SW13	SW13	SW14	SW15	SW14	SW14	SW13	SW13	SW14	SW12	SW14	SW17	WSW18	WSW19	WSW19	WSW17	SW13	SW13	SW12	SSW11	SW14	WSW17	WSW15	DF	SW14.3	WSW19
10-Sep	DF	DF	W15	WNW15	WNW13	W12	W14	W14	W13	W16	WNW16	W18	WNW16	WNW17	WNW14	WNW15	WNW16	WNW16	W14	WNW14	WNW14	WNW14	NW15	NW15	WNW14.5	W18
11-Sep	NW16	NW17	NW17	NW19	NW19	NW20	NW19	NW20	NW20	NW22	NW21	NW19	NNW18	NW20	NNW21	NW16	NW17	NW14	NNW13	NNW11	NW10	NW12	NW11	WNW10	NW16.5	NW22
12-Sep	WNW10	WNW11	WNW10	WNW11	WNW10	WNW8	WNW8	WNW8	WNW8	WNW7	WNW10	WNW9	WNW9	NW9	WNW11	NW8	WNW9	W7	WSW7	WSW9	WSW10	WSW13	SW13	SW13	W8.5	SW13
13-Sep	SW13	SW14	SW13	SW15	SW16	SW16	SW16	SW16	SW16	SW15	SW16	SW18	SW17	SW15	SSW12	SSW12	SSW13	SSW10	SW9	SW9	SSW10	SW12	SW11	SW13	SW13.5	SW18
14-Sep	SW12	W7	WNW7	NW11	NNW11	NW10	NW9	NNW11	NNW11	N10	NNW12	NNW13	NNW13	NNW12	NNW13	NNW10	NW14	NW10	NW9	NW9	NNW9	NW10	NW10	NW9	NW9.5	NW14
15-Sep	NW8	WNW8	WNW10	WNW10	WNW10	WNW10	W11	WNW9	WNW9	NW6	WNW7	W6	WNW5	WSW7	WSW7	WSW9	SW10	SSW9	SSW8	W8	SW8	SW10	W11	W10	W7.3	W11
16-Sep	W12	W13	WNW12	WNW9	NW8	WNW5	NW3	SSW2	S4	N2	NE4	ESE0	WSW5	WSW6	SSW4	SW7	SSW6	SE4	ESE8	ESE9	SE11	SSE10	SSE10	S10	SW2.4	W13
17-Sep	S10	S9	S10	SSW11	SSW11	SSW12	SSW15	SSW16	SW14	SW10	WSW8	WSW8	WSW12	SW8	SW9	W9	WNW6	NW7	WNW7	NW6	NW4	NNW5	SSW3	W3	SW6.7	SSW16
18-Sep	WNW7	W7	WNW7	WNW9	NW9	NNW8	NW7	NW7	NW7	NW7	NW8	NW7	NW10	NNW9	NNW11	NNW9	NNW8	NW5	NW4	W2	SSW5	SSW8	S8	SSW9	NW5.4	NNW11
19-Sep	SSW10	SSW11	SSW12	SSW13	SSW14	SSW15	SSW14	SSW15	S14	S14	S18	S19	S17	S17	S18	S17	SSW18	S15	S14	S14	S14	S15	S15	SSW15	S14.7	S19
20-Sep	SSW17	SSW17	SSW15	SSW15	SSW15	SW15	SW16	SW16	SW13	SSW9	SSW9	SSW8	SSW8	SSW9	SSW9	SSW9	SSW9	SSW9	SSW10	SSW11	SSW12	SSW13	SSW14	SW15	SSW12.1	SSW17
21-Sep	SW15	SW14	SW13	SW13	SW11	SW11	SW10	SSW10	S7	SSE8	SSE12	SSE13	SSE14	SSE15	S16	S15	S14	S11	S12	S13	SSW12	SSW11	SW10	SW10	SSW10.9	SSE16
22-Sep	N3	SSE8	SSE7	S6	SE8	SE8	SSE8	SSW8	WSW10	NW15	NW20	NW18	NW17	NW15	NW12	WNW14	WNW11	WNW8	W9	W11	WNW11	WNW10	WNW10	NW8	WNW6.4	NW20
23-Sep	NW8	NW7	NNW7	NNE8	NE8	E8	E7	E6	ESE5	SE4	NNW2	SSE6	NNW3	NNE4	NE6	NNE6	NNE5	E5	SE7	SE6	SE1	S3	W7	W9	NE1.9	W9
24-Sep	W10	WNW10	WNW10	WNW10	WNW9	WNW10	WNW11	WNW12	WNW11	WNW8	SW7	WSW8	WSW10	WSW9	WSW10	WSW9	WSW6	WSW5	NNW2	NNE3	NNE4	ENE7	E8	ENE8	W5.5	WNW12
25-Sep	ENE10	E10	E9	ENE8	ENE9	ENE9	ENE10	ENE11	E12	E16	E19	E18	E17	E12	E17	E13	ENE10	E12	E10	NE11	E17	E11	W10	NNW7	E10.6	E19
26-Sep	W3	WNW9	WNW13	W13	W15	W16	W19	W18	W19	W18	W20	W19	W20	W22	W22	W20	W20	WNW21	WNW20	WNW18	W16	W17	WSW17	WSW16	W16.9	W22
27-Sep	WSW18	WSW16	WSW16	WSW16	WSW16	WSW16	WSW17	WSW16	WSW17	WSW14	WSW16	WSW19	WSW20	W19	WSW19	WSW17	WSW13	SW10	WSW12	WSW13	WSW13	SW13	SW14	SW15	WSW15.6	WSW20
28-Sep	SW15	SW13	WSW13	SW12	SW15	WSW14	SW15	SW15	SW14	SW14	SW16	SW18	SW17	SW13	SSW13	SSW16	SSW14	SSW12	SSW10	SSW11	SSW12	SSW14	SSW14	SSW14	SW13.7	SW18
29-Sep	SSW13	SSW13	SSW13	SW14	WSW12	W11	W7	SW6	WNW8	WSW10	W15	W17	W19	WNW21	WNW20	WNW22	WNW20	W17	W15	W13	WSW15	WSW19	WSW19	W19	W13.6	WNW22
30-Sep	W17	W17	WSW16	WSW17	W20	W20	W19	WNW21	NW20	NW21	NW20	NW17	NW16	NW16	NW15	NW16	NW16	NW13	NW10	WNW8	W7	W10	W10	NW7	WNW13.8	WNW21
	WSW5.9	WSW5.8	WSW6.1	WSW6.1	WSW5.5	WSW5.6	WSW5.6	WSW5.3	WSW4.9	W3.8	W4.0	WSW4.5	W5.2	W5.0	WSW4.2	WSW4.6	WSW4.2	WSW2.8	WSW2.9	SW3.4	SW4.0	SW5.3	SW6.0	WSW5.7	Diurnal Average	
	WSW18	NW17	NW17	NW19	W20	W20	W19	WNW21	NW20	NW22	NW21	SE21	WSW20	W22	W22	WNW22	WNW20	WNW21	WNW20	WNW18	E17	WSW19	WSW19	W19	Diurnal Maximum	

DF - DAS 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

Stony Mountain - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9 km/h on Sep 29 16:00

Minimum Value: 1 km/h on Sep 18 19:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 3 Q_3 = 5 P_{90} = 6 P_{99} = 8

Hours in Service:	720
Hours of Data:	717
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-Sep	2	2	2	2	2	2	2	2	3	4	4	5	4	4	4	4	5	4	3	2	1	2	3	3	5
2-Sep	3	3	3	2	2	2	2	3	3	4	7	7	6	6	5	5	5	4	5	4	3	3	3	3	7
3-Sep	2	3	1	2	2	2	3	3	3	4	5	5	4	5	7	6	5	4	3	3	3	2	2	1	7
4-Sep	1	1	1	1	1	1	1	2	3	2	4	4	4	4	3	3	3	5	4	4	5	4	4	4	5
5-Sep	3	3	3	4	3	3	3	3	3	3	3	2	3	3	3	2	1	1	1	1	1	1	1	1	4
6-Sep	1	1	2	3	1	1	1	2	2	3	3	4	4	3	3	1	1	2	3	2	3	2	2	2	4
7-Sep	1	1	1	3	2	1	1	1	1	1	2	2	2	2	2	2	2	3	1	1	1	1	1	2	3
8-Sep	2	2	2	2	3	2	2	2	3	3	4	4	4	4	4	3	2	1	1	1	1	2	2	3	4
9-Sep	3	3	3	4	4	3	3	3	3	4	6	7	7	7	7	7	4	4	3	3	4	6	5	DF	7
10-Sep	DF	DF	6	5	4	4	5	5	4	6	6	7	6	8	5	5	6	6	4	5	5	5	5	5	8
11-Sep	5	6	6	6	7	7	7	6	7	8	7	8	7	7	8	6	6	5	5	4	3	4	3	3	8
12-Sep	3	3	3	3	3	3	3	2	2	2	4	3	4	4	4	3	3	2	1	2	2	3	3	3	4
13-Sep	3	3	2	3	4	4	4	4	5	5	6	7	6	5	4	4	4	3	1	2	2	3	2	3	7
14-Sep	2	4	2	2	3	3	3	4	4	4	5	5	5	5	5	4	6	4	2	3	3	3	3	3	6
15-Sep	3	2	3	3	2	2	3	3	3	2	2	2	2	3	3	3	3	2	2	4	2	2	3	2	4
16-Sep	4	4	3	3	2	1	2	2	1	1	1	2	2	3	3	2	2	1	1	2	2	2	2	2	4
17-Sep	2	2	2	2	2	2	3	4	5	3	3	3	4	3	4	4	2	2	1	1	1	1	2	1	5
18-Sep	1	1	1	2	2	2	2	2	2	2	2	3	3	4	4	4	3	1	1	1	3	1	1	2	4
19-Sep	2	2	2	3	3	3	3	3	4	5	6	7	6	6	6	6	6	5	4	3	3	4	4	4	7
20-Sep	4	4	4	4	4	4	4	4	4	2	3	2	2	2	3	3	2	2	2	2	2	3	3	3	4
21-Sep	3	3	3	2	2	2	2	2	2	3	4	5	5	6	6	5	5	3	2	2	2	2	2	2	6
22-Sep	2	1	1	3	2	1	1	2	4	5	7	7	6	5	4	5	4	2	2	3	3	3	2	2	7
23-Sep	2	2	1	2	1	2	1	1	1	2	2	2	2	2	2	2	1	1	1	1	2	1	2	2	2
24-Sep	3	2	2	2	2	2	3	3	3	3	3	3	4	3	5	3	2	1	1	2	1	1	2	2	5
25-Sep	3	3	2	2	3	3	2	3	5	5	6	6	7	5	6	5	4	4	3	4	6	5	4	2	7
26-Sep	3	3	5	5	6	6	7	6	7	6	8	7	8	9	8	8	7	7	7	6	5	6	6	6	9
27-Sep	6	5	5	5	5	5	6	5	6	5	6	7	8	8	8	7	5	4	4	4	4	3	4	4	8
28-Sep	4	3	3	3	4	4	4	4	4	5	6	6	6	5	5	5	5	3	2	2	3	3	3	3	6
29-Sep	3	3	3	3	4	3	3	3	2	3	6	7	7	8	8	9	8	7	5	5	5	6	6	7	9
30-Sep	6	5	5	6	7	7	7	8	7	7	7	6	6	5	6	6	6	5	3	2	2	3	3	2	8
	6	6	6	6	7	7	7	8	7	8	8	8	8	9	8	9	8	7	7	6	6	6	6	7	
	Diurnal Maximum																								

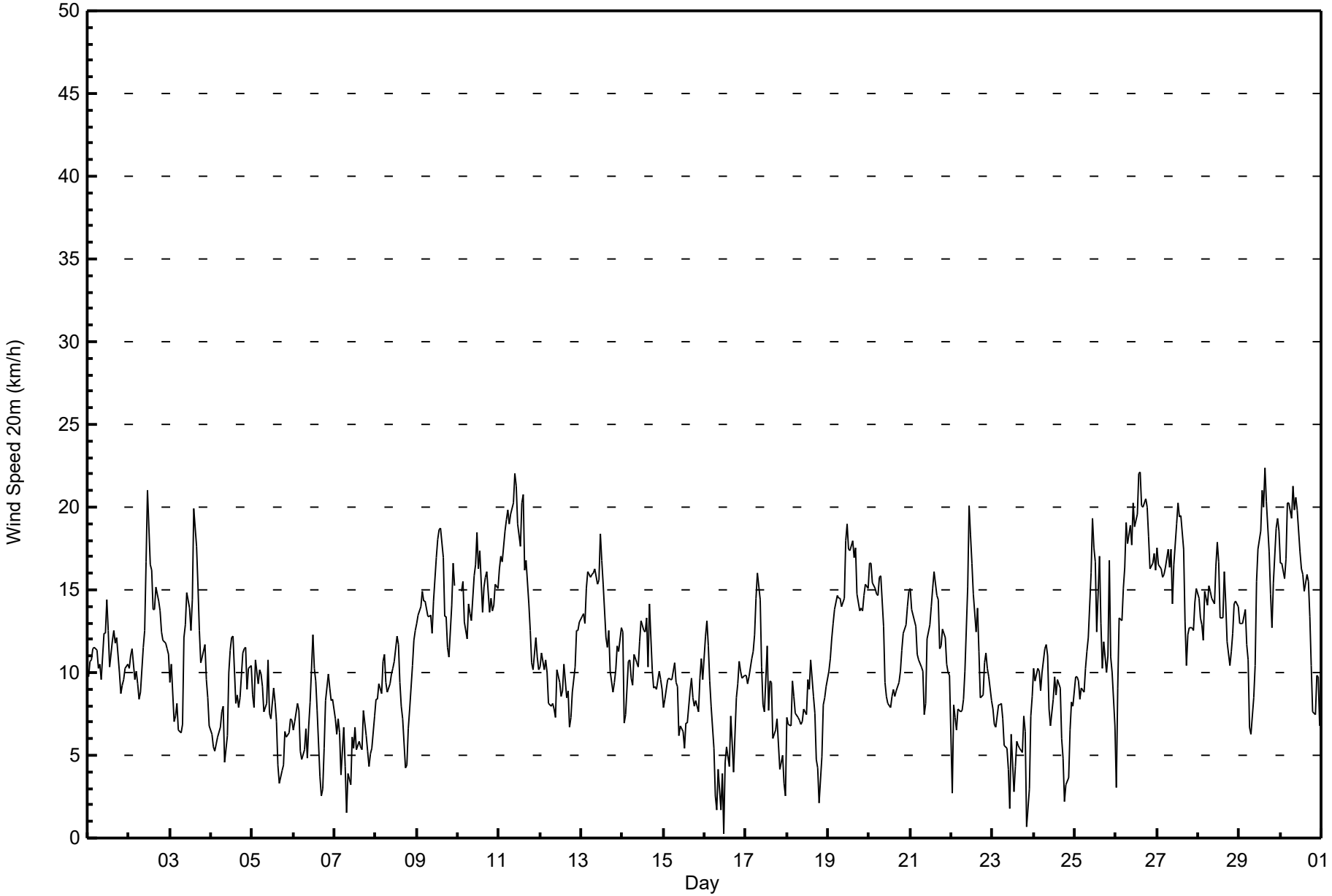
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 20m (WS20) - km/h

Stony Mountain - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	63	8.79	8.79
6 - 11	340	47.42	56.21
12 - 19	285	39.75	95.96
20 - 28	29	4.04	100.00
29 - 38	0	0.00	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 717

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 20m (WS20) - km/h

Stony Mountain - September 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	8	1	1	3	6	7	6	2	4	0	3	3	3	5	7	63
6 - 11	12	8	10	14	11	10	19	28	14	42	19	21	22	47	41	22	340
12 - 19	1	0	1	1	14	8	10	11	20	38	61	36	32	17	27	8	285
20 - 28	0	0	0	0	0	1	1	0	0	0	0	1	8	7	10	1	29
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	17	16	12	16	28	25	37	45	36	84	80	61	65	74	83	38	717

Total Number of Valid Hours: 717

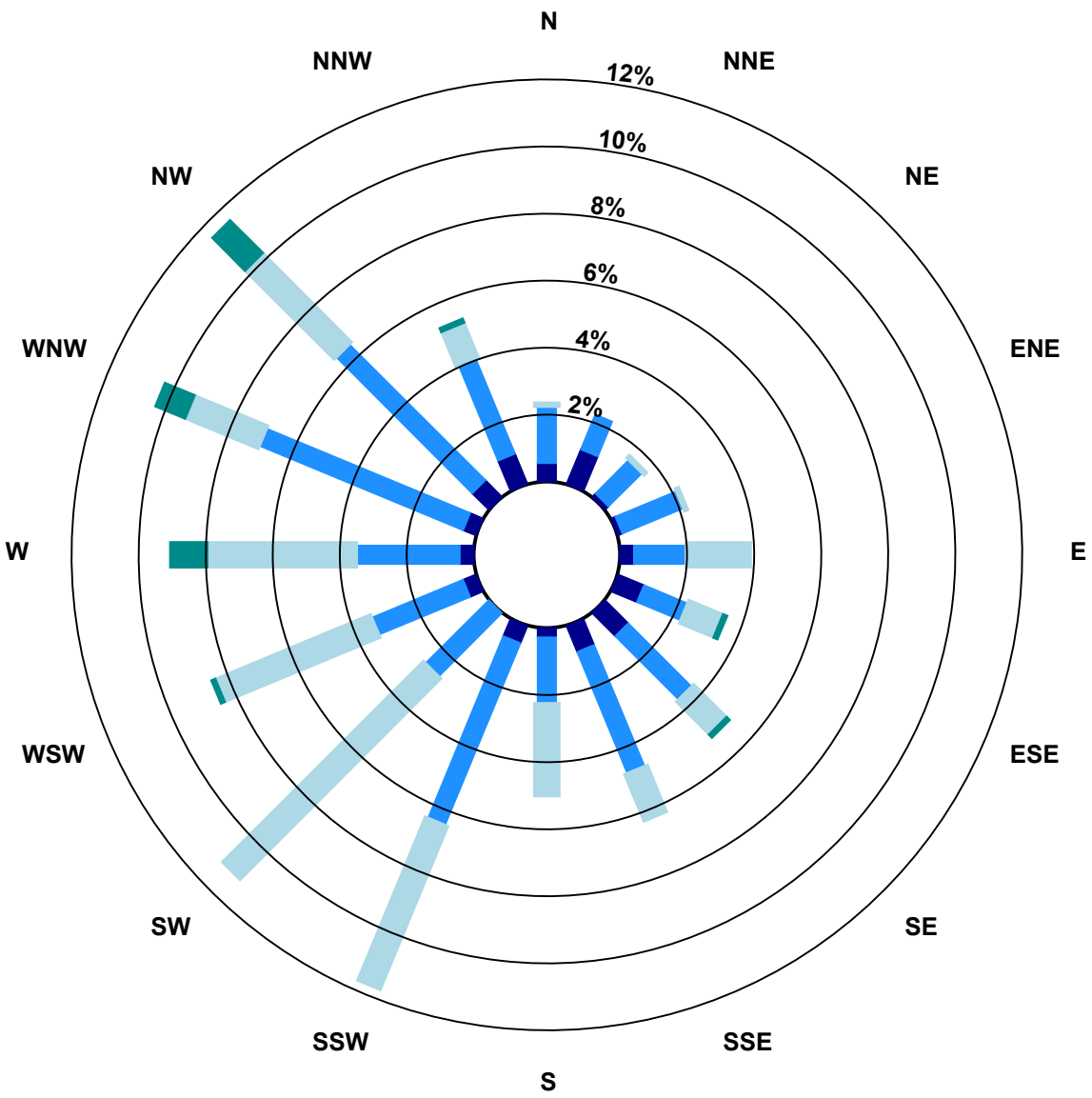
Total Number of Hours: 720

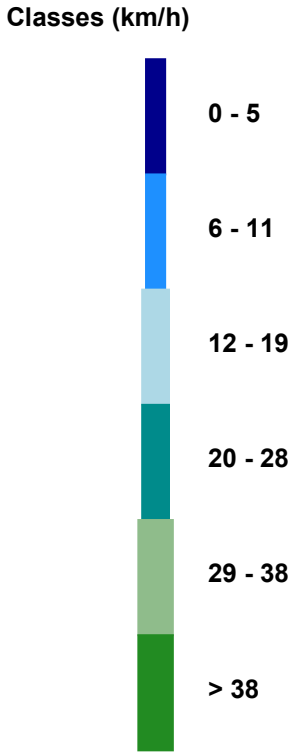
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 20m (WS20) - km/h

Stony Mountain





Total Number of Valid Hours: 717

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 20m (WD20) - deg

Stony Mountain - September 2026

Direction of Maximum Speed: 287 deg on Sep 29 16:00
Direction of Maximum Daily Speed Average: 271.5 deg on Sep 26

Direction of Minimum Speed: 117 deg on Sep 16 12:00
Direction of Minimum Daily Speed Average: 1.9 deg on Sep 23

Monthly Average Direction: 246.7 deg

Hours in Service:	720
Hours of Data:	717
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-Sep	223	212	213	213	210	202	192	195	183	172	168	164	173	161	163	156	149	145	149	157	156	155	161	165	175.8
2-Sep	163	169	168	152	140	151	141	132	131	137	141	139	146	139	139	122	113	112	121	128	127	128	126	114	135.8
3-Sep	102	108	91	73	57	71	29	55	55	77	85	86	84	99	105	104	105	105	94	94	110	120	121	135	92.8
4-Sep	139	152	153	163	171	154	156	172	238	211	195	210	236	272	266	258	279	336	347	347	359	0	349	352	259.4
5-Sep	356	357	6	7	9	5	6	22	14	17	39	48	40	53	51	102	123	132	168	181	192	208	208	208	27.7
6-Sep	198	185	163	162	147	153	126	113	131	104	114	125	125	153	138	116	88	27	114	136	139	135	148	155	138.0
7-Sep	149	125	142	164	359	140	165	87	131	351	1	346	27	27	35	29	31	62	60	72	26	336	346	327	52.1
8-Sep	310	319	317	316	309	307	313	312	321	326	341	332	317	327	327	339	305	312	290	241	251	229	218	217	303.1
9-Sep	221	217	220	221	220	222	223	221	223	226	233	233	245	246	246	237	223	226	214	213	214	244	256	DF	229.2
10-Sep	DF	DF	276	287	287	272	267	259	271	280	283	276	289	289	300	283	286	291	279	282	295	302	312	308	285.3
11-Sep	307	308	307	313	320	320	320	321	323	324	322	324	327	322	327	322	317	322	328	330	311	308	307	297	318.6
12-Sep	293	292	291	287	291	293	295	285	289	290	300	301	300	326	301	320	294	278	256	251	242	237	235	234	281.1
13-Sep	231	220	222	220	221	219	220	217	215	220	225	226	221	215	204	211	206	213	225	214	210	218	218	222	218.4
14-Sep	225	268	282	324	329	320	322	339	342	354	347	339	329	329	332	340	325	322	314	320	327	319	319	314	323.6
15-Sep	318	302	291	302	296	283	280	289	286	313	296	272	285	248	247	244	217	207	211	262	229	233	268	268	269.0
16-Sep	273	281	287	290	307	297	312	197	188	358	44	117	250	251	211	223	202	124	114	117	133	148	150	171	219.4
17-Sep	171	172	182	197	196	209	207	210	214	222	248	249	239	221	236	261	299	316	301	306	313	327	196	262	225.6
18-Sep	297	281	291	300	317	328	320	318	318	321	325	317	307	327	335	329	336	318	309	274	197	195	189	200	304.0
19-Sep	203	201	207	205	200	200	198	194	191	178	174	182	176	181	185	190	193	180	177	182	187	181	182	193	188.2
20-Sep	199	204	205	212	213	214	219	218	214	202	198	197	206	211	196	193	199	209	207	205	209	210	208	214	207.7
21-Sep	221	221	223	225	228	227	217	209	184	160	167	149	163	158	169	171	185	176	187	191	195	204	216	227	193.7
22-Sep	5	148	153	170	144	126	158	192	254	312	312	318	314	314	308	290	296	284	273	277	290	294	296	309	289.5
23-Sep	308	319	337	14	49	80	90	100	112	145	347	151	337	19	45	20	17	82	130	136	140	183	281	264	47.7
24-Sep	276	288	285	284	291	289	284	284	291	287	235	243	258	253	240	238	256	249	331	22	28	75	81	73	276.8
25-Sep	77	92	100	70	70	65	61	70	85	93	94	89	90	92	94	92	73	80	79	53	94	94	280	330	82.0
26-Sep	261	285	283	264	267	259	270	266	271	270	272	273	271	271	271	275	281	284	287	283	278	262	254	246	271.5
27-Sep	254	251	242	244	243	243	246	242	249	256	243	247	258	264	257	253	248	234	244	247	239	229	231	234	246.7
28-Sep	231	223	239	233	232	237	224	225	218	218	223	222	220	214	206	210	208	202	193	200	199	209	209	209	217.5
29-Sep	208	211	212	218	247	260	267	228	288	254	273	274	278	286	286	287	289	279	271	268	255	254	258	264	263.2
30-Sep	265	265	255	255	264	260	275	299	308	312	318	322	320	317	318	321	322	325	321	299	276	265	274	324	294.7
	239.3	236.8	242.5	248.1	255.3	247.5	248.6	245.5	254.2	263.2	260.8	248.1	259.5	263.0	255.8	253.9	257.5	250.9	238.1	233.4	222.0	227.6	236.2	238.0	
	Diurnal Average																								

DF - DAS 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

Stony Mountain - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 100 deg on Sep 16 12:00

Minimum Value: 6 deg on Sep 23 20:00

Percentiles: P_1 = 11 P_{10} = 15 Q_1 = 18 Median = 23 Q_3 = 28 P_{90} = 33 P_{99} = 72

Hours in Service:	720
Hours of Data:	717
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-Sep	11	11	11	16	15	14	16	18	25	28	31	28	32	34	32	31	28	26	21	18	13	18	21	24	34
2-Sep	23	21	20	17	14	15	19	24	21	25	27	25	29	28	34	24	20	19	21	20	19	19	21	16	34
3-Sep	14	15	17	16	14	26	32	29	15	20	19	19	22	22	25	21	21	20	18	17	17	17	16	17	32
4-Sep	17	13	14	19	14	12	16	25	63	44	34	32	34	26	33	31	35	34	28	25	27	26	28	29	63
5-Sep	26	25	22	25	21	21	24	24	25	23	26	27	26	29	37	62	48	27	19	10	10	12	12	13	62
6-Sep	14	15	16	24	19	21	15	17	25	30	24	29	30	33	28	23	40	37	33	21	22	20	21	15	40
7-Sep	14	14	17	36	58	22	22	62	32	64	32	30	29	37	33	28	34	23	14	22	31	19	19	21	64
8-Sep	20	20	19	19	18	17	18	22	24	28	30	30	27	31	33	35	32	26	22	13	11	14	14	17	35
9-Sep	16	16	15	18	19	19	17	20	19	23	26	27	29	32	27	27	23	24	19	19	19	28	26	DF	32
10-Sep	DF	DF	29	26	26	24	26	29	28	25	28	28	27	27	24	24	26	25	24	23	25	22	24	24	29
11-Sep	22	24	23	24	23	23	25	25	24	24	23	25	26	25	25	27	25	25	26	22	23	20	21	21	27
12-Sep	21	22	21	20	22	21	21	23	24	28	28	30	40	30	30	31	27	24	16	16	16	16	17	17	40
13-Sep	17	15	14	18	17	18	19	19	21	24	29	28	28	31	34	30	23	20	12	14	15	17	16	15	34
14-Sep	15	50	19	16	17	19	23	28	27	32	31	28	30	28	28	26	25	24	19	21	22	21	20	20	50
15-Sep	24	20	22	20	19	22	21	22	25	26	28	33	49	38	39	33	32	20	16	30	18	16	23	21	49
16-Sep	21	22	21	19	18	21	52	85	35	75	49	100	74	55	72	33	32	34	9	13	13	14	13	16	100
17-Sep	16	16	16	13	14	15	17	26	21	24	32	38	28	33	33	37	30	16	12	13	14	13	61	54	61
18-Sep	11	12	15	17	14	20	20	14	17	23	28	42	33	39	29	33	28	16	14	37	66	12	13	12	66
19-Sep	13	13	15	16	16	16	15	17	21	26	26	29	29	29	28	26	25	25	21	19	17	19	19	18	29
20-Sep	19	19	19	21	19	18	18	18	19	23	32	28	35	35	33	35	20	16	16	16	16	17	17	18	35
21-Sep	17	17	15	14	15	14	12	12	18	25	30	32	31	31	29	28	22	23	15	16	14	15	14	15	32
22-Sep	61	10	25	32	15	10	14	26	36	21	21	24	26	26	25	27	23	19	17	19	18	18	17	14	61
23-Sep	13	18	15	21	13	15	17	17	18	55	83	28	72	49	30	22	22	30	13	6	90	10	21	18	90
24-Sep	17	17	18	16	14	16	19	18	20	30	40	39	40	34	39	28	22	21	52	27	20	11	12	15	52
25-Sep	17	18	17	19	18	19	16	18	23	21	20	21	25	25	21	27	24	22	22	30	22	40	27	29	40
26-Sep	76	34	27	28	30	28	25	28	28	26	28	28	27	27	27	28	26	24	24	24	26	26	26	27	76
27-Sep	24	24	24	26	25	25	25	25	28	28	29	29	32	29	29	31	29	24	23	24	23	17	19	21	32
28-Sep	19	17	19	21	21	21	19	18	19	25	26	26	26	27	26	25	23	21	14	15	15	18	17	17	27
29-Sep	17	18	17	19	29	25	32	32	19	28	29	26	27	24	29	25	25	27	24	28	25	25	25	25	32
30-Sep	24	27	25	27	26	26	26	23	23	23	24	24	25	24	24	26	24	22	20	17	16	19	18	32	32
	76	50	29	36	58	28	52	85	63	75	83	100	74	55	72	62	48	37	52	37	90	40	61	54	
	Diurnal Maximum																								

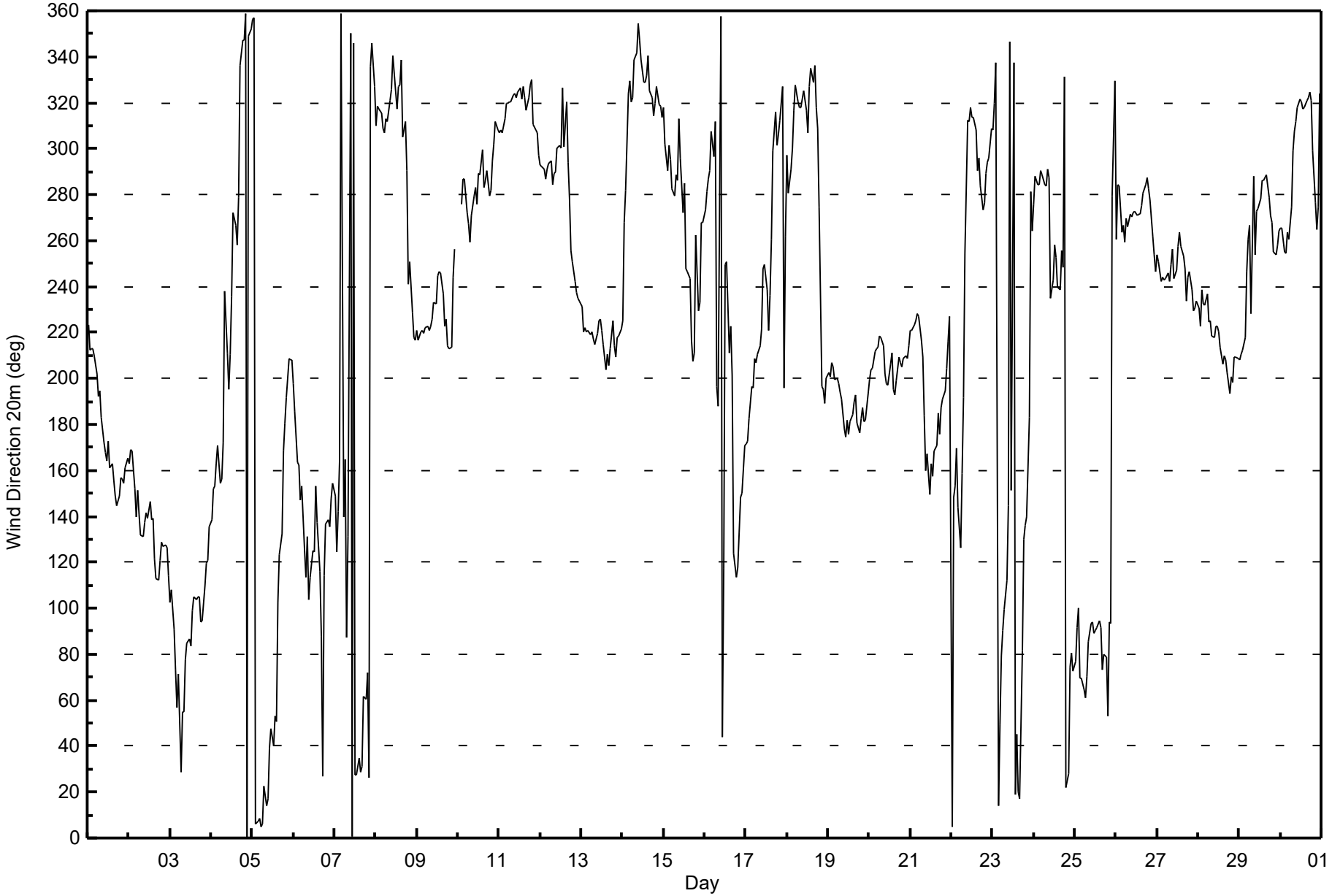
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 20m (WD20) - deg

Stony Mountain - September 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS19
FIREBAG
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FIREBAG (AMS19)
SEPTEMBER 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	686	34	34	100	25.1	0	2.6	0
H2S (ppb) Average	685	35	35	100	2	0	0.6	0
THC (ppm) Average	682	34	38	99.44	2.9	-	2.4	-
NO2 (ppb) Average	685	35	35	100	17	0	5.5	-
NO (ppb) Average	685	35	35	100	21.9	-	1.6	-
NOX (ppb) Average	685	35	35	100	32.5	-	6.3	-
Temperature 2 m (C) Average	720	0	0	100	24.6	-	19.5	-
Relative Humidity (%) Average	720	0	0	100	97.9	-	94.4	-
Wind Speed 10 m (km/h) Average	720	0	0	100	33	-	25	-
Wind Direction 10 m (deg) Average	720	0	0	100	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FIREBAG (AMS19)
SEPTEMBER 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	686	0.53	1.7	-	0	0	0	0.1	0.3	1.1	25.1
H2S (ppb) Average	685	0.16	0.2	-	0	0	0.1	0.1	0.2	0.3	2
THC (ppm) Average	682	2.16	0.1	-	1.9	2	2.1	2.1	2.2	2.3	2.9
NO2 (ppb) Average	685	2.44	2.7	-	0	0.2	0.6	1.5	3.2	5.8	17
NO (ppb) Average	685	0.49	1.4	-	0	0	0.1	0.1	0.4	1.1	21.9
NOX (ppb) Average	685	2.92	3.5	-	0.1	0.3	0.8	1.8	3.6	6.6	32.5
Temperature 2 m (C) Average	720	11.02	5.2	-	0.4	4.7	7.3	10.2	15.1	18.2	24.6
Relative Humidity (%) Average	720	73.61	18.4	-	29.5	46.2	59.7	76.4	90.5	95.8	97.9
Wind Speed 10 m (km/h) Average	720	14	6	-	1	7	9	13	17	22	33
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FIREBAG (AMS19)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
THC	29 Sep 2026 11:00	29 Sep 2026 14:00	4	Maintenance - replaced zero air generator

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Firebag - September 2026

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

Maximum Value: 25.1 ppb on Sep 21 09:00

Maximum Daily Average: 2.6 ppb on Sep 21

Minimum Value: 0.0 ppb on Sep 4 11:00

Minimum Daily Average: 0.0 ppb on Sep 14

Maximum Diurnal Average: 1.8 ppb at hour 9

Minimum Diurnal Average: 0.2 ppb at hour 4

Monthly Average: 0.53 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.3 P_{90} = 1.1 P_{99} = 7.2

Hours in Service:	720
Hours of Data:	686
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-Sep	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.2	0.4	0.2	0.3	0.3	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	0.4
2-Sep	0.1	0.1	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	0.0	0.1	0.1
3-Sep	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	0.1	0.3	0.3	0.1	0.1	0.2	0.2	0.1	0.0	0.0	0.1	0.3
4-Sep	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	0.0	0.1
5-Sep	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	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
6-Sep	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
7-Sep	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	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.2
8-Sep	0.0	0.0	0.1	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	0.4	0.7	0.1	0.2	0.6	0.3	0.2	0.1	0.7
9-Sep	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	0.2	0.4	2.3	0.5	0.3	0.1	0.5	0.7	0.3	0.7	0.3	0.3	2.3
10-Sep	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
11-Sep	0.0	Z	0.0	0.0	0.0	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	0.0
12-Sep	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	0.8	2.1	0.5	0.1	0.1	0.1	1.4	0.2	2.1
13-Sep	3.8	4.3	2.6	Z	0.4	0.3	0.4	3.8	4.1	4.8	5.7	5.9	1.4	0.9	2.3	1.3	2.4	0.5	0.4	0.2	0.1	0.1	0.0	0.0	2.0	5.9
14-Sep	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
15-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.5	1.5	0.5	0.2	0.2	0.1	0.2	0.1	0.1	0.0	0.2	1.5
16-Sep	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	1.6	2.7	1.5	0.6	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.3	2.7
17-Sep	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	1.8	7.2	6.1	4.2	10.4	4.1	1.5	0.7	0.4	0.2	1.7	10.4
18-Sep	0.2	0.1	Z	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	0.0	0.2	1.2	3.2	2.1	0.4	3.2
19-Sep	1.4	1.0	0.6	Z	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.3	0.3	0.4	1.4
20-Sep	0.4	0.6	0.9	0.9	Z	0.5	1.4	5.7	6.7	7.4	0.5	0.3	2.2	2.4	3.8	1.4	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.4	1.6	7.4
21-Sep	0.6	0.6	0.6	1.1	1.1	Z	3.5	6.7	25.1	15.1	0.9	0.2	0.7	0.3	0.3	0.3	0.4	0.5	0.2	0.3	0.3	0.3	0.3	0.7	2.6	25.1
22-Sep	Z	1.1	0.6	0.3	0.3	0.3	0.4	0.6	0.6	0.4	0.5	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.3	1.1
23-Sep	0.0	Z	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	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	0.4
24-Sep	0.1	0.5	Z	0.3	0.2	0.5	1.7	7.6	7.2	4.5	5.5	6.8	7.7	3.9	1.5	0.4	0.1	0.2	0.4	0.6	0.4	0.2	0.2	0.2	2.2	7.7
25-Sep	0.2	0.3	0.3	Z	3.0	10.7	4.7	4.7	4.7	3.1	0.4	0.3	0.3	0.2	0.4	1.0	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	1.5	10.7
26-Sep	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
27-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7	0.6	0.9	0.8	0.4	0.2	0.9
28-Sep	Z	0.8	0.5	0.9	0.7	0.3	0.2	0.5	1.6	1.3	1.5	1.7	0.5	1.0	1.4	1.4	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.7	1.7
29-Sep	0.2	Z	0.4	0.3	0.4	1.0	2.7	0.7	1.3	1.0	1.3	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.5	2.7
30-Sep	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
	0.3	0.4	0.3	0.2	0.3	0.6	0.5	1.1	1.8	1.3	0.6	0.6	0.5	0.4	0.5	0.7	0.4	0.3	0.6	0.3	0.2	0.2	0.2	0.2	Diurnal Average	
	3.8	4.3	2.6	1.1	3.0	10.7	4.7	7.6	25.1	15.1	5.7	6.8	7.7	3.9	3.8	7.2	6.1	4.2	10.4	4.1	1.5	1.2	3.2	2.1	Diurnal Maximum	

Z - zerospan C - Calibration

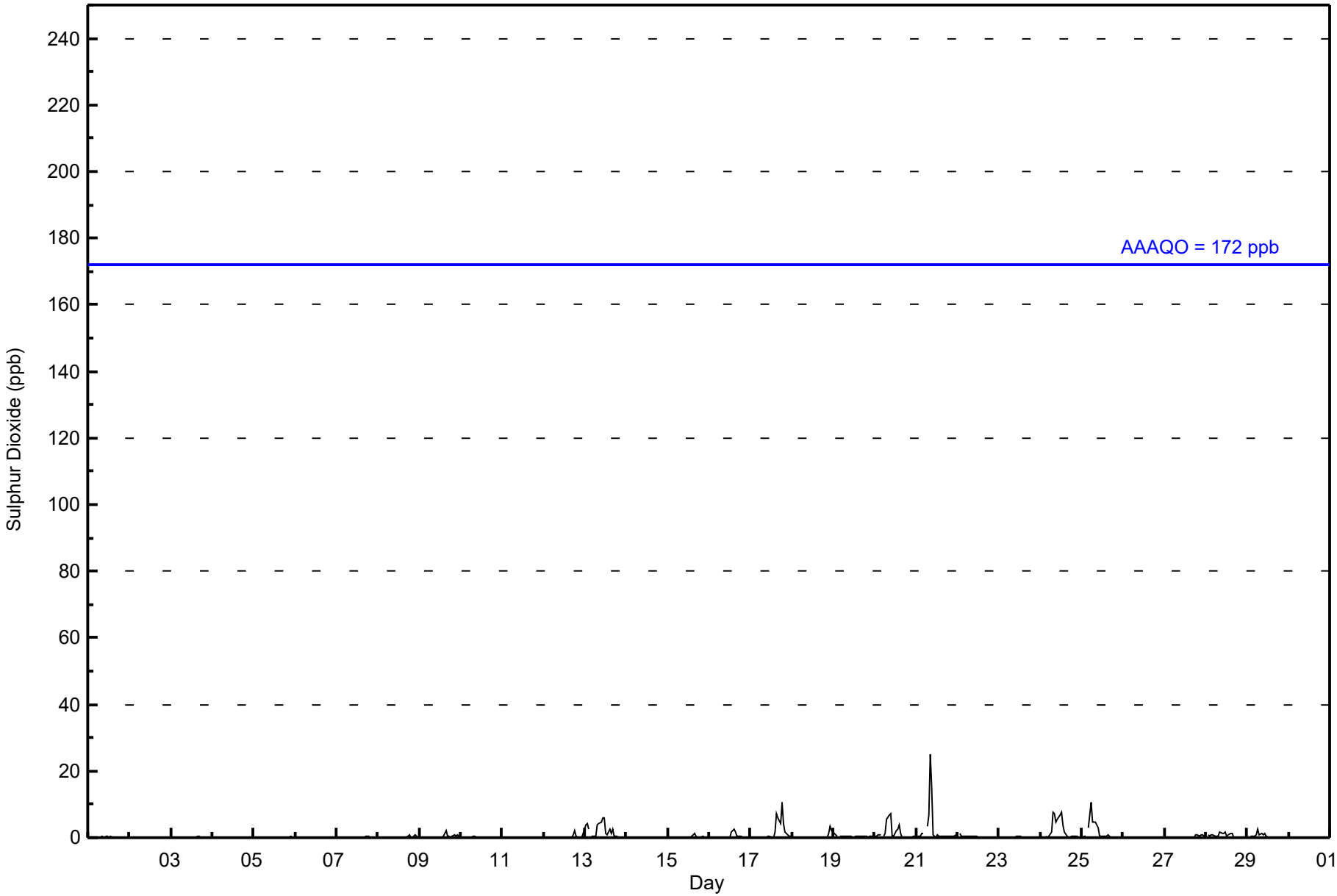
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Firebag - September 2026



Sulphur Dioxide (SO_2) - ppb
Firebag - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	683	99.56	99.56
11 - 20	2	0.29	99.85
21 - 60	1	0.15	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: 686

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Firebag - September 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	54	28	11	6	11	13	41	50	65	63	90	63	62	37	29	60	683
11 - 20	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
21 - 60	0	0	0	0	0	0	0	0	0	1	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	54	28	11	6	11	14	41	50	65	64	91	63	62	37	29	60	686

Total Number of Valid Hours: 686

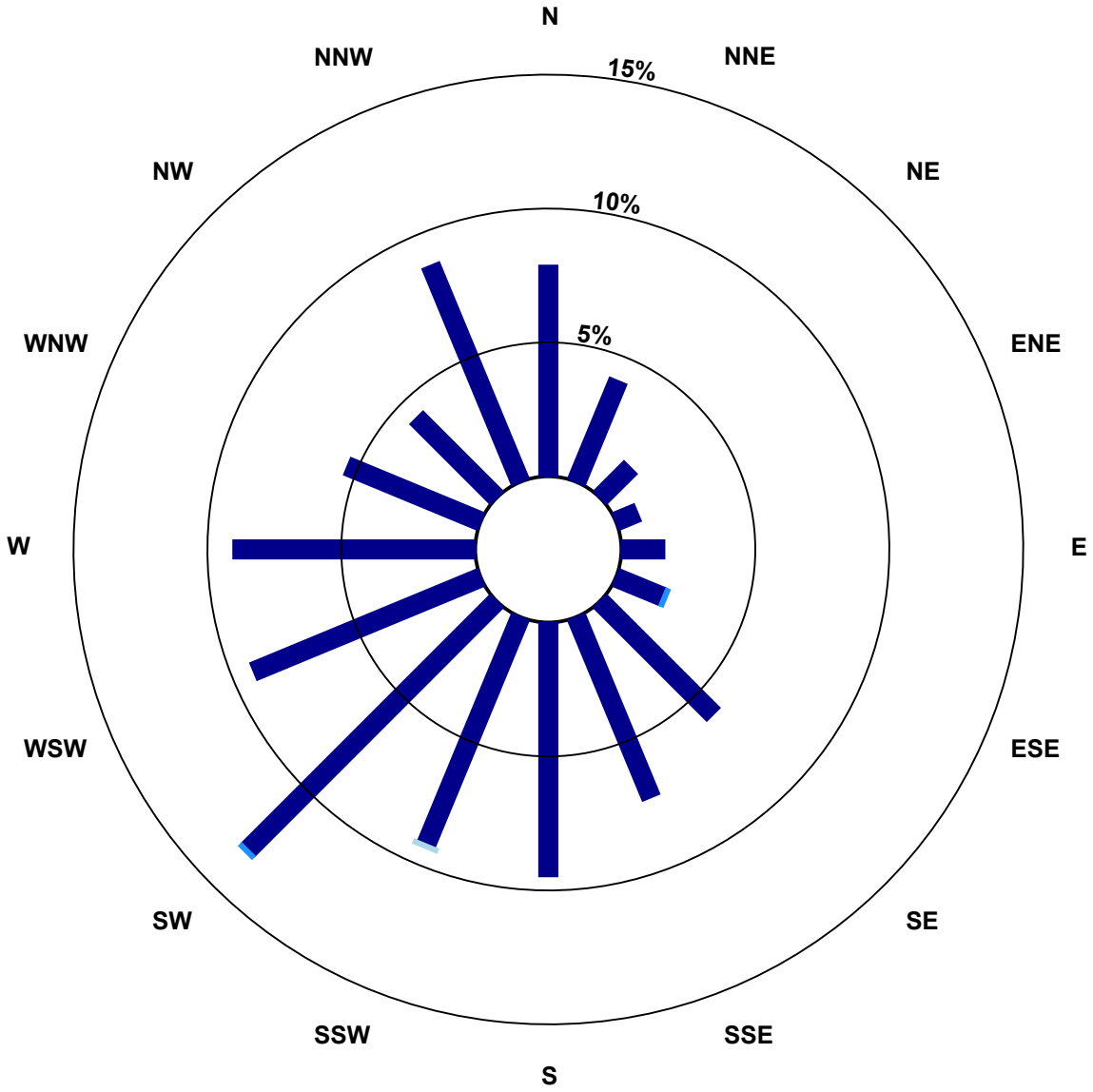
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Firebag



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

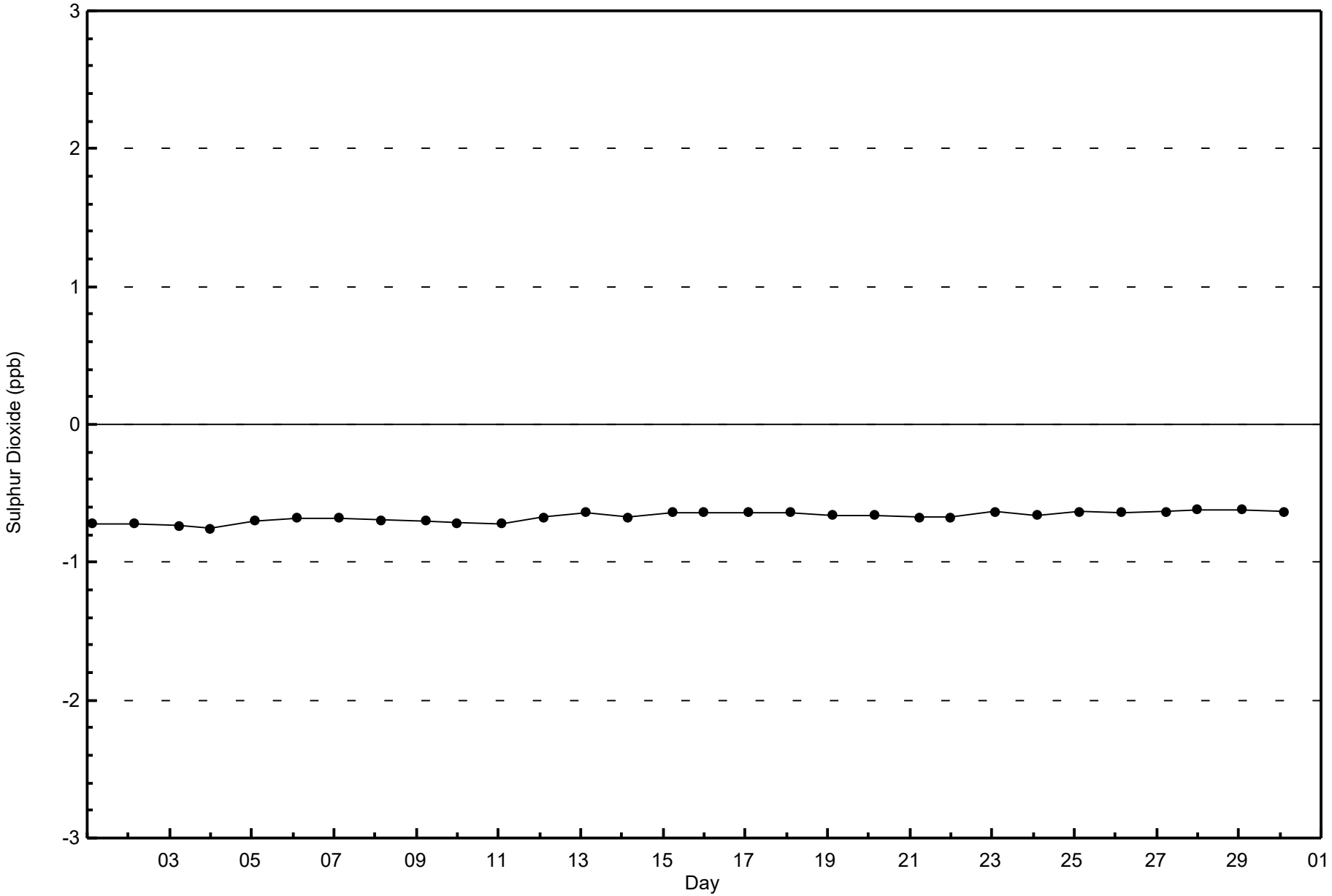
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Firebag - September 2026

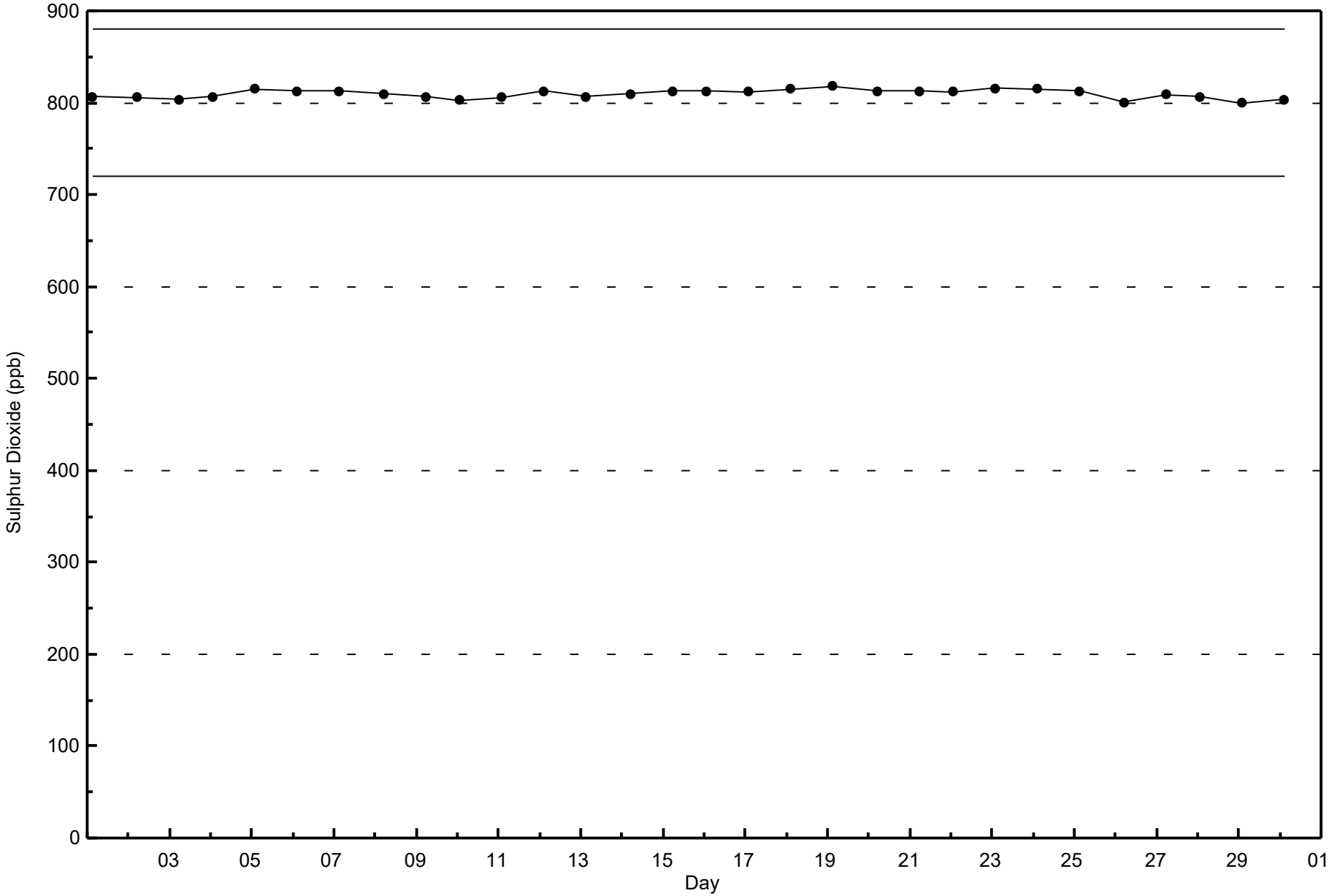


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Firebag - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Firebag - September 2026

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

Maximum Value: 2.0 ppb on Sep 25 03:00 Maximum Daily Average: 0.6 ppb on Sep 25

Minimum Value: 0.0 ppb on Sep 27 18:00 Minimum Daily Average: 0.1 ppb on Sep 2

Maximum Diurnal Average: 0.3 ppb at hour 3 Minimum Diurnal Average: 0.1 ppb at hour 17

Monthly Average: 0.16 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.3 P_{99} = 0.9

Hours in Service:	720
Hours of Data:	685
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-Sep	0.2	0.2	0.2	0.2	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
2-Sep	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	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	0.1	0.1
3-Sep	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
4-Sep	0.1	Z	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.3	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	0.2	0.4
5-Sep	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	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1
6-Sep	0.1	0.1	0.1	Z	0.2	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.3
7-Sep	0.1	0.1	0.1	0.2	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
8-Sep	0.1	0.1	0.7	0.8	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	0.1	0.1	0.2	0.4	0.4	0.2	0.1	0.2	0.8
9-Sep	Z	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	0.3	0.1	0.1	0.5	0.4	0.4	0.1	0.6	0.7	0.7	0.2	0.7
10-Sep	0.0	Z	0.1	0.2	0.2	0.1	0.2	0.3	0.3	0.3	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	0.3
11-Sep	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
12-Sep	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	0.0	0.0	0.0	0.1	0.2	0.4	0.1	0.0	0.1	0.2	0.1	0.4
13-Sep	0.5	0.5	0.4	0.1	Z	0.1	0.1	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.5
14-Sep	0.1	0.1	0.1	0.0	0.1	Z	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	0.2	0.1	0.2
15-Sep	Z	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.1	0.2	0.5	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.2	0.1	0.2	0.5
16-Sep	0.1	Z	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5
17-Sep	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	0.3	0.2	0.2	0.6	0.3	0.2	0.2	0.3	0.4	0.2	0.6
18-Sep	0.7	0.5	0.5	Z	0.8	0.4	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	0.2	0.2	0.8
19-Sep	0.1	0.1	0.1	0.1	Z	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	0.1	0.1	0.1	0.1
20-Sep	0.1	0.1	0.1	0.2	0.1	Z	0.2	0.2	0.4	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4
21-Sep	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2
22-Sep	0.2	Z	0.3	0.2	0.2	0.3	0.2	1.4	0.4	C	C	C	C	C	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.2	1.4
23-Sep	0.3	0.2	Z	0.4	0.6	0.2	0.1	0.1	0.1	0.1	0.0	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	0.6
24-Sep	0.0	0.1	0.3	Z	0.5	1.1	0.9	0.6	0.4	0.2	0.3	0.4	0.4	0.2	0.1	0.1	0.1	0.0	0.1	0.5	0.7	0.5	0.2	0.2	0.4	1.1
25-Sep	0.2	0.6	2.0	0.9	Z	1.1	1.0	1.4	0.6	1.1	0.2	0.5	0.6	0.6	0.5	0.7	0.5	0.4	0.1	0.3	0.3	0.1	0.1	0.1	0.6	2.0
26-Sep	0.1	0.1	0.0	0.1	0.1	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	0.1	0.1	0.2
27-Sep	Z	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	0.0	0.0	0.0	0.0	0.1	0.2	0.6	0.7	0.5	0.1	0.7
28-Sep	0.3	Z	0.2	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
29-Sep	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.3
30-Sep	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	0.2	0.2	0.1	0.2
	0.2	0.2	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	0.1	0.2	0.2	0.2	Diurnal Average	
	0.7	0.6	2.0	0.9	0.8	1.1	1.0	1.4	0.6	1.1	0.3	0.5	0.6	0.6	0.5	0.7	0.5	0.5	0.6	0.5	0.7	0.6	0.7	0.7	Diurnal Maximum	

Z - zerospan C - Calibration

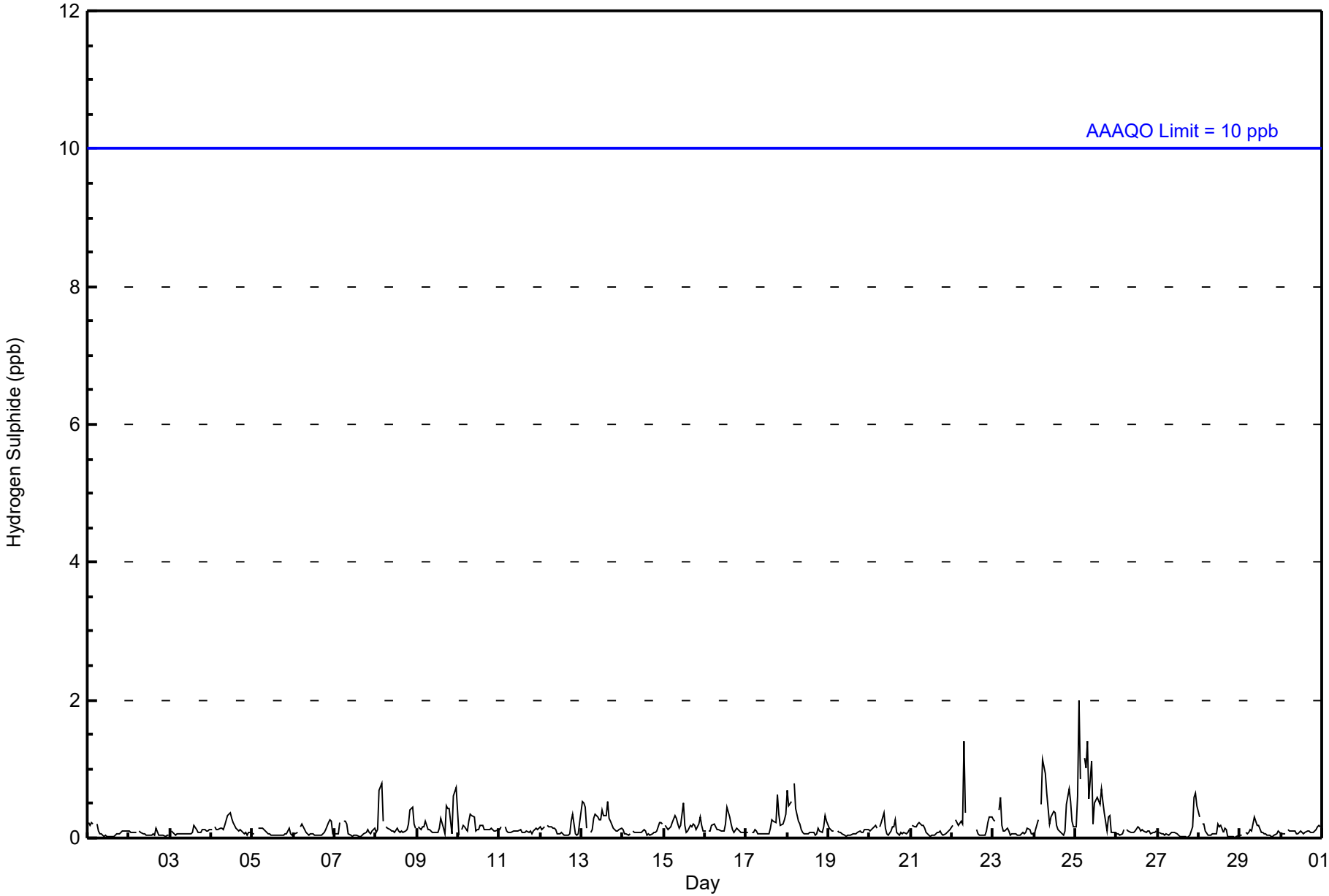
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Firebag - September 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Firebag - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	685	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Firebag - September 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	55	28	11	6	11	15	41	48	66	64	92	63	65	35	26	59	685
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	55	28	11	6	11	15	41	48	66	64	92	63	65	35	26	59	685

Total Number of Valid Hours: 685

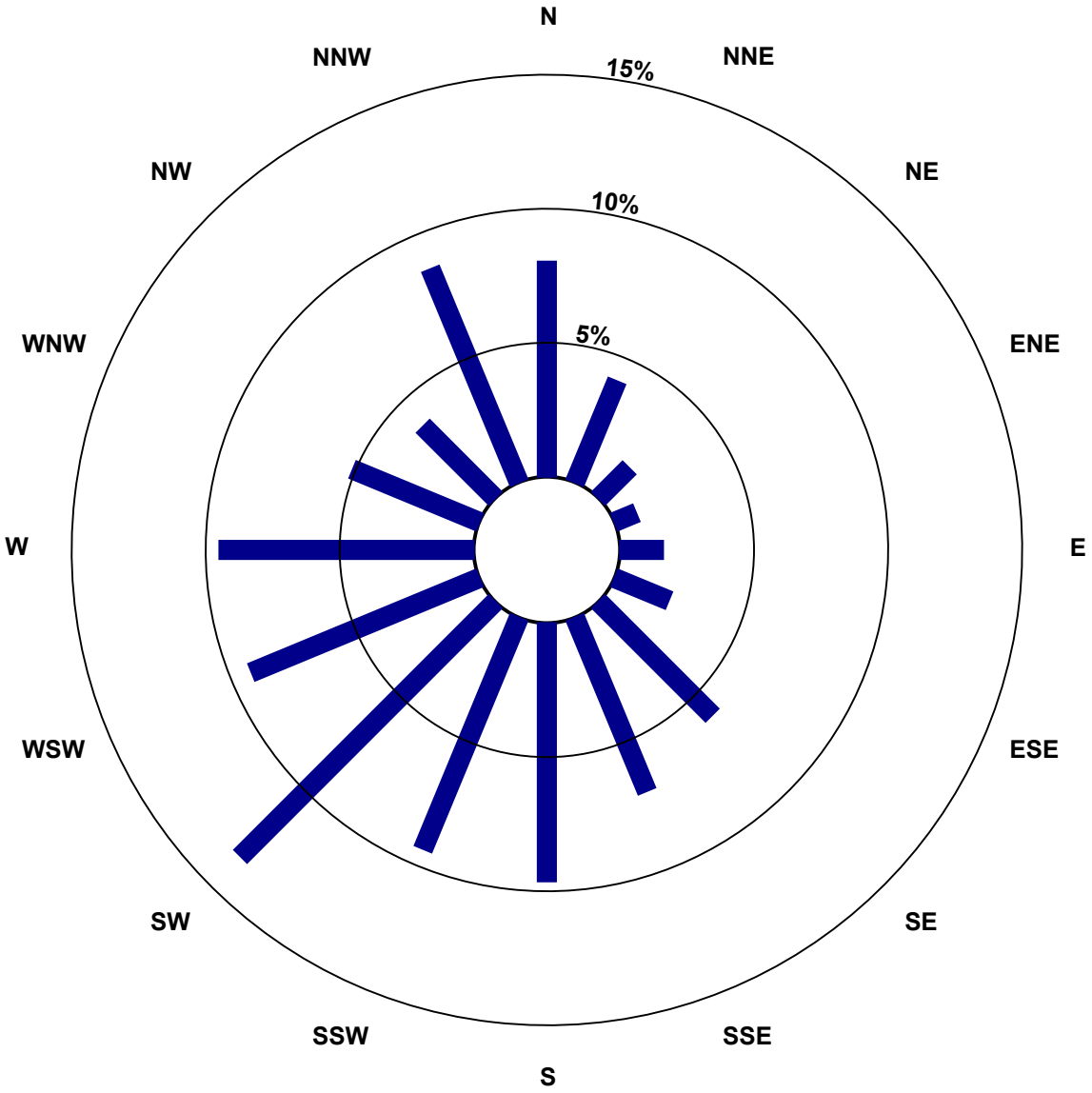
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

Firebag



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

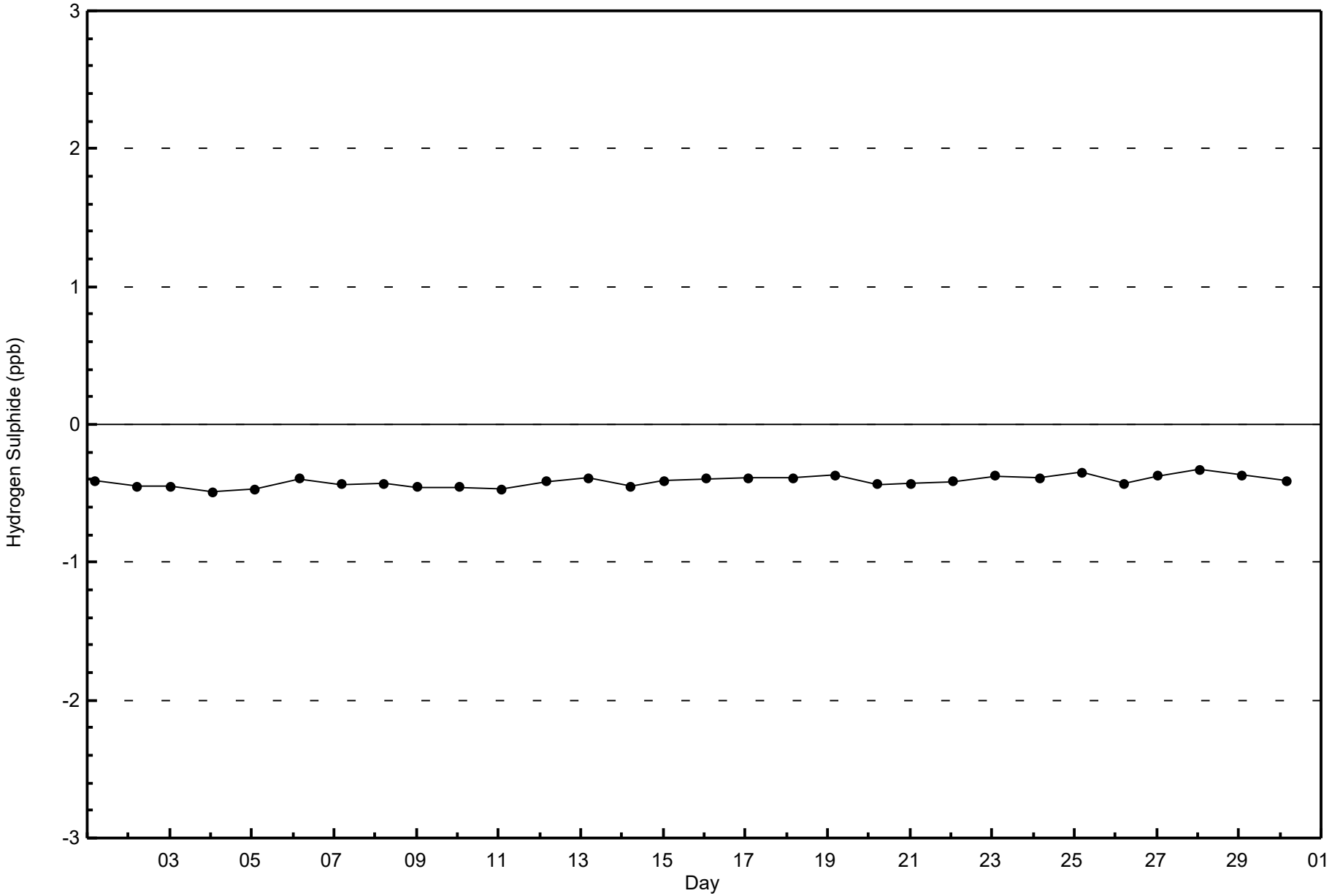
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Firebag - September 2026

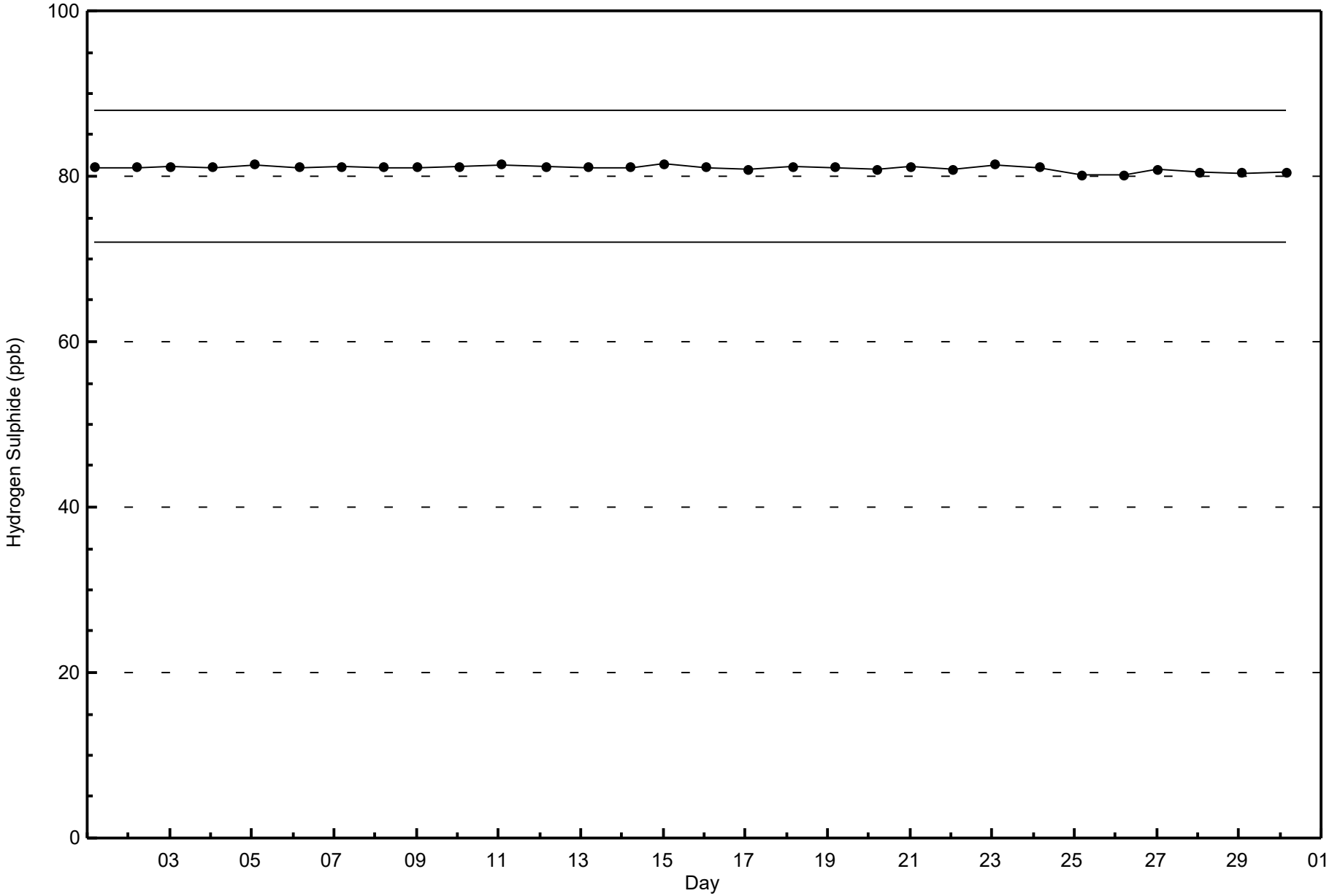


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Firebag - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Firebag - September 2026

Maximum Value: 2.9 ppm on Sep 23 04:00

Maximum Daily Average: 2.4 ppm on Sep 8

Minimum Value: 1.9 ppm on Sep 26 12:00

Minimum Daily Average: 2.0 ppm on Sep 26

Maximum Diurnal Average: 2.3 ppm at hour 5

Minimum Diurnal Average: 2.1 ppm at hour 10

Monthly Average: 2.16 ppm

Percentiles: P_1 = 1.9 P_{10} = 2.0 Q_1 = 2.1 Median = 2.1 Q_3 = 2.2 P_{90} = 2.3 P_{99} = 2.7

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	34
Percent Operational Time:	99.4

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-Sep	2.6	2.5	2.4	Z	2.3	2.2	2.2	2.2	2.1	2.0	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	2.1	2.2	2.6
2-Sep	2.1	2.1	2.2	2.1	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	2.1	2.1	2.1	2.2	2.2	2.1	2.2
3-Sep	2.1	2.2	2.2	2.2	2.2	Z	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	2.2	2.2	2.1	2.2
4-Sep	Z	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.4
5-Sep	2.1	Z	2.2	2.2	2.2	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	2.2	2.2	2.3	2.2	2.3
6-Sep	2.6	2.5	Z	2.4	2.3	2.3	2.3	2.2	2.1	2.1	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.6
7-Sep	2.2	2.2	2.3	Z	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	2.2	2.2	2.3	2.3	2.3	2.4	2.5	2.2	2.5
8-Sep	2.3	2.3	2.4	2.6	Z	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.5	2.8	2.7	2.4	2.4	2.4	2.8
9-Sep	2.4	2.4	2.3	2.5	2.3	Z	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.5
10-Sep	Z	2.1	2.2	2.3	2.3	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	2.2	2.2	2.2	2.2	2.3
11-Sep	2.2	Z	2.2	2.2	2.1	2.2	2.1	2.1	2.1	C	C	C	C	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-Sep	2.1	2.1	Z	2.1	2.1	2.2	2.1	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	2.1	2.1	2.1	2.2	2.1	2.2
13-Sep	2.2	2.2	2.2	Z	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.2	2.1	2.2	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.2
14-Sep	2.1	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	2.1	2.1	2.0	2.0	2.0	2.2	2.2	2.1	2.1	2.2
15-Sep	2.2	2.1	2.1	2.2	2.2	Z	2.6	2.4	2.3	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.6
16-Sep	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2
17-Sep	2.0	Z	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.3	2.3	2.3	2.5	2.4	2.1	2.5
18-Sep	2.7	2.8	Z	2.7	2.9	2.6	2.3	2.2	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.2	2.2	2.3	2.9
19-Sep	2.1	2.1	2.1	Z	2.2	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	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2
20-Sep	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	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.2
21-Sep	2.2	2.1	2.1	2.2	2.2	Z	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2
22-Sep	Z	2.3	2.4	2.3	2.2	2.3	2.1	2.2	2.2	2.1	2.5	2.6	2.5	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.2	2.2	2.3	2.4	2.2	2.6
23-Sep	2.6	Z	2.8	2.9	2.7	2.6	2.2	2.1	2.0	2.0	2.1	2.2	2.2	2.2	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.9
24-Sep	2.1	2.1	Z	2.3	2.3	2.4	2.4	2.2	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.4	2.4	2.2	2.4
25-Sep	2.5	2.9	2.6	Z	2.5	2.3	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	2.1	2.0	2.2	2.9
26-Sep	2.0	2.0	2.2	2.0	Z	2.4	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.0	2.2	2.0	2.0	2.4
27-Sep	2.2	1.9	1.9	2.1	2.0	Z	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.4	2.2	2.1	2.4
28-Sep	Z	2.3	2.0	2.0	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	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.3
29-Sep	2.0	Z	2.3	2.1	2.1	2.3	2.1	2.0	2.0	2.0	M	M	M	M	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.3
30-Sep	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	2.3	2.2	2.3	2.2	2.3	2.3	2.4	2.5	2.5	2.4	2.3	2.5
	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	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	Diurnal Average	
	2.7	2.9	2.8	2.9	2.9	2.6	2.6	2.4	2.3	2.4	2.5	2.6	2.5	2.3	2.3	2.2	2.3	2.2	2.3	2.5	2.8	2.7	2.5	2.5	Diurnal Maximum	

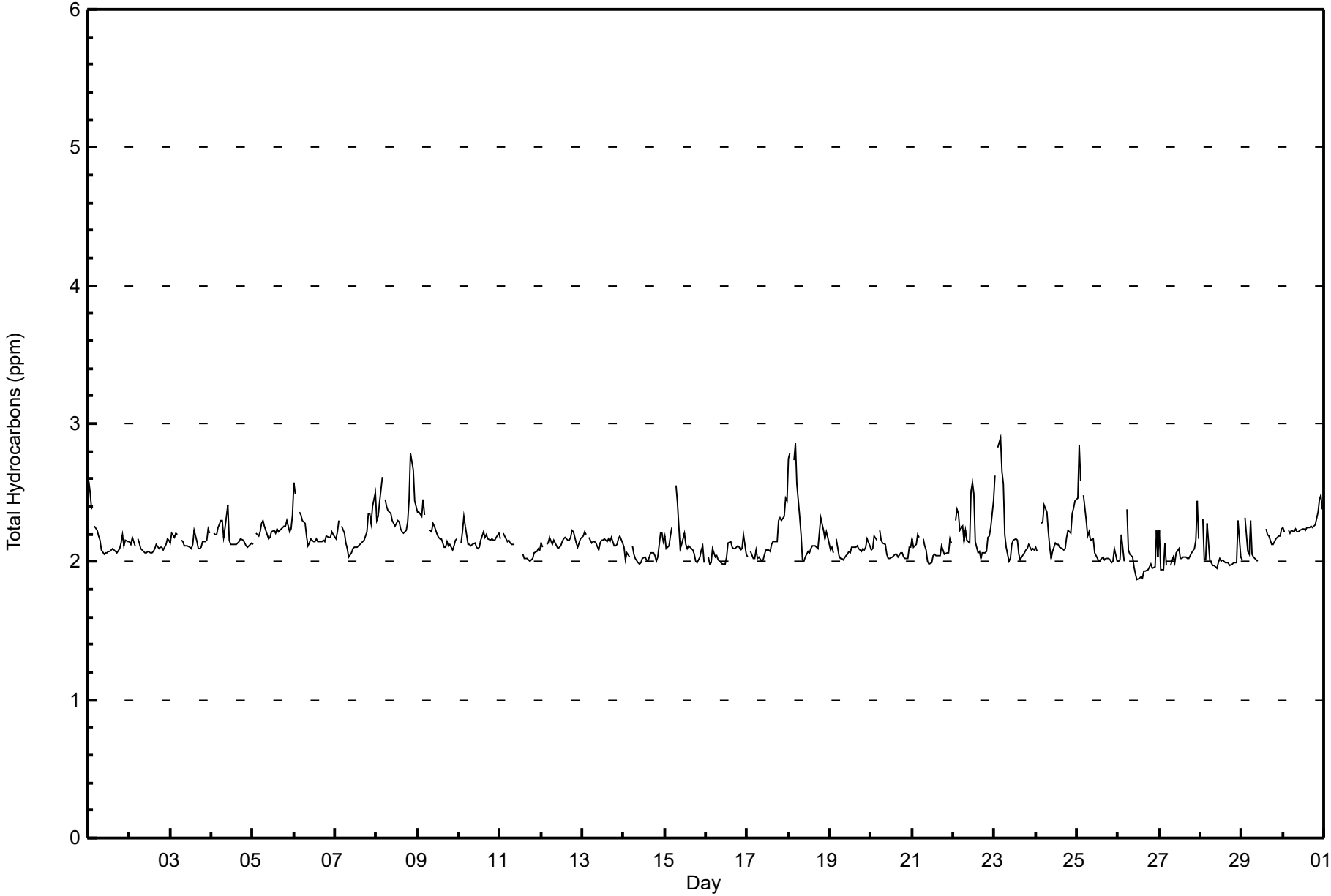
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Firebag - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	145	21.26	21.26
2.1 - 3.0	537	78.74	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Firebag - September 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	9	1	5	5	0	0	7	10	18	19	14	26	5	0	8	145
2.1 - 3.0	36	19	10	1	6	14	41	43	55	46	72	48	35	30	29	52	537
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	54	28	11	6	11	14	41	50	65	64	91	62	61	35	29	60	682

Total Number of Valid Hours: 682

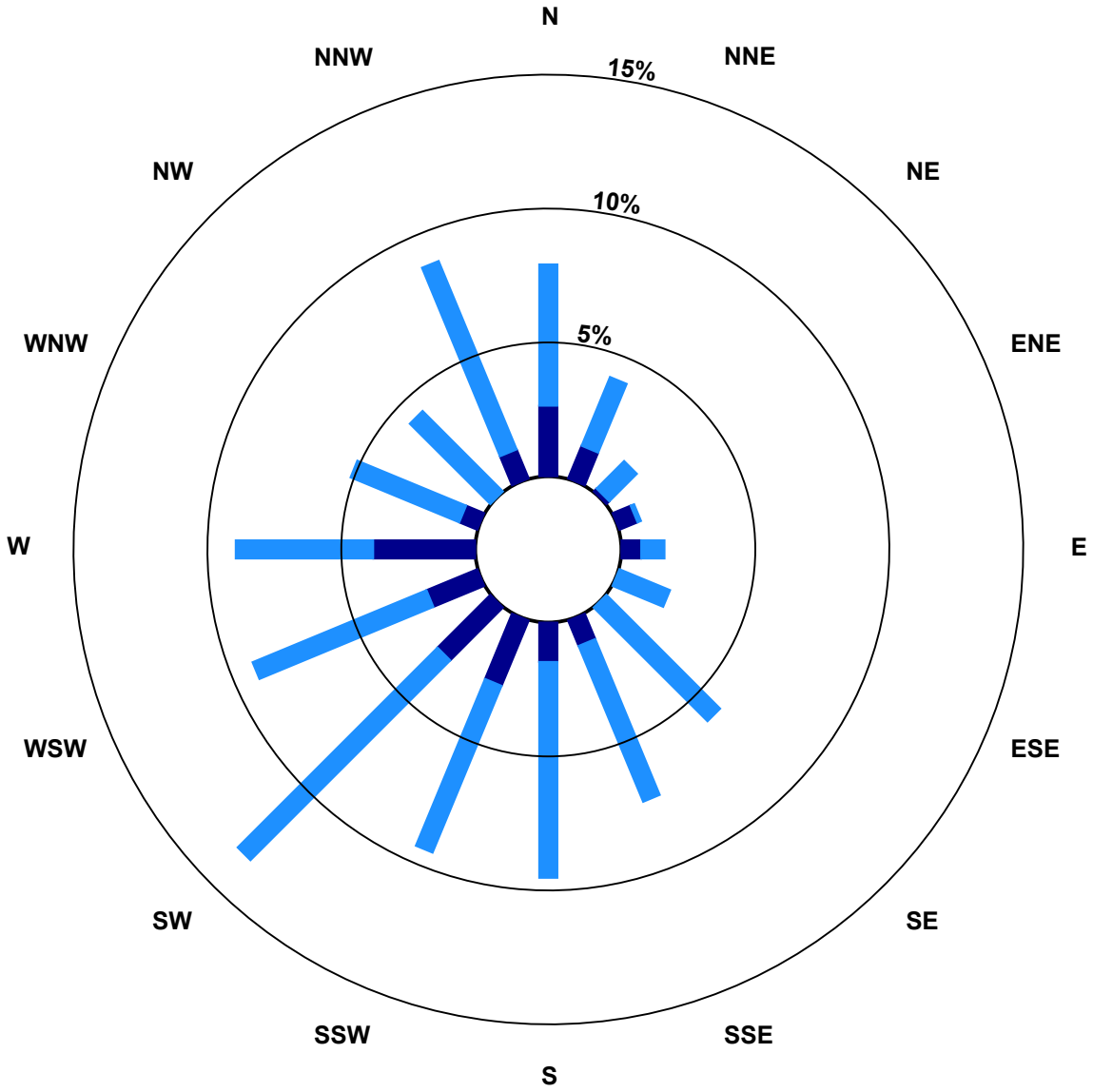
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Firebag



Classes (ppm)

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

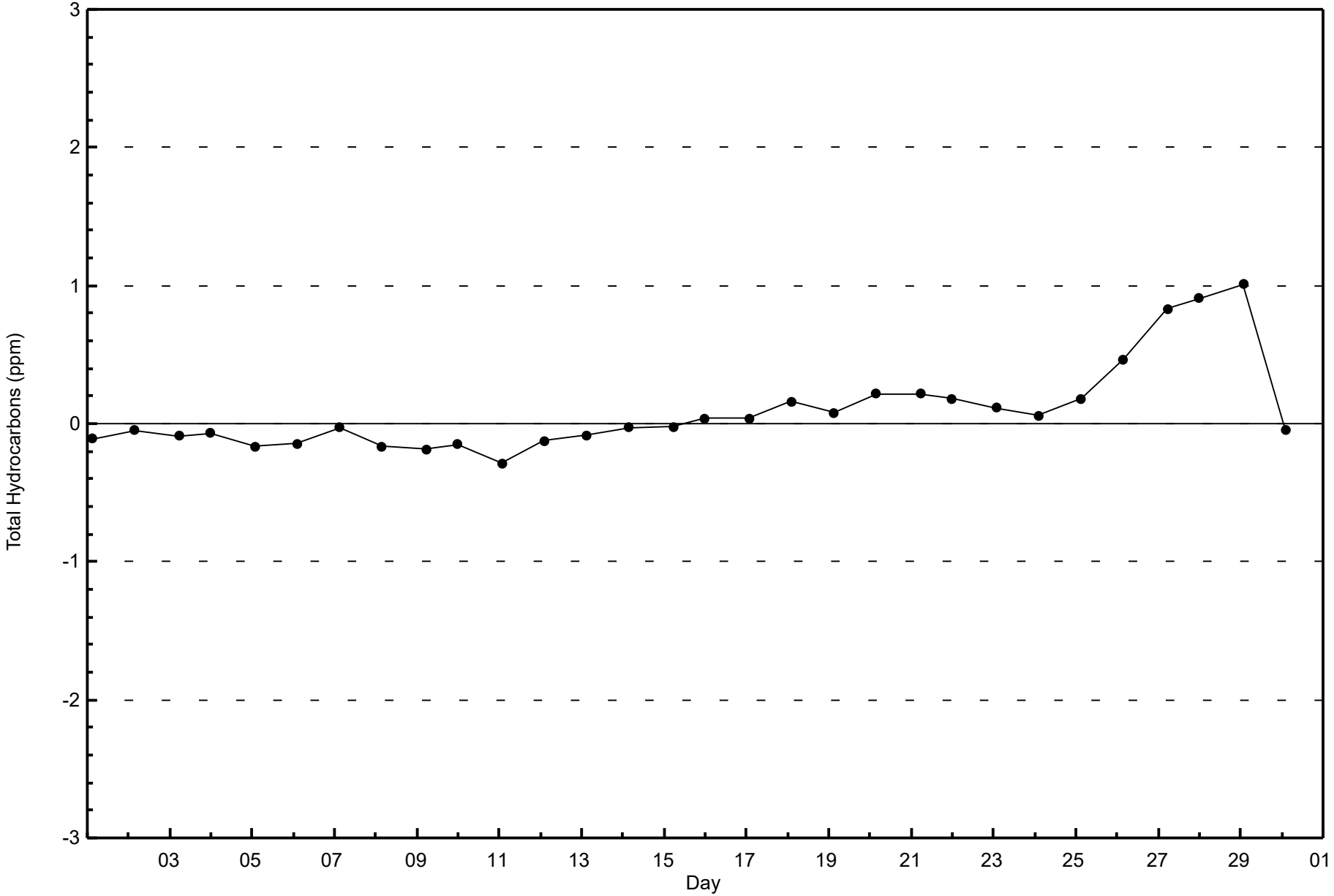
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Firebag - September 2026

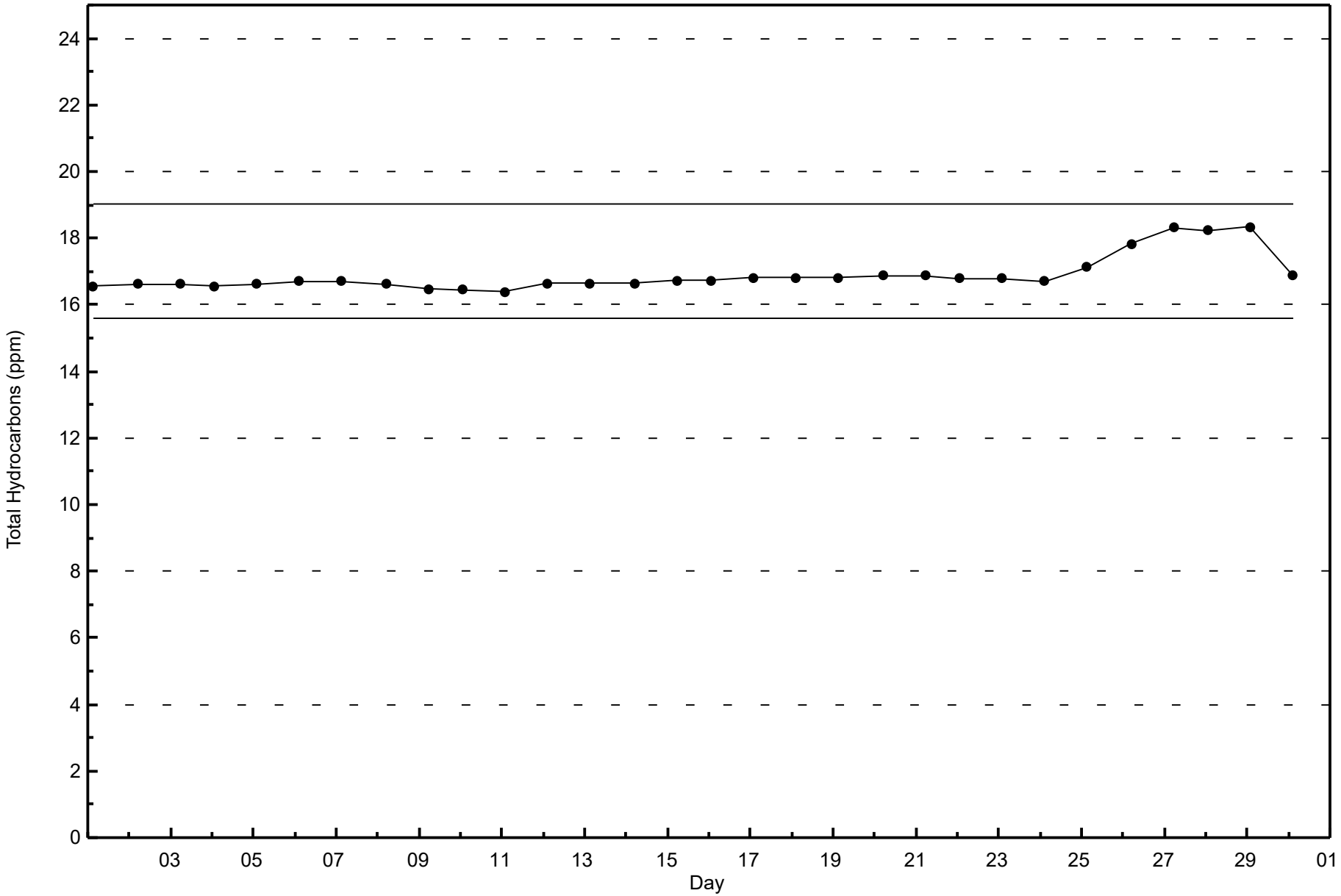


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Firebag - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Firebag - September 2026

Maximum Value: 21.9 ppb on Sep 25 10:00

Maximum Daily Average: 1.6 ppb on Sep 25

Minimum Value: 0.0 ppb on Sep 23 15:00

Minimum Daily Average: 0.1 ppb on Sep 14

Maximum Diurnal Average: 1.7 ppb at hour 6

Minimum Diurnal Average: 0.1 ppb at hour 24

Monthly Average: 0.49 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} = 5.8

Hours in Service:	720
Hours of Data:	685
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-Sep	0.4	Z	0.2	1.2	5.4	9.8	1.0	0.6	0.2	0.1	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.4	0.2	0.1	0.1	0.1	0.1	1.0	9.8
2-Sep	0.1	0.1	Z	0.2	0.3	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.3	0.1	0.1	0.3	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.4
3-Sep	0.1	0.2	0.3	Z	0.7	0.5	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.7
4-Sep	0.2	0.1	0.2	0.2	Z	0.6	0.4	0.2	2.7	3.7	0.3	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	0.4	3.7
5-Sep	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	0.2	0.1	0.1	0.1	0.1	0.4	0.4	0.3	0.1	0.4
6-Sep	Z	0.1	0.1	0.1	0.6	5.9	0.2	0.3	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.7	0.4	0.1	0.1	0.1	0.1	0.5	5.9
7-Sep	0.1	Z	0.1	0.2	1.8	2.9	1.8	1.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	1.2	0.1	0.5	0.1	0.5	2.9
8-Sep	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	1.9	1.0	0.5	0.3	0.1	0.1	0.1	0.2	0.4	0.2	0.1	0.1	0.3	1.9
9-Sep	0.1	0.1	0.1	Z	4.3	13.5	0.5	0.3	0.2	0.2	0.6	0.4	0.3	0.4	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0	13.5
10-Sep	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.3	0.5	0.2	0.1	0.2	0.1	0.6	1.2	0.3	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	1.2
11-Sep	0.0	0.0	0.0	0.1	0.1	Z	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
12-Sep	Z	0.0	0.0	0.0	0.1	0.0	0.4	0.8	1.4	0.8	0.1	0.1	0.6	0.3	0.2	0.3	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.3	1.4
13-Sep	0.1	Z	0.1	0.1	0.1	0.1	0.4	1.5	1.8	1.8	1.9	1.4	0.7	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.5	1.9
14-Sep	0.1	0.0	Z	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	0.1	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.4
15-Sep	0.1	0.1	0.1	Z	0.5	1.7	9.3	7.2	4.6	2.3	2.3	1.7	0.9	0.3	0.4	0.5	0.3	0.5	0.3	0.1	0.0	0.0	0.1	0.0	1.4	9.3
16-Sep	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.3	0.8	0.5	0.7	1.1	2.8	2.6	1.7	0.5	0.2	0.2	1.0	0.6	0.2	0.3	0.1	0.6	2.8
17-Sep	0.2	0.1	0.1	0.2	0.5	Z	1.7	0.3	0.2	0.4	0.4	0.2	0.1	0.1	1.2	1.5	1.2	0.7	0.6	0.1	0.1	1.1	0.5	0.2	0.5	1.7
18-Sep	Z	1.1	0.2	0.2	6.5	3.6	0.5	0.5	0.1	0.1	0.0	0.0	0.5	1.1	1.3	0.6	0.1	0.1	0.4	0.2	0.1	0.1	0.0	0.0	0.8	6.5
19-Sep	0.0	Z	0.0	0.4	0.6	0.1	0.1	0.7	1.0	0.5	0.2	0.1	0.1	0.1	0.2	0.1	0.3	0.6	0.4	0.2	0.0	0.0	0.1	0.1	0.3	1.0
20-Sep	0.1	0.1	Z	0.1	0.1	0.1	0.2	0.9	1.3	0.8	0.1	0.2	0.5	0.3	0.3	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	1.3
21-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.8	1.6	2.6	1.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.4	2.6
22-Sep	0.0	0.0	0.0	0.1	Z	1.3	0.2	0.7	0.4	0.8	5.8	5.5	5.2	1.1	0.8	0.7	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	1.0	5.8
23-Sep	0.2	0.1	0.8	1.5	3.1	Z	0.9	0.7	0.4	C	C	C	C	C	0.0	0.1	0.3	1.4	0.3	0.7	0.1	0.1	0.0	0.0	0.6	3.1
24-Sep	Z	0.0	0.0	0.1	0.3	0.1	0.9	4.0	3.7	2.2	2.1	2.0	1.8	0.7	0.2	0.2	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.8	4.0
25-Sep	0.1	Z	0.0	0.5	1.1	0.9	1.0	0.7	0.7	21.9	0.2	0.6	0.4	0.6	4.0	1.3	0.3	0.3	0.1	0.2	2.5	0.0	0.1	0.1	1.6	21.9
26-Sep	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	0.2	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
27-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.6	0.9	1.0	1.2	0.6	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.2
28-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.6	0.6	0.6	0.7	0.7	0.4	0.3	0.2	0.2	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.7
29-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.2	0.4	0.4	0.5	0.4	0.3	1.7	1.2	1.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.7
30-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.4	0.5	0.4	0.3	0.3	0.3	0.1	0.0	0.0	0.1	0.2	1.8	0.2	0.2	1.8
	0.1	0.1	0.1	0.2	1.1	1.7	0.7	0.9	0.8	1.4	0.6	0.6	0.6	0.5	0.6	0.4	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1	Diurnal Average	
	0.4	1.1	0.8	1.5	6.5	13.5	9.3	7.2	4.6	21.9	5.8	5.5	5.2	2.8	4.0	1.7	1.2	1.4	0.7	1.0	2.5	1.1	1.8	0.3	Diurnal Maximum	

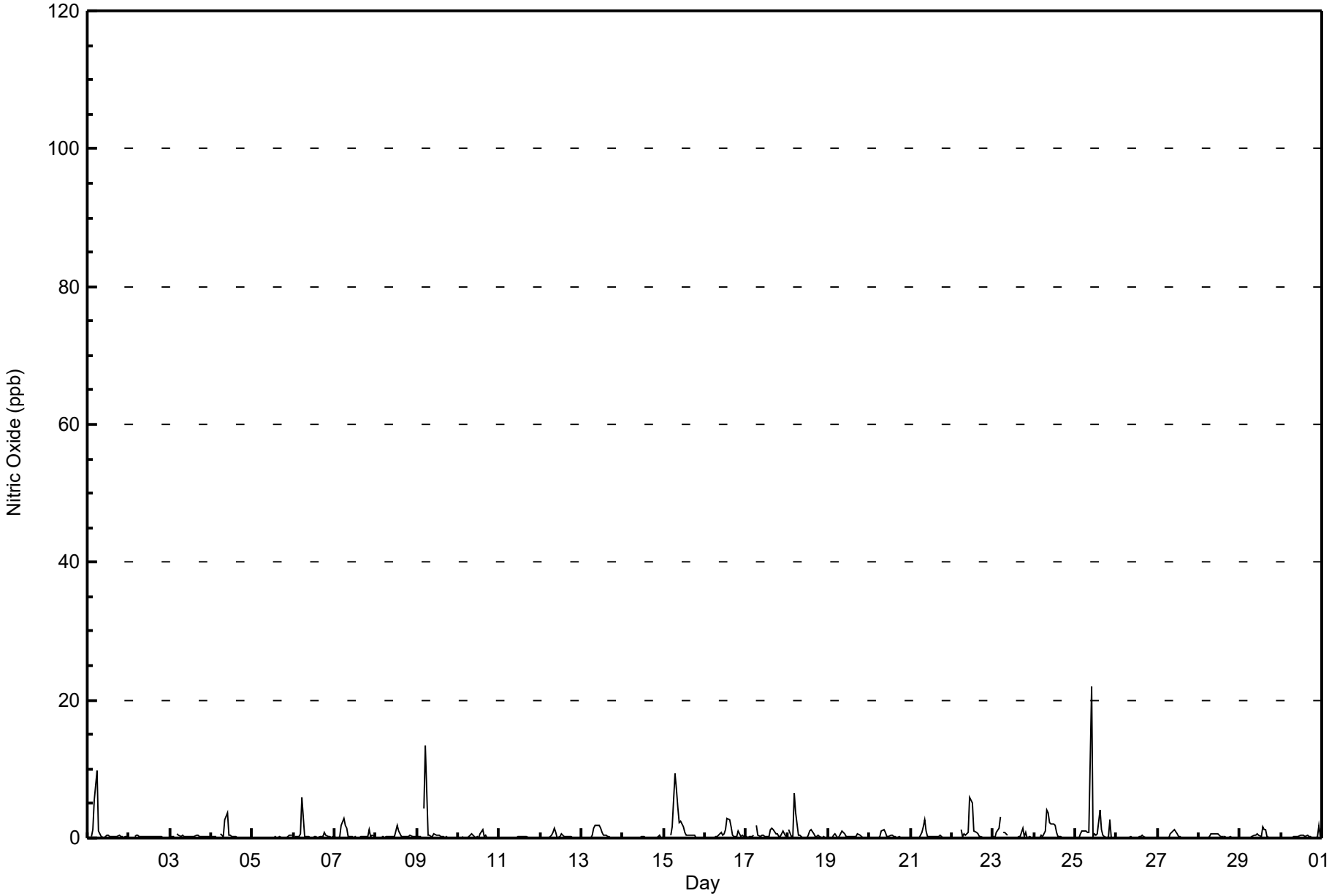
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Firebag - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	99.85	99.85
21 - 40	1	0.15	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: 685

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Firebag - September 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	57	28	9	6	10	15	41	46	65	63	91	64	64	36	27	62	684
21 - 40	0	0	0	0	1	0	0	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	57	28	9	6	11	15	41	46	65	63	91	64	64	36	27	62	685

Total Number of Valid Hours: 685

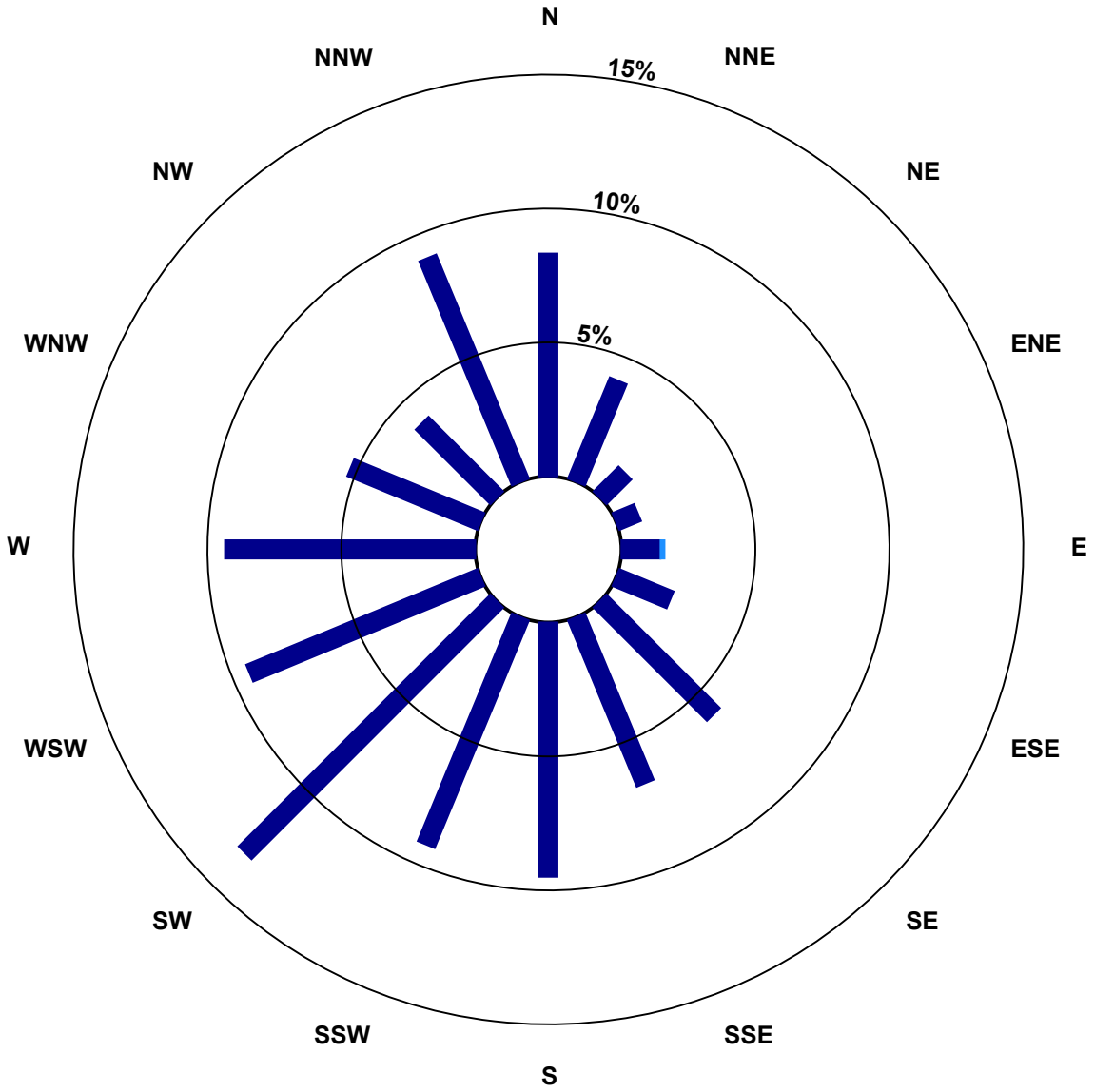
Total Number of Hours: 720

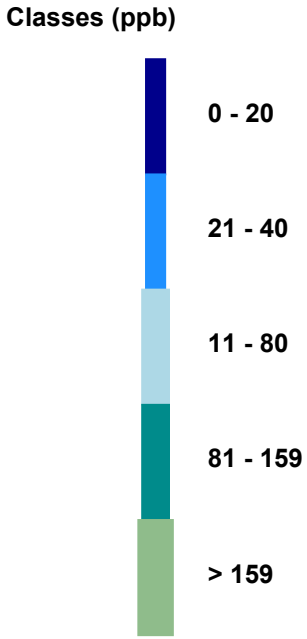
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Firebag





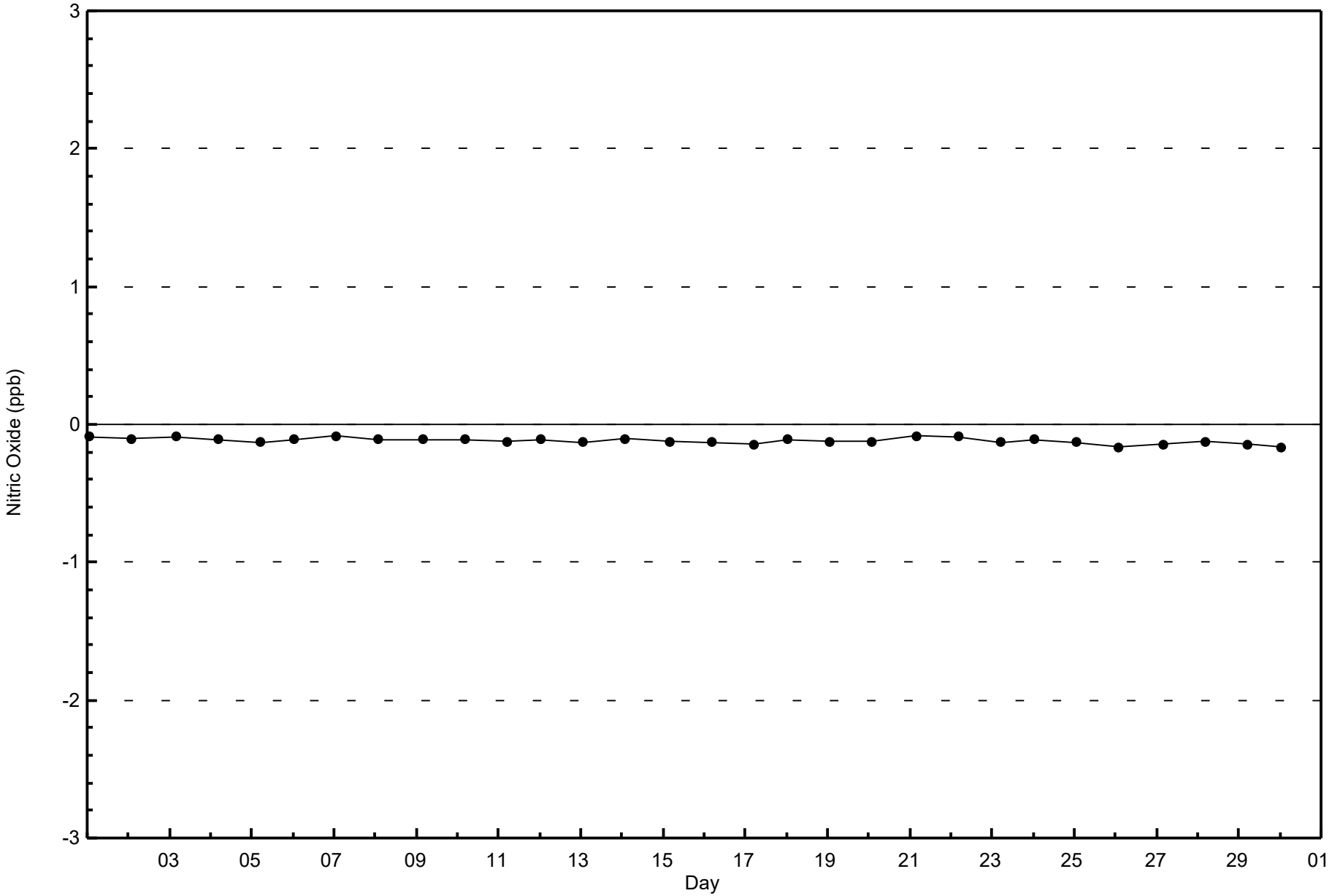
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Firebag - September 2026

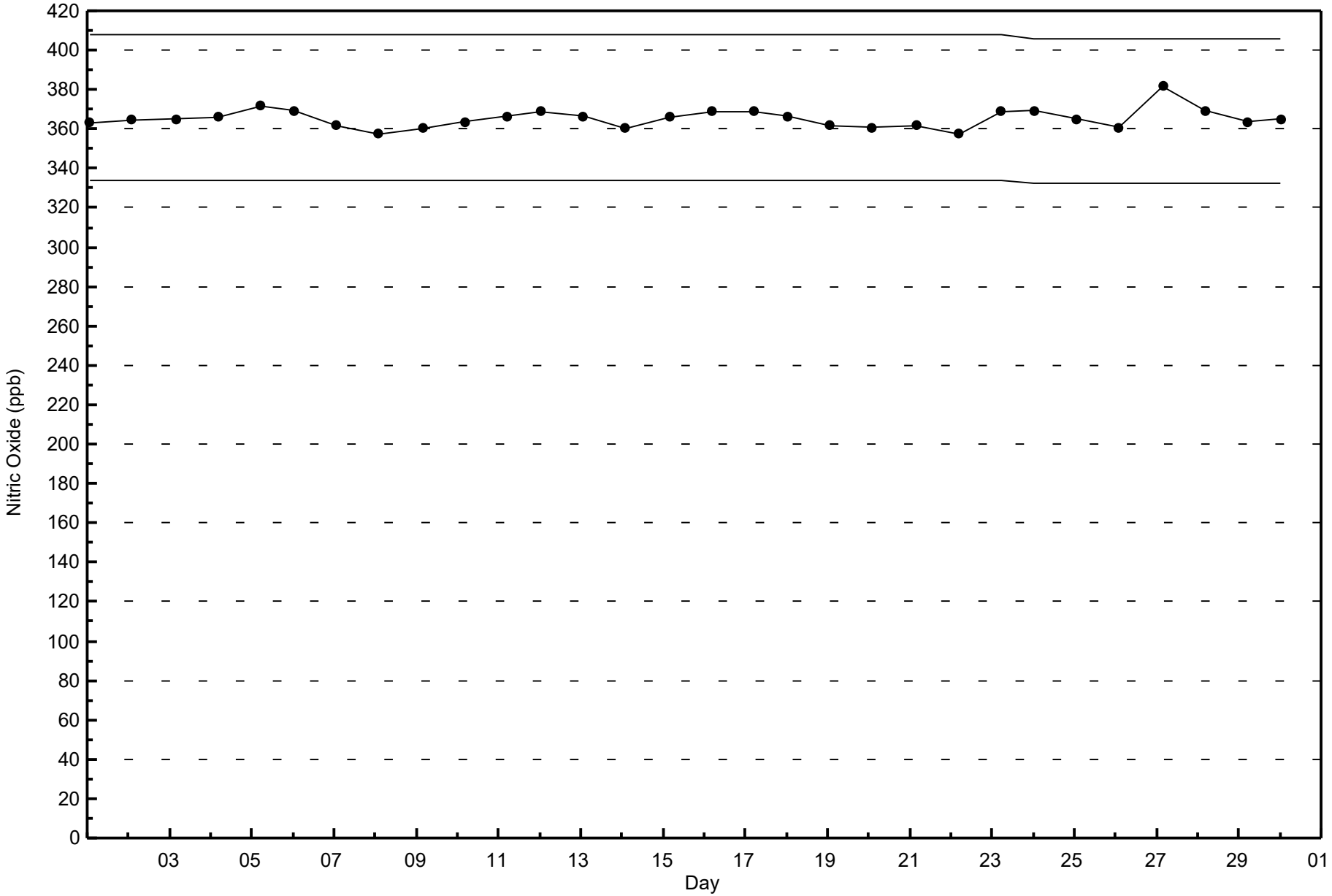


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Firebag - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Firebag - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 17.0 ppb on Sep 30 23:00 Maximum Daily Average: 5.5 ppb on Sep 24

Minimum Value: 0.0 ppb on Sep 14 09:00 Minimum Daily Average: 0.4 ppb on Sep 5
Maximum Diurnal Average: 5.0 ppb at hour 6 Minimum Diurnal Average: 1.3 ppb at hour 14
Monthly Average: 2.44 ppb Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.6 Median = 1.5 Q_3 = 3.2 P_{90} = 5.8 P_{99} = 12.7

Hours in Service:	720
Hours of Data:	685
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-Sep	4.9	Z	4.3	3.9	7.2	9.3	3.0	1.5	1.0	0.5	1.0	1.0	1.0	0.8	0.7	0.7	0.8	0.8	1.3	1.2	1.0	0.4	0.7	0.6	2.1	9.3
2-Sep	0.3	0.3	Z	1.2	1.2	1.8	1.1	0.9	0.6	0.5	0.4	0.4	0.8	0.5	0.5	0.9	0.8	0.9	1.3	0.8	0.7	0.7	0.5	0.5	0.8	1.8
3-Sep	0.9	1.1	1.1	Z	1.4	0.8	0.5	0.6	0.4	0.5	0.4	0.4	0.5	0.4	0.6	0.7	0.8	0.6	0.8	0.8	0.8	0.8	0.6	0.6	0.7	1.4
4-Sep	0.7	0.7	0.6	0.9	Z	3.7	3.6	1.0	3.9	5.1	0.4	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0	5.1
5-Sep	0.1	0.1	0.1	0.1	0.1	Z	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.4	0.2	0.1	0.1	0.1	2.4	1.6	1.6	0.4	2.4
6-Sep	Z	1.8	1.4	2.0	3.7	8.9	1.3	0.8	0.3	0.3	0.2	0.2	0.4	0.4	0.3	0.4	0.5	0.7	2.1	1.6	0.5	0.3	0.4	1.6	1.3	8.9
7-Sep	1.3	Z	1.0	1.9	3.1	3.7	2.7	1.4	0.3	0.3	0.3	0.1	0.2	0.1	0.1	0.5	0.5	0.8	0.8	3.9	3.4	2.2	3.8	1.0	1.5	3.9
8-Sep	0.2	0.9	Z	10.1	3.8	1.3	0.6	0.4	0.5	0.3	0.3	0.3	3.3	2.3	1.4	0.8	0.4	0.9	1.2	5.0	6.3	5.1	3.3	2.4	2.2	10.1
9-Sep	1.5	2.0	1.7	Z	5.4	10.0	1.4	1.1	0.6	0.7	1.0	1.0	0.9	0.9	0.8	1.2	0.5	1.0	0.9	1.1	0.7	1.4	2.3	1.9	1.7	10.0
10-Sep	0.9	1.6	4.8	10.5	Z	1.5	1.7	2.1	2.4	1.9	0.6	0.7	0.4	2.1	2.9	1.1	2.7	1.3	2.3	1.9	1.8	3.0	1.9	1.9	2.3	10.5
11-Sep	1.9	2.0	2.1	0.7	0.3	Z	0.4	0.3	0.1	0.2	0.3	0.3	0.3	0.4	0.7	1.0	1.8	1.1	1.5	1.1	2.6	4.8	5.2	4.9	1.5	5.2
12-Sep	Z	3.5	4.7	2.2	3.7	1.6	3.0	3.2	3.3	1.8	0.1	0.4	1.3	1.1	0.5	0.8	0.4	1.2	3.1	2.0	1.4	1.9	3.5	5.0	2.2	5.0
13-Sep	4.9	Z	5.5	3.6	3.2	2.5	2.4	3.9	3.3	3.1	3.4	3.5	2.0	1.6	1.6	1.4	1.7	1.2	0.6	0.2	0.1	0.2	0.2	0.1	2.2	5.5
14-Sep	0.1	0.2	Z	0.3	0.2	0.2	0.2	0.1	0.0	0.1	0.1	0.5	0.4	0.1	0.1	0.1	0.2	0.4	0.6	0.1	2.6	14.0	11.0	8.2	1.7	14.0
15-Sep	7.1	3.5	2.9	Z	10.5	13.2	10.9	8.8	5.4	3.4	3.5	2.6	1.5	0.9	1.1	1.6	1.8	2.5	2.6	1.9	1.4	2.8	5.3	0.4	4.2	13.2
16-Sep	0.2	0.1	0.1	0.1	Z	5.0	2.9	0.3	0.6	1.7	1.2	1.2	1.8	3.7	4.2	3.1	2.1	2.2	3.8	4.6	3.7	1.6	1.9	0.5	2.0	5.0
17-Sep	0.9	1.1	1.2	0.9	1.3	Z	3.0	1.4	0.8	0.9	0.9	0.8	0.7	0.7	4.2	6.5	5.9	5.6	12.1	13.3	13.9	12.2	8.7	6.3	4.5	13.9
18-Sep	Z	9.9	10.9	8.4	5.9	7.4	5.0	1.5	0.4	0.2	0.2	0.2	1.0	2.4	2.9	2.0	0.8	1.5	7.7	4.8	2.5	4.9	6.3	3.7	3.9	10.9
19-Sep	3.4	Z	2.3	4.1	4.7	3.6	2.6	3.2	2.8	1.4	0.8	0.6	0.5	0.6	1.0	0.9	1.2	2.0	2.1	1.6	1.2	1.1	1.2	1.4	1.9	4.7
20-Sep	1.2	1.5	Z	2.9	2.6	2.9	2.8	4.3	3.8	2.3	0.5	1.0	1.6	1.5	1.5	0.9	0.8	2.2	3.3	2.5	2.6	0.7	1.9	2.0	2.1	4.3
21-Sep	2.8	2.1	2.4	Z	5.6	5.5	6.2	6.2	6.9	2.9	0.7	0.6	1.2	0.9	1.1	1.6	2.4	3.2	1.7	1.3	1.3	2.7	3.3	2.2	2.8	6.9
22-Sep	3.3	3.1	3.5	4.8	Z	9.0	4.5	7.2	2.6	3.0	11.8	11.6	10.2	3.3	3.0	2.9	1.3	2.7	2.7	2.0	5.0	5.4	5.1	6.6	5.0	11.8
23-Sep	7.2	6.3	9.5	8.7	14.0	Z	5.8	3.7	1.4	C	C	C	C	C	0.4	0.6	1.1	4.9	2.4	3.9	1.7	1.8	0.9	2.3	4.3	14.0
24-Sep	Z	3.6	5.2	7.3	9.7	12.6	12.0	11.1	7.2	4.0	4.0	4.0	3.7	1.9	0.9	0.8	0.7	1.0	3.2	2.9	5.4	10.6	8.0	7.0	5.5	12.6
25-Sep	5.6	Z	4.5	6.4	8.2	12.4	9.1	7.2	5.7	10.6	0.9	1.5	1.5	2.0	6.4	4.3	1.7	1.5	0.4	1.4	8.0	0.3	0.1	0.1	4.3	12.4
26-Sep	0.1	0.1	Z	0.2	1.3	3.2	3.2	1.4	1.3	0.3	0.1	0.2	0.2	0.3	0.7	2.0	1.9	2.3	2.5	3.2	2.5	2.7	1.8	3.8	1.5	3.8
27-Sep	3.6	0.7	0.7	Z	0.5	0.3	0.8	2.0	1.4	1.3	1.5	1.1	0.3	0.4	0.3	0.2	0.2	0.4	1.7	1.5	2.6	4.6	6.1	7.9	1.7	7.9
28-Sep	7.9	5.8	5.1	4.0	Z	2.6	2.6	2.7	2.0	1.1	1.3	1.6	1.1	1.0	1.1	1.4	1.5	0.9	1.0	0.8	0.5	0.5	0.8	1.2	2.1	7.9
29-Sep	1.4	2.1	2.5	2.8	1.7	Z	4.8	2.8	3.7	3.1	3.0	2.2	1.3	4.9	4.7	3.9	2.7	1.9	1.3	1.7	1.7	3.1	2.8	3.4	2.8	4.9
30-Sep	Z	0.8	1.1	0.8	0.6	2.0	1.2	3.3	2.9	1.2	1.1	1.5	2.2	1.9	2.1	1.6	2.2	2.6	3.1	2.7	6.0	13.4	17.0	10.8	3.6	17.0
	2.5	2.2	3.2	3.6	4.0	5.0	3.3	2.8	2.2	1.8	1.4	1.4	1.4	1.3	1.5	1.5	1.3	1.6	2.3	2.3	2.7	3.5	3.5	3.0	Diurnal Average	
	7.9	9.9	10.9	10.5	14.0	13.2	12.0	11.1	7.2	10.6	11.8	11.6	10.2	4.9	6.4	6.5	5.9	5.6	12.1	13.3	13.9	14.0	17.0	10.8	Diurnal Maximum	

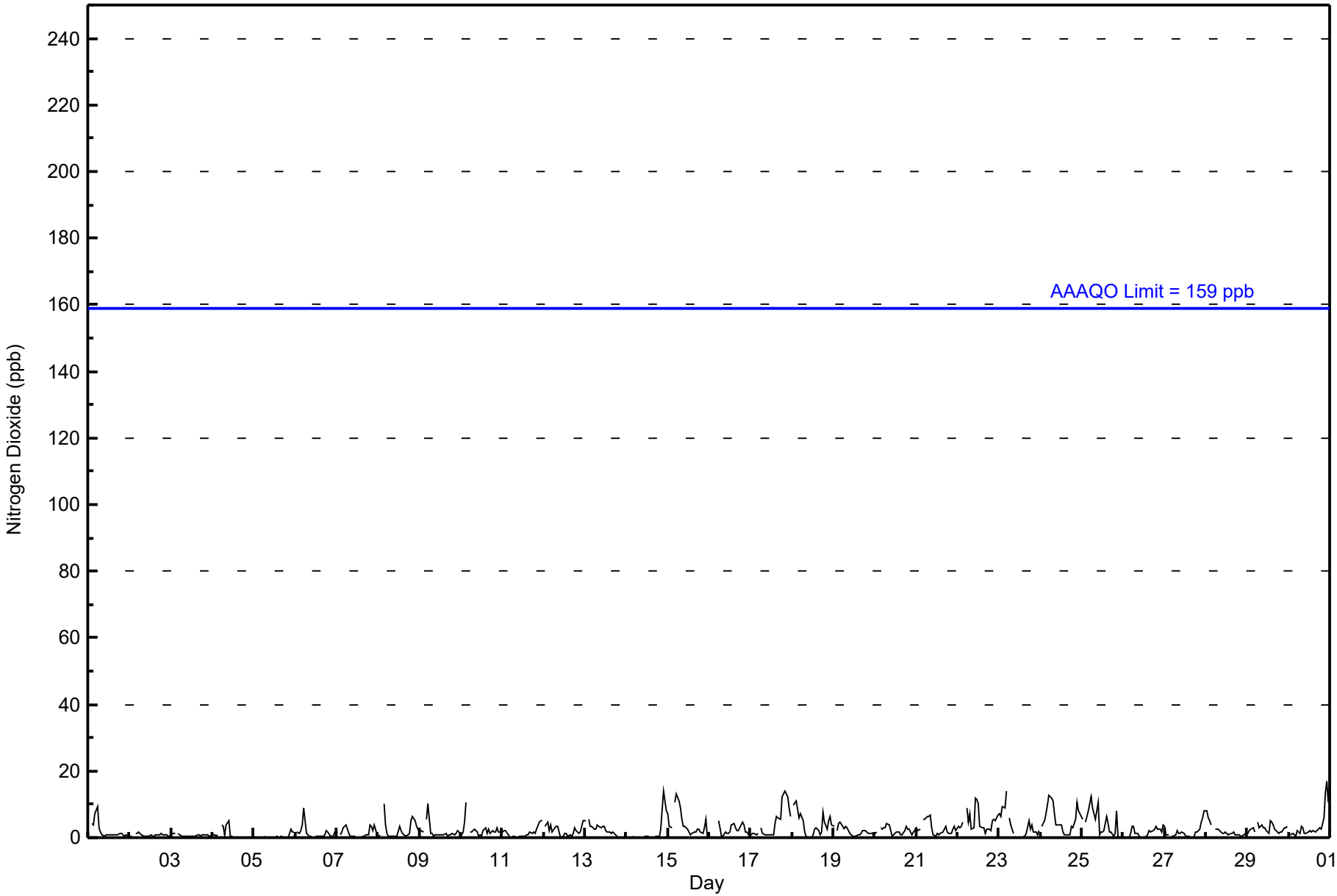
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Firebag - September 2026



Nitrogen Dioxide (NO_2) - ppb
Firebag - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	685	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Firebag - September 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	57	28	9	6	11	15	41	46	65	63	91	64	64	36	27	62	685
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	57	28	9	6	11	15	41	46	65	63	91	64	64	36	27	62	685

Total Number of Valid Hours: 685

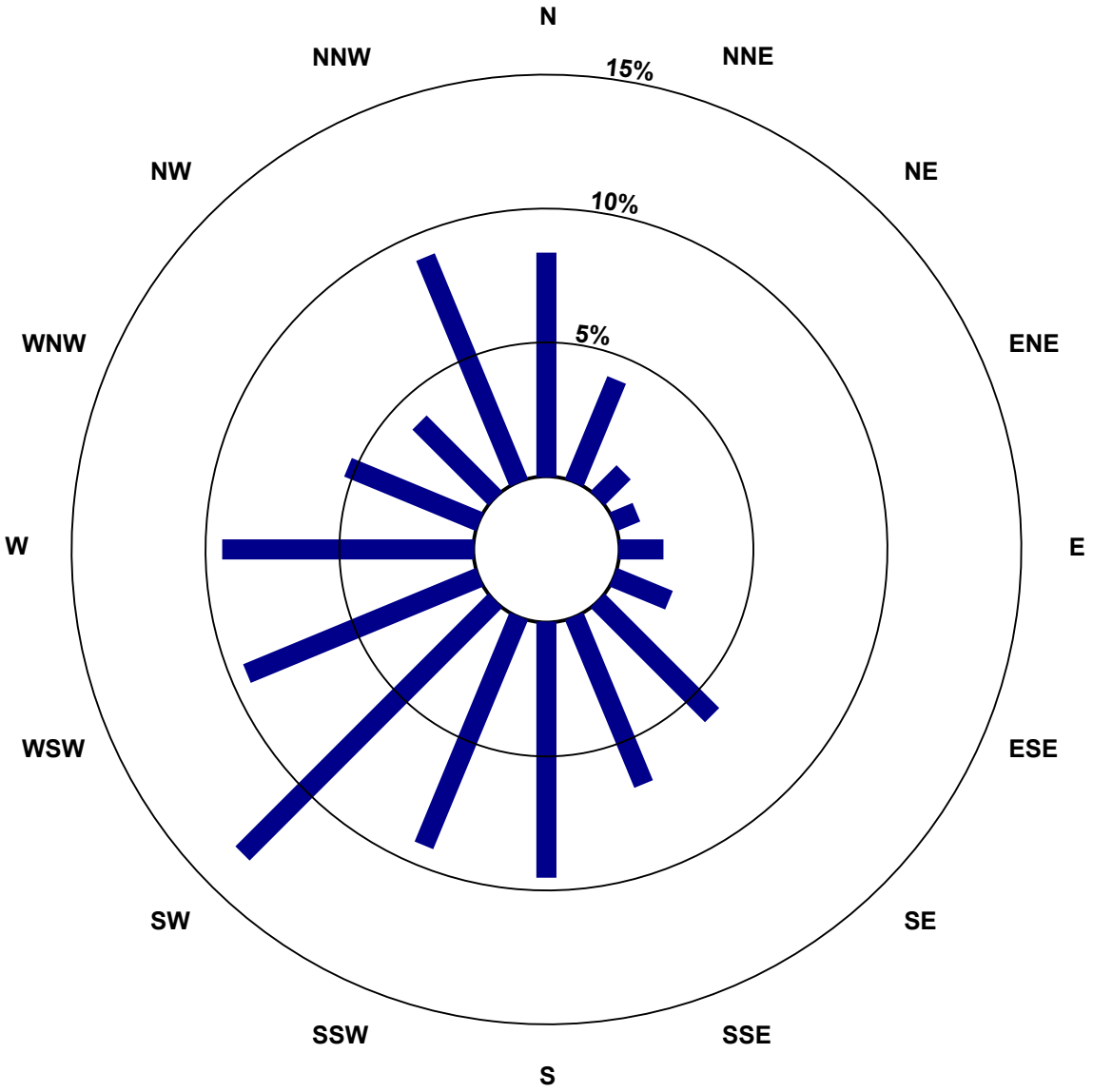
Total Number of Hours: 720

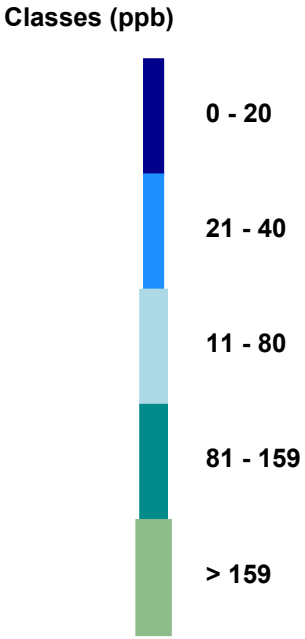
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Firebag





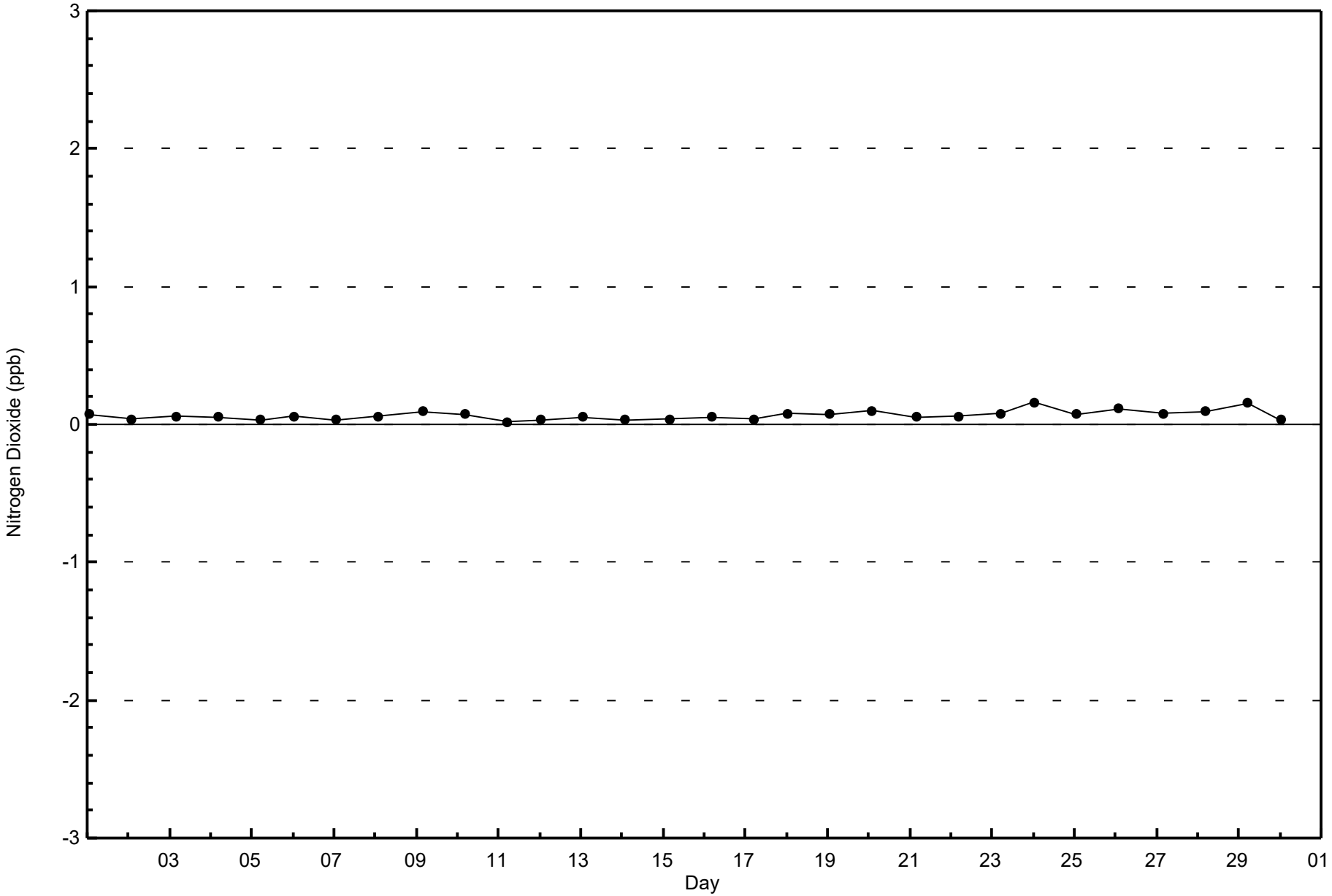
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Firebag - September 2026

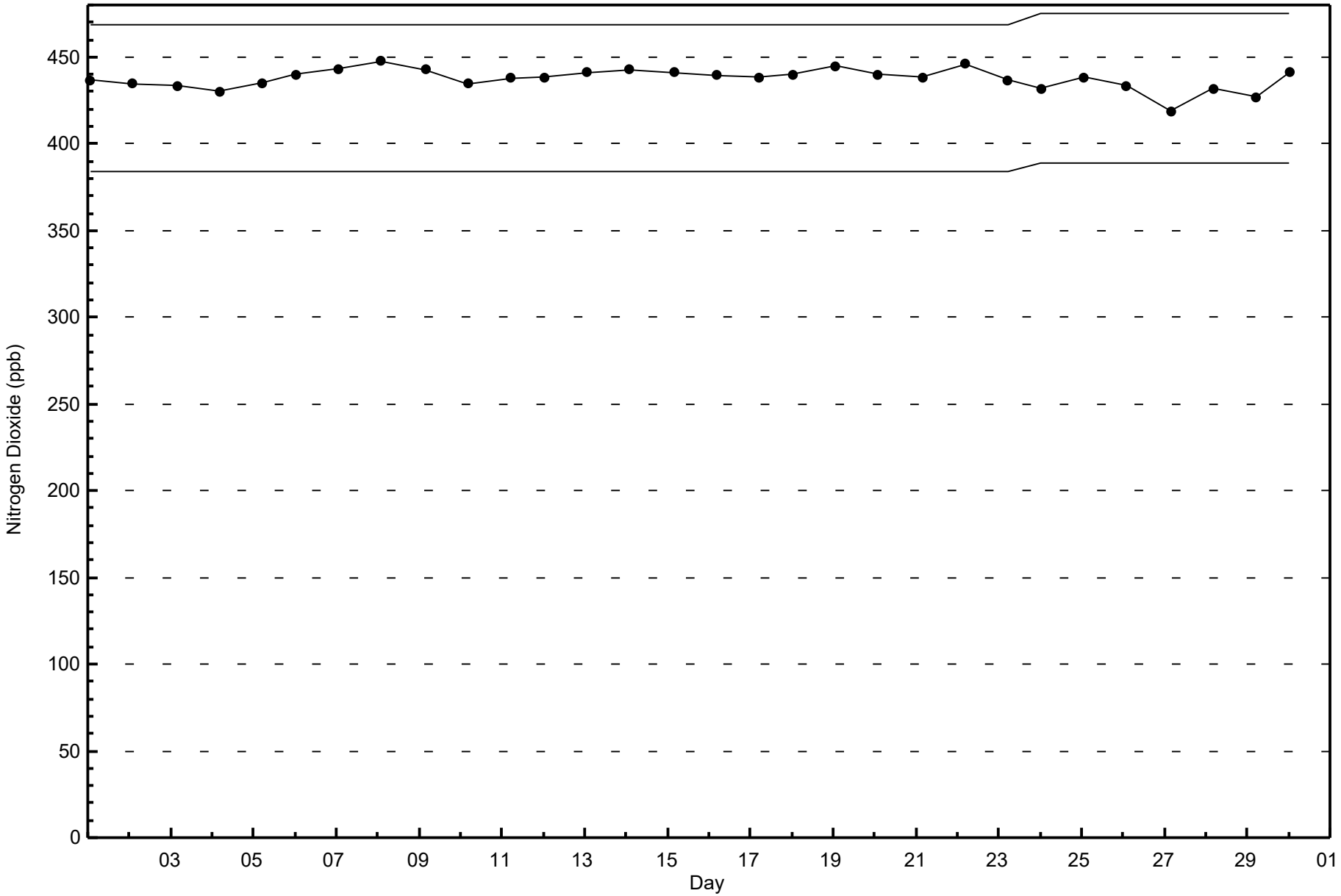


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Firebag - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Firebag - September 2026

Maximum Value: 32.5 ppb on Sep 25 10:00

Maximum Daily Average: 6.3 ppb on Sep 24

Minimum Value: 0.1 ppb on Sep 16 04:00

Minimum Daily Average: 0.5 ppb on Sep 5

Maximum Diurnal Average: 6.7 ppb at hour 6

Minimum Diurnal Average: 1.6 ppb at hour 17

Monthly Average: 2.92 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.3 Q_1 = 0.8 Median = 1.8 Q_3 = 3.6 P_{90} = 6.6 P_{99} = 17.1

Hours in Service:	720
Hours of Data:	685
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-Sep	5.3	Z	4.5	5.1	12.6	19.1	4.0	2.1	1.2	0.6	1.3	1.3	1.3	1.1	0.9	0.9	1.1	1.0	1.7	1.4	1.1	0.5	0.8	0.7	3.0	19.1
2-Sep	0.4	0.4	Z	1.4	1.5	2.2	1.3	1.1	0.8	0.6	0.5	0.5	1.1	0.6	0.6	1.2	1.0	1.2	1.5	0.9	0.8	0.8	0.6	0.6	0.9	2.2
3-Sep	1.0	1.3	1.4	Z	2.1	1.3	0.8	1.0	0.7	0.8	0.6	0.6	0.7	0.6	0.9	1.0	1.1	0.8	1.1	1.0	1.0	1.0	0.8	0.8	1.0	2.1
4-Sep	0.9	0.8	0.8	1.1	Z	4.3	4.0	1.2	6.6	8.8	0.7	0.8	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.4	8.8
5-Sep	0.2	0.2	0.2	0.2	0.2	Z	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.6	0.3	0.2	0.2	0.2	2.8	2.0	1.9	0.5	2.8
6-Sep	Z	1.9	1.5	2.1	4.3	14.8	1.5	1.1	0.4	0.4	0.3	0.3	0.6	0.6	0.4	0.6	0.6	0.8	2.8	2.0	0.6	0.4	0.5	1.7	1.7	14.8
7-Sep	1.4	Z	1.1	2.1	4.9	6.6	4.5	2.9	0.4	0.4	0.4	0.2	0.3	0.2	0.2	0.6	0.6	1.0	0.9	4.1	4.6	2.3	4.3	1.1	2.0	6.6
8-Sep	0.3	1.0	Z	10.2	3.9	1.4	0.7	0.5	0.6	0.4	0.4	0.5	5.2	3.3	1.9	1.1	0.5	1.0	1.3	5.2	6.7	5.3	3.4	2.5	2.5	10.2
9-Sep	1.6	2.1	1.8	Z	9.7	23.5	1.9	1.4	0.8	0.9	1.6	1.4	1.2	1.3	1.1	1.5	0.6	1.1	1.0	1.2	0.8	1.5	2.4	2.0	2.7	23.5
10-Sep	1.0	1.7	4.9	10.6	Z	1.6	1.8	2.4	2.9	2.1	0.7	0.9	0.5	2.7	4.1	1.4	3.0	1.4	2.4	1.9	1.8	3.0	1.9	1.9	2.5	10.6
11-Sep	1.9	2.0	2.1	0.8	0.4	Z	0.4	0.3	0.2	0.3	0.4	0.4	0.5	0.6	1.0	1.3	2.0	1.2	1.5	1.1	2.6	4.8	5.2	4.9	1.6	5.2
12-Sep	Z	3.5	4.7	2.2	3.8	1.6	3.4	4.0	4.7	2.6	0.2	0.5	1.9	1.4	0.7	1.1	0.5	1.4	3.3	2.1	1.5	2.0	3.6	5.1	2.4	5.1
13-Sep	5.0	Z	5.6	3.7	3.3	2.6	2.8	5.4	5.1	4.9	5.3	4.9	2.7	2.0	2.0	1.7	1.9	1.3	0.7	0.3	0.2	0.2	0.2	0.2	2.7	5.6
14-Sep	0.2	0.2	Z	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.6	0.5	0.1	0.1	0.2	0.3	0.5	0.7	0.2	2.7	14.4	11.1	8.3	1.8	14.4
15-Sep	7.2	3.6	3.0	Z	11.0	14.9	20.2	16.0	10.0	5.7	5.8	4.3	2.4	1.2	1.5	2.1	2.1	3.0	2.9	2.0	1.4	2.8	5.4	0.4	5.6	20.2
16-Sep	0.2	0.1	0.1	0.1	Z	5.1	3.0	0.4	0.9	2.5	1.7	1.9	2.9	6.5	6.8	4.8	2.6	2.4	4.0	5.6	4.3	1.8	2.2	0.6	2.6	6.8
17-Sep	1.1	1.2	1.3	1.1	1.8	Z	4.7	1.7	1.0	1.3	1.3	1.0	0.8	0.8	5.4	8.0	7.1	6.3	12.7	13.4	14.0	13.3	9.2	6.5	5.0	14.0
18-Sep	Z	11.0	11.1	8.6	12.4	11.0	5.5	2.0	0.5	0.3	0.2	0.2	1.5	3.5	4.2	2.6	0.9	1.6	8.1	5.0	2.6	5.0	6.3	3.7	4.7	12.4
19-Sep	3.4	Z	2.3	4.5	5.3	3.7	2.7	3.9	3.8	1.9	1.0	0.7	0.6	0.7	1.2	1.0	1.5	2.6	2.5	1.8	1.2	1.1	1.3	1.5	2.2	5.3
20-Sep	1.3	1.6	Z	3.0	2.7	3.0	3.0	5.2	5.1	3.1	0.6	1.2	2.1	1.8	1.8	1.0	0.9	2.3	3.4	2.5	2.6	0.7	1.9	2.0	2.3	5.2
21-Sep	2.8	2.1	2.4	Z	5.6	5.5	7.0	7.8	9.5	4.0	0.8	0.7	1.4	1.0	1.2	1.8	2.6	3.7	1.9	1.3	1.3	2.7	3.3	2.2	3.2	9.5
22-Sep	3.3	3.1	3.5	4.9	Z	10.3	4.7	7.9	3.0	3.8	17.6	17.1	15.4	4.4	3.8	3.6	1.5	2.8	2.7	2.0	5.0	5.4	5.1	6.7	6.0	17.6
23-Sep	7.4	6.4	10.3	10.2	17.1	Z	6.7	4.4	1.8	C	C	C	C	C	0.4	0.7	1.4	6.3	2.7	4.6	1.8	1.9	0.9	2.3	4.8	17.1
24-Sep	Z	3.6	5.2	7.4	10.0	12.7	12.9	15.1	10.9	6.2	6.1	6.0	5.5	2.6	1.1	1.0	0.8	1.0	3.3	2.9	5.5	10.7	8.1	7.1	6.3	15.1
25-Sep	5.7	Z	4.5	6.9	9.3	13.3	10.1	7.9	6.4	32.5	1.1	2.1	1.9	2.6	10.4	5.6	2.0	1.8	0.5	1.6	10.5	0.3	0.2	0.2	6.0	32.5
26-Sep	0.2	0.2	Z	0.3	1.4	3.3	3.3	1.5	1.4	0.4	0.2	0.3	0.3	0.4	0.9	2.3	2.1	2.4	2.5	3.2	2.5	2.7	1.8	3.8	1.6	3.8
27-Sep	3.6	0.7	0.7	Z	0.5	0.3	0.8	2.6	2.3	2.3	2.7	1.7	0.4	0.5	0.4	0.3	0.2	0.4	1.7	1.5	2.6	4.6	6.1	7.9	2.0	7.9
28-Sep	7.9	5.8	5.1	4.0	Z	2.6	2.7	3.3	2.6	1.7	2.0	2.3	1.5	1.3	1.3	1.6	1.6	1.0	1.2	0.8	0.5	0.5	0.8	1.2	2.3	7.9
29-Sep	1.4	2.1	2.5	2.8	1.7	Z	4.9	3.0	4.1	3.5	3.5	2.6	1.6	6.6	5.9	5.0	3.0	2.0	1.3	1.7	1.7	3.1	2.8	3.4	3.1	6.6
30-Sep	Z	0.8	1.1	0.8	0.6	2.0	1.2	3.5	3.1	1.4	1.3	1.9	2.7	2.3	2.4	1.9	2.5	2.7	3.1	2.7	6.1	13.6	18.8	11.0	3.8	18.8
	2.6	2.3	3.3	3.8	5.0	6.7	4.0	3.7	3.0	3.2	2.0	2.0	2.0	1.8	2.1	1.9	1.6	1.9	2.5	2.5	2.9	3.6	3.7	3.1	Diurnal Average	
	7.9	11.0	11.1	10.6	17.1	23.5	20.2	16.0	10.9	32.5	17.6	17.1	15.4	6.6	10.4	8.0	7.1	6.3	12.7	13.4	14.0	14.4	18.8	11.0	Diurnal Maximum	

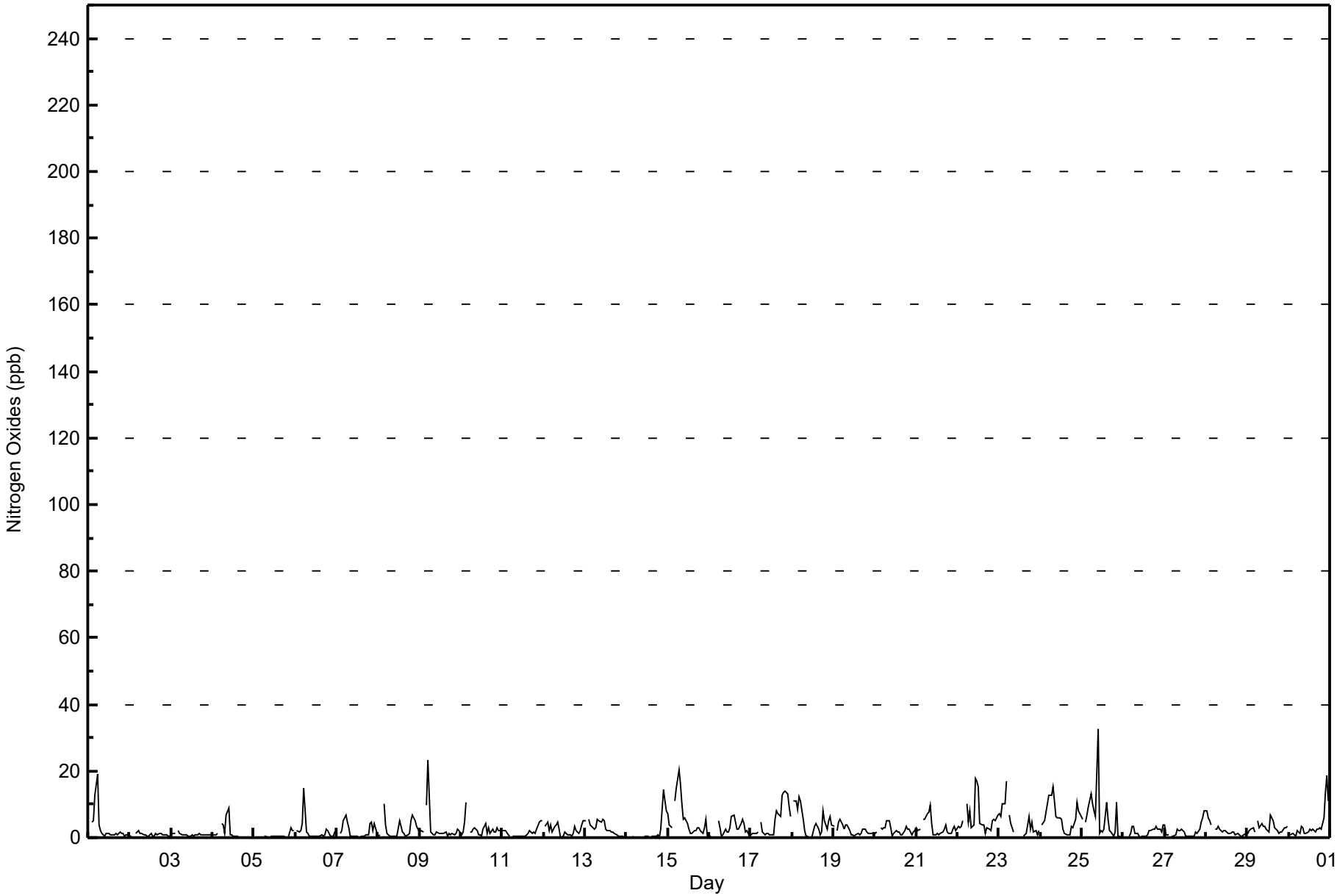
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Firebag - September 2026



Nitrogen Oxides (NO_X) - ppb
Firebag - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	683	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Firebag - September 2026

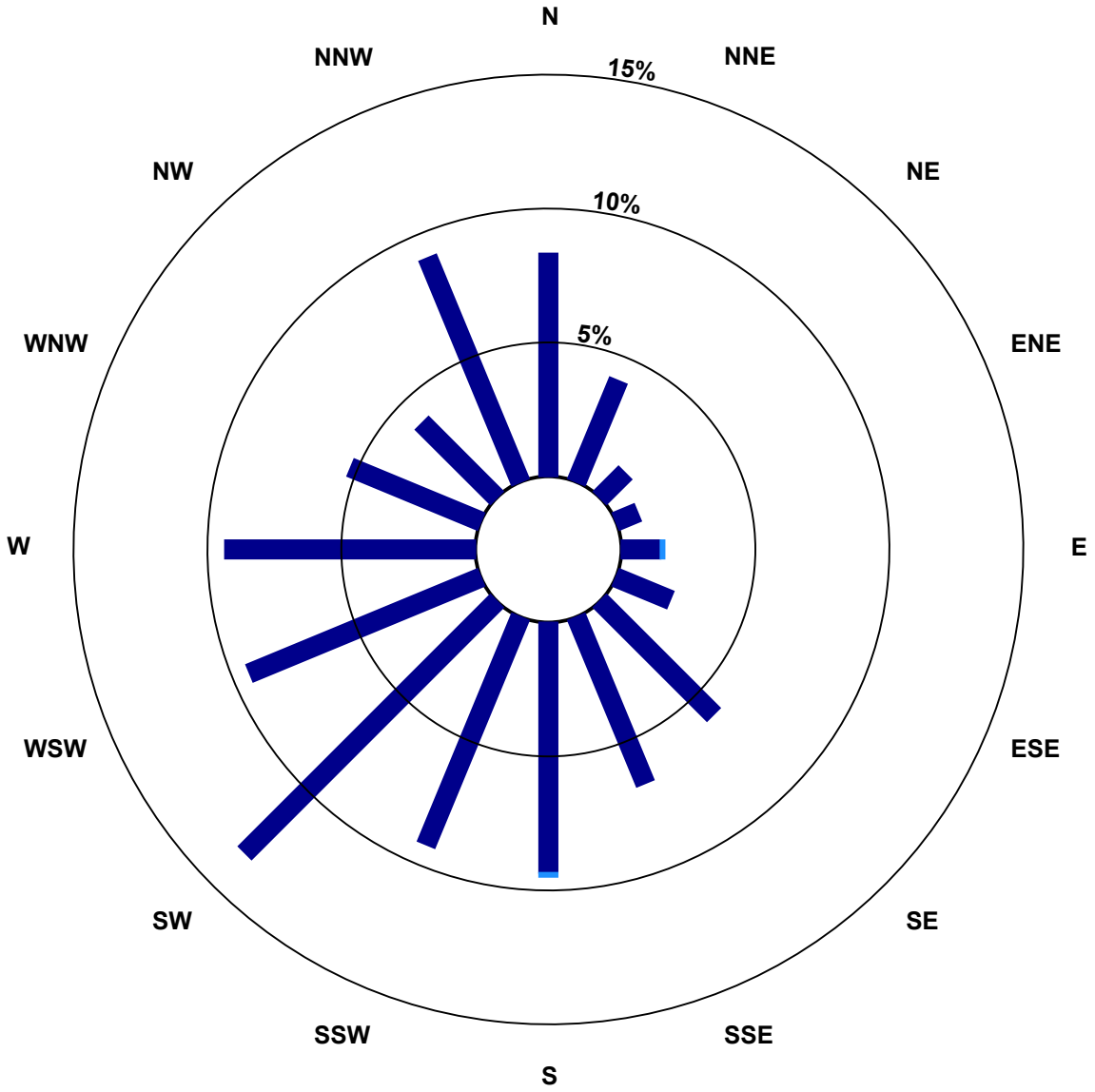
Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	57	28	9	6	10	15	41	46	64	63	91	64	64	36	27	62	683
21 - 40	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2
11 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81 - 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	57	28	9	6	11	15	41	46	65	63	91	64	64	36	27	62	685

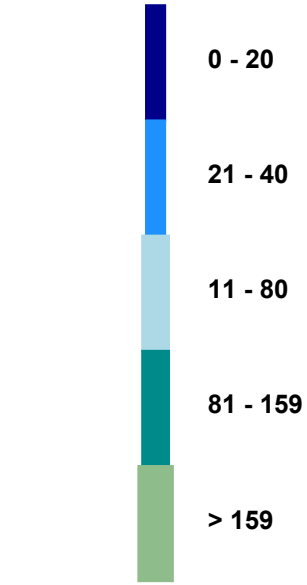
Total Number of Valid Hours: 685

Total Number of Hours: 720

Nitrogen Oxides (NO_X) - ppb

Firebag





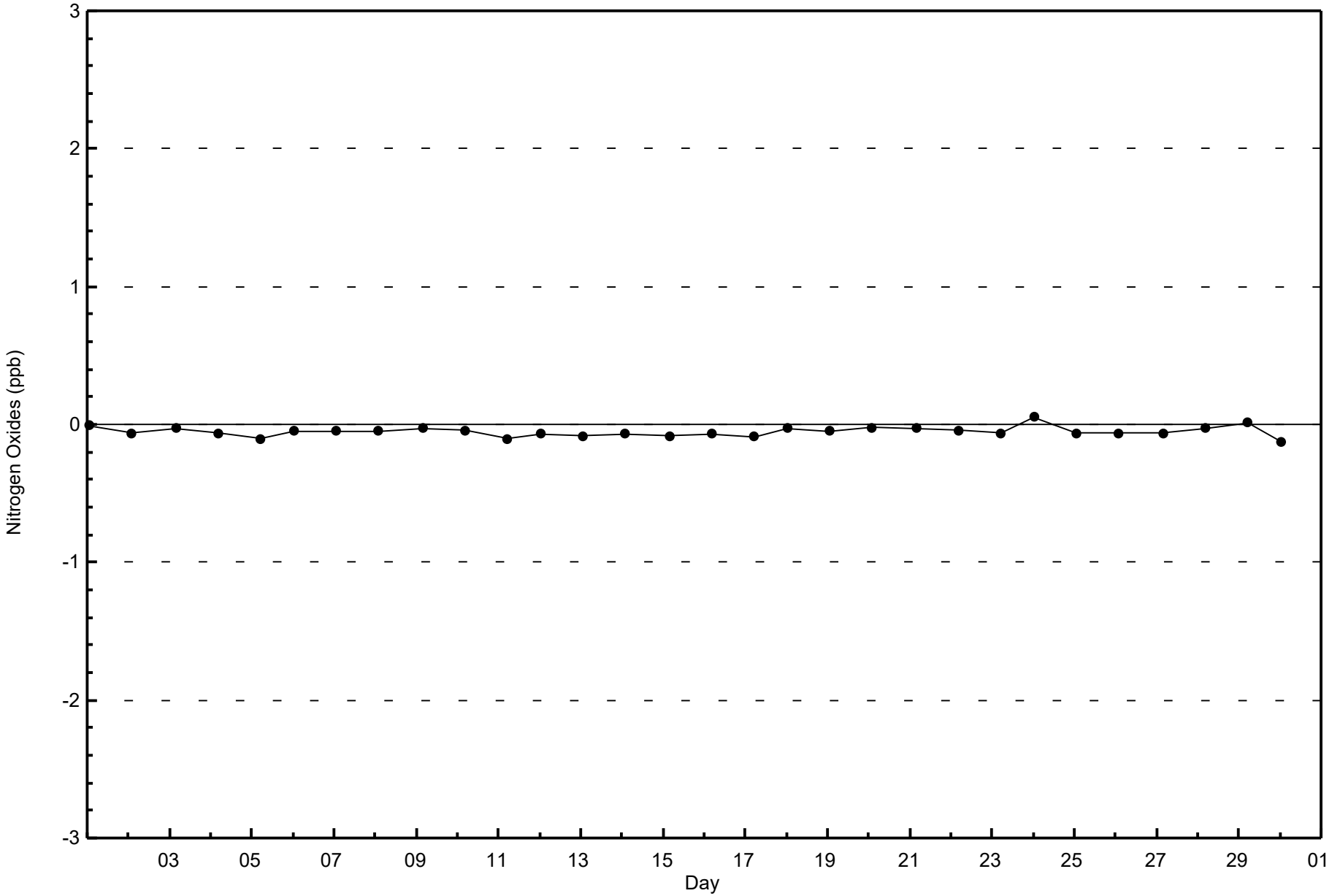
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Firebag - September 2026

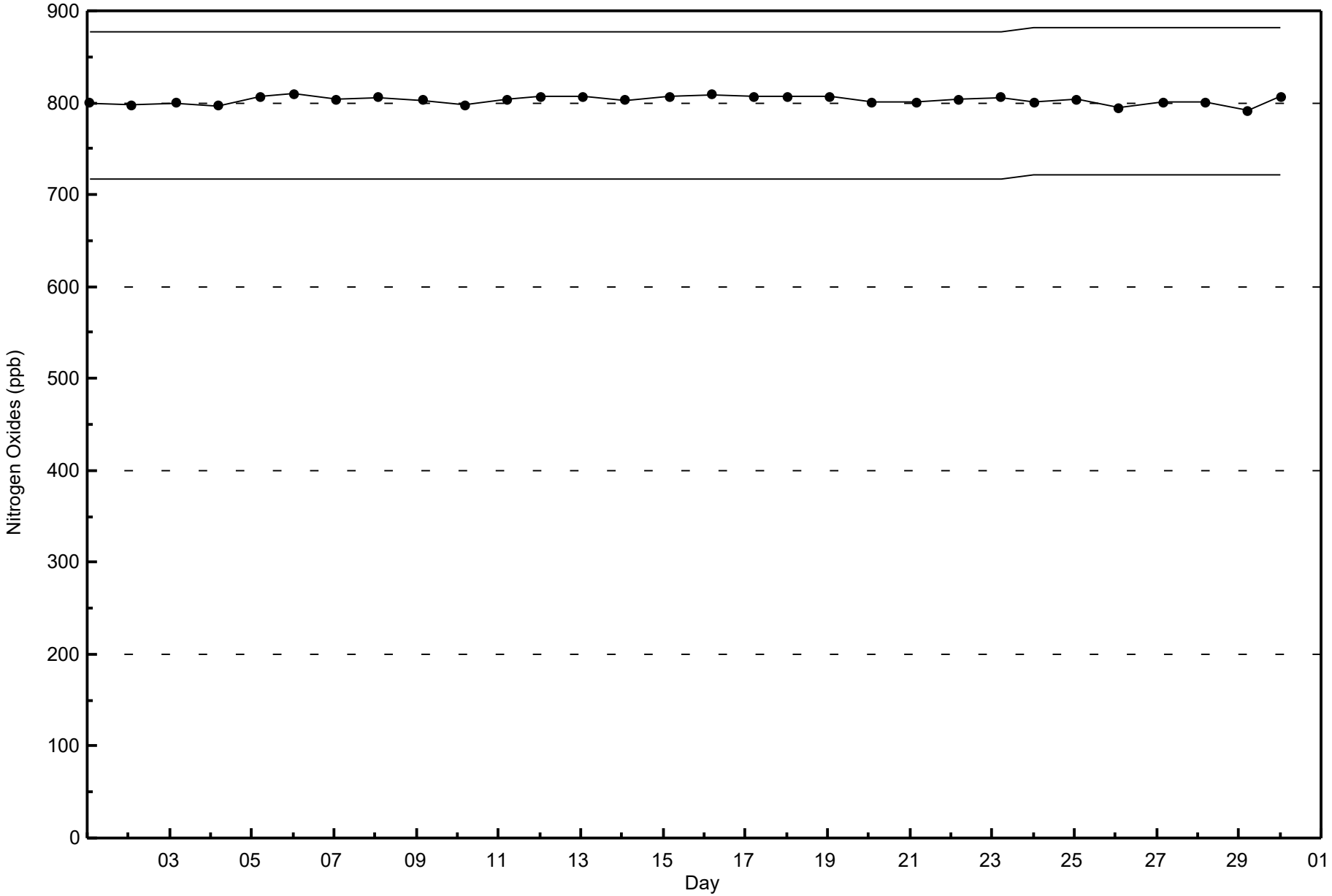


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Firebag - September 2026



Maximum Value: 24.6 C on Sep 2 14:00

Maximum Daily Average: 19.5 C on Sep 2

Minimum Value: 0.4 C on Sep 30 08:00

Minimum Daily Average: 2.2 C on Sep 30

Maximum Diurnal Average: 14.7 C at hour 16

Minimum Diurnal Average: 7.9 C at hour 6

Monthly Average: 11.02 C

Percentiles: P_1 = 1.6 P_{10} = 4.7 Q_1 = 7.3 Median = 10.2 Q_3 = 15.1 P_{90} = 18.2 P_{99} = 23.5

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

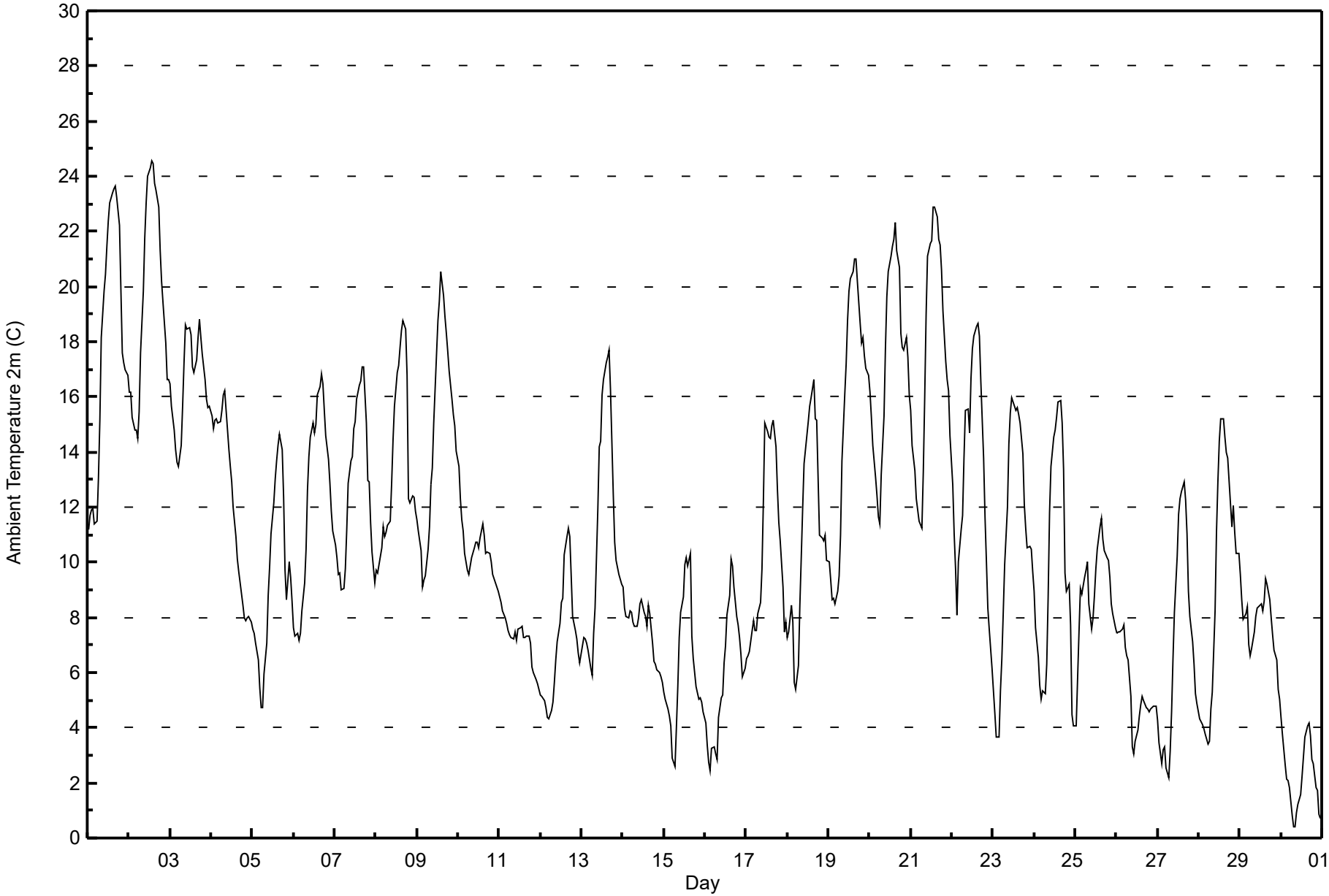
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	11.2	11.7	11.9	11.9	11.4	11.5	13.1	15.1	18.2	19.8	20.4	21.4	22.4	23.1	23.4	23.5	23.7	23.3	22.2	19.9	17.6	17.2	17.0	16.8	17.8	23.7
2-Sep	16.2	16.2	15.3	14.8	14.8	14.5	15.5	17.6	19.8	21.8	23.1	24.0	24.3	24.6	24.4	23.7	23.5	22.9	21.3	20.2	19.4	17.9	16.6	16.7	19.5	24.6
3-Sep	16.5	15.7	14.8	14.1	13.6	13.5	14.2	15.7	17.2	18.6	18.5	18.5	18.3	17.1	16.9	17.3	18.2	18.8	18.2	17.5	16.6	15.9	15.6	15.6	16.5	18.8
4-Sep	15.3	14.8	15.2	15.2	15.1	15.1	15.5	16.1	16.2	14.8	14.1	13.5	12.9	12.0	10.9	10.1	9.7	9.2	8.5	8.0	7.9	8.0	8.0	7.8	12.2	16.2
5-Sep	7.6	7.4	7.1	6.4	5.5	4.7	4.7	6.0	7.1	8.8	9.8	11.1	12.2	13.0	13.7	14.2	14.7	14.1	12.3	9.7	8.7	10.0	9.5	8.6	9.4	14.7
6-Sep	7.6	7.3	7.4	7.2	7.4	8.2	9.2	10.5	12.6	13.8	14.6	15.1	14.7	15.0	16.1	16.4	16.8	16.5	15.5	14.6	13.8	12.9	11.9	11.1	12.3	16.8
7-Sep	10.6	10.1	9.5	9.6	9.0	9.0	9.8	11.2	12.9	13.7	13.8	14.8	15.1	15.9	16.4	16.6	17.1	17.1	15.1	13.0	12.9	11.5	10.4	9.2	12.7	17.1
8-Sep	9.7	9.6	9.9	10.5	11.3	10.9	11.1	11.3	11.5	12.9	14.5	15.6	16.9	17.1	17.8	18.4	18.8	18.5	16.8	12.3	12.1	12.4	12.4	11.8	13.5	18.8
9-Sep	11.5	11.2	10.4	9.1	9.4	9.5	10.5	11.3	12.8	13.4	15.1	17.5	18.8	19.5	20.6	19.7	18.9	18.3	17.6	16.9	15.9	15.3	14.9	14.0	14.7	20.6
10-Sep	13.5	12.3	11.5	11.2	10.3	9.7	9.6	9.8	10.2	10.5	10.7	10.7	10.5	10.9	11.4	11.0	10.3	10.4	10.3	10.0	9.6	9.4	9.3	9.0	10.5	13.5
11-Sep	8.8	8.5	8.2	8.0	7.8	7.5	7.4	7.3	7.2	7.5	7.2	7.6	7.6	7.7	7.3	7.3	7.3	7.3	7.1	6.2	6.0	5.7	5.6	5.4	7.2	8.8
12-Sep	5.2	5.1	5.0	4.7	4.4	4.3	4.6	4.9	5.6	6.4	7.1	7.8	8.5	8.7	10.3	10.9	11.2	11.0	9.5	8.1	7.5	7.2	6.7	6.4	7.1	11.2
13-Sep	7.0	7.3	7.2	7.0	6.8	6.2	5.9	7.4	8.4	12.0	14.2	14.4	16.1	16.6	17.3	17.4	17.7	16.3	12.5	10.7	10.1	9.8	9.5	9.2	11.1	17.7
14-Sep	9.1	8.4	8.0	8.0	8.3	8.2	7.8	7.7	7.7	8.0	8.5	8.7	8.2	8.0	7.7	8.4	8.1	7.1	6.4	6.3	6.1	6.0	5.8	5.7	7.6	9.1
15-Sep	5.3	5.0	4.7	4.4	4.1	2.9	2.6	4.0	5.5	7.3	8.2	8.7	9.9	10.2	9.8	10.3	7.3	6.5	6.0	5.5	5.1	5.1	4.9	4.6	6.2	10.3
16-Sep	4.2	3.3	2.7	2.5	3.3	3.3	3.1	2.8	4.4	5.1	5.2	6.4	7.0	8.1	8.8	10.1	9.9	9.1	8.0	7.8	7.2	6.7	5.9	6.2	5.9	10.1
17-Sep	6.5	6.6	6.8	7.5	7.9	7.5	7.5	8.1	8.5	9.8	12.2	15.0	14.8	14.5	14.5	15.0	15.2	14.2	12.7	11.5	10.8	9.1	7.5	7.8	10.5	15.2
18-Sep	7.3	7.5	8.5	7.8	5.6	5.4	6.3	8.4	10.2	12.0	13.6	14.6	15.1	15.7	16.0	16.6	15.2	15.2	13.1	11.0	10.9	10.8	11.0	10.1	11.2	16.6
19-Sep	10.0	9.4	8.6	8.7	8.5	9.0	9.5	11.0	13.7	16.1	17.2	18.8	19.8	20.3	20.5	21.0	21.0	20.2	18.6	18.0	18.2	17.5	17.1	16.8	15.4	21.0
20-Sep	16.2	15.3	14.2	13.1	12.4	11.6	11.4	13.2	15.3	17.8	19.6	20.6	21.1	21.5	21.7	22.3	21.3	20.7	18.3	17.8	17.7	18.1	17.5	16.1	17.3	22.3
21-Sep	15.5	14.2	13.3	12.3	11.9	11.5	11.2	13.3	15.9	19.0	21.1	21.6	21.6	22.9	22.9	22.5	21.7	21.5	20.6	19.1	17.3	16.6	16.2	14.6	17.4	22.9
22-Sep	12.8	11.0	9.8	8.1	10.0	11.2	11.7	13.8	15.5	15.6	14.7	16.7	17.8	18.2	18.6	18.7	18.2	16.6	13.8	11.6	10.0	8.3	7.6	6.2	13.2	18.7
23-Sep	5.4	4.5	3.6	3.7	5.4	6.5	8.2	9.9	12.0	14.3	15.4	16.0	15.6	15.5	15.6	15.3	15.1	13.9	12.1	11.2	10.5	10.6	10.5	9.6	10.9	16.0
24-Sep	8.9	7.7	6.5	5.5	5.1	5.3	5.3	6.3	8.8	11.8	13.5	14.5	14.8	15.3	15.8	15.8	15.0	13.4	9.6	9.0	9.2	7.7	4.5	4.1	9.7	15.8
25-Sep	4.1	5.8	7.5	9.0	8.9	9.5	9.7	10.0	8.5	7.6	8.0	8.8	9.8	10.5	11.3	11.6	10.8	10.4	10.2	10.1	9.5	8.5	8.1	7.6	9.0	11.6
26-Sep	7.4	7.5	7.5	7.6	7.7	6.9	6.6	6.5	5.2	3.3	3.0	3.5	3.9	4.4	4.8	5.1	5.0	4.7	4.7	4.6	4.7	4.8	4.8	4.8	5.4	7.7
27-Sep	4.3	3.5	2.7	3.2	3.3	2.5	2.2	3.1	4.6	6.5	8.2	10.2	11.7	12.3	12.6	12.9	12.3	11.1	9.0	8.0	7.1	6.3	5.2	4.9	7.0	12.9
28-Sep	4.3	4.2	4.1	4.0	3.7	3.4	3.5	4.7	5.3	8.2	11.1	12.9	14.4	15.2	15.2	14.6	14.0	13.8	12.1	11.3	12.1	11.1	10.3	10.3	9.3	15.2
29-Sep	9.6	8.7	8.0	8.1	8.4	7.0	6.6	6.9	7.5	8.1	8.3	8.4	8.5	8.3	8.6	9.4	9.2	8.6	8.0	7.4	6.8	6.5	5.4	5.1	7.8	9.6
30-Sep	4.4	3.8	2.6	2.1	2.1	1.8	0.8	0.4	0.4	0.9	1.2	1.6	2.2	3.0	3.7	4.1	4.2	3.7	2.9	2.7	1.9	1.7	0.9	0.7	2.2	4.4
	9.2	8.8	8.4	8.2	8.1	7.9	8.2	9.1	10.3	11.5	12.4	13.3	13.8	14.2	14.5	14.7	14.4	13.8	12.4	11.3	10.8	10.3	9.7	9.2	Diurnal Average	
	16.5	16.2	15.3	15.2	15.1	15.1	15.5	17.6	19.8	21.8	23.1	24.0	24.3	24.6	24.4	23.7	23.7	23.3	22.2	20.2	19.4	18.1	17.5	16.8	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Firebag - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	345	47.92	47.92
10 - 20	333	46.25	94.17
> 20	42	5.83	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Firebag - September 2026

Maximum Value: 97.9 % on Sep 8 08:00

Maximum Daily Average: 94.4 % on Sep 4

Minimum Value: 29.5 % on Sep 24 16:00

Minimum Daily Average: 52.8 % on Sep 20

Maximum Diurnal Average: 86.2 % at hour 6

Minimum Diurnal Average: 57.1 % at hour 16

Monthly Average: 73.61 %

Percentiles: P_1 = 33.7 P_{10} = 46.2 Q_1 = 59.7 Median = 76.4 Q_3 = 90.5 P_{90} = 95.8 P_{99} = 97.7

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

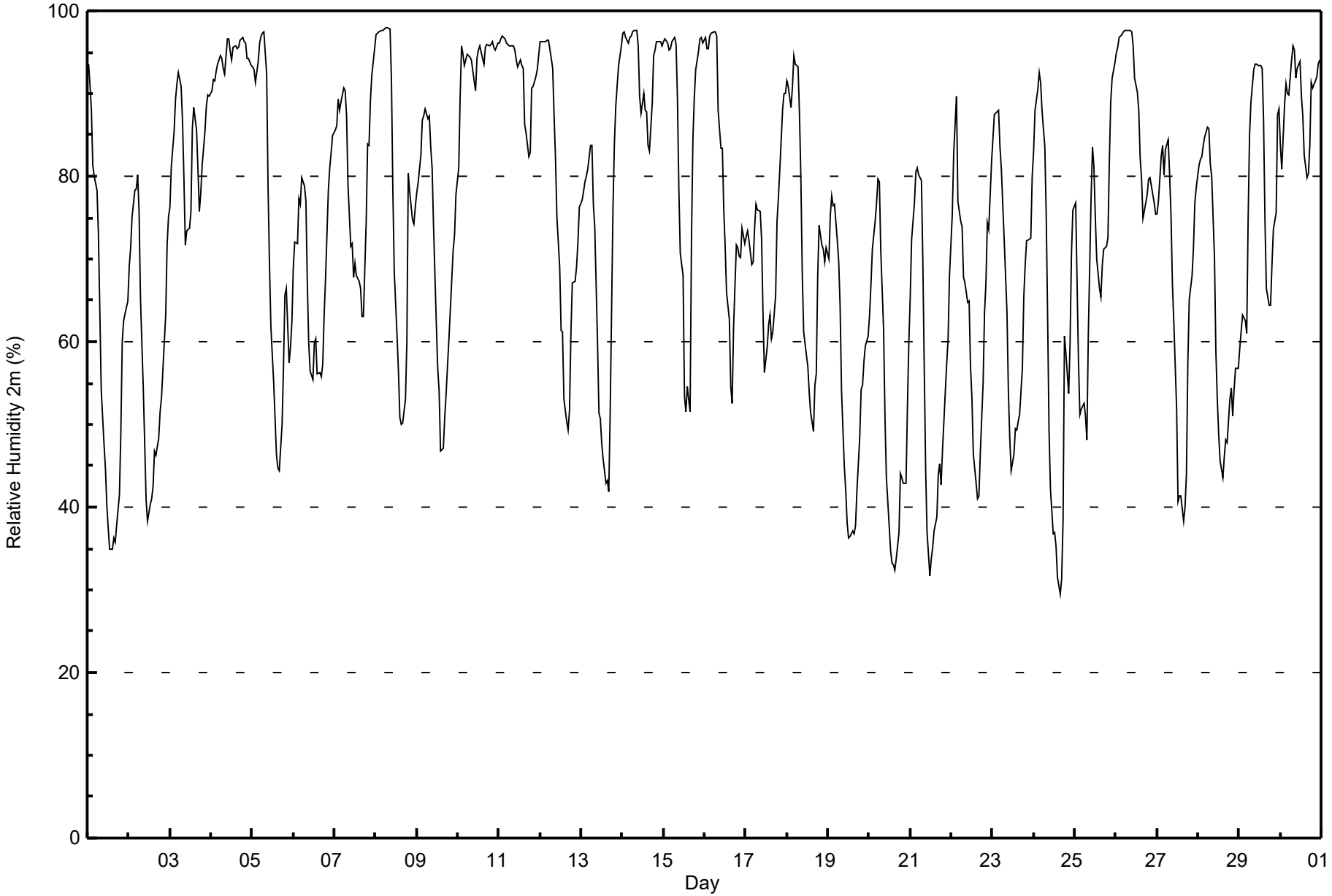
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	93.6	91.0	87.9	81.3	79.9	78.3	73.1	63.9	54.2	47.6	44.7	40.1	37.5	35.0	35.0	36.3	35.8	37.8	41.5	48.9	60.0	62.6	63.4	65.0	58.1	93.6
2-Sep	69.1	71.3	75.0	78.3	78.5	80.2	75.7	65.3	54.4	47.8	41.0	38.3	40.3	41.1	42.6	46.7	46.3	48.3	51.5	53.3	56.6	63.3	71.7	75.1	58.8	80.2
3-Sep	76.3	81.2	85.4	89.3	91.2	92.6	90.9	86.5	79.7	71.7	73.3	73.7	75.7	85.8	88.3	85.5	80.8	75.8	78.0	81.3	85.4	88.5	89.8	89.6	83.2	92.6
4-Sep	90.3	91.7	91.5	92.6	93.6	94.6	94.2	93.1	92.4	96.6	96.6	95.2	94.1	95.6	95.7	95.4	95.5	96.5	96.7	96.3	96.2	94.3	94.2	93.4	94.4	96.7
5-Sep	93.2	92.9	91.4	93.9	96.0	96.9	97.3	97.5	92.3	78.7	69.6	61.9	55.1	50.7	46.2	44.8	44.5	50.0	56.9	65.6	66.5	57.4	59.4	62.4	71.7	97.5
6-Sep	68.9	72.1	71.8	77.3	76.7	79.9	78.9	77.0	67.1	59.9	56.5	55.4	59.8	60.3	56.0	56.3	55.7	57.3	63.3	67.6	78.3	81.1	82.8	85.0	68.5	85.0
7-Sep	85.6	86.1	89.3	87.9	89.1	90.6	90.3	87.2	78.9	71.6	71.9	67.8	69.5	68.0	67.2	66.4	63.0	63.1	74.5	84.0	83.7	89.2	92.2	95.4	79.7	95.4
8-Sep	97.2	97.3	97.5	97.6	97.7	97.8	97.9	97.9	97.8	91.7	78.4	68.5	60.7	56.4	50.9	50.0	50.2	53.1	60.0	80.3	78.1	74.7	74.3	76.3	78.4	97.9
9-Sep	77.9	79.2	82.5	86.7	87.3	88.1	87.0	87.3	83.6	81.1	74.1	62.2	56.8	54.0	46.9	47.1	50.9	53.8	57.2	60.4	67.5	71.1	72.8	77.8	70.5	88.1
10-Sep	81.1	89.6	95.7	94.7	93.3	94.7	94.5	94.4	94.0	91.6	90.4	94.2	95.3	95.7	94.2	93.5	95.7	95.9	95.7	96.0	96.2	95.6	95.2	96.2	93.9	96.2
11-Sep	96.2	96.7	97.0	96.6	96.1	95.9	95.7	95.7	95.8	95.3	94.0	93.2	94.1	93.4	93.1	86.3	85.3	82.3	83.0	90.8	90.9	92.0	92.8	94.6	92.8	97.0
12-Sep	96.3	96.2	96.3	96.3	96.4	96.4	94.2	93.0	87.3	82.2	75.1	69.0	61.4	61.1	53.0	50.4	49.3	51.7	61.0	67.1	67.3	69.1	72.0	76.3	75.8	96.4
13-Sep	77.2	78.1	79.3	80.0	80.9	83.7	83.8	76.7	74.0	59.6	51.4	50.8	47.6	45.8	42.8	43.2	41.9	51.3	76.2	83.9	88.4	91.0	93.5	95.8	69.9	95.8
14-Sep	97.3	97.5	96.8	96.2	96.8	97.0	97.4	97.6	97.7	95.8	89.7	87.7	90.1	87.9	87.7	83.7	83.1	88.8	94.6	95.3	96.2	96.3	96.2	95.8	93.5	97.7
15-Sep	96.2	96.6	96.1	95.3	95.4	96.3	96.7	96.0	89.3	78.3	70.7	68.0	53.4	51.5	54.5	51.5	72.6	84.3	89.4	92.8	95.1	96.5	96.8	96.1	83.7	96.8
16-Sep	96.8	95.4	95.5	96.9	97.4	97.5	97.5	96.9	88.0	83.4	83.4	76.0	71.6	65.9	62.8	54.6	52.5	61.7	71.7	71.3	70.3	70.2	73.8	71.9	79.3	97.5
17-Sep	72.8	73.4	72.2	69.3	69.6	73.7	76.5	76.0	75.8	72.4	63.4	56.3	59.4	62.1	63.3	60.4	61.2	65.6	74.5	77.4	80.9	88.1	90.1	90.1	71.8	90.1
18-Sep	91.5	90.8	88.4	90.9	94.6	93.6	93.2	87.7	79.8	68.2	61.2	58.3	56.9	53.6	51.4	49.1	54.8	56.0	67.7	74.1	71.7	71.1	69.7	71.3	72.7	94.6
19-Sep	70.0	75.2	77.6	76.5	76.5	72.2	69.6	64.3	54.0	45.0	42.0	38.2	36.3	36.5	37.2	36.8	37.9	42.0	48.5	54.2	54.8	57.6	59.5	60.7	55.1	77.6
20-Sep	63.2	66.9	71.1	74.6	76.7	79.6	79.4	71.1	61.5	50.8	43.6	40.7	34.7	33.2	33.0	32.3	33.7	36.9	44.0	43.6	42.9	42.9	52.1	59.8	52.8	79.6
21-Sep	65.5	72.5	76.8	80.5	81.1	80.2	79.5	69.6	56.8	44.6	37.0	31.7	33.7	35.1	37.1	38.8	43.9	45.3	42.7	46.8	53.9	57.3	60.3	68.0	55.8	81.1
22-Sep	75.4	82.7	86.4	89.6	77.0	74.6	73.8	67.8	67.2	64.7	65.0	56.9	53.2	46.5	42.9	41.1	41.4	46.6	55.0	63.6	67.1	74.4	73.6	81.7	65.3	89.6
23-Sep	84.6	87.4	87.6	88.0	83.6	80.8	76.6	72.4	63.6	54.1	48.3	44.4	46.5	49.5	49.3	50.3	51.2	56.8	65.4	69.3	72.2	72.3	72.6	80.0	66.9	88.0
24-Sep	83.1	88.0	90.5	92.6	91.3	87.9	83.6	75.3	62.8	49.3	42.3	36.7	37.0	35.3	31.5	29.5	31.3	38.4	60.6	58.7	53.7	59.8	70.7	75.9	61.1	92.6
25-Sep	76.8	67.1	57.7	51.2	51.9	52.5	51.0	48.1	60.7	77.5	83.6	81.2	75.0	70.0	66.5	65.5	69.2	71.1	71.5	72.6	81.6	89.0	91.8	93.7	69.9	93.7
26-Sep	94.9	95.6	96.8	97.2	97.5	97.6	97.7	97.7	97.7	97.5	95.7	91.9	90.2	87.9	82.2	79.7	75.0	76.8	77.8	79.7	79.8	77.7	76.8	75.5	88.2	97.7
27-Sep	75.4	76.9	82.3	83.7	80.1	83.2	84.4	80.1	75.3	66.9	62.4	51.9	40.7	41.4	41.4	38.2	40.0	44.1	57.4	65.1	67.9	71.4	76.8	78.6	65.2	84.4
28-Sep	81.4	82.1	82.5	83.8	84.8	85.9	85.8	81.5	80.0	70.1	58.8	53.0	48.8	45.5	43.6	46.1	48.1	47.7	53.1	54.4	51.1	54.2	56.9	56.8	64.0	85.9
29-Sep	59.2	61.2	63.3	62.6	61.0	74.8	85.0	89.1	92.9	93.6	93.6	93.4	93.4	93.0	86.8	74.8	66.4	64.4	64.4	69.3	73.6	75.6	87.4	88.1	77.8	93.6
30-Sep	83.8	80.9	88.6	91.1	90.0	89.9	94.1	95.8	95.3	91.8	93.0	93.8	89.7	87.3	82.5	79.8	80.4	83.7	91.4	90.7	91.5	92.0	93.6	94.1	89.4	95.8
	82.4	83.8	85.0	85.8	85.4	86.2	85.8	82.7	78.3	72.6	68.4	64.3	61.9	60.8	58.9	57.1	57.9	60.9	67.5	71.8	74.0	75.9	78.4	80.7	Diurnal Average	
	97.3	97.5	97.5	97.6	97.7	97.8	97.9	97.9	97.8	97.5	96.6	95.2	95.3	95.7	95.7	95.4	95.7	96.5	96.7	96.3	96.2	96.5	96.8	96.2	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Firebag - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	33	4.58	4.58
40 - 60	153	21.25	25.83
60 - 80	226	31.39	57.22
80 - 100	308	42.78	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Firebag - September 2026

Maximum Speed: 33 km/h on Sep 25 14:00

Maximum Daily Speed Average: 24.7 km/h on Sep 11

Minimum Speed Value: 1 km/h on Sep 8 19:00

Minimum Daily Speed Average: 1.9 km/h on Sep 18

Maximum Diurnal Speed Average: 7.8 km/h at hour 13

Minimum Diurnal Speed Average: 1.9 km/h at hour 4

Monthly Average Velocity: 4.4 km/h 239.7 deg

Percentiles: $P_1 = 3$ $P_{10} = 7$ $Q_1 = 9$ Median = 13 $Q_3 = 17$ $P_{90} = 22$ $P_{99} = 30$

Hours in Service:	720
Hours of Data:	720
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-Sep	SSE5	S6	S7	S10	S11	S11	S10	S14	SSW16	SSW20	SSW18	S21	S21	S21	S23	S24	S23	S22	SSE18	SSE12	SE12	SSE15	S15	S16	S14.9	S24
2-Sep	SSE16	SSE15	SE14	SE14	SE16	SE16	SE17	SSE21	SSE24	SSE26	SSE30	SSE30	SSE29	SSE29	SSE27	SE22	SSE23	SE24	SSE20	SSE19	SE17	SE15	SE16	SSE17	SSE20.5	SSE30
3-Sep	SSE20	SE13	SE12	SE16	SE14	ESE17	SE19	SE18	SE18	SE21	SE18	SE18	SE18	SE16	ESE15	ESE16	SE15	SE16	SE13	ESE12	SE10	ESE10	SE12	SE11	SE15.1	SE21
4-Sep	SE10	SE9	SE10	SE9	SE7	SE5	S5	WSW6	WNW7	NNW13	N16	N19	N19	N23	N24	N23	N22	N21	N22	N22	N17	N19	N14	N14	N10.5	N24
5-Sep	NNE13	NNE9	NNE10	NNE8	N8	NNE8	NNE6	NNE10	NE9	NE12	NNE11	NNE8	N6	NE8	NE7	NE6	NNE5	NNE5	NNE9	N8	NE6	ESE9	ESE12	SE11	NE6.8	NNE13
6-Sep	SSE8	SSE7	S11	S9	S11	S12	SSE10	SSE12	S15	S12	S13	S17	S19	S17	S13	S12	S9	SSW13	S11	S11	S18	S18	S13	SSE11	S12.5	S19
7-Sep	SSE10	SSE11	SSE9	SSE10	SSE12	S16	SSE7	S13	S16	S15	S17	S16	S16	SW10	WSW7	NW5	W5	WNW5	WNW3	SE1	S8	SSW6	SSW5	SW5	S7.9	S17
8-Sep	WSW8	W7	NW6	NNW9	N11	N10	N9	N10	N10	N11	N12	N12	NNW13	NNW11	NNW13	NNW12	NW7	NW5	NW1	ESE2	SSE5	S7	SSW9	SSW8	NNW5.3	NNW13
9-Sep	SSW9	SSW10	SSW10	S8	S9	S10	SSW13	SSW14	SSW18	SW18	SW19	SW23	SW22	SW22	SW22	WSW20	WSW18	SW17	WSW17	WSW17	WSW15	SW15	WSW14	W18	SW14.7	SW23
10-Sep	W19	WNW16	NW13	WNW11	W13	W16	WSW16	WSW18	WSW17	W16	W14	W16	W18	WNW16	WNW13	WNW16	WNW16	NNW20	NNW23	NNW24	NNW27	NNW24	NNW27	NNW29	WNW15.8	NNW29
11-Sep	NNW32	NNW30	NNW30	NNW32	N32	N32	N32	N30	N30	N28	NNW27	N30	NNW29	NNW27	NNW28	NNW21	NNW13	NNW15	NNW17	NNW17	NNW16	NNW16	NNW16	NNW16	NNW24.7	N32
12-Sep	NNW15	N13	NNW11	NNW9	NW6	NW7	NW8	NW7	NNW8	NW9	NW8	NW8	W10	W12	W12	W12	W11	WSW11	SW9	SSW10	SW13	SW14	SW14	SW12	W7.3	NNW15
13-Sep	SW12	SW13	SW14	SW15	SW16	SW16	SW15	SW18	SW16	WSW17	WSW17	WSW17	WSW22	WSW20	WSW18	WSW14	WSW11	WSW8	N15	NNE14	NNE12	NE9	NE7	N8	WSW9.4	WSW22
14-Sep	N10	NNE17	NNE16	NNE16	NNE15	N15	N15	N14	N16	N15	NNE15	N15	N16	N16	N14	N15	N15	NNW13	N11	N10	NNW8	NNW8	NNW9	NNW10	N13.2	NNE17
15-Sep	NW10	NW9	NW9	NW8	WNW6	W5	W6	WSW7	W8	W8	WNW8	W12	W13	WSW15	WSW12	WSW13	WSW7	SW7	SW7	SW7	W6	NW5	NNW9	NNW10	W7.2	WSW15
16-Sep	N10	NNE12	NNE9	N7	N9	N10	N7	NNE2	SW5	SSW8	WSW12	SSW11	SW13	WSW12	WSW11	W8	WSW7	SW8	SW7	S9	SE8	SE12	SSE12	SSE16	SW2.6	SSE16
17-Sep	SSE18	SE16	SE17	SSE19	SSE19	SSE18	SSE16	S16	S15	S13	S11	SW10	WSW9	WSW11	W9	SW8	WSW10	WSW9	SW10	SW11	SW8	WSW5	W4	WNW4	S8.9	SSE19
18-Sep	WNW3	WSW4	WSW4	NW3	NW2	N8	NNW6	N5	NNE6	NNE6	N5	N7	NW6	NW8	NNW7	NW6	NW7	W3	SE4	S7	S7	SSW9	SSW9	SSW9	WNW1.9	SSW9
19-Sep	SSW10	SSW9	SSW9	SSW9	SSW9	SSW11	SSW12	S14	SSW18	SW23	SW24	SSW25	SSW27	SSW28	SSW30	SSW30	S28	S20	S19	SSW20	SSW23	SSW22	SSW19	SSW17	SSW18.8	SSW30
20-Sep	SW15	SW14	SW11	SW11	SW13	SW13	SW12	SW12	SW12	SW12	SW15	SW18	WSW18	WSW20	WSW17	WSW14	SW13	SW9	SSW12	SSW12	SSW12	SSW15	SW18	SW18	SW13.6	WSW20
21-Sep	SW18	SW15	SW17	SW13	SW12	SW13	SW10	SSW10	SSW11	SW14	SW18	SSW20	SSW15	S21	S20	SSE19	SSE15	S15	S17	SSW16	SSW13	SW11	SW13	SW11	SSW13.9	S21
22-Sep	SW8	WSW6	WSW3	NNE5	NE8	SE7	ESE7	E7	NNE4	NW10	NNW14	N15	NNW15	NNW13	NW12	W13	W13	WNW8	W7	WSW8	W7	SW6	SW5	WSW4	NW4.4	N15
23-Sep	SW2	SSW3	SSE4	SSE5	SE6	SE8	SSE11	SSE9	S11	SSE12	S17	SSW18	SSW16	SSW15	S17	S16	S17	SSE12	SSE11	SSE12	SSE13	S12	S13	SSW11	S10.7	SSW18
24-Sep	SW11	SW10	SW7	SW6	SW10	SW9	SW10	SW11	SW12	WSW12	WSW17	W20	WSW22	W19	WSW19	W16	W14	W7	SSW5	SW10	SW9	SSW6	SE1	E3	WSW10.2	WSW22
25-Sep	E4	ESE6	E8	ESE12	ESE13	ESE13	ESE17	E21	ESE17	E18	ENE22	E27	E30	E33	E29	E23	ENE22	ENE17	ENE16	ENE18	E21	NNE11	NNE12	N15	E16.1	E33
26-Sep	N11	N9	NE8	NE13	W6	WNW8	W15	W14	W19	W22	W23	W23	W23	W24	W26	WNW21	WNW23	WNW22	WNW21	W20	W20	W23	W22	WNW20	WNW15.8	W26
27-Sep	W19	W17	W17	W21	W18	W16	W17	W18	W18	W19	WSW21	W19	W21	W20	W19	W20	W17	W13	WSW13	WSW13	WSW13	WSW11	SW11	SW12	W16.4	W21
28-Sep	SW11	SW14	SW14	SW13	SW16	SW17	SW16	SW17	SW16	WSW21	WSW22	WSW24	WSW23	WSW25	WSW24	SW16	SW18	SSW17	SSW13	SSW17	SSW20	SSW18	SSW16	SSW14	SW16.9	WSW25
29-Sep	SSW13	SSW12	SSW10	SSW11	SW15	SW14	SW12	SW13	WSW14	WSW15	WSW16	W17	WNW16	WNW18	WNW15	WNW14	WNW14	WNW19	WNW20	WNW12	WNW14	WNW19	WNW15	WNW15	W12.0	WNW20
30-Sep	WNW16	WNW17	WNW16	WNW14	WNW14	NW17	NW17	NW20	NNW22	NNW26	NNW23	NNW22	NNW21	NNW21	NNW18	NNW19	NNW16	NNW14	NNW14	NNW15	NNW10	NNW10	NNW9	NNW8	NW16.0	NNW26
	WSW4.0	WSW3.3	SW2.5	SW1.9	SW3.0	SW3.3	SW3.5	SW4.2	SW5.1	WSW6.0	WSW6.5	WSW7.0	WSW7.8	WSW7.0	WSW6.4	WSW5.7	WSW5.3	WSW4.2	WSW2.7	SW3.1	SW3.8	SW4.3	SW4.2	WSW3.9	Diurnal Average	
	NNW32	NNW30	NNW30	NNW32	NNW32	N32	N32	N30	N30	N28	SSE30	N30	E30	E33	SSW30	SSW30	S28	SE24	NNW23	NNW24	NNW27	NNW24	NNW27	NNW29	Diurnal Maximum	

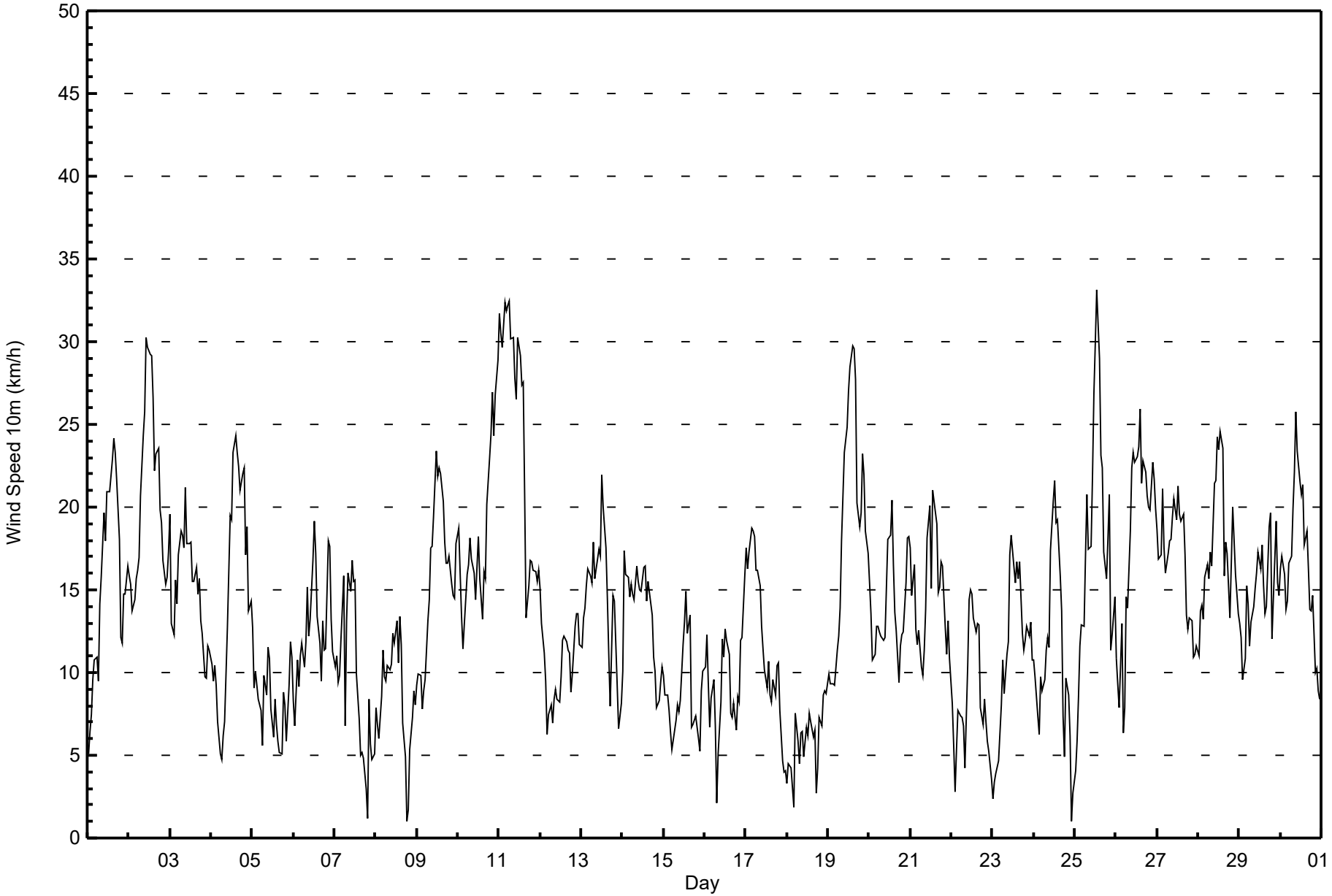
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Firebag - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	45	6.25	6.25
6 - 11	223	30.97	37.22
12 - 19	331	45.97	83.19
20 - 28	100	13.89	97.08
29 - 38	21	2.92	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Firebag - September 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	2	5	0	0	2	1	4	4	1	3	4	5	4	4	6	0	45
6 - 11	20	14	9	0	2	4	12	13	21	25	31	17	13	6	18	18	223
12 - 19	23	11	2	3	1	11	25	23	35	28	56	30	34	22	4	23	331
20 - 28	8	0	0	3	3	0	3	7	11	9	6	12	15	6	1	16	100
29 - 38	5	0	0	0	3	0	0	4	0	2	0	0	0	0	0	7	21
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	58	30	11	6	11	16	44	51	68	67	97	64	66	38	29	64	720

Total Number of Valid Hours: 720

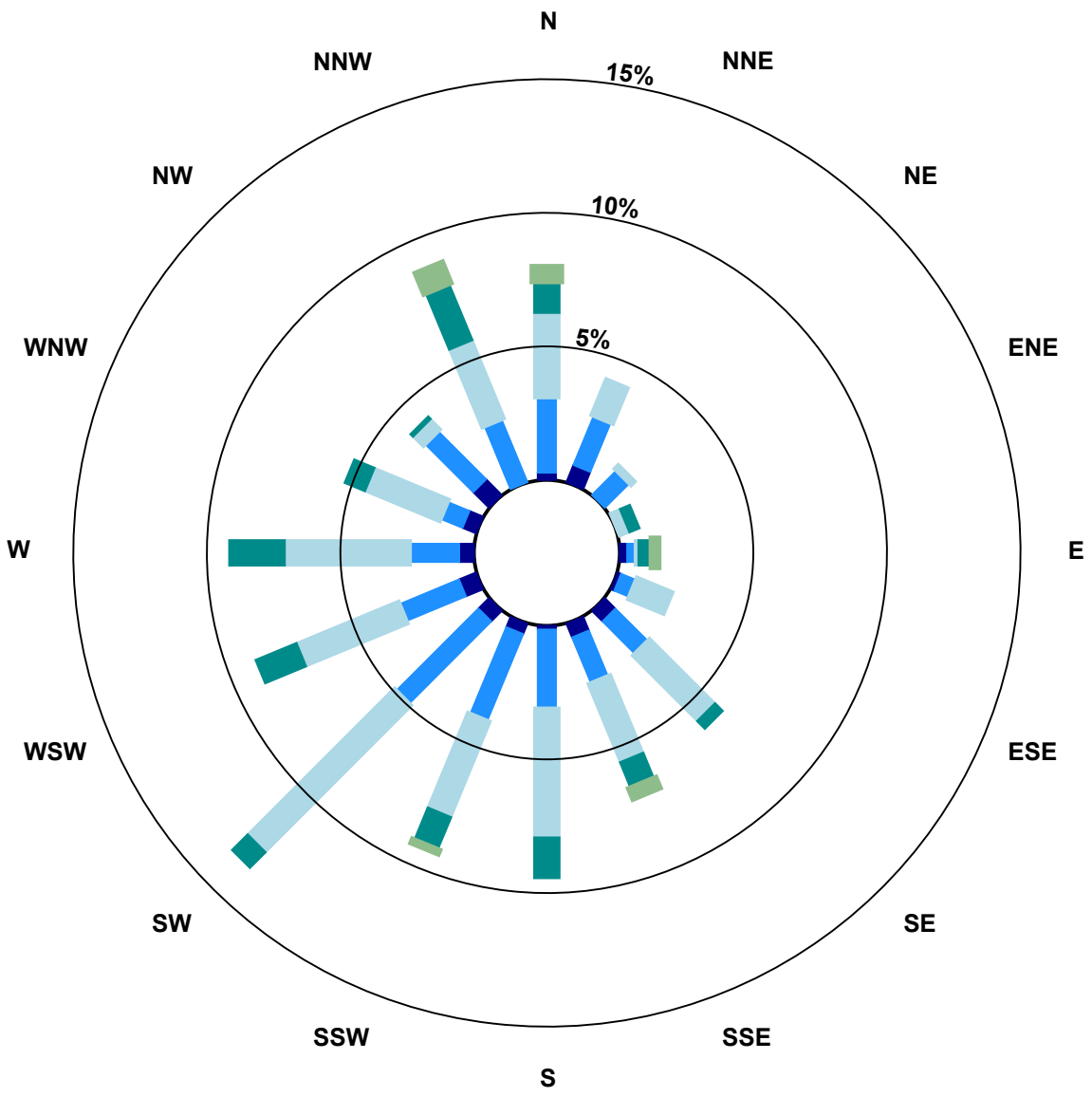
Total Number of Hours: 720

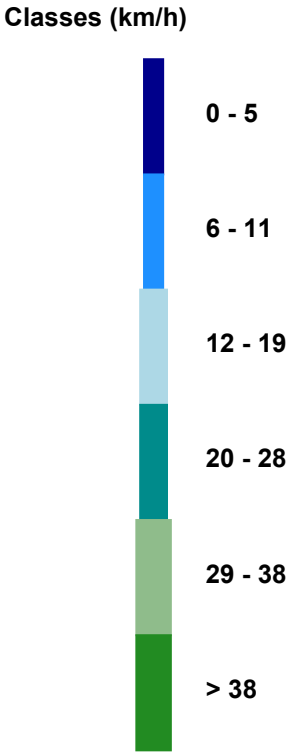
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Firebag





Total Number of Valid Hours: 720

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9 km/h on Sep 25 21:00

Minimum Value: 0 km/h on Sep 18 19:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 3 Q_3 = 4 P_{90} = 5 P_{99} = 8

Hours in Service:	720
Hours of Data:	720
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-Sep	1	1	1	1	2	2	1	2	3	3	3	4	4	4	4	4	4	4	4	3	2	2	3	2	4
2-Sep	2	3	2	3	3	3	3	4	5	5	6	6	5	6	6	4	5	6	4	4	3	3	3	3	6
3-Sep	3	3	2	3	3	3	4	3	4	4	4	4	4	3	3	3	3	4	3	2	2	2	2	2	4
4-Sep	2	2	2	2	1	2	2	2	3	4	4	5	4	5	6	6	6	6	6	5	4	4	3	3	6
5-Sep	4	2	2	2	1	1	2	2	2	3	3	3	3	3	4	3	2	2	2	1	1	2	2	2	4
6-Sep	1	1	2	2	1	2	2	2	2	3	4	4	3	4	4	3	3	3	2	2	4	3	2	2	4
7-Sep	2	2	1	2	2	3	3	3	3	3	3	3	3	3	2	2	2	1	2	1	2	1	1	1	3
8-Sep	1	1	2	2	2	2	3	3	3	3	3	3	3	4	4	4	2	2	1	1	1	1	1	1	4
9-Sep	2	2	1	1	2	1	2	3	3	3	4	4	4	5	5	5	4	4	4	4	4	3	3	5	5
10-Sep	5	5	4	3	3	4	3	4	4	4	3	5	5	5	4	5	5	5	6	6	7	6	7	7	7
11-Sep	8	7	7	8	8	9	8	8	8	8	7	7	7	7	7	6	3	4	4	4	4	4	4	4	9
12-Sep	3	3	3	3	2	2	2	2	2	2	2	2	4	4	4	4	3	2	1	1	2	2	2	2	4
13-Sep	2	2	2	2	3	2	3	3	3	3	3	4	4	5	4	3	3	3	3	3	2	2	1	2	5
14-Sep	3	4	4	3	3	4	4	3	4	4	4	4	4	4	3	4	4	3	2	3	2	2	2	3	4
15-Sep	3	2	2	2	2	1	1	2	2	2	3	3	4	5	3	4	5	3	3	1	2	2	3	2	5
16-Sep	3	3	2	2	2	3	2	2	1	3	2	3	3	3	4	3	2	1	1	1	2	2	2	3	4
17-Sep	3	3	3	4	3	3	2	3	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	4
18-Sep	1	2	2	1	2	3	2	2	2	2	2	3	2	3	3	2	2	1	0	1	1	2	2	1	3
19-Sep	1	1	1	1	2	1	2	3	4	4	5	5	5	5	5	5	5	4	3	3	4	3	3	3	5
20-Sep	3	2	2	2	2	2	2	2	2	2	3	4	5	5	5	4	3	2	2	2	2	2	3	3	5
21-Sep	3	2	2	2	2	2	2	2	2	2	4	3	3	4	4	4	3	2	3	3	1	2	2	2	4
22-Sep	1	1	2	2	1	3	2	2	2	3	3	3	4	4	4	4	4	3	1	2	1	1	2	1	4
23-Sep	1	1	1	1	2	2	1	2	3	3	4	3	3	3	3	3	3	2	1	2	2	1	2	1	4
24-Sep	1	1	1	1	2	2	1	2	2	2	4	5	6	5	5	5	4	2	1	1	1	2	1	1	6
25-Sep	1	1	2	2	2	3	3	3	3	4	4	6	6	7	8	6	5	4	4	4	9	2	3	4	9
26-Sep	4	3	3	5	4	5	4	3	6	6	6	6	6	7	7	7	7	7	6	6	5	6	6	6	7
27-Sep	4	4	4	5	5	4	4	4	4	5	4	5	6	6	6	6	5	3	2	2	2	2	1	1	6
28-Sep	2	2	2	2	3	2	2	3	3	5	5	5	6	6	5	3	4	3	2	2	3	2	3	2	6
29-Sep	2	1	2	2	3	3	1	2	3	4	4	5	5	6	5	4	5	6	6	3	6	6	5	6	6
30-Sep	5	6	5	4	5	5	4	6	6	7	6	5	5	5	4	4	4	3	3	3	2	2	1	2	7
	8	7	7	8	8	9	8	8	8	8	7	7	7	7	8	7	7	7	6	6	9	6	7	7	
	Diurnal Maximum																								

Direction of Maximum Speed: 80 deg on Sep 25 14:00

Direction of Maximum Daily Speed Average: 344.5 deg on Sep 11

Direction of Minimum Speed: 308 deg on Sep 8 19:00

Direction of Minimum Daily Speed Average: 1.9 deg on Sep 18

Monthly Average Direction: 239.7 deg

Hours in Service:	720
Hours of Data:	720
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-Sep	159	181	188	186	185	185	182	176	193	206	205	189	182	180	178	180	176	170	163	147	143	159	171	175	178.6
2-Sep	168	160	146	139	142	139	143	155	160	161	162	157	152	148	152	144	147	145	147	147	144	142	143	154	150.8
3-Sep	155	142	128	127	126	122	127	131	129	146	139	133	130	124	117	119	124	124	126	119	124	122	129	128	129.6
4-Sep	130	127	131	135	131	129	177	237	301	336	354	353	354	354	3	1	6	3	8	8	9	10	5	9	8.0
5-Sep	12	14	13	15	11	13	22	33	37	35	31	20	356	43	39	39	33	21	21	11	54	120	120	135	35.0
6-Sep	151	166	178	172	172	176	165	167	172	178	176	183	189	182	188	187	184	192	191	175	172	171	170	159	176.6
7-Sep	160	152	150	163	159	171	167	171	177	179	183	177	190	229	250	305	279	282	297	134	190	199	206	217	184.2
8-Sep	242	271	309	348	10	11	5	2	6	357	360	350	337	345	343	342	306	313	308	109	161	172	196	195	340.4
9-Sep	201	202	196	185	190	188	192	199	211	219	216	214	227	227	234	253	248	236	238	243	242	230	245	268	225.2
10-Sep	272	290	310	290	273	262	255	256	256	262	269	278	272	283	298	302	301	327	336	335	335	332	336	336	299.8
11-Sep	337	336	335	347	349	351	352	353	353	350	348	351	347	346	347	341	331	339	343	343	337	335	332	335	344.5
12-Sep	336	351	333	329	316	318	323	318	328	317	308	312	278	261	268	275	261	242	217	211	220	222	223	228	280.0
13-Sep	235	232	224	222	227	227	228	235	232	243	242	240	238	237	248	241	251	249	11	25	27	37	53	9	244.2
14-Sep	7	21	24	28	14	6	6	0	6	7	12	356	358	10	4	354	352	346	350	354	333	330	328	334	1.7
15-Sep	325	319	314	308	300	281	259	255	277	281	285	264	267	254	247	251	247	220	222	233	269	313	335	347	276.6
16-Sep	6	14	13	356	349	349	357	22	221	212	238	213	221	251	256	260	252	231	214	169	132	144	147	157	230.1
17-Sep	154	143	142	148	151	157	167	170	181	187	191	225	248	246	262	235	247	239	227	225	221	238	280	296	188.5
18-Sep	295	254	240	313	319	7	337	352	32	30	6	352	319	312	347	305	324	267	132	180	186	197	198	194	302.9
19-Sep	194	196	195	198	194	200	194	189	201	216	214	210	206	197	193	193	190	187	189	200	211	209	208	208	200.3
20-Sep	220	226	226	220	220	222	223	229	227	220	219	234	253	256	256	242	229	214	197	212	211	210	214	216	226.2
21-Sep	218	224	222	218	215	218	215	204	209	220	217	211	198	183	176	168	161	171	177	195	195	214	215	229	201.4
22-Sep	236	244	252	21	56	130	107	85	16	325	346	350	329	331	306	281	280	285	263	245	262	227	236	239	304.8
23-Sep	216	207	159	162	137	146	149	154	179	168	185	209	205	198	178	177	184	160	158	162	165	177	190	208	178.3
24-Sep	226	233	235	221	227	226	223	226	236	249	253	265	252	262	256	271	271	261	198	224	219	204	134	81	244.1
25-Sep	81	110	95	115	118	112	103	100	111	92	75	79	80	80	97	91	76	66	68	76	80	15	24	3	82.8
26-Sep	359	11	51	52	268	298	269	270	270	269	271	275	274	272	276	285	289	289	287	281	278	278	278	285	283.4
27-Sep	274	267	261	273	276	265	267	263	260	266	256	270	278	278	277	274	270	267	248	247	246	245	230	230	264.3
28-Sep	226	236	227	227	221	223	221	225	232	238	245	240	244	242	247	231	216	210	197	196	206	204	205	204	225.2
29-Sep	198	197	199	202	222	224	229	233	241	241	254	264	285	299	297	294	289	299	303	287	293	286	289	290	264.8
30-Sep	293	296	302	297	297	310	320	326	334	338	337	334	330	334	334	338	341	335	337	339	331	337	336	332	326.0
	239.9	245.1	234.0	222.2	220.2	219.2	220.6	218.0	228.3	241.7	244.0	247.7	251.2	253.0	253.8	255.6	249.7	245.0	240.3	229.6	222.9	226.8	229.8	244.0	
	Diurnal Average																								

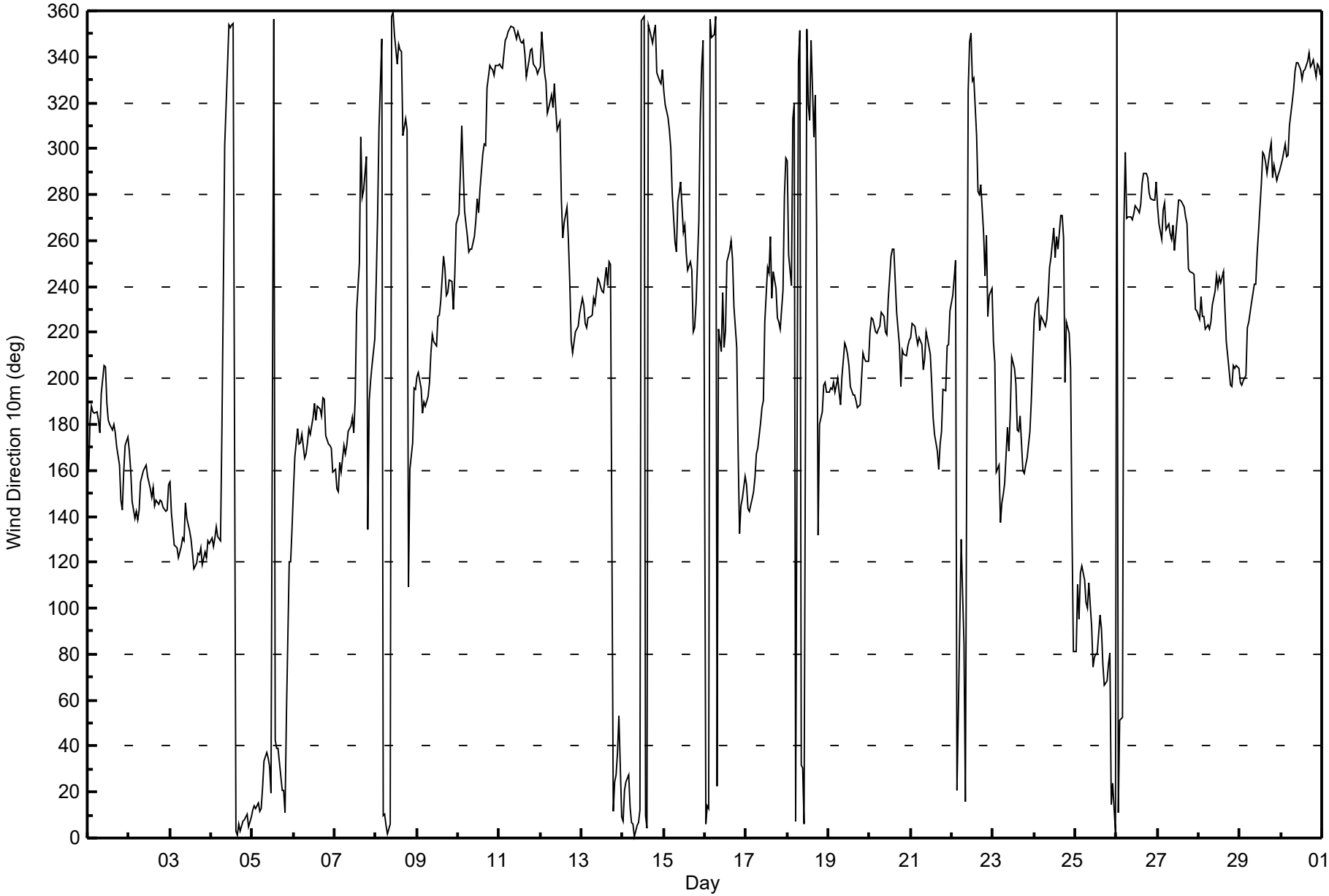
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Firebag - September 2026



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

Maximum Value: 72 deg on Sep 16 08:00

Minimum Value: 6 deg on Sep 22 01:00

Percentiles: $P_1 = 7$ $P_{10} = 9$ $Q_1 = 11$ Median = 14 $Q_3 = 18$ $P_{90} = 24$ $P_{99} = 61$

Hours in Service:	720
Hours of Data:	720
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-Sep	18	11	9	9	9	9	8	9	15	12	15	15	15	17	16	14	13	11	10	15	14	10	10	9	18
2-Sep	9	13	12	12	12	13	12	13	11	12	12	14	15	15	15	14	14	12	12	12	12	12	11	11	15
3-Sep	11	14	14	12	12	12	12	13	16	16	15	16	15	14	12	13	14	14	15	13	12	12	12	13	16
4-Sep	13	13	13	18	16	21	31	38	24	21	15	16	15	17	18	18	17	18	17	18	15	15	16	15	38
5-Sep	16	14	13	14	11	10	15	15	16	20	27	42	47	37	40	67	30	32	9	9	26	15	11	13	67
6-Sep	11	12	8	8	7	8	14	11	11	19	20	21	13	16	21	22	32	13	13	12	11	10	10	10	32
7-Sep	12	11	10	13	9	10	35	11	12	13	13	18	20	26	41	39	42	24	55	70	12	10	18	15	70
8-Sep	11	13	22	17	13	14	15	16	17	19	19	23	24	25	18	23	26	19	30	52	11	12	7	7	52
9-Sep	6	6	10	8	11	12	10	14	11	12	12	13	13	15	18	14	14	13	12	14	14	11	13	17	18
10-Sep	17	26	23	24	18	14	14	13	14	14	16	19	17	22	23	22	24	17	15	14	14	14	15	15	26
11-Sep	14	14	14	16	16	16	17	17	17	16	16	16	16	15	17	14	14	14	14	15	14	14	14	14	17
12-Sep	14	15	15	13	19	16	15	16	22	25	26	26	25	22	26	26	18	14	11	8	9	10	10	11	26
13-Sep	11	10	11	10	10	10	11	12	12	14	15	15	15	18	17	16	19	43	15	14	13	13	17	17	43
14-Sep	15	15	14	13	15	16	16	16	15	17	17	17	17	17	17	16	16	15	14	15	15	15	13	14	17
15-Sep	14	15	17	20	22	22	12	12	24	24	29	25	24	23	18	21	68	51	27	16	23	19	23	15	68
16-Sep	18	14	13	15	13	15	16	72	33	35	17	23	20	26	25	40	28	9	12	16	20	14	12	10	72
17-Sep	12	12	11	12	12	12	10	12	10	12	20	37	21	20	19	19	13	11	7	8	8	10	21	18	37
18-Sep	38	15	50	30	25	13	11	17	25	30	47	36	47	32	33	36	18	50	14	9	7	9	7	6	50
19-Sep	7	7	7	6	9	6	9	10	10	12	12	13	11	12	12	11	11	9	9	10	9	9	9	9	13
20-Sep	14	11	10	9	9	9	9	10	12	13	14	18	17	18	18	21	12	14	9	9	9	9	11	12	21
21-Sep	10	11	9	9	10	9	9	8	10	11	13	11	16	12	14	12	11	11	9	8	7	9	10	8	16
22-Sep	6	20	65	10	19	25	21	23	49	15	19	16	22	21	25	23	22	21	17	12	11	12	30	39	65
23-Sep	63	26	13	10	15	10	7	11	10	14	16	17	14	13	13	13	10	12	9	9	11	9	11	12	63
24-Sep	9	7	12	10	11	11	10	10	11	16	16	19	15	20	18	22	19	18	10	9	10	16	71	39	71
25-Sep	17	13	11	14	12	14	12	9	13	17	12	11	11	11	13	14	13	15	15	15	48	21	16	16	48
26-Sep	20	27	23	13	65	41	19	21	21	16	17	19	17	16	17	21	21	21	21	18	18	18	19	20	65
27-Sep	16	15	14	16	18	15	15	14	15	19	14	19	20	21	23	21	17	15	11	11	11	11	9	9	23
28-Sep	11	10	9	9	8	9	9	11	11	13	15	15	14	15	14	17	10	9	10	7	9	8	15	10	17
29-Sep	9	10	16	11	14	10	9	11	12	13	14	16	22	21	22	23	22	22	21	22	23	21	22	20	23
30-Sep	22	22	21	22	23	20	16	14	14	14	13	14	14	13	14	13	14	13	13	13	12	13	11	14	23
	63	27	65	30	65	41	35	72	49	35	47	42	47	37	41	67	68	51	55	70	48	21	71	39	
	Diurnal Maximum																								

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS20
MACKAY RIVER
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MACKAY RIVER (AMS20)
SEPTEMBER 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	686	34	34	100	11.8	0	4.5	0
H2S (ppb) Average	684	36	36	100	1.2	0	0.4	0
THC (ppm) Average	687	33	33	100	3.6	-	2.6	-
NO2 (ppb) Average	684	36	36	100	24	0	8	-
NO (ppb) Average	684	36	36	100	51.9	-	5.5	-
NOX (ppb) Average	684	36	36	100	75.9	-	13.5	-
Temperature 2 m (C) Average	720	0	0	100	27.2	-	19.4	-
Relative Humidity (%) Average	720	0	0	100	99.5	-	90	-
Wind Speed 10 m (km/h) Average	708	0	12	98.33	19	-	13	-
Wind Direction 10 m (deg) Average	708	0	12	98.33	-	-	-	-
Precipitation (mm) Total	720	0	0	100	4.5	-	10.9	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MACKAY RIVER (AMS20)
SEPTEMBER 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	686	0.44	1.3	-	0	0	0	0	0.2	0.8	11.8
H2S (ppb) Average	684	0.11	0.1	-	0	0	0.1	0.1	0.1	0.2	1.2
THC (ppm) Average	687	2.31	0.2	-	2.1	2.2	2.2	2.3	2.4	2.5	3.6
NO2 (ppb) Average	684	0.8	2.1	-	0	0.1	0.2	0.3	0.6	1.5	24
NO (ppb) Average	684	0.27	2.6	-	0	0	0	0	0	0.2	51.9
NOX (ppb) Average	684	1.06	4.3	-	0.1	0.1	0.2	0.3	0.6	1.8	75.9
Temperature 2 m (C) Average	720	10.7	5.9	-	-3.1	3.8	6.3	10	15.1	18.5	27.2
Relative Humidity (%) Average	720	74.93	18.6	-	28.6	44.1	61.7	80.5	89.9	95.6	99.5
Wind Speed 10 m (km/h) Average	708	7.1	4	-	0	2	4	7	9	12	19
Wind Direction 10 m (deg) Average	708	-	-	-	-	-	-	-	-	-	-
Precipitation (mm) Total	720	-	-	28.74	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION -MACKAY RIVER (AMS20)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
Wind Speed, Wind Direction	04 Sep 2026 08:00	04 Sep 2026 08:00	1	Unstable Operation - flatline in analyzer output signal
Wind Speed, Wind Direction	08 Sep 2026 00:00	08 Sep 2026 00:00	1	Unstable Operation - flatline in analyzer output signal
Wind Speed, Wind Direction	08 Sep 2026 05:00	08 Sep 2026 05:00	1	Unstable Operation - flatline in analyzer output signal
Wind Speed, Wind Direction	16 Sep 2026 06:00	16 Sep 2026 07:00	2	Unstable Operation - flatline in analyzer output signal
Wind Speed, Wind Direction	22 Sep 2026 06:00	22 Sep 2026 06:00	1	Unstable Operation - flatline in analyzer output signal
Wind Speed, Wind Direction	23 Sep 2026 08:00	23 Sep 2026 08:00	1	Unstable Operation - flatline in analyzer output signal
Wind Speed, Wind Direction	25 Sep 2026 03:00	25 Sep 2026 03:00	1	Unstable Operation - flatline in analyzer output signal
Wind Speed, Wind Direction	30 Sep 2026 19:00	30 Sep 2026 20:00	2	Unstable Operation - flatline in analyzer output signal
Wind Speed, Wind Direction	30 Sep 2026 23:00	01 Oct 2026 00:00	2	Unstable Operation - flatline in analyzer output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Mackay River - September 2026

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

Maximum Value: 11.8 ppb on Sep 11 05:00

Maximum Daily Average: 4.5 ppb on Sep 11

Minimum Value: 0.0 ppb on Sep 4 00:00

Minimum Daily Average: 0.0 ppb on Sep 9

Maximum Diurnal Average: 0.8 ppb at hour 14

Minimum Diurnal Average: 0.1 ppb at hour 23

Monthly Average: 0.44 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.2 P_{90} = 0.8 P_{99} = 6.7

Hours in Service:	720
Hours of Data:	686
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-Sep	0.0	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.4	0.3	0.6	0.1	0.6
2-Sep	0.6	0.4	0.3	0.2	Z	0.2	0.2	0.4	0.5	0.4	0.4	0.4	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.5	0.4	0.3	0.2	0.3	0.6
3-Sep	0.3	0.4	0.4	0.4	0.4	Z	0.3	0.3	0.2	0.3	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	0.2	0.4
4-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.2	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	1.2
5-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.4	5.5	3.7	3.7	1.8	0.8	0.2	0.3	0.8	2.8	5.1	4.0	2.3	1.2	0.8	0.5	0.4	1.5	5.5
6-Sep	0.7	0.4	Z	0.6	0.3	0.2	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.7
7-Sep	0.1	0.2	0.0	Z	0.1	0.1	0.0	0.1	0.2	0.3	0.4	0.3	0.1	0.0	0.1	0.3	1.2	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.2	1.2
8-Sep	0.0	0.0	0.0	0.1	Z	0.0	0.0	0.2	C	C	C	C	1.1	1.2	0.7	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.2
9-Sep	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
10-Sep	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	0.3	7.4	1.4	0.1	2.3	4.9	1.6	0.3	0.1	0.8	7.4
11-Sep	0.1	Z	2.2	11.1	11.8	10.6	11.6	2.1	4.5	2.7	0.6	3.2	8.0	5.1	5.8	6.3	3.5	4.0	5.1	5.6	0.3	0.1	0.0	0.0	4.5	11.8
12-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	1.3	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	0.1	1.3
13-Sep	0.0	0.0	0.1	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.4
14-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.2	0.1	0.1	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.2	1.5	4.5	3.4	1.3	0.0	0.0	0.5	4.5
15-Sep	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	0.1	0.1	0.0	0.0	0.0	0.0	0.1
16-Sep	Z	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.3
17-Sep	0.4	Z	0.6	0.4	0.4	0.1	0.2	0.1	0.3	1.2	0.4	0.2	0.1	0.1	0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.2
18-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	3.0	1.5	0.1	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3	3.0
19-Sep	0.0	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.1	0.4
20-Sep	0.1	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	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.0	0.3
21-Sep	0.2	0.1	0.0	0.1	0.1	Z	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.7	0.7	0.3	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.7
22-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.2	4.4	2.7	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.6	4.4
23-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.2	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	1.2
24-Sep	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	0.0	0.0	0.0	0.0	0.1	0.0	0.1
25-Sep	0.3	0.4	0.3	Z	0.1	0.2	1.7	3.2	1.9	1.4	1.0	1.0	4.8	8.0	6.6	5.3	2.7	1.9	1.2	1.5	1.1	0.4	0.3	0.1	2.0	8.0
26-Sep	0.3	0.2	0.6	0.3	Z	0.2	0.1	0.1	0.2	0.1	0.1	0.0	0.3	0.4	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.6
27-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.2
28-Sep	Z	0.1	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	0.0	0.0	0.0	0.0	0.0	0.1
29-Sep	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
30-Sep	0.1	0.1	Z	0.0	0.2	0.0	0.1	0.0	0.0	1.0	2.9	0.4	0.2	4.7	1.0	0.1	0.2	0.7	0.1	0.1	0.2	0.1	0.1	0.1	0.5	4.7
	0.1	0.1	0.2	0.5	0.5	0.5	0.5	0.2	0.5	0.7	0.6	0.5	0.7	0.8	0.6	0.5	0.7	0.5	0.4	0.6	0.4	0.2	0.1	0.1	Diurnal Average	
	0.7	0.4	2.2	11.1	11.8	10.6	11.6	3.2	5.5	3.7	3.7	4.4	8.0	8.0	6.6	6.3	7.4	5.1	5.1	5.6	4.9	1.6	0.5	0.6	Diurnal Maximum	

Z - zerospan C - Calibration

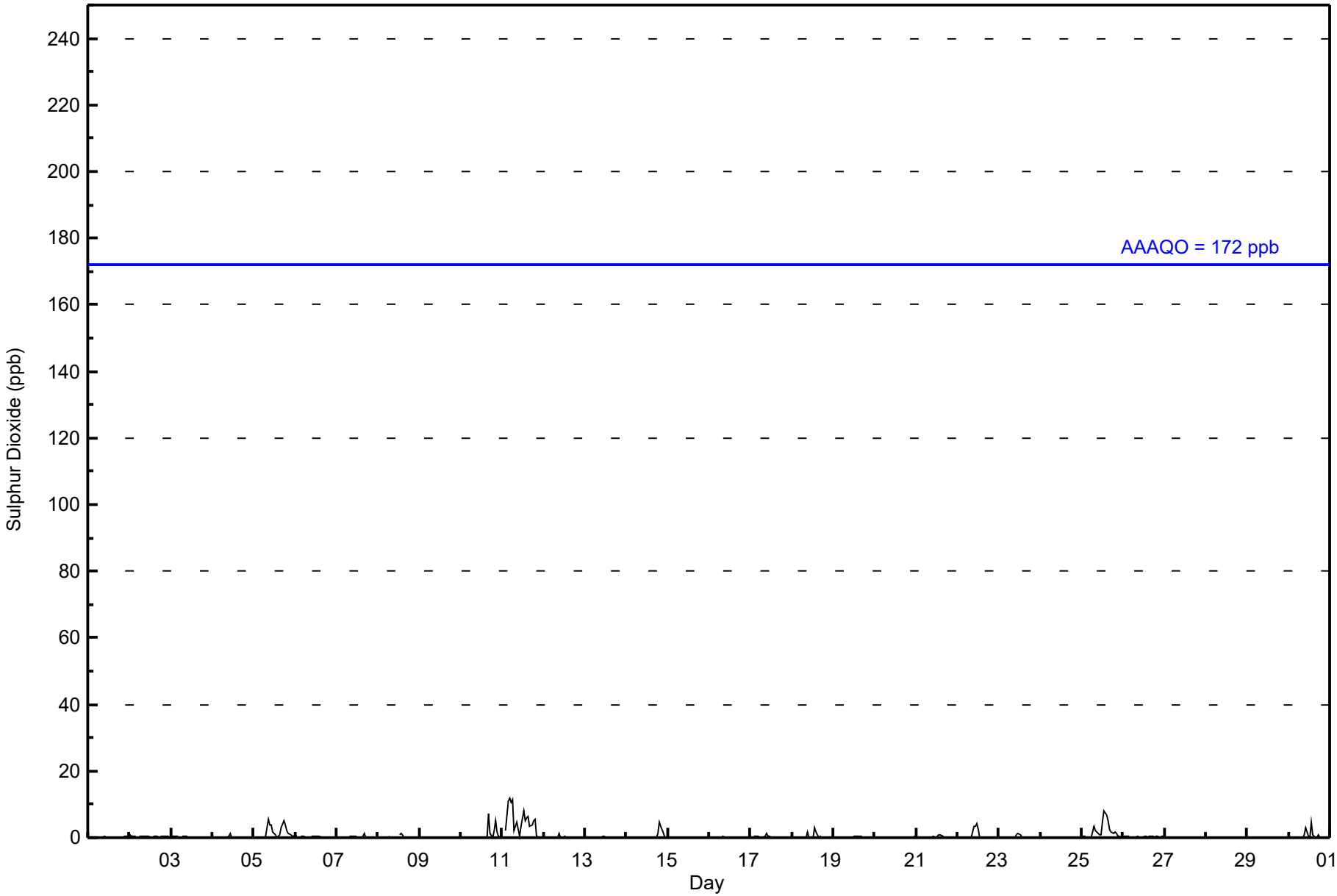
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Mackay River - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	682	99.42	99.42
11 - 20	4	0.58	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: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Mackay River - September 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	19	15	22	4	14	44	71	59	64	69	60	61	62	56	28	23	671
11 - 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	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	19	15	22	4	14	44	71	59	64	69	60	61	62	56	32	23	675

Total Number of Valid Hours: 675

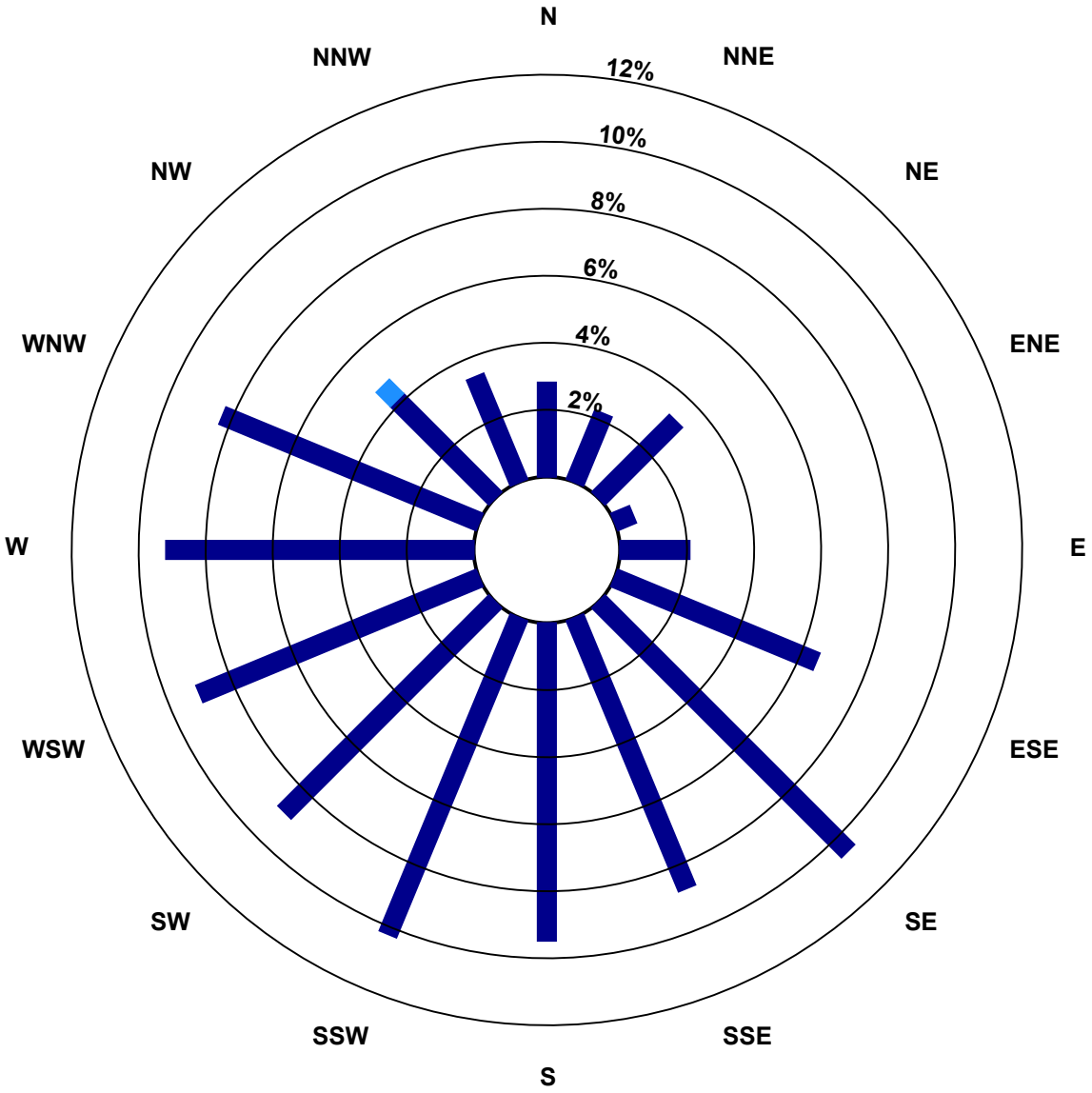
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Mackay River



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

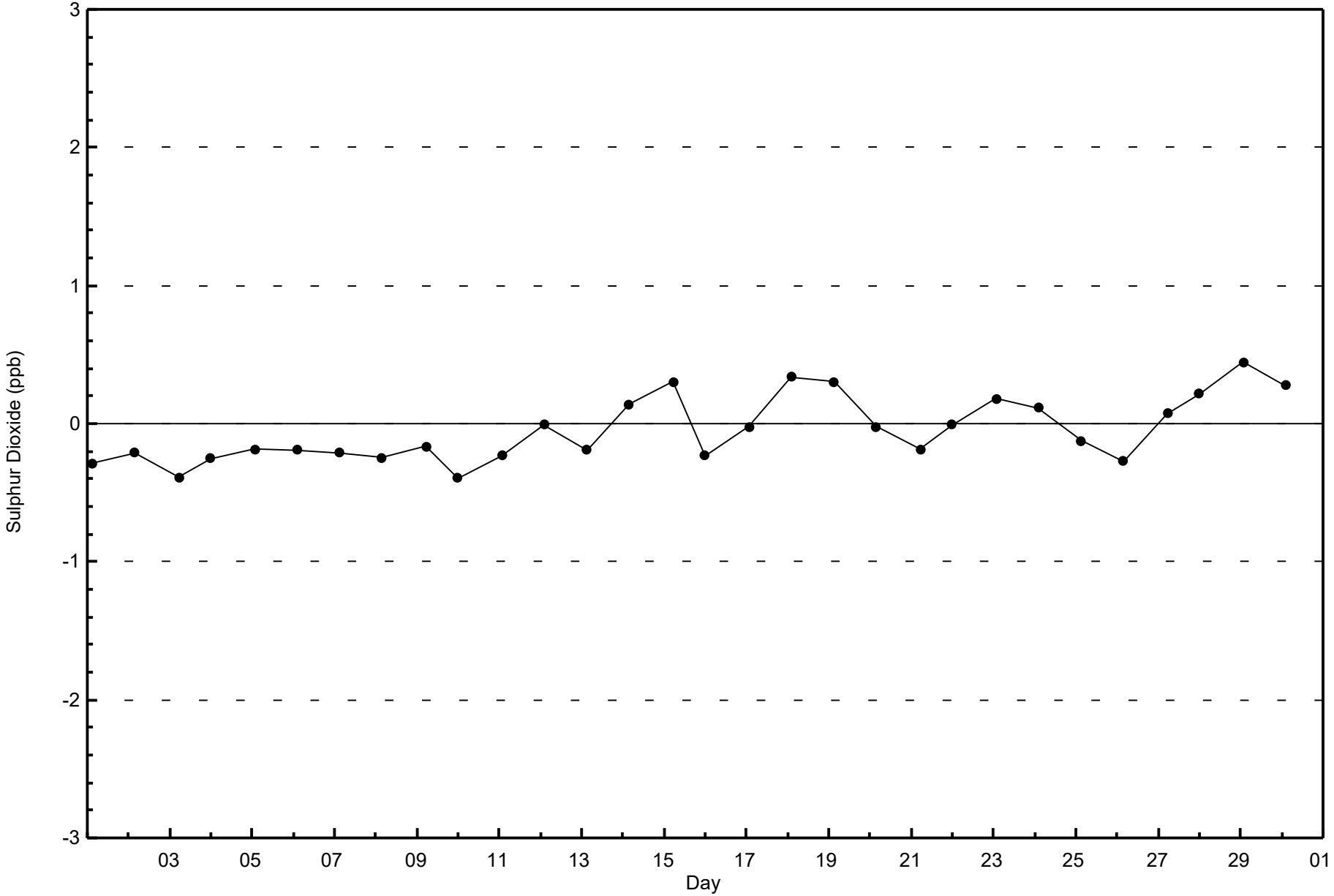
Total Number of Valid Hours: 675

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Mackay River - September 2026

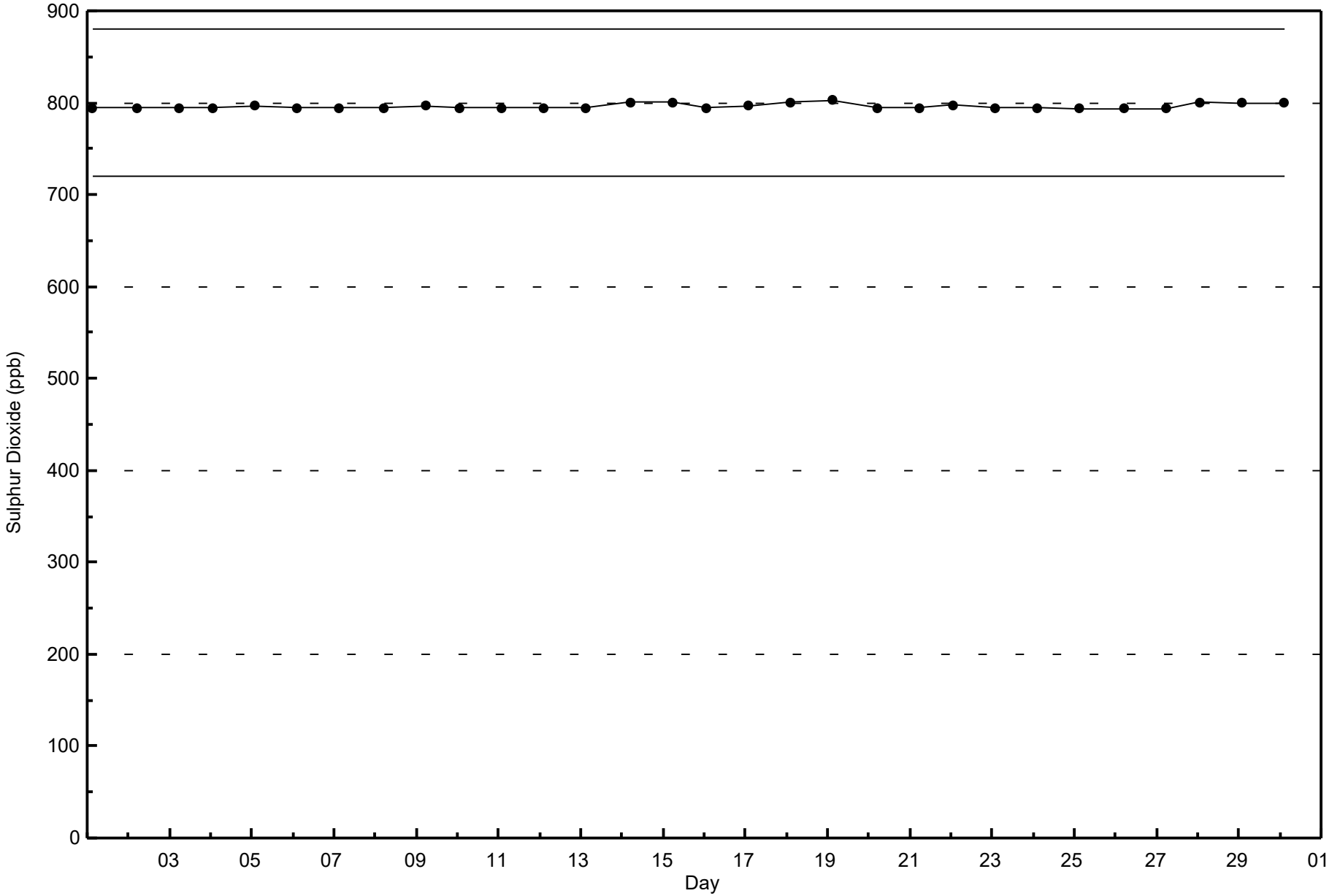


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Mackay River - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Mackay River - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.2 ppb on Sep 25 14:00 Maximum Daily Average: 0.4 ppb on Sep 25

Minimum Value: 0.0 ppb on Sep 28 16:00 Minimum Daily Average: 0.0 ppb on Sep 28
Maximum Diurnal Average: 0.2 ppb at hour 9 Minimum Diurnal Average: 0.1 ppb at hour 16
Monthly Average: 0.11 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.1 P_{90} = 0.2 P_{99} = 0.5

Hours in Service:	720
Hours of Data:	684
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-Sep	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	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2-Sep	0.1	0.1	0.1	0.1	0.1	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.3
3-Sep	Z	0.2	0.1	0.1	0.1	0.1	0.1	C	C	C	C	C	C	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	--	0.2
4-Sep	0.1	Z	0.3	0.2	0.1	0.1	0.1	0.1	0.1	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	0.2	0.3
5-Sep	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.3	0.5	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.5
6-Sep	0.2	0.2	0.2	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2
7-Sep	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	0.1	0.1	0.1	0.1	0.2
8-Sep	0.1	0.1	0.1	0.0	0.0	Z	0.1	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.2	0.2	0.1	0.1	0.1	0.4
9-Sep	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
10-Sep	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2
11-Sep	0.1	0.1	Z	0.3	0.3	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	0.1	0.1	0.1	0.1	0.1	0.1	0.3
12-Sep	0.1	0.1	0.0	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	0.1	0.0	0.1	0.1	0.1	0.1
13-Sep	0.1	0.1	0.0	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	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2
14-Sep	0.2	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	0.1	0.1	0.1	0.1	0.2
15-Sep	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
16-Sep	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
17-Sep	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	0.2	0.1	0.1	0.1	0.1	0.1	0.2
18-Sep	0.1	0.0	0.1	Z	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	0.2	0.1	0.1	0.1	0.1	0.1	0.2
19-Sep	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
20-Sep	0.1	0.1	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	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
21-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
22-Sep	0.1	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
23-Sep	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	0.0	0.1	0.1
24-Sep	0.0	0.0	0.0	Z	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25-Sep	0.0	0.1	0.1	0.1	Z	0.3	1.0	0.9	0.9	0.7	1.0	0.3	0.7	1.2	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	1.2
26-Sep	0.1	0.1	0.2	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
27-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
28-Sep	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	0.0	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-Sep	0.0	0.0	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1
30-Sep	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	0.2	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	0.1	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	0.2	0.3	0.3	0.3	0.3	1.0	0.9	0.9	0.7	1.0	0.3	0.7	1.2	0.4	0.2	0.2	0.3	0.3	0.4	0.2	0.2	0.2	0.2	Diurnal Maximum	

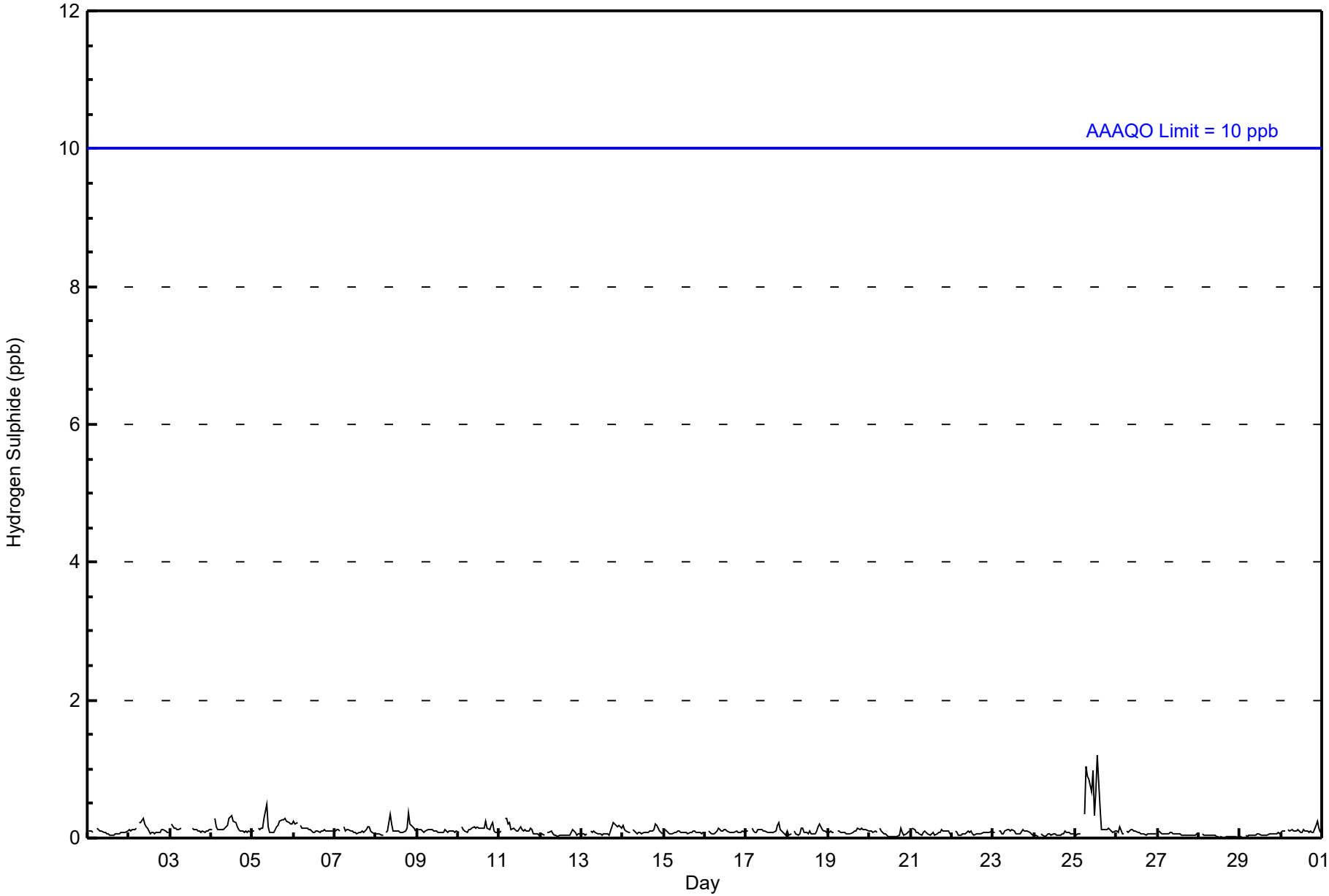
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Mackay River - September 2026



Hydrogen Sulphide (H_2S) - ppb
Mackay River - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Mackay River - September 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	20	15	21	4	11	44	70	59	64	69	60	63	59	55	34	24	672
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	20	15	21	4	11	44	70	59	64	69	60	63	59	55	34	24	672

Total Number of Valid Hours: 672

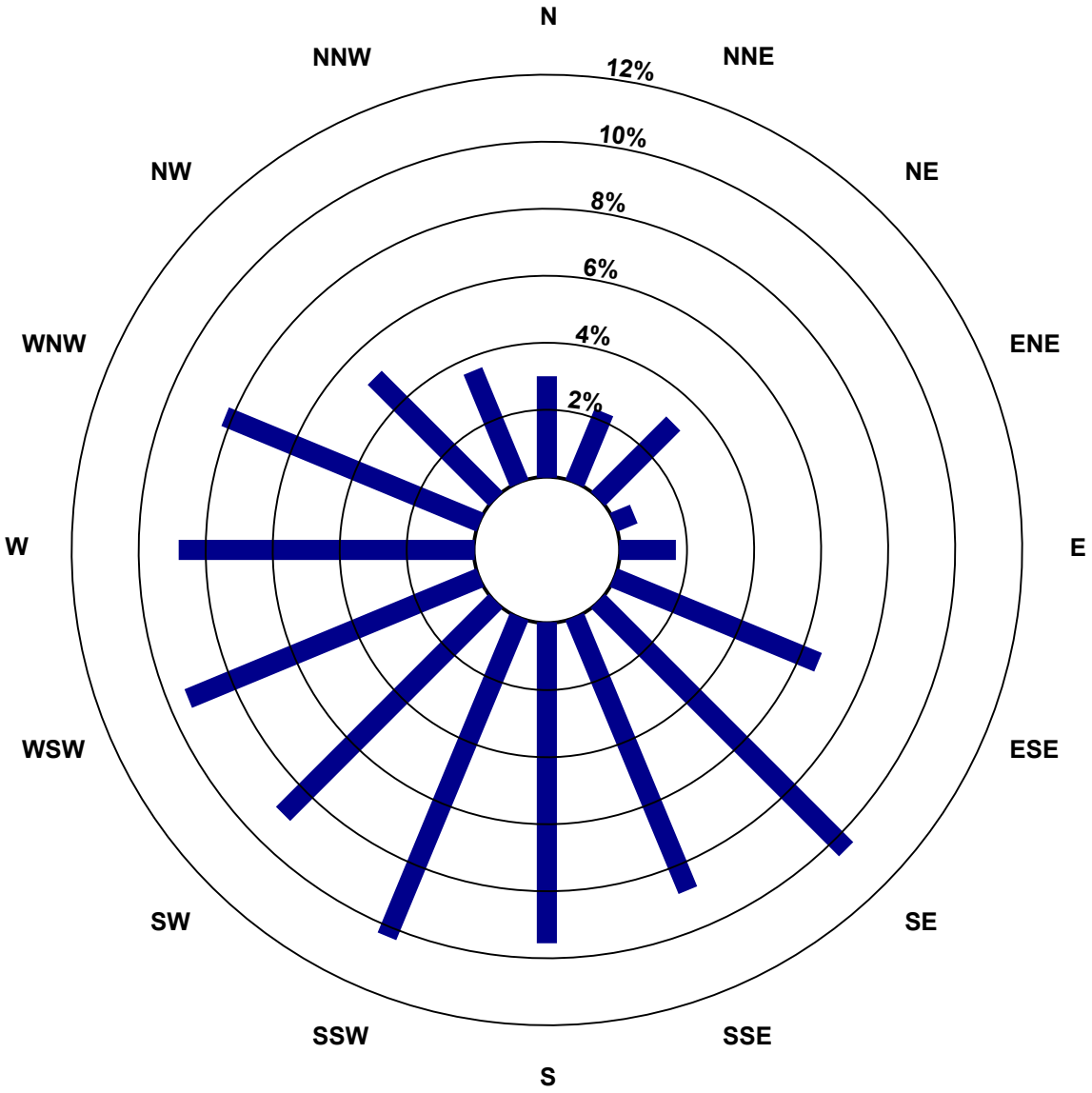
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

Mackay River



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

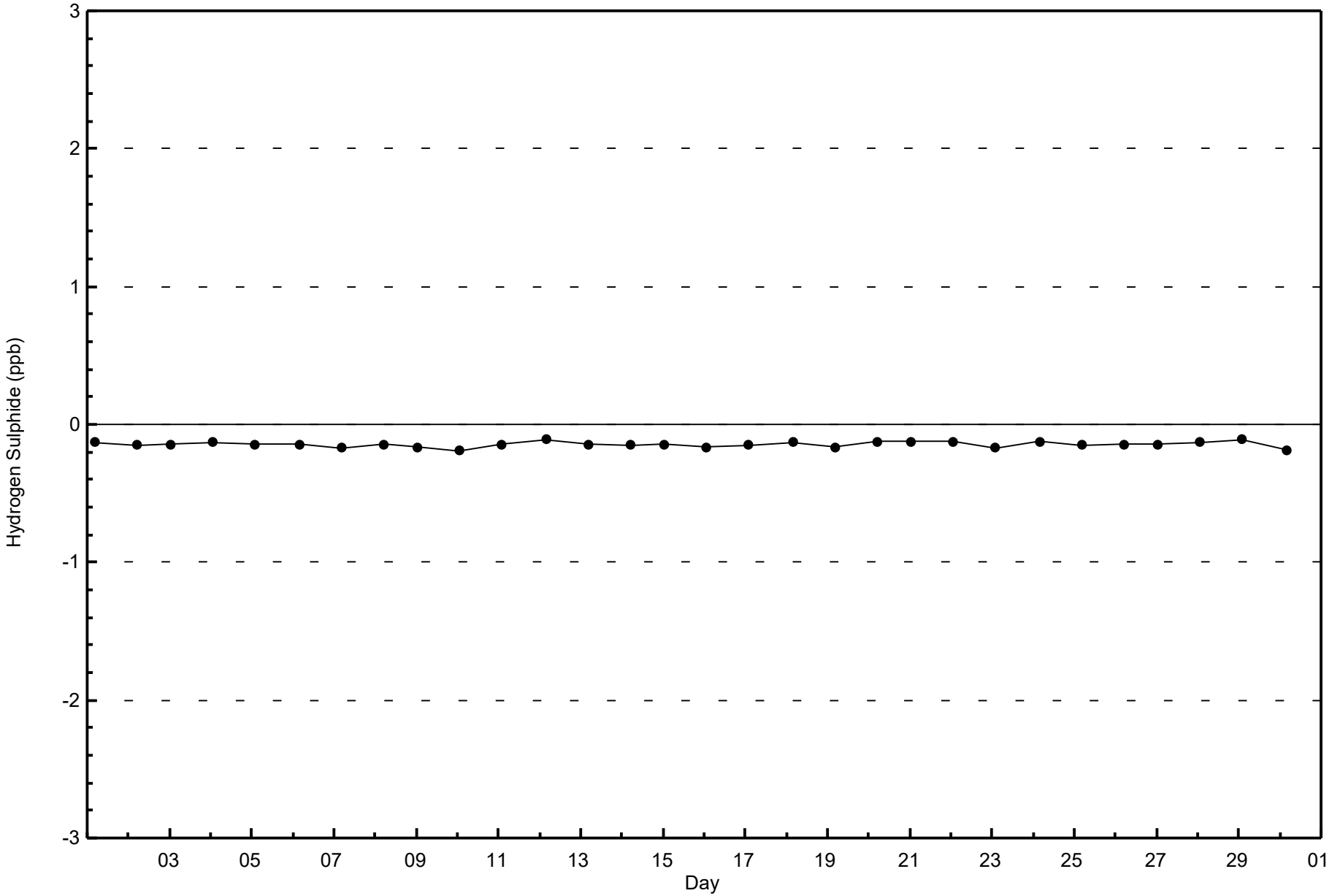
Total Number of Valid Hours: 672

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Mackay River - September 2026

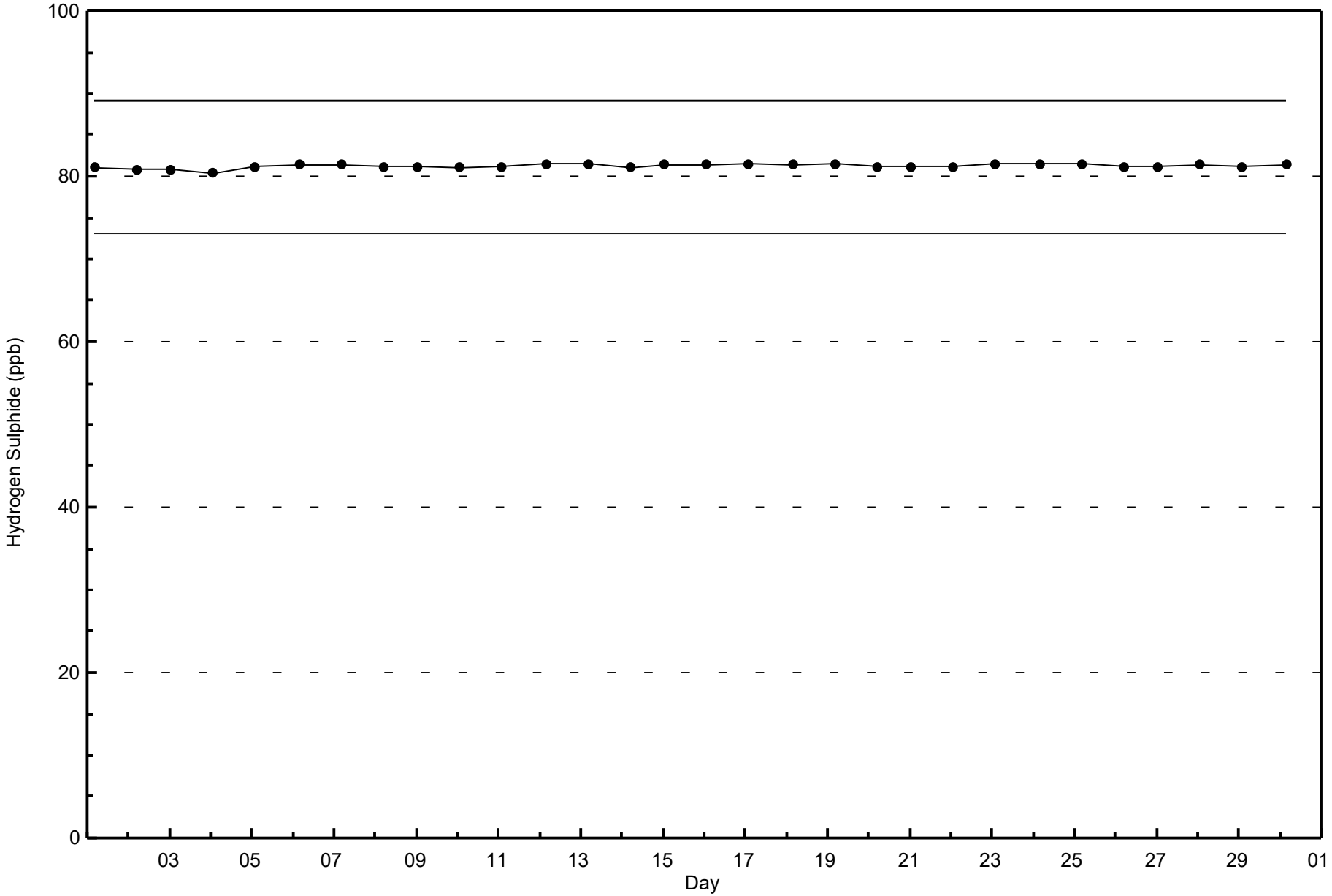


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Mackay River - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Mackay River - September 2026

Maximum Value: 3.6 ppm on Sep 25 08:00

Maximum Daily Average: 2.6 ppm on Sep 25

Minimum Value: 2.1 ppm on Sep 20 18:00

Minimum Daily Average: 2.2 ppm on Sep 29

Maximum Diurnal Average: 2.5 ppm at hour 7

Minimum Diurnal Average: 2.2 ppm at hour 17

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} = 3.1

Hours in Service:	720
Hours of Data:	687
Hours of Missing Data:	33
Hours of Calibration:	33
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-Sep	3.1	3.5	3.1	Z	2.8	2.7	2.8	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	2.3	2.4	2.4	3.5
2-Sep	2.4	2.4	2.4	2.4	Z	2.3	2.3	2.3	2.3	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	2.2	2.2	2.2	2.4
3-Sep	2.2	2.2	2.2	2.2	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	2.2	2.2	2.2	2.3	2.2	2.3
4-Sep	Z	2.3	2.3	2.4	2.4	2.4	2.6	2.5	2.5	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	2.6
5-Sep	2.3	Z	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.4	2.5
6-Sep	2.6	3.0	Z	2.8	3.2	3.4	3.3	2.9	2.5	2.5	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	2.3	2.5	3.4
7-Sep	2.3	2.3	2.4	Z	2.3	2.5	2.5	2.5	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.5	2.5	2.3	2.5
8-Sep	2.5	2.7	2.7	2.8	Z	2.9	2.9	2.9	C	C	C	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	2.5	2.9
9-Sep	2.6	2.6	2.5	2.5	2.5	Z	2.5	2.5	2.4	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.6
10-Sep	Z	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	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3
11-Sep	2.2	Z	2.2	2.2	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	2.2	2.2	2.2	2.2	2.2	2.2	2.3
12-Sep	2.2	2.3	Z	2.3	2.3	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	2.3	2.3	2.3	2.4
13-Sep	2.3	2.3	2.4	Z	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	2.3	2.4	2.4	2.4	2.4	2.3	2.4
14-Sep	2.4	2.3	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	2.3	2.3	2.3	2.3	2.3	2.2	2.4
15-Sep	2.3	2.3	2.4	2.3	2.4	Z	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	2.5	2.4	2.3	2.5
16-Sep	Z	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.6	2.4	2.3	2.4	2.3	2.3	2.3	2.3	2.2	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.4	2.7
17-Sep	2.3	Z	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.4	2.5
18-Sep	2.5	2.5	Z	2.4	2.4	2.4	2.5	2.5	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.5	2.3	2.5
19-Sep	2.5	2.6	2.7	Z	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	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.7
20-Sep	2.3	2.3	2.3	2.4	Z	2.4	2.4	2.4	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4
21-Sep	2.3	2.3	2.4	2.3	2.3	Z	2.4	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	2.3	2.3	2.3	2.4	2.3	2.5
22-Sep	Z	2.5	2.6	2.6	2.6	2.8	2.7	2.7	2.5	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.8
23-Sep	2.4	Z	2.5	2.5	2.6	2.6	2.7	2.8	2.8	2.5	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	2.4	2.8
24-Sep	2.3	2.3	Z	2.4	2.5	2.4	2.6	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.5	2.3	2.6
25-Sep	2.6	2.8	2.8	Z	2.3	2.4	3.1	3.6	3.4	3.0	2.7	2.3	2.5	2.6	2.4	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.6	3.6
26-Sep	2.3	2.3	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	2.3	2.2	2.2	2.2	2.3
27-Sep	2.2	2.3	2.3	2.2	2.2	Z	2.2	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	2.2	2.2	2.3
28-Sep	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	2.2	2.2	2.2	2.2	2.2	2.2	2.3
29-Sep	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	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3
30-Sep	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	2.3	2.3	2.3	2.3	2.2	2.3
	2.4	2.4	2.4	2.4	2.4	2.4	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	2.3	2.3	2.3	2.3	2.3	Diurnal Average	
	3.1	3.5	3.1	2.8	3.2	3.4	3.3	3.6	3.4	3.0	2.7	2.4	2.5	2.6	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	Diurnal Maximum	

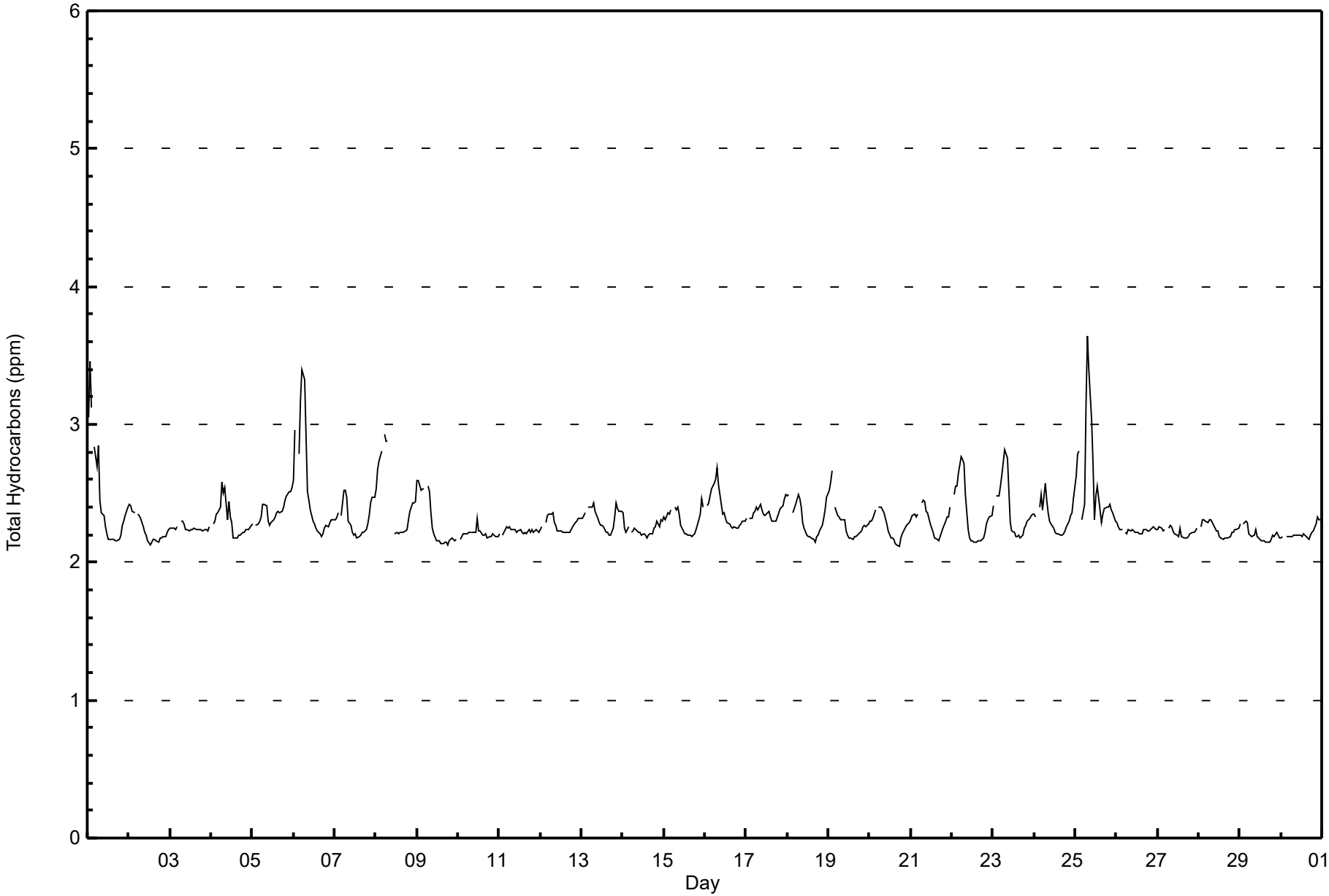
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Mackay River - September 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Total Hydrocarbons (THC) - ppm

Mackay River - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	0	0.00	0.00
2.1 - 3.0	678	98.69	98.69
3.1 - 10.0	9	1.31	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 687

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Mackay River - September 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	19	14	20	4	14	44	69	55	64	69	60	61	62	56	32	24	667
3.1 - 10.0	0	1	2	0	0	0	2	4	0	0	0	0	0	0	0	0	9
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	19	15	22	4	14	44	71	59	64	69	60	61	62	56	32	24	676

Total Number of Valid Hours: 676

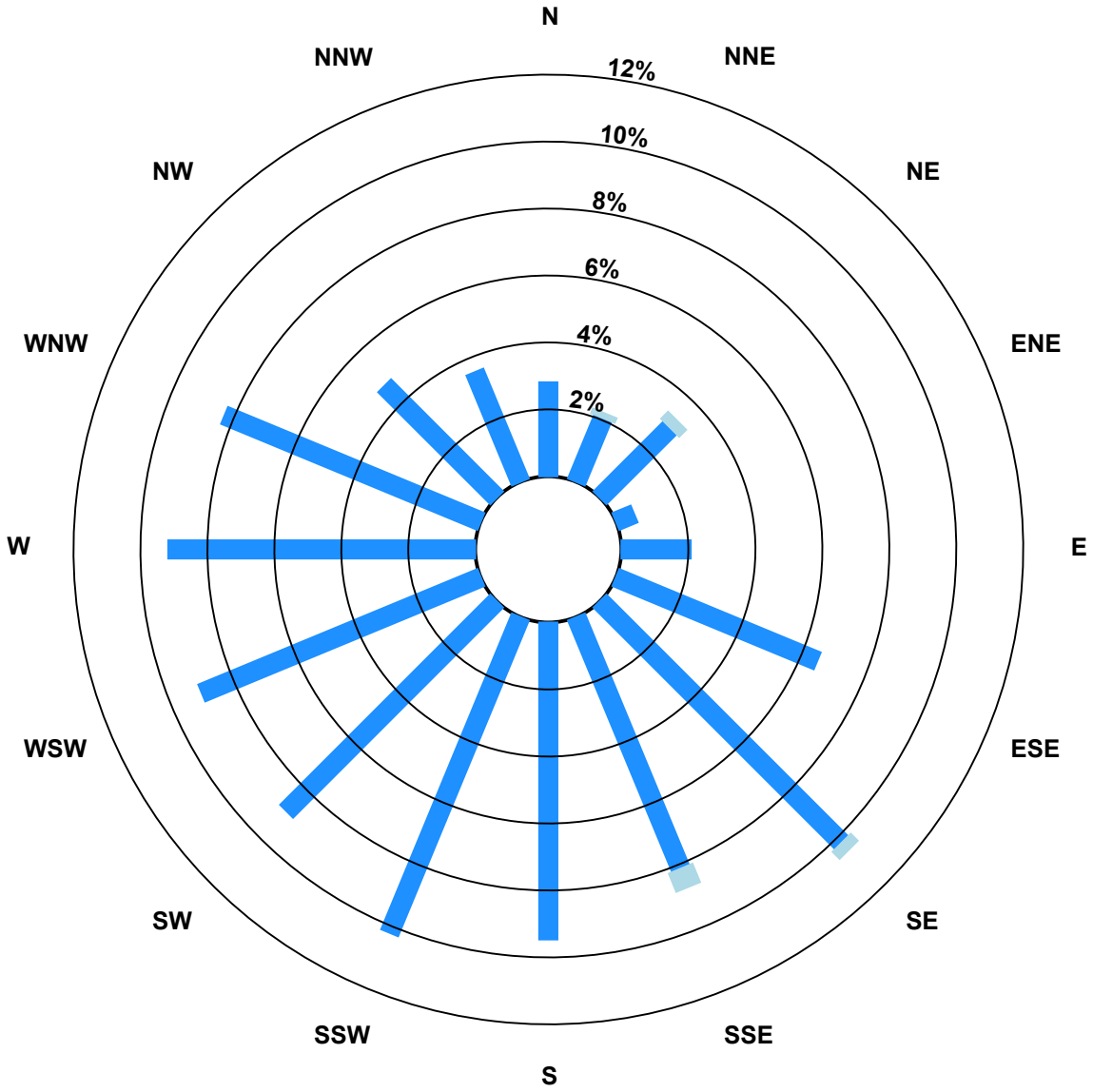
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Mackay River



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

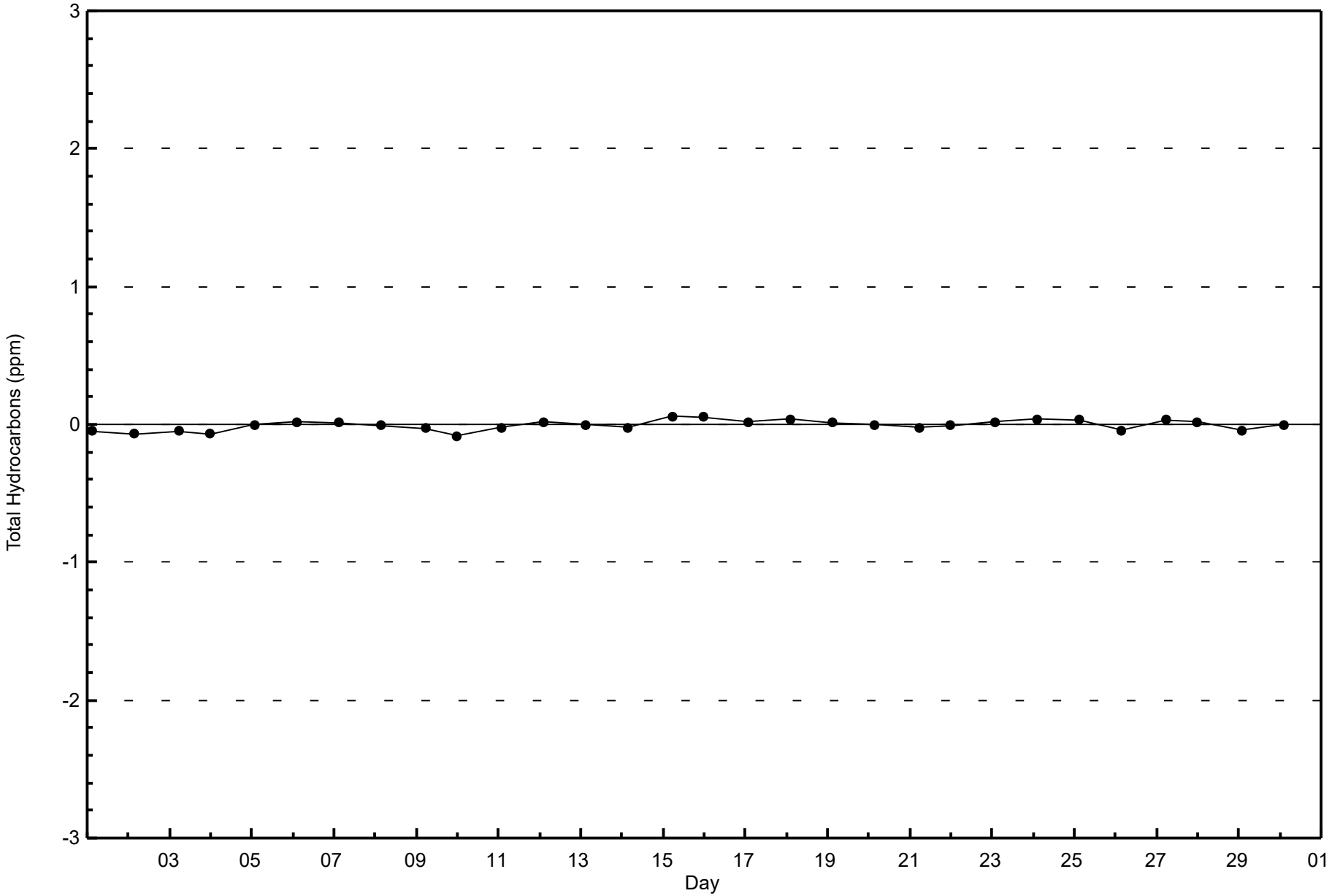
Total Number of Valid Hours: 676

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Mackay River - September 2026

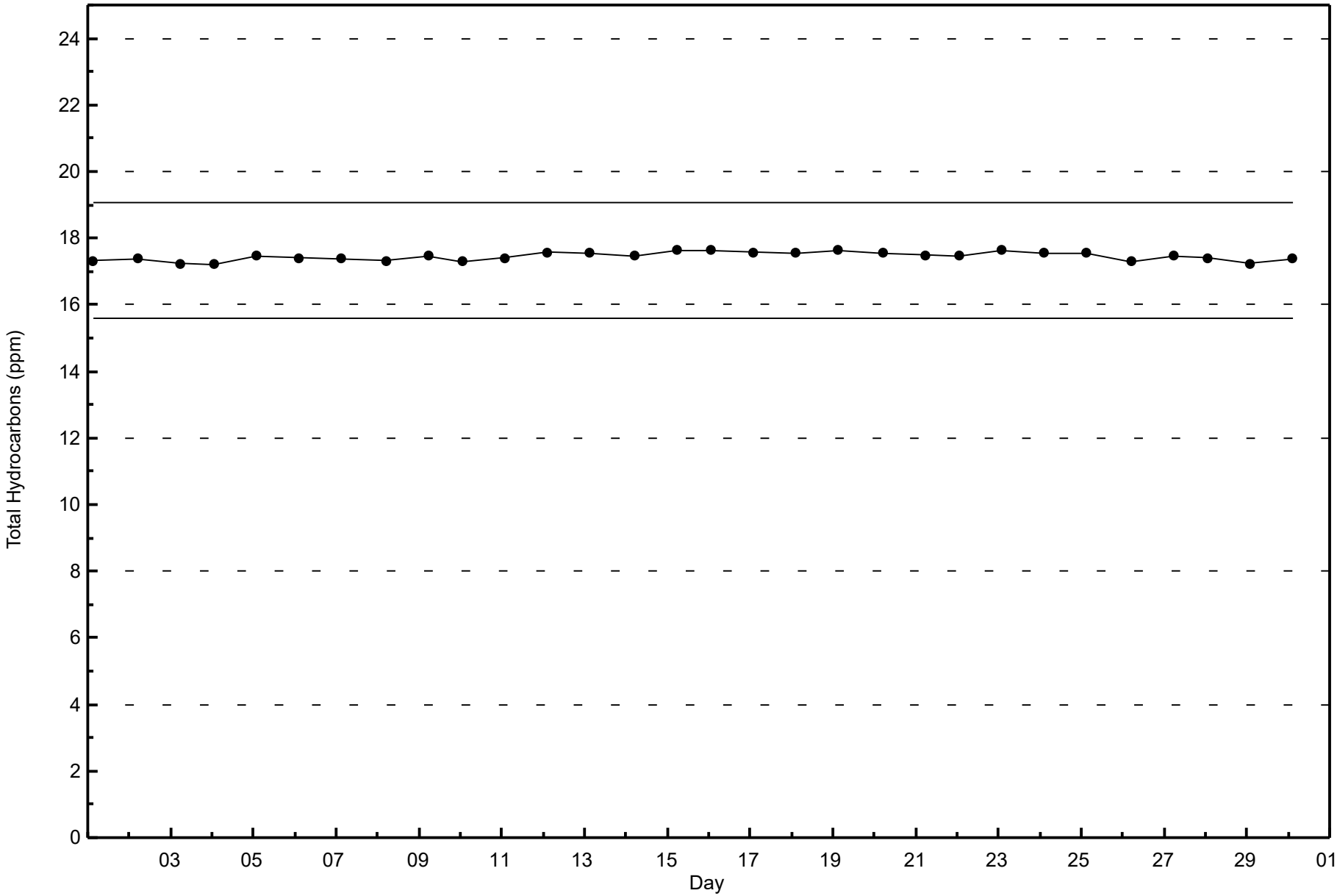


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Mackay River - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Mackay River - September 2026

Maximum Value: 51.9 ppb on Sep 25 08:00

Maximum Daily Average: 5.5 ppb on Sep 25

Minimum Value: 0.0 ppb on Sep 1 03:00

Minimum Daily Average: 0.0 ppb on Sep 26

Maximum Diurnal Average: 1.9 ppb at hour 8

Minimum Diurnal Average: 0.0 ppb at hour 24

Monthly Average: 0.27 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.0 P_{90} = 0.2 P_{99} = 2.3

Hours in Service:	720
Hours of Data:	684
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-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.1	C	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	--	0.1
3-Sep	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
4-Sep	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.4	0.2	4.0	2.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	4.0
5-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.9	2.7	1.2	0.7	1.5	1.5	1.6	1.7	1.5	1.0	0.7	0.3	0.1	0.1	0.0	0.0	0.0	0.7	2.7
6-Sep	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
7-Sep	0.0	Z	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	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1
8-Sep	0.2	0.0	Z	0.1	0.1	0.1	0.1	0.2	0.2	0.2	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	0.1	0.2
9-Sep	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-Sep	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	1.0	0.1	0.0	0.3	0.5	0.1	0.0	0.0	0.1	1.0
11-Sep	0.0	0.0	0.2	1.2	1.1	Z	1.3	0.3	0.5	0.3	0.1	0.5	1.3	0.7	0.9	0.6	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.4	1.3
12-Sep	Z	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	0.0	0.0	0.1
13-Sep	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-Sep	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	0.0	0.0	0.1	0.3	0.2	0.0	0.0	0.0	0.0	0.3
15-Sep	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
16-Sep	0.0	0.0	0.0	0.1	Z	0.0	0.0	0.5	1.9	1.2	0.6	0.7	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.9
17-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.2	0.2	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.3
18-Sep	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3	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	0.0	0.1	0.3
19-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
20-Sep	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-Sep	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
22-Sep	0.1	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.0	0.4	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	0.1	0.4
23-Sep	0.0	0.0	0.0	0.0	0.0	Z	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	0.0	0.3
24-Sep	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
25-Sep	0.1	Z	0.1	0.0	0.0	0.7	16.2	51.9	35.1	15.9	2.2	0.7	1.4	1.5	0.6	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	5.5	51.9
26-Sep	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
27-Sep	0.0	0.0	0.0	Z	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	0.1
28-Sep	0.0	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	0.1
29-Sep	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-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
	0.0	0.0	0.0	0.1	0.1	0.0	0.6	1.9	1.4	0.7	0.3	0.2	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Diurnal Average	
	0.2	0.1	0.2	1.2	1.1	0.7	16.2	51.9	35.1	15.9	4.0	2.6	1.8	1.6	1.7	1.5	1.0	0.7	0.3	0.3	0.5	0.1	0.1	0.1	Diurnal Maximum	

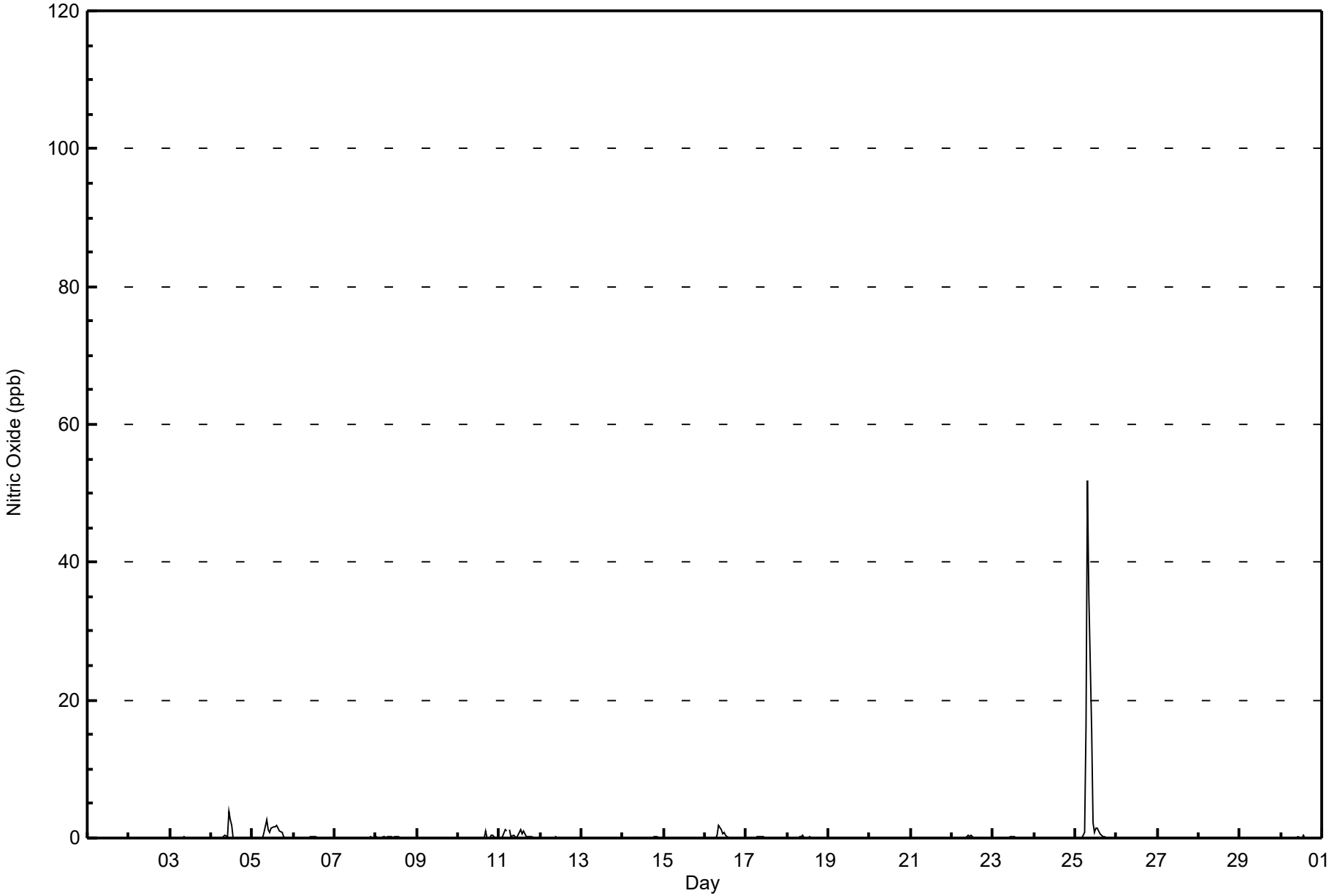
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Mackay River - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	682	99.71	99.71
21 - 40	1	0.15	99.85
11 - 80	1	0.15	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Mackay River - September 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	15	20	4	14	40	67	60	64	70	59	62	64	54	33	25	670
21 - 40	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11 - 80	0	0	1	0	0	0	0	0	0	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	19	15	22	4	14	40	67	60	64	70	59	62	64	54	33	25	672

Total Number of Valid Hours: 672

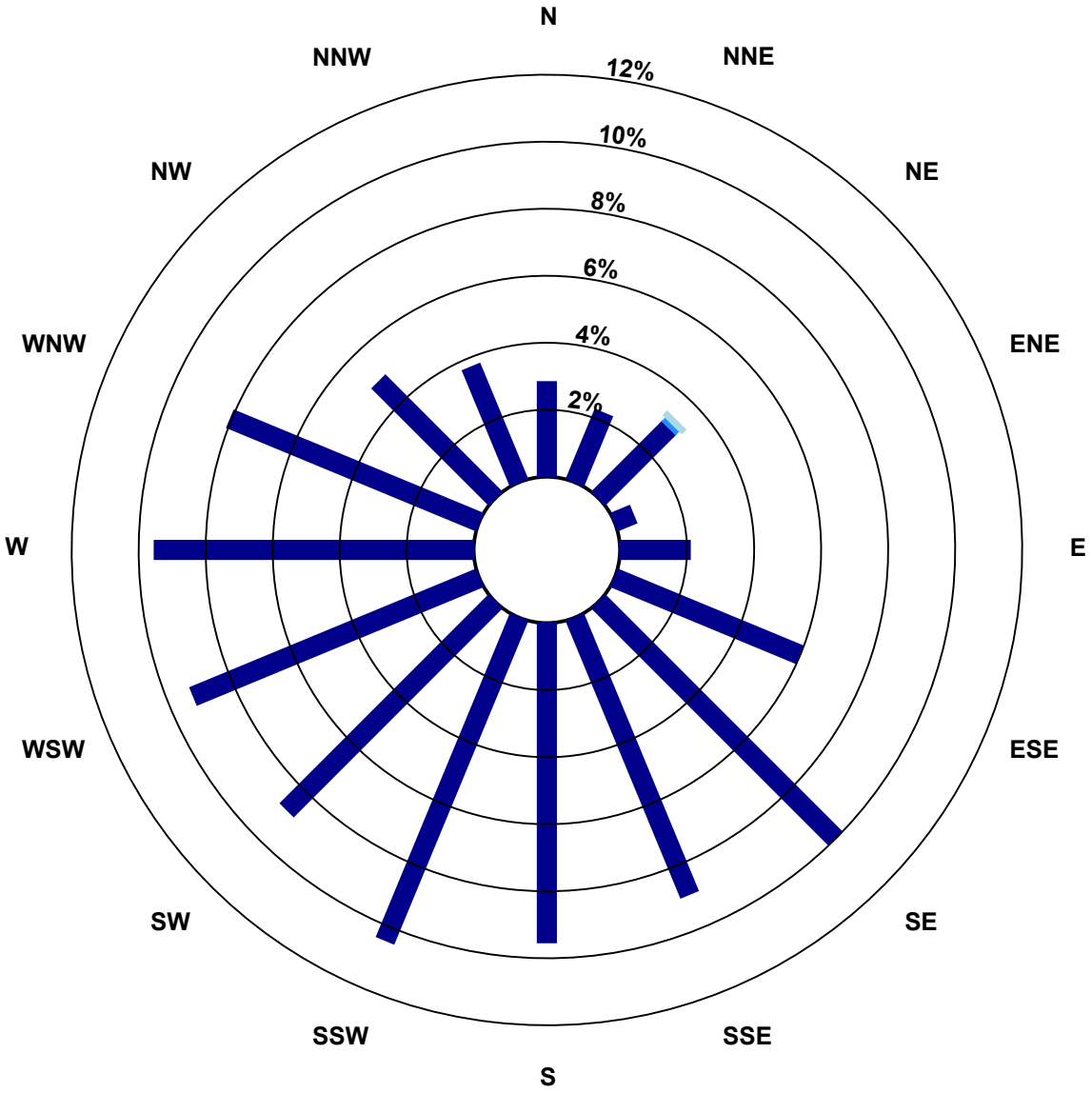
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Mackay River



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

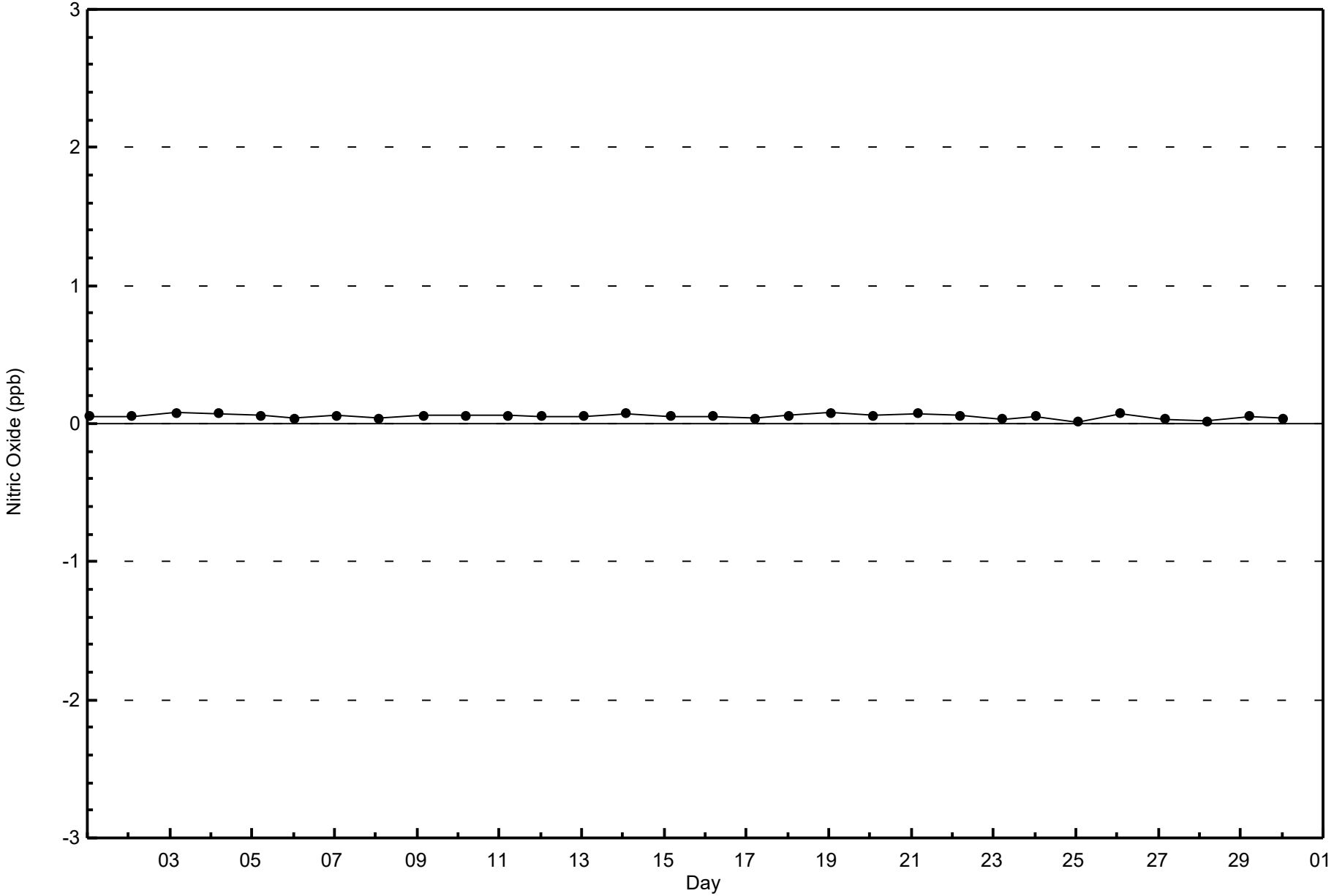
Total Number of Valid Hours: 672

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Mackay River - September 2026

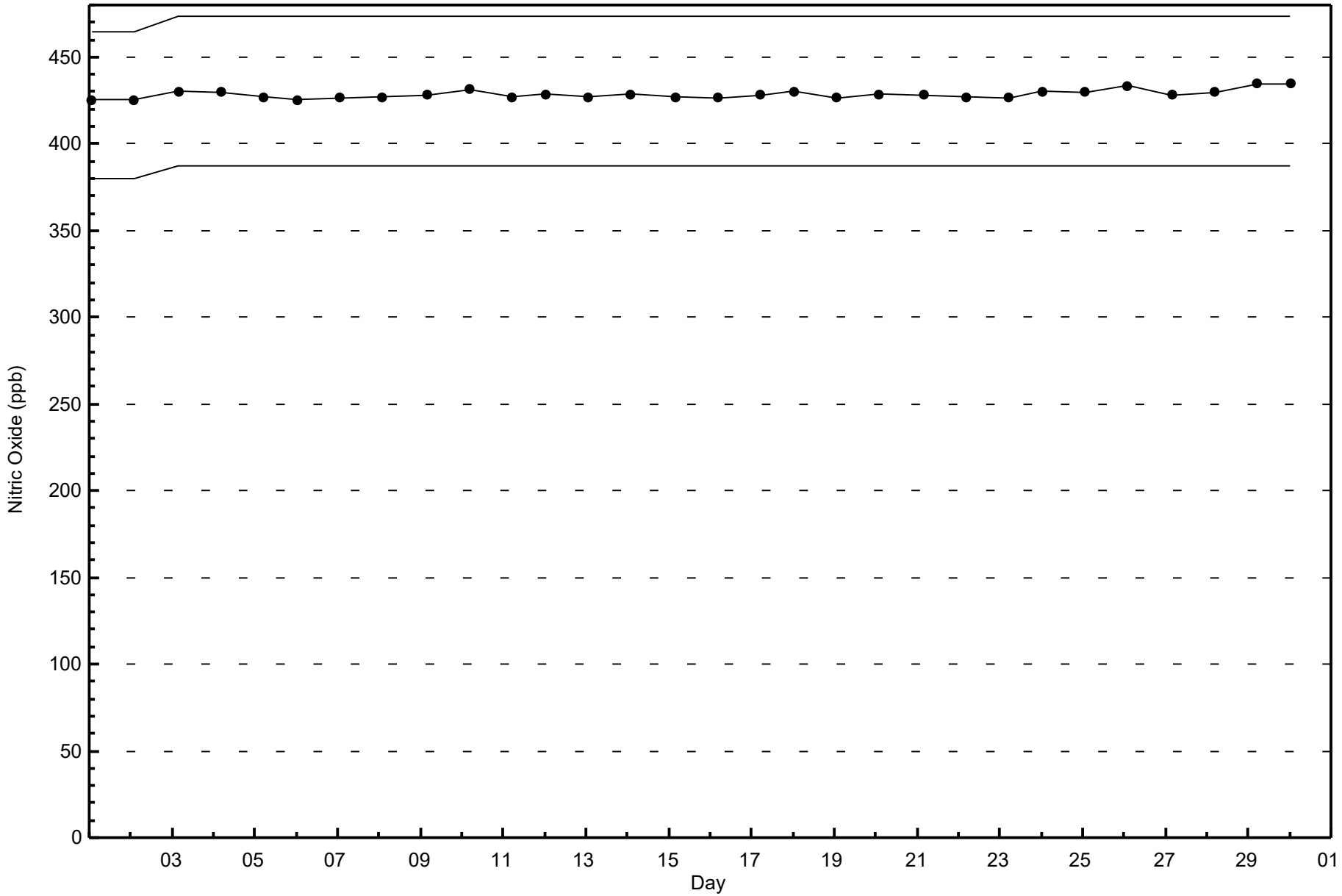


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Mackay River - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Mackay River - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 24.0 ppb on Sep 25 08:00
Maximum Daily Average: 8.0 ppb on Sep 25

Minimum Value: 0.0 ppb on Sep 16 04:00
Minimum Daily Average: 0.1 ppb on Sep 15
Maximum Diurnal Average: 1.4 ppb at hour 9
Minimum Diurnal Average: 0.4 ppb at hour 3
Monthly Average: 0.80 ppb
Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.2 Median = 0.3 Q_3 = 0.6 P_{90} = 1.5 P_{99} = 6.8

Hours in Service:	720
Hours of Data:	684
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-Sep	0.1	Z	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.3	0.6
2-Sep	0.6	0.6	Z	0.9	0.9	1.0	1.1	C	C	C	C	C	C	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.8	0.6	0.5	0.4	--	1.1
3-Sep	0.5	0.6	0.8	Z	0.7	0.5	0.6	0.7	0.7	0.5	0.5	0.5	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.8
4-Sep	0.6	0.6	0.5	0.3	Z	0.3	0.3	0.3	0.4	0.7	5.5	3.1	2.7	0.3	0.1	0.2	0.2	0.1	0.7	0.1	0.1	0.1	0.2	0.2	0.8	5.5
5-Sep	0.2	0.2	0.1	0.1	0.1	Z	0.5	2.1	3.8	2.0	1.8	2.7	3.0	3.5	4.4	4.8	4.8	5.6	5.4	4.6	3.4	2.7	2.2	2.1	2.6	5.6
6-Sep	Z	2.1	2.2	1.6	1.0	0.8	0.6	0.5	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	2.2
7-Sep	0.3	Z	0.5	0.3	0.4	0.4	0.2	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.3	0.5
8-Sep	0.1	0.1	Z	0.2	0.1	0.1	0.1	0.2	0.5	0.6	0.4	0.5	0.6	0.6	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.6
9-Sep	0.1	0.2	0.2	Z	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.4
10-Sep	0.2	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	0.4	2.8	0.4	0.1	1.1	1.8	0.7	0.1	0.2	0.4	2.8
11-Sep	0.1	0.2	0.9	3.2	3.3	Z	3.1	0.7	1.3	0.8	0.3	0.9	1.8	1.3	1.5	1.8	1.1	1.5	1.9	2.0	0.2	0.1	0.1	0.1	1.2	3.3
12-Sep	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.5
13-Sep	0.2	Z	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	1.9	6.0	5.4	6.1	4.9	1.3	6.1
14-Sep	4.1	1.7	Z	1.9	1.5	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.3	0.1	0.4	0.4	0.2	0.4	1.5	2.5	1.6	0.7	0.1	0.1	0.8	4.1
15-Sep	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	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2
16-Sep	0.1	0.1	0.1	0.0	Z	0.2	0.2	0.8	3.4	2.1	1.2	1.5	0.8	0.5	0.4	0.2	0.2	0.2	0.2	0.8	1.1	0.8	0.8	0.9	0.7	3.4
17-Sep	0.9	1.2	1.2	1.1	1.0	Z	0.5	0.6	0.8	0.8	0.7	0.6	0.5	0.5	0.5	0.4	0.5	0.4	0.4	0.2	0.2	0.1	0.1	0.2	0.6	1.2
18-Sep	Z	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.5	0.8	0.3	0.1	0.1	0.8	0.5	0.1	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.8
19-Sep	0.1	Z	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.6	0.7	0.7	0.8	0.9	0.8	0.5	0.9
20-Sep	0.8	0.8	Z	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.5	0.6	0.8	0.4	0.8
21-Sep	0.8	0.7	0.7	Z	0.6	0.5	0.4	0.4	0.6	0.5	0.5	0.6	0.8	0.9	0.8	0.6	0.6	0.8	0.7	0.7	0.6	0.7	0.7	0.4	0.6	0.9
22-Sep	0.4	0.3	0.2	0.2	Z	0.3	0.4	0.4	0.3	1.0	0.8	1.0	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.3	1.0
23-Sep	0.1	0.1	0.1	0.1	0.1	Z	0.2	0.2	0.2	0.4	1.0	1.0	0.6	0.3	0.3	0.3	0.3	0.3	0.8	0.8	0.6	0.4	0.3	0.3	0.4	1.0
24-Sep	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.4
25-Sep	0.1	Z	0.2	0.2	0.2	6.0	22.1	24.0	23.5	20.1	12.2	3.4	5.5	6.0	4.9	4.6	5.4	6.1	5.8	5.8	6.8	8.3	6.8	5.0	8.0	24.0
26-Sep	3.5	1.8	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	3.5
27-Sep	0.1	0.1	0.1	Z	0.3	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	0.3	0.2	0.2	0.4
28-Sep	0.2	0.2	0.2	0.3	Z	0.4	0.4	0.4	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.3	0.5
29-Sep	0.8	1.1	0.8	0.6	0.4	Z	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	0.1	0.1	0.1	0.1	0.3	1.1
30-Sep	Z	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.4	0.9	0.2	0.1	1.8	0.3	0.1	0.2	0.4	0.2	0.3	0.2	0.2	0.2	0.1	0.3	1.8
	0.6	0.6	0.4	0.5	0.5	0.6	1.1	1.2	1.4	1.3	1.1	0.7	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.9	0.9	0.9	0.8	0.7	Diurnal Average	
	4.1	2.1	2.2	3.2	3.3	6.0	22.1	24.0	23.5	20.1	12.2	3.4	5.5	6.0	4.9	4.8	5.4	6.1	5.8	5.8	6.8	8.3	6.8	5.0	Diurnal Maximum	

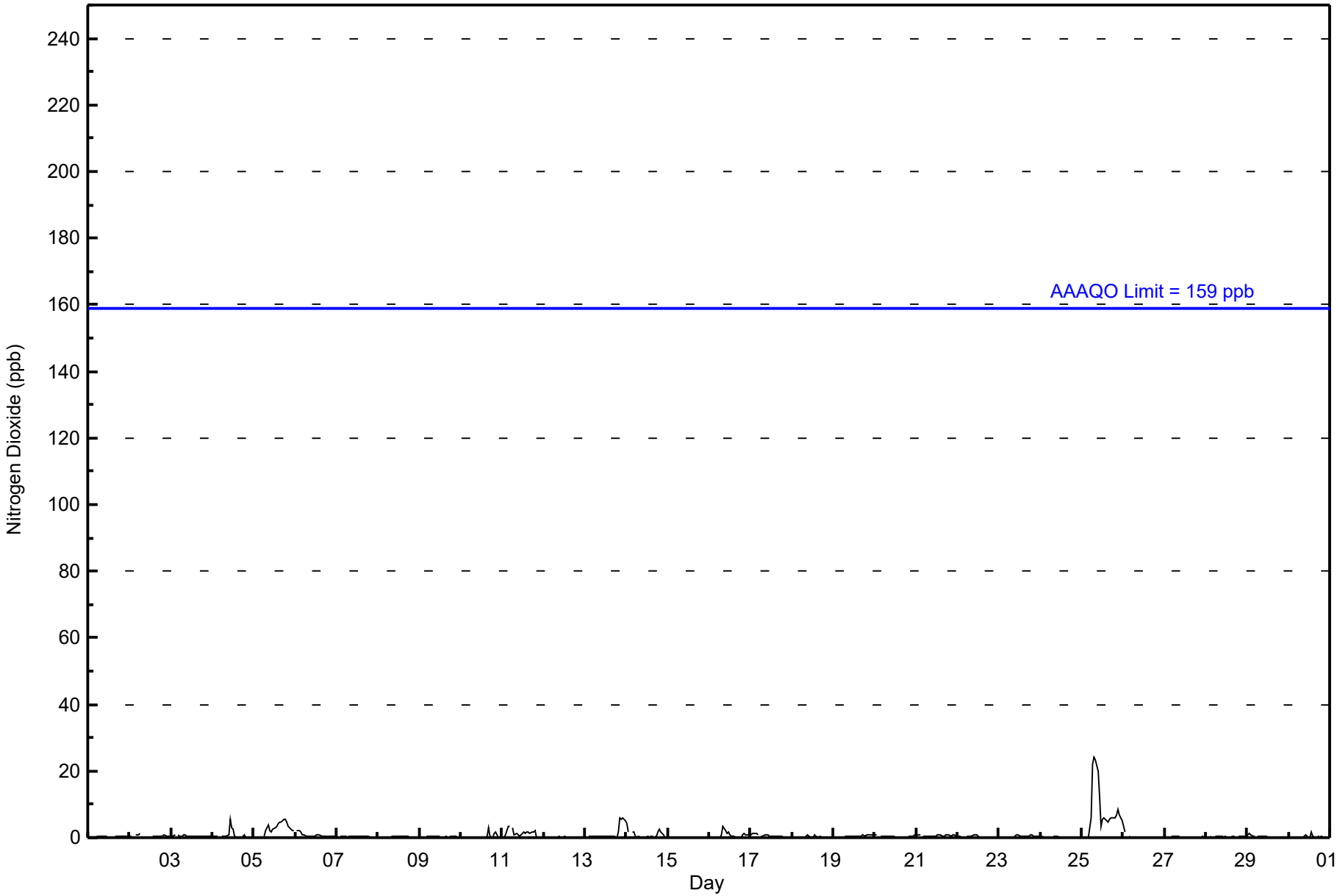
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Mackay River - September 2026



Nitrogen Dioxide (NO_2) - ppb
Mackay River - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	681	99.56	99.56
21 - 40	3	0.44	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Mackay River - September 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	14	20	4	14	40	67	60	64	70	59	62	64	54	33	25	669
21 - 40	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
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	19	15	22	4	14	40	67	60	64	70	59	62	64	54	33	25	672

Total Number of Valid Hours: 672

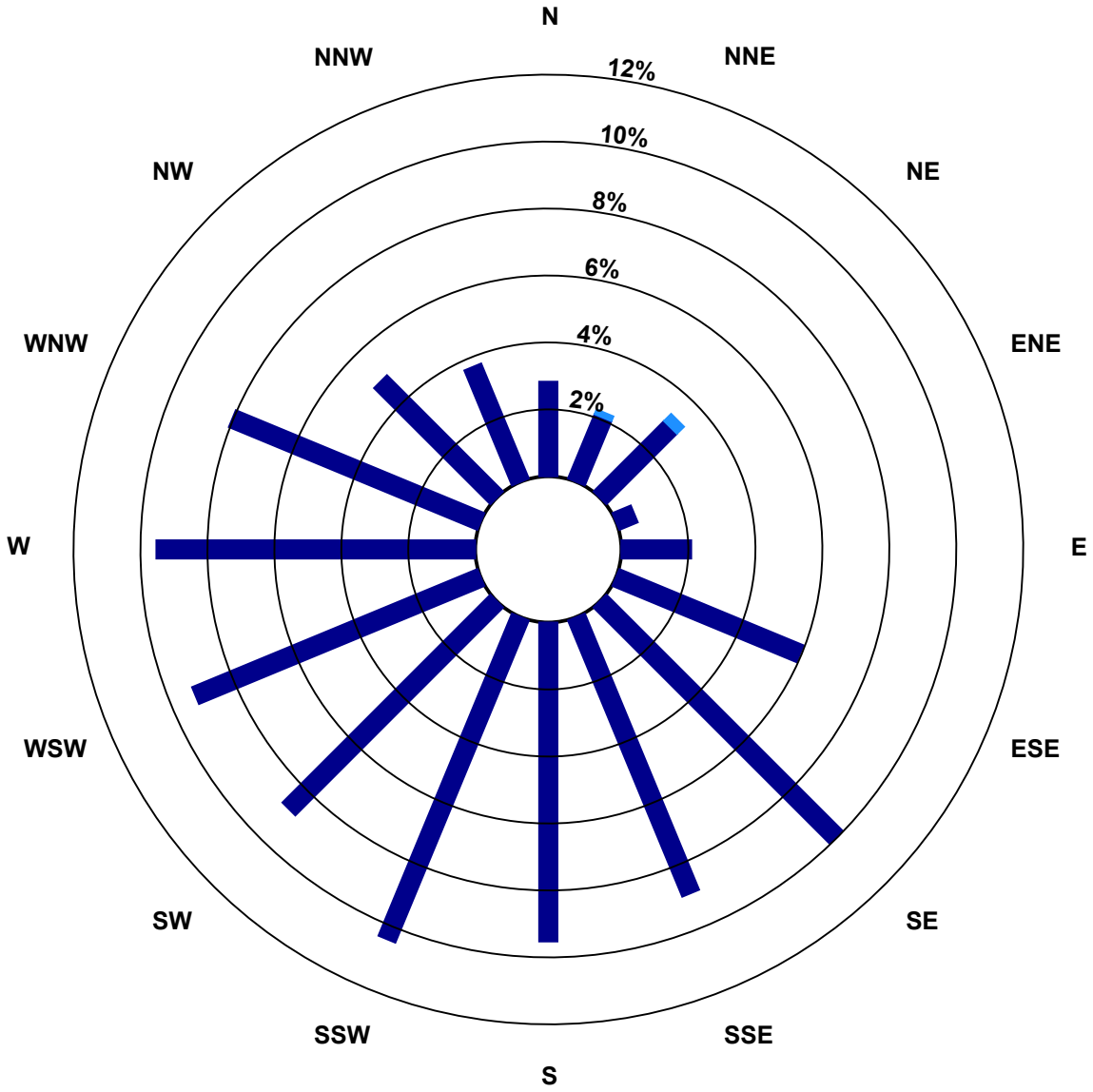
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Mackay River



Classes (ppb)

- 0 - 20
- 21 - 40
- 11 - 80
- 81 - 159
- > 159

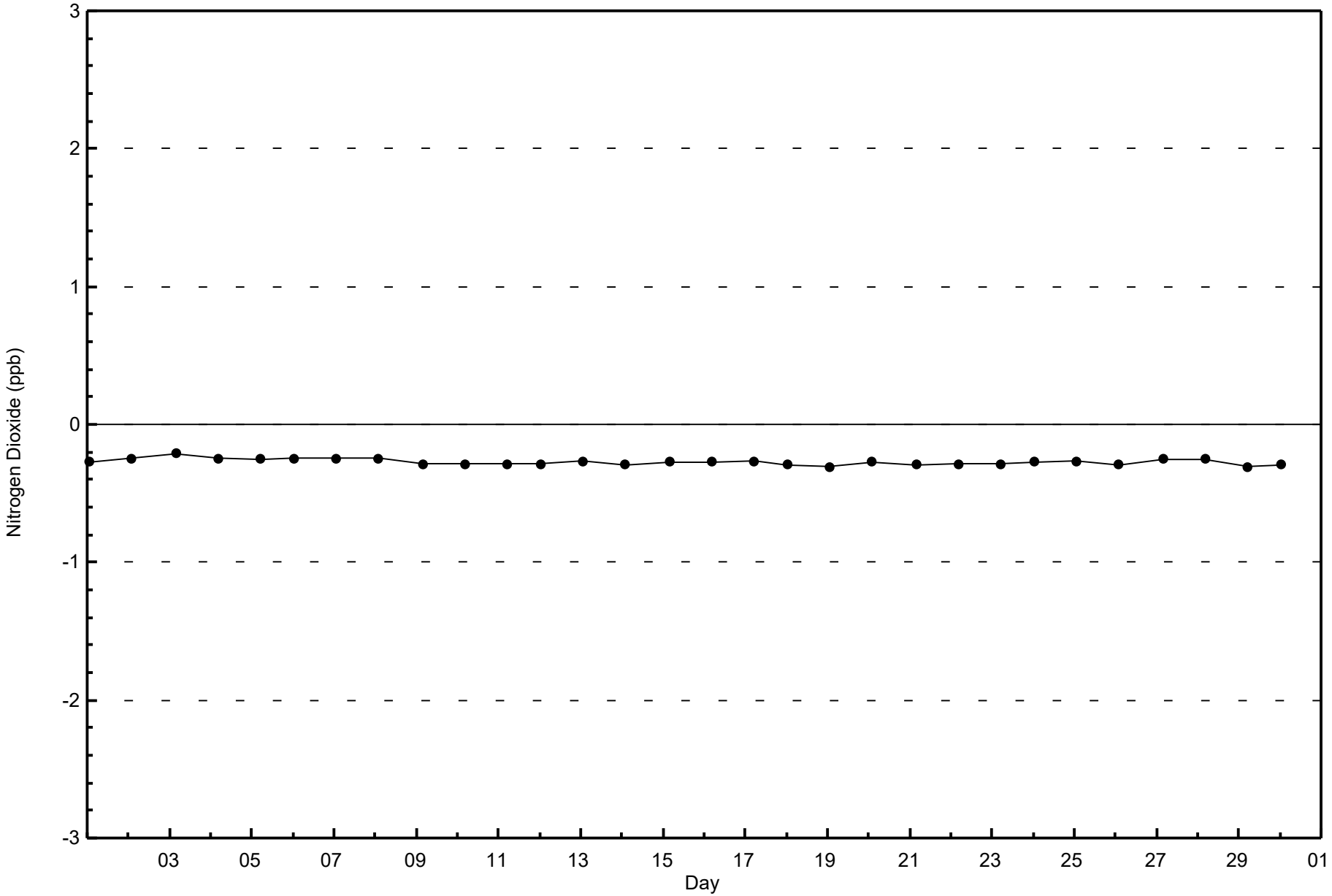
Total Number of Valid Hours: 672

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Mackay River - September 2026

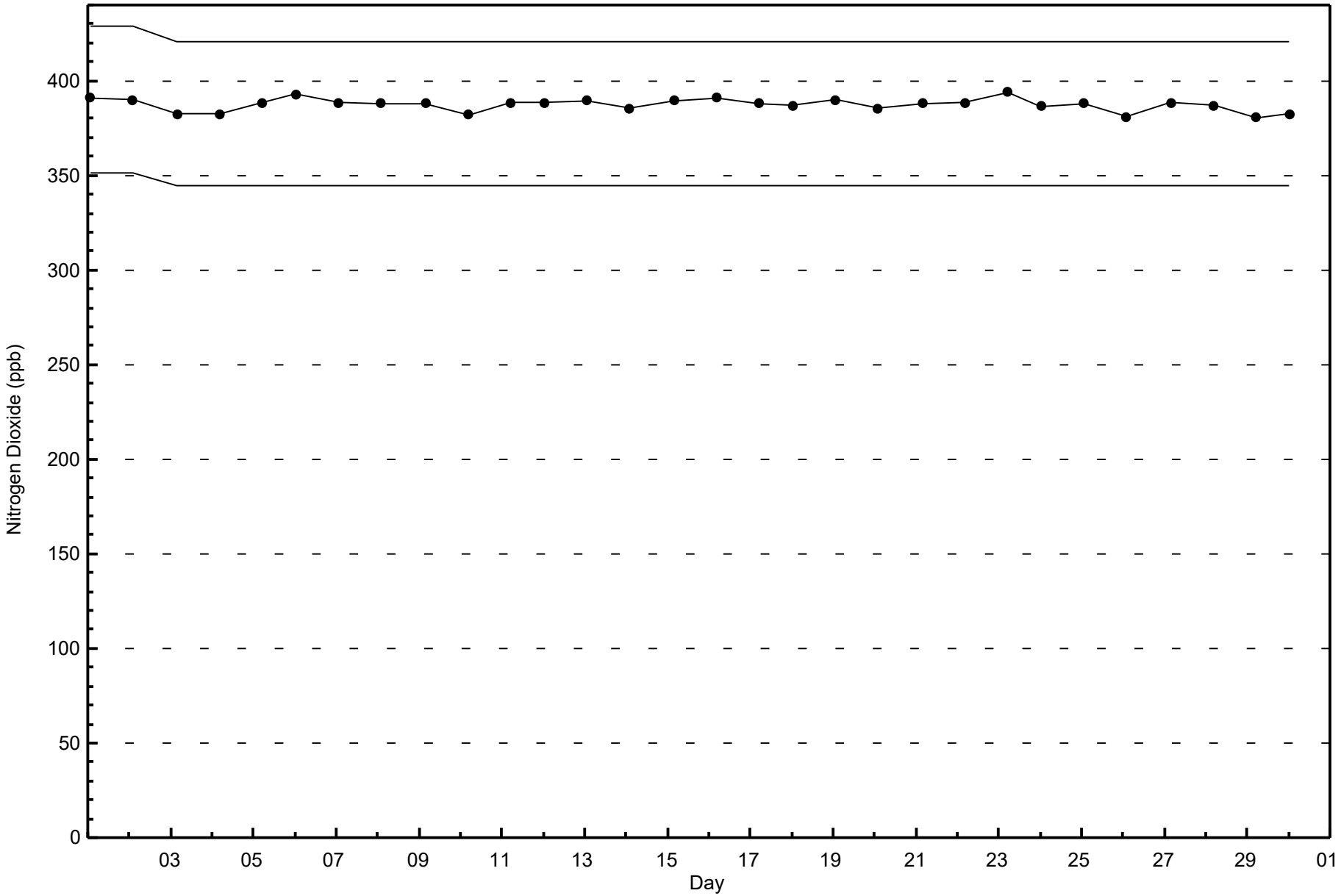


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Mackay River - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Mackay River - September 2026

Maximum Value: 75.9 ppb on Sep 25 08:00

Maximum Daily Average: 13.5 ppb on Sep 25

Minimum Value: 0.1 ppb on Sep 19 01:00

Minimum Daily Average: 0.1 ppb on Sep 15

Maximum Diurnal Average: 3.1 ppb at hour 8

Minimum Diurnal Average: 0.4 ppb at hour 3

Monthly Average: 1.06 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.1$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.6$ $P_{90} = 1.8$ $P_{99} = 7.6$

Hours in Service:	720
Hours of Data:	684
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-Sep	0.2	Z	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.3	0.6
2-Sep	0.6	0.6	Z	0.9	0.9	1.0	1.2	C	C	C	C	C	C	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.8	0.6	0.5	0.4	--	1.2
3-Sep	0.5	0.6	0.8	Z	0.7	0.5	0.6	0.8	0.8	0.6	0.5	0.5	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.8
4-Sep	0.6	0.6	0.5	0.3	Z	0.4	0.4	0.4	0.8	0.9	9.5	5.7	4.5	0.3	0.1	0.2	0.2	0.1	0.7	0.1	0.1	0.1	0.2	0.2	1.2	9.5
5-Sep	0.2	0.2	0.1	0.1	0.1	Z	0.6	3.0	6.5	3.2	2.5	4.2	4.5	5.1	6.1	6.3	5.8	6.3	5.7	4.7	3.5	2.7	2.2	2.1	3.3	6.5
6-Sep	Z	2.1	2.2	1.6	1.0	0.8	0.6	0.5	0.5	0.7	0.7	0.7	0.9	1.0	0.9	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	2.2
7-Sep	0.3	Z	0.5	0.3	0.4	0.4	0.3	0.5	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.6	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.4	0.6
8-Sep	0.3	0.1	Z	0.3	0.2	0.2	0.2	0.4	0.7	0.8	0.4	0.6	0.7	0.7	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.8
9-Sep	0.1	0.2	0.2	Z	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.4
10-Sep	0.2	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	0.4	3.8	0.5	0.1	1.4	2.3	0.8	0.1	0.2	0.5	3.8
11-Sep	0.1	0.2	1.1	4.4	4.4	Z	4.4	1.0	1.8	1.1	0.4	1.4	3.1	2.0	2.4	2.4	1.3	1.7	2.1	2.2	0.2	0.1	0.1	0.1	1.6	4.4
12-Sep	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.6	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.6
13-Sep	0.2	Z	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	1.9	6.0	5.4	6.1	4.9	1.3	6.1
14-Sep	4.1	1.7	Z	1.9	1.5	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.3	0.1	0.5	0.5	0.2	0.4	1.6	2.8	1.8	0.7	0.1	0.1	0.9	4.1
15-Sep	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	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2
16-Sep	0.1	0.1	0.1	0.1	Z	0.2	0.2	1.3	5.3	3.3	1.8	2.2	1.3	0.7	0.4	0.2	0.2	0.2	0.2	0.8	1.1	0.8	0.8	0.9	1.0	5.3
17-Sep	0.9	1.2	1.2	1.1	1.0	Z	0.6	0.8	1.0	1.1	0.8	0.7	0.5	0.5	0.5	0.4	0.5	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.6	1.2
18-Sep	Z	0.3	0.2	0.2	0.1	0.1	0.1	0.4	0.7	1.1	0.3	0.1	0.1	1.1	0.6	0.1	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	1.1
19-Sep	0.1	Z	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.6	0.5	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.6	0.7	0.7	0.8	0.9	0.8	0.5	0.9
20-Sep	0.8	0.8	Z	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.5	0.6	0.8	0.4	0.8
21-Sep	0.8	0.7	0.7	Z	0.6	0.5	0.4	0.4	0.6	0.5	0.5	0.6	0.8	0.9	0.8	0.6	0.6	0.8	0.7	0.7	0.6	0.7	0.7	0.4	0.6	0.9
22-Sep	0.5	0.3	0.2	0.2	Z	0.4	0.4	0.4	0.3	1.4	1.1	1.3	0.7	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.4	1.4
23-Sep	0.1	0.1	0.1	0.1	0.1	Z	0.2	0.2	0.2	0.5	1.2	1.3	0.7	0.3	0.3	0.3	0.3	0.3	0.8	0.8	0.6	0.4	0.3	0.3	0.4	1.3
24-Sep	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.4
25-Sep	0.2	Z	0.3	0.2	0.2	6.7	38.3	75.9	58.6	36.0	14.4	4.1	6.9	7.5	5.5	5.0	5.6	6.3	5.8	5.8	6.8	8.3	6.8	5.0	13.5	75.9
26-Sep	3.5	1.8	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	3.5
27-Sep	0.1	0.1	0.1	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	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.4
28-Sep	0.2	0.2	0.2	0.3	Z	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.3	0.5
29-Sep	0.8	1.1	0.8	0.6	0.4	Z	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	0.1	0.1	0.1	0.1	0.3	1.1
30-Sep	Z	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.5	1.1	0.2	0.1	2.3	0.4	0.1	0.2	0.4	0.2	0.3	0.2	0.2	0.2	0.1	0.3	2.3
	0.6	0.6	0.4	0.6	0.6	0.6	1.7	3.1	2.9	2.0	1.4	0.9	1.0	0.9	0.8	0.7	0.8	0.7	0.8	0.9	1.0	0.9	0.8	0.7	Diurnal Average	
	4.1	2.1	2.2	4.4	4.4	6.7	38.3	75.9	58.6	36.0	14.4	5.7	6.9	7.5	6.1	6.3	5.8	6.3	5.8	5.8	6.8	8.3	6.8	5.0	Diurnal Maximum	

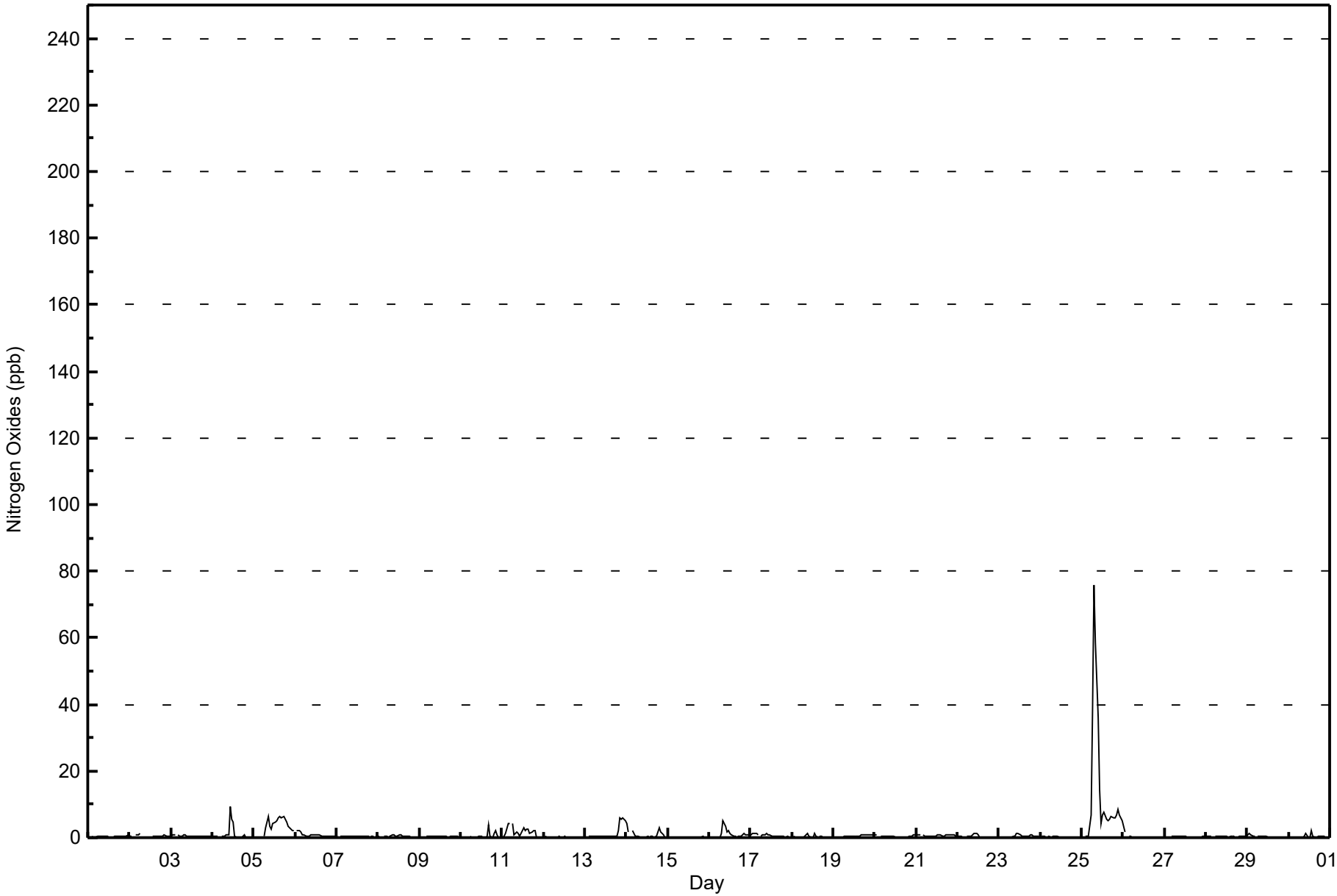
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Mackay River - September 2026



Nitrogen Oxides (NO_X) - ppb
Mackay River - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	680	99.42	99.42
21 - 40	2	0.29	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: 684

Total Number of Hours: 720

Nitrogen Oxides (NO_X) - ppb
Mackay River - September 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	14	19	4	14	40	67	60	64	70	59	62	64	54	33	25	668
21 - 40	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11 - 80	0	0	2	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	19	15	22	4	14	40	67	60	64	70	59	62	64	54	33	25	672

Total Number of Valid Hours: 672

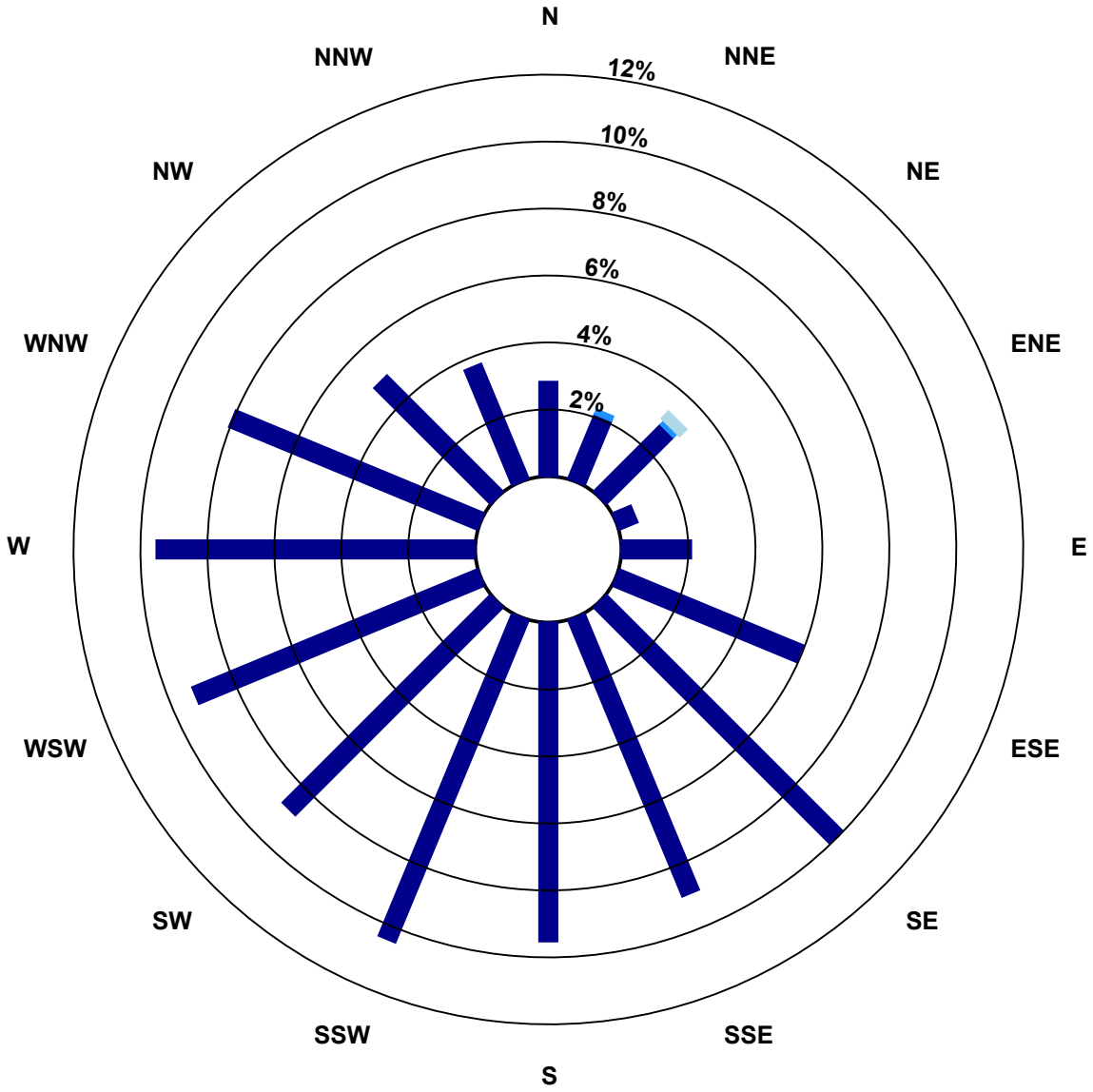
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Mackay River



Classes (ppb)

- 0 - 20
- 21 - 40
- 11 - 80
- 81 - 159
- > 159

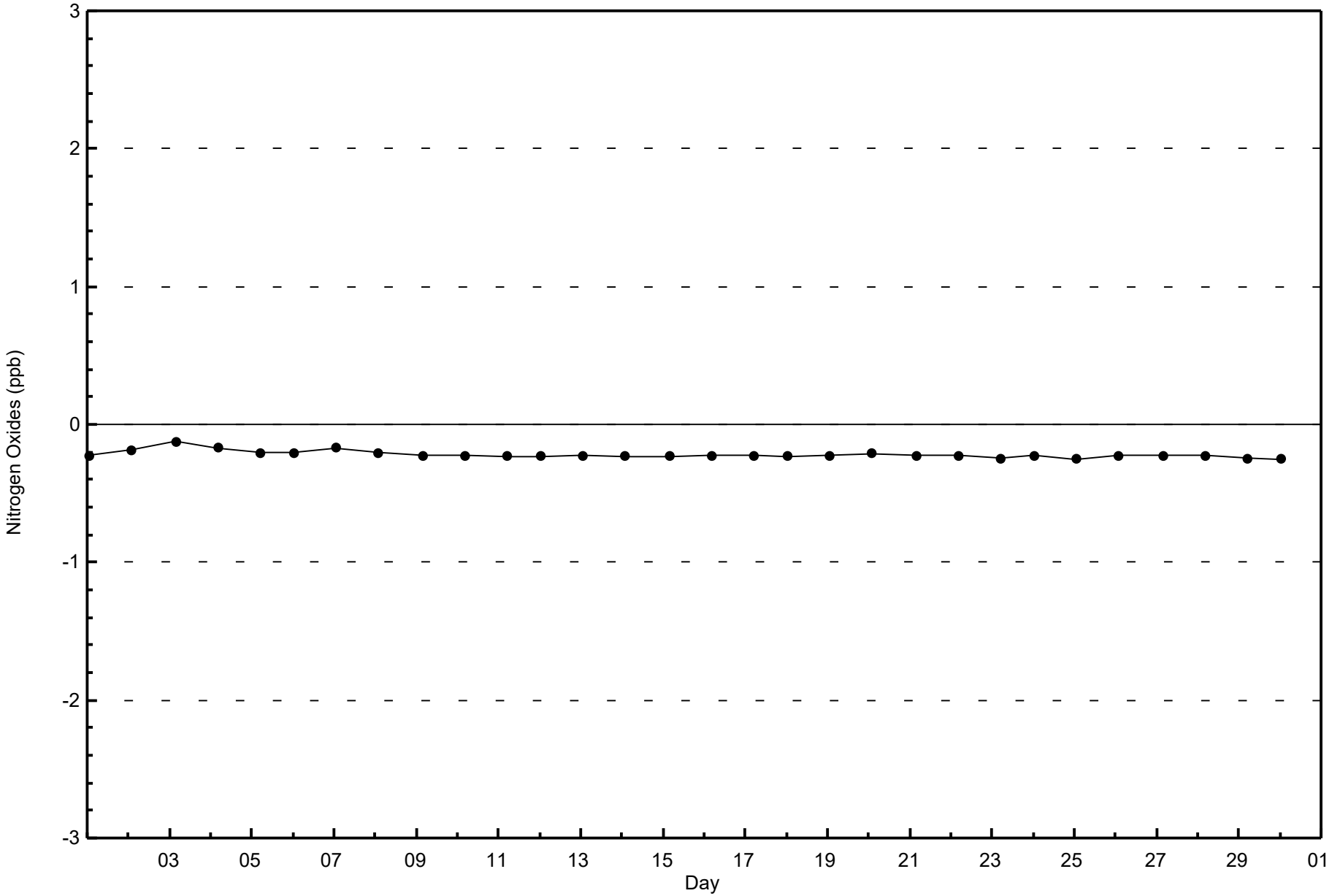
Total Number of Valid Hours: 672

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Mackay River - September 2026

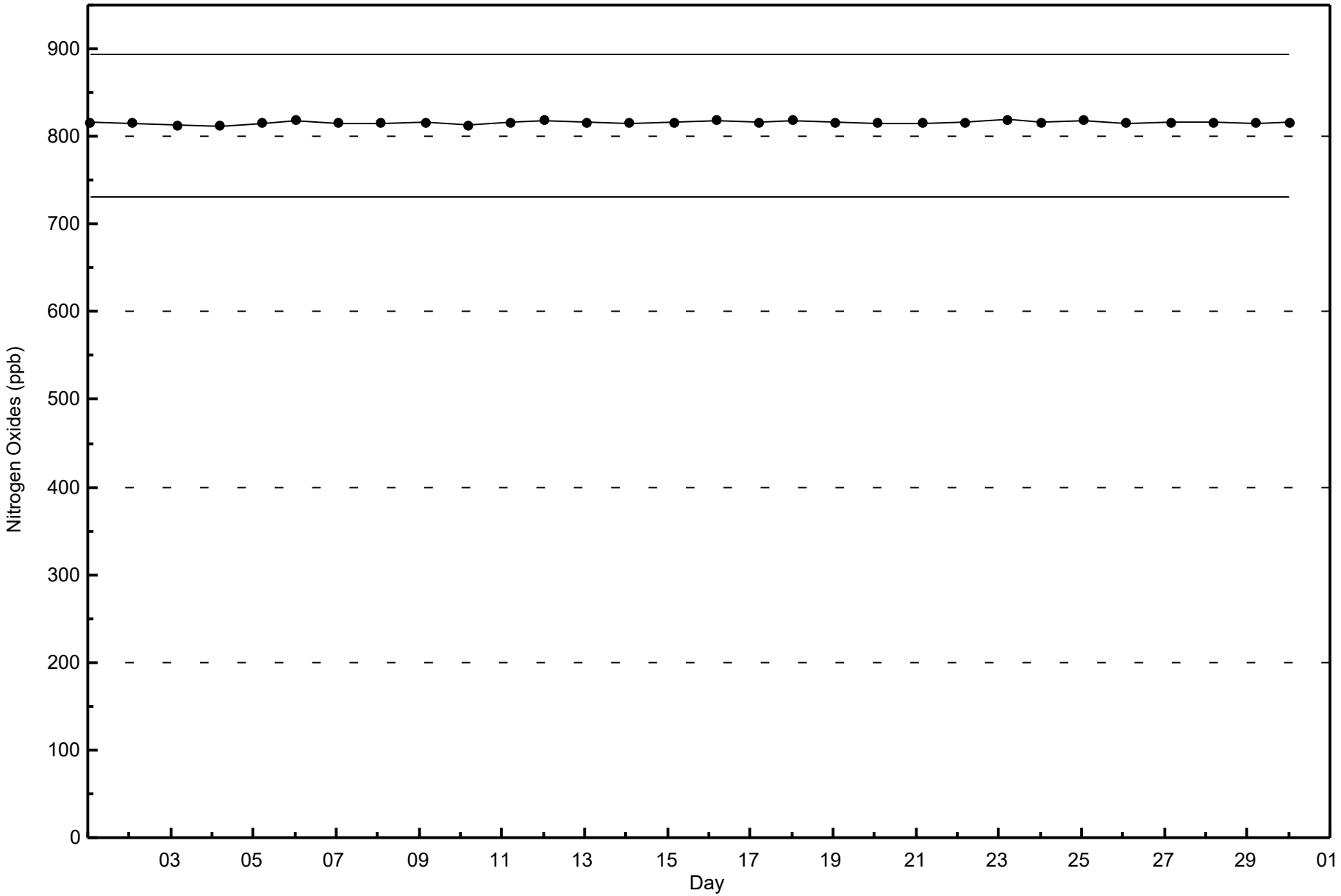


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Mackay River - September 2026



Maximum Value: 27.2 C on Sep 2 14:00

Maximum Daily Average: 19.4 C on Sep 2

Minimum Value: -3.1 C on Oct 1 00:00

Minimum Daily Average: 2.9 C on Sep 30

Maximum Diurnal Average: 16.2 C at hour 15

Minimum Diurnal Average: 5.9 C at hour 7

Monthly Average: 10.70 C

Percentiles: P_1 = -1.5 P_{10} = 3.8 Q_1 = 6.3 Median = 10.0 Q_3 = 15.1 P_{90} = 18.5 P_{99} = 25.4

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

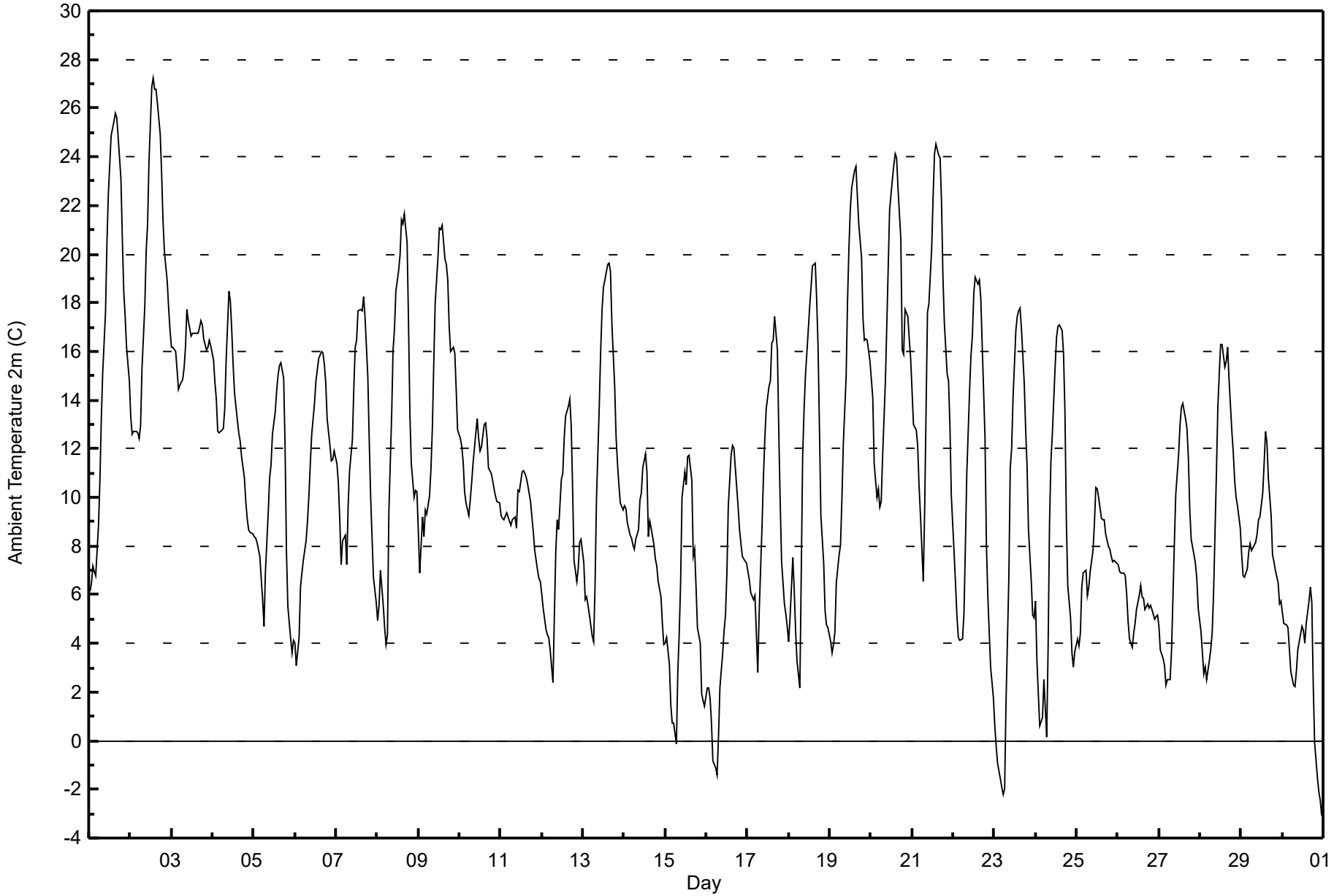
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	6.1	6.5	7.2	7.0	6.8	8.9	10.7	13.2	15.1	17.6	20.4	22.5	23.7	24.9	25.5	25.8	25.6	24.8	23.1	20.6	18.5	17.4	16.2	14.8	16.8	25.8
2-Sep	13.3	12.6	12.7	12.7	12.7	12.4	12.9	15.3	17.9	20.2	21.2	23.8	26.9	27.2	26.7	26.8	26.2	24.9	23.3	21.4	20.1	18.9	17.8	16.8	19.4	27.2
3-Sep	16.2	16.2	16.0	15.2	14.5	14.6	14.8	15.3	16.2	17.7	17.3	16.6	16.8	16.7	16.7	16.8	17.0	17.3	17.1	16.5	16.0	16.2	16.5	16.2	16.3	17.7
4-Sep	15.7	14.7	14.0	12.7	12.6	12.8	12.8	13.6	15.6	18.5	18.1	16.8	15.4	14.2	13.2	12.6	12.3	11.7	10.8	9.8	9.2	8.7	8.6	8.5	13.0	18.5
5-Sep	8.4	8.3	8.2	7.6	6.7	5.8	4.7	7.0	9.3	10.8	11.3	12.6	13.5	14.4	15.0	15.4	15.6	14.9	12.1	7.8	5.5	4.2	3.6	4.1	9.4	15.6
6-Sep	4.0	3.1	4.3	6.3	6.9	7.4	8.2	9.0	10.0	11.4	12.6	13.8	14.8	15.2	15.7	16.0	15.9	15.5	14.8	13.2	12.1	11.5	11.6	11.9	11.1	16.0
7-Sep	11.4	10.6	9.1	7.2	8.2	8.4	7.2	9.7	11.1	12.4	14.4	16.2	16.5	17.7	17.7	17.7	18.2	17.4	15.0	12.3	10.0	8.4	6.7	5.7	12.1	18.2
8-Sep	4.9	5.6	7.0	5.6	4.6	3.9	4.3	9.3	13.4	16.1	16.9	18.5	19.3	20.0	21.4	21.2	21.6	20.5	17.3	13.4	11.4	10.0	10.3	10.2	12.8	21.6
9-Sep	8.6	6.9	9.2	8.4	9.5	9.3	10.1	11.2	12.8	15.5	17.9	19.9	21.0	21.0	21.2	19.8	19.6	18.9	17.0	16.0	16.2	15.9	14.5	12.8	14.7	21.2
10-Sep	12.4	12.1	11.4	10.2	9.8	9.2	9.9	10.6	11.4	12.7	13.2	12.4	11.9	12.1	13.0	13.1	12.4	11.2	11.0	10.7	10.3	10.0	9.8	9.8	11.3	13.2
11-Sep	9.3	9.1	9.1	9.3	9.2	9.0	8.9	9.1	9.2	8.7	10.3	10.2	11.1	11.1	11.0	10.8	10.5	9.8	9.2	8.6	7.8	7.0	6.7	6.5	9.2	11.1
12-Sep	6.1	5.4	4.6	4.4	4.2	3.8	2.4	5.1	7.8	9.1	8.7	10.8	11.0	12.5	13.4	13.7	14.1	12.9	10.3	7.4	6.6	7.1	8.2	8.3	8.2	14.1
13-Sep	7.3	5.8	5.9	5.5	5.2	4.3	4.1	6.4	9.9	13.7	16.0	17.7	18.6	18.9	19.5	19.6	19.3	17.1	14.6	12.5	11.4	10.5	9.8	9.5	11.8	19.6
14-Sep	9.7	9.5	9.0	8.4	8.3	8.1	7.9	8.3	8.7	9.9	10.2	11.2	11.8	11.1	8.4	9.0	8.7	8.0	7.5	7.2	6.5	5.9	4.8	4.0	8.4	11.8
15-Sep	4.0	4.3	3.1	1.5	0.7	0.7	-0.1	2.8	4.4	6.5	10.0	11.0	10.6	11.7	11.7	10.7	7.6	7.9	6.3	4.6	4.0	1.9	1.7	1.4	5.4	11.7
16-Sep	2.2	2.1	1.8	0.7	-0.9	-1.1	-1.4	0.1	2.2	3.6	4.5	5.1	6.9	9.7	11.7	12.2	12.0	11.2	9.6	8.7	8.1	7.6	7.5	7.3	5.5	12.2
17-Sep	6.9	6.6	6.1	5.8	6.0	4.4	2.8	5.3	8.7	10.8	12.4	13.6	14.6	14.8	16.3	16.5	17.4	16.0	12.7	9.8	7.3	5.6	5.2	4.7	9.6	17.4
18-Sep	4.1	5.1	7.5	6.2	4.5	3.2	2.1	6.8	11.6	13.5	15.0	16.9	17.8	18.6	19.5	19.6	18.1	16.2	12.7	9.3	7.3	5.4	4.8	4.6	10.4	19.6
19-Sep	4.1	3.6	3.9	4.5	6.5	7.6	8.0	9.9	12.2	14.9	18.1	20.3	21.9	22.7	23.4	23.6	22.4	21.2	19.8	17.4	16.5	16.5	16.4	15.6	14.6	23.6
20-Sep	14.8	14.1	11.4	10.0	10.3	9.6	9.8	11.7	14.8	17.1	19.5	21.8	23.1	23.7	24.1	23.9	22.7	20.6	16.1	15.9	17.7	17.4	16.5	15.7	16.8	24.1
21-Sep	14.4	13.0	12.8	12.2	10.5	9.2	6.5	9.5	13.6	17.6	18.0	20.3	22.4	24.1	24.5	24.1	23.9	22.2	19.1	17.2	15.1	14.8	12.9	10.1	16.2	24.5
22-Sep	7.7	6.4	5.1	4.2	4.1	4.2	5.2	7.9	10.9	14.4	15.8	16.6	18.4	19.0	18.8	19.0	18.2	16.3	12.5	8.1	6.0	4.4	3.0	1.7	10.3	19.0
23-Sep	0.6	-0.3	-1.0	-1.6	-2.0	-2.2	-2.0	1.6	6.7	11.2	12.0	14.1	16.8	17.4	17.6	17.8	16.9	14.7	12.7	11.2	8.7	6.5	5.2	5.0	7.8	17.8
24-Sep	5.7	3.3	0.6	0.8	0.9	2.5	0.1	3.8	8.9	11.5	12.6	15.4	16.6	17.0	17.1	16.9	15.9	13.5	9.1	6.4	5.0	3.6	3.0	3.7	8.1	17.1
25-Sep	4.2	3.9	4.4	6.3	6.9	7.0	6.0	6.3	7.0	7.8	8.9	10.4	10.4	10.0	9.2	9.1	9.1	8.5	8.0	7.9	7.6	7.4	7.4	7.3	7.5	10.4
26-Sep	7.2	7.0	6.9	6.9	6.8	6.0	4.9	4.2	3.8	4.4	4.8	5.4	5.9	6.4	5.9	5.8	5.4	5.6	5.4	5.6	5.4	5.0	5.1	5.2	5.6	7.2
27-Sep	4.7	3.7	3.4	3.1	2.3	2.5	2.5	3.7	5.9	8.1	10.1	11.7	13.0	13.7	13.9	13.2	12.8	11.6	9.5	8.2	7.6	7.3	6.6	5.5	7.7	13.9
28-Sep	4.5	3.6	2.8	3.0	2.5	3.3	3.8	4.5	6.2	11.1	13.7	15.1	16.3	16.3	15.4	15.6	16.1	14.8	12.7	11.9	10.7	10.0	9.7	8.7	9.7	16.3
29-Sep	7.7	6.8	6.7	7.1	7.7	8.1	7.8	8.0	8.2	8.5	9.1	9.2	10.2	11.4	12.7	12.2	10.8	9.2	7.6	7.3	7.0	6.5	5.6	5.8	8.4	12.7
30-Sep	5.3	4.8	4.8	4.6	3.8	2.8	2.3	2.2	2.9	3.7	4.1	4.7	4.5	4.0	4.8	5.8	6.3	5.7	2.3	-0.1	-1.5	-2.1	-2.4	-3.1	2.9	6.3
	7.7	7.2	6.9	6.5	6.3	6.2	5.9	7.7	9.9	12.0	13.2	14.5	15.4	15.9	16.2	16.1	15.8	14.7	12.6	10.9	9.8	9.0	8.4	7.9	Diurnal Average	
	16.2	16.2	16.0	15.2	14.5	14.6	14.8	15.3	17.9	20.2	21.2	23.8	26.9	27.2	26.7	26.8	26.2	24.9	23.3	21.4	20.1	18.9	17.8	16.8	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Mackay River - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	15	2.08	2.08
0 - 10	348	48.33	50.42
10 - 20	307	42.64	93.06
> 20	50	6.94	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Mackay River - September 2026

Maximum Value: 99.5 % on Sep 16 02:00

Maximum Daily Average: 90.0 % on Sep 4

Minimum Value: 28.6 % on Sep 20 16:00

Minimum Daily Average: 59.1 % on Sep 20

Maximum Diurnal Average: 91.0 % at hour 7

Minimum Diurnal Average: 54.7 % at hour 15

Monthly Average: 74.93 %

Percentiles: P_1 = 32.5 P_{10} = 44.1 Q_1 = 61.7 Median = 80.5 Q_3 = 89.9 P_{90} = 95.6 P_{99} = 99.3

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

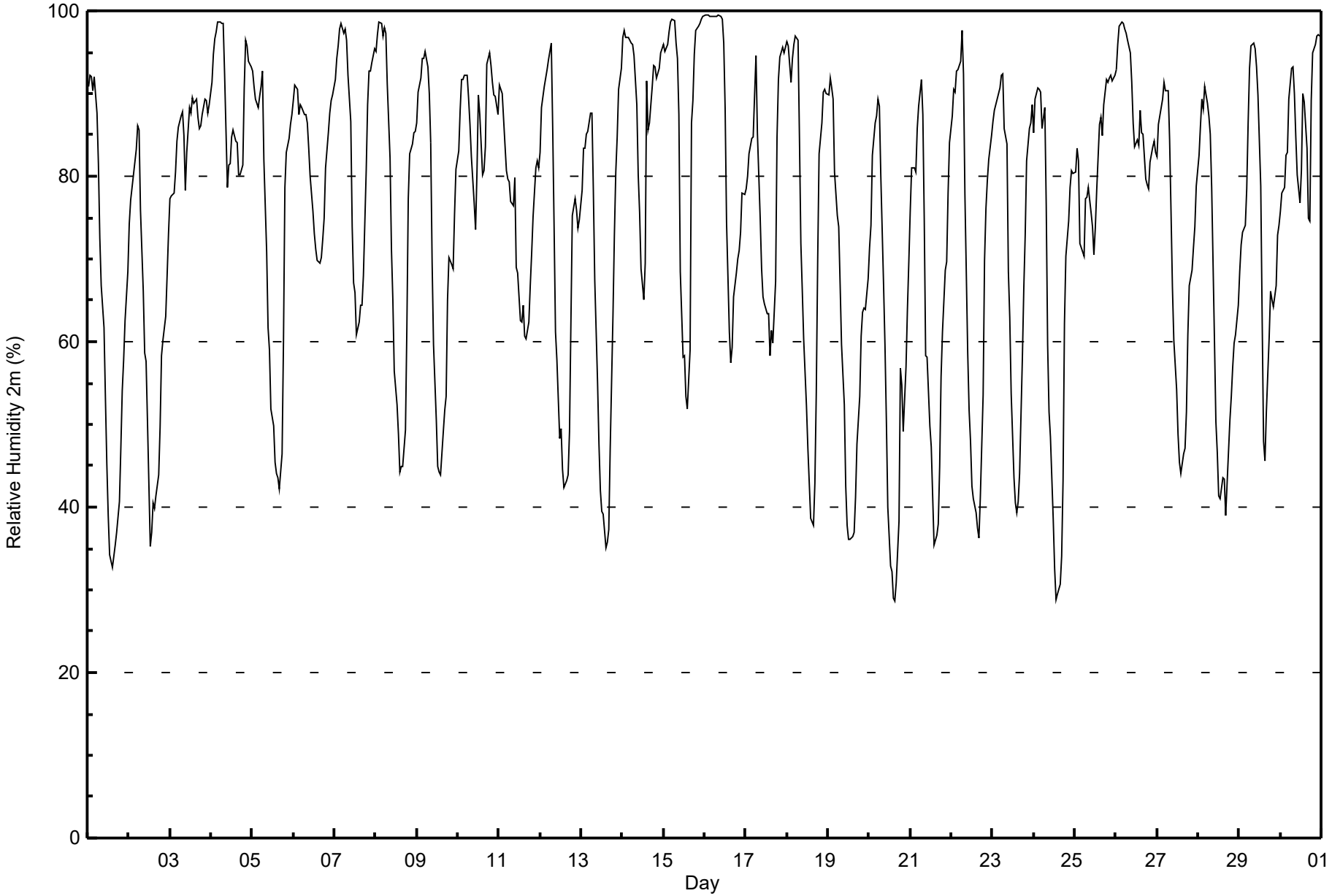
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	90.9	92.2	92.1	90.3	92.0	87.6	81.6	72.5	66.7	61.7	53.2	45.2	39.0	34.2	32.7	34.1	35.4	37.0	40.7	47.1	54.1	57.7	62.6	68.4	61.2	92.2
2-Sep	74.2	77.1	78.7	81.7	83.2	86.1	85.6	76.0	66.2	58.6	57.6	50.3	35.2	37.0	40.5	39.8	41.3	43.9	49.6	58.3	60.2	63.1	68.0	73.0	61.9	86.1
3-Sep	77.2	77.7	78.1	80.6	84.2	85.9	87.3	87.7	84.8	78.3	82.8	88.4	87.6	89.4	88.9	89.3	87.1	85.7	86.2	87.4	89.4	89.2	87.6	88.7	85.4	89.4
4-Sep	91.3	94.7	96.6	97.5	98.6	98.7	98.6	98.4	92.4	78.7	81.4	81.6	84.8	85.6	84.3	84.0	80.1	80.2	81.4	90.6	96.5	95.8	93.8	93.1	90.0	98.7
5-Sep	92.8	90.8	89.3	88.2	89.6	90.8	92.7	82.1	70.8	61.6	59.0	51.8	49.8	45.5	44.1	43.5	42.1	46.5	60.0	78.7	82.9	84.7	86.3	87.5	71.3	92.8
6-Sep	89.2	91.1	90.5	87.4	88.7	88.3	87.5	87.4	86.4	83.3	80.1	75.8	73.0	71.3	69.8	69.5	70.1	72.3	75.0	81.1	85.3	87.6	89.1	89.8	82.1	91.1
7-Sep	91.7	94.2	95.8	97.9	98.4	97.2	97.8	96.4	92.2	86.5	73.9	67.2	66.0	60.8	62.4	64.4	64.4	67.9	80.8	88.6	92.8	92.7	93.8	95.4	84.1	98.4
8-Sep	95.1	97.1	98.7	98.5	97.0	98.0	97.4	91.2	82.2	71.2	65.0	56.5	52.3	48.9	44.2	44.9	44.9	49.4	61.6	77.3	82.7	83.8	85.2	85.4	75.4	98.7
9-Sep	86.5	90.1	91.8	94.2	94.2	95.0	93.3	90.0	84.1	69.6	59.6	50.6	45.0	44.2	43.9	49.2	51.7	53.4	65.1	70.2	69.3	68.9	75.5	80.8	71.5	95.0
10-Sep	83.0	88.0	91.8	91.7	92.2	92.3	89.5	86.3	82.3	76.7	73.6	80.4	89.8	87.5	80.3	80.7	83.6	93.6	95.0	93.4	91.3	89.9	89.7	87.5	87.1	95.0
11-Sep	90.9	90.5	90.0	83.8	80.7	79.6	79.3	77.0	76.5	79.8	68.9	68.4	62.6	62.4	64.5	60.7	60.4	62.4	66.8	70.7	75.1	81.0	81.9	81.1	74.8	90.9
12-Sep	82.9	88.2	90.9	91.9	93.0	94.0	96.2	86.0	74.0	61.2	57.8	48.2	49.4	44.7	42.4	43.2	44.0	49.2	62.3	75.3	77.3	76.0	73.6	74.8	69.9	96.2
13-Sep	78.2	83.4	83.5	85.0	85.5	87.6	87.7	78.3	67.5	55.1	47.7	42.0	39.6	39.1	35.2	35.8	37.3	46.9	63.3	72.9	80.4	84.7	90.4	93.1	66.7	93.1
14-Sep	96.7	97.6	96.8	96.7	96.5	96.2	96.0	94.6	88.6	80.1	75.7	68.8	65.0	69.5	91.5	85.7	86.5	90.8	93.4	93.2	91.9	93.1	94.9	95.4	89.0	97.6
15-Sep	95.9	95.1	96.0	97.5	98.6	98.9	98.9	96.1	94.2	87.5	68.4	58.1	58.3	53.3	51.8	59.1	86.4	89.2	94.7	97.6	98.1	98.4	99.1	99.3	86.3	99.3
16-Sep	99.4	99.5	99.4	99.3	99.3	99.3	99.3	99.3	99.4	99.4	99.0	96.2	88.2	74.5	61.2	57.5	59.3	65.4	68.4	70.1	71.0	73.2	78.0	77.8	84.7	99.5
17-Sep	78.5	80.0	82.7	84.6	84.8	89.8	94.6	85.3	75.0	68.8	65.4	64.7	63.4	63.3	58.3	61.3	59.9	67.3	84.8	91.6	94.5	95.6	94.9	95.6	78.5	95.6
18-Sep	96.3	95.7	91.4	94.3	96.0	96.9	96.5	84.5	71.8	66.3	60.4	52.2	47.0	42.9	38.6	37.8	42.9	53.9	69.9	82.7	86.5	90.2	90.5	90.0	74.0	96.9
19-Sep	89.9	91.8	90.7	89.3	80.5	75.3	73.8	67.0	59.7	52.3	42.5	37.7	36.1	36.1	36.5	37.0	41.2	47.6	53.4	60.8	63.6	64.0	64.0	67.6	60.8	91.8
20-Sep	71.3	74.0	82.6	86.4	87.3	89.4	88.6	80.1	66.8	59.5	50.3	40.0	32.9	32.1	29.0	28.6	30.8	38.4	56.8	54.7	49.2	56.9	63.9	69.6	59.1	89.4
21-Sep	75.7	81.0	81.0	80.4	85.8	88.5	91.7	87.5	74.7	58.3	58.2	49.9	47.3	41.3	35.4	36.5	37.9	44.9	55.8	61.1	68.6	69.7	77.9	84.1	65.6	91.7
22-Sep	87.2	90.5	90.2	92.8	92.8	93.9	97.6	92.4	77.7	58.6	51.7	48.0	42.6	41.0	39.4	37.4	36.3	41.1	53.6	69.8	76.2	79.5	82.0	84.9	69.1	97.6
23-Sep	86.6	87.9	88.6	90.0	90.6	92.2	92.3	85.8	84.0	68.4	62.9	53.7	43.6	40.6	39.3	40.8	44.0	58.1	66.4	72.9	81.8	85.8	86.4	88.7	72.1	92.3
24-Sep	85.3	89.3	90.6	90.5	90.1	85.8	88.3	76.5	59.6	51.5	48.5	38.5	32.5	28.8	29.5	30.7	34.1	43.2	62.2	70.4	74.6	78.6	80.8	80.3	64.2	90.6
25-Sep	80.5	83.3	81.8	71.9	71.3	70.3	77.3	77.4	78.6	75.6	73.9	70.5	73.8	78.4	86.2	87.2	85.0	88.6	91.8	91.3	91.9	92.3	91.6	92.2	81.8	92.3
26-Sep	92.8	95.9	98.1	98.6	98.6	97.9	97.2	96.4	94.9	91.4	86.5	83.6	84.3	83.7	88.0	85.2	85.2	79.6	78.9	78.5	81.8	83.5	84.3	82.9	88.7	98.6
27-Sep	82.4	86.3	88.4	89.2	91.4	90.4	90.3	84.3	75.8	66.5	60.1	54.2	48.8	45.4	44.1	46.4	47.1	51.5	60.8	66.7	68.7	71.3	73.9	78.9	69.3	91.4
28-Sep	82.6	86.0	89.3	88.2	90.8	88.8	87.3	85.0	78.6	60.1	50.4	46.6	41.4	41.0	43.6	43.4	38.9	43.0	50.5	53.4	57.0	59.9	60.8	64.5	63.8	90.8
29-Sep	68.5	71.6	73.3	74.1	78.6	86.4	93.0	95.8	96.1	95.4	93.2	89.9	78.8	62.9	48.0	45.6	51.6	60.4	66.1	65.2	64.3	66.7	72.8	74.0	73.8	96.1
30-Sep	75.8	78.0	78.7	82.6	82.8	89.3	93.0	93.2	89.9	84.8	80.2	76.8	80.8	90.0	88.9	83.4	74.9	74.6	89.2	95.0	96.0	96.9	97.2	97.0	86.2	97.2
	85.7	88.0	88.9	89.2	89.8	90.3	91.0	86.4	79.7	71.6	66.3	61.2	58.0	55.8	54.7	54.8	56.1	60.9	69.5	75.6	78.4	80.4	82.3	84.1	Diurnal Average	
	99.4	99.5	99.4	99.3	99.3	99.3	99.3	99.3	99.4	99.4	99.0	96.2	89.8	90.0	91.5	89.3	87.1	93.6	95.0	97.6	98.1	98.4	99.1	99.3	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Mackay River - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	42	5.83	5.83
40 - 60	121	16.81	22.64
60 - 80	185	25.69	48.33
80 - 100	372	51.67	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Precipitation (PC) - mm

Mackay River - September 2026

Maximum Value: 4.5 mm on Sep 26 06:00

Maximum Daily Total: 10.9 mm on Sep 26

Minimum Value: 0.0 mm on Sep 1 01:00

Minimum Daily Total: 0.0 mm on Sep 1

Maximum Diurnal Total: 5.3 mm at hour 6

Minimum Diurnal Total: 0.0 mm at hour 23

Monthly Total: 28.74 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} = 0.8

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

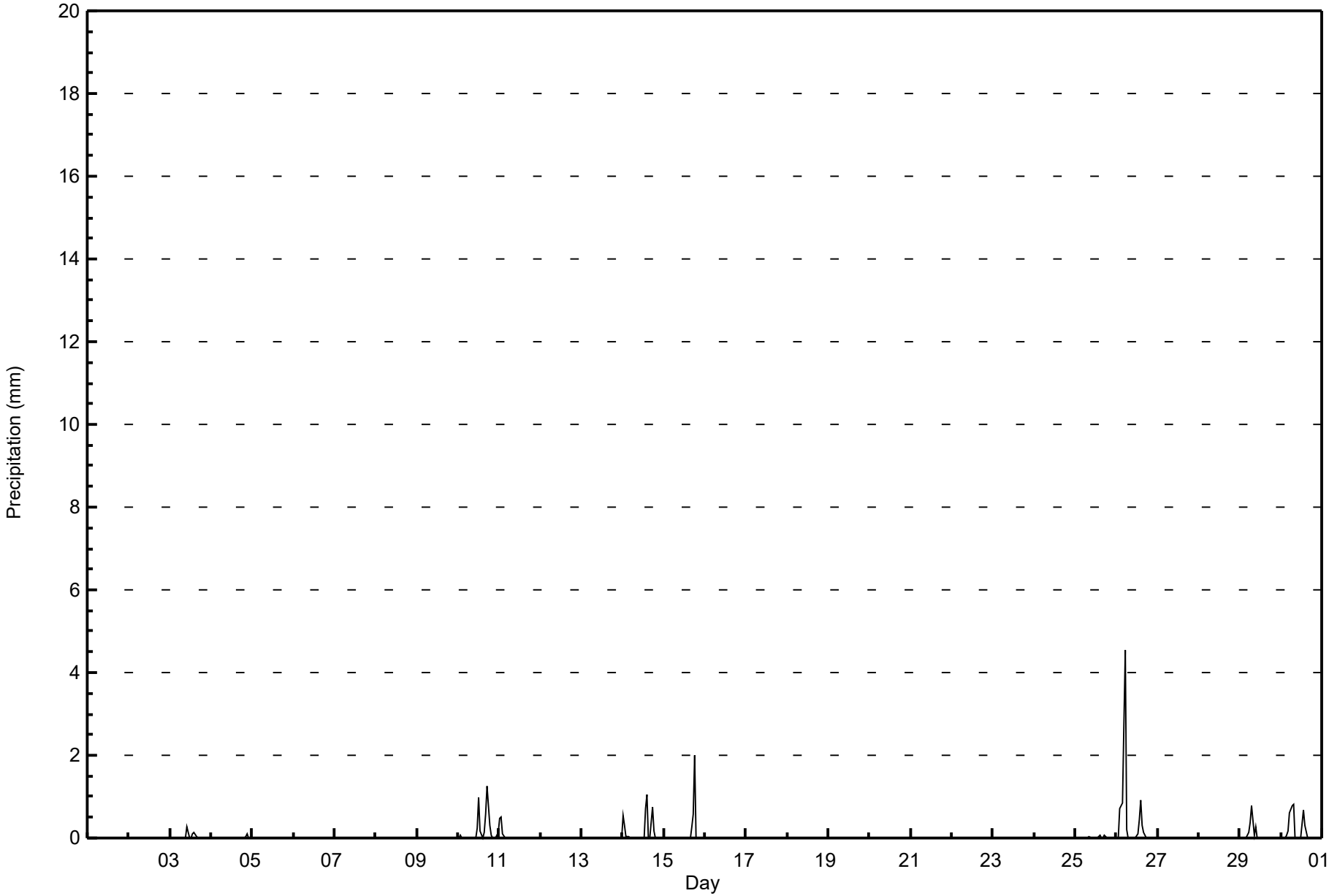
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	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	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.3
4-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.1
5-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.0	0.2	0.0	0.2	0.6	1.3	0.3	0.1	0.0	0.0	0.0	0.1	3.9	1.3
11-Sep	0.5	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.5
12-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	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	0.7	1.0	0.0	0.0	0.7	0.2	0.0	0.0	0.0	0.0	0.0	3.6	1.0
15-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	2.0	0.0	0.0	0.0	0.0	0.0	2.9	2.0
16-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1
26-Sep	0.0	0.0	0.7	0.8	2.7	4.5	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.9	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.9	4.5
27-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Sep	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.8	0.1	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	1.7	0.8
30-Sep	0.0	0.0	0.0	0.1	0.2	0.6	0.8	0.8	0.0	0.0	0.0	0.0	0.4	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.8
	1.0	0.9	0.9	1.0	3.0	5.3	1.4	1.6	0.1	0.3	0.3	0.2	1.4	2.1	2.5	0.5	1.0	2.6	2.5	0.1	0.1	0.1	0.0	0.1	Diurnal Average	
	0.5	0.5	0.7	0.8	2.7	4.5	0.8	0.8	0.1	0.3	0.3	0.2	1.0	0.7	1.0	0.3	0.6	1.3	2.0	0.1	0.1	0.1	0.0	0.1	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Precipitation (PC) - mm

Mackay River - September 2026



Concentration Ranges (mm)	Number of Hours	%	Cumulative %
0 - 0.3	697	96.81	96.81
0.4 - 0.5	5	0.69	97.50
0.6 - 0.7	7	0.97	98.47
0.8 - 1.4	8	1.11	99.58
1.5 - 10	3	0.42	100.00
> 10	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Mackay River - September 2026

Maximum Speed: 19 km/h on Sep 11 11:00

Maximum Daily Speed Average: 13.2 km/h on Sep 11

Minimum Speed Value: 0 km/h on Sep 16 04:00

Minimum Daily Speed Average: 1.3 km/h on Sep 18

Maximum Diurnal Speed Average: 3.5 km/h at hour 15

Minimum Diurnal Speed Average: 1.4 km/h at hour 21

Monthly Average Velocity: 2.2 km/h 229.1 deg

Percentiles: P_1 = 1 P_{10} = 2 Q_1 = 4 Median = 7 Q_3 = 9 P_{90} = 12 P_{99} = 16

Hours in Service: 720

Hours of Data: 708

Hours of Missing Data: 12

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-Sep	SE4	SSE5	SSE5	SSE5	SSE5	SSE5	SSE5	SSE6	SSE8	S6	S9	SSE12	SSE12	SSE14	SSE14	SSE12	SSE11	SE11	SSE8	SE6	SE6	SE6	SE6	SE6	SSE7.6	SSE14
2-Sep	ESE5	ESE5	SE6	SE7	ESE7	ESE8	ESE8	ESE8	ESE9	ESE10	ESE9	ESE12	SE16	SE14	ESE16	ESE15	ESE14	ESE13	ESE12	ESE12	SE12	SE12	SE11	ESE8	ESE10.2	ESE16
3-Sep	ESE7	ESE8	ESE8	ESE6	ESE7	ESE11	ESE12	SE12	ESE10	E8	E8	E9	E10	E10	E9	E8	E8	E8	E8	E6	ENE5	E6	E8	ESE9	ESE8.1	SE12
4-Sep	ESE8	ESE6	ESE3	ENE1	ESE1	SE3	NNE1	UO	NNW3	NNE5	NNE11	NNE13	NNE13	NNW14	N15	N14	N12	N12	N9	NNW8	NNW7	N5	NNW5	NNW4	N6.0	N15
5-Sep	NW3	NNW5	NNW6	N5	NNW5	NNW3	NW4	N4	NNE7	NNE8	NE5	NE7	NE5	NE3	ENE4	NE4	NE2	NE4	NE3	SE1	ESE3	SE4	SE4	SE3	NNE2.8	NNE8
6-Sep	SE4	SE4	SSE4	SSE5	SE4	SSE4	SSE5	SE3	SE5	SE4	ESE5	ESE6	ESE9	SE9	ESE6	SE6	ESE6	SE6	SE6	SE6	SE5	ESE5	SE6	SE7	SE5.4	SE9
7-Sep	SE6	SE5	SE3	ESE3	SE6	SE5	ESE4	SE6	SE6	SSE6	SSE9	SSE7	SSE8	SSW4	WNW5	W4	WSW3	N3	N1	SSE2	SSE2	SSE2	SSE2	UO	SSE3.1	SSE9
8-Sep	W1	W2	WNW3	WNW1	UO	WSW0	WSW1	W2	NW4	NW4	NNW6	NNW5	NW6	NNW5	WNW4	WNW5	W6	WSW4	SSW3	S3	S4	S4	SSW4	SSW4	W2.1	NW6
9-Sep	SSE4	SSE4	S7	S6	S7	S6	S7	SSW9	SSW8	SW9	SW9	SW12	SW13	WSW12	SW12	SW10	SW10	SW11	SW11	SSW9	SW8	WSW11	WSW9	WSW11	SW8.2	SW13
10-Sep	WSW11	W9	W7	WSW7	WSW8	WSW7	WSW8	WSW10	WSW9	WSW11	W10	W9	W7	W9	W10	WNW10	NW12	WNW9	WNW9	WNW11	WNW10	WNW11	WNW11	WNW11	W8.9	NW12
11-Sep	WNW11	WNW12	WNW12	NW15	NW16	NW16	NW16	NW17	NW17	NW15	NW19	NW18	NW16	NW16	NW17	NW15	NW14	NW12	NW9	NW8	WNW8	WNW7	WNW8	WNW8	NW13.2	NW19
12-Sep	WNW7	W4	W4	W4	WSW4	WSW3	SW2	W3	WNW7	WNW7	W6	WNW8	WNW7	W7	W6	W6	WSW8	WSW5	SSW4	S5	S6	SSW7	SW6	SSW6	WSW4.6	WSW8
13-Sep	SSW6	S7	SSW8	SSW9	SSW9	S9	SSW8	SSW6	SW6	SW7	SW9	SW10	SW11	SW10	SW9	SW6	W6	SSW3	S3	ENE3	NE9	NNE8	N5	NNW5	SSW4.4	SW11
14-Sep	NNW7	N9	N12	N9	N8	NNW6	NNW6	NW6	NNW9	NNW10	NNW12	NNW11	NNW9	N10	N10	N10	NNW8	NNW8	NW7	NW6	NW6	WNW4	W3	WNW4	NNW7.4	NNW12
15-Sep	W3	W4	WSW3	SW2	WSW3	W3	SSW2	W4	WSW4	SW5	SW6	SW6	SW6	SW7	SW9	WSW7	WSW4	WSW3	SW5	SSW3	NW1	WSW2	W2	W2	WSW3.6	SW9
16-Sep	W3	W2	WSW1	SSE0	SE1	UO	UO	SSE4	S6	SSE7	S6	S4	SE4	SE6	S5	SE5	SE5	ESE5	ESE6	ESE7	ESE8	SE9	SE10	ESE9	SE4.4	SE10
17-Sep	SE9	SE9	SE8	SE6	SE4	ESE1	ESE2	SSE4	S5	SSW3	SW5	SW4	WNW6	WNW5	WSW4	SW4	NW3	SW1	SSE1	SSE2	SSE2	SSE1	SE1	SE1	S2.0	SE9
18-Sep	SSW1	SW2	SW2	WSW2	WSW2	WSW2	WNW0	W1	N2	WSW3	W3	W6	W6	NW8	WNW6	W5	NE3	ESE3	SSE3	SSE3	SSE3	SSE5	SSE5	S5	WSW1.3	NW8
19-Sep	SSE4	SSE4	SSE5	SSE5	S6	SSE7	S8	S9	S11	S12	S13	S14	S14	S14	S13	SSW12	SSW10	SSW8	S6	S5	S7	S7	S9	SSW8	S8.7	S14
20-Sep	SSW6	SW4	S4	S6	S7	S7	SSW7	SSW6	SW5	SSW5	SSW7	SSW8	SW10	SW9	SW9	SW9	SW7	SSW4	S4	S5	S7	SSW10	S10	SSW9	SSW6.5	SSW10
21-Sep	SSW9	SSW8	SSW8	SSW6	SSW5	S6	SE3	SSE6	SSE4	S5	S6	SSE5	SE7	SE9	SE9	SSE7	S7	SW6	SSW5	SSW5	S5	SSW5	SW3	SSW2	S5.3	SE9
22-Sep	SE2	S1	SE2	SE2	SE4	UO	W3	W6	WNW8	NW12	WNW14	NW10	WNW10	W10	W10	W9	W9	W6	SW3	S2	SSW3	S2	SSE2	SSE1	W4.1	WNW14
23-Sep	SE2	SE2	SE2	SE2	SE3	SE1	SW0	UO	SSE1	S2	S5	S6	S7	SSW6	SSW6	SSW5	SSW4	SE3	SE3	SSE3	SE2	SSW4	SW4	WSW4	S2.9	S7
24-Sep	WSW4	SW2	SSW3	SW3	SW4	SW4	SSW3	SW5	SW5	SW6	WSW6	WSW8	WSW10	WSW10	WSW9	SW8	WSW6	SSW2	SSE3	SSE3	SSE3	SE1	SE1	SE2	SW4.0	WSW10
25-Sep	SE2	E1	UO	E3	NE3	NNE7	NNE6	NE6	NE7	NE11	NE11	NE15	NE14	NE13	NE13	NE14	NE14	NNE12	NE12	NNE13	NNE11	NNE12	NNE12	N9	NE9.3	NE15
26-Sep	NNW8	NNW8	WNW6	WNW7	W7	W11	W11	W11	W12	W12	W12	W13	W14	W14	WNW14	WNW15	WNW14	WNW15	W14	W13	W13	W10	W8	WSW8	W10.8	WNW15
27-Sep	W8	WSW7	WSW8	WSW8	WSW5	WSW7	WSW8	WSW9	WSW9	WSW11	WSW10	WSW11	WSW12	WSW12	WSW11	WSW10	WSW11	WSW8	SSW6	SW6	SSW6	SSW7	SSW7	S8	WSW8.2	WSW12
28-Sep	S7	S7	S6	S6	S6	SSW8	SSW8	SSW8	SSW9	SW9	SW11	SSW12	SW12	SW11	SSW10	SSW12	SSW11	SSW9	S6	S7	S6	S8	S8	S7	SSW8.2	SW12
29-Sep	S6	SSW6	SSW5	SSW5	SSW7	SW7	SW6	SSW7	SSW7	SW8	WSW9	W10	WNW11	W12	W14	W13	WNW14	W11	WSW6	WSW8	WSW9	W8	W9	W11	WSW7.5	WNW14
30-Sep	W11	W10	WSW10	WNW12	WNW13	WNW13	WNW13	WNW12	WNW11	WNW12	WNW12	WNW13	WNW12	NW10	WNW10	WNW8	WNW8	NW6	UO	UO	SE1	SSE2	UO	UO	WNW9.4	WNW13
	SSW1.9	SSW1.6	SSW1.9	SW1.8	SSW2.2	SW2.3	SW2.0	SW2.6	WSW2.5	WSW2.7	WSW3.0	WSW2.8	WSW3.2	WSW3.3	WSW3.5	WSW3.1	WSW2.7	WSW1.6	SSW1.5	S1.6	S1.4	SSW2.0	SSW2.1	SSW2.2	Diurnal Average	
	WSW11	WNW12	WNW12	NW15	NW16	NW16	NW16	NW17	NW17	NW15	NW19	NW18	NW16	NW16	NW17	WNW15	NW14	WNW15	W14	W13	W13	NNE12	NNE12	WNW11	Diurnal Maximum	

UO - Unstable Operation

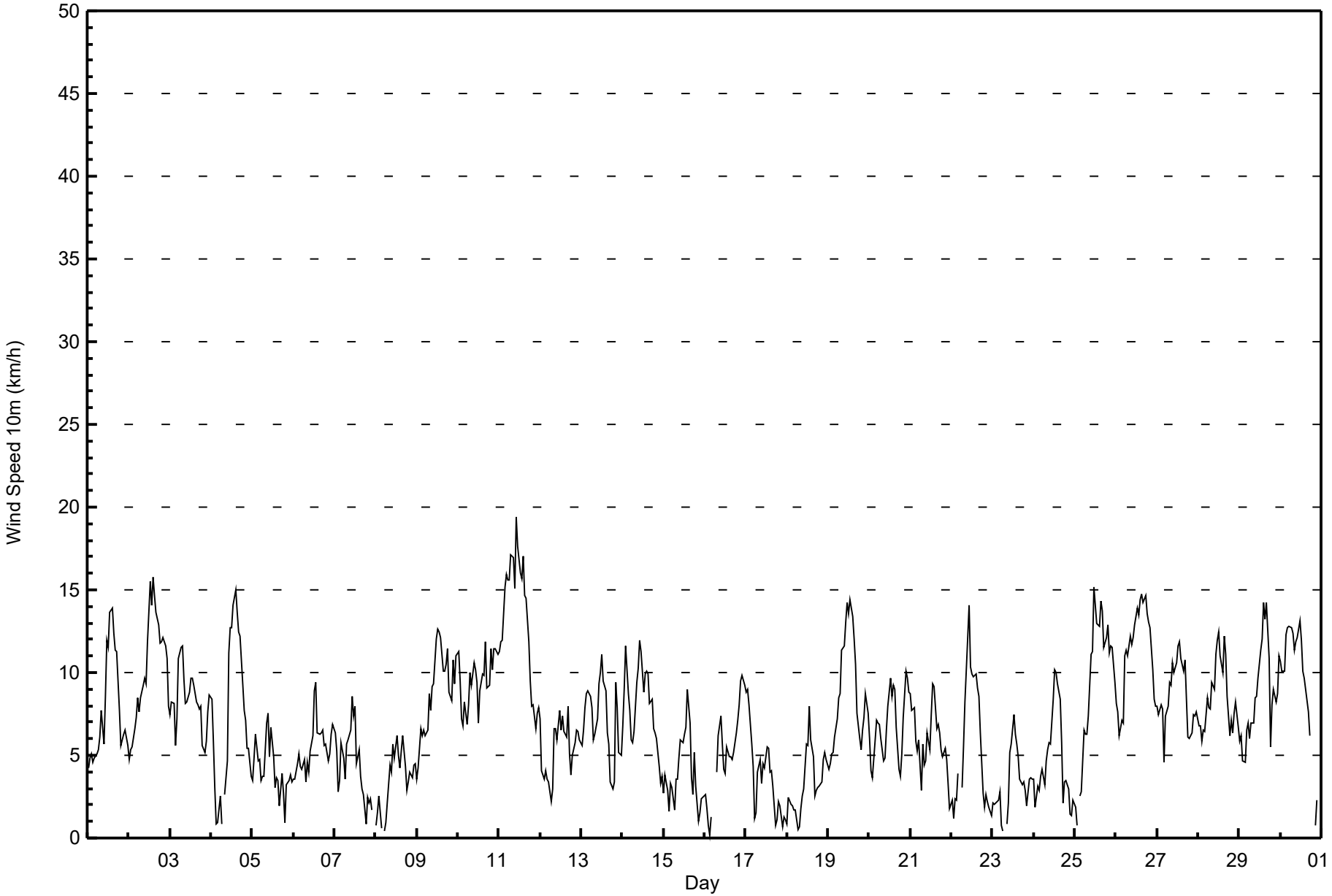
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Mackay River - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	256	36.16	36.16
6 - 11	352	49.72	85.88
12 - 19	100	14.12	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: 708

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Mackay River - September 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	7	2	9	4	2	13	41	44	19	26	22	23	20	9	6	9	256
6 - 11	8	7	6	0	13	27	28	13	43	43	35	39	33	31	11	15	352
12 - 19	5	6	7	0	0	8	5	5	6	3	4	3	12	17	17	2	100
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	20	15	22	4	15	48	74	62	68	72	61	65	65	57	34	26	708

Total Number of Valid Hours: 708

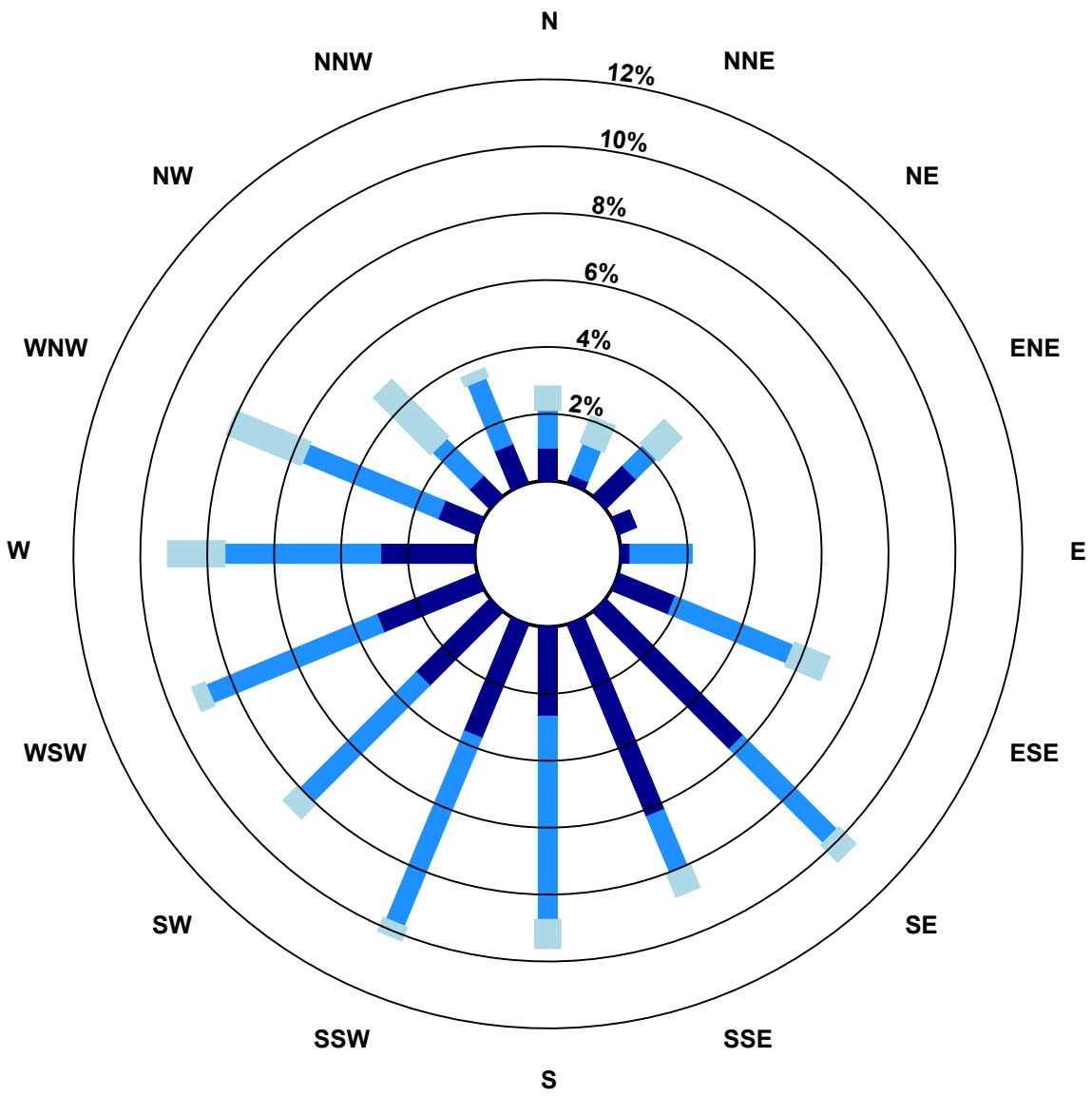
Total Number of Hours: 720

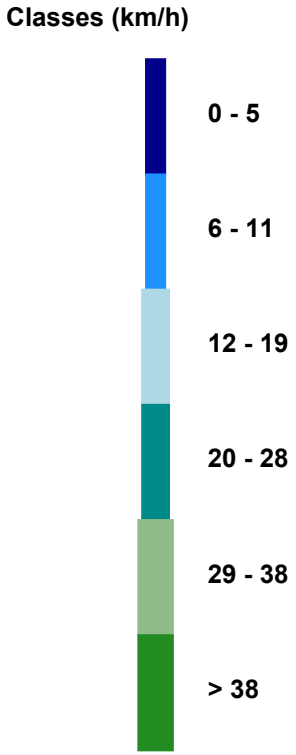
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Mackay River





Total Number of Valid Hours: 708

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

Maximum Value: 6 km/h on Sep 11 11:00

Minimum Value: 0 km/h on Sep 30 22:00

Percentiles: $P_1 = 1$ $P_{10} = 1$ $Q_1 = 2$ Median = 2 $Q_3 = 4$ $P_{90} = 5$ $P_{99} = 6$

Hours in Service:	720
Hours of Data:	708
Hours of Missing Data:	12
Hours of Calibration:	0
Percent Operational Time:	98.3

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-Sep	1	1	1	1	1	1	1	2	2	2	3	4	4	5	4	4	4	4	3	2	2	2	2	1	5
2-Sep	1	1	1	2	2	2	2	3	3	3	3	4	6	5	5	4	4	4	3	3	3	3	3	2	6
3-Sep	2	2	2	2	4	3	3	3	3	3	4	3	4	3	4	4	3	3	3	2	2	2	3	3	4
4-Sep	2	2	1	1	2	1	1	UO	2	3	4	4	4	4	5	5	4	4	3	2	2	3	2	1	5
5-Sep	1	2	2	1	1	1	1	1	2	3	3	3	3	3	3	3	2	2	2	1	1	1	1	1	3
6-Sep	1	1	1	1	1	1	1	1	2	1	2	2	3	3	2	3	2	2	1	2	1	1	1	2	3
7-Sep	2	1	2	2	1	3	1	2	2	2	2	3	3	2	2	2	2	2	1	1	1	1	1	UO	3
8-Sep	1	1	1	1	UO	1	1	1	2	2	2	3	3	2	3	2	3	2	1	1	1	1	1	1	3
9-Sep	1	1	1	2	1	2	2	3	3	3	4	5	5	5	5	4	4	5	5	3	4	5	4	5	5
10-Sep	5	4	3	3	3	3	3	4	4	5	4	4	3	4	4	4	5	4	4	4	3	4	4	4	5
11-Sep	4	4	4	6	5	5	5	6	6	5	6	6	6	5	6	5	5	4	4	3	3	3	3	3	6
12-Sep	3	2	2	2	2	2	1	2	2	2	3	3	3	3	3	3	3	2	1	1	1	2	2	2	3
13-Sep	2	2	2	2	2	2	2	2	2	3	4	5	5	4	4	3	3	1	1	4	3	3	2	1	5
14-Sep	2	3	4	3	2	2	2	2	3	3	3	3	4	4	3	3	2	3	2	2	2	2	1	2	4
15-Sep	2	2	1	1	1	2	1	2	2	2	2	3	2	3	4	4	3	4	3	1	3	1	1	1	4
16-Sep	1	1	1	1	1	UO	UO	2	2	2	2	2	2	3	3	2	1	2	2	2	2	3	3	2	3
17-Sep	2	3	2	2	2	1	1	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	3
18-Sep	1	3	2	1	1	1	1	1	2	2	2	3	2	3	3	2	2	2	1	0	0	1	1	1	3
19-Sep	1	1	1	1	2	2	2	3	4	4	5	5	5	5	5	4	4	2	2	1	2	2	2	2	5
20-Sep	2	2	2	1	2	1	2	2	2	2	3	3	4	3	4	3	3	2	1	1	2	3	3	3	4
21-Sep	2	2	2	2	1	1	1	1	2	2	2	2	2	3	4	3	3	2	1	1	1	1	1	1	4
22-Sep	1	1	2	2	2	UO	1	2	3	4	5	4	4	4	4	4	4	3	1	1	1	1	1	1	5
23-Sep	1	1	1	1	1	1	1	UO	1	2	2	2	3	3	3	3	3	1	1	1	1	1	1	1	3
24-Sep	2	1	1	2	1	1	1	2	2	3	3	4	4	5	4	4	3	2	1	1	1	1	1	2	5
25-Sep	1	1	UO	1	2	2	2	2	3	4	4	5	5	5	4	5	4	5	4	5	4	4	4	4	5
26-Sep	2	2	2	3	3	5	5	5	5	5	5	6	6	6	5	6	6	6	5	6	6	5	4	4	6
27-Sep	3	3	4	3	2	3	3	3	4	4	4	4	4	5	5	4	5	4	2	2	2	2	2	2	5
28-Sep	2	1	1	2	1	2	2	2	3	3	5	5	5	5	4	5	4	3	2	2	2	2	2	2	5
29-Sep	2	1	1	2	2	2	2	2	3	3	4	4	5	5	6	6	6	5	2	4	4	4	4	5	6
30-Sep	4	4	4	5	5	4	5	4	4	4	4	4	4	4	3	3	3	2	UO	UO	1	0	UO	UO	5
	5	4	4	6	5	5	5	6	6	5	6	6	6	6	6	6	6	6	5	6	6	5	4	5	
	Diurnal Maximum																								

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Mackay River - September 2026

Direction of Maximum Speed: 323 deg on Sep 11 11:00
Direction of Maximum Daily Speed Average: 312.3 deg on Sep 11

Direction of Minimum Speed: 167 deg on Sep 16 04:00
Direction of Minimum Daily Speed Average: 1.3 deg on Sep 18

Monthly Average Direction: 229.1 deg

Hours in Service:	720
Hours of Data:	708
Hours of Missing Data:	12
Percent Operational Time:	98.3

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-Sep	146	160	164	147	156	151	158	165	165	176	172	162	167	165	159	149	151	146	149	139	131	134	133	129	154.5
2-Sep	119	120	124	128	122	121	118	118	119	123	116	111	134	132	117	118	119	119	120	121	125	126	125	123	121.8
3-Sep	112	112	115	108	112	115	115	124	113	97	91	94	90	91	97	96	97	87	81	86	73	83	100	113	101.7
4-Sep	117	112	107	72	120	130	14	UO	342	16	24	28	19	346	353	352	360	357	9	344	340	356	341	327	8.1
5-Sep	324	344	347	351	336	332	324	7	14	24	36	35	39	52	63	44	51	53	45	131	117	134	142	138	25.6
6-Sep	141	135	153	152	145	150	147	129	132	135	122	123	122	134	123	139	123	126	124	130	128	123	125	134	131.9
7-Sep	130	125	126	116	138	136	122	141	142	148	157	160	164	194	295	277	258	352	5	151	148	151	150	UO	151.1
8-Sep	265	264	286	282	UO	249	258	275	315	317	345	333	316	334	285	282	259	257	195	174	175	172	199	212	274.4
9-Sep	167	150	178	181	180	185	187	195	206	222	224	218	234	237	232	233	214	228	224	206	217	237	244	255	217.7
10-Sep	252	273	279	245	238	240	245	256	257	258	267	278	276	269	274	297	310	294	292	302	303	299	295	297	277.1
11-Sep	296	298	300	313	315	315	315	320	319	318	323	321	315	321	311	318	320	318	306	305	294	287	290	291	312.3
12-Sep	292	278	261	272	256	252	235	259	286	299	274	285	287	262	281	272	258	245	205	186	190	205	221	211	256.8
13-Sep	209	190	194	193	193	189	194	198	215	226	217	225	218	218	219	218	262	204	170	63	34	13	7	340	211.6
14-Sep	344	4	9	4	350	332	342	326	336	335	333	341	345	1	357	353	337	329	317	309	310	288	269	283	339.5
15-Sep	260	279	258	226	256	259	199	267	257	225	235	227	219	221	230	237	246	239	215	205	310	245	271	272	238.6
16-Sep	276	274	244	167	138	UO	UO	156	169	156	185	175	146	145	169	138	132	118	113	117	120	125	126	122	140.4
17-Sep	127	127	127	133	141	110	118	149	180	209	227	219	290	289	255	220	304	234	149	153	150	161	143	146	169.7
18-Sep	199	234	216	248	240	257	291	278	355	252	263	278	279	316	295	276	55	119	167	152	148	147	150	169	239.2
19-Sep	155	156	148	164	170	168	171	175	187	189	189	190	187	183	184	206	196	193	188	181	183	184	188	193	183.6
20-Sep	199	224	182	180	185	183	195	198	234	199	203	210	224	215	216	216	219	201	169	180	185	193	191	198	200.9
21-Sep	195	193	205	208	193	182	129	163	168	173	174	160	133	137	143	152	186	215	205	200	187	206	234	195	178.7
22-Sep	132	171	144	144	145	UO	272	269	285	304	302	305	295	265	266	266	262	281	226	169	201	191	168	147	272.1
23-Sep	135	140	141	144	133	135	226	UO	154	188	177	177	177	195	204	211	208	138	144	162	141	197	215	244	179.4
24-Sep	250	228	210	218	216	222	206	222	234	236	244	247	251	253	257	235	246	208	162	158	157	138	137	144	229.9
25-Sep	134	93	UO	94	39	33	30	53	43	46	45	44	40	40	37	35	39	30	36	32	26	29	24	11	36.9
26-Sep	343	333	299	288	264	276	277	273	272	270	272	274	270	279	293	287	290	286	279	276	275	270	263	258	280.4
27-Sep	262	250	254	249	249	248	241	239	241	248	243	239	245	247	251	237	237	239	212	215	209	207	202	191	237.4
28-Sep	188	187	186	190	190	197	196	196	203	219	218	213	234	224	213	192	200	197	185	179	178	185	189	179	200.2
29-Sep	178	192	213	213	210	215	214	212	207	226	250	268	283	279	274	275	285	281	242	253	256	259	278	274	253.1
30-Sep	267	260	257	286	297	295	291	298	299	301	303	299	297	304	297	293	289	314	UO	UO	145	168	UO	UO	291.0
	208.5	208.6	210.7	214.8	208.6	215.8	220.1	220.2	238.0	246.7	249.7	248.3	246.3	246.1	252.2	249.9	256.7	254.8	196.9	189.3	188.6	194.6	199.7	211.5	
	Diurnal Average																								

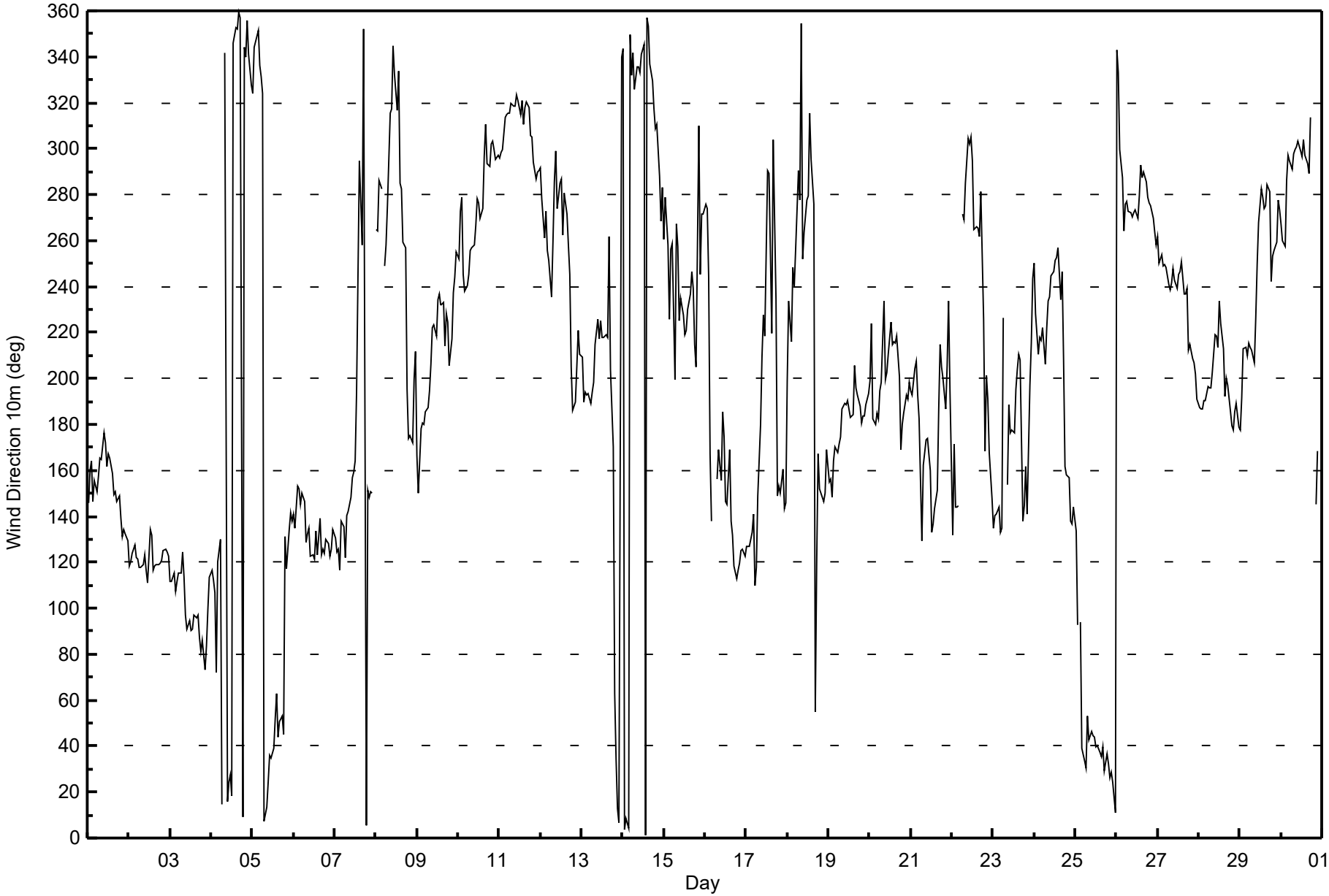
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Mackay River - September 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Mackay River - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 89 deg on Sep 5 17:00

Minimum Value: 6 deg on Sep 18 23:00

Percentiles: P_1 = 10 P_{10} = 17 Q_1 = 21 Median = 28 Q_3 = 40 P_{90} = 50 P_{99} = 80

Hours in Service:	720
Hours of Data:	708
Hours of Missing Data:	12
Hours of Calibration:	0
Percent Operational Time:	98.3

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-Sep	12	20	12	16	15	20	26	25	26	30	34	30	28	29	32	29	28	27	26	24	19	21	17	17	34
2-Sep	15	12	14	16	16	18	18	22	24	24	23	24	28	28	23	21	20	19	19	19	21	21	20	21	28
3-Sep	18	17	18	26	25	18	21	22	24	35	36	34	32	34	30	33	32	36	35	35	40	36	30	24	40
4-Sep	18	19	28	35	65	41	61	UO	39	75	31	28	28	26	25	27	25	26	29	25	22	26	20	22	75
5-Sep	17	20	21	22	16	20	18	40	29	38	70	52	71	81	86	81	89	45	28	12	13	24	8	9	89
6-Sep	13	15	20	12	10	15	15	23	23	30	29	38	29	33	32	32	23	20	21	19	15	14	18	21	38
7-Sep	19	20	16	13	18	33	20	19	22	27	26	37	32	58	36	47	51	45	38	18	20	11	48	UO	58
8-Sep	61	35	16	25	UO	21	34	26	31	53	40	63	54	56	68	49	46	48	32	11	15	17	20	17	68
9-Sep	26	22	14	18	15	19	19	19	26	35	39	35	41	38	39	37	28	40	37	25	30	41	45	46	46
10-Sep	45	43	39	48	36	44	46	45	47	46	45	41	42	38	41	32	24	28	29	25	24	26	27	27	48
11-Sep	27	26	26	24	22	23	22	22	22	22	22	24	25	24	29	25	23	23	27	25	27	32	28	29	32
12-Sep	28	46	49	38	44	54	34	56	37	48	49	44	53	51	65	51	45	45	25	12	14	22	25	22	65
13-Sep	21	16	17	19	19	17	23	24	31	36	37	42	38	36	40	41	48	25	12	60	28	27	25	20	60
14-Sep	22	29	27	26	22	20	23	23	21	26	25	28	35	28	25	27	23	25	21	21	22	32	34	28	35
15-Sep	40	31	38	61	37	54	39	50	46	39	43	51	35	45	45	47	58	47	44	21	80	31	33	31	80
16-Sep	33	26	64	85	25	UO	UO	22	25	25	33	47	54	50	54	41	30	24	17	18	18	20	20	17	85
17-Sep	19	19	18	22	25	33	19	15	27	50	46	53	36	42	52	39	39	74	46	43	10	51	22	31	74
18-Sep	61	39	46	26	28	21	56	39	83	60	70	54	50	42	49	63	62	31	29	8	14	6	6	11	83
19-Sep	14	9	13	17	21	24	23	27	25	25	27	26	30	27	29	30	25	23	21	17	17	20	20	20	30
20-Sep	20	30	37	12	14	15	17	26	32	42	39	39	40	41	39	33	26	25	12	12	19	21	21	22	42
21-Sep	17	17	22	22	20	18	21	20	25	29	27	32	34	29	27	30	36	23	17	20	14	22	26	19	36
22-Sep	17	77	42	60	30	UO	38	44	31	26	31	29	43	50	46	47	48	35	29	53	31	25	26	66	77
23-Sep	12	18	10	11	16	55	77	UO	54	35	26	35	33	39	42	56	25	19	19	45	23	24	22	26	77
24-Sep	36	47	23	33	18	22	28	25	32	38	42	46	47	49	47	40	47	56	16	11	22	53	53	55	56
25-Sep	12	43	UO	35	44	26	27	31	26	25	26	26	27	27	26	27	26	28	25	27	27	27	27	29	44
26-Sep	24	22	31	29	42	42	36	43	43	47	43	45	44	37	31	34	32	34	38	39	42	40	45	53	53
27-Sep	52	52	46	49	51	42	42	35	45	40	42	42	44	44	51	42	39	38	21	25	20	20	19	15	52
28-Sep	15	14	14	16	14	17	18	21	25	33	33	33	40	38	31	26	26	23	18	23	19	20	20	19	40
29-Sep	19	20	20	34	23	27	23	26	28	32	47	48	38	44	45	42	37	37	44	50	47	51	41	46	51
30-Sep	43	48	50	36	26	28	30	26	26	27	27	27	31	27	31	28	30	25	UO	UO	86	11	UO	UO	86
	61	77	64	85	65	55	77	56	83	75	70	63	71	81	86	81	89	74	46	60	86	53	53	66	
	Diurnal Maximum																								

UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS21
CONKLIN
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - CONKLIN (AMS21)
SEPTEMBER 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	685	35	35	100	-	-	1.7	0	0.4	0
TRS(ppb) Average	684	36	36	100	0.5	0	0.5	0	0.2	0
THC(ppm) Average	678	35	42	99.03	-	-	3.7	-	2.6	-
NMHC(ppm) Average	678	35	42	99.03	-	-	0.044	-	0.002	-
CH4(ppm) Average	678	35	42	99.03	-	-	3.7	-	2.6	-
O3 (ppb) Average	686	34	34	100	-	-	47.6	0	28.7	-
NO2 (ppb) Average	684	36	36	100	-	-	15.3	0	3.5	-
NO (ppb) Average	684	36	36	100	-	-	68	-	12.1	-
NOX (ppb) Average	684	36	36	100	-	-	71.8	-	15.6	-
PM2.5 (ug/m3) Average	719	1	1	100	-	-	26.4	0	7.7	0
Temperature 2 m (C) Average	720	0	0	100	-	-	26.8	-	17.7	-
Relative Humidity (%) Average	701	0	19	97.36	-	-	100	-	92	-
Wind Speed 10 m (km/h) Average	716	0	4	99.44	-	-	19	-	11	-
Wind Direction 10 m (deg) Average	716	0	4	99.44	-	-	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - CONKLIN (AMS21)
SEPTEMBER 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	685	0.17	0.2	-	0	0	0	0.1	0.2	0.4	1.7
TRS (ppb) Average	684	0.15	0.1	-	0.1	0.1	0.1	0.1	0.2	0.2	0.5
THC (ppm) Average	678	2.26	0.3	-	2	2.1	2.1	2.1	2.3	2.7	3.7
NMHC(ppm) Average	678	0	0.002	-	0	0	0	0	0	0	0.044
CH4(ppm) Average	678	2.26	0.3	-	2	2.1	2.1	2.1	2.3	2.7	3.7
O3 (ppb) Average	686	18.68	11.6	-	0.9	1.8	9.1	18.6	28.3	33.2	47.6
NO2 (ppb) Average	684	1.8	2.1	-	0	0.3	0.5	1	2.3	4.5	15.3
NO (ppb) Average	684	1.92	5.6	-	0	0	0	0.1	0.9	5.6	68
NOX (ppb) Average	684	3.73	6.8	-	0.1	0.3	0.5	1.1	3.8	10.2	71.8
PM2.5 (ug/m3) Average	719	3.95	2.5	-	0.3	1.4	2.3	3.5	5.2	6.7	26.4
Temperature 2 m (C) Average	720	10.54	6.2	-	-3.1	3.3	5.8	9.7	15	19.3	26.8
Relative Humidity (%) Average	701	76.87	19.9	-	30.9	45.3	62.9	80.9	95.1	99.2	100
Wind Speed 10 m (km/h) Average	716	6.3	4	-	0	1	3	6	9	12	19
Wind Direction 10 m (deg) Average	716	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - CONKLIN (AMS 21)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
THC/NMHC/CH4	16 Sep 2026 12:00	16 Sep 2026 13:00	2	Maintenance - replaced support gas cylinder
THC/NMHC/CH4	29 Sep 2026 09:00	29 Sep 2026 13:00	5	Maintenance - replaced zero air generator
Relative Humidity	02 Sep 2026 07:00	02 Sep 2026 08:00	2	Sensor operated out of range
Relative Humidity	07 Sep 2026 07:00	07 Sep 2026 08:00	2	Sensor operated out of range
Relative Humidity	08 Sep 2026 00:00	08 Sep 2026 08:00	9	Sensor operated out of range
Relative Humidity	16 Sep 2026 05:00	16 Sep 2026 07:00	3	Sensor operated out of range
Relative Humidity	18 Sep 2026 05:00	18 Sep 2026 05:00	1	Sensor operated out of range
Relative Humidity	18 Sep 2026 08:00	18 Sep 2026 08:00	1	Sensor operated out of range
Relative Humidity	24 Sep 2026 07:00	24 Sep 2026 07:00	1	Sensor operated out of range
Wind Speed, Wind Direction	04 Sep 2026 02:00	04 Sep 2026 02:00	1	Flat line in sensor output signal
Wind Speed, Wind Direction	05 Sep 2026 22:00	05 Sep 2026 22:00	1	Flat line in sensor output signal
Wind Speed, Wind Direction	16 Sep 2026 22:00	16 Sep 2026 22:00	1	Flat line in sensor output signal
Wind Speed, Wind Direction	24 Sep 2026 20:00	24 Sep 2026 20:00	1	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Conklin - September 2026

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

Maximum Value: 1.7 ppb on Sep 20 03:00 Maximum Daily Average: 0.4 ppb on Sep 20

Minimum Value: 0.0 ppb on Sep 2 22:00 Minimum Daily Average: 0.0 ppb on Sep 28

Maximum Diurnal Average: 0.3 ppb at hour 15 Minimum Diurnal Average: 0.1 ppb at hour 7

Monthly Average: 0.17 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} = 1.1

Hours in Service:	720
Hours of Data:	685
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-Sep	0.1	0.1	0.0	0.1	Z	0.0	0.1	0.1	0.1	0.2	0.2	0.4	0.4	0.6	0.6	0.5	0.8	0.8	1.5	0.7	0.3	0.2	0.2	0.5	0.4	1.5
2-Sep	0.3	0.2	0.2	0.2	0.3	Z	0.1	0.3	0.4	0.5	0.6	0.3	0.5	0.3	0.3	0.2	0.1	0.1	0.1	0.8	0.1	0.0	0.0	0.0	0.3	0.8
3-Sep	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	0.3	0.2	0.4	0.3	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.4
4-Sep	0.1	Z	0.1	0.1	0.3	0.3	0.3	0.2	0.5	0.2	0.3	0.2	0.1	0.4	0.5	0.6	0.4	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.6
5-Sep	0.1	0.1	Z	0.0	0.1	0.1	0.0	0.1	0.1	0.1	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	0.2	0.1	0.2
6-Sep	0.2	0.1	0.2	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.5	0.5	0.3	0.5	0.3	0.3	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.1	0.2	0.5
7-Sep	0.0	0.1	0.1	0.1	Z	0.0	0.0	0.0	0.0	0.1	0.4	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	0.1	0.4
8-Sep	0.0	0.0	0.1	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.4	0.4	0.4	0.3	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.4
9-Sep	Z	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.1	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	0.3	0.2	0.3
10-Sep	0.2	Z	0.2	0.1	0.1	0.2	0.2	0.3	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	0.1	0.2	0.1	0.2	0.3
11-Sep	0.1	0.1	Z	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2
12-Sep	0.2	0.2	0.1	Z	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2
13-Sep	0.1	0.1	0.1	0.1	Z	0.0	0.0	0.0	0.1	0.5	0.7	0.2	0.5	0.4	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.7
14-Sep	0.2	0.0	0.1	0.0	0.1	Z	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.3	0.5	0.5	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.5
15-Sep	Z	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.4
16-Sep	0.2	Z	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4
17-Sep	0.1	0.2	Z	0.1	0.1	0.1	0.2	0.3	0.7	0.4	0.3	0.3	0.2	0.2	0.5	0.8	0.6	0.4	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.8
18-Sep	0.2	0.2	0.2	Z	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.3	0.4	0.2	0.3	0.1	0.1	0.2	0.2	0.2	0.4
19-Sep	0.1	0.1	0.1	0.1	Z	0.1	0.2	0.3	0.3	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.8	0.8	1.0	0.6	0.3	0.4	1.0
20-Sep	0.3	0.8	1.7	0.5	0.3	Z	0.2	0.1	0.2	0.3	0.2	0.9	0.5	0.8	0.6	0.3	0.4	0.4	0.2	0.2	0.1	0.2	0.1	0.1	0.4	1.7
21-Sep	Z	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	1.1	1.4	1.6	1.0	0.8	0.6	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.4	1.6
22-Sep	0.1	Z	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.4	1.1	0.2	0.4	0.3	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.3	0.2	0.1	0.2	1.1
23-Sep	0.1	0.1	Z	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.3	0.6	1.2	1.1	0.7	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.2
24-Sep	0.1	0.1	0.3	Z	0.2	0.4	0.0	0.3	0.0	0.0	0.1	0.0	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	0.4
25-Sep	0.0	0.0	0.0	0.1	Z	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
26-Sep	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	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1
27-Sep	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
28-Sep	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
29-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
30-Sep	0.0	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	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	Diurnal Average	
	0.3	0.8	1.7	0.5	0.3	0.4	0.3	0.3	0.7	0.5	1.1	1.4	1.6	1.2	1.1	0.8	0.8	0.8	1.5	0.8	0.8	1.0	0.6	0.5	Diurnal Maximum	

Z - zerospan C - Calibration

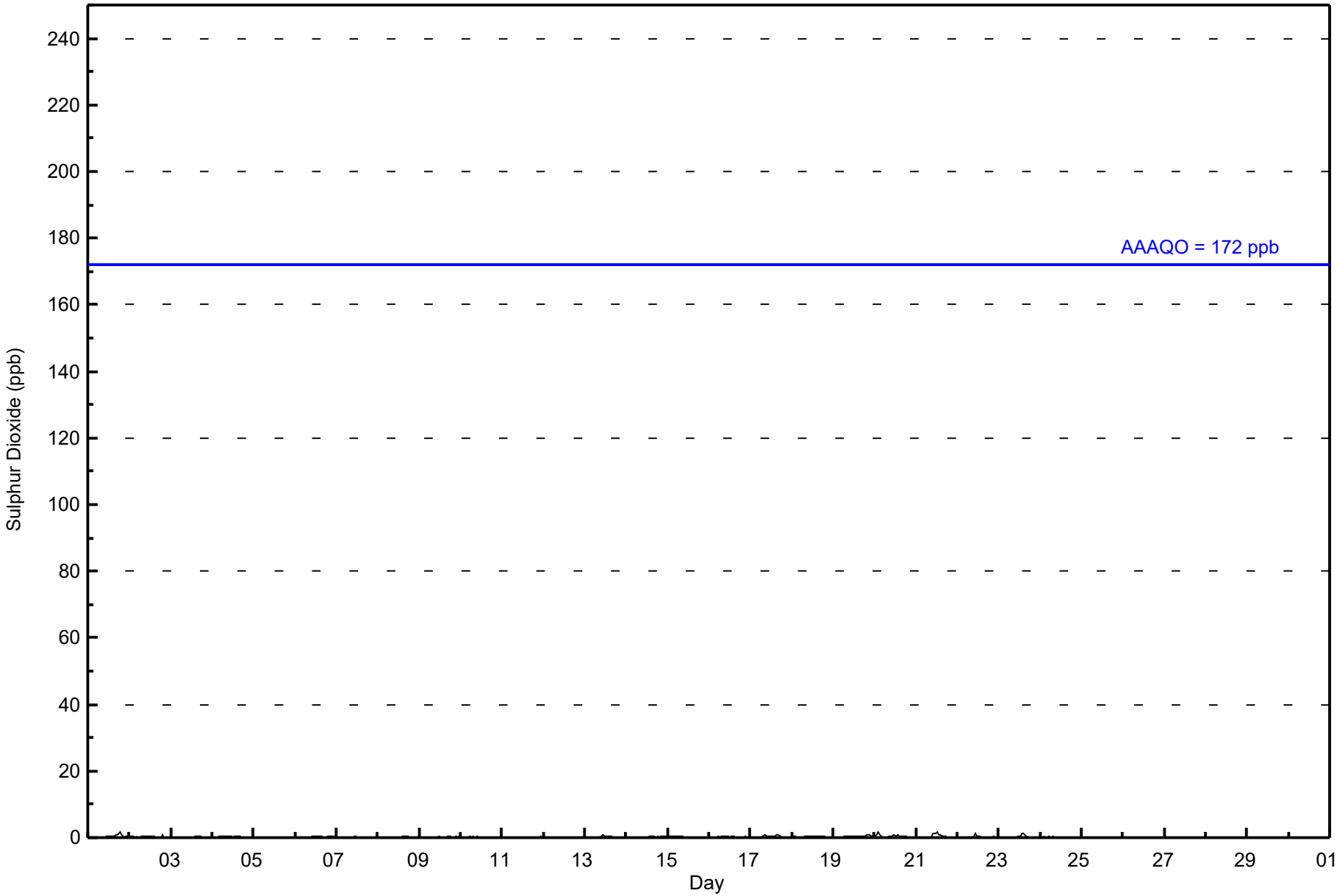
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Conklin - September 2026



Sulphur Dioxide (SO_2) - ppb

Conklin - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	685	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Conklin - September 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	27	16	14	12	14	27	51	65	68	59	67	43	43	33	83	60	682
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	27	16	14	12	14	27	51	65	68	59	67	43	43	33	83	60	682

Total Number of Valid Hours: 682

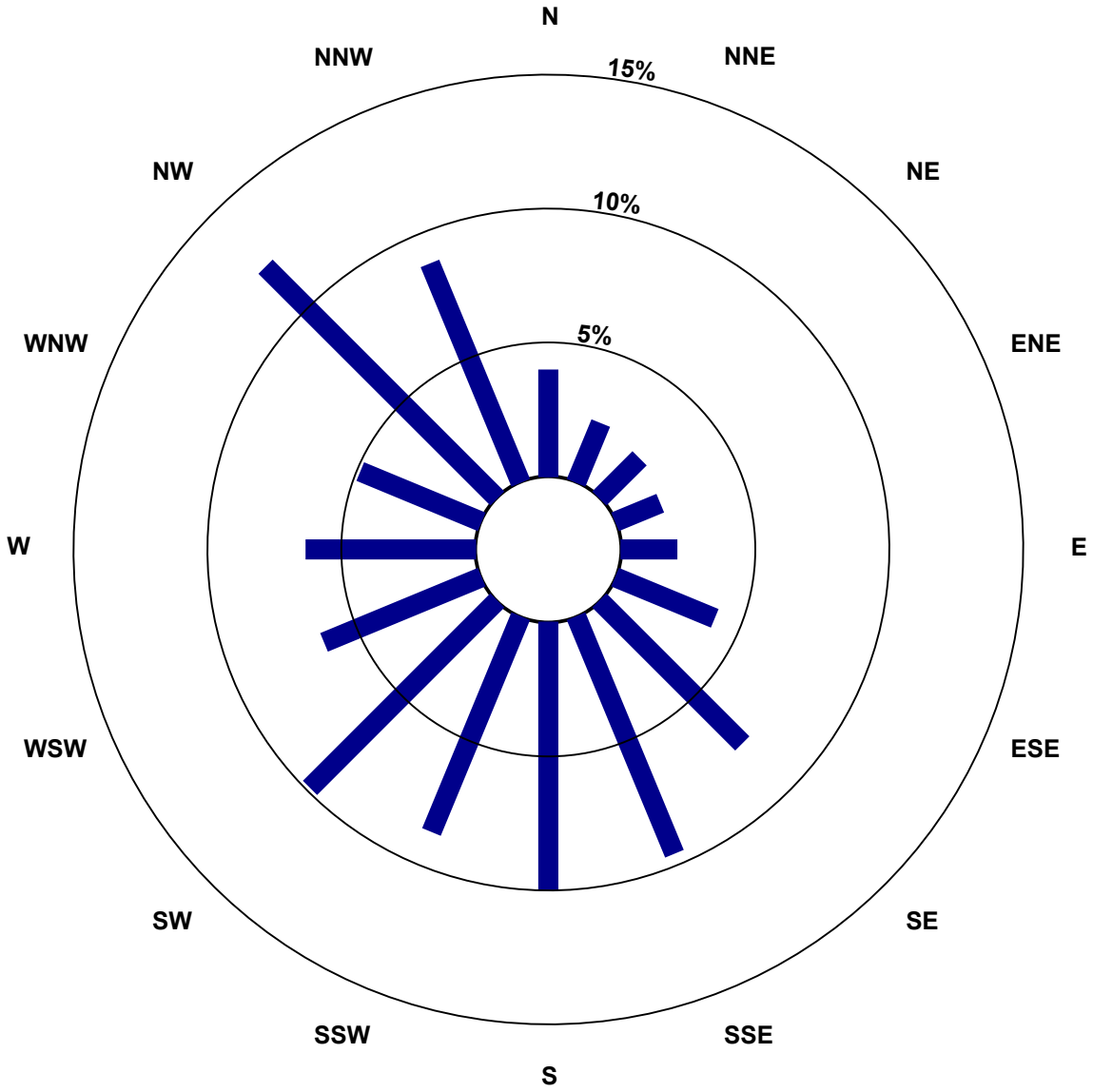
Total Number of Hours: 720

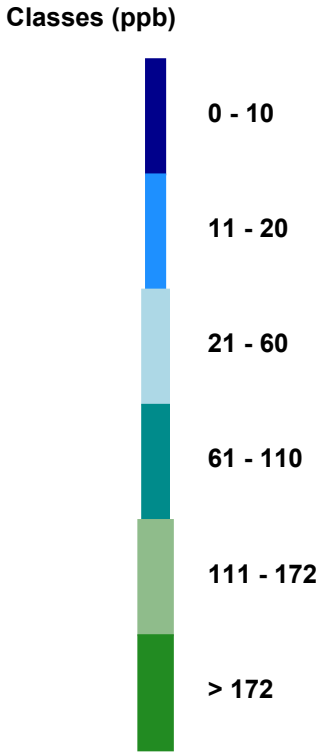
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Conklin





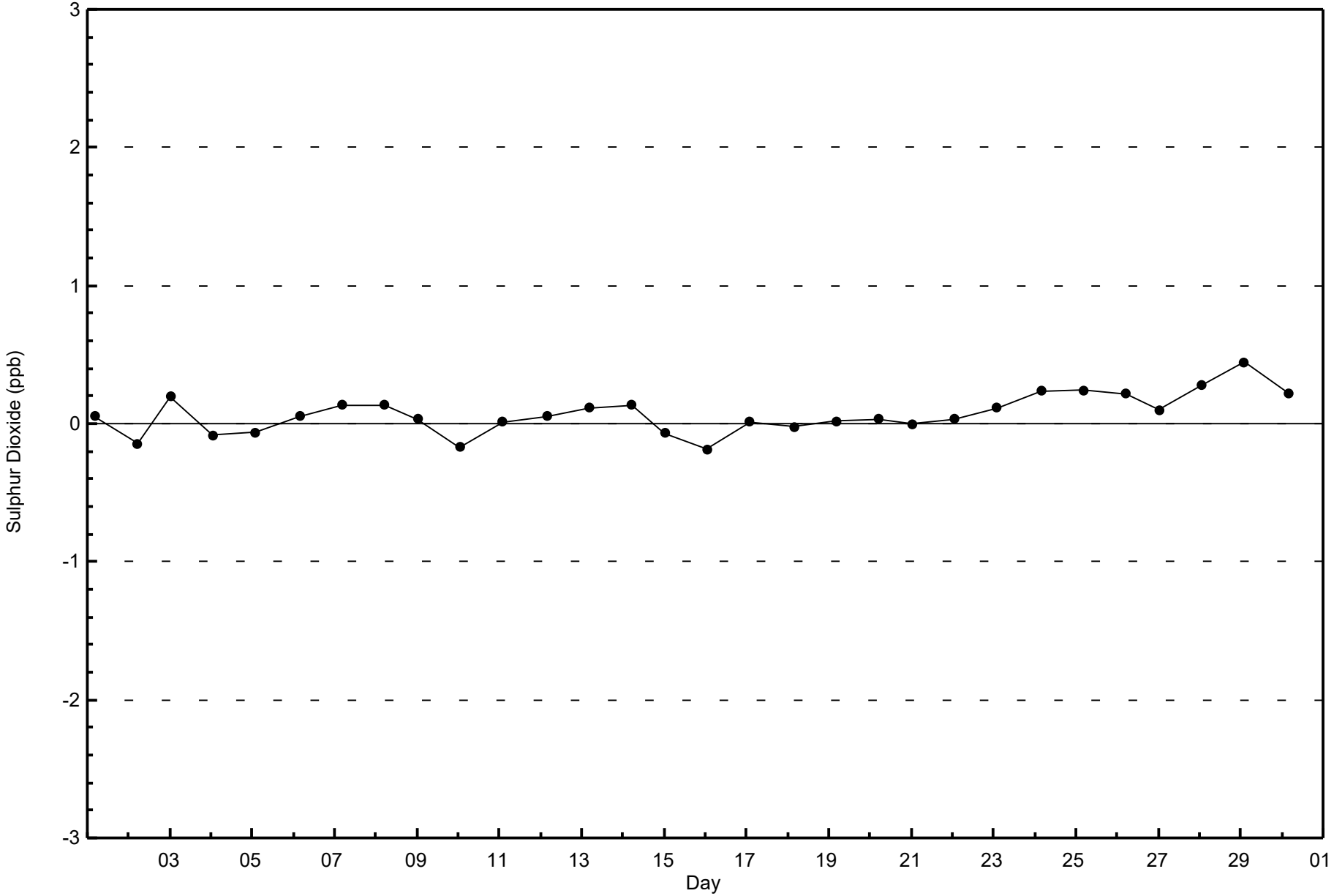
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Conklin - September 2026

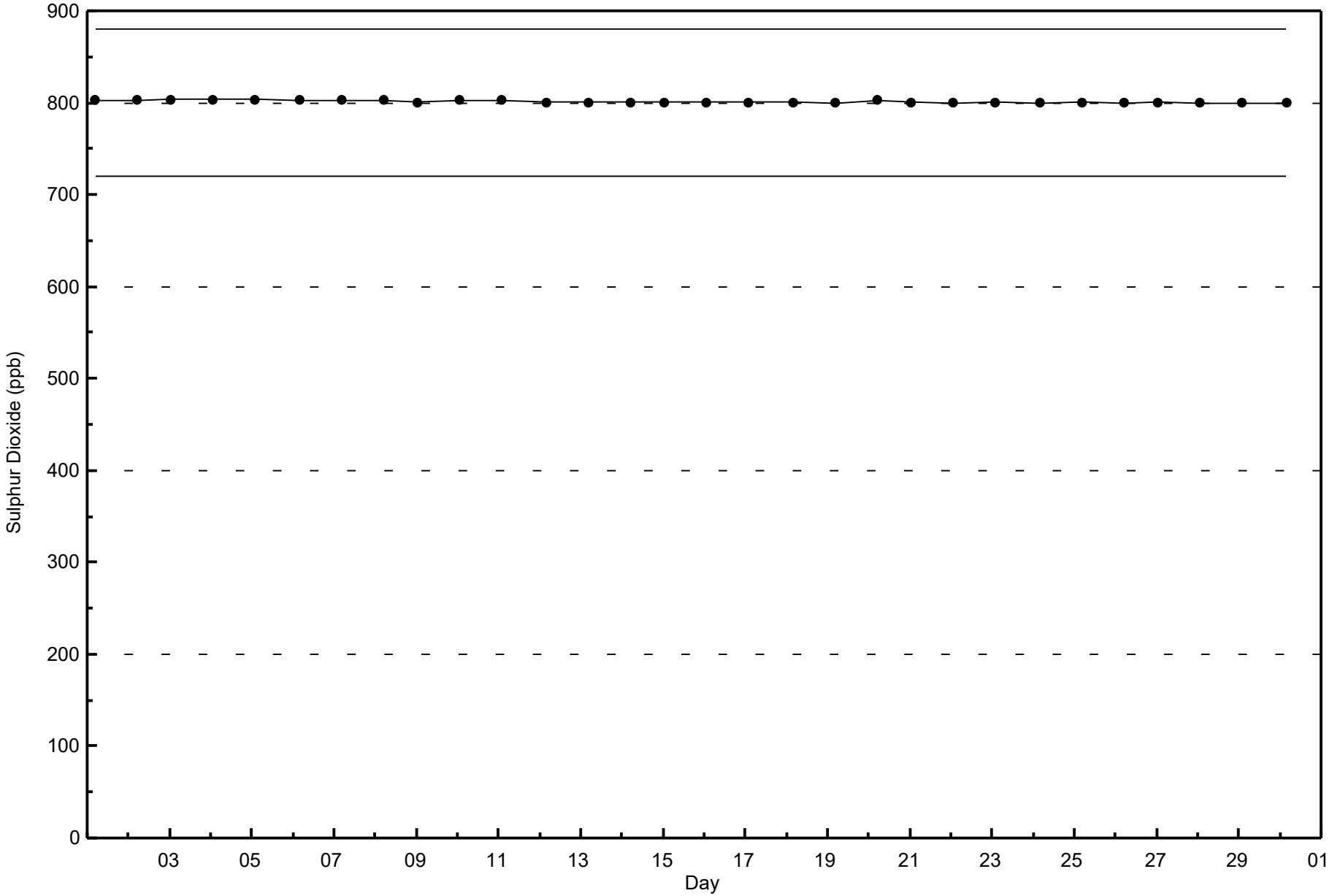


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Conklin - September 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Conklin - September 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 0.5 ppb on Sep 2 00:00

Maximum Daily Average: 0.2 ppb on Sep 4

Minimum Value: 0.0 ppb on Sep 15 08:30

Minimum Daily Average: 0.1 ppb on Sep 27

Maximum Diurnal Average: 0.2 ppb at hour 21

Minimum Diurnal Average: 0.1 ppb at hour 17

Monthly Average: 0.15 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.2 P_{99} = 0.3

Periods in Service:	1440
Periods of Valid Data:	1369
Periods of Invalid Data:	71
Periods of Calibration:	71
Percent Operational Time:	100.0

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-Sep	0.2	0.2	0.2	0.2	0.1	Z	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	0.3	0.3	0.4	0.2	0.5
	0.2	0.2	0.2	0.2	0.1	SP	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	0.2	0.2	0.3	0.3	0.5		
2-Sep	Z	0.2	0.4	0.4	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.4
	SP	0.3	0.4	0.3	0.4	0.3	0.2	0.2	0.2	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		
3-Sep	0.2	Z	0.2	0.2	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	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3
	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3		
4-Sep	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	0.3	0.3	0.2	0.2	0.2	0.2	0.2	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	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1		
5-Sep	0.2	0.1	0.1	Z	0.2	0.2	0.2	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	0.2	0.2	0.2	0.1	0.1	0.2
	0.1	0.1	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	0.2	0.2	0.2	0.1	0.1		
6-Sep	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	0.2
	0.1	0.1	0.1	0.1	SP	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	0.1	0.1		
7-Sep	0.1	0.2	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
	0.1	0.2	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
8-Sep	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.3
	SP	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.1		
9-Sep	0.1	Z	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	0.2	0.2	0.1	0.1	0.1	0.2
	0.1	SP	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1		
10-Sep	0.1	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3
	0.1	0.2	SP	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	0.2	0.2	0.1	0.1	0.1	0.1	0.1		
11-Sep	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	0.2	0.1	0.1	0.2
	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
12-Sep	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	0.2	0.2	0.1	0.1	0.1	0.1	0.2
	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	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1		
13-Sep	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	0.2	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	0.1	0.1	0.1	SP	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2		
14-Sep	Z	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.3
	SP	0.1	0.1	0.2	0.2	0.2	0.3	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	0.2	0.1	0.1		
15-Sep	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.0	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	0.2
	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	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1		

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Conklin - September 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-Sep	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	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.3
	0.1	0.1	SP	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	0.2	0.2	0.2	0.2	0.2		
17-Sep	0.2	0.2	0.2	Z	0.2	0.2	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
	0.2	0.1	0.2	SP	0.2	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.2		
18-Sep	0.2	0.2	0.1	0.1	Z	0.2	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	0.3	0.2	0.2	0.2	0.2	0.2	0.4
	0.2	0.2	0.1	0.1	SP	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.4	0.2	0.2	0.2	0.2		
19-Sep	0.1	0.2	0.1	0.1	0.1	Z	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	0.2	0.2	0.2	0.2	0.1	0.2	0.2
	0.1	0.1	0.1	0.1	0.1	SP	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	0.2	0.1		
20-Sep	Z	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	SP	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
21-Sep	0.2	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.4
	0.2	SP	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.3	0.3	0.3		
22-Sep	0.2	0.2	Z	0.2	0.2	0.2	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	0.2	0.2	0.3	0.2	0.2	0.2	0.3
	0.2	0.2	SP	0.2	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	0.2	0.1	0.2	0.2	0.3	0.2	0.2		
23-Sep	0.2	0.2	0.2	Z	0.1	0.1	0.1	0.1	0.1	0.1	C	C	C	C	C	C	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	--	0.3
	0.2	0.2	0.2	SP	0.1	0.1	0.1	0.1	0.1	0.1	C	C	C	C	C	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2		
24-Sep	0.2	0.2	0.3	0.2	Z	0.5	0.2	0.3	0.2	0.1	0.1	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	0.5
	0.2	0.2	0.3	0.2	SP	0.3	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	0.3	0.2	0.2	0.2		
25-Sep	0.2	0.2	0.2	0.1	0.1	Z	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	0.2	0.1	0.2	0.1	0.1	0.1	0.2
	0.1	0.2	0.1	0.1	0.2	SP	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	0.2	0.2	0.1		
26-Sep	Z	0.2	0.2	0.3	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	0.1	0.3
	SP	0.2	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
27-Sep	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	0.1	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-Sep	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	0.2	0.2	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1		
29-Sep	0.1	0.1	0.1	Z	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
	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
30-Sep	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	0.3	0.3	0.2	0.1	0.1	0.3
	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	0.1	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	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	0.2	Diurnal Average	
	0.3	0.3	0.4	0.4	0.4	0.5	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.4	0.3	0.3	0.5	Diurnal Maximum	

Z - zerospan C - Calibration 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 - September 2026

Maximum Value: 0.5 ppb on Sep 2 00:00

Maximum Daily Average: 0.2 ppb on Sep 4

Minimum Value: 0.1 ppb on Sep 15 09:00

Minimum Daily Average: 0.1 ppb on Sep 27

Maximum Diurnal Average: 0.2 ppb at hour 21

Minimum Diurnal Average: 0.1 ppb at hour 17

Monthly Average: 0.15 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.2 P_{99} = 0.3

Hours in Service:	720
Hours of Data:	684
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-Sep	0.2	0.2	0.2	0.2	0.1	Z	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	0.5	0.2	0.5
2-Sep	Z	0.3	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.4
3-Sep	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3
4-Sep	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	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3
5-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2
6-Sep	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
7-Sep	0.1	0.2	0.2	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	0.2
8-Sep	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
9-Sep	0.1	Z	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	0.2	0.1	0.1	0.1	0.1	0.2
10-Sep	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	0.1	0.1	0.1	0.1	0.1	0.2	0.2
11-Sep	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
12-Sep	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	0.2	0.2	0.1	0.1	0.1	0.1	0.2
13-Sep	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	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
14-Sep	Z	0.1	0.1	0.2	0.2	0.2	0.3	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	0.2	0.1	0.1	0.2	0.3
15-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
16-Sep	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
17-Sep	0.2	0.2	0.2	Z	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3
18-Sep	0.2	0.2	0.1	0.1	Z	0.2	0.2	0.1	0.1	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	0.2	0.2	0.3
19-Sep	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	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2
20-Sep	Z	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
21-Sep	0.2	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.3
22-Sep	0.2	0.2	Z	0.2	0.2	0.2	0.1	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	0.2	0.2	0.2	0.2	0.3
23-Sep	0.2	0.2	0.2	Z	0.1	0.1	0.1	0.1	0.1	0.1	C	C	C	C	C	C	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	--	0.2
24-Sep	0.2	0.2	0.3	0.2	Z	0.4	0.2	0.3	0.1	0.1	0.1	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	0.4
25-Sep	0.1	0.2	0.1	0.1	0.2	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	0.2	0.1	0.2	0.1	0.1	0.1	0.2
26-Sep	Z	0.2	0.2	0.3	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	0.1	0.1	0.3
27-Sep	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
28-Sep	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	0.1	0.2
29-Sep	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
30-Sep	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	0.2	0.2	0.2	0.1	0.1	0.2
	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	Diurnal Average	
	0.3	0.3	0.4	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	0.3	0.3	0.3	0.3	0.3	0.3	0.5	Diurnal Maximum	

Z - zerospan C - Calibration

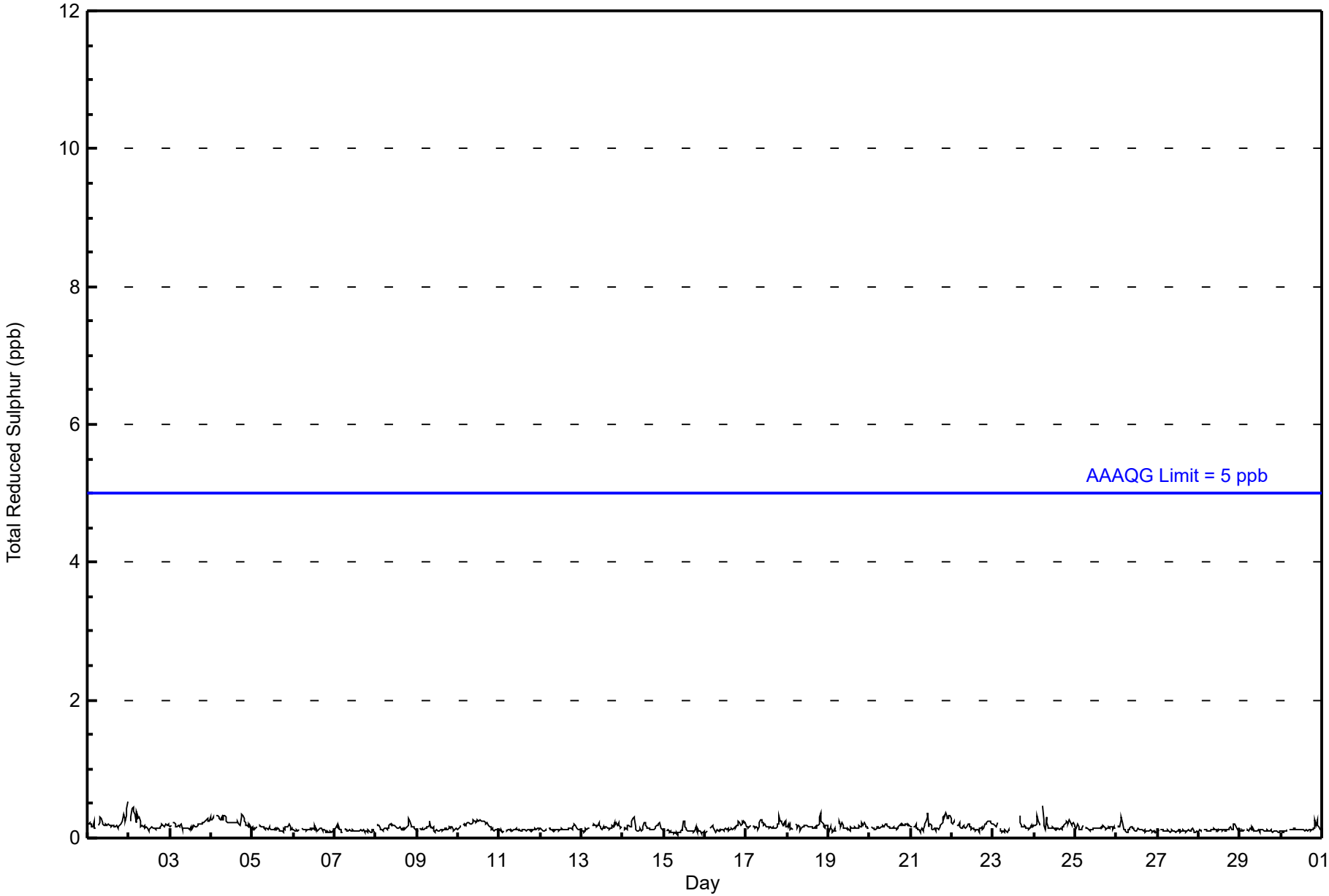
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Conklin - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Reduced Sulphur (TRS) - ppb

Conklin - September 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	16	12	8	13	29	52	65	66	56	69	45	44	36	85	57	680
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	16	12	8	13	29	52	65	66	56	69	45	44	36	85	57	680

Total Number of Valid Hours: 680

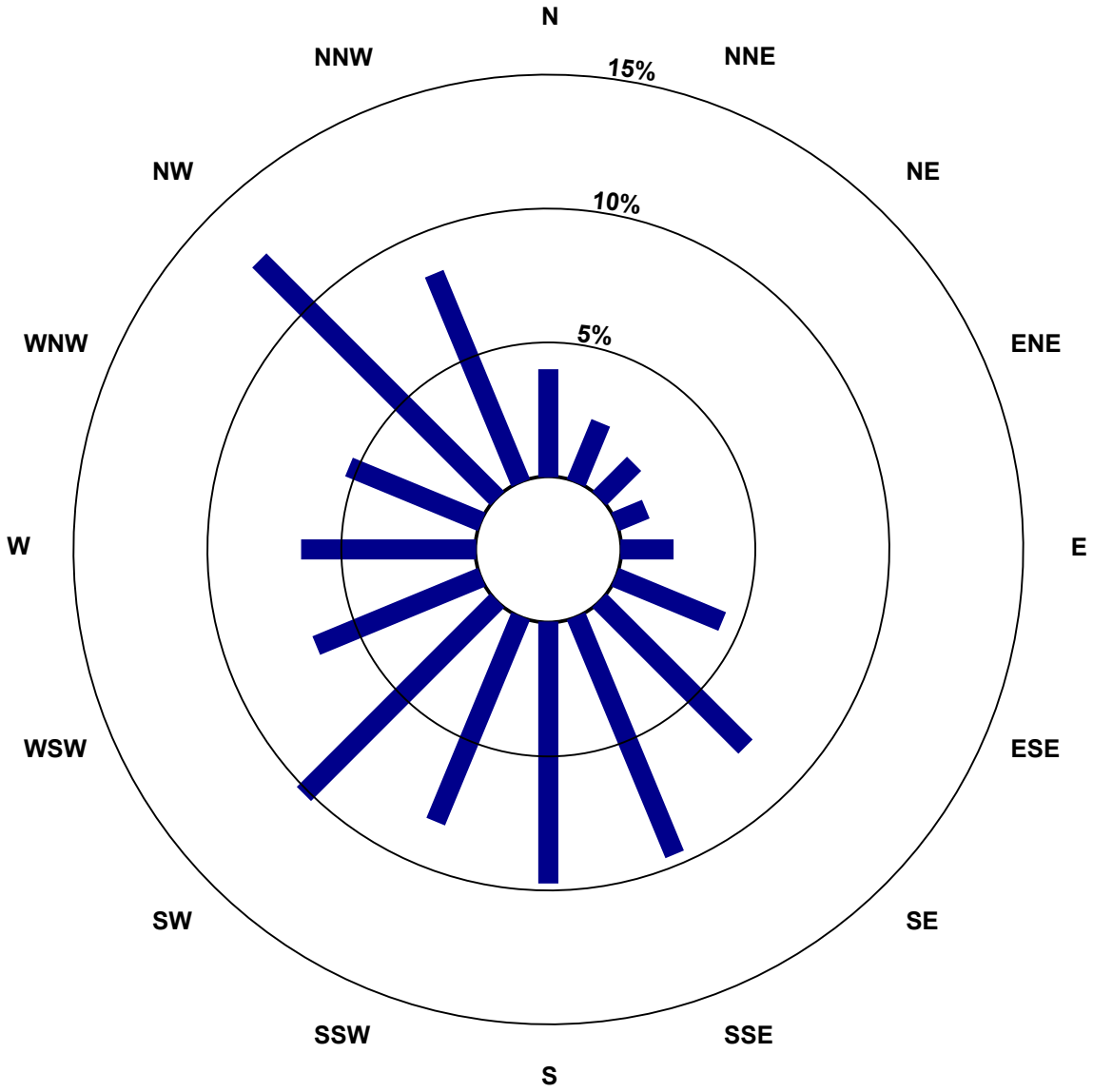
Total Number of Hours: 720

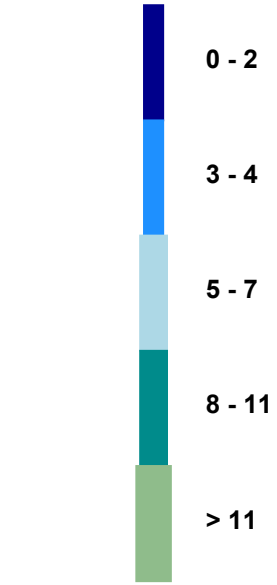
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Reduced Sulphur (TRS) - ppb

Conklin





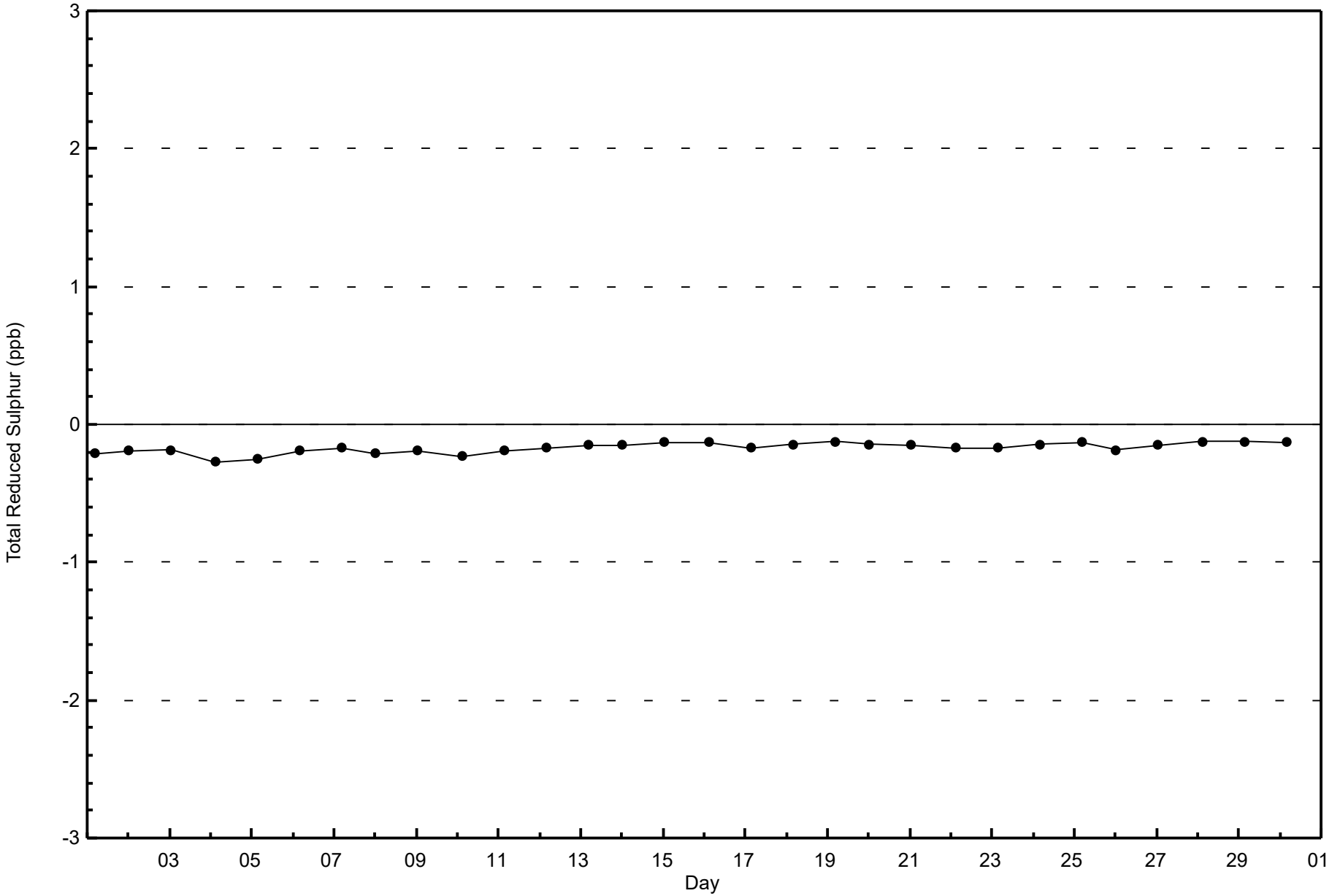
Total Number of Valid Hours: 680

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Conklin - September 2026

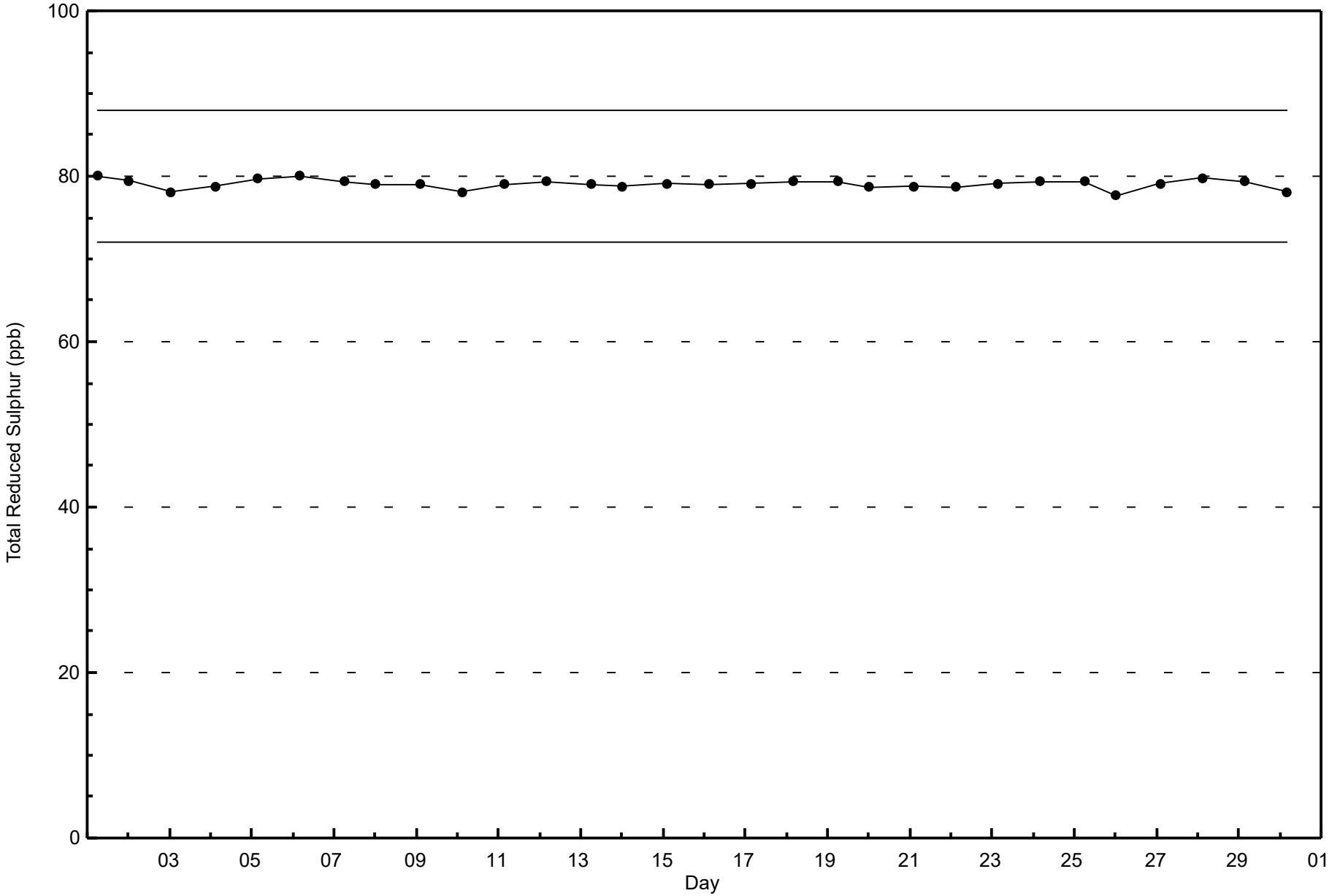


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Conklin - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Conklin - September 2026

Maximum Value: 3.7 ppm on Sep 4 03:00

Maximum Daily Average: 2.6 ppm on Sep 21

Minimum Value: 2.0 ppm on Sep 9 15:00

Minimum Daily Average: 2.1 ppm on Sep 10

Maximum Diurnal Average: 2.5 ppm at hour 3

Minimum Diurnal Average: 2.1 ppm at hour 15

Monthly Average: 2.26 ppm

Percentiles: P_1 = 2.0 P_{10} = 2.1 Q_1 = 2.1 Median = 2.1 Q_3 = 2.3 P_{90} = 2.7 P_{99} = 3.4

Hours in Service:	720
Hours of Data:	678
Hours of Missing Data:	42
Hours of Calibration:	35
Percent Operational Time:	99.0

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-Sep	2.4	2.5	2.5	2.7	Z	2.9	2.7	2.5	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.7	2.8	2.8	2.8	2.4	2.9
2-Sep	2.6	2.5	3.4	3.1	2.9	Z	3.1	2.6	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.2	2.3	3.4
3-Sep	Z	2.1	2.2	2.2	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	2.1	2.1	2.1	2.2	2.5	2.4	2.2	2.5
4-Sep	2.8	Z	3.7	3.5	3.5	3.4	3.4	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	2.1	2.1	2.1	2.5	3.7
5-Sep	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	2.3	2.4	2.5	2.8	2.7	2.2	2.8
6-Sep	2.4	2.5	2.5	Z	2.5	2.8	3.0	3.0	3.0	2.7	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.2	2.1	2.2	2.4	2.4	3.0
7-Sep	2.5	2.9	2.8	2.9	Z	2.7	2.8	2.5	2.4	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.3	2.6	2.8	2.6	2.4	2.9
8-Sep	2.4	2.6	2.6	2.4	2.3	Z	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	2.4	3.0	2.7	2.2	2.3	2.3	3.0
9-Sep	Z	2.3	2.3	2.3	2.3	2.3	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	2.1	2.1	2.0	2.0	2.2	2.4
10-Sep	2.0	Z	2.1	2.0	2.0	2.0	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1
11-Sep	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
12-Sep	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	2.4	2.5	2.2	2.2	2.2	2.2	2.5
13-Sep	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	2.1	2.1	2.1	2.1	2.1	2.3	2.4	2.4	2.3	2.3	2.2	2.4
14-Sep	2.3	2.3	2.3	2.7	2.4	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	2.1	2.1	2.1	2.2	2.7
15-Sep	Z	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	C	C	C	C	C	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.2
16-Sep	2.1	Z	2.2	2.5	2.6	2.5	2.3	2.2	2.2	2.1	2.1	M	M	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.5	2.7	2.7	2.6	2.3	2.7
17-Sep	2.5	2.8	Z	2.6	2.6	2.7	2.6	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.4	2.6	2.7	2.7	2.9	2.4	2.9
18-Sep	2.7	2.8	2.6	Z	2.5	2.6	2.7	2.5	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.4	2.7	2.5	2.4	2.5	2.3	2.8
19-Sep	2.6	2.5	2.4	2.4	Z	2.5	2.4	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	2.1	2.1	2.1	2.2	2.6
20-Sep	2.1	2.1	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	2.2	2.2	2.2	2.6	3.2	2.8	2.2	3.2
21-Sep	Z	3.4	2.9	3.6	3.7	3.7	3.4	2.9	2.3	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.5	2.5	2.8	3.3	2.6	3.7
22-Sep	3.4	Z	3.2	2.9	3.0	3.1	3.0	2.8	2.6	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.6	2.7	2.7	2.6	2.5	2.5	3.4
23-Sep	2.5	2.5	Z	2.4	2.3	2.2	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	2.4	2.7	2.7	2.8	2.6	2.4	2.8
24-Sep	2.6	2.6	2.6	Z	2.6	2.6	2.4	2.4	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.3	2.5	2.7	2.8	2.9	2.4	2.9
25-Sep	2.6	2.5	2.3	2.3	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	2.2	2.1	2.1	2.1	2.2	2.2	2.6
26-Sep	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
27-Sep	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	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
28-Sep	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	2.3	2.4	2.4	2.3	2.1	2.4
29-Sep	2.2	2.2	Z	2.1	2.1	2.2	2.2	2.2	M	M	M	M	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	2.2
30-Sep	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	2.2	2.4	2.6	2.4	2.3	2.1	2.6
	2.4	2.4	2.5	2.5	2.4	2.5	2.4	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	2.4	2.4	Diurnal Average	
	3.4	3.4	3.7	3.6	3.7	3.7	3.4	3.0	3.0	2.7	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.6	3.0	2.8	3.2	3.3	Diurnal Maximum	

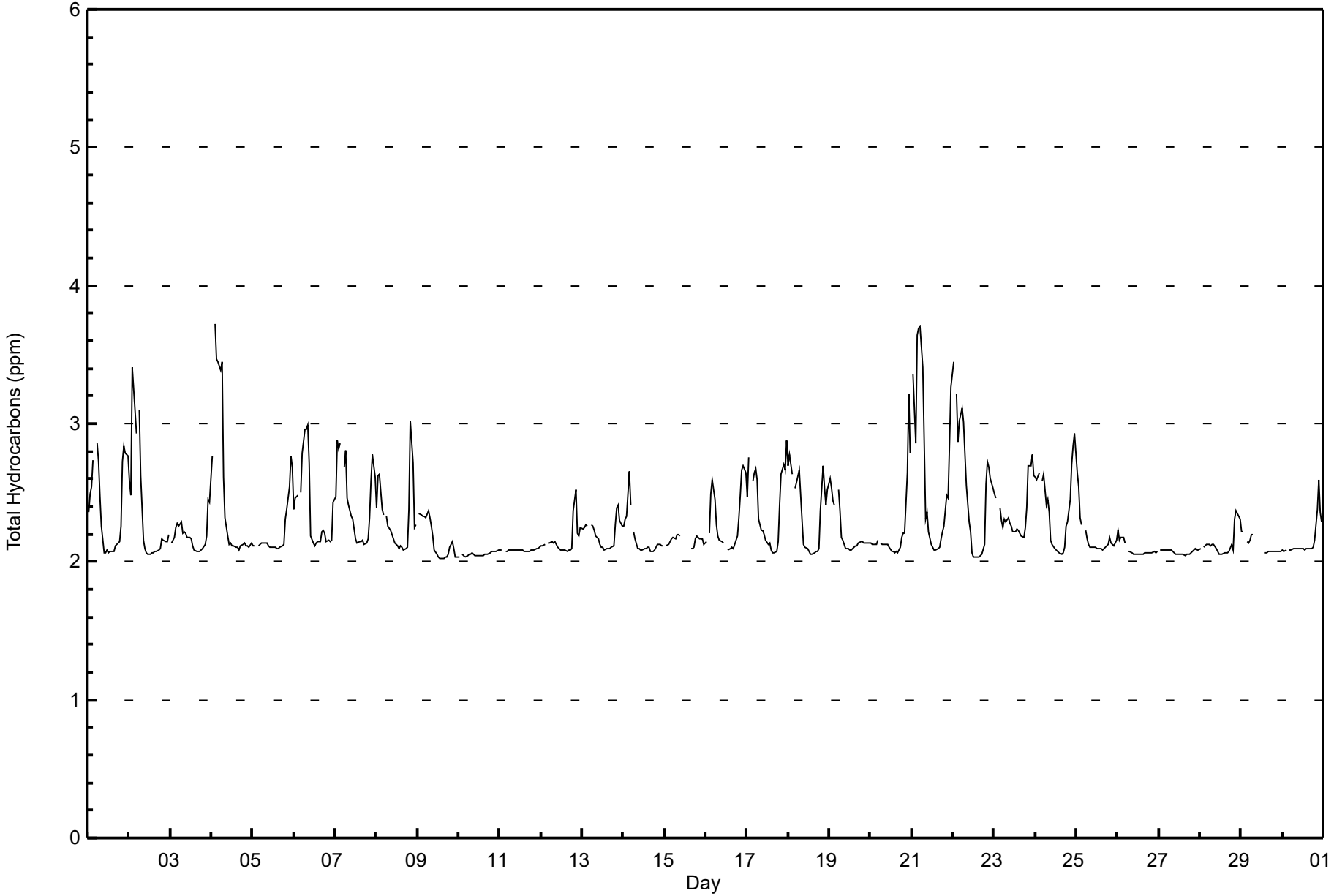
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Conklin - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	29	4.28	4.28
2.1 - 3.0	631	93.07	97.35
3.1 - 10.0	18	2.65	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 678

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Conklin - September 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	4	10	4	7	4	0	29
2.1 - 3.0	27	15	12	12	13	27	47	56	68	57	63	33	37	24	78	59	628
3.1 - 10.0	0	1	1	0	1	0	4	8	0	0	0	0	0	1	1	1	18
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	27	16	13	12	14	27	51	64	68	57	67	43	41	32	83	60	675

Total Number of Valid Hours: 675

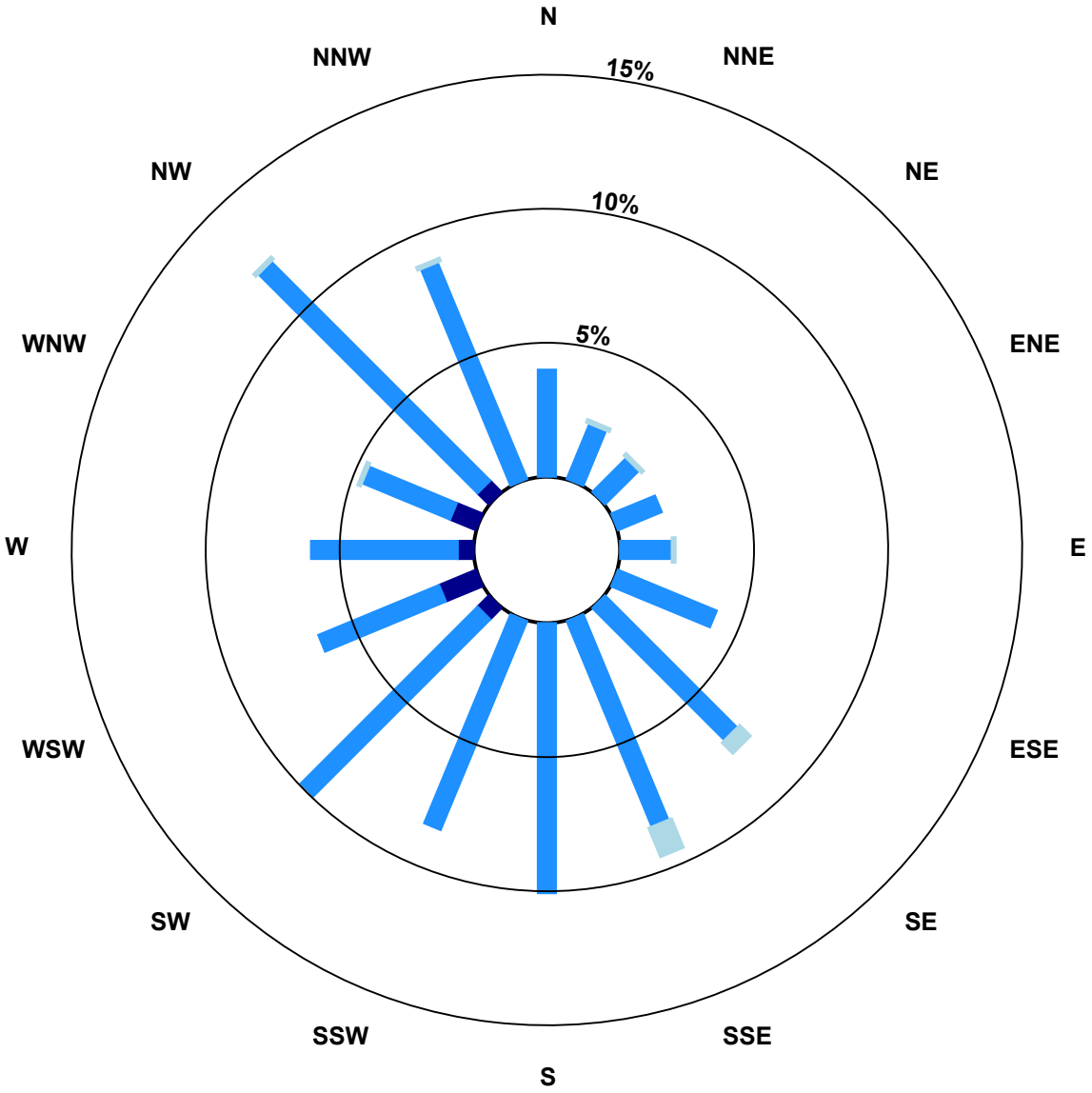
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Conklin



Classes (ppm)

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

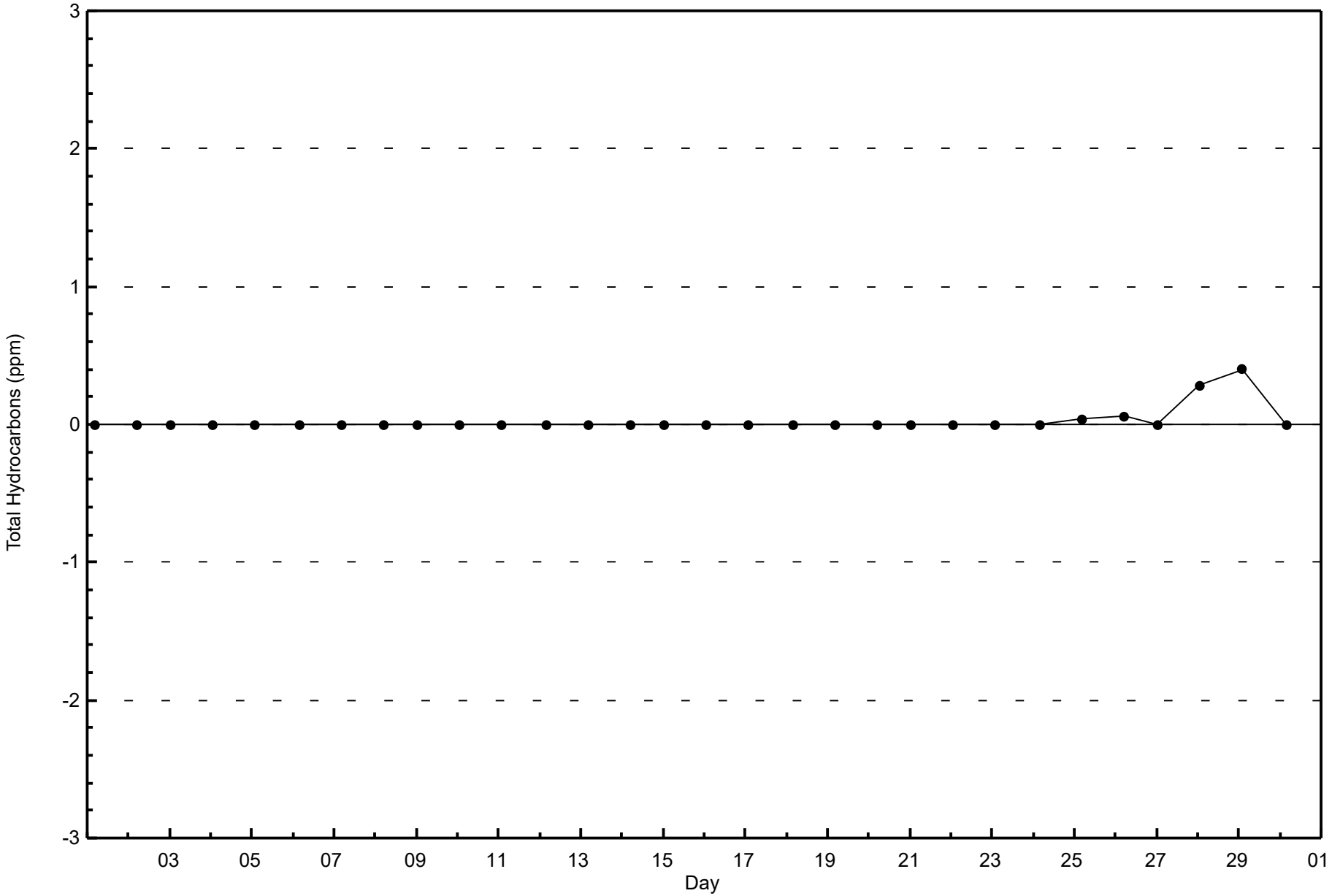
Total Number of Valid Hours: 675

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Conklin - September 2026

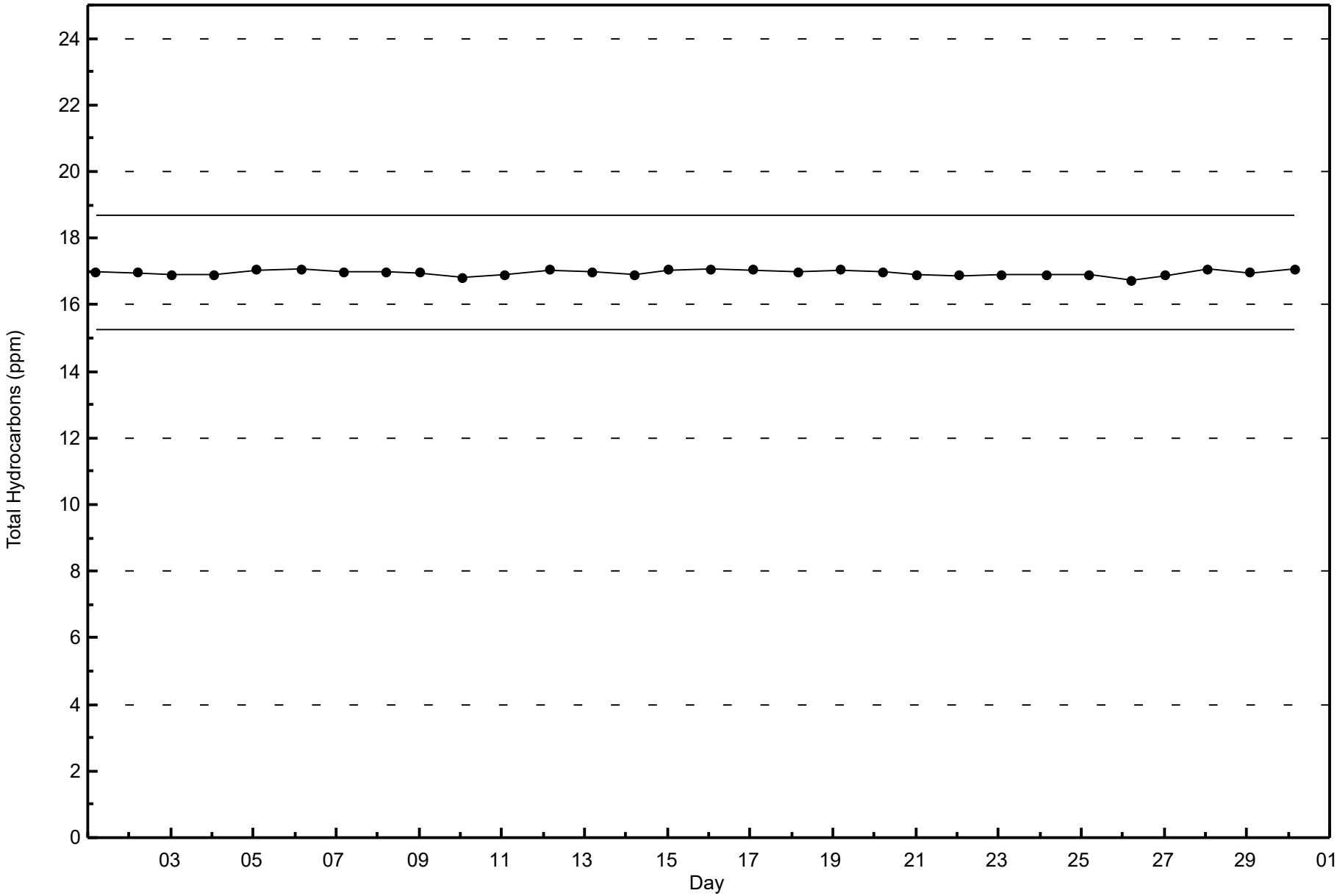


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Conklin - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Conklin - September 2026

Maximum Value: 0.044 ppm on Sep 1 23:00

Maximum Daily Average: 0.002 ppm on Sep 1

Minimum Value: 0.000 ppm on Sep 1 01:00

Minimum Daily Average: 0.000 ppm on Sep 2

Maximum Diurnal Average: 0.001 ppm at hour 23

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:	720
Hours of Data:	678
Hours of Missing Data:	42
Hours of Calibration:	35
Percent Operational Time:	99.0

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-Sep	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	0.044	0.000	0.002	0.044
2-Sep	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-Sep	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-Sep	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-Sep	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	0.000	0.002
6-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	Z	0.000	0.000	0.000	0.000	0.000	0.000	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	0.000	0.000	0.000
16-Sep	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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
17-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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-Sep	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
26-Sep	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-Sep	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-Sep	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-Sep	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	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	0.000	0.000	0.000
30-Sep	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	0.001	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.044	0.000	Diurnal Maximum	

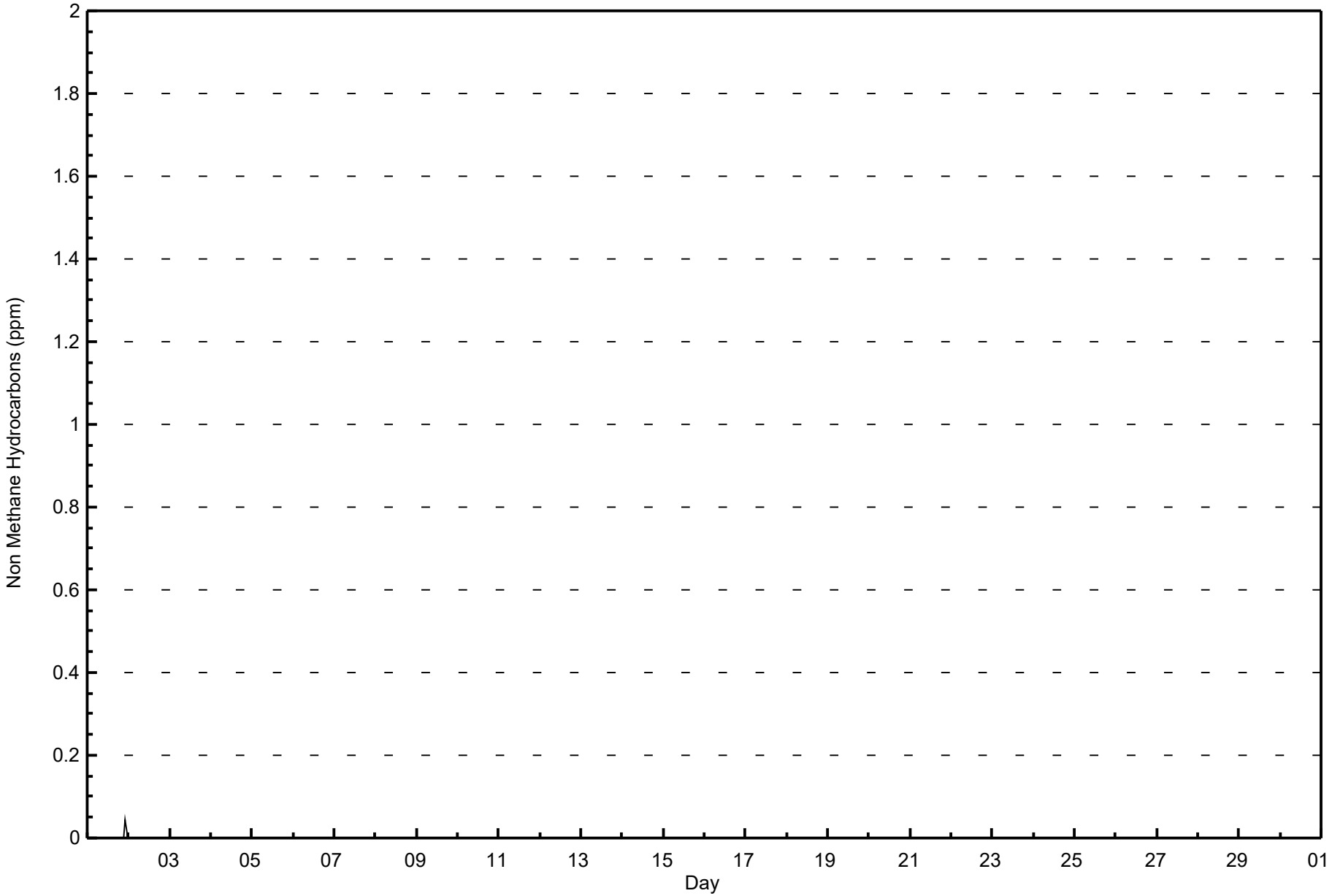
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Conklin - September 2026



Non Methane Hydrocarbons (NMHC) - ppm

Conklin - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	677	99.85	99.85
0.006 - 0.05	1	0.15	100.00
0.06 - 0.1	0	0.00	100.00
> 0.1	0	0.00	100.00

Total Number of Valid Hours: 678

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Conklin - September 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	26	16	13	12	14	27	51	64	68	57	67	43	41	32	83	60	674
0.006 - 0.05	1	0	0	0	0	0	0	0	0	0	0	0	0	0	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	27	16	13	12	14	27	51	64	68	57	67	43	41	32	83	60	675

Total Number of Valid Hours: 675

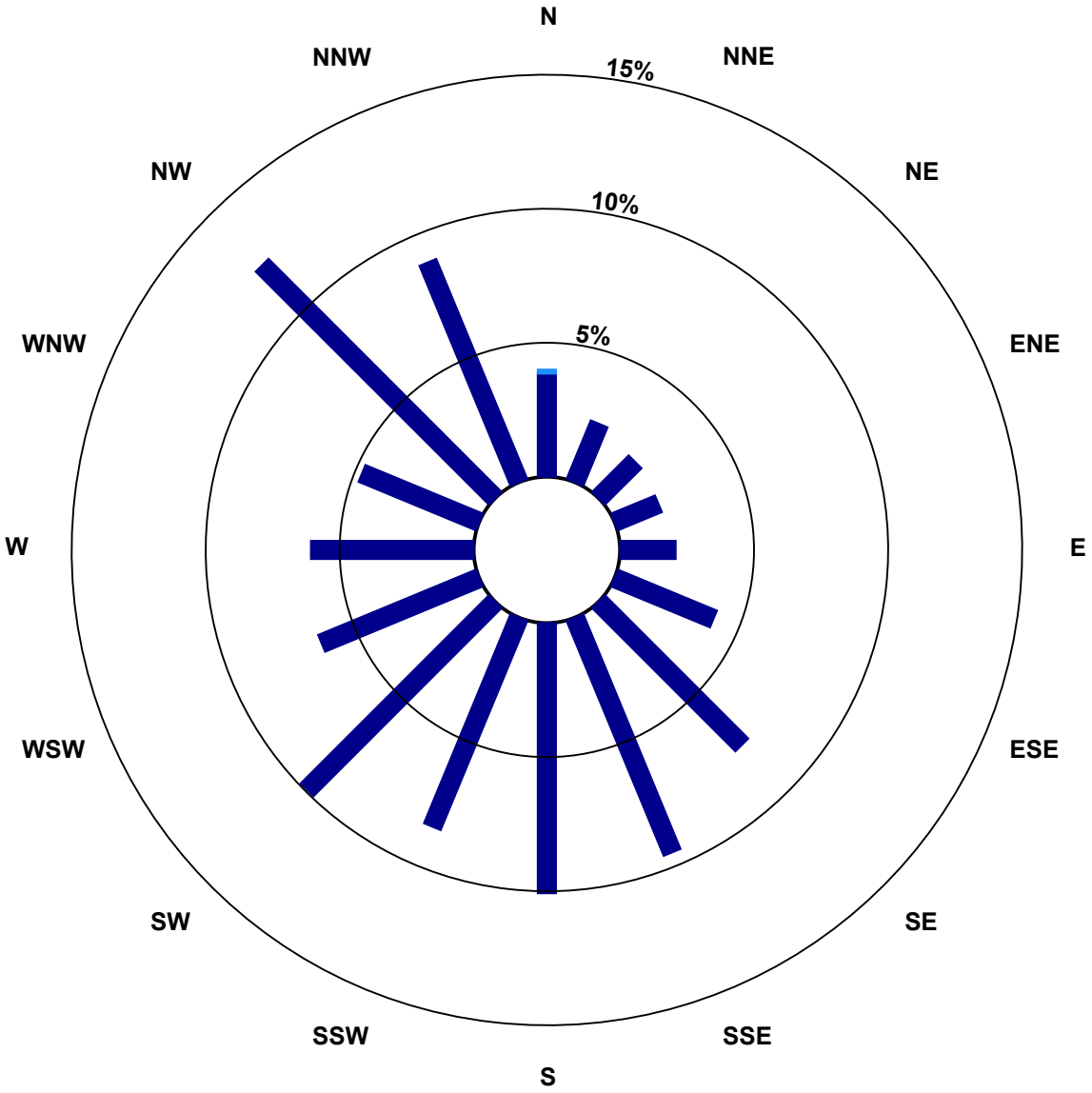
Total Number of Hours: 720

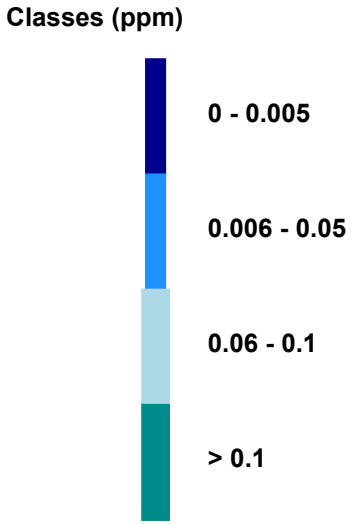
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Non Methane Hydrocarbons (NMHC) - ppm

Conklin





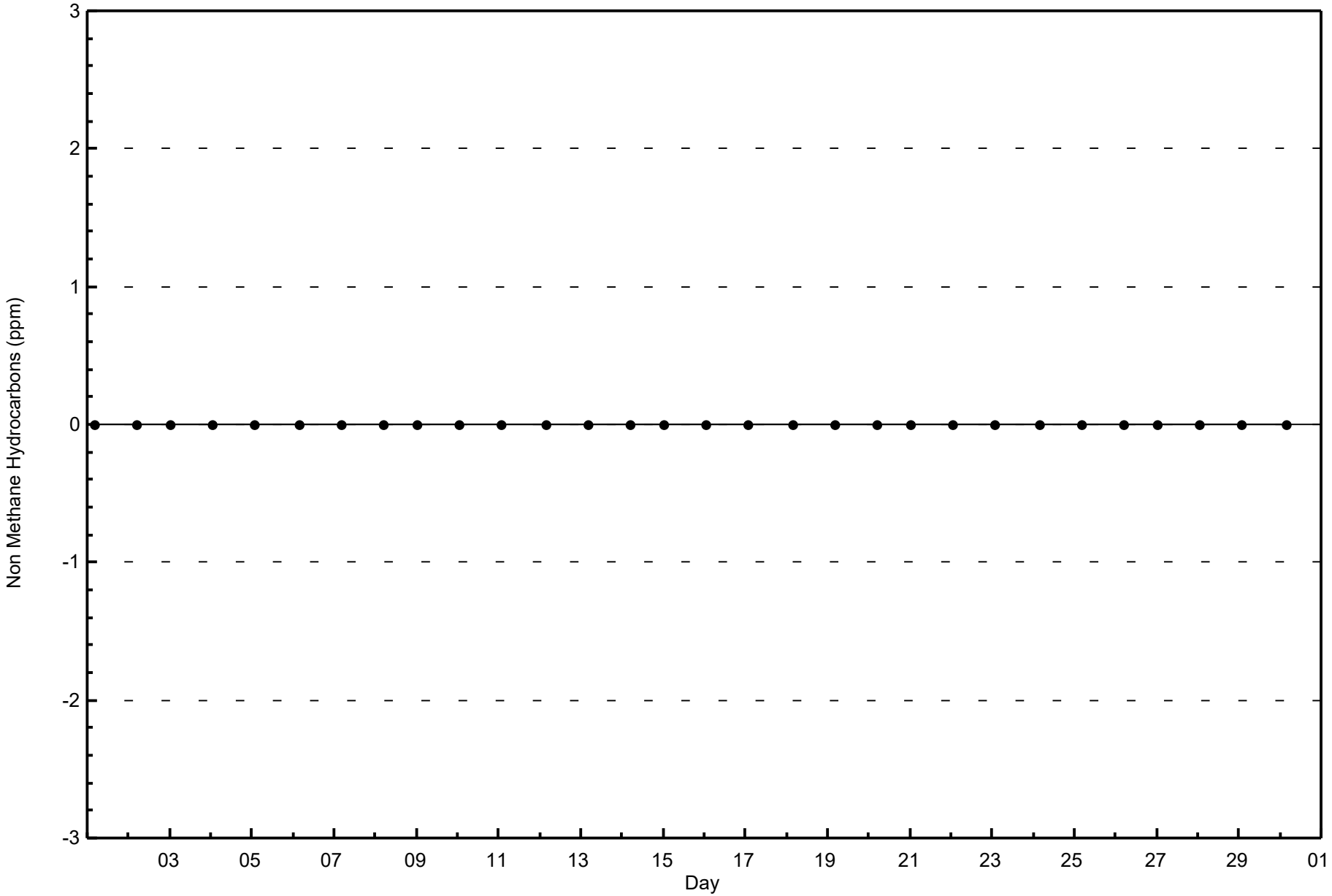
Total Number of Valid Hours: 675

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Conklin - September 2026

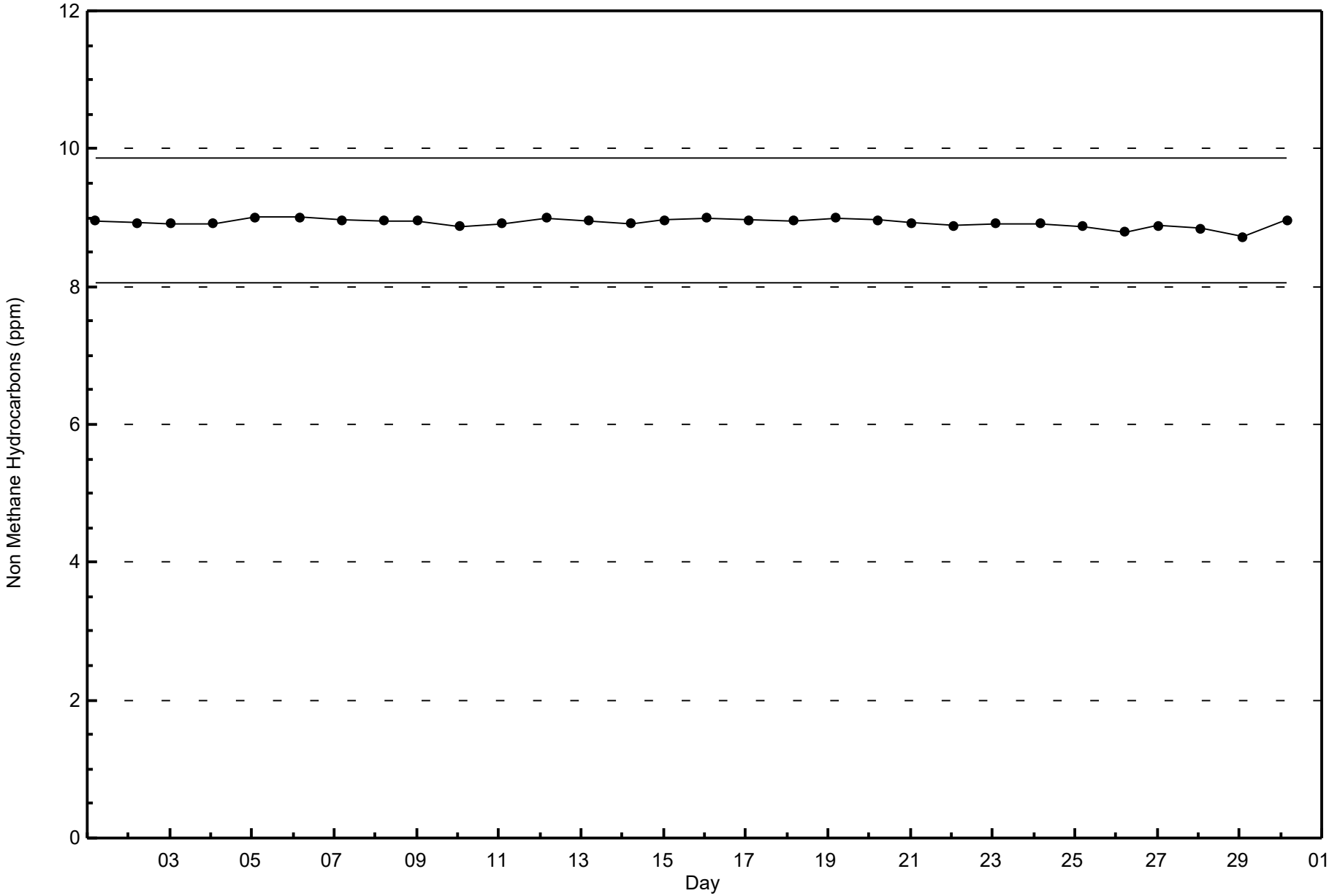


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Conklin - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Conklin - September 2026

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

Maximum Value: 3.7 ppm on Sep 4 03:00

Maximum Daily Average: 2.6 ppm on Sep 21

Minimum Value: 2.0 ppm on Sep 9 15:00

Minimum Daily Average: 2.1 ppm on Sep 10

Maximum Diurnal Average: 2.5 ppm at hour 3

Minimum Diurnal Average: 2.1 ppm at hour 15

Monthly Average: 2.26 ppm

Percentiles: P_1 = 2.0 P_{10} = 2.1 Q_1 = 2.1 Median = 2.1 Q_3 = 2.3 P_{90} = 2.7 P_{99} = 3.4

Hours in Service:	720
Hours of Data:	678
Hours of Missing Data:	42
Hours of Calibration:	35
Percent Operational Time:	99.0

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-Sep	2.4	2.5	2.5	2.7	Z	2.9	2.7	2.5	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.7	2.8	2.7	2.8	2.4	2.9
2-Sep	2.6	2.5	3.4	3.1	2.9	Z	3.1	2.6	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.2	2.3	3.4
3-Sep	Z	2.1	2.2	2.2	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	2.1	2.1	2.1	2.2	2.5	2.4	2.2	2.5
4-Sep	2.8	Z	3.7	3.5	3.5	3.4	3.4	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	2.1	2.1	2.1	2.5	3.7
5-Sep	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	2.3	2.4	2.5	2.8	2.7	2.2	2.8
6-Sep	2.4	2.5	2.5	Z	2.5	2.8	3.0	3.0	3.0	2.7	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.2	2.1	2.2	2.4	2.4	3.0
7-Sep	2.5	2.9	2.8	2.9	Z	2.7	2.8	2.5	2.4	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.3	2.6	2.8	2.6	2.4	2.9
8-Sep	2.4	2.6	2.6	2.4	2.3	Z	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	2.4	3.0	2.7	2.2	2.3	2.3	3.0
9-Sep	Z	2.3	2.3	2.3	2.3	2.3	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	2.1	2.1	2.0	2.0	2.2	2.4
10-Sep	2.0	Z	2.1	2.0	2.0	2.0	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1
11-Sep	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
12-Sep	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	2.4	2.5	2.2	2.2	2.2	2.2	2.5
13-Sep	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	2.1	2.1	2.1	2.1	2.1	2.3	2.4	2.4	2.3	2.3	2.2	2.4
14-Sep	2.3	2.3	2.3	2.7	2.4	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	2.1	2.1	2.1	2.2	2.7
15-Sep	Z	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	C	C	C	C	C	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.2
16-Sep	2.1	Z	2.2	2.5	2.6	2.5	2.3	2.2	2.2	2.1	2.1	M	M	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.5	2.7	2.7	2.6	2.3	2.7
17-Sep	2.5	2.8	Z	2.6	2.6	2.7	2.6	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.4	2.6	2.7	2.7	2.9	2.4	2.9
18-Sep	2.7	2.8	2.6	Z	2.5	2.6	2.7	2.5	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.4	2.7	2.5	2.4	2.5	2.3	2.8
19-Sep	2.6	2.5	2.4	2.4	Z	2.5	2.4	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	2.1	2.1	2.1	2.2	2.6
20-Sep	2.1	2.1	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	2.2	2.2	2.2	2.6	3.2	2.8	2.2	3.2
21-Sep	Z	3.4	2.9	3.6	3.7	3.7	3.4	2.9	2.3	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.5	2.5	2.8	3.3	2.6	3.7
22-Sep	3.4	Z	3.2	2.9	3.0	3.1	3.0	2.8	2.6	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.6	2.7	2.7	2.6	2.5	2.5	3.4
23-Sep	2.5	2.5	Z	2.4	2.3	2.2	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	2.4	2.7	2.7	2.8	2.6	2.4	2.8
24-Sep	2.6	2.6	2.6	Z	2.6	2.6	2.4	2.4	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.3	2.5	2.7	2.8	2.9	2.4	2.9
25-Sep	2.6	2.5	2.3	2.3	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	2.2	2.1	2.1	2.1	2.2	2.2	2.6
26-Sep	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
27-Sep	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	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
28-Sep	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	2.3	2.4	2.4	2.3	2.1	2.4
29-Sep	2.2	2.2	Z	2.1	2.1	2.2	2.2	2.2	M	M	M	M	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	2.2
30-Sep	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	2.2	2.4	2.6	2.4	2.3	2.1	2.6
	2.4	2.4	2.5	2.5	2.4	2.5	2.4	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	2.4	2.4	Diurnal Average	
	3.4	3.4	3.7	3.6	3.7	3.7	3.4	3.0	3.0	2.7	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.6	3.0	2.8	3.2	3.3	Diurnal Maximum	

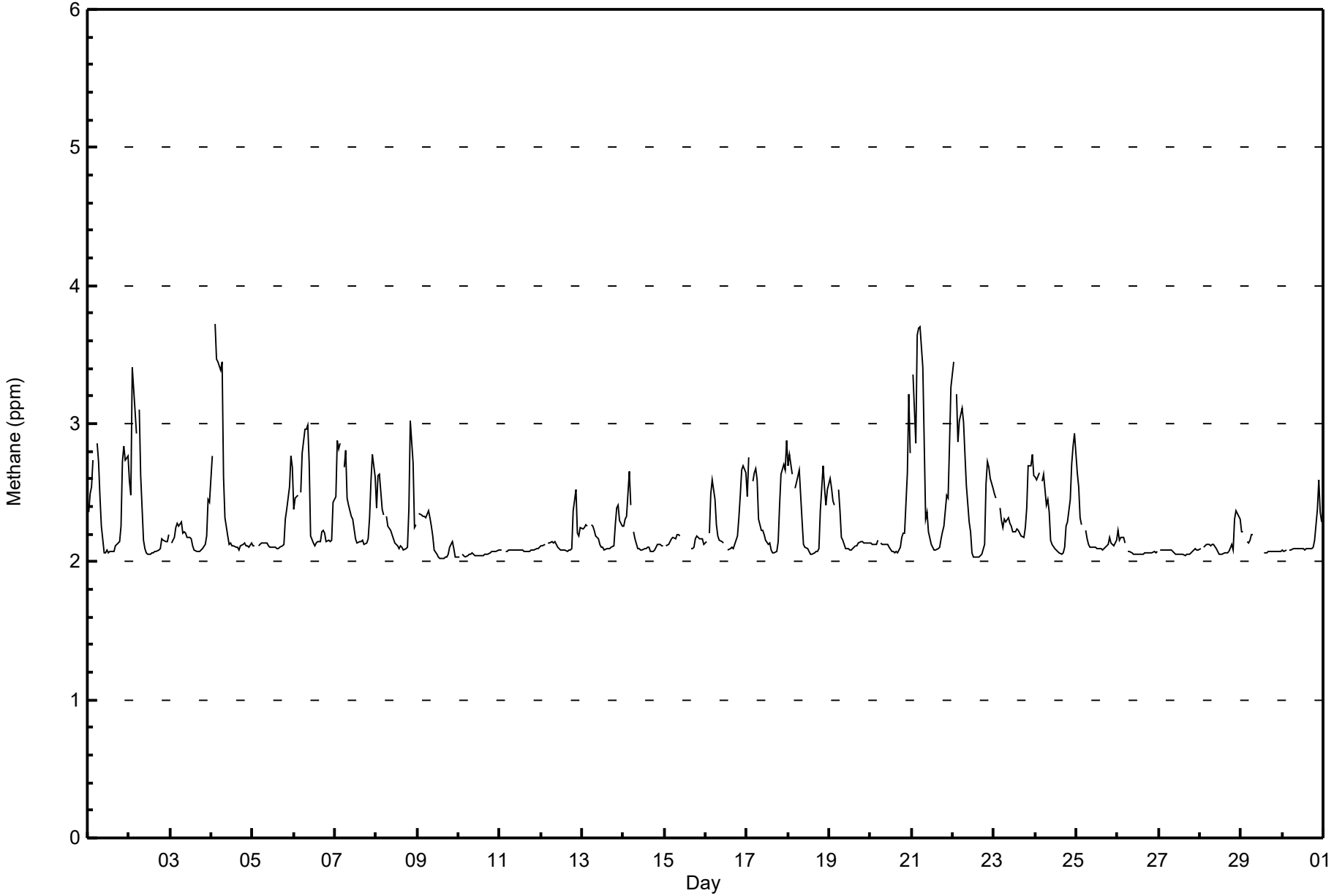
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Conklin - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	29	4.28	4.28
2.1 - 3.0	631	93.07	97.35
3.1 - 10.0	18	2.65	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 678

Total Number of Hours: 720

Methane (CH_4) - ppm
Conklin - September 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	4	10	4	7	4	0	29
2.1 - 3.0	27	15	12	12	13	27	47	56	68	57	63	33	37	24	78	59	628
3.1 - 10.0	0	1	1	0	1	0	4	8	0	0	0	0	0	1	1	1	18
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	27	16	13	12	14	27	51	64	68	57	67	43	41	32	83	60	675

Total Number of Valid Hours: 675

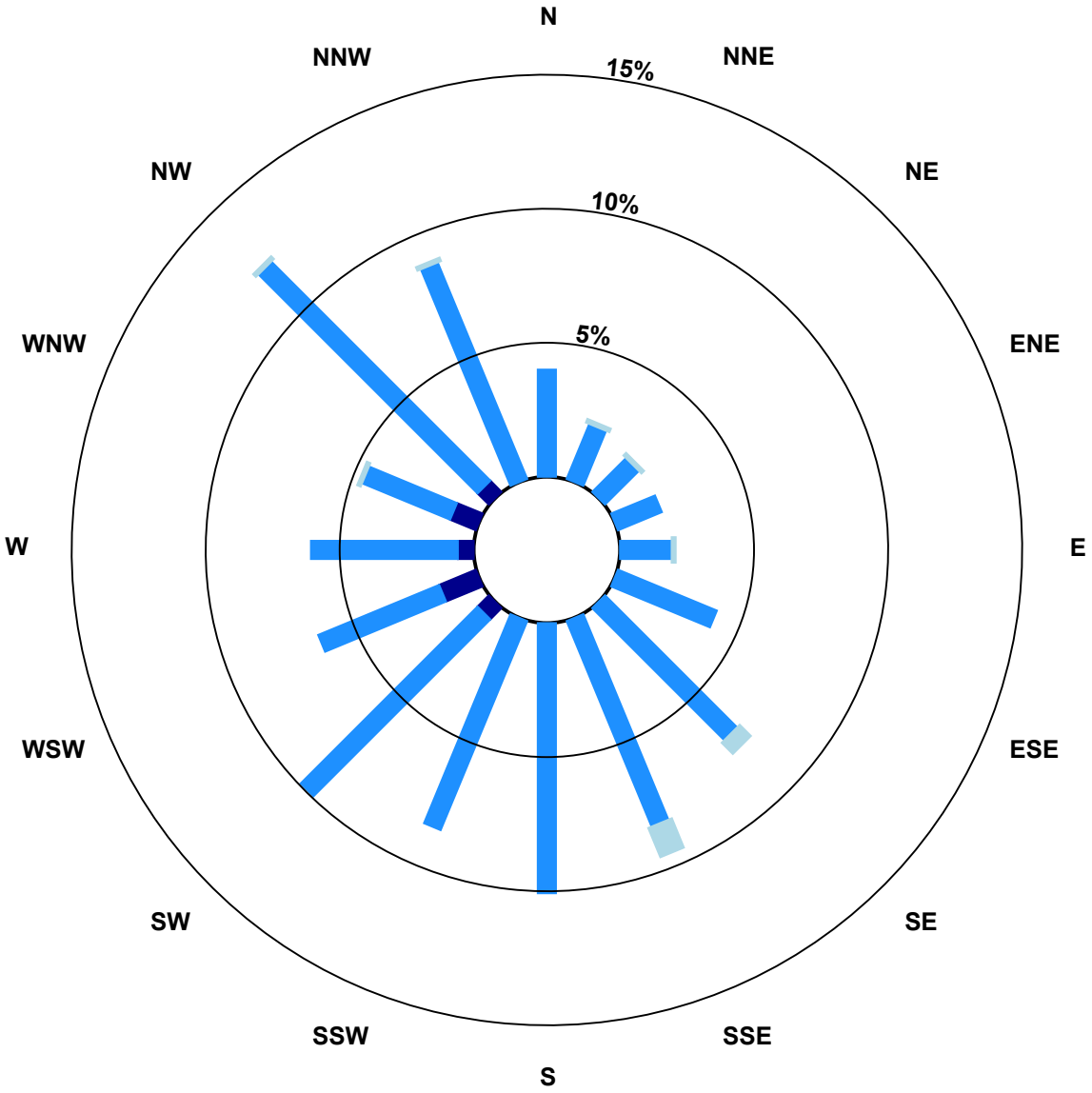
Total Number of Hours: 720

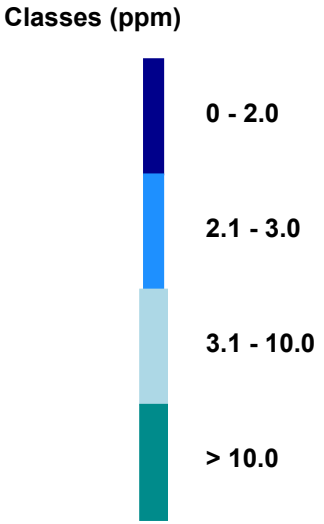
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Methane (CH_4) - ppm

Conklin





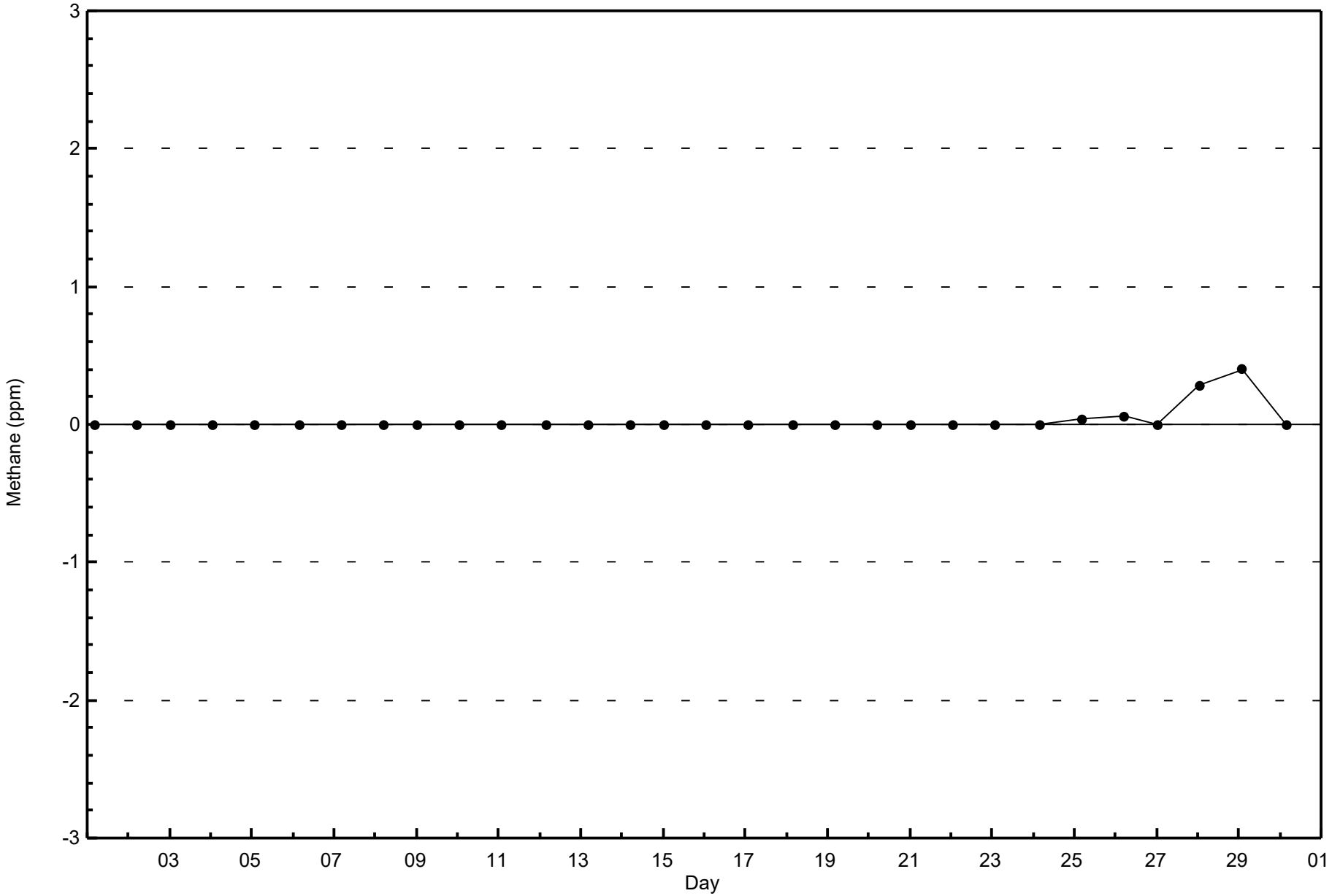
Total Number of Valid Hours: 675

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Conklin - September 2026

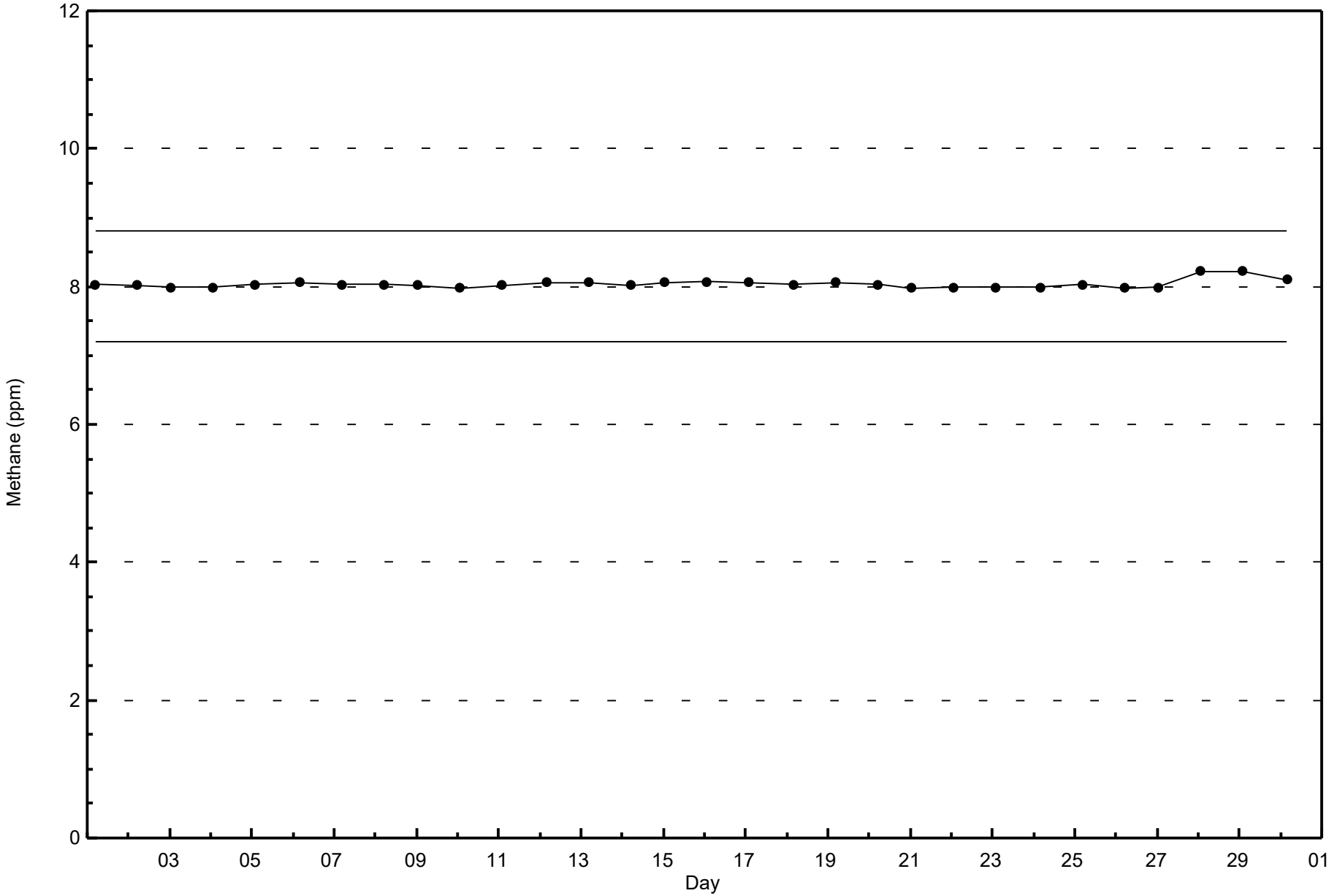


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Conklin - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Conklin - September 2026

Maximum Value: 68.0 ppb on Sep 24 06:00

Maximum Daily Average: 12.1 ppb on Sep 24

Minimum Value: 0.0 ppb on Sep 1 18:00

Minimum Daily Average: 0.0 ppb on Sep 3

Maximum Diurnal Average: 5.0 ppb at hour 8

Minimum Diurnal Average: 0.1 ppb at hour 16

Monthly Average: 1.92 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.9 P_{90} = 5.6 P_{99} = 24.5

Hours in Service:	720
Hours of Data:	684
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-Sep	2.0	3.3	Z	0.9	2.1	5.6	4.6	9.2	0.9	0.6	0.5	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	4.7	43.7	3.4	43.7
2-Sep	20.6	1.8	0.8	Z	0.4	0.2	0.3	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	0.0	1.1	20.6
3-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	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	0.2
4-Sep	7.6	11.6	7.3	10.6	16.0	Z	24.0	12.4	0.7	0.5	0.2	0.1	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	24.0
5-Sep	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	0.9	0.0	0.2	0.3	1.8	2.9	7.3	7.6	0.9	7.6
6-Sep	6.0	Z	8.7	8.3	0.4	0.0	0.3	0.5	0.6	0.5	0.4	0.3	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	8.7
7-Sep	6.4	4.4	Z	6.0	0.7	4.2	2.1	0.7	1.2	0.8	1.1	0.4	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	6.4
8-Sep	14.6	3.3	0.0	Z	0.0	0.9	0.1	0.2	0.3	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.3	5.4	3.7	2.6	2.0	1.6	14.6
9-Sep	1.8	2.1	1.5	1.1	Z	0.6	0.2	14.9	0.6	3.1	0.0	0.1	0.0	0.0	0.3	0.2	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	1.2	14.9
10-Sep	0.0	0.0	1.2	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.2
11-Sep	Z	0.8	0.0	2.3	0.0	0.0	0.0	0.0	2.4	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	0.0	0.2	2.4
12-Sep	0.0	Z	0.0	0.0	0.0	4.4	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.2	3.9	5.7	1.6	0.2	0.4	0.8	5.7
13-Sep	0.1	0.3	Z	0.6	0.1	0.3	0.4	0.6	0.2	0.4	0.5	0.1	0.1	0.2	0.4	0.0	0.0	0.0	0.0	5.5	2.8	5.8	4.9	2.5	1.1	5.8
14-Sep	2.0	0.2	0.9	Z	0.0	0.0	0.1	0.0	0.1	0.2	0.2	0.1	0.2	0.4	1.6	0.3	0.0	0.0	0.0	0.0	0.0	11.2	0.0	0.0	0.8	11.2
15-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.2	0.1	0.3	0.6	0.0	0.7	2.3	0.2	0.1	0.1	0.2	3.0	0.5	0.6	1.7	0.7	0.1	0.5	3.0
16-Sep	0.0	0.4	0.0	0.0	2.4	Z	1.3	0.6	0.4	0.4	0.2	0.1	0.1	0.1	0.5	0.1	0.1	0.0	0.0	2.9	9.7	7.4	11.9	13.9	2.3	13.9
17-Sep	Z	10.0	9.7	6.2	6.1	6.9	6.4	1.4	1.6	0.7	0.4	0.3	0.2	0.2	1.4	0.0	0.0	0.0	0.1	3.3	3.5	1.5	11.8	2.8	3.2	11.8
18-Sep	5.7	Z	1.5	5.5	4.3	10.0	12.6	14.5	8.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.4	3.2	0.5	1.0	4.0	3.9	17.4
19-Sep	0.6	0.7	Z	3.8	4.8	2.7	29.0	4.1	2.2	0.7	0.7	0.3	0.4	0.6	0.6	0.4	0.3	0.1	0.1	0.3	0.3	0.2	0.4	0.0	2.3	29.0
20-Sep	0.0	0.0	0.1	Z	0.5	0.4	0.1	0.1	0.1	1.0	0.2	0.1	0.5	0.1	0.0	0.1	0.0	0.2	0.1	0.3	0.1	0.0	0.7	0.1	0.2	1.0
21-Sep	0.0	0.0	0.0	0.1	Z	0.1	0.3	0.7	1.7	1.1	0.3	3.3	0.5	0.6	0.7	0.5	0.4	0.3	0.5	0.3	11.1	0.5	13.3	11.0	2.1	13.3
22-Sep	5.7	12.4	11.6	6.9	5.6	Z	3.8	23.6	5.2	0.9	C	C	C	C	C	C	0.0	1.0	0.0	1.0	0.8	18.5	20.4	13.4	--	23.6
23-Sep	Z	9.0	20.1	16.5	5.9	3.5	3.8	10.0	8.8	6.3	2.1	0.9	0.8	1.5	0.5	0.2	0.0	0.0	0.3	0.0	0.2	4.3	2.9	10.5	4.7	20.1
24-Sep	11.2	Z	44.0	27.2	39.4	68.0	17.7	50.4	12.7	0.8	0.2	0.1	0.1	0.5	0.1	0.1	0.0	1.4	0.0	0.3	0.8	0.9	1.2	0.8	12.1	68.0
25-Sep	0.2	1.9	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	0.1	1.9
26-Sep	0.3	0.3	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.0	0.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0
27-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.2	0.1	0.2	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.2	4.7
28-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.3	0.2	0.0	0.1	0.2	1.1	0.2	0.0	0.0	0.2	1.0	0.4	2.5	9.1	4.9	3.1	1.0	9.1
29-Sep	Z	1.5	1.1	0.4	0.1	0.1	2.3	4.1	1.0	1.0	0.2	0.0	0.1	1.7	0.0	0.1	0.1	0.0	0.1	0.1	0.0	2.2	0.0	0.0	0.7	4.1
30-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	2.8	0.1	1.5	0.4	4.0
	3.4	2.6	4.3	3.8	3.6	4.3	3.7	5.0	1.7	0.7	0.3	0.2	0.2	0.4	0.2	0.1	0.1	0.2	0.2	1.3	1.9	2.5	3.0	3.9	Diurnal Average	
	20.6	12.4	44.0	27.2	39.4	68.0	29.0	50.4	12.7	6.3	2.1	3.3	1.3	2.3	1.6	0.5	2.0	1.4	3.0	17.4	11.1	18.5	20.4	43.7	Diurnal Maximum	

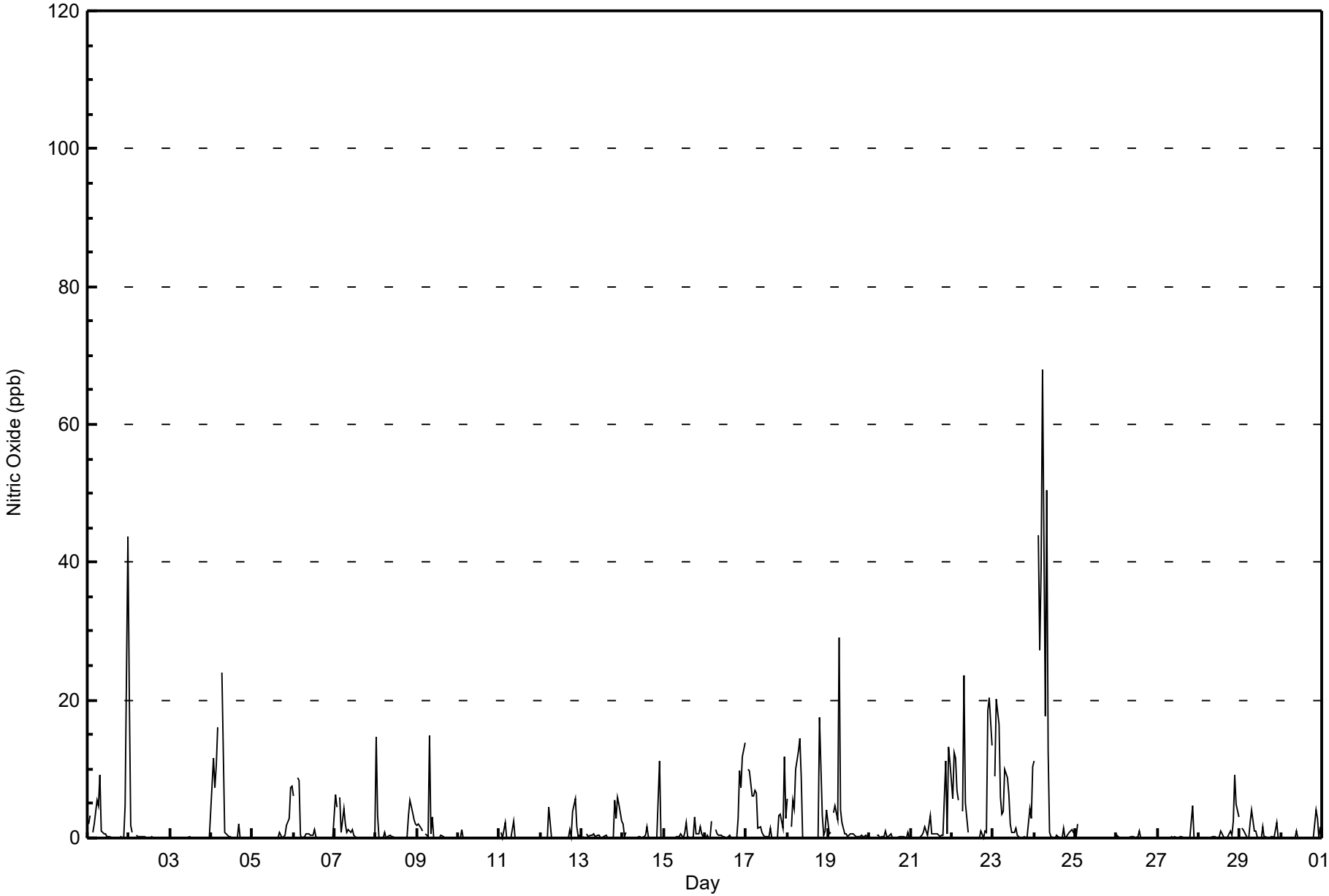
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Conklin - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	674	98.54	98.54
21 - 40	6	0.88	99.42
11 - 80	4	0.58	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Conklin - September 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	17	14	10	15	29	51	59	65	57	69	44	43	34	79	58	670
21 - 40	0	0	0	1	0	0	0	3	2	0	0	0	0	0	0	0	6
11 - 80	0	0	0	0	0	0	0	1	2	0	0	0	0	0	1	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	26	17	14	11	15	29	51	63	69	57	69	44	43	34	80	58	680

Total Number of Valid Hours: 680

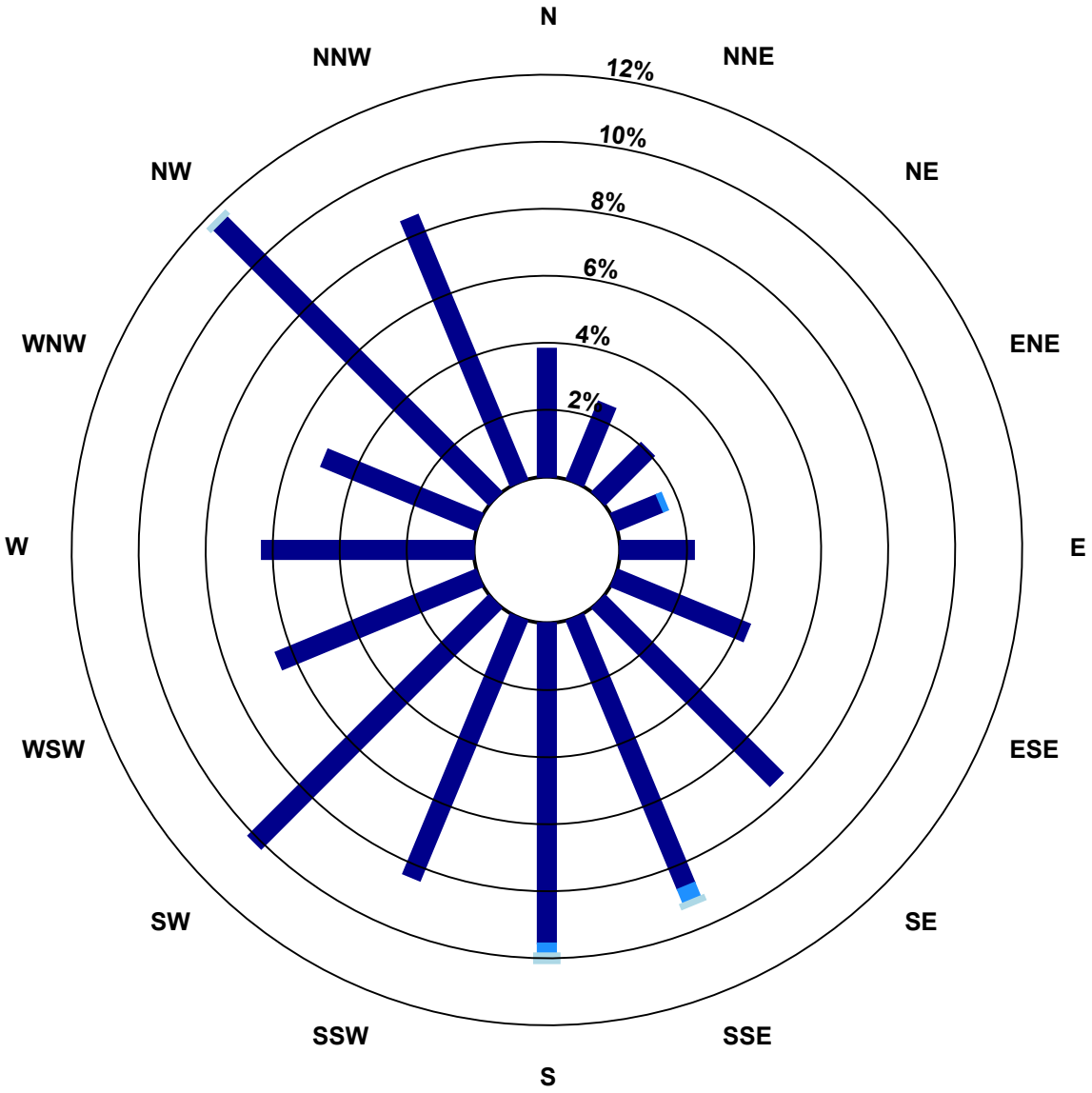
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Conklin



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

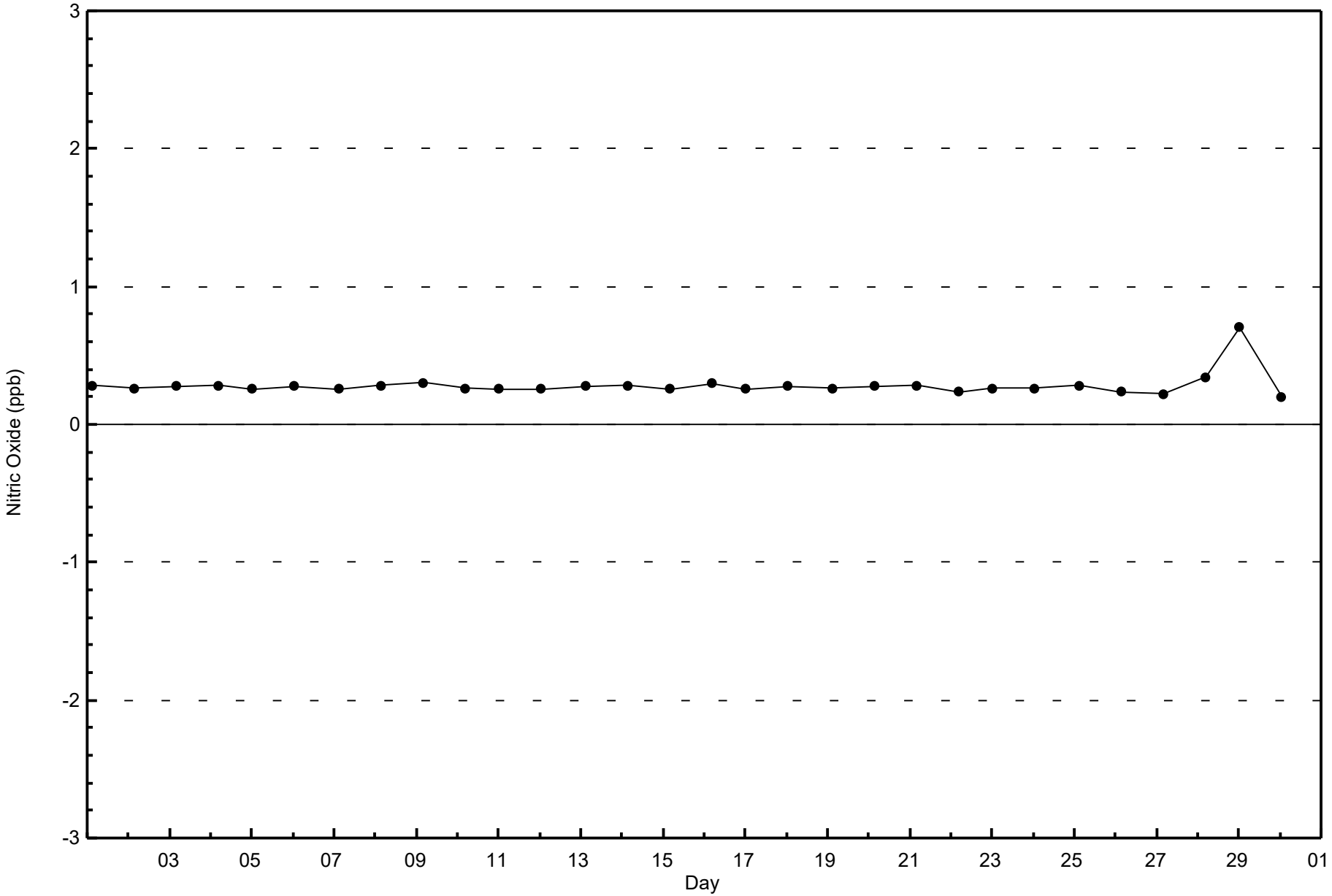
Total Number of Valid Hours: 680

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Conklin - September 2026

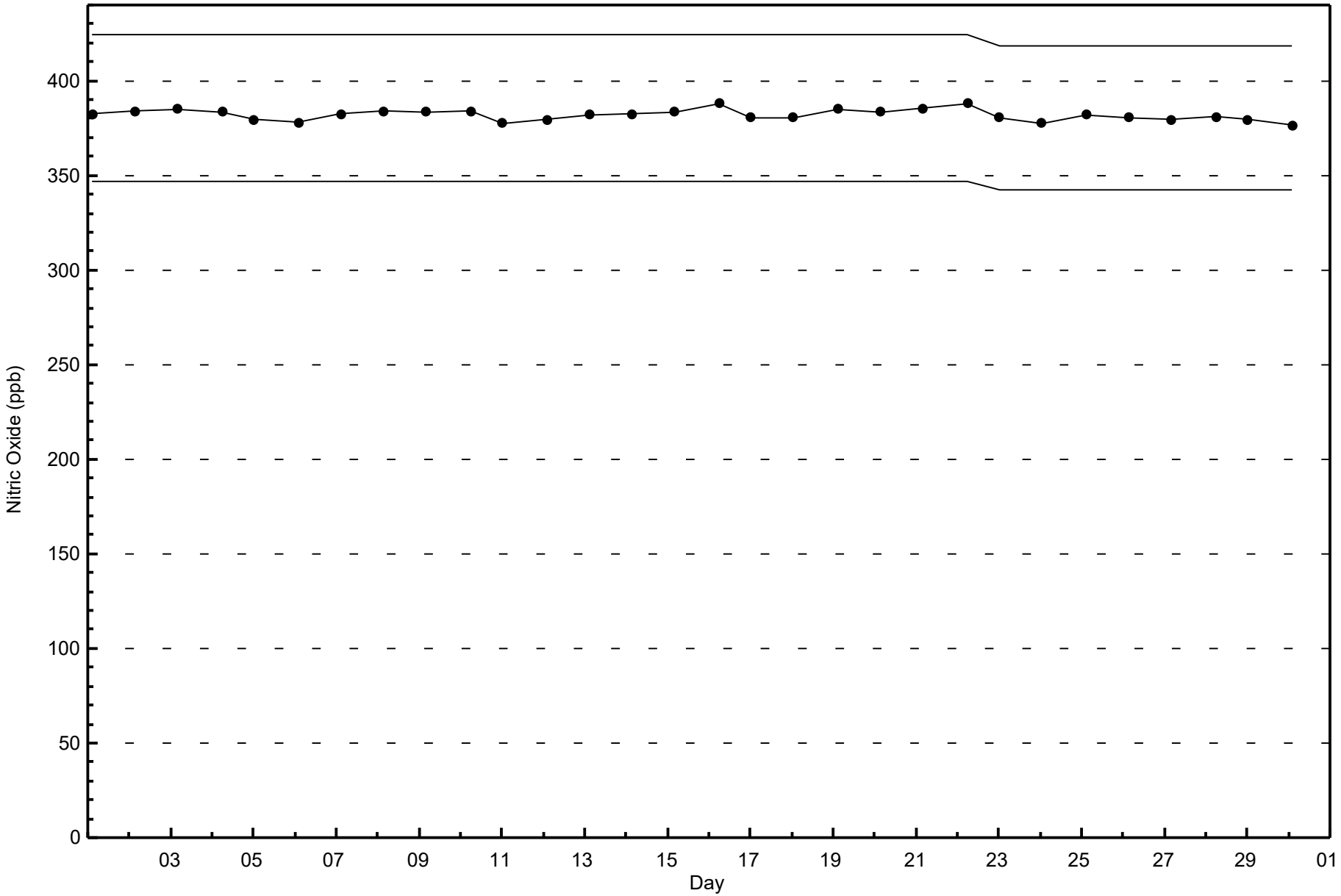


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Conklin - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Conklin - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 15.3 ppb on Sep 28 22:00 Maximum Daily Average: 3.5 ppb on Sep 21

Minimum Value: 0.0 ppb on Sep 9 08:00 Minimum Daily Average: 0.3 ppb on Sep 11
Maximum Diurnal Average: 3.7 ppb at hour 20 Minimum Diurnal Average: 0.7 ppb at hour 13
Monthly Average: 1.80 ppb Percentiles: P_1 = 0.1 P_{10} = 0.3 Q_1 = 0.5 Median = 1.0 Q_3 = 2.3 P_{90} = 4.5 P_{99} = 9.6

Hours in Service:	720
Hours of Data:	684
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-Sep	2.6	3.3	Z	1.4	1.2	3.4	2.5	4.8	1.6	1.5	1.3	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.2	4.5	1.1	1.0	3.2	4.3	2.0	4.8
2-Sep	5.5	3.2	1.6	Z	1.0	0.3	0.2	0.7	1.0	0.9	0.8	0.5	0.5	0.7	0.5	0.5	0.3	0.3	0.3	1.7	0.4	0.3	0.4	0.4	1.0	5.5
3-Sep	1.4	0.8	1.1	0.5	Z	1.0	0.8	0.4	0.6	0.4	0.5	0.8	0.7	0.6	0.6	0.4	0.8	0.6	0.8	0.7	0.6	1.3	0.7	0.6	0.7	1.4
4-Sep	2.6	3.6	1.9	2.5	3.0	Z	3.2	3.5	1.7	1.6	1.2	1.0	0.7	0.7	0.6	0.7	1.1	1.1	1.5	1.9	0.8	0.5	0.6	1.4	1.6	3.6
5-Sep	Z	0.6	0.8	0.7	0.5	0.5	0.6	0.4	0.4	0.5	0.2	0.3	0.2	0.1	0.1	0.1	0.7	0.4	1.3	2.6	2.2	2.0	2.2	2.9	0.9	2.9
6-Sep	2.8	Z	2.7	3.1	1.0	0.7	0.9	0.6	0.6	0.7	1.2	0.8	0.2	0.8	0.5	0.7	0.7	0.6	0.7	0.4	0.6	0.5	0.5	0.3	0.9	3.1
7-Sep	3.1	2.5	Z	2.4	1.9	3.6	1.7	1.5	1.3	1.6	2.3	1.4	0.9	0.5	0.6	0.3	0.3	0.2	0.1	0.3	0.1	0.3	0.3	0.3	1.2	3.6
8-Sep	1.8	1.2	0.5	Z	1.0	1.9	1.1	1.0	1.0	1.0	0.9	0.6	0.5	0.7	0.9	0.7	0.5	0.8	2.8	7.2	4.8	4.3	3.9	3.9	1.9	7.2
9-Sep	3.9	4.4	3.9	2.9	Z	2.2	1.0	0.0	1.5	1.2	0.5	0.5	0.4	0.4	0.7	0.8	0.3	0.3	1.2	3.4	3.2	0.7	0.3	0.3	1.5	4.4
10-Sep	0.3	0.4	0.4	0.3	0.2	Z	0.6	0.6	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.4	0.6
11-Sep	Z	0.9	0.4	0.5	0.2	0.1	0.2	0.2	1.1	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.4	0.5	0.4	0.3	1.1
12-Sep	0.4	Z	0.5	0.3	0.2	1.8	1.4	0.5	0.4	0.4	0.2	0.3	0.3	0.3	0.2	0.3	0.3	1.2	2.0	7.9	6.7	4.1	1.3	1.7	1.4	7.9
13-Sep	0.7	1.3	Z	2.2	1.1	1.3	1.4	1.2	0.8	1.3	1.6	0.7	0.7	0.9	1.2	0.8	0.8	1.0	1.6	9.9	9.0	9.5	8.0	8.7	2.9	9.9
14-Sep	6.1	2.5	4.4	Z	0.9	1.7	3.6	2.3	1.2	1.0	0.8	0.6	1.2	1.4	2.8	1.8	0.6	0.5	0.6	1.0	1.3	3.1	1.4	0.7	1.8	6.1
15-Sep	0.4	0.5	0.5	0.5	Z	1.1	0.7	0.8	0.4	0.5	0.8	0.3	0.6	2.2	0.6	0.4	0.4	1.0	6.3	3.3	3.4	4.4	2.3	1.2	1.4	6.3
16-Sep	0.9	2.5	0.2	0.4	2.1	Z	3.3	1.5	1.1	0.8	0.6	0.5	0.4	0.5	0.9	0.4	0.6	0.9	0.9	4.6	7.5	5.4	5.0	4.6	2.0	7.5
17-Sep	Z	2.7	3.0	2.4	2.1	2.3	2.0	2.5	2.8	1.8	1.4	1.1	0.9	1.0	1.8	0.5	0.5	0.5	1.7	5.6	5.0	3.4	5.4	1.9	2.3	5.6
18-Sep	2.1	Z	1.0	1.9	1.6	2.9	2.5	3.5	4.0	0.5	0.3	0.4	0.4	0.2	0.6	0.2	0.2	0.8	3.0	9.0	3.4	1.3	1.4	3.4	1.9	9.0
19-Sep	1.1	0.8	Z	1.7	2.2	1.9	12.8	6.1	4.4	1.8	1.7	1.1	1.2	1.7	2.4	2.3	2.1	2.3	3.6	5.9	4.5	4.5	4.6	3.0	3.2	12.8
20-Sep	3.2	3.4	4.9	Z	6.6	5.2	1.7	1.6	1.1	1.6	1.2	1.3	1.3	1.1	1.0	1.1	1.0	4.1	6.6	6.7	6.7	3.1	2.2	1.9	3.0	6.7
21-Sep	0.8	0.5	0.4	0.4	Z	0.5	0.6	1.0	2.3	2.3	1.9	3.4	2.3	2.5	3.1	2.9	2.9	3.2	7.0	8.3	11.2	5.1	11.0	7.2	3.5	11.2
22-Sep	3.9	5.0	3.6	2.2	1.7	Z	1.0	3.1	2.1	1.8	C	C	C	C	C	C	0.3	1.8	0.5	4.7	4.4	7.8	9.1	7.8	--	9.1
23-Sep	Z	6.0	5.8	5.3	4.3	3.5	2.5	4.1	4.5	5.4	4.6	3.3	3.0	3.4	2.2	1.9	1.6	1.4	3.1	1.5	1.0	1.1	0.8	2.2	3.2	6.0
24-Sep	2.4	Z	3.7	2.8	3.2	3.8	3.6	9.0	4.6	1.6	1.0	0.6	0.7	1.5	0.9	0.8	1.5	6.6	3.8	8.3	6.0	6.4	4.5	3.0	3.5	9.0
25-Sep	1.8	3.2	Z	0.7	1.0	0.9	1.0	1.1	0.5	0.6	0.3	0.4	0.3	0.5	0.8	0.7	0.7	0.6	0.7	1.5	0.6	0.4	0.6	0.7	0.9	3.2
26-Sep	1.8	1.1	1.1	Z	1.2	0.4	0.4	0.4	0.7	0.4	0.4	0.3	0.4	0.8	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.2	0.1	0.2	0.5	1.8
27-Sep	0.3	0.4	0.4	0.4	Z	0.5	0.4	0.4	0.4	0.4	0.4	0.2	0.4	0.5	0.5	0.2	0.3	0.3	0.4	0.4	4.3	1.2	0.1	0.1	0.6	4.3
28-Sep	0.1	0.4	0.4	0.5	0.6	Z	0.3	0.3	0.6	0.6	0.5	0.5	0.6	1.1	1.0	0.5	0.9	3.8	11.5	8.0	9.2	15.3	10.4	8.5	3.3	15.3
29-Sep	Z	6.7	6.6	6.2	2.6	2.7	8.0	7.7	2.6	2.1	0.7	0.6	0.6	1.0	0.5	0.7	0.7	0.6	1.0	1.0	0.3	1.0	0.4	0.5	2.4	8.0
30-Sep	0.5	Z	0.6	0.6	0.6	0.6	0.7	0.8	0.4	1.2	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.3	0.2	0.7	6.7	3.4	1.1	3.1	1.0	6.7
	2.0	2.3	2.0	1.7	1.7	1.8	2.0	2.1	1.5	1.2	1.0	0.8	0.7	0.9	0.9	0.7	0.7	1.2	2.2	3.7	3.5	3.1	2.8	2.5	Diurnal Average	
	6.1	6.7	6.6	6.2	6.6	5.2	12.8	9.0	4.6	5.4	4.6	3.4	3.0	3.4	3.1	2.9	2.9	6.6	11.5	9.9	11.2	15.3	11.0	8.7	Diurnal Maximum	

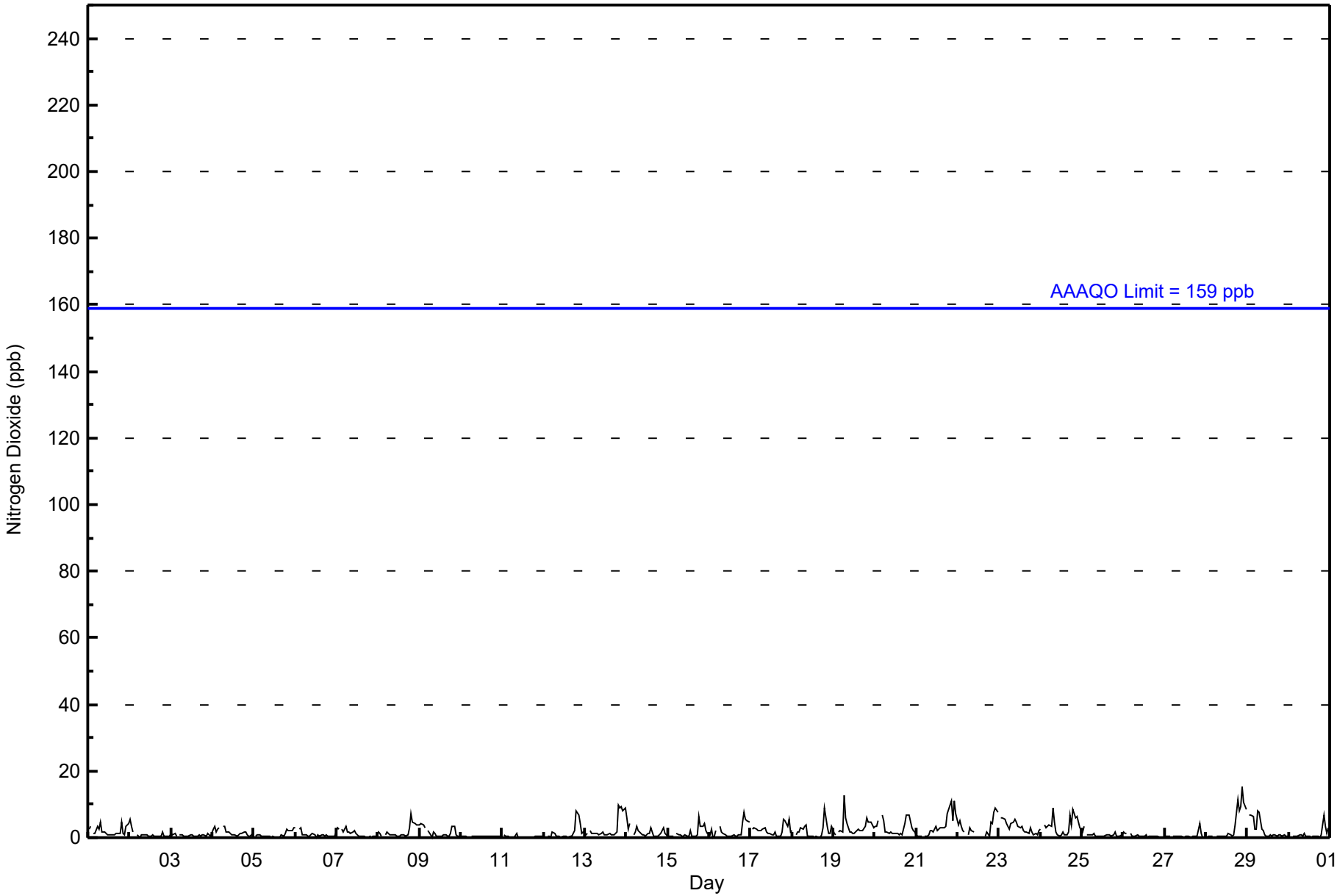
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Conklin - September 2026



Nitrogen Dioxide (NO_2) - ppb
Conklin - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Conklin - September 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	17	14	11	15	29	51	63	69	57	69	44	43	34	80	58	680
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	26	17	14	11	15	29	51	63	69	57	69	44	43	34	80	58	680

Total Number of Valid Hours: 680

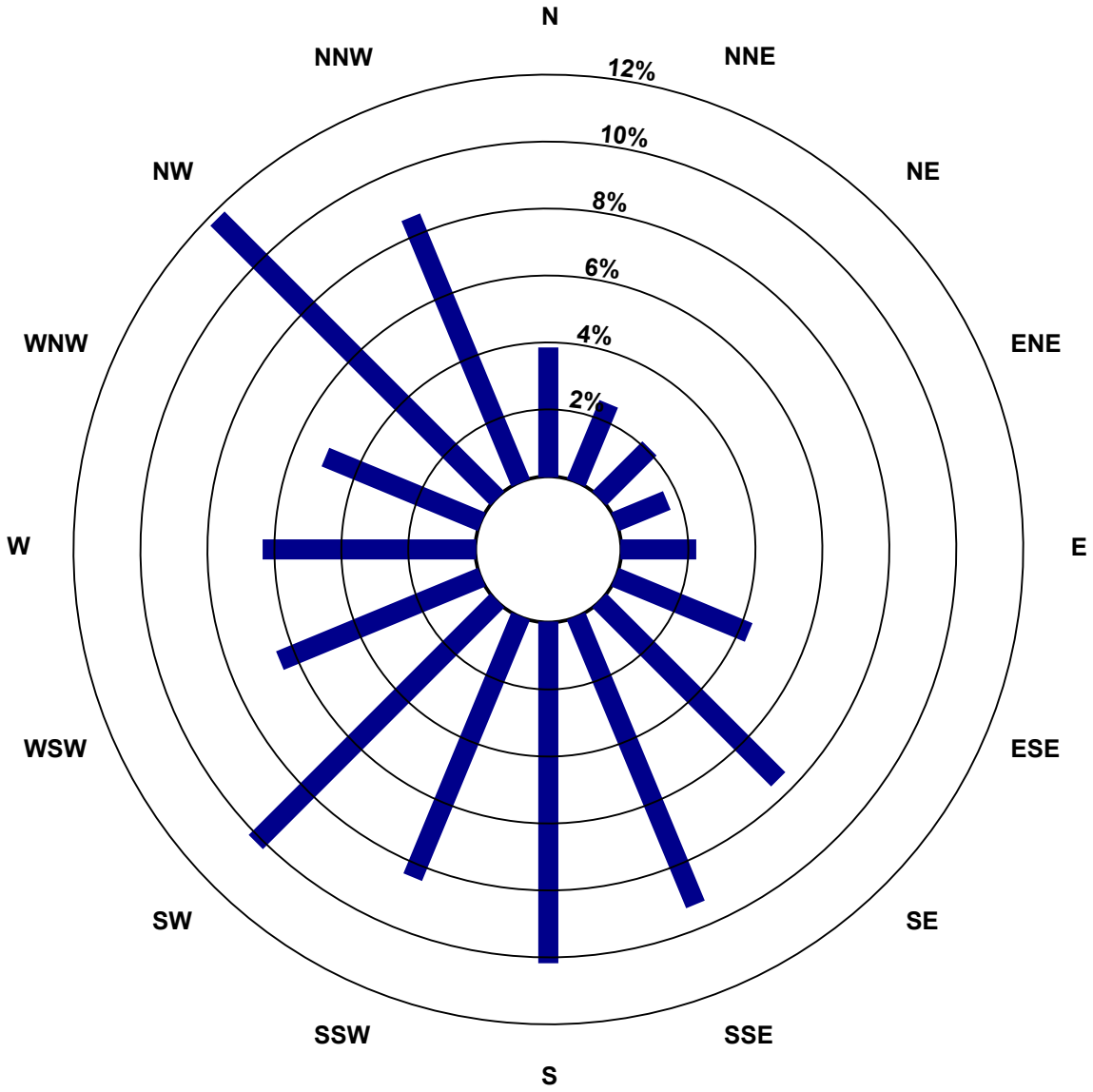
Total Number of Hours: 720

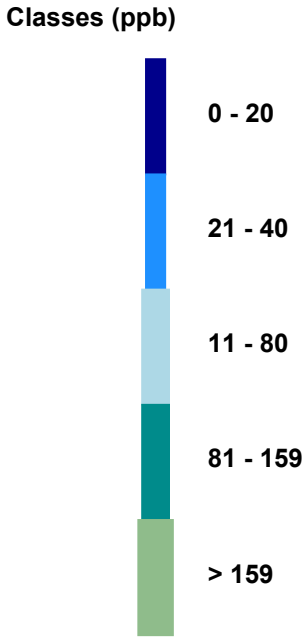
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Conklin





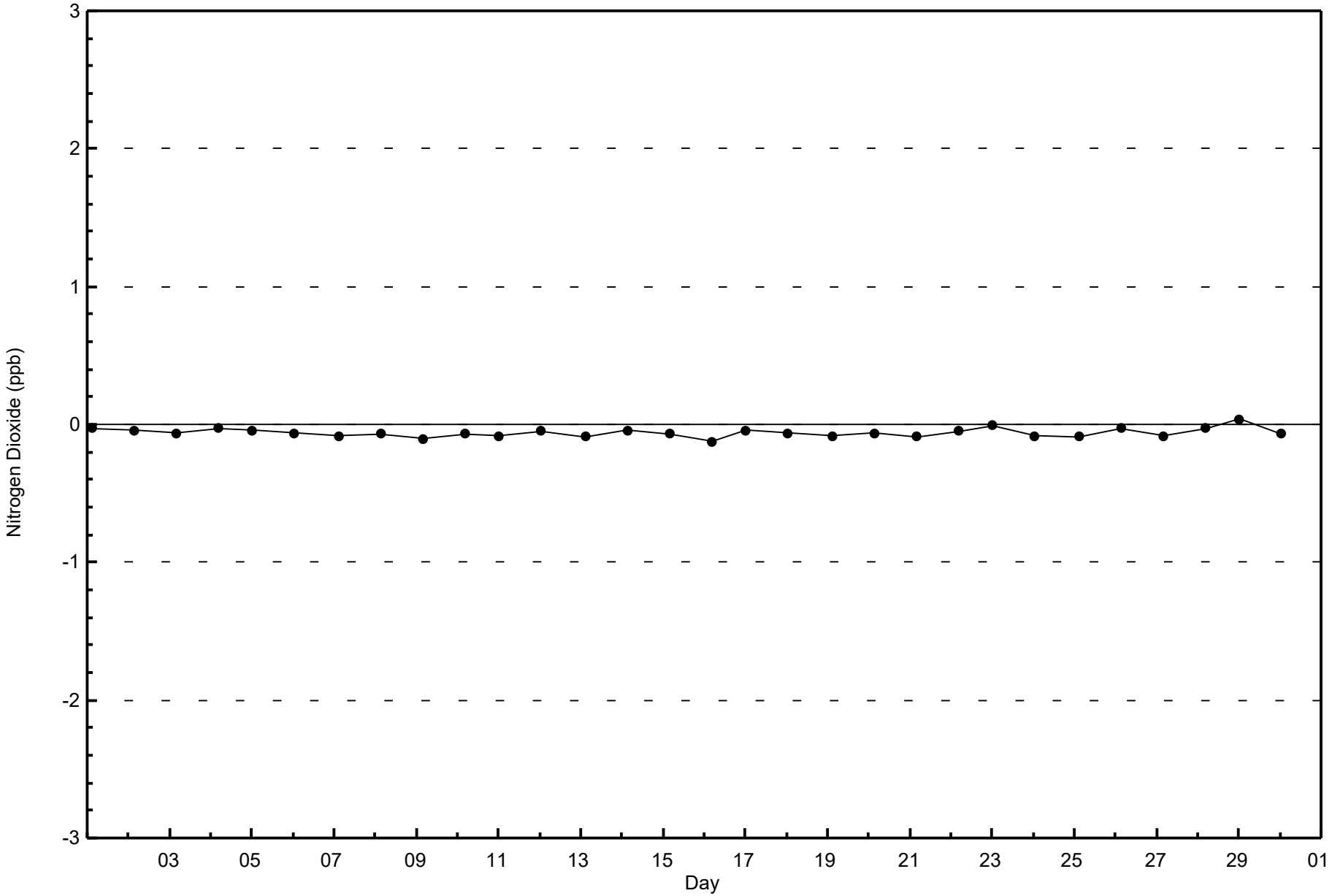
Total Number of Valid Hours: 680

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Conklin - September 2026

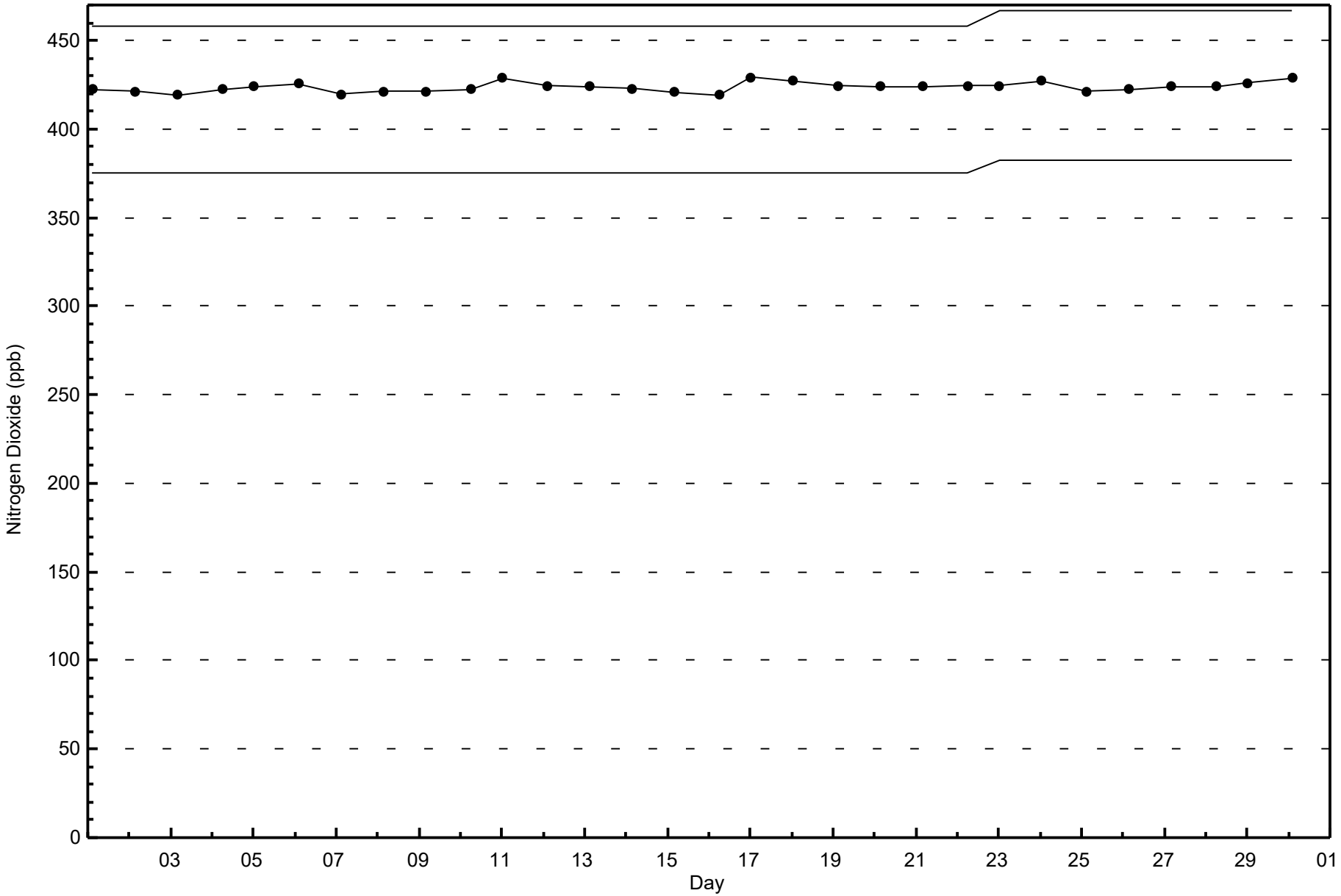


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Conklin - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Conklin - September 2026

Maximum Value: 71.8 ppb on Sep 24 06:00

Maximum Daily Average: 15.6 ppb on Sep 24

Minimum Value: 0.1 ppb on Sep 28 00:00

Minimum Daily Average: 0.5 ppb on Sep 10

Maximum Diurnal Average: 7.0 ppb at hour 8

Minimum Diurnal Average: 0.8 ppb at hour 16

Monthly Average: 3.73 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.3 Q_1 = 0.5 Median = 1.1 Q_3 = 3.8 P_{90} = 10.2 P_{99} = 29.6

Hours in Service:	720
Hours of Data:	684
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-Sep	4.6	6.6	Z	2.3	3.3	9.0	7.1	14.0	2.5	2.1	1.8	0.9	0.9	0.9	0.9	0.9	1.1	1.1	1.2	4.6	1.1	1.0	7.9	48.0	5.4	48.0
2-Sep	26.1	5.0	2.4	Z	1.4	0.5	0.5	1.0	1.2	1.0	0.9	0.5	0.5	0.8	0.5	0.5	0.3	0.3	0.3	1.7	0.4	0.3	0.4	0.4	2.0	26.1
3-Sep	1.4	0.8	1.1	0.5	Z	1.0	0.8	0.4	0.6	0.4	0.5	1.0	0.8	0.7	0.6	0.4	0.9	0.6	0.8	0.7	0.6	1.3	0.7	0.6	0.7	1.4
4-Sep	10.2	15.2	9.2	13.1	19.0	Z	27.2	15.9	2.4	2.1	1.4	1.1	0.7	0.7	0.6	0.7	3.1	1.1	1.5	1.9	0.8	0.5	0.6	1.4	5.7	27.2
5-Sep	Z	0.6	0.8	0.7	0.5	0.5	0.6	0.4	0.4	0.5	0.2	0.3	0.2	0.1	0.1	0.1	1.6	0.4	1.5	2.9	4.0	4.9	9.5	10.5	1.8	10.5
6-Sep	8.8	Z	11.4	11.4	1.4	0.7	1.2	1.1	1.2	1.2	1.6	1.1	1.5	0.9	0.5	0.7	0.7	0.6	0.7	0.4	0.6	0.5	0.5	0.3	2.1	11.4
7-Sep	9.5	6.9	Z	8.4	2.6	7.8	3.8	2.2	2.5	2.4	3.4	1.8	1.1	0.5	0.7	0.3	0.3	0.2	0.1	0.3	0.1	0.3	0.3	0.3	2.4	9.5
8-Sep	16.4	4.5	0.5	Z	1.0	2.8	1.2	1.2	1.3	1.2	1.1	0.6	0.5	0.7	0.9	0.7	0.5	0.8	3.0	10.5	10.2	8.0	6.5	5.9	3.5	16.4
9-Sep	5.7	6.5	5.4	4.0	Z	2.8	1.2	14.9	2.1	4.3	0.5	0.6	0.4	0.4	1.0	1.0	0.3	0.3	1.2	3.5	3.3	0.7	0.3	0.3	2.6	14.9
10-Sep	0.3	0.4	1.6	0.3	0.2	Z	0.6	0.6	0.6	0.4	0.4	0.4	0.5	0.4	0.5	0.6	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.5	1.6
11-Sep	Z	1.7	0.4	2.8	0.2	0.1	0.2	0.2	3.5	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.4	0.5	0.4	0.5	3.5
12-Sep	0.4	Z	0.5	0.3	0.2	6.2	1.5	0.6	0.5	0.5	0.2	0.3	0.3	0.3	0.2	0.3	0.3	2.4	2.2	11.8	12.4	5.7	1.5	2.1	2.2	12.4
13-Sep	0.8	1.6	Z	2.8	1.2	1.6	1.8	1.8	1.0	1.7	2.1	0.8	0.8	1.1	1.6	0.8	0.8	1.0	1.6	15.4	11.8	15.3	12.9	11.2	4.0	15.4
14-Sep	8.1	2.7	5.3	Z	0.9	1.7	3.7	2.3	1.3	1.2	1.0	0.7	1.4	1.8	4.4	2.1	0.6	0.5	0.6	1.0	1.3	14.3	1.4	0.7	2.6	14.3
15-Sep	0.4	0.5	0.5	0.5	Z	1.1	0.7	1.0	0.5	0.8	1.4	0.3	1.3	4.5	0.8	0.5	0.5	1.2	9.3	3.8	4.0	6.1	3.0	1.3	1.9	9.3
16-Sep	0.9	2.9	0.2	0.4	4.5	Z	4.6	2.1	1.5	1.2	0.8	0.6	0.5	0.6	1.4	0.5	0.7	0.9	0.9	7.5	17.2	12.8	16.9	18.5	4.3	18.5
17-Sep	Z	12.7	12.7	8.6	8.2	9.2	8.4	3.9	4.4	2.5	1.8	1.4	1.1	1.2	3.2	0.5	0.5	0.5	1.8	8.9	8.5	4.9	17.2	4.7	5.5	17.2
18-Sep	7.8	Z	2.5	7.4	5.9	12.9	15.1	18.0	12.8	0.6	0.3	0.4	0.4	0.2	0.6	0.2	0.2	0.8	3.0	26.4	6.6	1.8	2.4	7.4	5.8	26.4
19-Sep	1.7	1.5	Z	5.5	7.0	4.6	41.8	10.2	6.6	2.5	2.4	1.4	1.6	2.3	3.0	2.7	2.4	2.4	3.7	6.2	4.8	4.7	5.0	3.0	5.5	41.8
20-Sep	3.2	3.4	5.0	Z	7.1	5.6	1.8	1.7	1.2	2.6	1.4	1.4	1.8	1.2	1.0	1.2	1.0	4.3	6.7	7.0	6.8	3.1	2.9	2.0	3.2	7.1
21-Sep	0.8	0.5	0.4	0.5	Z	0.6	0.9	1.7	4.0	3.4	2.2	6.7	2.8	3.1	3.8	3.4	3.3	3.5	7.5	8.6	22.3	5.6	24.3	18.2	5.6	24.3
22-Sep	9.6	17.4	15.2	9.1	7.3	Z	4.8	26.7	7.3	2.6	C	C	C	C	C	C	0.3	2.8	0.5	5.7	5.2	26.3	29.5	21.2	--	29.5
23-Sep	Z	15.0	25.9	21.8	10.2	7.0	6.3	14.1	13.3	11.7	6.7	4.2	3.8	4.9	2.7	2.1	1.6	1.4	3.4	1.5	1.2	5.4	3.7	12.7	7.9	25.9
24-Sep	13.6	Z	47.7	30.0	42.6	71.8	21.3	59.4	17.3	2.4	1.2	0.7	0.8	2.0	1.0	0.9	1.5	8.0	3.8	8.6	6.8	7.3	5.7	3.8	15.6	71.8
25-Sep	2.0	5.1	Z	0.7	1.0	0.9	1.0	1.1	0.5	0.6	0.3	0.4	0.3	0.5	0.8	0.7	0.7	0.6	0.7	1.5	0.6	0.4	0.6	0.7	0.9	5.1
26-Sep	2.1	1.4	1.1	Z	1.2	0.4	0.4	0.4	0.8	0.5	0.7	0.3	0.6	1.8	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.2	0.1	0.2	0.6	2.1
27-Sep	0.3	0.4	0.4	0.4	Z	0.5	0.4	0.4	0.6	0.5	0.6	0.3	0.4	0.6	0.6	0.2	0.3	0.3	0.4	0.4	9.0	1.2	0.1	0.1	0.8	9.0
28-Sep	0.1	0.4	0.4	0.5	0.6	Z	0.3	0.3	0.9	0.8	0.5	0.6	0.8	2.2	1.2	0.5	0.9	4.0	12.5	8.4	11.7	24.4	15.3	11.6	4.3	24.4
29-Sep	Z	8.2	7.7	6.6	2.7	2.8	10.3	11.8	3.6	3.1	0.9	0.6	0.7	2.7	0.5	0.8	0.8	0.6	1.1	1.1	0.3	3.2	0.4	0.5	3.1	11.8
30-Sep	0.5	Z	0.6	0.6	0.6	0.6	0.8	0.8	0.4	2.3	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.3	0.2	0.7	10.7	6.2	1.2	4.6	1.4	10.7
	5.4	4.9	6.3	5.6	5.2	6.1	5.7	7.0	3.2	1.9	1.3	1.0	0.9	1.3	1.2	0.8	0.9	1.4	2.4	5.1	5.5	5.6	5.7	6.4	Diurnal Average	
	26.1	17.4	47.7	30.0	42.6	71.8	41.8	59.4	17.3	11.7	6.7	6.7	3.8	4.9	4.4	3.4	3.3	8.0	12.5	26.4	22.3	26.3	29.5	48.0	Diurnal Maximum	

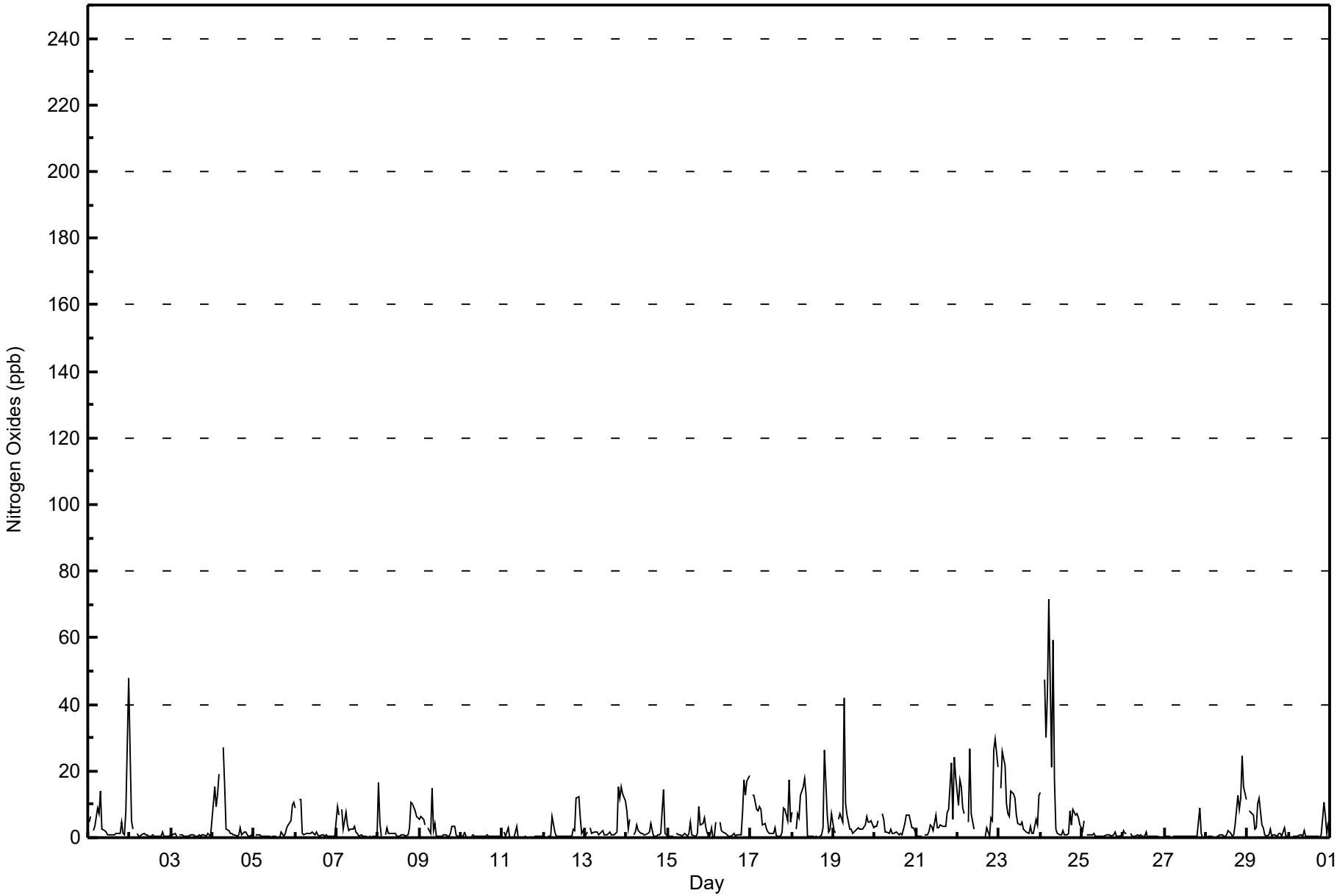
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Conklin - September 2026



Nitrogen Oxides (NO_X) - ppb
Conklin - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	664	97.08	97.08
21 - 40	14	2.05	99.12
11 - 80	6	0.88	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Conklin - September 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	17	14	10	15	29	51	53	61	57	69	44	43	34	79	58	660
21 - 40	0	0	0	0	0	0	0	9	5	0	0	0	0	0	0	0	14
11 - 80	0	0	0	1	0	0	0	1	3	0	0	0	0	0	1	0	6
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	26	17	14	11	15	29	51	63	69	57	69	44	43	34	80	58	680

Total Number of Valid Hours: 680

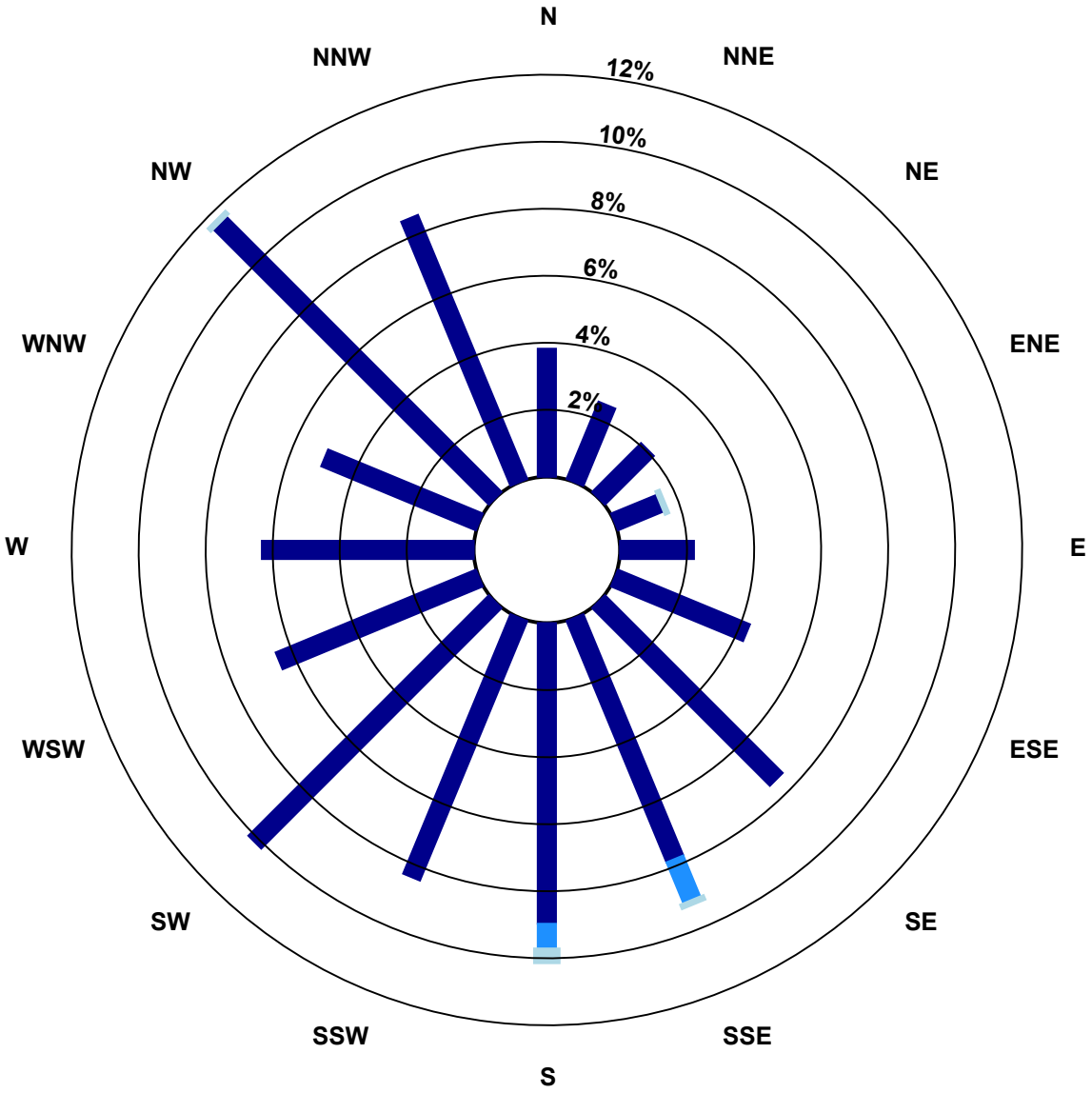
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Conklin



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

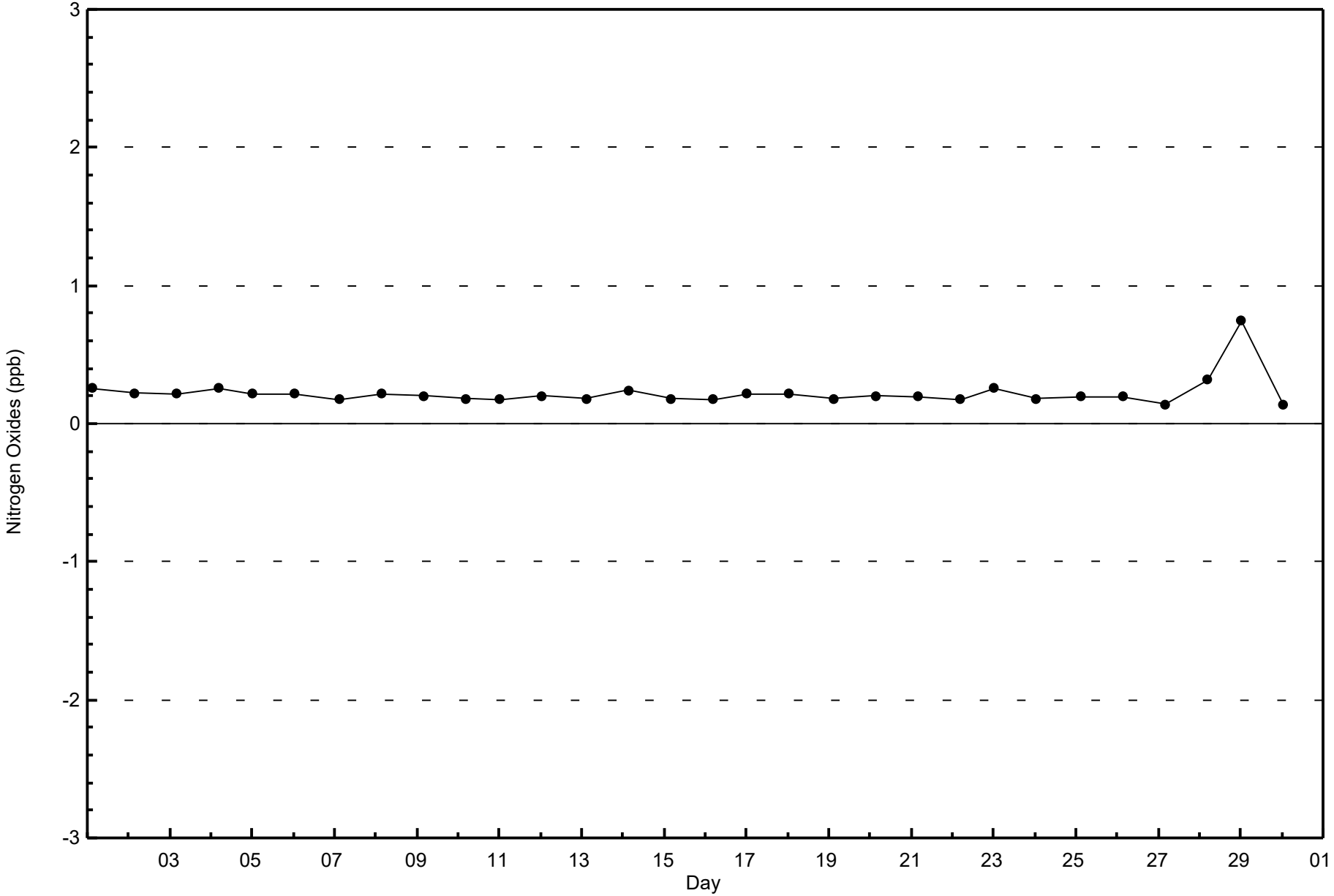
Total Number of Valid Hours: 680

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Conklin - September 2026

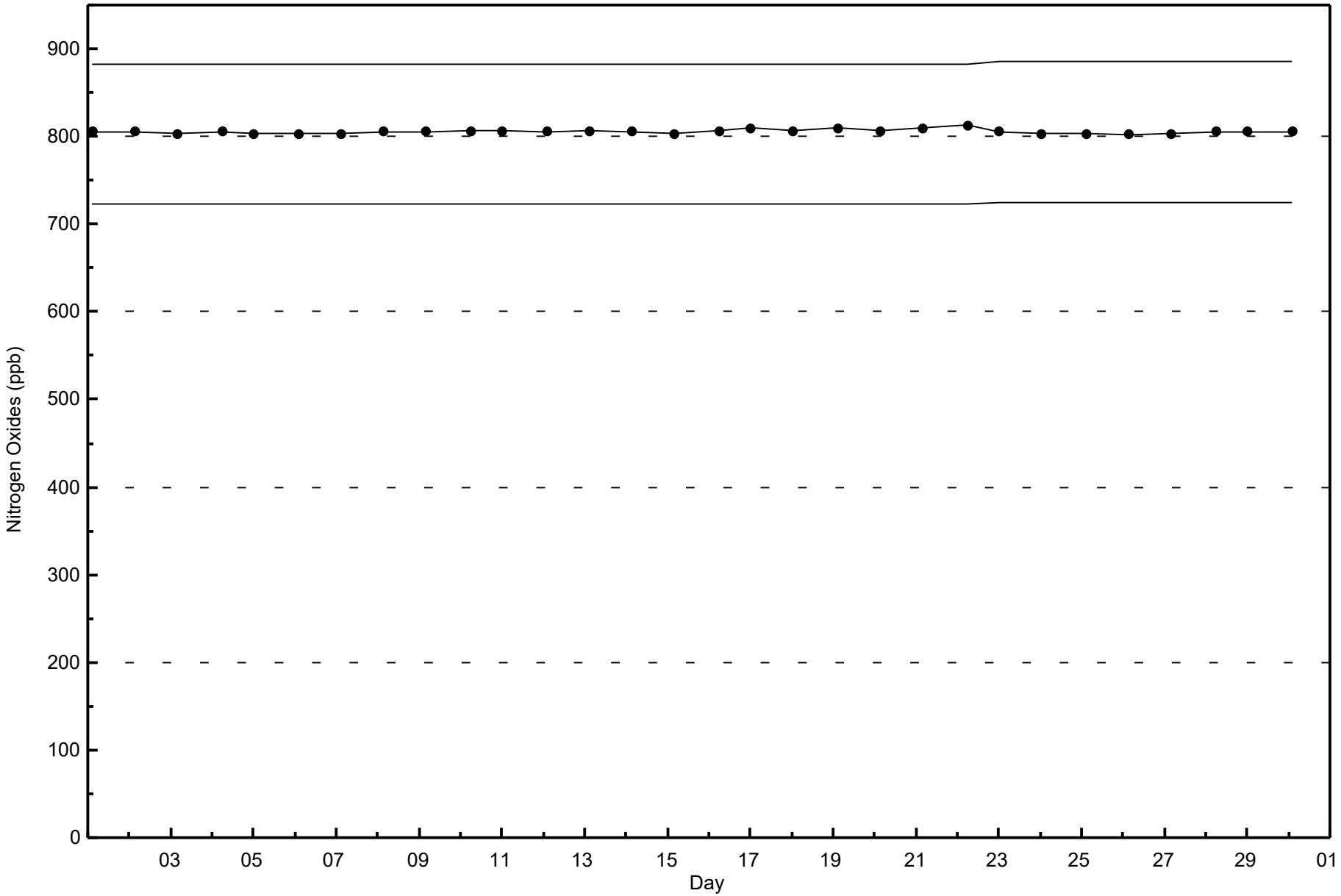


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Conklin - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Conklin - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 47.6 ppb on Sep 21 15:00 Maximum Daily Average: 28.7 ppb on Sep 20

Minimum Value: 0.9 ppb on Sep 17 02:00 Minimum Daily Average: 7.9 ppb on Sep 23
Maximum Diurnal Average: 31.0 ppb at hour 16 Minimum Diurnal Average: 10.0 ppb at hour 4
Monthly Average: 18.68 ppb Percentiles: P_1 = 1.0 P_{10} = 1.8 Q_1 = 9.1 Median = 18.6 Q_3 = 28.3 P_{90} = 33.2 P_{99} = 42.7

Hours in Service:	720
Hours of Data:	686
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-Sep	Z	4.4	3.6	2.1	1.3	1.7	2.9	7.8	19.0	29.2	31.3	C	C	C	C	39.7	42.6	39.5	35.3	22.7	13.0	6.0	2.9	1.1	16.1	42.6
2-Sep	1.4	Z	3.0	1.5	1.5	1.1	1.2	9.5	26.8	32.5	36.3	37.5	38.0	37.2	37.7	38.2	37.0	35.0	34.2	31.0	30.0	28.7	27.4	25.8	24.0	38.2
3-Sep	24.7	23.6	Z	14.7	14.0	14.8	10.5	11.2	10.8	11.5	12.1	12.3	13.6	21.2	30.7	32.7	32.1	31.0	26.9	24.8	21.8	13.4	4.1	2.6	18.0	32.7
4-Sep	1.6	1.4	1.4	Z	2.0	1.5	1.6	5.1	17.9	24.4	32.0	31.3	29.9	27.9	32.2	33.7	37.1	26.6	12.1	12.1	13.6	14.0	14.3	13.8	16.8	37.1
5-Sep	14.9	15.0	15.1	14.7	Z	13.2	12.4	12.4	12.9	15.0	16.4	16.9	18.5	19.0	19.8	21.4	19.9	19.3	16.7	6.3	2.4	0.9	0.9	1.4	13.3	21.4
6-Sep	1.3	0.9	1.2	1.0	1.7	Z	2.0	2.0	3.1	5.9	14.0	17.6	20.2	19.9	20.2	20.0	15.0	15.0	17.0	18.2	18.5	19.1	17.9	13.6	11.5	20.2
7-Sep	Z	1.8	1.0	1.2	2.8	1.2	1.3	2.9	6.0	8.2	9.1	10.7	14.2	16.4	15.9	16.1	15.0	20.7	18.8	15.1	7.9	3.1	1.8	2.8	8.4	20.7
8-Sep	3.5	Z	3.5	5.1	6.0	5.6	7.2	10.5	14.1	17.6	22.2	25.7	27.5	30.6	32.6	32.5	31.1	28.2	18.6	3.6	2.3	4.9	8.0	8.9	15.2	32.6
9-Sep	10.0	9.6	Z	11.6	11.9	12.3	11.6	11.5	12.3	14.5	21.7	28.0	30.7	32.0	33.3	32.7	31.1	29.8	28.0	24.5	23.5	26.7	30.8	30.6	22.1	33.3
10-Sep	28.9	29.4	30.3	Z	31.3	29.7	31.6	30.6	28.4	30.3	33.2	33.4	32.9	32.8	26.9	23.1	22.9	20.6	17.6	16.1	15.4	15.0	15.0	16.0	25.7	33.4
11-Sep	17.0	18.1	19.0	17.7	Z	18.2	17.5	17.4	15.9	17.0	17.5	18.3	20.6	21.6	22.2	22.2	22.7	21.4	21.0	22.1	19.1	18.6	18.2	17.8	19.2	22.7
12-Sep	17.2	15.6	15.1	14.6	13.8	Z	11.4	13.1	14.8	16.8	23.4	27.8	29.7	27.8	29.3	32.3	32.1	29.9	20.0	4.7	5.1	12.1	19.6	18.4	19.3	32.3
13-Sep	Z	17.6	16.0	15.1	14.7	13.5	13.3	15.9	20.4	24.9	30.5	32.7	32.9	34.4	36.6	38.3	37.8	35.7	27.5	8.9	8.9	8.0	8.0	9.1	21.8	38.3
14-Sep	11.7	Z	10.3	5.6	8.7	8.7	6.4	12.2	20.4	22.2	24.6	24.3	21.9	22.0	22.4	21.9	24.3	20.4	14.5	12.3	11.3	11.2	12.9	12.4	15.8	24.6
15-Sep	12.3	12.5	Z	11.7	9.5	9.5	9.6	9.2	11.4	12.2	16.2	19.4	23.4	22.0	23.5	25.5	24.5	22.0	12.8	14.7	11.3	7.7	10.7	15.0	15.1	25.5
16-Sep	11.0	15.3	16.3	Z	3.6	2.5	4.8	13.1	15.0	16.9	18.4	20.4	23.6	26.8	26.5	27.4	28.0	20.7	16.0	5.7	1.4	1.1	1.0	0.9	13.8	28.0
17-Sep	1.0	0.9	1.0	0.9	Z	1.3	3.6	10.3	17.4	20.4	23.2	27.2	28.9	28.8	30.0	30.1	28.4	26.0	15.5	4.0	1.7	1.5	1.1	1.0	13.2	30.1
18-Sep	1.0	1.0	1.0	1.1	1.1	Z	1.4	2.3	7.8	25.3	30.1	31.7	36.3	37.5	37.8	37.6	36.1	34.1	19.1	3.8	6.0	6.7	5.5	2.2	15.9	37.8
19-Sep	Z	4.1	4.1	3.5	2.5	3.5	4.4	16.0	22.6	33.6	35.7	38.1	39.3	39.7	42.4	43.0	42.5	41.0	38.3	33.4	33.2	31.4	30.3	31.9	26.7	43.0
20-Sep	31.2	Z	30.7	32.0	25.7	25.6	28.4	28.1	28.7	29.6	31.8	36.4	38.0	39.5	40.7	40.9	40.9	33.1	28.6	25.5	21.0	11.1	7.9	5.0	28.7	40.9
21-Sep	3.4	3.3	Z	2.7	2.5	3.5	2.8	7.5	15.5	18.3	38.1	43.4	44.3	45.6	47.6	45.8	43.7	40.9	32.5	27.4	16.9	12.2	2.2	1.4	21.8	47.6
22-Sep	1.3	1.4	1.3	Z	1.7	1.3	1.3	1.5	3.8	17.2	25.4	28.7	33.2	36.8	37.8	37.5	37.1	34.1	28.2	9.4	6.1	3.4	1.3	1.5	15.3	37.8
23-Sep	1.5	1.7	1.8	1.3	Z	2.4	1.6	1.8	2.6	4.4	11.2	15.7	17.3	20.0	21.7	22.2	19.4	16.4	8.5	4.0	1.8	1.2	1.0	1.0	7.9	22.2
24-Sep	1.0	1.1	1.1	1.0	1.0	Z	1.6	1.7	8.2	21.9	29.4	32.0	34.8	35.6	37.1	38.5	35.9	22.3	16.4	7.3	5.5	2.3	2.5	1.5	14.8	38.5
25-Sep	Z	10.2	20.5	19.3	19.8	21.5	24.3	27.5	29.7	29.6	29.6	28.5	28.3	27.2	25.6	25.7	24.5	23.8	21.6	15.7	17.8	19.6	15.2	11.4	22.5	29.7
26-Sep	9.0	Z	14.8	12.9	15.7	17.1	19.2	19.5	20.7	23.6	23.8	24.9	24.5	24.8	25.5	24.9	25.2	25.3	26.5	25.8	25.5	25.1	25.6	22.1	21.8	26.5
27-Sep	19.8	18.5	Z	18.6	18.1	17.2	16.4	16.5	19.6	20.6	22.4	24.9	28.1	29.2	29.7	30.8	28.9	27.3	25.5	25.3	20.5	23.4	25.2	25.3	23.1	30.8
28-Sep	24.3	22.9	21.9	Z	20.1	19.7	20.3	20.6	22.1	26.0	30.2	33.9	33.6	32.6	31.8	34.1	34.8	31.6	18.8	16.7	12.7	9.1	9.0	11.2	23.4	34.8
29-Sep	15.8	15.9	18.4	16.4	Z	22.6	13.9	10.8	14.9	17.3	28.1	32.7	29.5	27.5	31.1	32.0	32.6	32.8	32.3	32.3	32.1	30.2	30.8	30.2	25.2	32.8
30-Sep	29.3	28.7	26.2	24.2	25.1	Z	25.1	25.2	24.6	26.6	30.3	32.3	33.4	31.7	29.7	29.1	28.3	28.4	25.2	14.0	3.7	5.6	5.3	5.5	23.4	33.4
	11.8	11.0	11.1	10.0	10.2	10.8	10.3	12.5	16.2	20.5	24.9	27.1	28.5	29.3	30.3	31.0	30.4	27.8	22.5	16.2	13.7	12.4	11.9	11.4	Diurnal Average	
	31.2	29.4	30.7	32.0	31.3	29.7	31.6	30.6	29.7	33.6	38.1	43.4	44.3	45.6	47.6	45.8	43.7	41.0	38.3	33.4	33.2	31.4	30.8	31.9	Diurnal Maximum	

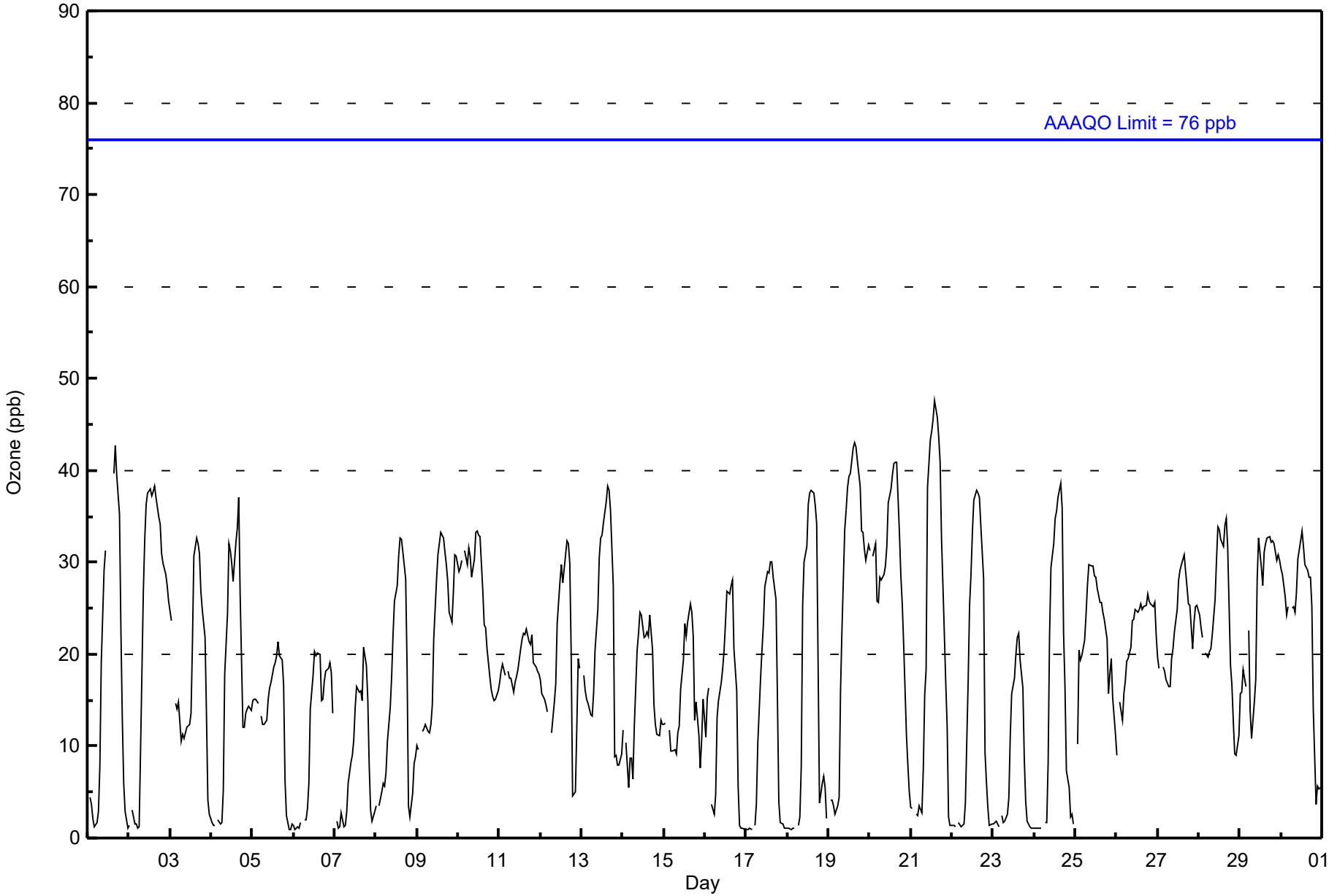
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Conklin - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	382	55.69	55.69
21 - 50	304	44.31	100.00
51 - 82	0	0.00	100.00
> 83	0	0.00	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

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	15	7	11	6	12	39	49	41	31	19	12	8	11	55	35	378
21 - 50	1	2	5	1	8	17	13	10	27	27	50	33	36	23	29	22	304
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	28	17	12	12	14	29	52	59	68	58	69	45	44	34	84	57	682

Total Number of Valid Hours: 682

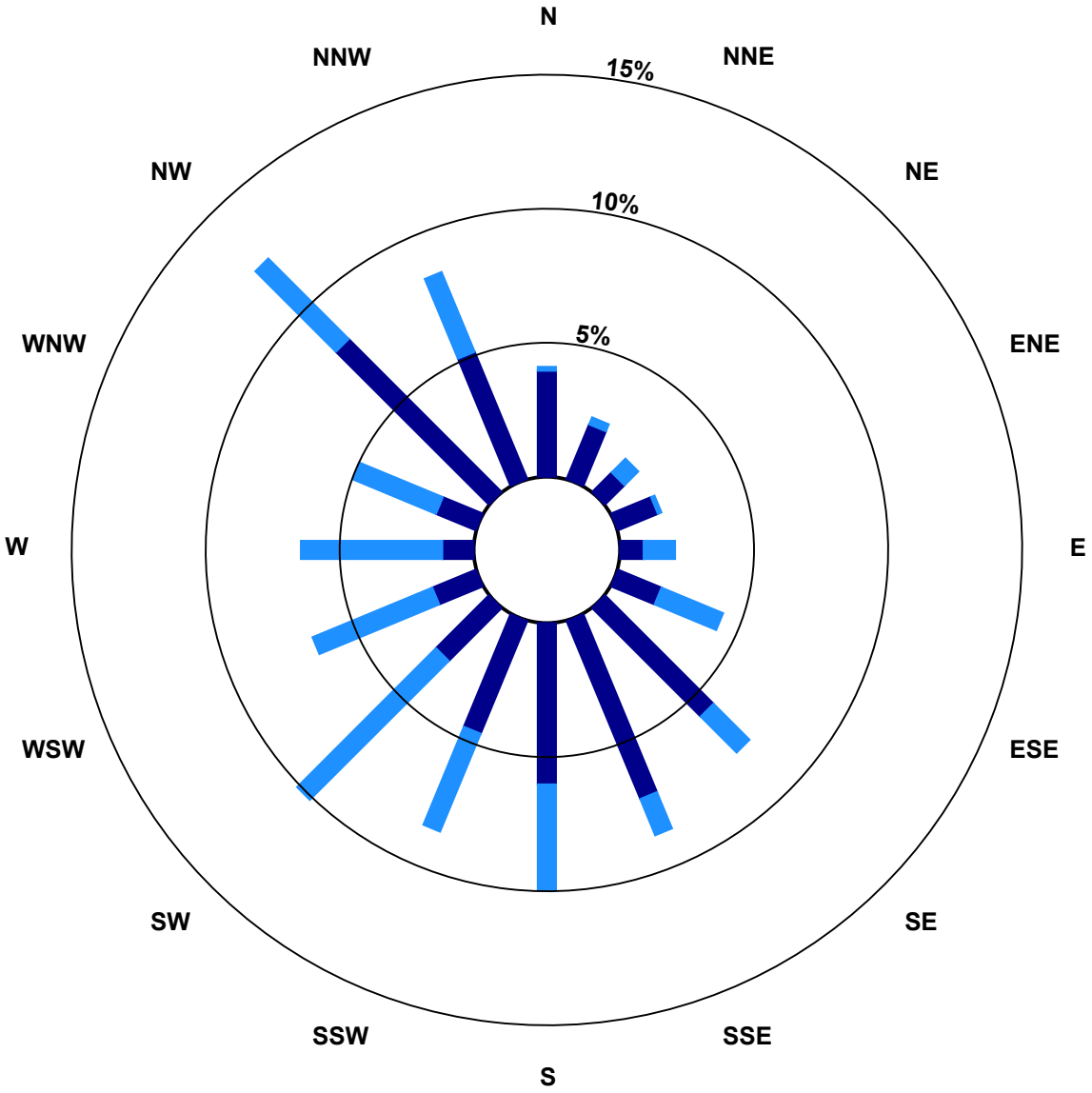
Total Number of Hours: 720

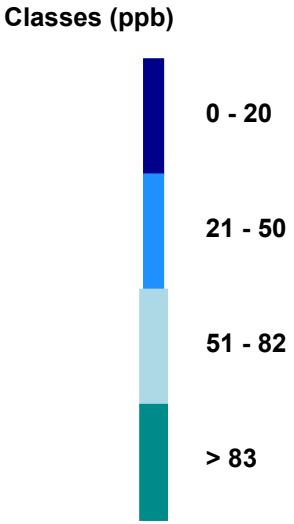
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Ozone (O_3) - ppb

Conklin





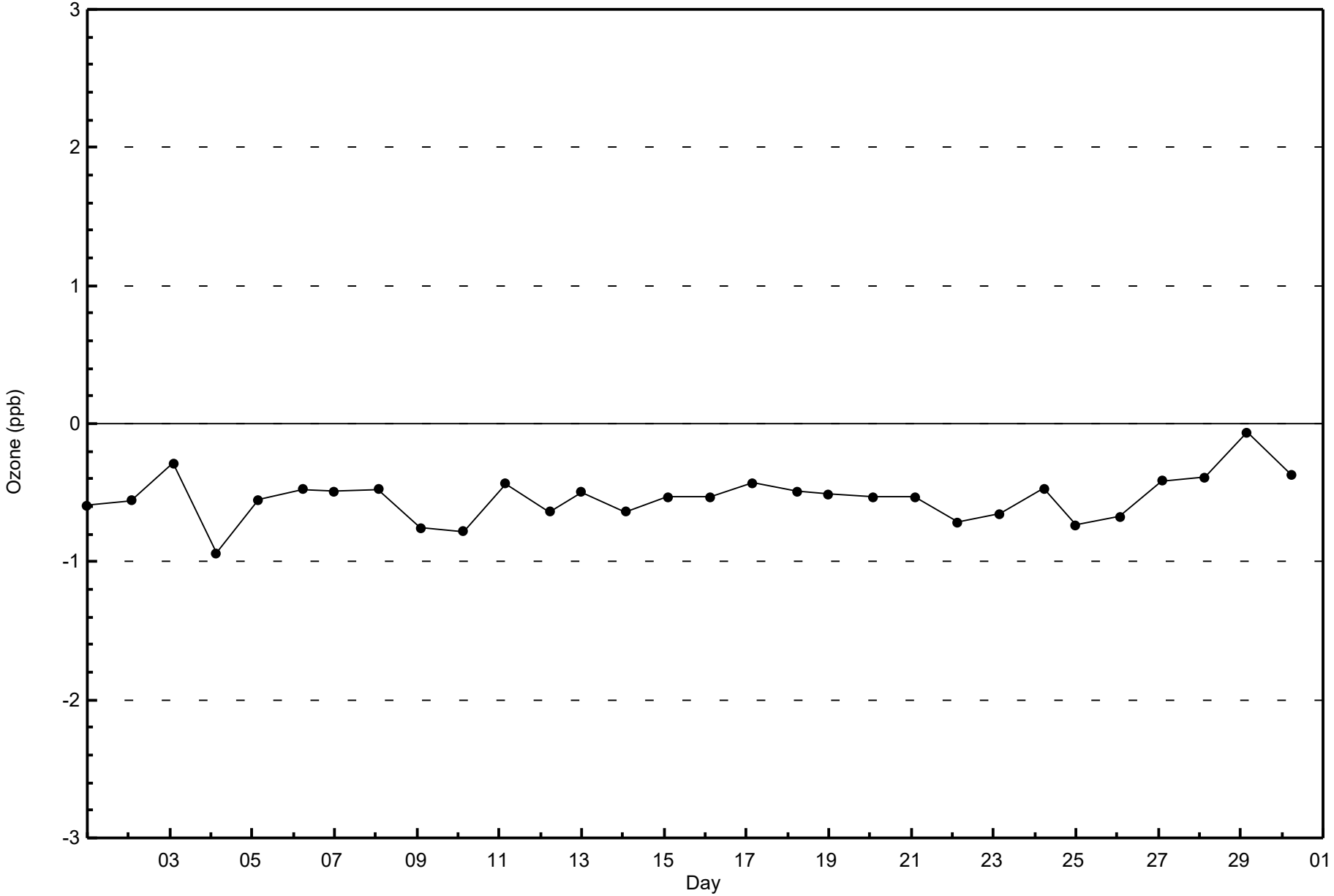
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Conklin - September 2026

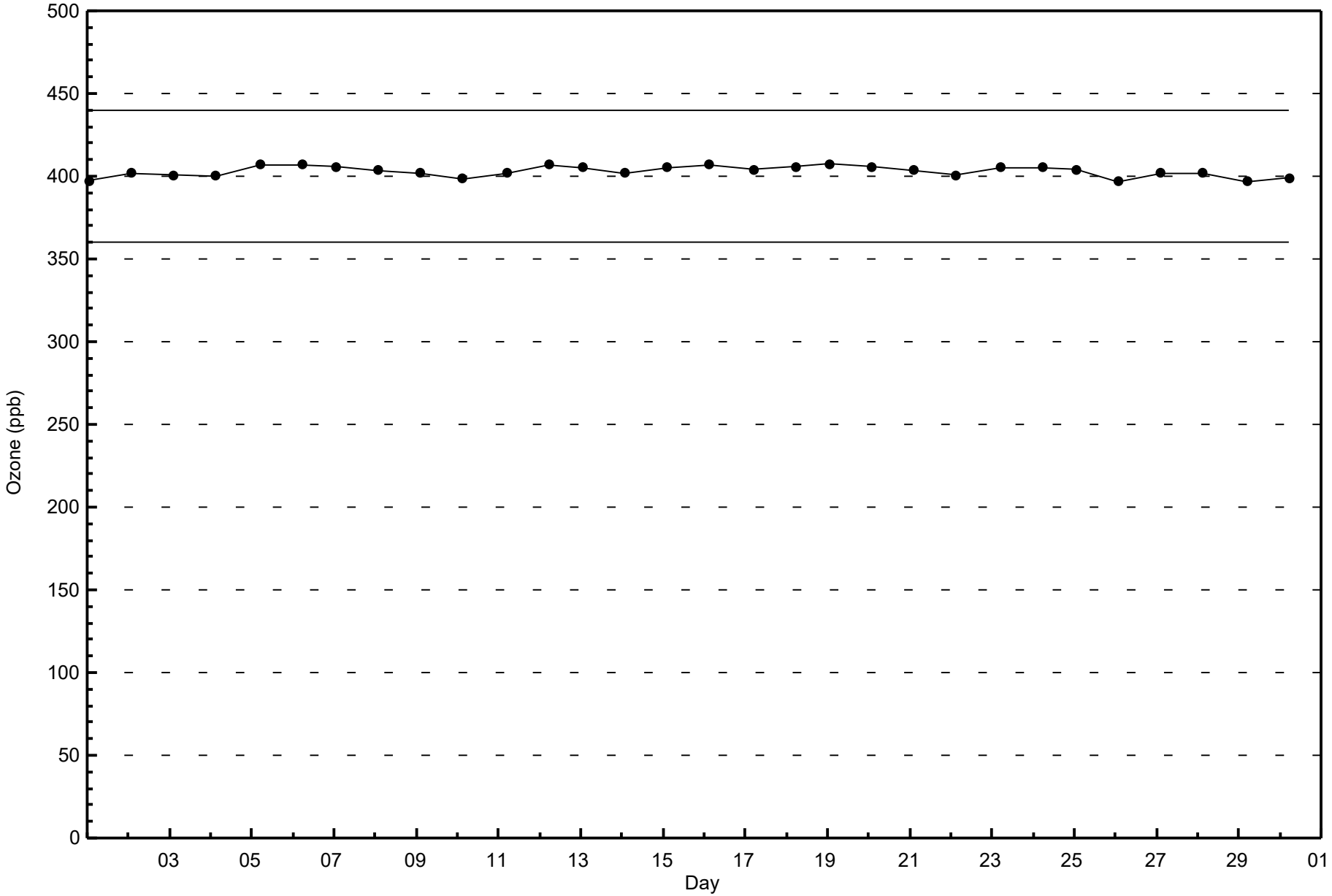


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Conklin - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Conklin - September 2026

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

Maximum Value: 26.4 $\mu g/m^3$ on Sep 23 20:00

Maximum Daily Average: 7.7 $\mu g/m^3$ on Sep 21

Minimum Value: 0.3 $\mu g/m^3$ on Sep 26 08:00

Minimum Daily Average: 1.3 $\mu g/m^3$ on Sep 30

Maximum Diurnal Average: 5.8 $\mu g/m^3$ at hour 20

Minimum Diurnal Average: 3.3 $\mu g/m^3$ at hour 13

Monthly Average: 3.95 $\mu g/m^3$

Percentiles: P_1 = 0.3 P_{10} = 1.4 Q_1 = 2.3 Median = 3.5 Q_3 = 5.2 P_{90} = 6.7 P_{99} = 12.0

Hours in Service:	720
Hours of Data:	719
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-Sep	4.6	4.7	3.5	3.7	3.5	3.4	3.6	4.2	4.1	3.5	3.2	3.4	3.0	3.0	2.9	3.0	3.1	5.2	5.8	12.7	7.2	6.8	15.1	7.1	5.0	15.1
2-Sep	5.9	4.5	4.0	3.9	3.9	3.5	3.4	3.7	5.2	5.2	5.3	5.0	4.2	4.1	4.1	3.6	3.8	4.1	5.8	6.2	5.6	5.1	5.3	5.4	4.6	6.2
3-Sep	5.4	5.2	5.1	5.1	5.2	5.3	5.3	5.4	5.2	4.8	5.0	5.3	5.1	4.9	3.9	3.4	4.0	4.4	5.1	5.5	5.7	5.9	6.3	6.2	5.1	6.3
4-Sep	8.0	7.0	8.2	9.4	9.1	9.3	8.1	6.5	5.1	4.6	3.8	3.9	4.1	6.2	7.7	7.6	7.3	6.1	6.9	5.4	3.0	2.2	2.1	1.7	6.0	9.4
5-Sep	1.7	2.0	2.4	2.9	2.9	3.0	3.2	3.1	3.0	2.7	2.7	2.7	2.5	2.4	2.3	2.4	2.6	3.0	4.0	4.5	4.5	4.1	4.8	4.1	3.1	4.8
6-Sep	3.6	3.7	3.7	3.7	3.0	3.0	3.3	3.2	3.3	3.6	3.1	2.1	2.7	3.3	4.0	3.7	4.5	10.3	4.4	3.1	2.7	2.7	2.8	2.8	3.6	10.3
7-Sep	5.8	19.1	5.5	4.9	3.5	4.1	3.6	3.3	3.4	3.6	3.4	3.5	4.0	3.7	3.9	3.6	3.5	2.9	2.4	2.7	2.6	2.9	3.2	3.3	4.3	19.1
8-Sep	3.3	3.5	3.3	3.2	3.3	3.5	3.8	4.4	5.1	5.4	5.8	5.8	5.6	6.1	7.8	7.7	7.0	6.7	7.4	10.0	11.2	7.4	5.9	5.9	5.8	11.2
9-Sep	5.9	6.0	6.0	6.1	5.7	5.6	5.6	5.8	5.5	5.6	4.9	4.8	4.2	3.7	3.3	3.2	3.2	3.4	3.8	3.6	3.7	3.5	2.5	2.2	4.5	6.1
10-Sep	2.3	2.3	2.1	1.4	1.0	1.2	1.3	1.4	1.7	1.9	2.1	2.3	3.0	3.4	9.4	12.1	15.2	10.4	6.1	4.5	3.1	2.2	1.1	0.9	3.8	15.2
11-Sep	1.2	1.7	1.7	1.6	1.2	0.8	0.6	0.7	0.7	0.6	0.6	1.3	2.2	2.5	2.2	0.9	0.9	1.1	3.8	3.7	2.4	2.4	3.0	2.5	1.7	3.8
12-Sep	2.4	2.3	2.5	2.6	2.7	2.9	2.9	2.9	2.9	3.1	2.4	2.1	2.7	3.3	2.9	3.2	3.2	3.2	3.8	5.1	5.2	3.2	2.8	2.8	3.0	5.2
13-Sep	2.7	2.8	2.8	3.1	3.1	3.1	3.3	3.5	3.6	3.8	3.8	3.5	3.5	3.4	3.4	3.2	3.5	3.6	3.9	7.2	10.1	4.5	4.1	3.8	3.9	10.1
14-Sep	3.8	3.8	4.0	3.9	4.2	4.6	4.8	3.2	1.0	1.6	2.2	2.4	3.2	4.5	4.8	5.1	2.5	1.7	2.0	2.3	3.3	5.2	3.3	1.8	3.3	5.2
15-Sep	1.0	1.0	1.2	1.5	1.6	1.7	1.3	1.3	1.4	1.7	1.7	1.3	1.2	1.5	1.8	2.0	2.3	2.4	2.8	2.7	2.7	2.8	2.7	2.5	1.8	2.8
16-Sep	2.3	2.3	2.1	2.1	2.2	2.9	2.5	2.6	2.6	2.5	2.5	2.6	2.4	2.4	2.4	2.6	2.7	3.1	3.5	4.6	5.6	5.6	5.5	4.7	3.1	5.6
17-Sep	4.6	3.9	4.3	4.0	3.9	3.9	5.0	4.0	4.4	4.6	4.4	4.4	4.6	4.7	4.7	4.4	4.9	5.5	6.1	8.7	7.9	6.6	6.1	5.4	5.0	8.7
18-Sep	5.2	5.1	4.6	4.7	4.4	5.7	6.2	6.7	4.9	3.0	2.5	2.8	2.4	1.9	1.8	2.0	2.2	2.6	5.6	8.5	6.5	5.1	3.9	3.9	4.3	8.5
19-Sep	3.2	3.1	3.1	3.2	3.4	3.6	6.0	3.6	3.1	3.0	3.2	3.3	3.6	3.9	4.4	5.0	5.2	7.1	6.4	6.1	5.9	5.6	5.4	5.4	4.4	7.1
20-Sep	5.3	5.3	5.4	5.5	5.7	5.7	5.9	5.6	5.3	5.5	5.5	5.6	5.0	4.9	4.9	5.7	6.0	8.5	6.4	6.0	6.1	6.2	6.3	6.1	5.8	8.5
21-Sep	5.7	5.5	5.7	5.1	5.2	6.0	6.8	6.7	8.9	9.5	10.0	8.6	8.2	7.5	7.6	7.9	7.4	8.6	9.2	9.1	7.8	7.4	9.5	9.8	7.7	10.0
22-Sep	7.9	8.4	7.9	7.4	6.7	5.8	7.1	8.9	8.4	9.6	10.9	3.5	2.7	2.7	2.9	3.0	3.6	4.5	1.5	5.2	5.5	6.1	5.2	10.9	6.1	10.9
23-Sep	3.7	2.8	3.3	3.0	3.4	3.2	3.4	4.4	4.1	4.3	6.1	11.7	6.5	5.1	C	3.5	3.1	4.8	5.4	26.4	7.2	3.2	4.2	5.0	5.6	26.4
24-Sep	4.7	4.3	5.9	4.8	3.9	5.2	4.6	4.9	4.1	2.4	1.9	1.9	1.7	1.7	1.7	1.4	1.6	5.5	4.5	8.2	13.6	13.0	7.7	5.2	4.8	13.6
25-Sep	4.0	3.9	3.6	2.7	2.5	2.1	2.2	2.2	2.1	2.6	3.4	3.3	3.8	4.1	4.4	4.7	4.9	4.9	5.2	4.9	4.7	5.1	5.2	4.8	3.8	5.2
26-Sep	5.0	4.9	4.3	4.4	2.2	1.2	0.7	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.4	0.4	0.3	0.5	0.5	0.4	0.6	1.0	1.1	1.3	1.3	5.0
27-Sep	1.6	1.6	1.4	1.3	1.4	1.6	1.7	1.7	1.8	1.8	2.0	1.9	2.1	1.9	1.7	1.2	1.4	1.6	2.0	1.9	2.0	1.6	1.4	1.2	1.7	2.1
28-Sep	1.4	1.6	1.6	1.6	1.8	1.7	1.6	1.6	1.8	1.9	1.5	1.6	1.5	1.7	1.6	1.6	2.0	2.3	3.3	3.4	4.6	3.7	3.0	3.0	2.1	4.6
29-Sep	3.1	3.2	3.4	3.2	3.1	3.1	3.3	3.2	3.1	2.6	1.3	1.2	1.0	1.0	1.1	1.0	1.1	1.0	1.2	1.4	1.4	1.6	1.8	1.8	2.0	3.4
30-Sep	1.7	1.8	1.8	1.9	1.9	1.9	1.7	1.7	1.1	0.4	0.3	1.1	0.7	0.4	0.3	0.3	0.9	1.9	0.9	1.2	1.8	1.8	1.2	1.7	1.3	1.9
	3.9	4.2	3.8	3.7	3.5	3.6	3.8	3.7	3.6	3.5	3.5	3.4	3.3	3.4	3.6	3.7	3.8	4.4	4.3	5.8	5.1	4.5	4.4	4.1	Diurnal Average	
	8.0	19.1	8.2	9.4	9.1	9.3	8.1	8.9	8.9	9.6	10.9	11.7	8.2	7.5	9.4	12.1	15.2	10.4	9.2	26.4	13.6	13.0	15.1	10.9	Diurnal Maximum	

C - Calibration

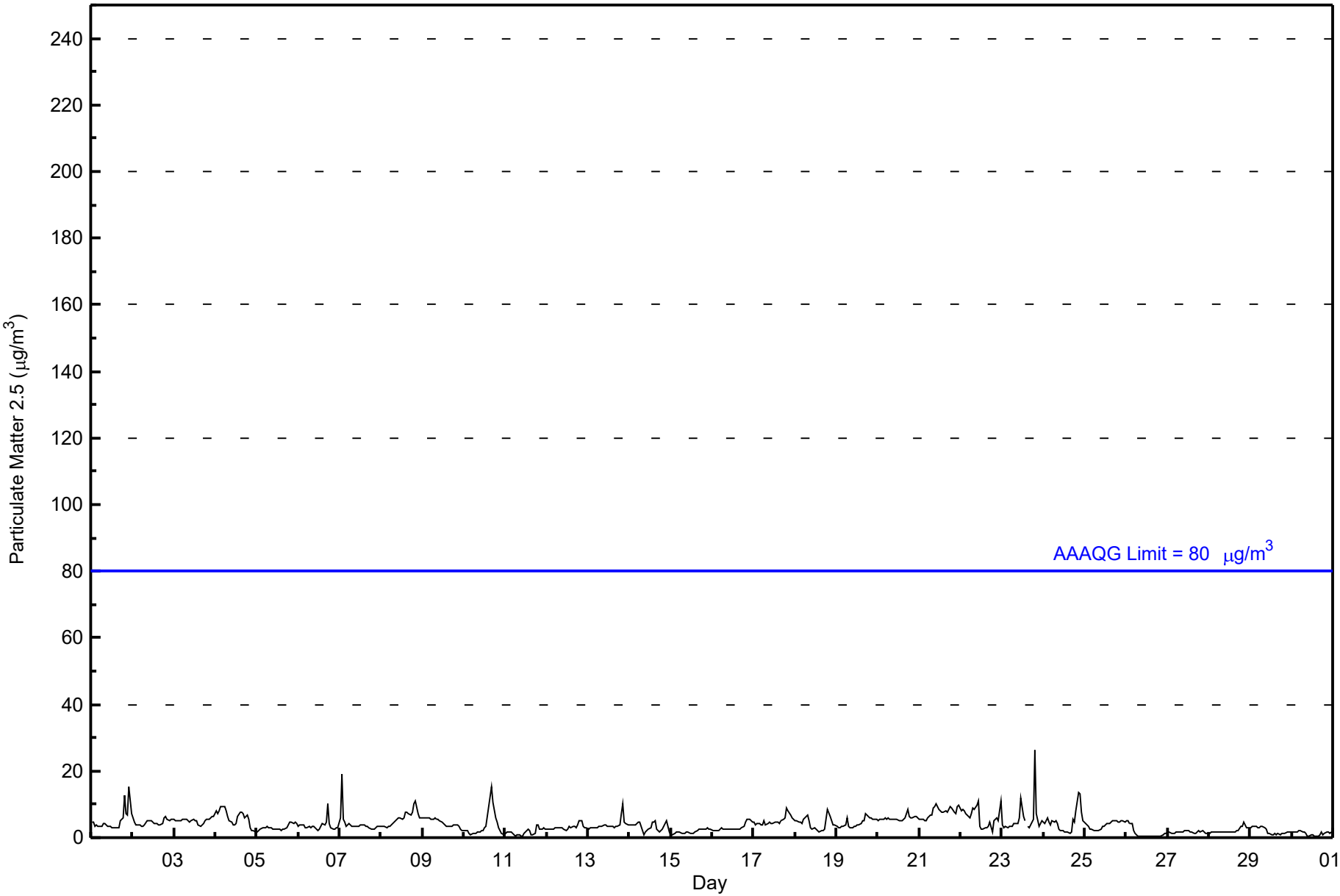
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Conklin - September 2026



Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	578	80.39	80.39
6 - 15	139	19.33	99.72
16 - 25	1	0.14	99.86
26 - 80	1	0.14	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

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

Conklin - September 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	25	16	13	9	11	25	36	39	43	49	66	43	41	31	81	49	577
6 - 15	4	1	1	2	4	4	18	28	29	11	5	3	4	5	6	11	136
16 - 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
26 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	29	17	14	11	15	29	54	67	72	60	71	46	45	36	88	61	715

Total Number of Valid Hours: 715

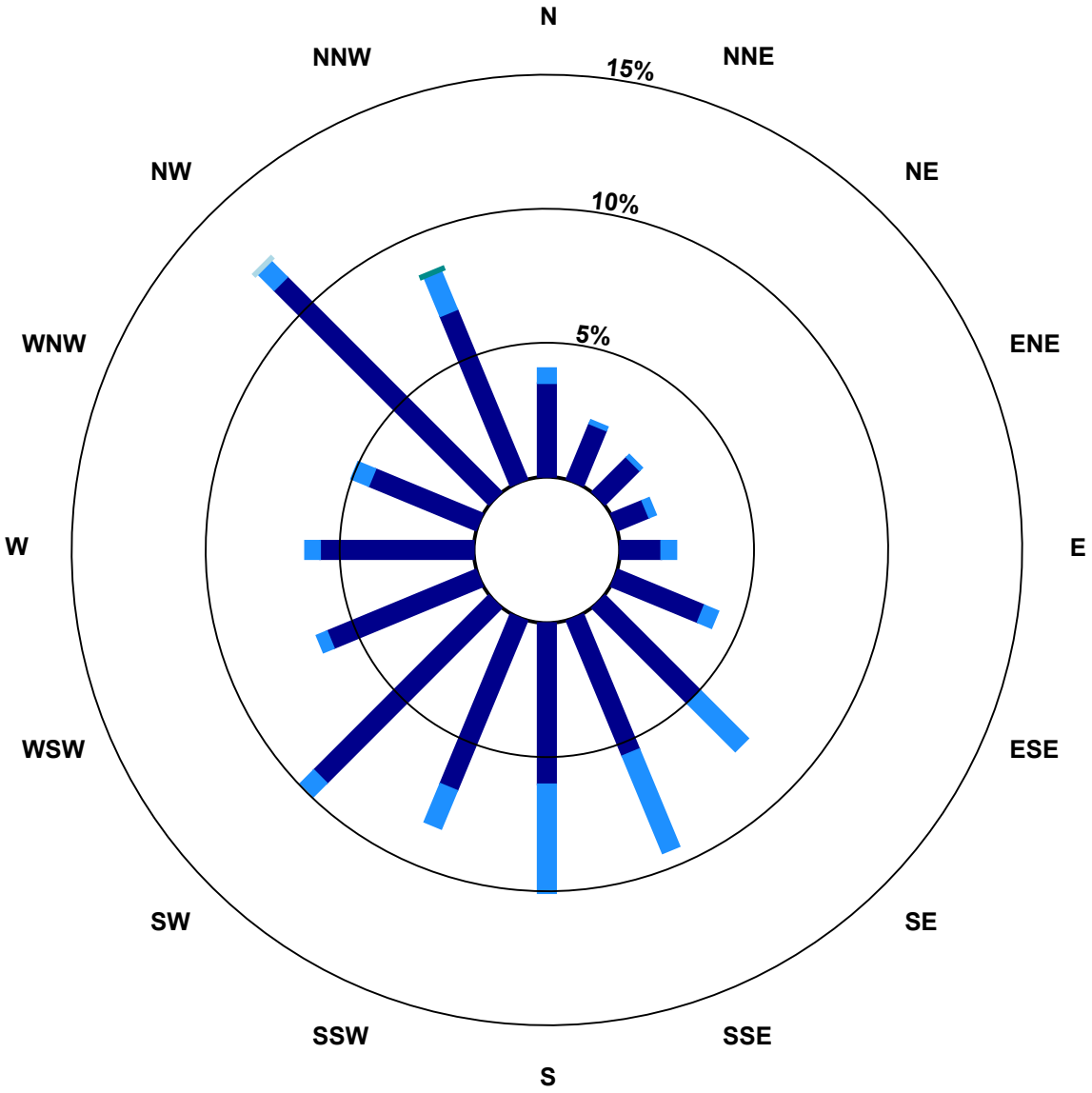
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 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: 715

Maximum Value: 26.8 C on Sep 2 13:00

Maximum Daily Average: 17.7 C on Sep 2

Minimum Value: -3.1 C on Oct 1 00:00

Minimum Daily Average: 3.8 C on Sep 30

Maximum Diurnal Average: 16.7 C at hour 16

Minimum Diurnal Average: 5.3 C at hour 6

Monthly Average: 10.54 C

Percentiles: P_1 = -1.5 P_{10} = 3.3 Q_1 = 5.8 Median = 9.7 Q_3 = 15.0 P_{90} = 19.3 P_{99} = 25.1

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

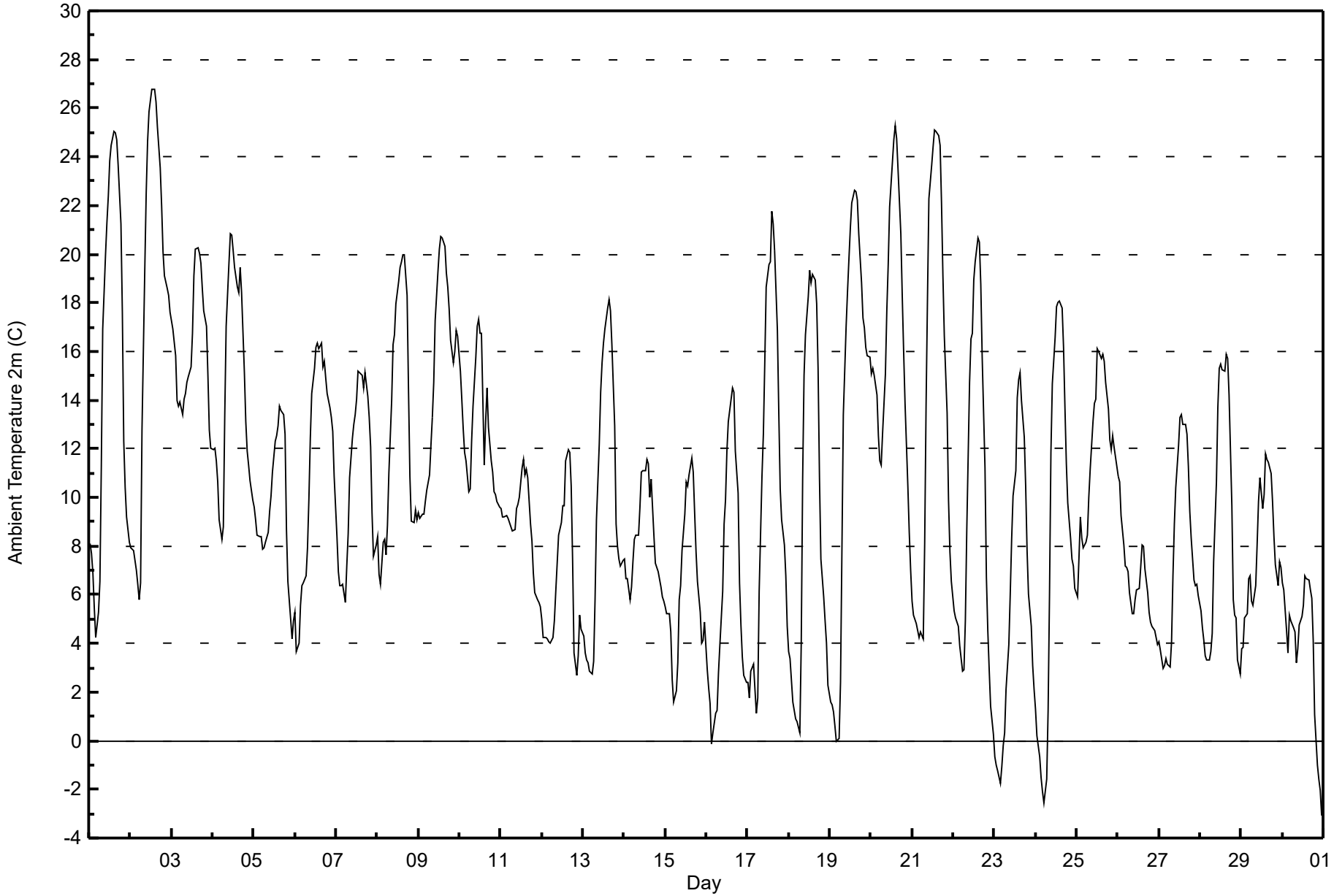
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	8.1	7.7	6.9	5.5	4.2	5.3	6.5	11.3	16.9	20.0	21.3	22.4	23.8	24.5	25.0	25.0	24.7	23.7	21.2	17.6	12.3	10.4	9.2	8.2	15.1	25.0
2-Sep	7.9	7.9	7.8	7.0	6.5	5.8	6.5	12.8	19.4	22.5	24.6	25.9	26.8	26.8	26.8	26.2	25.2	23.5	22.0	20.1	19.1	18.6	18.3	17.6	17.7	26.8
3-Sep	17.3	16.9	15.8	14.0	13.7	13.9	13.4	14.0	14.3	14.8	14.9	15.4	16.7	19.1	20.2	20.3	20.1	19.6	18.6	17.7	17.1	15.0	12.8	12.0	16.1	20.3
4-Sep	12.0	12.0	11.5	10.6	9.1	8.3	8.8	13.3	17.0	19.6	20.8	20.8	20.2	19.5	18.7	18.4	19.4	18.4	15.1	13.1	11.9	11.3	10.7	9.9	14.6	20.8
5-Sep	9.6	9.1	8.5	8.4	8.4	7.9	8.0	8.1	8.6	9.4	10.1	11.0	12.3	12.5	13.0	13.7	13.6	13.4	12.6	8.7	6.6	5.0	4.2	5.0	9.5	13.7
6-Sep	5.3	3.7	4.0	5.6	6.4	6.5	6.8	7.9	9.9	12.4	14.3	15.3	16.1	16.4	16.1	16.3	15.4	15.6	14.9	14.3	13.7	13.3	12.7	10.9	11.4	16.4
7-Sep	8.4	7.0	6.4	6.4	6.4	5.7	7.2	8.5	10.8	12.4	13.0	13.4	14.1	15.2	15.1	15.0	14.5	15.1	14.1	13.3	12.1	9.4	7.6	8.0	10.8	15.2
8-Sep	8.4	6.8	6.4	8.1	8.3	7.7	8.9	11.0	14.0	16.3	16.7	17.9	18.9	19.5	19.7	20.0	19.9	18.3	14.4	10.9	9.0	9.0	9.5	9.1	12.9	20.0
9-Sep	9.4	9.1	9.3	9.3	9.8	10.3	10.9	12.1	13.3	14.8	17.3	19.3	20.2	20.7	20.7	20.3	19.2	18.6	17.7	16.4	15.5	16.0	16.8	16.6	15.2	20.7
10-Sep	15.2	14.1	12.8	11.9	11.5	10.2	10.4	12.3	13.8	15.7	17.0	17.3	16.8	16.8	11.3	13.1	14.5	12.9	11.5	11.0	10.3	10.1	9.9	9.6	12.9	17.3
11-Sep	9.5	9.2	9.2	9.2	9.2	9.0	8.8	8.6	8.7	9.6	9.7	10.0	11.2	11.6	10.9	11.1	10.8	8.9	8.2	6.9	6.1	5.8	5.7	5.5	8.9	11.6
12-Sep	5.0	4.2	4.2	4.2	4.1	4.0	4.2	5.0	6.1	7.3	8.5	9.0	9.6	9.6	11.5	12.0	11.9	10.4	7.4	3.6	2.7	3.5	5.1	4.6	6.6	12.0
13-Sep	4.3	3.6	3.3	3.2	2.9	2.7	3.3	5.8	9.1	12.2	14.3	15.5	16.3	16.9	17.8	18.1	17.7	16.3	13.0	8.9	8.0	7.5	7.2	7.4	9.8	18.1
14-Sep	7.5	6.7	6.7	5.8	6.3	7.4	8.3	8.4	8.4	9.6	11.0	11.1	11.1	11.5	11.4	10.0	10.7	8.4	7.3	7.1	7.0	6.3	5.9	5.7	8.3	11.5
15-Sep	5.5	5.2	5.2	4.5	2.5	1.6	2.1	3.2	5.8	6.4	7.8	9.3	10.6	10.5	10.9	11.6	11.1	9.4	7.8	6.6	5.3	4.0	4.1	4.9	6.5	11.6
16-Sep	2.9	2.2	1.5	-0.1	0.3	1.1	1.3	2.8	3.9	6.2	8.9	9.9	11.9	13.1	14.0	14.5	14.3	11.9	10.2	6.5	4.7	3.4	2.7	2.4	6.3	14.5
17-Sep	2.4	1.8	2.9	3.1	2.1	1.1	1.7	6.1	10.9	12.6	15.5	18.6	19.6	19.7	21.8	21.2	20.1	16.9	13.5	10.4	9.1	8.1	6.8	4.7	10.4	21.8
18-Sep	3.7	3.4	1.6	1.3	0.9	0.8	0.3	4.0	10.7	15.0	16.7	18.3	19.3	18.8	19.2	18.9	17.9	15.3	10.8	7.5	5.9	5.0	4.0	2.3	9.2	19.3
19-Sep	1.6	1.5	1.2	0.6	0.0	0.1	2.4	7.8	13.4	17.0	18.5	19.8	21.1	22.1	22.6	22.6	22.2	20.9	18.8	17.4	17.0	16.2	15.8	15.8	13.2	22.6
20-Sep	15.1	15.3	15.0	14.2	12.6	11.5	11.4	12.7	15.1	17.7	19.6	22.0	23.8	24.7	25.3	24.7	23.5	20.8	18.3	16.0	13.8	10.5	8.6	7.0	16.6	25.3
21-Sep	5.8	5.2	4.8	4.5	4.3	4.5	4.2	8.1	13.8	18.2	22.3	23.7	24.4	25.1	25.0	24.8	24.4	22.1	19.1	16.6	13.5	9.9	7.7	6.5	14.1	25.1
22-Sep	5.3	5.1	4.9	4.7	3.9	2.9	2.9	4.9	8.6	14.8	16.5	16.8	19.0	19.7	20.7	20.5	18.8	15.8	11.2	6.7	4.5	2.9	1.4	0.3	9.7	20.7
23-Sep	-0.7	-1.0	-1.2	-1.7	-1.1	-0.2	0.4	2.1	3.9	6.0	8.3	10.1	11.1	14.1	14.8	15.1	14.0	12.5	10.5	7.8	6.0	4.7	3.1	2.1	5.9	15.1
24-Sep	1.3	0.2	-0.7	-1.5	-2.1	-2.6	-1.6	1.3	6.0	11.8	14.7	16.6	17.9	18.0	18.0	17.8	16.2	13.7	11.4	9.8	8.3	7.5	7.2	6.3	8.1	18.0
25-Sep	5.9	7.5	9.2	8.3	7.9	8.1	8.5	10.0	11.2	13.1	13.9	14.0	16.1	16.0	15.7	15.9	15.6	14.7	13.7	12.3	11.9	12.6	12.1	11.3	11.9	16.1
26-Sep	10.9	10.7	9.2	8.1	7.2	7.1	6.9	6.1	5.2	5.2	5.8	6.2	6.2	7.1	8.0	8.0	7.1	6.1	5.3	4.9	4.7	4.5	4.3	3.9	6.6	10.9
27-Sep	4.1	3.7	3.0	3.1	3.4	3.1	3.1	4.1	6.8	8.9	10.4	12.1	13.3	13.4	13.0	13.0	12.6	11.3	9.4	8.4	6.6	6.4	6.5	6.0	7.7	13.4
28-Sep	5.3	4.6	4.1	3.5	3.3	3.3	3.7	4.4	7.3	10.6	13.7	15.3	15.5	15.2	15.2	15.9	15.7	14.2	9.6	5.8	5.2	5.1	3.3	2.7	8.4	15.9
29-Sep	3.8	3.8	5.0	5.2	6.7	6.8	5.7	5.5	6.4	8.0	9.8	10.8	9.6	10.1	11.8	11.6	11.4	11.0	9.8	8.4	7.2	6.4	7.4	7.1	7.9	11.8
30-Sep	6.5	6.2	4.5	3.6	5.2	4.9	4.7	4.5	3.2	3.8	4.8	5.1	5.6	6.8	6.7	6.6	6.2	5.9	4.1	1.1	-1.0	-1.6	-2.1	-3.1	3.8	6.8
	6.9	6.4	6.1	5.7	5.5	5.3	5.6	7.6	10.1	12.4	14.0	15.1	16.0	16.5	16.7	16.7	16.3	14.9	12.7	10.5	9.1	8.2	7.6	7.0	Diurnal Average	
	17.3	16.9	15.8	14.2	13.7	13.9	13.4	14.0	19.4	22.5	24.6	25.9	26.8	26.8	26.8	26.2	25.2	23.7	22.0	20.1	19.1	18.6	18.3	17.6	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Conklin - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	17	2.36	2.36
0 - 10	355	49.31	51.67
10 - 20	292	40.56	92.22
> 20	56	7.78	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Conklin - September 2026

Maximum Value: 100.0 % on Sep 1 05:00

Maximum Daily Average: 92.0 % on Sep 14

Minimum Value: 30.9 % on Sep 24 13:00

Minimum Daily Average: 61.3 % on Sep 20

Maximum Diurnal Average: 93.0 % at hour 6

Minimum Diurnal Average: 53.8 % at hour 16

Monthly Average: 76.87 %

Percentiles: P_1 = 34.7 P_{10} = 45.3 Q_1 = 62.9 Median = 80.9 Q_3 = 95.1 P_{90} = 99.2 P_{99} = 100.0

Hours in Service:	720
Hours of Data:	701
Hours of Missing Data:	19
Hours of Calibration:	0
Percent Operational Time:	97.4

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-Sep	95.9	96.3	97.6	98.8	100.0	100.0	99.2	84.9	66.3	49.8	44.3	41.6	36.7	34.2	35.2	35.1	36.8	42.4	49.0	63.0	89.2	96.0	96.9	99.0	70.3	100.0
2-Sep	99.5	99.5	100.0	100.0	100.0	100.0	OR	OR	61.9	48.7	40.0	34.3	33.4	36.8	37.6	37.7	39.6	43.7	47.6	55.4	63.5	68.7	71.9	75.2	63.4	100.0
3-Sep	76.5	78.2	83.8	91.0	91.2	90.1	96.7	97.8	98.9	97.9	96.9	95.1	90.2	78.4	70.7	68.8	69.0	71.5	77.6	81.8	85.9	94.2	98.7	99.8	86.7	99.8
4-Sep	100.0	99.8	100.0	99.7	99.7	100.0	100.0	92.9	79.1	66.4	57.3	61.8	64.1	67.8	68.4	69.1	64.3	71.3	82.3	85.6	86.5	86.5	88.3	89.5	82.5	100.0
5-Sep	88.2	90.1	93.5	92.8	92.7	98.3	98.3	97.2	96.1	90.8	85.7	81.0	73.8	71.7	68.9	63.2	65.7	68.2	72.6	93.7	98.8	99.7	99.9	100.0	86.7	100.0
6-Sep	98.7	99.5	100.0	100.0	100.0	100.0	100.0	98.9	93.4	87.9	79.7	73.2	69.2	70.1	71.7	73.3	83.2	81.5	82.2	82.0	84.1	83.0	83.7	90.2	86.9	100.0
7-Sep	98.2	99.6	100.0	100.0	100.0	100.0	OR	OR	93.9	88.5	87.2	86.8	84.4	79.8	80.4	81.8	84.9	79.8	84.6	90.4	94.9	98.9	99.9	OR	91.1	100.0
8-Sep	OR	OR	OR	OR	OR	OR	OR	OR	85.5	75.2	71.0	63.1	57.5	52.7	50.9	49.3	49.0	56.0	76.3	91.6	94.2	94.4	92.0	92.0	--	94.4
9-Sep	90.8	91.9	92.6	93.9	94.0	95.5	94.4	89.6	84.3	77.8	63.5	50.7	46.7	45.3	45.1	46.9	52.0	56.1	60.3	66.2	70.8	69.0	62.3	61.2	70.9	95.5
10-Sep	66.4	69.3	72.9	76.2	78.1	83.8	81.2	73.1	68.4	60.0	53.5	52.8	55.6	54.0	87.3	81.2	70.1	75.1	83.0	87.4	95.5	96.0	94.7	92.5	75.3	96.0
11-Sep	91.0	90.1	87.8	86.1	84.3	83.0	82.3	83.7	84.2	79.3	77.3	79.4	70.6	67.7	70.7	65.7	66.8	78.3	78.7	81.3	87.7	90.0	90.0	89.5	81.1	91.0
12-Sep	90.4	92.5	92.5	93.3	94.8	95.3	95.1	91.8	85.7	78.7	64.0	55.1	54.6	57.7	50.8	46.5	47.5	52.7	71.4	89.7	91.1	86.5	76.8	78.7	76.4	95.3
13-Sep	81.3	84.6	87.1	88.3	91.2	92.8	91.0	81.2	70.0	60.5	51.6	45.5	43.6	40.1	38.9	37.3	38.4	45.3	62.7	81.4	84.7	86.2	89.2	89.7	69.3	92.8
14-Sep	90.5	93.9	94.6	98.2	99.5	100.0	100.0	100.0	100.0	93.7	81.7	80.9	79.5	77.4	76.0	84.2	72.7	90.9	98.1	98.9	99.4	99.1	99.1	99.4	92.0	100.0
15-Sep	99.2	99.1	96.9	97.7	98.8	100.0	100.0	100.0	90.6	86.8	79.0	70.7	57.1	57.0	55.7	49.7	54.7	65.1	76.1	87.7	97.7	99.0	98.9	95.7	83.9	100.0
16-Sep	97.7	99.2	98.5	100.0	OR	OR	OR	98.6	95.1	84.3	73.0	68.5	58.0	51.3	49.2	46.7	46.3	64.0	77.2	93.5	95.3	97.6	99.1	98.5	80.6	100.0
17-Sep	98.7	99.9	99.8	98.6	99.3	99.8	99.4	88.4	69.3	64.3	57.6	49.6	46.7	47.4	40.1	41.4	47.3	60.4	79.7	91.9	94.5	97.1	97.5	99.2	77.8	99.9
18-Sep	100.0	98.9	99.8	100.0	OR	100.0	100.0	OR	79.2	62.5	52.8	47.2	41.1	40.1	38.3	38.9	42.4	52.2	77.0	88.9	92.8	94.4	95.2	98.2	74.5	100.0
19-Sep	98.9	98.5	97.6	97.8	98.7	98.5	95.3	82.7	64.5	47.4	41.7	37.3	34.7	36.5	38.5	40.6	42.3	47.8	55.3	59.2	59.7	62.6	63.4	61.8	65.0	98.9
20-Sep	63.5	61.6	61.8	64.0	70.2	73.9	73.2	67.8	61.0	54.7	49.5	42.7	36.7	36.2	33.6	34.9	38.0	50.9	62.4	72.3	80.0	91.1	94.5	96.4	61.3	96.4
21-Sep	98.0	98.9	99.6	98.8	98.8	99.0	99.3	96.5	79.5	66.4	50.1	42.0	35.5	31.7	33.3	36.2	35.7	47.0	60.8	70.1	81.7	94.5	96.0	95.7	72.7	99.6
22-Sep	98.4	99.0	99.2	99.3	100.0	100.0	100.0	99.7	94.4	75.8	62.4	51.8	44.8	42.3	39.6	41.4	43.1	49.1	67.3	86.9	92.9	95.6	96.8	98.2	78.3	100.0
23-Sep	98.5	98.8	97.8	99.3	98.2	97.1	98.3	96.4	93.6	89.4	80.0	74.1	74.1	64.7	63.9	64.8	71.1	77.7	88.8	96.5	98.7	99.7	100.0	100.0	88.4	100.0
24-Sep	100.0	99.8	100.0	100.0	100.0	100.0	OR	99.4	88.2	64.2	45.5	35.3	30.9	34.9	35.4	35.5	43.2	59.3	73.3	82.5	87.9	91.9	92.3	95.9	73.7	100.0
25-Sep	96.5	87.6	79.3	80.6	81.1	77.7	76.0	71.6	62.7	60.2	62.0	63.3	60.4	62.9	67.4	69.0	71.7	75.3	82.2	94.2	95.7	95.2	97.3	97.9	77.8	97.9
26-Sep	99.2	99.2	97.8	97.2	97.6	96.5	93.8	91.9	92.6	91.0	86.4	79.7	78.6	74.2	67.5	70.4	74.4	79.1	79.8	80.5	80.7	80.5	82.1	85.7	85.7	99.2
27-Sep	85.6	85.9	88.5	90.0	90.6	90.4	89.9	85.6	73.3	65.7	59.7	51.3	44.2	43.6	45.7	45.3	48.6	53.5	61.6	64.7	71.5	72.2	70.0	71.2	68.7	90.6
28-Sep	73.8	77.1	79.5	81.6	82.7	83.0	81.6	78.4	68.2	56.9	46.9	40.4	40.7	40.4	42.1	38.0	38.3	43.6	60.4	77.4	76.1	75.9	82.7	84.1	64.6	84.1
29-Sep	78.4	78.0	73.5	74.6	71.9	79.4	91.2	94.3	94.6	91.7	82.8	70.4	78.4	73.7	53.2	48.2	44.5	43.4	48.0	54.3	60.3	63.5	57.1	55.7	69.2	94.6
30-Sep	57.5	59.5	67.1	72.4	67.0	68.7	69.9	77.5	91.3	84.2	75.6	75.3	75.3	71.6	73.7	74.0	78.0	75.1	83.3	95.2	97.7	98.3	98.0	99.0	78.5	99.0
	90.0	90.6	91.0	92.1	91.9	93.0	92.3	89.2	82.2	73.4	65.3	60.0	56.6	54.7	54.3	53.8	55.3	61.9	72.0	81.5	86.3	88.6	88.8	89.3	Diurnal Average	
	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.9	96.9	95.1	90.2	79.8	87.3	84.2	84.9	90.9	98.1	98.9	99.4	99.7	100.0	100.0	Diurnal Maximum	

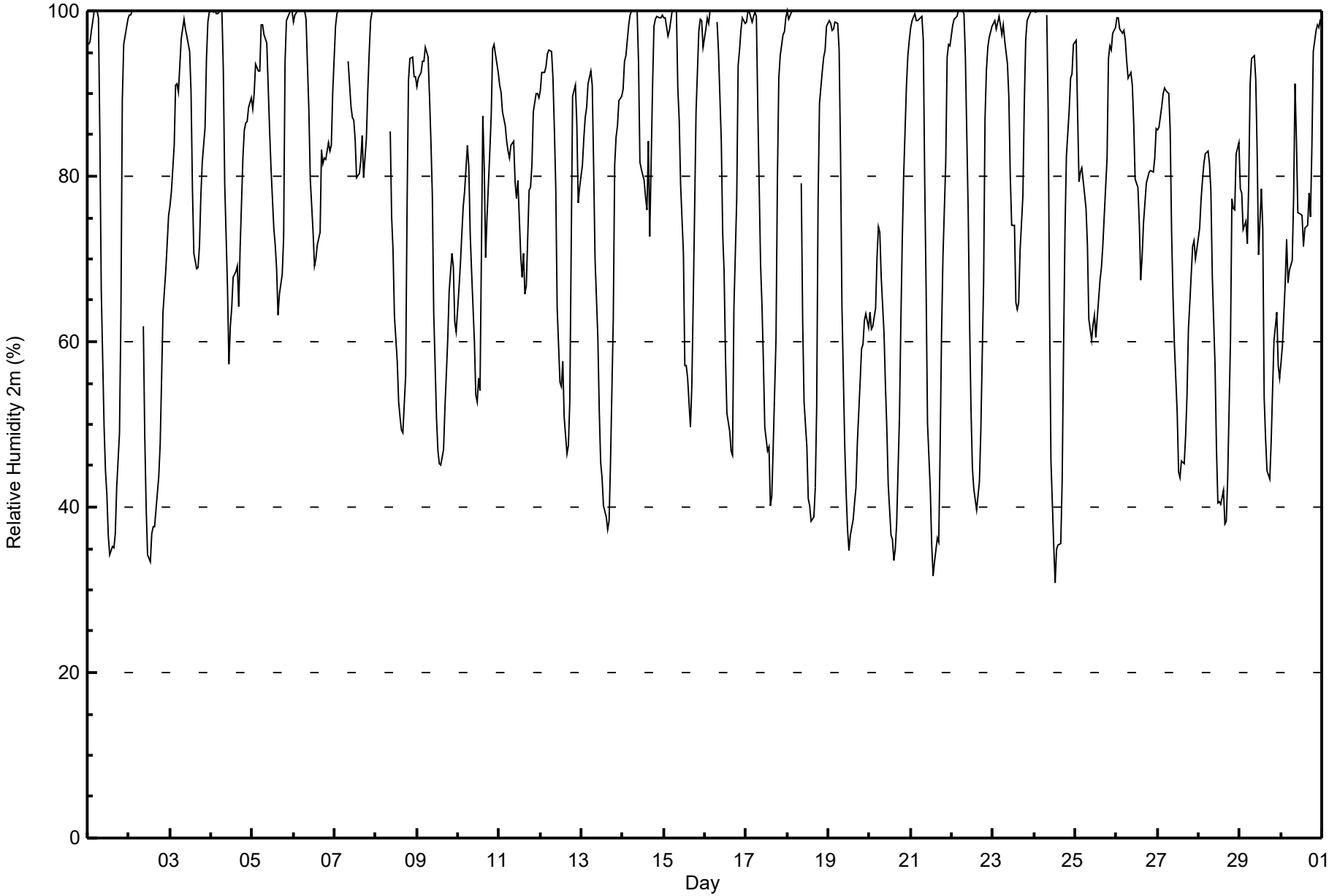
OR - Out of Range

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Conklin - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Conklin - September 2026

Maximum Speed: 19 km/h on Sep 2 12:00

Maximum Daily Speed Average: 11.1 km/h on Sep 27

Minimum Speed Value: 0 km/h on Sep 24 05:00

Minimum Daily Speed Average: 0.6 km/h on Sep 23

Maximum Diurnal Speed Average: 3.7 km/h at hour 13

Minimum Diurnal Speed Average: 1.3 km/h at hour 20

Monthly Average Velocity: 2.3 km/h 236.9 deg

Percentiles: $P_1 = 0$ $P_{10} = 1$ $Q_1 = 3$ Median = 6 $Q_3 = 9$ $P_{90} = 12$ $P_{99} = 16$

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Percent Operational Time:	99.4

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-Sep	SSE4	SSE4	SSE3	SE2	ESE3	SE5	SE4	S3	SE5	S11	S12	SSE12	SSE11	SSE10	SSE11	SSE12	SSE12	SSE11	SE8	SSE4	NNW1	WNW0	N1	NW3	SSE5.7	SSE12
2-Sep	S1	NW1	NNE1	WNW2	WSW1	NW2	NW2	E2	SE8	SE13	SE16	SE19	SE17	SE14	ESE15	ESE13	ESE12	ESE11	SE11	SE8	SE7	SE9	ESE6	ESE5	SE7.4	SE19
3-Sep	ESE5	E4	NE3	N3	N3	NE2	N3	NNE3	NNE6	ENE7	E9	ENE7	ENE8	ESE12	ESE15	ESE15	ESE14	ESE10	ESE8	ESE8	ESE7	ESE2	N2	NW1	E5.5	ESE15
4-Sep	S1	UO	NE0	SSE2	SSE2	SSE3	SSE2	SE1	NNE2	SSE3	SSW8	SW11	WSW11	W8	WSW7	WSW8	W5	NNW8	NNW12	NNW11	N8	NNE6	N9	N9	WNW2.6	NNW12
5-Sep	N7	N8	N10	N8	N8	N7	N7	N5	N7	N8	NNE6	NNE6	NNE6	NE6	NE5	SE2	SSE4	SSE4	SSE3	NNW1	SE1	UO	SSE1	SSE3	NNE3.7	N10
6-Sep	SSE2	S3	S3	SE0	NW2	NNW2	NW2	NNW2	WNW0	ENE3	SE8	SE11	ESE8	ESE7	SE7	ESE2	ESE1	SE2	SE6	SE8	SE7	SE7	SSE5	SSE3	SE3.3	SE11
7-Sep	S0	NW1	NNW1	W1	NW2	S1	N1	NNW1	NNE1	NNW3	NNW5	NNW6	N6	NNE6	NNE5	N5	N5	NE5	ENE4	ENE2	NNW2	NNW2	NNW2	NNW3	N2.4	N6
8-Sep	NNW3	NNW3	NNW3	NNW4	NNW2	N3	NNW4	NW5	NW7	NW7	NNW9	NNW9	NNW8	NNW9	NNW9	NW7	NW5	W2	WSW2	SSE2	SSE3	S5	S7	S6	NW3.2	NNW9
9-Sep	S7	S7	S7	SSW8	SSW6	SSW6	SW11	SW12	SW12	SW9	SW12	SW14	WSW16	WSW14	WSW14	SW15	SW11	SW10	SSW6	S5	SSW7	WSW11	WSW11	WSW11	SW9.4	WSW16
10-Sep	WSW9	WSW8	W7	WNW8	WNW7	W6	W7	WSW9	W9	W9	WNW9	W11	WNW9	WNW10	WNW6	WNW6	WNW8	WNW7	W7	WNW7	WNW5	NW6	NW7	NW7	WNW7.4	W11
11-Sep	NW7	NW8	NW8	NW9	NW11	NW11	NW11	NW12	NW12	NW13	NW13	NNW12	NNW15	NW13	NW12	NNW12	NNW12	NNW11	NNW7	NNW6	NW3	NW4	NW5	NW4	NW9.6	NNW15
12-Sep	NW4	NW3	NW4	NW4	NW3	NW3	NW2	NW3	NW4	NW5	WNW6	WNW6	WNW6	NW6	WNW7	W7	WNW6	WSW5	SW3	S3	S5	SSW6	SSW9	SSW9	W3.4	SSW9
13-Sep	SSW9	SSW9	SSW9	SSW9	SSW9	SSW9	SSW9	SSW10	SW11	SW10	SSW14	SW16	SW14	SSW15	SW11	SW10	SW11	SW7	SW4	SSW5	SSW6	SSW5	SSW6	S7	SSW9.3	SW16
14-Sep	S6	NNW2	SSW3	N2	NNW3	NNW3	NW4	NNW8	NNW9	NNW10	NNW12	NNW11	NNW11	NW10	NNW9	NNW8	NNW10	NW6	NW4	NW4	NW4	NW4	NW4	NW3	NNW5.5	NNW12
15-Sep	NW3	NW3	NW4	NW4	NW3	WNW1	NW2	NW3	NW6	NW5	WNW4	W5	W6	SW6	SW6	SW8	SW9	SSW7	SSW4	W2	SSW5	SSW5	WSW2	SW4	WSW3.1	SW9
16-Sep	SE1	WNW1	NNW3	NE0	WSW0	WSW1	W0	SW3	S2	SSE2	ENE4	NE3	SSW4	SW5	SW5	SSW6	SSW3	ESE2	SE1	S1	SSE2	UO	S1	SSE2	S1.1	SSW6
17-Sep	S1	S0	SE1	S1	SSE2	SSW1	SSE4	SE2	S4	SW8	SW7	SW7	SSW9	SW8	WSW7	WSW6	W4	NW3	SE0	S1	SSE1	NNW0	SSE2	NW1	SW2.6	SSW9
18-Sep	S1	SSE2	SSW1	WNW0	SSW1	SSE2	SSE1	SSW0	ESE1	NNW5	NW6	WNW5	NW6	NW7	NNW8	NW6	NW6	WNW2	SE0	SSE2	SE4	SE5	SE5	SSE1	NW1.2	NNW8
19-Sep	SE2	SE4	SE5	SE4	SE5	SE5	S5	SSW6	S4	S13	S15	SSE17	S17	S15	S15	S16	S14	S12	S9	S8	S10	S8	S8	SSW6	S9.1	S17
20-Sep	SSW5	SSW8	SSW7	SSW7	S7	S7	SSW8	SSW8	SW5	SSW7	SSW8	SSW6	SSW5	SW5	SW7	SW8	SW6	SSW4	S4	S4	S3	SE2	SSE4	E1	SSW5.4	SSW8
21-Sep	E1	E1	E2	SE2	SE2	SE3	SE3	SE4	SE3	ESE5	SE10	SSE12	SSE15	SSE14	SSE14	S13	S11	S12	S7	S5	SSE3	N1	S1	SSE3	SSE5.6	SSE15
22-Sep	SSE1	SE2	SSE1	SE0	SSW0	NNW1	SSE0	SSE1	N2	NW6	NW8	NW10	NW10	NW9	NW8	WNW7	NW5	W3	W2	E1	SE1	SSE1	SSE1	SSE2	NW2.4	NW10
23-Sep	SSE2	SSE3	S2	SSE2	S2	S2	WSW0	NNW0	SSE1	NE1	NNE1	ENE2	ENE1	N4	ENE4	NE4	NNE4	NE2	SSE1	NNW2	NNW1	NNW0	NW1	SSE1	ENE0.6	NNW4
24-Sep	SSE1	SE0	S1	SSE1	ENE0	S1	S2	SSE3	S2	WSW2	SW4	WSW8	WSW7	W7	SW8	WSW6	W3	SW1	NW1	UO	SSE1	SSE1	ESE1	NNW1	SW2.1	WSW8
25-Sep	NNW0	ESE3	ENE3	N3	NNE3	N4	NNE5	NE6	E7	E9	ESE14	E11	E11	E7	E10	E8	NE5	NE5	NNE2	N4	E7	ESE10	WNW3	NNW3	ENE4.8	ESE14
26-Sep	SSW2	WNW3	W6	WSW8	WSW9	WSW11	W10	WSW12	W11	W11	W12	W11	W13	W13	W14	W11	W11	W11	WNW10	WNW8	W9	WSW11	WSW12	WSW12	W9.7	W14
27-Sep	WSW12	SW11	SW12	SW12	SW12	SW12	SW11	SW13	WSW12	W10	WSW13	WSW15	WSW15	W14	W14	WSW13	WSW10	WSW8	SW7	SW7	SSW6	SW10	SW13	SW13	WSW11.1	WSW15
28-Sep	SW11	SW10	SW11	SW10	SW10	SW12	SW13	SW14	SW13	SW13	SW14	SW16	SW13	SW12	SSW9	SW12	SSW11	SSW7	S3	SW4	SSW6	S6	SSW6	S7	SW9.8	SW16
29-Sep	S7	S7	S7	S3	W2	SSW5	S4	S4	SSE2	SSW6	W9	WNW9	W12	WNW11	WNW11	WNW9	WNW10	W9	W9	W7	SW10	SW12	WSW13	WSW12	WSW6.3	WSW13
30-Sep	WSW10	W11	SW10	SW12	WSW12	WSW14	W11	NW8	NW10	NW11	NW14	NW12	NW11	NW11	NW10	NW10	NW8	NW7	NNW3	SSE1	S2	SE3	NNE1	W1	WNW6.6	NW14
	SW2.2	SW2.0	SW2.0	WSW2.0	WSW2.1	WSW2.3	WSW2.5	WSW2.6	W2.1	W2.4	WSW2.7	WSW3.3	WSW3.7	WSW3.5	WSW3.0	WSW3.3	WSW2.9	SW1.9	SSW1.4	SSW1.3	S2.1	SSW2.3	SW2.5	SW2.5	Diurnal Average	
	WSW12	SW11	SW12	SW12	WSW12	WSW14	SW13	SW14	SW13	SE13	SE16	SE19	S17	SSW15	ESE15	S16	S14	S12	NNW12	NNW11	SW10	SW12	WSW13	SW13	Diurnal Maximum	

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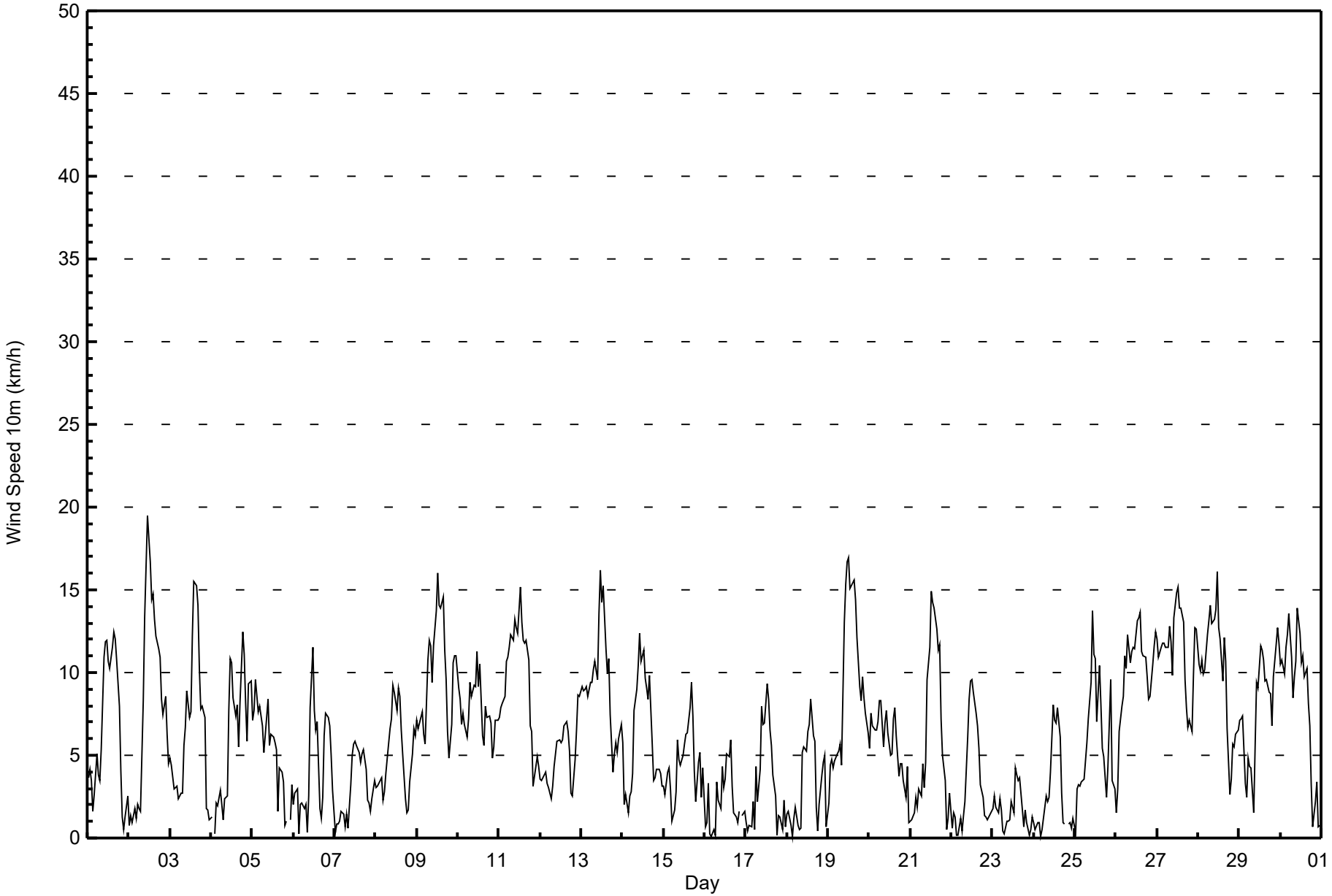
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Conklin - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	335	46.79	46.79
6 - 11	284	39.66	86.45
12 - 19	97	13.55	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: 716

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Conklin - September 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	11	12	9	7	11	35	55	39	18	11	8	12	12	44	35	335
6 - 11	13	6	2	3	8	10	14	4	22	40	34	22	26	24	36	20	284
12 - 19	0	0	0	0	0	8	5	8	11	2	26	16	7	0	8	6	97
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	29	17	14	12	15	29	54	67	72	60	71	46	45	36	88	61	716

Total Number of Valid Hours: 716

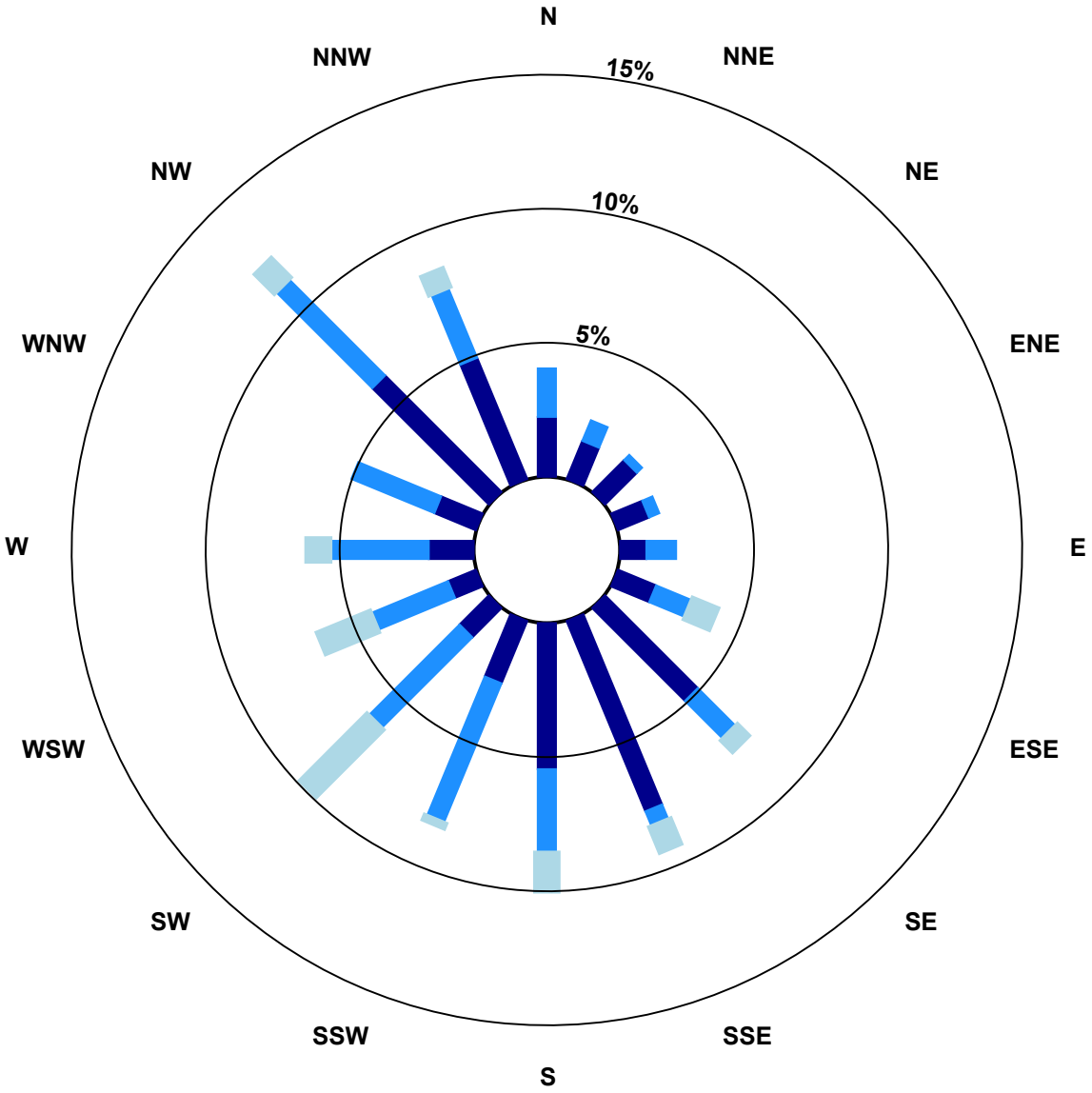
Total Number of Hours: 720

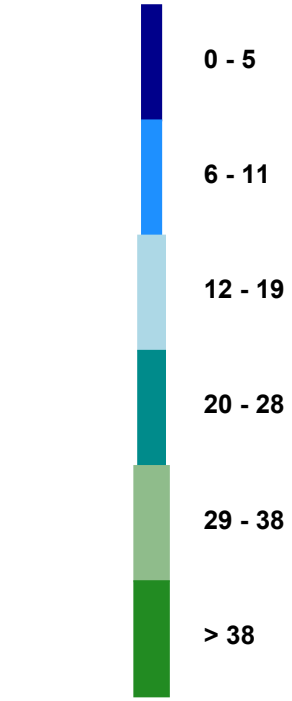
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Conklin





Total Number of Valid Hours: 716

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

Maximum Value: 7 km/h on Sep 27 14:00

Minimum Value: 1 km/h on Sep 19 06:00

Percentiles: $P_1 = 1$ $P_{10} = 1$ $Q_1 = 1$ Median = 2 $Q_3 = 4$ $P_{90} = 5$ $P_{99} = 6$

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

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-Sep	1	1	1	1	1	1	1	1	2	3	4	3	3	3	3	4	4	3	2	2	1	1	2	1	4
2-Sep	2	2	1	1	2	2	2	1	4	4	5	5	5	4	4	4	3	3	3	2	2	2	2	1	5
3-Sep	2	2	1	1	1	1	2	2	2	3	3	3	3	5	5	5	4	3	3	2	2	2	2	1	5
4-Sep	1	UO	3	1	1	2	1	2	1	2	3	3	4	4	3	4	3	6	3	3	3	3	3	3	6
5-Sep	3	3	3	3	3	2	2	2	3	3	2	2	3	3	2	2	2	1	2	2	2	UO	1	1	3
6-Sep	1	2	1	2	2	2	2	1	2	2	2	3	3	2	2	2	2	2	3	2	2	2	2	2	3
7-Sep	1	2	2	2	2	2	1	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1	2	1	2
8-Sep	1	1	1	1	1	1	1	2	3	3	4	4	4	4	4	3	2	1	1	1	1	1	1	1	4
9-Sep	2	1	2	2	2	3	3	3	4	3	4	5	6	6	6	5	4	3	2	1	2	4	4	4	6
10-Sep	3	4	4	4	3	3	4	4	4	4	4	5	5	5	4	3	4	4	3	3	2	3	3	3	5
11-Sep	3	4	4	4	5	5	5	5	5	5	5	5	7	6	6	5	6	5	3	4	1	2	2	2	7
12-Sep	2	2	2	2	1	1	1	2	2	2	3	3	3	2	3	3	3	2	1	2	1	1	2	2	3
13-Sep	2	2	3	2	2	2	2	3	3	3	4	5	4	4	5	3	4	3	2	1	1	1	1	1	5
14-Sep	1	3	2	1	1	2	2	4	3	4	5	4	5	4	4	4	5	3	2	2	2	2	2	1	5
15-Sep	1	1	2	2	1	1	1	2	3	2	2	2	2	3	3	4	3	3	1	2	1	1	2	1	4
16-Sep	1	2	1	1	1	2	2	2	2	2	2	2	3	3	3	3	2	1	1	1	1	UO	1	1	3
17-Sep	1	1	1	1	1	1	1	2	2	3	2	2	3	3	3	3	2	2	1	1	1	1	1	1	3
18-Sep	1	1	1	1	1	1	1	1	2	2	2	2	3	3	4	3	3	2	1	1	1	1	1	1	4
19-Sep	1	1	1	1	1	1	1	1	2	4	5	5	5	4	4	4	5	3	3	2	3	3	3	2	5
20-Sep	2	2	3	2	1	2	2	3	2	2	2	2	2	2	3	2	2	1	1	1	1	1	2	2	3
21-Sep	1	1	1	2	2	1	1	1	1	2	3	4	4	5	4	4	4	3	2	1	1	2	1	1	5
22-Sep	1	1	2	1	1	1	1	1	1	3	4	4	4	4	4	3	2	1	2	2	1	1	1	1	4
23-Sep	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	2	1	2	1	1	1	1	1	2
24-Sep	1	1	1	1	1	1	1	1	2	2	2	3	3	3	4	3	2	1	1	UO	1	2	1	1	4
25-Sep	1	2	1	1	1	1	2	2	3	4	5	4	4	3	4	4	3	3	2	2	3	4	2	2	5
26-Sep	2	2	3	4	4	4	4	5	5	5	5	5	6	7	7	6	5	5	5	4	4	4	4	5	7
27-Sep	4	3	3	4	3	3	3	4	4	4	5	6	6	7	7	6	4	3	2	2	1	3	3	4	7
28-Sep	3	3	3	3	3	3	3	4	4	4	4	5	4	4	3	4	4	3	1	1	1	1	1	1	5
29-Sep	1	1	2	1	3	3	1	2	1	3	5	5	6	5	6	5	5	4	4	3	3	4	4	4	6
30-Sep	4	4	3	3	5	5	6	4	5	5	6	5	5	5	4	4	3	3	3	1	1	1	1	2	6
	4	4	4	4	5	5	6	5	5	5	6	6	7	7	7	6	6	6	5	4	4	4	4	5	
	Diurnal Maximum																								

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Direction of Maximum Speed: 142 deg on Sep 2 12:00

Direction of Maximum Daily Speed Average: 240.0 deg on Sep 27

Direction of Minimum Speed: 69 deg on Sep 24 05:00

Direction of Minimum Daily Speed Average: 0.6 deg on Sep 23

Monthly Average Direction: 236.9 deg

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Percent Operational Time:	99.4

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-Sep	160	167	151	142	118	137	137	184	141	173	185	168	164	168	157	158	154	149	141	157	340	295	0	324	159.5
2-Sep	187	316	16	299	249	314	317	81	127	140	138	142	145	125	119	117	120	122	133	140	132	128	117	112	130.1
3-Sep	105	86	43	354	352	41	4	31	32	66	81	77	76	105	117	108	114	107	102	105	112	106	352	308	90.7
4-Sep	191	UO	36	163	150	167	165	129	27	158	199	221	240	259	258	241	263	334	348	342	353	12	351	349	293.6
5-Sep	355	355	358	356	359	353	354	5	358	8	30	21	31	41	36	138	148	161	165	329	132	UO	155	159	13.5
6-Sep	162	176	170	126	321	332	326	333	290	61	126	126	111	122	141	106	102	142	128	143	141	140	160	148	132.5
7-Sep	183	320	336	275	310	171	356	327	32	348	340	343	352	13	29	3	356	43	57	68	342	327	340	332	0.5
8-Sep	348	345	333	331	348	355	332	325	326	325	336	334	327	329	333	311	306	275	239	164	155	179	182	188	319.3
9-Sep	188	186	189	195	196	196	217	224	220	224	227	229	242	244	243	234	227	230	208	191	196	237	241	257	224.0
10-Sep	249	258	278	289	286	275	270	258	267	280	288	279	292	282	291	298	293	297	277	284	285	304	316	311	282.4
11-Sep	314	315	311	317	318	321	321	324	322	324	326	327	327	324	323	327	328	333	331	331	315	316	316	309	322.8
12-Sep	316	319	313	321	318	316	317	310	312	319	296	301	297	321	298	279	288	258	223	184	185	192	213	208	279.5
13-Sep	212	204	208	205	207	204	204	207	220	230	211	218	221	210	215	220	214	222	219	203	200	196	196	188	211.1
14-Sep	179	343	204	355	339	328	318	332	337	345	347	333	330	324	334	338	327	325	318	325	319	320	323	321	330.2
15-Sep	317	326	311	324	323	290	321	320	320	311	283	281	260	235	231	224	219	209	193	266	199	192	239	215	254.6
16-Sep	144	292	335	41	256	246	261	219	183	147	67	44	195	232	215	201	195	107	134	173	156	UO	173	160	190.2
17-Sep	170	177	145	177	164	206	148	134	188	227	217	222	211	218	257	251	275	317	134	179	152	328	164	317	216.3
18-Sep	171	147	195	289	205	157	147	205	121	330	323	297	308	325	328	321	322	303	140	164	139	138	140	156	309.9
19-Sep	135	136	141	143	146	146	182	194	183	183	173	165	169	179	181	178	185	174	174	179	180	189	187	196	174.7
20-Sep	196	198	194	197	186	190	205	206	222	212	200	198	199	216	225	214	216	197	188	178	172	128	147	93	198.8
21-Sep	81	83	90	132	128	124	126	132	138	112	139	147	158	162	168	176	184	177	177	183	158	356	178	150	158.0
22-Sep	152	145	168	144	213	339	162	150	351	308	310	317	319	321	310	297	307	274	271	94	135	155	163	149	307.5
23-Sep	161	166	180	161	180	191	240	337	147	41	29	74	71	349	63	54	22	56	149	341	338	332	316	158	73.6
24-Sep	167	133	170	150	69	172	184	154	176	249	235	239	237	264	226	251	273	226	325	UO	166	151	112	341	231.5
25-Sep	331	104	73	4	19	358	22	55	83	95	104	98	92	83	97	89	54	47	29	354	101	102	294	338	76.6
26-Sep	203	285	265	257	257	246	260	256	264	268	268	271	268	271	270	281	280	279	288	285	278	255	248	237	265.6
27-Sep	242	236	232	232	231	229	232	232	242	259	249	247	251	263	259	251	249	240	232	218	209	226	232	229	240.0
28-Sep	220	218	222	216	221	227	229	230	225	230	224	222	217	215	207	218	211	197	170	215	202	188	193	189	217.3
29-Sep	189	190	191	173	263	211	173	191	161	207	262	284	270	288	292	300	295	279	262	265	236	232	247	256	251.4
30-Sep	257	260	233	235	257	254	277	306	315	317	318	320	317	317	320	325	321	320	328	151	172	135	24	264	291.7
	222.7	229.4	234.1	245.3	253.2	240.8	247.9	249.5	261.5	258.8	239.2	237.4	242.8	251.9	240.8	238.1	243.6	228.8	207.7	209.9	186.2	198.8	227.1	235.4	
	Diurnal Average																								

UO - Unstable Operation

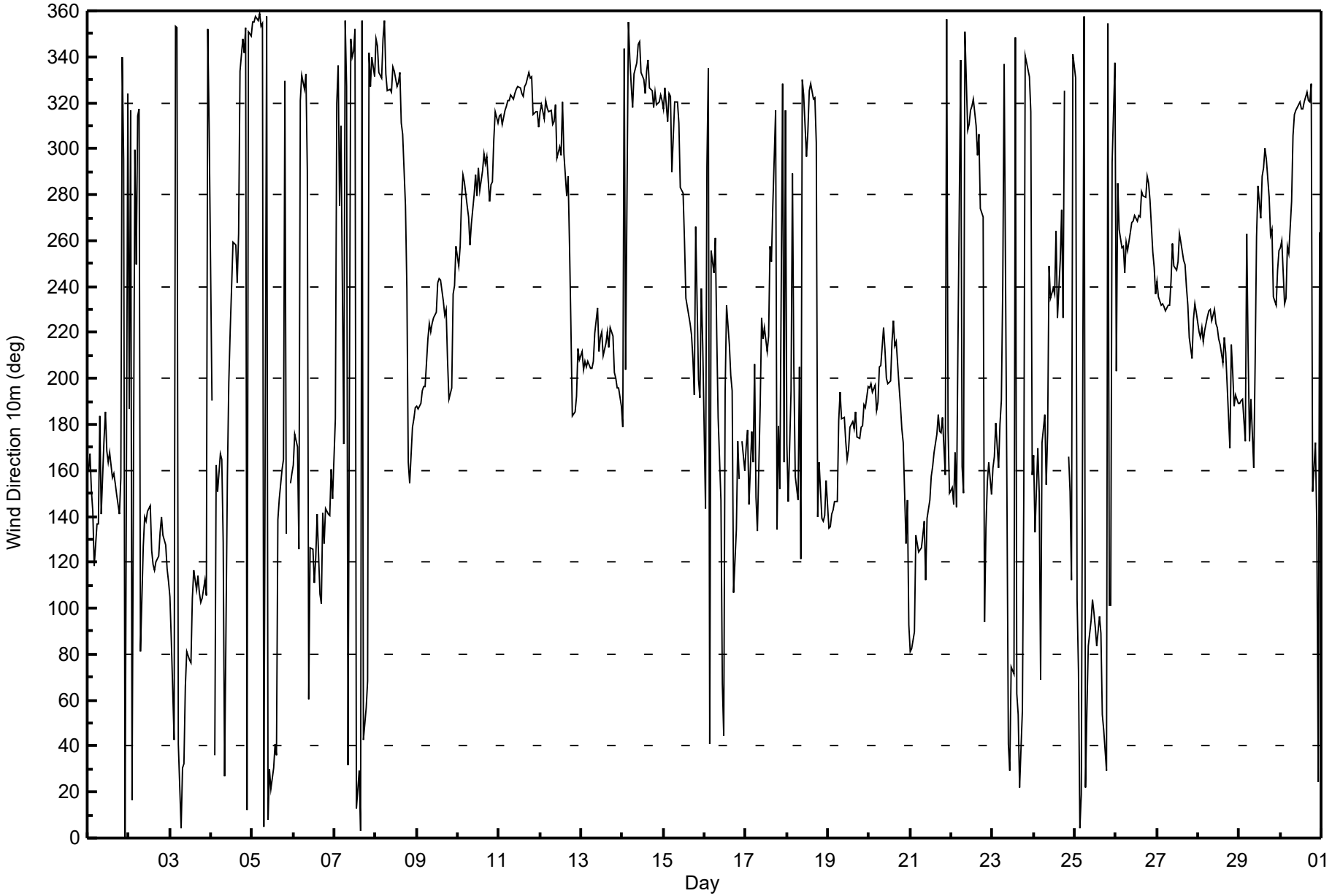
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Conklin - September 2026



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

Maximum Value: 102 deg on Sep 4 03:00

Minimum Value: 8 deg on Sep 13 20:00

Percentiles: P_1 = 12 P_{10} = 19 Q_1 = 24 Median = 36 Q_3 = 53 P_{90} = 73 P_{99} = 95

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

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-Sep	23	18	23	32	24	12	13	26	28	24	26	27	31	29	29	24	22	21	14	44	30	72	43	24	72
2-Sep	80	78	69	28	68	29	46	69	23	21	19	21	24	21	20	21	20	20	18	16	18	18	19	26	80
3-Sep	27	38	37	31	38	52	56	52	35	37	35	42	39	29	24	25	22	24	25	24	21	48	54	52	56
4-Sep	60	UO	102	40	21	49	26	58	75	85	36	28	34	51	50	42	52	49	23	24	26	45	25	23	102
5-Sep	27	27	23	27	23	23	23	24	25	24	40	39	50	53	43	97	38	25	51	68	65	UO	70	14	97
6-Sep	48	27	26	85	20	21	22	35	85	66	26	27	33	33	19	49	77	32	31	16	18	20	20	53	85
7-Sep	92	56	90	76	78	57	49	53	101	38	28	25	27	35	42	39	22	36	35	45	22	22	48	18	101
8-Sep	24	17	19	23	30	25	33	39	39	37	34	30	45	36	40	52	51	48	62	53	18	15	13	16	62
9-Sep	17	17	18	19	28	65	22	22	22	24	29	29	31	36	35	25	27	26	22	23	20	30	28	37	65
10-Sep	32	44	54	56	58	51	54	42	48	54	57	54	57	54	63	60	58	62	55	55	66	62	46	50	66
11-Sep	51	51	49	46	41	35	37	32	36	32	32	34	31	36	35	34	33	30	24	26	48	49	42	53	53
12-Sep	63	65	58	60	51	41	48	63	60	54	54	56	56	48	54	55	51	45	24	23	15	17	21	21	65
13-Sep	20	19	19	19	19	17	18	20	22	27	25	28	26	24	34	28	26	25	25	8	13	12	14	16	34
14-Sep	22	93	60	69	28	34	45	28	23	28	27	27	30	36	33	26	34	40	43	40	32	41	32	47	93
15-Sep	41	54	59	39	35	91	61	48	46	46	59	55	53	48	40	48	27	19	19	74	19	15	72	28	91
16-Sep	78	97	31	94	98	87	88	74	72	75	57	82	87	67	64	48	67	32	74	84	53	UO	22	21	98
17-Sep	82	82	81	93	53	87	19	79	54	35	30	34	27	29	53	60	55	35	84	64	46	80	54	82	93
18-Sep	72	67	81	91	76	61	77	87	79	32	40	61	57	45	39	45	48	39	97	25	13	12	18	87	97
19-Sep	20	12	9	13	14	13	13	18	44	23	22	24	23	25	23	22	22	19	18	17	19	20	21	23	44
20-Sep	24	21	22	24	20	21	20	30	42	30	30	40	51	47	33	26	24	18	21	22	30	46	18	71	71
21-Sep	55	72	51	50	46	16	37	14	42	28	28	25	22	24	23	22	22	19	15	16	23	81	80	18	81
22-Sep	95	63	68	96	84	68	90	73	79	51	53	41	42	46	48	55	52	50	42	55	68	28	62	49	96
23-Sep	28	25	60	52	40	62	86	91	80	84	79	55	90	54	47	36	35	59	68	17	84	61	66	58	91
24-Sep	77	76	80	46	90	82	28	27	52	72	65	32	47	50	47	48	49	74	88	UO	68	75	49	31	90
25-Sep	90	53	50	42	29	33	37	39	40	35	28	32	37	47	35	47	47	65	68	67	52	32	68	60	90
26-Sep	79	80	50	43	44	29	42	35	45	46	49	49	48	50	47	52	52	50	52	52	55	37	33	31	80
27-Sep	28	24	22	23	22	21	21	22	32	44	34	35	38	48	42	42	40	23	20	17	17	22	19	19	48
28-Sep	20	19	18	19	22	18	20	20	22	22	26	26	25	25	23	24	23	22	22	20	13	14	10	10	26
29-Sep	13	14	17	48	73	33	23	35	76	23	51	58	46	50	54	53	52	52	42	42	22	20	30	38	76
30-Sep	37	38	26	23	40	35	49	49	38	36	32	30	35	32	32	29	31	30	25	61	30	16	73	73	73
	95	97	102	96	98	91	90	91	101	85	79	82	90	67	64	97	77	74	97	84	84	81	80	87	
	Diurnal Maximum																								

UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS22
JANVIER
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JANVIER (AMS22)
SEPTEMBER 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	682	34	38	99.44	-	-	1.5	0	0.2	0
TRS(ppb) Average	682	34	38	99.44	0.4	0	0.3	-	0.2	-
THC(ppm) Average	682	34	38	99.44	-	-	2.7	-	2.2	-
NMHC(ppm) Average	682	34	38	99.44	-	-	0.005	-	0	-
CH4(ppm) Average	682	34	38	99.44	-	-	2.7	-	2.2	-
O3 (ppb) Average	683	33	37	99.44	-	-	48.5	0	28.9	-
NO2 (ppb) Average	658	36	62	96.39	-	-	3.6	0	1.5	-
NO (ppb) Average	658	36	62	96.39	-	-	5.5	-	1.1	-
NOX (ppb) Average	658	36	62	96.39	-	-	7.6	-	2.1	-
PM2.5 (ug/m3) Average	653	0	67	90.69	-	-	58.8	0	22.1	0
Temperature 2 m (C) Average	718	0	2	99.72	-	-	27	-	17.9	-
Relative Humidity (%) Average	718	0	2	99.72	-	-	99.3	-	91.3	-
Wind Speed 20 m (km/h) Average	719	0	1	99.86	-	-	24	-	15	-
Wind Direction 20 m (deg) Average	719	0	1	99.86	-	-	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JANVIER (AMS22)
SEPTEMBER 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	682	0.11	0.2	-	0	0	0	0.1	0.2	0.3	1.5
TRS (ppb) Average	682	0.13	0	-	0	0.1	0.1	0.1	0.2	0.2	0.3
THC (ppm) Average	682	2.07	0.1	-	2	2	2	2	2.1	2.2	2.7
NMHC(ppm) Average	682	0	0	-	0	0	0	0	0	0	0.005
CH4(ppm) Average	682	2.07	0.1	-	2	2	2	2	2.1	2.2	2.7
O3 (ppb) Average	683	19.31	10.2	-	0.8	5.2	11.9	18.7	26.8	33	48.5
NO2 (ppb) Average	658	0.68	0.6	-	0	0.1	0.3	0.5	1	1.5	3.6
NO (ppb) Average	658	0.32	0.6	-	0	0	0	0.1	0.3	0.7	5.5
NOX (ppb) Average	658	1	1	-	0	0.2	0.3	0.7	1.3	2.2	7.6
PM2.5 (ug/m3) Average	653	10.07	7.7	-	0.4	3.5	5	7.4	13.5	20.7	58.8
Temperature 2 m (C) Average	718	11.44	5.5	-	-0.3	4.7	7.2	10.8	15.2	19.1	27
Relative Humidity (%) Average	718	77.17	18.8	-	32.2	47	65.4	81.4	93.7	98.1	99.3
Wind Speed 20 m (km/h) Average	719	8.4	5	-	0	3	5	8	11	16	24
Wind Direction 20 m (deg) Average	719	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JANVIER (AMS22)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
NO2, NMHC, O3, SO2, TRS	08 Sep 2026 11:00	08 Sep 2026 13:00	3	DAS Failure - data not recorded
NO2, NMHC, O3, SO2, TRS	09 Sep 2026 13:00	09 Sep 2026 13:00	1	DAS Failure - data not recorded
NO2	24 Sep 2026 12:00	25 Sep 2026 09:00	22	Maintenance - replaced analyzer
PM2.5	08 Sep 2026 11:00	08 Sep 2026 13:00	3	DAS Failure - data not recorded
PM2.5	09 Sep 2026 07:00	09 Sep 2026 13:00	7	DAS Failure - data not recorded
PM2.5	12 Sep 2026 00:00	13 Sep 2026 10:00	35	DAS Failure - data not recorded
PM2.5	24 Sep 2026 23:00	25 Sep 2026 09:00	11	DAS Failure - data not recorded
PM2.5	28 Sep 2026 22:00	29 Sep 2026 08:00	11	DAS Failure - data not recorded
Relative Humidity, Temperature 2m	08 Sep 2026 12:00	08 Sep 2026 13:00	2	Unstable Operation - flatline in the sensor output signal
Wind Speed, Wind Direction	04 Sep 2026 07:00	04 Sep 2026 07:00	1	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Janvier - September 2026

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

Maximum Value: 1.5 ppb on Sep 22 12:00 Maximum Daily Average: 0.2 ppb on Sep 19

Minimum Value: 0.0 ppb on Sep 1 01:00 Minimum Daily Average: 0.0 ppb on Sep 10

Maximum Diurnal Average: 0.2 ppb at hour 11 Minimum Diurnal Average: 0.1 ppb at hour 8

Monthly Average: 0.11 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.2 P_{90} = 0.3 P_{99} = 0.9

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	34
Percent Operational Time:	99.4

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-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
2-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.2	0.1	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.1	0.3
3-Sep	0.2	0.3	0.2	0.2	Z	0.2	0.2	0.1	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	0.1	0.3
4-Sep	0.0	0.0	0.0	0.0	0.1	Z	0.1	0.0	0.0	0.1	0.3	0.5	1.0	0.1	0.1	0.1	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	1.0
5-Sep	Z	0.0	0.1	0.0	0.0	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.2	0.4
6-Sep	0.4	Z	0.4	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
7-Sep	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	0.1	0.0	0.1
8-Sep	0.1	0.1	0.1	Z	0.2	0.2	0.2	0.2	0.3	0.3	DF	DF	DF	0.5	0.4	0.4	0.4	0.3	0.0	0.1	0.1	0.0	0.1	0.1	0.2	0.5
9-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.0	0.0	0.0	0.0	0.0	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	0.1
10-Sep	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
11-Sep	Z	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.3	0.3	0.3	0.3	0.6	0.3	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.6
12-Sep	0.0	Z	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1
13-Sep	0.1	0.0	Z	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.1	0.2	0.3	0.3	0.4	0.3	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.4
14-Sep	0.1	0.0	0.1	Z	0.0	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.3	0.3	0.1	0.2	0.3	0.3	0.2	0.2	0.3	0.1	0.1	0.3
15-Sep	0.1	0.2	0.2	0.4	Z	0.1	0.0	0.1	0.1	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	0.0	0.1	0.4
16-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.2	1.0	0.9	0.6	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0
17-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.2	0.2	0.1	0.1	0.0	0.2	0.0	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.4
18-Sep	0.1	Z	0.2	0.0	0.0	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	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.3
19-Sep	0.0	0.0	Z	0.1	0.0	0.0	0.1	0.2	0.5	0.4	0.3	0.2	0.2	0.2	0.3	0.4	0.5	0.4	0.1	0.1	0.4	0.4	0.3	0.4	0.2	0.5
20-Sep	0.8	0.6	0.5	Z	0.2	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.3	0.1	0.1	0.2	0.1	0.2	0.8
21-Sep	0.1	0.1	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	1.3	1.0	0.2	0.3	0.5	0.6	0.4	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.2	1.3
22-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.2	1.3	1.5	0.3	0.2	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.2	1.5
23-Sep	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
24-Sep	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	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2
25-Sep	0.1	0.2	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	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	0.1	0.3
26-Sep	0.0	0.0	0.0	Z	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	0.0	0.0	0.1	0.0	0.0	0.0	0.1
27-Sep	0.1	0.1	0.1	0.2	Z	0.0	0.0	0.0	0.1	0.3	0.3	0.0	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	0.3
28-Sep	0.0	0.1	0.0	0.0	0.0	Z	0.1	0.0	0.1	0.1	0.2	0.1	0.0	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.6	1.0	0.4	0.2	0.2	1.0
29-Sep	Z	0.3	0.2	0.3	0.5	0.2	0.2	0.1	0.1	0.1	0.2	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	0.5
30-Sep	0.0	Z	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	0.0	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	0.2	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	
	0.8	0.6	0.5	0.4	0.5	0.2	0.2	0.2	0.5	1.0	1.3	1.5	1.0	0.6	0.5	0.6	0.5	0.4	0.3	0.3	0.6	1.0	0.4	0.4	Diurnal Maximum	

Z - zerospan C - Calibration DF - DAS Failure

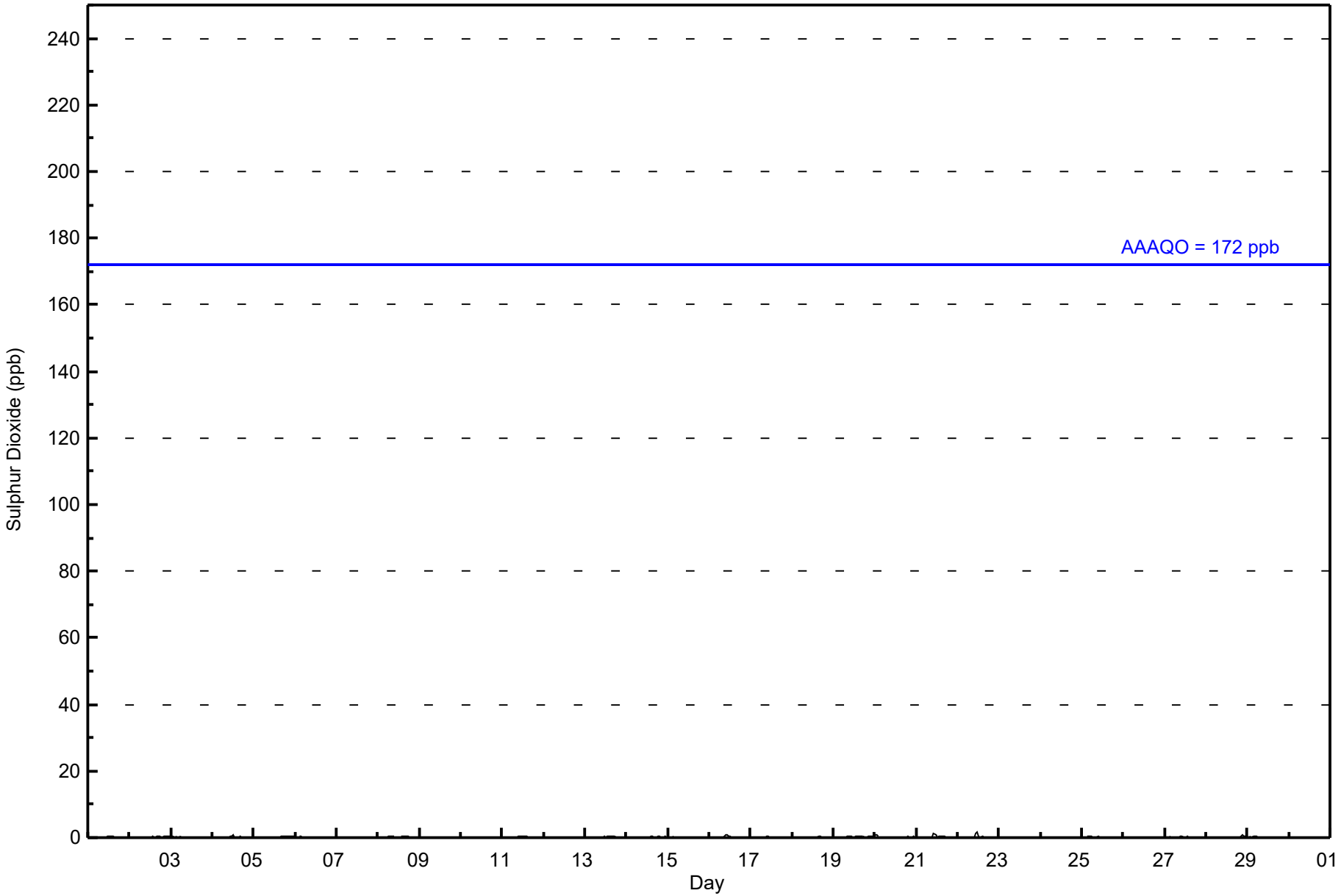
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Janvier - September 2026



Sulphur Dioxide (SO_2) - ppb

Janvier - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	682	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: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Janvier - September 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	39	43	18	16	27	22	20	18	36	111	113	69	46	43	35	25	681
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	39	43	18	16	27	22	20	18	36	111	113	69	46	43	35	25	681

Total Number of Valid Hours: 681

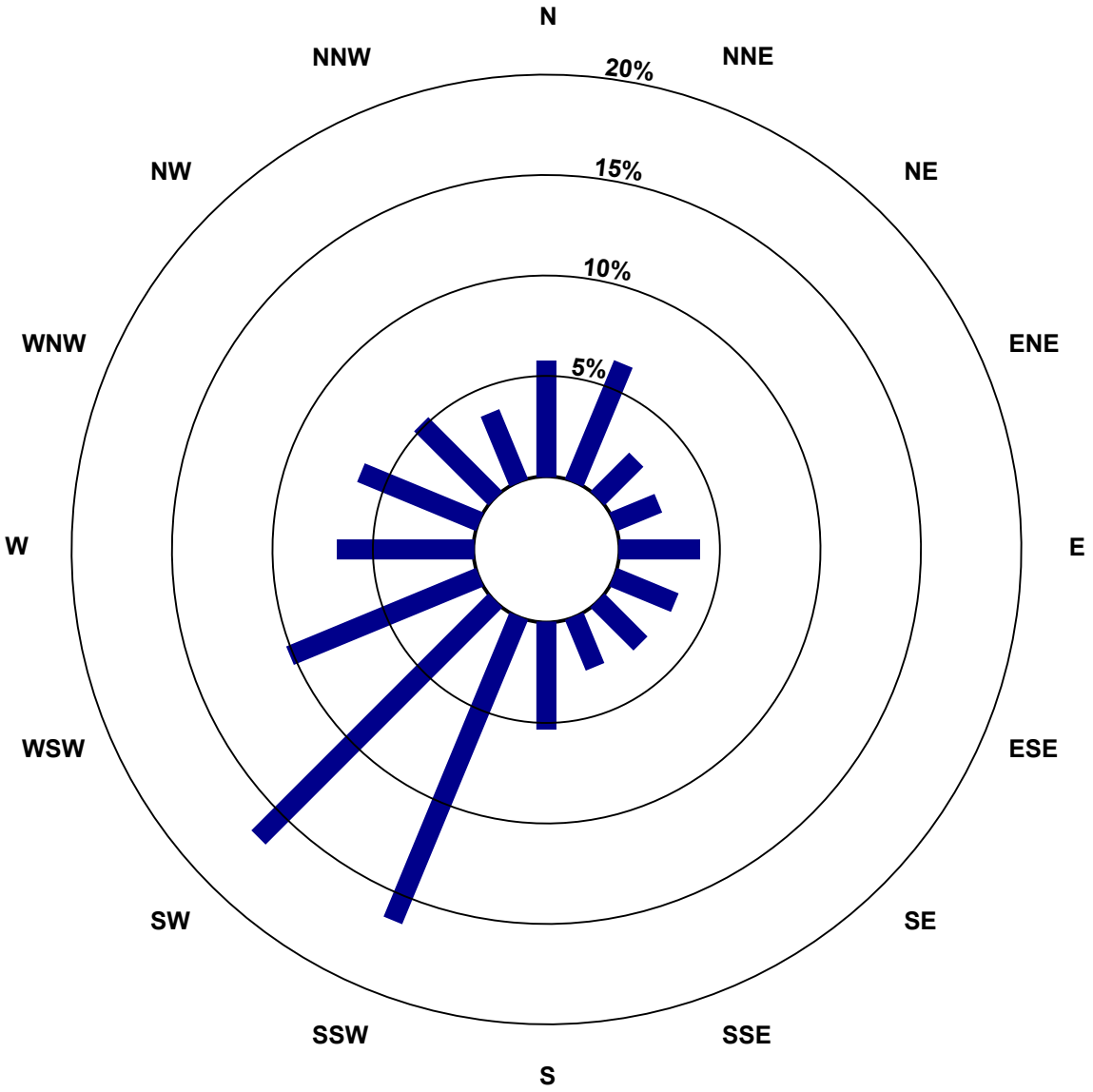
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Janvier



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

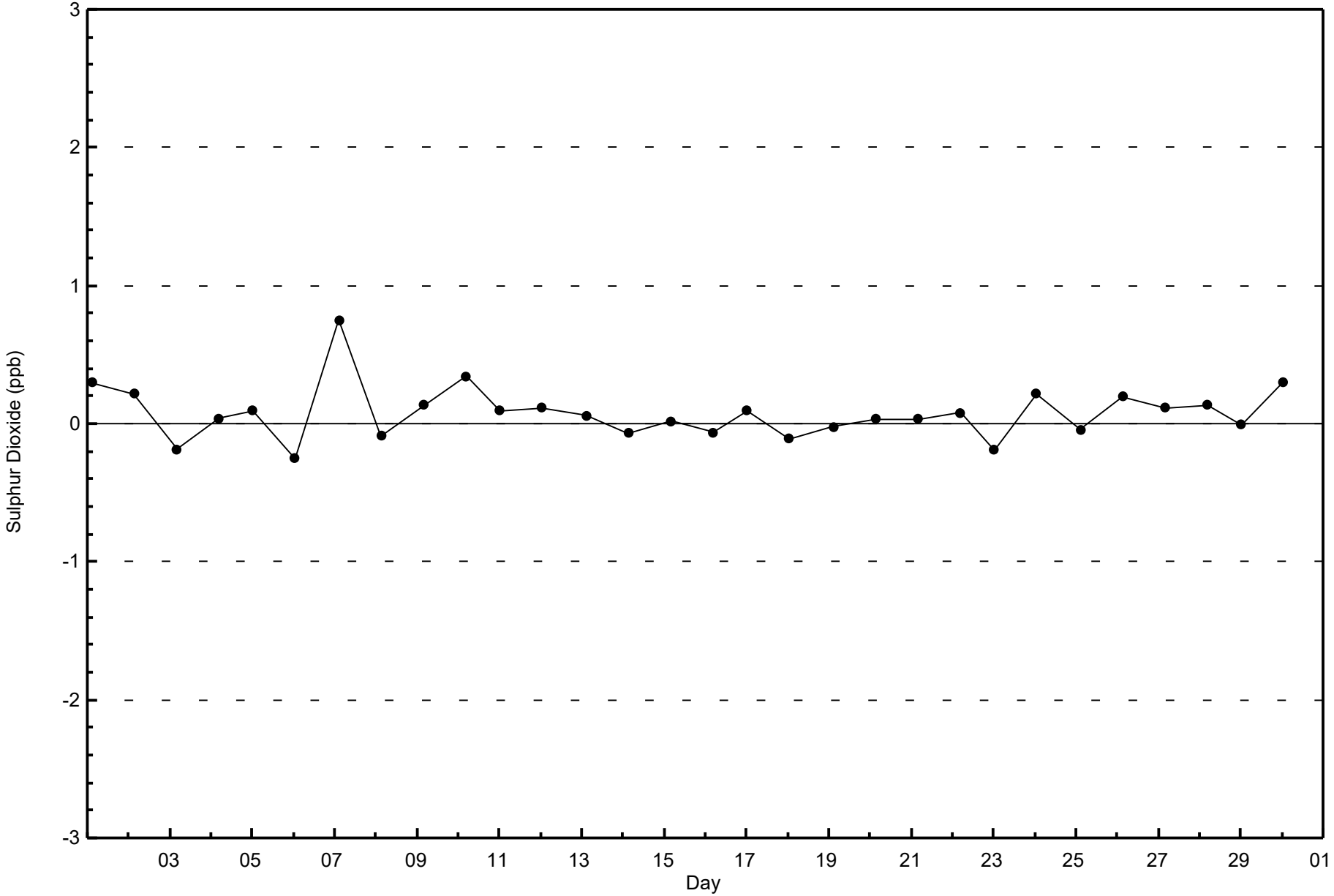
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Janvier - September 2026

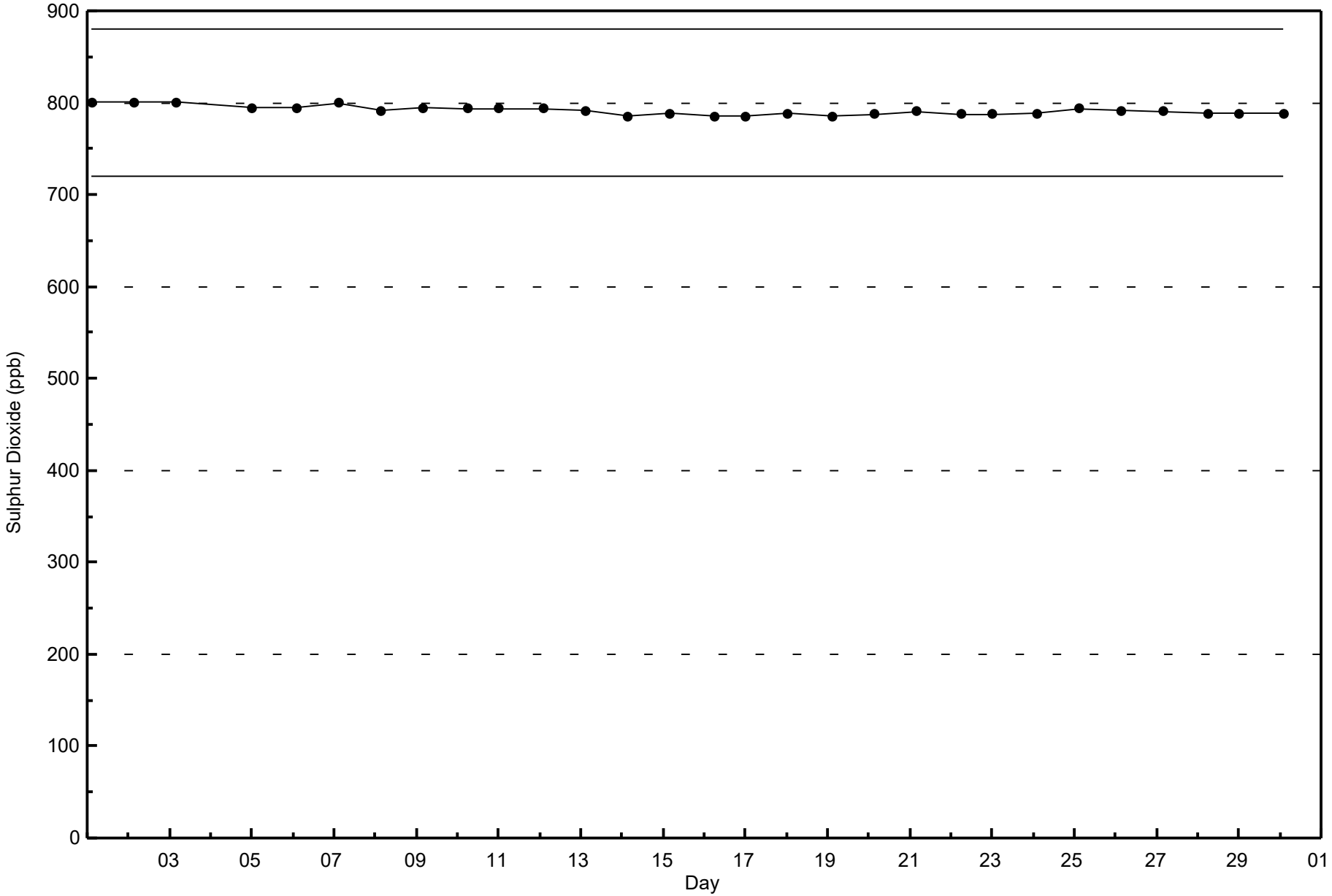


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Janvier - September 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Janvier - September 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 0.4 ppb on Sep 14 22:00 Maximum Daily Average: 0.2 ppb on Sep 3

Minimum Value: 0.0 ppb on Sep 1 00:30 Minimum Daily Average: 0.1 ppb on Sep 26

Maximum Diurnal Average: 0.1 ppb at hour 11 Minimum Diurnal Average: 0.1 ppb at hour 1

Monthly Average: 0.13 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} = 0.2

Periods in Service:	1440
Periods of Valid Data:	1365
Periods of Invalid Data:	75
Periods of Calibration:	70
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-Sep	0.0 0.0	0.0 0.0	0.0 0.0	Z SP	0.1 0.1	0.1 0.1	0.1 0.1	0.2 0.2	0.2 0.2	0.2 C	C C	C C	C C	C C	C 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	0.1	0.3
2-Sep	0.2 0.1	0.2 0.2	0.2 0.2	0.2 0.2	Z 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	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2	0.3
3-Sep	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	Z 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 0.2	0.2 0.2	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-Sep	Z SP	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	0.2 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	0.2 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
5-Sep	0.1 0.1	Z SP	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 0.1	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	0.0 0.1	0.1 0.0	0.1	0.2
6-Sep	0.0 0.0	0.0 0.0	Z SP	0.1 0.1	0.1 0.1	0.1 0.1	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 0.1	0.1 0.1	0.1 0.1	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-Sep	0.1 0.1	0.1 0.1	0.1 0.1	Z SP	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	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-Sep	0.1 0.1	0.1 0.0	0.0 0.0	0.0 0.0	Z SP	0.0 0.0	0.1 0.1	0.1 0.1	0.2 0.2	0.2 0.2	0.2 DF	DF DF	DF 0.1	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	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1	0.2
9-Sep	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	Z SP	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 DF	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	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-Sep	Z SP	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 0.1	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 0.2	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	0.2
11-Sep	0.1 0.1	Z SP	0.1 0.1	0.1 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	0.2 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	0.1 0.1	0.1 0.1	0.1	0.2
12-Sep	0.1 0.1	0.1 0.1	Z SP	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	0.1 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	0.2
13-Sep	0.1 0.1	0.1 0.1	0.1 0.1	Z 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	0.1 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	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.1 0.1	0.2	0.2
14-Sep	0.1 0.1	0.2 0.1	0.1 0.1	0.1 0.1	Z SP	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 0.1	0.2 0.2	0.1 0.2	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 0.4	0.3 0.3	0.2 0.2	0.2	0.4
15-Sep	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	Z SP	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 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 0.0	0.1 0.0	0.1	0.1

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Janvier - September 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-Sep	Z	0.1	0.0	0.0	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
	SP	0.0	0.1	0.0	0.0	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		
17-Sep	0.1	Z	0.1	0.2	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	0.2	0.2	0.2	0.1	0.1	0.1	0.2
	0.1	SP	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	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1		
18-Sep	0.1	0.1	Z	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	0.2	0.2	0.2	0.2	0.2	0.2	0.1	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1		
19-Sep	0.1	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	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2
	0.1	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	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1		
20-Sep	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	0.2	0.2	0.2	0.2	0.2	0.1	0.2
	0.1	0.2	0.2	0.1	SP	0.1	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	0.2		
21-Sep	0.2	0.2	0.2	0.1	0.1	Z	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	0.2	0.2	0.2	0.2	0.2	0.2
	0.2	0.2	0.1	0.1	0.1	SP	0.1	0.1	0.2	0.1	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		
22-Sep	Z	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	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2
	SP	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	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1		
23-Sep	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	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
	0.1	SP	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1		
24-Sep	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	0.2	0.2	0.1	0.1	0.1	0.1	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	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1		
25-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
26-Sep	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
	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	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1		
27-Sep	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	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
28-Sep	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	0.1	0.1	0.1	0.2
	SP	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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		
29-Sep	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	0.1	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	0.2	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	0.0	0.0		
30-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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	0.2	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	0.2	0.2	0.4	0.3	0.2	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

Janvier - September 2026

Maximum Value: 0.3 ppb on Sep 1 15:00

Maximum Daily Average: 0.2 ppb on Sep 3

Minimum Value: 0.0 ppb on Sep 1 01:00

Minimum Daily Average: 0.1 ppb on Sep 26

Maximum Diurnal Average: 0.1 ppb at hour 10

Minimum Diurnal Average: 0.1 ppb at hour 1

Monthly Average: 0.13 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} = 0.2

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	34
Percent Operational Time:	99.4

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-Sep	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.2	0.2	0.2	C	C	C	C	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
2-Sep	0.1	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
3-Sep	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
4-Sep	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	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2
5-Sep	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	0.0	0.1	0.1	0.2
6-Sep	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	0.1	0.1	0.1
7-Sep	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
8-Sep	0.1	0.1	0.0	0.0	Z	0.0	0.1	0.1	0.2	0.2	DF	DF	DF	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
9-Sep	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	DF	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
10-Sep	Z	0.2	0.2	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	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
11-Sep	0.1	Z	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	0.1	0.2
12-Sep	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	0.1	0.1	0.2
13-Sep	0.1	0.1	0.1	Z	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	0.1	0.2	0.2
14-Sep	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	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.3
15-Sep	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	0.0	0.1	0.1
16-Sep	Z	0.1	0.1	0.0	0.0	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	0.1	0.2
17-Sep	0.1	Z	0.1	0.2	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	0.2	0.2	0.1	0.1	0.1	0.1	0.2
18-Sep	0.1	0.1	Z	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	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2
19-Sep	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	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2
20-Sep	0.1	0.1	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
21-Sep	0.2	0.2	0.1	0.1	0.1	Z	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	0.2	0.2	0.2	0.2	0.2	0.2
22-Sep	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
23-Sep	0.1	Z	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	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2
24-Sep	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	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2
25-Sep	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
26-Sep	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
27-Sep	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	0.1	0.1	0.1
28-Sep	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	0.2	0.2	0.1	0.1	0.1	0.2
29-Sep	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	0.0	0.1	0.1	0.2
30-Sep	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	0.0	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	0.1	0.1	Diurnal Average	
	0.2	0.2	0.2	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	0.3	0.3	0.2	Diurnal Maximum	

Z - zerospan C - Calibration DF - DAS Failure

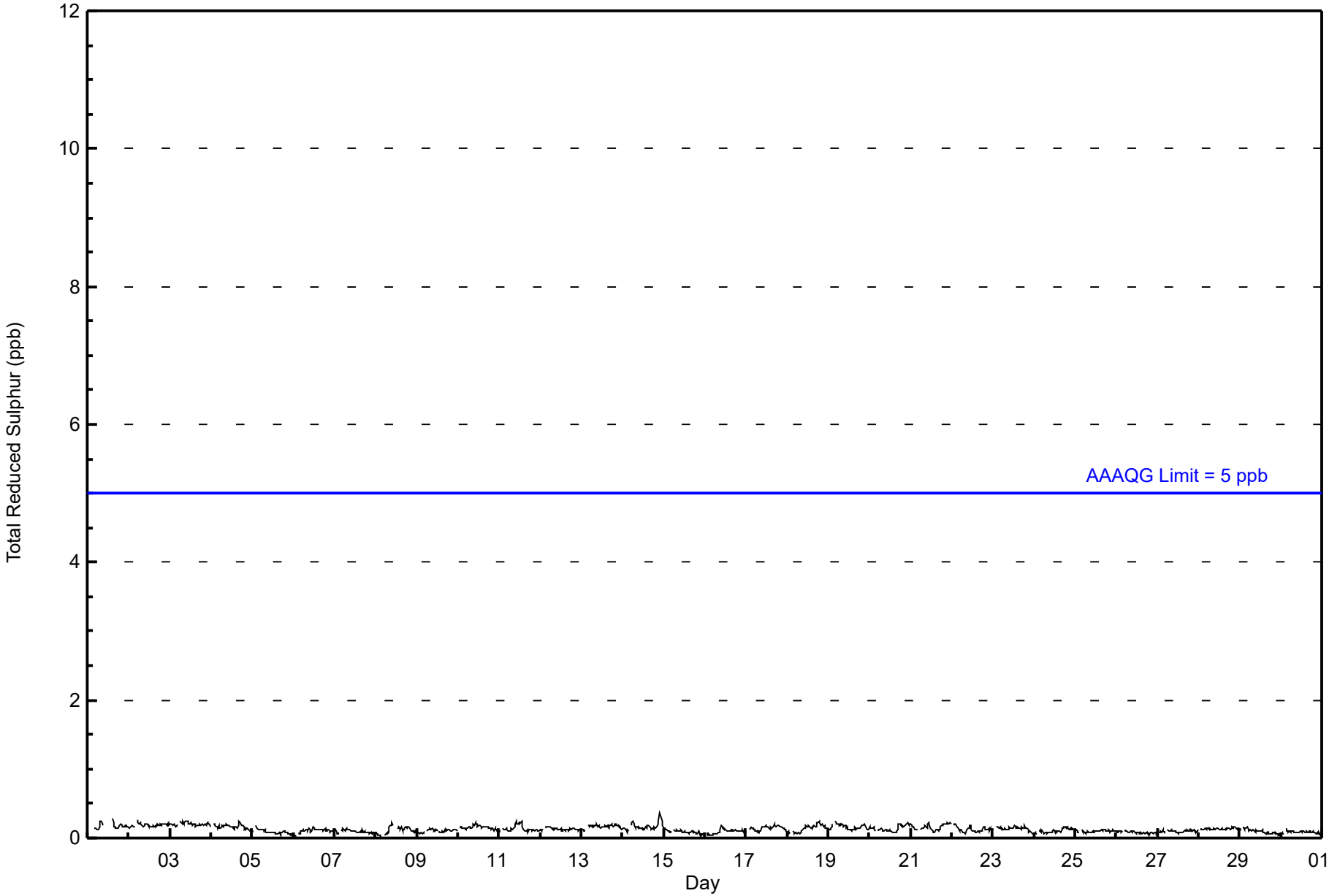
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Janvier - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	682	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: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Reduced Sulphur (TRS) - ppb

Janvier - September 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	41	42	18	18	29	22	18	20	34	110	110	68	46	46	34	25	681
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	41	42	18	18	29	22	18	20	34	110	110	68	46	46	34	25	681

Total Number of Valid Hours: 681

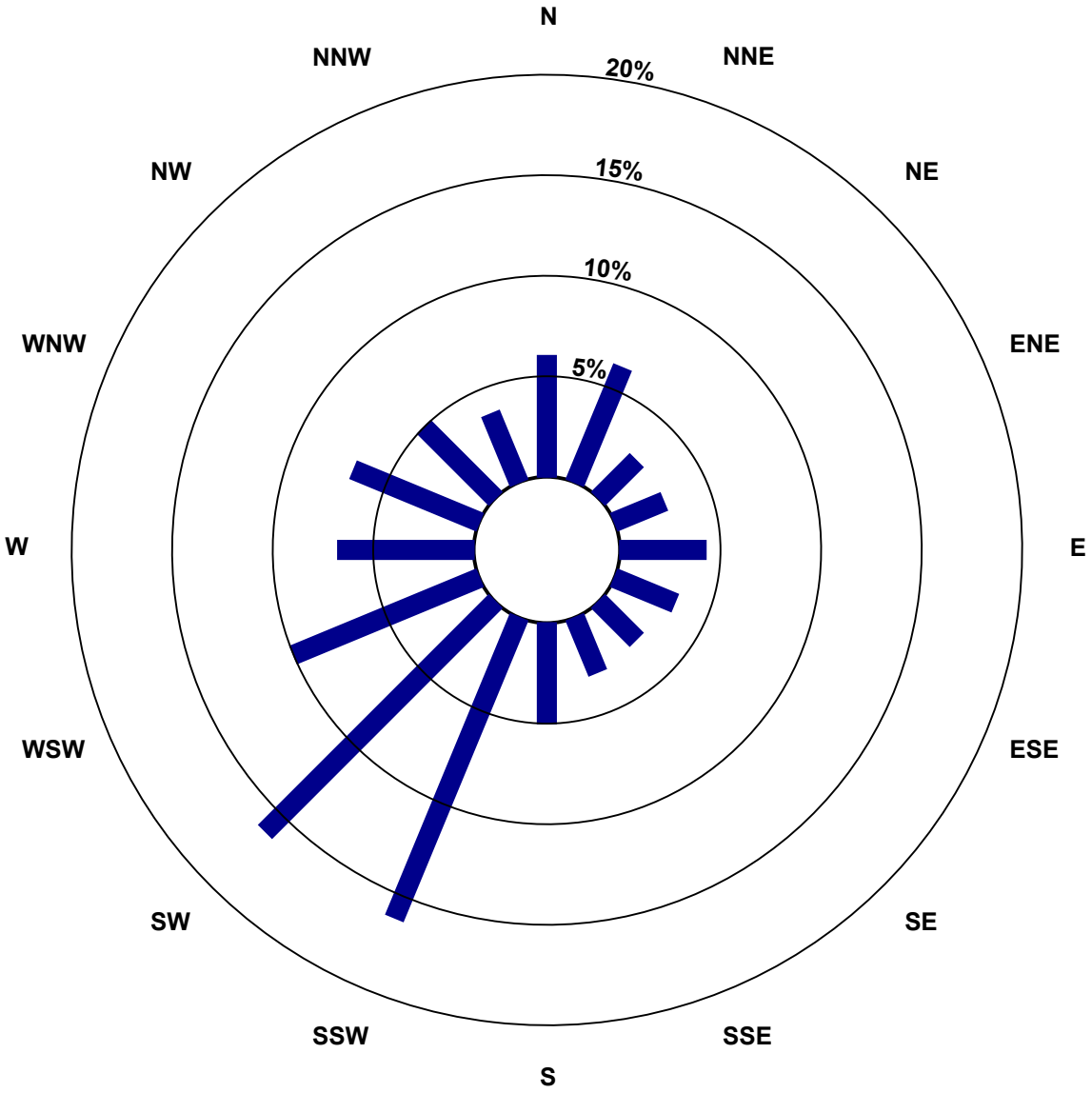
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Reduced Sulphur (TRS) - ppb

Janvier



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

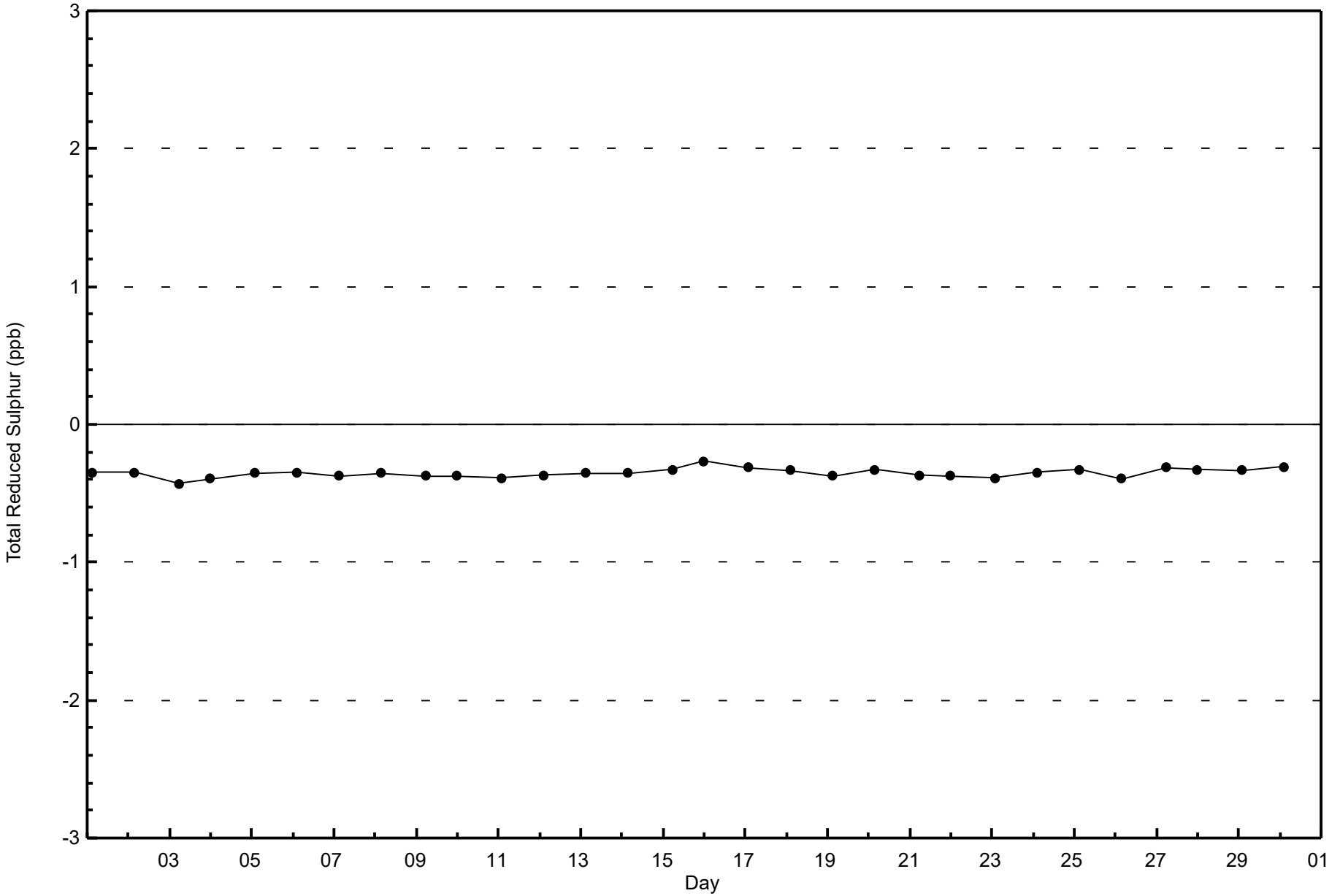
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Janvier - September 2026

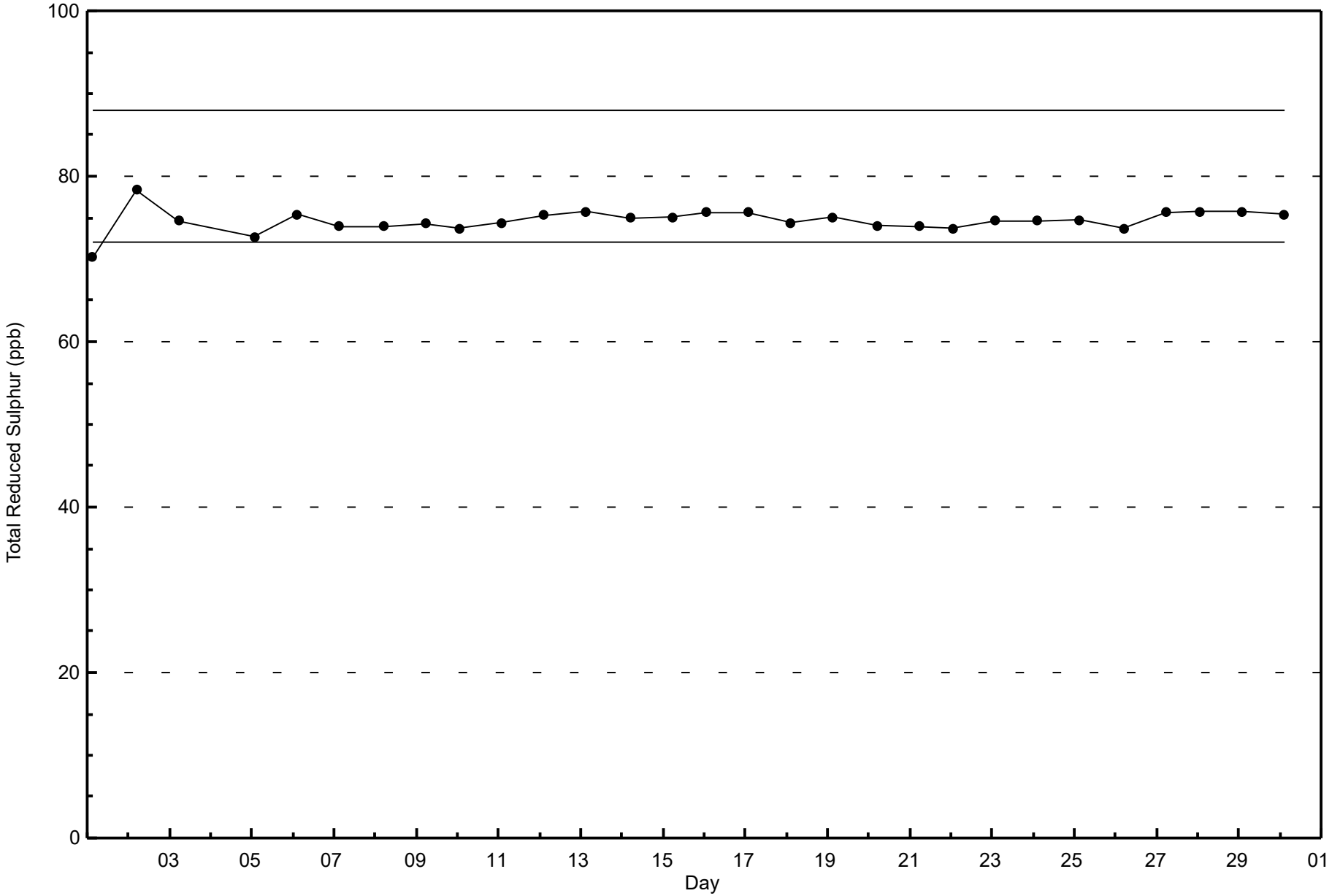


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Janvier - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Janvier - September 2026

Maximum Value: 2.7 ppm on Sep 2 03:00

Maximum Daily Average: 2.2 ppm on Sep 3

Minimum Value: 2.0 ppm on Sep 18 13:00

Minimum Daily Average: 2.0 ppm on Sep 5

Maximum Diurnal Average: 2.2 ppm at hour 7

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} = 2.5

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	34
Percent Operational Time:	99.4

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-Sep	2.1	2.1	Z	2.1	2.1	2.2	2.2	2.2	2.3	2.3	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	2.1	2.1	2.3
2-Sep	2.1	2.4	2.7	Z	2.6	2.4	2.5	2.6	2.5	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	2.2	2.7
3-Sep	2.2	2.5	2.4	2.5	Z	2.6	2.5	2.3	2.2	C	C	C	C	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.6
4-Sep	2.1	2.4	2.4	2.3	2.2	Z	2.4	2.5	2.4	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	2.1	2.5
5-Sep	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
6-Sep	2.0	Z	2.0	2.0	2.2	2.4	2.4	2.5	2.5	2.5	2.4	2.2	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	2.5
7-Sep	2.0	2.0	Z	2.2	2.3	2.3	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	2.2	2.4
8-Sep	2.2	2.1	2.1	Z	2.1	2.2	2.2	2.2	2.2	2.1	DF	DF	DF	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
9-Sep	2.1	2.1	2.2	2.2	Z	2.2	2.2	2.2	2.2	2.2	2.1	2.0	DF	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
10-Sep	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
11-Sep	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
12-Sep	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	2.1	2.0	2.1
13-Sep	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	2.0	2.1	2.1	2.1	2.1	2.1	2.1
14-Sep	2.1	2.1	2.1	Z	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	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.2
15-Sep	2.0	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	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
16-Sep	2.0	2.1	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	2.1	2.2	2.0	2.2
17-Sep	Z	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.1	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	2.0	2.1	2.3
18-Sep	2.0	Z	2.0	2.1	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2
19-Sep	2.0	2.0	Z	2.1	2.1	2.1	2.1	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	2.1	2.1	2.1	2.1	2.2
20-Sep	2.1	2.1	2.1	Z	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	2.1	2.1	2.0	2.1
21-Sep	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2
22-Sep	2.1	2.1	2.1	2.2	2.2	Z	2.4	2.4	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	2.4
23-Sep	Z	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
24-Sep	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	2.0	2.0	2.0	2.1	2.1
25-Sep	2.1	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	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3
26-Sep	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	2.0	2.0	2.0	2.0	2.0	2.0	2.1
27-Sep	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
28-Sep	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	2.1	2.0	2.1
29-Sep	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	2.0	2.0	2.0	2.0	2.0	2.1
30-Sep	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	2.0
	2.1	2.1	2.1	2.1	2.1	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	Diurnal Average	
	2.2	2.5	2.7	2.5	2.6	2.6	2.5	2.6	2.5	2.5	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	Diurnal Maximum	

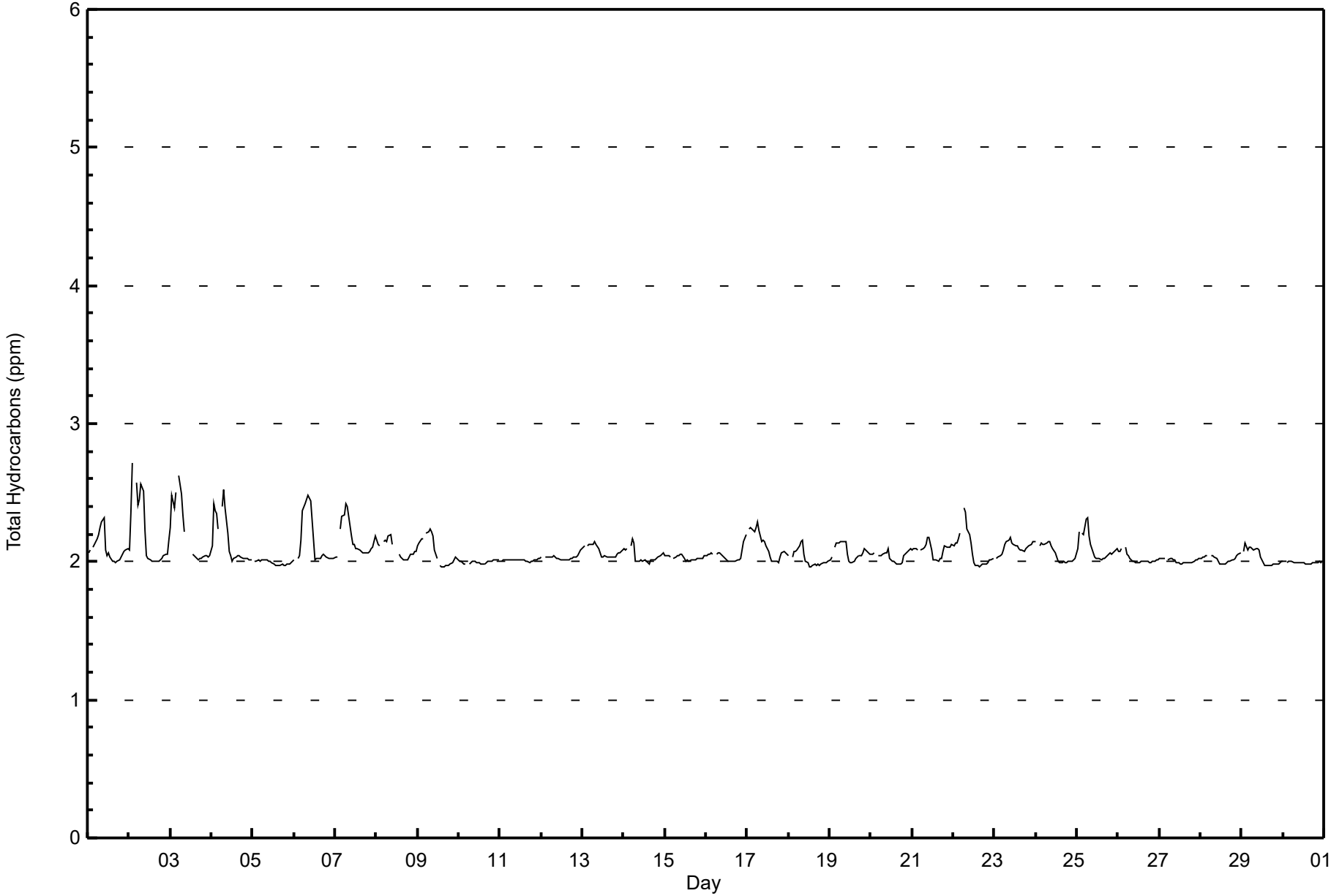
Z - zerospan C - Calibration DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Janvier - September 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Total Hydrocarbons (THC) - ppm

Janvier - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	411	60.26	60.26
2.1 - 3.0	271	39.74	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Janvier - September 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	30	7	6	7	16	17	14	15	17	43	59	55	40	40	32	13	411
2.1 - 3.0	9	36	12	9	11	5	6	3	19	68	54	14	6	3	3	12	270
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	39	43	18	16	27	22	20	18	36	111	113	69	46	43	35	25	681

Total Number of Valid Hours: 681

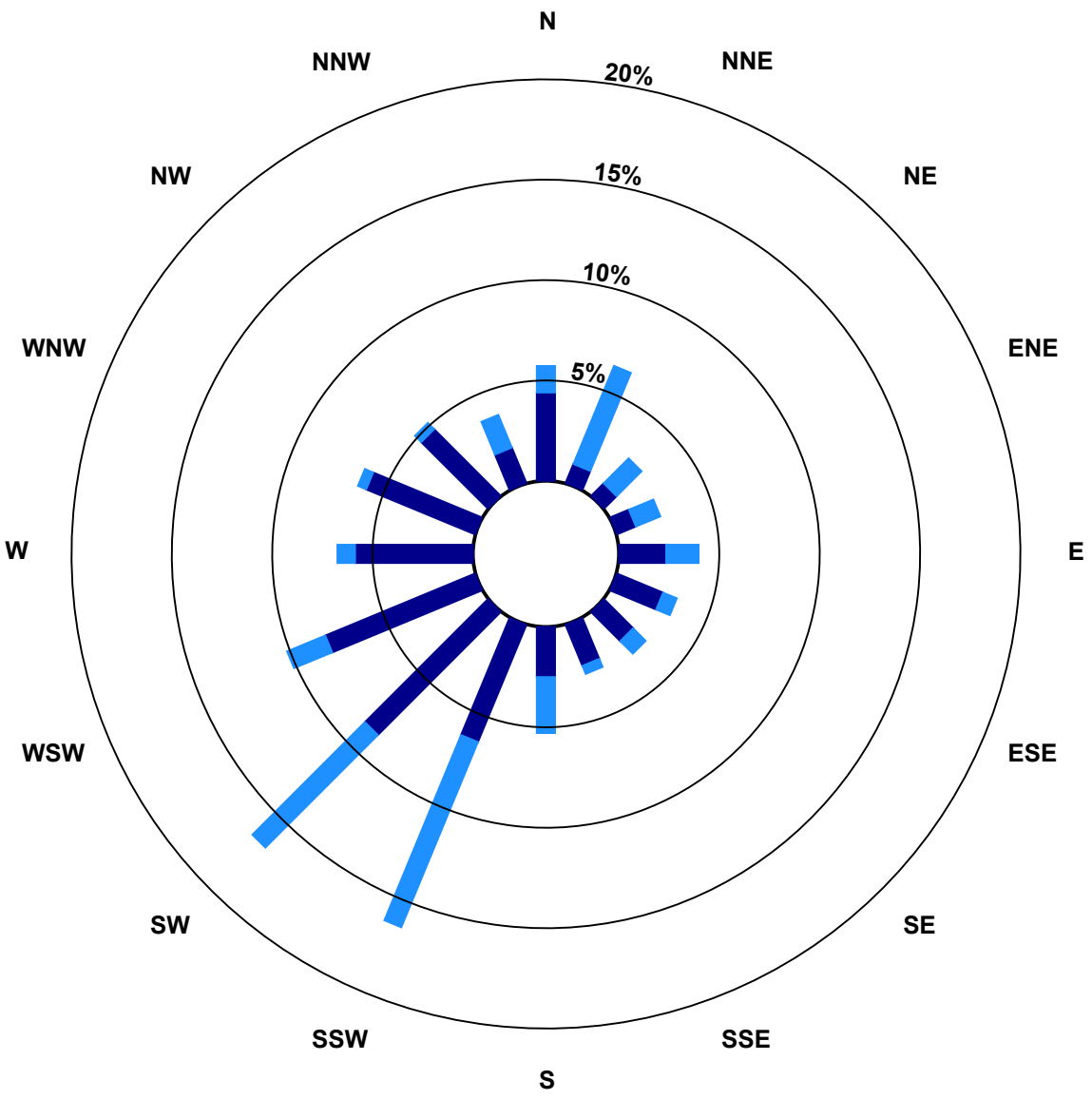
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Janvier



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

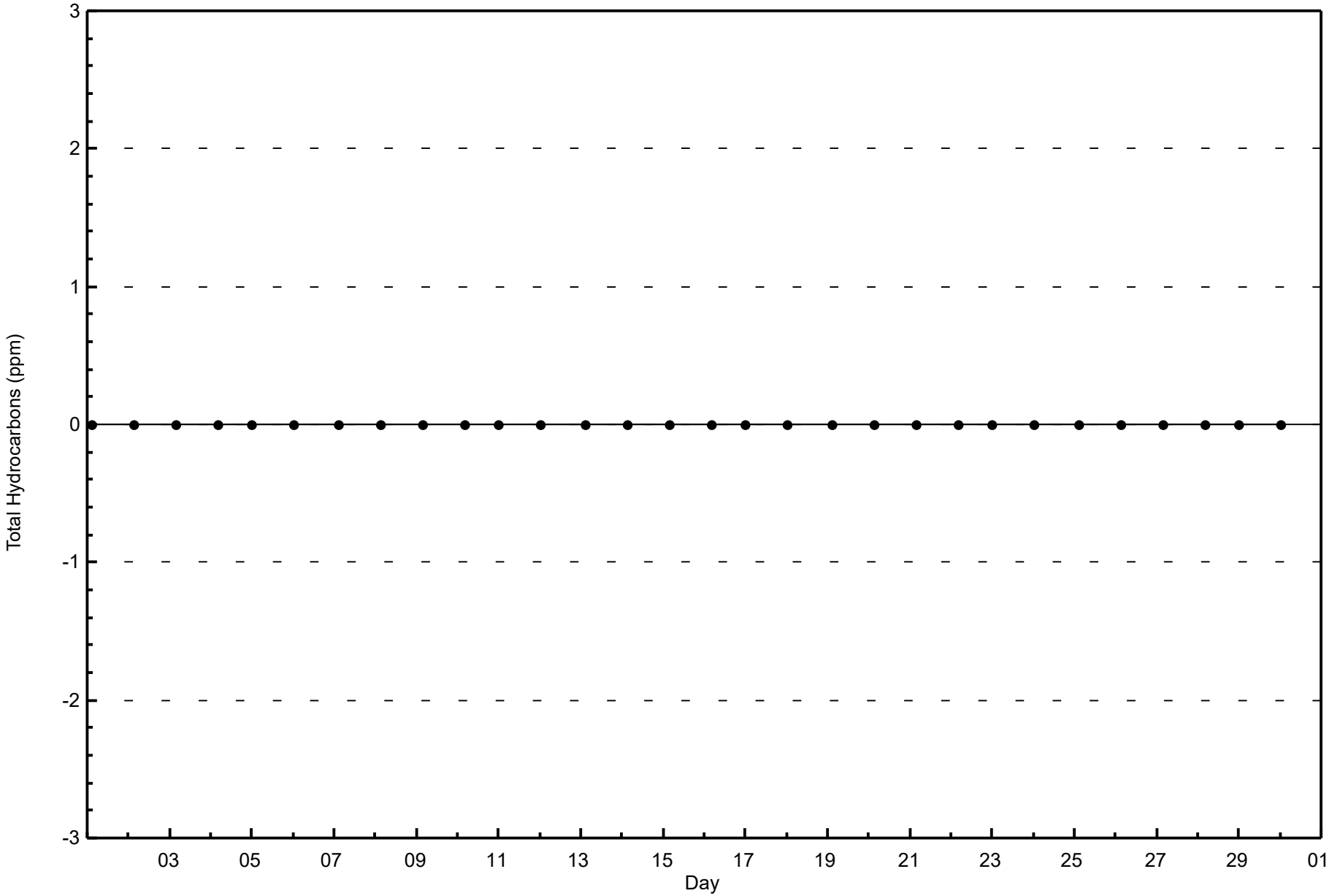
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Janvier - September 2026

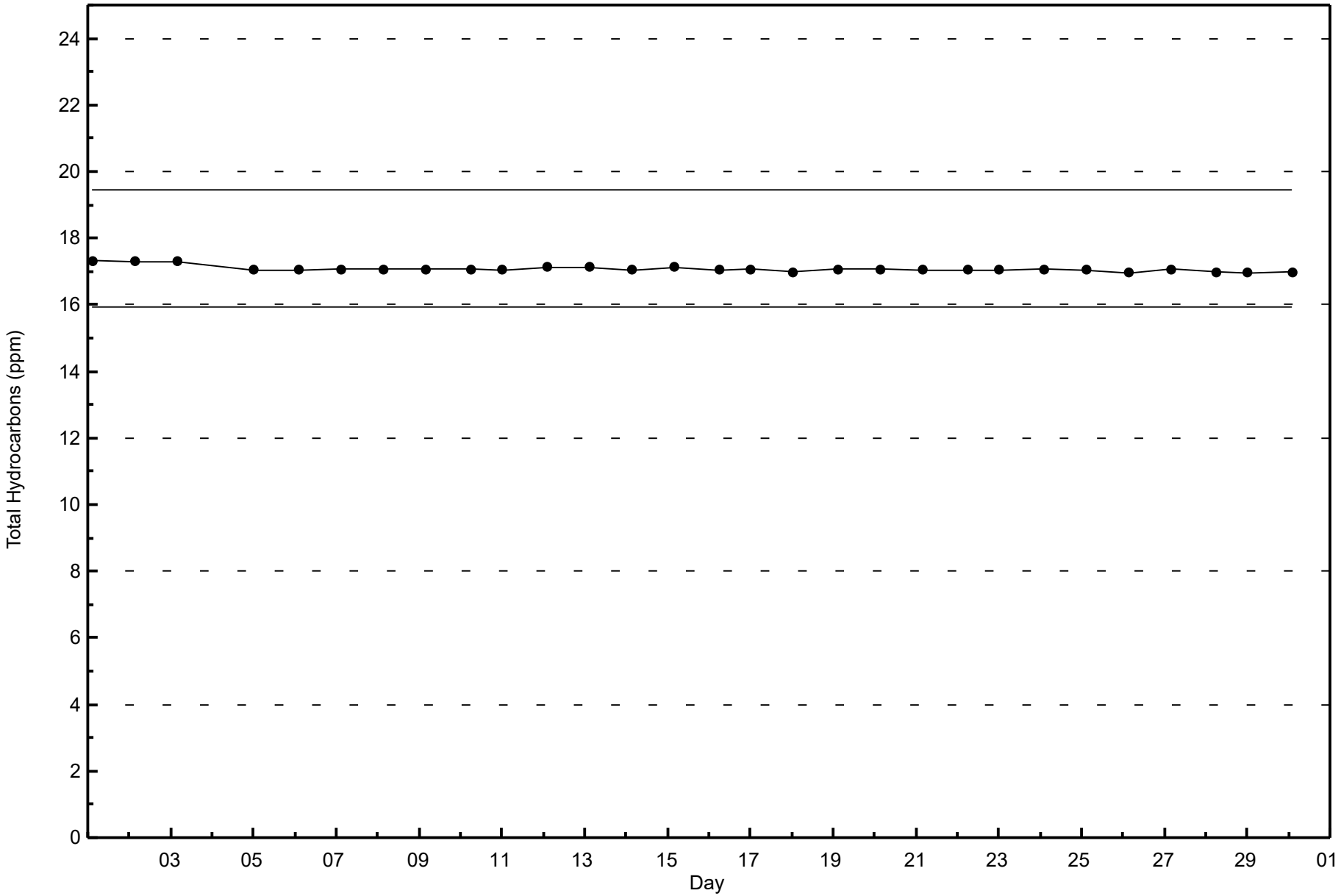


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Janvier - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Janvier - September 2026

Maximum Value: 0.005 ppm on Sep 21 21:00

Maximum Daily Average: 0.000 ppm on Sep 21

Minimum Value: 0.000 ppm on Sep 1 01:00

Minimum Daily Average: 0.000 ppm on Sep 2

Maximum Diurnal Average: 0.000 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:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	34
Percent Operational Time:	99.4

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-Sep	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	0.000	0.000	0.001
2-Sep	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
3-Sep	0.000	0.000	0.000	0.000	Z	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
4-Sep	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.003	0.000	0.001	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	0.003
5-Sep	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
6-Sep	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
7-Sep	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
8-Sep	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	DF	DF	DF	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001
9-Sep	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	DF	0.000	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-Sep	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
11-Sep	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
12-Sep	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
13-Sep	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
14-Sep	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
15-Sep	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
16-Sep	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
17-Sep	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
18-Sep	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
19-Sep	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
20-Sep	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
21-Sep	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	0.005	0.000	0.000	0.000	0.000	0.005
22-Sep	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
23-Sep	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
24-Sep	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	0.000	0.000	0.000	0.002
25-Sep	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
26-Sep	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
27-Sep	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
28-Sep	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
29-Sep	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
30-Sep	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	0.002	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	0.000	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	0.001	0.000	0.000	0.003	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.002	0.002	0.001	0.000	0.005	0.002	0.001	0.000	Diurnal Maximum	

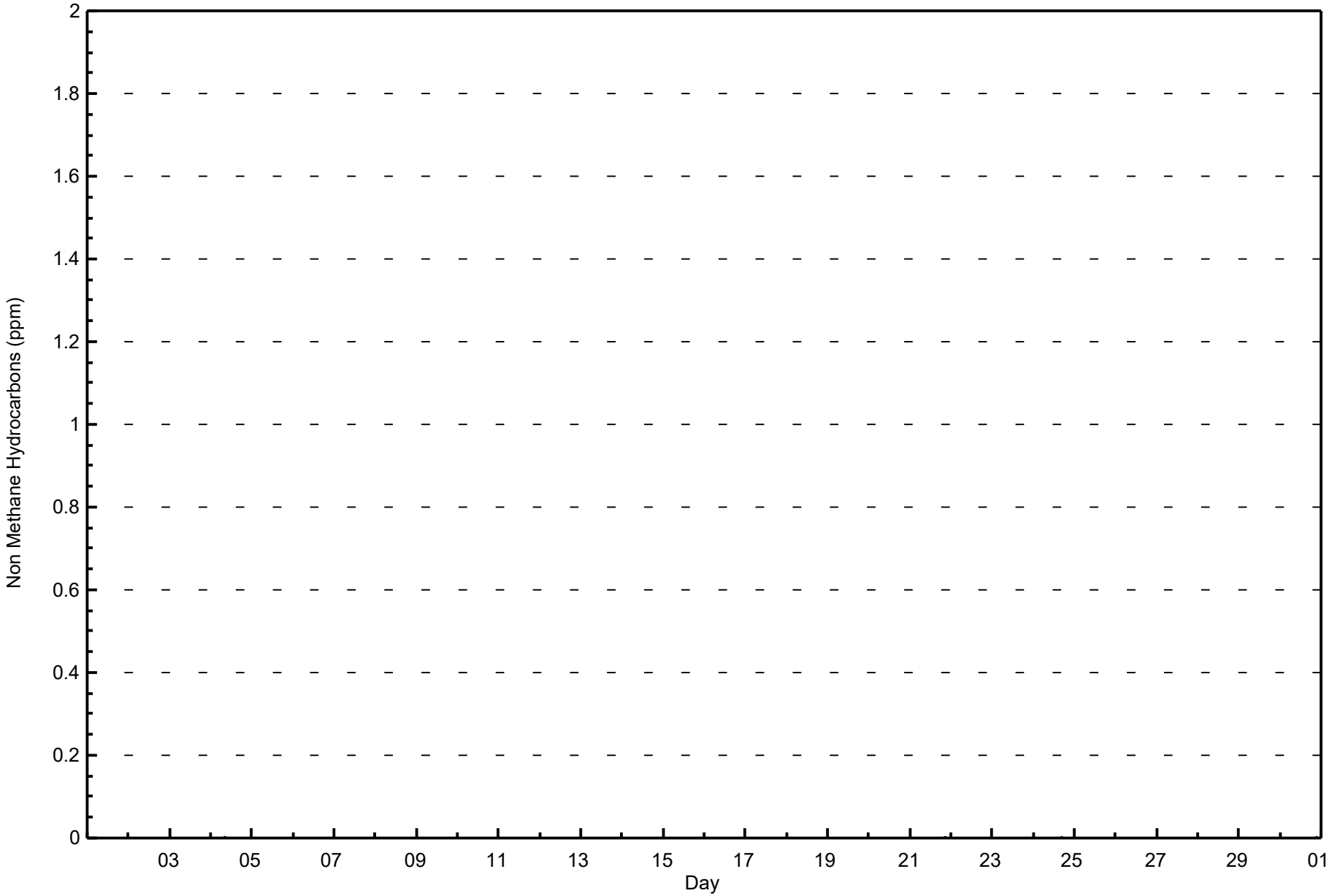
Z - zerospan C - Calibration DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Janvier - September 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Janvier - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	682	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: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Janvier - September 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	39	43	18	16	27	22	20	18	36	111	113	69	46	43	35	25	681
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	39	43	18	16	27	22	20	18	36	111	113	69	46	43	35	25	681

Total Number of Valid Hours: 681

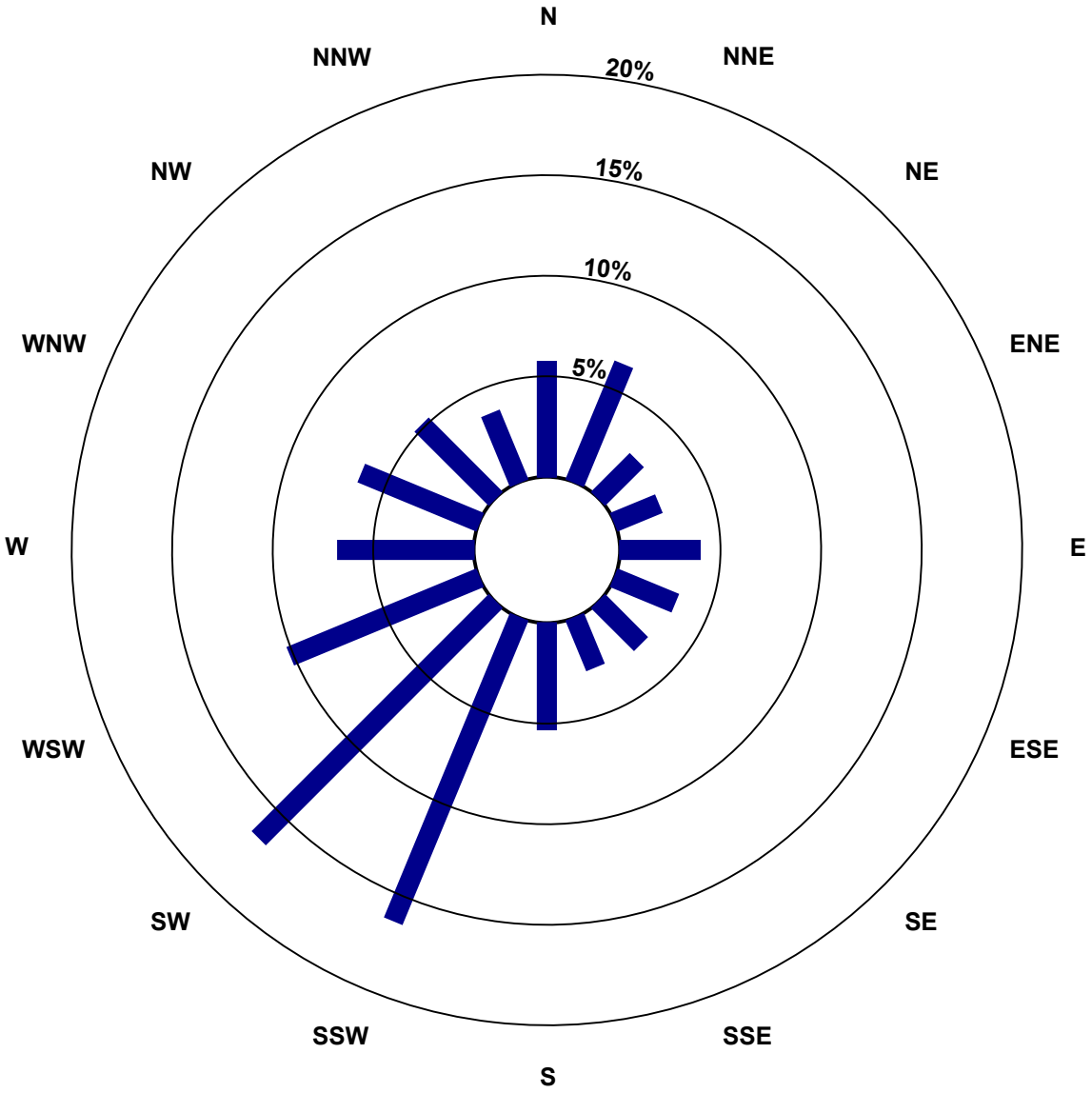
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Non Methane Hydrocarbons (NMHC) - ppm

Janvier



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

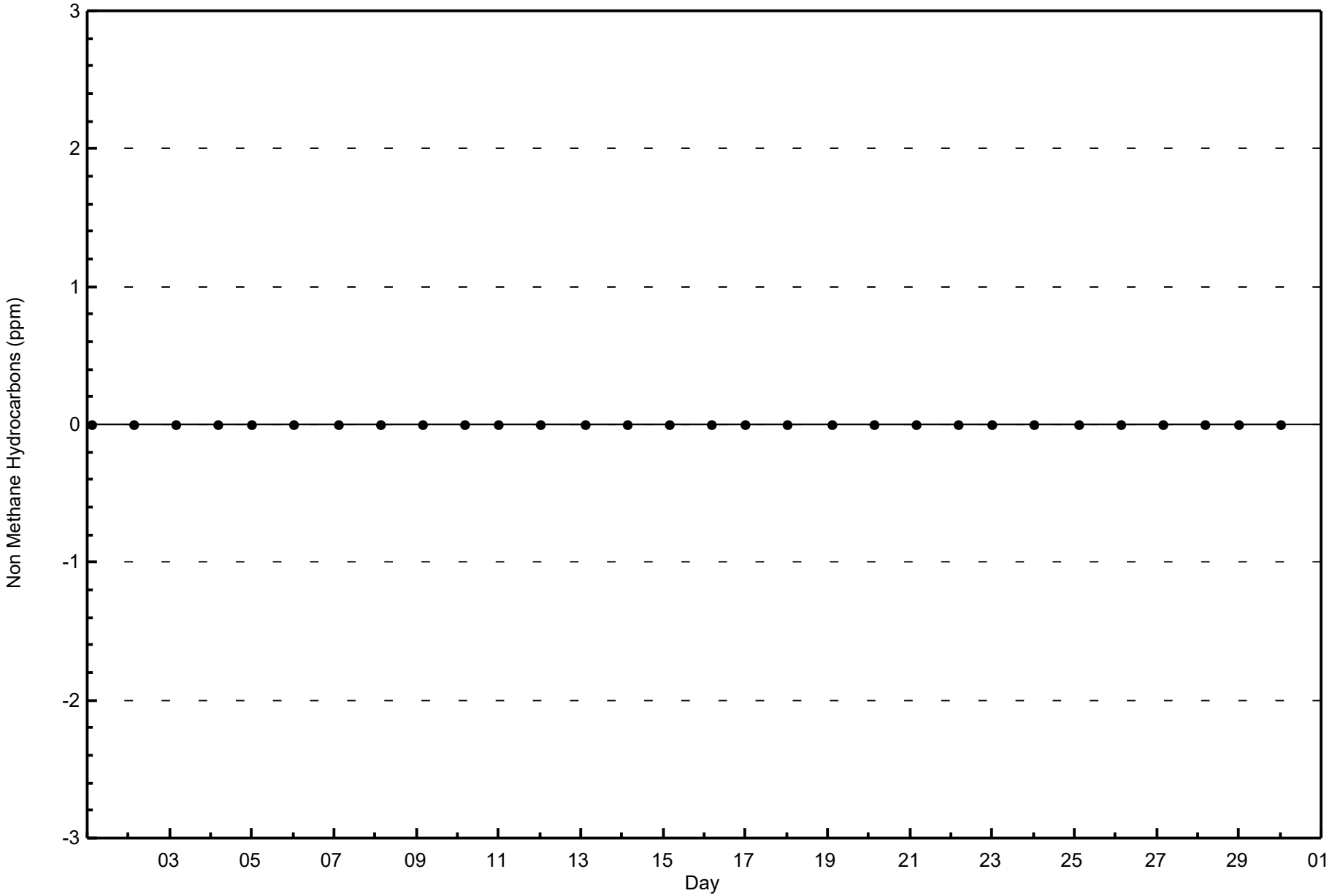
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Janvier - September 2026

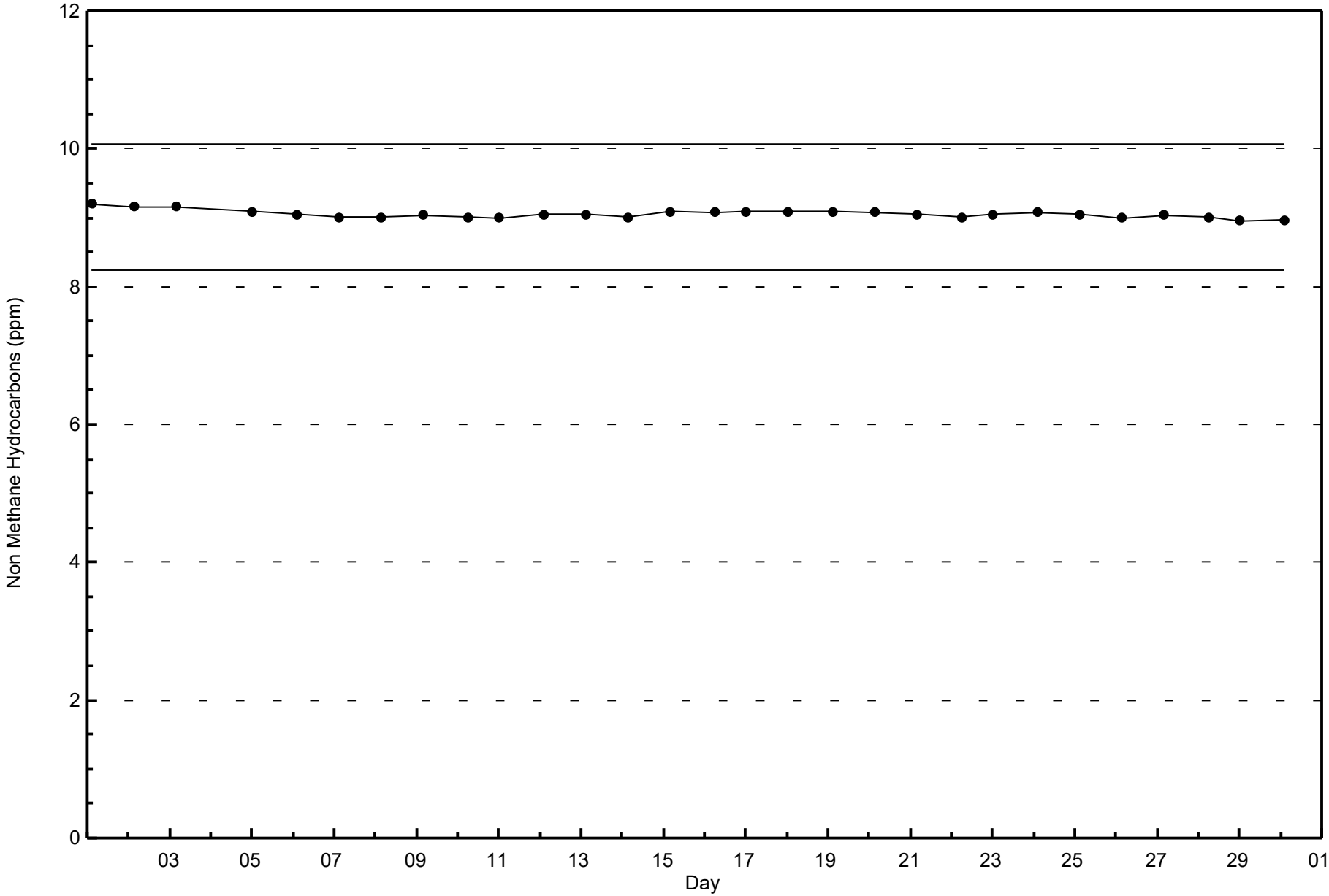


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Janvier - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Janvier - September 2026

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

Maximum Value: 2.7 ppm on Sep 2 03:00 Maximum Daily Average: 2.2 ppm on Sep 3

Minimum Value: 2.0 ppm on Sep 18 13:00 Minimum Daily Average: 2.0 ppm on Sep 5

Maximum Diurnal Average: 2.2 ppm at hour 7 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} = 2.5

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	34
Percent Operational Time:	99.4

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-Sep	2.1	2.1	Z	2.1	2.1	2.2	2.2	2.2	2.3	2.3	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	2.1	2.1	2.3
2-Sep	2.1	2.4	2.7	Z	2.6	2.4	2.5	2.6	2.5	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	2.2	2.7
3-Sep	2.2	2.5	2.4	2.5	Z	2.6	2.5	2.3	2.2	C	C	C	C	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.6
4-Sep	2.1	2.4	2.4	2.3	2.2	Z	2.4	2.5	2.4	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	2.1	2.5
5-Sep	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
6-Sep	2.0	Z	2.0	2.0	2.2	2.4	2.4	2.5	2.5	2.5	2.4	2.2	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	2.5
7-Sep	2.0	2.0	Z	2.2	2.3	2.3	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	2.2	2.4
8-Sep	2.2	2.1	2.1	Z	2.1	2.2	2.2	2.2	2.2	2.1	DF	DF	DF	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
9-Sep	2.1	2.1	2.2	2.2	Z	2.2	2.2	2.2	2.2	2.2	2.1	2.0	DF	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
10-Sep	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
11-Sep	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
12-Sep	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	2.1	2.0	2.1
13-Sep	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	2.0	2.1	2.1	2.1	2.1	2.1	2.1
14-Sep	2.1	2.1	2.1	Z	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	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.2
15-Sep	2.0	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	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
16-Sep	2.0	2.1	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	2.1	2.2	2.0	2.2
17-Sep	Z	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.1	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	2.0	2.1	2.3
18-Sep	2.0	Z	2.0	2.1	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2
19-Sep	2.0	2.0	Z	2.1	2.1	2.1	2.1	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	2.1	2.1	2.1	2.1	2.2
20-Sep	2.1	2.1	2.1	Z	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	2.1	2.1	2.0	2.1
21-Sep	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2
22-Sep	2.1	2.1	2.1	2.2	2.2	Z	2.4	2.4	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	2.4
23-Sep	Z	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
24-Sep	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	2.0	2.0	2.0	2.1	2.1
25-Sep	2.1	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	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3
26-Sep	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	2.0	2.0	2.0	2.0	2.0	2.0	2.1
27-Sep	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
28-Sep	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	2.1	2.0	2.1
29-Sep	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	2.0	2.0	2.0	2.0	2.0	2.1
30-Sep	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	2.0
	2.1	2.1	2.1	2.1	2.1	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	Diurnal Average	
	2.2	2.5	2.7	2.5	2.6	2.6	2.5	2.6	2.5	2.5	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	Diurnal Maximum	

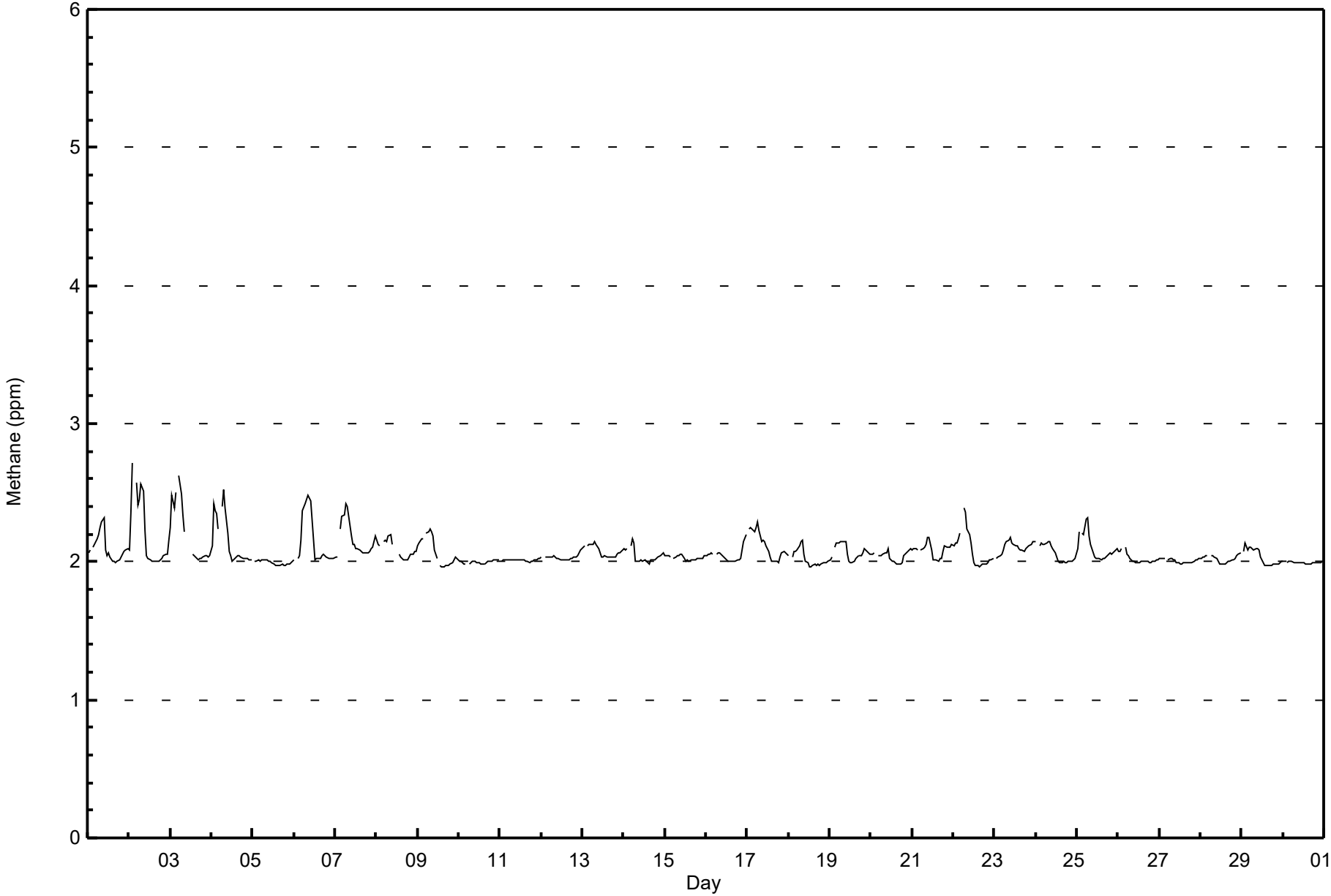
Z - zerospan C - Calibration DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Janvier - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	411	60.26	60.26
2.1 - 3.0	271	39.74	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Janvier - September 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	30	7	6	7	16	17	14	15	17	43	59	55	40	40	32	13	411
2.1 - 3.0	9	36	12	9	11	5	6	3	19	68	54	14	6	3	3	12	270
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	39	43	18	16	27	22	20	18	36	111	113	69	46	43	35	25	681

Total Number of Valid Hours: 681

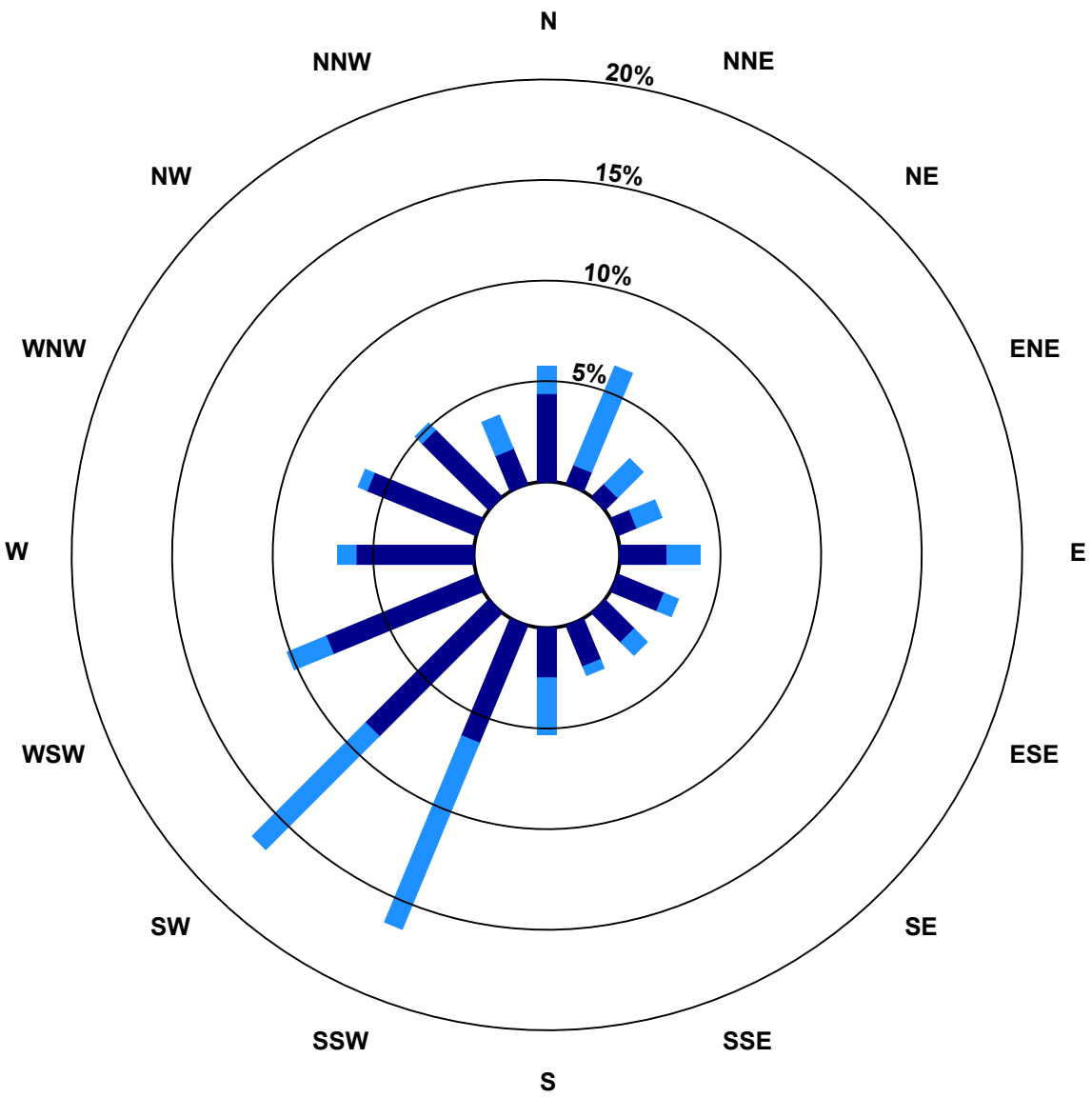
Total Number of Hours: 720

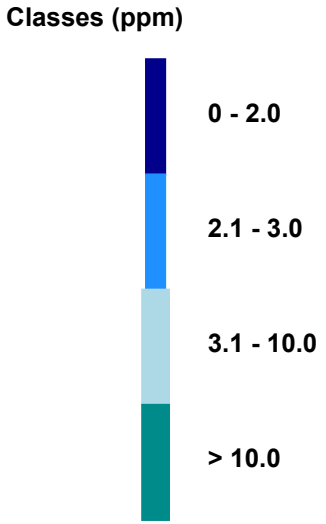
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Methane (CH_4) - ppm

Janvier





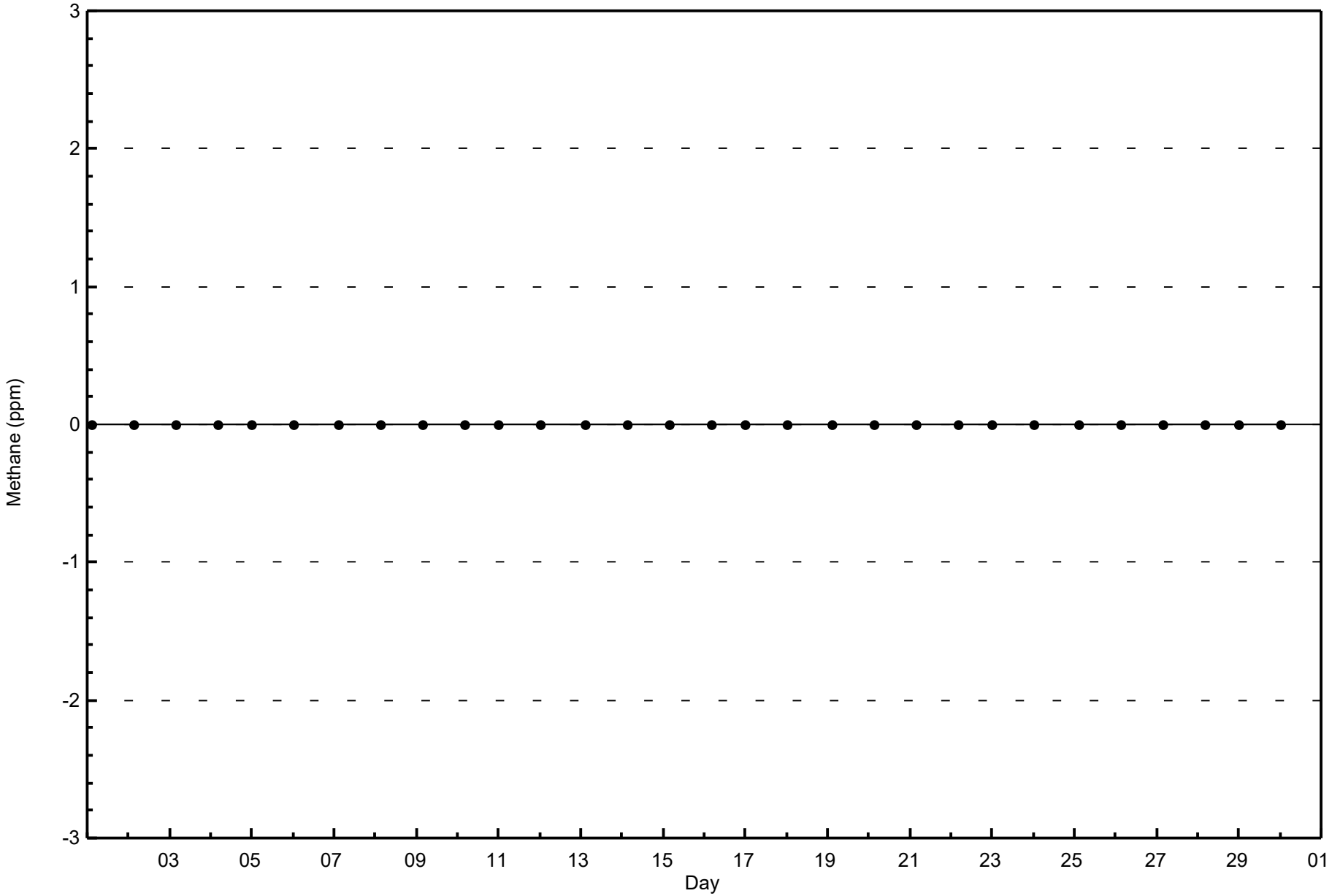
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Janvier - September 2026

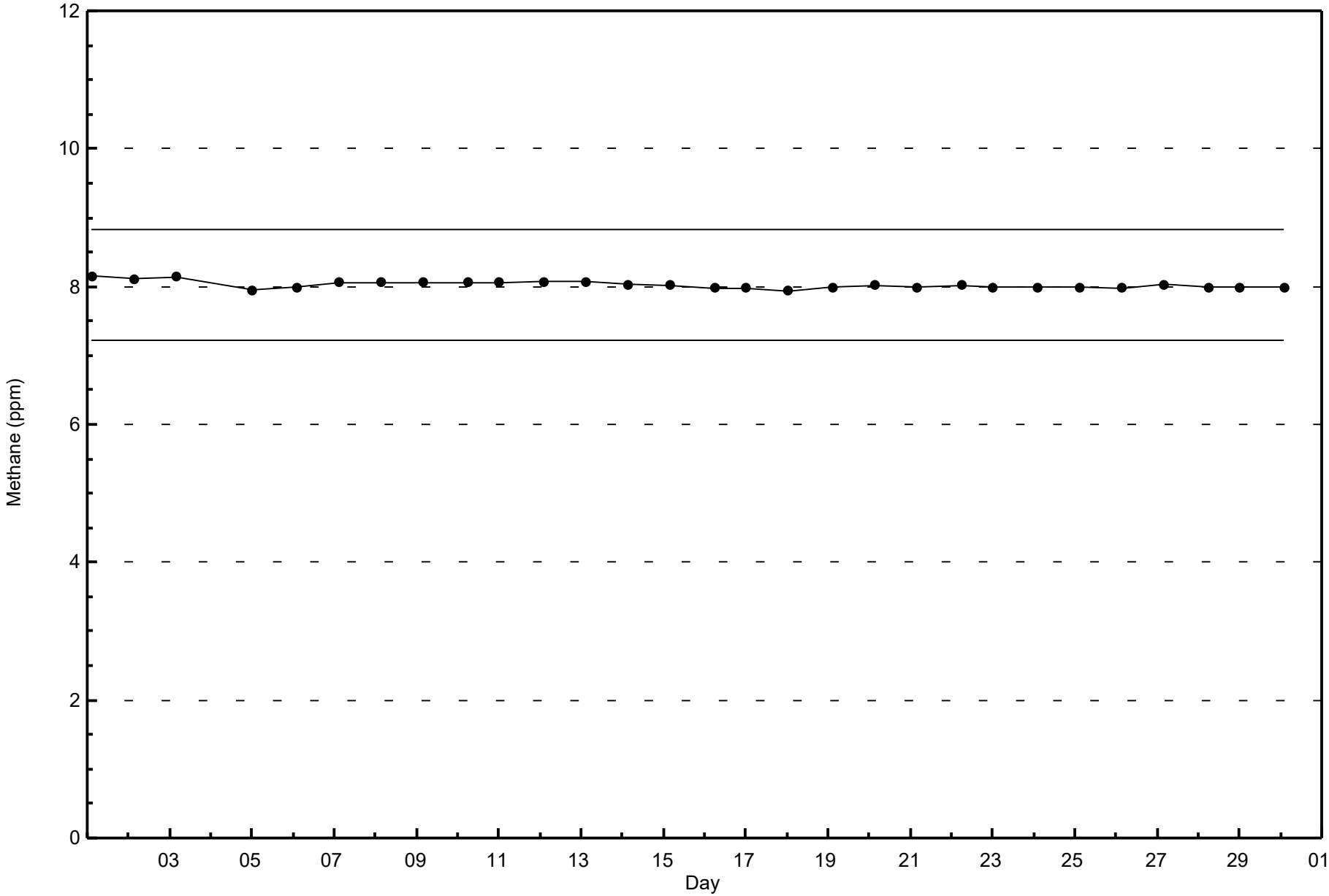


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Janvier - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Janvier - September 2026

Maximum Value: 5.5 ppb on Sep 4 07:00

Maximum Daily Average: 1.1 ppb on Sep 8

Minimum Value: 0.0 ppb on Sep 11 00:00

Minimum Daily Average: 0.0 ppb on Sep 26

Maximum Diurnal Average: 1.1 ppb at hour 8

Minimum Diurnal Average: 0.1 ppb at hour 2

Monthly Average: 0.32 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} = 3.6

Hours in Service:	720
Hours of Data:	658
Hours of Missing Data:	62
Hours of Calibration:	36
Percent Operational Time:	96.4

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-Sep	Z	0.2	0.3	0.1	0.1	1.2	1.3	2.5	1.3	1.0	0.4	0.2	0.2	0.3	0.2	0.1	0.0	0.0	0.6	0.9	0.2	0.2	0.1	0.1	0.5	2.5
2-Sep	0.2	Z	0.4	0.1	0.7	4.1	1.6	0.7	0.1	0.2	0.2	0.2	0.5	0.3	0.1	0.1	0.1	0.3	0.1	0.3	0.2	0.1	0.1	0.1	0.5	4.1
3-Sep	0.2	0.1	Z	0.1	0.1	0.5	1.3	0.3	0.2	0.2	0.1	0.3	0.1	0.1	0.3	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	1.3
4-Sep	0.3	0.3	0.4	Z	2.4	3.0	5.5	0.5	0.5	0.4	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.7	5.5
5-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.0	0.3	0.0	0.8	0.5	1.0	0.3	0.2	0.1	0.2	1.0
6-Sep	0.3	0.2	0.1	0.2	0.2	Z	0.3	0.2	0.3	0.5	0.6	0.3	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.3	0.1	0.4	0.3	0.2	0.6
7-Sep	Z	0.2	0.1	0.1	0.1	0.4	0.1	0.3	0.3	0.2	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.2	0.4
8-Sep	0.6	Z	0.4	0.1	0.6	0.8	2.0	3.3	4.1	0.7	DF	DF	DF	0.2	0.2	0.1	0.1	0.2	1.4	3.3	0.5	0.5	2.0	0.3	1.1	4.1
9-Sep	0.0	0.0	Z	0.1	0.1	0.4	0.9	1.2	0.6	0.3	0.2	0.1	DF	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.2	1.2
10-Sep	0.0	0.0	0.0	Z	0.0	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	0.1	0.0	0.0	0.0	0.0	0.0	0.2
11-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.3
12-Sep	0.0	0.1	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.2	0.6	0.6	0.1	0.4	0.0	0.0	0.1	0.6
13-Sep	Z	0.1	0.1	0.3	0.1	0.0	0.2	0.3	0.3	0.4	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.6	0.8	0.6	0.4	0.1	0.1	0.2	0.8
14-Sep	0.0	Z	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.2	0.3	0.3	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
15-Sep	0.1	0.0	Z	0.3	0.3	0.1	1.6	0.3	0.1	0.1	0.2	0.1	0.1	0.0	0.2	0.0	0.1	0.6	0.2	0.5	0.1	0.0	0.0	0.0	0.2	1.6
16-Sep	0.0	0.0	0.0	Z	0.5	0.2	0.4	0.6	0.4	0.7	1.0	0.4	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.8	0.1	0.2	0.1	0.3	0.3	1.0
17-Sep	0.1	0.1	0.3	0.4	Z	0.7	2.2	5.0	1.8	1.1	0.7	0.3	0.2	0.3	0.1	0.2	0.7	0.7	0.6	0.5	0.3	0.3	1.1	0.4	0.8	5.0
18-Sep	0.4	0.1	0.1	0.2	1.3	Z	3.2	1.6	0.9	0.6	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.7	0.5	0.5	0.6	0.4	0.4	0.8	0.6	3.2
19-Sep	Z	0.0	0.0	1.2	0.5	1.0	1.8	5.1	2.0	1.2	0.4	0.1	0.2	0.1	0.4	0.2	0.2	0.2	0.3	0.6	0.2	0.1	0.1	0.1	0.7	5.1
20-Sep	0.0	Z	0.1	0.1	0.2	0.0	0.1	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.3	0.9	1.0	0.1	0.2	0.4	0.1	0.4	0.2	1.0
21-Sep	0.1	0.0	Z	0.1	0.2	0.1	0.8	0.8	0.9	0.6	0.9	0.4	0.2	0.2	0.1	0.3	0.1	0.2	0.2	0.3	0.3	0.6	0.1	0.1	0.3	0.9
22-Sep	0.1	0.0	0.0	Z	0.3	0.6	3.6	3.3	0.8	0.7	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1	3.6	0.2	0.1	0.1	0.0	0.0	0.6	3.6
23-Sep	0.1	0.2	0.1	0.1	Z	0.1	0.6	1.1	0.6	0.5	0.6	0.2	0.4	0.1	0.1	0.2	0.1	0.5	1.2	4.3	2.3	0.4	0.3	0.2	0.6	4.3
24-Sep	0.1	0.1	0.1	0.1	1.0	Z	1.0	1.3	0.3	C	C	M	M	M	M	M	M	M	M	M	M	M	M	M	--	1.3
25-Sep	M	M	M	M	M	M	M	M	M	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
26-Sep	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-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	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	0.3
28-Sep	0.0	0.0	0.0	Z	0.1	0.0	0.4	0.8	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.4	0.1	0.1	0.0	0.1	0.8
29-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.4	0.6	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.0	0.1	0.1	0.6
30-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.7	0.2	0.7	0.0	0.1	0.7
	0.1	0.1	0.1	0.2	0.4	0.6	1.0	1.1	0.6	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.5	0.3	0.2	0.2	0.1	Diurnal Average	
	0.6	0.3	0.4	1.2	2.4	4.1	5.5	5.1	4.1	1.2	1.0	0.4	0.5	0.3	0.4	0.4	0.7	0.9	3.6	4.3	2.3	0.6	2.0	0.8	Diurnal Maximum	

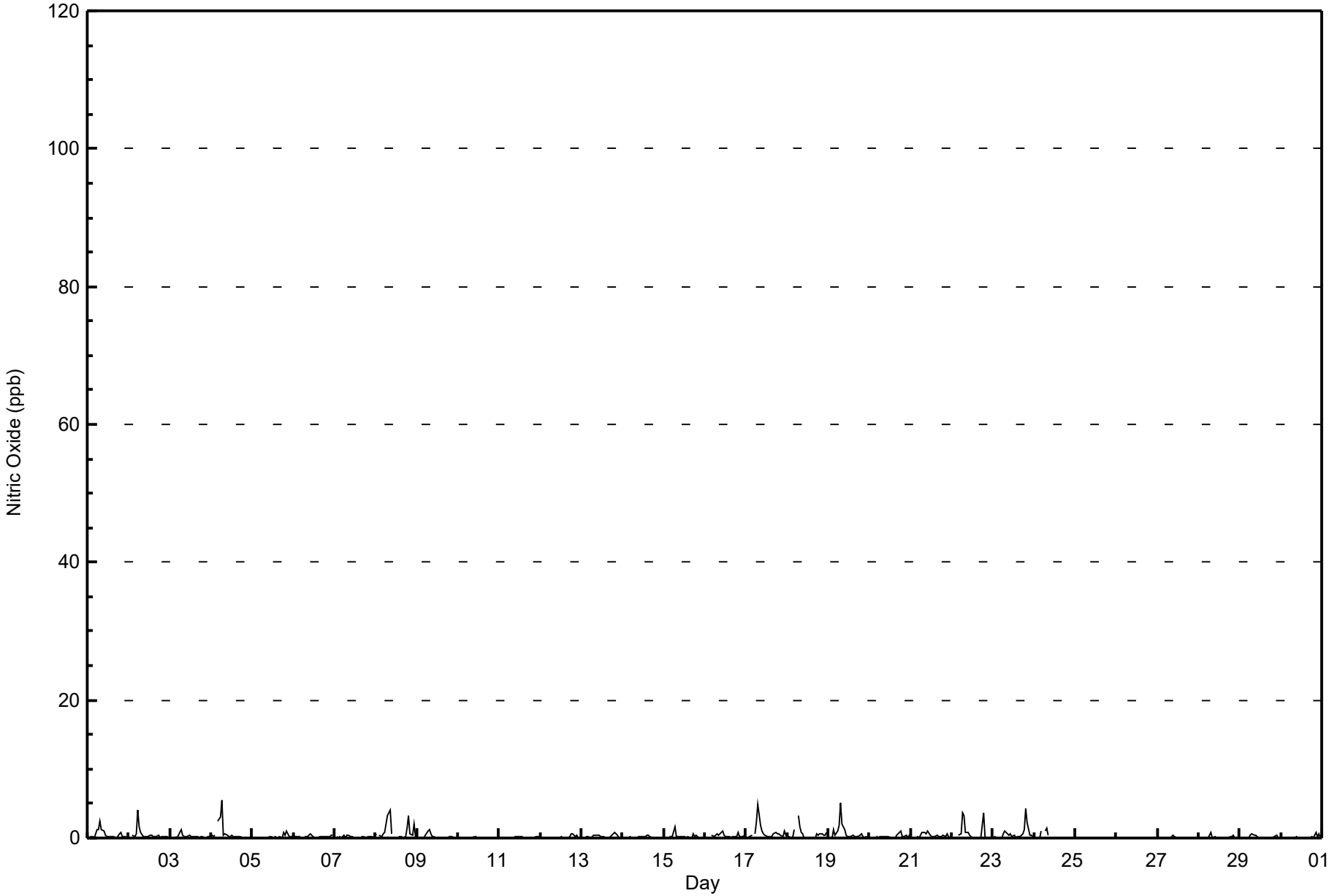
Z - zerospan C - Calibration M - Maintenance DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Janvier - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	658	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: 658

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Janvier - September 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	40	36	16	15	27	21	18	19	36	107	109	66	45	44	34	24	657
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	40	36	16	15	27	21	18	19	36	107	109	66	45	44	34	24	657

Total Number of Valid Hours: 657

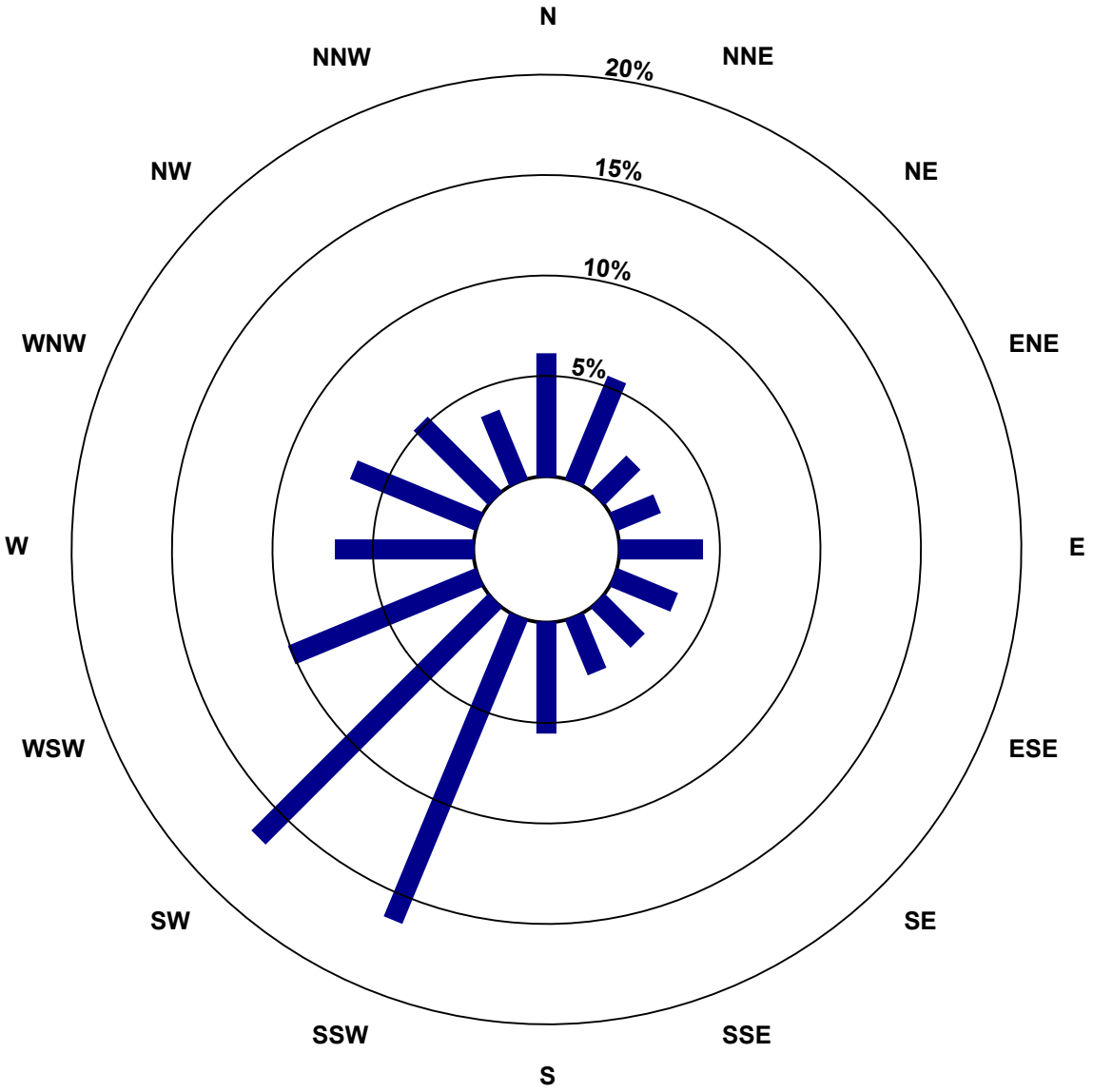
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Janvier



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

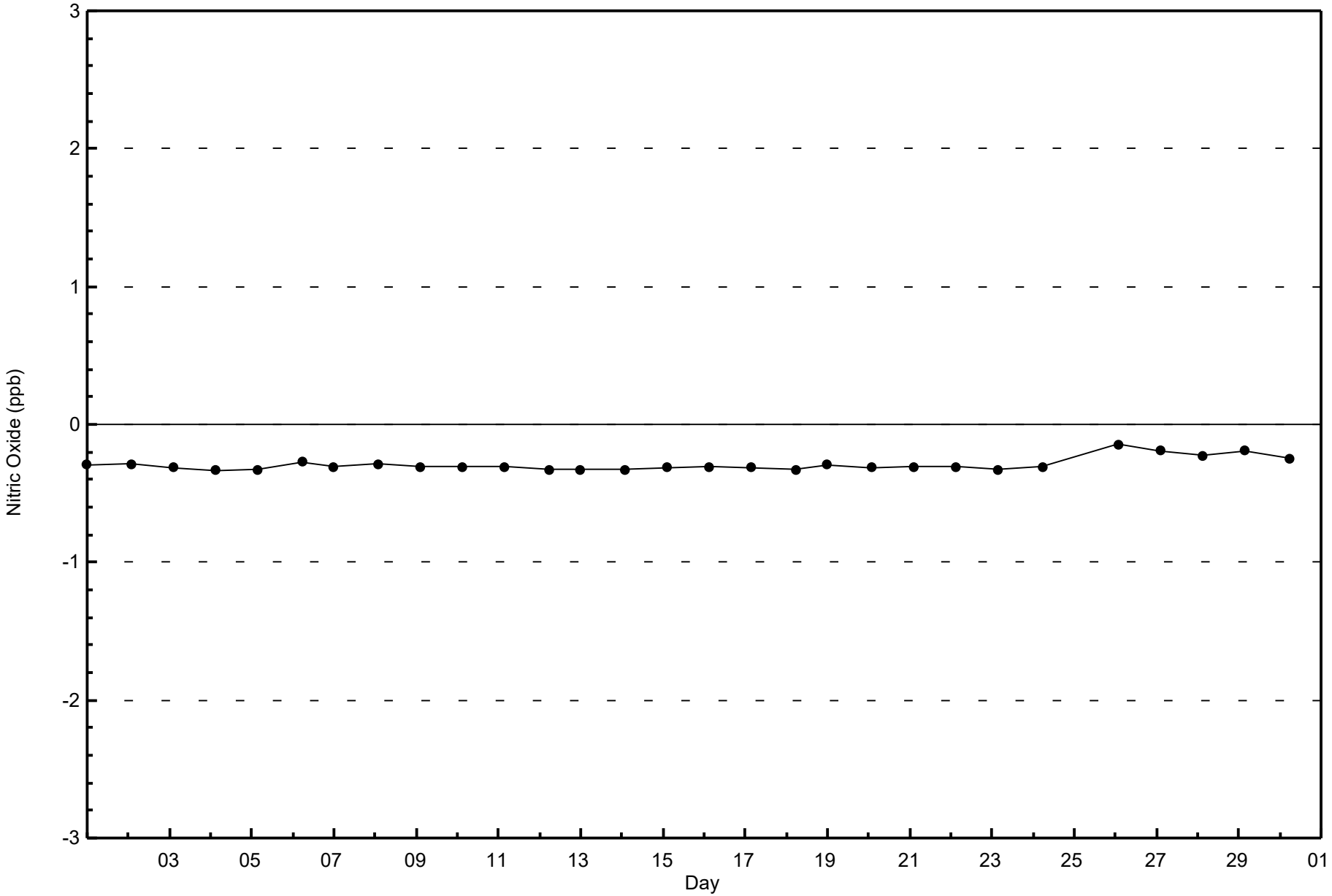
Total Number of Valid Hours: 657

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Janvier - September 2026

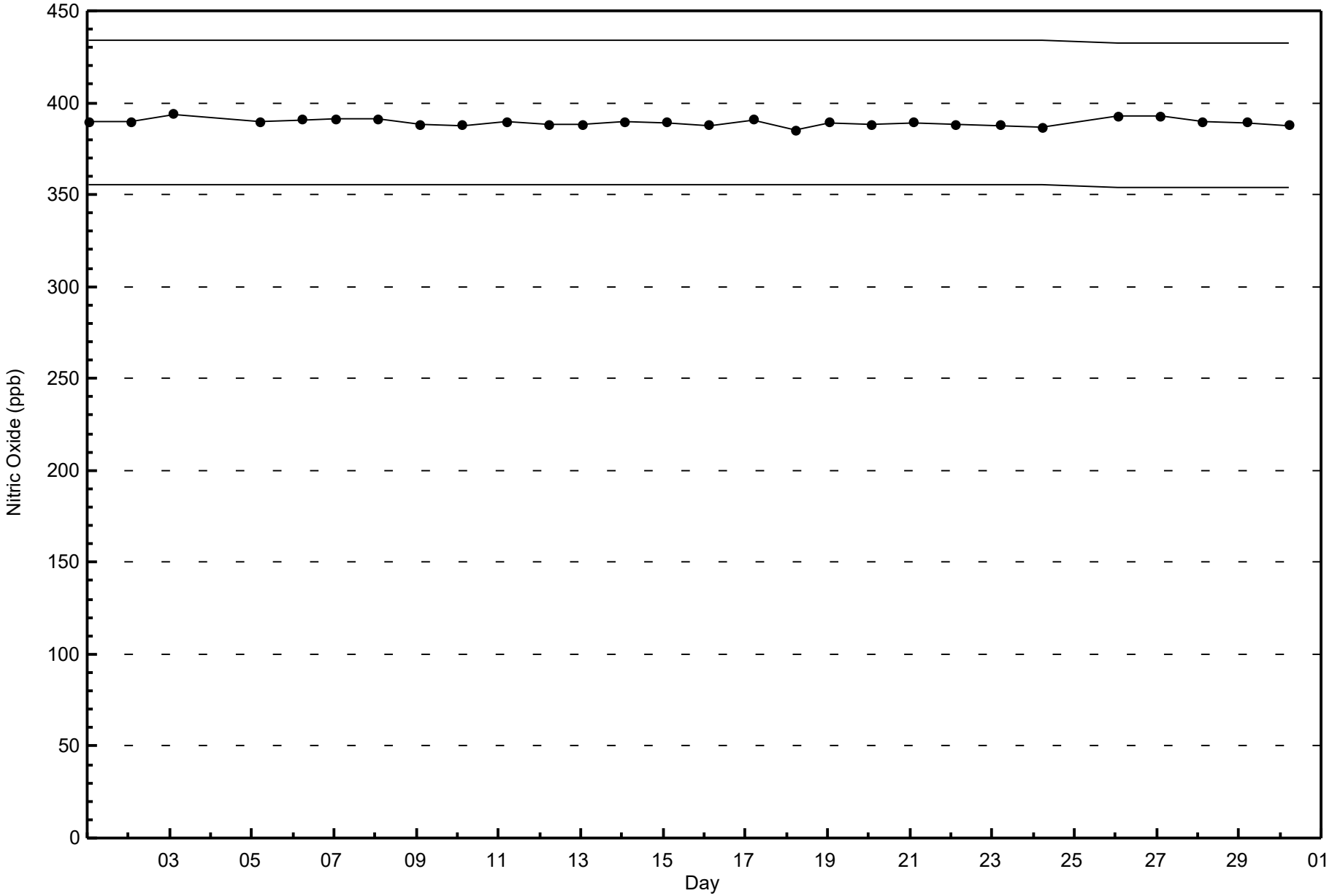


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Janvier - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Janvier - September 2026

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

Maximum Value: 3.6 ppb on Sep 13 21:00

Maximum Daily Average: 1.5 ppb on Sep 21

Minimum Value: 0.0 ppb on Sep 3 05:00

Minimum Daily Average: 0.2 ppb on Sep 26

Maximum Diurnal Average: 1.0 ppb at hour 21

Minimum Diurnal Average: 0.4 ppb at hour 16

Monthly Average: 0.68 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.3 Median = 0.5 Q_3 = 1.0 P_{90} = 1.5 P_{99} = 2.5

Hours in Service:	720
Hours of Data:	658
Hours of Missing Data:	62
Hours of Calibration:	36
Percent Operational Time:	96.4

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-Sep	Z	0.3	0.2	0.2	0.5	1.2	0.9	0.8	0.7	1.1	0.8	0.8	1.0	0.7	0.5	0.3	0.1	0.1	0.9	1.0	0.5	0.7	1.2	0.7	0.7	1.2
2-Sep	0.9	Z	0.4	0.5	0.4	1.6	0.8	0.5	0.1	0.2	0.2	0.3	0.6	0.2	0.1	0.1	0.1	0.3	0.1	0.5	0.5	0.6	0.7	0.2	0.4	1.6
3-Sep	0.4	0.1	Z	0.2	0.0	0.9	1.4	0.4	0.5	0.1	0.1	0.2	0.0	0.1	0.3	0.1	0.1	0.1	0.3	0.5	0.1	0.1	0.3	0.3	0.3	1.4
4-Sep	0.3	0.4	0.3	Z	0.6	0.6	0.6	0.1	0.3	0.6	0.9	1.2	1.0	0.5	0.4	0.4	0.6	1.0	0.9	1.0	0.8	0.8	1.0	0.9	0.7	1.2
5-Sep	0.7	0.6	0.4	0.2	Z	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.1	0.2	0.1	0.6	0.5	1.1	0.3	0.2	0.3	0.3	1.1
6-Sep	0.3	0.3	0.2	0.2	0.1	Z	0.3	0.2	0.1	0.1	0.3	0.1	0.2	0.3	0.3	0.4	0.2	0.2	0.2	0.2	0.4	0.3	0.7	0.5	0.3	0.7
7-Sep	Z	0.4	0.3	0.3	0.2	0.6	0.1	0.3	0.2	0.1	0.4	0.2	0.0	0.1	0.0	0.1	0.3	0.1	0.3	0.1	0.4	0.2	0.1	0.3	0.2	0.6
8-Sep	0.5	Z	0.4	0.3	0.2	0.5	1.5	1.7	1.7	1.3	DF	DF	DF	1.1	1.1	0.9	0.7	0.8	1.2	2.3	1.4	0.9	1.3	1.1	1.0	2.3
9-Sep	0.8	0.6	Z	0.8	0.8	1.2	1.2	1.5	1.1	0.5	0.3	0.2	DF	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.6	0.5	0.4	0.4	0.6	1.5
10-Sep	0.4	0.3	0.1	Z	0.3	0.2	0.2	0.3	0.2	0.4	0.4	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.4
11-Sep	0.1	0.2	0.3	0.1	Z	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.5	0.3	0.1	0.1	0.2	0.4	0.3	0.3	0.3	0.5	0.4	0.3	0.6
12-Sep	0.2	0.2	0.2	0.2	0.2	Z	0.5	0.3	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.5	1.0	1.4	0.6	0.9	0.3	0.3	0.4	1.4
13-Sep	Z	0.4	0.3	0.6	0.9	1.0	0.9	0.8	0.7	0.8	1.0	0.7	0.7	0.7	0.5	0.6	0.6	0.8	1.3	2.5	3.6	1.4	1.0	1.6	1.0	3.6
14-Sep	1.5	Z	0.8	0.5	0.9	1.0	1.6	0.6	0.5	0.7	0.7	0.5	0.7	0.9	1.0	1.0	0.9	0.8	1.1	1.0	1.2	1.9	2.2	1.9	1.0	2.2
15-Sep	1.4	1.0	Z	0.8	1.0	0.5	2.2	0.5	0.2	0.2	0.3	0.3	0.3	0.2	0.4	0.2	0.2	0.4	0.6	1.0	0.4	0.3	0.3	0.3	0.6	2.2
16-Sep	0.3	0.3	0.3	Z	1.0	1.0	1.2	1.0	0.9	1.3	1.0	0.6	0.5	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.7	0.7	1.1	0.8	0.7	1.3
17-Sep	0.5	0.5	0.4	0.6	Z	1.3	0.7	1.4	1.1	1.6	1.3	1.0	0.9	0.9	0.6	0.6	1.3	1.1	1.0	1.0	1.1	1.0	1.5	0.7	1.0	1.6
18-Sep	0.6	0.5	0.5	0.4	0.6	Z	1.2	1.8	1.1	0.9	0.4	0.3	0.2	0.3	0.2	0.4	0.4	0.8	1.0	0.8	1.4	0.8	0.6	0.9	0.7	1.8
19-Sep	Z	0.8	0.7	1.2	1.1	1.2	1.4	2.5	1.8	1.6	1.1	0.6	0.7	0.6	0.5	1.0	1.3	1.3	1.6	1.6	2.1	1.9	1.4	1.8	1.3	2.5
20-Sep	2.5	Z	1.9	1.4	2.1	1.2	1.3	0.9	0.9	1.1	1.0	0.8	0.6	0.5	0.6	0.4	1.1	1.8	1.9	1.6	2.0	2.7	2.4	2.4	1.4	2.7
21-Sep	1.4	1.0	Z	1.1	1.2	0.6	1.5	1.6	1.8	1.3	2.7	2.1	0.9	1.0	1.0	1.3	1.3	1.3	1.5	2.1	2.1	2.2	1.5	1.2	1.5	2.7
22-Sep	1.2	1.1	1.0	Z	1.1	1.0	1.1	0.8	0.7	1.4	1.5	1.0	0.4	0.3	0.3	0.3	0.3	0.5	3.0	1.3	0.6	0.6	0.3	0.3	0.9	3.0
23-Sep	0.3	0.4	0.6	0.5	Z	1.3	1.3	1.6	1.1	1.0	1.1	0.9	0.9	0.5	0.8	0.8	0.8	1.1	1.1	1.3	1.1	0.7	0.6	0.4	0.9	1.6
24-Sep	0.5	0.9	0.8	1.6	1.2	Z	1.7	1.7	0.7	C	C	M	M	M	M	M	M	M	M	M	M	M	M	M	--	1.7
25-Sep	M	M	M	M	M	M	M	M	M	C	C	C	C	C	0.3	0.0	0.0	0.1	0.0	0.3	0.3	0.0	0.1	0.1	--	0.3
26-Sep	0.4	Z	0.2	0.4	2.1	0.7	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	0.0	0.0	0.1	0.1	0.2	2.1
27-Sep	0.2	0.3	Z	0.7	0.4	0.6	0.5	0.4	0.6	0.7	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.4	0.6	0.5	0.2	0.4	0.4	0.4	0.7
28-Sep	0.5	0.4	0.3	Z	0.7	0.9	1.1	1.4	0.6	0.6	0.5	0.4	0.2	0.3	0.3	0.4	0.5	0.9	1.6	2.0	2.9	2.8	1.9	1.9	1.0	2.9
29-Sep	2.1	2.0	1.7	1.4	Z	1.7	2.2	1.7	2.2	1.5	1.1	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.3	0.7	0.4	0.6	0.9	2.2
30-Sep	0.5	0.4	0.2	0.4	0.5	Z	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.5	0.5	0.6	1.3	0.9	0.7	0.6	0.4	1.3
	0.7	0.6	0.5	0.6	0.8	0.9	1.0	0.9	0.7	0.7	0.7	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.8	0.9	1.0	0.8	0.8	0.7	Diurnal Average	
	2.5	2.0	1.9	1.6	2.1	1.7	2.2	2.5	2.2	1.6	2.7	2.1	1.0	1.1	1.1	1.3	1.3	1.8	3.0	2.5	3.6	2.8	2.4	2.4	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance DF - DAS Failure

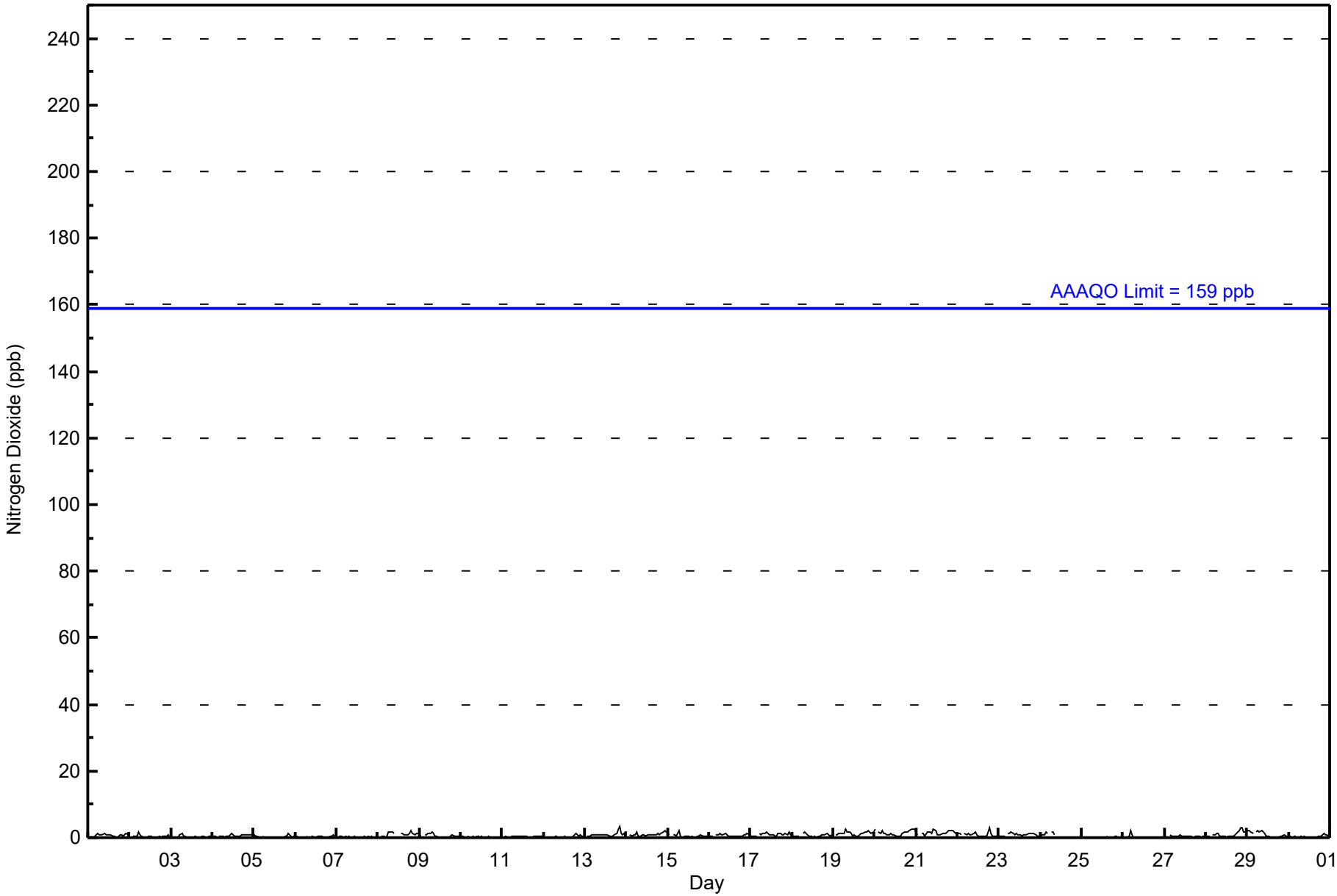
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Janvier - September 2026



Nitrogen Dioxide (NO_2) - ppb

Janvier - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	658	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: 658

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Janvier - September 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	40	36	16	15	27	21	18	19	36	107	109	66	45	44	34	24	657
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	40	36	16	15	27	21	18	19	36	107	109	66	45	44	34	24	657

Total Number of Valid Hours: 657

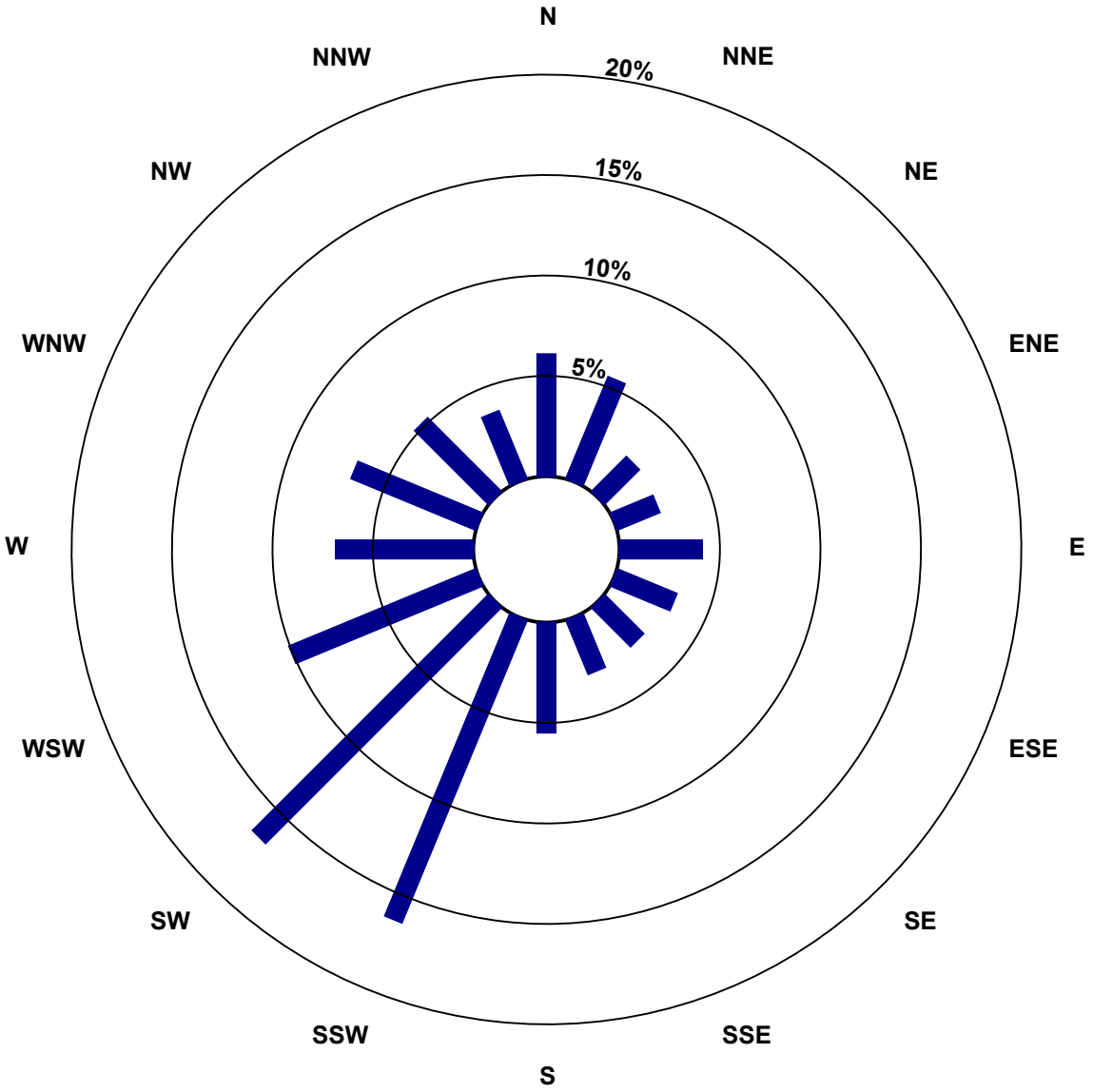
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Janvier



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

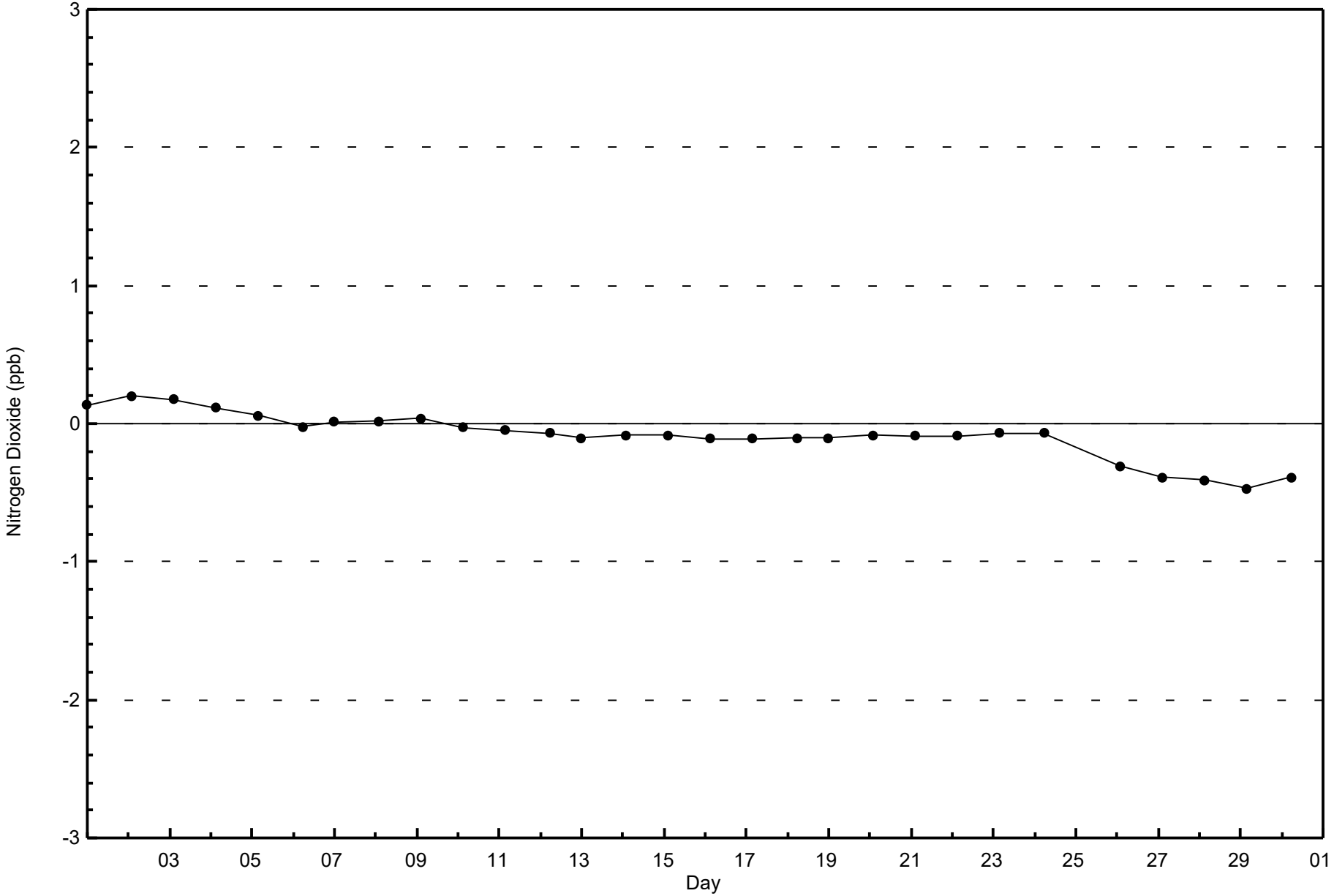
Total Number of Valid Hours: 657

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Janvier - September 2026

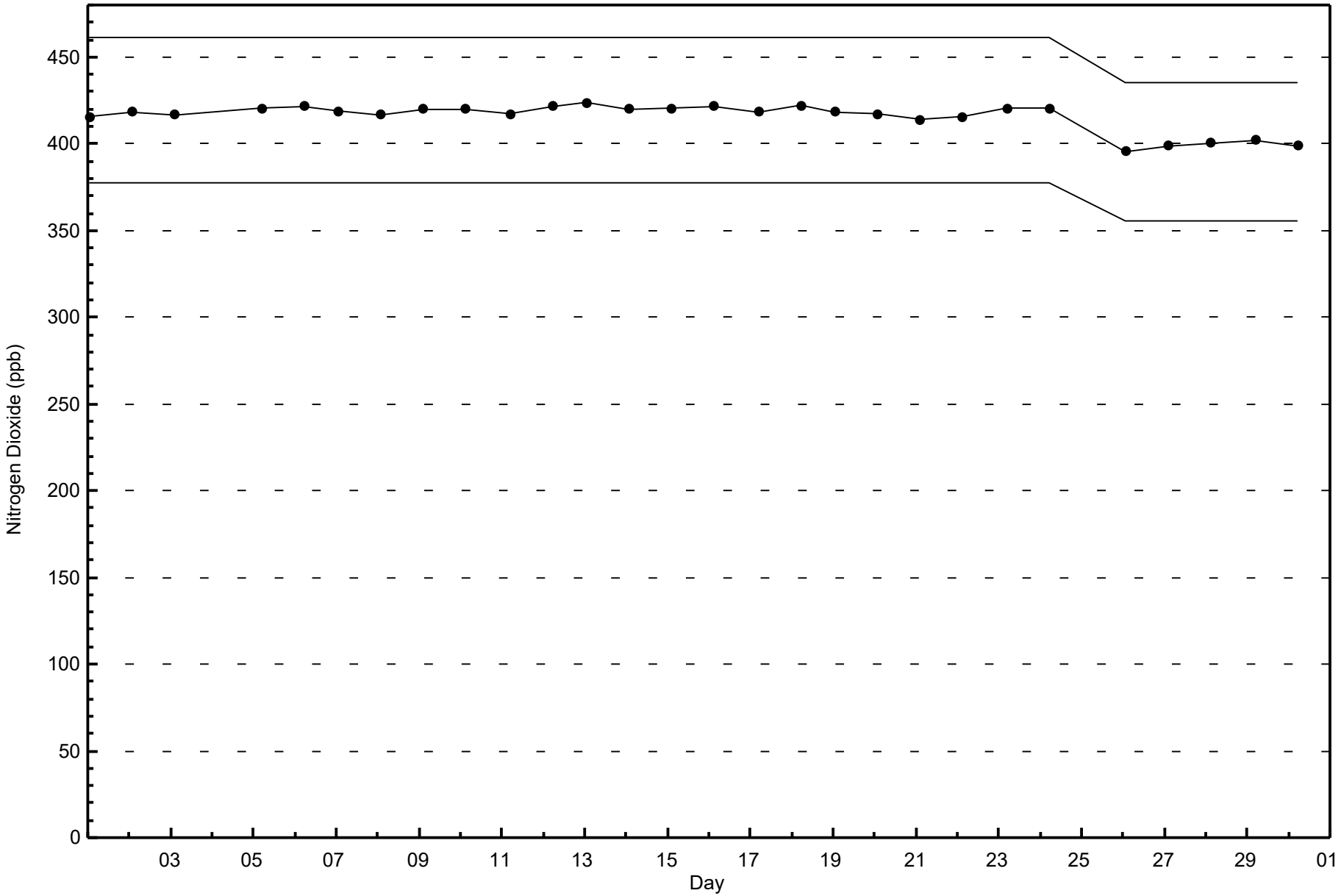


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Janvier - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Janvier - September 2026

Maximum Value: 7.6 ppb on Sep 19 08:00

Maximum Daily Average: 2.1 ppb on Sep 8

Minimum Value: 0.0 ppb on Sep 26 09:00

Minimum Daily Average: 0.2 ppb on Sep 26

Maximum Diurnal Average: 2.0 ppb at hour 7

Minimum Diurnal Average: 0.5 ppb at hour 16

Monthly Average: 1.00 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.2$ $Q_1 = 0.3$ Median = 0.7 $Q_3 = 1.3$ $P_{90} = 2.2$ $P_{99} = 5.6$

Hours in Service:	720
Hours of Data:	658
Hours of Missing Data:	62
Hours of Calibration:	36
Percent Operational Time:	96.4

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-Sep	Z	0.5	0.5	0.3	0.6	2.4	2.2	3.3	2.0	2.1	1.2	1.0	1.2	1.0	0.7	0.4	0.1	0.1	1.5	1.9	0.7	0.9	1.3	0.8	1.2	3.3
2-Sep	1.1	Z	0.8	0.6	1.1	5.7	2.4	1.2	0.2	0.4	0.4	0.5	1.1	0.5	0.2	0.2	0.2	0.6	0.2	0.8	0.7	0.7	0.8	0.3	0.9	5.7
3-Sep	0.6	0.2	Z	0.3	0.1	1.4	2.7	0.7	0.7	0.3	0.2	0.5	0.1	0.2	0.6	0.2	0.2	0.2	0.5	0.7	0.2	0.2	0.4	0.5	0.5	2.7
4-Sep	0.6	0.7	0.7	Z	3.0	3.6	6.1	0.6	0.8	1.0	1.2	1.5	1.3	0.6	0.5	0.5	0.7	1.1	1.0	1.1	0.9	0.8	1.0	0.9	1.3	6.1
5-Sep	0.7	0.6	0.4	0.2	Z	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.1	0.2	0.1	0.1	0.5	0.1	1.4	1.0	2.1	0.6	0.4	0.4	0.5	2.1
6-Sep	0.6	0.5	0.3	0.4	0.3	Z	0.6	0.4	0.4	0.6	0.9	0.4	0.2	0.3	0.4	0.5	0.4	0.3	0.3	0.3	0.7	0.4	1.1	0.8	0.5	1.1
7-Sep	Z	0.6	0.4	0.4	0.3	1.0	0.2	0.6	0.5	0.3	0.6	0.3	0.1	0.1	0.1	0.2	0.4	0.2	0.4	0.3	0.6	0.5	0.3	0.4	0.4	1.0
8-Sep	1.1	Z	0.8	0.4	0.8	1.3	3.5	5.0	5.8	2.0	DF	DF	DF	1.3	1.3	1.0	0.8	1.0	2.6	5.6	1.9	1.4	3.3	1.4	2.1	5.8
9-Sep	0.8	0.6	Z	0.9	0.9	1.6	2.1	2.7	1.7	0.8	0.5	0.3	DF	0.2	0.2	0.3	0.2	0.2	0.3	0.8	0.7	0.6	0.4	0.4	0.8	2.7
10-Sep	0.4	0.3	0.1	Z	0.3	0.2	0.2	0.3	0.2	0.5	0.6	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.6
11-Sep	0.1	0.2	0.3	0.1	Z	0.3	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.8	0.4	0.2	0.1	0.2	0.4	0.3	0.3	0.4	0.6	0.5	0.4	0.8
12-Sep	0.2	0.3	0.2	0.2	0.2	Z	0.6	0.4	0.2	0.2	0.3	0.3	0.5	0.3	0.2	0.3	0.3	0.7	1.6	2.0	0.7	1.3	0.3	0.3	0.5	2.0
13-Sep	Z	0.5	0.4	0.9	1.0	1.0	1.1	1.1	1.0	1.2	1.4	0.9	0.8	0.8	0.6	0.7	0.7	1.0	1.9	3.3	4.2	1.8	1.1	1.7	1.3	4.2
14-Sep	1.5	Z	0.9	0.6	1.2	1.1	1.7	0.7	0.6	1.0	0.9	0.7	0.9	1.2	1.3	1.4	1.0	0.9	1.1	1.0	1.2	1.9	2.2	1.9	1.2	2.2
15-Sep	1.5	1.0	Z	1.1	1.3	0.6	3.8	0.8	0.3	0.3	0.5	0.4	0.4	0.2	0.6	0.2	0.3	1.0	0.8	1.5	0.5	0.3	0.3	0.3	0.8	3.8
16-Sep	0.3	0.3	0.3	Z	1.5	1.2	1.6	1.6	1.3	2.0	2.0	1.0	0.7	0.5	0.6	0.4	0.6	0.5	0.6	1.3	0.8	0.9	1.2	1.1	1.0	2.0
17-Sep	0.6	0.6	0.7	1.0	Z	2.0	2.9	6.4	2.9	2.7	2.0	1.3	1.1	1.2	0.7	0.8	2.0	1.8	1.6	1.5	1.4	1.3	2.6	1.1	1.8	6.4
18-Sep	1.0	0.6	0.6	0.6	1.9	Z	4.4	3.4	2.0	1.5	0.5	0.4	0.2	0.3	0.2	0.4	0.5	1.5	1.5	1.3	2.0	1.2	1.0	1.7	1.2	4.4
19-Sep	Z	0.8	0.7	2.4	1.6	2.2	3.2	7.6	3.8	2.8	1.5	0.7	0.9	0.7	0.9	1.2	1.5	1.5	1.9	2.2	2.3	2.0	1.5	1.9	2.0	7.6
20-Sep	2.5	Z	2.0	1.5	2.3	1.2	1.4	1.1	1.1	1.4	1.2	0.9	0.7	0.6	0.7	0.4	1.4	2.7	2.9	1.7	2.2	3.1	2.5	2.8	1.7	3.1
21-Sep	1.5	1.0	Z	1.2	1.4	0.7	2.3	2.4	2.7	1.9	3.6	2.5	1.1	1.2	1.1	1.6	1.4	1.5	1.7	2.4	2.4	2.8	1.6	1.3	1.8	3.6
22-Sep	1.3	1.1	1.0	Z	1.4	1.6	4.7	4.1	1.5	2.1	1.9	1.2	0.5	0.3	0.3	0.3	0.3	0.6	6.6	1.5	0.7	0.7	0.3	0.3	1.5	6.6
23-Sep	0.4	0.6	0.7	0.6	Z	1.4	1.9	2.7	1.7	1.5	1.7	1.1	1.3	0.6	0.9	1.0	0.9	1.6	2.3	5.6	3.4	1.1	0.9	0.6	1.5	5.6
24-Sep	0.6	1.0	0.9	1.7	2.2	Z	2.7	3.0	1.0	C	C	M	M	M	M	M	M	M	M	M	M	M	M	M	--	3.0
25-Sep	M	M	M	M	M	M	M	M	M	C	C	C	C	C	0.3	0.0	0.0	0.1	0.0	0.3	0.3	0.0	0.1	0.1	--	0.3
26-Sep	0.4	Z	0.2	0.4	2.1	0.7	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	0.0	0.0	0.1	0.1	0.2	2.1
27-Sep	0.2	0.3	Z	0.7	0.4	0.6	0.5	0.5	0.8	1.0	0.6	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.4	0.6	0.6	0.2	0.4	0.4	0.4	1.0
28-Sep	0.5	0.4	0.3	Z	0.8	0.9	1.5	2.2	0.7	0.8	0.6	0.4	0.2	0.3	0.3	0.4	0.6	1.0	1.9	2.3	3.3	2.9	2.0	1.9	1.1	3.3
29-Sep	2.1	2.0	1.7	1.4	Z	1.7	2.6	2.3	2.6	1.8	1.3	0.6	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.4	0.4	1.1	0.4	0.7	1.1	2.6
30-Sep	0.5	0.4	0.2	0.4	0.5	Z	0.4	0.3	0.3	0.5	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.5	0.7	0.6	2.0	1.1	1.4	0.6	0.5	2.0
	0.9	0.6	0.6	0.8	1.1	1.4	2.0	1.9	1.3	1.1	1.0	0.7	0.6	0.5	0.5	0.5	0.6	0.7	1.3	1.5	1.3	1.1	1.0	0.9	Diurnal Average	
	2.5	2.0	2.0	2.4	3.0	5.7	6.1	7.6	5.8	2.8	3.6	2.5	1.3	1.3	1.3	1.6	2.0	2.7	6.6	5.6	4.2	3.1	3.3	2.8	Diurnal Maximum	

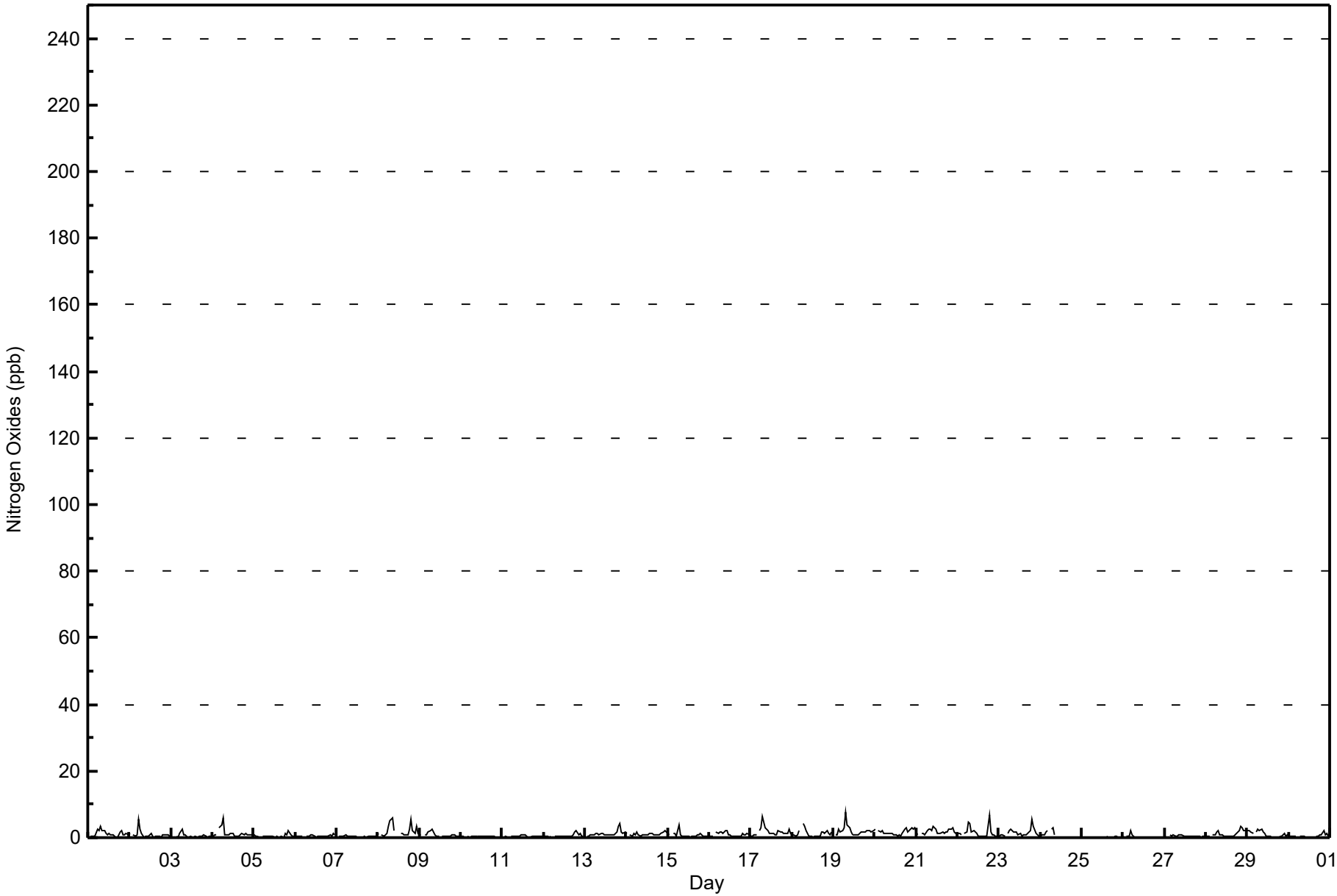
Z - zerospan C - Calibration M - Maintenance DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Janvier - September 2026



Nitrogen Oxides (NO_X) - ppb

Janvier - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	658	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: 658

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Janvier - September 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	40	36	16	15	27	21	18	19	36	107	109	66	45	44	34	24	657
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	40	36	16	15	27	21	18	19	36	107	109	66	45	44	34	24	657

Total Number of Valid Hours: 657

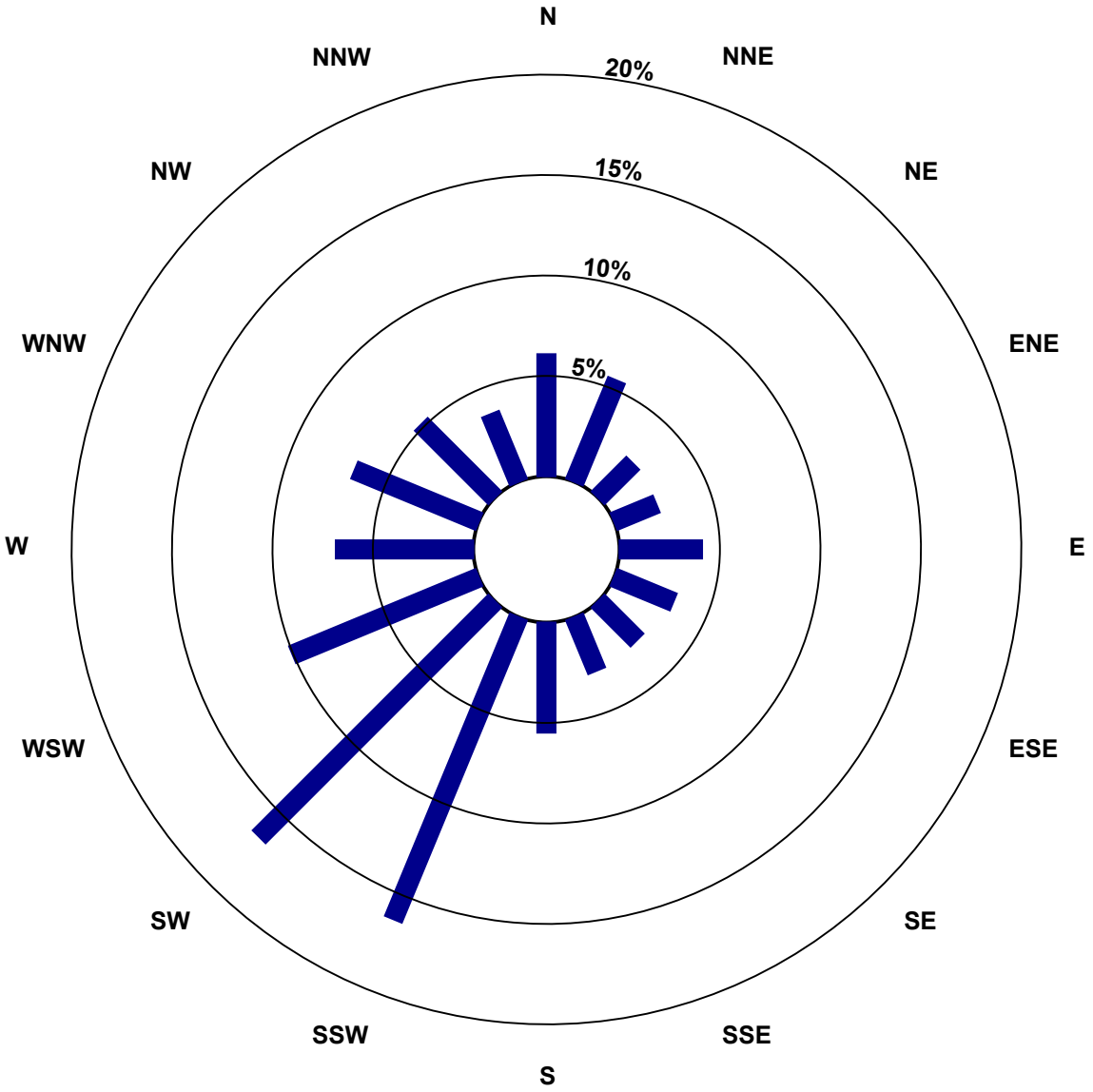
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Janvier



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

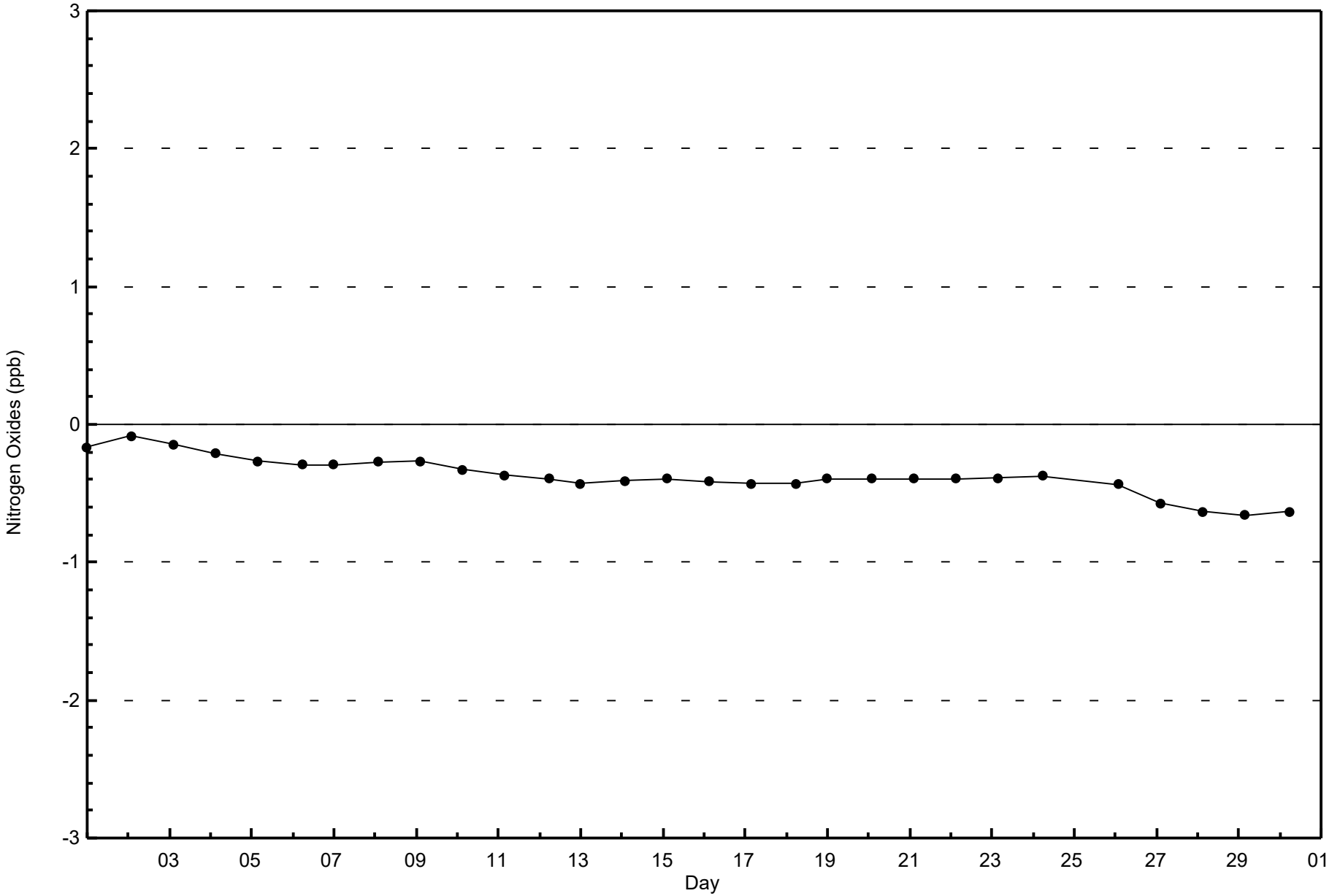
Total Number of Valid Hours: 657

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Janvier - September 2026

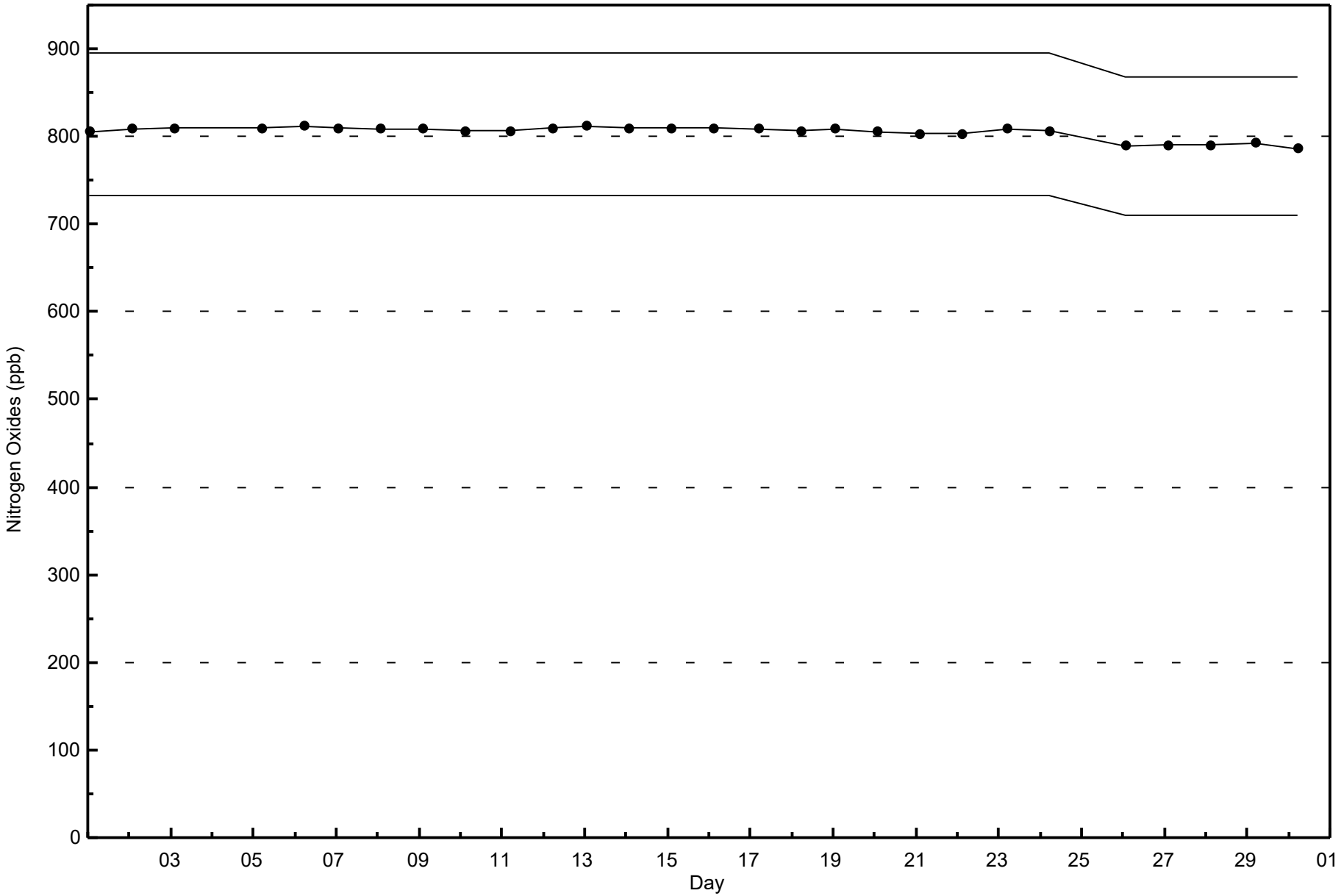


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Janvier - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Janvier - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 48.5 ppb on Sep 21 16:00
Maximum Daily Average: 28.9 ppb on Sep 20

Minimum Value: 0.8 ppb on Sep 6 06:00
Minimum Daily Average: 9.1 ppb on Sep 7
Maximum Diurnal Average: 30.4 ppb at hour 16
Minimum Diurnal Average: 10.7 ppb at hour 7
Monthly Average: 19.31 ppb
Percentiles: P_1 = 1.2 P_{10} = 5.2 Q_1 = 11.9 Median = 18.7 Q_3 = 26.8 P_{90} = 33.0 P_{99} = 42.1

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	33
Percent Operational Time:	99.4

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-Sep	6.0	4.5	3.3	3.0	Z	3.2	2.9	5.7	8.2	12.4	24.6	32.3	36.0	37.2	38.6	37.4	36.0	33.0	23.7	19.7	20.4	16.2	11.6	8.6	18.5	38.6
2-Sep	6.8	4.5	3.4	3.1	3.7	Z	3.6	6.1	9.2	17.1	25.5	35.4	37.6	38.2	38.5	38.2	36.2	34.4	32.2	28.9	26.3	23.0	21.0	14.6	21.2	38.5
3-Sep	Z	6.4	7.2	4.1	8.5	7.0	6.9	8.2	8.5	12.7	14.5	15.9	17.5	18.8	22.6	26.5	27.5	26.4	24.4	23.2	20.9	20.7	20.8	12.3	15.7	27.5
4-Sep	6.3	Z	2.5	2.1	1.8	1.2	1.3	3.7	6.0	14.9	29.1	36.3	41.3	34.9	30.1	27.0	20.0	12.4	12.7	12.9	13.0	13.2	13.7	13.9	15.2	41.3
5-Sep	14.4	14.1	Z	13.2	12.9	11.8	12.5	12.6	13.1	14.3	16.0	17.8	19.9	22.5	22.4	23.2	22.8	20.9	12.0	9.1	6.7	7.2	5.0	2.6	14.2	23.2
6-Sep	2.6	2.7	1.6	Z	1.0	0.8	0.9	1.2	1.6	2.8	4.6	15.2	24.3	24.6	24.7	22.4	16.9	14.7	17.1	17.3	15.6	16.3	11.4	10.9	10.9	24.7
7-Sep	9.3	5.4	3.3	2.4	Z	3.9	3.8	3.1	4.7	9.7	11.7	11.7	12.8	13.4	13.4	14.2	15.1	15.3	14.7	13.2	10.8	6.6	4.4	6.0	9.1	15.3
8-Sep	3.2	4.3	2.8	2.1	1.8	Z	2.8	3.0	8.9	19.0	DF	DF	DF	30.8	32.8	35.6	35.6	25.2	15.5	13.4	10.8	10.3	10.3	12.4	14.0	35.6
9-Sep	Z	14.0	13.5	13.2	11.9	10.3	11.0	10.4	10.6	12.5	17.4	22.6	DF	29.9	31.9	32.6	31.5	30.2	29.6	28.0	26.3	26.3	24.1	25.6	21.1	32.6
10-Sep	27.6	Z	33.0	30.8	29.3	29.5	28.0	27.8	28.4	29.5	33.0	31.8	30.2	27.6	27.8	26.2	23.4	20.4	18.9	17.1	15.8	16.0	17.4	18.0	25.5	33.0
11-Sep	19.1	19.6	Z	19.1	17.9	17.4	16.5	15.9	15.6	15.6	15.3	17.0	18.2	21.4	22.2	21.5	23.1	27.0	26.7	22.2	20.7	19.3	17.0	17.3	19.4	27.0
12-Sep	16.7	14.9	14.1	Z	15.4	13.3	13.2	14.2	17.7	20.1	21.5	25.0	26.2	29.3	29.6	30.1	30.0	26.8	15.6	13.9	17.6	17.7	17.2	16.9	19.9	30.1
13-Sep	16.2	15.8	15.6	15.5	Z	15.5	15.7	14.8	17.6	22.5	27.7	33.0	35.2	36.5	36.4	37.3	38.0	33.5	26.1	22.0	19.1	17.1	19.2	19.8	23.9	38.0
14-Sep	18.0	13.2	10.5	6.7	3.8	Z	9.0	22.5	21.5	20.3	21.7	24.2	23.1	24.4	25.3	24.0	22.4	22.6	21.9	19.5	18.8	17.2	15.1	12.2	18.2	25.3
15-Sep	Z	10.8	10.5	13.1	11.1	7.0	7.3	10.3	12.5	12.5	13.6	17.8	22.4	24.0	24.1	24.1	23.6	17.0	17.4	15.1	19.7	17.0	16.2	13.2	15.7	24.1
16-Sep	10.6	Z	10.9	8.2	7.3	8.2	8.9	9.7	9.4	12.9	17.1	18.7	19.9	23.8	23.7	24.3	23.9	21.0	19.5	18.3	14.3	7.4	5.5	5.6	14.3	24.3
17-Sep	4.3	3.4	Z	3.8	1.9	1.2	1.1	2.1	8.1	14.0	19.2	23.4	27.4	27.5	28.3	28.5	19.5	20.7	14.6	10.1	10.4	9.3	6.1	5.0	12.6	28.5
18-Sep	4.0	5.8	5.6	Z	1.5	2.2	4.5	5.8	9.6	21.1	28.9	32.1	35.4	36.2	35.7	36.1	35.5	26.8	18.4	17.4	14.5	12.1	12.1	10.3	17.9	36.2
19-Sep	8.8	11.1	9.4	9.8	Z	6.6	4.9	6.1	12.6	16.7	31.0	38.2	40.5	41.8	42.0	43.0	44.3	42.8	37.6	25.7	30.5	29.1	30.1	29.5	25.7	44.3
20-Sep	29.2	28.0	26.9	25.6	25.5	Z	25.9	27.1	27.7	29.5	30.9	34.0	36.1	37.0	39.2	38.9	36.1	25.1	24.6	31.7	24.8	20.4	22.0	18.5	28.9	39.2
21-Sep	Z	23.0	22.0	22.2	19.2	17.6	16.4	18.3	20.2	16.5	C	C	C	44.2	45.0	48.5	45.9	41.8	34.9	31.3	23.5	18.1	18.0	15.6	27.1	48.5
22-Sep	14.0	Z	7.3	4.1	2.2	1.2	1.0	1.0	5.8	14.8	26.7	31.6	31.6	34.1	36.9	38.2	39.3	36.8	28.5	25.8	27.1	21.7	21.2	20.0	20.5	39.3
23-Sep	17.8	16.5	Z	12.0	7.3	7.9	5.2	5.1	6.1	6.7	12.9	15.3	15.3	17.2	19.1	18.6	15.8	10.4	7.2	4.5	4.1	3.4	2.5	2.7	10.1	19.1
24-Sep	5.5	7.0	5.9	Z	7.6	7.6	8.5	11.4	14.8	18.0	22.3	27.7	31.6	37.0	38.7	37.8	31.3	24.2	20.3	18.5	18.7	16.1	13.7	12.6	19.0	38.7
25-Sep	9.7	8.8	9.2	11.0	Z	11.9	11.2	17.4	20.8	27.0	31.1	30.4	29.5	29.2	27.8	27.4	26.8	22.9	22.7	21.6	21.6	20.6	17.6	12.9	20.4	31.1
26-Sep	12.0	9.5	7.7	9.7	12.6	Z	16.6	19.4	22.6	23.2	25.0	25.8	25.5	25.7	26.2	26.1	26.6	28.3	29.1	28.7	27.8	25.0	23.7	21.8	21.7	29.1
27-Sep	Z	18.1	17.5	19.0	17.6	16.3	15.3	15.0	17.3	19.9	22.2	25.2	27.6	29.1	29.5	29.4	30.2	29.4	27.8	23.8	22.2	25.7	25.8	25.3	23.0	30.2
28-Sep	23.7	Z	22.2	21.2	20.4	19.6	18.5	18.1	19.9	22.7	29.8	35.8	38.5	37.1	35.1	34.0	34.1	33.4	29.2	25.4	21.9	26.1	22.3	17.3	26.4	38.5
29-Sep	18.1	12.6	Z	13.4	21.5	23.2	21.3	17.6	16.7	16.9	18.1	24.7	28.8	28.8	30.9	32.3	33.8	34.3	32.9	32.4	31.5	26.8	29.0	27.7	24.9	34.3
30-Sep	27.8	27.4	26.9	Z	24.7	25.6	26.4	26.3	25.1	24.8	27.0	28.9	30.6	33.4	32.5	29.7	28.5	26.6	25.3	22.2	14.5	13.8	9.4	9.8	24.7	33.4
	13.3	12.1	11.7	11.5	11.5	10.8	10.7	12.0	14.0	17.4	22.1	26.0	28.3	29.9	30.4	30.4	29.1	26.1	22.7	20.4	19.0	17.3	16.1	14.6	Diurnal Average	
	29.2	28.0	33.0	30.8	29.3	29.5	28.0	27.8	28.4	29.5	33.0	38.2	41.3	44.2	45.0	48.5	45.9	42.8	37.6	32.4	31.5	29.1	30.1	29.5	Diurnal Maximum	

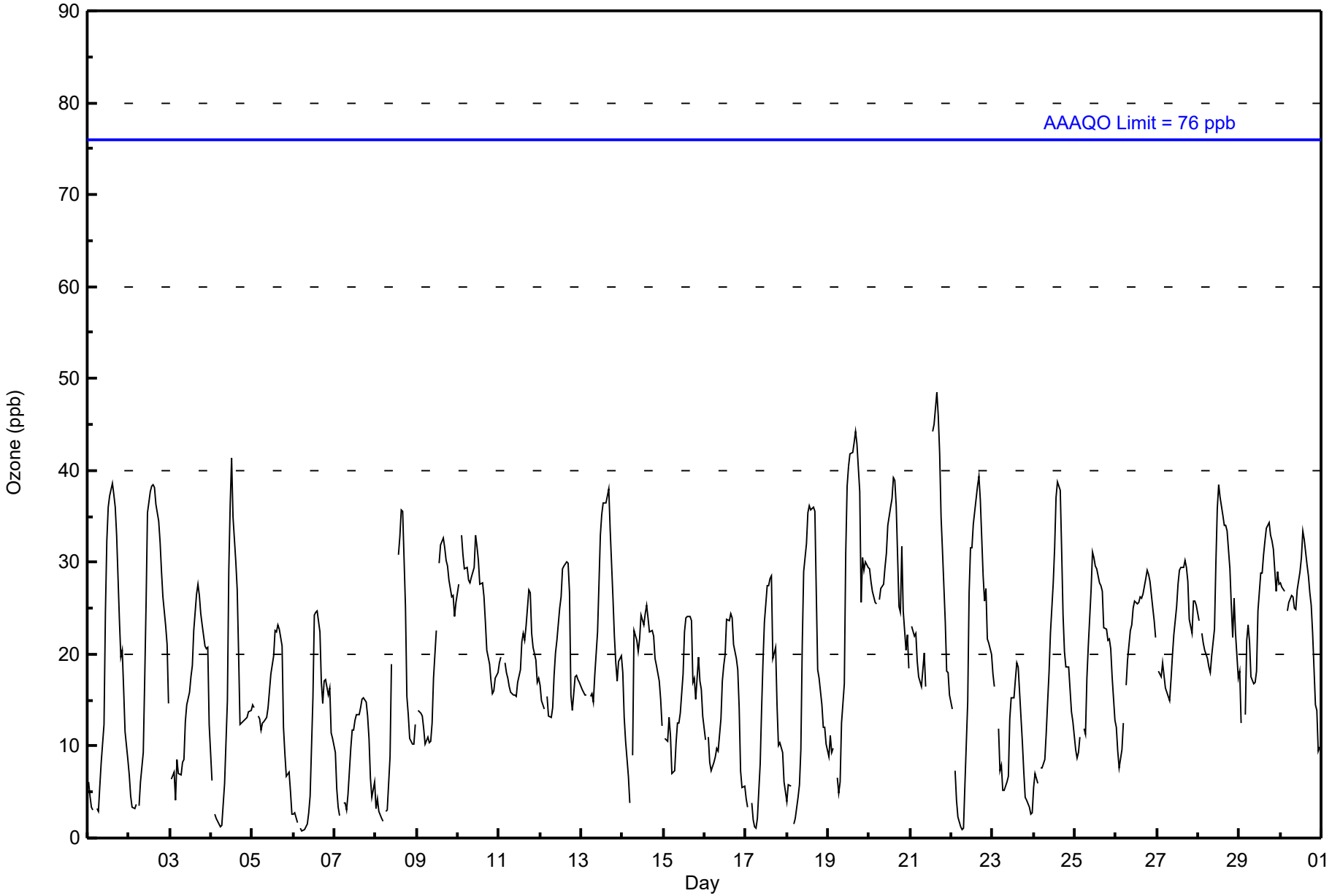
Z - zerospan C - Calibration DF - DAS Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Janvier - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	378	55.34	55.34
21 - 50	305	44.66	100.00
51 - 82	0	0.00	100.00
> 83	0	0.00	100.00

Total Number of Valid Hours: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Ozone (O_3) - ppb

Janvier - September 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	38	13	10	13	9	11	12	23	77	60	26	11	17	13	18	377
21 - 50	15	4	4	8	16	12	9	6	14	35	50	42	33	28	21	8	305
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	41	42	17	18	29	21	20	18	37	112	110	68	44	45	34	26	682

Total Number of Valid Hours: 682

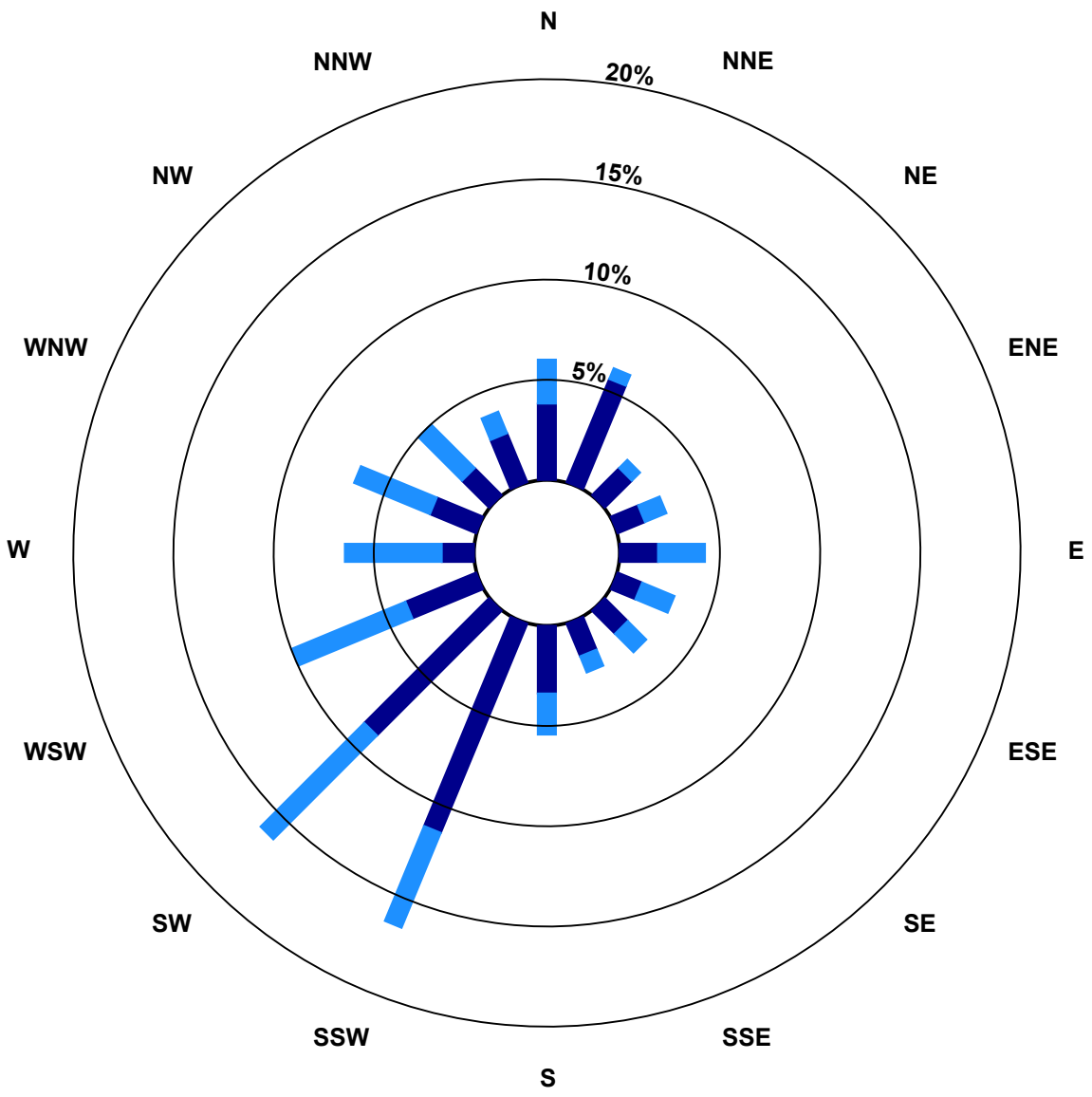
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Ozone (O_3) - ppb

Janvier



Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

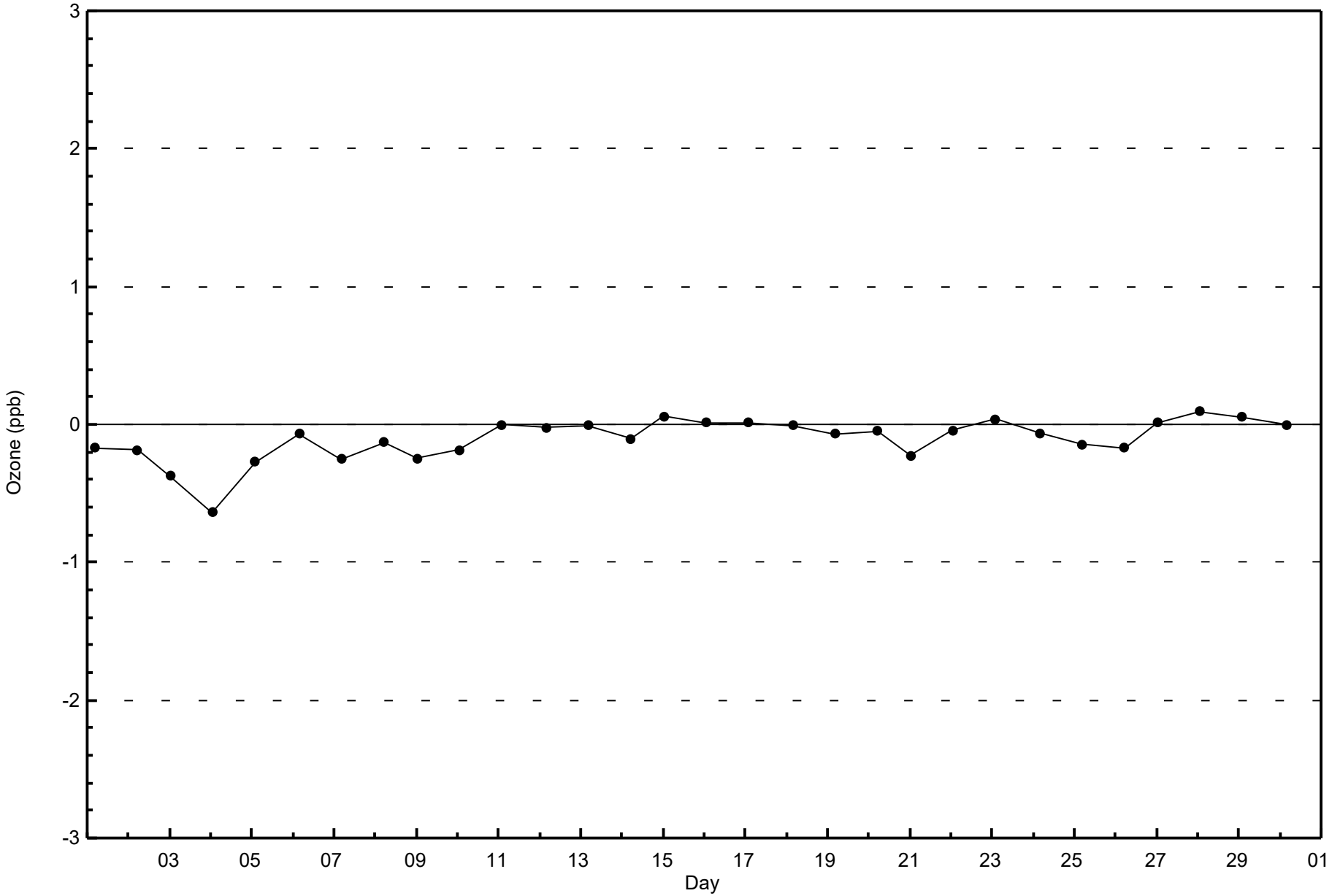
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Janvier - September 2026

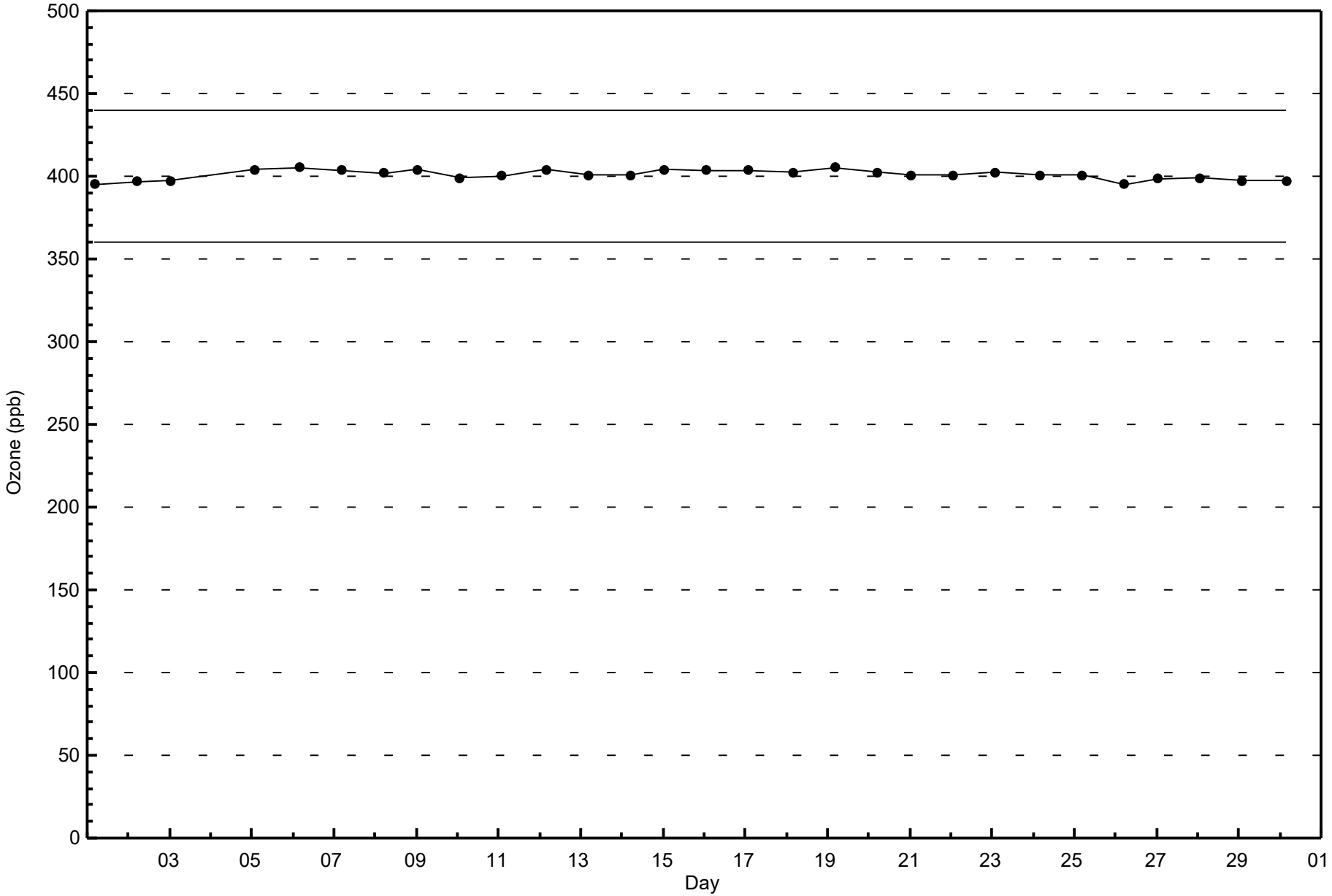


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Janvier - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Janvier - September 2026

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

Maximum Value: 58.8 $\mu g/m^3$ on Sep 8 23:00

Maximum Daily Average: 22.1 $\mu g/m^3$ on Sep 21

Minimum Value: 0.4 $\mu g/m^3$ on Sep 30 11:00

Minimum Daily Average: 2.9 $\mu g/m^3$ on Sep 30

Maximum Diurnal Average: 11.6 $\mu g/m^3$ at hour 23

Minimum Diurnal Average: 8.7 $\mu g/m^3$ at hour 13

Monthly Average: 10.07 $\mu g/m^3$

Percentiles: P_1 = 1.0 P_{10} = 3.5 Q_1 = 5.0 Median = 7.4 Q_3 = 13.5 P_{90} = 20.7 P_{99} = 43.3

Hours in Service:	720
Hours of Data:	653
Hours of Missing Data:	67
Hours of Calibration:	0
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-Sep	7.1	7.5	7.2	7.1	7.2	7.5	7.6	7.3	7.1	7.4	6.8	6.7	6.4	6.2	5.6	4.7	4.7	5.4	6.5	6.5	6.4	7.1	8.2	10.4	6.9	10.4
2-Sep	9.5	9.5	10.8	12.8	13.6	13.3	13.2	14.6	16.2	16.3	13.6	10.1	9.5	9.4	9.7	10.3	10.3	11.2	12.7	17.1	17.6	18.3	18.9	19.1	13.2	19.1
3-Sep	19.9	19.6	18.7	18.3	17.0	15.8	15.9	15.4	15.0	14.4	13.7	12.5	13.5	13.5	10.8	9.1	11.0	12.7	15.5	16.5	16.7	16.3	16.9	18.0	15.3	19.9
4-Sep	25.0	27.7	25.8	26.0	26.2	46.0	47.5	18.7	11.4	16.2	16.0	14.5	10.4	11.2	13.0	17.6	13.9	6.3	5.3	4.5	4.2	3.4	4.2	4.3	16.6	47.5
5-Sep	4.9	6.1	6.2	5.9	6.3	5.9	5.5	5.7	5.7	5.8	6.0	5.2	5.0	5.7	6.0	6.2	6.0	6.0	6.6	6.8	8.2	7.5	10.0	10.9	6.4	10.9
6-Sep	8.3	8.7	8.0	9.2	11.5	7.6	7.4	8.7	9.0	7.8	6.6	5.7	5.7	6.4	6.7	7.4	4.5	3.6	4.6	5.3	5.5	5.5	6.0	6.2	6.9	11.5
7-Sep	6.3	6.7	8.1	9.2	9.1	7.7	9.6	12.0	12.1	9.2	7.1	6.9	6.3	5.3	5.7	5.5	5.6	5.6	5.7	6.6	7.9	9.4	10.1	16.1	8.1	16.1
8-Sep	16.2	10.7	9.1	8.0	7.7	7.6	11.8	11.2	14.3	18.7	DF	DF	DF	18.3	18.2	15.8	22.2	23.5	26.1	25.1	27.1	29.9	58.8	28.6	19.5	58.8
9-Sep	25.4	22.7	22.7	21.6	20.7	22.3	DF	DF	DF	DF	DF	DF	DF	12.7	11.5	9.7	8.4	7.4	6.6	10.6	9.0	9.5	12.8	7.2	--	25.4
10-Sep	5.0	4.1	3.3	2.8	2.5	2.7	3.3	3.5	3.5	4.4	5.8	22.9	43.0	55.3	42.8	43.5	49.4	45.8	27.9	13.3	6.1	3.6	2.5	2.1	16.6	55.3
11-Sep	2.5	5.7	5.5	3.8	2.8	1.7	1.4	1.6	2.4	2.7	2.6	3.5	4.8	6.7	4.6	3.0	2.9	5.3	6.7	6.4	7.4	8.6	8.9	DF	4.4	8.9
12-Sep	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	--	--
13-Sep	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	10.4	9.7	8.7	9.1	8.8	9.0	9.4	10.1	14.7	10.3	12.6	12.3	10.4	11.1	--	14.7
14-Sep	11.3	11.1	10.7	10.3	10.3	11.1	10.3	3.5	3.5	5.0	5.6	5.5	5.6	6.9	6.6	6.5	6.2	4.9	4.4	3.1	4.6	6.0	6.7	6.9	6.9	11.3
15-Sep	6.6	6.4	5.4	6.2	6.7	7.0	7.3	5.3	3.8	3.7	3.5	4.2	4.8	5.4	4.6	4.5	4.6	5.5	5.7	5.9	7.7	6.3	6.3	5.8	5.5	7.7
16-Sep	6.0	5.9	5.5	5.6	5.9	5.9	5.9	6.0	7.0	8.9	11.1	8.9	8.4	6.7	7.9	6.9	6.5	6.6	6.7	6.9	7.3	8.4	8.2	7.3	7.1	11.1
17-Sep	8.4	9.7	8.3	7.6	8.0	11.7	9.1	10.4	8.8	10.2	11.5	12.5	14.0	13.9	13.7	14.2	13.4	13.3	13.8	14.0	14.1	15.4	15.5	15.3	12.0	15.5
18-Sep	14.7	15.3	15.6	15.7	15.6	15.7	15.2	14.1	11.4	8.2	6.0	5.4	4.4	4.5	4.8	5.2	5.7	6.4	8.7	9.2	7.8	8.6	8.3	10.8	9.9	15.7
19-Sep	18.4	9.3	10.4	11.4	10.4	9.8	10.0	9.7	9.5	9.0	8.8	8.6	8.7	9.2	10.7	13.2	15.4	15.6	15.6	16.4	17.9	17.2	16.2	15.7	12.4	18.4
20-Sep	15.9	16.7	17.4	17.1	17.2	16.9	18.1	17.2	16.1	16.3	17.4	15.5	14.3	13.0	13.9	14.0	14.8	15.8	16.7	20.2	20.9	20.7	21.7	22.5	17.1	22.5
21-Sep	22.4	22.5	22.5	21.8	21.5	21.1	21.3	22.0	23.1	22.8	23.9	25.2	20.8	20.5	19.7	21.2	21.9	20.9	22.6	23.5	23.2	21.5	22.1	22.5	22.1	25.2
22-Sep	24.4	24.1	24.7	24.0	26.1	26.1	25.0	24.8	22.6	26.2	30.2	23.3	9.5	5.6	4.9	5.5	7.4	5.0	3.7	20.0	7.4	4.7	3.7	3.2	15.9	30.2
23-Sep	3.7	3.7	3.7	4.6	8.4	9.0	11.0	7.3	5.4	5.9	4.9	4.8	5.2	5.9	5.4	9.8	7.5	7.2	6.8	6.4	6.7	6.5	6.9	7.4	6.4	11.0
24-Sep	7.6	8.1	7.9	7.6	7.2	6.6	6.5	6.4	5.5	4.9	4.6	4.0	3.6	3.7	4.2	4.2	5.2	8.2	7.3	5.0	4.7	4.5	DF	DF	5.8	8.2
25-Sep	DF	DF	DF	DF	DF	DF	DF	DF	DF	5.0	6.3	7.3	7.4	8.6	9.1	10.0	12.6	12.1	10.9	11.7	12.1	13.4	15.3	14.8	--	15.3
26-Sep	15.8	15.7	15.8	13.4	12.0	3.2	2.5	1.8	0.8	0.7	1.2	1.4	1.7	2.0	1.6	1.2	1.0	1.8	1.1	1.3	2.2	2.3	3.1	3.8	4.5	15.8
27-Sep	4.0	4.5	4.6	3.9	3.8	3.9	4.0	4.3	4.5	4.6	4.9	5.2	5.3	5.3	5.5	4.9	4.0	3.6	4.6	4.6	4.6	4.4	3.9	3.8	4.4	5.5
28-Sep	5.6	5.4	4.6	4.0	4.3	4.5	4.7	4.8	4.4	4.2	4.4	4.2	4.5	4.7	4.9	4.6	4.5	4.9	8.8	13.5	14.8	DF	DF	DF	5.7	14.8
29-Sep	DF	DF	DF	DF	DF	DF	DF	DF	6.7	6.5	5.6	4.6	3.9	2.6	3.1	3.1	2.9	2.9	3.1	3.1	3.0	3.6	3.9	4.2	--	6.7
30-Sep	4.3	4.4	4.6	4.6	4.6	4.8	5.6	3.2	1.3	0.8	0.4	0.4	0.5	1.2	1.9	1.0	2.7	2.3	2.2	5.9	3.1	2.3	2.5	5.4	2.9	5.9
	11.5	11.2	11.0	10.9	11.0	11.4	11.2	9.6	8.9	9.1	8.8	8.9	8.7	9.6	9.2	9.4	9.8	9.6	9.7	10.3	10.0	9.9	11.6	10.9	Diurnal Average	
	25.4	27.7	25.8	26.0	26.2	46.0	47.5	24.8	23.1	26.2	30.2	25.2	43.0	55.3	42.8	43.5	49.4	45.8	27.9	25.1	27.1	29.9	58.8	28.6	Diurnal Maximum	

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 - September 2026



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

Janvier - September 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	193	29.56	29.56
6 - 15	331	50.69	80.25
16 - 25	107	16.39	96.63
26 - 80	22	3.37	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 653

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Janvier - September 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	14	4	2	2	1	2	1	6	5	11	37	30	27	19	24	8	193
6 - 15	20	30	10	12	23	15	17	8	12	65	42	33	12	10	7	15	331
16 - 25	6	4	3	3	6	5	0	6	17	28	18	4	2	2	2	1	107
26 - 80	1	0	1	1	0	0	2	0	1	3	2	0	0	6	2	2	21
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	41	38	16	18	30	22	20	20	35	107	99	67	41	37	35	26	652

Total Number of Valid Hours: 652

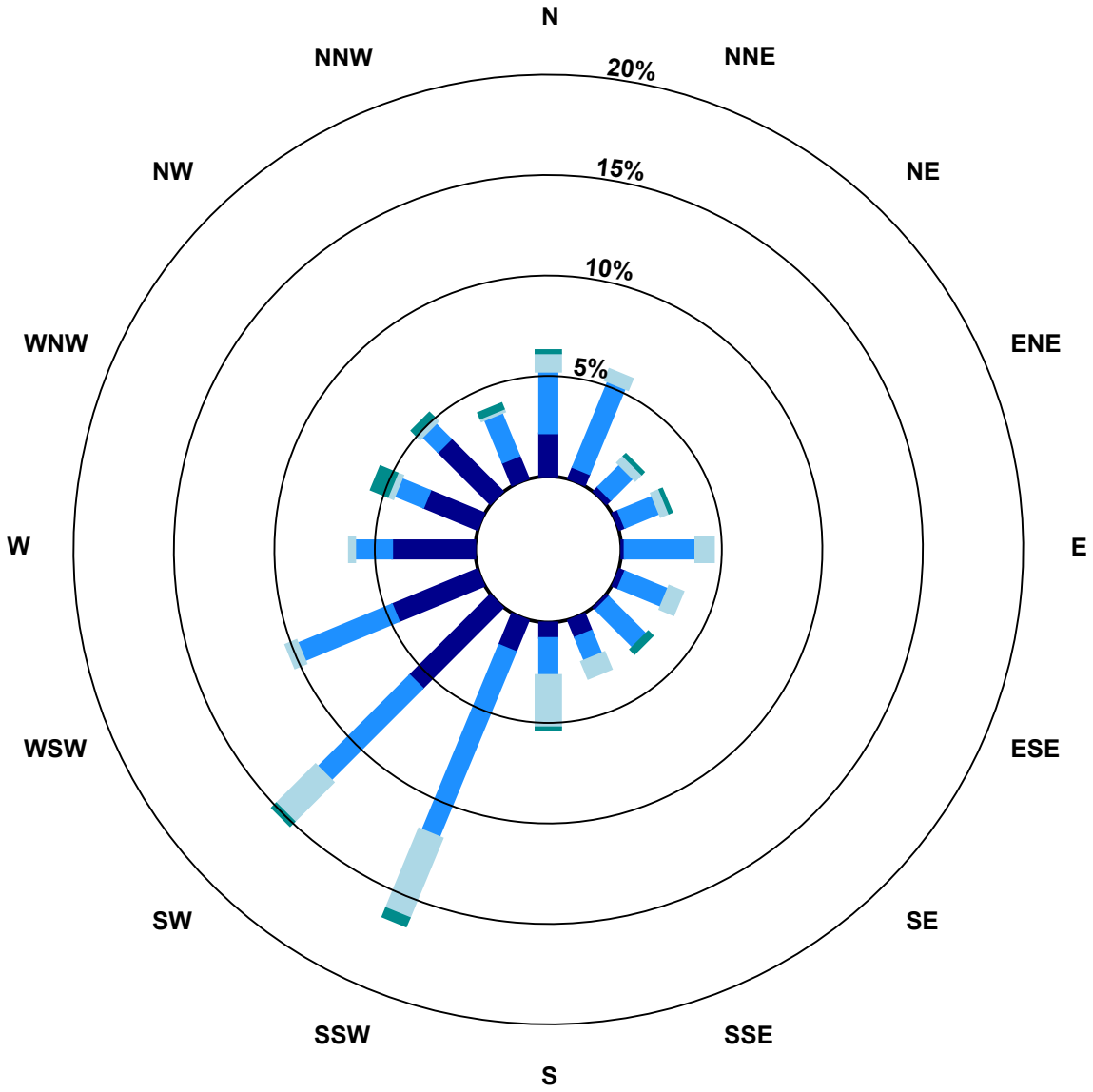
Total Number of Hours: 720

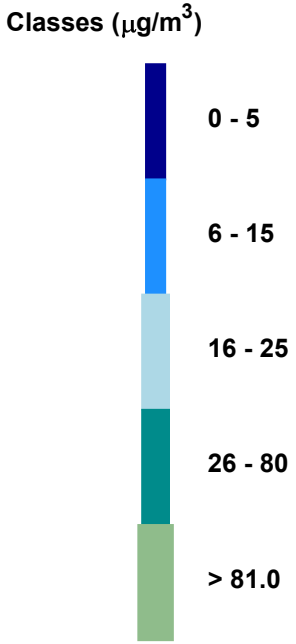
Wood Buffalo Environmental Association

Wind Rose Sep 2026

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

Janvier





Total Number of Valid Hours: 652

Maximum Value: 27.0 C on Sep 2 15:00

Maximum Daily Average: 17.9 C on Sep 2

Minimum Value: -0.3 C on Oct 1 00:00

Minimum Daily Average: 4.5 C on Sep 30

Maximum Diurnal Average: 17.1 C at hour 16

Minimum Diurnal Average: 6.8 C at hour 6

Monthly Average: 11.44 C

Percentiles: P_1 = 2.3 P_{10} = 4.7 Q_1 = 7.2 Median = 10.8 Q_3 = 15.2 P_{90} = 19.1 P_{99} = 25.4

Hours in Service:	720
Hours of Data:	718
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-Sep	9.8	9.5	8.6	8.0	7.8	7.9	7.9	11.7	15.4	18.4	21.4	22.9	23.6	24.3	24.7	24.7	24.7	23.7	20.5	17.6	17.3	16.0	13.5	12.2	16.3	24.7
2-Sep	11.3	10.5	9.7	9.1	8.9	8.5	8.9	11.9	15.6	20.0	23.6	25.4	26.2	26.8	27.0	26.8	25.7	24.3	22.0	20.4	18.6	17.0	16.9	15.7	17.9	27.0
3-Sep	14.8	13.3	13.2	12.5	12.6	12.5	13.4	14.9	15.3	16.0	16.6	16.8	17.6	18.4	19.4	18.2	18.3	18.8	18.5	17.8	16.7	16.5	16.6	15.2	16.0	19.4
4-Sep	13.8	13.0	12.9	12.8	12.1	11.2	11.1	12.3	15.4	18.5	21.0	22.7	23.8	23.1	22.0	20.8	18.1	14.9	13.3	12.0	10.9	10.8	10.1	9.6	15.3	23.8
5-Sep	9.5	9.1	8.8	8.8	8.8	8.7	8.8	9.1	9.5	10.2	11.4	12.1	13.0	14.3	15.1	15.7	15.9	15.7	12.4	9.9	8.5	7.8	6.9	6.3	10.7	15.9
6-Sep	5.8	5.5	4.6	4.0	4.9	5.3	5.8	6.7	7.5	9.3	12.0	14.7	16.6	16.4	16.8	16.5	16.6	16.1	15.2	14.6	14.0	13.7	12.7	11.3	11.1	16.8
7-Sep	10.1	9.0	8.2	8.1	8.7	9.0	9.2	9.9	12.3	13.3	13.5	13.9	14.5	14.8	15.4	15.6	15.3	15.0	14.7	14.0	13.2	11.4	10.6	10.6	12.1	15.6
8-Sep	9.6	9.0	9.0	8.4	7.5	7.7	8.8	9.6	13.8	15.9	16.9	UO	UO	19.1	20.0	20.3	20.3	19.3	14.3	12.2	11.1	10.3	9.8	10.6	12.9	20.3
9-Sep	10.9	10.6	10.1	9.9	9.5	9.4	10.4	11.8	13.3	14.9	17.2	18.7	20.4	20.8	20.9	20.8	19.6	19.2	18.4	17.7	16.6	16.3	15.3	15.2	15.3	20.9
10-Sep	15.3	14.6	13.4	12.9	12.6	11.6	10.9	12.2	14.1	15.9	17.1	16.8	16.8	16.5	17.5	16.2	14.8	14.3	13.4	11.5	11.1	11.3	11.2	10.9	13.9	17.5
11-Sep	10.7	10.6	10.5	10.4	10.2	9.9	9.2	9.0	9.5	10.1	10.3	11.0	10.9	12.4	11.9	12.0	12.0	10.7	9.5	7.8	6.9	6.5	5.5	5.6	9.7	12.4
12-Sep	5.7	6.0	5.7	5.6	5.6	5.2	5.3	6.2	7.3	8.6	9.5	10.5	10.5	10.8	11.6	12.0	12.2	12.3	7.9	5.9	6.1	5.8	5.3	4.7	7.8	12.3
13-Sep	4.1	3.8	3.6	3.6	3.8	3.8	4.1	5.6	8.6	11.8	14.5	16.1	17.1	17.6	18.3	18.7	18.6	17.3	13.4	11.5	10.2	9.0	9.4	9.6	10.6	18.7
14-Sep	8.7	7.5	6.8	7.0	7.4	7.8	8.9	8.8	9.1	10.6	11.3	12.3	11.8	12.1	12.1	11.7	10.9	10.3	9.4	8.7	8.3	8.0	7.6	7.2	9.3	12.3
15-Sep	5.7	5.9	6.1	5.1	3.8	2.6	2.6	4.4	5.5	6.7	8.4	9.9	11.2	11.0	11.3	10.6	11.2	9.9	9.1	7.9	7.4	6.1	6.4	5.8	7.3	11.3
16-Sep	4.5	3.8	2.8	1.8	2.2	2.8	3.1	3.8	4.7	5.9	7.4	9.4	10.7	11.6	11.7	13.6	13.9	12.6	10.3	9.2	8.2	6.3	4.9	4.4	7.1	13.9
17-Sep	4.1	3.6	3.3	3.5	3.4	2.5	2.5	3.8	7.9	11.4	13.9	16.6	19.0	20.3	20.5	20.3	18.9	18.7	14.2	12.0	11.2	10.5	9.2	8.4	10.8	20.5
18-Sep	8.0	8.2	7.6	5.9	5.7	6.3	6.3	7.0	10.4	15.1	17.3	18.2	19.3	19.7	18.7	19.6	18.8	16.4	11.9	10.0	8.8	7.5	6.9	6.1	11.7	19.7
19-Sep	5.4	5.9	5.4	5.2	4.8	3.8	3.8	6.2	10.4	14.2	18.5	20.4	21.6	22.5	22.8	23.0	22.6	21.1	18.5	15.2	15.8	15.3	15.4	15.8	13.9	23.0
20-Sep	15.9	15.0	14.3	13.6	12.9	11.8	11.4	12.5	14.3	16.6	19.1	21.5	23.5	24.4	25.2	25.3	24.7	20.2	17.5	17.8	15.5	13.8	13.7	12.6	17.2	25.3
21-Sep	12.1	12.1	11.7	11.5	10.8	10.4	10.2	11.1	13.5	15.8	19.9	23.5	24.4	25.3	25.7	25.5	24.9	22.5	19.5	17.6	15.1	13.4	12.4	11.2	16.7	25.7
22-Sep	10.6	9.9	9.3	8.7	8.1	7.1	6.8	7.8	9.6	14.2	18.0	18.5	19.7	20.7	21.4	21.2	20.2	18.3	14.0	10.8	10.3	8.3	7.2	5.7	12.8	21.4
23-Sep	4.6	3.8	3.4	2.9	2.1	2.2	2.6	4.1	5.4	6.5	8.7	9.8	10.3	10.8	11.9	12.9	13.0	12.0	9.9	8.4	7.8	7.0	6.1	5.7	7.2	13.0
24-Sep	5.9	5.9	5.2	4.9	3.9	3.2	2.8	4.2	6.6	10.4	14.1	15.5	17.6	18.3	18.2	18.2	16.2	13.8	11.8	11.0	10.4	9.9	9.4	8.8	10.3	18.3
25-Sep	7.6	7.5	7.4	7.3	7.2	7.2	7.2	8.3	10.0	12.8	14.9	15.1	15.8	16.2	15.5	15.7	15.4	14.1	13.0	12.3	11.9	11.7	12.3	11.5	11.6	16.2
26-Sep	11.4	11.3	11.2	10.9	8.7	7.8	7.9	7.6	6.3	6.2	6.8	6.8	7.4	8.0	8.6	9.0	8.5	7.6	6.6	6.2	6.0	5.5	5.2	4.2	7.7	11.4
27-Sep	4.2	4.3	4.2	4.3	3.3	2.8	2.9	3.9	6.8	9.0	10.8	12.9	14.0	14.6	14.1	13.5	13.4	12.7	11.3	9.2	7.9	8.0	7.3	6.6	8.4	14.6
28-Sep	5.5	4.9	4.5	4.1	4.0	3.8	3.8	4.6	6.4	9.8	14.3	16.1	17.1	16.5	16.4	16.1	16.6	14.9	12.1	10.1	8.3	9.3	7.3	5.4	9.7	17.1
29-Sep	4.2	3.5	3.5	4.8	6.4	7.1	6.8	6.6	6.8	7.3	8.5	9.9	10.9	11.3	12.3	11.9	12.6	11.1	9.4	9.0	7.3	5.6	5.6	5.4	7.8	12.6
30-Sep	5.6	5.2	4.8	4.3	4.3	5.0	5.3	4.4	4.2	4.4	5.1	5.4	6.2	7.0	6.7	7.4	6.6	5.5	5.0	3.6	1.9	1.0	0.3	-0.3	4.5	7.4
	8.5	8.1	7.7	7.3	7.1	6.8	7.0	8.0	9.9	12.0	14.1	15.3	16.2	16.9	17.1	17.1	16.7	15.4	13.2	11.7	10.8	10.0	9.4	8.7	Diurnal Average	
	15.9	15.0	14.3	13.6	12.9	12.5	13.4	14.9	15.6	20.0	23.6	25.4	26.2	26.8	27.0	26.8	25.7	24.3	22.0	20.4	18.6	17.0	16.9	15.8	Diurnal Maximum	

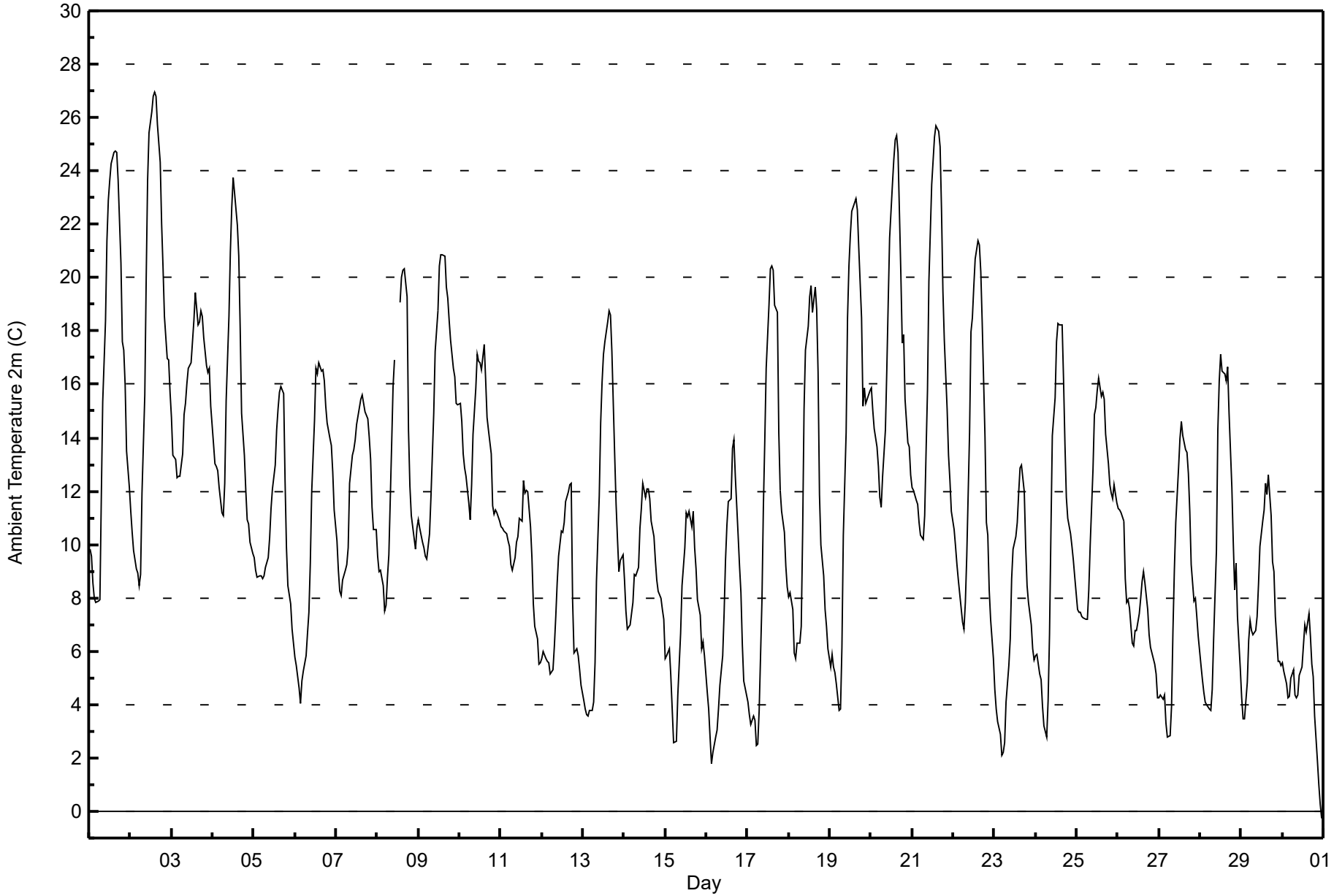
UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Janvier - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	1	0.14	0.14
0 - 10	317	44.15	44.29
10 - 20	340	47.35	91.64
> 20	60	8.36	100.00

Total Number of Valid Hours: 718

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Janvier - September 2026

Maximum Value: 99.3 % on Sep 6 07:00

Maximum Daily Average: 91.3 % on Sep 7

Minimum Value: 32.2 % on Sep 20 16:00

Minimum Daily Average: 63.2 % on Sep 28

Maximum Diurnal Average: 93.6 % at hour 7

Minimum Diurnal Average: 52.3 % at hour 15

Monthly Average: 77.17 %

Percentiles: P_1 = 34.3 P_{10} = 47.0 Q_1 = 65.4 Median = 81.4 Q_3 = 93.7 P_{90} = 98.1 P_{99} = 99.1

Hours in Service:	720
Hours of Data:	718
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-Sep	97.0	96.8	97.7	98.3	98.3	97.6	98.1	87.3	76.0	67.2	51.6	45.8	44.4	41.9	37.2	34.7	35.2	40.2	57.9	70.0	70.1	76.6	88.8	93.9	70.9	98.3
2-Sep	96.3	97.5	98.2	98.6	99.0	99.0	99.1	92.0	81.1	68.3	53.8	39.5	36.2	36.1	36.1	36.3	39.6	44.3	54.0	63.8	71.6	79.9	79.5	85.2	70.2	99.1
3-Sep	90.1	94.7	96.1	96.7	97.4	97.3	96.2	93.0	95.7	91.7	88.0	86.7	83.6	80.3	76.0	79.6	78.9	78.2	79.6	82.9	88.3	89.4	89.0	93.7	88.5	97.4
4-Sep	97.1	98.3	98.4	98.7	98.6	98.8	99.0	98.5	89.3	78.7	65.7	56.7	47.5	55.5	59.4	63.3	74.8	84.0	87.5	90.8	95.7	94.6	94.9	93.6	84.1	99.0
5-Sep	92.5	96.1	98.0	97.1	95.7	95.6	94.0	92.7	90.9	85.9	78.6	74.6	67.2	57.9	57.2	54.3	54.7	58.2	80.6	91.5	95.2	96.4	97.2	97.9	83.3	98.0
6-Sep	98.2	98.5	98.5	98.8	99.2	99.3	99.3	99.1	98.4	93.5	85.2	75.7	65.1	66.9	66.8	71.6	73.7	77.4	80.9	83.0	84.8	83.6	89.3	93.3	86.7	99.3
7-Sep	96.3	97.4	98.2	98.8	99.1	99.3	99.2	99.0	90.4	84.8	84.6	83.9	83.0	81.9	80.3	80.8	82.9	85.6	86.8	91.0	93.6	97.0	98.3	98.8	91.3	99.3
8-Sep	98.8	98.8	98.9	98.8	98.9	99.2	99.2	98.5	85.4	76.2	70.1	UO	UO	53.5	50.3	45.4	46.0	60.6	86.1	93.1	95.5	95.9	95.7	91.0	83.5	99.2
9-Sep	88.7	88.7	89.9	91.6	93.8	95.5	93.7	90.3	85.9	79.6	67.9	59.1	50.1	47.7	46.7	47.9	52.3	54.6	58.2	61.7	67.2	68.6	74.1	73.7	72.0	95.5
10-Sep	70.7	68.2	70.5	74.5	77.9	80.9	83.8	77.4	69.1	61.6	54.4	55.3	55.4	56.8	50.6	56.8	65.3	69.4	74.7	90.1	91.4	89.7	87.1	86.2	71.6	91.4
11-Sep	84.9	82.8	81.8	81.1	81.4	81.1	87.5	89.1	83.3	78.1	78.0	73.5	75.8	62.3	64.4	65.0	62.0	61.3	65.9	78.5	83.8	86.8	90.9	90.0	77.9	90.9
12-Sep	89.1	89.1	90.2	89.7	88.2	90.4	90.2	85.9	78.9	69.9	64.3	57.2	56.6	50.0	48.0	46.0	47.2	51.0	80.3	87.4	83.2	81.8	82.7	83.9	74.2	90.4
13-Sep	86.3	88.2	89.3	89.4	88.6	88.7	87.6	82.3	72.4	62.8	54.0	46.0	42.4	42.4	40.4	40.0	41.5	50.1	68.7	75.0	79.8	86.5	84.5	82.9	69.6	89.4
14-Sep	87.1	93.4	95.7	96.8	98.0	98.5	99.0	98.1	95.7	88.8	81.4	72.5	75.9	71.4	68.3	72.1	76.1	75.1	78.1	81.1	85.4	86.0	88.0	90.8	85.6	99.0
15-Sep	95.4	95.6	94.2	94.0	96.3	97.5	98.3	92.9	88.3	82.0	75.8	66.8	56.7	54.6	54.1	56.7	57.2	69.8	71.2	80.0	82.5	92.1	91.7	93.5	80.7	98.3
16-Sep	96.5	97.2	96.7	98.0	98.6	98.5	98.4	97.1	93.9	86.5	74.9	67.3	63.1	55.1	58.3	52.7	53.7	62.4	73.5	77.1	83.3	93.1	96.8	97.9	82.1	98.6
17-Sep	98.1	98.3	98.3	98.4	98.1	98.3	98.6	96.9	83.3	71.4	63.7	57.1	51.1	48.9	48.0	48.2	64.7	62.1	82.3	92.6	95.2	96.6	97.6	98.3	81.1	98.6
18-Sep	98.4	98.3	97.9	98.2	98.7	99.0	98.2	95.5	83.3	63.9	52.7	48.4	41.4	39.5	41.3	39.2	41.7	57.6	80.9	89.1	93.0	96.1	96.9	97.0	76.9	99.0
19-Sep	97.6	96.9	96.8	95.6	95.8	97.6	97.9	92.3	79.0	69.4	50.3	37.7	33.8	32.4	34.4	37.7	40.8	47.1	58.5	76.7	69.7	70.9	68.6	66.8	68.5	97.9
20-Sep	65.2	68.8	71.9	75.4	75.9	80.7	80.5	75.0	67.1	59.4	53.2	46.1	39.0	36.5	34.3	32.2	36.4	60.8	70.0	65.3	77.6	86.1	85.4	89.5	63.8	89.5
21-Sep	90.5	89.6	90.3	90.6	92.8	94.6	94.7	90.0	80.4	74.9	62.1	47.4	36.8	33.9	33.5	32.2	38.3	45.0	59.1	68.0	81.2	88.9	92.2	95.7	70.9	95.7
22-Sep	97.3	97.8	98.2	98.3	98.2	98.5	98.5	97.9	95.9	79.9	63.2	51.2	44.0	38.7	36.2	37.7	40.5	41.5	53.4	67.0	66.4	77.3	81.7	87.5	72.8	98.5
23-Sep	91.9	94.0	95.1	95.6	97.2	97.2	96.7	92.8	88.8	86.7	77.6	76.5	77.5	76.5	72.2	72.7	77.1	86.0	93.6	96.8	97.5	98.1	98.2	98.5	88.9	98.5
24-Sep	98.1	97.4	97.6	97.1	97.5	98.1	98.2	93.8	85.1	72.5	56.3	45.5	35.1	33.4	34.8	37.0	49.7	64.8	72.4	75.8	76.6	80.5	85.7	90.4	73.9	98.2
25-Sep	94.4	92.6	90.2	88.5	85.9	87.4	91.7	85.5	78.0	63.3	54.5	56.4	58.1	60.3	65.8	67.5	70.2	75.5	80.0	85.8	89.4	95.1	95.8	97.5	79.6	97.5
26-Sep	98.3	98.5	99.0	98.5	94.6	95.2	93.7	90.9	88.5	87.8	81.6	78.5	72.9	69.8	65.8	65.6	67.0	69.6	71.3	71.7	72.9	78.0	79.3	84.5	82.2	99.0
27-Sep	86.5	86.7	87.0	85.6	89.5	91.9	92.9	87.9	75.9	66.3	59.2	51.0	45.0	40.8	41.9	45.1	46.8	50.4	55.2	65.6	72.1	68.4	69.9	72.5	68.1	92.9
28-Sep	77.5	79.8	81.6	82.9	83.0	83.6	84.0	81.9	76.0	63.7	46.8	39.6	35.9	36.8	37.7	38.2	37.6	42.7	54.3	62.5	70.0	62.6	73.5	83.8	63.2	84.0
29-Sep	87.0	90.4	91.5	85.5	72.8	72.4	86.1	94.1	95.5	95.8	94.2	87.4	77.4	72.4	58.4	52.4	43.5	48.1	56.9	59.2	70.1	77.5	71.7	69.8	75.4	95.8
30-Sep	67.4	69.0	71.8	73.7	73.7	72.1	74.1	80.8	80.3	79.7	74.8	72.6	71.6	68.2	69.9	68.1	73.5	79.5	82.7	88.0	94.2	96.5	96.6	97.2	78.2	97.2
	90.4	91.3	92.0	92.2	92.1	92.8	93.6	90.9	84.4	76.3	67.3	60.5	55.9	53.4	52.3	52.6	55.6	61.8	71.8	78.7	82.6	85.7	87.4	89.2	Diurnal Average	
	98.8	98.8	99.0	98.8	99.2	99.3	99.3	99.1	98.4	95.8	94.2	87.4	83.6	81.9	80.3	80.8	82.9	86.0	93.6	96.8	97.5	98.1	98.3	98.8	Diurnal Maximum	

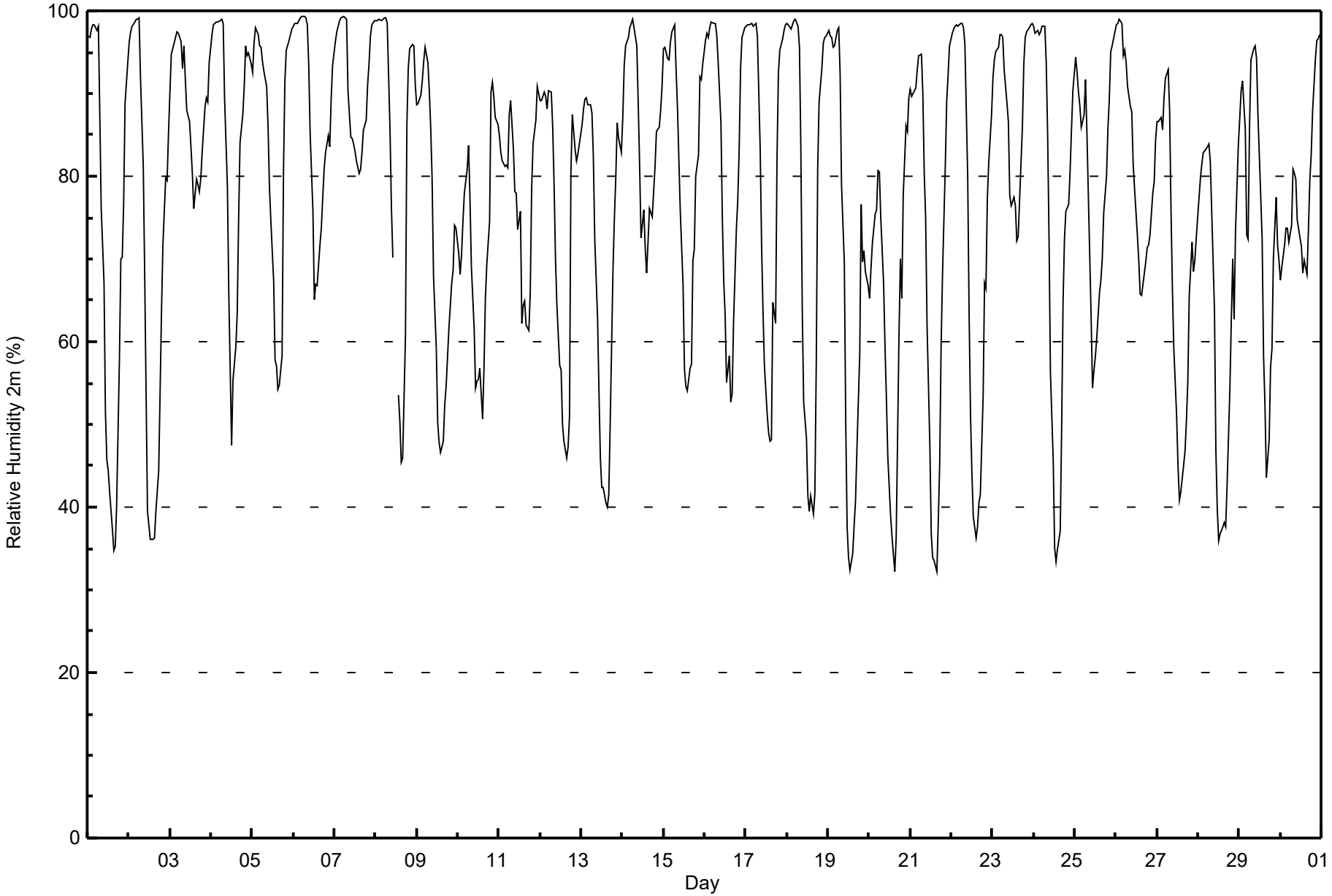
UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Janvier - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 20m (WS20) - km/h

Janvier - September 2026

Maximum Speed: 24 km/h on Sep 26 13:00

Maximum Daily Speed Average: 14.8 km/h on Sep 26

Minimum Speed Value: 0 km/h on Sep 14 04:00

Minimum Daily Speed Average: 0.7 km/h on Sep 8

Maximum Diurnal Speed Average: 5.5 km/h at hour 14

Minimum Diurnal Speed Average: 2.1 km/h at hour 19

Monthly Average Velocity: 3.7 km/h 248.8 deg

Percentiles: P_1 = 1 P_{10} = 3 Q_1 = 5 Median = 8 Q_3 = 11 P_{90} = 16 P_{99} = 22

Hours in Service: 720

Hours of Data: 719

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-Sep	SSW8	SSW6	S5	S5	SSW7	SSW6	SSW4	SSW4	W3	WNW3	SSW8	S9	SE11	SE11	SSE12	SSE12	S12	S10	SSE7	SE7	SE8	SSE5	SE4	E3	S6.1	SSE12
2-Sep	NE2	NNE4	NNE3	NNE4	NNE4	NNE4	NNE5	NNE3	N4	ENE4	E7	SE12	SE15	SE13	SE13	SE13	SE11	SE10	ESE9	ESE9	ESE7	E6	ESE6	ESE6	ESE5.4	SSE15
3-Sep	E5	ENE4	NNE3	NE4	NNE4	NNE3	NE2	NE3	NE5	ENE10	E11	E10	E11	E12	ESE12	ESE11	E10	E7	E7	E7	E7	E7	ESE7	SSE4	E6.3	E12
4-Sep	E3	NE1	NNW0	ENE1	S1	WNW0	UO	N2	NNW3	NW2	W6	SW4	SW5	WSW13	WSW15	WSW13	NNW11	N15	N12	N11	N11	N8	N11	N8	NW3.8	N15
5-Sep	N9	N8	N7	N7	N7	N7	NNE8	NNE6	N7	N11	NNE10	NNE8	NNE8	ENE3	ESE5	ENE4	SE5	ESE5	SE5	SSE6	S4	SSW3	SW3	S3	NNE3.6	N11
6-Sep	S4	SSE3	SSW2	ESE2	NNW1	NNW2	N2	NNW2	N3	N4	NNE5	ESE6	ESE9	E6	ENE6	E6	E7	ESE6	ESE8	SSE5	SSE3	SSE3	SSE4	SE4	ESE2.8	ESE9
7-Sep	SE4	ESE2	ENE1	W0	NNE4	N1	NNW2	NNE1	NNW4	NE6	NNE5	NNE7	NNE7	NNE6	ENE7	E6	ENE5	E6	ENE5	ENE5	NNE3	NE2	NNE4	NNW3	NE3.2	NNE7
8-Sep	WNW3	NNW2	SE3	SSE3	S5	SSW5	SW5	SSW4	NNE1	N10	N11	N10	N10	N9	N8	N6	NNE5	ENE3	SE5	SSE6	SSW5	SSW6	SSW8	SW10	NNW0.7	N11
9-Sep	SW10	SSW10	SW10	SW10	SW9	SW10	SW12	SW11	SW12	SW13	WSW15	SW17	WSW18	WSW16	SW16	WSW14	SW15	SW14	WSW13	SW11	SSW12	SSW12	SW11	WSW12	SW12.3	WSW18
10-Sep	WSW12	W11	WNW17	W12	W12	W13	WSW12	WSW13	W16	W17	WNW20	WNW17	WNW18	NW17	NW20	WNW15	WNW16	WNW13	WNW14	WNW11	WNW11	WNW12	NW13	NW14	WNW13.7	NW20
11-Sep	WNW16	NW17	NW17	NW16	NW17	NW16	NW13	NW13	NW14	NW17	NW16	NNW17	NNW17	NNW19	NNW16	NW19	NNW16	NNW14	NNW11	NW9	WNW7	W6	WSW6	WSW7	NW13.4	NW19
12-Sep	W8	WNW6	W6	WNW5	WNW6	WSW5	W5	W6	WNW8	WNW7	WSW9	W10	W10	W7	W9	WNW6	WNW7	WNW5	SSW6	SSW7	SSW10	SSW11	SSW11	SSW11	WSW6.3	SSW11
13-Sep	SSW11	SW10	SW11	SW10	SW12	SW12	SW13	SW9	SW9	SW10	SW12	SW18	WSW17	WSW16	WSW13	WSW10	WSW9	SW8	SSW8	SSW8	SW6	SSW8	SW9	SSW10	SW10.6	WSW18
14-Sep	SW6	SSW5	SW2	NNW0	NNW2	W3	N7	N10	N9	N11	N12	N13	N12	N13	N14	N11	N10	N10	NNW9	NNW7	NNW7	NNW7	NNW5	NW3	NNW6.7	NNW14
15-Sep	W4	W4	WNW5	WNW6	W5	SSW5	SW7	W6	WSW7	SW8	SW9	SW8	WSW10	WSW10	SW9	WNW3	SSE1	SSW5	SW7	WSW5	SW9	SW7	SW8	SSW7	WSW5.9	WSW10
16-Sep	SW6	WSW7	WSW6	SW4	WSW4	SW5	SSW4	SW4	WSW5	SW4	WSW5	WSW6	WSW8	SW6	SW4	E2	E6	ESE6	ESE9	ESE8	ESE5	ESE4	NNE3	NNE3	SSW2.3	ESE9
17-Sep	NNE4	NNE3	NNE3	NNE2	E1	SSW2	SSW2	SW3	WSW3	SW9	SW10	WSW9	SW10	SW10	SW10	SW9	WSW3	WNW6	NNE4	E2	SSW2	S1	SSW3	SSW5	SW3.1	SW10
18-Sep	SSW6	SSW7	SW5	W1	S3	SSW5	SSW6	SSW7	SW4	WSW3	W4	N4	NW8	N9	NW9	N8	NE7	NE5	E4	SSW3	S2	SSW4	S5	SSW3	WSW1.5	NW9
19-Sep	SSW5	SSW7	SSW7	SSW8	SSW6	S5	S4	S3	WSW4	WSW5	SSW10	SSW16	SSW17	SSW16	SSW18	SSW18	SSW17	S13	S10	S7	S11	SSW9	SSW11	SSW10	SSW9.6	SSW18
20-Sep	SSW11	SSW9	SSW9	SSW7	SW9	SW9	SW9	SW10	SW12	SW12	WSW9	SW8	WSW7	W8	SW8	W10	WSW6	SSW5	SSW8	SSW11	SSW8	SSW6	SSW8	SW7	SW8.2	SW12
21-Sep	SW9	SSW10	SSW10	SSW10	SSW10	SSW9	SSW8	SSW8	SSW6	WSW4	S5	S9	SSE11	S13	SSE11	S12	S9	S9	S10	S9	SSW5	SSW5	SSW5	S4	SSW7.9	S13
22-Sep	S4	SSE3	SSW2	S2	SE1	N1	SSE1	SW3	SW6	SW7	NNW8	NW14	NW12	NW12	NW12	WNW11	NW11	WNW10	W6	WSW7	WSW7	SSW6	SSW6	S5	W4.2	NW14
23-Sep	S5	SSW5	SSW6	SSW3	SSW5	SSW4	SW3	SW3	SW1	W3	NNE2	NE2	ENE4	N5	NE4	NNE4	NE3	E3	SSW3	SSW1	SE1	SW3	SSW5	SSW7	SSW1.4	SSW7
24-Sep	SSW9	SSW10	SSW9	SSW10	SSW8	SSW7	SSW8	SSW10	SSW8	SW7	SW7	SW7	SW9	WSW12	WSW10	WNW7	W3	WSW3	SW2	SSE2	S1	SE3	NE0	NE3	SW5.6	WSW12
25-Sep	NNE4	NNE5	N3	NNE5	NNE6	NNE5	NNE5	NNE7	NNE7	ENE8	E16	ESE14	E14	ENE12	E9	ENE10	NE8	NE9	NNE6	NNE7	E8	E19	NNE4	WNW7	ENE6.7	E19
26-Sep	NE2	S1	SW3	WSW7	WSW14	WSW11	WSW13	W14	W20	W17	W21	W22	W24	W24	W23	W22	W23	WNW23	WNW21	WNW15	W13	W11	WSW11	SW11	W14.8	W24
27-Sep	WSW12	WSW12	WSW13	WSW14	SW13	SW12	SW13	SW12	WSW14	WSW16	WSW17	WSW16	WSW18	W19	W21	WSW18	W18	WSW11	SW9	SW8	SW10	SW12	SW11	SW11	WSW13.3	W21
28-Sep	SW11	SW11	SW10	SW11	SW13	SSW11	SSW11	SSW10	SW11	SW11	SW16	SW16	SW18	SW16	SW12	SW10	SW13	SSW11	SSW10	SSW9	SSW8	SSW9	S6	S5	SW10.8	SW18
29-Sep	S6	S6	SW4	SSW7	SW9	SW9	SW9	SSW6	SW7	SSW8	SW7	W12	W17	W21	WNW23	WNW20	WNW20	WNW15	WNW15	W12	WSW9	SW7	WSW10	WSW10	W9.3	WNW23
30-Sep	WSW10	WSW9	WSW10	SW10	WSW13	W16	WNW19	WNW18	NW16	NW18	NW18	NW17	NW16	NW19	NW17	NW17	NW14	NW10	WNW8	WNW6	SW3	WSW6	SW5	SSW6	WNW10.9	NW19
	SW4.0	SW3.9	WSW4.1	WSW3.7	WSW4.2	WSW4.4	WSW4.5	WSW4.1	W4.8	W4.6	W4.6	W4.6	W5.1	W5.5	W5.2	W4.3	W3.3	W2.1	SW2.1	SW2.6	SW2.9	SSW3.3	SW3.7	SW4.1	Diurnal Average	
	WNW16	NW17	NW17	NW16	NW17	NW16	WNW19	WNW18	W20	NW18	W21	W22	W24	W24	WNW23	W22	W23	WNW23	WNW21	WNW15	W13	E19	NW13	NW14	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: 8 km/h on Sep 11 14:00

Minimum Value: 0 km/h on Sep 17 20:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 1 Median = 2 Q_3 = 4 P_{90} = 6 P_{99} = 8

Hours in Service:	720
Hours of Data:	719
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-Sep	2	1	1	1	1	2	1	1	1	1	4	3	4	4	4	4	4	3	2	2	2	2	2	1	4
2-Sep	2	1	1	1	1	1	1	1	1	2	2	4	5	5	4	4	4	3	3	3	2	2	2	2	5
3-Sep	1	1	1	1	1	1	2	2	1	3	4	4	4	4	4	4	3	3	2	2	2	2	2	1	4
4-Sep	2	1	1	2	2	1	UO	1	2	1	2	2	3	4	5	4	5	5	5	4	4	3	4	3	5
5-Sep	3	3	3	2	3	2	3	2	3	4	3	3	3	2	2	2	3	2	1	1	1	1	1	1	4
6-Sep	1	2	1	2	2	1	1	1	1	2	1	3	3	3	2	2	2	2	2	2	1	2	1	1	3
7-Sep	1	1	1	1	2	1	2	1	1	1	1	2	2	2	2	2	2	2	2	1	1	1	1	1	2
8-Sep	1	1	1	1	1	1	1	1	2	4	4	4	3	3	3	3	2	1	1	1	2	1	2	1	4
9-Sep	2	2	2	2	2	2	3	3	4	4	5	6	6	6	6	5	5	5	4	3	3	3	3	4	6
10-Sep	4	4	7	4	4	4	4	4	5	6	6	7	6	6	7	6	6	4	5	4	3	4	5	5	7
11-Sep	5	6	6	6	7	7	5	5	6	8	6	7	7	8	6	7	7	6	5	3	2	1	1	1	8
12-Sep	2	1	1	2	2	1	2	2	3	3	3	4	5	3	4	4	2	2	1	1	1	2	2	2	5
13-Sep	2	2	2	2	3	3	3	3	3	3	5	6	6	5	5	4	4	2	1	1	2	1	1	2	6
14-Sep	2	2	1	1	1	1	5	4	3	4	5	5	5	5	6	5	4	3	3	3	3	3	2	1	6
15-Sep	1	1	2	2	2	1	1	1	2	2	3	3	4	4	4	4	1	2	2	3	2	2	2	2	4
16-Sep	1	1	2	1	2	1	1	1	2	2	2	2	3	3	2	2	2	2	2	2	2	1	1	1	3
17-Sep	1	1	1	1	2	2	2	1	1	3	3	3	3	3	3	3	2	2	2	0	1	1	2	1	3
18-Sep	2	1	3	2	1	1	2	2	2	1	3	3	3	4	3	3	2	1	1	1	1	2	1	1	4
19-Sep	2	1	1	1	1	1	1	1	1	2	5	6	6	5	6	6	5	4	3	1	3	2	3	2	6
20-Sep	2	2	2	2	2	2	2	3	3	4	2	3	3	3	3	3	2	1	2	2	1	1	2	2	4
21-Sep	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	3	2	2	2	1	1	2	4
22-Sep	1	1	2	1	2	1	1	1	3	3	5	5	5	5	5	5	4	3	2	1	1	1	1	1	5
23-Sep	1	1	1	2	1	3	2	1	1	2	2	2	2	2	1	1	1	1	1	2	1	1	1	1	3
24-Sep	1	2	1	1	1	1	1	2	2	2	2	2	3	5	4	3	2	1	1	1	1	1	1	2	5
25-Sep	1	1	3	1	2	2	1	2	3	4	5	6	5	5	4	4	4	3	3	2	4	7	3	3	7
26-Sep	2	2	2	5	4	4	5	5	6	5	7	8	8	8	8	8	8	8	7	5	5	4	4	3	8
27-Sep	4	4	4	5	4	3	3	4	5	6	5	6	7	7	7	6	7	4	2	2	2	3	2	2	7
28-Sep	3	3	3	2	3	2	3	2	3	5	5	6	6	6	5	4	4	3	2	2	1	2	1	1	6
29-Sep	1	1	1	1	2	3	4	1	2	2	2	5	6	7	8	7	7	6	7	4	3	2	3	3	8
30-Sep	3	2	3	3	4	5	6	6	6	7	6	7	6	6	7	6	6	3	2	2	1	1	1	1	7
	5	6	7	6	7	7	6	6	6	8	7	8	8	8	8	8	8	8	7	5	5	7	5	5	
	Diurnal Maximum																								

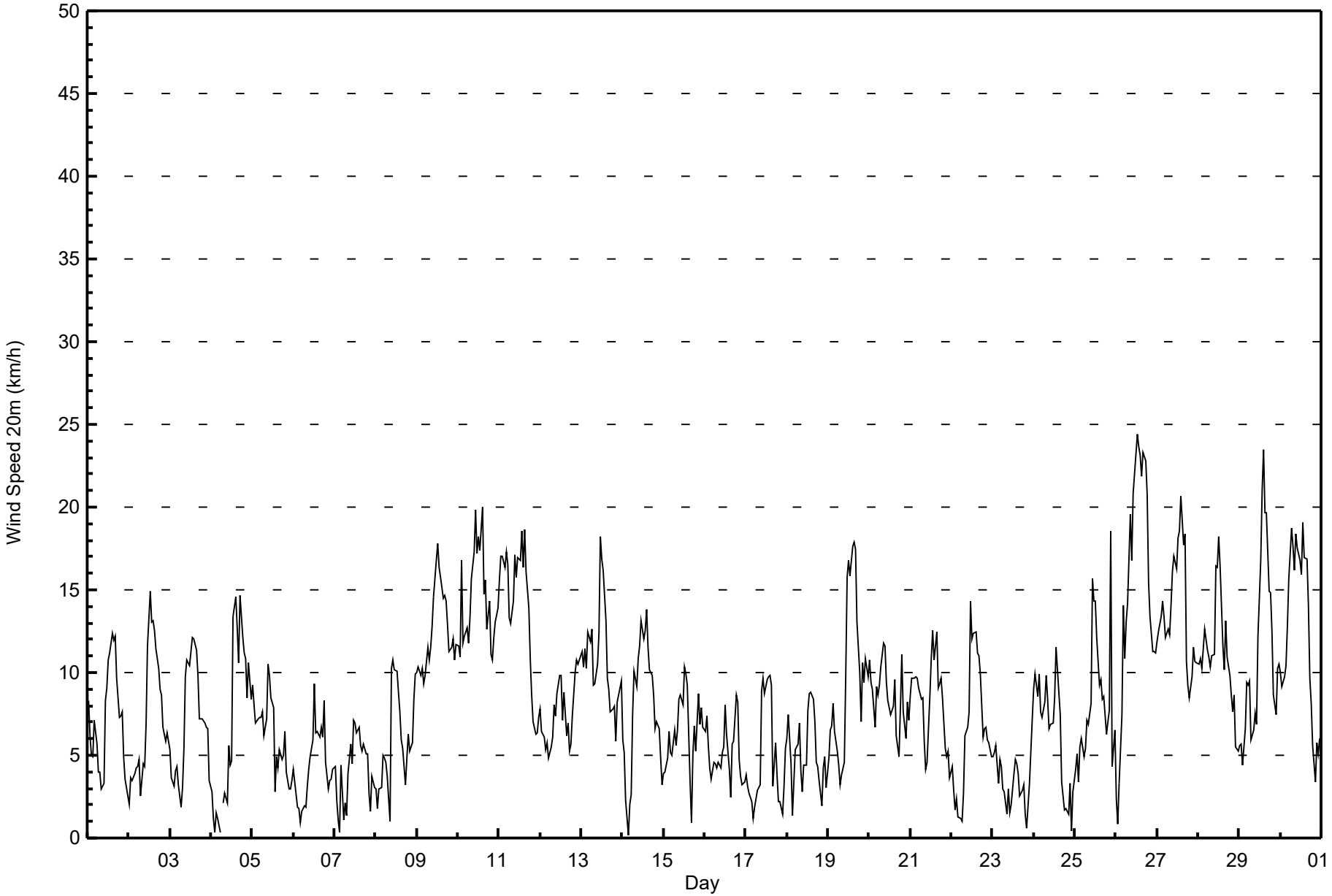
UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 20m (WS20) - km/h

Janvier - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	227	31.57	31.57
6 - 11	326	45.34	76.91
12 - 19	149	20.72	97.64
20 - 28	17	2.36	100.00
29 - 38	0	0.00	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 20m (WS20) - km/h

Janvier - September 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	33	14	11	8	6	10	12	22	35	22	12	11	7	2	12	227
6 - 11	29	13	4	6	18	14	6	5	13	74	70	30	14	18	5	7	326
12 - 19	6	0	0	1	4	2	4	3	4	8	25	30	14	14	27	7	149
20 - 28	0	0	0	0	0	0	0	0	0	0	0	0	9	7	1	0	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	45	46	18	18	30	22	20	20	39	117	117	72	48	46	35	26	719

Total Number of Valid Hours: 719

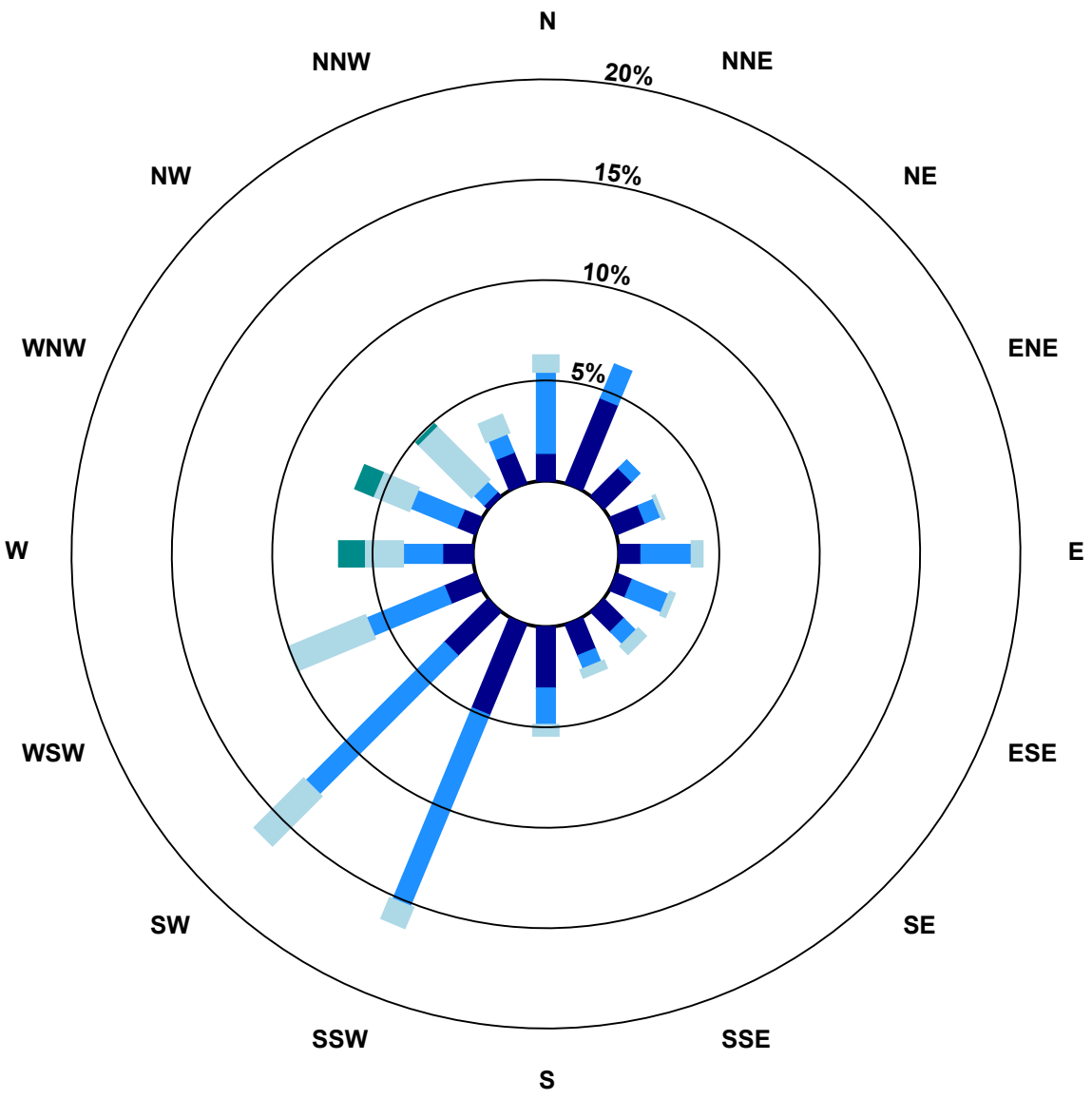
Total Number of Hours: 720

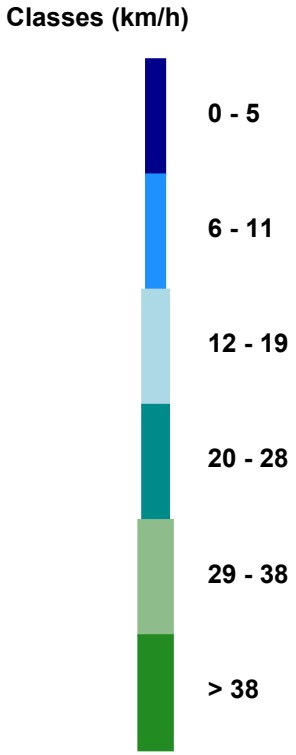
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 20m (WS20) - km/h

Janvier





Total Number of Valid Hours: 719

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 20m (WD20) - deg

Janvier - September 2026

Direction of Maximum Speed: 273 deg on Sep 26 13:00
Direction of Maximum Daily Speed Average: 270.6 deg on Sep 26

Direction of Minimum Speed: 343 deg on Sep 14 04:00

Direction of Minimum Daily Speed Average: 0.7 deg on Sep 8

Monthly Average Direction: 248.8 deg

Hours in Service:	720
Hours of Data:	719
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-Sep	201	200	184	177	204	199	200	193	266	288	196	177	145	145	148	149	178	173	154	140	137	148	127	94	169.0
2-Sep	39	24	24	20	27	28	22	16	6	69	87	138	146	145	135	131	129	126	115	111	104	97	109	108	109.3
3-Sep	98	68	24	44	18	17	51	53	44	74	90	91	94	82	102	109	92	88	96	88	88	90	121	151	85.9
4-Sep	80	35	330	63	182	294	UO	5	332	305	273	215	231	258	247	238	345	3	350	353	3	10	1	358	324.6
5-Sep	5	1	3	7	11	8	17	12	5	9	18	27	24	64	104	69	128	109	135	162	177	213	216	177	29.9
6-Sep	181	154	192	110	343	336	1	346	358	4	17	115	112	82	64	86	98	105	116	151	147	154	147	137	103.2
7-Sep	145	112	68	277	30	10	339	20	333	41	33	29	20	16	60	83	69	94	59	67	25	53	16	338	44.0
8-Sep	289	333	139	166	181	207	219	207	19	6	359	2	358	8	11	4	22	68	142	162	193	201	207	214	339.5
9-Sep	218	213	215	214	221	215	215	216	229	231	237	233	244	246	234	247	233	232	238	219	206	212	222	240	228.1
10-Sep	250	269	288	266	272	265	244	252	274	277	287	296	295	305	305	297	287	290	293	299	297	302	305	308	285.8
11-Sep	303	305	306	310	314	319	320	317	319	325	323	330	335	335	330	316	331	337	332	310	302	278	254	248	317.4
12-Sep	269	282	278	298	297	255	261	281	292	289	256	266	276	267	264	295	284	294	206	202	212	208	211	211	257.5
13-Sep	210	217	215	219	218	222	220	221	226	232	236	236	245	238	244	248	240	215	203	202	214	211	215	213	225.4
14-Sep	229	212	224	343	334	269	350	357	360	359	358	359	356	353	349	353	359	9	348	339	332	337	337	312	347.7
15-Sep	267	267	287	290	263	200	234	261	255	230	222	216	245	254	233	290	160	204	223	247	223	224	219	212	238.3
16-Sep	220	243	244	236	239	226	211	218	243	225	245	249	251	225	236	87	99	114	110	115	110	117	28	24	204.6
17-Sep	24	16	30	26	92	205	193	217	239	235	235	238	235	218	222	224	239	297	32	79	206	178	211	208	231.7
18-Sep	203	210	218	260	184	196	209	207	230	246	270	8	316	349	315	6	35	36	99	194	178	211	187	198	246.6
19-Sep	196	194	203	207	198	184	183	191	247	255	200	203	202	192	198	196	199	190	185	176	191	199	203	206	198.1
20-Sep	207	210	207	208	216	223	222	227	230	233	240	228	239	261	236	259	246	205	197	196	208	207	193	214	221.5
21-Sep	215	210	208	210	207	209	212	211	203	249	184	170	167	178	164	187	176	177	178	189	199	196	194	179	192.7
22-Sep	175	163	192	185	132	10	163	220	221	230	332	311	306	315	308	300	310	295	279	237	243	211	195	185	277.1
23-Sep	178	196	212	196	213	208	219	215	214	264	28	40	69	3	36	23	43	91	202	206	135	216	205	201	197.7
24-Sep	206	206	204	206	202	204	209	211	210	225	220	230	230	242	243	283	276	253	214	154	177	133	49	36	219.3
25-Sep	32	29	356	24	25	19	27	26	23	78	97	102	83	76	79	67	56	36	25	22	84	99	29	287	60.6
26-Sep	37	189	231	256	257	245	252	271	271	272	273	269	273	271	276	277	277	284	287	287	279	265	251	233	270.6
27-Sep	255	248	250	249	232	227	230	234	252	252	240	253	253	260	262	258	260	252	230	222	217	218	218	221	244.3
28-Sep	227	227	228	215	217	212	210	210	222	228	231	233	229	235	225	216	216	202	192	205	196	193	178	173	217.2
29-Sep	176	180	224	211	218	224	220	200	218	204	232	271	278	281	288	291	288	300	290	267	250	234	242	255	259.8
30-Sep	251	251	238	231	244	276	295	303	304	306	308	311	313	306	308	309	311	307	286	289	228	244	228	206	289.2
	228.0	234.1	242.6	239.8	240.9	239.6	243.4	251.4	269.0	274.5	266.4	260.5	263.3	269.5	264.4	269.4	271.7	269.1	235.3	217.4	215.7	207.0	218.4	224.0	
	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 20m (WD20) - deg

Janvier - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 107 deg on Sep 8 09:00

Minimum Value: 6 deg on Sep 22 23:00

Percentiles: P_1 = 9 P_{10} = 13 Q_1 = 18 Median = 24 Q_3 = 32 P_{90} = 49 P_{99} = 83

Hours in Service:	720
Hours of Data:	719
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-Sep	8	14	15	12	12	17	37	18	41	46	53	35	31	27	27	26	24	24	17	17	19	24	33	25	53
2-Sep	20	15	17	12	10	11	12	23	26	43	34	31	26	30	28	23	22	20	19	18	17	22	21	22	43
3-Sep	19	38	28	34	17	59	74	57	19	28	24	26	26	26	25	27	28	29	22	20	21	23	26	26	74
4-Sep	37	72	82	73	77	79	UO	29	52	81	40	51	76	28	26	28	49	28	36	31	26	32	29	28	82
5-Sep	25	26	25	24	21	23	22	25	25	30	26	25	33	82	63	62	38	28	24	10	29	22	11	19	82
6-Sep	26	14	63	56	94	34	36	58	36	39	35	54	29	31	24	27	25	25	21	36	44	37	40	18	94
7-Sep	11	54	77	83	52	77	44	66	39	24	26	20	32	26	26	26	27	23	23	31	49	65	26	32	83
8-Sep	37	55	22	23	17	18	18	15	107	30	33	34	34	37	42	46	31	31	17	9	24	11	13	11	107
9-Sep	14	13	14	13	16	15	16	21	23	22	26	26	26	29	27	27	24	23	24	18	16	20	20	23	29
10-Sep	24	24	21	22	22	21	24	25	24	24	24	28	24	26	25	31	25	23	22	21	22	24	24	25	31
11-Sep	24	24	27	30	30	31	32	31	33	36	33	37	36	37	35	30	37	39	32	22	23	18	21	15	39
12-Sep	17	18	17	32	30	18	21	23	29	39	36	37	44	44	35	52	26	25	18	11	10	11	13	13	52
13-Sep	13	15	15	16	15	18	18	23	28	28	26	26	26	27	31	31	29	19	12	11	24	11	12	13	31
14-Sep	45	23	57	93	54	46	28	31	29	32	33	31	34	35	36	34	30	28	33	34	38	39	35	36	93
15-Sep	22	21	22	20	28	12	15	27	27	27	29	36	33	31	28	73	85	17	15	45	18	18	17	14	85
16-Sep	15	16	15	23	27	22	20	27	30	41	57	58	44	45	43	78	28	18	13	13	25	24	33	12	78
17-Sep	13	12	20	31	68	67	59	43	37	24	29	31	29	26	26	23	37	23	34	23	33	68	27	11	68
18-Sep	11	9	50	51	37	19	21	15	28	62	58	62	41	49	31	39	20	15	16	28	65	24	26	30	65
19-Sep	13	11	10	10	12	13	15	20	33	39	31	23	23	23	22	20	19	18	15	14	15	15	15	14	39
20-Sep	14	11	13	31	14	15	17	19	22	22	23	30	34	32	36	26	24	13	14	11	12	11	17	16	36
21-Sep	11	10	12	12	11	11	14	14	21	38	37	31	27	27	31	23	23	21	18	15	16	13	19	39	39
22-Sep	18	24	81	64	88	58	81	24	20	32	59	30	35	38	30	36	33	21	20	13	22	16	6	17	88
23-Sep	21	15	14	32	13	27	40	45	69	62	86	79	46	34	21	31	32	39	29	72	64	24	12	9	86
24-Sep	9	9	9	9	10	11	10	13	16	24	31	31	31	33	32	30	33	34	29	69	62	12	59	17	69
25-Sep	11	15	60	16	16	24	20	17	24	37	26	29	29	29	46	39	29	19	40	36	52	30	69	34	69
26-Sep	78	92	77	65	25	30	28	24	23	23	23	25	25	24	23	23	21	21	21	21	24	23	24	23	92
27-Sep	22	21	21	23	19	19	21	21	24	25	24	30	28	30	26	27	26	24	21	14	12	16	16	16	30
28-Sep	17	17	17	13	15	15	18	18	23	24	24	26	25	25	25	25	23	17	17	11	12	16	20	10	26
29-Sep	12	13	17	13	18	21	21	12	24	18	29	26	24	24	22	22	22	28	21	22	25	23	20	20	29
30-Sep	21	21	20	20	21	21	24	26	25	26	29	31	31	24	30	29	28	23	20	21	21	16	16	11	31
	78	92	82	93	94	79	81	66	107	81	86	79	76	82	63	78	85	39	40	72	65	68	69	39	
	Diurnal Maximum																								

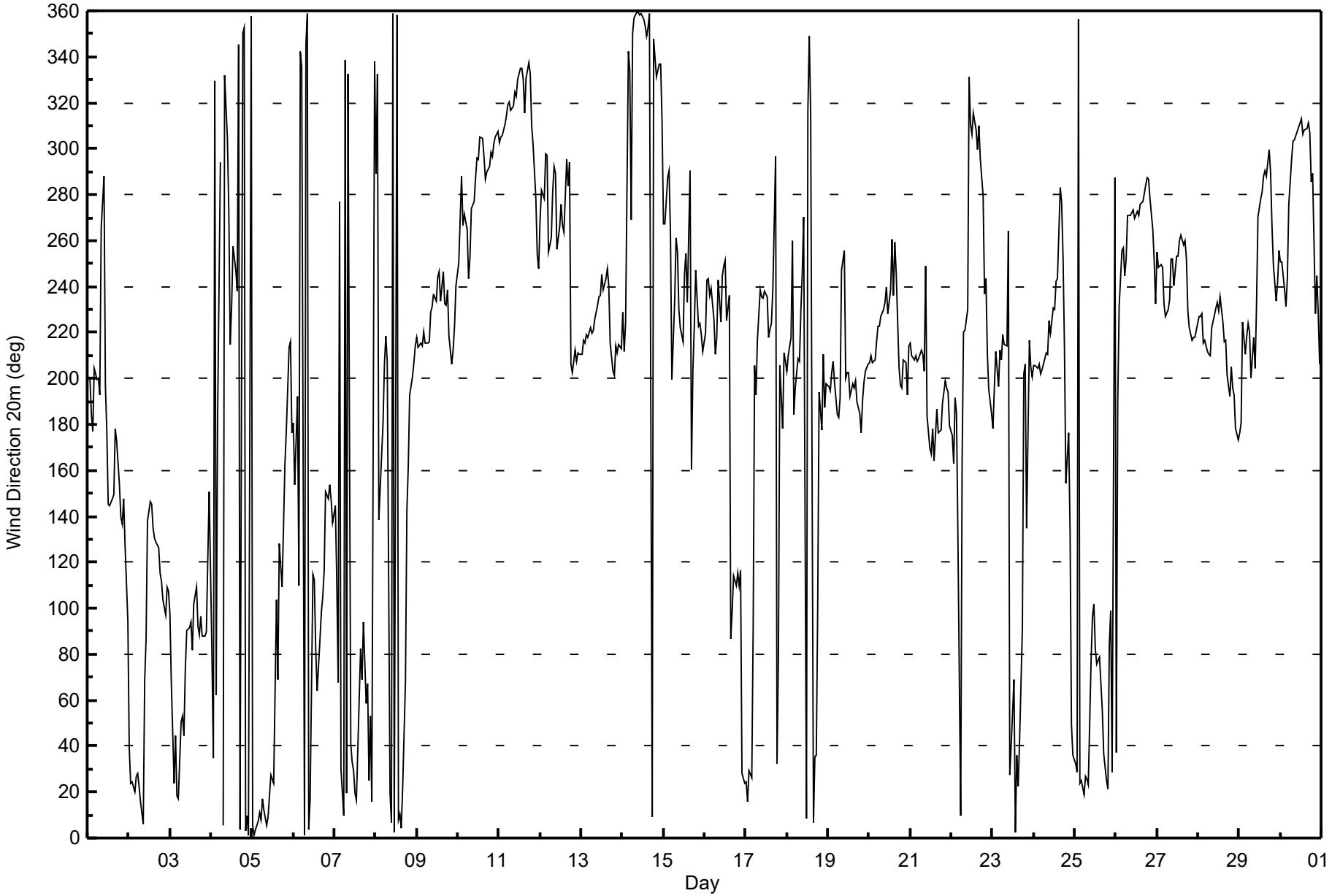
UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 20m (WD20) - deg

Janvier - September 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS23
FORT HILLS
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT HILLS (AMS23)
SEPTEMBER 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	684	34	36	99.72	-	-	15.4	0	3.1	0
TRS(ppb) Average	682	35	38	99.58	6.6	1	5.7	-	1.3	-
H2S(ppb) Average	682	35	38	99.58	-	-	5.4	0	1.2	0
THC(ppm) Average	685	34	35	99.86	-	-	4.2	-	2.8	-
NMHC(ppm) Average	685	34	35	99.86	-	-	1.132	-	0.259	-
CH4(ppm) Average	685	34	35	99.86	-	-	3.7	-	2.5	-
NO2 (ppb) Average	684	36	36	100	-	-	39.2	0	14.6	-
NO (ppb) Average	684	36	36	100	-	-	176.2	-	40.1	-
NOX (ppb) Average	684	36	36	100	-	-	203.5	-	54.4	-
PM2.5 (ug/m3) Average	692	1	28	96.25	-	-	102.9	1	23.8	0
Temperature 2 m (C) Average	720	0	0	100	-	-	27.7	-	20.8	-
Relative Humidity (%) Average	720	0	0	100	-	-	99	-	85.9	-
Wind Speed 10 m (km/h) Average	720	0	0	100	-	-	32	-	21	-
Wind Direction 10 m (deg) Average	720	0	0	100	-	-	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT HILLS (AMS23)
SEPTEMBER 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	684	0.58	1.8	-	0	0	0	0.1	0.3	1.1	15.4
TRS(ppb) Average	682	0.47	0.4	-	0.2	0.2	0.2	0.3	0.5	0.9	5.7
H2S(ppb) Average	682	0.31	0.5	-	0	0	0.1	0.1	0.4	0.8	5.4
THC(ppm) Average	685	2.25	0.3	-	2	2	2	2.1	2.4	2.7	4.2
NMHC(ppm) Average	685	0.064	0.132	-	0	0	0	0	0.1	0.2	1.132
CH4(ppm) Average	685	2.19	0.2	-	2	2	2	2.1	2.3	2.5	3.7
NO2(ppb) Average	684	7.61	7.1	-	0	0.3	1.6	5.6	12.2	18.6	39.2
NO(ppb) Average	684	8	17.5	-	0	0.1	0.2	1.4	6.6	24.3	176.2
NOX(ppb) Average	684	15.61	22.3	-	0	0.4	1.9	7.7	19.4	42.4	203.5
PM2.5(ug/m3) Average	692	7.54	8.9	-	0.1	1.3	2.7	5.2	9	16.9	102.9
AT(C) Average	720	12.51	5.1	-	3	6.5	8.5	11.7	16	19.6	27.7
RH(%) Average	720	72.03	17.5	-	27.2	45	61.3	74.8	86.4	93	99
WS(km/h) Average	720	11.7	7	-	0	4	6	11	16	22	32
WD(deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT HILLS (AMS23)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
SO2, TRS, H2S	18 Sep 2026 13:00	18 Sep 2026 13:00	1	Maintenance - reinitiated daily QA check
SO2, TRS, H2S, THC/NMHC/CH4	25 Sep 2026 16:00	25 Sep 2026 16:00	1	Maintenance - sample manifold cleaned
TRS, H2S	14 Sep 2026 09:00	14 Sep 2026 09:00	1	Maintenance - reinitiated daily QA check
PM2.5	28 Sep 2026 12:00	29 Sep 2026 14:00	27	Unstable Operation - flatline in analyzer output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Fort Hills - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 15.4 ppb on Sep 21 14:00 Maximum Daily Average: 3.1 ppb on Sep 7

Minimum Value: 0.0 ppb on Sep 1 03:00 Minimum Daily Average: 0.0 ppb on Sep 11
Maximum Diurnal Average: 1.7 ppb at hour 16 Minimum Diurnal Average: 0.1 ppb at hour 6
Monthly Average: 0.58 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.3 P_{90} = 1.1 P_{99} = 10.1

Hours in Service:	720
Hours of Data:	684
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-Sep	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.4	3.7	6.1	5.1	4.1	13.2	1.8	1.4	1.4	1.2	0.9	0.4	0.5	0.5	0.4	0.3	0.3	1.8	13.2
2-Sep	0.3	0.4	0.3	0.3	0.3	Z	0.5	1.0	0.7	0.5	0.4	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.3	1.0
3-Sep	Z	0.4	0.3	0.1	0.6	0.6	0.7	0.5	0.5	0.3	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.2	0.0	0.2	0.3	0.2	0.2	0.7
4-Sep	0.2	Z	0.2	0.2	0.1	0.1	0.1	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	0.2
5-Sep	0.0	0.1	Z	0.1	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	0.2	0.0	0.0	0.0	0.1	0.2
6-Sep	0.0	0.0	0.1	Z	0.1	0.0	0.2	0.3	0.3	4.1	3.4	3.4	2.4	1.1	0.7	3.3	4.9	1.6	1.2	0.7	0.4	0.3	0.3	0.2	1.3	4.9
7-Sep	0.2	0.2	0.2	0.2	Z	0.1	0.1	1.1	0.8	1.3	1.9	14.9	12.3	9.4	9.1	3.2	1.0	1.6	2.4	4.3	3.3	2.2	1.3	0.6	3.1	14.9
8-Sep	0.3	0.2	0.1	0.1	0.1	Z	0.3	0.1	0.1	0.2	0.2	0.2	0.2	2.2	9.9	14.1	6.3	1.9	1.8	2.3	1.4	0.7	0.4	0.3	1.9	14.1
9-Sep	Z	0.3	0.3	0.2	0.4	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.3	0.2	0.3	0.2	0.4
10-Sep	0.1	Z	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.0	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	0.3
11-Sep	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
12-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.6	0.3	0.7	1.0	0.8	0.8	1.1	0.3	0.1	0.1	0.0	0.0	0.1	0.0	0.3	1.1
13-Sep	0.1	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.3
14-Sep	0.1	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	0.1
15-Sep	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
16-Sep	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	0.9	0.5	0.2	0.1	0.1	2.5	1.6	0.7	0.5	0.2	0.1	0.3	2.5
17-Sep	0.1	0.1	Z	0.3	0.3	0.3	0.2	0.2	0.6	2.7	6.8	0.8	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.7	6.8
18-Sep	0.1	0.1	0.1	Z	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.1	M	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.2	0.2	0.1	0.3
19-Sep	0.1	0.1	0.2	0.3	Z	0.3	0.4	0.6	0.8	1.9	1.9	2.3	4.7	2.1	1.7	4.4	3.8	1.7	0.5	0.4	0.4	0.5	0.7	0.7	1.3	4.7
20-Sep	0.5	0.3	0.2	0.2	0.1	Z	0.2	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.5
21-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	1.9	15.4	12.5	9.6	7.1	2.7	2.2	2.8	2.6	1.9	1.3	0.8	2.7	15.4
22-Sep	0.6	Z	0.2	0.1	0.4	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.6
23-Sep	0.2	0.1	Z	0.0	0.1	0.1	0.0	0.0	0.1	C	C	C	C	6.9	9.2	11.3	3.4	1.0	0.4	0.1	0.1	0.3	6.8	3.7	2.3	11.3
24-Sep	0.9	0.3	0.2	Z	0.1	0.1	0.0	0.1	0.1	0.1	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	0.9
25-Sep	0.1	0.9	0.5	0.6	Z	0.3	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	M	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.9
26-Sep	0.1	0.1	0.1	0.1	0.1	Z	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	0.0	0.0	0.1
27-Sep	Z	0.1	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	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2
28-Sep	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	0.1	0.2	0.1	0.0	0.0	0.2
29-Sep	0.0	0.2	Z	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	0.2	0.0	0.8	0.8	0.4	0.0	0.1	0.8
30-Sep	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	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.1
	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.7	0.8	1.0	1.3	1.4	1.6	1.7	1.0	0.4	0.4	0.5	0.4	0.3	0.4	0.3	Diurnal Average	
	0.9	0.9	0.5	0.6	0.6	0.6	0.7	1.1	3.7	6.1	6.8	14.9	13.2	15.4	12.5	14.1	7.1	2.7	2.5	4.3	3.3	2.2	6.8	3.7	Diurnal Maximum	

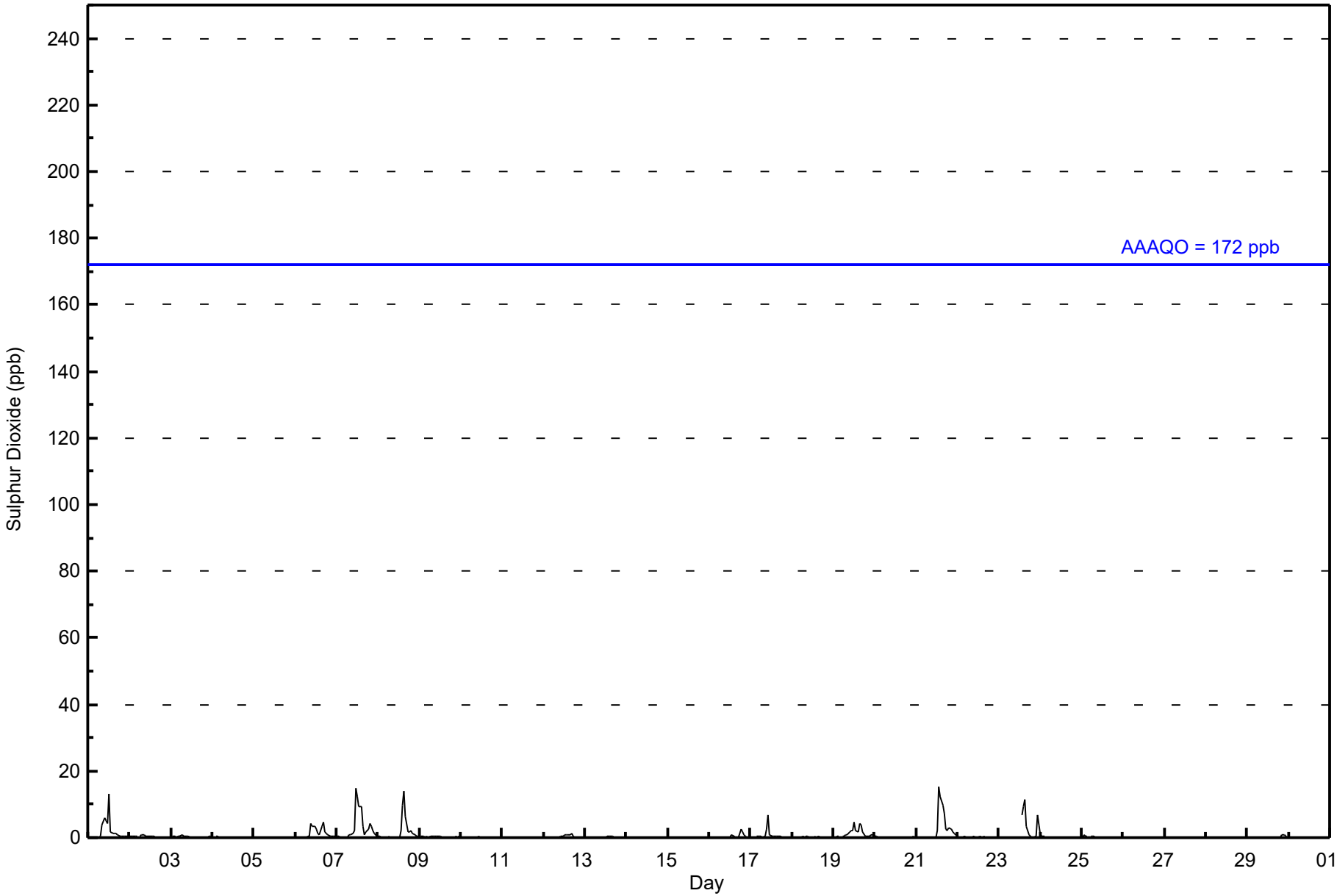
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Fort Hills - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	677	98.98	98.98
11 - 20	7	1.02	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Fort Hills - September 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	91	28	3	4	5	5	35	86	109	55	71	25	42	30	43	45	677
11 - 20	0	0	0	0	1	0	0	3	1	1	0	0	1	0	0	0	7
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	91	28	3	4	6	5	35	89	110	56	71	25	43	30	43	45	684

Total Number of Valid Hours: 684

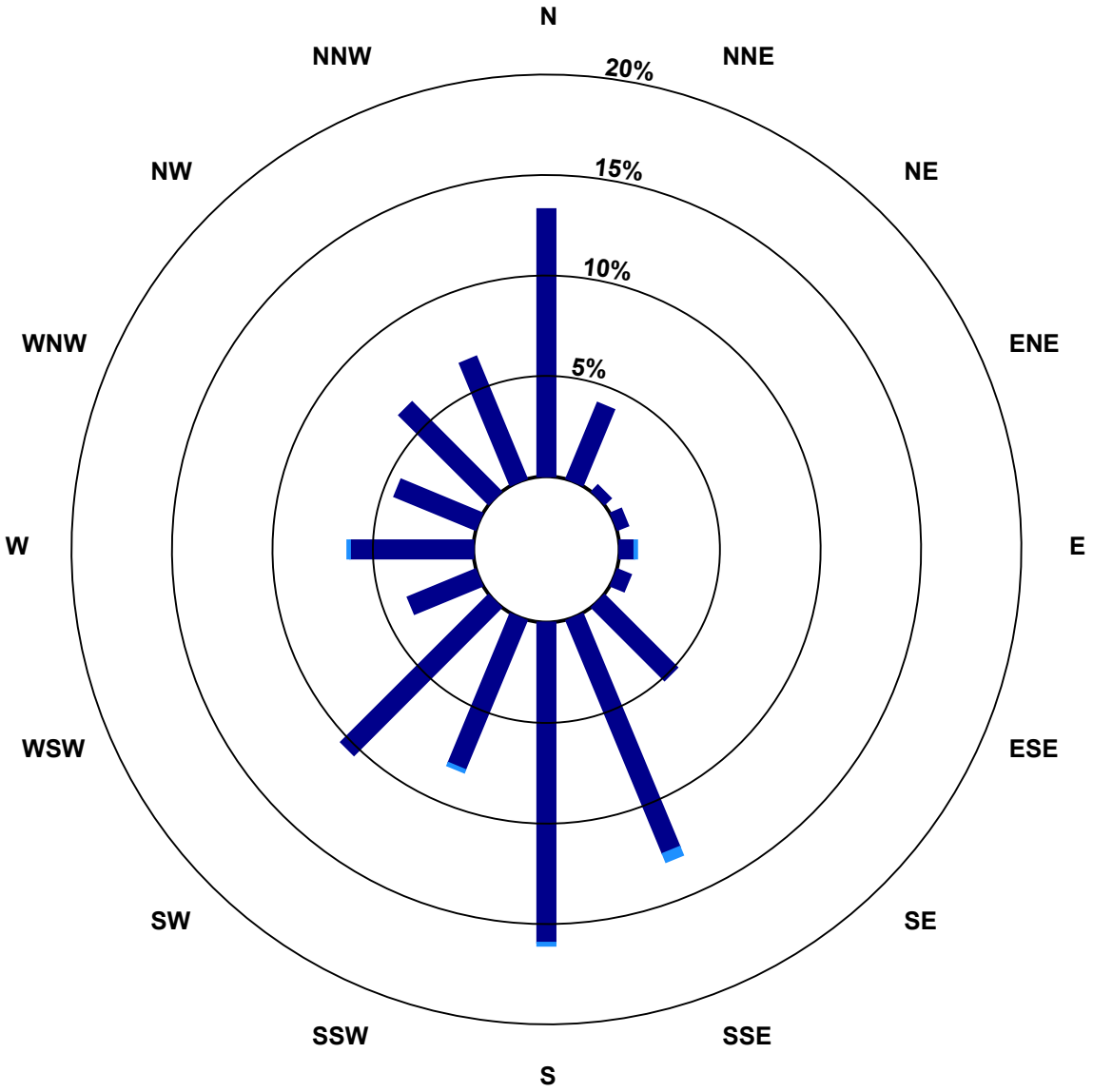
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Fort Hills



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

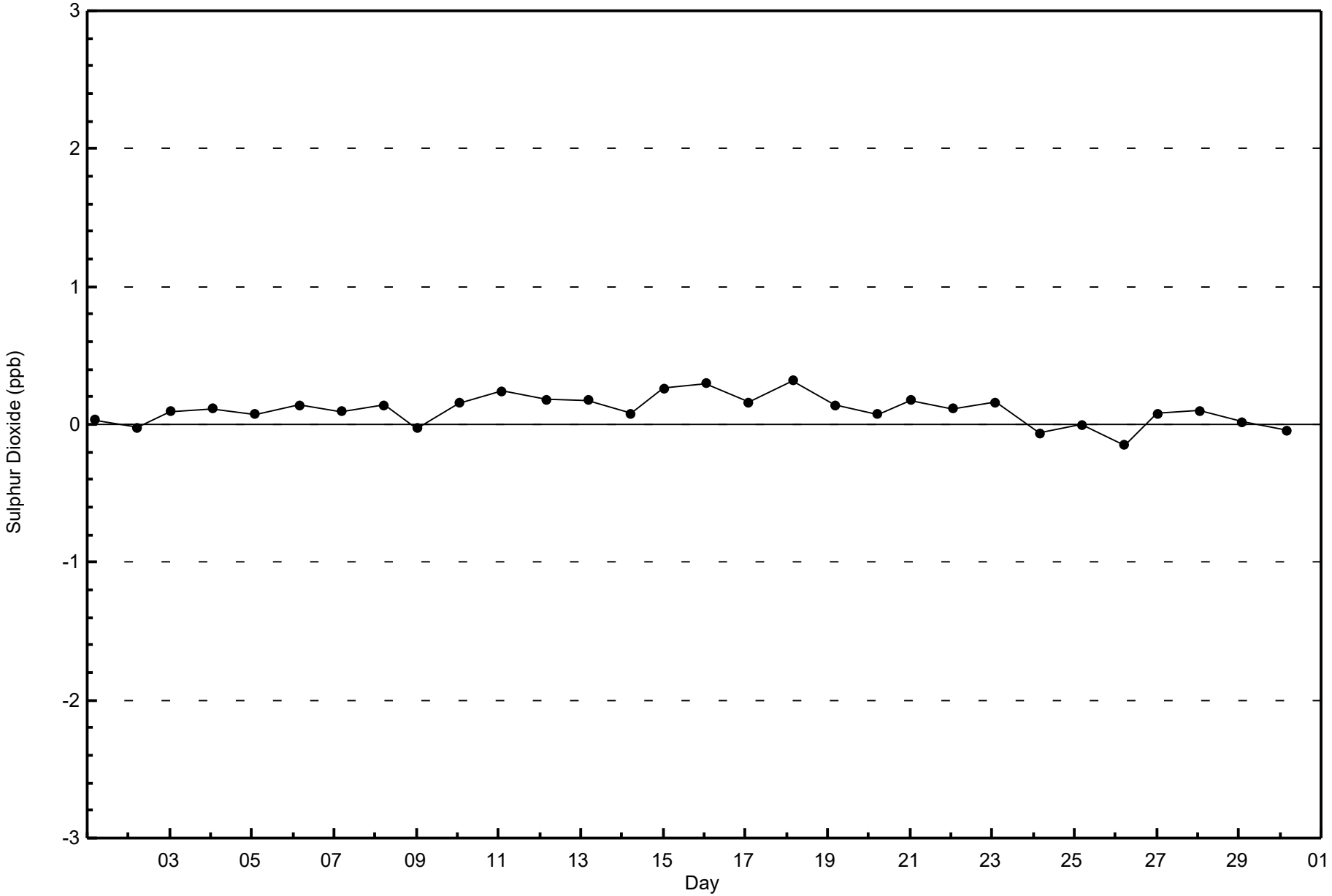
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Fort Hills - September 2026

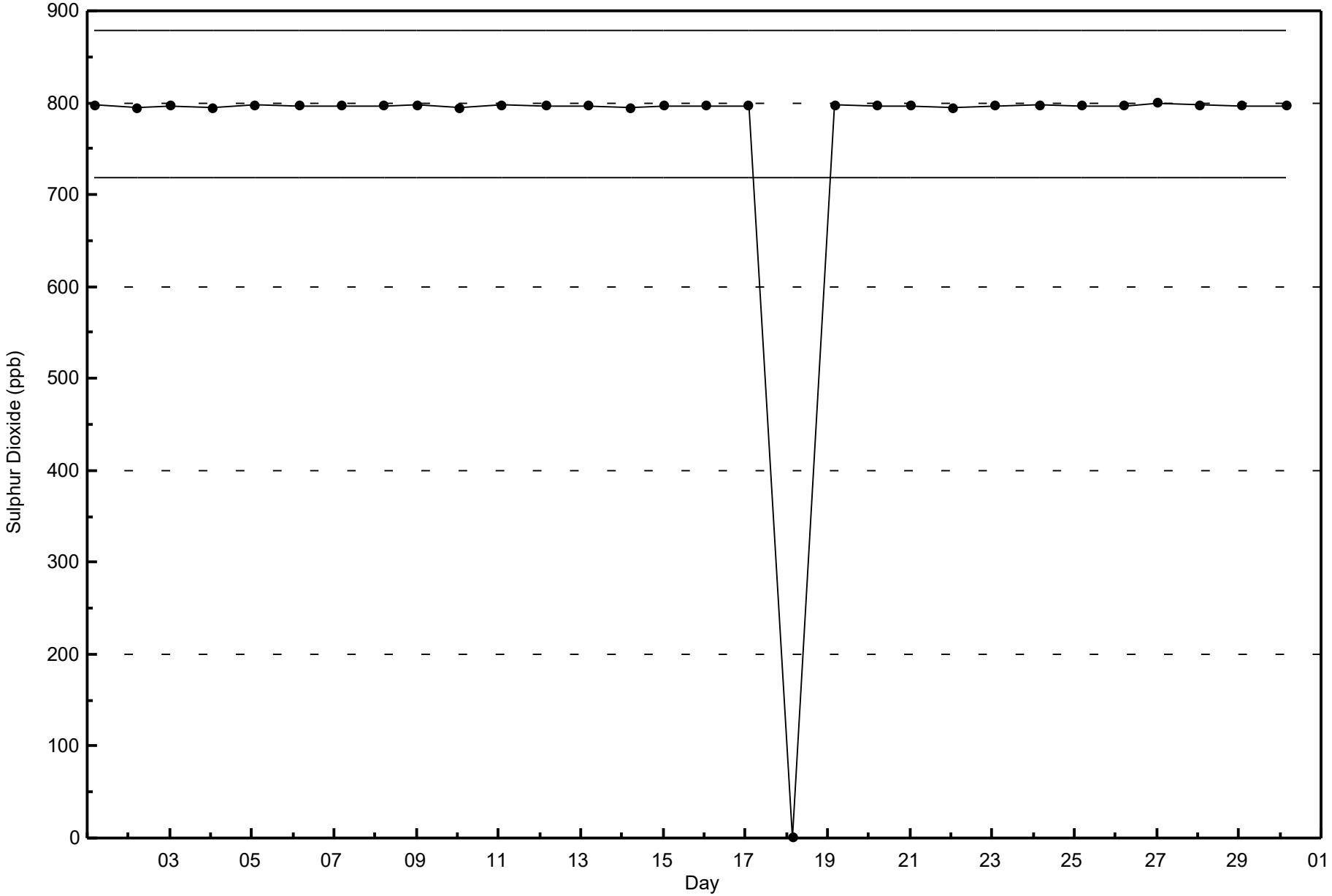


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Fort Hills - September 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Fort Hills - September 2026

Number of Exceedences (AAAQG): 30-Min: 1

Maximum Value: 6.6 ppb on Sep 6 09:30

Maximum Daily Average: 1.3 ppb on Sep 6

Minimum Value: 0.2 ppb on Sep 17 15:30

Minimum Daily Average: 0.2 ppb on Sep 11

Maximum Diurnal Average: 0.7 ppb at hour 8

Minimum Diurnal Average: 0.3 ppb at hour 18

Monthly Average: 0.47 ppb

Percentiles: P_1 = 0.2 P_{10} = 0.2 Q_1 = 0.2 Median = 0.3 Q_3 = 0.5 P_{90} = 0.9 P_{99} = 2.3

Periods in Service:	1440
Periods of Valid Data:	1366
Periods of Invalid Data:	74
Periods of Calibration:	69
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-Sep	0.5	0.4	0.6	0.5	0.9	Z	1.2	1.4	1.4	1.1	1.5	1.4	0.8	0.2	0.5	0.6	0.5	0.3	0.2	0.5	0.6	0.9	0.7	0.5	0.7	2.2
	0.4	0.4	0.5	0.5	0.6	SP	1.3	1.0	2.2	1.1	1.3	1.3	0.4	0.3	0.6	0.6	0.5	0.3	0.5	0.7	0.6	1.0	0.5	0.4		
2-Sep	Z	0.3	0.8	0.6	0.8	0.8	0.9	1.4	1.0	0.7	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.6	0.4	1.0	0.5	0.6	0.7	0.4	0.6	1.4
	SP	0.5	0.9	0.7	0.8	0.9	1.1	1.2	0.8	0.7	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.6	0.7	0.4	0.6	0.6	0.4		
3-Sep	0.4	Z	0.7	1.0	1.0	1.1	1.6	1.8	1.6	1.5	1.5	1.2	0.9	0.7	0.5	0.4	0.4	0.5	0.5	0.5	0.7	0.7	1.0	1.1	0.9	1.8
	0.4	SP	1.0	0.8	1.1	1.4	1.7	1.6	1.6	1.5	1.3	1.1	0.8	0.5	0.4	0.4	0.5	0.5	0.5	0.6	0.8	0.9	1.0	1.1		
4-Sep	1.1	1.0	Z	0.8	1.1	1.1	1.0	1.0	0.8	0.8	0.7	0.5	0.5	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.6	1.1
	1.0	1.0	SP	1.1	1.1	1.1	1.0	0.8	0.8	0.7	0.6	0.5	0.4	0.4	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3		
5-Sep	0.3	0.3	0.3	Z	0.3	0.4	0.5	0.5	0.6	0.4	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.6
	0.3	0.3	0.4	SP	0.4	0.4	0.5	0.6	0.6	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.2		
6-Sep	0.2	0.2	0.2	0.4	Z	0.5	1.0	2.3	2.3	6.6	2.9	2.9	2.8	1.8	0.8	0.9	0.5	0.3	0.3	0.3	0.7	0.3	0.5	0.6	1.3	6.6
	0.2	0.2	0.3	0.6	SP	1.0	1.6	2.7	3.2	4.7	3.0	2.9	2.5	1.5	0.7	0.6	0.4	0.3	0.3	0.3	0.5	0.3	0.5	0.5		
7-Sep	0.4	0.6	0.5	0.3	0.3	Z	0.4	0.9	1.2	1.7	0.9	1.8	0.8	0.6	0.6	0.4	0.2	0.3	0.4	0.6	1.4	1.6	2.1	1.3	0.8	2.2
	0.6	0.6	0.4	0.3	0.4	SP	0.5	1.4	1.1	1.8	0.7	1.0	0.6	0.7	0.5	0.3	0.3	0.4	0.4	1.2	1.5	2.2	1.5	1.2		
8-Sep	Z	0.8	1.0	0.8	0.7	0.6	0.5	0.4	0.3	0.4	0.4	0.3	0.2	0.2	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.4	0.5	1.0
	SP	0.8	0.9	0.8	0.6	0.5	0.5	0.3	0.3	0.4	0.3	0.2	0.2	0.3	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.4		
9-Sep	0.4	Z	0.3	0.5	2.2	2.2	1.8	2.1	1.5	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	0.7	3.2
	0.5	SP	0.5	0.9	3.2	2.0	1.3	2.6	0.6	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3		
10-Sep	0.3	0.3	Z	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.8	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.8
	0.5	0.3	SP	0.7	0.4	0.3	0.3	0.3	0.4	0.3	0.7	0.4	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
11-Sep	0.2	0.2	0.2	Z	0.2	0.2	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	0.2	0.2	0.3
	0.2	0.2	0.2	SP	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.3		
12-Sep	0.2	0.3	0.3	0.2	Z	0.3	0.3	0.3	0.4	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	0.3	0.3	0.3	0.4
	0.2	0.2	0.3	0.3	SP	0.2	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3		
13-Sep	0.3	0.4	0.3	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	0.3	0.3	0.4	0.4	0.4	0.3	0.4
	0.3	0.3	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	0.3	0.3	0.4	0.4	0.4	0.3	0.3		
14-Sep	Z	0.3	0.3	0.3	0.3	0.3	0.3	0.3	M	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	0.3	0.3
	SP	0.3	0.3	0.3	0.3	0.3	0.3	M	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	0.2	0.2	0.2		
15-Sep	0.2	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	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	0.3	SP	0.3	0.3	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	0.2	0.3	0.3	0.2	0.3	0.3	0.3		

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Fort Hills - September 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-Sep	0.2	0.2	Z	0.2	0.2	0.3	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.8	0.6	0.8	0.5	0.3	0.3	0.8
	0.2	0.3	SP	0.2	0.2	0.3	0.2	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.7	0.6	0.7	0.7	0.4	0.2		
17-Sep	0.3	0.3	0.7	Z	0.4	0.5	0.5	0.4	0.3	0.7	0.6	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	0.3	0.7
	0.2	0.4	0.5	SP	0.5	0.6	0.4	0.4	0.6	0.6	0.5	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		
18-Sep	0.4	0.3	0.3	0.3	Z	0.4	0.5	0.4	0.5	0.4	0.3	0.2	M	0.3	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.5	0.4	0.6
	0.3	0.2	0.2	0.3	SP	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.5	0.6		
19-Sep	0.5	0.5	0.4	1.1	1.0	Z	1.4	1.9	1.7	0.8	0.9	1.0	0.7	0.5	0.3	0.4	0.5	0.5	0.3	0.3	0.5	1.0	1.5	0.7	0.8	2.6
	0.5	0.4	0.9	0.9	1.1	SP	1.7	2.6	1.1	0.9	0.9	0.8	0.6	0.3	0.4	0.4	0.4	0.3	0.3	0.3	1.0	1.2	1.0	0.7		
20-Sep	Z	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.7	0.6	0.4	0.3	0.8
	SP	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.6	0.8	0.4	0.3		
21-Sep	0.3	Z	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.6	0.9	0.7	0.9	0.7	0.8	1.0	0.9	0.7	0.7	0.5	0.5	1.0
	0.2	SP	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.4	0.9	0.8	0.6	0.9	0.7	1.0	0.9	0.7	0.7	0.6	0.5		
22-Sep	0.6	0.7	Z	0.3	0.6	0.4	0.3	0.3	0.3	0.7	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.7
	0.7	0.5	SP	0.4	0.6	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.4		
23-Sep	0.4	0.4	0.3	Z	0.3	0.3	0.3	0.4	0.4	0.9	0.5	0.4	0.5	0.7	1.1	1.2	0.9	1.2	0.8	0.9	0.4	0.3	1.4	1.7	0.7	1.9
	0.4	0.4	0.3	SP	0.2	0.3	0.5	0.4	0.5	0.5	0.5	0.4	0.7	1.1	0.9	1.4	1.1	0.7	0.6	0.4	0.3	0.6	1.9	1.1		
24-Sep	0.7	0.5	0.4	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	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.3	0.7
	0.5	0.5	0.4	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	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6		
25-Sep	0.6	0.9	0.8	0.8	0.9	Z	1.0	0.9	0.6	0.6	0.7	0.5	0.4	0.4	0.3	M	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	1.4
	0.5	0.9	0.7	0.8	1.4	SP	1.1	0.8	0.6	0.6	0.6	0.4	0.5	0.4	0.4	M	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
26-Sep	Z	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3
	SP	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.2	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		
27-Sep	0.2	Z	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	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.3	0.4
	0.3	SP	0.3	0.4	0.4	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.4		
28-Sep	0.4	0.3	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.2	C	C	C	C	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.4
	0.3	0.2	SP	0.2	0.2	0.2	0.2	0.2	0.2	C	C	C	C	C	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3		
29-Sep	0.2	0.3	0.4	Z	0.3	0.3	0.5	0.6	0.6	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	0.3	0.6
	0.2	0.3	0.4	SP	0.4	0.4	0.6	0.6	0.5	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	0.2		
30-Sep	0.2	0.2	0.3	0.3	Z	0.2	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	0.2	0.2	0.3	0.2	0.3	0.2	0.3
	0.2	0.2	0.2	0.2	SP	0.2	0.2	0.3	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	0.3	0.2	0.2		
	0.4	0.4	0.4	0.5	0.6	0.5	0.6	0.7	0.6	0.7	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.4	Diurnal Average	
	1.1	1.0	1.0	1.1	3.2	2.2	1.8	2.7	3.2	6.6	3.0	2.9	2.8	1.8	1.1	1.4	1.1	1.2	1.0	1.2	1.5	2.2	2.1	1.7	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 - September 2026

Maximum Value: 5.7 ppb on Sep 6 10:00

Maximum Daily Average: 1.3 ppb on Sep 6

Minimum Value: 0.2 ppb on Sep 17 16:00

Minimum Daily Average: 0.2 ppb on Sep 11

Maximum Diurnal Average: 0.7 ppb at hour 10

Minimum Diurnal Average: 0.3 ppb at hour 18

Monthly Average: 0.47 ppb

Percentiles: P_1 = 0.2 P_{10} = 0.2 Q_1 = 0.2 Median = 0.3 Q_3 = 0.5 P_{90} = 0.9 P_{99} = 2.4

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	35
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-Sep	0.5	0.4	0.5	0.5	0.8	Z	1.2	1.2	1.8	1.1	1.4	1.3	0.6	0.2	0.5	0.6	0.5	0.3	0.3	0.6	0.6	1.0	0.6	0.5	0.7	1.8
2-Sep	Z	0.4	0.8	0.6	0.8	0.9	1.0	1.3	0.9	0.7	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.8	0.4	0.6	0.7	0.4	0.6	1.3
3-Sep	0.4	Z	0.8	0.9	1.1	1.3	1.7	1.7	1.6	1.5	1.4	1.1	0.8	0.6	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.8	1.0	1.1	0.9	1.7
4-Sep	1.1	1.0	Z	1.0	1.1	1.1	1.0	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.6	1.1
5-Sep	0.3	0.3	0.4	Z	0.4	0.4	0.5	0.5	0.6	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.2	0.3	0.6
6-Sep	0.2	0.2	0.3	0.5	Z	0.7	1.3	2.5	2.8	5.7	3.0	2.9	2.7	1.7	0.8	0.7	0.5	0.3	0.3	0.3	0.6	0.3	0.5	0.6	1.3	5.7
7-Sep	0.5	0.6	0.4	0.3	0.3	Z	0.5	1.1	1.1	1.7	0.8	1.4	0.7	0.6	0.5	0.3	0.3	0.3	0.4	0.9	1.5	1.9	1.8	1.3	0.8	1.9
8-Sep	Z	0.8	1.0	0.8	0.6	0.5	0.5	0.4	0.3	0.4	0.4	0.3	0.2	0.3	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.4	0.5	1.0
9-Sep	0.4	Z	0.4	0.7	2.7	2.1	1.6	2.3	1.0	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.7	2.7
10-Sep	0.4	0.3	Z	0.5	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.6	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	0.6
11-Sep	0.2	0.2	0.2	Z	0.2	0.2	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	0.2	0.2	0.2	0.3	0.2	0.3
12-Sep	0.2	0.2	0.3	0.3	Z	0.2	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4
13-Sep	0.3	0.3	0.3	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	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.4
14-Sep	Z	0.3	0.3	0.3	0.3	0.3	0.3	0.3	M	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	0.2	0.3	0.3
15-Sep	0.2	Z	0.3	0.3	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	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
16-Sep	0.2	0.3	Z	0.2	0.2	0.3	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.5	0.7	0.7	0.8	0.5	0.2	0.3	0.8
17-Sep	0.3	0.3	0.6	Z	0.4	0.5	0.5	0.4	0.5	0.7	0.5	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	0.7
18-Sep	0.3	0.3	0.3	0.3	Z	0.4	0.5	0.4	0.5	0.4	0.3	0.3	M	0.3	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.6	0.4	0.6
19-Sep	0.5	0.4	0.7	1.0	1.0	Z	1.5	2.2	1.4	0.9	0.9	0.9	0.6	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.7	1.1	1.3	0.7	0.8	2.2
20-Sep	Z	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.5	0.7	0.5	0.3	0.3	0.7
21-Sep	0.2	Z	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.4	0.8	0.8	0.6	0.9	0.7	0.9	0.9	0.8	0.7	0.6	0.5	0.5	0.9
22-Sep	0.7	0.6	Z	0.3	0.6	0.4	0.3	0.3	0.4	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.4	0.3	0.3	0.7
23-Sep	0.4	0.4	0.3	Z	0.3	0.3	0.4	0.4	0.5	0.7	0.5	0.4	0.6	0.9	1.0	1.3	1.0	1.0	0.7	0.6	0.4	0.5	1.7	1.4	0.7	1.7
24-Sep	0.6	0.5	0.4	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	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.3	0.6
25-Sep	0.5	0.9	0.8	0.8	1.1	Z	1.0	0.9	0.6	0.6	0.7	0.5	0.5	0.4	0.3	M	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	1.1
26-Sep	Z	0.2	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
27-Sep	0.2	Z	0.3	0.4	0.4	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	0.3	0.3	0.3	0.3	0.4	0.3	0.4
28-Sep	0.4	0.3	Z	0.2	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	0.3	0.3	0.2	0.4
29-Sep	0.2	0.3	0.4	Z	0.3	0.3	0.5	0.6	0.5	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	0.2	0.3	0.6
30-Sep	0.2	0.2	0.2	0.3	Z	0.2	0.2	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	0.3	0.3	0.3	0.2	0.2	0.3
	0.4	0.4	0.4	0.5	0.6	0.5	0.6	0.7	0.7	0.7	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.4	Diurnal Average	
	1.1	1.0	1.0	1.0	2.7	2.1	1.7	2.5	2.8	5.7	3.0	2.9	2.7	1.7	1.0	1.3	1.0	1.0	0.9	0.9	1.5	1.9	1.8	1.4	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

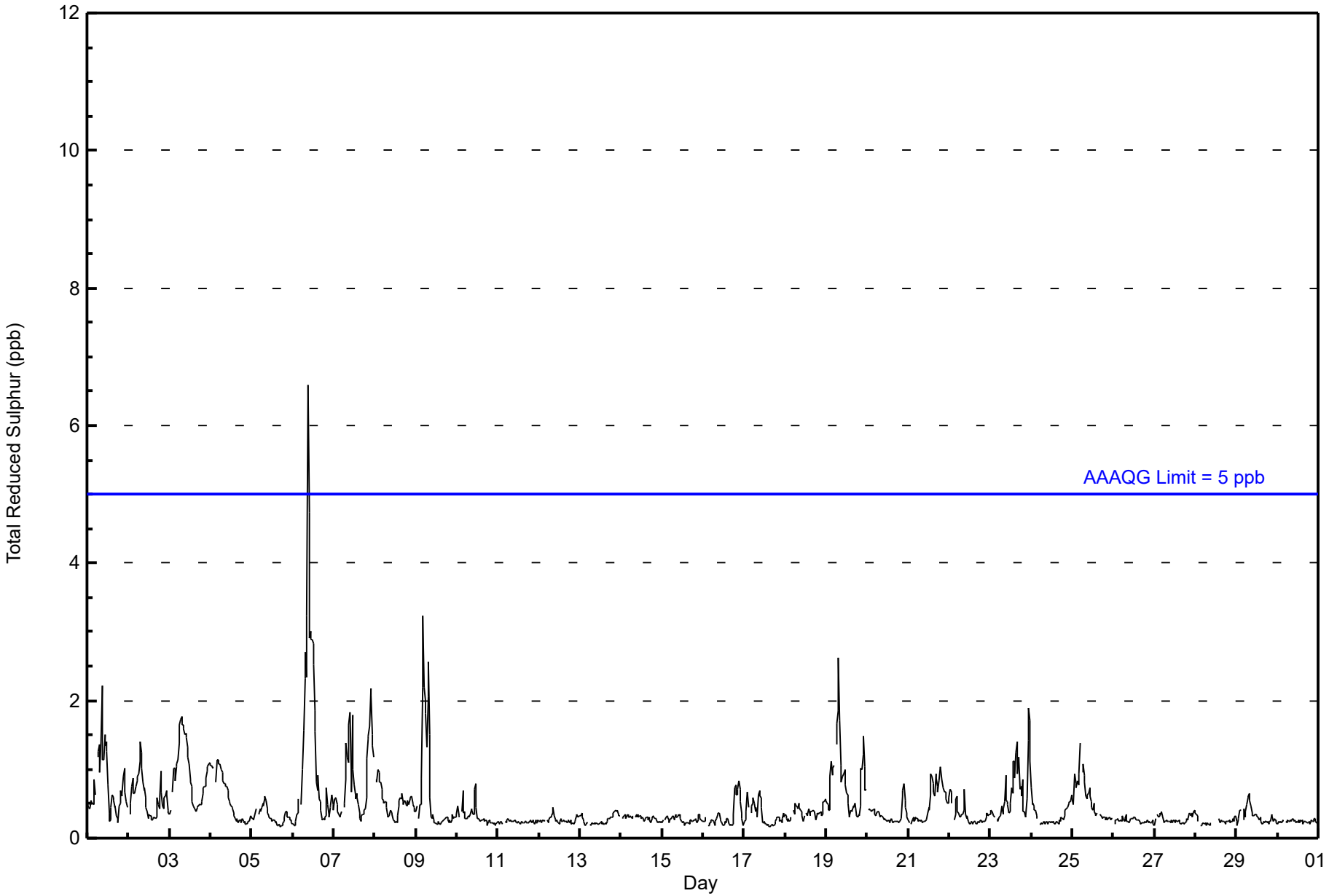
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Fort Hills - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	675	98.97	98.97
3 - 4	6	0.88	99.85
5 - 7	1	0.15	100.00
8 - 11	0	0.00	100.00
> 11	0	0.00	100.00

Total Number of Valid Hours: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Reduced Sulphur (TRS) - ppb

Fort Hills - September 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	29	4	4	6	5	34	88	110	55	64	25	44	30	41	49	675
3 - 4	0	0	0	0	0	0	0	2	0	0	3	1	0	0	0	0	6
5 - 7	0	0	0	0	0	0	0	0	0	0	1	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	87	29	4	4	6	5	34	90	110	55	68	26	44	30	41	49	682

Total Number of Valid Hours: 682

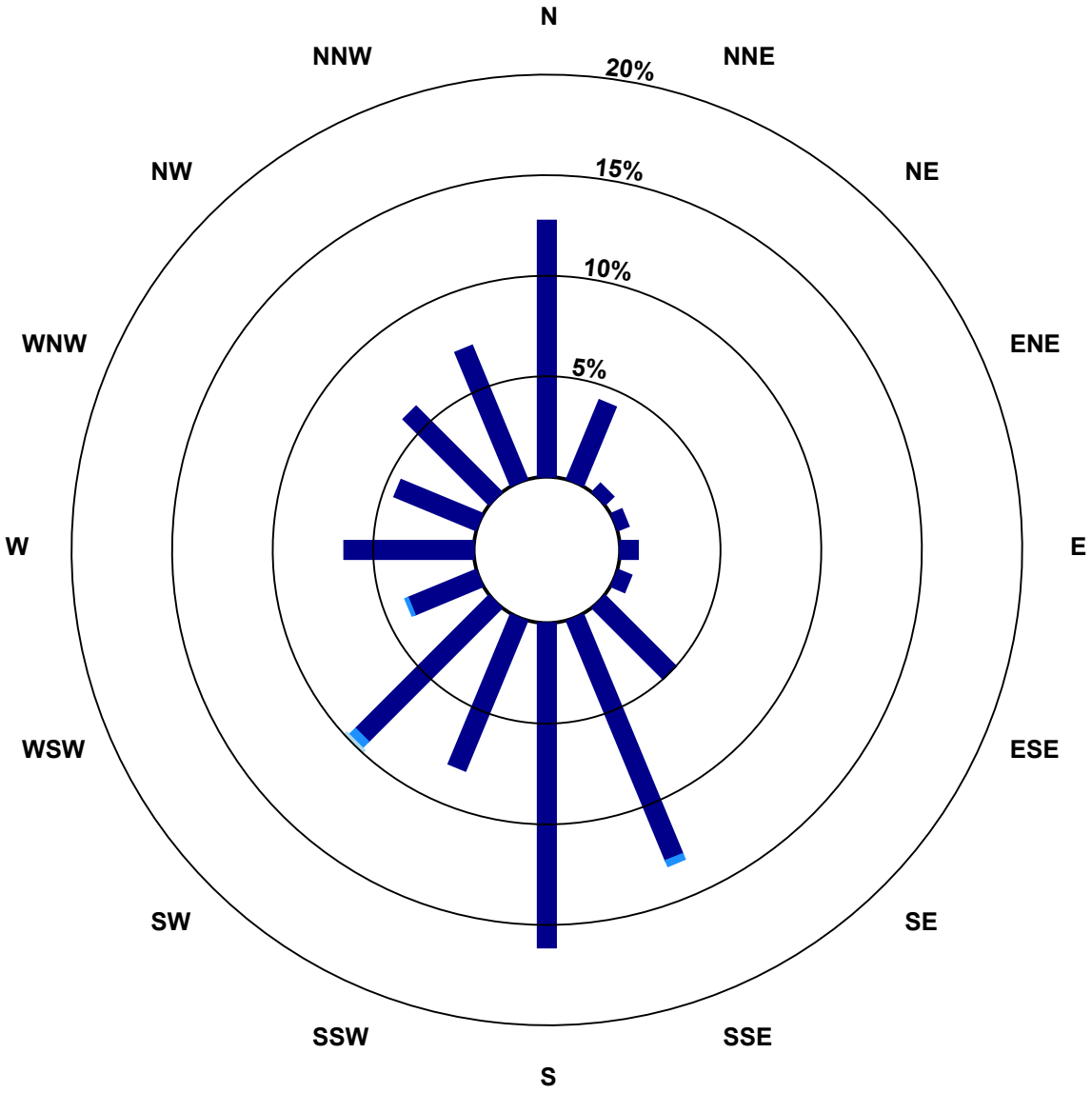
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Reduced Sulphur (TRS) - ppb

Fort Hills



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

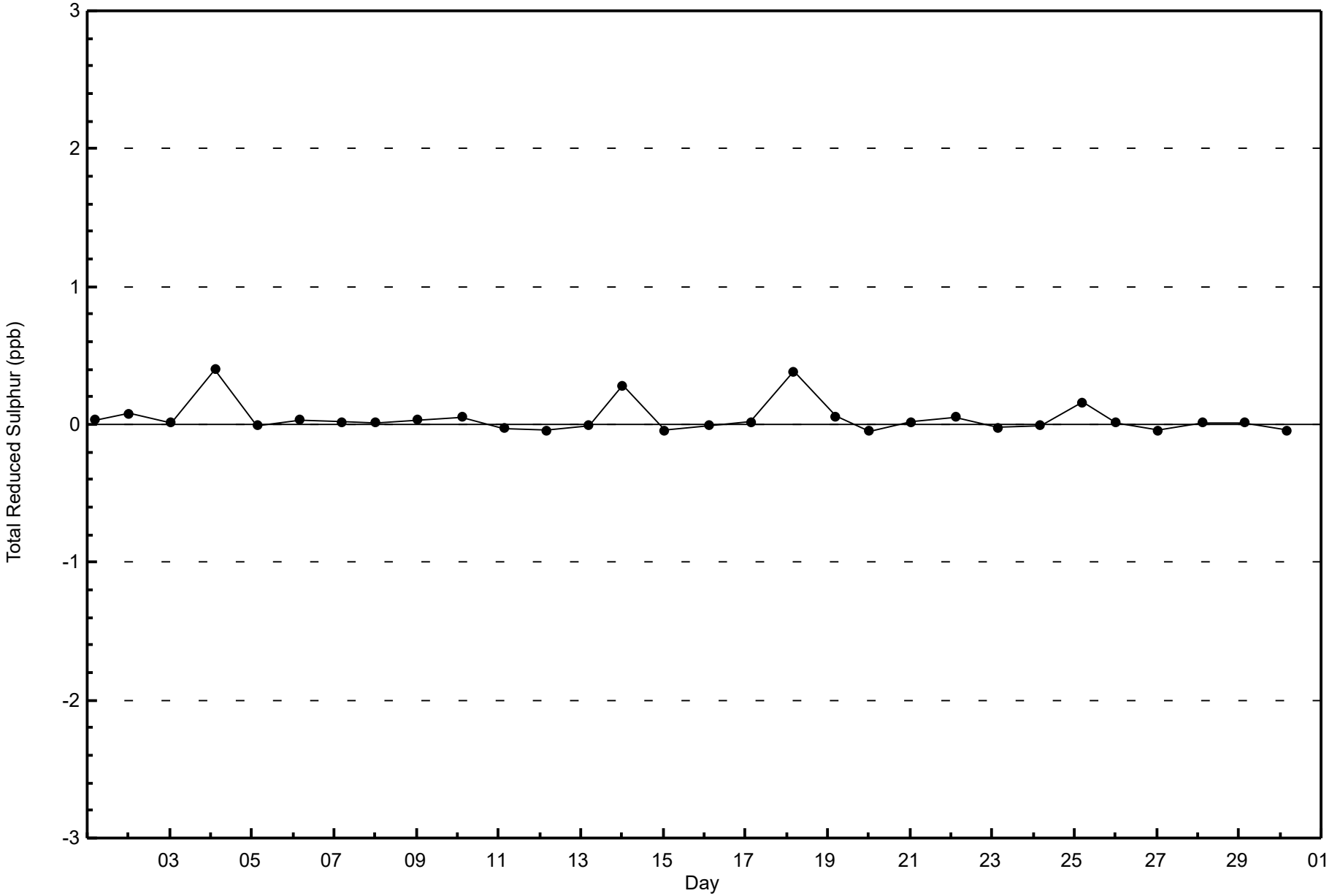
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Fort Hills - September 2026

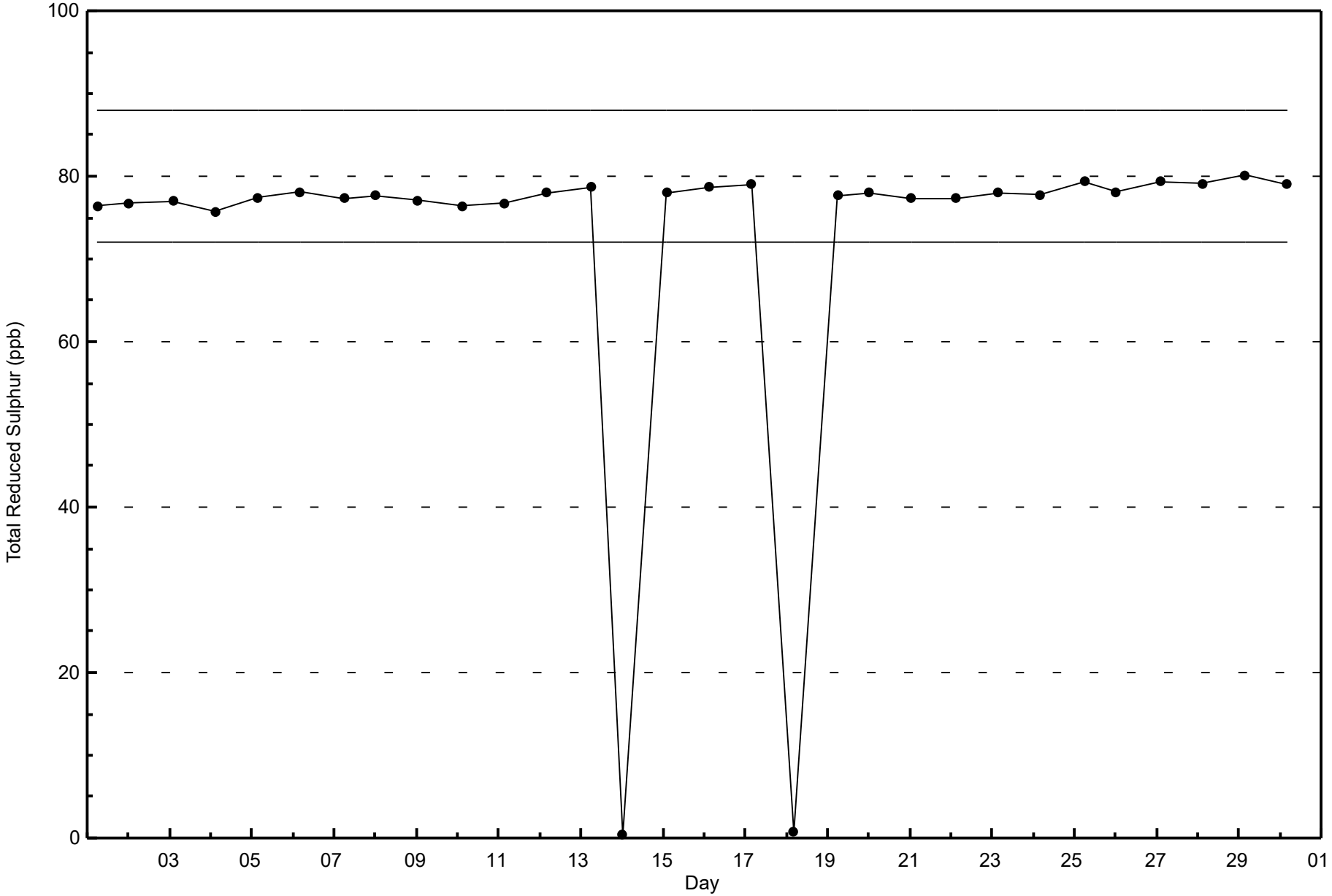


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Fort Hills - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Fort Hills - September 2026

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

Maximum Value: 5.4 ppb on Sep 6 10:00 Maximum Daily Average: 1.2 ppb on Sep 6

Minimum Value: 0.0 ppb on Sep 2 15:00 Minimum Daily Average: 0.1 ppb on Sep 30

Maximum Diurnal Average: 0.6 ppb at hour 8 Minimum Diurnal Average: 0.1 ppb at hour 18

Monthly Average: 0.31 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.4 P_{90} = 0.8 P_{99} = 2.3

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	35
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-Sep	0.4	0.3	0.4	0.4	0.6	Z	1.1	1.0	1.7	1.0	1.3	1.2	0.3	0.1	0.3	0.3	0.2	0.0	0.1	0.4	0.5	0.7	0.4	0.3	0.6	1.7
2-Sep	Z	0.3	0.6	0.5	0.6	0.7	0.9	1.4	0.8	0.6	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.5	0.2	0.4	0.4	0.2	0.4	1.4
3-Sep	0.2	Z	0.7	0.8	1.2	1.4	1.9	1.8	1.6	1.4	1.2	1.0	0.8	0.7	0.5	0.4	0.3	0.3	0.4	0.5	0.7	0.8	1.1	1.1	0.9	1.9
4-Sep	1.0	1.0	Z	0.8	1.0	0.9	0.9	0.7	0.6	0.6	0.5	0.4	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	1.0
5-Sep	0.2	0.2	0.3	Z	0.2	0.3	0.4	0.5	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.5
6-Sep	0.1	0.1	0.2	0.4	Z	0.7	1.2	2.4	2.6	5.4	2.9	2.9	2.7	1.6	0.7	0.6	0.3	0.1	0.1	0.2	0.5	0.2	0.3	0.5	1.2	5.4
7-Sep	0.4	0.4	0.3	0.2	0.2	Z	0.3	1.0	1.1	1.6	0.7	1.2	0.5	0.4	0.3	0.1	0.1	0.2	0.2	0.7	1.2	1.7	1.6	1.1	0.7	1.7
8-Sep	Z	0.7	0.8	0.7	0.5	0.5	0.5	0.3	0.2	0.4	0.3	0.1	0.1	0.1	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.8
9-Sep	0.3	Z	0.3	0.6	2.6	1.9	1.4	2.2	1.0	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	0.1	0.1	0.5	2.6
10-Sep	0.3	0.2	Z	0.4	0.2	0.1	0.1	0.2	0.3	0.2	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	0.4
11-Sep	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
12-Sep	0.1	0.1	0.1	0.1	Z	0.1	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	0.1	0.1	0.2	0.2	0.1	0.4
13-Sep	0.2	0.2	0.2	0.1	0.1	Z	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	0.2	0.2	0.3	0.2	0.2	0.1	0.3
14-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.2	M	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
15-Sep	0.1	Z	0.2	0.2	0.1	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	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.3
16-Sep	0.1	0.2	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.3	0.6	0.6	0.8	0.3	0.1	0.2	0.8
17-Sep	0.1	0.3	0.7	Z	0.4	0.5	0.4	0.3	0.4	0.6	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.2	0.7
18-Sep	0.1	0.1	0.0	0.1	Z	0.2	0.5	0.4	0.4	0.3	0.1	0.1	M	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.3	0.5	0.2	0.5
19-Sep	0.4	0.3	0.5	0.9	0.9	Z	1.4	2.1	1.3	0.7	0.8	0.7	0.5	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.4	0.8	1.0	0.4	0.6	2.1
20-Sep	Z	0.2	0.2	0.2	0.2	0.1	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	0.0	0.2	0.5	0.3	0.2	0.1	0.5
21-Sep	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.6	0.6	0.4	0.7	0.5	0.7	0.7	0.6	0.5	0.4	0.4	0.3	0.7
22-Sep	0.6	0.5	Z	0.1	0.6	0.2	0.2	0.2	0.3	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.2	0.6
23-Sep	0.3	0.2	0.1	Z	0.1	0.1	0.2	0.3	0.4	0.6	0.4	0.2	0.4	0.7	0.8	1.1	0.8	0.8	0.6	0.4	0.2	0.3	1.5	1.2	0.5	1.5
24-Sep	0.5	0.3	0.3	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	0.2	0.2	0.3	0.1	0.5
25-Sep	0.3	1.2	0.8	0.9	1.0	Z	0.9	0.7	0.4	0.4	0.5	0.3	0.4	0.2	0.2	M	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.4	1.2
26-Sep	Z	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	0.1	0.1	0.1	0.2
27-Sep	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	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.3	0.1	0.3
28-Sep	0.2	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	C	C	C	C	C	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-Sep	0.0	0.1	0.3	Z	0.2	0.2	0.3	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.4
30-Sep	0.0	0.1	0.1	0.1	Z	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	0.2	0.3	0.3	0.3	0.5	0.4	0.5	0.6	0.5	0.6	0.4	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.3	Diurnal Average	
	1.0	1.2	0.8	0.9	2.6	1.9	1.9	2.4	2.6	5.4	2.9	2.9	2.7	1.6	0.8	1.1	0.8	0.8	0.7	0.7	1.2	1.7	1.6	1.2	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

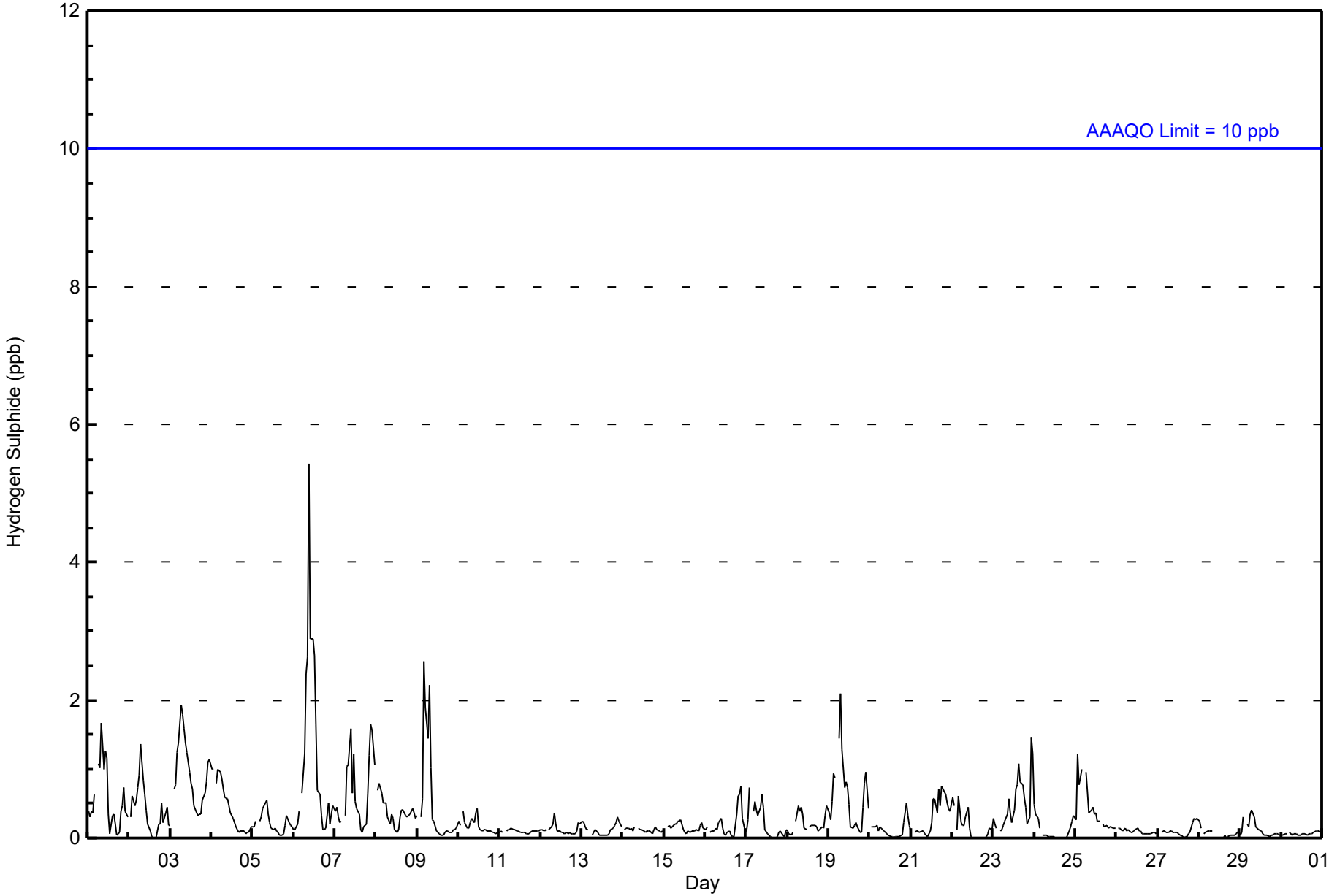
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Fort Hills - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	676	99.12	99.12
3 - 4	5	0.73	99.85
5 - 7	1	0.15	100.00
8 - 11	0	0.00	100.00
> 11	0	0.00	100.00

Total Number of Valid Hours: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Fort Hills - September 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	29	4	4	6	5	34	89	110	55	64	25	44	30	41	49	676
3 - 4	0	0	0	0	0	0	0	1	0	0	3	1	0	0	0	0	5
5 - 7	0	0	0	0	0	0	0	0	0	0	1	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	87	29	4	4	6	5	34	90	110	55	68	26	44	30	41	49	682

Total Number of Valid Hours: 682

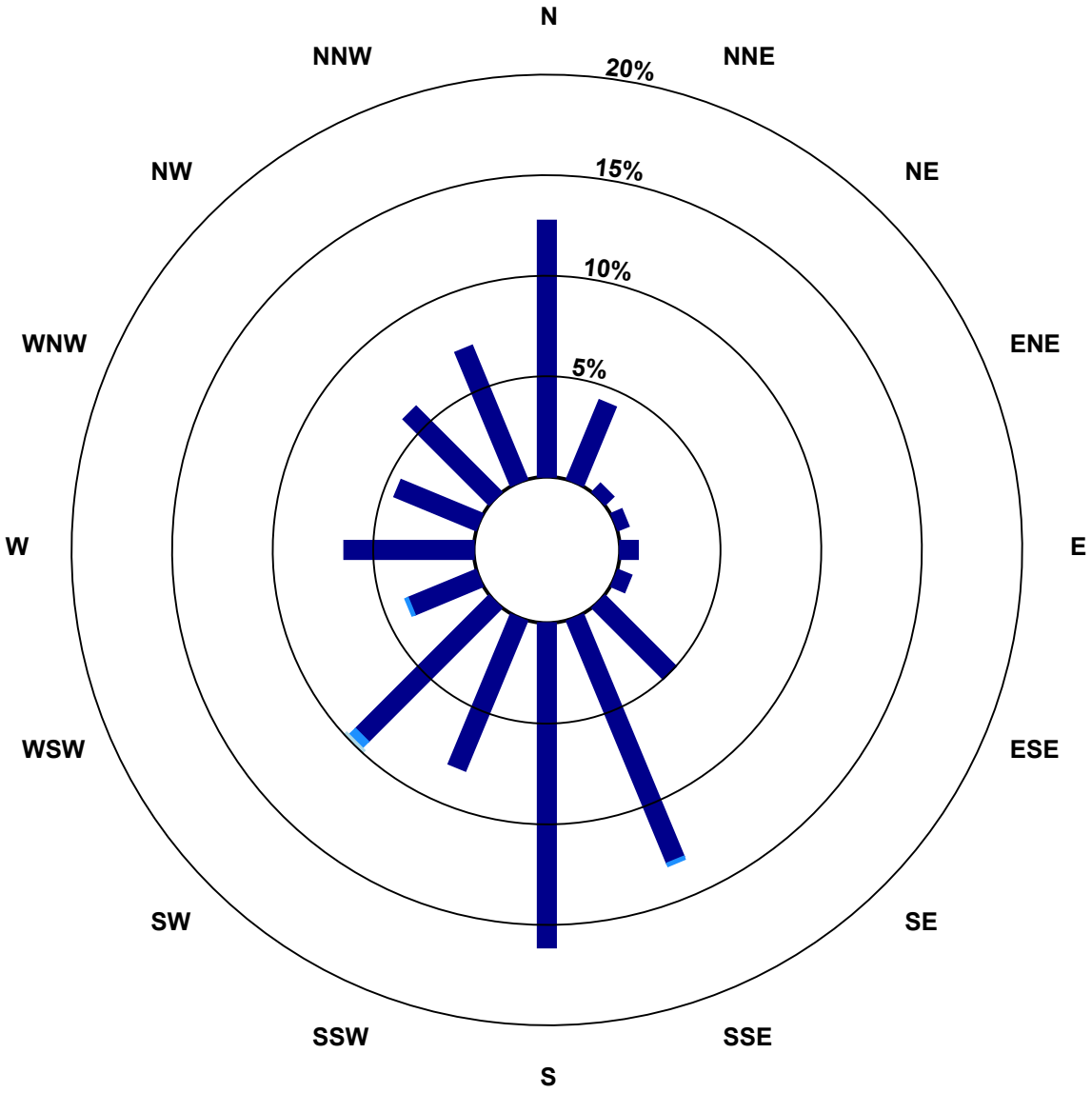
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

Fort Hills



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

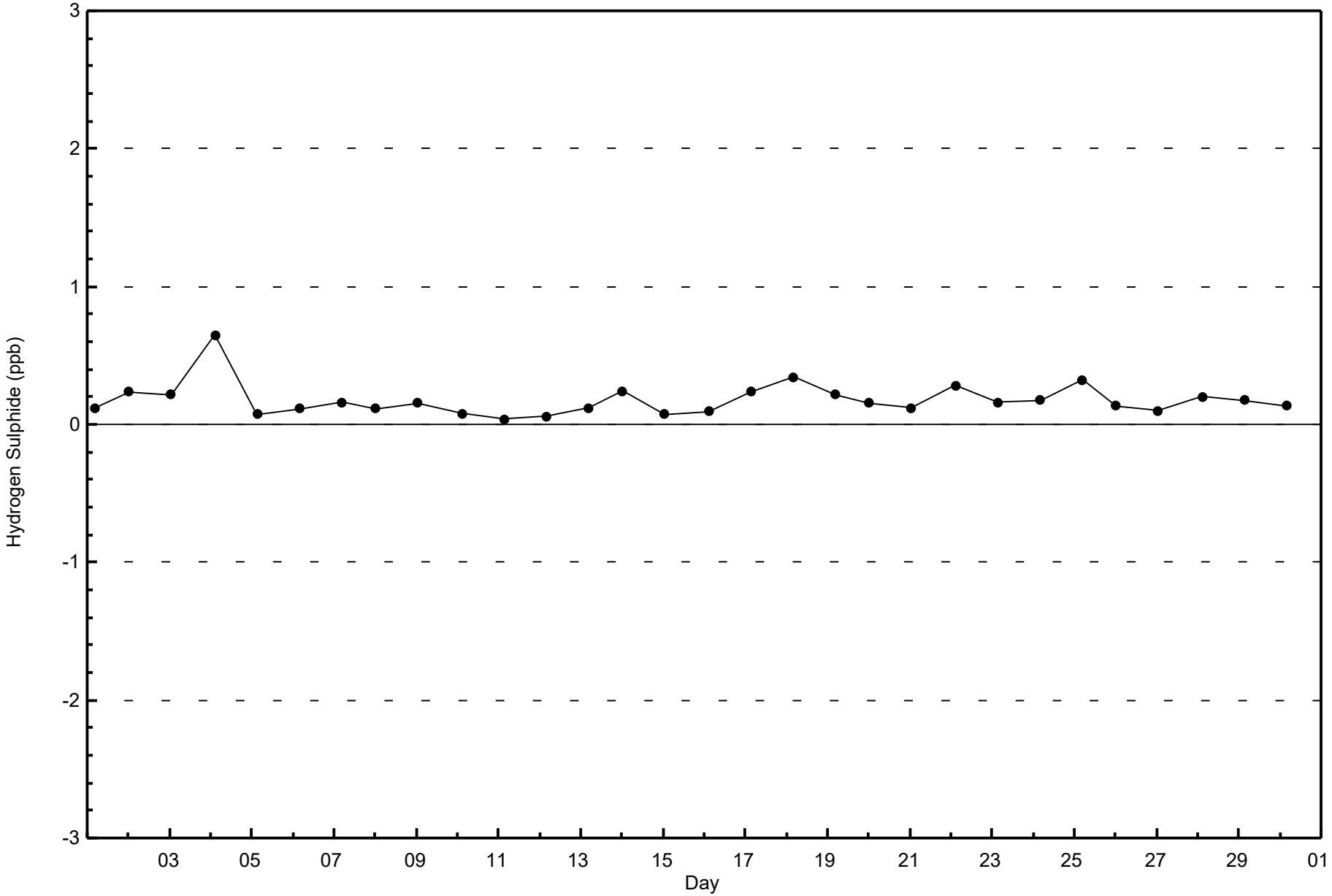
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Fort Hills - September 2026

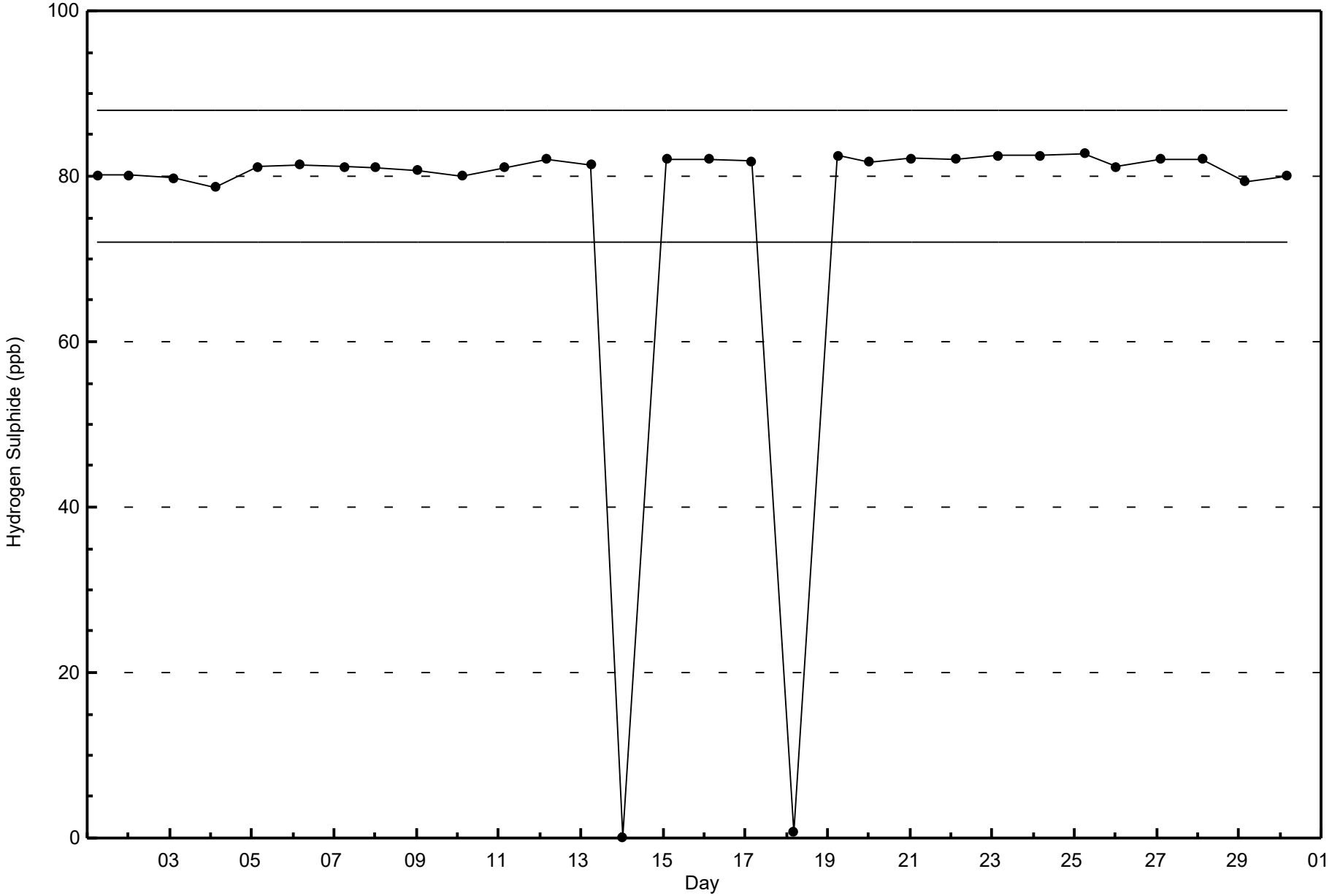


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Fort Hills - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Fort Hills - September 2026

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

Maximum Value: 4.2 ppm on Sep 6 12:00

Maximum Daily Average: 2.8 ppm on Sep 3

Minimum Value: 2.0 ppm on Sep 20 18:00

Minimum Daily Average: 2.0 ppm on Sep 11

Maximum Diurnal Average: 2.4 ppm at hour 5

Minimum Diurnal Average: 2.1 ppm at hour 15

Monthly Average: 2.25 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} = 3.5

Hours in Service:	720
Hours of Data:	685
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-Sep	2.1	2.2	2.2	2.4	Z	2.6	2.7	2.5	2.4	2.2	2.3	2.3	2.1	2.0	2.0	2.0	2.1	2.2	2.4	2.9	2.5	3.5	3.0	2.6	2.4	3.5
2-Sep	2.3	2.4	2.9	2.5	2.6	Z	2.7	3.1	2.7	2.7	2.5	2.1	2.2	2.1	2.0	2.0	2.0	2.2	2.3	2.3	2.4	2.3	2.6	2.2	2.4	3.1
3-Sep	Z	3.2	2.8	2.8	3.7	3.9	3.9	3.3	3.1	2.9	2.7	2.4	2.3	2.1	2.1	2.1	2.2	2.3	2.2	2.6	2.6	2.9	3.0	3.1	2.8	3.9
4-Sep	3.0	Z	2.8	3.3	2.9	2.7	2.4	2.1	2.1	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	2.1	2.3	3.3
5-Sep	2.0	2.1	Z	2.1	2.1	2.1	2.2	2.3	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.2	2.2	2.1	2.2	2.1	2.4
6-Sep	2.1	2.1	2.2	Z	2.3	2.3	2.6	3.1	2.7	2.8	3.0	4.2	3.6	2.5	2.1	2.0	2.0	2.0	2.0	2.1	2.8	2.3	2.8	2.7	2.5	4.2
7-Sep	2.6	2.9	2.3	2.1	Z	2.1	2.2	2.7	2.6	2.3	2.1	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.4	2.4	2.4	2.5	2.4	2.3	2.9
8-Sep	2.4	2.4	2.5	2.5	2.6	Z	2.5	2.2	2.1	2.4	2.2	2.0	2.0	2.0	2.0	2.1	2.5	2.6	2.4	2.3	2.3	2.5	2.3	2.2	2.3	2.6
9-Sep	Z	2.6	2.4	2.5	3.5	2.8	2.6	2.7	2.5	2.4	2.2	2.1	2.0	2.0	2.0	2.1	2.2	2.3	2.2	2.1	2.0	2.0	2.0	2.1	2.3	3.5
10-Sep	2.2	Z	2.0	2.1	2.4	2.1	2.2	2.4	2.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.4
11-Sep	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
12-Sep	2.0	2.0	2.0	Z	2.1	2.1	2.1	2.3	2.7	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.4	2.8	2.5	2.2	2.8
13-Sep	2.6	2.5	2.1	2.1	Z	2.2	2.1	2.1	2.2	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.3	2.2	2.1	2.1	2.1	2.6
14-Sep	2.1	2.1	2.1	2.0	2.0	Z	2.0	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	2.0	2.0	2.1	2.1
15-Sep	Z	2.0	2.1	2.2	2.1	2.1	2.2	2.3	2.3	2.4	2.5	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.3	2.4	2.1	2.1	2.5
16-Sep	2.0	Z	2.1	2.0	2.0	2.2	2.1	2.1	2.3	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.7	2.8	3.1	2.4	2.1	2.2	3.1
17-Sep	2.4	2.6	Z	2.3	2.5	2.7	2.5	2.3	2.8	3.1	2.6	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.3	2.3	3.1
18-Sep	2.4	2.2	2.2	Z	2.7	2.5	2.7	2.3	2.9	2.7	2.2	2.1	2.4	2.4	2.4	2.4	2.3	2.2	2.1	2.2	2.4	2.2	2.6	2.6	2.4	2.9
19-Sep	2.2	2.2	2.9	3.4	Z	2.3	2.4	2.6	2.3	2.2	2.2	2.2	2.2	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.4	2.3	2.3	3.4
20-Sep	2.2	2.2	2.2	2.3	2.3	Z	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	2.2	2.4	2.6	2.5	2.1	2.6
21-Sep	Z	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.1	2.1	2.1	2.2	2.3	2.4	2.1	2.1	2.9	2.7	3.2	2.8	3.0	2.9	2.7	2.9	2.4	3.2
22-Sep	3.1	Z	2.3	2.2	3.0	2.3	2.2	2.3	2.7	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	2.4	2.2	2.2	3.1
23-Sep	2.8	2.5	Z	2.0	2.0	2.0	2.1	2.1	2.2	C	C	C	C	2.6	2.8	2.8	2.5	2.8	2.5	2.7	2.2	2.1	2.8	2.5	2.4	2.8
24-Sep	2.2	2.3	2.5	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	2.2	2.1	2.1	2.3	2.5	2.6	2.8	2.2	2.8
25-Sep	2.6	4.1	3.3	3.2	Z	2.8	3.0	2.8	2.5	2.5	2.4	2.4	2.3	2.2	2.1	M	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.5	4.1
26-Sep	2.1	2.1	2.1	2.0	2.0	Z	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	2.0	2.0	2.0	2.0	2.0	2.0	2.2
27-Sep	Z	2.1	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	2.1	2.3	2.3	2.8	3.1	2.6	2.7	2.2	3.1
28-Sep	2.5	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	2.1	2.2	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.1	2.5
29-Sep	2.1	2.1	Z	2.7	2.5	2.3	2.6	2.4	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	2.0	2.0	2.0	2.2	2.7
30-Sep	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	2.0	2.1	2.1	2.0	2.1
	2.3	2.4	2.3	2.4	2.4	2.3	2.4	2.4	2.4	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	2.3	Diurnal Average	
	3.1	4.1	3.3	3.4	3.7	3.9	3.9	3.3	3.1	3.1	3.0	4.2	3.6	2.6	2.8	2.8	2.9	2.8	3.2	2.9	3.0	3.5	3.0	3.1	Diurnal Maximum	

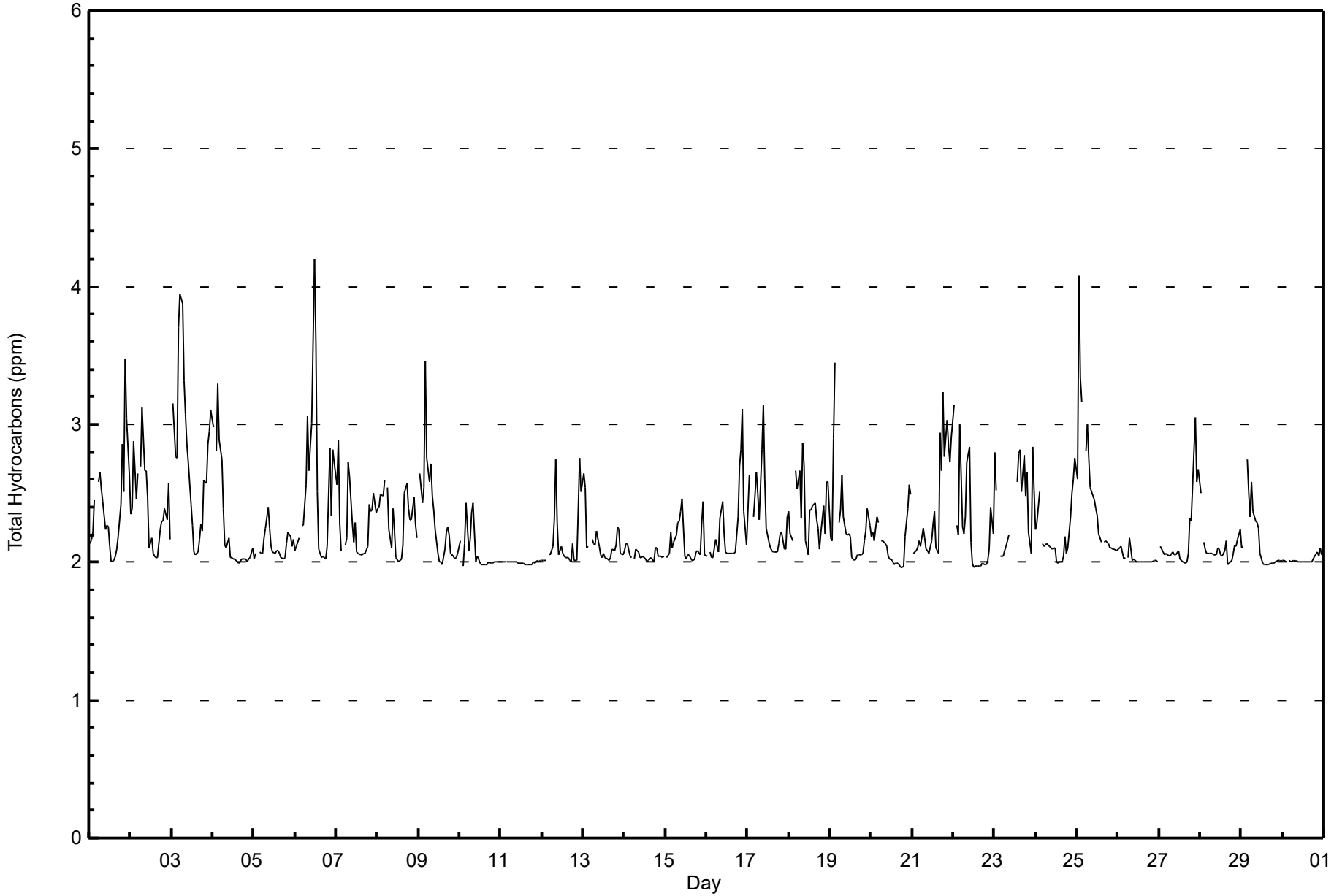
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Fort Hills - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	209	30.51	30.51
2.1 - 3.0	453	66.13	96.64
3.1 - 10.0	23	3.36	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Fort Hills - September 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	2	0	1	0	1	3	7	13	12	20	11	36	23	23	30	209
2.1 - 3.0	58	26	3	3	6	4	30	79	95	43	48	14	7	7	20	10	453
3.1 - 10.0	6	0	0	0	0	0	2	4	2	1	3	0	0	0	0	5	23
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	91	28	3	4	6	5	35	90	110	56	71	25	43	30	43	45	685

Total Number of Valid Hours: 685

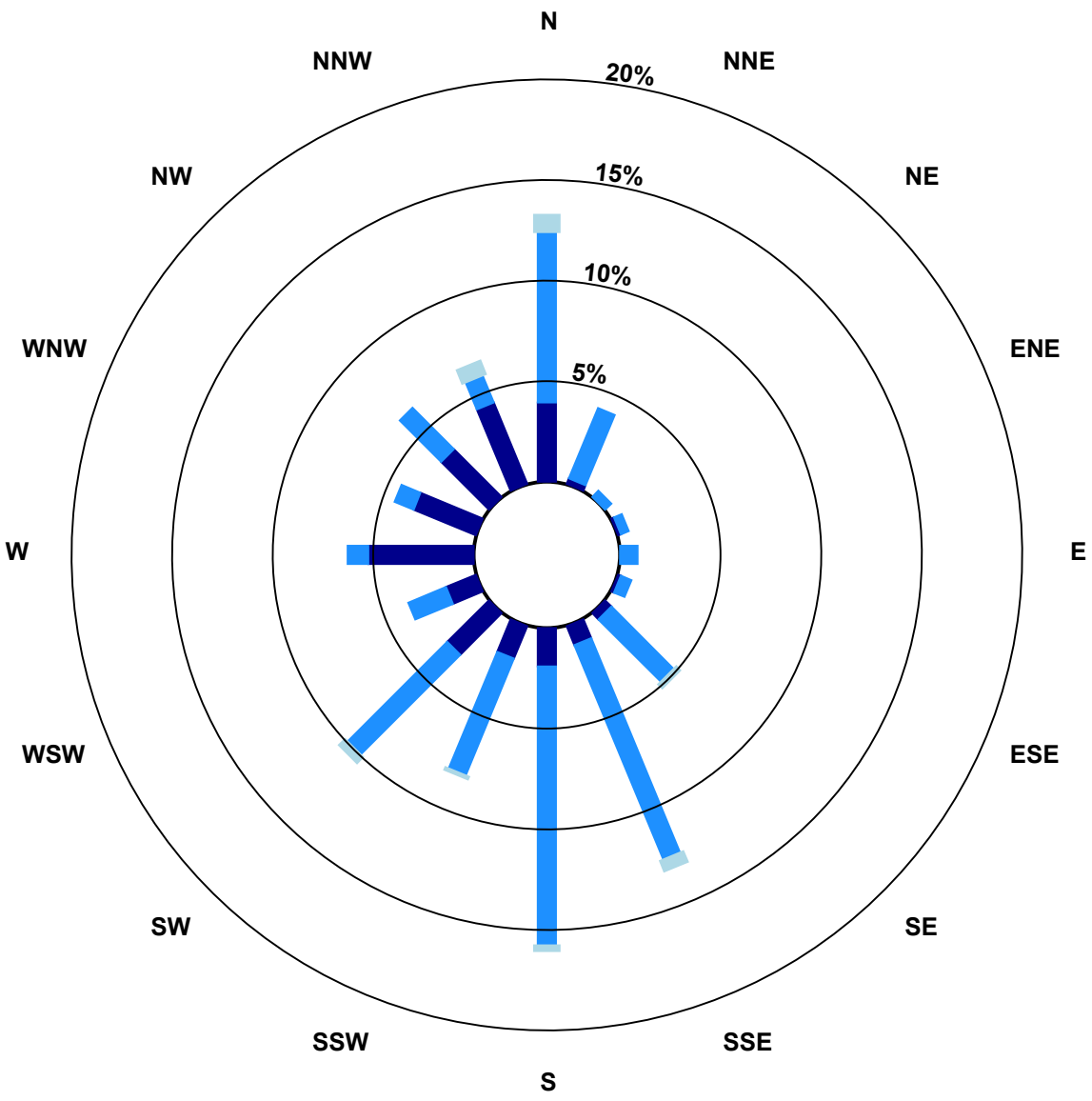
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Fort Hills



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

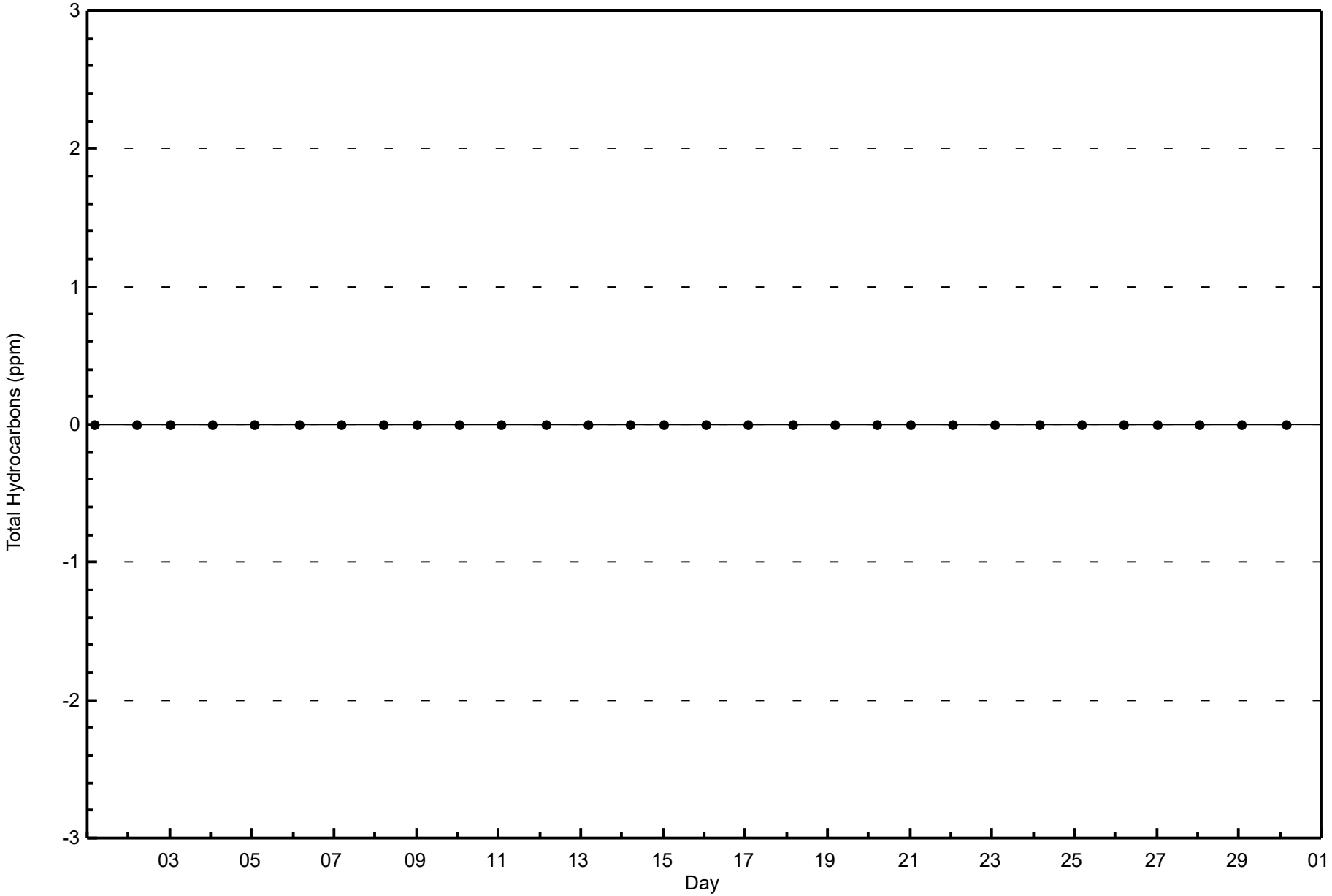
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Fort Hills - September 2026

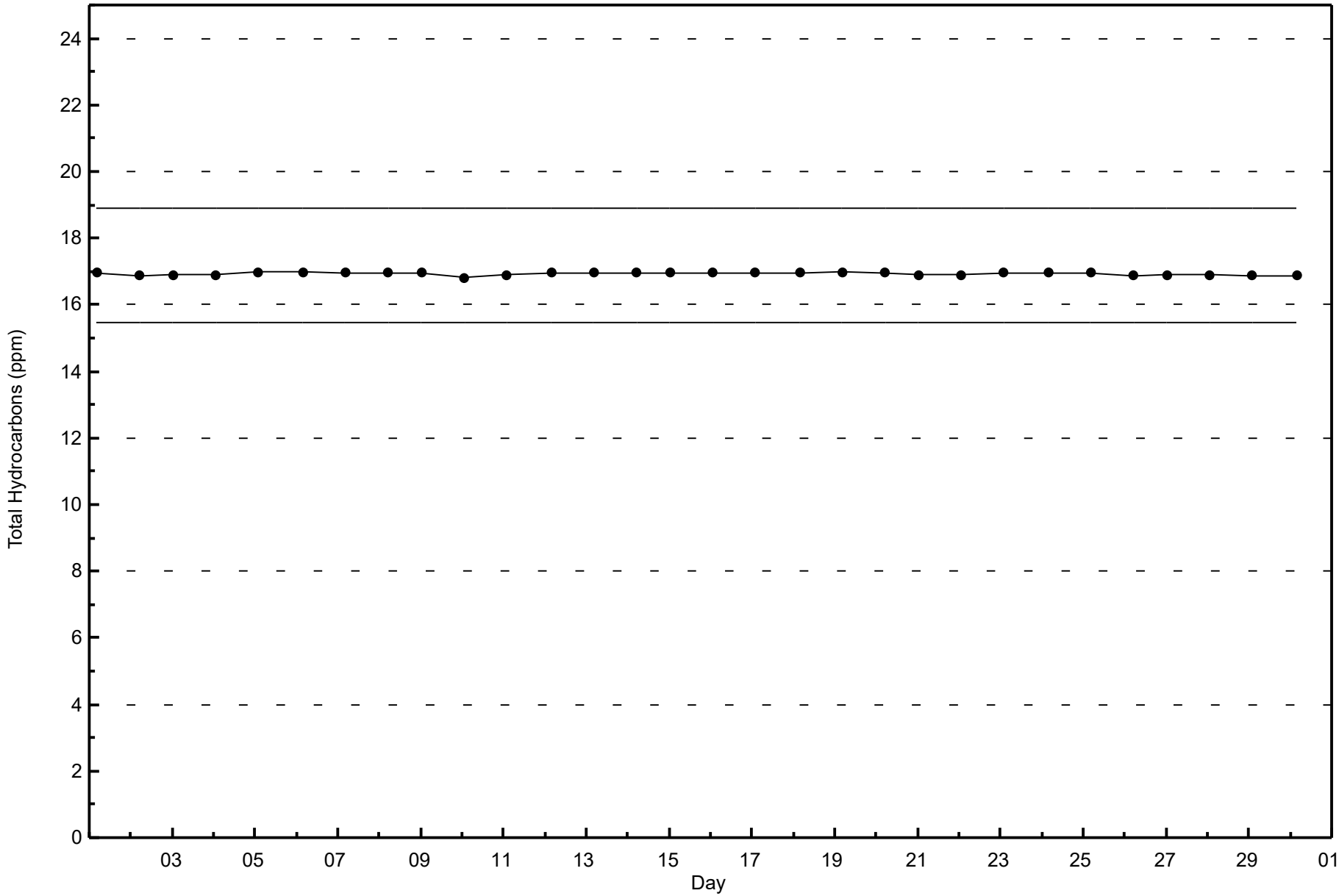


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Fort Hills - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Fort Hills - September 2026

Maximum Value: 1.132 ppm on Sep 1 22:00

Maximum Daily Average: 0.259 ppm on Sep 3

Minimum Value: 0.000 ppm on Sep 1 01:00

Minimum Daily Average: 0.000 ppm on Sep 11

Maximum Diurnal Average: 0.125 ppm at hour 23

Minimum Diurnal Average: 0.030 ppm at hour 15

Monthly Average: 0.064 ppm

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.1 P_{90} = 0.2 P_{99} = 0.6

Hours in Service:	720
Hours of Data:	685
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-Sep	0.000	0.000	0.000	0.098	Z	0.090	0.133	0.069	0.158	0.058	0.088	0.098	0.025	0.000	0.000	0.011	0.032	0.118	0.346	0.661	0.219	1.132	0.865	0.528	0.206	1.132
2-Sep	0.239	0.239	0.269	0.086	0.200	Z	0.151	0.310	0.220	0.307	0.222	0.006	0.136	0.050	0.016	0.017	0.017	0.168	0.173	0.190	0.158	0.154	0.363	0.013	0.161	0.363
3-Sep	Z	0.390	0.267	0.226	0.560	0.701	0.689	0.401	0.411	0.355	0.279	0.176	0.103	0.000	0.000	0.000	0.075	0.107	0.005	0.163	0.228	0.284	0.292	0.249	0.259	0.701
4-Sep	0.210	Z	0.163	0.240	0.193	0.062	0.002	0.000	0.000	0.000	0.000	0.009	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.039	0.240
5-Sep	0.000	0.000	Z	0.000	0.000	0.000	0.025	0.021	0.031	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.050	0.024	0.000	0.000	0.000	0.007	0.050
6-Sep	0.000	0.000	0.009	Z	0.012	0.000	0.095	0.395	0.167	0.390	0.332	0.506	0.375	0.207	0.023	0.000	0.000	0.000	0.000	0.021	0.429	0.068	0.656	0.512	0.182	0.656
7-Sep	0.381	0.763	0.088	0.000	Z	0.000	0.000	0.209	0.162	0.029	0.000	0.081	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.116	0.121	0.134	0.150	0.053	0.099	0.763
8-Sep	0.023	0.004	0.014	0.011	0.019	Z	0.047	0.000	0.000	0.159	0.082	0.000	0.000	0.000	0.000	0.054	0.317	0.423	0.245	0.154	0.104	0.170	0.087	0.004	0.083	0.423
9-Sep	Z	0.225	0.088	0.071	0.325	0.170	0.095	0.148	0.026	0.000	0.000	0.000	0.000	0.000	0.000	0.046	0.104	0.122	0.084	0.010	0.011	0.006	0.000	0.000	0.067	0.325
10-Sep	0.006	Z	0.000	0.035	0.128	0.000	0.051	0.074	0.139	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.019	0.139
11-Sep	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-Sep	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.077	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.016	0.000	0.000	0.098	0.211	0.070	0.021	0.211
13-Sep	0.169	0.109	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	0.002	0.000	0.000	0.000	0.000	0.039	0.000	0.000	0.014	0.169
14-Sep	0.000	0.006	0.045	0.000	0.000	Z	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	0.000	0.000	0.000	0.000	0.002	0.045
15-Sep	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.028	0.023	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.045	0.019	0.000	0.009	0.093
16-Sep	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.043	0.084	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.131	0.238	0.298	0.421	0.093	0.000	0.057	0.421
17-Sep	0.000	0.073	Z	0.011	0.020	0.027	0.013	0.000	0.112	0.173	0.151	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.002	0.010	0.000	0.000	0.037	0.028	0.173
18-Sep	0.020	0.000	0.002	Z	0.095	0.106	0.244	0.101	0.236	0.162	0.049	0.015	0.212	0.274	0.299	0.282	0.150	0.097	0.000	0.004	0.004	0.000	0.141	0.149	0.115	0.299
19-Sep	0.000	0.000	0.195	0.277	Z	0.015	0.034	0.172	0.032	0.000	0.000	0.030	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.094	0.060	0.042	0.277
20-Sep	0.000	0.000	0.000	0.071	0.047	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	0.103	0.082	0.013	0.103
21-Sep	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.019	0.023	0.114	0.004	0.005	0.446	0.274	0.542	0.404	0.344	0.251	0.209	0.231	0.125	0.542
22-Sep	0.297	Z	0.000	0.000	0.243	0.013	0.000	0.000	0.070	0.140	0.042	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.028	0.084	0.000	0.040	0.297
23-Sep	0.175	0.068	Z	0.000	0.000	0.000	0.000	0.000	0.000	C	C	C	C	0.316	0.540	0.605	0.361	0.536	0.269	0.414	0.050	0.000	0.198	0.100	0.191	0.605
24-Sep	0.006	0.004	0.088	Z	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	0.026	0.000	0.007	0.002	0.069	0.094	0.139	0.019	0.139
25-Sep	0.036	0.508	0.292	0.288	Z	0.213	0.260	0.193	0.113	0.100	0.121	0.032	0.007	0.010	0.011	M	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.100	0.508
26-Sep	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-Sep	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	0.040	0.018	0.167	0.168	0.088	0.098	0.025	0.168
28-Sep	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	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.012
29-Sep	0.000	0.000	Z	0.095	0.045	0.000	0.068	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.095
30-Sep	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
	0.062	0.096	0.061	0.060	0.075	0.056	0.064	0.070	0.067	0.069	0.051	0.034	0.032	0.032	0.030	0.036	0.050	0.063	0.062	0.082	0.072	0.102	0.125	0.078	Diurnal Average	
	0.381	0.763	0.292	0.288	0.560	0.701	0.689	0.401	0.411	0.390	0.332	0.506	0.375	0.316	0.540	0.605	0.446	0.536	0.542	0.661	0.429	1.132	0.865	0.528	Diurnal Maximum	

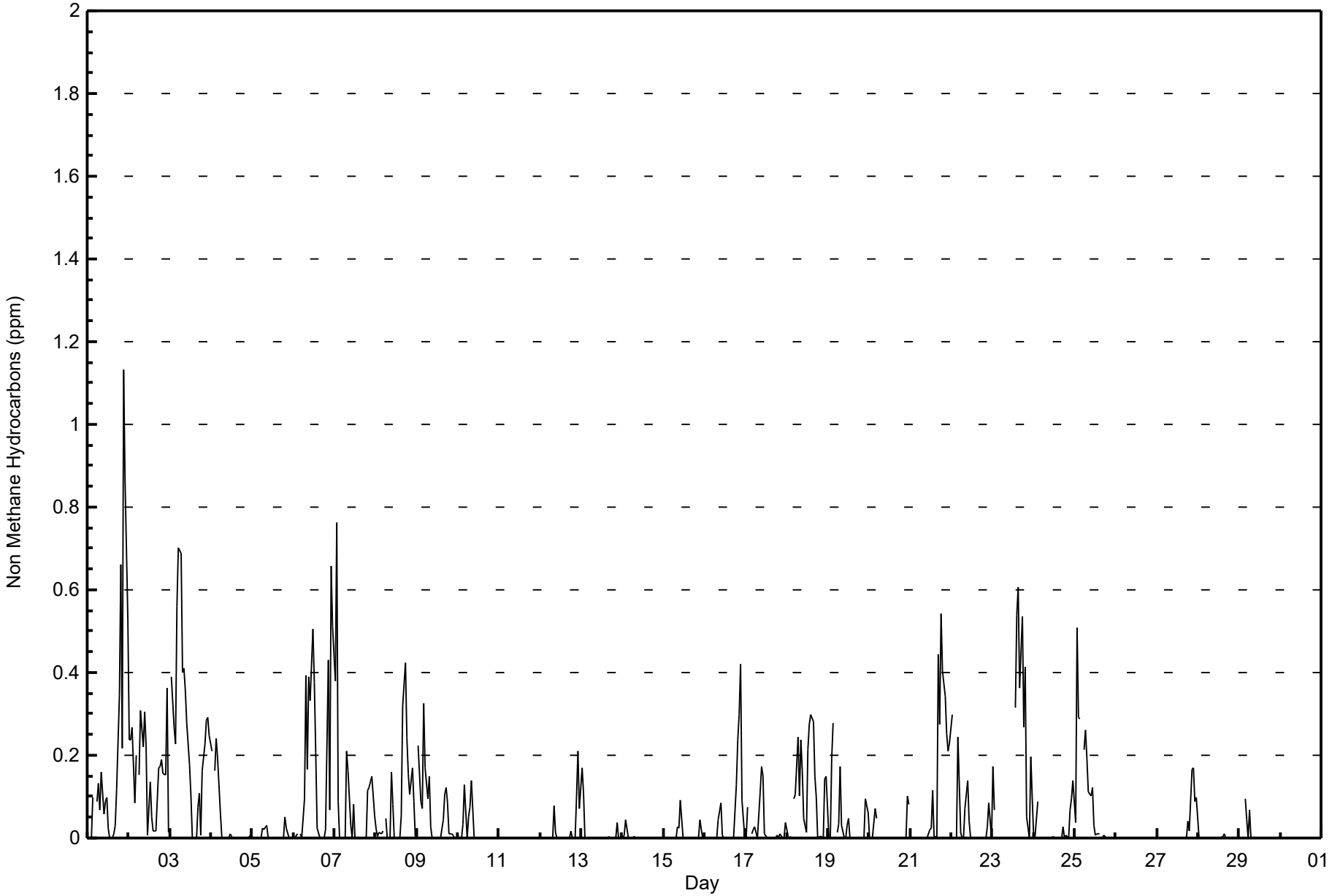
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Fort Hills - September 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Fort Hills - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	420	61.31	61.31
0.006 - 0.05	82	11.97	73.28
0.06 - 0.1	74	10.80	84.09
> 0.1	109	15.91	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Fort Hills - September 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	49	15	1	2	2	1	7	27	75	39	42	21	39	29	36	35	420
0.006 - 0.05	14	5	1	0	2	0	5	14	17	4	11	3	0	1	3	2	82
0.06 - 0.1	4	5	1	1	1	0	4	20	11	11	10	0	2	0	3	1	74
> 0.1	24	3	0	1	1	4	19	29	7	2	8	1	2	0	1	7	109
Totals	91	28	3	4	6	5	35	90	110	56	71	25	43	30	43	45	685

Total Number of Valid Hours: 685

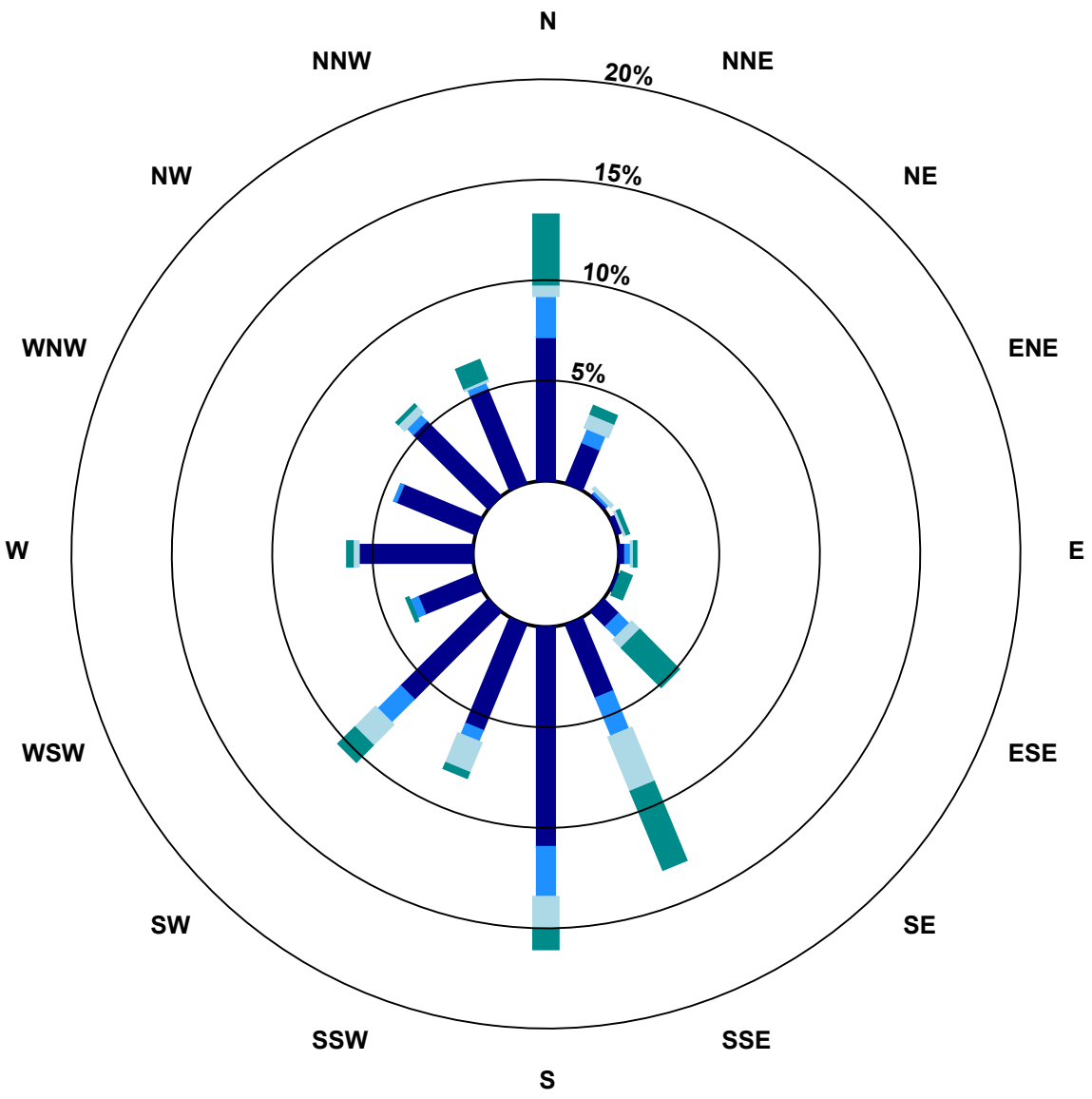
Total Number of Hours: 720

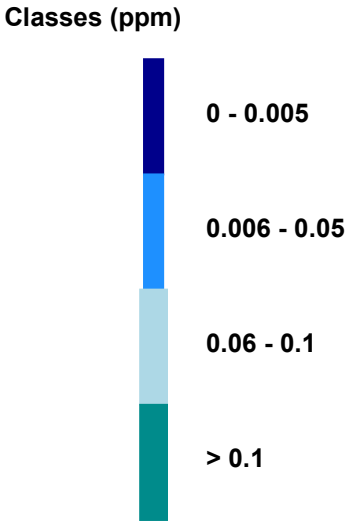
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Non Methane Hydrocarbons (NMHC) - ppm

Fort Hills





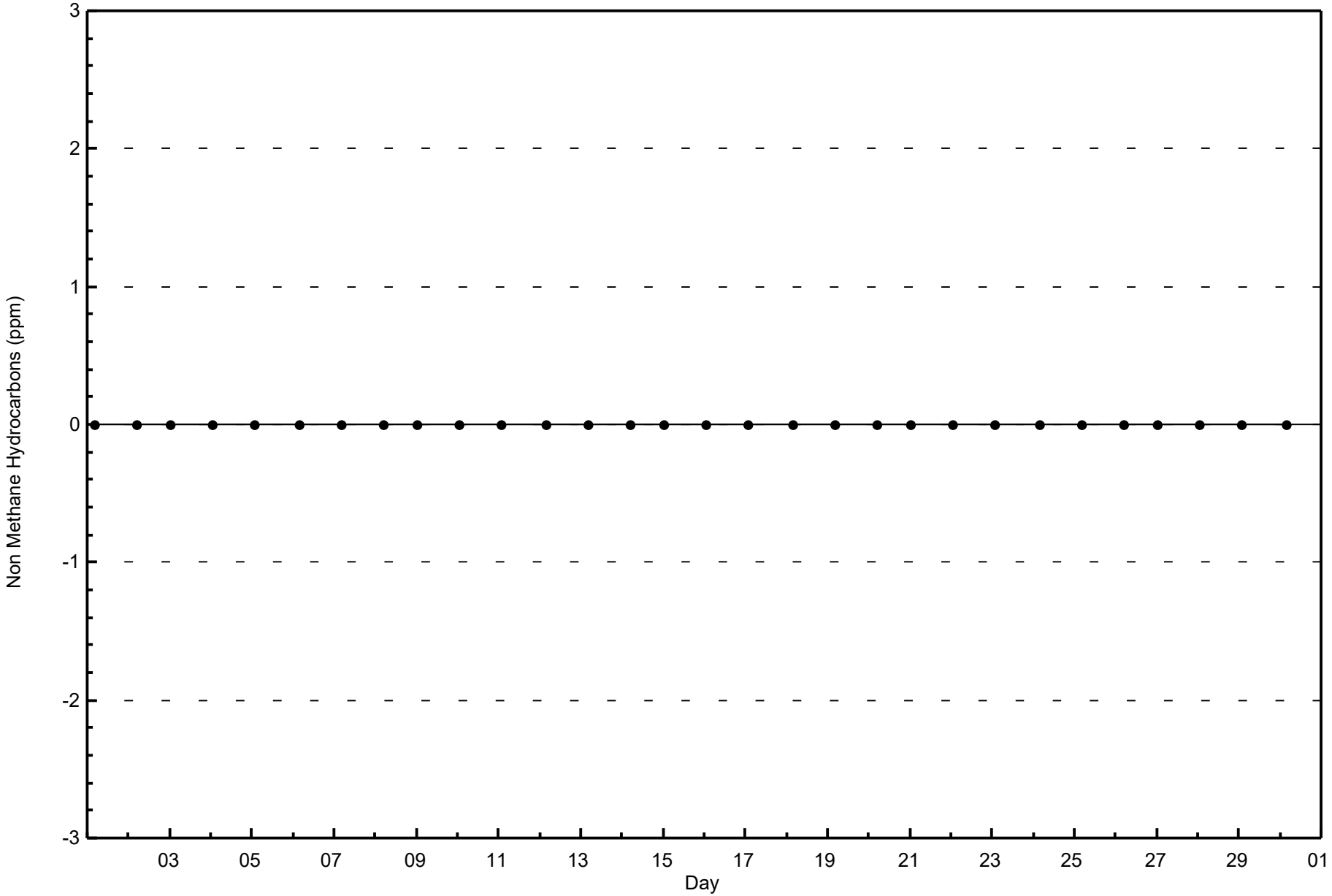
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Fort Hills - September 2026

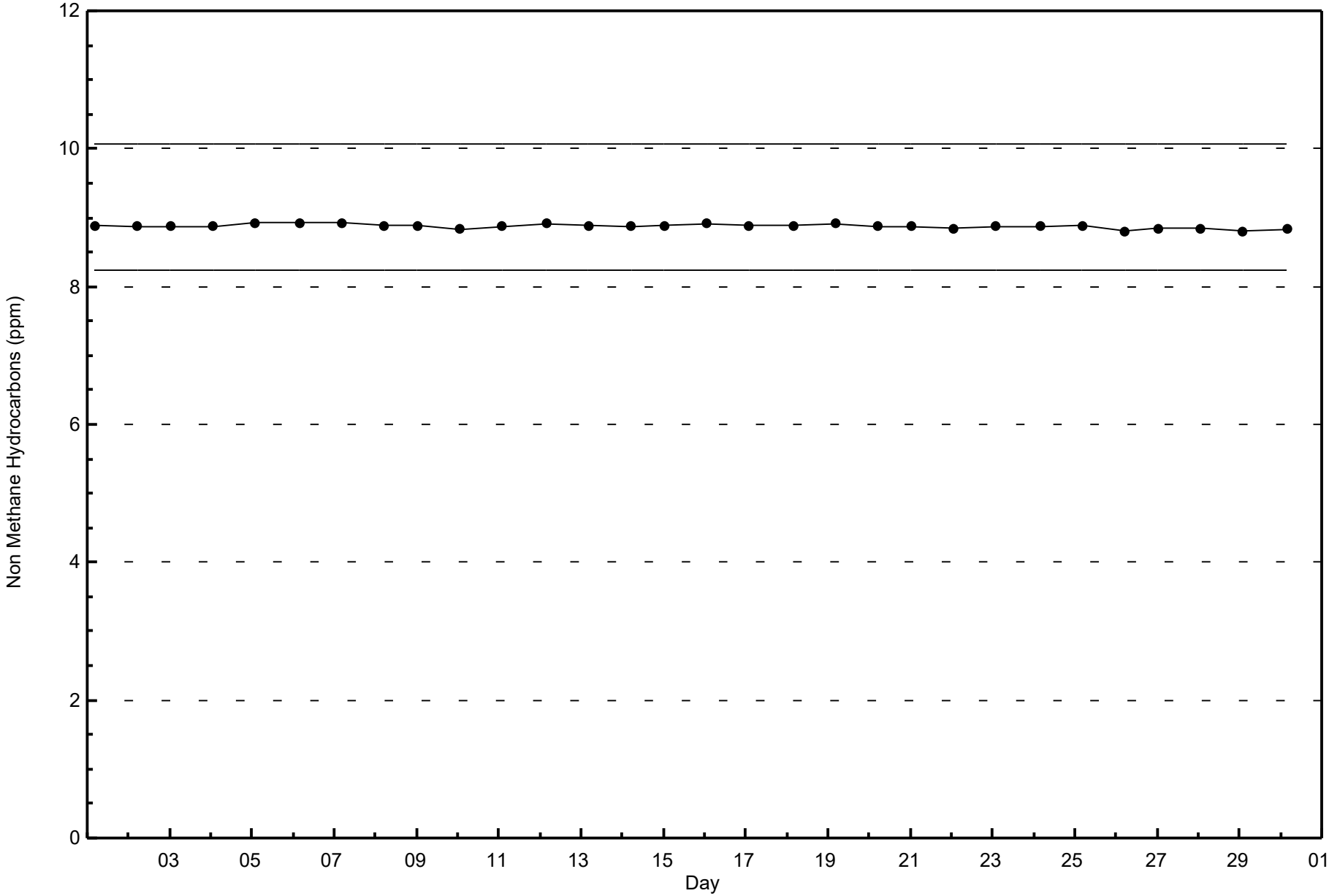


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Fort Hills - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Fort Hills - September 2026

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

Maximum Value: 3.7 ppm on Sep 6 12:00

Maximum Daily Average: 2.5 ppm on Sep 3

Minimum Value: 2.0 ppm on Sep 20 18:00

Minimum Daily Average: 2.0 ppm on Sep 11

Maximum Diurnal Average: 2.3 ppm at hour 5

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} = 3.1

Hours in Service:	720
Hours of Data:	685
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-Sep	2.1	2.2	2.2	2.4	Z	2.5	2.5	2.5	2.3	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.3	2.3	2.2	2.1	2.2	2.5
2-Sep	2.1	2.1	2.6	2.4	2.4	Z	2.5	2.8	2.4	2.4	2.2	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	2.8
3-Sep	Z	2.8	2.5	2.5	3.1	3.2	3.2	2.9	2.7	2.5	2.4	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.4	2.3	2.6	2.7	2.9	2.5	3.2
4-Sep	2.8	Z	2.6	3.1	2.7	2.7	2.4	2.1	2.1	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	2.1	2.2	3.1
5-Sep	2.0	2.1	Z	2.1	2.1	2.1	2.2	2.2	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.2	2.2	2.1	2.2	2.1	2.4
6-Sep	2.1	2.1	2.2	Z	2.3	2.3	2.5	2.7	2.5	2.5	2.7	3.7	3.2	2.3	2.1	2.0	2.0	2.0	2.0	2.1	2.4	2.3	2.2	2.2	2.4	3.7
7-Sep	2.2	2.1	2.2	2.1	Z	2.1	2.2	2.5	2.5	2.3	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.2	2.2	2.3	2.3	2.2	2.5
8-Sep	2.4	2.4	2.5	2.5	2.6	Z	2.5	2.2	2.1	2.2	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.1	2.2	2.2	2.3	2.2	2.2	2.2	2.6
9-Sep	Z	2.4	2.3	2.5	3.1	2.6	2.5	2.6	2.5	2.4	2.2	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.3	3.1
10-Sep	2.2	Z	2.0	2.1	2.3	2.1	2.1	2.3	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	2.0	2.0	2.0	2.1	2.3
11-Sep	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
12-Sep	2.0	2.0	2.0	Z	2.1	2.1	2.1	2.3	2.7	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.3	2.5	2.4	2.1	2.7
13-Sep	2.5	2.4	2.1	2.1	Z	2.2	2.1	2.1	2.2	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.3	2.2	2.1	2.1	2.1	2.5
14-Sep	2.1	2.1	2.1	2.0	2.0	Z	2.0	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	2.0	2.0	2.1	2.1
15-Sep	Z	2.0	2.1	2.2	2.1	2.1	2.2	2.3	2.3	2.3	2.4	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.4	2.1	2.1	2.4
16-Sep	2.0	Z	2.1	2.0	2.0	2.2	2.1	2.1	2.3	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.5	2.5	2.7	2.3	2.1	2.2	2.7
17-Sep	2.4	2.6	Z	2.3	2.5	2.6	2.5	2.3	2.7	3.0	2.5	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.3	2.3	3.0
18-Sep	2.4	2.2	2.2	Z	2.6	2.4	2.4	2.2	2.6	2.5	2.1	2.0	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.4	2.2	2.4	2.4	2.3	2.6
19-Sep	2.2	2.2	2.7	3.2	Z	2.3	2.3	2.5	2.3	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.2	2.2	3.2
20-Sep	2.2	2.2	2.2	2.3	2.2	Z	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	2.2	2.4	2.5	2.4	2.1	2.5
21-Sep	Z	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.3	2.3	2.1	2.1	2.5	2.4	2.7	2.4	2.7	2.6	2.5	2.7	2.3	2.7
22-Sep	2.8	Z	2.3	2.2	2.8	2.2	2.2	2.3	2.7	2.7	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3	2.2	2.2	2.8
23-Sep	2.6	2.5	Z	2.0	2.0	2.0	2.1	2.1	2.2	C	C	C	C	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.6	2.4	2.2	2.6
24-Sep	2.2	2.3	2.4	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	2.2	2.1	2.1	2.3	2.4	2.5	2.6	2.2	2.6
25-Sep	2.6	3.6	3.0	2.9	Z	2.6	2.7	2.6	2.4	2.4	2.3	2.4	2.3	2.2	2.1	M	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.4	3.6
26-Sep	2.1	2.1	2.1	2.0	2.0	Z	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	2.0	2.0	2.0	2.0	2.0	2.0	2.2
27-Sep	Z	2.1	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	2.1	2.3	2.3	2.6	2.9	2.5	2.6	2.2	2.9
28-Sep	2.5	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	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.1	2.5
29-Sep	2.1	2.1	Z	2.6	2.5	2.3	2.5	2.4	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	2.0	2.0	2.0	2.1	2.6
30-Sep	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	2.0	2.1	2.1	2.0	2.1
	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	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	Diurnal Average	
	2.8	3.6	3.0	3.2	3.1	3.2	3.2	2.9	2.7	3.0	2.7	3.7	3.2	2.3	2.2	2.2	2.5	2.4	2.7	2.5	2.7	2.9	2.7	2.9	Diurnal Maximum	

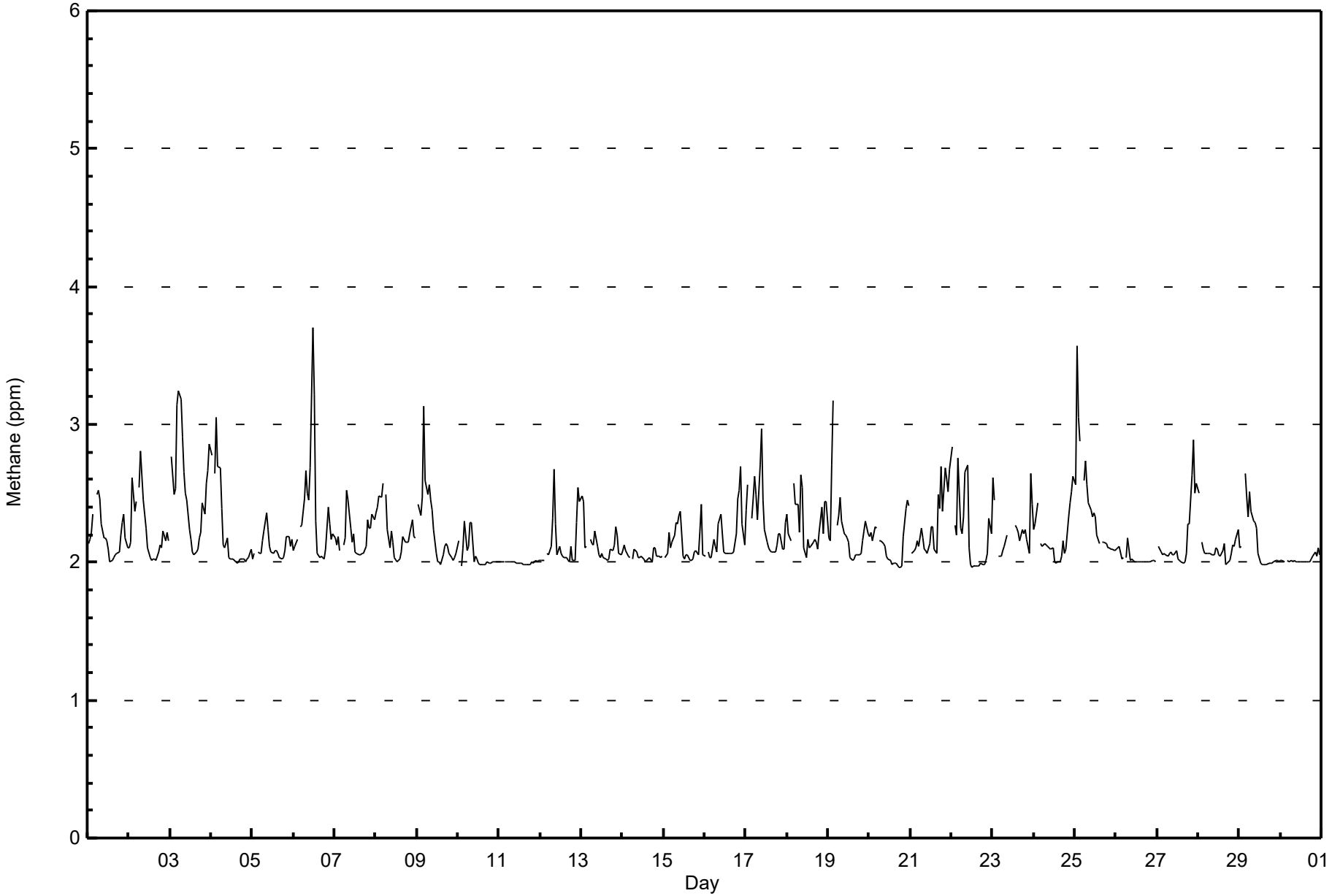
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Fort Hills - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	212	30.95	30.95
2.1 - 3.0	464	67.74	98.69
3.1 - 10.0	9	1.31	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Fort Hills - September 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	2	0	1	0	1	4	9	13	12	20	11	36	23	23	30	212
2.1 - 3.0	61	26	3	3	6	4	31	79	96	44	49	14	7	7	20	14	464
3.1 - 10.0	3	0	0	0	0	0	0	2	1	0	2	0	0	0	0	1	9
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	91	28	3	4	6	5	35	90	110	56	71	25	43	30	43	45	685

Total Number of Valid Hours: 685

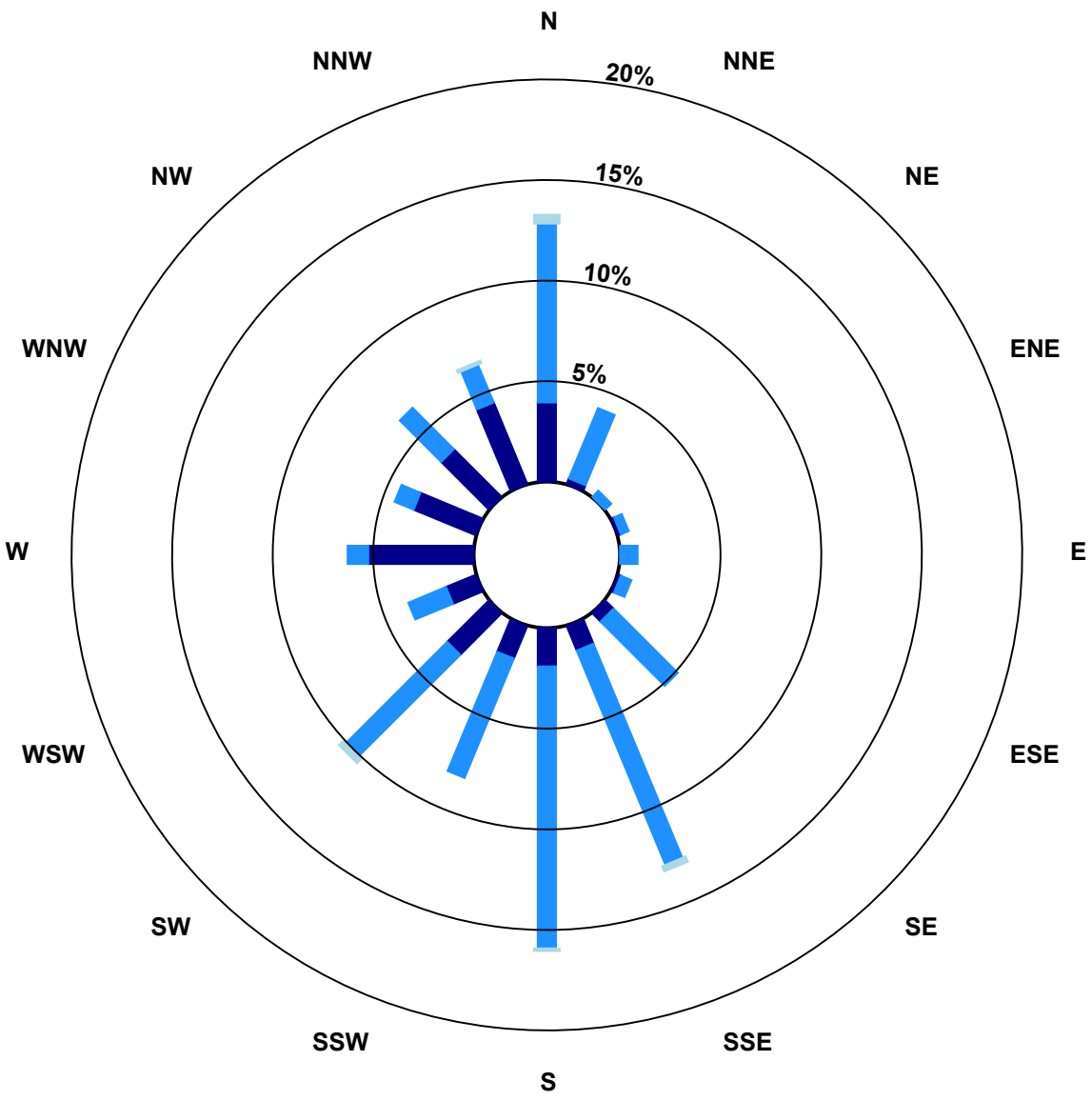
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Methane (CH_4) - ppm

Fort Hills



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

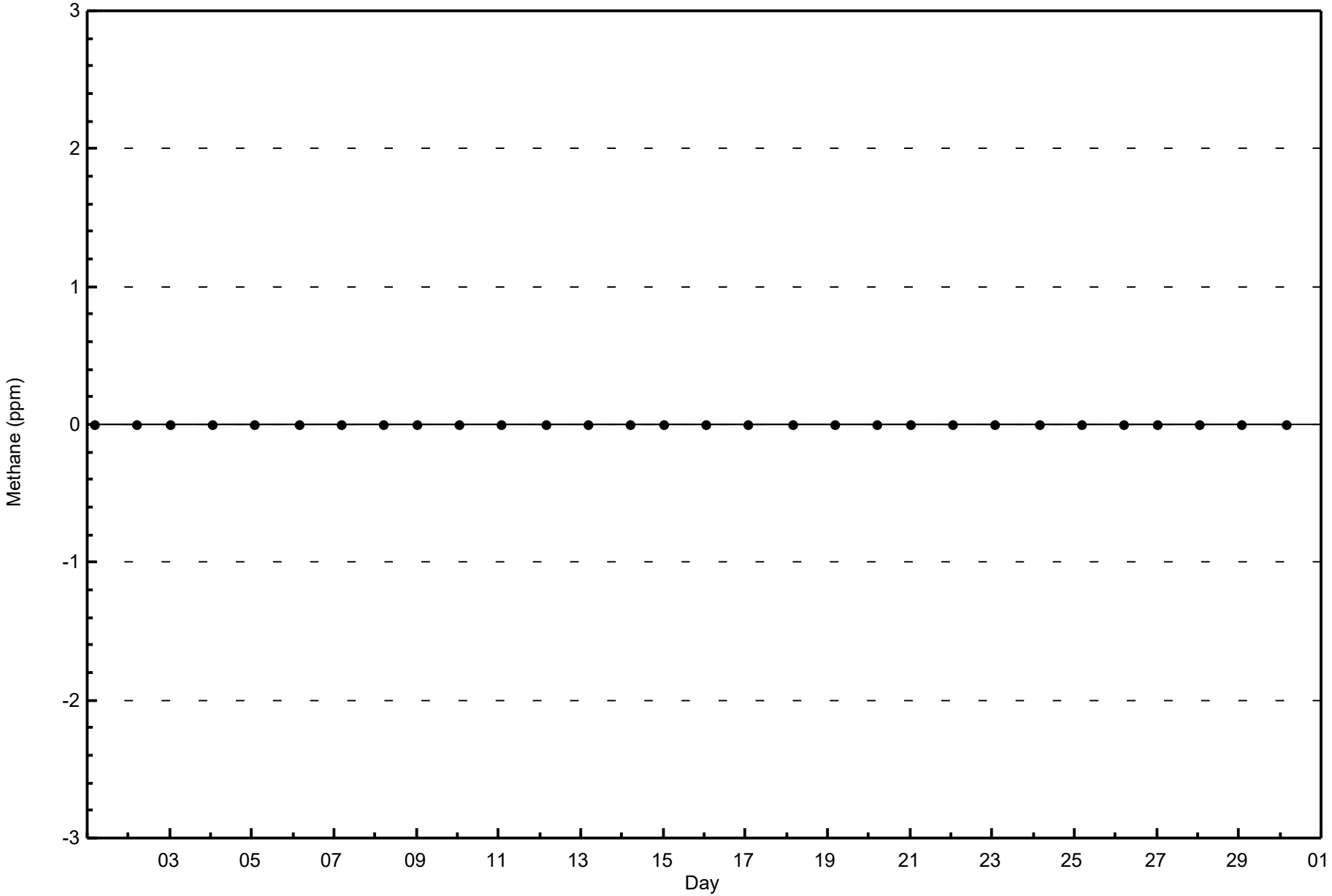
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Fort Hills - September 2026

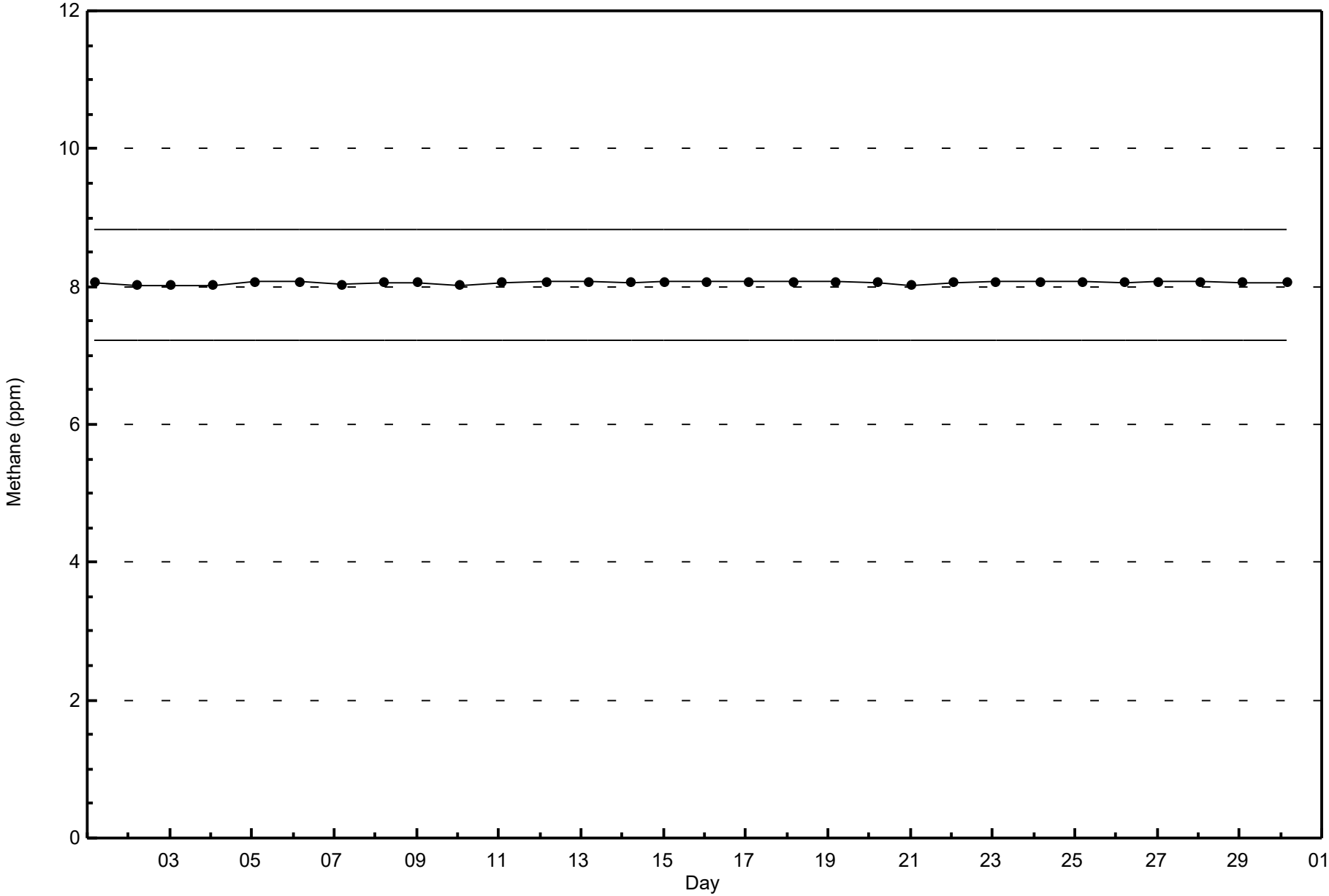


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Fort Hills - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Fort Hills - September 2026

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

Maximum Value: 176.2 ppb on Sep 25 02:00

Maximum Daily Average: 40.1 ppb on Sep 3

Minimum Value: 0.0 ppb on Sep 10 18:00

Minimum Daily Average: 0.1 ppb on Sep 30

Maximum Diurnal Average: 17.1 ppb at hour 2

Minimum Diurnal Average: 1.6 ppb at hour 16

Monthly Average: 8.00 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.2 Median = 1.4 Q_3 = 6.6 P_{90} = 24.3 P_{99} = 82.9

Hours in Service:	720
Hours of Data:	684
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-Sep	0.3	0.2	Z	8.8	10.1	11.2	12.9	11.6	5.2	4.9	4.4	2.6	2.4	0.4	0.6	1.1	1.2	1.6	2.9	17.7	37.9	28.2	12.5	9.4	8.2	37.9
2-Sep	9.7	26.3	28.7	Z	14.7	30.6	54.5	103.7	45.8	24.6	11.2	1.7	1.5	1.3	1.2	1.5	1.4	3.1	1.9	1.4	6.6	7.2	16.2	2.2	17.3	103.7
3-Sep	5.5	59.3	44.9	43.4	Z	116.2	159.1	110.5	79.7	51.3	28.5	9.4	4.7	1.2	0.3	0.2	0.4	1.5	3.9	27.6	6.3	34.2	66.9	67.6	40.1	159.1
4-Sep	47.3	43.0	45.2	60.6	43.6	Z	11.5	6.1	7.0	11.6	5.6	6.6	5.4	5.4	2.9	2.2	1.4	2.0	1.5	1.4	0.3	1.2	0.6	5.8	13.8	60.6
5-Sep	Z	0.2	8.0	1.8	0.7	3.6	18.6	22.2	22.1	12.1	5.6	2.7	3.3	4.0	2.5	1.7	0.7	0.3	0.5	9.2	24.1	2.8	0.3	0.2	6.4	24.1
6-Sep	0.0	Z	2.0	5.8	0.4	1.1	18.4	35.5	15.2	3.1	15.3	60.5	39.8	11.2	2.3	1.0	1.0	0.4	0.2	0.6	18.8	5.7	8.0	16.4	11.4	60.5
7-Sep	14.2	15.7	Z	0.5	4.8	0.4	2.3	29.1	29.5	9.4	5.8	5.8	2.7	1.7	1.4	1.0	0.7	0.5	0.4	6.1	2.4	1.0	10.1	7.2	6.6	29.5
8-Sep	5.3	4.1	2.9	Z	7.2	33.5	36.2	12.0	2.7	24.3	12.7	1.2	0.9	1.1	0.8	3.1	8.9	5.3	2.2	0.9	1.2	2.1	1.9	1.0	7.5	36.2
9-Sep	9.6	10.2	13.0	14.4	Z	5.2	3.0	5.2	3.9	4.2	3.1	0.6	0.3	0.6	0.8	1.1	1.6	1.4	0.5	0.1	0.2	0.2	0.1	0.3	3.5	14.4
10-Sep	1.2	0.0	0.1	0.3	1.9	Z	1.7	7.5	8.4	0.5	0.3	0.6	0.2	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	1.0	8.4
11-Sep	Z	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.2
12-Sep	0.0	Z	0.0	0.2	0.1	0.0	1.2	4.6	32.4	10.9	1.5	3.4	1.8	1.5	1.3	1.4	0.6	0.3	0.4	0.0	0.1	5.5	14.6	6.3	3.8	32.4
13-Sep	9.8	6.1	Z	0.2	1.9	0.3	0.3	1.2	4.8	1.6	0.7	0.3	1.6	1.0	0.7	0.5	0.5	2.2	1.3	2.5	6.8	13.8	3.1	0.4	2.7	13.8
14-Sep	0.3	0.3	0.9	Z	1.1	2.4	0.9	7.9	6.5	2.4	2.6	2.6	1.3	0.5	0.8	2.0	1.2	0.1	4.5	4.9	0.0	0.1	0.1	0.1	1.9	7.9
15-Sep	0.1	0.1	0.2	2.0	Z	0.5	2.6	5.2	13.6	14.6	16.4	1.5	1.0	1.5	1.0	0.1	0.1	0.2	0.2	0.1	0.2	11.1	15.4	1.0	3.9	16.4
16-Sep	0.5	6.3	0.2	0.1	0.1	Z	3.7	3.4	16.9	21.5	7.7	1.9	1.6	2.4	1.7	1.6	1.0	0.5	5.2	34.2	55.1	57.7	13.3	1.5	10.4	57.7
17-Sep	Z	23.9	98.4	30.6	39.8	55.4	39.3	21.5	32.0	36.3	15.4	6.0	2.0	1.0	0.7	0.3	0.2	0.2	0.4	0.4	2.6	0.3	0.5	4.5	17.9	98.4
18-Sep	3.6	Z	2.0	2.9	16.7	19.0	53.8	37.0	46.6	27.2	7.5	3.2	13.7	5.8	5.8	5.4	4.5	2.3	0.6	0.5	0.8	0.3	25.5	36.6	14.0	53.8
19-Sep	3.5	3.4	Z	35.9	3.3	2.3	4.9	10.3	6.2	3.2	3.4	2.8	2.6	0.5	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.1	0.0	0.1	3.6	35.9
20-Sep	0.1	0.1	0.1	Z	2.5	0.1	0.2	0.5	0.6	0.7	0.1	0.1	0.6	0.3	0.4	0.5	0.6	0.1	0.1	0.2	0.2	0.4	7.8	9.2	1.1	9.2
21-Sep	0.1	0.1	0.1	0.1	Z	0.2	1.1	0.7	0.6	0.6	0.5	1.7	5.0	5.9	2.4	1.5	30.1	9.7	37.7	10.1	9.7	4.4	3.1	12.3	6.0	37.7
22-Sep	44.8	31.9	1.3	0.6	65.0	Z	0.9	6.8	29.8	38.8	7.5	1.8	0.2	0.4	0.5	0.2	0.1	0.1	0.1	0.2	0.1	1.1	7.2	1.1	10.5	65.0
23-Sep	Z	14.0	2.0	0.0	0.0	0.0	0.9	1.7	5.2	15.6	11.0	5.0	7.9	16.1	16.4	16.2	6.6	24.3	42.6	7.4	2.4	0.1	16.8	8.4	9.6	42.6
24-Sep	6.0	Z	10.7	1.1	0.3	0.1	0.1	0.6	1.1	1.0	2.1	3.5	0.4	0.4	0.8	0.7	1.2	1.2	0.3	0.9	3.5	9.9	17.0	24.1	3.8	24.1
25-Sep	20.8	176.2	Z	112.1	57.2	42.2	59.7	33.5	16.9	14.8	C	C	C	C	C	C	1.6	1.2	1.7	0.9	2.1	1.8	0.7	1.4	--	176.2
26-Sep	2.1	1.1	1.7	Z	0.1	1.1	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.3	2.1
27-Sep	0.1	0.1	0.0	0.1	Z	0.5	0.9	5.4	6.2	4.8	3.6	2.6	1.3	0.6	0.6	0.1	0.3	0.8	2.2	2.9	20.0	26.0	21.0	22.5	5.3	26.0
28-Sep	13.3	4.1	0.2	0.2	0.1	Z	0.2	0.4	0.4	0.4	3.5	3.0	1.5	1.0	1.1	1.5	0.2	0.2	0.2	0.1	0.1	0.3	1.7	0.6	1.5	13.3
29-Sep	Z	0.5	27.1	10.2	3.4	0.1	0.2	0.6	1.3	3.2	3.0	1.2	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	27.1
30-Sep	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.0	0.1	0.2
	7.9	17.1	11.6	13.3	11.0	13.1	16.3	16.2	14.7	11.5	6.2	4.6	3.6	2.3	1.6	1.6	2.2	2.0	3.7	4.3	6.7	7.2	8.8	8.0	Diurnal Average	
	47.3	176.2	98.4	112.1	65.0	116.2	159.1	110.5	79.7	51.3	28.5	60.5	39.8	16.1	16.4	16.2	30.1	24.3	42.6	34.2	55.1	57.7	66.9	67.6	Diurnal Maximum	

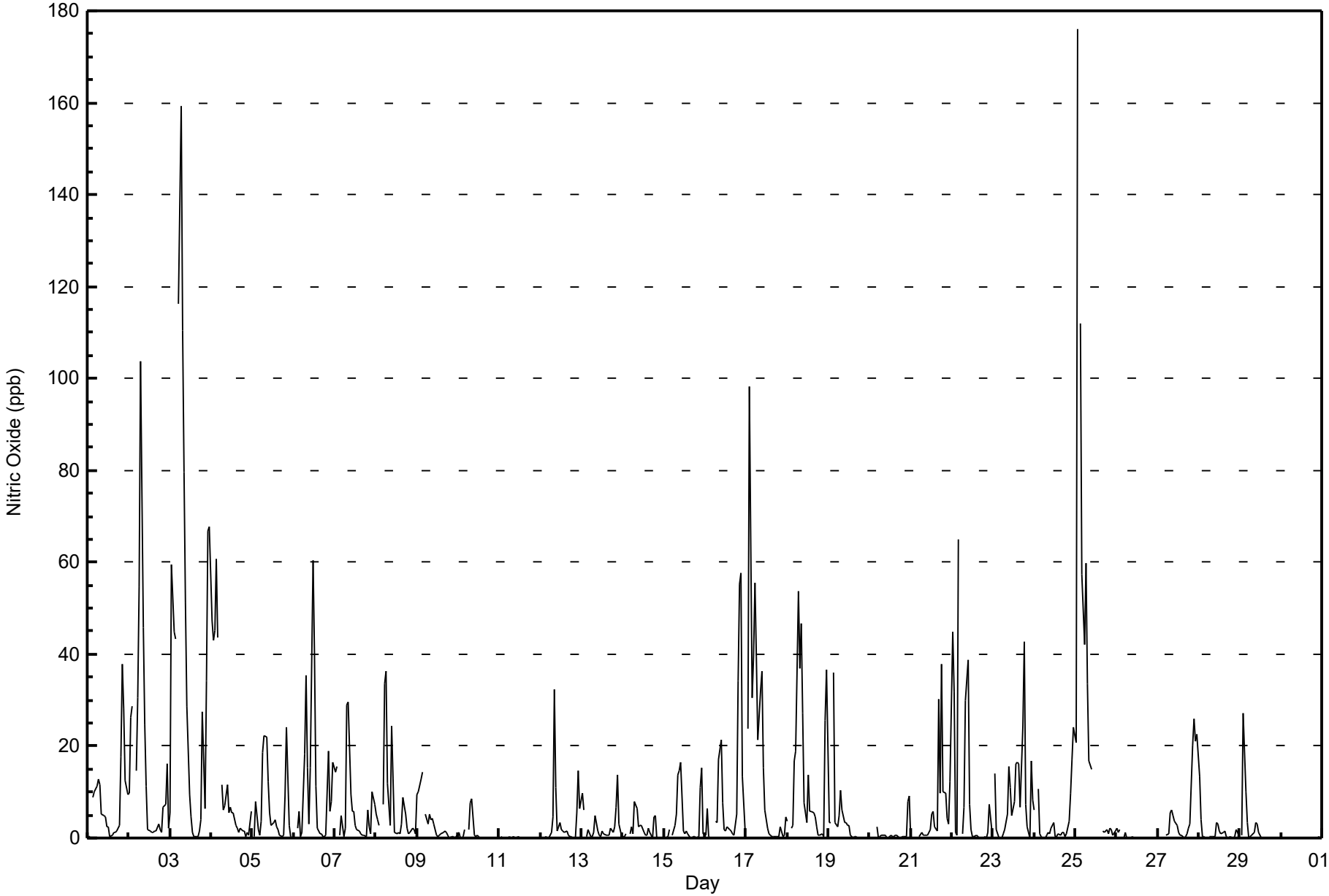
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Fort Hills - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	604	88.30	88.30
21 - 40	47	6.87	95.18
11 - 80	26	3.80	98.98
81 - 159	6	0.88	99.85
> 159	1	0.15	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Fort Hills - September 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	19	3	4	5	5	27	87	100	53	64	26	44	28	39	35	604
21 - 40	11	2	1	0	0	0	3	9	4	2	6	0	0	2	2	5	47
11 - 80	14	2	0	0	1	0	4	2	0	1	1	0	0	0	0	1	26
81 - 159	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	6
> 159	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Totals	92	23	4	4	6	5	34	98	105	56	71	26	44	30	41	45	684

Total Number of Valid Hours: 684

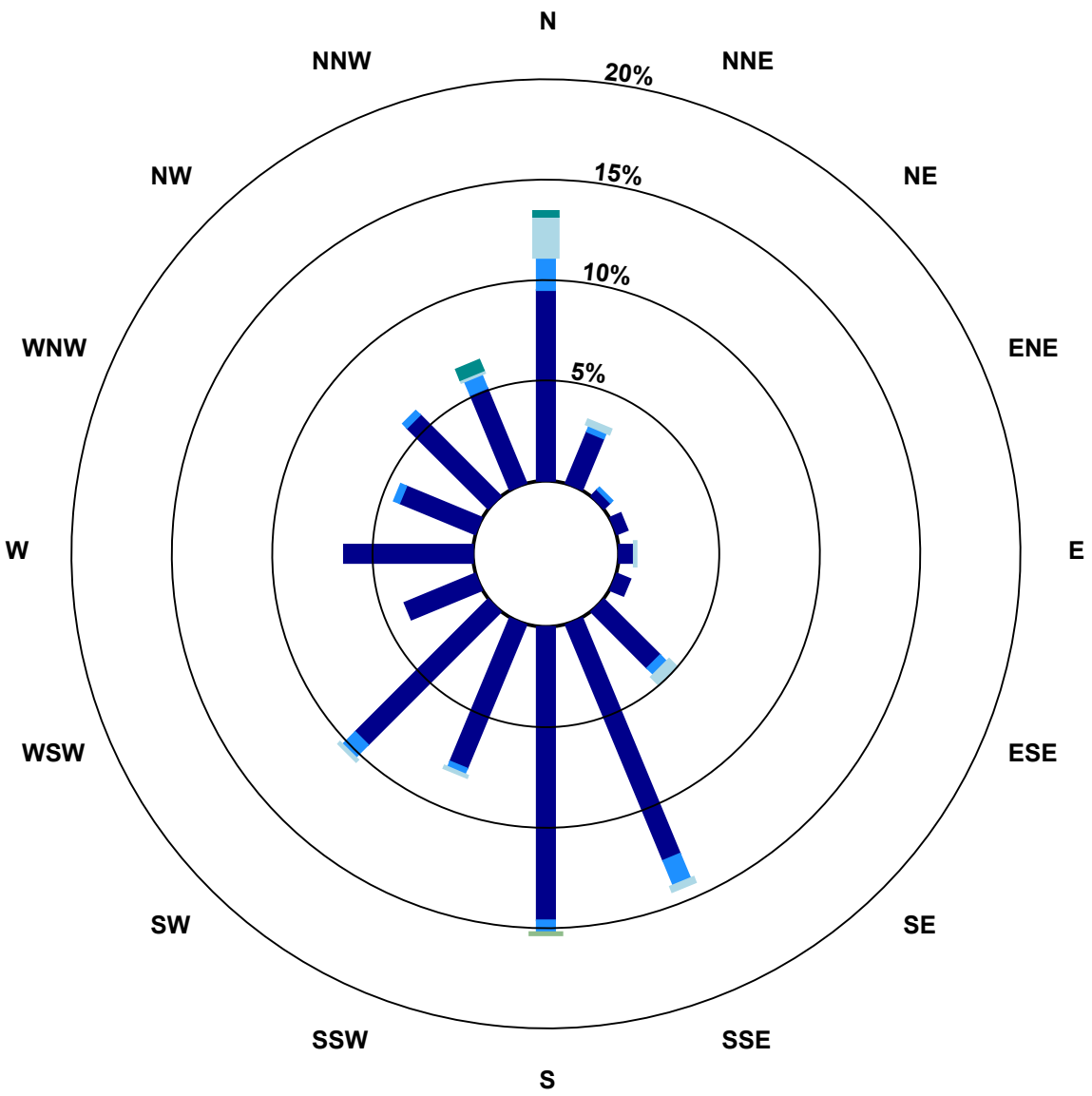
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Fort Hills



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

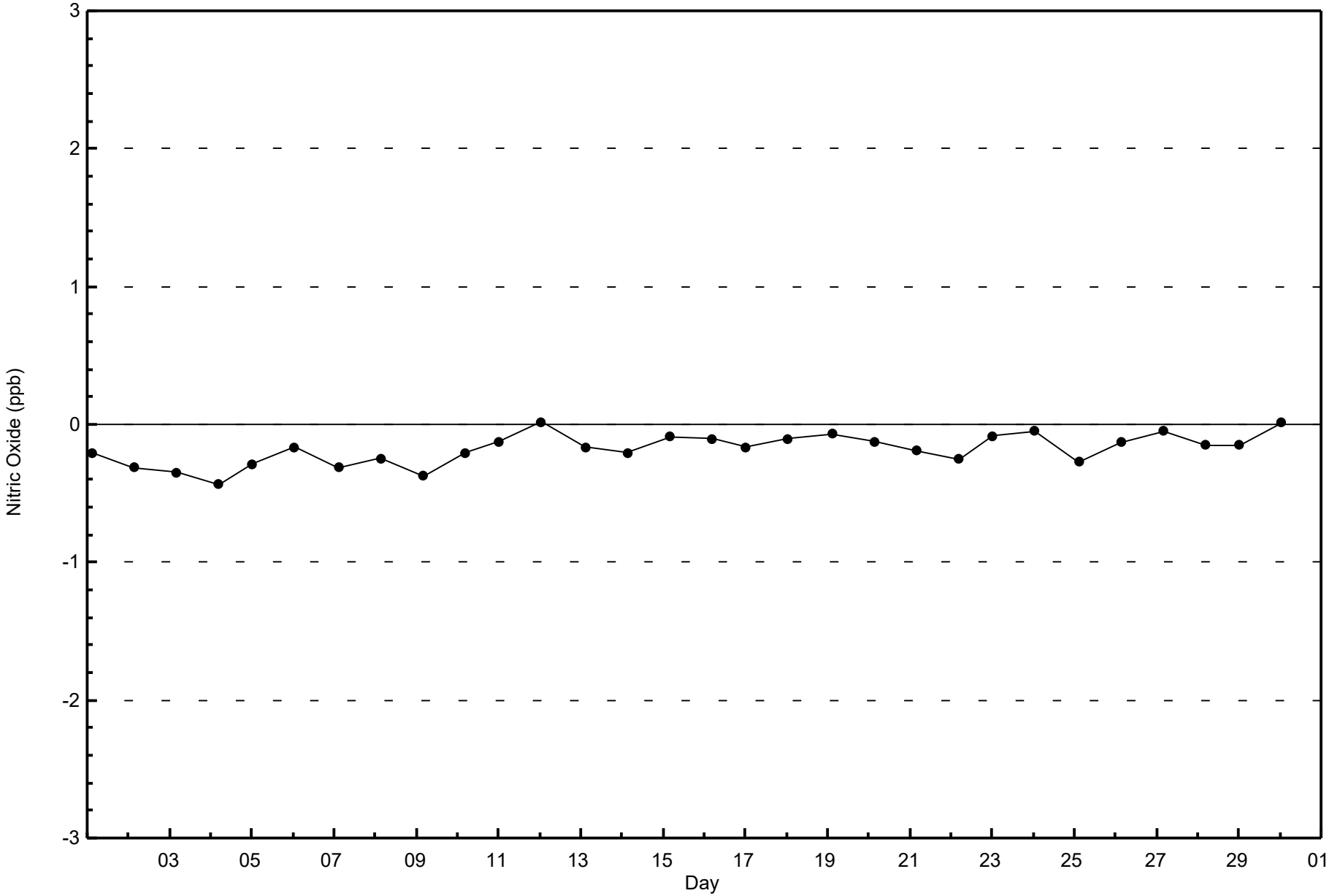
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Fort Hills - September 2026

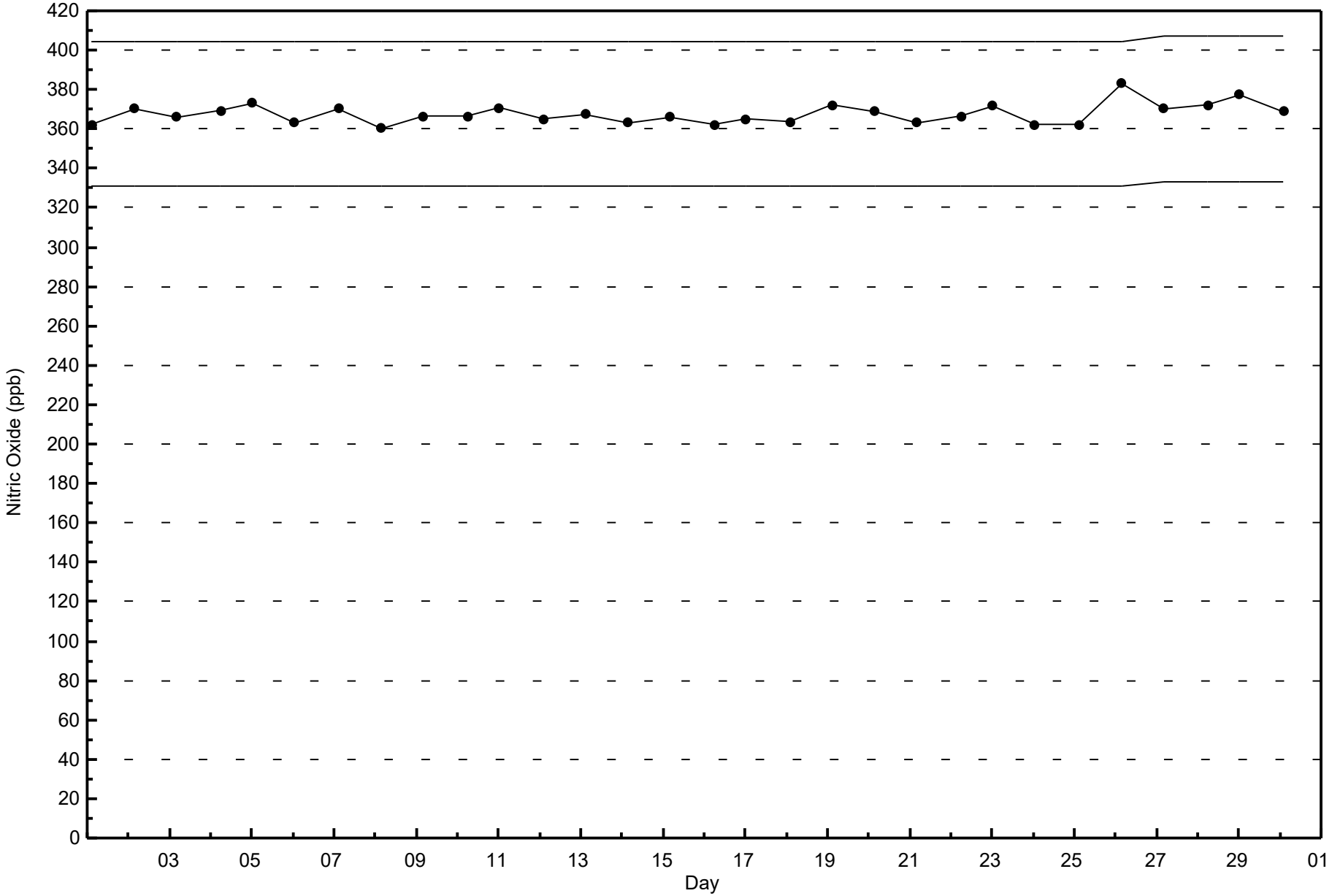


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Fort Hills - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Fort Hills - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 39.2 ppb on Sep 21 17:00 Maximum Daily Average: 14.6 ppb on Sep 2

Minimum Value: 0.0 ppb on Sep 30 01:00 Minimum Daily Average: 0.2 ppb on Sep 11
Maximum Diurnal Average: 11.8 ppb at hour 23 Minimum Diurnal Average: 3.3 ppb at hour 15
Monthly Average: 7.61 ppb Percentiles: P_1 = 0.1 P_{10} = 0.3 Q_1 = 1.6 Median = 5.6 Q_3 = 12.2 P_{90} = 18.6 P_{99} = 28.0

Hours in Service:	720
Hours of Data:	684
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-Sep	1.5	0.5	Z	5.5	6.5	5.8	7.2	5.5	6.0	6.4	5.7	4.8	5.4	1.2	2.1	4.3	5.3	8.3	16.7	22.8	25.5	25.5	22.9	21.1	9.4	25.5
2-Sep	20.5	20.5	17.6	Z	11.8	12.4	11.7	19.6	19.1	17.7	13.3	4.1	4.8	4.2	3.4	4.7	6.0	12.4	13.3	15.8	26.1	27.9	28.4	21.3	14.6	28.4
3-Sep	22.1	25.2	22.0	19.1	Z	21.4	21.1	18.5	20.1	19.9	18.5	14.3	10.3	3.3	1.0	1.0	1.8	4.3	10.9	16.4	12.2	17.1	14.6	14.1	14.3	25.2
4-Sep	13.4	13.3	13.1	13.6	13.0	Z	12.3	8.9	7.9	7.8	5.9	5.8	6.3	6.3	4.1	3.9	3.2	7.7	7.6	6.9	1.7	8.1	4.5	14.1	8.2	14.1
5-Sep	Z	0.6	15.4	10.0	2.9	10.8	14.5	13.7	13.0	9.2	6.2	3.7	4.8	5.9	4.2	3.3	1.6	1.5	5.4	21.0	20.8	6.7	2.2	0.6	7.7	21.0
6-Sep	0.4	Z	5.0	8.1	4.3	5.7	8.2	15.3	9.2	7.5	9.6	17.5	15.3	9.8	3.0	3.4	2.7	1.7	1.7	3.8	22.0	16.0	15.1	16.0	8.8	22.0
7-Sep	15.9	15.8	Z	4.1	8.6	3.5	5.5	10.0	9.8	5.9	4.9	6.1	4.0	3.5	3.4	2.8	2.9	3.1	4.5	13.7	12.1	10.6	17.3	14.6	7.9	17.3
8-Sep	12.2	10.0	6.4	Z	5.8	10.1	8.9	6.5	3.9	14.3	10.5	1.9	1.6	2.2	1.7	7.1	19.6	19.5	16.6	16.0	13.8	16.8	8.9	3.3	9.5	19.6
9-Sep	6.6	8.3	5.6	9.2	Z	9.5	6.3	5.3	4.0	3.3	2.5	0.7	0.3	1.1	1.8	5.8	9.7	10.6	8.0	8.2	7.3	5.6	6.7	10.0	5.9	10.6
10-Sep	12.6	0.6	0.3	7.8	20.2	Z	5.3	12.6	13.3	2.0	1.7	2.5	0.3	0.3	0.3	0.4	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.2	3.5	20.2
11-Sep	Z	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.3	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	0.4
12-Sep	0.3	Z	0.5	0.6	1.2	0.7	4.5	7.2	11.2	6.0	2.0	4.6	3.8	2.8	2.6	3.3	1.9	1.4	6.1	0.9	2.2	14.8	20.0	18.6	5.1	20.0
13-Sep	18.9	17.8	Z	3.8	13.1	5.1	1.8	2.8	5.5	2.0	1.0	0.6	3.6	2.3	2.2	2.1	2.6	7.7	6.6	9.3	12.6	12.8	7.6	6.1	6.4	18.9
14-Sep	10.3	11.8	13.6	Z	7.6	13.3	4.2	11.5	10.8	5.6	5.6	4.5	2.5	1.0	2.0	4.6	4.7	0.4	12.3	14.6	1.5	0.2	0.2	0.7	6.2	14.6
15-Sep	0.3	0.4	1.7	6.2	Z	4.4	6.4	6.5	7.8	7.8	9.9	2.5	2.4	2.6	3.1	0.3	1.1	1.5	0.5	1.9	3.5	7.8	18.6	10.2	4.7	18.6
16-Sep	10.6	8.8	1.2	0.2	0.2	Z	7.0	3.4	11.4	14.3	8.9	3.5	4.0	3.2	2.4	2.8	3.4	3.1	12.9	21.5	21.5	19.1	15.2	6.6	8.1	21.5
17-Sep	Z	13.7	16.7	10.5	12.1	11.6	11.0	8.4	10.0	13.5	9.0	6.1	6.2	3.2	2.0	1.0	0.9	1.2	5.3	9.2	9.4	3.8	5.6	14.2	8.0	16.7
18-Sep	13.8	Z	11.2	12.2	11.7	13.0	18.6	15.3	20.4	18.3	8.3	5.1	14.4	9.8	11.5	14.0	13.9	12.5	7.1	10.2	7.4	4.2	11.5	12.2	12.0	20.4
19-Sep	8.4	9.4	Z	17.5	10.5	9.6	8.8	9.4	6.4	4.9	4.7	4.4	5.4	1.4	0.7	1.8	2.0	1.8	2.8	3.2	2.7	2.9	3.6	7.2	5.6	17.5
20-Sep	4.4	6.9	3.6	Z	8.2	2.9	3.5	1.8	1.2	1.1	0.3	0.3	1.4	0.9	1.5	2.2	2.6	0.3	0.5	2.5	12.2	17.4	20.6	17.2	4.9	20.6
21-Sep	1.8	0.8	0.6	0.7	Z	3.5	6.6	2.0	1.1	0.9	0.9	3.2	9.0	16.0	10.7	9.5	39.2	30.8	34.4	28.3	25.7	25.0	21.7	23.3	12.9	39.2
22-Sep	21.3	17.2	9.8	7.5	16.4	Z	4.2	6.6	9.3	11.6	9.0	2.4	0.1	1.0	1.5	0.4	0.3	0.6	0.2	1.1	3.0	7.1	20.4	12.0	7.1	21.3
23-Sep	Z	17.1	9.8	0.9	2.3	1.3	3.9	3.8	5.5	8.5	8.4	5.7	9.6	16.1	21.6	27.0	22.3	29.9	28.7	20.8	9.5	5.3	18.6	10.4	12.5	29.9
24-Sep	14.6	Z	14.3	6.7	4.6	3.1	1.1	1.1	1.1	0.9	2.2	4.8	0.7	0.4	1.8	1.8	4.8	10.6	4.8	6.6	19.1	22.0	20.1	18.4	7.2	22.0
25-Sep	14.9	27.3	Z	23.9	23.1	20.6	21.2	21.0	19.7	18.1	C	C	C	C	C	C	10.7	12.6	14.9	12.9	16.2	16.2	12.6	15.1	--	27.3
26-Sep	16.4	12.8	16.6	Z	0.5	6.5	0.6	1.9	0.5	0.6	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.5	0.5	0.1	2.6	16.6
27-Sep	1.7	4.9	3.4	5.0	Z	8.5	7.4	9.0	5.9	4.4	3.7	3.2	2.2	1.4	1.4	0.4	1.3	7.1	15.2	19.2	23.8	23.4	22.7	21.6	8.6	23.8
28-Sep	21.2	13.2	8.7	5.5	3.2	Z	1.3	1.1	0.7	0.3	3.4	4.2	3.1	3.2	6.0	10.6	0.5	1.6	4.6	4.1	6.0	9.8	12.5	14.3	6.0	21.2
29-Sep	Z	6.4	22.7	13.6	9.9	7.5	6.7	7.3	6.7	9.8	8.4	4.5	0.3	0.3	0.2	0.1	0.3	0.3	0.4	0.3	1.5	1.7	0.8	0.1	4.8	22.7
30-Sep	0.0	Z	0.3	0.2	0.1	0.1	0.3	0.7	0.4	0.2	0.3	0.2	0.3	0.1	0.1	0.2	0.2	0.1	0.5	0.7	0.6	1.0	1.7	0.7	0.4	1.7
	10.6	10.5	8.8	7.7	7.9	7.6	7.3	7.9	8.1	7.4	5.7	4.2	4.2	3.6	3.3	4.1	5.5	6.4	8.1	9.7	10.7	11.0	11.8	10.8	Diurnal Average	
	22.1	27.3	22.7	23.9	23.1	21.4	21.2	21.0	20.4	19.9	18.5	17.5	15.3	16.1	21.6	27.0	39.2	30.8	34.4	28.3	26.1	27.9	28.4	23.3	Diurnal Maximum	

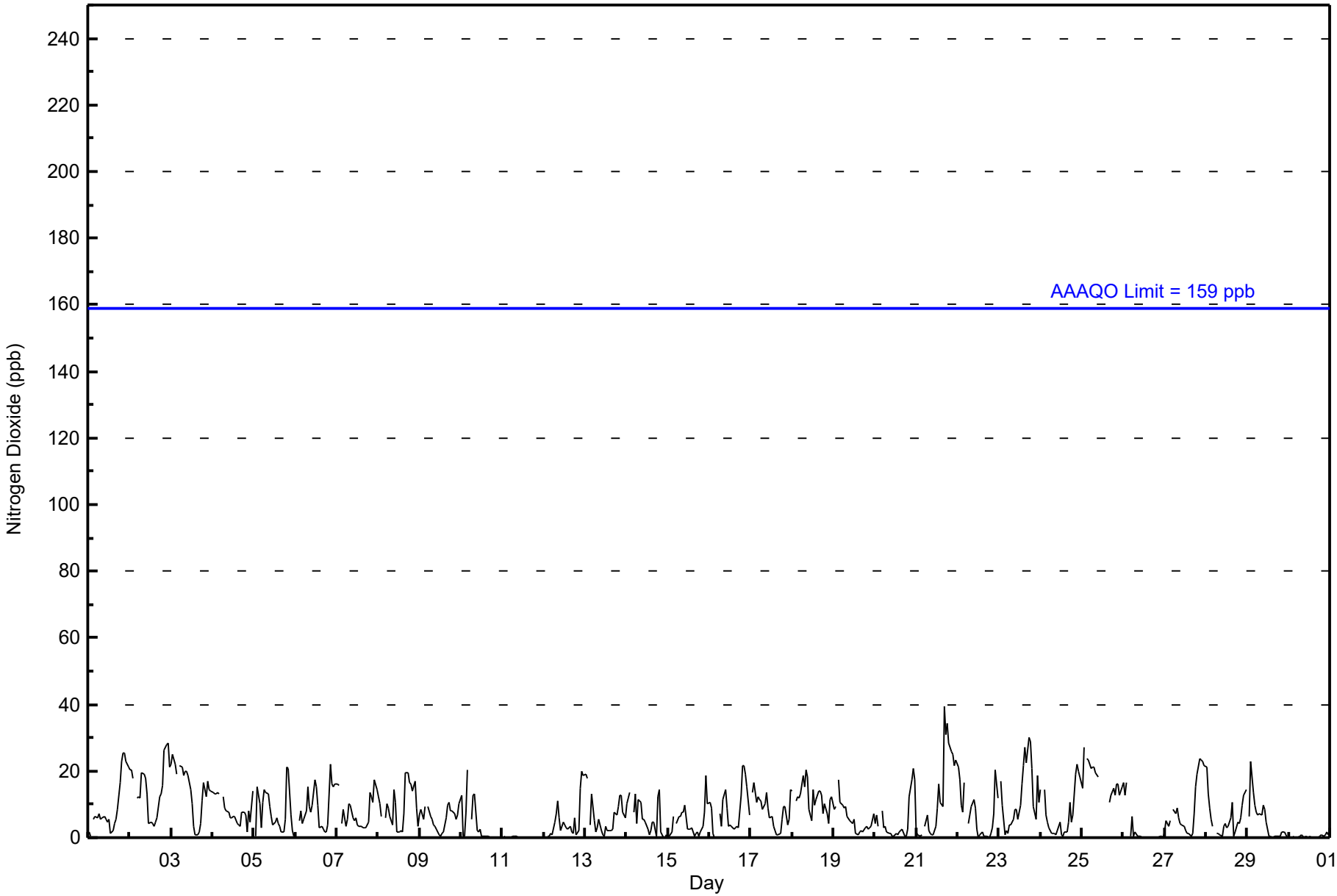
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Fort Hills - September 2026



Nitrogen Dioxide (NO_2) - ppb
Fort Hills - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	635	92.84	92.84
21 - 40	49	7.16	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Fort Hills - September 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	84	22	4	4	6	5	21	83	103	53	68	26	43	30	41	42	635
21 - 40	8	1	0	0	0	0	13	15	2	3	3	0	1	0	0	3	49
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	92	23	4	4	6	5	34	98	105	56	71	26	44	30	41	45	684

Total Number of Valid Hours: 684

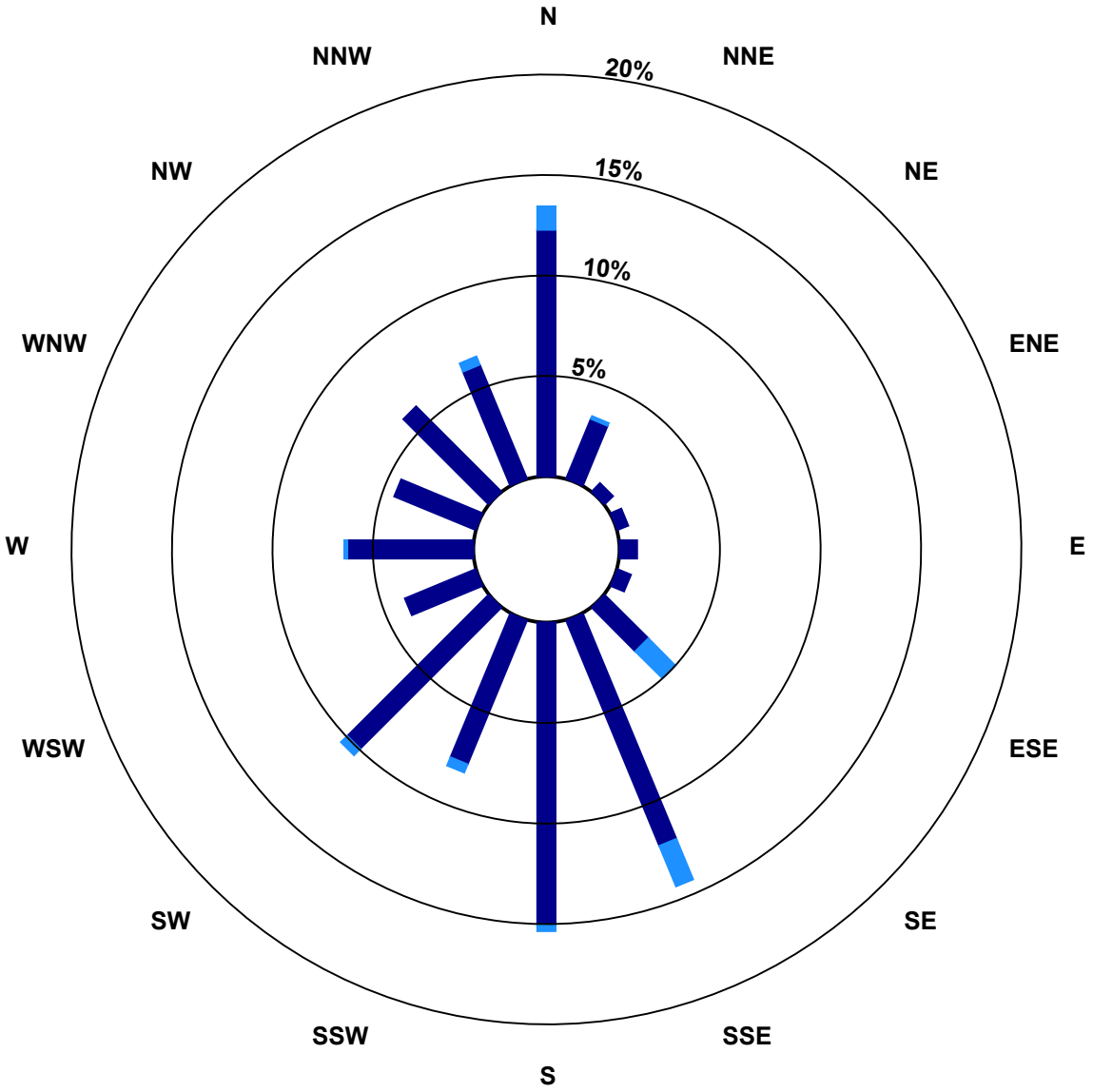
Total Number of Hours: 720

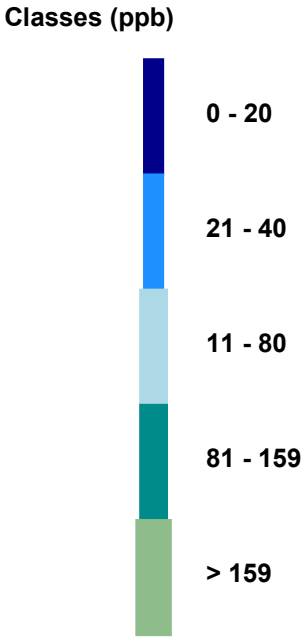
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Fort Hills





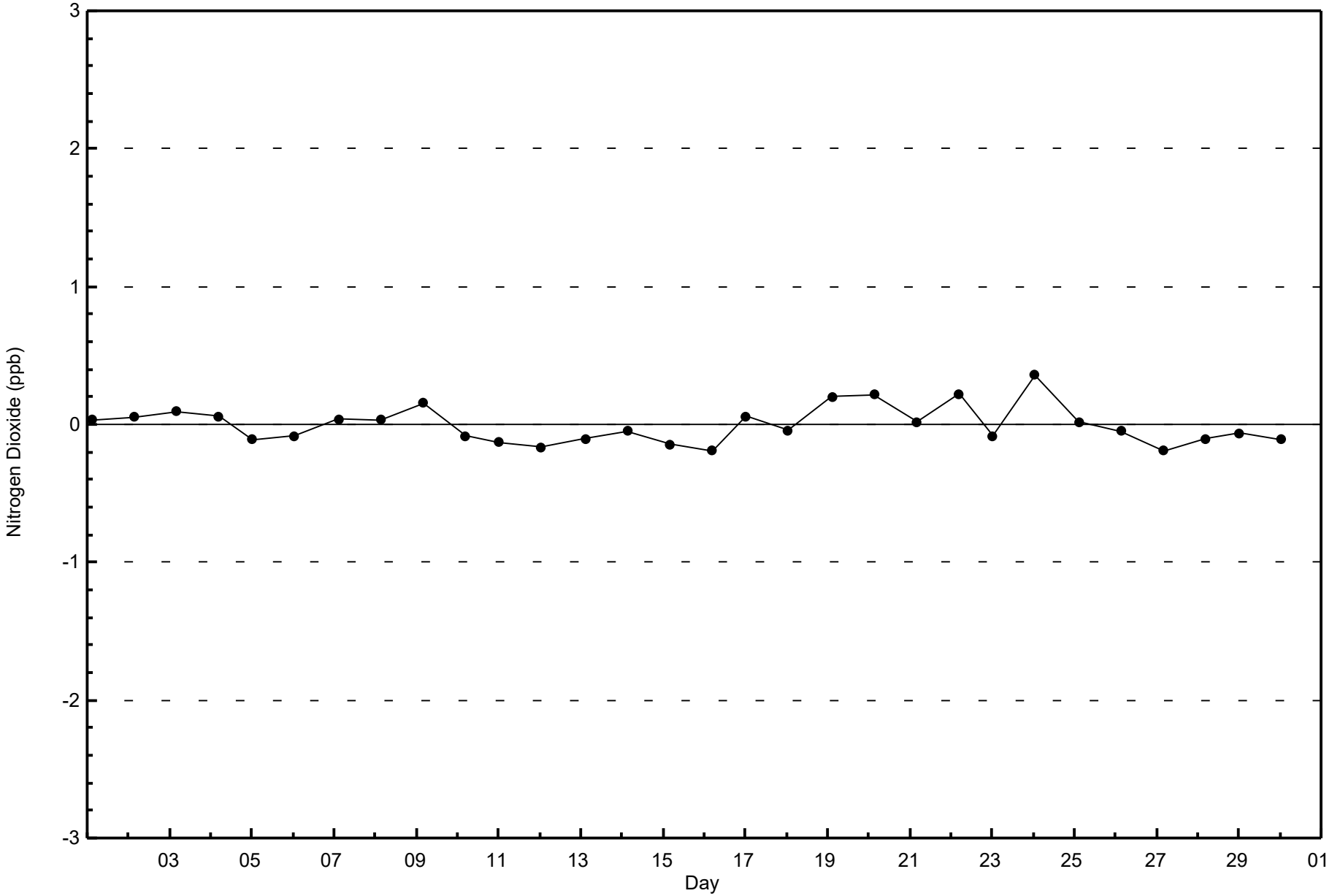
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Fort Hills - September 2026

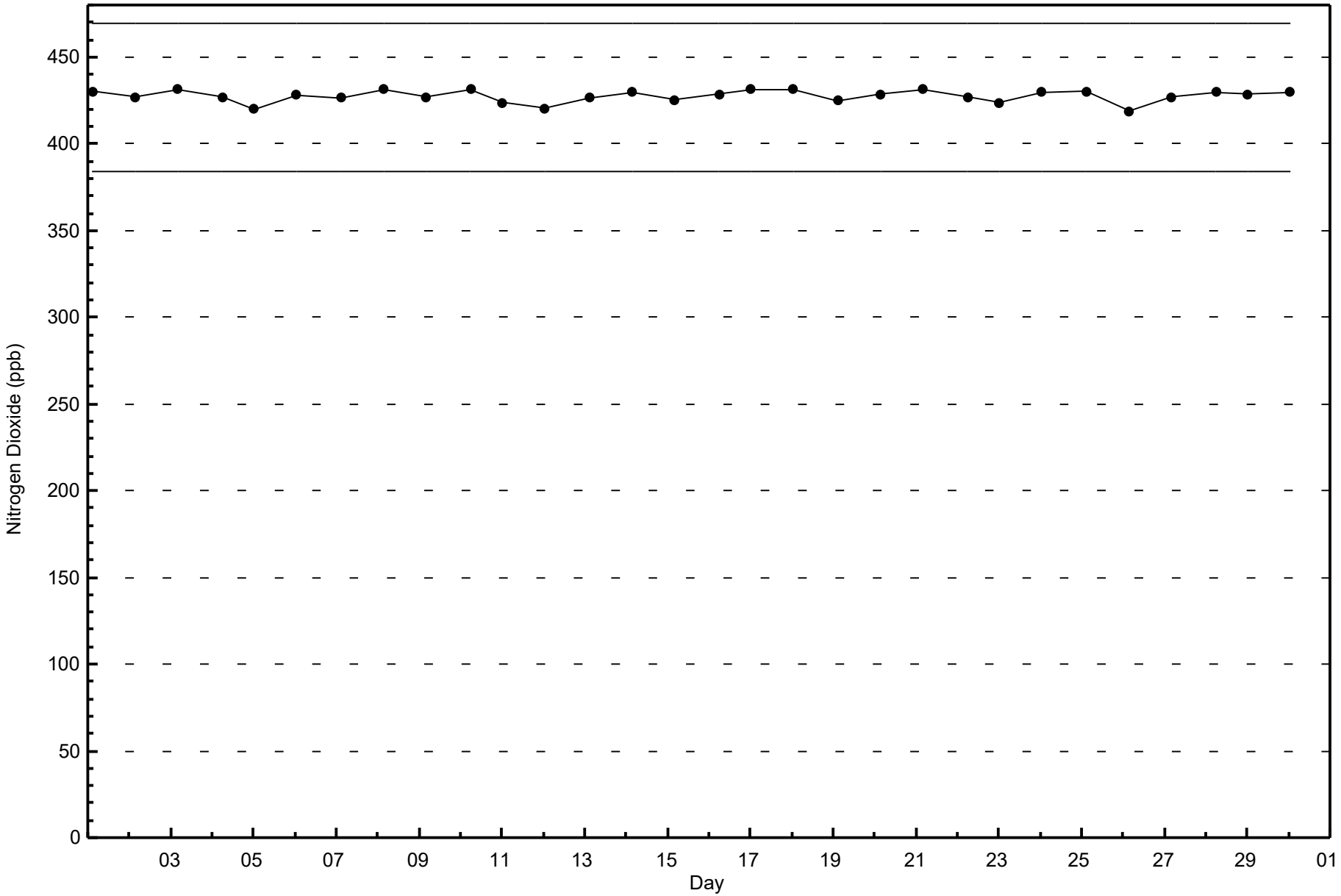


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Fort Hills - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Fort Hills - September 2026

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

Maximum Value: 203.5 ppb on Sep 25 02:00 Maximum Daily Average: 54.4 ppb on Sep 3

Minimum Value: 0.0 ppb on Sep 30 01:00 Minimum Daily Average: 0.3 ppb on Sep 11

Maximum Diurnal Average: 27.6 ppb at hour 2 Minimum Diurnal Average: 5.0 ppb at hour 15

Monthly Average: 15.61 ppb Percentiles: P_1 = 0.2 P_{10} = 0.4 Q_1 = 1.9 Median = 7.7 Q_3 = 19.4 P_{90} = 42.4 P_{99} = 102.4

Hours in Service:	720
Hours of Data:	684
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-Sep	1.8	0.7	Z	14.3	16.6	17.0	20.1	17.1	11.2	11.3	10.1	7.4	7.8	1.6	2.7	5.4	6.5	9.9	19.6	40.5	63.4	53.7	35.4	30.5	17.6	63.4
2-Sep	30.2	46.8	46.3	Z	26.5	43.0	66.2	123.3	64.9	42.3	24.5	5.8	6.3	5.5	4.6	6.2	7.4	15.5	15.2	17.2	32.7	35.1	44.6	23.5	31.9	123.3
3-Sep	27.6	84.5	66.9	62.5	Z	137.6	180.2	129.0	99.8	71.2	47.0	23.7	15.0	4.5	1.3	1.2	2.2	5.8	14.8	44.0	18.5	51.3	81.5	81.7	54.4	180.2
4-Sep	60.7	56.3	58.3	74.2	56.6	Z	23.8	15.0	14.9	19.4	11.5	12.4	11.7	11.7	7.0	6.1	4.6	9.7	9.1	8.3	2.0	9.3	5.1	19.9	22.1	74.2
5-Sep	Z	0.8	23.4	11.8	3.6	14.4	33.1	35.9	35.1	21.3	11.8	6.4	8.1	9.9	6.7	5.0	2.3	1.8	5.9	30.2	44.9	9.5	2.5	0.8	14.1	44.9
6-Sep	0.4	Z	7.0	13.9	4.7	6.8	26.6	50.8	24.4	10.6	24.9	78.0	55.1	21.0	5.3	4.4	3.7	2.1	1.9	4.4	40.8	21.7	23.1	32.4	20.2	78.0
7-Sep	30.1	31.5	Z	4.6	13.4	3.9	7.8	39.1	39.3	15.3	10.7	11.9	6.7	5.2	4.8	3.8	3.6	3.6	4.9	19.8	14.5	11.6	27.4	21.8	14.6	39.3
8-Sep	17.5	14.1	9.3	Z	13.0	43.6	45.1	18.5	6.6	38.6	23.2	3.1	2.5	3.3	2.5	10.2	28.5	24.8	18.8	16.9	15.0	18.9	10.8	4.3	16.9	45.1
9-Sep	16.2	18.5	18.6	23.6	Z	14.7	9.3	10.5	7.9	7.5	5.6	1.3	0.6	1.7	2.6	6.9	11.3	12.0	8.5	8.3	7.5	5.8	6.8	10.3	9.4	23.6
10-Sep	13.8	0.6	0.4	8.1	22.1	Z	7.0	20.1	21.7	2.5	2.0	3.1	0.5	0.4	0.3	0.4	0.4	0.2	0.2	0.1	0.3	0.1	0.2	0.2	4.6	22.1
11-Sep	Z	0.6	0.3	0.3	0.3	0.3	0.5	0.4	0.5	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.1	0.2	0.3	0.2	0.2	0.2	0.1	0.3	0.6
12-Sep	0.3	Z	0.5	0.8	1.3	0.7	5.7	11.8	43.6	16.9	3.5	8.0	5.6	4.3	3.9	4.7	2.5	1.7	6.5	0.9	2.3	20.3	34.6	24.9	8.9	43.6
13-Sep	28.7	23.9	Z	4.0	15.0	5.4	2.1	4.0	10.3	3.6	1.7	0.9	5.2	3.3	2.9	2.6	3.1	9.9	7.9	11.8	19.4	26.6	10.7	6.5	9.1	28.7
14-Sep	10.6	12.1	14.5	Z	8.7	15.7	5.1	19.4	17.3	8.0	8.2	7.1	3.8	1.5	2.8	6.6	5.9	0.5	16.8	19.5	1.5	0.3	0.3	0.8	8.1	19.5
15-Sep	0.4	0.5	1.9	8.2	Z	4.9	9.0	11.7	21.4	22.4	26.3	4.0	3.4	4.1	4.1	0.4	1.2	1.7	0.7	2.0	3.7	18.9	34.0	11.2	8.5	34.0
16-Sep	11.1	15.1	1.4	0.3	0.3	Z	10.7	6.8	28.3	35.8	16.6	5.4	5.6	5.6	4.1	4.4	4.4	3.6	18.1	55.7	76.6	76.8	28.5	8.1	18.4	76.8
17-Sep	Z	37.6	115.1	41.1	51.9	67.0	50.3	29.9	42.0	49.8	24.4	12.1	8.2	4.2	2.7	1.3	1.1	1.4	5.7	9.6	12.0	4.1	6.1	18.7	25.9	115.1
18-Sep	17.4	Z	13.2	15.1	28.4	32.0	72.4	52.3	67.0	45.5	15.8	8.3	28.1	15.6	17.3	19.4	18.4	14.8	7.7	10.7	8.2	4.5	37.0	48.8	26.0	72.4
19-Sep	11.9	12.8	Z	53.4	13.8	11.9	13.7	19.7	12.6	8.1	8.1	7.2	8.0	1.9	0.8	2.1	2.3	1.9	2.8	3.2	2.7	3.0	3.6	7.3	9.3	53.4
20-Sep	4.5	7.0	3.7	Z	10.7	3.0	3.7	2.3	1.8	1.8	0.4	0.4	2.0	1.2	1.9	2.7	3.2	0.4	0.6	2.7	12.4	17.8	28.4	26.4	6.1	28.4
21-Sep	1.9	0.9	0.7	0.8	Z	3.7	7.7	2.7	1.7	1.5	1.4	4.9	14.0	21.9	13.1	11.0	69.3	40.5	72.1	38.4	35.4	29.4	24.8	35.6	18.8	72.1
22-Sep	66.1	49.1	11.1	8.1	81.4	Z	5.1	13.4	39.1	50.4	16.5	4.2	0.3	1.4	2.0	0.6	0.4	0.7	0.3	1.3	3.1	8.2	27.6	13.1	17.5	81.4
23-Sep	Z	31.1	11.8	0.9	2.3	1.3	4.8	5.5	10.7	24.1	19.4	10.7	17.5	32.2	38.0	43.2	28.9	54.2	71.3	28.2	11.9	5.4	35.4	18.8	22.1	71.3
24-Sep	20.6	Z	25.0	7.8	4.9	3.2	1.2	1.7	2.2	1.9	4.3	8.3	1.1	0.8	2.6	2.5	6.0	11.8	5.1	7.5	22.6	31.9	37.1	42.5	11.0	42.5
25-Sep	35.7	203.5	Z	136.0	80.3	62.8	80.9	54.5	36.6	32.9	C	C	C	C	C	C	12.3	13.8	16.6	13.8	18.3	18.0	13.3	16.5	--	203.5
26-Sep	18.5	13.9	18.3	Z	0.6	7.6	0.6	1.9	0.6	0.8	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.6	0.5	0.2	2.9	18.5
27-Sep	1.8	5.0	3.4	5.1	Z	9.0	8.3	14.4	12.1	9.2	7.3	5.8	3.5	2.0	2.0	0.5	1.6	7.9	17.4	22.1	43.8	49.4	43.7	44.1	13.9	49.4
28-Sep	34.5	17.3	8.9	5.7	3.3	Z	1.5	1.5	1.1	0.7	6.9	7.2	4.6	4.2	7.1	12.1	0.7	1.8	4.8	4.2	6.1	10.1	14.2	14.9	7.5	34.5
29-Sep	Z	6.9	49.8	23.8	13.3	7.6	6.9	7.9	8.0	13.0	11.4	5.7	0.4	0.3	0.2	0.2	0.4	0.3	0.4	0.3	1.5	1.7	0.8	0.1	7.0	49.8
30-Sep	0.0	Z	0.3	0.2	0.1	0.2	0.4	0.8	0.5	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.6	0.7	0.6	1.0	1.9	0.7	0.4	1.9
	18.5	27.6	20.4	21.0	18.9	20.7	23.7	24.1	22.8	18.9	11.9	8.8	7.8	5.9	5.0	5.7	7.8	8.4	11.8	14.1	17.4	18.2	20.7	18.8	Diurnal Average	
	66.1	203.5	115.1	136.0	81.4	137.6	180.2	129.0	99.8	71.2	47.0	78.0	55.1	32.2	38.0	43.2	69.3	54.2	72.1	55.7	76.6	76.8	81.5	81.7	Diurnal Maximum	

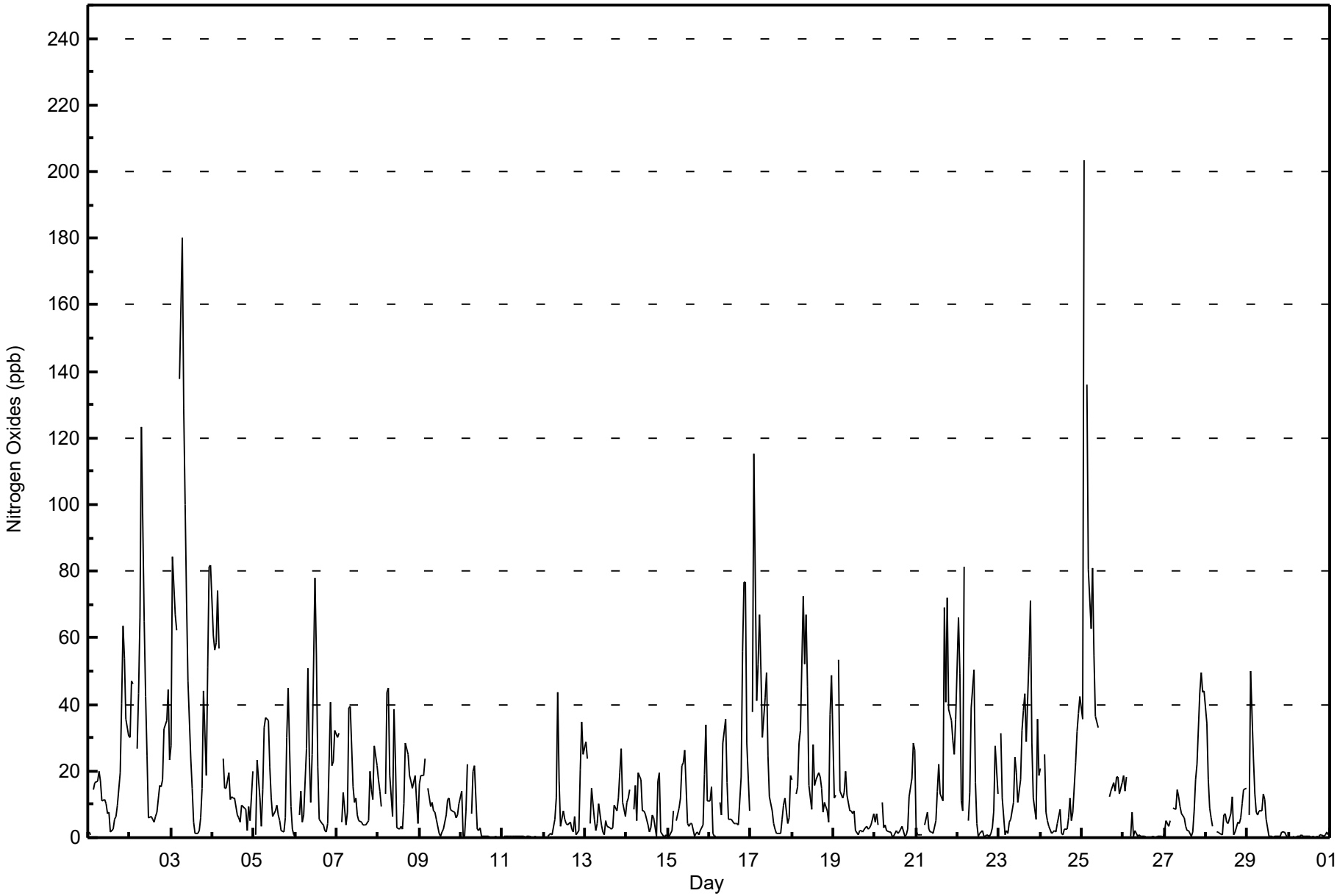
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Fort Hills - September 2026



Nitrogen Oxides (NO_X) - ppb
Fort Hills - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	525	76.75	76.75
21 - 40	85	12.43	89.18
11 - 80	61	8.92	98.10
81 - 159	8	1.17	99.27
> 159	2	0.29	99.56

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Fort Hills - September 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	56	15	3	4	5	2	15	64	94	45	57	23	41	28	38	35	525
21 - 40	13	4	0	0	0	3	13	22	6	8	8	3	3	1	1	0	85
11 - 80	17	4	1	0	1	0	5	11	4	3	6	0	0	1	2	6	61
81 - 159	4	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	8
> 159	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2
Totals	90	23	4	4	6	5	34	97	105	56	71	26	44	30	41	45	681

Total Number of Valid Hours: 684

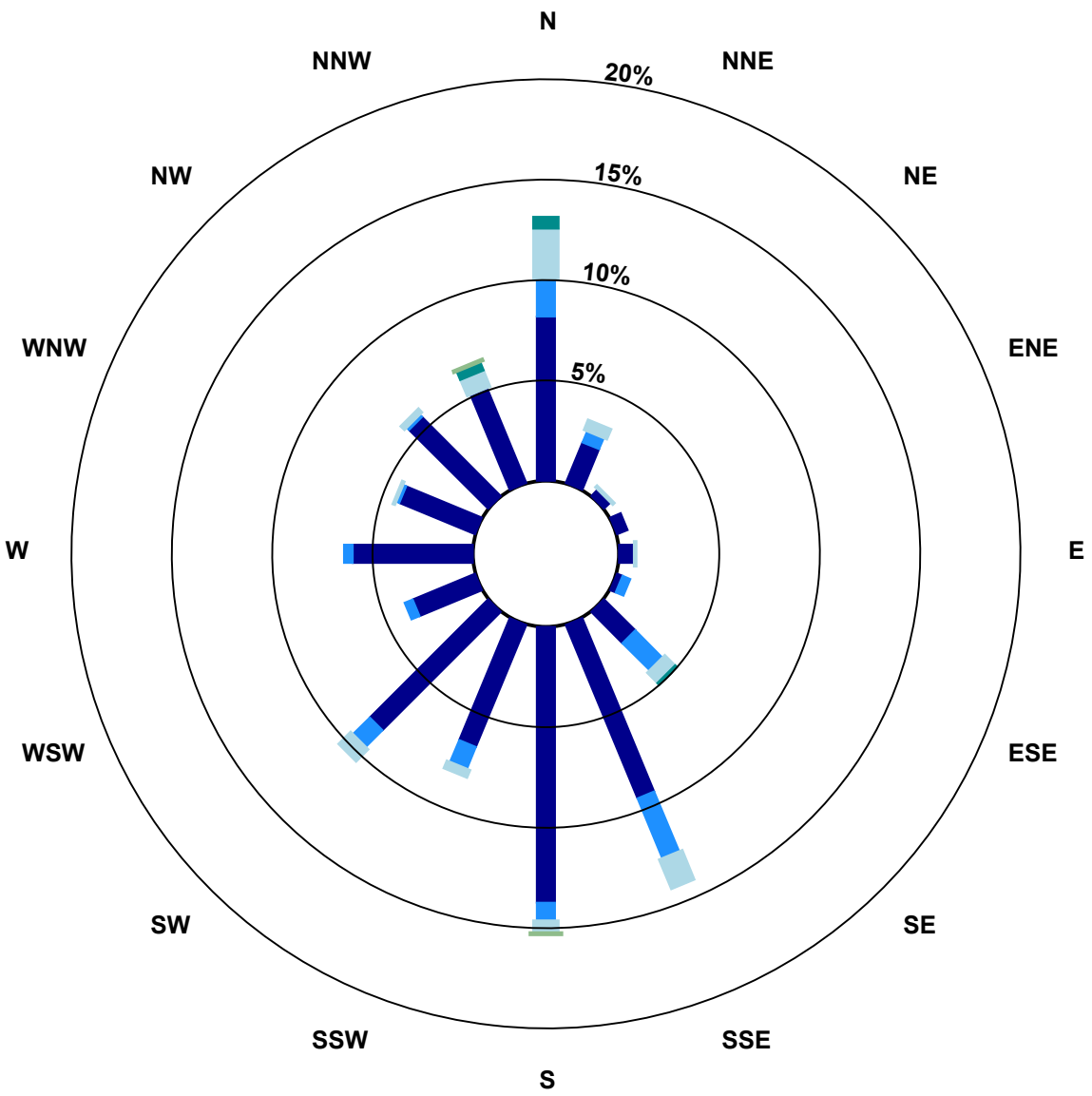
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Fort Hills



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

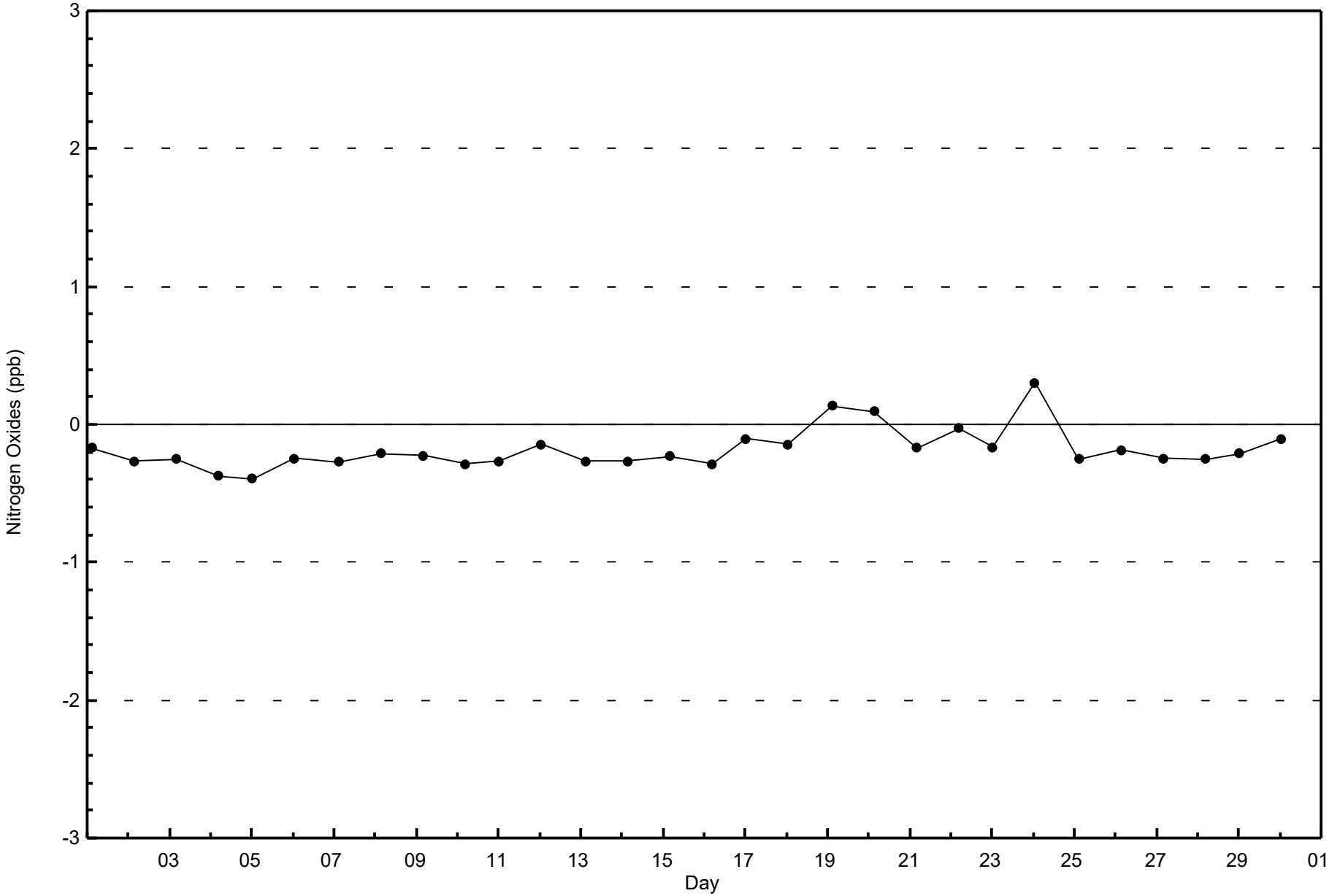
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Fort Hills - September 2026

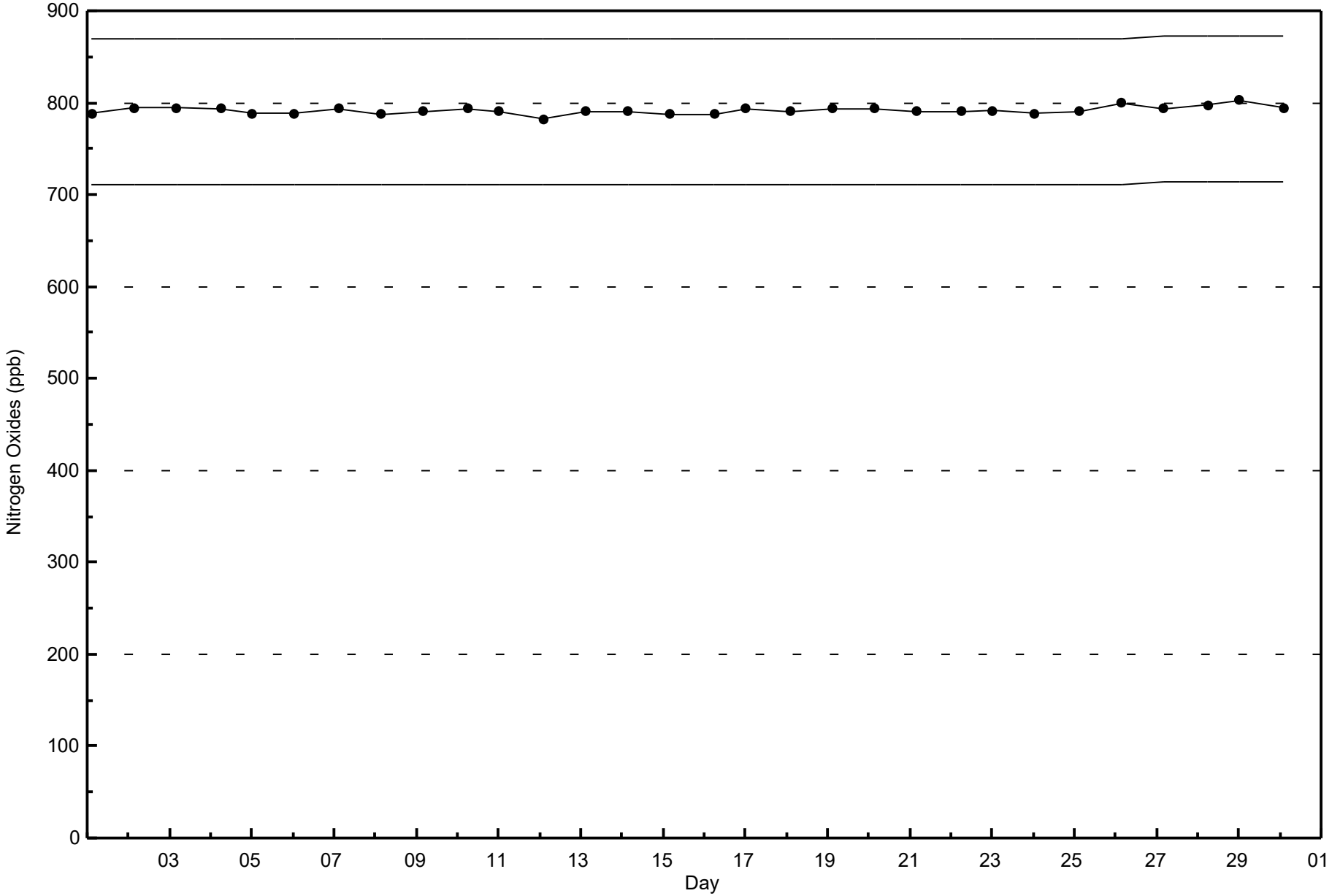


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Fort Hills - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Fort Hills - September 2026

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

Maximum Value: 102.9 $\mu g/m^3$ on Sep 2 05:00 Maximum Daily Average: 23.8 $\mu g/m^3$ on Sep 2

Minimum Value: 0.1 $\mu g/m^3$ on Sep 30 06:00 Minimum Daily Average: 0.9 $\mu g/m^3$ on Sep 30

Maximum Diurnal Average: 10.6 $\mu g/m^3$ at hour 21 Minimum Diurnal Average: 5.9 $\mu g/m^3$ at hour 14

Monthly Average: 7.54 $\mu g/m^3$ Percentiles: P_1 = 0.3 P_{10} = 1.3 Q_1 = 2.7 Median = 5.2 Q_3 = 9.0 P_{90} = 16.9 P_{99} = 41.0

Hours in Service:	720
Hours of Data:	692
Hours of Missing Data:	28
Hours of Calibration:	1
Percent Operational Time:	96.3

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-Sep	7.6	12.5	18.9	5.0	9.8	7.6	11.4	9.4	16.9	20.6	16.9	16.6	14.7	4.9	6.2	10.5	11.7	12.2	18.9	25.0	27.8	18.4	10.5	8.8	13.5	27.8
2-Sep	6.7	8.7	40.9	26.4	102.9	77.9	28.5	22.6	19.5	16.5	13.7	9.2	9.7	10.5	11.3	12.4	12.4	22.4	17.4	20.6	21.0	21.9	26.8	11.5	23.8	102.9
3-Sep	9.4	16.9	25.6	47.3	35.1	42.8	30.6	22.3	18.4	16.3	18.8	16.7	11.0	6.7	5.5	5.5	5.5	5.8	6.3	6.7	7.2	7.4	8.5	8.2	16.0	47.3
4-Sep	7.8	7.8	7.5	7.3	6.8	6.4	6.3	3.5	2.0	1.1	0.9	1.1	1.5	1.0	0.9	1.7	2.7	3.1	3.2	3.0	2.2	3.0	2.7	3.4	3.6	7.8
5-Sep	3.0	3.2	5.3	5.0	4.3	5.8	7.0	5.8	5.2	5.4	5.6	5.5	6.8	8.1	8.5	8.0	7.3	6.1	5.9	7.9	9.9	6.4	4.6	4.5	6.0	9.9
6-Sep	4.5	4.4	5.1	7.4	7.0	8.0	10.0	15.8	13.4	15.0	12.9	15.6	14.1	10.1	6.1	7.2	7.8	5.5	5.8	6.1	15.5	6.4	5.4	5.2	8.9	15.8
7-Sep	5.3	5.3	3.7	3.3	4.3	3.8	4.4	7.0	6.8	5.5	7.4	23.7	12.5	10.1	10.6	7.0	7.1	8.6	9.6	18.8	15.6	16.7	17.0	15.4	9.6	23.7
8-Sep	13.0	13.1	6.8	6.3	12.5	10.3	8.2	6.2	7.2	7.2	7.8	6.2	6.7	6.6	8.1	12.8	20.7	19.0	18.2	18.5	35.7	34.7	52.3	16.9	14.8	52.3
9-Sep	10.8	11.2	11.6	11.1	12.8	11.2	9.7	10.1	8.1	6.8	6.9	5.6	5.3	6.3	6.8	7.5	10.6	9.4	6.2	6.7	5.3	3.9	3.0	2.6	7.9	12.8
10-Sep	2.8	1.9	1.7	2.6	3.3	2.5	2.3	3.6	7.4	22.0	12.0	9.5	5.2	5.6	5.8	4.7	2.4	0.7	0.5	0.9	1.0	1.3	1.2	0.9	4.2	22.0
11-Sep	0.7	0.6	0.7	0.5	0.6	0.5	0.4	0.5	0.7	0.8	0.9	1.1	1.1	1.3	2.7	5.4	5.2	4.8	3.7	2.6	2.8	2.1	2.7	2.5	1.9	5.4
12-Sep	2.2	1.2	1.6	3.7	3.7	3.8	2.4	2.9	3.6	2.6	2.3	3.9	4.5	4.5	5.1	5.4	4.3	3.7	4.3	2.8	4.0	6.3	8.9	6.2	3.9	8.9
13-Sep	5.4	5.0	3.2	3.2	4.3	3.7	3.4	3.6	4.6	4.1	3.6	3.1	4.4	4.5	4.2	3.8	5.3	9.6	7.1	4.5	3.7	3.5	2.9	2.2	4.3	9.6
14-Sep	1.9	2.0	2.5	2.6	2.7	2.7	2.6	2.8	2.7	2.4	2.5	2.0	1.9	1.3	2.2	3.5	3.2	2.1	2.9	2.4	1.6	1.6	1.6	1.5	2.3	3.5
15-Sep	1.6	1.6	1.9	2.0	1.5	1.6	2.1	2.3	2.6	2.8	3.4	2.7	2.7	3.0	3.2	1.9	1.7	2.4	2.3	2.4	2.3	2.4	2.3	1.4	2.3	3.4
16-Sep	1.5	1.8	1.4	1.4	1.4	1.4	2.0	1.9	2.7	3.5	3.0	2.3	2.8	4.9	4.5	4.3	4.0	4.6	11.6	14.4	17.6	20.8	11.3	6.0	5.5	20.8
17-Sep	6.3	7.0	7.9	6.4	7.7	7.9	7.1	6.8	6.4	8.2	10.9	5.2	5.5	4.5	4.8	4.3	4.3	4.4	7.5	9.5	10.2	3.8	4.3	6.9	6.6	10.9
18-Sep	10.0	3.9	3.5	7.9	13.8	5.3	4.8	4.5	5.0	4.7	4.0	4.3	9.0	6.7	8.6	8.8	10.2	11.6	6.6	10.1	14.0	10.0	12.8	13.3	8.1	14.0
19-Sep	8.5	8.0	7.1	7.7	6.6	7.3	7.2	8.4	7.0	6.9	7.6	8.3	11.1	6.8	6.6	8.3	7.9	7.6	7.5	10.0	8.6	7.5	7.3	9.4	7.9	11.1
20-Sep	6.8	6.5	6.3	6.8	6.5	5.8	6.5	5.8	5.6	5.6	4.8	4.3	4.1	4.1	3.9	3.5	3.8	2.7	2.8	7.6	16.3	20.9	17.0	7.5	6.9	20.9
21-Sep	5.2	5.5	5.6	5.7	5.8	6.0	15.3	12.9	5.8	5.8	6.2	9.0	15.2	22.6	20.7	22.5	39.8	51.6	75.3	35.2	27.4	25.8	23.4	17.6	19.4	75.3
22-Sep	17.3	18.4	10.9	10.6	16.4	10.8	8.5	10.0	9.4	9.8	6.2	4.6	2.1	3.9	4.1	2.5	1.4	2.4	2.4	10.3	8.3	7.6	9.0	7.9	8.1	18.4
23-Sep	9.6	5.5	4.5	2.0	2.6	3.3	5.5	5.9	4.1	9.4	4.0	4.3	10.8	18.7	23.9	21.6	13.9	23.8	24.9	13.8	6.4	5.2	12.5	9.5	10.2	24.9
24-Sep	6.2	5.8	6.1	3.7	2.8	2.4	2.2	2.0	2.0	1.9	2.2	3.9	3.0	2.5	3.7	3.0	4.5	7.4	3.2	4.6	32.3	24.3	27.2	25.6	7.6	32.3
25-Sep	19.1	21.8	17.5	14.3	11.6	15.9	16.7	11.3	7.0	4.9	3.5	3.2	2.8	2.8	C	2.8	2.7	2.8	2.8	2.8	2.7	2.8	2.7	2.9	7.7	21.8
26-Sep	3.2	3.3	3.6	2.3	1.1	1.6	1.0	1.3	0.4	0.3	0.2	0.3	0.4	0.6	0.5	0.5	0.5	0.3	0.3	0.4	0.5	0.9	0.8	0.8	1.0	3.6
27-Sep	1.1	1.7	1.9	2.2	2.5	3.0	3.0	3.3	3.4	3.6	4.3	3.8	3.8	2.7	3.2	2.0	2.1	4.6	5.1	4.6	4.5	4.1	3.5	3.2	3.2	5.1
28-Sep	2.8	2.0	1.6	1.4	1.3	1.2	1.3	1.2	1.3	1.4	1.9	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	2.8
29-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	1.5	3.4	4.2	5.8	1.6	2.1	0.9	1.3	1.1	0.8	--	5.8
30-Sep	0.4	0.3	0.5	0.3	0.2	0.1	0.2	0.2	0.1	0.5	0.8	0.4	0.5	0.7	1.8	1.1	2.4	1.1	2.8	1.1	0.9	1.8	1.7	2.1	0.9	2.8
	6.2	6.4	7.4	7.1	10.1	9.0	7.3	6.7	6.2	6.8	6.0	6.3	6.2	5.9	6.3	6.4	7.2	8.5	9.2	8.8	10.6	9.4	9.8	7.1	Diurnal Average	
	19.1	21.8	40.9	47.3	102.9	77.9	30.6	22.6	19.5	22.0	18.8	23.7	15.2	22.6	23.9	22.5	39.8	51.6	75.3	35.2	35.7	34.7	52.3	25.6	Diurnal Maximum	

C - Calibration UO - Unstable Operation

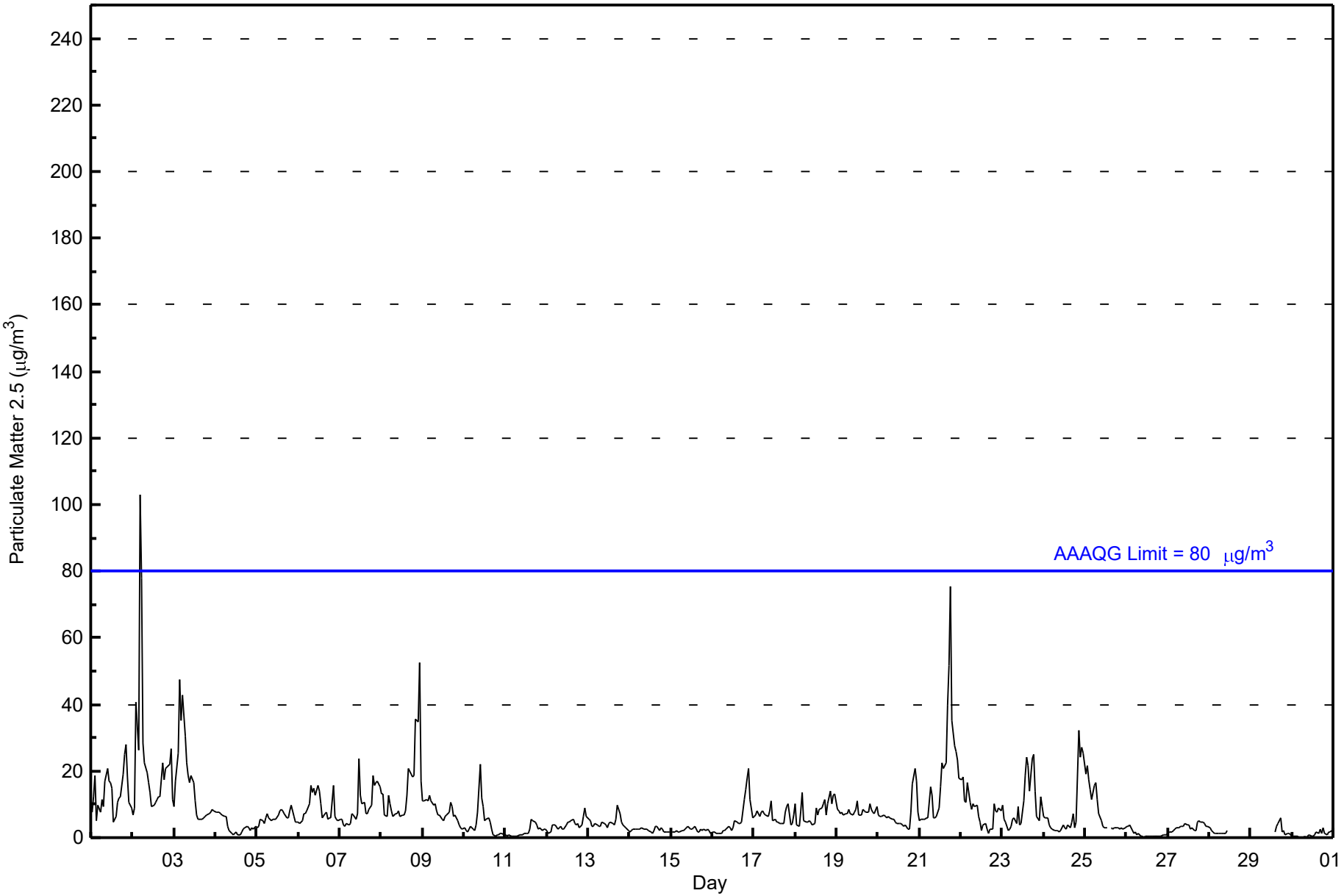
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Fort Hills - September 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Fort Hills - September 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	367	53.03	53.03
6 - 15	242	34.97	88.01
16 - 25	59	8.53	96.53
26 - 80	23	3.32	99.86
> 81.0	1	0.14	100.00

Total Number of Valid Hours: 692

Total Number of Hours: 720

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	56	16	0	1	1	0	6	18	38	38	44	19	36	25	34	35	367
6 - 15	25	12	3	3	4	1	15	59	62	12	19	5	2	7	6	7	242
16 - 25	8	0	0	0	1	4	12	13	8	4	1	1	3	0	1	3	59
26 - 80	4	1	1	0	0	0	2	2	2	0	0	1	3	0	2	5	23
> 81.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Totals	94	29	4	4	6	5	35	92	110	54	64	26	44	32	43	50	692

Total Number of Valid Hours: 692

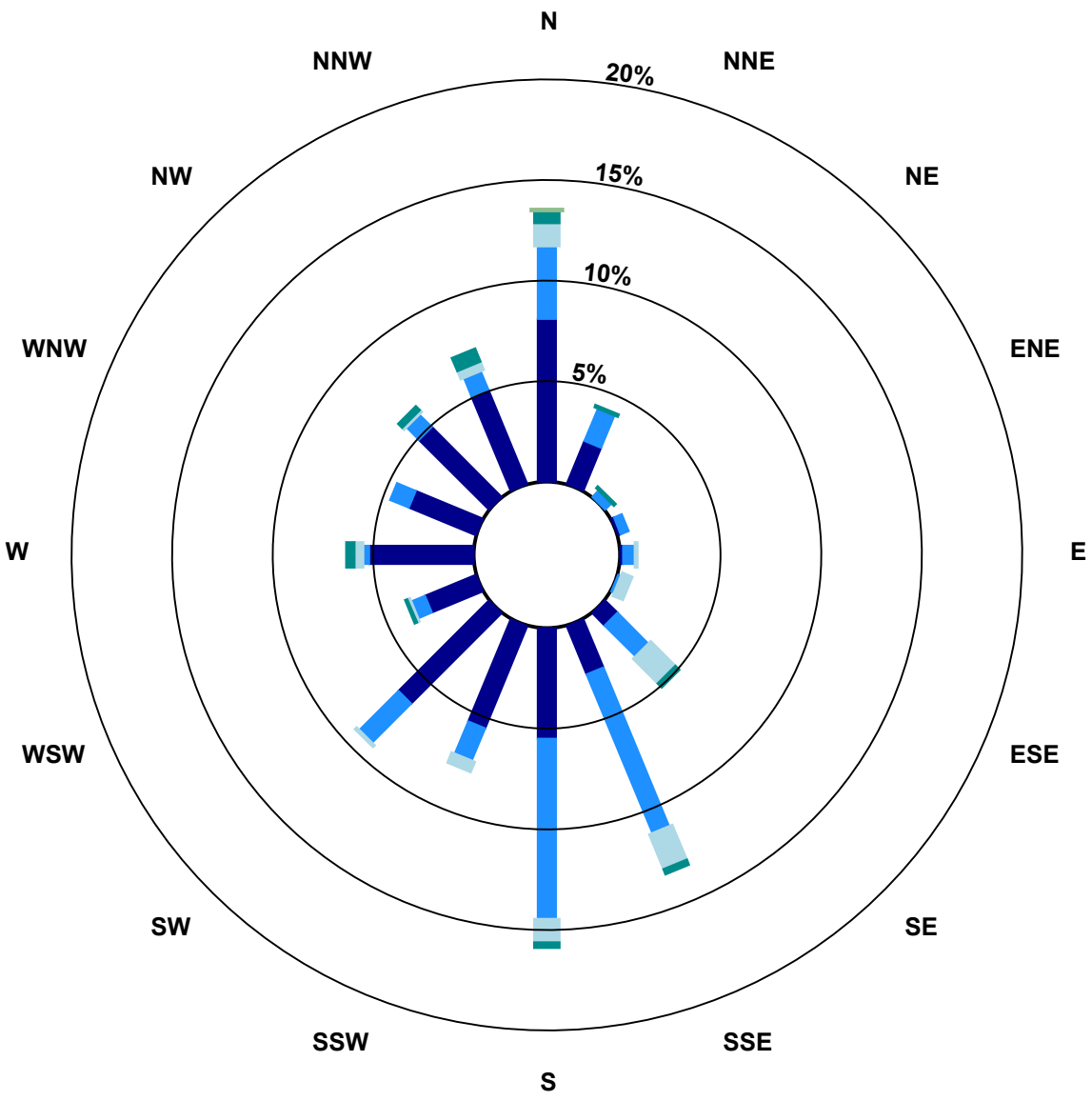
Total Number of Hours: 720

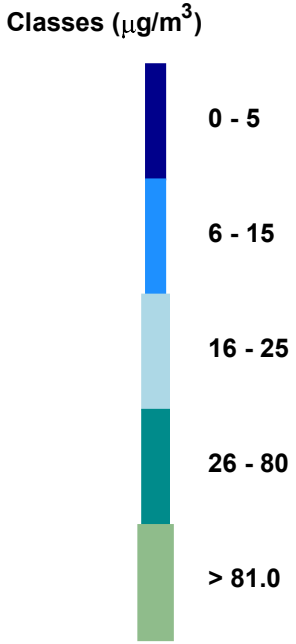
Wood Buffalo Environmental Association

Wind Rose Sep 2026

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

Fort Hills





Total Number of Valid Hours: 692

Maximum Value: 27.7 C on Sep 2 16:00
Maximum Daily Average: 20.8 C on Sep 2

Minimum Value: 3.0 C on Sep 30 23:00
Minimum Daily Average: 5.7 C on Sep 30
Maximum Diurnal Average: 16.9 C at hour 16
Minimum Diurnal Average: 8.4 C at hour 7
Monthly Average: 12.51 C
Percentiles: P_1 = 4.0 P_{10} = 6.5 Q_1 = 8.5 Median = 11.7 Q_3 = 16.0 P_{90} = 19.6 P_{99} = 25.8

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

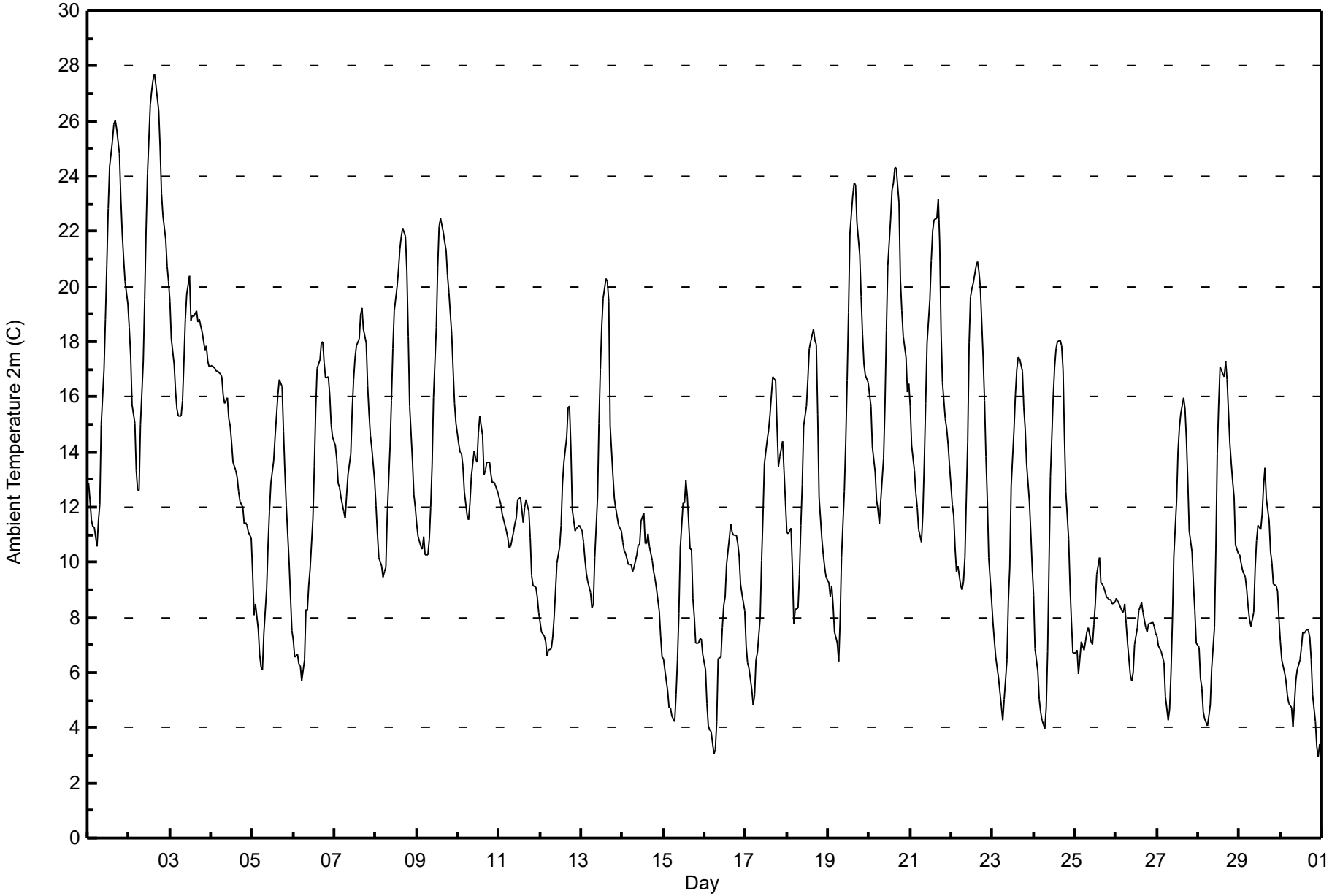
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	12.9	12.3	11.6	11.3	11.3	10.6	11.5	12.1	15.0	17.0	18.8	20.8	22.9	24.4	25.3	25.9	26.0	25.7	24.8	23.2	21.9	21.0	20.2	19.4	18.6	26.0
2-Sep	18.5	17.5	15.7	15.0	13.3	12.6	12.6	15.0	17.3	19.5	22.0	24.1	26.6	27.1	27.5	27.7	27.3	26.4	25.1	23.4	22.6	21.7	20.8	20.2	20.8	27.7
3-Sep	19.5	18.1	17.2	16.2	15.6	15.3	15.3	15.9	17.3	18.8	19.7	20.4	18.8	19.0	18.9	19.1	18.7	18.8	18.6	18.4	17.7	17.8	17.3	17.1	17.9	20.4
4-Sep	17.1	17.1	17.0	16.9	16.9	16.9	16.8	16.1	15.8	15.9	15.2	14.9	14.3	13.6	13.3	13.1	12.6	12.2	12.0	11.4	11.5	11.4	11.1	10.9	14.3	17.1
5-Sep	9.6	8.1	8.5	7.6	6.7	6.2	6.1	7.4	9.1	10.6	11.8	12.9	13.7	14.5	15.3	16.1	16.7	16.4	14.7	13.3	12.0	10.0	8.8	7.5	11.0	16.7
6-Sep	7.2	6.5	6.7	6.3	6.2	5.7	6.5	8.3	8.2	9.2	9.8	11.6	13.5	15.5	17.0	17.3	18.0	18.0	17.2	16.7	16.7	16.1	15.0	14.6	12.0	18.0
7-Sep	14.2	13.7	12.8	12.7	12.3	11.8	11.6	12.4	13.2	13.9	15.5	16.6	17.4	17.8	18.1	19.0	19.2	18.5	17.9	16.4	15.4	14.6	14.2	13.0	15.1	19.2
8-Sep	12.0	11.0	10.2	9.9	9.4	9.7	9.8	11.7	14.2	15.9	17.7	19.1	20.0	20.6	21.4	21.8	22.1	21.8	20.5	18.2	15.6	13.7	12.5	12.0	15.4	22.1
9-Sep	11.4	10.9	10.6	10.5	10.9	10.3	10.3	10.8	12.0	13.5	16.0	18.5	20.7	22.2	22.5	22.0	21.6	21.3	20.4	19.8	18.2	17.0	15.8	15.1	15.9	22.5
10-Sep	14.3	14.0	14.0	13.5	12.5	11.7	11.6	12.2	13.1	14.0	13.8	13.6	14.7	15.3	14.6	13.2	13.3	13.6	13.6	13.2	12.9	12.9	12.8	12.5	13.4	15.3
11-Sep	12.3	12.1	11.7	11.3	11.1	10.9	10.5	10.6	11.1	11.4	11.6	12.3	12.4	11.9	11.4	12.0	12.3	11.9	10.9	9.5	9.1	9.1	8.7	8.2	11.0	12.4
12-Sep	7.8	7.5	7.3	7.1	6.6	6.8	6.9	7.3	8.0	9.0	10.0	10.6	11.3	12.9	13.6	14.6	15.6	15.6	14.2	11.9	11.1	11.3	11.3	11.3	10.4	15.6
13-Sep	11.1	10.8	10.1	9.6	9.3	8.9	8.4	8.5	10.2	12.4	15.0	17.0	18.6	19.6	20.3	20.2	19.5	14.9	13.1	12.3	12.0	11.7	11.3	11.1	13.2	20.3
14-Sep	10.7	10.4	10.3	9.9	9.9	9.9	9.7	9.8	10.3	10.6	10.6	11.5	11.8	10.7	10.7	11.0	10.6	10.1	9.7	9.4	9.0	8.2	7.3	6.6	10.0	11.8
15-Sep	6.5	6.1	5.3	4.7	4.7	4.4	4.2	5.2	6.5	8.1	10.5	12.1	12.2	12.9	12.4	10.5	10.5	8.7	8.0	7.1	7.1	7.2	7.2	6.7	7.9	12.9
16-Sep	6.1	4.9	4.1	3.9	3.8	3.1	3.2	4.2	6.5	6.6	7.6	8.4	8.8	9.9	10.9	11.4	11.1	11.0	11.0	10.7	10.2	9.2	8.9	8.2	7.7	11.4
17-Sep	7.0	6.4	6.1	5.4	4.8	5.2	6.5	6.7	8.0	10.1	11.7	13.6	14.4	14.8	15.4	16.1	16.7	16.6	15.0	13.5	13.9	14.4	13.3	12.2	11.2	16.7
18-Sep	11.1	11.0	11.2	9.7	7.8	8.3	8.3	9.5	11.3	12.8	15.0	15.7	16.6	17.7	18.0	18.4	18.1	17.9	15.4	12.4	10.8	10.3	9.8	9.5	12.8	18.4
19-Sep	9.3	8.7	9.1	8.5	7.5	7.1	6.4	7.9	10.2	12.5	14.3	16.6	19.1	21.9	23.3	23.7	23.7	22.3	21.2	19.6	18.3	17.2	16.8	16.6	15.1	23.7
20-Sep	16.1	15.7	14.2	13.3	12.3	11.9	11.4	12.3	13.8	15.7	18.4	20.7	22.4	23.5	23.7	24.3	24.3	23.0	20.2	19.1	18.2	17.4	16.2	16.5	17.7	24.3
21-Sep	15.7	14.2	13.3	12.5	12.0	11.2	10.8	11.7	13.6	15.8	17.9	19.5	21.0	22.0	22.4	22.5	23.2	21.6	18.3	16.5	15.2	14.9	14.3	13.5	16.4	23.2
22-Sep	12.1	11.7	10.5	9.7	9.9	9.1	9.0	9.3	10.2	14.4	18.0	19.6	20.0	20.2	20.7	20.9	20.5	20.0	17.5	15.9	13.8	12.3	10.1	8.7	14.3	20.9
23-Sep	7.8	7.2	6.6	5.8	5.3	4.8	4.3	5.0	6.4	8.6	9.8	12.7	14.8	16.1	17.0	17.4	17.4	16.9	15.6	14.8	13.6	12.2	11.1	9.8	10.9	17.4
24-Sep	8.8	6.9	6.1	5.0	4.6	4.3	4.0	4.7	6.8	9.9	13.1	16.0	17.1	17.7	18.0	18.1	17.9	17.0	14.5	12.6	10.8	9.1	7.8	6.7	10.7	18.1
25-Sep	6.7	6.8	6.0	6.5	7.1	6.8	7.1	7.5	7.6	7.1	7.0	7.7	8.5	9.5	10.1	9.3	9.2	9.1	8.8	8.7	8.6	8.7	8.5	8.5	8.0	10.1
26-Sep	8.7	8.6	8.5	8.3	8.2	8.5	7.8	7.1	5.9	5.7	6.0	7.0	7.6	8.2	8.4	8.5	8.2	7.6	7.5	7.8	7.8	7.9	7.7	7.4	7.7	8.7
27-Sep	7.3	7.0	6.8	6.6	6.4	5.1	4.3	4.7	6.0	7.9	10.2	12.3	14.1	14.9	15.4	16.0	15.6	14.5	12.9	11.2	10.4	9.2	8.3	7.1	9.7	16.0
28-Sep	6.9	5.8	5.5	4.6	4.3	4.1	4.4	4.8	6.2	7.6	10.5	13.9	15.7	17.1	16.9	16.7	17.3	16.6	14.3	13.6	12.9	12.4	10.7	10.3	10.5	17.3
29-Sep	10.2	10.0	9.7	9.4	9.0	8.4	7.9	7.7	8.2	9.8	10.8	11.3	11.2	11.7	12.8	13.4	12.3	11.5	10.4	10.0	9.2	9.2	8.9	7.9	10.0	13.4
30-Sep	7.1	6.5	6.0	5.7	5.2	4.9	4.7	4.0	4.8	5.7	6.1	6.5	6.9	7.5	7.4	7.6	7.5	7.3	6.5	5.2	4.2	3.3	3.0	3.4	5.7	7.6
	10.9	10.2	9.8	9.2	8.8	8.5	8.4	9.0	10.2	11.7	13.2	14.6	15.6	16.4	16.8	16.9	16.9	16.2	15.0	13.8	13.0	12.4	11.6	11.1	Diurnal Average	
	19.5	18.1	17.2	16.9	16.9	16.9	16.8	16.1	17.3	19.5	22.0	24.1	26.6	27.1	27.5	27.7	27.3	26.4	25.1	23.4	22.6	21.7	20.8	20.2	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Fort Hills - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	255	35.42	35.42
10 - 20	399	55.42	90.83
> 20	66	9.17	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 99.0 % on Sep 8 04:00

Maximum Daily Average: 85.9 % on Sep 4

Minimum Value: 27.2 % on Sep 27 16:00

Minimum Daily Average: 57.7 % on Sep 20

Maximum Diurnal Average: 88.6 % at hour 7

Minimum Diurnal Average: 52.2 % at hour 16

Monthly Average: 72.03 %

Percentiles: P_1 = 30.4 P_{10} = 45.0 Q_1 = 61.3 Median = 74.8 Q_3 = 86.4 P_{90} = 93.0 P_{99} = 97.1

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

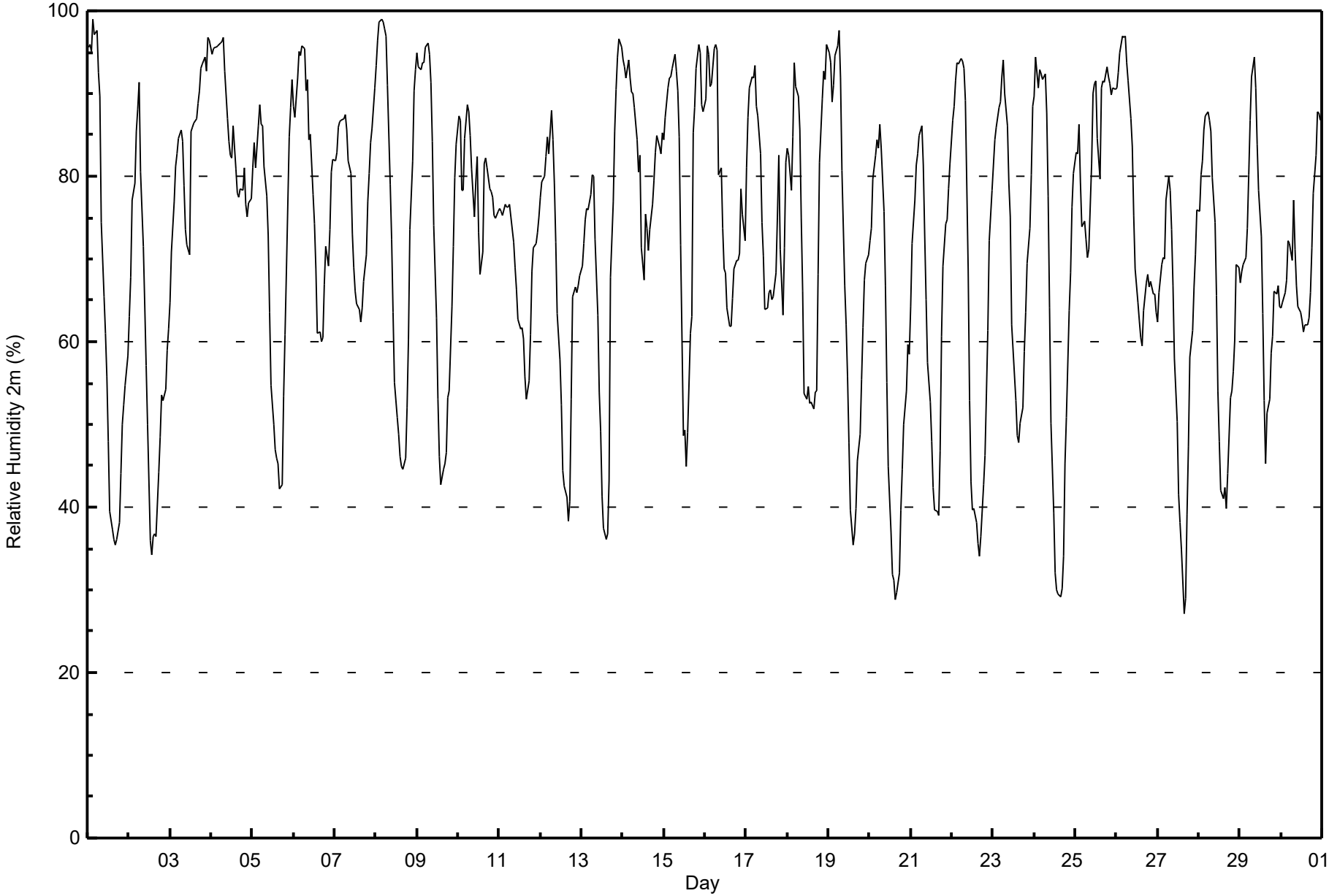
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	95.7	96.0	95.1	98.9	97.1	97.6	92.5	89.7	74.3	65.4	61.0	55.7	48.0	39.4	37.2	36.0	35.4	36.0	38.1	44.0	50.0	52.4	54.8	58.4	64.5	98.9
2-Sep	63.1	67.9	77.1	79.1	85.5	88.1	91.4	80.4	71.6	64.4	57.1	50.0	35.9	34.3	36.4	36.9	36.5	44.2	48.5	53.6	53.0	54.2	59.1	61.6	59.6	91.4
3-Sep	64.7	70.8	76.9	81.2	82.7	84.6	85.7	84.2	78.9	73.6	71.8	70.6	85.4	86.0	86.4	87.0	88.9	90.3	93.1	93.6	94.4	92.8	96.8	96.4	84.0	96.8
4-Sep	94.7	95.3	95.6	95.6	95.8	96.1	96.4	96.7	92.7	87.0	84.2	82.6	82.2	86.1	80.9	78.1	77.4	78.5	78.3	81.1	76.5	75.2	76.8	77.4	85.9	96.7
5-Sep	81.0	84.0	80.9	86.1	88.7	86.4	86.1	81.2	77.7	72.9	63.6	54.7	50.0	46.9	45.9	45.2	42.2	42.6	53.3	60.9	68.7	84.7	88.2	91.7	69.3	91.7
6-Sep	88.4	87.2	91.8	95.1	94.7	95.8	95.4	90.3	91.7	84.5	85.1	77.8	74.3	68.7	61.1	61.1	60.0	60.6	67.0	71.6	69.2	73.5	80.5	82.1	79.5	95.8
7-Sep	81.8	82.9	85.9	86.5	86.7	87.0	87.5	85.6	81.9	80.3	73.0	68.9	66.1	64.5	63.9	62.3	64.1	67.3	70.6	76.9	80.3	84.0	85.8	90.6	77.7	90.6
8-Sep	93.4	96.4	98.6	99.0	98.7	97.8	96.9	91.0	79.1	72.4	63.5	55.1	50.9	48.9	46.1	45.0	44.6	45.9	52.0	60.4	73.5	81.8	90.3	92.9	73.9	99.0
9-Sep	94.9	93.2	92.8	93.8	93.7	95.6	96.2	94.8	91.4	84.3	74.1	62.8	53.1	46.1	42.6	44.6	45.3	46.6	53.2	54.1	64.3	71.5	79.8	83.9	73.0	96.2
10-Sep	87.2	86.9	78.3	78.4	84.6	88.6	87.8	84.9	80.9	75.1	79.3	82.3	73.2	68.2	70.9	81.5	82.2	81.0	78.5	78.1	77.5	75.3	74.9	75.7	79.6	88.6
11-Sep	76.1	75.7	75.2	76.7	76.3	76.2	76.6	75.1	72.0	69.0	66.2	62.7	61.5	61.7	60.3	55.8	53.1	55.2	60.9	68.4	71.3	71.8	73.2	75.1	68.6	76.7
12-Sep	77.4	79.3	80.0	82.3	84.7	82.7	88.0	84.4	79.2	72.0	63.4	57.9	52.4	44.4	42.6	41.3	38.4	40.7	53.0	65.5	66.6	65.9	66.8	68.0	65.7	88.0
13-Sep	69.2	71.9	74.7	76.1	75.9	77.8	80.2	80.0	72.4	63.3	54.0	49.2	41.3	37.4	36.0	36.8	43.3	67.8	76.9	85.4	90.5	94.4	96.7	95.5	68.6	96.7
14-Sep	94.0	93.1	91.9	94.1	91.9	90.2	90.1	88.3	84.5	80.4	82.6	71.4	67.4	75.4	73.8	71.0	73.6	76.6	79.5	82.9	84.9	83.5	82.7	85.3	82.9	94.1
15-Sep	84.4	87.1	90.7	91.8	92.0	93.0	94.7	92.7	90.3	84.7	71.7	48.6	49.3	44.8	49.0	61.0	63.0	85.2	88.3	93.0	96.0	94.9	88.6	87.8	80.1	96.0
16-Sep	89.3	95.7	94.8	90.9	91.1	95.4	96.0	95.3	80.2	81.0	73.7	68.8	68.3	64.0	61.9	61.9	65.2	68.9	69.9	69.8	70.7	78.5	75.4	72.2	78.3	96.0
17-Sep	81.1	87.1	90.7	92.0	91.9	93.3	88.5	87.3	82.7	74.4	70.4	63.9	64.0	66.0	66.2	65.0	65.5	68.4	75.1	82.5	71.2	63.2	71.4	81.8	76.8	93.3
18-Sep	83.3	82.6	78.4	84.8	93.7	90.9	89.7	85.6	74.8	66.1	53.8	53.0	54.5	52.5	52.8	51.9	54.0	54.0	68.1	81.6	89.3	92.6	91.6	95.9	74.0	95.9
19-Sep	94.9	93.7	89.0	91.0	94.6	95.7	97.6	91.9	80.6	66.8	62.1	55.8	47.9	39.6	35.4	36.7	39.8	45.6	48.9	55.4	61.6	67.4	69.5	70.4	68.0	97.6
20-Sep	72.1	73.7	79.7	82.6	84.4	83.4	86.2	83.3	75.8	66.8	55.0	44.9	36.9	31.9	31.2	28.8	29.7	32.1	39.7	44.5	50.0	54.0	59.6	58.5	57.7	86.2
21-Sep	64.2	71.9	77.2	81.3	82.8	84.9	86.1	81.3	72.8	65.0	57.5	52.8	48.0	42.3	39.7	39.5	39.0	46.7	60.7	69.1	74.3	74.7	78.5	81.5	65.5	86.1
22-Sep	86.7	88.5	91.6	93.8	93.6	94.3	93.9	93.0	89.2	68.7	52.8	43.0	39.6	39.8	38.2	35.5	34.1	36.4	42.7	46.2	53.8	61.4	72.3	78.4	65.3	94.3
23-Sep	81.4	84.4	85.9	88.3	89.0	92.0	94.1	90.0	86.1	79.2	75.1	62.0	56.0	52.8	48.7	47.9	50.2	52.0	58.8	63.5	69.4	73.6	80.3	88.4	72.9	94.1
24-Sep	89.6	94.3	90.7	93.0	92.4	91.7	92.4	87.7	77.5	64.0	50.2	39.3	32.1	30.0	29.5	29.2	30.2	34.1	45.3	50.8	63.7	68.2	76.2	80.3	63.8	94.3
25-Sep	82.9	82.8	86.3	79.4	73.9	74.5	72.3	70.1	71.1	81.5	90.0	91.2	91.5	84.6	79.6	90.6	91.5	91.4	93.2	92.0	91.1	89.8	90.6	90.6	84.7	93.2
26-Sep	90.7	92.6	95.0	97.0	96.9	96.9	93.8	91.6	87.0	83.5	75.3	68.8	64.7	62.6	60.5	59.5	63.7	67.1	68.1	66.5	67.2	65.7	65.8	63.5	76.8	97.0
27-Sep	62.3	65.9	69.4	70.2	70.0	77.1	80.0	78.3	73.6	66.8	58.0	50.3	41.5	38.1	34.9	27.2	29.0	39.2	47.3	58.1	61.4	66.6	70.4	76.0	58.8	80.0
28-Sep	75.7	80.2	81.8	85.6	87.3	87.8	86.9	85.5	79.9	74.4	65.6	54.0	48.0	42.0	41.0	42.4	39.8	44.1	53.3	54.0	56.5	60.2	69.2	69.0	65.2	87.8
29-Sep	67.0	68.4	69.3	70.2	73.7	80.2	86.8	92.0	94.3	90.7	83.9	78.3	72.8	63.3	52.8	45.2	51.3	53.0	58.7	60.7	66.0	65.8	66.7	64.3	69.8	94.3
30-Sep	64.1	64.7	66.0	67.4	72.1	71.9	69.8	77.1	71.2	66.8	64.3	63.6	62.5	61.2	62.1	62.0	63.0	65.9	71.4	78.0	82.6	87.8	87.7	86.8	70.4	87.8
	81.0	83.1	84.4	86.1	87.2	88.2	88.6	86.3	80.5	74.2	67.9	61.3	57.3	54.1	52.3	52.2	53.1	57.2	63.1	68.1	71.5	74.2	77.3	79.3	Diurnal Average	
	95.7	96.4	98.6	99.0	98.7	97.8	97.6	96.7	94.3	90.7	90.0	91.2	91.5	86.1	86.4	90.6	91.5	91.4	93.2	93.6	96.0	94.9	96.8	96.4	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Fort Hills - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	48	6.67	6.67
40 - 60	117	16.25	22.92
60 - 80	269	37.36	60.28
80 - 100	286	39.72	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Fort Hills - September 2026

Maximum Speed: 32 km/h on Sep 25 14:00

Maximum Daily Speed Average: 21.1 km/h on Sep 25

Minimum Speed Value: 0 km/h on Sep 17 06:00

Minimum Daily Speed Average: 1.4 km/h on Sep 18

Maximum Diurnal Speed Average: 6.4 km/h at hour 15

Minimum Diurnal Speed Average: 0.8 km/h at hour 19

Monthly Average Velocity: 2.9 km/h 245.7 deg

Percentiles: P_1 = 1 P_{10} = 4 Q_1 = 6 Median = 11 Q_3 = 16 P_{90} = 22 P_{99} = 29

Hours in Service: 720

Hours of Data: 720

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-Sep	NW3	NW1	W1	SSE6	S8	SSE10	SSE9	SSW8	S15	S13	SSW11	S10	SSE15	S22	SSE21	SSE22	SSE25	SSE24	SSE20	SE14	SE16	SE19	SE19	SSE20	SSE12.9	SSE25
2-Sep	SSE16	SSE9	S4	W3	N4	NNW3	N6	NNW6	N6	NW5	W5	WSW4	SSE19	SSE25	SSE25	SE23	SE22	SE19	SE18	SE17	SE19	SE7	SSE7	SSE9	SE8.5	SSE25
3-Sep	SSE10	SE5	SSE5	N4	N8	N7	NNW7	NNW8	N8	N8	N9	ESE3	SE9	E5	ENE5	E7	ENE7	N4	NNW8	N5	N5	NNE9	N9	N12	NNE4.2	N12
4-Sep	NNE12	NNE11	N10	N11	N12	N13	N15	N18	NNE20	NNE21	N27	N22	N22	N21	N27	N30	N29	N24	N22	N16	N16	N13	N13	N14	N18.3	N30
5-Sep	NNW11	NNW10	N11	N7	N5	N8	N5	N11	N13	NNE12	N12	NNE11	NNE8	NNE9	NNE7	NE4	ENE5	ESE3	N8	N6	NNW3	NNW4	NW5	NW5	N6.9	N13
6-Sep	WNW3	NNW3	S4	S3	S5	SW3	S4	S6	SW4	SW3	WSW6	SW5	SW4	S8	S10	S13	S12	S10	SSW5	SSE6	SSE13	SSE16	SE13	SSE12	S6.0	SSE16
7-Sep	SSE12	SSE11	S6	S6	SSE6	SSE9	SE2	SSE7	SSE19	SSW16	S17	SSW13	S14	S14	S10	S8	S10	SSE12	SSE9	SSE9	S5	S4	SSE9	S3	S9.3	SSE19
8-Sep	S1	SW1	NW3	NW2	NNW2	NNW3	WNW2	WNW3	N5	N6	N6	N7	NNE4	SE2	SSE3	E4	ESE6	ESE6	ESE5	E6	NE1	NNW3	NW4	WSW1	NNE1.4	N7
9-Sep	S4	SSE7	SSE9	SSE10	SSE10	SSE11	SSE13	SSE16	S18	S18	SSW19	SSW19	SSW22	SSW22	SW21	SW20	SW19	SW18	SW12	SW21	SSW14	SW12	SW16	SW15	SSW13.9	SSW22
10-Sep	WSW13	W8	W9	WSW13	SW14	SSW17	SW19	SW15	SW14	W14	WSW17	WSW13	WNW19	WNW20	WNW18	W13	WNW13	NW12	NNW15	NNW16	NW15	NW17	NW19	NNW19	W11.7	WNW20
11-Sep	NNW20	NNW23	NNW25	NNW25	NNW25	NNW23	NNW23	NNW23	NNW27	NNW26	NNW27	NNW27	NNW25	NNW24	NNW25	NNW22	NNW25	NNW22	NNW20	NW12	WNW8	NW10	NW8	NW9	NNW20.8	NNW27
12-Sep	WNW7	WNW8	WNW8	WNW5	NW3	NW5	SW3	SW2	SSW5	S8	S6	SW8	SSW3	SW8	SW10	SW11	WSW8	SW7	SSW8	S9	S11	SSW9	SSW10	SSW12	SW5.7	SSW12
13-Sep	SW13	SSW13	S12	SSW14	SSW14	S13	SSW14	SSW17	SSW19	SSW16	SSW18	SSW19	SW21	SW20	SW17	SW16	NW5	NNE28	NNE27	NNE19	N15	N11	N13	N19	SW5.7	NNE28
14-Sep	N23	N18	N16	N14	N17	N18	N16	N13	N14	N16	N16	NNE17	N20	N21	N20	N17	N16	NNW12	N7	NW4	NW6	NW8	WNW6	NW5	N13.6	N23
15-Sep	W8	W9	WNW7	W4	SSW3	S4	SSE6	S7	SSE7	SE5	SSW8	WSW10	SW11	SW12	WSW15	NW10	SW5	NW7	WNW4	NNW2	NW4	N6	N12	N12	WSW3.5	WSW15
16-Sep	N9	NNW8	WNW6	WNW4	W4	NW2	NW4	SW5	SW2	SW6	SW8	SSW9	SSW10	SSW11	S11	S15	S13	S10	SSE10	SE10	SE7	SSW4	S3	SE3	SSW4.1	S15
17-Sep	SE1	N5	NNW6	N4	NE1	E0	S2	WNW0	SW4	S11	SW11	S12	S13	S11	S9	S10	S9	S9	SSE5	SSE4	NW3	N3	S3	S4	S3.9	S13
18-Sep	S3	S5	S4	NE2	NW4	NNE7	N7	N8	N10	N4	SE2	SE4	SSE1	SSE4	SSE7	ENE9	E7	SE10	S3	SW2	SW2	S1	SE3	S3	E1.4	SE10
19-Sep	SSE8	SSE9	SSE10	SSE8	SSE8	SSE8	S7	SSE10	S13	S17	S12	S11	SSE16	S22	S25	S27	S21	S14	S15	S11	S9	S9	SSE9	SSE11	S12.6	S27
20-Sep	S9	SSE9	S8	S7	S9	SSE8	S9	SSW12	S12	SSW9	S13	SSW16	SW20	SW18	SSW14	SSW14	SSW13	SSW12	S11	S11	S11	S12	SSW10	SSW11	SSW11.1	SW20
21-Sep	S10	S14	S11	S9	S8	SSE10	SE12	SSE14	S13	S12	S10	SSE9	SSE11	SSE8	W4	N5	NNE9	N7	NNW4	W2	S5	SE6	SE7	SSE5	SSE6.1	S14
22-Sep	SE5	SSE5	SSE4	SE3	SSE4	S5	S3	SSE4	SW3	NNW10	N11	NW11	WNW8	WSW14	WSW15	W17	W11	W7	WNW9	WNW10	WNW6	SW3	SSE5	SSW3	W3.9	W17
23-Sep	S3	S5	SSE6	SSE6	SSE5	S7	SSE5	S6	S5	WSW4	SSW6	SSE7	SSE7	SE6	SSE7	SSE10	SE8	SE10	SE12	SSE14	S8	SE6	SE5	S5	SSE6.3	SSE14
24-Sep	SSE6	S6	SE5	SSE7	SSE9	SSE9	S8	SSE11	S12	S13	SSW15	SW21	SW22	WSW20	SW20	SW19	SW18	SW12	SSW9	SW4	WSW4	SSE1	W1	NW1	SSW9.0	SW22
25-Sep	N5	S1	NNW5	N7	N11	N14	N19	N15	NNE23	NNE17	NNE20	NNE25	NNE29	NNE32	NNE26	NNE27	NNE31	NNE29	NNE29	N29	N27	N30	N31	N31	NNE21.1	NNE32
26-Sep	N25	N22	N19	NNW16	NW8	WSW11	W11	WSW14	W14	WSW17	W22	W23	W26	W26	W28	W28	W25	W23	W19	W19	W18	W22	W24	W21	W16.5	W28
27-Sep	W18	WSW16	WSW22	W23	WSW21	WSW23	SW20	SW16	SW17	SW21	SW23	SW21	WSW20	WSW21	WSW20	W19	W14	SW15	SW12	SSW12	SW10	SW10	SW10	SSW10	WSW16.5	WSW23
28-Sep	SSW11	S9	SSW9	SSE9	S11	S10	SSW15	SSW17	SSW18	SSW18	SSW15	SW21	SW23	SW24	SW26	SW17	SSW23	SSW13	SSE12	S14	SSW11	SSW8	S6	SSE7	SSW13.7	SW26
29-Sep	S8	SSE11	SSE12	SSE12	SSE12	S12	SSE10	SSE8	S8	SW10	SW16	WSW15	W17	W18	WNW20	W26	W26	W21	W14	WNW14	W19	W17	W15	W18	WSW10.3	W26
30-Sep	WNW16	WNW21	WNW16	WNW16	WNW15	WNW16	NW16	WNW13	NW17	NNW18	NNW24	NNW20	NNW19	NW19	NW15	NW13	NNW13	NW12	NW6	NNW7	NW7	WNW5	NW4	NW2	NW13.2	NNW24
	W1.9	WSW1.5	W1.9	W2.0	WSW2.0	SW1.8	WSW2.0	SW2.7	SW2.7	WSW3.5	WSW4.8	WSW5.2	WSW5.2	WSW6.2	WSW6.4	WSW4.9	WSW3.5	WSW2.1	WNW0.8	WSW1.2	WSW2.1	W2.0	W1.8	W1.8	Diurnal Average	
	N25	NNW23	NNW25	NNW25	NNW25	NNW23	NNW23	NNW23	NNW27	NNW26	N27	NNW27	NNE29	NNE32	W28	N30	NNE31	NNE29	NNE29	N29	N27	N30	N31	N31	Diurnal Maximum	

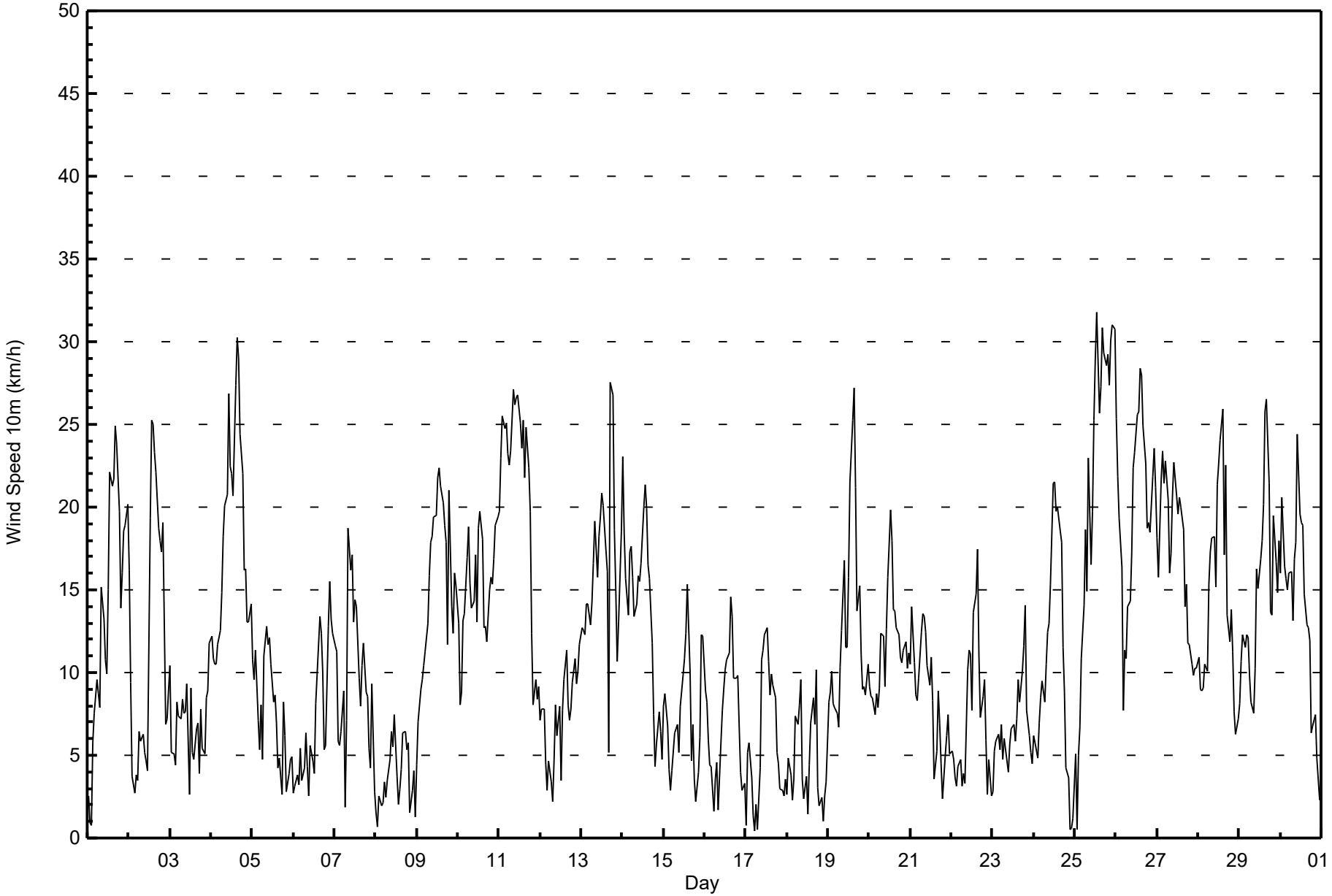
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Fort Hills - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	158	21.94	21.94
6 - 11	239	33.19	55.14
12 - 19	208	28.89	84.03
20 - 28	104	14.44	98.47
29 - 38	11	1.53	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Fort Hills - September 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	1	4	2	3	3	13	16	28	6	17	4	8	8	21	10	158
6 - 11	29	8	0	2	3	2	10	57	52	19	13	4	7	11	11	11	239
12 - 19	31	7	0	0	0	0	10	19	30	30	24	11	17	10	11	8	208
20 - 28	14	9	0	0	0	0	2	8	5	3	17	8	14	3	0	21	104
29 - 38	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	94	30	4	4	6	5	35	100	115	58	71	27	46	32	43	50	720

Total Number of Valid Hours: 720

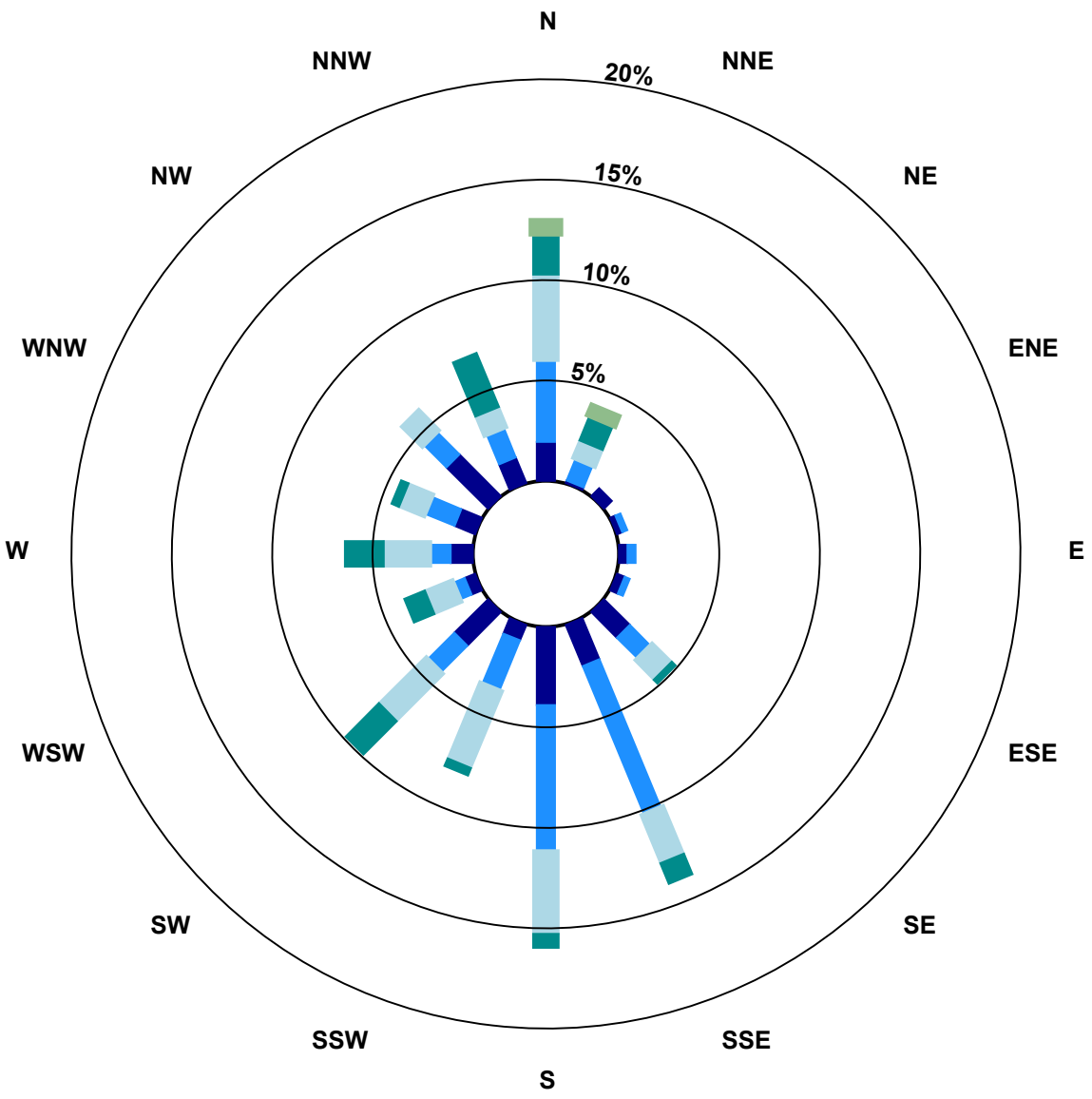
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Fort Hills



Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 720

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

Maximum Value: 8 km/h on Sep 13 17:00

Minimum Value: 1 km/h on Sep 2 05:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 2 Q_3 = 4 P_{90} = 5 P_{99} = 7

Hours in Service:	720
Hours of Data:	720
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-Sep	1	1	2	2	2	2	2	3	2	2	2	3	5	4	4	4	4	3	3	2	2	3	2	3	5
2-Sep	3	4	3	2	1	2	1	1	1	2	2	2	4	4	5	4	4	4	4	3	3	4	3	2	5
3-Sep	3	2	3	2	2	2	1	1	2	1	2	3	4	1	1	2	2	1	1	2	1	1	2	2	4
4-Sep	2	2	1	2	2	2	2	4	4	5	5	4	4	5	6	6	7	5	4	4	4	3	3	3	7
5-Sep	2	2	2	1	1	2	2	3	2	3	3	3	3	3	3	2	2	2	3	1	2	1	1	1	3
6-Sep	1	1	2	2	1	2	2	1	1	1	1	1	2	3	4	2	3	1	1	2	3	3	2	2	4
7-Sep	2	2	3	2	2	1	2	6	3	3	3	3	3	3	3	2	3	2	2	1	2	1	2	3	6
8-Sep	2	2	1	2	1	1	1	1	2	1	2	3	3	3	2	2	2	1	1	1	2	2	1	1	3
9-Sep	1	2	1	2	2	2	2	2	3	2	3	3	4	5	4	4	5	3	2	5	3	5	3	3	5
10-Sep	3	2	2	3	3	3	3	3	3	4	4	3	5	5	5	3	3	3	4	4	4	4	5	5	5
11-Sep	5	6	6	6	5	5	5	5	6	7	7	6	6	6	6	6	6	6	6	4	2	3	2	2	7
12-Sep	2	1	1	1	1	2	2	2	1	2	3	3	4	5	3	3	3	2	1	1	2	1	1	2	5
13-Sep	2	2	2	2	3	2	2	3	4	3	3	3	3	4	4	3	8	5	6	4	3	3	3	5	8
14-Sep	4	4	3	3	4	3	4	3	3	3	4	3	4	5	4	3	4	3	2	2	1	1	1	1	5
15-Sep	1	1	2	2	2	1	2	2	1	1	3	3	2	3	3	6	2	2	1	1	1	2	3	2	6
16-Sep	2	1	1	2	2	1	2	1	2	1	3	3	2	3	4	3	3	1	1	2	2	2	1	1	4
17-Sep	1	1	1	1	2	1	2	1	2	3	3	3	2	2	2	2	1	1	2	1	3	2	2	1	3
18-Sep	1	1	1	2	2	3	2	2	2	2	2	2	2	3	3	3	2	3	2	1	1	1	1	1	3
19-Sep	2	1	2	1	1	1	1	3	3	3	2	3	3	5	4	4	5	2	2	3	1	1	2	1	5
20-Sep	2	1	2	2	2	2	2	2	2	3	3	3	4	4	3	3	3	2	1	2	1	2	1	2	4
21-Sep	2	1	2	2	2	2	1	2	2	2	2	2	3	3	1	1	2	1	1	2	1	2	2	1	3
22-Sep	1	1	2	2	2	1	2	1	2	4	3	3	5	3	4	4	3	2	2	2	1	1	1	2	5
23-Sep	2	2	1	1	1	1	2	2	1	1	2	2	2	2	2	2	2	3	2	2	3	2	2	1	3
24-Sep	1	2	1	2	2	1	1	2	2	2	3	4	5	4	5	4	4	4	1	2	1	2	2	1	5
25-Sep	2	2	2	2	3	3	4	4	4	4	3	5	5	6	7	5	5	5	6	5	6	6	5	5	7
26-Sep	5	4	5	4	3	4	3	4	3	5	5	6	6	7	7	7	6	5	5	5	4	6	6	5	7
27-Sep	4	3	5	5	5	4	3	3	3	3	4	4	4	4	5	4	4	3	2	1	2	2	2	2	5
28-Sep	2	2	2	2	1	2	4	2	2	3	3	4	5	6	6	4	5	3	1	2	2	2	1	1	6
29-Sep	2	1	2	1	2	3	2	1	1	4	3	3	6	5	6	7	7	6	5	7	6	6	5	5	7
30-Sep	4	5	5	3	4	4	4	4	4	5	5	5	5	4	4	3	3	4	1	1	1	2	2	1	5
	5	6	6	6	5	5	5	6	6	7	7	6	6	7	7	7	8	6	6	7	6	6	6	5	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Fort Hills - September 2026

Direction of Maximum Speed: 20 deg on Sep 25 14:00
Direction of Maximum Daily Speed Average: 11.9 deg on Sep 25

Direction of Minimum Speed: 100 deg on Sep 17 06:00

Direction of Minimum Daily Speed Average: 1.4 deg on Sep 18

Monthly Average Direction: 245.7 deg

Hours in Service:	720
Hours of Data:	720
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-Sep	316	313	273	167	172	153	156	195	169	177	211	188	163	170	167	151	153	151	151	144	140	146	145	147	159.5
2-Sep	151	151	176	279	3	348	349	346	354	318	274	240	151	147	148	140	138	126	125	127	140	137	149	150	140.4
3-Sep	152	137	154	358	3	1	348	343	355	354	352	119	127	80	65	80	60	1	348	353	8	24	357	11	23.2
4-Sep	20	15	11	11	9	11	11	8	13	15	11	5	7	6	1	3	3	4	3	0	359	356	359	1	6.3
5-Sep	338	331	3	0	359	2	1	11	6	13	11	22	27	24	29	40	67	112	4	0	337	345	321	313	5.7
6-Sep	285	339	185	181	183	228	176	169	223	221	251	236	229	184	182	187	190	186	193	167	153	153	142	149	180.2
7-Sep	147	149	183	170	158	164	132	150	161	198	189	196	176	174	179	183	172	165	159	155	173	171	148	175	170.4
8-Sep	176	216	315	321	333	329	298	300	358	0	356	5	14	146	157	88	104	121	104	98	40	334	305	250	24.7
9-Sep	180	159	151	166	154	159	167	168	190	187	195	200	208	213	227	221	222	227	216	232	211	225	232	231	203.6
10-Sep	251	276	278	245	220	210	214	229	227	269	255	254	282	289	292	278	296	317	331	328	324	318	325	327	278.2
11-Sep	327	331	333	334	335	337	335	341	339	342	337	335	338	328	332	328	332	337	331	326	299	314	304	306	332.4
12-Sep	292	288	294	301	317	320	234	226	212	183	186	218	205	229	214	221	244	235	199	185	191	203	208	211	224.2
13-Sep	217	209	189	199	204	191	201	210	213	202	196	201	217	228	228	220	306	19	14	18	11	359	359	2	228.1
14-Sep	9	6	3	358	360	2	356	356	0	1	1	13	6	359	2	5	3	341	360	325	316	306	296	315	357.8
15-Sep	274	279	293	269	213	169	164	176	161	143	206	237	222	217	246	305	231	316	301	341	313	357	10	358	258.2
16-Sep	358	347	284	287	261	324	324	221	233	235	217	211	209	192	182	189	184	169	148	129	125	198	189	134	196.3
17-Sep	145	4	345	4	40	100	177	302	215	182	220	179	177	181	185	182	176	183	154	159	308	356	191	183	185.5
18-Sep	179	182	169	39	323	15	354	4	6	353	137	140	168	152	148	73	91	134	186	223	234	175	132	189	97.4
19-Sep	165	150	151	154	164	167	191	162	179	174	183	175	157	173	178	174	175	180	179	182	181	185	168	152	171.9
20-Sep	174	166	183	191	176	165	171	195	187	194	181	201	219	233	213	212	203	196	188	179	188	189	202	200	195.3
21-Sep	187	178	179	176	181	152	145	159	174	175	177	163	153	149	277	6	15	8	341	262	179	141	145	162	164.9
22-Sep	144	155	158	133	158	174	172	164	214	336	1	320	288	249	250	261	276	267	286	302	299	221	154	202	263.0
23-Sep	185	171	155	166	167	175	153	178	188	257	202	159	153	135	149	149	145	146	135	149	173	142	145	172	158.8
24-Sep	161	170	145	163	158	154	177	168	170	180	201	218	232	238	234	225	224	220	198	217	246	150	264	318	204.8
25-Sep	351	186	346	350	359	359	6	4	16	18	12	22	18	20	23	13	16	14	14	9	10	9	9	6	11.9
26-Sep	7	6	0	348	314	242	279	247	259	253	264	272	270	271	277	277	270	269	275	266	260	266	270	271	280.4
27-Sep	259	242	258	259	253	238	235	225	223	232	231	235	243	243	250	273	265	232	219	209	221	218	219	203	239.7
28-Sep	209	178	194	150	172	174	196	196	194	201	207	218	220	226	228	216	203	192	165	183	200	205	183	160	200.7
29-Sep	185	156	151	158	167	172	159	168	169	215	227	251	277	275	283	280	273	277	276	286	259	264	268	280	247.8
30-Sep	293	287	295	287	286	295	314	303	323	330	334	328	327	316	308	322	328	315	311	330	320	294	317	304	311.8
	263.9	257.3	270.8	262.2	241.8	225.6	238.7	225.0	226.2	241.0	250.7	245.1	238.7	237.1	242.4	243.9	242.2	252.3	286.4	246.9	240.9	260.9	265.8	276.7	
	Diurnal Average																								

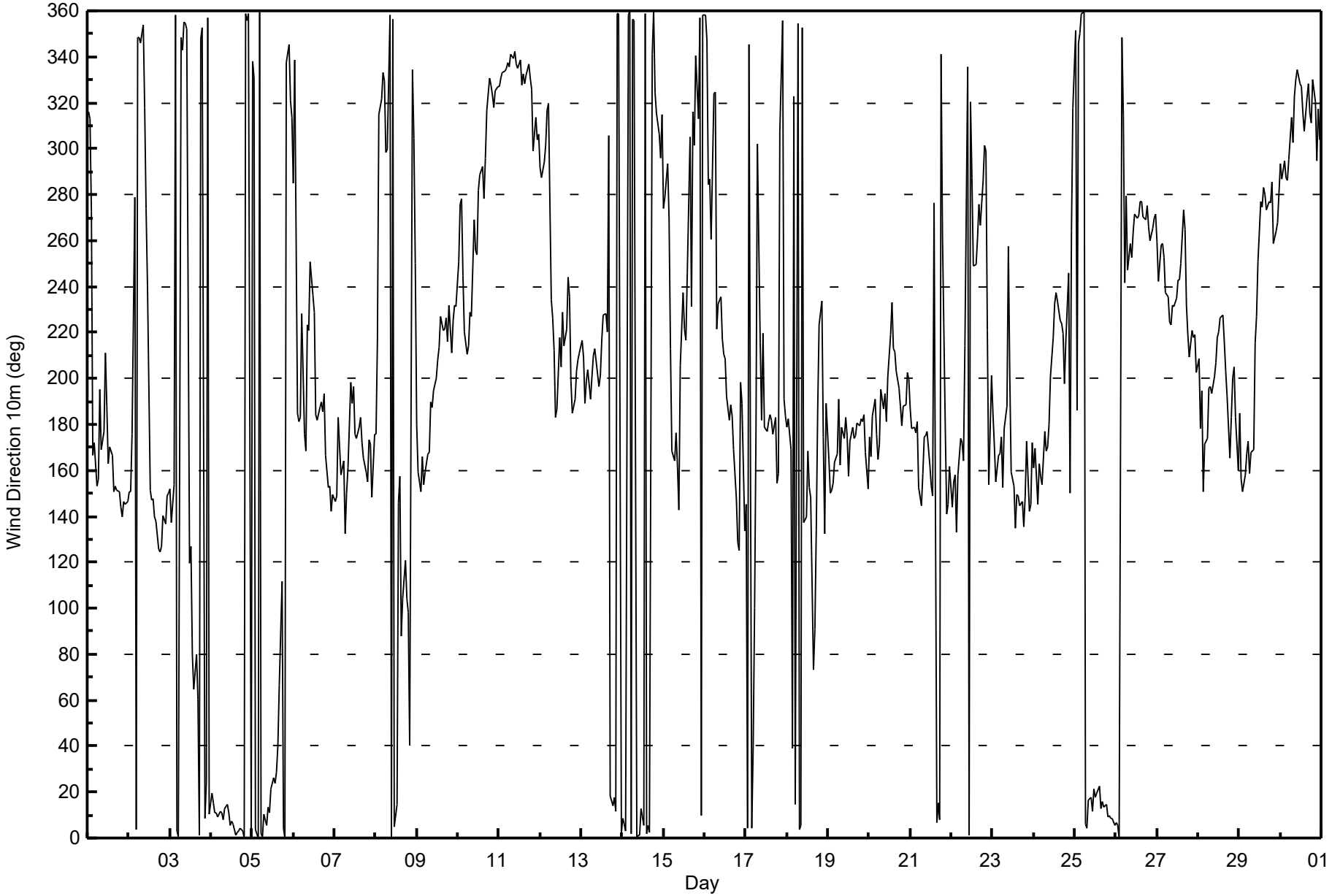
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Fort Hills - September 2026



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

Maximum Value: 102 deg on Sep 17 21:00

Minimum Value: 5 deg on Sep 20 19:00

Percentiles: P_1 = 7 P_{10} = 9 Q_1 = 12 Median = 15 Q_3 = 22 P_{90} = 42 P_{99} = 87

Hours in Service:	720
Hours of Data:	720
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-Sep	38	55	64	21	26	17	19	34	9	13	19	26	18	14	15	13	9	9	7	9	8	8	8	7	64
2-Sep	9	11	70	52	10	14	9	14	17	29	43	63	15	11	17	12	11	12	13	10	9	56	16	9	70
3-Sep	19	26	46	26	13	12	14	13	15	16	19	82	21	25	29	23	14	39	12	44	21	10	15	11	82
4-Sep	9	9	8	10	10	10	10	12	12	12	12	14	13	15	17	17	16	13	15	15	16	15	16	15	17
5-Sep	14	18	13	16	19	15	27	14	15	18	19	25	34	32	46	65	54	63	15	13	38	19	21	12	65
6-Sep	27	23	44	60	24	48	28	16	32	51	19	21	33	20	38	14	14	12	10	14	9	9	8	12	60
7-Sep	11	9	27	19	15	11	76	74	11	15	13	17	16	15	16	19	20	7	7	8	16	26	10	84	84
8-Sep	78	93	20	19	20	21	23	14	27	22	42	35	86	83	72	52	27	15	24	19	74	45	12	72	93
9-Sep	30	12	15	23	17	11	8	8	11	10	12	11	13	16	14	12	11	9	11	10	13	18	11	10	30
10-Sep	22	13	14	17	12	7	11	11	19	16	12	22	14	16	15	14	15	15	14	15	14	15	15	15	22
11-Sep	14	14	14	13	13	14	13	16	15	16	16	15	18	16	16	16	15	15	13	14	14	16	14	13	18
12-Sep	14	10	11	14	26	33	62	84	34	22	45	42	87	60	32	19	37	22	11	5	7	16	8	10	87
13-Sep	9	9	15	10	11	9	8	9	9	11	11	11	11	14	16	13	61	10	12	12	12	14	15	16	61
14-Sep	12	15	14	15	16	15	16	15	16	16	15	18	16	17	15	16	17	15	22	18	12	13	19	19	22
15-Sep	15	8	14	42	50	30	25	28	18	30	28	26	14	22	24	25	32	20	31	41	35	21	16	15	50
16-Sep	13	14	25	13	24	58	41	28	92	28	28	29	18	29	23	15	11	9	9	10	26	44	49	37	92
17-Sep	84	10	19	14	65	94	85	86	41	24	23	17	12	13	29	10	8	8	43	14	102	52	73	17	102
18-Sep	62	19	36	72	34	11	13	12	17	70	82	68	95	68	52	33	20	21	59	32	38	78	28	22	95
19-Sep	20	9	9	9	13	18	11	11	9	10	16	21	11	12	12	10	9	8	7	10	10	6	14	12	21
20-Sep	9	10	18	28	25	34	17	8	11	16	15	15	16	18	13	15	9	11	5	7	6	9	7	15	34
21-Sep	11	6	10	11	20	9	8	9	11	11	13	17	15	14	44	21	13	11	30	75	16	14	11	16	75
22-Sep	16	14	38	37	37	27	50	31	50	19	16	30	46	22	22	15	19	17	12	13	16	68	29	39	68
23-Sep	69	25	20	17	19	16	41	17	17	29	31	23	31	32	27	17	11	11	7	8	19	10	21	17	69
24-Sep	15	19	14	22	14	11	12	9	10	12	11	11	12	15	17	14	11	13	7	43	36	100	80	43	100
25-Sep	11	88	18	16	16	15	12	15	14	12	12	10	10	12	12	11	12	12	10	13	13	14	12	13	88
26-Sep	13	16	15	17	29	23	25	13	13	13	14	15	14	16	14	15	15	14	16	16	15	15	13	14	29
27-Sep	19	15	13	12	15	9	9	12	11	10	10	13	17	18	18	17	23	9	11	8	9	10	8	12	23
28-Sep	12	11	11	12	13	20	11	7	9	11	14	12	15	12	11	12	10	12	7	15	8	7	17	10	20
29-Sep	10	9	8	11	10	12	9	10	8	23	9	20	14	16	16	15	16	17	18	18	17	19	16	20	23
30-Sep	15	14	14	14	14	18	15	17	15	16	14	16	17	17	16	18	14	16	16	18	12	27	27	41	41
	84	93	70	72	65	94	85	86	92	70	82	82	95	83	72	65	61	63	59	75	102	100	80	84	
	Diurnal Maximum																								

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS25
WASKŌW OHCI PIMÂTISIWIN
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WASKŌW OHCI PIMÂTISIWIN (AMS25)
SEPTEMBER 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	685	33	35	99.72	10.6	0	1.6	0
H2S(ppb) Average	684	36	36	100	3.2	0	1.1	0
Temperature 2 m (C) Average	720	0	0	100	27.7	0	19.3	0
Relative Humidity (%) Average	720	0	0	100	99.3	-	89.5	-
Wind Speed 10 m (km/h) Average	720	0	0	100	20	0	13	0
Wind Direction 10 m (deg) Average	720	0	0	100	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WASKŌW OHCI PIMÂTISIWIN (AMS25)
SEPTEMBER 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	685	0.3	1	-	0	0	0	0	0.1	0.4	10.6
H2S (ppb) Average	684	0.31	0.5	-	0	0	0.1	0.1	0.3	0.7	3.2
Temperature 2 m (C) Average	720	11.74	5.6	-	0.9	4.9	7.7	11	15.5	19.5	27.7
Relative Humidity (%) Average	720	75.64	19	-	26.6	46.2	63.1	79.7	93.2	97.3	99.3
Wind Speed 10 m (km/h) Average	720	5.1	4	-	0	1	2	4	8	10	20
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WASKŌW OHCI PIMÂTISIWIN (AMS25)

SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
SO2	07 Sep 2026 03:00	07 Sep 2026 03:00	1	DAS Failure
SO2	29 Sep 2026 14:00	29 Sep 2026 14:00	1	Maintenance - sample manifold cleaned

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Waskow ohci Pimatisiwin - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10.6 ppb on Sep 7 14:00 Maximum Daily Average: 1.6 ppb on Sep 21

Minimum Value: 0.0 ppb on Sep 2 01:00
Maximum Diurnal Average: 1.1 ppb at hour 15
Monthly Average: 0.30 ppb

Minimum Daily Average: 0.0 ppb on Sep 10
Minimum Diurnal Average: 0.0 ppb at hour 3
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} = 5.0

Hours in Service:	720
Hours of Data:	685
Hours of Missing Data:	35
Hours of Calibration:	33
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-Sep	0.0	0.0	Z	0.1	0.0	0.1	0.1	0.5	4.7	5.6	C	C	C	C	1.0	0.9	2.4	0.9	0.3	0.2	0.2	0.1	0.1	0.0	0.9	5.6
2-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.2	0.6	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.6
3-Sep	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2
4-Sep	0.0	0.1	0.0	0.0	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	0.0	0.0	0.0	0.0	0.2
5-Sep	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	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
6-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.6	0.5	1.0	1.4	1.0	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.3	1.4
7-Sep	0.1	0.0	DF	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.9	10.6	9.3	3.1	2.0	4.0	3.7	0.9	0.3	0.1	0.0	0.0	1.5	10.6
8-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	4.5	3.7	1.1	0.4	0.2	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.5	4.5
9-Sep	0.0	0.0	0.0	0.0	Z	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	0.0	0.2
10-Sep	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
11-Sep	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
12-Sep	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	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	0.1	0.2
13-Sep	0.2	0.2	Z	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.3	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.3
14-Sep	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
15-Sep	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
16-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.2	1.3	2.9	1.5	0.5	0.3	0.0	0.1	1.3	0.6	0.2	0.0	0.0	0.0	0.0	0.4	2.9
17-Sep	Z	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.6	1.0	3.7	0.5	0.4	0.3	0.3	0.4	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.4	3.7
18-Sep	0.1	Z	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.2	0.4
19-Sep	0.1	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.3	0.5	1.9	3.6	4.4	1.2	4.4	5.3	4.3	0.5	0.3	0.2	0.3	0.6	0.3	0.3	1.3	5.3
20-Sep	0.3	0.1	0.1	Z	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	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.3
21-Sep	0.1	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.4	0.6	4.2	5.7	5.0	5.0	4.1	4.4	3.8	1.2	0.6	0.6	0.3	0.2	0.1	1.6	5.7
22-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.0	0.1	0.0	0.0	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
23-Sep	Z	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.4	1.9	3.3	3.9	9.9	5.6	1.3	0.7	0.4	0.3	0.1	0.8	1.0	0.3	1.4	9.9
24-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
25-Sep	0.0	0.0	Z	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	0.0	0.0	0.0	0.0	0.0	0.3
26-Sep	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
27-Sep	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
28-Sep	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	0.1	0.0	0.1
29-Sep	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	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
30-Sep	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	0.0	0.1	0.0	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	0.2	0.3	0.3	0.5	0.8	1.0	1.1	0.7	0.5	0.4	0.3	0.1	0.1	0.1	0.1	0.0	Diurnal Average	
	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.5	4.7	5.6	3.7	4.2	5.7	10.6	9.9	5.6	4.4	4.0	3.7	0.9	0.6	0.8	1.0	0.3	Diurnal Maximum	

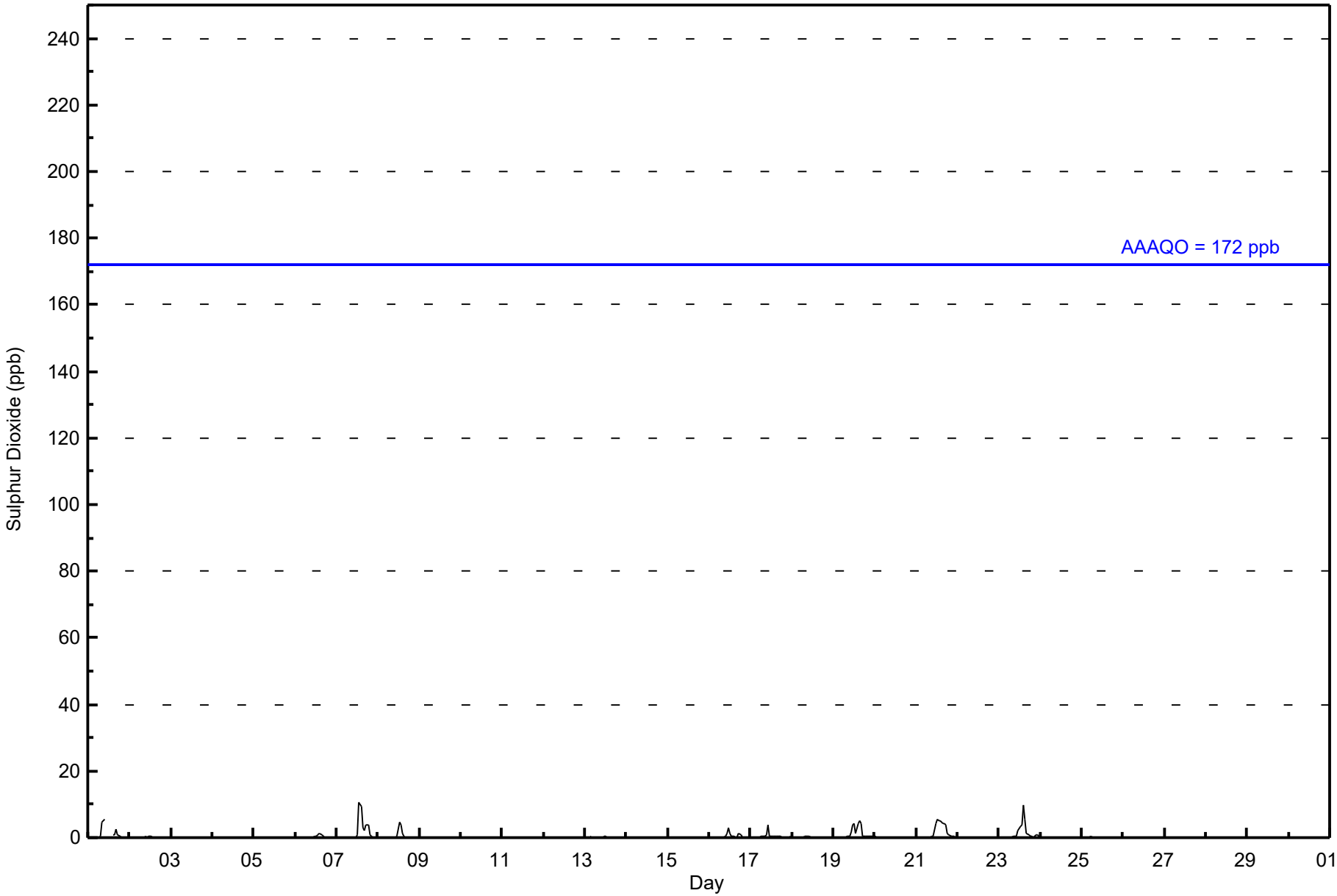
Z - zerospan C - Calibration M - Maintenance DF - DAS Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Waskow ohci Pimatisiwin - September 2026



Sulphur Dioxide (SO_2) - ppb

Waskow ohci Pimatisiwin - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	684	99.85	99.85
11 - 20	1	0.15	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Waskow ohci Pimatisiwin - September 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	54	20	3	7	5	22	42	89	61	49	41	46	55	69	62	59	684
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	54	20	3	7	5	22	42	90	61	49	41	46	55	69	62	59	685

Total Number of Valid Hours: 685

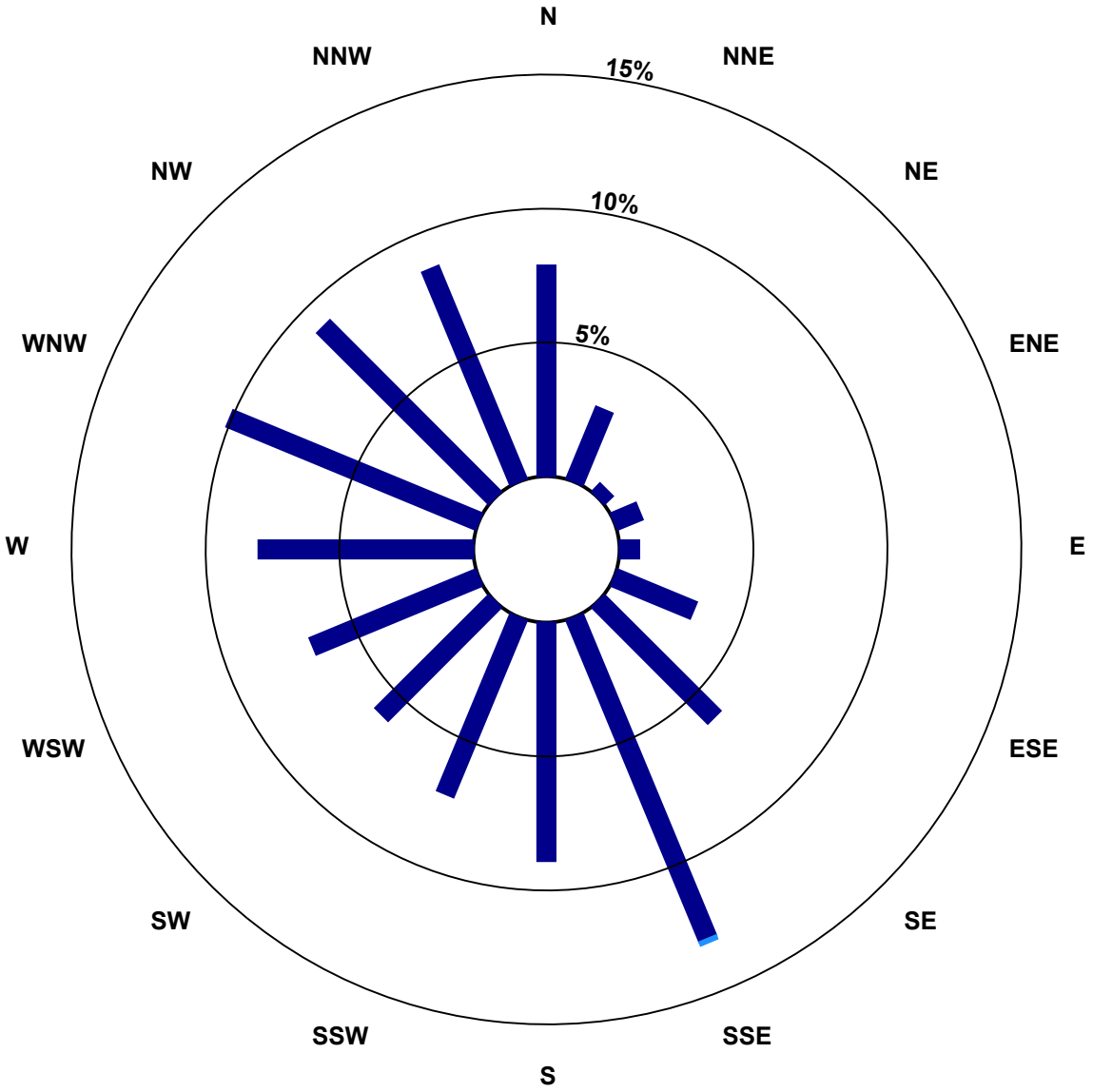
Total Number of Hours: 720

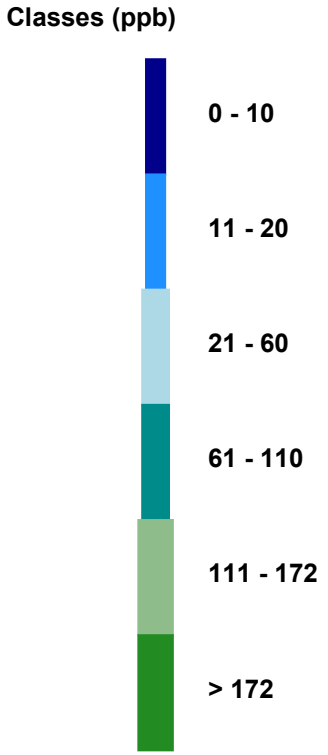
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Waskow ohci Pimatisiwin





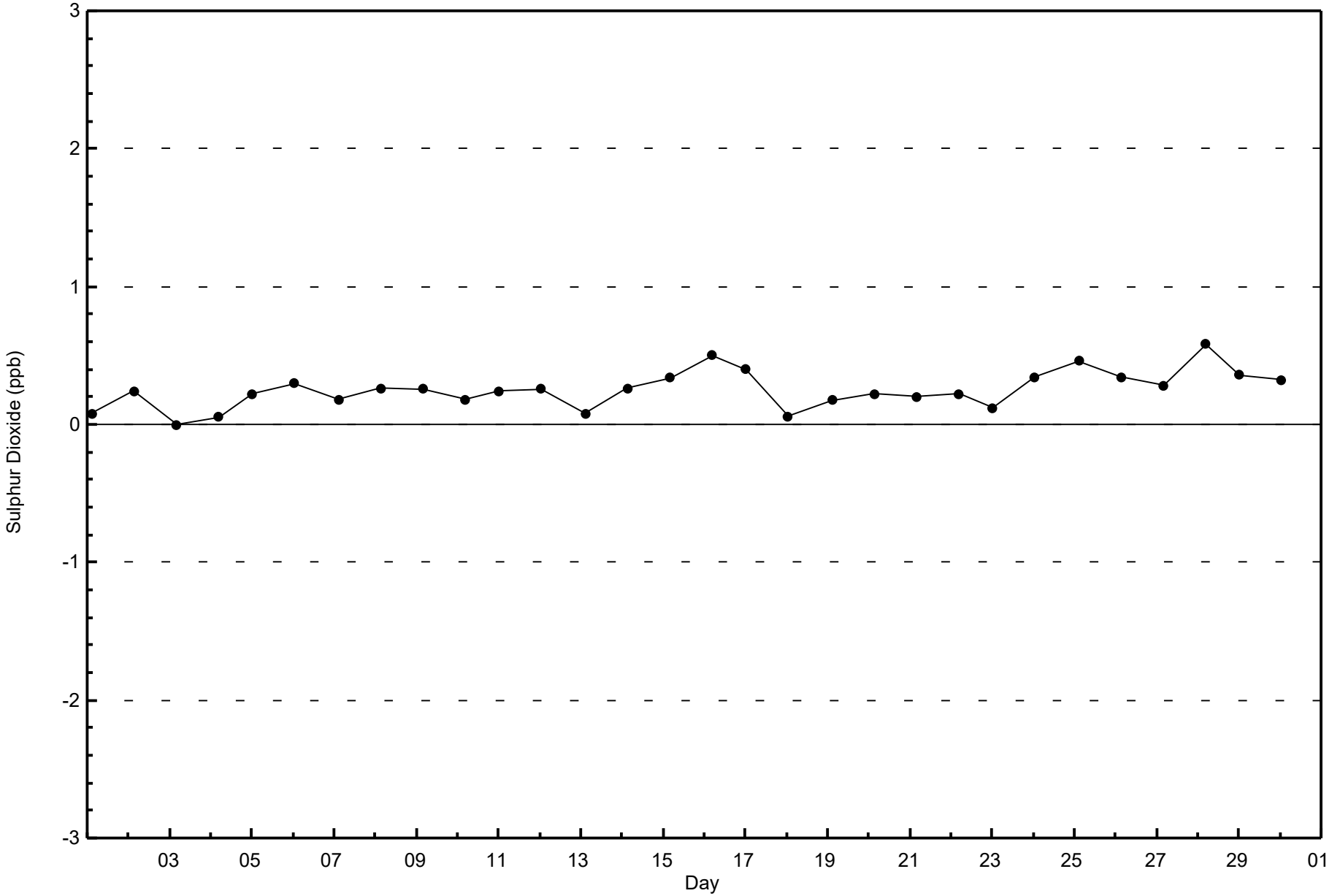
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Waskow ohci Pimatisiwin - September 2026

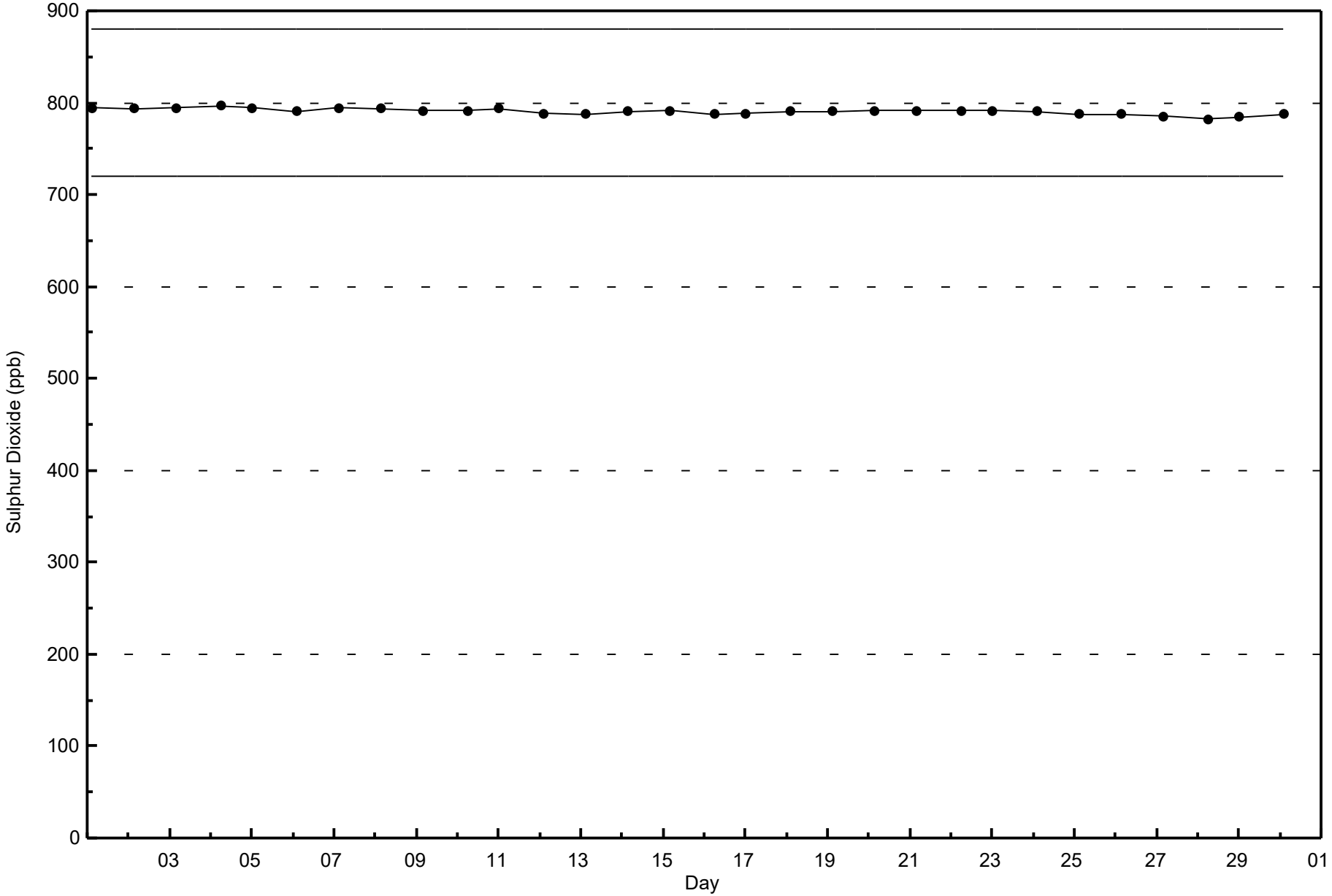


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Waskow ohci Pimatisiwin - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Waskow ohci Pimatisiwin - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.2 ppb on Sep 7 00:00 Maximum Daily Average: 1.1 ppb on Sep 7

Minimum Value: 0.0 ppb on Sep 9 15:00 Minimum Daily Average: 0.0 ppb on Sep 27
Maximum Diurnal Average: 0.6 ppb at hour 9 Minimum Diurnal Average: 0.2 ppb at hour 17
Monthly Average: 0.31 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.3 P_{90} = 0.7 P_{99} = 2.3

Hours in Service:	720
Hours of Data:	684
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-Sep	0.3	0.3	0.2	Z	0.3	0.7	0.8	1.3	2.4	1.1	0.6	0.4	0.2	0.1	0.2	0.3	0.5	1.5	2.3	2.3	1.3	0.5	0.3	0.2	0.8	2.4
2-Sep	0.3	0.3	0.2	0.3	Z	0.4	0.4	0.4	0.2	0.8	0.7	0.7	0.6	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.8
3-Sep	0.1	0.1	0.2	0.1	0.2	Z	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.4
4-Sep	Z	0.4	0.5	0.5	0.5	0.6	0.7	0.7	0.7	0.6	0.6	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	0.3	0.7
5-Sep	0.1	Z	0.4	0.3	0.3	0.3	0.2	0.3	0.6	0.5	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	0.2	0.6
6-Sep	0.2	0.1	Z	0.1	0.1	0.1	0.2	0.2	0.9	1.3	1.0	1.8	1.7	1.4	0.6	0.2	0.1	0.1	0.2	0.2	0.6	0.7	1.0	3.2	0.7	3.2
7-Sep	2.9	2.2	1.7	Z	0.9	0.4	0.6	0.5	1.1	2.3	0.2	0.1	0.2	0.5	0.4	0.3	0.2	0.3	0.9	2.1	2.5	2.0	1.5	0.9	1.1	2.9
8-Sep	0.6	0.3	0.3	0.2	Z	0.2	0.2	0.5	2.0	0.6	0.3	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.6	0.3	0.3	2.0
9-Sep	0.2	0.1	0.1	0.5	1.1	Z	0.8	0.7	1.6	1.0	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	0.3	1.6
10-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
11-Sep	0.1	Z	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	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
12-Sep	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	0.1	0.1	0.1	0.3	0.1	0.3
13-Sep	0.1	0.2	0.4	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.4
14-Sep	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
15-Sep	0.1	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
16-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.1	0.3	0.2	0.5	0.4	0.2	0.2	0.2	0.1	0.2	0.5
17-Sep	0.1	Z	0.2	0.1	0.1	0.3	0.4	0.6	0.8	0.4	0.4	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.8
18-Sep	0.1	0.2	Z	0.2	0.2	0.1	0.2	0.3	0.2	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.3	0.4	0.2	0.4
19-Sep	0.3	0.2	0.1	Z	0.4	0.5	2.2	1.9	2.6	2.1	0.5	0.4	0.3	0.3	0.3	0.4	0.4	0.1	0.2	0.9	2.7	1.0	0.4	0.4	0.8	2.7
20-Sep	0.5	0.5	0.3	0.3	Z	0.8	0.5	0.5	0.7	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	1.4	0.8	0.6	0.5	0.4	1.4
21-Sep	0.3	0.2	0.2	0.2	0.2	Z	0.1	0.3	0.9	1.5	1.0	0.9	1.3	1.1	1.0	1.0	0.9	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.6	1.5
22-Sep	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	0.1	0.0	0.1
23-Sep	0.1	Z	0.2	0.1	0.2	0.1	0.3	0.3	0.6	1.0	1.0	1.5	0.5	0.6	1.1	1.3	0.7	0.8	1.7	2.3	1.8	2.3	2.0	0.8	0.9	2.3
24-Sep	0.3	0.2	Z	0.1	0.1	0.1	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	0.1	0.1	0.2	0.2	0.2	0.1	0.3
25-Sep	0.2	0.1	0.1	Z	0.3	0.4	0.5	0.6	0.5	0.4	0.4	0.3	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	0.6
26-Sep	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	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	0.0	0.0	0.0	0.1	0.1
27-Sep	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	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1
28-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	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	0.2	0.1	0.3
29-Sep	0.2	Z	0.2	0.2	0.3	0.3	0.6	0.6	0.2	0.0	C	C	C	C	C	C	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.1	--	0.6
30-Sep	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
	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.4	0.6	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.3	0.3	Diurnal Average	
	2.9	2.2	1.7	0.5	1.1	0.8	2.2	1.9	2.6	2.3	1.0	1.8	1.7	1.4	1.1	1.3	0.9	1.5	2.3	2.3	2.7	2.3	2.0	3.2	Diurnal Maximum	

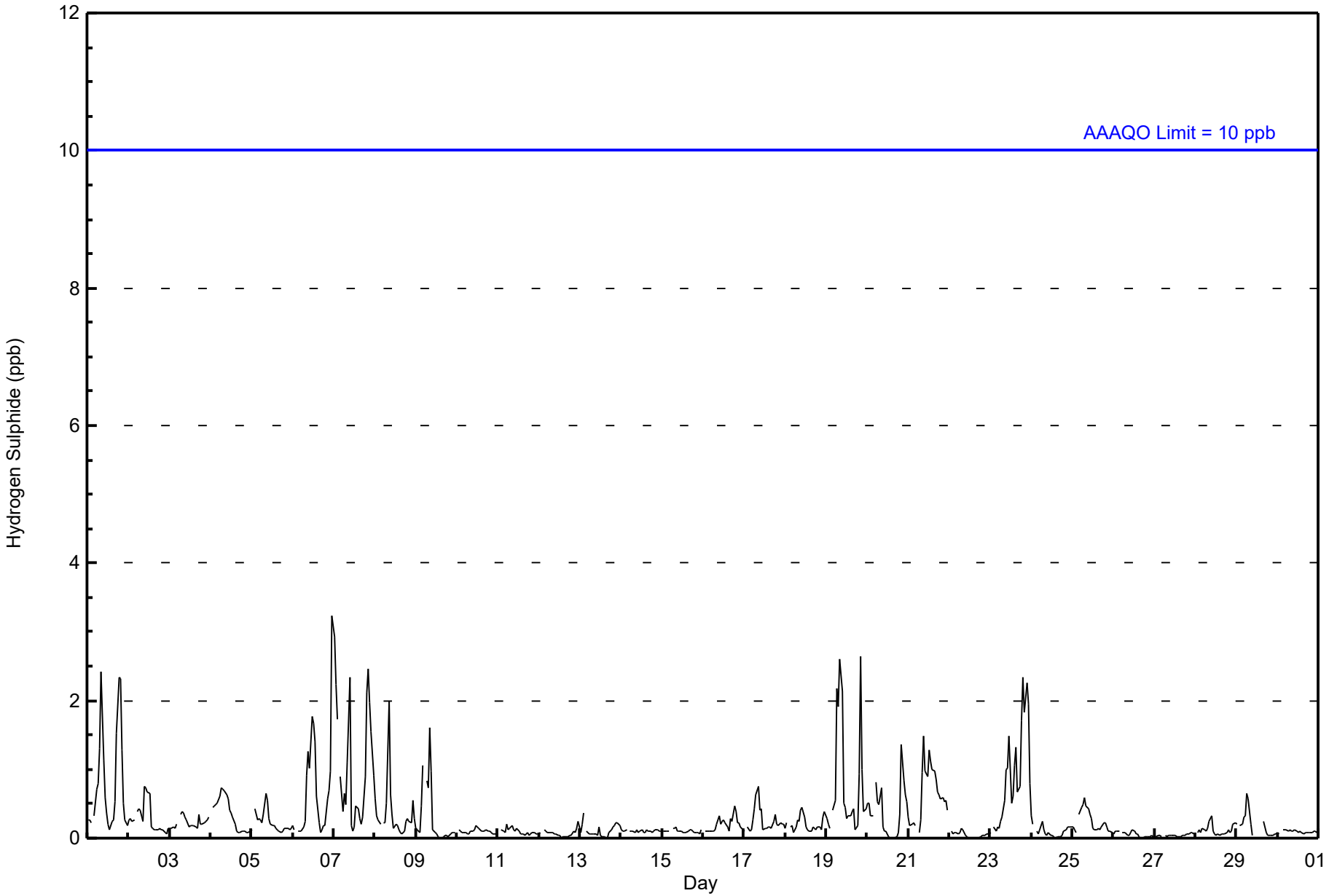
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Waskow ohci Pimatisiwin - September 2026



Hydrogen Sulphide (H_2S) - ppb

Waskow ohci Pimatisiwin - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	680	99.42	99.42
3 - 4	4	0.58	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Waskow ohci Pimatisiwin - September 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	54	20	3	8	4	22	42	91	62	49	43	44	53	64	64	57	680
3 - 4	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	4
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	54	20	3	8	4	22	44	93	62	49	43	44	53	64	64	57	684

Total Number of Valid Hours: 684

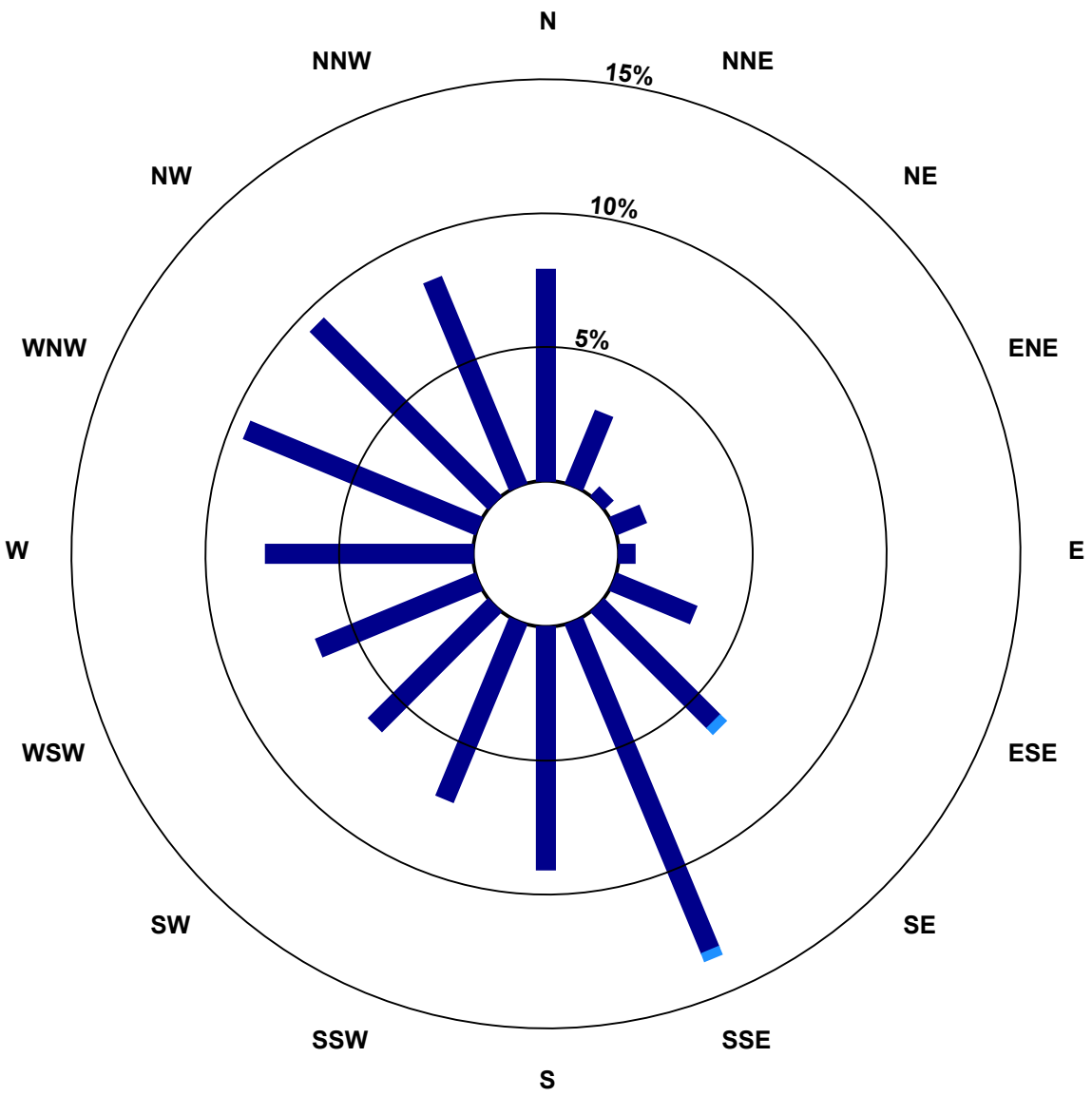
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

Waskow ohci Pimatisiwin



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

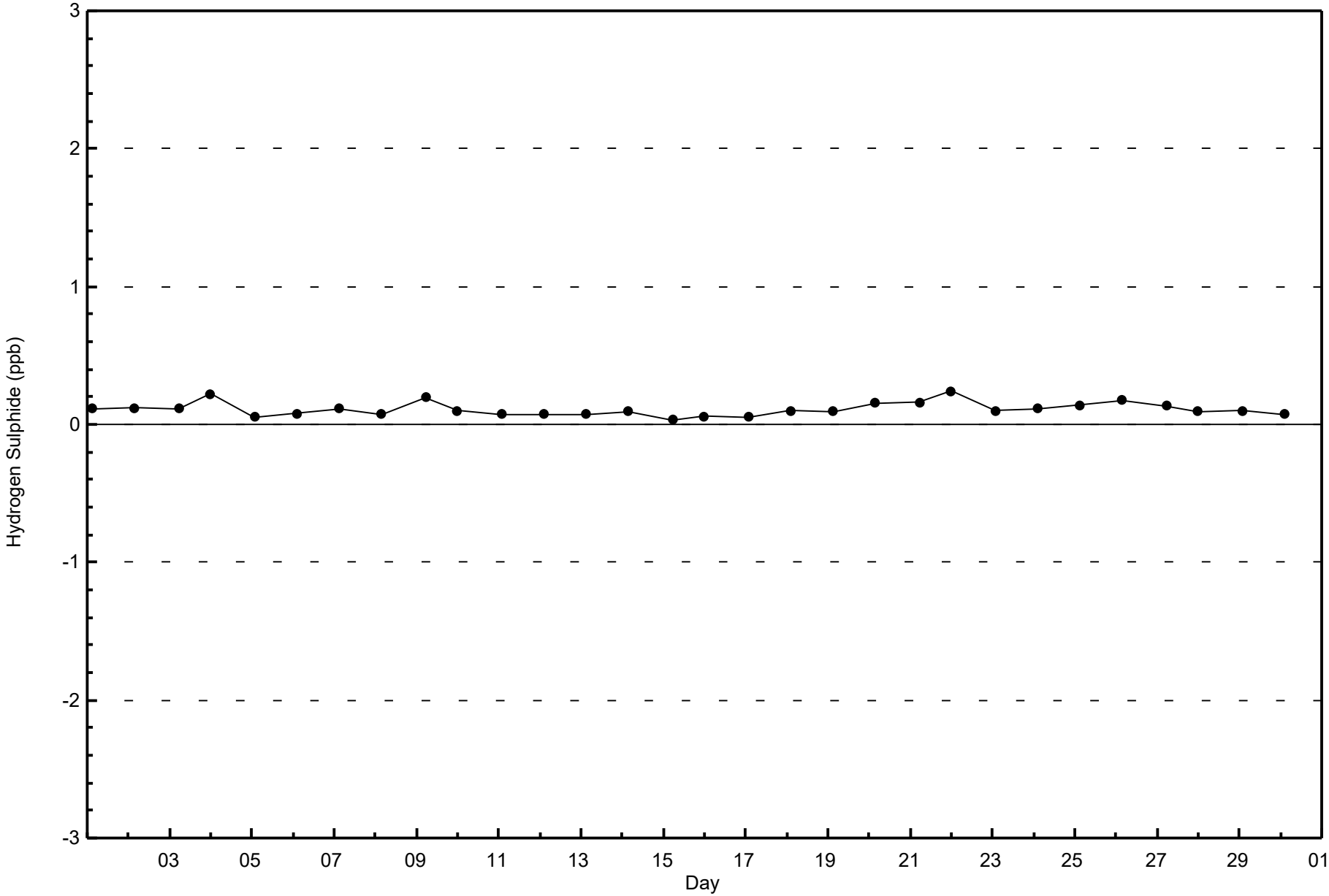
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Waskow ohci Pimatisiwin - September 2026

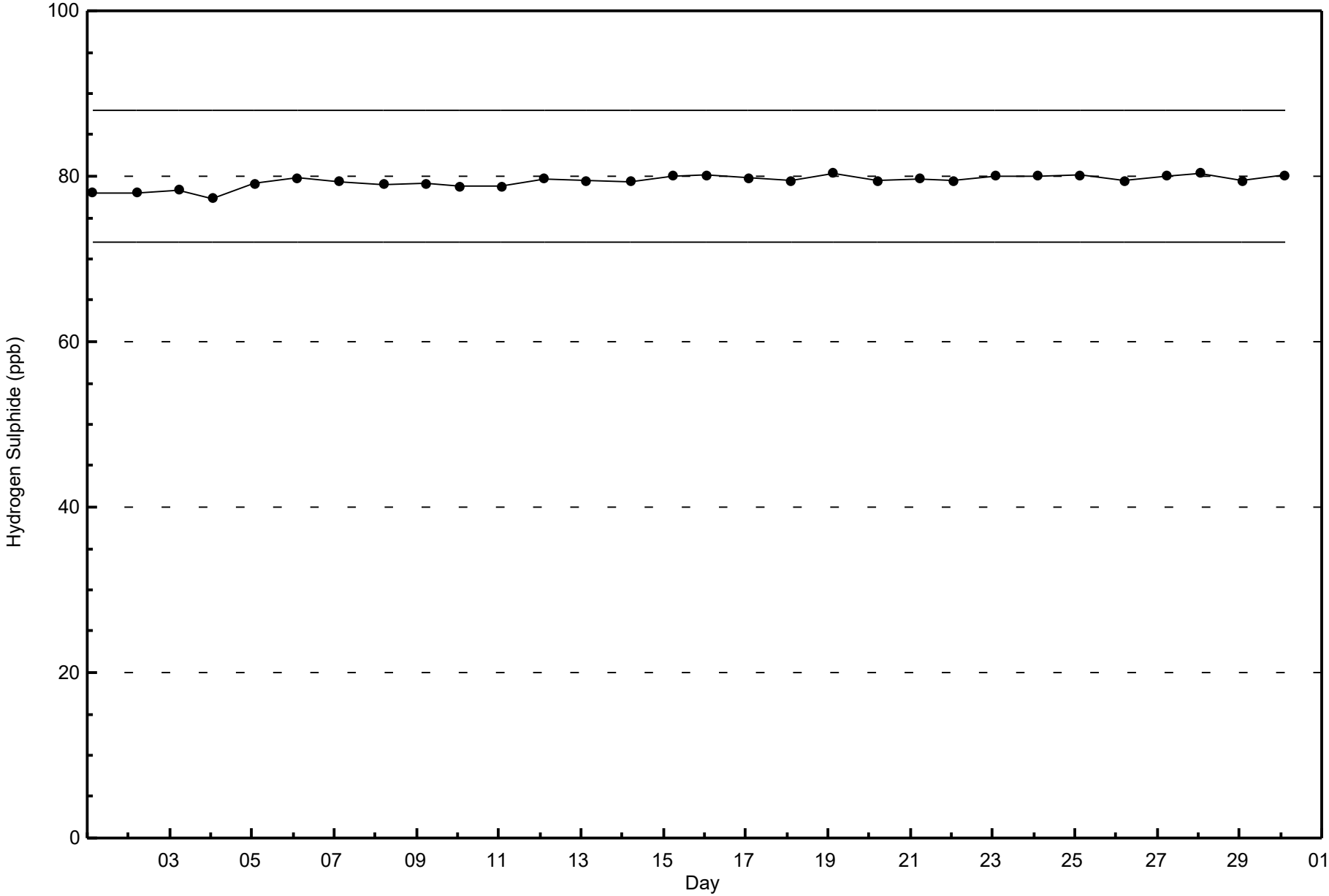


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Waskow ohci Pimatisiwin - September 2026



Maximum Value: 27.7 C on Sep 2 15:00 | Maximum Daily Average: 19.3 C on Sep 2

Minimum Value: 0.9 C on Sep 28 07:00 | Minimum Daily Average: 5.3 C on Sep 30

Maximum Diurnal Average: 17.2 C at hour 15 | Minimum Diurnal Average: 6.7 C at hour 6

Monthly Average: 11.74 C | Percentiles: P_1 = 1.8 P_{10} = 4.9 Q_1 = 7.7 Median = 11.0 Q_3 = 15.5 P_{90} = 19.5 P_{99} = 25.9

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

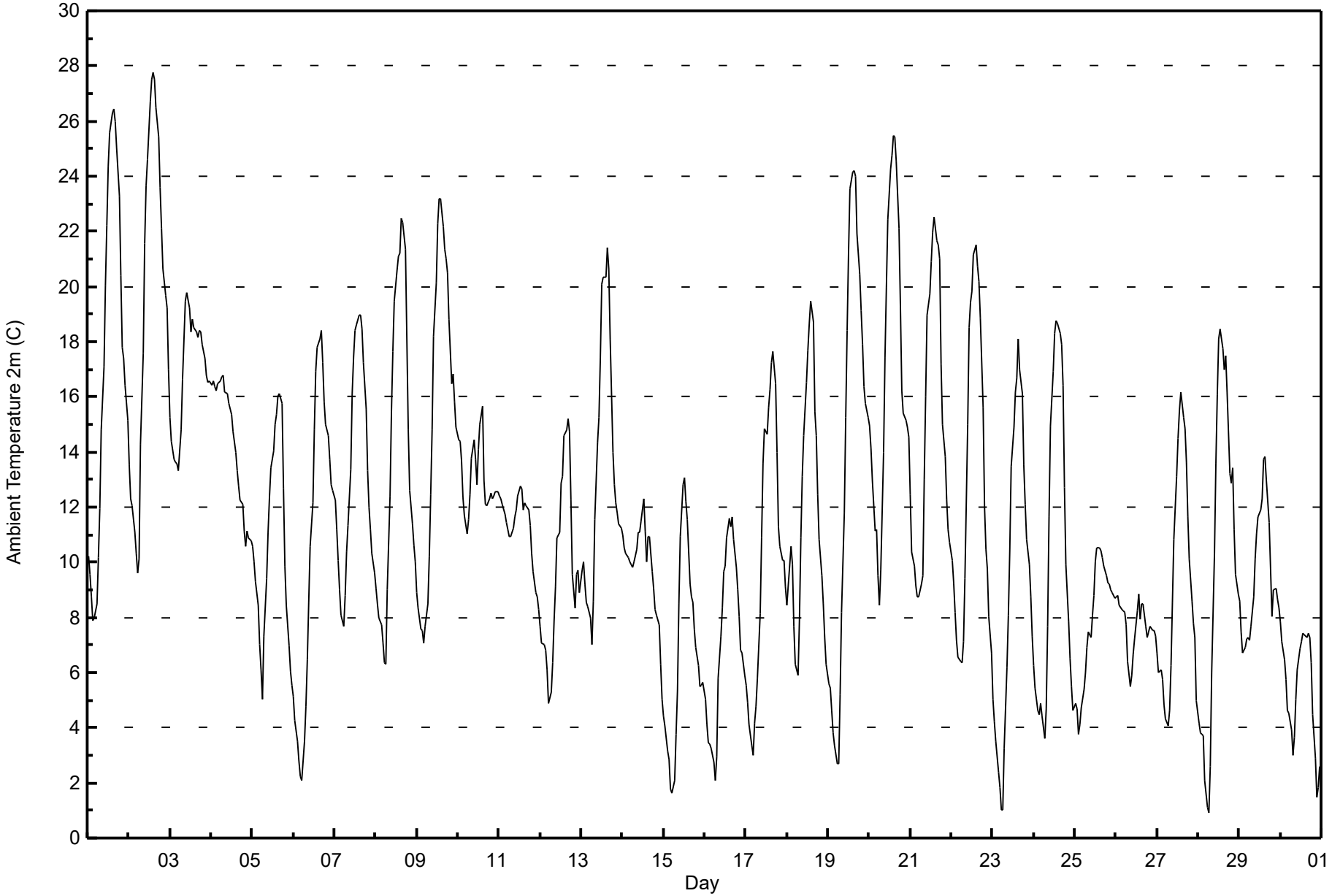
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	10.2	9.6	8.8	7.9	8.0	8.5	10.2	11.9	14.8	17.1	20.1	22.2	24.4	25.6	26.3	26.5	26.0	25.0	23.3	20.4	17.8	17.4	16.4	15.2	17.2	26.5
2-Sep	13.5	12.3	12.1	11.1	10.3	9.6	10.1	14.3	17.6	21.6	23.7	24.6	26.7	27.5	27.7	27.5	26.5	25.4	23.6	22.1	20.6	19.7	19.2	17.0	19.3	27.7
3-Sep	15.3	14.4	13.8	13.6	13.6	13.3	14.8	16.6	18.1	19.5	19.8	19.2	18.4	18.8	18.5	18.3	18.2	18.4	18.4	17.9	17.4	16.8	16.5	16.6	16.9	19.8
4-Sep	16.4	16.6	16.4	16.2	16.5	16.6	16.7	16.8	16.2	16.1	15.8	15.6	15.3	14.7	14.0	13.3	12.8	12.3	12.1	11.2	10.6	11.1	10.9	10.8	14.4	16.8
5-Sep	10.6	10.0	9.3	8.4	7.0	6.1	5.0	7.3	9.4	11.1	12.3	13.4	14.1	15.0	15.4	16.0	16.1	15.8	12.6	9.9	8.5	7.0	6.0	5.5	10.5	16.1
6-Sep	5.1	4.3	3.5	2.8	2.3	2.1	3.5	4.8	6.4	8.5	10.6	12.2	14.8	16.9	17.8	18.1	18.4	17.2	15.8	15.0	14.6	13.7	12.8	12.6	10.6	18.4
7-Sep	12.3	11.2	10.1	9.0	8.1	7.7	8.8	10.4	11.4	13.4	16.1	17.5	18.4	18.6	19.0	18.9	18.5	17.2	15.6	13.3	12.0	11.2	10.3	9.6	13.3	19.0
8-Sep	9.0	8.5	8.0	7.7	7.1	6.4	6.3	9.0	12.4	15.5	17.6	19.5	20.6	21.1	21.2	22.5	22.3	21.3	18.1	14.8	12.6	11.4	10.6	10.0	13.9	22.5
9-Sep	8.9	8.3	7.6	7.5	7.1	7.7	8.5	10.2	12.5	14.8	18.2	20.1	22.3	23.2	23.2	22.2	21.3	21.0	20.5	18.8	16.5	16.9	15.8	14.9	15.3	23.2
10-Sep	14.5	14.4	13.7	12.4	11.7	11.0	11.5	12.5	13.8	14.4	13.7	12.8	14.1	15.0	15.7	13.0	12.1	12.0	12.3	12.5	12.3	12.4	12.6	12.6	13.0	15.7
11-Sep	12.4	12.3	12.1	11.7	11.4	11.2	10.9	10.9	11.2	11.7	11.9	12.4	12.8	12.7	11.9	12.1	12.0	11.9	11.3	10.3	9.7	8.9	8.8	8.3	11.3	12.8
12-Sep	7.7	7.1	7.0	6.8	6.1	4.9	5.3	6.3	7.9	9.1	10.9	11.1	12.9	13.1	14.6	14.8	15.2	14.8	12.2	9.6	8.3	9.6	9.7	8.9	9.7	15.2
13-Sep	9.7	10.0	9.2	8.5	8.4	8.0	7.0	8.6	11.5	14.3	15.3	17.5	20.1	20.3	20.4	21.4	20.7	18.1	14.0	12.8	12.2	11.8	11.4	11.3	13.4	21.4
14-Sep	11.0	10.5	10.3	10.2	10.0	9.9	9.8	10.0	10.5	11.1	11.1	11.5	12.3	11.1	10.0	10.9	10.9	9.7	9.1	8.3	8.1	7.8	6.3	5.1	9.8	12.3
15-Sep	4.4	4.0	3.2	2.8	1.8	1.6	2.1	3.8	5.4	8.5	10.9	12.8	13.0	12.2	11.6	9.2	8.7	8.5	7.6	6.9	6.3	5.5	5.5	5.6	6.8	13.0
16-Sep	5.0	4.1	3.5	3.4	3.2	2.8	2.1	2.9	5.8	7.3	8.4	9.7	9.9	10.9	11.6	11.3	11.6	10.8	9.8	9.0	8.0	6.8	6.7	5.9	7.1	11.6
17-Sep	5.6	4.9	4.1	3.4	3.0	4.2	4.8	5.8	8.1	10.9	13.6	14.8	14.7	15.6	16.3	17.2	17.6	16.5	14.0	11.3	10.6	10.1	10.1	9.1	10.3	17.6
18-Sep	8.4	9.2	10.6	9.9	7.7	6.3	5.9	7.9	10.9	13.1	14.6	16.5	17.7	18.7	19.5	18.7	15.4	14.6	12.4	10.8	9.5	8.5	7.3	6.3	11.7	19.5
19-Sep	5.6	5.5	4.6	3.8	3.3	2.7	2.7	5.2	8.2	11.8	15.3	18.4	21.2	23.6	24.2	24.2	24.0	21.9	20.4	19.1	17.9	16.3	15.7	15.2	13.8	24.2
20-Sep	14.9	14.2	13.0	11.1	11.2	9.5	8.5	9.7	14.0	17.5	20.0	22.4	24.2	24.8	25.5	25.4	24.6	22.1	19.3	16.2	15.4	15.2	14.9	14.5	17.0	25.5
21-Sep	12.4	10.4	9.9	9.1	8.7	8.8	9.2	9.5	13.0	16.0	19.0	19.7	20.9	21.9	22.5	21.7	21.5	21.0	17.2	15.0	13.8	12.2	11.2	10.7	14.8	22.5
22-Sep	10.1	9.2	8.2	7.1	6.6	6.4	6.3	7.1	9.4	15.0	18.5	19.4	19.8	21.1	21.5	20.8	20.2	18.9	15.6	12.0	10.5	9.7	8.0	6.7	12.8	21.5
23-Sep	5.0	4.2	3.5	2.4	1.8	1.0	1.0	3.3	6.2	8.1	10.4	13.5	14.9	16.2	16.7	18.1	17.0	16.1	13.5	12.1	10.8	9.9	8.7	7.3	9.2	18.1
24-Sep	6.3	5.4	4.6	4.5	4.9	4.4	3.6	4.7	7.7	11.7	15.0	16.9	18.3	18.8	18.7	18.3	17.9	16.4	12.7	9.9	7.9	6.5	5.5	4.6	10.2	18.8
25-Sep	4.9	4.7	3.8	4.1	4.7	5.4	6.0	6.9	7.5	7.3	8.1	8.8	10.0	10.5	10.5	10.4	10.2	9.9	9.5	9.3	9.2	9.0	8.9	8.7	7.8	10.5
26-Sep	8.8	8.8	8.5	8.3	8.3	8.2	7.7	6.4	5.5	5.9	6.6	7.2	8.2	8.8	7.9	8.5	8.5	7.7	7.2	7.5	7.7	7.5	7.5	7.3	7.7	8.8
27-Sep	6.7	6.0	6.1	5.8	4.8	4.3	4.1	4.6	6.2	8.5	10.8	13.1	14.5	15.5	16.2	15.3	14.8	13.6	11.6	10.1	8.6	7.8	7.3	5.0	9.2	16.2
28-Sep	4.2	3.8	3.8	3.7	2.1	1.1	0.9	2.6	6.0	10.3	13.6	16.1	18.1	18.5	17.8	17.0	17.5	16.1	13.2	12.9	13.4	11.2	9.6	8.8	10.1	18.5
29-Sep	8.6	7.5	6.7	6.9	7.2	7.2	7.1	7.7	8.7	10.1	11.0	11.7	11.9	12.3	13.7	13.8	13.0	11.4	9.8	8.0	9.0	9.0	8.6	8.3	9.6	13.8
30-Sep	7.8	7.1	6.5	5.7	4.6	4.5	3.9	3.0	3.7	5.0	6.1	6.9	7.1	7.4	7.4	7.3	7.4	7.3	6.4	4.5	2.9	1.5	1.8	2.6	5.3	7.8
	9.2	8.6	8.1	7.5	7.0	6.7	6.8	8.0	10.0	12.2	14.0	15.3	16.4	17.0	17.2	17.1	16.7	15.8	14.0	12.4	11.4	10.7	10.2	9.5	Diurnal Average	
	16.4	16.6	16.4	16.2	16.5	16.6	16.7	16.8	18.1	21.6	23.7	24.6	26.7	27.5	27.7	27.5	26.5	25.4	23.6	22.1	20.6	19.7	19.2	17.0	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Waskow ohci Pimatisiwin - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	306	42.50	42.50
10 - 20	349	48.47	90.97
> 20	65	9.03	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Waskow ohci Pimatisiwin - September 2026

Maximum Value: 99.3 % on Sep 19 08:00

Maximum Daily Average: 89.5 % on Sep 3

Minimum Value: 26.6 % on Sep 24 15:00

Minimum Daily Average: 61.8 % on Sep 27

Maximum Diurnal Average: 93.1 % at hour 7

Minimum Diurnal Average: 53.2 % at hour 15

Monthly Average: 75.64 %

Percentiles: P_1 = 29.9 P_{10} = 46.2 Q_1 = 63.1 Median = 79.7 Q_3 = 93.2 P_{90} = 97.3 P_{99} = 98.9

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

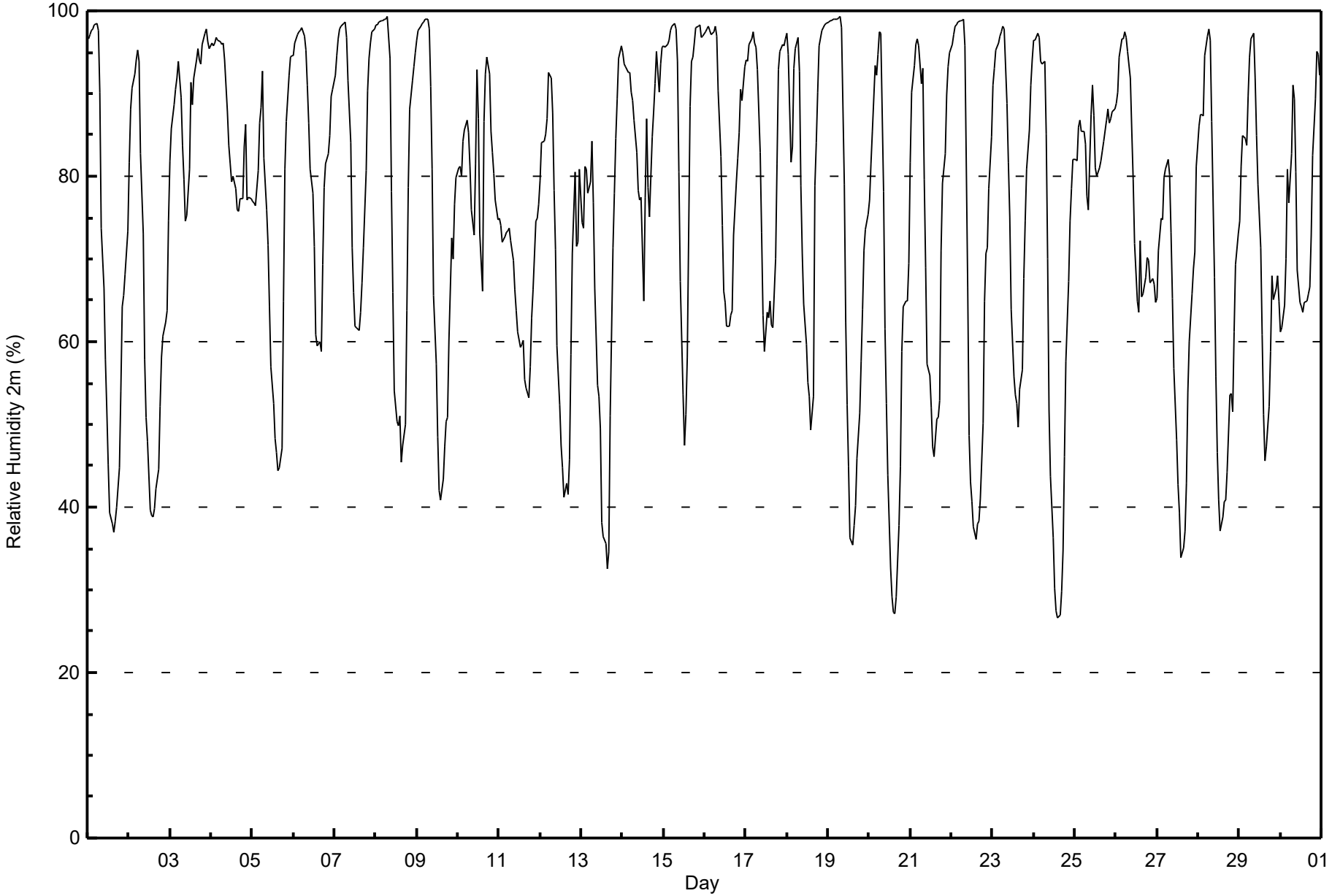
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	96.7	97.1	97.6	97.8	98.3	98.5	97.6	90.2	73.8	66.5	57.8	51.6	45.0	39.4	37.9	37.0	38.3	40.1	44.8	54.1	64.3	65.6	68.1	73.5	68.0	98.5
2-Sep	81.6	88.1	90.7	92.3	94.0	95.3	93.9	82.7	73.0	57.8	50.9	48.0	39.7	39.0	38.9	39.9	42.2	44.5	52.2	58.1	60.7	62.3	63.8	74.5	65.2	95.3
3-Sep	81.8	85.7	88.6	90.5	91.8	93.9	89.4	83.8	79.6	74.5	75.2	80.9	91.4	88.7	91.9	94.0	95.5	94.0	93.6	95.9	97.3	97.7	96.3	95.4	89.5	97.7
4-Sep	96.1	95.8	96.1	96.7	96.5	96.3	95.9	96.2	94.0	87.9	83.7	81.6	79.4	80.0	78.5	76.0	75.8	77.3	77.3	83.6	86.2	77.2	77.5	77.3	86.0	96.7
5-Sep	77.0	76.8	76.5	80.6	86.5	88.4	92.6	82.1	75.9	71.7	64.3	57.0	52.6	48.3	46.5	44.4	44.8	47.1	64.9	80.9	86.6	92.3	94.5	94.6	72.0	94.6
6-Sep	94.6	96.2	97.1	97.4	97.6	98.0	96.9	95.3	91.0	86.4	80.9	77.9	71.5	60.8	59.6	60.1	58.9	69.3	78.6	81.6	82.7	84.9	89.7	90.6	83.2	98.0
7-Sep	92.2	94.6	96.7	97.8	98.2	98.5	98.6	96.8	91.5	84.1	71.4	66.0	61.9	61.6	61.4	63.6	67.1	71.3	80.7	90.3	94.3	96.2	97.4	97.8	84.6	98.6
8-Sep	98.2	98.4	98.6	98.8	98.9	98.9	99.0	99.3	94.3	78.2	66.0	54.1	50.4	49.9	51.0	45.5	47.4	49.9	63.8	78.7	88.2	91.6	93.2	94.9	78.6	99.3
9-Sep	96.5	97.7	98.1	98.6	98.6	98.9	98.9	97.8	90.9	80.8	65.5	57.3	48.5	42.1	40.8	43.4	47.3	50.3	50.8	60.2	72.5	70.1	76.7	79.8	73.4	98.9
10-Sep	80.9	81.2	80.0	84.3	85.6	86.9	85.2	81.1	75.9	72.8	81.6	92.9	87.0	73.1	66.1	86.6	92.3	94.4	92.3	85.5	83.0	80.4	77.0	74.8	82.5	94.4
11-Sep	74.9	74.1	72.1	72.6	73.2	73.3	73.7	72.3	69.8	66.2	63.7	61.2	59.2	59.7	60.1	55.4	54.4	53.3	56.9	62.9	66.2	74.6	74.9	76.6	66.7	76.6
12-Sep	79.5	84.1	84.2	85.0	86.9	92.5	91.9	87.6	78.2	71.2	59.5	52.4	47.5	44.7	41.3	42.9	41.5	45.7	58.5	70.7	80.5	71.5	72.1	80.8	68.8	92.5
13-Sep	74.4	73.7	81.2	80.9	78.0	79.3	84.2	76.8	66.4	54.7	53.4	49.6	38.2	36.4	35.5	32.5	34.5	51.1	71.4	78.0	84.6	89.4	94.3	95.8	66.4	95.8
14-Sep	94.8	93.6	93.2	92.5	92.5	90.1	89.2	86.7	83.0	78.3	77.0	77.5	64.9	77.4	86.9	78.6	75.1	84.7	87.8	91.3	95.0	90.1	93.6	95.6	86.2	95.6
15-Sep	95.8	95.6	96.0	96.4	97.7	98.1	98.5	97.8	94.0	80.5	67.2	53.5	47.5	51.1	58.2	88.5	94.0	94.4	96.1	98.0	98.1	98.3	96.8	96.9	87.0	98.5
16-Sep	97.4	97.7	98.2	97.6	97.2	97.5	98.1	97.0	90.4	82.4	74.1	66.1	64.7	61.9	61.8	63.3	63.7	72.9	79.3	82.2	85.3	90.5	89.1	93.3	83.4	98.2
17-Sep	94.1	93.9	95.9	96.7	97.5	96.0	95.6	92.9	82.9	73.2	63.2	58.8	63.6	62.8	64.9	62.0	61.7	69.9	81.6	93.0	95.2	95.9	95.7	96.6	82.7	97.5
18-Sep	97.3	94.8	81.7	83.5	93.1	95.4	96.7	92.7	78.9	70.6	64.6	59.6	55.1	53.4	49.3	53.3	78.8	84.1	90.2	95.8	97.6	98.0	98.3	98.5	81.7	98.5
19-Sep	98.7	98.9	98.8	98.9	99.0	99.0	99.1	99.3	98.0	79.0	62.4	52.4	45.0	36.2	35.5	37.7	40.1	45.9	51.3	57.7	63.9	71.1	73.5	75.4	71.5	99.3
20-Sep	77.1	81.5	85.4	93.4	92.1	94.8	97.5	97.3	78.2	61.5	52.5	43.9	32.7	29.2	27.3	27.0	29.1	37.8	44.9	58.8	64.3	64.9	64.9	69.6	62.7	97.5
21-Sep	81.7	90.2	93.4	96.0	96.7	95.7	91.2	93.1	79.7	69.1	57.2	56.0	52.0	47.4	46.2	50.6	50.8	52.9	71.0	79.2	82.7	89.8	93.3	94.9	75.4	96.7
22-Sep	95.9	97.1	98.1	98.3	98.6	98.8	98.8	98.9	95.8	66.7	48.6	43.0	40.7	37.6	36.2	37.9	38.4	41.0	50.2	64.8	70.6	71.3	78.4	84.8	70.4	98.9
23-Sep	91.0	93.1	95.2	96.1	97.0	97.4	98.1	97.8	88.9	81.6	75.0	64.0	55.7	53.5	52.6	49.7	54.3	56.6	67.7	74.6	80.8	85.5	91.0	94.1	78.8	98.1
24-Sep	96.4	96.4	97.4	96.9	93.9	93.5	93.8	85.1	70.0	51.7	43.8	36.3	30.2	27.4	26.6	26.9	29.9	34.8	46.1	57.6	67.2	74.6	78.5	82.1	64.0	97.4
25-Sep	82.0	81.9	85.9	86.8	85.5	85.5	83.9	77.7	75.9	87.4	91.1	87.3	81.1	80.0	81.1	81.9	83.0	84.2	86.8	88.2	86.4	86.9	87.7	88.2	84.4	91.1
26-Sep	88.8	90.1	94.4	96.6	96.6	97.4	96.7	95.1	91.9	85.6	79.6	71.8	65.0	63.6	72.1	65.3	65.7	67.8	70.1	69.9	67.1	67.6	67.0	64.7	78.8	97.4
27-Sep	65.3	71.0	74.9	74.7	79.8	80.9	82.1	80.2	73.3	65.2	56.8	48.2	42.7	39.3	33.8	35.1	37.1	42.9	53.9	59.9	65.7	68.8	70.9	81.2	61.8	82.1
28-Sep	86.1	87.5	87.5	87.2	94.5	96.9	97.9	96.5	86.6	67.8	55.7	46.6	40.8	37.2	38.8	40.7	40.8	44.2	53.6	53.7	51.5	61.2	69.3	73.1	66.5	97.9
29-Sep	74.6	81.3	84.9	84.5	83.8	89.7	94.3	96.7	97.3	91.9	84.9	79.0	71.3	60.9	51.2	45.6	47.2	52.3	58.7	67.9	65.1	66.5	67.9	64.9	73.4	97.3
30-Sep	61.2	61.8	64.5	70.0	80.8	76.7	82.7	91.1	89.3	80.5	68.7	64.7	64.3	63.5	64.7	65.0	65.8	66.6	72.9	82.6	89.2	95.1	94.7	92.2	75.3	95.1
	86.8	88.3	89.4	90.6	92.0	92.7	93.1	90.6	83.6	74.2	66.5	61.3	56.3	53.5	53.2	54.4	56.5	60.7	68.3	75.2	79.1	81.0	82.9	85.1	Diurnal Average	
	98.7	98.9	98.8	98.9	99.0	99.0	99.1	99.3	98.0	91.9	91.1	92.9	91.4	88.7	91.9	94.0	95.5	94.4	96.1	98.0	98.1	98.3	98.3	98.5	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Waskow ohci Pimatisiwin - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	39	5.42	5.42
40 - 60	119	16.53	21.94
60 - 80	205	28.47	50.42
80 - 100	357	49.58	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Speed: 20 km/h on Sep 11 10:00

Maximum Daily Speed Average: 13.3 km/h on Sep 11

Minimum Speed Value: 0 km/h on Sep 23 20:00

Minimum Daily Speed Average: 0.1 km/h on Sep 18

Maximum Diurnal Speed Average: 2.5 km/h at hour 3

Minimum Diurnal Speed Average: 1.0 km/h at hour 20

Monthly Average Velocity: 1.6 km/h 282.7 deg

Percentiles: P_1 = 0 P_{10} = 1 Q_1 = 2 Median = 4 Q_3 = 8 P_{90} = 10 P_{99} = 17

Hours in Service: 720

Hours of Data: 720

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-Sep	W2	W2	SW2	WSW1	SSW2	S2	SE3	S3	SSE6	SSE6	SSE7	SE8	SSE8	SSE10	SE9	SSE9	SSE10	SSE9	SSE6	ESE2	SE3	SE3	SE4	SE2	SSE4.5	SSE10
2-Sep	NNE0	NE1	SSE0	W3	WNW3	W3	WNW3	NNW3	N4	SSE6	SSE8	SSE8	SE10	SE10	SE10	SE9	ESE7	ESE7	ESE5	ESE5	SE5	SSE5	SSE3	NNW3	SE3.2	SE10
3-Sep	NNW2	NNW2	WNW1	NW2	NW2	NNW4	N4	N4	N3	E2	ENE2	ESE4	ENE2	NE2	NNE3	NE2	NNE2	N4	N3	N3	NW3	NW3	NNW4	N5	N2.2	N5
4-Sep	N4	N4	N3	N2	NNW3	N4	NNW4	NNW7	N10	NNE9	N11	N10	NNE9	N10	N14	N14	N15	N12	N12	N12	NNW8	NNW8	NNW7	NNW9	N8.2	N15
5-Sep	NNW8	NNW7	NNW6	NNW6	NNW6	NW5	W3	NW5	NNW5	N6	NNE7	NNE5	N5	NNE5	N7	N3	NW2	NW3	WNW3	WNW2	W2	W2	W4	W2	NNW3.9	NNW8
6-Sep	WSW1	WSW2	W3	W2	WNW3	W3	W2	W2	NW2	NNW3	NW2	NW1	SSE4	SSE9	SSE7	SSE6	SE4	SSE2	ESE0	SE2	SSE3	SSE3	SE4	SE3	S1.4	SSE9
7-Sep	SE3	ESE2	SE0	WNW2	WSW2	SW1	NNW3	SE1	SSE5	SSE7	SSE8	SE8	SE7	SSE5	ESE3	SE3	SSE5	S3	SSE2	SSW2	WSW1	SE1	WSW1	SSW1	SSE2.5	SE8
8-Sep	SW1	NW0	NW3	NW2	WNW1	SSW1	NNW1	NNE1	ENE1	NNE5	N6	NNE6	ENE3	ESE3	ESE3	E3	ESE3	SE4	SSE1	SSW1	WSW1	SSE1	W1	S1	NE0.8	N6
9-Sep	SE1	S1	SSE1	WSW1	S1	SSE2	SSE3	SSE5	SSE6	SSE7	SSE9	S8	S10	SSW12	SW10	SSW10	SSW8	SSW8	SSW7	SSW7	SSE4	SW4	WSW4	WSW6	SSW5.0	SSW12
10-Sep	WSW7	WNW8	WNW6	WSW4	SW6	S4	SSW6	WSW7	W6	W8	W5	SW5	W6	WNW10	NW12	WNW7	WNW6	WNW5	WNW6	NW9	NW8	NW9	NW12	NW12	WNW6.2	NW12
11-Sep	NW13	NW15	NW17	NW15	NW15	NNW13	NNW12	NNW13	NNW17	NNW20	NNW18	NNW17	NNW16	NW18	NW18	NNW15	NNW14	NNW14	NW13	NNW9	NNW6	NW4	NW6	WNW6	NNW13.3	NNW20
12-Sep	WNW5	WNW4	WNW5	WNW5	NW3	WNW2	NW1	SSW2	WNW2	SSW3	SW1	WSW3	SSW4	WSW2	SSW4	S3	SSW4	S4	SSW3	S2	SSE2	S4	SSE2	SE2	SW2.0	WNW5
13-Sep	SSW4	S3	SSE3	SSE3	SSW3	SW3	S3	S5	S5	SW7	S5	SSE7	SW8	SW7	SW7	WSW6	SSW4	N5	N10	N8	N8	NNW7	NNW6	NNW9	WSW1.7	N10
14-Sep	N10	N10	N9	NNW9	NNW10	NNW11	NNW11	NNW9	NNW9	NNW11	N11	N10	N10	NNW11	NNW9	N9	N7	NNW6	NW6	NW3	W2	WNW5	WNW3	WNW3	NNW7.8	N11
15-Sep	WNW3	WNW4	NNW1	NW2	SW2	WSW1	SSE2	SSE2	S3	WSW3	SW6	SW7	SW7	S4	NW4	N2	SE2	S3	SW2	W2	NW1	WNW2	NW4	WNW3	WSW1.7	SW7
16-Sep	NW4	W3	WNW3	NW2	NW2	WNW3	W3	W2	S3	SSW4	SW4	SSE8	S6	S6	SSE7	S5	SSE4	SE2	ESE2	E2	SE1	ESE1	ENE1	NW2	SSW1.6	SSE8
17-Sep	NW3	NW3	WNW3	WNW3	WNW3	WNW2	NW2	WNW2	NNE1	SSE6	S5	S5	S5	S3	S4	ESE1	S4	SSE4	S3	SSW1	SSE0	NNE1	W1	S1	SSW1.2	SSE6
18-Sep	SW0	ENE0	W3	W1	NW0	NW3	WNW3	NW2	NNW4	NNE3	W1	ESE4	E4	ESE4	SE4	ESE3	SSW2	SSE1	S2	WNW1	W1	W1	WSW0	WSW1	SSE0.1	SE4
19-Sep	W1	SSW1	W1	SW1	ESE0	WSW1	WNW1	SSE0	SSE2	SE4	SE6	SE7	SSE8	SSE10	SSE12	SSE12	SSE9	S5	SSE6	SSE6	SSE5	SSE5	S3	SSE3	SSE4.3	SSE12
20-Sep	S3	SSE2	S1	SSE3	S3	SSE2	WSW1	SSE1	S5	S6	SSE6	S6	SW7	SW8	SW6	SSW6	SSW5	SSW3	S2	S2	S4	SSE4	SE3	SE3	S3.3	SW8
21-Sep	S2	SSW3	SSW3	SSW2	W2	SSE2	S3	SE2	SSE4	SSE6	SE5	SSE4	SSE4	SSE3	N4	N5	NW4	NNW3	WSW3	SSE2	SSW2	WNW2	N1	ENE1	S1.1	SSE6
22-Sep	NNW1	W1	WSW1	WSW1	SSW2	WSW1	W1	N1	WNW1	NW8	NW9	NNW13	NW8	WSW7	WSW8	WSW8	SW6	SW4	W3	WSW2	WNW2	NW2	NW1	S0	WNW2.8	NNW13
23-Sep	SW1	WSW2	W1	SSW1	SW1	WSW1	SSE1	WNW1	SE3	ESE2	ESE3	SE4	SE4	SE2	SSE2	SSE3	SE2	SE2	SE2	ENE0	SW2	SSE2	S2	SW1	SSE1.4	SE4
24-Sep	S2	SSW1	E1	SSW2	SSW3	S3	SSE3	SSE4	SSW5	SW6	SSW4	SW8	SW9	WSW8	WSW9	WSW8	W6	SSW3	SSW3	S1	SSW1	NW2	W3	WNW2	SW3.2	WSW9
25-Sep	S1	NW3	WNW3	W1	NW3	NNW2	NNW4	NNW7	NNW6	N8	NNE8	NNE10	NNE13	NNE12	NNE12	N13	NNE13	N14	N12	N12	N14	N13	N14	N14	N8.3	N14
26-Sep	N10	NNW9	NNW8	NW8	WNW4	W6	W7	W8	W9	WNW10	W10	WNW10	WNW12	W12	WNW13	W12	W12	W11	W9	WNW8	WNW8	W9	W10	W9	WNW8.6	WNW13
27-Sep	W6	SW5	W8	WSW9	WSW10	WSW9	WSW8	WSW10	WSW7	WSW8	SW10	WSW8	SW11	WSW9	WSW9	WSW8	SW7	SW6	SSW4	SSW5	SSW3	SSW4	SW4	WNW1	WSW6.8	SW11
28-Sep	SSW2	S3	S4	SSE4	S2	SW2	SW1	WNW2	S3	SSE6	S6	SSW10	SW9	SW11	SW8	SSW8	S9	S6	SSE4	S6	S5	SE2	ESE2	SSE3	S4.4	SW11
29-Sep	SSE1	W1	SSE2	SSE2	SSE3	SSE5	SSE5	SSE5	SSE3	SSW5	SW7	W7	WNW10	WNW11	WNW11	WNW13	WNW13	W9	WSW4	S2	WNW5	WSW8	WNW7	WNW9	W4.3	WNW13
30-Sep	WNW11	NW11	NW10	WNW8	WNW7	WNW11	WNW9	WNW8	NW7	NW9	NW17	NW16	NW13	NW12	WNW11	WNW8	NW6	NW9	NW4	WNW4	N1	W2	WSW1	NNW2	NW8.0	NW17
	WNW2.1	NW2.3	WNW2.5	WNW2.3	WNW2.1	WNW1.9	WNW1.8	WNW1.7	WNW1.2	W1.1	W1.1	WSW1.1	WSW1.7	WSW2.1	W2.2	W1.5	WSW1.5	W1.3	WNW1.1	WNW1.0	WNW1.1	WNW1.3	WNW1.8	NW2.3	Diurnal Average	
	NW13	NW15	NW17	NW15	NW15	NNW13	NNW12	NNW13	NNW17	NNW20	NNW18	NNW17	NNW16	NW18	NW18	NNW15	N15	N14	NW13	N12	N14	N13	N14	N14	Diurnal Maximum	

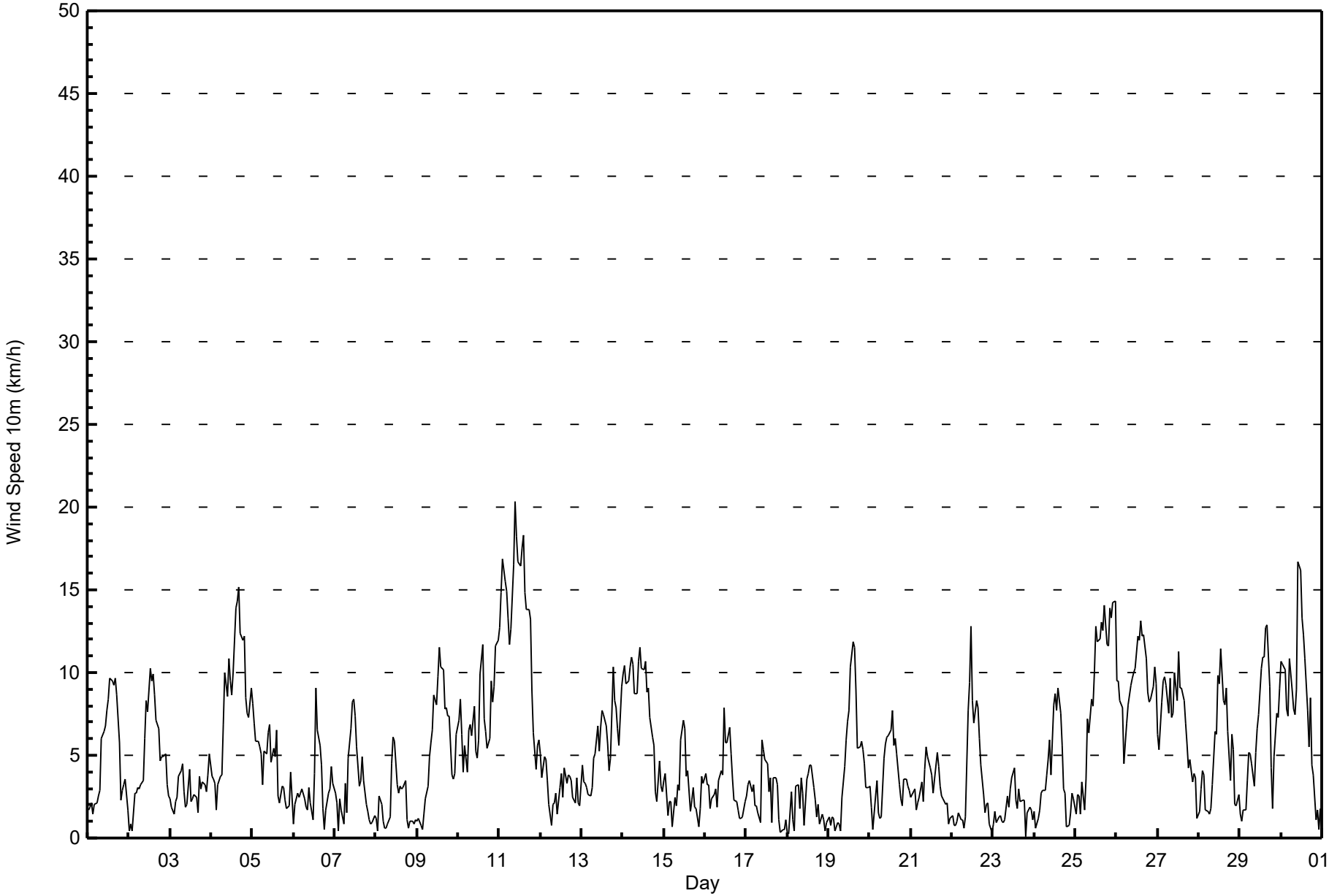
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Waskow ohci Pimatisiwin - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	444	61.67	61.67
6 - 11	221	30.69	92.36
12 - 19	54	7.50	99.86
20 - 28	1	0.14	100.00
29 - 38	0	0.00	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Waskow ohci Pimatisiwin - September 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	22	10	3	8	5	20	34	62	53	40	21	27	37	44	39	19	444
6 - 11	19	6	0	0	0	2	10	32	10	9	24	22	18	25	14	30	221
12 - 19	14	4	0	0	0	0	0	2	0	1	0	0	3	4	15	11	54
20 - 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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	55	20	3	8	5	22	44	96	63	50	45	49	58	73	68	61	720

Total Number of Valid Hours: 720

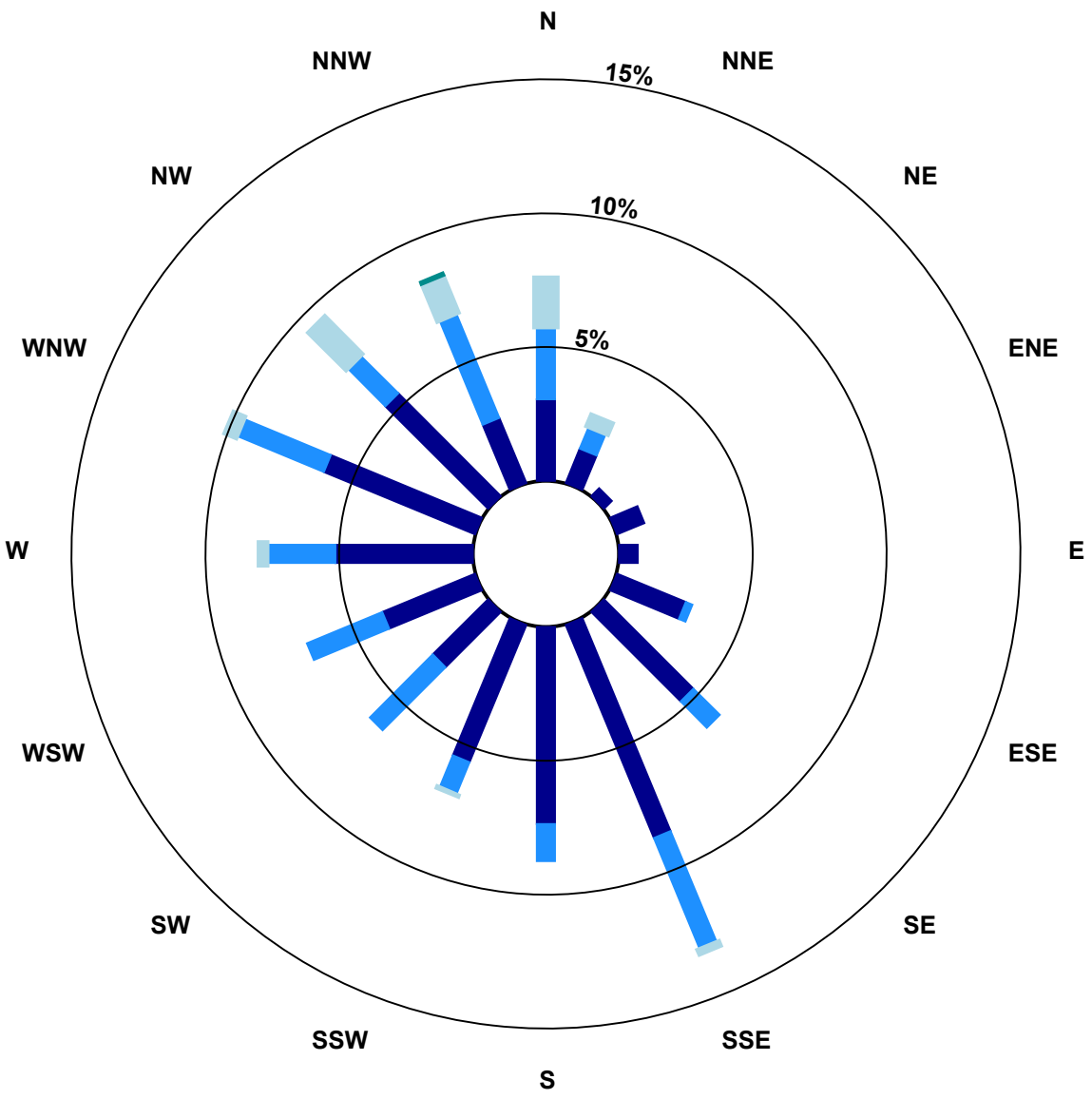
Total Number of Hours: 720

Wood Buffalo Environmental Association

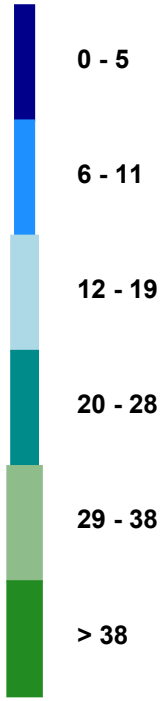
Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Waskow ohci Pimatisiwin



Classes (km/h)



Total Number of Valid Hours: 720

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

Maximum Value: 6 km/h on Sep 11 10:00

Minimum Value: 0 km/h on Sep 21 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:	720
Hours of Data:	720
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-Sep	1	1	1	1	1	1	1	2	2	2	2	3	3	4	4	4	4	4	2	2	1	1	1	1	4
2-Sep	1	1	1	1	1	0	1	1	1	2	3	3	4	4	4	4	3	3	2	2	2	2	2	1	4
3-Sep	1	1	1	2	1	1	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	2
4-Sep	1	1	1	1	1	1	1	2	3	4	4	3	3	4	6	5	6	4	4	4	3	2	2	3	6
5-Sep	3	2	2	2	2	2	1	2	2	2	3	2	3	2	3	2	2	1	1	1	1	1	1	1	3
6-Sep	1	1	1	0	1	1	1	1	1	1	1	1	2	3	2	2	2	1	1	1	1	1	1	1	3
7-Sep	1	1	1	1	0	1	1	1	2	2	4	3	3	2	1	1	2	2	1	1	1	1	1	1	4
8-Sep	1	1	1	1	1	1	1	1	1	2	2	2	1	2	1	1	1	1	1	1	1	1	1	1	2
9-Sep	1	1	1	1	1	1	1	2	2	2	4	3	4	4	5	4	3	3	3	4	1	3	3	3	5
10-Sep	3	3	3	2	3	2	3	3	3	3	3	2	3	4	5	3	3	2	2	3	3	3	4	4	5
11-Sep	4	5	5	5	5	5	4	4	6	6	6	5	6	6	6	5	5	4	4	4	3	1	2	2	6
12-Sep	2	1	2	1	2	1	1	1	1	2	2	2	3	3	2	2	2	1	1	1	1	1	1	1	3
13-Sep	2	1	1	1	1	2	1	2	2	3	2	3	4	3	3	3	2	6	4	3	3	2	2	3	6
14-Sep	3	4	2	3	3	3	3	3	3	3	3	3	4	4	3	3	3	2	2	1	1	1	1	1	4
15-Sep	1	1	1	1	1	1	1	1	1	2	3	3	3	2	4	1	1	1	1	1	1	1	1	1	4
16-Sep	1	1	1	1	1	1	1	2	1	2	2	3	3	2	3	2	1	1	1	1	1	1	1	0	3
17-Sep	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	2	1	1	1	1	1	1	1	2
18-Sep	1	1	1	1	1	1	1	1	2	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	2
19-Sep	1	1	1	1	1	1	1	1	1	2	2	2	3	4	5	5	4	2	2	2	2	2	2	1	5
20-Sep	1	1	1	1	1	1	1	1	2	2	2	3	3	4	3	3	2	1	1	1	1	1	1	1	4
21-Sep	1	1	1	1	1	1	2	1	1	2	2	1	1	1	1	2	3	2	1	1	1	0	1	1	3
22-Sep	1	1	1	1	1	1	1	1	2	3	4	4	3	3	4	4	3	2	1	1	1	1	1	1	4
23-Sep	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	2
24-Sep	1	1	1	1	1	1	1	1	2	2	2	4	4	4	4	3	3	1	1	1	1	1	1	1	4
25-Sep	1	1	1	1	1	1	1	2	2	3	3	4	5	5	4	4	4	4	4	4	5	4	5	4	5
26-Sep	4	3	3	3	2	3	3	4	4	4	5	5	5	5	5	6	5	5	4	4	4	4	5	4	6
27-Sep	3	2	4	4	4	4	3	5	3	4	4	4	4	4	4	4	3	2	1	1	1	1	1	1	5
28-Sep	1	1	1	1	1	1	1	1	2	3	3	4	5	5	4	3	4	3	1	2	2	1	1	1	5
29-Sep	1	1	1	1	1	2	2	1	1	2	3	4	4	5	5	6	6	4	3	2	2	4	4	4	6
30-Sep	5	4	4	3	3	4	3	3	2	3	6	5	4	4	4	3	2	4	2	1	1	1	1	1	6
	5	5	5	5	5	5	4	5	6	6	6	5	6	6	6	6	6	6	4	4	5	4	5	4	
	Diurnal Maximum																								

Direction of Maximum Speed: 340 deg on Sep 11 10:00
Direction of Maximum Daily Speed Average: 328.4 deg on Sep 11

Direction of Minimum Speed: 74 deg on Sep 23 20:00

Direction of Minimum Daily Speed Average: 0.1 deg on Sep 18

Monthly Average Direction: 282.7 deg

Hours in Service:	720
Hours of Data:	720
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-Sep	260	270	235	245	198	190	129	170	153	152	156	143	147	147	145	148	148	150	150	123	140	134	141	138	152.2
2-Sep	22	50	154	261	287	276	297	348	358	152	157	149	142	131	133	125	116	116	107	119	128	152	160	344	134.5
3-Sep	343	338	302	323	322	329	349	356	2	80	57	109	77	46	33	49	21	350	3	8	320	316	346	356	1.6
4-Sep	355	358	349	0	344	350	331	345	355	12	7	3	15	8	357	359	1	356	357	351	346	339	333	342	355.6
5-Sep	340	338	334	328	335	325	265	322	343	358	22	16	349	17	350	5	325	316	294	285	272	262	271	271	334.6
6-Sep	258	246	267	263	283	275	270	261	318	328	325	313	147	154	148	147	142	166	120	145	152	148	146	142	176.6
7-Sep	125	120	136	286	257	224	341	142	156	158	153	143	146	149	122	137	158	169	165	198	240	140	253	207	155.1
8-Sep	228	322	320	320	284	200	342	20	64	16	4	14	71	106	113	97	109	139	163	203	254	164	269	182	50.3
9-Sep	146	178	167	243	187	155	147	161	157	157	167	174	189	205	215	209	204	203	210	204	161	228	251	247	194.0
10-Sep	258	295	293	245	226	188	213	237	261	272	263	225	267	298	309	302	295	288	301	317	309	314	313	316	285.2
11-Sep	316	319	324	321	325	333	327	333	342	340	339	334	341	320	323	329	328	332	323	335	327	315	307	303	328.4
12-Sep	298	288	285	285	306	283	304	203	288	206	233	243	203	252	208	172	196	191	195	184	151	182	151	144	229.8
13-Sep	206	186	159	166	197	230	171	191	182	219	188	164	231	229	218	240	207	355	10	7	351	346	332	341	243.3
14-Sep	355	349	350	345	346	348	345	347	341	348	350	351	357	348	345	359	349	333	326	318	281	300	291	300	344.3
15-Sep	298	290	347	325	231	244	157	157	176	245	229	228	216	179	324	2	126	177	221	260	310	294	308	301	243.8
16-Sep	311	275	283	310	312	298	269	273	169	202	218	168	177	175	163	170	153	128	105	94	141	111	60	314	193.3
17-Sep	311	319	289	285	302	298	310	302	22	149	189	172	188	191	169	122	173	164	179	210	158	20	278	188	205.4
18-Sep	225	63	261	279	314	318	288	305	345	16	269	108	101	111	134	115	197	164	183	301	276	278	238	254	167.9
19-Sep	261	194	267	215	115	252	291	163	160	145	145	143	149	161	154	156	166	184	168	163	154	156	175	159	160.7
20-Sep	171	159	180	159	170	164	240	147	174	175	166	172	221	227	226	199	195	192	181	169	175	155	137	130	183.7
21-Sep	187	207	207	196	259	151	187	139	167	148	137	150	147	147	9	354	325	328	254	154	199	284	8	67	174.2
22-Sep	348	269	239	254	196	241	281	3	296	324	321	330	317	250	238	255	231	222	259	248	292	321	319	188	284.2
23-Sep	225	247	264	205	225	248	167	296	145	122	123	138	143	126	160	150	141	135	145	74	216	165	182	219	160.0
24-Sep	176	213	90	198	208	172	151	166	199	218	211	221	224	250	247	248	260	212	199	173	194	312	269	290	224.1
25-Sep	170	325	300	265	318	328	327	337	342	353	17	21	21	29	13	11	12	1	4	355	354	357	1	352	1.1
26-Sep	357	346	342	316	302	264	271	265	280	282	268	282	283	281	293	275	279	275	272	282	285	268	280	280	286.8
27-Sep	260	223	263	253	241	248	250	244	253	242	223	239	218	238	257	237	231	226	207	211	196	205	217	291	237.9
28-Sep	211	176	172	163	171	225	234	282	173	161	179	208	223	231	214	196	176	177	150	176	180	127	117	165	190.8
29-Sep	166	263	152	163	160	152	155	162	158	208	227	266	292	286	287	293	283	280	256	191	288	256	283	287	262.7
30-Sep	301	304	305	292	300	294	296	299	304	313	321	318	318	317	302	302	304	318	309	292	7	274	242	340	307.4
	303.4	305.4	301.9	289.8	286.4	286.2	282.8	288.2	287.8	273.9	263.3	242.9	241.6	247.8	269.3	264.0	249.6	274.8	289.7	301.8	295.0	286.6	298.5	309.5	
	Diurnal Average																								

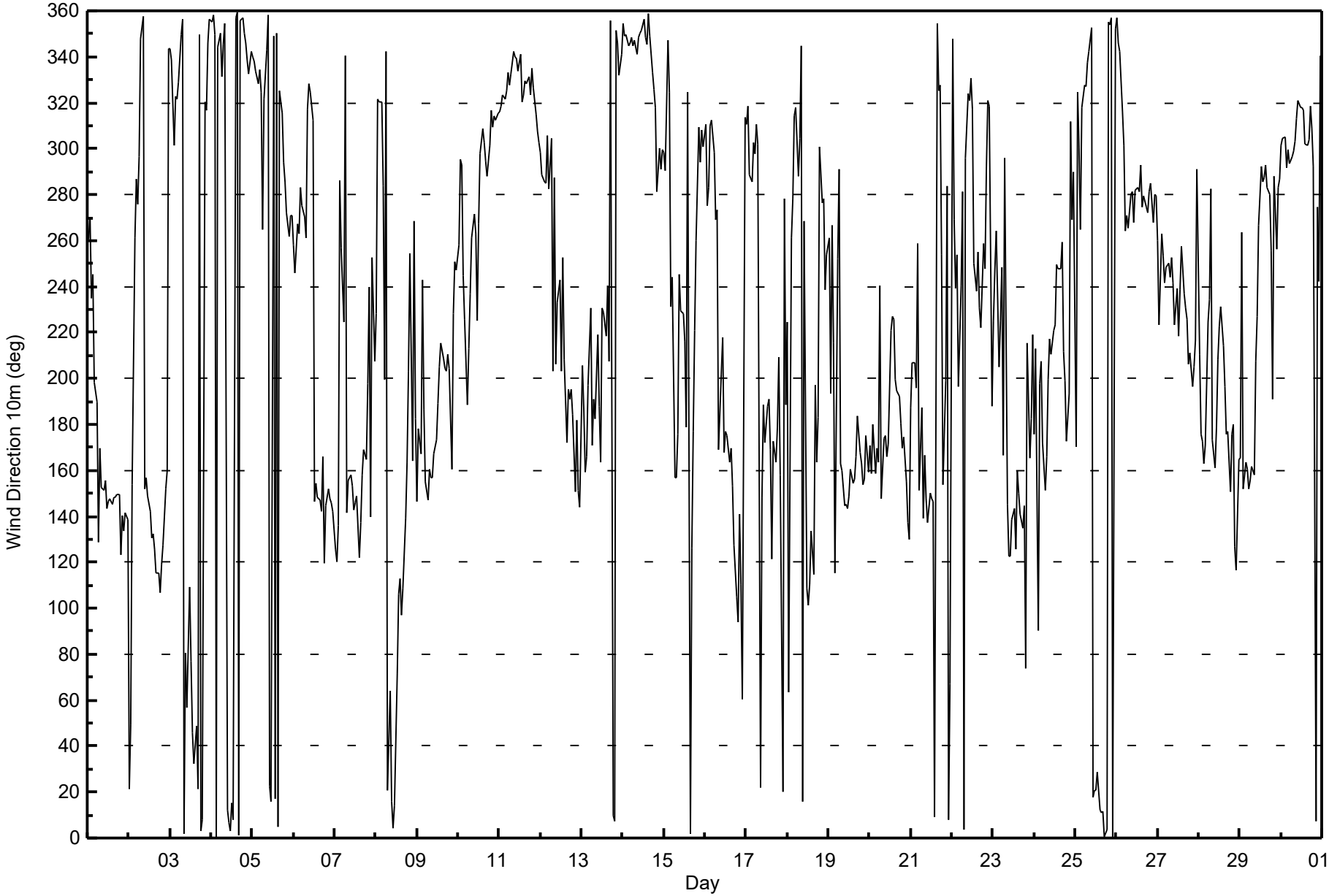
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Waskow ohci Pimatisiwin - September 2026



Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 108 deg on Sep 9 04:00

Minimum Value: 10 deg on Sep 5 23:00

Percentiles: P_1 = 16 P_{10} = 23 Q_1 = 28 Median = 39 Q_3 = 54 P_{90} = 73 P_{99} = 96

Hours in Service:	720
Hours of Data:	720
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-Sep	71	55	28	31	40	30	45	71	34	30	36	34	35	35	37	35	36	33	33	39	36	32	26	40	71
2-Sep	75	67	87	22	15	11	21	22	31	34	31	38	36	36	37	38	37	37	33	37	36	36	56	59	87
3-Sep	33	40	31	29	32	15	21	27	34	57	66	39	42	44	29	38	49	19	29	25	27	44	24	23	66
4-Sep	17	19	20	39	24	19	17	18	24	31	31	30	34	29	26	27	28	25	26	22	20	20	22	20	39
5-Sep	21	22	22	21	19	27	31	32	53	36	38	59	59	57	38	92	83	41	32	38	24	23	10	37	92
6-Sep	90	53	42	18	21	23	31	29	44	45	51	82	48	29	31	35	40	55	78	34	39	26	26	29	90
7-Sep	28	27	57	27	43	85	25	69	25	28	33	31	34	38	62	38	25	28	28	38	79	66	91	67	91
8-Sep	84	97	14	18	44	58	47	28	73	45	30	42	58	68	36	42	39	33	59	81	59	84	86	66	97
9-Sep	59	27	54	108	73	48	38	28	26	28	36	44	41	45	49	44	40	37	45	48	29	58	68	54	108
10-Sep	61	39	44	53	59	58	46	57	59	52	58	52	55	40	34	34	42	45	29	23	26	25	28	23	61
11-Sep	26	21	22	21	21	23	22	24	24	24	24	24	24	26	24	25	22	22	21	22	26	30	26	28	30
12-Sep	31	41	34	33	48	38	90	63	85	79	93	74	84	93	77	76	60	34	23	36	29	35	26	16	93
13-Sep	47	49	23	24	61	71	29	37	43	52	44	42	57	57	56	59	48	83	31	29	21	19	20	22	83
14-Sep	23	24	19	21	22	21	21	23	23	25	21	25	30	24	24	27	28	22	19	34	47	25	31	46	47
15-Sep	43	46	76	56	45	78	40	64	48	79	66	50	56	49	81	75	36	53	39	48	75	68	31	29	81
16-Sep	20	19	30	46	33	36	34	86	31	58	76	39	55	46	47	39	42	42	36	49	37	49	47	24	86
17-Sep	21	16	22	16	35	49	48	46	73	31	53	52	49	56	49	92	31	20	16	72	101	93	94	63	101
18-Sep	100	105	51	94	101	33	28	38	48	60	105	43	37	42	40	39	80	59	54	57	19	60	64	35	105
19-Sep	57	80	40	33	54	32	23	87	38	34	33	32	31	35	30	28	30	35	30	26	30	28	39	25	87
20-Sep	27	72	91	44	30	73	50	54	22	37	38	43	59	57	61	42	33	27	50	41	23	27	30	26	91
21-Sep	33	21	22	21	36	29	38	29	29	28	32	32	40	52	44	27	68	24	41	33	47	26	70	59	70
22-Sep	39	91	88	60	70	64	74	74	96	32	28	23	34	56	56	55	56	43	44	50	44	57	88	88	96
23-Sep	76	87	92	56	55	56	80	68	37	69	41	46	42	68	70	47	46	30	24	78	57	38	50	59	92
24-Sep	70	87	79	79	65	33	22	29	39	48	80	52	55	62	50	57	71	53	26	67	76	69	42	61	87
25-Sep	80	28	34	60	24	58	58	23	30	28	28	31	33	35	31	28	32	26	27	24	22	24	27	23	80
26-Sep	27	28	29	22	37	48	46	49	47	45	56	51	44	47	42	46	48	52	51	52	48	54	49	47	56
27-Sep	52	50	56	51	47	53	53	48	54	56	48	50	42	54	54	51	53	44	28	32	37	33	47	83	83
28-Sep	66	40	32	28	51	58	78	52	43	30	46	45	53	47	49	37	36	35	33	35	39	54	35	30	78
29-Sep	75	87	45	54	26	27	22	24	30	46	52	50	40	45	50	41	47	51	60	65	56	62	53	41	87
30-Sep	36	34	32	38	36	35	34	32	30	25	21	24	25	25	34	37	31	24	24	18	56	69	92	37	92
	100	105	92	108	101	85	90	87	96	79	105	82	84	93	81	92	83	83	78	81	101	93	94	88	
	Diurnal Maximum																								

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS27
JACKFISH 2/3
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JACKFISH 2/3 (AMS27)
SEPTEMBER 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	686	34	34	100	12.2	0	2.6	0
H2S (ppb) Average	684	35	36	99.86	1.4	0	0.3	0
NO2 (ppb) Average	685	35	35	100	10.5	0	2.8	-
NO (ppb) Average	685	35	35	100	3	-	0.3	-
NOX (ppb) Average	685	35	35	100	10.6	-	3	-
Temperature 2 m (C) Average	720	0	0	100	25.7	-	19.2	-
Relative Humidity (%) Average	720	0	0	100	100	-	93	-
Wind Speed 10 m (km/h) Average	719	1	1	100	18	-	12	-
Wind Direction 10 m (deg) Average	719	1	1	100	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JACKFISH 2/3 (AMS27)
SEPTEMBER 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	686	0.51	1.2	-	0	0	0	0.2	0.4	1.2	12.2
H2S (ppb) Average	684	0.15	0.2	-	0	0	0.1	0.1	0.2	0.3	1.4
NO2 (ppb) Average	685	1	1.1	-	0.1	0.3	0.4	0.7	1.3	1.9	10.5
NO (ppb) Average	685	0.11	0.3	-	0	0	0	0	0.1	0.4	3
NOX (ppb) Average	685	1.11	1.2	-	0.1	0.3	0.4	0.8	1.4	2.2	10.6
Temperature 2 m (C) Average	720	11.3	5	-	0.7	5	7.5	10.7	14.8	18.4	25.7
Relative Humidity (%) Average	720	75.26	17.5	-	34.2	47.1	65.1	78.6	89.7	96.3	100
Wind Speed 10 m (km/h) Average	719	7	3	-	1	3	4	7	9	12	18
Wind Direction 10 m (deg) Average	719	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JACKFISH 2/3 (AMS27)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
H2S	13 Sep 2026 14:00	13 Sep 2026 14:00	1	Unstable Operation - flatline in analyzer output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Jackfish 2/3 - September 2026

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

Maximum Value: 12.2 ppb on Sep 30 09:00

Maximum Daily Average: 2.6 ppb on Sep 12

Minimum Value: 0.0 ppb on Sep 1 04:00

Minimum Daily Average: 0.0 ppb on Sep 6

Maximum Diurnal Average: 1.0 ppb at hour 11

Minimum Diurnal Average: 0.2 ppb at hour 1

Monthly Average: 0.51 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.2 Q_3 = 0.4 P_{90} = 1.2 P_{99} = 6.3

Hours in Service:	720
Hours of Data:	686
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-Sep	0.2	0.2	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	0.9	0.8	1.6	1.1	0.5	0.2	0.2	0.3	1.6
2-Sep	0.2	0.2	0.3	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.3
3-Sep	0.1	0.1	0.1	0.4	Z	0.0	0.0	0.0	0.0	0.1	0.3	0.4	1.2	0.6	1.5	1.5	0.4	0.7	0.3	0.3	0.0	0.1	0.0	0.0	0.4	1.5
4-Sep	0.1	0.1	0.1	0.1	0.1	Z	0.0	0.0	1.0	0.4	0.3	0.1	0.2	0.7	0.9	0.9	0.8	0.6	0.3	0.1	0.0	0.2	0.2	0.3	0.3	1.0
5-Sep	Z	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	0.6	1.1	0.9	0.9	1.7	0.4	0.1	0.0	0.0	0.0	0.0	0.3	1.7
6-Sep	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-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.6	0.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.6
8-Sep	0.0	0.0	0.1	Z	0.0	0.0	0.0	0.1	0.7	0.8	0.0	0.0	0.0	0.0	0.8	0.5	1.5	0.6	0.3	0.1	0.1	0.1	0.1	0.1	0.3	1.5
9-Sep	0.2	0.1	0.1	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	0.3	0.0	0.0	0.3
10-Sep	0.1	0.1	0.1	0.4	0.7	Z	0.0	0.0	0.0	0.1	2.4	0.0	2.4	1.6	4.7	1.9	0.2	3.0	0.2	0.0	0.8	7.1	5.1	1.4	1.4	7.1
11-Sep	Z	0.9	2.1	1.0	0.0	0.0	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	0.1	0.4	0.3	0.4	0.3	2.1
12-Sep	0.4	Z	6.9	5.2	7.2	9.3	2.9	3.7	1.5	1.2	4.2	1.9	1.3	1.8	1.5	1.2	6.4	1.1	0.2	0.2	0.2	0.2	0.2	0.2	2.6	9.3
13-Sep	0.2	0.2	Z	0.0	0.0	0.0	0.0	0.0	0.4	1.1	0.2	0.1	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	1.1
14-Sep	0.0	0.0	0.4	Z	0.1	0.0	0.0	0.0	0.1	0.3	0.1	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.3	0.1	0.1	0.4
15-Sep	0.2	0.2	0.2	0.2	Z	0.1	0.0	2.4	1.7	0.6	1.7	1.0	1.7	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.5	2.4
16-Sep	0.1	0.0	0.2	0.1	0.2	Z	0.0	1.1	3.3	5.9	8.6	1.4	0.4	0.4	0.3	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.2	1.0	8.6
17-Sep	Z	0.3	0.4	0.3	0.2	0.1	0.0	0.3	0.4	0.3	0.2	0.2	0.1	0.3	0.4	0.9	1.2	0.8	0.4	0.2	0.1	0.0	0.0	0.1	0.3	1.2
18-Sep	0.2	Z	0.0	0.0	0.1	0.1	0.3	0.9	1.8	1.0	0.0	0.0	1.2	1.2	0.8	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.2	0.4	1.8
19-Sep	0.2	0.4	Z	0.3	0.3	0.5	0.5	0.3	0.2	0.3	0.2	0.2	0.2	0.4	0.5	0.4	0.4	0.3	0.2	0.3	0.7	0.5	0.3	0.9	0.4	0.9
20-Sep	0.3	0.2	0.2	Z	0.0	0.1	0.0	0.0	0.1	0.3	0.4	0.4	1.3	0.7	0.3	0.4	0.5	0.6	0.1	0.2	0.1	0.2	0.2	0.2	0.3	1.3
21-Sep	0.2	0.2	0.4	0.4	Z	0.1	0.1	0.0	0.2	0.3	0.5	0.5	0.6	0.9	0.6	0.3	0.6	0.3	0.3	0.2	0.4	0.5	0.4	0.3	0.4	0.9
22-Sep	0.6	1.0	0.8	1.1	0.7	Z	0.1	0.4	0.4	3.6	5.9	5.3	1.9	6.3	1.5	3.1	1.3	4.3	2.1	0.2	1.5	4.8	2.5	0.9	2.2	6.3
23-Sep	Z	0.1	0.2	0.2	0.1	0.2	1.5	0.7	0.6	0.7	0.3	0.5	1.0	1.0	1.5	1.1	0.6	0.6	0.5	0.3	0.2	0.2	0.3	0.3	0.5	1.5
24-Sep	0.3	Z	0.9	1.2	0.8	0.2	0.1	0.1	0.2	0.1	0.3	0.5	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.3	1.2
25-Sep	0.8	2.0	Z	0.5	1.3	2.4	0.1	0.3	1.0	0.9	0.5	1.0	2.1	0.9	1.4	1.4	0.6	1.4	0.4	0.4	1.7	2.1	0.5	0.4	1.1	2.4
26-Sep	0.2	0.3	0.7	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	0.8	0.0	0.1	0.1	0.2	0.3	0.1	0.8
27-Sep	0.3	0.2	0.4	0.3	Z	0.1	0.1	0.2	0.2	0.4	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.2	0.2	0.0	0.0	0.1	0.1	0.4
28-Sep	0.1	0.1	0.1	0.1	0.1	Z	0.2	0.2	0.3	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.3	0.3	0.2	0.1	0.5
29-Sep	Z	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.7	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	2.8
30-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	3.3	12.2	4.7	1.4	0.2	0.8	3.0	0.7	0.0	0.0	0.0	0.1	0.8	0.4	0.0	0.0	0.0	1.2	12.2
	0.2	0.3	0.6	0.5	0.5	0.5	0.2	0.5	0.9	0.8	1.0	0.5	0.6	0.7	0.7	0.6	0.6	0.6	0.3	0.2	0.3	0.6	0.4	0.3	Diurnal Average	
	0.8	2.0	6.9	5.2	7.2	9.3	2.9	3.7	12.2	5.9	8.6	5.3	2.4	6.3	4.7	3.1	6.4	4.3	2.1	1.6	1.7	7.1	5.1	1.4	Diurnal Maximum	

Z - zerospan C - Calibration

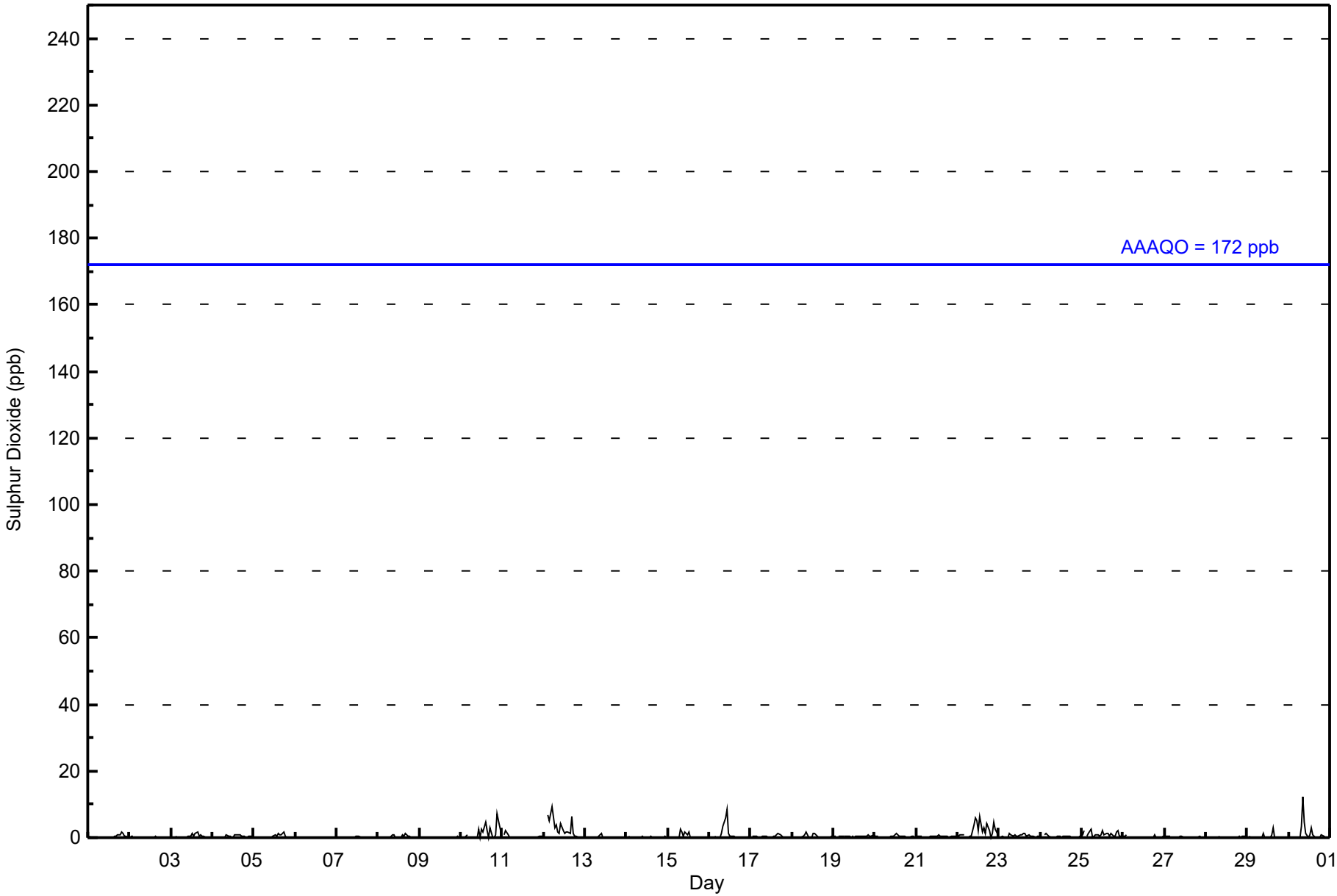
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Jackfish 2/3 - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	685	99.85	99.85
11 - 20	1	0.15	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: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Jackfish 2/3 - September 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	20	20	14	29	30	37	22	58	94	76	89	62	43	55	25	684
11 - 20	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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	10	20	20	14	29	30	37	22	58	94	76	89	62	44	55	25	685

Total Number of Valid Hours: 685

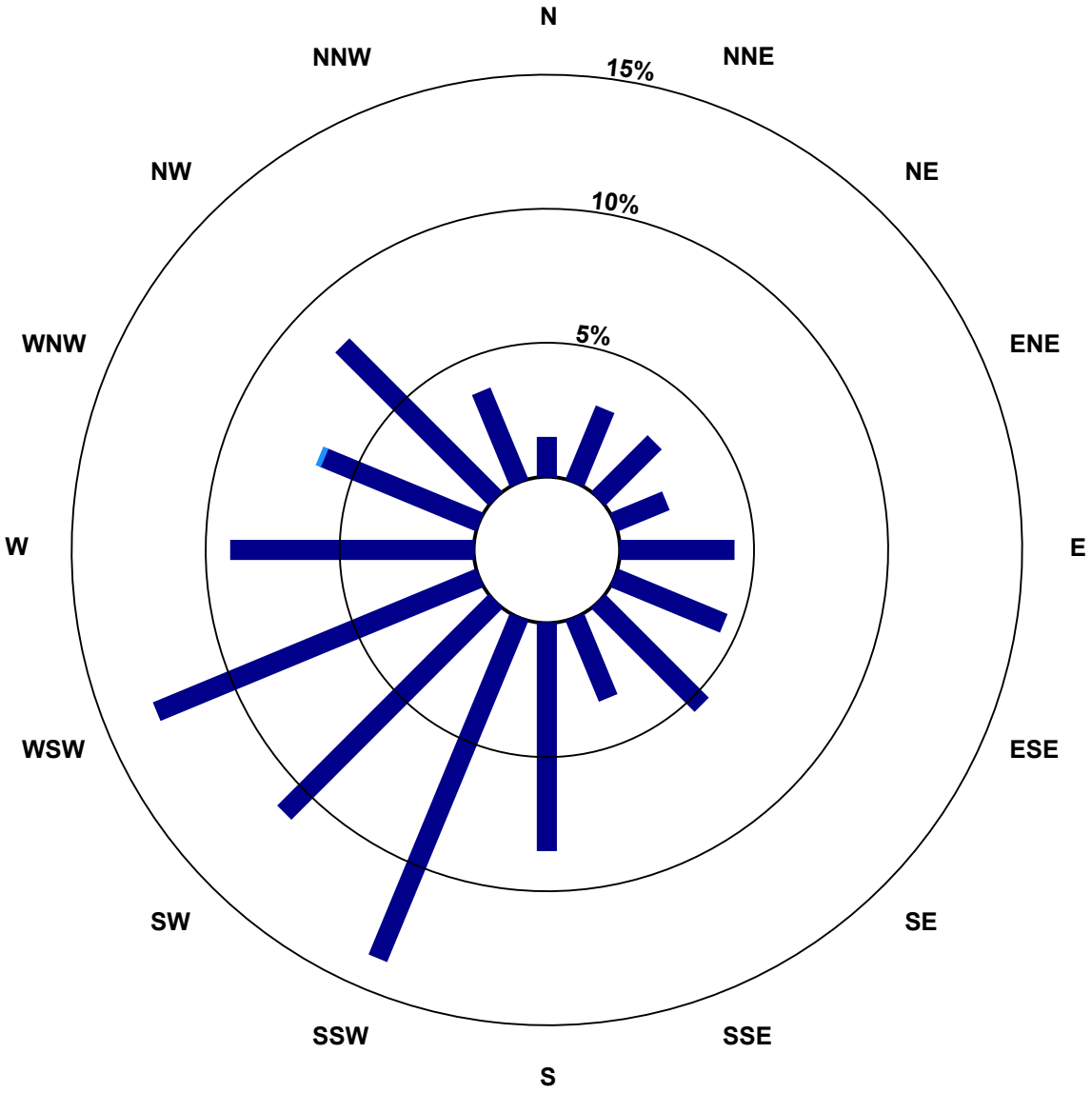
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Jackfish 2/3



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

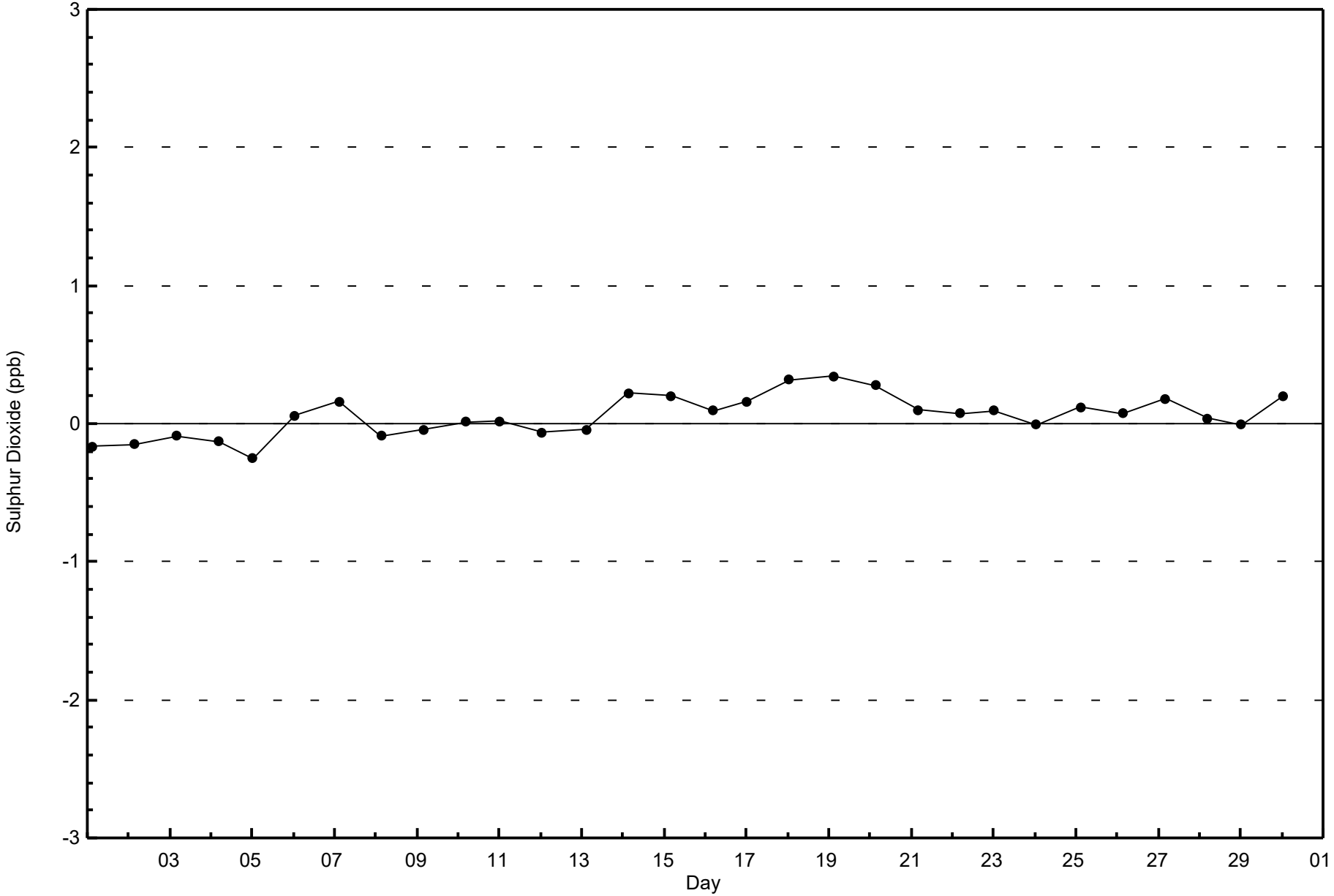
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Jackfish 2/3 - September 2026

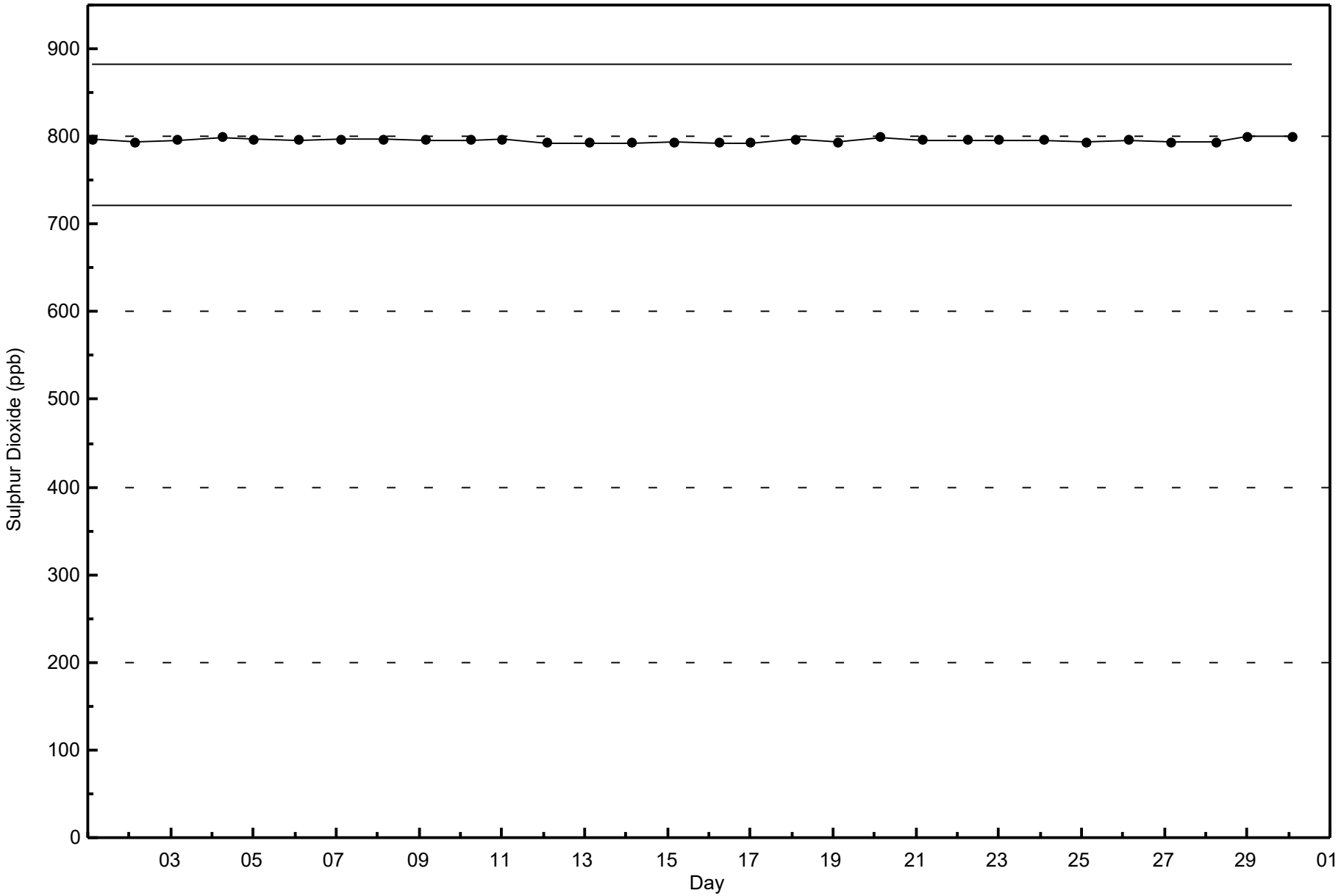


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Jackfish 2/3 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H2S) - ppb

Jackfish 2/3 - September 2026

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

Maximum Value: 1.4 ppb on Sep 24 02:00 Maximum Daily Average: 0.3 ppb on Sep 22

Minimum Value: 0.0 ppb on Sep 19 14:00 Minimum Daily Average: 0.0 ppb on Sep 19

Maximum Diurnal Average: 0.2 ppb at hour 7 Minimum Diurnal Average: 0.1 ppb at hour 17

Monthly Average: 0.15 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.3 P_{99} = 0.8

Hours in Service:	720
Hours of Data:	684
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-Sep	0.3	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	0.3
2-Sep	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	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
3-Sep	0.2	0.1	0.1	0.6	0.5	Z	0.6	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.2	0.3	0.6	1.1	0.2	0.1	0.1	0.1	0.3	1.1
4-Sep	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	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2
5-Sep	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
6-Sep	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	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1
7-Sep	0.0	0.0	0.0	Z	0.1	0.8	0.1	0.2	0.2	0.3	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	0.1	0.8
8-Sep	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	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.4
9-Sep	0.0	0.0	0.0	0.1	0.1	Z	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
10-Sep	Z	0.1	0.1	0.1	0.1	0.2	0.2	0.1	C	C	C	C	C	0.2	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5	0.7	0.2	0.7
11-Sep	0.7	Z	1.1	0.8	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.4	0.2	0.4	0.2	1.1
12-Sep	0.3	0.3	Z	0.1	0.3	0.2	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.3	0.3	0.3	0.3	0.2	0.2	0.5
13-Sep	0.4	0.3	0.3	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	UO	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.4
14-Sep	0.0	0.0	0.6	0.6	Z	0.1	0.2	0.2	0.1	0.0	0.0	0.0	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	0.6
15-Sep	0.1	0.2	0.2	0.1	0.2	Z	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.1	0.5
16-Sep	Z	0.1	0.3	0.4	0.3	0.5	0.3	0.2	0.3	0.4	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.4	0.1	0.1	0.1	0.1	0.1	0.2	0.5
17-Sep	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	0.0	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.3
18-Sep	0.4	0.8	Z	0.3	0.2	0.2	1.0	1.2	0.1	0.0	0.0	0.1	0.3	0.2	0.1	0.1	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.2	1.2
19-Sep	0.0	0.0	0.0	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1
20-Sep	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
21-Sep	0.1	0.1	0.3	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.3
22-Sep	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.6	0.6	0.4	0.2	0.2	0.2	0.1	0.1	0.3	0.7	0.7	0.7	0.4	0.3	0.3	0.7
23-Sep	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.5	1.3	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.5	0.6	0.1	0.1	0.5	0.8	0.3	1.3
24-Sep	0.2	1.4	Z	0.5	0.4	0.8	0.7	0.2	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.4	0.3	0.2	0.4	0.3	1.4
25-Sep	0.4	0.4	0.3	Z	0.5	0.5	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.1	0.2	0.3	0.3	0.1	0.1	0.2	0.5
26-Sep	0.5	0.2	0.2	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	0.1	0.1	0.1	0.5
27-Sep	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	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.4
28-Sep	Z	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	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	0.0	0.1	0.1	0.2
29-Sep	0.0	Z	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	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	0.1	0.2
30-Sep	0.1	0.1	Z	0.0	0.1	0.0	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.4	0.1	0.2	0.1	0.1	0.4
	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	0.1	0.2	Diurnal Average	
	0.7	1.4	1.1	0.8	0.5	0.8	1.0	1.2	1.3	0.4	0.6	0.6	0.4	0.2	0.5	0.4	0.2	0.3	0.6	1.1	0.7	0.7	0.5	0.8	Diurnal Maximum	

Z - zerospan C - Calibration UO - Unstable Operation

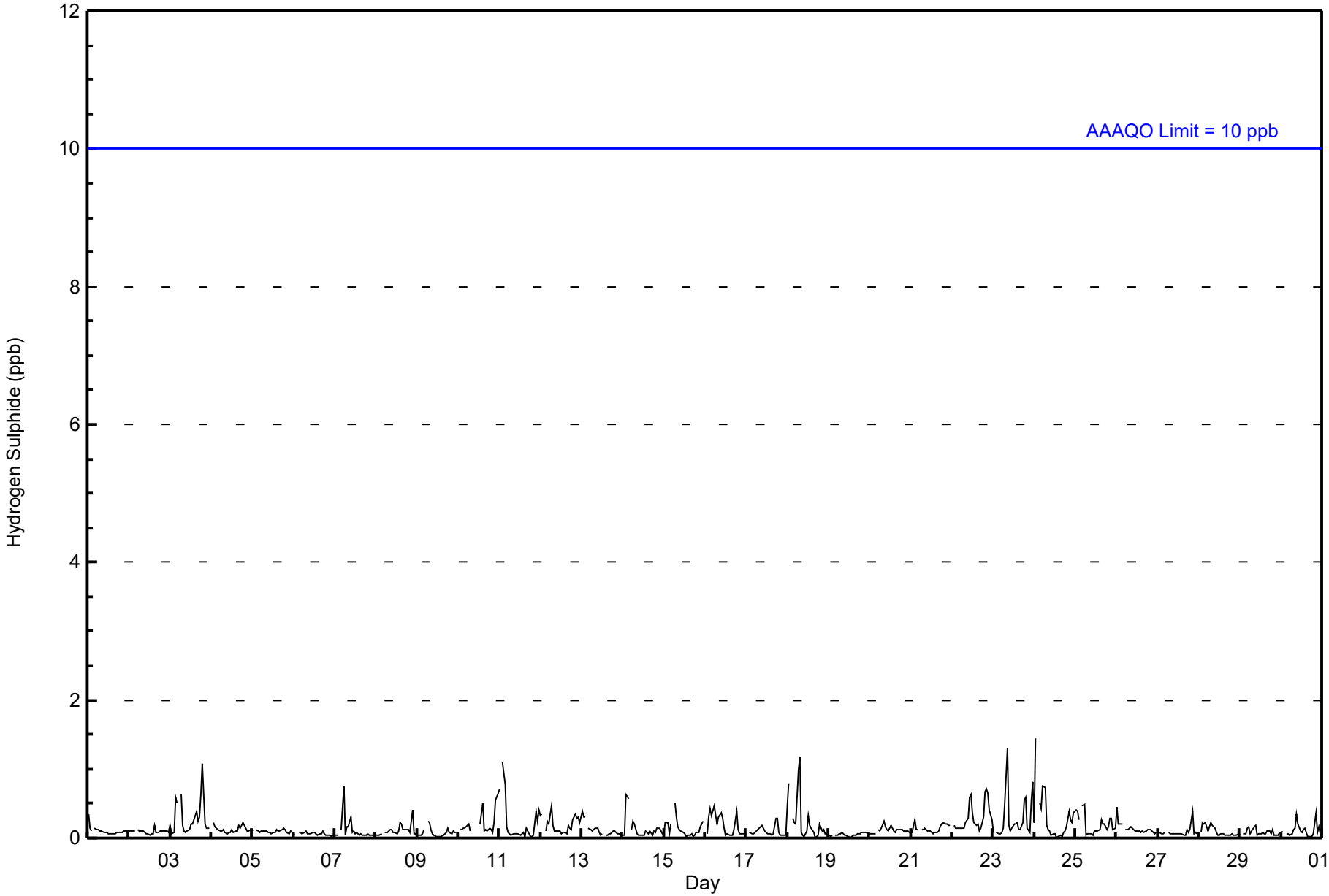
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H2S) - ppb

Jackfish 2/3 - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H2S) - ppb

Jackfish 2/3 - September 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	10	19	20	14	30	29	37	23	58	94	74	92	61	43	54	26	684
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	10	19	20	14	30	29	37	23	58	94	74	92	61	43	54	26	684

Total Number of Valid Hours: 684

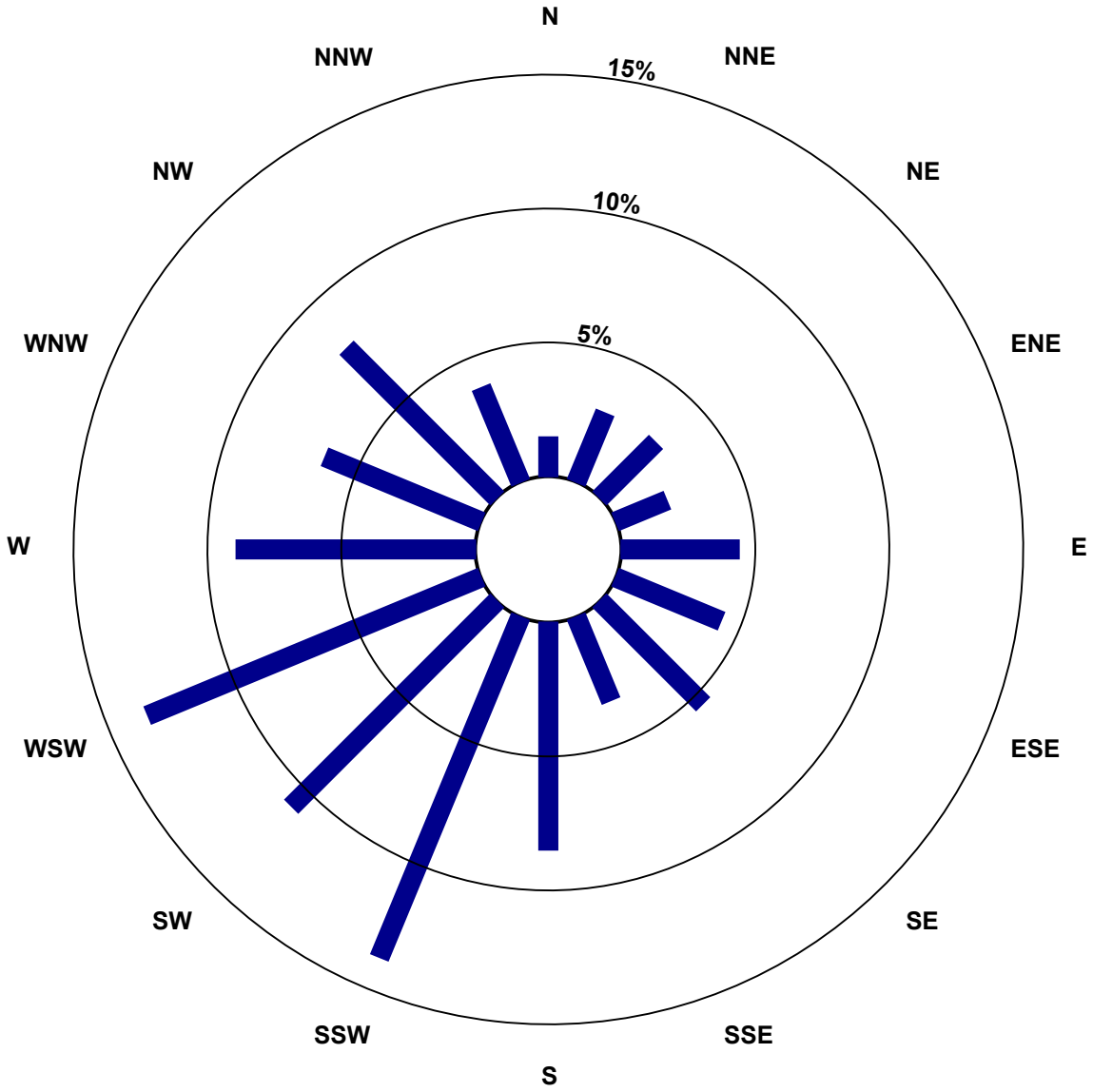
Total Number of Hours: 720

Wood Buffalo Environmental Association

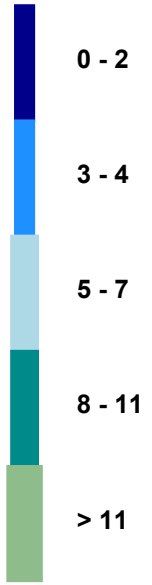
Wind Rose Sep 2026

Hydrogen Sulphide (H2S) - ppb

Jackfish 2/3



Classes (ppb)



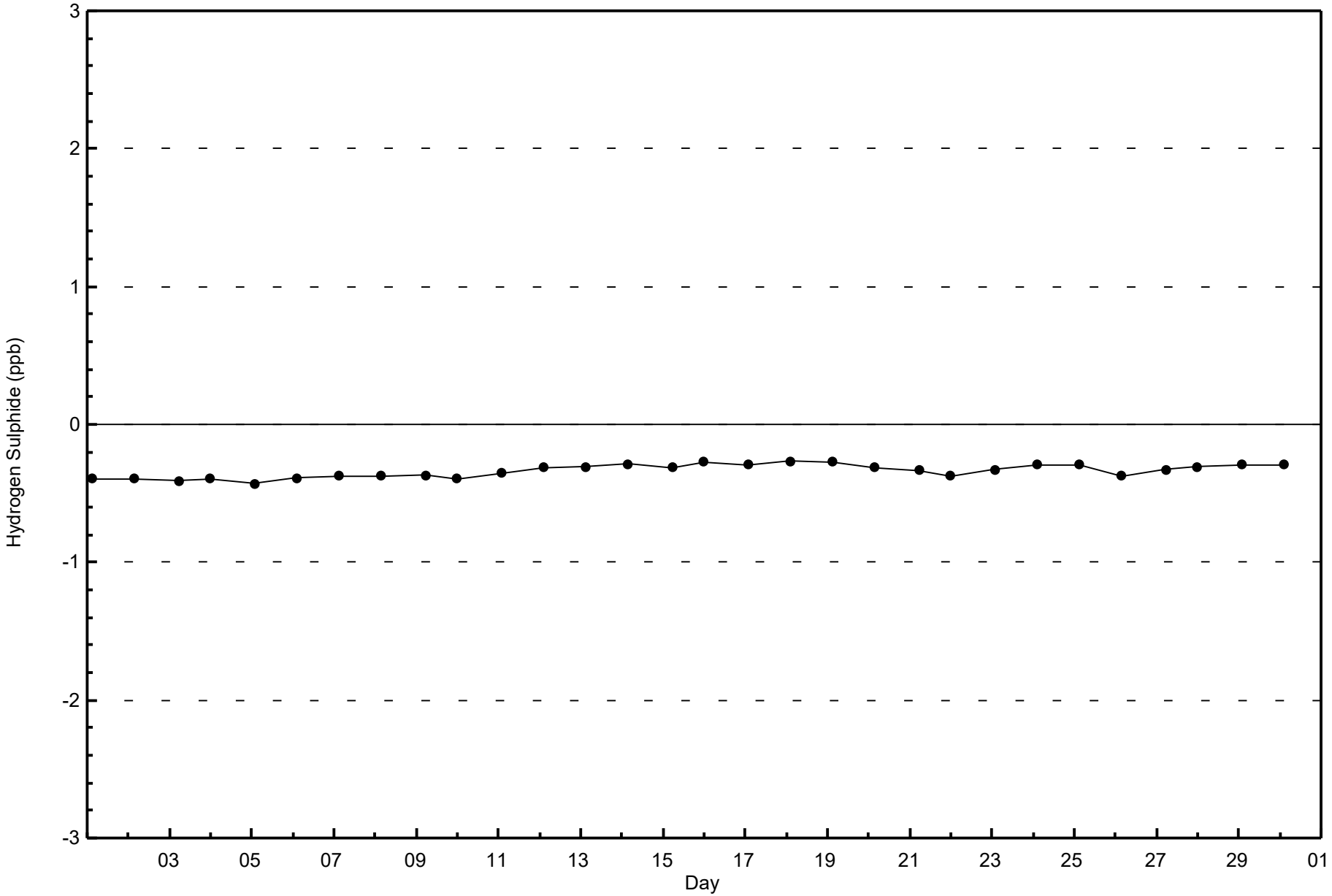
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H2S) - ppb

Jackfish 2/3 - September 2026

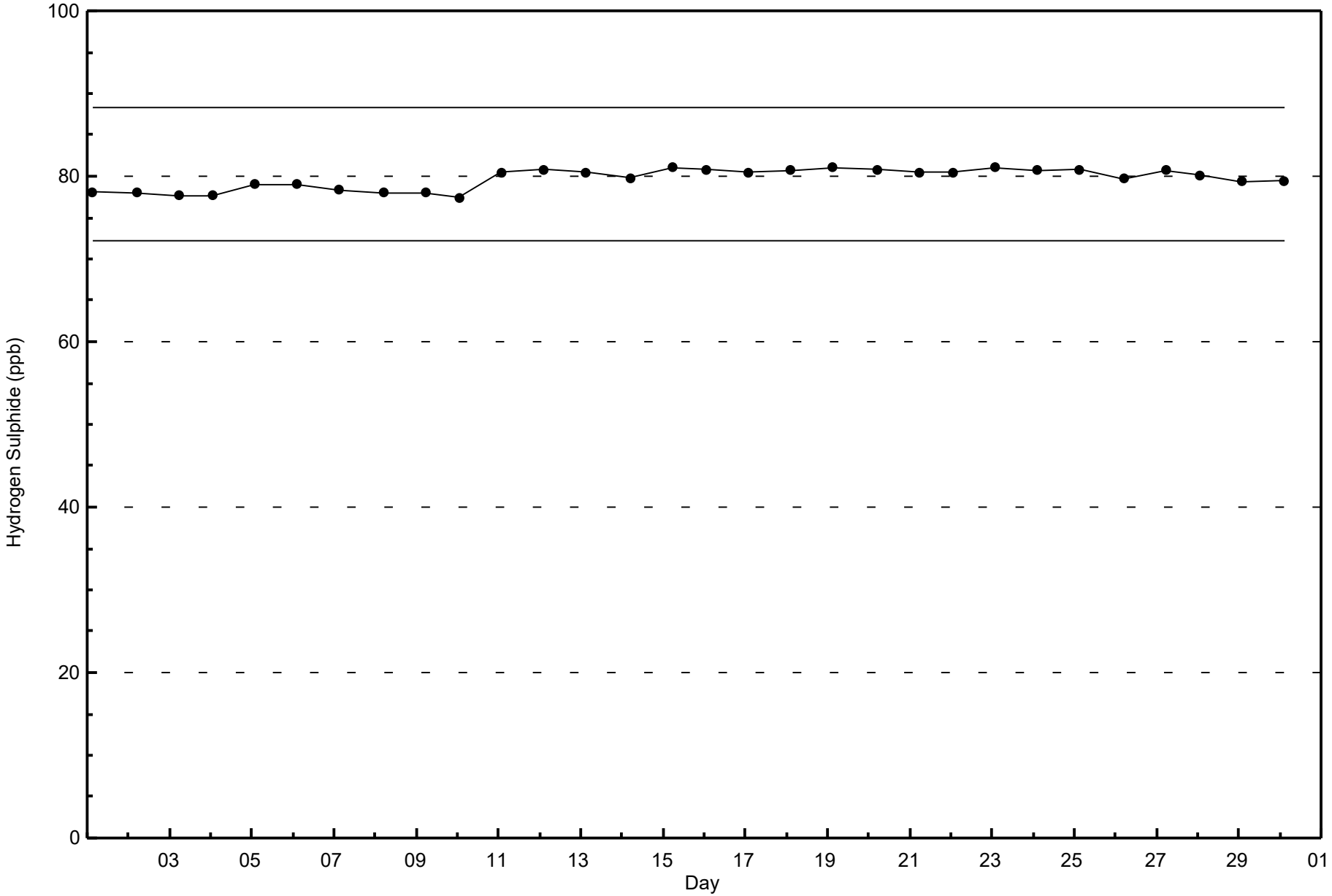


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H2S) - ppb

Jackfish 2/3 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Jackfish 2/3 - September 2026

Maximum Value: 3.0 ppb on Sep 18 08:00

Maximum Daily Average: 0.3 ppb on Sep 12

Minimum Value: 0.0 ppb on Sep 1 02:00

Minimum Daily Average: 0.0 ppb on Sep 9

Maximum Diurnal Average: 0.4 ppb at hour 9

Minimum Diurnal Average: 0.0 ppb at hour 20

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} = 0.4 P_{99} = 1.1

Hours in Service:	720
Hours of Data:	685
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-Sep	Z	0.0	0.0	0.2	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	0.0	0.0	0.0	0.0	0.0	0.0	0.3
2-Sep	0.0	Z	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	0.0	0.1
3-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.3	0.3	0.5	0.2	0.2	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
4-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.8	0.3	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8
5-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.4	0.7	0.5	0.4	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.7
6-Sep	0.0	0.0	0.0	0.0	0.0	Z	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
7-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.5	0.4	0.5	0.3	0.5	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
8-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.7	0.5	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7
9-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	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	0.1
10-Sep	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.1	0.1	0.4	0.4	0.1	0.4	0.3	0.6	0.5	0.3	0.4	0.1	0.0	0.3	0.9	0.4	0.1	0.2	0.9
11-Sep	1.1	0.0	0.1	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	1.1
12-Sep	0.0	0.6	0.3	1.2	0.8	Z	0.2	0.8	0.7	0.4	0.5	0.6	0.4	0.3	0.2	0.2	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.2
13-Sep	Z	0.0	0.0	0.0	0.1	0.0	0.2	0.2	0.3	0.6	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	0.1	0.6
14-Sep	0.0	Z	0.0	0.6	0.2	0.0	0.0	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
15-Sep	0.0	0.0	Z	0.0	0.2	0.7	0.5	2.2	2.1	0.4	0.4	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	2.2
16-Sep	0.0	0.0	0.3	Z	0.0	0.0	0.1	0.6	1.6	1.1	1.0	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	0.2	1.6
17-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.2	0.6	0.7	0.7	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	0.1	0.7
18-Sep	0.0	0.0	0.0	0.0	0.1	Z	0.6	3.0	0.5	0.3	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	0.2	3.0
19-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	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	0.2
20-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	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	0.2
21-Sep	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.1	0.3	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	0.3
22-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.3	0.5	1.0	0.6	0.5	0.2	0.6	0.1	0.3	0.2	0.1	0.0	0.0	0.2	0.1	0.0	0.0	0.2	1.0
23-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.2	1.0	0.9	0.7	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.2	1.0
24-Sep	0.0	0.1	0.3	0.1	0.2	Z	0.0	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
25-Sep	Z	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.1	0.4
26-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.3	0.1	0.3	0.4	0.2	0.4	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
27-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.3	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	0.3
28-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
29-Sep	0.0	0.0	0.6	0.0	Z	0.0	0.0	0.1	0.1	0.7	0.0	0.1	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	0.7
30-Sep	0.1	0.0	0.0	0.0	0.1	Z	0.0	0.3	1.1	0.3	0.1	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	0.1	1.1
	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.3	0.4	0.3	0.2	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	Diurnal Average	
	1.1	0.6	0.6	1.2	0.8	0.7	0.6	3.0	2.1	1.1	1.0	0.6	0.5	1.0	0.9	0.7	0.4	0.5	0.1	0.0	0.4	0.9	0.4	0.2	Diurnal Maximum	

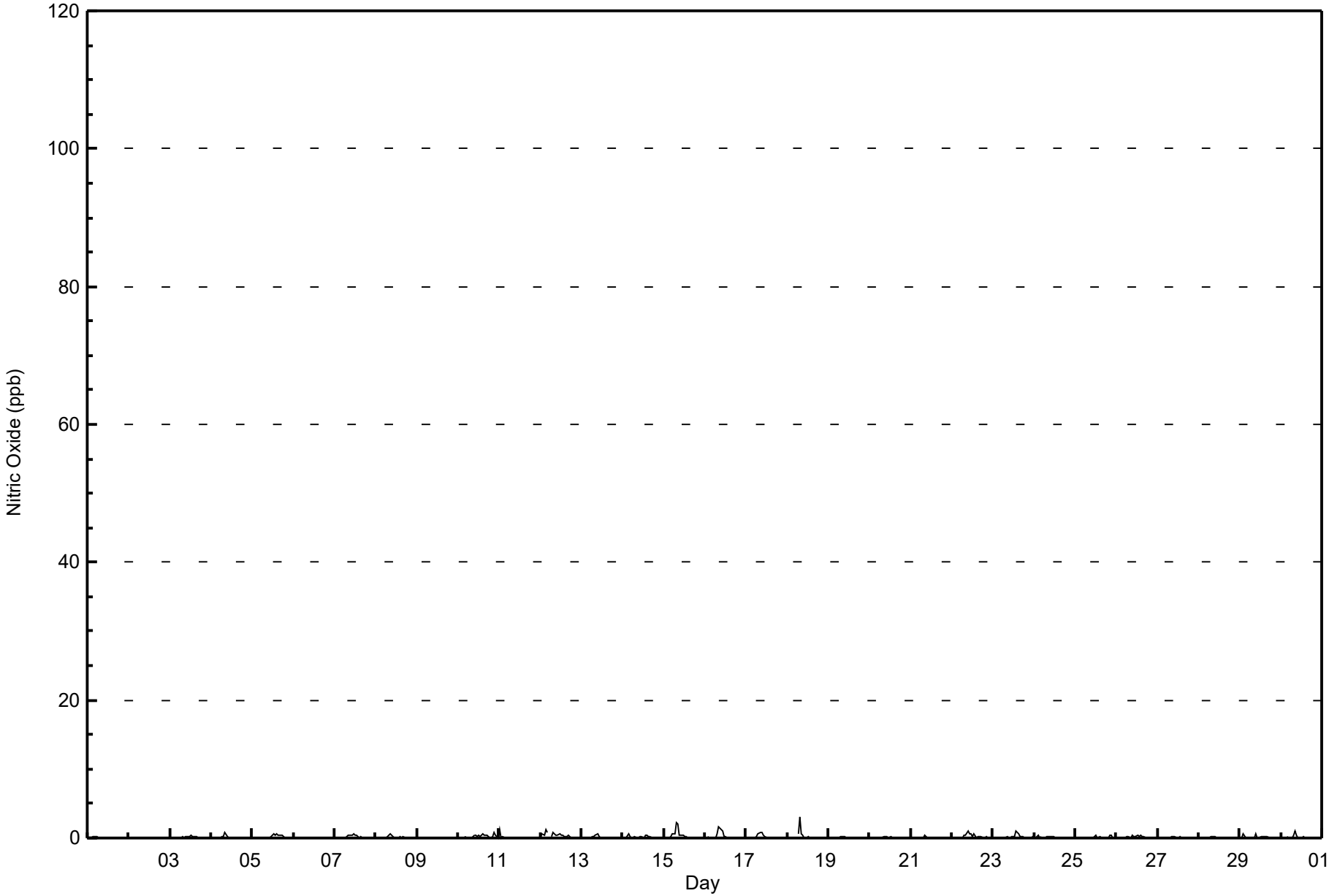
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Jackfish 2/3 - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	685	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Jackfish 2/3 - September 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	20	20	12	30	29	38	24	58	94	74	89	62	45	54	25	684
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	20	20	12	30	29	38	24	58	94	74	89	62	45	54	25	684

Total Number of Valid Hours: 684

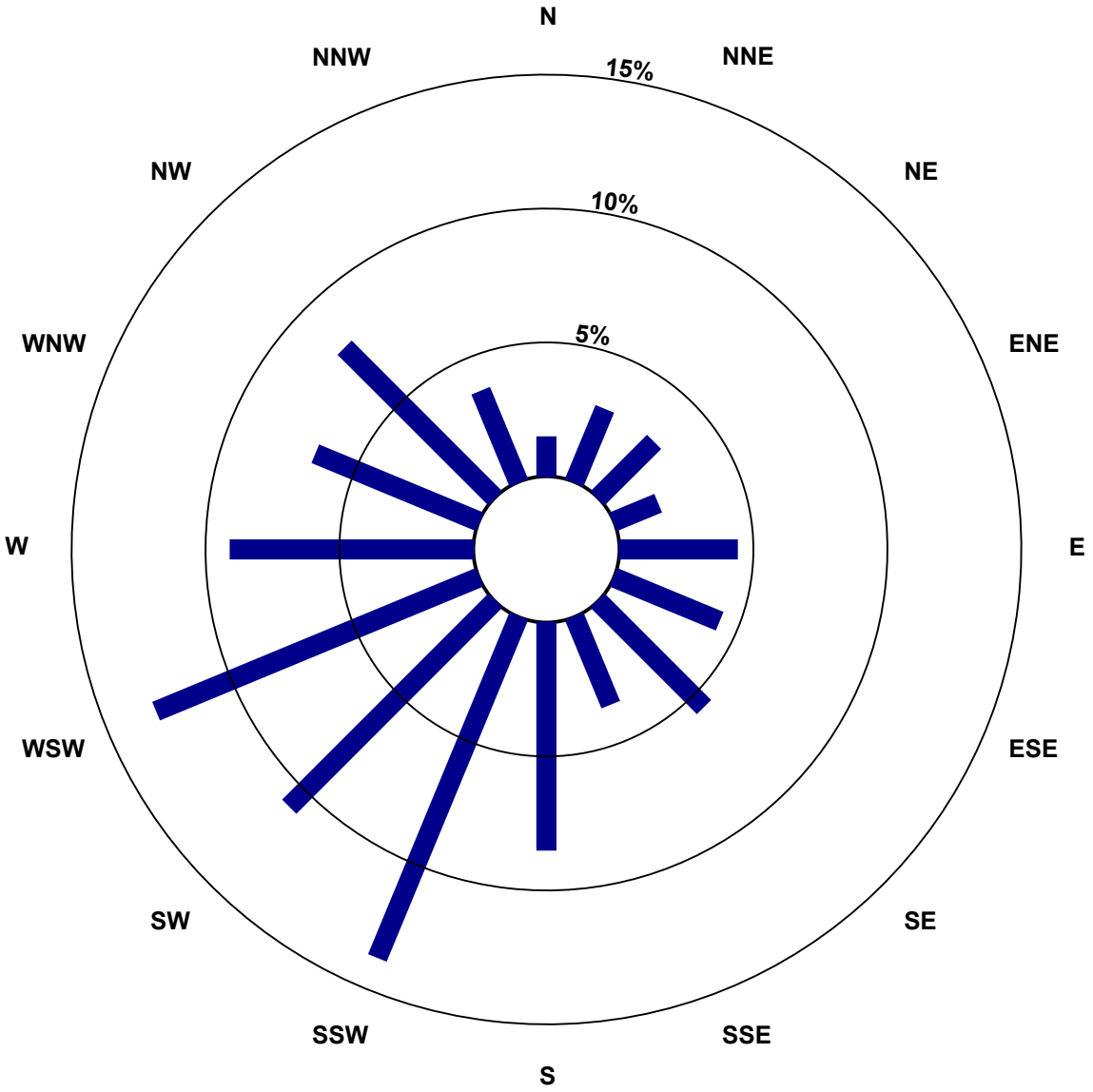
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Jackfish 2/3



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

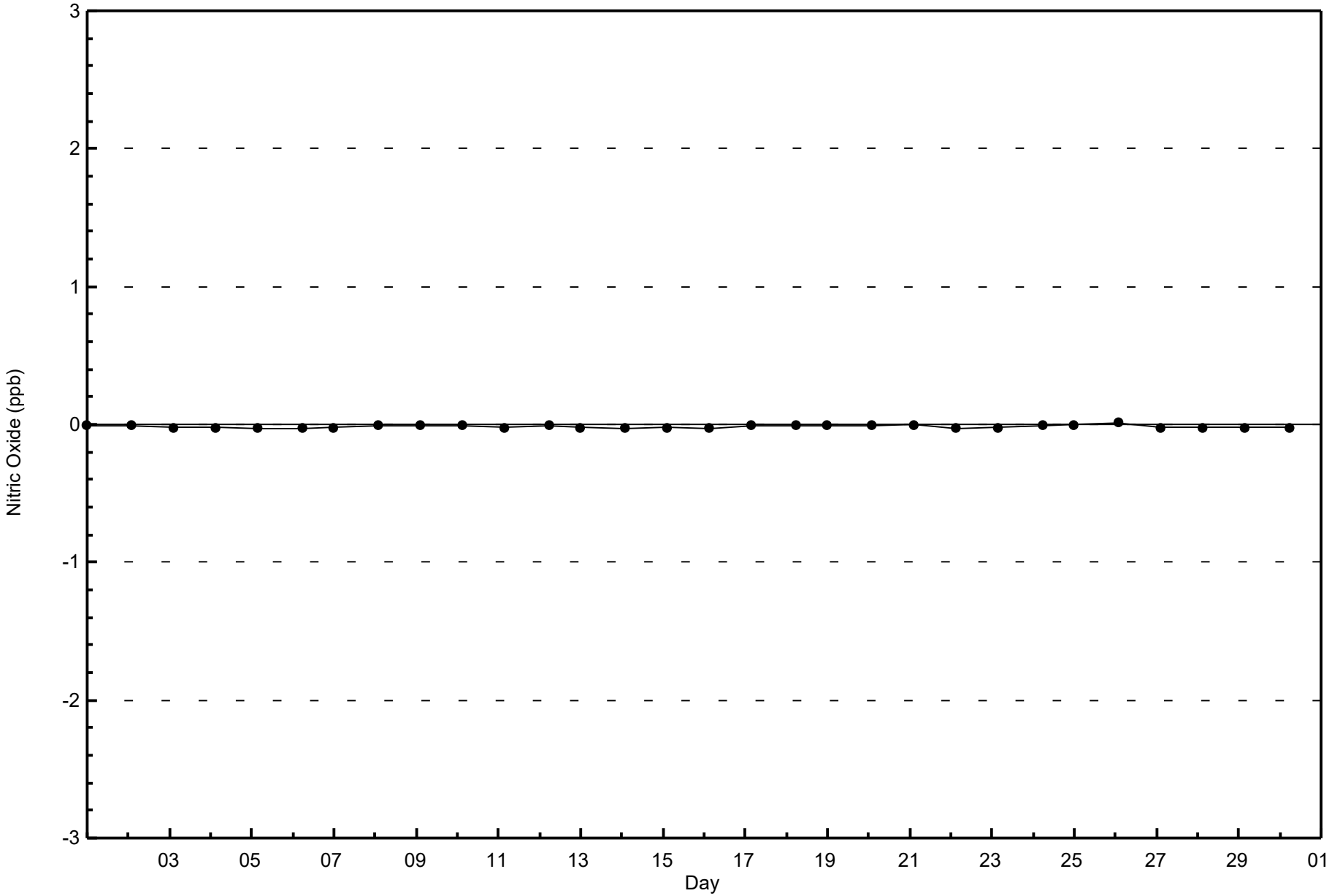
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Jackfish 2/3 - September 2026

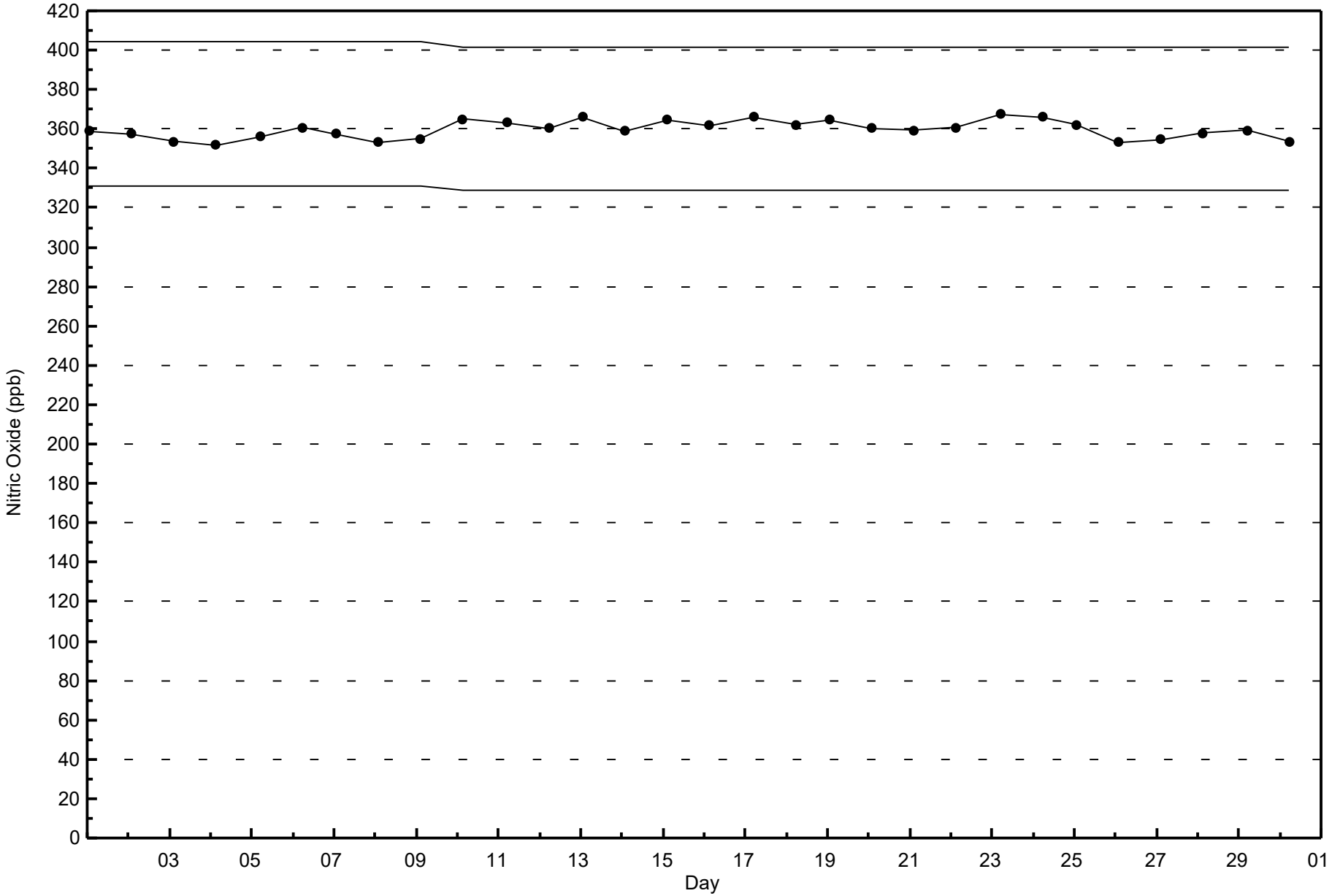


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Jackfish 2/3 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Jackfish 2/3 - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10.5 ppb on Sep 22 22:00 Maximum Daily Average: 2.8 ppb on Sep 22

Minimum Value: 0.1 ppb on Sep 5 22:00 Minimum Daily Average: 0.2 ppb on Sep 6
Maximum Diurnal Average: 1.7 ppb at hour 5 Minimum Diurnal Average: 0.7 ppb at hour 13
Monthly Average: 1.00 ppb Percentiles: P_1 = 0.1 P_{10} = 0.3 Q_1 = 0.4 Median = 0.7 Q_3 = 1.3 P_{90} = 1.9 P_{99} = 5.7

Hours in Service:	720
Hours of Data:	685
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-Sep	Z	0.4	0.3	0.4	0.6	0.7	0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.7	0.8	0.8	0.8	0.5	0.2	0.3	0.3	0.3	0.5	0.8
2-Sep	0.4	Z	0.9	0.8	0.7	0.6	0.5	0.4	0.5	0.6	0.7	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	0.4	0.9
3-Sep	0.2	0.2	Z	0.7	0.5	1.0	1.1	1.4	0.6	1.0	1.4	1.5	1.1	0.7	1.1	1.3	0.6	0.8	0.9	0.6	0.3	0.3	0.4	0.4	0.8	1.5
4-Sep	0.4	0.4	0.5	Z	0.8	0.8	1.1	0.8	1.9	1.0	0.8	0.7	0.6	0.8	0.7	0.8	0.7	1.2	1.0	1.0	0.8	1.0	0.8	0.9	0.8	1.9
5-Sep	0.9	0.8	0.8	0.4	Z	0.5	0.4	0.3	0.4	0.4	0.4	0.7	1.3	1.0	1.5	1.3	1.5	3.0	1.9	1.2	0.3	0.1	0.1	0.1	0.8	3.0
6-Sep	0.3	0.1	0.1	0.3	0.3	Z	0.7	0.4	0.4	0.2	0.3	0.1	0.2	0.1	0.3	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.7
7-Sep	Z	0.4	0.2	0.1	0.4	0.4	0.3	0.8	1.1	1.3	1.2	1.6	1.1	1.2	0.5	0.8	0.2	0.3	0.5	0.4	0.4	0.3	0.4	0.4	0.6	1.6
8-Sep	0.6	Z	0.8	0.7	0.6	0.8	0.8	0.8	1.6	1.4	0.8	0.7	0.5	0.6	1.0	0.9	1.4	0.6	1.1	1.1	0.3	0.4	0.3	0.4	0.8	1.6
9-Sep	0.3	0.3	Z	0.6	0.6	0.7	0.7	0.6	C	C	C	C	C	0.2	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.6	0.7	0.3	0.4	0.7
10-Sep	0.5	0.4	0.4	Z	2.8	0.3	0.4	0.6	0.3	1.3	1.4	0.7	1.2	1.4	2.8	1.8	1.5	2.0	0.8	0.5	2.2	3.2	1.5	0.6	1.2	3.2
11-Sep	4.0	0.4	0.8	0.5	Z	0.4	0.3	0.3	0.4	0.3	0.2	0.3	0.3	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.4	0.3	0.3	0.5	4.0
12-Sep	0.3	4.3	2.7	6.3	5.6	Z	1.7	4.0	2.2	1.2	1.6	1.6	0.9	0.9	0.7	0.6	1.6	1.4	0.3	0.5	0.6	0.3	0.2	0.2	1.7	6.3
13-Sep	Z	0.6	0.5	0.5	0.7	0.7	1.0	0.8	1.1	1.6	0.8	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.6	1.6
14-Sep	0.5	Z	2.1	7.0	3.0	1.3	3.1	3.1	1.2	1.1	0.9	0.8	0.4	1.2	1.4	1.3	1.0	0.5	0.6	1.0	1.3	1.6	1.8	0.9	1.6	7.0
15-Sep	0.6	0.5	Z	0.7	1.7	2.1	1.7	3.8	3.0	0.7	1.0	0.8	0.6	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.8	0.4	0.5	0.6	0.9	3.8
16-Sep	0.2	0.2	3.1	Z	1.5	1.8	1.2	1.7	2.7	1.9	2.2	0.8	0.6	0.5	0.4	0.3	0.4	0.2	1.5	1.2	0.2	0.3	0.5	1.0	1.1	3.1
17-Sep	1.5	1.7	1.9	1.9	Z	2.0	2.1	2.2	2.1	1.9	1.3	1.0	0.7	0.7	0.6	0.5	0.5	0.5	0.7	0.5	0.3	0.4	0.5	0.3	1.1	2.2
18-Sep	0.7	1.4	0.7	0.5	3.4	Z	2.8	3.3	1.7	1.0	0.5	0.3	0.6	0.4	0.4	0.4	0.2	0.3	0.3	1.0	0.3	0.2	0.2	0.2	0.9	3.4
19-Sep	Z	0.5	0.4	1.0	1.0	1.4	1.7	1.3	1.0	0.8	0.7	0.5	0.4	0.6	1.0	1.2	1.2	1.1	1.0	1.0	1.7	1.7	1.6	2.7	1.1	2.7
20-Sep	1.8	Z	1.7	1.4	1.3	1.4	1.6	1.1	1.0	1.2	1.1	0.9	1.5	1.3	0.8	0.7	1.1	1.3	1.1	1.0	1.0	1.0	0.9	0.8	1.2	1.8
21-Sep	1.2	1.1	Z	1.1	1.0	1.2	1.1	1.0	1.5	1.2	1.2	1.3	1.2	1.3	1.3	0.9	1.2	1.4	1.4	1.3	1.2	1.4	1.4	1.2	1.2	1.5
22-Sep	1.8	2.8	2.8	Z	2.5	1.8	1.5	1.8	1.9	2.3	2.3	1.7	0.8	1.7	0.6	1.4	1.6	2.1	4.2	1.1	7.7	10.5	7.0	1.9	2.8	10.5
23-Sep	1.2	0.5	0.5	0.5	Z	0.9	2.5	1.2	1.5	0.9	0.8	1.1	1.4	2.8	4.8	4.1	2.4	3.1	2.7	1.3	0.6	0.5	0.6	2.7	1.7	4.8
24-Sep	1.9	3.0	6.0	4.4	9.5	Z	1.4	1.1	0.9	0.8	0.8	0.8	0.5	0.4	0.4	0.4	0.4	0.4	0.5	1.7	4.6	4.1	2.0	1.1	2.0	9.5
25-Sep	Z	2.2	1.0	0.9	1.2	1.7	0.4	1.2	0.9	0.8	0.7	1.0	1.3	0.8	1.7	1.2	0.9	1.9	1.1	1.7	2.7	2.0	0.4	1.0	1.2	2.7
26-Sep	1.4	Z	1.5	2.3	1.3	0.5	0.5	0.4	0.3	0.7	0.4	0.6	0.8	0.5	0.6	0.4	0.8	0.4	0.4	0.1	0.1	0.1	0.1	0.5	0.6	2.3
27-Sep	0.5	0.6	Z	0.7	0.6	0.6	0.7	0.4	0.5	0.5	0.5	0.3	0.3	0.4	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.7
28-Sep	0.4	0.5	0.5	Z	0.6	0.9	0.7	0.7	0.7	0.6	0.3	0.3	0.4	0.3	0.3	0.5	0.6	0.6	0.6	1.6	0.9	1.5	1.4	1.3	0.7	1.6
29-Sep	1.6	2.0	2.6	2.0	Z	1.5	1.4	1.4	0.8	2.3	0.6	0.5	0.8	0.8	0.7	1.2	0.9	0.8	0.2	0.5	0.3	0.3	0.4	0.4	1.0	2.6
30-Sep	0.5	0.5	0.5	0.5	0.6	Z	0.7	1.9	3.7	1.6	0.6	0.3	0.5	0.9	0.4	0.3	0.4	0.3	0.5	1.0	1.2	0.2	0.4	0.4	0.8	3.7
	0.9	1.0	1.3	1.4	1.7	1.0	1.2	1.3	1.2	1.1	0.9	0.8	0.7	0.8	0.9	0.8	0.8	0.9	0.9	0.8	1.1	1.1	0.9	0.7	Diurnal Average	
	4.0	4.3	6.0	7.0	9.5	2.1	3.1	4.0	3.7	2.3	2.3	1.7	1.5	2.8	4.8	4.1	2.4	3.1	4.2	1.7	7.7	10.5	7.0	2.7	Diurnal Maximum	

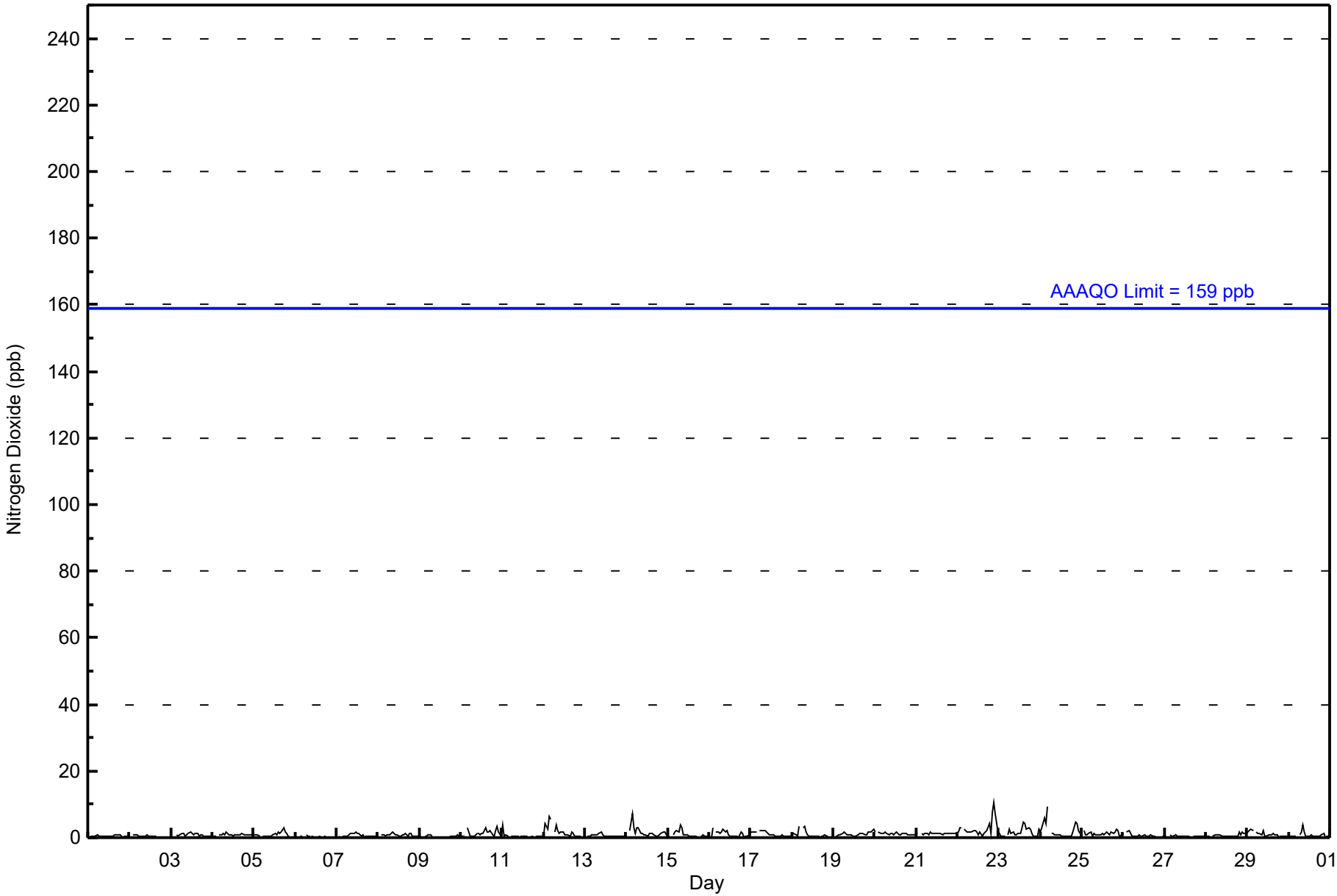
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Jackfish 2/3 - September 2026



Nitrogen Dioxide (NO_2) - ppb
Jackfish 2/3 - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	685	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Jackfish 2/3 - September 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	20	20	12	30	29	38	24	58	94	74	89	62	45	54	25	684
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	20	20	12	30	29	38	24	58	94	74	89	62	45	54	25	684

Total Number of Valid Hours: 684

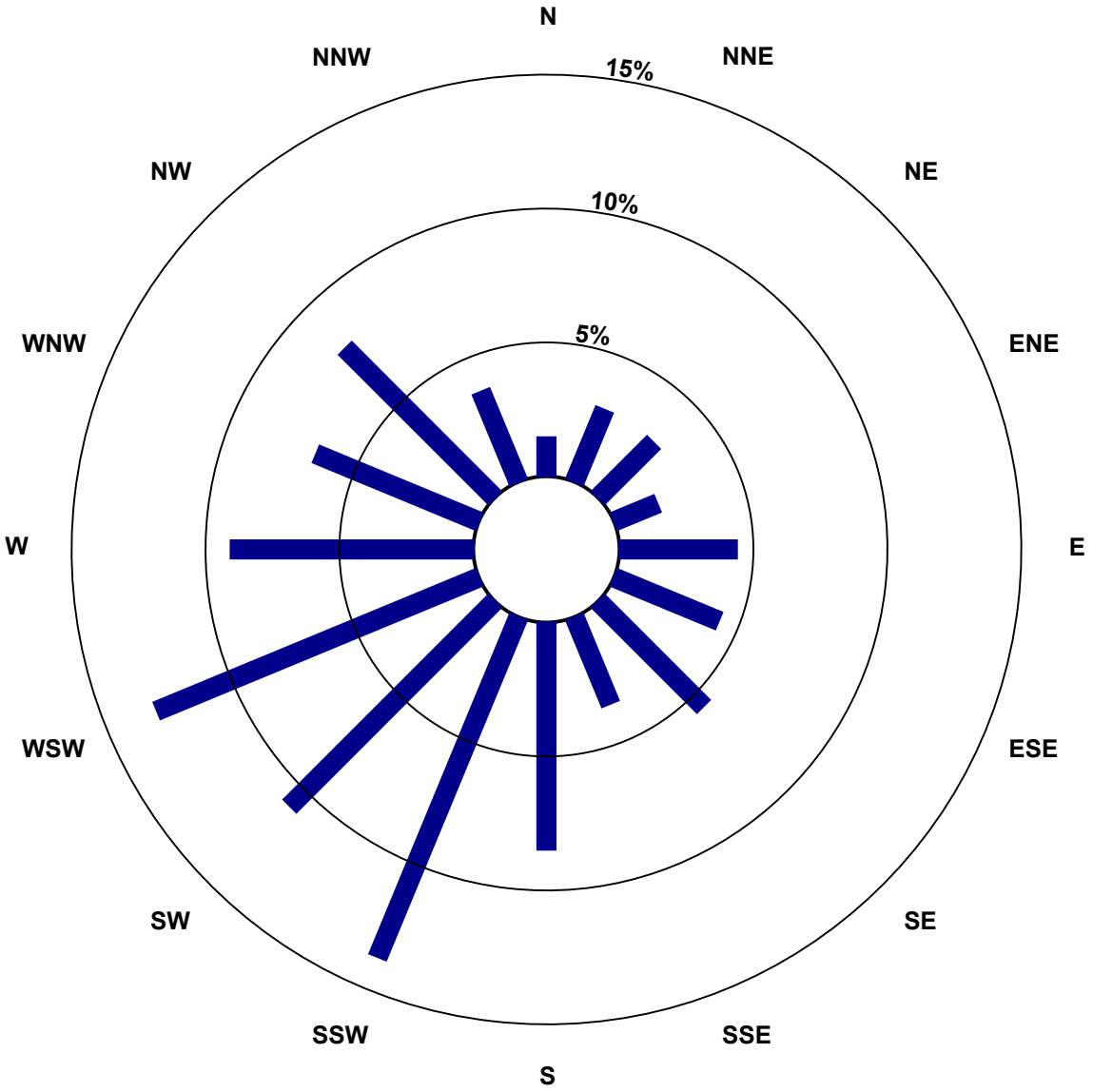
Total Number of Hours: 720

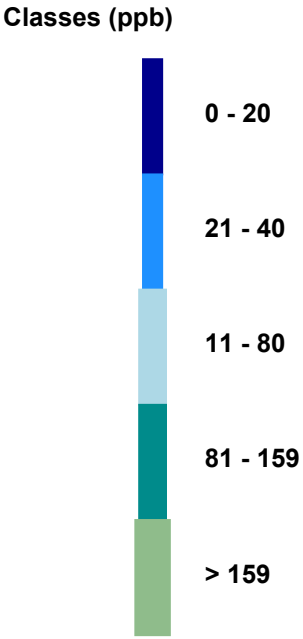
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Jackfish 2/3





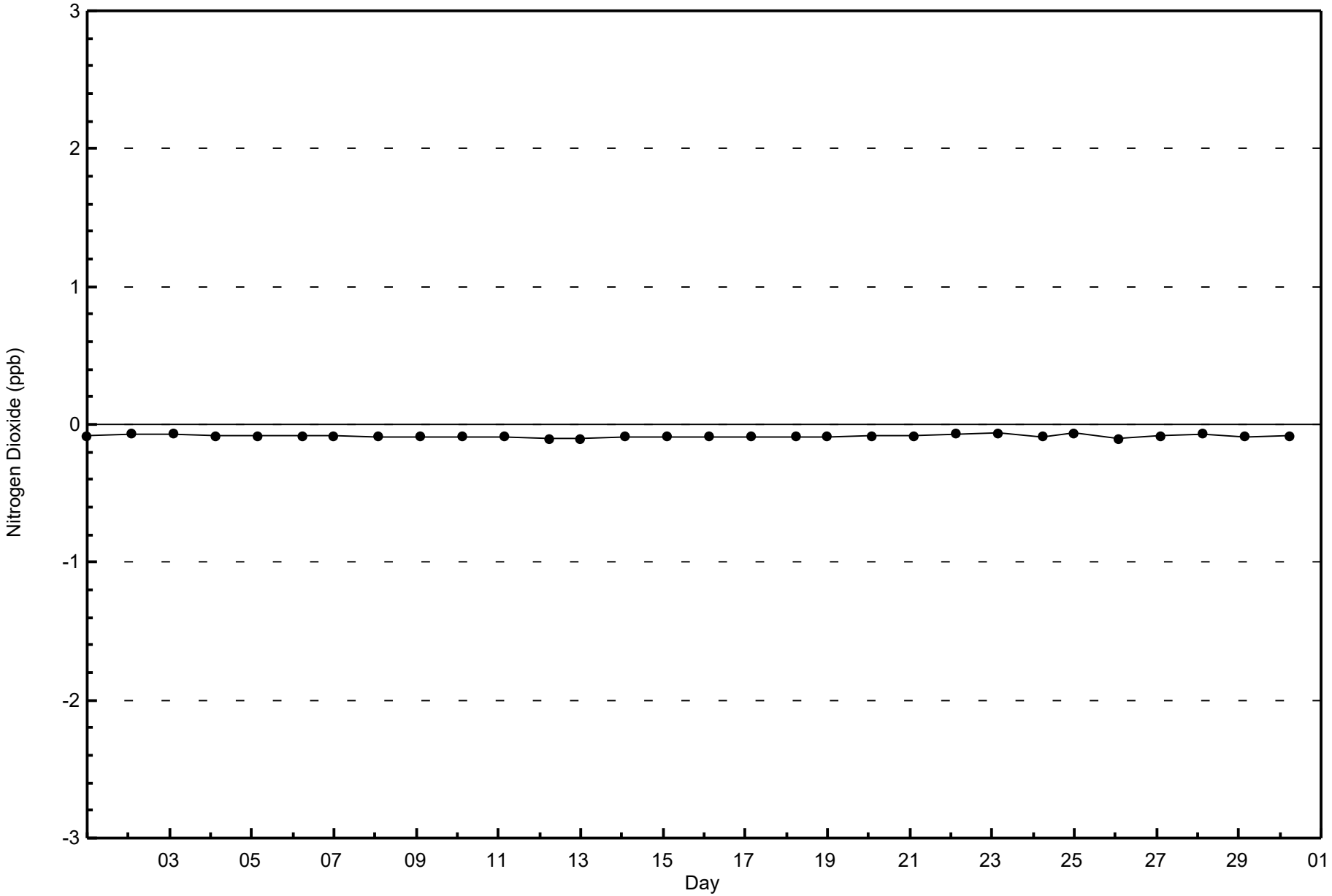
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Jackfish 2/3 - September 2026

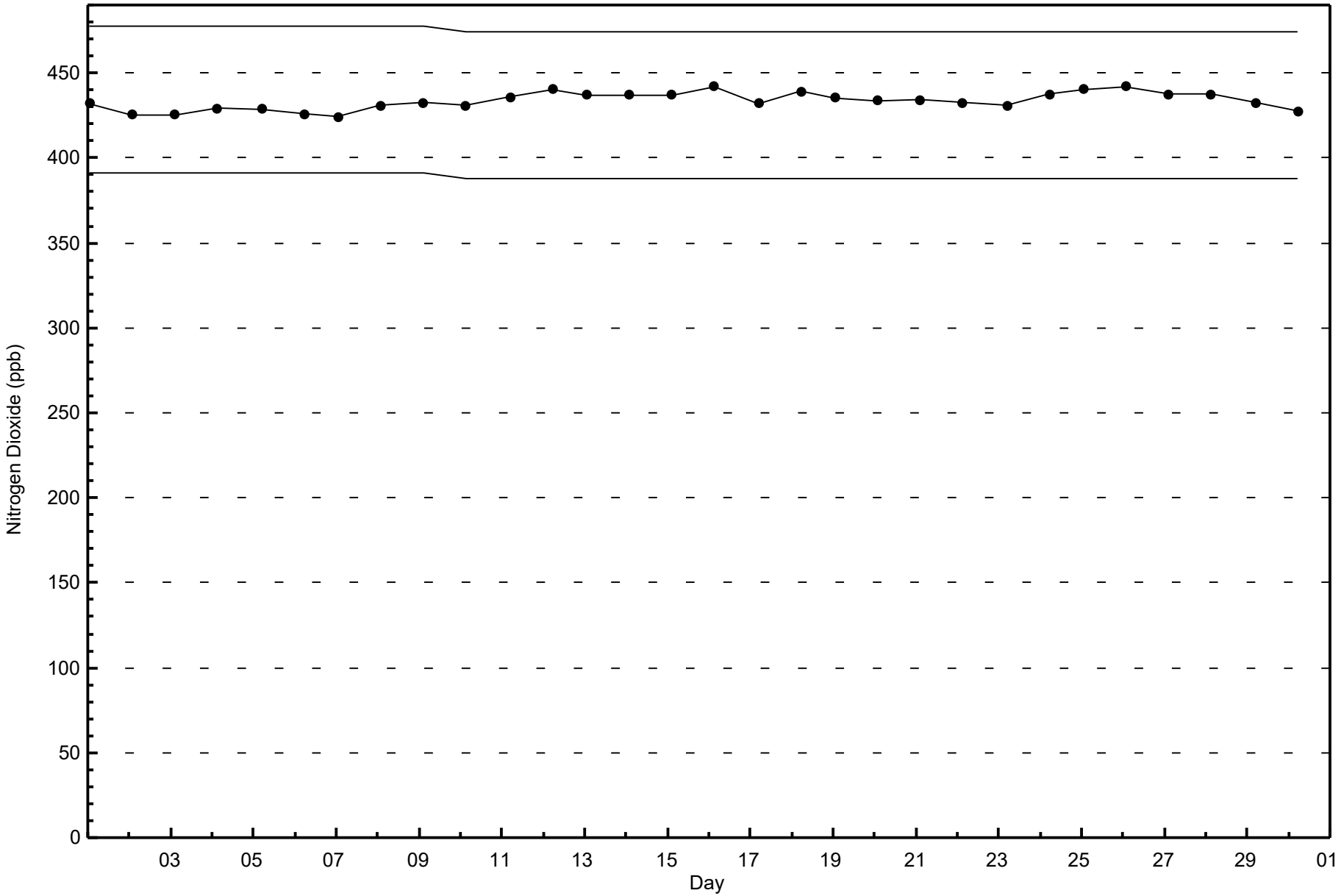


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Jackfish 2/3 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Jackfish 2/3 - September 2026

Maximum Value: 10.6 ppb on Sep 22 22:00

Maximum Daily Average: 3.0 ppb on Sep 22

Minimum Value: 0.1 ppb on Sep 26 20:00

Minimum Daily Average: 0.2 ppb on Sep 6

Maximum Diurnal Average: 1.8 ppb at hour 5

Minimum Diurnal Average: 0.8 ppb at hour 24

Monthly Average: 1.11 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.3$ $Q_1 = 0.4$ Median = 0.8 $Q_3 = 1.4$ $P_{90} = 2.2$ $P_{99} = 6.3$

Hours in Service:	720
Hours of Data:	685
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-Sep	Z	0.4	0.3	0.6	0.9	0.9	0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.7	0.8	0.8	0.8	0.5	0.2	0.3	0.3	0.3	0.5	0.9
2-Sep	0.4	Z	0.9	0.8	0.7	0.6	0.5	0.4	0.5	0.7	0.8	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	0.4	0.9
3-Sep	0.2	0.2	Z	0.7	0.5	1.0	1.2	1.5	0.6	1.1	1.7	1.8	1.6	0.9	1.3	1.5	0.6	0.9	0.9	0.6	0.3	0.3	0.4	0.4	0.9	1.8
4-Sep	0.4	0.4	0.5	Z	0.8	0.8	1.2	0.9	2.7	1.3	0.9	0.7	0.7	0.9	0.7	0.8	0.7	1.3	1.0	1.0	0.8	1.0	0.8	0.9	0.9	2.7
5-Sep	0.9	0.8	0.8	0.4	Z	0.5	0.4	0.3	0.4	0.4	0.4	0.9	1.8	1.4	2.2	1.8	1.9	3.5	2.0	1.2	0.3	0.1	0.1	0.1	1.0	3.5
6-Sep	0.3	0.1	0.1	0.3	0.3	Z	0.7	0.5	0.5	0.2	0.3	0.1	0.2	0.1	0.3	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.7
7-Sep	Z	0.4	0.2	0.1	0.4	0.4	0.3	1.0	1.5	1.8	1.6	2.1	1.4	1.7	0.6	0.9	0.2	0.3	0.5	0.4	0.4	0.3	0.4	0.4	0.7	2.1
8-Sep	0.6	Z	0.8	0.7	0.6	0.8	0.8	0.9	2.3	1.9	0.9	0.7	0.5	0.6	1.1	0.9	1.5	0.6	1.1	1.1	0.3	0.4	0.3	0.4	0.9	2.3
9-Sep	0.3	0.3	Z	0.6	0.6	0.7	0.7	0.7	C	C	C	C	C	0.2	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.6	0.7	0.3	0.4	0.7
10-Sep	0.5	0.4	0.4	Z	2.9	0.3	0.4	0.7	0.4	1.7	1.8	0.8	1.6	1.7	3.4	2.3	1.8	2.4	0.9	0.5	2.5	4.1	1.9	0.7	1.5	4.1
11-Sep	5.1	0.4	0.9	0.5	Z	0.4	0.3	0.3	0.4	0.3	0.2	0.3	0.3	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.4	0.3	0.3	0.5	5.1
12-Sep	0.3	4.9	3.0	7.5	6.4	Z	1.9	4.8	2.9	1.6	2.1	2.2	1.3	1.2	0.9	0.8	2.0	1.5	0.3	0.5	0.6	0.3	0.2	0.2	2.1	7.5
13-Sep	Z	0.6	0.5	0.5	0.8	0.7	1.2	1.0	1.4	2.2	1.0	0.6	0.6	0.6	0.5	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.7	2.2
14-Sep	0.5	Z	2.1	7.6	3.2	1.3	3.1	3.3	1.3	1.2	1.0	0.9	0.5	1.5	1.7	1.5	1.2	0.5	0.6	1.0	1.3	1.6	1.8	0.9	1.7	7.6
15-Sep	0.6	0.5	Z	0.7	1.9	2.8	2.2	6.0	5.1	1.1	1.4	1.2	0.9	0.6	0.3	0.3	0.3	0.2	0.2	0.2	0.9	0.4	0.5	0.6	1.3	6.0
16-Sep	0.2	0.2	3.4	Z	1.5	1.8	1.3	2.3	4.3	3.0	3.2	1.0	0.7	0.6	0.5	0.3	0.4	0.2	1.5	1.2	0.2	0.3	0.5	1.0	1.3	4.3
17-Sep	1.5	1.7	1.9	1.9	Z	2.0	2.3	2.8	2.8	2.6	1.7	1.2	0.8	0.7	0.6	0.5	0.5	0.5	0.7	0.5	0.3	0.4	0.5	0.3	1.2	2.8
18-Sep	0.7	1.4	0.7	0.5	3.5	Z	3.4	6.3	2.2	1.3	0.5	0.3	0.7	0.5	0.4	0.4	0.2	0.3	0.3	1.0	0.3	0.2	0.2	0.2	1.1	6.3
19-Sep	Z	0.5	0.4	1.0	1.0	1.4	1.7	1.5	1.2	1.0	0.8	0.5	0.4	0.6	1.1	1.2	1.2	1.1	1.0	1.0	1.7	1.7	1.6	2.7	1.1	2.7
20-Sep	1.8	Z	1.7	1.4	1.3	1.4	1.6	1.2	1.1	1.4	1.2	0.9	1.7	1.4	0.8	0.7	1.1	1.3	1.1	1.0	1.0	1.0	0.9	0.8	1.2	1.8
21-Sep	1.2	1.1	Z	1.1	1.0	1.3	1.1	1.1	1.8	1.3	1.2	1.4	1.3	1.4	1.3	0.9	1.2	1.4	1.4	1.3	1.2	1.4	1.4	1.2	1.3	1.8
22-Sep	1.8	2.8	2.8	Z	2.5	1.8	1.5	2.1	2.4	3.3	2.9	2.2	1.0	2.3	0.7	1.7	1.8	2.2	4.2	1.1	7.9	10.6	7.0	1.9	3.0	10.6
23-Sep	1.2	0.5	0.5	0.5	Z	0.9	2.5	1.2	1.6	0.9	0.9	1.3	1.6	3.8	5.7	4.8	2.7	3.2	2.7	1.3	0.6	0.5	0.6	2.9	1.9	5.7
24-Sep	1.9	3.1	6.3	4.5	9.7	Z	1.4	1.2	1.0	0.9	1.0	0.9	0.5	0.4	0.4	0.4	0.4	0.4	0.5	1.7	4.6	4.1	2.0	1.1	2.1	9.7
25-Sep	Z	2.2	1.0	0.9	1.2	1.8	0.4	1.2	1.0	0.9	0.8	1.1	1.7	0.9	1.8	1.3	0.9	1.9	1.1	1.7	3.1	2.4	0.4	1.0	1.3	3.1
26-Sep	1.4	Z	1.5	2.3	1.3	0.5	0.6	0.5	0.3	1.0	0.5	0.9	1.2	0.7	1.0	0.6	1.1	0.5	0.4	0.1	0.1	0.1	0.1	0.5	0.8	2.3
27-Sep	0.5	0.6	Z	0.7	0.6	0.6	0.7	0.5	0.6	0.8	0.7	0.4	0.3	0.5	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.5	0.8
28-Sep	0.4	0.5	0.5	Z	0.6	0.9	0.8	0.8	0.9	0.7	0.4	0.4	0.4	0.3	0.3	0.5	0.6	0.6	0.6	1.6	0.9	1.5	1.4	1.3	0.7	1.6
29-Sep	1.6	2.0	3.2	2.0	Z	1.5	1.4	1.5	0.9	3.0	0.6	0.6	1.0	1.0	0.9	1.4	1.0	0.8	0.2	0.5	0.3	0.3	0.4	0.4	1.2	3.2
30-Sep	0.6	0.5	0.5	0.5	0.7	Z	0.7	2.2	4.8	1.9	0.7	0.3	0.6	1.1	0.4	0.3	0.4	0.3	0.5	1.0	1.2	0.2	0.4	0.4	0.9	4.8
	1.0	1.1	1.4	1.5	1.8	1.1	1.2	1.6	1.6	1.4	1.1	0.9	0.9	1.0	1.0	0.9	0.9	1.0	0.9	0.8	1.1	1.2	0.9	0.8	Diurnal Average	
	5.1	4.9	6.3	7.6	9.7	2.8	3.4	6.3	5.1	3.3	3.2	2.2	1.8	3.8	5.7	4.8	2.7	3.5	4.2	1.7	7.9	10.6	7.0	2.9	Diurnal Maximum	

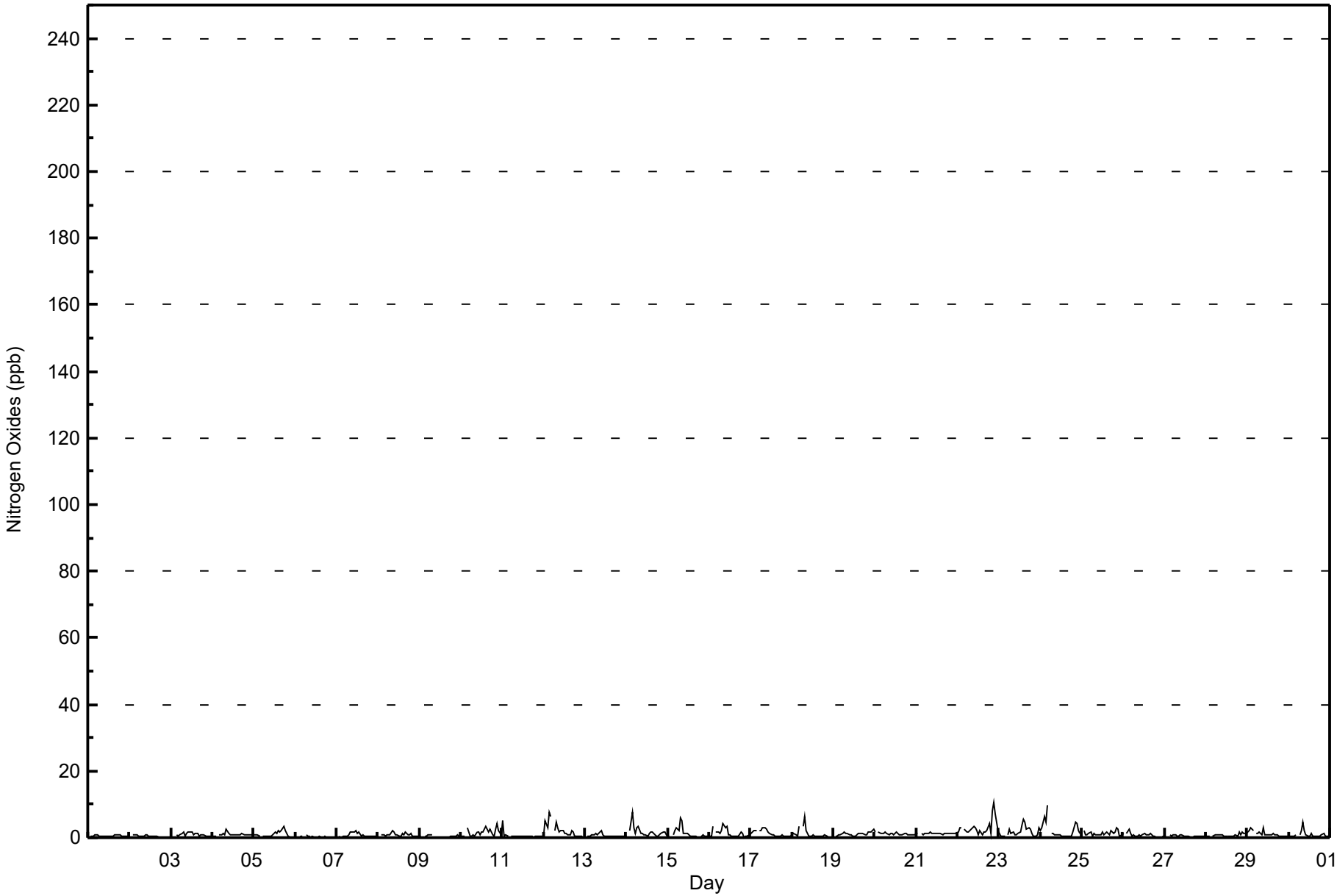
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Jackfish 2/3 - September 2026



Nitrogen Oxides (NO_X) - ppb
Jackfish 2/3 - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	685	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Jackfish 2/3 - September 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	20	20	12	30	29	38	24	58	94	74	89	62	45	54	25	684
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	20	20	12	30	29	38	24	58	94	74	89	62	45	54	25	684

Total Number of Valid Hours: 684

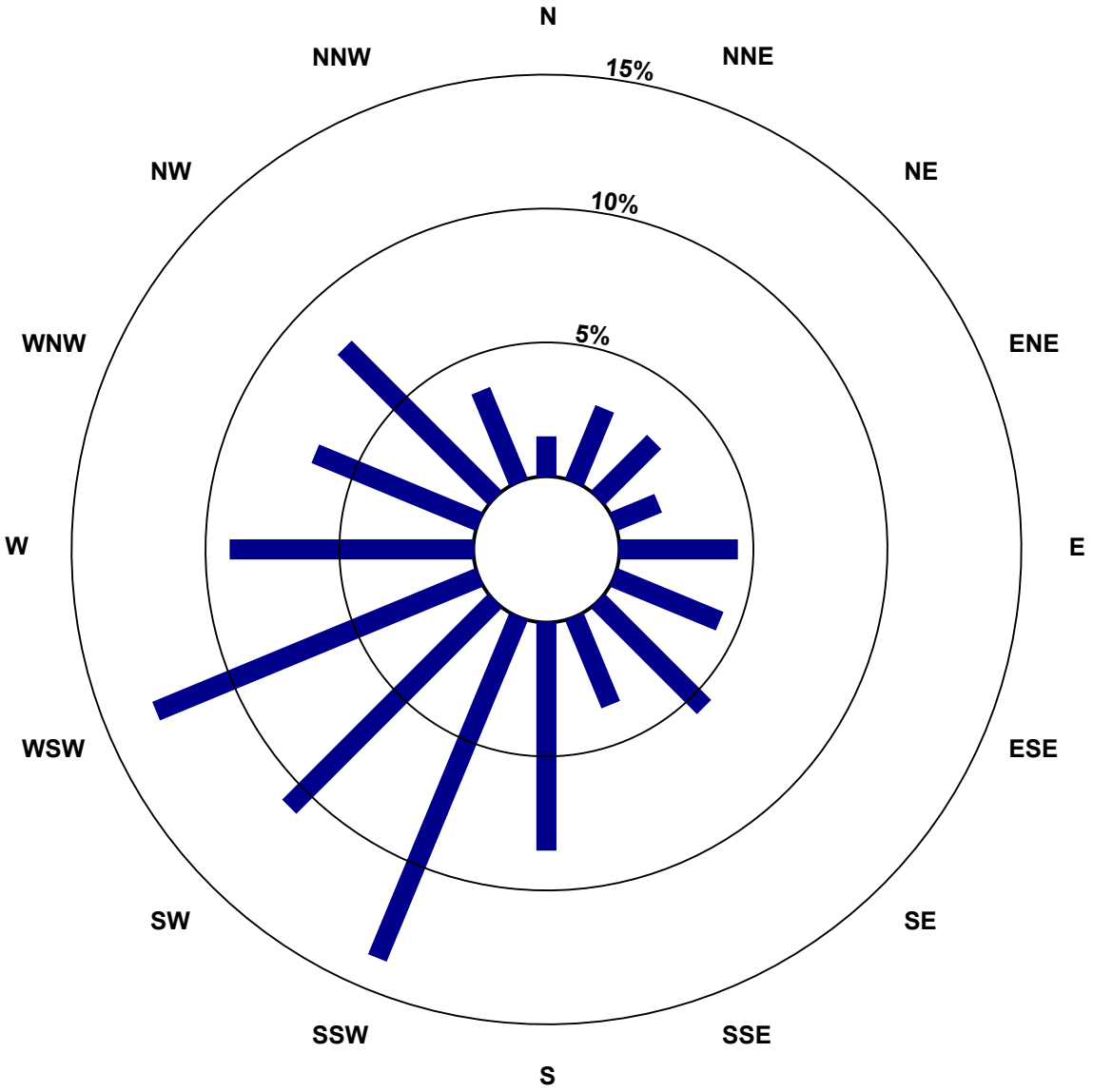
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Jackfish 2/3



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

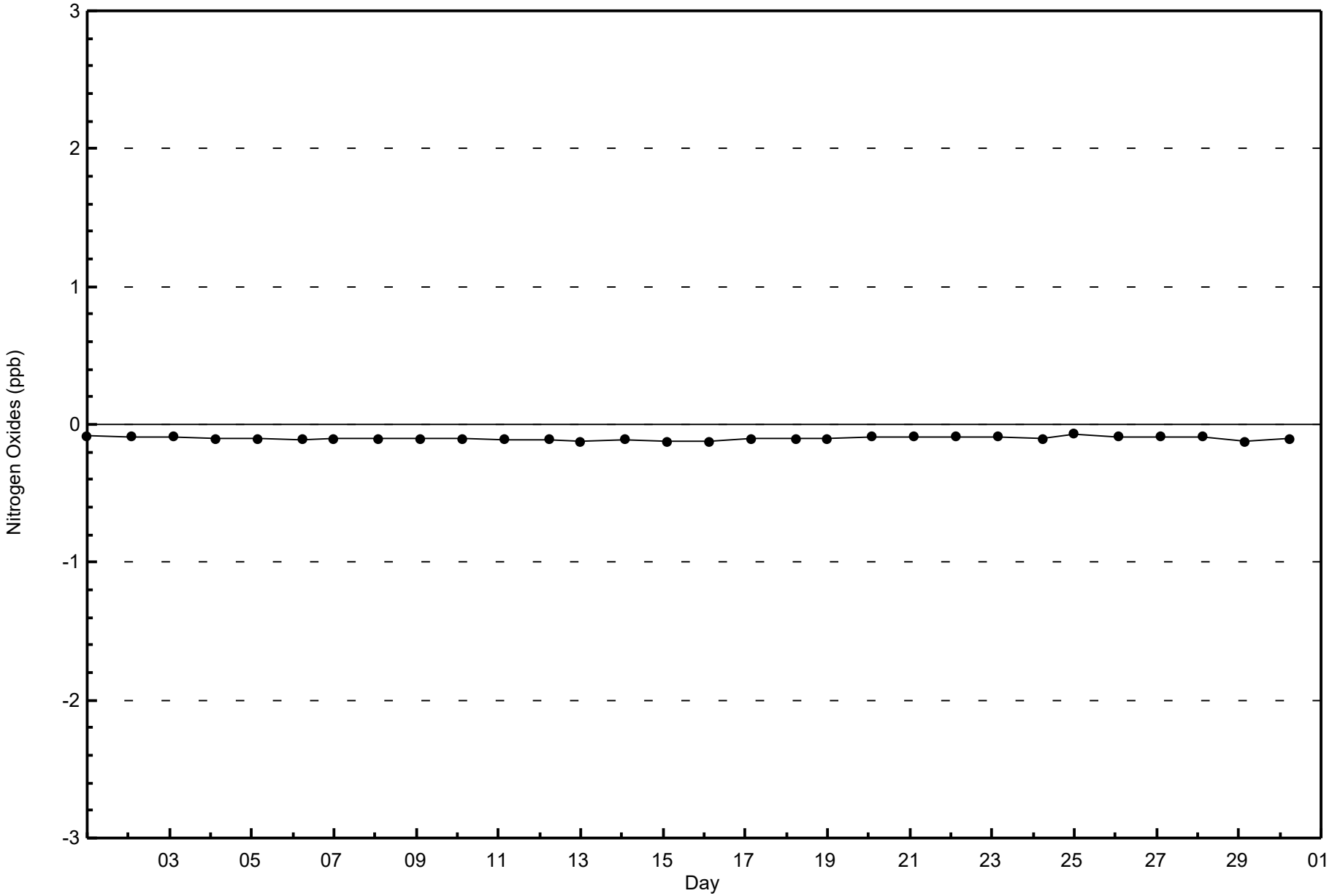
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Jackfish 2/3 - September 2026

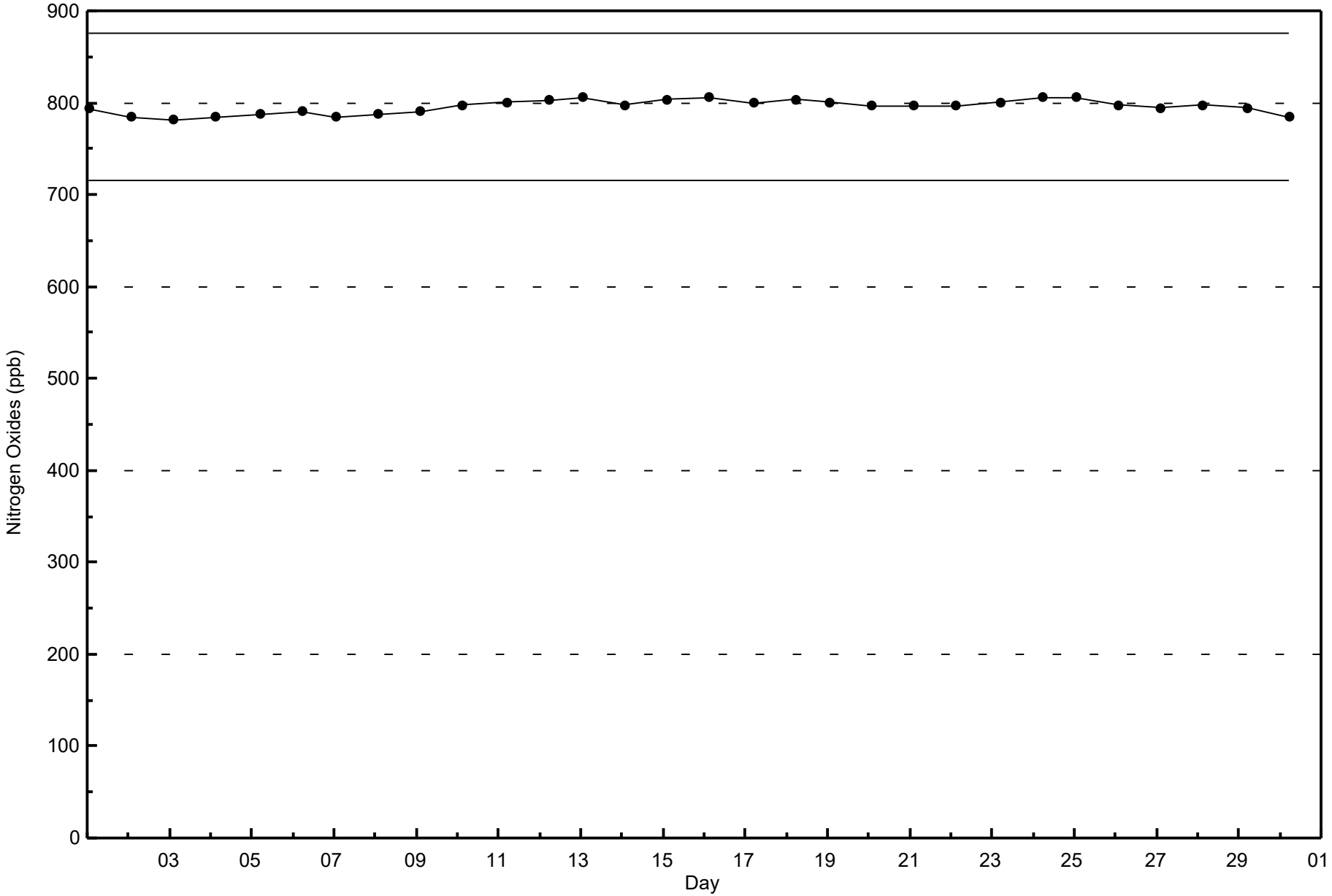


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Jackfish 2/3 - September 2026



Maximum Value: 25.7 C on Sep 2 15:00

Maximum Daily Average: 19.2 C on Sep 2

Minimum Value: 0.7 C on Oct 1 00:00

Minimum Daily Average: 4.1 C on Sep 30

Maximum Diurnal Average: 15.8 C at hour 16

Minimum Diurnal Average: 7.8 C at hour 6

Monthly Average: 11.30 C

Percentiles: P_1 = 2.5 P_{10} = 5.0 Q_1 = 7.5 Median = 10.7 Q_3 = 14.8 P_{90} = 18.4 P_{99} = 23.7

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

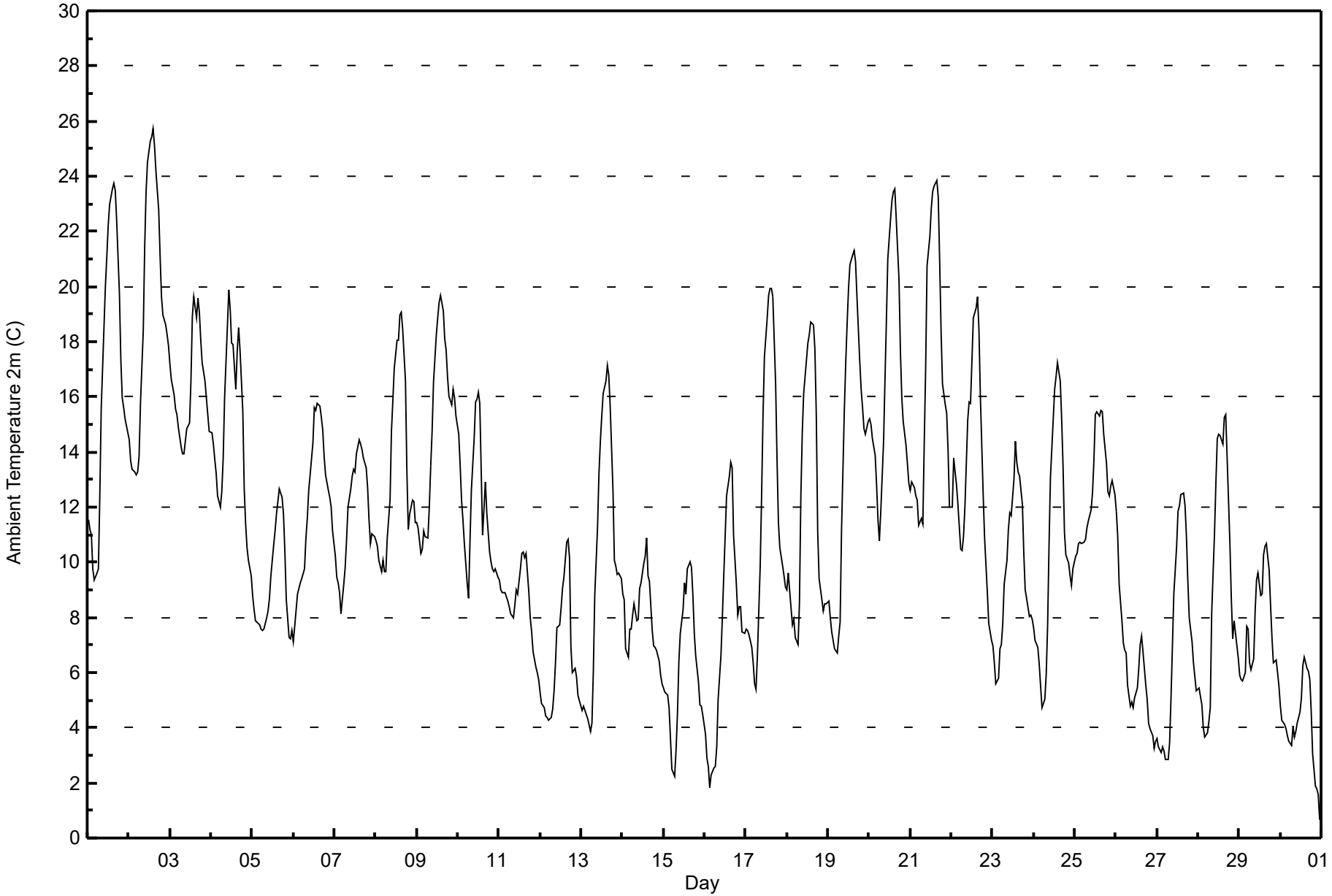
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	11.6	11.2	11.0	9.7	9.4	9.6	9.8	12.4	15.6	18.5	20.0	21.1	22.2	23.0	23.6	23.7	23.5	22.4	19.7	17.3	16.0	15.6	15.2	14.7	16.5	23.7
2-Sep	14.4	13.7	13.4	13.3	13.2	13.3	13.8	15.8	18.4	21.4	23.4	24.5	25.3	25.4	25.7	25.1	24.2	22.8	21.1	19.6	19.0	18.6	18.2	17.9	19.2	25.7
3-Sep	17.2	16.6	16.1	15.6	15.4	14.9	14.2	13.9	13.9	14.4	14.8	15.0	16.6	18.9	19.6	18.9	19.6	19.1	18.1	17.2	16.6	16.0	15.4	14.8	16.4	19.6
4-Sep	14.7	14.3	13.7	13.2	12.4	12.0	12.6	13.8	16.0	18.6	19.9	19.2	18.0	17.9	16.3	17.6	18.5	17.7	15.4	12.7	11.4	10.5	10.1	9.5	14.8	19.9
5-Sep	8.8	8.3	7.9	7.8	7.7	7.6	7.5	7.6	8.0	8.2	8.7	9.5	10.6	11.1	11.8	12.2	12.7	12.4	11.7	10.4	8.6	7.3	7.2	7.5	9.2	12.7
6-Sep	7.1	7.7	8.8	9.1	9.2	9.4	9.8	10.9	11.6	12.6	13.2	14.3	15.6	15.5	15.8	15.7	15.2	14.8	13.8	13.2	12.6	12.3	12.0	11.1	12.1	15.8
7-Sep	10.2	9.5	9.2	8.9	8.2	9.2	9.8	10.8	12.0	12.7	13.1	13.3	13.3	14.0	14.5	14.3	14.1	13.8	13.4	12.7	11.6	10.7	11.1	11.0	11.7	14.5
8-Sep	10.8	10.6	10.1	9.7	10.1	9.6	9.7	10.9	12.2	14.7	15.9	17.0	18.1	18.1	19.0	19.1	18.5	16.6	13.3	11.2	11.7	12.3	12.2	11.5	13.4	19.1
9-Sep	11.4	11.2	10.3	10.5	11.2	11.0	10.9	12.0	13.5	14.8	16.5	18.3	18.9	19.4	19.7	19.1	18.1	17.7	16.7	16.0	15.7	16.3	15.9	15.3	15.0	19.7
10-Sep	14.7	13.5	12.3	11.5	10.7	9.2	8.7	10.7	12.6	14.5	15.8	15.9	16.2	15.8	11.0	12.0	12.9	11.8	10.4	10.0	9.8	9.7	9.7	9.5	12.0	16.2
11-Sep	9.4	9.0	8.9	8.9	8.8	8.6	8.4	8.1	8.0	8.4	9.0	8.9	9.8	10.3	10.4	10.2	10.3	8.9	8.0	7.5	6.8	6.2	6.0	5.7	8.5	10.4
12-Sep	5.3	4.9	4.7	4.4	4.3	4.3	4.4	4.7	5.3	6.4	7.6	7.7	8.4	9.1	9.5	10.7	10.9	10.2	6.9	6.0	6.1	5.8	5.2	5.0	6.6	10.9
13-Sep	4.6	4.8	4.6	4.5	4.3	3.9	4.2	6.1	8.8	11.3	13.2	14.4	15.3	16.1	16.6	17.1	16.8	15.7	12.6	10.1	9.9	9.6	9.6	9.4	10.1	17.1
14-Sep	8.8	8.7	6.9	6.5	7.6	7.6	8.1	8.5	7.9	7.9	9.1	9.2	10.0	10.2	10.9	9.5	9.3	7.5	7.0	6.9	6.8	6.4	5.9	5.6	8.0	10.9
15-Sep	5.4	5.3	5.2	4.7	3.6	2.5	2.3	3.2	4.5	6.4	7.4	8.3	9.3	8.9	9.8	10.0	9.8	8.8	7.4	6.6	5.6	4.8	4.8	4.5	6.2	10.0
16-Sep	3.8	2.9	2.6	1.9	2.3	2.5	2.6	3.3	5.1	6.6	8.0	9.5	10.9	12.4	13.1	13.6	13.4	11.0	9.2	8.1	8.4	8.4	7.5	7.4	7.3	13.6
17-Sep	7.6	7.5	7.4	6.9	6.4	5.6	5.4	6.6	9.8	12.4	15.3	17.4	18.9	19.7	19.9	19.9	19.6	16.5	13.7	11.4	10.5	9.9	9.5	9.1	12.0	19.9
18-Sep	9.0	9.6	8.3	7.7	7.9	7.3	7.0	8.5	12.4	14.7	16.1	17.3	18.0	18.3	18.7	18.6	17.7	15.4	11.1	9.4	8.7	8.3	8.5	8.5	12.0	18.7
19-Sep	8.6	8.0	7.5	7.2	6.8	6.7	7.3	7.8	11.1	15.5	17.2	18.7	19.9	20.8	21.2	21.3	20.9	19.6	17.3	16.3	15.6	14.8	14.6	15.1	14.2	21.3
20-Sep	15.2	15.0	14.5	13.9	12.8	11.6	10.8	11.8	14.4	16.6	18.8	21.0	22.5	23.1	23.4	23.5	22.5	20.2	17.6	16.0	15.1	14.2	13.6	12.9	16.7	23.5
21-Sep	12.6	12.9	12.7	12.4	12.3	11.3	11.6	11.4	14.4	17.0	20.7	21.8	22.8	23.4	23.7	23.9	23.3	20.9	18.4	16.5	15.7	15.4	14.1	12.0	16.7	23.9
22-Sep	12.0	13.8	13.3	12.8	12.1	10.5	10.4	10.9	12.0	15.2	15.8	15.7	17.3	18.9	19.2	19.6	18.4	16.1	12.5	11.0	9.9	8.9	7.8	7.1	13.4	19.6
23-Sep	7.0	6.4	5.6	5.8	6.8	7.0	7.8	9.2	10.1	11.2	11.8	11.7	13.0	14.4	13.6	13.3	13.1	12.1	10.3	9.0	8.7	8.0	8.1	7.9	9.7	14.4
24-Sep	7.6	7.2	6.9	6.3	5.5	4.7	5.1	6.0	7.7	10.6	13.1	15.2	16.3	16.8	17.3	16.6	15.2	13.5	11.1	10.3	9.9	9.5	9.1	9.7	10.5	17.3
25-Sep	10.2	10.3	10.7	10.7	10.7	10.7	10.8	11.2	11.5	11.9	12.5	13.7	15.4	15.5	15.3	15.5	15.4	14.6	13.6	12.5	12.4	12.8	13.0	12.4	12.6	15.5
26-Sep	11.8	11.0	9.2	7.9	7.1	6.8	6.7	5.5	4.8	4.9	4.7	5.1	5.4	6.1	7.0	7.3	6.7	5.5	5.0	4.2	4.0	3.7	3.2	3.5	6.1	11.8
27-Sep	3.6	3.3	3.1	3.3	3.2	2.8	2.8	3.5	5.1	7.0	8.8	10.6	11.8	12.0	12.5	12.5	12.1	10.9	9.3	8.0	7.1	6.4	5.9	5.3	7.1	12.5
28-Sep	5.4	5.2	4.8	4.0	3.7	3.8	4.2	4.7	8.2	11.0	12.9	14.5	14.7	14.6	14.3	15.2	15.4	13.8	10.7	8.7	7.2	7.9	7.4	6.5	9.1	15.4
29-Sep	5.9	5.7	5.7	6.0	7.7	7.6	6.4	6.1	6.5	8.2	9.4	9.6	8.8	8.9	10.3	10.6	10.7	9.7	8.4	7.3	6.3	6.5	6.0	5.5	7.7	10.7
30-Sep	4.8	4.3	4.1	4.0	3.7	3.5	3.4	4.0	3.7	3.9	4.2	4.6	5.1	6.3	6.6	6.1	6.1	5.8	4.6	3.1	1.9	1.8	1.6	0.7	4.1	6.6
	9.3	9.1	8.6	8.3	8.2	7.8	7.9	8.7	10.2	11.9	13.2	14.1	14.9	15.5	15.7	15.8	15.5	14.2	12.3	11.0	10.3	9.9	9.6	9.2	Diurnal Average	
	17.2	16.6	16.1	15.6	15.4	14.9	14.2	15.8	18.4	21.4	23.4	24.5	25.3	25.4	25.7	25.1	24.2	22.8	21.1	19.6	19.0	18.6	18.2	17.9	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Jackfish 2/3 - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	322	44.72	44.72
10 - 20	361	50.14	94.86
> 20	37	5.14	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 100.0 % on Sep 14 09:00

Maximum Daily Average: 93.0 % on Sep 14

Minimum Value: 34.2 % on Sep 2 13:00

Minimum Daily Average: 58.8 % on Sep 2

Maximum Diurnal Average: 89.2 % at hour 7

Minimum Diurnal Average: 56.1 % at hour 16

Monthly Average: 75.26 %

Percentiles: P_1 = 35.9 P_{10} = 47.1 Q_1 = 65.1 Median = 78.6 Q_3 = 89.7 P_{90} = 96.3 P_{99} = 98.9

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

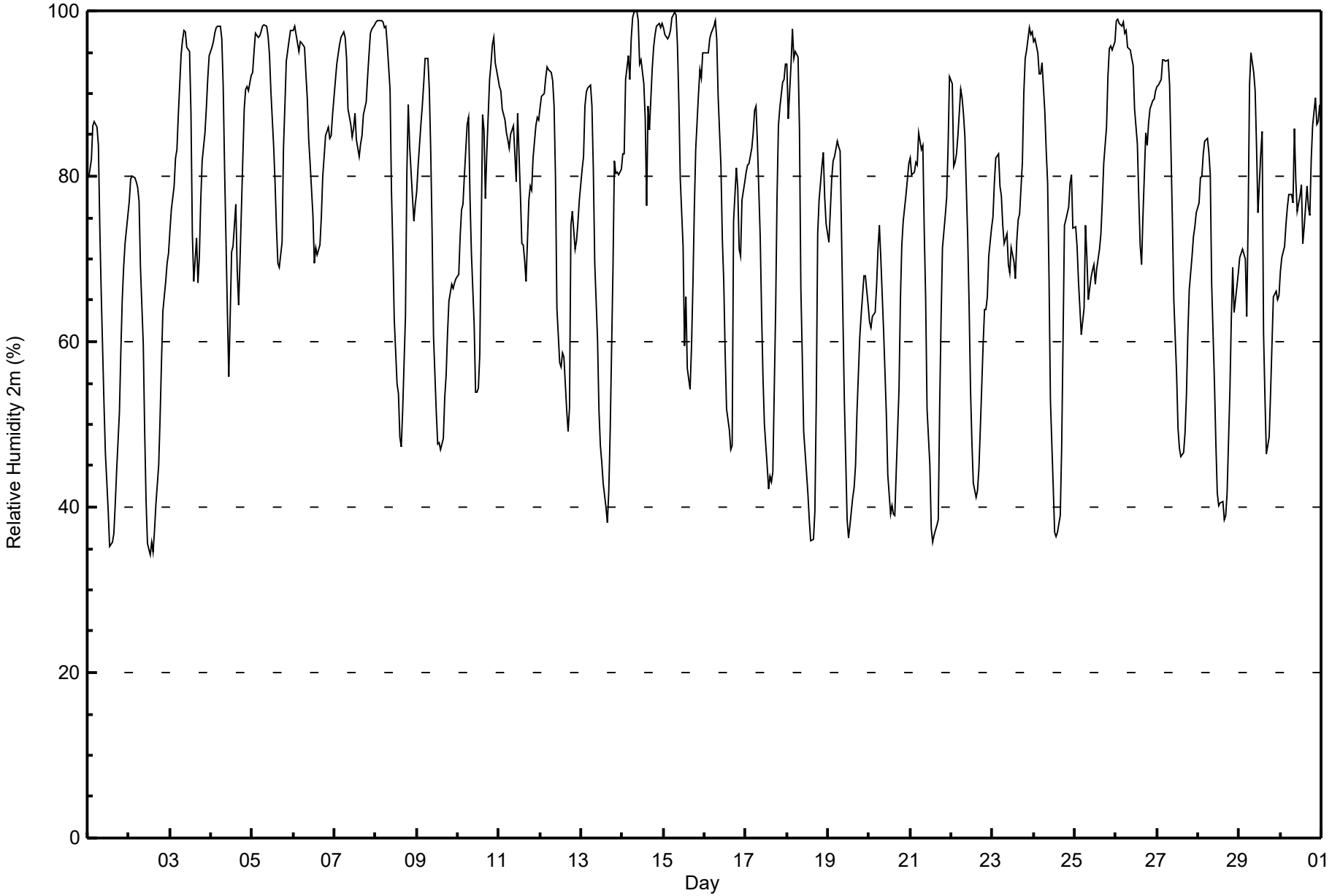
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	79.8	80.8	82.1	86.1	86.6	85.9	83.7	73.7	65.9	52.3	46.4	43.1	39.5	35.3	35.7	36.8	40.3	44.4	51.4	58.9	65.1	69.0	71.8	75.2	62.1	86.6
2-Sep	76.9	79.7	79.9	79.8	79.3	78.7	76.9	69.0	59.6	49.1	40.6	35.6	34.2	35.7	34.7	37.1	40.3	45.0	50.9	57.6	63.7	67.2	69.4	70.7	58.8	79.9
3-Sep	73.4	75.9	78.9	82.2	83.2	87.4	94.7	96.4	97.7	97.4	95.6	95.0	87.8	73.1	67.3	72.5	67.2	70.4	77.1	81.9	85.3	88.4	91.9	94.5	84.0	97.7
4-Sep	95.6	96.3	97.4	98.0	98.1	98.2	96.6	90.8	80.9	63.5	55.7	63.2	70.9	71.5	76.6	68.6	64.4	69.9	82.2	88.2	90.4	90.9	90.4	92.2	82.9	98.2
5-Sep	92.6	95.0	97.3	96.7	96.9	97.4	98.2	98.3	98.1	97.0	94.7	90.4	83.5	79.1	73.8	69.6	69.0	72.1	83.3	88.5	94.0	96.5	97.6	97.6	89.9	98.3
6-Sep	97.7	98.1	96.1	95.0	96.3	96.1	95.6	92.3	89.3	84.4	81.5	75.2	69.5	71.4	70.6	71.6	75.0	80.1	82.4	84.9	86.0	84.5	84.9	87.4	85.2	98.1
7-Sep	91.5	93.5	94.7	95.9	96.8	97.5	96.8	94.2	88.2	86.3	84.8	85.7	87.6	84.4	82.3	83.9	84.9	87.5	89.0	92.1	94.7	97.3	97.8	98.3	91.1	98.3
8-Sep	98.6	98.8	98.8	98.8	98.6	98.0	98.2	95.9	90.5	78.3	71.2	62.7	55.0	53.6	48.4	47.3	51.6	63.0	80.5	88.6	83.6	77.5	74.6	76.6	78.7	98.8
9-Sep	78.2	81.1	86.3	88.5	91.2	94.2	94.3	90.6	83.2	73.1	60.7	51.3	47.6	47.8	47.0	48.3	53.2	55.9	61.1	64.9	67.0	66.4	67.2	67.6	69.5	94.3
10-Sep	68.2	72.8	76.0	76.6	80.0	86.2	87.1	77.7	70.9	62.1	53.9	53.9	54.5	58.5	87.4	85.6	77.3	82.9	91.7	93.6	96.0	96.8	93.7	91.9	78.1	96.8
11-Sep	90.8	90.4	88.2	86.8	85.3	84.3	83.4	85.2	86.2	82.7	79.4	87.6	77.5	71.9	71.7	69.8	67.3	77.1	78.8	78.2	82.2	86.2	87.2	86.9	81.9	90.8
12-Sep	88.2	89.7	90.0	91.8	93.2	92.9	92.5	91.6	88.4	79.8	64.1	57.5	57.0	58.7	58.1	51.6	49.2	52.0	74.1	75.8	71.2	72.3	74.4	77.1	74.6	93.2
13-Sep	80.8	82.4	88.5	90.2	90.7	90.9	88.4	80.8	69.6	60.1	51.7	47.4	45.5	42.8	40.1	38.1	41.9	49.2	68.8	81.8	80.4	80.6	80.2	80.9	68.8	90.9
14-Sep	82.7	82.7	91.6	94.7	91.7	96.6	99.2	99.8	100.0	98.9	93.5	94.1	91.1	86.9	76.4	88.5	85.6	93.0	95.6	97.1	98.1	98.4	97.9	98.5	93.0	100.0
15-Sep	98.0	97.1	96.6	96.9	97.7	99.2	99.9	99.4	95.8	88.8	79.7	71.6	59.5	65.4	56.7	54.3	59.3	66.8	76.0	83.2	90.0	92.8	91.9	94.9	83.8	99.9
16-Sep	94.8	95.0	95.0	96.6	97.4	98.1	98.8	96.7	89.7	81.3	72.4	67.3	58.7	51.8	49.3	47.0	47.4	74.7	81.1	78.5	71.2	70.4	77.1	79.4	77.9	98.8
17-Sep	80.4	81.3	81.6	83.5	85.2	88.0	88.5	84.1	72.6	63.4	55.5	50.1	44.8	42.2	43.8	43.0	44.2	63.8	77.5	86.0	88.4	91.3	91.7	93.5	71.9	93.5
18-Sep	93.6	87.0	93.6	97.7	94.3	95.1	94.4	85.8	66.5	58.3	49.1	44.2	41.7	38.5	35.9	36.1	39.5	52.9	73.1	77.1	81.1	82.9	77.5	74.2	69.6	97.7
19-Sep	72.0	75.8	79.7	81.9	82.3	84.2	83.6	83.0	73.1	53.1	45.8	38.5	36.2	37.9	41.2	42.4	45.1	51.4	60.5	63.2	65.5	68.0	68.0	64.3	62.4	84.2
20-Sep	62.3	61.7	63.0	63.6	66.8	71.3	74.0	70.2	61.4	56.2	50.9	43.9	39.1	40.2	39.1	39.0	44.2	54.2	65.0	71.7	74.6	77.8	79.6	81.6	60.5	81.6
21-Sep	82.2	80.2	80.6	81.7	81.4	85.2	83.2	83.8	73.4	65.3	51.8	45.0	37.5	35.8	36.7	37.8	38.4	52.3	62.8	71.4	75.2	77.5	83.6	92.0	66.4	92.0
22-Sep	91.3	81.2	81.6	82.7	84.9	90.4	89.5	87.4	84.8	72.6	64.3	54.2	47.9	42.9	41.1	42.1	44.7	49.4	59.7	63.9	63.9	65.4	70.3	73.6	67.9	91.3
23-Sep	75.1	79.1	82.2	82.8	78.9	77.6	74.1	71.8	73.0	69.3	68.4	71.4	69.6	67.6	72.2	74.7	75.5	81.7	90.1	94.3	95.3	97.9	97.2	97.5	79.9	97.9
24-Sep	96.3	96.6	94.9	92.4	92.3	93.7	87.8	83.1	79.2	67.6	52.9	42.4	36.9	36.4	37.0	38.9	47.1	60.4	74.1	74.8	76.3	79.2	80.1	73.8	70.6	96.6
25-Sep	74.0	71.5	67.2	64.1	60.8	64.0	74.1	70.2	65.1	67.8	68.6	69.3	66.9	68.8	71.1	73.0	77.0	81.6	86.0	92.1	95.5	95.8	95.2	96.3	75.7	96.3
26-Sep	98.8	99.0	98.5	98.1	98.6	97.3	97.7	95.7	95.3	94.2	93.5	88.2	83.8	77.4	71.8	69.3	75.3	85.3	83.8	86.5	88.1	89.1	89.3	90.4	89.4	99.0
27-Sep	90.9	91.0	91.8	94.1	94.1	93.9	94.0	91.1	82.9	74.4	65.1	55.9	49.5	47.2	46.1	46.6	48.9	53.5	60.8	66.3	70.3	72.7	73.9	75.6	72.1	94.1
28-Sep	76.9	79.8	80.0	82.8	84.3	84.6	82.9	80.1	66.9	54.9	47.6	41.6	40.2	40.5	40.6	38.5	39.0	41.7	54.1	62.7	69.1	63.6	65.0	68.4	61.9	84.6
29-Sep	70.2	70.6	71.2	70.1	63.1	74.7	91.1	95.0	92.6	90.3	83.6	75.6	82.7	85.5	61.0	53.3	46.4	48.4	53.8	59.6	65.5	66.0	65.1	65.6	70.9	95.0
30-Sep	68.5	70.1	71.4	74.2	76.3	77.9	77.9	76.8	85.8	79.5	75.8	77.6	78.9	71.8	73.9	78.8	76.3	75.2	82.0	86.2	89.5	86.2	86.6	88.7	78.6	89.5
	84.0	84.5	85.8	86.8	86.9	88.6	89.2	86.3	80.9	73.4	66.6	62.7	59.2	57.4	56.3	56.1	57.2	64.5	73.6	78.3	80.6	81.6	82.4	83.5	Diurnal Average	
	98.8	99.0	98.8	98.8	98.6	99.2	99.9	99.8	100.0	98.9	95.6	95.0	91.1	86.9	87.4	88.5	85.6	93.0	95.6	97.1	98.1	98.4	97.9	98.5	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Jackfish 2/3 - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	31	4.31	4.31
40 - 60	112	15.56	19.86
60 - 80	240	33.33	53.19
80 - 100	337	46.81	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Jackfish 2/3 - September 2026

Maximum Speed: 18 km/h on Sep 9 13:00

Maximum Daily Speed Average: 12.2 km/h on Sep 27

Minimum Speed Value: 1 km/h on Sep 16 08:00

Minimum Daily Speed Average: 1.2 km/h on Sep 4

Maximum Diurnal Speed Average: 4.5 km/h at hour 13

Minimum Diurnal Speed Average: 1.6 km/h at hour 20

Monthly Average Velocity: 3.2 km/h 238.7 deg

Percentiles: P_1 = 1 P_{10} = 3 Q_1 = 4 Median = 7 Q_3 = 9 P_{90} = 12 P_{99} = 16

Hours in Service: 720

Hours of Data: 719

Hours of Missing Data: 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-Sep	SSW6	SSW6	SSW7	S6	SSW6	SSW6	SSW6	SSW6	S6	S8	S7	S7	S7	SSE7	S6	SSE7	SSE7	SE6	SE5	SE4	SE4	SE5	SE5	SSE5	S5.6	S8
2-Sep	SSE6	S5	S5	SSE5	SSE6	SSE7	SSE7	SE8	SE8	SE8	SE11	SE12	SE10	SE10	SE9	ESE9	ESE10	ESE10	ESE9	ESE8	ESE9	SE9	SE9	SE8	SE7.8	SE12
3-Sep	ESE8	ESE8	ESE6	E6	E6	ESE6	E6	ENE4	ENE7	E7	E8	E8	E11	ESE12	ESE14	ESE12	ESE11	ESE9	E7	E7	ESE7	SE6	SE4	SE3	E7.3	ESE14
4-Sep	SE4	SSE2	SSE2	S3	SSE2	S3	SSE3	S4	SSW5	SSW5	SSW8	SW9	WSW9	W10	WSW9	WSW8	W6	W3	NNE8	NNE9	NE9	NNE8	NNE8	NNE8	WSW1.2	W10
5-Sep	NNE7	NNE7	NNE7	NNE6	NNE7	NNE7	NE8	NE5	NNE6	NNE7	NE6	NE6	NE6	ENE6	ENE6	ENE3	NE3	NE2	SSW1	S2	SSW3	S2	SSW4	SSW3	NE3.7	NNE8
6-Sep	S2	S3	S4	S3	SSE3	ESE3	SE4	ESE5	SE4	SE5	SE6	ESE8	SSE5	SE5	SSE3	SE3	SSE3	ESE2	SSE5	SE6	SE6	SE5	SSE3	SSE3	SE3.8	ESE8
7-Sep	SSE3	SE3	SSE3	SSE2	ENE4	ESE4	S2	NE2	SE1	ENE3	NE5	NNE4	N4	N4	NE6	ENE5	NNE4	NE5	ENE5	NE3	NE2	NE1	N2	NNW4	NE2.2	NE6
8-Sep	NNW3	NNW3	NNW3	NNW3	NW3	WNW2	WNW1	NW3	N4	NNE7	N6	NNW6	NNW7	NW6	NW7	NW7	NW3	W2	S2	SSW3	SW5	SSW6	SSW7	SSW7	NW2.3	NW7
9-Sep	SSW7	SSW7	SSW8	SSW8	SSW9	SW8	SW9	SW9	WSW10	WSW12	WSW13	WSW16	WSW18	WSW16	WSW15	WSW17	WSW13	WSW12	SW7	SW8	SW9	WSW12	WSW12	WSW11	SW10.6	WSW18
10-Sep	WSW12	WSW12	W9	W11	W9	WSW8	WSW9	WSW10	WSW12	C	WNW11	W13	W13	W12	WNW9	WNW9	WNW9	WNW10	W8	W8	WNW8	WNW9	NW9	NW9	W9.5	W13
11-Sep	NW9	NW9	NW10	NW10	NW10	NW9	NW10	NW10	NW10	NW10	NW9	NW9	NNW10	NW10	NW10	NW8	NW8	NW7	NNW6	NNW5	NW5	NW6	NW7	NW7	NW8.5	NW10
12-Sep	NW6	WNW6	NW6	WNW5	WNW5	WNW6	WNW5	WNW4	WNW4	W5	WNW4	WNW6	W8	WNW7	WNW6	WNW6	WNW7	WNW5	SW4	SW6	SW7	SW7	SW7	SW8	W5.0	W8
13-Sep	SW7	SW8	SW7	SW9	SW8	SW9	SW8	SW9	SW10	WSW12	SW14	WSW14	WSW13	WSW11	WSW11	SW9	SW9	SW7	SW4	SSW4	SSW4	SSW5	SSW6	SSW7	SW8.4	SW14
14-Sep	SSW7	SW6	WNW2	W3	NNE1	NNW3	NNW4	NNW5	N8	N7	NNE6	NNE5	NNW6	NNW5	N7	NNW4	NNW4	NW5	NW5	NW5	NW4	NW5	NW4	NW5	NNW3.5	N8
15-Sep	NW4	NW6	NW5	NNW4	WNW4	WNW5	W5	W4	W4	NNW3	WNW5	WNW6	W6	WSW8	WSW7	WSW9	WSW9	SW6	SSW5	SW4	SW5	SSW5	WSW6	WSW6	W4.5	WSW9
16-Sep	WSW6	W5	W4	W3	WSW2	WSW2	WSW1	ESE1	SW3	SW4	SW2	WSW2	SW6	W5	WSW6	SW5	SW3	ESE2	ESE3	ESE5	SE5	SSE5	S5	S6	SW2.5	SW6
17-Sep	S6	S7	S7	S7	S7	S7	S7	SSW7	SW10	SW10	SW8	WSW8	WSW9	WSW11	WSW9	WSW10	WSW8	SW3	SSW2	S3	SSW3	S2	S2	SSW3	SW5.6	WSW11
18-Sep	SW2	WSW4	SW4	WSW3	W2	WSW1	W3	WNW1	N3	N4	NNW5	NNW5	NNW6	NW6	NW7	NNW6	NNW4	WNW1	S3	S3	SSW3	S3	S4	SSW5	WNW1.8	NW7
19-Sep	SSW6	SSW5	SSW5	SSW5	SSW6	SSW6	SSW6	SSW5	S6	S8	SSW10	SSW10	S10	SSW11	SSW11	SSW11	SSW10	SSW8	SSW5	S6	S6	SSW6	SSW7	SSW8	SSW7.4	SSW11
20-Sep	SSW8	SSW8	SSW8	SSW6	SW7	SSW8	SSW8	SW9	SW11	SW9	SW7	SSW5	SSW5	SW6	SW7	SW7	SSW5	SSW5	SSW5	SSW5	SSW5	SSW5	SSW6	SSW6	SSW6.7	SW11
21-Sep	SSW7	SW8	SW8	SSW8	SW8	SSW8	SSW9	S7	SSW6	SSW5	S6	S6	S8	S8	S8	SSW8	SW10	SSW7	SSW5	SSW4	S5	S5	S5	S3	SSW6.6	SW10
22-Sep	S3	S7	S7	S7	S6	SSE3	S5	SSW7	SW8	WNW7	NW9	NW9	NW9	NW8	NW8	WNW7	WNW6	WNW4	W3	W3	W4	WSW4	SW3	SW2	W3.5	NW9
23-Sep	SE1	SSW1	ENE1	ENE3	ENE3	E4	E5	E4	ESE4	SE3	SE4	SE2	E1	NE4	NE6	NE5	NE5	E4	NE1	SE3	S1	SSW2	WSW4	WSW6	E1.8	WSW6
24-Sep	WSW6	WSW4	W4	W4	WSW4	WSW4	WSW5	WSW6	WSW6	WSW6	WSW7	WSW7	WSW9	WSW9	WSW9	WSW9	WSW5	SW3	SSW3	SW2	SSW3	ESE1	ESE3	E5	WSW4.3	WSW9
25-Sep	ENE5	E8	ESE7	ESE7	ESE8	E10	E11	E10	E11	E12	E13	E12	E13	E8	E11	E11	E5	ENE7	NE3	NE6	E12	E13	SSW5	W1	E8.1	E13
26-Sep	SSW2	W6	W8	W11	W12	W15	W13	W14	W15	W13	W16	W15	W15	W16	W15	W15	W13	WNW11	WNW11	W9	W9	W11	WSW12	WSW12	W11.9	W16
27-Sep	WSW13	WSW13	WSW13	WSW13	WSW13	WSW11	WSW12	WSW14	WSW14	WSW15	WSW15	WSW16	W18	W17	W17	WSW15	WSW14	WSW10	WSW8	SW7	SW7	SSW8	SW8	SSW8	WSW12.2	W18
28-Sep	SW9	SW9	SW8	SW7	SW8	WSW9	SW8	SW8	SW9	WSW11	SW14	WSW15	WSW14	WSW11	SW10	SW11	SW9	SW7	SSW5	S4	S5	SSW6	SSW7	SSW7	SW8.4	WSW15
29-Sep	S6	SSW7	S7	SSW7	SW7	WSW6	SW4	SSW4	WSW4	W5	WSW12	W12	W12	WNW12	WNW13	WNW12	WNW13	WNW10	W10	W9	WSW12	W13	W13	W12	W8.1	WNW13
30-Sep	W12	W12	WSW13	WSW14	W14	WSW15	W13	WNW12	WNW12	NW11	NW11	NW10	NW9	NW10	NW9	NW7	NNW7	NNW6	NW3	WNW3	WSW4	WSW7	W6	NW2	WNW8.1	WSW15
	SW3.4	SW3.8	SW3.6	SW3.4	SW3.3	SW3.3	SW3.3	SW3.1	WSW3.5	WSW2.9	WSW3.5	WSW3.8	WSW4.5	W4.5	W4.1	WSW3.9	WSW3.5	WSW2.1	SW1.7	SW1.6	SSW2.3	SSW2.9	SW3.4	SW3.1	Diurnal Average	
	WSW13	WSW13	WSW13	WSW14	W14	WSW15	W13	W14	W15	WSW15	W16	WSW16	WSW18	W17	W17	WSW17	WSW14	WSW12	WNW11	W9	E12	W13	W13	W12	Diurnal Maximum	

C - Calibration

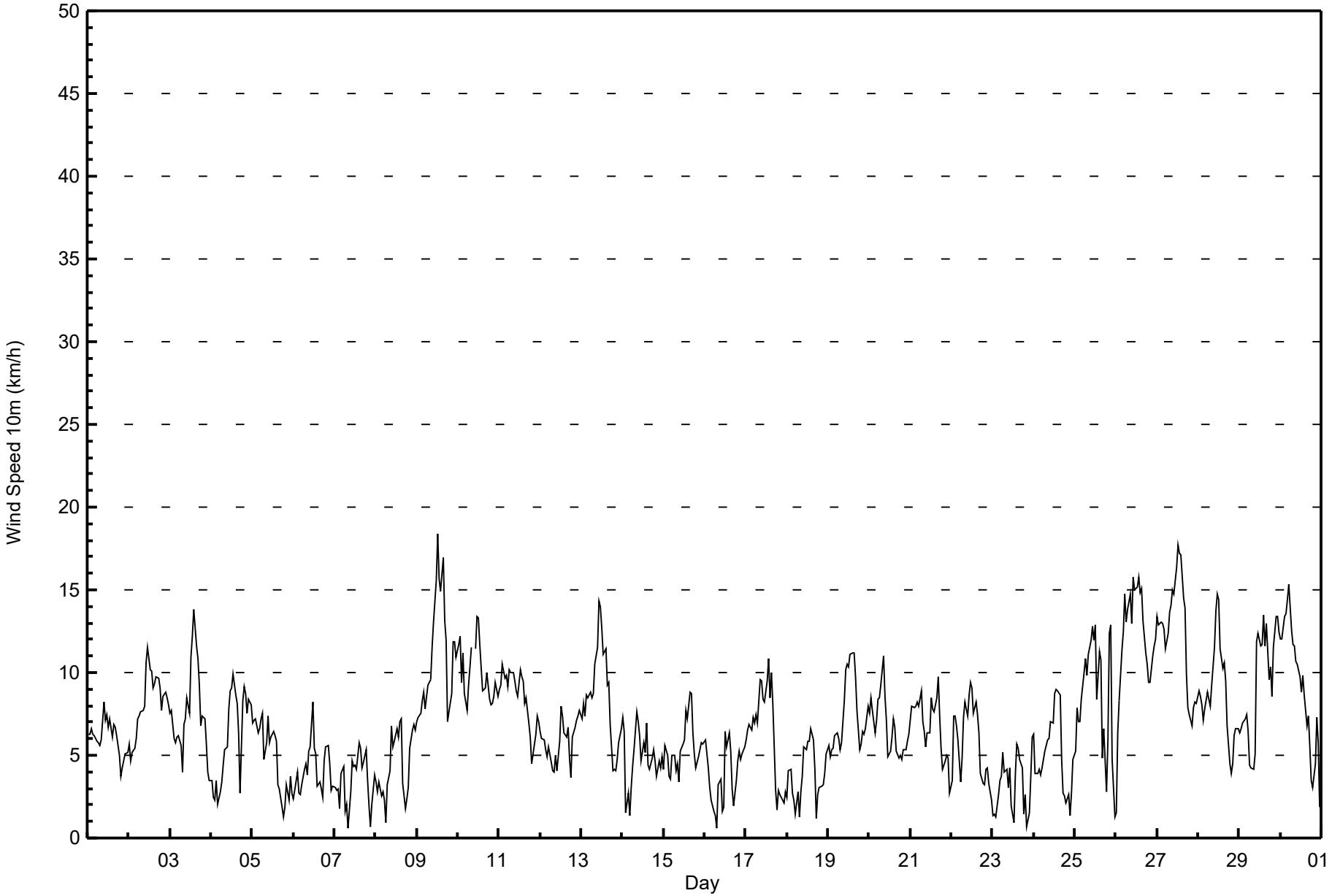
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Jackfish 2/3 - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	266	37.00	37.00
6 - 11	368	51.18	88.18
12 - 19	85	11.82	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: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Jackfish 2/3 - September 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	14	10	7	11	22	18	30	41	18	16	20	17	15	17	266
6 - 11	4	17	6	4	17	17	15	7	32	57	59	43	17	23	41	9	368
12 - 19	0	0	0	0	6	3	1	0	0	0	2	39	28	6	0	0	85
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	10	21	20	14	30	31	38	25	62	98	79	98	65	46	56	26	719

Total Number of Valid Hours: 719

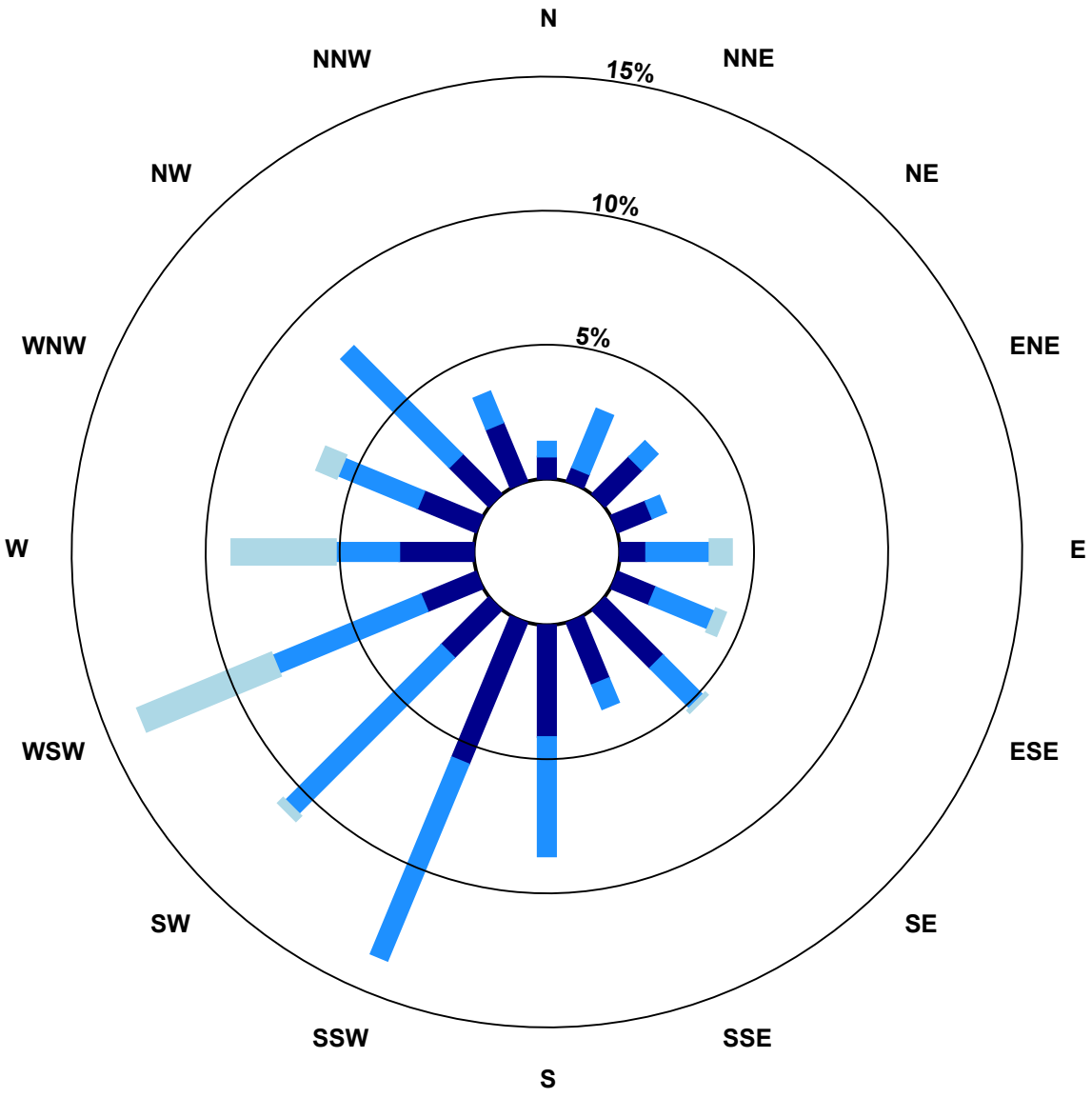
Total Number of Hours: 720

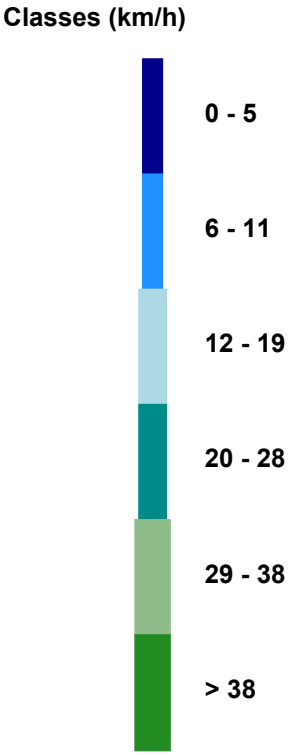
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Jackfish 2/3





Total Number of Valid Hours: 719

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 10m (WS10) - km/h

Jackfish 2/3 - September 2026

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

Maximum Value: 7 km/h on Sep 27 15:00

Minimum Value: 0 km/h on Sep 18 20:00

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

Hours in Service:	720
Hours of Data:	719
Hours of Missing Data:	1
Hours of Calibration:	1
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-Sep	1	1	1	1	1	2	1	2	2	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	3
2-Sep	3	2	2	2	3	3	3	3	3	3	5	5	5	4	4	4	4	4	4	3	3	4	4	3	5
3-Sep	3	3	2	2	2	2	3	2	2	3	3	3	5	5	5	4	4	4	2	3	3	2	2	1	5
4-Sep	1	1	1	1	1	1	2	2	2	2	3	3	3	4	3	3	2	2	4	4	3	3	3	3	4
5-Sep	3	3	3	3	3	3	3	2	2	3	2	2	2	2	2	2	2	1	1	1	1	1	1	1	3
6-Sep	1	1	1	2	1	2	1	2	2	2	2	3	2	2	2	2	1	3	2	3	2	2	2	2	3
7-Sep	1	2	1	2	1	2	1	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1	1	2	2
8-Sep	2	2	2	1	2	2	1	2	2	3	3	3	3	3	3	3	2	1	1	2	1	1	1	2	3
9-Sep	2	2	2	2	2	2	2	3	3	4	5	5	6	6	6	6	5	4	2	2	3	4	4	4	6
10-Sep	4	4	4	5	4	2	2	4	4	C	5	5	6	5	4	4	4	4	3	3	4	4	4	4	6
11-Sep	4	4	5	4	5	4	5	5	4	5	4	4	5	4	5	4	4	3	3	3	2	3	3	3	5
12-Sep	3	3	3	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	1	2	1	2	2	2	3
13-Sep	2	2	2	2	2	2	2	3	4	4	5	5	4	4	4	3	3	3	1	1	1	2	2	2	5
14-Sep	2	2	1	1	1	2	2	3	3	3	3	2	3	3	3	3	4	3	2	2	2	2	2	2	4
15-Sep	2	3	2	2	2	2	2	1	2	2	2	2	2	3	3	3	3	2	2	2	2	1	2	2	3
16-Sep	2	2	1	1	1	1	1	1	1	2	1	2	3	3	3	2	3	1	1	1	2	2	2	2	3
17-Sep	2	3	2	2	2	2	2	2	3	3	3	3	3	4	3	4	3	1	1	1	0	1	1	1	4
18-Sep	1	1	1	1	1	1	1	1	1	2	2	2	3	3	3	3	2	1	1	0	0	1	1	1	3
19-Sep	1	1	1	1	2	2	2	2	2	3	4	4	4	4	4	4	4	3	2	2	3	2	2	3	4
20-Sep	3	3	3	2	2	2	2	2	3	3	2	2	2	2	2	2	2	2	2	1	1	1	2	1	3
21-Sep	2	2	2	2	2	1	2	2	1	2	3	3	4	4	3	4	3	3	2	1	2	2	1	2	4
22-Sep	3	2	2	2	2	2	2	2	2	3	4	4	4	4	3	3	3	2	1	1	1	1	1	1	4
23-Sep	1	1	1	1	1	1	2	1	1	2	2	2	1	1	2	2	1	1	1	1	1	1	1	2	2
24-Sep	2	1	1	1	1	1	1	2	1	2	2	2	3	3	4	3	2	1	1	1	1	1	1	1	4
25-Sep	2	2	2	2	3	4	3	3	4	5	5	4	4	4	4	5	2	3	2	2	5	5	4	3	5
26-Sep	2	3	4	5	4	5	5	5	5	5	6	6	6	7	6	6	5	5	5	4	4	4	4	4	7
27-Sep	4	4	4	4	4	4	4	4	4	5	5	6	6	7	7	5	4	3	2	2	2	2	2	2	7
28-Sep	2	2	2	2	2	2	2	2	3	4	5	5	5	4	4	4	4	3	2	2	2	2	2	2	5
29-Sep	2	1	1	1	2	2	2	1	1	2	5	5	5	5	6	6	5	4	4	3	3	4	5	4	6
30-Sep	4	3	4	4	5	5	5	5	5	5	5	4	4	4	4	3	3	3	2	2	2	2	1	2	5
	4	4	5	5	5	5	5	5	5	5	6	6	6	7	7	6	5	5	5	4	5	5	5	4	
	Diurnal Maximum																								

C - Calibration

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Jackfish 2/3 - September 2026

Direction of Maximum Speed: 246 deg on Sep 9 13:00
Direction of Maximum Daily Speed Average: 248.3 deg on Sep 27

Direction of Minimum Speed: 115 deg on Sep 16 08:00

Direction of Minimum Daily Speed Average: 1.2 deg on Sep 4

Monthly Average Direction: 238.7 deg

Hours in Service:	720
Hours of Data:	719
Hours of Missing Data:	1
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-Sep	206	198	195	191	199	194	193	194	191	190	184	169	174	160	181	163	159	138	131	127	132	144	138	148	173.5
2-Sep	156	177	175	156	162	147	149	145	141	138	138	143	146	135	137	115	114	116	118	118	118	126	129	125	135.7
3-Sep	102	115	117	82	96	102	86	63	57	81	82	80	99	110	102	103	105	109	97	97	109	129	128	128	99.3
4-Sep	131	163	164	175	165	171	162	179	208	204	209	227	248	259	252	257	265	274	28	31	38	23	28	29	246.6
5-Sep	24	16	24	29	33	28	34	35	27	33	34	46	51	60	64	72	50	53	192	186	204	187	199	199	40.5
6-Sep	189	190	185	174	163	117	129	111	141	132	142	111	151	140	148	141	161	121	148	132	139	136	155	166	142.5
7-Sep	153	127	149	148	74	118	191	42	131	73	41	21	351	359	37	58	23	52	69	55	45	41	355	328	52.9
8-Sep	346	343	334	338	323	289	296	324	357	23	6	343	332	311	307	312	314	272	188	206	214	208	202	198	305.8
9-Sep	204	202	198	206	208	223	229	230	237	237	246	242	246	248	246	247	241	239	225	217	216	238	249	254	234.6
10-Sep	251	253	261	280	281	255	244	250	258	C	287	274	281	280	296	286	282	289	274	278	287	294	314	313	276.1
11-Sep	305	311	311	315	316	322	316	317	321	323	320	325	330	321	324	326	320	322	328	335	321	314	316	314	319.3
12-Sep	318	298	304	292	298	296	296	288	297	279	301	298	272	283	288	294	297	286	222	226	227	222	224	226	275.5
13-Sep	230	232	232	224	222	220	222	223	233	239	236	239	239	238	238	231	226	223	218	211	203	197	211	204	228.1
14-Sep	208	217	286	260	16	335	342	333	4	6	16	21	346	344	352	331	344	313	315	313	326	323	319	313	331.6
15-Sep	314	311	324	329	298	282	274	279	280	342	293	286	269	252	250	248	241	223	209	228	233	209	241	249	263.8
16-Sep	244	264	275	270	257	237	247	115	218	224	217	240	236	259	246	229	224	121	112	110	124	163	171	181	217.3
17-Sep	178	176	179	183	181	182	188	200	218	235	235	240	249	251	256	248	243	222	195	182	201	187	190	203	216.5
18-Sep	229	251	230	238	272	250	261	283	353	1	343	334	330	325	315	328	345	297	191	191	194	182	178	192	286.4
19-Sep	192	193	198	199	199	198	195	194	191	191	200	194	190	204	207	209	200	200	195	191	188	197	200	204	197.8
20-Sep	204	210	206	206	216	212	212	225	233	230	216	201	210	231	230	217	207	209	208	203	199	196	199	202	213.4
21-Sep	206	215	224	212	222	205	202	190	195	194	177	175	177	185	188	197	215	197	203	196	188	188	190	175	198.2
22-Sep	188	185	185	186	181	165	189	199	232	287	311	310	315	314	318	299	302	297	259	274	274	256	231	217	259.6
23-Sep	132	208	73	71	61	83	92	92	105	124	140	133	94	55	56	42	50	79	48	125	190	200	241	250	89.6
24-Sep	253	256	263	261	247	243	253	257	251	254	250	239	247	246	240	240	248	231	203	229	202	108	120	81	243.4
25-Sep	70	84	107	104	107	95	84	83	93	91	88	90	92	84	91	96	95	70	41	50	93	94	212	279	90.3
26-Sep	208	265	271	263	262	261	264	266	262	273	267	272	275	274	274	274	281	285	284	274	273	260	256	251	268.8
27-Sep	256	258	251	248	247	248	245	245	247	252	254	255	261	261	262	256	250	243	241	236	222	210	219	211	248.3
28-Sep	215	223	233	227	220	238	225	220	228	241	235	243	242	243	229	226	228	223	197	190	189	193	196	193	225.7
29-Sep	190	192	190	194	225	243	231	192	244	264	258	274	276	287	289	288	282	283	268	274	255	261	263	265	259.3
30-Sep	263	261	258	258	260	257	266	290	296	309	316	318	319	317	316	322	327	331	317	293	242	253	259	308	285.0
	225.1	229.7	231.3	230.9	231.0	228.5	228.1	234.0	243.2	248.9	251.3	254.4	256.9	260.1	261.2	254.0	254.1	243.0	224.1	214.0	204.1	212.0	225.1	227.2	
	Diurnal Average																								

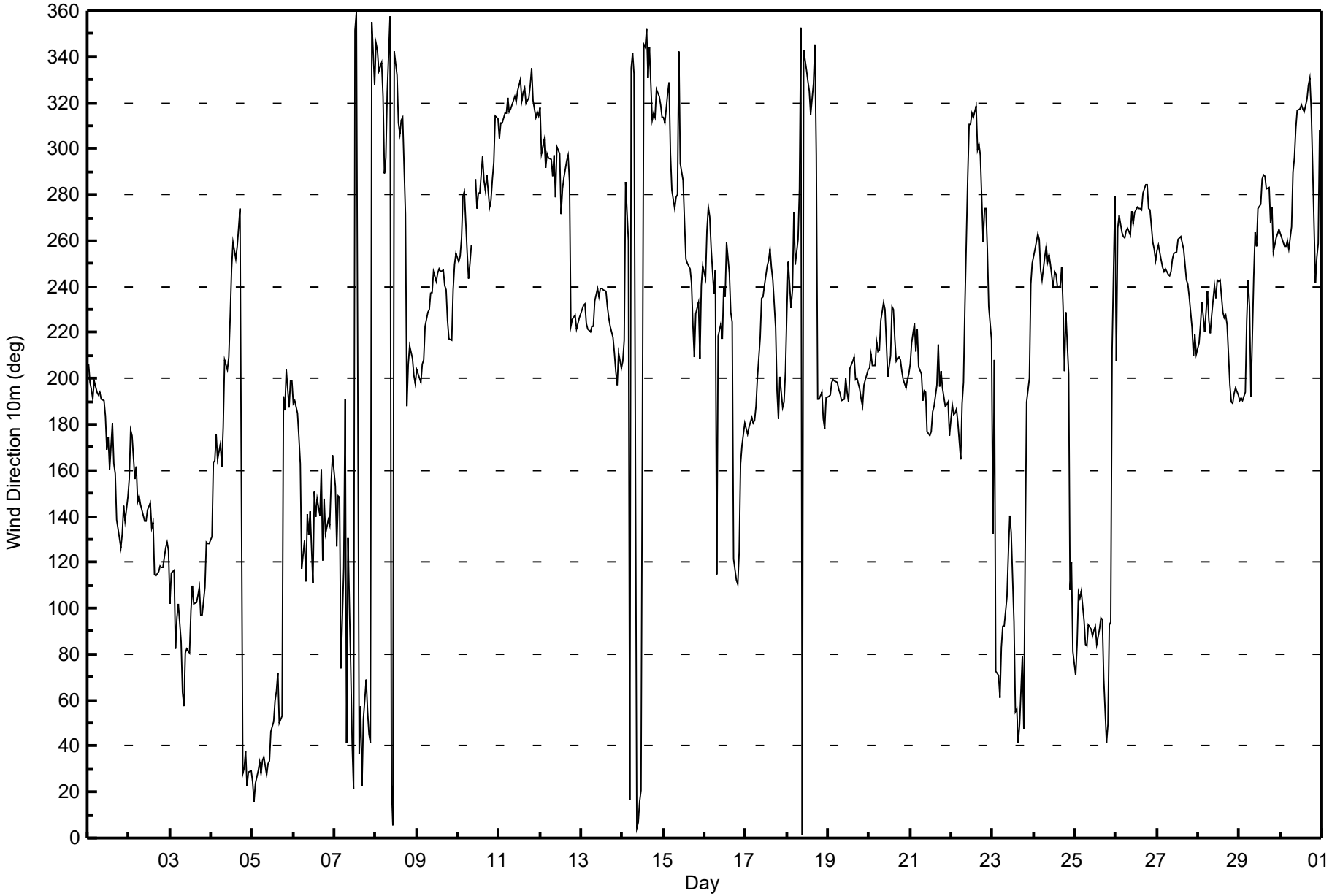
C - Calibration
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Jackfish 2/3 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Jackfish 2/3 - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 104 deg on Sep 18 18:00

Minimum Value: 3 deg on Sep 23 22:00

Percentiles: P_1 = 11 P_{10} = 18 Q_1 = 25 Median = 37 Q_3 = 50 P_{90} = 61 P_{99} = 89

Hours in Service:	720
Hours of Data:	719
Hours of Missing Data:	1
Hours of Calibration:	1
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-Sep	17	15	13	11	14	18	19	30	35	48	53	53	53	56	61	59	58	55	50	55	61	62	68	70	70
2-Sep	64	71	68	63	67	64	58	52	49	55	46	50	54	45	51	40	40	37	39	39	38	43	45	42	71
3-Sep	31	36	39	28	29	38	41	30	27	32	32	31	34	39	35	33	38	37	32	29	42	47	56	52	56
4-Sep	38	55	51	40	46	37	57	46	32	42	43	33	33	37	31	41	48	95	51	46	39	55	50	49	95
5-Sep	51	46	47	51	44	49	40	42	46	46	40	41	37	38	39	80	59	45	8	31	11	12	10	16	80
6-Sep	22	30	40	61	53	56	34	41	50	52	48	42	61	50	64	59	54	47	55	48	47	49	56	53	64
7-Sep	45	48	58	81	33	50	72	57	103	53	39	54	58	66	47	42	53	38	33	35	42	92	68	59	103
8-Sep	57	59	70	87	60	66	94	67	65	51	67	70	58	63	61	52	89	69	34	48	16	19	18	18	94
9-Sep	20	19	19	20	23	23	22	23	26	27	28	29	29	32	32	26	27	26	28	29	28	28	25	30	32
10-Sep	26	28	35	41	46	26	21	29	35	C	50	41	46	46	46	42	42	41	39	41	40	42	48	46	50
11-Sep	50	49	45	51	50	57	58	55	51	62	56	55	60	54	58	60	55	57	62	83	45	54	46	47	83
12-Sep	52	40	45	45	35	37	43	49	49	55	68	61	42	53	45	62	53	57	28	18	18	19	19	19	68
13-Sep	19	21	21	23	24	22	24	26	27	29	29	30	30	35	31	34	31	27	17	17	22	23	20	18	35
14-Sep	18	42	74	21	80	60	71	62	54	58	56	64	62	64	66	62	60	65	45	53	65	43	53	44	80
15-Sep	48	45	51	48	33	28	30	36	40	64	48	45	42	34	46	34	30	26	20	28	21	17	24	23	64
16-Sep	21	22	26	17	43	12	40	87	27	51	80	103	53	64	46	51	88	23	12	22	37	63	54	43	103
17-Sep	40	47	39	29	23	23	23	24	22	26	28	34	37	35	39	29	28	34	45	14	19	48	48	5	48
18-Sep	27	11	16	18	43	74	37	62	55	58	55	57	68	63	58	60	70	104	33	3	7	13	20	17	104
19-Sep	16	22	19	17	19	19	30	33	34	46	45	44	45	44	40	40	45	47	50	49	48	43	41	37	50
20-Sep	35	32	29	27	22	18	18	20	20	27	35	50	50	40	33	39	35	29	24	22	19	18	17	16	50
21-Sep	17	18	17	16	18	13	15	14	16	36	53	53	49	55	52	46	32	41	31	34	32	24	18	60	60
22-Sep	80	19	23	24	26	44	26	22	29	56	51	50	51	64	48	51	55	52	30	19	18	21	42	55	80
23-Sep	74	52	23	16	19	32	19	23	24	37	47	83	91	42	23	31	28	20	33	24	73	3	14	16	91
24-Sep	16	16	11	15	14	11	14	18	16	30	30	41	37	37	40	30	20	17	16	21	18	41	13	16	41
25-Sep	20	23	28	27	31	30	27	31	29	31	31	28	35	35	27	33	63	33	76	54	28	31	70	83	83
26-Sep	78	54	42	34	30	28	31	34	32	40	35	37	40	40	40	37	41	39	40	38	36	29	24	26	78
27-Sep	24	25	23	23	22	23	24	23	24	25	27	31	33	34	35	33	27	25	21	21	20	21	22	21	35
28-Sep	21	21	20	22	21	20	22	21	24	26	27	29	29	29	30	31	31	28	32	27	27	21	20	18	32
29-Sep	17	15	13	14	25	23	20	18	40	33	29	39	38	43	40	42	41	41	34	31	21	25	27	29	43
30-Sep	25	26	23	23	25	25	33	41	41	44	46	50	52	49	50	52	50	54	52	62	21	16	15	72	72
	80	71	74	87	80	74	94	87	103	64	80	103	91	66	66	80	89	104	76	83	73	92	70	83	
	Diurnal Maximum																								

C - Calibration

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS29
SURMONT 2
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SURMONT2 (AMS29)
SEPTEMBER 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	686	34	34	100	10.3	0	1.7	0
H2S (ppb) Average	685	35	35	100	0.5	0	0.2	0
THC(ppm) Average	686	34	34	100	2.6	-	2.3	-
NO2 (ppb) Average	684	36	36	100	6	0	2	-
NO (ppb) Average	684	36	36	100	1.8	-	0.4	-
NOX (ppb) Average	684	36	36	100	6	-	2.2	-
PM2.5 (ug/m3) Average	719	1	1	100	35.6	0	8.9	0
Temperature 2 m (C) Average	720	0	0	100	26.4	-	18.6	-
Relative Humidity (%) Average	720	0	0	100	99.9	-	90.3	-
Wind Speed 10 m (km/h) Average	679	0	41	94.31	17	-	11	-
Wind Direction 10 m (deg) Average	679	0	41	94.31	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SURMONT 2 (AMS29)
SEPTEMBER 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	686	0.32	0.7	-	0	0	0.1	0.1	0.3	0.7	10.3
H2S (ppb) Average	685	0.09	0.1	-	0	0	0	0.1	0.1	0.2	0.5
THC (ppm) Average	686	2.22	0.1	-	2.1	2.1	2.2	2.2	2.3	2.3	2.6
NO2 (ppb) Average	684	0.83	0.8	-	0.1	0.2	0.3	0.5	1.1	1.8	6
NO (ppb) Average	684	0.09	0.2	-	0	0	0	0	0.1	0.2	1.8
NOX (ppb) Average	684	0.92	0.9	-	0.1	0.2	0.3	0.6	1.2	2	6
PM2.5 (ug/m3) Average	719	3.66	3.1	-	0.1	0.9	2.1	3	4.9	6.4	35.6
Temperature 2 m (C) Average	720	11.14	5.6	-	-1.3	4.7	6.6	10.6	15.1	18.7	26.4
Relative Humidity (%) Average	720	75.26	18.8	-	26.9	46.8	62.4	79.8	91.8	96.5	99.9
Wind Speed 10 m (km/h) Average	679	6	4	-	0	1	3	5	9	12	17
Wind Direction 10 m (deg) Average	679	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SURMONT 2 (AMS29)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
Wind Speed, Wind Direction	05 Sep 2026 23:00	05 Sep 2026 23:00	1	DAS Failure - data not recorded
Wind Speed, Wind Direction	01 Sep 2026 01:00	01 Oct 2026 00:00	40	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Surmont 2 - September 2026

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

Maximum Value: 10.3 ppb on Sep 20 01:00

Maximum Daily Average: 1.7 ppb on Sep 20

Minimum Value: 0.0 ppb on Sep 1 01:00

Minimum Daily Average: 0.1 ppb on Sep 24

Maximum Diurnal Average: 0.6 ppb at hour 22

Minimum Diurnal Average: 0.1 ppb at hour 6

Monthly Average: 0.32 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.1 $Q_3 = 0.3$ $P_{90} = 0.7$ $P_{99} = 3.2$

Hours in Service:	720
Hours of Data:	686
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-Sep	0.0	0.0	Z	0.1	0.1	0.1	0.2	0.1	0.3	0.3	0.2	0.8	0.3	0.5	0.6	0.6	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.2	0.8
2-Sep	0.0	0.3	1.7	Z	0.2	0.1	0.1	0.4	0.4	0.4	0.3	0.3	0.1	0.3	0.3	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.1	0.3	1.7
3-Sep	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
4-Sep	0.2	0.1	0.3	0.3	0.2	Z	0.1	0.1	0.2	1.6	1.4	1.0	0.2	0.5	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3	1.6
5-Sep	Z	0.1	0.1	0.0	0.1	0.1	0.2	0.3	0.4	0.4	0.2	0.6	0.2	0.2	0.4	0.5	0.6	0.5	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.6
6-Sep	0.1	Z	0.1	0.2	0.3	0.2	0.3	0.2	0.2	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.3
7-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7	0.2	0.3	0.3	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.7
8-Sep	0.0	0.1	0.1	Z	0.1	0.0	0.2	0.4	0.3	0.2	0.3	0.3	0.4	0.6	0.4	1.4	1.5	0.8	0.3	0.1	0.0	0.0	0.0	0.0	0.3	1.5
9-Sep	0.2	0.3	0.4	0.2	Z	0.2	0.5	0.2	0.2	0.2	0.5	0.5	1.6	0.3	0.5	0.3	0.5	0.4	0.3	3.6	2.3	2.1	0.4	0.3	0.7	3.6
10-Sep	0.5	0.4	0.3	0.4	0.4	Z	0.3	0.3	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.2	0.2	0.1	0.0	0.2	0.5
11-Sep	Z	0.1	0.2	0.3	0.3	0.2	0.3	0.3	0.5	0.7	0.6	0.7	0.9	0.7	0.4	0.2	0.4	0.8	1.3	0.0	0.0	0.1	0.0	0.0	0.4	1.3
12-Sep	0.0	Z	0.1	0.0	0.3	0.1	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.1	0.0	0.0	0.0	0.1	0.3
13-Sep	0.1	0.3	Z	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.9	0.8	1.8	1.5	0.8	0.5	0.2	0.3	0.9	0.7	0.3	0.3	0.5	1.8
14-Sep	0.3	0.2	0.0	Z	0.0	0.0	0.1	0.1	0.1	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.2	0.3	0.4	0.6	0.5	0.3	0.6
15-Sep	0.5	0.5	0.6	0.4	Z	0.2	0.1	0.3	0.7	1.1	0.4	0.3	0.3	0.3	0.3	0.6	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.3	1.1
16-Sep	0.3	0.2	0.1	0.0	0.1	Z	1.3	1.1	0.9	0.7	2.4	2.2	1.2	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.5	2.4
17-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.3	0.2	0.3	0.1	0.2	0.2	0.3	0.7	0.6	0.2	0.2	0.1	0.3	0.0	0.0	0.2	0.7
18-Sep	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	0.3	0.4	0.1	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.4
19-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.6	0.3	0.1	0.3	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.3	0.1	0.3	2.1	3.2	0.4	3.2
20-Sep	10.3	0.6	0.2	Z	0.5	0.4	0.2	0.1	0.0	0.1	0.1	0.6	1.0	1.1	2.0	0.6	1.1	0.5	0.2	0.5	3.5	4.6	6.4	4.2	1.7	10.3
21-Sep	0.7	0.3	0.4	1.0	Z	0.2	0.1	0.1	0.4	0.6	0.5	1.2	1.4	0.5	0.4	0.5	0.7	0.6	0.4	1.5	1.0	7.1	0.6	0.3	0.9	7.1
22-Sep	0.2	0.1	0.1	0.0	0.0	Z	0.1	0.2	0.6	1.1	1.3	0.5	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.3	1.3
23-Sep	Z	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.7	0.8	0.1	0.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8
24-Sep	0.1	Z	0.3	0.1	0.0	0.1	0.1	0.1	C	C	C	C	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	0.3
25-Sep	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2
26-Sep	0.1	0.1	0.2	Z	0.5	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	0.0	0.1	0.5
27-Sep	0.1	0.0	0.0	0.0	Z	0.2	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.3
28-Sep	0.1	0.1	0.0	0.0	0.0	Z	0.1	0.3	0.1	0.1	0.0	0.1	1.2	1.7	2.3	1.8	1.2	0.5	0.9	1.2	1.3	0.8	0.2	0.2	0.6	2.3
29-Sep	Z	0.2	0.1	0.1	0.3	0.2	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
30-Sep	0.2	Z	0.1	0.1	0.0	0.2	0.2	0.3	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	0.1	0.3
	0.5	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.3	0.4	0.6	0.4	0.3	Diurnal Average	
	10.3	0.6	1.7	1.0	0.5	0.4	1.3	1.1	0.9	1.6	2.4	2.2	1.6	1.7	2.3	1.8	1.5	0.8	1.3	3.6	3.5	7.1	6.4	4.2	Diurnal Maximum	

Z - zerospan C - Calibration

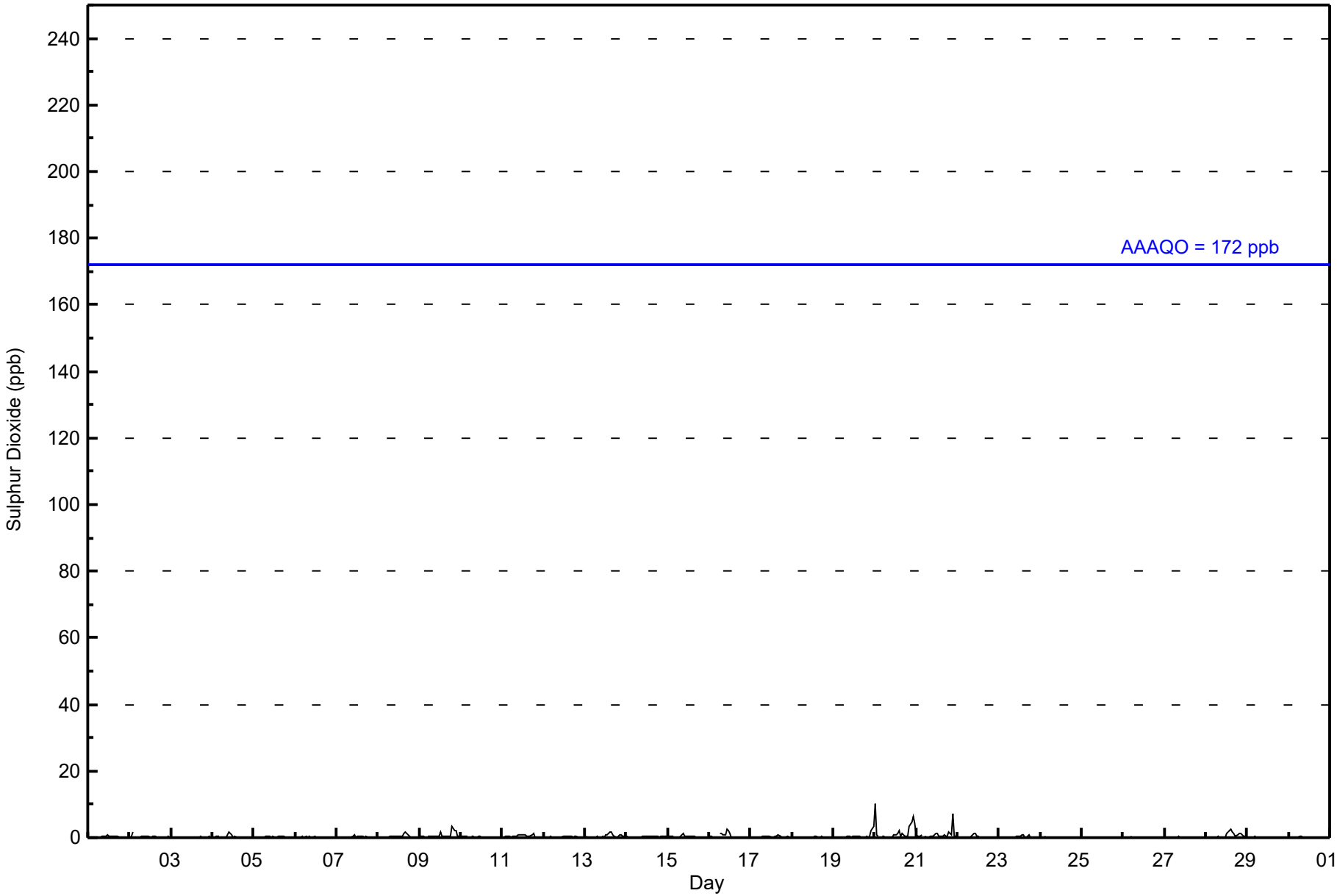
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Surmont 2 - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	686	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: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Surmont 2 - September 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	13	2	4	13	68	55	27	17	17	24	137	118	67	29	45	650
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	14	13	2	4	13	68	55	27	17	17	24	137	118	67	29	45	650

Total Number of Valid Hours: 650

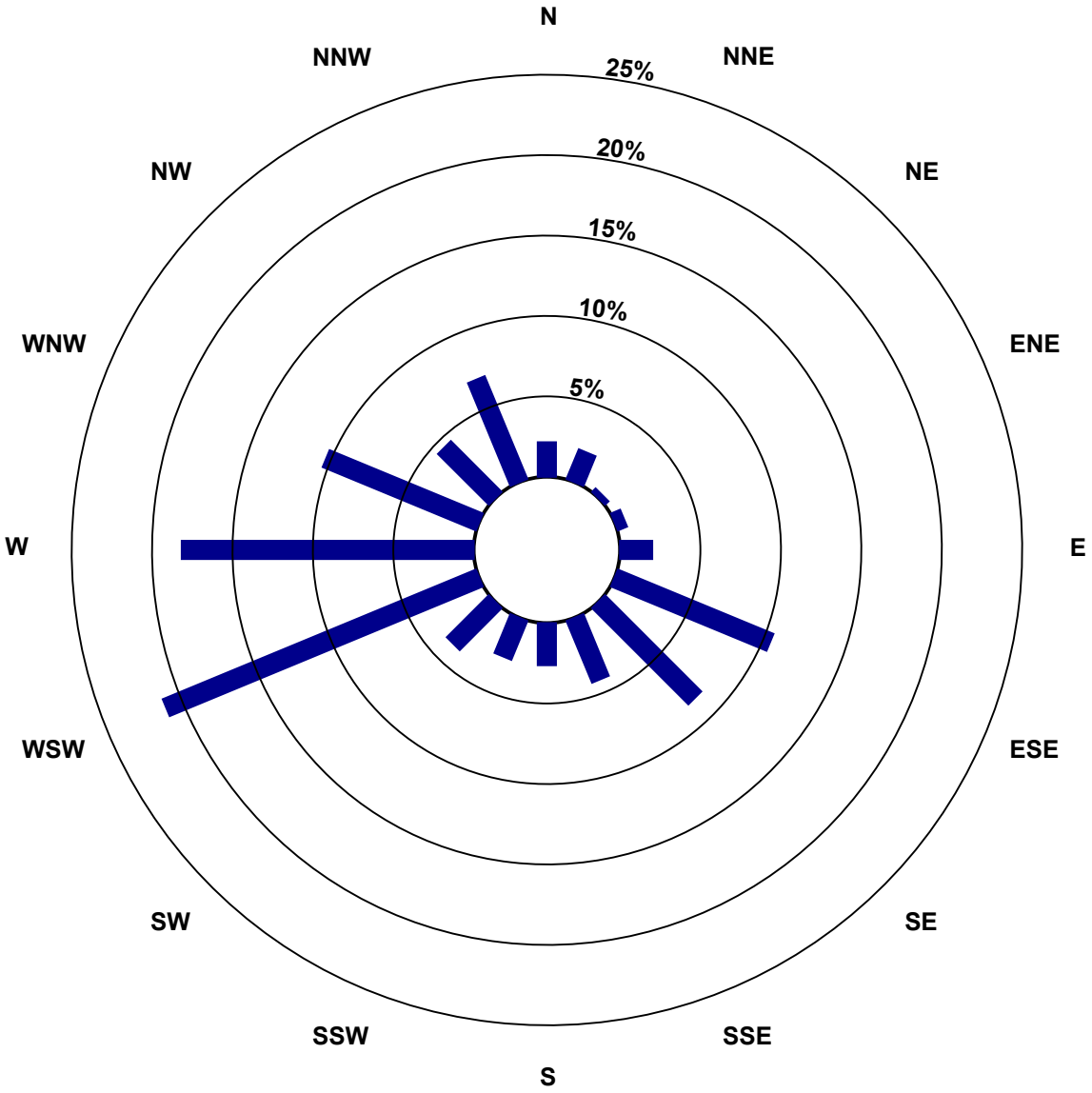
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Surmont 2



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

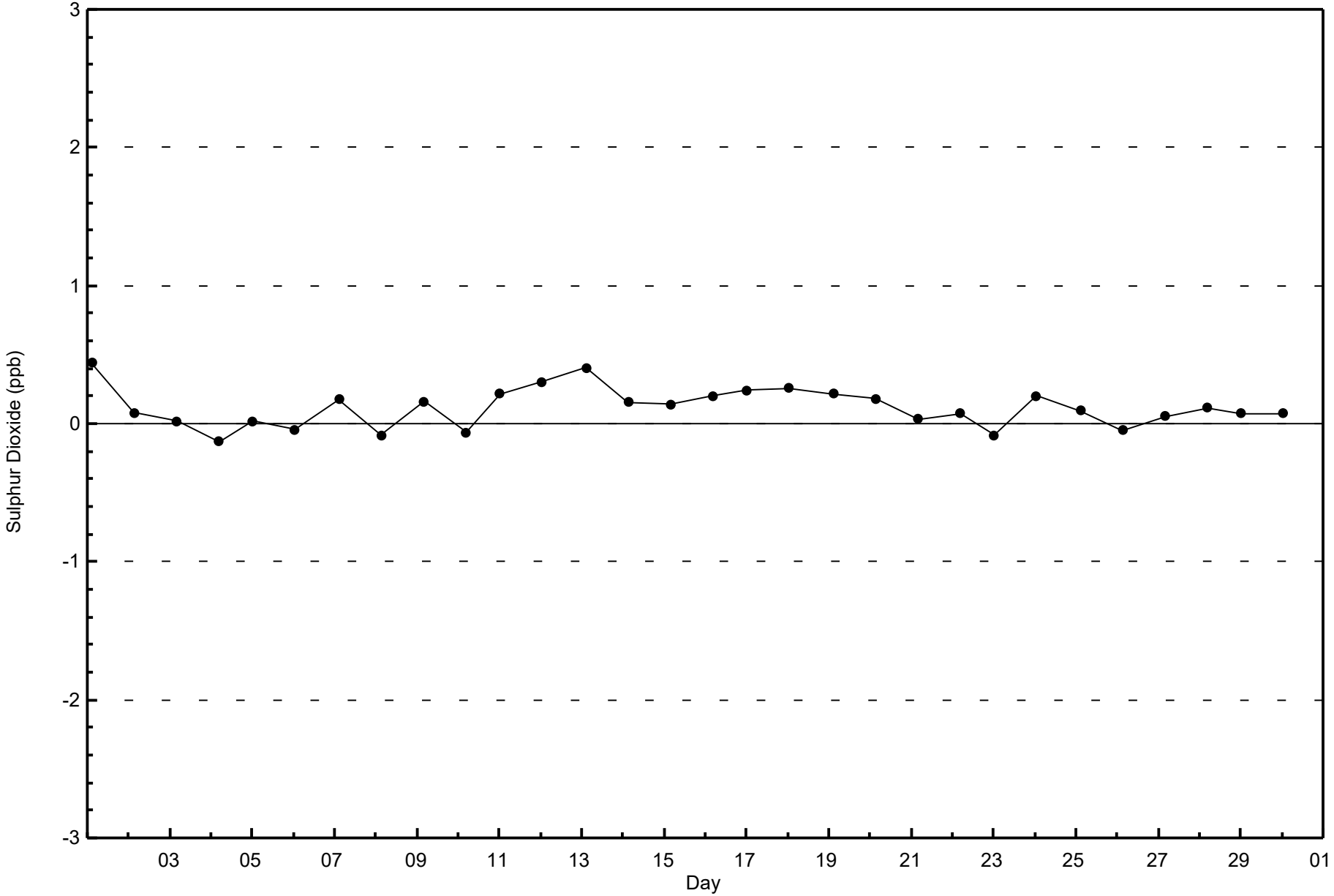
Total Number of Valid Hours: 650

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Surmont 2 - September 2026

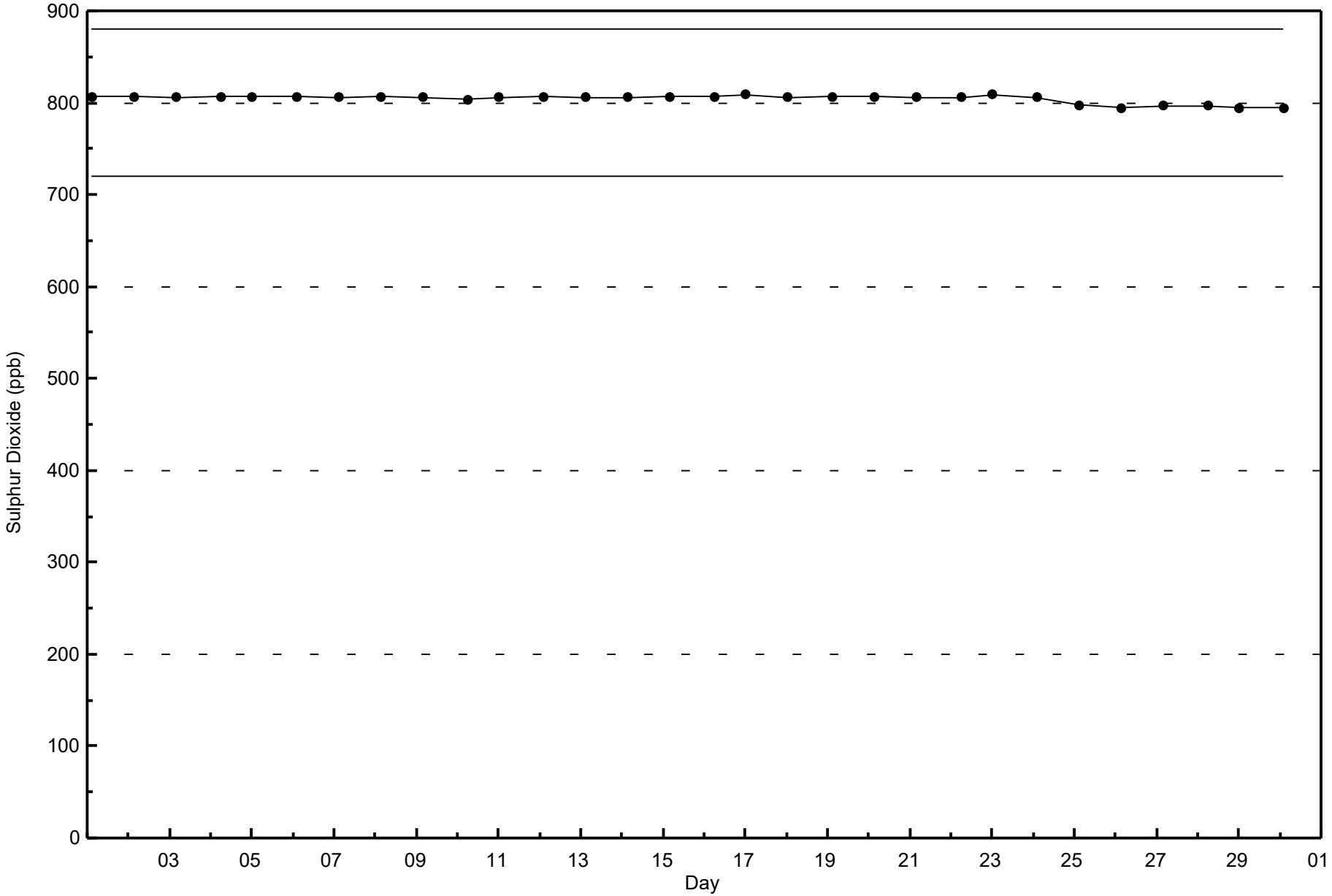


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Surmont 2 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Surmont 2 - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.5 ppb on Sep 14 04:00 Maximum Daily Average: 0.2 ppb on Sep 8

Minimum Value: 0.0 ppb on Sep 22 13:00
Maximum Diurnal Average: 0.1 ppb at hour 4
Monthly Average: 0.09 ppb

Minimum Daily Average: 0.0 ppb on Sep 29
Minimum Diurnal Average: 0.1 ppb at hour 16
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} = 0.3

Hours in Service:	720
Hours of Data:	685
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-Sep	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	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
2-Sep	0.1	0.1	0.2	0.3	Z	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	0.3
3-Sep	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	0.1	0.1	0.1
4-Sep	Z	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	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.3
5-Sep	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	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1
6-Sep	0.1	0.1	Z	0.2	0.2	0.4	0.1	0.2	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4
7-Sep	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
8-Sep	0.1	0.1	0.2	0.1	Z	0.2	0.2	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	0.3	0.2	0.1	0.2	0.4
9-Sep	0.1	0.0	0.1	0.0	0.1	Z	0.1	0.1	C	C	C	C	C	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1
10-Sep	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	0.0	0.0	0.1	0.1
11-Sep	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.3
12-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
13-Sep	0.1	0.1	0.0	Z	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2
14-Sep	0.1	0.2	0.3	0.5	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	0.3	0.4	0.3	0.3	0.3	0.2	0.5
15-Sep	0.2	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
16-Sep	Z	0.1	0.1	0.2	0.1	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
17-Sep	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
18-Sep	0.1	0.1	Z	0.1	0.2	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	0.2	0.1	0.1	0.1	0.2
19-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20-Sep	0.1	0.1	0.1	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2
21-Sep	0.1	0.1	0.1	0.1	0.2	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	0.2	0.1	0.1	0.1	0.2
22-Sep	Z	0.2	0.2	0.1	0.1	0.1	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	0.1	0.1	0.1	0.2
23-Sep	0.1	Z	0.3	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	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.3
24-Sep	0.1	0.1	Z	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	0.1	0.1	0.1	0.0	0.1
25-Sep	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	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1
26-Sep	0.1	0.2	0.3	0.3	Z	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	0.0	0.0	0.0	0.0	0.1	0.3
27-Sep	0.0	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	0.1
28-Sep	Z	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	0.1	0.1	0.1	0.1	0.1	0.0	0.1
29-Sep	0.1	Z	0.1	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
30-Sep	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	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	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.2	0.2	0.3	0.5	0.2	0.4	0.3	0.4	0.4	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.1	0.3	0.4	0.3	0.3	0.3	Diurnal Maximum	

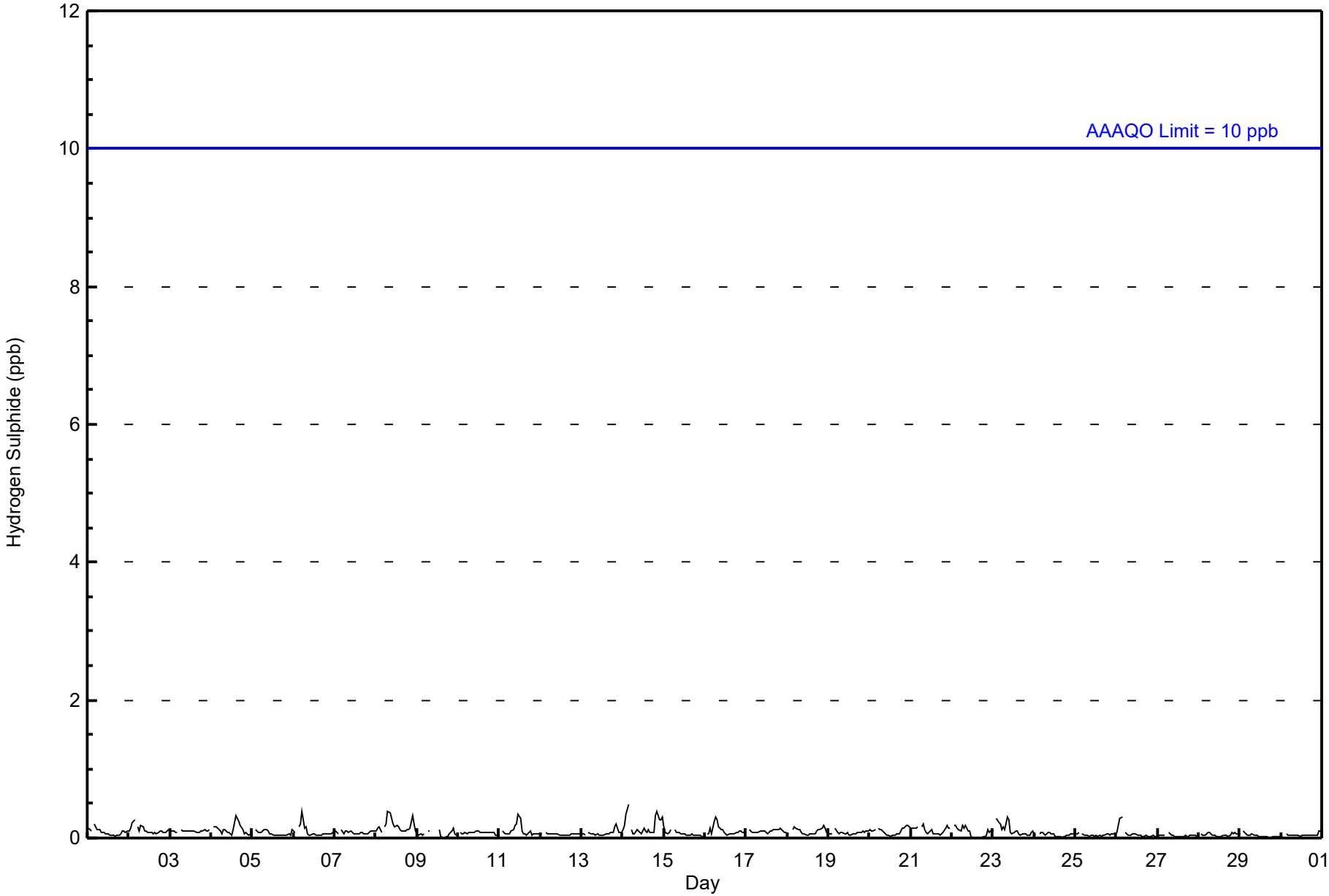
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Surmont 2 - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	685	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Surmont 2 - September 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	11	2	4	14	69	57	26	19	16	24	135	116	69	29	45	650
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	11	2	4	14	69	57	26	19	16	24	135	116	69	29	45	650

Total Number of Valid Hours: 650

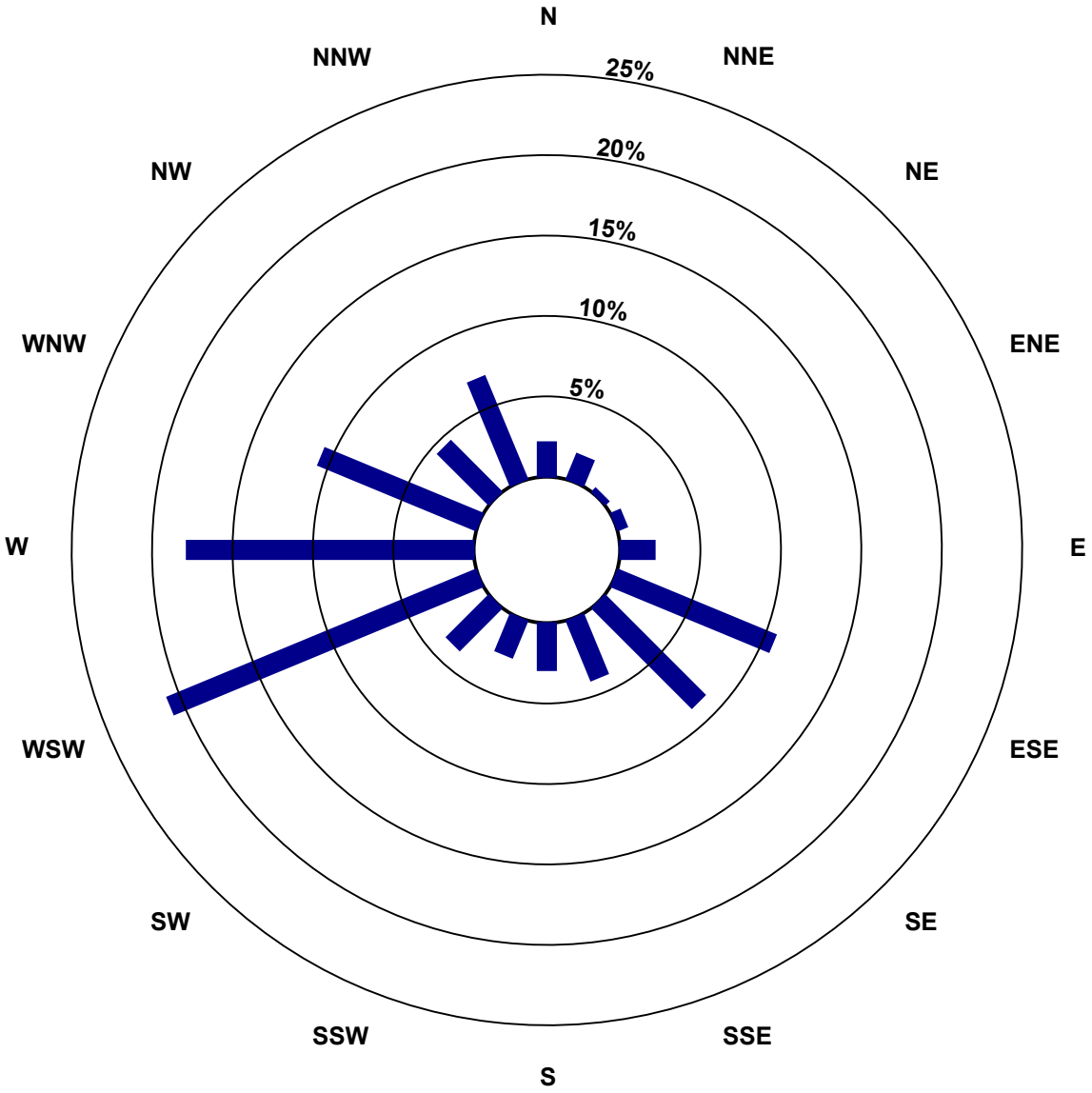
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

Surmont 2



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

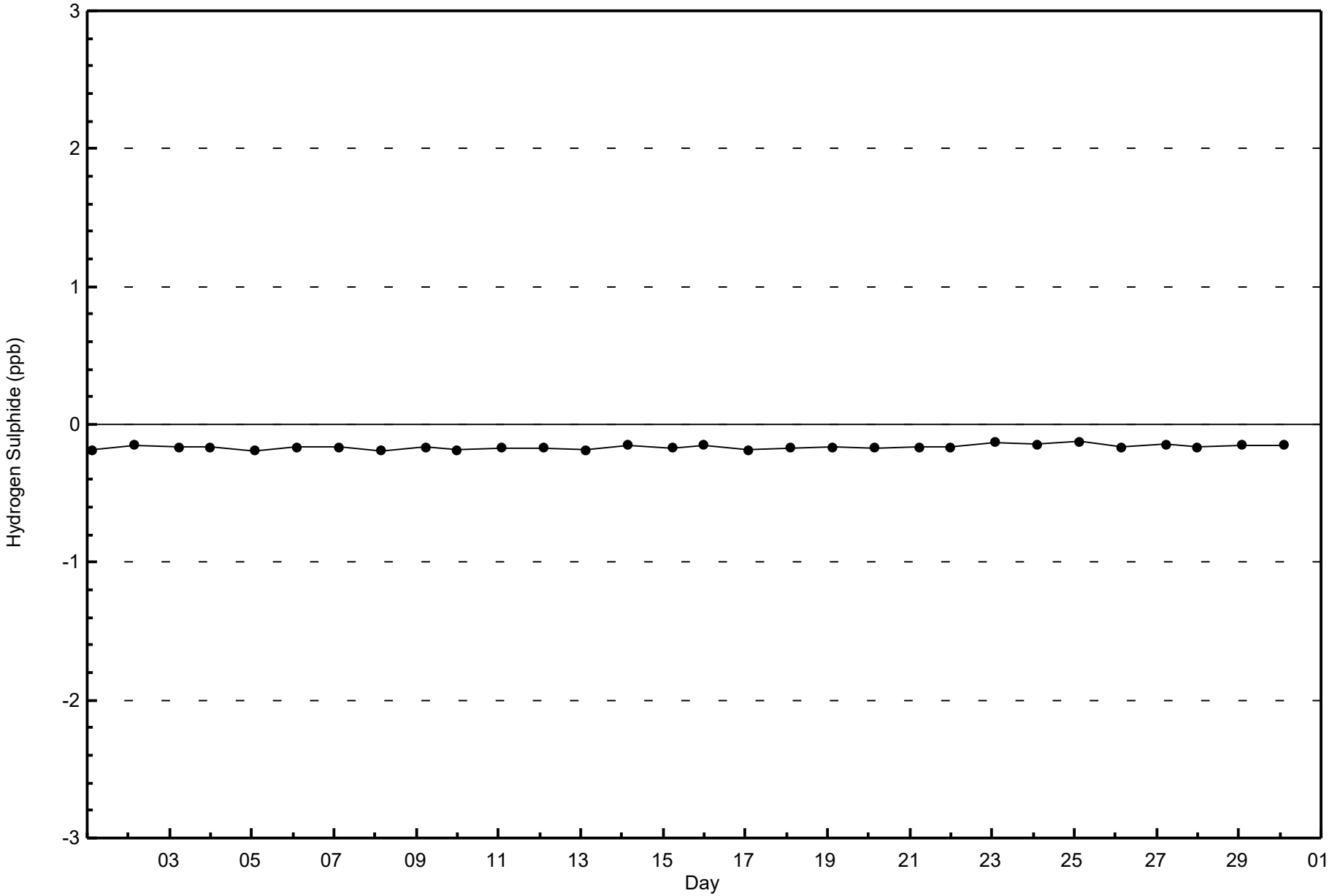
Total Number of Valid Hours: 650

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Surmont 2 - September 2026

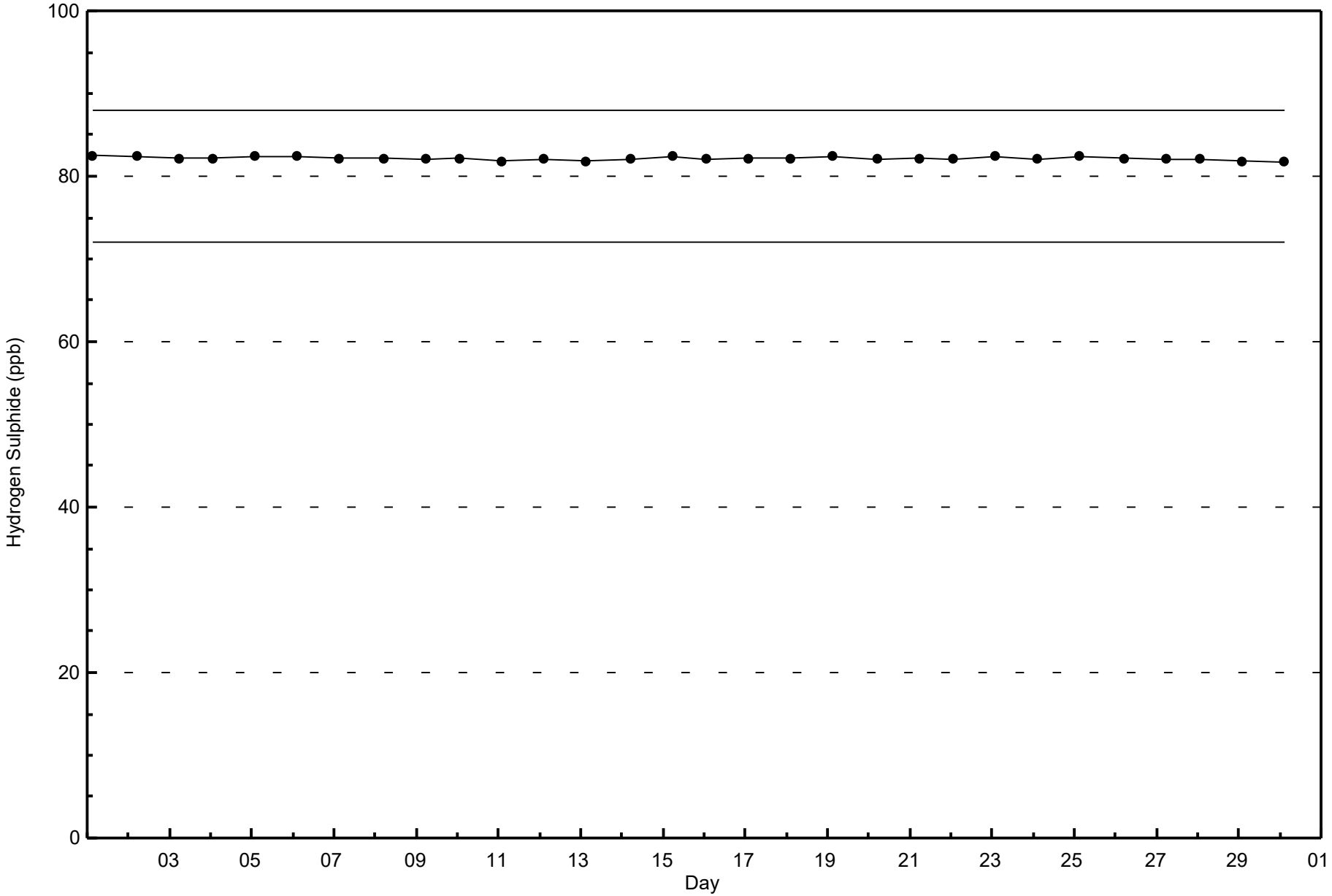


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Surmont 2 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Surmont 2 - September 2026

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

Maximum Value: 2.6 ppm on Sep 6 06:00

Maximum Daily Average: 2.3 ppm on Sep 18

Minimum Value: 2.1 ppm on Sep 14 08:00

Minimum Daily Average: 2.1 ppm on Sep 11

Maximum Diurnal Average: 2.2 ppm at hour 7

Minimum Diurnal Average: 2.2 ppm at hour 15

Monthly Average: 2.22 ppm

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

Hours in Service:	720
Hours of Data:	686
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-Sep	2.3	2.4	Z	2.4	2.4	2.4	2.4	2.3	C	C	C	C	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.4
2-Sep	2.2	2.2	2.2	Z	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	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.3
3-Sep	2.3	2.2	2.2	2.3	Z	2.3	2.3	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	2.4	2.2	2.2	2.3	2.4
4-Sep	2.2	2.3	2.3	2.2	2.3	Z	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3
5-Sep	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	2.2	2.3
6-Sep	2.3	Z	2.4	2.4	2.5	2.6	2.5	2.4	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.2	2.3	2.2	2.3	2.6
7-Sep	2.2	2.3	Z	2.3	2.2	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.3	2.3	2.3	2.3
8-Sep	2.4	2.4	2.5	Z	2.3	2.3	2.3	2.4	2.4	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.3	2.4	2.4	2.3	2.3	2.5
9-Sep	2.2	2.2	2.2	2.2	Z	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.2
10-Sep	2.1	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	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	2.2
11-Sep	Z	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	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.2	2.1	2.2
12-Sep	2.1	Z	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.1	2.1	2.1	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
13-Sep	2.2	2.3	Z	2.2	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	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.3
14-Sep	2.2	2.2	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	2.1	2.2	2.2	2.2	2.2	2.3	2.2	2.3
15-Sep	2.2	2.2	2.2	2.2	Z	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	2.2	2.2	2.2	2.2	2.2	2.3
16-Sep	2.2	2.2	2.3	2.2	2.2	Z	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	2.3	2.2	2.3	2.2	2.3
17-Sep	Z	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.4	2.3	2.4
18-Sep	2.4	Z	2.5	2.4	2.5	2.5	2.5	2.4	2.2	2.3	2.2	2.2	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.3	2.3	2.5
19-Sep	2.2	2.3	Z	2.3	2.2	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	2.3	2.2	2.2	2.2	2.3	2.2	2.3
20-Sep	2.2	2.2	2.3	Z	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.1	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.3
21-Sep	2.2	2.2	2.2	2.3	Z	2.2	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.4
22-Sep	2.2	2.3	2.3	2.3	2.3	Z	2.4	2.4	2.3	2.3	2.3	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	2.4
23-Sep	Z	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.3
24-Sep	2.3	Z	2.3	2.3	2.3	2.2	2.3	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
25-Sep	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	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3
26-Sep	2.2	2.2	2.3	Z	2.3	2.2	2.2	2.1	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	2.3
27-Sep	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	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
28-Sep	2.2	2.2	2.2	2.2	2.2	Z	2.2	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.3
29-Sep	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	2.2	2.2	2.2	2.2
30-Sep	2.1	Z	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.2	2.1	2.2	2.2	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
	2.2	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	2.2	Diurnal Average	
	2.4	2.4	2.5	2.4	2.5	2.6	2.5	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.3	2.4	2.4	2.4	2.4	Diurnal Maximum	

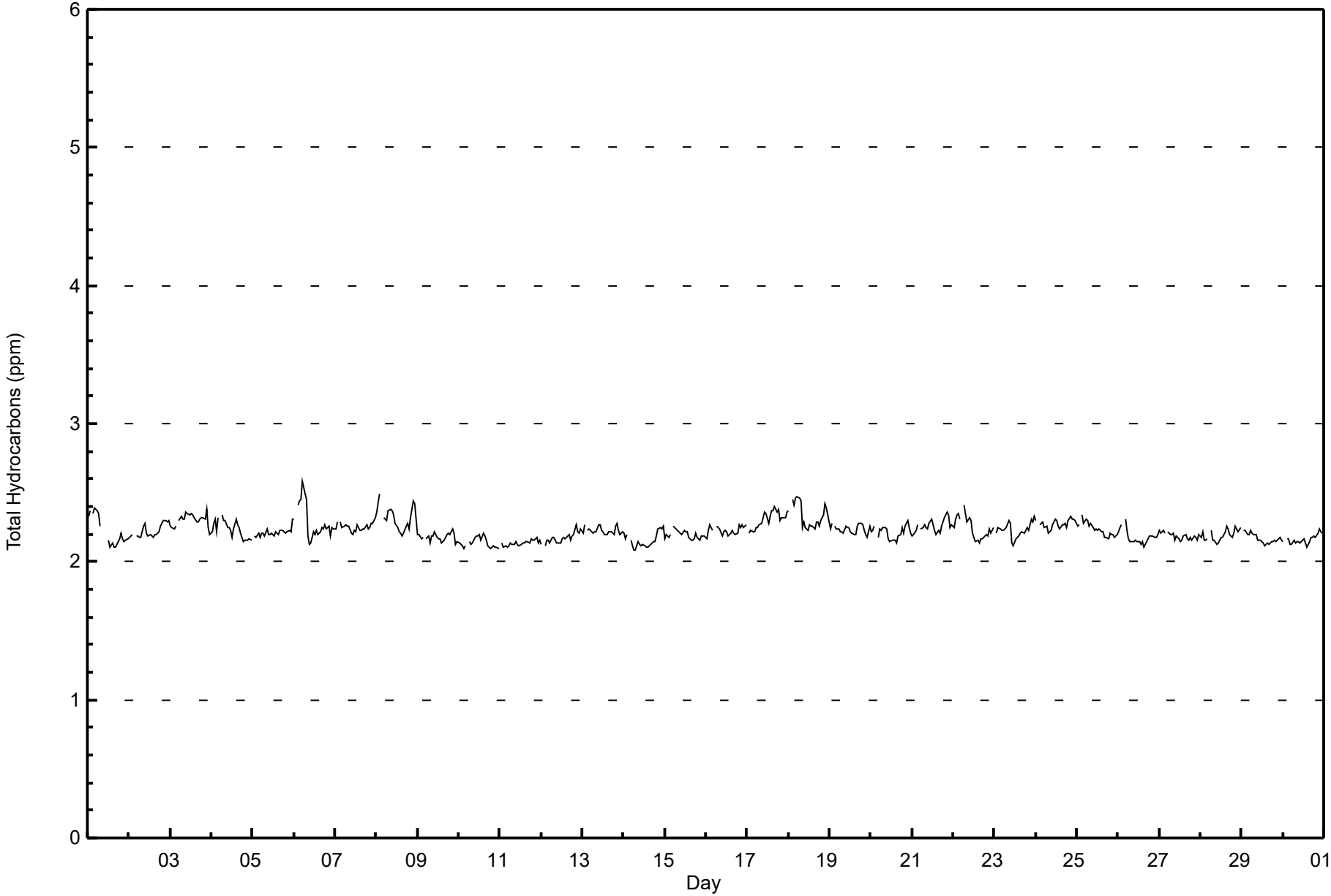
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Surmont 2 - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	0	0.00	0.00
2.1 - 3.0	686	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: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Surmont 2 - September 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	14	13	2	4	13	69	55	24	17	17	24	139	118	67	29	45	650
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	14	13	2	4	13	69	55	24	17	17	24	139	118	67	29	45	650

Total Number of Valid Hours: 650

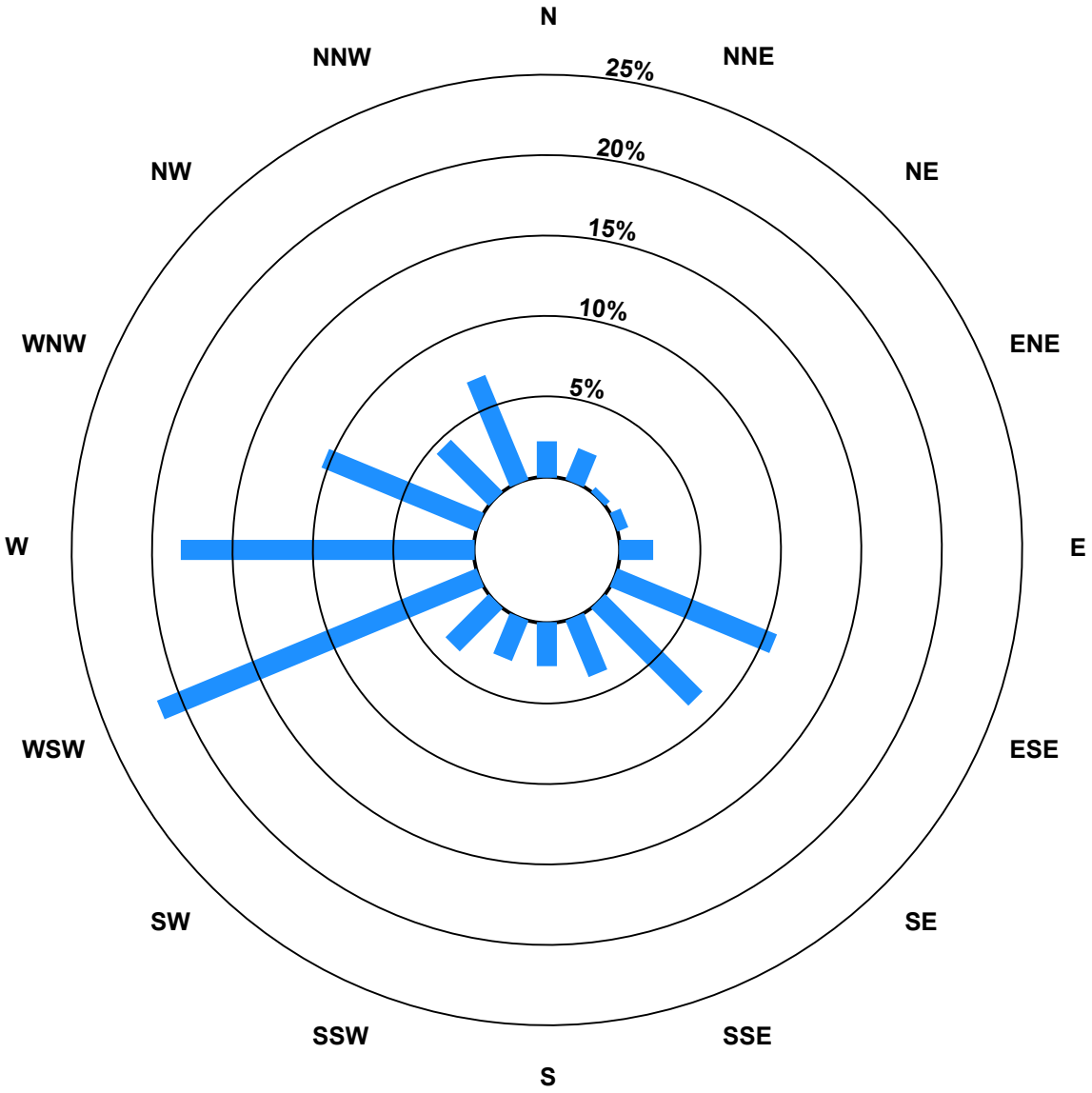
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Surmont 2



Classes (ppm)

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

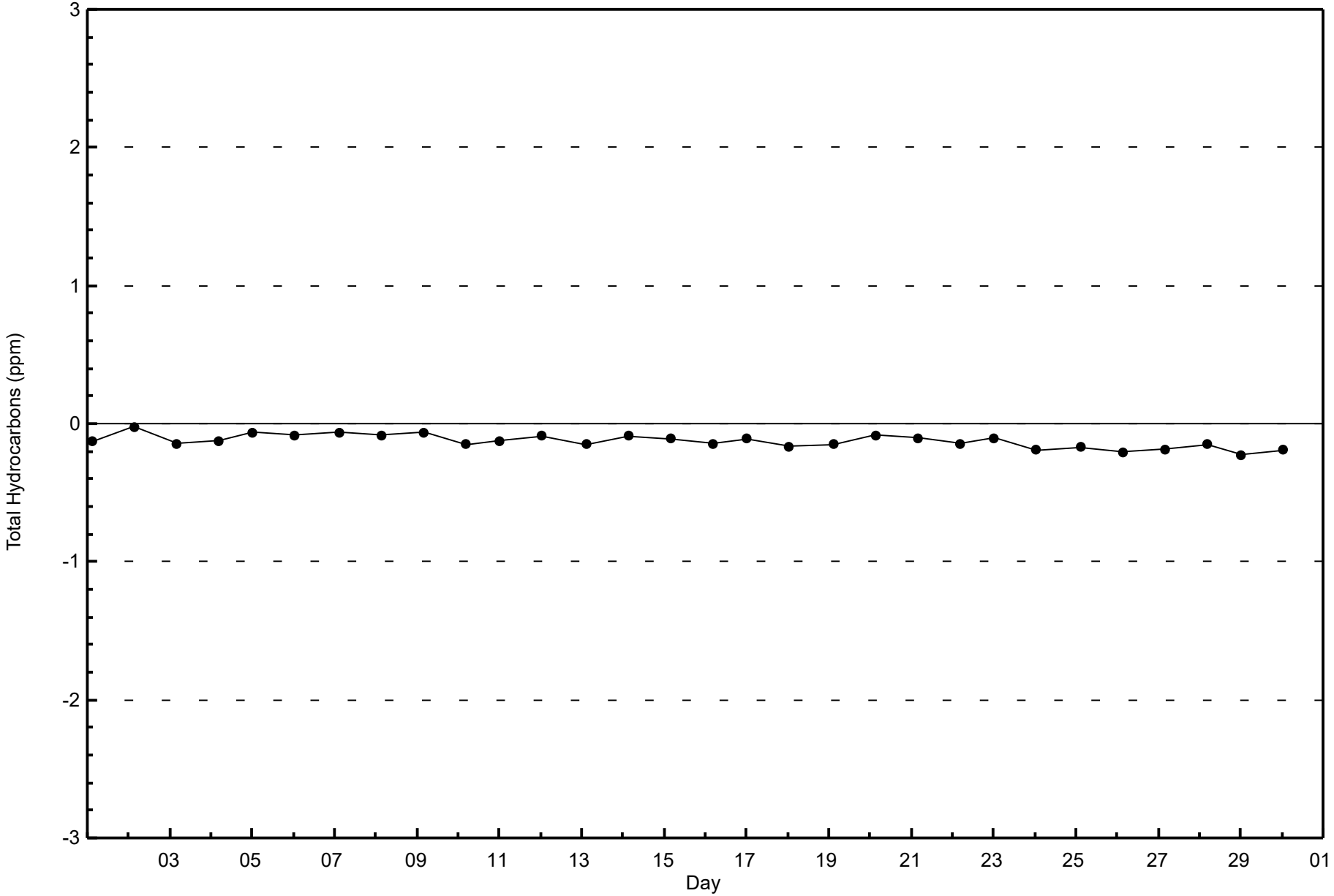
Total Number of Valid Hours: 650

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Surmont 2 - September 2026

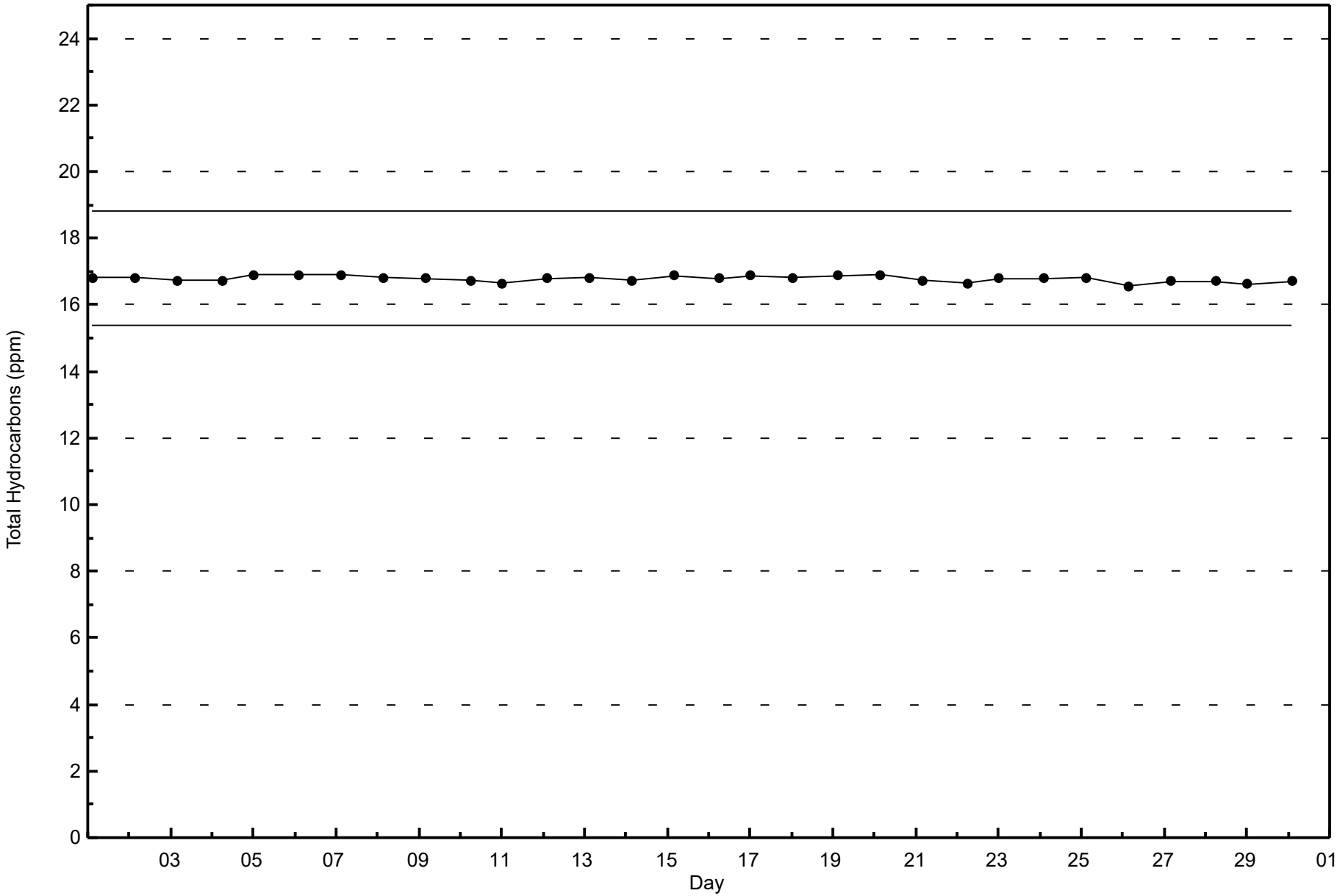


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Surmont 2 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Surmont 2 - September 2026

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

Maximum Value: 1.8 ppb on Sep 8 08:00 Maximum Daily Average: 0.4 ppb on Sep 8

Minimum Value: 0.0 ppb on Sep 1 23:00 Minimum Daily Average: 0.0 ppb on Sep 25

Maximum Diurnal Average: 0.3 ppb at hour 8 Minimum Diurnal Average: 0.0 ppb at hour 24

Monthly Average: 0.09 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.1 P_{90} = 0.2 P_{99} = 1.0

Hours in Service:	720
Hours of Data:	684
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-Sep	Z	0.0	0.0	0.0	0.1	0.7	0.1	0.1	0.2	0.3	0.1	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	0.7
2-Sep	0.0	Z	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.1
3-Sep	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	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1
4-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.3	0.2	0.1	0.2	0.4	0.3	0.1	0.2	0.5	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
5-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.4	0.6	0.7	0.3	0.5	0.1	0.1	0.2	0.2	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.7
6-Sep	0.2	0.2	0.2	0.2	0.1	Z	0.4	0.2	0.0	0.0	0.0	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	0.1	0.4
7-Sep	Z	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.3	0.3	0.1	0.2	0.2	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.4	0.1	0.1	0.4
8-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.4	1.8	1.6	1.2	1.1	0.7	0.7	0.5	0.4	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.4	1.8
9-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.3
10-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	C	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
11-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.2	0.2	0.4	0.5	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
12-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.4	0.2	0.1	0.0	0.0	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	0.4
13-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
14-Sep	0.0	Z	0.0	0.0	0.0	0.1	0.0	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.2	0.5	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
15-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.2	0.2	0.2	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	0.2
16-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.4	0.6	0.4	0.9	0.8	0.4	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.9
17-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.2	0.5	0.6	0.7	0.4	0.1	0.1	0.2	0.2	0.3	0.1	0.2	0.0	0.3	0.0	0.0	0.0	0.2	0.7
18-Sep	0.1	0.0	0.1	0.0	0.1	Z	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.2
19-Sep	Z	0.0	0.0	0.0	0.0	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
20-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
21-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.3	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	0.0	0.0	0.1	0.3
22-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.3	1.4	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.4
23-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.2	1.0	1.7	1.6	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	0.2	1.7
24-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
25-Sep	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
26-Sep	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-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.2	0.2	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	0.2
28-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	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	0.2
29-Sep	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
30-Sep	0.0	0.0	0.0	0.0	0.0	Z	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	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.3	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	Diurnal Average	
	0.2	0.2	0.2	0.2	0.1	0.7	0.4	1.8	1.7	1.6	1.1	0.8	0.7	0.5	0.5	0.5	0.3	0.1	0.2	0.1	0.3	0.1	0.4	0.1	Diurnal Maximum	

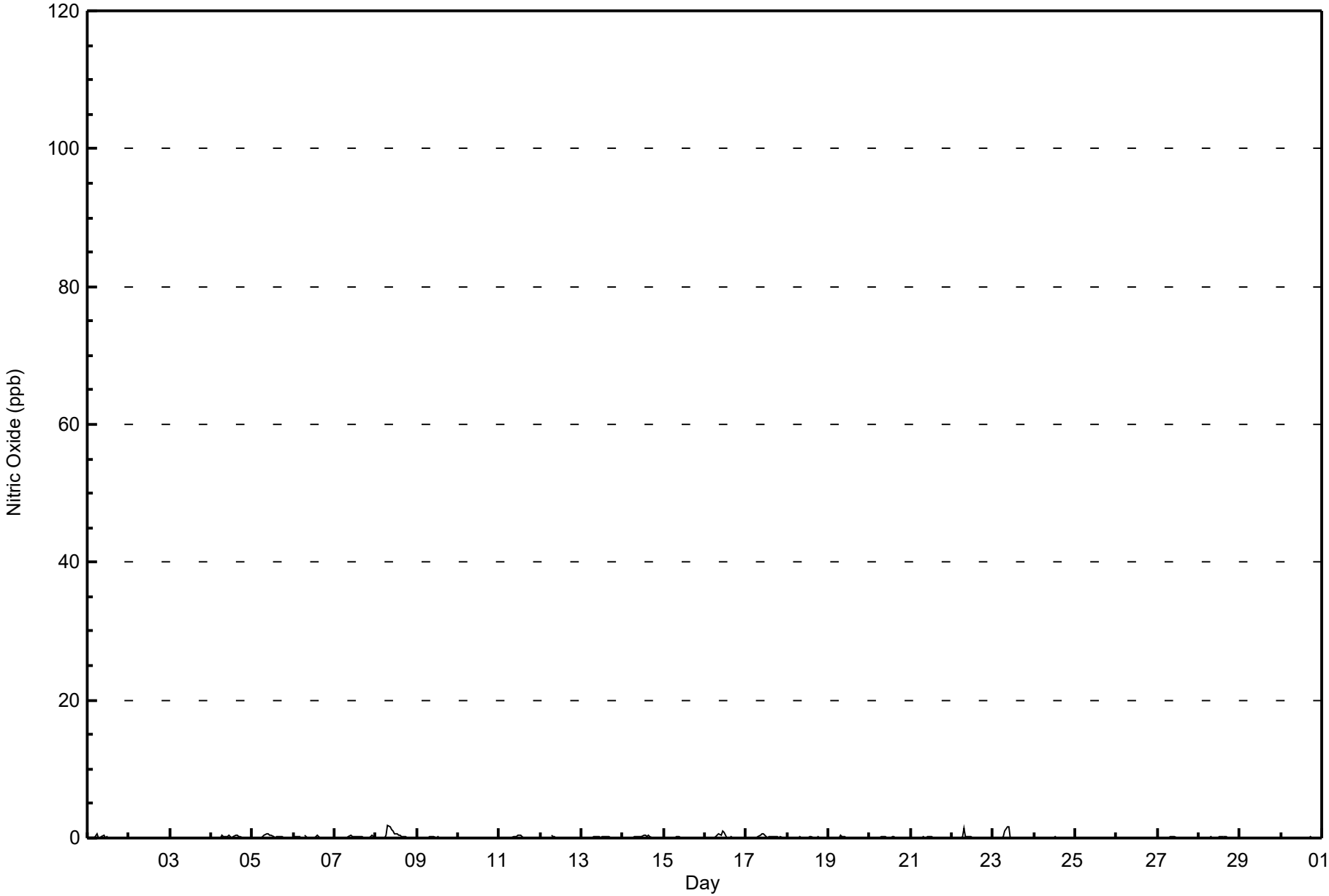
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Surmont 2 - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Surmont 2 - September 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	13	12	2	4	14	68	57	26	19	18	25	139	112	64	28	46	647
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	13	12	2	4	14	68	57	26	19	18	25	139	112	64	28	46	647

Total Number of Valid Hours: 647

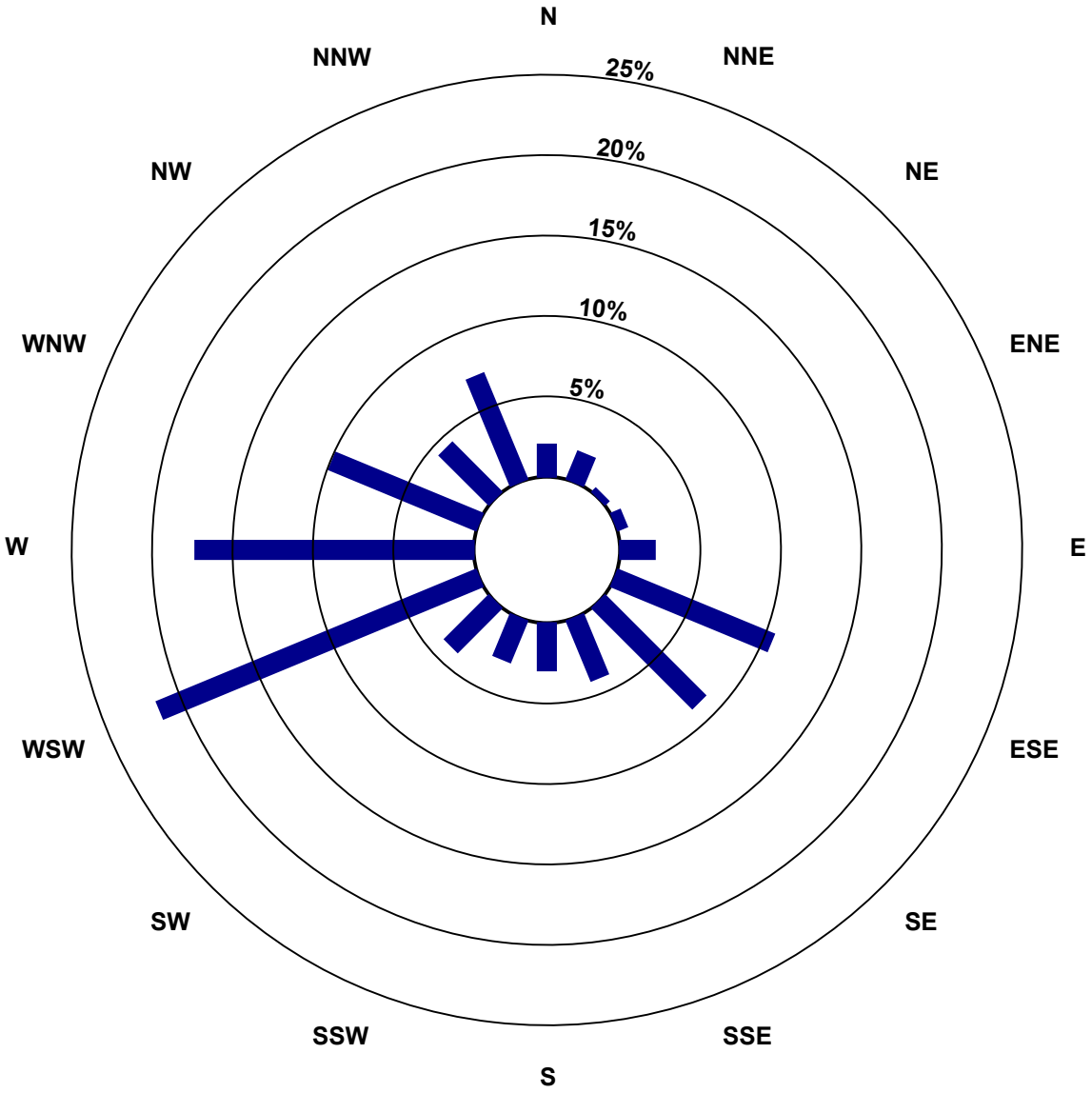
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Surmont 2



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

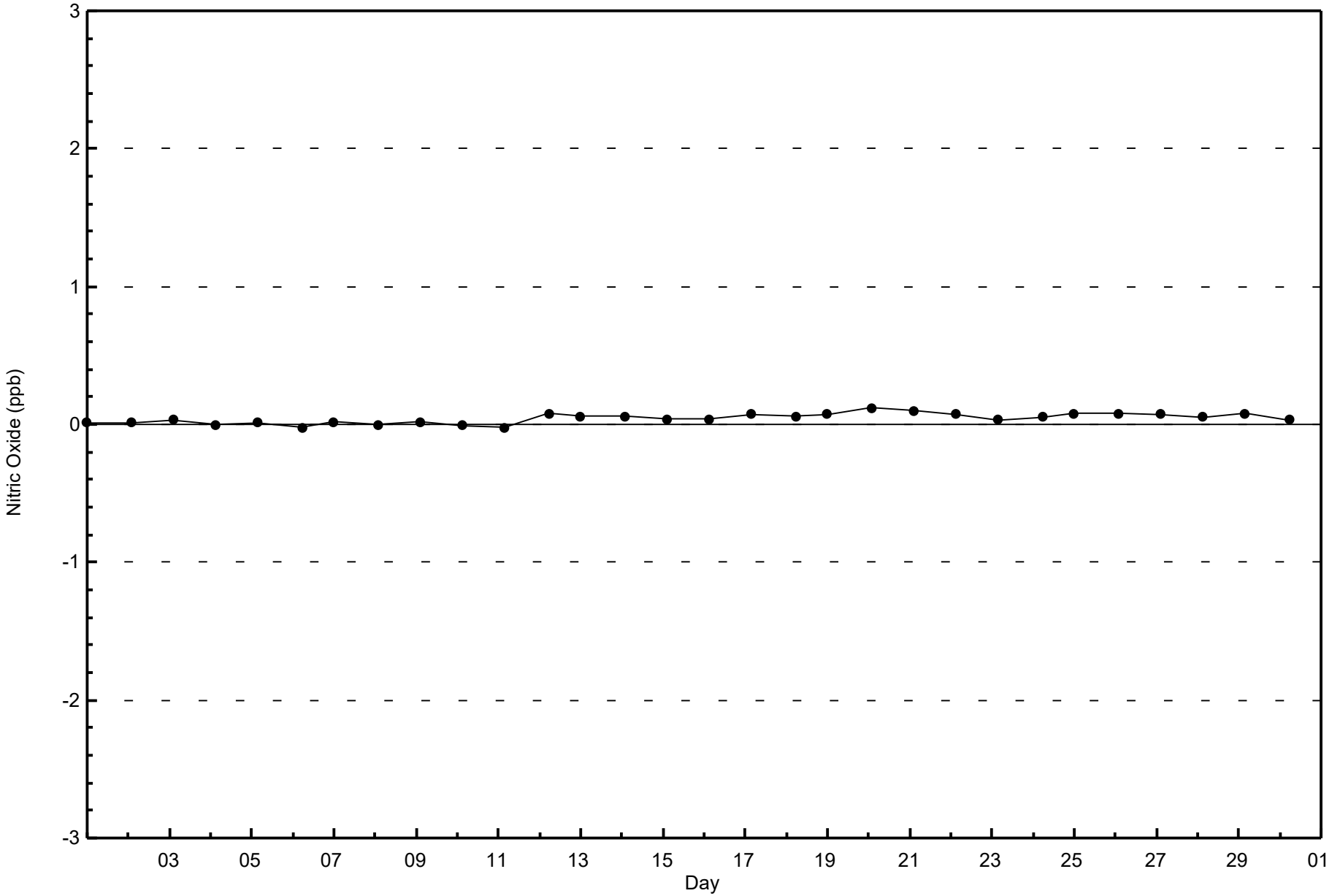
Total Number of Valid Hours: 647

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Surmont 2 - September 2026

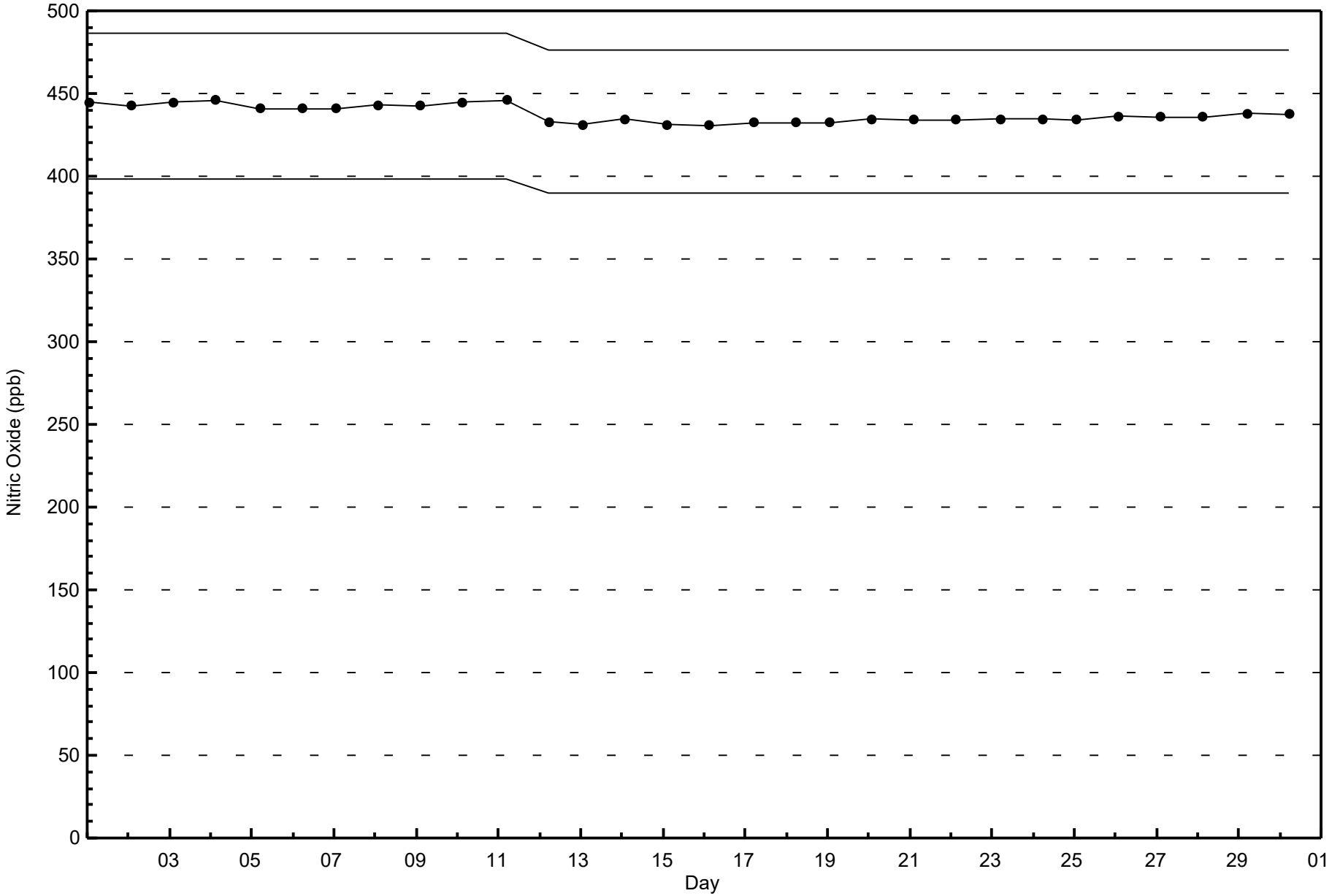


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Surmont 2 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Surmont 2 - September 2026

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

Maximum Value: 6.0 ppb on Sep 20 01:00

Maximum Daily Average: 2.0 ppb on Sep 14

Minimum Value: 0.1 ppb on Sep 6 21:00

Minimum Daily Average: 0.2 ppb on Sep 30

Maximum Diurnal Average: 1.3 ppb at hour 20

Minimum Diurnal Average: 0.6 ppb at hour 2

Monthly Average: 0.83 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.3$ Median = 0.5 $Q_3 = 1.1$ $P_{90} = 1.8$ $P_{99} = 3.9$

Hours in Service:	720
Hours of Data:	684
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-Sep	Z	0.5	0.4	0.4	0.4	0.9	0.2	0.2	0.7	1.1	0.5	0.9	0.7	0.9	0.9	0.7	0.5	0.4	0.3	0.3	0.4	0.4	0.6	0.4	0.6	1.1
2-Sep	0.4	Z	1.1	0.9	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.4	1.1
3-Sep	0.2	0.3	Z	0.3	0.6	1.1	0.7	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.3	0.3	0.4	1.1
4-Sep	0.5	0.4	0.3	Z	0.3	0.3	0.4	0.3	0.6	1.2	1.7	1.5	0.7	1.5	2.4	1.0	1.0	1.0	1.1	0.4	0.7	0.6	0.6	0.5	0.8	2.4
5-Sep	0.9	1.0	1.1	1.0	Z	1.4	1.6	1.8	1.9	1.5	0.7	1.1	0.5	0.4	0.7	0.9	1.1	1.1	0.6	1.7	0.7	0.5	0.4	0.6	1.0	1.9
6-Sep	0.7	0.5	0.2	0.2	0.2	Z	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.7	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.3	0.3	0.7
7-Sep	Z	0.2	0.2	0.2	0.5	0.6	0.6	0.5	0.4	0.6	0.8	0.8	0.7	0.7	0.9	0.7	0.7	0.5	0.3	0.2	0.2	0.8	0.9	0.4	0.5	0.9
8-Sep	0.3	Z	0.3	0.2	0.2	0.2	2.1	4.1	3.6	3.1	2.3	1.8	2.0	1.6	1.8	1.5	1.4	1.7	2.3	2.1	2.1	1.5	1.1	0.6	1.6	4.1
9-Sep	0.4	0.4	Z	0.7	0.5	1.1	0.9	0.9	0.8	0.8	0.6	0.4	0.8	0.3	0.4	0.4	0.6	0.5	0.5	2.4	1.8	1.7	0.5	0.4	0.8	2.4
10-Sep	0.3	0.2	0.2	Z	0.4	0.2	0.4	C	C	C	C	C	C	0.2	0.3	0.3	0.2	0.4	0.1	0.2	0.1	0.1	0.1	0.1	--	0.4
11-Sep	0.1	0.1	0.1	0.1	Z	0.2	0.3	0.3	0.5	0.7	0.7	0.8	0.9	0.7	0.4	0.3	0.4	1.0	1.5	0.5	0.8	0.6	0.2	0.1	0.5	1.5
12-Sep	0.1	0.1	0.1	0.1	0.2	Z	0.9	0.5	0.3	0.2	0.3	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.4	1.4	1.2	0.3	0.5	1.1	0.4	1.4
13-Sep	Z	0.9	0.5	0.4	0.4	0.7	0.9	1.0	0.7	0.6	0.7	0.5	0.8	0.8	1.2	1.2	1.0	1.1	1.3	2.0	2.1	2.3	0.8	0.7	1.0	2.3
14-Sep	1.1	Z	3.3	5.2	3.7	1.7	1.3	1.8	2.1	1.3	1.0	1.1	1.4	1.1	1.2	1.7	1.5	1.1	1.0	2.3	3.1	3.5	3.0	2.1	2.0	5.2
15-Sep	1.2	0.8	Z	0.7	0.9	0.4	0.3	0.4	0.5	0.6	0.3	0.3	0.2	0.3	0.4	0.5	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.2	0.5	1.2
16-Sep	0.4	0.4	0.4	Z	0.6	2.2	2.9	2.3	1.2	0.8	1.4	1.6	0.8	0.3	0.3	1.1	0.5	0.3	0.3	0.4	0.4	0.3	0.2	0.2	0.8	2.9
17-Sep	0.3	0.3	0.2	0.2	Z	0.4	0.6	1.1	1.2	1.3	1.3	1.1	0.6	1.0	1.3	1.6	1.9	2.0	3.3	2.6	2.5	1.1	0.9	1.0	1.2	3.3
18-Sep	0.6	0.6	0.4	0.4	0.3	Z	0.5	0.3	0.4	0.3	0.2	0.2	0.3	0.8	0.7	0.5	0.5	1.3	3.5	3.9	2.5	1.7	0.9	0.6	0.9	3.9
19-Sep	Z	0.4	0.4	0.6	0.4	0.4	1.4	1.4	1.1	0.8	0.5	0.7	0.5	0.6	0.5	0.6	0.9	0.8	0.7	0.7	0.9	1.4	4.1	3.9	1.0	4.1
20-Sep	6.0	Z	1.0	2.4	1.4	1.8	1.6	1.7	1.3	1.1	0.5	0.5	0.5	0.7	0.9	0.6	0.8	1.0	3.7	2.9	3.3	4.0	4.3	3.0	2.0	6.0
21-Sep	1.2	0.9	Z	1.9	1.4	1.5	1.4	1.4	1.1	1.0	1.2	1.6	1.9	1.0	0.9	1.0	1.1	1.1	1.1	3.3	2.7	4.9	1.6	1.7	1.6	4.9
22-Sep	1.9	1.4	1.5	Z	1.4	1.5	1.5	1.8	1.7	1.4	1.4	0.6	0.4	0.2	0.3	0.3	0.5	0.5	1.4	1.8	0.6	0.6	0.6	0.5	1.0	1.9
23-Sep	0.5	0.6	0.5	0.3	Z	0.5	0.9	0.8	1.2	1.0	0.6	0.7	0.7	0.8	0.8	0.4	0.4	0.5	0.9	0.4	0.3	0.3	0.8	0.5	0.6	1.2
24-Sep	0.6	0.6	0.6	0.4	0.3	Z	0.3	0.3	0.3	0.5	0.6	0.5	0.6	0.4	0.4	0.4	0.4	0.7	1.3	3.0	1.9	1.9	1.8	1.9	0.9	3.0
25-Sep	Z	1.5	1.1	0.8	0.7	1.5	0.8	0.8	0.6	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.6	0.3	0.2	0.4	0.4	0.6	1.5
26-Sep	0.5	Z	3.0	2.7	3.7	0.7	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.4	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.6	3.7
27-Sep	0.1	0.1	Z	0.4	0.4	1.0	1.1	0.8	0.7	0.6	0.5	0.4	0.3	0.4	0.4	0.3	0.4	0.6	0.8	0.5	0.7	0.6	0.6	1.2	0.6	1.2
28-Sep	1.2	0.9	0.5	Z	1.1	1.9	1.8	1.1	0.7	0.4	0.4	0.3	0.6	1.0	1.4	1.7	1.5	0.9	1.8	3.0	2.0	2.6	1.0	1.0	1.3	3.0
29-Sep	0.8	0.8	0.7	0.8	Z	0.9	0.8	0.8	0.6	0.6	0.5	0.5	0.4	0.3	0.2	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.5	0.9
30-Sep	0.2	0.2	0.3	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	0.1	0.4	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.4
	0.8	0.6	0.7	0.9	0.8	0.9	0.9	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7	1.0	1.3	1.1	1.1	0.9	0.8	Diurnal Average	
	6.0	1.5	3.3	5.2	3.7	2.2	2.9	4.1	3.6	3.1	2.3	1.8	2.0	1.6	2.4	1.7	1.9	2.0	3.7	3.9	3.3	4.9	4.3	3.9	Diurnal Maximum	

Z - zerospan C - Calibration

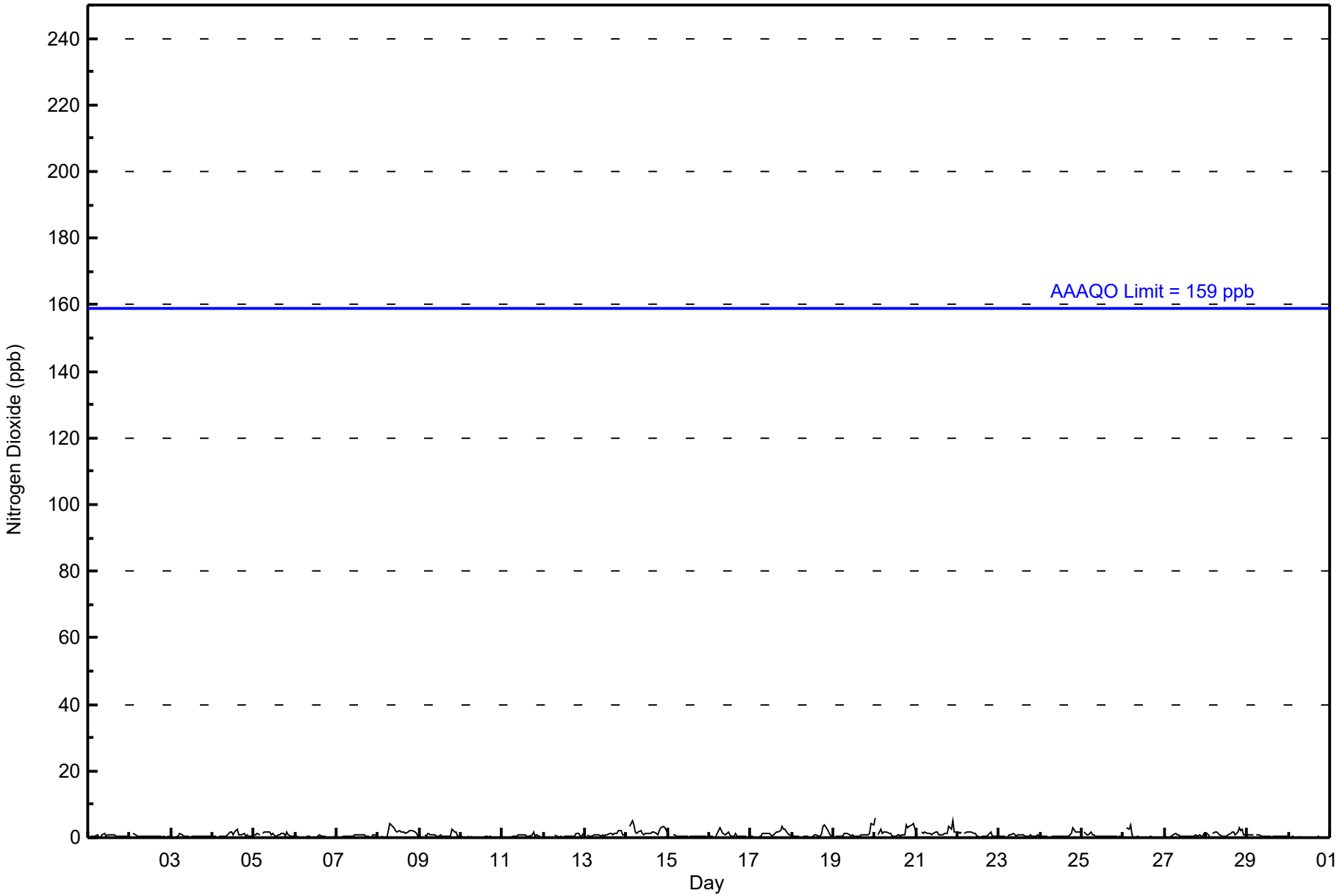
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Surmont 2 - September 2026



Nitrogen Dioxide (NO_2) - ppb

Surmont 2 - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Surmont 2 - September 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	13	12	2	4	14	68	57	26	19	18	25	139	112	64	28	46	647
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	13	12	2	4	14	68	57	26	19	18	25	139	112	64	28	46	647

Total Number of Valid Hours: 647

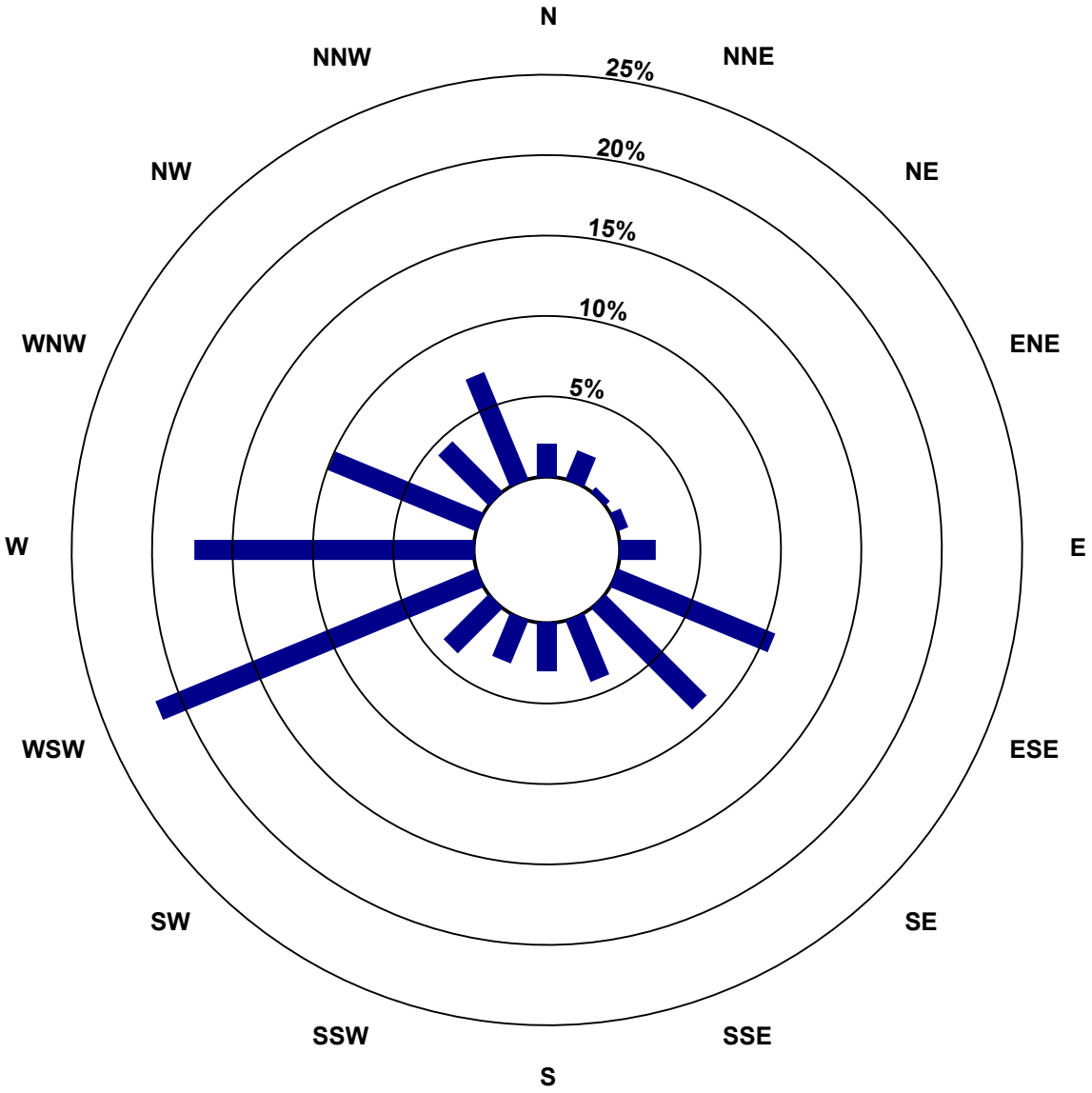
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Surmont 2



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

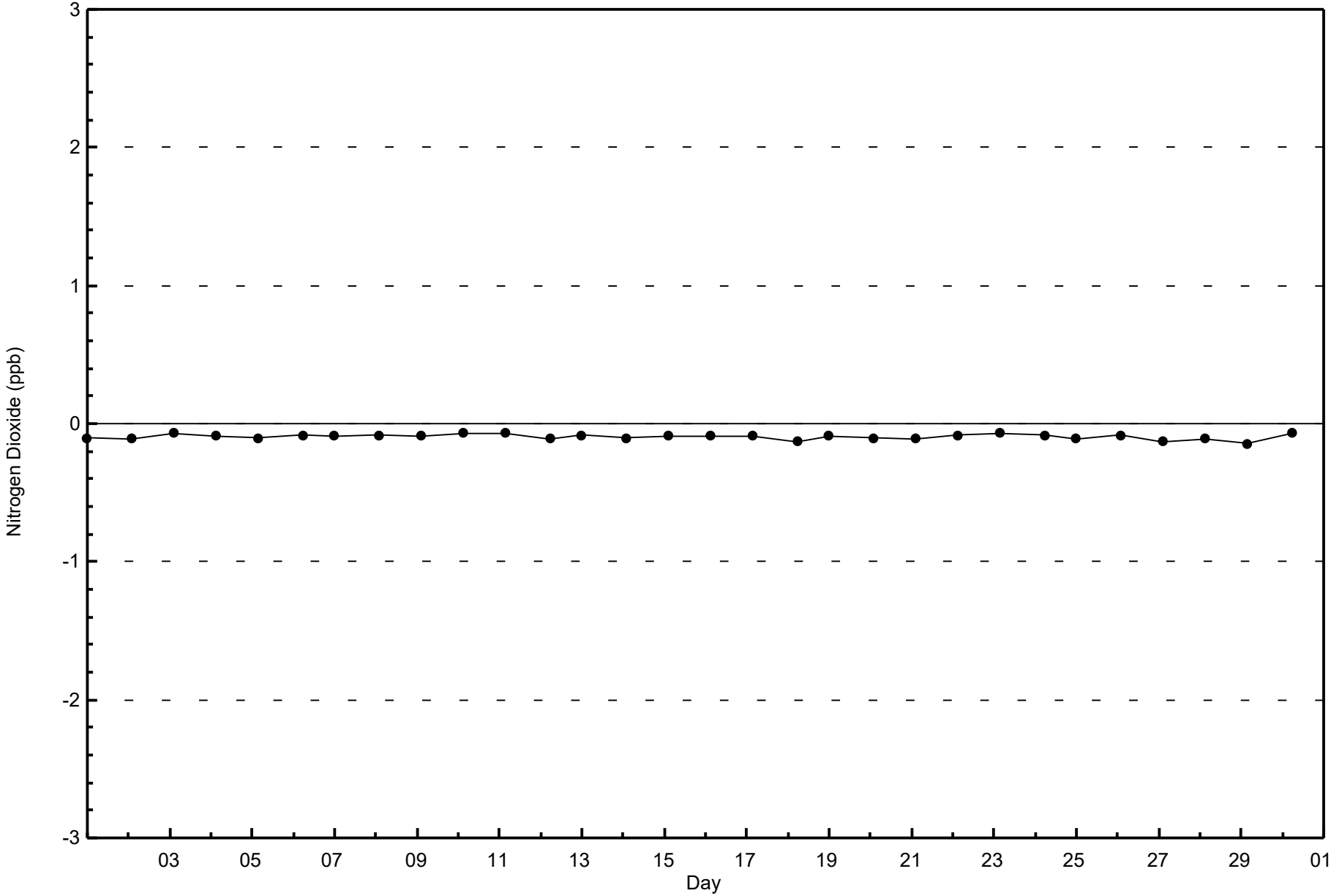
Total Number of Valid Hours: 647

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Surmont 2 - September 2026

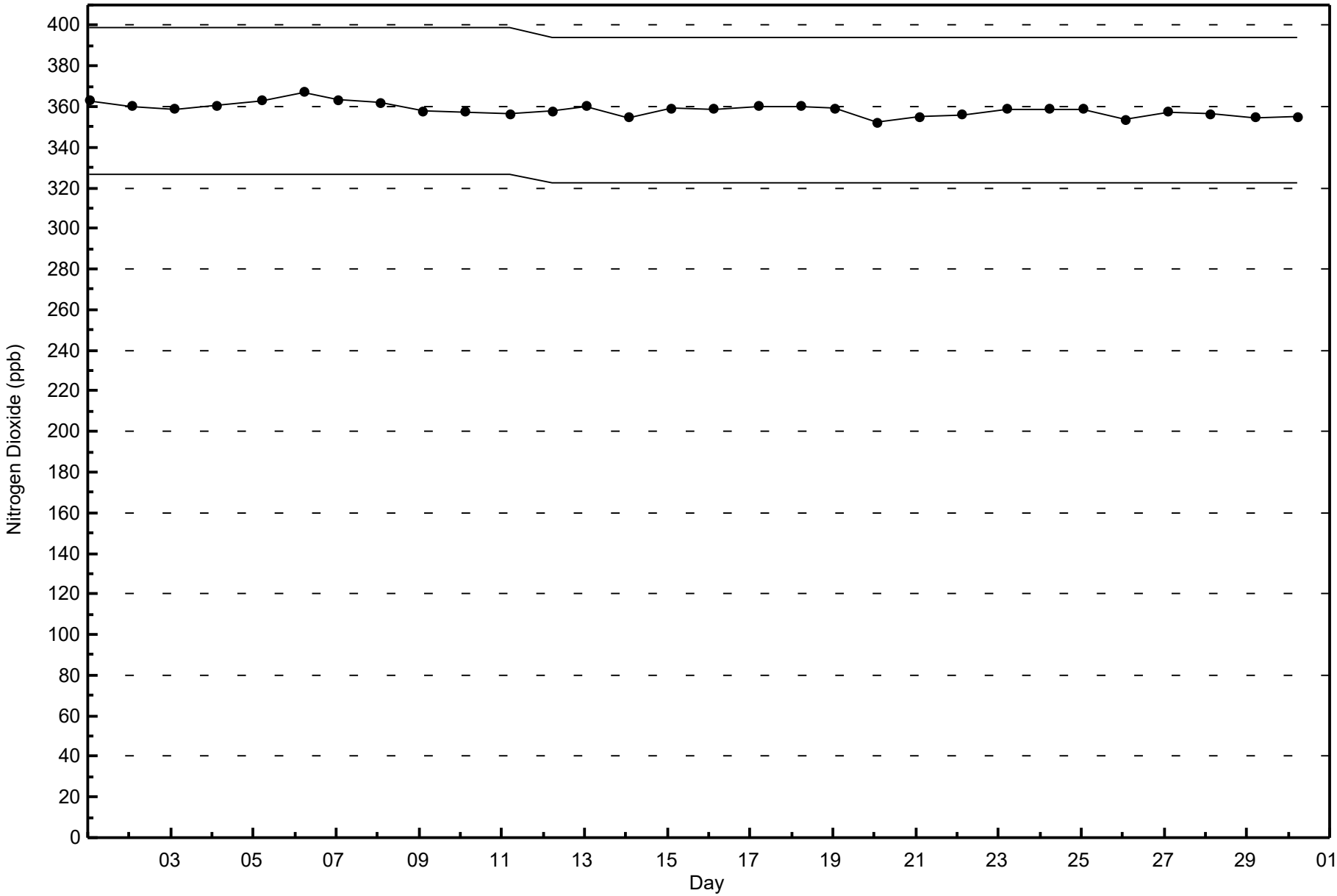


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Surmont 2 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Surmont 2 - September 2026

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

Maximum Value: 6.0 ppb on Sep 20 01:00

Maximum Daily Average: 2.2 ppb on Sep 14

Minimum Value: 0.1 ppb on Sep 11 03:00

Minimum Daily Average: 0.2 ppb on Sep 30

Maximum Diurnal Average: 1.3 ppb at hour 20

Minimum Diurnal Average: 0.6 ppb at hour 2

Monthly Average: 0.92 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.3$ Median = 0.6 $Q_3 = 1.2$ $P_{90} = 2.0$ $P_{99} = 4.1$

Hours in Service:	720
Hours of Data:	684
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-Sep	Z	0.5	0.4	0.4	0.5	1.6	0.3	0.3	0.9	1.4	0.6	1.1	0.8	1.0	1.0	0.8	0.5	0.4	0.3	0.3	0.4	0.4	0.6	0.4	0.6	1.6
2-Sep	0.4	Z	1.1	0.9	0.5	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	0.2	0.3	0.2	0.3	0.2	0.4	1.1
3-Sep	0.2	0.3	Z	0.3	0.6	1.1	0.7	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.3	0.3	0.4	1.1
4-Sep	0.5	0.4	0.3	Z	0.3	0.3	0.7	0.5	0.7	1.4	2.1	1.8	0.8	1.7	2.9	1.3	1.2	1.1	1.1	0.4	0.7	0.6	0.6	0.5	1.0	2.9
5-Sep	0.9	1.0	1.1	1.0	Z	1.4	1.7	2.2	2.5	2.2	1.0	1.6	0.6	0.5	0.9	1.1	1.3	1.2	0.6	1.8	0.7	0.5	0.4	0.7	1.2	2.5
6-Sep	0.9	0.7	0.4	0.4	0.3	Z	0.7	0.5	0.3	0.2	0.2	0.3	0.2	0.4	1.1	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.3	0.4	1.1
7-Sep	Z	0.2	0.2	0.2	0.6	0.6	0.6	0.5	0.5	0.9	1.1	0.9	0.9	0.9	1.2	0.9	0.8	0.6	0.3	0.2	0.2	0.9	1.3	0.5	0.7	1.3
8-Sep	0.3	Z	0.3	0.2	0.2	0.2	2.5	5.9	5.2	4.3	3.4	2.5	2.7	2.1	2.2	1.7	1.6	1.8	2.4	2.1	2.1	1.5	1.1	0.6	2.0	5.9
9-Sep	0.4	0.4	Z	0.7	0.5	1.1	1.0	1.0	1.0	0.9	0.7	0.5	1.1	0.4	0.5	0.4	0.6	0.5	0.5	2.5	1.8	1.7	0.5	0.4	0.8	2.5
10-Sep	0.3	0.2	0.2	Z	0.4	0.2	0.4	C	C	C	C	C	C	0.2	0.3	0.3	0.2	0.4	0.1	0.2	0.1	0.1	0.1	0.1	--	0.4
11-Sep	0.1	0.1	0.1	0.1	Z	0.2	0.3	0.3	0.6	0.9	0.9	1.2	1.4	0.9	0.5	0.3	0.4	1.0	1.5	0.5	0.8	0.6	0.2	0.1	0.6	1.5
12-Sep	0.1	0.1	0.1	0.1	0.2	Z	1.3	0.7	0.4	0.2	0.3	0.2	0.4	0.4	0.3	0.4	0.4	0.3	0.4	1.4	1.2	0.3	0.5	1.1	0.5	1.4
13-Sep	Z	0.9	0.5	0.4	0.4	0.7	1.0	1.2	0.9	0.7	0.8	0.6	1.0	1.0	1.4	1.4	1.1	1.2	1.3	2.0	2.1	2.3	0.8	0.7	1.1	2.3
14-Sep	1.1	Z	3.3	5.2	3.7	1.8	1.3	2.0	2.4	1.6	1.3	1.4	1.8	1.5	1.4	2.2	1.6	1.2	1.0	2.3	3.1	3.5	3.0	2.1	2.2	5.2
15-Sep	1.2	0.8	Z	0.7	0.9	0.4	0.4	0.6	0.7	0.8	0.3	0.3	0.2	0.3	0.4	0.5	0.5	0.4	0.3	0.4	0.3	0.4	0.3	0.2	0.5	1.2
16-Sep	0.4	0.4	0.4	Z	0.6	2.2	3.0	2.7	1.8	1.2	2.3	2.4	1.2	0.3	0.3	1.4	0.6	0.3	0.3	0.4	0.4	0.3	0.2	0.2	1.0	3.0
17-Sep	0.3	0.3	0.2	0.2	Z	0.4	0.6	1.3	1.7	1.9	2.0	1.5	0.7	1.1	1.5	1.8	2.2	2.1	3.5	2.6	2.8	1.1	0.9	1.0	1.4	3.5
18-Sep	0.7	0.6	0.5	0.4	0.4	Z	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.9	0.8	0.6	0.6	1.4	3.7	3.9	2.5	1.7	0.9	0.6	1.0	3.9
19-Sep	Z	0.4	0.4	0.6	0.4	0.4	1.5	1.7	1.4	0.9	0.6	0.8	0.6	0.6	0.5	0.6	0.9	0.8	0.7	0.7	0.9	1.4	4.1	3.9	1.1	4.1
20-Sep	6.0	Z	1.0	2.4	1.4	1.8	1.6	1.9	1.4	1.2	0.5	0.5	0.6	0.8	1.1	0.6	0.9	1.0	3.7	2.9	3.3	4.0	4.3	3.0	2.0	6.0
21-Sep	1.2	0.9	Z	1.9	1.4	1.5	1.4	1.7	1.2	1.1	1.3	1.8	2.1	1.1	1.0	1.1	1.2	1.1	1.1	3.3	2.8	5.0	1.6	1.7	1.7	5.0
22-Sep	1.9	1.4	1.5	Z	1.4	1.5	1.8	3.2	1.9	1.6	1.6	0.7	0.5	0.3	0.3	0.4	0.6	0.5	1.4	1.8	0.6	0.6	0.6	0.5	1.2	3.2
23-Sep	0.5	0.6	0.5	0.3	Z	0.5	1.1	1.8	2.9	2.6	0.7	0.8	0.8	0.9	0.9	0.4	0.4	0.5	0.9	0.4	0.3	0.3	0.8	0.5	0.8	2.9
24-Sep	0.6	0.6	0.6	0.4	0.3	Z	0.3	0.4	0.4	0.6	0.6	0.5	0.7	0.5	0.4	0.4	0.4	0.7	1.3	3.0	1.9	1.9	1.8	1.9	0.9	3.0
25-Sep	Z	1.5	1.1	0.8	0.7	1.5	0.8	0.8	0.6	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.6	0.3	0.2	0.4	0.4	0.6	1.5
26-Sep	0.5	Z	3.0	2.7	3.7	0.7	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.4	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.6	3.7
27-Sep	0.1	0.1	Z	0.4	0.4	1.0	1.1	0.9	0.9	0.8	0.6	0.5	0.4	0.5	0.4	0.4	0.4	0.6	0.8	0.5	0.7	0.6	0.6	1.2	0.6	1.2
28-Sep	1.2	0.9	0.5	Z	1.1	1.9	1.8	1.2	0.8	0.4	0.4	0.3	0.8	1.2	1.6	1.9	1.7	0.9	1.8	3.0	2.0	2.6	1.0	1.0	1.3	3.0
29-Sep	0.8	0.8	0.7	0.8	Z	0.9	0.8	0.8	0.6	0.6	0.5	0.6	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.5	0.9
30-Sep	0.2	0.2	0.3	0.2	0.2	Z	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.5	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.5
	0.8	0.6	0.8	0.9	0.8	1.0	1.0	1.2	1.1	1.0	0.9	0.9	0.8	0.7	0.8	0.8	0.7	0.7	1.0	1.3	1.1	1.1	0.9	0.8	Diurnal Average	
	6.0	1.5	3.3	5.2	3.7	2.2	3.0	5.9	5.2	4.3	3.4	2.5	2.7	2.1	2.9	2.2	2.2	2.1	3.7	3.9	3.3	5.0	4.3	3.9	Diurnal Maximum	

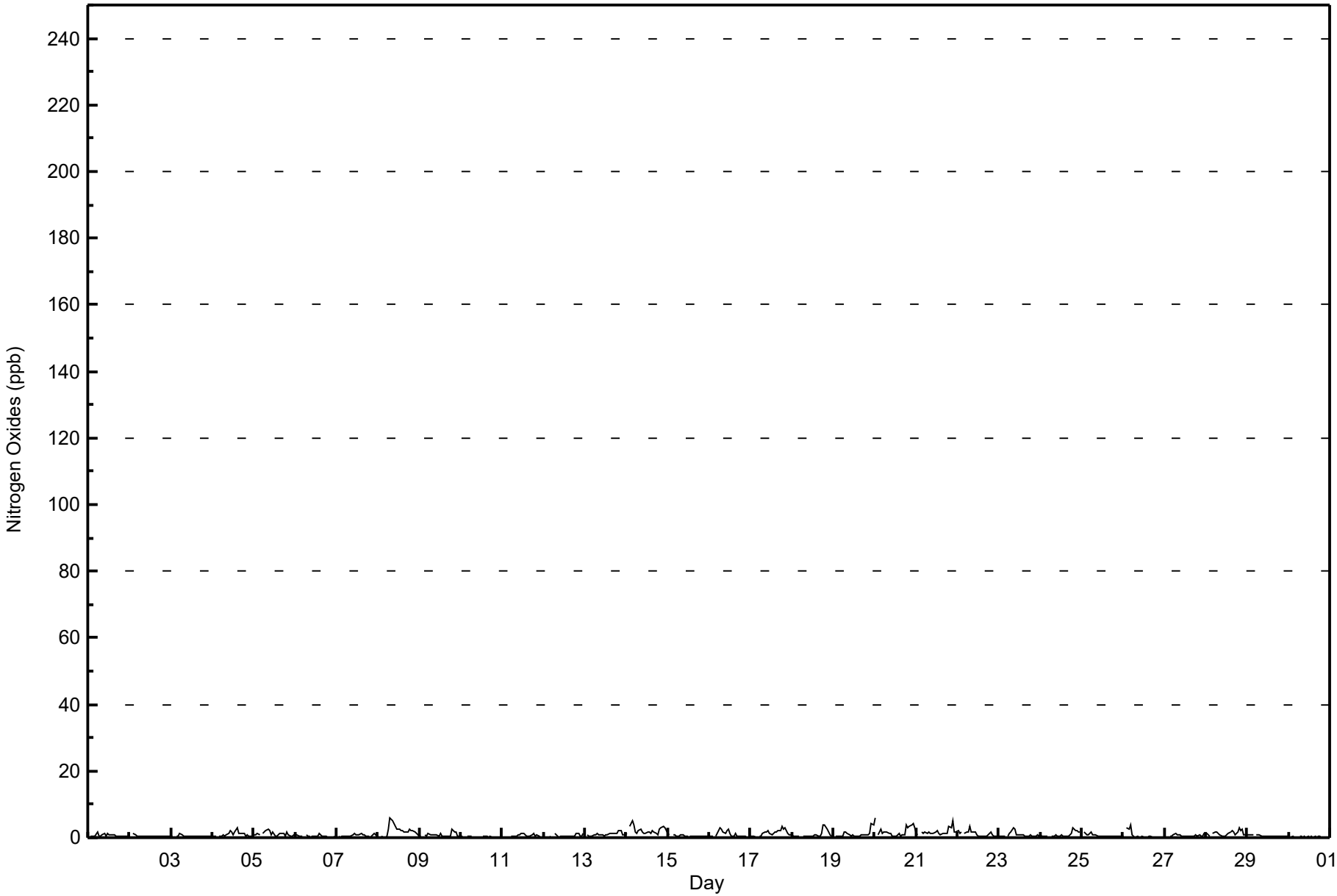
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Surmont 2 - September 2026



Nitrogen Oxides (NO_X) - ppb

Surmont 2 - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Surmont 2 - September 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	13	12	2	4	14	68	57	26	19	18	25	139	112	64	28	46	647
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	13	12	2	4	14	68	57	26	19	18	25	139	112	64	28	46	647

Total Number of Valid Hours: 647

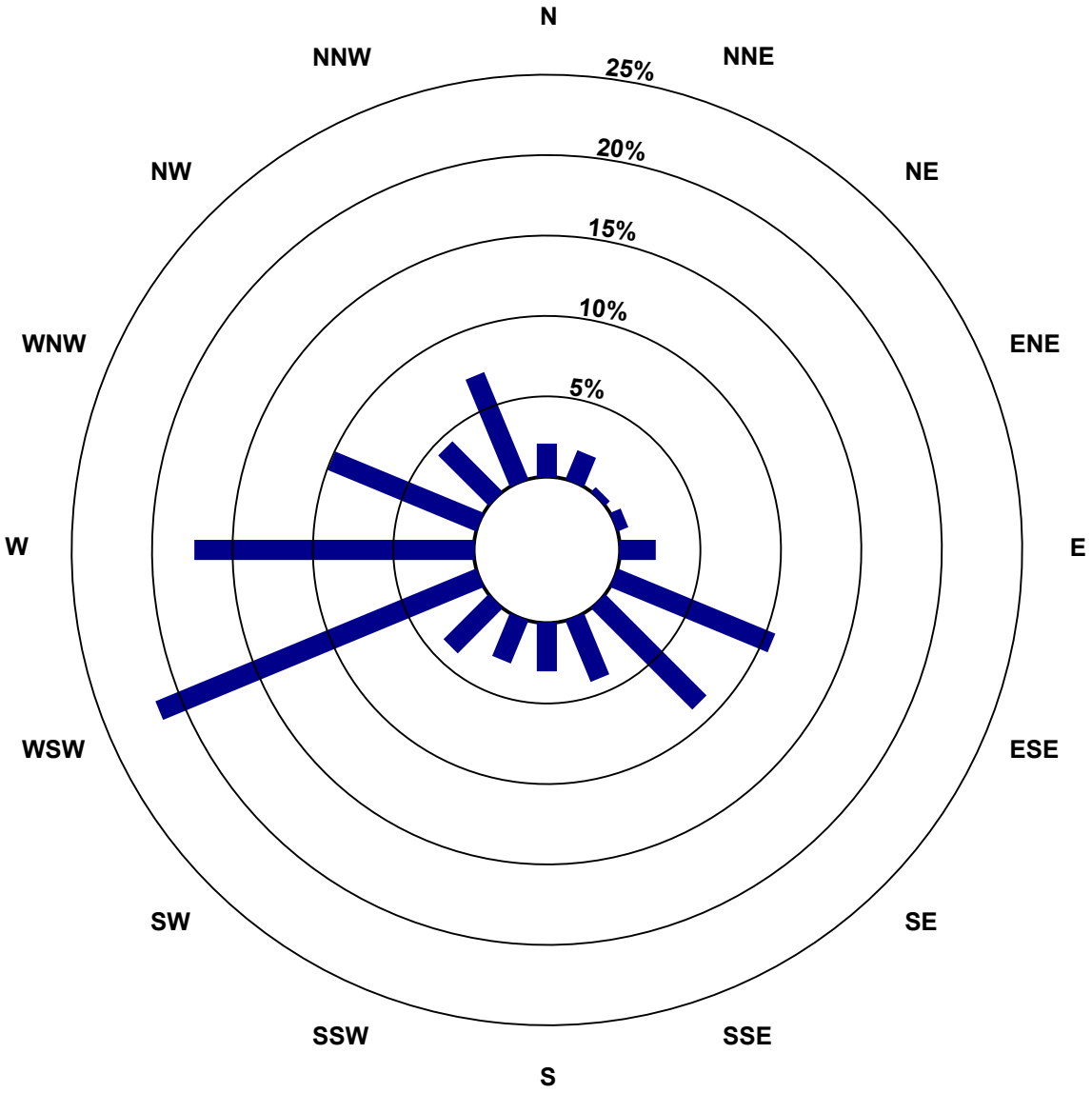
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Surmont 2



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

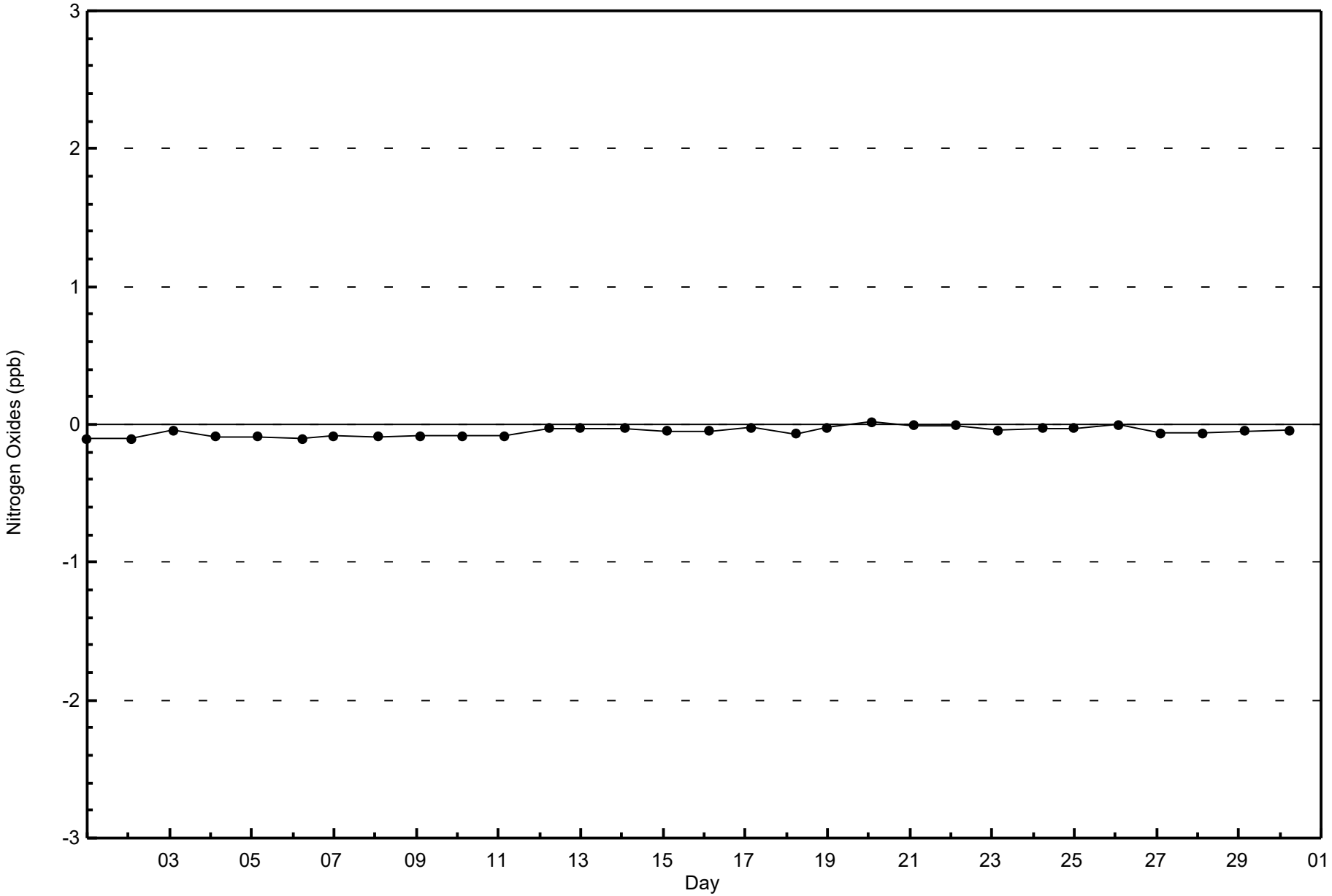
Total Number of Valid Hours: 647

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Surmont 2 - September 2026

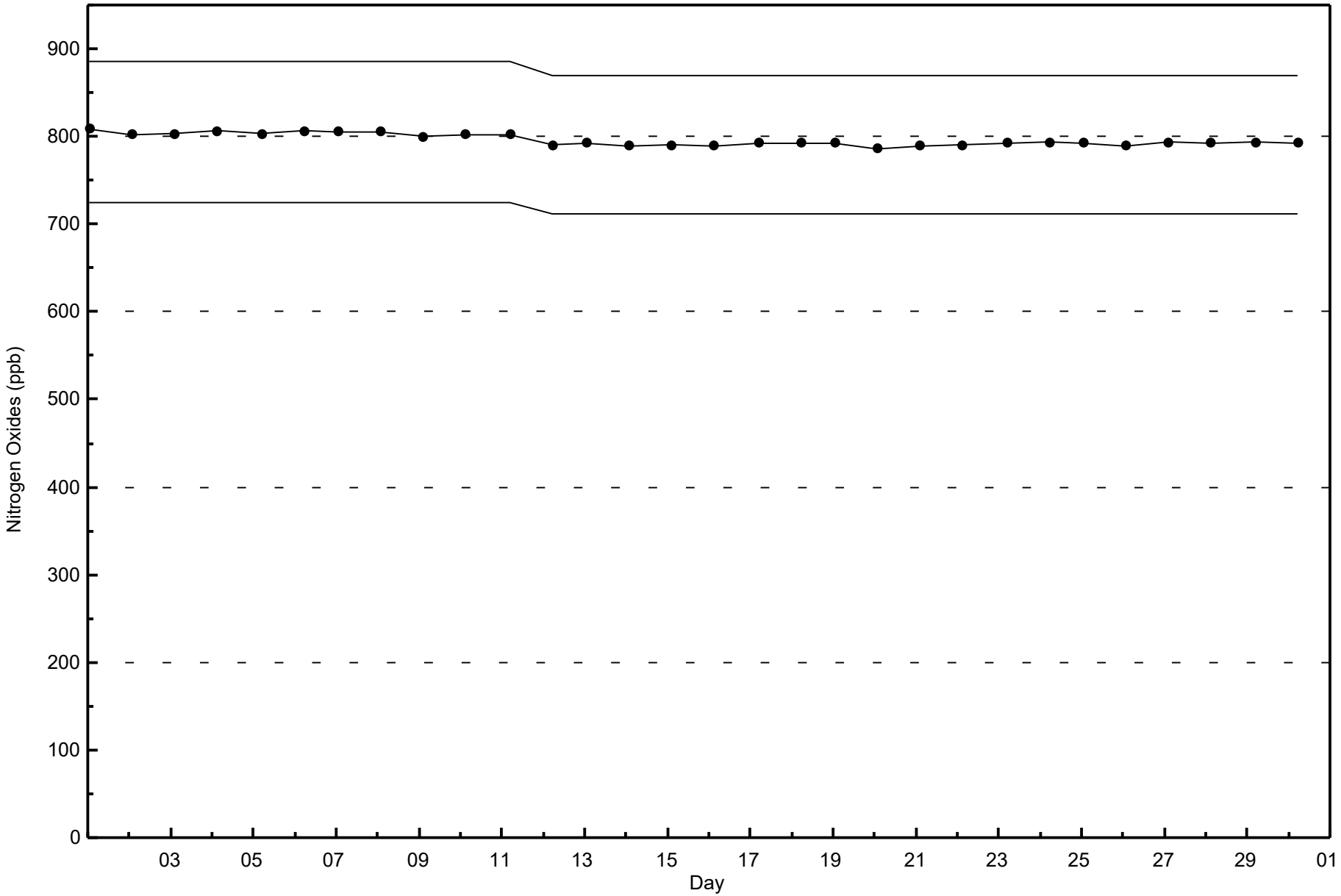


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Surmont 2 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Surmont 2 - September 2026

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

Maximum Value: 35.6 $\mu g/m^3$ on Sep 22 19:00

Maximum Daily Average: 8.9 $\mu g/m^3$ on Sep 22

Minimum Value: 0.1 $\mu g/m^3$ on Sep 30 10:00

Minimum Daily Average: 0.5 $\mu g/m^3$ on Sep 30

Maximum Diurnal Average: 5.9 $\mu g/m^3$ at hour 19

Minimum Diurnal Average: 3.3 $\mu g/m^3$ at hour 10

Monthly Average: 3.66 $\mu g/m^3$

Percentiles: P_1 = 0.1 P_{10} = 0.9 Q_1 = 2.1 Median = 3.0 Q_3 = 4.9 P_{90} = 6.4 P_{99} = 13.4

Hours in Service:	720
Hours of Data:	719
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-Sep	5.2	5.2	5.0	5.4	4.3	5.5	3.6	3.0	3.0	3.3	3.1	2.8	2.7	2.7	2.6	2.5	2.2	1.9	2.1	2.6	2.6	2.9	3.1	3.0	3.3	5.5
2-Sep	3.0	3.2	3.8	4.2	4.7	5.4	5.9	6.0	5.5	5.1	4.8	4.4	4.0	3.8	3.5	3.7	3.6	4.2	4.7	5.1	5.2	5.8	5.9	5.8	4.6	6.0
3-Sep	5.5	5.2	4.9	4.7	4.8	5.7	5.3	5.0	4.9	4.6	4.5	4.2	4.2	4.4	4.4	3.6	3.7	4.0	4.7	5.1	5.1	6.2	5.6	5.3	4.8	6.2
4-Sep	5.5	5.4	5.1	5.7	5.8	5.6	5.9	5.5	5.1	3.6	4.1	3.8	3.3	5.8	6.9	3.3	2.8	2.3	1.5	1.1	1.5	1.6	1.9	2.3	4.0	6.9
5-Sep	2.7	2.9	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.4	2.5	2.6	2.7	2.9	3.0	3.1	3.6	4.3	8.7	13.9	9.8	6.4	6.5	4.1	13.9
6-Sep	6.0	5.6	5.5	5.3	3.7	3.2	4.0	3.2	2.4	1.7	2.2	2.1	2.2	2.5	2.7	2.8	2.8	2.6	2.1	1.8	2.2	2.4	2.5	2.5	3.1	6.0
7-Sep	2.6	2.7	2.8	4.6	3.2	4.5	3.2	2.9	3.7	3.9	4.0	3.5	4.1	4.6	4.3	3.3	3.2	3.2	2.7	2.5	2.9	4.6	5.1	3.9	3.6	5.1
8-Sep	3.4	3.3	3.2	3.3	3.4	3.6	5.2	7.2	7.3	7.6	7.3	7.2	6.8	6.4	7.9	9.4	10.5	13.2	33.7	14.9	13.4	9.1	7.6	6.6	8.4	33.7
9-Sep	5.2	5.0	5.3	5.7	5.6	5.9	5.4	6.2	5.6	5.3	5.2	4.9	4.6	4.7	5.1	4.0	4.0	3.4	3.2	2.9	2.7	2.7	2.9	2.7	4.5	6.2
10-Sep	2.0	1.2	1.0	1.0	1.3	1.2	2.2	2.4	3.3	3.0	11.1	17.8	16.0	11.5	11.4	11.2	9.9	7.4	4.0	1.7	0.8	0.9	0.7	0.8	5.2	17.8
11-Sep	1.1	1.2	1.2	0.8	0.6	0.5	0.6	0.8	1.0	1.3	1.4	2.2	2.6	2.6	1.8	1.3	2.4	3.4	4.5	3.6	4.1	3.9	2.9	2.6	2.0	4.5
12-Sep	2.3	2.0	2.1	2.3	2.3	1.9	2.5	2.5	2.3	2.0	1.5	2.1	2.3	2.3	2.2	3.1	3.5	3.7	2.9	3.8	3.4	2.6	2.6	2.6	2.5	3.8
13-Sep	2.7	2.8	2.7	2.7	3.1	3.4	3.6	3.9	4.1	4.1	3.2	3.3	3.4	3.1	3.1	3.1	3.4	4.1	4.4	4.2	3.7	3.5	3.3	3.4	3.4	4.4
14-Sep	3.9	4.1	4.4	6.6	3.5	1.6	0.8	1.8	2.6	2.3	2.5	2.5	2.9	2.7	2.5	2.8	2.8	1.8	1.0	3.0	2.7	2.8	3.1	3.0	2.8	6.6
15-Sep	2.6	2.7	2.4	2.6	3.1	2.8	2.3	1.9	2.5	2.0	1.8	2.0	2.1	2.8	2.6	2.3	2.1	2.2	2.1	2.0	2.0	1.9	1.8	1.8	2.3	3.1
16-Sep	2.0	2.1	2.1	1.9	2.3	3.7	4.7	4.3	3.2	2.7	2.3	2.2	2.2	2.3	2.5	3.8	2.9	2.3	2.4	2.5	2.6	2.5	2.5	2.7	2.7	4.7
17-Sep	2.8	3.0	2.9	3.0	3.0	3.1	3.3	3.3	3.5	3.5	3.4	3.7	5.1	5.3	4.3	4.9	5.5	8.9	9.8	7.6	7.9	6.0	5.0	5.2	4.8	9.8
18-Sep	4.9	4.4	3.9	3.9	4.0	4.6	5.9	4.9	4.7	2.7	2.4	2.3	2.7	3.3	2.8	3.0	5.6	4.2	11.6	5.7	6.2	4.8	4.3	3.4	4.4	11.6
19-Sep	2.9	2.9	3.1	3.2	2.7	2.5	2.7	2.6	2.4	2.4	2.6	2.7	2.7	3.1	3.4	3.7	4.1	4.5	4.5	4.7	5.1	5.1	5.3	5.2	3.5	5.3
20-Sep	5.2	5.5	5.5	5.6	5.8	5.7	5.8	6.2	6.0	5.2	3.6	3.6	3.4	3.4	3.6	3.9	4.8	5.9	10.5	8.0	5.6	5.5	5.4	5.5	5.4	10.5
21-Sep	5.8	6.0	6.6	7.2	7.2	7.0	6.8	6.4	6.3	5.8	6.4	8.2	8.2	7.2	6.2	5.9	6.2	6.8	6.6	6.5	6.7	6.4	6.4	6.5	6.6	8.2
22-Sep	6.6	6.5	6.5	6.6	7.7	9.6	9.6	9.7	7.5	7.7	8.4	4.4	3.5	3.5	3.3	5.2	5.8	9.2	35.6	29.8	8.0	6.8	7.1	5.2	8.9	35.6
23-Sep	3.3	3.5	3.2	2.6	3.4	4.9	6.1	7.2	8.4	8.7	1.9	2.4	2.7	2.5	2.5	2.4	2.3	2.5	4.4	2.6	2.6	3.1	4.6	4.2	3.8	8.7
24-Sep	2.9	2.5	2.3	2.2	1.9	2.1	2.6	3.1	C	2.7	3.1	1.3	1.5	1.7	1.9	2.0	2.8	6.5	6.2	11.3	5.3	4.8	5.1	5.6	3.5	11.3
25-Sep	5.7	4.5	3.8	3.5	3.0	2.6	2.3	1.2	0.9	1.0	1.1	1.5	2.4	2.7	2.7	2.9	2.8	2.8	2.9	3.0	3.0	3.0	3.3	3.4	2.8	5.7
26-Sep	3.5	3.2	3.2	2.7	2.9	0.6	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.3	0.5	0.8	0.9	0.9	3.5
27-Sep	0.9	1.0	1.1	0.8	0.8	0.8	0.7	0.9	1.2	1.3	1.4	1.4	1.6	2.0	1.8	2.0	1.8	1.4	1.3	1.0	0.9	0.8	1.0	0.9	1.2	2.0
28-Sep	1.1	1.0	0.8	0.9	0.8	0.8	0.8	0.8	1.2	1.1	1.0	1.3	1.3	1.2	1.4	1.3	1.2	1.2	1.0	1.2	1.8	1.9	1.6	1.5	1.2	1.9
29-Sep	1.4	1.6	1.5	1.6	3.0	2.1	1.1	0.7	0.6	0.3	0.4	0.8	0.7	0.4	0.5	0.6	0.6	0.6	0.6	0.8	0.8	0.7	0.8	0.9	1.0	3.0
30-Sep	1.1	1.1	1.2	1.3	1.3	1.3	0.5	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	0.3	0.3	0.4	0.4	0.5	1.3
	3.5	3.4	3.3	3.5	3.4	3.5	3.5	3.6	3.5	3.3	3.3	3.4	3.4	3.4	3.4	3.4	3.6	3.9	5.9	4.9	4.1	3.8	3.6	3.5	Diurnal Average	
	6.6	6.5	6.6	7.2	7.7	9.6	9.6	9.7	8.4	8.7	11.1	17.8	16.0	11.5	11.4	11.2	10.5	13.2	35.6	29.8	13.9	9.8	7.6	6.6	Diurnal Maximum	

C - Calibration

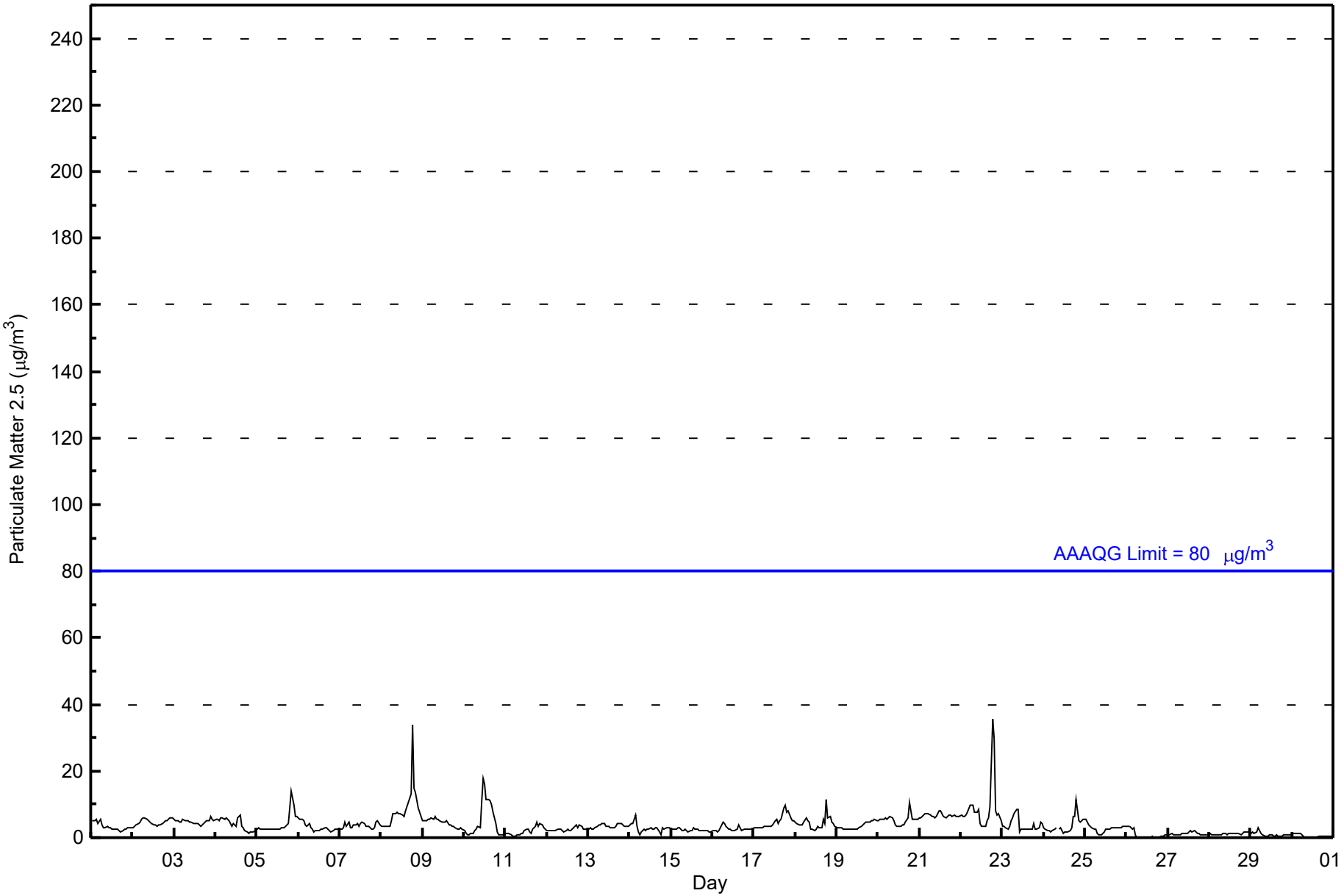
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Surmont 2 - September 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Surmont 2 - September 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	591	82.20	82.20
6 - 15	123	17.11	99.30
16 - 25	2	0.28	99.58
26 - 80	3	0.42	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

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

Surmont 2 - September 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	10	10	2	4	14	61	45	24	16	12	21	111	111	56	27	39	563
6 - 15	4	3	0	0	0	7	14	3	3	6	4	32	12	12	2	8	110
16 - 25	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
26 - 80	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	14	13	2	4	14	68	59	27	19	18	25	146	123	70	29	47	678

Total Number of Valid Hours: 678

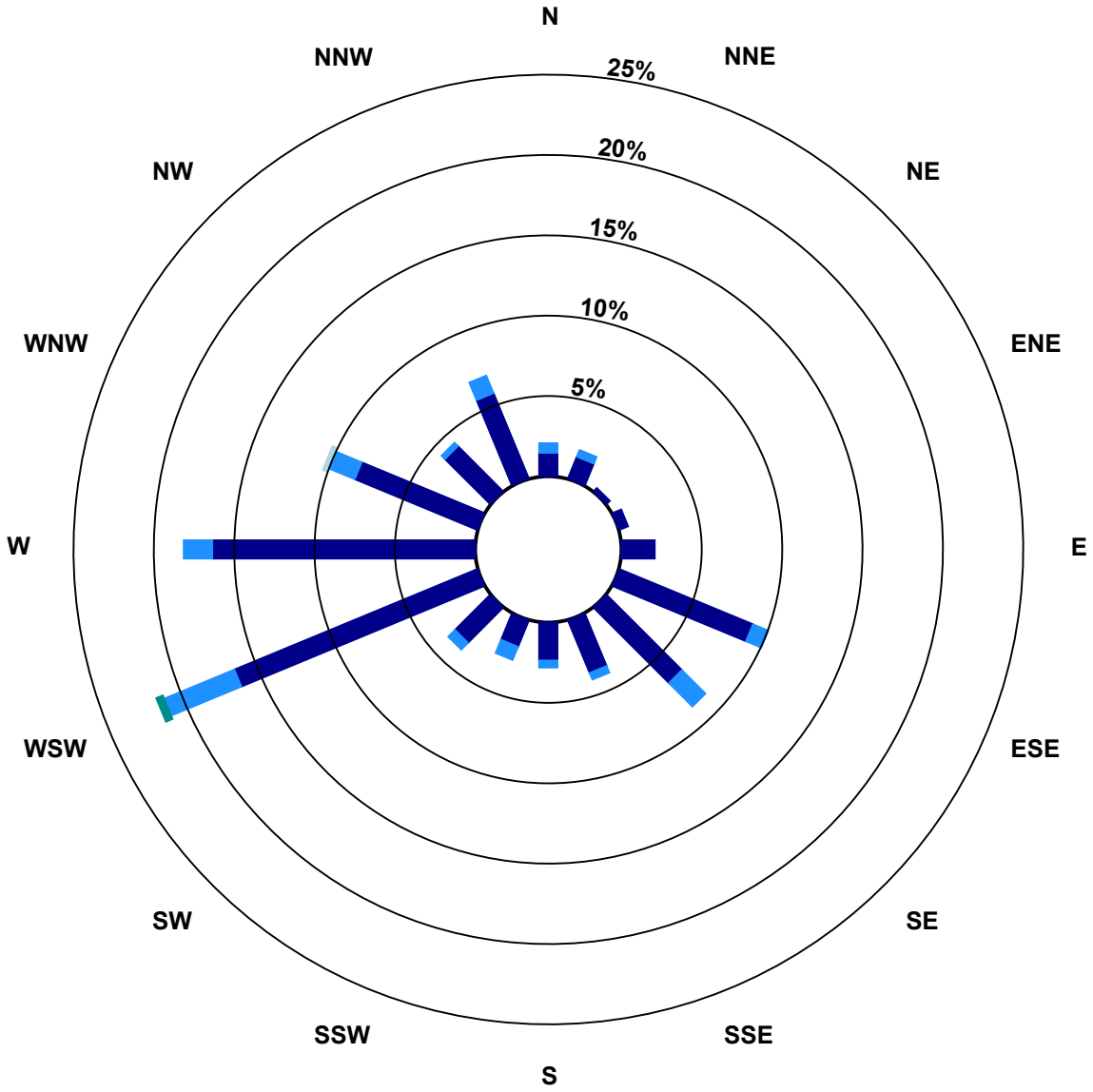
Total Number of Hours: 720

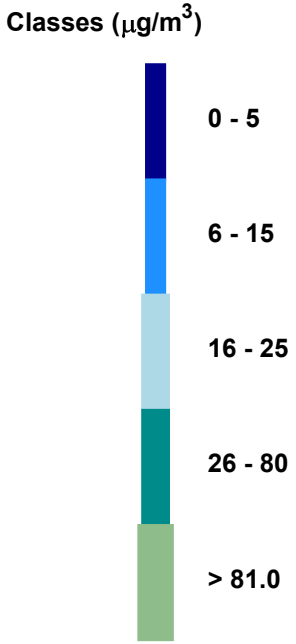
Wood Buffalo Environmental Association

Wind Rose Sep 2026

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

Surmont 2





Total Number of Valid Hours: 678

Maximum Value: 26.4 C on Sep 2 15:00

Maximum Daily Average: 18.6 C on Sep 2

Minimum Value: -1.3 C on Oct 1 00:00

Minimum Daily Average: 3.8 C on Sep 30

Maximum Diurnal Average: 16.3 C at hour 15

Minimum Diurnal Average: 6.9 C at hour 6

Monthly Average: 11.14 C

Percentiles: P_1 = 0.6 P_{10} = 4.7 Q_1 = 6.6 Median = 10.6 Q_3 = 15.1 P_{90} = 18.7 P_{99} = 24.7

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

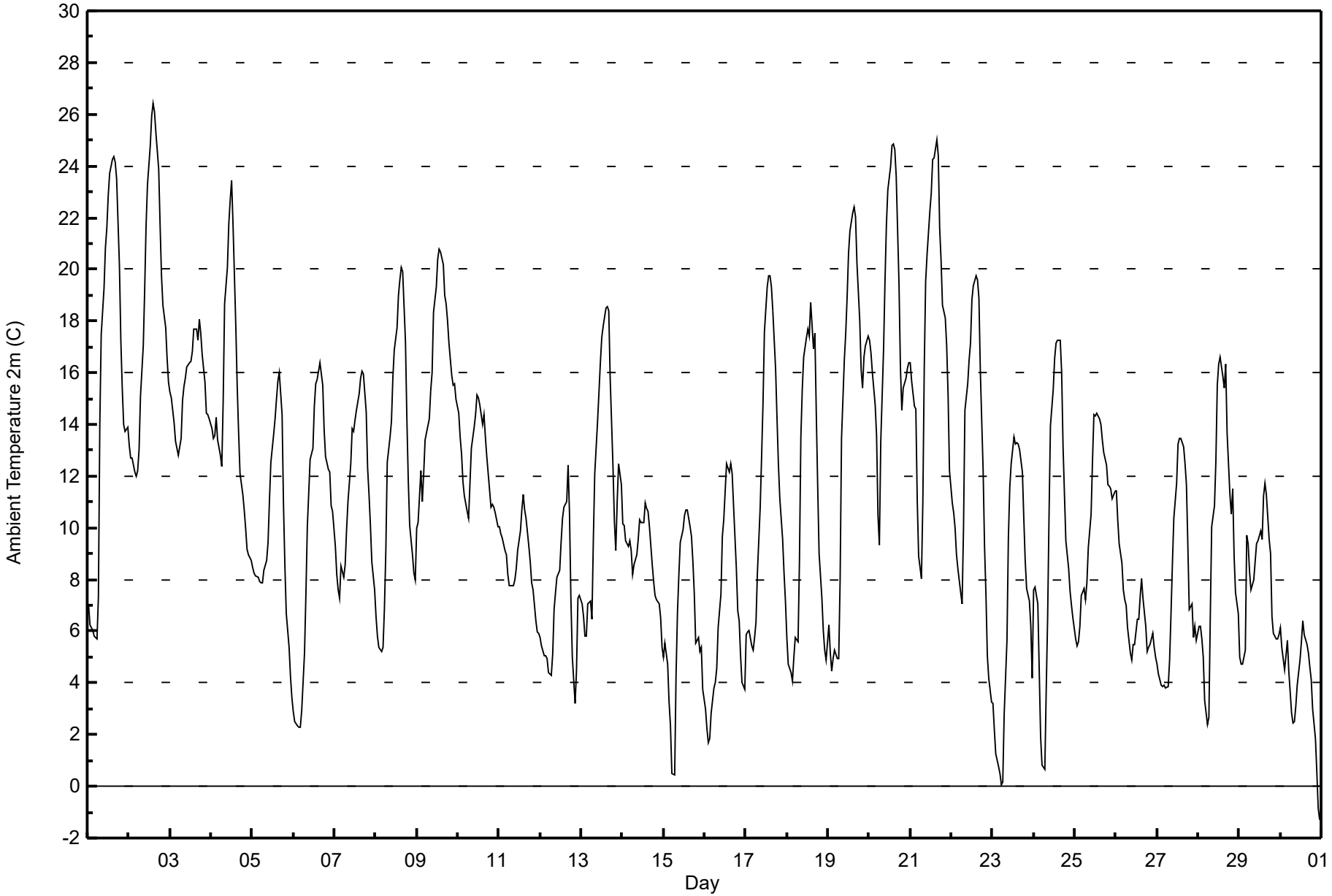
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	7.0	6.2	6.1	6.0	5.8	5.7	7.3	14.0	17.5	19.3	20.8	21.6	22.8	23.7	24.2	24.4	24.2	23.5	20.1	17.3	15.4	14.0	13.7	13.9	15.6	24.4
2-Sep	13.2	12.7	12.7	12.2	12.0	12.2	13.0	15.1	17.0	19.2	21.7	23.3	24.8	25.9	26.4	26.1	25.3	23.8	21.7	19.8	18.6	17.8	16.6	15.6	18.6	26.4
3-Sep	15.3	15.0	14.1	13.3	13.1	12.8	13.5	14.9	15.5	15.8	16.2	16.4	16.4	16.8	17.7	17.7	17.3	18.0	17.5	16.7	15.6	14.4	14.4	14.2	15.5	18.0
4-Sep	13.9	13.4	13.6	14.3	13.4	12.8	12.4	14.9	18.6	20.1	21.7	22.7	23.4	21.7	17.8	15.5	13.7	12.1	11.3	10.7	10.0	9.2	8.9	8.7	14.8	23.4
5-Sep	8.5	8.3	8.2	8.1	8.0	7.8	7.9	8.3	8.8	9.4	11.1	12.6	13.6	14.2	15.0	15.7	16.0	14.4	10.9	8.5	6.7	5.4	4.2	3.4	9.8	16.0
6-Sep	2.9	2.5	2.3	2.3	2.3	2.9	5.1	7.4	10.1	11.4	12.6	13.1	14.7	15.6	15.7	16.4	16.0	15.5	13.8	12.8	12.3	12.1	10.8	10.6	10.0	16.4
7-Sep	9.3	8.2	7.6	7.3	8.5	8.1	8.6	9.9	11.0	12.5	13.9	13.7	14.2	14.5	15.2	15.8	16.1	15.9	14.5	12.3	11.3	10.1	8.7	7.6	11.4	16.1
8-Sep	6.6	5.8	5.4	5.2	5.4	6.9	9.1	12.5	13.5	14.1	15.8	16.9	17.8	19.0	19.6	20.1	19.9	17.2	14.2	11.8	10.1	8.9	8.3	8.0	12.2	20.1
9-Sep	10.0	10.2	12.2	11.0	12.1	13.4	13.9	14.2	15.3	16.0	18.3	19.3	20.4	20.8	20.7	20.2	19.0	18.7	18.0	17.1	15.9	15.5	15.6	15.0	16.0	20.8
10-Sep	14.5	13.5	12.9	11.8	11.2	10.7	10.4	11.7	13.1	13.9	14.4	15.1	15.0	14.8	14.0	14.4	13.5	12.8	11.5	10.8	10.9	10.8	10.6	10.0	12.6	15.1
11-Sep	10.1	9.8	9.6	9.1	9.0	8.2	7.8	7.7	7.8	8.0	8.4	9.1	9.9	10.7	11.3	10.7	10.3	9.3	8.7	7.9	7.6	6.4	6.0	5.9	8.7	11.3
12-Sep	5.8	5.4	5.0	5.0	4.9	4.4	4.3	5.1	6.8	7.5	8.1	8.4	9.4	10.4	10.8	11.0	12.4	10.5	7.2	5.0	3.2	4.5	7.3	7.4	7.1	12.4
13-Sep	7.0	6.5	5.8	5.8	7.1	7.2	6.5	9.6	12.1	14.1	15.2	16.4	17.4	17.8	18.5	18.6	18.4	15.8	12.4	10.3	9.1	11.0	12.5	11.7	11.9	18.6
14-Sep	10.2	10.1	9.5	9.3	9.5	9.1	8.2	8.6	8.9	9.6	10.3	10.2	10.2	11.0	10.8	10.6	10.0	8.6	7.9	7.4	7.2	7.1	6.5	5.4	9.0	11.0
15-Sep	5.0	5.6	4.7	3.3	2.4	0.5	0.5	4.4	6.7	8.2	9.4	9.9	10.5	10.7	10.7	10.1	9.7	8.7	7.4	5.5	5.7	5.2	5.4	3.7	6.4	10.7
16-Sep	3.0	2.2	1.7	1.9	2.8	3.8	4.0	4.6	6.2	7.4	9.7	10.3	11.4	12.5	12.2	12.5	12.1	10.9	8.4	6.8	6.4	5.0	4.0	3.8	6.8	12.5
17-Sep	5.9	6.0	6.0	5.4	5.3	5.8	6.4	8.3	10.8	12.8	14.8	17.6	19.3	19.7	19.7	19.3	18.4	16.1	14.2	12.4	11.1	9.5	8.3	7.2	11.7	19.7
18-Sep	5.8	4.7	4.4	4.1	5.0	5.7	5.6	8.7	13.5	15.3	16.6	17.4	17.7	17.4	18.7	16.9	17.5	14.5	11.6	9.0	7.3	6.0	5.3	4.9	10.6	18.7
19-Sep	6.2	5.2	4.4	5.0	5.3	4.9	5.0	8.0	13.5	16.5	17.5	18.9	20.6	21.5	22.2	22.4	22.0	20.2	18.0	16.1	15.4	16.6	17.0	17.4	14.2	22.4
20-Sep	17.3	16.8	16.0	14.7	13.6	10.5	9.3	13.3	16.9	19.5	21.7	23.1	24.0	24.8	24.8	24.6	23.6	19.4	16.2	14.5	15.4	15.8	16.2	16.4	17.9	24.8
21-Sep	16.4	15.7	14.7	14.6	11.1	8.9	8.0	11.0	16.2	19.6	20.5	22.3	22.9	24.2	24.3	25.0	24.4	21.6	20.3	18.6	18.1	17.0	15.1	12.2	17.6	25.0
22-Sep	10.9	10.6	10.0	9.0	8.4	7.5	7.0	10.0	14.6	15.6	16.5	17.1	18.8	19.4	19.7	19.6	18.9	16.1	12.2	9.3	7.4	5.1	4.2	3.3	12.1	19.7
23-Sep	3.2	2.2	1.3	0.7	0.5	0.1	0.2	2.8	5.6	9.6	11.6	12.5	13.5	13.2	13.3	13.2	13.0	12.1	10.3	8.7	7.7	7.1	6.2	4.2	7.2	13.5
24-Sep	7.6	7.7	7.1	4.5	1.9	0.8	0.7	3.8	6.5	10.5	14.0	15.4	16.6	17.2	17.3	17.2	16.0	13.1	11.3	9.5	8.4	7.5	7.0	6.5	9.5	17.3
25-Sep	5.7	5.4	5.6	6.2	7.4	7.6	7.2	7.9	9.2	10.5	12.6	14.4	14.3	14.5	14.2	14.0	13.4	12.9	12.4	11.7	11.6	11.5	11.1	11.4	10.5	14.5
26-Sep	11.5	10.3	9.4	8.7	7.6	7.2	7.0	6.1	5.2	4.9	5.5	5.5	6.5	6.5	7.4	8.0	7.3	6.2	5.2	5.4	5.5	5.9	5.3	5.0	6.8	11.5
27-Sep	4.7	4.3	3.9	3.9	3.9	3.8	3.8	4.9	6.7	8.6	10.4	11.7	13.3	13.4	13.4	13.1	12.5	11.7	9.4	6.8	7.0	5.7	6.2	5.7	7.9	13.4
28-Sep	6.2	6.2	5.7	5.0	3.3	2.4	2.6	6.5	10.0	10.8	12.6	15.5	16.3	16.6	15.9	15.4	16.4	13.7	11.3	10.5	11.5	8.9	7.5	6.7	9.9	16.6
29-Sep	5.0	4.7	4.7	5.3	9.7	9.4	8.3	7.6	8.0	8.7	9.4	9.5	9.9	9.6	11.2	11.7	11.3	9.5	9.0	6.6	5.9	5.7	5.7	5.9	8.0	11.7
30-Sep	6.2	5.4	4.5	5.1	5.6	4.5	2.8	2.4	2.5	3.1	3.9	4.9	5.6	6.4	5.9	5.5	5.1	4.6	4.2	3.0	1.9	0.5	-0.9	-1.3	3.8	6.4
	8.5	8.0	7.6	7.3	7.2	6.9	6.9	8.8	10.9	12.4	13.8	14.8	15.7	16.1	16.3	16.2	15.8	14.2	12.4	10.8	10.0	9.3	8.9	8.3	Diurnal Average	
	17.3	16.8	16.0	14.7	13.6	13.4	13.9	15.1	18.6	20.1	21.7	23.3	24.8	25.9	26.4	26.1	25.3	23.8	21.7	19.8	18.6	17.8	17.0	17.4	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Surmont 2 - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	2	0.28	0.28
0 - 10	329	45.69	45.97
10 - 20	339	47.08	93.06
> 20	50	6.94	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Surmont 2 - September 2026

Maximum Value: 99.9 % on Sep 8 06:00

Maximum Daily Average: 90.3 % on Sep 7

Minimum Value: 26.9 % on Sep 20 15:00

Minimum Daily Average: 55.2 % on Sep 20

Maximum Diurnal Average: 92.8 % at hour 7

Minimum Diurnal Average: 53.4 % at hour 15

Monthly Average: 75.26 %

Percentiles: P_1 = 30.3 P_{10} = 46.8 Q_1 = 62.4 Median = 79.8 Q_3 = 91.8 P_{90} = 96.5 P_{99} = 99.1

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

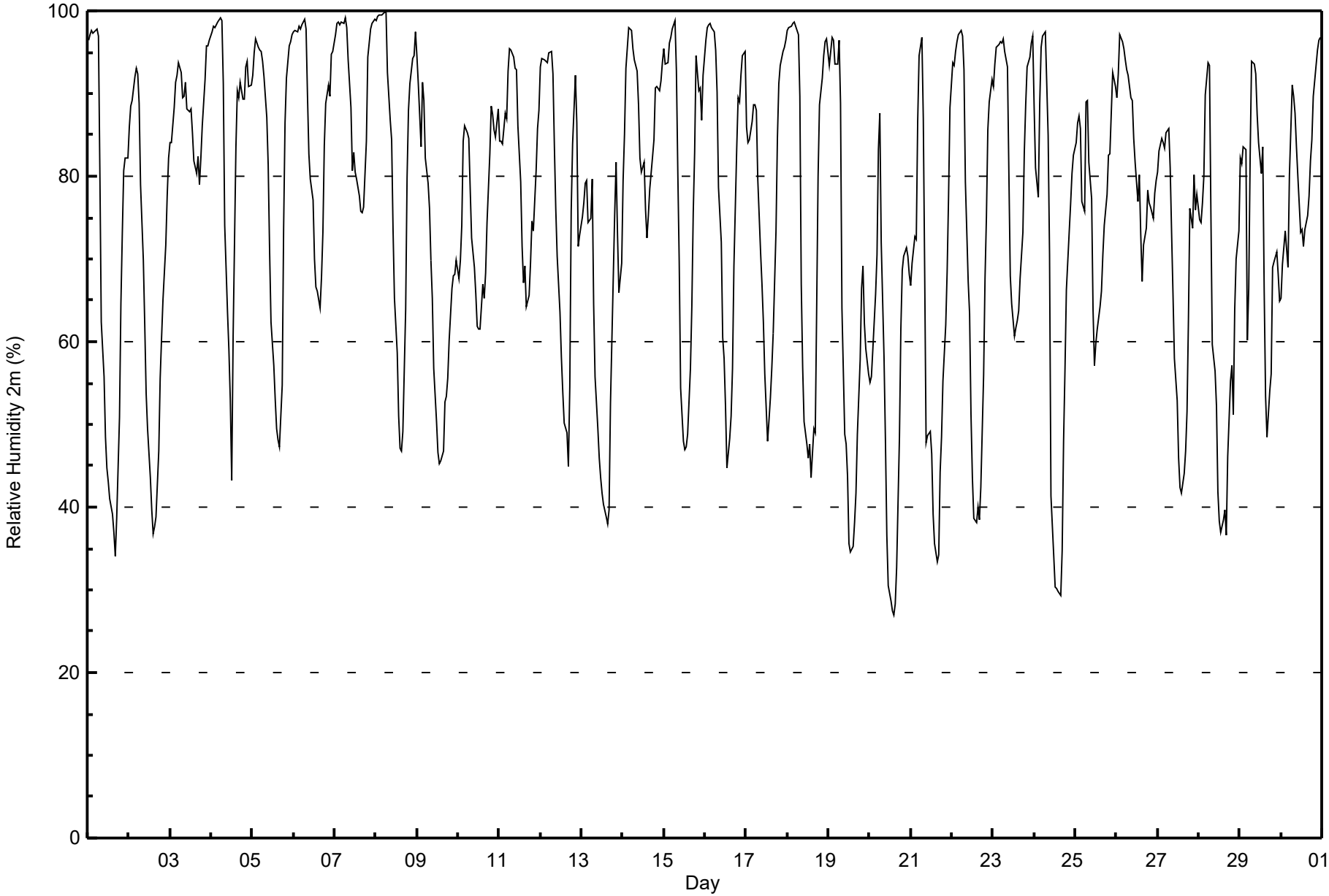
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	96.5	97.1	97.6	97.4	97.4	97.8	96.9	80.6	62.5	55.7	48.4	44.8	43.1	41.0	39.1	36.9	34.1	38.7	50.9	64.5	73.0	80.6	82.2	82.3	68.3	97.8
2-Sep	85.9	88.5	89.1	92.0	93.0	92.3	88.9	78.9	69.9	62.0	53.8	49.6	43.6	39.7	36.7	37.5	38.7	46.8	55.5	60.5	65.1	71.8	77.5	82.3	66.6	93.0
3-Sep	84.0	84.1	88.3	91.3	92.2	93.8	92.5	89.4	89.7	91.4	88.2	87.8	88.2	85.3	81.9	80.4	82.3	79.0	82.2	86.1	91.7	95.8	95.7	96.5	88.2	96.5
4-Sep	97.5	98.1	98.0	98.4	98.6	99.1	98.9	91.2	74.1	63.6	58.9	52.9	43.2	60.6	83.6	90.4	89.4	91.3	89.4	89.3	93.2	93.9	90.8	91.0	84.8	99.1
5-Sep	92.2	95.0	96.6	95.6	95.2	95.2	93.9	92.1	87.0	81.3	71.0	62.4	57.0	53.0	49.5	48.2	47.3	54.8	73.7	86.5	91.9	95.7	96.3	97.2	79.5	97.2
6-Sep	97.5	97.7	97.5	98.1	97.8	98.3	99.1	97.8	89.9	82.8	79.7	77.1	70.0	66.6	66.1	64.1	67.8	73.1	83.7	88.8	90.9	89.7	94.8	95.1	86.0	99.1
7-Sep	97.1	98.5	98.6	98.2	98.6	98.5	99.2	97.9	94.1	88.2	80.8	82.9	80.5	79.7	77.7	75.7	75.7	76.3	84.2	94.3	96.2	97.7	98.6	99.0	90.3	99.2
8-Sep	98.9	99.3	99.5	99.5	99.6	99.9	99.8	92.5	86.8	84.4	73.6	65.2	58.6	51.0	47.1	46.8	49.2	63.9	79.8	88.0	91.2	94.3	94.5	97.4	81.7	99.9
9-Sep	94.5	91.3	83.6	91.4	89.2	82.2	79.1	76.0	69.9	65.2	56.8	50.4	46.6	45.2	45.7	46.8	52.7	53.3	55.6	60.2	66.5	67.9	68.1	69.8	67.0	94.5
10-Sep	67.7	69.8	74.1	84.3	86.1	85.2	84.5	78.4	72.5	69.1	65.7	61.9	61.6	61.5	66.9	65.3	68.4	74.4	82.7	88.4	87.4	85.6	84.8	88.1	75.6	88.4
11-Sep	84.2	84.3	83.9	87.7	86.9	92.7	95.4	95.2	94.5	93.1	92.9	86.1	79.2	71.5	67.2	69.2	64.2	65.6	69.5	74.6	73.4	80.6	85.8	87.9	81.9	95.4
12-Sep	93.2	94.2	94.0	93.9	93.7	94.9	95.1	92.4	83.7	76.1	70.3	63.6	58.2	53.8	50.1	49.0	45.0	54.6	75.8	83.9	92.1	86.4	71.5	72.9	76.6	95.1
13-Sep	75.1	76.7	79.2	79.5	74.3	74.9	79.6	64.6	55.8	49.5	45.9	43.6	41.6	40.4	38.8	38.0	39.7	52.6	67.8	75.4	81.7	73.0	65.9	69.5	61.8	81.7
14-Sep	79.5	85.0	93.0	98.1	97.9	97.6	95.4	94.1	92.7	88.6	82.2	80.6	81.7	76.0	72.6	75.3	78.4	82.4	84.4	90.7	90.9	90.4	91.5	93.8	87.2	98.1
15-Sep	95.4	93.6	93.8	96.0	96.7	97.9	98.9	92.7	80.5	69.7	54.4	47.9	47.0	47.2	48.7	56.9	64.2	75.6	83.0	94.6	90.3	90.6	86.8	92.3	78.9	98.9
16-Sep	96.5	97.9	98.3	98.6	98.0	97.4	95.3	90.2	78.7	72.1	60.6	57.9	52.2	44.7	48.3	51.1	56.7	69.1	83.4	89.5	88.9	92.2	94.6	95.0	79.5	98.6
17-Sep	86.0	84.0	84.3	86.7	88.6	88.7	88.0	79.7	70.9	66.9	62.3	56.1	47.9	50.4	53.2	56.7	61.0	73.5	84.6	91.2	93.4	95.1	95.5	96.5	76.7	96.5
18-Sep	97.6	97.9	98.2	98.4	98.7	98.2	97.2	89.7	66.9	57.0	50.4	47.6	45.9	47.6	43.5	49.5	48.9	64.3	80.0	88.6	91.9	94.5	96.3	96.6	76.9	98.7
19-Sep	93.4	95.2	96.9	96.5	93.6	93.6	96.5	88.8	64.1	48.8	47.6	43.7	35.6	34.6	35.2	38.2	41.8	48.8	57.7	66.4	69.1	62.2	59.1	56.0	65.1	96.9
20-Sep	55.1	55.8	58.9	65.8	70.4	83.1	87.7	72.1	58.1	48.1	36.7	30.5	28.6	27.4	26.9	28.3	32.7	48.5	61.6	68.7	70.3	71.4	70.3	68.1	55.2	87.7
21-Sep	66.7	69.5	72.7	72.5	86.6	94.6	96.8	86.9	68.1	47.7	48.7	49.2	46.5	39.2	35.5	33.3	34.3	44.3	48.5	55.2	62.0	68.5	77.4	88.3	62.2	96.8
22-Sep	93.8	93.4	95.1	96.2	97.2	97.7	96.9	92.8	79.3	67.3	63.3	51.2	43.6	38.6	38.2	40.0	38.5	42.3	56.0	67.7	75.0	85.6	88.9	91.8	72.1	97.7
23-Sep	90.8	93.6	95.6	95.9	96.3	96.2	96.7	95.1	93.2	80.5	67.9	64.5	60.7	61.7	62.5	63.8	67.5	73.2	82.8	88.6	93.3	94.4	96.1	97.0	83.7	97.0
24-Sep	88.4	81.0	77.4	88.8	95.6	97.0	97.5	91.2	84.9	70.5	41.4	34.0	30.3	30.2	29.9	29.4	34.7	48.0	56.6	66.3	73.2	76.7	80.4	82.5	66.1	97.5
25-Sep	84.1	86.5	87.3	85.8	76.9	75.8	88.9	89.1	81.7	77.2	63.9	57.1	59.8	61.6	64.2	66.1	70.5	74.1	77.7	82.5	82.8	87.6	92.5	90.8	77.7	92.5
26-Sep	89.5	92.4	97.2	96.2	95.3	94.1	92.9	92.2	89.5	89.2	84.6	81.7	77.0	80.1	73.0	67.2	71.7	73.8	78.3	76.7	76.3	75.0	77.9	79.4	83.4	97.2
27-Sep	80.5	83.0	84.6	84.0	83.4	85.2	85.7	81.0	73.2	65.7	57.9	52.8	45.9	42.4	41.7	44.1	46.9	51.6	62.5	76.2	73.8	80.2	75.9	77.9	68.2	85.7
28-Sep	74.7	74.3	76.8	80.1	89.8	93.7	93.3	76.0	59.7	56.4	52.2	41.9	38.4	36.9	38.4	39.7	36.7	46.0	55.2	57.2	51.2	63.8	70.0	73.4	61.5	93.7
29-Sep	82.2	81.5	83.6	83.3	60.2	66.4	82.3	93.8	93.6	92.3	87.4	84.0	80.4	83.6	66.4	53.4	48.5	54.1	56.1	68.9	69.7	70.9	68.1	65.0	74.0	93.8
30-Sep	65.2	69.3	73.4	71.1	68.9	80.2	91.0	89.6	87.7	83.6	80.0	73.2	73.5	71.4	73.6	75.2	77.6	81.8	84.4	89.7	93.5	95.2	96.4	96.8	80.9	96.8
	86.1	86.9	88.2	90.0	89.9	91.4	92.8	87.4	78.4	71.5	64.2	59.4	55.5	54.1	53.4	53.9	55.5	62.5	71.5	78.6	81.3	83.6	84.1	85.7	Diurnal Average	
	98.9	99.3	99.5	99.5	99.6	99.9	99.8	97.9	94.5	93.1	92.9	87.8	88.2	85.3	83.6	90.4	89.4	91.3	89.4	94.6	96.2	97.7	98.6	99.0	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Surmont 2 - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	40	5.56	5.56
40 - 60	123	17.08	22.64
60 - 80	198	27.50	50.14
80 - 100	359	49.86	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Surmont 2 - September 2026

Maximum Speed: 17 km/h on Sep 26 13:00

Maximum Daily Speed Average: 10.8 km/h on Sep 26

Minimum Speed Value: 0 km/h on Sep 23 00:00

Minimum Daily Speed Average: 1.0 km/h on Sep 7

Maximum Diurnal Speed Average: 3.6 km/h at hour 3

Minimum Diurnal Speed Average: 1.5 km/h at hour 21

Monthly Average Velocity: 2.5 km/h 261.9 deg

Percentiles: $P_1 = 0$ $P_{10} = 1$ $Q_1 = 3$ Median = 5 $Q_3 = 9$ $P_{90} = 12$ $P_{99} = 16$

Hours in Service:	720
Hours of Data:	679
Hours of Missing Data:	41
Percent Operational Time:	94.3

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-Sep	UO	UO	UO	W2	WSW1	W1	SSW1	ESE2	SSE5	SE8	SSE8	SSE9	SE9	SE10	SE9	ESE11	SE9	SE5	SSE4	S3	S3	S2	SSE3	SSE3	SE4.6	ESE11
2-Sep	SE3	SSE3	SE5	S3	SSE4	SE6	SE6	SE7	SE9	SE9	ESE12	ESE14	ESE16	ESE15	ESE13	ESE13	ESE15	ESE14	ESE12	ESE10	ESE9	ESE8	ESE5	SE3	ESE8.7	ESE16
3-Sep	SE2	ESE5	ESE1	ENE1	E2	NNE1	ESE2	ESE4	E5	ESE7	ESE11	ESE13	ESE11	ESE12	ESE12	ESE16	ESE11	ESE12	ESE8	ESE6	NNW1	WSW1	ESE3	ESE4	ESE6.0	ESE16
4-Sep	UO	SSW1	SE1	SE1	SSE0	UO	UO	SE1	SE5	SE6	SE4	SE5	SW3	NNW6	NNW7	NNW8	NNW8	NNW9	NNW9	NNW9	N9	NNW8	NNW8	NNW6	NNW2.9	N9
5-Sep	NNW6	NNW6	NW5	NNW6	NNW5	NW4	NW5	NW4	NNW6	NNW6	N7	NNE3	NNE3	N5	N3	NNE2	NNE4	NNW3	WSW3	WSW3	WSW2	W1	DF	UO	NNW3.5	N7
6-Sep	WSW1	WSW1	UO	W1	UO	W1	UO	E2	SE4	ESE6	SE7	ESE8	ESE8	ESE7	ESE7	ESE6	ESE6	ESE5	ESE3	ESE6	ESE4	ESE4	S1	S1	ESE3.9	ESE8
7-Sep	WSW2	WSW1	WSW1	SW1	SE1	SSW1	S1	ESE2	NNE2	ENE3	NE3	ENE4	N3	NNE3	ESE6	ESE5	E5	E5	E2	W1	SW1	W2	NW1	W1	E1.0	ESE6
8-Sep	UO	UO	UO	UO	UO	SSW1	WNW1	NW5	NNW6	NNW7	N8	N8	N9	NNW7	NNW7	N6	NNW4	WNW1	WSW3	WSW3	WSW2	WSW2	WSW1	W2	NNW3.5	N9
9-Sep	WNW3	W2	W5	WNW2	W5	W8	WSW9	WSW6	WSW9	WSW10	WSW9	WSW13	WSW10	WSW12	WSW10	WSW11	WSW7	WSW9	WSW9	SW5	S3	SW4	WSW7	W5	WSW6.9	WSW13
10-Sep	W8	W9	W10	W10	W9	W9	W10	W11	W12	W12	WNW14	WNW14	WNW15	WNW12	WNW12	WNW11	WNW13	W9	WNW10	W9	WNW10	WNW10	WNW11	WNW10	W10.6	WNW15
11-Sep	WNW12	WNW14	WNW14	WNW13	WNW12	NW10	NW9	WNW10	NW10	NW10	NW10	NNW13	NW11	NW11	NW12	WNW11	NNW11	NNW9	NW6	WNW6	WNW6	WNW5	WNW6	WNW6	NW9.6	WNW14
12-Sep	WNW5	W5	W5	W5	W5	W4	W4	W5	NW5	WNW5	NW4	W6	W8	W10	W8	W6	WNW5	W4	WSW3	SW3	SW0	WSW4	W6	W6	W4.9	W10
13-Sep	WSW6	WSW7	WSW8	WSW7	WSW8	WSW7	SW4	WSW5	WSW5	WSW8	WSW12	WSW11	WSW9	WSW10	SW7	WSW7	WSW6	WSW3	WSW2	WSW2	S1	WSW6	W6	WNW4	WSW6.2	WSW12
14-Sep	WNW3	WNW5	NW6	NNW7	NNW6	NNW8	NNW8	NNW8	NNW8	NNW9	NNW8	NNW8	N8	NNW8	NNW8	NNW8	NNW6	NNW6	WNW5	WNW5	NW4	NW5	WNW4	W4	NNW6.0	NNW9
15-Sep	W3	W4	W4	WSW4	WSW3	UO	WSW3	W5	WNW6	NW4	WNW4	W6	W7	W8	WSW5	SW3	WNW3	SW1	W6	NNW1	W4	W4	W7	WSW3	W4.1	W8
16-Sep	WSW4	W2	WSW3	NW1	WNW1	WNW3	NNW2	NNW3	NW3	NW2	SE4	S4	SSE2	WSW5	WSW6	WSW3	SSW2	SSE1	WSW1	SW2	SW2	WSW1	WSW1	SSE2	WSW1.5	WSW6
17-Sep	SE5	SE5	SE5	SE5	SE5	SE5	SE4	SE5	SSE5	ESE6	ESE6	SE5	WNW6	N3	NE3	NE4	NNE3	WNW2	WSW2	WSW2	W2	UO	WSW2	WSW1	SE1.9	ESE6
18-Sep	UO	UO	NNE0	UO	ESE0	NNE0	WNW1	WSW1	NW4	NW5	NNW6	NNW7	NW7	NNW4	N7	NW3	NNE3	WNW2	WSW2	WSW2	SW1	SW1	UO	WSW3	NW2.3	N7
19-Sep	WSW3	SW2	SW1	SSW2	SSW1	SSW1	SE0	ESE3	SE5	SSE7	SE9	SE10	SSE10	S10	SSE9	SSE9	SSE8	SSE7	SE5	SE5	SE5	SSE7	SSW7	S7	SSE5.0	SSE10
20-Sep	SW6	WSW10	WSW8	SSW2	WSW1	ESE3	S2	SW4	WSW7	WSW7	W5	WSW7	WSW7	WSW7	WSW7	WSW6	WSW5	WSW2	WSW4	SW1	SW1	WSW3	WSW3	WSW6	WSW4.5	WSW10
21-Sep	WSW5	W5	W6	WSW7	SE1	UO	UO	SSW1	SE2	SE5	SE7	SE8	SE9	SE10	SE9	SE9	SSE8	S4	SSW5	S4	SSW4	WSW4	WNW2	S1	S3.4	SE10
22-Sep	SSW1	WSW1	WSW2	WSW1	UO	UO	UO	ESE1	WSW3	NW7	WNW7	WNW11	WNW10	WNW11	WNW10	WNW10	W7	W5	WSW4	WSW4	WSW2	W1	SSW1	SSE0	WNW4.2	WNW11
23-Sep	WSW1	UO	UO	UO	UO	UO	UO	UO	ESE1	ESE3	E3	ESE3	ESE5	ESE7	SE5	SE4	ESE4	SE2	SW2	WSW2	W1	UO	W1	WSW1	----	ESE7
24-Sep	WSW8	WSW6	W5	WSW2	UO	UO	UO	UO	ESE2	SE1	WSW6	WSW6	W8	W8	W8	W7	W5	W2	WSW2	W1	WSW1	WSW1	WSW1	WSW1	WSW3.8	W8
25-Sep	WSW1	UO	W1	WSW2	WNW2	W2	ESE1	ENE4	E4	E7	ESE13	ESE16	E15	ESE14	E12	E9	E8	ESE8	E3	ESE3	ESE7	E1	WNW4	W4	E4.8	ESE16
26-Sep	N2	N1	NW2	WNW4	W10	WNW7	W9	W11	W12	W12	W16	W16	W17	W15	W16	W17	W14	W13	W12	W12	W11	W12	W11	W10	W10.8	W17
27-Sep	W9	W9	W9	WSW9	WSW10	WSW13	WSW12	WSW14	WSW13	WSW11	WSW13	WSW15	W14	W13	W14	W12	WSW11	WSW9	WSW6	W3	W4	SW3	WSW6	SW5	WSW9.7	WSW15
28-Sep	WSW8	WSW8	WSW8	WSW5	S2	S2	SSE3	SSE2	WSW10	WSW11	WSW9	WSW10	WSW11	WSW11	SW8	SSW6	SSW6	SSW4	S4	SSE4	S5	SE4	ESE4	SE4	SW4.9	WSW11
29-Sep	SE4	SE4	SSE2	NNE0	W8	W8	W5	W4	W5	W6	W9	W10	W12	W11	W13	W13	W11	W9	W10	WSW5	WSW6	WSW6	WSW8	W8	W6.6	W13
30-Sep	W12	W9	W7	W10	W14	WNW13	WNW10	WNW12	WNW14	WNW14	NW14	NW14	WNW14	WNW11	WNW13	WNW13	WNW10	W7	W7	W4	WSW3	WSW3	WSW1	UO	WNW9.7	WNW14
	W3.4	W3.5	W3.6	W3.1	W3.4	W3.2	W2.8	W2.4	W2.8	W2.1	W2.0	WSW2.3	W3.1	W2.9	W2.5	WSW2.2	W1.6	WSW1.5	WSW2.3	WSW1.7	WSW1.5	WSW2.1	W2.7	WSW2.6	Diurnal Average	
	WNW12	WNW14	WNW14	WNW13	W14	WNW13	WSW12	WSW14	WNW14	WNW14	W16	W16	W17	ESE15	W16	W17	ESE15	ESE14	W12	W12	W11	W12	W11	WNW10	Diurnal Maximum	

DF - DAS Failure UO - Unstable Operation

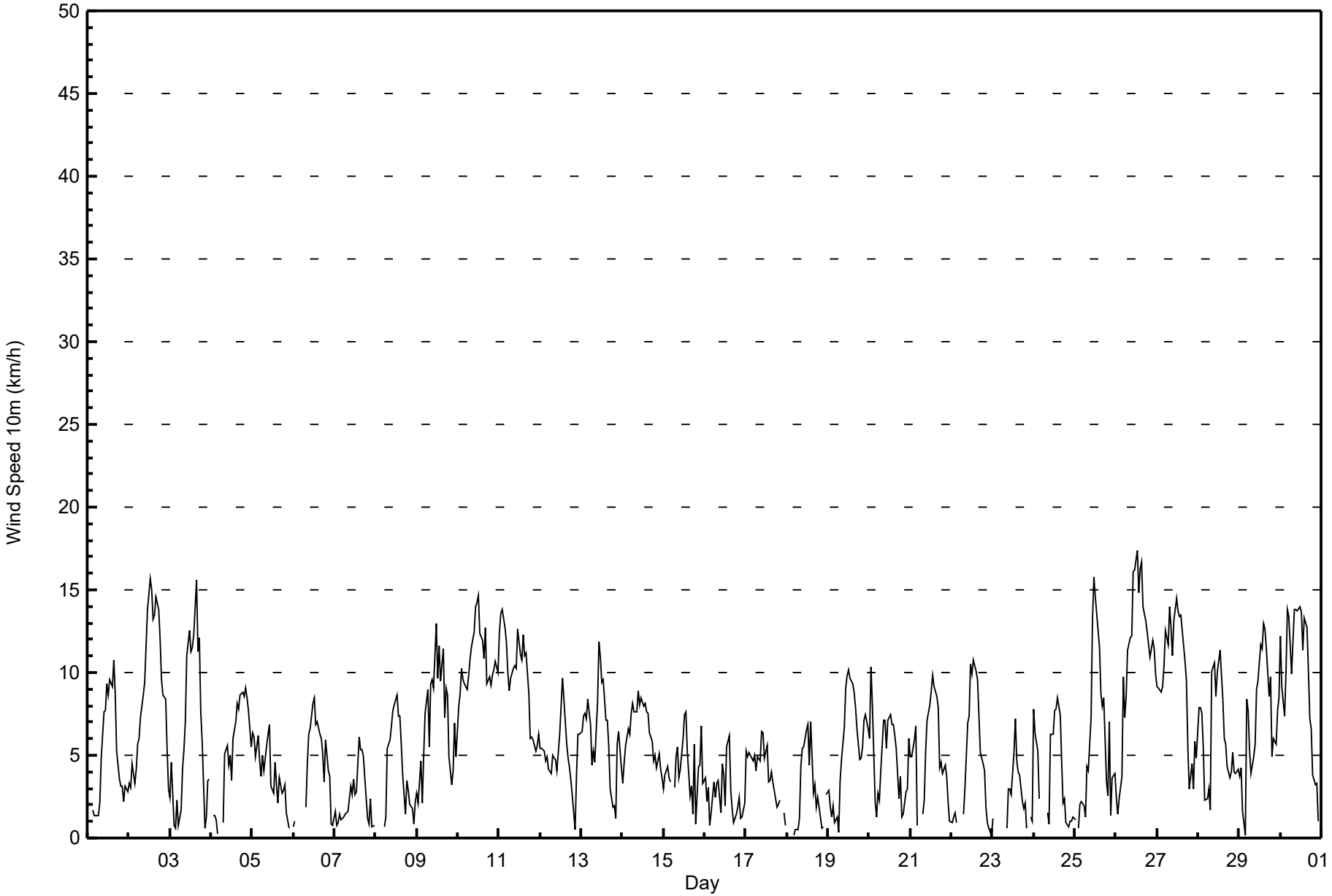
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Surmont 2 - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	346	50.96	50.96
6 - 11	259	38.14	89.10
12 - 19	74	10.90	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: 679

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Surmont 2 - September 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	13	2	4	9	28	39	17	17	15	22	76	47	25	17	9	346
6 - 11	8	0	0	0	3	24	20	10	2	3	3	61	52	25	11	37	259
12 - 19	0	0	0	0	2	17	0	0	0	0	0	9	24	20	1	1	74
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	14	13	2	4	14	69	59	27	19	18	25	146	123	70	29	47	679

Total Number of Valid Hours: 679

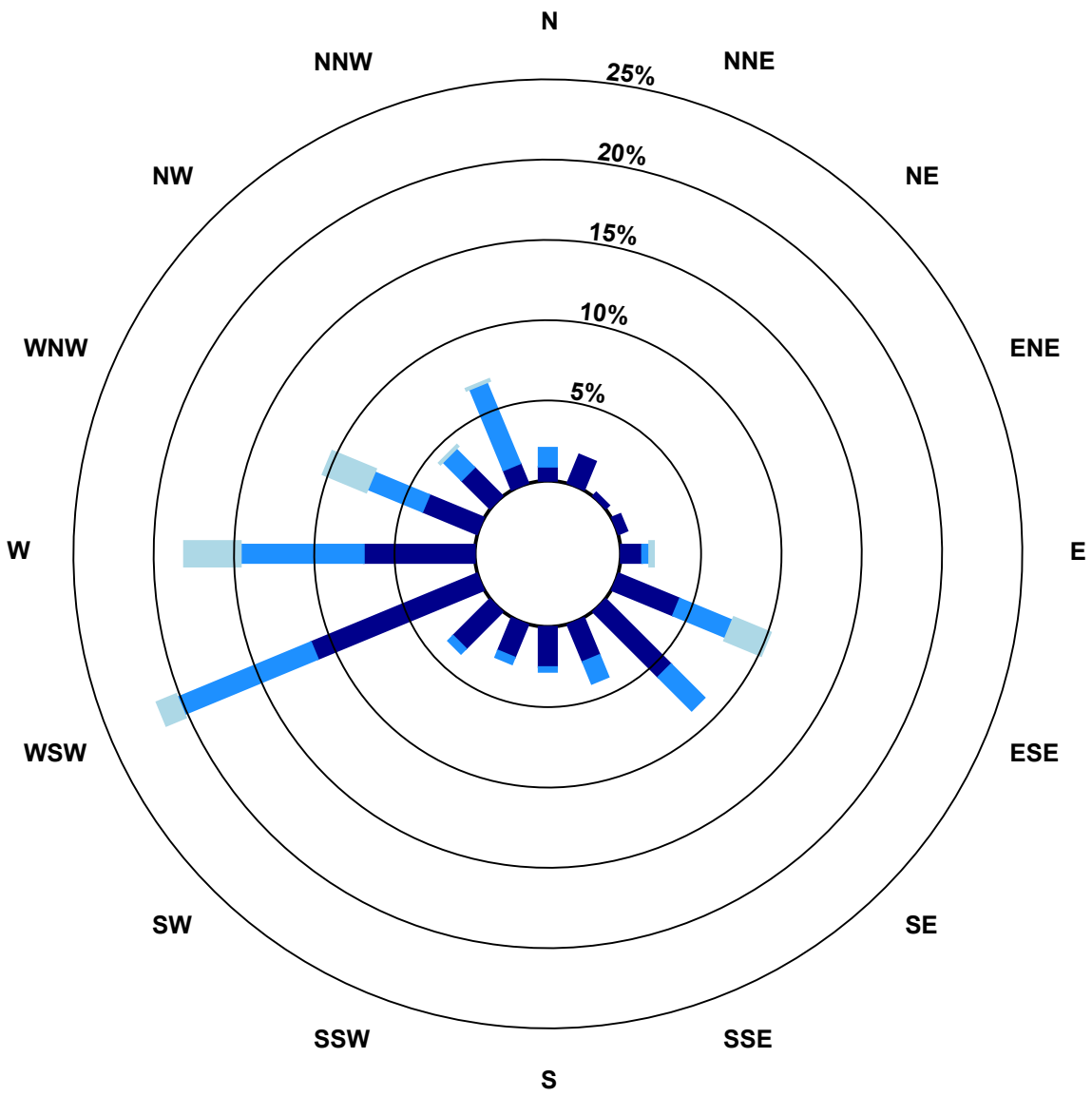
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Surmont 2



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

Surmont 2 - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6 km/h on Sep 26 11:00

Minimum Value: 1 km/h on Sep 17 18:00

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

Hours in Service:	720
Hours of Data:	679
Hours of Missing Data:	41
Hours of Calibration:	0
Percent Operational Time:	94.3

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-Sep	UO	UO	UO	1	1	1	1	2	2	3	3	4	3	4	4	4	3	2	2	1	1	1	1	1	4
2-Sep	1	1	2	1	2	2	2	3	3	3	4	4	5	5	5	4	5	4	3	3	2	2	2	1	5
3-Sep	1	1	1	1	1	1	2	2	2	4	4	4	4	4	5	5	3	4	3	3	1	1	1	1	5
4-Sep	UO	1	2	1	1	UO	UO	2	2	2	2	2	2	3	3	4	4	4	4	4	4	3	3	2	4
5-Sep	3	3	2	2	2	2	2	2	2	2	3	3	2	2	2	2	2	1	1	1	1	1	DF	UO	3
6-Sep	1	1	UO	1	UO	1	UO	2	2	2	2	3	4	2	3	2	2	2	2	2	1	2	1	1	4
7-Sep	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	2
8-Sep	UO	UO	UO	UO	UO	1	2	2	3	3	3	3	3	3	3	2	2	1	1	1	2	1	1	1	3
9-Sep	1	1	2	1	2	3	3	2	4	4	4	5	5	5	4	5	3	4	4	3	2	2	3	3	5
10-Sep	3	4	4	3	3	3	4	4	4	4	5	5	6	5	5	4	5	4	4	3	4	4	5	4	6
11-Sep	5	5	5	5	5	4	4	4	4	5	5	5	5	5	5	5	5	4	2	3	2	2	2	2	5
12-Sep	2	2	2	1	2	1	1	1	2	2	3	3	3	4	3	2	2	2	1	1	1	2	3	2	4
13-Sep	2	2	3	3	3	3	2	2	2	4	5	4	4	4	3	3	2	2	1	1	1	2	2	2	5
14-Sep	1	2	3	3	3	3	3	3	3	3	4	4	4	3	3	3	3	2	2	2	2	2	2	1	4
15-Sep	1	1	1	1	2	UO	2	2	2	2	2	2	3	3	2	3	3	2	4	1	2	2	2	2	4
16-Sep	1	1	1	1	1	1	1	2	2	2	2	2	2	3	2	2	1	1	1	1	1	1	1	2	3
17-Sep	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	1	1	1	1	UO	1	1	2
18-Sep	UO	UO	1	UO	1	1	1	1	2	2	2	3	3	2	3	2	2	1	2	2	1	1	UO	1	3
19-Sep	1	1	1	1	1	1	1	2	2	3	4	4	4	4	4	4	3	3	2	1	2	3	3	4	4
20-Sep	3	4	3	2	2	1	1	2	2	2	2	3	3	3	3	3	3	1	1	1	1	2	2	3	4
21-Sep	2	2	2	2	1	UO	UO	2	2	2	3	3	4	4	3	4	3	2	2	2	2	2	2	1	4
22-Sep	2	2	1	1	UO	UO	UO	2	3	3	4	5	4	4	4	4	3	3	1	1	2	1	1	2	5
23-Sep	1	UO	UO	UO	UO	UO	UO	UO	1	2	1	1	2	2	2	2	1	2	1	1	1	UO	1	2	2
24-Sep	2	1	2	2	UO	UO	UO	UO	1	1	3	2	3	3	3	3	2	1	1	1	2	1	1	1	3
25-Sep	1	UO	1	1	1	2	1	2	2	3	6	6	6	5	4	3	3	4	2	2	4	4	1	2	6
26-Sep	1	1	1	3	3	3	4	5	5	5	6	6	6	6	6	6	5	5	5	4	4	5	4	3	6
27-Sep	3	3	3	3	4	4	4	4	5	5	5	5	5	5	5	5	5	4	2	1	2	1	2	2	5
28-Sep	3	2	3	2	1	1	1	3	4	4	4	4	5	5	4	3	3	2	2	2	2	1	1	1	5
29-Sep	1	2	2	2	3	3	2	2	2	2	3	4	4	4	5	5	5	3	4	1	2	2	2	3	5
30-Sep	4	3	3	4	6	5	4	5	6	6	6	6	5	5	5	5	4	3	2	1	1	1	1	UO	6
	5	5	5	5	6	5	4	5	6	6	6	6	6	6	6	6	5	5	5	4	4	5	5	4	
	Diurnal Maximum																								

DF - DAS Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Surmont 2 - September 2026

Direction of Maximum Speed: 267 deg on Sep 26 13:00
Direction of Maximum Daily Speed Average: 271.3 deg on Sep 26

Direction of Minimum Speed: 158 deg on Sep 23 00:00

Direction of Minimum Daily Speed Average: 1.0 deg on Sep 7

Monthly Average Direction: 261.9 deg

Hours in Service:	720
Hours of Data:	679
Hours of Missing Data:	41
Percent Operational Time:	94.3

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-Sep	UO	UO	UO	261	257	261	201	123	157	131	163	151	142	127	133	120	128	131	149	182	181	172	168	157	144.9
2-Sep	143	161	144	171	153	132	126	128	132	130	122	114	110	116	120	121	114	113	111	112	114	116	113	132	121.1
3-Sep	124	111	120	70	83	32	102	104	99	102	106	108	106	107	108	112	112	113	106	107	328	256	119	109	107.9
4-Sep	UO	201	126	146	157	UO	UO	138	136	139	136	129	226	329	328	333	327	330	340	335	351	343	344	330	339.9
5-Sep	328	343	321	332	330	316	315	318	339	339	351	32	20	5	0	26	33	328	258	255	244	262	DF	UO	336.1
6-Sep	238	249	UO	260	UO	264	UO	88	139	112	131	118	120	107	113	104	115	115	113	115	113	119	181	170	118.4
7-Sep	252	250	255	214	135	213	186	120	13	70	51	59	353	19	108	121	96	98	101	264	224	275	321	278	92.8
8-Sep	UO	UO	UO	UO	UO	212	288	305	332	337	353	350	354	340	339	353	328	292	252	240	239	251	249	260	327.7
9-Sep	298	261	265	290	266	259	258	257	253	255	248	254	248	258	258	252	250	250	250	229	184	216	251	260	252.9
10-Sep	278	280	275	274	272	265	262	265	267	266	282	282	282	283	289	288	284	281	288	281	291	297	297	293	280.3
11-Sep	291	289	293	292	298	313	315	303	306	310	316	327	309	313	322	298	330	327	312	300	298	284	288	286	305.7
12-Sep	288	274	272	270	278	266	270	281	312	300	325	280	264	265	270	280	294	280	245	230	222	257	266	265	275.1
13-Sep	258	253	252	247	248	246	232	248	251	256	255	252	252	244	235	242	254	250	237	243	191	247	263	292	250.2
14-Sep	301	296	308	327	341	339	329	327	339	339	340	338	351	332	347	345	348	327	290	288	308	312	294	269	327.7
15-Sep	272	278	273	255	254	UO	254	263	283	311	299	274	273	266	250	220	284	219	268	340	268	265	259	258	268.5
16-Sep	254	260	250	321	302	301	342	345	326	326	135	173	167	258	249	255	211	159	255	229	219	255	252	165	251.8
17-Sep	126	132	139	143	137	132	132	134	156	111	122	124	283	4	40	34	13	282	256	253	268	UO	238	249	128.4
18-Sep	UO	UO	32	UO	116	13	299	253	309	314	329	339	324	337	5	323	13	290	256	249	228	217	UO	238	322.1
19-Sep	246	228	233	192	192	206	133	116	138	151	136	139	168	171	157	164	163	154	144	126	131	161	193	187	159.7
20-Sep	235	251	253	197	248	114	176	229	247	254	276	247	245	255	244	243	253	252	247	232	225	244	242	247	245.0
21-Sep	252	267	261	255	136	UO	UO	198	146	137	136	139	145	130	125	137	152	172	195	190	206	246	289	169	168.9
22-Sep	210	243	253	244	UO	UO	UO	118	246	305	299	299	301	301	290	282	277	266	253	244	248	259	208	158	283.6
23-Sep	237	UO	UO	UO	UO	UO	UO	UO	115	113	100	104	122	115	128	138	121	134	228	254	273	UO	264	244	--
24-Sep	249	255	259	248	UO	UO	UO	UO	107	132	247	241	273	270	272	271	262	281	240	259	252	242	258	248	258.7
25-Sep	257	UO	277	253	293	270	103	77	84	96	104	108	100	104	99	95	91	105	92	108	108	96	300	262	100.8
26-Sep	5	358	315	287	269	287	265	267	265	270	266	262	267	272	267	267	274	277	278	276	270	272	270	263	271.3
27-Sep	264	261	260	258	254	249	253	250	249	248	255	253	260	268	264	262	256	254	253	259	262	223	246	235	255.3
28-Sep	245	243	246	247	180	177	165	160	249	249	245	247	247	240	236	201	200	195	188	162	173	135	123	127	223.8
29-Sep	132	139	149	28	268	268	266	261	261	259	260	271	270	277	278	278	273	262	266	251	251	252	256	268	264.3
30-Sep	273	271	260	267	274	284	297	289	290	294	304	304	294	299	292	292	290	281	274	263	248	251	252	UO	285.7
	264.2	262.1	264.2	265.6	269.3	270.8	268.4	266.8	265.3	268.2	261.6	253.8	261.4	270.2	268.0	255.8	265.4	249.4	252.9	244.1	242.9	253.8	261.5	254.9	
	Diurnal Average																								

DF - DAS Failure UO - Unstable Operation

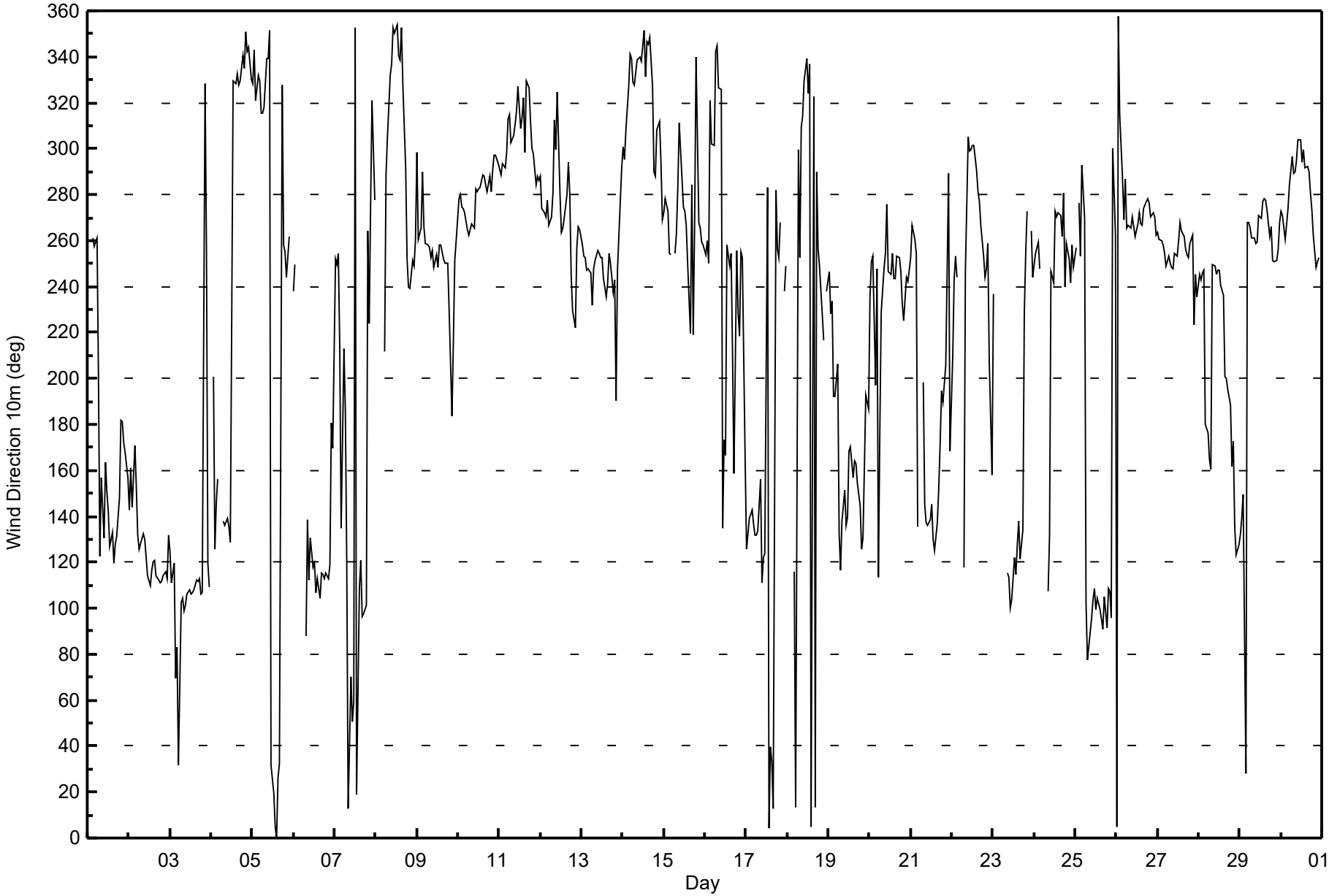
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Surmont 2 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Surmont 2 - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 114 deg on Sep 20 05:00

Minimum Value: 12 deg on Sep 12 19:00

Percentiles: P_1 = 17 P_{10} = 27 Q_1 = 34 Median = 46 Q_3 = 58 P_{90} = 74 P_{99} = 99

Hours in Service:	720
Hours of Data:	679
Hours of Missing Data:	41
Hours of Calibration:	0
Percent Operational Time:	94.3

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-Sep	UO	UO	UO	35	33	36	48	69	43	41	61	50	50	41	47	33	45	47	59	61	59	54	61	74	74
2-Sep	45	55	49	52	48	43	38	43	42	42	32	24	25	26	33	29	24	21	18	22	22	25	32	50	55
3-Sep	43	24	84	86	37	41	37	32	33	28	25	23	25	25	26	21	20	26	26	23	71	68	38	34	86
4-Sep	UO	48	81	99	73	UO	UO	85	47	50	72	66	82	66	64	61	61	55	54	60	48	58	55	59	99
5-Sep	61	59	58	58	61	67	53	57	52	52	54	100	93	76	87	88	57	54	41	18	34	39	DF	UO	100
6-Sep	69	43	UO	32	UO	54	UO	30	52	29	41	29	38	32	32	36	25	29	33	25	33	48	80	80	80
7-Sep	39	79	68	63	85	82	56	57	39	40	60	47	60	57	32	38	30	33	53	53	69	45	91	62	91
8-Sep	UO	UO	UO	UO	UO	83	108	57	59	57	59	54	49	60	56	60	60	72	15	20	51	14	19	44	108
9-Sep	45	94	42	54	39	32	31	45	37	39	48	37	54	43	45	40	50	42	39	71	84	76	49	72	94
10-Sep	42	40	37	34	30	35	32	34	34	33	36	37	40	42	37	39	37	37	41	37	46	50	50	46	50
11-Sep	45	41	43	44	54	53	61	57	53	55	56	55	57	56	56	52	57	58	54	45	54	42	46	36	61
12-Sep	43	35	24	26	29	22	30	32	55	58	63	46	43	40	44	48	59	35	12	21	94	68	42	32	94
13-Sep	28	22	27	30	29	33	40	42	64	45	37	39	52	49	66	58	54	53	24	30	86	45	43	54	86
14-Sep	42	59	60	55	60	58	57	54	55	49	62	57	59	58	57	59	61	55	49	46	61	58	46	29	62
15-Sep	30	37	29	21	64	UO	26	33	41	72	62	58	40	43	41	73	57	57	49	78	39	39	25	34	78
16-Sep	29	44	29	96	66	58	63	57	67	97	68	81	104	56	43	66	72	62	45	50	45	48	51	48	104
17-Sep	39	46	60	54	49	48	67	58	45	21	32	61	39	69	65	45	56	32	41	37	28	UO	16	70	70
18-Sep	UO	UO	55	UO	100	61	54	60	53	58	60	58	63	75	52	67	70	54	21	52	63	77	UO	22	100
19-Sep	20	58	50	53	68	30	74	26	52	60	46	54	54	56	63	53	58	49	50	37	40	58	59	69	74
20-Sep	83	39	37	88	114	58	59	52	27	31	48	44	52	55	56	50	47	29	19	67	103	86	82	52	114
21-Sep	58	51	28	26	95	UO	UO	58	65	48	46	54	49	40	39	46	54	67	62	80	82	77	62	86	95
22-Sep	86	72	39	76	UO	UO	UO	90	85	52	52	51	60	47	45	40	36	28	13	18	87	88	84	95	95
23-Sep	73	UO	UO	UO	UO	UO	UO	UO	96	47	38	49	33	20	40	35	29	71	57	56	44	UO	45	81	96
24-Sep	17	20	26	52	UO	UO	UO	UO	32	94	39	42	42	43	40	47	34	27	22	51	85	50	74	59	94
25-Sep	52	UO	62	54	63	77	83	35	41	29	27	28	26	23	26	29	30	50	72	79	49	96	58	37	96
26-Sep	74	89	72	74	33	41	41	38	34	36	36	35	34	32	34	34	36	34	35	32	33	36	32	32	89
27-Sep	30	31	32	31	28	24	29	26	27	32	34	32	36	35	36	38	34	33	33	45	39	43	37	34	45
28-Sep	29	23	24	29	41	61	54	100	40	37	41	47	49	47	56	56	63	68	71	74	67	48	45	32	100
29-Sep	31	35	72	77	31	32	39	45	33	41	33	33	32	36	35	36	34	30	30	23	29	28	27	31	77
30-Sep	32	31	32	35	33	37	44	38	38	42	44	47	41	52	38	35	44	35	29	25	14	13	60	UO	60
	86	94	84	99	114	83	108	100	96	97	72	100	104	76	87	88	72	72	72	80	103	96	91	95	
	Diurnal Maximum																								

DF - DAS Failure UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS30
ELLS RIVER
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ELLS RIVER (AMS30)
SEPTEMBER 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	686	34	34	100	-	-	24.5	0	2.7	0
TRS (ppb) Average	685	35	35	100	4.3	0	3.7	0	1.1	0
THC (ppm) Average	686	34	34	100	-	-	3.3	-	2.3	-
NMHC (ppm) Average	686	34	34	100	-	-	0.234	-	0.02	-
CH4 (ppm) Average	686	34	34	100	-	-	3.3	-	2.3	-
NO2 (ppb) Average	684	36	36	100	-	-	35.5	0	9.4	-
NO (ppb) Average	684	36	36	100	-	-	80.2	-	11.1	-
NOX (ppb) Average	684	36	36	100	-	-	86.9	-	18.9	-
PM2.5 (ug/m3) Average	570	1	150	79.31	-	-	30.3	0	10.7	0
Temperature 2 m (C) Average	720	0	0	100	-	-	27.7	-	19.8	-
Relative Humidity (%) Average	720	0	0	100	-	-	96.7	-	86.3	-
Wind Speed 10 m (km/h) Average	715	0	5	99.31	-	-	30	-	21	-
Wind Direction 10 m (deg) Average	715	0	5	99.31	-	-	-	-	-	-
Global Solar Radiation (W/m2) Average	720	0	0	100	-	-	733.7	-	221.1	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ELLS RIVER (AMS30)
SEPTEMBER 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	686	0.47	1.8	-	0	0	0	0	0.2	0.7	24.5
TRS (ppb) Average	685	0.24	0.3	-	0	0.1	0.1	0.1	0.2	0.5	3.7
THC (ppm) Average	686	2.12	0.2	-	2	2	2	2.1	2.2	2.3	3.3
NMHC(ppm) Average	686	0.002	0.012	-	0	0	0	0	0	0	0.234
CH4(ppm) Average	686	2.11	0.2	-	2	2	2	2.1	2.2	2.3	3.3
NO2 (ppb) Average	684	3.34	4.6	-	0	0	0.2	1.6	4.8	8.9	35.5
NO (ppb) Average	684	2.35	7.2	-	0	0	0	0.3	1.3	5.6	80.2
NOX (ppb) Average	684	5.69	10.1	-	0	0	0.3	2.1	6.7	14.4	86.9
PM2.5 (ug/m3) Average	570	4.49	4	-	0.1	0.8	1.7	3.2	6.3	8.5	30.3
Temperature 2 m (C) Average	720	11.98	5.5	-	0.8	5.1	7.7	11.3	15.8	19.6	27.7
Relative Humidity (%) Average	720	71.09	18.2	-	25.2	43.6	58.9	74.2	86.9	92.9	96.7
Wind Speed 10 m (km/h) Average	715	10	6	-	0	3	5	9	14	20	30
Wind Direction 10 m (deg) Average	715	242.4	-	-	-	-	-	-	-	-	-
Global Solar Radiation (W/m2) Average	720	131.82	189	-	0	0	0	12.1	213.9	457.4	733.7

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ELLS RIVER (AMS30)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
PM2.5	01 Sep 2026 01:00	29 Sep 2026 17:00	149	Unstable Operation - flatline in analyzer output signal
Wind Speed, Wind Direction	08 Sep 2026 20:00	24 Sep 2026 23:00	5	Intermittent unstable operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Ells River - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 24.5 ppb on Sep 7 10:00 Maximum Daily Average: 2.7 ppb on Sep 7

Minimum Value: 0.0 ppb on Sep 1 04:00 Minimum Daily Average: 0.0 ppb on Sep 24
Maximum Diurnal Average: 1.3 ppb at hour 10 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 = 0.0 Median = 0.0 Q_3 = 0.2 P_{90} = 0.7 P_{99} = 9.0

Hours in Service:	720
Hours of Data:	686
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-Sep	0.0	0.1	Z	0.0	0.0	0.0	0.0	0.1	0.2	C	C	C	C	10.5	5.3	3.4	1.9	1.8	1.4	0.9	0.3	0.1	0.2	0.1	1.4	10.5
2-Sep	0.1	0.1	0.0	Z	0.0	0.0	0.0	0.1	0.0	0.9	1.1	0.7	2.4	1.2	1.1	0.3	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.4	2.4
3-Sep	0.0	0.1	0.1	0.1	Z	0.1	0.2	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	0.2	0.1	0.1	0.1	0.1	0.3
4-Sep	0.1	0.2	0.1	0.2	0.1	Z	0.1	0.0	0.1	0.1	0.0	1.3	0.3	0.3	0.5	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.3	0.2	0.2	1.3
5-Sep	Z	0.8	0.5	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8
6-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.4	3.1	2.1	1.4	3.9	9.5	12.3	13.8	7.3	3.1	0.9	0.4	0.8	0.4	2.7	13.8
7-Sep	0.5	0.0	Z	0.0	0.0	0.0	0.6	2.4	1.8	24.5	15.5	0.7	4.2	1.8	0.2	0.1	0.2	1.6	3.4	3.4	1.2	0.4	0.2	0.1	2.7	24.5
8-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3	1.3	0.5	0.7	0.6	0.4	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.7	12.3
9-Sep	0.0	0.0	0.0	0.0	Z	0.2	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
10-Sep	0.0	0.0	0.1	0.0	0.0	Z	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	0.1	0.0	0.1
11-Sep	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
12-Sep	0.0	Z	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	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2
13-Sep	0.3	0.3	Z	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	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3
14-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.2	0.0	0.5	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	0.5
15-Sep	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
16-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.1	0.1	0.1	0.3	1.6	0.7	0.5	0.3	0.3	0.2	1.6	0.9	0.4	0.3	0.2	0.2	0.3	1.6
17-Sep	Z	0.3	0.2	0.3	0.4	0.5	0.4	0.4	0.8	8.0	1.5	0.5	0.4	0.3	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.7	8.0
18-Sep	0.1	Z	0.0	0.0	0.0	0.1	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	0.0	0.0	0.1
19-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.7	1.5	1.5	2.1	3.3	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.1	0.5	3.3
20-Sep	0.2	0.1	0.1	Z	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.0	0.1	0.2
21-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.0	7.3	6.1	7.0	6.3	6.0	4.0	3.6	1.9	1.1	0.4	0.2	2.0	7.3
22-Sep	0.1	0.1	0.0	0.0	0.0	Z	0.1	0.1	0.0	0.1	0.1	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	0.1	0.1
23-Sep	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.5	3.0	8.3	8.9	3.4	1.1	0.5	0.4	6.0	1.0	0.3	0.0	1.5	8.9
24-Sep	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-Sep	0.0	0.0	Z	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	0.0	0.0	0.0	0.0	0.0	0.2
26-Sep	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
27-Sep	0.0	0.1	0.1	0.1	Z	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	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2
28-Sep	0.2	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	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.1	0.2	0.3
29-Sep	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	0.0	0.0	0.1
30-Sep	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
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	1.3	0.9	0.8	0.7	0.9	0.9	1.1	0.9	0.9	0.7	0.4	0.4	0.2	0.1	0.1	Diurnal Average	
	0.5	0.8	0.5	0.3	0.4	0.5	0.6	2.4	1.8	24.5	15.5	12.3	4.2	10.5	8.3	9.5	12.3	13.8	7.3	3.6	6.0	1.1	0.8	0.4	Diurnal Maximum	

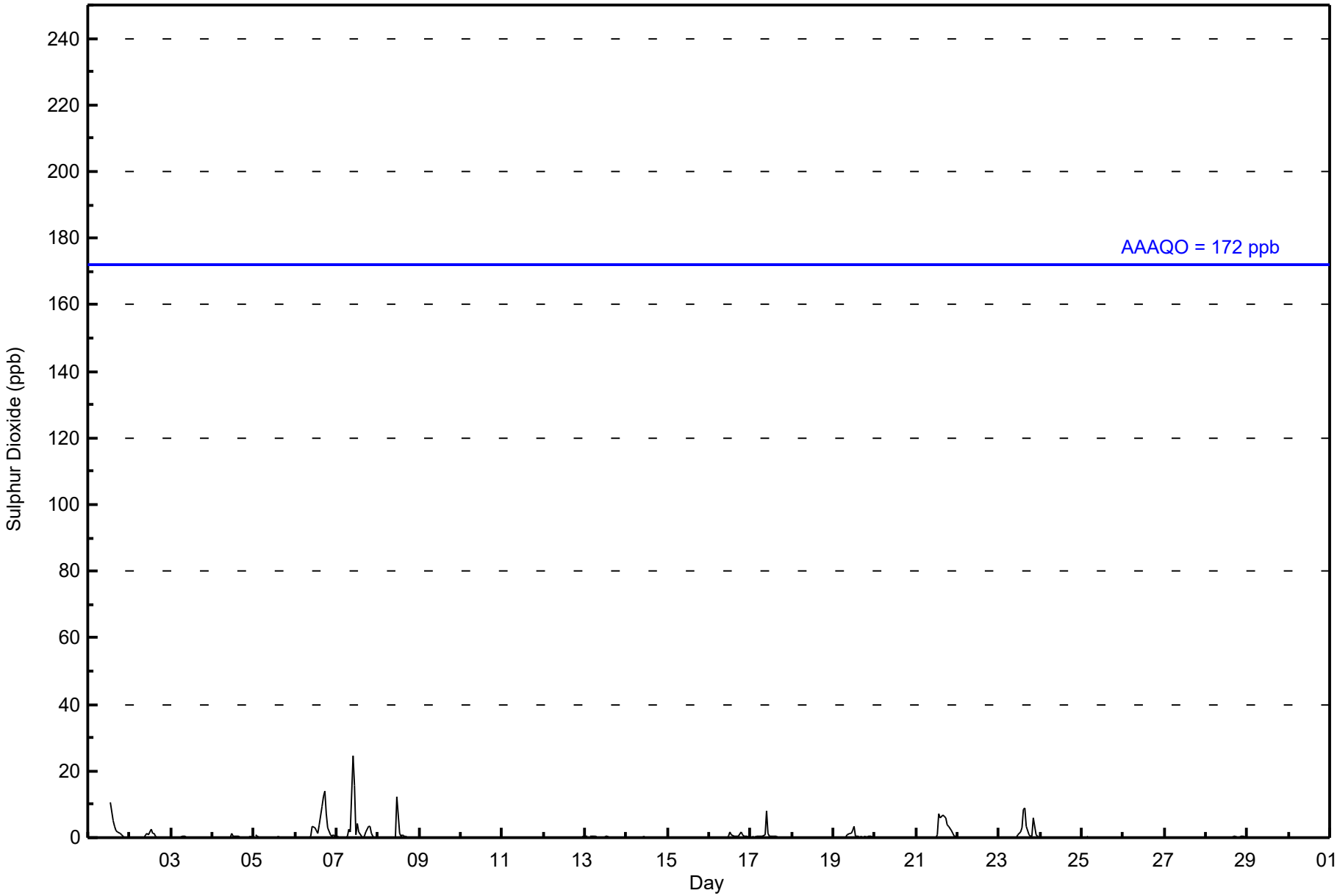
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Ells River - September 2026



Sulphur Dioxide (SO_2) - ppb
Ells River - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	680	99.13	99.13
11 - 20	5	0.73	99.85
21 - 60	1	0.15	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: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Ells River - September 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	17	2	4	2	14	40	51	83	86	86	44	62	40	40	32	675
11 - 20	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	1	5
21 - 60	0	0	0	0	0	0	0	0	1	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	72	17	2	4	2	14	40	54	85	86	86	44	62	40	40	33	681

Total Number of Valid Hours: 681

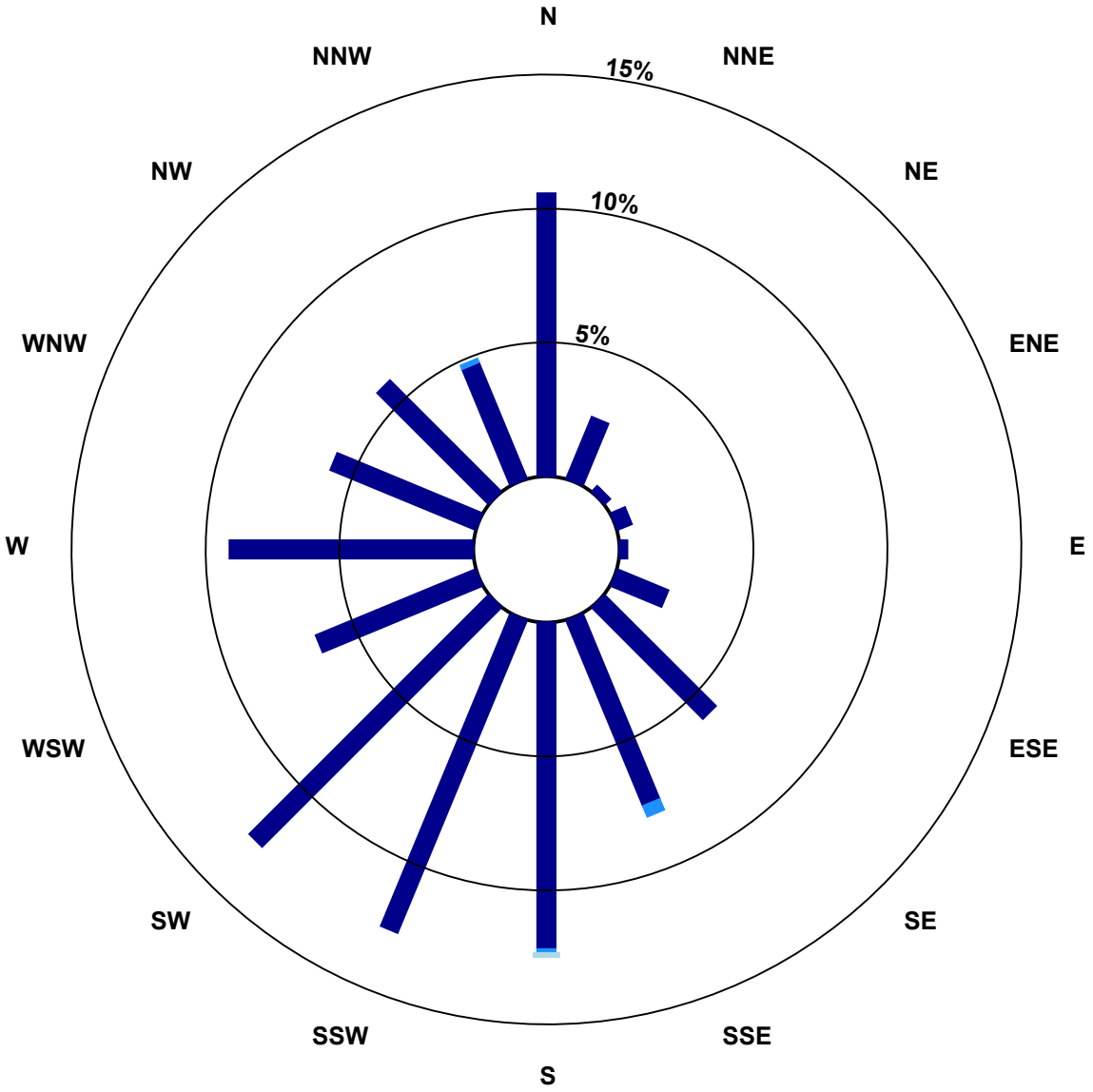
Total Number of Hours: 720

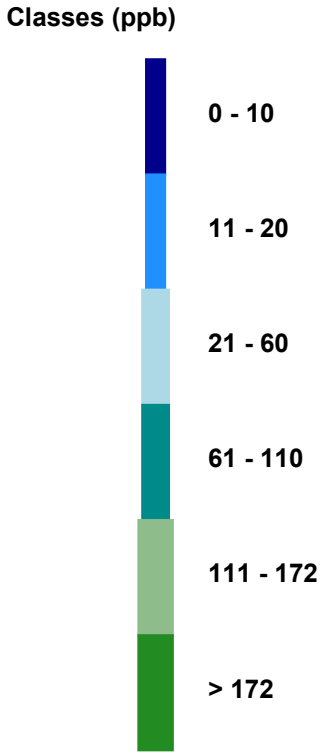
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Ells River





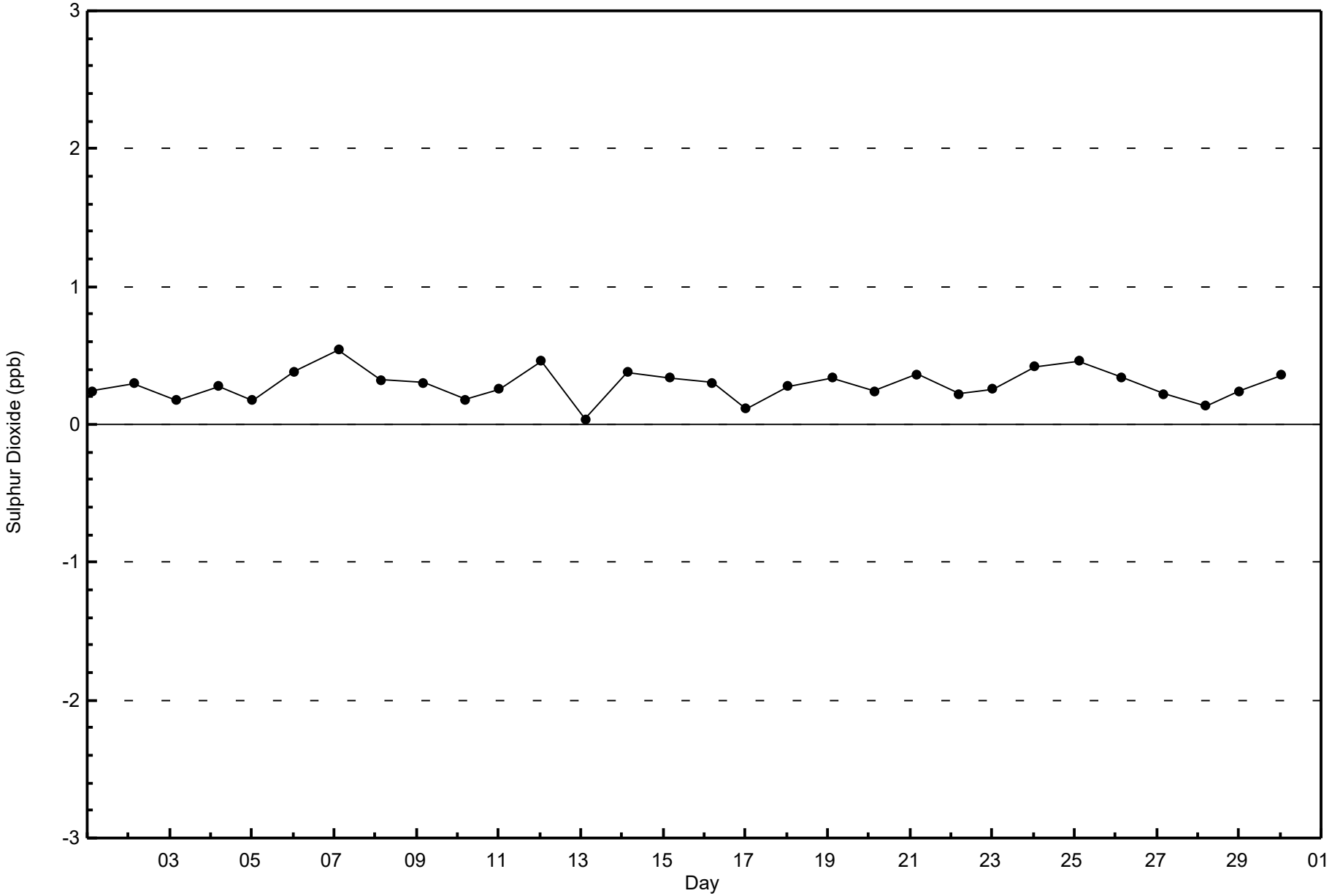
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Ells River - September 2026

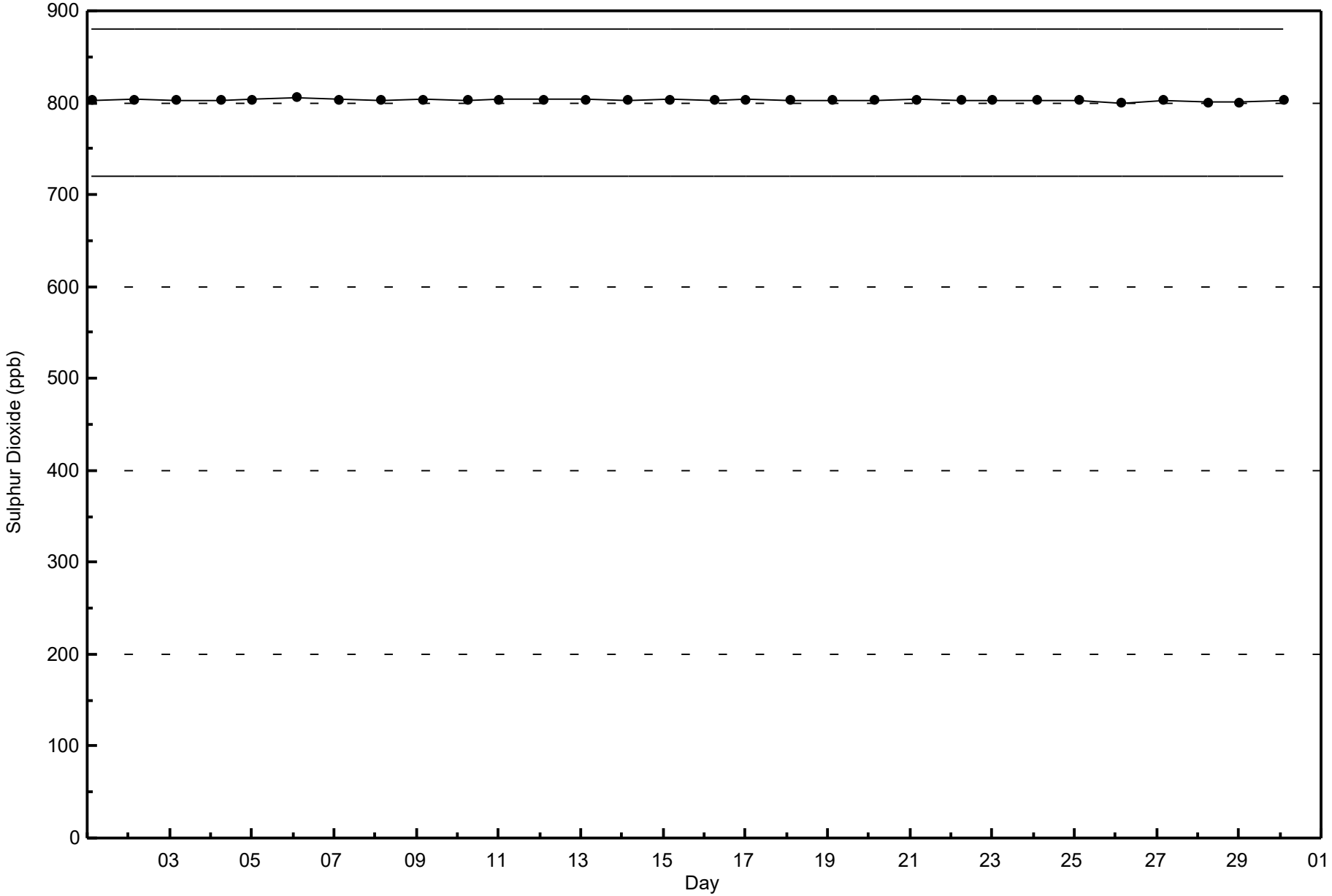


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Ells River - September 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Ells River - September 2026

Number of Exceedences (AAAQG): 30-Min: 0

Maximum Value: 4.3 ppb on Sep 1 08:00

Maximum Daily Average: 1.1 ppb on Sep 1

Minimum Value: 0.0 ppb on Sep 4 16:00

Minimum Daily Average: 0.1 ppb on Sep 29

Maximum Diurnal Average: 0.4 ppb at hour 10

Minimum Diurnal Average: 0.2 ppb at hour 15

Monthly Average: 0.24 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.5 P_{99} = 1.8

Periods in Service:	1440
Periods of Valid Data:	1371
Periods of Invalid Data:	69
Periods of Calibration:	69
Percent Operational Time:	100.0

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-Sep	0.5	0.7	0.4	Z	0.3	0.2	0.4	2.4	1.7	4.1	2.4	1.8	0.9	0.7	0.2	0.3	0.2	0.7	1.2	2.0	2.1	0.5	0.3	0.3	1.1	4.3
	0.6	0.4	0.3	SP	0.3	0.3	0.7	4.3	2.5	3.3	3.0	1.1	0.9	0.3	0.3	0.2	0.5	1.7	1.1	2.9	0.7	0.3	0.3	0.3		
2-Sep	0.5	0.3	0.7	1.0	Z	1.1	1.2	0.9	0.3	0.3	0.9	0.6	0.9	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	1.2
	0.5	0.7	0.8	1.1	SP	1.2	1.0	0.7	0.3	1.0	0.5	0.7	0.8	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
3-Sep	0.1	0.1	0.2	0.3	0.4	Z	0.2	0.4	0.9	C	C	C	C	C	0.3	0.6	0.4	0.4	0.4	0.4	0.2	0.3	0.3	0.3	0.3	0.9
	0.1	0.1	0.3	0.4	0.3	SP	0.3	0.6	0.9	C	C	C	C	0.3	0.4	0.5	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2		
4-Sep	Z	0.1	0.2	0.4	0.5	0.4	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	0.0	0.0	0.0	0.2	0.1	0.2	0.5
	SP	0.1	0.3	0.5	0.5	0.4	0.4	0.3	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2		
5-Sep	0.4	Z	0.8	0.3	0.7	0.6	0.3	0.6	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.4	0.3	0.3	1.2
	0.2	SP	0.4	0.3	1.2	0.3	0.5	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	0.3	0.4	0.3		
6-Sep	0.3	0.2	Z	0.3	0.3	0.2	0.3	0.3	0.5	0.8	1.2	0.8	1.1	1.3	0.3	0.5	0.3	0.6	0.7	0.8	0.4	0.5	2.5	1.3	0.7	2.5
	0.2	0.2	SP	0.5	0.3	0.2	0.5	0.5	0.7	0.8	1.1	1.0	1.0	1.2	0.4	0.3	0.6	0.4	0.5	0.7	0.3	1.7	2.4	0.3		
7-Sep	0.2	0.1	0.2	Z	0.3	0.3	0.8	1.5	0.8	1.4	1.0	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.7	0.9	0.3	0.3	0.3	0.5	2.5
	0.2	0.1	0.2	SP	0.3	0.5	1.2	1.4	1.3	2.5	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.3	1.2	0.4	0.3	0.3	0.2		
8-Sep	0.2	0.2	0.1	0.2	Z	0.1	0.2	0.2	0.2	0.2	0.1	0.3	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	0.3
	0.2	0.2	0.2	0.2	SP	0.2	0.3	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2		
9-Sep	0.2	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	0.1	0.1	0.1	0.1	0.1	0.1	0.3
	0.2	0.1	0.1	0.1	0.2	SP	0.2	0.3	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	0.2	0.1	0.1		
10-Sep	Z	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	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2
	SP	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	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1		
11-Sep	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2
	0.1	SP	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	0.1	0.1	0.1	0.1	0.2	0.1	0.1		
12-Sep	0.1	0.1	Z	0.2	0.2	0.1	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	0.3
	0.1	0.2	SP	0.2	0.1	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		
13-Sep	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	0.2	0.2	0.2	0.3	0.6	0.1	0.6
	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	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.4		
14-Sep	0.2	0.1	0.1	0.1	Z	0.2	0.2	0.6	0.4	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.4	0.3	0.2	0.1	0.2	0.1	0.2	0.6
	0.2	0.1	0.2	0.2	SP	0.2	0.4	0.4	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.1	0.2	0.1	0.1		
15-Sep	0.2	0.1	0.1	0.1	0.2	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	0.1	0.2
	0.1	0.1	0.1	0.1	0.1	SP	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	0.2	0.2		

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Ells River - September 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-Sep	Z	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.5	0.3	0.2	0.2	0.2	0.2	0.5
	SP	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.4	0.3	0.3	0.3	0.3		
17-Sep	0.2	Z	0.3	0.2	0.3	0.4	0.4	0.4	0.5	0.3	0.3	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	0.6
	0.3	SP	0.3	0.2	0.4	0.4	0.4	0.4	0.4	0.6	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1		
18-Sep	0.1	0.1	Z	0.1	0.1	0.2	0.2	0.2	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	0.3
	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	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
19-Sep	0.2	0.1	0.1	Z	0.1	0.1	0.1	0.2	0.4	2.3	1.2	1.0	0.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	2.3
	0.1	0.1	0.1	SP	0.1	0.1	0.2	0.3	1.7	0.8	1.3	0.7	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3		
20-Sep	0.3	0.2	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	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.3
	0.2	0.2	0.1	0.1	SP	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		
21-Sep	0.1	0.1	0.1	0.2	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.6	0.5	0.6	0.7	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.3	0.7
	0.1	0.1	0.1	0.1	0.1	SP	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.6	0.4	0.7	0.6	0.5	0.5	0.5	0.4	0.4	0.2	0.2		
22-Sep	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	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
	SP	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
23-Sep	0.1	Z	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.5	0.9	0.7	0.8	1.1	0.6	0.7	0.4	1.5	0.3	0.3	0.2	0.4	1.5
	0.2	SP	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.4	0.9	0.9	0.6	1.1	1.0	0.6	0.9	0.4	0.9	0.3	0.2	0.2		
24-Sep	0.2	0.1	Z	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	0.1	0.2
	0.2	0.1	SP	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-Sep	0.1	0.2	0.2	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	0.1	0.1	0.1	0.2	0.4
	0.2	0.2	0.2	SP	0.4	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
26-Sep	0.1	0.1	0.1	0.2	Z	0.1	0.2	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	0.2
	0.1	0.1	0.1	0.1	SP	0.1	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		
27-Sep	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	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
28-Sep	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	0.1	0.1	0.2
	SP	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	0.1	0.1		
29-Sep	0.1	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	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.2
	0.1	SP	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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	0.0	0.1		
30-Sep	0.0	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	0.2	0.1	0.2	0.1	0.2
	0.1	0.0	SP	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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	0.2	0.2	0.2	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	Diurnal Average	
	0.6	0.7	0.8	1.1	1.2	1.2	1.2	4.3	2.5	4.1	3.0	1.8	1.1	1.3	0.7	1.1	1.1	1.7	1.2	2.9	2.1	1.7	2.5	1.3	Diurnal Maximum	

Z - zerospan C - Calibration 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 - September 2026

Maximum Value: 3.7 ppb on Sep 1 10:00

Maximum Daily Average: 1.1 ppb on Sep 1

Minimum Value: 0.0 ppb on Sep 4 17:00

Minimum Daily Average: 0.1 ppb on Sep 29

Maximum Diurnal Average: 0.4 ppb at hour 10

Minimum Diurnal Average: 0.2 ppb at hour 15

Monthly Average: 0.24 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.5 P_{99} = 1.6

Hours in Service:	720
Hours of Data:	685
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-Sep	0.6	0.5	0.4	Z	0.3	0.3	0.5	3.4	2.1	3.7	2.7	1.4	0.9	0.5	0.2	0.2	0.3	1.2	1.2	2.5	1.4	0.4	0.3	0.3	1.1	3.7
2-Sep	0.5	0.5	0.8	1.0	Z	1.2	1.1	0.8	0.3	0.7	0.7	0.7	0.9	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	1.2
3-Sep	0.1	0.1	0.2	0.4	0.4	Z	0.2	0.5	0.9	C	C	C	C	C	0.4	0.5	0.4	0.4	0.4	0.3	0.2	0.2	0.3	0.2	0.3	0.9
4-Sep	Z	0.1	0.2	0.4	0.5	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.2	0.5
5-Sep	0.3	Z	0.6	0.3	1.0	0.5	0.4	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.3	0.4	0.3	0.3	1.0
6-Sep	0.2	0.2	Z	0.4	0.3	0.2	0.4	0.4	0.6	0.8	1.1	0.9	1.1	1.3	0.4	0.4	0.4	0.5	0.6	0.7	0.4	1.1	2.5	0.8	0.7	2.5
7-Sep	0.2	0.1	0.2	Z	0.3	0.4	1.0	1.5	1.1	2.0	0.6	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.9	0.7	0.3	0.3	0.3	0.5	2.0
8-Sep	0.2	0.2	0.2	0.2	Z	0.1	0.2	0.2	0.2	0.2	0.1	0.3	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	0.3
9-Sep	0.2	0.1	0.1	0.1	0.2	Z	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	0.1	0.1	0.1	0.1	0.3
10-Sep	Z	0.1	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	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
11-Sep	0.1	Z	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
12-Sep	0.1	0.2	Z	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	0.1	0.1	0.1	0.2
13-Sep	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	0.2	0.2	0.2	0.3	0.5	0.1	0.5
14-Sep	0.2	0.1	0.2	0.2	Z	0.2	0.3	0.5	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.1	0.2	0.5
15-Sep	0.2	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	0.2	0.1	0.2
16-Sep	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	0.1	0.1	0.1	0.2	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.4
17-Sep	0.2	Z	0.3	0.2	0.4	0.4	0.4	0.4	0.4	0.5	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.5
18-Sep	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	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
19-Sep	0.2	0.1	0.1	Z	0.1	0.1	0.2	0.2	1.0	1.6	1.2	0.8	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	1.6
20-Sep	0.2	0.2	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	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
21-Sep	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.6	0.5	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.2	0.2	0.3	0.6
22-Sep	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	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
23-Sep	0.2	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.3	0.7	0.9	0.7	1.0	1.1	0.6	0.8	0.4	1.2	0.3	0.3	0.2	0.4	1.2
24-Sep	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	0.1	0.2
25-Sep	0.2	0.2	0.2	Z	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4
26-Sep	0.1	0.1	0.1	0.2	Z	0.1	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	0.1	0.1	0.1	0.1	0.2
27-Sep	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	0.1	0.1	0.1
28-Sep	Z	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	0.1	0.1	0.1	0.2
29-Sep	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
30-Sep	0.0	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	0.2	0.1	0.1	0.2
	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	Diurnal Average	
	0.6	0.5	0.8	1.0	1.0	1.2	1.1	3.4	2.1	3.7	2.7	1.4	1.1	1.3	0.7	1.0	1.1	1.2	1.2	2.5	1.4	1.1	2.5	0.8	Diurnal Maximum	

Z - zerospan C - Calibration

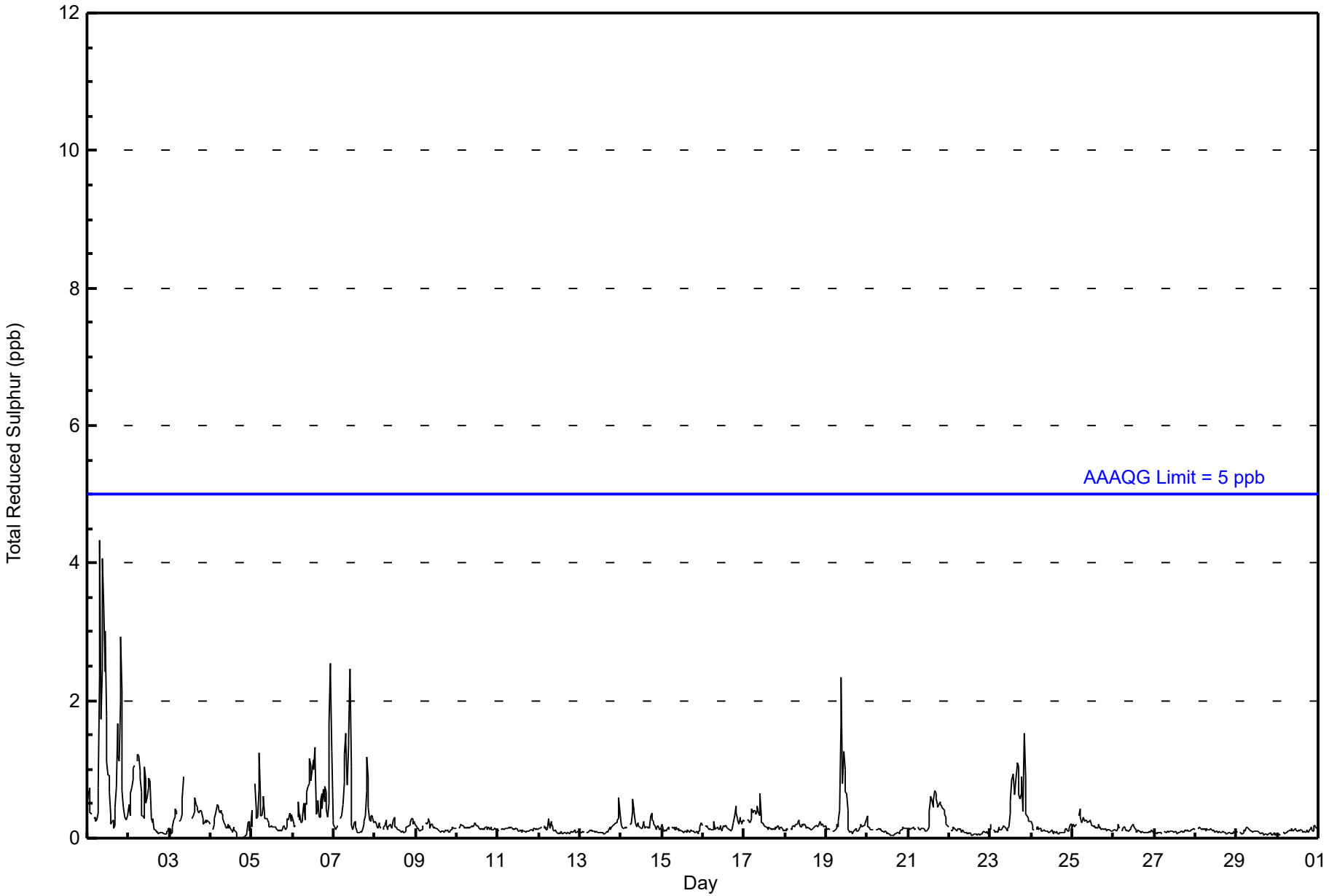
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Ells River - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	682	99.56	99.56
3 - 4	3	0.44	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Reduced Sulphur (TRS) - ppb

Ells River - September 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	16	2	3	0	14	41	54	83	89	83	44	65	40	39	34	677
3 - 4	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	3
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	70	16	2	3	0	14	42	55	83	89	84	44	65	40	39	34	680

Total Number of Valid Hours: 680

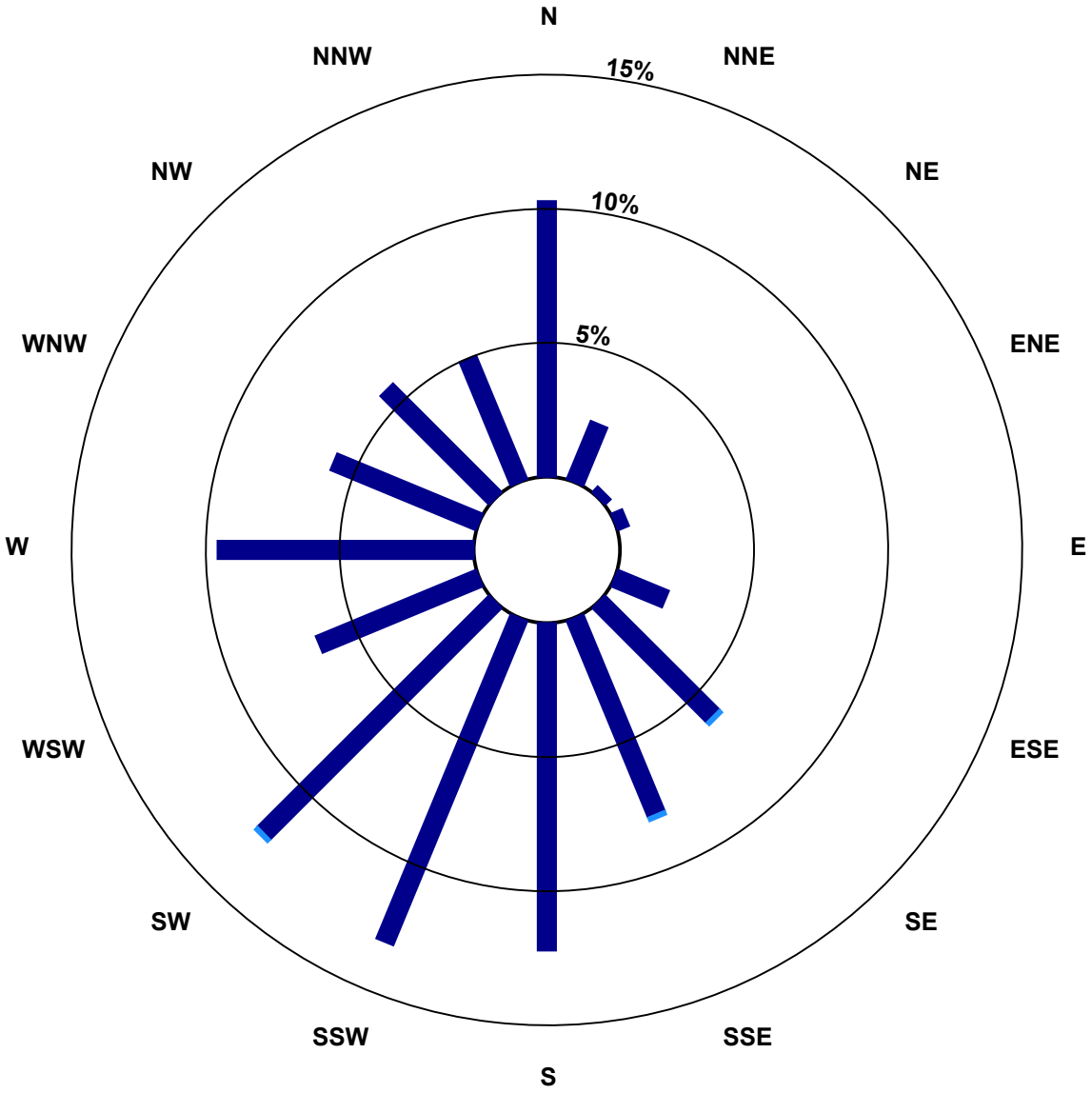
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Reduced Sulphur (TRS) - ppb

Ells River



Classes (ppb)

- 0 - 2
- 3 - 4
- 5 - 7
- 8 - 11
- > 11

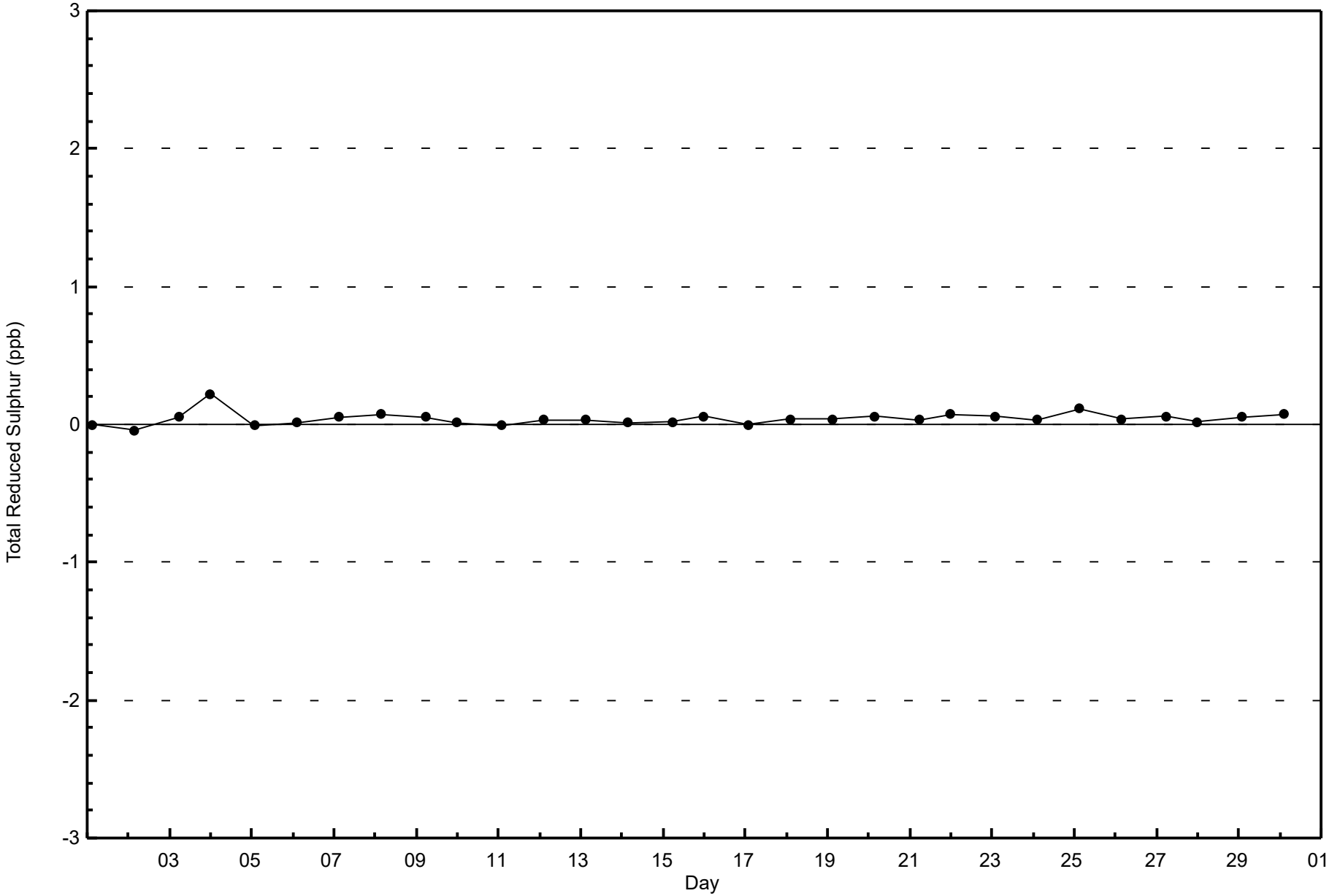
Total Number of Valid Hours: 680

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Ells River - September 2026

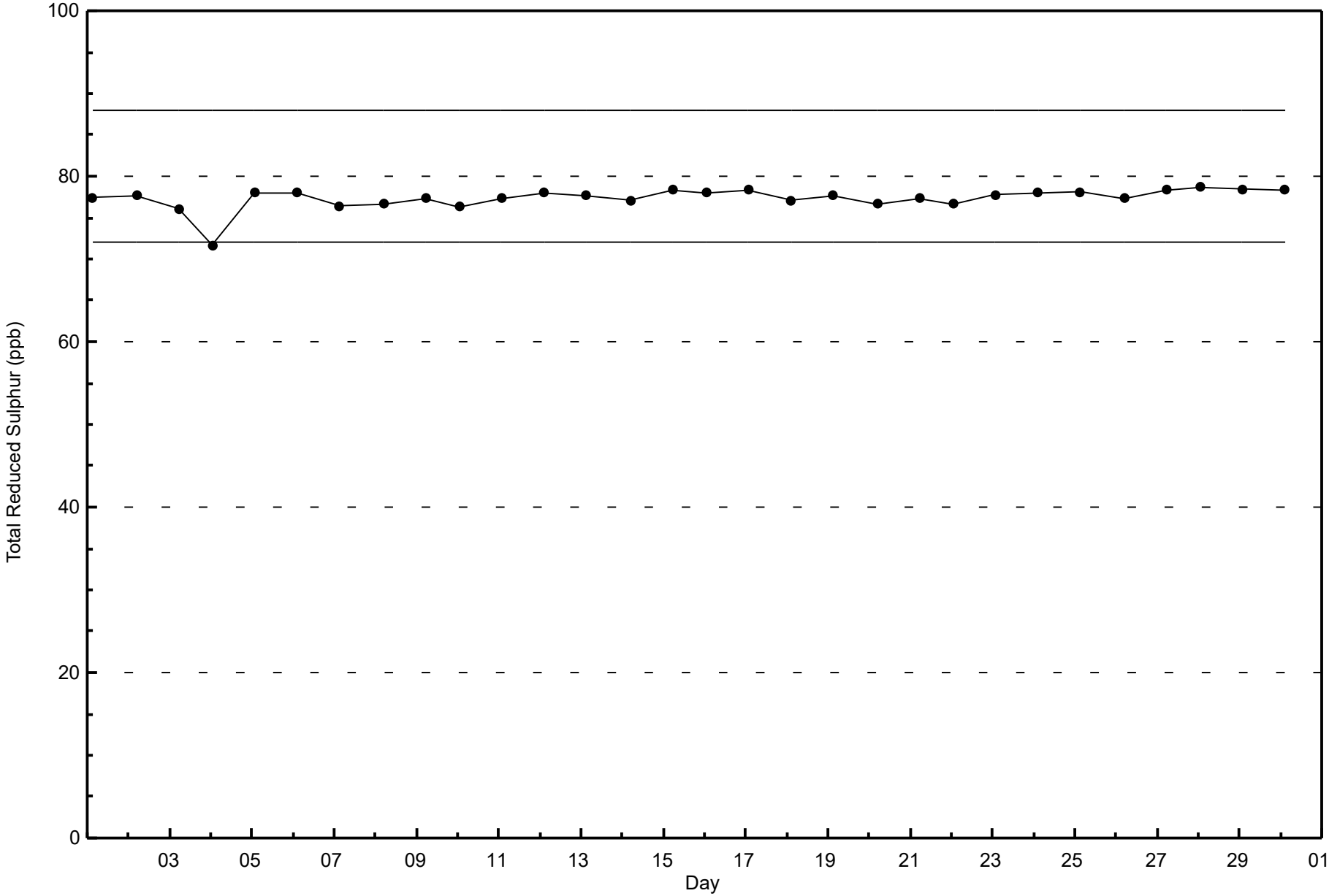


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Ells River - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Ells River - September 2026

Maximum Value: 3.3 ppm on Sep 17 06:00

Maximum Daily Average: 2.3 ppm on Sep 17

Minimum Value: 2.0 ppm on Sep 20 16:00

Minimum Daily Average: 2.0 ppm on Sep 27

Maximum Diurnal Average: 2.2 ppm at hour 7

Minimum Diurnal Average: 2.0 ppm at hour 16

Monthly Average: 2.12 ppm

Percentiles: P_1 = 2.0 P_{10} = 2.0 Q_1 = 2.0 Median = 2.1 Q_3 = 2.2 P_{90} = 2.3 P_{99} = 2.7

Hours in Service:	720
Hours of Data:	686
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-Sep	2.4	2.3	Z	2.1	2.1	2.2	2.3	2.3	2.2	C	C	C	C	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.3	2.1	2.1	2.1	2.4
2-Sep	2.2	2.2	2.3	Z	2.4	2.4	2.5	2.7	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	2.7
3-Sep	2.2	2.1	2.2	2.2	Z	2.4	2.6	2.7	2.6	2.3	2.2	2.3	2.1	2.1	2.2	2.2	2.5	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.7
4-Sep	2.3	2.5	2.5	2.5	2.4	Z	2.4	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	2.1	2.5
5-Sep	Z	3.0	2.4	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	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3.0
6-Sep	2.2	Z	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.1	2.2	2.4
7-Sep	2.2	2.1	Z	2.2	2.3	2.3	2.3	2.3	2.2	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.2	2.3	2.4	2.3	2.2	2.4
8-Sep	2.4	2.3	2.3	Z	2.3	2.3	2.4	2.2	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.4
9-Sep	2.1	2.2	2.3	2.3	Z	2.7	2.7	2.7	2.5	2.5	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	2.2	2.7
10-Sep	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	2.0	2.1	2.0	2.0	2.0	2.1
11-Sep	Z	2.0	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	2.0	2.1	2.2	2.0	2.0	2.0	2.1	2.2
12-Sep	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	2.0
13-Sep	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
14-Sep	2.0	2.0	2.0	Z	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	2.0	2.2	2.2	2.1	2.1	2.1	2.1	2.2
15-Sep	2.0	2.0	2.0	2.1	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	2.2	2.2	2.0	2.2
16-Sep	2.1	2.1	2.1	2.1	2.1	Z	2.1	2.1	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	2.1	2.2	2.2	2.1	2.2
17-Sep	Z	2.2	2.2	2.4	3.0	3.3	3.1	2.8	2.5	2.3	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	2.1	2.3	3.3
18-Sep	2.1	Z	2.0	2.0	2.0	2.2	2.4	2.4	2.2	2.2	2.2	2.2	2.4	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.4
19-Sep	2.2	2.2	Z	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.3	2.3	2.3	2.2	2.3
20-Sep	2.2	2.1	2.1	Z	2.1	2.1	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	2.4	2.5	2.3	2.2	2.1	2.5
21-Sep	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.2	2.1	2.1	2.1	2.2	2.3	2.5	2.5	2.4	2.4	2.3	2.2	2.2	2.5
22-Sep	2.2	2.2	2.2	2.3	2.3	Z	2.3	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3
23-Sep	Z	2.1	2.0	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	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.1	2.3
24-Sep	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	2.0	2.0	2.0	2.0	2.1	2.0	2.1
25-Sep	2.2	2.3	Z	3.1	2.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.2	3.1
26-Sep	2.0	2.0	2.1	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	2.1
27-Sep	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
28-Sep	2.0	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	2.2	2.1	2.0	2.0	2.1	2.0	2.2
29-Sep	Z	2.1	2.1	2.1	2.2	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	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3
30-Sep	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	2.2	2.1	2.0	2.0	2.2
	2.1	2.2	2.1	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	2.1	2.1	2.1	2.1	2.1	Diurnal Average	
	2.4	3.0	2.5	3.1	3.0	3.3	3.1	2.8	2.6	2.5	2.3	2.4	2.4	2.3	2.2	2.2	2.5	2.3	2.5	2.5	2.4	2.5	2.4	2.3	Diurnal Maximum	

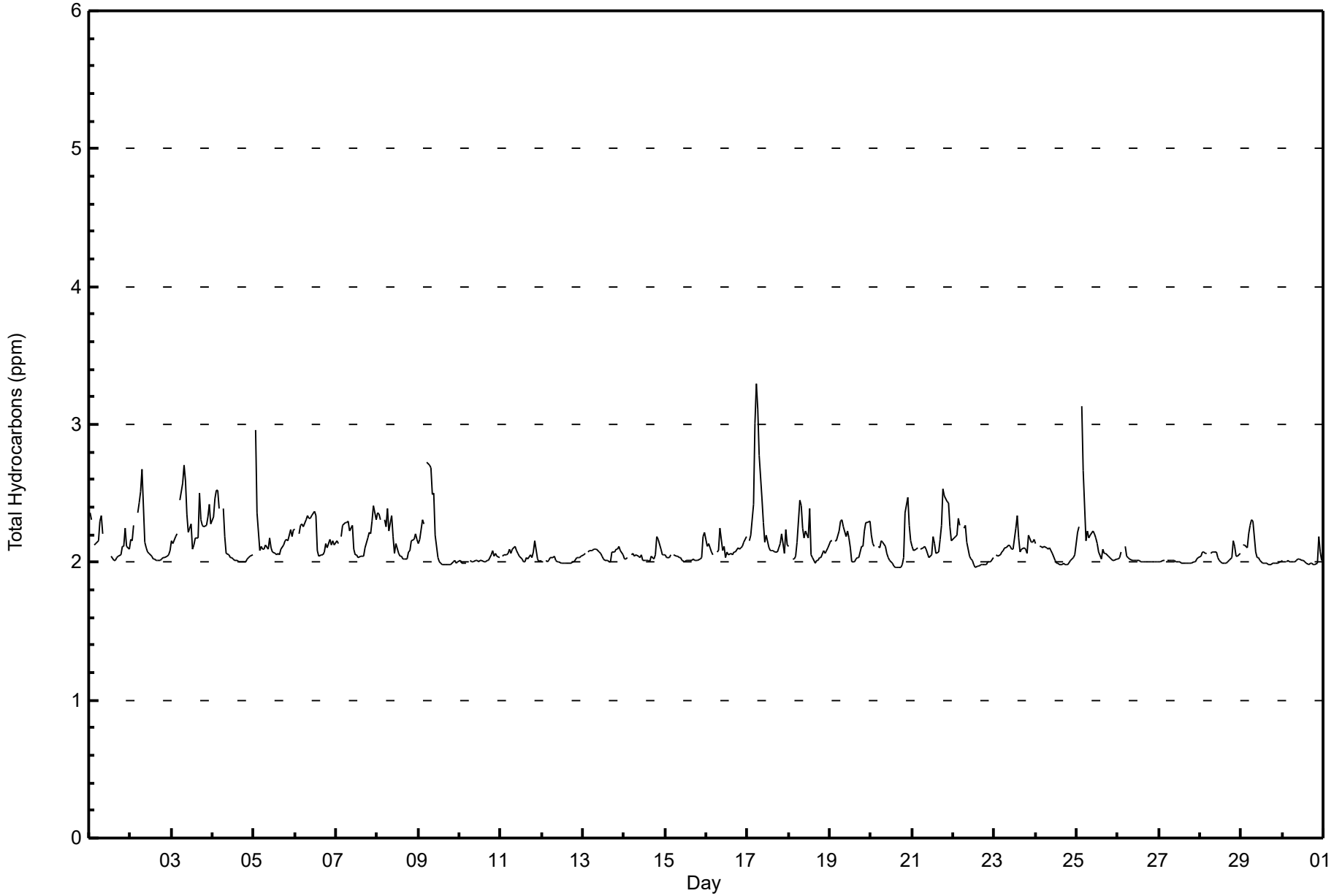
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Ells River - September 2026



Total Hydrocarbons (THC) - ppm
Ells River - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	298	43.44	43.44
2.1 - 3.0	385	56.12	99.56
3.1 - 10.0	3	0.44	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Ells River - September 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	30	2	0	1	0	6	13	13	11	38	54	37	38	26	19	8	296
2.1 - 3.0	42	15	2	3	2	8	27	41	74	48	32	7	22	14	20	25	382
3.1 - 10.0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	3
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	72	17	2	4	2	14	40	54	85	86	86	44	62	40	40	33	681

Total Number of Valid Hours: 681

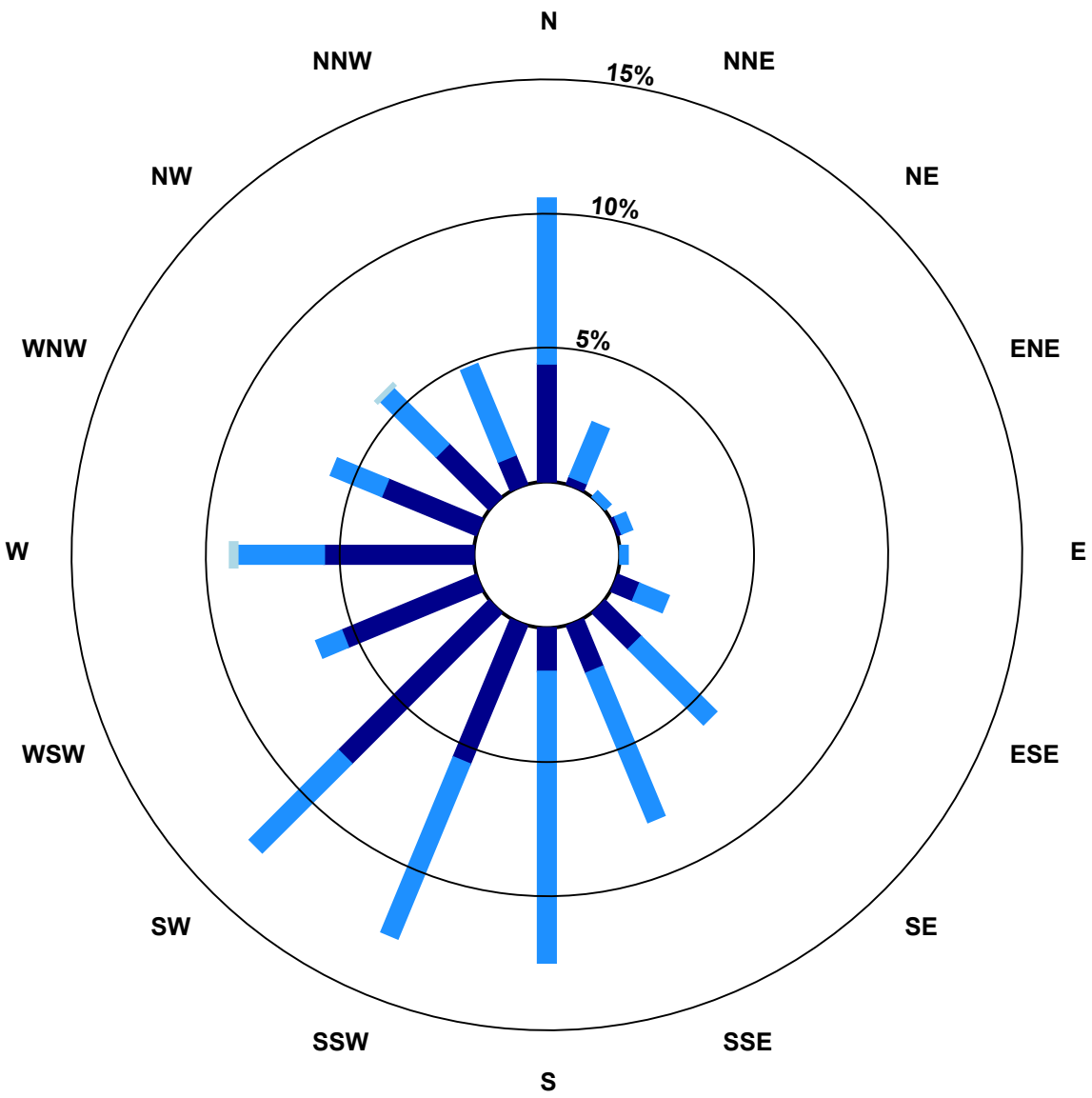
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Ells River



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

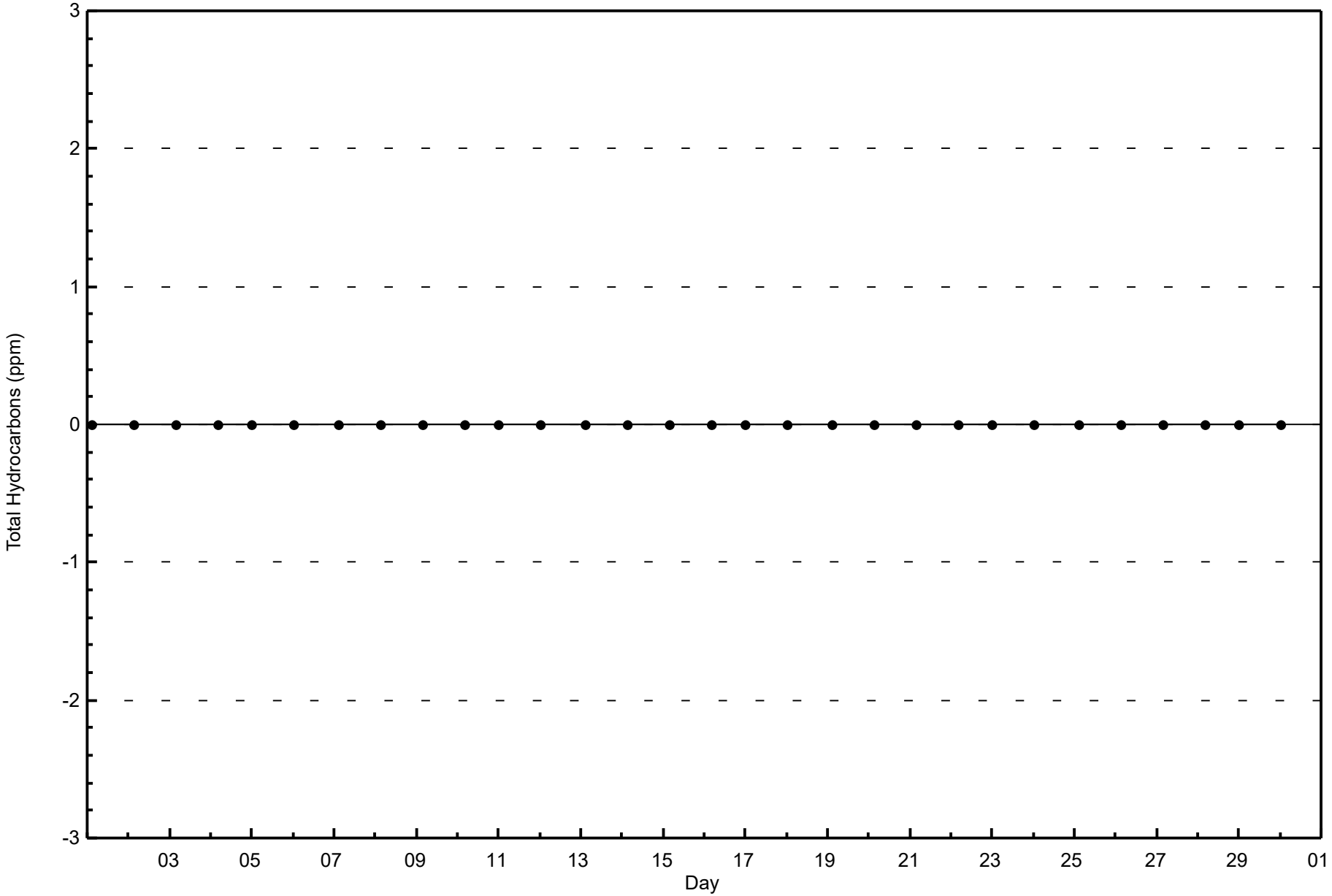
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Ells River - September 2026

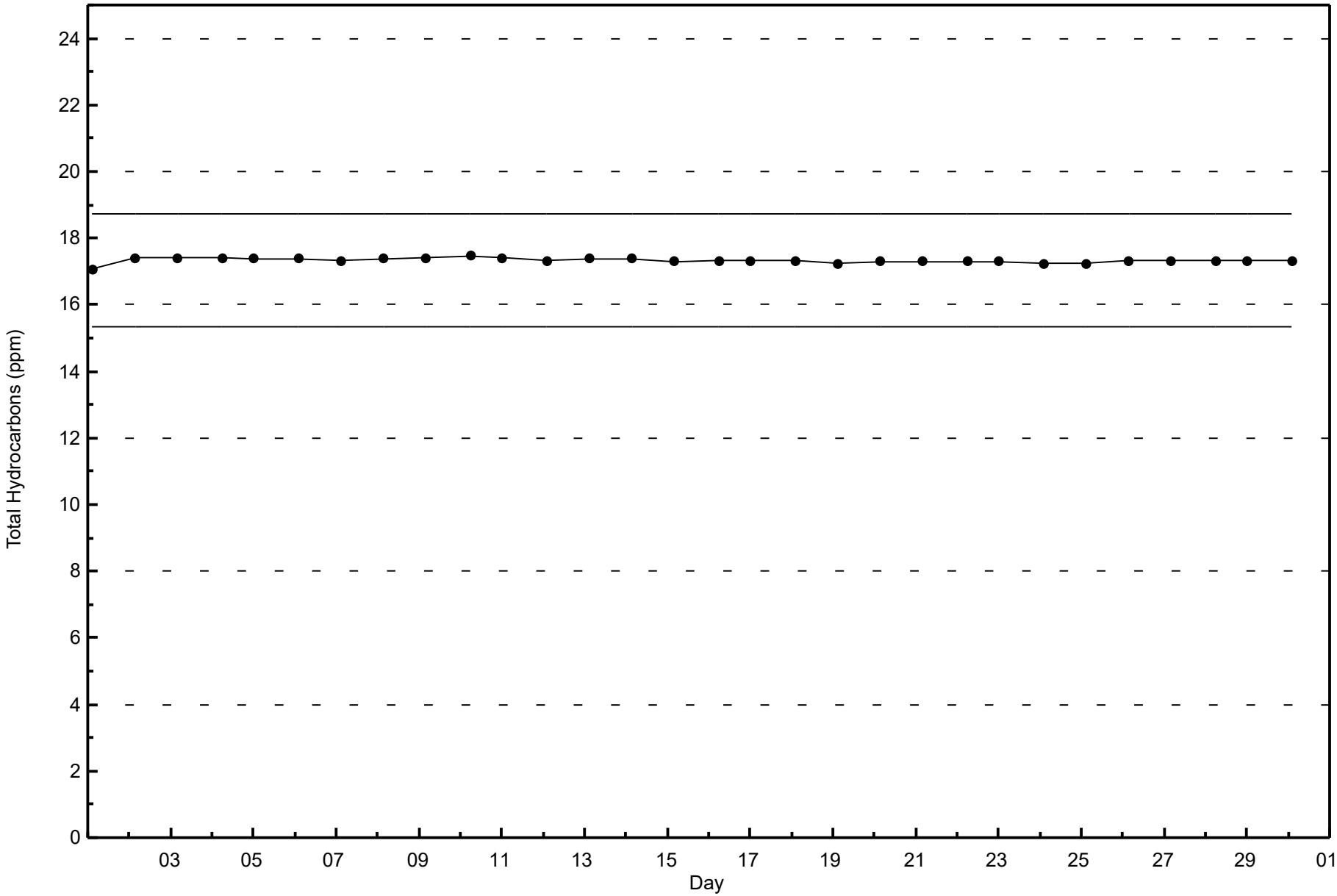


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Ells River - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Ells River - September 2026

Maximum Value: 0.234 ppm on Sep 3 17:00

Maximum Daily Average: 0.020 ppm on Sep 3

Minimum Value: 0.000 ppm on Sep 1 01:00

Minimum Daily Average: 0.000 ppm on Sep 1

Maximum Diurnal Average: 0.010 ppm at hour 17

Minimum Diurnal Average: 0.000 ppm at hour 1

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:	720
Hours of Data:	686
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-Sep	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
2-Sep	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
3-Sep	0.000	0.000	0.000	0.000	Z	0.080	0.002	0.000	0.000	0.000	0.002	0.031	0.000	0.000	0.000	0.000	0.234	0.067	0.000	0.000	0.000	0.009	0.046	0.000	0.020	0.234
4-Sep	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
5-Sep	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	0.027	0.066	0.062	0.063	0.055	0.053	0.031	0.005	0.016	0.066
6-Sep	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
7-Sep	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
8-Sep	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
9-Sep	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
10-Sep	0.000	0.000	0.000	0.002	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	0.002
11-Sep	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
12-Sep	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
13-Sep	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
14-Sep	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
15-Sep	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
16-Sep	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
17-Sep	Z	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008
18-Sep	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
19-Sep	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
20-Sep	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
21-Sep	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	0.035	0.053	0.083	0.037	0.001	0.002	0.000	0.000	0.009	0.083
22-Sep	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
23-Sep	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
24-Sep	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
25-Sep	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
26-Sep	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
27-Sep	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
28-Sep	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
29-Sep	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
30-Sep	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	0.003	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.010	0.006	0.005	0.003	0.002	0.002	0.003	0.000	Diurnal Average	
	0.000	0.000	0.000	0.002	0.002	0.080	0.002	0.000	0.000	0.000	0.002	0.031	0.000	0.000	0.000	0.000	0.234	0.067	0.083	0.063	0.055	0.053	0.046	0.005	Diurnal Maximum	

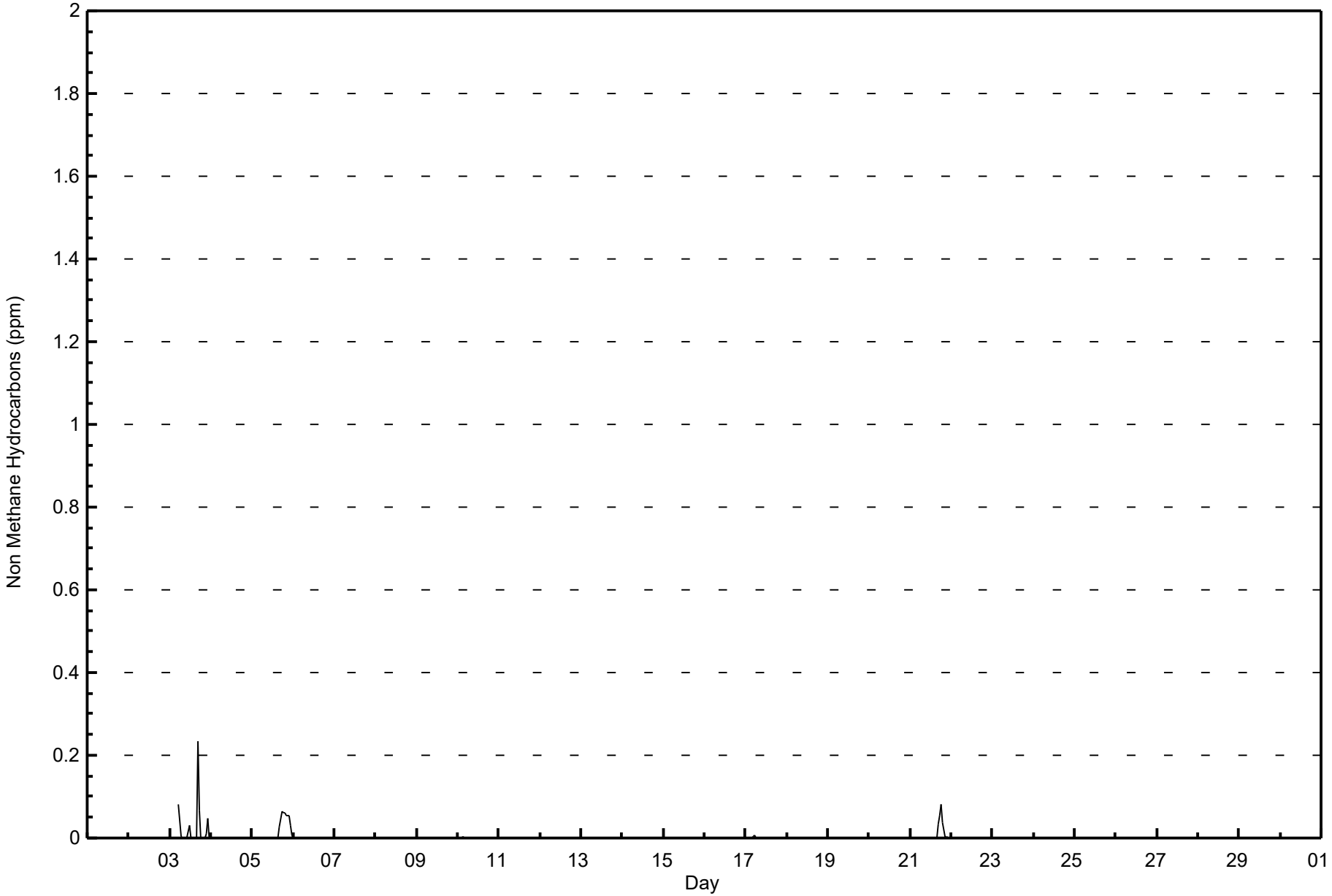
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Ells River - September 2026



Non Methane Hydrocarbons (NMHC) - ppm
Ells River - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	668	97.38	97.38
0.006 - 0.05	10	1.46	98.83
0.06 - 0.1	7	1.02	99.85
> 0.1	1	0.15	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Ells River - September 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	69	16	2	4	1	14	39	54	84	86	85	44	56	40	40	29	663
0.006 - 0.05	2	0	0	0	1	0	1	0	0	0	1	0	3	0	0	2	10
0.06 - 0.1	1	0	0	0	0	0	0	0	1	0	0	0	3	0	0	2	7
> 0.1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Totals	72	17	2	4	2	14	40	54	85	86	86	44	62	40	40	33	681

Total Number of Valid Hours: 681

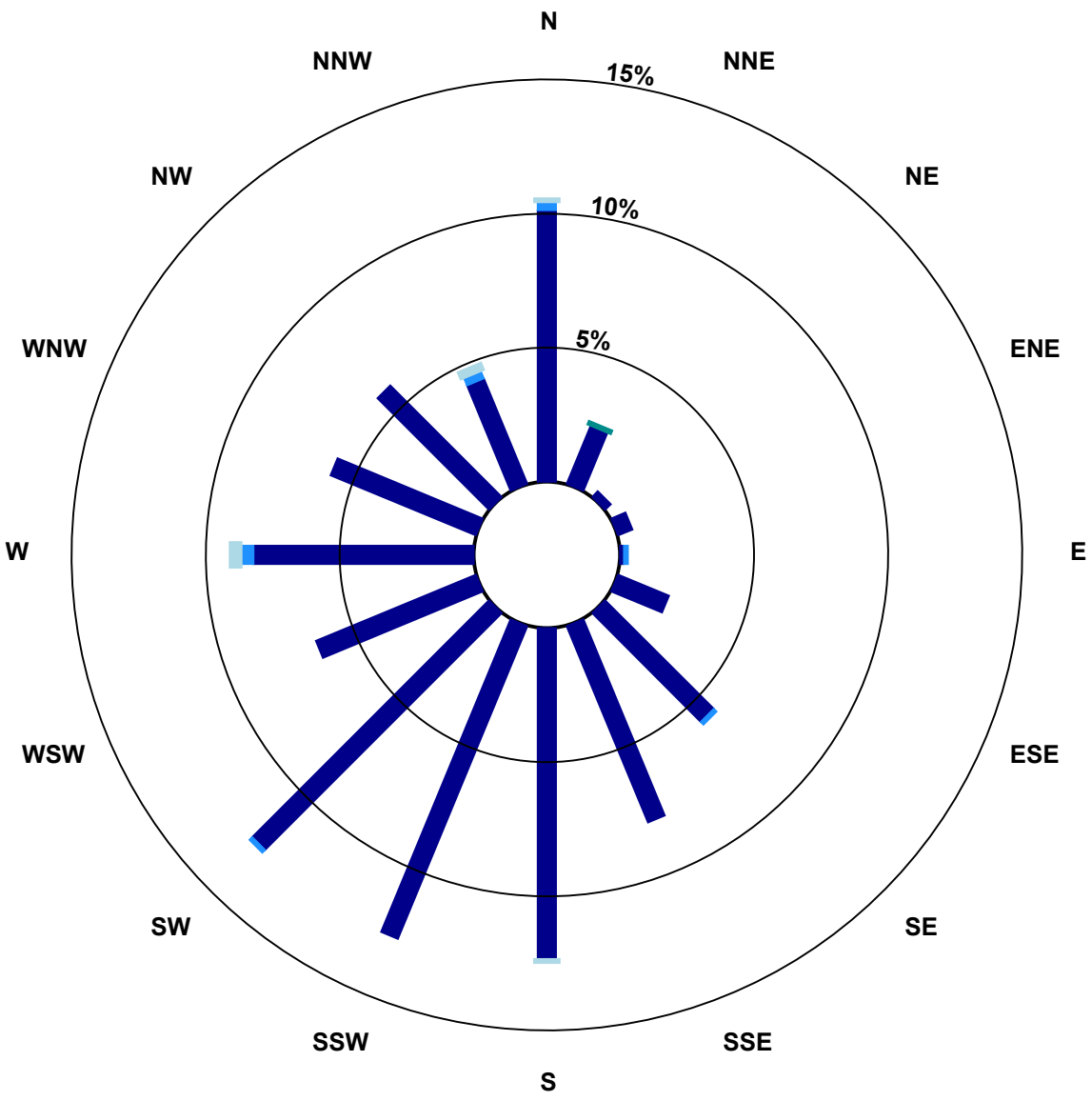
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Non Methane Hydrocarbons (NMHC) - ppm

Ells River



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

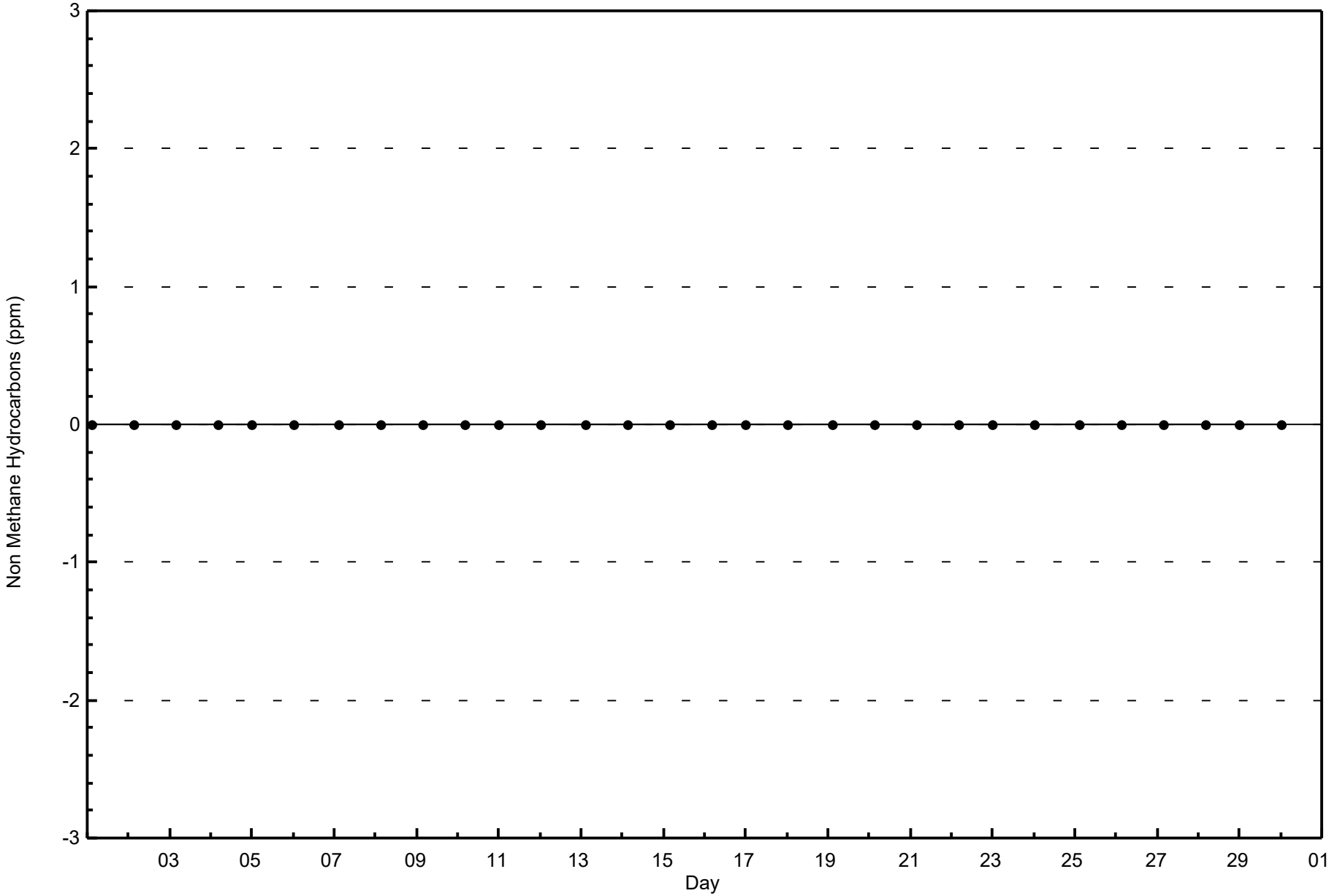
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Ells River - September 2026

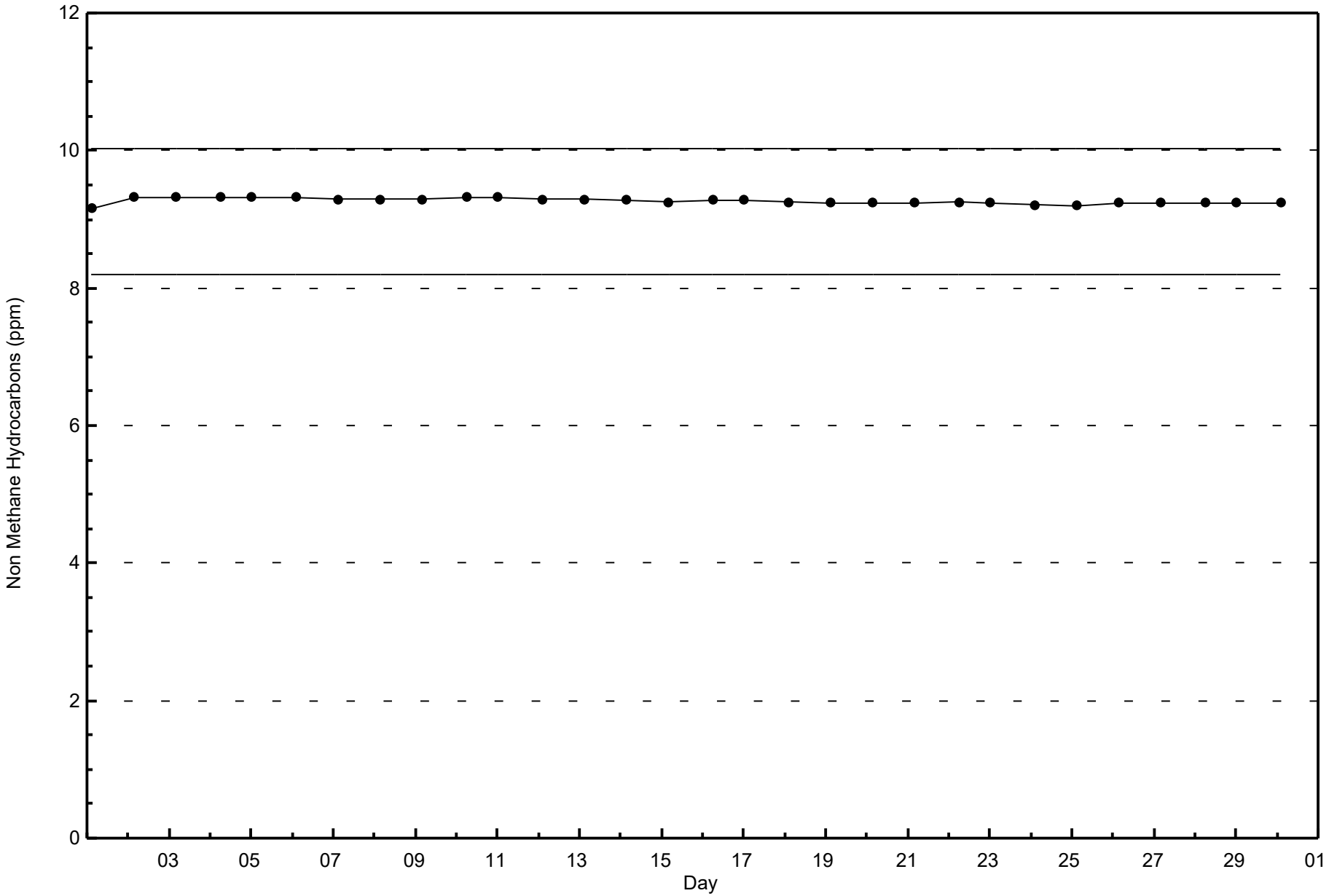


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Ells River - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Ells River - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.3 ppm on Sep 17 06:00
Maximum Daily Average: 2.3 ppm on Sep 17

Minimum Value: 2.0 ppm on Sep 20 16:00
Minimum Daily Average: 2.0 ppm on Sep 27
Maximum Diurnal Average: 2.2 ppm at hour 7
Minimum Diurnal Average: 2.0 ppm at hour 16
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} = 2.3 P_{99} = 2.7

Hours in Service:	720
Hours of Data:	686
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-Sep	2.4	2.3	Z	2.1	2.1	2.2	2.3	2.3	2.2	C	C	C	C	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.3	2.1	2.1	2.1	2.4
2-Sep	2.2	2.2	2.3	Z	2.4	2.4	2.5	2.7	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	2.7
3-Sep	2.2	2.1	2.2	2.2	Z	2.4	2.6	2.7	2.6	2.3	2.2	2.2	2.1	2.1	2.2	2.2	2.3	2.2	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.7
4-Sep	2.3	2.5	2.5	2.5	2.4	Z	2.4	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	2.1	2.5
5-Sep	Z	3.0	2.4	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	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	3.0
6-Sep	2.2	Z	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.1	2.2	2.4
7-Sep	2.2	2.1	Z	2.2	2.3	2.3	2.3	2.3	2.2	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.2	2.3	2.4	2.3	2.2	2.4
8-Sep	2.4	2.3	2.3	Z	2.3	2.3	2.4	2.2	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.4
9-Sep	2.1	2.2	2.3	2.3	Z	2.7	2.7	2.7	2.5	2.5	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	2.2	2.7
10-Sep	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	2.0	2.1	2.0	2.0	2.0	2.1
11-Sep	Z	2.0	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	2.0	2.1	2.2	2.0	2.0	2.0	2.1	2.2
12-Sep	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	2.0
13-Sep	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
14-Sep	2.0	2.0	2.0	Z	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	2.0	2.2	2.2	2.1	2.1	2.1	2.1	2.2
15-Sep	2.0	2.0	2.0	2.1	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	2.2	2.2	2.0	2.2
16-Sep	2.1	2.1	2.1	2.1	2.1	Z	2.1	2.1	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	2.1	2.2	2.2	2.1	2.2
17-Sep	Z	2.2	2.2	2.4	3.0	3.3	3.1	2.8	2.5	2.3	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	2.1	2.3	3.3
18-Sep	2.1	Z	2.0	2.0	2.0	2.2	2.4	2.4	2.2	2.2	2.2	2.2	2.4	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.4
19-Sep	2.2	2.2	Z	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.3	2.3	2.3	2.2	2.3
20-Sep	2.2	2.1	2.1	Z	2.1	2.1	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	2.4	2.5	2.3	2.2	2.1	2.5
21-Sep	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.2	2.1	2.1	2.1	2.1	2.2	2.4	2.4	2.4	2.4	2.3	2.2	2.2	2.4
22-Sep	2.2	2.2	2.2	2.3	2.3	Z	2.3	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3
23-Sep	Z	2.1	2.0	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	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.1	2.3
24-Sep	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	2.0	2.0	2.0	2.0	2.1	2.0	2.1
25-Sep	2.2	2.3	Z	3.1	2.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.2	3.1
26-Sep	2.0	2.0	2.1	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	2.1
27-Sep	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
28-Sep	2.0	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	2.2	2.1	2.0	2.0	2.0	2.2
29-Sep	Z	2.1	2.1	2.1	2.2	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	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3
30-Sep	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	2.2	2.1	2.0	2.0	2.2
	2.1	2.2	2.1	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	2.1	2.1	2.1	2.1	2.1	Diurnal Average	
	2.4	3.0	2.5	3.1	3.0	3.3	3.1	2.8	2.6	2.5	2.3	2.4	2.4	2.3	2.2	2.2	2.3	2.2	2.4	2.4	2.4	2.5	2.4	2.3	Diurnal Maximum	

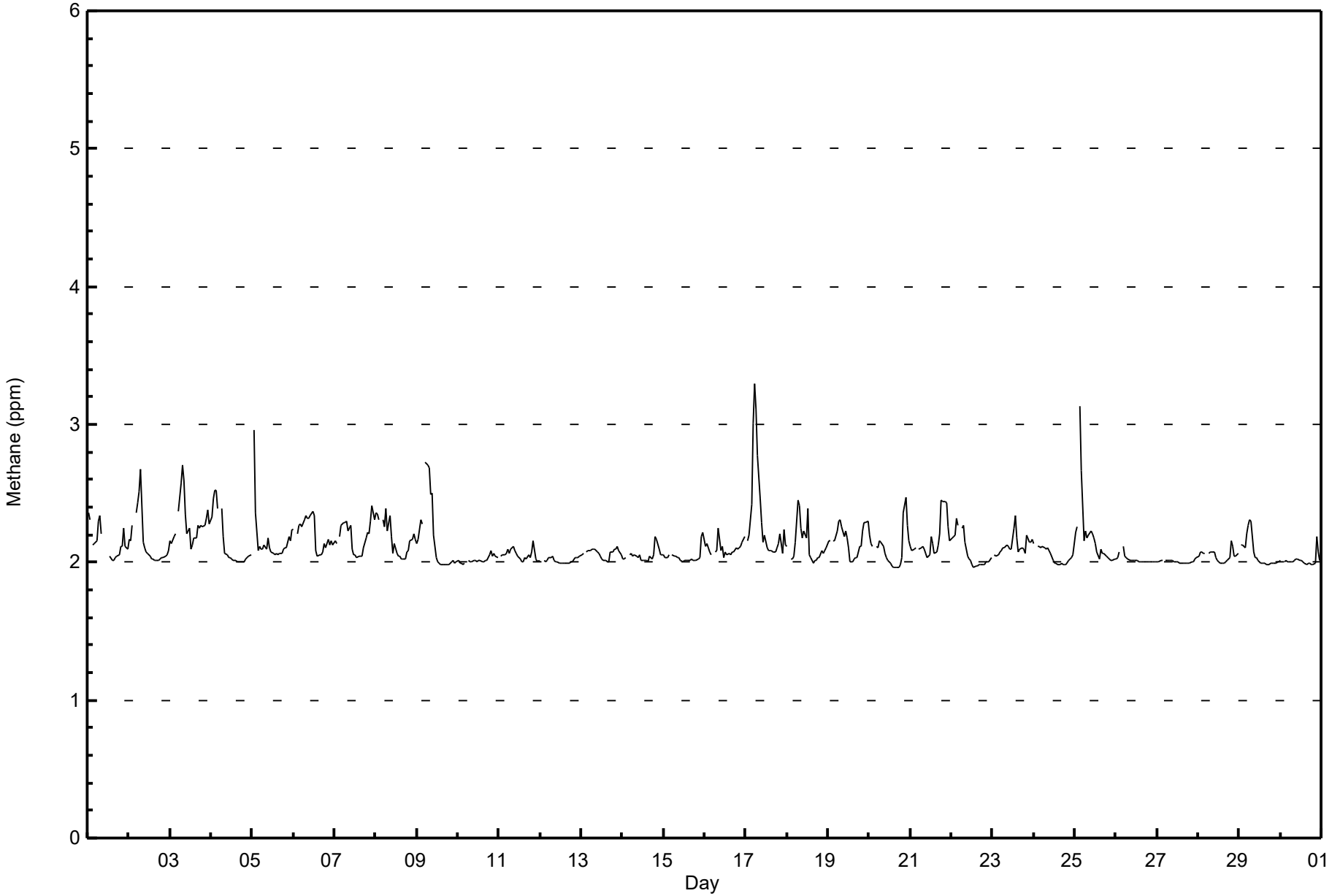
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Ells River - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	298	43.44	43.44
2.1 - 3.0	385	56.12	99.56
3.1 - 10.0	3	0.44	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Ells River - September 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	30	2	0	1	0	6	13	13	11	38	54	37	38	26	19	8	296
2.1 - 3.0	42	15	2	3	2	8	27	41	74	48	32	7	22	14	20	25	382
3.1 - 10.0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	3
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	72	17	2	4	2	14	40	54	85	86	86	44	62	40	40	33	681

Total Number of Valid Hours: 681

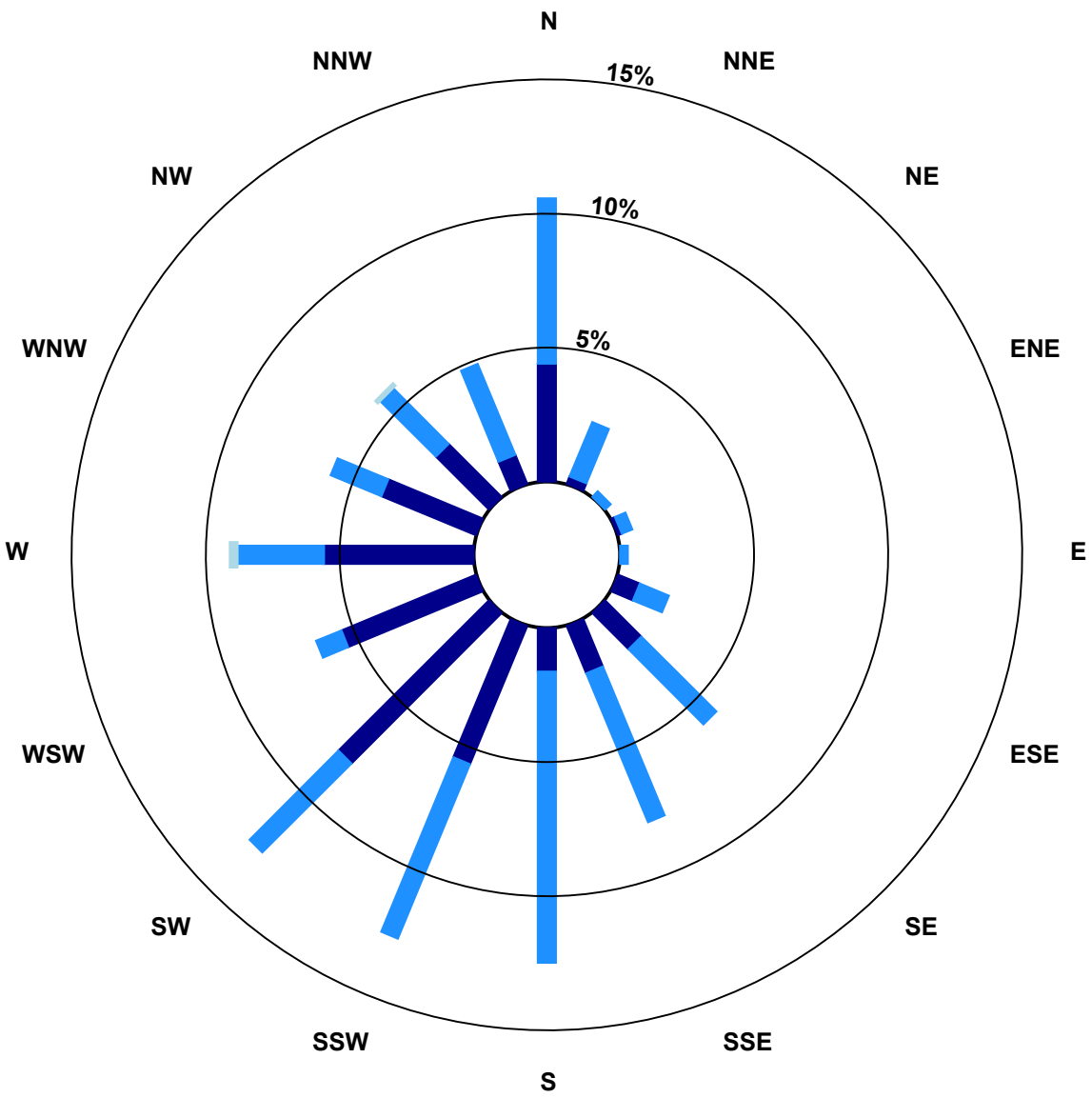
Total Number of Hours: 720

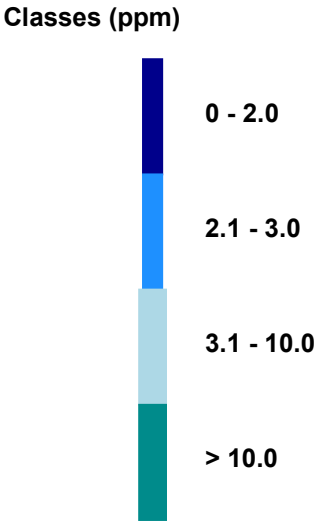
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Methane (CH_4) - ppm

Ells River





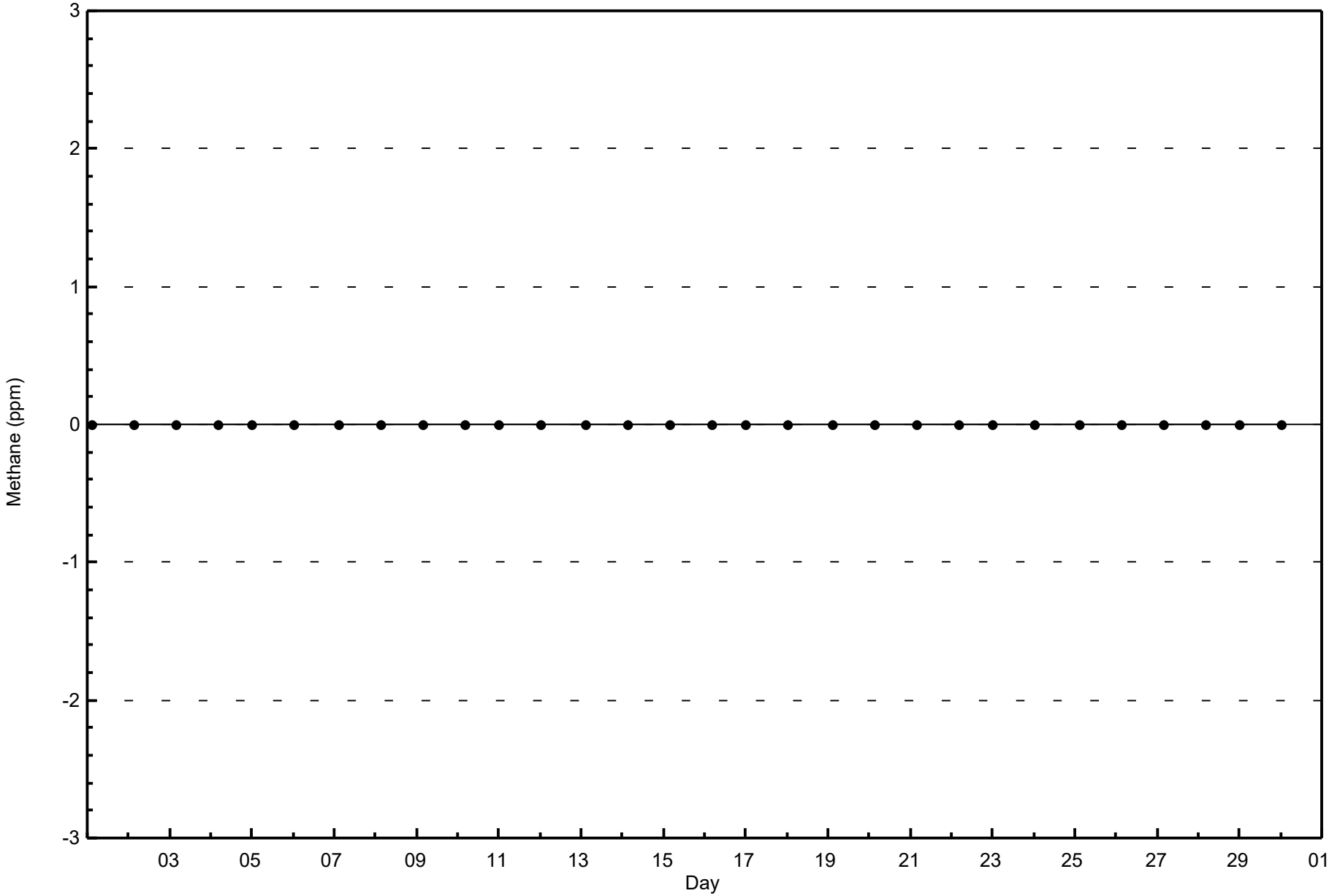
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Ells River - September 2026

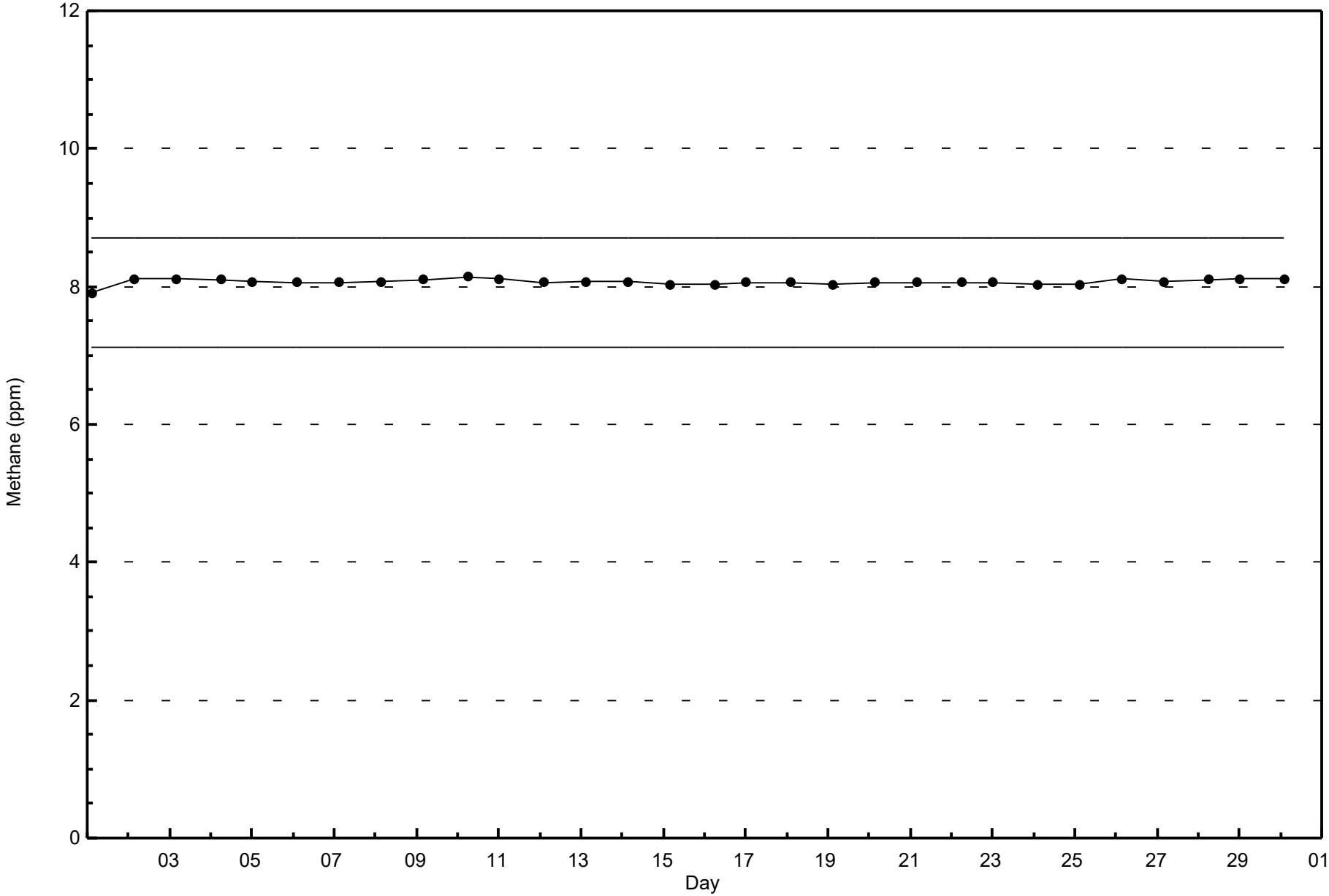


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Ells River - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Ells River - September 2026

Maximum Value: 80.2 ppb on Sep 17 06:00

Maximum Daily Average: 11.1 ppb on Sep 17

Minimum Value: 0.0 ppb on Sep 2 18:00

Minimum Daily Average: 0.0 ppb on Sep 10

Maximum Diurnal Average: 7.5 ppb at hour 7

Minimum Diurnal Average: 0.4 ppb at hour 20

Monthly Average: 2.35 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.3 Q_3 = 1.3 P_{90} = 5.6 P_{99} = 43.2

Hours in Service:	720
Hours of Data:	684
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-Sep	Z	1.4	0.3	0.3	0.3	1.1	11.7	10.8	3.2	4.2	5.1	1.9	2.3	1.4	0.7	0.6	0.7	0.6	0.6	0.5	0.5	0.8	0.6	0.8	2.2	11.7
2-Sep	0.8	Z	1.0	3.8	15.1	11.5	10.0	7.1	1.3	C	C	C	C	C	C	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	15.1
3-Sep	0.0	0.0	Z	2.9	6.6	12.1	37.6	47.7	43.9	15.7	4.2	10.4	0.4	0.5	2.5	2.9	2.0	1.3	0.9	1.1	4.2	4.5	9.0	8.8	9.5	47.7
4-Sep	18.7	29.5	30.2	Z	27.5	17.8	11.5	2.0	0.3	2.7	2.4	1.0	0.6	0.7	0.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	6.3	30.2
5-Sep	2.3	9.2	5.5	0.3	Z	0.3	0.9	2.1	3.5	7.4	3.8	2.7	1.9	1.3	1.8	0.9	1.8	1.0	0.3	0.0	0.0	0.0	1.0	1.4	2.1	9.2
6-Sep	0.8	0.0	0.1	0.0	0.0	Z	0.4	1.0	1.6	5.4	6.8	8.5	6.5	3.0	0.9	1.3	1.1	0.8	0.2	0.0	0.0	0.0	0.4	0.2	1.7	8.5
7-Sep	Z	0.0	0.1	0.4	1.3	0.9	0.9	4.0	5.0	13.7	2.7	0.7	1.0	0.3	0.7	0.7	0.7	0.5	0.8	0.2	0.3	5.5	7.7	7.4	2.4	13.7
8-Sep	5.3	Z	1.0	0.9	0.7	0.1	0.6	0.2	3.4	3.7	0.7	2.7	1.3	0.9	0.4	0.2	0.4	0.4	0.8	0.5	1.4	0.6	0.4	0.1	1.2	5.3
9-Sep	0.3	0.5	Z	5.7	20.3	45.0	47.8	40.6	10.8	13.7	4.6	0.2	0.1	0.0	0.3	0.4	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	8.3	47.8
10-Sep	0.0	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	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2
11-Sep	0.0	0.2	0.1	0.0	Z	0.3	0.5	1.2	2.0	1.4	1.1	1.2	1.0	0.0	0.2	0.2	0.2	0.1	0.0	0.2	0.2	0.0	0.0	0.2	0.4	2.0
12-Sep	0.1	0.0	0.0	0.0	0.0	Z	0.0	0.2	0.3	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0	0.0	0.1	0.6
13-Sep	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	0.6	0.2	0.1	0.1	2.1	1.7	0.2	0.2	2.1
14-Sep	0.0	Z	0.0	0.1	0.1	0.1	0.5	2.8	2.4	1.8	1.6	0.5	0.5	0.8	0.5	0.4	0.9	0.6	0.3	1.4	0.9	1.1	0.2	0.0	0.8	2.8
15-Sep	0.0	0.0	Z	0.0	0.4	0.2	0.0	0.4	0.3	0.2	0.2	0.2	0.2	0.0	0.3	0.4	0.0	0.5	0.2	0.3	0.3	0.4	4.1	8.1	0.7	8.1
16-Sep	1.4	1.4	0.5	Z	0.8	0.5	0.5	1.3	9.9	3.4	6.2	2.2	3.4	2.4	3.0	2.0	1.7	0.7	1.6	0.9	0.8	0.4	0.6	0.6	2.0	9.9
17-Sep	1.0	0.8	2.6	12.9	Z	80.2	68.6	38.5	15.6	9.8	3.7	6.4	1.0	0.2	0.1	0.0	0.0	0.1	0.0	1.8	9.0	2.0	1.5	0.0	11.1	80.2
18-Sep	0.0	0.0	0.0	0.0	0.0	Z	8.8	10.3	13.5	9.8	11.8	8.5	3.4	1.3	0.7	0.0	0.1	1.1	0.2	0.2	0.8	5.4	3.2	0.5	3.5	13.5
19-Sep	Z	0.8	0.5	0.3	1.5	5.9	8.0	7.7	6.5	3.7	3.5	2.0	1.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0	1.8	8.0
20-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	5.1	14.3	3.4	0.9	1.1	14.3
21-Sep	0.3	0.2	Z	0.3	0.1	0.1	0.1	0.0	0.1	0.0	0.1	1.3	2.4	1.5	1.0	1.5	3.2	5.1	11.7	3.8	0.9	0.9	0.6	0.1	1.5	11.7
22-Sep	0.2	0.0	0.1	Z	1.5	0.7	4.8	4.7	0.7	0.6	0.7	0.6	0.7	0.2	0.4	0.0	0.0	0.1	0.1	0.3	0.2	0.0	0.2	0.0	0.7	4.8
23-Sep	0.3	0.2	0.0	0.2	Z	0.4	0.3	0.2	0.2	0.4	0.1	2.6	6.3	6.8	2.3	2.5	1.5	1.3	0.5	0.0	0.0	0.0	0.0	0.6	1.2	6.8
24-Sep	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	0.1	0.0	0.0	1.3	0.1	0.2	0.1	1.3
25-Sep	Z	13.4	8.9	58.2	43.0	5.1	11.4	4.0	5.7	6.6	3.2	2.8	1.2	0.9	0.4	1.6	0.8	0.2	0.2	0.1	0.1	0.0	0.1	0.0	7.3	58.2
26-Sep	0.0	Z	0.7	0.8	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.1	0.2	0.3	0.3	0.0	0.0	0.2	0.1	0.3	0.2	0.3	0.2	0.2	0.8
27-Sep	0.3	0.0	Z	0.4	0.4	0.3	0.1	0.0	0.1	0.2	0.1	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	0.1	0.4
28-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.7	0.2	0.0	0.0	0.0	0.2	0.0	0.3	0.1	0.2	0.0	0.3	0.1	0.3	0.5	0.1	0.7
29-Sep	0.2	0.4	0.0	0.0	Z	0.8	0.3	0.5	0.3	0.1	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.2	0.8
30-Sep	0.0	0.1	0.0	0.0	0.1	Z	0.2	0.0	0.5	0.7	0.4	0.5	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	11.4	0.3	0.8	11.4
	1.3	2.3	2.1	3.5	4.8	7.3	7.5	6.3	4.4	3.7	2.2	2.0	1.3	0.8	0.6	0.5	0.5	0.5	0.6	0.4	0.9	1.4	1.6	1.0	Diurnal Average	
	18.7	29.5	30.2	58.2	43.0	80.2	68.6	47.7	43.9	15.7	11.8	10.4	6.5	6.8	3.0	2.9	3.2	5.1	11.7	3.8	9.0	14.3	11.4	8.8	Diurnal Maximum	

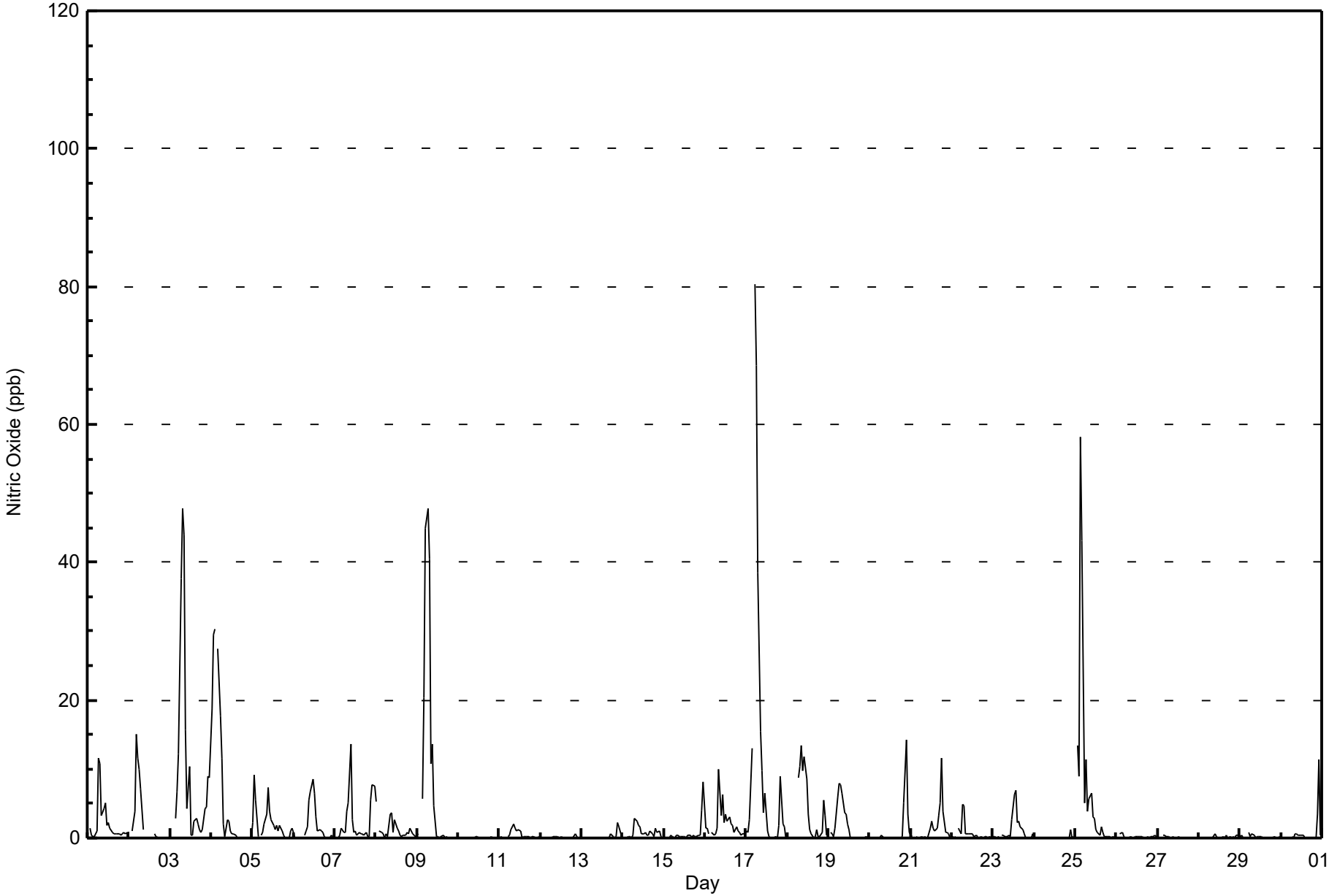
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Ells River - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	670	97.95	97.95
21 - 40	5	0.73	98.68
11 - 80	9	1.32	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Ells River - September 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	66	17	1	4	2	14	36	53	81	88	87	41	62	39	41	33	665
21 - 40	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5
11 - 80	2	0	0	0	0	0	0	0	3	0	0	0	2	0	1	1	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	72	17	1	4	2	14	36	53	85	88	87	41	64	39	42	34	679

Total Number of Valid Hours: 679

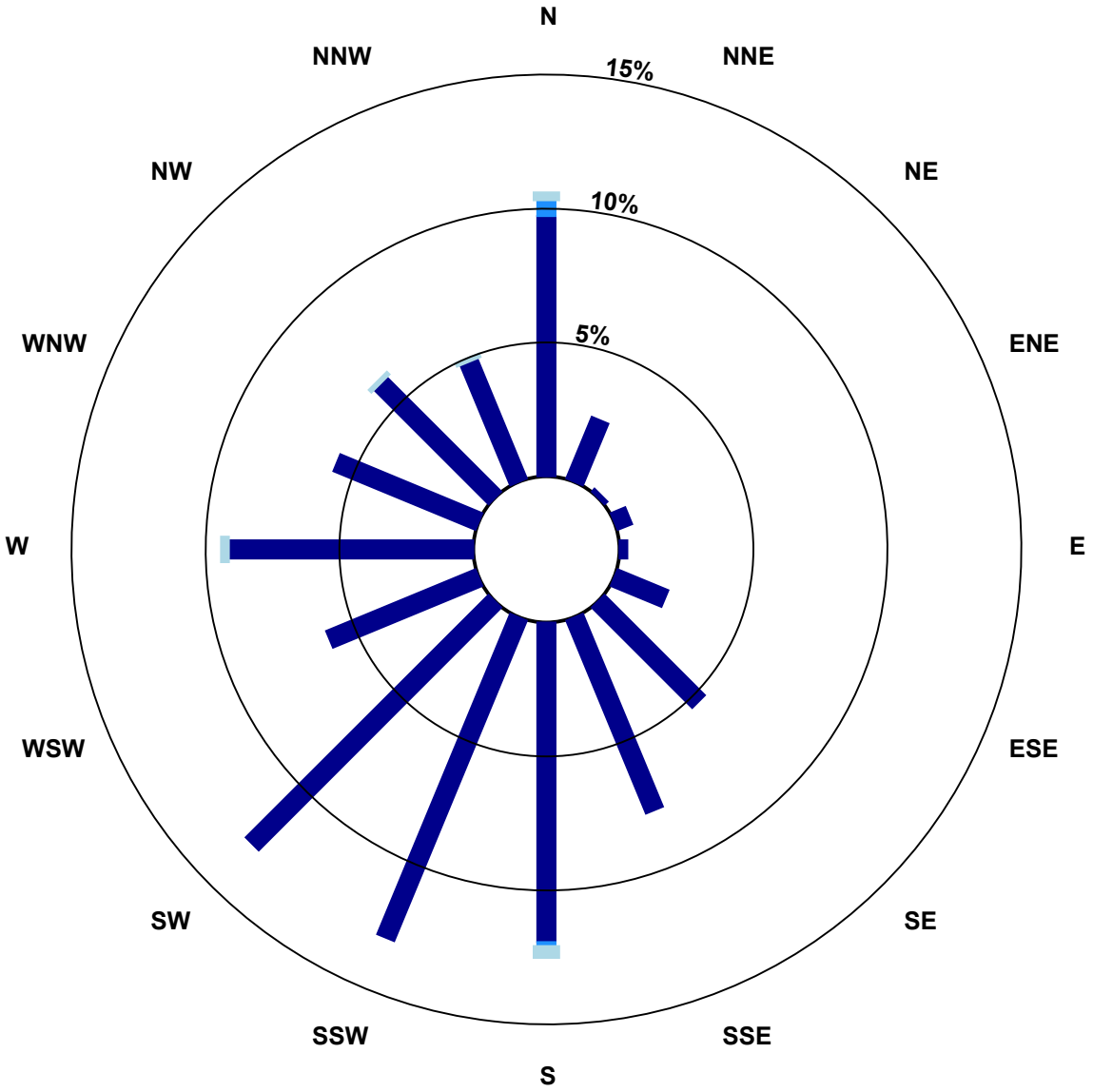
Total Number of Hours: 720

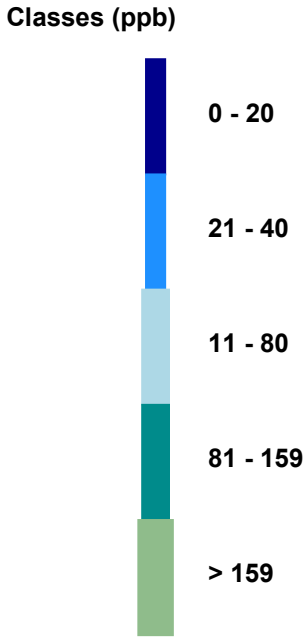
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Ells River





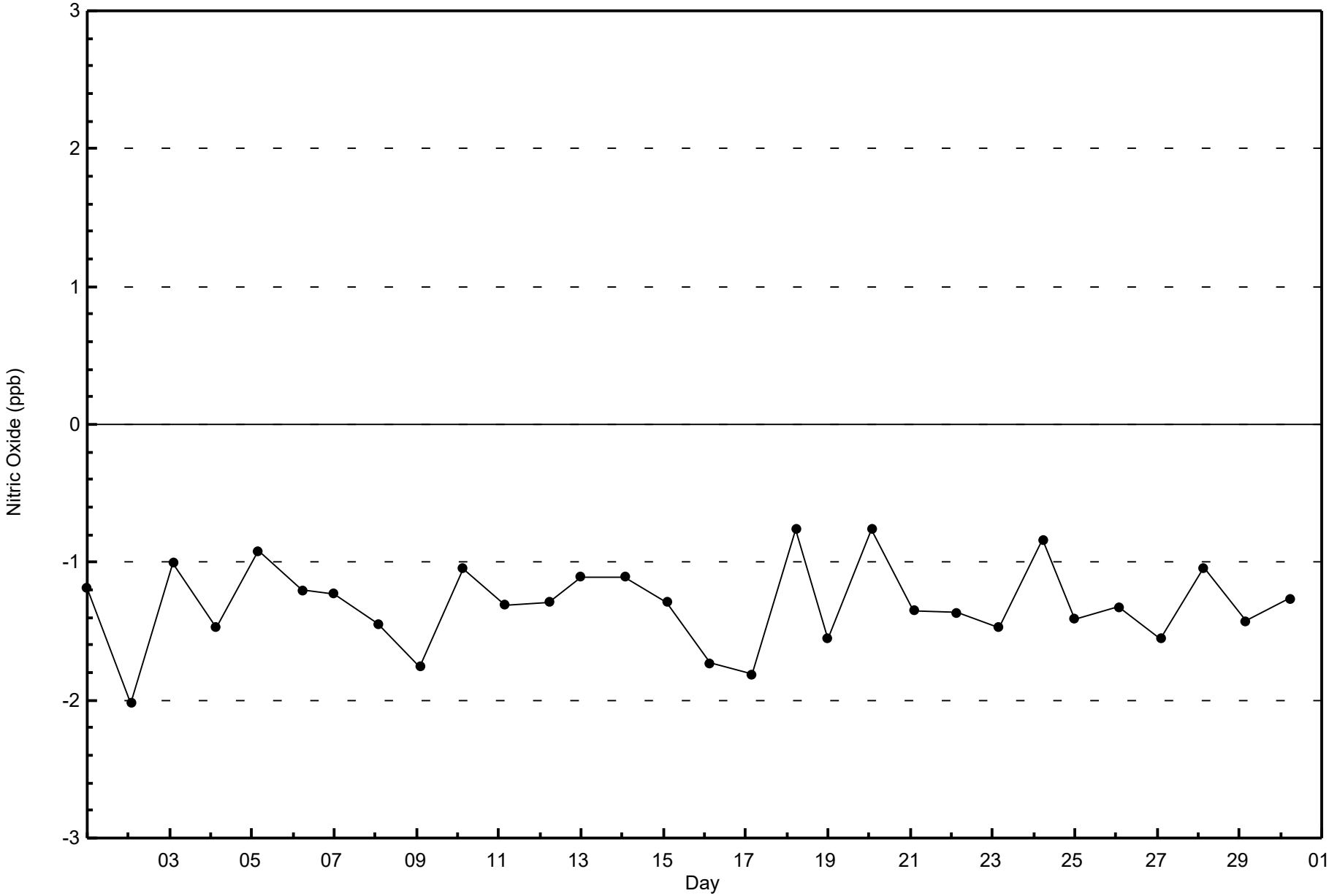
Total Number of Valid Hours: 679

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Ells River - September 2026

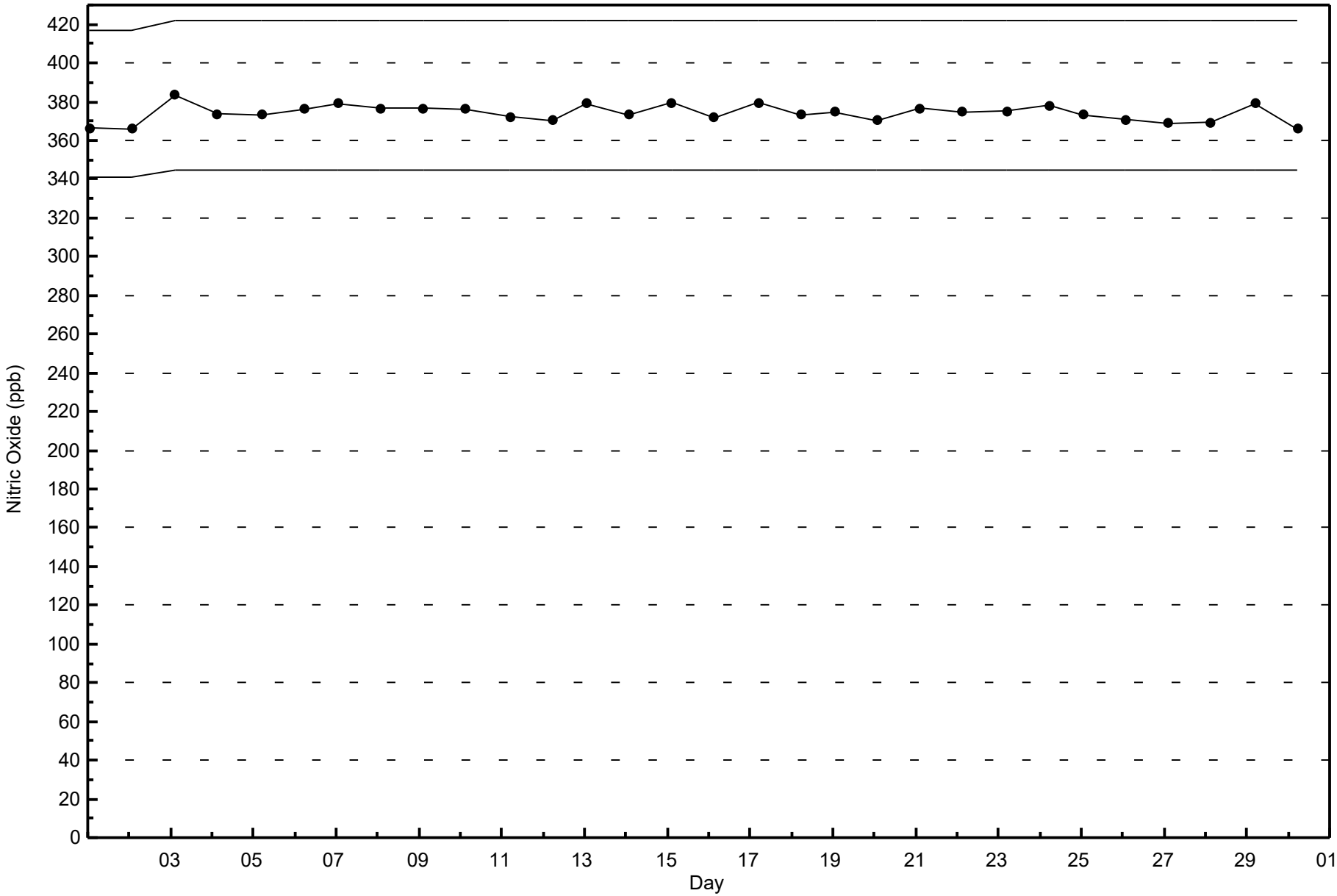


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Ells River - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Ells River - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 35.5 ppb on Sep 21 19:00 Maximum Daily Average: 9.4 ppb on Sep 25

Minimum Value: 0.0 ppb on Sep 1 04:00 Minimum Daily Average: 0.0 ppb on Sep 27
Maximum Diurnal Average: 5.7 ppb at hour 22 Minimum Diurnal Average: 1.6 ppb at hour 15
Monthly Average: 3.34 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.2 Median = 1.6 Q_3 = 4.8 P_{90} = 8.9 P_{99} = 19.6

Hours in Service:	720
Hours of Data:	684
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-Sep	Z	1.4	0.6	0.0	0.0	0.2	2.7	3.3	3.3	5.7	7.0	3.9	4.9	2.9	1.7	1.5	1.7	2.4	3.7	6.0	3.4	2.5	2.7	3.1	2.8	7.0
2-Sep	3.6	Z	3.7	3.7	6.2	3.2	2.7	3.8	2.2	C	C	C	C	C	C	1.0	0.6	0.7	0.6	0.5	0.8	0.1	0.0	0.6	--	6.2
3-Sep	1.1	0.5	Z	7.4	8.6	14.4	17.8	18.6	18.1	13.2	9.0	12.3	1.0	1.7	6.4	8.1	5.7	4.4	5.4	10.9	12.8	12.8	14.1	11.6	9.4	18.6
4-Sep	11.2	12.2	11.3	Z	11.0	11.3	12.5	5.0	0.6	3.8	3.4	2.1	1.5	1.2	1.4	1.0	0.3	0.4	0.4	0.6	3.9	5.8	5.5	6.2	4.9	12.5
5-Sep	11.5	19.2	12.1	7.4	Z	8.4	5.4	4.7	5.1	8.0	6.1	5.0	4.0	3.6	4.7	3.3	5.6	5.7	5.0	4.7	3.5	1.9	2.7	3.4	6.1	19.2
6-Sep	2.2	0.8	0.7	0.4	0.3	Z	1.0	1.8	2.7	4.7	5.8	5.7	5.5	5.3	3.1	3.9	4.4	5.6	5.6	2.1	3.4	4.4	5.5	8.4	3.6	8.4
7-Sep	Z	4.2	3.1	2.5	2.3	1.3	1.6	3.7	4.6	7.0	2.9	1.3	1.8	1.6	1.6	1.6	1.6	3.4	5.3	7.3	5.0	9.3	6.6	7.7	3.8	9.3
8-Sep	4.0	Z	1.6	0.9	0.8	0.5	0.2	0.1	2.7	3.5	1.1	4.5	2.5	1.1	1.1	0.7	0.6	0.9	4.4	3.2	3.7	2.1	0.9	1.2	1.8	4.5
9-Sep	1.6	1.1	Z	7.7	8.0	8.1	8.7	7.0	5.4	6.0	2.9	0.2	0.3	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.7	2.4	0.1	0.2	2.7	8.7
10-Sep	0.0	0.0	0.0	Z	0.3	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.3	0.0	0.1	0.0	0.1	0.1	3.9	1.1	2.5	0.5	1.2	0.5	3.9
11-Sep	0.5	1.4	1.9	2.4	Z	3.0	2.8	2.9	4.0	2.7	2.5	1.9	1.6	0.3	0.9	1.7	1.8	2.6	2.0	4.8	8.1	3.7	1.1	0.4	2.4	8.1
12-Sep	0.1	0.0	0.1	0.2	0.4	Z	0.4	0.2	0.1	0.4	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	8.2	7.2	0.0	0.0	0.8	8.2
13-Sep	Z	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.2	0.3	0.0	0.1	0.1	0.0	0.0	0.1	5.1	5.4	7.4	7.3	12.1	10.1	4.6	2.3	12.1
14-Sep	1.1	Z	3.6	2.1	6.9	8.1	5.7	8.4	7.5	4.4	4.4	1.2	2.5	3.0	2.2	1.5	4.8	6.1	6.9	10.2	10.5	10.7	5.0	0.4	5.1	10.7
15-Sep	0.0	0.0	Z	0.3	0.3	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.6	0.0	0.0	0.0	0.1	2.1	7.4	10.5	1.0	10.5
16-Sep	9.8	3.3	0.7	Z	0.4	0.2	0.1	0.7	7.1	4.1	8.1	3.6	5.2	3.1	3.1	3.0	4.4	2.2	6.4	5.8	4.8	3.4	2.6	1.8	3.6	9.8
17-Sep	2.2	1.6	1.8	3.2	Z	6.7	4.3	3.8	4.4	7.1	3.8	6.4	3.0	0.5	0.5	0.5	0.1	0.6	4.5	7.4	8.2	3.1	4.0	1.3	3.4	8.2
18-Sep	0.0	0.1	0.0	0.0	0.0	Z	7.7	4.8	9.3	10.4	12.2	10.0	5.4	3.0	2.3	1.1	2.7	4.0	2.6	2.3	2.0	4.1	4.7	1.7	3.9	12.2
19-Sep	Z	3.9	3.4	1.3	1.1	2.6	3.2	4.2	5.2	4.4	4.8	4.3	3.5	0.9	0.5	0.5	1.1	1.5	8.4	3.8	8.5	13.5	15.2	9.9	4.6	15.2
20-Sep	4.6	Z	0.5	0.2	0.0	0.0	2.4	1.9	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	8.1	28.6	31.2	25.5	9.2	5.1	31.2
21-Sep	3.7	0.4	Z	0.4	0.3	0.2	0.4	0.2	0.2	0.2	0.2	2.3	5.2	7.0	6.6	10.0	16.3	27.6	35.5	25.4	21.6	13.4	3.9	1.2	7.9	35.5
22-Sep	1.1	1.0	0.5	Z	2.0	1.1	5.0	3.5	0.7	1.4	1.5	1.5	1.8	0.0	0.1	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.1	1.0	5.0
23-Sep	0.3	0.8	0.2	0.4	Z	0.7	0.7	0.4	0.5	0.5	0.6	3.8	10.6	11.5	8.1	11.5	12.8	12.3	10.0	3.5	3.3	3.2	5.0	6.3	4.7	12.8
24-Sep	4.0	0.2	0.1	0.0	0.0	Z	0.6	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	3.1	0.2	0.5	0.4	4.0
25-Sep	Z	13.3	11.7	14.3	15.6	18.0	18.5	12.9	17.4	16.9	12.7	9.4	7.5	5.5	2.7	10.3	8.5	6.3	6.5	4.1	1.6	0.2	2.6	0.5	9.4	18.5
26-Sep	0.8	Z	6.2	13.0	4.3	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	0.0	0.0	0.0	0.0	0.0	1.1	13.0
27-Sep	0.0	0.0	Z	0.2	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	0.2
28-Sep	0.0	0.0	0.0	Z	0.4	0.0	0.0	0.0	0.0	1.2	0.3	0.1	0.0	0.2	0.1	0.1	1.9	2.1	3.8	7.7	9.8	7.6	4.8	7.0	2.0	9.8
29-Sep	3.9	3.7	1.8	0.9	Z	10.3	5.5	5.7	1.5	0.3	0.2	0.2	0.4	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.4	0.2	0.0	0.1	1.6	10.3
30-Sep	0.2	0.1	0.0	0.2	0.2	Z	0.4	0.3	3.4	3.4	1.9	1.8	2.1	1.8	0.0	0.2	1.4	0.2	0.0	0.0	0.2	7.9	10.9	4.0	1.8	10.9
	2.7	2.8	2.6	2.8	2.8	3.9	3.7	3.3	3.5	3.8	3.2	2.8	2.4	1.9	1.6	2.1	2.6	3.2	4.2	4.3	5.4	5.7	4.7	3.4	Diurnal Average	
	11.5	19.2	12.1	14.3	15.6	18.0	18.5	18.6	18.1	16.9	12.7	12.3	10.6	11.5	8.1	11.5	16.3	27.6	35.5	25.4	28.6	31.2	25.5	11.6	Diurnal Maximum	

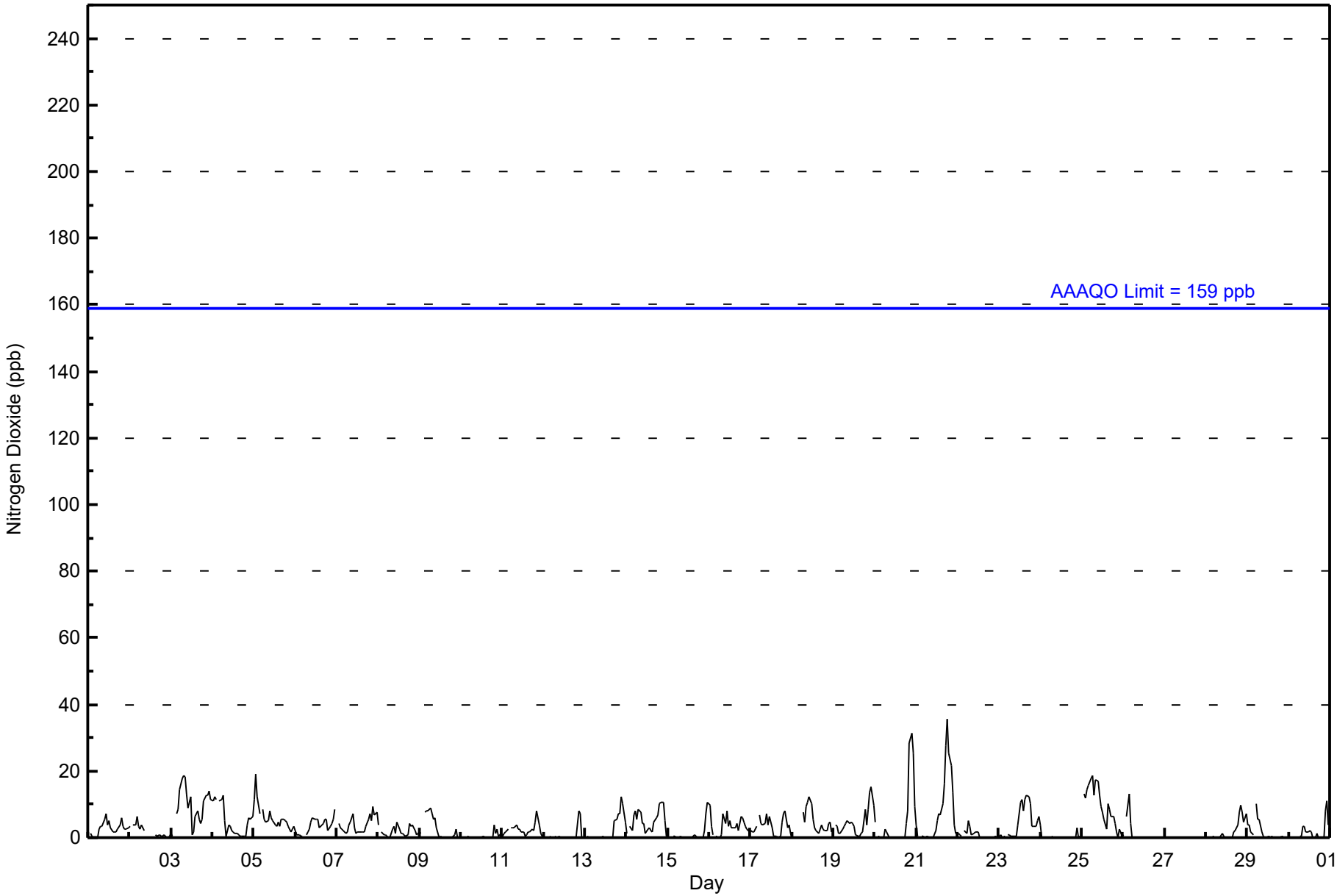
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Ells River - September 2026



Nitrogen Dioxide (NO_2) - ppb
Ells River - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	677	98.98	98.98
21 - 40	7	1.02	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Ells River - September 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	72	17	1	4	2	14	36	53	82	88	85	41	63	39	42	33	672
21 - 40	0	0	0	0	0	0	0	0	3	0	2	0	1	0	0	1	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	72	17	1	4	2	14	36	53	85	88	87	41	64	39	42	34	679

Total Number of Valid Hours: 679

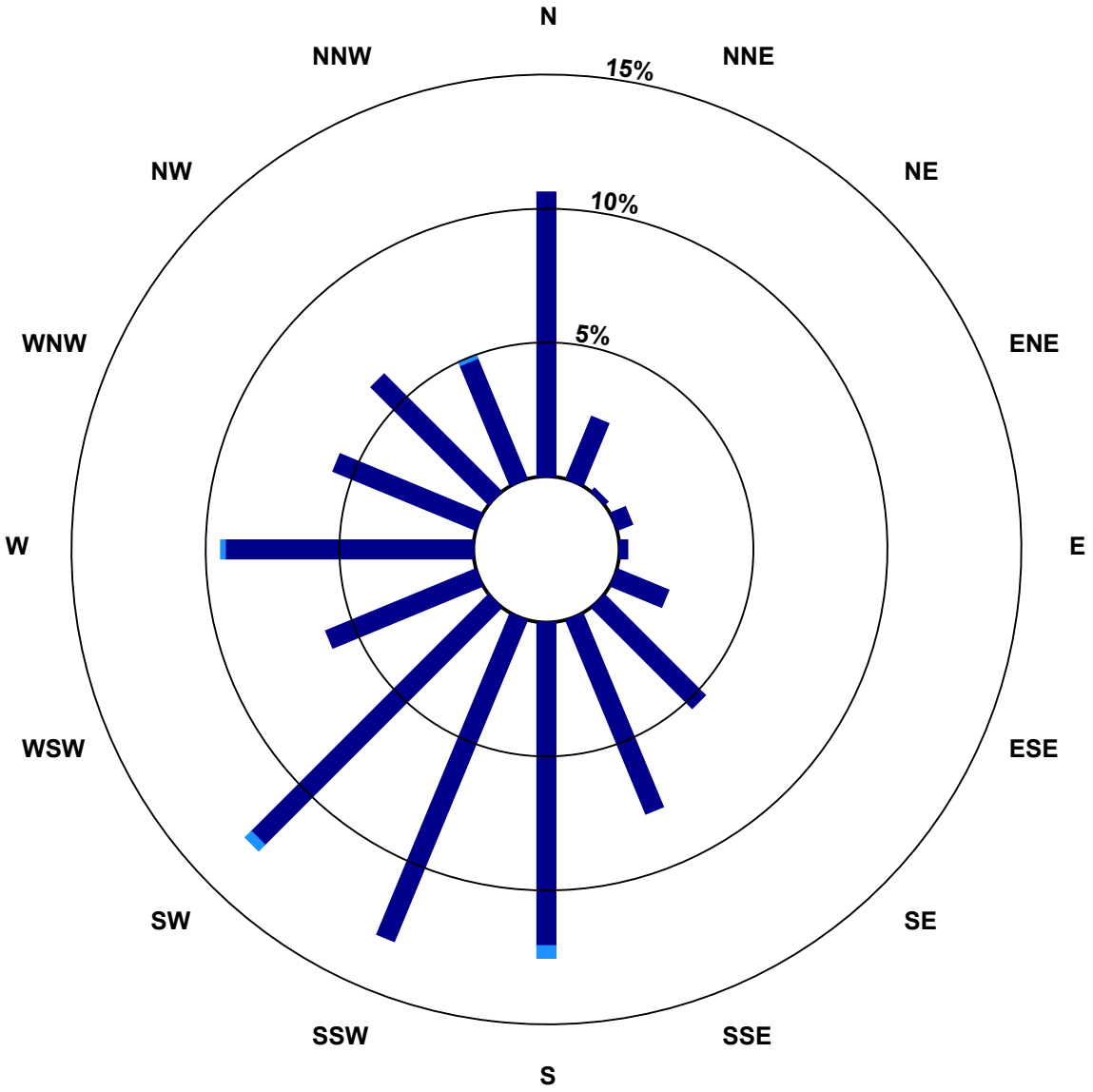
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Ells River



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

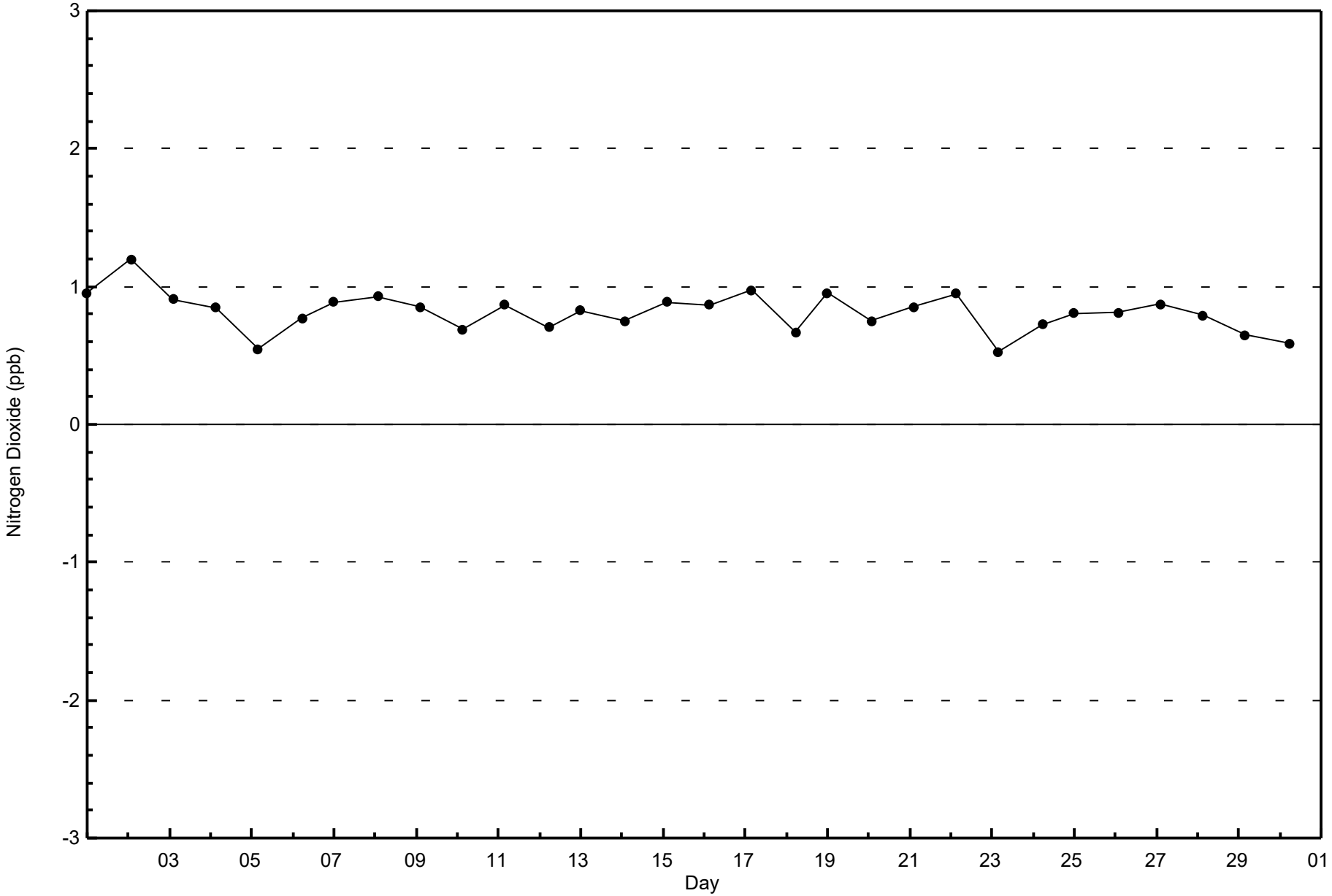
Total Number of Valid Hours: 679

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Ells River - September 2026

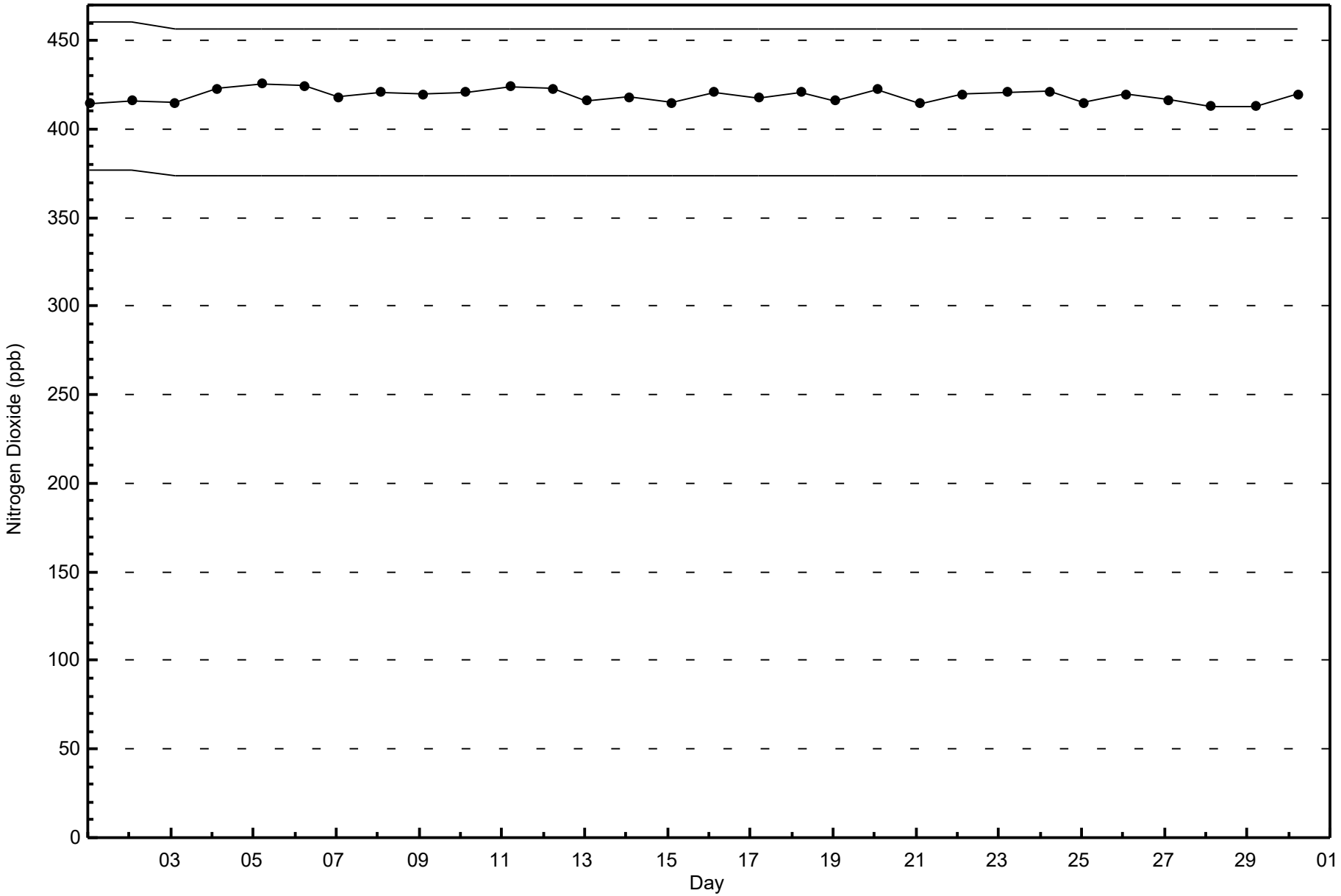


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Ells River - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Ells River - September 2026

Maximum Value: 86.9 ppb on Sep 17 06:00

Maximum Daily Average: 18.9 ppb on Sep 3

Minimum Value: 0.0 ppb on Sep 2 23:00

Minimum Daily Average: 0.1 ppb on Sep 27

Maximum Diurnal Average: 11.3 ppb at hour 6

Minimum Diurnal Average: 2.2 ppb at hour 15

Monthly Average: 5.69 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.3 Median = 2.1 Q_3 = 6.7 P_{90} = 14.4 P_{99} = 55.6

Hours in Service:	720
Hours of Data:	684
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-Sep	Z	2.8	0.9	0.3	0.3	1.3	14.4	14.1	6.5	9.9	12.1	5.8	7.2	4.3	2.4	2.1	2.4	3.0	4.3	6.5	3.9	3.3	3.3	3.9	5.0	14.4
2-Sep	4.4	Z	4.7	7.5	21.3	14.7	12.7	10.9	3.5	C	C	C	C	C	C	1.7	0.7	0.7	0.6	0.5	0.8	0.1	0.0	0.6	--	21.3
3-Sep	1.1	0.5	Z	10.3	15.2	26.5	55.4	66.3	62.0	28.9	13.2	22.7	1.4	2.2	8.9	11.0	7.7	5.7	6.3	12.0	17.0	17.3	23.1	20.4	18.9	66.3
4-Sep	29.9	41.7	41.5	Z	38.5	29.1	24.0	7.0	0.9	6.5	5.8	3.1	2.1	1.9	1.9	1.0	0.3	0.4	0.4	0.6	4.0	5.8	5.5	6.2	11.2	41.7
5-Sep	13.8	28.4	17.6	7.7	Z	8.7	6.3	6.8	8.6	15.4	9.9	7.7	5.9	4.9	6.5	4.2	7.4	6.7	5.3	4.7	3.5	1.9	3.7	4.8	8.3	28.4
6-Sep	3.0	0.8	0.8	0.4	0.3	Z	1.4	2.8	4.3	10.1	12.6	14.2	12.0	8.3	4.0	5.2	5.5	6.4	5.8	2.1	3.4	4.4	5.9	8.6	5.3	14.2
7-Sep	Z	4.2	3.2	2.9	3.6	2.2	2.5	7.7	9.6	20.7	5.6	2.0	2.8	1.9	2.3	2.3	2.3	3.9	6.1	7.5	5.3	14.8	14.3	15.1	6.2	20.7
8-Sep	9.3	Z	2.6	1.8	1.5	0.6	0.8	0.3	6.1	7.2	1.8	7.2	3.8	2.0	1.5	0.9	1.0	1.3	5.2	3.7	5.1	2.7	1.3	1.3	3.0	9.3
9-Sep	1.9	1.6	Z	13.4	28.3	53.1	56.5	47.6	16.2	19.7	7.5	0.4	0.4	0.0	0.4	0.5	0.2	0.3	0.1	0.1	0.8	2.4	0.1	0.2	11.0	56.5
10-Sep	0.0	0.0	0.0	Z	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.0	0.3	0.0	0.1	0.0	0.1	0.1	4.0	1.1	2.5	0.5	1.2	0.5	4.0
11-Sep	0.5	1.6	2.0	2.4	Z	3.3	3.3	4.1	6.0	4.1	3.6	3.1	2.6	0.3	1.1	1.9	2.0	2.7	2.0	5.0	8.3	3.7	1.1	0.6	2.8	8.3
12-Sep	0.2	0.0	0.1	0.2	0.4	Z	0.4	0.4	0.4	0.5	0.4	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.0	8.8	7.4	0.0	0.0	0.8	8.8
13-Sep	Z	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.2	0.3	0.0	0.1	0.1	0.0	0.0	0.1	5.7	5.6	7.5	7.4	14.2	11.8	4.8	2.5	14.2
14-Sep	1.1	Z	3.6	2.2	7.0	8.2	6.2	11.2	9.9	6.2	6.0	1.7	3.0	3.8	2.7	1.9	5.7	6.7	7.2	11.6	11.4	11.8	5.2	0.4	5.8	11.8
15-Sep	0.0	0.0	Z	0.3	0.7	0.2	0.0	0.8	0.3	0.2	0.2	0.2	0.2	0.0	0.3	1.4	0.6	0.5	0.2	0.3	0.4	2.5	11.5	18.6	1.7	18.6
16-Sep	11.2	4.7	1.2	Z	1.2	0.7	0.6	2.0	17.0	7.5	14.3	5.8	8.6	5.5	6.1	5.0	6.1	2.9	8.0	6.7	5.6	3.8	3.2	2.4	5.7	17.0
17-Sep	3.2	2.4	4.4	16.1	Z	86.9	72.9	42.3	20.0	16.9	7.5	12.8	4.0	0.7	0.6	0.5	0.1	0.7	4.5	9.2	17.2	5.1	5.5	1.3	14.6	86.9
18-Sep	0.0	0.1	0.0	0.0	0.0	Z	16.5	15.1	22.8	20.2	24.0	18.5	8.8	4.3	3.0	1.1	2.8	5.1	2.8	2.5	2.8	9.5	7.9	2.2	7.4	24.0
19-Sep	Z	4.7	3.9	1.6	2.6	8.5	11.2	11.9	11.7	8.1	8.3	6.3	4.8	0.9	0.5	0.5	1.1	1.5	8.5	3.8	8.5	13.5	15.4	9.9	6.4	15.4
20-Sep	4.6	Z	0.5	0.2	0.0	0.0	2.4	2.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	8.3	33.7	45.5	28.9	10.1	6.1	45.5
21-Sep	4.0	0.6	Z	0.7	0.4	0.3	0.5	0.2	0.3	0.2	0.3	3.6	7.6	8.5	7.6	11.5	19.5	32.7	47.2	29.2	22.5	14.3	4.5	1.3	9.5	47.2
22-Sep	1.3	1.0	0.6	Z	3.5	1.8	9.8	8.2	1.4	2.0	2.2	2.1	2.5	0.2	0.5	0.0	0.2	0.3	0.3	0.5	0.4	0.2	0.6	0.1	1.7	9.8
23-Sep	0.6	1.0	0.2	0.6	Z	1.1	1.0	0.6	0.7	0.9	0.7	6.4	16.9	18.3	10.4	14.0	14.3	13.6	10.5	3.5	3.3	3.2	5.0	6.9	5.8	18.3
24-Sep	4.0	0.2	0.1	0.0	0.0	Z	0.6	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	4.4	0.3	0.7	0.5	4.4
25-Sep	Z	26.7	20.6	72.5	58.6	23.1	29.9	16.9	23.1	23.5	15.9	12.2	8.7	6.4	3.1	11.9	9.3	6.5	6.7	4.2	1.7	0.2	2.7	0.5	16.7	72.5
26-Sep	0.8	Z	6.9	13.8	4.6	0.2	0.0	0.0	0.2	0.0	0.0	0.2	0.1	0.2	0.3	0.3	0.0	0.0	0.2	0.1	0.3	0.2	0.3	0.2	1.3	13.8
27-Sep	0.3	0.0	Z	0.6	0.4	0.3	0.1	0.0	0.1	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	0.0	0.0	0.1	0.6
28-Sep	0.0	0.0	0.0	Z	0.4	0.0	0.0	0.0	0.0	1.9	0.5	0.1	0.0	0.2	0.3	0.1	2.2	2.2	4.0	7.7	10.1	7.7	5.1	7.5	2.2	10.1
29-Sep	4.1	4.1	1.8	0.9	Z	11.1	5.8	6.2	1.8	0.4	0.4	0.4	0.6	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.6	0.2	0.0	0.3	1.7	11.1
30-Sep	0.2	0.2	0.0	0.2	0.3	Z	0.6	0.3	3.9	4.1	2.3	2.3	2.6	2.2	0.0	0.2	1.4	0.2	0.0	0.0	0.2	11.5	22.3	4.3	2.6	22.3
	4.0	5.1	4.7	6.3	7.6	11.3	11.2	9.5	7.9	7.4	5.4	4.8	3.7	2.7	2.2	2.7	3.1	3.7	4.9	4.7	6.3	7.1	6.3	4.5	Diurnal Average	
	29.9	41.7	41.5	72.5	58.6	86.9	72.9	66.3	62.0	28.9	24.0	22.7	16.9	18.3	10.4	14.0	19.5	32.7	47.2	29.2	33.7	45.5	28.9	20.4	Diurnal Maximum	

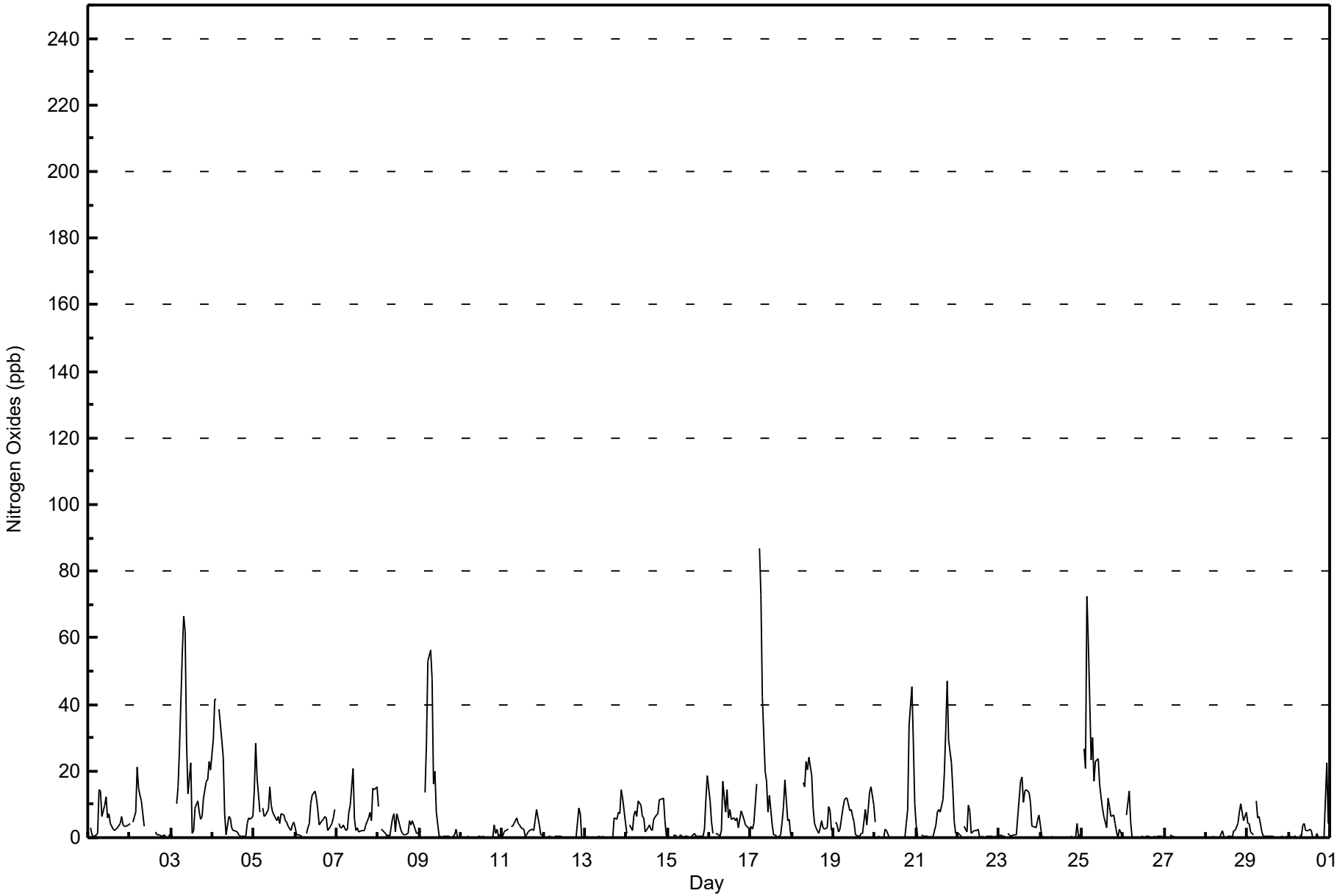
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Ells River - September 2026



Nitrogen Oxides (NO_X) - ppb
Ells River - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	643	94.01	94.01
21 - 40	26	3.80	97.81
11 - 80	14	2.05	99.85
81 - 159	1	0.15	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Ells River - September 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	58	16	1	4	1	14	36	53	76	88	84	41	60	37	40	29	638
21 - 40	9	1	0	0	1	0	0	0	4	0	3	0	1	2	1	4	26
11 - 80	5	0	0	0	0	0	0	0	5	0	0	0	2	0	1	1	14
81 - 159	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	72	17	1	4	2	14	36	53	85	88	87	41	64	39	42	34	679

Total Number of Valid Hours: 679

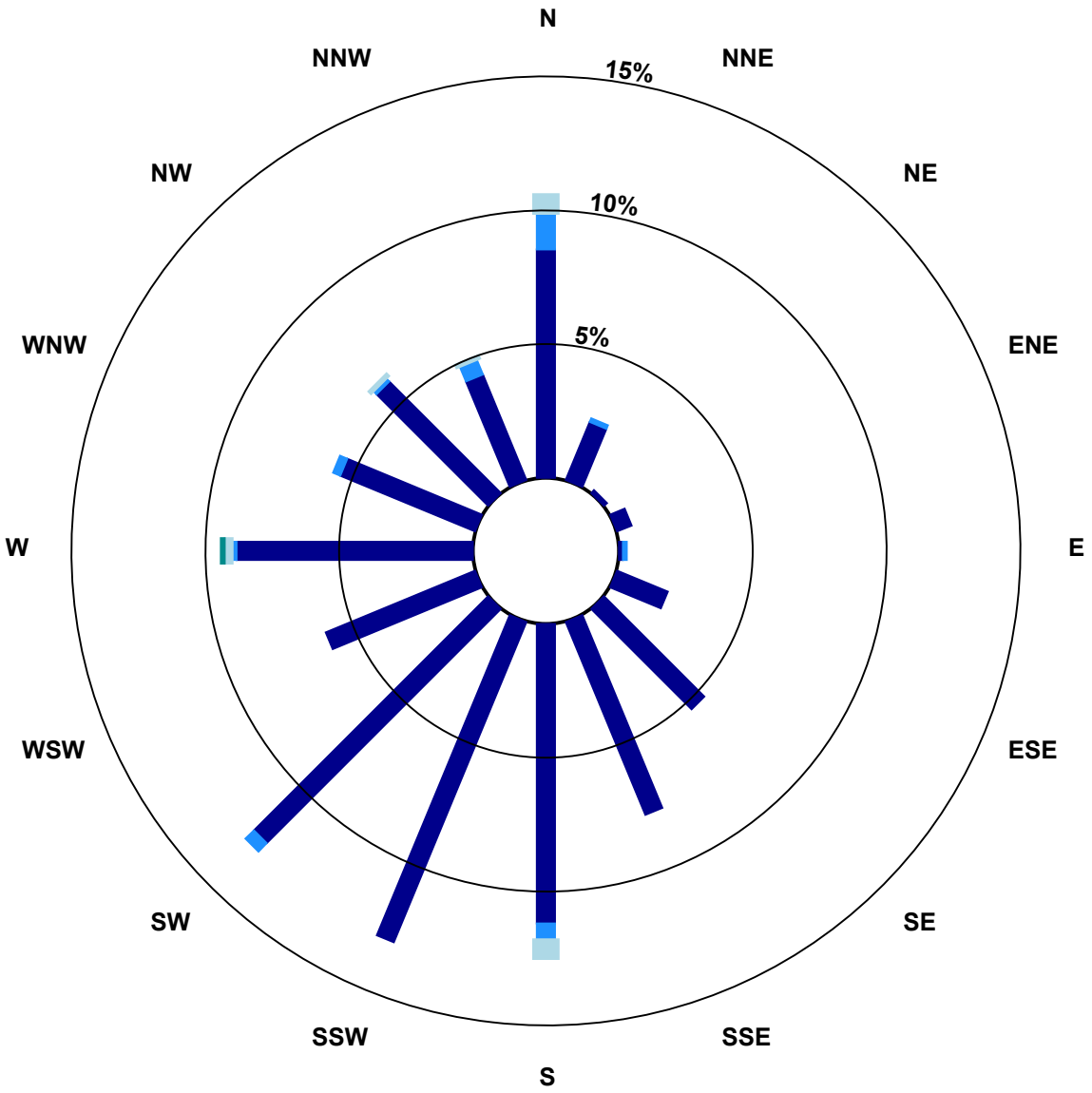
Total Number of Hours: 720

Wood Buffalo Environmental Association

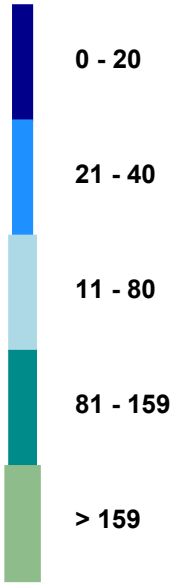
Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Ells River



Classes (ppb)



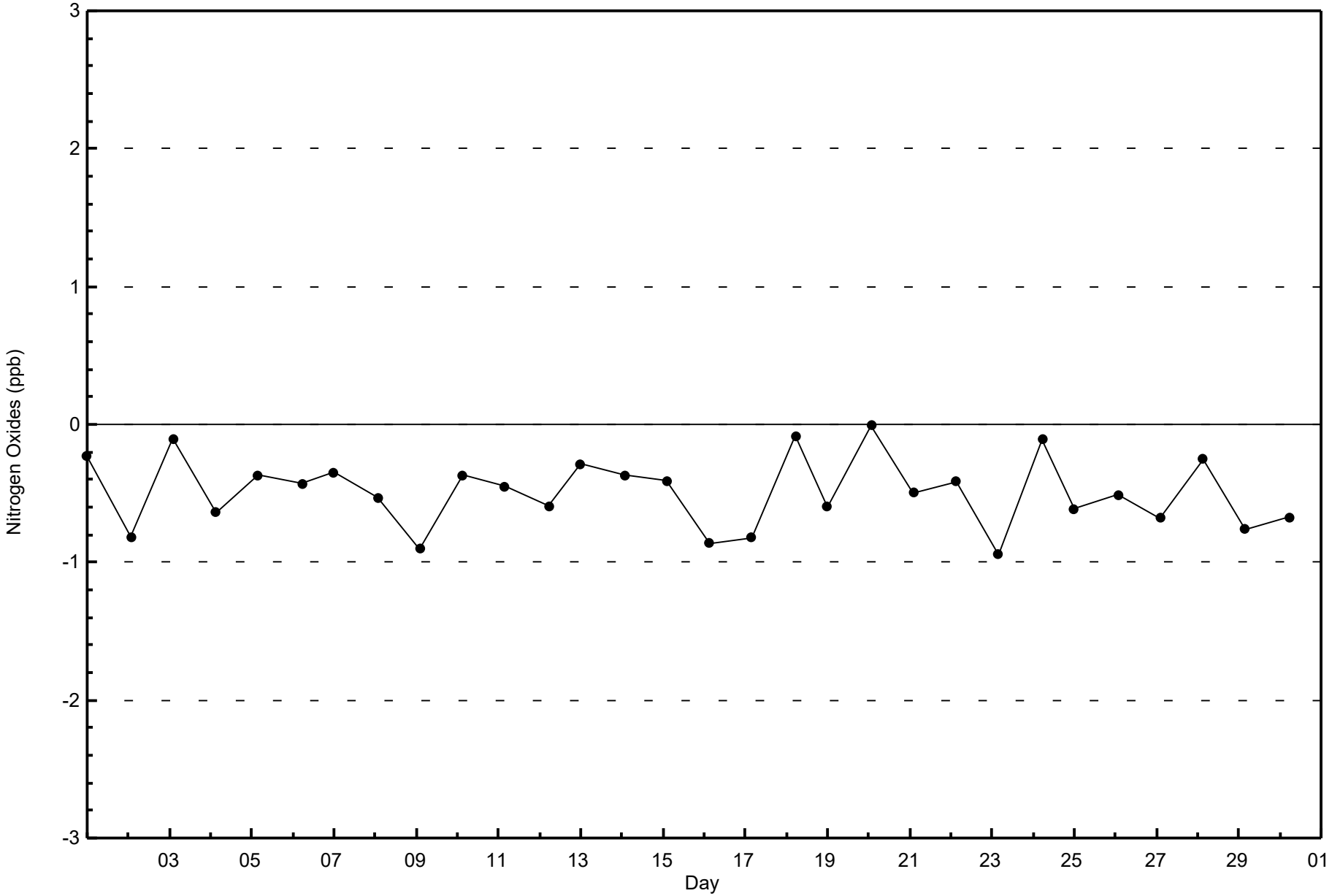
Total Number of Valid Hours: 679

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Ells River - September 2026

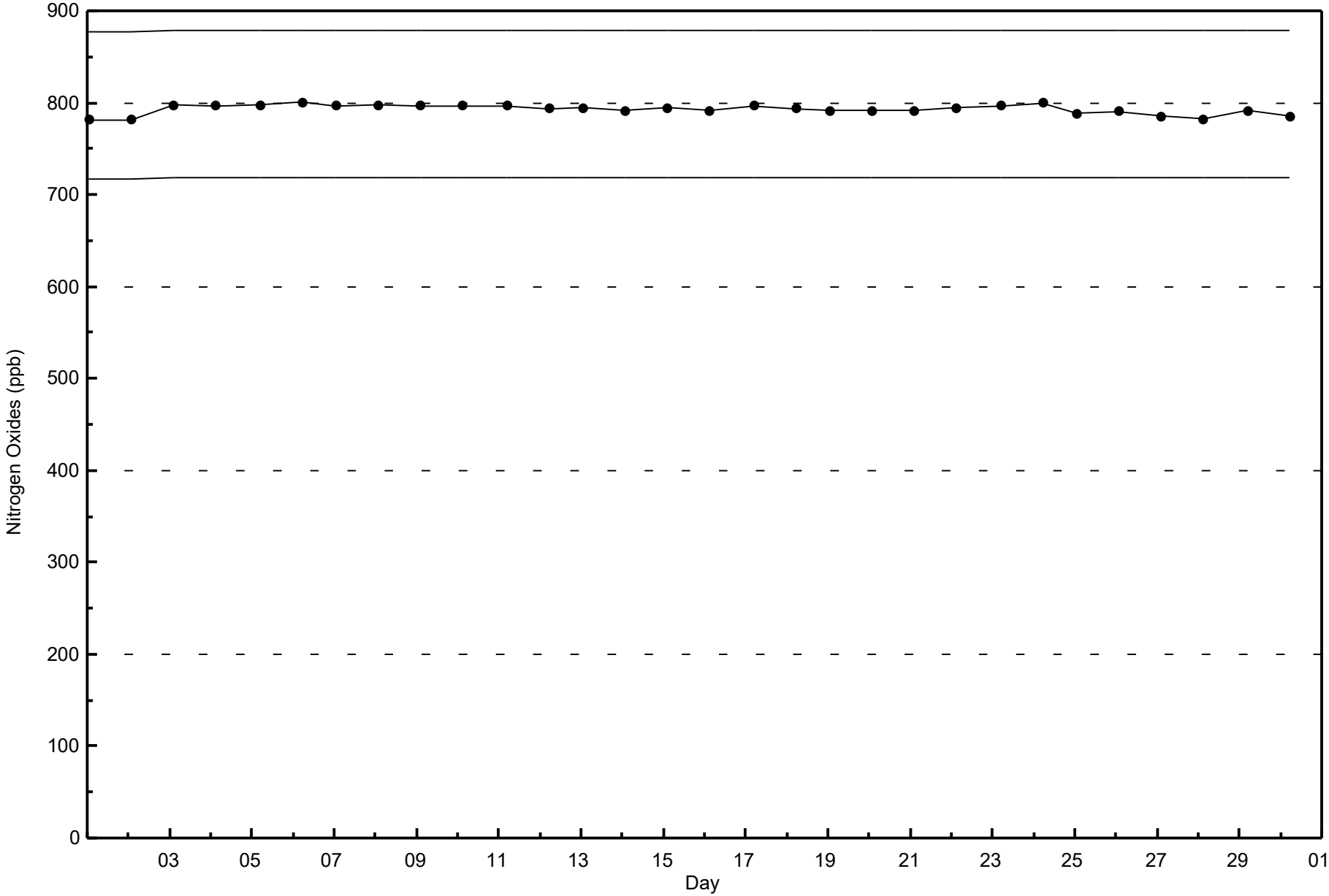


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Ells River - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Ells River - September 2026

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

Maximum Value: 30.3 $\mu g/m^3$ on Sep 20 22:00

Maximum Daily Average: 10.7 $\mu g/m^3$ on Sep 21

Minimum Value: 0.1 $\mu g/m^3$ on Sep 30 05:00

Minimum Daily Average: 0.4 $\mu g/m^3$ on Sep 30

Maximum Diurnal Average: 6.0 $\mu g/m^3$ at hour 21

Minimum Diurnal Average: 3.6 $\mu g/m^3$ at hour 4

Monthly Average: 4.49 $\mu g/m^3$

Percentiles: P_1 = 0.1 P_{10} = 0.8 Q_1 = 1.7 Median = 3.2 Q_3 = 6.3 P_{90} = 8.5 P_{99} = 20.9

Hours in Service:	720
Hours of Data:	570
Hours of Missing Data:	150
Hours of Calibration:	1
Percent Operational Time:	79.3

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-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	21.4	25.1	13.8	16.0	9.5	6.9	7.5	5.3	8.5	10.6	11.2	8.2	5.7	5.6	5.2	--	25.1
2-Sep	UO	UO	UO	UO	UO	UO	UO	UO	6.8	9.5	9.6	9.3	13.9	11.3	10.2	9.0	6.3	5.2	5.8	7.8	7.2	7.2	6.6	6.4	--	13.9
3-Sep	6.9	6.4	6.7	6.9	7.6	8.3	11.0	11.6	11.6	9.7	8.3	9.4	5.8	5.9	6.0	5.8	6.0	6.2	6.3	6.3	6.7	6.8	7.0	7.8	7.5	11.6
4-Sep	7.8	7.8	7.6	7.3	7.1	7.0	6.7	5.2	2.6	1.4	0.8	0.8	0.5	0.6	0.6	0.6	1.0	1.9	2.0	2.1	2.3	2.4	2.6	2.4	3.4	7.8
5-Sep	3.4	4.3	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	6.9	7.2	7.4	7.7	6.9	7.0	7.4	7.0	6.7	7.3	7.0	--	7.7
6-Sep	6.6	5.8	5.6	5.5	5.5	5.5	5.5	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	6.6
7-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	4.8	6.4	6.0	5.7	5.6	4.9	6.9	13.1	13.2	12.9	10.8	10.5	8.5	--	13.2
8-Sep	7.4	6.1	5.8	5.4	6.0	5.4	6.4	7.6	5.6	5.8	C	6.7	7.2	6.7	6.7	7.2	8.2	6.6	8.2	10.0	8.9	7.3	7.4	7.4	7.0	10.0
9-Sep	7.4	UO	UO	UO	UO	UO	UO	UO	7.4	8.1	6.6	5.1	4.8	4.5	4.1	3.7	3.5	3.2	2.8	2.6	2.8	3.3	2.6	2.4	--	8.1
10-Sep	2.2	1.8	1.5	1.8	1.8	1.8	1.7	2.2	4.8	11.3	17.5	14.0	6.6	5.3	5.1	4.8	3.2	1.9	0.7	0.9	0.8	1.4	1.3	0.9	4.0	17.5
11-Sep	0.7	0.8	0.9	0.7	0.6	0.6	0.7	0.9	1.5	2.1	2.8	2.9	2.2	3.0	3.3	4.7	4.9	4.8	3.8	3.2	3.5	2.8	1.8	1.5	2.3	4.9
12-Sep	1.4	1.2	1.1	0.9	0.9	0.9	1.6	1.0	1.0	1.2	1.5	1.7	UO	UO	2.9	2.6	2.4	2.3	2.4	2.5	5.2	4.9	2.6	2.5	2.0	5.2
13-Sep	2.6	2.6	2.6	2.9	3.0	3.0	3.2	3.2	3.1	3.2	2.9	2.9	2.7	2.7	2.6	2.6	2.6	5.4	4.3	4.2	3.6	3.5	3.2	2.3	3.1	5.4
14-Sep	1.6	1.6	2.0	2.2	2.5	2.4	2.3	2.6	2.4	2.1	2.1	1.7	1.6	1.6	1.0	0.8	1.2	1.5	1.4	1.8	1.7	1.7	1.7	1.7	1.8	2.6
15-Sep	1.8	1.6	UO	UO	UO	UO	UO	UO	1.4	1.3	1.3	1.7	1.8	2.0	2.0	2.0	2.0	2.1	1.7	1.5	1.4	1.5	2.0	2.4	1.8	2.4
16-Sep	1.7	2.0	1.7	1.4	1.3	1.4	1.9	1.5	2.2	2.1	2.9	3.0	5.7	3.9	4.0	3.8	4.0	4.2	5.7	7.2	7.3	6.7	6.5	6.2	3.7	7.3
17-Sep	5.3	4.5	4.6	5.4	6.1	6.5	6.1	5.9	5.4	9.8	5.4	4.3	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	9.8
18-Sep	UO	UO	UO	UO	UO	UO	UO	UO	3.4	3.2	3.7	3.6	3.3	3.1	3.2	2.8	3.4	3.8	4.0	3.9	4.1	4.3	4.3	5.0	--	5.0
19-Sep	5.7	4.9	4.3	3.7	3.5	3.7	4.8	4.7	5.8	5.5	6.6	6.8	8.1	5.4	5.1	6.9	7.5	6.8	8.8	8.7	10.0	10.2	9.9	8.8	6.5	10.2
20-Sep	7.0	5.7	5.7	5.5	5.5	5.5	5.6	5.6	5.2	4.7	4.2	3.6	3.2	2.8	2.7	2.4	2.1	2.2	11.4	15.5	26.5	30.3	19.5	8.6	8.0	30.3
21-Sep	6.0	5.3	5.2	5.2	5.3	5.5	5.5	5.5	5.4	5.4	5.4	6.0	10.5	14.6	11.9	12.6	15.3	20.7	25.1	21.4	19.5	17.2	11.9	9.3	10.7	25.1
22-Sep	8.5	8.4	8.1	7.9	8.0	7.6	8.3	7.4	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	8.5
23-Sep	UO	UO	UO	UO	UO	UO	UO	UO	1.9	1.8	1.8	3.2	6.4	11.5	11.1	8.9	6.6	8.0	5.6	5.0	5.7	4.9	4.8	4.9	--	11.5
24-Sep	4.0	2.7	2.3	2.1	1.9	1.9	1.8	1.6	1.4	1.3	1.1	0.9	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	4.0
25-Sep	UO	UO	UO	UO	UO	UO	UO	UO	5.4	5.1	3.6	3.1	2.8	2.6	2.5	2.6	2.6	2.6	2.6	2.6	2.4	2.4	2.5	2.6	--	5.4
26-Sep	2.8	3.2	3.4	2.9	2.3	1.7	1.1	0.8	0.2	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.5	0.5	0.7	0.8	1.0	3.4
27-Sep	0.8	1.1	1.7	1.7	2.0	2.1	2.2	2.2	1.8	1.8	1.6	1.5	1.4	1.4	1.4	1.4	1.4	1.7	2.0	2.1	1.9	1.9	1.5	UO	1.7	2.2
28-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	1.5	1.4	1.7	1.7	1.7	2.3	2.8	3.6	4.5	3.8	3.2	2.7	3.1	--	4.5
29-Sep	2.8	3.0	2.7	2.4	3.4	4.5	3.8	3.6	1.3	0.7	0.7	0.8	0.6	0.9	1.1	UO	UO	1.0	1.0	1.4	1.3	1.3	0.9	0.5	1.8	4.5
30-Sep	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.4	0.2	0.3	0.5	0.7	0.6	0.7	0.7	1.2	1.9	1.1	0.4	1.9
	4.1	3.7	3.7	3.6	3.7	3.8	4.0	3.8	3.7	4.7	4.8	4.2	4.7	4.6	4.2	4.3	4.2	4.5	5.4	5.7	6.0	5.8	5.0	4.4	Diurnal Average	
	8.5	8.4	8.1	7.9	8.0	8.3	11.0	11.6	11.6	21.4	25.1	14.0	16.0	14.6	11.9	12.6	15.3	20.7	25.1	21.4	26.5	30.3	19.5	9.3	Diurnal Maximum	

C - Calibration UO - Unstable Operation

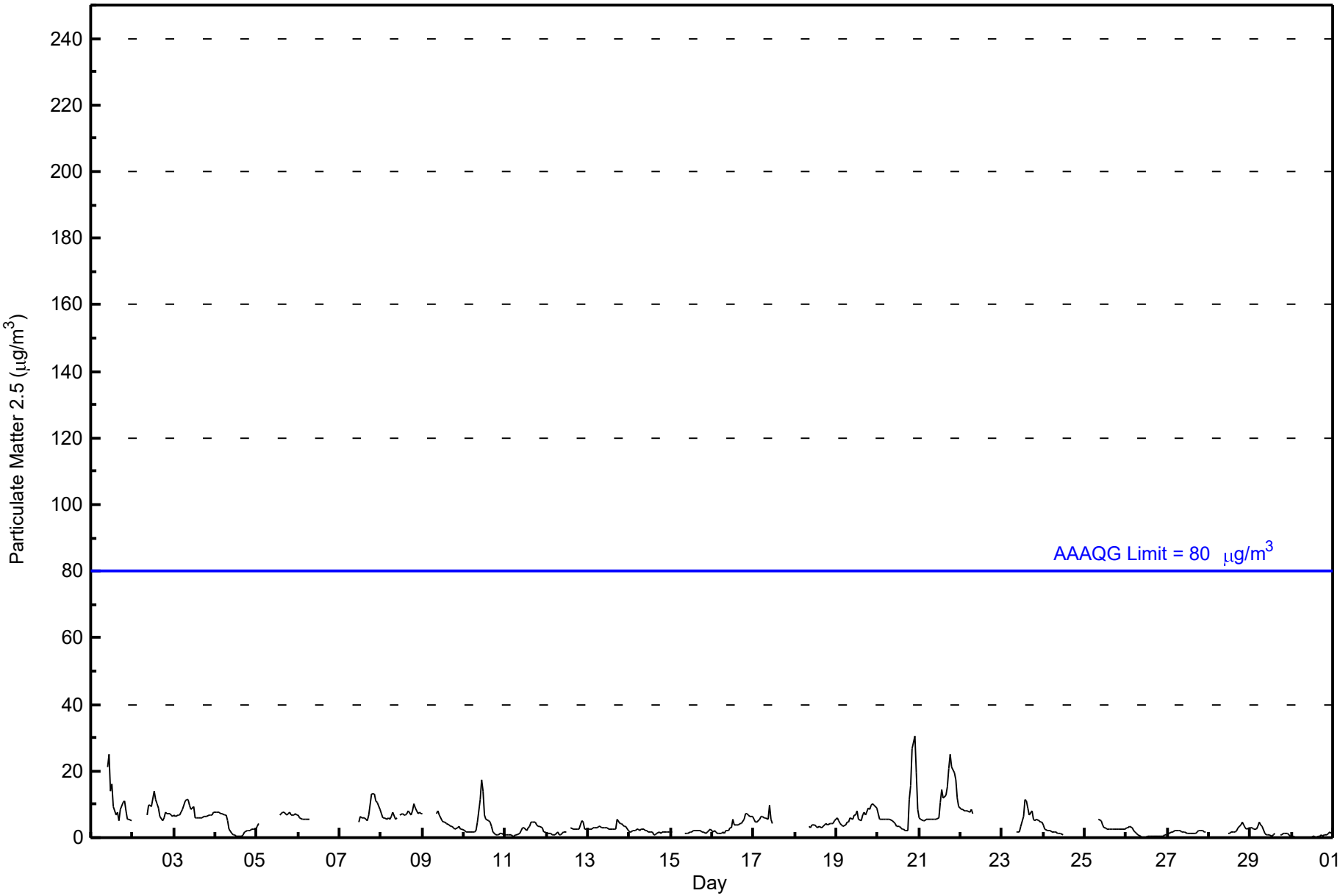
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Ells River - September 2026



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

Ells River - September 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	383	67.19	67.19
6 - 15	175	30.70	97.89
16 - 25	10	1.75	99.65
26 - 80	2	0.35	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 570

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Ells River - September 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	46	8	0	0	0	2	6	21	33	57	50	29	46	27	34	22	381
6 - 15	22	7	2	4	2	12	29	16	27	12	16	3	10	5	2	4	173
16 - 25	0	0	0	0	0	0	1	2	1	1	2	1	1	0	0	1	10
26 - 80	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	68	15	2	4	2	14	36	39	63	70	68	33	57	32	36	27	566

Total Number of Valid Hours: 566

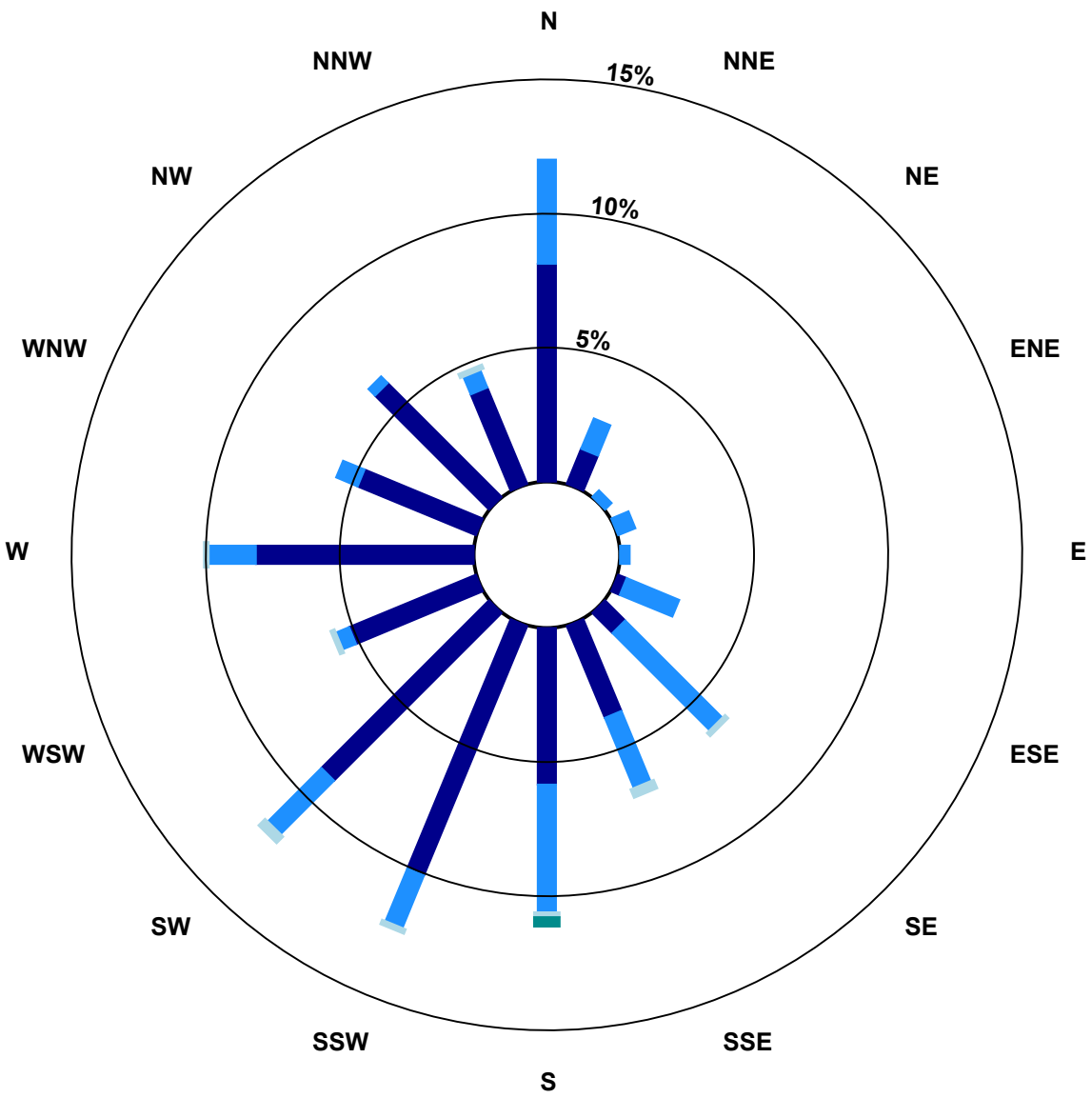
Total Number of Hours: 720

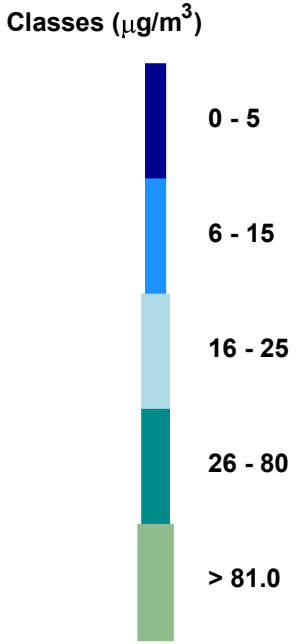
Wood Buffalo Environmental Association

Wind Rose Sep 2026

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

Ells River





Total Number of Valid Hours: 566

Maximum Value: 27.7 C on Sep 2 16:00

Maximum Daily Average: 19.8 C on Sep 2

Minimum Value: 0.8 C on Sep 15 05:00

Minimum Daily Average: 5.4 C on Sep 30

Maximum Diurnal Average: 17.1 C at hour 16

Minimum Diurnal Average: 7.1 C at hour 6

Monthly Average: 11.98 C

Percentiles: P_1 = 2.2 P_{10} = 5.1 Q_1 = 7.7 Median = 11.3 Q_3 = 15.8 P_{90} = 19.6 P_{99} = 26.1

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

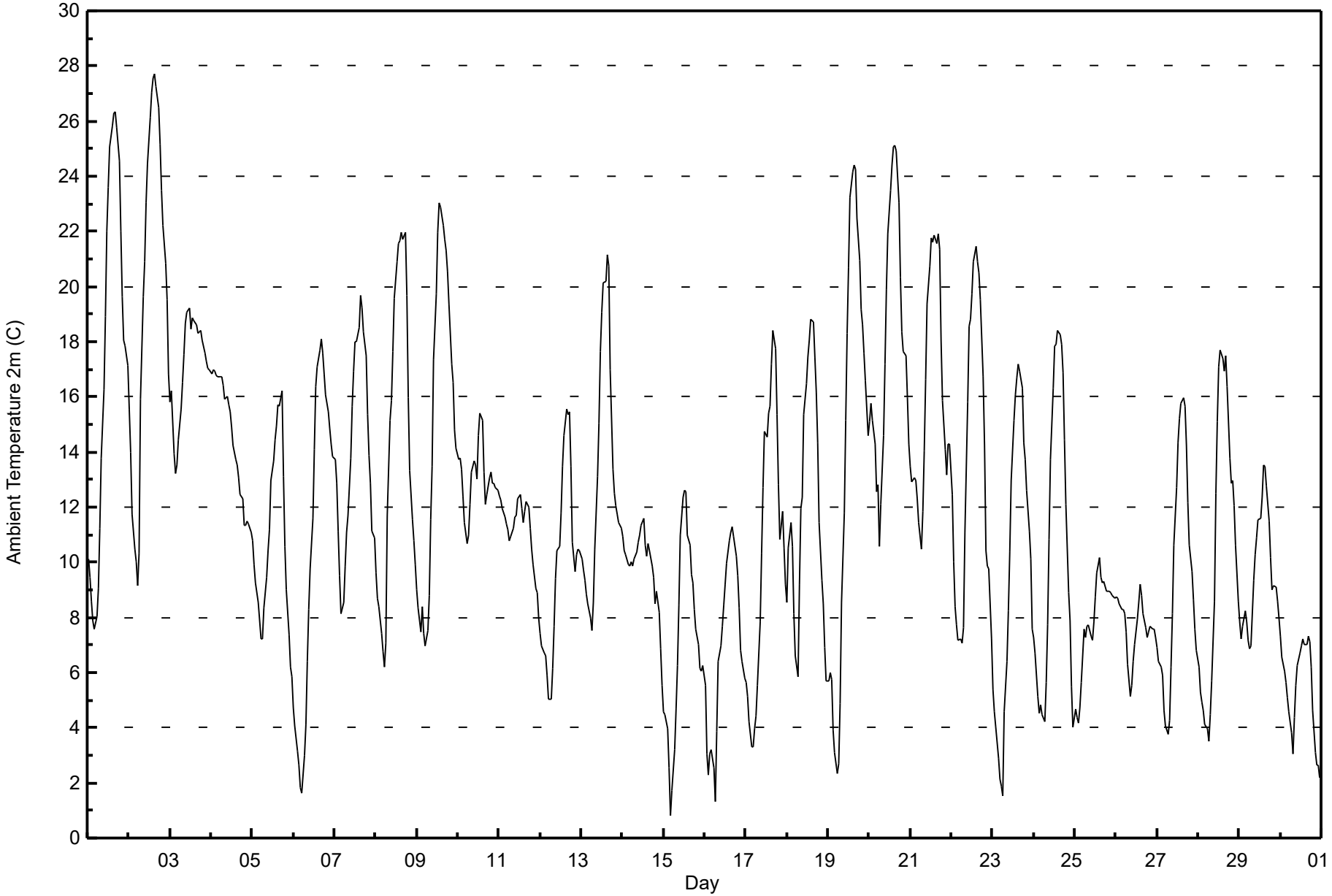
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	10.1	9.5	8.6	7.9	7.6	8.0	9.0	11.3	13.8	16.3	18.9	22.0	23.6	25.1	25.8	26.3	26.3	25.8	24.5	22.0	19.6	18.0	17.9	17.1	17.3	26.3
2-Sep	15.6	14.0	11.7	10.5	10.0	9.2	10.3	15.9	19.6	20.9	23.1	24.4	26.1	27.1	27.6	27.7	27.3	26.5	25.2	23.5	22.2	20.8	19.5	16.8	19.8	27.7
3-Sep	15.8	16.2	13.9	13.2	13.5	14.4	15.6	16.5	17.6	18.7	19.1	19.2	18.5	18.9	18.8	18.6	18.3	18.3	18.4	18.0	17.6	17.3	17.0	17.0	17.1	19.2
4-Sep	16.8	17.0	16.9	16.8	16.7	16.7	16.7	16.4	15.9	16.0	15.7	15.4	14.9	14.2	13.7	13.5	13.0	12.5	12.3	11.3	11.3	11.5	11.4	11.1	14.5	17.0
5-Sep	10.8	9.9	9.3	8.6	7.9	7.2	7.2	8.4	9.5	10.4	11.2	12.9	13.7	14.5	14.9	15.7	15.7	16.2	13.1	10.6	9.0	7.4	6.2	5.8	10.7	16.2
6-Sep	4.7	4.1	3.1	2.7	1.8	1.6	3.0	4.1	6.4	8.3	9.8	11.6	14.1	16.4	17.1	17.7	18.1	17.6	16.8	16.1	15.4	14.8	14.3	13.8	10.6	18.1
7-Sep	13.7	12.9	11.2	9.5	8.1	8.5	9.9	11.1	11.7	13.8	15.6	16.9	18.0	18.0	18.5	19.7	19.2	18.3	17.5	15.3	13.9	12.9	11.2	10.9	14.0	19.7
8-Sep	9.6	8.7	8.4	7.4	6.8	6.2	7.1	11.7	15.1	15.8	17.6	19.6	20.9	21.6	21.7	22.0	21.7	22.0	19.7	16.0	13.3	11.5	10.8	9.9	14.4	22.0
9-Sep	9.0	8.3	7.5	8.4	7.4	7.0	7.5	8.8	11.5	13.5	17.4	19.7	22.0	23.0	22.9	22.2	21.7	21.3	20.5	19.4	17.2	16.5	14.8	14.2	15.1	23.0
10-Sep	13.7	13.8	13.4	12.4	11.4	10.7	11.0	12.1	13.3	13.7	13.5	13.0	14.6	15.4	15.1	13.3	12.1	12.5	13.1	13.3	12.8	12.9	12.7	12.6	13.0	15.4
11-Sep	12.4	12.3	12.0	11.6	11.4	11.2	10.8	10.9	11.3	11.6	11.7	12.3	12.5	12.0	11.5	11.9	12.2	12.0	11.3	10.5	9.9	9.1	8.9	8.0	11.2	12.5
12-Sep	7.4	7.0	6.7	6.6	5.9	5.0	5.0	6.1	7.7	9.4	10.4	10.6	11.8	13.5	14.6	15.6	15.3	15.5	13.5	10.7	9.7	10.3	10.5	10.4	10.0	15.6
13-Sep	10.1	9.7	9.3	8.8	8.5	8.0	7.5	8.6	10.5	13.1	15.1	17.6	19.1	20.1	20.2	21.2	20.7	17.0	13.4	12.5	12.1	11.8	11.4	11.2	13.2	21.2
14-Sep	10.9	10.4	10.3	9.9	9.9	10.0	9.8	10.1	10.3	10.8	11.0	11.3	11.6	10.6	10.2	10.7	10.4	9.9	9.4	8.5	8.9	8.2	6.9	5.5	9.8	11.6
15-Sep	4.6	4.5	3.9	2.5	0.8	1.7	3.2	4.7	6.2	8.5	11.0	12.4	12.6	12.6	11.0	10.6	9.6	9.2	8.3	7.6	7.0	6.2	6.1	6.2	7.1	12.6
16-Sep	5.6	3.0	2.3	3.1	3.2	2.5	1.3	3.8	6.4	7.0	7.7	8.5	9.2	10.0	10.8	11.1	11.3	10.9	10.2	9.5	8.3	6.8	6.4	5.8	6.9	11.3
17-Sep	5.6	5.2	4.2	3.3	3.3	4.0	4.4	5.5	7.8	10.3	12.7	14.7	14.5	15.4	15.6	17.2	18.4	17.8	15.3	12.8	10.8	11.8	10.5	9.2	10.4	18.4
18-Sep	8.5	10.5	11.4	10.6	8.1	6.6	5.8	9.2	12.0	12.4	15.3	16.5	17.4	18.0	18.8	18.7	17.5	16.2	14.3	11.5	9.3	8.5	6.9	5.7	12.1	18.8
19-Sep	5.7	6.0	5.8	3.9	3.1	2.4	2.7	4.9	8.6	11.8	15.2	18.3	20.7	23.2	24.2	24.4	24.2	22.5	20.9	19.1	18.6	17.6	16.6	14.6	14.0	24.4
20-Sep	15.1	15.8	15.1	14.3	12.6	12.8	10.6	12.1	14.6	17.2	19.9	21.9	23.5	24.4	25.1	25.1	24.9	23.0	20.3	18.3	17.6	17.5	15.9	14.3	18.0	25.1
21-Sep	13.5	12.9	13.0	12.9	12.3	11.4	10.5	11.9	14.0	16.6	19.4	20.7	21.8	21.6	21.9	21.6	21.9	21.4	18.0	15.8	14.1	13.2	14.3	14.3	16.2	21.9
22-Sep	12.4	10.0	8.4	7.7	7.2	7.2	7.1	7.7	11.1	15.8	18.5	18.8	19.7	20.9	21.4	20.9	20.5	19.5	16.7	14.2	10.4	9.9	9.8	7.2	13.5	21.4
23-Sep	5.4	4.6	4.0	2.9	2.2	1.9	1.5	4.6	6.4	8.2	10.4	12.9	15.1	16.0	16.7	17.2	17.0	16.3	14.4	13.7	12.6	11.2	10.1	7.6	9.7	17.2
24-Sep	7.3	6.7	5.1	4.5	4.8	4.5	4.2	5.6	7.7	10.8	13.7	16.3	17.8	17.9	18.4	18.3	17.9	16.9	14.4	12.1	8.9	7.9	5.5	4.0	10.5	18.4
25-Sep	4.7	4.3	4.2	4.7	5.6	7.6	7.3	7.7	7.7	7.3	7.2	7.8	8.7	9.6	10.2	9.4	9.3	9.3	9.0	8.9	8.9	8.9	8.8	8.7	7.7	10.2
26-Sep	8.7	8.7	8.5	8.3	8.3	8.1	7.5	6.3	5.1	5.5	6.4	7.0	8.0	8.5	9.2	8.8	8.2	7.6	7.3	7.5	7.7	7.6	7.6	7.3	7.7	9.2
27-Sep	6.9	6.4	6.2	5.9	4.6	4.1	3.8	4.3	6.2	8.1	10.6	12.7	14.3	15.2	15.8	16.0	15.6	14.2	12.2	10.6	9.6	8.6	7.6	6.8	9.4	16.0
28-Sep	6.2	5.3	4.9	4.6	4.1	4.0	3.5	4.5	5.7	8.6	12.5	15.1	17.1	17.7	17.4	17.0	17.5	16.4	13.8	12.9	13.0	12.1	10.6	8.6	10.5	17.7
29-Sep	7.8	7.2	7.7	8.2	7.8	7.2	6.9	7.0	9.3	10.3	10.9	11.6	11.6	12.3	13.5	13.4	12.7	11.5	10.2	9.0	9.2	9.1	8.6	8.0	9.6	13.5
30-Sep	7.3	6.6	6.1	5.7	5.1	4.6	3.8	3.0	4.4	5.6	6.2	6.7	6.9	7.2	7.0	7.0	7.3	7.1	6.2	4.6	3.1	2.7	2.7	2.2	5.4	7.3
	9.5	9.0	8.4	7.9	7.3	7.1	7.2	8.5	10.2	11.9	13.6	15.0	16.0	16.7	17.0	17.1	16.9	16.2	14.7	13.2	12.1	11.4	10.7	9.8	Diurnal Average	
	16.8	17.0	16.9	16.8	16.7	16.7	16.7	16.5	19.6	20.9	23.1	24.4	26.1	27.1	27.6	27.7	27.3	26.5	25.2	23.5	22.2	20.8	19.5	17.1	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Ells River - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	292	40.56	40.56
10 - 20	363	50.42	90.97
> 20	65	9.03	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Ells River - September 2026

Maximum Value: 96.7 % on Sep 4 05:00

Maximum Daily Average: 86.3 % on Sep 3

Minimum Value: 25.2 % on Sep 24 15:00

Minimum Daily Average: 53.5 % on Sep 20

Maximum Diurnal Average: 87.8 % at hour 7

Minimum Diurnal Average: 51.2 % at hour 16

Monthly Average: 71.09 %

Percentiles: P_1 = 28.5 P_{10} = 43.6 Q_1 = 58.9 Median = 74.2 Q_3 = 86.9 P_{90} = 92.9 P_{99} = 95.9

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

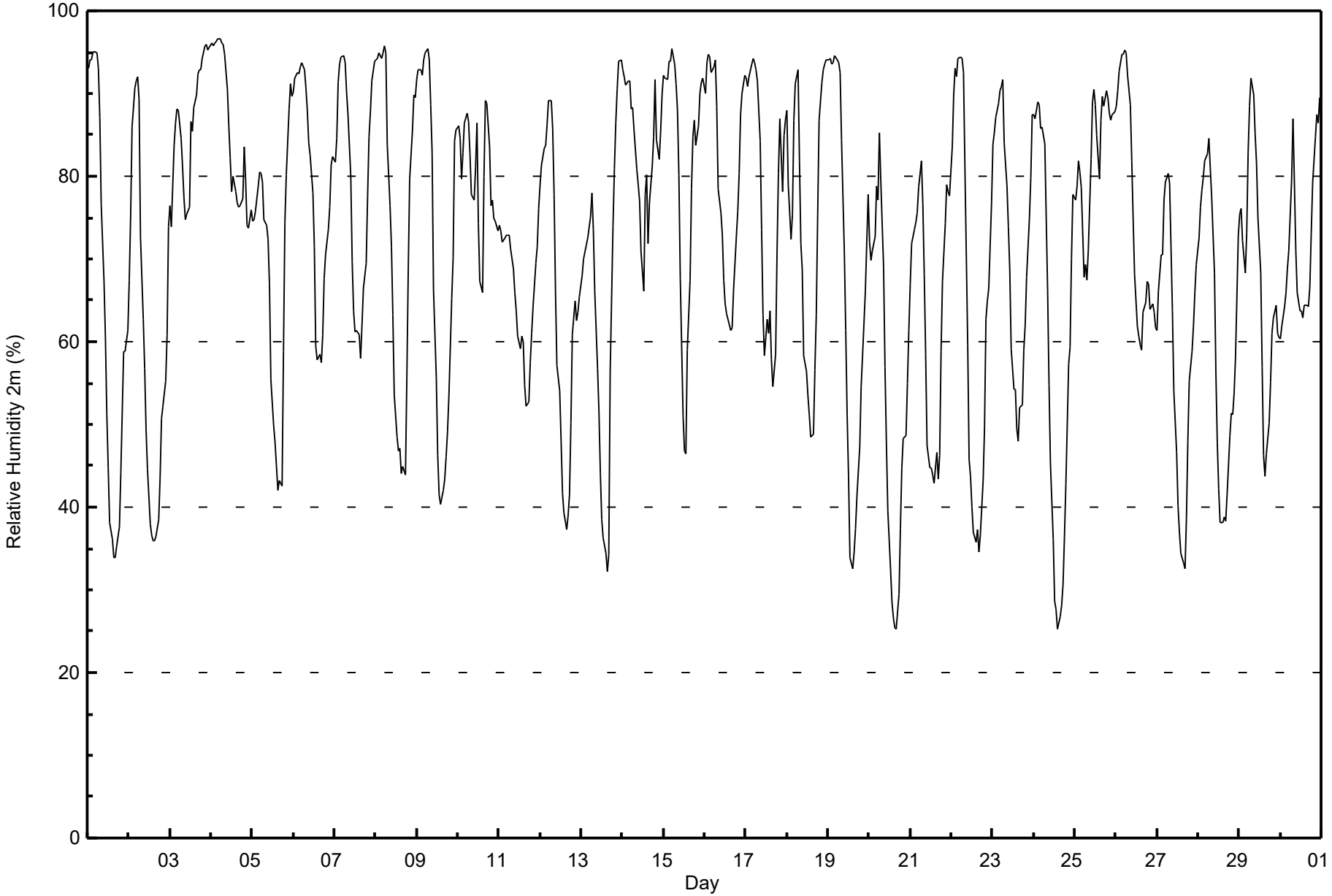
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	93.1	94.0	94.0	94.9	95.1	94.8	93.0	87.1	76.6	67.2	60.5	51.1	44.7	38.2	36.0	33.9	34.0	35.2	37.6	44.3	51.5	58.9	58.7	61.4	64.0	95.1
2-Sep	67.5	75.3	86.0	90.7	91.5	92.1	89.3	72.7	62.8	56.8	49.4	44.6	37.9	36.5	35.9	35.9	36.4	38.5	43.6	50.6	52.2	55.3	60.9	73.9	59.8	92.1
3-Sep	76.4	73.9	83.7	86.5	88.1	87.9	84.5	81.2	77.5	74.7	75.5	76.4	86.6	85.4	88.3	89.9	92.4	92.9	92.8	94.2	95.8	95.9	95.2	95.5	86.3	95.9
4-Sep	96.1	95.8	96.1	96.3	96.7	96.6	96.1	96.0	94.7	90.4	86.0	82.1	78.2	80.0	78.1	76.7	76.3	76.5	77.2	83.6	79.6	74.1	73.8	76.0	85.5	96.7
5-Sep	74.5	74.7	75.8	78.8	80.5	80.3	79.3	74.7	74.0	72.4	67.0	55.4	49.8	47.8	44.9	42.1	43.2	42.5	58.9	74.3	80.2	88.2	91.2	89.7	68.3	91.2
6-Sep	90.1	91.8	92.5	92.4	93.2	93.8	92.9	90.6	87.9	84.0	82.5	77.9	71.6	59.5	57.8	58.4	57.4	60.8	67.7	70.5	73.5	76.3	81.4	82.3	78.6	93.8
7-Sep	81.6	84.6	91.4	93.5	94.3	94.6	93.8	90.2	87.4	80.0	69.7	63.7	61.1	61.3	60.8	58.0	62.1	66.4	69.4	77.5	84.8	87.8	91.6	93.9	79.2	94.6
8-Sep	94.1	94.2	94.8	94.2	94.9	95.8	95.0	84.0	76.4	71.5	63.3	53.6	48.4	46.7	47.1	44.0	44.9	44.0	55.7	68.8	79.7	85.5	89.8	89.5	73.2	95.8
9-Sep	91.7	92.9	92.8	92.2	94.0	94.9	95.4	94.1	88.6	82.9	66.3	55.5	46.3	41.5	40.4	42.0	43.3	46.1	49.1	53.6	65.2	70.2	84.2	85.6	71.2	95.4
10-Sep	86.1	84.6	79.7	82.8	86.4	87.6	86.5	82.7	77.9	77.1	81.0	86.5	74.2	67.3	65.9	80.1	89.2	88.8	83.5	76.4	77.1	74.9	74.5	73.3	80.2	89.2
11-Sep	74.1	73.4	72.1	72.5	72.9	72.9	72.9	71.1	68.8	65.9	63.7	60.6	59.1	60.7	60.0	54.8	52.2	52.6	57.4	61.1	64.3	69.5	71.4	76.2	65.8	76.2
12-Sep	79.0	81.4	83.3	83.8	86.3	89.2	89.2	85.7	77.9	66.1	57.2	54.0	47.9	41.7	39.4	37.4	38.9	41.5	50.1	60.9	64.9	62.6	63.5	65.4	64.5	89.2
13-Sep	67.9	70.0	70.9	71.8	72.6	75.1	78.0	73.6	66.2	56.7	51.5	44.0	38.4	36.3	34.4	32.2	34.3	56.2	73.9	80.9	86.5	90.5	93.9	94.0	64.6	94.0
14-Sep	92.8	92.1	91.1	91.5	91.5	88.2	88.3	85.6	80.8	79.0	77.0	70.8	66.1	77.9	80.2	71.9	76.7	81.2	84.8	91.6	84.3	82.1	85.5	89.9	83.4	92.8
15-Sep	92.2	91.9	91.7	93.9	94.0	95.4	93.6	91.2	88.0	80.1	67.6	51.0	46.8	46.5	58.9	67.5	78.5	84.7	86.8	83.7	86.1	90.0	91.4	91.8	81.0	95.4
16-Sep	90.1	93.7	94.7	94.5	92.6	93.2	94.0	88.5	78.5	75.5	72.9	67.4	64.6	63.3	62.0	61.4	61.7	66.2	72.7	75.8	80.4	87.4	89.9	92.2	79.7	94.7
17-Sep	91.8	90.9	92.0	93.5	94.2	93.7	93.0	91.6	84.2	73.6	63.2	58.4	62.7	61.0	63.8	57.9	54.5	58.4	70.7	80.4	87.0	78.1	84.9	86.8	77.8	94.2
18-Sep	87.9	79.0	72.4	75.4	86.7	91.2	92.8	81.8	71.8	68.6	58.2	56.5	53.5	51.2	48.4	48.8	56.7	63.2	75.4	86.8	91.4	92.8	93.6	94.1	74.1	94.1
19-Sep	94.1	94.3	93.6	93.7	94.6	94.1	93.7	92.6	84.4	70.8	61.4	51.3	43.7	33.9	32.6	34.7	37.4	41.4	47.3	54.6	58.3	62.1	66.0	77.8	67.0	94.6
20-Sep	72.0	69.8	70.9	72.8	78.8	77.2	85.2	79.5	68.9	57.0	47.8	39.7	32.4	28.5	26.7	25.5	25.2	29.5	37.4	44.7	48.3	48.7	55.0	61.4	53.5	85.2
21-Sep	66.9	71.9	73.6	74.3	75.5	78.6	81.9	76.6	68.2	58.5	47.5	44.7	44.8	43.8	42.9	46.7	43.4	46.2	58.8	67.3	74.2	79.0	78.1	77.6	63.4	81.9
22-Sep	83.5	89.8	93.0	92.1	94.2	94.5	94.2	92.6	81.2	59.6	45.7	43.8	40.1	37.0	35.8	37.2	34.6	36.6	43.2	49.6	62.7	65.0	66.4	76.7	64.5	94.5
23-Sep	83.9	85.2	87.0	88.8	90.3	90.9	91.8	84.0	78.9	73.8	68.7	59.1	54.2	54.2	49.4	48.0	52.1	52.3	58.9	62.0	67.8	74.9	79.8	87.5	71.8	91.8
24-Sep	87.5	87.0	89.0	88.6	85.7	85.9	83.9	74.9	66.1	54.7	45.3	36.0	28.7	27.6	25.2	26.8	28.2	30.7	36.4	42.7	57.3	59.3	70.0	77.8	58.1	89.0
25-Sep	77.1	78.8	81.9	80.6	78.7	67.9	69.4	67.4	71.0	82.0	89.0	90.5	88.6	84.8	79.6	86.8	89.7	88.5	90.3	89.5	87.6	86.8	87.5	87.9	82.6	90.5
26-Sep	88.5	90.4	92.8	94.7	94.7	95.3	94.9	92.3	88.6	81.9	74.7	68.1	61.9	60.7	59.7	58.9	63.6	64.7	67.3	66.9	63.9	64.6	63.5	61.8	75.6	95.3
27-Sep	61.4	66.1	70.5	70.4	77.2	79.4	80.4	79.1	71.3	63.8	54.0	46.6	40.1	36.9	34.5	33.2	32.6	38.7	47.9	55.3	58.8	61.8	65.9	69.4	58.1	80.4
28-Sep	72.5	76.3	78.4	79.9	81.8	82.7	84.6	81.0	77.4	68.3	56.4	47.8	42.2	38.1	38.1	38.8	38.2	41.5	48.7	51.4	51.2	53.7	58.2	72.8	60.8	84.6
29-Sep	75.4	76.1	72.1	68.2	73.3	83.0	88.5	91.9	89.8	85.1	81.6	74.9	68.3	57.0	46.3	43.7	46.4	50.2	55.1	61.0	62.8	64.3	61.0	60.5	68.2	91.9
30-Sep	60.4	61.9	64.2	65.9	68.8	71.0	79.5	87.0	79.2	71.1	65.9	63.7	63.7	63.0	64.4	64.3	64.2	66.5	73.0	79.1	84.8	87.5	86.4	89.5	71.9	89.5
	81.7	82.7	84.1	85.0	86.6	87.2	87.8	84.0	78.2	71.6	65.0	59.2	54.9	52.3	51.3	51.2	52.9	56.1	62.4	68.0	72.1	74.3	77.1	80.4	Diurnal Average	
	96.1	95.8	96.1	96.3	96.7	96.6	96.1	96.0	94.7	90.4	89.0	90.5	88.6	85.4	88.3	89.9	92.4	92.9	92.8	94.2	95.8	95.9	95.2	95.5	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Ells River - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	54	7.50	7.50
40 - 60	137	19.03	26.53
60 - 80	258	35.83	62.36
80 - 100	271	37.64	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Global Radiation (GR) - W/m2

Ells River - September 2026

Maximum Value: 733.7 W/m2 on Sep 1 13:00

Maximum Daily Average: 221.1 W/m2 on Sep 1

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

Minimum Daily Average: 17.6 W/m2 on Sep 25

Maximum Diurnal Average: 426.8 W/m2 at hour 14

Minimum Diurnal Average: 0.0 W/m2 at hour 1

Monthly Average: 131.82 W/m2

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 12.1 Q_3 = 213.9 P_{90} = 457.4 P_{99} = 704.9

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

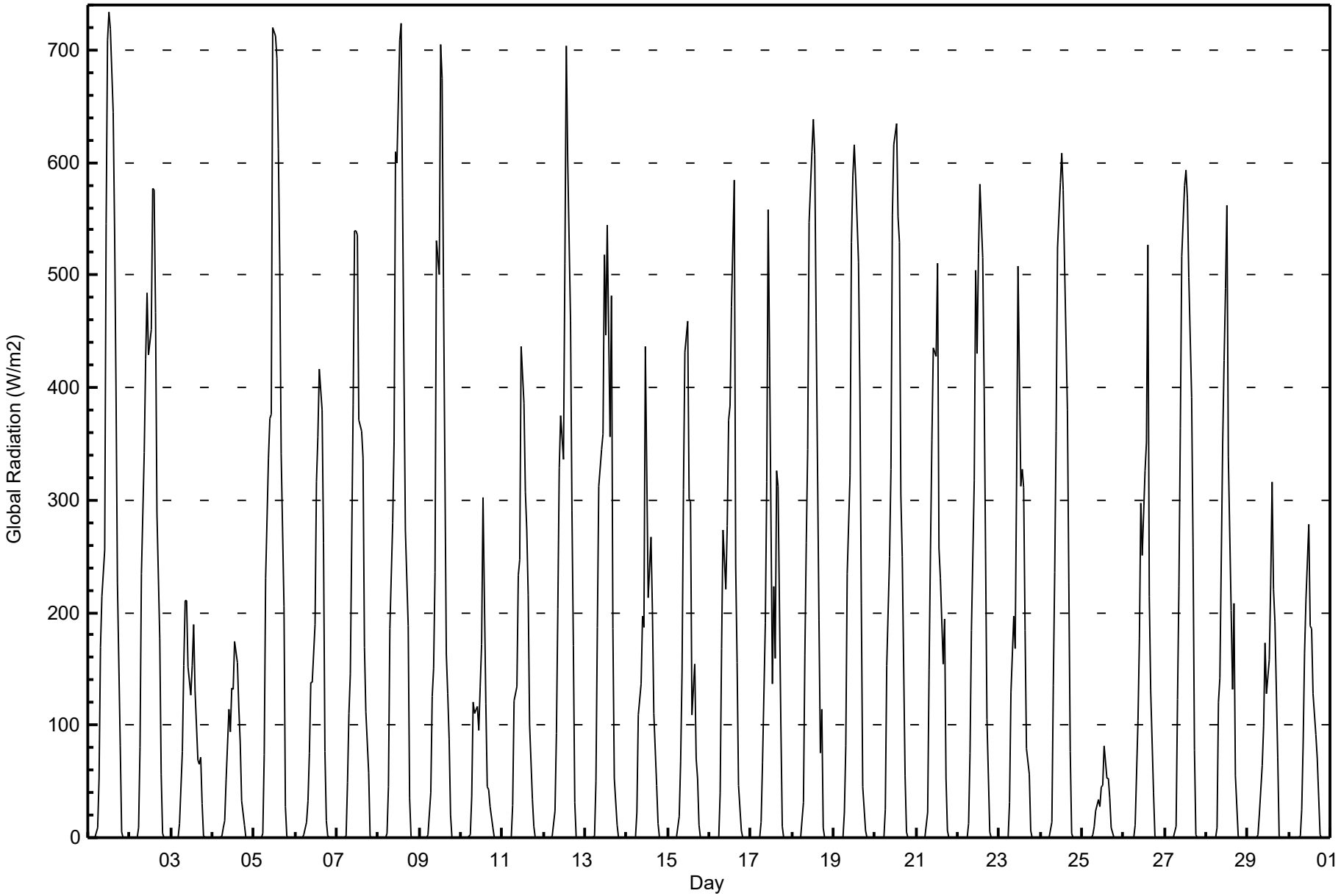
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	0.0	0.0	0.0	0.0	0.0	8.9	52.4	169.9	214.2	256.3	545.8	709.2	733.7	719.0	644.8	539.3	398.7	227.3	81.3	4.4	0.0	0.0	0.0	0.0	221.1	733.7
2-Sep	0.0	0.0	0.0	0.0	0.0	8.6	80.3	235.2	342.3	425.7	484.4	428.5	451.3	577.0	575.8	467.1	288.8	176.9	56.2	3.5	0.0	0.0	0.0	0.0	191.7	577.0
3-Sep	0.0	0.0	0.0	0.0	0.0	12.5	76.8	152.8	210.4	210.6	151.3	126.2	152.9	189.0	130.6	68.6	65.4	71.4	29.5	0.7	0.0	0.0	0.0	0.0	68.7	210.6
4-Sep	0.0	0.0	0.0	0.0	0.0	0.9	8.9	14.5	51.9	114.3	93.6	133.2	131.5	174.9	155.4	115.9	84.0	32.5	11.1	0.2	0.0	0.0	0.0	0.0	46.8	174.9
5-Sep	0.0	0.0	0.0	0.0	0.0	4.0	74.3	230.2	336.9	372.6	376.7	719.7	712.5	692.1	612.1	508.9	341.4	206.1	27.9	1.7	0.0	0.0	0.0	0.0	217.4	719.7
6-Sep	0.0	0.0	0.0	0.0	0.0	2.7	14.1	32.6	75.9	138.4	138.1	189.0	315.7	356.6	416.7	379.8	261.6	76.4	14.6	0.7	0.0	0.0	0.0	0.0	100.5	416.7
7-Sep	0.0	0.0	0.0	0.0	0.0	1.1	49.3	110.2	145.9	384.8	539.8	539.4	535.1	371.0	361.8	336.9	169.9	111.3	57.9	1.4	0.0	0.0	0.0	0.0	154.8	539.8
8-Sep	0.0	0.0	0.0	0.0	0.0	3.5	45.4	186.2	280.1	352.4	609.2	600.2	708.3	723.7	568.0	413.7	273.2	188.3	35.0	0.8	0.0	0.0	0.0	0.0	207.8	723.7
9-Sep	0.0	0.0	0.0	0.0	0.0	3.1	40.6	125.9	150.6	235.8	530.7	500.4	705.4	674.8	487.6	162.8	127.6	87.3	19.5	0.0	0.0	0.0	0.0	0.0	160.5	705.4
10-Sep	0.0	0.0	0.0	0.0	0.0	2.0	36.1	120.5	110.8	116.7	95.6	134.6	171.7	302.6	118.7	45.7	43.1	28.2	9.3	0.0	0.0	0.0	0.0	0.0	55.7	302.6
11-Sep	0.0	0.0	0.0	0.0	0.0	0.6	29.1	121.7	134.6	232.8	247.1	436.7	386.6	307.2	274.0	215.8	100.0	34.5	9.6	0.0	0.0	0.0	0.0	0.0	105.4	436.7
12-Sep	0.0	0.0	0.0	0.0	0.0	1.0	23.8	92.4	202.6	328.6	375.2	336.3	510.8	703.1	602.5	459.6	290.9	170.7	31.0	0.4	0.0	0.0	0.0	0.0	172.0	703.1
13-Sep	0.0	0.0	0.0	0.0	0.0	1.1	50.3	186.8	312.9	344.8	358.4	517.6	446.9	544.9	356.4	481.1	186.2	52.7	11.4	0.0	0.0	0.0	0.0	0.0	160.5	544.9
14-Sep	0.0	0.0	0.0	0.0	0.0	0.2	23.1	109.0	136.9	197.0	187.0	436.3	213.8	239.7	267.5	201.6	110.3	46.7	12.2	0.0	0.0	0.0	0.0	0.0	90.9	436.3
15-Sep	0.0	0.0	0.0	0.0	0.0	0.4	18.6	68.0	147.4	309.7	431.8	459.1	300.5	297.9	109.6	154.7	70.6	52.8	11.1	0.0	0.0	0.0	0.0	0.0	101.3	459.1
16-Sep	0.0	0.0	0.0	0.0	0.0	0.5	40.5	167.7	273.5	220.9	276.8	371.3	384.2	471.0	584.5	242.5	155.8	46.2	6.1	0.0	0.0	0.0	0.0	0.0	135.1	584.5
17-Sep	0.0	0.0	0.0	0.0	0.0	0.0	13.6	65.9	190.9	316.6	558.0	427.6	136.9	223.3	159.7	326.4	312.2	99.8	9.6	0.0	0.0	0.0	0.0	0.0	118.3	558.0
18-Sep	0.0	0.0	0.0	0.0	0.0	0.3	31.0	161.8	261.8	345.3	546.9	609.5	638.1	607.4	457.2	193.3	75.2	114.5	9.0	0.0	0.0	0.0	0.0	0.0	168.8	638.1
19-Sep	0.0	0.0	0.0	0.0	0.0	0.3	23.1	81.9	234.2	322.7	528.9	588.6	615.4	586.2	511.8	399.1	207.8	45.4	6.4	0.0	0.0	0.0	0.0	0.0	173.0	615.4
20-Sep	0.0	0.0	0.0	0.0	0.0	0.1	24.9	152.6	249.3	327.8	552.5	616.0	634.9	552.2	529.6	305.2	249.0	55.7	5.4	0.0	0.0	0.0	0.0	0.0	177.3	634.9
21-Sep	0.0	0.0	0.0	0.0	0.0	0.1	23.1	148.9	255.3	354.0	435.2	427.9	510.3	256.6	230.8	153.7	194.0	52.4	5.9	0.0	0.0	0.0	0.0	0.0	127.0	510.3
22-Sep	0.0	0.0	0.0	0.0	0.0	0.0	12.1	75.0	184.0	317.2	503.9	430.1	519.4	580.4	515.5	401.4	256.4	105.4	5.1	0.0	0.0	0.0	0.0	0.0	162.7	580.4
23-Sep	0.0	0.0	0.0	0.0	0.0	0.1	31.0	129.3	196.4	167.7	319.0	507.9	312.8	327.7	310.5	184.7	79.3	55.8	6.9	0.0	0.0	0.0	0.0	0.0	109.6	507.9
24-Sep	0.0	0.0	0.0	0.0	0.0	0.0	14.4	135.2	236.1	360.7	524.3	582.5	608.8	576.1	507.5	379.7	227.1	76.6	3.6	0.0	0.0	0.0	0.0	0.0	176.4	608.8
25-Sep	0.0	0.0	0.0	0.0	0.0	0.0	2.7	10.6	23.6	34.1	28.1	44.8	47.0	81.3	53.1	52.7	35.6	9.3	0.1	0.0	0.0	0.0	0.0	0.0	17.6	81.3
26-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.4	11.0	104.0	177.1	297.3	250.4	325.9	351.5	527.3	214.6	129.8	40.3	1.5	0.0	0.0	0.0	0.0	0.0	101.3	527.3
27-Sep	0.0	0.0	0.0	0.0	0.0	0.0	9.5	122.9	223.4	363.8	516.7	579.3	592.7	567.8	497.6	391.2	257.9	77.5	2.2	0.0	0.0	0.0	0.0	0.0	175.1	592.7
28-Sep	0.0	0.0	0.0	0.0	0.0	0.0	8.8	120.0	141.4	351.1	424.1	488.3	562.0	338.7	201.4	131.6	208.3	55.1	1.3	0.0	0.0	0.0	0.0	0.0	126.3	562.0
29-Sep	0.0	0.0	0.0	0.0	0.0	0.0	2.1	21.2	63.6	99.5	172.7	128.4	158.1	224.6	315.9	221.1	192.2	71.7	1.2	0.0	0.0	0.0	0.0	0.0	69.7	315.9
30-Sep	0.0	0.0	0.0	0.0	0.0	0.0	1.9	24.8	83.7	164.6	211.8	279.0	187.8	185.9	128.3	91.5	69.9	36.1	2.7	0.0	0.0	0.0	0.0	0.0	61.2	279.0
	0.0	0.0	0.0	0.0	0.0	1.7	28.7	112.8	185.8	264.8	368.7	419.9	423.7	426.8	373.7	274.7	182.1	83.5	16.1	0.5	0.0	0.0	0.0	0.0	Diurnal Average	
	0.0	0.0	0.0	0.0	0.0	12.5	80.3	235.2	342.3	425.7	609.2	719.7	733.7	723.7	644.8	539.3	398.7	227.3	81.3	4.4	0.0	0.0	0.0	0.0	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Global Radiation (GR) - W/m2

Ells River - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Ells River - September 2026

Maximum Speed: 30 km/h on Sep 25 17:00

Maximum Daily Speed Average: 20.8 km/h on Sep 11

Minimum Speed Value: 0 km/h on Sep 7 04:00

Minimum Daily Speed Average: 0.6 km/h on Sep 8

Maximum Diurnal Speed Average: 4.4 km/h at hour 4

Minimum Diurnal Speed Average: 1.3 km/h at hour 19

Monthly Average Velocity: 3.1 km/h 253.5 deg

Percentiles: P_1 = 1 P_{10} = 3 Q_1 = 5 Median = 9 Q_3 = 14 P_{90} = 20 P_{99} = 28

Hours in Service: 720

Hours of Data: 715

Hours of Missing Data: 5

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-Sep	W2	W3	S3	S6	SSW3	S3	SSE3	SW3	SSE9	SE8	SSE8	SE9	SE15	SSE18	SSE20	SE22	SE23	SE21	SE16	SE8	SE7	SE10	SSE10	SSE10	SSE9.5	SE23
2-Sep	SE9	S3	WNW3	W3	WNW3	W3	WNW3	NW2	NE3	SE12	SE17	SE15	SE21	SE22	SE25	SE23	SE21	SE21	ESE15	ESE14	SE15	SE11	S1	N2	SE9.4	SE25
3-Sep	ESE4	ESE4	WNW1	NW3	N2	N4	N6	N7	N5	NNE5	N7	E6	E6	ENE8	ENE8	ENE8	NNE6	NNW5	N7	N7	N5	NNW4	N5	N9	NNE4.1	N9
4-Sep	N7	N8	N8	N7	N9	N9	N10	N16	N16	NNE15	N19	N20	N24	N25	NNW28	N22	N25	N19	N18	N17	N12	NNW14	NNW14	NNW15	N15.4	NNW28
5-Sep	NNW15	NW10	NNW12	NNW13	NNW11	NNW13	NNW8	N6	N9	N9	N12	NNE9	N8	NNE9	NNE9	NNE7	SE6	S2	W4	NNW1	W0	W2	W3	W2	N6.1	NNW15
6-Sep	SW1	SW2	S7	SW2	S2	SSW3	S3	S4	W2	NW3	WSW3	SSW2	SE5	SE17	SSE11	SSE11	SSE9	SSE7	SE5	SSE6	SE6	SSE10	SSE13	SSE12	SSE5.4	SE17
7-Sep	SSE11	SSE6	NW2	N0	SE2	SSW1	NW2	SE7	SSE10	S12	S17	S15	S12	SSE11	SSE8	S5	S7	SSE7	SSE8	SSE7	S7	SSW5	S4	SSW7	SSE6.7	S17
8-Sep	SW2	SW2	W3	W3	SW2	SSW1	WSW2	W5	WNW3	N9	NNE6	NNW4	NW5	NNE6	ENE8	ESE5	ESE8	ESE7	SE3	UO	SW1	SW3	W2	SSW3	NNE0.6	N9
9-Sep	S4	S5	SSE7	S5	S7	S6	S8	S8	S9	SSE10	SSW13	SSW14	SSW17	SSW15	SSW17	SW14	SSW13	SSW10	SSW13	SW11	S7	SW8	SW9	SW11	SSW9.6	SSW17
10-Sep	WSW12	W10	W9	SW9	SSW9	S8	SSW11	SW11	WSW10	WSW11	WSW9	SW9	WNW16	WNW19	WNW20	WNW13	W9	W9	NW13	NW18	NW17	NW19	NW20	NW20	W10.6	NW20
11-Sep	NW20	NW21	NW23	NW23	NW24	NW21	NW22	NW23	NW23	NNW28	NNW29	NNW30	NW24	NW25	NW25	NW24	NW25	NNW23	NW21	NW18	NW11	WNW7	WNW10	W7	NW20.8	NNW30
12-Sep	W7	W7	W5	W5	WSW2	WSW3	SSW3	SSW4	SW4	SW3	WSW4	NNW4	SSW7	WNW4	WNW8	WSW7	SW6	SW6	SSW7	S8	S10	SSW9	SW9	SW10	SW4.8	SW10
13-Sep	SW9	SSW10	SSW12	SW13	SW14	SSW13	SSW13	SSW13	SSW13	SW11	SSW12	SSW14	SW13	SW13	SW12	WSW10	WSW6	N19	NNE23	NNE17	N16	NNW12	N13	N19	WSW4.7	NNE23
14-Sep	N21	N20	N15	N14	N16	N17	N12	NNW10	N12	N15	NNW16	N18	N16	N21	N16	N17	N10	N11	NNW6	WNW6	WNW8	WNW10	WNW7	W8	NNW12.4	N21
15-Sep	WSW8	WSW7	WSW7	SW7	SSW4	SW7	SSW5	SW3	SW6	SW6	SW10	WSW9	SW8	SSW8	WSW4	WNW7	SSE5	SSW5	WNW5	W6	WNW5	W8	WNW8	NNW5	WSW5.3	SW10
16-Sep	NW3	WSW3	WSW4	WSW4	W4	W4	SW3	S3	S5	SSW7	S8	S9	S8	SSE10	SSE12	S8	SSE9	SSE7	SE7	ESE5	SSE3	WNW3	ESE1	UO	S4.3	SSE12
17-Sep	NNW3	NNW3	WNW3	W3	WNW4	W2	W1	S1	SSW3	SSE11	S9	SSE8	S8	SSW7	S5	SSW8	S9	S9	SSW7	SSW4	SSE3	SW4	SSE3	S6	SSW3.9	SSE11
18-Sep	SSW4	SSW6	SW8	SW7	WNW5	WNW4	W4	SSW2	N5	NNW6	NNW2	N3	ESE3	SSE8	SE7	ESE6	SE6	SSE7	SSE4	UO	W2	UO	SSW4	SSW5	SSW1.9	SSE8
19-Sep	S6	S8	S6	S6	S5	S6	S4	S7	SSE9	SSE10	SE8	SE10	SE13	SSE20	SSE21	SSE21	S15	S10	S10	S10	S11	S8	S6	ESE1	SSE9.2	SSE21
20-Sep	S6	SSW8	SW6	SW8	S9	SSW9	SSE7	S7	SSW10	SSW10	SSW11	SSW13	SSW14	SW13	SW10	SSW12	SSW11	SSW9	S8	S9	S11	S11	SW5	SSW5	SSW8.8	SSW14
21-Sep	SSW8	S10	S12	SSW12	SW10	SSW8	S8	S9	S9	S9	SSW8	SSW4	SE8	SE8	N4	NNE9	N9	NNW6	W4	SW6	S4	SSW4	SW7	WSW7	SSW4.6	S12
22-Sep	SW4	SW3	SW3	NE0	S6	SSW2	SW2	S3	WSW5	WNW14	NW18	NW17	WNW11	WSW11	WSW12	WSW13	WSW11	SW8	WNW5	WSW5	SW6	SW6	SW7	WSW4	W5.8	NW18
23-Sep	WSW3	S5	SSW4	S4	S6	S5	S5	SSW2	SSE2	SSW1	SE4	SE7	ESE5	ESE6	SE8	SE10	SE6	SE7	SE8	SSE9	S9	SSE8	S8	SW5	SSE5.0	SE10
24-Sep	SW6	SW8	SSW5	SSW8	SSW9	SSW8	SW9	SSW6	SSW8	SW8	SW12	SW14	SW15	SW17	WSW14	SW13	SW11	SW8	SSW7	SSW7	SW4	WSW2	UO	W0	SW8.5	SW17
25-Sep	W3	SW3	WNW6	NW2	NNW6	NNW14	NNW14	N17	N15	N14	N19	NNE22	NNE27	NNE25	NNE27	N28	N30	N29	N30	N27	N27	N29	N28	N28	N18.7	N30
26-Sep	N23	N20	NNW14	NW13	W6	WSW10	W10	WSW12	W15	W17	W17	W20	W22	W22	W22	WNW23	W20	W20	W17	W15	W17	WSW16	W17	W13	W14.4	WNW23
27-Sep	WSW11	WSW13	WSW16	WSW16	SW14	SW16	SW14	SW14	SW13	SW15	SW15	SW14	SW16	WSW15	WSW16	WSW14	WSW14	SW12	SSW9	SSW9	SW9	SSW10	SW10	SW10	SW12.9	WSW16
28-Sep	SW11	SW11	SW12	SW13	SSW12	SSW12	SSW10	S10	S10	S10	SSW12	SSW16	SW16	SW17	SW16	SSW15	S15	S10	SSE9	S12	S11	SSW8	SSW6	NNE2	SSW10.8	SW17
29-Sep	W2	SSE7	S9	S8	SSE8	SSE7	SSE7	S6	SSW9	SW11	SW13	WSW13	W16	W19	W21	W19	W21	W16	WSW9	SSW4	W14	WSW13	W20	WNW17	WSW9.3	W21
30-Sep	WNW19	WNW18	WNW15	WNW16	W15	W16	WNW13	WNW12	NW15	NW20	NW22	NW22	NW19	NW17	WNW16	WNW11	WNW12	NW15	WNW8	W6	W6	NW5	W6	W2	WNW13.3	NW22
	W3.4	W3.6	W3.9	WSW4.4	WSW3.6	WSW3.7	WSW3.2	WSW2.9	WSW3.0	WSW2.9	WSW3.6	WSW3.2	WSW3.6	WSW3.8	WSW3.6	WSW3.1	SW2.8	WSW1.8	W1.3	WSW1.6	WSW2.1	WSW3.1	W3.9	W3.6	Diurnal Average	
	N23	NW21	NW23	NW23	NW24	NW21	NW22	NW23	NW23	NNW28	NNW29	NNW30	NNE27	NW25	NNW28	N28	N30	N29	N30	N27	N27	N29	N28	N28	Diurnal Maximum	

UO - Unstable Operation

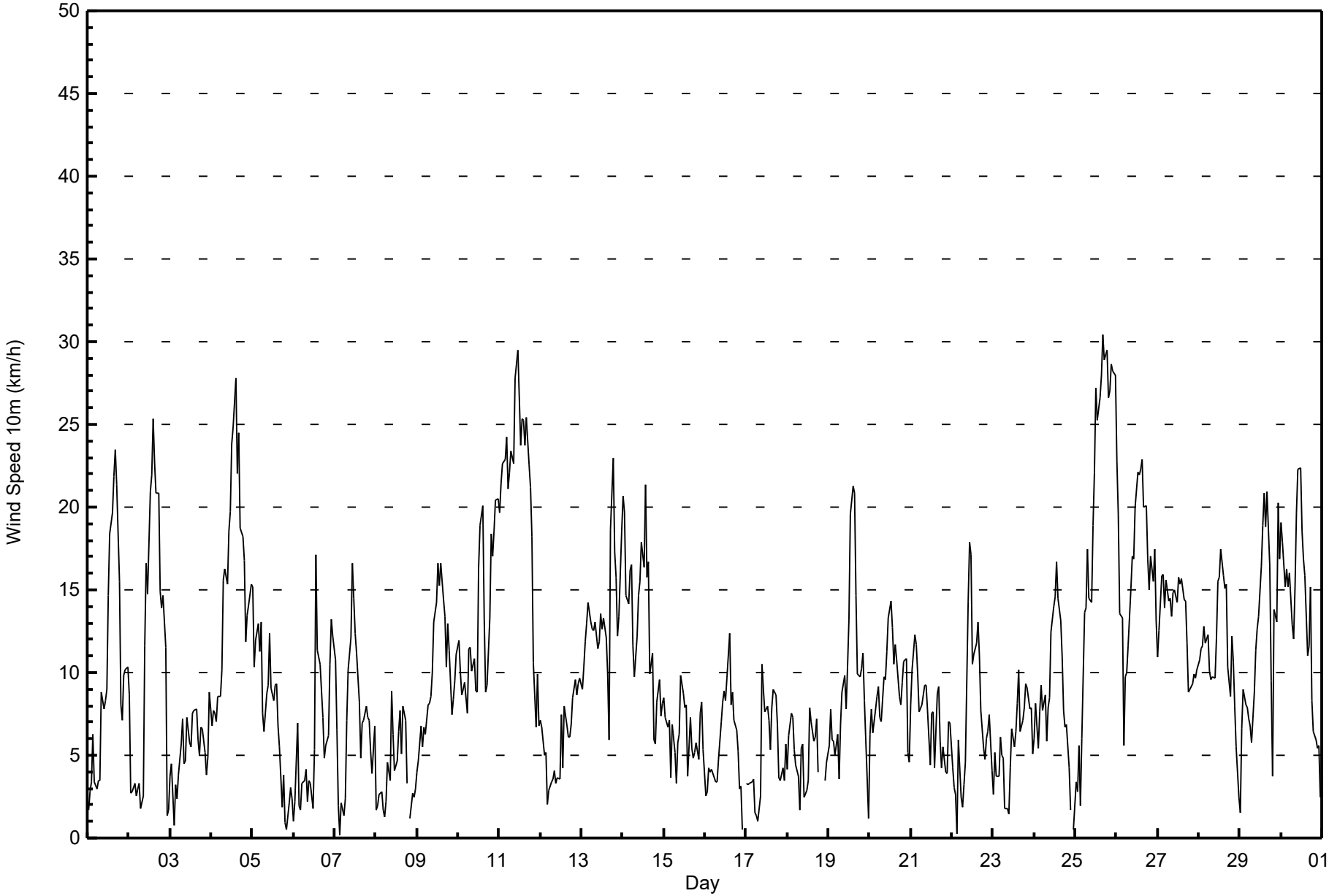
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Ells River - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	182	25.45	25.45
6 - 11	291	40.70	66.15
12 - 19	169	23.64	89.79
20 - 28	67	9.37	99.16
29 - 38	6	0.84	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 715

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Ells River - September 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	2	2	0	0	8	5	7	25	27	22	14	28	14	9	9	182
6 - 11	21	8	0	4	2	4	21	40	56	40	42	16	15	13	2	7	291
12 - 19	25	2	0	0	0	2	7	5	8	24	27	15	15	13	12	14	169
20 - 28	15	5	0	0	0	0	9	4	0	0	0	0	9	2	20	3	67
29 - 38	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	75	17	2	4	2	14	42	56	89	91	91	45	67	42	43	35	715

Total Number of Valid Hours: 715

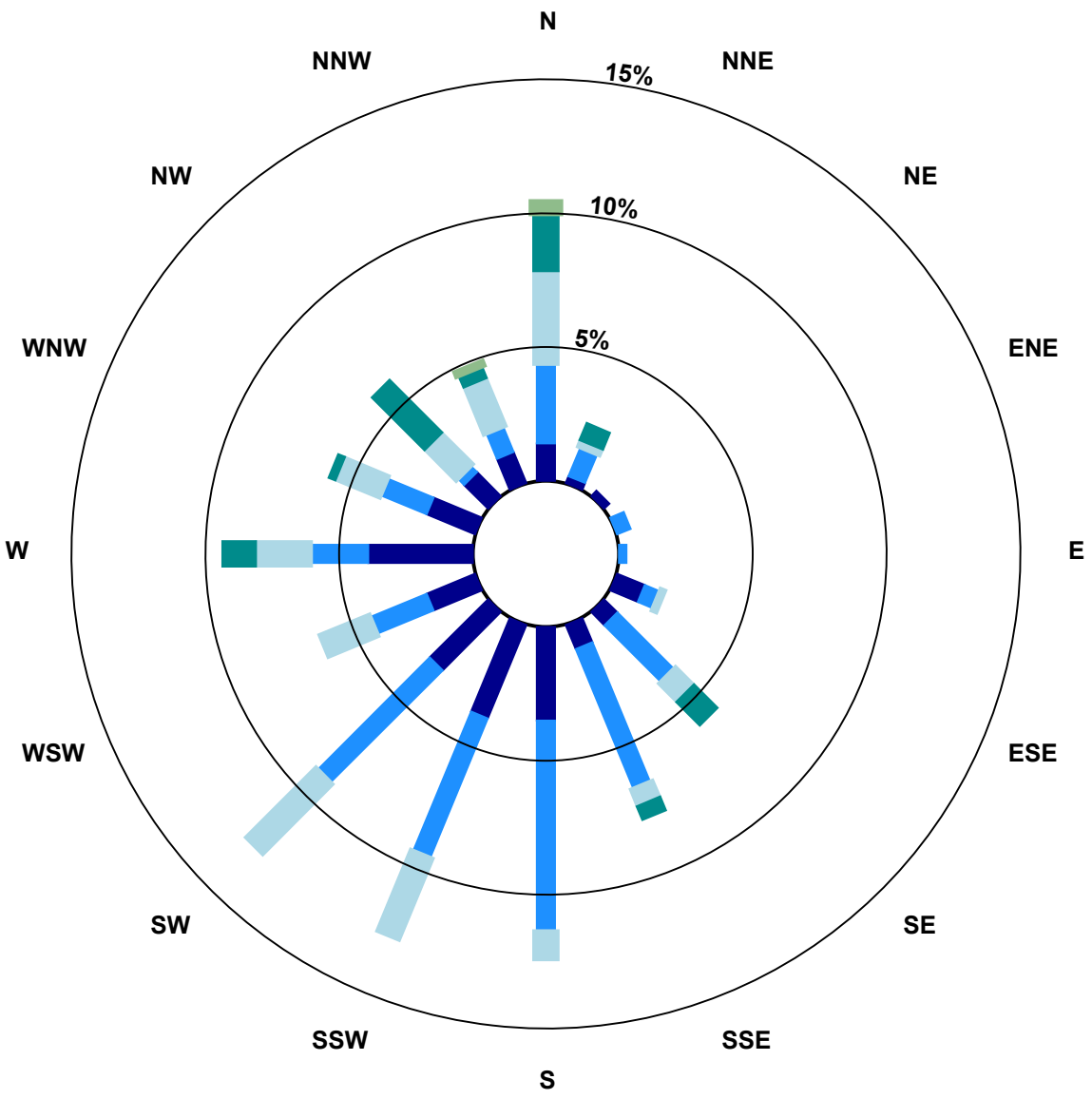
Total Number of Hours: 720

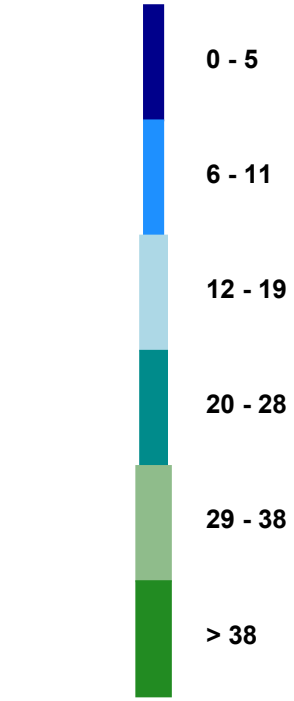
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Ells River





Total Number of Valid Hours: 715

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 11 km/h on Sep 13 18:00

Minimum Value: 1 km/h on Sep 3 05:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 2 Q_3 = 4 P_{90} = 5 P_{99} = 7

Hours in Service:	720
Hours of Data:	715
Hours of Missing Data:	5
Hours of Calibration:	0
Percent Operational Time:	99.3

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-Sep	1	2	2	2	3	2	1	3	2	2	2	3	5	4	4	4	4	4	4	2	1	1	1	2	5
2-Sep	1	2	2	1	2	1	1	1	2	5	3	3	6	4	5	5	4	4	3	2	2	2	2	1	6
3-Sep	2	3	1	1	1	1	2	2	2	2	2	4	2	1	2	2	1	1	1	1	2	1	2	1	4
4-Sep	1	1	1	1	1	2	1	4	3	3	3	4	4	4	5	4	5	4	4	6	3	2	2	2	6
5-Sep	4	2	2	2	1	2	2	3	2	3	3	4	4	3	3	3	2	1	1	2	1	2	1	1	4
6-Sep	1	2	2	1	2	2	3	2	1	1	1	1	4	4	3	3	2	2	1	2	1	3	2	2	4
7-Sep	2	2	1	1	1	2	1	3	2	3	4	4	3	3	3	2	3	2	2	1	2	2	1	2	4
8-Sep	2	1	1	1	1	2	1	2	2	3	3	3	3	3	2	3	2	1	1	UO	2	2	1	2	3
9-Sep	1	2	1	2	2	2	1	1	2	2	4	4	5	5	5	5	4	3	4	4	1	3	3	3	5
10-Sep	4	3	2	2	3	2	3	4	4	3	3	3	6	5	5	4	3	3	4	4	4	4	4	5	6
11-Sep	4	4	5	5	5	4	4	5	5	6	6	6	5	5	5	6	5	5	4	5	3	2	3	1	6
12-Sep	1	1	1	1	1	2	1	2	1	1	3	2	2	3	4	3	2	2	1	1	1	2	2	2	4
13-Sep	2	2	3	3	4	3	3	3	4	4	4	3	4	4	4	3	2	11	6	4	2	2	2	4	11
14-Sep	3	3	3	2	3	3	3	2	2	3	3	3	3	4	4	4	3	2	2	1	2	2	2	1	4
15-Sep	1	1	2	1	1	2	2	2	2	3	3	3	3	3	4	3	2	2	2	1	1	2	1	2	4
16-Sep	2	1	2	2	3	3	1	1	2	2	2	3	3	4	3	2	2	1	1	1	1	1	1	UO	4
17-Sep	1	1	1	2	2	2	2	1	2	2	3	3	2	2	3	2	2	2	1	2	1	1	2	2	3
18-Sep	2	2	2	2	1	1	1	1	4	3	1	1	2	3	3	3	4	1	2	UO	1	UO	3	1	4
19-Sep	1	2	1	1	1	1	1	2	1	2	2	3	3	5	5	5	4	2	1	1	2	1	1	2	5
20-Sep	1	2	2	2	2	3	1	2	3	3	3	3	4	4	3	3	3	2	1	1	1	2	2	1	4
21-Sep	2	1	2	3	3	2	2	2	2	2	2	2	2	3	1	1	2	1	2	3	1	1	2	2	3
22-Sep	2	2	2	1	3	2	1	1	3	5	4	4	3	4	4	5	4	3	2	2	1	1	2	2	5
23-Sep	2	2	2	2	1	2	2	1	1	1	2	2	2	2	2	2	1	1	1	1	1	1	1	1	2
24-Sep	2	2	1	2	2	2	2	2	2	3	4	5	5	5	5	4	4	2	1	1	3	3	UO	1	5
25-Sep	2	3	1	2	4	3	3	3	4	4	2	4	4	5	5	4	5	5	4	4	4	4	4	5	5
26-Sep	5	4	3	3	3	3	3	4	5	5	5	6	7	7	7	7	6	7	6	5	5	5	5	5	7
27-Sep	3	5	5	5	4	4	4	4	4	4	4	5	5	5	5	5	5	3	2	2	2	2	3	3	5
28-Sep	3	3	3	4	3	3	2	2	2	3	4	5	6	6	5	4	5	3	1	2	1	1	2	1	6
29-Sep	2	2	1	2	1	1	1	1	3	3	4	4	5	5	7	6	7	6	4	1	4	5	7	5	7
30-Sep	7	6	4	4	4	4	3	4	4	5	5	5	4	4	4	4	5	4	4	1	2	2	3	2	7
	7	6	5	5	5	4	4	5	5	6	6	6	7	7	7	7	7	11	6	6	5	5	7	5	
	Diurnal Maximum																								

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Ells River - September 2026

Direction of Maximum Speed: 11 deg on Sep 25 17:00
Direction of Maximum Daily Speed Average: 320.1 deg on Sep 11

Direction of Minimum Speed: 351 deg on Sep 7 04:00
Direction of Minimum Daily Speed Average: 0.6 deg on Sep 8

Monthly Average Direction: 253.5 deg

Hours in Service:	720
Hours of Data:	715
Hours of Missing Data:	5
Percent Operational Time:	99.3

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-Sep	263	270	187	185	195	178	159	217	150	141	147	140	146	154	149	139	139	141	146	142	143	137	151	152	149.3
2-Sep	146	174	283	271	297	274	283	322	50	135	145	139	140	135	135	131	125	129	122	122	127	139	173	350	134.9
3-Sep	116	108	294	320	360	350	358	353	349	21	9	85	87	67	67	57	27	347	352	9	1	340	351	3	22.1
4-Sep	7	8	3	355	355	359	355	356	8	13	9	349	354	353	341	1	5	5	6	8	1	346	345	348	358.1
5-Sep	341	319	346	345	341	343	328	352	359	0	358	32	7	27	31	25	124	185	272	335	274	261	272	260	351.8
6-Sep	223	214	181	219	171	200	171	191	272	306	247	213	135	142	156	160	151	152	140	157	144	150	148	153	160.3
7-Sep	151	158	310	351	142	206	321	126	161	177	175	175	173	154	166	188	169	152	149	160	183	196	175	195	168.0
8-Sep	233	232	262	271	230	197	256	259	282	3	21	346	310	28	57	102	113	108	126	UO	231	228	270	199	13.4
9-Sep	185	188	155	185	185	182	186	173	190	165	193	200	204	212	212	216	210	206	211	222	184	225	227	225	201.6
10-Sep	247	277	262	228	211	185	207	225	239	240	250	224	283	287	292	283	268	276	306	319	311	311	305	310	275.7
11-Sep	311	312	317	319	319	320	318	322	325	331	327	330	326	308	319	324	324	327	321	323	322	286	300	280	320.1
12-Sep	280	279	266	268	241	237	201	199	234	223	239	331	212	285	300	248	215	219	196	188	189	211	217	216	231.3
13-Sep	222	207	201	214	214	211	209	212	212	219	197	192	218	222	216	237	239	10	13	12	5	348	349	352	244.5
14-Sep	359	356	356	357	350	351	355	347	354	355	348	357	5	350	356	349	351	353	337	283	303	302	283	268	347.1
15-Sep	250	250	248	227	210	222	208	223	236	231	235	238	232	211	255	293	166	213	289	272	301	281	299	327	246.5
16-Sep	317	241	247	254	264	261	216	187	174	199	185	186	191	168	161	177	160	152	126	118	150	290	123	UO	183.2
17-Sep	342	342	303	268	296	271	271	176	211	158	188	166	185	203	189	194	185	183	194	207	162	233	165	188	195.0
18-Sep	208	209	217	234	283	284	261	204	6	348	334	10	111	151	137	110	140	157	154	UO	273	UO	192	197	192.4
19-Sep	191	182	183	186	186	177	176	181	168	157	138	138	135	160	163	165	171	185	169	173	178	170	172	115	166.7
20-Sep	182	206	215	221	188	205	158	183	194	210	196	195	211	234	217	211	202	192	184	178	181	179	219	212	199.4
21-Sep	198	188	190	203	215	204	175	176	187	179	199	195	132	139	1	23	353	346	261	217	186	211	233	239	197.0
22-Sep	222	214	219	40	171	192	216	191	253	301	308	316	299	255	250	246	251	231	282	255	226	218	228	238	260.3
23-Sep	253	188	192	189	172	189	190	213	163	198	144	140	123	104	127	139	128	140	146	163	169	163	174	220	159.1
24-Sep	227	224	208	210	208	207	217	209	208	220	214	233	236	234	237	222	224	216	202	208	224	243	UO	270	221.3
25-Sep	269	215	294	323	332	347	348	352	2	10	4	18	13	24	17	9	11	6	9	9	2	2	6	357	4.9
26-Sep	359	353	341	321	275	251	269	251	262	265	263	270	268	267	271	284	261	263	261	266	269	258	268	264	277.0
27-Sep	251	239	250	244	230	228	231	231	229	226	226	225	226	244	240	245	237	215	204	207	214	213	224	225	230.9
28-Sep	220	217	223	216	202	211	196	186	190	184	199	210	219	229	220	200	190	187	165	174	181	197	197	19	202.8
29-Sep	261	156	169	181	166	165	163	174	197	215	224	251	264	278	273	271	266	265	255	211	271	245	274	285	247.2
30-Sep	294	288	286	282	280	281	282	285	304	308	315	310	312	306	289	288	292	304	293	274	280	312	269	260	295.0
	275.4	259.8	258.8	257.2	248.6	252.8	248.6	248.4	250.6	256.4	253.7	254.8	247.1	242.2	247.6	245.0	221.8	237.7	261.7	249.3	248.6	253.5	268.6	280.2	
	Diurnal Average																								

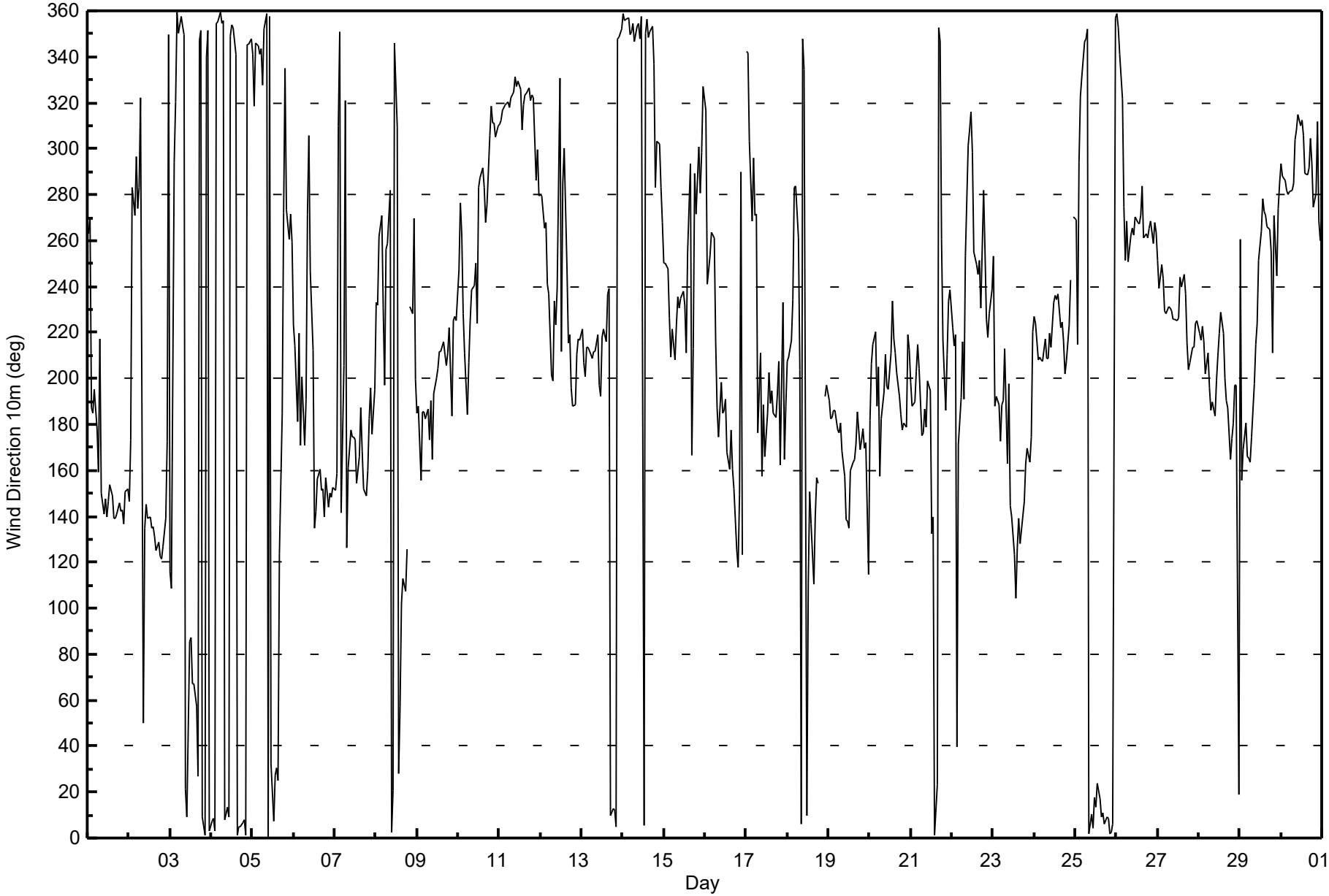
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Ells River - September 2026



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

Maximum Value: 96 deg on Sep 22 04:00

Minimum Value: 6 deg on Sep 2 01:00

Percentiles: P_1 = 7 P_{10} = 11 Q_1 = 14 Median = 20 Q_3 = 29 P_{90} = 51 P_{99} = 84

Hours in Service:	720
Hours of Data:	715
Hours of Missing Data:	5
Hours of Calibration:	0
Percent Operational Time:	99.3

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-Sep	33	43	41	14	66	59	36	58	13	14	18	26	21	20	18	13	10	10	8	10	8	6	7	6	66
2-Sep	6	73	16	23	23	16	19	57	48	20	12	13	11	12	12	12	11	9	9	9	9	9	89	34	89
3-Sep	72	53	92	16	39	24	18	14	20	30	16	53	36	18	15	13	14	23	15	12	25	16	26	11	92
4-Sep	10	7	12	11	11	9	9	12	13	11	13	16	14	14	13	14	13	12	11	11	14	12	11	11	16
5-Sep	14	11	15	11	9	10	24	40	20	22	15	31	33	34	31	44	33	85	30	39	60	41	37	44	85
6-Sep	82	50	17	28	85	49	82	21	33	32	25	71	53	13	21	22	21	9	13	16	8	8	9	10	85
7-Sep	10	15	51	92	64	84	64	47	14	15	16	20	25	21	20	47	31	11	8	13	10	20	56	30	92
8-Sep	77	56	22	25	53	55	40	33	39	15	41	64	57	43	26	40	17	13	50	UO	68	35	59	44	77
9-Sep	28	25	13	33	25	20	10	11	19	14	20	20	22	24	23	22	21	17	20	25	15	27	21	20	33
10-Sep	26	18	21	21	19	20	17	23	25	21	24	21	22	17	15	18	20	22	13	11	12	12	12	11	26
11-Sep	12	12	11	12	11	11	11	12	12	13	13	14	16	14	13	14	13	14	13	12	15	16	14	15	16
12-Sep	15	16	20	20	59	43	35	47	39	66	71	83	36	79	47	42	37	24	14	6	8	19	19	19	83
13-Sep	21	19	16	20	19	19	17	19	20	22	21	20	23	26	20	33	27	47	11	10	11	10	9	12	47
14-Sep	12	12	12	12	9	9	11	11	13	15	14	15	13	15	13	14	23	14	15	14	18	11	16	12	23
15-Sep	14	12	13	12	36	21	42	65	34	34	24	37	37	25	78	35	33	39	23	26	26	17	16	27	78
16-Sep	72	31	29	29	60	40	30	37	30	32	30	32	35	29	22	31	18	11	9	9	29	17	78	UO	78
17-Sep	22	18	25	30	28	77	56	66	59	22	38	46	22	23	52	24	17	12	8	60	31	33	37	30	77
18-Sep	28	52	14	17	21	21	16	67	29	41	62	59	81	32	44	52	59	16	49	UO	22	UO	21	30	81
19-Sep	23	8	18	10	16	13	20	11	12	13	24	14	14	14	14	14	20	13	9	7	10	7	7	81	81
20-Sep	16	17	22	23	24	18	13	23	21	23	24	22	25	28	32	24	17	11	9	7	8	10	35	27	35
21-Sep	13	10	11	17	21	24	17	15	19	23	33	53	27	19	26	10	16	13	41	44	27	32	23	19	53
22-Sep	25	60	48	96	41	67	55	43	44	16	16	15	26	30	31	24	25	23	22	24	15	13	14	47	96
23-Sep	66	30	39	43	13	41	51	56	61	61	33	24	26	23	21	14	16	11	11	8	9	17	16	14	66
24-Sep	23	18	26	21	16	17	19	28	23	26	22	29	28	27	28	29	22	17	11	9	42	72	UO	87	87
25-Sep	62	59	18	78	44	12	10	11	13	9	10	14	9	10	10	11	11	14	12	13	14	14	12	13	78
26-Sep	13	14	16	14	37	26	23	21	22	21	23	21	21	22	23	19	21	20	22	23	23	22	20	23	37
27-Sep	24	25	21	22	21	21	21	21	22	20	21	24	25	30	25	26	24	18	13	13	17	17	20	20	30
28-Sep	19	19	22	18	17	18	17	15	17	22	26	22	25	25	23	19	15	12	13	10	10	11	36	41	41
29-Sep	77	14	10	12	12	12	6	11	15	22	21	21	21	22	22	22	23	24	25	53	23	25	22	18	77
30-Sep	15	15	16	16	16	15	16	16	14	13	13	14	15	14	15	15	16	13	21	14	36	36	27	79	79
	82	73	92	96	85	84	82	67	61	66	71	83	81	79	78	52	59	85	50	60	68	72	89	87	
	Diurnal Maximum																								

UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS31
BLACKROD
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BLACKROD (AMS31)
SEPTEMBER 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	685	34	35	99.86	4.9	0	2	0
H2S (ppb) Average	684	35	36	99.86	1	0	0.3	0
THC(ppm) Average	685	34	35	99.86	8.1	-	3.7	-
NO2 (ppb) Average	685	35	35	100	15.5	0	3.6	-
NO (ppb) Average	685	35	35	100	70.1	-	16.9	-
NOX (ppb) Average	685	35	35	100	78.9	-	20.4	-
Temperature 2 m (C) Average	720	0	0	100	25.8	-	20.6	-
Relative Humidity (%) Average	720	0	0	100	100	-	92.7	-
Wind Speed 10 m (km/h) Average	720	0	0	100	28	-	18	-
Wind Direction 10 m (deg) Average	720	0	0	100	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BLACKROD (AMS31)
SEPTEMBER 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	685	0.27	0.6	-	0	0	0	0.1	0.2	0.6	4.9
H2S (ppb) Average	684	0.11	0.1	-	0	0	0.1	0.1	0.1	0.2	1
THC (ppm) Average	685	2.43	0.5	-	2.1	2.2	2.2	2.3	2.4	2.7	8.1
NO2 (ppb) Average	685	1.79	1.9	-	0	0.4	0.6	1	2.2	4.4	15.5
NO (ppb) Average	685	2.51	7	-	0	0	0.1	0.4	1.7	6.2	70.1
NOX (ppb) Average	685	4.31	8.4	-	0.1	0.5	0.8	1.4	4.1	10.3	78.9
Temperature 2 m (C) Average	720	11.79	5.2	-	0	5.1	8.1	11.4	15.3	18.8	25.8
Relative Humidity (%) Average	720	73.6	18.1	-	31.6	46.1	59	76.4	90.1	95.1	100
Wind Speed 10 m (km/h) Average	720	10.7	6	-	0	3	6	10	15	19	28
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BLACKROD (AMS31)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
H2S, SO2, THC	10 Sep 2026 13:00	10 Sep 2026 13:00	1	Maintenance - sample manifold cleaned

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Blackrod - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.9 ppb on Sep 29 17:00 Maximum Daily Average: 2.0 ppb on Sep 26

Minimum Value: 0.0 ppb on Sep 1 01:00
Maximum Diurnal Average: 0.5 ppb at hour 12
Monthly Average: 0.27 ppb

Minimum Daily Average: 0.0 ppb on Sep 3
Minimum Diurnal Average: 0.1 ppb at hour 6
Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.2 P_{90} = 0.6 P_{99} = 3.6

Hours in Service:	720
Hours of Data:	685
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-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.1	0.0	0.1	0.1	0.2	0.2	0.1	0.5	0.5	0.5	0.5	0.1	0.5
2-Sep	0.6	0.7	0.6	0.6	0.6	Z	0.7	0.8	0.7	0.6	0.6	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.4	0.8
3-Sep	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
4-Sep	0.0	Z	0.8	0.1	0.2	0.1	0.2	0.4	0.4	0.4	0.4	0.1	0.0	0.0	0.1	0.0	0.2	0.5	0.5	0.6	0.1	0.1	0.3	0.2	0.2	0.8
5-Sep	0.1	0.4	Z	0.9	0.5	0.4	0.8	0.7	0.4	0.4	0.3	0.2	0.3	0.3	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.3	0.9
6-Sep	0.1	0.0	0.0	Z	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	0.0	0.0	0.0	0.1
7-Sep	0.0	0.0	0.0	0.0	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1
8-Sep	0.0	0.0	0.1	0.0	0.0	Z	0.3	0.3	0.2	0.5	1.6	1.2	0.6	0.6	0.6	0.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.6
9-Sep	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
10-Sep	0.2	Z	0.3	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.4	0.7	M	0.0	0.1	0.3	0.2	0.8	0.3	0.2	0.0	0.0	0.0	0.1	0.2	0.8
11-Sep	0.0	0.0	Z	0.1	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
12-Sep	0.0	0.0	0.0	Z	0.2	0.1	0.1	0.1	0.1	0.0	0.2	0.7	0.5	0.3	0.1	0.9	0.8	0.8	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.9
13-Sep	0.2	0.2	0.2	0.2	Z	0.2	0.2	0.1	0.3	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	0.0	0.1	0.3
14-Sep	0.0	0.0	1.6	1.7	1.1	Z	0.7	1.5	1.3	0.5	0.0	0.1	0.1	0.2	0.1	0.6	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.4	1.7
15-Sep	Z	0.2	0.5	0.5	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.0	0.1	0.5	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.5
16-Sep	0.2	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	0.0	0.1	0.1	0.1	0.1	0.2	0.8	0.6	0.5	0.2	0.8
17-Sep	0.4	0.2	Z	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.8	1.6	1.2	1.0	0.7	0.7	0.5	0.2	0.1	0.1	0.0	0.1	0.1	0.4	1.6
18-Sep	0.1	0.1	0.1	Z	0.3	0.1	0.4	0.2	1.1	0.3	0.2	0.2	0.3	0.4	0.2	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.1
19-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.4	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.1	0.5
20-Sep	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	0.2	0.1	0.1	0.1	0.1	0.0	0.2
21-Sep	Z	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.4	0.5	C	C	C	C	0.1	0.2	0.4	0.4	0.3	0.3	0.3	0.2	0.5	0.2	0.2	0.5
22-Sep	0.1	Z	0.3	0.2	0.3	0.0	0.2	0.1	0.1	0.0	0.0	0.1	0.1	1.3	1.5	0.8	0.2	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.2	1.5
23-Sep	0.1	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.2	0.3	0.4	0.3	0.4	0.2	1.0	0.1	0.2	0.0	0.0	0.1	0.0	0.0	0.2	1.0
24-Sep	0.0	0.0	0.1	Z	0.0	0.0	0.1	0.1	0.1	0.4	0.5	0.1	0.6	0.1	0.8	0.2	0.3	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.8
25-Sep	0.0	0.0	0.2	0.4	Z	0.4	0.3	0.2	0.3	0.3	0.2	0.1	0.2	0.1	0.2	0.3	0.6	0.1	0.1	0.2	0.4	0.4	0.5	0.5	0.3	0.6
26-Sep	0.4	0.4	0.2	0.2	3.7	Z	2.8	1.5	2.4	3.4	4.2	4.7	3.9	3.6	3.8	3.0	1.3	1.8	2.5	1.0	0.2	0.0	0.0	0.0	2.0	4.7
27-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.1	0.8	0.2	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8
28-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.2	0.2	0.4	0.6	0.5	0.3	0.1	0.6
29-Sep	0.3	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.7	2.5	2.2	2.7	1.6	3.6	4.9	1.8	0.2	0.2	0.1	0.1	0.1	0.0	1.0	4.9
30-Sep	0.0	0.1	0.1	Z	0.1	0.1	1.4	1.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.5	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.3	1.4
	0.1	0.1	0.2	0.2	0.3	0.1	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.4	0.4	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.6	0.7	1.6	1.7	3.7	0.4	2.8	1.5	2.4	3.4	4.2	4.7	3.9	3.6	3.8	3.6	4.9	1.8	2.5	1.0	0.5	0.8	0.6	0.5	Diurnal Maximum	

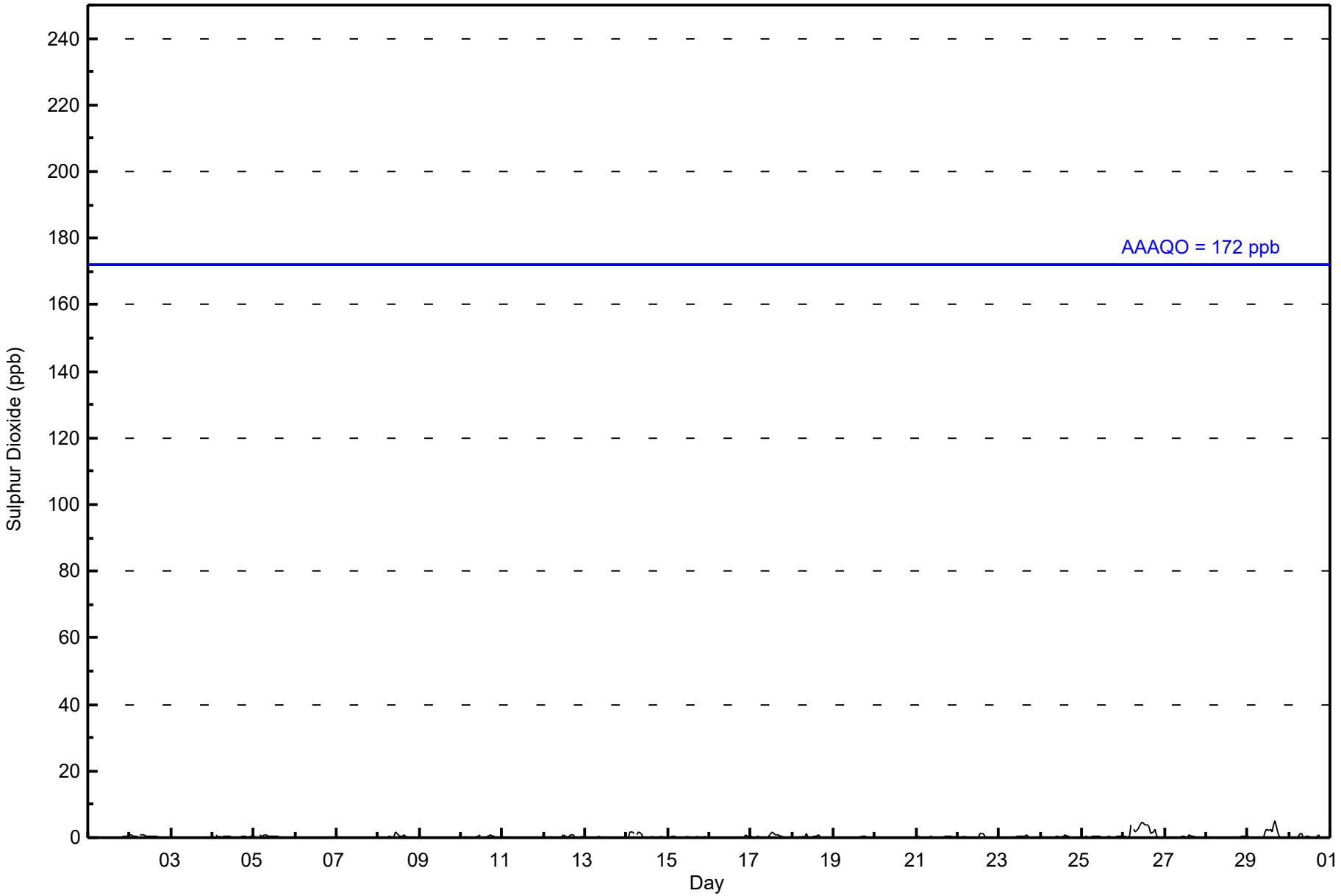
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Blackrod - September 2026



Sulphur Dioxide (SO_2) - ppb
Blackrod - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	685	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Blackrod - September 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	29	26	23	20	27	51	148	92	51	30	15	18	48	37	40	685
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	30	29	26	23	20	27	51	148	92	51	30	15	18	48	37	40	685

Total Number of Valid Hours: 685

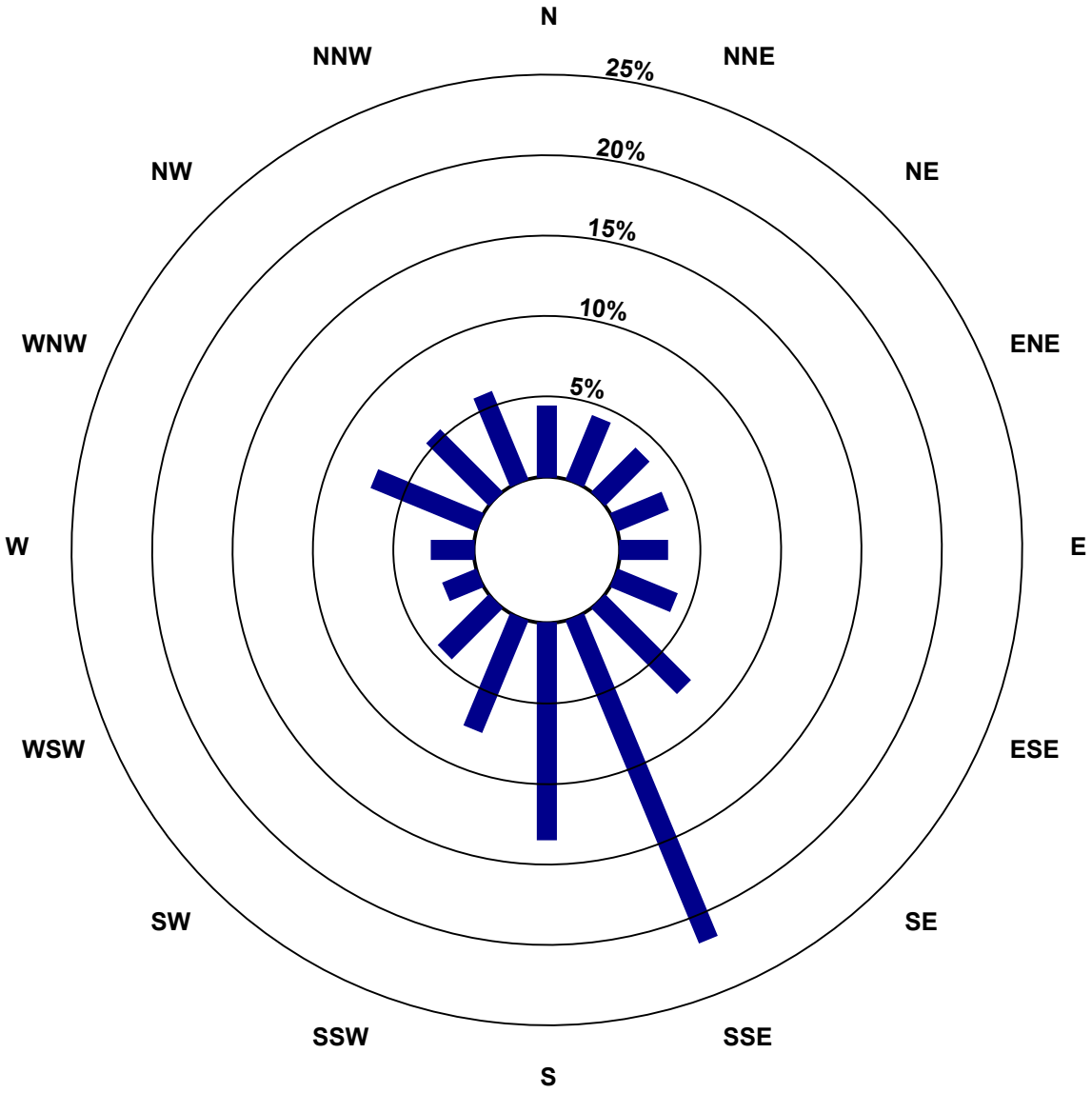
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Blackrod



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

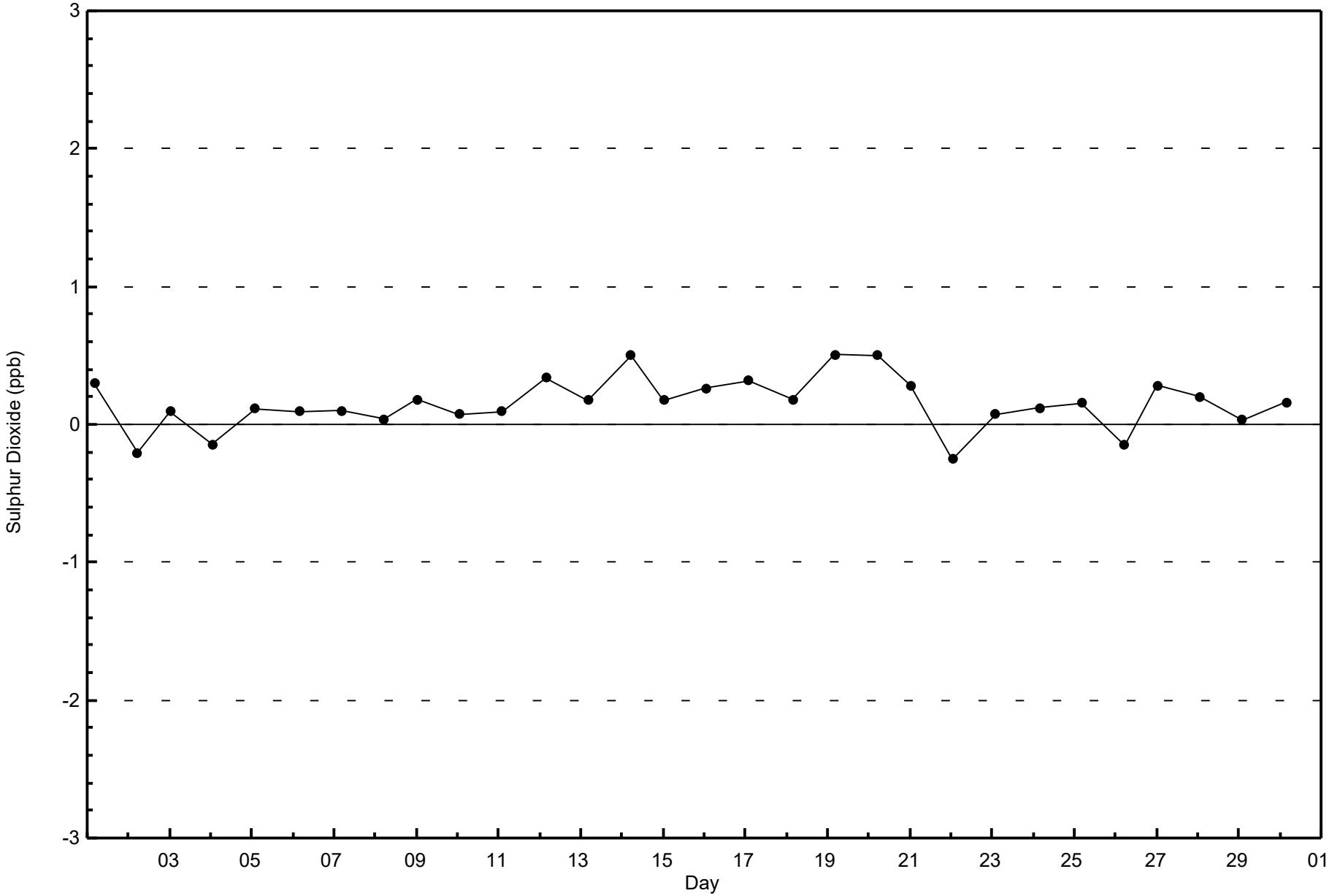
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Blackrod - September 2026

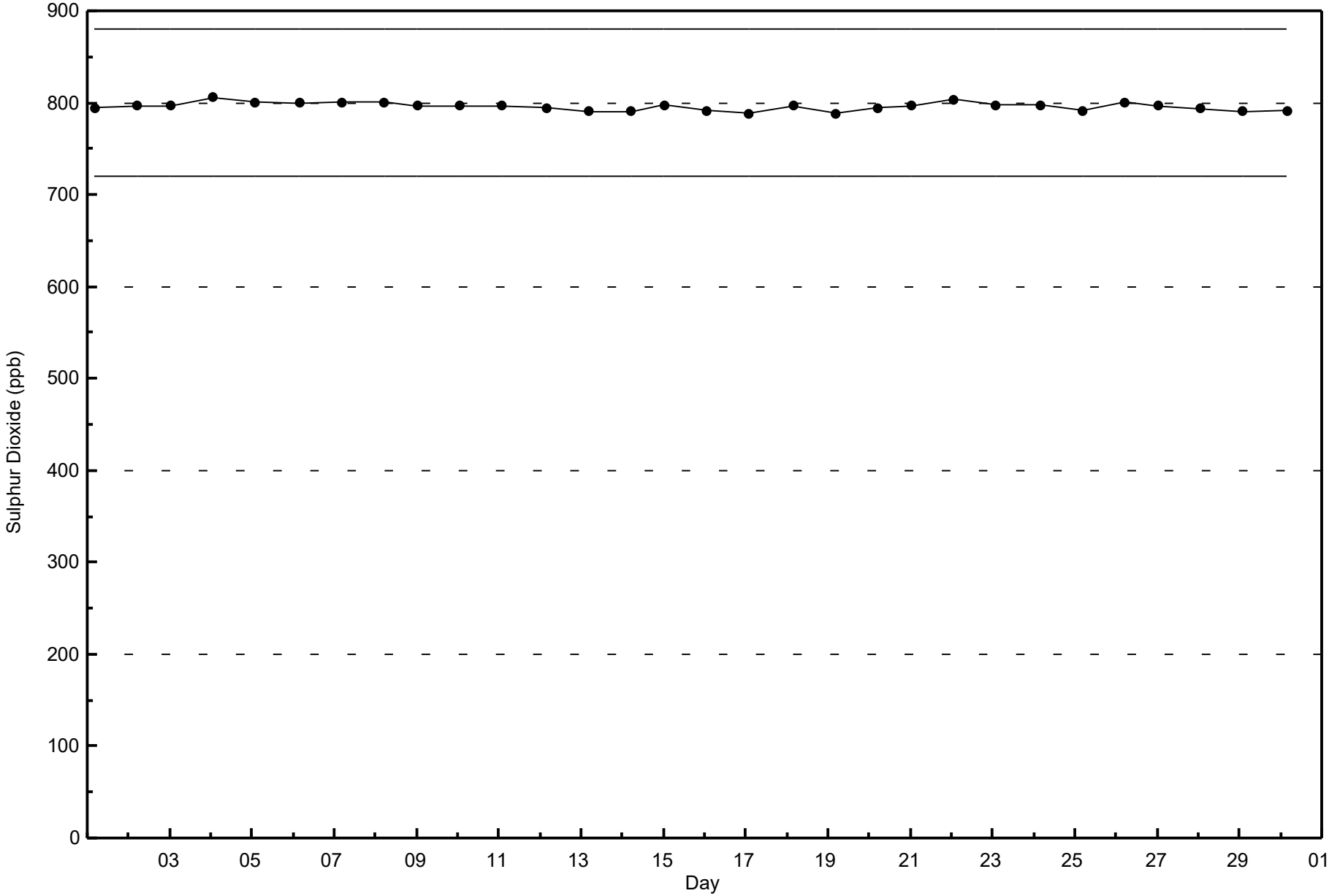


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Blackrod - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Blackrod - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.0 ppb on Sep 22 07:00 Maximum Daily Average: 0.3 ppb on Sep 4

Minimum Value: 0.0 ppb on Sep 9 00:00
Maximum Diurnal Average: 0.2 ppb at hour 7
Monthly Average: 0.11 ppb

Minimum Daily Average: 0.0 ppb on Sep 28
Minimum Diurnal Average: 0.1 ppb at hour 1
Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.1 P_{90} = 0.2 P_{99} = 0.6

Hours in Service:	720
Hours of Data:	684
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-Sep	0.0	0.1	0.0	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2
2-Sep	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	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.2
3-Sep	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	C	C	C	C	C	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.3
4-Sep	0.1	0.2	Z	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	0.4	0.6	0.5	0.8	0.3	0.3	0.3	0.3	0.3	0.8
5-Sep	0.3	0.6	0.1	Z	0.5	0.5	0.6	0.6	0.3	0.5	0.3	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.6
6-Sep	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	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1
7-Sep	0.1	0.0	0.1	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
8-Sep	Z	0.1	0.2	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.3
9-Sep	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	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
10-Sep	0.1	0.1	Z	0.1	0.1	0.1	0.0	0.1	0.2	0.2	0.2	0.1	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	0.2
11-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
12-Sep	0.1	0.1	0.1	0.1	Z	0.1	0.5	0.1	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	0.0	0.0	0.0	0.1	0.5
13-Sep	0.0	0.0	0.0	0.0	0.0	Z	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	0.1	0.0	0.1	0.1	0.1	0.0	0.1
14-Sep	Z	0.2	0.3	0.4	0.3	0.2	0.5	0.6	0.5	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.2	0.6
15-Sep	0.1	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.2
16-Sep	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	0.1	0.1	0.1	0.0	0.1
17-Sep	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
18-Sep	0.0	0.1	0.1	0.1	Z	0.3	0.7	0.1	0.4	0.3	0.2	0.1	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	0.7
19-Sep	0.0	0.0	0.0	0.0	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
20-Sep	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	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2
21-Sep	0.2	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	0.1	0.1	0.1	0.2	0.1	0.1	0.4	0.2	0.1	0.4
22-Sep	0.2	0.2	Z	0.3	0.3	0.2	1.0	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	0.2	1.0
23-Sep	0.1	0.1	0.1	Z	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2
24-Sep	0.1	0.0	0.1	0.0	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2
25-Sep	0.1	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	0.3	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.3
26-Sep	Z	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.3
27-Sep	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.3	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.3
28-Sep	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	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1
29-Sep	0.1	0.0	0.1	Z	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.1	0.3
30-Sep	0.0	0.0	0.0	0.0	Z	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4
	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.3	0.6	0.3	0.4	0.5	0.5	1.0	0.6	0.5	0.5	0.3	0.2	0.2	0.3	0.3	0.2	0.4	0.6	0.5	0.8	0.3	0.3	0.4	0.3	Diurnal Maximum	

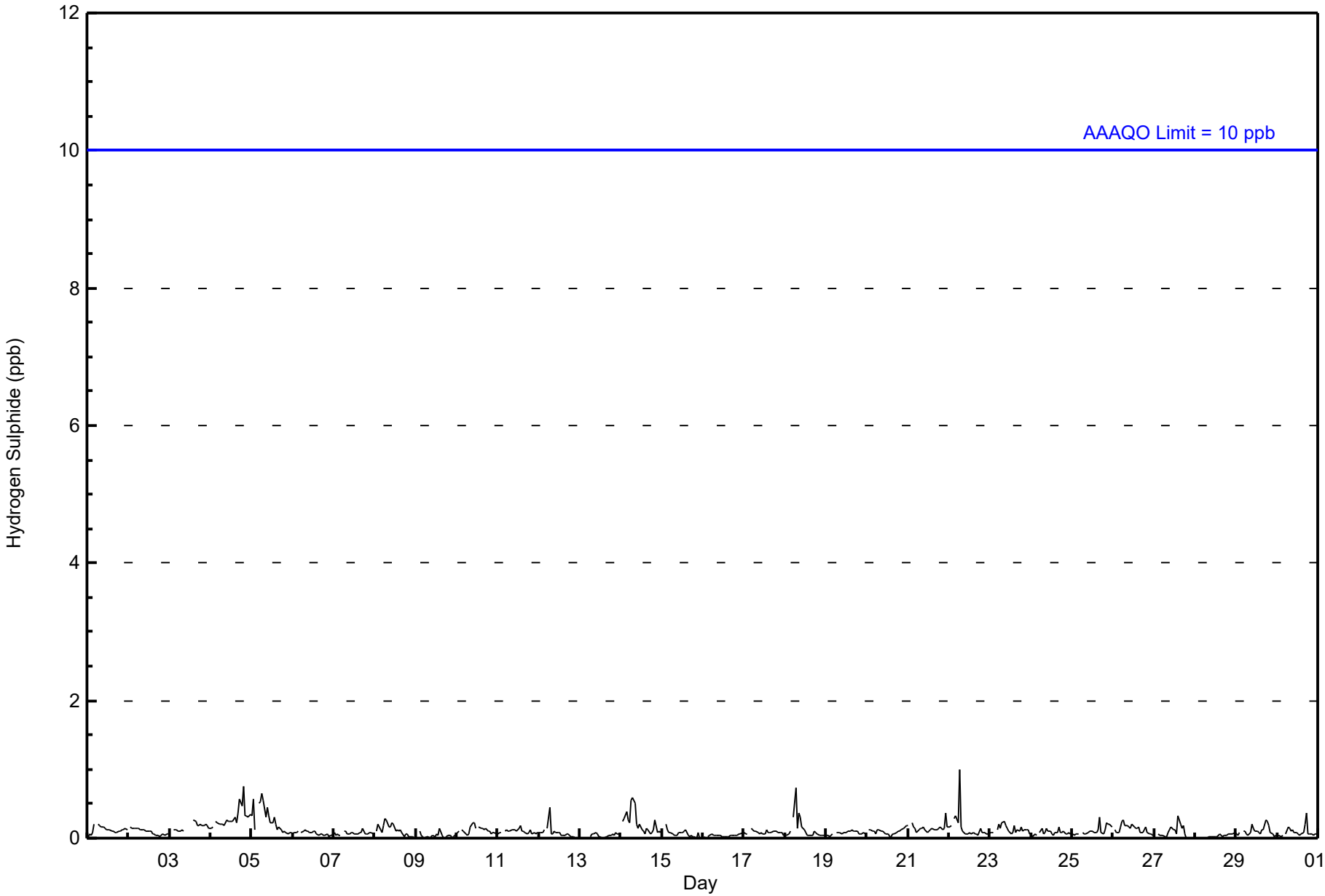
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Blackrod - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Blackrod - September 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	29	29	25	20	20	27	50	150	95	51	30	14	19	48	36	41	684
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	29	29	25	20	20	27	50	150	95	51	30	14	19	48	36	41	684

Total Number of Valid Hours: 684

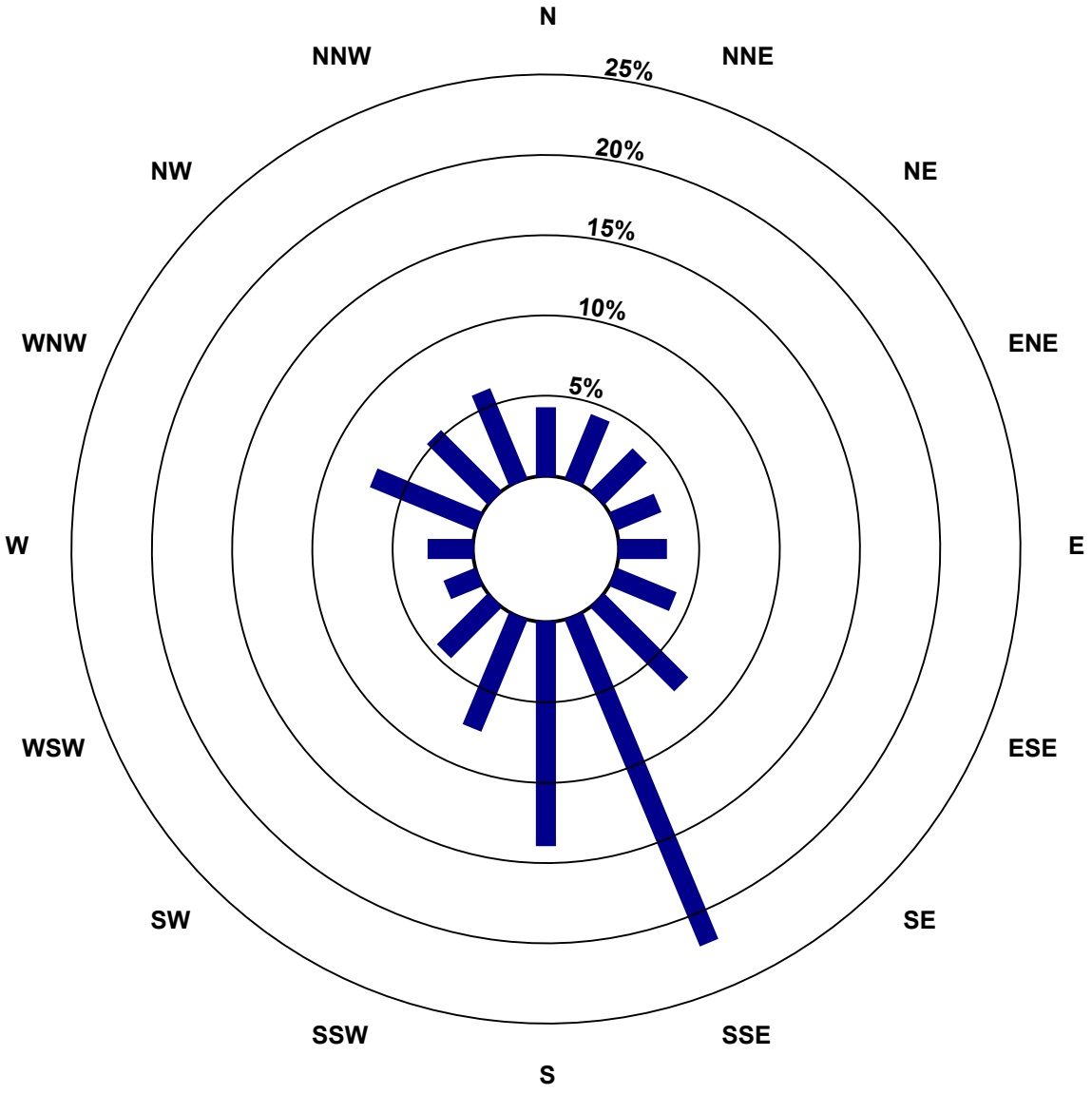
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

Blackrod



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

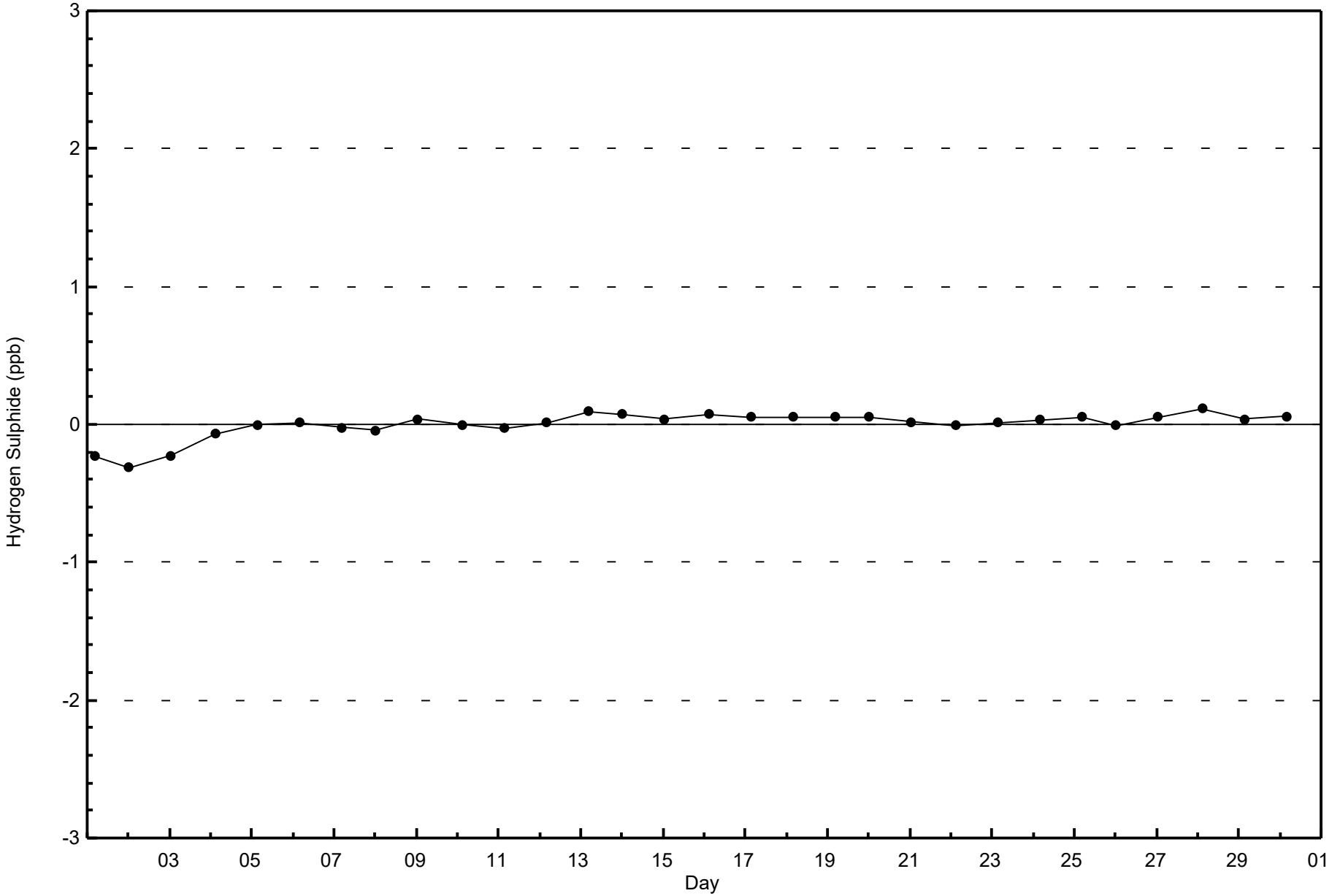
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Blackrod - September 2026

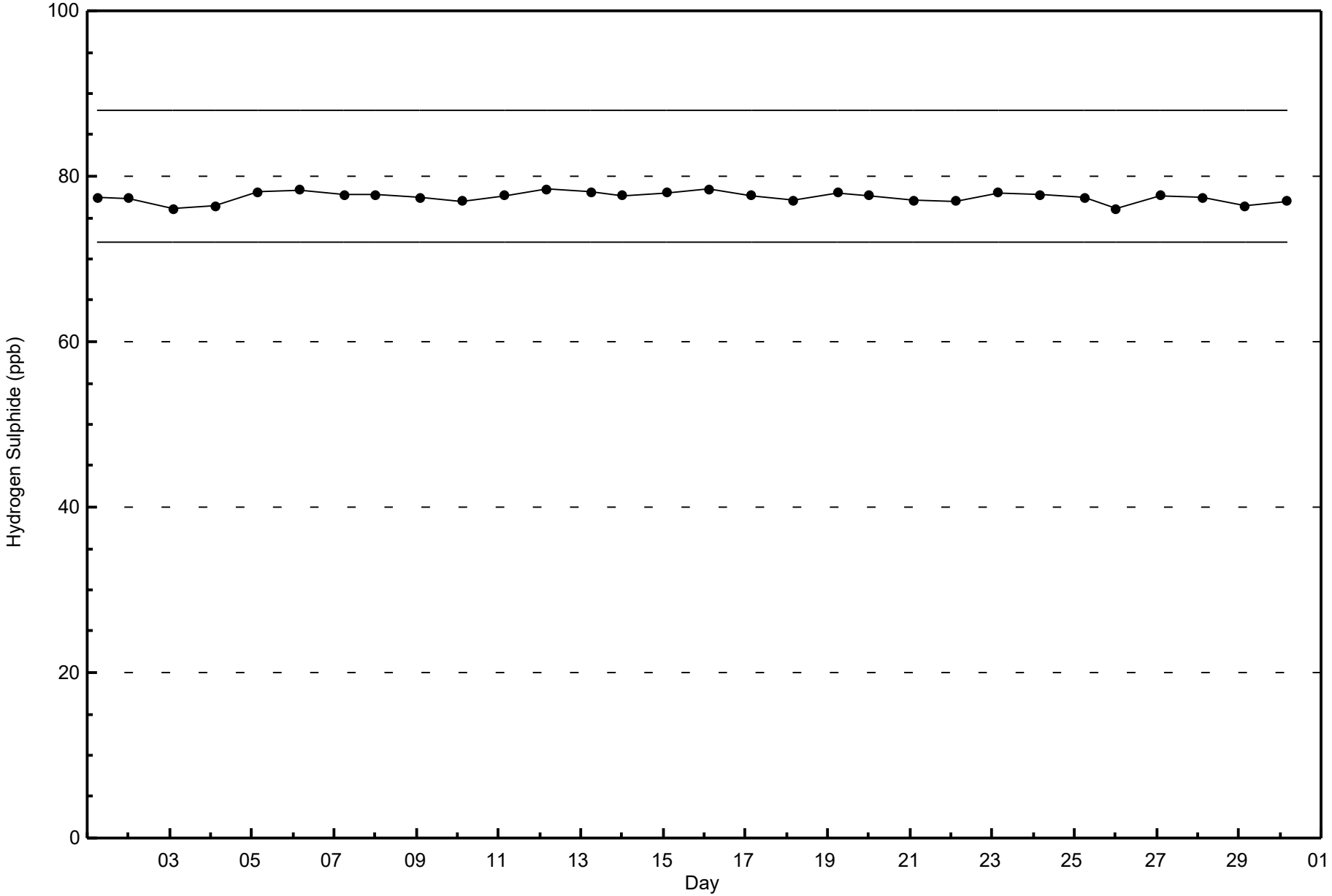


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Blackrod - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Blackrod - September 2026

Maximum Value: 8.1 ppm on Sep 14 21:00

Maximum Daily Average: 3.7 ppm on Sep 14

Minimum Value: 2.1 ppm on Sep 3 18:00

Minimum Daily Average: 2.2 ppm on Sep 3

Maximum Diurnal Average: 2.6 ppm at hour 5

Minimum Diurnal Average: 2.3 ppm at hour 24

Monthly Average: 2.43 ppm

Percentiles: P_1 = 2.1 P_{10} = 2.2 Q_1 = 2.2 Median = 2.3 Q_3 = 2.4 P_{90} = 2.7 P_{99} = 4.7

Hours in Service:	720
Hours of Data:	685
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-Sep	2.2	2.2	2.2	2.2	Z	2.2	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	2.2	2.2	2.2	2.2	2.2	2.2	2.3
2-Sep	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	2.2	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-Sep	Z	2.2	2.1	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.1	2.2	2.3
4-Sep	2.2	Z	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.3	2.4	3.1	2.6	3.8	3.5	3.5	2.7	2.3	2.3	2.3	2.3	2.5	3.8
5-Sep	2.3	2.4	Z	2.6	2.5	2.5	2.7	2.6	2.4	2.4	2.4	2.3	2.3	2.6	2.4	2.3	2.5	2.7	2.2	2.2	2.2	2.2	2.2	2.2	2.4	2.7
6-Sep	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	2.2	2.2	2.2	2.2	2.2	2.3
7-Sep	2.2	2.2	2.2	2.2	Z	2.2	2.2	2.5	2.3	2.2	2.3	2.2	2.3	2.3	2.2	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.5
8-Sep	2.2	2.3	2.5	2.6	2.5	Z	2.7	3.5	3.6	2.6	2.8	2.4	2.6	2.6	2.4	2.3	2.3	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.5	3.6
9-Sep	Z	2.4	2.2	2.2	2.3	2.2	2.2	2.3	2.2	2.4	2.4	2.5	2.5	2.5	2.6	2.5	2.3	2.1	2.1	2.1	2.3	2.1	2.3	2.3	2.3	2.6
10-Sep	2.8	Z	2.2	2.5	2.2	2.2	2.2	2.2	2.6	2.2	2.2	2.2	M	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.8
11-Sep	2.2	2.2	Z	2.2	2.3	2.3	2.5	2.5	2.7	2.6	2.9	2.4	2.8	3.0	2.5	2.6	2.3	2.7	2.8	3.9	2.3	2.3	2.3	2.3	2.6	3.9
12-Sep	2.3	2.3	2.3	Z	2.3	2.3	2.3	2.3	2.4	2.8	2.7	2.5	2.4	2.3	2.3	2.3	2.4	2.3	2.5	2.2	2.2	2.2	2.2	2.2	2.3	2.8
13-Sep	2.2	2.3	2.3	2.3	Z	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.4
14-Sep	2.4	6.5	4.1	3.1	5.1	Z	3.6	2.9	3.0	3.9	3.4	3.6	3.1	3.1	2.4	3.5	4.1	2.6	3.2	4.5	8.1	2.6	2.8	2.8	3.7	8.1
15-Sep	Z	3.1	2.6	2.6	2.4	2.4	2.3	2.3	2.3	2.4	2.5	2.4	2.3	2.5	2.6	2.3	2.2	2.4	2.3	2.3	2.3	2.6	2.3	2.3	2.4	3.1
16-Sep	2.3	Z	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.4
17-Sep	2.3	2.3	Z	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.4	2.3	2.5	2.5	2.5	2.4	3.4	2.2	2.2	2.2	2.3	2.3	2.2	2.4	3.4
18-Sep	2.2	2.3	2.5	Z	3.7	6.7	2.8	2.5	3.1	2.7	2.4	2.4	2.6	2.3	2.4	2.3	2.4	2.5	2.2	2.2	2.2	2.2	2.2	2.2	2.6	6.7
19-Sep	2.2	2.2	2.2	2.2	Z	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.3
20-Sep	2.3	2.3	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	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.3
21-Sep	Z	2.3	2.3	2.3	2.3	2.3	2.3	2.7	2.3	2.3	C	C	C	C	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.9	2.3	2.3	2.9
22-Sep	2.3	Z	2.3	5.4	6.0	3.0	2.9	3.7	2.6	2.5	2.7	2.3	2.3	2.3	2.3	2.2	2.3	2.3	4.0	2.3	2.3	2.2	2.2	2.2	2.8	6.0
23-Sep	2.2	2.2	Z	2.3	2.7	2.8	2.5	2.9	2.9	2.7	2.5	2.3	2.2	2.3	2.6	2.3	2.4	2.3	4.1	2.3	2.3	2.3	2.3	2.3	2.5	4.1
24-Sep	2.2	2.2	2.2	Z	2.2	2.3	2.2	2.2	2.4	2.6	2.4	2.5	2.4	2.5	2.3	3.0	2.6	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.4	3.0
25-Sep	2.3	2.3	2.3	2.3	Z	2.3	2.3	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.2	3.4	3.1	2.3	2.3	3.1	4.8	3.5	2.5	2.6	2.6	4.8
26-Sep	2.4	2.4	2.3	2.3	2.4	Z	2.4	2.3	2.3	2.4	2.3	2.3	2.6	2.3	2.4	2.3	2.3	2.3	2.4	2.8	2.4	2.3	2.3	2.3	2.4	2.8
27-Sep	Z	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.5	2.7	2.9	2.8	2.6	2.5	4.3	3.0	2.7	2.8	2.4	2.2	2.2	2.3	2.3	2.3	2.5	4.3
28-Sep	2.3	Z	2.3	2.3	2.2	2.2	2.2	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	2.3	2.3	2.3	2.3	2.3	2.3
29-Sep	2.3	2.2	Z	2.6	2.2	2.4	2.3	2.3	2.4	2.7	2.6	2.3	2.2	2.3	2.2	2.3	2.4	3.7	2.8	2.7	2.4	2.4	2.2	2.3	2.4	3.7
30-Sep	2.2	2.3	2.2	Z	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.5	2.9	3.3	4.7	2.3	2.2	2.2	2.2	2.3	2.3	2.5	4.7
	2.3	2.5	2.4	2.5	2.6	2.5	2.4	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.4	2.5	2.3	2.3	2.3	Diurnal Average	
	2.8	6.5	4.1	5.4	6.0	6.7	3.6	3.7	3.6	3.9	3.4	3.6	3.1	3.1	4.3	3.5	4.1	4.7	4.1	4.5	8.1	3.5	2.9	2.8	Diurnal Maximum	

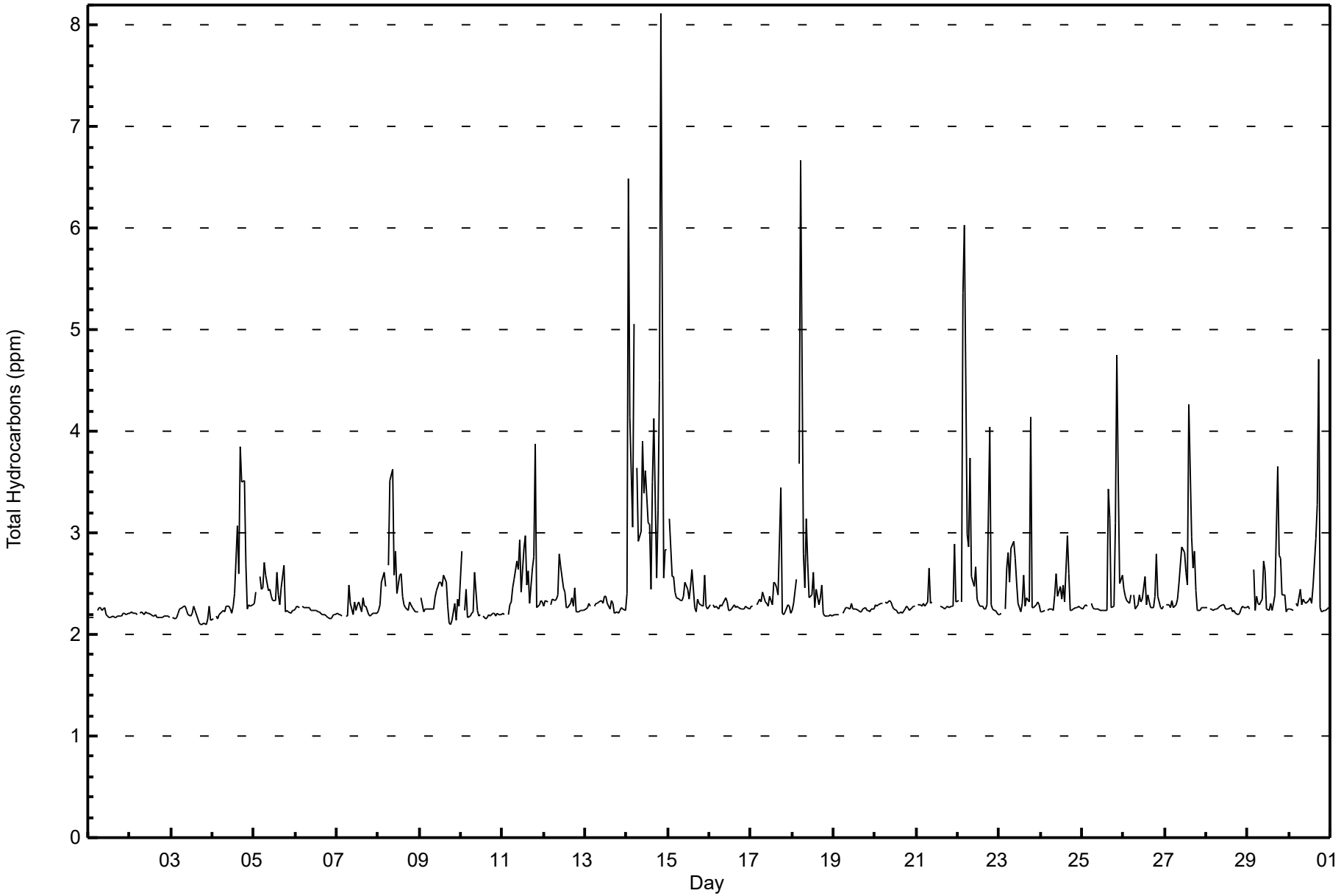
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Blackrod - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	0	0.00	0.00
2.1 - 3.0	644	94.01	94.01
3.1 - 10.0	41	5.99	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Blackrod - September 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	14	24	24	22	20	27	51	148	92	51	30	13	18	48	36	26	644
3.1 - 10.0	16	5	2	1	0	0	0	0	0	0	0	2	0	0	1	14	41
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	30	29	26	23	20	27	51	148	92	51	30	15	18	48	37	40	685

Total Number of Valid Hours: 685

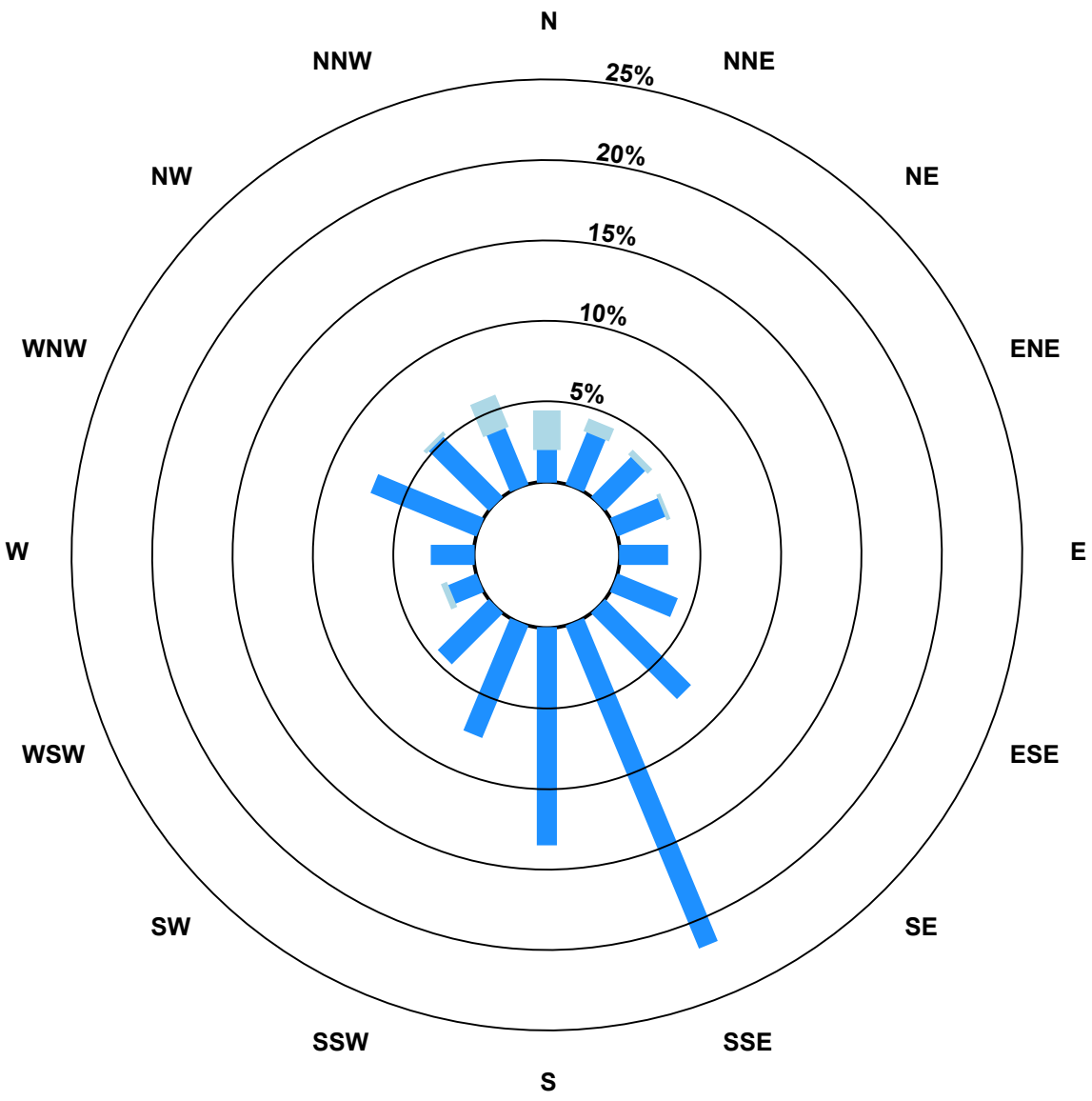
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Blackrod



Classes (ppm)

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

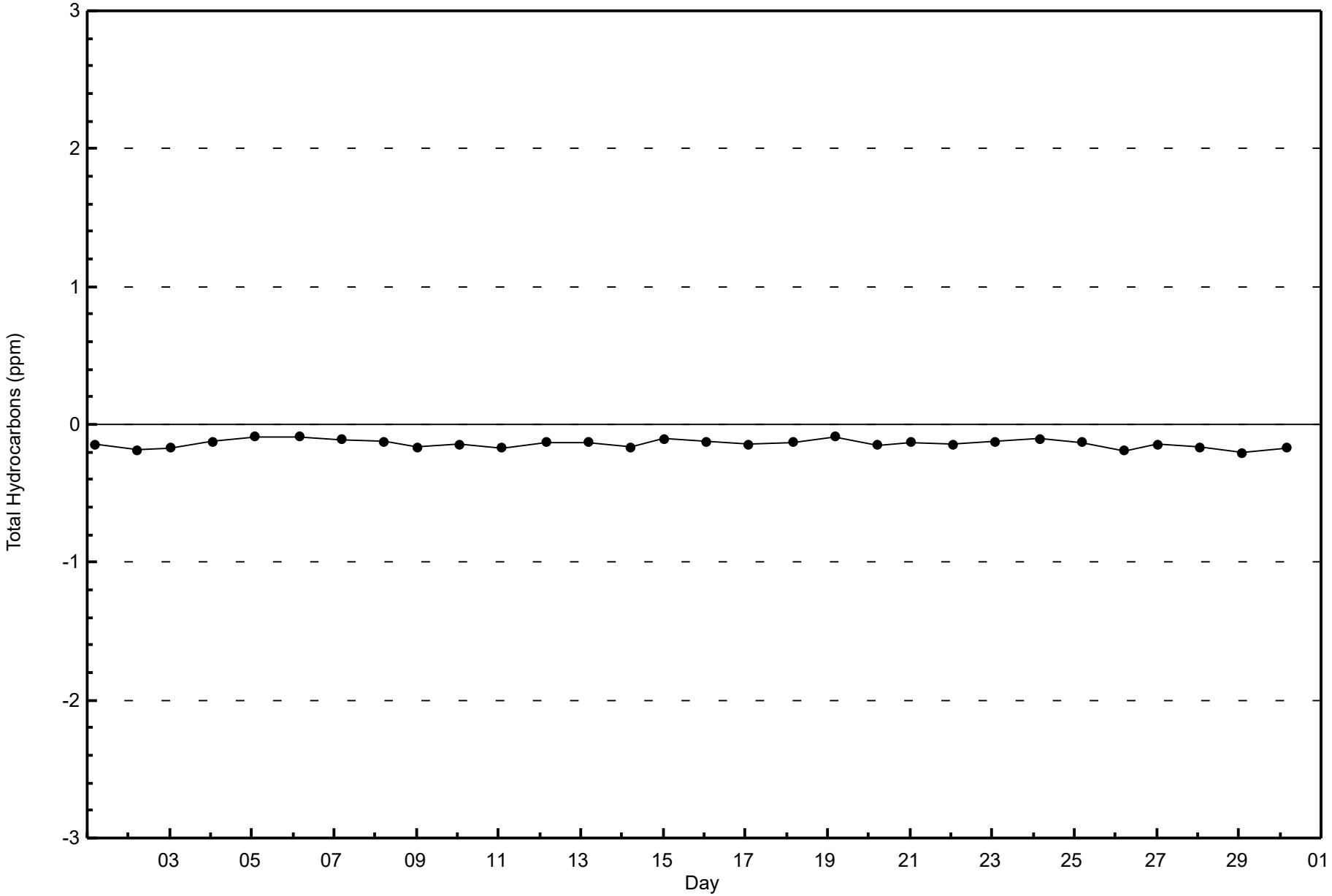
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Blackrod - September 2026

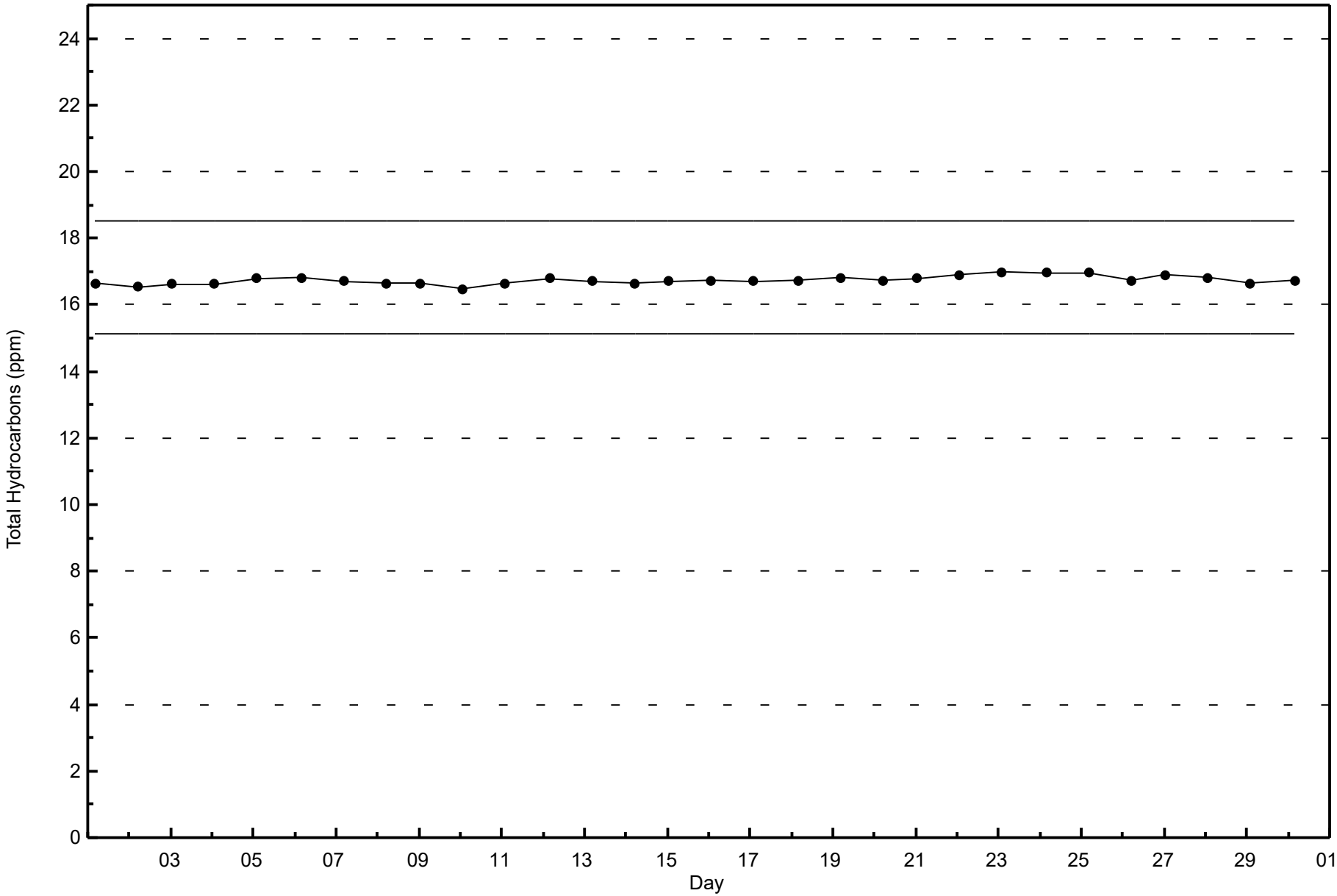


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Blackrod - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxide (NO) - ppb

Blackrod - September 2026

Maximum Value: 70.1 ppb on Sep 5 04:00

Maximum Daily Average: 16.9 ppb on Sep 5

Minimum Value: 0.0 ppb on Sep 1 02:00

Minimum Daily Average: 0.1 ppb on Sep 19

Maximum Diurnal Average: 6.6 ppb at hour 7

Minimum Diurnal Average: 0.5 ppb at hour 1

Monthly Average: 2.51 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.4 Q_3 = 1.7 P_{90} = 6.2 P_{99} = 43.7

Hours in Service:	720
Hours of Data:	685
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-Sep	0.6	0.0	Z	0.0	0.0	0.0	0.8	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.8
2-Sep	0.0	0.0	0.0	Z	0.1	0.0	0.1	0.2	0.2	0.3	0.2	0.2	0.5	0.3	0.1	0.6	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.6
3-Sep	0.0	0.0	0.0	0.2	Z	1.0	1.4	1.3	0.6	0.7	1.3	0.5	1.7	0.7	1.0	1.0	0.3	0.1	0.4	0.6	0.7	1.2	1.7	0.0	0.7	1.7
4-Sep	0.0	0.4	0.0	0.1	0.0	Z	0.9	0.3	0.3	0.2	0.2	0.2	0.2	0.4	8.2	5.5	6.7	24.9	20.2	57.1	6.8	10.0	10.2	27.1	7.8	57.1
5-Sep	Z	54.0	2.4	70.1	35.9	43.3	51.3	40.5	14.5	24.1	9.2	4.5	6.0	16.0	7.1	1.4	5.4	1.2	0.4	0.1	0.1	0.1	0.1	0.5	16.9	70.1
6-Sep	0.1	Z	0.3	1.3	0.8	0.1	2.5	3.5	0.8	0.3	0.7	0.6	0.2	0.2	0.1	0.1	0.1	0.1	0.9	0.0	0.0	0.0	0.0	0.0	0.6	3.5
7-Sep	0.0	0.0	Z	0.0	0.1	0.7	0.2	0.7	0.4	0.1	2.7	1.2	1.6	3.7	1.3	3.7	3.6	8.8	0.6	0.3	0.3	2.2	2.8	0.5	1.5	8.8
8-Sep	0.6	3.8	14.3	Z	4.7	11.5	19.8	15.4	1.5	7.1	15.3	8.9	4.6	6.9	2.2	2.3	4.1	0.8	3.6	1.2	0.3	0.0	0.0	0.0	5.6	19.8
9-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.5	0.1	0.1	0.4	0.4	0.7	2.0	0.8	11.1	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	11.1
10-Sep	1.7	2.6	1.1	0.3	0.2	Z	0.2	0.2	5.4	5.9	C	C	C	C	C	1.9	2.7	3.0	0.9	1.4	0.1	0.0	0.0	0.1	1.5	5.9
11-Sep	Z	0.3	0.1	0.1	0.2	0.8	0.4	0.2	0.2	0.0	0.2	0.4	1.9	4.4	1.1	0.8	0.4	0.5	0.1	0.0	0.2	0.1	0.1	0.2	0.5	4.4
12-Sep	1.2	Z	0.8	2.4	3.9	5.6	4.5	0.6	0.4	0.5	1.6	2.7	2.1	0.7	0.4	2.3	3.4	3.9	0.3	0.3	0.0	0.0	0.0	0.0	1.7	5.6
13-Sep	0.0	0.0	Z	0.2	0.0	0.0	0.1	0.2	0.3	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.2	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.1	1.0
14-Sep	0.6	0.6	7.9	Z	11.0	2.9	49.2	54.7	45.7	7.4	3.0	6.3	3.7	1.9	1.2	3.6	0.9	0.7	0.2	0.5	0.6	0.0	0.1	0.0	8.8	54.7
15-Sep	0.0	2.4	3.1	1.3	Z	1.6	0.4	0.6	0.7	0.1	0.9	0.9	0.3	0.4	0.4	0.4	0.3	1.3	0.4	1.0	0.2	3.6	0.1	0.2	0.9	3.6
16-Sep	0.0	1.4	1.7	0.9	2.6	Z	4.0	3.1	0.1	0.1	0.1	0.2	0.2	0.1	0.0	0.5	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.7	4.0
17-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.5	0.1	0.3	0.4	0.2	0.3	0.1	0.9	0.9	0.1	0.3	1.0	2.0	0.3	2.3	0.8	0.9	0.0	0.5	2.3
18-Sep	0.1	Z	2.6	6.7	15.0	7.0	27.4	9.8	25.6	16.7	6.8	8.5	2.6	0.9	0.6	2.0	0.6	0.6	0.2	1.1	0.0	0.0	0.0	0.0	5.9	27.4
19-Sep	0.0	0.0	Z	0.0	0.0	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	0.1	0.3
20-Sep	0.0	0.0	0.0	Z	1.4	0.1	0.1	1.5	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	0.0	0.0	0.2	1.5
21-Sep	0.0	0.0	1.6	0.2	Z	0.0	3.4	0.9	0.2	0.3	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.0	0.0	0.1	0.0	0.1	23.1	0.6	1.4	23.1
22-Sep	2.4	4.1	4.6	0.7	0.9	Z	4.9	0.5	0.8	0.3	0.7	0.4	0.7	2.9	4.0	2.8	1.0	0.1	0.3	1.4	2.3	0.1	0.8	0.4	1.6	4.9
23-Sep	Z	2.1	1.0	0.7	0.7	0.1	0.2	1.7	0.9	0.3	1.4	0.4	0.3	0.5	0.8	0.3	2.4	0.3	1.2	1.3	1.2	2.2	2.8	1.7	1.1	2.8
24-Sep	4.3	Z	2.5	0.4	2.3	3.3	10.4	0.7	0.3	1.3	1.3	0.3	1.2	0.8	2.3	0.7	8.8	0.8	0.2	3.6	0.7	1.3	2.3	1.1	2.2	10.4
25-Sep	0.6	0.6	Z	0.7	0.4	0.8	0.4	0.9	0.5	0.5	0.7	0.3	0.5	0.6	0.3	3.4	19.8	0.1	0.1	3.3	7.7	0.1	0.1	0.0	1.8	19.8
26-Sep	0.2	0.8	0.1	Z	8.4	14.0	8.5	5.3	12.4	10.6	8.8	14.3	8.1	6.4	9.1	9.8	2.9	3.0	4.4	1.2	0.4	0.0	0.0	0.0	5.6	14.3
27-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.2	0.2	0.3	1.5	4.8	2.3	0.6	0.4	6.9	4.7	3.8	4.3	0.1	0.0	0.0	0.0	0.0	0.0	1.3	6.9
28-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.5	0.1	0.2	0.2	0.2	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	0.5
29-Sep	Z	0.0	0.0	0.4	0.1	0.3	0.8	0.0	0.3	1.1	4.2	6.9	6.8	4.5	2.9	7.9	9.9	4.5	1.7	1.3	0.4	0.2	0.0	0.0	2.4	9.9
30-Sep	0.0	Z	0.0	0.0	0.0	0.0	4.5	5.9	2.1	4.1	2.3	1.7	1.7	0.4	1.2	0.7	11.1	22.0	0.9	1.3	0.2	0.4	0.9	0.6	2.7	22.0
	0.5	2.9	1.8	3.5	3.6	3.7	6.6	5.0	3.9	2.8	2.3	2.2	1.7	1.9	2.2	1.9	3.0	2.7	1.3	2.6	0.8	0.8	1.5	1.1	Diurnal Average	
	4.3	54.0	14.3	70.1	35.9	43.3	51.3	54.7	45.7	24.1	15.3	14.3	8.1	16.0	11.1	9.8	19.8	24.9	20.2	57.1	7.7	10.0	23.1	27.1	Diurnal Maximum	

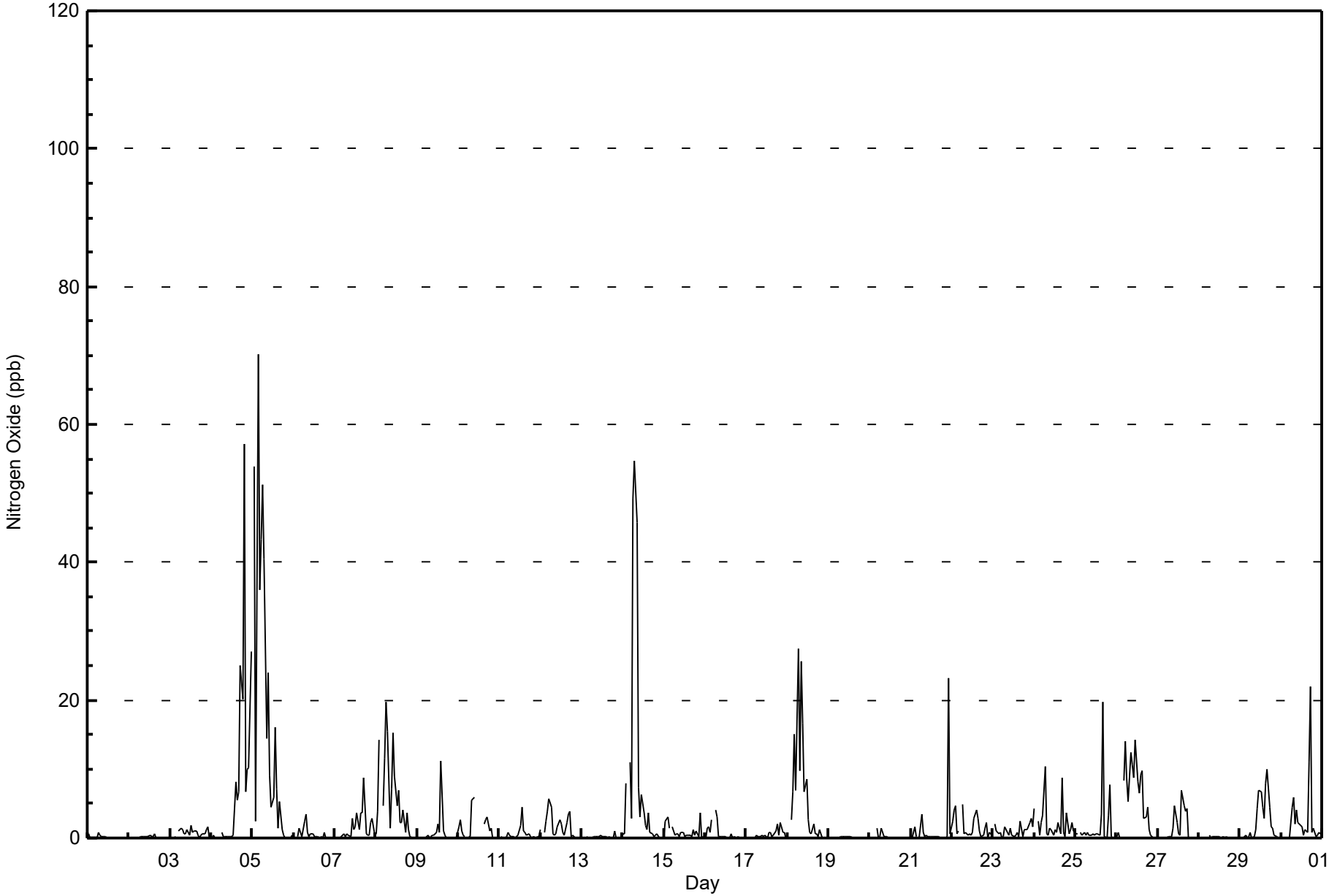
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Blackrod - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	668	97.52	97.52
21 - 40	8	1.17	98.69
11 - 80	9	1.31	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxide (NO) - ppb

Blackrod - September 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	25	25	23	20	26	53	148	94	50	30	15	18	44	37	41	668
21 - 40	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8
11 - 80	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	30	29	27	23	20	26	53	148	94	50	30	15	18	44	37	41	685

Total Number of Valid Hours: 685

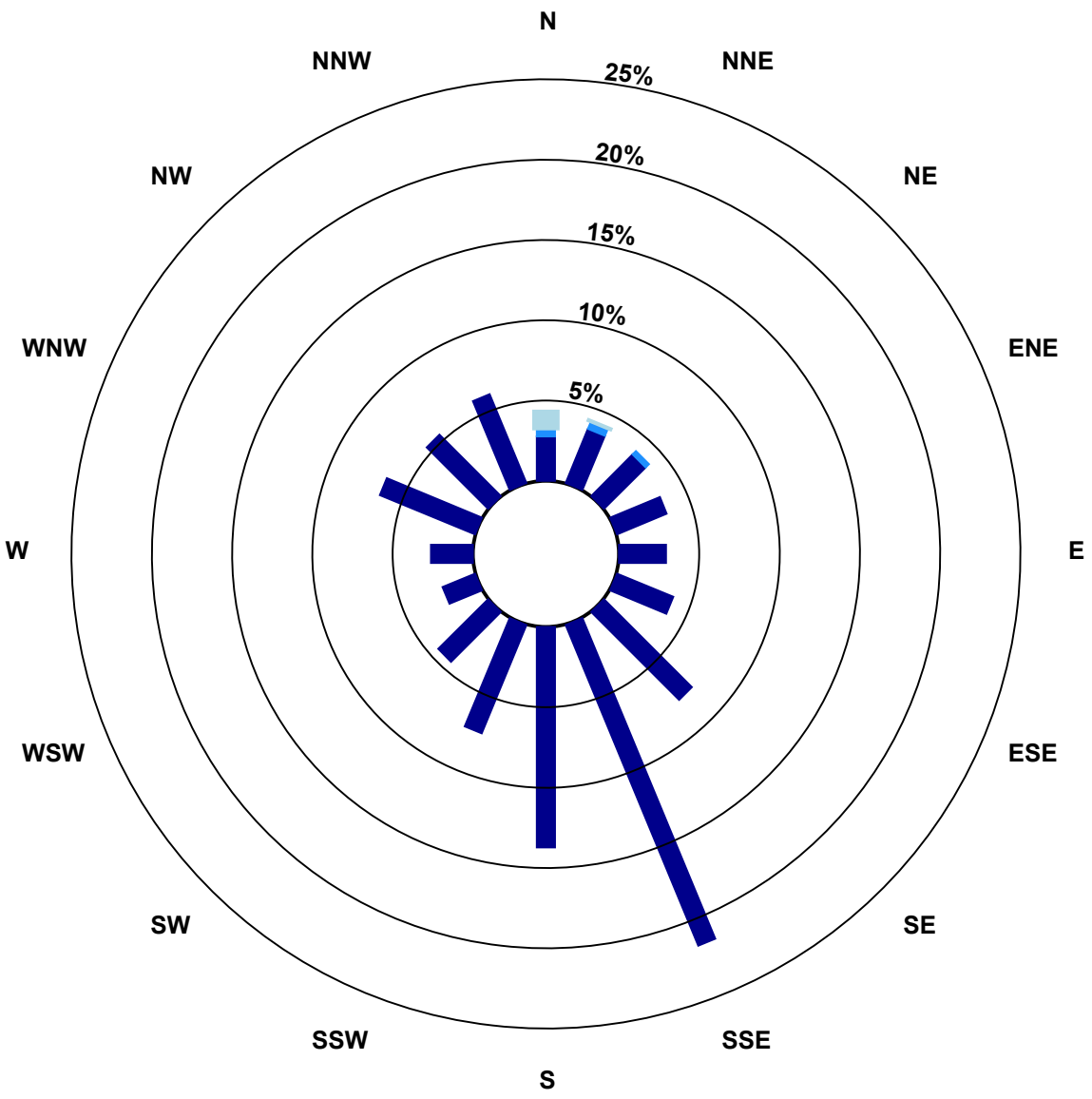
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxide (NO) - ppb

Blackrod



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

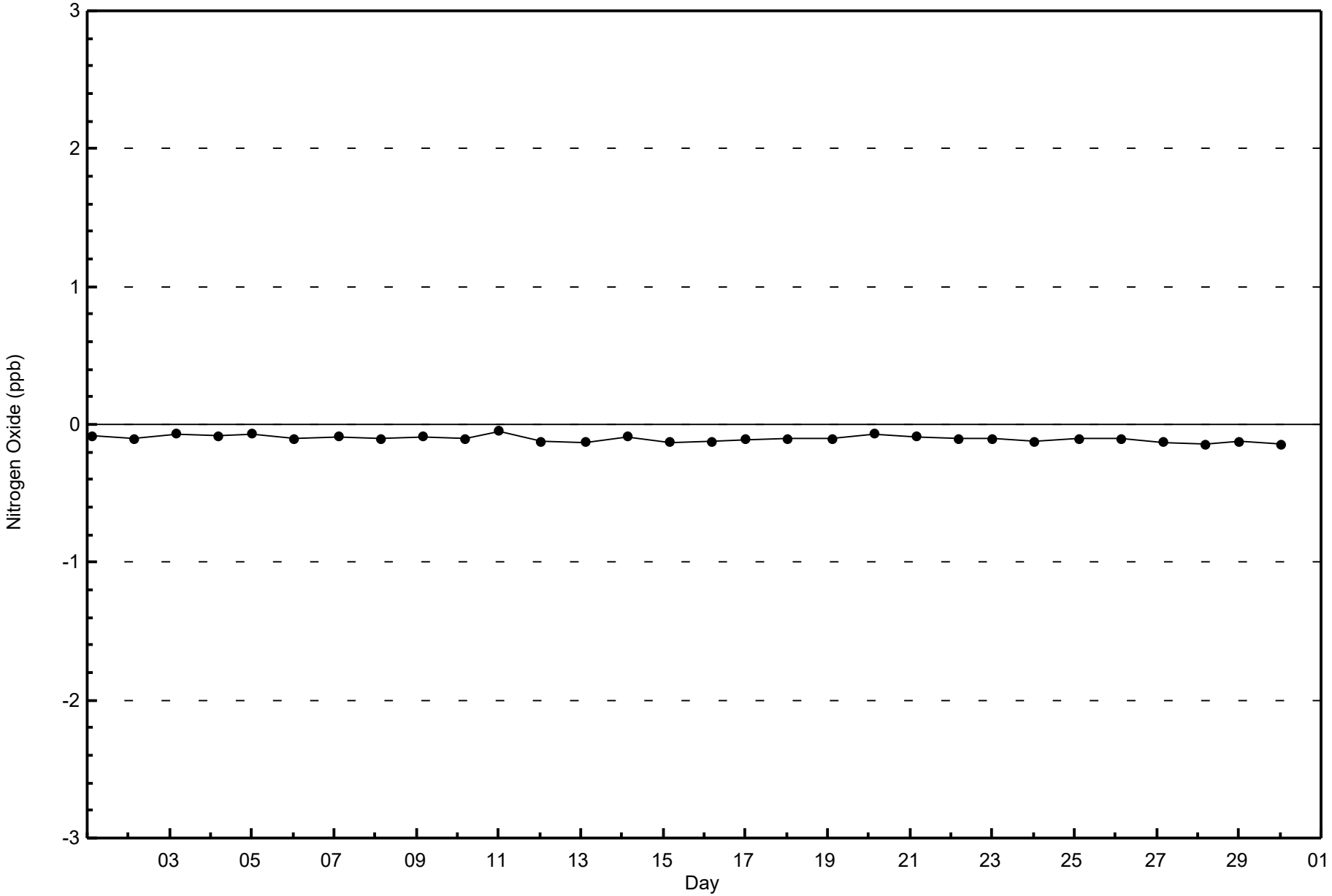
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxide (NO) - ppb

Blackrod - September 2026

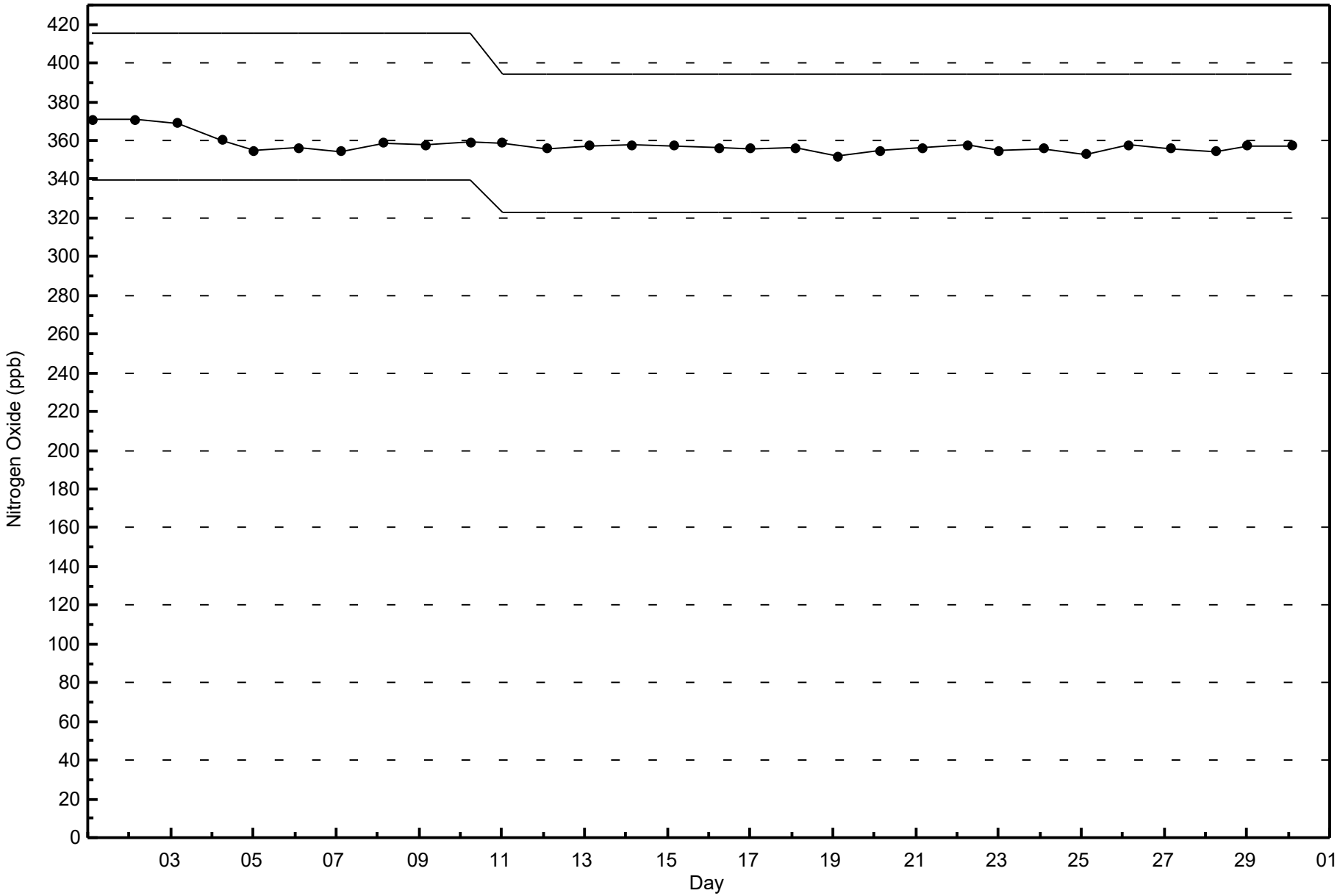


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxide (NO) - ppb

Blackrod - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Blackrod - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 15.5 ppb on Sep 23 23:00 Maximum Daily Average: 3.6 ppb on Sep 5

Minimum Value: 0.0 ppb on Sep 11 16:00 Minimum Daily Average: 0.3 ppb on Sep 11
Maximum Diurnal Average: 2.7 ppb at hour 7 Minimum Diurnal Average: 1.2 ppb at hour 1
Monthly Average: 1.79 ppb Percentiles: P_1 = 0.1 P_{10} = 0.4 Q_1 = 0.6 Median = 1.0 Q_3 = 2.2 P_{90} = 4.4 P_{99} = 8.8

Hours in Service:	720
Hours of Data:	685
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-Sep	0.9	0.3	Z	0.5	0.7	0.7	1.5	0.9	0.6	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.5	0.6	0.8	0.9	0.8	0.7	0.7	0.6	1.5
2-Sep	0.7	0.8	0.8	Z	0.9	0.8	0.7	0.8	0.8	0.8	0.8	0.7	1.0	1.1	0.6	1.5	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.7	1.5
3-Sep	0.5	0.6	0.5	0.7	Z	1.4	1.6	1.1	1.1	0.6	0.9	0.7	1.5	0.8	0.6	1.3	1.0	0.5	1.1	1.2	1.2	2.6	3.0	0.7	1.1	3.0
4-Sep	0.8	1.7	1.2	0.7	0.8	Z	2.0	1.1	1.0	0.9	0.9	0.9	0.8	1.0	2.8	3.1	1.1	4.0	2.9	5.3	3.4	3.9	3.7	5.2	2.1	5.3
5-Sep	Z	6.5	2.8	8.8	6.3	5.0	7.3	8.4	3.3	3.7	3.0	2.2	3.3	4.2	3.7	1.7	3.7	2.2	0.9	1.0	0.6	0.6	1.6	1.0	3.6	8.8
6-Sep	0.7	Z	1.3	1.4	0.9	0.5	1.1	1.8	0.8	0.5	0.7	0.5	0.6	0.5	0.5	0.4	0.5	0.5	1.5	0.4	0.4	0.4	0.6	0.7	0.7	1.8
7-Sep	0.7	0.7	Z	0.6	1.0	0.9	0.6	1.5	0.7	0.5	2.0	1.4	1.0	2.2	1.3	2.2	2.1	4.0	0.8	0.9	0.7	1.6	1.7	0.9	1.3	4.0
8-Sep	0.7	2.4	7.0	Z	3.2	6.4	7.1	3.6	0.9	3.2	4.8	4.9	3.6	3.6	2.7	2.6	2.9	1.0	4.3	3.0	1.1	0.4	0.3	0.5	3.1	7.1
9-Sep	0.5	0.6	0.5	0.7	Z	1.0	0.9	0.4	0.3	0.6	0.9	0.9	2.2	1.4	8.6	1.5	0.8	0.3	0.3	0.3	0.5	0.4	0.5	0.5	1.1	8.6
10-Sep	2.7	3.1	1.8	1.1	0.5	Z	0.8	0.8	4.4	3.9	C	C	C	C	C	1.9	2.0	1.7	0.7	0.7	0.2	0.1	0.1	0.1	1.5	4.4
11-Sep	Z	0.3	0.1	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.4	0.5	1.2	0.5	0.0	0.1	0.2	0.2	0.1	0.4	0.2	0.2	0.4	0.3	1.2
12-Sep	0.4	Z	1.1	2.4	3.1	3.7	3.2	1.0	0.7	0.8	1.9	2.9	2.0	0.9	0.5	2.4	2.9	4.1	0.8	0.7	0.3	0.4	0.4	0.4	1.6	4.1
13-Sep	0.4	0.4	Z	0.7	0.6	0.7	0.6	0.7	0.6	0.7	0.7	0.9	0.7	0.7	0.7	0.6	0.8	0.7	0.9	2.2	1.0	0.9	0.9	0.9	0.8	2.2
14-Sep	1.5	1.2	2.3	Z	3.3	1.6	6.6	13.0	9.8	2.2	0.9	2.3	1.4	0.9	0.6	1.7	0.6	0.5	0.4	0.4	0.4	0.1	0.1	0.1	2.3	13.0
15-Sep	0.2	1.2	3.5	2.7	Z	1.4	0.5	0.4	1.0	0.2	0.7	1.1	0.4	0.4	0.8	0.6	0.5	1.4	1.2	2.4	1.4	2.7	0.8	0.5	1.1	3.5
16-Sep	0.3	1.4	1.4	0.7	3.4	Z	1.5	2.0	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.7	0.5	0.7	0.6	0.7	1.0	2.3	2.0	1.8	1.0	3.4
17-Sep	Z	1.4	1.2	1.4	1.7	1.3	1.5	1.2	1.1	0.9	0.8	0.8	0.5	1.9	2.2	0.9	1.0	3.2	3.2	2.0	2.2	6.0	2.6	0.7	1.7	6.0
18-Sep	1.2	Z	3.1	7.1	4.9	5.0	9.0	5.7	7.3	5.8	4.7	6.6	3.0	1.4	1.1	2.5	1.2	1.2	1.4	1.4	0.5	0.3	0.3	0.2	3.3	9.0
19-Sep	0.2	0.2	Z	0.5	0.6	0.8	1.1	1.2	0.8	0.8	0.8	0.7	0.8	0.8	0.7	0.7	1.0	1.4	1.1	0.9	0.8	0.8	0.8	0.9	0.8	1.4
20-Sep	1.3	1.2	1.3	Z	3.2	1.1	1.3	2.2	1.0	0.8	0.8	0.6	0.6	0.4	0.4	0.5	0.6	0.7	1.0	1.1	1.0	1.1	1.4	1.4	1.1	3.2
21-Sep	1.5	1.3	4.8	2.1	Z	1.2	3.8	2.2	1.7	2.2	1.1	1.1	1.0	1.0	1.1	1.2	1.6	1.4	1.3	1.3	1.5	1.3	8.2	2.2	2.0	8.2
22-Sep	4.8	6.2	6.0	2.3	3.5	Z	4.5	1.1	0.5	0.3	0.8	0.6	1.1	3.2	3.9	3.1	1.1	0.4	6.4	5.0	4.0	1.2	1.6	1.3	2.7	6.4
23-Sep	Z	3.0	2.6	3.0	3.5	0.9	1.1	2.5	1.3	0.8	2.0	0.7	0.7	1.0	1.7	0.7	4.1	1.2	5.3	4.6	8.3	11.9	15.5	5.0	3.5	15.5
24-Sep	5.0	Z	7.1	4.9	3.3	4.0	9.7	2.3	1.2	2.1	1.6	0.8	1.6	1.3	3.3	1.2	4.3	1.1	2.8	6.0	2.2	2.7	5.7	2.9	3.4	9.7
25-Sep	1.3	1.0	Z	2.0	1.4	1.7	1.1	1.5	1.2	1.2	1.6	1.2	1.2	1.0	1.0	2.0	8.1	0.5	0.5	1.6	1.3	1.5	2.9	3.1	1.7	8.1
26-Sep	2.5	1.5	0.6	Z	4.3	6.7	4.5	3.2	6.4	5.2	4.7	6.7	4.6	4.3	4.5	5.4	2.0	2.2	3.7	1.5	0.7	0.1	0.3	0.7	3.3	6.7
27-Sep	0.9	0.8	0.7	0.7	Z	1.0	1.0	0.8	0.6	1.3	3.2	2.1	0.9	0.7	5.7	6.1	4.6	5.7	0.4	0.4	0.4	0.4	0.3	0.4	1.7	6.1
28-Sep	0.4	0.3	0.4	0.5	0.5	Z	0.8	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.4	0.3	0.5	0.6	0.7	1.0	2.8	3.6	3.4	2.9	0.9	3.6
29-Sep	Z	1.9	1.7	2.3	1.3	1.5	2.1	0.9	0.9	2.0	5.0	5.0	4.4	3.5	2.0	6.0	8.7	6.7	2.8	2.4	0.8	0.7	0.7	0.9	2.8	8.7
30-Sep	0.9	Z	0.9	1.0	1.1	1.1	3.7	4.2	1.9	2.9	1.7	1.3	0.7	0.2	0.5	0.8	3.7	8.8	1.9	1.7	1.1	1.2	1.6	0.9	1.9	8.8
	1.2	1.6	2.2	2.0	2.2	2.0	2.7	2.2	1.8	1.5	1.7	1.7	1.4	1.4	1.8	1.8	2.1	1.9	1.7	1.7	1.4	1.7	2.1	1.3	Diurnal Average	
	5.0	6.5	7.1	8.8	6.3	6.7	9.7	13.0	9.8	5.8	5.0	6.7	4.6	4.3	8.6	6.1	8.7	8.8	6.4	6.0	8.3	11.9	15.5	5.2	Diurnal Maximum	

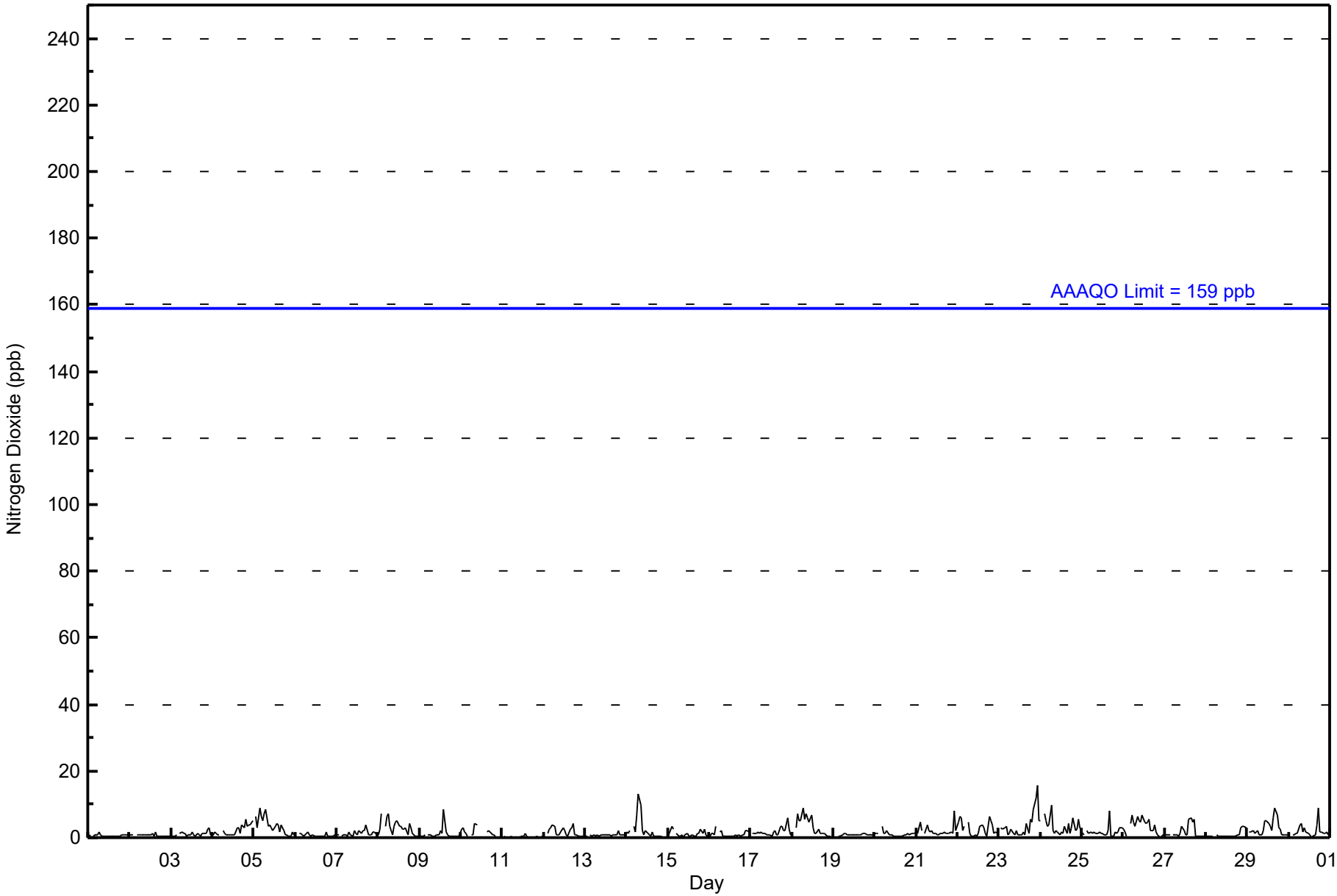
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Blackrod - September 2026



Nitrogen Dioxide (NO_2) - ppb
Blackrod - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	685	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Blackrod - September 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	30	29	27	23	20	26	53	148	94	50	30	15	18	44	37	41	685
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	30	29	27	23	20	26	53	148	94	50	30	15	18	44	37	41	685

Total Number of Valid Hours: 685

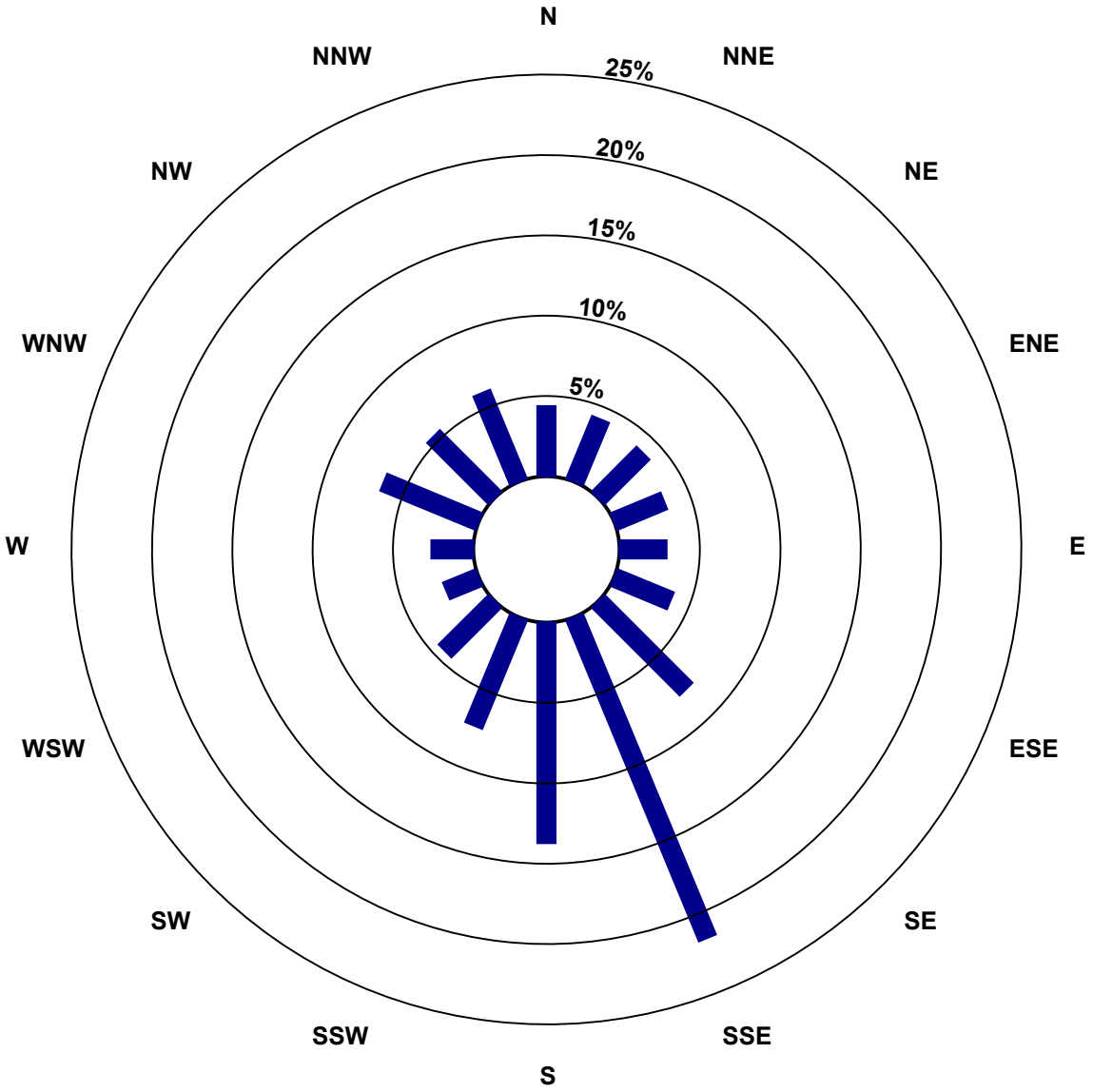
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Blackrod



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

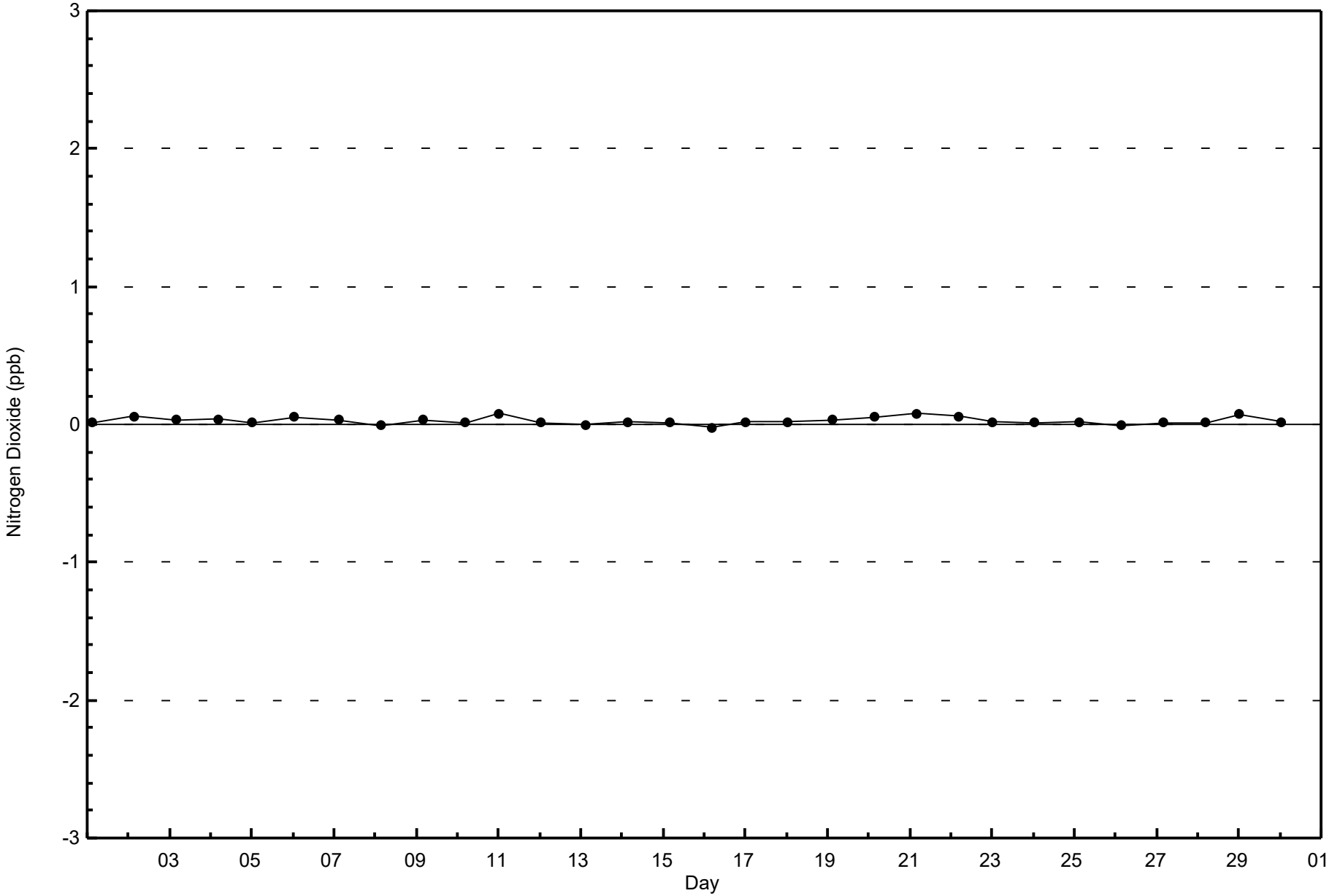
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Blackrod - September 2026

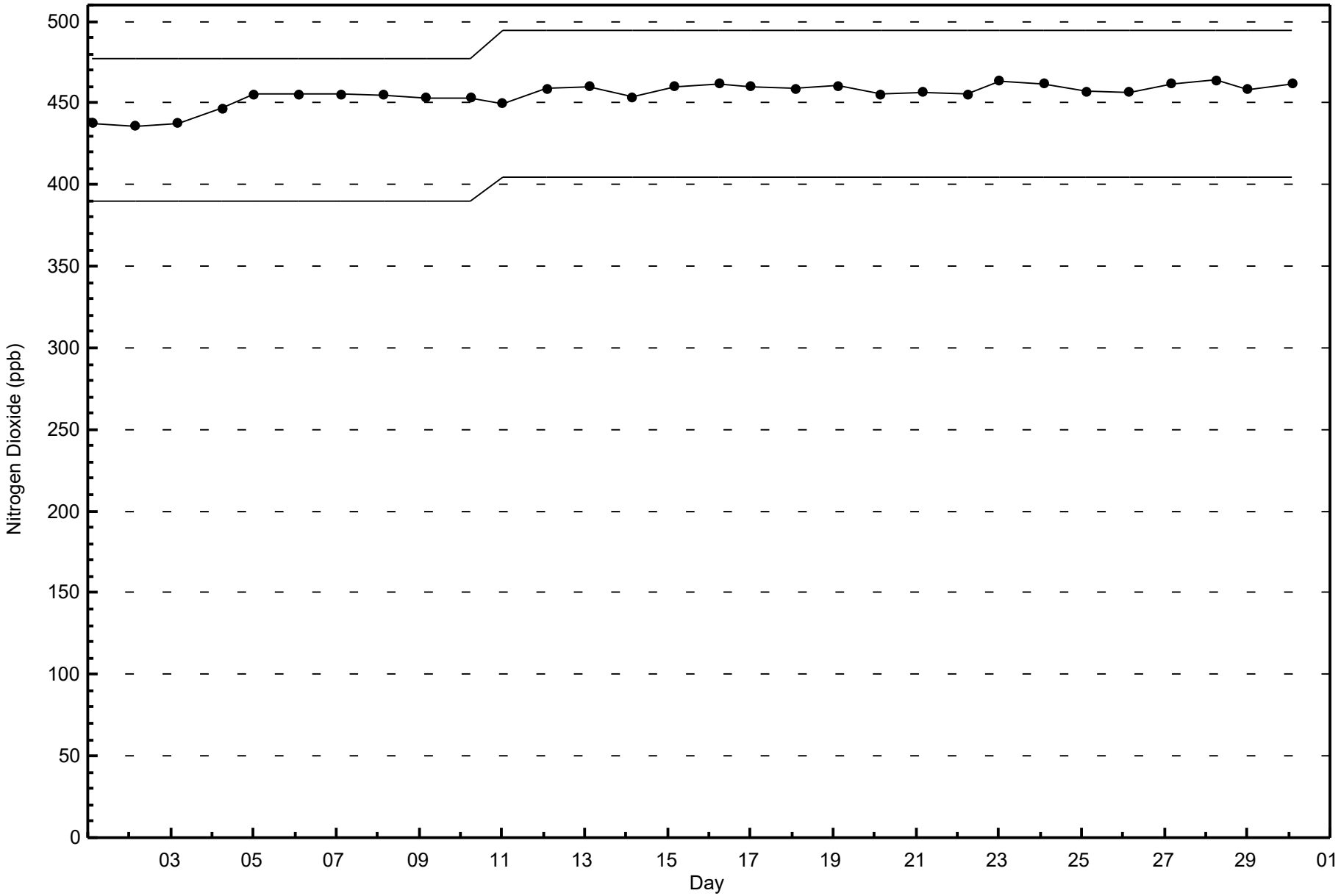


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Blackrod - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Blackrod - September 2026

Maximum Value: 78.9 ppb on Sep 5 04:00

Maximum Daily Average: 20.4 ppb on Sep 5

Minimum Value: 0.1 ppb on Sep 11 10:00

Minimum Daily Average: 0.8 ppb on Sep 1

Maximum Diurnal Average: 9.3 ppb at hour 7

Minimum Diurnal Average: 1.7 ppb at hour 1

Monthly Average: 4.31 ppb

Percentiles: P_1 = 0.2 P_{10} = 0.5 Q_1 = 0.8 Median = 1.4 Q_3 = 4.1 P_{90} = 10.3 P_{99} = 50.0

Hours in Service:	720
Hours of Data:	685
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-Sep	1.5	0.3	Z	0.5	0.7	0.7	2.3	1.3	0.8	0.6	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.8	1.0	0.8	0.7	0.7	0.8	2.3
2-Sep	0.7	0.8	0.8	Z	1.0	0.8	0.8	1.0	1.0	1.1	1.0	0.9	1.5	1.4	0.7	2.1	0.6	0.6	0.7	0.5	0.6	0.6	0.6	0.5	0.9	2.1
3-Sep	0.5	0.6	0.5	0.9	Z	2.4	3.0	2.4	1.7	1.3	2.2	1.2	3.2	1.5	1.6	2.3	1.3	0.6	1.5	1.8	1.9	3.8	4.7	0.7	1.8	4.7
4-Sep	0.8	2.1	1.2	0.8	0.8	Z	2.9	1.4	1.3	1.1	1.1	1.1	1.0	1.4	11.0	8.6	7.8	28.9	23.1	62.4	10.2	13.9	13.9	32.3	10.0	62.4
5-Sep	Z	60.5	5.2	78.9	42.2	48.3	58.6	48.9	17.8	27.8	12.2	6.7	9.3	20.2	10.8	3.1	9.1	3.4	1.3	1.1	0.7	0.7	1.7	1.5	20.4	78.9
6-Sep	0.8	Z	1.6	2.7	1.7	0.6	3.6	5.3	1.6	0.8	1.4	1.1	0.8	0.7	0.6	0.5	0.6	0.6	2.4	0.4	0.4	0.4	0.6	0.7	1.3	5.3
7-Sep	0.7	0.7	Z	0.6	1.1	1.6	0.8	2.2	1.1	0.6	4.7	2.6	2.6	5.9	2.6	5.9	5.7	12.8	1.4	1.2	1.0	3.8	4.5	1.4	2.8	12.8
8-Sep	1.3	6.2	21.3	Z	7.9	17.9	26.9	19.0	2.4	10.3	20.1	13.8	8.2	10.5	4.9	4.9	7.0	1.8	7.9	4.2	1.4	0.4	0.3	0.5	8.7	26.9
9-Sep	0.5	0.6	0.5	0.7	Z	1.0	1.4	0.5	0.4	1.0	1.3	1.6	4.2	2.2	19.7	2.5	1.1	0.3	0.3	0.3	0.5	0.4	0.5	0.5	1.8	19.7
10-Sep	4.4	5.7	2.9	1.4	0.7	Z	1.0	1.0	9.8	9.8	C	C	C	C	C	3.8	4.7	4.7	1.6	2.1	0.3	0.1	0.1	0.2	3.0	9.8
11-Sep	Z	0.6	0.2	0.3	0.4	1.1	0.6	0.3	0.3	0.1	0.3	0.8	2.4	5.6	1.6	0.8	0.5	0.7	0.3	0.1	0.6	0.3	0.3	0.6	0.8	5.6
12-Sep	1.6	Z	1.9	4.8	7.0	9.3	7.7	1.6	1.1	1.3	3.5	5.6	4.1	1.6	0.9	4.7	6.3	8.0	1.1	1.0	0.3	0.4	0.4	0.4	3.2	9.3
13-Sep	0.4	0.4	Z	0.9	0.6	0.7	0.7	0.9	0.9	0.9	0.9	1.2	0.9	0.8	0.9	0.7	1.0	0.7	0.9	3.2	1.0	0.9	0.9	0.9	0.9	3.2
14-Sep	2.1	1.8	10.2	Z	14.3	4.5	55.8	67.7	55.5	9.6	3.9	8.6	5.1	2.8	1.8	5.3	1.5	1.2	0.6	0.9	1.0	0.1	0.2	0.1	11.1	67.7
15-Sep	0.2	3.6	6.6	4.0	Z	3.0	0.9	1.0	1.7	0.3	1.6	2.0	0.7	0.8	1.2	1.0	0.8	2.7	1.6	3.4	1.6	6.3	0.9	0.7	2.0	6.6
16-Sep	0.3	2.8	3.1	1.6	6.0	Z	5.5	5.1	0.5	0.5	0.4	0.6	0.5	0.4	0.3	1.2	0.6	0.8	0.7	0.9	1.0	2.3	2.0	1.8	1.7	6.0
17-Sep	Z	1.4	1.2	1.4	1.7	1.3	2.0	1.3	1.4	1.3	1.0	1.1	0.6	2.8	3.1	1.0	1.3	4.2	5.2	2.3	4.5	6.8	3.5	0.7	2.2	6.8
18-Sep	1.3	Z	5.7	13.8	19.9	12.0	36.4	15.5	32.9	22.5	11.5	15.1	5.6	2.3	1.7	4.5	1.8	1.8	1.6	2.5	0.5	0.3	0.3	0.2	9.1	36.4
19-Sep	0.2	0.2	Z	0.5	0.6	0.8	1.2	1.5	1.0	0.9	0.9	0.8	0.9	0.9	0.8	0.8	1.1	1.4	1.1	0.9	0.8	0.8	0.8	0.9	0.9	1.5
20-Sep	1.3	1.2	1.3	Z	4.6	1.2	1.4	3.7	1.2	1.0	0.9	0.7	0.7	0.5	0.4	0.5	0.6	0.7	1.0	1.1	1.0	1.1	1.4	1.4	1.3	4.6
21-Sep	1.5	1.3	6.4	2.3	Z	1.2	7.2	3.1	1.9	2.5	1.2	1.2	1.1	1.2	1.4	1.4	1.8	1.4	1.3	1.4	1.5	1.4	31.3	2.8	3.4	31.3
22-Sep	7.2	10.3	10.6	3.0	4.4	Z	9.4	1.6	1.3	0.6	1.5	1.0	1.8	6.1	7.9	5.9	2.1	0.5	6.7	6.4	6.3	1.3	2.4	1.7	4.4	10.6
23-Sep	Z	5.1	3.6	3.7	4.2	1.0	1.3	4.2	2.2	1.1	3.4	1.1	1.0	1.5	2.5	1.0	6.5	1.5	6.5	5.9	9.5	14.1	18.3	6.7	4.6	18.3
24-Sep	9.3	Z	9.6	5.3	5.6	7.3	20.1	3.0	1.5	3.4	2.9	1.1	2.8	2.1	5.6	1.9	13.1	1.9	3.0	9.6	2.9	4.0	8.0	4.0	5.6	20.1
25-Sep	1.9	1.6	Z	2.7	1.8	2.5	1.5	2.4	1.7	1.7	2.3	1.5	1.7	1.6	1.3	5.4	27.9	0.6	0.6	4.9	9.0	1.6	3.0	3.1	3.6	27.9
26-Sep	2.7	2.3	0.7	Z	12.7	20.7	13.0	8.5	18.8	15.8	13.5	21.0	12.7	10.7	13.6	15.2	4.9	5.2	8.1	2.7	1.1	0.1	0.3	0.7	8.9	21.0
27-Sep	0.9	0.8	0.7	0.7	Z	1.0	1.2	1.0	0.9	2.8	8.0	4.4	1.5	1.1	12.6	10.8	8.4	10.0	0.5	0.4	0.4	0.4	0.3	0.4	3.0	12.6
28-Sep	0.4	0.3	0.4	0.5	0.5	Z	1.3	0.5	0.6	0.7	0.6	0.5	0.4	0.4	0.6	0.4	0.6	0.7	0.7	1.0	2.8	3.6	3.4	2.9	1.0	3.6
29-Sep	Z	1.9	1.7	2.7	1.4	1.8	2.9	0.9	1.2	3.1	9.2	11.9	11.2	8.0	4.9	13.9	18.6	11.2	4.5	3.7	1.2	0.9	0.7	0.9	5.2	18.6
30-Sep	0.9	Z	0.9	1.0	1.1	1.1	8.2	10.1	4.0	7.0	4.0	3.0	2.4	0.6	1.7	1.5	14.8	30.8	2.8	3.0	1.3	1.6	2.5	1.5	4.6	30.8
	1.7	4.5	3.9	5.4	5.7	5.8	9.3	7.2	5.6	4.4	4.0	3.9	3.1	3.3	4.0	3.7	5.1	4.7	3.0	4.3	2.2	2.4	3.6	2.4	Diurnal Average	
	9.3	60.5	21.3	78.9	42.2	48.3	58.6	67.7	55.5	27.8	20.1	21.0	12.7	20.2	19.7	15.2	27.9	30.8	23.1	62.4	10.2	14.1	31.3	32.3	Diurnal Maximum	

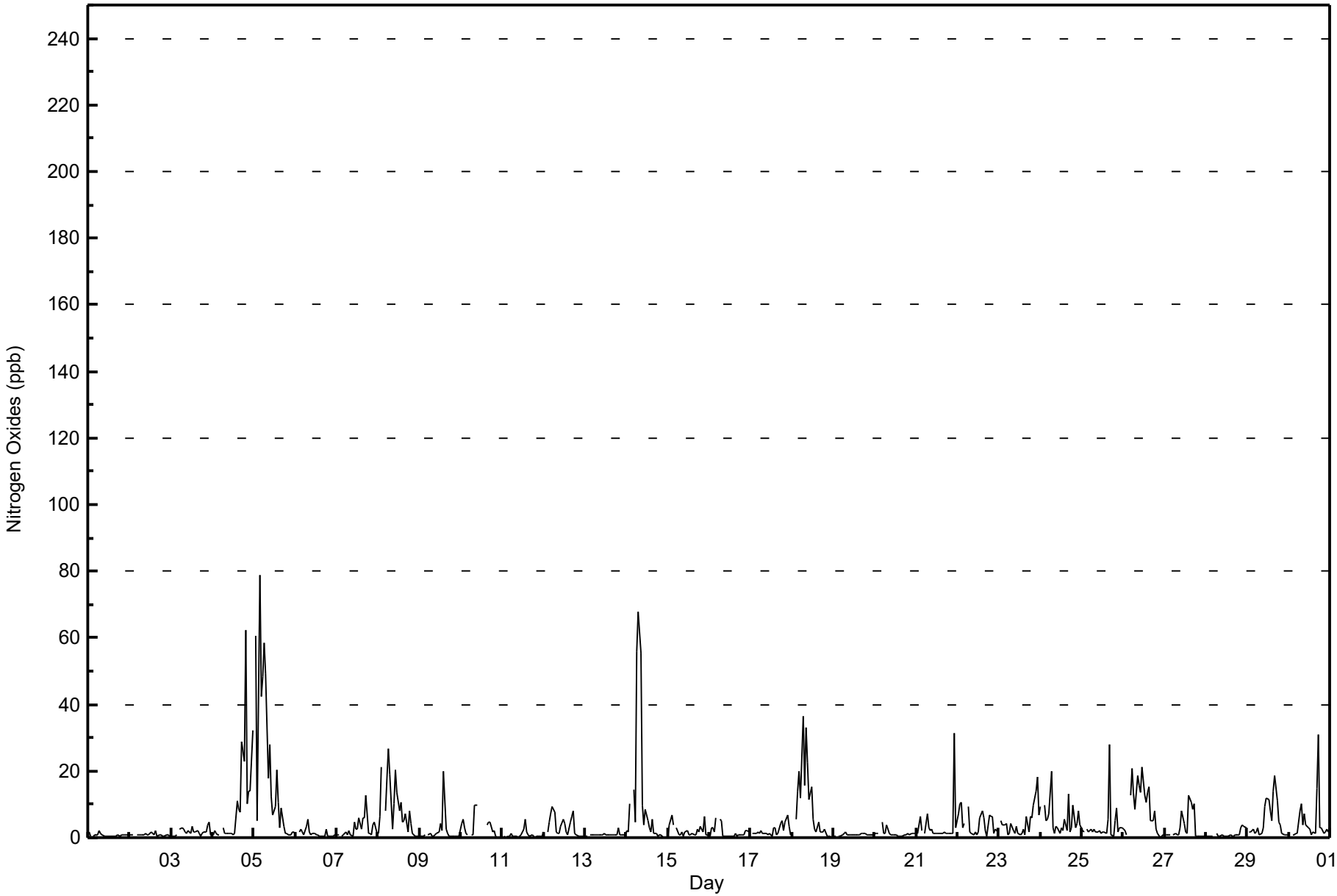
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Blackrod - September 2026



Nitrogen Oxides (NO_X) - ppb
Blackrod - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	661	96.50	96.50
21 - 40	14	2.04	98.54
11 - 80	10	1.46	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Blackrod - September 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	18	23	23	23	20	26	53	148	94	50	30	15	16	44	37	41	661
21 - 40	4	4	4	0	0	0	0	0	0	0	0	0	2	0	0	0	14
11 - 80	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
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	30	29	27	23	20	26	53	148	94	50	30	15	18	44	37	41	685

Total Number of Valid Hours: 685

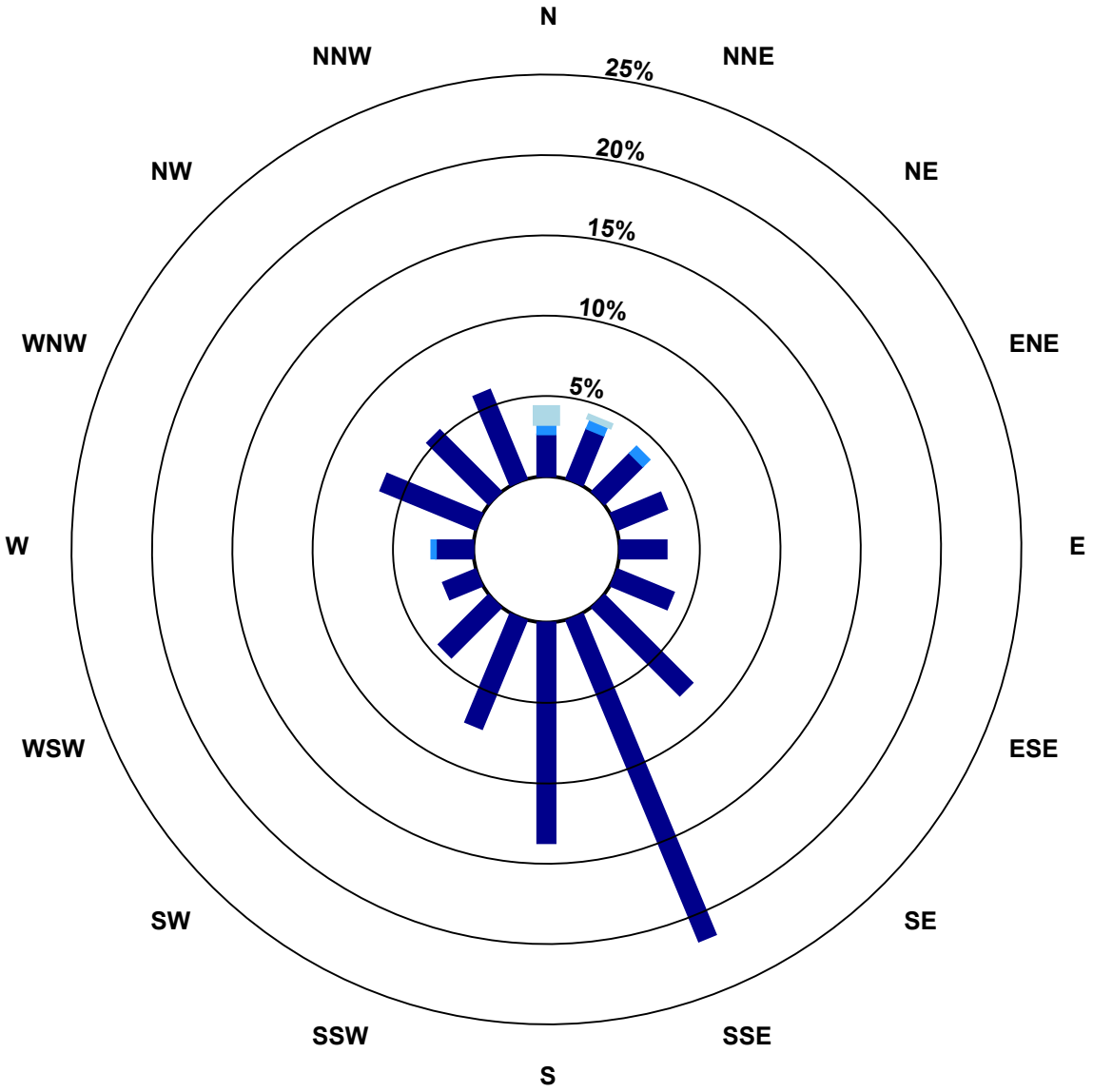
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Blackrod



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

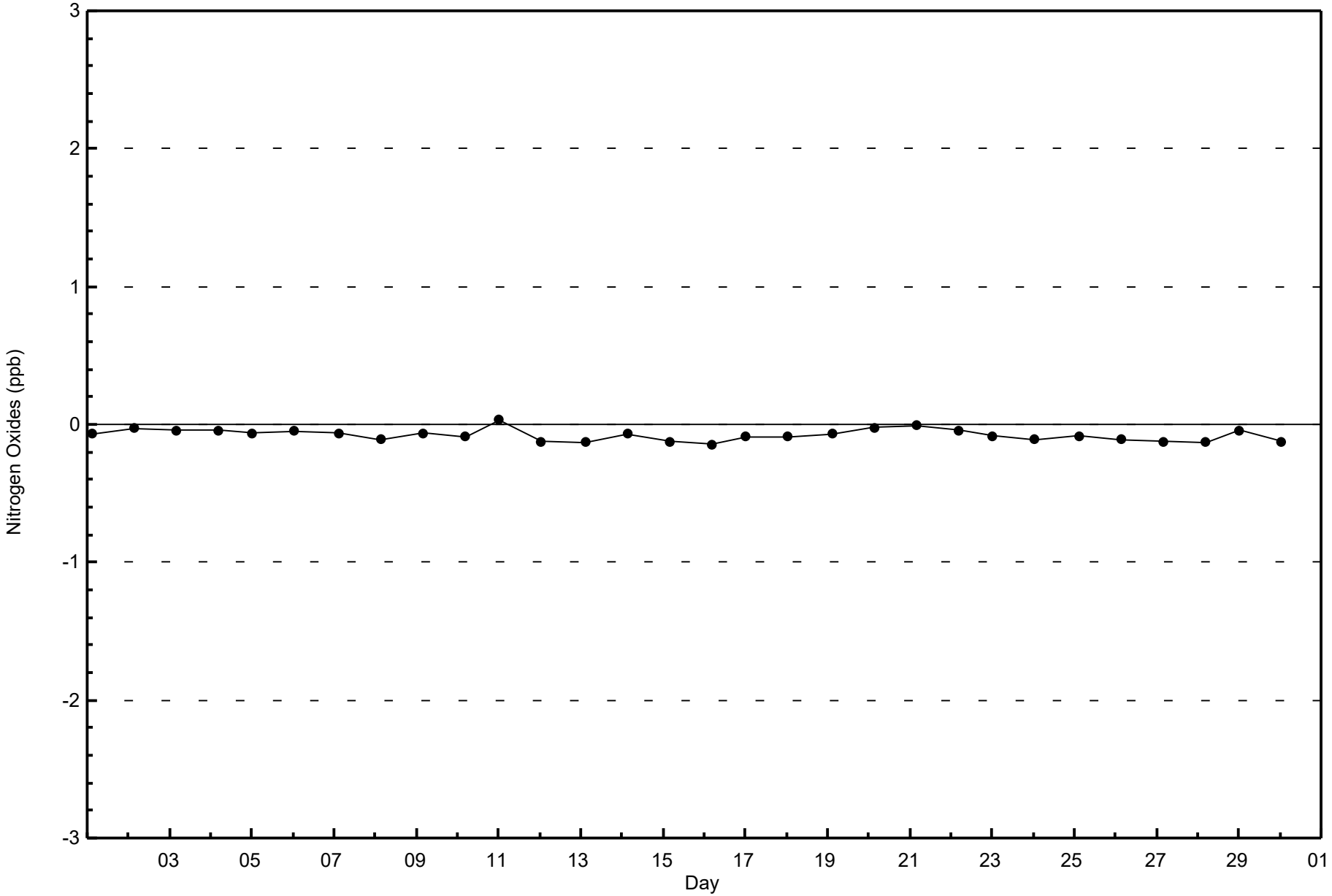
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Blackrod - September 2026

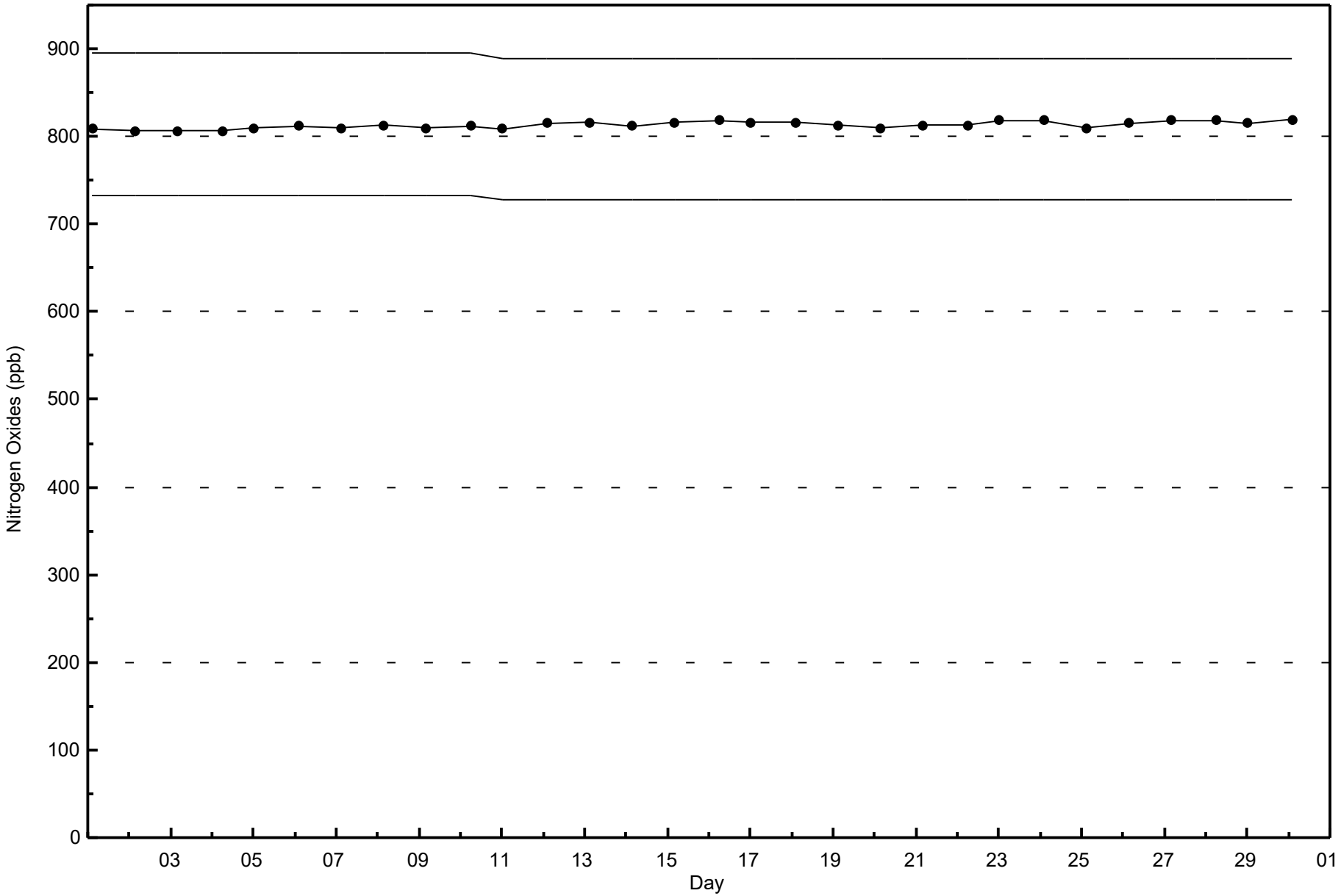


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Blackrod - September 2026



Maximum Value: 25.8 C on Sep 2 15:00

Maximum Daily Average: 20.6 C on Sep 2

Minimum Value: 0.0 C on Oct 1 00:00

Minimum Daily Average: 4.9 C on Sep 30

Maximum Diurnal Average: 16.5 C at hour 16

Minimum Diurnal Average: 8.2 C at hour 6

Monthly Average: 11.79 C

Percentiles: P_1 = 1.5 P_{10} = 5.1 Q_1 = 8.1 Median = 11.4 Q_3 = 15.3 P_{90} = 18.8 P_{99} = 23.7

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

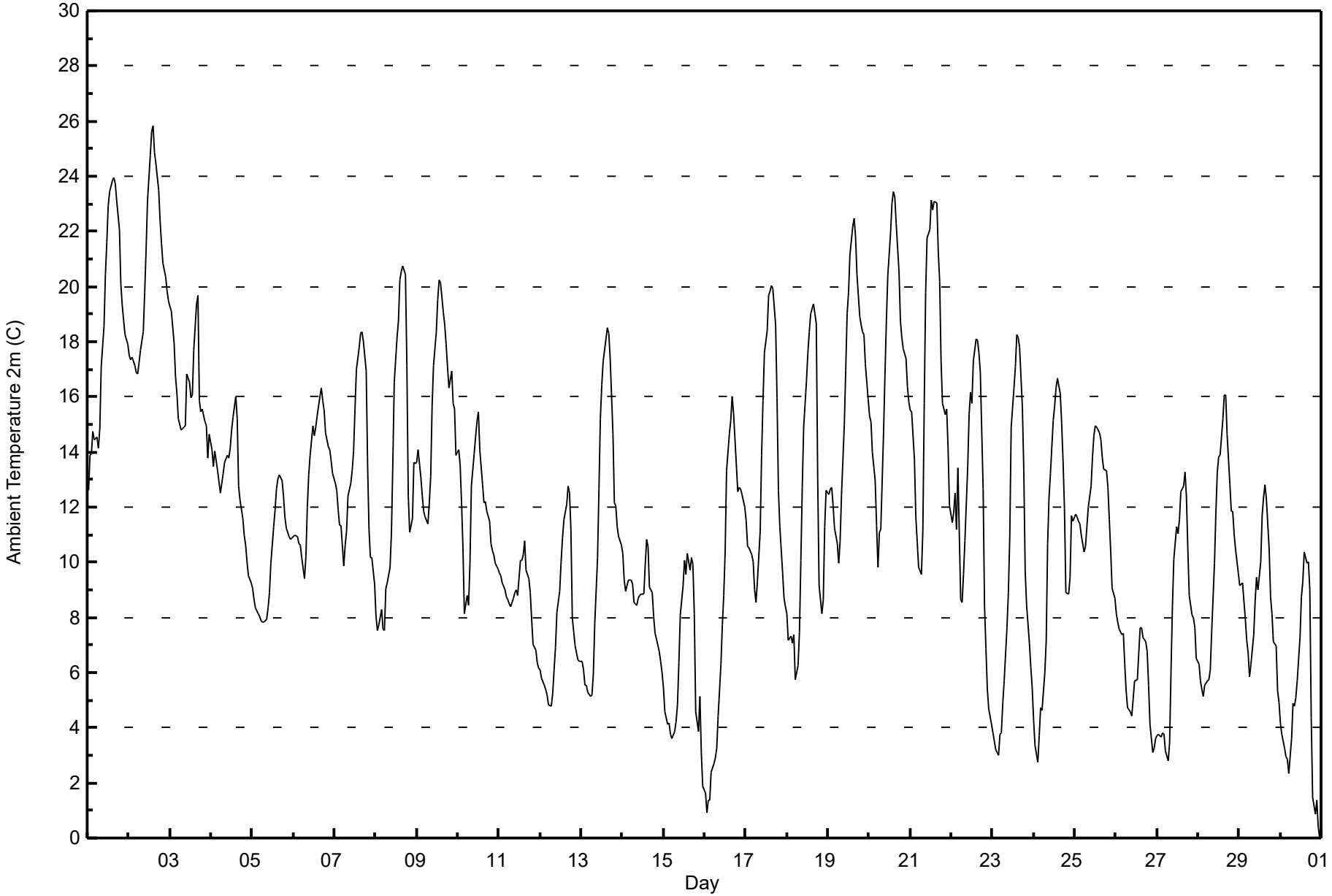
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	12.6	13.9	13.9	14.8	14.4	14.6	14.1	14.8	17.1	18.6	20.5	21.6	22.9	23.5	23.8	24.0	23.7	23.1	22.1	20.1	19.3	18.8	18.2	17.9	18.7	24.0
2-Sep	17.5	17.4	17.4	17.1	16.9	16.8	17.2	17.7	18.4	19.8	21.3	23.1	24.8	25.6	25.8	24.9	24.5	23.5	22.4	21.6	20.8	20.3	19.8	19.5	20.6	25.8
3-Sep	19.3	19.1	18.0	16.8	16.1	15.2	14.8	14.8	14.9	15.0	16.9	16.5	16.0	16.1	17.7	19.4	19.7	15.9	15.5	15.5	15.1	15.0	13.8	14.6	16.3	19.7
4-Sep	14.1	13.5	14.0	13.7	13.3	12.5	12.9	13.2	13.6	13.9	13.8	14.1	14.8	15.2	16.0	15.2	12.8	12.3	11.6	11.0	10.6	10.0	9.5	9.2	13.0	16.0
5-Sep	9.1	8.6	8.3	8.2	8.0	7.9	7.9	7.8	8.0	8.4	8.9	10.0	11.3	11.9	12.7	13.0	13.2	12.9	12.4	11.6	11.2	10.9	10.8	10.9	10.2	13.2
6-Sep	10.9	11.0	10.9	10.7	10.6	10.2	9.4	10.2	12.0	13.2	13.9	15.0	14.6	14.9	15.3	16.0	16.3	15.9	15.5	14.7	14.2	14.1	13.7	13.2	13.2	16.3
7-Sep	12.9	12.6	11.9	11.3	11.4	9.9	10.6	11.1	12.4	12.9	13.3	14.0	15.6	17.0	17.8	18.3	18.4	18.0	16.9	13.5	11.2	10.2	10.2	9.2	13.4	18.4
8-Sep	8.1	7.5	7.7	8.3	7.6	7.5	9.0	9.2	9.8	11.1	13.7	16.5	18.1	18.7	20.2	20.5	20.8	20.4	17.1	12.4	11.1	11.6	13.6	13.6	13.1	20.8
9-Sep	13.6	14.1	13.1	12.4	11.8	11.7	11.4	12.2	13.1	15.7	17.1	18.3	19.5	20.2	20.1	19.1	18.6	17.9	17.1	16.3	16.9	15.7	15.6	13.9	15.6	20.2
10-Sep	14.1	13.5	12.1	10.5	8.2	8.8	8.4	10.0	12.8	14.0	14.6	15.1	15.5	14.1	12.8	12.1	12.2	11.8	11.5	10.7	10.4	10.3	10.0	9.8	11.8	15.5
11-Sep	9.6	9.5	9.3	9.0	8.7	8.6	8.5	8.4	8.7	8.9	9.0	8.8	10.1	10.1	10.3	10.8	9.7	9.4	8.9	8.0	7.0	6.8	6.3	6.1	8.8	10.8
12-Sep	6.1	5.8	5.6	5.4	5.2	4.8	4.8	5.2	6.1	6.9	8.2	9.0	10.0	10.9	11.6	12.1	12.8	12.5	11.2	8.0	6.9	6.7	6.5	6.4	7.9	12.8
13-Sep	6.4	6.1	5.6	5.6	5.3	5.1	5.2	5.9	7.8	10.2	12.7	15.2	16.4	17.3	18.1	18.5	18.3	17.4	14.6	12.1	12.1	11.3	11.0	10.6	11.2	18.5
14-Sep	10.3	9.4	8.9	9.4	9.3	9.3	9.2	8.5	8.5	8.7	8.8	8.9	8.8	9.9	10.8	10.6	9.1	8.9	8.0	7.4	7.2	6.8	6.4	6.0	8.7	10.8
15-Sep	5.5	4.6	4.1	4.2	3.8	3.6	3.9	4.2	4.8	6.4	8.1	9.2	10.1	9.6	10.3	9.7	10.2	9.9	8.1	4.6	3.9	5.2	3.1	1.9	6.2	10.3
16-Sep	1.7	0.9	1.4	1.4	2.4	2.7	2.9	3.3	4.4	6.3	7.7	8.8	10.4	13.3	14.7	15.2	16.0	15.4	13.5	12.6	12.7	12.6	12.5	12.0	8.5	16.0
17-Sep	11.5	10.6	10.5	10.3	10.0	9.0	8.5	9.3	11.1	13.9	15.9	17.6	18.4	19.7	19.8	20.0	19.9	18.6	15.9	12.6	11.3	9.6	8.7	8.4	13.4	20.0
18-Sep	8.1	7.2	7.3	7.1	7.4	5.8	6.3	7.5	10.1	12.7	14.9	16.6	17.6	18.3	19.0	19.4	19.0	18.7	13.1	9.2	8.1	8.6	11.3	12.6	11.9	19.4
19-Sep	12.5	12.6	12.7	12.0	11.2	10.7	10.0	10.8	12.4	15.0	17.0	19.0	19.8	21.1	22.2	22.5	21.8	20.5	18.9	18.6	18.4	18.3	17.2	15.9	16.3	22.5
20-Sep	15.3	15.1	14.0	13.0	11.3	9.8	11.1	11.2	14.7	16.8	18.8	20.4	22.0	23.0	23.5	23.2	22.3	20.6	18.8	18.1	17.7	17.4	16.4	15.8	17.1	23.5
21-Sep	15.5	15.5	13.8	11.7	10.8	9.8	9.5	11.1	15.7	19.8	21.7	22.1	23.1	22.8	23.1	23.0	21.2	20.2	17.3	15.7	15.3	15.6	14.1	12.0	16.7	23.1
22-Sep	11.4	11.8	12.5	11.2	13.4	8.6	8.5	9.6	10.8	13.5	15.3	16.2	15.8	17.3	18.1	18.0	17.6	16.9	12.7	8.4	6.9	5.4	4.7	4.1	12.0	18.1
23-Sep	3.8	3.5	3.2	3.0	3.8	3.8	4.9	5.7	7.6	8.9	11.0	14.9	16.3	17.1	18.3	18.2	17.8	15.6	13.3	9.7	8.4	7.0	6.2	5.4	9.5	18.3
24-Sep	4.3	3.4	2.8	3.7	4.7	4.6	6.0	7.2	10.7	12.4	13.2	15.2	15.7	16.3	16.7	16.1	15.0	13.7	11.9	8.9	8.8	9.4	11.7	11.5	10.2	16.7
25-Sep	11.8	11.6	11.5	11.4	11.0	10.4	10.6	11.3	12.0	12.8	13.8	14.6	15.0	14.9	14.7	14.4	13.8	13.4	13.3	12.7	11.6	10.4	9.1	8.7	12.3	15.0
26-Sep	8.1	7.8	7.6	7.4	7.4	6.3	5.3	4.7	4.6	4.4	5.0	5.7	5.8	6.7	7.7	7.6	7.3	7.1	6.8	5.5	4.1	3.1	3.3	3.6	6.0	8.1
27-Sep	3.7	3.8	3.6	3.8	3.8	3.2	2.8	3.5	6.0	8.4	10.1	11.3	11.0	11.6	12.5	12.8	13.2	12.3	10.5	8.8	8.1	8.0	7.6	6.5	7.8	13.2
28-Sep	6.3	5.7	5.4	5.1	5.5	5.7	5.7	6.1	7.5	10.0	11.8	13.2	13.8	13.9	15.2	16.1	16.1	14.7	12.8	11.8	11.8	11.0	10.5	9.6	10.2	16.1
29-Sep	9.2	9.2	9.2	7.9	7.2	6.7	5.8	6.3	7.4	8.6	9.4	9.0	10.0	11.7	12.4	12.8	12.3	10.5	8.7	8.1	7.1	6.9	5.3	5.0	8.6	12.8
30-Sep	4.2	3.8	3.3	2.9	2.8	2.3	3.6	4.9	4.8	5.1	5.7	7.3	8.8	9.3	10.4	10.0	10.0	9.0	4.4	1.5	0.8	1.3	0.4	0.0	4.9	10.4
	9.9	9.6	9.3	9.0	8.8	8.2	8.3	8.9	10.3	11.7	13.1	14.2	15.1	15.7	16.4	16.5	16.1	15.2	13.5	11.7	11.0	10.6	10.2	9.8	Diurnal Average	
	19.3	19.1	18.0	17.1	16.9	16.8	17.2	17.7	18.4	19.8	21.7	23.1	24.8	25.6	25.8	24.9	24.5	23.5	22.4	21.6	20.8	20.3	19.8	19.5	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Blackrod - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	280	38.89	38.89
10 - 20	391	54.31	93.19
> 20	49	6.81	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Blackrod - September 2026

Maximum Value: 100.0 % on Sep 8 06:00

Maximum Daily Average: 92.7 % on Sep 4

Minimum Value: 31.6 % on Sep 18 16:00

Minimum Daily Average: 53.8 % on Sep 2

Maximum Diurnal Average: 87.8 % at hour 6

Minimum Diurnal Average: 53.6 % at hour 15

Monthly Average: 73.60 %

Percentiles: P_1 = 36.2 P_{10} = 46.1 Q_1 = 59.0 Median = 76.4 Q_3 = 90.1 P_{90} = 95.1 P_{99} = 99.7

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

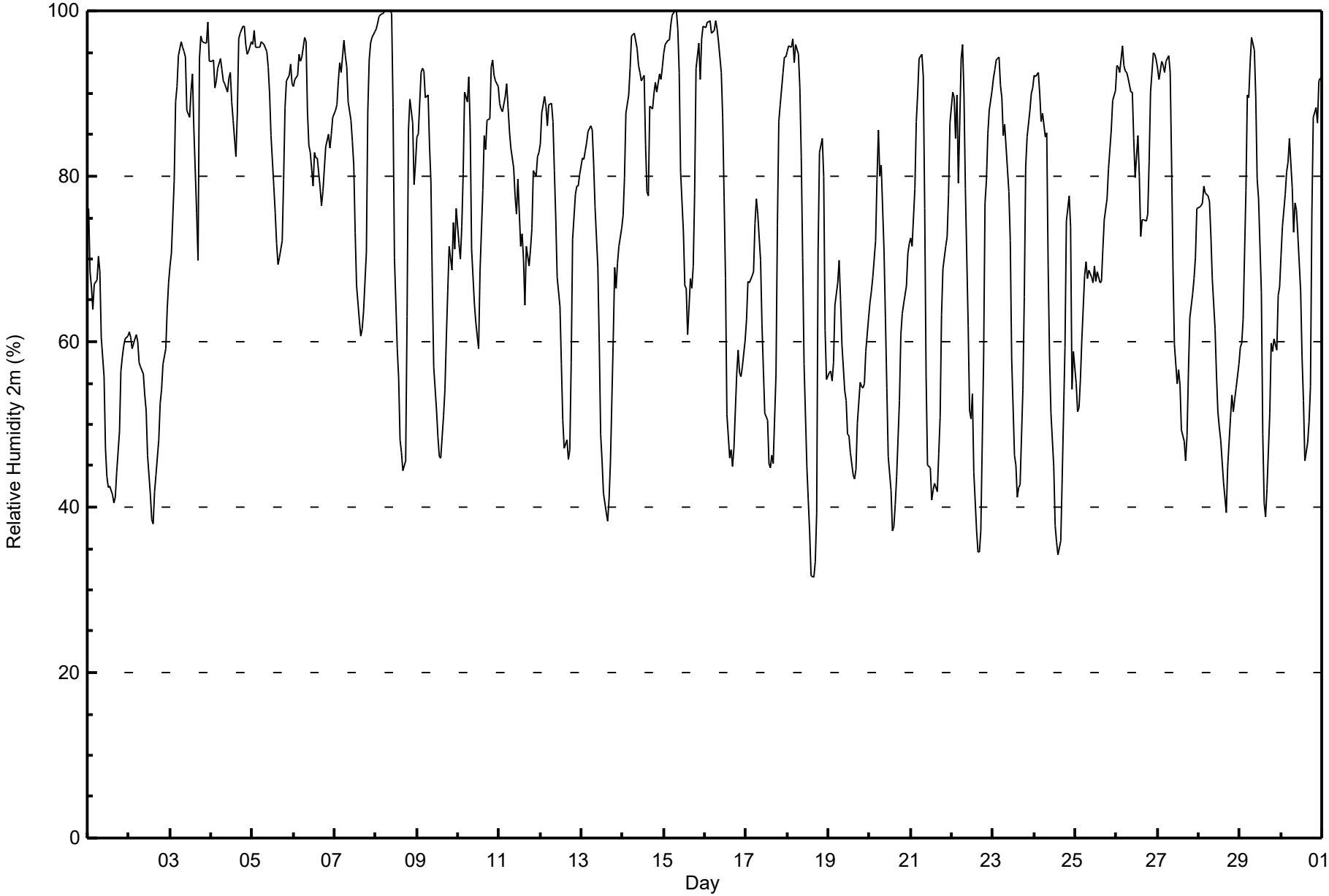
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	76.0	68.5	66.7	63.8	66.9	67.5	70.3	68.5	60.5	55.8	47.0	43.6	42.4	42.6	41.6	40.5	41.2	44.2	49.1	56.5	58.1	59.5	60.3	60.7	56.3	76.0
2-Sep	61.2	60.5	59.1	60.3	60.9	60.0	57.5	56.9	56.1	53.5	51.7	46.2	41.5	38.5	38.0	41.9	43.8	48.1	52.6	54.2	57.3	59.2	63.9	67.1	53.8	67.1
3-Sep	69.1	70.7	79.4	89.0	90.9	94.6	96.3	95.5	95.1	94.4	87.9	87.0	90.4	92.3	85.7	75.6	69.9	94.2	96.9	96.3	96.1	96.0	98.6	94.0	89.0	98.6
4-Sep	94.0	94.0	90.6	91.6	93.0	94.3	92.9	91.5	91.2	90.1	91.9	92.5	89.0	86.7	82.4	87.7	96.6	97.3	98.2	98.1	96.0	94.8	95.1	96.2	92.7	98.2
5-Sep	96.0	97.6	95.7	95.6	95.6	96.3	96.1	95.9	95.1	93.3	90.0	85.0	78.8	75.7	71.8	69.4	70.2	72.3	79.7	88.2	91.5	92.2	93.5	91.3	87.8	97.6
6-Sep	90.9	91.7	92.3	94.8	93.9	94.4	96.8	96.3	87.7	83.8	82.8	78.9	82.9	82.2	82.2	78.6	76.5	78.1	80.8	83.5	85.1	83.5	85.2	87.2	86.2	96.8
7-Sep	88.1	88.6	91.6	93.7	92.5	96.5	94.6	93.2	88.9	86.8	84.2	81.3	73.2	66.8	62.5	60.6	61.5	63.8	70.8	87.7	94.0	96.1	96.8	97.5	83.8	97.5
8-Sep	97.8	98.5	99.3	99.7	99.7	100.0	100.0	100.0	100.0	99.7	88.3	70.2	59.1	55.6	48.1	46.6	44.4	45.6	63.1	85.5	89.3	86.5	79.0	81.5	80.7	100.0
9-Sep	84.7	85.0	92.6	93.1	92.6	89.5	89.8	83.8	79.3	67.0	56.9	51.8	48.4	46.1	45.9	51.0	54.3	60.4	66.1	71.5	68.6	74.3	71.2	76.1	70.8	93.1
10-Sep	71.9	70.0	73.9	80.4	90.2	89.1	92.0	85.9	71.2	64.5	62.4	60.7	59.2	68.6	78.3	85.0	83.2	86.8	87.0	93.2	94.1	92.2	91.6	90.8	80.1	94.1
11-Sep	88.9	88.2	87.8	89.6	91.2	88.3	85.4	83.4	81.1	77.6	75.4	79.7	71.5	73.1	70.1	64.4	71.6	69.1	71.3	73.7	80.7	80.0	82.4	82.8	79.5	91.2
12-Sep	84.0	87.6	89.7	88.5	86.1	88.6	88.7	86.7	80.7	74.8	67.8	64.3	57.3	50.4	47.1	48.1	45.8	47.0	57.5	72.5	77.9	78.9	78.9	80.2	72.0	89.7
13-Sep	82.1	82.0	83.1	84.1	85.4	86.2	85.6	81.6	76.3	68.9	59.9	48.8	45.6	41.6	39.3	38.4	41.1	45.6	60.6	68.9	66.4	69.5	71.4	73.7	66.1	86.2
14-Sep	75.2	79.9	87.7	89.8	93.0	96.9	97.1	97.4	95.3	93.5	92.5	91.6	92.2	84.0	78.1	77.7	88.5	88.2	90.1	91.4	90.2	92.4	91.6	93.2	89.5	97.4
15-Sep	94.9	96.0	96.4	96.4	98.2	99.6	100.0	100.0	97.7	92.5	80.5	73.2	66.7	66.4	60.8	67.6	66.4	69.2	78.0	93.1	96.1	91.6	96.5	98.2	86.5	100.0
16-Sep	98.0	98.6	98.6	98.9	97.2	97.6	98.9	97.8	96.2	92.6	87.1	77.5	67.6	51.3	45.9	47.0	45.0	47.1	56.1	59.0	56.3	55.7	57.0	60.1	74.5	98.9
17-Sep	62.8	67.3	67.1	67.9	68.4	74.3	77.3	75.4	69.9	62.1	56.6	51.3	50.5	45.2	44.8	46.2	45.3	56.0	74.1	86.6	88.7	92.6	94.5	94.4	67.5	94.5
18-Sep	95.1	95.8	95.7	96.7	93.8	96.0	94.7	90.6	82.3	70.2	57.2	44.9	40.8	37.0	31.6	31.6	33.4	39.3	70.9	82.8	84.5	80.1	61.4	55.4	69.2	96.7
19-Sep	56.2	56.5	55.2	57.4	64.5	67.1	69.8	65.1	59.7	54.0	52.9	48.7	48.6	46.7	43.9	43.4	44.6	50.2	55.1	54.6	54.3	54.8	58.8	62.8	55.2	69.8
20-Sep	64.7	66.1	67.8	72.2	79.6	85.6	80.0	81.4	71.0	62.9	54.5	46.2	42.0	37.1	37.6	40.3	43.7	52.8	60.8	63.4	64.6	66.8	70.7	71.9	61.8	85.6
21-Sep	72.5	71.6	78.4	86.7	89.9	94.2	94.8	92.0	76.2	55.7	45.1	44.7	40.8	42.0	42.8	41.8	46.5	50.8	63.2	68.8	71.6	72.6	77.9	86.4	67.0	94.8
22-Sep	90.1	89.5	84.5	89.8	79.1	94.2	96.0	89.8	78.5	61.8	51.8	50.7	53.7	44.3	37.1	34.5	34.6	37.1	58.0	76.8	79.5	85.0	87.9	90.3	69.8	96.0
23-Sep	91.8	92.9	94.0	94.5	91.1	89.4	85.0	86.3	80.8	78.1	72.2	58.0	46.2	45.0	41.1	42.5	42.7	54.2	65.3	81.2	84.8	88.0	90.0	90.7	74.4	94.5
24-Sep	92.2	92.0	92.5	90.1	86.6	87.6	84.8	85.2	69.2	58.1	51.4	44.8	37.7	35.7	34.2	36.0	43.3	51.4	59.4	74.6	77.7	73.9	54.2	58.9	65.5	92.5
25-Sep	54.9	51.5	52.0	55.4	60.1	68.0	69.7	67.6	68.6	67.9	67.1	69.2	67.2	68.4	67.2	67.3	71.2	74.7	77.3	80.9	83.3	85.5	89.2	90.3	69.8	90.3
26-Sep	93.4	93.2	92.5	95.8	93.5	92.7	92.6	91.9	90.2	90.2	84.6	79.8	84.9	80.0	72.6	74.8	74.7	74.6	75.4	81.9	90.1	95.0	94.7	94.1	86.8	95.8
27-Sep	93.0	91.8	93.9	93.4	92.6	94.0	94.7	92.5	81.5	68.9	59.6	54.9	56.5	54.8	49.4	47.9	45.6	48.7	56.3	62.9	65.8	67.6	70.2	76.1	71.4	94.7
28-Sep	76.3	76.5	76.7	78.9	77.9	77.6	77.0	72.8	67.6	61.5	55.9	51.6	49.7	48.1	43.0	41.2	39.3	44.9	50.8	53.5	51.5	53.1	54.4	57.2	59.9	78.9
29-Sep	59.2	59.7	62.7	78.4	89.8	89.6	93.8	96.8	95.3	89.7	79.6	77.3	65.9	48.9	40.6	38.8	42.2	51.3	59.9	58.9	60.3	58.9	65.7	66.6	67.9	96.8
30-Sep	70.4	73.9	77.7	80.4	81.7	84.6	78.6	73.2	76.8	75.9	72.9	66.1	58.1	52.9	45.5	47.8	50.3	54.5	75.4	87.1	88.3	86.4	91.5	91.8	72.6	91.8
	80.8	81.2	82.5	84.9	85.9	87.8	87.7	85.8	80.7	74.9	68.9	64.0	60.3	56.9	53.6	53.8	55.2	59.9	68.7	76.2	78.1	78.8	79.1	80.6	Diurnal Average	
	98.0	98.6	99.3	99.7	99.7	100.0	100.0	100.0	100.0	99.7	92.5	92.5	92.2	92.3	85.7	87.7	96.6	97.3	98.2	98.1	96.1	96.1	98.6	98.2	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Blackrod - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	21	2.92	2.92
40 - 60	173	24.03	26.94
60 - 80	211	29.31	56.25
80 - 100	309	42.92	99.17

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Blackrod - September 2026

Maximum Speed: 28 km/h on Sep 29 15:00

Maximum Daily Speed Average: 17.3 km/h on Sep 2

Minimum Speed Value: 0 km/h on Sep 23 19:00

Minimum Daily Speed Average: 0.9 km/h on Sep 18

Maximum Diurnal Speed Average: 5.5 km/h at hour 24

Minimum Diurnal Speed Average: 1.8 km/h at hour 19

Monthly Average Velocity: 3.2 km/h 192.8 deg

Percentiles: P_1 = 1 P_{10} = 3 Q_1 = 6 Median = 10 Q_3 = 15 P_{90} = 19 P_{99} = 24

Hours in Service:	720
Hours of Data:	720
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-Sep	SSE10	SSE14	SSE15	SSE16	SSE16	SSE16	S18	S16	S16	SSE17	SSE22	SSE21	SSE21	S20	SSE19	SSE20	SSE20	SSE16	SSE14	SE9	SE15	SE17	SSE22	SSE24	SSE17.1	SSE24
2-Sep	SSE20	SSE20	SSE22	SSE21	SSE22	SSE23	SSE24	SSE24	SSE22	SSE21	SSE17	SSE19	SSE22	SSE22	SSE20	SE14	SE11	SE9	SE8	SE9	SE12	SE12	SE12	SE13	SSE17.3	SSE24
3-Sep	SE12	SE11	SSE14	E5	ENE7	NE8	NE9	NE8	NE9	NE13	ENE14	ENE15	ENE9	NE8	NNE11	ENE8	SE4	S9	ESE3	ENE6	ENE6	E3	SE2	SE9	ENE6.4	ENE15
4-Sep	SSE10	SE7	SE8	SSE6	SSE8	ESE4	SE5	SSE7	S7	SSE8	SSE8	S6	S5	WSW2	N6	NNW14	N17	N16	N16	N17	NNE12	NNE12	NNE13	NNE12	NE2.7	N17
5-Sep	NNE13	N14	NNE12	N13	NNE10	N11	N10	N9	NNE9	NNE11	NE9	NNE9	NNE9	N9	NNE8	NE5	NNE5	NNE3	ESE2	SSE2	SE3	ESE2	SSE3	ESE4	NNE6.7	NNE14
6-Sep	SE5	SSE6	SSE4	SE4	SE4	SE6	ESE4	ESE3	ESE4	ESE3	NE7	SE7	SSE12	SE8	SSE10	SSE10	SSE10	SE8	SE5	SE8	SSE12	SSE14	SSE12	SSE16	SE7.0	SSE16
7-Sep	SSE15	SSE14	SSE11	SSE12	SSE8	SE5	SSE7	W2	SSW4	S8	SW3	NNE2	NE5	NNE7	NNE6	N9	NNE10	NNE10	NE6	E3	E1	ENE2	E1	SE1	ESE2.4	SSE15
8-Sep	ESE1	E1	NE2	NE2	ESE1	E1	NE3	N4	NNW5	NNE4	N6	N9	N5	NNW4	WNW10	WNW8	WNW12	NW9	NNW1	SE2	SE4	SSE7	SSE11	SSE10	NNW1.3	WNW12
9-Sep	SSE10	S10	S11	S11	S9	S11	S12	S13	S14	SSW14	SW17	SW19	SW18	SW20	SW19	SW15	SW14	SSW13	S8	S12	SW16	SSW12	SW12	SSW8	SSW12.1	SW20
10-Sep	WSW10	WNW16	WNW12	SW4	SSE5	SSW8	S9	SSW9	WSW11	WNW15	WNW17	WNW18	WNW17	WNW22	WNW20	WNW19	WNW16	WNW15	WNW15	WNW16	NW13	NW15	NW14	NW15	WNW11.6	WNW22
11-Sep	NW16	NW16	NW15	NW16	NNW18	NNW19	NNW19	NNW22	NNW21	NNW24	NNW23	NNW21	NNW22	NNW18	NW19	NNW19	NW16	NNW16	NNW13	NNW11	NNW9	NW10	NNW8	NW6	NNW16.5	NNW24
12-Sep	NW7	WNW7	WNW7	WNW7	WNW8	W3	WSW2	SSW1	WSW3	SW9	SW10	W9	WNW8	WNW11	NW10	WNW8	WNW9	WNW8	SSW6	SSE8	SSE9	SSE10	SSE10	SSE10	WSW4.2	WNW11
13-Sep	SSE11	S11	S11	S12	S12	SSE14	SSE15	SSE16	S16	S16	S17	SSW18	SSW16	SSW15	SSW15	SSW14	SSW13	SSW11	SSE8	SSE10	SSE11	SSE10	SSE9	SSE8	S12.2	SSW18
14-Sep	WSW2	NNW7	N10	N11	N11	N13	N15	N17	N16	N15	NNW16	N17	NNW16	NNW13	NW10	NNW14	NNW11	NNW10	NNW10	NNW9	NNW9	NNW8	NNW7	NNW8	NNW11.2	N17
15-Sep	NNW7	N7	NNE5	N2	W2	SSW4	S6	S7	SSW7	SSW7	SW6	SW6	SSW5	SSW9	SW11	S9	S9	WSW7	NW2	ESE2	SSE2	NE4	SSE3	SE5	SSW3.0	SW11
16-Sep	SE6	SE3	SE3	SE3	NE4	SE2	SSE2	SSW6	S6	SSW6	SSW8	S9	SSE11	SSE8	SSE11	SSE10	S14	SSE9	SE9	SE12	SE14	SSE15	SSE16	SSE15	SSE7.8	SSE16
17-Sep	SSE16	SSE15	SSE15	SSE16	SSE16	SSE15	S12	S11	S13	S12	S11	SSW11	S11	SW8	W7	SSW8	WNW6	NNE2	ESE2	SE2	ESE2	ESE2	E2	SE2	S7.6	SSE16
18-Sep	SE2	SSE3	E2	NE3	NNE3	N2	NE5	NE5	N5	NNE5	NNE6	NNW5	NW6	NW7	NW8	WNW8	NW7	SW3	ESE2	ESE3	SE5	SE6	SE10	SSE13	NNE0.9	SSE13
19-Sep	SSE14	SSE14	SSE15	SSE18	SSE19	SSE17	SSE18	SSE17	S18	S21	S22	S25	S23	S22	S22	S21	S17	S10	SSE11	SSE13	SSE14	SSE17	SSE18	SSE16	S17.3	S25
20-Sep	SSE13	SSE10	SSE14	SSE9	SSE5	S7	SSE9	SSE5	SSW7	SSW9	S9	S11	S12	S14	S14	S13	S13	S10	SSE12	SSE16	SSE15	SSE16	SSE15	SSE14	SSE11.1	SSE16
21-Sep	SSE14	SSE12	SSE7	SSE4	SSE5	S7	S4	S2	S9	SSE11	SSE18	SSE19	SSE24	S25	S19	S18	S13	SSE11	SSE8	SSE9	SE7	SE7	NE5	E3	SSE10.2	S25
22-Sep	ENE2	NE4	NE7	NE6	ENE6	SSW5	W3	NNW10	NNW16	NW20	NNW21	NW18	WNW17	WNW15	WNW15	WNW15	WNW13	NW7	NNE2	E2	ESE3	SE2	SE2	ESE2	NW6.2	NNW21
23-Sep	ESE2	E3	ESE1	E1	WSW2	SW3	SSW4	SSW3	SW4	SSW4	SSW2	SSW9	S13	SSW10	SW9	SSW9	W9	WSW2	NE0	ESE2	ESE1	ESE2	ESE2	SE3	SSW3.0	S13
24-Sep	ESE2	SE3	SE2	SSE4	SSE4	SSE1	ESE2	SE2	S5	W6	W4	SW8	NW6	NW3	NW3	N5	NE6	E5	E5	E2	ENE1	E4	E9	ENE11	E1.3	ENE11
25-Sep	ENE13	ENE14	E14	ENE11	ENE12	ENE11	ENE14	ENE14	ENE12	ENE10	ENE7	ENE5	E7	ENE11	NE16	NNE9	NNE9	NE11	NE12	N7	NNW11	NW11	NW12	NW12	NE8.7	NE16
26-Sep	NW12	WNW16	NW13	WNW13	W17	W18	WNW20	WNW21	WNW21	WNW21	W21	W21	W19	WNW21	WNW25	WNW23	WNW26	WNW23	W16	W9	WNW7	S9	S11	SSW11	W15.7	WNW26
27-Sep	SSW10	SSW11	SSW10	SSW11	SSW11	S11	SSW12	SSW11	SW14	SW16	WSW19	SW18	SW18	SW17	WSW17	WSW17	WSW18	WSW13	SSW10	S11	S11	S12	S13	S10	SW12.3	WSW19
28-Sep	S11	S11	S9	S11	SSE13	SSE13	SSE14	SSE14	S15	S16	S16	S15	S15	S17	S18	S18	S19	S13	SSE14	SSE14	SSE15	SSE16	SSE15	SSE14	S14.3	S19
29-Sep	SSE14	SSE14	S7	SSE3	SSE4	S5	SSE7	S9	SSW11	SW12	W15	WNW20	WNW21	WNW24	WNW28	WNW24	W22	WSW15	SW11	SW10	SSW11	SSW11	S10	S9	WSW8.8	WNW28
30-Sep	S8	S10	S10	SSW10	SSW10	SSW10	W10	WNW18	NW17	NW19	NW19	NW18	NW21	NW19	NW22	NNW16	NNW16	N10	E1	SE3	SSE6	SSE7	SE3	SSE3	WNW6.4	NW22
	SSE4.9	SSE4.0	SSE4.1	SSE3.7	SSE3.6	S3.9	SSE3.6	S2.7	SSW3.5	SW3.7	SW3.8	SW4.5	SW4.5	WSW5.2	WSW5.3	WSW4.8	WSW4.4	WSW2.6	S1.8	SSE2.9	SSE3.9	SSE4.7	SSE5.0	SSE5.5	Diurnal Average	
	SSE20	SSE20	SSE22	SSE21	SSE22	SSE23	SSE24	SSE24	SSE22	NNW24	NNW23	S25	SSE24	S25	WNW28	WNW24	WNW26	WNW23	N16	N17	SW16	SE17	SSE22	SSE24	Diurnal Maximum	

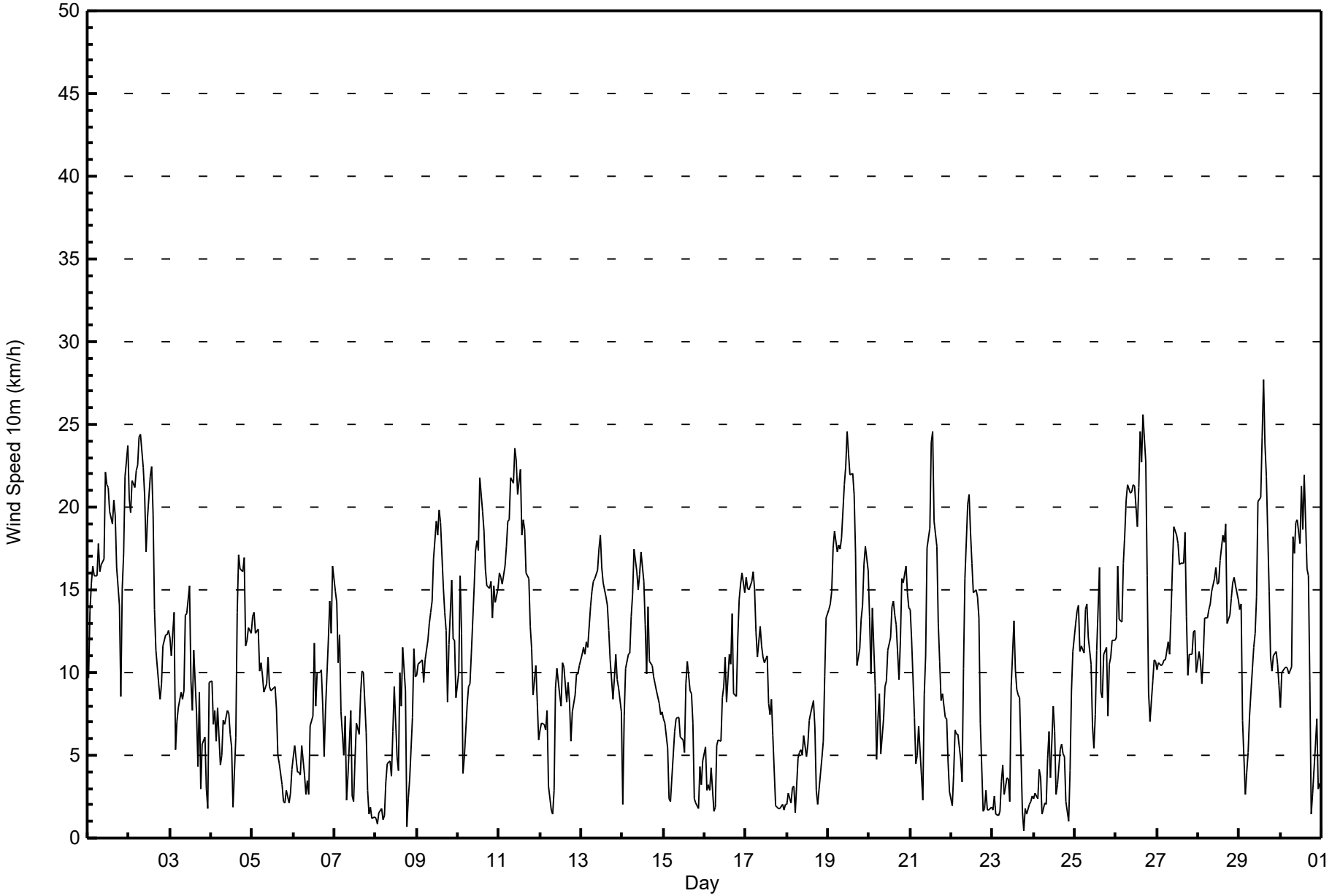
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Blackrod - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	161	22.36	22.36
6 - 11	260	36.11	58.47
12 - 19	239	33.19	91.67
20 - 28	60	8.33	100.00
29 - 38	0	0.00	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Blackrod - September 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	9	13	4	18	28	27	19	4	10	5	6	5	0	3	4	161
6 - 11	14	14	12	12	2	0	18	49	45	33	10	3	6	14	13	15	260
12 - 19	11	7	3	8	1	0	10	70	39	10	14	6	5	21	19	15	239
20 - 28	0	0	0	0	0	0	0	21	9	0	1	0	3	16	3	7	60
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	30	28	24	21	28	55	159	97	53	30	15	19	51	38	41	720

Total Number of Valid Hours: 720

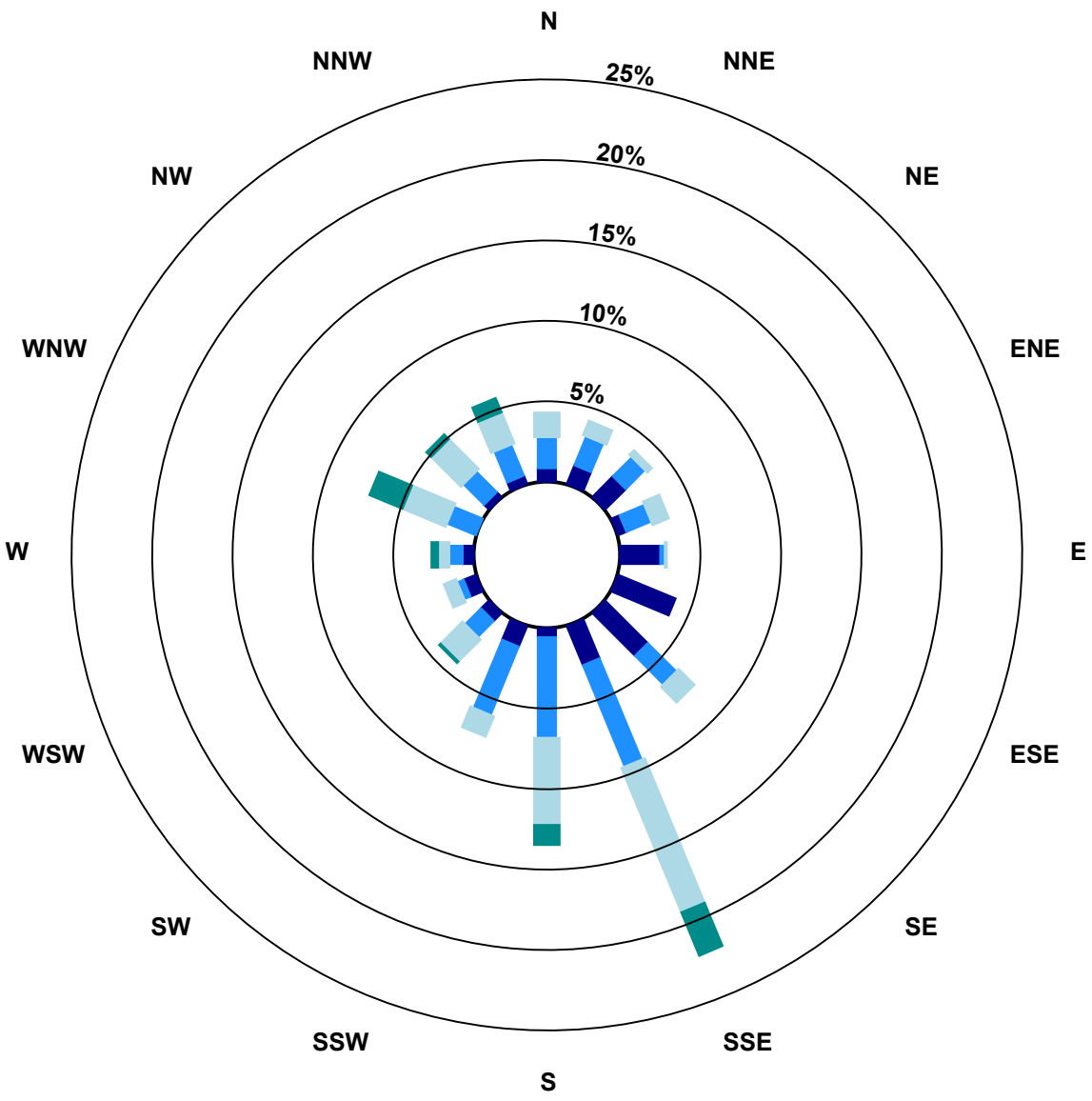
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Blackrod



Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 10m (WS10) - km/h

Blackrod - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8 km/h on Sep 29 15:00

Minimum Value: 1 km/h on Sep 18 01:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 3 Q_3 = 4 P_{90} = 5 P_{99} = 6

Hours in Service:	720
Hours of Data:	720
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-Sep	2	2	3	3	3	3	3	3	3	4	5	5	5	5	5	5	4	5	4	3	4	4	5	5	5
2-Sep	5	4	5	4	5	5	5	6	5	5	4	6	6	6	5	4	4	3	3	3	4	4	5	4	6
3-Sep	4	4	3	2	2	3	3	3	3	3	4	4	4	2	3	3	2	6	1	1	2	2	1	2	6
4-Sep	2	2	2	1	2	2	2	2	2	2	2	1	2	2	2	5	3	3	3	3	3	3	3	3	5
5-Sep	4	3	3	3	3	2	2	2	2	3	2	3	2	3	3	2	1	1	1	1	1	1	1	1	4
6-Sep	1	1	1	2	1	1	1	1	1	2	2	3	3	3	3	3	3	3	2	3	3	3	3	3	3
7-Sep	3	3	3	3	6	2	2	1	2	2	2	2	2	3	3	3	3	3	2	2	1	1	1	2	6
8-Sep	1	1	1	1	1	1	1	1	1	1	2	3	3	2	4	4	3	2	2	1	1	1	2	2	4
9-Sep	1	2	2	2	1	2	2	2	2	3	4	4	5	6	6	4	4	2	2	4	4	2	3	2	6
10-Sep	4	4	3	3	2	1	1	2	3	4	4	5	4	5	7	5	4	4	3	4	3	4	4	4	7
11-Sep	4	4	4	4	5	5	5	5	6	6	7	5	5	7	6	5	5	4	3	4	2	3	2	2	7
12-Sep	2	2	3	2	2	3	2	1	2	3	3	3	3	3	3	3	3	3	2	1	1	1	1	2	3
13-Sep	2	2	2	2	2	3	3	3	3	3	4	4	5	5	4	4	3	3	2	1	1	2	2	2	5
14-Sep	2	1	2	2	2	3	3	4	3	3	3	4	3	3	3	5	3	3	2	2	1	2	2	2	5
15-Sep	1	1	1	2	2	2	2	1	1	1	2	2	3	3	4	2	2	3	3	1	2	3	2	2	4
16-Sep	1	2	1	1	1	1	2	1	1	2	3	2	3	3	3	2	4	2	2	3	3	3	3	2	4
17-Sep	3	3	3	3	3	3	2	2	2	2	2	2	3	3	3	2	2	2	1	1	1	1	1	1	3
18-Sep	1	2	1	1	2	2	1	1	1	2	2	3	3	4	3	3	2	2	1	1	1	1	2	2	4
19-Sep	2	2	3	3	4	3	3	4	4	4	5	6	5	5	5	5	4	2	2	2	3	3	3	3	6
20-Sep	4	2	2	3	2	2	3	1	1	2	2	2	3	3	3	3	3	2	2	3	2	3	3	2	4
21-Sep	2	2	3	2	2	1	1	2	2	3	5	6	6	6	5	4	3	2	1	1	1	2	3	1	6
22-Sep	2	3	2	1	2	2	4	4	4	5	5	5	4	4	4	4	3	2	2	2	1	1	1	1	5
23-Sep	1	1	1	2	2	1	2	1	2	1	1	3	3	3	3	3	4	2	1	1	1	1	1	1	4
24-Sep	1	1	1	2	3	1	1	1	2	3	3	3	3	2	3	2	1	1	1	1	1	2	2	3	3
25-Sep	3	3	4	3	3	3	4	4	5	4	3	3	3	5	5	4	3	3	3	2	2	3	3	3	5
26-Sep	4	4	4	4	5	5	6	5	6	6	6	6	5	6	7	6	6	5	5	6	5	2	2	2	7
27-Sep	2	2	2	2	2	2	2	2	3	4	5	5	5	5	5	5	5	5	2	2	1	2	2	1	5
28-Sep	2	1	1	2	2	3	2	2	3	3	3	4	3	4	4	4	5	3	2	2	3	2	3	2	5
29-Sep	3	2	3	2	2	2	1	3	3	3	5	6	6	7	8	6	7	5	3	2	3	3	1	2	8
30-Sep	1	1	1	1	1	2	5	4	5	5	5	5	6	6	6	4	4	3	1	2	3	2	2	1	6
	5	4	5	4	6	5	6	6	6	6	7	6	6	7	8	6	7	6	5	6	5	4	5	5	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Blackrod - September 2026

Direction of Maximum Speed: 292 deg on Sep 29 15:00
Direction of Maximum Daily Speed Average: 149.0 deg on Sep 2

Direction of Minimum Speed: 48 deg on Sep 23 19:00

Direction of Minimum Daily Speed Average: 0.9 deg on Sep 18

Monthly Average Direction: 192.8 deg

Hours in Service:	720
Hours of Data:	720
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-Sep	151	157	159	164	161	167	169	171	174	165	161	152	166	171	164	160	167	157	155	141	144	145	149	153	159.9
2-Sep	157	151	151	151	151	147	149	151	154	152	164	155	153	159	151	146	145	146	146	130	129	128	126	134	149.0
3-Sep	133	133	147	86	65	50	49	50	46	48	57	57	67	46	32	59	126	176	106	60	69	92	142	141	78.6
4-Sep	147	132	137	151	161	121	129	159	183	158	161	176	191	244	355	330	351	355	355	6	20	22	21	15	36.1
5-Sep	13	11	25	6	13	8	7	10	21	17	35	32	32	360	14	36	24	27	121	147	132	108	158	121	21.9
6-Sep	134	147	153	141	124	133	123	115	116	103	51	128	152	145	148	166	150	145	128	138	156	155	161	165	144.8
7-Sep	165	163	154	161	159	131	160	262	198	186	231	27	45	19	19	351	27	27	55	85	94	78	92	146	123.4
8-Sep	113	88	54	34	121	80	36	359	341	28	358	7	7	341	295	295	296	310	342	125	138	156	156	160	341.3
9-Sep	165	179	171	180	174	173	175	177	179	205	222	228	235	227	232	228	215	200	188	174	218	202	219	209	203.5
10-Sep	247	288	289	236	166	193	187	193	241	287	300	292	299	299	302	293	295	289	292	298	315	319	322	321	289.3
11-Sep	322	319	317	321	327	329	330	332	333	332	336	329	336	338	326	331	325	327	333	339	328	326	330	318	329.2
12-Sep	319	302	298	297	295	277	238	202	244	222	232	268	282	302	308	295	288	288	203	164	166	162	162	167	255.2
13-Sep	168	172	174	173	170	162	162	166	178	181	182	210	206	196	195	203	201	193	162	150	152	157	160	167	178.9
14-Sep	258	339	352	359	354	350	358	1	358	350	340	349	345	341	318	328	338	332	334	337	348	332	331	330	344.1
15-Sep	339	2	13	1	265	204	185	189	192	196	222	236	199	210	219	186	173	247	309	118	150	40	163	145	205.9
16-Sep	146	138	128	141	45	142	162	197	185	194	198	170	162	168	163	155	181	167	139	142	144	149	151	159	159.2
17-Sep	155	159	162	164	163	166	171	180	179	180	185	192	183	228	264	213	290	31	121	124	115	103	98	142	175.3
18-Sep	134	154	95	39	32	7	34	40	5	14	17	341	316	305	311	290	309	221	111	120	127	137	146	154	25.6
19-Sep	152	155	160	161	161	163	159	167	176	175	176	179	176	188	183	182	185	175	162	160	156	159	158	164	169.3
20-Sep	159	147	155	148	164	169	158	162	197	195	181	186	182	188	181	178	179	169	155	153	158	163	163	161	168.3
21-Sep	162	166	161	147	148	171	180	187	176	162	155	150	168	170	186	176	172	167	163	151	145	139	41	96	163.3
22-Sep	58	54	55	54	64	206	276	333	329	326	327	313	303	288	294	292	296	313	29	82	117	125	130	119	319.5
23-Sep	109	84	109	92	245	227	195	205	215	212	192	197	176	199	225	198	277	250	48	107	103	122	123	133	195.4
24-Sep	111	141	131	149	150	153	111	144	188	259	266	218	319	313	323	359	52	79	96	87	75	81	81	76	96.9
25-Sep	71	65	81	76	61	57	61	69	74	73	68	60	80	64	46	27	25	44	44	6	346	314	314	323	47.3
26-Sep	311	296	307	294	276	278	286	288	286	284	278	275	277	282	282	286	291	289	281	276	286	186	187	197	280.8
27-Sep	196	200	198	196	205	191	196	203	217	228	243	235	228	225	245	240	237	240	207	190	182	181	177	177	214.3
28-Sep	182	181	180	174	164	165	168	164	173	177	181	188	181	183	183	184	188	178	164	160	161	158	161	166	173.8
29-Sep	166	154	176	160	154	180	162	176	195	229	270	288	292	289	292	283	274	253	230	224	211	210	186	187	242.4
30-Sep	186	184	191	198	200	201	266	293	311	306	304	308	315	314	321	335	348	355	92	145	155	157	137	155	292.8
	160.1	162.6	158.1	159.8	160.8	169.7	167.2	183.8	204.8	220.0	231.5	231.2	224.0	237.4	253.3	247.2	253.2	244.9	172.2	151.4	156.1	157.0	157.3	158.9	
	Diurnal Average																								

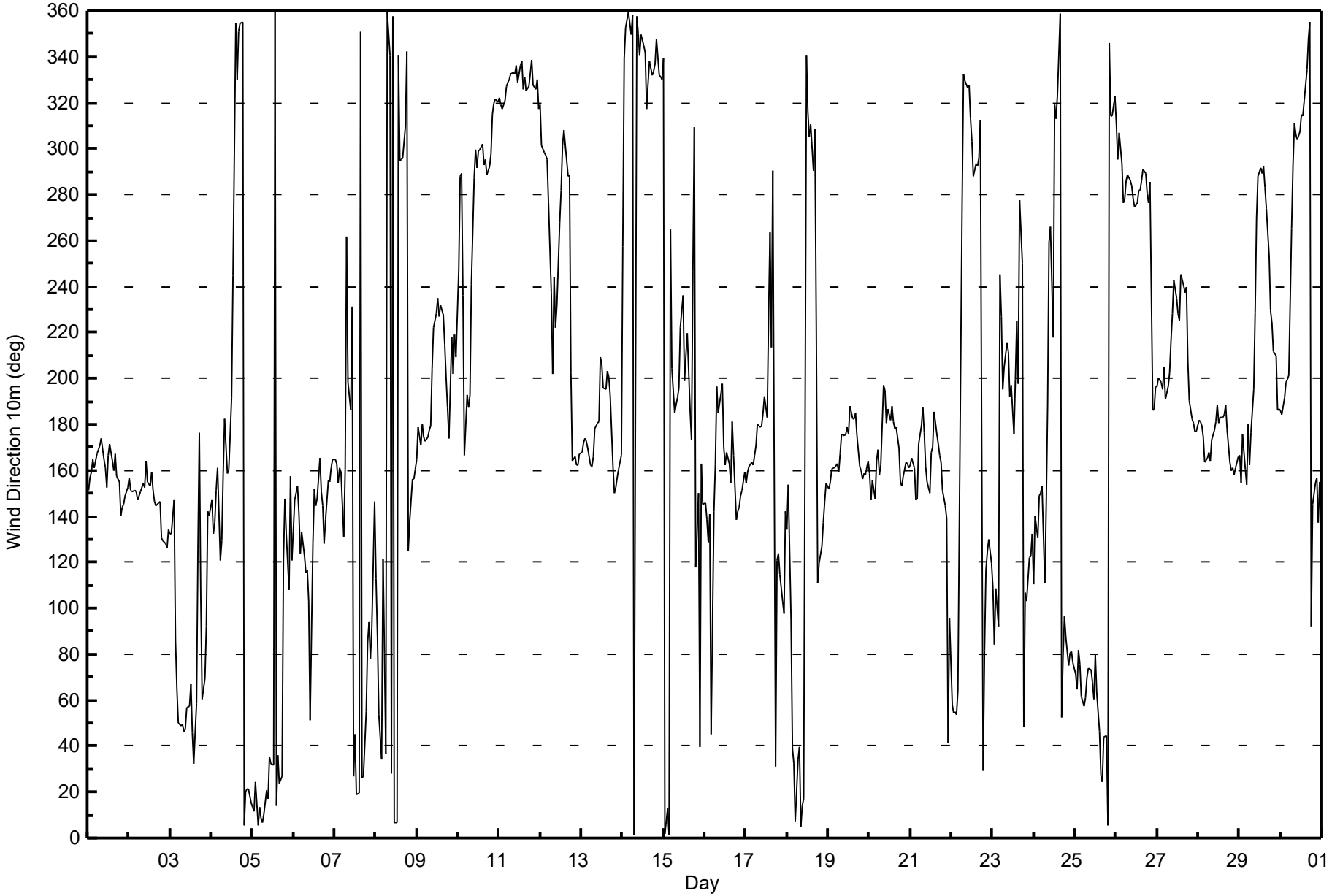
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Blackrod - September 2026



Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 98 deg on Sep 23 18:00

Minimum Value: 7 deg on Sep 12 21:00

Percentiles: P_1 = 10 P_{10} = 12 Q_1 = 14 Median = 18 Q_3 = 28 P_{90} = 50 P_{99} = 85

Hours in Service:	720
Hours of Data:	720
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-Sep	12	11	11	13	13	14	13	14	16	18	18	19	20	20	20	18	19	18	16	20	18	18	15	15	20
2-Sep	15	16	15	15	15	16	15	15	15	18	20	19	19	20	19	22	19	18	18	23	25	24	27	24	27
3-Sep	23	25	19	47	22	23	18	17	16	11	17	17	27	19	15	40	29	31	50	14	28	61	67	19	67
4-Sep	16	15	15	20	15	39	27	22	24	25	29	25	27	74	34	17	12	13	14	14	16	17	16	16	74
5-Sep	16	16	16	14	17	14	14	17	18	18	19	22	28	33	33	47	38	59	41	40	20	40	55	28	59
6-Sep	12	12	20	28	18	19	22	36	43	61	29	43	21	27	20	21	22	22	26	21	14	16	18	14	61
7-Sep	15	15	14	15	53	23	20	60	49	20	74	80	66	39	46	30	25	19	18	29	43	33	72	63	80
8-Sep	33	43	55	55	35	50	32	27	19	40	25	28	61	57	31	59	16	18	97	35	20	10	10	12	97
9-Sep	11	22	15	12	13	15	12	12	12	22	17	18	23	19	19	18	18	13	14	12	19	14	16	17	23
10-Sep	30	11	17	56	33	14	13	17	27	19	16	16	20	16	16	14	13	12	11	14	16	15	14	14	56
11-Sep	14	16	16	15	14	14	14	14	16	17	16	14	17	21	17	18	15	15	12	13	13	13	13	19	21
12-Sep	17	19	19	17	16	84	79	87	69	26	32	42	50	24	24	29	27	26	28	8	7	8	12	14	87
13-Sep	15	17	19	15	13	14	13	14	13	15	17	21	25	23	19	21	17	15	13	10	9	10	12	19	25
14-Sep	74	12	15	14	12	12	17	16	16	14	15	13	16	16	23	31	15	13	12	15	10	11	12	12	74
15-Sep	11	17	18	82	88	46	24	18	17	22	37	45	55	38	29	23	15	54	84	33	56	50	47	44	88
16-Sep	14	68	48	48	31	55	81	12	16	14	14	20	21	29	30	24	18	18	17	16	14	14	12	13	81
17-Sep	13	12	14	14	18	15	15	20	10	14	19	25	20	37	41	20	44	60	63	37	55	21	30	24	63
18-Sep	22	53	55	28	74	79	16	19	20	36	34	53	60	49	43	35	23	69	31	16	11	16	13	11	79
19-Sep	11	11	12	13	13	12	12	14	14	15	16	15	17	17	17	16	14	14	9	10	13	14	12	15	17
20-Sep	27	17	11	15	26	14	14	16	15	16	23	20	20	19	18	20	12	11	12	12	13	13	12	10	27
21-Sep	12	12	19	25	29	10	23	85	17	22	18	20	18	19	17	16	13	10	22	11	13	13	45	46	85
22-Sep	57	31	12	13	48	34	72	18	15	16	16	19	22	21	24	16	13	18	58	54	27	24	30	22	72
23-Sep	28	43	33	64	76	32	29	46	29	37	56	19	19	25	27	31	34	98	86	36	50	31	39	32	98
24-Sep	28	33	57	44	72	76	71	52	48	45	84	33	54	93	92	41	29	16	20	46	44	18	16	17	93
25-Sep	18	17	23	20	16	17	16	23	29	34	40	47	34	28	17	30	21	12	12	32	14	23	19	18	47
26-Sep	19	13	18	12	17	16	15	13	15	14	17	18	17	17	17	14	13	13	17	43	53	12	10	13	53
27-Sep	13	14	14	13	15	13	13	15	15	17	20	19	19	19	22	21	20	21	17	12	11	11	10	9	22
28-Sep	10	10	11	10	12	13	12	12	14	15	16	15	14	15	18	17	16	16	11	10	12	11	12	13	18
29-Sep	17	9	51	81	32	42	22	21	21	20	22	14	14	19	17	15	19	22	20	19	20	20	10	13	81
30-Sep	13	10	11	12	13	13	37	12	16	16	15	20	19	17	21	15	17	17	51	41	23	15	65	43	65
	74	68	57	82	88	84	81	87	69	61	84	80	66	93	92	59	44	98	97	54	56	61	72	63	
	Diurnal Maximum																								

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS02
PIHEW POINT
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - PIHEW POINT (AMS32)
SEPTEMBER 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	685	34	35	99.86	37	0	11.9	0
H2S (ppb) Average	682	36	38	99.72	12.4	2	3.4	1
THC (ppm) Average	643	36	77	94.31	4.8	-	2.5	-
NMHC(ppm) Average	643	36	77	94.31	1.031	-	0.284	-
CH4(ppm) Average	643	36	77	94.31	4.8	-	2.5	-
Temperature (C) Average	720	0	0	100	27.7	-	21.6	-
Relative Humidity (%) Average	720	0	0	100	97.7	-	87.1	-
Wind Speed 10 m (km/h) Average	719	0	1	99.86	36	-	27	-
Wind Direction 10 m (deg) Average	719	0	1	99.86	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - PIHEW POINT (AMS32)
SEPTEMBER 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	685	2.32	5.9	-	0	0	0.1	0.2	0.5	7.8	37
H2S (ppb) Average	682	0.69	1.3	-	0	0.1	0.1	0.3	0.7	1.6	12.4
THC (ppm) Average	643	2.18	0.3	-	1.9	2	2	2.1	2.2	2.4	4.8
NMHC(ppm) Average	643	0.018	0.088	-	0	0	0	0	0	0	1.031
CH4(ppm) Average	643	2.17	0.3	-	1.9	2	2	2.1	2.2	2.4	4.8
Temperature 2 m (C) Average	720	12.75	5	-	3.2	7	9	11.7	16.5	19.4	27.7
Relative Humidity (%) Average	720	71.03	17.2	-	25.7	44.4	60.5	74.1	85	91.5	97.7
Wind Speed 10 m (km/h) Average	719	10.5	7	-	1	3	5	8	15	21	36
Wind Direction 10 m (deg) Average	719	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - PIHEW POINT (AMS32)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
H2S	02 Sep 2026 12:00	02 Sep 2026 12:00	1	Maintenance - sample manifold cleaned
H2S, SO2	14 Sep 2026 13:00	14 Sep 2026 13:00	1	Maintenance - sample manifold cleaned
THC/NMHC/CH4	14 Sep 2026 10:00	14 Sep 2026 13:00	4	Maintenance - station operator activities
THC/NMHC/CH4	20 Sep 2026 04:00	21 Sep 2026 09:00	30	Unstable Operation - excessive baseline drift
THC/NMHC/CH4	21 Sep 2026 10:00	21 Sep 2026 14:00	5	Maintenance - station operator activities
THC/NMHC/CH4	25 Sep 2026 11:00	25 Sep 2026 12:00	2	Maintenance - analyzer replaced
Wind Speed, Wind Direction	01 Sep 2026 01:00	01 Sep 2026 01:00	1	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Pihew Point - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 37.0 ppb on Sep 10 09:00 Maximum Daily Average: 11.9 ppb on Sep 26

Minimum Value: 0.0 ppb on Sep 2 14:00 Minimum Daily Average: 0.0 ppb on Sep 14
Maximum Diurnal Average: 6.1 ppb at hour 15 Minimum Diurnal Average: 0.5 ppb at hour 1
Monthly Average: 2.32 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.2 Q_3 = 0.5 P_{90} = 7.8 P_{99} = 29.8

Hours in Service:	720
Hours of Data:	685
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-Sep	0.1	Z	0.1	0.0	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.2	0.2	0.3	0.4	0.6	0.6	0.4	0.2	0.2	0.2	0.3	0.4	0.3	0.6
2-Sep	0.3	0.4	Z	0.5	0.4	0.4	0.3	0.3	0.3	C	C	C	C	0.0	0.0	2.5	6.5	4.5	5.1	5.2	2.4	0.7	0.1	0.0	1.6	6.5
3-Sep	0.1	3.0	2.9	3.2	2.0	5.0	Z	3.8	0.8	0.4	0.3	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	1.0	5.0
4-Sep	0.3	0.9	0.6	0.1	Z	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	0.0	0.1	0.9
5-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4
6-Sep	Z	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.4	0.3	0.5	0.5	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	0.5
7-Sep	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.6	0.2	0.2	0.3	0.2	0.1	0.1	4.2	13.3	11.0	0.6	0.4	0.3	0.3	0.2	0.1	0.1	1.4	13.3
8-Sep	0.1	0.1	Z	0.2	0.1	0.1	0.2	0.1	0.3	0.2	0.2	0.1	1.1	4.2	2.6	1.9	9.3	0.4	0.3	0.3	0.2	0.2	0.1	0.0	1.0	9.3
9-Sep	0.1	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.3
10-Sep	0.5	8.2	0.2	13.9	14.5	Z	0.7	16.3	37.0	15.4	6.3	12.7	18.0	3.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	6.4	37.0
11-Sep	0.1	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.1
12-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.4	0.1	10.4	22.1	23.9	25.3	13.6	12.2	6.9	1.0	0.3	0.2	0.2	0.2	0.1	5.1	25.3
13-Sep	0.7	Z	0.1	0.1	0.2	0.3	2.2	0.3	0.3	0.2	0.2	0.3	0.3	0.2	2.1	0.6	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.4	2.2
14-Sep	0.1	0.1	Z	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	M	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1
15-Sep	0.1	0.1	0.1	Z	0.0	0.1	2.6	1.4	1.8	4.5	9.9	7.4	15.3	0.2	0.2	0.1	0.1	0.1	0.3	0.6	0.1	0.1	0.1	0.0	2.0	15.3
16-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.2	0.1	4.9	6.4	2.0	0.8	0.7	0.5	0.2	0.6	1.2	0.2	0.2	0.2	1.8	0.2	0.3	0.9	6.4
17-Sep	0.2	0.1	0.2	0.1	0.1	Z	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	21.1	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	1.1	21.1
18-Sep	Z	0.2	0.5	0.1	0.2	0.3	0.2	0.2	0.3	0.2	0.3	10.5	13.9	2.9	29.7	23.5	0.9	2.9	1.4	2.1	1.7	0.6	0.4	0.2	4.0	29.7
19-Sep	0.2	Z	0.1	0.1	0.1	0.1	0.1	0.2	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	0.1	0.1	0.1	0.2	0.4
20-Sep	0.2	1.6	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.6	0.3	0.8	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	1.6
21-Sep	0.1	0.1	0.0	Z	0.2	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.6	0.9	2.3	0.9	0.8	0.9	1.1	0.5	0.2	0.2	22.2	6.8	1.7	22.2
22-Sep	1.2	0.4	0.2	0.1	Z	0.1	0.1	0.2	2.1	0.6	0.2	0.1	0.1	8.5	34.0	19.0	13.6	7.8	11.5	6.7	2.1	2.2	0.9	0.2	4.9	34.0
23-Sep	0.3	0.1	0.1	0.0	0.0	Z	0.1	0.1	0.1	0.2	0.2	0.5	1.3	2.3	1.7	0.8	0.6	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.4	2.3
24-Sep	Z	2.9	1.5	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	1.1	5.7	19.7	17.4	5.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	2.4	19.7
25-Sep	0.4	Z	0.4	0.2	0.2	0.5	0.5	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	0.0	0.0	0.0	0.0	0.2	0.5
26-Sep	0.0	0.0	Z	0.0	0.0	2.5	4.1	16.8	24.3	22.3	19.5	21.2	9.9	18.7	13.0	0.8	5.3	13.7	20.4	15.0	14.1	21.8	19.9	10.5	11.9	24.3
27-Sep	7.1	12.0	30.1	Z	17.3	17.5	14.6	17.2	18.0	20.5	13.8	12.8	1.6	25.0	21.0	11.1	6.3	0.4	0.3	0.4	0.2	0.2	0.2	0.3	10.8	30.1
28-Sep	0.8	3.9	1.2	0.3	Z	0.3	0.2	0.2	0.3	0.4	0.3	0.2	0.2	2.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.5	3.9
29-Sep	0.1	0.2	0.2	0.2	0.2	Z	0.1	0.1	0.1	0.1	0.5	12.1	6.3	3.2	5.0	25.8	12.4	32.6	37.0	33.1	7.1	7.8	35.8	20.3	10.4	37.0
30-Sep	Z	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.3
	0.5	1.4	1.6	0.8	1.4	1.1	1.0	2.0	3.0	2.5	2.1	3.2	3.4	3.5	6.1	4.5	2.9	2.5	2.7	2.2	1.0	1.2	2.7	1.4	Diurnal Average	
	7.1	12.0	30.1	13.9	17.3	17.5	14.6	17.2	37.0	22.3	19.5	21.2	22.1	25.0	34.0	25.8	13.6	32.6	37.0	33.1	14.1	21.8	35.8	20.3	Diurnal Maximum	

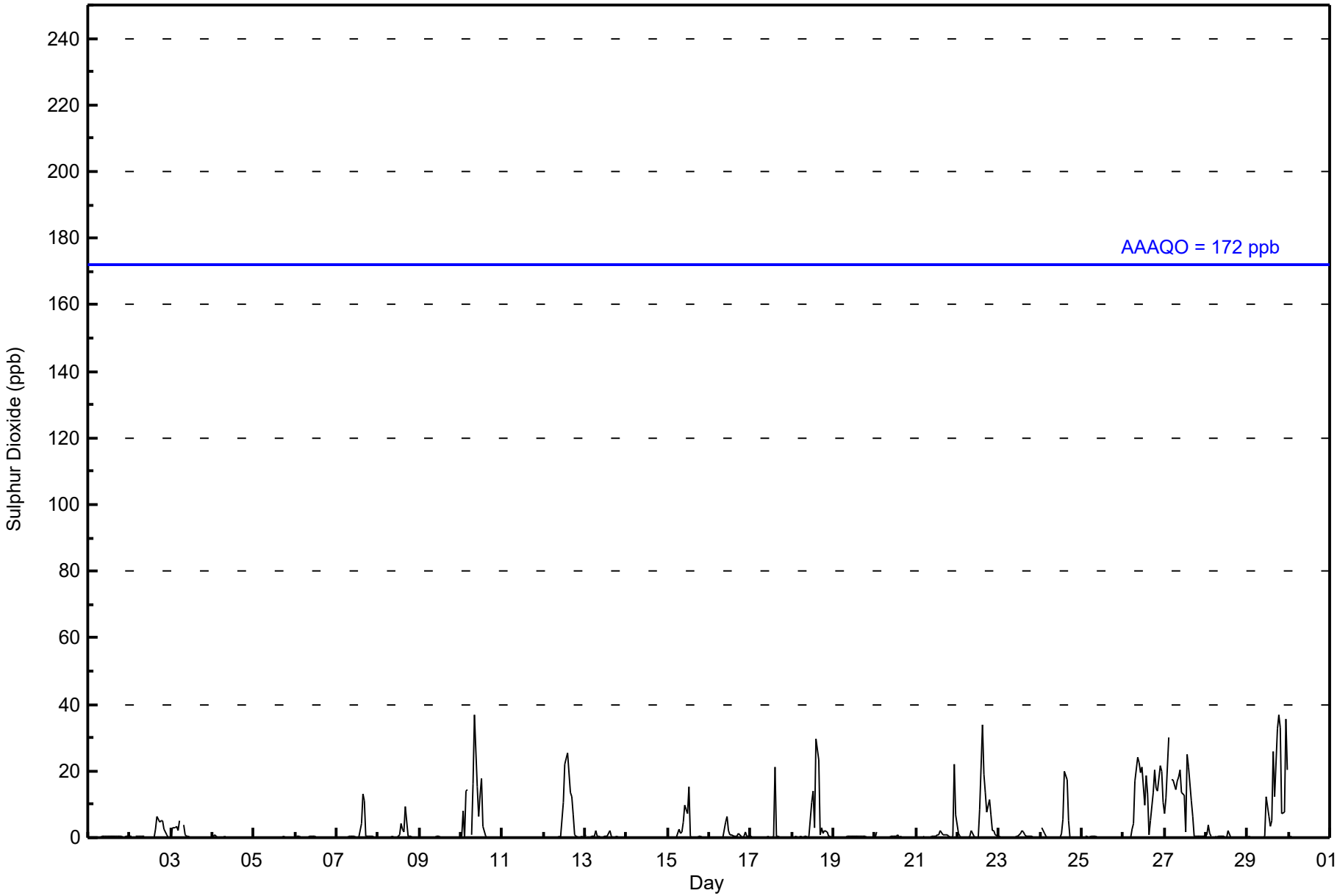
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Pihew Point - September 2026



Sulphur Dioxide (SO_2) - ppb
Pihew Point - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	623	90.95	90.95
11 - 20	41	5.99	96.93
21 - 60	21	3.07	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Pihew Point - September 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	64	25	8	9	20	55	77	43	38	43	90	14	30	33	31	42	622
11 - 20	2	0	0	0	1	1	0	0	0	0	4	15	18	0	0	0	41
21 - 60	0	1	0	0	1	0	0	0	0	0	3	4	11	1	0	0	21
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	66	26	8	9	22	56	77	43	38	43	97	33	59	34	31	42	684

Total Number of Valid Hours: 684

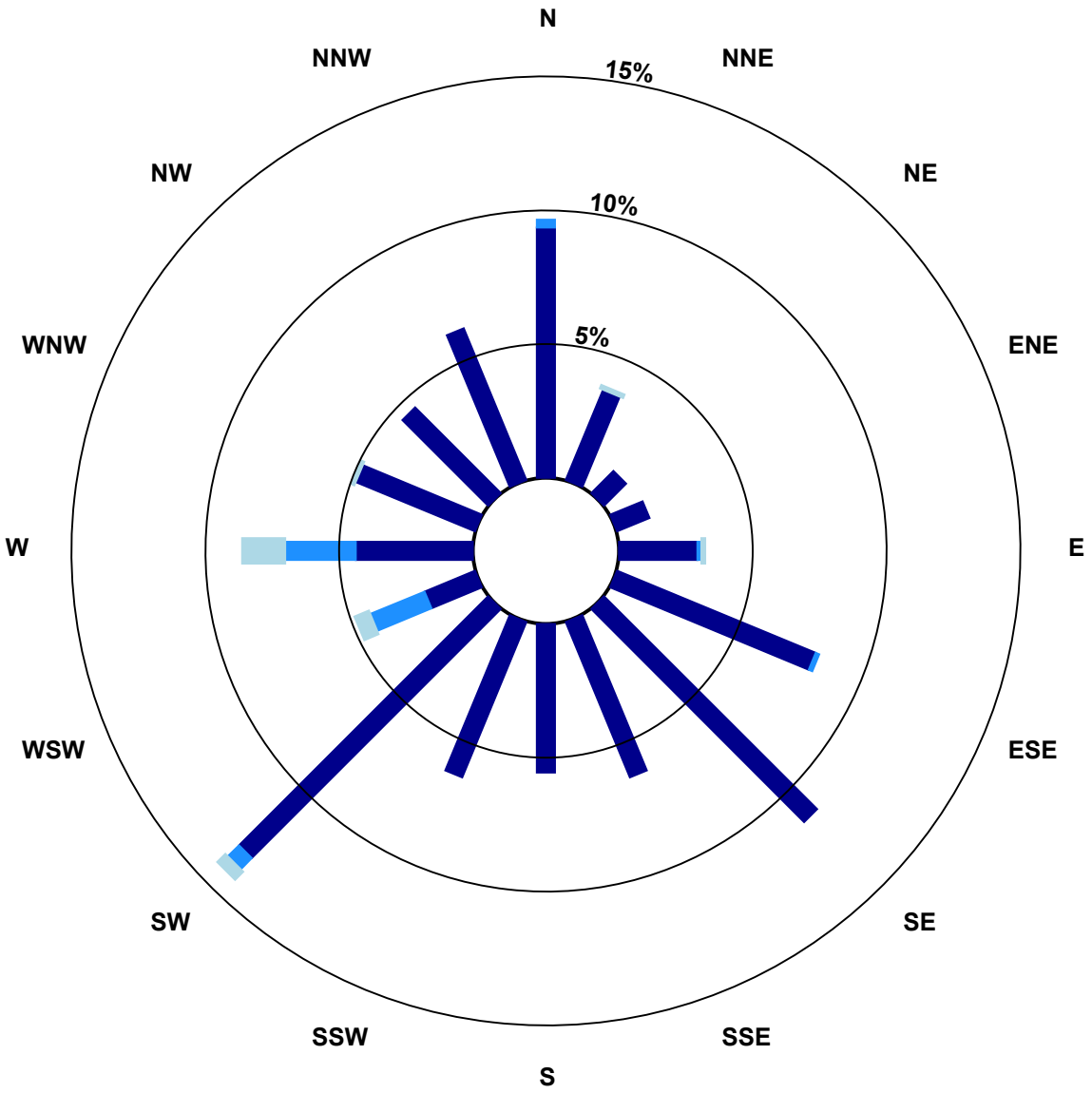
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Pihew Point



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

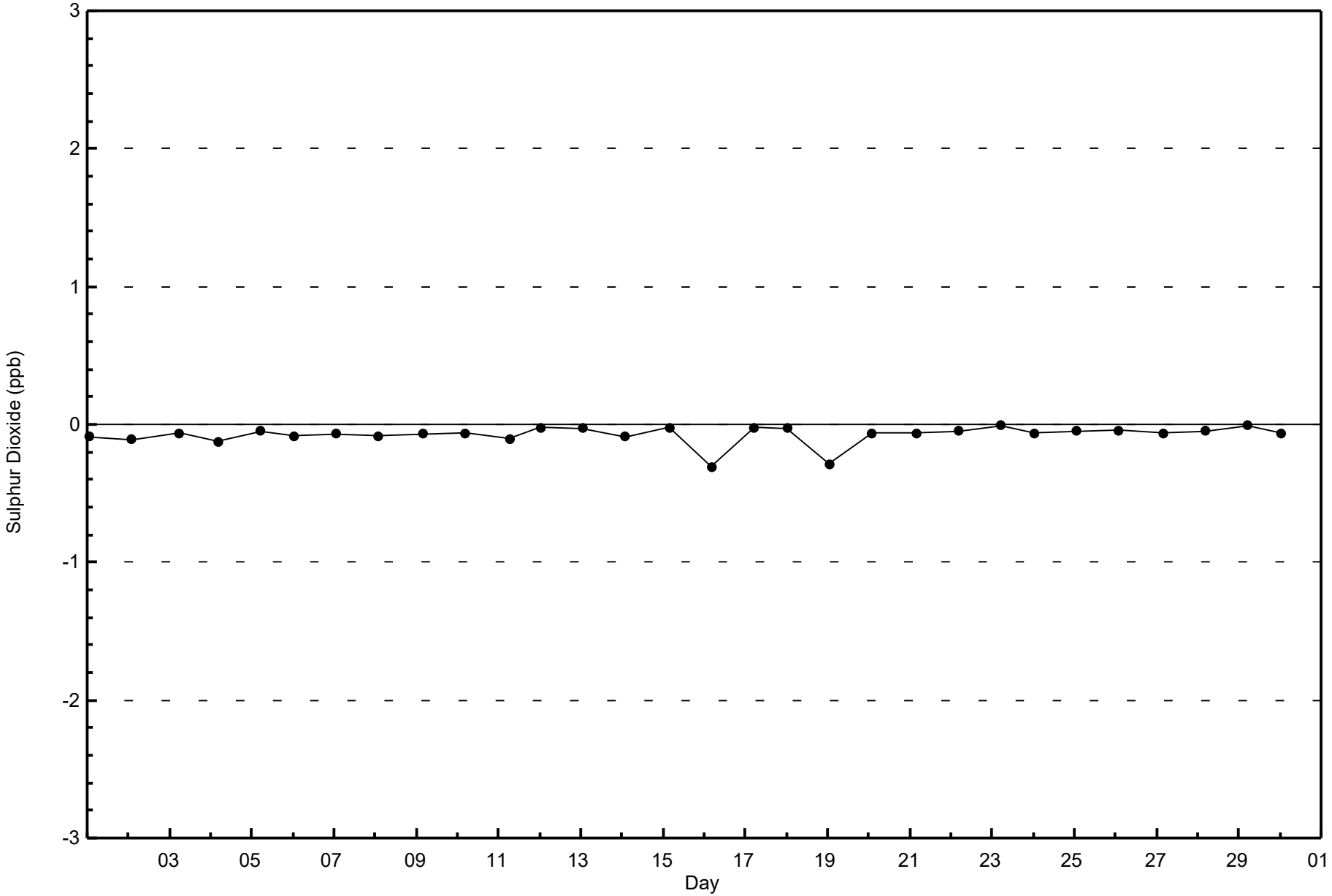
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Pihew Point - September 2026

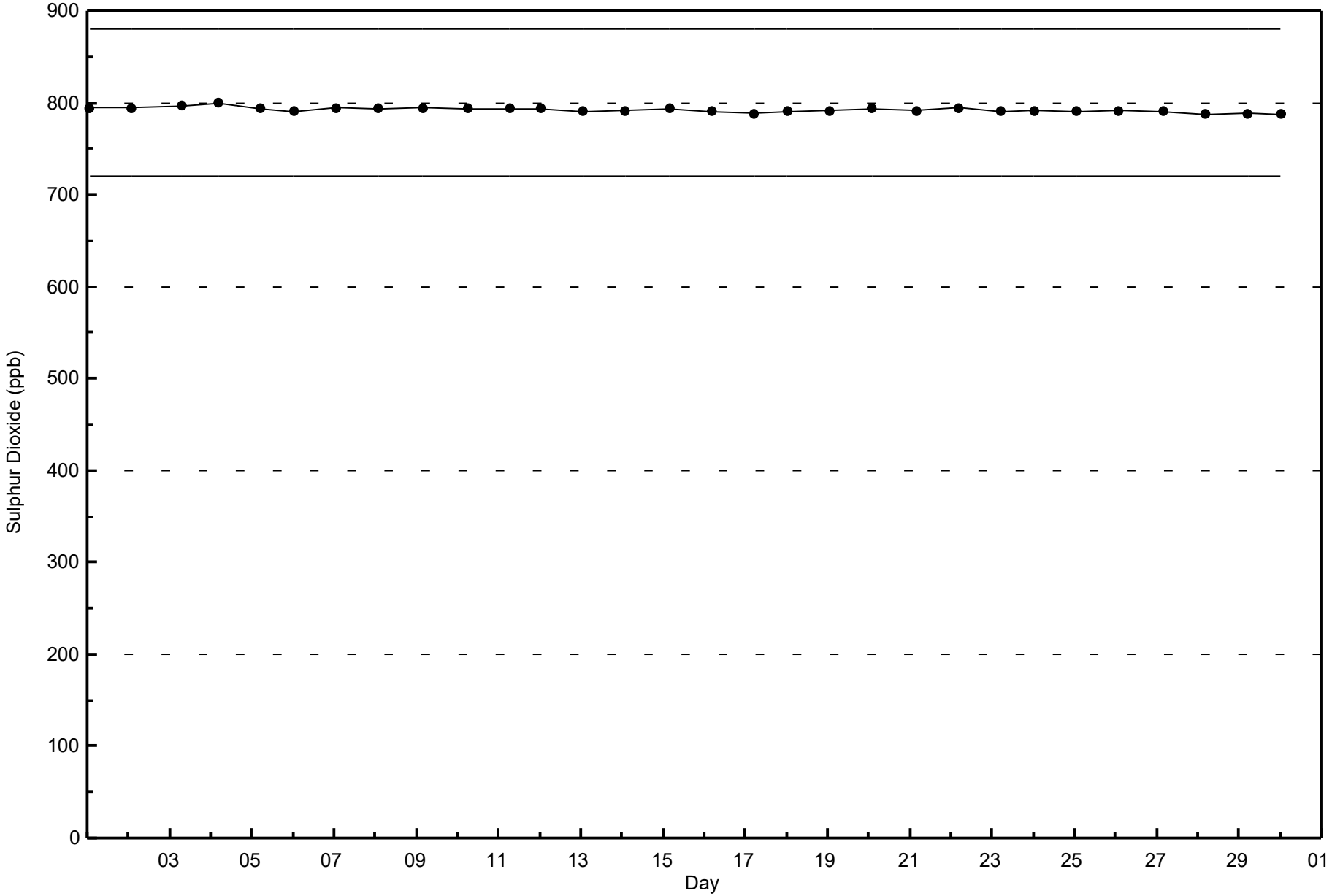


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Pihew Point - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Pihew Point - September 2026

Number of Exceedances (AAAQO): 1-hr: 2 24-hr: 1
Maximum Value: 12.4 ppb on Sep 8 03:00 Maximum Daily Average: 3.4 ppb on Sep 10

Minimum Value: 0.0 ppb on Sep 2 14:00 Minimum Daily Average: 0.1 ppb on Sep 20
Maximum Diurnal Average: 2.2 ppb at hour 3 Minimum Diurnal Average: 0.3 ppb at hour 13
Monthly Average: 0.69 ppb Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.1 Median = 0.3 Q_3 = 0.7 P_{90} = 1.6 P_{99} = 6.8

Hours in Service:	720
Hours of Data:	682
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-Sep	1.3	1.1	Z	0.7	0.5	0.4	0.3	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.3	0.2	0.3	1.3
2-Sep	0.3	1.3	3.2	0.2	Z	0.2	0.2	0.1	0.2	0.1	0.1	M	0.0	0.0	0.0	1.3	2.7	2.5	1.9	3.8	1.7	0.2	0.1	0.1	0.9	3.8
3-Sep	0.1	7.7	11.0	9.0	3.7	5.4	7.0	Z	0.7	0.7	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	2.0	11.0
4-Sep	2.1	4.7	3.1	0.3	0.3	Z	0.4	0.6	0.8	0.6	0.5	0.4	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.7	4.7
5-Sep	Z	0.2	0.3	0.3	0.3	0.5	0.5	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.3	1.5	0.3	1.5
6-Sep	0.9	Z	1.1	1.7	0.3	0.8	0.8	0.9	1.9	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.5	1.9
7-Sep	0.1	0.1	Z	0.3	0.4	0.1	0.3	2.0	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.2	0.2	0.1	0.0	0.1	0.2	2.0
8-Sep	0.2	2.2	12.4	0.6	Z	0.6	2.5	0.4	0.4	0.2	0.3	0.2	0.1	0.2	0.3	0.4	0.3	0.1	0.3	0.2	0.2	0.2	0.2	0.3	1.0	12.4
9-Sep	0.2	0.3	0.3	0.4	Z	0.3	0.4	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	0.1	0.1	0.1	0.2	0.4
10-Sep	0.1	4.2	6.9	1.6	0.7	0.4	Z	0.7	1.3	1.9	2.9	2.9	1.3	4.1	3.8	1.9	8.9	6.7	6.7	4.0	1.4	4.0	6.4	5.0	3.4	8.9
11-Sep	2.5	Z	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	1.0	0.2	2.5
12-Sep	1.8	Z	2.9	2.4	2.7	3.0	3.1	2.0	2.3	1.0	0.7	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	1.0	3.1
13-Sep	0.1	0.1	Z	0.1	0.1	0.2	0.4	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	0.1	0.2	0.3	0.3	0.1	0.4
14-Sep	0.3	0.3	0.1	Z	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	M	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	1.2	4.0	4.6	0.5	4.6
15-Sep	4.3	3.9	4.6	4.9	Z	2.6	0.8	0.4	0.2	0.1	0.3	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.4	1.1	1.7	2.3	0.2	1.3	4.9
16-Sep	0.2	0.1	0.1	0.1	0.2	Z	0.3	0.6	0.3	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.2	1.3	1.4	0.5	0.8	1.8	0.2	0.3	0.4	1.8
17-Sep	Z	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	0.1	0.2	0.3	0.3	0.2	0.3	0.8	1.5	0.2	1.5
18-Sep	0.9	Z	2.1	0.3	0.8	4.6	0.4	0.5	0.5	0.3	0.3	0.4	0.8	0.4	0.3	0.3	0.1	0.1	0.3	0.8	0.6	0.3	0.2	0.2	0.7	4.6
19-Sep	0.2	0.3	Z	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	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.3
20-Sep	0.2	0.3	0.4	Z	0.2	0.1	0.2	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.4
21-Sep	0.2	0.2	0.4	0.6	Z	0.1	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.3	1.3	1.2	0.3	0.4	0.8	0.8	0.3	0.2	2.0	1.9	0.6	2.0
22-Sep	4.1	1.2	2.2	1.5	0.5	Z	0.7	1.8	4.8	6.4	0.3	0.5	0.2	0.6	0.4	0.9	0.8	0.4	0.4	1.8	3.1	1.6	1.4	0.6	1.6	6.4
23-Sep	Z	0.2	0.7	0.3	0.3	0.3	0.3	0.4	0.2	0.3	0.3	0.5	0.7	1.3	0.8	0.5	0.5	0.6	0.6	0.7	0.7	0.9	0.9	1.0	0.6	1.3
24-Sep	1.1	Z	1.8	0.9	0.8	0.8	0.7	0.6	C	C	C	C	C	C	0.3	0.5	0.2	0.3	0.3	0.5	0.6	0.6	0.7	1.3	--	1.8
25-Sep	1.5	3.5	Z	0.9	0.8	1.4	1.3	1.2	1.2	1.0	0.8	0.8	0.8	0.8	0.9	0.9	0.8	0.8	0.7	0.7	0.8	0.7	0.7	0.7	1.0	3.5
26-Sep	0.6	0.6	0.6	Z	0.7	0.8	1.0	0.7	0.5	0.5	0.6	0.6	0.9	0.8	0.8	0.9	1.0	0.4	0.3	0.4	0.4	0.3	0.3	0.4	0.6	1.0
27-Sep	0.4	0.5	0.5	0.9	Z	1.4	1.1	1.5	1.3	0.6	0.5	0.3	0.1	0.4	0.4	0.4	0.3	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.5	1.5
28-Sep	0.3	0.3	0.2	0.1	0.1	Z	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.3
29-Sep	Z	0.0	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.5	0.6	1.1	1.0	0.8	0.8	0.6	0.5	0.4	0.5	0.4	0.6	0.5	0.3	0.4	0.5	1.1
30-Sep	0.9	Z	0.0	0.4	0.4	0.9	0.6	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.4	0.2	0.9
	1.0	1.4	2.2	1.1	0.6	1.0	0.8	0.6	0.7	0.6	0.4	0.4	0.3	0.4	0.4	0.4	0.6	0.5	0.5	0.6	0.5	0.6	0.8	0.8	Diurnal Average	
	4.3	7.7	12.4	9.0	3.7	5.4	7.0	2.0	4.8	6.4	2.9	2.9	1.3	4.1	3.8	1.9	8.9	6.7	6.7	4.0	3.1	4.0	6.4	5.0	Diurnal Maximum	

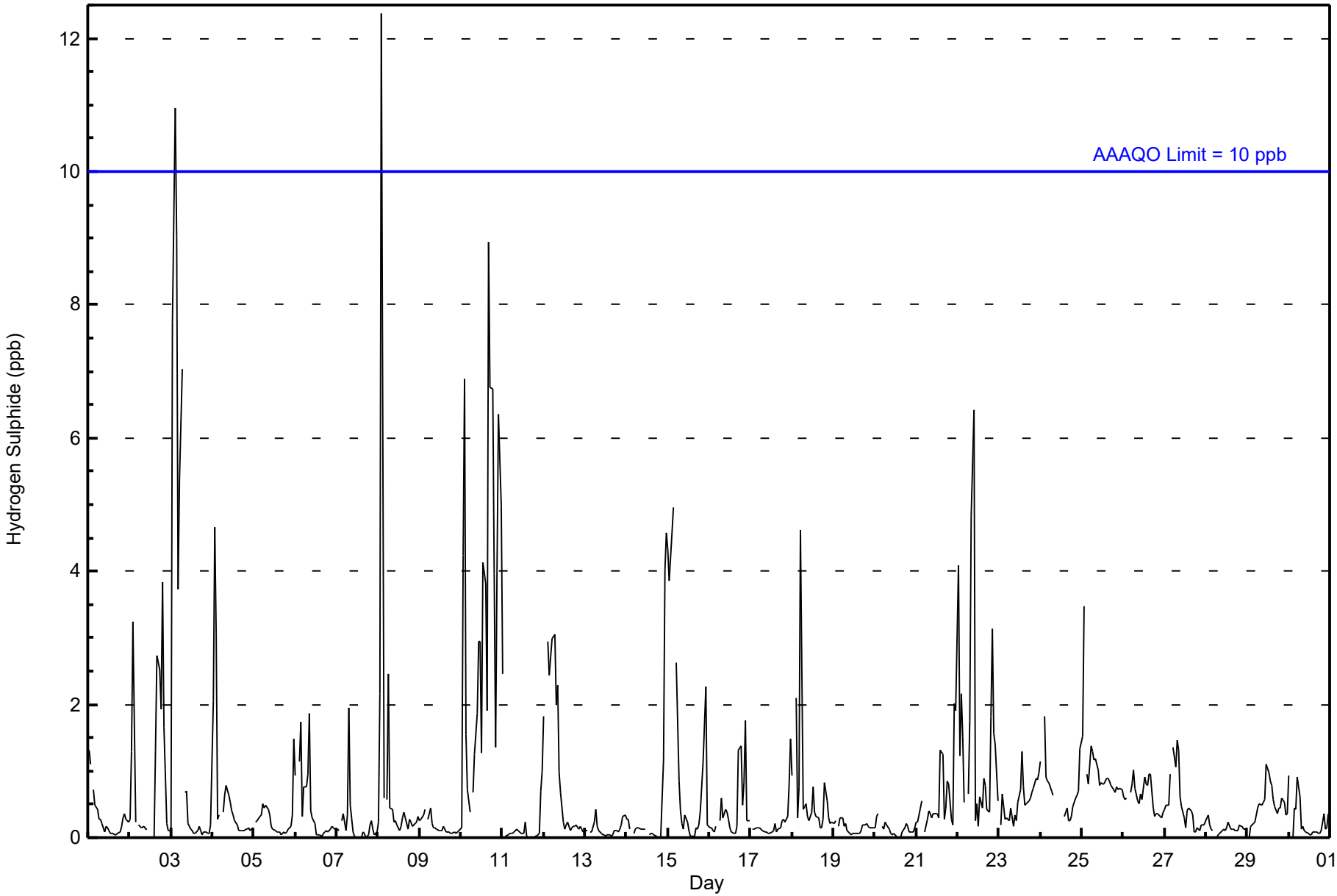
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Pihew Point - September 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Pihew Point - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	639	93.70	93.70
3 - 4	24	3.52	97.21
5 - 7	14	2.05	99.27
8 - 11	3	0.44	99.71
> 11	2	0.29	100.00

Total Number of Valid Hours: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Pihew Point - September 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	65	25	7	9	22	48	74	41	40	45	93	31	46	21	29	42	638
3 - 4	0	1	1	0	0	6	0	0	0	0	0	1	6	9	0	0	24
5 - 7	0	0	0	0	0	3	0	0	0	0	0	0	7	2	1	1	14
8 - 11	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	3
> 11	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2
Totals	65	26	8	9	22	60	74	41	40	45	93	32	60	32	31	43	681

Total Number of Valid Hours: 681

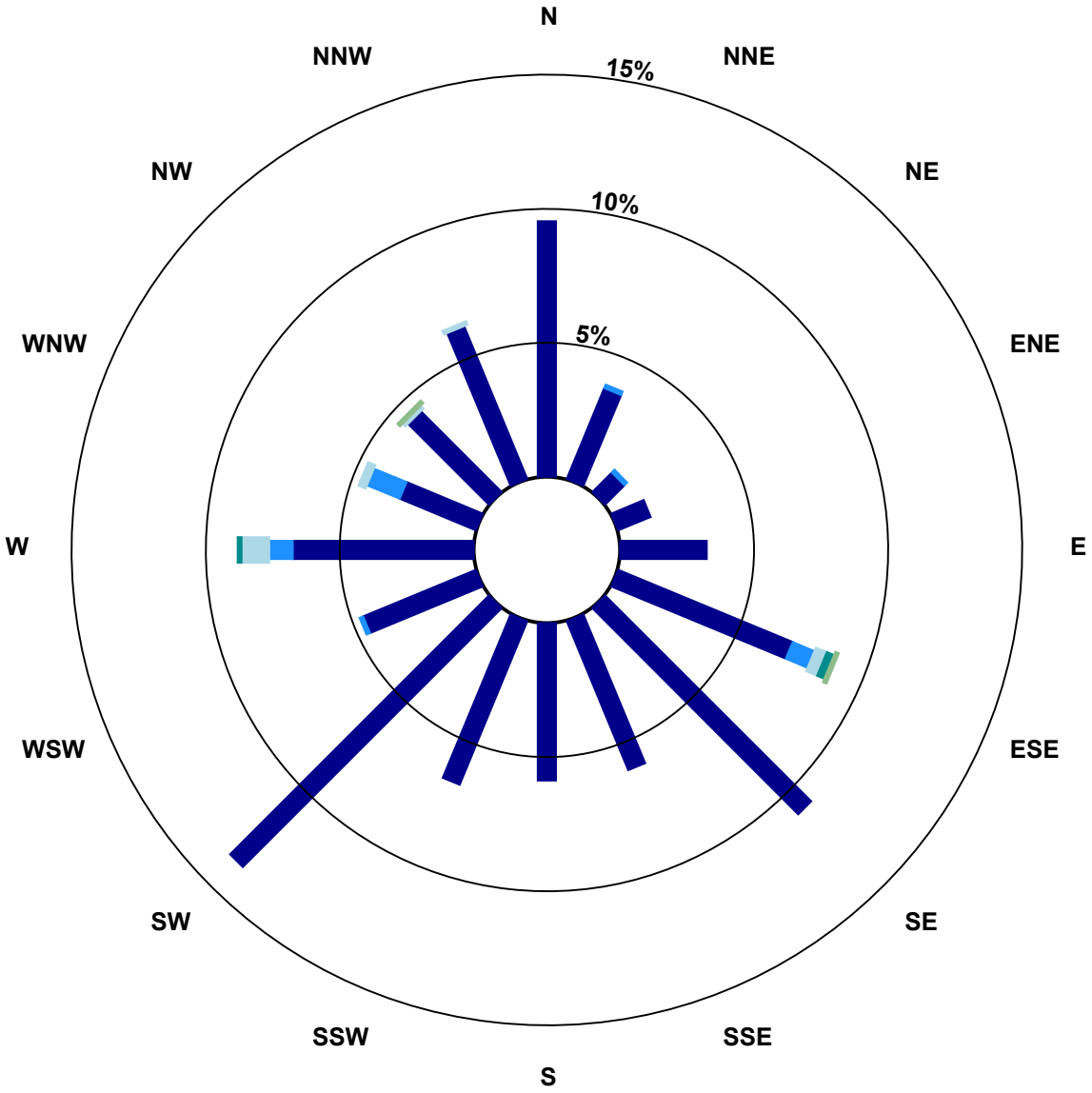
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

Pihew Point



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

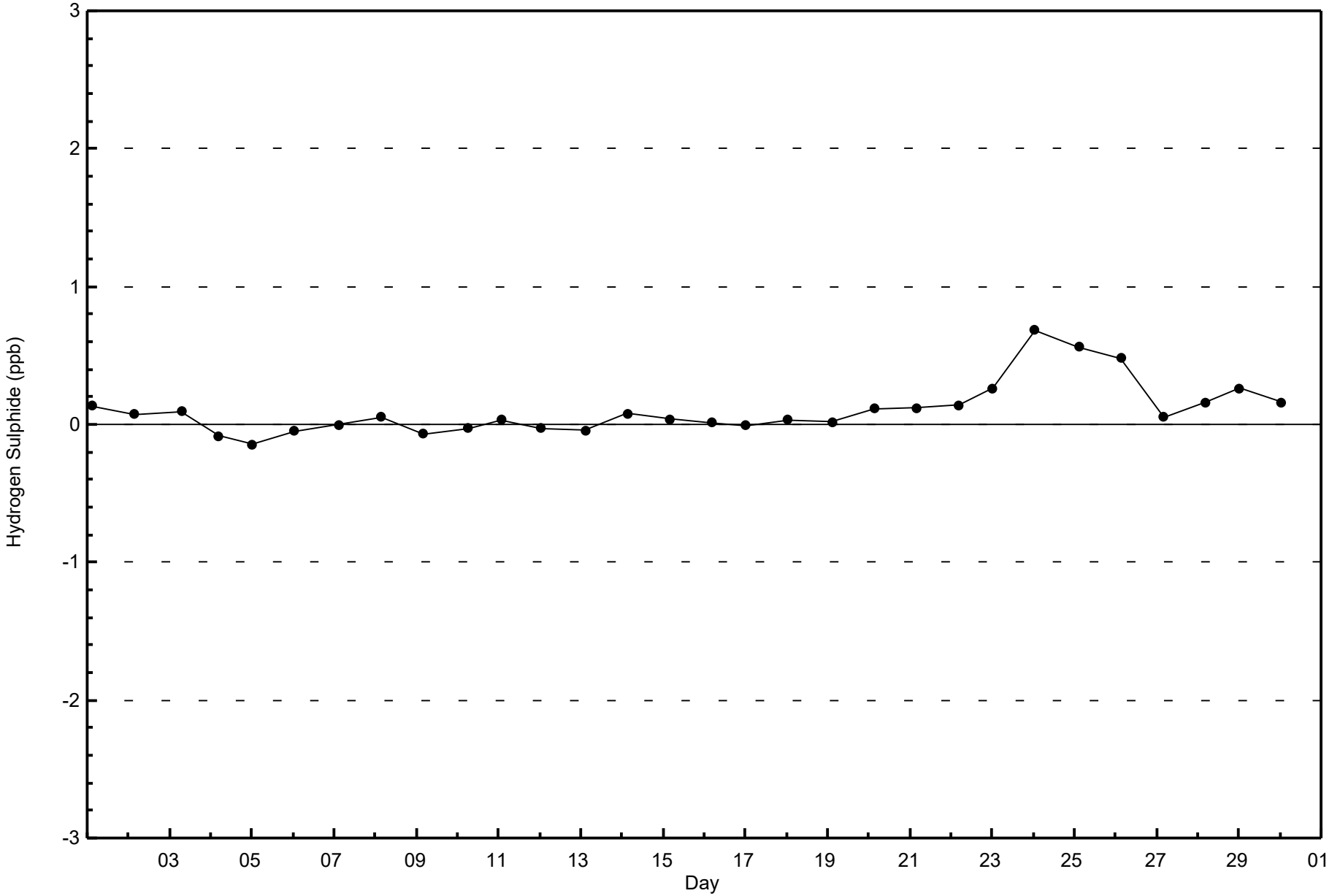
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Pihew Point - September 2026

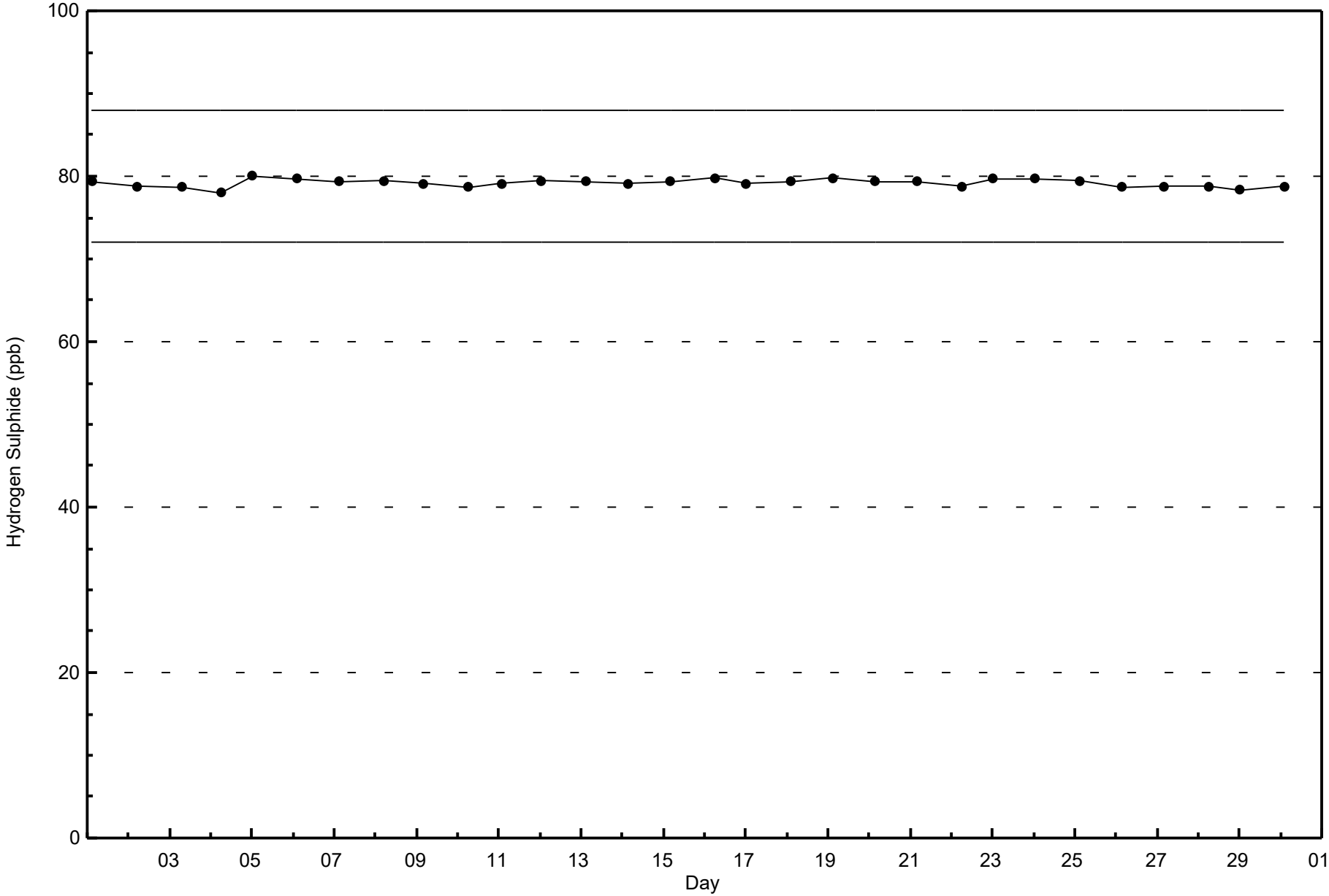


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Pihew Point - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Pihew Point - September 2026

Maximum Value: 4.8 ppm on Sep 8 07:00

Maximum Daily Average: 2.5 ppm on Sep 22

Minimum Value: 1.9 ppm on Sep 19 14:00

Minimum Daily Average: 2.0 ppm on Sep 19

Maximum Diurnal Average: 2.4 ppm at hour 6

Minimum Diurnal Average: 2.1 ppm at hour 18

Monthly Average: 2.18 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} = 3.3

Hours in Service:	720
Hours of Data:	643
Hours of Missing Data:	77
Hours of Calibration:	36
Percent Operational Time:	94.3

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-Sep	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	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.1	2.2
2-Sep	2.1	2.1	Z	2.1	2.1	2.1	2.0	2.1	2.1	C	C	C	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	2.2
3-Sep	2.2	2.3	2.5	2.4	2.2	2.3	Z	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	2.5
4-Sep	2.3	2.3	2.3	2.3	Z	2.4	2.5	2.7	2.7	2.4	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	2.7
5-Sep	2.1	2.2	2.1	2.1	2.2	Z	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.1	2.3
6-Sep	Z	2.3	2.2	2.2	2.2	2.2	2.1	2.2	2.4	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.3	2.3	2.3	2.2	2.4
7-Sep	2.2	Z	2.3	2.4	2.1	2.1	2.2	2.3	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.4
8-Sep	2.2	2.3	Z	3.0	2.8	4.0	4.8	3.7	2.5	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.5	4.8
9-Sep	2.1	2.1	2.1	Z	2.2	2.2	2.2	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	2.0	2.0	2.0	2.1	2.2
10-Sep	2.0	2.2	2.2	2.2	2.0	Z	2.0	2.0	2.4	2.4	2.1	2.6	2.4	2.1	2.1	2.3	2.2	2.2	2.2	2.4	2.3	2.4	2.2	2.3	2.2	2.6
11-Sep	2.3	2.3	2.0	2.1	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	2.3	2.4	2.4	2.1	2.4
12-Sep	Z	2.3	2.3	2.4	2.3	2.4	2.4	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.1	2.4
13-Sep	2.0	Z	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1
14-Sep	2.0	2.0	Z	2.0	2.1	2.0	2.0	2.0	2.0	M	M	M	M	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.9	2.7	2.8	2.2	2.9
15-Sep	2.6	2.6	2.7	Z	2.6	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	2.2	2.7	2.4	2.7	2.5	2.3	2.7
16-Sep	2.2	2.2	2.2	2.1	Z	2.1	2.1	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.4
17-Sep	2.2	2.2	2.2	2.2	2.2	Z	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	2.1	2.1	2.2	2.2	2.7	2.2	2.7
18-Sep	Z	2.6	2.7	2.1	2.3	3.3	2.5	2.4	2.7	2.2	2.1	2.2	2.4	2.1	2.0	2.0	1.9	2.0	2.0	2.3	2.1	2.0	2.0	2.0	2.3	3.3
19-Sep	2.0	Z	2.0	2.0	2.0	2.0	2.1	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	2.1
20-Sep	2.0	2.0	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	2.0
21-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	M	M	M	M	2.2	2.2	2.4	2.3	3.0	2.8	2.2	2.2	2.3	2.4	--	3.0
22-Sep	2.4	2.4	2.9	3.0	Z	2.3	2.3	4.4	4.3	2.8	2.2	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.4	2.2	2.2	2.3	2.5	4.4
23-Sep	2.2	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	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
24-Sep	Z	2.3	2.3	2.2	2.3	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	2.4	2.1	2.4
25-Sep	2.4	Z	2.6	2.3	2.2	2.7	2.8	2.5	2.5	2.3	M	M	C	C	C	C	2.0	2.0	2.0	2.1	2.2	2.1	2.2	2.2	--	2.8
26-Sep	2.1	2.1	Z	2.6	2.8	2.4	2.3	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.8
27-Sep	2.3	2.4	2.2	Z	2.9	3.1	2.7	3.4	3.5	3.0	2.4	2.2	2.0	2.3	2.4	2.3	2.2	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.4	3.5
28-Sep	2.2	2.3	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	2.1	2.1	2.1	2.1	2.3
29-Sep	2.2	2.4	2.5	2.1	2.1	Z	2.1	2.1	2.0	2.1	2.1	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.3	2.2	2.2	2.1	2.1	2.1	2.2	2.5
30-Sep	Z	2.3	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.0	2.7	3.3	2.8	2.4	2.9	2.3	3.3
	2.2	2.3	2.3	2.3	2.2	2.4	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	2.1	2.2	2.2	2.2	2.2	Diurnal Average	
	2.6	2.6	2.9	3.0	2.9	4.0	4.8	4.4	4.3	3.0	2.4	2.6	2.4	2.3	2.4	2.3	2.4	2.3	3.0	2.8	3.3	2.9	2.7	2.9	Diurnal Maximum	

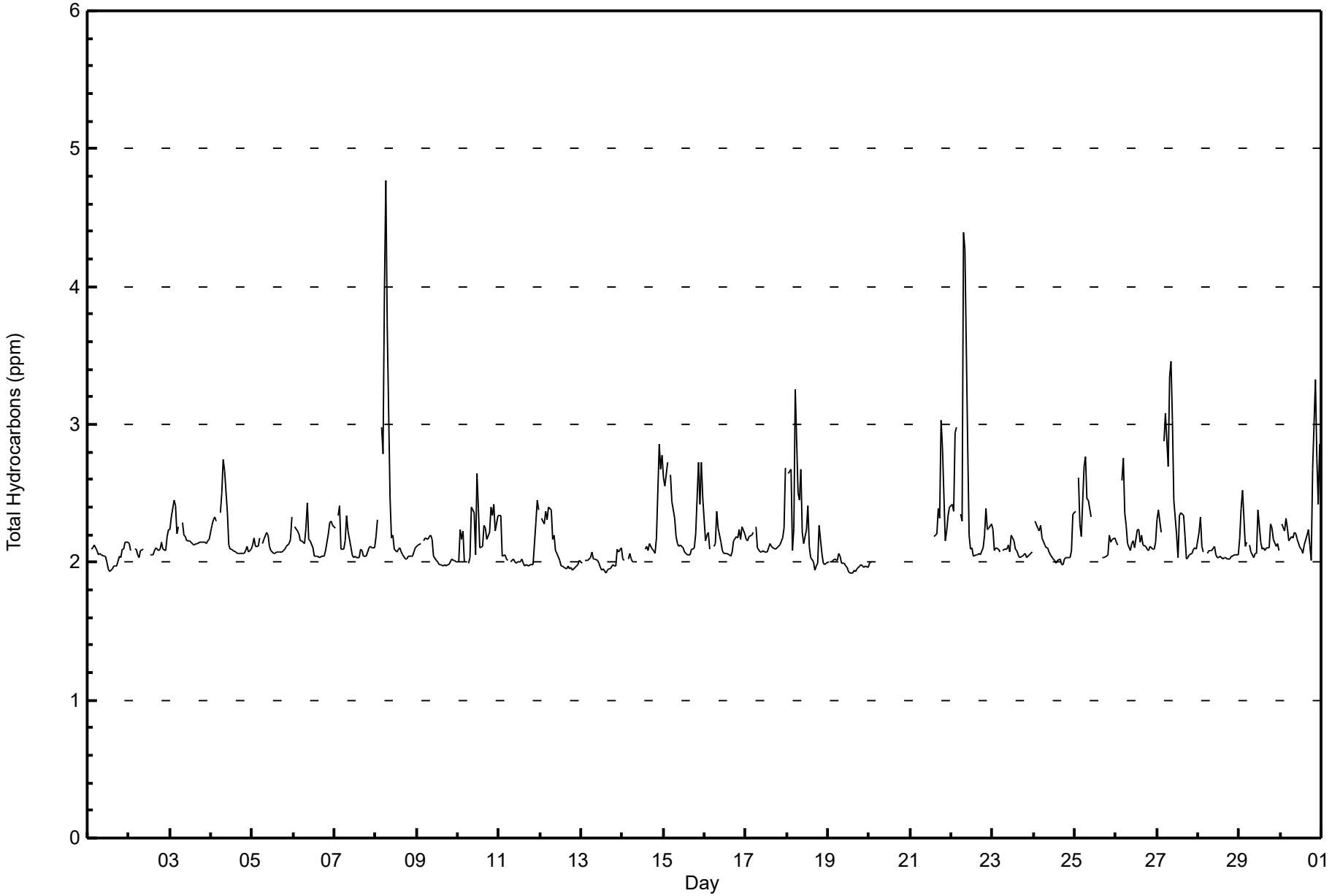
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Pihew Point - September 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	171	26.59	26.59
2.1 - 3.0	462	71.85	98.44
3.1 - 10.0	10	1.56	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 643

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Pihew Point - September 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	7	5	0	2	3	10	29	9	9	12	53	6	3	2	4	17	171
2.1 - 3.0	54	17	7	7	15	43	46	28	24	26	38	23	55	31	24	23	461
3.1 - 10.0	0	0	0	0	0	0	0	0	0	0	0	3	1	1	3	2	10
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	61	22	7	9	18	53	75	37	33	38	91	32	59	34	31	42	642

Total Number of Valid Hours: 642

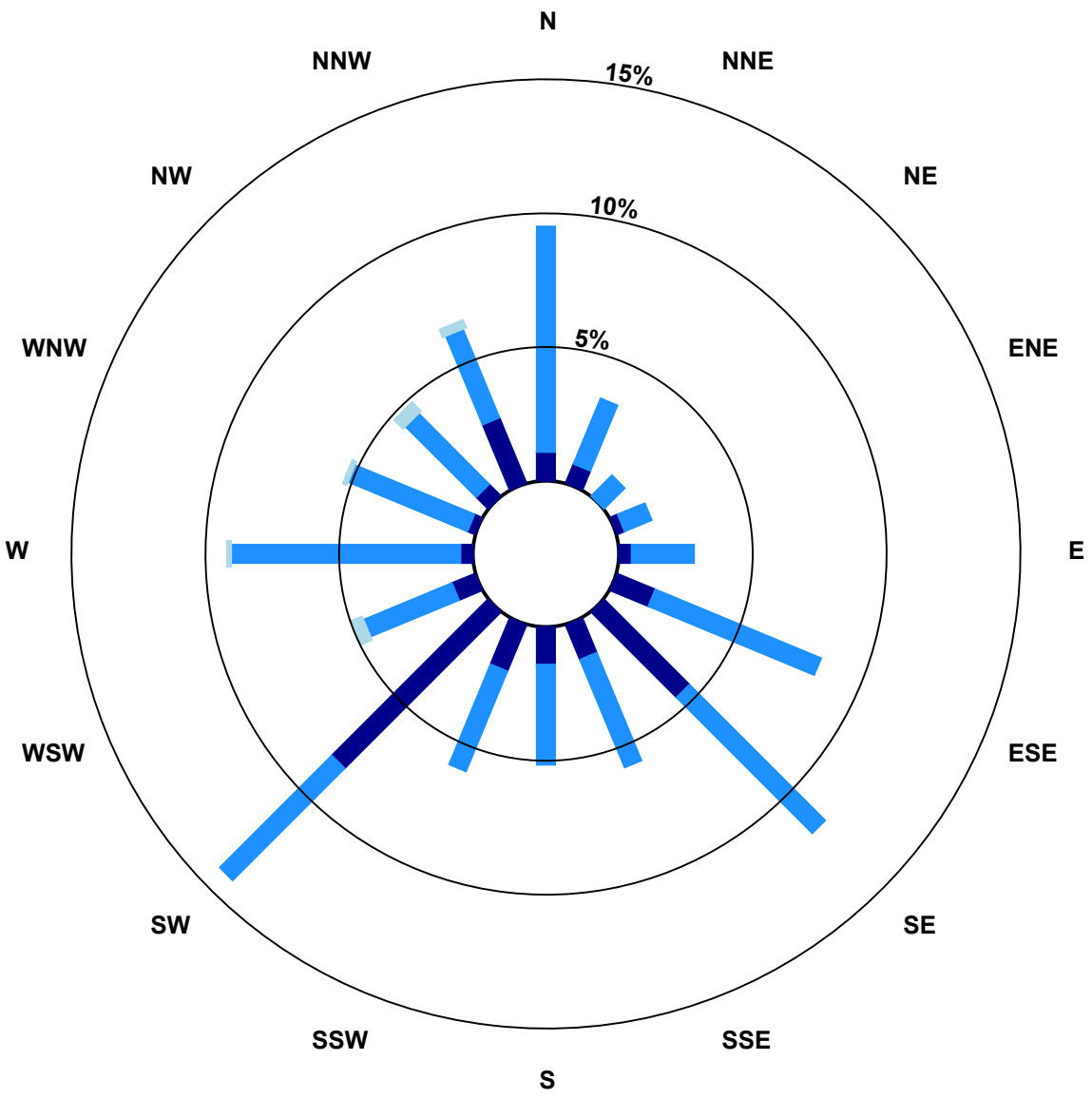
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Pihew Point



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

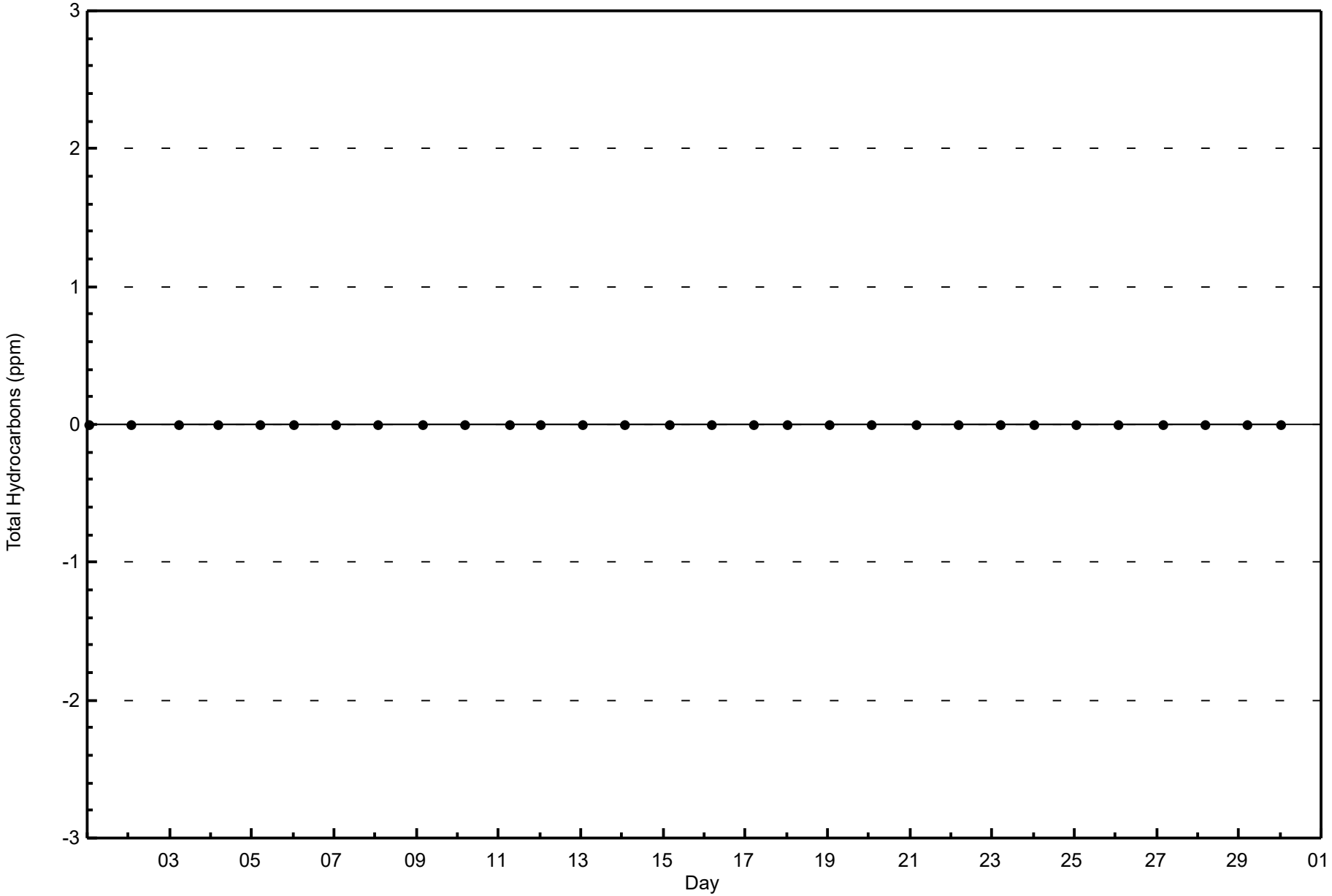
Total Number of Valid Hours: 642

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Pihew Point - September 2026

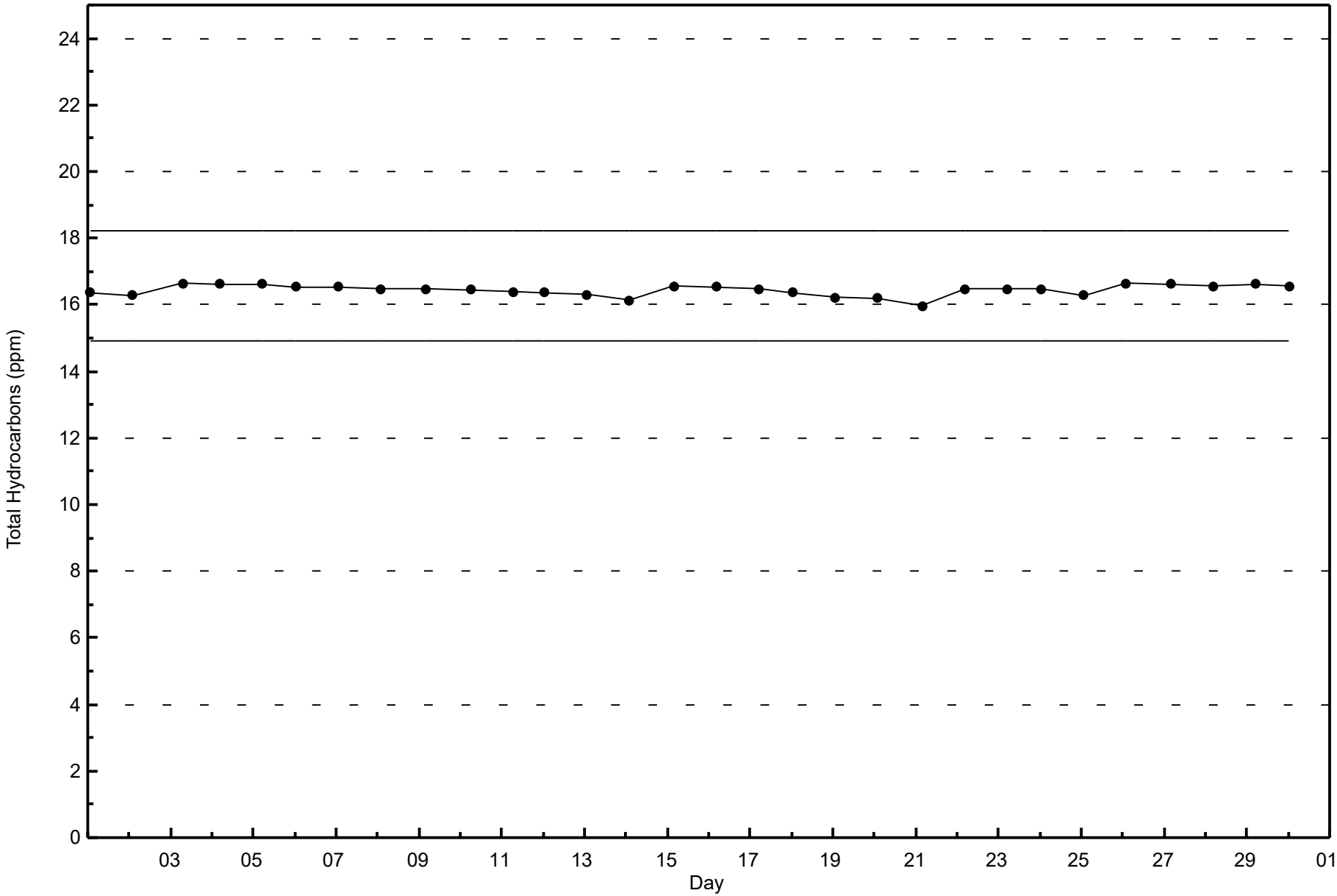


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Pihew Point - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Pihew Point - September 2026

Maximum Value: 1.031 ppm on Sep 27 09:00

Maximum Daily Average: 0.284 ppm on Sep 27

Minimum Value: 0.000 ppm on Sep 1 01:00

Minimum Daily Average: 0.000 ppm on Sep 1

Maximum Diurnal Average: 0.057 ppm at hour 9

Minimum Diurnal Average: 0.001 ppm at hour 18

Monthly Average: 0.018 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} = 0.4

Hours in Service:	720
Hours of Data:	643
Hours of Missing Data:	77
Hours of Calibration:	36
Percent Operational Time:	94.3

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-Sep	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-Sep	0.000	0.000	Z	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	0.000
3-Sep	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	0.000	0.000	0.000	0.000
4-Sep	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.181	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.181
5-Sep	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.002	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	0.002
6-Sep	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-Sep	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-Sep	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-Sep	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-Sep	0.000	0.105	0.000	0.147	0.000	Z	0.000	0.000	0.251	0.240	0.000	0.507	0.263	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.066	0.507
11-Sep	0.000	0.000	0.000	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
12-Sep	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	0.012	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.012
13-Sep	0.000	Z	0.000	0.000	0.000	0.000	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.019
14-Sep	0.000	0.000	Z	0.000	0.068	0.000	0.000	0.000	0.000	M	M	M	M	0.000	0.000	0.000	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.068
15-Sep	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-Sep	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-Sep	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-Sep	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.276	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.276
19-Sep	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-Sep	0.000	0.000	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	0.000
21-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	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	--	0.000
22-Sep	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-Sep	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-Sep	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
25-Sep	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	M	M	C	C	C	C	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	--	0.002
26-Sep	0.000	0.002	Z	0.001	0.021	0.134	0.069	0.007	0.001	0.036	0.055	0.016	0.145	0.138	0.053	0.076	0.007	0.000	0.000	0.000	0.000	0.005	0.000	0.024	0.034	0.145
27-Sep	0.194	0.243	0.100	Z	0.533	0.671	0.455	0.933	1.031	0.934	0.351	0.138	0.000	0.278	0.294	0.267	0.101	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.284	1.031
28-Sep	0.121	0.239	0.039	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.018	0.239
29-Sep	0.000	0.005	0.016	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.227	0.002	0.000	0.023	0.010	0.010	0.021	0.195	0.162	0.067	0.017	0.066	0.000	0.036	0.227
30-Sep	Z	0.121	0.018	0.170	0.102	0.023	0.050	0.007	0.028	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.002	0.000	0.000	0.023	0.108	0.003	0.000	0.023	0.031	0.170
	0.013	0.030	0.007	0.013	0.030	0.036	0.023	0.034	0.057	0.054	0.016	0.035	0.016	0.016	0.014	0.013	0.005	0.001	0.007	0.006	0.006	0.001	0.002	0.002	Diurnal Average	
	0.194	0.243	0.100	0.170	0.533	0.671	0.455	0.933	1.031	0.934	0.351	0.507	0.263	0.278	0.294	0.267	0.101	0.021	0.195	0.162	0.108	0.017	0.066	0.024	Diurnal Maximum	

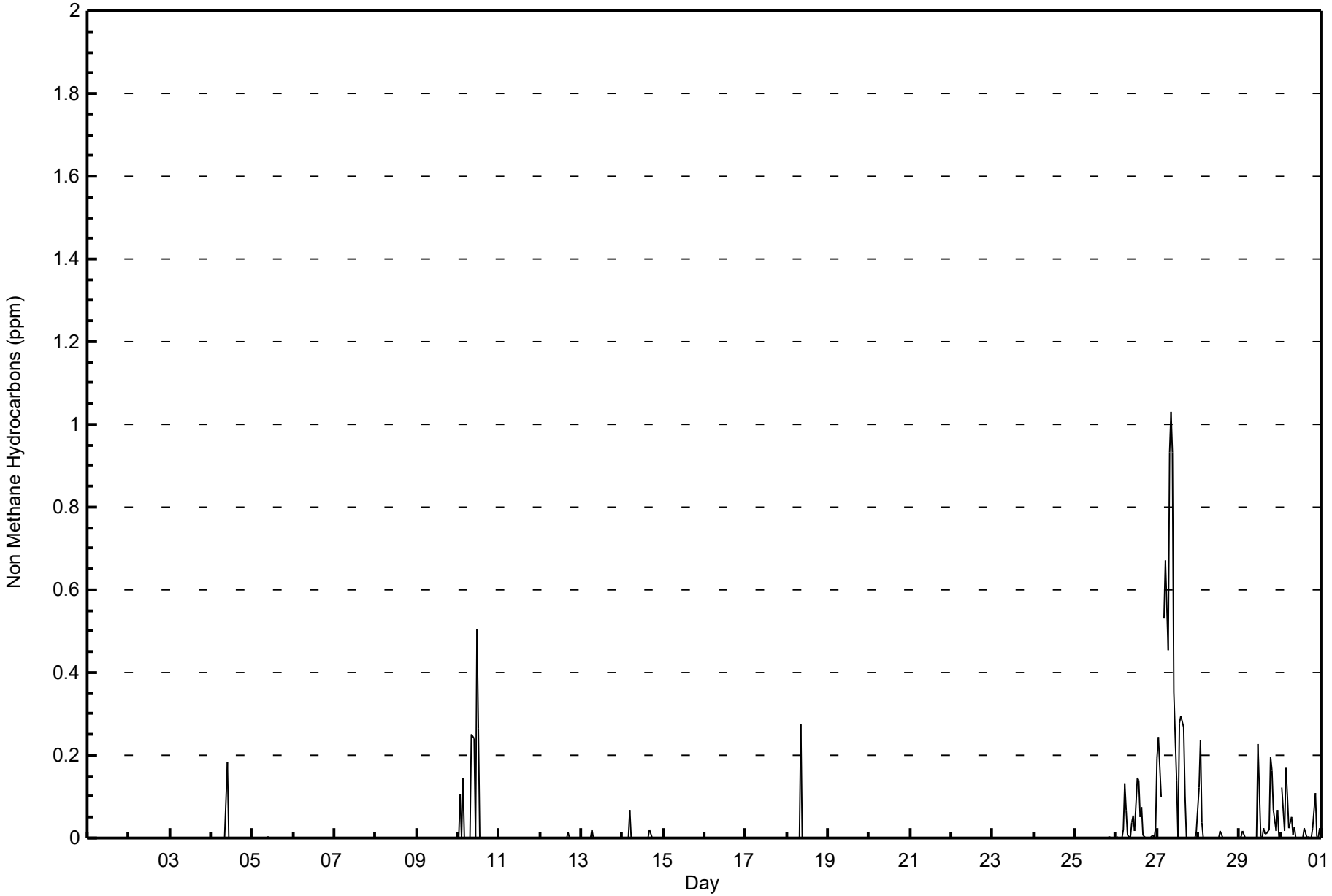
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Pihew Point - September 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Pihew Point - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	575	89.42	89.42
0.006 - 0.05	27	4.20	93.62
0.06 - 0.1	18	2.80	96.42
> 0.1	23	3.58	100.00

Total Number of Valid Hours: 643

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Pihew Point - September 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	57	22	7	9	18	53	75	36	33	38	85	14	32	25	28	42	574
0.006 - 0.05	1	0	0	0	0	0	0	1	0	0	4	1	12	6	2	0	27
0.06 - 0.1	1	0	0	0	0	0	0	0	0	0	1	2	11	2	1	0	18
> 0.1	2	0	0	0	0	0	0	0	0	0	1	15	4	1	0	0	23
Totals	61	22	7	9	18	53	75	37	33	38	91	32	59	34	31	42	642

Total Number of Valid Hours: 642

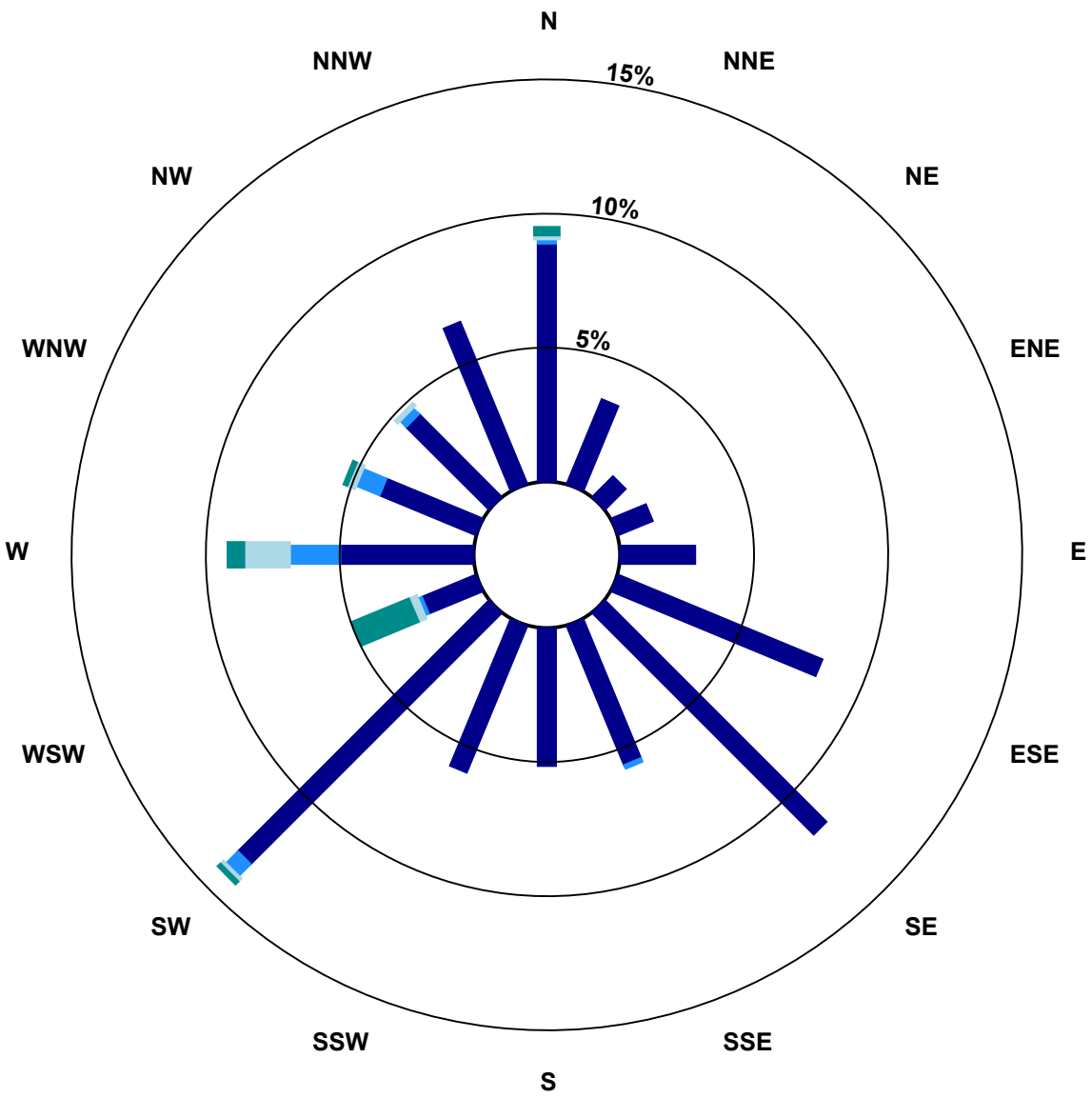
Total Number of Hours: 720

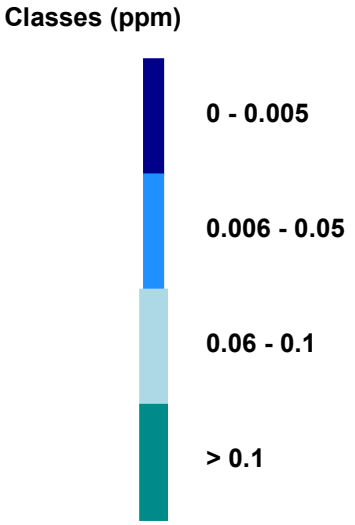
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Non Methane Hydrocarbons (NMHC) - ppm

Pihew Point





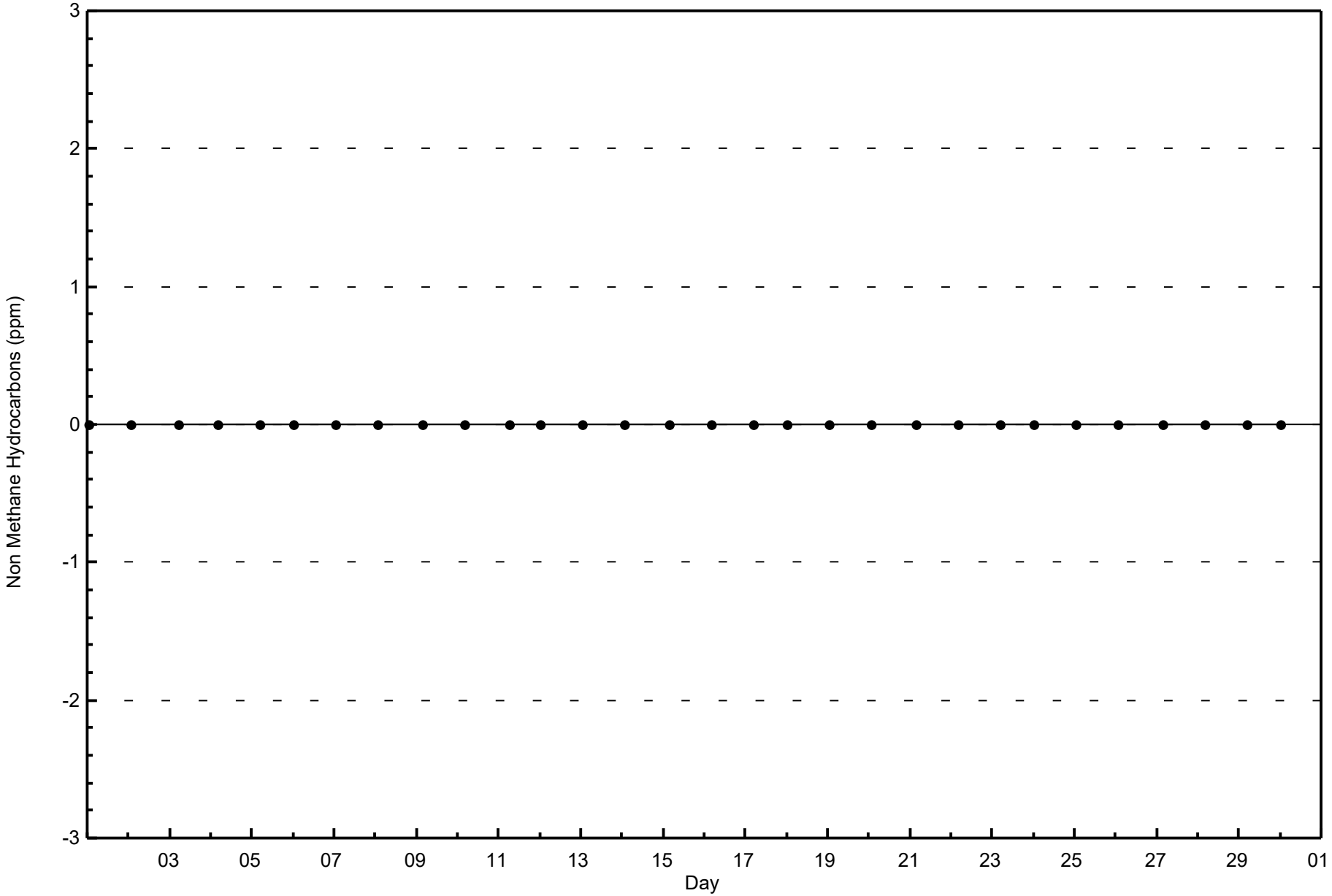
Total Number of Valid Hours: 642

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Pihew Point - September 2026

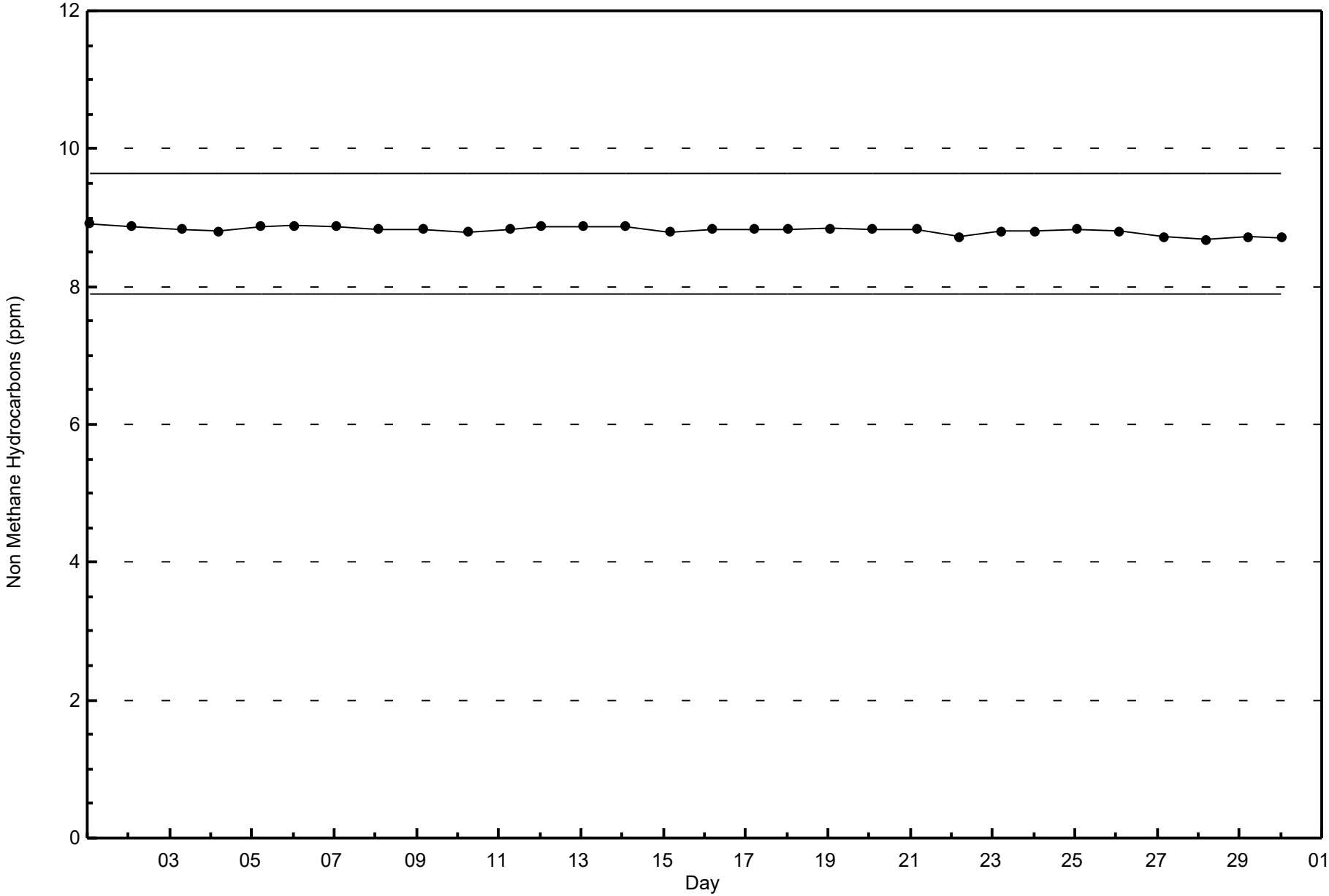


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Pihew Point - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Pihew Point - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.8 ppm on Sep 8 07:00 Maximum Daily Average: 2.5 ppm on Sep 22

Minimum Value: 1.9 ppm on Sep 19 14:00 Minimum Daily Average: 2.0 ppm on Sep 19
Maximum Diurnal Average: 2.3 ppm at hour 8 Minimum Diurnal Average: 2.0 ppm at hour 14
Monthly Average: 2.17 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} = 3.1

Hours in Service:	720
Hours of Data:	643
Hours of Missing Data:	77
Hours of Calibration:	36
Percent Operational Time:	94.3

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-Sep	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	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.1	2.2
2-Sep	2.1	2.1	Z	2.1	2.1	2.1	2.0	2.1	2.1	C	C	C	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	2.2
3-Sep	2.2	2.3	2.5	2.4	2.2	2.3	Z	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	2.5
4-Sep	2.3	2.3	2.3	2.3	Z	2.4	2.5	2.7	2.7	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	2.7
5-Sep	2.1	2.2	2.1	2.1	2.2	Z	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.1	2.3
6-Sep	Z	2.3	2.2	2.2	2.2	2.2	2.1	2.2	2.4	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.3	2.3	2.3	2.2	2.4
7-Sep	2.2	Z	2.3	2.4	2.1	2.1	2.2	2.3	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.4
8-Sep	2.2	2.3	Z	3.0	2.8	4.0	4.8	3.7	2.5	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.5	4.8
9-Sep	2.1	2.1	2.1	Z	2.2	2.2	2.2	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	2.0	2.0	2.0	2.1	2.2
10-Sep	2.0	2.1	2.2	2.1	2.0	Z	2.0	2.0	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.2	2.2	2.2	2.4	2.3	2.4	2.2	2.3	2.2	2.4
11-Sep	2.3	2.3	2.0	2.1	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	2.3	2.4	2.4	2.1	2.4
12-Sep	Z	2.3	2.3	2.4	2.3	2.4	2.4	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.1	2.4
13-Sep	2.0	Z	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1
14-Sep	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	M	M	M	M	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.9	2.7	2.8	2.2	2.9
15-Sep	2.6	2.6	2.7	Z	2.6	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	2.2	2.7	2.4	2.7	2.5	2.3	2.7
16-Sep	2.2	2.2	2.2	2.1	Z	2.1	2.1	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.4
17-Sep	2.2	2.2	2.2	2.2	2.2	Z	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	2.1	2.1	2.2	2.2	2.7	2.2	2.7
18-Sep	Z	2.6	2.7	2.1	2.3	3.3	2.5	2.4	2.4	2.2	2.1	2.2	2.4	2.1	2.0	2.0	1.9	2.0	2.0	2.3	2.1	2.0	2.0	2.0	2.2	3.3
19-Sep	2.0	Z	2.0	2.0	2.0	2.0	2.1	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	2.1
20-Sep	2.0	2.0	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	2.0
21-Sep	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	M	M	M	M	2.2	2.2	2.4	2.3	3.0	2.8	2.2	2.2	2.3	2.4	--	3.0
22-Sep	2.4	2.4	2.9	3.0	Z	2.3	2.3	4.4	4.3	2.8	2.2	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.4	2.2	2.2	2.3	2.5	4.4
23-Sep	2.2	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	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
24-Sep	Z	2.3	2.3	2.2	2.3	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	2.4	2.1	2.4
25-Sep	2.4	Z	2.6	2.3	2.2	2.7	2.8	2.5	2.5	2.3	M	M	C	C	C	C	2.0	2.0	2.0	2.1	2.2	2.1	2.2	2.2	--	2.8
26-Sep	2.1	2.1	Z	2.6	2.7	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	2.7
27-Sep	2.1	2.1	2.1	Z	2.3	2.4	2.2	2.4	2.4	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.4
28-Sep	2.1	2.1	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	2.1	2.1	2.1	2.1	2.1
29-Sep	2.2	2.4	2.5	2.1	2.1	Z	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	2.1	2.1	2.1	2.1	2.1	2.1	2.5
30-Sep	Z	2.2	2.2	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.0	2.7	3.2	2.7	2.4	2.8	2.3	3.2
	2.2	2.2	2.3	2.2	2.2	2.3	2.3	2.3	2.3	2.2	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	Diurnal Average	
	2.6	2.6	2.9	3.0	2.8	4.0	4.8	4.4	4.3	2.8	2.2	2.2	2.4	2.1	2.2	2.3	2.4	2.3	3.0	2.8	3.2	2.9	2.7	2.8	Diurnal Maximum	

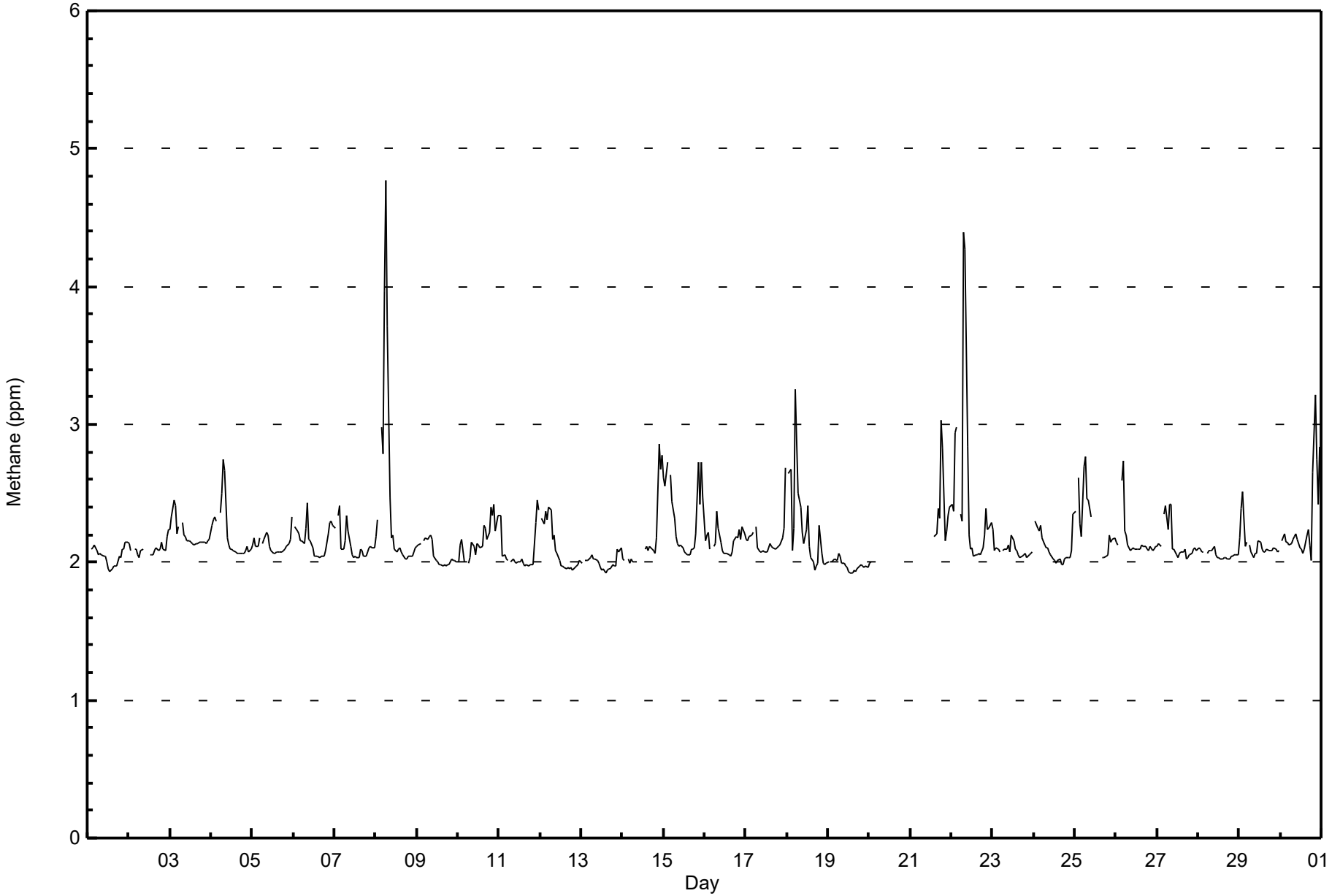
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Pihew Point - September 2026



Methane (CH_4) - ppm
Pihew Point - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	172	26.75	26.75
2.1 - 3.0	464	72.16	98.91
3.1 - 10.0	7	1.09	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 643

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Pihew Point - September 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	8	5	0	2	3	10	29	9	9	12	53	6	3	2	4	17	172
2.1 - 3.0	53	17	7	7	15	43	46	28	24	26	38	26	55	31	24	23	463
3.1 - 10.0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	2	7
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	61	22	7	9	18	53	75	37	33	38	91	32	59	34	31	42	642

Total Number of Valid Hours: 642

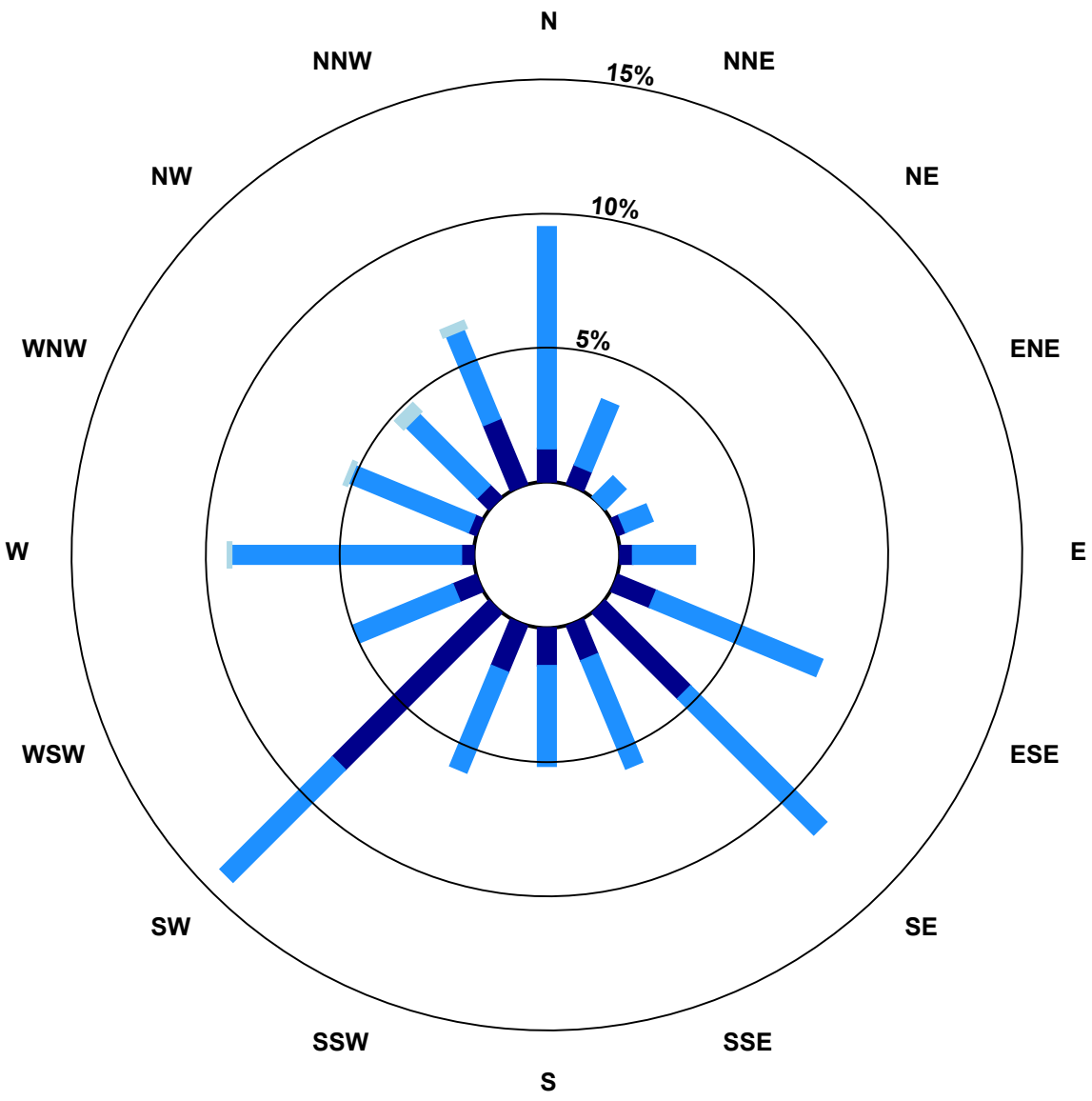
Total Number of Hours: 720

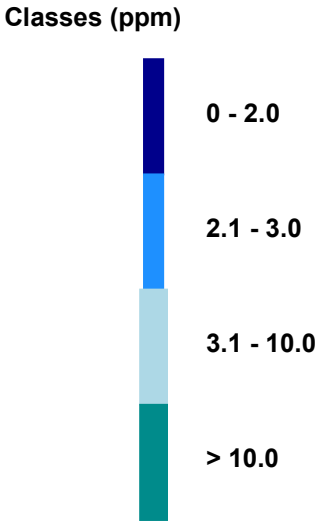
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Methane (CH_4) - ppm

Pihew Point





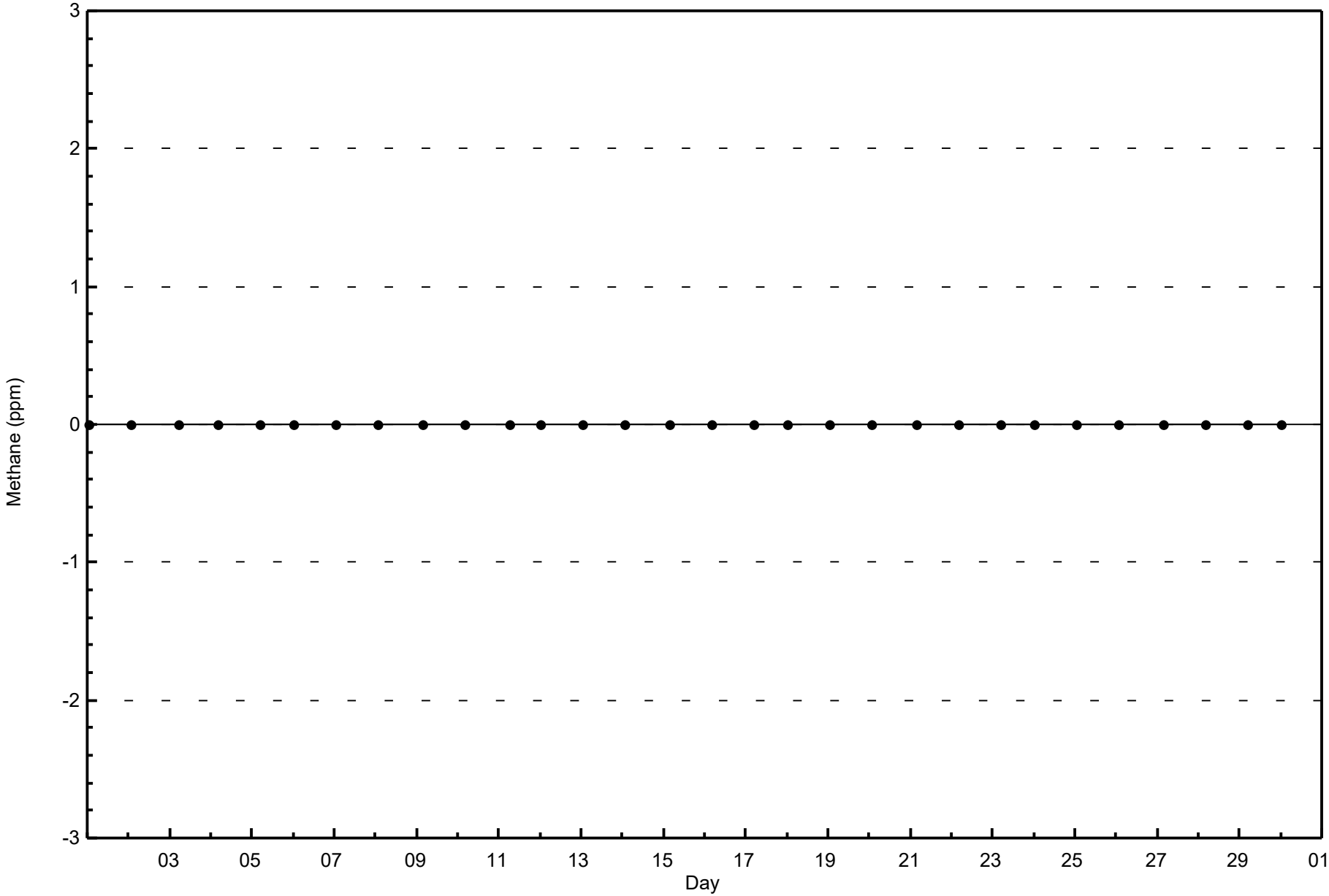
Total Number of Valid Hours: 642

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Pihew Point - September 2026

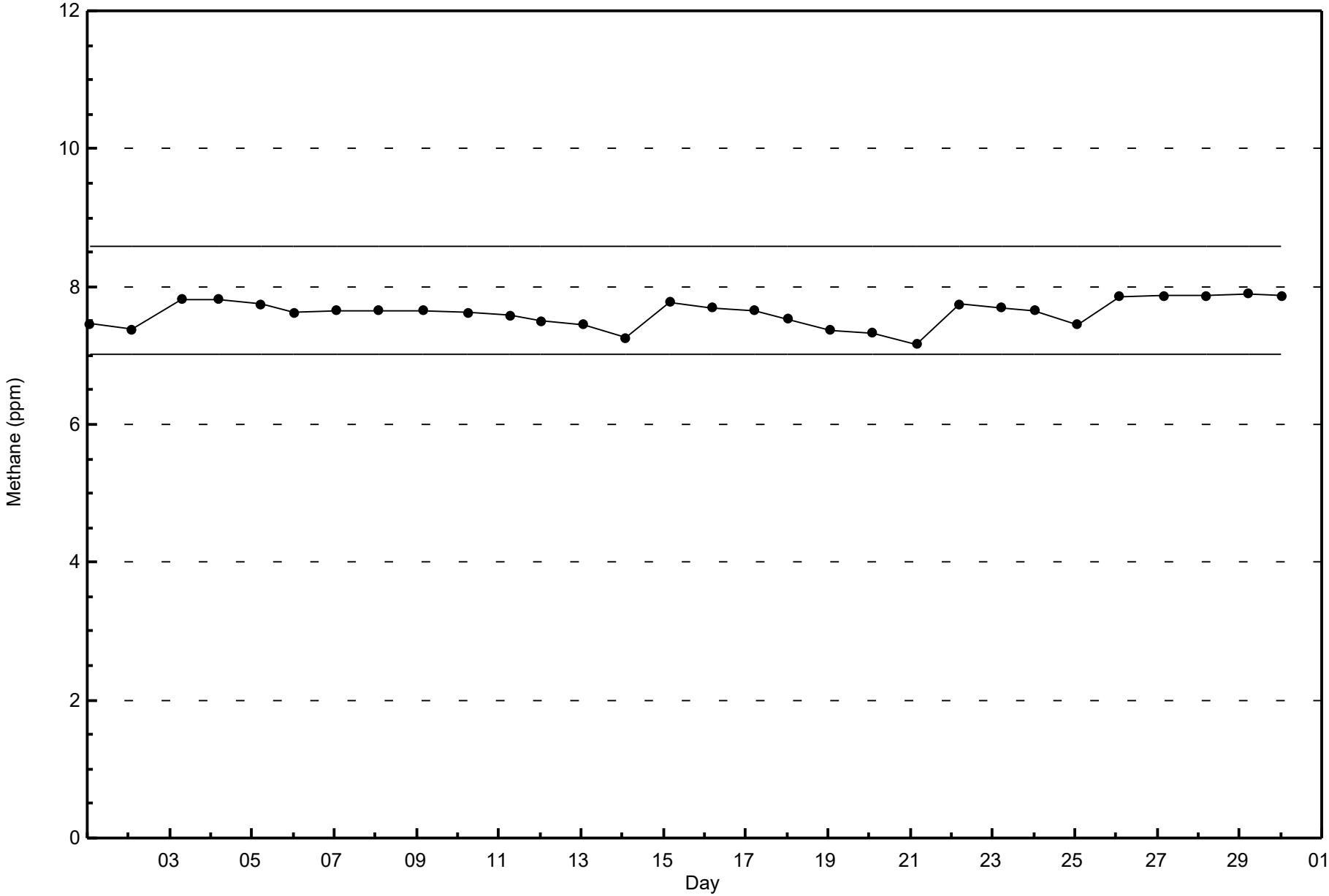


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Pihew Point - September 2026



Maximum Value: 27.7 C on Sep 2 15:00

Maximum Daily Average: 21.6 C on Sep 2

Minimum Value: 3.2 C on Sep 23 06:00

Minimum Daily Average: 6.2 C on Sep 30

Maximum Diurnal Average: 17.3 C at hour 15

Minimum Diurnal Average: 8.7 C at hour 6

Monthly Average: 12.75 C

Percentiles: P_1 = 4.2 P_{10} = 7.0 Q_1 = 9.0 Median = 11.7 Q_3 = 16.5 P_{90} = 19.4 P_{99} = 25.9

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

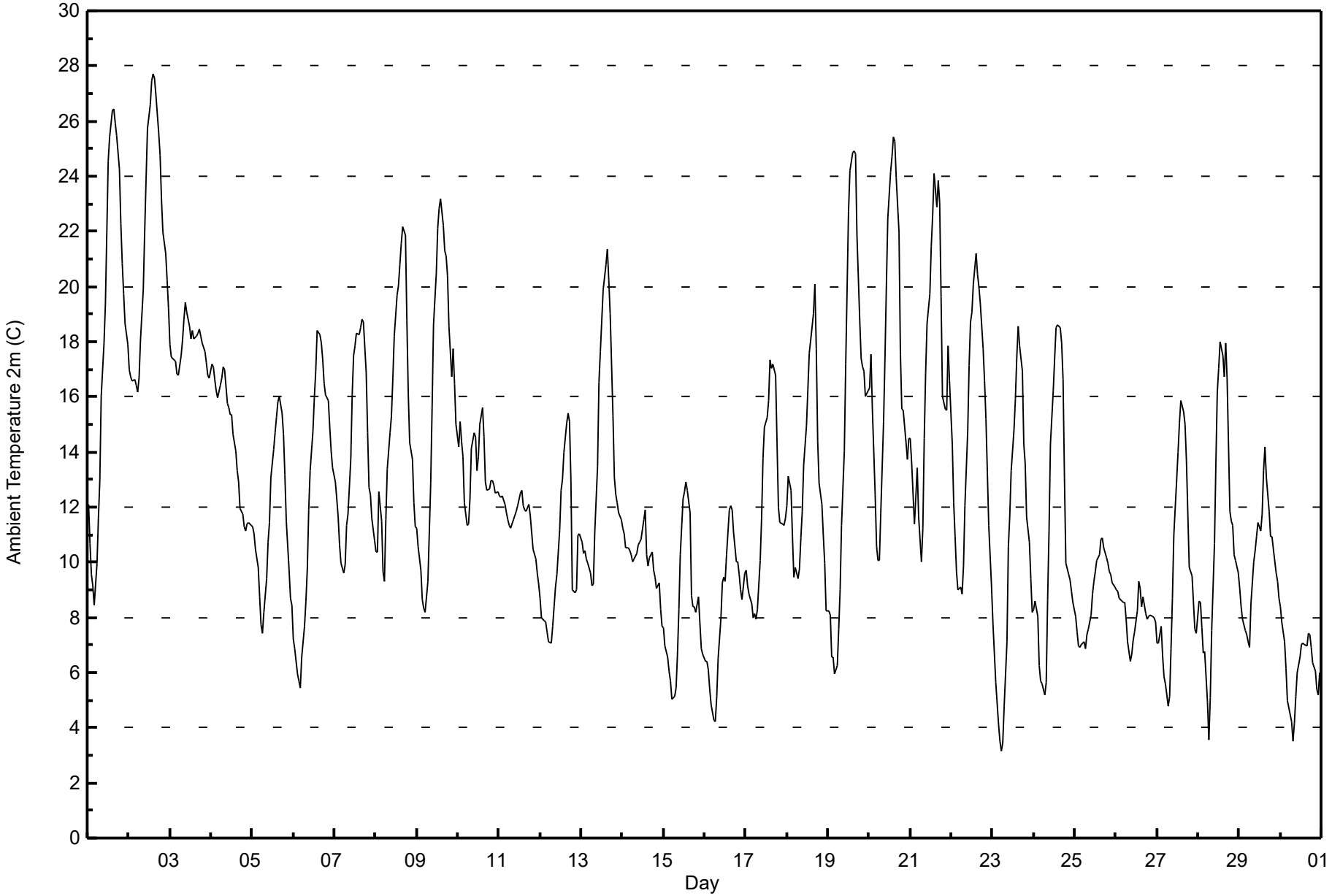
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	12.1	10.7	9.6	9.1	8.4	10.0	11.6	13.0	16.0	17.9	19.4	22.0	24.5	25.4	26.4	26.5	25.9	25.5	24.3	22.3	20.8	19.7	18.7	17.9	18.2	26.5
2-Sep	17.0	16.8	16.6	16.6	16.4	16.2	16.7	18.0	19.9	22.0	23.9	25.7	26.6	27.5	27.7	27.6	26.9	25.6	24.8	23.1	21.9	21.2	20.3	19.2	21.6	27.7
3-Sep	17.9	17.4	17.3	17.3	16.8	16.8	17.5	18.1	18.8	19.4	19.1	18.6	18.1	18.4	18.1	18.2	18.3	18.4	18.2	18.0	17.6	17.2	16.8	16.7	17.9	19.4
4-Sep	17.2	17.1	16.6	16.2	16.0	16.4	16.7	17.1	17.0	15.8	15.6	15.4	15.3	14.6	14.1	13.3	12.9	11.9	11.7	11.3	11.1	11.4	11.5	11.3	14.5	17.2
5-Sep	11.3	11.0	10.5	9.8	8.7	7.7	7.4	8.2	9.4	10.7	11.5	13.1	14.1	14.7	15.3	15.8	16.0	15.4	14.6	13.2	11.5	9.7	8.7	8.4	11.5	16.0
6-Sep	7.2	6.9	5.9	5.7	5.5	6.5	7.7	8.6	9.8	11.9	13.3	14.8	16.0	17.0	18.4	18.3	18.0	17.3	16.5	16.1	15.9	14.9	14.0	13.4	12.5	18.4
7-Sep	12.9	12.3	11.7	10.6	9.9	9.6	9.9	11.3	11.8	13.7	16.1	17.5	17.9	18.3	18.3	18.5	18.8	18.7	16.9	14.7	12.7	12.5	11.6	10.8	14.0	18.8
8-Sep	10.4	10.4	12.6	11.5	9.7	9.3	11.5	13.4	14.7	15.3	16.7	18.2	19.7	20.1	20.8	21.5	22.1	21.9	18.7	16.1	14.3	13.7	12.2	11.3	15.3	22.1
9-Sep	11.2	10.6	9.7	8.7	8.3	8.2	9.3	11.1	12.9	15.6	18.6	20.5	22.1	22.8	23.2	22.2	21.3	21.1	20.4	18.6	16.7	17.8	16.5	15.0	15.9	23.2
10-Sep	14.2	15.1	14.4	13.8	12.2	11.3	11.4	12.3	14.1	14.7	14.6	13.3	13.8	15.0	15.6	14.5	12.9	12.6	12.7	12.9	12.9	12.8	12.5	12.6	13.4	15.6
11-Sep	12.4	12.4	12.4	12.1	11.8	11.6	11.3	11.3	11.5	11.7	11.9	12.1	12.5	12.6	12.1	11.9	11.8	12.1	11.7	11.1	10.5	10.1	9.6	9.2	11.6	12.6
12-Sep	8.7	8.0	7.9	7.8	7.5	7.1	7.1	7.7	8.4	9.1	9.6	11.2	12.6	13.0	14.0	15.1	15.4	15.1	13.0	9.0	8.9	9.0	11.0	11.1	10.3	15.4
13-Sep	10.7	10.3	10.4	10.1	10.0	9.6	9.2	9.2	11.1	13.5	16.5	17.6	18.8	19.9	20.8	21.4	20.2	19.0	15.3	13.1	12.5	12.2	11.8	11.5	13.9	21.4
14-Sep	11.2	11.0	10.5	10.5	10.4	10.3	10.0	10.1	10.3	10.6	10.7	10.9	11.6	11.9	10.3	9.9	10.2	10.4	9.7	9.4	9.1	9.3	8.3	7.7	10.2	11.9
15-Sep	7.6	7.0	6.6	6.1	5.7	5.0	5.2	5.5	6.7	8.3	10.3	12.3	12.5	12.9	12.6	11.8	8.8	8.4	8.4	8.2	8.7	7.8	6.9	6.7	8.3	12.9
16-Sep	6.4	6.4	6.1	5.4	4.9	4.3	4.2	5.1	6.5	8.0	9.3	9.5	9.3	10.3	11.9	12.1	11.9	11.1	10.0	10.0	9.6	9.0	8.7	9.6	8.3	12.1
17-Sep	9.7	9.2	8.8	8.5	8.0	8.2	7.9	8.3	10.1	11.6	13.8	14.9	15.3	15.9	17.3	17.0	17.2	16.8	14.4	12.0	11.4	11.4	11.3	11.6	12.1	17.3
18-Sep	12.0	13.1	12.6	10.9	9.4	9.8	9.4	9.8	10.9	11.8	13.5	14.9	16.3	17.6	18.1	19.0	20.1	17.7	14.4	12.9	12.1	11.0	9.9	8.2	13.2	20.1
19-Sep	8.2	8.1	6.6	6.6	6.0	6.3	7.6	9.0	11.3	14.0	17.2	20.0	22.8	24.2	24.9	24.9	24.8	21.9	18.7	17.4	17.1	17.0	16.0	16.2	15.3	24.9
20-Sep	16.3	17.6	15.5	12.5	10.6	10.1	10.1	11.8	15.1	17.4	20.0	22.5	24.1	24.7	25.4	25.3	23.9	22.0	17.5	15.5	15.5	14.3	13.7	14.5	17.3	25.4
21-Sep	14.5	13.6	11.4	12.3	13.4	11.6	10.0	11.2	14.5	16.9	18.7	19.7	21.5	22.6	24.1	22.9	23.9	23.0	19.6	16.0	15.5	15.5	17.9	16.6	17.0	24.1
22-Sep	14.3	12.2	10.9	9.6	9.0	9.1	8.9	9.9	12.0	14.7	17.2	18.7	19.1	20.1	21.2	20.4	20.0	19.4	17.8	16.6	15.2	13.3	11.3	9.1	14.6	21.2
23-Sep	7.8	6.7	5.6	4.1	3.5	3.2	3.4	4.8	7.1	10.6	11.7	13.3	14.8	15.9	17.4	18.6	17.8	16.9	14.3	13.6	11.6	10.7	9.4	8.2	10.5	18.6
24-Sep	8.3	8.6	8.0	6.2	5.7	5.6	5.2	5.6	8.6	11.1	14.3	16.2	17.4	18.5	18.6	18.5	18.0	16.6	13.1	10.0	9.6	9.3	9.0	8.5	11.3	18.6
25-Sep	8.0	7.5	7.0	6.9	7.0	7.1	6.9	7.4	7.6	8.1	8.8	9.3	9.6	10.1	10.3	10.8	10.9	10.5	10.1	10.0	9.7	9.6	9.3	9.1	8.8	10.9
26-Sep	9.0	9.0	8.7	8.6	8.5	8.5	7.9	7.1	6.4	6.6	7.2	7.5	8.2	9.3	9.1	8.4	8.8	8.2	7.9	8.0	8.1	8.1	8.0	7.8	8.1	9.3
27-Sep	7.1	7.1	7.7	6.6	5.8	5.6	4.8	5.1	6.8	8.7	11.0	13.0	14.0	15.1	15.9	15.4	15.0	13.7	11.8	9.8	9.5	8.5	7.6	7.4	9.7	15.9
28-Sep	8.6	8.5	7.6	6.7	6.8	4.9	3.6	5.1	7.5	10.7	13.6	16.2	17.0	18.0	17.5	16.7	17.9	16.7	11.9	11.5	11.4	10.3	10.1	9.6	11.2	18.0
29-Sep	9.1	8.4	7.9	7.5	7.4	7.1	6.9	8.5	10.0	10.4	11.0	11.4	11.1	11.7	13.3	14.2	13.0	11.8	10.9	10.9	10.4	9.6	9.3	8.7	10.0	14.2
30-Sep	8.4	7.9	7.1	6.1	5.0	4.7	4.2	3.5	4.2	5.2	6.0	6.6	7.0	7.1	7.0	7.0	7.4	7.4	6.9	6.4	6.1	5.4	5.2	6.0	6.2	8.4
	11.0	10.7	10.1	9.5	8.9	8.7	8.8	9.6	11.0	12.5	14.0	15.2	16.1	16.8	17.3	17.3	17.0	16.2	14.5	13.3	12.6	12.1	11.6	11.1	Diurnal Average	
	17.9	17.6	17.3	17.3	16.8	16.8	17.5	18.1	19.9	22.0	23.9	25.7	26.6	27.5	27.7	27.6	26.9	25.6	24.8	23.1	21.9	21.2	20.3	19.2	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Pihew Point - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	250	34.72	34.72
10 - 20	404	56.11	90.83
> 20	66	9.17	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Pihew Point - September 2026

Maximum Value: 97.7 % on Sep 8 06:00

Maximum Daily Average: 87.1 % on Sep 4

Minimum Value: 25.7 % on Sep 24 15:00

Minimum Daily Average: 56.2 % on Sep 2

Maximum Diurnal Average: 86.5 % at hour 7

Minimum Diurnal Average: 52.1 % at hour 15

Monthly Average: 71.03 %

Percentiles: P_1 = 29.4 P_{10} = 44.4 Q_1 = 60.5 Median = 74.1 Q_3 = 85.0 P_{90} = 91.5 P_{99} = 96.1

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

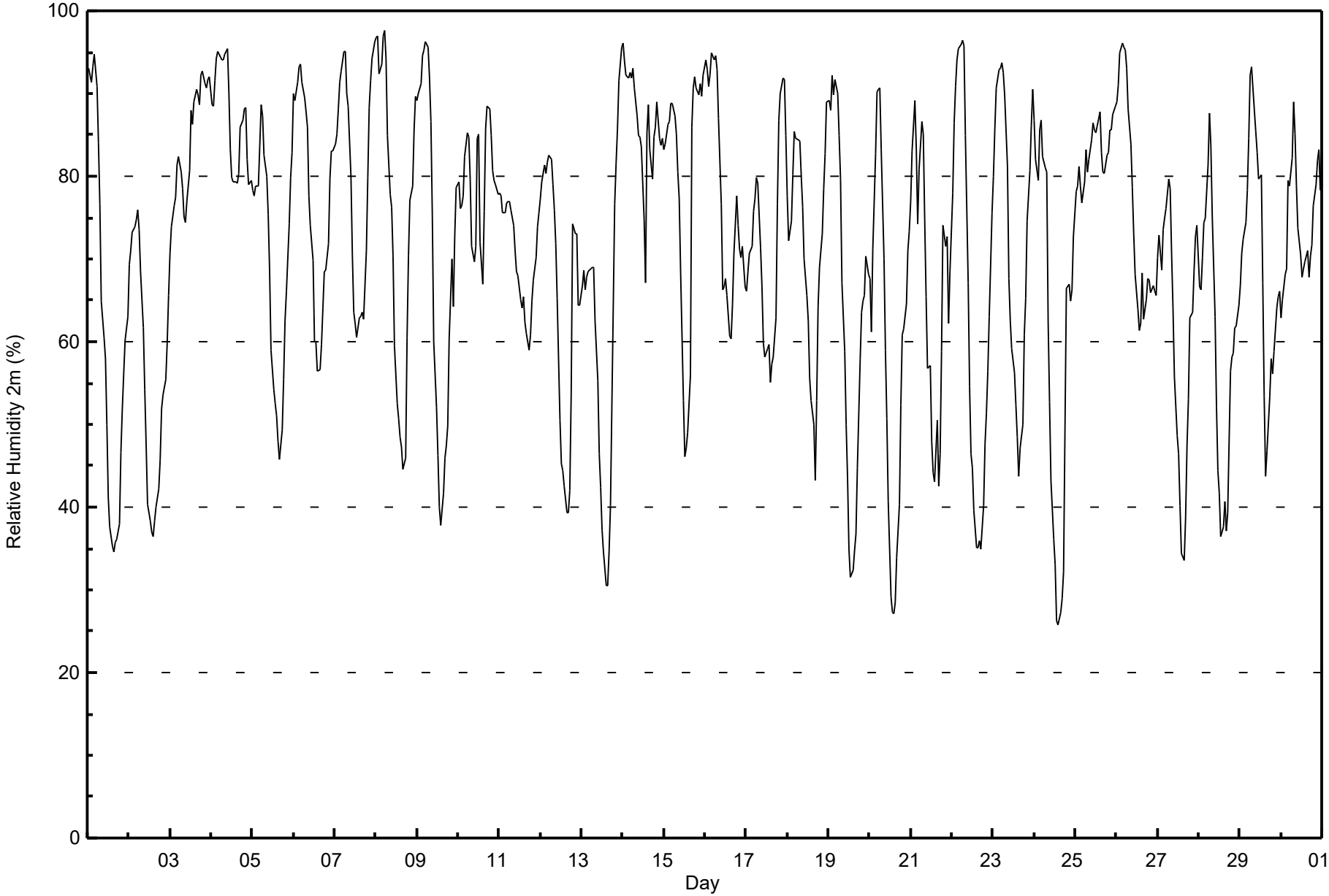
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	93.1	92.2	91.3	93.2	94.7	90.8	84.1	76.6	64.9	60.5	58.0	50.0	41.2	37.5	35.3	34.6	35.7	36.1	38.0	46.5	51.9	56.2	60.2	63.1	61.9	94.7
2-Sep	69.3	71.1	73.3	74.0	74.7	76.0	73.6	68.4	61.7	54.2	47.5	40.3	38.4	37.0	36.4	38.3	39.9	42.2	45.7	51.9	53.6	55.5	59.8	65.6	56.2	76.0
3-Sep	70.7	73.8	76.4	77.5	81.4	82.4	80.5	78.4	75.1	74.4	77.0	80.6	88.0	86.2	89.0	90.5	89.9	88.7	92.2	92.7	91.2	90.7	91.7	92.0	83.8	92.7
4-Sep	88.7	88.4	91.5	94.3	95.1	94.3	94.1	94.0	94.7	95.5	90.0	83.2	79.8	79.3	79.4	79.2	80.3	85.9	86.8	88.1	88.2	82.1	78.9	79.4	87.1	95.5
5-Sep	78.3	77.5	78.8	78.8	83.8	88.6	87.4	82.6	79.9	75.4	68.6	58.9	54.2	52.5	51.1	47.9	45.7	49.4	55.4	62.5	66.1	74.2	79.8	82.9	69.2	88.6
6-Sep	90.0	89.1	91.4	93.2	93.5	91.4	89.5	87.8	85.9	77.7	74.1	69.8	60.1	60.0	56.5	56.7	59.7	64.1	68.4	68.6	71.9	79.7	83.0	83.0	76.9	93.5
7-Sep	84.0	85.1	88.1	91.3	92.7	95.0	95.1	90.0	88.5	80.0	70.5	63.5	62.2	60.5	62.9	63.0	63.5	62.7	71.0	79.8	88.3	91.5	94.2	96.2	80.0	96.2
8-Sep	96.7	97.0	92.3	93.5	96.9	97.7	94.2	85.0	77.8	76.3	70.4	59.5	52.6	50.8	48.5	47.2	44.5	45.9	60.5	70.3	77.0	78.9	85.6	89.7	74.5	97.7
9-Sep	89.2	90.1	91.2	94.5	95.3	96.2	95.6	91.9	86.6	75.3	60.0	52.1	46.3	40.0	37.8	41.7	45.9	47.4	49.8	60.4	70.1	64.3	72.8	78.6	69.7	96.2
10-Sep	79.4	76.0	76.5	77.6	82.4	85.3	84.7	79.7	71.6	69.6	71.5	84.6	85.2	72.1	66.9	75.8	85.7	88.5	88.1	84.9	80.6	79.5	78.9	77.8	79.3	88.5
11-Sep	77.9	77.6	75.7	75.7	76.7	77.0	77.0	75.9	74.1	70.9	68.5	68.0	65.1	64.0	65.4	62.4	61.1	59.0	60.8	65.0	67.4	70.1	73.9	75.5	70.2	77.9
12-Sep	77.2	79.3	81.4	80.4	81.7	82.5	82.1	79.1	76.0	71.8	65.3	50.6	45.3	44.3	42.5	39.3	39.3	42.0	53.8	74.3	73.0	73.1	64.3	64.4	65.1	82.5
13-Sep	66.8	68.6	66.3	67.8	68.5	68.8	69.0	69.0	62.6	55.3	46.4	42.4	37.4	34.5	30.6	30.5	34.7	40.1	64.4	76.6	81.6	85.8	91.5	95.6	60.6	95.6
14-Sep	96.0	93.9	92.3	91.9	92.6	91.8	93.1	90.6	87.3	84.9	84.8	83.6	74.8	67.2	85.3	88.7	83.2	79.7	84.7	85.9	88.9	84.5	83.8	84.5	86.4	96.0
15-Sep	83.2	84.0	86.2	86.6	88.8	88.8	87.3	85.0	80.5	77.2	68.5	52.8	46.1	47.1	49.0	56.0	86.0	90.6	92.1	90.7	89.8	91.2	89.6	92.2	78.7	92.2
16-Sep	94.1	92.9	90.9	92.4	94.9	94.1	94.5	93.0	86.9	76.7	66.2	66.6	67.7	65.5	60.6	60.4	64.6	70.6	77.7	74.0	71.1	70.1	71.5	66.6	77.7	94.9
17-Sep	66.1	68.5	70.7	71.5	75.8	77.3	79.9	79.1	71.3	66.7	59.8	58.2	59.2	59.7	55.1	57.3	58.1	62.9	76.6	86.7	90.0	91.8	91.7	85.0	71.6	91.8
18-Sep	77.6	72.3	74.6	80.1	85.5	84.5	84.4	84.2	80.0	76.2	70.0	65.6	62.6	55.6	52.9	50.0	43.3	52.8	64.2	69.0	73.1	78.5	82.7	89.0	71.2	89.0
19-Sep	89.2	87.9	92.2	89.8	91.6	89.9	84.9	79.7	67.1	58.8	49.9	43.6	34.8	31.5	32.4	34.7	36.7	44.7	57.7	63.5	64.9	65.6	70.3	68.2	63.7	92.2
20-Sep	67.6	61.1	71.2	82.8	90.2	90.4	90.6	83.2	70.0	59.0	50.7	40.7	29.1	27.3	27.1	28.5	33.9	40.3	52.3	60.8	61.5	64.7	71.1	73.4	59.5	90.6
21-Sep	76.9	83.0	89.1	83.4	74.2	80.9	86.6	85.2	74.8	65.4	56.9	57.1	47.9	44.3	43.1	50.6	42.5	46.5	58.9	74.1	71.6	72.7	62.2	68.5	66.5	89.1
22-Sep	78.0	86.4	90.9	94.0	95.4	96.0	96.4	95.8	84.9	67.1	54.6	46.4	44.8	39.6	35.1	35.1	36.0	35.0	40.1	47.7	51.4	56.5	63.1	75.6	64.4	96.4
23-Sep	80.1	85.8	90.7	92.8	93.0	93.7	92.6	89.8	81.1	67.6	62.5	59.2	56.2	52.4	48.4	43.7	47.1	50.0	60.8	65.3	74.6	80.7	86.1	90.6	72.7	93.7
24-Sep	86.9	82.0	79.6	85.6	86.8	82.4	81.0	80.5	62.4	52.7	43.3	36.1	33.0	26.2	25.7	27.3	29.0	32.2	49.5	66.5	66.9	64.9	66.3	72.6	59.1	86.9
25-Sep	78.2	78.8	81.2	78.7	76.9	79.3	83.3	80.6	82.1	84.5	86.4	85.7	85.2	86.2	87.8	82.9	80.5	80.3	82.5	82.8	85.7	85.5	87.5	88.4	82.9	88.4
26-Sep	89.0	91.0	95.0	96.1	95.6	95.2	93.1	88.2	83.9	78.6	73.1	68.1	63.9	61.3	62.2	68.2	62.7	65.2	67.7	67.5	66.0	66.9	66.0	65.6	76.2	96.1
27-Sep	70.2	72.9	68.7	73.6	74.8	76.2	79.7	78.5	70.7	64.0	55.7	48.7	46.4	40.1	34.3	33.5	38.8	47.4	53.0	62.9	63.5	68.5	72.8	74.1	61.2	79.7
28-Sep	66.6	66.3	70.2	74.4	74.9	81.4	87.7	83.8	75.0	63.1	52.2	44.4	41.6	36.5	37.6	40.7	37.1	39.4	56.5	58.1	58.7	61.7	61.8	64.5	59.8	87.7
29-Sep	66.8	70.7	72.4	74.4	78.3	84.5	92.1	93.2	87.9	85.4	82.9	79.7	80.2	67.2	53.4	43.8	46.7	53.3	57.9	56.1	58.9	64.1	65.4	66.2	70.1	93.2
30-Sep	62.8	65.1	68.1	68.8	79.4	78.8	82.2	89.0	85.0	78.8	73.7	70.6	67.7	68.8	69.7	71.0	67.9	70.3	71.7	76.4	78.9	81.9	83.2	78.2	74.5	89.0
	79.7	80.3	81.9	83.6	85.5	86.4	86.5	83.9	77.7	71.5	65.3	60.3	56.6	53.2	52.1	52.6	54.0	57.1	64.6	70.3	72.6	74.4	76.3	78.2	Diurnal Average	
	96.7	97.0	95.0	96.1	96.9	97.7	96.4	95.8	94.7	95.5	90.0	85.7	88.0	86.2	89.0	90.5	89.9	90.6	92.2	92.7	91.2	91.8	94.2	96.2	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Pihew Point - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Pihew Point - September 2026

Maximum Speed: 36 km/h on Sep 11 04:00

Maximum Daily Speed Average: 26.9 km/h on Sep 11

Minimum Speed Value: 1 km/h on Sep 7 06:00

Minimum Daily Speed Average: 1.5 km/h on Sep 18

Maximum Diurnal Speed Average: 5.0 km/h at hour 15

Minimum Diurnal Speed Average: 2.5 km/h at hour 22

Monthly Average Velocity: 3.2 km/h 284.6 deg

Percentiles: P_1 = 1 P_{10} = 3 Q_1 = 5 Median = 8 Q_3 = 15 P_{90} = 21 P_{99} = 32

Hours in Service: 720

Hours of Data: 719

Hours of Missing Data: 1

Percent Operational Time: 99.9

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-Sep	UO	S4	S2	SSE3	SSE2	SSE1	SSE3	S2	SE6	SE7	SE6	SSE4	SE8	SE12	SE11	ESE13	SE14	SE14	SE11	SE8	SE8	SE7	ESE6	SE5	SE6.6	SE14
2-Sep	ESE5	ESE8	ESE9	SE8	SE10	ESE11	ESE12	ESE11	ESE12	ESE13	ESE12	ESE15	ESE17	ESE17	ESE16	ESE15	ESE15	ESE17	ESE16	ESE14	ESE14	ESE13	SE10	SE8	ESE12.4	ESE17
3-Sep	SE6	ESE9	ESE8	ESE8	ESE8	ESE10	ESE10	ESE10	ESE12	ESE11	E13	E13	ENE9	ENE11	ENE11	NE9	ENE7	NNE5	N5	NE7	ENE7	ENE6	ENE5	E4	E7.5	E13
4-Sep	ESE6	ESE6	NE3	N3	N3	N6	N5	N8	N11	N19	NNE24	NNE27	NNE28	NNE31	N28	N30	N27	N26	N25	N24	N20	N16	NNW14	N13	N16.0	NNE31
5-Sep	N13	N12	NNW14	NNW13	N13	N10	N10	N8	N9	N12	NNE10	N6	NNW8	N6	NNW9	NNW5	NNW4	N7	NNW9	N6	NE1	E3	SSE2	SW5	N7.4	NNW14
6-Sep	SSW2	SSE6	S5	S3	SW1	SSW3	SSE3	SE3	SSE2	SW2	S4	SE4	SE11	SE10	SE6	S5	SE4	SSE3	SE4	SE5	SE9	SE8	SE8	SE5	SSE4.4	SE11
7-Sep	SE5	SE7	SE6	SSW3	SSW4	S1	ESE2	SE4	SSW4	S5	S6	SE8	SSE7	SSE4	ENE4	E3	ESE5	SE4	SE4	SE3	SE1	SE2	SE3	S3	SSE3.5	SSE8
8-Sep	S3	W2	NW8	NE2	ESE1	WNW1	NW8	NNW12	NNW10	N10	NNW8	N13	NNW7	NNW4	NNE3	N4	W3	SW4	SE1	SE2	E2	S5	SSE2	SE4	NNW2.8	N13
9-Sep	SSE4	SSE6	SSE7	S4	SSE4	SSE4	SE5	SE4	SSE4	S5	SSW9	SW13	SW15	SW21	SW21	SW20	SW16	SW19	SW20	SW13	SSW6	SW15	SW16	SW13	SSW10.0	SW21
10-Sep	SW15	W19	W16	W16	WSW15	SW15	SW14	WSW19	WSW18	W17	W17	W15	WSW16	W18	WNW17	NW19	W16	W19	W17	WNW17	NW20	WNW16	WNW16	WNW18	W15.4	NW20
11-Sep	WNW22	NW24	NW35	NW36	NW33	NW31	NW31	NNW33	NNW28	NNW35	NNW33	NNW32	NNW27	NNW29	NW35	NNW29	NNW22	NNW25	NNW24	NNW24	NNW20	NW15	NW15	NW17	NNW26.9	NW36
12-Sep	WNW14	W11	WNW10	WNW11	WNW10	WNW9	WNW7	WNW8	WNW8	WNW7	NW9	W7	SW10	W9	WNW6	SW7	SW9	SW8	SW4	SE3	SSW4	SW4	SW11	SW13	W6.8	WNW14
13-Sep	SW10	SW11	WSW10	SW10	SW11	WSW12	SW15	SW11	SW14	SW11	SW11	SW12	SW16	SW14	SW14	SW13	SSW9	SSW5	NNE19	NNE19	N17	N11	N10	NNW13	WSW6.3	NNE19
14-Sep	N17	N16	NNE17	N15	N17	N18	NNW16	N15	NNW17	N16	N15	N16	N17	N21	N18	NNE12	N13	NNW15	NNW15	NNW10	NNW9	NW13	WNW11	W10	N13.9	N21
15-Sep	WNW10	W11	W10	W8	WNW9	WSW6	WSW7	SW8	SW7	SW9	W3	WSW10	SW10	SW13	SW14	SW5	NNE6	SE3	NE2	SW5	NW11	WNW6	WNW11	NNW13	W6.0	SW14
16-Sep	N8	NNW9	N8	NNE3	NNE4	NNE3	S1	SSW4	SSW5	S5	S7	S8	SSW6	ESE5	SE4	SE4	E7	ESE5	E5	ESE7	ESE7	SE6	SSE4	SE9	ESE2.3	SE9
17-Sep	SE10	SE9	SE8	SE8	SE5	S3	SSE4	S3	SSE6	SSE5	SSW7	SSW6	SSW5	SSW4	SW6	SSW5	SW5	SSW5	SSE4	S3	SSW3	S1	S1	SW1	S4.1	SE10
18-Sep	WSW2	WNW4	WSW5	SW5	SW5	NNW6	NNW7	N7	N6	N6	N3	N4	N6	NNW7	NNE5	E4	SSE4	ENE7	SE3	SE3	ESE4	ESE4	ESE3	SSW1	N1.5	ENE7
19-Sep	S4	S5	S3	S6	S3	SSE2	SE5	SE4	SE7	SE7	SE9	SE8	S8	SSW9	SSW9	S8	S7	SSW5	ESE1	ESE2	SE5	SE3	E3	SE4	SSE4.5	SSW9
20-Sep	SW6	SW10	SSE3	SSE3	SSE4	SSE6	S5	SSE6	S4	SSW6	S4	SSW7	SW14	SW14	SW11	SW11	SSW6	S3	SE3	E2	NE1	E2	E3	WSW1	SSW4.5	SW14
21-Sep	SW4	SSW3	SSW3	SW8	SW12	S6	SSE6	SE6	SSE5	ESE6	ESE7	ESE7	ESE7	E6	E8	NE4	ESE6	ESE3	SSW5	SSW1	SW3	SW5	SW11	SW3	SSE3.3	SW12
22-Sep	NNE2	ESE2	E1	S3	SSE4	SE3	S3	NW3	W3	NW15	NW21	NW19	NW15	WNW11	WSW15	W17	W14	W15	WSW10	W10	W8	SW6	SSW4	SW2	W6.7	NW21
23-Sep	S5	SSW5	SSW4	SSE5	SSE6	S5	S5	SSW6	SE4	ESE3	SSE3	E7	E8	E7	ESE7	ESE8	ESE8	SE5	SSE4	SE4	SSE2	E1	SSE3	SSW5	SE4.0	ESE8
24-Sep	SW8	SW5	SW7	SW9	SSW7	SSW5	SSW5	S5	SW10	SW13	SW12	SW16	SW17	WSW16	W16	WSW11	SW12	SW11	SSW6	NNW2	SW3	SW4	WSW4	E4	SW7.8	SW17
25-Sep	E2	ESE4	NNE5	N5	N10	N12	N12	N14	N8	NNE15	NNE17	NNE23	NNE25	NNE23	N23	N24	NNE21	N23	NNE23	NNE21	N22	N22	N21	N24	NNE16.2	NNE25
26-Sep	NNE18	N15	NNW14	NW16	WNW13	W14	W18	W21	W23	W21	W21	W24	W24	W23	W24	W21	W23	W25	W23	W22	W22	W21	W21	W16	W18.1	W25
27-Sep	WSW12	WSW14	W19	WSW17	WSW20	WSW21	WSW21	WSW20	WSW21	WSW17	WSW16	SW16	SW18	WSW18	WSW18	WSW17	WSW12	SW15	SW10	SW10	SW11	SW9	SW8	WSW7	WSW15.0	WSW21
28-Sep	WSW15	SW18	SW16	SW9	SSW7	SSE5	ESE5	ESE7	ESE6	SSW8	SW14	SW17	SW19	SW20	SW17	SW12	SSW12	SSW7	ESE2	SSE2	ESE2	WNW2	SE3	SE4	SSW7.9	SW20
29-Sep	SE4	SE4	SSE3	S3	SE3	SE5	SE4	SSW6	SW13	SW14	SW16	WSW17	W18	W20	W21	W24	W24	W21	W14	W18	W18	W20	W21	W20	W11.4	W24
30-Sep	W25	WNW24	WNW24	WNW19	WNW19	W20	WNW21	WNW21	WNW19	WNW22	NW26	NW27	NW24	NW26	WNW18	NW16	NW12	NNW17	NNW11	NW13	NW12	NNW10	NW7	NW11	WNW17.8	NW27
	W2.7	W3.2	WNW3.7	W3.7	W3.3	W2.7	W2.7	WNW2.9	W3.1	WNW3.3	WNW3.4	WNW3.8	W4.2	WNW4.7	WNW5.0	WNW3.9	W2.9	WNW3.3	NW2.7	NW2.7	NW2.9	WNW2.5	W3.3	WNW3.1	Diurnal Average	
	W25	NW24	NW35	NW36	NW33	NW31	NW31	NNW33	NNW28	NNW35	NNW33	NNW32	NNE28	NNE31	NW35	N30	N27	N26	N25	NNW24	W22	N22	W21	N24	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 Sep 13 19:00

Minimum Value: 1 km/h on Sep 19 05:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 3 Q_3 = 4 P_{90} = 5 P_{99} = 7

Hours in Service:	720
Hours of Data:	719
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-Sep	UO	3	2	2	2	2	2	2	3	3	3	3	5	5	4	5	4	5	4	3	3	2	2	3	5
2-Sep	2	2	3	3	3	3	4	4	4	4	5	5	6	5	6	5	5	5	5	5	4	4	3	2	6
3-Sep	2	3	2	3	3	3	3	3	4	4	4	4	2	2	3	2	2	2	2	3	2	2	2	2	4
4-Sep	2	1	2	2	2	2	2	3	5	4	5	5	6	6	6	5	6	7	6	4	5	4	2	2	7
5-Sep	2	3	2	2	3	2	2	3	2	3	3	3	3	3	3	3	2	3	1	2	1	1	1	1	3
6-Sep	3	2	1	2	1	1	1	1	1	1	1	2	4	4	3	2	2	2	2	2	3	3	3	2	4
7-Sep	2	2	2	2	2	1	2	3	2	2	3	3	3	2	2	2	2	2	1	2	1	1	1	2	3
8-Sep	2	3	3	2	1	1	3	2	2	3	3	3	3	3	3	2	3	2	1	1	1	2	2	2	3
9-Sep	2	1	1	2	2	1	1	2	2	2	4	4	5	5	5	5	4	4	5	5	4	5	4	3	5
10-Sep	4	6	5	4	4	4	3	5	4	5	5	4	4	5	4	5	4	5	4	5	6	4	4	5	6
11-Sep	6	7	5	5	4	4	4	5	6	7	7	7	5	6	5	6	4	5	4	5	3	3	4	4	7
12-Sep	4	2	3	3	3	2	2	2	2	2	2	4	3	3	3	3	3	3	2	1	2	3	3	3	4
13-Sep	3	3	3	3	4	4	4	2	5	3	3	4	4	4	4	4	4	2	9	4	3	3	2	2	9
14-Sep	3	4	3	3	3	4	3	3	3	3	3	3	4	4	4	4	3	2	2	3	2	3	3	2	4
15-Sep	2	3	2	3	3	2	2	2	2	3	3	3	4	3	4	5	4	2	3	2	2	3	4	3	5
16-Sep	2	2	2	2	2	2	2	1	2	2	2	3	3	2	2	2	2	1	1	2	2	2	2	3	3
17-Sep	3	3	2	3	3	1	1	1	2	2	3	3	2	2	2	3	2	2	1	2	2	1	1	2	3
18-Sep	3	3	3	2	2	3	2	1	2	2	1	1	1	3	3	2	2	4	1	1	2	1	1	1	4
19-Sep	2	1	2	1	1	1	2	2	3	3	3	3	4	4	4	4	3	2	1	1	1	1	1	2	4
20-Sep	2	3	2	2	1	1	1	2	1	2	2	4	4	4	3	4	2	1	1	1	1	1	1	1	4
21-Sep	1	1	1	4	2	2	2	1	2	2	2	3	2	2	3	3	2	2	2	1	2	4	3	2	4
22-Sep	1	2	1	2	3	2	2	2	3	7	4	5	4	5	5	5	4	5	4	3	2	2	3	2	7
23-Sep	2	2	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	1	2	1	2	1	2	2
24-Sep	1	1	3	2	2	2	2	2	4	3	4	4	4	5	4	4	3	3	2	1	2	2	1	2	5
25-Sep	1	1	2	2	3	3	4	4	2	2	3	4	4	5	5	4	4	5	4	3	4	4	4	5	5
26-Sep	4	3	3	4	4	4	5	6	6	6	6	7	6	7	7	6	7	7	6	6	6	6	6	4	7
27-Sep	3	5	6	5	4	4	5	5	5	5	4	4	4	4	5	5	4	5	4	4	3	3	2	2	6
28-Sep	3	4	5	3	4	2	1	2	2	6	4	5	5	5	4	4	4	4	1	2	1	1	2	1	6
29-Sep	1	1	2	2	2	2	1	4	3	3	4	4	5	5	6	7	7	7	4	7	5	6	7	6	7
30-Sep	8	7	6	6	6	6	6	6	5	5	6	5	5	6	5	4	2	5	2	2	2	4	2	2	8
	8	7	6	6	6	6	6	6	6	7	7	7	6	7	7	7	7	7	9	7	6	6	7	6	
	Diurnal Maximum																								

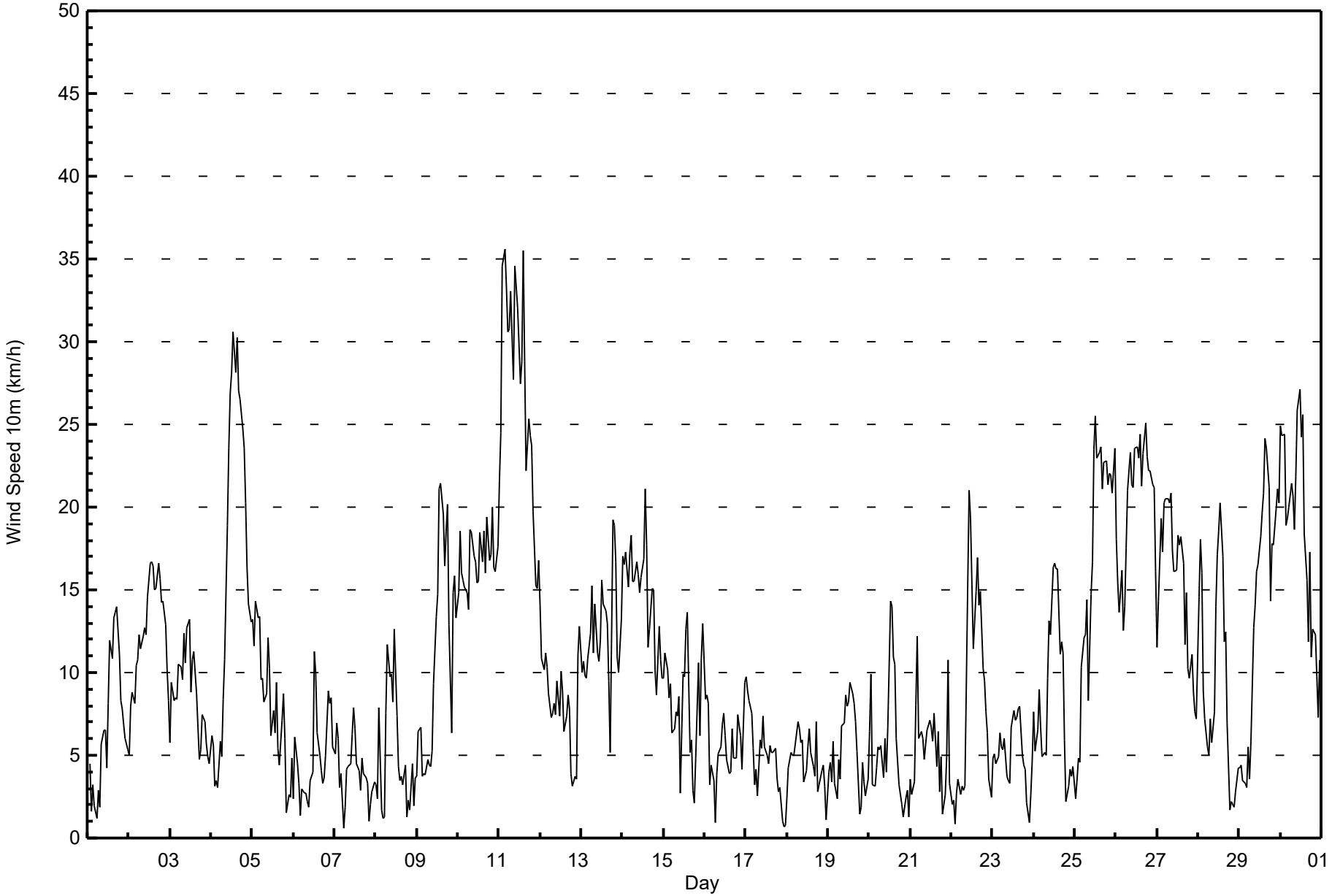
UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Pihew Point - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	232	32.27	32.27
6 - 11	221	30.74	63.00
12 - 19	173	24.06	87.07
20 - 28	79	10.99	98.05
29 - 38	14	1.95	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Pihew Point - September 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	2	14	18	44	35	35	26	19	5	4	3	1	4	232
6 - 11	22	2	2	7	6	27	33	10	8	18	35	7	9	15	6	14	221
12 - 19	25	7	0	0	2	18	2	0	0	1	42	18	22	11	13	12	173
20 - 28	13	10	0	0	0	0	0	0	0	0	5	5	26	6	7	7	79
29 - 38	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6	6	14
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	69	28	8	9	22	63	79	45	43	45	101	35	61	35	33	43	719

Total Number of Valid Hours: 719

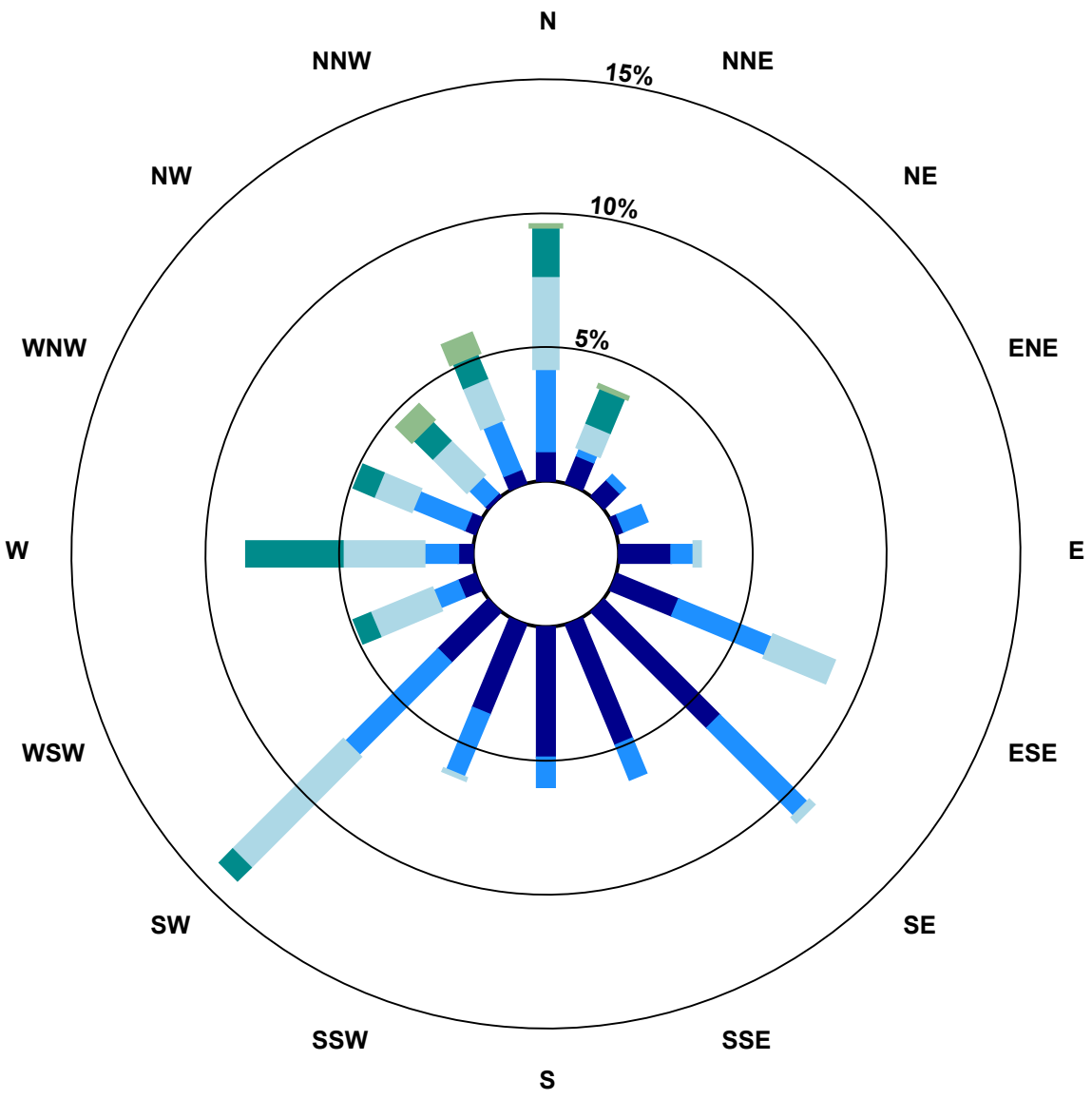
Total Number of Hours: 720

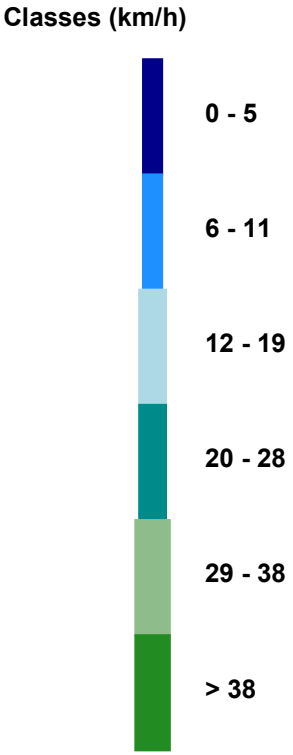
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Pihew Point





Total Number of Valid Hours: 719

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Pihew Point - September 2026

Direction of Maximum Speed: 322 deg on Sep 11 04:00
Direction of Maximum Daily Speed Average: 327.5 deg on Sep 11

Direction of Minimum Speed: 171 deg on Sep 7 06:00
Direction of Minimum Daily Speed Average: 1.5 deg on Sep 18

Monthly Average Direction: 284.6 deg

Hours in Service:	720
Hours of Data:	719
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-Sep	UO	179	175	168	161	159	150	189	142	133	125	163	134	128	126	123	124	127	125	128	124	124	120	129	132.2
2-Sep	119	111	113	128	125	119	122	119	116	117	119	118	119	117	117	109	106	111	111	110	112	120	127	131	116.7
3-Sep	127	113	117	119	120	112	105	105	122	110	87	91	77	70	71	53	71	23	3	37	59	67	65	79	88.9
4-Sep	108	117	44	1	11	7	359	358	357	4	14	14	13	14	11	9	6	5	6	4	357	354	341	353	7.7
5-Sep	360	7	347	343	349	353	353	1	4	3	22	4	331	352	340	345	337	0	348	355	46	90	159	215	354.6
6-Sep	197	166	180	188	227	208	166	142	165	215	189	145	128	126	144	169	143	153	140	135	124	132	129	139	147.7
7-Sep	137	134	131	203	212	171	121	133	209	175	169	146	166	151	78	91	114	144	138	142	145	134	146	169	148.2
8-Sep	170	262	314	41	106	297	326	332	337	360	347	351	335	335	21	8	274	221	145	142	97	185	164	135	336.7
9-Sep	156	162	164	180	163	150	137	135	150	178	210	220	222	224	232	223	220	221	226	225	210	222	225	225	213.1
10-Sep	230	274	281	260	237	231	227	241	249	276	275	262	251	280	282	306	280	276	277	300	313	298	283	296	271.5
11-Sep	303	309	323	322	324	326	323	330	336	343	344	332	337	328	325	331	331	330	330	332	334	324	308	306	327.5
12-Sep	301	281	284	293	292	289	286	284	299	302	317	280	236	276	291	224	231	227	222	144	196	228	229	224	268.7
13-Sep	219	222	237	229	228	239	229	222	222	219	219	216	220	226	225	226	211	200	13	16	7	3	350	342	245.2
14-Sep	359	5	15	3	0	357	346	351	346	356	360	359	358	356	358	31	6	336	332	344	339	308	286	279	351.3
15-Sep	285	278	278	278	298	244	247	223	215	225	268	251	233	228	220	236	15	130	34	223	316	297	297	334	264.4
16-Sep	359	342	356	24	19	22	175	195	202	176	185	183	195	115	139	130	88	102	85	106	111	124	160	132	118.2
17-Sep	130	131	131	140	138	173	156	174	156	164	213	197	197	205	222	209	214	205	162	169	200	173	171	228	171.1
18-Sep	253	285	252	221	222	336	348	351	355	355	10	358	355	338	17	88	155	64	124	128	119	117	121	213	3.3
19-Sep	172	189	170	177	185	164	132	139	130	138	135	136	176	202	204	191	190	212	106	117	133	126	88	133	163.5
20-Sep	214	226	153	165	164	156	186	164	179	210	176	204	236	227	219	214	208	191	124	100	51	83	80	254	200.9
21-Sep	220	203	205	228	216	178	157	144	162	110	105	110	120	82	98	56	118	120	198	195	231	225	235	227	165.0
22-Sep	29	119	83	185	168	142	185	314	269	311	318	306	313	283	257	272	276	270	257	273	259	230	200	223	279.9
23-Sep	174	199	199	156	158	172	186	202	130	118	148	92	89	91	107	118	120	140	147	136	159	99	147	197	141.9
24-Sep	217	227	226	221	209	201	199	185	215	215	221	227	228	247	264	257	228	216	198	336	236	225	251	83	226.8
25-Sep	96	110	19	4	5	357	4	7	6	16	19	24	23	24	3	9	14	10	17	14	4	6	5	5	12.3
26-Sep	21	356	342	312	299	260	265	266	272	268	264	269	274	269	271	277	276	269	270	269	268	269	269	268	277.6
27-Sep	251	255	267	254	249	248	244	248	247	238	241	234	232	243	246	252	248	229	218	221	223	227	235	244	243.1
28-Sep	239	232	228	217	208	151	123	106	121	209	220	218	222	228	223	215	212	201	111	158	123	297	144	127	211.9
29-Sep	129	144	151	172	140	137	125	198	217	222	233	256	277	272	277	272	272	271	266	265	278	274	269	272	259.3
30-Sep	281	291	298	286	289	281	284	296	294	303	308	315	310	316	302	308	304	335	342	312	307	338	326	315	303.1
	271.1	266.3	292.0	273.2	272.0	272.7	269.0	281.5	265.6	291.3	295.3	287.1	274.9	283.0	282.7	287.9	278.8	283.0	317.1	326.1	322.5	296.1	274.6	284.2	
	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

Pihew Point - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 108 deg on Sep 7 06:00

Minimum Value: 8 deg on Sep 11 05:00

Percentiles: P_1 = 10 P_{10} = 15 Q_1 = 19 Median = 25 Q_3 = 44 P_{90} = 61 P_{99} = 91

Hours in Service:	720
Hours of Data:	719
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-Sep	UO	17	24	24	44	58	43	71	46	42	35	67	50	38	41	34	34	32	33	34	32	30	25	33	71
2-Sep	24	20	23	31	30	27	30	31	32	32	34	32	32	31	32	30	25	27	27	26	27	31	34	31	34
3-Sep	29	18	20	25	28	25	24	28	30	34	23	23	20	20	19	18	23	34	38	22	26	23	24	33	38
4-Sep	25	24	53	28	47	11	34	14	15	16	14	14	15	17	15	16	17	16	16	15	16	16	13	16	53
5-Sep	15	15	14	13	14	14	14	18	20	19	26	48	33	43	26	47	52	27	14	18	52	32	46	11	52
6-Sep	69	26	25	45	99	68	64	49	66	86	52	63	35	45	60	62	55	60	54	37	33	39	34	48	99
7-Sep	44	37	36	52	44	108	83	61	42	55	65	58	53	59	27	37	37	46	22	44	105	81	32	35	108
8-Sep	60	68	27	67	50	48	21	11	23	19	23	18	43	58	71	55	72	65	82	64	61	43	80	39	82
9-Sep	34	16	18	48	54	61	38	50	53	58	36	21	25	19	20	16	17	16	17	19	42	18	16	16	61
10-Sep	17	25	22	22	17	17	18	16	20	25	24	23	19	22	22	22	22	20	19	22	19	21	22	22	25
11-Sep	18	17	9	9	8	9	9	9	14	15	17	12	13	18	11	14	11	11	9	10	10	15	18	17	18
12-Sep	21	22	23	24	23	23	25	23	21	26	17	49	36	45	48	48	35	32	53	49	68	52	17	15	68
13-Sep	20	20	18	19	21	19	17	15	18	20	24	21	18	21	20	20	27	60	28	16	13	16	15	13	60
14-Sep	18	16	13	14	15	16	15	16	15	17	15	15	17	16	17	15	21	15	12	15	18	16	22	21	22
15-Sep	21	21	21	26	22	30	17	18	26	34	83	32	27	19	20	65	48	61	97	51	14	46	24	19	97
16-Sep	16	16	17	51	50	37	88	28	38	60	53	55	54	63	73	55	22	31	30	24	18	29	40	32	88
17-Sep	30	32	30	39	49	55	44	71	48	58	37	50	45	47	55	53	40	31	38	46	51	64	68	87	87
18-Sep	86	64	59	44	26	45	22	18	27	19	31	24	17	28	35	44	61	35	54	20	18	19	37	72	86
19-Sep	29	23	41	14	26	46	54	68	51	53	43	53	67	68	69	75	70	53	87	90	42	81	60	57	90
20-Sep	27	27	60	65	39	25	30	31	42	33	74	56	21	21	26	24	31	44	35	60	80	54	41	92	92
21-Sep	35	46	40	20	13	34	26	22	37	45	32	40	40	24	23	56	30	78	40	82	70	50	16	94	94
22-Sep	64	55	71	77	61	55	30	65	54	17	12	19	16	33	25	23	25	22	25	23	27	16	48	63	77
23-Sep	36	19	37	29	20	29	31	31	45	70	66	36	24	27	29	33	28	51	51	45	60	99	42	35	99
24-Sep	14	17	31	12	22	35	44	44	21	17	21	19	20	27	23	29	21	18	28	46	41	55	42	31	55
25-Sep	49	20	46	22	13	16	16	15	19	13	13	12	13	14	16	13	13	13	12	14	15	14	15	16	49
26-Sep	16	19	24	16	22	21	21	20	19	20	21	21	22	22	22	23	22	20	21	21	21	20	21	23	24
27-Sep	19	21	20	18	15	14	14	15	17	18	19	21	19	20	20	21	26	17	29	25	13	15	16	15	29
28-Sep	16	16	17	23	40	42	26	21	39	68	19	20	18	19	18	24	36	51	51	96	90	67	40	27	96
29-Sep	22	27	39	48	62	30	32	43	18	16	18	24	23	23	23	22	22	20	22	22	22	23	21	22	62
30-Sep	22	21	20	22	23	22	21	21	22	18	16	13	15	15	20	16	21	16	17	13	15	25	24	18	25
	86	68	71	77	99	108	88	71	66	86	83	67	67	68	73	75	72	78	97	96	105	99	80	94	
	Diurnal Maximum																								

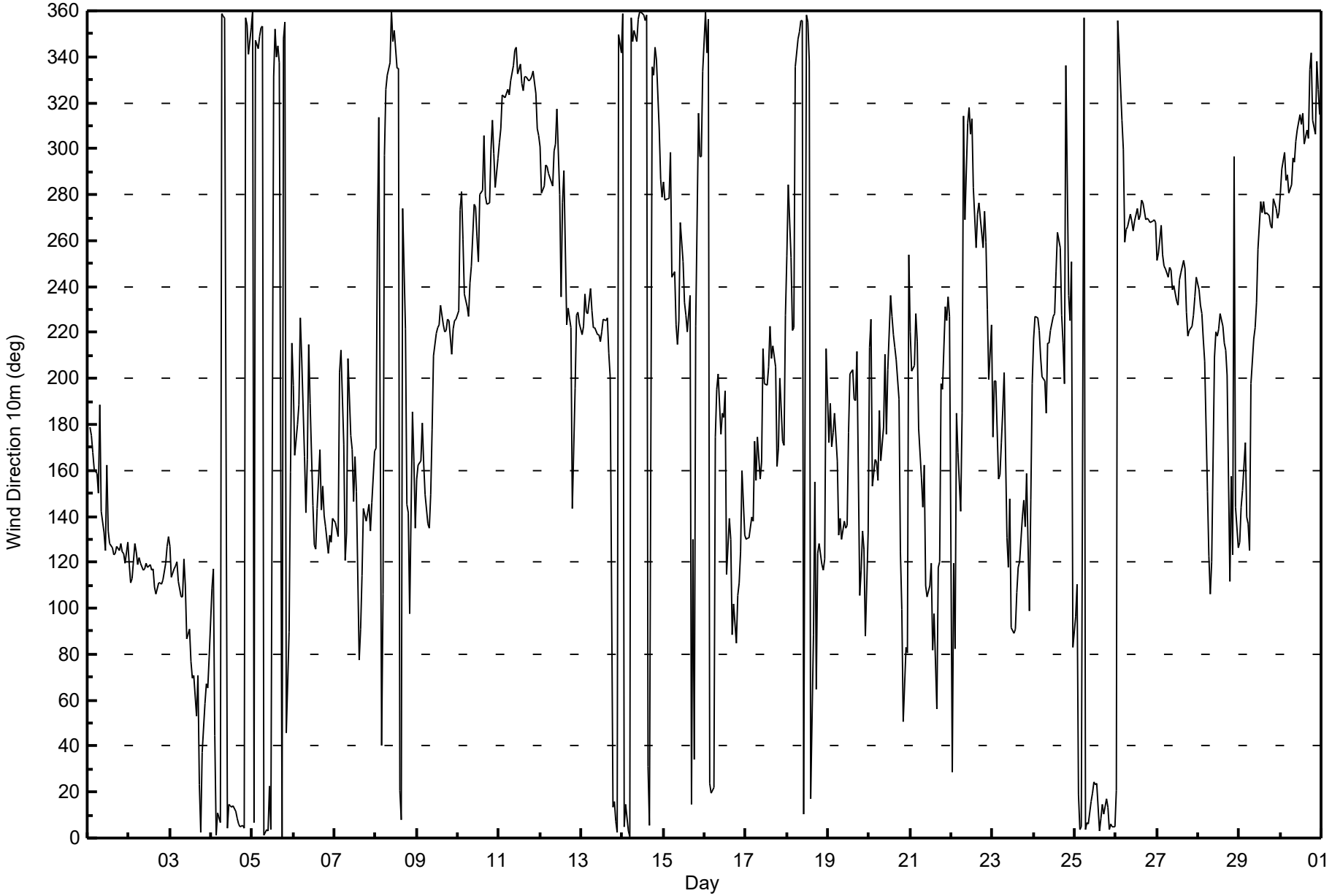
UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Pihew Point - September 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS33
MONDAY CREEK
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MONDAY CREEK (AMS33)
SEPTEMBER 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	685	34	35	99.86	14.8	0	4.6	0
H2S (ppb) Average	683	37	37	100	0.7	0	0.2	0
NO2 (ppb) Average	643	34	77	94.03	13.9	0	4.7	-
NO (ppb) Average	643	34	77	94.03	8.4	-	2.1	-
NOX (ppb) Average	643	34	77	94.03	22.3	-	6.7	-
Temperature 2 m (C) Average	720	0	0	100	26.2	-	20.4	-
Relative Humidity (%) Average	716	0	4	99.44	100	-	87.8	-
Wind Speed 10 m (km/h) Average	716	0	4	99.44	31	-	21	-
Wind Direction 10 m (deg) Average	716	0	4	99.44	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MONDAY CREEK (AMS33)
SEPTEMBER 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	685	0.56	1.5	-	0	0	0	0.1	0.4	1.2	14.8
H2S (ppb) Average	683	0.11	0.1	-	0	0	0.1	0.1	0.1	0.2	0.7
NO2 (ppb) Average	643	1.33	1.8	-	0	0.2	0.4	0.8	1.6	2.6	13.9
NO (ppb) Average	643	0.33	0.9	-	0	0	0	0	0.2	0.8	8.4
NOX (ppb) Average	643	1.66	2.4	-	0	0.2	0.4	0.9	1.8	3.6	22.3
Temperature 2 m (C) Average	720	11.68	5.7	-	-1.4	4.8	7.4	11	15.9	19.7	26.2
Relative Humidity (%) Average	716	72.87	18.8	-	31	43.5	59.7	75.8	89	95.5	100
Wind Speed 10 m (km/h) Average	716	10.6	7	-	0	2	5	10	15	21	31
Wind Direction 10 m (deg) Average	716	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MONDAY CREEK (AMS33)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
SO2	28 Sep 2026 16:00	28 Sep 2026 16:00	1	Maintenance - sample manifold cleaned
NO2	17 Sep 2026 06:00	19 Sep 2026 00:00	43	Unstable Operation - span outside AMD criteria
Relative Humidity	08 Sep 2026 00:00	08 Sep 2026 00:00	1	Sensor operated out of range
Relative Humidity	16 Sep 2026 07:00	16 Sep 2026 07:00	1	Sensor operated out of range
Relative Humidity	24 Sep 2026 01:00	24 Sep 2026 01:00	1	Sensor operated out of range
Relative Humidity	26 Sep 2026 02:00	26 Sep 2026 02:00	1	Sensor operated out of range
Wind Speed, Wind Direction	01 Sep 2026 05:00	01 Sep 2026 06:00	2	Flat line in sensor output signal
Wind Speed, Wind Direction	17 Sep 2026 21:00	17 Sep 2026 21:00	1	Flat line in sensor output signal
Wind Speed, Wind Direction	18 Sep 2026 20:00	18 Sep 2026 20:00	1	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Monday Creek - September 2026

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

Maximum Value: 14.8 ppb on Sep 27 07:00

Maximum Daily Average: 4.6 ppb on Sep 27

Minimum Value: 0.0 ppb on Sep 1 02:00

Minimum Daily Average: 0.0 ppb on Sep 2

Maximum Diurnal Average: 1.0 ppb at hour 6

Minimum Diurnal Average: 0.2 ppb at hour 20

Monthly Average: 0.56 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.4 P_{90} = 1.2 P_{99} = 8.9

Hours in Service:	720
Hours of Data:	685
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-Sep	0.1	0.0	Z	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.6	1.0	0.5	0.0	0.0	0.0	0.0	0.2	1.0
2-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3-Sep	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
4-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.9	0.4	0.6	1.1	1.6	1.4	1.0	0.9	0.4	0.2	0.2	0.2	0.3	0.1	0.2	0.4	1.6
5-Sep	Z	0.3	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.5	0.5	0.6	0.5	0.4	0.2	0.1	0.1	0.2	0.1	0.3	0.6
6-Sep	0.1	Z	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3
7-Sep	0.2	0.3	Z	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.3	0.2	0.2	0.1	0.1	0.0	0.2	0.1	0.0	0.1	0.1	0.2	0.5
8-Sep	0.0	0.0	0.0	Z	0.1	0.0	0.1	0.0	0.3	0.4	0.2	0.1	0.1	0.0	0.2	0.4	0.5	0.4	0.4	0.2	0.1	0.1	0.1	0.1	0.2	0.5
9-Sep	0.2	0.3	0.3	0.3	Z	0.6	0.8	1.6	1.5	1.0	0.9	0.7	1.4	1.4	1.0	1.0	1.2	1.6	1.2	1.0	0.3	1.9	1.9	5.3	1.2	5.3
10-Sep	6.7	2.8	1.0	0.3	0.1	Z	1.1	5.9	2.1	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	0.0	0.9	6.7
11-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1
12-Sep	0.1	Z	0.1	0.1	0.1	0.1	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	0.2	0.2	0.1	0.3	0.8	0.1	0.8
13-Sep	1.3	1.1	Z	0.7	0.8	0.9	1.2	1.8	2.1	1.6	0.8	0.5	1.1	0.6	0.4	0.5	0.4	0.3	0.2	0.2	0.2	0.3	1.4	1.3	0.9	2.1
14-Sep	0.5	0.3	0.3	Z	0.3	0.2	0.1	0.1	0.2	0.1	0.1	C	C	C	C	0.1	0.2	0.2	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.5
15-Sep	0.2	0.2	0.2	0.1	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.4	0.3	0.6	0.9	0.4	0.1	0.1	0.1	0.0	0.2	0.2	0.9
16-Sep	0.3	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.3	0.6	0.6	0.9	1.0	1.3	1.0	1.0	0.9	0.7	0.3	0.2	0.1	0.2	0.2	0.2	0.5	1.3
17-Sep	Z	0.2	0.3	0.3	0.1	0.2	0.1	0.2	0.9	2.1	1.8	2.3	0.8	1.2	0.8	1.3	1.7	1.0	0.5	0.3	0.2	0.2	0.2	0.3	0.7	2.3
18-Sep	0.2	Z	0.3	0.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0	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	0.1	0.5
19-Sep	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.2	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.3	0.3	0.4	0.3	0.1	0.4
20-Sep	0.2	0.5	1.1	Z	0.7	1.3	0.9	0.6	1.2	2.2	1.5	2.4	1.4	1.1	1.3	0.8	0.9	0.2	0.1	0.2	0.1	0.0	0.1	0.0	0.8	2.4
21-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.4	0.3	0.5	0.7	0.7	0.6	0.3	0.2	0.1	0.2	0.2	0.3	0.1	0.1	0.0	0.2	0.7
22-Sep	0.0	0.1	0.1	0.0	0.1	Z	0.1	0.1	0.2	1.8	1.1	1.0	0.1	0.3	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.8
23-Sep	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	0.1	0.0	0.0	0.0	0.0	0.0	0.1
24-Sep	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.8	2.7	3.7	1.4	0.4	0.8	0.6	0.5	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.5	3.7
25-Sep	0.1	0.2	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	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.5	0.1	0.5
26-Sep	0.0	0.0	0.0	Z	0.2	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	0.0	0.0	2.7	6.3	9.9	0.9	9.9
27-Sep	10.6	3.1	8.8	11.6	Z	11.9	14.8	10.3	6.3	4.7	3.0	2.6	5.2	2.4	1.2	2.5	0.1	0.0	0.9	0.4	0.9	1.9	1.2	0.7	4.6	14.8
28-Sep	1.0	0.8	0.8	0.8	0.5	Z	0.5	0.8	1.3	1.3	2.0	1.0	0.8	0.5	0.5	M	0.2	0.5	0.6	0.2	0.1	0.2	0.2	0.3	0.7	2.0
29-Sep	Z	0.2	0.2	0.7	1.1	0.9	0.6	0.5	0.5	0.3	1.7	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4.7	10.6	3.6	1.2	1.2	10.6
30-Sep	0.3	Z	6.7	7.6	1.9	8.7	1.1	0.2	0.2	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	1.2	8.7
	0.9	0.4	0.8	0.9	0.3	1.0	0.8	0.8	0.6	0.7	0.6	0.6	0.6	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.3	0.7	0.6	0.7	Diurnal Average	
	10.6	3.1	8.8	11.6	1.9	11.9	14.8	10.3	6.3	4.7	3.0	3.7	5.2	2.4	1.4	2.5	1.7	1.6	1.2	1.0	4.7	10.6	6.3	9.9	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

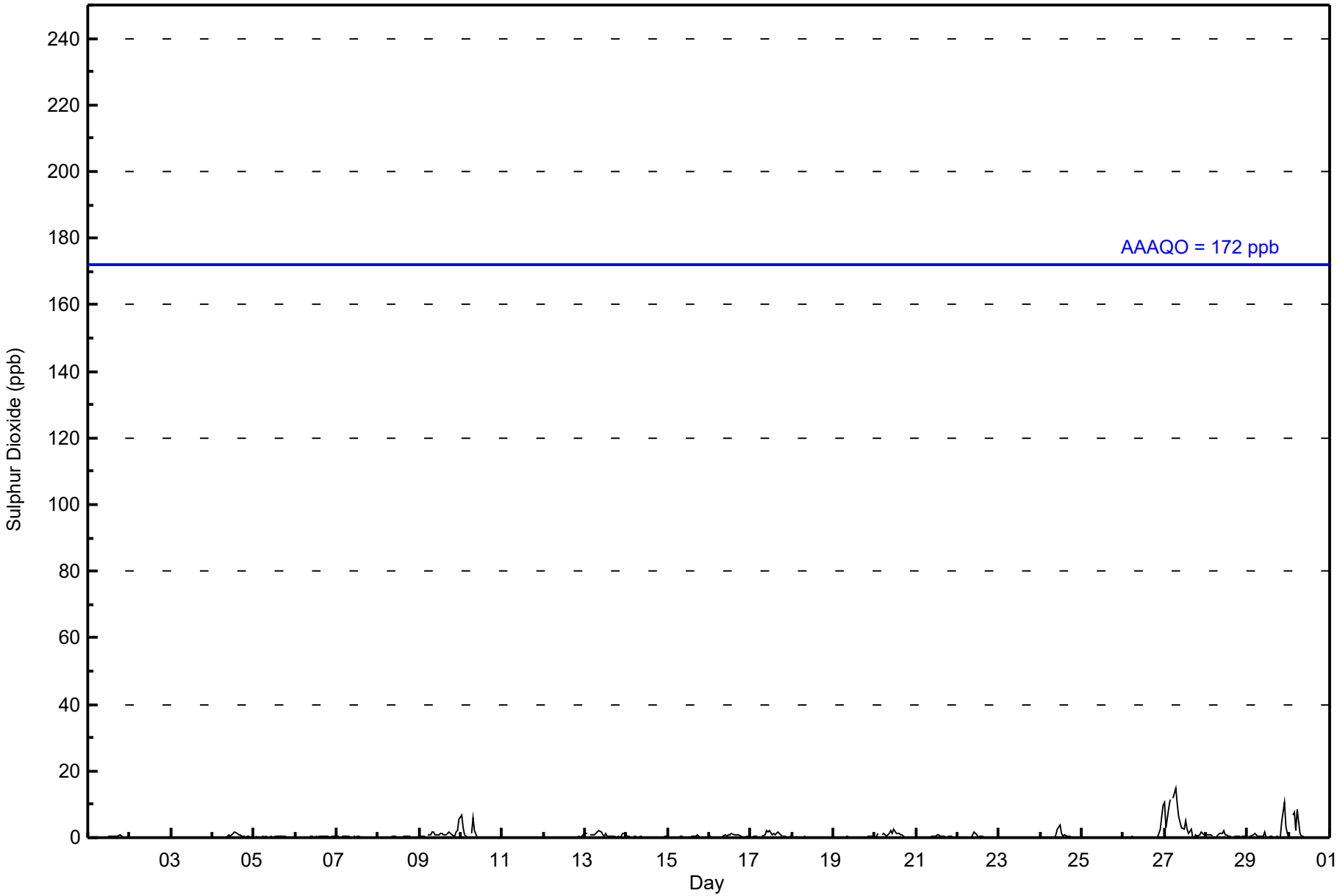
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Monday Creek - September 2026



Sulphur Dioxide (SO_2) - ppb
Monday Creek - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	680	99.27	99.27
11 - 20	5	0.73	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Monday Creek - September 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	9	23	15	20	33	44	71	34	31	65	44	57	71	63	65	31	676
11 - 20	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5
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	9	23	15	20	33	44	71	34	31	65	44	57	76	63	65	31	681

Total Number of Valid Hours: 681

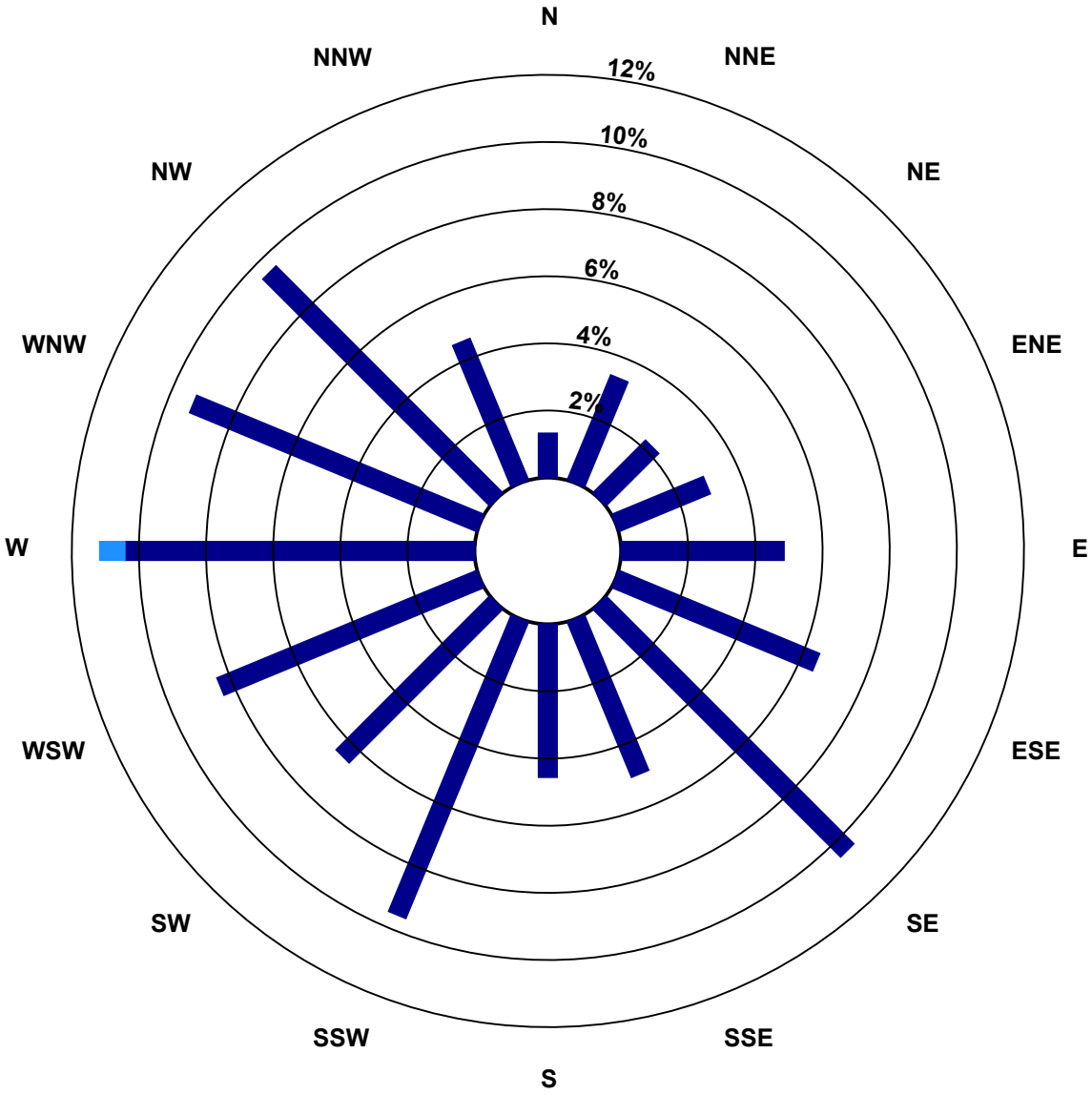
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Monday Creek



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

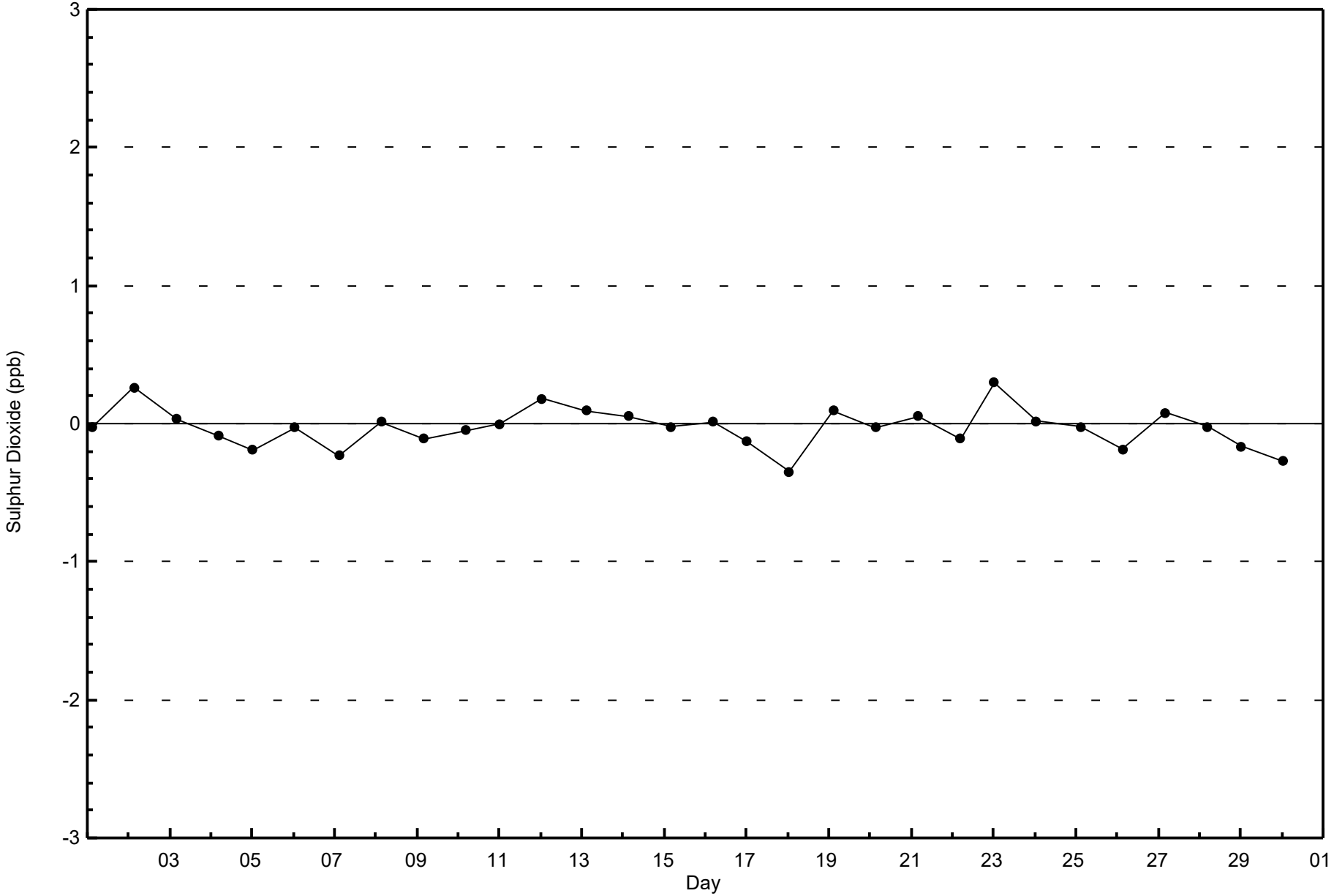
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Monday Creek - September 2026

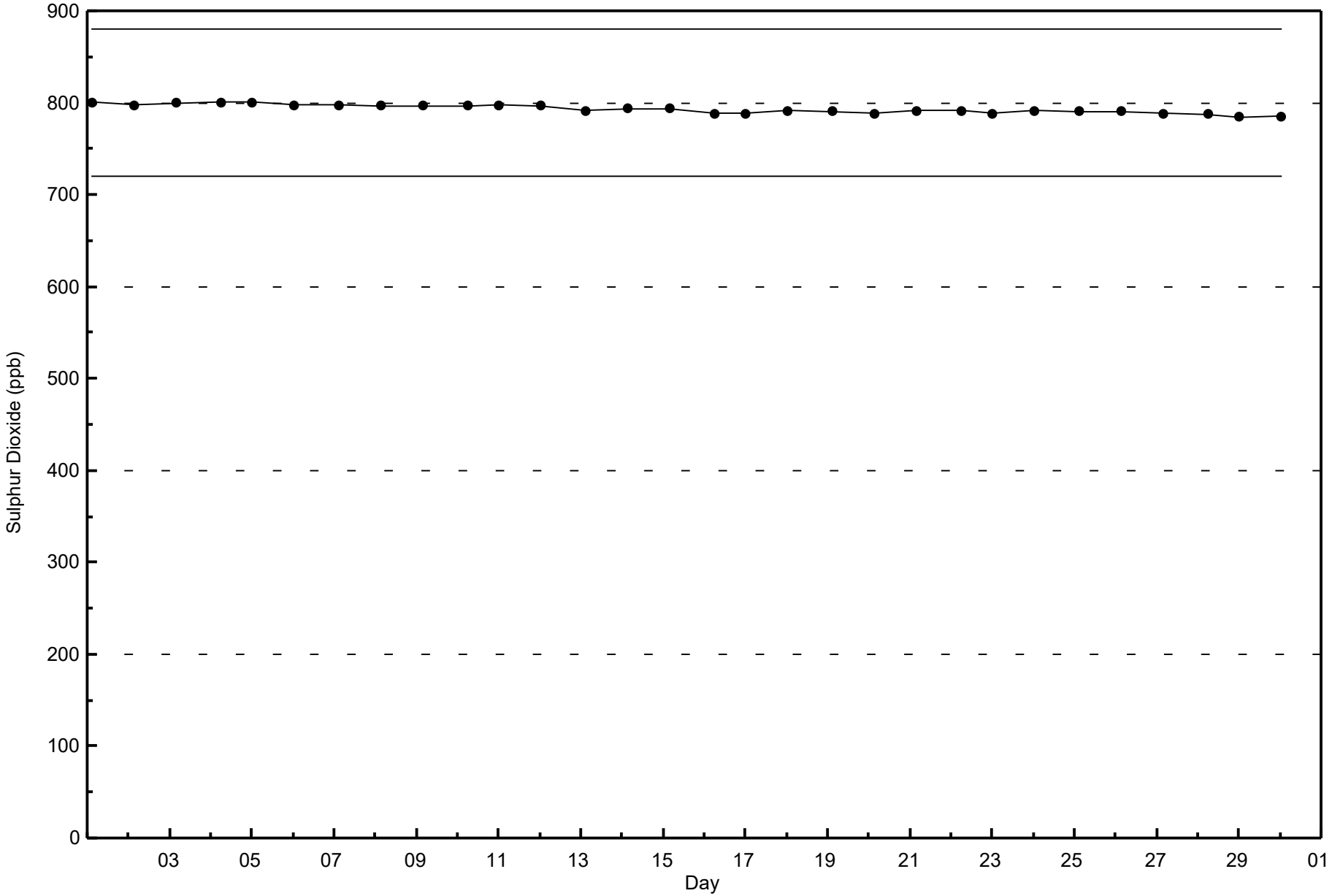


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Monday Creek - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Monday Creek - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.7 ppb on Sep 18 08:00 Maximum Daily Average: 0.2 ppb on Sep 18

Minimum Value: 0.0 ppb on Sep 23 22:00
Maximum Diurnal Average: 0.2 ppb at hour 8
Monthly Average: 0.11 ppb

Minimum Daily Average: 0.1 ppb on Sep 6
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 = 0.1 P_{90} = 0.2 P_{99} = 0.4

Hours in Service:	720
Hours of Data:	683
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-Sep	0.3	0.3	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
2-Sep	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
3-Sep	0.1	0.0	0.0	0.0	0.0	Z	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	0.2	0.2	0.1	0.2
4-Sep	Z	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	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.3
5-Sep	0.1	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
6-Sep	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	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1
7-Sep	0.0	0.0	0.0	Z	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	0.1	0.1	0.1	0.1	0.1
8-Sep	0.1	0.1	0.1	0.1	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	0.3	0.3	0.2	0.1	0.3
9-Sep	0.2	0.2	0.1	0.2	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.3
10-Sep	Z	0.2	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	0.1	0.1	0.1	0.2
11-Sep	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
12-Sep	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	0.1	0.5	0.6	0.4	0.2	0.1	0.6
13-Sep	0.2	0.2	0.2	Z	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.3	0.3	0.2	0.3
14-Sep	0.2	0.2	0.1	0.2	Z	0.2	0.2	0.3	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	0.2	0.2	0.1	0.2	0.3
15-Sep	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	0.2	0.1	0.2	0.3	0.1	0.1	0.3
16-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
17-Sep	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.3
18-Sep	0.2	0.5	Z	0.4	0.4	0.6	0.7	0.7	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	0.1	0.2	0.7
19-Sep	0.1	0.2	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
20-Sep	0.1	0.1	0.2	0.1	Z	0.3	0.3	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	0.1	0.3
21-Sep	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	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2
22-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
23-Sep	0.1	Z	0.2	0.1	0.1	0.2	0.4	0.6	0.4	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	0.0	0.1	0.2	0.6
24-Sep	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.4	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	0.4
25-Sep	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
26-Sep	0.1	0.1	0.1	0.2	Z	0.2	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	0.2	0.2	0.1	0.2
27-Sep	0.3	0.1	0.3	0.3	0.3	Z	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.3
28-Sep	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	C	C	C	C	C	C	C	0.2	0.1	0.1	0.1	0.1	0.1	--	0.2
29-Sep	0.1	Z	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.3
30-Sep	0.1	0.1	Z	0.2	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	0.0	0.1	0.0	0.1	0.3	0.2	0.1	0.1	0.3
	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	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	0.5	0.3	0.4	0.4	0.6	0.7	0.7	0.4	0.3	0.4	0.2	0.1	0.1	0.2	0.1	0.1	0.3	0.2	0.2	0.5	0.6	0.4	0.3	Diurnal Maximum	

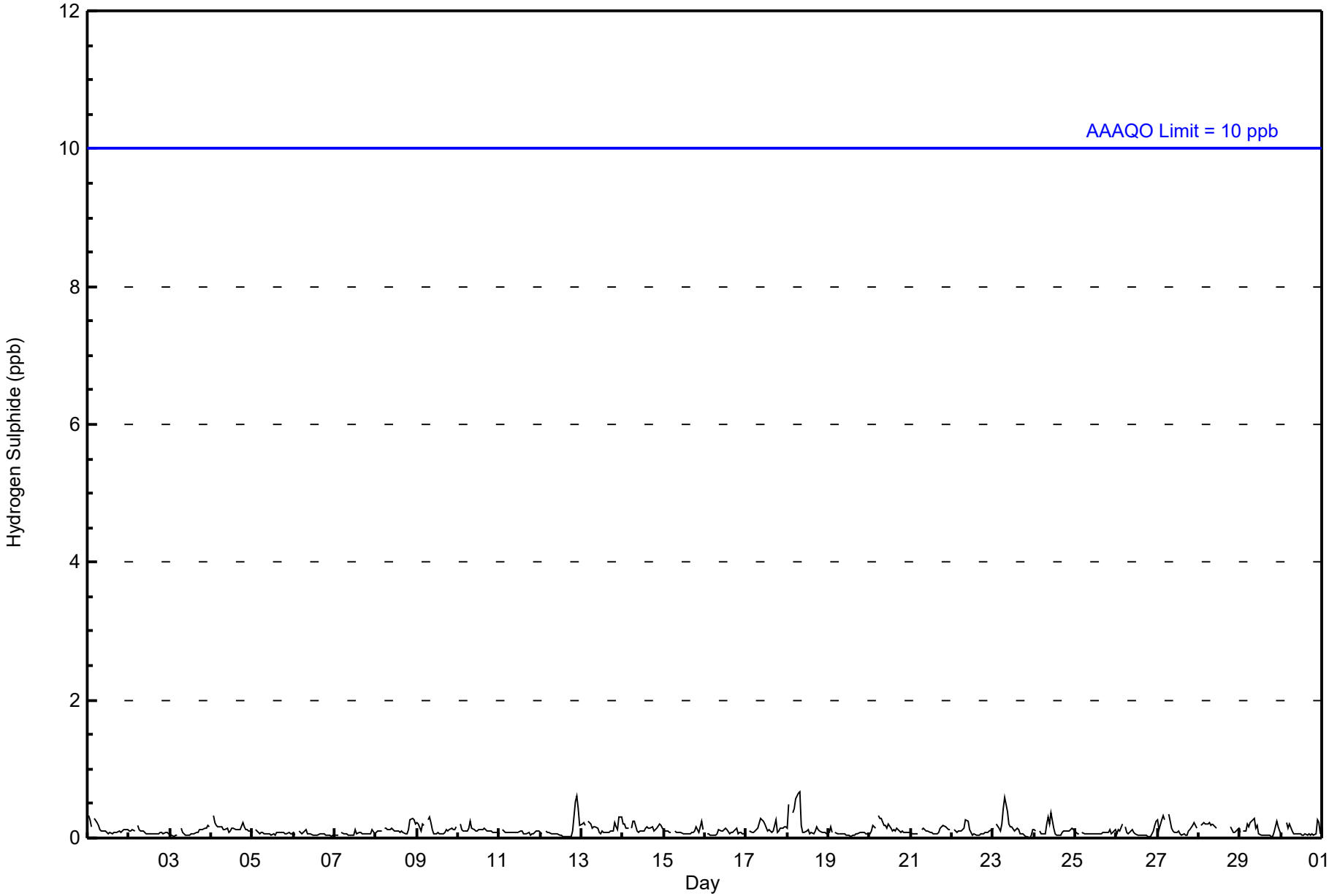
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Monday Creek - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	683	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: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Monday Creek - September 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	10	23	16	21	31	47	68	33	33	65	40	55	75	60	66	36	679
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	10	23	16	21	31	47	68	33	33	65	40	55	75	60	66	36	679

Total Number of Valid Hours: 679

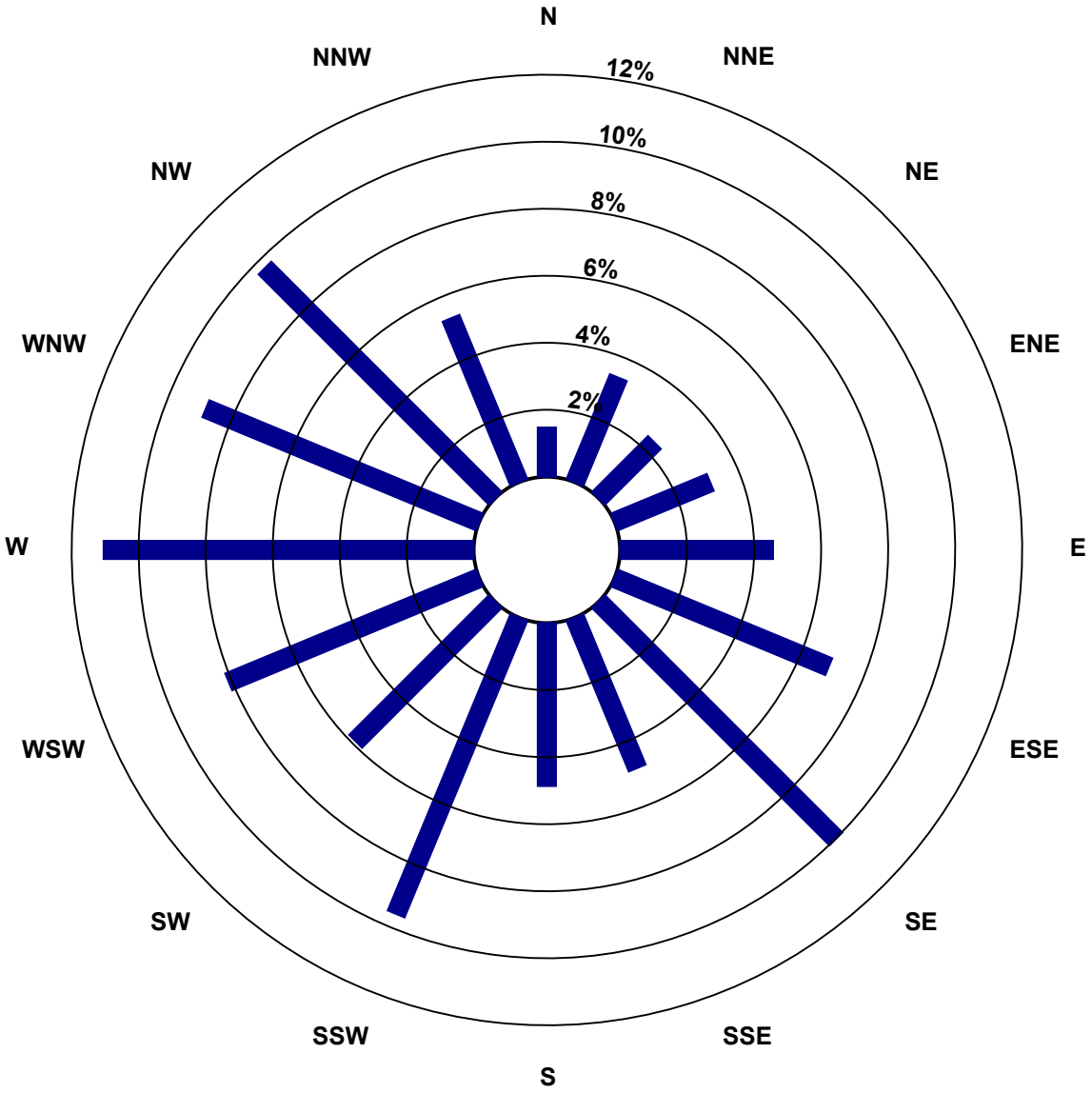
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

Monday Creek



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

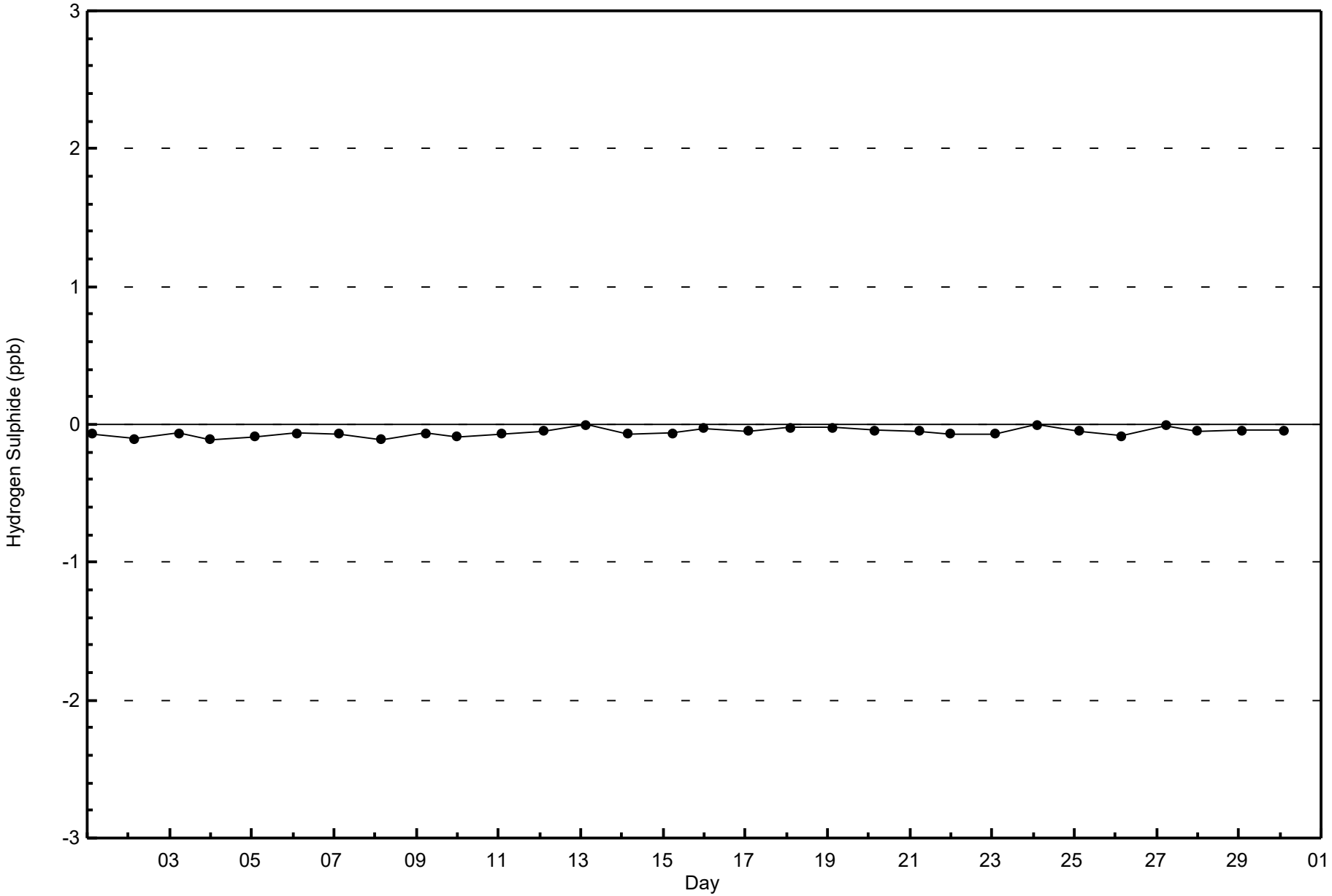
Total Number of Valid Hours: 679

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Monday Creek - September 2026

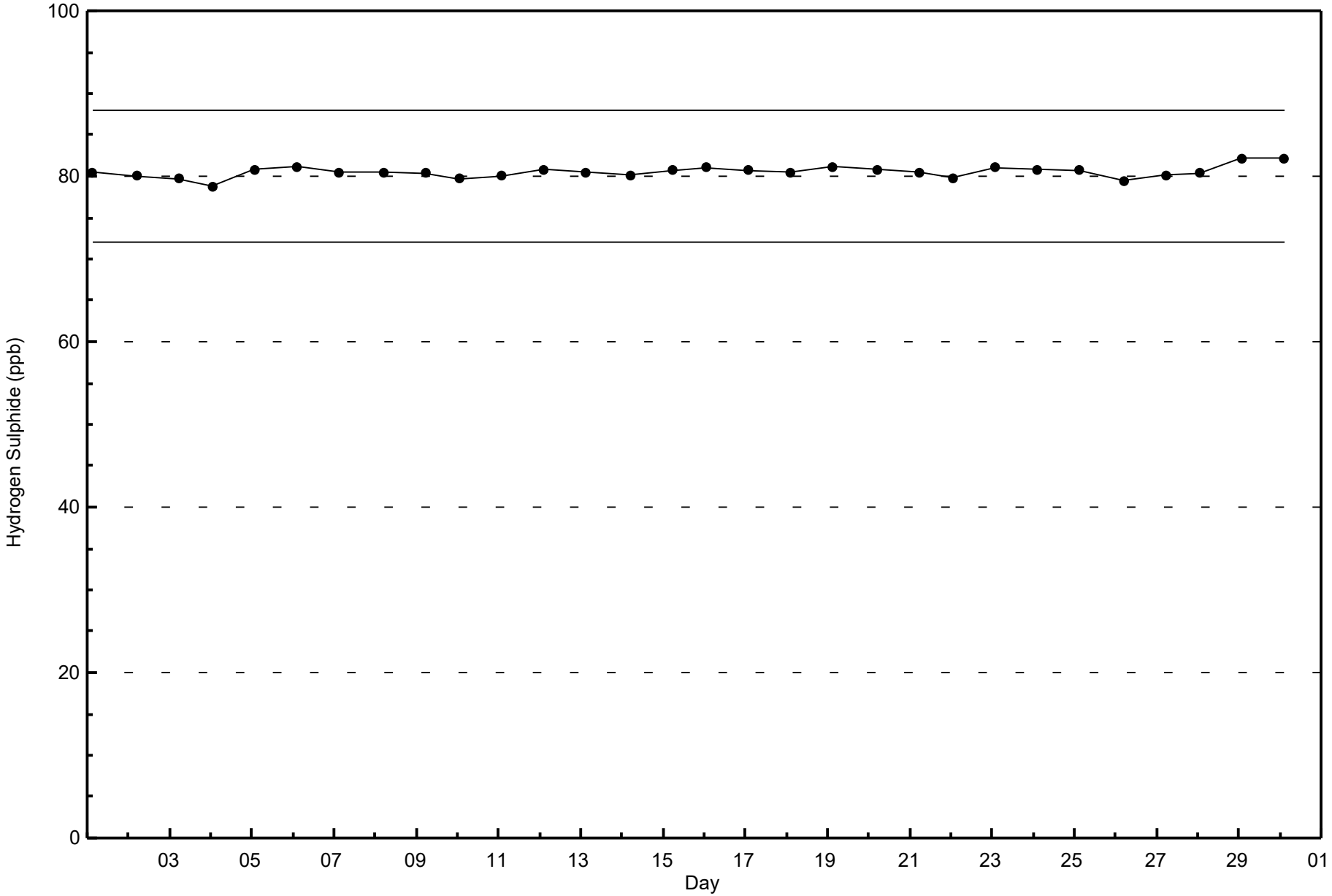


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Monday Creek - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Monday Creek - September 2026

Maximum Value: 8.4 ppb on Sep 27 07:00

Maximum Daily Average: 2.1 ppb on Sep 27

Minimum Value: 0.0 ppb on Sep 1 02:00

Minimum Daily Average: 0.0 ppb on Sep 11

Maximum Diurnal Average: 1.3 ppb at hour 8

Minimum Diurnal Average: 0.0 ppb at hour 20

Monthly Average: 0.33 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.2 P_{90} = 0.8 P_{99} = 5.3

Hours in Service:	720
Hours of Data:	643
Hours of Missing Data:	77
Hours of Calibration:	34
Percent Operational Time:	94.0

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-Sep	Z	0.0	0.7	0.5	0.7	3.0	2.9	0.3	0.5	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	0.4	3.0
2-Sep	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.5	0.3	0.2	0.7	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	0.1	0.7
4-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.3	0.3	0.6	0.2	0.2	0.2	0.8	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.8
5-Sep	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	0.0	0.3	0.1	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3
6-Sep	0.1	0.2	0.3	0.1	0.2	Z	2.1	5.3	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	0.0	0.0	0.4	5.3
7-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.2	0.2	0.6	0.1	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
8-Sep	0.0	Z	0.0	0.0	0.0	0.0	2.6	2.5	0.6	0.8	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.5	0.1	0.0	0.0	0.3	2.6
9-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.2	0.5	0.5	0.3	0.2	0.1	1.0	0.9	0.5	0.4	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.2	1.0
10-Sep	0.6	0.2	0.0	Z	0.0	0.0	0.3	3.5	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	0.0	0.0	0.0	0.2	3.5
11-Sep	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	0.0	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-Sep	0.0	0.0	0.0	0.0	0.0	Z	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	0.0	0.0	0.1
13-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.3	0.9	0.9	0.6	0.5	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.9
14-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.2	0.1	0.1	0.1	0.3	0.3	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
15-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
16-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.6	0.5	1.1	2.4	2.1	1.3	0.6	0.5	0.5	0.2	0.1	0.1	0.2	0.0	0.0	0.0	0.4	2.4
17-Sep	0.0	0.0	0.0	0.0	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	0.0
18-Sep	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-Sep	Z	0.0	0.2	0.0	0.0	0.1	0.0	0.3	0.4	0.1	0.5	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	0.1	0.5
20-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.2	0.6	0.4	0.6	0.6	1.0	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.0
21-Sep	0.0	0.0	Z	0.0	0.0	0.7	2.1	3.1	0.5	0.2	0.1	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	3.1
22-Sep	0.1	0.3	0.3	Z	3.8	5.6	5.9	7.3	4.3	2.8	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	0.1	1.3	7.3
23-Sep	0.0	0.1	0.0	0.6	Z	1.5	1.7	2.5	3.5	1.8	0.9	0.7	0.5	0.9	0.4	0.2	0.1	0.1	0.0	0.0	0.3	0.1	3.4	1.7	0.9	3.5
24-Sep	1.4	1.5	0.5	2.0	0.8	Z	2.1	1.2	2.0	1.4	2.3	0.6	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.7	0.8	2.3
25-Sep	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	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2
26-Sep	0.0	Z	0.0	0.9	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	1.1	1.7	3.0	0.3	3.0
27-Sep	3.8	0.7	Z	5.4	3.7	6.7	8.4	5.4	3.2	2.5	1.8	1.6	2.3	0.9	0.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	8.4
28-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.7	0.8	0.8	0.2	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8
29-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.6	0.5	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.6	0.3	0.0	0.2	1.6
30-Sep	0.0	0.0	1.3	1.7	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	0.1	1.7
	0.3	0.1	0.1	0.5	0.4	0.8	1.0	1.3	0.8	0.5	0.4	0.3	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.3	Diurnal Average	
	3.8	1.5	1.3	5.4	3.8	6.7	8.4	7.3	4.3	2.8	2.3	2.4	2.3	1.3	0.6	0.7	0.5	0.2	0.1	0.1	0.5	1.6	3.4	3.0	Diurnal Maximum	

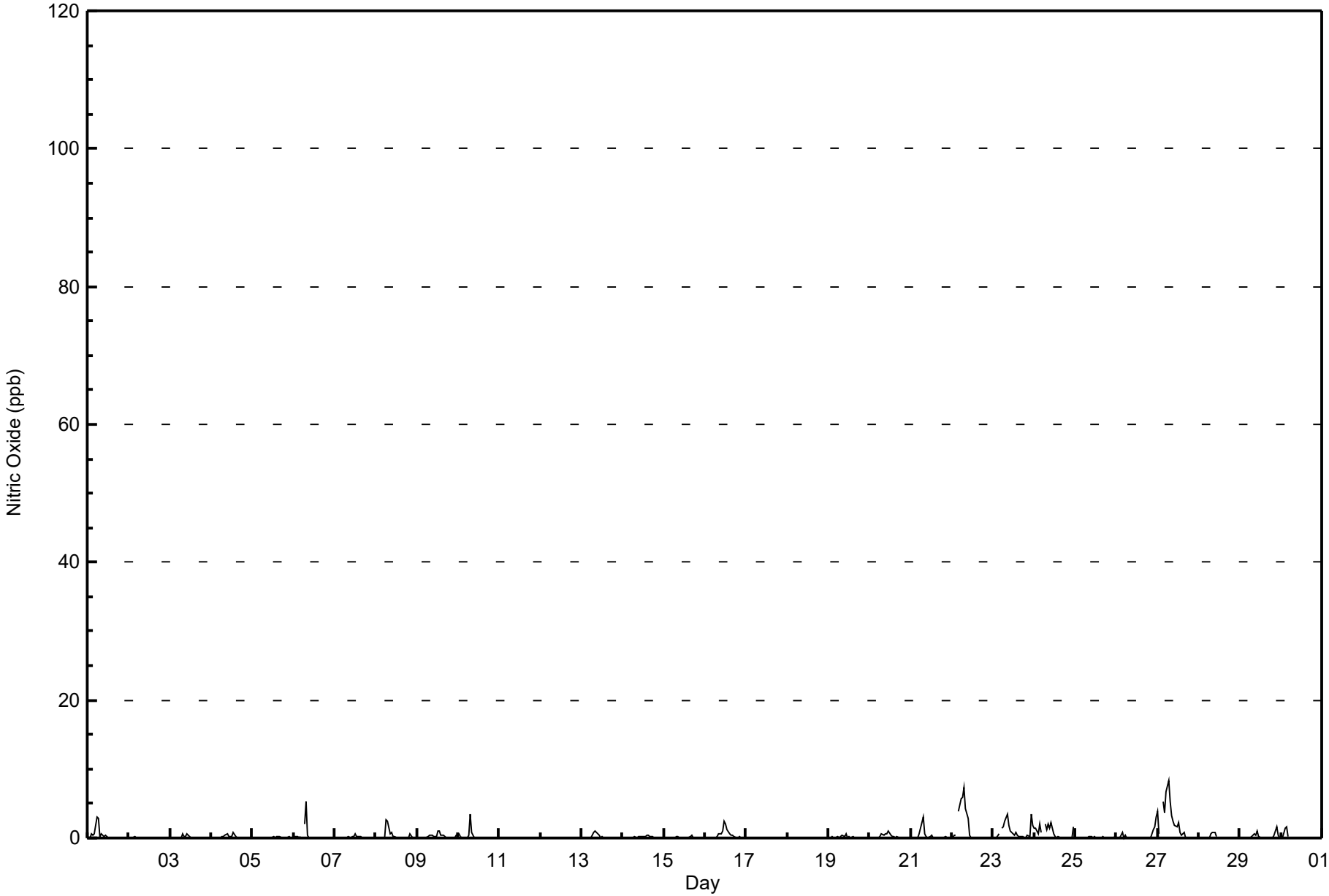
Z - zerospan C - Calibration UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Monday Creek - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	643	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: 643

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Monday Creek - September 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	9	23	16	21	35	40	69	30	30	61	42	49	70	54	60	32	641
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	9	23	16	21	35	40	69	30	30	61	42	49	70	54	60	32	641

Total Number of Valid Hours: 641

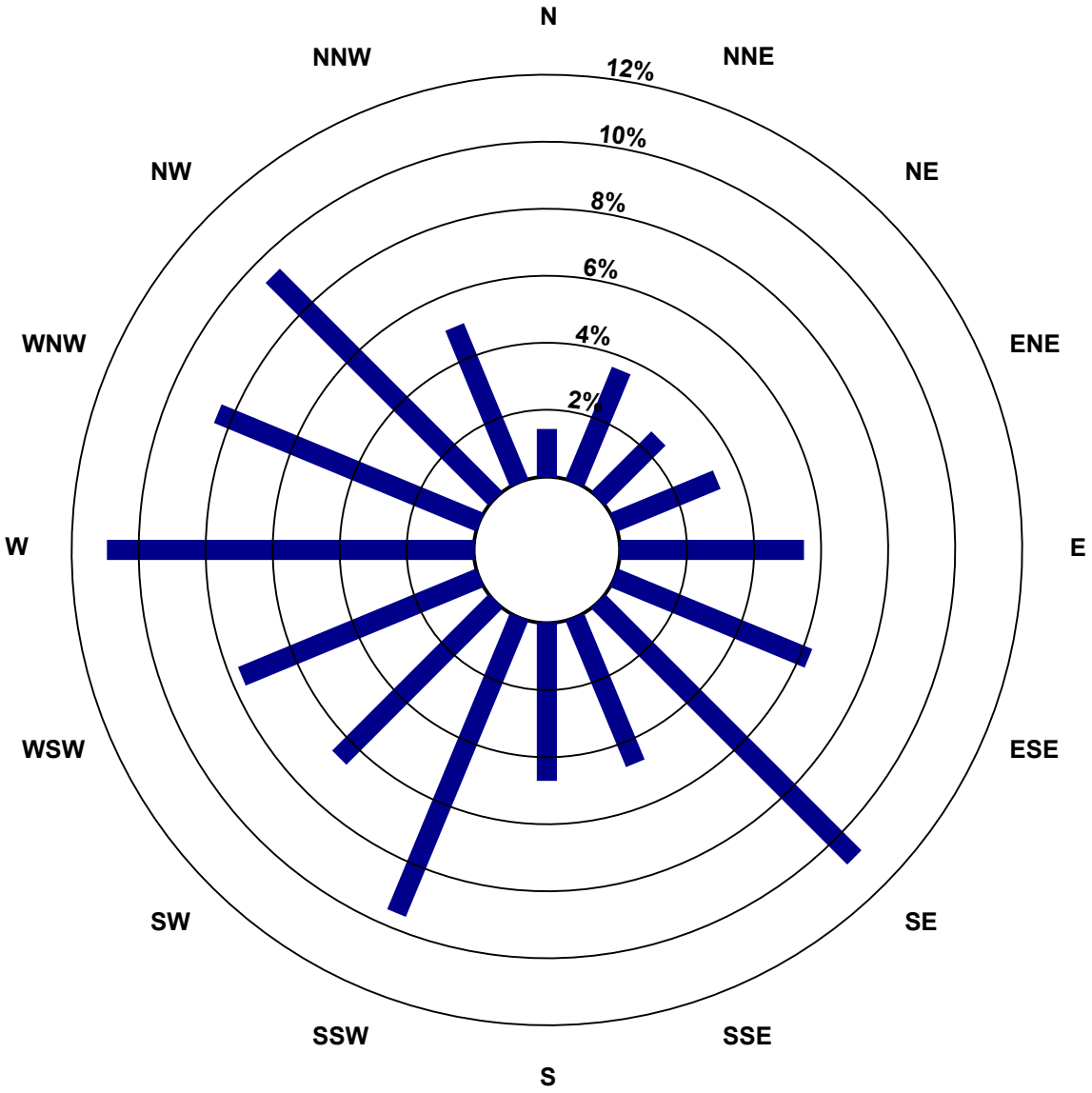
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Monday Creek



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

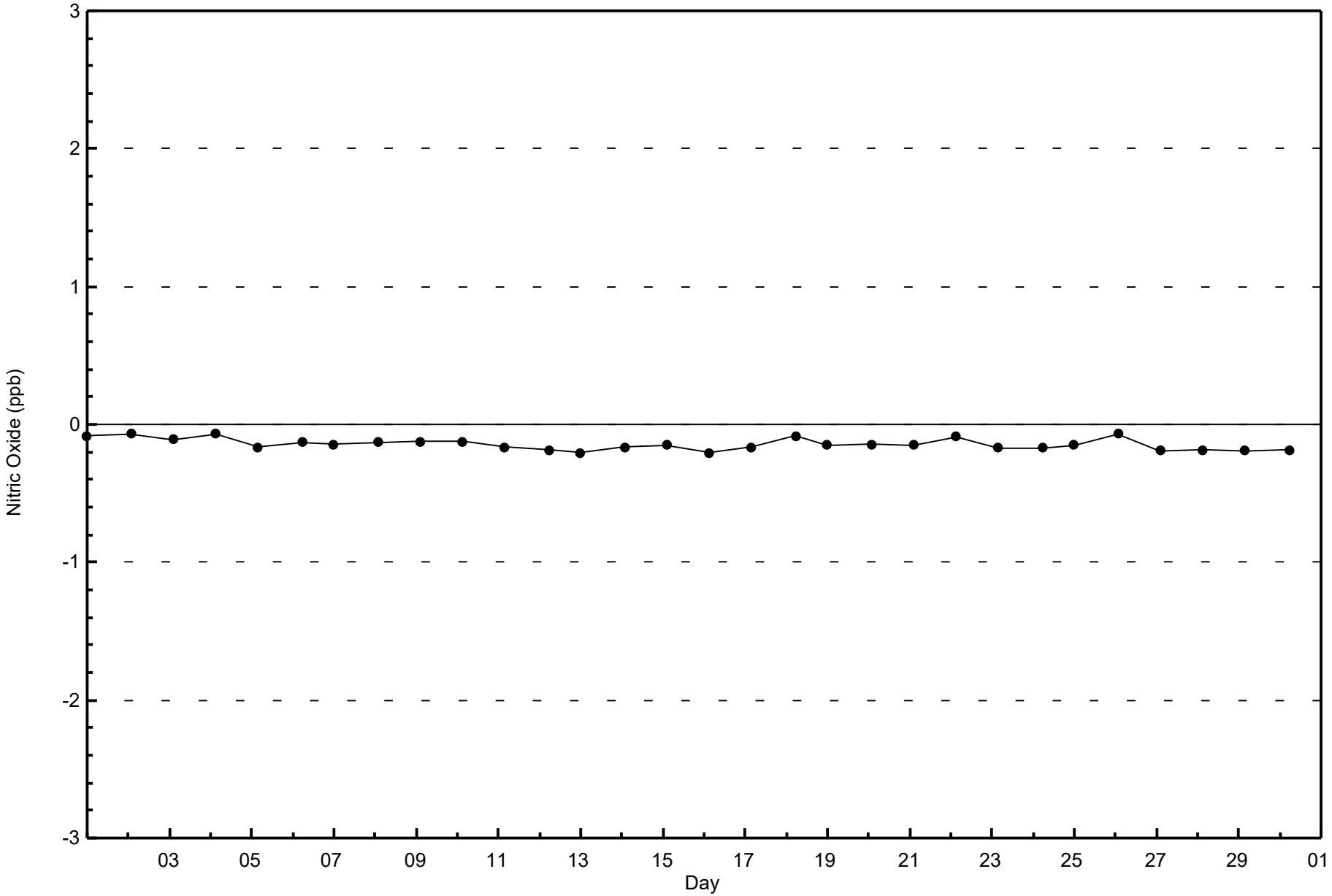
Total Number of Valid Hours: 641

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Monday Creek - September 2026

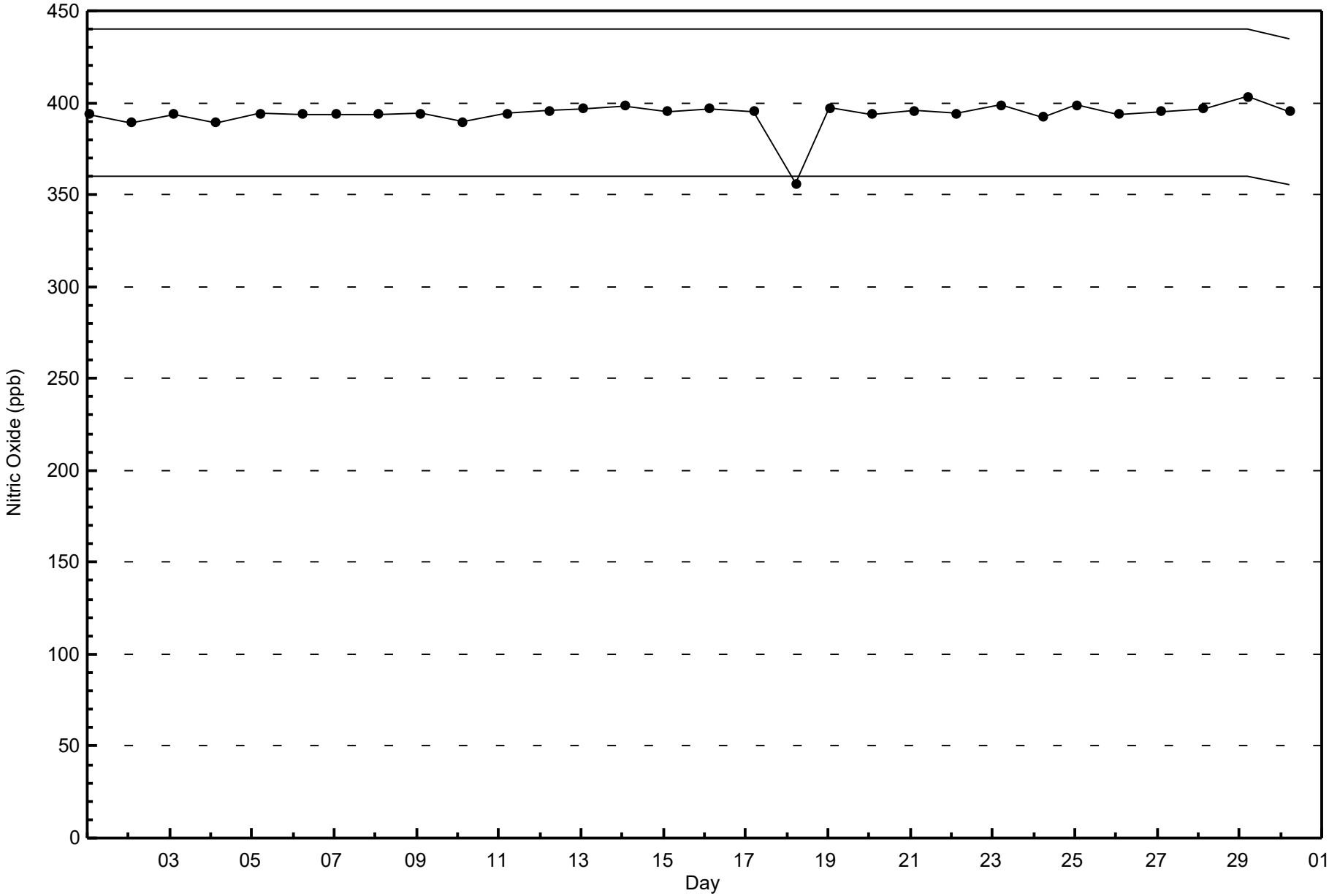


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Monday Creek - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Monday Creek - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 13.9 ppb on Sep 27 07:00
Maximum Daily Average: 4.7 ppb on Sep 27

Minimum Value: 0.0 ppb on Sep 26 18:00
Minimum Daily Average: 0.2 ppb on Sep 11
Maximum Diurnal Average: 2.2 ppb at hour 7
Minimum Diurnal Average: 0.7 ppb at hour 19
Monthly Average: 1.33 ppb
Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.4 Median = 0.8 Q_3 = 1.6 P_{90} = 2.6 P_{99} = 10.7

Hours in Service:	720
Hours of Data:	643
Hours of Missing Data:	77
Hours of Calibration:	34
Percent Operational Time:	94.0

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-Sep	Z	0.5	0.8	0.7	0.7	0.8	1.6	0.7	1.1	0.6	0.6	0.6	0.9	0.9	0.7	0.9	0.9	0.4	0.3	0.5	0.4	0.4	0.4	0.4	0.7	1.6
2-Sep	0.3	Z	0.4	0.8	0.3	0.6	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.4	0.8
3-Sep	0.2	0.2	Z	0.4	0.3	0.3	0.5	2.1	1.0	1.0	1.6	1.0	0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.6	2.1
4-Sep	0.4	0.3	0.4	Z	0.7	0.8	1.2	1.1	1.3	1.9	1.1	1.3	1.3	0.8	1.2	0.8	0.7	0.8	1.2	1.1	1.2	0.9	0.8	1.0	1.0	1.9
5-Sep	0.9	0.7	0.7	0.4	Z	0.5	0.5	0.3	0.4	0.3	0.3	0.3	0.5	0.3	0.7	0.6	0.9	1.0	0.8	0.3	0.3	0.9	0.2	0.3	0.5	1.0
6-Sep	0.5	0.5	0.5	0.4	1.9	Z	2.1	3.0	1.1	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.6	3.0
7-Sep	Z	0.2	0.1	0.1	0.4	0.6	0.8	0.6	0.6	0.5	0.6	0.5	1.4	0.6	0.6	0.7	0.4	0.3	0.4	0.3	0.3	1.2	0.9	0.2	0.5	1.4
8-Sep	0.4	Z	0.4	0.3	0.4	0.5	1.9	2.8	1.1	1.6	1.0	0.8	0.5	0.5	0.8	1.0	0.7	0.6	0.8	0.7	4.9	2.5	1.0	0.5	1.1	4.9
9-Sep	1.0	0.8	Z	0.8	1.0	1.6	1.6	1.4	1.3	1.1	0.8	0.7	2.2	2.2	1.5	1.8	1.4	0.9	0.8	1.3	0.5	3.4	4.1	8.2	1.8	8.2
10-Sep	11.2	5.1	1.3	Z	0.2	0.2	3.3	9.0	2.4	0.4	0.3	0.3	0.3	0.2	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1	1.6	11.2
11-Sep	0.1	0.2	0.1	0.1	Z	0.2	0.1	0.2	0.2	0.2	0.3	0.2	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.6	0.4	0.3	0.2	0.6
12-Sep	0.4	0.6	0.5	0.7	0.7	Z	1.1	0.8	0.6	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.8	0.8	0.6	1.9	1.9	0.6	1.9
13-Sep	Z	1.4	1.7	1.3	1.8	2.6	2.7	2.5	2.1	1.6	1.2	0.6	1.0	0.6	0.6	0.8	1.0	0.8	1.2	1.6	0.7	0.6	3.6	3.8	1.6	3.8
14-Sep	1.5	Z	0.9	1.5	1.4	0.8	1.8	2.1	0.8	0.8	0.8	0.8	0.7	0.9	1.2	1.4	1.4	2.3	0.9	1.3	1.0	1.6	1.9	1.4	1.3	2.3
15-Sep	0.8	0.6	Z	0.5	0.5	0.7	0.8	0.8	0.6	0.3	0.4	0.3	0.2	0.3	0.6	0.8	1.3	0.7	0.6	0.8	0.7	1.1	1.0	2.1	0.7	2.1
16-Sep	1.7	0.4	0.5	Z	0.9	0.7	0.9	0.8	1.5	1.2	1.4	2.5	2.7	2.3	1.6	1.4	1.1	1.4	1.0	0.8	1.3	0.6	0.6	0.7	1.2	2.7
17-Sep	1.1	1.4	1.7	2.0	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	2.0
18-Sep	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-Sep	Z	0.9	0.8	0.9	1.5	2.8	2.6	1.7	1.7	0.9	0.6	0.5	0.6	0.5	0.8	0.8	1.0	1.1	1.1	1.5	1.4	1.3	1.7	1.7	1.2	2.8
20-Sep	1.8	Z	3.2	1.9	2.5	4.0	4.2	4.0	1.9	2.1	2.3	3.2	2.2	1.7	1.5	1.2	1.7	1.2	1.2	1.3	1.3	1.3	1.0	0.8	2.1	4.2
21-Sep	0.8	0.8	Z	0.8	0.5	1.6	3.5	4.3	1.9	1.5	1.4	1.7	2.2	1.2	1.0	1.0	0.9	1.2	1.3	1.5	6.2	2.3	1.7	2.1	1.8	6.2
22-Sep	2.5	1.5	1.2	Z	2.4	1.8	2.2	2.2	4.4	3.6	1.5	0.8	0.4	0.3	0.3	0.3	0.3	0.4	0.5	1.0	0.9	0.6	1.8	2.2	1.4	4.4
23-Sep	2.2	1.2	0.9	1.3	Z	2.8	2.9	3.6	4.2	3.0	2.5	2.6	1.4	2.3	2.5	1.4	1.1	1.8	1.8	1.1	2.3	1.3	1.4	1.8	2.1	4.2
24-Sep	1.5	1.2	0.5	0.5	0.4	Z	0.8	0.8	2.7	2.5	4.1	1.7	1.1	0.7	1.3	0.8	1.3	1.6	1.2	1.9	1.6	1.7	1.2	3.0	1.5	4.1
25-Sep	Z	1.7	1.4	0.4	0.4	0.6	1.1	0.3	1.5	1.2	0.7	0.9	0.6	1.0	0.6	1.0	1.5	1.2	0.9	1.2	1.3	0.3	0.7	2.3	1.0	2.3
26-Sep	1.2	Z	1.3	3.8	1.8	2.5	0.6	0.3	0.2	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	5.3	8.9	12.3	1.7	12.3
27-Sep	11.6	3.9	Z	13.7	9.8	13.8	13.9	7.9	4.0	3.0	2.2	2.1	3.3	1.9	1.1	2.2	0.6	0.5	0.9	1.0	1.2	2.6	3.6	2.6	4.7	13.9
28-Sep	1.7	1.4	2.3	Z	1.8	2.2	2.9	3.5	2.2	1.4	0.8	C	C	C	C	C	1.0	1.7	1.1	0.7	0.8	1.1	1.0	1.2	1.6	3.5
29-Sep	1.4	1.7	2.0	2.9	Z	2.6	4.3	3.6	3.2	2.2	2.7	0.7	0.5	0.5	0.3	0.2	0.2	0.3	0.4	0.3	7.1	13.8	4.9	1.8	2.5	13.8
30-Sep	1.0	1.1	8.7	9.9	2.8	Z	1.7	0.5	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.1	0.2	0.4	0.4	2.1	1.5	0.3	1.4	9.9
	1.9	1.2	1.3	1.9	1.5	1.9	2.2	2.2	1.6	1.2	1.1	0.9	1.0	0.8	0.8	0.8	0.8	0.8	0.7	0.8	1.3	1.8	1.7	1.9	Diurnal Average	
	11.6	5.1	8.7	13.7	9.8	13.8	13.9	9.0	4.4	3.6	4.1	3.2	3.3	2.3	2.5	2.2	1.7	2.3	1.8	1.9	7.1	13.8	8.9	12.3	Diurnal Maximum	

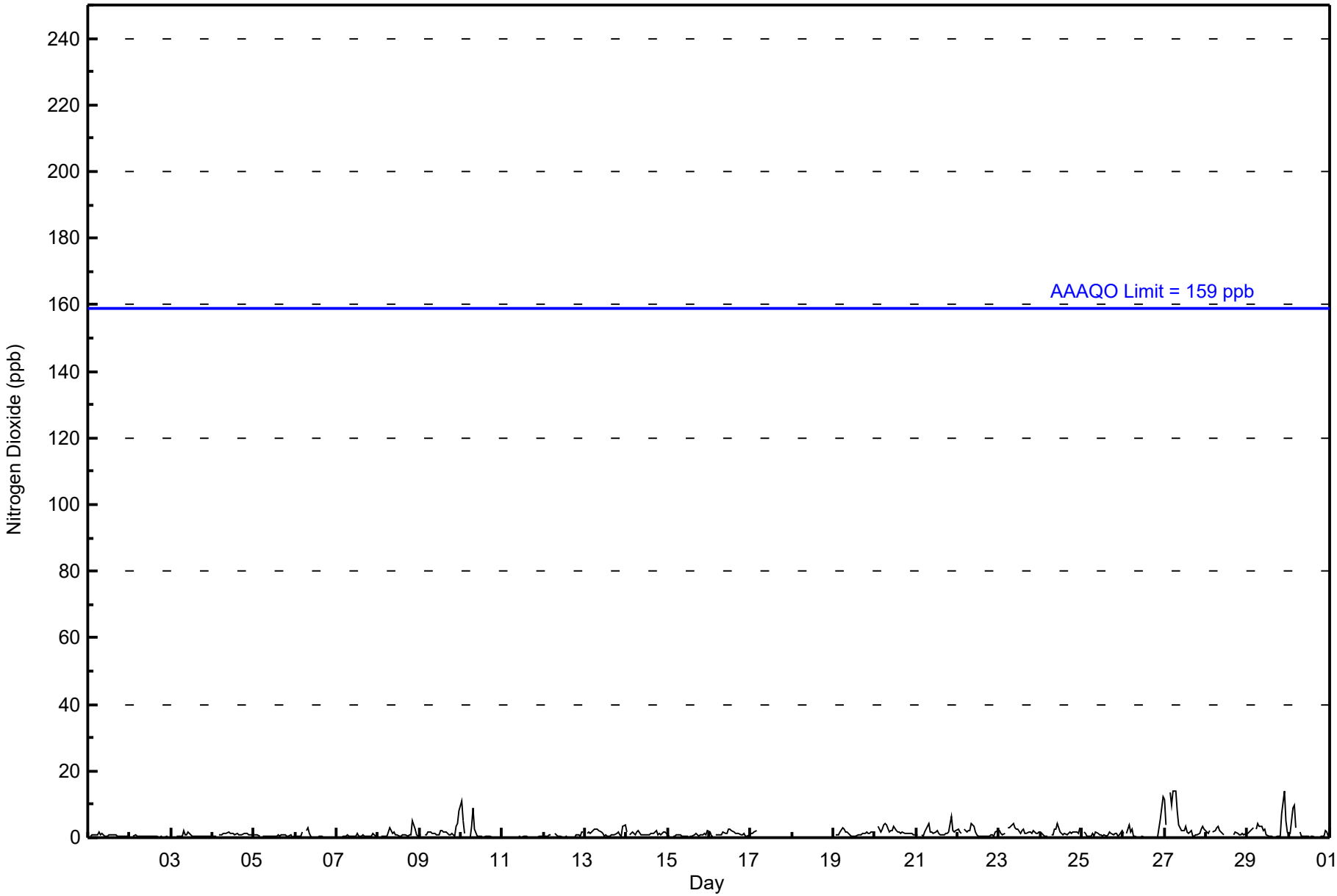
Z - zerospan C - Calibration UO - Unstable Operation
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Monday Creek - September 2026



Nitrogen Dioxide (NO_2) - ppb
Monday Creek - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	643	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: 643

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Monday Creek - September 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	9	23	16	21	35	40	69	30	30	61	42	49	70	54	60	32	641
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	9	23	16	21	35	40	69	30	30	61	42	49	70	54	60	32	641

Total Number of Valid Hours: 641

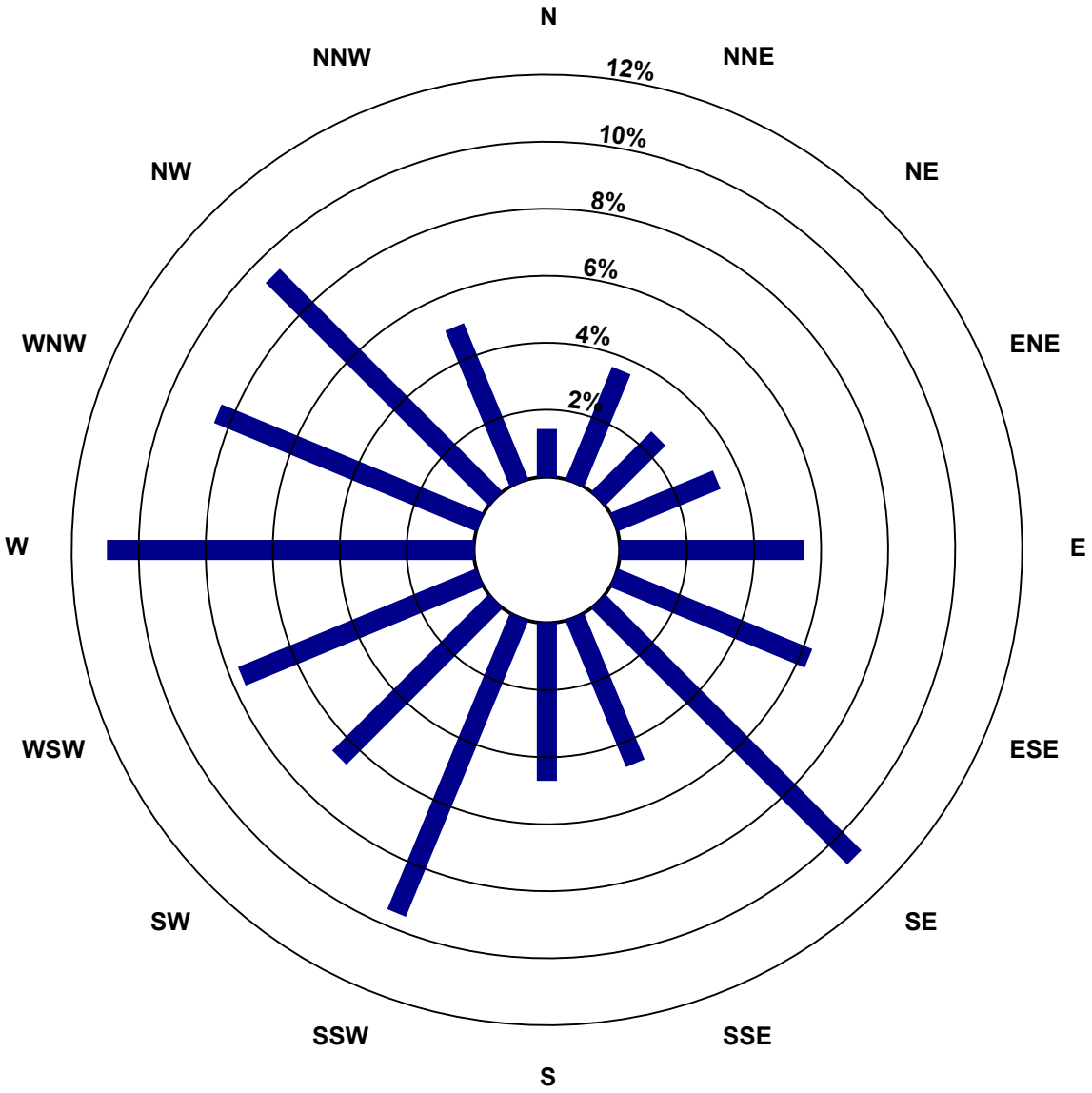
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Monday Creek



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

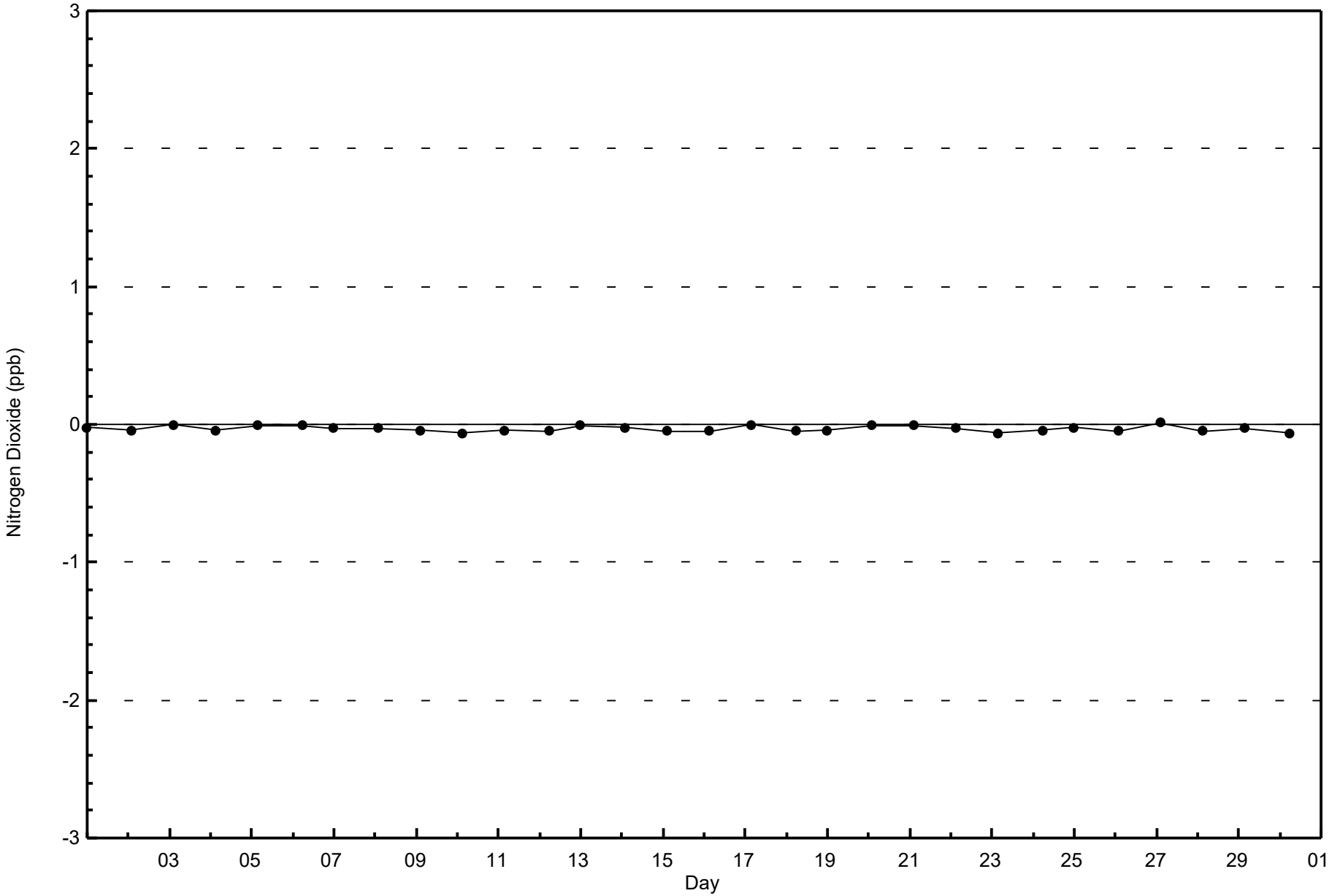
Total Number of Valid Hours: 641

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Monday Creek - September 2026

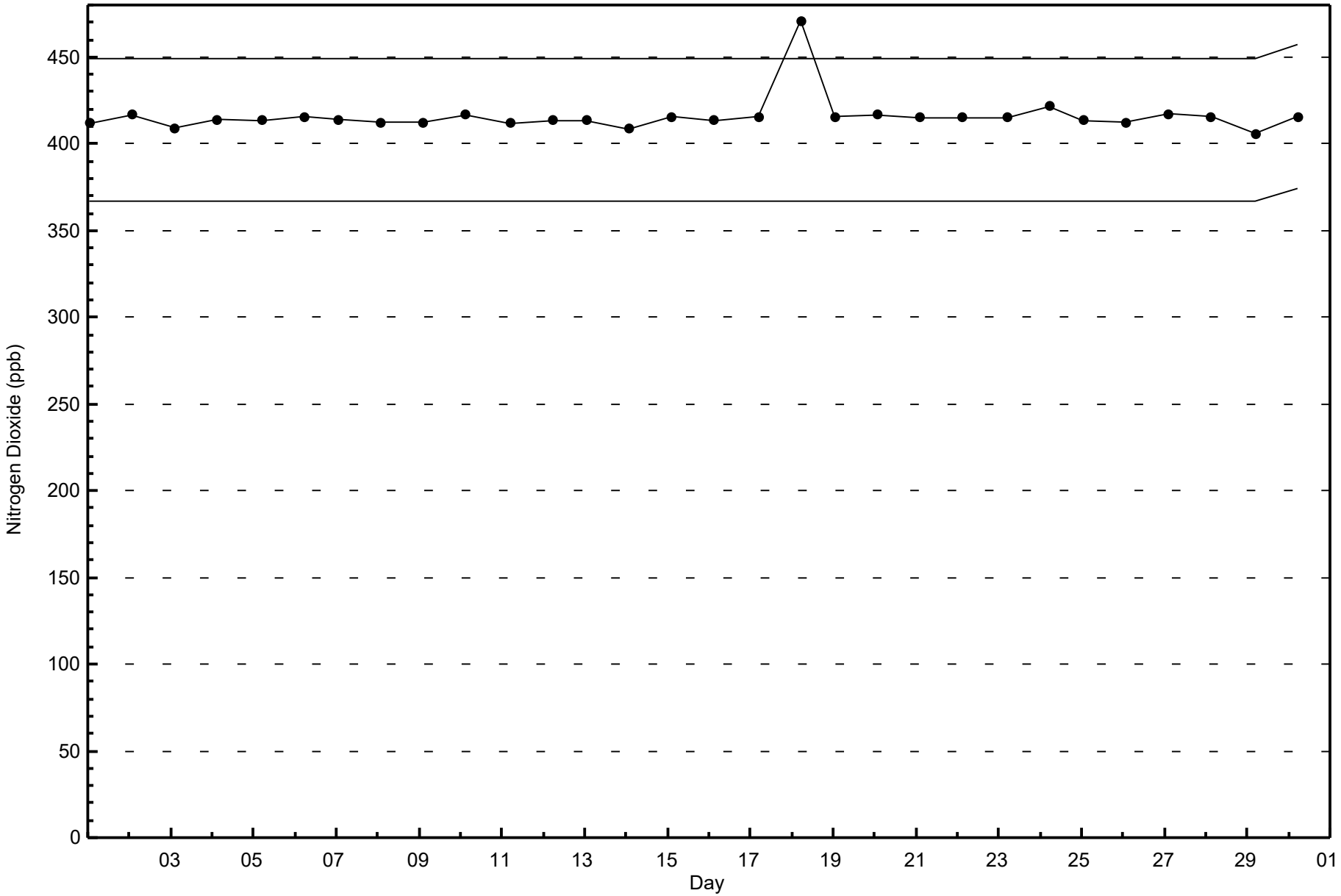


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Monday Creek - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Monday Creek - September 2026

Maximum Value: 22.3 ppb on Sep 27 07:00

Maximum Daily Average: 6.7 ppb on Sep 27

Minimum Value: 0.0 ppb on Sep 26 21:00

Minimum Daily Average: 0.2 ppb on Sep 11

Maximum Diurnal Average: 3.5 ppb at hour 8

Minimum Diurnal Average: 0.7 ppb at hour 19

Monthly Average: 1.66 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.4$ Median = 0.9 $Q_3 = 1.8$ $P_{90} = 3.6$ $P_{99} = 13.4$

Hours in Service:	720
Hours of Data:	643
Hours of Missing Data:	77
Hours of Calibration:	34
Percent Operational Time:	94.0

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-Sep	Z	0.5	1.5	1.2	1.4	3.8	4.5	1.0	1.6	0.8	1.0	0.7	0.9	0.9	0.7	0.9	0.9	0.4	0.3	0.5	0.4	0.4	0.4	0.4	1.1	4.5
2-Sep	0.3	Z	0.4	0.9	0.3	0.6	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.5	0.3	0.4	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.4	0.9
3-Sep	0.2	0.2	Z	0.4	0.3	0.3	0.6	2.6	1.3	1.2	2.3	1.3	0.6	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.7	2.6
4-Sep	0.4	0.3	0.4	Z	0.7	0.8	1.3	1.4	1.6	2.5	1.3	1.5	1.5	1.6	1.4	0.9	0.7	0.8	1.3	1.1	1.2	0.9	0.8	1.0	1.1	2.5
5-Sep	0.9	0.7	0.7	0.4	Z	0.5	0.5	0.3	0.4	0.3	0.3	0.3	0.6	0.3	1.0	0.7	1.1	1.1	0.8	0.3	0.3	1.0	0.2	0.3	0.6	1.1
6-Sep	0.6	0.7	0.8	0.5	2.1	Z	4.2	8.3	1.6	0.4	0.2	0.2	0.2	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.9	8.3
7-Sep	Z	0.2	0.1	0.1	0.4	0.6	0.9	0.7	0.7	0.5	0.8	0.7	2.0	0.7	0.8	1.0	0.4	0.3	0.4	0.3	0.3	1.2	0.9	0.2	0.6	2.0
8-Sep	0.4	Z	0.4	0.3	0.4	0.5	4.5	5.3	1.7	2.4	1.2	0.9	0.5	0.5	0.8	1.1	0.7	0.6	0.8	0.7	5.4	2.6	1.0	0.5	1.4	5.4
9-Sep	1.0	0.8	Z	0.8	1.0	1.6	1.8	1.9	1.8	1.4	1.0	0.8	3.2	3.1	2.0	2.2	1.5	0.9	0.8	1.3	0.5	3.5	4.2	8.6	2.0	8.6
10-Sep	11.8	5.3	1.3	Z	0.2	0.2	3.6	12.5	3.3	0.4	0.3	0.3	0.3	0.2	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1	1.8	12.5
11-Sep	0.1	0.2	0.1	0.1	Z	0.2	0.1	0.2	0.2	0.2	0.3	0.2	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.6	0.4	0.3	0.2	0.6
12-Sep	0.4	0.6	0.5	0.7	0.7	Z	1.1	0.8	0.6	0.5	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.8	0.8	0.6	2.0	1.9	0.6	2.0
13-Sep	Z	1.4	1.7	1.3	1.8	2.6	3.0	3.4	3.0	2.2	1.7	0.7	1.2	0.7	0.7	0.9	1.1	0.8	1.2	1.6	0.7	0.6	3.6	3.8	1.7	3.8
14-Sep	1.5	Z	0.9	1.5	1.4	0.8	1.8	2.3	0.8	0.9	1.0	0.9	0.8	1.0	1.5	1.7	1.5	2.5	0.9	1.3	1.0	1.6	1.9	1.4	1.3	2.5
15-Sep	0.8	0.6	Z	0.5	0.5	0.7	0.8	0.9	0.8	0.4	0.4	0.3	0.2	0.3	0.7	0.9	1.7	0.7	0.6	0.8	0.7	1.1	1.0	2.1	0.8	2.1
16-Sep	1.7	0.4	0.5	Z	0.9	0.7	0.9	0.9	2.1	1.7	2.5	4.9	4.8	3.6	2.2	1.9	1.6	1.6	1.1	0.9	1.5	0.6	0.6	0.7	1.7	4.9
17-Sep	1.1	1.4	1.7	2.0	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	2.0
18-Sep	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-Sep	Z	0.9	1.0	0.9	1.5	2.9	2.6	2.0	2.1	1.0	1.1	0.5	0.8	0.5	1.0	0.8	1.0	1.1	1.1	1.5	1.4	1.3	1.7	1.7	1.3	2.9
20-Sep	1.8	Z	3.2	1.9	2.5	4.0	4.4	4.6	2.3	2.7	2.9	4.2	2.6	2.0	1.6	1.3	1.8	1.2	1.2	1.3	1.3	1.3	1.0	0.8	2.2	4.6
21-Sep	0.8	0.8	Z	0.8	0.5	2.3	5.6	7.4	2.4	1.7	1.5	1.9	2.6	1.2	1.0	1.0	0.9	1.2	1.3	1.5	6.3	2.3	1.7	2.1	2.1	7.4
22-Sep	2.6	1.8	1.5	Z	6.2	7.4	8.1	9.5	8.7	6.4	1.8	0.9	0.4	0.3	0.3	0.3	0.3	0.4	0.5	1.0	0.9	0.6	1.8	2.3	2.8	9.5
23-Sep	2.2	1.3	0.9	1.9	Z	4.3	4.6	6.1	7.7	4.8	3.4	3.3	1.9	3.2	2.9	1.6	1.2	1.9	1.8	1.1	2.6	1.4	4.8	3.5	3.0	7.7
24-Sep	2.9	2.7	1.0	2.5	1.2	Z	2.9	2.0	4.7	3.9	6.4	2.3	1.3	0.7	1.5	0.8	1.3	1.6	1.2	1.9	1.6	1.7	1.3	4.7	2.3	6.4
25-Sep	Z	1.8	1.4	0.4	0.4	0.6	1.1	0.3	1.6	1.3	0.7	1.0	0.6	1.1	0.6	1.0	1.6	1.2	0.9	1.2	1.3	0.3	0.7	2.5	1.0	2.5
26-Sep	1.2	Z	1.3	4.7	1.8	3.0	0.6	0.3	0.2	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	6.4	10.6	15.3	2.0	15.3
27-Sep	15.4	4.6	Z	19.1	13.5	20.5	22.3	13.3	7.2	5.5	4.0	3.7	5.6	2.8	1.5	2.9	0.6	0.5	0.9	1.0	1.2	2.6	3.6	2.6	6.7	22.3
28-Sep	1.7	1.4	2.3	Z	1.8	2.2	2.9	4.2	3.0	2.2	1.0	C	C	C	C	C	1.0	1.7	1.1	0.7	0.8	1.1	1.0	1.2	1.7	4.2
29-Sep	1.4	1.7	2.0	2.9	Z	2.6	4.3	3.7	3.8	2.7	3.7	0.8	0.5	0.5	0.3	0.2	0.2	0.3	0.4	0.3	7.6	15.4	5.2	1.8	2.7	15.4
30-Sep	1.0	1.1	10.0	11.6	2.9	Z	1.8	0.5	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.1	0.2	0.4	0.4	2.1	1.5	0.3	1.6	11.6
	2.2	1.3	1.5	2.4	1.9	2.6	3.3	3.5	2.3	1.7	1.5	1.2	1.3	1.0	0.9	0.9	0.8	0.8	0.7	0.8	1.4	1.9	1.9	2.2	Diurnal Average	
	15.4	5.3	10.0	19.1	13.5	20.5	22.3	13.3	8.7	6.4	6.4	4.9	5.6	3.6	2.9	2.9	1.8	2.5	1.8	1.9	7.6	15.4	10.6	15.3	Diurnal Maximum	

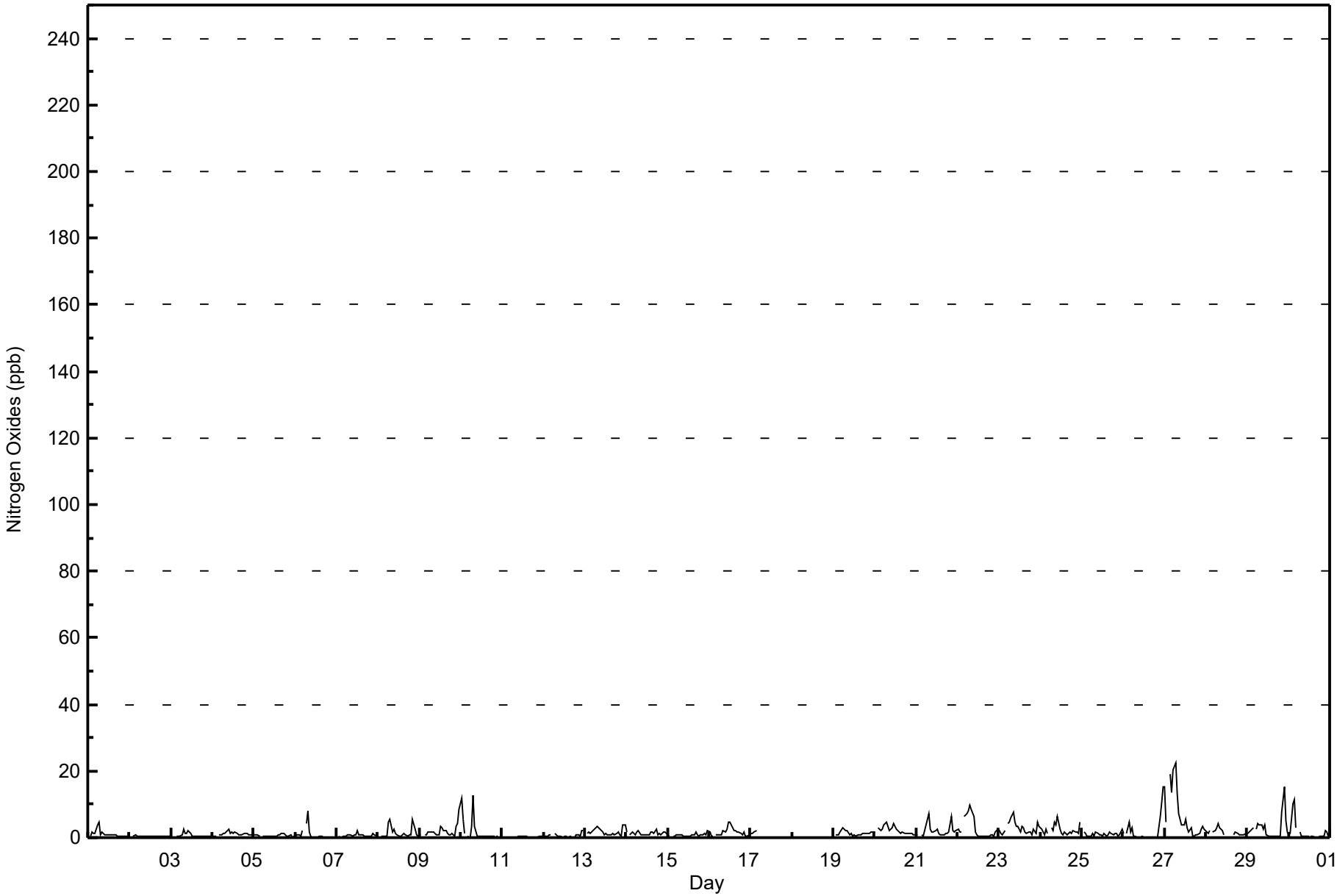
Z - zerospan C - Calibration UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Monday Creek - September 2026



Nitrogen Oxides (NO_X) - ppb
Monday Creek - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	642	99.84	99.84
21 - 40	1	0.16	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: 643

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Monday Creek - September 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	9	23	16	21	35	40	69	30	30	61	42	49	69	54	60	32	640
21 - 40	0	0	0	0	0	0	0	0	0	0	0	0	1	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	9	23	16	21	35	40	69	30	30	61	42	49	70	54	60	32	641

Total Number of Valid Hours: 641

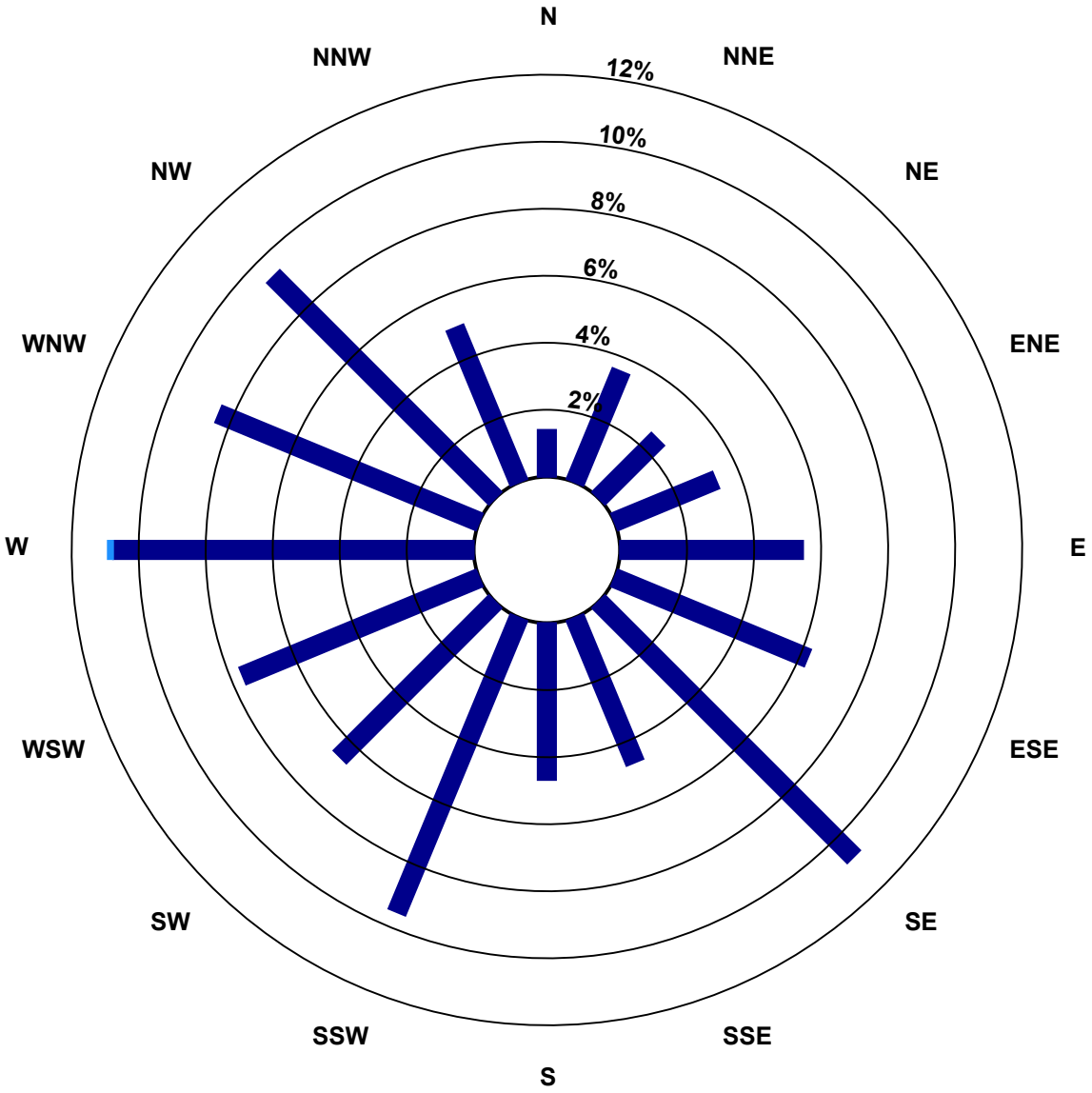
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Monday Creek



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

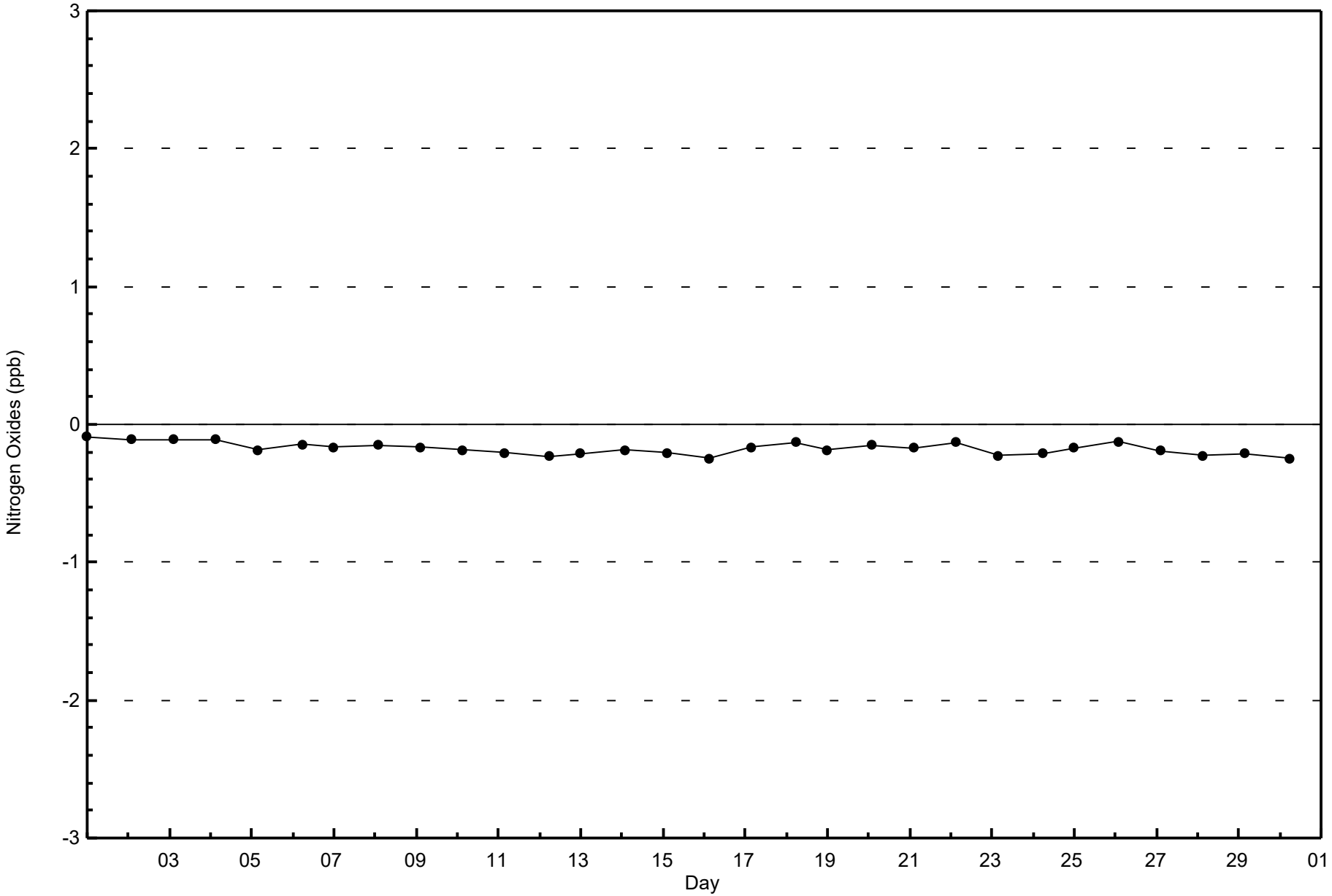
Total Number of Valid Hours: 641

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Monday Creek - September 2026

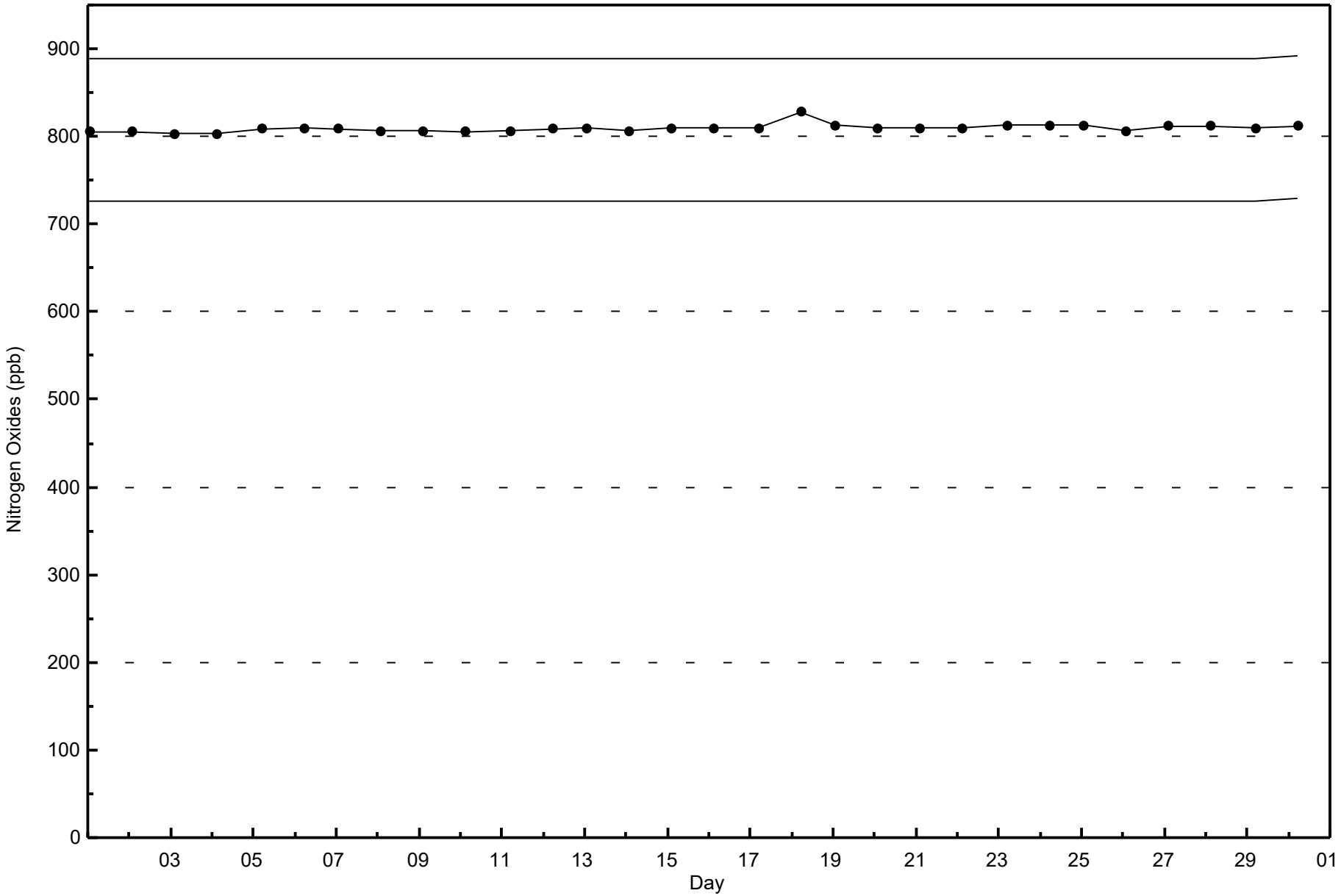


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Monday Creek - September 2026



Maximum Value: 26.2 C on Sep 2 15:00

Maximum Daily Average: 20.4 C on Sep 2

Minimum Value: -1.4 C on Sep 24 06:00

Minimum Daily Average: 4.9 C on Sep 30

Maximum Diurnal Average: 16.8 C at hour 16

Minimum Diurnal Average: 7.3 C at hour 6

Monthly Average: 11.68 C

Percentiles: P_1 = 0.3 P_{10} = 4.8 Q_1 = 7.4 Median = 11.0 Q_3 = 15.9 P_{90} = 19.7 P_{99} = 25.0

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

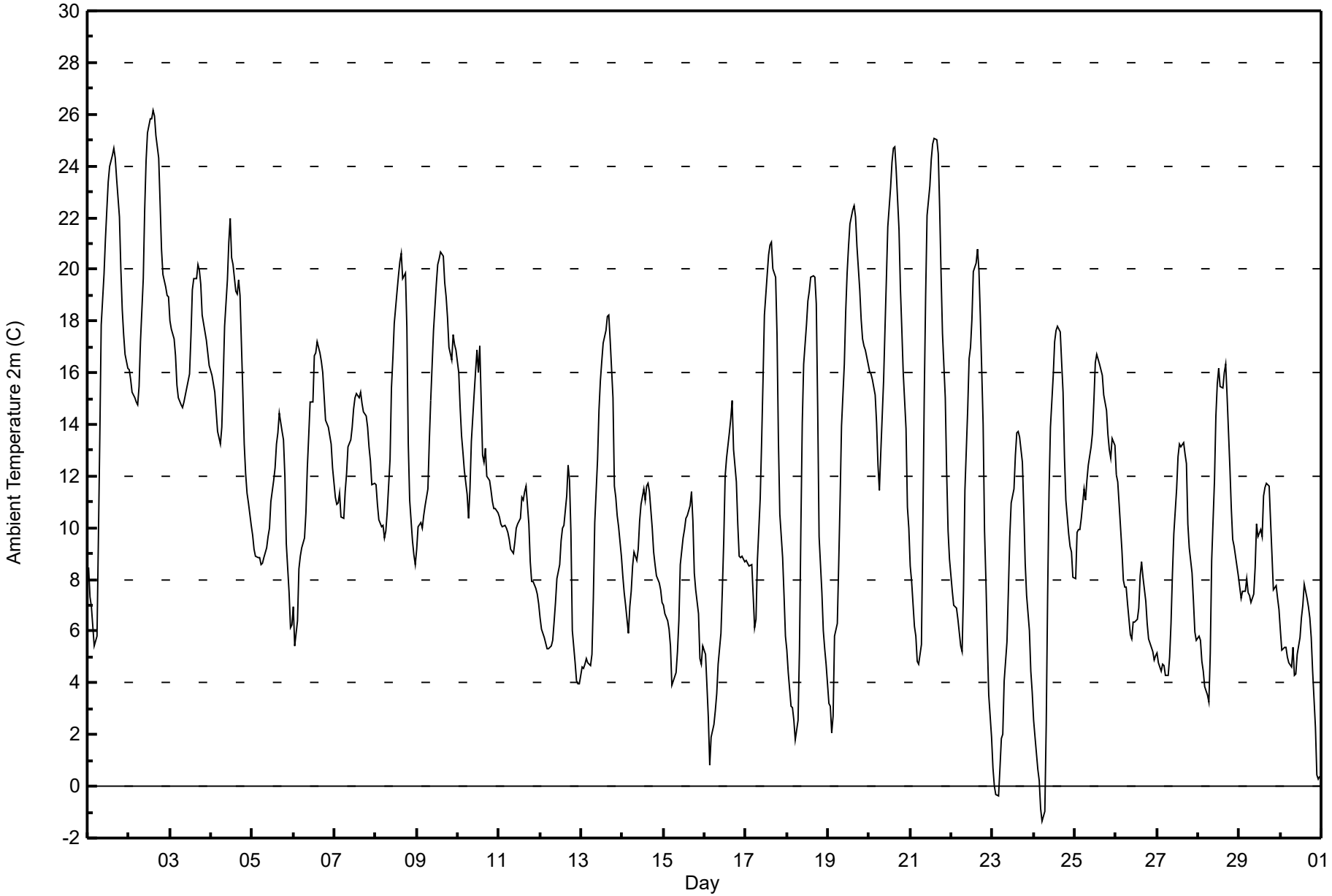
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	8.5	7.3	6.9	6.2	5.4	5.8	9.6	13.5	17.8	19.8	21.2	22.3	23.4	24.0	24.4	24.7	24.3	23.5	22.0	20.0	18.4	17.5	16.7	16.1	16.6	24.7
2-Sep	16.1	15.7	15.2	15.1	14.9	14.8	15.5	17.2	19.6	22.3	24.2	25.3	25.8	25.8	26.2	25.9	25.2	24.3	22.5	20.8	19.8	19.3	19.0	18.9	20.4	26.2
3-Sep	18.0	17.7	17.3	16.7	15.5	15.0	14.7	14.6	14.9	15.2	15.4	15.9	17.4	19.2	19.6	19.6	20.2	20.0	19.4	18.2	17.6	17.3	16.8	16.3	17.2	20.2
4-Sep	15.9	15.6	15.3	14.5	13.7	13.3	13.9	15.8	17.8	19.6	21.0	21.9	20.4	20.2	19.2	19.0	19.6	19.0	15.2	13.3	12.1	11.3	11.0	10.1	16.2	21.9
5-Sep	9.7	9.2	8.9	8.8	8.9	8.6	8.6	8.8	9.2	9.6	10.0	11.0	11.8	12.3	13.2	13.7	14.4	13.7	13.4	12.0	9.4	7.5	6.1	6.2	10.2	14.4
6-Sep	7.0	5.5	6.4	8.4	8.9	9.2	9.6	10.6	12.3	13.6	14.9	14.9	16.6	16.7	17.2	16.8	16.5	16.0	15.1	14.2	13.9	13.6	13.2	12.3	12.6	17.2
7-Sep	11.2	10.9	11.0	11.3	10.4	10.4	11.4	12.1	13.1	13.4	13.9	14.6	15.0	15.2	15.0	15.3	14.8	14.5	14.3	13.9	13.1	12.6	11.7	11.7	13.0	15.3
8-Sep	11.7	10.9	10.3	10.0	10.1	9.6	9.9	10.7	12.6	15.4	16.6	17.9	19.2	19.8	20.3	20.6	19.7	19.8	17.7	13.3	11.0	9.5	9.0	8.6	13.9	20.6
9-Sep	9.1	10.1	10.2	10.0	10.5	10.8	11.5	13.3	14.9	16.3	17.7	19.4	20.2	20.4	20.7	20.5	19.5	18.9	18.1	17.0	16.5	17.5	17.1	16.9	15.7	20.7
10-Sep	16.0	14.6	13.5	12.9	12.2	11.3	10.4	11.5	13.3	15.2	16.1	16.9	16.0	17.0	12.8	12.5	13.1	12.0	11.8	11.5	11.0	10.7	10.8	10.6	13.1	17.0
11-Sep	10.4	10.1	10.0	10.1	10.0	9.8	9.6	9.2	9.0	9.4	10.0	10.1	10.4	11.2	11.1	11.4	11.6	10.1	8.7	7.9	7.9	7.7	7.5	7.1	9.6	11.6
12-Sep	6.5	6.1	5.8	5.5	5.3	5.3	5.4	5.6	6.3	7.1	8.0	8.6	9.5	10.0	10.1	11.2	12.4	11.8	9.8	6.1	4.8	4.1	3.9	3.9	7.2	12.4
13-Sep	4.6	4.6	4.7	4.9	4.8	4.7	5.1	7.3	10.2	12.7	14.5	15.7	16.4	17.1	17.6	18.2	18.2	17.2	15.0	11.6	11.2	10.5	10.0	8.9	11.1	18.2
14-Sep	8.2	7.5	7.0	5.9	7.0	7.5	8.5	9.1	8.7	9.2	10.3	10.9	11.5	11.1	11.6	11.7	11.4	10.0	9.0	8.6	8.1	7.9	7.6	7.1	9.0	11.7
15-Sep	7.0	6.7	6.4	6.1	5.4	3.9	4.2	4.4	5.2	6.4	8.6	9.6	9.9	10.4	10.5	10.9	11.4	10.2	8.3	7.6	6.7	5.0	4.7	5.4	7.3	11.4
16-Sep	5.1	3.9	2.7	0.8	1.9	2.4	2.9	3.6	4.7	5.9	7.6	9.5	12.0	12.7	13.7	14.2	14.9	13.0	11.8	10.1	8.9	8.9	8.9	8.7	7.9	14.9
17-Sep	8.7	8.7	8.5	8.6	7.4	6.1	6.4	8.8	11.1	13.3	15.7	18.2	19.8	20.6	20.9	21.1	20.0	19.7	17.5	13.4	10.5	8.9	7.4	5.8	12.8	21.1
18-Sep	5.3	4.4	3.1	3.0	2.6	1.8	2.5	5.3	10.0	14.1	16.3	17.9	18.8	19.2	19.7	19.7	19.7	18.7	14.7	9.7	7.5	6.0	5.3	4.7	10.4	19.7
19-Sep	3.2	3.1	2.1	2.7	5.8	6.3	8.6	11.1	14.0	16.4	18.4	19.9	20.9	21.7	22.3	22.5	22.0	20.9	19.2	18.1	17.3	17.0	16.9	16.3	14.4	22.5
20-Sep	16.1	16.0	15.7	15.2	14.0	12.4	11.5	12.9	15.7	17.7	19.7	21.7	23.2	24.1	24.7	24.7	23.8	21.5	19.3	17.7	16.0	13.8	10.8	10.0	17.4	24.7
21-Sep	8.5	7.9	6.2	5.8	4.8	4.7	5.5	10.1	15.1	19.0	22.1	23.2	24.3	24.9	25.1	25.0	24.4	22.4	19.8	17.5	15.0	12.1	9.9	8.8	15.1	25.1
22-Sep	7.5	7.0	7.0	6.9	6.5	5.4	5.2	7.6	11.5	14.6	16.6	17.0	18.0	19.9	20.3	20.8	19.9	18.2	14.0	9.9	7.9	5.6	3.5	1.9	11.4	20.8
23-Sep	0.7	0.0	-0.3	-0.4	0.7	1.9	2.0	4.1	5.6	7.6	9.6	10.9	11.5	12.8	13.7	13.8	13.5	12.5	10.7	8.6	7.4	6.0	4.4	3.7	6.7	13.8
24-Sep	2.6	1.9	0.7	0.2	-0.9	-1.4	-0.9	2.4	7.4	11.4	13.9	15.9	17.2	17.7	17.8	17.6	16.4	15.3	12.8	11.1	9.8	9.3	9.1	8.1	9.0	17.8
25-Sep	8.0	9.8	9.9	9.9	10.3	11.5	11.1	11.8	12.4	13.1	13.7	14.9	16.4	16.7	16.3	16.1	15.9	15.1	14.5	13.6	13.0	12.7	13.5	13.2	13.1	16.7
26-Sep	12.0	11.8	10.9	9.1	8.0	7.7	7.7	7.0	5.9	5.7	6.4	6.4	6.5	6.9	8.1	8.7	8.1	7.2	6.3	5.7	5.5	5.2	4.9	5.0	7.4	12.0
27-Sep	5.2	4.8	4.4	4.7	4.7	4.3	4.3	5.0	6.3	8.2	9.8	11.5	12.8	13.3	13.1	13.3	12.9	12.5	10.1	9.2	8.3	7.2	6.0	5.7	8.2	13.3
28-Sep	5.8	5.7	4.8	4.5	3.8	3.5	3.3	5.2	8.8	11.9	14.3	15.6	16.2	15.5	15.4	16.0	16.3	15.1	12.3	10.7	9.6	9.3	8.9	8.1	10.0	16.3
29-Sep	7.7	7.3	7.6	7.5	8.0	7.5	7.4	7.1	7.4	8.5	10.1	9.7	9.9	9.7	11.3	11.5	11.7	11.6	10.3	8.9	7.6	7.7	7.3	6.8	8.8	11.7
30-Sep	6.0	5.3	5.4	5.4	5.0	4.8	4.6	5.4	4.3	4.4	5.1	5.7	6.5	7.0	7.8	7.3	7.0	6.5	5.8	4.5	2.3	0.5	0.3	0.4	4.9	7.8
	8.7	8.3	7.9	7.7	7.5	7.3	7.7	9.0	10.8	12.6	14.0	15.1	15.9	16.4	16.7	16.8	16.6	15.7	14.0	12.2	10.9	10.1	9.4	8.9	Diurnal Average	
	18.0	17.7	17.3	16.7	15.5	15.0	15.5	17.2	19.6	22.3	24.2	25.3	25.8	25.8	26.2	25.9	25.2	24.3	22.5	20.8	19.8	19.3	19.0	18.9	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Monday Creek - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	6	0.83	0.83
0 - 10	304	42.22	43.06
10 - 20	352	48.89	91.94
> 20	58	8.06	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Monday Creek - September 2026

Maximum Value: 100.0 % on Sep 16 06:00

Maximum Daily Average: 87.8 % on Sep 7

Minimum Value: 31.0 % on Sep 21 14:00

Minimum Daily Average: 55.5 % on Sep 2

Maximum Diurnal Average: 88.5 % at hour 6

Minimum Diurnal Average: 52.1 % at hour 16

Monthly Average: 72.87 %

Percentiles: P_1 = 34.1 P_{10} = 43.5 Q_1 = 59.7 Median = 75.8 Q_3 = 89.0 P_{90} = 95.5 P_{99} = 99.5

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

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-Sep	94.0	96.0	97.0	97.1	98.5	98.6	89.2	76.4	60.9	51.8	46.5	42.2	38.3	36.3	34.9	35.8	36.8	39.2	43.9	50.9	59.3	64.0	68.2	72.2	63.7	98.6
2-Sep	71.7	72.5	73.3	72.7	73.2	73.7	71.5	64.9	56.7	48.0	38.9	35.6	37.0	37.8	35.0	32.6	35.0	39.6	46.9	55.2	60.5	64.3	67.0	67.9	55.5	73.7
3-Sep	71.8	73.4	75.7	78.9	82.8	84.8	91.8	96.5	97.5	96.4	95.0	92.8	85.9	75.6	71.5	69.6	67.2	69.6	72.6	78.5	83.0	86.9	89.7	91.4	82.4	97.5
4-Sep	92.9	94.3	95.7	97.9	99.3	99.8	96.8	87.0	76.5	64.5	53.0	51.0	60.5	63.0	66.2	64.1	60.7	65.2	82.2	86.6	88.4	87.8	88.9	91.8	79.8	99.8
5-Sep	89.5	93.3	94.5	94.4	94.1	96.5	95.7	94.3	92.5	89.7	86.6	81.0	76.7	73.0	66.2	64.3	60.8	65.6	68.2	75.5	87.9	93.2	97.2	98.2	84.5	98.2
6-Sep	96.7	97.1	99.3	97.2	95.2	95.5	95.7	91.3	85.6	80.6	73.0	72.8	65.1	66.2	64.1	67.4	69.3	72.3	77.8	82.2	78.9	77.0	78.1	81.9	81.7	99.3
7-Sep	87.1	89.0	89.6	89.3	93.9	95.2	93.7	90.7	85.0	85.3	84.2	80.0	79.0	79.4	82.0	81.7	84.5	86.1	87.0	89.4	94.0	96.0	98.3	OR	87.8	98.3
8-Sep	98.9	99.7	99.8	98.2	96.6	98.5	98.2	95.7	88.3	76.5	68.0	59.7	52.5	46.9	43.7	43.2	45.8	45.8	54.6	74.7	81.8	87.7	88.8	89.1	76.4	99.8
9-Sep	87.0	85.2	85.9	89.3	90.4	92.8	93.3	86.9	78.4	67.7	58.3	48.7	45.0	45.3	44.9	45.3	49.3	52.5	56.4	61.6	64.3	61.8	63.7	61.8	67.3	93.3
10-Sep	63.1	68.0	69.7	71.0	74.4	79.0	82.0	75.5	68.5	59.2	53.5	51.2	55.0	50.7	76.1	83.2	83.0	90.5	84.7	87.3	92.8	95.3	92.5	88.8	74.8	95.3
11-Sep	87.5	86.6	84.3	82.7	81.6	80.1	80.0	82.4	83.5	79.1	75.2	75.2	72.8	65.1	67.7	64.7	62.0	73.7	79.9	81.1	78.2	80.7	82.9	83.2	77.9	87.5
12-Sep	85.0	85.8	86.9	88.4	89.7	89.2	89.3	87.8	83.4	78.9	68.2	56.3	51.1	51.1	54.1	49.4	43.9	45.8	54.3	73.4	78.1	80.8	81.0	80.3	72.2	89.7
13-Sep	80.1	80.8	82.8	85.3	86.6	86.8	84.1	75.3	64.2	55.5	48.9	44.2	43.1	40.9	38.7	35.8	37.8	42.8	53.2	67.9	70.4	74.9	78.1	82.7	64.2	86.8
14-Sep	85.2	88.6	91.9	95.2	94.5	97.1	98.5	99.5	97.5	92.5	85.8	80.2	74.8	79.3	75.4	68.1	68.0	78.2	89.1	92.4	87.2	87.3	89.1	91.1	86.9	99.5
15-Sep	91.2	91.6	92.6	92.0	92.9	97.3	94.7	93.0	89.5	85.1	72.4	61.4	56.6	51.3	51.9	52.8	48.2	58.2	69.5	76.1	91.5	95.6	94.0	92.6	78.8	97.3
16-Sep	92.0	92.1	94.8	98.3	99.4	100.0	OR	100.0	94.4	86.7	79.4	70.7	59.8	54.0	49.1	47.9	43.4	53.9	63.0	70.4	76.0	76.1	71.2	73.2	75.9	100.0
17-Sep	74.5	75.1	75.9	76.7	82.9	86.5	85.2	75.4	66.9	60.1	53.3	47.7	42.9	40.4	40.0	39.4	43.7	45.9	53.9	72.5	85.3	88.7	92.2	94.8	66.7	94.8
18-Sep	95.8	97.3	98.0	98.1	98.6	99.5	99.5	94.9	82.0	62.9	51.7	43.7	40.3	35.8	34.7	34.3	34.7	39.8	57.0	77.4	83.9	87.5	89.3	89.2	71.9	99.5
19-Sep	93.5	94.5	93.0	94.0	87.7	86.1	80.9	73.3	61.6	50.4	40.9	35.7	32.6	34.1	37.0	39.1	41.5	46.5	52.5	56.2	58.6	58.1	58.1	59.8	61.1	94.5
20-Sep	59.6	58.6	58.2	58.2	61.3	67.0	70.6	66.2	57.5	52.3	48.5	43.2	37.3	37.6	36.3	35.0	39.2	49.2	57.6	62.6	69.1	77.4	85.7	85.1	57.2	85.7
21-Sep	89.3	92.2	94.3	96.2	96.6	97.0	96.4	87.0	72.9	60.5	47.5	40.8	33.9	31.0	31.3	33.3	34.2	47.0	56.3	65.0	76.3	84.6	88.3	91.6	68.5	97.0
22-Sep	94.6	94.4	95.3	95.5	96.1	96.5	99.1	98.1	88.6	74.5	65.6	53.3	45.5	39.3	38.5	37.6	40.3	42.6	55.2	69.4	73.2	82.4	86.7	89.5	73.0	99.1
23-Sep	93.4	94.3	93.8	95.1	93.3	92.6	93.3	90.9	91.4	84.1	77.3	76.6	76.2	73.0	73.3	72.5	73.3	79.7	87.3	94.6	96.4	97.9	99.1	100.0	87.5	100.0
24-Sep	OR	99.8	97.8	99.4	98.3	99.0	99.1	94.0	82.6	65.0	53.4	41.3	34.4	34.0	34.4	36.7	42.3	48.0	62.5	72.9	77.8	81.1	80.3	84.9	70.4	99.8
25-Sep	85.2	73.4	68.4	66.5	61.7	58.9	71.9	60.9	57.0	61.5	61.6	61.4	60.8	62.0	65.2	67.9	71.7	76.0	79.3	85.6	91.4	94.6	93.7	94.5	72.1	94.6
26-Sep	98.4	OR	97.8	95.7	96.3	94.7	92.4	89.5	89.6	88.5	83.7	80.1	77.9	74.6	65.5	63.2	67.9	73.2	75.8	75.8	77.9	78.3	81.1	81.3	82.6	98.4
27-Sep	82.3	82.4	83.3	85.2	86.4	87.3	87.1	82.7	76.1	68.6	62.2	53.3	46.3	43.1	44.2	44.0	46.8	47.7	57.2	60.4	64.1	68.5	73.6	74.1	67.0	87.3
28-Sep	73.3	75.3	79.7	80.2	82.7	83.8	85.7	79.2	65.7	54.0	44.2	38.7	36.6	38.9	38.2	36.9	37.0	40.2	47.5	53.3	56.6	58.2	59.3	61.4	58.6	85.7
29-Sep	62.6	65.2	64.1	65.7	64.3	70.0	79.2	90.2	92.9	87.8	81.2	79.7	74.6	76.8	60.5	49.7	45.1	42.8	46.5	53.2	59.1	60.7	60.7	59.5	66.3	92.9
30-Sep	61.9	64.9	65.5	66.7	69.3	71.6	71.6	72.0	83.2	79.3	72.8	69.1	66.9	66.9	65.6	68.4	70.1	72.4	76.4	81.8	89.4	95.4	94.6	91.2	74.5	95.4
	84.1	84.9	86.0	86.7	87.3	88.5	88.5	85.1	79.0	71.6	64.4	58.9	55.3	53.4	52.9	52.1	52.8	57.7	64.9	72.8	77.7	80.8	82.4	82.9	Diurnal Average	
	98.9	99.8	99.8	99.4	99.4	100.0	99.5	100.0	97.5	96.4	95.0	92.8	85.9	79.4	82.0	83.2	84.5	90.5	89.1	94.6	96.4	97.9	99.1	100.0	Diurnal Maximum	

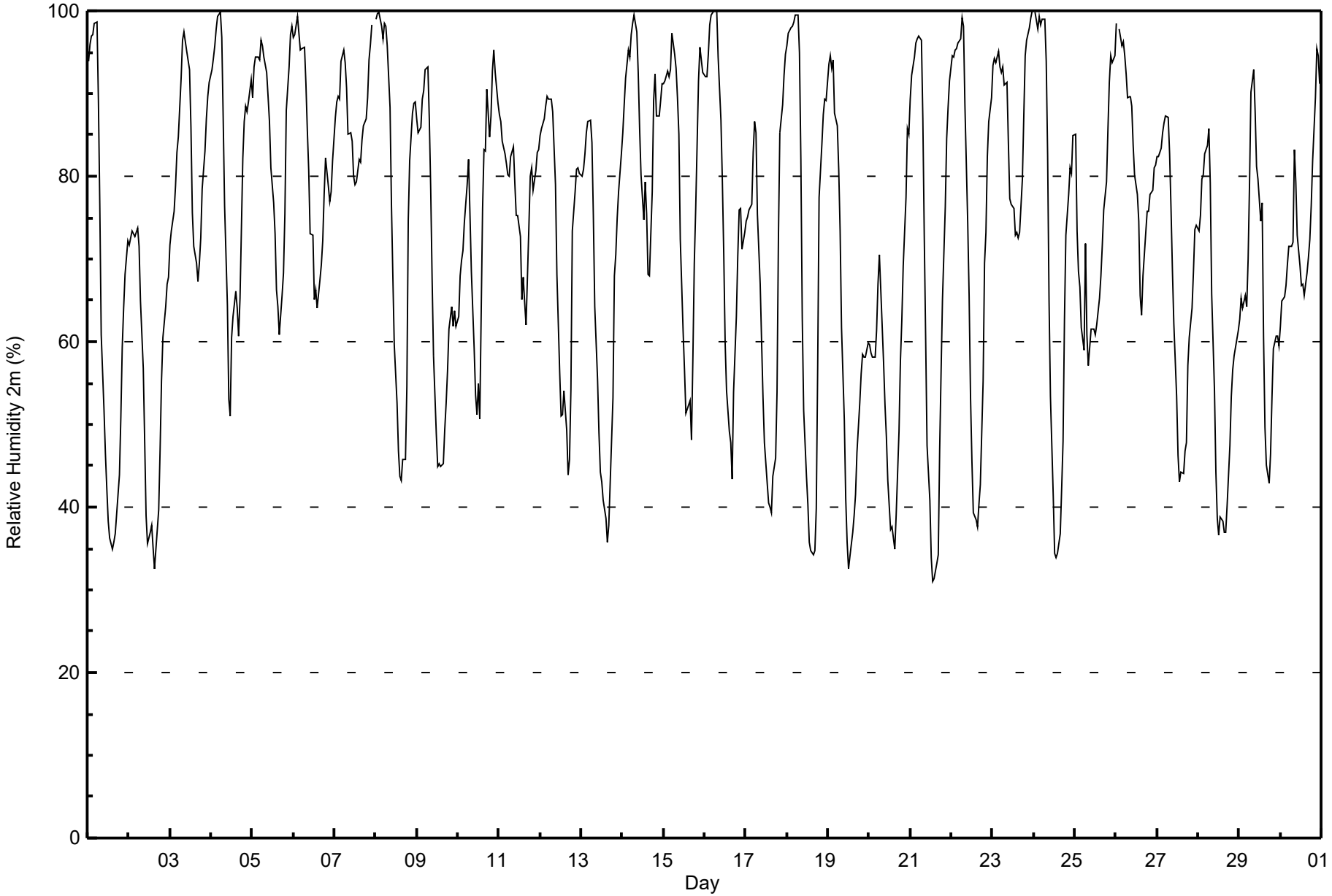
OR - Out of Range

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Monday Creek - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	51	7.12	7.12
40 - 60	131	18.30	25.42
60 - 80	227	31.70	57.12
80 - 100	304	42.46	99.58

Total Number of Valid Hours: 716

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Monday Creek - September 2026

Maximum Speed: 31 km/h on Sep 26 15:00

Maximum Daily Speed Average: 21.2 km/h on Sep 26

Minimum Speed Value: 0 km/h on Sep 18 07:00

Minimum Daily Speed Average: 1.0 km/h on Sep 23

Maximum Diurnal Speed Average: 7.6 km/h at hour 14

Minimum Diurnal Speed Average: 1.6 km/h at hour 20

Monthly Average Velocity: 3.6 km/h 259.6 deg

Percentiles: P_1 = 1 P_{10} = 2 Q_1 = 5 Median = 10 Q_3 = 15 P_{90} = 21 P_{99} = 27

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Percent Operational Time:	99.4

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-Sep	SE3	ESE2	ESE2	E3	UO	UO	SE4	SE6	SSW6	SSW11	SSW13	SSW12	SSE12	SSE14	SSE13	SSE13	SSE14	SE14	SE12	SE11	SE10	SE11	SE12	SE11	SSE8.7	SE14
2-Sep	SE13	SE11	SE11	SE10	SE11	SE13	SE14	SSE16	SE16	SE18	SSE21	SE20	SE20	SE19	SE20	SE21	SE18	SE16	SE14	SE11	ESE11	SE11	SE13	ESE12	SE14.8	SSE21
3-Sep	ESE11	ESE12	ESE10	ESE8	E8	E9	E9	ENE7	ENE11	E15	E17	E14	ESE14	SE19	ESE20	ESE21	ESE20	ESE19	ESE14	ESE12	ESE13	ESE11	SE9	SE8	ESE12.6	ESE21
4-Sep	SE7	SE6	SE5	SSE5	SSE6	SSE5	SE5	ESE6	SE1	WSW6	SSW10	SSW13	SW17	WSW14	W18	W15	WNW12	NW8	NNE19	NNE15	NNE14	NNE15	NNE17	NNE16	NW1.8	NNE19
5-Sep	N12	NNE15	NNE15	NNE14	NNE13	NNE14	NNE11	NNE9	NNE10	NNE14	NNE12	NE10	NE10	NE9	ENE7	NNE4	NE3	ENE3	SSE2	SE5	SSE2	ENE1	S2	SSE1	NNE7.2	NNE15
6-Sep	ESE2	ESE2	SE2	ESE4	E5	ESE4	E5	E7	E5	SE8	SE12	SE13	SE11	SSE9	SSE8	SE10	SE10	SE11	SE13	SE12	SSE10	SE9	SE8	SE7	SE7.4	SE13
7-Sep	SSE5	SE8	SE6	SE2	ENE6	ESE7	ESE3	NE3	ESE5	E4	NNE8	NNE7	NNE9	NE8	ENE9	ENE8	ENE8	NE8	NE8	ENE7	NE3	N6	NNW5	N8	ENE4.6	ENE9
8-Sep	NNW6	NW7	NW6	NNW5	WNW6	WNW5	WNW6	WNW6	NNW7	N10	NNE13	NNW12	NNW12	NNW14	NW14	NW14	NW9	NW8	W6	WSW2	SE3	S3	SSW4	SSW5	NW5.9	NNW14
9-Sep	SSW5	SSW4	SSW5	S4	S5	SW7	SW8	SW11	WSW13	WSW15	WSW17	WSW21	WSW26	WSW25	WSW22	WSW23	WSW18	WSW17	WSW12	SW9	SW11	WSW16	WSW14	W17	WSW12.9	WSW26
10-Sep	W14	W14	W16	WNW23	WNW20	W11	WSW10	W16	W18	WNW24	WNW26	W27	WNW24	WNW27	WNW25	WNW16	NW10	NW12	WNW18	WNW17	WNW15	WNW17	NW17	NW16	WNW17.6	WNW27
11-Sep	NW18	NW20	NW20	NW19	NW21	NW21	NW22	NW22	NW21	NNW21	NNW22	NW22	NNW21	NNW22	NNW20	NNW19	NNW19	NNW19	N15	NNW13	NNW10	NW10	NW12	NW12	NW18.0	NW22
12-Sep	NW13	NW12	NW10	NW10	WNW11	WNW10	NW9	WNW9	NW9	NW8	WNW11	WNW11	WNW14	WNW13	W10	WNW12	NW12	WNW10	W6	SW6	SSW7	SSW6	SSW6	SW8	WNW8.5	WNW14
13-Sep	SW10	SW9	SW7	SW10	SSW9	SW11	SW10	SW12	SW15	WSW16	WSW19	WSW20	WSW17	SW16	SW14	WSW13	SW12	SW12	SW6	SSW6	S7	SSW7	SW5	SSW4	SW10.9	WSW20
14-Sep	SW3	WNW2	WSW3	NNW2	WNW5	WNW6	NW7	NNW9	N14	NNE15	N13	NNE13	NNW14	NNW12	NNW13	NNW13	NNW12	N9	NW8	NNW7	NNW9	NW10	NW8	NW8	NNW8.1	NNE15
15-Sep	NW8	NW7	NW9	NW10	NW8	WNW8	NW7	NW8	NW9	NNW6	NW9	WNW11	WNW9	WNW10	W11	WSW11	WSW12	SW12	SSW7	WSW7	WSW4	SSW6	WSW6	WSW6	W7.0	SW12
16-Sep	WSW6	W8	W4	W2	NW3	WSW2	W3	SW5	SE2	ENE4	ENE5	NE5	NNW4	NW4	E2	E5	SW5	SSW2	SE7	ESE7	ESE7	SE7	SE10	SE8	SE1.3	SE10
17-Sep	SE7	SE8	SE7	SE4	SE5	SE5	SE5	S8	SW9	WSW11	WSW9	WSW9	WSW13	W14	W11	W13	WSW10	WNW6	NW6	W1	UO	SSE1	SSE1	S1	SW4.2	W14
18-Sep	W2	S2	S1	WNW1	WSW2	SSW3	WNW0	W2	WNW5	NNW6	NNW8	NW9	NW12	WNW14	NW12	NNW12	NW10	NW6	N2	UO	ESE2	ESE2	ESE3	SSE1	NW3.7	WNW14
19-Sep	SSW2	E3	ENE2	ESE3	SSE5	S5	SSE6	S3	S11	SSW15	SSW19	SSW18	S18	S17	SSW17	SSW17	SSW17	SSW15	S11	S9	S12	S13	SSW14	SSW14	S10.6	SSW19
20-Sep	SSW15	SSW13	SSW9	SSW9	SSW6	SSW6	S4	SSW5	SW8	SW9	SW9	SSW7	SSW7	S7	SSW9	SSW11	SSW9	SSW9	SSW9	S7	SSE4	SSE5	SSE5	SE3	SSW7.4	SSW15
21-Sep	E3	SE3	ESE3	E2	E2	SE2	SE2	ESE4	SSE5	S6	SSE10	SSE12	SSE14	S13	S14	SSW14	SSW15	SSW13	S7	SE6	ESE5	SE6	ENE2	E3	SSE6.1	SSW15
22-Sep	E2	E4	ESE4	ESE2	E3	NE1	W1	SSE3	W5	WNW10	WNW15	WNW20	NW18	NW16	NW16	NW15	WNW16	WNW12	WNW6	WNW6	WNW4	SSW1	ESE1	SSE1	WNW5.7	WNW20
23-Sep	E1	SSE1	ENE2	SE0	SSW1	S1	SW2	W1	SSW2	W2	ESE3	NNE3	NNW7	N5	NE5	NE6	NE7	E6	NE1	ENE2	NNW2	WSW1	WSW3	WSW3	NNE1.0	NNW7
24-Sep	SW3	SSW1	SSW1	S1	ESE1	SSW2	SW2	SSW2	SW2	WNW6	WSW7	WSW9	WSW12	W15	W13	WSW11	WSW7	WSW6	SSW0	ENE1	SE1	ESE3	ENE2	ENE1	WSW3.6	W15
25-Sep	ESE3	E9	ESE8	E9	E10	E12	E12	E17	ESE16	ESE17	E22	ESE19	E19	E13	E18	ESE16	ENE8	ENE10	N6	NE11	E16	E23	S3	NW6	E11.5	E23
26-Sep	W0	WNW3	W13	W18	W18	W21	W21	W22	W23	W25	W24	W26	W28	W29	W31	W30	WNW28	WNW26	WNW22	W22	W19	W20	W20	W22	W21.2	W31
27-Sep	W21	W20	W17	W19	WSW17	W15	W18	W20	W21	W21	WSW21	WSW24	W28	W27	W27	W25	WSW18	WSW17	SW11	WSW12	SW12	SW10	SSW8	SW8	WSW17.5	W28
28-Sep	SW8	SSW8	SSW10	SSW10	SSW9	SSW8	SSW10	SW11	SW12	SW14	SW17	WSW21	WSW20	WSW16	SW14	SW14	SW14	SSW10	S8	S7	S6	SSW9	SSW9	S7	SW10.6	WSW21
29-Sep	S6	SSE6	S5	SSW4	WSW5	W5	WSW4	SSE4	W3	W5	W17	WNW20	WNW24	WNW27	WNW25	WNW23	WNW21	WNW19	W18	W13	W12	W21	W21	W21	W12.3	WNW27
30-Sep	W17	W16	W20	W21	W20	W22	W22	WNW26	NW23	NW23	NW25	NW22	NW22	NW22	NW22	NW19	NW16	NW14	NW10	WNW7	WSW4	WSW4	WNW4	WNW3	WNW15.6	WNW26
	WSW2.7	WSW2.1	WSW2.6	W2.7	W2.8	WSW3.0	W2.7	W3.1	W3.8	W4.4	W4.9	W5.9	W6.8	W7.6	W6.5	W5.8	W5.1	WSW3.8	WSW2.2	SW1.6	SSW1.8	SSW2.4	SW2.8	WSW2.9	Diurnal Average	
	W21	W20	NW20	WNW23	NW21	W22	W22	WNW26	NW23	W25	WNW26	WNW27	W28	W29	W31	W30	WNW28	WNW26	WNW22	W22	W19	E23	W21	W22	Diurnal Maximum	

UO - Unstable Operation

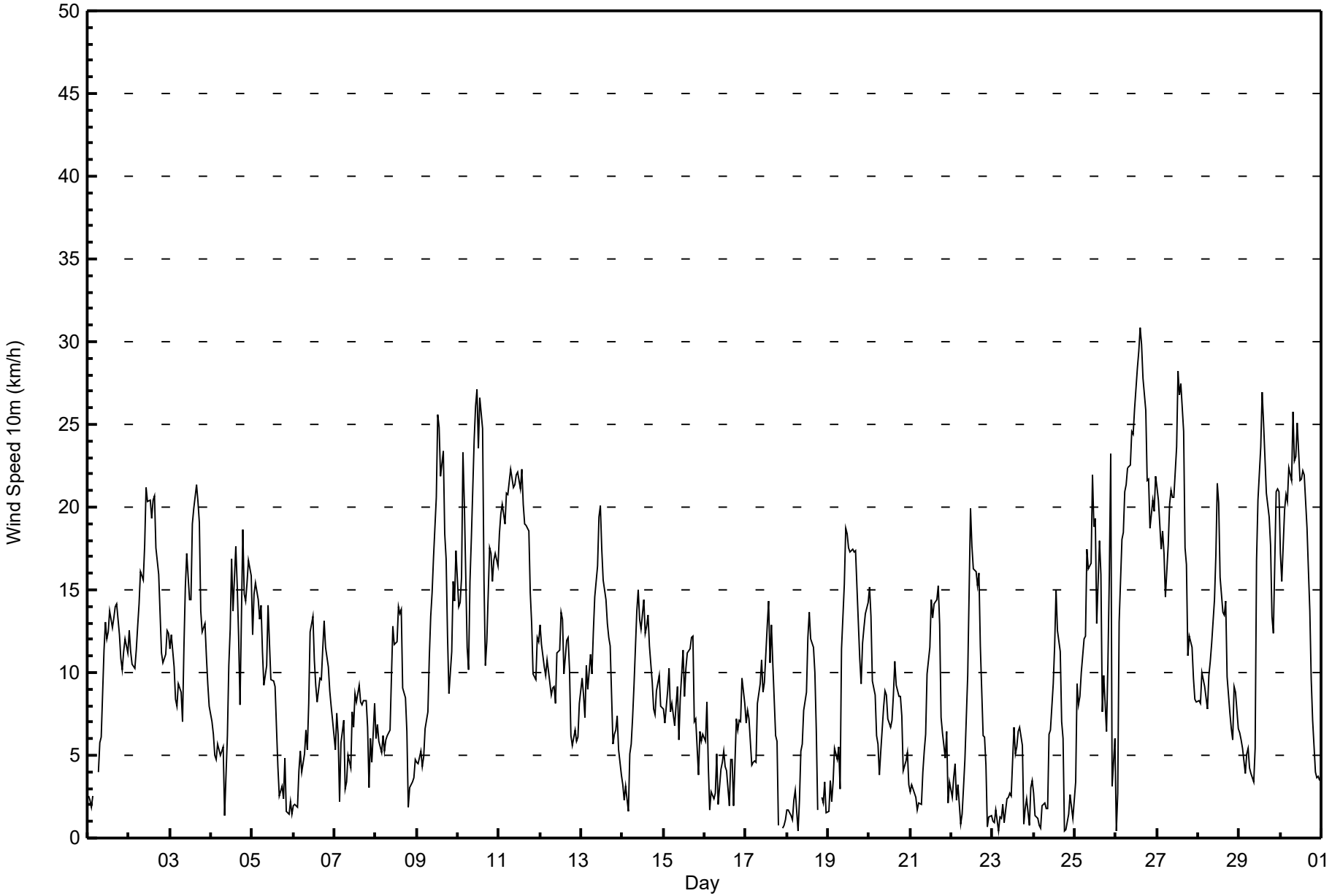
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Monday Creek - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	182	25.42	25.42
6 - 11	243	33.94	59.36
12 - 19	200	27.93	87.29
20 - 28	88	12.29	99.58
29 - 38	3	0.42	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 716

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Monday Creek - September 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	2	2	7	11	15	23	20	18	14	19	8	12	14	10	2	5	182
6 - 11	5	6	9	10	8	10	33	8	14	32	23	16	7	20	31	11	243
12 - 19	3	16	0	0	10	11	18	8	6	17	15	21	26	14	21	14	200
20 - 28	0	0	0	0	2	4	3	1	0	0	0	10	29	19	14	6	88
29 - 38	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	10	24	16	21	35	48	74	35	34	68	46	59	79	63	68	36	716

Total Number of Valid Hours: 716

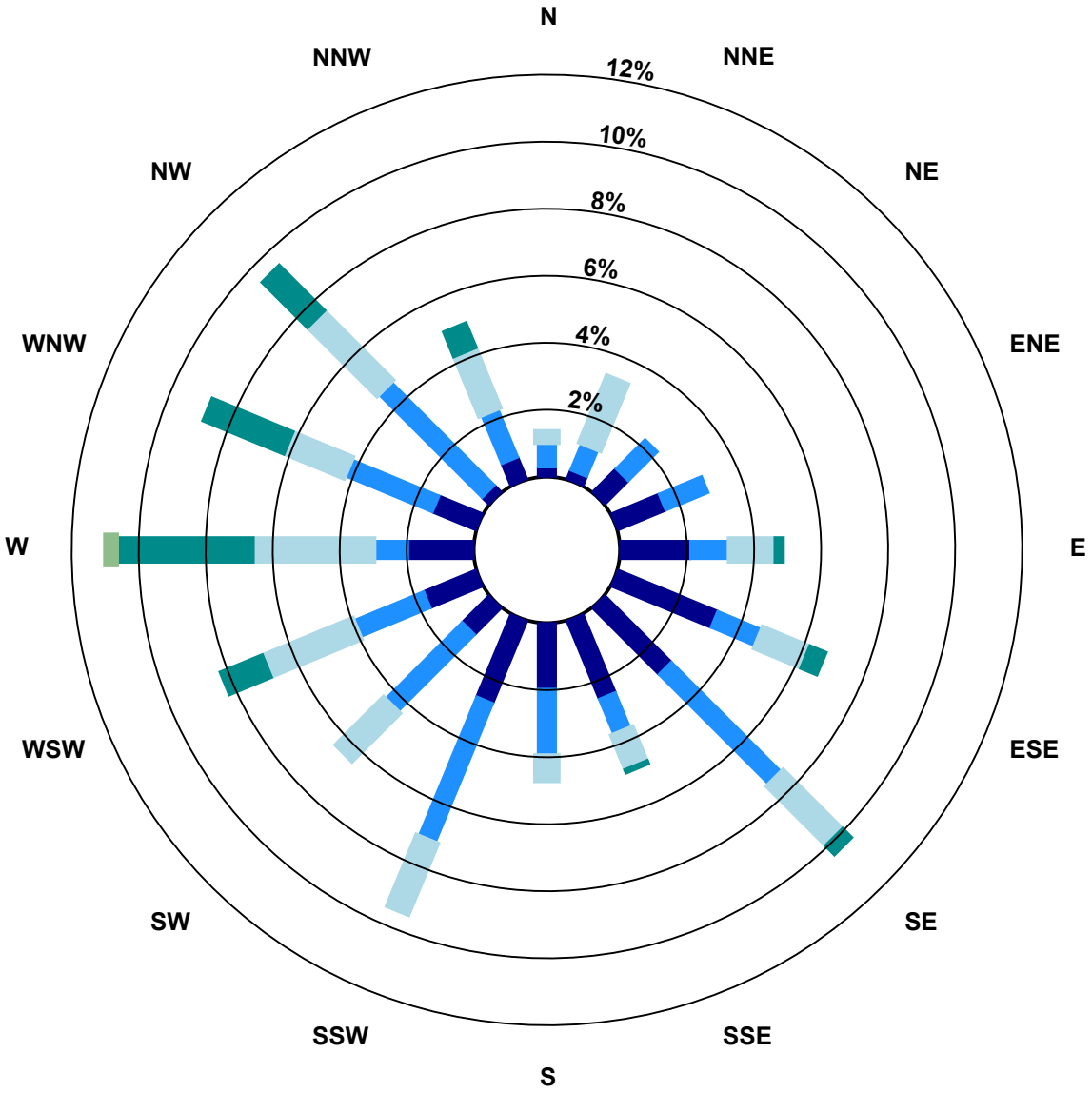
Total Number of Hours: 720

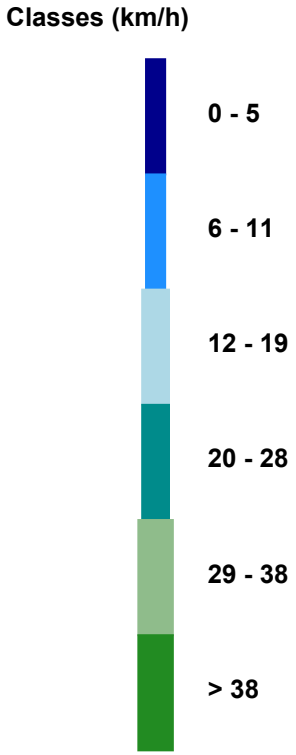
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Monday Creek





Total Number of Valid Hours: 716

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 10m (WS10) - km/h

Monday Creek - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10 km/h on Sep 10 15:00

Minimum Value: 1 km/h on Sep 23 23:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 2 Q_3 = 4 P_{90} = 5 P_{99} = 7

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

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-Sep	1	1	1	1	UO	UO	1	1	3	3	4	4	4	3	4	4	4	4	3	2	2	2	2	2	4
2-Sep	2	2	2	2	2	2	3	3	4	4	5	5	5	4	5	5	4	4	3	2	2	2	2	3	5
3-Sep	2	2	2	2	1	2	3	3	3	3	3	4	4	5	6	5	4	4	3	3	3	3	2	2	6
4-Sep	1	1	2	1	1	2	2	2	1	2	4	4	4	4	4	3	3	4	4	4	4	4	5	4	5
5-Sep	4	3	4	4	3	3	3	2	2	4	3	2	2	3	2	3	2	2	1	1	2	2	2	1	4
6-Sep	2	1	2	1	1	1	1	1	2	3	3	3	3	3	2	2	2	3	3	3	3	3	2	3	3
7-Sep	2	1	1	1	2	2	2	1	2	1	1	2	3	2	3	2	2	2	2	1	1	1	3	2	3
8-Sep	2	2	1	1	1	1	1	1	2	4	4	3	3	4	4	4	2	3	1	1	1	2	1	1	4
9-Sep	1	1	1	1	1	2	2	2	4	3	4	5	7	7	6	6	5	4	4	2	3	4	3	4	7
10-Sep	4	4	4	7	4	3	2	4	4	5	6	6	5	6	10	3	3	4	4	4	4	4	4	4	10
11-Sep	5	5	5	6	6	5	6	6	5	5	6	6	6	6	6	5	6	5	4	4	4	3	3	3	6
12-Sep	3	3	3	2	2	2	2	2	2	3	3	3	4	4	4	3	4	3	1	1	1	1	1	1	4
13-Sep	1	1	1	2	2	2	2	3	3	4	5	5	5	4	4	3	4	3	1	1	1	2	1	1	5
14-Sep	1	3	1	2	1	1	2	4	4	4	4	4	4	4	4	4	3	3	2	2	2	2	2	2	4
15-Sep	2	2	2	2	2	3	2	2	2	2	3	3	2	3	3	3	3	3	1	4	2	2	2	2	4
16-Sep	2	2	2	1	1	2	1	1	1	1	2	2	2	3	2	2	2	2	1	1	2	1	2	2	3
17-Sep	1	1	1	1	1	2	1	2	3	3	3	3	3	3	4	4	5	2	1	1	UO	1	1	1	5
18-Sep	1	1	2	1	2	2	1	2	1	2	2	3	4	4	4	4	3	2	2	UO	1	1	1	1	4
19-Sep	1	1	1	1	1	1	1	2	4	4	6	5	5	5	5	5	5	5	3	2	3	3	4	4	6
20-Sep	4	4	3	3	2	1	1	1	2	2	2	2	2	2	3	3	3	2	2	2	1	1	1	2	4
21-Sep	1	1	1	1	1	1	1	1	1	2	3	3	4	4	4	5	4	3	3	1	1	1	1	1	5
22-Sep	2	1	1	1	1	1	1	1	2	4	5	5	5	4	4	4	5	3	1	1	1	1	1	1	5
23-Sep	1	1	1	1	2	2	1	1	1	2	2	3	2	2	1	2	2	2	2	1	1	1	1	1	3
24-Sep	2	1	1	1	1	1	2	1	1	2	2	3	3	4	4	3	2	2	1	1	1	1	1	1	4
25-Sep	2	2	2	1	2	3	3	4	4	4	5	4	5	4	5	6	5	3	3	3	6	6	6	4	6
26-Sep	2	2	5	5	4	4	4	5	6	6	5	6	7	7	7	7	6	6	5	5	4	4	4	5	7
27-Sep	5	4	4	5	4	4	5	5	5	5	5	6	7	6	6	5	5	4	2	2	2	2	1	2	7
28-Sep	2	2	2	2	1	2	2	2	3	3	4	5	6	4	4	4	4	2	2	2	1	2	2	2	6
29-Sep	1	1	2	1	2	2	1	1	2	2	6	6	6	5	7	6	6	6	4	4	3	5	4	4	7
30-Sep	3	3	4	4	4	5	5	6	6	6	7	6	6	6	5	5	4	3	3	1	1	1	2	1	7
	5	5	5	7	6	5	6	6	6	6	7	6	7	7	10	7	6	6	5	5	6	6	6	5	
	Diurnal Maximum																								

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Monday Creek - September 2026

Direction of Maximum Speed: 276 deg on Sep 26 15:00
Direction of Maximum Daily Speed Average: 274.9 deg on Sep 26

Direction of Minimum Speed: 288 deg on Sep 18 07:00

Direction of Minimum Daily Speed Average: 1.0 deg on Sep 23

Monthly Average Direction: 259.6 deg

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Percent Operational Time:	99.4

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-Sep	137	119	106	79	UO	UO	126	142	192	196	207	196	165	153	151	149	153	143	143	145	146	143	143	145	155.8
2-Sep	145	146	142	138	137	137	142	147	145	141	148	140	124	126	129	125	130	132	130	131	123	125	125	120	134.5
3-Sep	115	122	120	102	83	94	91	77	68	88	89	85	104	126	121	119	122	118	115	111	115	122	133	139	109.3
4-Sep	128	139	142	150	149	153	135	102	128	249	205	198	221	256	265	265	292	326	20	12	20	14	14	12	312.4
5-Sep	9	13	17	16	17	14	12	31	18	23	25	41	54	42	66	31	35	76	160	134	160	78	188	155	28.0
6-Sep	102	110	129	111	80	114	86	84	94	135	132	127	127	162	150	126	139	130	130	132	149	146	144	142	129.6
7-Sep	148	133	138	140	57	118	113	34	122	84	28	25	25	35	68	63	77	45	55	60	42	10	340	353	60.4
8-Sep	336	316	318	327	298	290	295	295	341	356	14	336	332	328	323	315	324	315	277	246	125	172	192	199	321.2
9-Sep	194	195	196	183	186	228	227	234	237	241	243	245	257	257	258	252	245	243	239	224	221	243	249	263	242.4
10-Sep	264	262	273	290	285	281	251	263	268	288	289	281	290	286	290	298	321	305	288	288	291	294	305	305	286.1
11-Sep	305	307	307	315	317	320	323	325	325	328	330	326	332	336	330	327	339	332	349	346	327	313	310	312	324.4
12-Sep	304	305	306	305	299	303	304	299	305	317	295	290	295	287	278	294	308	293	262	216	206	213	212	222	288.8
13-Sep	218	218	221	224	213	219	220	224	226	237	242	237	243	235	225	239	225	222	227	199	187	200	215	209	226.2
14-Sep	231	292	242	338	283	294	320	336	2	12	8	12	343	339	333	338	337	350	321	330	340	326	317	312	337.9
15-Sep	313	313	307	307	317	285	306	305	319	327	306	300	292	286	271	248	258	234	209	250	256	208	241	243	280.7
16-Sep	257	274	280	276	318	241	275	235	141	74	78	51	330	306	91	101	217	199	126	115	113	125	136	134	145.0
17-Sep	137	133	143	135	125	128	138	191	219	237	247	238	250	271	265	262	253	296	326	265	UO	158	168	191	229.6
18-Sep	279	185	186	288	247	208	288	272	290	327	345	320	307	291	324	334	323	312	356	UO	112	102	116	158	312.7
19-Sep	193	83	59	116	150	175	159	185	190	195	199	193	185	180	192	195	197	195	185	175	183	189	194	196	187.2
20-Sep	199	202	203	208	206	200	185	203	232	222	218	198	210	190	203	206	202	199	197	189	158	154	165	142	199.9
21-Sep	89	130	109	97	101	134	139	123	147	171	168	160	162	179	182	192	196	193	191	138	119	139	66	81	164.7
22-Sep	94	101	121	107	92	50	279	147	272	293	301	301	307	314	307	310	302	295	283	285	292	213	104	157	302.3
23-Sep	86	165	77	124	195	190	229	278	198	270	107	15	340	350	44	35	36	98	46	76	330	249	257	258	20.3
24-Sep	226	198	212	174	117	203	215	197	221	283	250	254	246	274	272	240	251	257	205	76	129	102	74	68	250.7
25-Sep	102	95	104	92	95	97	87	96	104	104	100	102	101	98	94	102	75	65	11	35	96	100	185	305	93.6
26-Sep	261	286	270	272	270	268	270	271	273	276	276	271	278	281	276	278	283	284	283	278	276	267	268	266	274.9
27-Sep	269	268	260	262	258	264	269	267	269	267	256	256	262	270	268	270	251	246	230	242	228	223	203	218	258.4
28-Sep	232	213	204	195	206	204	212	220	223	224	235	246	240	239	233	222	219	211	184	182	176	194	196	186	218.7
29-Sep	177	165	184	201	256	269	238	155	281	260	275	287	286	284	293	297	294	284	274	279	269	270	270	271	275.6
30-Sep	270	269	268	270	267	266	270	296	304	304	309	318	314	310	316	312	321	325	312	295	257	241	301	303	294.9
	242.0	238.0	246.8	267.1	268.9	255.2	258.9	261.9	266.9	271.2	267.3	266.1	271.1	273.5	269.9	266.6	264.2	258.7	251.0	233.2	195.3	205.0	229.6	246.5	
	Diurnal Average																								

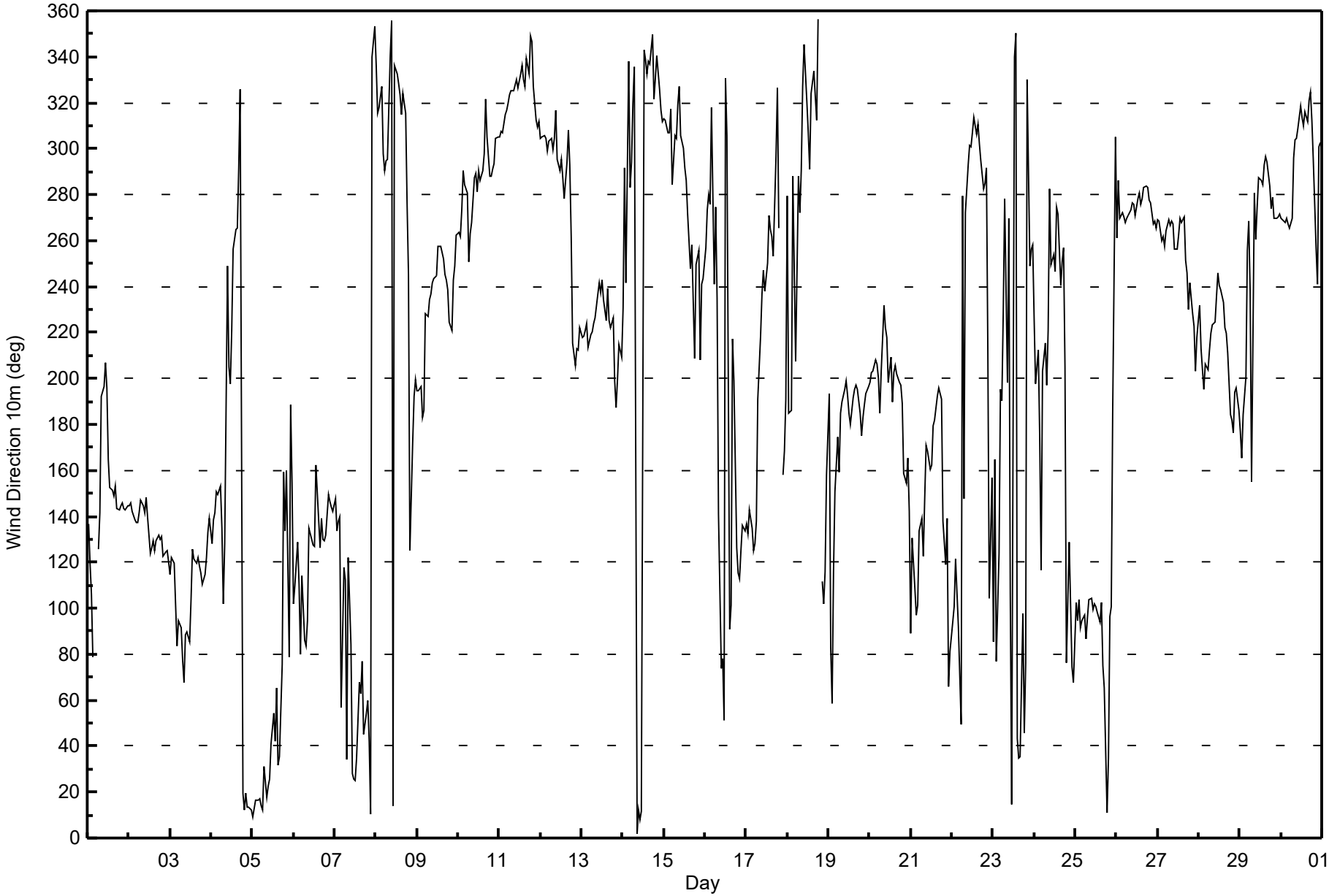
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Monday Creek - September 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Monday Creek - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 99 deg on Sep 26 01:00

Minimum Value: 6 deg on Sep 21 22:00

Percentiles: P_1 = 9 P_{10} = 12 Q_1 = 14 Median = 18 Q_3 = 26 P_{90} = 50 P_{99} = 88

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

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-Sep	37	23	69	16	UO	UO	21	16	31	21	24	27	27	20	22	25	21	15	12	12	12	12	11	12	69
2-Sep	13	12	12	11	11	12	13	14	14	16	17	19	15	16	16	14	14	13	11	10	11	13	12	13	19
3-Sep	12	12	12	17	11	11	21	21	14	12	11	13	15	15	14	14	16	15	14	13	13	12	13	12	21
4-Sep	12	13	16	12	11	20	22	20	78	42	28	21	18	25	17	22	19	30	15	18	18	18	18	20	78
5-Sep	19	17	15	15	15	15	19	15	16	17	16	22	22	32	35	64	85	55	32	23	65	77	54	64	85
6-Sep	43	48	52	32	15	29	13	15	24	27	19	16	21	24	20	19	17	13	12	15	14	16	14	12	52
7-Sep	15	10	13	69	36	15	36	39	32	35	17	34	23	19	19	27	20	16	21	23	55	19	62	20	69
8-Sep	38	20	22	23	18	10	11	16	24	24	20	27	31	23	28	19	23	26	7	55	35	21	22	14	55
9-Sep	15	14	15	27	26	18	15	15	15	13	16	18	16	16	19	16	15	14	14	15	14	17	14	13	27
10-Sep	12	15	11	13	12	12	15	14	14	14	14	14	12	13	12	17	26	22	12	11	10	12	15	15	26
11-Sep	15	15	15	17	17	16	16	16	16	17	17	18	19	18	16	19	22	18	18	23	23	17	17	17	23
12-Sep	14	17	17	16	13	16	18	14	17	25	19	18	23	26	29	23	23	24	16	7	10	8	9	7	29
13-Sep	8	11	9	12	13	13	12	13	14	18	16	18	20	22	24	22	18	15	11	13	13	17	10	12	24
14-Sep	34	71	46	56	19	28	18	23	19	18	20	20	22	25	19	18	18	28	19	24	19	16	18	19	71
15-Sep	19	21	17	16	18	16	25	22	22	35	37	24	31	26	20	21	21	15	10	33	53	14	27	23	53
16-Sep	19	9	35	55	37	63	41	19	71	35	52	49	59	65	87	52	53	66	8	9	10	10	11	11	87
17-Sep	12	11	11	17	11	40	20	27	21	18	28	24	20	17	27	20	24	19	14	74	UO	81	88	81	88
18-Sep	36	50	91	58	63	35	91	43	27	35	26	39	24	22	33	26	23	20	63	UO	38	67	27	70	91
19-Sep	48	13	30	28	16	17	17	64	19	19	18	21	21	23	22	21	18	19	18	18	19	19	18	18	64
20-Sep	18	17	19	26	22	15	30	16	21	23	24	34	34	39	30	19	20	14	14	17	17	17	13	43	43
21-Sep	35	39	39	39	34	24	33	23	27	22	21	20	20	23	23	21	19	20	25	16	17	6	50	27	50
22-Sep	30	17	20	44	16	76	63	30	24	24	18	16	20	20	18	20	17	11	14	9	10	75	80	62	80
23-Sep	44	76	43	98	88	89	61	85	51	77	75	70	27	33	31	21	17	26	74	59	50	79	15	33	98
24-Sep	32	55	69	88	70	28	64	18	59	21	42	26	26	18	21	17	15	13	84	85	45	24	54	59	88
25-Sep	31	25	14	10	10	14	13	11	13	14	13	14	15	16	12	22	61	18	48	32	13	13	75	41	75
26-Sep	99	78	21	25	12	12	11	13	12	12	12	13	12	13	14	12	11	13	12	11	12	12	13	12	99
27-Sep	12	11	14	15	14	13	12	13	12	14	17	17	15	14	14	14	18	13	12	11	12	12	11	14	18
28-Sep	12	18	12	13	10	12	14	12	16	16	17	17	16	18	16	18	17	14	15	15	15	15	15	17	18
29-Sep	15	18	17	40	45	33	26	18	57	20	23	13	12	12	14	13	13	13	11	15	11	11	10	11	57
30-Sep	11	11	11	12	12	12	11	14	15	16	17	18	18	18	19	17	18	16	18	19	18	21	31	50	50
	99	78	91	98	88	89	91	85	78	77	75	70	59	65	87	64	85	66	84	85	65	81	88	81	
	Diurnal Maximum																								

UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS34
HANGINGSTONE EXPANSION
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - HANGINGSTONE EXPANSION (AMS34)
SEPTEMBER 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	686	33	34	99.86	33.2	0	12	0
H2S (ppb) Average	683	37	37	100	1.7	0	0.6	0
NO2 (ppb) Average	684	35	36	99.86	18.3	0	4.2	-
NO (ppb) Average	684	35	36	99.86	18.7	-	3.5	-
NOX (ppb) Average	684	35	36	99.86	26.6	-	7.1	-
Temperature 2 m (C) Average	720	0	0	100	26.2	-	20.3	-
Relative Humidity (%) Average	720	0	0	100	100	-	93.7	-
Wind Speed 10 m (km/h) Average	720	0	0	100	25	-	18	-
Wind Direction 10 m (deg) Average	720	0	0	100	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - HANGINGSTONE EXPANSION (AMS34)
SEPTEMBER 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	686	1.2	3.7	-	0	0	0.1	0.2	0.6	1.9	33.2
H2S (ppb) Average	683	0.17	0.2	-	0	0	0.1	0.1	0.2	0.3	1.7
NO2 (ppb) Average	684	2	2.3	-	0	0.2	0.4	1.1	2.7	5.2	18.3
NO (ppb) Average	684	0.71	1.7	-	0	0	0	0.2	0.7	1.7	18.7
NOX (ppb) Average	684	2.71	3.6	-	0	0.2	0.5	1.4	3.5	7	26.6
Temperature 2 m (C) Average	720	11.42	5.2	-	-1.8	4.8	7.8	10.7	15.3	18	26.2
Relative Humidity (%) Average	720	72.84	18.3	-	27.2	45.1	59.8	74.1	89.8	95.9	100
Wind Speed 10 m (km/h) Average	720	10.4	5	-	1	5	7	10	14	17	25
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - HANGINGSTONE EXPANSION (AMS34)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
NO2, SO2	28 Sep 2026 08:00	28 Sep 2026 08:00	1	Maintenance - sample manifold cleaned

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Hangingstone Expansion - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 33.2 ppb on Sep 27 08:00 Maximum Daily Average: 12.0 ppb on Sep 27

Minimum Value: 0.0 ppb on Sep 3 18:00 Minimum Daily Average: 0.0 ppb on Sep 11
Maximum Diurnal Average: 2.2 ppb at hour 7 Minimum Diurnal Average: 0.4 ppb at hour 20
Monthly Average: 1.20 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.2 Q_3 = 0.6 P_{90} = 1.9 P_{99} = 20.8

Hours in Service:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	33
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-Sep	0.2	0.6	0.2	0.1	0.1	Z	0.2	0.1	0.2	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.3	0.3	0.2	0.8	1.1	0.6	0.3	1.1
2-Sep	Z	0.6	0.6	0.6	0.6	0.7	0.7	0.5	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.7
3-Sep	0.1	Z	0.1	0.0	0.0	0.1	0.3	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
4-Sep	0.1	0.1	Z	0.2	0.2	0.2	0.1	0.2	0.7	0.3	0.2	0.2	0.4	0.5	0.2	0.6	1.3	0.8	0.4	0.2	0.1	0.1	0.0	0.1	0.3	1.3
5-Sep	0.2	0.1	0.0	Z	0.2	0.1	0.1	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.0	0.2	0.5
6-Sep	0.1	0.1	0.1	0.1	Z	0.2	0.2	0.2	0.3	0.5	0.4	0.4	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.5
7-Sep	0.1	0.2	0.2	0.1	0.1	Z	0.0	0.2	0.0	0.1	0.1	0.1	0.1	0.8	0.7	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.8
8-Sep	Z	0.2	0.1	0.2	0.1	0.0	0.1	0.2	1.5	3.6	2.8	2.3	2.1	0.6	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	3.6
9-Sep	0.0	Z	0.1	0.1	0.1	0.1	0.4	1.6	9.1	16.1	10.1	6.5	5.7	5.2	8.8	11.8	15.2	14.3	0.8	0.5	1.4	15.5	1.1	4.9	5.6	16.1
10-Sep	0.3	0.2	Z	0.2	0.1	6.2	2.1	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.5	6.2
11-Sep	0.1	0.1	0.0	Z	0.1	0.0	0.1	0.1	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	0.1	0.0	0.1
12-Sep	0.0	0.1	3.4	0.1	Z	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.6	0.9	0.3	3.4
13-Sep	0.2	0.2	0.3	0.2	0.7	Z	0.4	0.3	1.4	1.1	2.5	6.0	6.3	4.3	2.3	4.1	3.4	0.3	0.2	0.2	0.2	0.3	0.9	0.3	1.6	6.3
14-Sep	Z	0.3	1.2	2.1	0.2	0.1	0.1	0.2	0.6	1.4	1.4	1.4	1.6	0.6	0.3	2.2	2.6	1.9	1.9	0.5	0.5	0.3	0.1	0.1	0.9	2.6
15-Sep	0.1	Z	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	1.9	0.9	0.9	1.6	1.1	0.5	0.1	0.0	0.5	3.2	0.9	0.3	0.1	0.6	3.2
16-Sep	0.1	0.1	Z	0.1	0.1	0.2	0.3	0.6	0.9	3.5	1.3	1.1	0.2	0.7	0.2	0.4	0.4	0.2	0.2	0.1	0.1	0.3	0.3	0.2	0.5	3.5
17-Sep	0.6	0.6	0.5	Z	0.4	0.3	0.4	0.5	1.2	4.0	2.2	0.1	0.4	0.6	0.3	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.5	4.0
18-Sep	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	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.0	0.2
19-Sep	0.2	0.2	0.2	0.2	0.3	Z	0.4	0.4	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.4
20-Sep	Z	0.1	0.1	0.6	0.3	0.3	0.2	0.2	0.9	1.3	1.0	3.0	3.2	3.1	9.1	5.2	1.6	0.9	0.2	0.8	1.7	0.4	0.5	1.3	1.6	9.1
21-Sep	0.9	Z	1.2	1.2	1.0	0.6	0.3	0.3	0.3	0.4	0.3	0.6	0.8	0.4	0.2	0.3	0.1	0.6	1.3	1.1	0.1	1.0	0.4	0.4	0.6	1.3
22-Sep	0.6	0.1	Z	0.0	0.0	0.9	3.6	1.5	0.7	0.2	0.1	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	0.4	3.6
23-Sep	0.1	0.1	0.1	Z	0.1	0.5	1.3	0.9	0.7	0.3	0.6	0.8	0.9	0.8	0.8	1.4	0.7	0.8	1.8	0.7	0.5	0.5	0.6	0.3	0.7	1.8
24-Sep	0.5	1.6	0.4	0.2	Z	0.3	0.2	0.2	0.2	0.3	0.9	0.3	0.9	0.1	0.2	0.6	0.1	0.0	0.2	0.1	0.1	0.1	0.0	0.1	0.3	1.6
25-Sep	0.2	0.2	0.0	0.1	0.1	Z	0.2	0.3	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.3
26-Sep	Z	0.3	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	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.5	0.2	0.1	0.5
27-Sep	1.0	Z	8.6	20.5	22.5	19.6	26.5	33.2	27.8	17.1	12.0	6.5	0.5	0.1	0.7	0.5	0.1	0.1	7.6	5.3	15.7	25.6	24.6	0.6	12.0	33.2
28-Sep	8.9	19.4	Z	1.5	3.3	11.5	27.7	M	4.1	3.3	14.3	5.4	15.6	10.8	4.3	0.1	0.2	0.6	0.2	0.1	0.5	1.5	1.6	1.6	6.2	27.7
29-Sep	1.1	0.9	0.4	Z	4.1	1.0	0.4	1.5	1.0	6.8	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	1.2	0.2	1.3	0.3	0.2	1.0	6.8
30-Sep	0.2	0.5	0.9	0.6	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	0.9
	0.6	1.1	0.8	1.2	1.4	1.7	2.2	1.5	1.8	2.1	1.8	1.3	1.4	1.1	1.1	1.0	0.9	0.7	0.5	0.4	0.9	1.7	1.1	0.4	Diurnal Average	
	8.9	19.4	8.6	20.5	22.5	19.6	27.7	33.2	27.8	17.1	14.3	6.5	15.6	10.8	9.1	11.8	15.2	14.3	7.6	5.3	15.7	25.6	24.6	4.9	Diurnal Maximum	

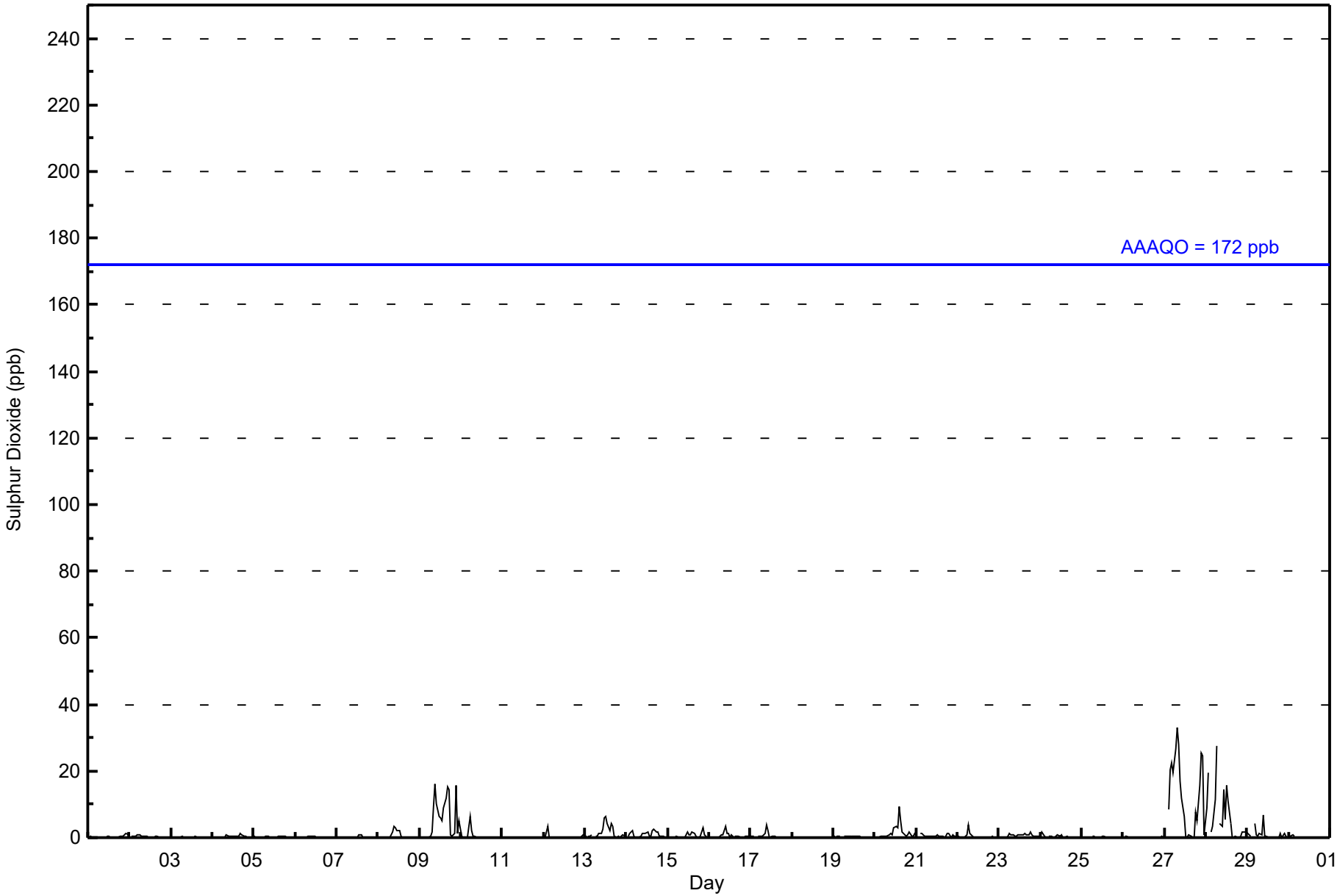
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Hangingstone Expansion - September 2026



Sulphur Dioxide (SO_2) - ppb

Hangingstone Expansion - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	664	96.79	96.79
11 - 20	15	2.19	98.98
21 - 60	7	1.02	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: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Hangingstone Expansion - September 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	37	10	5	7	20	33	64	64	100	55	47	65	48	50	40	19	664
11 - 20	0	0	0	0	0	0	0	0	0	0	13	2	0	0	0	0	15
21 - 60	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7
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	37	10	5	7	20	33	64	64	100	55	67	67	48	50	40	19	686

Total Number of Valid Hours: 686

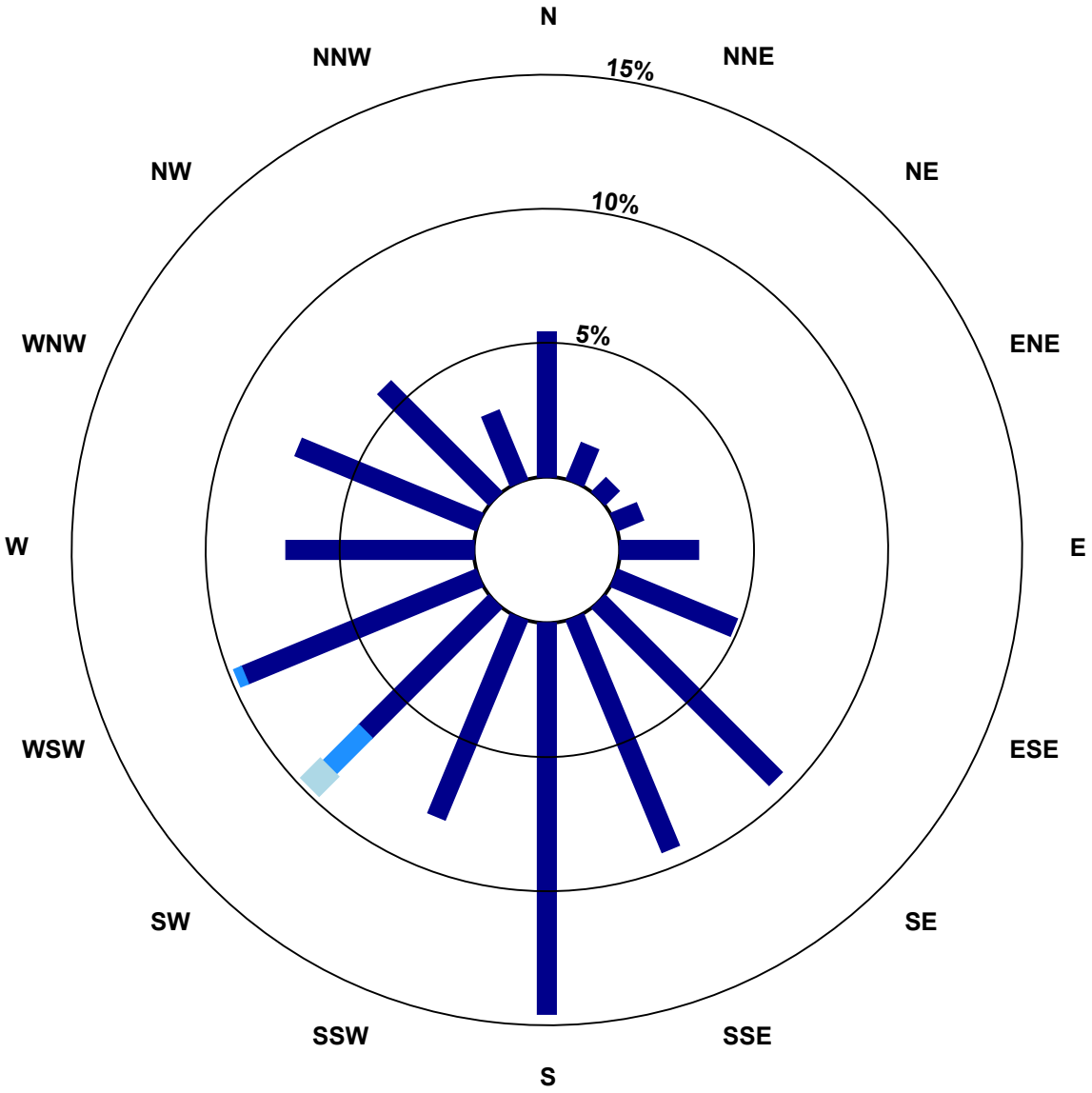
Total Number of Hours: 720

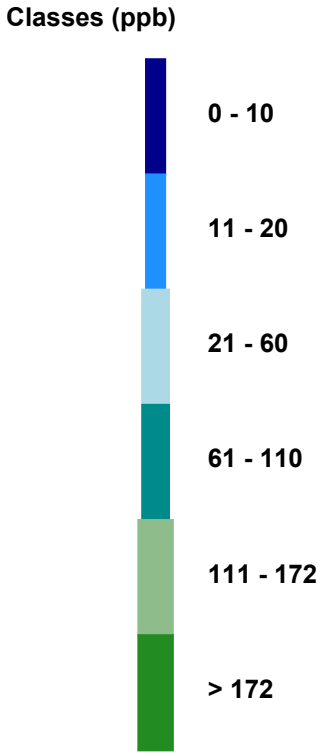
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Hangingstone Expansion





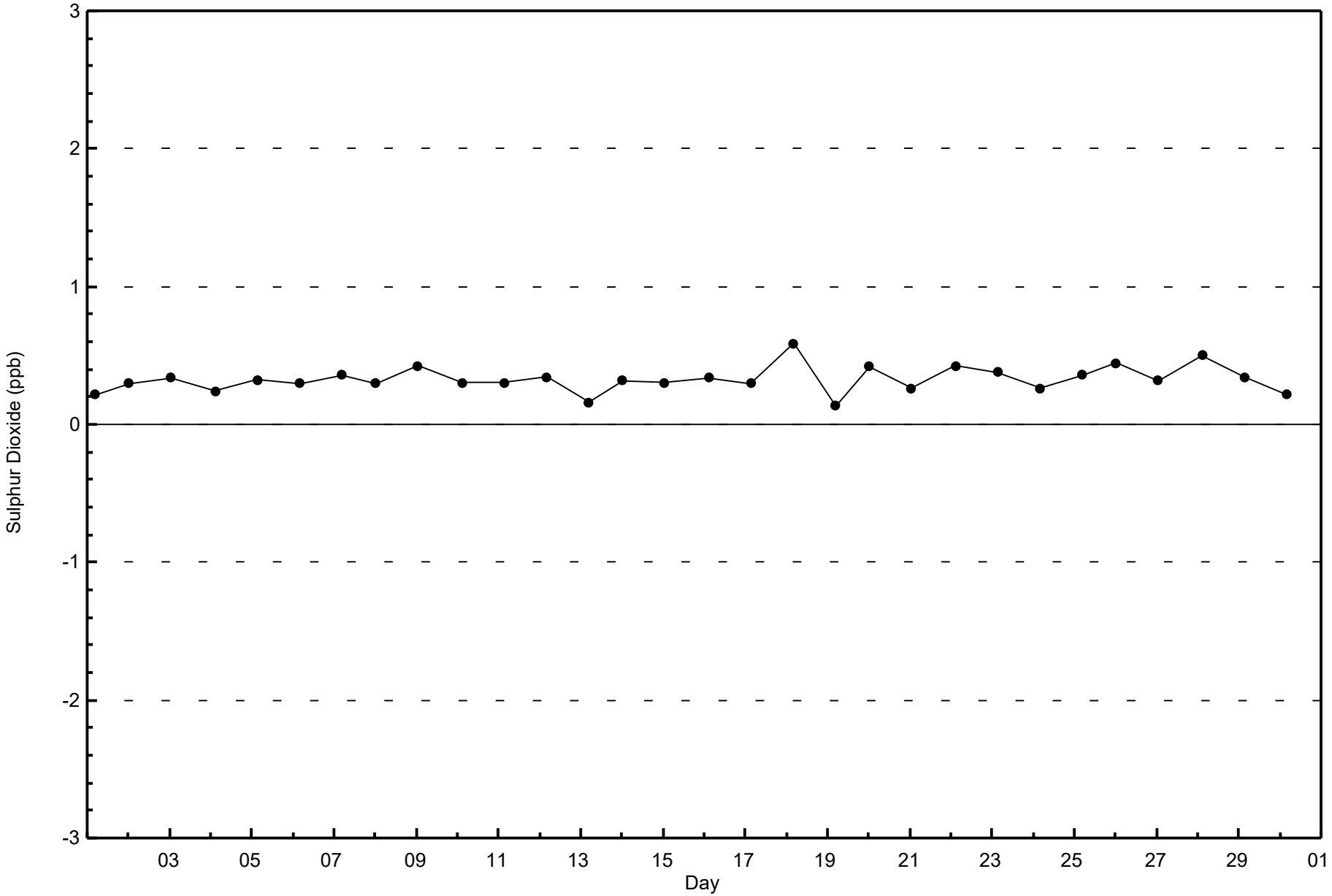
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Hangingstone Expansion - September 2026

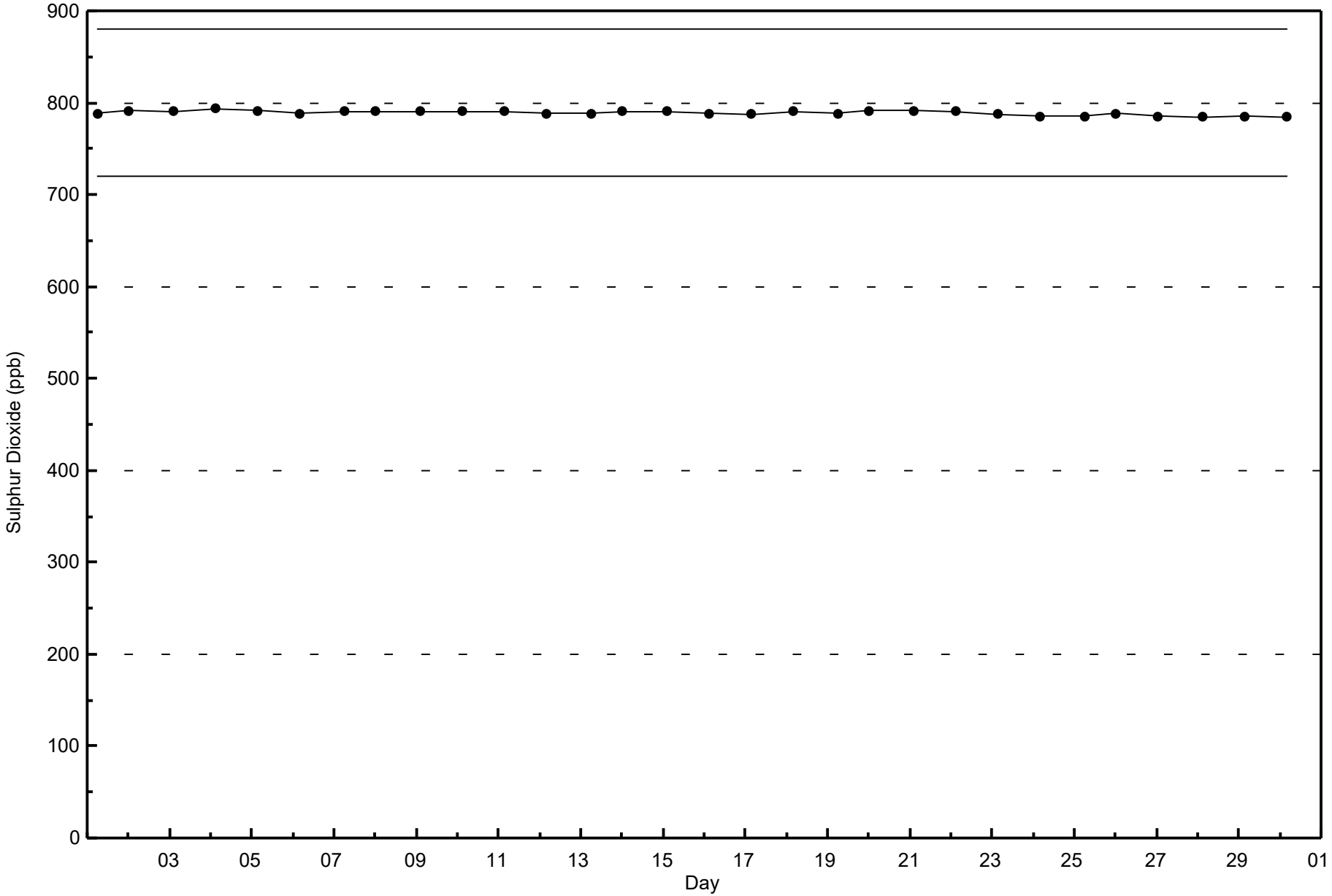


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Hangingstone Expansion - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Hangingstone Expansion - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.7 ppb on Sep 27 08:00 Maximum Daily Average: 0.6 ppb on Sep 27

Minimum Value: 0.0 ppb on Sep 6 05:00
Minimum Daily Average: 0.0 ppb on Sep 7
Maximum Diurnal Average: 0.3 ppb at hour 6
Minimum Diurnal Average: 0.1 ppb at hour 20
Monthly Average: 0.17 ppb
Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.3 P_{99} = 1.3

Hours in Service:	720
Hours of Data:	683
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-Sep	Z	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	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2
2-Sep	0.2	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	0.1	0.1	0.1	0.1	0.2
3-Sep	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	0.1	0.2
4-Sep	0.2	0.2	0.2	Z	0.3	0.2	0.2	0.2	0.1	0.0	0.1	0.1	0.2	0.6	0.6	0.5	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.6
5-Sep	0.2	0.3	0.3	0.3	Z	0.3	0.4	0.5	0.5	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.2	0.5
6-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2
7-Sep	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
8-Sep	1.0	Z	0.4	0.9	0.1	0.5	0.2	0.2	0.3	0.2	0.3	0.2	0.1	0.0	0.1	0.0	0.1	0.2	0.6	0.2	0.1	0.1	0.1	0.1	0.3	1.0
9-Sep	0.1	0.1	Z	0.2	0.1	0.2	0.2	0.3	0.8	1.3	0.8	0.6	0.5	0.5	0.7	1.1	1.3	1.5	0.3	0.1	0.1	1.6	0.2	0.9	0.6	1.6
10-Sep	0.1	0.1	0.1	Z	0.2	1.3	0.6	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	0.1	0.0	0.0	0.2	1.3
11-Sep	0.0	0.0	0.0	0.0	Z	0.1	0.0	0.1	0.1	0.1	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
12-Sep	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	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2
13-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.5	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.2	0.5
14-Sep	0.3	Z	0.4	0.4	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.4
15-Sep	0.1	0.1	Z	0.3	0.5	0.5	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.8	0.5	0.3	0.0	0.2	0.8
16-Sep	0.1	0.3	0.4	Z	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.4
17-Sep	0.1	0.1	0.1	0.1	Z	0.1	0.2	0.2	0.2	0.5	0.4	0.1	0.2	0.3	0.2	0.2	0.2	0.5	0.8	0.2	0.2	0.1	0.1	0.1	0.2	0.8
18-Sep	0.1	0.1	0.2	0.2	0.1	Z	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.5	0.5	0.2	0.1	0.1	0.1	0.1	0.2	0.5
19-Sep	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	0.0	0.0	0.0	0.0	0.1	0.1
20-Sep	0.0	Z	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.3	0.1	0.2	0.2	0.3	0.5	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5
21-Sep	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	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
22-Sep	0.5	0.2	0.2	Z	0.2	0.1	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.2	0.3	0.2	0.1	0.1	0.2	0.5
23-Sep	0.1	0.1	0.0	0.0	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	0.1	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.4
24-Sep	0.3	1.0	0.2	0.1	0.0	Z	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	1.0
25-Sep	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	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.3	0.5	0.1	0.5
26-Sep	0.4	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.4
27-Sep	0.2	0.7	Z	1.2	1.6	1.5	1.5	1.7	1.3	0.8	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.6	0.1	0.4	1.0	1.3	0.1	0.6	1.7
28-Sep	0.1	1.1	0.3	Z	0.1	0.3	1.2	C	C	C	C	C	C	C	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	1.2
29-Sep	0.0	0.0	0.0	0.1	Z	0.1	0.1	0.2	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.1	0.0	0.1	0.4
30-Sep	0.1	0.1	0.1	0.1	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	0.1	0.2	0.0	0.1	0.1	0.1	0.1	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	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	Diurnal Average	
	1.0	1.1	0.4	1.2	1.6	1.5	1.5	1.7	1.3	1.3	0.8	0.6	0.5	0.6	0.7	1.1	1.3	1.5	0.8	0.3	0.8	1.6	1.3	0.9	Diurnal Maximum	

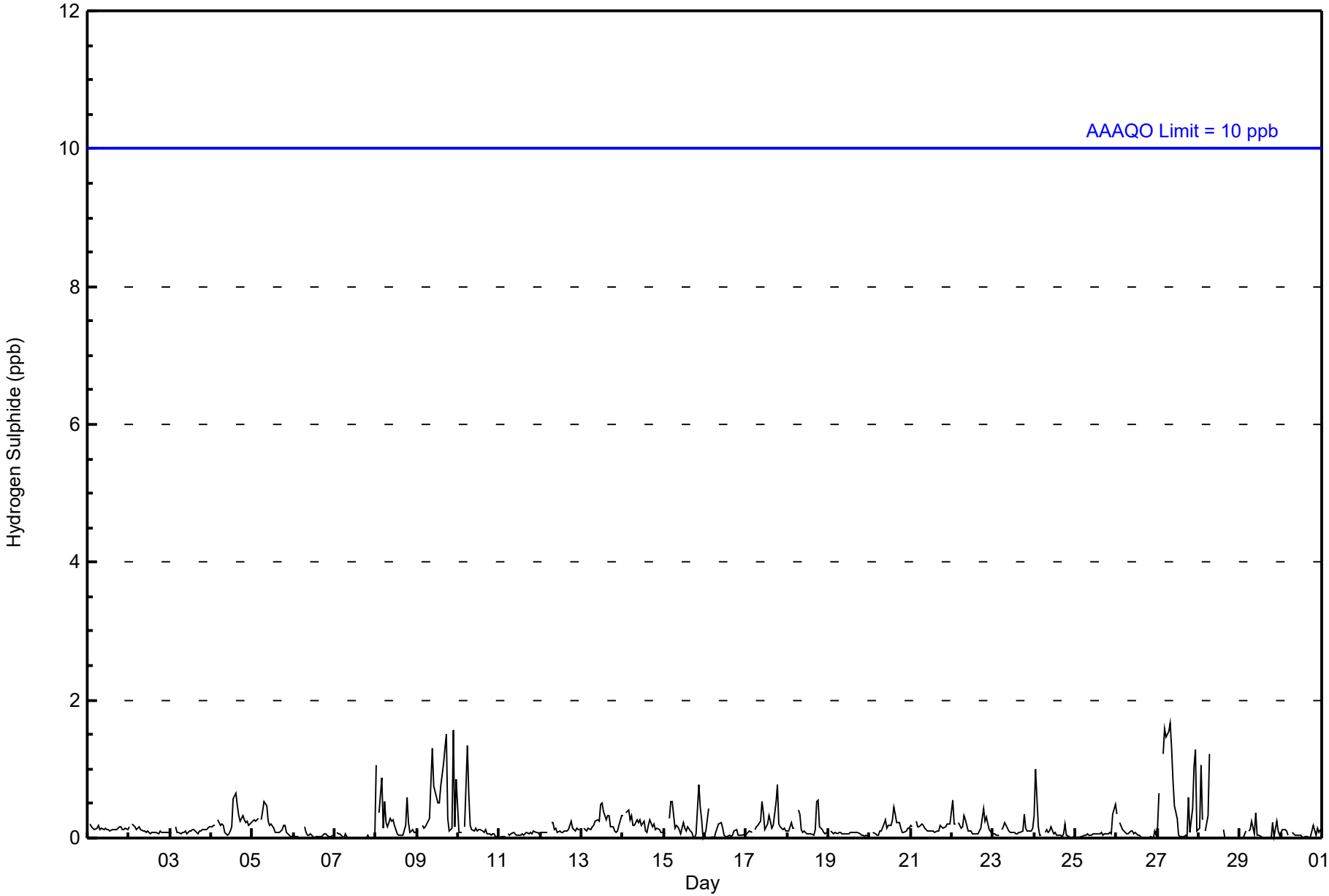
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Hangingstone Expansion - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	683	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: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Hangingstone Expansion - September 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	36	11	5	7	21	33	63	63	100	55	61	67	49	49	42	21	683
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	36	11	5	7	21	33	63	63	100	55	61	67	49	49	42	21	683

Total Number of Valid Hours: 683

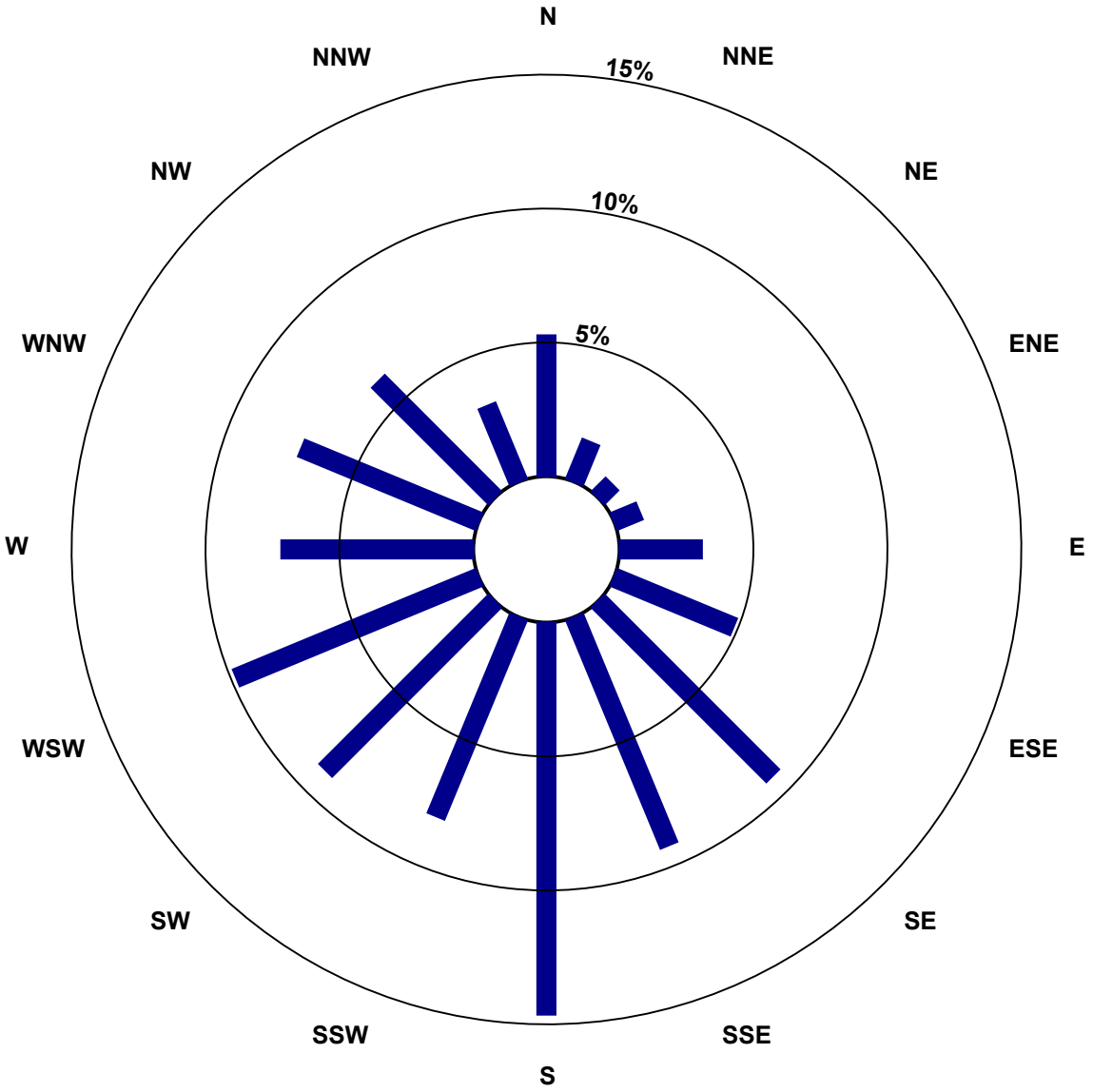
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

Hangingstone Expansion



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

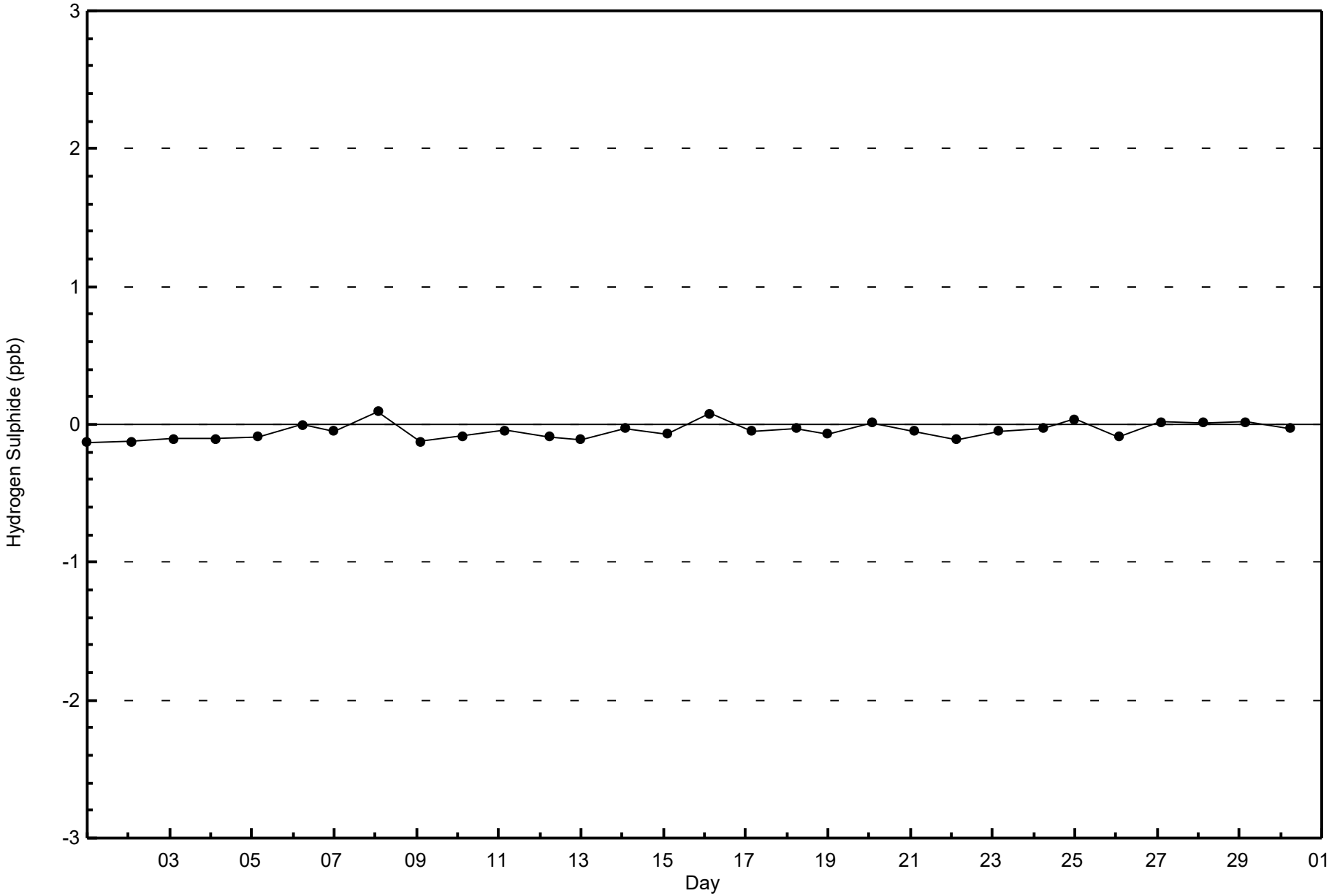
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Hangingstone Expansion - September 2026

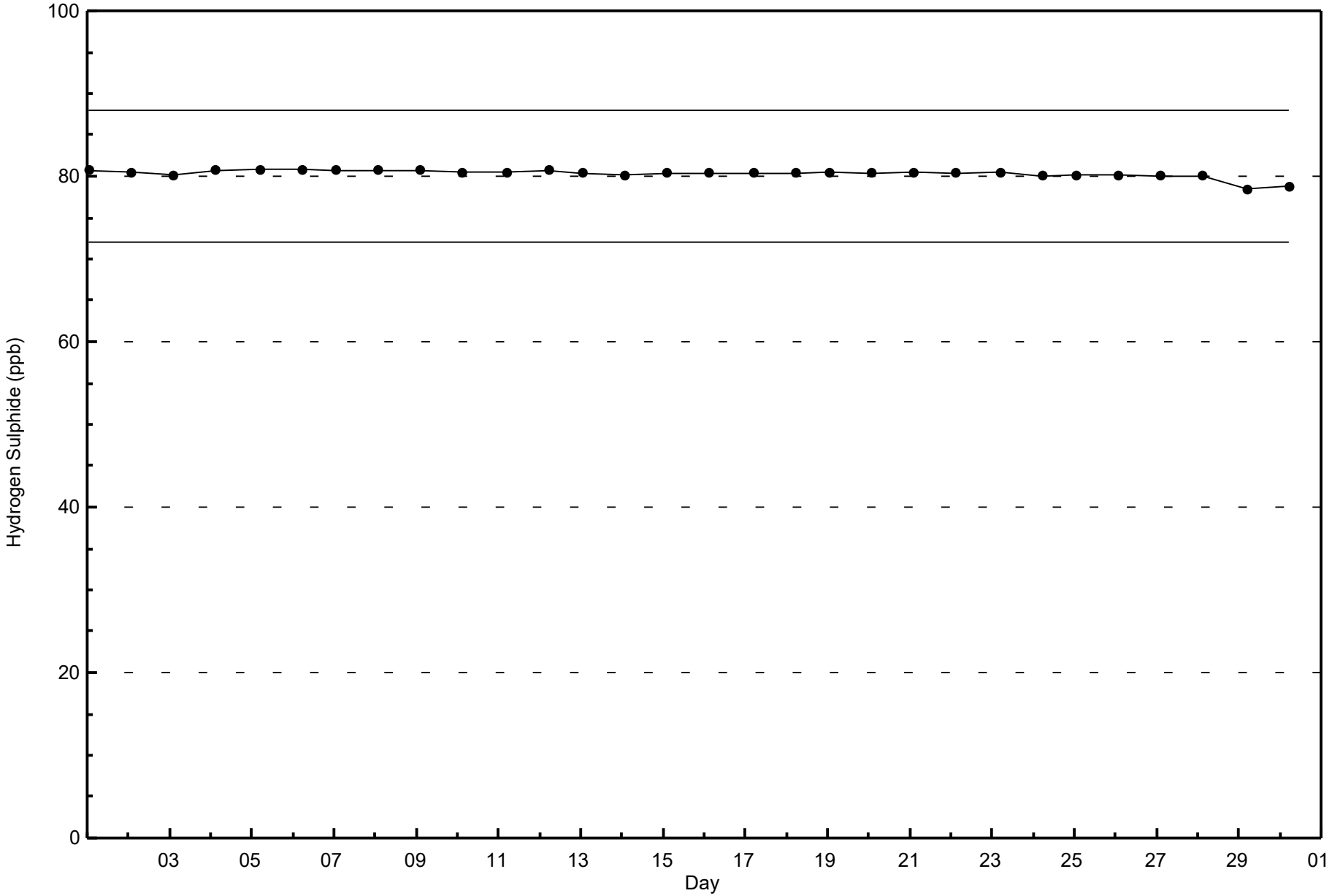


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Hangingstone Expansion - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Hangingstone Expansion - September 2026

Maximum Value: 18.7 ppb on Sep 8 11:00

Maximum Daily Average: 3.5 ppb on Sep 8

Minimum Value: 0.0 ppb on Sep 1 01:00

Minimum Daily Average: 0.1 ppb on Sep 1

Maximum Diurnal Average: 1.8 ppb at hour 11

Minimum Diurnal Average: 0.2 ppb at hour 23

Monthly Average: 0.71 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.2 Q_3 = 0.7 P_{90} = 1.7 P_{99} = 8.7

Hours in Service:	720
Hours of Data:	684
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-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.3	0.4	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	0.1	0.4
2-Sep	0.0	0.0	0.0	0.0	Z	0.1	0.2	0.4	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	0.0	0.0	0.0	0.1	0.4
3-Sep	0.0	0.0	0.0	0.1	0.2	Z	0.3	0.2	0.4	3.2	1.1	1.2	1.0	1.5	1.6	0.5	0.8	0.8	0.5	0.3	0.7	0.5	0.1	0.0	0.7	3.2
4-Sep	Z	0.2	0.1	0.1	0.1	0.1	0.6	1.8	0.6	0.3	1.2	3.3	2.1	3.6	2.0	0.6	0.5	0.4	0.2	0.2	0.2	0.1	0.4	1.4	0.9	3.6
5-Sep	0.8	Z	0.2	0.3	0.4	0.7	2.9	5.4	2.9	1.7	2.0	1.4	0.6	0.4	0.6	0.3	0.2	0.3	0.0	0.6	0.1	0.8	0.0	0.2	1.0	5.4
6-Sep	0.0	0.0	Z	0.1	0.0	0.2	0.0	0.2	0.2	0.4	0.5	0.2	0.2	0.2	0.5	0.3	0.1	0.0	0.2	0.6	0.1	0.4	0.1	0.1	0.2	0.6
7-Sep	0.0	0.0	0.1	Z	0.2	1.4	0.3	0.4	0.3	0.1	0.6	0.6	0.6	0.3	1.1	0.9	0.4	0.7	1.3	0.8	0.1	1.9	0.8	0.4	0.6	1.9
8-Sep	1.1	10.1	6.3	2.3	Z	0.0	5.4	0.6	4.4	8.5	18.7	16.1	3.2	2.8	0.2	0.2	0.5	0.0	0.2	0.2	0.1	0.2	0.1	0.1	3.5	18.7
9-Sep	0.1	0.0	0.1	0.2	2.0	Z	1.9	1.8	1.8	3.2	2.2	1.3	5.1	12.1	9.8	1.9	1.5	1.2	1.1	0.6	0.9	1.3	0.0	0.3	2.2	12.1
10-Sep	Z	0.0	0.0	0.0	0.0	1.1	0.3	0.1	0.0	0.1	0.1	0.0	0.2	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	1.1
11-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.8	0.2	0.2	0.2	0.1	0.2	0.0	0.3	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8
12-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.2	0.0	0.0	0.8	0.5	0.0	0.1	0.0	0.1	0.0	0.0	0.0	1.1	0.0	0.1	1.6	0.1	0.3	0.2	1.6
13-Sep	1.6	1.4	3.0	Z	0.1	0.2	2.3	1.7	0.5	0.7	1.0	1.0	1.1	0.7	0.4	0.6	0.5	0.4	0.1	0.0	0.0	0.1	0.7	0.1	0.8	3.0
14-Sep	0.1	0.0	0.0	0.2	Z	0.8	1.5	5.0	2.1	3.3	13.0	5.4	17.8	2.5	1.5	2.1	1.8	0.2	0.1	0.0	0.0	0.0	0.1	0.0	2.5	17.8
15-Sep	0.0	0.0	0.1	0.0	0.4	Z	0.1	3.1	0.3	1.2	1.1	0.7	0.5	0.5	1.2	1.1	0.2	0.1	0.1	0.9	0.5	0.0	0.0	0.0	0.5	3.1
16-Sep	Z	0.0	0.0	0.1	0.5	0.6	0.6	1.3	2.1	2.9	2.0	0.8	1.1	0.1	0.1	0.2	0.1	1.4	0.8	0.0	0.1	0.0	0.0	0.1	0.7	2.9
17-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.2	0.8	2.1	0.9	0.7	0.2	0.1	0.3	0.0	0.0	0.1	0.0	0.0	0.4	1.8	0.8	0.9	4.2	0.6	4.2
18-Sep	2.7	0.4	Z	0.3	0.1	0.2	1.6	0.4	0.1	0.4	0.1	0.1	0.6	0.1	0.6	0.2	0.0	0.1	0.1	0.3	0.2	0.1	0.1	0.1	0.4	2.7
19-Sep	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	0.0	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
20-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.1	2.4	0.4	1.4	1.3	0.3	0.8	0.4	0.8	0.4	0.2	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.4	2.4
21-Sep	0.0	1.0	1.8	1.1	0.0	Z	2.9	1.1	0.4	0.3	0.3	0.2	0.1	0.1	0.8	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.9
22-Sep	Z	0.1	0.1	0.2	0.3	0.1	0.2	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.3	0.1	0.2	0.1	0.2	1.0
23-Sep	0.0	Z	0.0	0.0	0.1	0.0	1.1	7.3	1.3	0.4	0.4	0.3	0.2	0.2	0.2	0.7	0.2	0.2	0.7	4.4	0.1	0.1	0.1	2.6	0.9	7.3
24-Sep	1.1	0.1	Z	0.2	0.1	1.1	0.6	3.5	2.2	1.3	0.5	0.3	0.2	0.1	0.1	0.2	0.1	0.0	0.2	0.3	0.1	0.1	0.1	0.1	0.6	3.5
25-Sep	0.1	0.0	0.3	Z	0.9	1.1	1.1	0.8	0.6	0.8	1.0	0.9	1.2	0.9	0.8	0.5	0.2	0.1	0.2	0.3	0.1	0.2	0.1	0.2	0.5	1.2
26-Sep	0.2	0.1	0.2	0.2	Z	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2
27-Sep	0.4	1.2	1.8	4.3	4.3	Z	4.9	5.8	4.8	3.1	2.0	1.1	0.1	0.2	0.1	0.1	0.1	0.1	0.4	0.6	1.0	1.3	1.3	0.4	1.7	5.8
28-Sep	Z	1.0	0.5	0.3	1.1	0.9	2.0	M	0.6	0.5	1.4	0.8	1.4	0.8	1.0	0.9	0.4	0.1	0.0	0.0	0.0	0.1	0.5	0.0	0.7	2.0
29-Sep	0.0	Z	0.0	1.3	0.2	1.7	2.3	1.0	1.3	1.0	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.9	0.0	0.0	0.0	0.0	0.4	2.3
30-Sep	0.0	0.0	Z	0.0	0.0	0.1	0.4	0.1	0.3	0.1	1.2	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.2	0.0	0.5	0.3	0.2	1.2
	0.3	0.6	0.6	0.5	0.4	0.4	1.1	1.6	1.1	1.3	1.8	1.3	1.3	1.0	0.8	0.4	0.3	0.2	0.3	0.4	0.2	0.3	0.2	0.4	Diurnal Average	
	2.7	10.1	6.3	4.3	4.3	1.7	5.4	7.3	4.8	8.5	18.7	16.1	17.8	12.1	9.8	2.1	1.8	1.4	1.3	4.4	1.8	1.9	1.3	4.2	Diurnal Maximum	

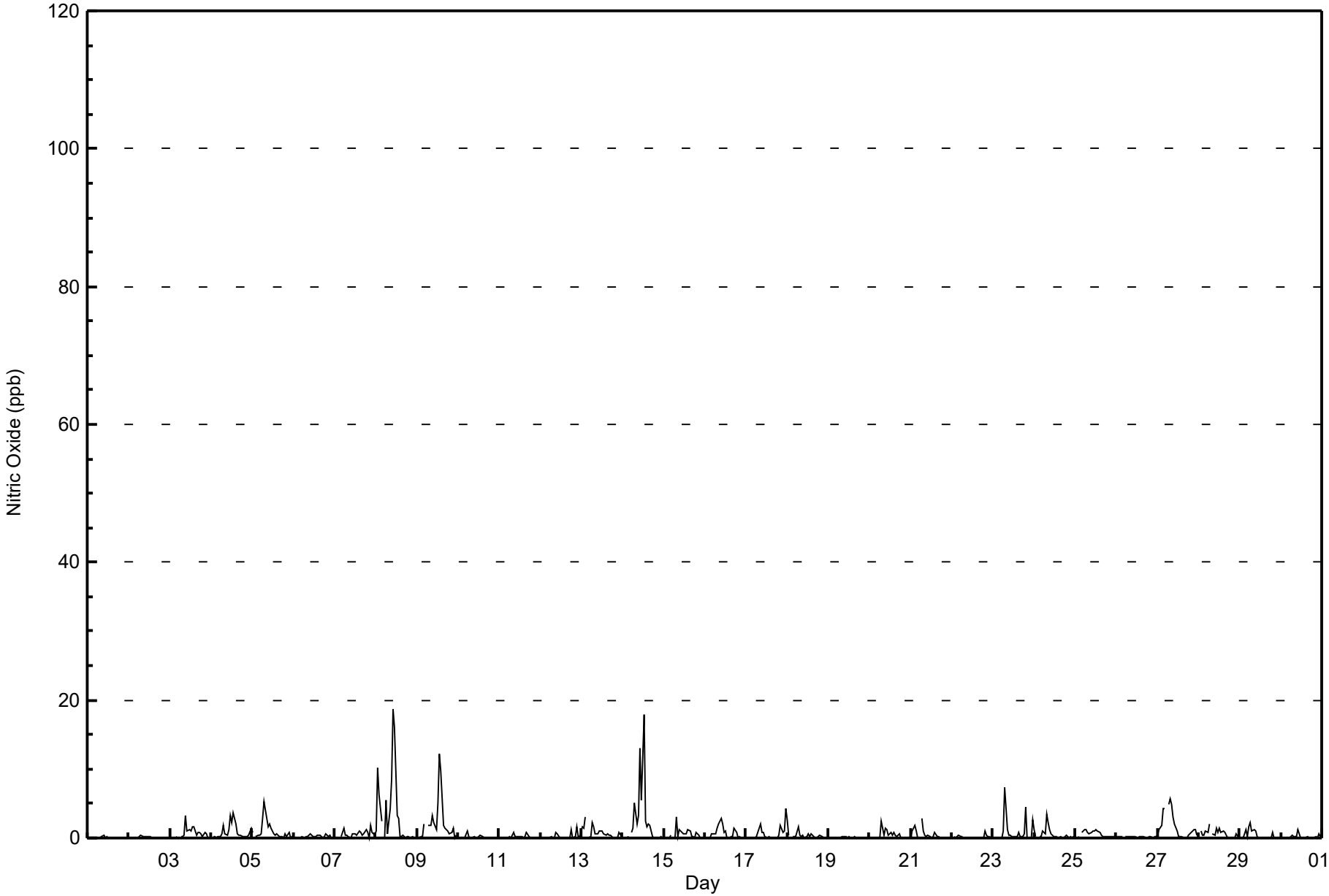
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Hangingstone Expansion - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	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: 684

Total Number of Hours: 720

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	36	11	4	7	20	33	65	66	97	55	67	66	47	46	43	21	684
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	36	11	4	7	20	33	65	66	97	55	67	66	47	46	43	21	684

Total Number of Valid Hours: 684

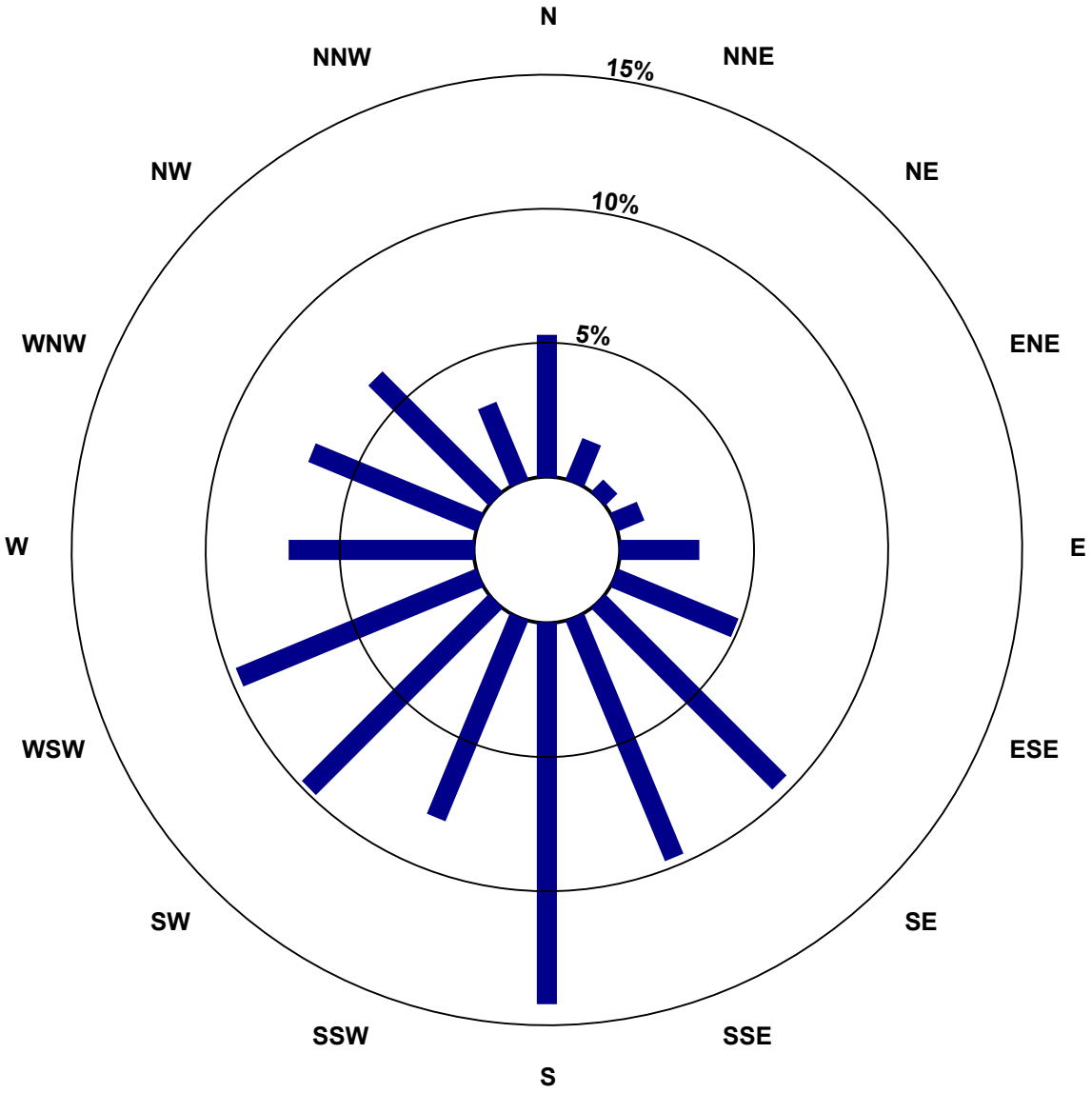
Total Number of Hours: 720

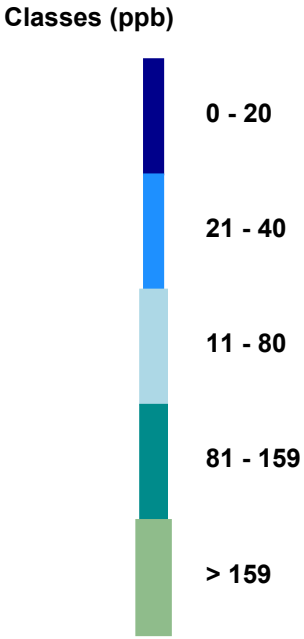
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Hangingstone Expansion





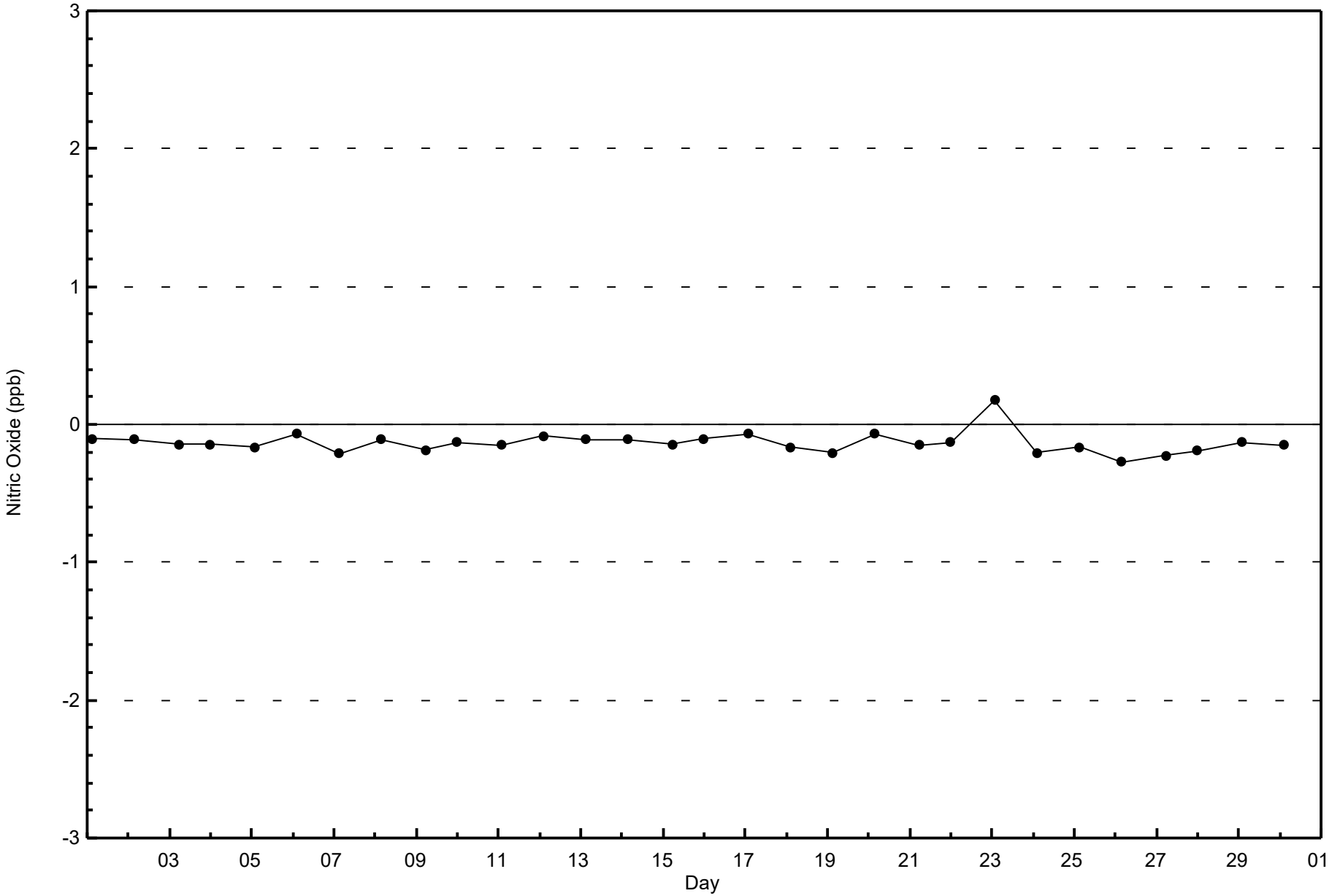
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Hangingstone Expansion - September 2026

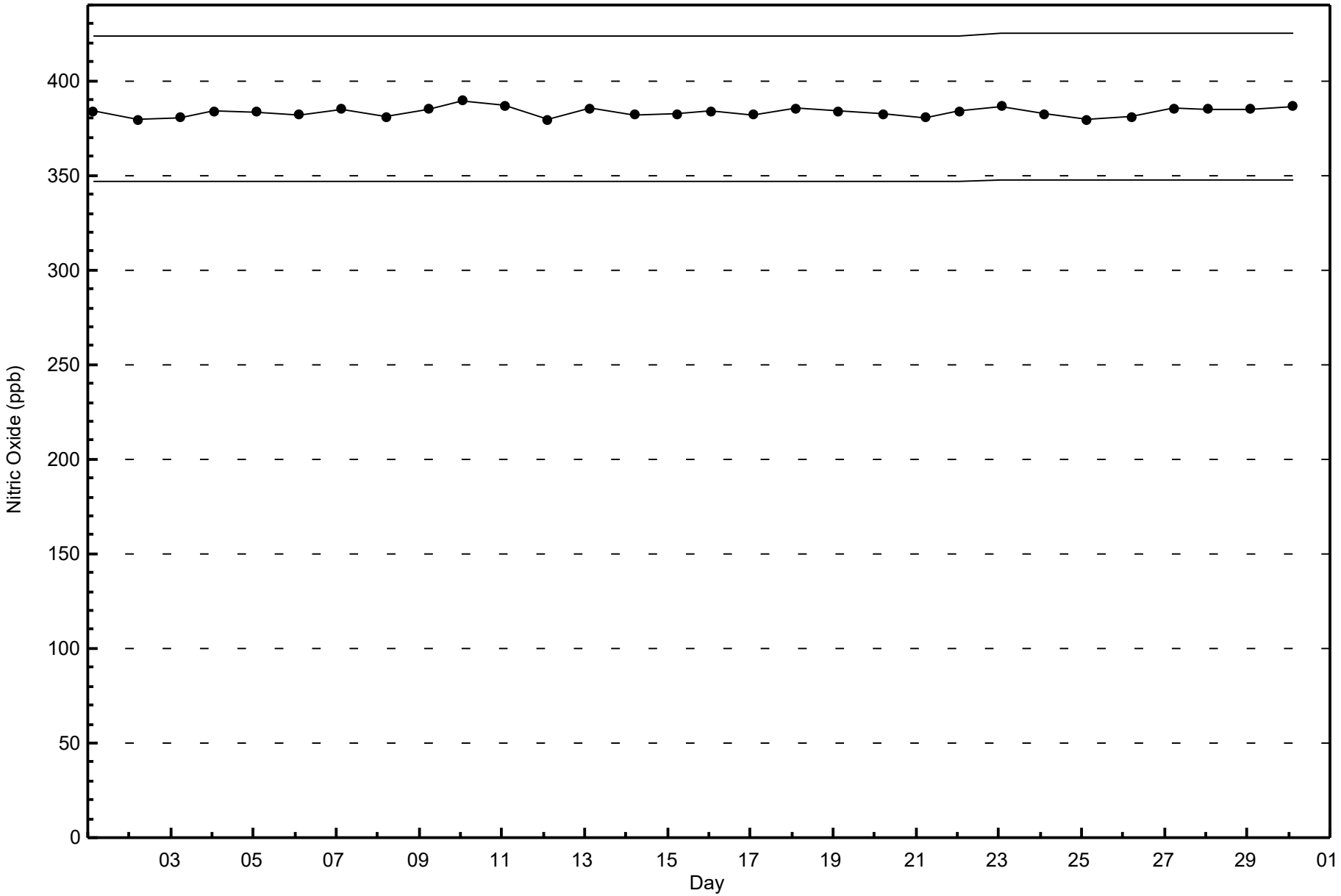


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Hangingstone Expansion - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Hangingstone Expansion - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 18.3 ppb on Sep 23 08:00 Maximum Daily Average: 4.2 ppb on Sep 9

Minimum Value: 0.0 ppb on Sep 8 18:00 Minimum Daily Average: 0.3 ppb on Sep 11
Maximum Diurnal Average: 3.4 ppb at hour 8 Minimum Diurnal Average: 1.0 ppb at hour 17
Monthly Average: 2.00 ppb Percentiles: P_1 = 0.0 P_{10} = 0.2 Q_1 = 0.4 Median = 1.1 Q_3 = 2.7 P_{90} = 5.2 P_{99} = 10.0

Hours in Service:	720
Hours of Data:	684
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-Sep	0.9	0.8	0.3	Z	1.0	0.7	0.8	0.4	0.4	0.5	0.2	0.6	0.3	0.2	0.3	0.3	0.4	0.4	0.7	1.8	1.0	0.5	0.6	0.7	0.6	1.8
2-Sep	0.8	0.8	0.9	1.0	Z	1.6	1.3	1.1	0.7	0.6	0.5	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.8	0.5	0.2	0.2	0.2	0.1	0.6	1.6
3-Sep	0.2	0.1	0.1	0.4	0.5	Z	1.5	0.6	0.7	3.7	1.5	1.8	1.6	2.1	2.0	1.0	1.7	1.5	1.4	1.5	2.5	1.5	0.4	0.4	1.2	3.7
4-Sep	Z	1.2	0.8	0.9	1.0	1.4	2.7	3.7	1.6	1.1	2.4	7.8	6.1	4.7	2.3	2.1	2.4	2.5	1.8	1.4	1.6	1.2	1.6	4.7	2.5	7.8
5-Sep	4.0	Z	2.6	3.3	3.1	3.1	5.3	7.6	5.3	3.2	2.6	1.9	1.2	0.9	1.4	1.3	1.1	1.2	1.0	4.1	3.7	3.4	2.3	3.8	2.9	7.6
6-Sep	0.7	1.2	Z	0.9	0.7	1.0	0.6	1.0	0.7	0.9	1.0	0.8	0.6	0.5	0.6	0.5	0.5	0.4	0.8	2.0	0.9	0.6	0.4	0.7	0.8	2.0
7-Sep	0.6	0.6	0.4	Z	1.5	3.1	1.4	1.2	0.4	0.3	1.2	1.3	0.9	1.0	1.3	1.5	0.6	1.8	3.3	4.1	3.3	4.6	3.3	1.9	1.7	4.6
8-Sep	3.0	9.6	6.6	8.2	Z	0.6	3.0	1.6	6.4	6.6	7.9	9.4	3.7	2.5	0.5	0.5	0.6	0.0	1.7	4.5	2.3	2.1	1.1	0.6	3.6	9.6
9-Sep	0.7	0.4	1.1	1.4	6.9	Z	3.8	2.7	2.9	4.4	2.9	2.0	5.0	11.2	7.7	6.0	4.9	5.0	6.8	5.8	7.0	5.9	0.6	2.0	4.2	11.2
10-Sep	Z	0.3	0.1	0.1	0.1	4.7	1.1	0.2	0.0	0.1	0.0	0.2	0.2	0.6	0.2	0.1	0.2	0.2	0.2	0.1	0.0	0.2	0.2	0.2	0.4	4.7
11-Sep	0.2	Z	0.4	0.3	0.2	0.2	0.2	0.1	0.5	0.4	0.1	0.3	0.4	0.3	0.1	0.3	0.9	0.4	0.1	0.0	0.0	0.1	0.2	0.1	0.3	0.9
12-Sep	0.5	0.8	Z	0.4	0.2	0.1	0.2	0.1	0.1	0.4	0.9	0.3	0.1	0.2	0.2	0.2	0.1	0.0	5.8	2.0	1.1	6.3	1.3	1.8	1.0	6.3
13-Sep	7.2	7.9	9.9	Z	1.5	1.8	6.0	4.5	1.5	1.4	1.9	2.0	2.4	1.9	1.3	2.0	1.9	3.4	2.0	1.7	1.1	2.0	5.0	3.0	3.2	9.9
14-Sep	2.4	2.2	5.4	7.6	Z	2.5	3.2	6.0	5.2	5.8	7.1	4.4	8.5	3.4	2.7	4.3	5.3	4.2	3.5	0.7	0.5	0.6	0.3	0.2	3.7	8.5
15-Sep	0.2	0.7	0.3	0.6	1.4	Z	0.4	1.9	0.4	1.0	1.2	0.8	0.9	1.0	2.1	1.8	0.8	1.0	1.4	3.3	2.4	1.2	0.3	0.1	1.1	3.3
16-Sep	Z	0.7	0.5	1.6	1.6	2.5	5.2	5.2	5.0	4.1	2.2	1.0	1.2	0.4	0.4	0.7	0.7	3.3	3.1	1.3	0.8	0.7	0.7	0.6	1.9	5.2
17-Sep	1.2	Z	1.4	1.6	1.3	1.8	2.3	2.4	4.7	1.9	1.6	0.6	0.6	1.1	0.5	0.4	0.4	0.3	1.9	4.9	6.5	4.2	4.6	4.1	2.2	6.5
18-Sep	3.1	2.3	Z	3.8	3.5	3.7	3.3	0.8	0.2	0.4	0.1	0.2	0.7	0.3	0.9	0.3	0.1	0.1	4.5	6.3	5.3	1.1	0.9	0.6	1.8	6.3
19-Sep	0.4	0.6	0.2	Z	0.5	0.8	0.7	0.6	0.5	0.4	0.4	0.3	0.4	0.4	0.7	1.0	0.5	0.8	0.6	0.4	0.4	0.4	0.5	0.5	0.5	1.0
20-Sep	0.8	0.8	0.7	1.1	Z	1.7	2.5	7.6	1.6	2.0	1.8	0.9	2.0	1.0	2.3	1.3	0.5	5.0	2.9	1.4	1.3	0.5	0.5	1.2	1.8	7.6
21-Sep	1.0	7.0	17.8	9.4	2.2	Z	6.1	2.7	1.3	0.9	0.7	0.7	0.8	0.5	1.1	0.5	0.7	1.5	1.6	1.5	0.7	1.3	1.5	2.5	2.8	17.8
22-Sep	Z	3.7	3.7	4.6	4.6	3.7	4.4	C	C	C	C	C	0.3	0.2	0.1	0.0	0.0	0.0	0.4	11.3	10.0	5.6	4.5	2.6	3.3	11.3
23-Sep	0.8	Z	2.2	1.9	2.3	3.9	8.3	18.3	6.3	2.4	2.2	1.2	0.9	1.1	0.9	1.8	1.6	1.4	3.4	6.7	1.3	1.8	1.9	11.2	3.6	18.3
24-Sep	8.1	3.0	Z	2.9	1.0	6.0	5.3	10.0	6.6	2.8	1.9	0.6	0.4	0.2	0.2	0.6	0.1	0.1	7.2	6.3	3.4	2.7	1.9	2.4	3.2	10.0
25-Sep	1.7	1.1	1.1	Z	3.0	2.9	3.4	2.3	1.6	1.9	1.5	1.6	2.1	1.8	1.9	0.9	0.7	1.0	1.1	1.0	1.2	0.8	2.5	3.5	1.8	3.5
26-Sep	3.3	3.2	4.6	3.1	Z	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.3	0.1	0.7	4.6
27-Sep	0.4	1.9	3.0	5.6	6.1	Z	6.2	5.6	4.1	2.9	2.0	1.2	0.3	0.1	0.3	0.2	0.1	0.1	2.2	2.9	3.5	6.1	6.2	3.4	2.8	6.2
28-Sep	Z	5.4	2.8	2.0	4.0	3.2	6.6	M	1.6	1.5	2.8	1.4	3.2	2.4	4.2	3.3	1.9	0.8	0.7	0.9	1.3	2.6	3.4	2.9	2.7	6.6
29-Sep	2.1	Z	1.8	6.3	3.6	9.3	15.0	6.2	4.8	3.6	0.5	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.7	0.1	0.5	0.2	0.2	2.4	15.0
30-Sep	0.1	0.2	Z	0.4	0.3	0.2	0.4	0.4	0.3	0.3	0.9	0.3	0.2	0.2	0.3	0.5	0.2	0.4	0.3	0.1	1.0	3.3	4.9	2.7	0.8	4.9
	1.8	2.3	2.7	2.8	2.1	2.4	3.4	3.4	2.3	1.9	1.7	1.5	1.5	1.4	1.2	1.1	1.0	1.2	2.1	2.6	2.1	2.1	1.7	2.0	Diurnal Average	
	8.1	9.6	17.8	9.4	6.9	9.3	15.0	18.3	6.6	6.6	7.9	9.4	8.5	11.2	7.7	6.0	5.3	5.0	7.2	11.3	10.0	6.3	6.2	11.2	Diurnal Maximum	

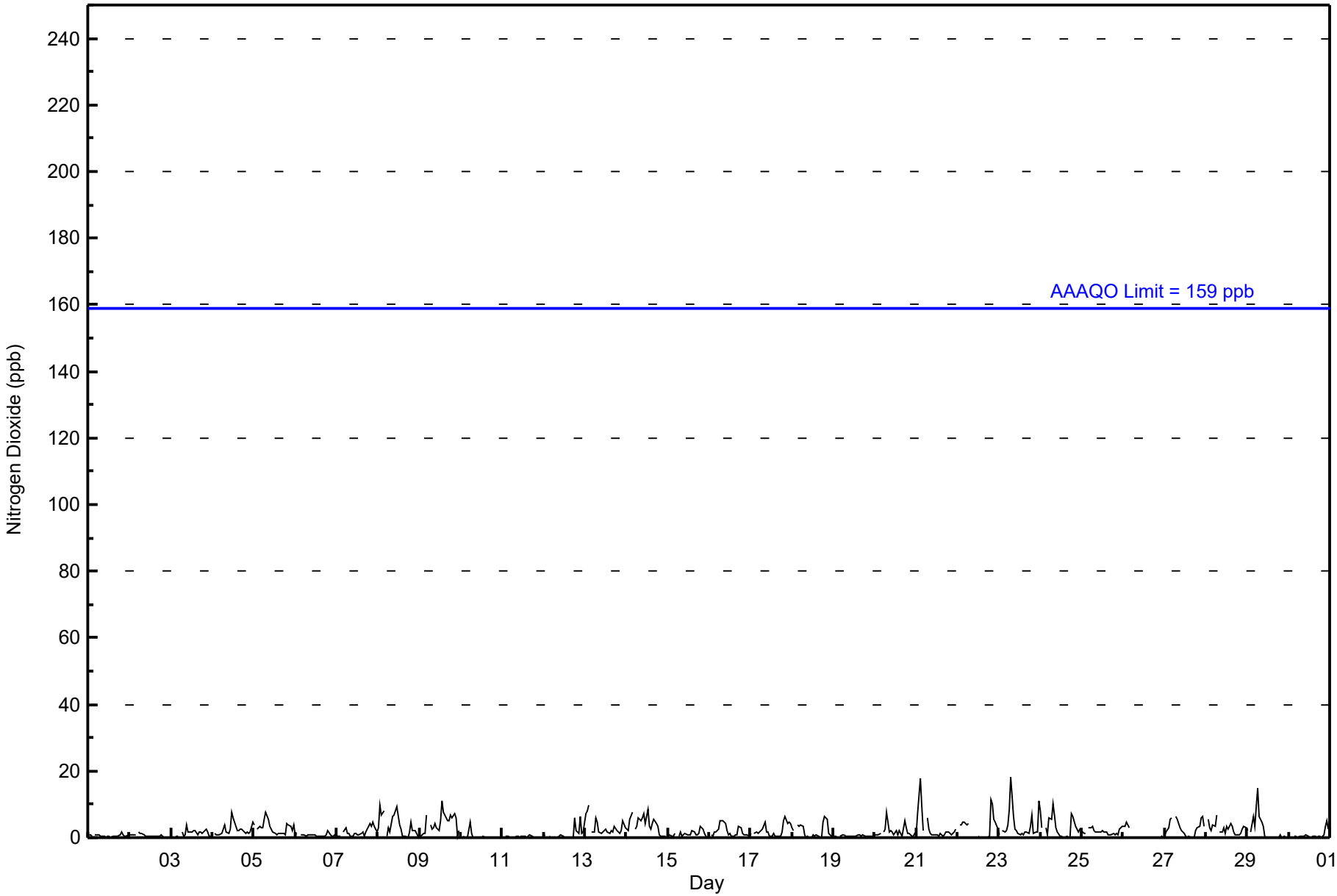
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Hangingstone Expansion - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Hangingstone Expansion - September 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	36	11	4	7	20	33	65	66	97	55	67	66	47	46	43	21	684
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	36	11	4	7	20	33	65	66	97	55	67	66	47	46	43	21	684

Total Number of Valid Hours: 684

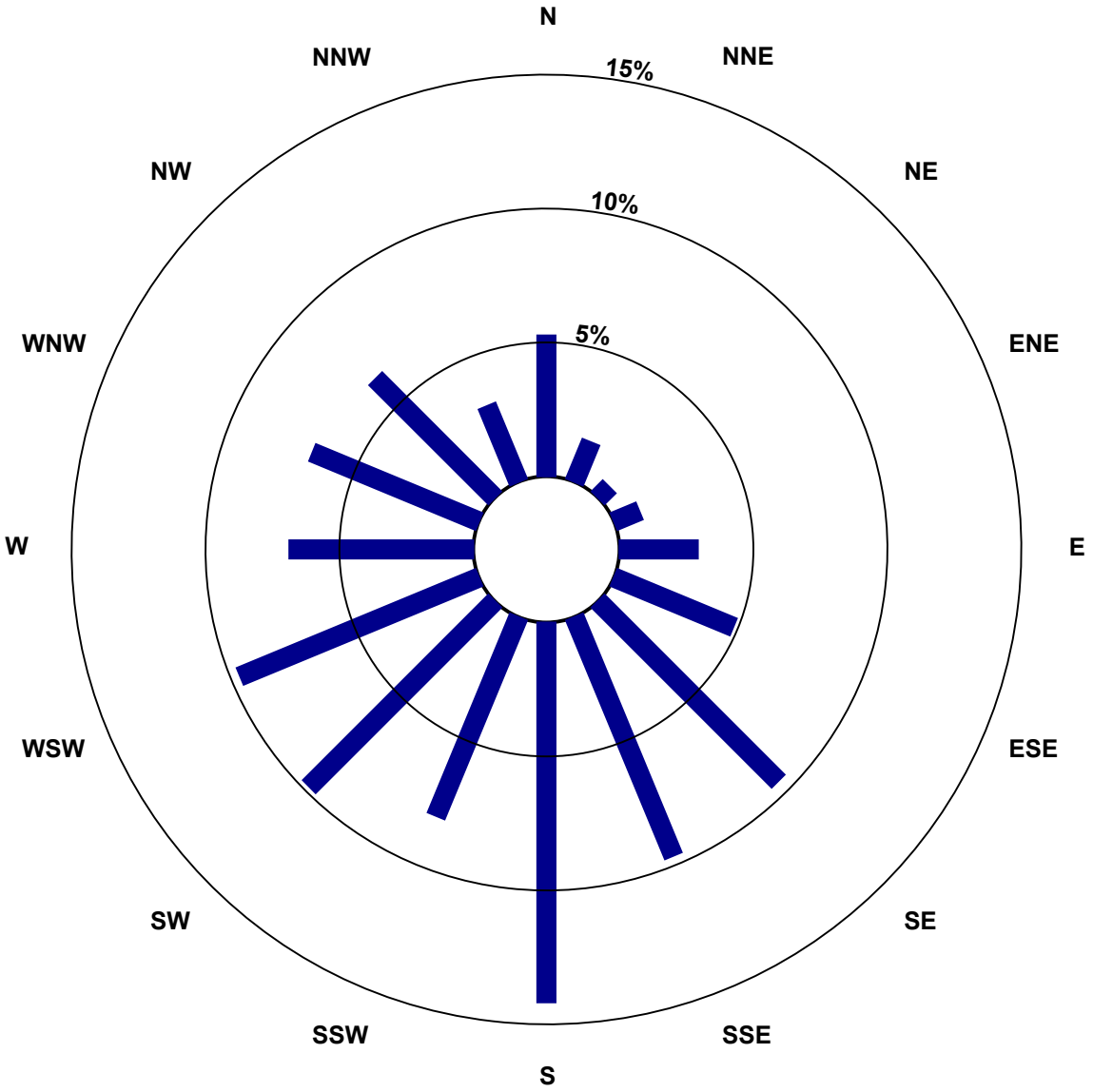
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Hangingstone Expansion



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

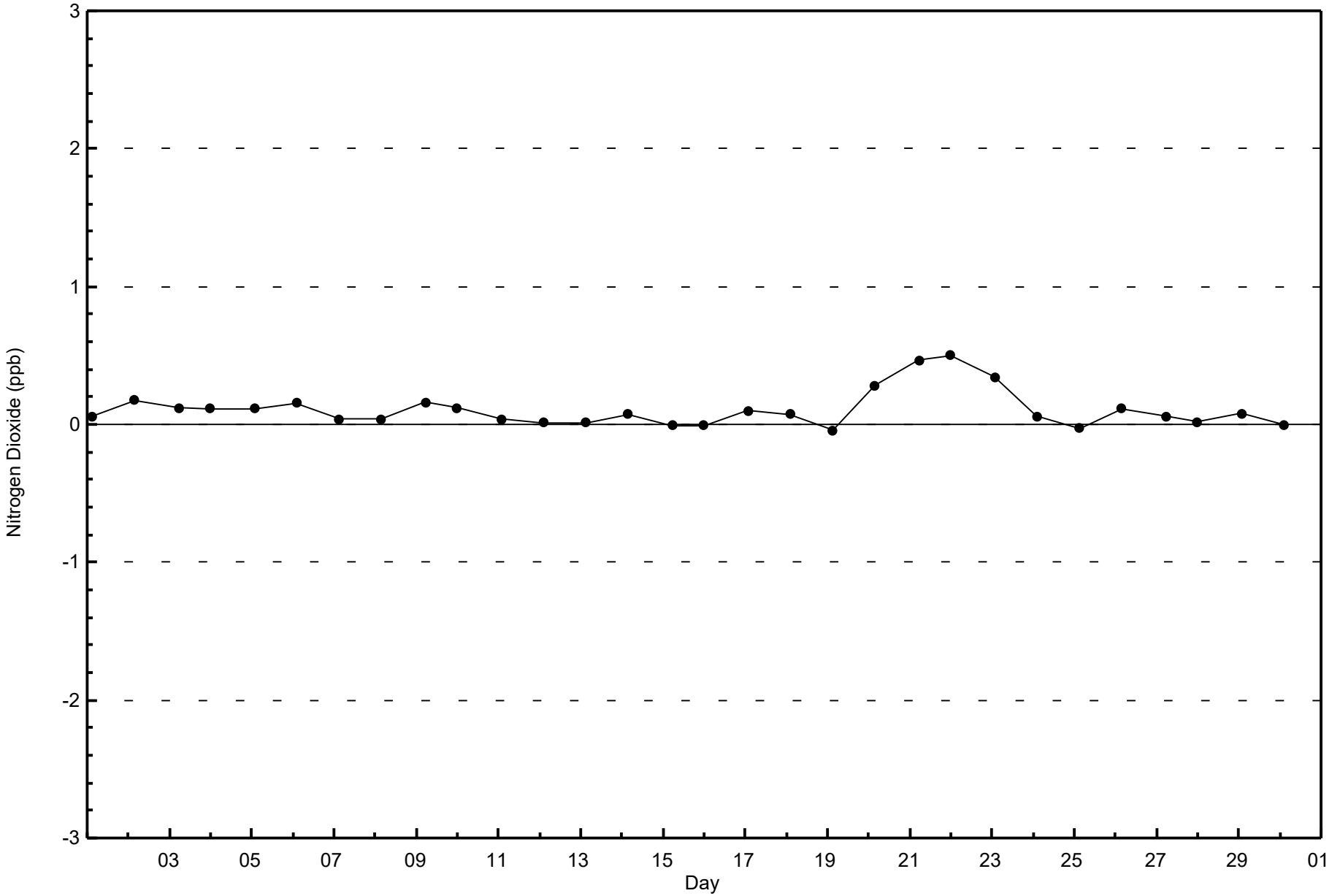
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Hangingstone Expansion - September 2026

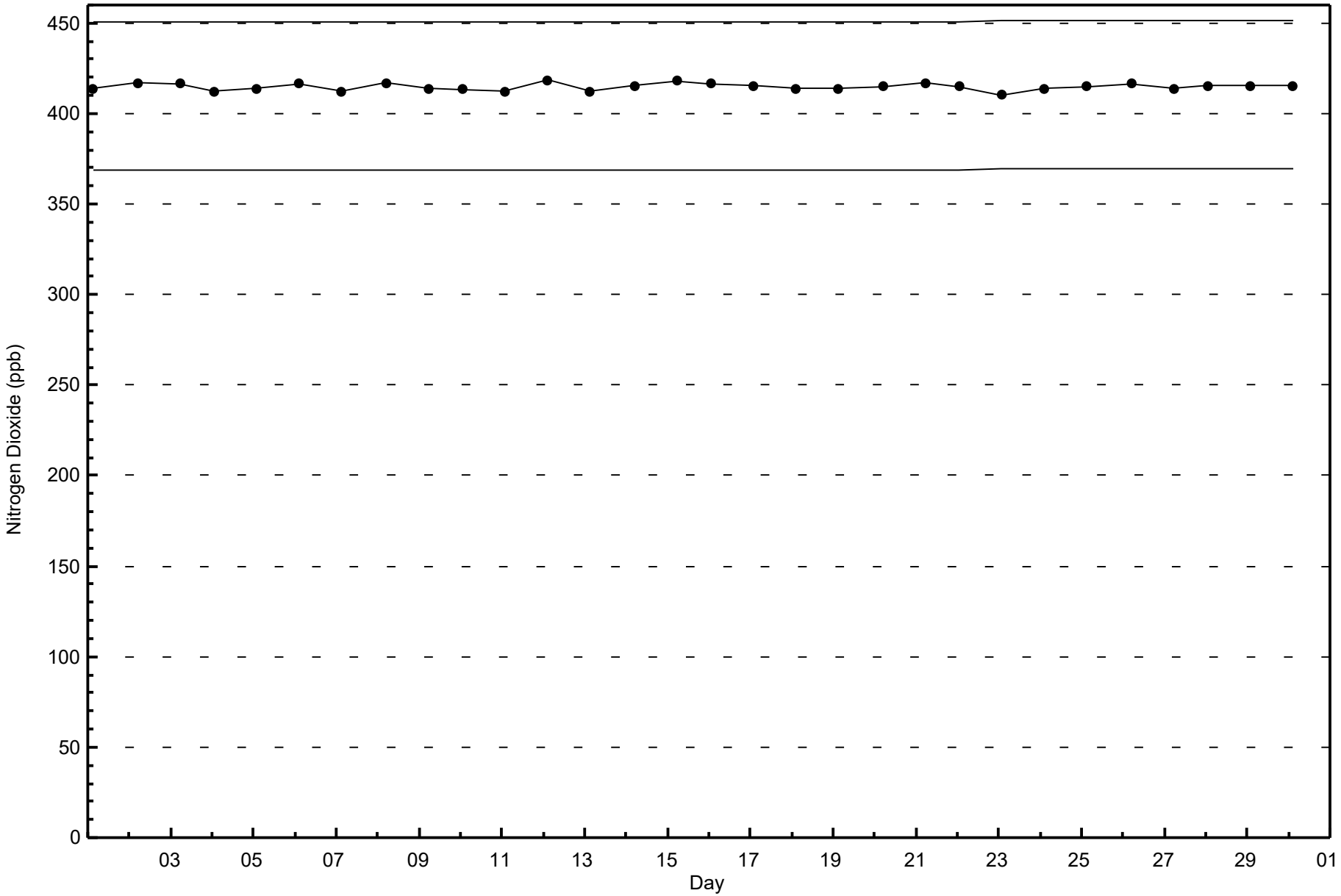


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Hangingstone Expansion - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Hangingstone Expansion - September 2026

Maximum Value: 26.6 ppb on Sep 8 11:00

Maximum Daily Average: 7.1 ppb on Sep 8

Minimum Value: 0.0 ppb on Sep 11 21:00

Minimum Daily Average: 0.4 ppb on Sep 11

Maximum Diurnal Average: 5.0 ppb at hour 8

Minimum Diurnal Average: 1.3 ppb at hour 17

Monthly Average: 2.71 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.2 Q_1 = 0.5 Median = 1.4 Q_3 = 3.5 P_{90} = 7.0 P_{99} = 19.6

Hours in Service:	720
Hours of Data:	684
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-Sep	0.9	0.8	0.3	Z	1.0	0.7	0.8	0.5	0.7	0.9	0.2	0.8	0.4	0.3	0.3	0.3	0.4	0.4	0.7	1.8	1.0	0.5	0.6	0.7	0.7	1.8
2-Sep	0.8	0.8	0.9	1.0	Z	1.7	1.5	1.5	0.9	0.8	0.7	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.8	0.5	0.2	0.2	0.2	0.1	0.7	1.7
3-Sep	0.2	0.1	0.1	0.5	0.7	Z	1.8	0.8	1.1	6.9	2.6	3.0	2.6	3.6	3.6	1.5	2.5	2.3	1.9	1.8	3.2	2.0	0.5	0.4	1.9	6.9
4-Sep	Z	1.4	0.9	1.0	1.1	1.5	3.3	5.5	2.2	1.4	3.6	11.1	8.2	8.3	4.3	2.7	2.9	2.9	2.0	1.6	1.8	1.3	2.0	6.1	3.4	11.1
5-Sep	4.8	Z	2.8	3.6	3.5	3.8	8.2	13.0	8.2	4.9	4.6	3.3	1.8	1.3	2.0	1.6	1.3	1.5	1.0	4.7	3.8	4.2	2.3	4.0	3.9	13.0
6-Sep	0.7	1.2	Z	1.0	0.7	1.2	0.6	1.2	0.9	1.3	1.5	1.0	0.8	0.7	1.1	0.8	0.6	0.4	1.0	2.6	1.0	1.0	0.5	0.8	1.0	2.6
7-Sep	0.6	0.6	0.5	Z	1.7	4.5	1.7	1.6	0.7	0.4	1.8	1.9	1.5	1.3	2.4	2.4	1.0	2.5	4.6	4.9	3.4	6.5	4.1	2.3	2.3	6.5
8-Sep	4.1	19.7	12.9	10.5	Z	0.6	8.4	2.2	10.8	15.1	26.6	25.5	6.9	5.3	0.7	0.7	1.1	0.0	1.9	4.7	2.4	2.3	1.2	0.7	7.1	26.6
9-Sep	0.8	0.4	1.2	1.6	8.9	Z	5.7	4.5	4.7	7.6	5.1	3.3	10.1	23.3	17.5	7.9	6.4	6.2	7.9	6.4	7.9	7.2	0.6	2.3	6.4	23.3
10-Sep	Z	0.3	0.1	0.1	0.1	5.8	1.4	0.3	0.0	0.2	0.1	0.2	0.4	1.0	0.5	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.5	5.8
11-Sep	0.2	Z	0.4	0.3	0.2	0.2	0.3	0.2	1.3	0.6	0.3	0.5	0.5	0.5	0.1	0.6	1.7	0.6	0.1	0.0	0.0	0.1	0.2	0.1	0.4	1.7
12-Sep	0.5	0.8	Z	0.4	0.2	0.1	0.4	0.1	0.1	1.2	1.4	0.3	0.2	0.2	0.3	0.2	0.1	0.0	6.9	2.0	1.2	7.9	1.4	2.1	1.2	7.9
13-Sep	8.8	9.3	12.9	Z	1.6	2.0	8.3	6.2	2.0	2.1	2.9	3.0	3.5	2.6	1.7	2.6	2.4	3.8	2.1	1.7	1.1	2.1	5.7	3.1	4.0	12.9
14-Sep	2.5	2.2	5.4	7.8	Z	3.3	4.7	11.0	7.3	9.1	20.1	9.8	26.3	5.9	4.2	6.4	7.1	4.4	3.6	0.7	0.5	0.6	0.4	0.2	6.2	26.3
15-Sep	0.2	0.7	0.4	0.6	1.8	Z	0.5	5.0	0.7	2.2	2.3	1.5	1.4	1.5	3.3	2.9	1.0	1.1	1.5	4.2	2.9	1.2	0.3	0.1	1.6	5.0
16-Sep	Z	0.7	0.5	1.7	2.1	3.1	5.8	6.5	7.1	7.0	4.2	1.8	2.3	0.5	0.5	0.9	0.8	4.7	3.9	1.3	0.9	0.7	0.7	0.7	2.5	7.1
17-Sep	1.2	Z	1.4	1.6	1.3	1.8	2.5	3.2	6.8	2.8	2.3	0.8	0.7	1.4	0.5	0.4	0.5	0.3	1.9	5.3	8.3	5.0	5.5	8.3	2.8	8.3
18-Sep	5.8	2.7	Z	4.1	3.6	3.9	4.9	1.2	0.3	0.8	0.2	0.3	1.3	0.4	1.5	0.5	0.1	0.2	4.6	6.6	5.5	1.2	1.0	0.7	2.2	6.6
19-Sep	0.4	0.7	0.3	Z	0.6	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.5	0.4	0.8	1.2	0.6	0.8	0.6	0.4	0.4	0.4	0.5	0.5	0.6	1.2
20-Sep	0.8	0.8	0.7	1.1	Z	1.7	2.6	10.0	2.0	3.4	3.1	1.2	2.8	1.4	3.1	1.7	0.7	5.6	3.0	1.4	1.3	0.5	0.5	1.2	2.2	10.0
21-Sep	1.0	8.0	19.6	10.5	2.2	Z	9.0	3.8	1.7	1.2	1.0	0.9	0.9	0.6	1.9	0.6	0.8	1.6	1.6	1.5	0.7	1.3	1.5	2.5	3.2	19.6
22-Sep	Z	3.8	3.8	4.8	4.9	3.8	4.6	C	C	C	C	C	0.3	0.2	0.1	0.0	0.0	0.0	0.4	12.3	10.3	5.7	4.7	2.7	3.5	12.3
23-Sep	0.8	Z	2.2	1.9	2.4	3.9	9.4	25.6	7.6	2.8	2.6	1.5	1.1	1.3	1.1	2.5	1.8	1.6	4.1	11.1	1.4	1.9	2.0	13.8	4.5	25.6
24-Sep	9.2	3.1	Z	3.1	1.1	7.1	5.9	13.5	8.8	4.1	2.4	0.9	0.6	0.3	0.3	0.8	0.2	0.1	7.4	6.6	3.5	2.8	2.0	2.5	3.8	13.5
25-Sep	1.8	1.1	1.4	Z	3.9	4.0	4.5	3.1	2.2	2.7	2.5	2.5	3.3	2.7	2.7	1.4	0.9	1.1	1.3	1.3	1.3	1.0	2.6	3.7	2.3	4.5
26-Sep	3.5	3.3	4.8	3.3	Z	0.4	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.1	0.1	0.1	0.5	0.2	0.8	4.8
27-Sep	0.8	3.1	4.8	9.9	10.4	Z	11.1	11.4	8.9	6.0	4.0	2.3	0.4	0.3	0.4	0.3	0.2	0.2	2.6	3.5	4.5	7.4	7.5	3.8	4.5	11.4
28-Sep	Z	6.4	3.3	2.3	5.1	4.1	8.6	M	2.2	2.0	4.2	2.2	4.6	3.2	5.2	4.2	2.3	0.9	0.7	0.9	1.3	2.7	3.9	2.9	3.3	8.6
29-Sep	2.1	Z	1.8	7.6	3.8	11.0	17.3	7.2	6.1	4.6	0.6	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.2	1.6	0.1	0.5	0.2	0.2	2.9	17.3
30-Sep	0.1	0.2	Z	0.4	0.3	0.3	0.8	0.5	0.6	0.4	2.1	0.3	0.2	0.3	0.3	0.7	0.3	0.4	0.3	0.1	1.2	3.3	5.4	3.0	0.9	5.4
	2.1	2.9	3.3	3.2	2.5	2.8	4.5	5.0	3.3	3.2	3.6	2.8	2.8	2.3	2.0	1.6	1.3	1.5	2.3	3.1	2.4	2.4	2.0	2.3	Diurnal Average	
	9.2	19.7	19.6	10.5	10.4	11.0	17.3	25.6	10.8	15.1	26.6	25.5	26.3	23.3	17.5	7.9	7.1	6.2	7.9	12.3	10.3	7.9	7.5	13.8	Diurnal Maximum	

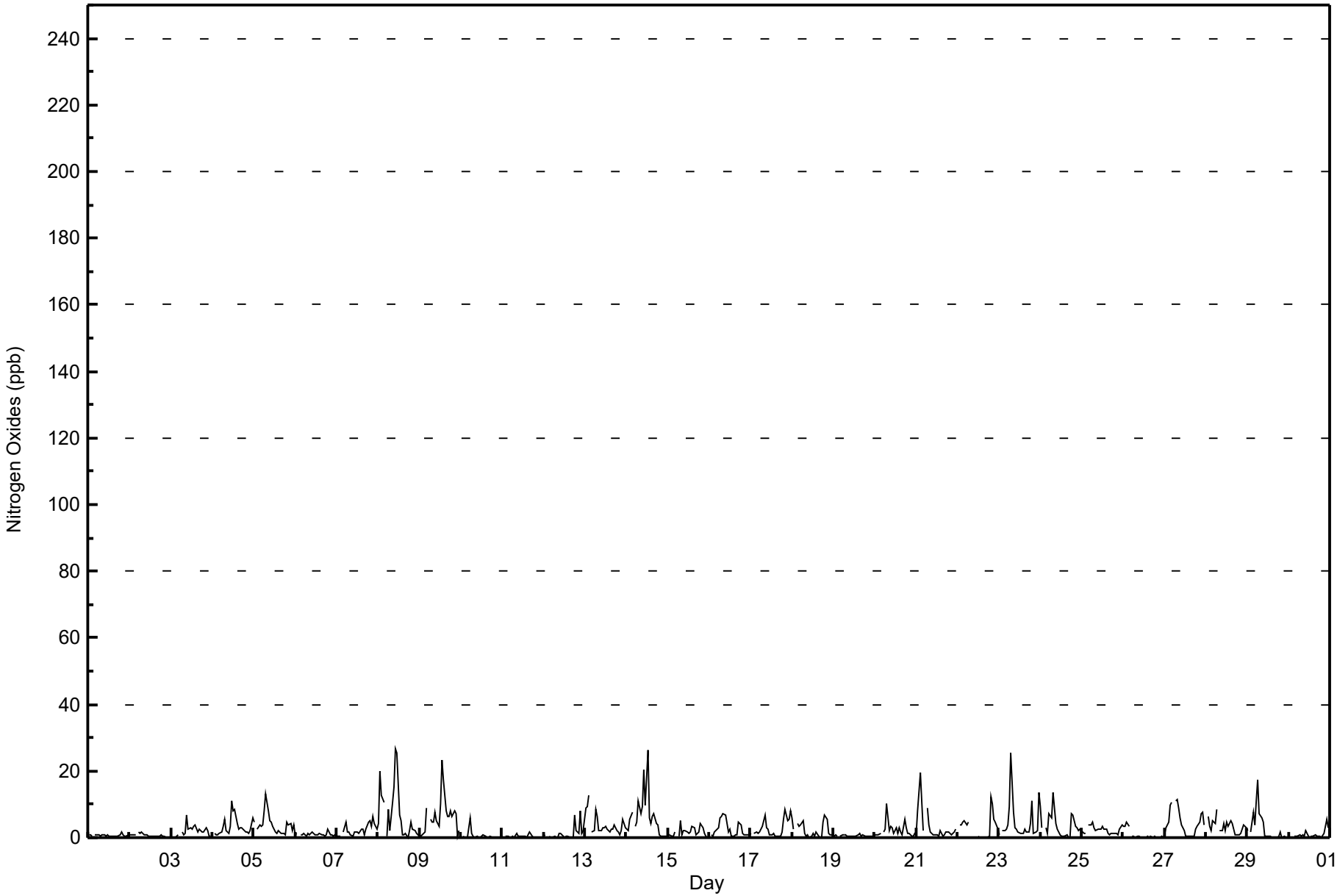
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Hangingstone Expansion - September 2026



Nitrogen Oxides (NO_X) - ppb
Hangingstone Expansion - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	679	99.27	99.27
21 - 40	5	0.73	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Hangingstone Expansion - September 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	36	11	4	7	20	33	64	66	97	55	67	65	47	46	42	19	679
21 - 40	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	2	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	36	11	4	7	20	33	65	66	97	55	67	66	47	46	43	21	684

Total Number of Valid Hours: 684

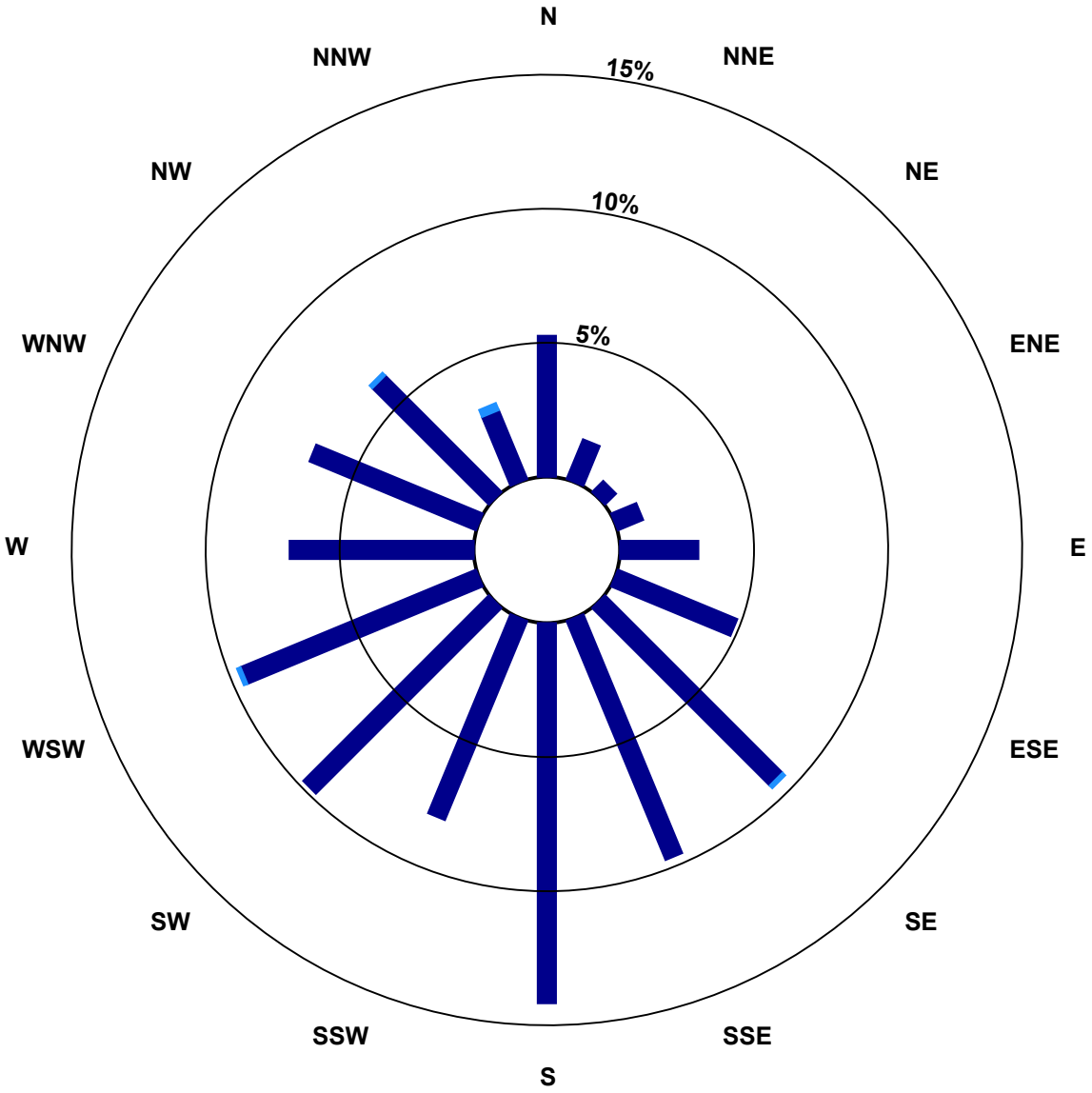
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Hangingstone Expansion



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

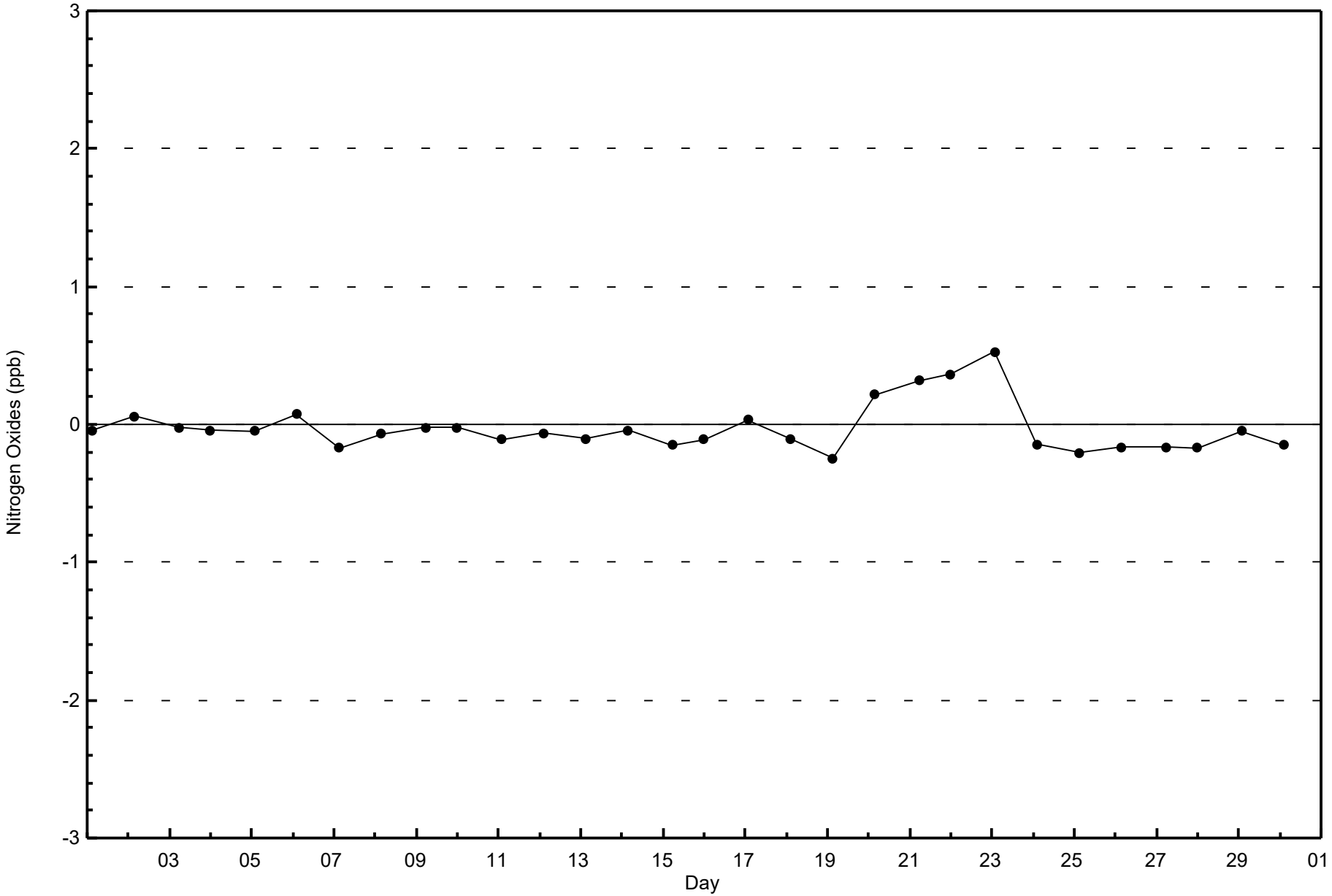
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Hangingstone Expansion - September 2026

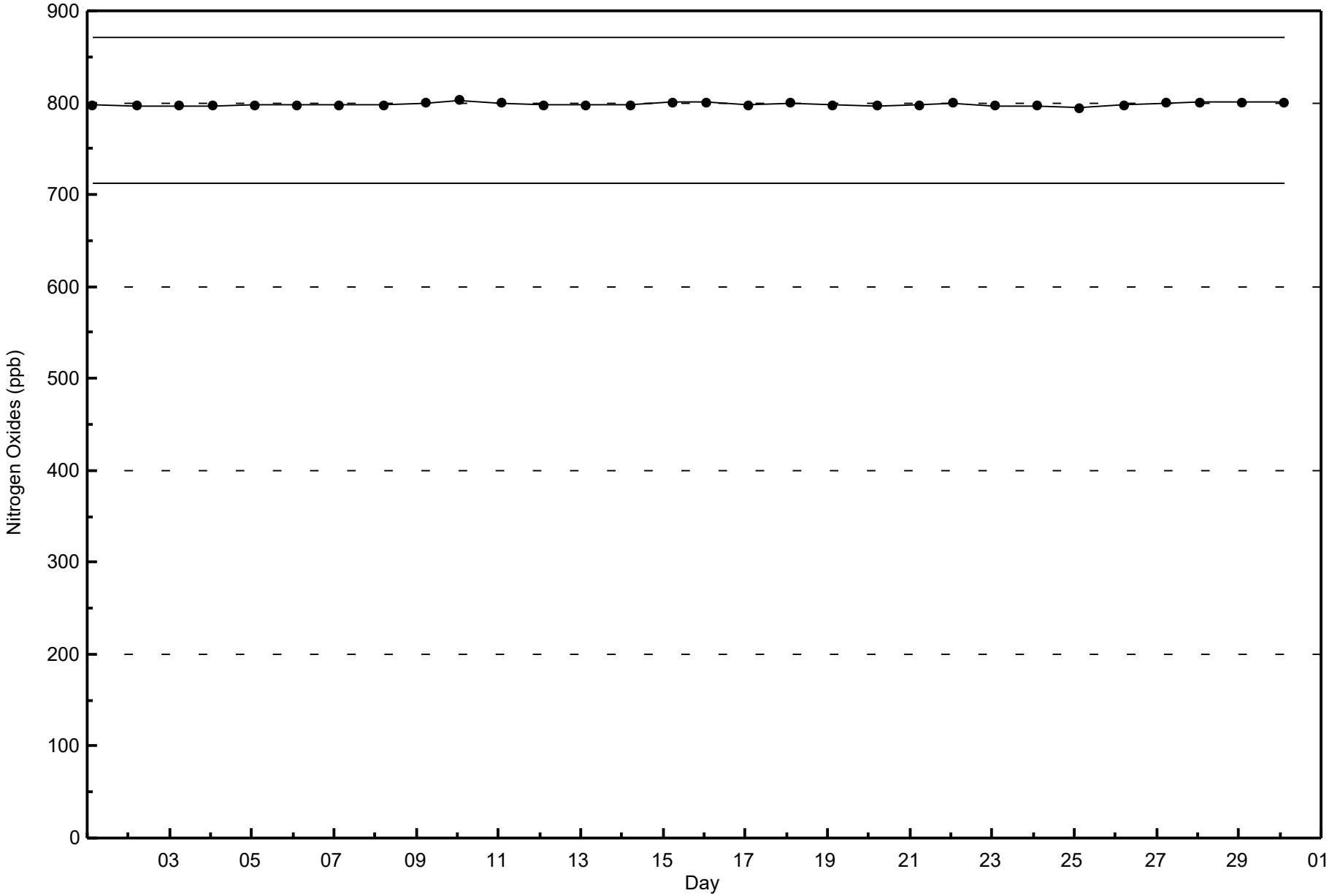


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Hangingstone Expansion - September 2026



Maximum Value: 26.2 C on Sep 2 15:00
Maximum Daily Average: 20.3 C on Sep 2

Minimum Value: -1.8 C on Oct 1 00:00
Minimum Daily Average: 2.6 C on Sep 30
Maximum Diurnal Average: 15.7 C at hour 16
Minimum Diurnal Average: 8.5 C at hour 6
Monthly Average: 11.42 C
Percentiles: P_1 = 2.1 P_{10} = 4.8 Q_1 = 7.8 Median = 10.7 Q_3 = 15.3 P_{90} = 18.0 P_{99} = 24.3

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

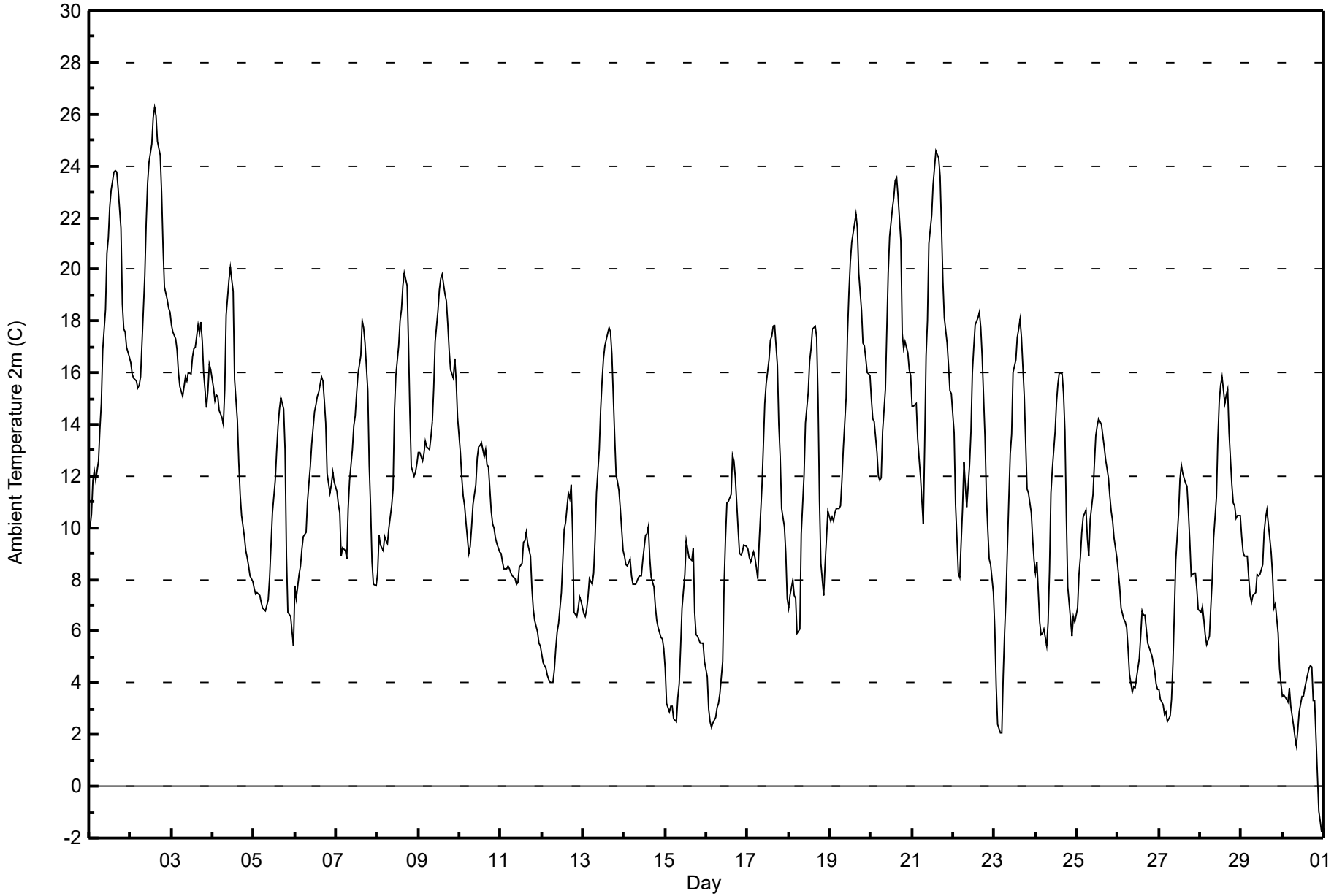
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	10.0	10.5	11.8	12.2	11.8	12.6	13.8	14.8	16.8	18.5	20.6	21.2	22.4	23.1	23.8	23.8	23.8	23.1	21.6	18.7	17.7	17.6	17.0	16.6	17.7	23.8
2-Sep	16.4	15.9	15.8	15.7	15.4	15.5	15.8	17.2	19.7	21.8	23.3	24.2	24.8	25.9	26.2	25.9	25.0	24.4	23.0	20.9	19.3	18.8	18.5	18.4	20.3	26.2
3-Sep	17.9	17.6	17.3	16.9	16.0	15.5	15.1	15.5	15.8	15.7	16.0	15.9	16.6	16.9	17.0	17.9	17.5	18.0	17.2	16.0	14.6	15.3	16.3	16.1	16.4	18.0
4-Sep	15.4	14.9	15.1	15.1	14.5	14.3	14.0	15.4	18.2	19.6	20.1	19.6	19.1	15.7	14.1	12.6	11.3	10.5	9.7	9.1	8.8	8.5	8.1	7.9	13.8	20.1
5-Sep	7.7	7.5	7.5	7.4	7.1	6.9	6.8	6.8	7.2	8.1	9.3	10.6	11.8	13.0	13.9	14.6	15.0	14.6	13.0	8.9	6.7	6.5	6.0	5.4	9.3	15.0
6-Sep	7.8	7.3	8.2	8.5	9.2	9.7	9.8	11.0	11.7	12.4	13.2	14.5	14.7	15.1	15.3	15.9	15.7	14.9	14.1	12.1	11.4	11.6	12.2	11.8	12.0	15.9
7-Sep	11.4	10.9	10.6	8.9	9.2	9.1	8.8	10.7	11.8	13.0	13.9	14.3	15.2	15.9	16.7	18.0	17.8	17.2	15.3	12.4	10.8	8.7	7.8	7.8	12.3	18.0
8-Sep	8.2	9.7	9.4	9.1	9.7	9.5	9.4	10.0	10.9	11.5	14.5	15.9	17.0	18.0	18.5	19.4	19.8	19.4	17.1	14.4	12.4	12.0	12.2	12.5	13.4	19.8
9-Sep	12.9	12.9	12.6	12.8	13.3	13.1	13.0	13.5	14.1	15.4	17.2	18.4	19.2	19.6	19.8	19.1	18.7	17.9	16.9	16.1	15.8	16.6	15.7	14.3	15.8	19.8
10-Sep	12.9	11.9	11.2	10.9	10.2	9.0	9.3	10.0	10.9	11.6	12.7	13.1	13.2	13.3	12.7	13.0	12.4	12.4	10.6	10.1	10.0	9.6	9.4	9.1	11.2	13.3
11-Sep	9.0	8.7	8.4	8.4	8.5	8.4	8.2	8.1	8.0	7.8	7.9	8.5	8.6	9.5	9.5	9.8	9.4	8.9	7.6	6.8	6.4	6.0	5.6	5.4	8.1	9.8
12-Sep	5.1	4.8	4.6	4.3	4.1	4.0	4.0	4.5	5.3	6.0	6.3	7.5	8.8	9.9	10.2	11.3	11.1	11.7	9.8	6.7	6.6	6.9	7.3	7.2	7.0	11.7
13-Sep	6.7	6.6	6.8	7.3	8.0	7.8	8.2	9.5	11.3	13.0	14.6	15.7	16.6	17.0	17.5	17.8	17.6	16.7	13.5	12.0	11.8	11.5	10.8	9.1	12.0	17.8
14-Sep	8.9	8.6	8.5	8.8	8.1	7.8	7.8	7.8	8.1	8.1	8.1	8.7	9.7	9.8	10.0	8.9	8.1	7.7	7.0	6.4	6.1	5.8	5.7	5.3	7.9	10.0
15-Sep	4.6	3.2	2.9	3.1	3.1	2.6	2.5	3.4	4.0	5.4	6.9	8.2	9.5	9.2	8.8	8.8	9.2	6.7	5.9	5.8	5.5	5.5	5.6	4.8	5.6	9.5
16-Sep	4.2	3.0	2.5	2.3	2.5	2.6	3.0	3.2	3.6	4.9	7.8	9.6	10.9	11.0	11.3	12.8	12.6	11.9	9.9	9.0	9.0	9.0	9.4	9.3	7.3	12.8
17-Sep	9.2	8.9	8.7	9.1	8.9	8.5	8.0	9.4	11.6	13.2	14.8	15.6	16.5	17.2	17.4	17.8	17.8	16.3	14.0	12.8	10.8	10.0	9.0	7.3	12.2	17.8
18-Sep	6.9	7.4	8.0	7.4	7.3	5.9	6.1	9.8	10.9	12.0	14.0	15.3	16.4	16.9	17.7	17.8	17.3	15.0	11.1	8.6	7.4	8.6	9.6	10.6	11.2	17.8
19-Sep	10.3	10.4	10.3	10.6	10.7	10.7	10.9	11.9	13.1	15.0	17.5	19.1	20.3	21.1	21.8	22.1	21.6	19.8	18.4	17.1	17.1	16.5	16.0	15.9	15.8	22.1
20-Sep	15.0	14.2	14.1	12.9	12.0	11.8	11.9	13.7	15.3	17.6	19.9	21.3	22.3	22.8	23.4	23.5	22.8	21.1	17.5	16.9	17.2	16.8	16.1	15.9	17.3	23.5
21-Sep	14.7	14.7	14.8	13.4	12.7	12.0	10.2	13.2	16.7	18.0	21.0	22.1	23.3	23.9	24.6	24.3	23.6	21.7	19.5	18.1	17.2	16.3	15.3	15.2	17.8	24.6
22-Sep	13.7	10.9	9.6	8.2	8.1	10.7	12.5	11.6	10.8	12.4	13.7	16.0	17.0	17.9	18.1	18.3	17.8	16.6	13.5	11.2	9.9	8.8	8.6	7.5	12.6	18.3
23-Sep	6.1	3.9	2.4	2.0	2.1	4.3	6.0	7.3	11.2	12.8	13.6	16.0	16.5	17.4	17.7	18.1	17.4	15.1	13.3	11.5	11.4	10.6	9.5	8.8	10.6	18.1
24-Sep	8.2	8.7	6.4	5.9	5.9	6.1	5.4	6.4	8.3	11.3	12.3	13.7	14.9	15.6	16.0	15.9	15.2	13.7	10.4	7.7	6.5	5.8	6.6	6.3	9.7	16.0
25-Sep	6.9	8.2	8.9	9.8	10.4	10.7	9.6	8.9	10.3	11.3	12.5	13.6	14.0	14.2	14.0	13.6	13.1	12.7	11.9	11.3	10.7	10.3	9.6	8.9	11.0	14.2
26-Sep	8.3	7.7	6.9	6.5	6.4	6.1	5.3	4.3	3.6	3.9	3.8	4.2	5.0	5.8	6.8	6.6	6.6	5.5	5.4	5.2	5.0	4.4	4.0	3.8	5.5	8.3
27-Sep	3.8	3.4	3.1	2.8	2.9	2.5	2.7	3.4	4.8	6.7	8.7	10.5	11.9	12.5	12.1	11.7	11.6	10.7	9.5	8.1	8.2	8.3	7.7	6.9	7.3	12.5
28-Sep	6.8	7.0	6.5	5.8	5.5	5.8	6.9	8.0	9.6	11.2	13.4	14.9	15.5	15.9	14.8	15.1	15.4	13.7	11.7	11.0	10.9	10.4	10.5	10.4	10.7	15.9
29-Sep	9.7	9.1	8.9	8.9	8.1	7.4	7.1	7.4	7.5	8.2	8.1	8.2	8.6	9.8	10.4	10.7	10.1	9.0	8.2	6.9	7.1	5.9	4.6	4.0	8.1	10.7
30-Sep	3.5	3.5	3.4	3.3	3.8	3.1	2.4	1.9	1.6	2.2	2.9	3.5	3.5	3.8	4.1	4.6	4.7	4.6	3.3	3.3	0.5	-1.0	-1.4	-1.8	2.6	4.7
	9.4	9.1	8.8	8.6	8.5	8.5	8.5	9.3	10.4	11.6	13.0	14.0	14.8	15.3	15.5	15.7	15.3	14.4	12.7	11.2	10.4	10.1	9.8	9.4	Diurnal Average	
	17.9	17.6	17.3	16.9	16.0	15.5	15.8	17.2	19.7	21.8	23.3	24.2	24.8	25.9	26.2	25.9	25.0	24.4	23.0	20.9	19.3	18.8	18.5	18.4	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Hangingstone Expansion - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	3	0.42	0.42
0 - 10	320	44.44	44.86
10 - 20	356	49.44	94.31
> 20	41	5.69	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 100.0 % on Sep 16 06:00

Maximum Daily Average: 93.7 % on Sep 14

Minimum Value: 27.2 % on Sep 20 15:00

Minimum Daily Average: 54.0 % on Sep 2

Maximum Diurnal Average: 84.7 % at hour 5

Minimum Diurnal Average: 54.2 % at hour 16

Monthly Average: 72.84 %

Percentiles: P_1 = 33.2 P_{10} = 45.1 Q_1 = 59.8 Median = 74.1 Q_3 = 89.8 P_{90} = 95.9 P_{99} = 99.5

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

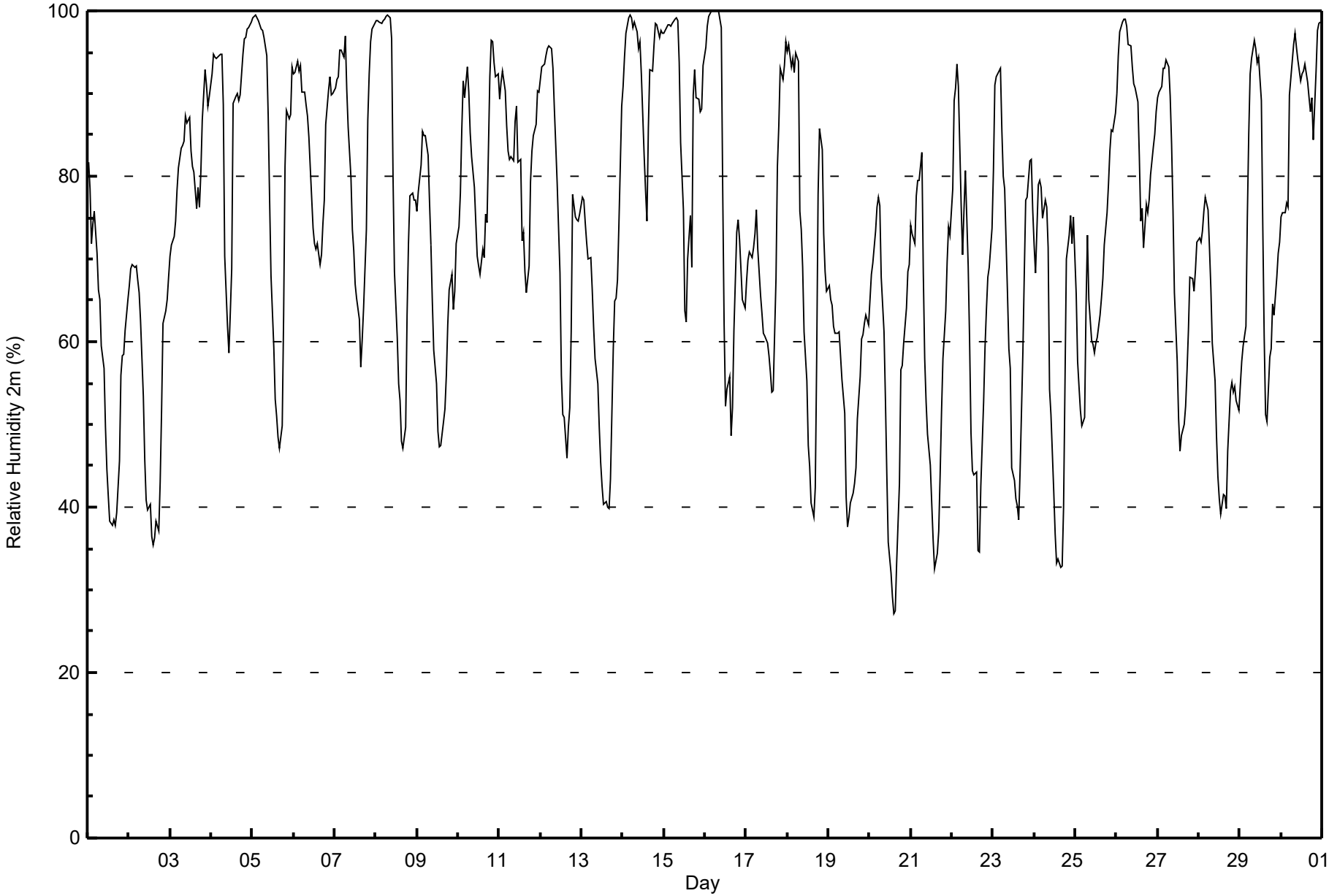
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	81.7	78.5	71.8	74.2	75.7	70.6	66.2	65.1	59.5	56.9	49.6	44.6	41.4	38.2	37.8	38.5	37.9	39.3	45.5	56.0	58.3	58.5	61.4	65.1	57.2	81.7
2-Sep	66.8	68.9	69.3	69.0	69.1	67.5	66.0	62.6	53.4	45.8	40.8	39.7	40.3	36.4	35.5	36.3	38.3	37.1	43.0	51.8	62.2	63.7	65.1	67.8	54.0	69.3
3-Sep	70.3	71.6	72.7	74.6	78.4	81.0	83.3	83.7	84.2	87.2	86.4	87.1	83.1	81.2	80.6	76.1	78.6	76.3	80.5	86.7	92.8	91.0	88.5	89.7	81.9	92.8
4-Sep	92.4	94.8	94.4	94.3	94.5	94.8	94.8	88.6	70.3	61.9	58.7	63.6	68.8	88.8	89.7	90.0	89.1	89.9	94.7	96.6	96.7	97.9	98.0	98.7	87.6	98.7
5-Sep	99.1	99.4	99.5	98.8	98.2	97.7	97.7	96.7	94.7	87.3	77.2	67.9	59.3	53.1	50.9	48.4	47.1	49.9	63.1	81.1	88.0	86.9	87.5	93.3	80.1	99.5
6-Sep	92.4	92.5	93.9	92.7	93.3	90.2	90.2	88.7	87.4	84.7	81.1	73.8	71.9	71.2	71.8	69.3	70.5	74.2	77.2	86.3	90.4	92.0	89.8	90.0	84.0	93.9
7-Sep	90.7	91.7	92.1	95.2	95.2	94.4	97.0	90.6	85.9	79.8	73.6	71.1	67.0	65.2	62.7	57.0	60.2	64.0	73.6	86.8	92.4	96.3	97.8	98.4	82.4	98.4
8-Sep	98.8	98.8	98.7	98.5	98.7	99.0	99.3	99.4	99.1	96.6	79.8	68.4	60.5	54.9	52.8	48.0	47.1	49.6	63.3	71.8	77.6	77.9	77.2	77.1	78.9	99.4
9-Sep	75.8	78.2	81.4	85.4	85.0	84.9	82.5	76.9	71.7	64.9	59.0	54.9	49.1	47.3	47.4	50.4	51.9	55.9	62.0	66.3	68.1	63.9	66.1	71.8	66.7	85.4
10-Sep	74.0	78.0	85.6	91.6	89.5	93.1	90.1	85.3	82.3	78.7	74.4	70.4	69.1	68.1	71.2	70.2	75.5	74.4	92.0	96.5	96.3	93.7	92.1	92.4	82.7	96.5
11-Sep	89.2	91.4	92.7	90.3	86.1	83.0	82.1	82.3	81.8	86.6	88.5	81.7	82.0	72.3	73.2	68.5	66.0	69.1	79.4	83.0	85.0	86.3	90.3	90.2	82.6	92.7
12-Sep	91.7	93.3	93.6	94.6	95.5	95.7	95.5	93.0	88.1	83.8	79.1	68.2	55.9	51.1	50.9	46.0	49.7	52.1	61.1	77.8	75.0	74.7	74.6	75.5	75.7	95.7
13-Sep	77.4	77.1	74.3	72.1	70.0	70.2	66.2	61.7	58.0	54.9	49.7	45.5	42.5	40.3	40.7	40.0	39.8	43.4	59.2	64.8	65.2	67.4	74.0	88.6	60.1	88.6
14-Sep	90.9	94.4	97.2	99.1	99.6	99.1	97.9	98.7	97.5	95.5	96.3	92.4	82.5	78.3	74.6	85.8	92.9	92.7	95.7	98.4	98.3	96.8	97.6	97.2	93.7	99.6
15-Sep	97.3	97.7	98.3	98.3	98.2	98.4	99.0	99.1	98.8	93.8	84.1	75.9	63.8	62.3	70.0	75.3	69.0	89.8	92.9	89.6	89.4	87.7	88.1	93.3	87.9	99.1
16-Sep	95.5	98.1	99.3	99.7	99.9	100.0	100.0	100.0	100.0	97.9	78.4	62.1	52.1	54.3	55.7	48.6	52.0	61.4	73.2	74.7	72.4	68.8	65.1	64.1	78.1	100.0
17-Sep	67.2	69.9	70.9	70.1	71.4	73.1	75.9	71.2	65.5	63.3	61.0	60.7	59.9	58.4	56.2	53.9	54.1	67.6	81.1	86.2	93.1	91.7	93.3	96.2	71.3	96.2
18-Sep	95.0	95.9	93.3	94.2	92.6	94.9	93.9	75.7	73.5	69.0	61.2	55.3	47.5	45.0	40.5	38.8	42.4	58.0	77.7	85.8	83.2	73.1	68.5	66.0	71.7	95.9
19-Sep	66.8	65.1	64.3	61.8	61.0	61.0	61.3	58.3	55.4	51.4	41.1	37.7	38.9	40.5	41.7	42.9	44.8	50.7	55.8	60.4	60.9	62.1	63.3	62.0	54.5	66.8
20-Sep	65.1	68.1	69.5	73.4	76.3	77.4	76.5	67.7	61.2	53.0	43.8	35.8	32.1	29.1	27.2	27.5	33.2	42.9	56.6	57.2	59.9	64.1	68.4	69.2	55.6	77.4
21-Sep	74.1	73.1	71.9	77.7	79.4	79.5	82.9	68.3	58.0	52.8	48.8	45.1	40.4	36.1	32.5	34.4	37.2	43.9	51.5	58.0	63.8	69.6	73.8	73.0	59.4	82.9
22-Sep	78.6	89.1	90.7	93.6	90.8	76.5	70.4	76.0	80.6	69.2	60.1	48.9	44.4	44.0	44.2	34.8	34.6	42.6	52.8	59.4	63.8	67.7	69.0	73.7	64.8	93.6
23-Sep	80.7	91.0	92.1	92.7	93.1	85.5	80.0	78.5	66.0	59.2	56.7	44.8	43.1	41.0	40.2	38.4	44.4	58.8	68.2	77.1	77.4	81.9	82.1	75.9	68.7	93.1
24-Sep	71.7	68.3	78.9	79.4	78.6	74.9	77.2	76.2	71.4	54.3	51.1	41.9	36.8	33.2	33.8	32.7	32.9	40.0	55.0	70.0	72.9	75.2	71.9	75.1	60.6	79.4
25-Sep	65.8	57.6	54.6	51.7	49.8	50.8	64.0	72.8	65.1	60.2	59.6	58.7	59.8	60.5	63.2	65.2	67.7	71.8	75.5	79.1	83.1	85.7	85.4	87.6	66.5	87.6
26-Sep	90.1	94.5	97.4	98.6	99.0	99.0	98.2	95.9	95.8	93.2	91.2	90.7	89.0	82.4	74.6	76.0	71.3	76.6	75.6	77.1	80.2	83.6	85.1	87.9	87.6	99.0
27-Sep	89.4	90.1	90.9	93.1	93.0	94.1	93.2	89.7	84.0	76.0	66.0	57.6	50.7	46.8	48.7	50.0	52.2	56.5	61.4	67.8	67.6	66.2	68.7	72.1	71.9	94.1
28-Sep	72.5	72.0	73.3	75.8	77.5	76.0	71.3	66.5	59.8	55.2	48.7	43.8	41.1	39.1	41.6	41.4	39.9	46.8	54.0	55.1	53.9	54.6	52.9	51.7	56.9	77.5
29-Sep	54.8	57.7	59.4	61.9	75.1	85.1	92.4	94.2	96.5	95.5	93.8	94.5	89.2	74.1	60.7	51.1	50.3	58.1	59.1	64.5	63.3	67.7	70.7	72.1	72.6	96.5
30-Sep	75.2	75.6	75.6	76.8	76.3	89.8	93.8	95.9	97.3	95.5	94.0	91.6	92.3	92.7	93.6	91.3	89.5	87.8	89.5	84.3	92.7	97.7	98.4	98.6	89.4	98.6
	81.0	82.4	83.3	84.3	84.7	84.6	84.6	82.0	78.1	73.5	67.8	62.5	58.5	56.2	55.5	54.2	55.3	60.7	69.0	75.0	77.5	78.2	78.8	80.5	Diurnal Average	
	99.1	99.4	99.5	99.7	99.9	100.0	100.0	100.0	100.0	97.9	96.3	94.5	92.3	92.7	93.6	91.3	92.9	92.7	95.7	98.4	98.3	97.9	98.4	98.7	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Hangingstone Expansion - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	37	5.14	5.14
40 - 60	146	20.28	25.42
60 - 80	262	36.39	61.81
80 - 100	271	37.64	99.44

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Hangingstone Expansion - September 2026

Maximum Speed: 25 km/h on Sep 2 12:00

Maximum Daily Speed Average: 17.8 km/h on Sep 2

Minimum Speed Value: 1 km/h on Sep 7 04:00

Minimum Daily Speed Average: 1.8 km/h on Sep 7

Maximum Diurnal Speed Average: 5.2 km/h at hour 3

Minimum Diurnal Speed Average: 2.1 km/h at hour 19

Monthly Average Velocity: 3.8 km/h 214.5 deg

Percentiles: $P_1 = 2$ $P_{10} = 5$ $Q_1 = 7$ Median = 10 $Q_3 = 14$ $P_{90} = 17$ $P_{99} = 21$

Hours in Service:	720
Hours of Data:	720
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-Sep	SSE8	SSE9	SSE9	S10	S9	SSE10	S11	S13	S12	SSE9	S11	SSE13	SSE16	SSE15	SSE14	SSE14	SSE16	SSE14	SSE10	SE7	SE9	SSE14	SE15	SE15	SSE11.5	SSE16
2-Sep	SE17	SE16	SE18	SE18	SE17	SE18	SE19	SE18	SE20	SE21	SE24	SE25	SE23	SE20	SE19	SE17	SE15	SE15	ESE12	ESE14	ESE15	SE16	SE17	SE16	SE17.8	SE25
3-Sep	ESE13	ESE13	SE14	ESE10	ESE8	ESE13	ESE16	SE13	ESE11	E10	E14	E13	E14	E14	E13	ESE15	E15	E14	E11	ENE7	E6	ESE12	SE8	SE7	ESE11.3	ESE16
4-Sep	SE6	SE7	SE7	SSE8	SSE7	SSE6	SE6	SE5	NE3	SSE1	N3	N7	N9	N15	N16	N17	N15	N17	N16	N14	N12	N14	N14	N11	NNE5.9	N17
5-Sep	N12	N11	NNE8	N8	N7	NNE7	N7	N9	NNE7	NNE6	N9	N9	N3	N3	N5	N5	WNW3	NNW4	N4	ENE4	ESE6	ESE6	ESE6	SE6	NNE4.9	N12
6-Sep	SSE8	SE6	SSE7	SSE8	SSE6	SSE4	SSE3	SE5	SSE10	SSE13	SSE10	SE10	SE10	SE9	SE10	SE9	SE9	SE10	ESE7	ESE5	ESE7	ESE9	SE11	SE11	SE7.9	SSE13
7-Sep	SSE10	SE10	SE6	NE1	SSE5	NNE3	SE5	SE2	SSE6	SSE4	N3	NNE4	N5	N3	NW2	NNW7	NNW12	NNE9	NE6	ESE5	SE5	SE3	SSE6	SSW4	E1.8	NNW12
8-Sep	SW4	SSW5	SW5	SSW4	WSW4	WSW4	WSW4	WSW3	WNW4	NW5	NNW5	NW8	NW10	NW10	NW8	WNW8	NW5	WNW4	SW3	S6	S7	S8	S9	S8	WSW3.2	NW10
9-Sep	S9	S9	S9	S9	SSW9	SSW9	SSW12	SSW12	SW14	SW14	SW13	SW15	WSW17	WSW16	SW16	SW15	SW15	SW13	SSW10	SSW10	SSW10	SW15	WSW15	WSW13	SW11.7	WSW17
10-Sep	W13	WSW13	W14	W11	WSW10	SW10	WSW14	WSW13	WSW13	W14	W14	WNW18	WNW18	WNW18	WNW18	WNW20	WNW15	WNW15	NW14	WNW12	NW16	NW15	NW17	NW16	WNW13.4	WNW20
11-Sep	WNW17	WNW18	WNW18	NW19	NW20	NW23	NW22	NW20	NW20	NW20	NW19	NW20	NW17	NW18	NW19	NW21	NNW18	NW16	NW11	NW8	NW9	WNW8	WNW8	WNW8	NW16.3	NW23
12-Sep	W7	W6	W6	W5	W4	WSW5	WSW5	WSW5	W7	WSW6	WNW5	W7	W8	W9	NW9	WNW10	WNW8	WNW5	SW5	S8	S8	SSW8	SSW10	SSW10	WSW5.5	SSW10
13-Sep	SSW9	SSW9	SSW10	SSW11	SW12	SSW11	SSW11	SSW10	SSW10	SW10	SW12	SW14	SW14	SW14	SW13	SSW11	SSW10	SSW9	S7	S8	S8	S9	NNW6	NE3	SSW9.1	SW14
14-Sep	NNW3	N5	NNW7	NNW10	N14	N14	N12	N12	NNW12	NNW11	NNW12	NNW13	NNW13	NNW11	N12	NNW11	NNW9	NNW8	NNW7	NW9	NW9	NNW7	WNW7	WNW7	NNW9.5	N14
15-Sep	WNW6	WSW5	WSW5	SW5	SW5	SW6	WSW6	SW6	SW6	SW6	SSW8	SSW8	SW9	WSW6	SW8	SE5	WSW7	W6	S7	SW9	SW8	SW9	WSW7	WSW6	SW6.0	SW9
16-Sep	WSW7	SW7	SW6	SW4	WSW3	E1	SE2	ESE2	ESE2	S4	NW5	WNW4	W6	W7	SSW5	SSE4	SE4	E5	ESE6	ESE8	ESE10	SE12	SE15	SE14	SSE3.0	SE15
17-Sep	SE15	SSE16	SSE14	SSE14	S15	S14	S12	S10	SSW9	SW8	SW8	W8	WSW6	SW6	W7	WSW8	WSW5	WSW3	S5	SE3	SE5	SSE6	SSE7	SSE7	S6.7	SSE16
18-Sep	SSE7	WSW3	SSW4	S5	S6	S6	SW4	WSW6	WSW7	NW5	WNW7	WNW9	NW11	WNW10	NW11	NW10	NW7	WNW3	S5	SSE7	SSE8	SSE9	SSE9	SSE10	WSW2.8	NW11
19-Sep	SSE10	S10	S11	S12	S13	S14	S16	S16	S16	S16	S19	S19	S19	S20	S18	S17	S16	S12	S11	S12	S14	S16	S15	S14	S14.7	S20
20-Sep	S11	S9	S9	S9	S9	S8	S8	SSW9	SSW10	SW8	SW6	SW9	SSW11	SW11	SW11	WSW11	WSW8	SSW5	S8	S9	S11	S12	S12	S12	SSW8.6	S12
21-Sep	S10	SSW9	SSW8	S7	S7	S7	SSE8	SSE9	SSE8	SSE9	SSE12	SSE15	SSE16	SSE18	SSE19	S19	S15	S9	S10	S10	S11	S10	S8	SSW6	S10.5	S19
22-Sep	S5	SSE6	SE7	SE8	ESE8	ESE9	ESE8	WNW6	WSW6	WNW12	WNW13	NW21	NW18	WNW16	W13	W12	W11	W6	WSW5	SSW6	SSW6	S7	S7	S7	WSW4.3	NW21
23-Sep	S7	S7	SSE8	SSE9	SE9	ESE9	ESE7	SE6	SE4	SSE6	S4	S6	S7	SE7	SSE5	NW2	SSE7	SSE9	SSW4	SSE7	S9	S8	S7	SSW6	SSE6.0	S9
24-Sep	SSW7	SW8	S6	S8	SSW7	SSW7	SSW7	SSW8	SSW7	WSW6	SW6	W9	W11	WSW12	WSW10	WSW10	W8	WSW5	S4	SSE6	SSE7	SSE8	SE7	SE7	SSW5.6	WSW12
25-Sep	ESE8	ESE9	ESE9	E10	E11	E12	E12	ENE11	ENE13	E18	E18	E20	E18	E17	ENE13	ENE17	ENE15	NNE10	NNE9	NNE9	NNE10	N9	N10	NE6	ENE10.6	E20
26-Sep	NNW7	NW6	W10	WNW10	W12	W15	W17	W18	W17	W18	W18	W18	W18	W16	W19	W20	W22	WNW21	WNW18	W16	W14	WSW14	WSW13	WSW13	W15.0	W22
27-Sep	WSW13	SW13	SW13	SW13	SW13	SW12	SW13	SW14	SW14	SW14	WSW16	WSW17	WSW17	W17	WSW16	WSW15	WSW14	WSW11	SW10	SSW9	SW11	SW10	SW9	SSW10	SW12.7	WSW17
28-Sep	SSW10	SW10	SSW11	SSW11	SSW10	SW10	SW11	SW13	SW13	SW12	SW13	SW13	SW14	SW15	SSW14	SSW13	S12	S10	S11	S12	S14	S13	S13	S13	SSW11.4	WSW15
29-Sep	S11	S10	S9	SSW8	SW8	SSW8	SSW6	SW8	SSW9	SW11	W14	W13	WNW17	WNW19	W16	W16	W14	W13	W12	WSW11	WSW11	WSW13	WSW11	WSW12	WSW9.8	WNW19
30-Sep	WSW11	WSW13	WSW14	WSW14	WSW14	WNW17	WNW20	WNW18	WNW17	WNW19	WNW19	WNW17	WNW17	WNW15	WNW13	NW13	NW11	WNW7	WSW5	WSW6	W3	WSW4	W4	SW4	WNW11.0	WNW20
	SSW4.8	SSW4.8	SSW5.2	SSW4.9	SSW4.7	SSW3.9	SSW4.0	SSW4.1	SW4.3	SW4.0	WSW4.0	WSW4.4	WSW4.6	WSW4.8	WSW4.6	WSW4.1	WSW3.7	WSW2.4	SSW2.1	S3.3	S4.1	S4.8	S4.7	S4.9	Diurnal Average	
	SE17	WNW18	SE18	NW19	NW20	NW23	NW22	NW20	NW20	SE21	SE24	SE25	SE23	S20	NW19	NW21	W22	WNW21	WNW18	W16	NW16	SE16	NW17	SE16	Diurnal Maximum	

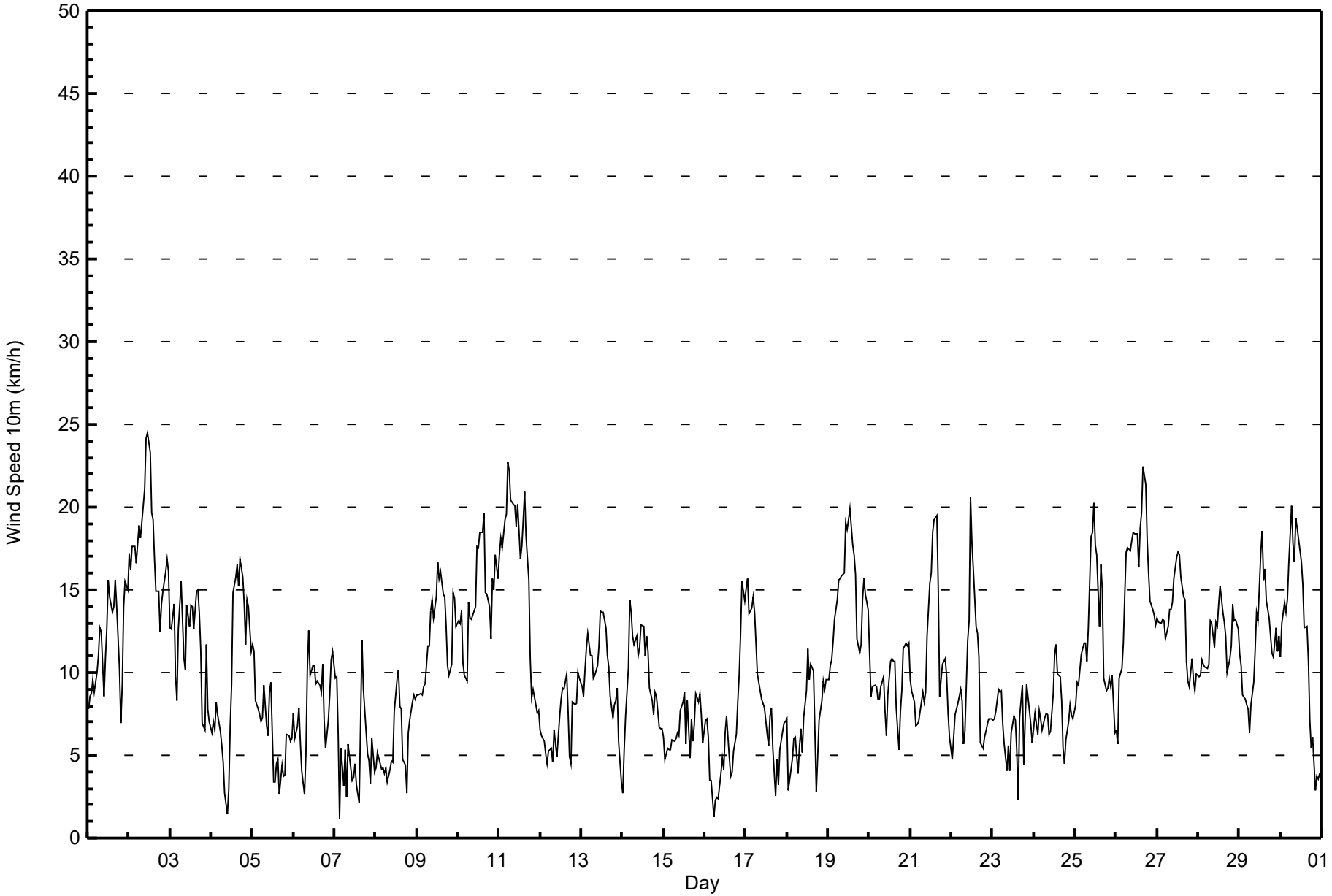
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Hangingstone Expansion - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	101	14.03	14.03
6 - 11	349	48.47	62.50
12 - 19	248	34.44	96.94
20 - 28	22	3.06	100.00
29 - 38	0	0.00	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

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	2	3	1	2	4	12	8	6	7	9	18	3	7	6	3	101
6 - 11	12	9	2	2	5	20	27	43	62	48	33	25	18	15	16	12	349
12 - 19	16	0	0	4	13	10	22	17	35	5	28	27	27	25	13	6	248
20 - 28	0	0	0	0	1	0	6	0	1	0	0	0	2	3	9	0	22
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	38	11	5	7	21	34	67	68	104	60	70	70	50	50	44	21	720

Total Number of Valid Hours: 720

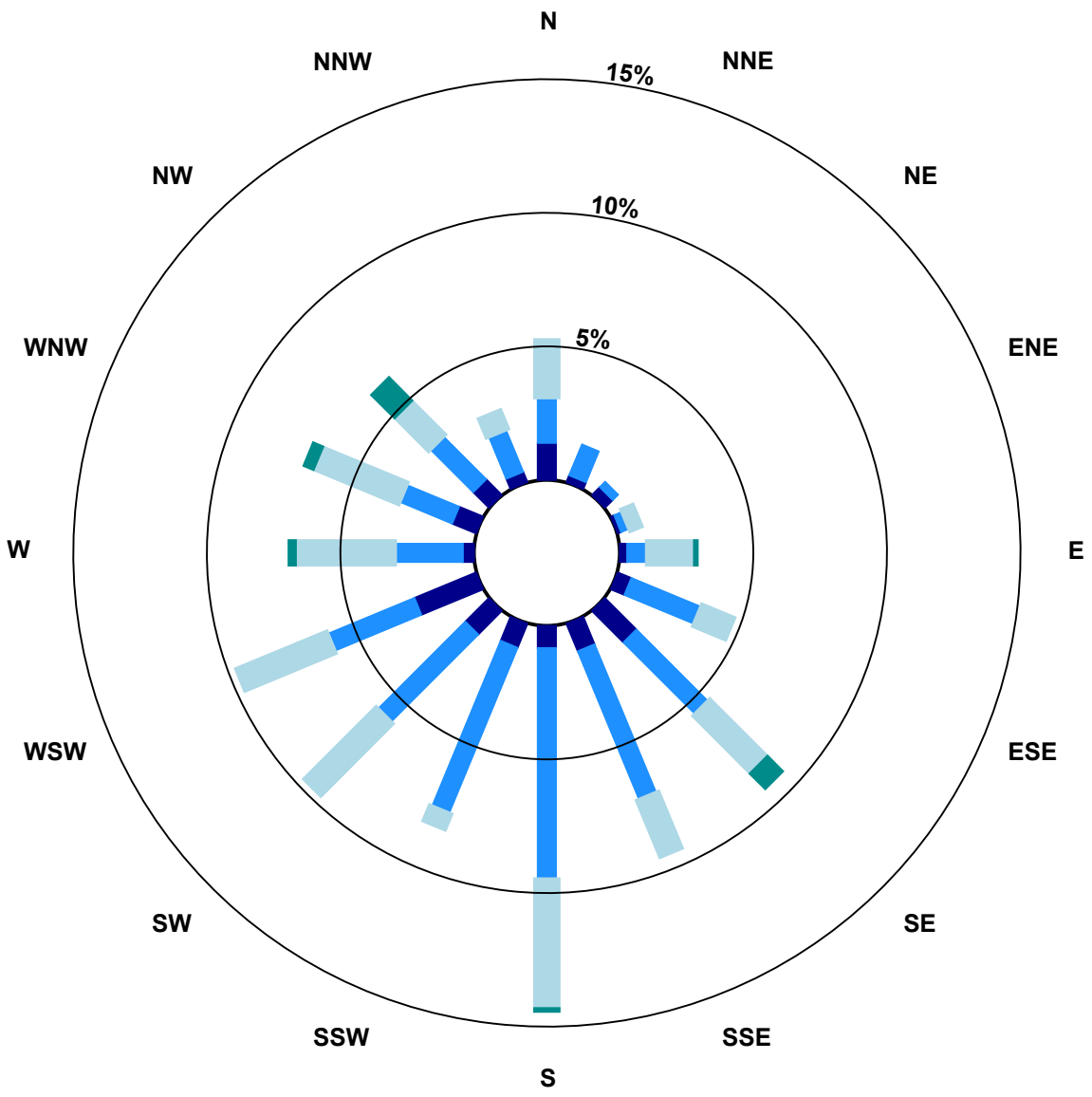
Total Number of Hours: 720

Wood Buffalo Environmental Association

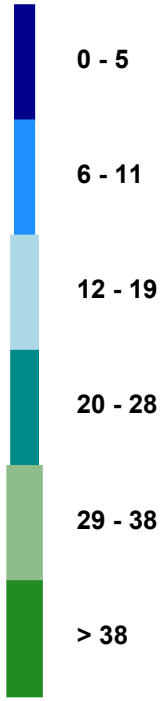
Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Hangingstone Expansion



Classes (km/h)



Total Number of Valid Hours: 720

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 7 km/h on Sep 26 17:00

Minimum Value: 0 km/h on Oct 1 00:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 3 Q_3 = 4 P_{90} = 5 P_{99} = 6

Hours in Service:	720
Hours of Data:	720
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-Sep	1	1	1	2	2	2	3	3	4	3	4	4	5	5	4	4	5	4	2	1	2	4	4	4	5
2-Sep	4	4	5	4	4	5	5	5	6	6	7	7	7	6	6	5	5	5	4	4	4	5	5	5	7
3-Sep	4	4	4	4	3	3	4	4	3	3	4	4	4	4	4	5	4	4	3	3	2	3	4	2	5
4-Sep	1	1	1	2	1	1	1	1	1	2	3	2	4	4	4	4	4	4	4	4	4	4	4	3	4
5-Sep	3	3	3	2	2	2	2	2	2	2	3	3	3	2	2	2	1	1	1	1	1	1	1	1	3
6-Sep	1	1	1	1	1	1	1	2	3	3	3	3	3	3	3	3	3	4	2	1	2	2	3	3	4
7-Sep	2	2	2	1	4	1	1	2	2	2	1	2	2	3	2	3	3	2	2	1	1	1	1	2	4
8-Sep	1	2	1	1	1	1	1	1	1	2	2	3	3	3	2	3	2	1	2	1	2	1	1	1	3
9-Sep	2	2	2	2	3	3	4	3	5	5	4	5	6	5	5	5	5	5	3	3	4	5	5	5	6
10-Sep	4	4	4	3	3	3	4	4	4	5	5	5	5	5	5	5	4	4	3	3	4	4	4	4	5
11-Sep	4	4	4	5	5	6	6	5	6	5	5	6	5	5	5	5	5	5	4	3	2	2	2	2	6
12-Sep	2	2	2	1	1	1	1	1	2	2	3	3	3	3	3	3	3	2	2	2	2	2	3	3	3
13-Sep	3	2	3	4	4	3	3	3	3	3	4	5	5	5	4	4	3	3	1	1	2	2	3	1	5
14-Sep	1	2	1	3	3	4	3	3	3	3	3	3	3	3	4	3	2	2	2	2	3	4	2	2	4
15-Sep	2	1	2	2	1	2	2	2	2	2	2	3	3	4	5	2	5	4	1	4	3	3	2	2	5
16-Sep	2	3	2	1	2	1	1	1	1	2	2	2	3	3	2	2	1	1	1	2	3	3	4	4	4
17-Sep	4	4	4	3	3	3	3	2	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	4
18-Sep	1	2	2	2	2	1	1	2	2	2	2	3	4	3	3	3	3	1	1	1	1	1	1	2	4
19-Sep	2	2	2	3	3	3	4	4	4	4	5	6	6	6	5	5	4	4	3	3	3	4	4	3	6
20-Sep	3	2	2	2	2	2	2	2	3	3	2	3	3	4	4	4	3	2	1	2	3	2	3	3	4
21-Sep	2	2	2	1	1	1	1	1	2	3	4	5	5	5	6	6	4	3	2	2	2	2	2	1	6
22-Sep	1	1	1	1	1	1	2	5	3	3	5	5	5	4	4	4	4	2	1	1	1	1	1	1	5
23-Sep	1	1	1	1	1	1	1	1	2	2	2	3	3	3	2	2	2	3	2	1	2	2	1	1	3
24-Sep	2	2	2	2	2	1	2	2	2	2	2	3	3	4	4	3	3	2	1	1	1	1	1	1	4
25-Sep	1	2	2	2	3	3	4	3	4	6	6	6	6	6	4	6	5	3	3	2	2	2	3	3	6
26-Sep	2	2	3	3	4	5	5	6	6	6	6	7	6	5	6	6	7	6	6	5	5	4	4	4	7
27-Sep	4	4	5	4	4	4	5	5	5	5	5	6	5	6	5	5	5	4	3	3	3	4	3	3	6
28-Sep	3	4	3	3	3	3	3	4	5	4	5	5	5	6	5	5	4	3	2	3	3	3	3	3	6
29-Sep	3	2	2	2	3	2	2	2	3	5	4	4	5	6	5	5	5	4	5	4	3	4	3	4	6
30-Sep	3	4	5	4	5	5	6	4	4	5	5	4	4	4	3	3	3	2	1	2	2	1	1	0	6
	4	4	5	5	5	6	6	6	6	6	7	7	7	6	6	6	7	6	6	5	5	5	5	5	
	Diurnal Maximum																								

Direction of Maximum Speed: 164 deg on Sep 1 00:00
Direction of Maximum Daily Speed Average: 0.0 deg on Jan 1

Direction of Minimum Speed: 164 deg on Sep 1 00:00
Direction of Minimum Daily Speed Average: 0.0 deg on Jan 1

Monthly Average Direction: -- deg

Hours in Service:	720
Hours of Data:	720
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-Sep	164	161	165	169	174	160	170	170	170	167	169	168	155	152	157	156	152	154	147	140	146	148	144	138	--
2-Sep	139	141	145	145	141	143	141	141	141	140	139	138	137	144	143	140	138	128	121	122	123	126	130	134	--
3-Sep	122	120	127	122	111	108	120	124	110	88	88	92	93	93	99	105	93	93	93	64	83	103	133	131	--
4-Sep	126	127	135	154	160	155	143	137	51	162	349	352	355	356	357	357	360	2	1	6	6	5	3	354	--
5-Sep	357	0	12	356	1	12	1	360	26	30	8	6	11	9	355	355	296	332	356	74	111	110	118	143	--
6-Sep	166	144	165	159	150	156	152	139	155	149	154	128	128	132	136	125	135	135	112	112	120	118	137	145	--
7-Sep	149	144	137	35	151	15	125	125	148	147	7	27	358	355	325	346	343	12	40	106	145	136	157	198	--
8-Sep	225	212	220	211	254	239	254	254	300	307	328	324	320	309	307	297	313	289	225	183	177	175	174	174	--
9-Sep	181	183	186	188	204	207	208	213	220	227	223	224	242	242	236	234	229	225	205	206	204	234	255	241	--
10-Sep	259	255	263	273	255	224	241	244	253	269	269	291	295	295	303	293	295	289	306	294	307	304	304	304	--
11-Sep	301	300	300	305	309	312	319	317	321	318	318	320	316	319	313	320	327	325	325	312	306	300	288	287	--
12-Sep	281	277	273	261	259	253	245	242	263	245	300	279	275	271	310	282	286	288	216	176	189	200	209	208	--
13-Sep	201	202	202	211	216	211	209	207	209	214	214	227	226	234	231	210	210	203	180	175	186	191	339	56	--
14-Sep	348	351	341	338	351	356	355	351	348	348	331	330	335	348	354	340	341	347	338	321	324	334	298	294	--
15-Sep	290	253	241	235	220	225	244	224	235	225	202	213	215	256	228	131	249	259	175	219	226	231	242	246	--
16-Sep	238	232	229	236	255	85	142	116	110	173	321	297	281	263	208	151	125	91	102	120	120	134	141	136	--
17-Sep	143	150	159	164	169	172	175	185	211	231	227	273	242	234	259	257	258	258	178	146	139	155	156	162	--
18-Sep	158	249	193	185	181	187	229	250	257	307	291	299	317	295	319	317	304	303	175	158	154	155	159	165	--
19-Sep	168	170	174	173	173	177	175	172	173	174	173	179	173	172	180	184	187	187	179	171	172	174	177	183	--
20-Sep	187	190	178	180	182	188	189	200	212	223	224	236	213	230	233	239	245	195	174	180	182	179	181	184	--
21-Sep	184	194	199	191	186	176	155	157	155	152	161	156	153	152	157	169	182	191	184	177	178	187	187	194	--
22-Sep	187	166	145	140	118	111	115	299	256	287	293	306	307	300	275	266	273	264	240	195	196	189	187	188	--
23-Sep	182	179	164	148	137	121	116	125	134	155	169	187	173	141	162	321	163	157	213	154	171	181	185	194	--
24-Sep	207	221	191	191	192	194	193	197	192	250	218	262	266	257	257	256	263	248	184	155	153	147	144	131	--
25-Sep	111	110	104	101	97	84	94	75	69	84	80	86	94	95	76	70	59	33	33	26	14	8	356	38	--
26-Sep	331	306	280	286	262	261	274	272	273	275	268	270	268	269	261	272	279	287	282	273	260	254	243	245	--
27-Sep	241	236	234	224	225	225	228	231	232	235	239	243	253	259	247	253	251	251	231	210	216	227	218	208	--
28-Sep	212	221	211	209	210	217	220	214	217	215	220	231	226	236	208	192	188	183	174	177	182	182	185	181	--
29-Sep	173	177	188	209	218	208	208	215	208	231	260	273	282	283	279	279	278	280	267	239	252	241	246	250	--
30-Sep	246	242	243	242	257	293	302	302	299	299	300	302	297	298	303	315	305	289	237	245	268	243	259	234	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Diurnal Average																								

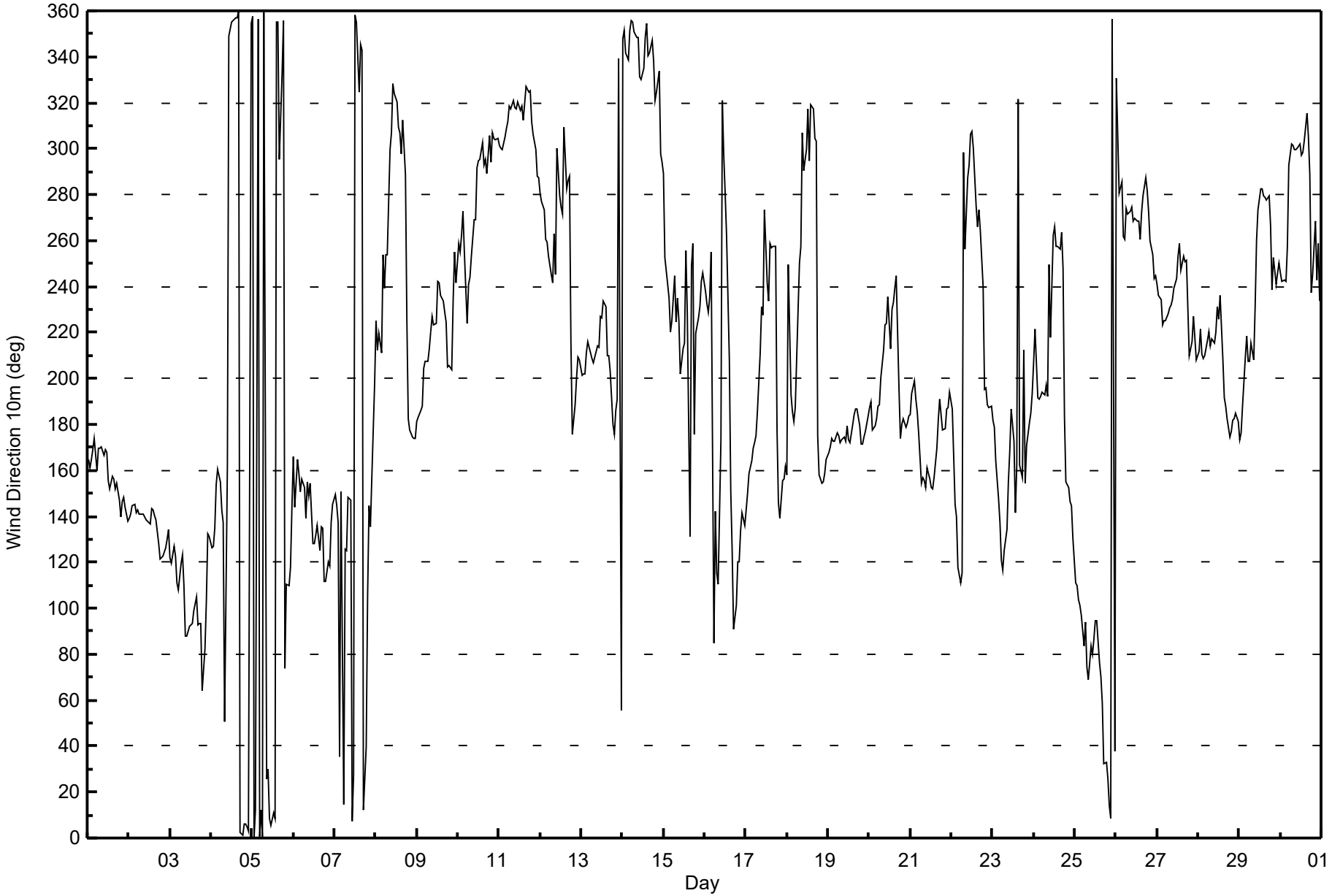
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Hangingstone Expansion - September 2026



Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 105 deg on Sep 4 10:00

Minimum Value: 5 deg on Sep 18 21:00

Percentiles: P_1 = 7 P_{10} = 14 Q_1 = 17 Median = 21 Q_3 = 28 P_{90} = 34 P_{99} = 78

Hours in Service:	720
Hours of Data:	720
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-Sep	9	8	12	13	15	15	18	18	21	22	24	23	21	23	22	20	20	19	15	13	15	17	18	19	24
2-Sep	18	18	17	17	19	20	18	18	18	20	20	20	20	21	20	21	21	21	18	17	18	19	20	19	21
3-Sep	20	19	19	23	23	16	19	22	19	19	19	19	19	20	19	20	20	21	23	21	24	14	34	21	34
4-Sep	18	14	17	15	13	11	11	15	54	105	96	18	20	20	18	18	18	18	19	17	18	16	17	18	105
5-Sep	17	18	17	16	17	15	16	15	26	30	22	30	71	83	57	59	71	34	18	23	11	8	9	16	83
6-Sep	13	12	12	12	16	22	25	27	21	19	21	23	22	24	26	28	26	22	16	23	14	17	21	20	28
7-Sep	18	18	46	80	53	44	17	64	30	58	47	63	53	78	88	34	19	19	24	25	20	39	11	47	88
8-Sep	29	24	26	23	21	21	21	26	25	42	48	31	25	21	28	34	50	35	44	12	14	11	12	12	50
9-Sep	16	17	19	20	26	25	26	28	27	30	30	32	30	29	30	29	30	32	28	28	28	30	27	32	32
10-Sep	26	27	25	24	28	29	27	28	27	24	25	21	18	17	19	18	17	18	14	16	15	14	14	15	29
11-Sep	14	15	15	14	15	15	15	14	14	17	16	16	16	17	16	16	15	15	16	14	12	14	16	17	17
12-Sep	20	20	22	21	26	22	25	27	29	33	65	37	41	38	20	27	24	26	31	14	19	25	26	27	65
13-Sep	24	25	26	27	28	28	27	27	27	29	32	32	33	33	34	31	29	26	13	13	16	20	49	26	49
14-Sep	59	27	13	17	16	17	17	16	16	17	17	18	21	23	20	19	16	17	16	16	19	24	15	14	59
15-Sep	19	22	24	29	28	30	26	27	29	30	29	29	33	76	40	27	43	51	16	31	28	29	27	27	76
16-Sep	26	28	29	36	47	76	56	57	67	65	53	71	54	36	51	65	42	16	13	16	16	20	18	19	76
17-Sep	18	18	18	17	16	17	17	22	29	33	36	26	31	35	29	28	31	26	11	35	13	16	7	5	36
18-Sep	7	57	36	34	17	8	21	25	27	35	25	29	24	28	23	21	19	21	22	10	5	7	11	13	57
19-Sep	14	14	14	17	17	18	18	18	19	20	20	23	22	22	22	21	22	21	18	17	18	19	18	18	23
20-Sep	21	24	17	15	15	17	17	23	27	32	39	36	30	33	35	32	33	29	10	15	19	18	19	18	39
21-Sep	18	23	23	18	16	12	6	9	14	17	20	20	21	20	21	21	21	21	17	17	19	19	18	19	23
22-Sep	19	20	7	6	7	8	11	80	30	20	21	16	19	19	26	27	24	21	20	18	17	17	14	12	80
23-Sep	11	11	14	6	8	9	9	18	27	24	53	48	28	36	54	87	25	15	47	12	15	34	15	17	87
24-Sep	24	30	18	14	16	16	17	23	22	33	30	33	31	33	31	34	26	27	20	11	7	5	6	10	34
25-Sep	8	11	13	14	16	17	18	21	23	20	22	19	19	21	21	21	24	21	18	25	15	32	18	31	32
26-Sep	32	50	23	20	24	26	23	25	24	24	25	25	25	26	26	24	23	19	20	23	27	25	28	28	50
27-Sep	28	31	31	29	28	29	30	28	30	32	29	29	28	28	29	29	28	27	30	27	27	30	29	27	32
28-Sep	26	30	26	27	27	27	30	28	29	30	30	32	31	31	27	26	22	19	16	18	20	19	19	19	32
29-Sep	16	17	20	27	28	25	23	26	27	34	27	24	20	22	23	21	24	21	24	30	27	28	27	26	34
30-Sep	27	29	27	28	28	19	15	14	15	15	15	15	15	16	16	16	15	18	20	26	54	17	15	20	54
	59	57	46	80	53	76	56	80	67	105	96	71	71	83	88	87	71	51	47	35	54	39	49	47	
	Diurnal Maximum																								

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS505
SAWBONES BAY
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SAWBONES BAY (AMS505)
SEPTEMBER 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	686	34	34	100	39.1	0	13.8	0
H2S (ppb) Average	683	36	37	99.86	3.4	0	1.6	0
NO2 (ppb) Average	684	35	36	99.86	20.2	0	8.6	-
NO (ppb) Average	684	35	36	99.86	46.5	-	8.5	-
NOX (ppb) Average	684	35	36	99.86	66.7	-	17.1	-
Temperature 2 m (C) Average	720	0	0	100	26.7	-	20	-
Relative Humidity (%) Average	720	0	0	100	99.5	-	90.4	-
Wind Speed 10 m (km/h) Average	715	4	5	99.86	33	-	23	-
Wind Direction 10 m (deg) Average	715	4	5	99.86	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SAWBONES BAY (AMS505)
SEPTEMBER 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	686	1.65	4.8	-	0	0	0	0.1	0.7	3.9	39.1
H2S (ppb) Average	683	0.3	0.5	-	0	0.1	0.1	0.1	0.2	0.7	3.4
NO2 (ppb) Average	684	2.52	2.9	-	0	0.2	0.4	1.6	3.4	6.1	20.2
NO (ppb) Average	684	1.39	3.2	-	0	0	0	0.2	1.2	4.4	46.5
NOX (ppb) Average	684	3.91	5.8	-	0	0.2	0.5	1.8	4.6	10.5	66.7
Temperature 2 m (C) Average	720	11.49	5.5	-	0.3	4.9	7.4	10.5	15.4	19.2	26.7
Relative Humidity (%) Average	720	73.72	18.9	-	29.9	43.5	60.5	77.4	90.1	95.7	99.5
Wind Speed 10 m (km/h) Average	715	11.4	6	-	0	5	7	10	15	21	33
Wind Direction 10 m (deg) Average	715	224.9	0	-	0	-	-	-	-	-	0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SAWBONES BAY (AMS505)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
H2S, NO2	22 Sep 2026 14:00	22 Sep 2026 14:00	1	Maintenance - sample manifold cleaned
Wind Speed, Wind Direction	18 Sep 2026 00:00	18 Sep 2026 00:00	1	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Sawbones Bay - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 39.1 ppb on Sep 29 23:00 Maximum Daily Average: 13.8 ppb on Sep 26

Minimum Value: 0.0 ppb on Sep 1 05:00 Minimum Daily Average: 0.0 ppb on Sep 3
Maximum Diurnal Average: 3.1 ppb at hour 2 Minimum Diurnal Average: 0.5 ppb at hour 18
Monthly Average: 1.65 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.7 P_{90} = 3.9 P_{99} = 25.3

Hours in Service:	720
Hours of Data:	686
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-Sep	0.1	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.6	0.5	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.6
2-Sep	0.0	0.0	0.0	0.0	Z	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	0.0	0.0	0.0	0.1
3-Sep	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	0.1	0.1	0.1	0.0	0.1
4-Sep	Z	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.2	0.3	0.3	0.1	0.3	4.0	4.2	5.6	5.9	0.6	0.2	0.1	0.2	0.1	0.0	0.1	1.0	5.9
5-Sep	0.1	Z	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
6-Sep	0.1	0.0	Z	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1
7-Sep	0.0	0.1	0.0	Z	0.2	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	0.1	0.2
8-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.2	0.2	0.0	0.2	0.4	0.4	0.3	0.1	0.1	0.0	0.0	0.0	0.1	0.4
9-Sep	0.0	0.1	0.2	0.1	0.0	Z	0.2	0.6	0.8	0.7	1.1	1.3	4.7	8.9	6.2	1.9	1.5	0.7	0.3	0.8	0.3	1.0	5.2	9.4	2.0	9.4
10-Sep	Z	9.4	13.3	1.7	4.3	4.9	20.4	9.2	13.4	7.9	3.1	5.5	5.3	0.6	0.7	0.6	0.4	0.1	1.5	0.6	0.1	0.2	0.0	0.0	4.5	20.4
11-Sep	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	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
12-Sep	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.5	1.9	3.1	2.3	3.0	1.7	0.3	4.6	4.6	0.1	0.2	0.3	0.3	0.5	1.1	4.6
13-Sep	0.6	0.6	1.1	Z	1.0	0.5	0.7	1.4	2.3	2.2	1.7	1.6	1.7	4.7	1.2	0.7	0.7	0.4	0.3	0.3	0.1	0.0	0.1	0.2	1.0	4.7
14-Sep	0.4	0.3	0.4	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	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.4
15-Sep	0.0	0.1	0.0	0.0	0.0	Z	0.1	0.0	0.1	0.1	0.4	0.0	2.6	1.9	1.1	4.1	0.3	0.3	0.4	0.3	0.8	0.1	0.6	17.6	1.3	17.6
16-Sep	Z	1.1	0.3	0.2	0.0	0.0	0.1	0.2	0.3	0.7	0.6	1.7	0.9	1.4	0.9	0.3	0.5	0.6	0.4	0.3	0.2	0.1	0.0	0.0	0.5	1.7
17-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.5	1.4	1.1	1.6	1.1	0.7	2.5	0.9	1.4	0.1	0.0	0.0	0.0	0.0	0.0	0.6	2.5
18-Sep	0.0	0.0	Z	0.0	0.2	0.0	0.0	0.0	0.5	0.7	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	0.1	0.1	0.7
19-Sep	0.1	0.0	0.1	Z	0.2	0.2	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.2	0.1	0.2	0.5	0.5	0.4	0.3	0.3	0.5
20-Sep	0.2	0.2	0.1	0.2	Z	0.1	0.1	0.3	1.4	2.1	1.4	0.5	0.2	0.2	0.7	0.9	0.8	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.4	2.1
21-Sep	0.0	0.0	0.0	0.0	0.1	Z	0.0	0.0	0.2	0.6	0.5	0.3	0.3	0.7	0.8	0.6	0.4	0.4	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.8
22-Sep	Z	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.4	3.4	C	C	C	C	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.4
23-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.3
24-Sep	0.3	0.8	0.4	Z	0.3	1.8	1.8	2.6	9.0	3.0	1.1	2.8	2.1	3.4	3.5	3.7	2.0	2.2	0.4	0.2	0.3	0.2	0.2	0.2	1.8	9.0
25-Sep	0.3	0.2	0.2	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	9.2	0.5	9.2
26-Sep	0.1	0.1	1.8	8.2	Z	17.0	18.6	25.2	22.5	20.1	17.5	13.3	4.8	13.0	13.3	9.0	12.0	1.0	0.6	18.9	13.7	38.0	36.3	11.2	13.8	38.0
27-Sep	18.5	31.2	9.0	4.5	3.4	Z	1.9	0.9	2.3	2.7	1.3	0.6	5.8	12.7	19.4	20.0	17.0	0.7	0.2	0.4	0.4	0.9	2.2	1.9	6.9	31.2
28-Sep	Z	1.5	1.2	0.9	1.2	1.0	0.8	1.4	2.8	2.6	1.7	1.6	1.6	0.8	0.8	0.6	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	1.0	2.8
29-Sep	0.1	Z	0.2	0.2	3.8	9.3	1.3	0.3	2.7	5.2	1.6	4.1	4.2	6.6	2.3	0.8	1.6	0.3	11.8	0.9	10.3	9.9	39.1	25.6	6.2	39.1
30-Sep	30.4	30.6	Z	7.6	12.3	25.3	11.2	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.2	3.9	0.3	0.0	5.3	30.6
	2.0	3.1	1.1	1.0	1.1	2.5	1.9	1.5	2.0	1.8	1.3	1.3	1.4	2.2	2.0	1.8	1.5	0.5	0.7	0.8	0.9	1.9	2.9	2.6	Diurnal Average	
	30.4	31.2	13.3	8.2	12.3	25.3	20.4	25.2	22.5	20.1	17.5	13.3	5.8	13.0	19.4	20.0	17.0	4.6	11.8	18.9	13.7	38.0	39.1	25.6	Diurnal Maximum	

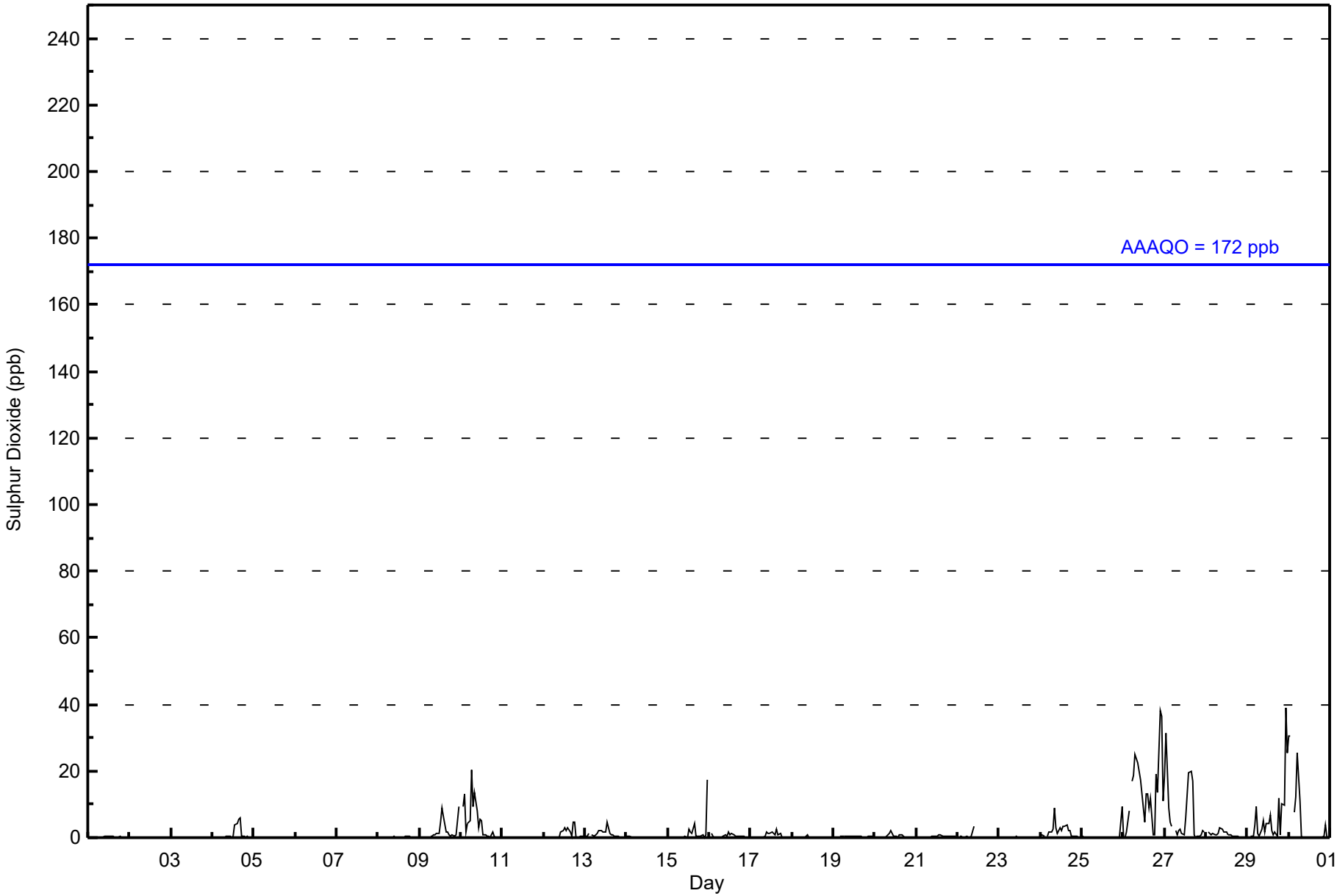
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Sawbones Bay - September 2026



Sulphur Dioxide (SO_2) - ppb
Sawbones Bay - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	653	95.19	95.19
11 - 20	23	3.35	98.54
21 - 60	10	1.46	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: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Sawbones Bay - September 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	29	17	11	10	50	48	32	40	67	68	55	40	20	81	56	24	648
11 - 20	0	0	0	0	0	0	0	0	0	0	0	2	20	1	0	0	23
21 - 60	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10
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	29	17	11	10	50	48	32	40	67	68	55	42	50	82	56	24	681

Total Number of Valid Hours: 681

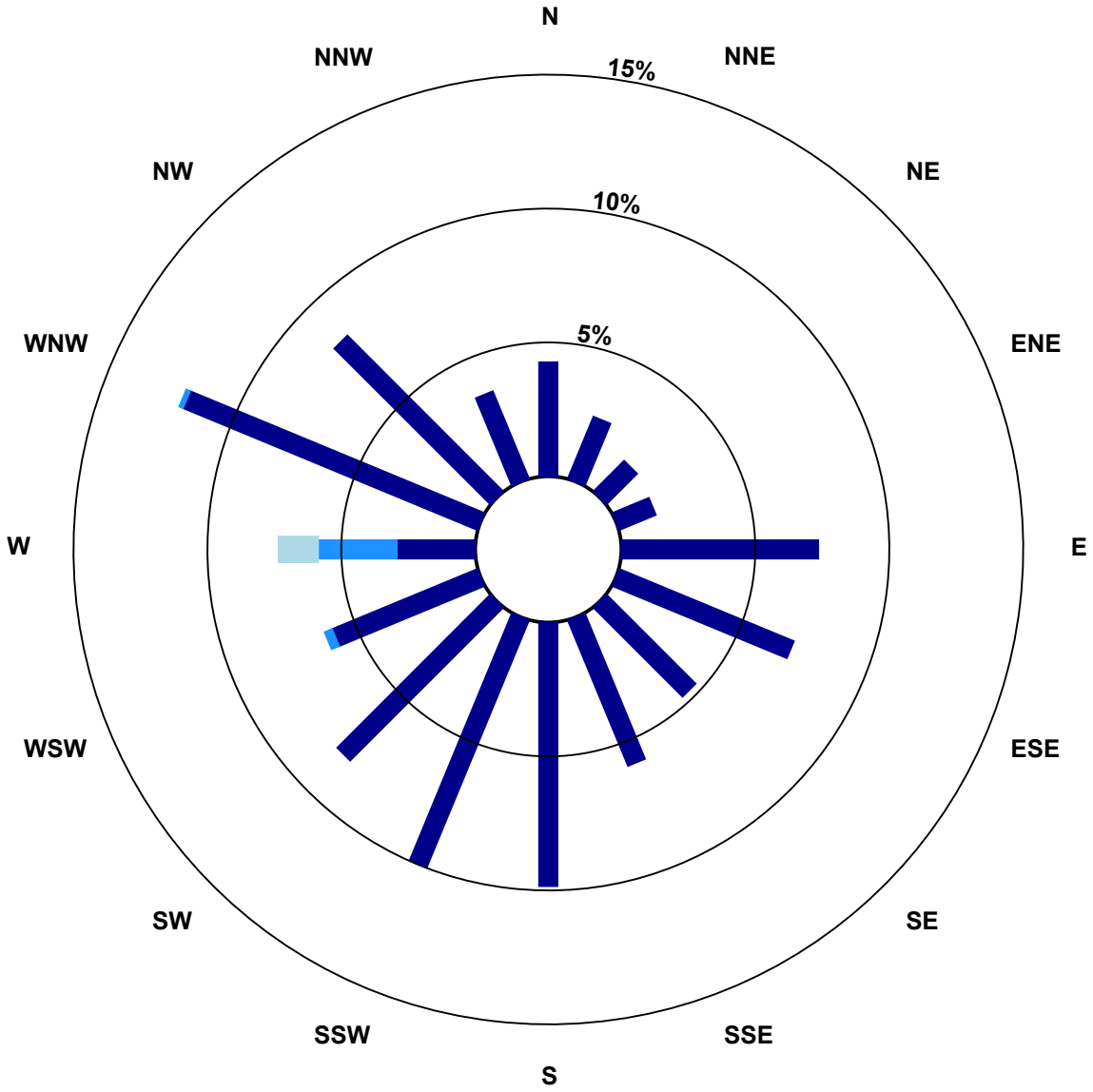
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Sawbones Bay



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

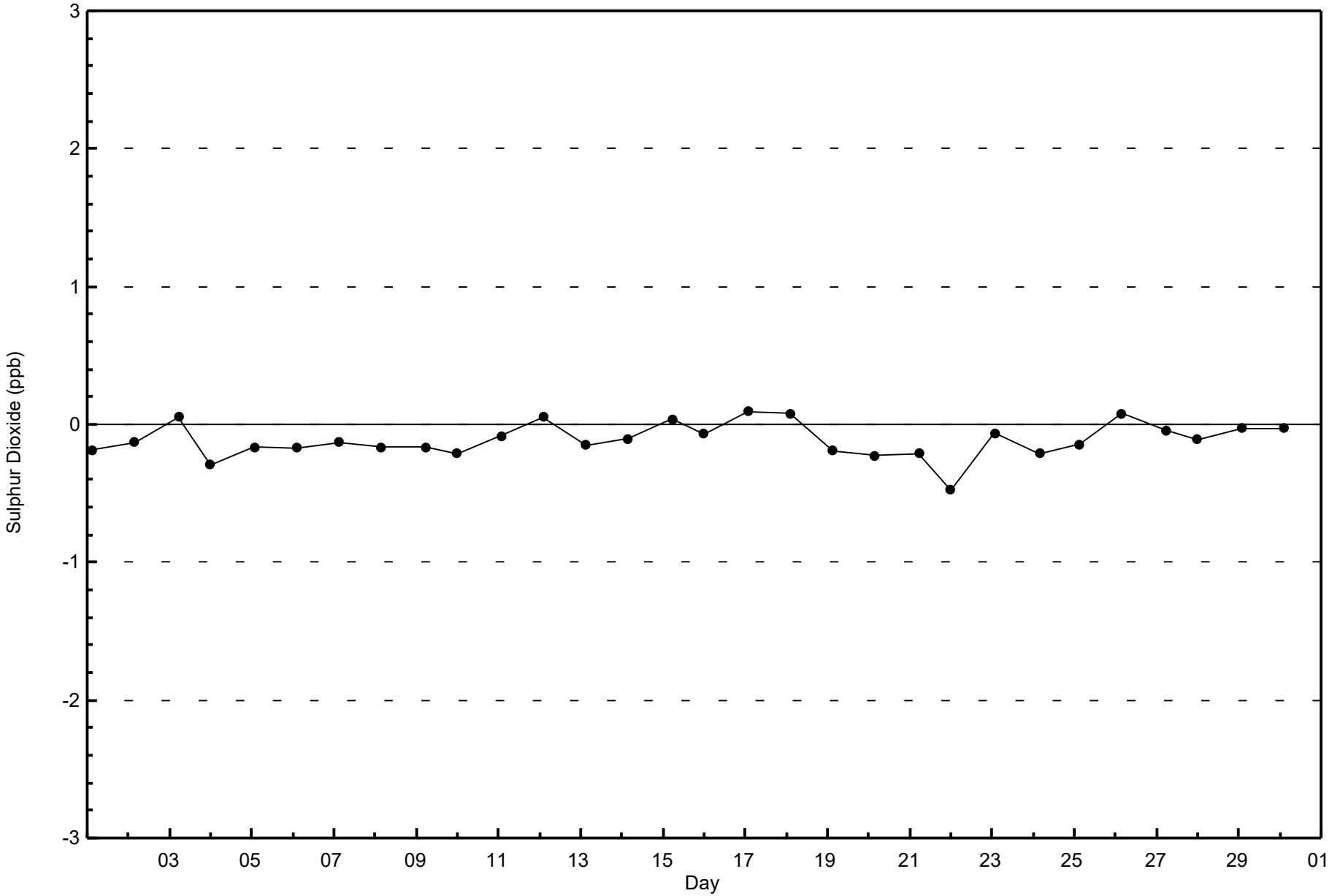
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Sawbones Bay - September 2026

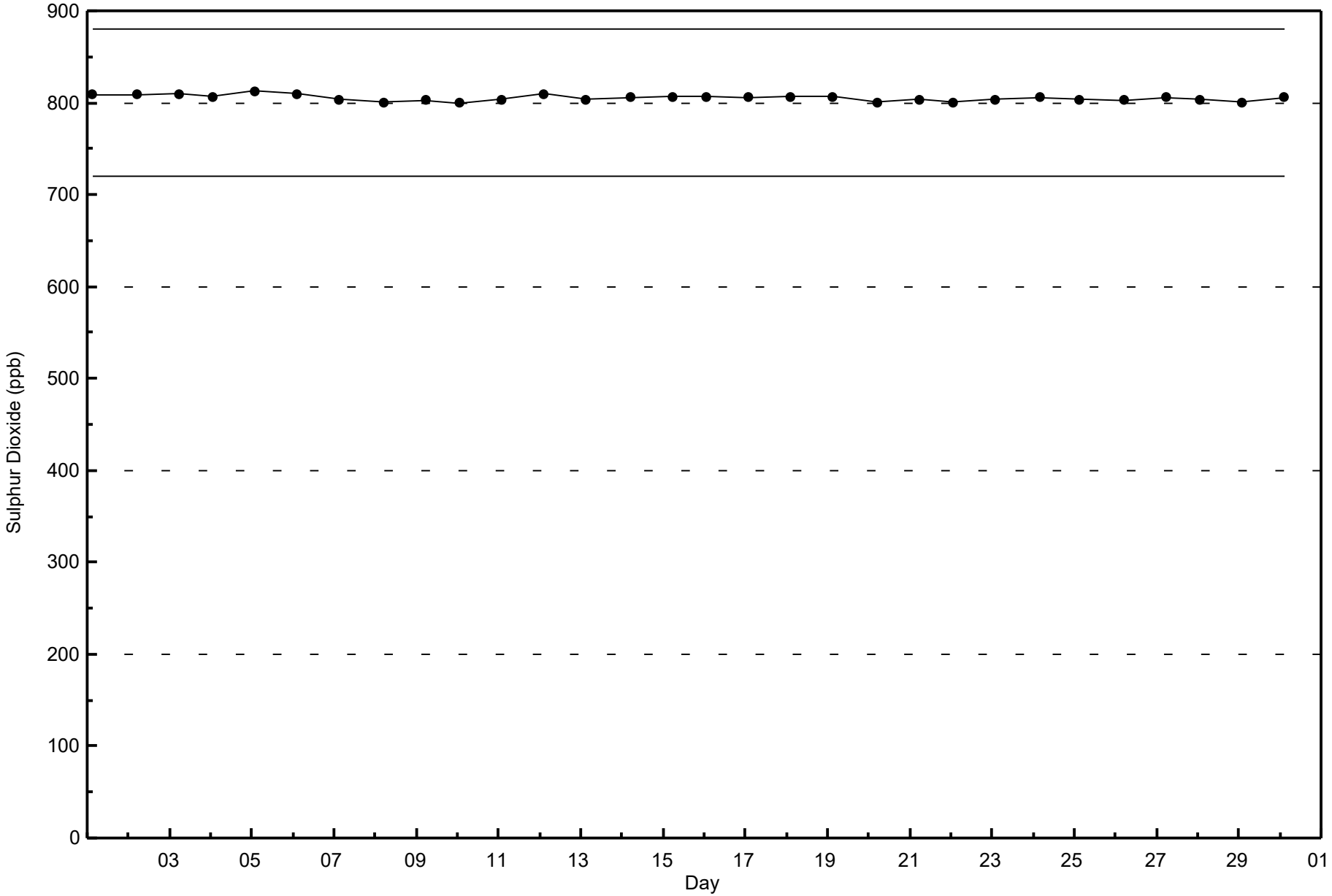


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Sawbones Bay - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H2S) - ppb

Sawbones Bay - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.4 ppb on Sep 30 07:00 Maximum Daily Average: 1.6 ppb on Sep 26

Minimum Value: 0.0 ppb on Sep 16 04:00 Minimum Daily Average: 0.1 ppb on Sep 7
Maximum Diurnal Average: 0.5 ppb at hour 1 Minimum Diurnal Average: 0.2 ppb at hour 18
Monthly Average: 0.30 ppb Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.7 P_{99} = 2.5

Hours in Service:	720
Hours of Data:	683
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-Sep	0.3	0.3	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
2-Sep	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
3-Sep	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
4-Sep	0.2	Z	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.4	0.9	0.4	0.4	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.3	0.9
5-Sep	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
6-Sep	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	0.1	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-Sep	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
8-Sep	0.1	0.1	0.1	0.1	0.1	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
9-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.4	0.2	0.3	0.1	0.1	0.2	0.4	0.7	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.9	0.2	0.9
10-Sep	1.7	Z	2.5	0.6	1.2	1.5	1.4	0.9	1.2	1.3	1.1	0.9	1.0	0.5	0.5	0.3	0.3	0.1	1.1	0.7	0.1	0.1	0.1	0.1	0.8	2.5
11-Sep	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	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.2
12-Sep	0.1	0.1	0.1	Z	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.4	0.4	0.2	0.3	0.3	0.1	0.6	0.4	0.1	0.1	0.2	0.3	0.2	0.2	0.6
13-Sep	0.2	0.2	0.2	0.2	Z	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3
14-Sep	0.1	0.2	0.2	0.1	0.1	Z	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	0.1	0.1	0.2	0.3	0.2	0.1	0.3
15-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.3	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.4	0.1	0.3	1.7	0.2	1.7
16-Sep	1.3	Z	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.0	C	C	C	C	C	C	0.3	0.2	0.1	0.1	0.1	0.0	0.0	--	1.3
17-Sep	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.4	0.7	0.4	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.7
18-Sep	0.2	0.5	0.3	Z	0.6	0.2	0.3	0.8	1.1	0.4	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	1.1
19-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20-Sep	0.1	0.1	0.1	0.1	0.1	Z	0.2	0.2	0.3	0.3	0.2	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	0.3
21-Sep	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	0.2	0.2	0.2	0.1	0.2
22-Sep	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.7	0.2	0.2	0.1	M	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.7
23-Sep	0.1	0.1	Z	0.2	0.1	0.1	0.2	0.2	0.3	0.5	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	0.8	0.2	0.8
24-Sep	3.3	2.7	0.9	2.0	Z	0.4	2.2	0.4	0.7	0.8	0.1	0.2	0.1	0.3	0.4	0.4	0.3	1.0	0.3	0.1	0.1	0.1	0.1	0.1	0.7	3.3
25-Sep	0.1	0.1	0.1	0.0	Z	0.1	0.1	0.1	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	0.1	0.1	1.5	0.1	1.5
26-Sep	0.1	0.2	0.4	0.9	2.2	Z	1.5	2.0	2.1	2.1	2.0	1.9	1.2	1.9	2.1	2.1	2.2	0.6	0.2	2.5	2.3	2.5	2.2	0.9	1.6	2.5
27-Sep	Z	2.3	0.8	0.4	0.3	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.5	1.1	1.8	1.6	1.2	0.1	0.1	0.1	0.0	0.1	0.2	0.2	0.5	2.3
28-Sep	0.2	Z	0.2	0.1	0.1	0.1	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	0.3
29-Sep	0.1	0.1	Z	0.1	0.4	1.5	0.3	0.2	0.7	0.8	0.3	1.5	1.3	1.9	1.0	0.6	0.5	0.3	1.6	0.4	0.7	0.9	3.1	2.9	0.9	3.1
30-Sep	3.3	3.4	1.1	Z	1.1	2.2	3.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2	2.4	0.1	0.1	0.8	3.4
	0.5	0.5	0.3	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.2	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	Diurnal Average	
	3.3	3.4	2.5	2.0	2.2	2.2	3.4	2.0	2.1	2.1	2.0	1.9	1.3	1.9	2.1	2.1	2.2	1.0	1.6	2.5	2.3	2.5	3.1	2.9	Diurnal Maximum	

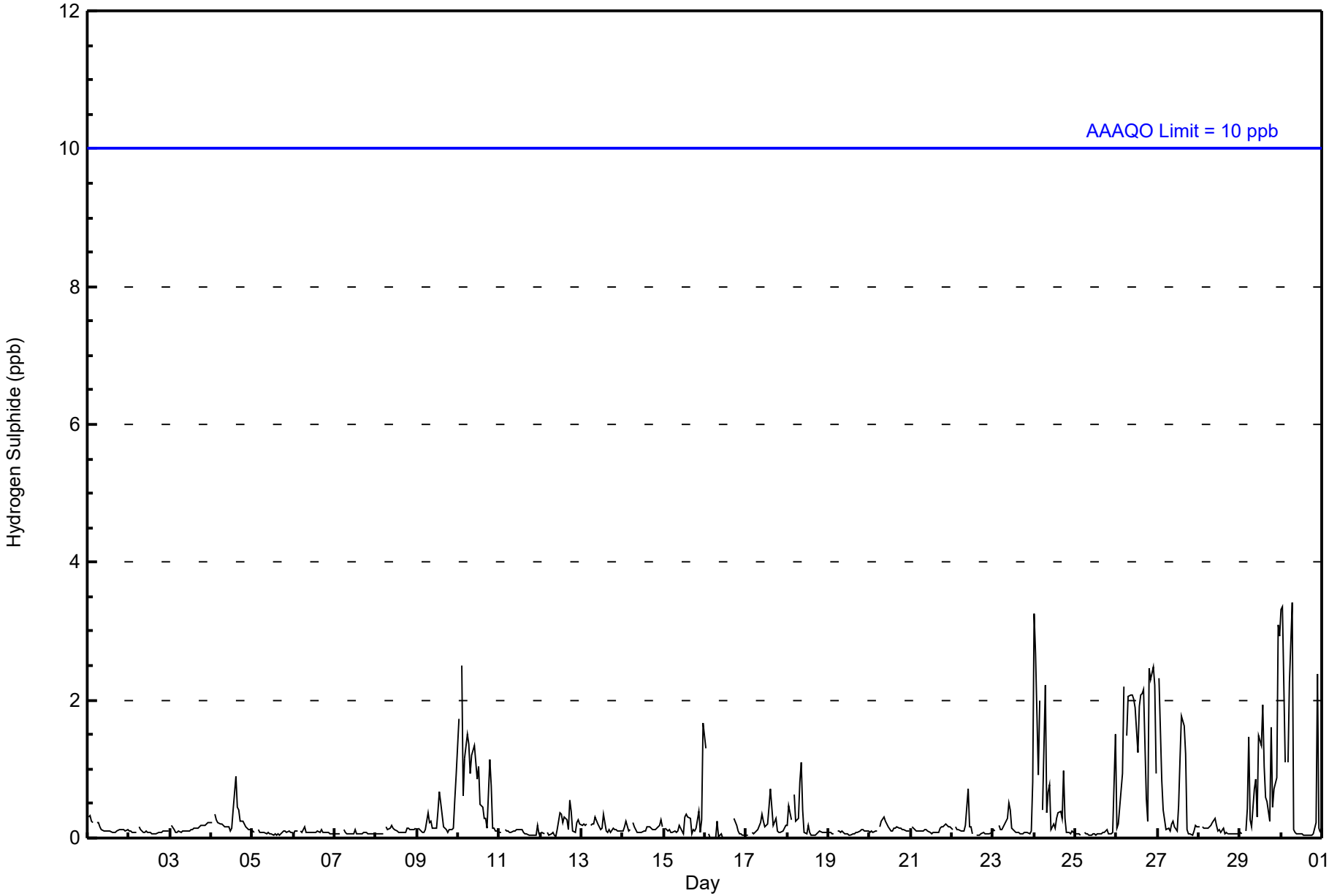
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H2S) - ppb

Sawbones Bay - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	675	98.83	98.83
3 - 4	8	1.17	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: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H2S) - ppb

Sawbones Bay - September 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	29	17	10	10	50	48	34	39	65	67	56	43	44	80	58	24	674
3 - 4	0	0	0	0	0	0	0	0	0	0	0	0	6	2	0	0	8
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	29	17	10	10	50	48	34	39	65	67	56	43	50	82	58	24	682

Total Number of Valid Hours: 682

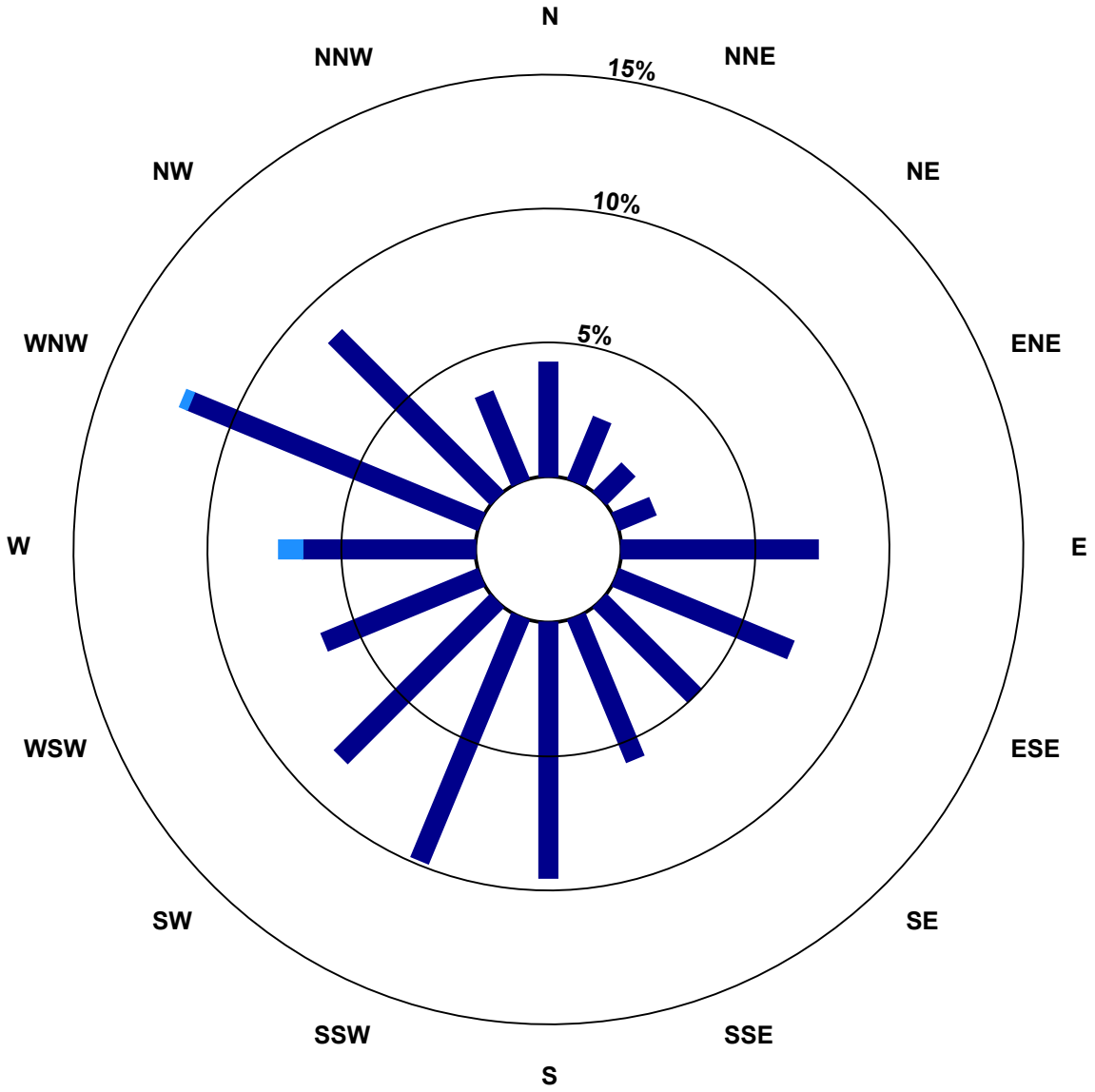
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H2S) - ppb

Sawbones Bay



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

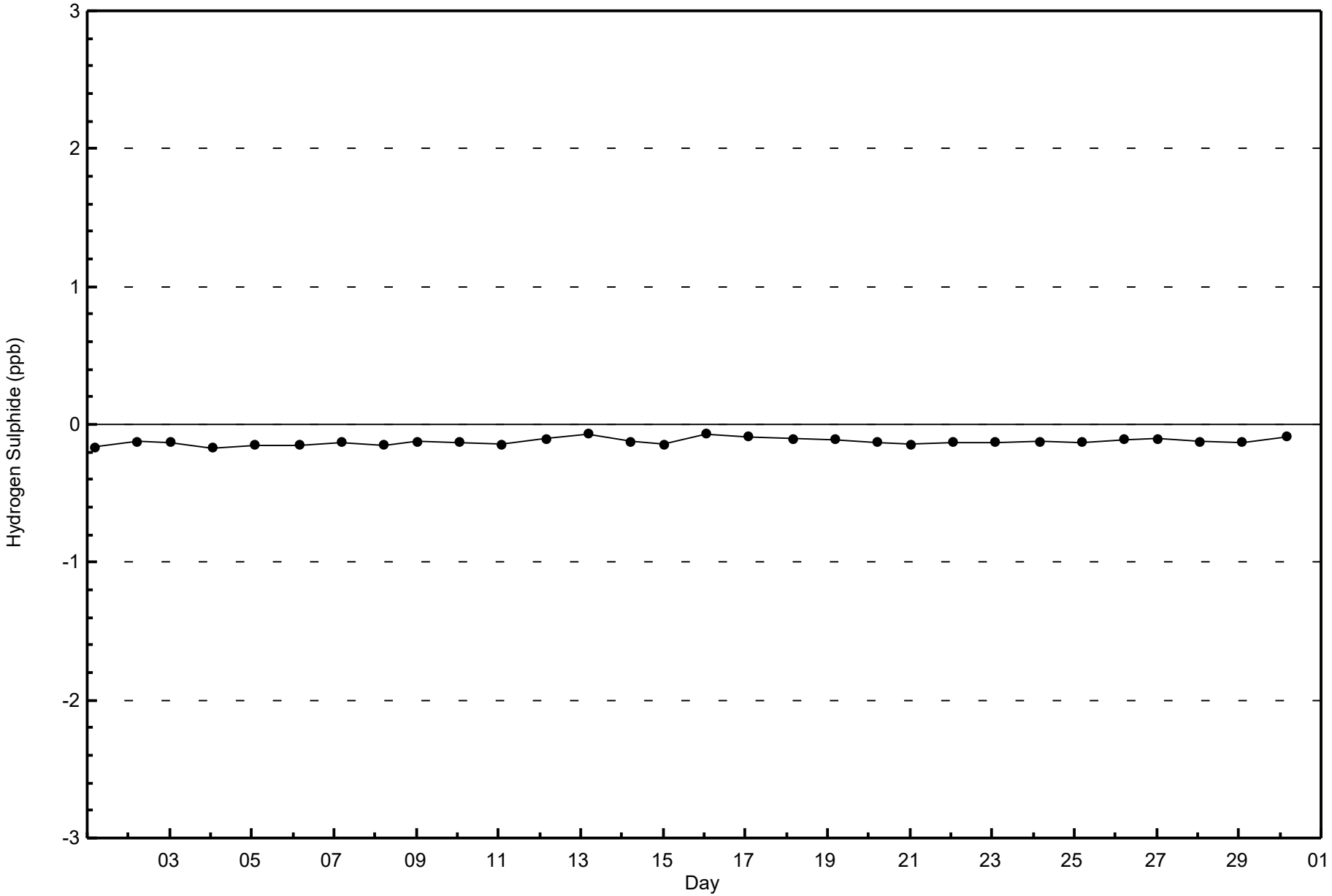
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H2S) - ppb

Sawbones Bay - September 2026

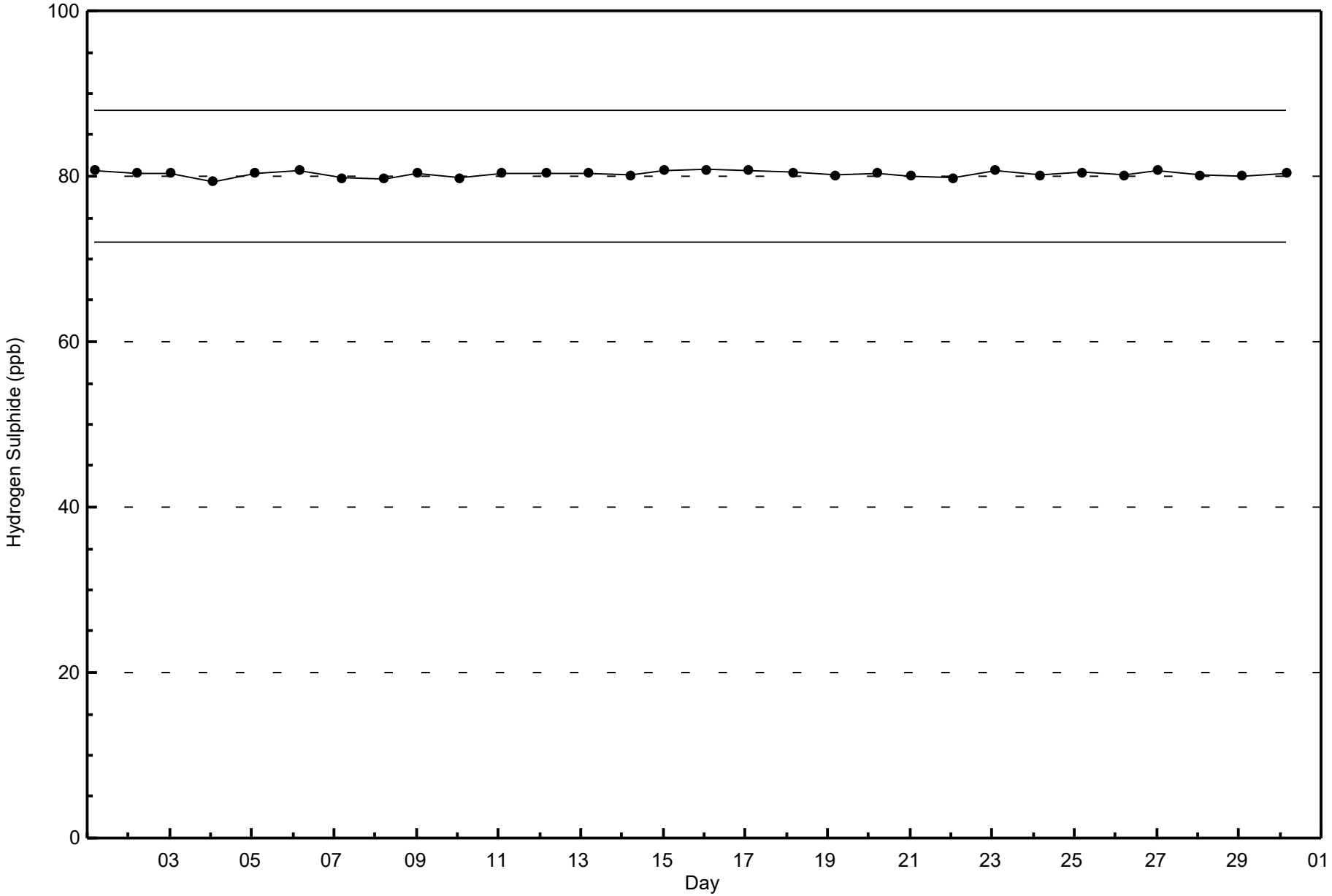


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H2S) - ppb

Sawbones Bay - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Sawbones Bay - September 2026

Maximum Value: 46.5 ppb on Sep 29 10:00

Maximum Daily Average: 8.5 ppb on Sep 29

Minimum Value: 0.0 ppb on Sep 2 20:00

Minimum Daily Average: 0.0 ppb on Sep 2

Maximum Diurnal Average: 3.0 ppb at hour 10

Minimum Diurnal Average: 0.3 ppb at hour 21

Monthly Average: 1.39 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.2 Q_3 = 1.2 P_{90} = 4.4 P_{99} = 13.4

Hours in Service:	720
Hours of Data:	684
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-Sep	0.3	Z	0.3	0.3	0.4	0.4	2.0	2.1	0.4	0.5	0.6	0.5	0.3	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.4	2.1
2-Sep	0.1	0.1	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	0.0	0.0	0.0	0.1
3-Sep	0.0	0.1	0.0	Z	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1
4-Sep	0.1	0.0	0.1	0.2	Z	0.2	0.3	0.6	0.4	0.4	0.6	0.3	0.3	2.0	2.2	3.1	2.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.6	3.1
5-Sep	0.0	0.1	0.0	0.1	0.1	Z	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	0.4	0.6	0.3	0.1	0.6
6-Sep	Z	0.4	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
7-Sep	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.0	17.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.8	17.1
8-Sep	0.1	0.1	Z	0.2	0.6	1.7	4.6	2.2	1.3	1.0	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.6	4.6
9-Sep	0.7	0.1	0.1	Z	0.4	0.7	1.0	2.5	1.8	1.3	2.3	3.0	6.6	7.8	6.5	3.3	2.2	0.2	0.0	0.3	0.3	0.7	5.6	3.9	2.2	7.8
10-Sep	5.8	3.5	2.7	0.6	Z	1.5	6.9	6.8	5.2	3.1	2.1	2.3	2.8	0.6	0.7	1.2	1.2	0.3	1.2	1.5	0.1	2.9	0.0	0.1	2.3	6.9
11-Sep	0.1	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.1	0.8
12-Sep	Z	2.1	0.6	0.6	2.3	0.6	3.4	2.1	0.3	0.1	1.0	1.7	2.1	1.2	1.7	0.8	0.2	1.0	1.1	0.1	0.3	0.5	0.2	0.3	1.1	3.4
13-Sep	0.4	Z	1.1	1.7	0.7	0.6	2.7	3.0	2.0	1.9	1.1	1.4	2.0	4.3	1.1	0.6	0.5	0.4	0.6	0.0	0.0	0.0	0.5	1.4	1.2	4.3
14-Sep	0.8	0.0	Z	0.4	0.1	1.2	0.5	0.1	0.0	0.0	0.1	0.1	0.2	0.1	0.2	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.2
15-Sep	0.0	0.0	0.0	Z	0.1	0.4	1.7	0.5	1.2	0.7	1.0	C	C	C	C	C	0.5	0.1	1.0	0.5	0.7	1.8	1.3	9.0	1.1	9.0
16-Sep	2.7	0.6	0.0	0.1	Z	0.5	2.3	1.6	0.5	0.7	0.6	3.8	1.6	1.5	0.6	0.2	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.8	3.8
17-Sep	0.0	0.0	0.0	0.0	0.0	Z	1.1	1.4	2.4	2.2	2.2	1.5	1.6	1.4	0.7	1.3	0.5	0.5	0.1	0.0	0.1	0.1	0.2	0.6	0.8	2.4
18-Sep	Z	1.5	0.6	1.1	2.9	1.3	15.2	14.9	9.7	2.3	0.3	0.1	0.3	0.2	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	2.2	15.2
19-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.2	2.2	0.7	0.4	0.3	0.4	0.3	0.2	0.3	0.6	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.3	2.2
20-Sep	0.1	0.4	Z	0.1	0.3	0.1	0.2	1.0	1.6	1.4	1.0	0.4	0.2	0.2	0.5	0.3	0.3	0.3	0.2	0.2	0.0	0.1	0.0	0.0	0.4	1.6
21-Sep	0.1	0.0	0.2	Z	0.1	0.0	0.2	0.8	0.7	0.9	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.9
22-Sep	0.2	0.1	0.2	0.2	Z	1.8	1.6	0.8	4.2	4.4	0.7	0.3	0.1	M	0.1	0.2	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.7	4.4
23-Sep	0.0	0.0	0.0	0.0	0.1	Z	6.1	4.0	5.7	4.7	2.1	0.5	0.6	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.3	0.8	0.8	0.8	1.2	6.1
24-Sep	Z	1.6	1.8	0.8	0.4	4.6	3.7	7.5	10.2	3.8	1.6	2.4	2.6	2.5	2.6	2.0	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	2.2	10.2
25-Sep	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	0.1	0.0	0.1	0.0	0.1	0.0	0.1	3.9	0.2	3.9
26-Sep	0.1	0.2	Z	6.8	13.1	12.0	12.2	11.4	10.2	7.6	6.7	5.2	2.7	4.5	4.9	4.1	4.9	0.9	0.6	4.4	2.8	8.4	8.6	6.2	6.0	13.1
27-Sep	10.7	8.8	6.7	Z	8.0	2.7	4.4	2.0	5.0	4.5	4.0	1.7	6.7	9.3	7.9	8.6	7.0	0.5	0.5	0.4	0.3	1.0	1.7	2.0	4.5	10.7
28-Sep	0.4	0.3	0.3	0.3	Z	0.8	0.9	1.6	2.4	1.3	1.1	1.2	1.6	0.6	1.4	0.7	0.7	0.5	0.2	0.1	0.0	0.1	0.0	0.0	0.7	2.4
29-Sep	0.0	0.0	0.0	0.0	6.2	Z	1.5	0.3	21.3	46.5	5.7	9.9	11.1	8.6	11.6	9.9	6.6	18.1	11.4	5.1	2.6	4.5	8.2	6.4	8.5	46.5
30-Sep	Z	6.9	4.0	4.1	9.4	15.5	5.1	0.4	0.3	0.1	0.1	0.4	0.2	0.3	0.1	0.1	0.0	0.0	0.0	0.6	1.0	1.0	0.1	0.1	2.2	15.5
	0.9	1.1	0.8	0.7	1.8	1.9	2.6	2.3	2.9	3.0	1.2	1.3	2.1	1.6	1.5	1.3	0.9	0.8	0.6	0.5	0.3	0.8	1.0	1.2	Diurnal Average	
	10.7	8.8	6.7	6.8	13.1	15.5	15.2	14.9	21.3	46.5	6.7	9.9	17.1	9.3	11.6	9.9	7.0	18.1	11.4	5.1	2.8	8.4	8.6	9.0	Diurnal Maximum	

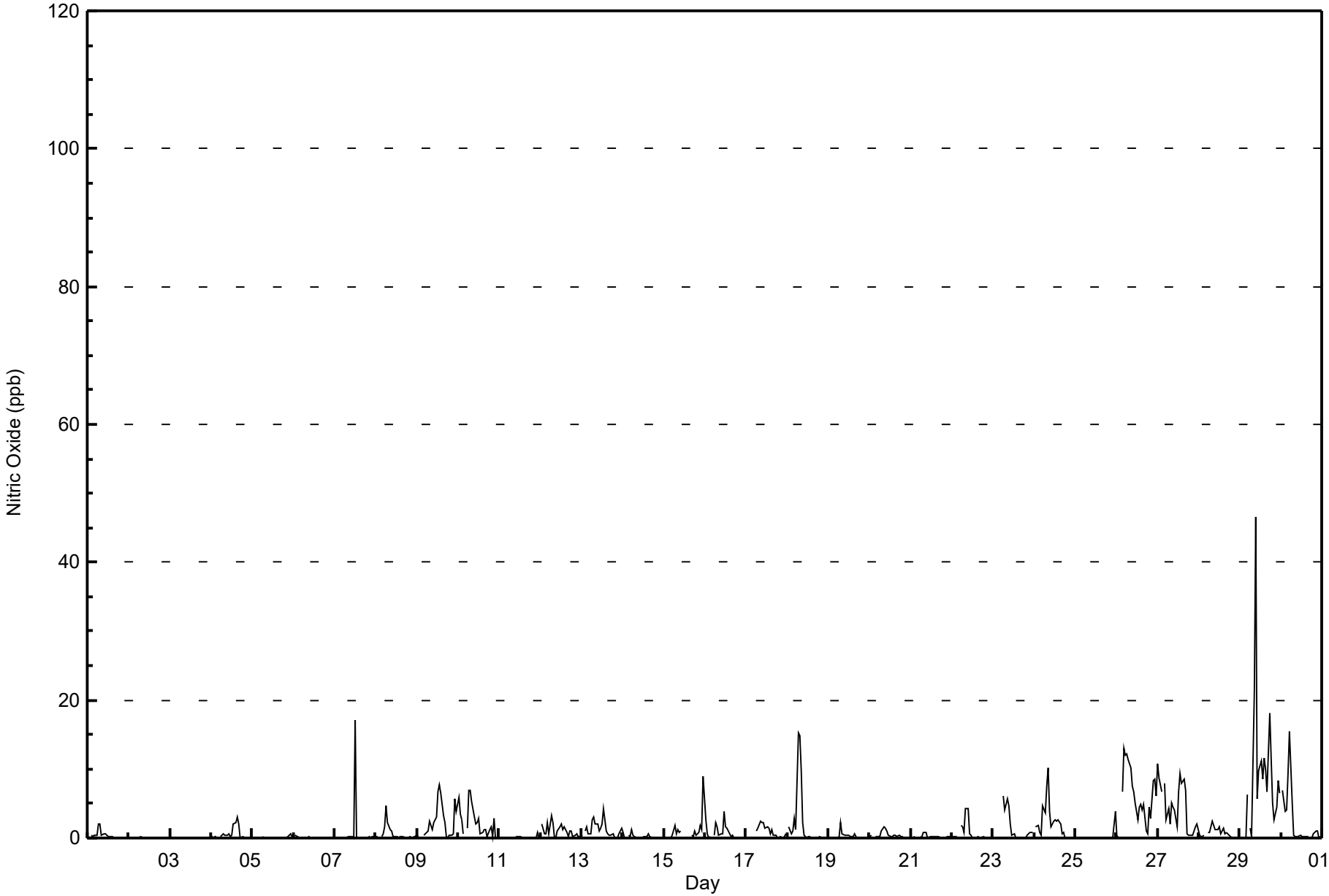
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Sawbones Bay - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	682	99.71	99.71
21 - 40	1	0.15	99.85
11 - 80	1	0.15	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

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	17	11	10	51	46	36	38	67	67	56	41	48	78	58	24	677
21 - 40	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
11 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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	29	17	11	10	51	46	36	38	67	67	56	41	49	79	58	24	679

Total Number of Valid Hours: 679

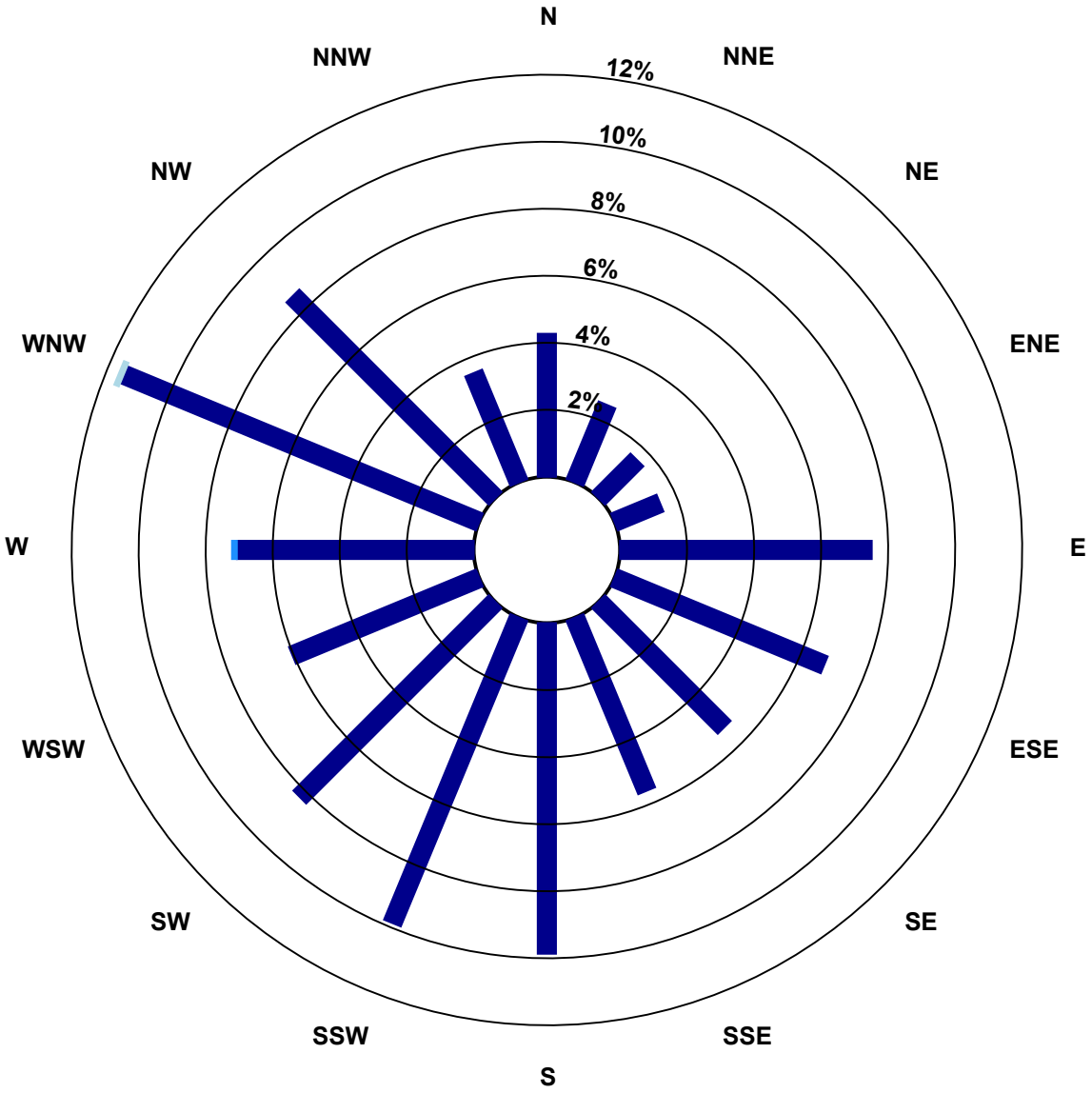
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Sawbones Bay



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

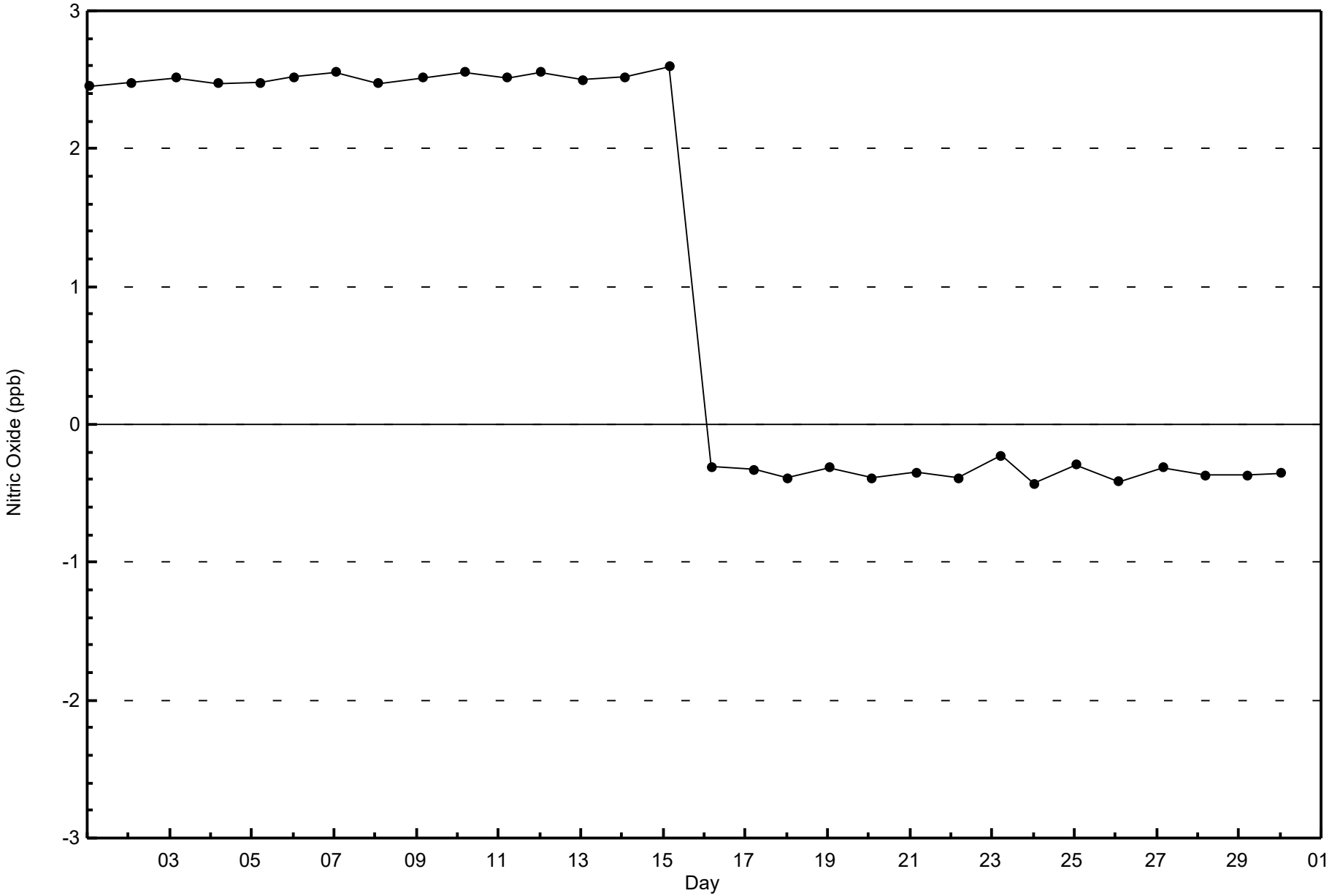
Total Number of Valid Hours: 679

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Sawbones Bay - September 2026

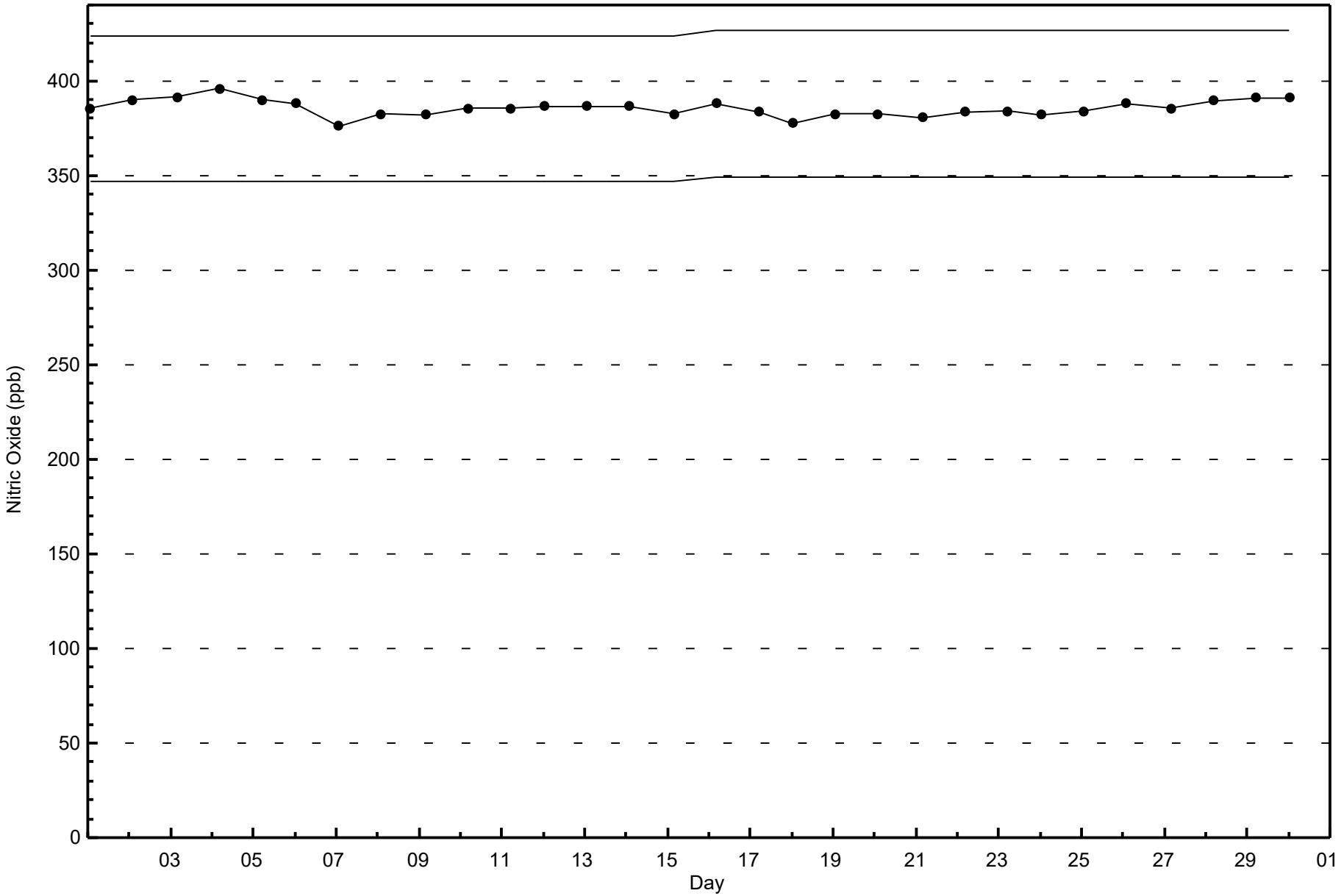


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Sawbones Bay - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Sawbones Bay - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 20.2 ppb on Sep 29 10:00
Maximum Daily Average: 8.6 ppb on Sep 29

Minimum Value: 0.0 ppb on Sep 1 18:00
Minimum Daily Average: 0.3 ppb on Sep 2
Maximum Diurnal Average: 4.0 ppb at hour 7
Minimum Diurnal Average: 1.7 ppb at hour 20
Monthly Average: 2.52 ppb
Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.4 Median = 1.6 Q_3 = 3.4 P_{90} = 6.1 P_{99} = 12.9

Hours in Service:	720
Hours of Data:	684
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-Sep	2.9	Z	2.2	1.1	1.4	1.3	2.5	2.9	0.8	1.4	1.8	1.7	1.1	0.7	0.5	0.2	0.1	0.0	0.1	0.2	0.2	0.2	0.2	0.2	1.0	2.9
2-Sep	0.2	0.2	Z	0.4	0.3	0.4	0.4	0.5	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.5
3-Sep	0.2	0.2	0.3	Z	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3
4-Sep	0.3	0.4	0.5	0.9	Z	0.8	0.7	1.3	1.5	1.6	1.7	1.0	1.2	4.1	4.0	5.3	5.3	1.1	1.2	1.0	1.2	0.7	0.5	0.9	1.6	5.3
5-Sep	0.7	0.6	0.6	0.4	0.2	Z	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.0	0.1	0.2	0.7	1.5	1.3	0.4	1.5
6-Sep	Z	1.2	0.7	0.5	0.1	0.1	0.0	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.1	0.2	0.3	0.2	0.0	0.2	0.3	1.2
7-Sep	0.3	Z	0.6	0.2	0.2	0.2	0.2	0.3	0.5	0.9	0.5	0.2	0.7	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.9
8-Sep	0.3	0.9	Z	1.3	2.4	4.7	5.7	3.0	1.7	1.9	1.0	0.8	0.6	0.6	0.6	0.9	0.8	0.5	0.8	1.0	2.1	1.4	1.0	1.2	1.5	5.7
9-Sep	2.5	0.9	1.0	Z	3.2	4.4	3.5	3.5	2.8	1.9	2.9	3.6	7.5	8.7	8.9	5.2	4.2	1.6	0.9	3.2	3.3	3.4	10.5	9.8	4.2	10.5
10-Sep	12.9	9.3	7.3	2.3	Z	4.2	13.0	11.8	7.6	4.5	3.5	4.0	4.6	1.2	1.8	2.3	2.7	1.1	1.8	2.0	0.5	2.5	0.4	0.3	4.4	13.0
11-Sep	0.4	0.3	0.3	0.3	0.2	Z	0.4	0.3	0.2	0.3	0.5	0.4	0.6	0.6	0.5	0.3	0.3	0.3	0.3	0.2	0.2	0.6	3.4	2.1	0.6	3.4
12-Sep	Z	2.4	2.5	1.4	2.7	2.8	5.0	3.1	0.9	0.4	1.3	2.3	3.2	2.1	3.1	2.0	0.9	3.2	4.3	2.2	3.2	3.7	2.6	3.3	2.5	5.0
13-Sep	3.4	Z	5.0	5.5	3.9	3.9	5.2	4.9	3.5	3.6	2.6	2.9	3.6	6.4	2.5	1.9	1.9	2.2	4.3	1.2	1.2	1.7	2.9	5.3	3.5	6.4
14-Sep	3.9	2.3	Z	2.8	3.2	4.1	2.5	1.7	0.5	0.2	0.4	0.4	0.6	0.8	0.9	1.3	1.0	0.9	0.8	1.3	0.9	1.0	1.8	1.7	1.5	4.1
15-Sep	1.3	1.6	0.7	Z	0.9	1.4	2.2	0.9	1.5	0.9	1.1	C	C	C	C	C	1.2	1.2	3.6	2.2	2.3	3.7	3.5	10.8	2.3	10.8
16-Sep	5.9	2.3	1.1	2.0	Z	3.7	4.5	3.4	1.7	2.2	1.6	4.0	2.2	2.3	1.3	0.6	1.7	1.2	0.7	0.6	0.4	0.2	0.2	0.1	1.9	5.9
17-Sep	0.3	0.5	0.7	1.3	2.1	Z	5.0	4.3	4.2	4.3	4.2	3.3	3.5	2.7	1.8	3.3	2.1	2.5	2.7	1.5	0.9	0.9	2.4	5.9	2.6	5.9
18-Sep	Z	5.2	3.6	4.6	4.4	3.4	6.5	6.5	6.4	2.7	0.9	0.3	0.6	0.6	0.1	0.1	0.1	0.1	0.1	1.0	1.7	0.9	0.8	1.1	2.2	6.5
19-Sep	0.8	Z	1.8	0.9	3.5	4.5	4.6	3.8	2.4	1.4	1.2	1.1	1.1	0.8	0.9	1.7	0.9	1.0	0.9	1.3	2.1	1.9	1.6	1.6	1.8	4.6
20-Sep	2.0	2.9	Z	2.0	3.1	2.3	2.4	4.2	4.9	4.1	3.2	1.7	0.8	0.9	2.0	2.1	2.0	3.6	3.2	3.5	3.2	2.2	2.4	1.7	2.6	4.9
21-Sep	1.8	1.5	4.7	Z	2.4	2.3	3.1	3.1	2.6	3.3	1.3	0.9	0.9	1.0	1.2	1.4	1.2	1.1	1.4	1.5	1.8	1.6	3.7	5.2	2.1	5.2
22-Sep	3.2	1.2	2.2	3.1	Z	4.7	4.0	1.6	6.1	5.3	1.8	1.3	0.4	M	0.3	0.7	0.2	0.4	2.0	1.7	1.5	0.6	1.0	1.8	2.1	6.1
23-Sep	2.6	3.9	2.9	2.7	2.9	Z	7.1	6.1	5.6	6.3	5.3	3.1	2.1	0.7	0.8	0.4	0.3	0.3	0.3	0.8	2.3	3.8	2.8	3.4	2.9	7.1
24-Sep	Z	5.3	4.4	3.5	2.7	7.9	7.7	9.3	11.1	5.3	2.9	4.5	4.5	4.9	5.1	4.6	3.2	6.9	2.9	1.6	1.2	1.3	3.2	1.1	4.6	11.1
25-Sep	0.4	Z	0.4	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.3	0.2	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.1	0.2	0.2	4.6	0.4	4.6
26-Sep	1.3	1.7	Z	5.9	9.4	9.7	10.3	9.9	8.9	7.5	6.8	5.4	3.3	5.2	5.4	4.7	6.0	1.9	1.1	7.4	5.0	12.4	12.7	9.9	6.6	12.7
27-Sep	10.8	9.4	7.6	Z	7.8	3.4	4.8	2.3	4.1	3.9	3.1	1.7	6.1	8.9	8.6	10.5	10.2	1.9	2.1	1.7	1.6	4.1	6.7	7.8	5.6	10.8
28-Sep	4.7	3.0	3.0	3.6	Z	4.4	4.6	4.9	4.6	2.8	2.4	2.5	2.8	1.8	3.2	1.9	2.3	3.8	3.0	3.1	1.6	1.1	1.8	1.8	3.0	4.9
29-Sep	2.0	2.1	3.2	1.9	7.3	Z	6.5	4.1	13.8	20.2	5.0	8.8	10.4	8.0	8.4	8.5	7.5	13.4	11.5	7.3	8.3	10.3	16.9	13.1	8.6	20.2
30-Sep	Z	12.9	7.6	8.9	12.4	16.9	7.6	1.5	0.9	0.5	0.4	0.9	0.5	0.7	0.4	0.3	0.2	0.1	0.2	2.0	2.7	3.8	2.6	3.3	3.8	16.9
	2.6	2.9	2.6	2.3	3.1	3.7	4.0	3.3	3.3	3.0	1.9	2.0	2.2	2.3	2.2	2.1	1.9	1.7	1.7	1.7	1.7	2.2	2.9	3.3	Diurnal Average	
	12.9	12.9	7.6	8.9	12.4	16.9	13.0	11.8	13.8	20.2	6.8	8.8	10.4	8.9	8.9	10.5	10.2	13.4	11.5	7.4	8.3	12.4	16.9	13.1	Diurnal Maximum	

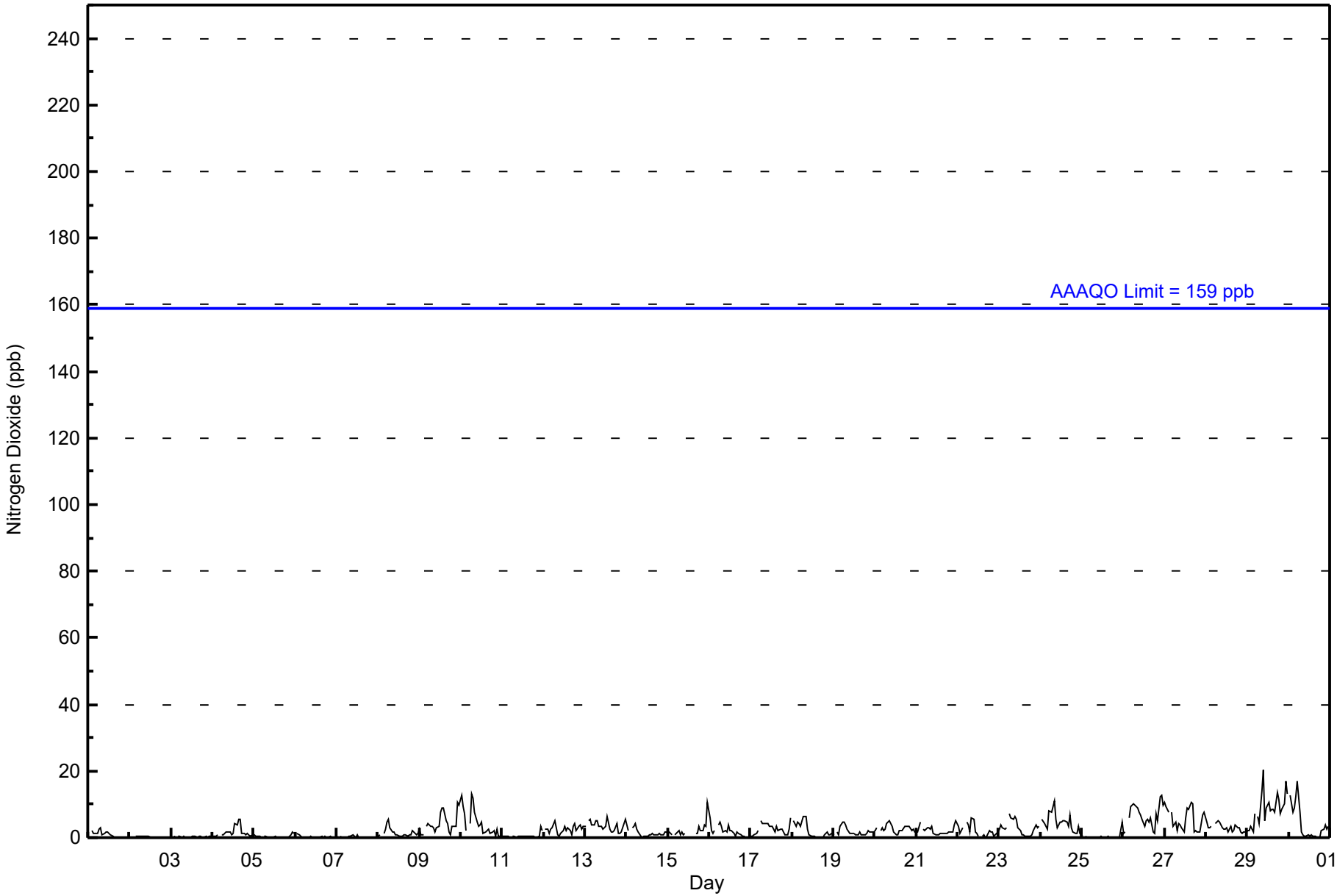
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Sawbones Bay - September 2026



Nitrogen Dioxide (NO_2) - ppb
Sawbones Bay - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Sawbones Bay - September 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	17	11	10	51	46	36	38	67	67	56	41	49	79	58	24	679
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	29	17	11	10	51	46	36	38	67	67	56	41	49	79	58	24	679

Total Number of Valid Hours: 679

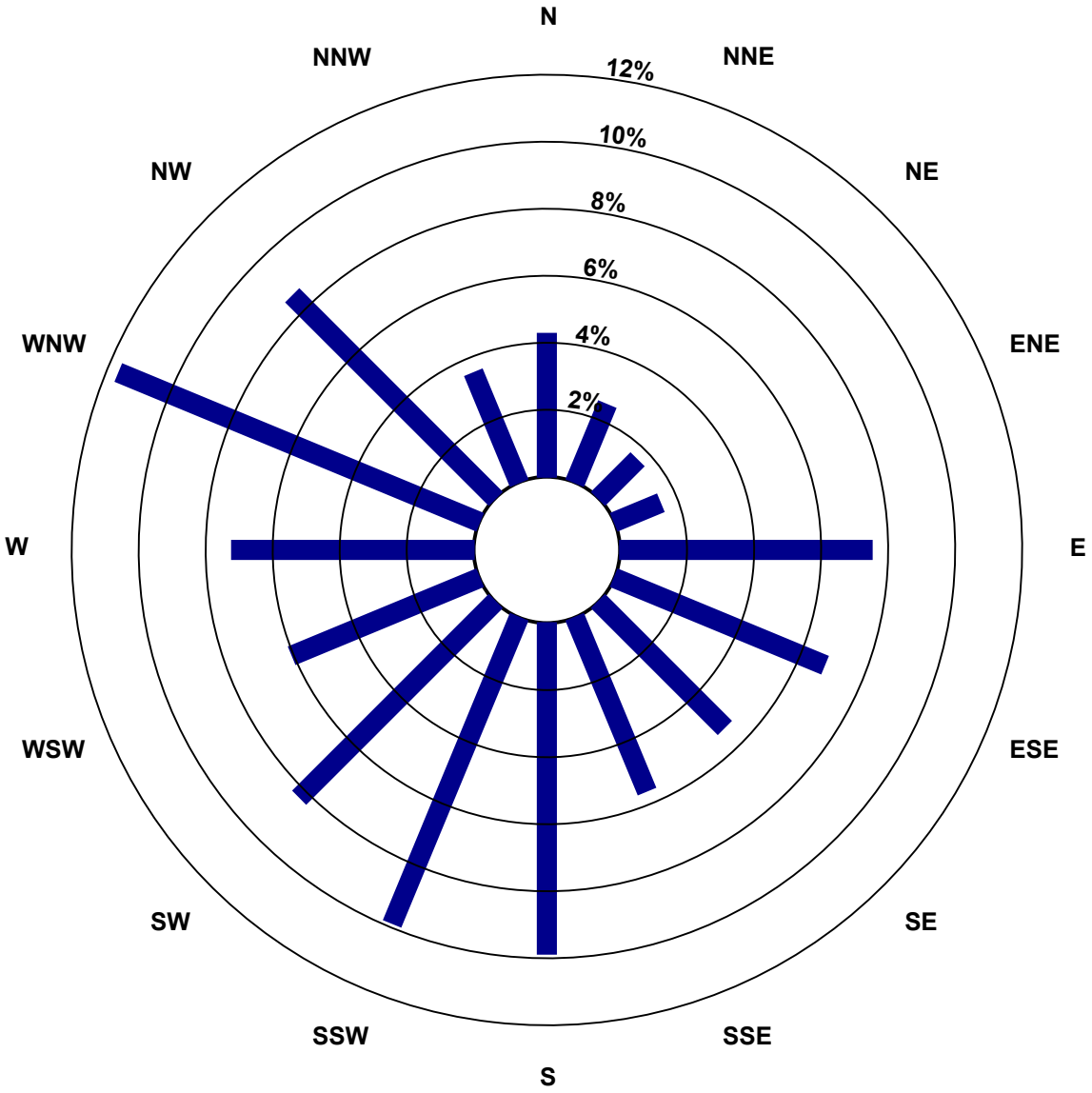
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Sawbones Bay



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

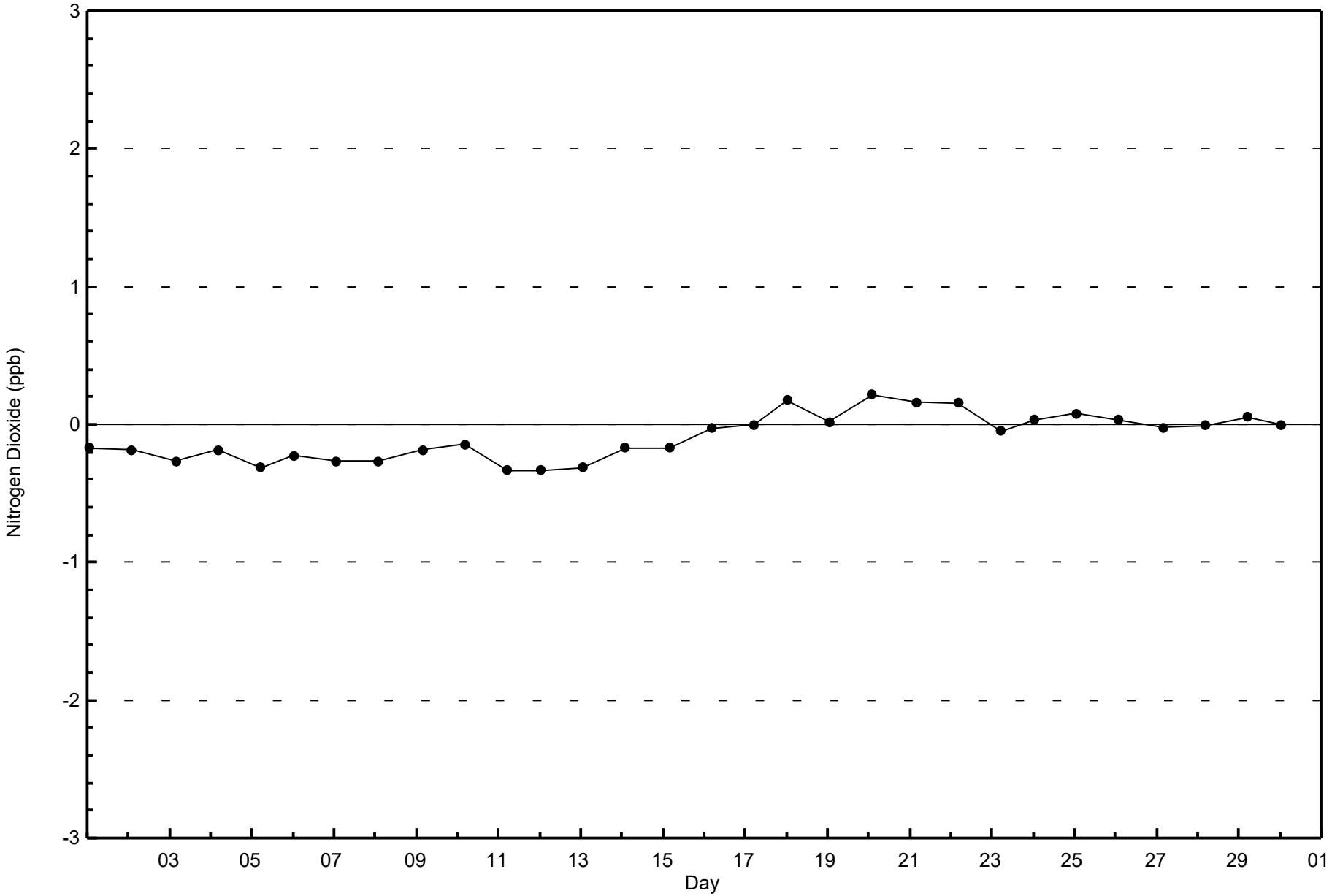
Total Number of Valid Hours: 679

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Sawbones Bay - September 2026

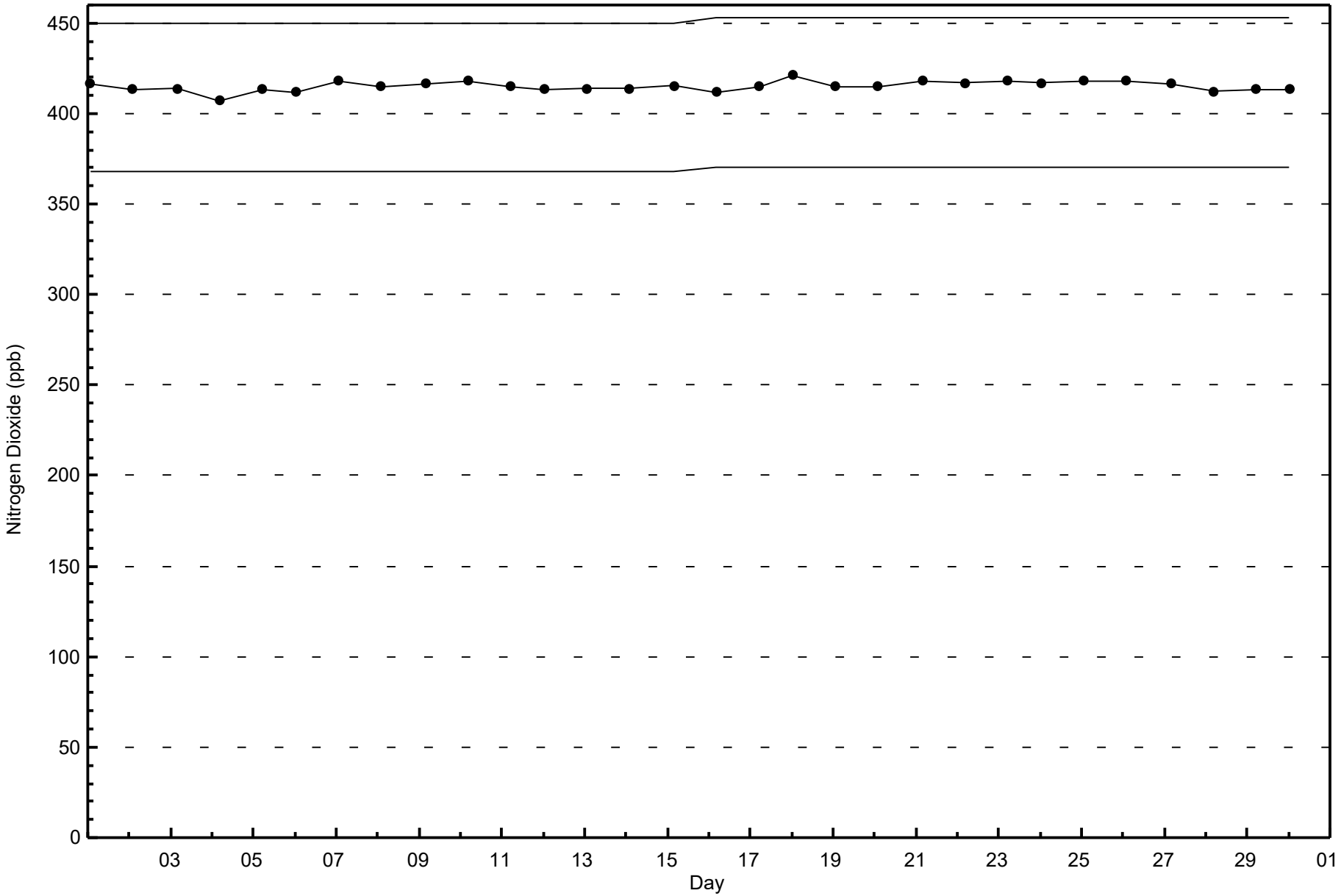


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Sawbones Bay - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Sawbones Bay - September 2026

Maximum Value: 66.7 ppb on Sep 29 10:00

Maximum Daily Average: 17.1 ppb on Sep 29

Minimum Value: 0.0 ppb on Sep 5 19:00

Minimum Daily Average: 0.3 ppb on Sep 2

Maximum Diurnal Average: 6.6 ppb at hour 7

Minimum Diurnal Average: 2.0 ppb at hour 21

Monthly Average: 3.91 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.5$ Median = 1.8 $Q_3 = 4.6$ $P_{90} = 10.5$ $P_{99} = 22.5$

Hours in Service:	720
Hours of Data:	684
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-Sep	3.2	Z	2.5	1.4	1.8	1.7	4.5	5.0	1.2	1.9	2.4	2.2	1.4	0.8	0.6	0.3	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	1.4	5.0
2-Sep	0.3	0.3	Z	0.5	0.4	0.4	0.5	0.6	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.6
3-Sep	0.2	0.3	0.3	Z	0.4	0.3	0.2	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	0.3	0.3	0.4	0.4	0.3	0.4
4-Sep	0.4	0.4	0.6	1.1	Z	1.0	1.0	1.9	1.9	2.0	2.3	1.3	1.5	6.1	6.2	8.4	7.3	1.2	1.3	1.1	1.3	0.8	0.6	1.0	2.2	8.4
5-Sep	0.7	0.7	0.6	0.5	0.3	Z	0.5	0.4	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.0	0.1	0.2	1.1	2.1	1.6	0.5	2.1
6-Sep	Z	1.6	0.8	0.6	0.1	0.1	0.1	0.2	0.3	0.5	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.1	0.2	0.3	0.2	0.0	0.2	0.3	1.6
7-Sep	0.3	Z	0.7	0.3	0.3	0.3	0.3	0.4	0.6	1.0	0.7	0.2	17.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	1.1	17.8
8-Sep	0.4	1.0	Z	1.5	3.0	6.4	10.3	5.2	3.0	2.9	1.2	0.9	0.7	0.7	0.7	1.0	0.9	0.5	0.8	1.0	2.2	1.4	1.1	1.4	2.1	10.3
9-Sep	3.2	1.0	1.1	Z	3.6	5.1	4.5	6.0	4.6	3.2	5.2	6.6	14.1	16.5	15.4	8.5	6.4	1.8	0.9	3.5	3.6	4.1	16.1	13.7	6.5	16.5
10-Sep	18.7	12.8	10.0	2.9	Z	5.7	19.9	18.6	12.8	7.6	5.6	6.3	7.4	1.8	2.5	3.5	3.9	1.4	3.0	3.5	0.6	5.4	0.4	0.4	6.7	19.9
11-Sep	0.5	0.3	0.3	0.3	0.2	Z	0.4	0.3	0.3	0.4	0.7	0.6	0.7	0.7	0.6	0.4	0.3	0.3	0.3	0.2	0.2	0.6	4.2	2.1	0.6	4.2
12-Sep	Z	4.5	3.1	2.0	5.0	3.4	8.4	5.2	1.2	0.5	2.3	4.0	5.3	3.3	4.8	2.8	1.1	4.2	5.4	2.3	3.5	4.2	2.8	3.6	3.6	8.4
13-Sep	3.8	Z	6.1	7.2	4.6	4.5	7.9	7.9	5.5	5.5	3.7	4.3	5.6	10.7	3.6	2.5	2.4	2.6	4.9	1.2	1.2	1.7	3.4	6.7	4.7	10.7
14-Sep	4.7	2.3	Z	3.2	3.3	5.3	3.0	1.8	0.5	0.2	0.5	0.5	0.8	0.9	1.1	1.9	1.2	0.9	0.8	1.3	0.9	1.0	1.8	1.7	1.7	5.3
15-Sep	1.3	1.6	0.7	Z	1.0	1.8	3.9	1.4	2.7	1.6	2.1	C	C	C	C	C	1.7	1.3	4.6	2.7	3.0	5.5	4.8	19.8	3.4	19.8
16-Sep	8.6	2.9	1.1	2.1	Z	4.2	6.8	5.0	2.2	2.9	2.2	7.8	3.8	3.8	1.9	0.8	2.2	1.3	0.7	0.6	0.4	0.2	0.2	0.1	2.7	8.6
17-Sep	0.3	0.5	0.7	1.3	2.1	Z	6.1	5.7	6.6	6.5	6.4	4.8	5.1	4.1	2.5	4.6	2.6	3.0	2.8	1.5	1.0	1.0	2.6	6.5	3.4	6.6
18-Sep	Z	6.7	4.2	5.7	7.3	4.7	21.7	21.4	16.1	5.0	1.2	0.4	0.9	0.8	0.1	0.2	0.1	0.1	0.1	1.3	1.7	0.9	0.8	1.1	4.5	21.7
19-Sep	0.8	Z	1.8	0.9	3.5	4.5	4.8	6.0	3.1	1.8	1.5	1.5	1.4	1.0	1.2	2.3	1.0	1.0	0.9	1.4	2.1	1.9	1.6	1.7	2.1	6.0
20-Sep	2.1	3.3	Z	2.1	3.4	2.4	2.6	5.2	6.5	5.5	4.2	2.1	1.0	1.1	2.5	2.4	2.3	3.9	3.4	3.7	3.2	2.3	2.4	1.7	3.0	6.5
21-Sep	1.9	1.5	4.9	Z	2.5	2.3	3.3	3.9	3.3	4.2	1.4	1.0	1.0	1.1	1.3	1.6	1.3	1.2	1.4	1.5	1.9	1.7	3.8	5.4	2.3	5.4
22-Sep	3.4	1.3	2.4	3.3	Z	6.5	5.6	2.4	10.3	9.7	2.5	1.6	0.5	M	0.4	0.9	0.2	0.4	2.2	1.8	1.5	0.6	1.0	1.8	2.7	10.3
23-Sep	2.6	3.9	2.9	2.7	3.0	Z	13.2	10.1	11.3	11.0	7.4	3.6	2.7	0.8	0.9	0.4	0.3	0.3	0.4	0.9	2.6	4.6	3.6	4.2	4.1	13.2
24-Sep	Z	6.9	6.2	4.3	3.1	12.5	11.4	16.8	21.3	9.1	4.5	6.9	7.1	7.4	7.7	6.6	3.9	7.8	2.9	1.6	1.2	1.3	3.2	1.1	6.7	21.3
25-Sep	0.4	Z	0.4	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	8.5	0.6	8.5
26-Sep	1.4	1.9	Z	12.7	22.5	21.7	22.5	21.3	19.1	15.1	13.5	10.6	6.0	9.7	10.3	8.8	10.9	2.8	1.7	11.8	7.8	20.8	21.3	16.1	12.6	22.5
27-Sep	21.5	18.2	14.3	Z	15.8	6.1	9.2	4.3	9.1	8.4	7.1	3.4	12.8	18.2	16.5	19.1	17.2	2.4	2.6	2.1	1.9	5.1	8.4	9.8	10.2	21.5
28-Sep	5.1	3.3	3.3	3.9	Z	5.2	5.5	6.5	7.0	4.1	3.5	3.7	4.4	2.4	4.6	2.6	3.0	4.3	3.2	3.2	1.6	1.2	1.8	1.8	3.7	7.0
29-Sep	2.0	2.1	3.2	1.9	13.5	Z	8.0	4.4	35.1	66.7	10.7	18.7	21.5	16.6	20.0	18.4	14.1	31.5	22.9	12.4	10.9	14.8	25.1	19.5	17.1	66.7
30-Sep	Z	19.8	11.6	13.0	21.8	32.4	12.7	1.9	1.2	0.6	0.5	1.3	0.7	1.0	0.5	0.4	0.2	0.1	0.2	2.6	3.7	4.8	2.7	3.4	6.0	32.4
	3.5	4.0	3.3	3.0	4.9	5.5	6.6	5.7	6.3	6.0	3.2	3.3	4.3	4.0	3.7	3.4	2.9	2.5	2.3	2.2	2.0	3.0	3.9	4.5	Diurnal Average	
	21.5	19.8	14.3	13.0	22.5	32.4	22.5	21.4	35.1	66.7	13.5	18.7	21.5	18.2	20.0	19.1	17.2	31.5	22.9	12.4	10.9	20.8	25.1	19.8	Diurnal Maximum	

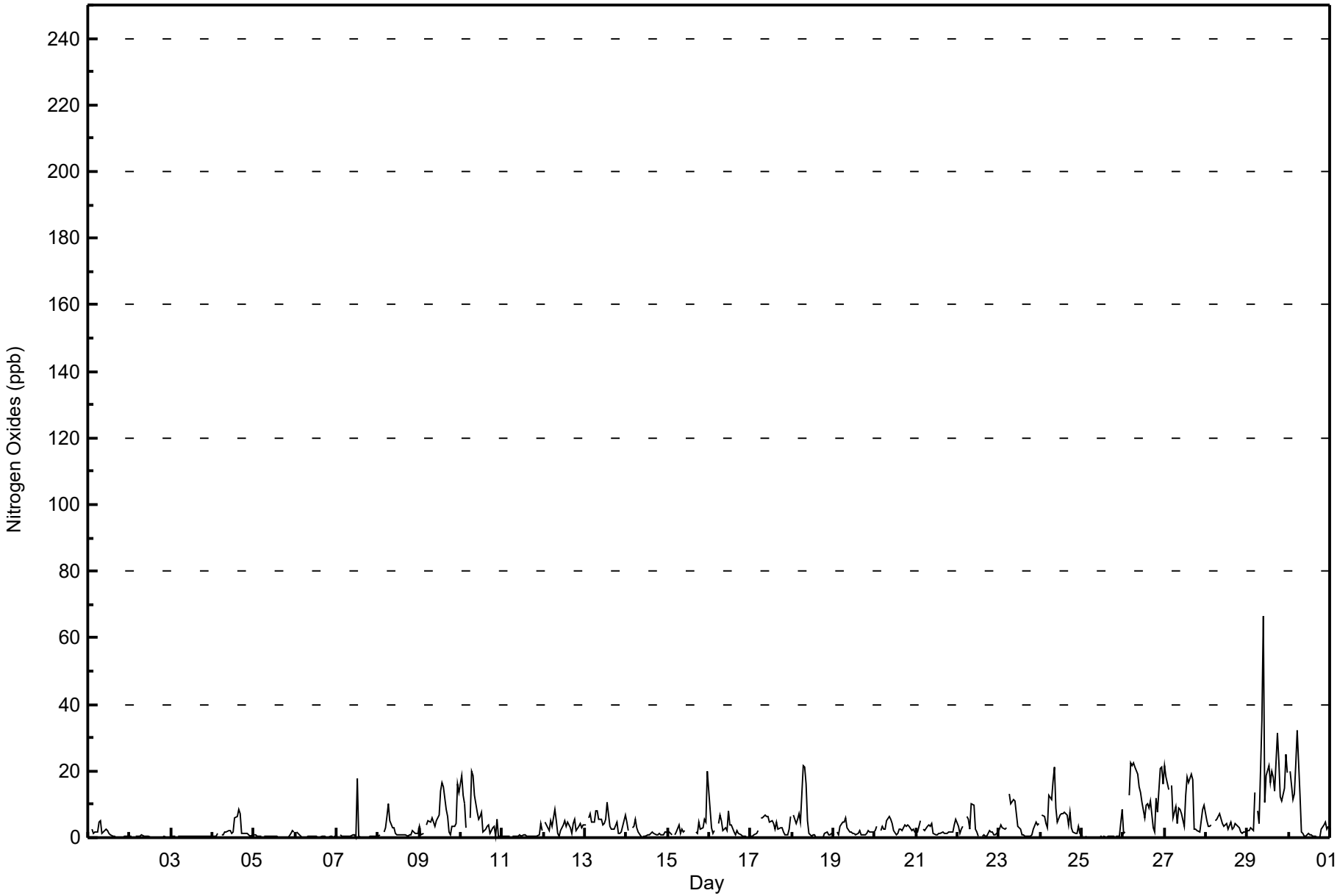
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Sawbones Bay - September 2026



Nitrogen Oxides (NO_X) - ppb
Sawbones Bay - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	666	97.37	97.37
21 - 40	17	2.49	99.85
11 - 80	1	0.15	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Sawbones Bay - September 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	17	11	10	51	46	36	38	67	66	56	40	38	74	58	24	661
21 - 40	0	0	0	0	0	0	0	0	0	1	0	1	11	4	0	0	17
11 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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	29	17	11	10	51	46	36	38	67	67	56	41	49	79	58	24	679

Total Number of Valid Hours: 679

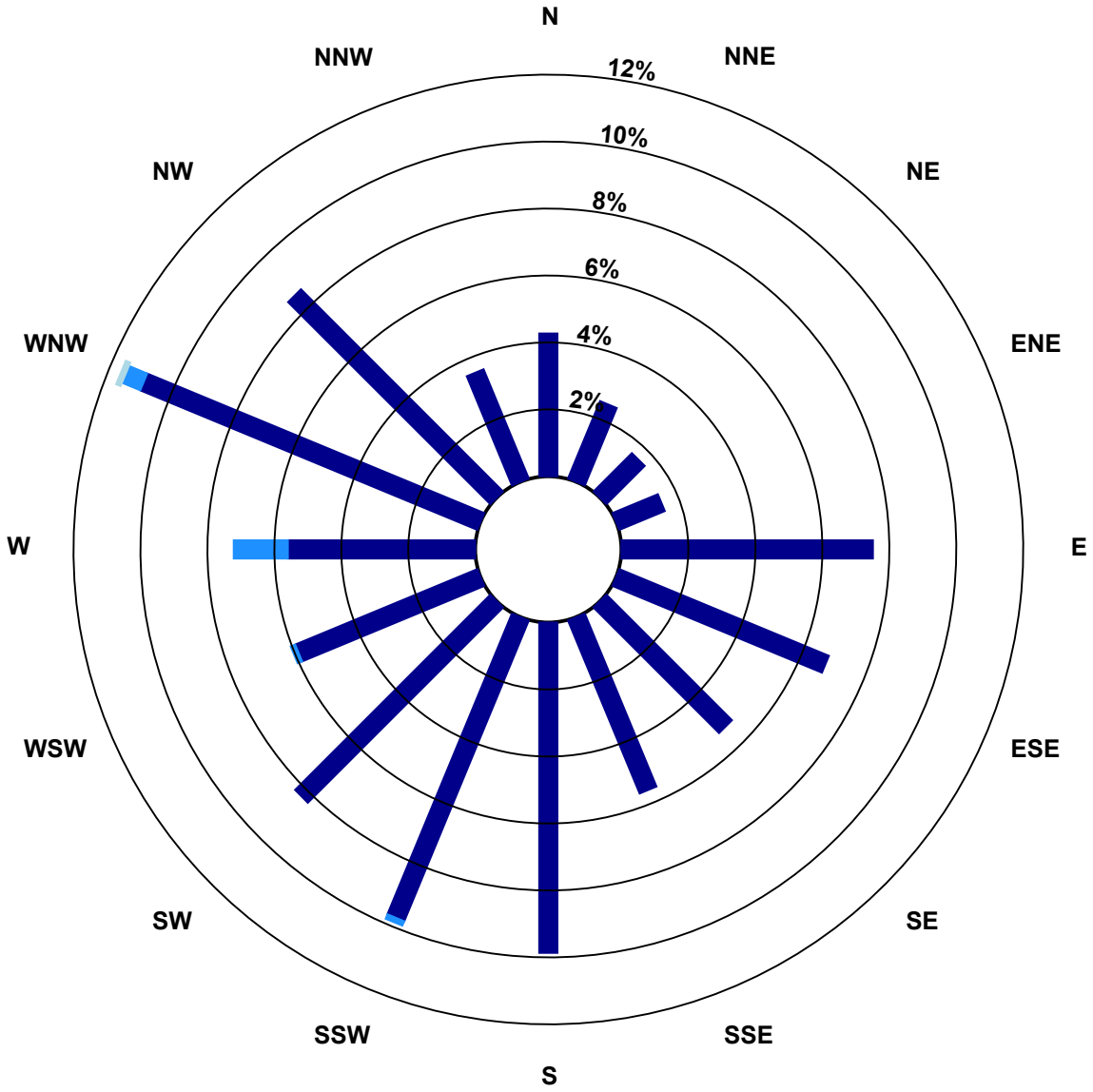
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Sawbones Bay



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

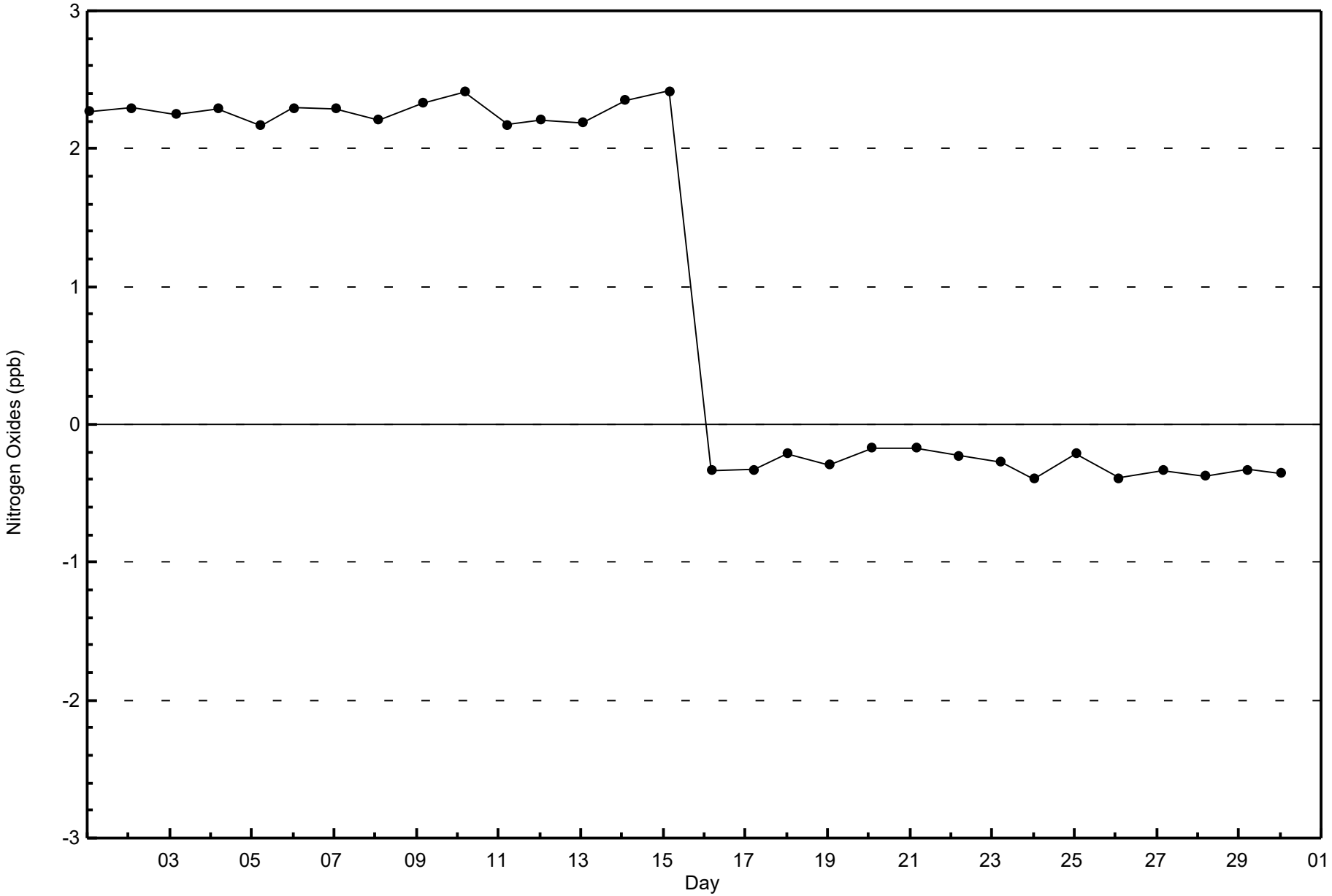
Total Number of Valid Hours: 679

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Sawbones Bay - September 2026

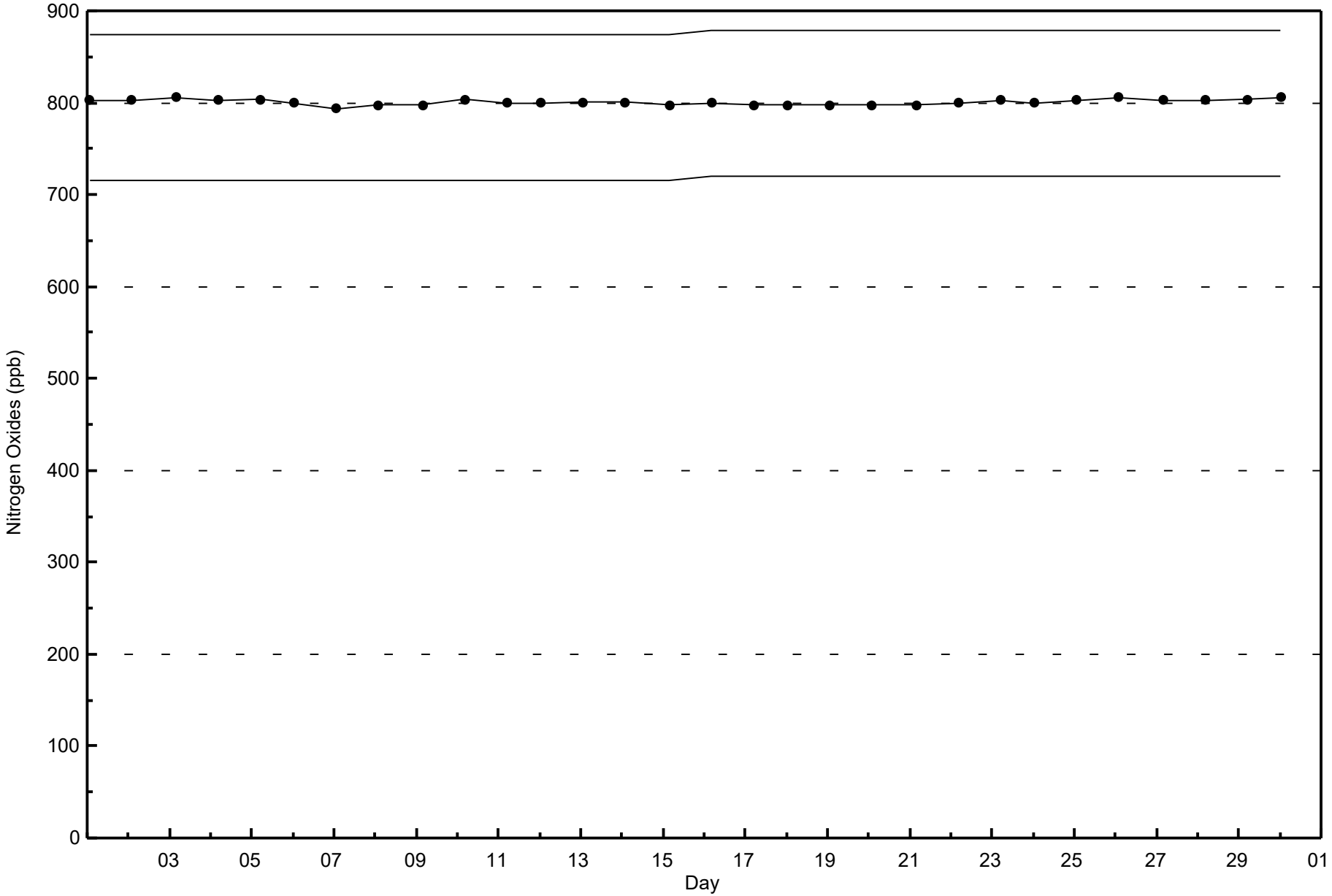


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Sawbones Bay - September 2026



Maximum Value: 26.7 C on Sep 2 15:00

Maximum Daily Average: 20.0 C on Sep 2

Minimum Value: 0.3 C on Oct 1 00:00

Minimum Daily Average: 4.8 C on Sep 30

Maximum Diurnal Average: 16.5 C at hour 16

Minimum Diurnal Average: 7.3 C at hour 6

Monthly Average: 11.49 C

Percentiles: P_1 = 2.2 P_{10} = 4.9 Q_1 = 7.4 Median = 10.5 Q_3 = 15.4 P_{90} = 19.2 P_{99} = 25.1

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

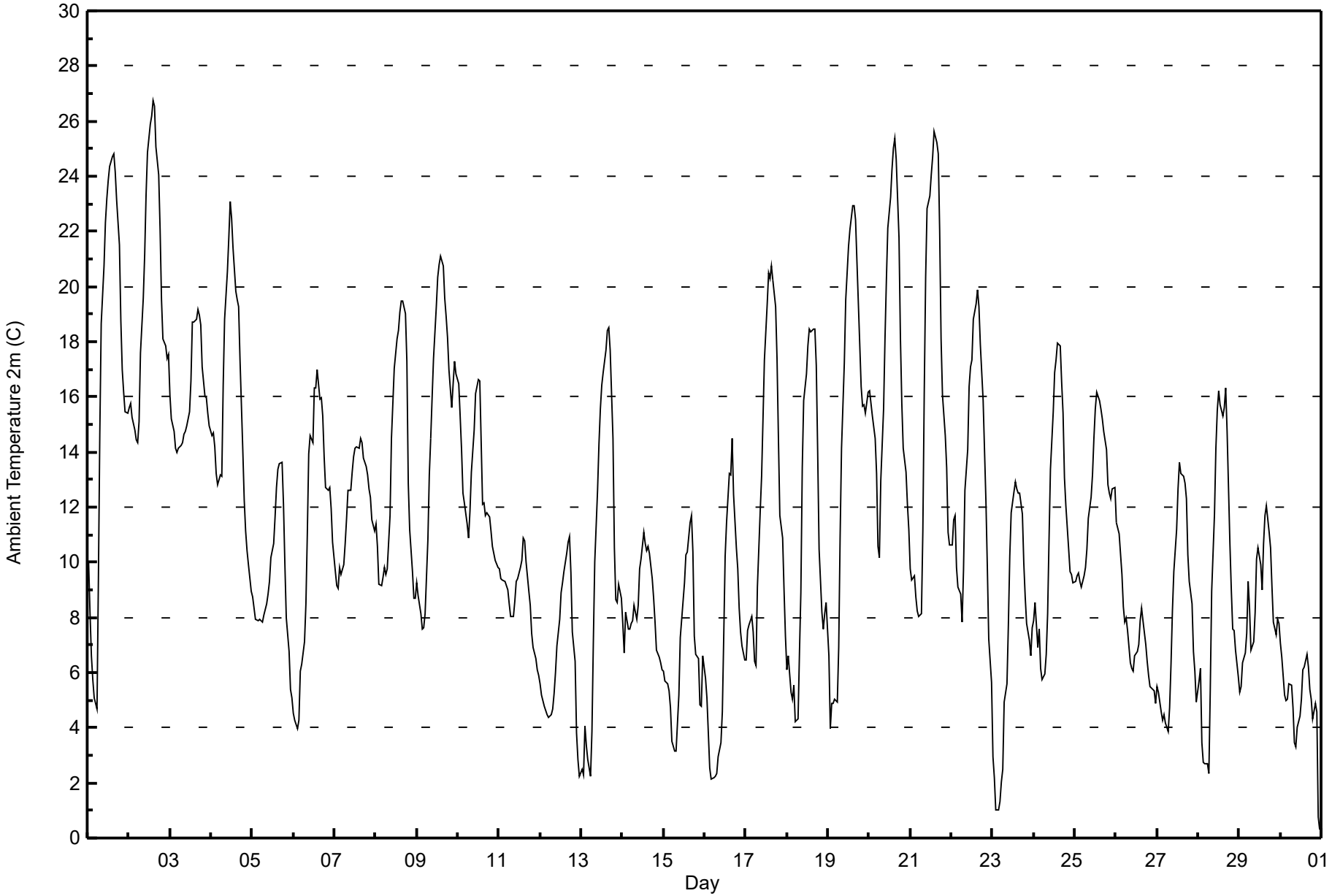
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	10.0	8.2	6.6	5.8	5.1	4.7	9.4	14.7	18.6	20.7	22.3	23.2	23.9	24.4	24.7	24.8	24.1	23.1	21.5	18.7	17.0	16.2	15.5	15.4	16.6	24.8
2-Sep	15.6	15.8	15.3	14.8	14.4	14.4	15.1	17.6	19.6	21.2	23.3	24.9	25.9	26.2	26.7	26.6	25.1	24.0	22.1	19.5	18.1	17.9	17.4	17.6	20.0	26.7
3-Sep	16.1	15.2	14.8	14.2	14.0	14.2	14.2	14.3	14.6	14.8	14.9	15.5	16.6	18.7	18.7	18.8	19.2	19.0	18.6	17.1	16.0	16.0	15.4	14.9	16.1	19.2
4-Sep	14.6	14.7	14.2	13.2	12.8	13.2	13.1	16.4	18.8	20.5	21.8	23.1	22.5	21.4	19.8	19.5	19.3	17.4	14.0	12.2	11.1	10.4	9.9	8.9	16.0	23.1
5-Sep	8.7	8.3	7.9	7.9	7.9	7.9	7.8	8.1	8.5	8.9	9.3	10.2	10.7	11.7	12.7	13.4	13.6	13.6	12.1	9.9	8.0	6.8	5.4	5.1	9.3	13.6
6-Sep	4.5	4.3	4.0	4.3	6.0	6.3	7.1	8.5	11.0	14.0	14.6	14.3	16.3	16.3	17.0	15.9	16.0	15.3	13.8	12.7	12.6	12.7	12.0	10.7	11.3	17.0
7-Sep	9.7	9.1	9.0	9.8	9.5	9.9	10.7	11.6	12.6	12.6	13.3	13.9	14.2	14.2	14.1	14.5	14.3	13.8	13.5	13.2	12.7	12.3	11.5	11.1	12.1	14.5
8-Sep	11.4	10.6	9.2	9.1	9.5	9.8	9.6	9.8	11.7	14.5	15.8	17.0	18.1	18.4	19.1	19.5	19.5	19.0	17.3	12.9	11.2	9.6	8.7	8.7	13.3	19.5
9-Sep	9.2	8.8	8.1	7.6	7.6	8.2	10.8	13.2	14.5	16.0	17.4	19.3	20.4	20.8	21.1	20.8	19.6	18.9	18.1	17.0	15.6	16.5	17.3	16.8	15.1	21.1
10-Sep	16.5	15.3	14.1	12.5	12.1	11.4	10.9	11.9	13.3	14.8	16.1	16.4	16.6	16.6	12.1	12.2	11.7	11.8	11.6	11.1	10.6	10.3	10.1	9.8	12.9	16.6
11-Sep	9.7	9.4	9.3	9.3	9.2	9.0	8.5	8.0	8.1	8.6	9.3	9.4	9.8	10.1	10.9	10.8	10.0	9.0	8.5	7.4	6.9	6.5	6.1	5.9	8.7	10.9
12-Sep	5.6	5.2	4.8	4.6	4.5	4.4	4.5	4.7	5.2	6.0	7.0	7.9	8.9	9.3	9.7	10.3	10.7	10.9	9.6	7.5	6.4	3.8	2.8	2.2	6.5	10.9
13-Sep	2.5	2.3	4.0	3.4	2.8	2.2	3.9	7.1	10.0	12.6	14.3	15.6	16.4	16.9	17.7	18.4	18.5	17.7	14.5	10.5	8.6	8.6	9.2	8.7	10.3	18.5
14-Sep	7.8	6.7	8.2	7.6	7.6	7.8	7.9	8.5	7.9	8.4	9.8	10.1	11.1	10.7	10.4	10.6	10.3	9.4	8.7	7.8	6.8	6.6	6.3	6.1	8.5	11.1
15-Sep	6.1	5.7	5.6	5.3	4.8	3.5	3.2	3.1	4.2	5.2	7.3	8.6	9.3	10.3	10.4	11.5	11.7	10.4	7.3	6.7	6.5	4.8	4.8	6.6	6.8	11.7
16-Sep	5.8	5.1	3.8	2.5	2.1	2.2	2.3	2.4	2.9	3.5	4.6	7.3	10.2	11.4	13.2	13.2	14.5	12.4	10.5	9.8	8.4	7.5	7.0	6.4	7.0	14.5
17-Sep	6.5	7.5	7.7	8.0	7.5	6.4	6.3	9.1	11.8	13.1	15.2	17.3	19.4	20.5	20.3	20.7	20.2	19.3	17.4	14.5	11.7	10.9	9.0	7.3	12.8	20.7
18-Sep	6.1	6.6	5.3	5.0	5.5	4.2	4.3	6.7	8.9	13.4	15.9	16.9	17.9	18.5	18.3	18.5	18.5	17.1	14.0	10.5	8.2	7.6	8.2	8.5	11.0	18.5
19-Sep	6.6	4.0	4.9	4.9	5.0	4.9	6.9	10.9	14.2	17.3	19.5	20.5	21.5	22.1	22.9	22.9	22.4	20.9	17.9	16.4	15.7	15.7	15.4	16.2	14.6	22.9
20-Sep	16.2	15.7	15.3	14.5	13.2	10.6	10.2	13.0	15.6	18.1	20.2	22.1	23.3	24.3	25.0	25.4	24.6	21.8	18.2	15.7	14.2	13.3	12.1	11.2	17.2	25.4
21-Sep	9.8	9.3	9.5	8.7	8.2	8.0	8.1	11.1	16.2	20.3	22.8	23.3	24.1	24.7	25.6	25.2	24.8	22.0	18.1	16.1	14.6	13.4	11.1	10.6	16.1	25.6
22-Sep	10.6	11.5	11.7	9.8	9.1	8.8	7.8	9.7	12.6	14.1	16.4	17.1	17.4	18.8	19.4	19.9	19.3	17.9	15.9	14.0	12.2	9.8	7.2	5.7	13.2	19.9
23-Sep	2.9	2.2	1.0	1.0	1.3	2.0	2.5	4.9	5.6	7.8	10.2	11.8	12.6	12.9	12.7	12.5	12.5	11.8	10.0	8.8	7.8	7.2	6.6	7.6	7.3	12.9
24-Sep	7.9	8.6	6.9	7.6	6.2	5.8	5.9	6.7	8.1	10.8	13.4	15.5	16.9	17.3	18.0	17.9	16.5	15.4	13.1	12.0	10.5	9.6	9.5	9.3	11.2	18.0
25-Sep	9.3	9.5	9.6	9.3	9.1	9.5	9.8	10.5	11.6	12.4	13.2	14.5	15.6	16.2	15.8	15.5	15.2	14.7	14.1	12.8	12.5	12.3	12.7	12.7	12.4	16.2
26-Sep	11.5	11.2	11.0	9.6	8.4	7.8	8.0	7.5	6.4	6.1	6.0	6.6	6.8	7.0	7.9	8.3	7.9	7.0	6.4	5.9	5.5	5.4	5.4	4.9	7.4	11.5
27-Sep	5.5	5.3	4.6	4.3	4.5	4.2	3.8	4.7	6.3	8.3	9.7	11.2	12.7	13.6	13.2	13.1	12.9	12.3	10.3	9.3	8.5	6.8	6.1	4.9	8.2	13.6
28-Sep	5.7	6.2	3.5	2.7	2.7	2.7	2.3	5.4	8.9	11.7	14.1	15.5	16.2	15.7	15.3	15.6	16.3	14.8	10.7	9.0	7.6	7.5	6.8	5.9	9.3	16.3
29-Sep	5.3	5.5	6.4	6.7	7.4	9.3	8.3	6.8	7.1	8.2	10.1	10.5	9.9	9.0	10.7	11.7	12.1	11.1	10.5	9.1	7.8	7.4	7.9	7.8	8.6	12.1
30-Sep	7.1	6.6	5.2	5.0	5.0	5.6	5.5	4.7	3.4	3.3	4.0	4.4	5.1	6.1	6.2	6.6	6.2	5.4	5.1	4.3	4.9	4.6	0.8	0.3	4.8	7.1
	8.8	8.5	8.1	7.6	7.4	7.3	7.6	9.1	10.6	12.2	13.7	14.8	15.7	16.1	16.3	16.5	16.3	15.2	13.4	11.8	10.6	9.9	9.3	8.9	Diurnal Average	
	16.5	15.8	15.3	14.8	14.4	14.4	15.1	17.6	19.6	21.2	23.3	24.9	25.9	26.2	26.7	26.6	25.1	24.0	22.1	19.5	18.1	17.9	17.4	17.6	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Sawbones Bay - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	334	46.39	46.39
10 - 20	329	45.69	92.08
> 20	57	7.92	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Sawbones Bay - September 2026

Maximum Value: 99.5 % on Sep 18 07:00

Maximum Daily Average: 90.4 % on Sep 7

Minimum Value: 29.9 % on Sep 21 15:00

Minimum Daily Average: 58.1 % on Sep 2

Maximum Diurnal Average: 89.3 % at hour 6

Minimum Diurnal Average: 52.8 % at hour 16

Monthly Average: 73.72 %

Percentiles: P_1 = 33.5 P_{10} = 43.5 Q_1 = 60.5 Median = 77.4 Q_3 = 90.1 P_{90} = 95.7 P_{99} = 99.0

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

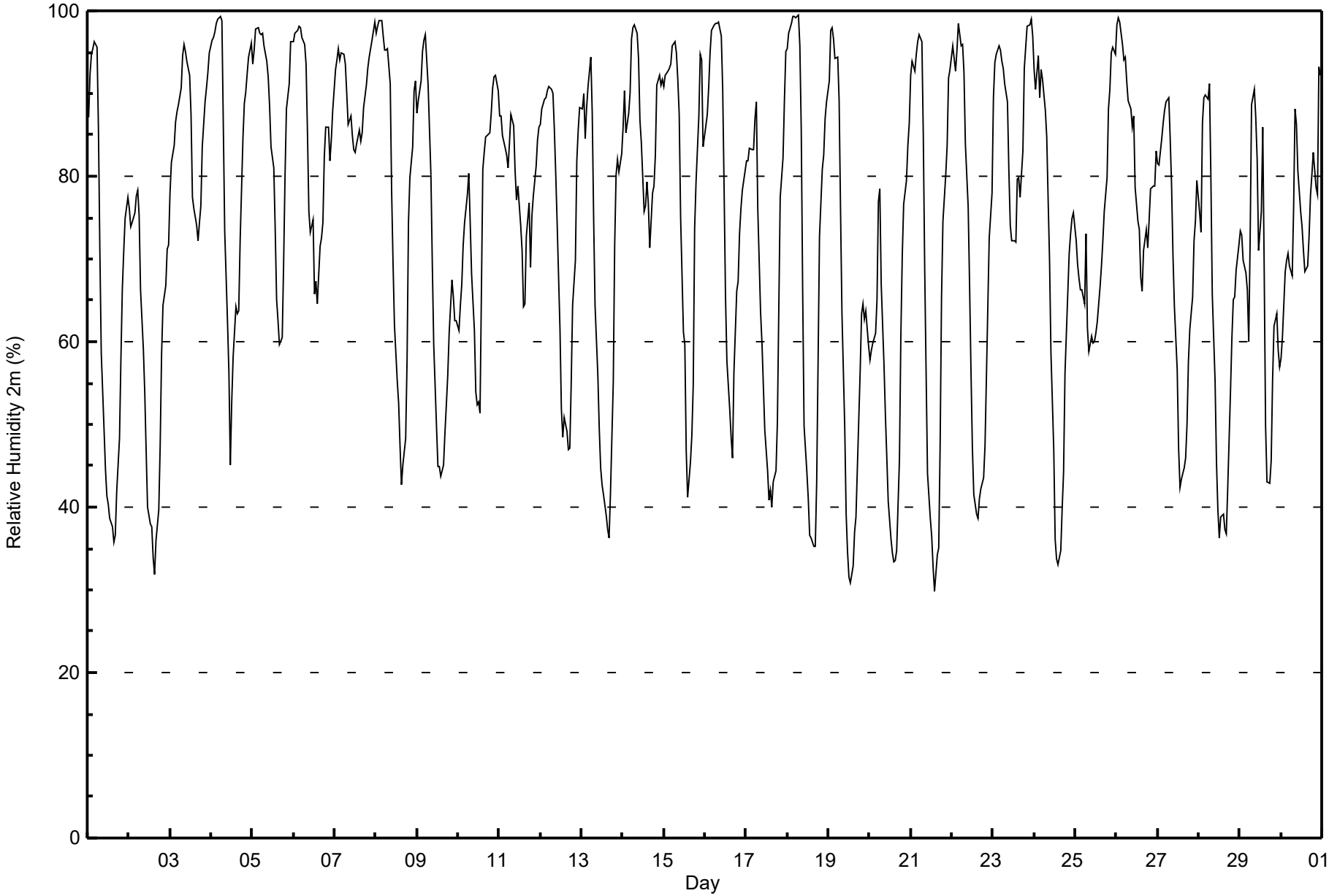
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	87.1	92.4	94.7	95.4	96.2	95.7	85.6	70.9	58.7	49.3	44.6	41.4	40.3	38.6	37.6	35.7	36.5	41.9	48.3	57.9	66.3	70.8	74.9	77.5	64.1	96.2
2-Sep	76.2	73.9	74.3	75.7	77.7	78.3	75.2	66.3	59.1	54.0	46.8	40.0	37.9	37.6	33.9	31.9	35.9	39.7	47.5	58.6	64.5	66.7	71.2	71.8	58.1	78.3
3-Sep	77.9	81.7	83.7	86.6	87.8	88.6	90.7	94.6	95.9	95.0	94.0	92.2	87.4	77.5	76.2	74.0	72.2	74.4	76.5	83.5	88.9	90.7	92.5	95.0	85.7	95.9
4-Sep	96.4	96.8	97.5	98.4	99.0	99.3	98.8	86.3	73.4	62.3	56.2	45.1	52.8	58.1	64.2	63.3	63.7	72.2	84.6	88.9	90.2	92.4	94.5	96.2	80.4	99.3
5-Sep	93.5	95.2	97.7	98.0	97.3	97.2	97.3	95.8	93.9	92.0	88.4	83.6	81.0	73.6	65.0	62.6	59.6	60.5	69.5	80.1	88.2	91.1	96.3	96.4	85.6	98.0
6-Sep	96.2	97.3	97.6	98.2	98.0	96.8	96.0	93.5	85.2	75.7	73.3	74.7	65.8	67.2	64.5	71.5	72.5	74.5	82.3	86.0	85.9	81.9	84.4	87.9	83.6	98.2
7-Sep	92.8	94.1	95.5	94.0	94.9	94.8	93.5	90.0	86.3	87.3	84.9	83.3	82.9	83.8	85.6	84.3	85.2	88.3	91.0	93.1	94.4	95.4	96.5	98.6	90.4	98.6
8-Sep	97.3	98.2	98.8	98.8	97.0	95.2	95.2	95.4	91.2	78.1	69.5	62.0	55.2	52.6	47.2	42.7	45.0	48.4	57.8	74.4	79.8	83.6	90.4	91.5	76.9	98.8
9-Sep	87.7	89.2	91.5	95.1	96.4	97.2	91.0	85.6	80.2	69.3	59.6	49.6	44.9	44.9	43.8	45.2	49.0	52.4	55.9	61.0	67.5	65.5	62.6	62.6	68.7	97.2
10-Sep	61.4	64.4	67.0	71.6	74.5	77.9	80.3	74.5	68.2	61.4	53.8	52.3	52.7	51.4	80.9	82.9	84.8	85.0	85.3	87.6	90.6	92.0	92.2	90.3	74.3	92.2
11-Sep	87.3	87.3	84.9	83.4	82.5	81.0	84.2	87.4	86.1	80.8	77.0	78.8	74.0	71.1	64.3	64.6	72.6	76.8	69.1	75.3	77.6	81.2	84.5	86.0	79.1	87.4
12-Sep	86.2	88.2	89.3	89.5	90.3	90.8	90.4	90.0	85.6	80.2	74.2	61.5	51.9	48.6	50.8	49.2	46.9	47.1	54.9	64.4	69.8	81.9	85.6	88.3	73.1	90.8
13-Sep	88.1	90.1	84.6	88.3	90.9	94.3	87.7	74.9	64.4	56.0	49.5	44.7	42.7	41.6	39.1	37.2	36.2	41.7	55.1	71.7	80.1	82.0	80.5	82.8	66.8	94.3
14-Sep	86.0	90.3	85.2	87.6	90.2	96.7	98.0	98.3	97.3	94.3	86.8	84.1	75.7	76.4	79.3	76.5	71.4	77.9	78.8	82.5	91.0	92.2	91.1	91.6	86.6	98.3
15-Sep	90.9	92.2	92.7	93.1	93.6	95.7	96.3	94.9	91.7	87.5	75.0	61.1	59.6	46.8	41.2	45.3	48.6	54.7	73.8	79.4	87.3	94.8	94.1	83.6	78.1	96.3
16-Sep	86.1	87.5	90.7	94.9	97.6	98.4	98.5	98.5	98.6	97.0	90.5	78.5	65.5	57.6	51.9	48.4	46.0	56.3	66.1	67.3	73.1	76.2	78.4	80.7	78.5	98.6
17-Sep	81.9	81.9	83.4	83.2	83.2	86.9	89.0	76.2	63.5	59.9	54.5	49.3	44.3	40.8	42.1	40.0	43.0	44.4	50.4	64.0	77.4	82.2	89.2	95.1	66.9	95.1
18-Sep	95.4	97.3	98.5	99.3	99.4	99.1	99.5	95.7	85.6	66.3	49.8	44.3	41.1	36.6	36.3	35.3	35.2	43.0	57.6	72.8	80.9	82.5	86.9	89.0	72.0	99.5
19-Sep	91.5	97.6	98.0	96.7	94.2	94.3	89.1	76.0	63.6	49.7	39.2	34.6	31.5	30.9	32.9	37.0	38.8	44.7	56.5	63.3	64.5	62.8	63.6	59.5	62.9	98.0
20-Sep	57.9	59.0	59.9	61.1	65.0	77.0	78.5	67.0	57.2	51.0	46.0	40.8	36.1	34.4	33.5	33.6	34.7	45.7	60.7	70.3	76.6	79.5	83.8	86.5	58.2	86.5
21-Sep	92.2	93.9	92.7	94.8	96.3	97.1	96.3	84.9	68.8	56.2	44.0	38.7	36.4	32.7	29.9	34.3	35.1	47.4	65.5	74.6	80.2	83.8	91.9	92.9	69.2	97.1
22-Sep	95.8	94.2	92.8	95.2	98.5	95.8	96.0	92.5	83.9	76.2	66.7	56.4	47.1	41.5	39.2	38.7	41.1	42.2	43.5	47.4	55.7	64.3	72.5	78.0	69.0	98.5
23-Sep	89.5	93.8	94.8	95.7	95.2	94.0	93.0	91.1	89.0	80.6	74.0	72.2	72.2	72.0	79.7	79.8	77.5	83.1	93.1	95.5	98.1	98.2	99.0	96.9	87.8	99.0
24-Sep	93.0	90.5	94.6	89.5	92.8	91.7	88.0	84.7	77.0	69.8	58.6	46.9	36.2	33.8	33.1	34.8	39.8	44.3	56.0	61.0	70.7	73.0	74.9	75.5	67.1	94.6
25-Sep	72.2	69.3	67.5	66.3	66.3	64.5	73.0	61.7	58.8	60.6	59.8	60.0	60.9	62.4	66.6	69.2	72.2	75.8	79.8	88.1	90.6	94.9	95.5	94.7	72.1	95.5
26-Sep	98.3	99.1	98.7	95.9	94.0	94.3	91.5	89.2	88.1	86.0	87.3	78.7	74.5	73.5	67.7	66.2	71.0	73.5	71.3	74.7	78.4	78.7	78.8	83.0	83.0	99.1
27-Sep	81.5	81.3	84.6	86.5	87.9	89.0	89.6	84.6	78.8	70.4	64.2	56.5	47.1	42.4	43.4	44.8	46.0	49.9	57.6	61.6	65.5	72.2	74.6	79.6	68.3	89.6
28-Sep	75.7	73.2	86.4	89.5	89.8	89.3	91.1	80.1	65.8	55.3	45.5	39.6	36.2	38.8	39.2	37.2	36.8	42.2	54.0	60.4	65.0	65.4	68.6	71.7	62.4	91.1
29-Sep	73.4	72.9	69.7	68.3	66.3	59.9	72.4	88.7	90.5	87.1	82.0	71.0	75.7	85.9	68.9	49.8	43.1	42.9	45.7	55.5	61.9	63.5	58.9	57.0	67.1	90.5
30-Sep	58.0	60.4	68.5	69.9	70.7	69.2	68.0	76.4	88.2	86.3	80.7	75.7	73.9	71.0	68.5	69.2	72.7	77.6	80.2	82.9	78.7	77.9	93.2	92.3	75.4	93.2
	84.9	86.1	87.2	88.0	88.8	89.3	89.1	84.9	79.2	72.5	65.9	59.9	56.1	54.1	53.5	52.8	53.8	58.3	65.6	72.8	78.0	80.6	83.4	84.4	Diurnal Average	
	98.3	99.1	98.8	99.3	99.4	99.3	99.5	98.5	98.6	97.0	94.0	92.2	87.4	85.9	85.6	84.3	85.2	88.3	93.1	95.5	98.1	98.2	99.0	98.6	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Sawbones Bay - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	49	6.81	6.81
40 - 60	128	17.78	24.58
60 - 80	215	29.86	54.44
80 - 100	328	45.56	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Sawbones Bay - September 2026

Maximum Speed: 33 km/h on Sep 26 13:00

Maximum Daily Speed Average: 22.2 km/h on Sep 26

Minimum Speed Value: 0 km/h on Sep 26 02:00

Minimum Daily Speed Average: 0.8 km/h on Sep 16

Maximum Diurnal Speed Average: 7.4 km/h at hour 14

Minimum Diurnal Speed Average: 1.9 km/h at hour 21

Monthly Average Velocity: 4.0 km/h 259.7 deg

Percentiles: $P_1 = 2$ $P_{10} = 5$ $Q_1 = 7$ Median = 10 $Q_3 = 15$ $P_{90} = 21$ $P_{99} = 30$

Hours in Service:	720
Hours of Data:	715
Hours of Missing Data:	5
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-Sep	S2	S2	SE4	SSE3	S5	SSE4	SSE7	SSE7	SSE8	S12	S12	S13	SSE12	SSE12	SSE13	SSE14	SE14	SSE12	SSE11	ESE8	ESE9	ESE9	ESE10	SE9	SSE8.3	SE14
2-Sep	SE9	SE10	SE10	SE10	SE10	SE11	SE11	SE11	SE12	SE15	SE17	SSE19	SSE17	SSE17	SSE16	SSE16	ESE15	SE14	SE10	ESE9	ESE10	ESE12	ESE10	ESE10	SE12.2	SSE19
3-Sep	E7	E9	E9	E10	E11	E12	E9	ENE7	ENE11	E16	E17	E16	E17	ESE18	ESE17	E17	E17	E14	E13	E11	E11	ESE12	ESE8	SE6	E11.9	ESE18
4-Sep	SE6	SE7	SSE5	S6	SSE6	SE6	SSE5	SSE6	SSE4	SSW6	SSW7	SSW12	SSW15	SW15	W18	SW17	WSW12	NNW12	N17	N16	N14	N13	N14	N14	W2.3	W18
5-Sep	N12	N12	N12	N12	N12	N12	N10	N7	N11	N12	NNE9	NNE9	NE8	NE9	NE5	NNW7	NNE5	ENE6	ESE6	SE5	ESE5	ESE4	SSE5	SSE4	NNE6.2	N12
6-Sep	SSE4	ESE5	SE4	E5	E6	E7	E3	E7	ESE7	SSE7	ESE10	ESE10	ESE10	ESE7	ESE9	ESE10	SE7	E10	ESE12	ESE9	ESE8	SE7	SE7	ESE4	ESE7.1	ESE12
7-Sep	ESE5	ESE6	E5	E3	NE6	ESE8	E6	E5	SE5	E4	NE6	NNE7	NNE8	NE9	NNE8	NE8	NE8	NNE8	NNE7	NE5	NNE5	N7	N5	NNW9	NE4.9	NE9
8-Sep	NNW6	NW5	NW3	WNW5	WNW6	WNW6	WNW8	WNW7	NNW8	N14	N14	NNW14	NNW15	NNW13	NNW13	NW15	NW13	N6	E2	SE4	SSE3	SSE4	S7	S6	NNW5.9	NW15
9-Sep	SSW7	S6	S5	S5	S6	S6	S5	SSW9	SW13	SW16	SW17	SW19	WSW22	WSW21	WSW20	SW20	SW19	SW19	SW16	SSW10	SSW6	SW12	SW16	WSW15	SW12.3	WSW22
10-Sep	WSW17	WSW19	W21	WNW23	W20	W18	WSW17	WSW15	W21	W24	W28	W27	W28	WNW28	WNW19	WNW21	WNW18	WNW15	W20	WNW21	WNW20	WNW21	WNW18	WNW19	W20.2	WNW28
11-Sep	WNW22	WNW22	WNW24	NW22	NW22	NW23	NW23	NW21	NW23	NW25	NW24	NNW24	NNW26	NNW23	NW25	NW25	NNW19	NW19	NW17	NW14	NW12	WNW10	WNW11	WNW11	NW19.9	NNW26
12-Sep	WNW14	WNW14	WNW10	NW9	WNW10	WNW10	WNW12	WNW11	NW9	NW8	WNW8	W12	W14	WNW13	WNW13	WNW14	WNW12	W13	WSW8	SW5	SW5	SSW6	SSW8	SSW8	WNW8.8	WNW14
13-Sep	SSW8	SSW8	SSW11	SSW10	SSW8	SSW8	SSW8	SSW10	SW13	SSW15	SW18	SW19	SW17	WSW17	SW15	SSW12	SW13	SSW10	SSW8	S6	S7	S7	SSW7	SSW7	SSW10.5	SW19
14-Sep	SSW7	WNW2	W5	WNW7	NW6	NW6	NW8	NNW14	N16	N16	N17	N14	NNW17	NNW17	N13	N16	N16	N11	NNW11	NNW12	NW8	NW9	NW10	NW8	NNW10.0	NNW17
15-Sep	WNW8	WNW9	WNW10	WNW13	WNW10	NW11	WNW10	WNW12	WNW10	WNW10	NW9	NW9	WNW10	WNW14	WNW14	WSW13	SW13	SW13	SSW7	SSW7	SW9	SSW8	SSW7	W13	W8.4	WNW14
16-Sep	W11	WNW16	WNW14	WNW10	WNW8	WNW5	SW3	WNW3	NNW4	NNE5	ESE5	SSE5	C	C	C	C	S4	SE5	ESE7	ESE8	ESE7	ESE8	ESE8	ESE9	WSW0.8	WNW16
17-Sep	ESE9	SE9	SSE9	S7	SSE7	SSE5	S7	S10	SW10	SW12	SW11	WSW11	WSW12	WSW13	WSW11	WSW10	SW11	WNW8	NW8	N5	NNE3	SSE1	S3	UO	SW5.3	WSW13
18-Sep	SW2	WSW4	SW1	SSW4	NW4	SSW3	SSW3	WNW4	WNW5	WNW6	NNW9	NW9	NW14	NW15	NNW13	NNW14	NNW11	NNE7	NE4	SSE4	SSE5	SE6	SE7	SE8	NW2.9	NW15
19-Sep	SSE5	S5	S6	S7	S8	S8	S9	S9	S12	S13	SSW14	S18	SSW17	S19	SSW16	SSW17	SSW15	SSW12	S9	S10	S11	S13	S11	SSW12	S11.3	S19
20-Sep	SSW14	SSW12	SSW11	SSW9	SSW8	SSW5	SSW5	SSW7	SW9	SSW9	SW9	SSW8	SSW8	SW7	SW8	SW9	SW10	SSW8	SSW7	SSW5	SSW5	S6	S7	S6	SSW7.8	SSW14
21-Sep	S5	S6	SSW3	S5	S5	S7	S6	S6	S6	S7	S12	S13	S13	S14	S15	S12	S13	S14	S6	S6	S7	SSE7	E3	SE4	S7.8	S15
22-Sep	SE5	SE7	SE8	ESE4	ESE6	E6	ESE3	SSE4	SW7	W11	NW14	NW20	NW21	NW20	NW17	NW18	NW18	NW14	WNW13	WNW14	WNW16	NW10	NW8	WNW3	NW7.2	NW21
23-Sep	SSW2	SSW4	S4	S4	SSW3	SSW1	SW1	NW2	SE2	SE0	ENE4	SSE4	E5	ENE5	NE5	NNE7	NNE7	E4	E4	ESE4	SSW2	NW2	WNW4	WNW6	E1.0	NNE7
24-Sep	WNW9	WNW11	WNW8	WNW13	NW12	WNW9	W7	SW6	WSW6	W6	SW7	WSW8	SW11	WSW13	WSW13	WSW12	SW9	W6	E2	NNE3	ESE3	ESE5	E4	ENE5	W5.5	WSW13
25-Sep	E6	E10	E11	E10	E11	E9	E13	E16	E17	E14	E18	E18	E20	E15	E15	ESE18	ENE10	ENE11	NNE6	NNE10	ENE10	E21	ESE13	WNW11	E11.6	E21
26-Sep	E3	ENE0	WSW8	W16	W24	W18	W20	W24	W25	W28	W29	W31	WNW33	W30	W32	W31	W27	WNW31	WNW30	W24	W24	W22	W21	WSW14	W22.2	WNW33
27-Sep	W19	W23	WSW15	WSW14	WSW15	WSW15	WSW15	WSW17	WSW16	WSW16	WSW19	WSW22	WSW23	W24	W27	W24	W21	SW15	SW12	SW14	SW12	SW9	SW9	SSW8	WSW16.0	W27
28-Sep	SW11	SW11	SSW8	SSW8	SSW8	SSW8	SSW7	SSW8	SW11	SW12	WSW16	WSW19	WSW21	SW16	SW13	SW14	SW14	SSW9	SSW7	SSW7	S7	S9	S9	S9	SW10.3	WSW21
29-Sep	S9	S9	S9	S6	WSW6	WSW12	SW8	SSE4	W6	WNW9	W12	WNW26	WNW22	WNW24	WNW27	WNW31	WNW29	WNW26	WNW22	NW18	WSW12	WSW15	W20	W21	W13.4	WNW31
30-Sep	W22	W21	WSW12	WSW12	W15	W20	W25	WNW27	NW20	NW23	NW27	NW25	NW24	NW25	NW23	NW21	NW19	NW13	NW11	WNW13	WNW14	WNW13	NNW6	NW7	WNW17.1	WNW27
	WSW3.5	WSW3.7	WSW3.6	WSW3.6	W3.5	WSW3.2	WSW3.6	WSW3.4	WSW4.0	W4.6	W4.8	W6.1	W6.9	W7.4	W7.2	W6.9	W5.5	W3.4	W2.5	W2.0	WSW1.9	SSW2.2	SW2.4	WSW3.2	Diurnal Average	
	W22	W23	WNW24	WNW23	W24	NW23	W25	WNW27	W25	W28	W29	W31	WNW33	W30	W32	W31	WNW29	WNW31	WNW30	W24	W24	W22	W21	W21	Diurnal Maximum	

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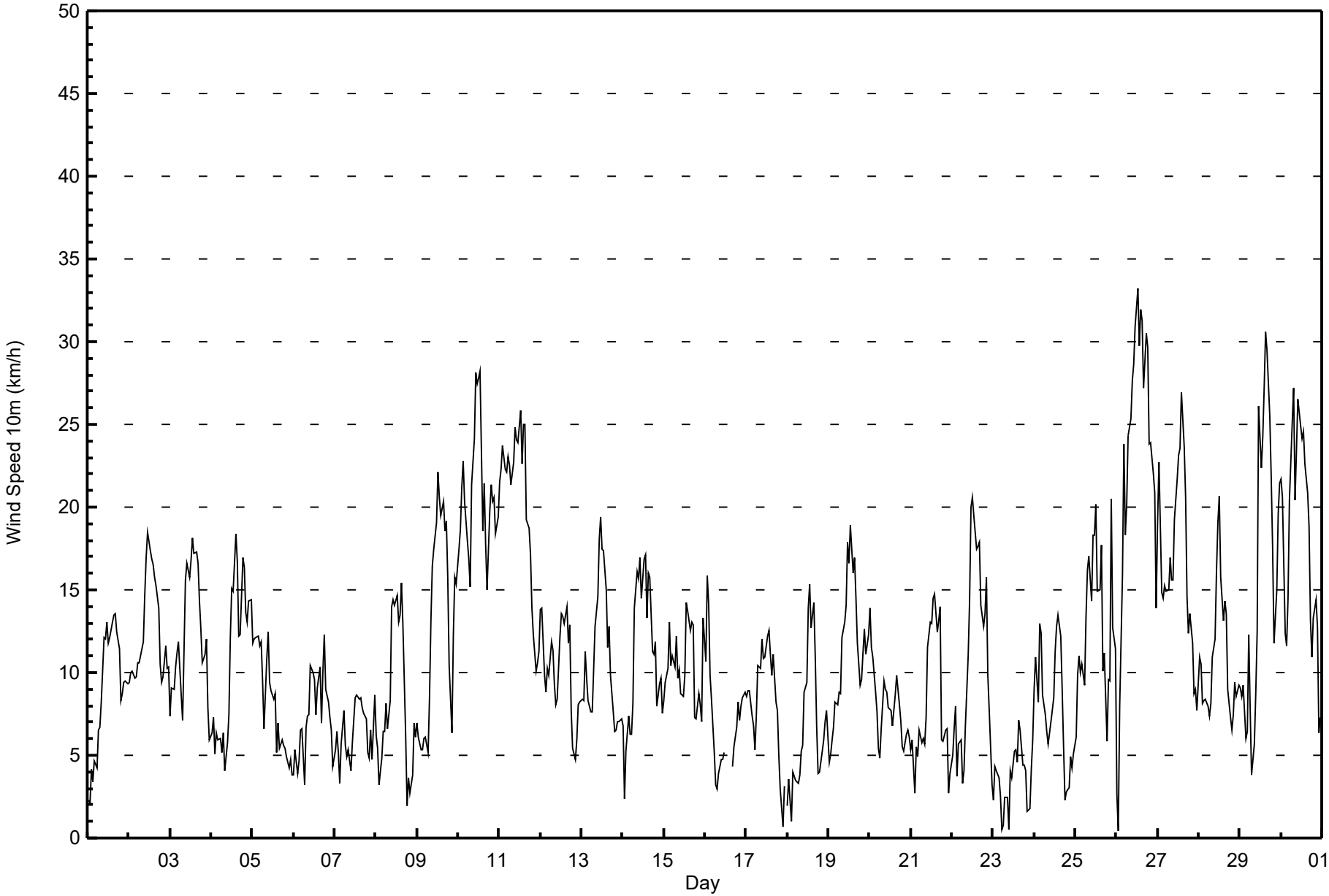
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Sawbones Bay - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	118	16.50	16.50
6 - 11	294	41.12	57.62
12 - 19	215	30.07	87.69
20 - 28	78	10.91	98.60
29 - 38	10	1.40	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 715

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Sawbones Bay - September 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	2	5	4	4	14	11	9	20	14	13	6	1	1	8	5	1	118
6 - 11	6	12	7	6	20	29	23	10	42	45	21	8	6	32	19	8	294
12 - 19	22	0	0	0	17	8	5	11	15	13	29	30	11	25	17	12	215
20 - 28	0	0	0	0	2	0	0	0	0	0	1	6	29	16	21	3	78
29 - 38	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	10
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	30	17	11	10	53	48	37	41	71	71	57	45	52	86	62	24	715

Total Number of Valid Hours: 715

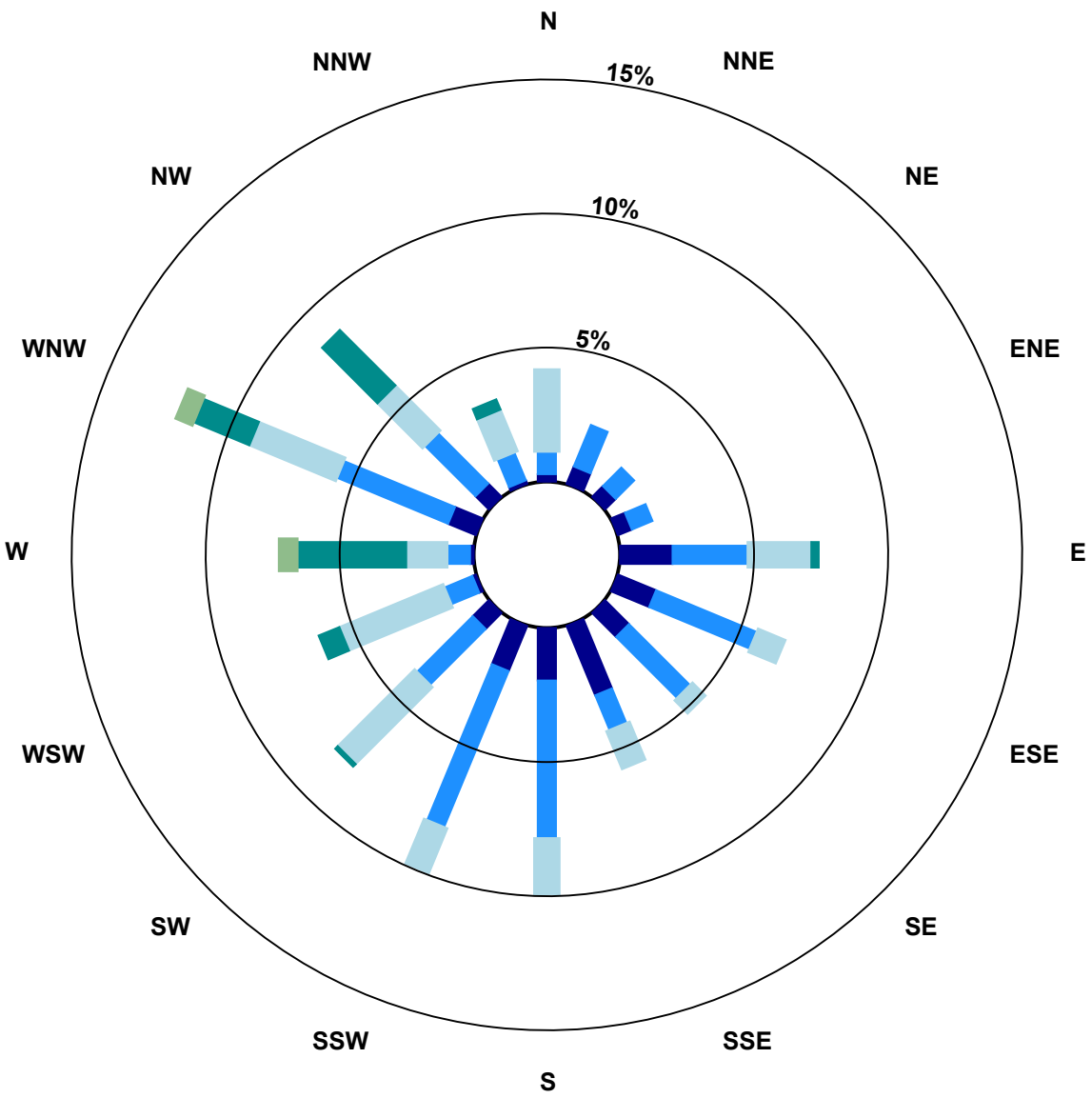
Total Number of Hours: 720

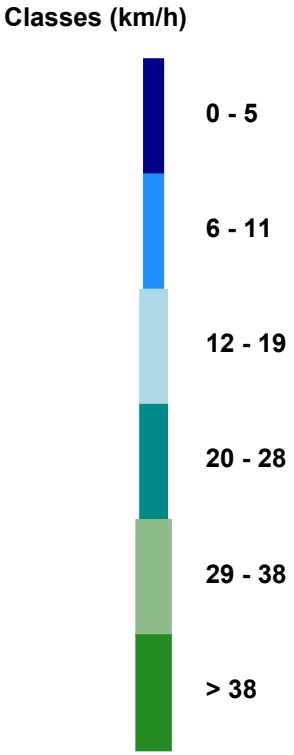
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Sawbones Bay





Total Number of Valid Hours: 715

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

Maximum Value: 9 km/h on Sep 27 17:00

Minimum Value: 0 km/h on Sep 25 00:00

Percentiles: $P_1 = 1$ $P_{10} = 1$ $Q_1 = 2$ Median = 3 $Q_3 = 4$ $P_{90} = 5$ $P_{99} = 7$

Hours in Service:	720
Hours of Data:	715
Hours of Missing Data:	5
Hours of Calibration:	4
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-Sep	2	1	1	2	2	1	1	1	2	4	4	4	4	4	4	4	4	4	3	1	1	2	2	2	4
2-Sep	3	2	2	2	2	2	3	3	3	4	5	6	5	5	5	5	4	4	3	2	2	2	2	2	6
3-Sep	1	1	2	2	2	3	2	2	3	4	4	3	4	5	5	5	4	3	3	2	2	3	2	1	5
4-Sep	1	1	1	1	1	1	1	2	2	2	3	4	5	4	6	5	4	5	4	3	4	4	4	4	6
5-Sep	3	3	3	3	3	3	3	2	3	3	2	2	2	3	3	2	2	2	1	1	1	1	1	1	3
6-Sep	1	2	1	1	1	2	1	2	2	2	3	3	4	3	3	3	2	3	3	2	2	2	2	2	4
7-Sep	2	1	1	1	1	2	1	1	2	1	1	2	2	2	2	2	2	2	2	1	1	2	1	2	2
8-Sep	3	2	1	1	2	1	1	2	3	3	4	4	4	4	4	4	4	3	1	1	2	2	1	1	4
9-Sep	1	1	1	1	1	2	3	3	4	4	5	5	6	6	6	6	5	5	4	3	2	5	4	5	6
10-Sep	6	7	5	5	5	4	4	5	6	5	6	6	7	6	6	4	3	3	4	4	3	3	3	4	7
11-Sep	5	5	5	5	5	6	6	5	5	6	6	7	7	6	6	6	5	5	5	3	3	2	2	2	7
12-Sep	2	3	2	2	3	2	2	3	2	2	2	3	4	3	4	5	4	3	3	3	2	3	1	1	5
13-Sep	1	1	3	2	1	1	2	3	4	4	5	5	5	5	5	4	4	3	2	1	1	1	1	1	5
14-Sep	2	3	4	3	1	1	2	5	4	4	4	4	4	4	5	4	4	3	3	3	2	2	2	2	5
15-Sep	2	2	1	2	2	3	2	2	2	2	3	3	3	5	4	4	3	3	2	4	4	2	3	5	5
16-Sep	4	3	3	2	2	2	1	2	1	1	2	2	C	C	C	C	2	2	1	1	1	1	1	1	4
17-Sep	1	2	2	2	2	2	2	3	4	3	3	3	4	4	4	4	3	2	1	1	0	2	2	UO	4
18-Sep	1	1	2	2	3	2	3	2	1	2	3	4	4	4	3	4	3	2	0	1	1	1	1	2	4
19-Sep	2	1	1	1	1	1	2	2	3	4	5	5	5	6	6	6	5	4	2	2	3	3	3	4	6
20-Sep	4	3	3	3	2	1	1	2	3	3	3	3	3	3	3	3	3	2	2	1	1	1	1	1	4
21-Sep	1	2	2	2	3	2	1	1	2	2	3	4	4	4	4	4	4	5	2	1	1	1	1	1	5
22-Sep	1	2	1	2	2	1	2	2	4	3	3	5	4	5	4	4	4	3	2	2	2	2	1	2	5
23-Sep	2	1	1	2	2	1	1	2	1	4	2	2	1	2	2	2	2	1	1	1	2	2	1	2	4
24-Sep	2	3	5	3	2	5	3	2	2	2	2	3	3	4	4	4	3	4	1	1	1	1	1	0	5
25-Sep	2	2	2	2	2	2	3	4	4	4	4	5	5	4	5	6	6	2	3	2	3	5	4	7	7
26-Sep	2	2	5	8	6	6	7	6	6	6	6	7	7	7	7	7	6	7	6	5	5	5	5	4	8
27-Sep	6	5	4	4	4	4	4	4	4	5	5	6	6	7	7	7	9	3	3	3	3	2	2	2	9
28-Sep	2	3	1	1	2	1	1	2	3	3	5	5	6	4	4	4	4	3	1	1	1	2	1	1	6
29-Sep	1	1	2	1	4	4	4	1	4	2	8	6	5	6	7	6	7	5	5	4	5	6	4	5	8
30-Sep	4	4	5	4	6	6	6	7	4	5	6	6	6	6	5	5	5	4	2	4	3	3	1	1	7
	6	7	5	8	6	6	7	7	6	6	8	7	7	7	7	7	9	7	6	5	5	6	5	7	
	Diurnal Maximum																								

C - Calibration UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Sawbones Bay - September 2026

Direction of Maximum Speed: 287 deg on Sep 26 13:00
Direction of Maximum Daily Speed Average: 277.6 deg on Sep 26

Direction of Minimum Speed: 69 deg on Sep 26 02:00

Direction of Minimum Daily Speed Average: 0.8 deg on Sep 16

Monthly Average Direction: 259.7 deg

Hours in Service:	720
Hours of Data:	715
Hours of Missing Data:	5
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-Sep	177	171	146	157	169	163	168	168	168	187	175	169	161	157	155	151	145	147	148	121	114	118	118	129	152.4
2-Sep	139	143	146	138	141	137	132	136	137	136	138	149	151	153	155	149	123	124	126	115	114	113	113	105	135.8
3-Sep	87	81	88	82	86	97	98	78	65	84	83	83	89	107	106	100	96	100	95	94	91	102	122	144	93.3
4-Sep	125	138	163	170	158	126	147	149	166	198	199	201	197	233	265	236	248	340	356	351	358	353	352	354	263.5
5-Sep	357	352	357	2	6	5	355	6	8	0	20	26	35	36	39	333	22	67	111	132	109	114	158	155	18.4
6-Sep	154	123	144	88	86	91	93	90	115	148	121	117	115	112	123	114	139	100	110	117	121	129	127	108	115.7
7-Sep	105	109	92	93	55	107	93	87	139	97	38	28	19	43	27	43	45	14	19	39	22	354	2	347	47.8
8-Sep	347	323	315	301	295	295	298	302	336	2	355	345	338	337	333	316	309	353	98	142	157	162	179	188	327.3
9-Sep	196	188	182	181	181	191	186	201	217	226	231	233	239	247	242	233	230	225	224	207	201	219	236	247	224.8
10-Sep	245	256	267	285	277	272	258	249	262	273	278	280	277	289	303	291	290	296	281	285	291	290	300	300	279.5
11-Sep	300	303	302	305	312	315	319	315	313	317	324	327	328	332	325	319	327	322	326	319	317	301	294	295	316.1
12-Sep	290	292	298	305	299	300	292	299	309	324	300	278	275	286	283	294	300	279	245	233	228	194	193	193	283.1
13-Sep	196	195	209	203	193	193	196	204	217	211	222	226	229	242	224	213	217	198	204	186	185	191	196	202	211.2
14-Sep	194	284	281	298	317	311	312	339	353	360	358	3	341	331	350	353	359	355	347	343	326	318	322	316	339.5
15-Sep	301	296	290	288	292	307	298	294	298	299	308	308	282	290	282	237	216	216	201	211	231	199	213	265	271.5
16-Sep	273	284	289	294	299	300	236	291	337	27	123	161	C	C	C	C	189	146	112	115	117	118	115	111	237.1
17-Sep	115	138	152	172	168	166	174	182	214	227	230	239	239	239	249	250	226	297	311	350	31	152	183	UO	215.4
18-Sep	215	253	215	198	309	192	206	290	296	299	334	321	315	307	334	335	334	22	54	150	155	145	134	132	314.9
19-Sep	156	173	186	189	183	184	180	177	182	182	193	190	195	180	194	193	195	193	174	176	181	184	182	194	185.9
20-Sep	200	208	203	202	209	195	194	193	216	207	214	196	199	215	226	217	218	208	202	204	192	186	179	172	203.8
21-Sep	188	184	205	186	188	184	184	175	170	175	180	171	169	175	180	172	184	180	172	170	170	166	91	124	175.5
22-Sep	137	138	134	113	104	99	103	152	226	260	308	304	311	309	315	307	311	309	303	303	302	306	312	294	303.8
23-Sep	193	194	185	176	194	192	227	316	128	126	64	147	92	71	39	20	31	90	97	119	197	325	301	301	87.6
24-Sep	292	292	289	292	304	288	266	227	244	261	236	240	235	242	248	243	231	266	85	26	115	112	99	77	260.8
25-Sep	81	92	96	90	92	89	84	87	89	90	89	96	92	94	87	102	75	73	21	27	77	94	117	286	87.2
26-Sep	81	69	249	268	273	263	268	273	274	277	276	280	287	278	279	280	281	293	294	276	279	276	274	255	277.6
27-Sep	264	275	252	249	245	239	240	238	244	242	242	240	251	266	274	269	264	234	228	230	230	214	215	213	248.9
28-Sep	228	225	205	201	210	204	199	205	216	230	237	237	237	229	234	224	217	210	201	194	181	178	177	177	216.0
29-Sep	177	173	175	175	244	246	234	156	264	290	260	286	289	285	291	293	292	297	283	306	254	255	272	271	274.7
30-Sep	274	273	252	255	262	269	278	301	312	311	311	313	314	314	317	318	318	321	315	300	294	294	334	310	299.3
	239.2	247.5	237.4	252.0	260.9	250.3	249.4	251.9	258.5	265.8	266.8	262.3	268.3	271.3	276.5	271.4	267.9	274.6	274.4	271.6	244.0	211.2	222.1	246.3	
	Diurnal Average																								

C - Calibration UO - Unstable Operation

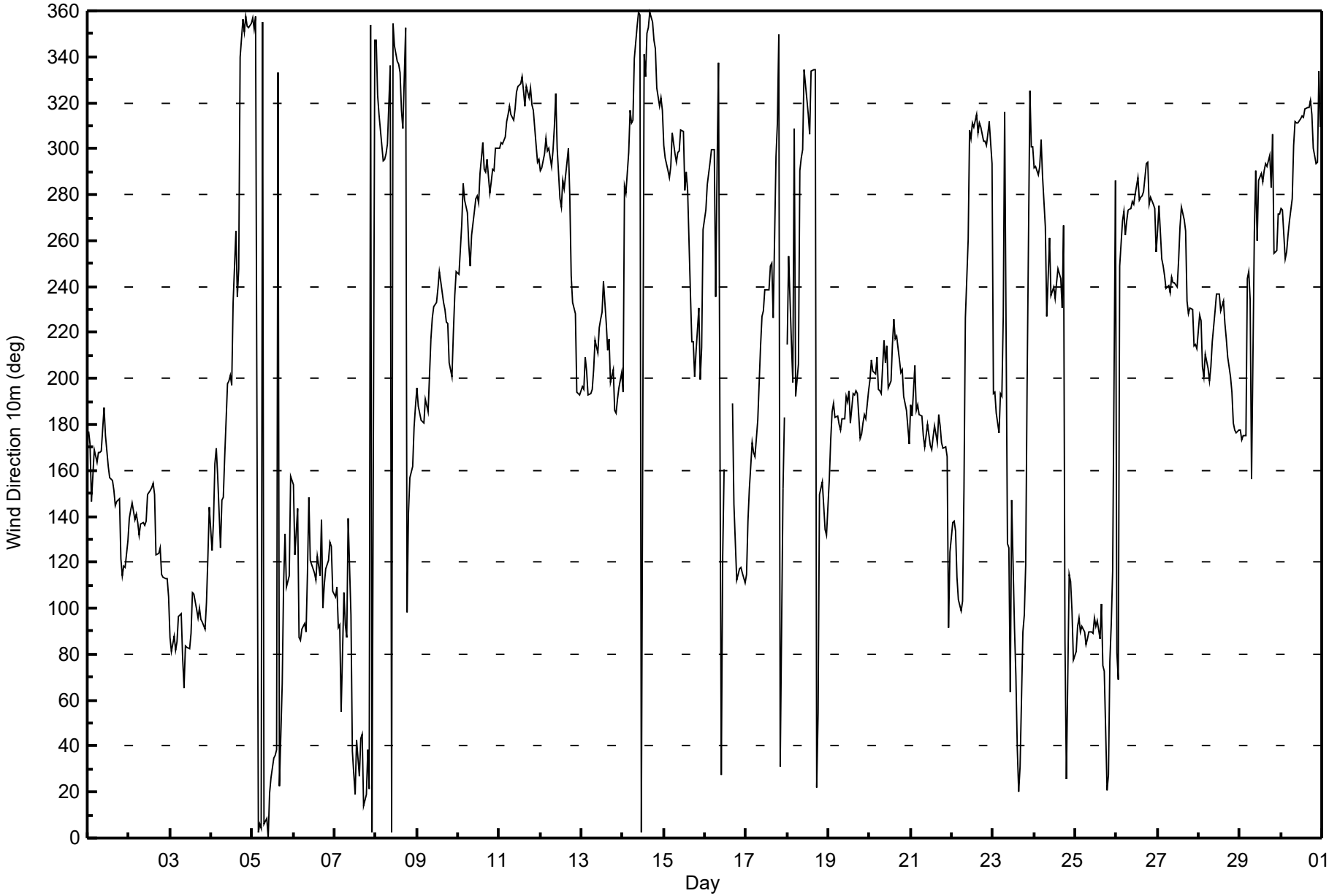
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Sawbones Bay - September 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Sawbones Bay - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 99 deg on Sep 23 06:00

Minimum Value: 6 deg on Oct 1 00:00

Percentiles: P_1 = 8 P_{10} = 11 Q_1 = 14 Median = 19 Q_3 = 25 P_{90} = 35 P_{99} = 80

Hours in Service:	720
Hours of Data:	715
Hours of Missing Data:	5
Hours of Calibration:	4
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-Sep	74	30	29	15	9	9	10	16	21	25	26	27	27	27	26	28	25	24	20	17	13	14	13	16	74
2-Sep	17	17	17	15	17	18	18	20	22	22	23	22	24	25	24	24	21	20	20	15	15	15	16	15	25
3-Sep	12	8	11	10	11	14	21	43	13	12	11	13	14	19	18	18	15	17	14	12	12	14	19	17	43
4-Sep	18	14	18	10	14	15	22	20	51	36	37	28	27	29	26	23	27	33	19	16	18	19	16	19	51
5-Sep	16	18	16	18	18	19	19	21	17	19	20	24	26	27	61	32	37	34	18	16	16	19	22	18	61
6-Sep	10	18	21	18	11	11	33	13	25	27	30	25	34	26	27	20	23	16	16	19	17	28	21	27	34
7-Sep	19	20	11	48	29	20	17	24	28	39	31	22	24	17	20	21	22	17	15	15	36	15	42	15	48
8-Sep	20	15	14	11	8	11	8	17	20	18	22	24	23	28	27	19	19	36	50	16	77	45	12	15	77
9-Sep	16	13	14	13	17	22	48	21	18	18	20	20	23	22	23	20	19	18	17	18	21	21	22	24	48
10-Sep	21	22	13	16	17	16	16	21	20	16	15	17	16	19	22	11	10	11	16	14	9	10	11	11	22
11-Sep	12	13	12	13	14	14	15	14	14	15	15	16	16	19	18	16	16	14	14	13	13	13	11	12	19
12-Sep	10	10	12	15	14	12	10	14	16	23	31	22	30	23	29	27	23	25	26	49	33	29	13	13	49
13-Sep	14	13	16	15	16	14	16	17	19	20	21	22	23	24	24	28	22	21	15	11	12	15	17	16	28
14-Sep	19	80	86	12	16	16	16	17	20	21	21	21	20	19	25	21	22	21	20	16	13	11	13	14	86
15-Sep	13	11	9	8	11	13	11	11	12	15	29	35	33	26	33	27	21	16	16	31	29	17	29	18	35
16-Sep	26	10	9	10	13	17	47	68	37	35	36	50	C	C	C	C	31	36	14	13	13	13	10	9	68
17-Sep	8	18	17	20	20	52	19	22	26	19	22	23	24	26	32	28	20	29	8	18	14	85	11	UO	85
18-Sep	60	49	86	58	57	70	62	53	17	34	31	33	26	19	20	23	25	14	16	23	17	20	13	15	86
19-Sep	24	10	11	13	11	13	16	18	22	23	27	25	26	23	27	24	25	25	20	19	20	21	20	23	27
20-Sep	23	21	23	23	20	17	15	24	23	27	25	32	32	45	32	30	24	20	20	16	11	12	11	13	45
21-Sep	13	36	51	38	27	13	15	16	24	28	24	24	25	23	23	26	23	20	17	16	11	12	47	29	51
22-Sep	27	19	15	25	23	14	42	30	31	32	15	12	15	16	17	14	15	12	9	8	8	8	7	79	79
23-Sep	62	26	43	51	71	99	84	49	52	91	55	60	38	31	40	21	20	35	7	12	64	57	17	17	99
24-Sep	11	11	41	13	7	34	29	25	32	32	25	29	22	27	25	26	24	39	67	39	25	10	12	10	67
25-Sep	13	15	11	9	12	11	10	11	13	13	13	17	14	14	13	21	37	13	47	27	29	12	44	33	47
26-Sep	68	92	73	41	14	21	20	13	14	15	13	14	13	14	14	14	14	11	10	12	14	12	14	21	92
27-Sep	21	12	21	20	20	19	19	17	21	21	20	18	22	22	16	19	24	17	15	17	19	17	15	15	24
28-Sep	16	22	13	14	16	16	18	20	20	19	20	20	20	20	19	19	20	20	18	15	13	14	13	12	22
29-Sep	12	14	15	18	41	25	27	38	54	34	38	14	14	14	13	13	12	10	16	19	23	22	13	13	54
30-Sep	12	13	24	20	19	15	14	12	13	12	13	14	13	15	14	14	14	13	11	10	9	16	33	6	33
	74	92	86	58	71	99	84	68	54	91	55	60	38	45	61	32	37	39	67	49	77	85	47	79	
	Diurnal Maximum																								

C - Calibration UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS506
JACKFISH 1
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JACKFISH 1 (AMS506)
SEPTEMBER 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	685	34	35	99.86	11.6	0	2.4	0
H2S (ppb) Average	685	35	35	100	10.8	1	1.4	0
NO2 (ppb) Average	684	35	36	99.86	12.4	0	4.3	-
NO (ppb) Average	684	35	36	99.86	16.7	-	2.6	-
NOX (ppb) Average	684	35	36	99.86	26.9	-	6.4	-
Temperature 2 m (C) Average	720	0	0	100	25.8	-	19.5	-
Relative Humidity (%) Average	700	0	20	97.22	100	-	96.7	-
Wind Speed 10 m (km/h) Average	701	0	19	97.36	15	-	11	-
Wind Direction 10 m (deg) Average	701	0	19	97.36	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JACKFISH 1 (AMS506)
SEPTEMBER 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	685	0.38	1.1	-	0	0	0	0.1	0.3	0.9	11.6
H2S (ppb) Average	685	0.55	1	-	0	0.1	0.1	0.2	0.5	1.5	10.8
NO2 (ppb) Average	684	1.68	1.8	-	0.1	0.3	0.5	1.1	2.1	3.8	12.4
NO (ppb) Average	684	0.69	1.7	-	0	0	0	0.1	0.6	1.9	16.7
NOX (ppb) Average	684	2.37	3.3	-	0.1	0.4	0.6	1.3	2.7	5.4	26.9
Temperature 2 m (C) Average	720	11.55	5.4	-	0.2	4.9	7.6	10.8	15.1	19.2	25.8
Relative Humidity (%) Average	700	77.88	18.2	-	35.9	48.5	66.5	80.3	94.3	99.7	100
Wind Speed 10 m (km/h) Average	701	5.2	3	-	0	2	3	5	7	9	15
Wind Direction 10 m (deg) Average	701	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JACKFISH 1 (AMS506)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
NO2, SO2	09 Sep 2026 12:00	09 Sep 2026 12:00	1	Maintenance - sample manifold cleaned
Relative Humidity	04 Sep 2026 04:00	04 Sep 2026 07:00	4	Sensor operated out of range
Relative Humidity	06 Sep 2026 05:00	06 Sep 2026 08:00	4	Sensor operated out of range
Relative Humidity	07 Sep 2026 07:00	07 Sep 2026 07:00	1	Sensor operated out of range
Relative Humidity	07 Sep 2026 23:00	08 Sep 2026 08:00	10	Sensor operated out of range
Relative Humidity	10 Sep 2026 23:00	10 Sep 2026 23:00	1	Sensor operated out of range
Wind Speed, Wind Direction	05 Sep 2026 19:00	05 Sep 2026 19:00	1	Flat line in sensor output signal - Sensor frozen
Wind Speed, Wind Direction	05 Sep 2026 22:00	06 Sep 2026 01:00	4	Flat line in sensor output signal - Sensor frozen
Wind Speed, Wind Direction	17 Sep 2026 19:00	18 Sep 2026 04:00	10	Flat line in sensor output signal - Sensor frozen
Wind Speed, Wind Direction	23 Sep 2026 20:00	23 Sep 2026 20:00	1	Flat line in sensor output signal - Sensor frozen
Wind Speed, Wind Direction	24 Sep 2026 01:00	24 Sep 2026 02:00	2	Flat line in sensor output signal - Sensor frozen
Wind Speed, Wind Direction	25 Sep 2026 00:00	25 Sep 2026 00:00	1	Flat line in sensor output signal - Sensor frozen

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Jackfish 1 - September 2026

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

Maximum Value: 11.6 ppb on Sep 22 13:00

Maximum Daily Average: 2.4 ppb on Sep 22

Minimum Value: 0.0 ppb on Sep 1 23:00

Minimum Daily Average: 0.0 ppb on Sep 6

Maximum Diurnal Average: 0.9 ppb at hour 11

Minimum Diurnal Average: 0.1 ppb at hour 21

Monthly Average: 0.38 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.3$ $P_{90} = 0.9$ $P_{99} = 5.0$

Hours in Service:	720
Hours of Data:	685
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-Sep	0.2	0.1	0.2	0.2	Z	0.2	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.4	0.3	0.5	0.1	0.0	0.0	0.0	0.2	0.5
2-Sep	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
3-Sep	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	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1
4-Sep	0.1	Z	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.6	1.0	0.8	0.3	0.2	0.2	0.1	0.1	0.1	0.0	0.2	1.0
5-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
6-Sep	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
7-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1
8-Sep	0.2	0.1	0.0	0.2	0.0	Z	0.2	0.3	0.6	0.8	0.4	0.4	0.4	0.3	1.1	0.8	1.0	0.5	0.2	0.0	0.0	0.0	0.1	0.1	0.3	1.1
9-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	M	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.2
10-Sep	0.3	Z	0.4	0.4	0.3	0.1	0.3	0.2	0.5	1.0	0.5	0.2	0.9	1.0	1.9	0.4	0.2	0.2	0.0	0.0	0.0	0.2	1.8	2.2	0.6	2.2
11-Sep	2.9	4.7	Z	6.1	2.6	1.5	0.7	0.4	0.4	0.2	0.1	0.8	0.5	0.3	0.1	0.4	0.1	0.0	0.1	0.0	0.0	1.1	2.1	2.8	1.2	6.1
12-Sep	2.0	0.4	1.3	Z	0.4	0.5	0.6	0.4	0.6	1.2	0.7	0.9	0.7	0.6	0.6	1.3	0.8	0.8	0.2	0.2	0.0	0.0	0.0	0.0	0.6	2.0
13-Sep	0.0	0.0	0.1	0.0	Z	0.0	0.0	0.0	0.2	0.5	0.4	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	0.1	0.5
14-Sep	0.1	0.1	0.3	0.2	0.3	Z	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.2	0.1	0.3	0.0	0.4	0.0	0.0	0.0	0.2	0.1	0.4
15-Sep	Z	0.2	0.3	0.3	0.1	0.0	0.0	0.2	0.0	1.8	1.1	0.3	1.1	0.7	1.1	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.8
16-Sep	0.1	Z	0.1	0.0	0.0	0.0	0.1	0.1	0.9	1.9	2.1	1.7	1.7	2.3	0.9	0.5	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.3	0.6	2.3
17-Sep	0.2	0.2	Z	0.3	0.2	0.2	0.2	0.3	0.4	0.3	0.4	0.3	0.2	0.6	0.4	0.6	0.7	0.7	0.6	0.5	0.3	0.2	0.1	0.1	0.4	0.7
18-Sep	0.1	0.1	0.0	Z	0.0	0.0	0.0	0.1	0.8	0.9	0.9	0.5	1.9	1.9	0.2	0.9	0.4	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.4	1.9
19-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	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	0.1	0.0	0.0	0.0	0.3
20-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.1	0.1	0.2	0.4	0.1	0.1	0.3	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
21-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.3	0.4	0.3	0.2	0.2	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.4
22-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	8.9	11.1	11.6	7.8	3.6	4.3	4.3	1.2	0.0	0.0	0.0	0.0	0.5	0.9	2.4	11.6
23-Sep	0.9	0.2	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	0.9
24-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.7	2.8	2.2	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.4	2.8
25-Sep	0.0	0.0	0.0	0.1	Z	0.2	0.3	0.2	0.4	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.1	0.2	0.4
26-Sep	0.0	0.0	0.0	0.0	0.1	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
27-Sep	Z	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	0.4	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.4
28-Sep	0.1	Z	0.2	0.0	0.0	0.0	0.1	0.2	0.2	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
29-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.3	0.5	0.2	4.1	0.5	0.0	0.0	0.7	1.0	0.8	0.7	2.0	1.6	0.6	4.1
30-Sep	1.9	2.2	1.5	Z	1.1	0.7	0.9	1.6	3.4	3.4	8.0	3.3	3.9	7.9	2.7	2.2	1.4	0.9	0.4	0.4	0.3	0.4	0.4	0.6	2.2	8.0
	0.4	0.3	0.2	0.3	0.2	0.1	0.1	0.1	0.3	0.6	0.9	0.8	0.9	0.9	0.7	0.5	0.4	0.2	0.1	0.1	0.1	0.1	0.3	0.3	Diurnal Average	
	2.9	4.7	1.5	6.1	2.6	1.5	0.9	1.6	3.4	3.4	8.9	11.1	11.6	7.9	4.1	4.3	4.3	1.2	0.7	1.0	0.8	1.1	2.1	2.8	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

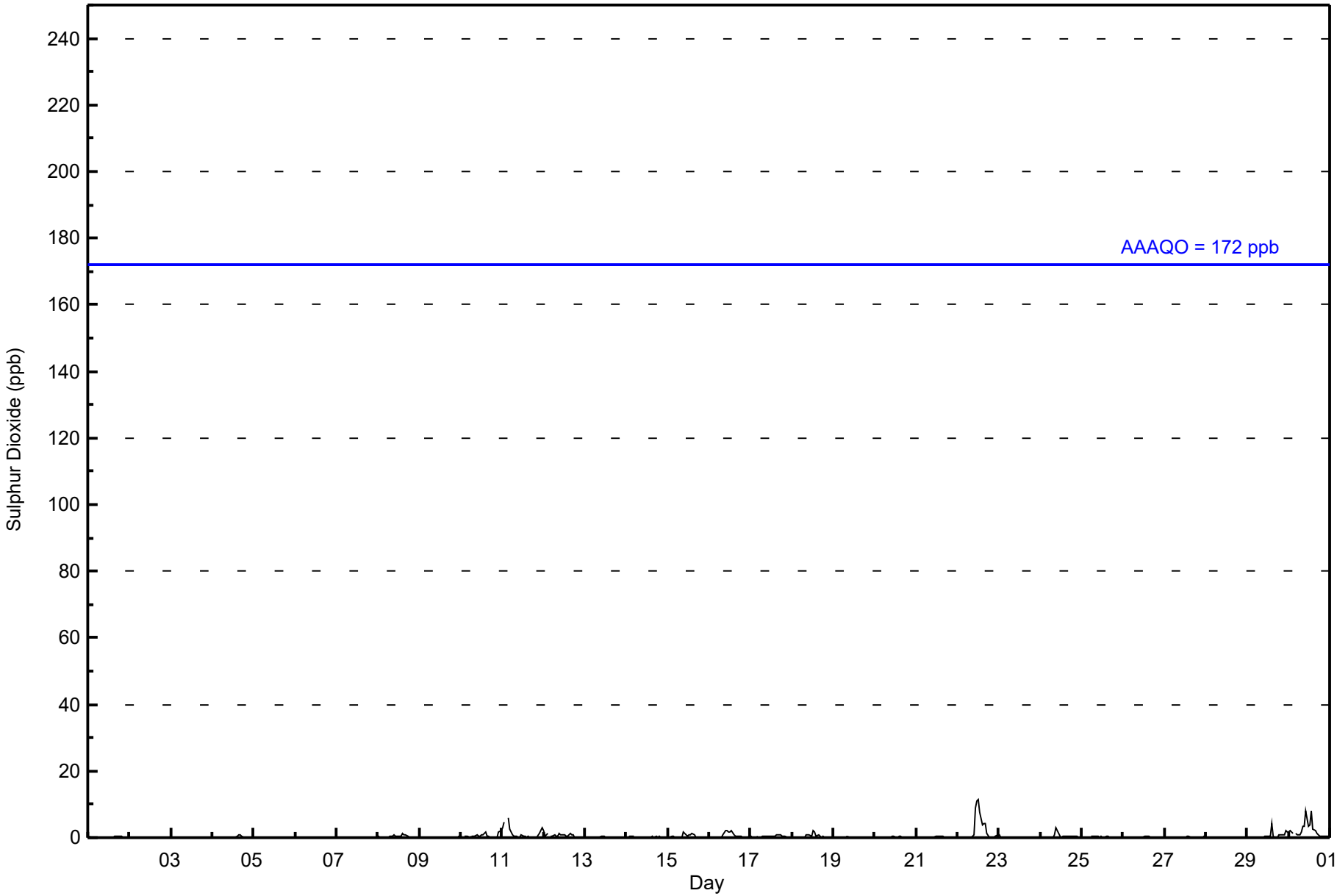
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Jackfish 1 - September 2026



Sulphur Dioxide (SO_2) - ppb
Jackfish 1 - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	683	99.71	99.71
11 - 20	2	0.29	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Jackfish 1 - September 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	26	8	8	3	11	25	54	46	92	77	67	36	32	55	77	48	665
11 - 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
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	26	8	8	3	11	25	54	46	92	77	67	36	32	55	79	48	667

Total Number of Valid Hours: 667

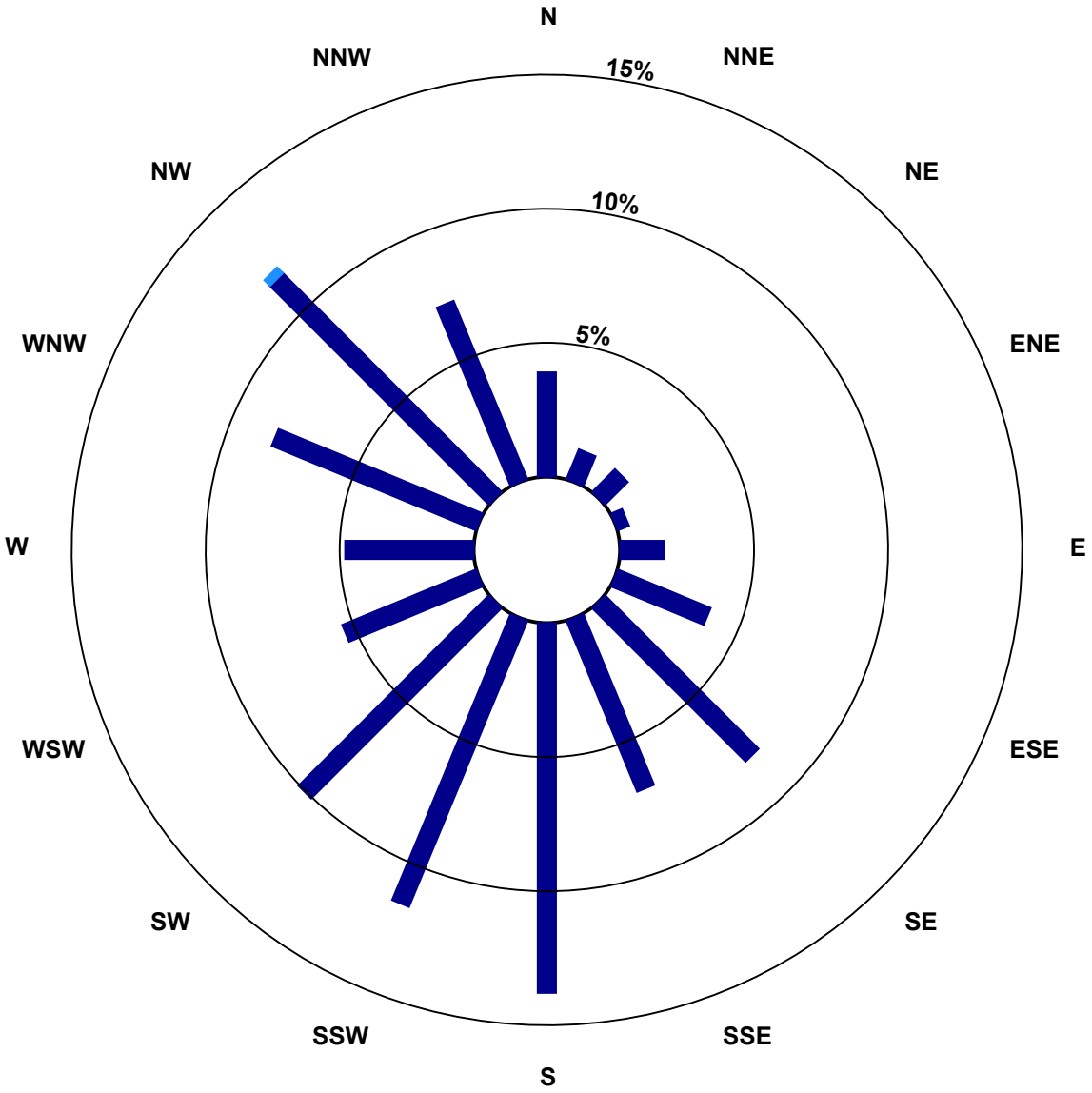
Total Number of Hours: 720

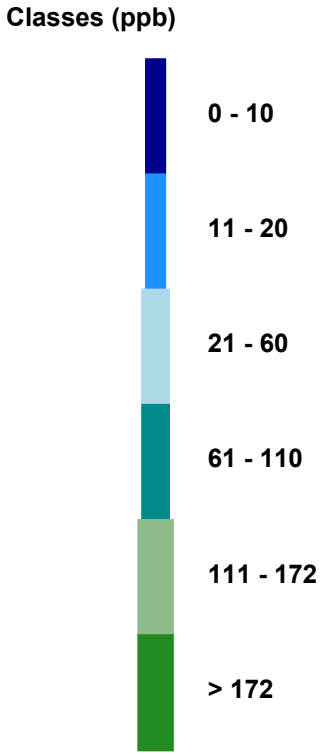
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Jackfish 1





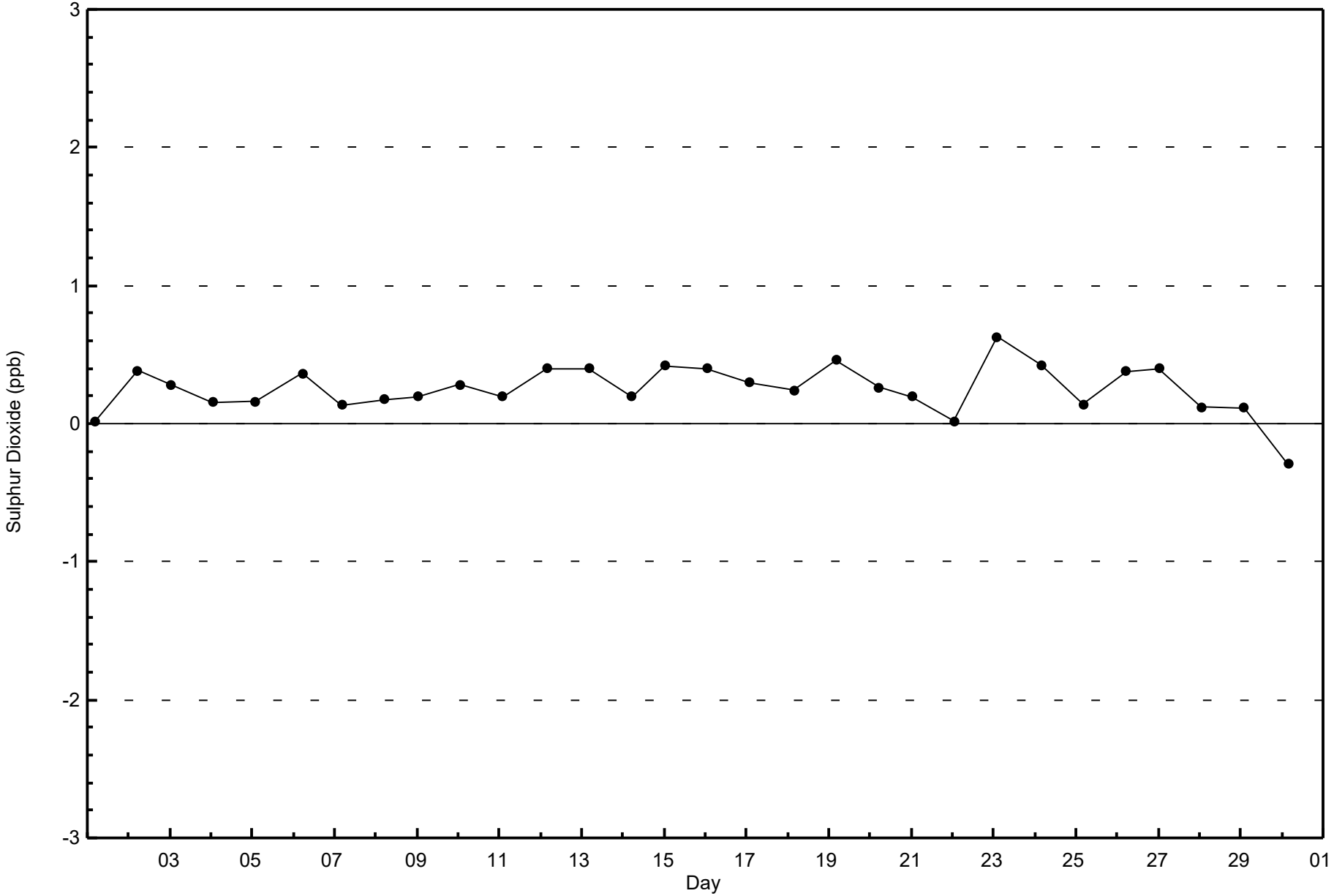
Total Number of Valid Hours: 667

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Jackfish 1 - September 2026

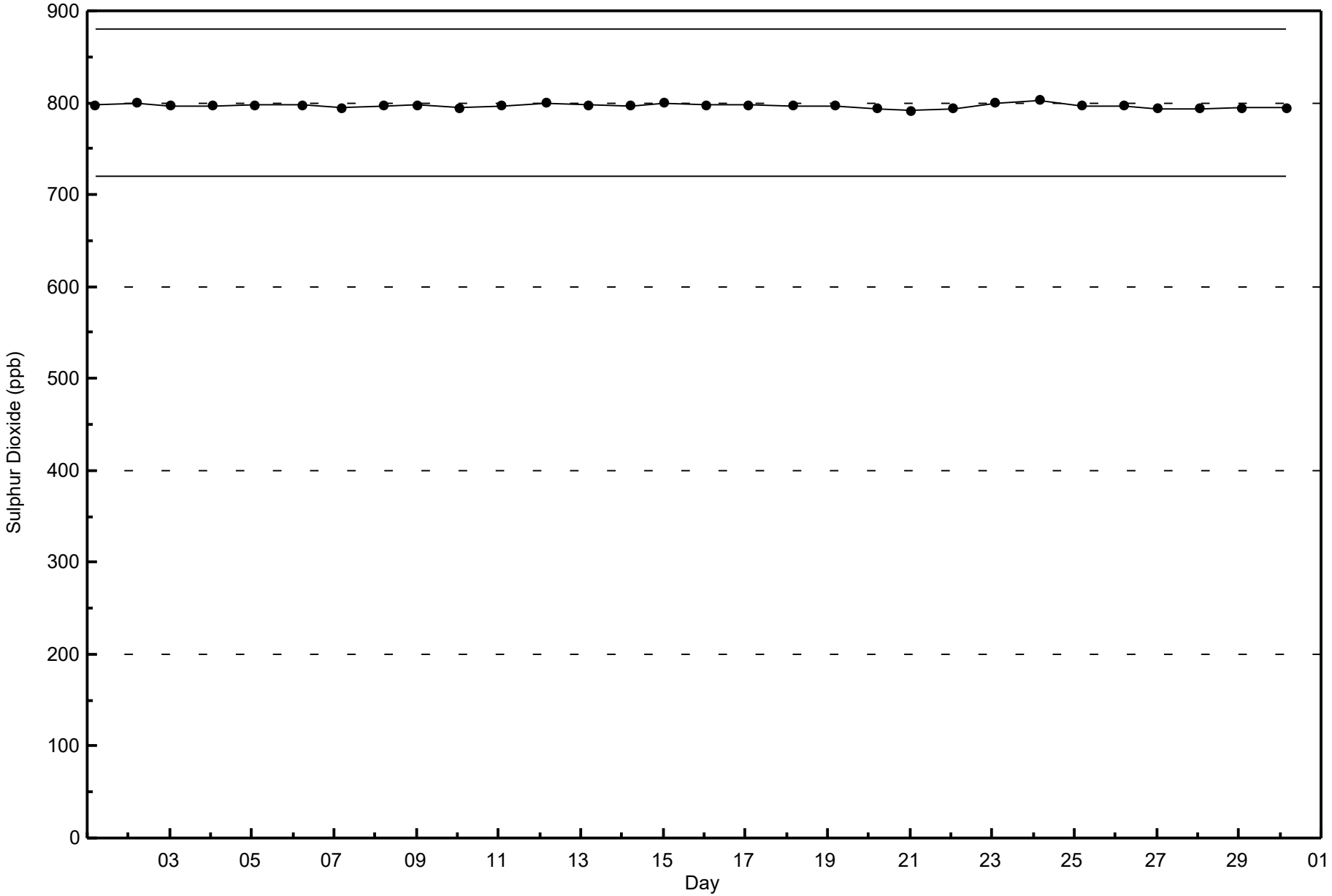


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Jackfish 1 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H2S) - ppb

Jackfish 1 - September 2026

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

Maximum Value: 10.8 ppb on Sep 30 21:00

Maximum Daily Average: 1.4 ppb on Sep 2

Minimum Value: 0.0 ppb on Sep 5 16:00

Minimum Daily Average: 0.1 ppb on Sep 27

Maximum Diurnal Average: 1.2 ppb at hour 21

Minimum Diurnal Average: 0.2 ppb at hour 16

Monthly Average: 0.55 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.5 P_{90} = 1.5 P_{99} = 4.9

Hours in Service:	720
Hours of Data:	685
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-Sep	3.6	3.0	1.4	0.9	0.9	Z	0.3	0.5	0.3	0.3	0.2	0.3	0.3	0.4	0.6	0.6	1.0	0.7	1.1	6.0	4.4	1.3	1.4	1.0	1.3	6.0
2-Sep	Z	0.7	1.0	1.6	1.3	1.7	1.7	1.8	1.8	2.0	1.5	1.8	1.8	1.4	1.0	0.9	0.5	0.9	1.6	1.7	1.7	1.2	1.6	1.1	1.4	2.0
3-Sep	0.5	Z	1.2	0.1	0.1	0.7	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.7	0.1	0.1	0.4	0.1	0.1	0.1	0.2	1.2	1.9	2.0	0.5	2.0
4-Sep	3.9	5.8	1.5	Z	1.7	1.3	0.8	0.5	0.3	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.8	5.8
5-Sep	0.1	0.1	0.1	Z	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	0.2	0.2	1.8	0.1	0.4	2.9	0.3	2.9
6-Sep	1.1	1.9	5.0	3.6	3.5	1.5	Z	0.1	0.6	0.7	0.9	0.9	0.5	0.7	0.8	0.2	0.9	0.7	0.9	1.5	1.5	1.4	1.4	1.8	1.4	5.0
7-Sep	0.9	3.9	4.3	2.8	1.9	Z	0.6	0.1	0.1	0.5	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.7	4.3
8-Sep	Z	0.2	0.1	0.1	0.1	0.4	0.4	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.0	0.0	0.3	0.1	1.9	0.7	0.3	0.3	1.9
9-Sep	0.3	Z	0.3	0.3	0.3	0.2	0.1	0.2	0.1	C	C	C	C	C	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.3
10-Sep	0.1	0.1	Z	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.5	0.5	0.2	0.5
11-Sep	0.4	0.5	0.6	Z	0.6	0.5	0.4	0.3	0.5	0.6	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.4	0.1	0.1	0.3	0.2	0.3	0.3	0.4	0.6
12-Sep	0.2	0.1	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	0.0	0.3	0.2	0.0	0.1	0.3
13-Sep	0.0	0.0	0.1	0.1	0.1	Z	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2
14-Sep	Z	0.3	0.4	0.2	0.3	0.4	0.6	0.4	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.3	0.4	0.3	0.4	0.2	0.3	0.4	0.3	0.3	0.6
15-Sep	0.4	Z	0.3	0.3	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	0.2	0.3	0.3	0.4	0.4	0.2	0.2	0.4
16-Sep	0.1	0.2	Z	0.2	0.3	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.5	0.7	6.2	6.6	1.4	1.1	0.7	0.9	6.6
17-Sep	0.8	0.9	0.9	Z	0.5	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.3	1.4	1.9	1.4	2.3	2.6	0.6	2.6
18-Sep	1.7	1.2	2.8	2.8	1.2	Z	3.6	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.9	0.2	2.7	1.7	1.2	0.9	3.6
19-Sep	0.3	0.2	0.3	0.2	0.3	Z	0.6	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.6
20-Sep	Z	0.1	0.2	0.2	0.2	0.2	0.4	0.4	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	0.4
21-Sep	0.2	Z	0.4	1.3	4.8	1.1	0.5	0.5	0.5	0.3	0.3	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.5	0.4	0.5	0.4	0.6	4.8
22-Sep	0.3	1.2	Z	2.1	1.1	0.6	0.7	3.7	0.3	0.2	0.4	0.4	0.3	0.3	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.2	0.5	0.6	3.7
23-Sep	1.1	2.4	3.1	Z	0.7	3.4	3.7	2.5	2.7	1.4	1.1	0.7	0.6	0.5	0.7	0.5	0.4	0.1	1.3	0.4	2.3	0.2	0.2	0.3	1.3	3.7
24-Sep	2.5	4.4	0.8	0.1	Z	0.1	2.7	7.2	4.9	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.9	0.7	1.5	0.4	1.2	7.2
25-Sep	0.1	0.0	1.5	0.6	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	0.5	0.5	0.2	0.1	0.4	0.6	0.2	1.5
26-Sep	Z	0.6	0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.2	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	0.2	0.6
27-Sep	0.1	Z	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	0.0	0.0	0.2	0.2	0.1	0.2
28-Sep	0.2	0.2	Z	0.3	0.4	0.2	0.2	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.4
29-Sep	0.2	0.3	0.2	Z	0.1	0.0	0.1	1.7	0.2	0.1	0.1	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	1.7
30-Sep	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.2	0.3	0.5	0.5	0.5	0.4	0.7	0.6	0.4	0.3	0.2	0.1	0.2	10.8	1.0	1.7	2.0	0.9	10.8
	0.8	1.1	1.0	0.8	0.8	0.6	0.7	0.8	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.8	1.2	0.6	0.7	0.7	Diurnal Average	
	3.9	5.8	5.0	3.6	4.8	3.4	3.7	7.2	4.9	2.0	1.5	1.8	1.8	1.4	1.0	0.9	1.0	0.9	1.6	6.2	10.8	2.7	2.3	2.9	Diurnal Maximum	

Z - zerospan C - Calibration

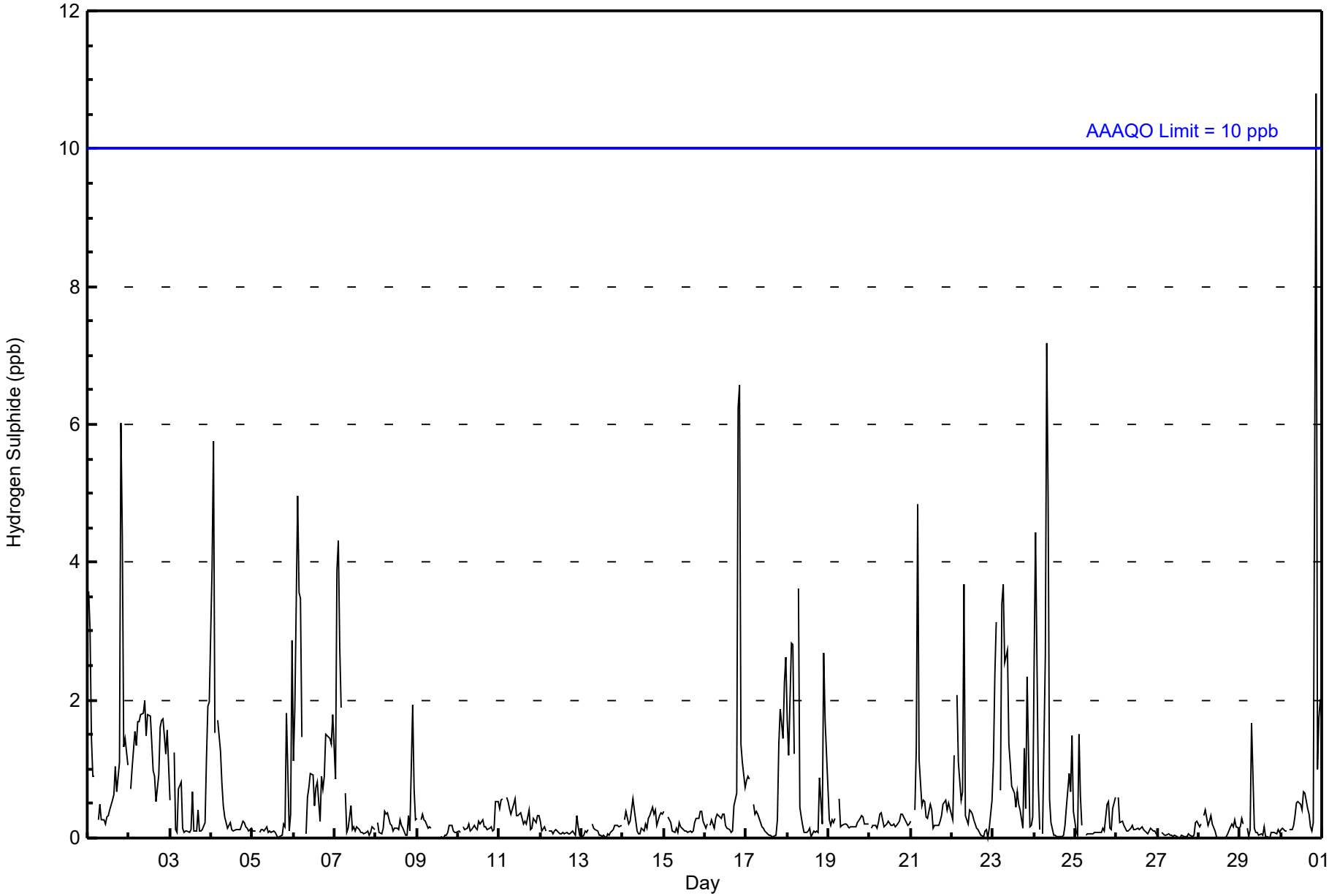
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H2S) - ppb

Jackfish 1 - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	652	95.18	95.18
3 - 4	24	3.50	98.69
5 - 7	8	1.17	99.85
8 - 11	0	0.00	99.85
> 11	1	0.15	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H2S) - ppb

Jackfish 1 - September 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	26	8	8	4	11	24	48	39	82	76	68	36	26	56	80	47	639
3 - 4	0	0	0	0	0	1	3	3	5	3	2	0	1	0	0	0	18
5 - 7	0	0	0	0	0	0	3	3	2	0	0	0	0	0	0	0	8
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	1	0	0	0	0	0	0	1
Totals	26	8	8	4	11	25	54	45	89	80	70	36	27	56	80	47	666

Total Number of Valid Hours: 666

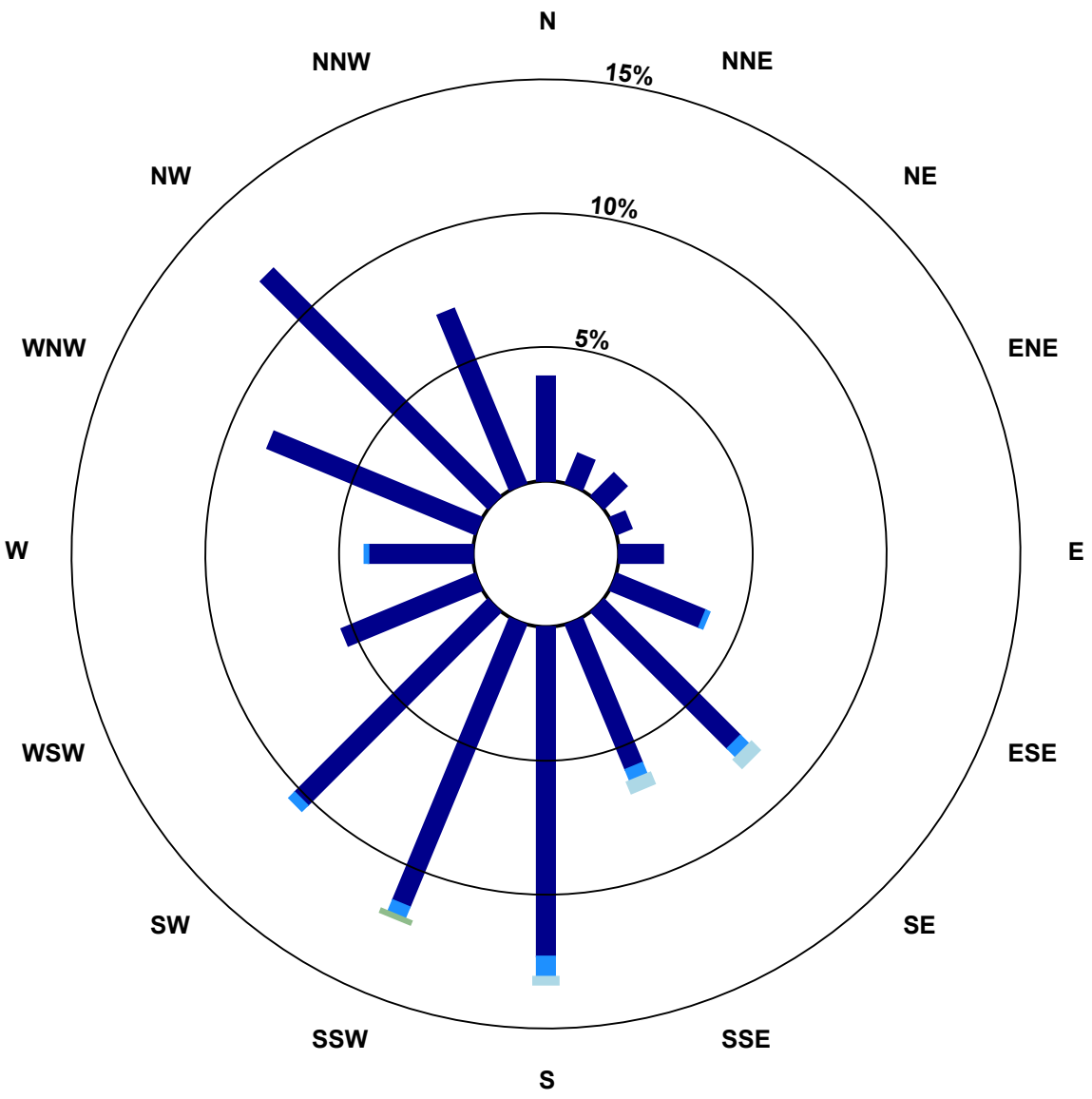
Total Number of Hours: 720

Wood Buffalo Environmental Association

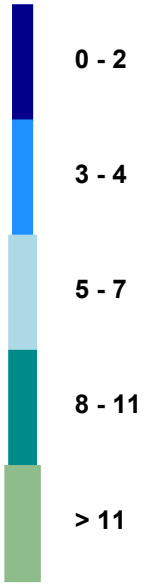
Wind Rose Sep 2026

Hydrogen Sulphide (H2S) - ppb

Jackfish 1



Classes (ppb)



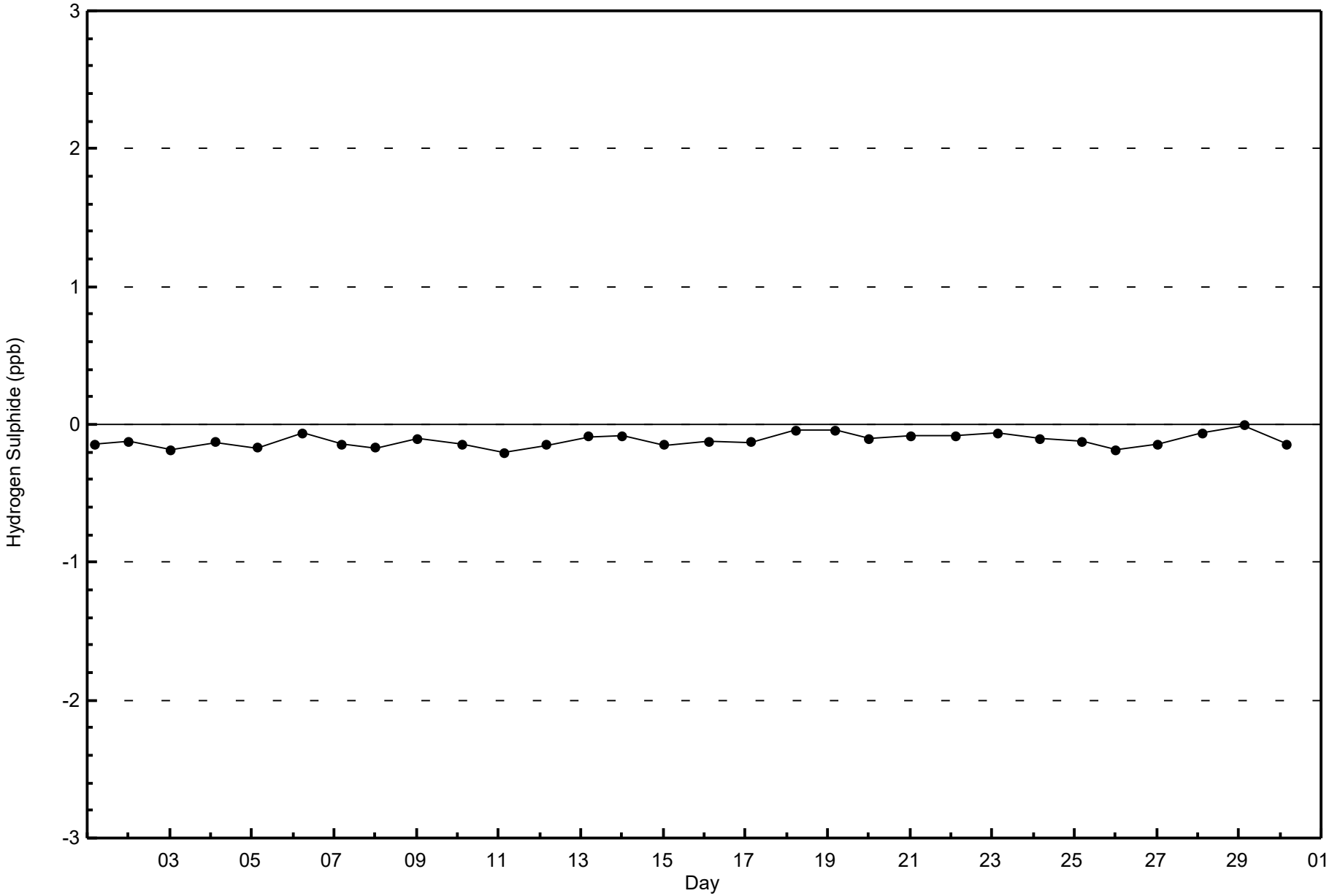
Total Number of Valid Hours: 666

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H2S) - ppb

Jackfish 1 - September 2026

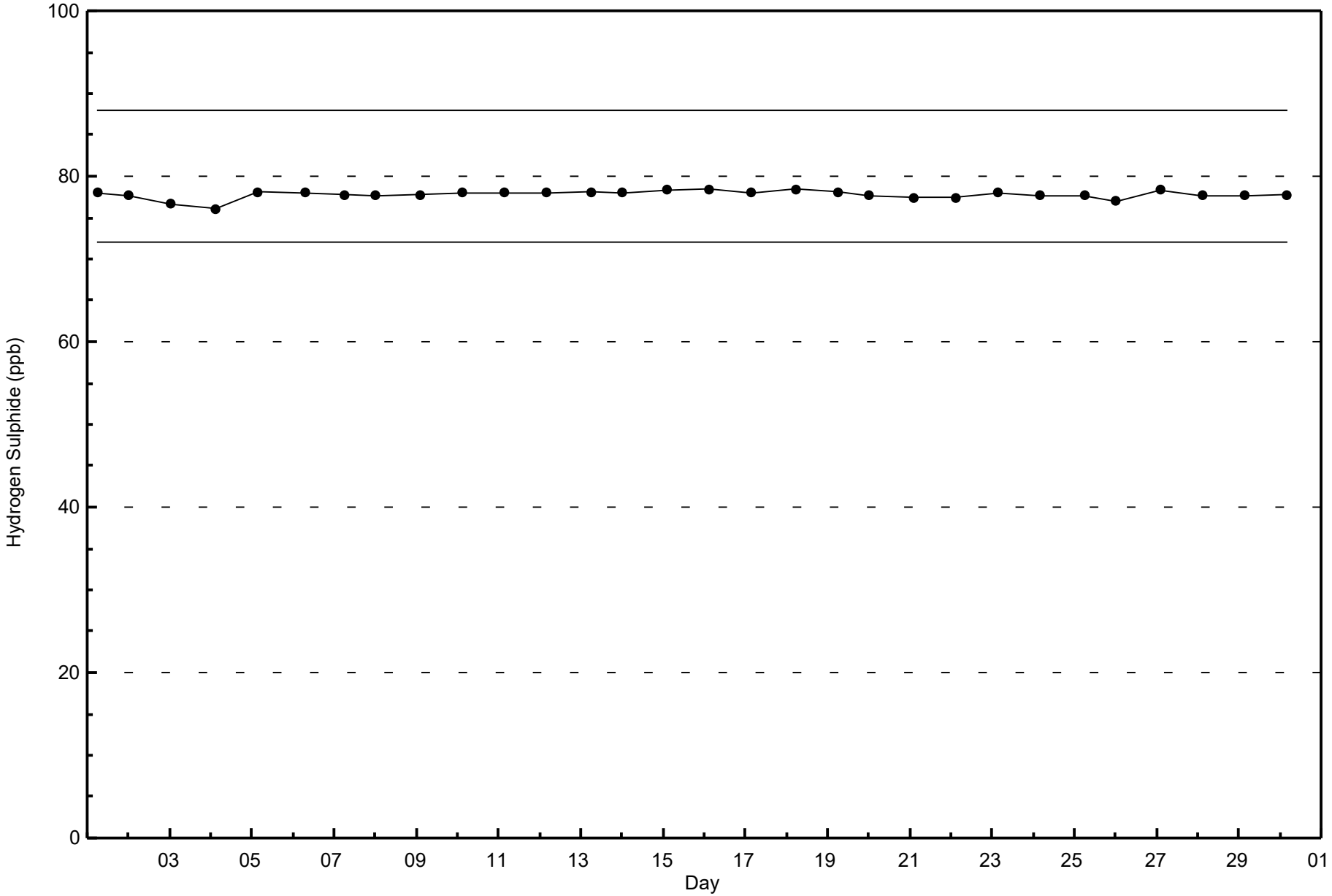


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H2S) - ppb

Jackfish 1 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Jackfish 1 - September 2026

Maximum Value: 16.7 ppb on Sep 23 08:00

Maximum Daily Average: 2.6 ppb on Sep 11

Minimum Value: 0.0 ppb on Sep 1 13:00

Minimum Daily Average: 0.1 ppb on Sep 25

Maximum Diurnal Average: 1.7 ppb at hour 8

Minimum Diurnal Average: 0.1 ppb at hour 21

Monthly Average: 0.69 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.6 P_{90} = 1.9 P_{99} = 9.1

Hours in Service:	720
Hours of Data:	684
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-Sep	0.4	0.2	Z	0.1	0.0	1.2	2.2	0.8	0.7	1.0	1.0	0.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.2
2-Sep	0.1	0.0	0.1	Z	0.1	0.4	0.4	0.3	0.6	0.3	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.6
3-Sep	0.0	0.0	0.1	0.0	Z	0.8	0.1	2.4	0.1	1.1	1.2	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	0.3	2.4
4-Sep	0.0	0.0	0.0	0.0	0.0	0.3	Z	0.4	0.3	0.9	0.3	0.5	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	0.9
5-Sep	Z	0.1	0.1	0.1	0.1	1.2	0.3	0.8	0.4	0.5	1.0	0.7	1.4	2.1	1.7	0.0	0.1	0.0	0.0	0.0	0.2	0.2	0.1	0.1	0.5	2.1
6-Sep	0.1	Z	0.1	0.1	0.4	2.8	1.0	0.1	0.1	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	0.0	0.0	0.2	2.8
7-Sep	0.0	0.1	Z	0.1	0.1	0.3	0.8	1.5	0.4	0.0	0.1	0.8	0.3	0.5	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	1.5
8-Sep	0.1	0.1	0.1	Z	0.1	1.1	1.1	4.8	1.2	C	C	C	C	C	1.1	0.6	0.5	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.6	4.8
9-Sep	0.0	0.1	0.1	0.1	Z	2.6	0.2	0.4	0.2	0.3	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	0.2	2.6
10-Sep	0.0	0.0	0.0	0.3	0.4	Z	0.1	0.1	0.2	0.4	0.1	0.1	3.3	1.8	4.2	0.4	0.0	0.0	0.0	0.0	0.0	2.0	12.0	9.7	1.5	12.0
11-Sep	Z	13.5	14.5	11.3	3.2	1.2	0.5	0.7	0.5	0.1	0.5	1.8	0.9	0.4	0.0	0.5	0.0	0.0	0.0	0.0	0.0	1.7	3.4	4.2	2.6	14.5
12-Sep	2.5	Z	2.8	1.0	0.8	1.1	1.6	1.0	4.4	2.5	0.9	1.5	0.7	0.2	1.2	0.9	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.0	4.4
13-Sep	0.0	0.0	Z	0.0	0.5	5.4	2.6	2.0	1.6	0.4	0.4	0.4	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.6	5.4
14-Sep	0.0	0.2	0.2	Z	0.1	0.3	1.8	1.2	0.5	0.1	0.6	1.0	0.4	0.2	0.3	1.4	0.7	2.7	1.2	2.6	0.1	0.2	0.2	2.1	0.8	2.7
15-Sep	2.2	0.7	1.8	2.0	Z	0.3	0.1	0.9	1.8	4.4	2.0	0.2	0.2	0.1	0.3	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.8	4.4
16-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.2	0.6	2.4	2.5	2.5	6.5	1.0	1.0	0.2	0.0	0.0	0.0	0.0	0.2	0.3	0.1	0.1	0.1	0.8	6.5
17-Sep	Z	0.1	0.1	0.1	0.6	0.9	0.2	1.3	1.8	0.9	0.4	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	0.3	1.8
18-Sep	0.1	Z	0.0	0.0	1.3	0.0	4.2	1.3	2.1	2.6	2.5	0.1	1.1	0.7	0.0	0.3	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.7	4.2
19-Sep	0.0	0.1	Z	0.0	0.2	1.1	0.1	2.1	1.6	1.9	1.1	0.4	0.5	0.4	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.1
20-Sep	0.0	0.0	0.0	Z	1.1	0.7	0.5	0.9	0.3	0.7	0.9	0.3	2.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.4
21-Sep	0.0	0.1	0.1	0.1	Z	4.8	2.9	0.9	0.4	0.5	0.9	0.0	0.8	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	4.8
22-Sep	0.1	0.1	0.1	0.1	1.3	Z	0.3	3.2	2.5	2.8	8.8	9.1	8.9	4.1	1.5	1.6	1.7	0.0	0.0	0.1	0.1	0.0	0.0	0.0	2.0	9.1
23-Sep	Z	0.0	0.1	0.1	3.5	1.7	2.5	16.7	1.5	1.5	2.9	2.8	1.5	0.7	0.7	0.6	0.2	0.1	0.2	0.3	0.5	0.3	0.2	0.1	1.7	16.7
24-Sep	0.1	Z	0.1	0.0	0.0	0.0	0.8	2.4	2.9	2.6	0.7	0.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.5	2.9
25-Sep	0.1	0.1	Z	0.0	0.0	0.1	0.3	0.2	0.4	0.0	0.3	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	0.4
26-Sep	0.2	0.2	0.2	Z	0.4	1.8	0.7	0.2	1.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.3	1.8
27-Sep	0.0	0.0	0.0	0.0	Z	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.3
28-Sep	0.0	0.0	0.0	0.0	1.2	Z	3.6	2.1	1.7	0.7	0.2	0.1	0.0	0.0	0.4	0.1	0.1	0.1	0.2	0.2	0.1	0.0	0.1	0.0	0.5	3.6
29-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.6	1.1	0.8	0.3	0.8	0.4	4.9	0.3	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.5	4.9
30-Sep	0.1	Z	0.1	0.1	0.1	0.2	0.1	1.8	5.2	8.1	9.2	2.2	4.5	7.7	2.0	1.6	0.9	0.7	0.1	0.0	0.1	0.1	0.1	0.0	2.0	9.2
	0.2	0.6	0.8	0.6	0.6	1.2	1.0	1.7	1.2	1.3	1.4	1.1	1.0	0.8	0.7	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.6	0.6	Diurnal Average	
	2.5	13.5	14.5	11.3	3.5	5.4	4.2	16.7	5.2	8.1	9.2	9.1	8.9	7.7	4.9	1.6	1.7	2.7	1.2	2.6	0.5	2.0	12.0	9.7	Diurnal Maximum	

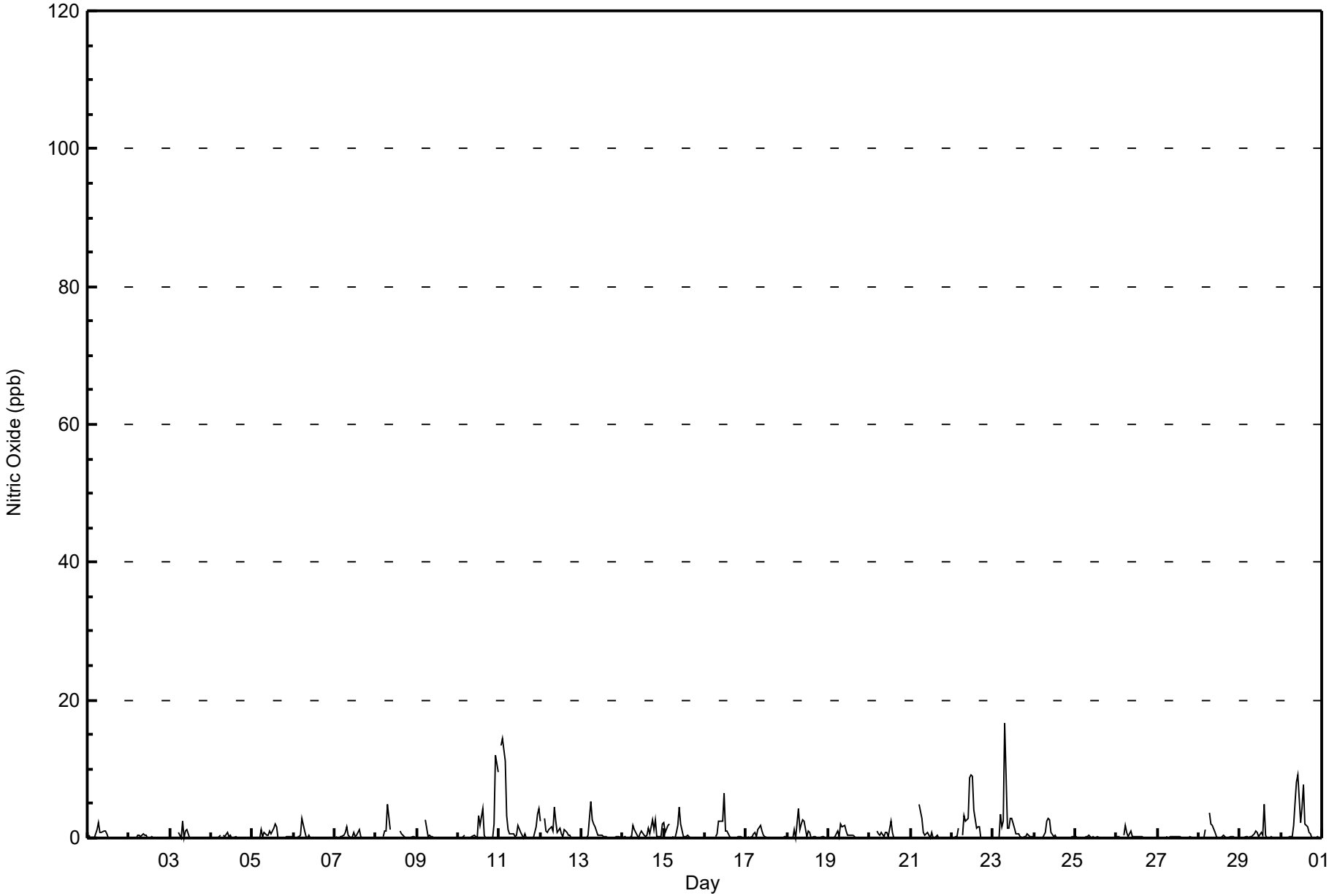
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Jackfish 1 - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Jackfish 1 - September 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	8	8	4	11	25	56	44	91	79	71	35	33	52	82	42	667
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	26	8	8	4	11	25	56	44	91	79	71	35	33	52	82	42	667

Total Number of Valid Hours: 667

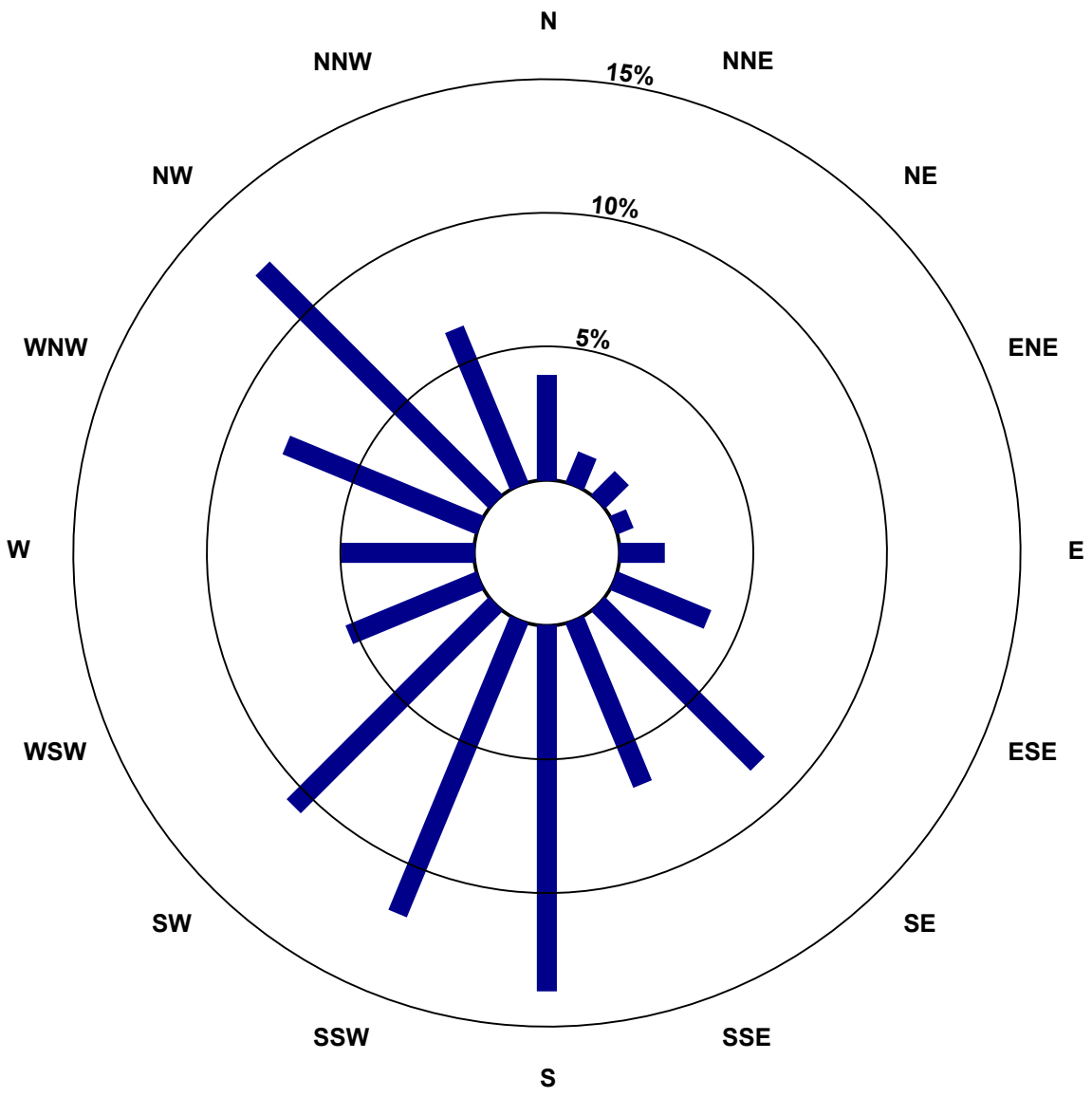
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Jackfish 1



Classes (ppb)

- 0 - 20
- 21 - 40
- 11 - 80
- 81 - 159
- > 159

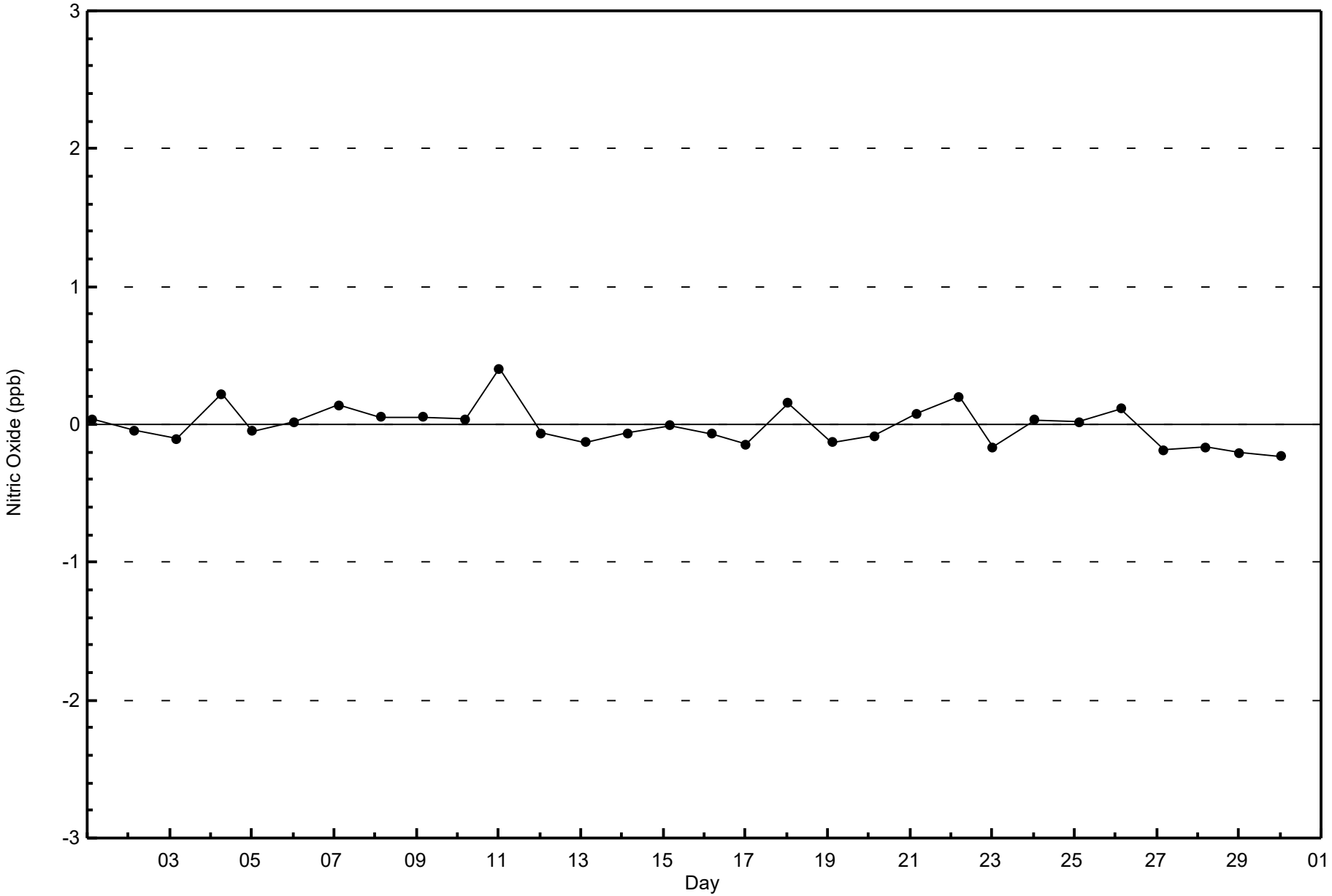
Total Number of Valid Hours: 667

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Jackfish 1 - September 2026

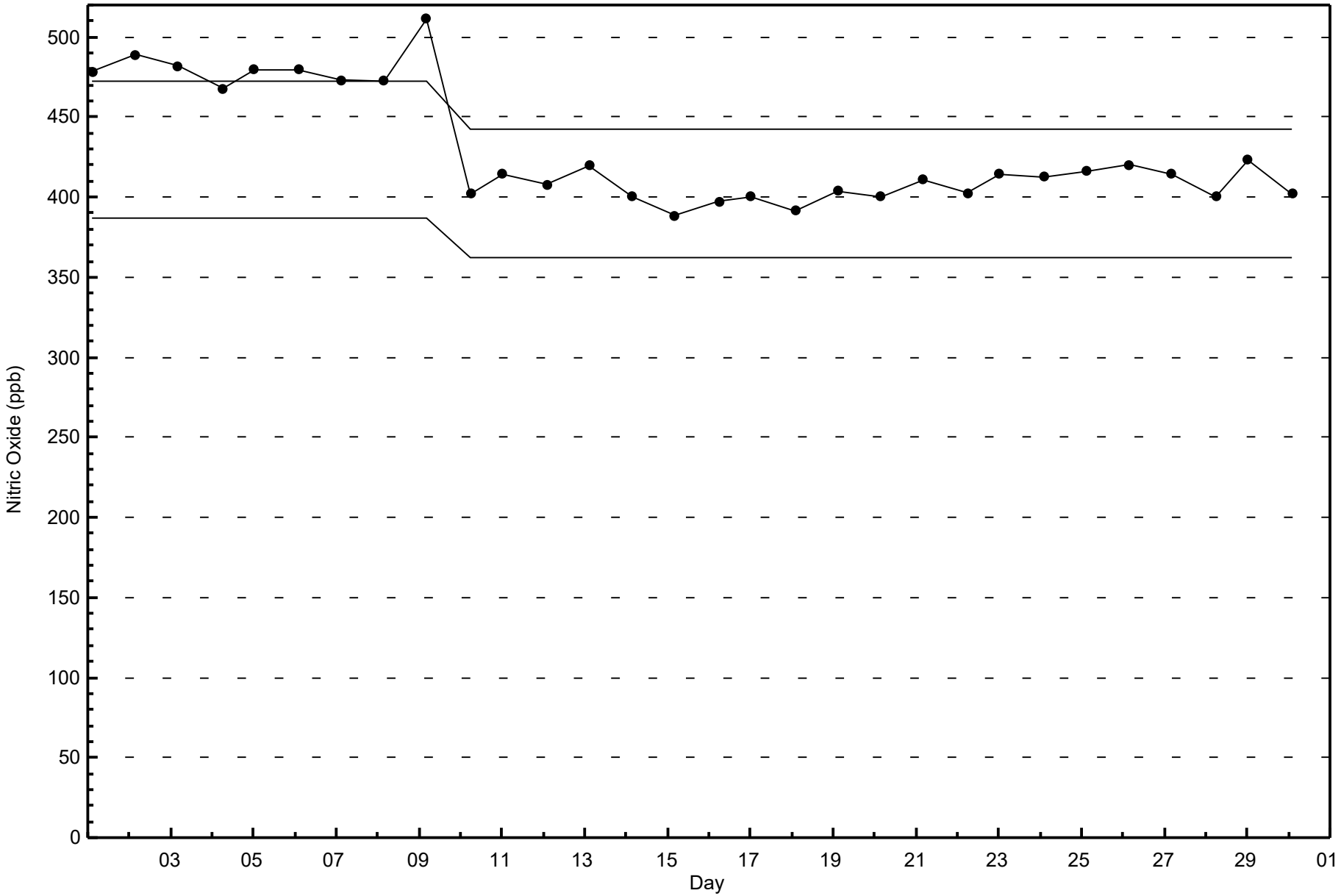


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Jackfish 1 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Jackfish 1 - September 2026

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

Maximum Value: 12.4 ppb on Sep 11 03:00

Maximum Daily Average: 4.3 ppb on Sep 22

Minimum Value: 0.1 ppb on Sep 3 16:00

Minimum Daily Average: 0.3 ppb on Sep 6

Maximum Diurnal Average: 2.4 ppb at hour 7

Minimum Diurnal Average: 0.8 ppb at hour 19

Monthly Average: 1.68 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.3 Q_1 = 0.5 Median = 1.1 Q_3 = 2.1 P_{90} = 3.8 P_{99} = 9.7

Hours in Service:	720
Hours of Data:	684
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-Sep	0.4	0.3	Z	0.5	0.7	1.3	2.0	0.8	1.2	1.8	2.0	1.6	0.7	0.9	0.8	0.8	0.7	0.6	0.2	0.6	1.3	0.4	0.4	0.5	0.9	2.0
2-Sep	0.4	0.6	0.7	Z	0.6	0.9	1.2	0.7	0.8	0.8	0.8	0.4	0.5	0.6	0.4	0.3	0.2	0.2	0.2	0.4	0.4	0.5	0.3	0.5	0.5	1.2
3-Sep	0.5	0.5	0.5	0.3	Z	1.4	0.5	1.8	0.3	0.6	0.3	0.4	0.5	0.4	0.2	0.1	0.2	0.1	0.2	0.1	0.3	0.3	0.3	0.3	0.4	1.8
4-Sep	0.3	0.3	0.4	0.5	0.6	1.7	Z	1.6	1.6	1.8	1.0	2.2	0.8	0.5	1.5	1.6	1.1	1.0	1.0	1.2	1.0	1.0	0.7	0.9	1.1	2.2
5-Sep	Z	0.9	0.8	0.6	0.3	0.6	0.7	0.7	0.9	0.6	0.9	0.9	1.2	1.7	1.9	0.5	0.8	0.5	0.7	0.7	0.2	0.2	0.4	0.3	0.7	1.9
6-Sep	0.2	Z	0.2	0.4	0.4	1.1	1.0	0.4	0.4	0.6	0.1	0.5	0.4	0.1	0.3	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	1.1
7-Sep	0.3	0.3	Z	0.4	0.4	0.4	1.2	1.1	0.7	0.2	0.6	1.0	1.0	1.5	1.7	0.8	0.6	0.2	0.2	0.4	0.4	0.8	0.7	1.2	0.7	1.7
8-Sep	1.8	0.9	0.6	Z	1.1	3.0	2.9	5.1	3.7	C	C	C	C	C	3.4	3.9	3.8	1.9	1.5	5.0	0.9	1.1	0.6	0.4	2.3	5.1
9-Sep	0.5	0.4	0.4	0.4	Z	3.8	0.8	0.8	0.7	0.8	0.5	M	0.3	0.3	0.2	0.3	0.4	0.2	0.3	0.4	0.4	0.5	0.6	1.0	0.6	3.8
10-Sep	0.9	0.9	1.7	2.1	2.2	Z	2.0	1.2	1.5	1.4	1.3	1.1	4.6	4.2	6.4	2.3	1.3	1.2	0.2	0.1	0.5	2.5	8.8	8.3	2.5	8.8
11-Sep	Z	11.7	12.4	10.4	4.0	2.1	1.7	1.7	1.5	0.9	0.9	2.2	1.7	1.2	0.7	1.2	0.6	0.9	0.3	0.8	0.4	6.7	8.3	8.9	3.5	12.4
12-Sep	5.8	Z	6.1	3.3	2.6	2.8	3.5	2.7	3.7	2.9	2.0	2.0	1.4	1.1	1.6	2.5	2.1	3.6	0.6	0.5	0.4	0.3	0.3	0.3	2.3	6.1
13-Sep	0.4	0.5	Z	0.7	1.2	4.1	3.5	2.4	2.3	1.5	1.4	1.1	1.1	1.0	1.1	1.4	0.6	0.5	0.6	0.7	0.6	0.5	0.6	1.2	1.3	4.1
14-Sep	1.2	0.9	3.5	Z	2.4	2.5	4.2	3.7	1.8	0.8	1.3	1.2	1.3	1.0	1.5	3.7	3.5	5.4	4.2	5.4	1.8	1.7	2.5	4.8	2.6	5.4
15-Sep	5.2	2.9	4.1	3.8	Z	1.3	0.6	1.8	1.4	3.8	2.1	0.8	0.7	0.9	1.1	0.7	0.6	0.3	0.5	0.5	0.5	0.4	0.4	1.1	1.5	5.2
16-Sep	0.9	1.3	0.7	0.3	0.8	Z	1.5	1.8	3.4	4.1	3.9	4.8	2.3	2.3	1.3	0.9	0.7	0.5	1.1	0.3	0.1	0.4	1.1	1.8	1.6	4.8
17-Sep	Z	1.9	1.8	2.1	2.4	3.1	2.4	2.6	3.1	2.4	1.6	1.4	0.7	1.0	0.9	0.3	0.4	0.3	1.5	3.5	2.0	1.1	0.8	0.7	1.7	3.5
18-Sep	0.9	Z	1.3	0.7	4.3	1.4	2.5	2.7	4.3	3.8	3.6	1.2	3.6	3.0	0.6	2.5	2.4	1.1	1.1	0.5	0.7	0.4	0.3	0.3	1.9	4.3
19-Sep	0.5	0.4	Z	0.8	1.4	3.2	2.0	3.4	3.8	3.4	1.9	1.4	1.7	1.6	2.3	2.3	1.0	1.1	1.1	1.5	1.5	1.5	1.7	1.7	1.8	3.8
20-Sep	1.8	1.8	1.7	Z	3.5	3.4	3.4	3.8	1.7	2.5	2.9	2.2	0.6	2.8	1.9	2.5	1.2	1.0	1.1	1.1	1.1	1.0	1.0	1.4	2.0	3.8
21-Sep	2.2	1.8	1.5	1.1	Z	5.5	4.0	2.2	2.0	2.7	2.2	2.4	3.1	1.3	1.4	3.7	1.0	0.9	1.1	1.0	1.1	1.4	1.4	1.8	2.0	5.5
22-Sep	2.1	1.9	1.6	2.0	2.5	Z	4.3	4.2	3.6	3.9	12.0	11.0	10.5	8.0	5.5	6.4	6.9	2.9	0.4	1.7	1.1	0.7	3.3	3.5	4.3	12.0
23-Sep	Z	1.5	1.5	1.6	2.6	3.5	7.0	5.4	4.0	4.2	3.8	3.8	3.8	2.7	2.1	2.2	2.1	1.9	1.0	0.7	1.4	2.8	2.2	2.2	2.8	7.0
24-Sep	3.4	Z	3.3	1.4	2.2	2.3	4.2	2.6	3.4	4.7	2.1	1.2	0.9	0.3	0.1	0.2	1.1	1.9	0.9	2.9	1.3	0.9	0.6	0.6	1.8	4.7
25-Sep	0.5	0.4	Z	0.4	0.3	0.5	0.9	0.8	1.0	0.4	0.5	0.4	0.7	0.6	0.2	0.2	0.3	0.3	0.7	1.1	0.8	0.4	0.4	0.7	0.5	1.1
26-Sep	0.9	1.0	1.2	Z	2.7	2.1	1.7	1.3	2.3	1.3	0.9	0.9	1.2	1.1	0.8	0.9	0.8	0.6	0.6	0.2	0.7	0.7	0.5	0.3	1.1	2.7
27-Sep	0.4	1.0	0.6	0.4	Z	0.7	0.6	0.5	0.5	0.6	0.4	0.5	0.5	0.7	0.6	0.6	0.3	0.4	0.5	0.4	0.6	0.4	0.4	0.4	0.5	1.0
28-Sep	0.5	0.5	0.6	0.5	1.6	Z	6.1	4.3	2.6	1.5	0.7	0.5	0.5	0.6	2.3	0.9	1.0	1.0	0.8	0.7	0.8	0.9	1.0	1.2	1.4	6.1
29-Sep	Z	1.9	2.2	2.3	2.3	1.8	1.8	1.4	1.8	2.0	2.1	1.1	2.3	1.1	5.7	1.3	0.4	0.5	1.2	1.0	1.5	1.9	3.8	2.6	1.9	5.7
30-Sep	3.2	Z	2.3	1.2	2.5	1.8	2.5	3.5	7.3	9.2	11.3	4.6	7.6	9.5	3.8	3.5	2.7	2.1	0.3	2.0	2.1	1.8	1.2	1.7	3.8	11.3
	1.4	1.5	2.1	1.5	1.8	2.2	2.4	2.2	2.2	2.2	2.2	1.9	1.9	1.8	1.7	1.6	1.3	1.1	0.8	1.2	0.9	1.1	1.5	1.7	Diurnal Average	
	5.8	11.7	12.4	10.4	4.3	5.5	7.0	5.4	7.3	9.2	12.0	11.0	10.5	9.5	6.4	6.4	6.9	5.4	4.2	5.4	2.1	6.7	8.8	8.9	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

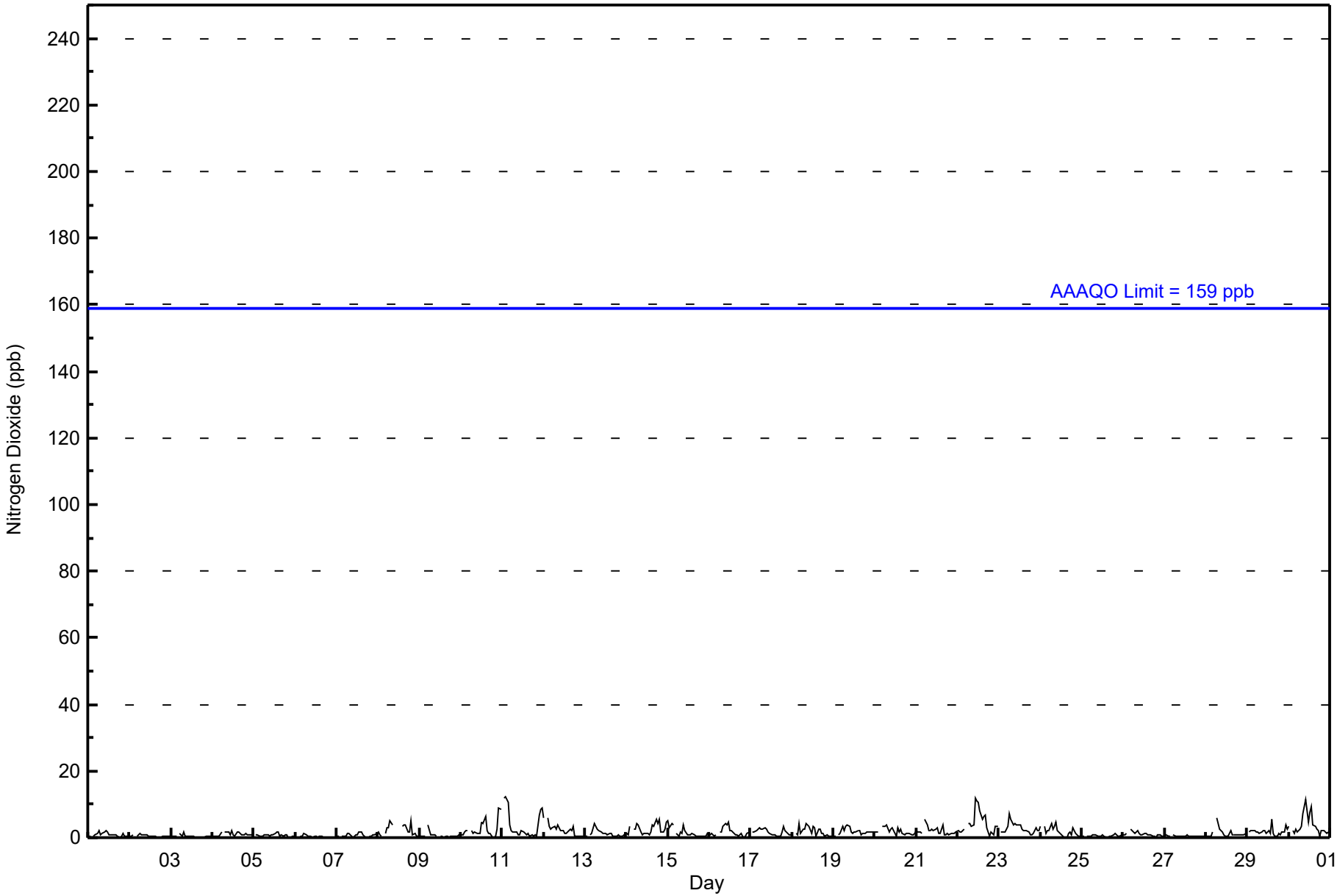
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Jackfish 1 - September 2026



Nitrogen Dioxide (NO_2) - ppb
Jackfish 1 - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Jackfish 1 - September 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	8	8	4	11	25	56	44	91	79	71	35	33	52	82	42	667
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	26	8	8	4	11	25	56	44	91	79	71	35	33	52	82	42	667

Total Number of Valid Hours: 667

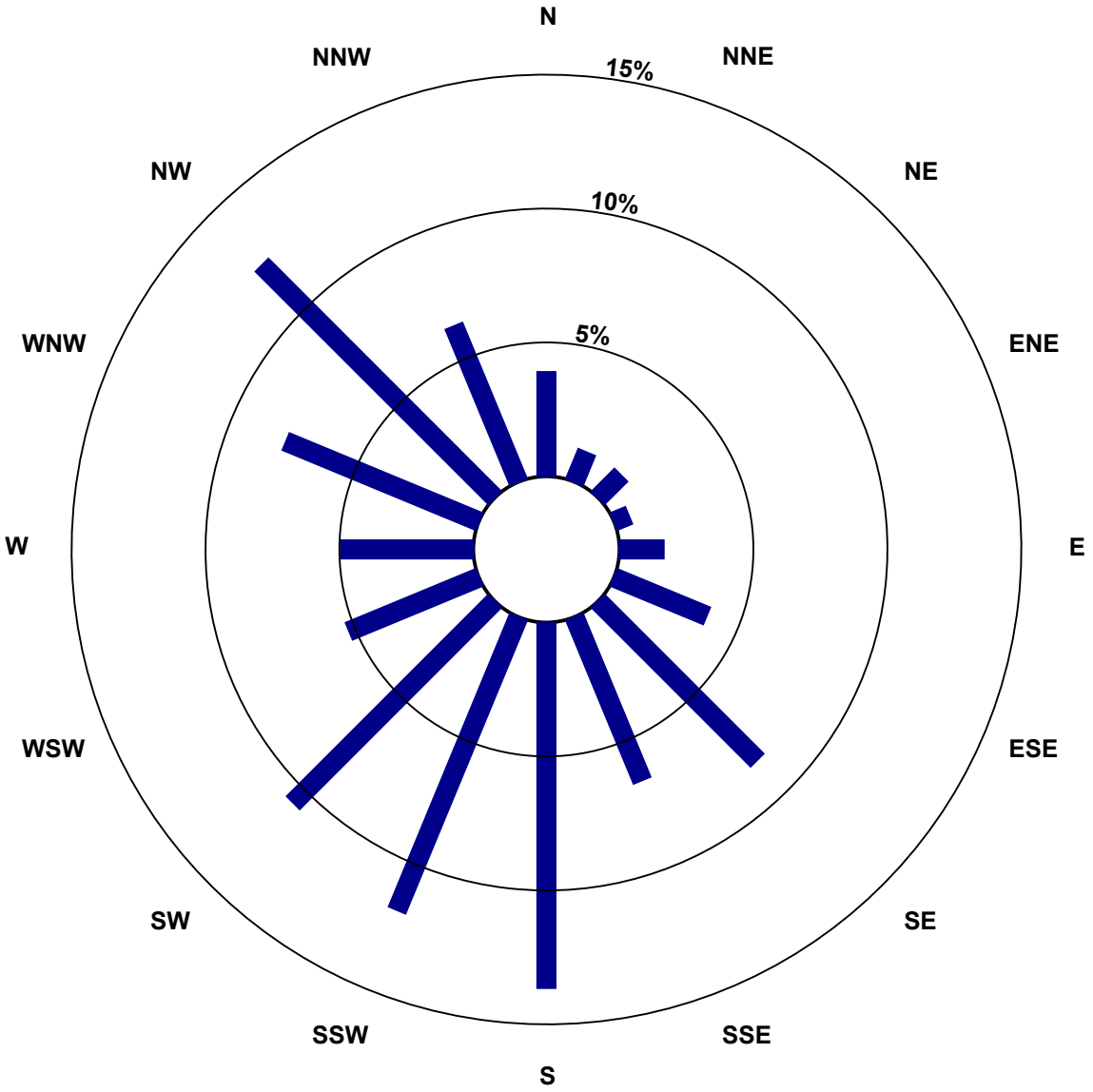
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Jackfish 1



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

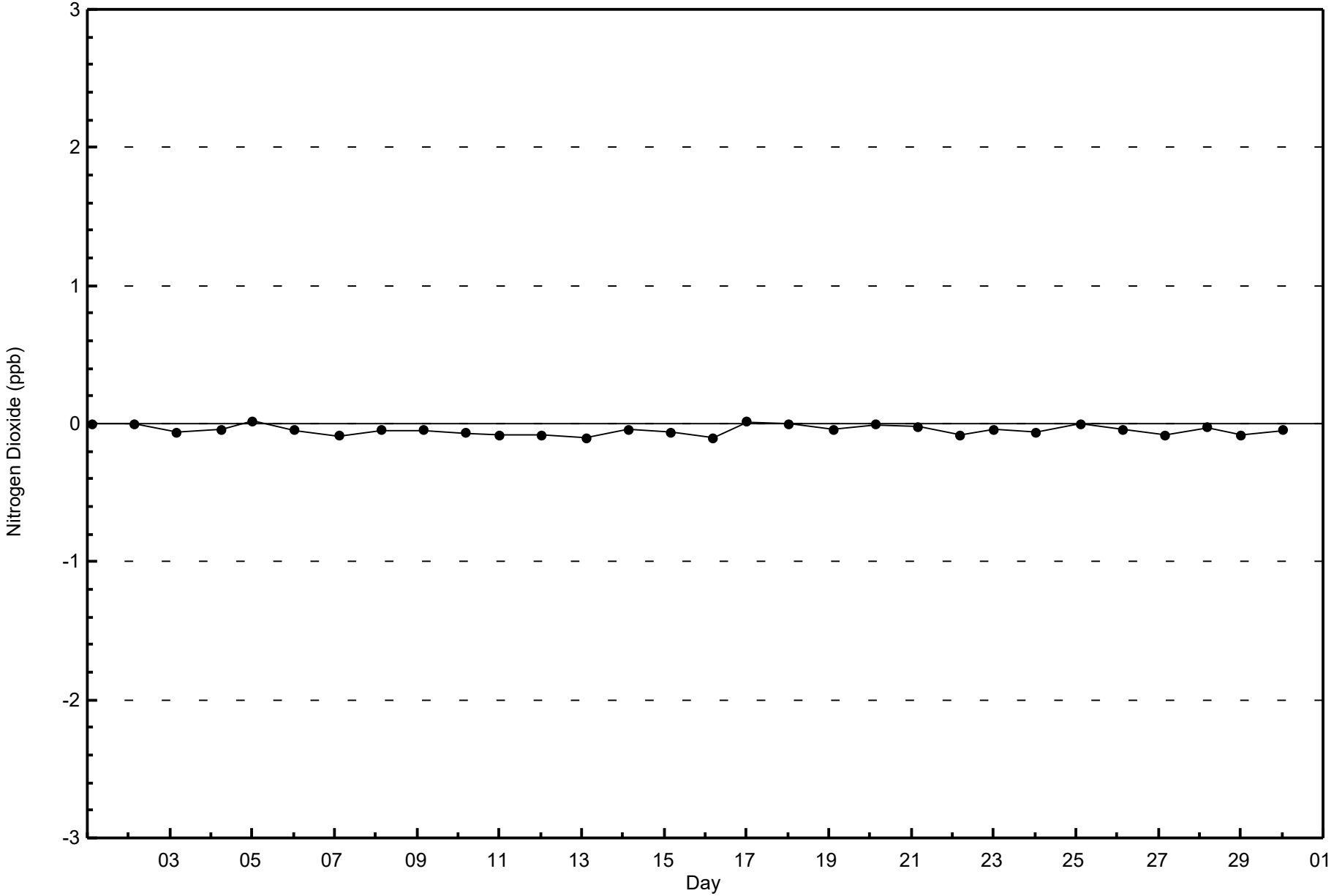
Total Number of Valid Hours: 667

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Jackfish 1 - September 2026

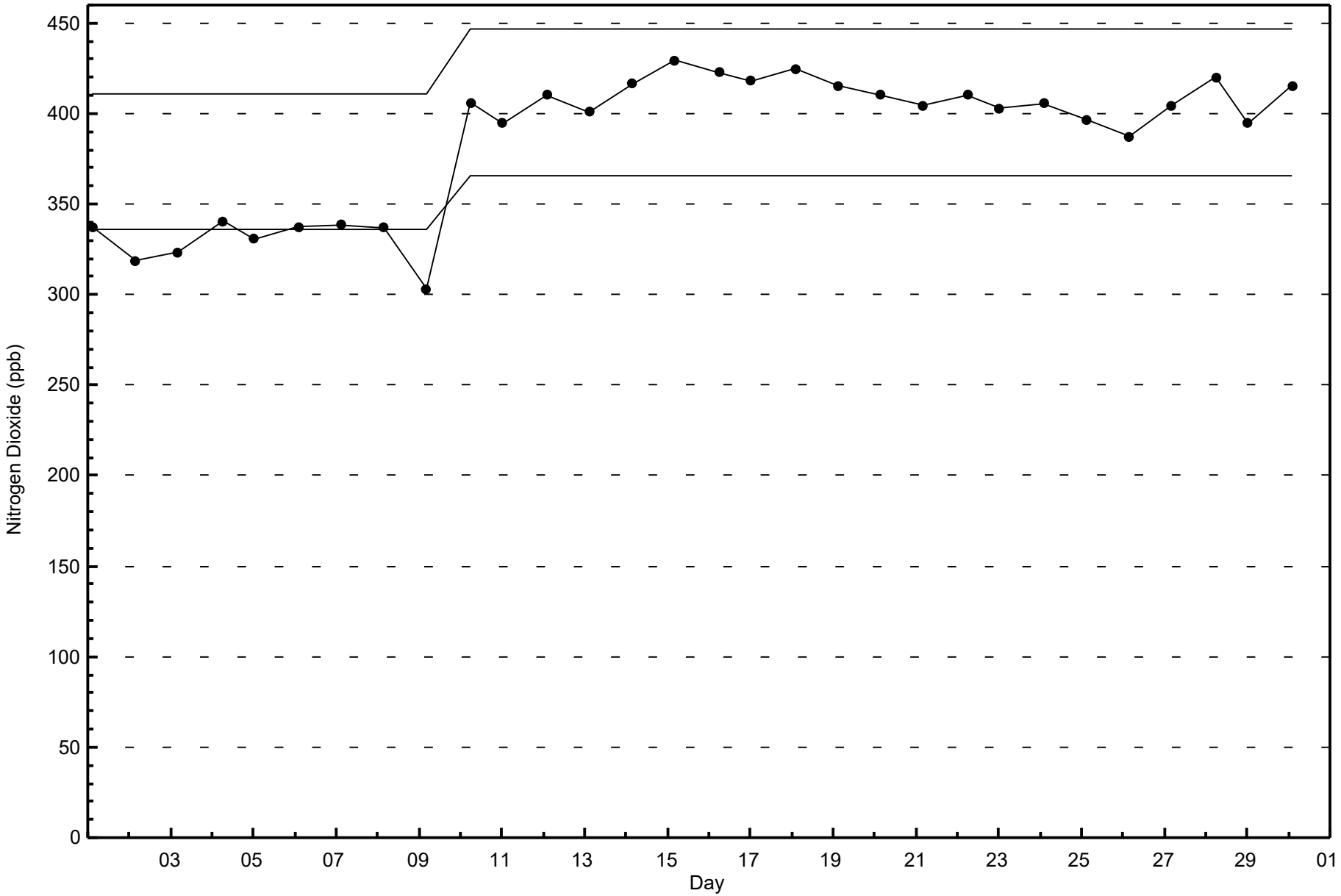


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Jackfish 1 - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Jackfish 1 - September 2026

Maximum Value: 26.9 ppb on Sep 11 03:00

Maximum Daily Average: 6.4 ppb on Sep 22

Minimum Value: 0.1 ppb on Sep 3 16:00

Minimum Daily Average: 0.6 ppb on Sep 6

Maximum Diurnal Average: 3.9 ppb at hour 8

Minimum Diurnal Average: 0.9 ppb at hour 19

Monthly Average: 2.37 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.4$ $Q_1 = 0.6$ Median = 1.3 $Q_3 = 2.7$ $P_{90} = 5.4$ $P_{99} = 20.2$

Hours in Service:	720
Hours of Data:	684
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-Sep	0.8	0.5	Z	0.6	0.7	2.5	4.2	1.6	1.9	2.8	3.0	2.2	0.7	1.0	0.8	0.8	0.7	0.6	0.2	0.6	1.3	0.4	0.4	0.5	1.3	4.2
2-Sep	0.5	0.6	0.8	Z	0.7	1.3	1.6	1.0	1.4	1.1	1.1	0.4	0.5	0.7	0.4	0.3	0.2	0.2	0.2	0.4	0.4	0.5	0.4	0.5	0.7	1.6
3-Sep	0.5	0.5	0.6	0.3	Z	2.2	0.6	4.2	0.4	1.7	1.5	0.5	0.6	0.5	0.2	0.1	0.2	0.1	0.2	0.1	0.3	0.3	0.3	0.3	0.7	4.2
4-Sep	0.3	0.3	0.4	0.5	0.6	2.0	Z	2.0	1.9	2.7	1.3	2.7	0.8	0.5	1.7	1.6	1.1	1.0	1.0	1.2	1.0	1.0	0.7	0.9	1.2	2.7
5-Sep	Z	1.0	0.9	0.7	0.4	1.8	1.0	1.5	1.3	1.1	1.9	1.6	2.6	3.8	3.6	0.5	0.9	0.5	0.7	0.7	0.4	0.4	0.5	0.4	1.2	3.8
6-Sep	0.3	Z	0.3	0.5	0.8	3.9	2.0	0.5	0.5	1.0	0.1	0.6	0.4	0.1	0.3	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	3.9
7-Sep	0.3	0.4	Z	0.5	0.5	0.7	2.0	2.6	1.1	0.2	0.7	1.8	1.3	2.0	3.0	0.9	0.6	0.2	0.2	0.4	0.4	0.9	0.8	1.3	1.0	3.0
8-Sep	1.9	1.0	0.7	Z	1.2	4.1	4.0	9.9	4.9	C	C	C	C	C	4.5	4.5	4.3	1.9	1.5	5.0	1.0	1.3	0.8	0.5	2.9	9.9
9-Sep	0.5	0.5	0.5	0.5	Z	6.4	1.0	1.2	0.9	1.1	0.5	M	0.3	0.3	0.2	0.3	0.4	0.2	0.3	0.4	0.4	0.5	0.6	1.0	0.8	6.4
10-Sep	0.9	0.9	1.7	2.4	2.6	Z	2.1	1.3	1.7	1.8	1.4	1.2	7.9	6.0	10.6	2.7	1.3	1.2	0.2	0.1	0.5	4.5	20.8	18.0	4.0	20.8
11-Sep	Z	25.2	26.9	21.7	7.2	3.3	2.2	2.4	2.0	1.0	1.4	4.0	2.6	1.6	0.7	1.7	0.6	0.9	0.3	0.8	0.4	8.4	11.7	13.1	6.1	26.9
12-Sep	8.3	Z	8.9	4.3	3.4	3.9	5.1	3.7	8.1	5.4	2.9	3.5	2.1	1.3	2.8	3.4	2.5	4.1	0.6	0.5	0.4	0.3	0.3	0.3	3.3	8.9
13-Sep	0.4	0.5	Z	0.7	1.7	9.5	6.1	4.4	3.9	1.9	1.8	1.5	1.5	1.2	1.2	1.5	0.6	0.5	0.6	0.8	0.8	0.7	0.7	1.3	1.9	9.5
14-Sep	1.2	1.1	3.7	Z	2.5	2.8	6.0	4.9	2.3	0.9	1.9	2.2	1.7	1.2	1.8	5.1	4.2	8.1	5.4	8.0	1.9	1.9	2.7	6.9	3.4	8.1
15-Sep	7.4	3.6	5.9	5.8	Z	1.6	0.7	2.7	3.2	8.2	4.1	1.0	0.9	1.0	1.4	0.7	0.6	0.3	0.5	0.6	0.6	0.4	0.4	1.1	2.3	8.2
16-Sep	0.9	1.3	0.7	0.3	0.8	Z	1.7	2.4	5.8	6.6	6.4	11.3	3.3	3.3	1.5	0.9	0.7	0.5	1.1	0.5	0.4	0.5	1.2	1.9	2.3	11.3
17-Sep	Z	2.0	1.9	2.2	3.0	4.0	2.6	3.9	4.9	3.3	2.0	1.6	0.7	1.0	0.9	0.3	0.4	0.3	1.5	3.5	2.0	1.2	0.9	0.8	2.0	4.9
18-Sep	1.0	Z	1.3	0.7	5.6	1.4	6.7	4.0	6.4	6.4	6.1	1.3	4.7	3.7	0.6	2.8	2.6	1.1	1.1	0.6	0.8	0.5	0.4	0.3	2.6	6.7
19-Sep	0.5	0.5	Z	0.8	1.6	4.3	2.1	5.5	5.4	5.3	3.0	1.8	2.2	2.0	2.7	2.6	1.0	1.1	1.1	1.5	1.5	1.5	1.7	1.7	2.2	5.5
20-Sep	1.8	1.8	1.7	Z	4.6	4.1	3.9	4.7	2.0	3.2	3.8	2.5	3.0	3.6	1.9	2.5	1.2	1.0	1.1	1.1	1.1	1.0	1.0	1.4	2.3	4.7
21-Sep	2.2	1.9	1.6	1.2	Z	10.3	6.9	3.1	2.4	3.2	3.1	2.4	3.9	1.3	1.4	4.0	1.0	0.9	1.1	1.0	1.1	1.4	1.4	1.8	2.6	10.3
22-Sep	2.2	2.0	1.7	2.1	3.8	Z	4.6	7.4	6.1	6.7	20.8	20.1	19.4	12.1	7.0	8.0	8.6	2.9	0.4	1.8	1.2	0.7	3.3	3.5	6.4	20.8
23-Sep	Z	1.5	1.6	1.7	6.1	5.2	9.5	22.1	5.5	5.7	6.7	6.6	5.3	3.4	2.8	2.8	2.3	2.0	1.2	1.0	1.9	3.1	2.4	2.3	4.5	22.1
24-Sep	3.5	Z	3.4	1.4	2.2	2.3	5.0	5.0	6.3	7.3	2.8	1.4	1.4	0.3	0.1	0.2	1.1	1.9	0.9	2.9	1.3	1.0	0.7	0.7	2.3	7.3
25-Sep	0.6	0.5	Z	0.4	0.3	0.6	1.2	1.0	1.4	0.4	0.8	0.4	0.7	0.7	0.2	0.2	0.3	0.3	0.7	1.1	0.8	0.4	0.4	0.7	0.6	1.4
26-Sep	1.1	1.2	1.4	Z	3.1	3.9	2.4	1.5	3.4	1.5	1.0	1.1	1.4	1.3	1.0	1.1	0.8	0.7	0.7	0.2	0.7	0.7	0.5	0.3	1.4	3.9
27-Sep	0.4	1.0	0.6	0.4	Z	1.0	0.7	0.6	0.7	0.8	0.6	0.6	0.6	0.8	0.7	0.6	0.3	0.4	0.6	0.5	0.6	0.4	0.4	0.4	0.6	1.0
28-Sep	0.5	0.5	0.6	0.5	2.8	Z	9.7	6.4	4.3	2.2	0.9	0.6	0.5	0.6	2.7	1.0	1.1	1.1	1.0	0.9	0.9	0.9	1.1	1.2	1.8	9.7
29-Sep	Z	2.0	2.3	2.4	2.4	1.9	1.9	1.7	2.4	3.1	2.9	1.4	3.1	1.5	10.6	1.6	0.5	0.6	1.3	1.1	1.5	1.9	3.9	2.7	2.4	10.6
30-Sep	3.3	Z	2.4	1.3	2.6	2.0	2.6	5.3	12.5	17.3	20.5	6.8	12.1	17.2	5.8	5.1	3.6	2.8	0.4	2.0	2.2	1.9	1.3	1.7	5.8	20.5
	1.7	2.1	2.9	2.2	2.5	3.3	3.5	3.9	3.5	3.6	3.6	3.0	3.0	2.6	2.4	1.9	1.5	1.3	0.9	1.3	0.9	1.3	2.1	2.3	Diurnal Average	
	8.3	25.2	26.9	21.7	7.2	10.3	9.7	22.1	12.5	17.3	20.8	20.1	19.4	17.2	10.6	8.0	8.6	8.1	5.4	8.0	2.2	8.4	20.8	18.0	Diurnal Maximum	

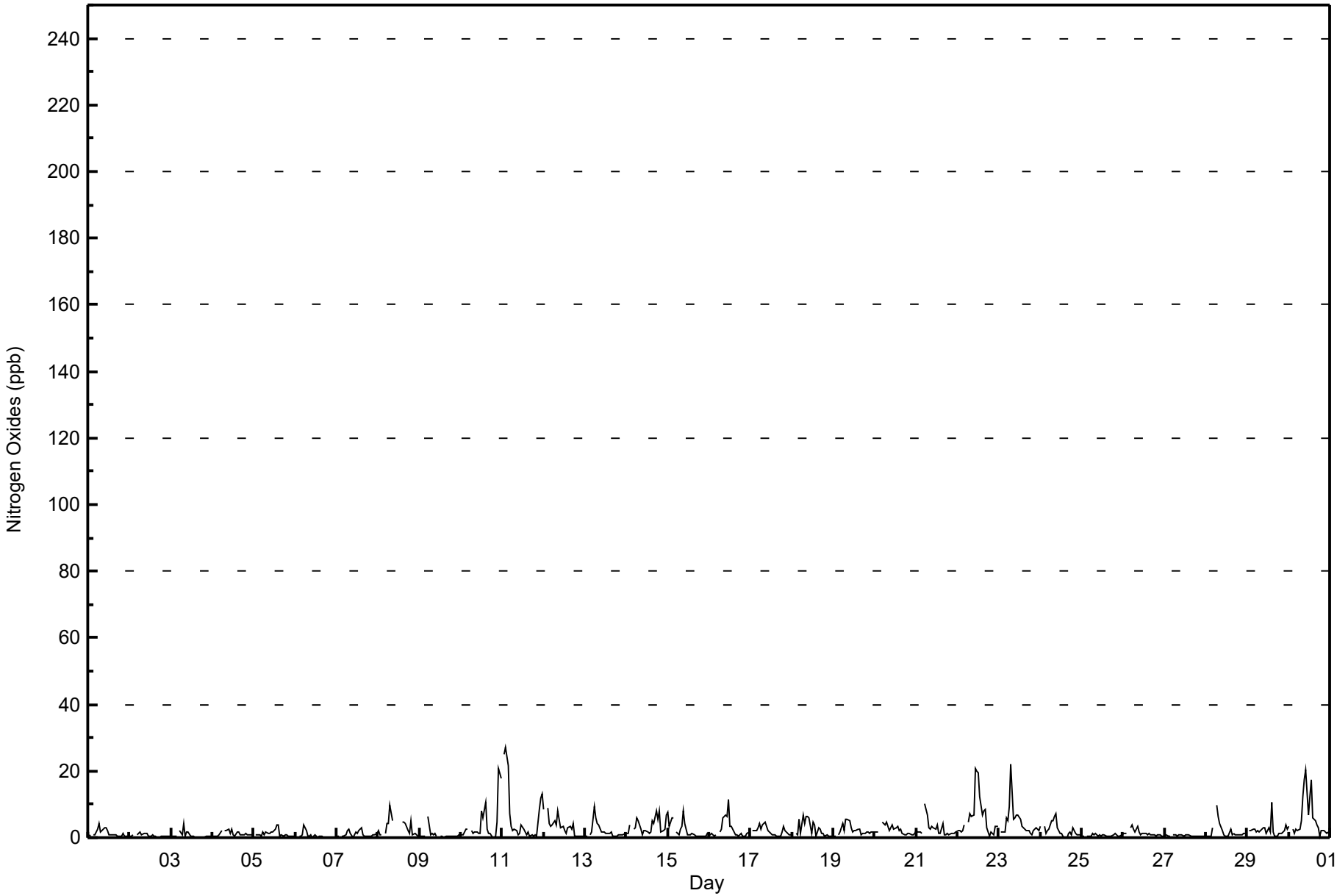
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Jackfish 1 - September 2026



Nitrogen Oxides (NO_X) - ppb
Jackfish 1 - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	677	98.98	98.98
21 - 40	7	1.02	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Jackfish 1 - September 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	8	8	4	11	25	56	43	91	79	71	35	33	52	76	42	660
21 - 40	0	0	0	0	0	0	0	1	0	0	0	0	0	0	6	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	26	8	8	4	11	25	56	44	91	79	71	35	33	52	82	42	667

Total Number of Valid Hours: 667

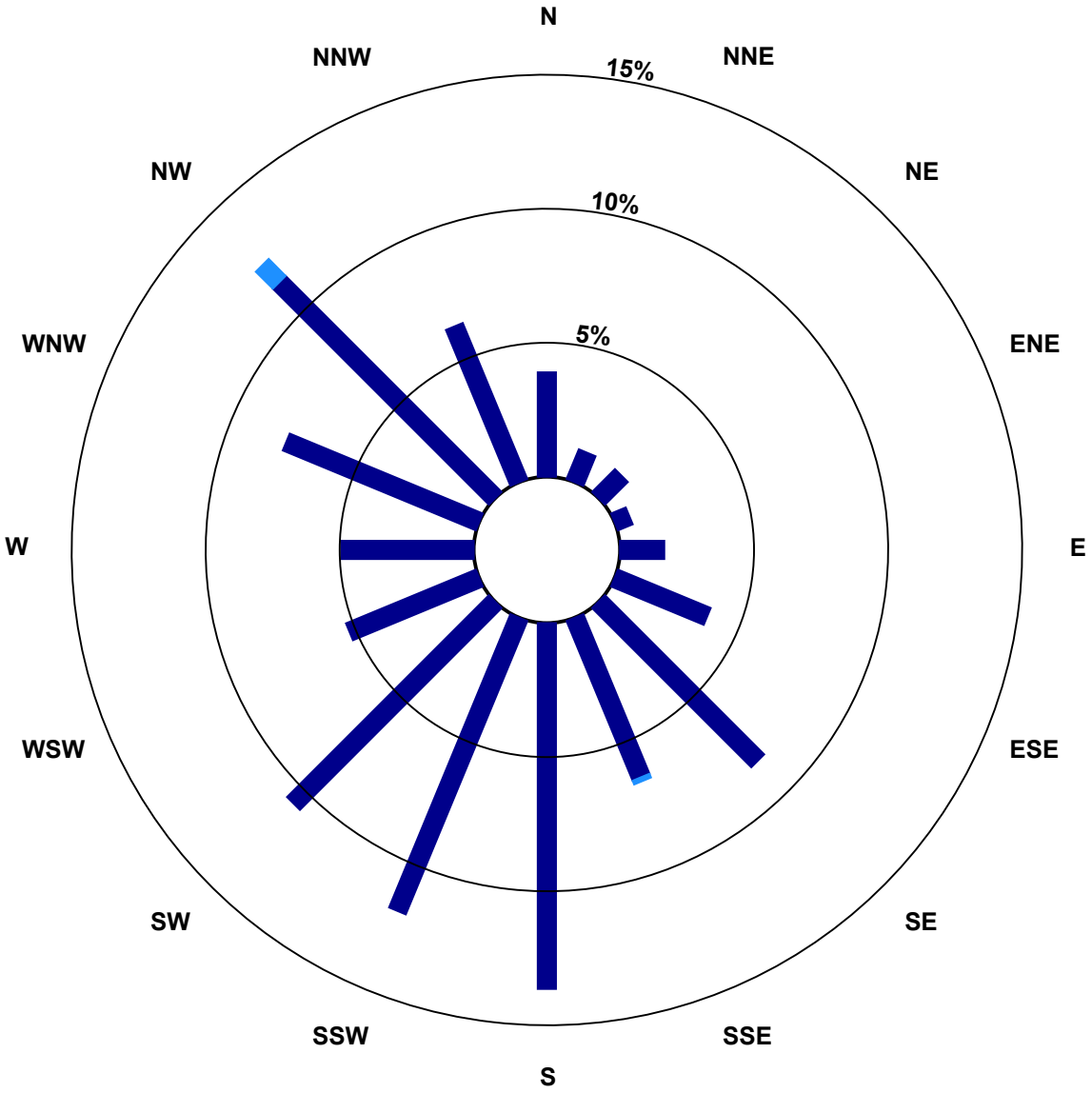
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Jackfish 1



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

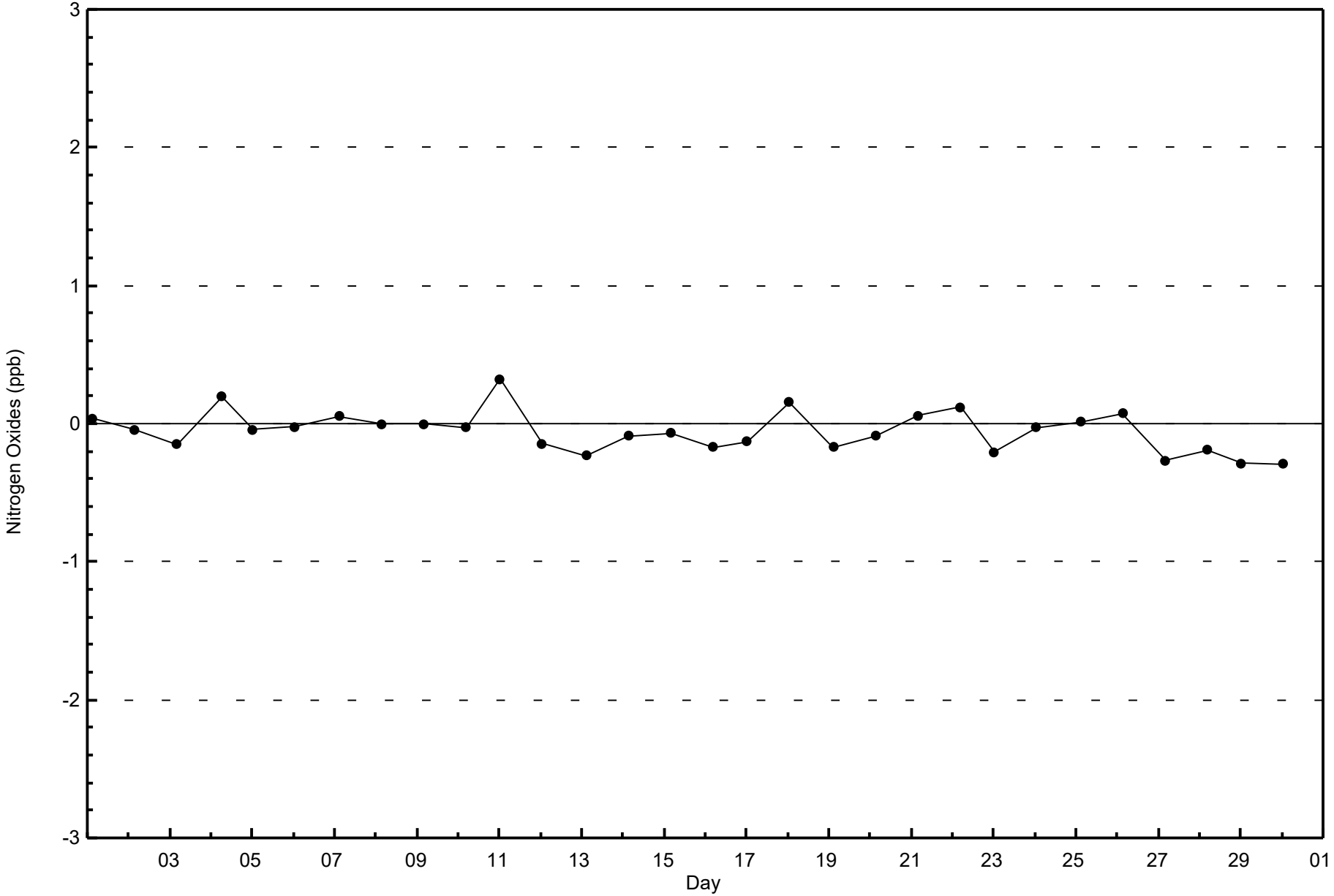
Total Number of Valid Hours: 667

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Jackfish 1 - September 2026

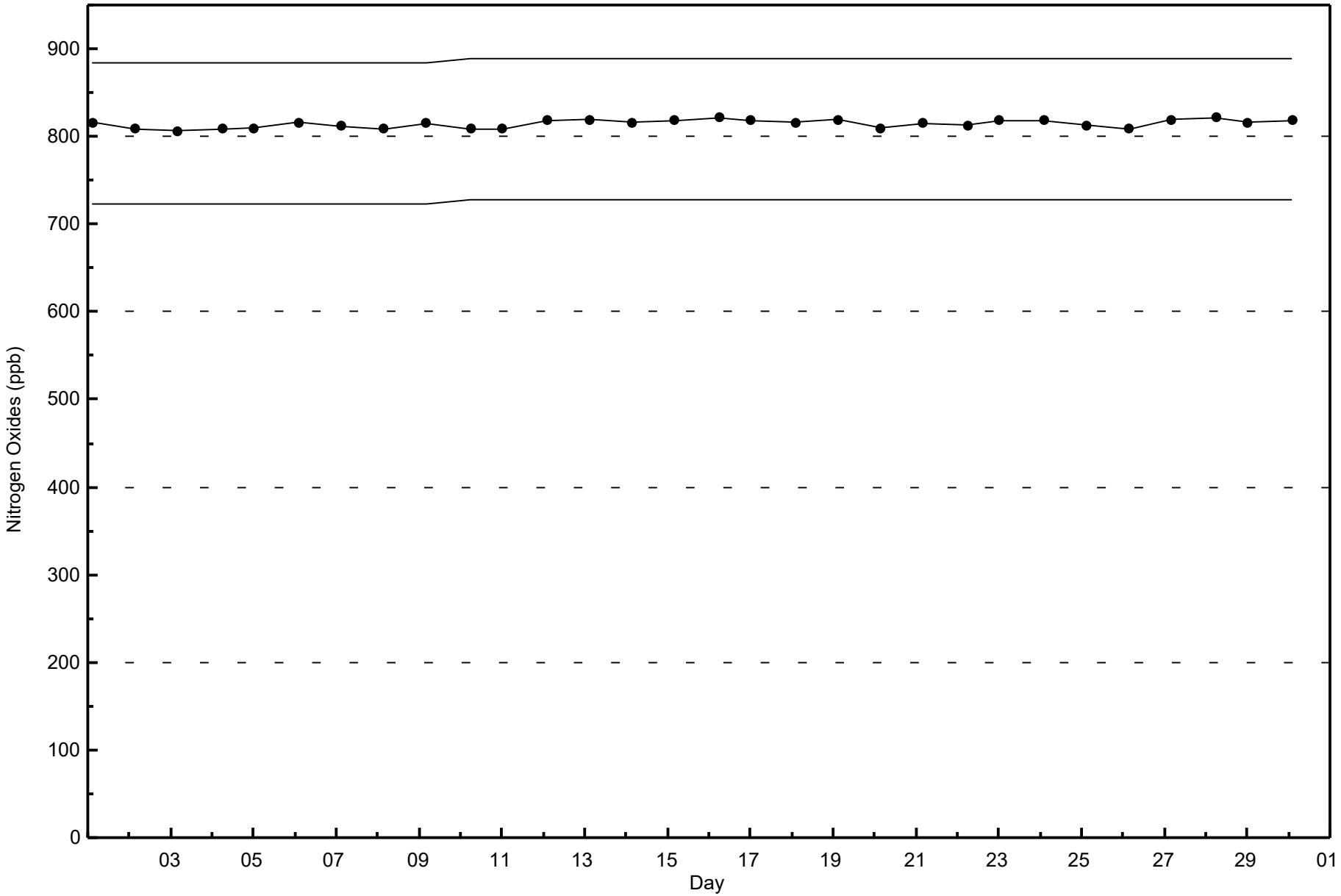


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Jackfish 1 - September 2026



Maximum Value: 25.8 C on Sep 2 15:00

Maximum Daily Average: 19.5 C on Sep 2

Minimum Value: 0.2 C on Oct 1 00:00

Minimum Daily Average: 4.4 C on Sep 30

Maximum Diurnal Average: 16.7 C at hour 15

Minimum Diurnal Average: 7.6 C at hour 6

Monthly Average: 11.55 C

Percentiles: P_1 = 2.2 P_{10} = 4.9 Q_1 = 7.6 Median = 10.8 Q_3 = 15.1 P_{90} = 19.2 P_{99} = 24.7

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

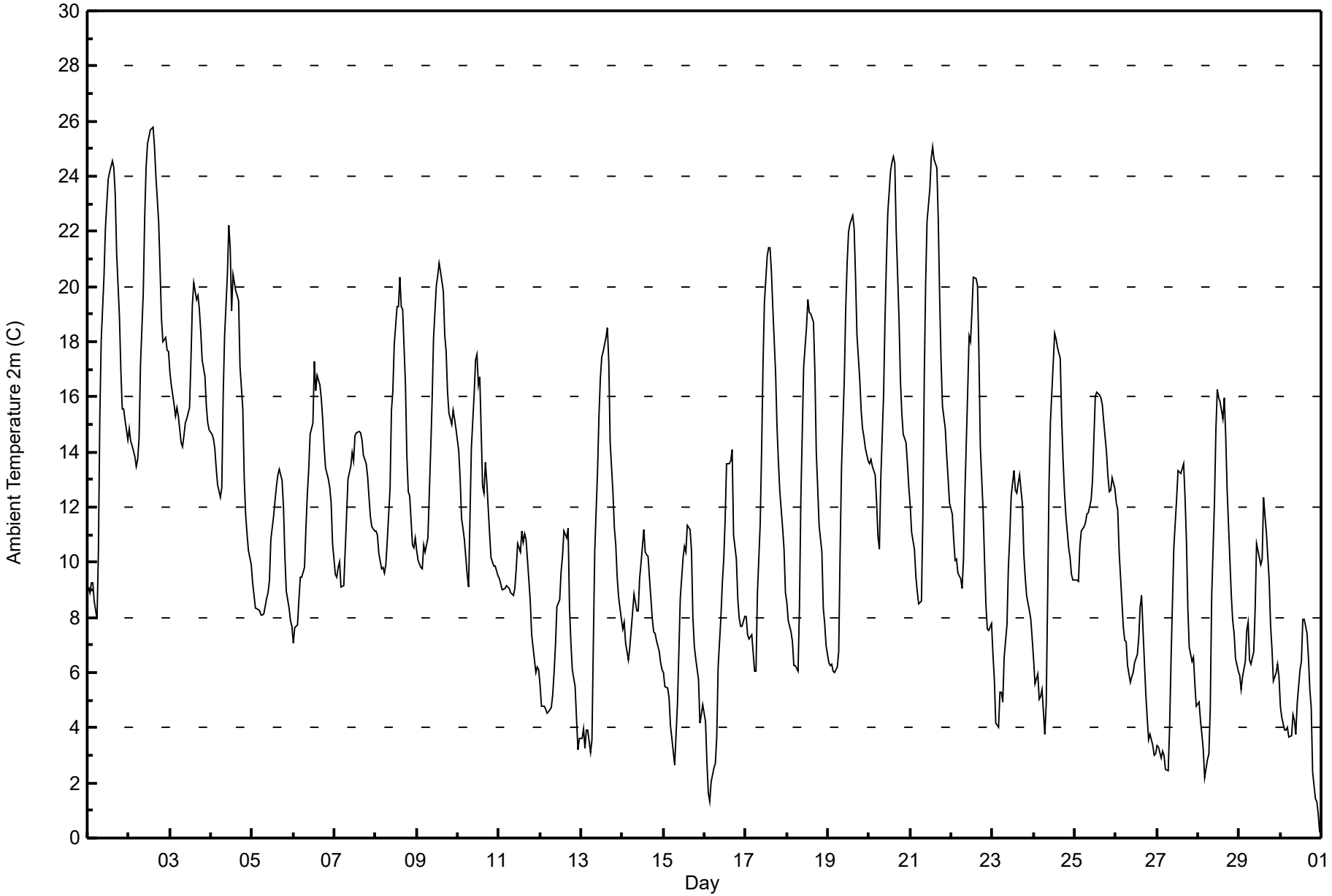
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	9.1	8.9	9.2	9.3	8.6	7.9	10.4	15.3	18.0	20.4	22.1	23.0	23.9	24.2	24.6	24.3	23.3	21.2	18.9	17.0	15.5	15.6	15.1	14.5	16.7	24.6
2-Sep	14.8	14.4	14.2	13.8	13.5	13.7	14.5	17.1	19.8	22.5	24.3	25.2	25.7	25.8	25.8	25.1	24.0	22.3	20.6	18.8	18.0	18.2	17.7	17.6	19.5	25.8
3-Sep	16.9	16.4	15.7	15.3	15.6	15.3	14.3	14.2	14.6	15.0	15.2	15.6	17.3	19.3	20.1	19.5	19.7	19.2	18.4	17.3	16.7	15.7	15.0	14.8	16.6	20.1
4-Sep	14.6	14.5	14.2	13.4	12.8	12.4	12.7	16.1	18.2	20.4	22.2	21.4	19.1	20.5	19.8	19.7	19.5	17.1	15.6	13.1	11.8	11.0	10.4	9.9	15.8	22.2
5-Sep	9.2	8.8	8.3	8.3	8.2	8.1	8.1	8.1	8.7	8.9	9.4	10.8	11.7	12.2	12.8	13.2	13.4	13.0	12.0	10.2	9.0	8.3	7.9	7.7	9.8	13.4
6-Sep	7.1	7.6	7.7	8.6	9.5	9.4	9.8	11.2	12.5	13.4	14.6	15.1	17.3	16.2	16.8	16.4	15.9	15.2	14.2	13.4	13.0	12.7	12.2	10.7	12.5	17.3
7-Sep	9.6	9.5	9.8	10.0	9.1	9.2	10.4	11.7	13.0	13.4	14.0	13.7	14.6	14.7	14.7	14.7	14.4	13.9	13.6	13.1	12.4	11.6	11.3	11.1	12.2	14.7
8-Sep	11.1	11.0	10.3	9.7	9.8	9.6	9.9	10.8	12.7	15.5	16.2	17.9	19.3	19.3	20.3	19.3	19.2	16.4	13.8	12.6	12.4	10.6	10.5	10.9	13.7	20.3
9-Sep	10.4	10.1	9.8	9.7	10.6	10.4	10.9	12.5	14.1	15.9	18.1	20.0	20.4	20.8	20.6	19.8	18.2	17.7	16.2	15.4	15.0	15.5	15.2	14.9	15.1	20.8
10-Sep	14.1	13.0	11.6	11.2	10.8	9.6	9.1	11.6	14.1	16.1	17.3	17.5	16.4	16.7	12.8	12.5	13.6	12.9	11.1	10.2	10.0	9.9	9.9	9.5	12.6	17.5
11-Sep	9.4	9.2	9.0	9.1	9.2	9.1	9.1	8.9	8.8	9.0	9.8	10.7	10.4	11.1	10.7	11.1	10.9	9.3	8.6	7.4	6.9	6.0	6.2	6.1	9.0	11.1
12-Sep	5.5	4.8	4.8	4.7	4.5	4.6	4.7	5.2	6.0	7.0	8.4	8.6	9.6	10.2	11.1	10.9	11.2	8.3	7.1	6.1	5.5	4.3	3.2	3.6	6.7	11.2
13-Sep	3.6	4.0	3.2	3.9	3.9	3.1	3.6	7.1	10.4	13.3	15.3	16.7	17.4	17.7	18.2	18.5	17.3	14.4	12.5	11.2	10.6	9.4	8.7	7.9	10.5	18.5
14-Sep	7.6	7.9	7.0	6.5	6.9	7.6	8.2	8.8	8.2	8.2	9.4	10.0	11.2	10.4	10.3	10.2	9.4	8.0	7.5	7.4	7.2	6.8	6.4	6.1	8.2	11.2
15-Sep	6.0	5.5	5.4	5.1	4.1	3.6	2.7	3.8	4.9	6.8	8.7	10.2	10.6	10.4	11.3	11.2	10.4	8.0	7.0	6.5	5.7	4.2	4.5	4.8	6.7	11.3
16-Sep	4.2	2.7	1.6	1.3	2.1	2.6	2.7	3.7	6.2	8.0	9.3	10.1	11.5	13.6	13.6	13.7	14.1	11.0	10.1	8.7	8.0	7.7	7.7	8.0	7.6	14.1
17-Sep	8.0	7.4	7.2	7.4	6.7	6.0	6.1	8.9	11.4	14.1	17.1	19.4	21.1	21.4	21.4	20.5	19.2	16.8	14.9	13.6	12.6	11.2	10.5	8.9	13.0	21.4
18-Sep	8.6	7.9	7.5	7.1	6.3	6.2	6.0	8.4	12.3	14.7	17.1	18.5	19.5	19.1	19.0	18.7	16.9	14.0	12.7	11.3	10.4	8.3	7.8	7.0	11.9	19.5
19-Sep	6.4	6.3	6.3	6.0	6.0	6.2	6.8	10.4	13.4	16.7	19.2	20.9	21.9	22.3	22.6	22.1	20.3	18.3	16.6	15.5	14.9	14.6	14.1	13.7	14.2	22.6
20-Sep	13.6	13.8	13.5	13.1	12.2	10.9	10.5	13.0	16.1	18.8	20.9	22.7	24.2	24.5	24.7	24.5	22.0	18.9	16.6	15.4	14.6	14.3	13.6	12.7	16.9	24.7
21-Sep	12.0	11.1	10.5	9.5	9.0	8.5	8.6	11.6	16.7	20.1	22.4	23.6	24.7	25.1	24.6	24.3	22.4	19.6	17.3	15.7	14.8	13.9	13.1	12.2	16.3	25.1
22-Sep	11.7	10.8	10.1	10.1	9.6	9.4	9.0	10.1	12.5	16.2	18.2	18.0	19.0	20.3	20.3	20.1	17.5	14.2	11.9	10.1	8.5	7.6	7.5	7.8	12.9	20.3
23-Sep	6.7	5.7	4.2	4.0	5.3	5.3	4.9	6.6	7.7	9.8	10.9	12.4	13.3	12.6	12.5	12.9	13.2	12.1	10.3	9.5	8.8	8.2	7.9	7.2	8.8	13.3
24-Sep	6.4	5.6	6.0	5.0	5.1	5.4	3.7	4.9	8.7	12.9	15.1	17.3	18.3	18.1	17.8	17.4	15.2	13.7	12.6	11.7	10.5	10.2	9.6	9.3	10.9	18.3
25-Sep	9.4	9.4	9.3	10.6	11.2	11.3	11.4	11.7	11.8	12.3	13.0	14.5	16.0	16.2	16.1	15.9	15.7	15.1	14.0	13.1	12.6	12.6	13.1	12.6	12.9	16.2
26-Sep	12.2	11.9	10.4	8.6	7.6	7.2	7.1	6.2	5.7	5.9	6.0	6.3	6.6	7.3	8.4	8.8	7.6	5.2	4.4	3.6	3.8	3.4	3.0	3.1	6.7	12.2
27-Sep	3.4	3.3	2.9	3.2	3.0	2.5	2.4	4.0	6.4	8.5	10.5	12.3	13.3	13.2	13.2	13.6	12.4	10.8	8.3	6.9	6.4	6.6	5.6	4.8	7.4	13.6
28-Sep	4.9	4.2	3.8	3.2	2.2	2.8	3.1	4.7	8.7	12.2	14.8	16.3	16.0	15.8	15.2	16.0	14.6	12.6	10.1	8.8	7.9	7.4	6.5	6.1	9.1	16.3
29-Sep	5.9	5.4	5.8	6.4	7.5	7.8	6.4	6.3	6.8	8.3	10.7	10.4	9.9	10.1	12.4	11.7	11.1	9.4	7.7	6.9	5.7	6.0	6.3	5.8	7.9	12.4
30-Sep	4.8	4.4	3.9	3.9	4.0	3.7	3.7	4.5	4.3	3.8	4.9	6.1	6.4	7.9	7.9	7.4	6.6	5.4	4.7	2.4	1.4	1.3	0.9	0.2	4.4	7.9
	8.9	8.5	8.1	7.9	7.8	7.6	7.7	9.2	11.1	12.9	14.5	15.5	16.2	16.6	16.7	16.5	15.6	13.8	12.3	11.1	10.3	9.8	9.4	9.0	Diurnal Average	
	16.9	16.4	15.7	15.3	15.6	15.3	14.5	17.1	19.8	22.5	24.3	25.2	25.7	25.8	25.8	25.1	24.0	22.3	20.6	18.8	18.0	18.2	17.7	17.6	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Jackfish 1 - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	309	42.92	42.92
10 - 20	354	49.17	92.08
> 20	57	7.92	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Jackfish 1 - September 2026

Maximum Value: 100.0 % on Sep 3 09:00

Maximum Daily Average: 96.7 % on Sep 14

Minimum Value: 35.9 % on Sep 21 14:00

Minimum Daily Average: 62.6 % on Sep 2

Maximum Diurnal Average: 93.2 % at hour 7

Minimum Diurnal Average: 57.9 % at hour 15

Monthly Average: 77.88 %

Percentiles: P_1 = 39.2 P_{10} = 48.5 Q_1 = 66.5 Median = 80.3 Q_3 = 94.3 P_{90} = 99.7 P_{99} = 100.0

Hours in Service:	720
Hours of Data:	700
Hours of Missing Data:	20
Hours of Calibration:	0
Percent Operational Time:	97.2

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-Sep	97.4	95.9	95.0	94.9	97.7	99.6	91.2	70.3	62.2	55.8	49.5	45.8	41.8	40.1	39.8	43.3	46.9	50.5	57.0	65.9	72.6	75.9	79.2	82.6	68.8	99.6
2-Sep	79.6	80.2	80.1	81.3	82.9	82.1	79.8	69.5	61.3	52.1	44.7	40.3	39.6	41.2	40.3	40.8	43.5	48.6	55.3	64.3	71.3	72.3	75.7	75.6	62.6	82.9
3-Sep	78.3	80.7	85.0	87.7	86.8	89.7	98.7	99.7	100.0	99.3	98.5	97.2	87.6	75.9	70.5	73.0	69.7	75.2	79.4	85.9	89.3	95.0	98.9	99.5	87.6	100.0
4-Sep	100.0	100.0	100.0	OR	OR	OR	OR	88.3	75.5	62.4	52.9	59.9	68.5	63.8	67.6	65.9	66.3	79.3	85.6	91.9	93.7	93.8	94.2	95.3	80.2	100.0
5-Sep	95.5	97.0	99.7	99.3	99.9	100.0	100.0	100.0	100.0	99.7	97.2	90.7	82.1	78.3	74.6	69.5	67.8	71.7	82.3	91.9	96.9	99.1	100.0	100.0	91.4	100.0
6-Sep	100.0	100.0	100.0	100.0	OR	OR	OR	OR	89.3	84.4	78.7	75.4	66.6	71.5	68.9	71.2	75.2	79.3	84.2	88.2	87.0	86.4	88.3	93.9	84.4	100.0
7-Sep	98.6	100.0	99.8	99.3	100.0	100.0	OR	96.4	87.4	86.1	85.8	93.8	85.5	85.7	86.0	87.1	88.5	92.2	94.2	96.3	99.0	100.0	OR	OR	93.4	100.0
8-Sep	OR	OR	OR	OR	OR	OR	OR	OR	94.4	80.7	73.4	66.3	57.6	55.9	50.9	54.9	55.0	67.1	79.7	83.2	84.3	90.6	89.1	85.4	--	94.4
9-Sep	87.5	90.7	93.1	96.4	97.0	99.9	99.1	93.3	86.6	75.8	61.4	50.9	48.4	48.5	49.2	52.2	58.2	61.1	68.0	71.4	74.3	73.1	75.9	74.7	74.4	99.9
10-Sep	75.0	78.8	84.8	84.6	85.8	90.6	90.9	77.6	69.0	62.1	55.7	54.6	71.2	74.0	82.6	88.8	79.6	79.8	88.8	96.1	100.0	100.0	OR	100.0	81.3	100.0
11-Sep	99.7	98.2	96.4	94.1	89.7	86.9	85.7	86.3	87.2	84.6	78.8	76.8	77.9	69.0	74.4	68.9	66.5	75.7	74.2	85.2	87.5	93.1	94.5	93.2	84.3	99.7
12-Sep	94.9	98.6	97.4	97.3	98.3	98.1	97.0	93.9	89.2	81.7	69.2	59.6	54.6	56.1	56.0	56.8	55.4	69.4	72.9	75.8	78.8	83.9	89.1	87.6	79.7	98.6
13-Sep	88.9	90.2	96.2	95.8	94.6	96.5	94.4	79.0	66.9	56.7	50.3	45.9	43.9	42.8	41.2	41.8	45.7	56.7	66.5	73.8	77.4	85.0	87.5	90.8	71.2	96.5
14-Sep	92.6	90.4	94.6	98.3	98.8	99.1	100.0	100.0	100.0	100.0	97.1	92.4	83.3	90.6	94.3	93.7	95.0	99.7	100.0	100.0	100.0	100.0	100.0	100.0	96.7	100.0
15-Sep	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.5	90.6	79.1	66.6	57.5	60.0	52.9	54.8	59.1	74.0	82.2	86.5	95.1	98.5	99.1	98.1	85.5	100.0
16-Sep	97.5	98.9	100.0	100.0	100.0	100.0	100.0	100.0	86.3	76.9	70.6	66.9	60.3	51.5	51.9	50.9	48.2	60.6	67.5	76.7	76.6	79.3	82.9	82.9	78.6	100.0
17-Sep	84.2	86.5	88.3	88.3	90.8	92.5	92.3	78.2	70.8	60.5	52.3	47.7	42.5	41.4	42.8	46.2	50.6	58.8	68.0	70.5	76.1	84.1	87.3	94.3	70.6	94.3
18-Sep	96.2	98.7	98.5	99.9	99.6	100.0	100.0	92.4	72.3	64.2	52.1	46.1	42.9	42.3	40.1	41.8	48.0	58.9	61.7	67.2	70.3	80.4	82.3	85.9	72.6	100.0
19-Sep	87.6	86.6	87.6	91.7	94.6	94.0	93.7	80.3	67.7	55.4	46.7	40.2	36.8	38.5	42.4	44.6	50.8	59.0	64.9	68.5	70.4	70.8	72.7	74.7	67.5	94.6
20-Sep	73.9	71.3	70.8	69.8	72.2	76.8	78.7	67.7	57.8	52.5	48.3	43.4	39.9	41.4	40.7	40.6	50.7	62.4	70.7	75.3	77.8	78.5	81.2	84.8	63.6	84.8
21-Sep	86.9	90.5	93.8	95.2	97.6	98.2	97.7	85.7	69.6	58.6	50.6	44.2	38.3	35.9	39.2	39.9	45.8	59.8	68.8	76.8	79.8	85.5	89.3	94.6	71.8	98.2
22-Sep	97.3	99.0	99.7	99.8	99.9	100.0	100.0	98.1	87.4	72.5	63.0	55.4	48.4	43.9	43.9	45.1	54.6	62.1	66.5	69.7	74.7	75.1	72.4	69.7	74.9	100.0
23-Sep	77.3	81.2	89.7	90.6	89.8	92.7	93.3	91.8	85.3	78.3	79.6	82.5	78.3	83.0	91.6	87.0	81.5	86.7	95.2	98.4	99.4	99.6	100.0	100.0	88.9	100.0
24-Sep	100.0	100.0	100.0	100.0	99.9	95.1	97.9	96.2	83.1	60.8	53.0	42.0	36.1	36.9	38.5	40.3	51.2	57.1	61.5	65.1	73.0	76.1	83.3	83.9	72.1	100.0
25-Sep	82.0	78.5	76.9	67.2	59.3	63.3	72.4	66.3	63.6	67.2	67.0	67.5	65.5	66.6	68.7	72.5	76.9	80.8	86.5	91.8	96.9	99.3	98.7	99.6	76.5	99.6
26-Sep	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.6	96.7	96.4	92.2	87.0	82.2	76.7	69.1	66.3	74.0	94.1	95.1	94.1	92.2	93.1	93.3	93.8	91.5	100.0
27-Sep	94.8	93.3	94.1	96.1	96.8	97.5	97.5	90.4	79.0	71.0	62.6	53.9	48.7	47.9	47.2	46.6	50.8	56.9	67.4	73.6	76.3	74.2	77.8	80.6	74.0	97.5
28-Sep	80.9	85.1	87.3	89.1	93.8	91.2	91.0	83.5	68.9	57.0	45.1	40.2	40.4	41.7	43.5	41.8	45.3	48.5	59.0	64.2	67.2	70.6	73.2	74.9	66.0	93.8
29-Sep	75.1	79.5	76.5	74.5	69.0	74.1	95.3	99.1	99.0	94.5	83.2	78.1	82.9	84.0	60.3	55.1	50.9	53.1	59.3	63.8	70.2	69.5	65.4	65.3	74.1	99.1
30-Sep	69.9	71.3	73.8	75.3	76.3	78.2	77.9	78.6	88.1	94.8	80.9	74.0	77.0	67.9	68.4	73.1	77.4	86.0	84.2	93.7	96.0	94.7	95.7	96.2	81.2	96.2
	89.4	90.4	91.7	91.7	91.5	92.4	93.2	87.9	81.4	74.4	67.3	62.8	59.5	58.4	57.9	58.5	61.0	68.8	74.9	80.2	83.5	85.9	86.7	88.2	Diurnal Average	
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.5	97.2	87.6	90.6	94.3	93.7	95.0	99.7	100.0	100.0	100.0	100.0	100.0	100.0	Diurnal Maximum	

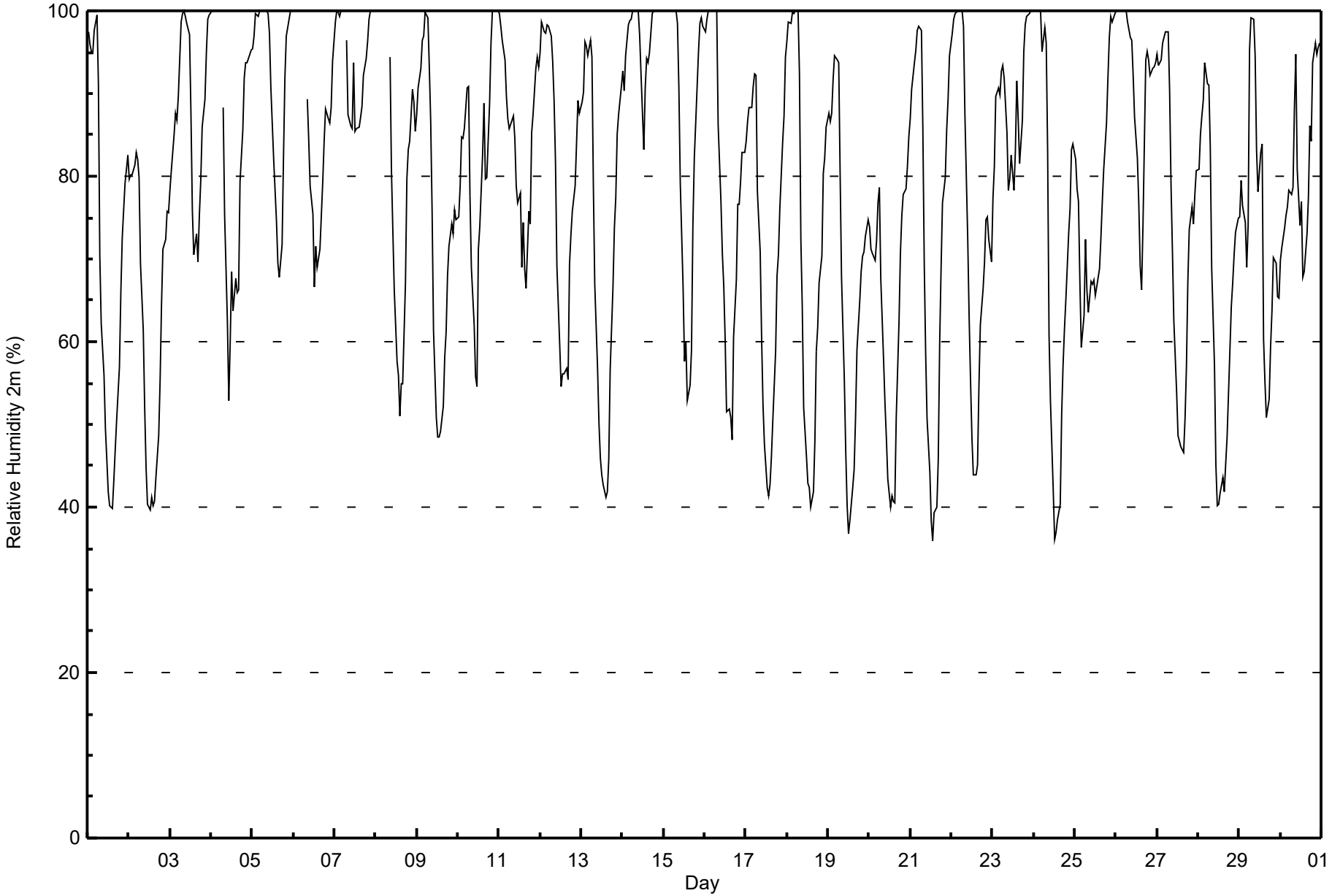
OR - Out of Range

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Jackfish 1 - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	12	1.71	1.71
40 - 60	126	18.00	19.71
60 - 80	209	29.86	49.57
80 - 100	293	41.86	91.43

Total Number of Valid Hours: 700

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Jackfish 1 - September 2026

Maximum Speed: 15 km/h on Sep 3 15:00

Maximum Daily Speed Average: 10.9 km/h on Sep 11

Minimum Speed Value: 0 km/h on Sep 22 22:00

Minimum Daily Speed Average: 0.4 km/h on Sep 23

Maximum Diurnal Speed Average: 2.3 km/h at hour 14

Minimum Diurnal Speed Average: 0.5 km/h at hour 20

Monthly Average Velocity: 1.2 km/h 240.3 deg

Percentiles: $P_1 = 0$ $P_{10} = 2$ $Q_1 = 3$ Median = 5 $Q_3 = 7$ $P_{90} = 9$ $P_{99} = 14$

Hours in Service:	720
Hours of Data:	701
Hours of Missing Data:	19
Percent Operational Time:	97.4

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-Sep	SSW2	S2	S2	SSE1	S2	S3	S4	S4	S4	SSW5	SSW6	S6	S6	SSE7	SSE6	SSE7	SE9	SSE8	SSE6	SSE4	SE5	SSE6	SSE5	SSE5	SSE4.6	SE9
2-Sep	SSE6	SSE6	SSE7	SSE6	SSE6	SSE8	SSE8	SE9	SE10	SE11	SE12	SE14	SE14	SE13	SE14	SE13	SE13	SE11	SE10	SE8	SE9	SE9	SE9	SE9	SE9.8	SE14
3-Sep	SE9	SE8	SE6	ESE6	ESE6	SE7	E4	NE2	NE5	ESE8	E8	E7	ESE13	SE14	ESE15	ESE14	SE14	ESE12	ESE8	ESE9	SE11	SE7	SE5	SSE3	ESE8.1	ESE15
4-Sep	SE4	SSE3	SSE3	SSE3	SSE2	SSE2	S3	S3	S4	SSW4	SSW5	SSW5	WSW5	WSW5	WNW5	WNW4	WNW3	NW1	NNW10	N11	N10	N11	NNW10	N10	NW1.6	N11
5-Sep	N9	NNW10	N10	N8	N8	N9	N8	N5	N7	N8	N6	NNE7	NNE7	N6	N5	NE3	N2	ENE0	UO	SW1	SW0	UO	UO	UO	N5.7	N10
6-Sep	UO	S1	SSE1	S2	SSE1	ESE1	SE3	ESE4	SE5	SE7	SSE7	SE8	SE7	SSE6	SE6	SE7	SE5	SE6	SE9	SE8	SE8	SE7	SE6	SSE3	SE5.0	SE9
7-Sep	SSE2	SE3	SSE2	SSW1	ENE1	SE3	E1	ENE2	E2	SE3	N4	N5	N5	N5	NNE5	NE6	NE5	NE4	NNE5	NNE4	N2	NNW6	NNW5	NNW6	NNE2.3	NNW6
8-Sep	NNW5	NNW6	NNW7	NNW7	NNW4	WNW3	WNW2	NW5	NNW7	NNW7	NNW9	NNW8	NNW7	NNW8	NNW8	NW7	NW4	W1	SW2	SW3	SW3	SSW3	S2	SSW3	NW4.0	NNW9
9-Sep	SSW1	SSW1	SSW2	S2	SSW4	SSW3	SW6	SW6	SW6	SW5	SW7	SW9	WSW10	WSW9	WSW8	WSW8	SW7	SW7	SSW4	S3	S4	SSW6	SW4	WSW5	SW5.1	WSW10
10-Sep	WSW5	WSW5	W3	NW5	WNW4	WNW2	SW3	WSW5	W5	WNW6	NW7	NW7	WNW6	NW6	NW7	WNW5	WNW5	NW6	WNW5	NW4	WNW5	NW5	NW7	NW8	WNW4.9	NW8
11-Sep	NW6	NW8	NW8	NW9	NW11	NW12	NW13	NW13	NW13	NW13	NNW14	NW13	NW15	NW15	NNW14	NNW14	NNW14	NW13	NNW13	NNW10	NNW8	NW4	NW5	NW5	NW10.9	NW15
12-Sep	NW4	WNW3	NW4	NW3	NW3	NW3	WNW3	WNW2	NW2	NW3	NW4	NW4	W5	WNW4	NW5	WNW4	NW4	W2	SW3	SW3	SW4	SSW3	SW3	SW5	WNW2.8	W5
13-Sep	SW6	SW6	SSW4	SSW6	SSW5	S3	SSW2	S3	SSW5	SW7	SW8	WSW7	SW7	SW6	SW6	SSW4	SSW5	SSW4	SSW2	S1	S2	S3	S2	S2	SSW4.2	SW8
14-Sep	SSW2	SW2	WNW2	SW1	NW3	NW7	NNW6	NNW10	NNW13	NNW10	NNW10	N8	NNW11	NNW10	NNW9	NNW8	NW6	NW8	NW4	NW5	NNW8	NNW8	NNW7	NW5	NNW6.3	NNW13
15-Sep	NW5	NW2	NW4	NW5	WNW1	WNW2	WNW2	NW2	WNW2	NW3	WNW3	WNW4	W4	W3	W4	WSW5	SW5	SSW4	S2	SSW1	SW1	SSW0	SW1	SW3	W2.2	SW5
16-Sep	SW5	SW3	W0	SE1	NW1	WSW1	NNE1	ESE1	S2	WNW1	NE2	NNE3	WNW2	W2	SSW3	SSW2	SW2	ESE2	SE4	SE4	SE4	SSE5	SSE5	SSE6	S1.4	SSE6
17-Sep	SSE5	SSE5	S4	S5	S5	S5	S5	S5	SSW5	SW5	SW4	SW5	WSW6	WSW5	WSW4	WSW4	SW4	SW2	UO	UO	UO	UO	UO	UO	SSW3.8	WSW6
18-Sep	UO	UO	UO	UO	WNW2	W1	SW2	NW2	NW4	NNW4	NNW7	NNW6	NW6	NNW6	NNW8	NW8	NW5	NNW3	WSW1	SSE2	S5	S2	S2	SSW2	NW2.6	NNW8
19-Sep	S4	S4	S3	S4	S4	S4	S4	S5	S6	SSW6	SSW6	SSW7	S7	S7	SSW7	SSW7	SSW7	SSW5	S4	S5	S4	SSW6	SSW5	S5	S5.2	S7
20-Sep	S5	SSW4	SSW4	SSW4	SSW3	SSW3	SSW3	SSW4	SW5	SW4	SSW4	SSW4	S4	S3	SSW4	SSW3	SSW3	S2	S2	S2	S3	S3	S3	S3	SSW3.5	SW5
21-Sep	SSW2	S1	SW3	S2	S2	SSE3	S3	SSE4	SSE4	S4	S5	SSE7	SSE6	SSW6	S5	SSW6	SSW5	SSW4	SSW3	S3	S3	S3	S3	SW1	S3.5	SSE7
22-Sep	SSW1	S2	SSE3	S1	S3	SSE2	SW1	S2	SW4	WNW4	NW7	NW7	NW7	NW7	NW7	NW6	NW5	W2	SW1	SW0	SE0	S0	W0	WSW1	WNW1.8	NW7
23-Sep	WSW1	SW2	SW1	S2	SW1	W0	S1	SSE0	ESE0	SSE0	ENE1	NE0	N3	NNW3	N3	N4	NNE4	E3	SE1	UO	SSW1	W2	W2	WNW2	NNW0.4	N4
24-Sep	UO	UO	SSE1	SE1	W1	WSW3	SSW2	S3	SE2	SW2	SW3	SW4	SW4	W4	WSW5	WSW4	SW2	SW1	SW2	SW1	SSE3	S4	S3	UO	SW2.0	WSW5
25-Sep	E2	E4	SE5	SE8	SE11	ESE11	ESE10	ESE10	ESE13	ESE12	ESE12	ESE13	ESE13	ESE10	E10	ESE13	E4	E6	NNW4	N5	ESE9	ESE12	SSE6	NW1	ESE7.8	ESE13
26-Sep	W0	WNW2	W3	W5	W6	W7	WNW6	WNW7	W6	WNW6	WNW7	WNW8	WNW8	WNW9	WNW9	WNW8	WNW8	WNW6	WNW6	WNW6	WNW6	W5	WSW4	SW6	WNW5.7	WNW9
27-Sep	WSW6	W6	WSW6	WSW7	WSW6	SW6	SW6	WSW6	WSW7	WSW8	WSW8	WSW8	W9	W8	W8	WSW7	SW8	SW5	SSW5	SW5	SSW5	SSW5	SSW4	S4	WSW5.9	W9
28-Sep	SSW5	S4	SSW4	SSW2	S2	SSW5	SSW5	S3	S3	SW5	SW8	SW9	SSW8	SW5	SSW5	SSW6	SSW5	SSW4	S3	S3	S5	S6	S6	S6	SSW4.8	SW9
29-Sep	S6	S5	S4	S3	SSW5	SW5	SW4	S3	WSW2	WSW2	W5	WNW6	WNW6	NW7	NW8	NW7	NW8	WNW6	NW4	WNW5	WSW3	W5	WNW6	WNW6	W3.5	NW8
30-Sep	WNW5	WNW5	WSW4	W6	W7	W6	WNW6	NW7	NW9	NW10	NW12	NW11	NW10	NW11	NW11	NW8	NW9	NNW9	NNW9	NW2	SSW2	SW4	SSW2	NW1	NW6.3	NW12
	SW1.7	SW1.5	SW1.3	SW1.3	SW1.3	SW1.4	SW1.2	SW1.0	WSW1.2	W1.3	W1.7	W1.6	W2.1	WNW2.3	WNW2.0	W1.4	WSW1.4	SW0.8	WSW0.5	SSW0.5	S1.4	S1.7	SSW1.5	SW1.5	Diurnal Average	
	SE9	NNW10	N10	NW9	SE11	NW12	NW13	NW13	NW13	NW13	NNW14	SE14	NW15	NW15	ESE15	ESE14	SE14	NNW13	NNW13	N11	SE11	ESE12	NNW10	N10	Diurnal Maximum	

UO - Unstable Operation

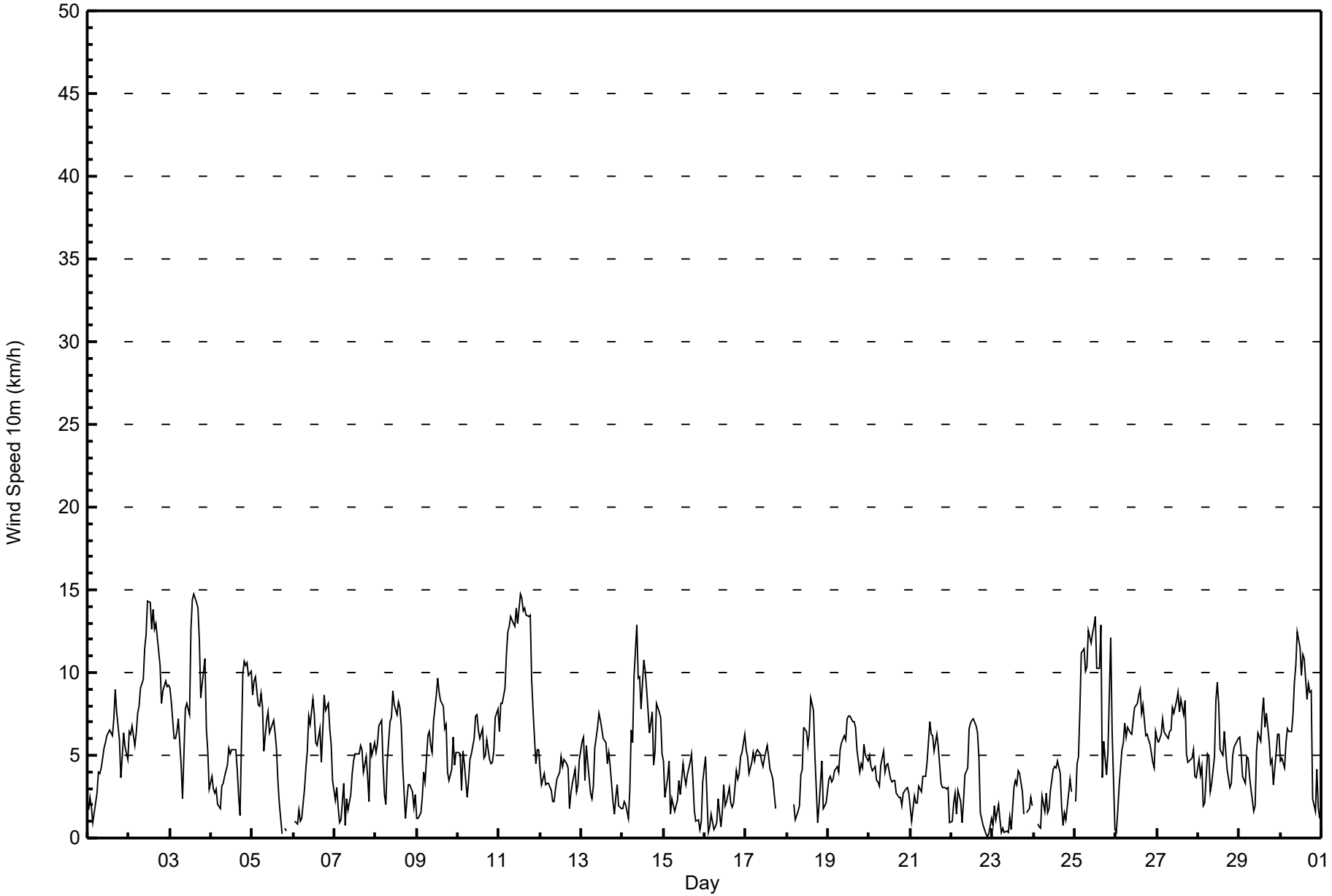
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Jackfish 1 - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	422	60.20	60.20
6 - 11	243	34.66	94.86
12 - 19	36	5.14	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: 701

Total Number of Hours: 720

Wind Speed 10m (WS10) - km/h
Jackfish 1 - September 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	7	4	7	5	18	29	88	69	53	22	24	34	37	7	422
6 - 11	15	2	1	0	4	10	30	19	9	14	20	16	10	22	37	34	243
12 - 19	0	0	0	0	0	11	9	0	0	0	0	0	0	0	9	7	36
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	27	8	8	4	11	26	57	48	97	83	73	38	34	56	83	48	701

Total Number of Valid Hours: 701

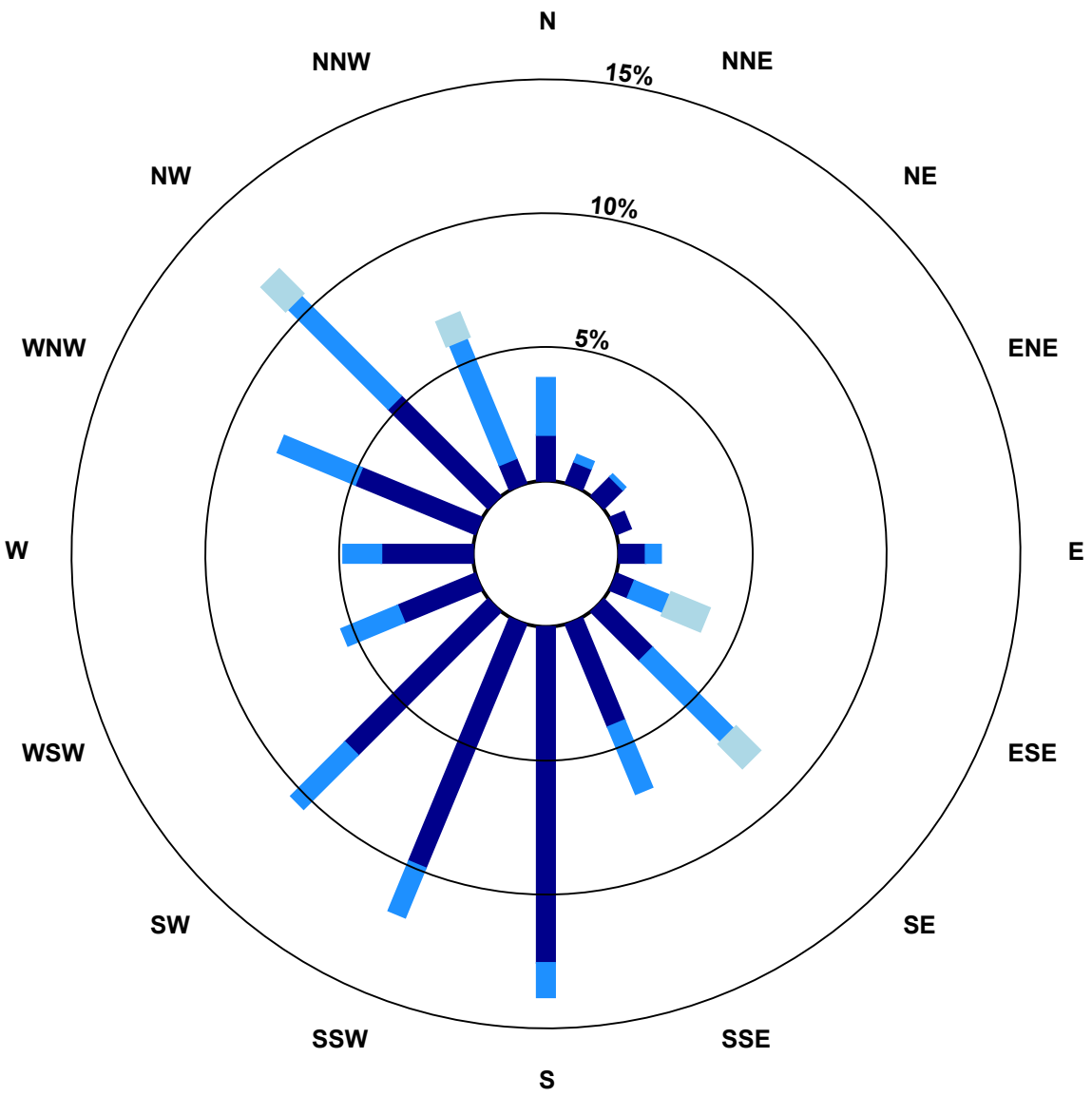
Total Number of Hours: 720

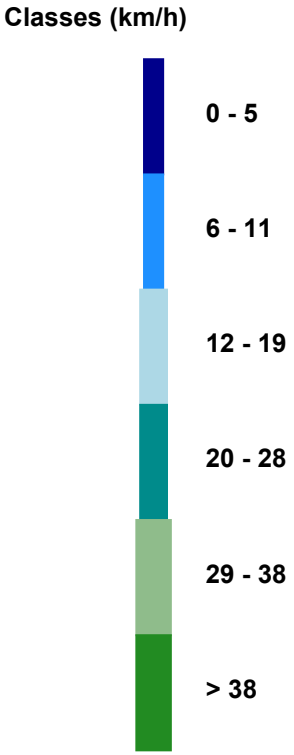
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Jackfish 1





Total Number of Valid Hours: 701

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 10m (WS10) - km/h

Jackfish 1 - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 5 km/h on Sep 3 15:00

Minimum Value: 0 km/h on Sep 22 22:00

Percentiles: $P_1 = 1$ $P_{10} = 1$ $Q_1 = 1$ Median = 2 $Q_3 = 3$ $P_{90} = 4$ $P_{99} = 5$

Hours in Service:	720
Hours of Data:	701
Hours of Missing Data:	19
Hours of Calibration:	0
Percent Operational Time:	97.4

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-Sep	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	3	3	2	1	2	2	2	2	3
2-Sep	2	2	2	2	2	3	3	3	3	4	5	5	5	5	5	5	4	4	4	3	3	3	3	3	5
3-Sep	3	2	2	2	2	2	2	2	2	3	3	2	4	5	5	5	5	5	3	3	3	2	2	2	5
4-Sep	1	1	1	1	1	1	1	2	2	2	3	2	2	3	3	2	1	2	4	3	3	4	3	3	4
5-Sep	3	3	3	3	2	3	3	2	2	3	2	2	3	2	2	2	2	1	UO	1	1	UO	UO	UO	3
6-Sep	UO	1	1	1	1	1	1	2	2	3	3	4	3	2	2	3	2	3	3	3	3	3	2	2	4
7-Sep	1	1	1	1	1	1	1	1	1	2	2	1	2	2	2	2	2	2	2	2	1	1	2	1	2
8-Sep	1	2	2	2	3	2	1	2	2	3	3	3	3	3	3	2	2	1	1	1	1	1	1	1	3
9-Sep	1	1	1	2	2	2	2	2	2	2	3	4	5	5	4	4	3	3	2	2	2	3	3	3	5
10-Sep	3	3	2	2	2	2	2	3	3	3	3	3	3	3	3	2	3	2	2	2	1	2	2	3	3
11-Sep	2	2	2	3	3	4	4	4	4	4	4	4	5	4	4	5	4	4	4	3	2	1	2	2	5
12-Sep	2	1	1	1	1	1	1	1	1	1	2	2	2	2	3	3	2	2	1	1	1	1	2	2	3
13-Sep	2	2	2	3	2	1	1	1	2	3	3	3	3	3	3	2	3	2	1	1	1	1	1	1	3
14-Sep	1	2	2	1	2	2	1	3	4	3	3	3	3	3	2	4	2	3	2	2	2	2	2	2	4
15-Sep	1	1	1	2	2	2	1	1	1	2	2	2	2	2	2	2	3	2	1	1	1	1	1	1	3
16-Sep	1	2	1	1	2	1	1	1	1	1	2	1	2	2	2	1	2	1	1	1	1	1	2	2	2
17-Sep	1	1	1	2	2	2	2	3	2	2	2	2	2	3	2	3	3	2	UO	UO	UO	UO	UO	UO	3
18-Sep	UO	UO	UO	UO	2	1	1	2	2	3	2	2	2	3	3	3	2	3	1	2	2	2	1	1	3
19-Sep	1	1	1	1	1	1	1	3	2	3	3	4	3	3	3	3	3	2	2	2	2	2	2	2	4
20-Sep	2	2	2	2	1	1	2	2	2	2	2	2	1	2	2	2	2	1	1	1	1	1	1	1	2
21-Sep	1	1	2	2	1	1	1	1	1	2	2	3	3	3	3	3	2	2	2	1	1	1	1	1	3
22-Sep	1	1	2	1	1	1	1	1	2	2	2	2	3	3	3	2	2	2	1	1	1	0	1	1	3
23-Sep	1	1	1	2	2	1	1	1	1	1	2	2	2	2	2	2	1	1	1	UO	1	1	1	1	2
24-Sep	UO	UO	1	1	1	1	1	1	1	2	2	2	2	2	3	2	2	1	1	1	1	1	1	UO	3
25-Sep	1	1	2	3	4	4	3	4	5	4	5	5	5	4	4	5	4	3	2	2	3	4	4	1	5
26-Sep	1	2	2	3	3	4	3	4	4	3	4	4	4	5	5	4	4	3	2	2	3	3	3	3	5
27-Sep	3	3	3	3	3	3	3	3	3	4	4	4	5	4	5	4	4	2	2	2	2	2	1	2	5
28-Sep	2	2	2	2	1	2	2	1	2	3	4	4	3	3	3	3	2	2	1	1	1	1	1	2	4
29-Sep	1	1	1	1	2	2	1	1	1	1	3	3	3	3	3	3	4	2	2	2	2	3	3	3	4
30-Sep	3	3	3	3	3	3	3	3	3	3	4	4	3	3	4	3	2	2	2	2	1	1	1	2	4
	3	3	3	3	4	4	4	4	5	4	5	5	5	5	5	5	5	5	4	3	3	4	4	3	
	Diurnal Maximum																								

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Jackfish 1 - September 2026

Direction of Maximum Speed: 112 deg on Sep 3 15:00
Direction of Maximum Daily Speed Average: 323.5 deg on Sep 11

Direction of Minimum Speed: 190 deg on Sep 22 22:00
Direction of Minimum Daily Speed Average: 0.4 deg on Sep 23

Monthly Average Direction: 240.3 deg

Hours in Service:	720
Hours of Data:	701
Hours of Missing Data:	19
Percent Operational Time:	97.4

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-Sep	203	169	178	167	176	172	179	172	183	193	198	185	177	166	160	155	146	156	157	147	138	158	154	163	166.3
2-Sep	161	164	159	155	155	149	149	145	144	143	143	143	142	145	136	134	131	134	138	135	135	136	138	134	142.0
3-Sep	129	132	131	118	116	126	100	53	50	105	83	99	118	130	112	122	128	118	119	119	131	136	146	150	118.8
4-Sep	144	153	158	166	160	160	170	169	181	210	195	196	247	251	290	294	287	306	347	349	349	350	345	356	306.5
5-Sep	351	347	352	352	349	351	355	9	357	356	9	14	14	7	9	46	359	77	UO	215	216	UO	UO	UO	359.2
6-Sep	UO	190	165	178	147	116	128	116	137	135	150	129	145	152	144	136	138	129	138	141	143	142	138	156	139.9
7-Sep	163	138	156	201	71	143	88	57	90	133	8	357	350	1	32	41	41	35	26	21	9	337	334	337	23.2
8-Sep	344	336	341	342	328	302	303	320	339	342	339	346	330	329	327	319	310	277	215	215	225	209	190	205	323.8
9-Sep	196	201	198	191	199	211	231	232	230	223	227	227	239	250	245	237	224	218	203	186	188	210	227	252	225.4
10-Sep	239	238	265	304	298	299	226	244	272	299	304	305	301	310	306	303	299	304	299	306	299	304	314	315	294.1
11-Sep	310	314	314	317	318	320	321	322	323	324	327	322	325	326	329	330	329	326	333	334	329	308	312	313	323.5
12-Sep	307	300	311	304	306	304	303	296	307	326	313	304	277	299	314	284	313	272	214	222	224	207	218	228	284.8
13-Sep	228	221	213	211	208	188	193	184	205	223	226	238	227	232	229	202	207	200	196	182	177	179	187	187	212.9
14-Sep	194	226	296	218	313	325	327	334	339	342	342	353	337	333	336	327	324	324	314	323	339	332	330	320	330.9
15-Sep	316	307	311	311	294	285	290	318	286	323	302	294	281	270	274	240	221	207	186	206	215	200	222	215	274.7
16-Sep	224	222	262	126	310	253	12	122	182	297	45	17	290	270	202	192	215	114	127	136	142	160	163	167	173.8
17-Sep	167	167	173	178	175	180	179	178	205	227	218	227	250	255	258	242	235	225	UO	UO	UO	UO	UO	UO	205.4
18-Sep	UO	UO	UO	UO	295	273	236	306	325	345	340	343	322	330	337	325	325	328	254	161	188	188	187	192	319.0
19-Sep	177	180	175	178	178	174	172	186	187	193	195	192	190	187	199	201	203	199	191	188	189	195	196	190	189.8
20-Sep	190	200	195	197	198	200	195	198	215	215	205	196	173	191	201	210	200	190	186	172	175	181	185	191	195.8
21-Sep	199	185	219	187	172	167	173	163	155	178	171	151	168	194	189	196	195	200	196	177	176	177	174	215	180.5
22-Sep	192	186	168	178	170	156	217	177	216	292	312	313	318	318	319	317	304	276	228	229	139	190	278	258	289.4
23-Sep	245	225	217	178	236	277	185	158	103	150	78	55	350	343	11	4	32	99	131	UO	194	279	278	290	343.9
24-Sep	UO	UO	165	130	270	244	194	179	133	222	228	226	229	270	250	239	225	223	222	223	162	175	169	UO	217.0
25-Sep	94	95	130	127	129	115	105	104	113	104	103	110	111	102	95	115	94	80	343	11	106	107	149	326	107.1
26-Sep	263	282	279	269	271	263	291	286	270	299	292	297	297	301	295	298	299	302	300	300	294	259	247	222	285.8
27-Sep	244	265	242	244	239	225	228	240	242	249	245	249	269	279	270	257	225	217	210	214	210	207	196	190	240.2
28-Sep	203	191	202	200	188	205	205	187	186	221	220	218	213	223	208	204	203	195	180	178	182	181	183	184	201.1
29-Sep	183	180	188	188	205	225	221	174	247	247	269	295	303	307	308	307	305	300	306	302	258	267	295	297	272.1
30-Sep	286	284	243	267	269	268	289	305	312	314	313	316	315	315	319	320	317	332	336	309	205	224	210	313	304.4
	216.1	217.5	224.1	228.2	227.5	220.4	224.0	227.5	247.7	262.2	273.4	266.0	267.8	281.9	289.4	259.1	251.0	221.6	236.4	210.0	176.5	190.4	208.0	231.6	
	Diurnal Average																								

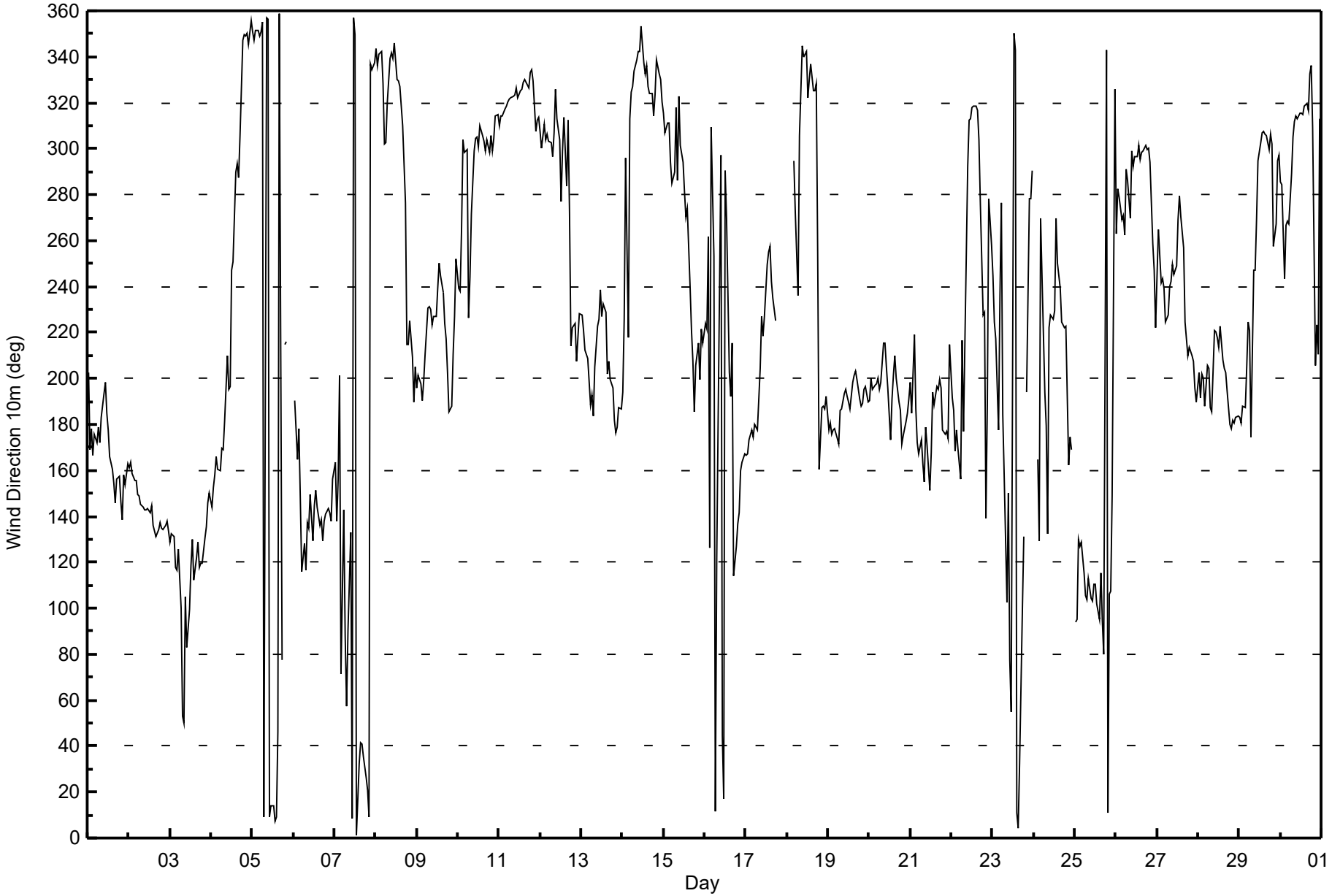
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Jackfish 1 - September 2026



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

Maximum Value: 102 deg on Sep 26 01:00

Minimum Value: 9 deg on Sep 24 22:00

Percentiles: P_1 = 12 P_{10} = 18 Q_1 = 26 Median = 37 Q_3 = 56 P_{90} = 69 P_{99} = 94

Hours in Service:	720
Hours of Data:	701
Hours of Missing Data:	19
Hours of Calibration:	0
Percent Operational Time:	97.4

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-Sep	28	16	16	49	12	12	21	31	57	60	57	50	56	46	44	46	36	35	32	28	24	33	32	28	60
2-Sep	34	32	30	29	30	32	34	33	32	31	32	31	32	33	28	31	28	29	29	26	25	26	30	27	34
3-Sep	21	24	24	25	22	25	49	45	35	30	33	31	26	32	28	29	28	26	27	22	23	30	33	28	49
4-Sep	23	18	18	11	18	22	20	36	50	52	51	59	58	68	58	65	70	90	27	26	27	28	29	29	90
5-Sep	28	26	27	29	26	27	27	37	30	33	34	37	35	34	41	58	71	95	UO	66	63	UO	UO	UO	95
6-Sep	UO	78	20	18	74	43	18	25	28	36	38	32	40	39	35	35	32	27	30	30	29	31	29	27	78
7-Sep	19	24	27	76	76	27	66	43	65	67	35	33	31	34	40	38	40	38	35	36	47	14	61	16	76
8-Sep	19	19	18	16	30	40	33	25	22	29	25	31	28	24	26	29	48	89	29	13	20	23	23	26	89
9-Sep	28	32	42	34	57	39	31	35	47	54	51	58	57	62	64	52	44	48	39	48	45	48	68	69	69
10-Sep	64	67	92	54	52	85	54	61	65	67	51	58	54	48	36	37	57	40	50	49	33	31	20	19	92
11-Sep	23	20	21	22	17	19	18	17	17	18	18	18	17	18	19	19	17	18	17	19	17	23	23	20	23
12-Sep	25	30	28	35	30	33	37	46	62	63	52	62	57	63	66	59	50	59	18	16	19	35	39	31	66
13-Sep	26	30	45	41	49	48	81	74	47	47	50	61	59	66	57	79	54	41	26	50	10	16	18	23	81
14-Sep	15	48	67	62	32	14	15	18	21	24	24	27	23	18	19	21	17	19	33	30	16	17	17	25	67
15-Sep	27	28	29	23	62	41	55	43	54	50	67	56	77	71	68	59	47	45	29	39	52	53	58	19	77
16-Sep	19	35	87	33	56	80	75	75	60	98	94	58	94	91	76	73	81	39	20	17	19	21	21	26	98
17-Sep	21	20	21	23	23	29	28	46	48	63	59	60	62	70	74	69	50	45	UO	UO	UO	UO	UO	UO	74
18-Sep	UO	UO	UO	UO	39	25	50	32	37	34	24	35	36	35	26	24	41	57	74	49	10	54	49	50	74
19-Sep	13	13	15	13	22	20	24	54	58	58	59	61	55	58	60	50	53	47	41	35	42	46	51	45	61
20-Sep	45	41	43	49	33	43	56	45	37	55	54	52	65	67	62	64	48	25	20	18	17	20	24	34	67
21-Sep	38	51	34	17	15	18	15	19	37	48	53	37	56	53	55	55	52	55	38	22	13	10	13	44	56
22-Sep	54	24	15	23	22	23	59	17	49	54	28	26	27	29	28	25	31	73	48	21	84	80	66	55	84
23-Sep	55	27	38	66	62	70	77	92	73	91	78	92	45	35	34	31	37	31	68	UO	56	31	11	38	92
24-Sep	UO	UO	53	60	84	42	88	28	49	73	60	59	76	79	70	59	42	42	40	81	30	9	11	UO	88
25-Sep	33	27	24	22	24	25	27	27	28	32	29	27	31	32	31	26	90	40	44	49	25	27	62	101	101
26-Sep	102	89	66	62	70	70	70	74	69	58	68	59	55	57	67	62	53	47	42	43	50	77	79	51	102
27-Sep	68	75	66	57	64	47	52	60	62	55	61	59	67	64	68	66	46	47	27	33	27	33	37	41	75
28-Sep	44	47	47	66	33	23	29	48	57	55	44	46	44	54	41	45	42	32	16	12	15	15	15	17	66
29-Sep	16	15	26	25	33	38	19	19	39	52	75	62	53	46	37	44	52	43	71	51	94	82	72	62	94
30-Sep	85	88	90	72	76	71	67	38	23	17	18	18	17	19	18	19	16	19	17	60	58	20	30	100	100
	102	89	92	76	84	85	88	92	73	98	94	92	94	91	76	79	90	95	74	81	94	82	79	101	
	Diurnal Maximum																								

UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS508
KIRBY NORTH
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - KIRBY NORTH (AMS 508)
SEPTEMBER 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	687	33	33	100	14.2	0	5.1	0
H2S (ppb) Average	684	36	36	100	1.8	0	0.3	0
THC (ppm) Average	687	33	33	100	2.6	-	2.4	-
NO2 (ppb) Average	684	36	36	100	5.9	0	2.7	-
NO (ppb) Average	684	36	36	100	9	-	3.1	-
NOX (ppb) Average	684	36	36	100	14.9	-	5.8	-
Temperature 2 m (C) Average	720	0	0	100	25.9	-	20	-
Relative Humidity (%) Average	720	0	0	100	98.8	-	90.2	-
Wind Speed 10 m (km/h) Average	720	0	0	100	27	-	19	-
Wind Direction 10 m (deg) Average	720	0	0	100	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - KIRBY NORTH (AMS508)
SEPTEMBER 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	687	0.6	1.7	-	0	0	0	0.1	0.3	0.9	14.2
H2S (ppb) Average	684	0.1	0.1	-	0	0	0.1	0.1	0.1	0.2	1.8
THC (ppm) Average	687	2.3	0.1	-	2.1	2.2	2.3	2.3	2.3	2.4	2.6
NO2 (ppb) Average	684	1.01	0.9	-	0.1	0.3	0.4	0.7	1.3	2	5.9
NO (ppb) Average	684	0.33	0.9	-	0	0	0	0.1	0.2	0.7	9
NOX (ppb) Average	684	1.33	1.6	-	0.1	0.3	0.5	0.8	1.5	2.7	14.9
Temperature 2 m (C) Average	720	11.28	5.1	-	-1	4.7	7.7	10.6	15	18.1	25.9
Relative Humidity (%) Average	720	74.4	17	-	33.1	47.3	63.6	77.3	88.6	95.1	98.8
Wind Speed 10 m (km/h) Average	720	11.2	5	-	1	5	8	10	15	18	27
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - KIRBY NORTH (AMS508)
SEPTEMBER 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

Kirby North - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 14.2 ppb on Sep 29 17:00 Maximum Daily Average: 5.1 ppb on Sep 26

Minimum Value: 0.0 ppb on Sep 1 01:00 Minimum Daily Average: 0.0 ppb on Sep 3
Maximum Diurnal Average: 1.3 ppb at hour 17 Minimum Diurnal Average: 0.1 ppb at hour 24
Monthly Average: 0.60 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.3 P_{90} = 0.9 P_{99} = 9.4

Hours in Service:	720
Hours of Data:	687
Hours of Missing Data:	33
Hours of Calibration:	33
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-Sep	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	0.7	0.6	1.2	0.8	0.8	0.1	0.1	0.2	1.2
2-Sep	0.2	0.3	0.3	0.4	0.4	Z	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
3-Sep	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
4-Sep	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	0.6	0.8	0.6	0.7	0.5	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.8
5-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.2	0.3	0.3	0.8	0.6	0.9	0.4	0.1	0.1	0.2	0.2	0.9
6-Sep	0.2	0.2	0.3	Z	0.3	0.3	0.2	0.4	0.6	0.7	1.0	0.6	0.4	0.4	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.1	0.3	1.0
7-Sep	0.2	0.2	0.1	0.1	Z	0.1	0.2	0.3	0.4	0.5	0.6	0.3	0.8	1.5	0.6	0.3	0.1	0.2	0.2	0.3	0.3	0.3	0.1	0.2	0.3	1.5
8-Sep	0.2	0.2	0.2	0.3	0.1	Z	0.1	0.3	0.4	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.4
9-Sep	Z	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	0.0	0.0	0.0	0.0	0.1
10-Sep	0.0	Z	0.3	3.9	2.7	0.1	0.3	0.0	1.3	2.9	3.1	7.3	8.6	9.2	0.8	6.2	7.2	7.1	3.2	6.5	3.5	1.1	0.1	0.1	3.3	9.2
11-Sep	0.0	0.0	Z	0.0	0.0	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.2	0.3
12-Sep	0.4	0.3	0.2	Z	0.3	0.2	0.2	0.3	0.3	0.4	0.3	0.6	2.4	2.7	3.2	0.9	1.9	0.3	0.2	0.2	0.1	0.3	0.3	0.2	0.7	3.2
13-Sep	0.2	0.2	0.2	0.2	Z	0.2	0.1	0.1	0.5	1.5	0.4	0.4	0.4	0.4	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.2	1.5
14-Sep	0.1	0.1	0.2	0.7	0.2	Z	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.4	0.3	0.1	0.0	0.0	0.1	0.2	0.4	0.4	0.4	0.2	0.2	0.7
15-Sep	Z	0.0	0.0	0.1	0.0	0.1	0.5	1.8	0.3	0.2	2.1	C	C	C	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.1
16-Sep	0.0	Z	0.2	0.1	0.0	0.2	0.1	0.1	0.4	0.6	1.7	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.5	0.2	1.7
17-Sep	0.4	0.3	Z	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.2	0.2	0.3	0.7	1.1	1.2	1.5	0.8	0.3	0.1	0.1	0.2	0.1	0.4	1.5
18-Sep	0.1	0.1	0.0	Z	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.3	0.1	0.4	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.4
19-Sep	0.1	0.1	0.3	0.3	Z	0.4	0.4	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	0.2	0.2	0.1	0.0	0.2	0.4
20-Sep	0.0	0.1	0.0	0.0	0.0	Z	0.0	0.1	0.0	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.3
21-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.4	0.4	0.7	0.7	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.1	0.0	0.2	0.7
22-Sep	0.2	Z	0.4	0.4	0.5	0.5	0.6	0.4	0.4	1.2	0.6	0.1	0.1	0.1	0.2	0.1	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.2
23-Sep	0.0	0.0	Z	0.1	0.1	0.5	0.4	0.4	1.4	1.0	0.6	0.6	0.8	0.4	0.6	0.5	2.0	1.4	1.2	0.2	0.1	0.2	0.0	0.7	0.6	2.0
24-Sep	0.8	0.9	0.7	Z	0.1	0.2	0.3	0.7	0.3	0.8	0.2	0.2	0.2	1.5	0.1	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.3	1.5
25-Sep	0.1	0.1	0.1	0.2	Z	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.4	0.6	1.1	0.2	1.4	0.3	0.2	1.4
26-Sep	0.1	0.2	0.9	0.6	1.7	Z	2.5	3.6	4.0	3.9	5.4	9.0	10.9	9.3	11.8	14.0	10.1	11.6	6.5	5.7	4.9	0.4	0.1	0.0	5.1	14.0
27-Sep	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.6	1.5	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.2	1.5
28-Sep	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	0.0	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.3
29-Sep	0.1	0.1	Z	0.0	0.1	0.1	0.0	0.0	3.2	1.1	0.7	7.8	8.2	7.7	4.7	4.8	14.2	12.6	5.8	0.2	0.1	0.0	0.1	0.0	3.1	14.2
30-Sep	0.2	0.1	0.0	Z	0.1	0.1	0.1	3.9	0.5	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.3	3.9
	0.1	0.2	0.2	0.3	0.3	0.1	0.2	0.5	0.5	0.6	0.6	1.0	1.2	1.3	0.9	1.0	1.3	1.3	0.7	0.6	0.5	0.2	0.1	0.1	Diurnal Average	
	0.8	0.9	0.9	3.9	2.7	0.5	2.5	3.9	4.0	3.9	5.4	9.0	10.9	9.3	11.8	14.0	14.2	12.6	6.5	6.5	4.9	1.1	1.4	0.7	Diurnal Maximum	

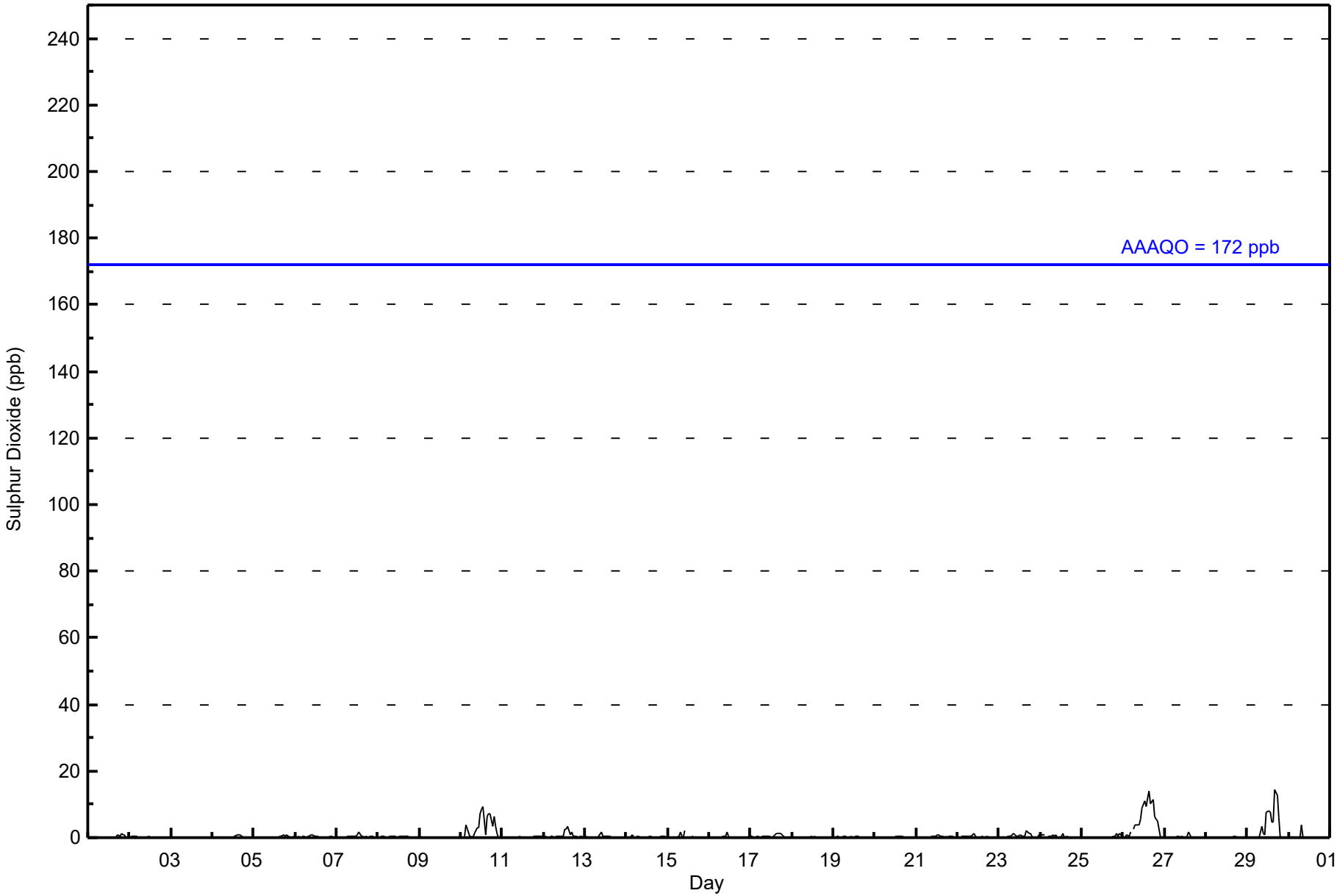
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Kirby North - September 2026



Sulphur Dioxide (SO_2) - ppb
Kirby North - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	681	99.13	99.13
11 - 20	6	0.87	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: 687

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Kirby North - September 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	22	22	13	30	19	41	63	70	79	56	65	37	25	44	66	29	681
11 - 20	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6
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	22	22	13	30	19	41	63	70	79	56	65	37	31	44	66	29	687

Total Number of Valid Hours: 687

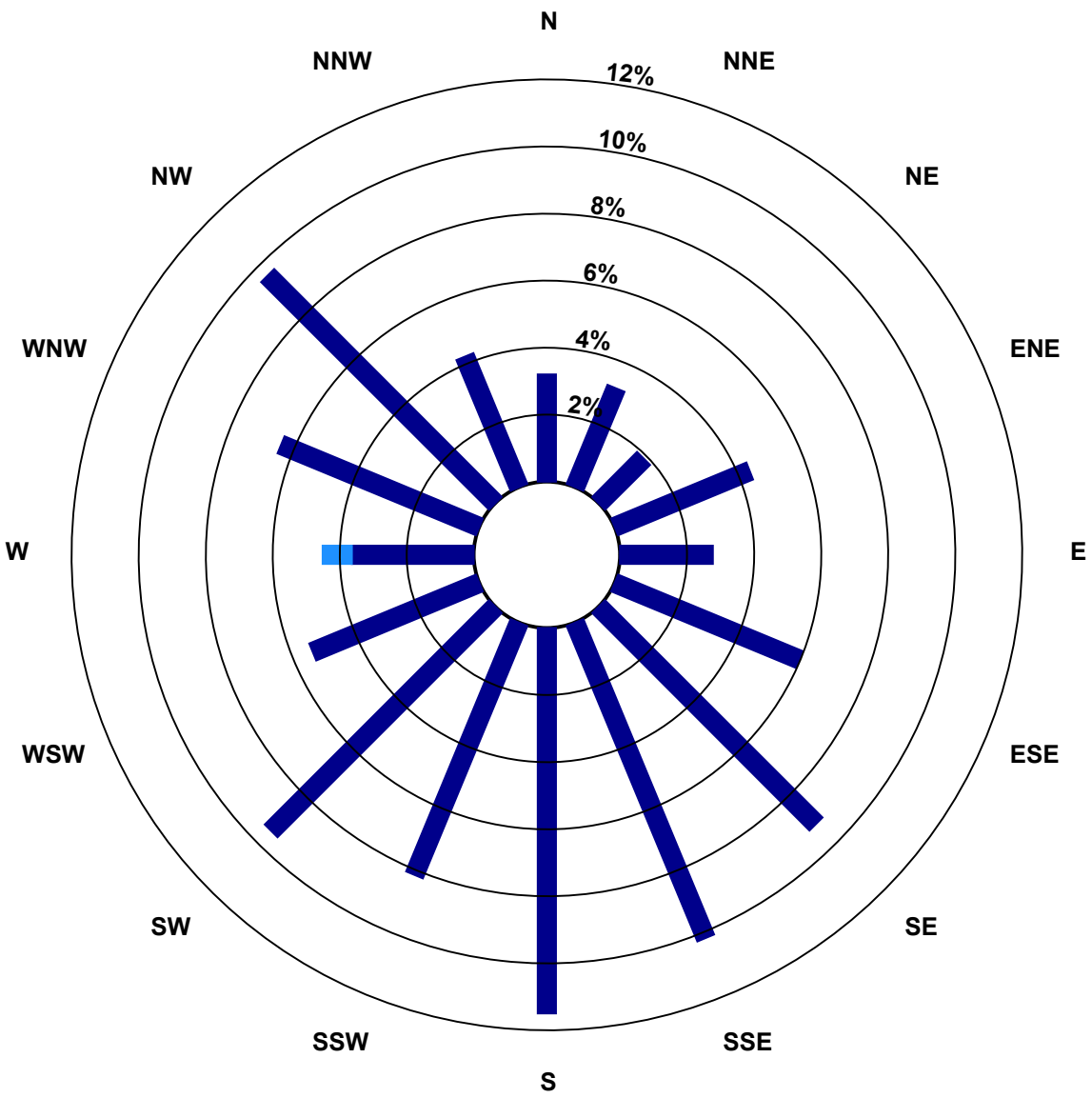
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

Kirby North



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

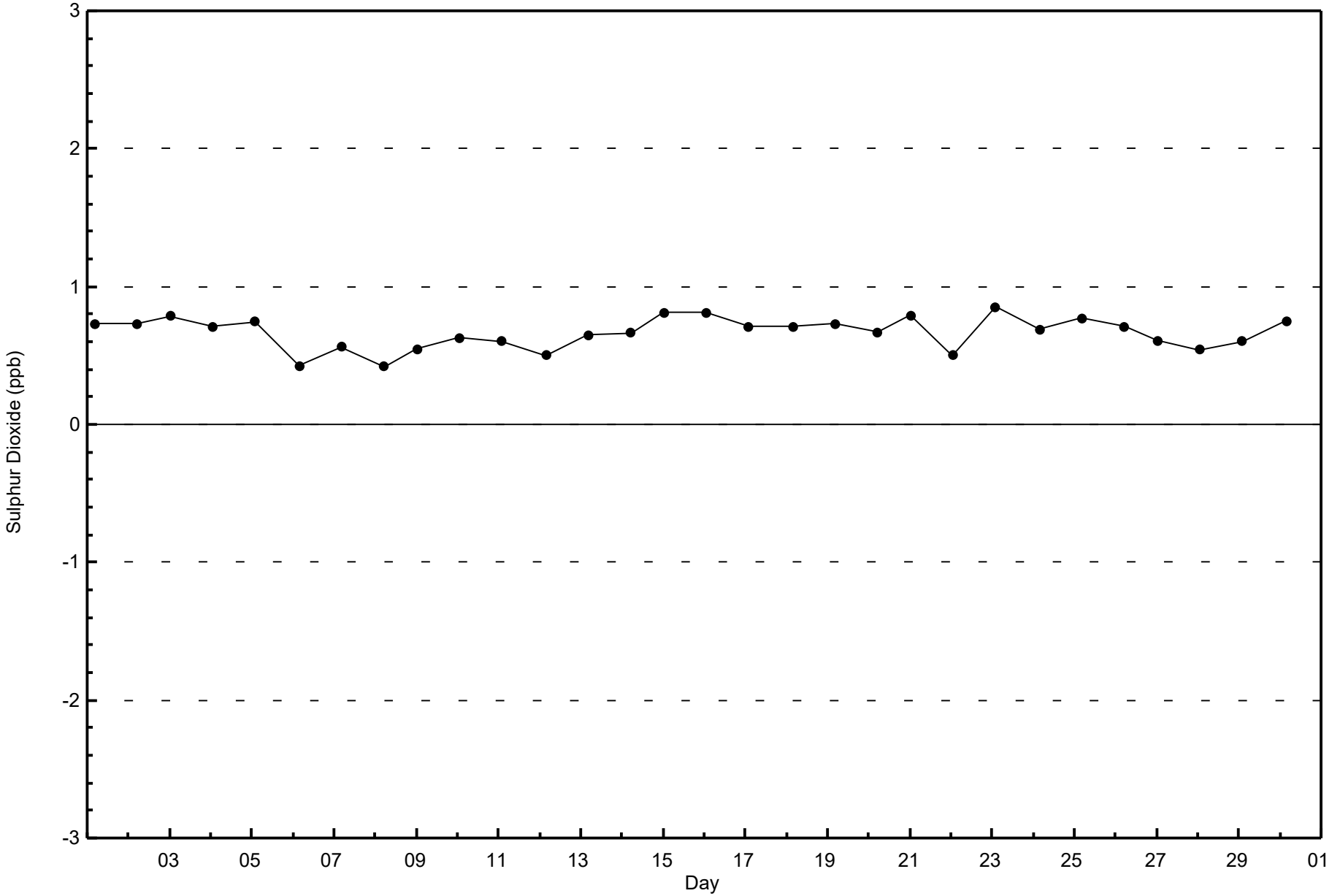
Total Number of Valid Hours: 687

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Kirby North - September 2026

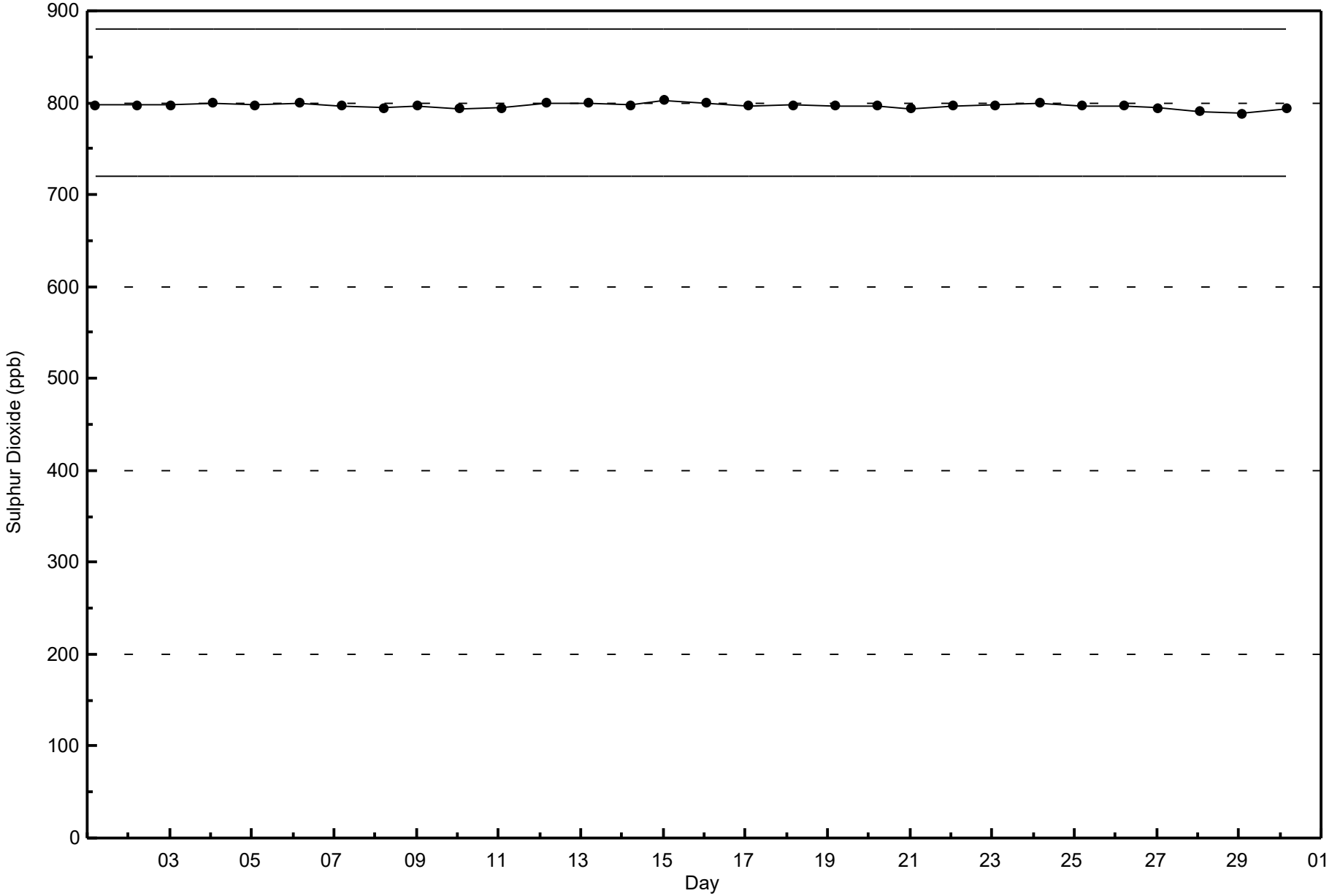


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Kirby North - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Kirby North - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.8 ppb on Sep 10 04:00 Maximum Daily Average: 0.3 ppb on Sep 10

Minimum Value: 0.0 ppb on Sep 6 00:00 Minimum Daily Average: 0.0 ppb on Sep 30
Maximum Diurnal Average: 0.2 ppb at hour 4 Minimum Diurnal Average: 0.1 ppb at hour 15
Monthly Average: 0.10 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.1 P_{90} = 0.2 P_{99} = 0.3

Hours in Service:	720
Hours of Data:	684
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-Sep	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
2-Sep	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	0.1	0.2	0.2	0.2	0.1	0.2
3-Sep	0.2	Z	0.2	0.2	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
4-Sep	0.2	0.2	Z	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	0.1	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.3
5-Sep	0.1	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	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1
6-Sep	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	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
7-Sep	0.1	0.1	0.0	0.0	0.1	Z	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	0.1	0.0	0.0	0.0	0.1	0.1
8-Sep	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	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2
9-Sep	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	0.1	0.1	0.1	0.4	0.1	0.4
10-Sep	0.1	0.2	Z	1.8	1.2	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.3	1.8
11-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1
12-Sep	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.2
13-Sep	0.0	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
14-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
15-Sep	0.1	Z	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	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
16-Sep	0.0	0.2	Z	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	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
17-Sep	0.1	0.1	0.1	Z	0.1	0.1	0.2	0.2	0.2	0.2	C	C	C	C	C	C	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.1	--	0.2
18-Sep	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	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2
19-Sep	0.0	0.0	0.0	0.0	0.0	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20-Sep	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
21-Sep	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	0.2	0.2	0.2	0.2	0.1	0.1	0.2
22-Sep	0.1	0.1	Z	0.2	0.1	0.1	0.2	0.2	0.2	0.1	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	0.0	0.1	0.2
23-Sep	0.0	0.0	0.0	Z	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.1	0.3
24-Sep	0.2	0.2	0.3	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	0.3
25-Sep	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	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2
26-Sep	Z	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.0	0.0	0.2	0.3
27-Sep	0.0	Z	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1
28-Sep	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	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
29-Sep	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	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1
30-Sep	0.0	0.0	0.0	0.0	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	0.0	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	0.1	0.1	0.1	0.1	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	0.2	0.3	1.8	1.2	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	0.2	0.2	0.2	0.2	0.4	Diurnal Maximum	

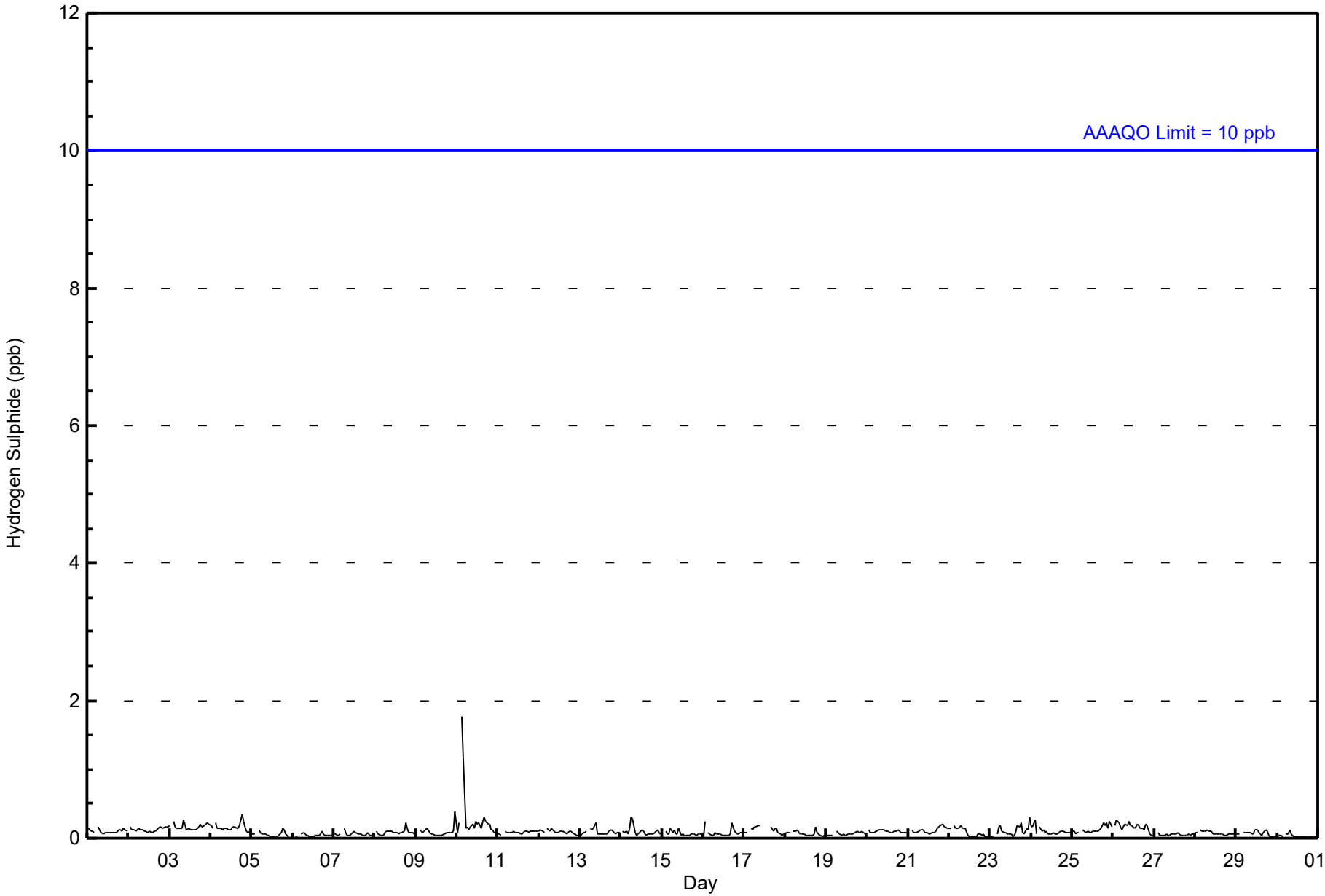
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Kirby North - September 2026



Hydrogen Sulphide (H_2S) - ppb
Kirby North - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Kirby North - September 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	21	14	30	20	39	62	72	77	52	65	39	32	44	64	30	684
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	21	14	30	20	39	62	72	77	52	65	39	32	44	64	30	684

Total Number of Valid Hours: 684

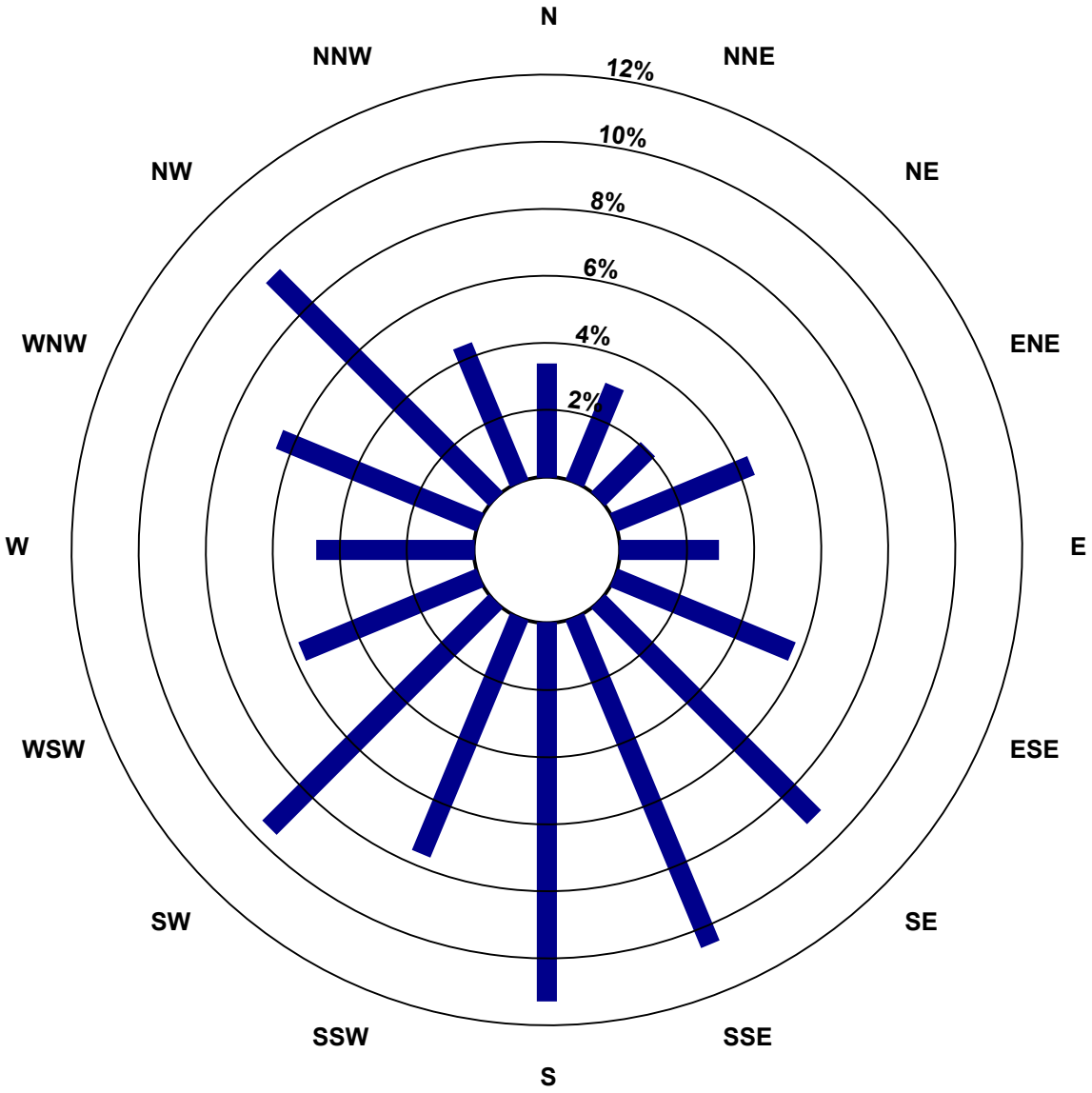
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

Kirby North



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

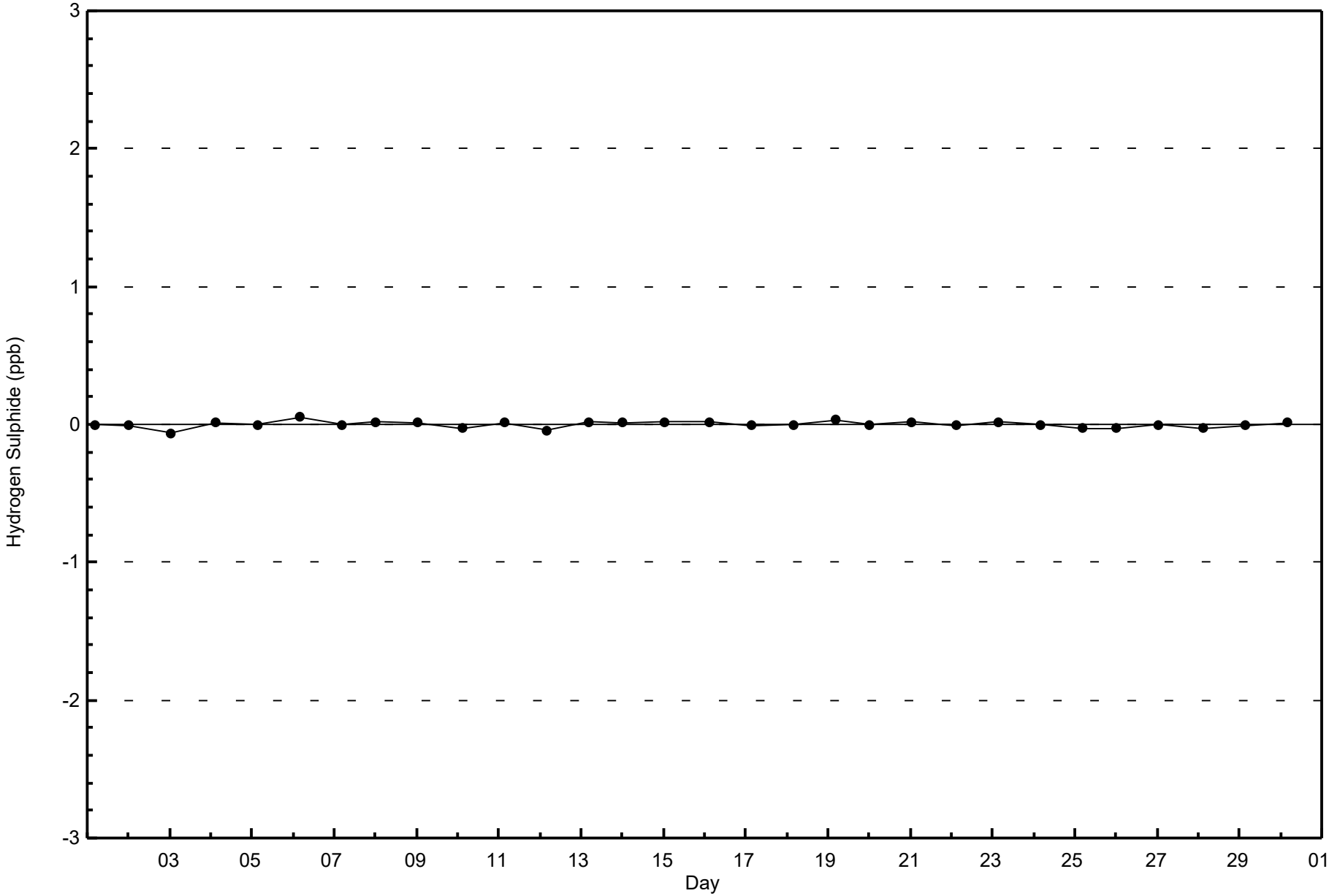
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Kirby North - September 2026

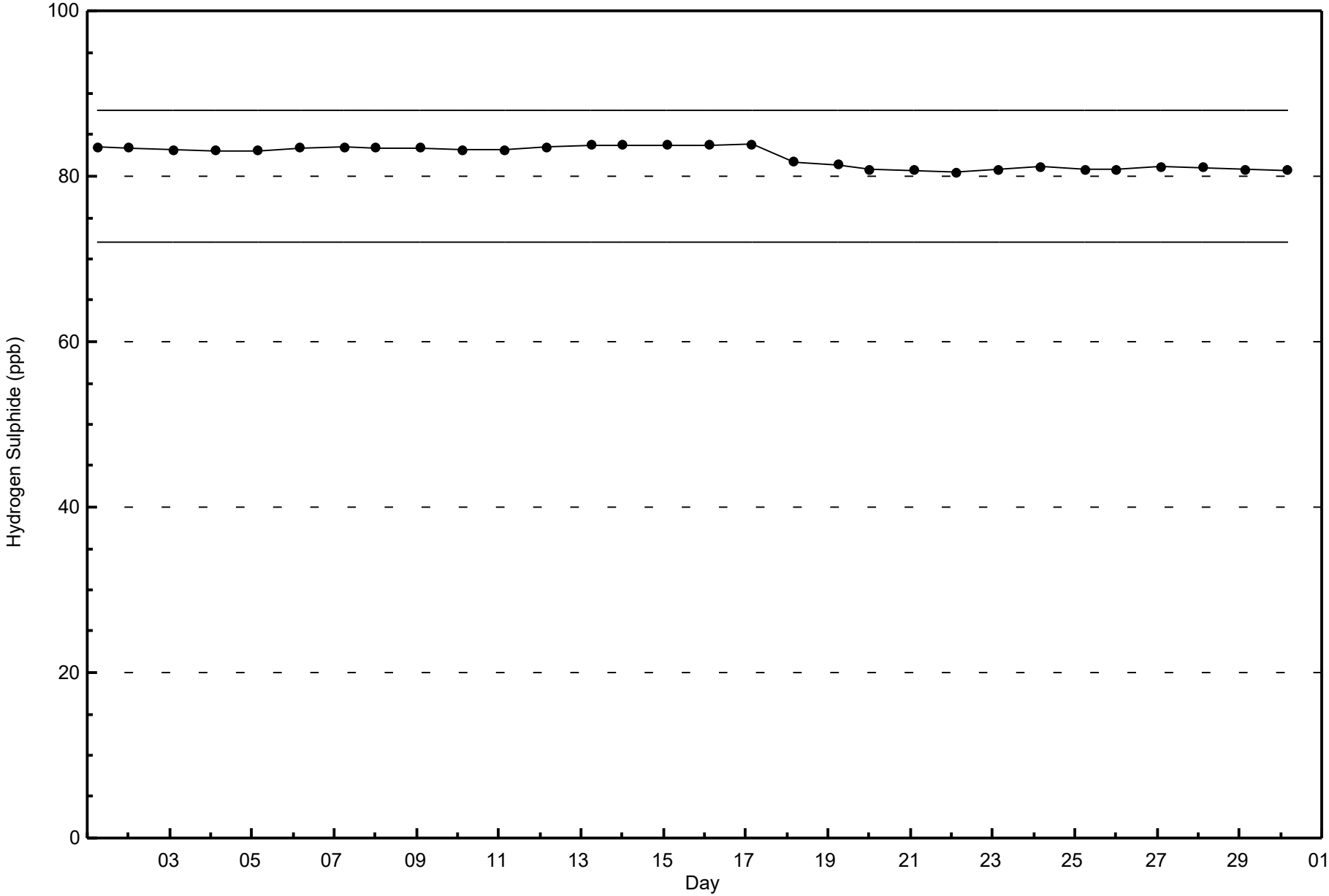


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Kirby North - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Kirby North - September 2026

Maximum Value: 2.6 ppm on Sep 9 07:00

Maximum Daily Average: 2.4 ppm on Sep 24

Minimum Value: 2.1 ppm on Sep 2 15:00

Minimum Daily Average: 2.2 ppm on Sep 2

Maximum Diurnal Average: 2.3 ppm at hour 7

Minimum Diurnal Average: 2.2 ppm at hour 15

Monthly Average: 2.30 ppm

Percentiles: P_1 = 2.2 P_{10} = 2.2 Q_1 = 2.3 Median = 2.3 Q_3 = 2.3 P_{90} = 2.4 P_{99} = 2.5

Hours in Service:	720
Hours of Data:	687
Hours of Missing Data:	33
Hours of Calibration:	33
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-Sep	2.4	2.3	2.3	2.4	Z	2.3	2.3	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4
2-Sep	2.3	2.3	2.3	2.3	2.3	Z	2.3	2.3	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	2.2	2.2	2.3	2.2	2.3
3-Sep	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	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.3
4-Sep	2.3	Z	2.3	2.3	2.3	2.3	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.3	2.3	2.3	2.4
5-Sep	2.3	2.3	Z	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.4
6-Sep	2.3	2.3	2.4	Z	2.4	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	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4
7-Sep	2.3	2.3	2.3	2.3	Z	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.4	2.4	2.4	2.3	2.4
8-Sep	2.3	2.4	2.4	2.4	2.4	Z	2.4	2.5	2.4	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	2.4	2.3	2.5
9-Sep	Z	2.4	2.4	2.4	2.5	2.5	2.6	2.5	2.4	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	2.2	2.3	2.6
10-Sep	2.2	Z	2.3	2.3	2.2	2.3	2.3	2.2	2.3	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.3
11-Sep	2.3	2.3	Z	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.3
12-Sep	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	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.4	2.4	2.4	2.3	2.4
13-Sep	2.4	2.4	2.4	2.5	Z	2.5	2.4	2.5	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5
14-Sep	2.3	2.3	2.3	2.4	2.5	Z	2.4	2.4	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	2.3	2.3	2.3	2.3	2.5
15-Sep	Z	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3	C	C	C	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4
16-Sep	2.4	Z	2.3	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	2.3	2.3	2.3	2.3	2.3	2.3	2.4
17-Sep	2.3	2.3	Z	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.4	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	2.3	2.5
18-Sep	2.3	2.3	2.3	Z	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4
19-Sep	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	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
20-Sep	2.3	2.3	2.3	2.3	2.3	Z	2.3	2.3	2.4	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	2.3	2.3	2.3	2.4
21-Sep	Z	2.3	2.3	2.2	2.2	2.2	2.2	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
22-Sep	2.3	Z	2.4	2.4	2.3	2.4	2.3	2.3	2.4	2.5	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.5
23-Sep	2.3	2.3	Z	2.3	2.3	2.3	2.4	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.5	2.4	2.5	2.3	2.3	2.4	2.4	2.4	2.3	2.5
24-Sep	2.4	2.4	2.4	Z	2.4	2.4	2.5	2.5	2.5	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.4	2.5
25-Sep	2.3	2.3	2.3	2.3	Z	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	2.4	2.3	2.4	2.3	2.4	2.4	2.3	2.4
26-Sep	2.4	2.4	2.4	2.4	2.3	Z	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	2.3	2.3	2.3	2.3	2.3	2.3	2.4
27-Sep	Z	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	2.3	2.3	2.3	2.3	2.3
28-Sep	2.3	Z	2.3	2.3	2.4	2.3	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4
29-Sep	2.3	2.3	Z	2.3	2.3	2.3	2.3	2.3	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	2.2	2.3	2.4
30-Sep	2.2	2.2	2.2	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	2.2	2.2	2.2	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	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	Diurnal Average	
	2.4	2.4	2.4	2.5	2.5	2.5	2.6	2.5	2.5	2.5	2.4	2.4	2.4	2.3	2.3	2.3	2.5	2.4	2.5	2.4	2.4	2.4	2.4	2.4	Diurnal Maximum	

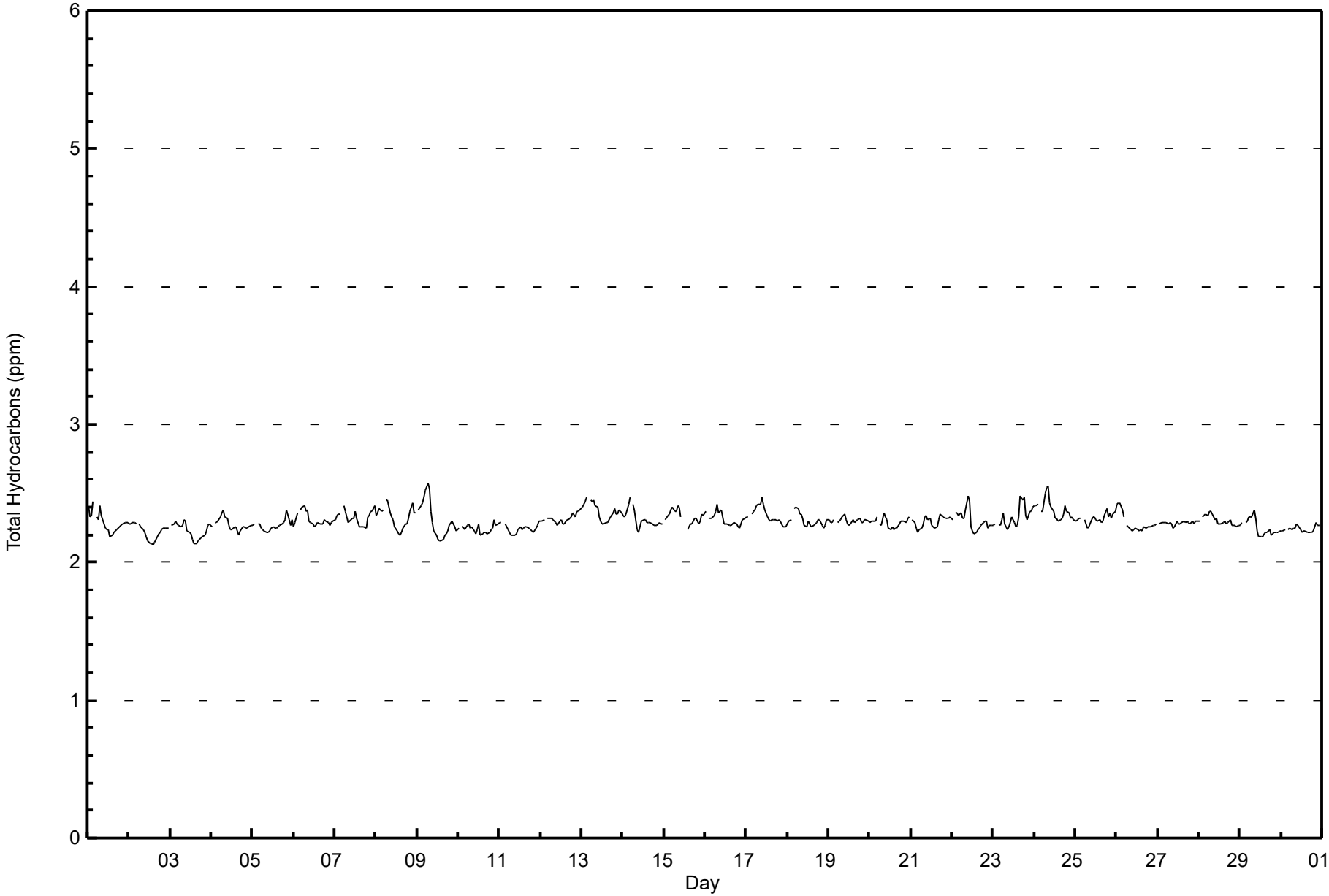
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Kirby North - September 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Total Hydrocarbons (THC) - ppm

Kirby North - September 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	0	0.00	0.00
2.1 - 3.0	687	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: 687

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Kirby North - September 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	22	22	13	30	19	41	63	70	79	56	65	37	31	44	66	29	687
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	22	22	13	30	19	41	63	70	79	56	65	37	31	44	66	29	687

Total Number of Valid Hours: 687

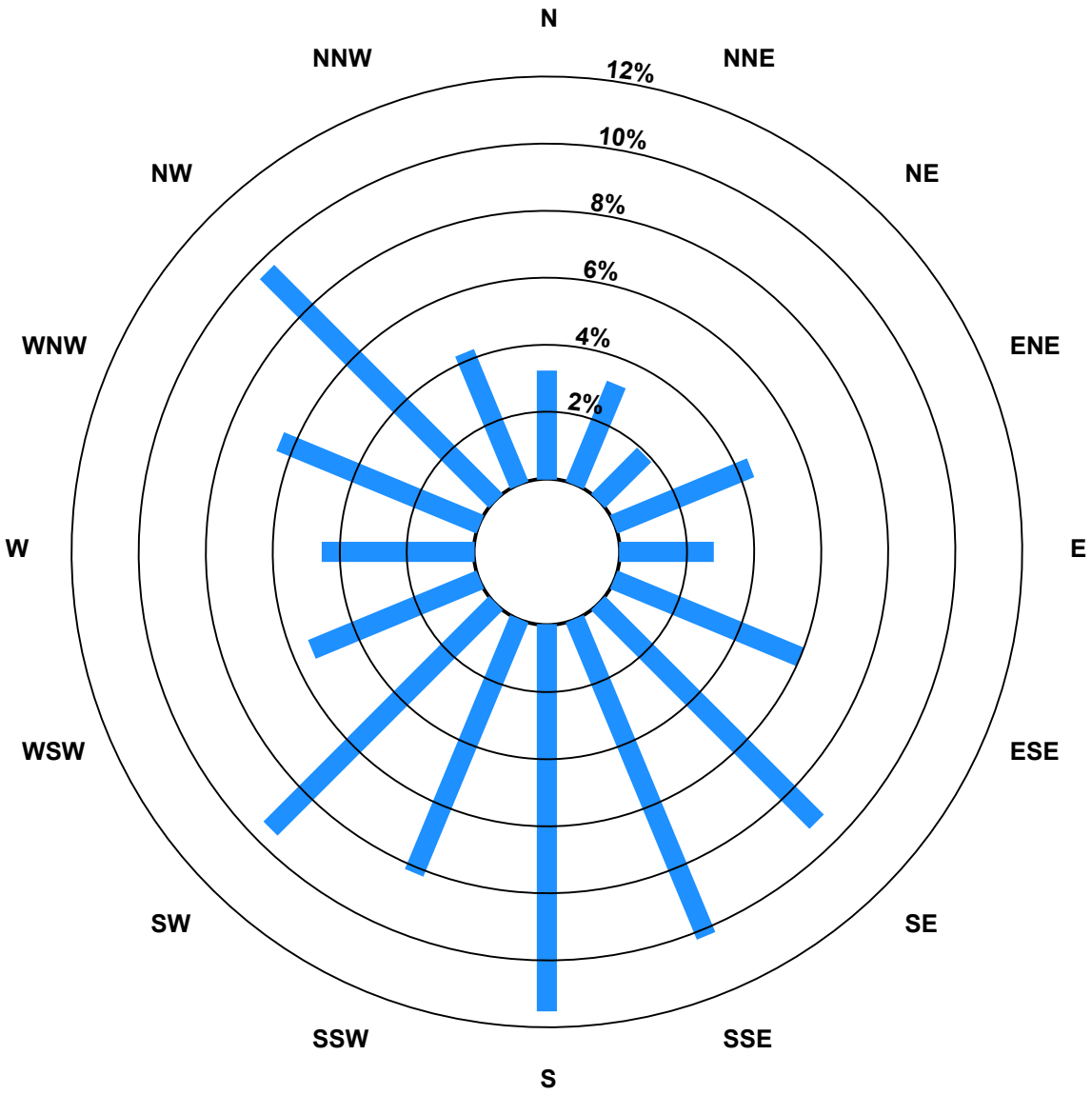
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Total Hydrocarbons (THC) - ppm

Kirby North



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

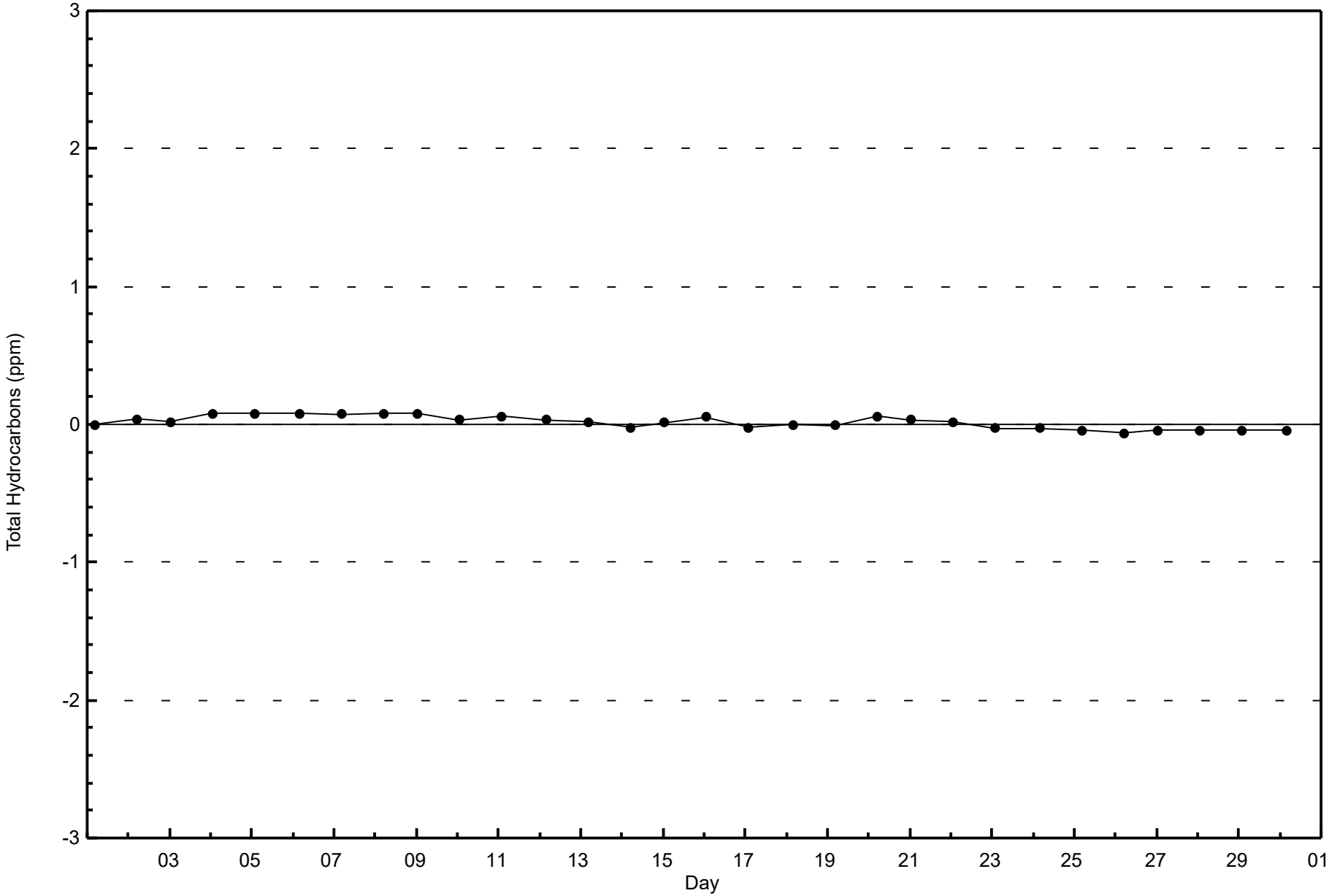
Total Number of Valid Hours: 687

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Kirby North - September 2026

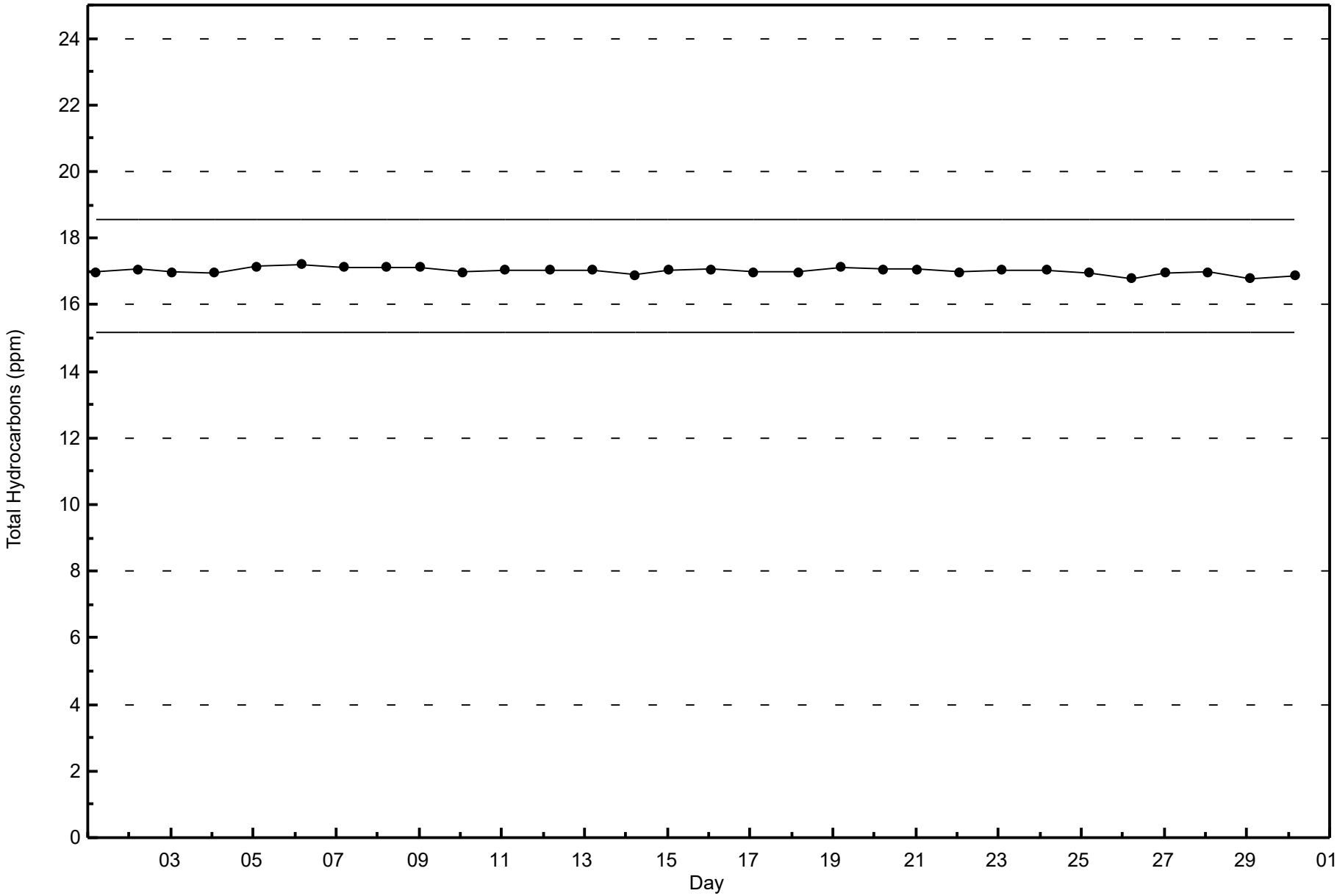


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Kirby North - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Kirby North - September 2026

Maximum Value: 9.0 ppb on Sep 26 16:00

Maximum Daily Average: 3.1 ppb on Sep 26

Minimum Value: 0.0 ppb on Sep 1 14:00

Minimum Daily Average: 0.0 ppb on Sep 11

Maximum Diurnal Average: 0.7 ppb at hour 14

Minimum Diurnal Average: 0.0 ppb at hour 1

Monthly Average: 0.33 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} = 4.5

Hours in Service:	720
Hours of Data:	684
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-Sep	0.1	0.0	Z	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	0.0	0.0	0.0	0.1
2-Sep	0.0	0.0	0.0	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3-Sep	0.0	0.0	0.0	0.0	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
4-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.3	0.3	0.7	0.4	0.5	0.2	0.9	0.4	0.2	0.3	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.9
5-Sep	Z	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	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
6-Sep	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.3	0.7	0.9	0.7	0.4	0.3	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.9
7-Sep	0.0	0.0	Z	0.1	0.0	0.1	0.1	0.2	0.2	0.3	0.5	0.1	0.5	0.6	1.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.2	1.0
8-Sep	0.0	0.2	0.1	Z	0.0	0.0	0.4	0.4	0.3	0.3	0.2	0.1	0.0	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
9-Sep	0.0	0.0	0.0	0.3	Z	0.2	0.5	0.3	0.2	0.5	0.2	0.1	0.3	0.3	0.1	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.5
10-Sep	0.1	0.2	0.4	1.4	0.7	Z	0.3	0.5	1.0	1.9	1.4	3.2	3.2	3.6	0.4	3.1	3.3	3.0	1.4	2.9	1.6	0.4	0.1	0.0	1.5	3.6
11-Sep	Z	0.0	0.0	0.0	0.2	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	0.0	0.0	0.0	0.0	0.0	0.0	0.2
12-Sep	0.0	Z	0.2	0.2	0.0	0.0	0.2	0.6	0.1	0.4	0.1	0.6	1.2	1.5	1.7	0.3	0.7	0.1	0.2	0.0	0.1	0.1	0.0	0.0	0.4	1.7
13-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.5	0.7	1.0	0.4	0.2	0.1	0.3	0.1	0.1	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.2	1.0
14-Sep	0.0	0.0	0.0	Z	0.6	0.0	0.2	0.4	0.0	0.0	0.1	0.2	0.3	0.6	0.1	0.1	0.2	0.1	0.2	0.2	0.0	0.2	0.0	0.0	0.2	0.6
15-Sep	0.0	0.3	0.4	0.5	Z	0.6	0.8	2.2	0.5	0.5	1.4	0.2	0.4	0.3	0.5	0.1	0.2	0.1	0.1	0.8	0.1	1.2	0.1	1.1	0.5	2.2
16-Sep	0.1	1.1	0.2	0.1	0.1	Z	0.1	0.6	0.6	0.7	C	C	C	C	C	C	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	1.1
17-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.8	0.8	0.6	0.4	0.2	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.2	0.8
18-Sep	0.1	Z	0.0	0.1	0.3	0.1	0.3	0.3	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	0.0	0.0	0.0	0.1	0.4
19-Sep	0.0	0.0	Z	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
20-Sep	0.0	0.1	0.1	Z	0.1	0.1	0.2	0.3	0.2	0.3	0.3	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.3
21-Sep	0.1	0.1	0.1	0.1	Z	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
22-Sep	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.4	0.6	0.8	1.6	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.6
23-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.3	0.1	0.1	0.2	0.6	0.3	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.6
24-Sep	0.0	Z	0.1	0.0	0.0	0.1	0.0	0.6	0.7	1.0	0.2	0.1	0.2	0.8	0.6	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.0
25-Sep	0.0	0.0	Z	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	0.7	0.1	0.1	0.7
26-Sep	0.1	0.3	0.8	Z	1.3	0.5	2.5	3.7	3.2	4.2	4.5	5.6	6.1	5.3	7.9	9.0	4.4	4.5	2.3	2.2	1.7	0.1	0.0	0.0	3.1	9.0
27-Sep	0.0	0.0	0.0	0.0	Z	0.3	0.1	0.4	0.2	0.7	0.6	0.7	0.4	0.8	1.5	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.5
28-Sep	0.0	0.0	0.0	0.0	0.1	Z	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	0.0	0.0	0.0	0.0	0.0	0.1	0.2
29-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.7	0.4	3.2	3.5	3.3	1.8	1.9	4.7	3.8	1.8	0.0	0.0	0.0	0.0	0.1	1.2	4.7
30-Sep	0.0	Z	0.0	0.1	0.2	0.2	0.2	2.1	0.6	0.1	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	0.2	2.1
	0.0	0.1	0.1	0.1	0.2	0.1	0.2	0.5	0.5	0.6	0.5	0.6	0.6	0.7	0.6	0.6	0.5	0.4	0.2	0.2	0.1	0.1	0.1	0.1	Diurnal Average	
	0.1	1.1	0.8	1.4	1.3	0.6	2.5	3.7	3.2	4.2	4.5	5.6	6.1	5.3	7.9	9.0	4.7	4.5	2.3	2.9	1.7	1.2	0.7	1.1	Diurnal Maximum	

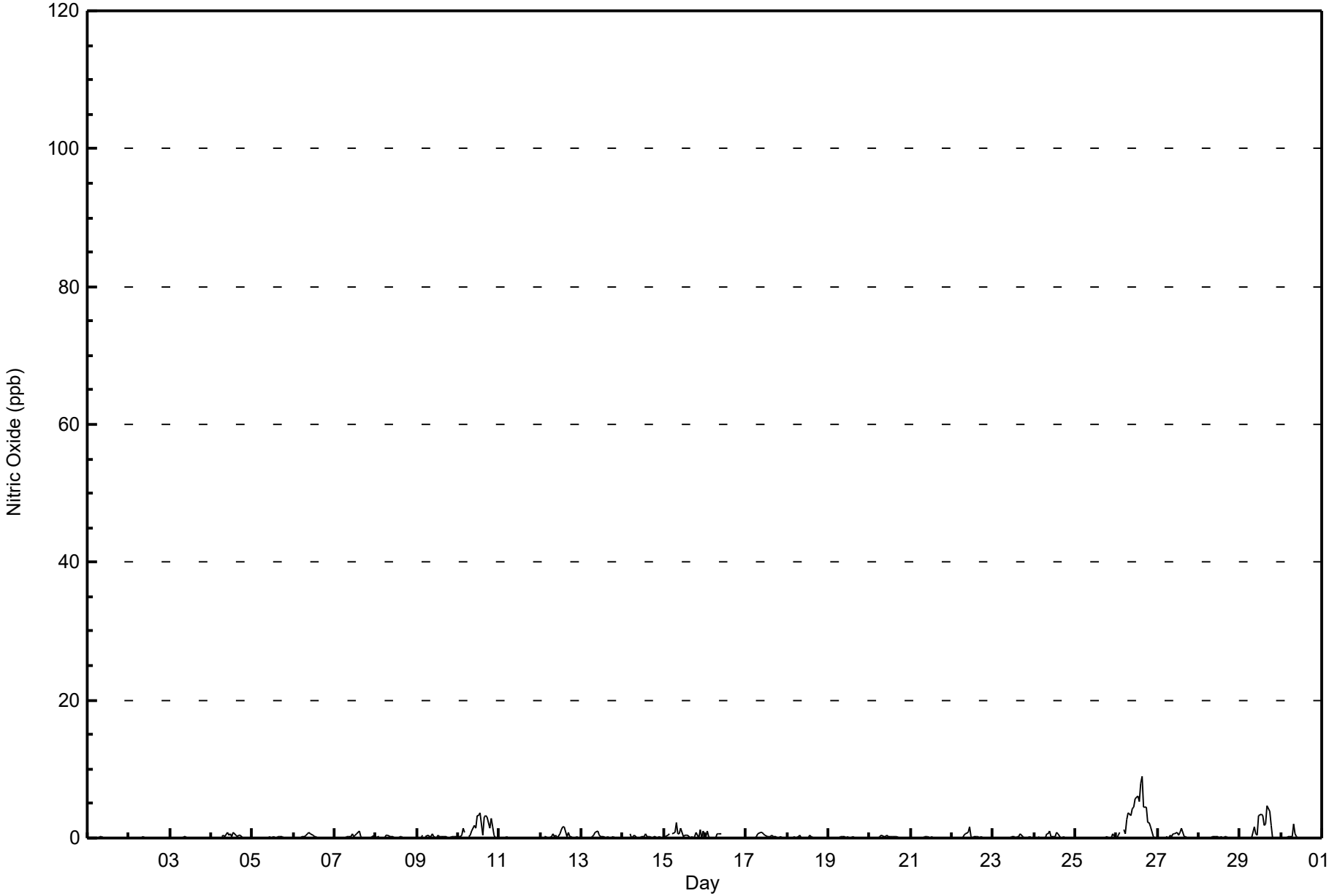
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Kirby North - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Kirby North - September 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	22	15	29	20	40	61	72	78	53	64	39	30	41	68	30	684
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	22	15	29	20	40	61	72	78	53	64	39	30	41	68	30	684

Total Number of Valid Hours: 684

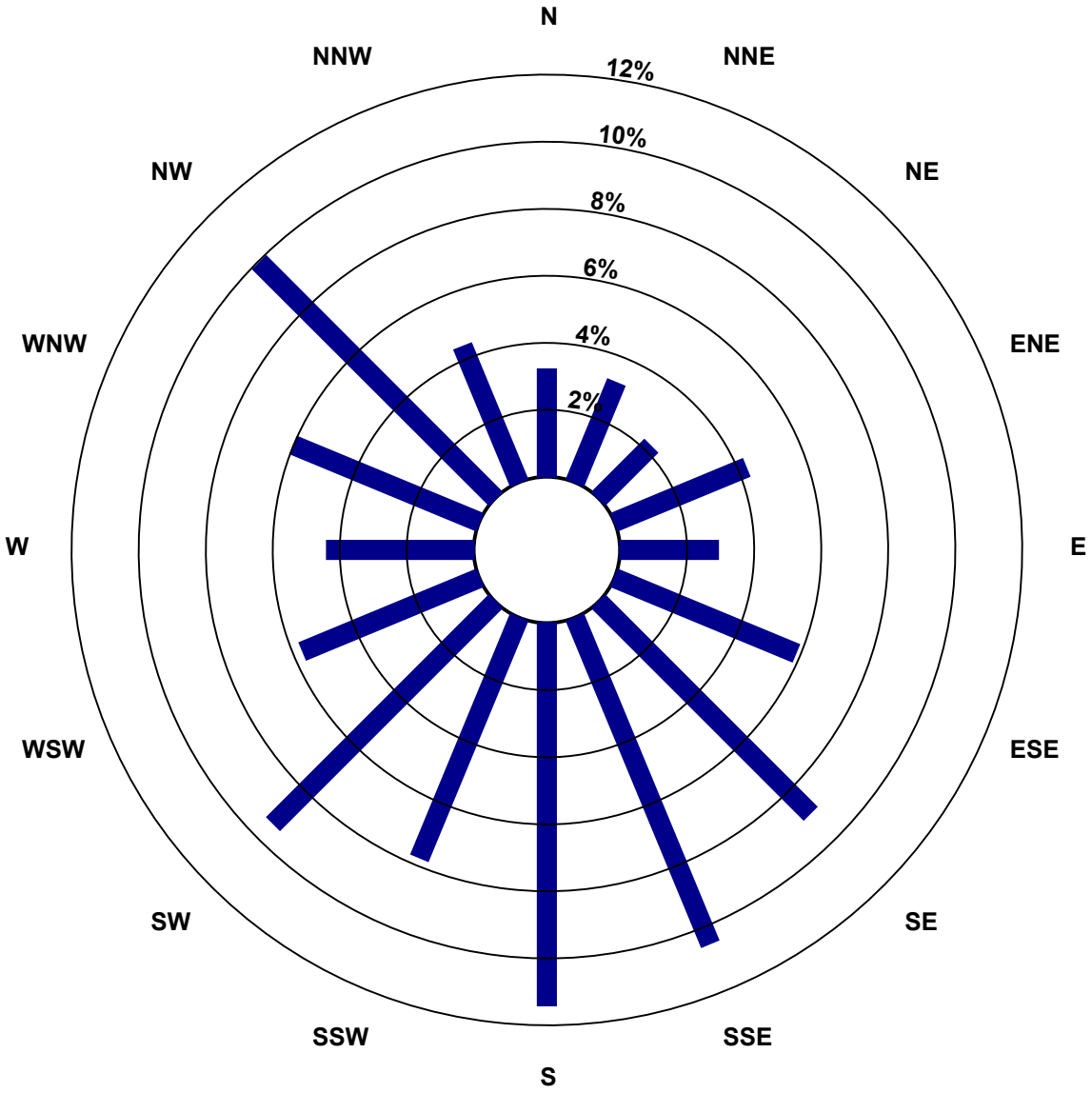
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

Kirby North



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

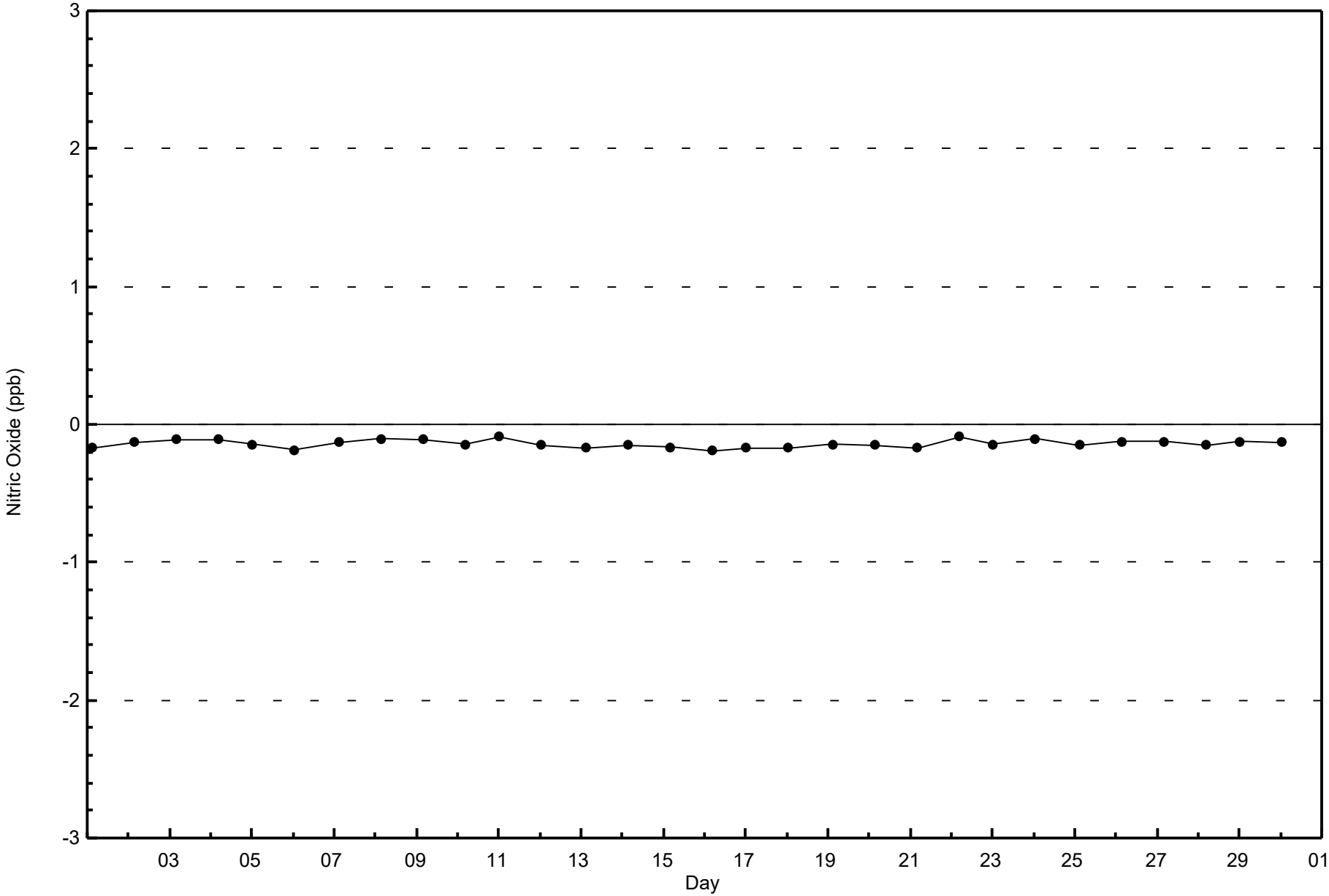
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Kirby North - September 2026

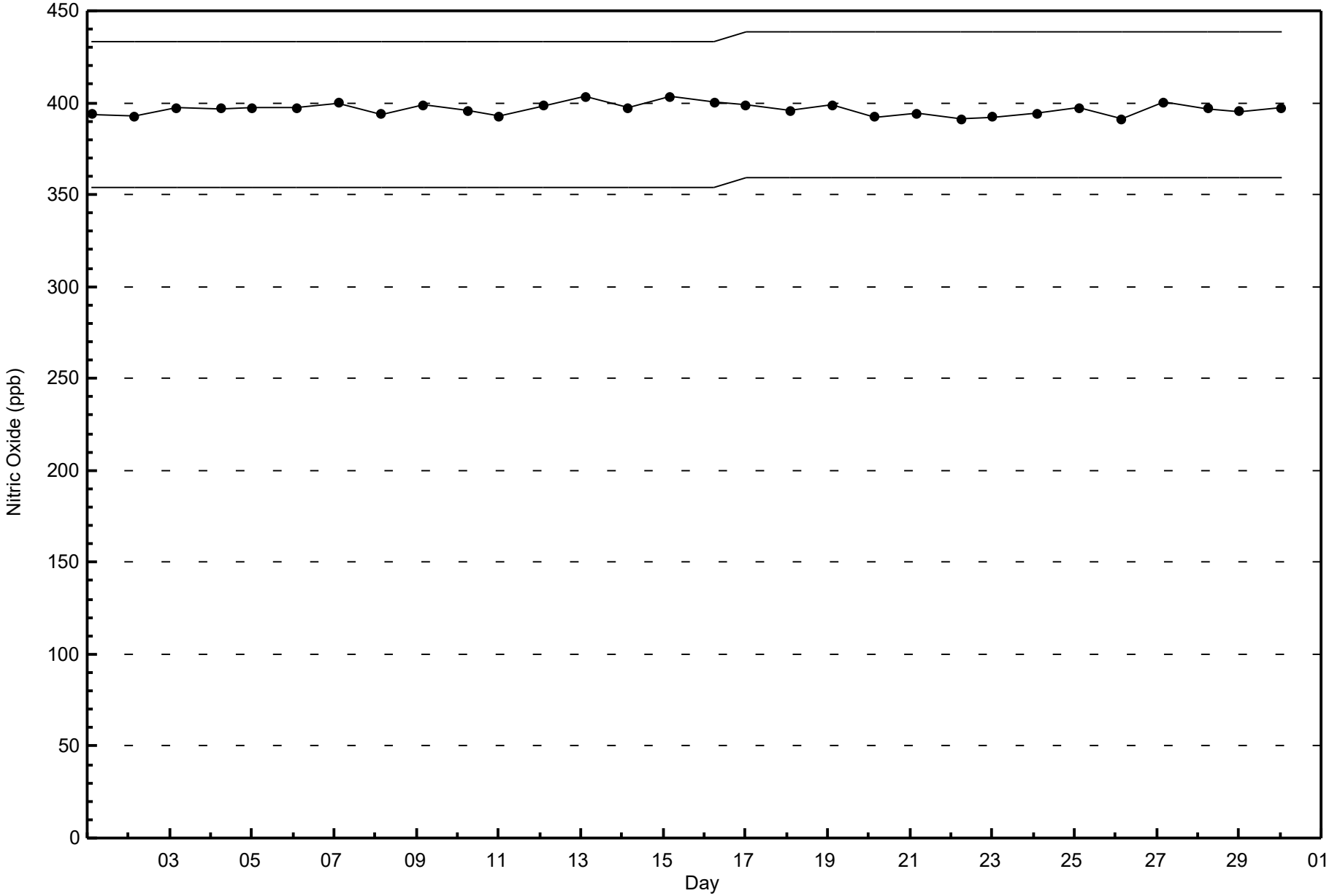


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Kirby North - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Kirby North - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 5.9 ppb on Sep 26 16:00 Maximum Daily Average: 2.7 ppb on Sep 26

Minimum Value: 0.1 ppb on Sep 11 07:00 Minimum Daily Average: 0.2 ppb on Sep 11
Maximum Diurnal Average: 1.3 ppb at hour 8 Minimum Diurnal Average: 0.8 ppb at hour 1
Monthly Average: 1.01 ppb Percentiles: P_1 = 0.1 P_{10} = 0.3 Q_1 = 0.4 Median = 0.7 Q_3 = 1.3 P_{90} = 2.0 P_{99} = 4.4

Hours in Service:	720
Hours of Data:	684
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-Sep	0.4	0.3	Z	0.5	0.7	0.4	0.4	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.7	0.6	0.6	0.7	0.9	0.8	0.5	1.3	0.7	0.7	0.6	1.3
2-Sep	0.8	0.9	1.1	Z	1.1	1.1	0.9	0.9	0.9	0.6	0.5	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.6	1.1
3-Sep	0.4	0.3	0.3	0.3	Z	0.4	0.4	0.5	1.4	0.8	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.8	1.0	0.7	0.5	1.4
4-Sep	0.9	0.8	0.8	0.9	1.1	Z	1.4	1.3	1.0	1.3	1.0	1.0	0.8	2.1	1.5	0.9	1.3	2.0	1.3	1.3	1.0	0.7	0.8	0.8	1.1	2.1
5-Sep	Z	0.7	0.7	0.8	0.7	0.7	0.6	0.6	0.3	0.4	0.7	0.3	0.3	0.3	0.3	0.5	0.5	1.0	0.8	1.7	1.1	0.4	0.2	0.2	0.6	1.7
6-Sep	0.3	Z	0.7	0.4	0.4	0.7	0.7	1.0	1.1	1.3	1.4	0.6	0.7	0.7	0.3	0.3	0.4	0.5	0.6	0.4	0.4	0.3	0.2	0.2	0.6	1.4
7-Sep	0.4	0.6	Z	0.3	0.6	0.7	0.9	0.7	0.7	0.7	1.1	0.4	1.0	1.2	1.3	0.7	0.5	0.4	0.4	1.4	1.8	0.3	0.6	1.0	0.8	1.8
8-Sep	0.2	0.5	1.0	Z	0.8	0.6	1.1	1.0	0.9	0.7	0.8	0.6	0.6	0.8	0.9	0.8	0.5	0.4	0.6	1.3	0.5	0.7	0.7	0.7	0.7	1.3
9-Sep	0.4	0.7	0.5	1.6	Z	1.2	0.8	0.5	0.4	0.7	0.5	0.3	0.7	0.5	0.4	0.4	0.5	0.5	0.5	0.6	0.8	0.6	0.6	0.4	0.6	1.6
10-Sep	0.6	0.7	0.6	2.4	1.8	Z	0.9	0.8	1.4	2.3	1.8	4.2	4.4	4.4	1.5	3.5	3.4	2.9	1.4	2.6	1.5	0.6	0.3	0.2	1.9	4.4
11-Sep	Z	0.3	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.2	0.3
12-Sep	0.2	Z	0.9	0.6	0.4	0.3	0.5	1.4	0.5	0.6	0.3	0.8	1.4	1.5	1.9	0.7	1.3	0.6	1.1	0.5	1.3	2.7	0.8	0.5	0.9	2.7
13-Sep	0.5	0.6	Z	0.8	1.0	0.8	0.9	1.1	1.4	1.9	1.0	0.7	0.6	0.9	0.7	0.7	0.7	0.6	1.4	0.6	0.9	1.3	1.6	0.8	0.9	1.9
14-Sep	0.5	0.7	1.0	Z	1.9	1.3	3.8	3.6	0.6	0.4	0.5	0.7	1.0	1.5	0.7	0.3	0.7	0.5	0.8	1.1	1.6	2.5	1.5	0.6	1.2	3.8
15-Sep	0.5	1.1	1.5	1.6	Z	1.9	1.4	2.8	1.0	1.0	1.5	0.6	0.6	0.6	0.9	0.2	0.3	0.3	0.7	1.1	0.6	3.0	1.2	3.4	1.2	3.4
16-Sep	1.0	1.9	1.1	0.9	0.9	Z	1.2	2.2	1.1	1.0	C	C	C	C	C	C	0.5	0.3	0.3	0.3	0.4	0.8	1.5	2.1	--	2.2
17-Sep	Z	2.3	2.0	1.9	1.8	1.9	2.0	2.2	1.9	1.6	1.4	1.2	0.9	0.8	0.8	0.8	0.8	0.7	0.6	0.4	1.1	0.3	0.4	0.4	1.2	2.3
18-Sep	1.0	Z	0.9	0.6	2.0	1.1	1.0	1.0	0.4	0.2	0.2	0.3	0.3	0.7	0.5	0.3	0.2	0.2	0.3	0.4	0.2	0.2	0.2	0.9	0.6	2.0
19-Sep	0.4	0.5	Z	0.8	1.1	1.1	1.0	0.9	0.7	0.6	0.6	0.5	0.6	0.9	1.3	0.8	0.8	1.0	1.2	1.1	1.1	1.4	1.6	1.9	1.0	1.9
20-Sep	1.7	1.6	1.5	Z	2.3	1.5	1.8	2.0	1.0	1.0	1.1	0.9	1.0	0.9	1.0	1.0	1.0	0.7	1.0	0.9	0.8	0.7	0.6	0.7	1.2	2.3
21-Sep	0.8	0.9	0.9	0.9	Z	1.0	1.0	0.8	1.3	1.4	1.1	1.1	1.2	1.1	0.9	0.8	1.1	1.6	1.6	1.6	1.3	1.3	1.3	1.4	1.1	1.6
22-Sep	1.8	2.4	2.6	2.7	2.9	Z	2.5	2.6	2.0	1.7	1.9	0.4	0.4	0.6	0.6	0.6	0.6	0.9	0.7	0.5	0.4	0.3	0.3	0.3	1.3	2.9
23-Sep	Z	0.3	1.4	3.8	2.6	1.8	2.3	0.9	1.1	0.9	1.1	1.1	1.5	0.7	1.0	1.4	3.9	4.1	4.0	1.0	0.6	1.7	2.5	3.4	1.9	4.1
24-Sep	3.0	Z	1.8	1.6	1.7	1.7	1.3	2.1	1.3	2.0	0.6	0.6	0.5	1.4	1.0	0.4	0.6	1.4	0.8	0.4	0.3	1.0	4.8	0.7	1.3	4.8
25-Sep	1.9	1.2	Z	0.3	0.3	0.3	0.6	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.6	1.7	2.6	1.9	3.0	0.4	1.7	1.1	0.9	3.0
26-Sep	0.6	0.9	2.2	Z	1.8	1.2	2.0	3.3	2.7	3.5	3.6	4.3	4.7	3.8	5.4	5.9	3.8	4.0	3.0	2.8	2.2	0.3	0.2	0.4	2.7	5.9
27-Sep	0.4	0.5	0.5	0.4	Z	0.6	0.5	0.5	0.4	0.7	0.7	0.8	0.5	1.0	1.6	0.5	0.5	0.3	0.3	0.2	0.3	0.2	0.3	0.4	0.5	1.6
28-Sep	0.4	0.5	0.5	0.6	0.6	Z	0.9	0.5	0.6	0.5	0.4	0.4	0.3	0.4	0.3	0.4	0.6	0.8	0.7	0.8	0.7	0.8	0.7	0.7	0.6	0.9
29-Sep	Z	1.5	1.6	1.7	1.9	1.7	0.9	0.8	2.8	1.4	0.9	3.9	3.7	3.3	2.0	2.4	5.3	5.1	2.4	0.3	0.4	0.4	0.4	0.5	2.0	5.3
30-Sep	0.5	Z	0.7	0.6	0.8	0.8	0.7	2.4	0.7	0.5	0.3	0.3	0.2	0.3	0.4	0.2	0.2	0.1	0.1	0.1	0.4	0.2	0.1	0.2	0.5	2.4
	0.8	0.9	1.1	1.1	1.3	1.0	1.2	1.3	1.0	1.0	0.9	1.0	1.0	1.1	1.0	0.9	1.1	1.1	1.0	0.9	0.9	0.9	0.9	0.9	Diurnal Average	
	3.0	2.4	2.6	3.8	2.9	1.9	3.8	3.6	2.8	3.5	3.6	4.3	4.7	4.4	5.4	5.9	5.3	5.1	4.0	2.8	3.0	3.0	4.8	3.4	Diurnal Maximum	

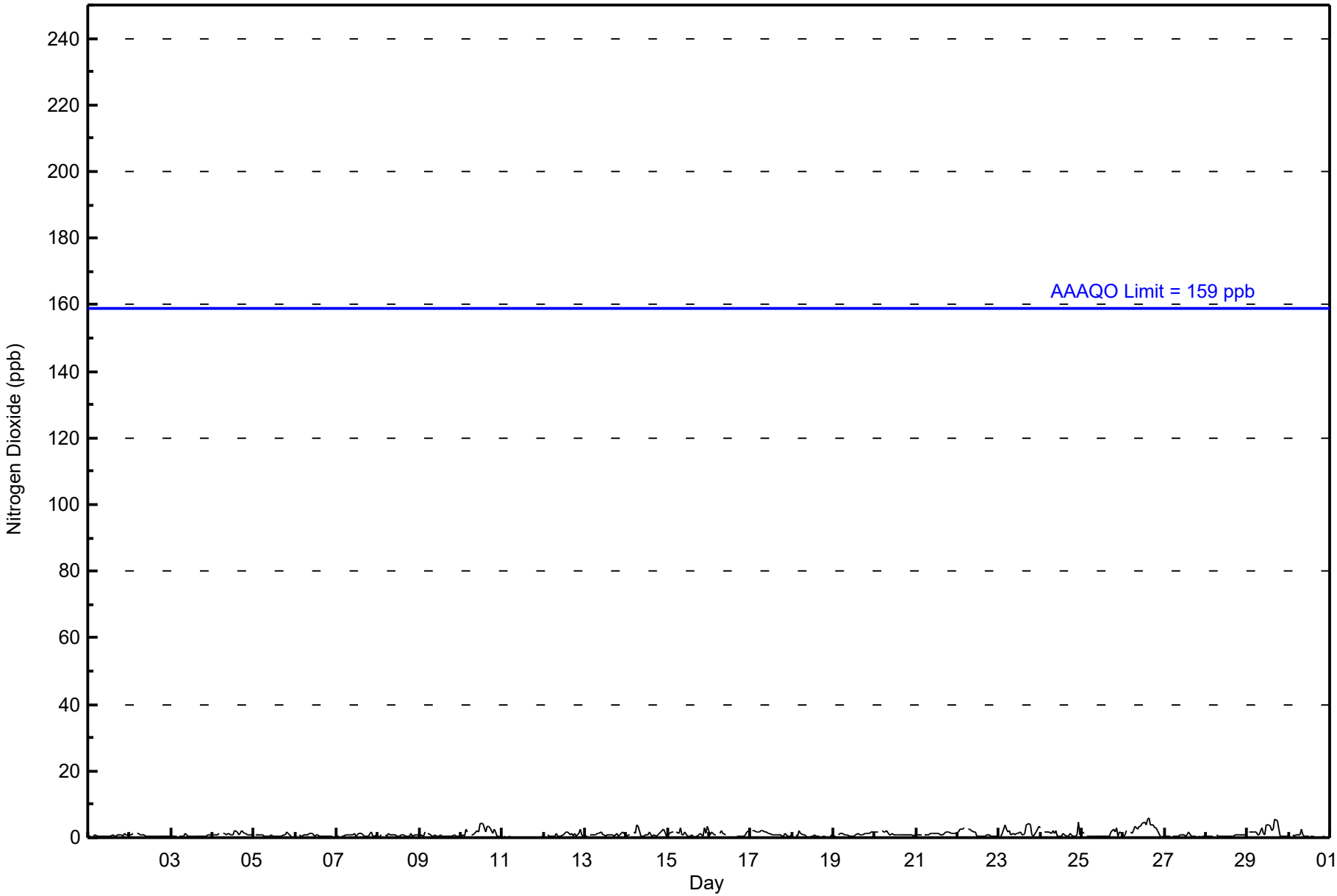
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Kirby North - September 2026



Nitrogen Dioxide (NO_2) - ppb
Kirby North - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Kirby North - September 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	22	15	29	20	40	61	72	78	53	64	39	30	41	68	30	684
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	22	15	29	20	40	61	72	78	53	64	39	30	41	68	30	684

Total Number of Valid Hours: 684

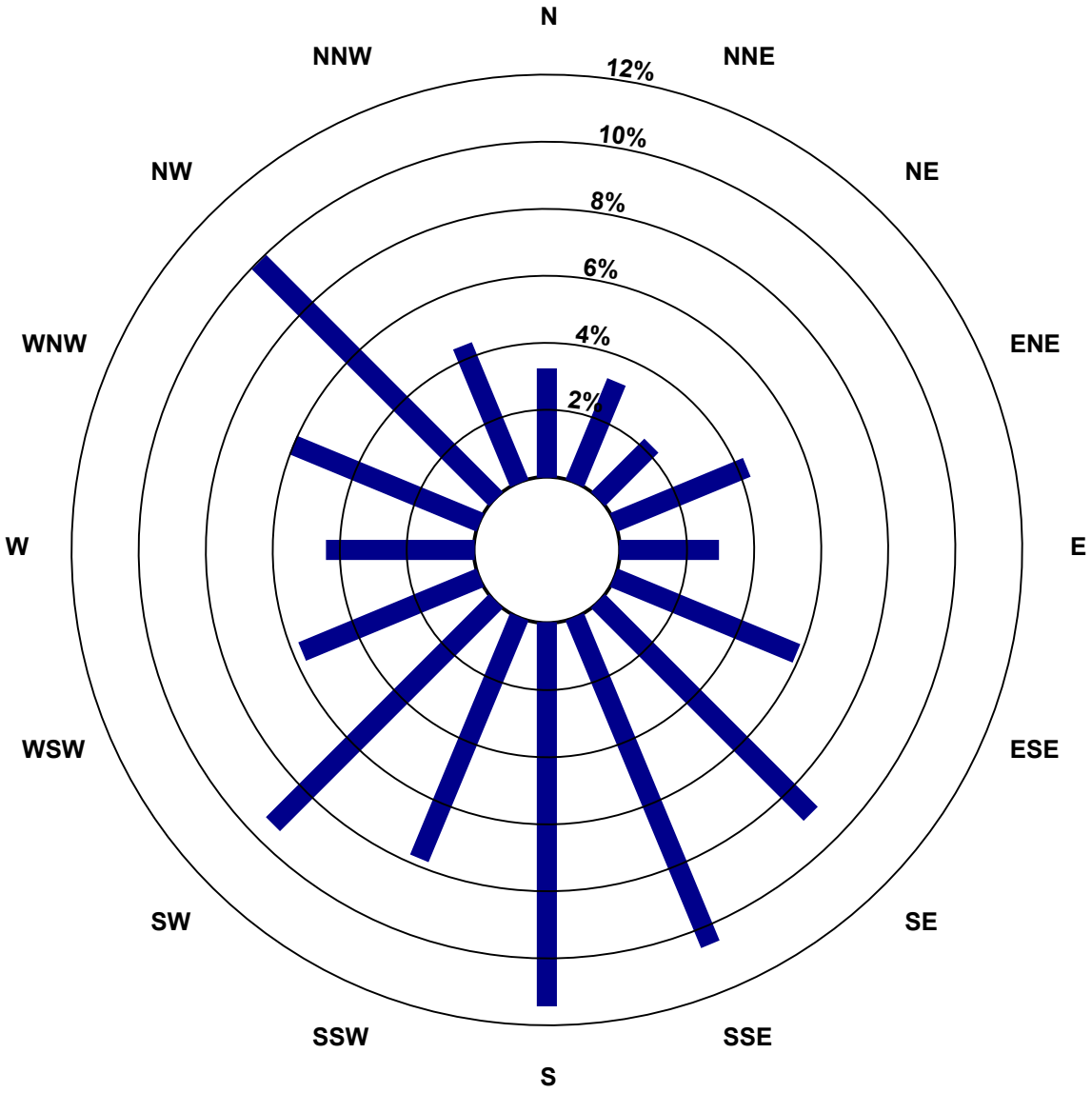
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

Kirby North



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

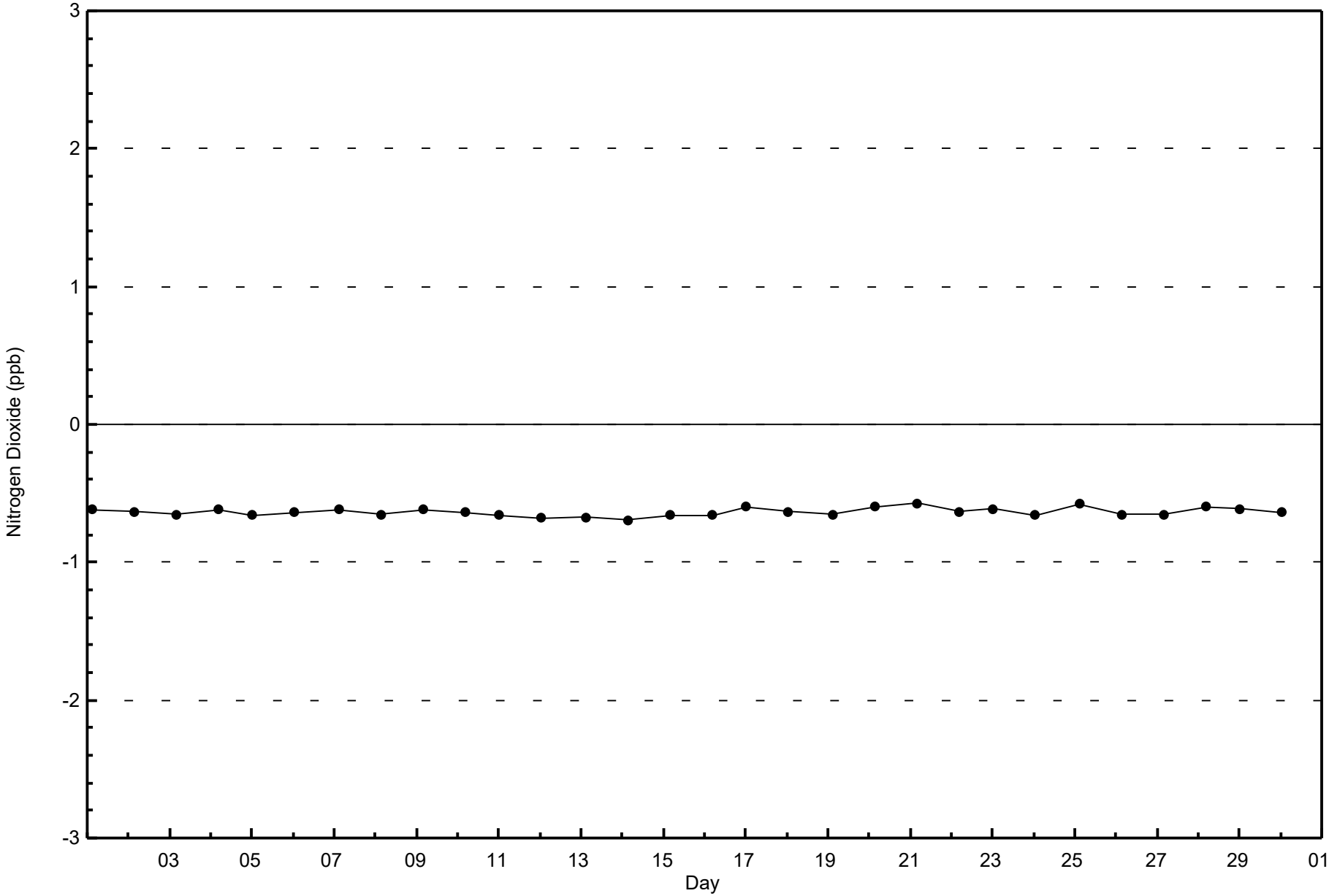
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Kirby North - September 2026

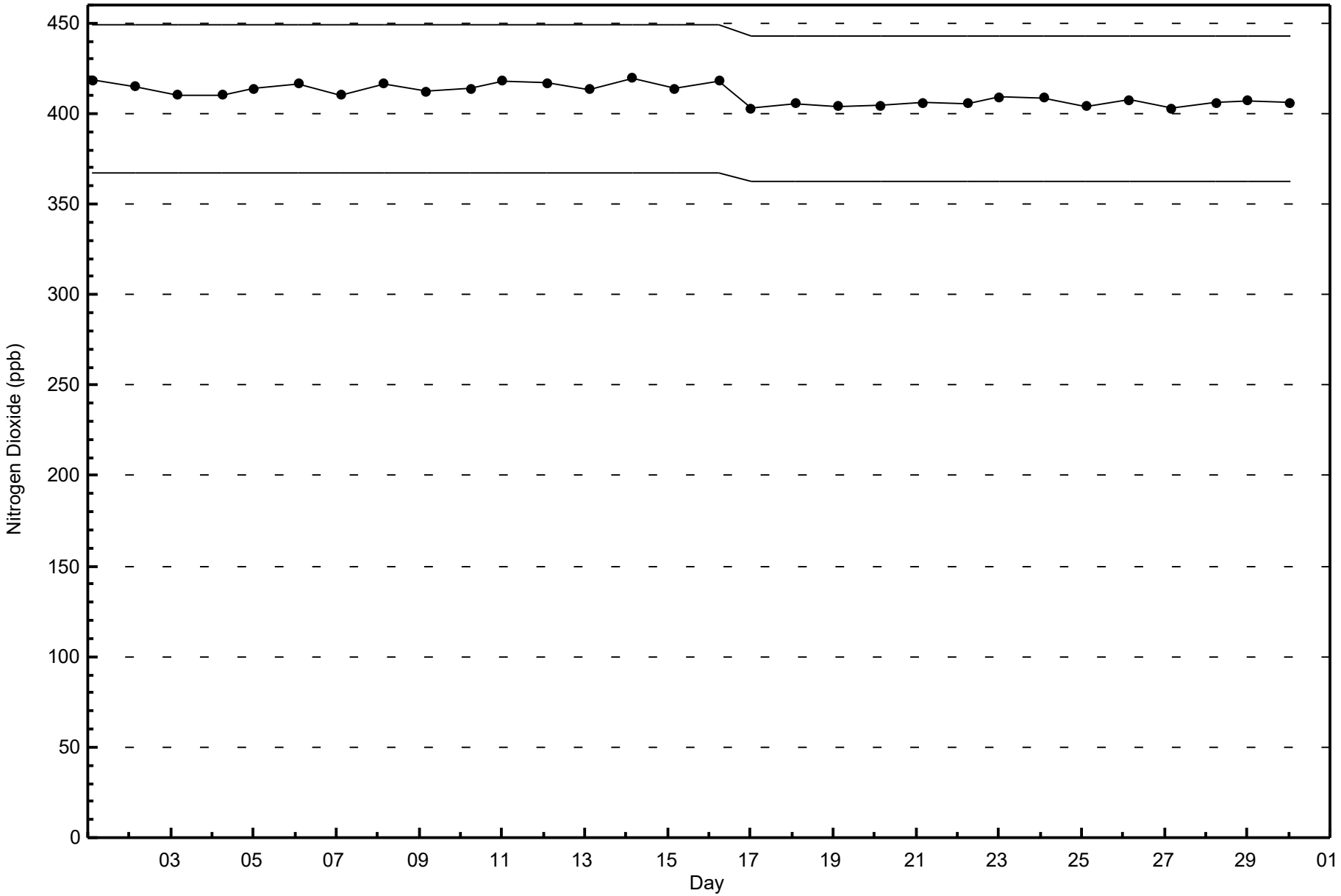


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Kirby North - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Kirby North - September 2026

Maximum Value: 14.9 ppb on Sep 26 16:00

Maximum Daily Average: 5.8 ppb on Sep 26

Minimum Value: 0.1 ppb on Sep 11 11:00

Minimum Daily Average: 0.2 ppb on Sep 11

Maximum Diurnal Average: 1.8 ppb at hour 8

Minimum Diurnal Average: 0.8 ppb at hour 1

Monthly Average: 1.33 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.3 Q_1 = 0.5 Median = 0.8 Q_3 = 1.5 P_{90} = 2.7 P_{99} = 8.6

Hours in Service:	720
Hours of Data:	684
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-Sep	0.5	0.3	Z	0.5	0.7	0.4	0.4	0.6	0.5	0.4	0.4	0.3	0.4	0.4	0.7	0.6	0.6	0.7	0.9	0.8	0.5	1.3	0.7	0.7	0.6	1.3
2-Sep	0.8	0.9	1.1	Z	1.1	1.1	1.0	1.0	1.0	0.7	0.6	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.6	1.1
3-Sep	0.4	0.3	0.3	0.3	Z	0.4	0.4	0.5	1.7	1.0	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.8	1.0	0.7	0.5	1.7
4-Sep	0.9	0.8	0.8	0.9	1.1	Z	1.5	1.6	1.3	2.0	1.4	1.5	1.0	3.0	1.9	1.1	1.6	2.3	1.3	1.4	1.0	0.7	0.8	0.8	1.3	3.0
5-Sep	Z	0.7	0.7	0.8	0.8	0.8	0.7	0.6	0.4	0.5	0.8	0.4	0.4	0.4	0.4	0.6	0.6	1.2	0.9	1.8	1.2	0.5	0.3	0.3	0.7	1.8
6-Sep	0.3	Z	0.8	0.5	0.5	0.8	0.8	1.3	1.8	2.2	2.1	1.0	1.0	0.8	0.4	0.3	0.5	0.5	0.6	0.4	0.4	0.3	0.2	0.2	0.8	2.2
7-Sep	0.4	0.6	Z	0.4	0.6	0.8	1.0	0.9	0.9	1.0	1.6	0.5	1.5	1.8	2.3	0.9	0.5	0.4	0.4	1.4	1.8	0.3	0.8	1.3	1.0	2.3
8-Sep	0.2	0.7	1.1	Z	0.8	0.6	1.5	1.4	1.2	1.0	1.0	0.7	0.6	0.9	1.0	1.0	0.5	0.4	0.6	1.3	0.5	0.7	0.7	0.7	0.8	1.5
9-Sep	0.4	0.7	0.5	1.9	Z	1.4	1.3	0.8	0.6	1.2	0.7	0.4	1.0	0.8	0.5	0.6	0.6	0.6	0.5	0.7	0.9	0.7	0.8	0.6	0.8	1.9
10-Sep	0.7	0.9	1.0	3.8	2.5	Z	1.2	1.3	2.4	4.2	3.2	7.4	7.6	8.0	1.9	6.6	6.7	5.9	2.8	5.5	3.1	1.0	0.4	0.2	3.4	8.0
11-Sep	Z	0.3	0.2	0.2	0.5	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.2	0.5
12-Sep	0.2	Z	1.1	0.8	0.4	0.3	0.7	2.0	0.6	1.0	0.4	1.4	2.6	3.0	3.6	1.0	2.0	0.7	1.3	0.5	1.4	2.8	0.8	0.5	1.3	3.6
13-Sep	0.5	0.6	Z	0.8	1.0	0.8	1.0	1.6	2.1	2.9	1.4	0.9	0.7	1.2	0.8	0.8	0.8	0.7	1.7	0.6	0.9	1.3	1.6	0.8	1.1	2.9
14-Sep	0.5	0.7	1.0	Z	2.5	1.3	4.0	4.0	0.6	0.4	0.6	0.9	1.3	2.1	0.8	0.4	0.9	0.6	1.0	1.3	1.6	2.7	1.5	0.6	1.4	4.0
15-Sep	0.5	1.4	1.9	2.1	Z	2.5	2.2	5.0	1.5	1.5	2.9	0.8	1.0	0.9	1.4	0.3	0.5	0.4	0.8	1.9	0.7	4.2	1.3	4.5	1.7	5.0
16-Sep	1.1	3.0	1.3	1.0	1.0	Z	1.3	2.8	1.7	1.7	C	C	C	C	C	C	0.6	0.3	0.3	0.3	0.4	0.8	1.5	2.1	--	3.0
17-Sep	Z	2.3	2.0	1.9	1.8	1.9	2.2	2.8	2.7	2.4	2.0	1.6	1.1	0.9	0.9	1.1	0.9	0.8	0.7	0.5	1.3	0.4	0.4	0.4	1.4	2.8
18-Sep	1.1	Z	0.9	0.7	2.3	1.2	1.3	1.3	0.5	0.3	0.3	0.4	0.4	1.1	0.7	0.4	0.3	0.2	0.3	0.4	0.2	0.2	0.2	0.9	0.7	2.3
19-Sep	0.4	0.5	Z	0.8	1.1	1.1	1.0	1.0	0.8	0.8	0.7	0.6	0.7	1.0	1.4	0.9	0.9	1.0	1.2	1.1	1.1	1.4	1.6	1.9	1.0	1.9
20-Sep	1.7	1.7	1.6	Z	2.4	1.6	2.0	2.3	1.2	1.3	1.4	1.0	1.2	1.0	1.2	1.1	1.2	0.8	1.0	1.0	0.9	0.8	0.7	0.8	1.3	2.4
21-Sep	0.9	1.0	1.0	1.0	Z	1.0	1.0	0.9	1.4	1.6	1.2	1.2	1.3	1.2	1.0	0.9	1.2	1.6	1.6	1.6	1.3	1.3	1.3	1.4	1.2	1.6
22-Sep	1.8	2.4	2.6	2.7	2.9	Z	2.6	3.0	2.6	2.5	3.5	0.5	0.4	0.7	0.8	0.7	0.7	1.0	0.7	0.5	0.4	0.3	0.3	0.3	1.5	3.5
23-Sep	Z	0.3	1.4	3.8	2.6	1.8	2.4	0.9	1.1	0.9	1.2	1.3	1.8	0.8	1.1	1.6	4.5	4.4	4.1	1.0	0.6	1.8	2.5	3.4	2.0	4.5
24-Sep	3.0	Z	1.9	1.6	1.7	1.8	1.3	2.7	2.0	3.0	0.8	0.7	0.7	2.2	1.6	0.5	0.6	1.5	0.8	0.4	0.3	1.0	4.8	0.7	1.5	4.8
25-Sep	1.9	1.2	Z	0.3	0.3	0.3	0.6	0.4	0.3	0.3	0.4	0.5	0.4	0.4	0.5	0.5	0.7	1.8	2.7	2.0	3.1	0.5	2.4	1.2	1.0	3.1
26-Sep	0.7	1.2	3.0	Z	3.1	1.7	4.5	7.0	5.9	7.7	8.1	9.9	10.8	9.1	13.3	14.9	8.2	8.5	5.3	5.0	3.9	0.4	0.2	0.4	5.8	14.9
27-Sep	0.4	0.5	0.5	0.4	Z	0.9	0.6	0.9	0.6	1.4	1.3	1.5	0.9	1.8	3.1	0.7	0.7	0.4	0.3	0.2	0.3	0.2	0.3	0.4	0.8	3.1
28-Sep	0.4	0.5	0.5	0.6	0.7	Z	1.0	0.6	0.8	0.6	0.6	0.6	0.4	0.5	0.4	0.5	0.7	0.9	0.8	0.8	0.7	0.8	0.7	0.7	0.7	1.0
29-Sep	Z	1.5	1.6	1.7	1.9	1.7	0.9	0.8	4.4	2.1	1.3	7.1	7.2	6.6	3.8	4.3	10.0	8.9	4.2	0.3	0.4	0.4	0.4	0.6	3.1	10.0
30-Sep	0.5	Z	0.7	0.7	1.0	1.0	0.9	4.5	1.3	0.6	0.4	0.4	0.2	0.4	0.5	0.2	0.2	0.1	0.1	0.1	0.4	0.2	0.1	0.2	0.6	4.5
	0.8	1.0	1.2	1.2	1.4	1.1	1.4	1.8	1.5	1.6	1.4	1.5	1.6	1.8	1.6	1.5	1.6	1.6	1.3	1.1	1.0	1.0	1.0	0.9	Diurnal Average	
	3.0	3.0	3.0	3.8	3.1	2.5	4.5	7.0	5.9	7.7	8.1	9.9	10.8	9.1	13.3	14.9	10.0	8.9	5.3	5.5	3.9	4.2	4.8	4.5	Diurnal Maximum	

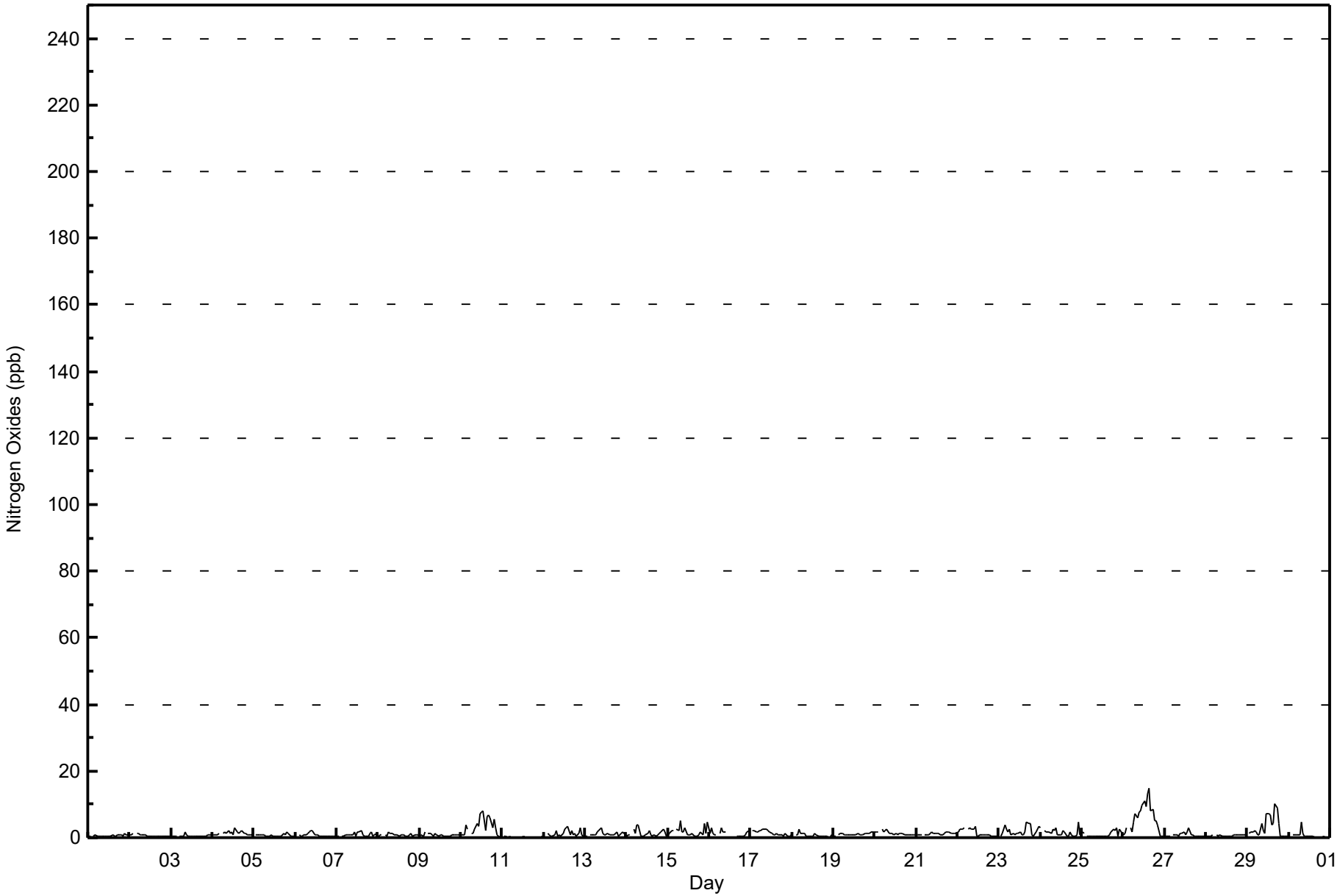
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Kirby North - September 2026



Nitrogen Oxides (NO_X) - ppb
Kirby North - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	684	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Kirby North - September 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	22	15	29	20	40	61	72	78	53	64	39	30	41	68	30	684
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	22	15	29	20	40	61	72	78	53	64	39	30	41	68	30	684

Total Number of Valid Hours: 684

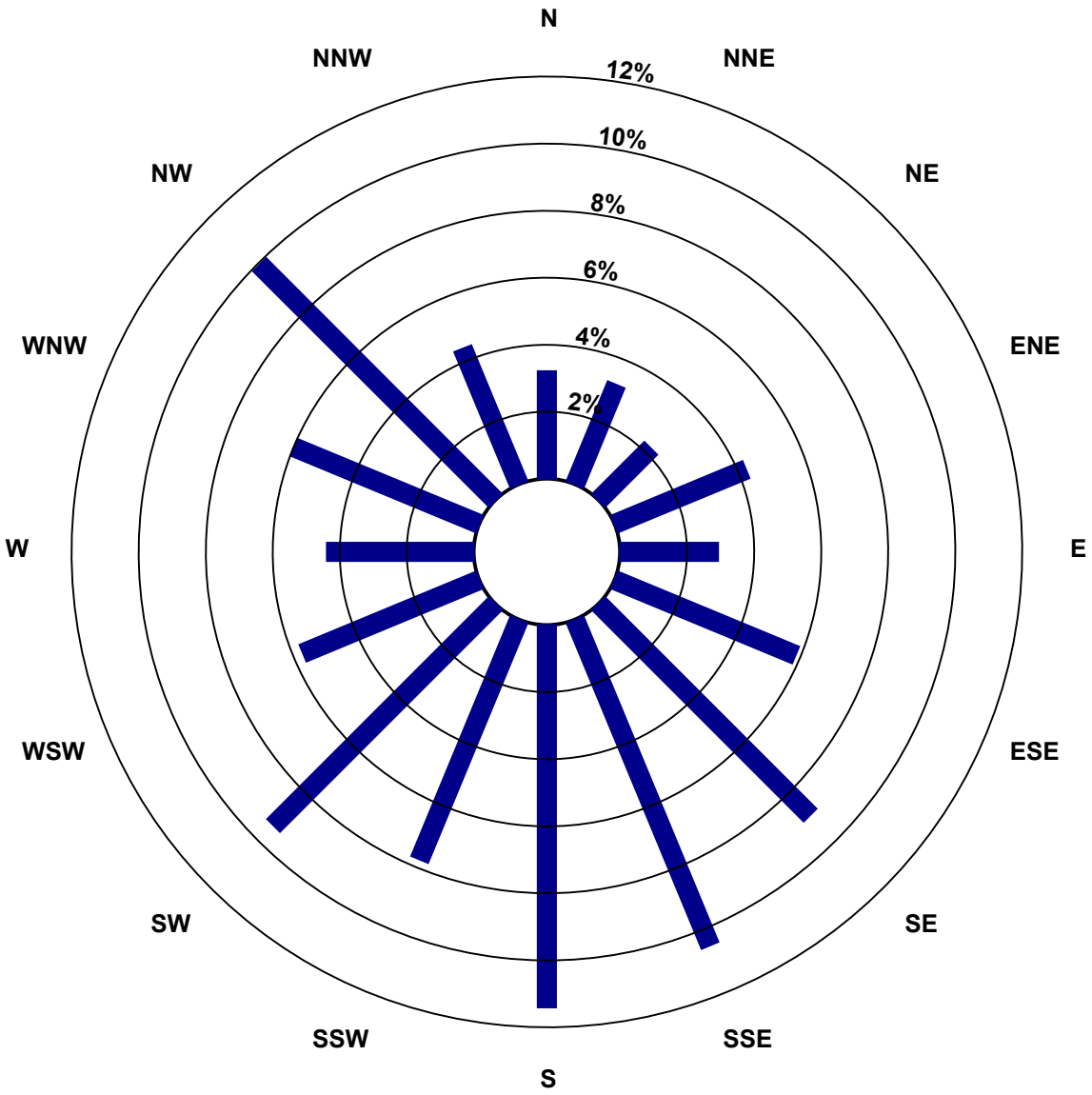
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

Kirby North



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

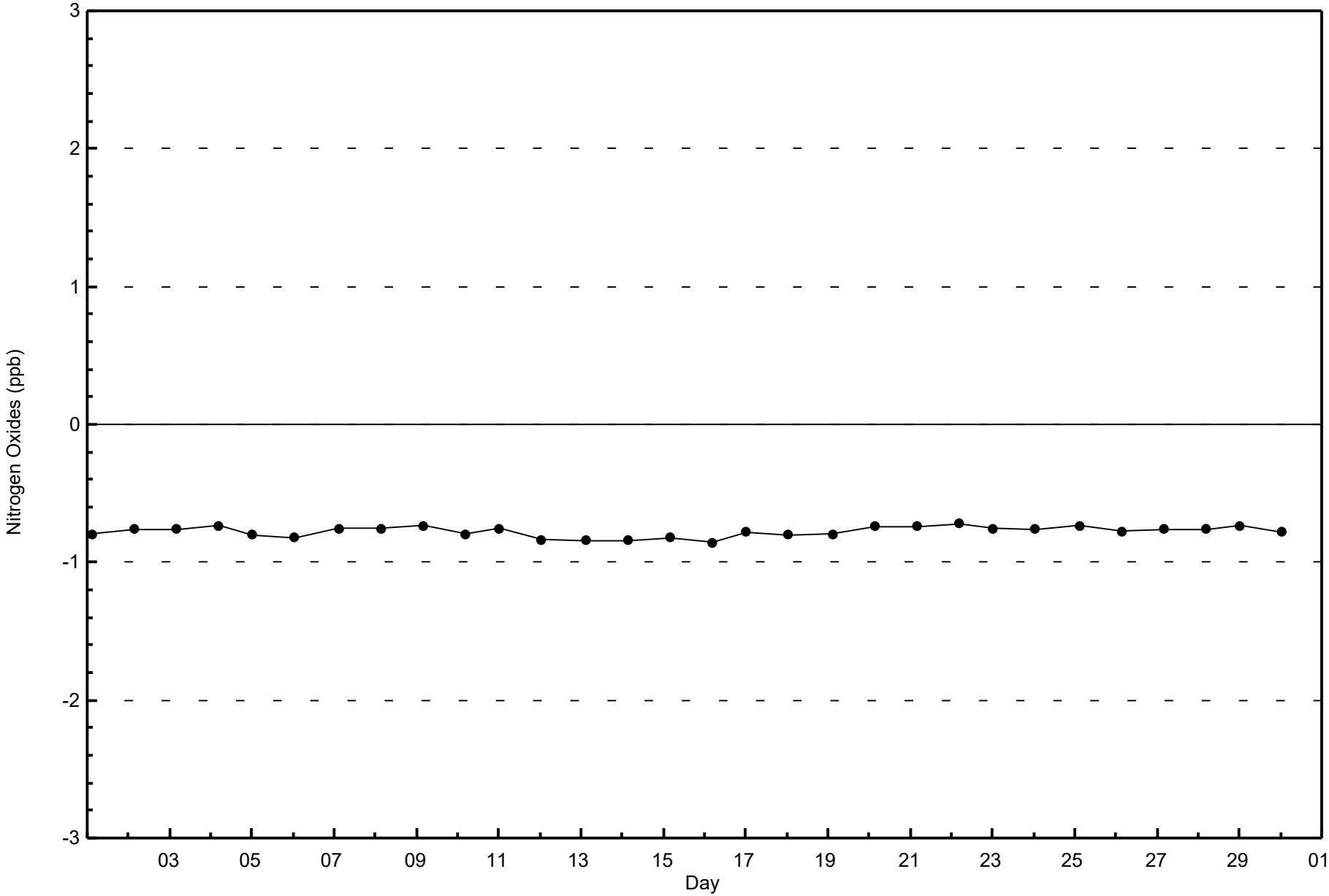
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Kirby North - September 2026

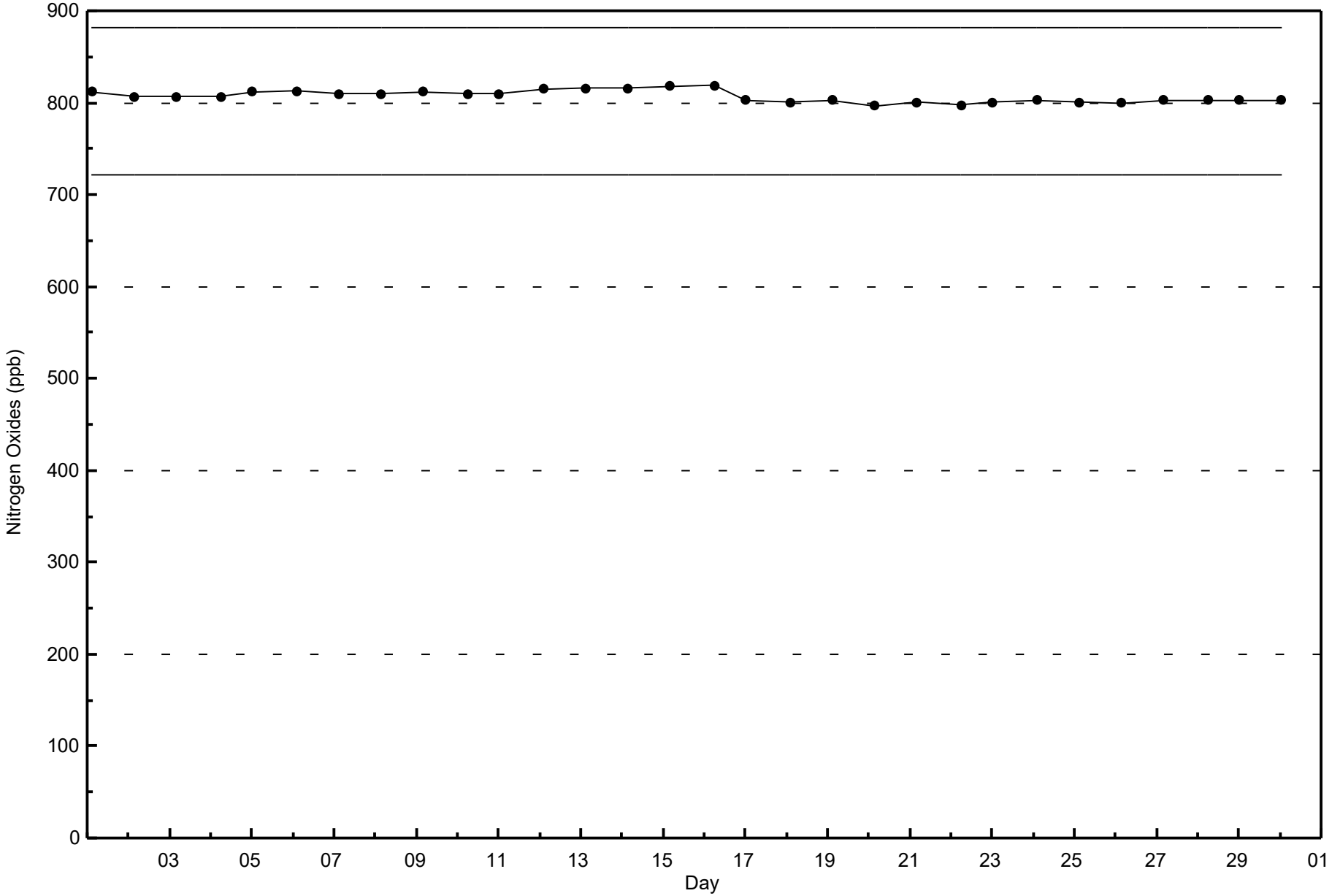


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Kirby North - September 2026



Maximum Value: 25.9 C on Sep 2 15:00

Maximum Daily Average: 20.0 C on Sep 2

Minimum Value: -1.0 C on Oct 1 00:00

Minimum Daily Average: 4.2 C on Sep 30

Maximum Diurnal Average: 15.7 C at hour 16

Minimum Diurnal Average: 7.7 C at hour 7

Monthly Average: 11.28 C

Percentiles: P_1 = 2.5 P_{10} = 4.7 Q_1 = 7.7 Median = 10.6 Q_3 = 15.0 P_{90} = 18.1 P_{99} = 23.6

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

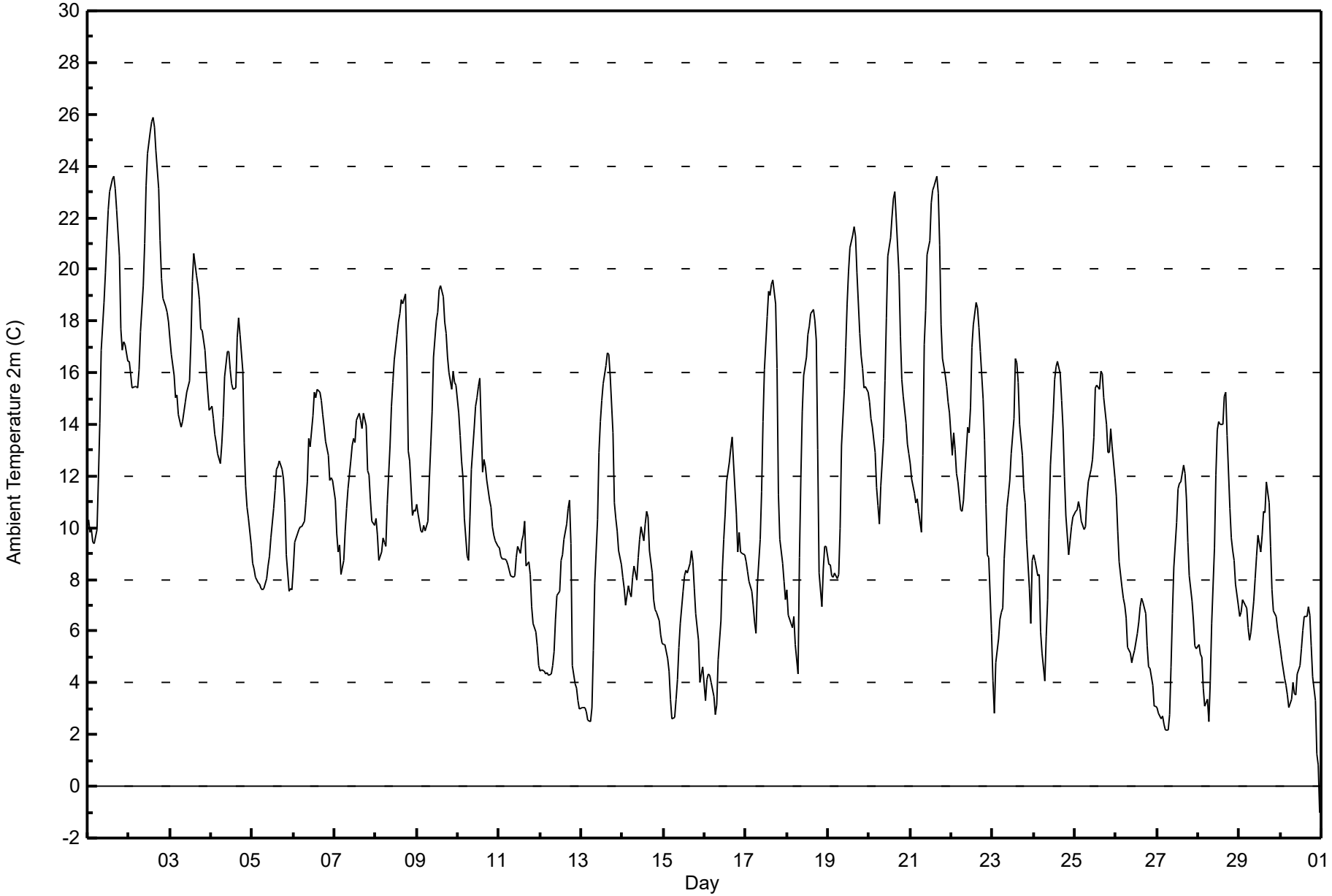
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	10.3	9.8	10.0	9.5	9.4	9.9	11.9	14.1	16.9	18.7	19.9	21.2	22.3	23.0	23.5	23.6	23.1	22.3	20.5	17.7	16.9	17.2	17.1	16.5	16.9	23.6
2-Sep	16.5	16.0	15.4	15.5	15.5	15.4	16.1	17.6	19.4	21.0	23.2	24.5	25.3	25.7	25.9	25.5	24.6	23.1	21.1	19.6	18.9	18.6	18.3	18.0	20.0	25.9
3-Sep	17.3	16.7	15.9	15.0	15.2	14.4	13.9	14.1	14.5	14.8	15.2	15.7	17.3	19.6	20.6	19.8	19.3	18.9	17.7	17.6	16.9	16.0	15.3	14.6	16.5	20.6
4-Sep	14.7	14.2	13.6	13.3	12.9	12.5	13.2	14.3	15.8	16.8	16.8	16.1	15.6	15.4	15.4	17.4	18.1	17.5	16.1	13.3	11.6	10.8	10.4	9.4	14.4	18.1
5-Sep	8.6	8.4	8.1	7.9	7.8	7.6	7.6	7.7	8.0	8.5	8.9	9.6	10.8	11.4	12.3	12.4	12.6	12.3	11.9	11.0	8.9	7.6	7.7	7.6	9.4	12.6
6-Sep	8.4	9.5	9.8	10.0	10.0	10.0	10.3	10.9	11.8	13.5	13.1	14.3	15.2	15.1	15.4	15.2	14.9	14.4	13.9	13.4	12.8	11.8	12.0	11.8	12.4	15.4
7-Sep	11.1	9.8	9.1	9.3	8.2	8.7	9.9	10.7	11.5	12.6	13.2	13.4	13.3	14.1	14.4	14.2	13.8	14.4	13.9	12.2	12.1	11.1	10.3	10.1	11.7	14.4
8-Sep	10.4	9.7	8.7	9.0	9.6	9.5	9.3	10.9	13.2	14.7	15.6	16.5	17.5	18.0	18.3	18.8	18.6	19.0	16.7	12.9	12.6	10.5	10.7	10.6	13.4	19.0
9-Sep	10.9	10.5	9.9	9.8	10.1	9.9	10.3	11.8	13.1	14.5	16.6	18.0	18.3	19.2	19.3	18.9	17.9	17.6	16.6	16.0	15.3	16.0	15.6	15.5	14.7	19.3
10-Sep	14.4	13.5	12.6	12.0	10.3	8.9	8.7	10.4	12.2	13.9	14.7	15.0	15.5	15.8	12.1	12.7	12.4	11.8	11.1	10.8	10.0	9.7	9.5	9.3	12.0	15.8
11-Sep	9.3	8.9	8.8	8.8	8.7	8.6	8.4	8.1	8.1	8.1	8.8	9.3	9.0	9.5	9.7	10.3	8.5	8.7	8.2	7.0	6.3	6.0	5.5	4.7	8.2	10.3
12-Sep	4.5	4.5	4.4	4.3	4.4	4.3	4.3	4.7	5.2	6.4	7.4	7.5	8.7	9.0	9.6	10.1	10.7	11.1	9.4	4.7	4.0	3.8	3.3	3.0	6.2	11.1
13-Sep	3.0	3.0	3.0	2.9	2.6	2.5	3.0	5.3	7.9	10.3	12.9	14.1	14.9	15.6	16.3	16.8	16.7	15.9	13.7	11.0	10.4	9.9	9.1	8.6	9.6	16.8
14-Sep	8.1	7.7	7.0	7.8	7.5	7.3	8.1	8.5	8.0	8.9	9.5	10.0	9.5	10.1	10.6	10.4	9.1	8.2	7.2	6.8	6.7	6.4	5.9	5.6	8.1	10.6
15-Sep	5.5	5.5	5.0	4.5	3.3	2.6	2.7	3.4	4.2	5.4	6.3	7.6	8.1	8.4	8.3	8.6	9.1	8.7	7.6	6.7	5.7	4.0	4.4	4.6	5.8	9.1
16-Sep	3.3	4.1	4.3	4.3	4.0	3.5	2.8	3.1	4.9	6.4	8.3	9.6	10.5	11.8	12.5	13.1	13.5	12.5	10.5	9.1	9.8	9.1	9.0	9.0	7.9	13.5
17-Sep	8.7	8.3	7.9	7.6	7.0	6.4	5.9	7.8	9.6	11.4	14.1	16.1	18.2	19.2	19.0	19.4	19.6	18.6	16.2	11.3	9.5	8.6	7.9	7.2	11.9	19.6
18-Sep	7.6	6.6	6.3	6.1	6.6	5.5	4.4	8.8	11.9	14.5	15.9	16.6	17.5	17.8	18.3	18.4	18.0	17.2	13.0	8.3	7.0	8.4	9.3	9.3	11.4	18.4
19-Sep	8.6	8.6	8.1	8.1	8.3	8.0	8.2	10.0	13.2	15.3	17.0	18.6	19.9	20.9	21.3	21.6	21.3	19.9	17.5	16.6	16.2	15.4	15.5	15.3	14.7	21.6
20-Sep	14.9	14.2	13.9	12.9	11.5	10.9	10.2	11.6	13.5	15.7	18.1	20.5	21.2	22.0	22.7	23.0	22.0	19.8	17.4	15.7	15.1	14.1	13.3	12.8	16.1	23.0
21-Sep	12.5	11.9	11.3	11.0	11.1	10.6	9.8	12.8	17.1	18.4	20.6	21.1	22.6	23.1	23.2	23.6	23.0	20.9	17.9	16.5	15.9	15.5	14.9	14.4	16.6	23.6
22-Sep	12.8	13.7	13.0	12.1	11.8	10.7	10.6	11.1	12.1	13.9	13.7	14.6	17.0	17.8	18.7	18.5	17.8	16.8	15.0	13.4	10.9	8.9	8.8	5.9	13.3	18.7
23-Sep	4.1	2.8	4.8	5.7	6.5	6.7	6.9	8.8	10.8	11.3	11.8	12.8	14.2	16.5	16.4	15.7	14.0	12.8	11.5	11.0	9.6	7.7	6.3	8.7	9.9	16.5
24-Sep	8.9	8.7	8.2	8.2	6.0	5.2	4.1	5.8	7.2	10.3	12.4	14.4	15.8	16.2	16.4	16.0	14.9	13.8	12.0	10.5	8.9	9.5	10.0	10.4	10.6	16.4
25-Sep	10.7	10.7	11.0	10.7	10.3	9.9	10.0	11.1	11.8	12.3	12.6	13.5	15.4	15.5	15.4	16.0	16.0	15.0	14.0	12.9	12.9	13.9	13.1	12.0	12.8	16.0
26-Sep	11.2	9.9	8.7	7.7	7.3	7.0	6.5	5.4	5.2	4.8	5.1	5.3	5.9	6.4	6.9	7.3	7.1	6.7	5.5	4.6	4.6	3.9	3.1	3.1	6.2	11.2
27-Sep	3.1	2.8	2.6	2.7	2.4	2.2	2.2	2.8	4.6	6.7	8.5	10.2	11.5	11.7	11.8	12.5	12.1	11.1	9.5	8.2	7.2	6.4	5.4	5.3	6.8	12.5
28-Sep	5.5	5.1	5.0	3.8	3.1	3.4	2.5	4.1	6.3	9.2	12.0	13.8	14.1	14.0	14.0	15.1	15.2	13.6	10.7	9.6	9.1	8.7	7.8	7.0	8.9	15.2
29-Sep	6.6	6.7	7.2	7.0	6.9	6.2	5.6	5.9	7.1	8.0	8.9	9.7	9.1	9.7	10.6	10.6	11.8	10.9	9.3	7.6	6.8	6.6	6.1	5.7	7.9	11.8
30-Sep	5.3	4.9	4.2	3.9	3.5	3.0	3.4	4.0	3.6	3.5	4.3	4.7	5.3	6.0	6.6	6.5	7.0	6.6	5.5	4.2	3.3	1.3	0.8	-1.0	4.2	7.0
	9.2	8.9	8.6	8.4	8.1	7.7	7.7	8.9	10.3	11.7	12.9	13.8	14.7	15.3	15.5	15.7	15.4	14.7	13.0	11.3	10.5	9.9	9.5	9.2	Diurnal Average	
	17.3	16.7	15.9	15.5	15.5	15.4	16.1	17.6	19.4	21.0	23.2	24.5	25.3	25.7	25.9	25.5	24.6	23.1	21.1	19.6	18.9	18.6	18.3	18.0	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Kirby North - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	1	0.14	0.14
0 - 10	322	44.72	44.86
10 - 20	360	50.00	94.86
> 20	37	5.14	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 98.8 % on Sep 8 04:00

Maximum Daily Average: 90.2 % on Sep 7

Minimum Value: 33.1 % on Sep 2 15:00

Minimum Daily Average: 55.5 % on Sep 2

Maximum Diurnal Average: 88.7 % at hour 7

Minimum Diurnal Average: 55.4 % at hour 16

Monthly Average: 74.40 %

Percentiles: P_1 = 37.7 P_{10} = 47.3 Q_1 = 63.6 Median = 77.3 Q_3 = 88.6 P_{90} = 95.1 P_{99} = 98.4

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

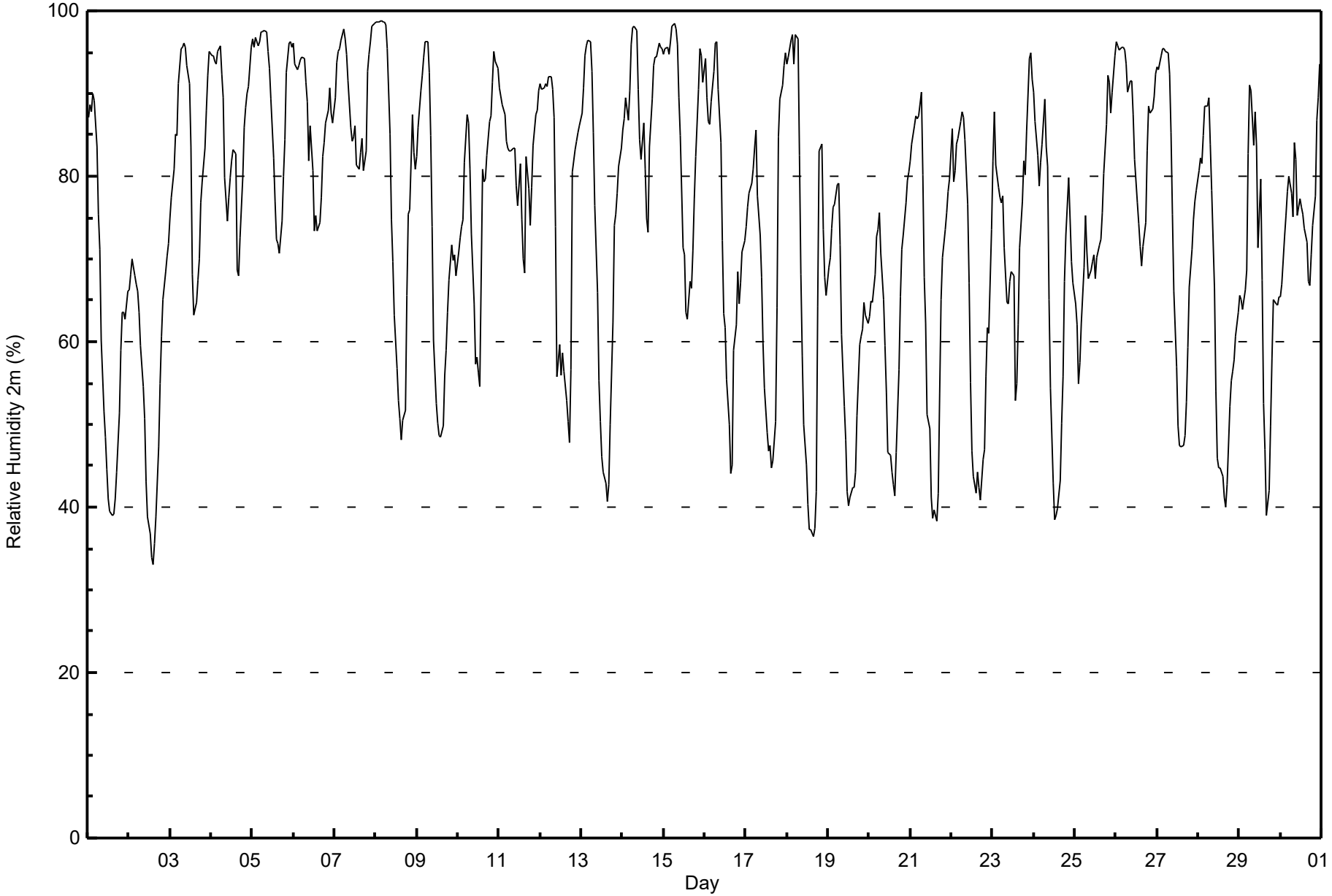
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	87.1	88.7	87.8	90.0	89.2	83.6	75.3	71.1	60.2	51.6	48.5	44.6	41.0	39.6	38.9	39.1	41.0	44.2	51.3	58.9	63.5	63.6	62.6	66.1	62.0	90.0
2-Sep	66.2	68.2	70.1	68.0	66.9	66.0	63.5	59.4	54.6	50.7	43.1	38.8	36.8	33.9	33.1	35.6	38.8	47.3	54.9	60.7	65.1	68.4	70.3	71.8	55.5	71.8
3-Sep	74.9	77.4	80.8	85.2	84.9	91.3	95.5	95.6	96.2	95.6	93.4	91.2	83.5	68.2	63.2	64.7	67.5	70.1	76.8	79.4	83.4	88.0	92.2	95.0	83.1	96.2
4-Sep	94.6	94.5	93.9	93.6	95.2	95.7	92.4	89.5	79.8	74.6	77.4	79.8	81.8	83.3	82.7	68.7	68.0	72.5	80.0	85.9	88.2	89.9	90.9	95.6	85.4	95.7
5-Sep	96.6	95.7	96.8	95.8	96.2	97.5	97.4	97.6	97.4	95.1	93.1	89.4	82.1	76.9	72.4	71.9	70.7	74.6	80.0	84.4	92.6	96.1	96.3	95.7	89.3	97.6
6-Sep	96.1	93.5	92.9	93.5	94.1	94.4	94.3	91.3	88.9	81.9	86.2	80.7	73.3	75.3	73.4	74.3	77.5	82.3	84.0	86.5	87.9	90.7	87.6	86.4	86.1	96.1
7-Sep	89.6	93.8	95.1	95.4	96.5	97.8	96.6	94.8	91.6	85.9	84.2	84.7	86.0	81.4	80.8	83.0	84.6	80.7	83.0	92.8	94.8	96.3	98.1	98.4	90.2	98.4
8-Sep	98.6	98.6	98.7	98.8	98.7	98.6	98.3	95.5	85.1	74.8	69.7	63.2	56.8	52.9	50.6	48.2	50.4	51.7	65.6	75.4	75.9	87.4	82.8	80.8	77.4	98.8
9-Sep	82.3	85.9	90.3	92.3	94.4	96.3	96.2	92.6	84.8	74.0	60.2	52.6	50.2	48.7	48.4	49.9	56.0	59.0	63.6	67.5	71.7	69.8	70.4	68.0	71.9	96.3
10-Sep	70.8	72.6	73.9	74.8	81.7	87.5	86.5	80.8	73.1	64.6	57.3	58.1	56.3	54.6	80.9	79.3	79.6	82.5	86.7	87.3	91.4	95.1	93.8	93.1	77.6	95.1
11-Sep	90.7	89.6	88.7	87.4	84.3	83.4	83.1	83.1	83.3	83.3	78.8	76.4	81.5	74.8	70.0	68.3	82.3	78.5	74.0	78.6	83.7	87.5	88.0	90.4	82.1	90.7
12-Sep	91.1	90.5	90.6	91.2	90.9	92.1	92.0	90.4	87.1	73.9	55.8	59.6	55.9	58.6	56.4	52.9	50.3	47.8	56.6	80.5	83.2	84.2	85.3	86.1	75.1	92.1
13-Sep	87.7	90.7	94.6	95.7	96.5	96.3	92.8	85.3	76.4	66.0	55.2	50.4	46.1	44.3	42.9	40.7	42.7	50.0	62.3	74.1	75.4	77.9	81.2	83.4	71.2	96.5
14-Sep	85.6	87.0	89.5	86.9	90.3	96.0	98.0	98.2	97.6	90.5	84.4	82.0	86.4	80.9	74.9	73.2	83.6	89.3	93.3	94.5	94.4	96.0	95.6	95.5	89.3	98.2
15-Sep	94.8	95.5	95.6	94.8	96.2	98.1	98.4	97.9	95.9	89.5	85.0	71.4	70.5	63.6	62.6	67.4	66.5	71.0	77.3	82.4	90.5	95.5	94.6	91.4	85.3	98.4
16-Sep	94.2	89.6	86.7	86.3	89.0	92.7	96.1	96.2	90.5	84.0	72.2	63.3	61.6	55.5	50.0	44.1	45.0	58.9	62.0	68.4	64.6	67.2	70.8	72.2	73.4	96.2
17-Sep	74.0	76.3	78.0	79.1	80.8	83.3	85.5	77.6	72.8	67.8	59.9	54.3	49.0	46.7	47.5	44.7	45.6	50.4	64.2	84.7	89.4	91.0	93.3	94.9	70.4	94.9
18-Sep	93.5	94.4	96.4	97.1	93.6	97.1	96.6	82.5	68.1	58.3	50.0	45.1	40.3	37.2	37.3	36.5	37.5	41.9	64.2	83.0	83.9	73.6	67.8	65.6	68.4	97.1
19-Sep	69.0	70.2	73.8	76.2	76.6	79.1	79.2	71.6	60.9	52.1	48.2	41.8	40.1	41.2	42.4	42.4	44.3	51.0	59.7	60.7	61.5	64.8	63.3	62.2	59.7	79.2
20-Sep	63.0	64.9	64.8	68.2	72.7	73.5	75.7	70.6	65.1	59.5	53.9	46.6	46.2	44.2	42.7	41.4	46.5	56.7	65.4	71.2	73.0	76.8	79.6	80.6	62.6	80.6
21-Sep	81.9	83.8	86.0	87.3	86.9	87.3	90.2	80.2	67.8	62.2	51.2	49.4	41.2	38.7	39.6	38.3	41.7	53.8	65.1	70.2	73.5	75.6	78.2	79.6	67.1	90.2
22-Sep	85.8	79.4	80.7	83.8	84.6	86.7	87.9	87.1	84.4	76.6	67.2	55.1	46.8	43.8	41.7	44.3	42.4	40.9	45.7	47.0	55.8	61.7	61.0	73.6	65.2	87.9
23-Sep	81.9	87.8	81.3	78.6	77.5	76.8	77.6	71.3	64.7	64.5	67.3	68.5	68.0	52.9	55.0	62.0	71.3	76.9	81.9	80.2	85.4	94.3	94.9	91.7	75.5	94.9
24-Sep	90.2	86.6	82.5	78.8	81.7	83.8	89.3	83.5	81.1	65.1	54.4	42.8	38.4	39.0	39.9	43.2	50.1	55.7	67.3	72.9	79.9	74.9	69.6	67.2	67.4	90.2
25-Sep	64.6	62.1	54.9	57.4	62.3	69.0	75.2	70.8	67.6	68.6	69.7	70.5	67.7	70.1	71.8	72.4	75.6	80.3	86.2	92.3	91.4	87.7	90.2	94.6	73.9	94.6
26-Sep	96.2	95.7	95.3	95.5	95.5	95.2	93.6	90.2	91.5	91.6	87.4	82.0	76.8	74.3	71.5	69.1	71.5	74.5	83.0	88.5	87.6	88.2	89.6	92.3	86.5	96.2
27-Sep	93.2	92.8	94.7	95.5	95.4	95.2	94.9	92.3	85.2	75.5	66.1	57.0	49.8	47.4	47.3	47.5	48.7	52.7	59.4	66.6	71.3	74.7	77.0	78.3	73.3	95.5
28-Sep	80.7	82.2	81.6	85.0	88.4	88.5	89.6	84.0	78.3	66.5	54.1	46.0	44.7	44.8	43.8	41.1	40.0	42.7	52.1	55.3	56.4	57.8	60.7	63.6	63.7	89.6
29-Sep	65.6	65.1	63.9	66.2	68.7	82.6	91.0	90.4	83.8	87.8	83.5	71.3	79.7	67.4	52.6	46.9	38.9	42.1	49.8	58.0	65.2	64.5	64.4	65.4	67.3	91.0
30-Sep	65.4	66.9	72.7	75.3	78.1	80.0	78.0	75.1	84.0	82.1	75.2	77.3	76.3	75.4	73.7	72.1	67.3	66.8	70.5	74.1	77.5	86.9	89.5	93.6	76.4	93.6
	83.5	84.0	84.4	85.1	86.3	88.2	88.7	84.9	79.9	73.8	67.7	63.1	60.5	57.2	56.3	55.4	57.5	61.6	68.9	75.4	78.6	80.9	81.3	82.4	Diurnal Average	
	98.6	98.6	98.7	98.8	98.7	98.6	98.4	98.2	97.6	95.6	93.4	91.2	86.4	83.3	82.7	83.0	84.6	89.3	93.3	94.5	94.8	96.3	98.1	98.4	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Kirby North - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	21	2.92	2.92
40 - 60	133	18.47	21.39
60 - 80	239	33.19	54.58
80 - 100	327	45.42	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Kirby North - September 2026

Maximum Speed: 27 km/h on Sep 26 16:00

Maximum Daily Speed Average: 18.2 km/h on Sep 26

Minimum Speed Value: 1 km/h on Sep 8 19:00

Minimum Daily Speed Average: 1.9 km/h on Sep 4

Maximum Diurnal Speed Average: 6.1 km/h at hour 14

Minimum Diurnal Speed Average: 1.3 km/h at hour 19

Monthly Average Velocity: 3.1 km/h 216.7 deg

Percentiles: P_1 = 2 P_{10} = 5 Q_1 = 8 Median = 10 Q_3 = 15 P_{90} = 18 P_{99} = 25

Hours in Service:	720
Hours of Data:	720
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-Sep	SSE9	SSE8	SSE8	S7	SSE8	SSE9	SSE9	SSE8	SSE11	SSE13	S14	SSE13	SSE12	SSE13	SSE11	SSE13	SE15	SE13	SE11	SE9	SE12	SE15	SE16	SE15	SSE11.1	SE16
2-Sep	SE16	SE15	SE14	SE16	SE17	SE16	SE18	SE19	SE18	SE19	SE21	SE23	SE18	SE20	SE17	ESE14	ESE15	E14	ESE14	ESE14	ESE15	ESE15	ESE16	ESE12	SE16.1	SE23
3-Sep	E8	ESE10	E7	ENE10	ENE9	E9	ENE12	ENE11	NE12	ENE16	ENE16	ENE16	E17	ESE21	E20	ESE19	E16	ESE13	E12	E14	ESE11	ESE9	SE7	SE6	E11.8	ESE21
4-Sep	SSE6	SSE5	SE6	SE7	SE7	SE8	SSE8	S7	S10	SW10	SW13	SW14	SW15	WSW10	SW9	NW6	WSW7	WNW5	NNW12	N16	N16	N16	N14	N14	WSW1.9	N16
5-Sep	N12	N13	N15	NNE15	NNE14	NNE16	NNE14	NNE10	NNE12	NNE12	NNE11	NNE12	NE11	NE9	NNE9	NE7	NE6	ENE4	ESE3	SSE4	SE4	SE5	SE6	ESE4	NNE8.0	NNE16
6-Sep	SE5	SE6	SE7	SE6	SE6	SE2	ENE3	ESE6	ESE6	ESE10	ESE11	SE12	SE11	SE11	SE8	SSE8	SSE6	ESE5	ESE7	SE8	SE10	ESE11	ESE10	ESE8	SE7.4	SE12
7-Sep	SE5	SE5	SE6	SE4	NE4	ESE8	ESE6	ENE3	E4	NNE2	NNE6	NNE8	N9	NNE9	N8	NNE10	N8	NNE11	NE7	ENE6	N6	N7	NNE5	NW7	NE4.4	NNE11
8-Sep	NNW7	NNW5	NNW5	NNW6	NNW4	NNW4	NW4	NNW5	N11	NNW12	N13	NNW13	NNW12	NW13	NW12	NW12	NW9	NNW5	W1	W4	S4	S8	S9	S9	NNW5.2	NW13
9-Sep	SSE8	S9	S10	S10	S10	S10	SSW11	SSW12	SSW13	SW14	SW16	SW21	SW27	SW23	SW22	SW22	SW16	SW15	SSW11	SSW10	SSW11	SW16	SW15	WSW16	SSW13.6	SW27
10-Sep	SW15	WSW16	WSW17	W17	W10	SW10	SW11	SW13	WSW16	W17	WNW19	W19	W21	W19	WNW12	W16	WSW16	W18	W15	W16	WNW17	WNW15	NW15	NW16	W14.5	W21
11-Sep	WNW16	NW18	NW19	NW18	NW20	NW19	NW21	NW23	NW23	NW21	NW20	NW20	NW21	NW22	NNW21	NW20	NW16	NW15	NNW14	NW11	NW10	NW11	NW11	NW9	NW17.3	NW23
12-Sep	WNW10	WNW11	WNW10	WNW9	WNW10	NW8	NW7	WNW9	NW8	NW9	NW10	WNW10	W11	WNW12	WSW14	WNW9	WNW11	NW10	WNW4	S4	S6	S8	S8	S9	WNW6.8	WSW14
13-Sep	S9	S10	S9	S9	S9	S10	S10	S10	SSW12	SSW15	SSW17	SSW18	SSW18	SW17	SSW14	SW14	SSW13	SSW10	SSW5	SSE5	SSE7	S7	S7	S8	SSW10.5	SSW18
14-Sep	S9	S9	S4	W6	NNW7	NNW7	NNW8	NNW11	N17	N18	N15	NNW16	N15	NNW14	NNW13	NW13	NNW10	NNW11	NW8	NW8	NW9	NNW9	NW10	NW9	NNW8.5	N18
15-Sep	NW8	NW9	WNW11	NW11	WNW10	WNW9	WNW9	WNW8	WNW9	WNW6	WNW8	WSW7	SW11	SW11	WNW8	SSW8	SSW8	S6	S6	SSW6	SSW6	S6	SW3	W3	W5.5	SW11
16-Sep	SW4	W9	WNW10	WNW9	WNW6	WNW4	NNW1	S2	ESE2	S5	SSW3	SSW7	SW9	SW9	SW8	SW7	SSW3	ESE5	E8	ESE9	ESE11	SE10	SE11	SSE11	S3.2	SE11
17-Sep	SSE11	SSE11	SSE9	SSE11	SSE11	SSE10	SSE11	S12	SSW13	SSW14	SSW11	SSW11	SW12	SSW13	SSW12	SW12	SSW11	SW7	NNW5	ESE3	ESE2	SE4	SSE3	S2	S7.8	SSW14
18-Sep	S5	W2	S2	WSW2	NW3	NNW4	NNE2	N4	N7	N8	NNW9	NW8	NW11	NW12	NW11	NNW10	NNW10	NNW6	ENE2	SE4	SE6	SE8	SE8	SSE8	NNW2.6	NW12
19-Sep	SE8	SSE7	SSE8	SSE10	SSE10	SSE11	SSE10	SSE10	SSE11	S14	S18	S18	S19	SSE18	S18	S16	S15	SSE12	SSE9	SSE12	SSE13	SSE12	SSE14	S12	SSE12.5	S19
20-Sep	S11	S10	S9	S9	S10	S10	S10	S10	S10	SSW11	SSW10	SSE9	SW9	SW10	SW11	SW10	SSW9	SSW9	S7	S8	S8	S8	S9	S9	S8.8	S11
21-Sep	S8	SSE9	SSE9	SSE9	S8	S8	SSE8	SSE8	SSE6	SSE11	SE13	SE15	SSE16	SSE17	SSE16	S14	S13	SSE11	SSE7	SSE8	SSE8	SSE8	SSE9	SE6	SSE10.0	SSE17
22-Sep	SE7	SE9	SSE10	SE10	SE10	SSE5	SSE8	S8	SW11	WNW14	WNW18	NW19	NW19	NW16	WNW15	NW15	NW13	WNW9	WNW9	WNW9	NW6	NW7	NW6	N5	WNW5.1	NW19
23-Sep	ESE1	ENE4	NE7	NE7	NE7	ENE8	NE5	E8	ESE10	ESE7	SE6	ESE5	ESE8	SE3	E6	NNE8	NNE9	NE8	E5	ESE7	ESE2	NNE1	WSW3	WNW7	ENE4.2	ESE10
24-Sep	W6	WNW7	WNW6	WNW8	NW6	W6	SSW6	SW5	SSW5	WSW8	SW8	SSW11	SW12	SW11	SW12	SSW8	SW6	SW6	SSW3	SSE1	NNE2	ENE5	ENE8	ENE10	SW3.9	SW12
25-Sep	ENE12	E14	E15	E16	E17	E16	ENE17	ENE20	ENE18	ENE19	ENE17	ENE15	ENE19	ENE13	ENE19	ENE10	ENE9	NE10	NE8	NE14	E24	E17	WSW10	WNW2	ENE13.2	E24
26-Sep	WSW4	W10	WSW14	WSW16	WSW16	WSW17	WSW21	WSW21	WSW19	WSW23	WSW22	WSW26	W26	WSW26	W23	W27	W22	W21	W18	WSW14	WSW13	WSW16	SW14	SW16	WSW18.2	W27
27-Sep	SW15	SW15	SW15	SW15	SW14	SW14	SW14	SW14	SW15	SW18	SW19	WSW23	WSW27	WSW26	WSW27	SW20	SW18	SW13	SW11	SW10	SSW9	SSW9	S10	SSW10	SW15.4	WSW27
28-Sep	SSW11	SSW10	SSW11	S9	S10	SSW11	S11	S10	S10	SSW15	SSW16	SSW17	SSW17	SSW14	SSW14	SSW15	SSW13	SSW10	S8	S8	S8	S8	SSE9	SSE9	SSW10.9	SSW17
29-Sep	SSE9	SSE9	SSE10	S8	S8	S5	SSE2	S6	W8	SW9	WSW17	WSW21	W19	W24	WNW24	WNW24	W23	W18	WSW21	WSW14	SW15	SW19	SW17	WSW17	WSW11.9	WNW24
30-Sep	WSW18	WSW17	SW16	SW16	SW16	SW16	WSW19	W18	WNW20	WNW23	NW24	NW21	NW19	NW18	WNW19	NW16	NW16	NW12	NW12	NW7	WSW5	SE2	ESE3	ENE2	WNW11.5	NW24
	S3.8	SSW3.6	SSW3.5	SSW3.2	SSW2.5	S2.7	S3.0	SSW2.8	SW2.5	WSW3.3	WSW4.1	WSW4.7	WSW5.9	WSW6.1	WSW5.3	WSW5.2	WSW4.1	WSW2.6	WSW1.3	S1.7	SSE2.7	S3.4	S3.6	S3.0	Diurnal Average	
	WSW18	NW18	NW19	NW18	NW20	NW19	NW21	NW23	NW23	WSW23	NW24	WSW26	SW27	WSW26	WSW27	W27	W23	W21	WSW21	W16	E24	SW19	SW17	WSW17	Diurnal Maximum	

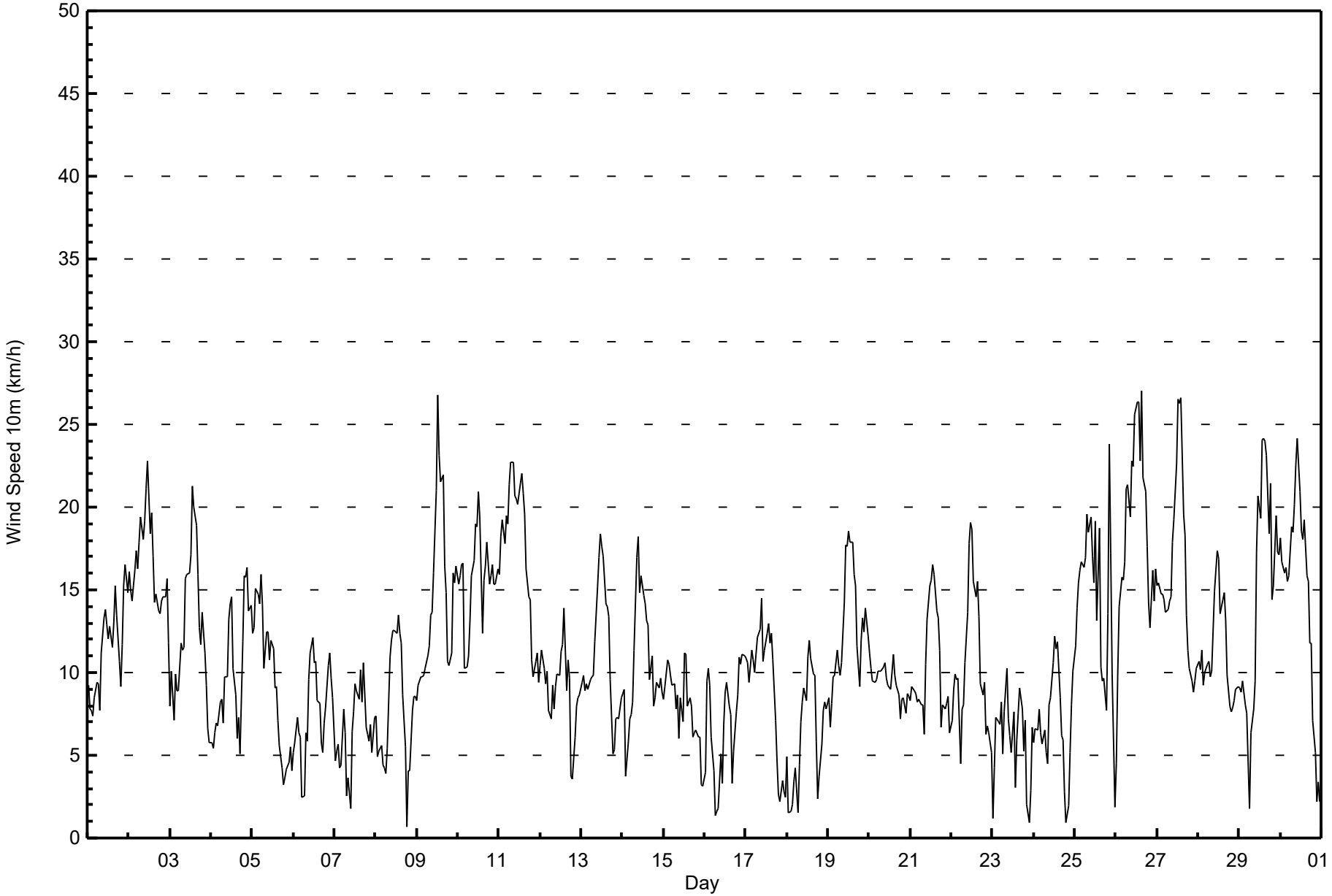
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Kirby North - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	87	12.08	12.08
6 - 11	346	48.06	60.14
12 - 19	237	32.92	93.06
20 - 28	50	6.94	100.00
29 - 38	0	0.00	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Kirby North - September 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	2	5	2	7	2	11	11	7	9	5	3	4	4	4	2	9	87
6 - 11	8	10	11	9	6	19	30	55	62	30	22	5	8	28	30	13	346
12 - 19	13	7	2	13	11	10	21	15	11	22	38	20	12	10	24	8	237
20 - 28	0	0	0	1	2	1	3	0	0	0	6	12	8	4	12	1	50
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	23	22	15	30	21	41	65	77	82	57	69	41	32	46	68	31	720

Total Number of Valid Hours: 720

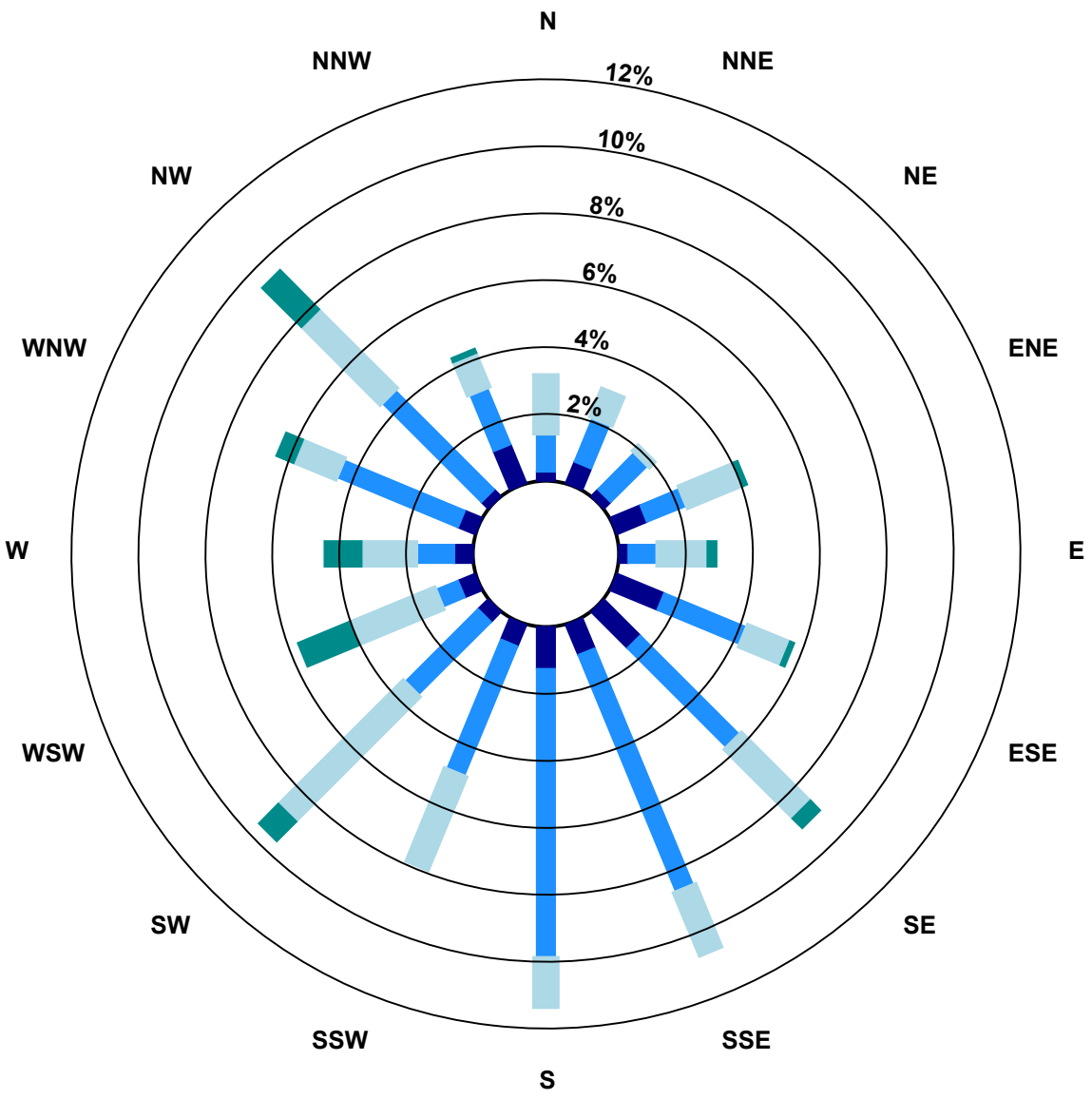
Total Number of Hours: 720

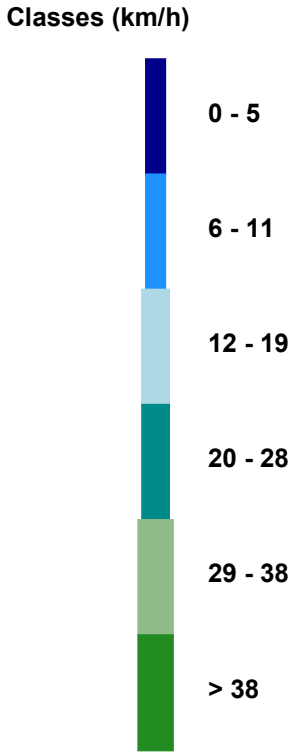
Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

Kirby North





Total Number of Valid Hours: 720

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8 km/h on Sep 27 15:00

Minimum Value: 1 km/h on Sep 5 20:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 3 Q_3 = 4 P_{90} = 5 P_{99} = 7

Hours in Service:	720
Hours of Data:	720
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-Sep	1	1	1	1	1	2	2	2	3	4	4	4	4	4	4	5	4	4	4	2	3	4	4	4	5
2-Sep	4	4	4	4	4	4	4	5	5	5	6	6	5	5	5	4	4	4	4	3	4	4	4	3	6
3-Sep	2	3	2	2	3	3	4	3	4	4	4	4	5	7	6	6	5	5	3	3	3	2	2	1	7
4-Sep	1	2	1	1	1	2	2	2	3	3	3	3	3	2	2	2	2	2	4	4	3	4	3	4	4
5-Sep	3	3	3	3	3	3	4	2	3	4	2	3	2	3	3	2	2	1	1	1	1	2	1	1	4
6-Sep	1	1	2	2	1	1	1	2	2	2	3	3	3	3	3	3	2	1	2	2	3	3	2	2	3
7-Sep	2	1	1	3	2	2	1	1	2	2	2	3	2	2	2	2	2	3	2	1	1	1	1	2	3
8-Sep	2	1	1	1	1	1	1	3	3	3	4	3	4	4	4	3	2	2	1	2	2	1	1	1	4
9-Sep	1	1	2	2	2	2	2	3	3	4	4	6	6	6	5	6	4	4	3	3	3	4	3	4	6
10-Sep	4	4	4	5	4	2	2	3	4	5	5	5	5	6	7	5	4	5	5	4	4	4	4	4	7
11-Sep	4	5	5	5	5	5	5	6	6	5	5	6	6	6	6	5	5	4	4	3	2	3	3	2	6
12-Sep	3	3	3	2	3	2	2	3	2	2	3	3	4	4	4	4	3	3	2	2	2	1	1	1	4
13-Sep	2	2	1	2	1	2	2	2	3	4	5	5	5	4	4	4	4	3	1	1	1	1	1	1	5
14-Sep	1	1	3	2	2	2	2	4	5	4	4	5	4	4	4	3	4	4	2	2	3	2	2	2	5
15-Sep	2	2	2	2	2	2	2	2	2	2	4	3	3	3	6	3	2	2	1	3	1	1	2	2	6
16-Sep	2	4	3	2	2	2	1	2	1	1	2	3	3	3	3	2	2	2	1	1	2	2	2	3	4
17-Sep	2	2	2	2	2	2	3	3	3	4	3	3	3	3	3	4	3	2	1	1	1	1	1	2	4
18-Sep	1	2	1	3	3	2	2	1	2	2	2	3	3	3	3	3	3	2	1	1	1	1	1	1	3
19-Sep	2	1	2	2	2	3	3	2	3	5	6	6	6	6	6	6	5	4	2	3	4	4	4	4	6
20-Sep	3	2	2	2	2	2	2	2	3	3	2	2	2	2	3	2	2	2	1	2	2	1	2	2	3
21-Sep	1	1	1	1	1	1	2	1	2	3	3	4	5	5	5	5	4	4	2	2	1	1	1	1	5
22-Sep	3	1	1	1	2	3	2	2	3	4	5	5	6	4	4	4	4	3	2	2	2	2	2	2	6
23-Sep	1	2	1	1	1	2	1	1	2	2	3	2	2	2	3	2	2	2	2	1	2	1	2	2	3
24-Sep	4	2	2	2	1	3	2	2	2	3	2	3	3	4	4	3	1	1	2	2	2	1	1	1	4
25-Sep	2	3	4	4	4	4	4	5	5	6	5	4	5	5	6	4	4	4	4	5	6	7	4	3	7
26-Sep	6	4	4	4	4	4	6	6	6	6	6	7	7	7	6	7	6	7	7	4	3	4	3	3	7
27-Sep	3	3	3	3	3	3	3	3	4	5	5	6	7	6	8	5	5	4	2	2	2	2	2	2	8
28-Sep	2	2	2	2	2	2	2	2	3	4	4	5	5	4	4	4	4	3	2	2	2	2	2	2	5
29-Sep	2	2	2	1	2	2	1	2	3	2	5	6	6	7	7	7	7	5	5	4	4	4	3	4	7
30-Sep	4	4	3	3	3	3	4	5	5	6	6	5	5	5	5	5	5	3	3	2	2	2	1	1	6
	6	5	5	5	5	5	6	6	6	6	6	7	7	7	8	7	7	7	7	5	6	7	4	4	
	Diurnal Maximum																								

Direction of Maximum Speed: 261 deg on Sep 26 16:00
Direction of Maximum Daily Speed Average: 253.4 deg on Sep 26

Direction of Minimum Speed: 270 deg on Sep 8 19:00

Direction of Minimum Daily Speed Average: 1.9 deg on Sep 4

Monthly Average Direction: 216.7 deg

Hours in Service:	720
Hours of Data:	720
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-Sep	154	155	158	170	160	158	160	167	158	162	169	153	156	160	159	156	127	137	129	128	127	130	133	133	148.5
2-Sep	137	144	143	139	139	135	132	132	134	136	135	137	137	141	137	122	111	97	102	109	109	118	119	110	128.8
3-Sep	91	103	96	66	71	80	77	64	48	66	75	77	91	104	99	103	98	102	92	93	109	122	135	135	90.3
4-Sep	154	157	145	143	144	144	152	172	190	225	221	224	234	238	223	313	243	288	345	358	6	5	1	0	251.4
5-Sep	3	5	11	14	15	12	18	24	12	24	18	27	35	43	32	38	39	68	106	148	124	136	137	120	27.4
6-Sep	143	129	124	133	146	142	65	112	112	117	121	131	135	136	127	150	160	108	121	124	127	123	109	123	126.8
7-Sep	139	125	127	129	45	114	121	73	99	31	32	16	8	25	7	16	10	29	43	58	10	357	14	324	38.5
8-Sep	343	328	333	335	340	332	320	347	351	345	350	348	332	321	318	311	317	334	270	271	184	169	172	173	327.5
9-Sep	168	170	170	178	170	189	194	201	209	214	223	225	231	229	229	227	220	218	199	193	194	226	231	239	213.0
10-Sep	230	239	243	270	272	235	220	228	246	264	288	263	265	265	297	272	254	270	277	280	285	293	308	309	266.7
11-Sep	300	307	305	307	317	313	318	320	322	322	321	326	324	326	327	317	325	321	328	325	317	310	309	305	317.8
12-Sep	301	298	300	296	300	317	316	294	313	304	317	298	270	289	257	290	297	307	282	188	180	179	174	176	285.0
13-Sep	175	173	172	170	172	175	177	183	196	204	211	211	212	216	212	216	213	213	202	167	167	177	184	175	195.4
14-Sep	171	169	178	263	335	340	332	336	350	1	349	344	350	333	340	319	329	332	318	313	322	328	324	325	333.4
15-Sep	316	311	303	304	295	293	286	292	297	302	282	252	229	225	282	199	193	178	187	209	196	180	215	266	262.1
16-Sep	235	265	283	288	301	289	340	180	121	170	194	200	216	217	214	226	195	104	100	113	118	132	146	153	190.5
17-Sep	154	154	160	154	159	160	164	175	193	206	209	210	215	204	212	226	205	221	342	106	107	146	166	178	186.5
18-Sep	179	268	191	250	326	344	20	360	358	2	348	323	317	310	320	330	336	343	74	145	138	141	136	152	336.9
19-Sep	143	158	163	161	160	157	157	161	158	173	169	171	172	166	179	183	182	166	160	159	160	164	165	175	166.8
20-Sep	176	175	172	174	175	171	173	179	188	195	196	165	231	233	226	217	213	205	186	171	175	169	169	170	187.7
21-Sep	174	168	167	165	170	171	165	148	158	151	142	137	149	152	158	171	170	168	160	164	160	154	152	144	158.2
22-Sep	135	146	149	146	144	150	155	177	218	296	301	314	314	311	303	306	307	287	291	299	309	316	324	360	290.1
23-Sep	103	57	41	48	45	58	45	80	106	104	140	120	123	141	97	33	31	55	80	110	102	16	243	286	75.5
24-Sep	281	289	284	296	307	281	197	226	192	248	218	206	215	231	224	206	218	221	192	166	17	60	66	76	232.4
25-Sep	70	80	97	92	95	84	74	73	78	75	75	67	74	71	71	70	62	44	35	38	81	96	250	291	75.2
26-Sep	237	268	254	245	245	242	249	250	248	253	253	257	260	256	260	261	266	264	279	256	256	241	226	223	253.4
27-Sep	226	223	220	219	217	218	218	214	223	234	234	237	239	243	247	224	231	226	226	220	213	195	186	193	226.0
28-Sep	195	194	202	184	191	193	176	175	181	205	205	211	211	212	209	210	206	195	171	174	172	170	160	158	193.9
29-Sep	155	160	164	176	180	188	151	175	263	232	239	256	263	279	284	282	271	264	251	239	232	236	234	238	245.7
30-Sep	244	243	235	234	230	229	241	263	292	302	306	310	313	305	301	319	324	324	321	314	240	135	114	75	281.9
	188.2	195.7	197.7	201.0	194.2	189.0	187.3	196.6	222.7	237.7	241.2	237.9	241.0	242.8	248.1	249.2	244.6	245.0	238.6	179.0	159.6	168.8	179.6	188.8	
	Diurnal Average																								

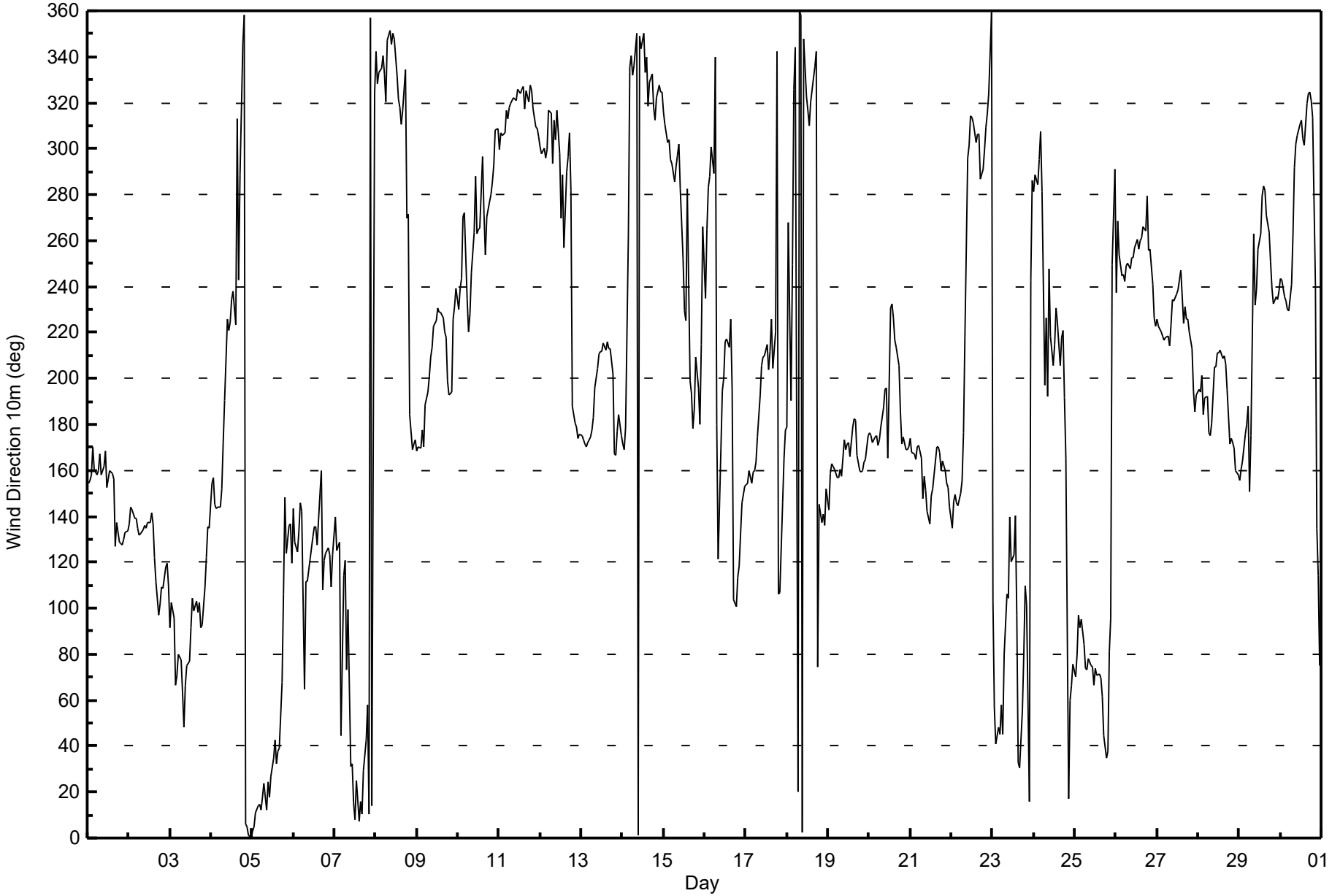
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Kirby North - September 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Kirby North - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 97 deg on Sep 24 20:00

Minimum Value: 6 deg on Sep 18 22:00

Percentiles: P_1 = 9 P_{10} = 13 Q_1 = 15 Median = 18 Q_3 = 22 P_{90} = 32 P_{99} = 77

Hours in Service:	720
Hours of Data:	720
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-Sep	8	9	11	10	11	11	15	24	20	24	27	29	30	26	30	28	20	17	15	13	13	16	15	16	30
2-Sep	17	18	18	17	17	16	16	16	17	17	18	19	21	22	22	23	17	16	14	14	14	15	15	16	23
3-Sep	20	18	24	14	20	27	19	19	14	16	16	17	21	19	19	20	18	17	14	15	15	14	15	12	27
4-Sep	15	17	13	12	10	13	17	27	25	29	19	17	17	21	20	53	28	29	25	15	14	15	14	16	53
5-Sep	15	14	14	14	13	12	13	13	13	19	14	19	20	22	25	22	32	23	26	20	22	14	10	16	32
6-Sep	13	15	13	16	16	28	29	27	28	20	17	21	24	20	27	23	22	16	14	14	17	13	13	14	29
7-Sep	23	20	15	65	39	20	16	54	38	63	22	20	20	21	22	16	16	16	17	11	17	16	33	16	65
8-Sep	17	17	14	14	20	16	23	29	17	20	24	24	24	23	19	20	18	19	95	44	48	10	11	11	95
9-Sep	12	12	12	16	16	17	17	19	16	18	18	17	16	17	17	15	16	17	19	19	19	17	14	14	19
10-Sep	14	14	14	23	31	18	20	14	17	25	19	21	20	22	21	23	17	21	22	19	17	18	17	16	31
11-Sep	16	15	15	18	17	17	16	17	15	16	17	17	17	18	19	18	17	15	16	14	16	16	16	17	19
12-Sep	17	16	17	18	18	19	18	19	18	21	23	33	28	35	24	39	26	20	60	48	37	10	10	10	60
13-Sep	13	12	12	12	12	13	15	19	21	19	20	19	21	20	21	19	20	18	22	10	13	12	12	11	22
14-Sep	11	11	83	45	24	17	17	17	18	16	19	21	19	19	22	21	22	19	14	14	16	15	14	13	83
15-Sep	17	16	15	14	17	15	17	23	17	21	30	42	25	21	59	25	27	20	16	34	16	10	68	61	68
16-Sep	49	24	17	16	17	56	80	77	71	39	77	42	35	28	29	26	43	18	11	8	13	17	17	16	80
17-Sep	16	15	15	12	13	13	16	21	20	17	21	22	22	20	22	20	19	33	21	35	26	11	12	27	35
18-Sep	15	74	62	64	40	53	66	19	18	21	25	33	29	25	23	25	20	18	41	18	8	6	12	17	74
19-Sep	9	14	14	15	16	16	19	18	21	24	25	24	25	23	24	25	24	21	19	21	20	21	21	22	25
20-Sep	21	18	19	18	14	14	14	18	21	24	25	26	28	20	19	20	17	17	15	14	14	13	13	12	28
21-Sep	12	11	10	10	8	9	10	10	19	22	21	19	20	22	24	24	23	21	17	16	14	11	10	13	24
22-Sep	13	9	10	9	12	70	14	18	21	31	18	16	19	20	21	19	20	18	14	14	21	15	16	19	70
23-Sep	58	36	11	15	11	19	26	14	14	25	47	31	23	67	37	17	11	19	34	12	31	77	46	19	77
24-Sep	37	16	20	15	12	36	21	37	55	26	24	25	22	32	27	21	17	13	80	97	47	13	11	7	97
25-Sep	10	14	14	15	16	16	13	14	16	18	18	18	19	17	18	42	25	31	36	29	15	56	47	81	81
26-Sep	89	38	24	15	21	15	15	15	18	14	16	16	18	16	17	16	21	19	21	20	22	14	14	14	89
27-Sep	14	15	14	14	14	15	15	16	16	16	17	17	16	16	16	19	17	15	12	12	13	15	15	15	19
28-Sep	15	16	14	18	17	16	14	15	23	19	18	19	17	19	17	20	21	21	15	18	19	14	12	11	23
29-Sep	12	13	15	14	16	67	69	24	40	27	20	19	21	19	17	17	18	19	14	15	13	13	13	14	69
30-Sep	14	14	13	13	13	13	14	24	17	16	16	18	18	18	18	18	16	14	15	15	55	67	25	52	67
	89	74	83	65	40	70	80	77	71	63	77	42	35	67	59	53	43	33	95	97	55	77	68	81	
	Diurnal Maximum																								

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS513
EBRT
SEPTEMBER 2026

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

October 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - EBRT (AMS513)
SEPTEMBER 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	669	34	51	97.64	28.8	0	4.3	0
H2S (ppb) Average	660	35	60	96.53	1	0	0.3	0
NO2 (ppb) Average	669	35	51	97.78	18.4	0	4.9	-
NO (ppb) Average	669	35	51	97.78	53.6	-	5.3	-
NOX (ppb) Average	669	35	51	97.78	67.7	-	9.1	-
Temperature 2 m (C) Average	720	0	0	100	25.6	-	20.4	-
Relative Humidity (%) Average	714	0	6	99.17	100	-	94.9	-
Wind Speed 10 m (km/h) Average	716	0	4	99.44	29	-	20	-
Wind Direction 10 m (deg) Average	716	0	4	99.44	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - EBRT (AMS513)
SEPTEMBER 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	669	0.51	2	-	0	0	0	0.1	0.3	0.7	28.8
H2S (ppb) Average	660	0.14	0.1	-	0	0	0.1	0.1	0.2	0.3	1
NO2 (ppb) Average	669	2.11	2.5	-	0	0.2	0.6	1.4	2.7	4.6	18.4
NO (ppb) Average	669	1.18	3.8	-	0	0	0	0.2	1	2.5	53.6
NOX (ppb) Average	669	3.28	5.7	-	0.1	0.3	0.7	1.7	3.5	7.1	67.7
Temperature 2 m (C) Average	720	10.96	5.4	-	0.3	4.4	7	10	15.3	18.3	25.6
Relative Humidity (%) Average	714	76.12	18.5	-	29.7	48.5	62.3	80.4	92.1	97.4	100
Wind Speed 10 m (km/h) Average	716	11.2	5	-	1	5	7	10	14	19	29
Wind Direction 10 m (deg) Average	716	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - EBRT (AMS513)
SEPTEMBER 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
ALL GASEOUS ANALYZERS	05 Sep 2026 12:00	05 Sep 2026 14:00	3	Station power failure
ALL GASEOUS ANALYZERS	08 Sep 2026 12:00	08 Sep 2026 12:00	1	Station power failure
ALL GASEOUS ANALYZERS	09 Sep 2026 11:00	09 Sep 2026 13:00	3	Station power failure
ALL GASEOUS ANALYZERS	13 Sep 2026 04:00	13 Sep 2026 12:00	9	Station power failure
H2S, SO2	25 Sep 2026 15:00	25 Sep 2026 15:00	1	Maintenance - sample manifold cleaned
H2S	24 Sep 2026 09:00	24 Sep 2026 10:00	2	Unstable Operation - flatline in analyzer output signal
H2S	28 Sep 2026 10:00	28 Sep 2026 10:00	1	Unstable Operation - flatline in analyzer output signal
H2S	29 Sep 2026 21:00	29 Sep 2026 22:00	2	Unstable Operation - flatline in analyzer output signal
H2S	30 Sep 2026 03:00	30 Sep 2026 05:00	3	Unstable Operation - flatline in analyzer output signal
Relative Humidity	08 Sep 2026 06:00	08 Sep 2026 09:00	4	Sensor operated out of range
Relative Humidity	14 Sep 2026 08:00	14 Sep 2026 09:00	2	Sensor operated out of range
Wind Speed, Wind Direction	22 Sep 2026 21:00	22 Sep 2026 23:00	3	Flat line in sensor output signal - Sensor frozen
Wind Speed, Wind Direction	23 Sep 2026 01:00	23 Sep 2026 01:00	1	Flat line in sensor output signal - Sensor frozen

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

EBRT - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 28.8 ppb on Sep 24 11:00 Maximum Daily Average: 4.3 ppb on Sep 24

Minimum Value: 0.0 ppb on Sep 1 03:00 Minimum Daily Average: 0.0 ppb on Sep 30
Maximum Diurnal Average: 1.4 ppb at hour 11 Minimum Diurnal Average: 0.1 ppb at hour 6
Monthly Average: 0.51 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} = 9.1

Hours in Service:	720
Hours of Data:	669
Hours of Missing Data:	51
Hours of Calibration:	34
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-Sep	0.0	Z	0.0	0.2	0.1	0.0	0.1	0.1	0.4	0.1	0.1	0.3	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
2-Sep	0.0	0.0	Z	0.1	0.0	0.1	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	0.1	0.0	0.0	0.0	0.2
3-Sep	0.0	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
4-Sep	0.2	0.2	0.1	0.1	Z	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.2	0.2	0.3	0.1	0.1	0.2	0.1	0.0	0.0	0.1	0.2	0.1	0.3
5-Sep	0.2	0.2	0.1	0.2	0.1	Z	0.0	0.1	0.2	0.1	0.0	PF	PF	PF	0.1	0.2	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
6-Sep	Z	0.0	0.1	0.1	0.1	0.1	0.2	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	0.0	0.0	0.0	0.2
7-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
8-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	PF	0.0	0.0	0.0	0.1	2.6	2.8	0.8	0.1	0.6	0.9	0.4	0.2	0.4	2.8
9-Sep	0.0	0.1	0.1	Z	0.2	0.2	0.3	0.3	0.2	0.2	PF	PF	PF	0.5	0.6	0.8	0.5	0.2	0.3	0.6	0.6	0.2	0.7	1.6	0.4	1.6
10-Sep	1.0	0.4	0.2	0.1	Z	0.1	1.4	4.0	3.0	0.5	0.1	0.0	0.0	0.1	0.2	0.3	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.0	0.5	4.0
11-Sep	0.1	0.1	0.1	0.0	0.1	Z	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.2	0.1	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.3
12-Sep	Z	0.3	0.3	0.2	0.1	0.1	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.1	1.0	0.7	0.7	4.3	1.5	0.0	0.0	0.0	0.0	0.0	0.4	4.3
13-Sep	0.0	Z	0.0	PF	PF	PF	PF	PF	PF	PF	PF	PF	0.8	0.6	0.5	0.5	0.5	0.2	0.1	0.2	0.0	0.0	0.0	0.0	--	0.8
14-Sep	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.2
15-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.2	0.3	1.5	0.7	1.2	1.0	1.3	0.6	0.5	0.3	0.2	0.2	0.2	0.2	0.1	0.4	1.5
16-Sep	0.2	0.2	0.2	0.1	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.8	4.8	2.0	0.4	0.9	2.6	0.8	0.2	0.2	0.2	0.1	0.3	0.7	4.8
17-Sep	0.3	0.2	0.1	0.2	0.2	Z	0.3	0.1	0.4	0.3	0.2	0.3	0.2	0.3	15.8	11.5	9.5	15.6	8.9	2.6	0.8	0.5	0.3	0.3	3.0	15.8
18-Sep	Z	0.3	0.3	0.4	0.3	0.3	0.4	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.8	3.9	2.7	0.6	3.9
19-Sep	1.5	Z	0.7	0.6	0.8	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.2	0.1	0.2	0.2	0.3	0.4	1.5
20-Sep	0.4	0.3	Z	0.3	0.1	0.1	0.0	0.0	6.7	1.5	0.2	0.4	2.4	2.3	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.7	6.7
21-Sep	0.5	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.2	4.0	0.0	0.1	0.5	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.1	0.1	0.0	0.2	0.3	4.0
22-Sep	0.1	0.1	0.0	0.2	Z	0.2	0.0	0.0	0.3	1.4	0.5	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.4
23-Sep	0.0	0.0	0.0	0.1	0.1	Z	0.3	0.3	0.0	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.3
24-Sep	Z	0.3	0.2	0.2	0.5	0.5	0.4	1.0	5.8	14.1	28.8	22.9	5.2	4.3	4.6	2.8	2.4	2.8	0.8	0.3	0.3	0.2	0.2	0.2	4.3	28.8
25-Sep	0.4	Z	0.7	0.5	0.4	0.3	0.3	0.5	0.7	0.3	0.4	0.4	0.4	0.4	M	0.4	0.2	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.3	0.7
26-Sep	0.1	0.1	Z	0.0	0.1	0.0	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.0	0.1	0.2	0.1	0.2
27-Sep	0.2	0.3	0.2	Z	0.2	0.2	0.2	0.6	2.3	3.6	4.9	2.5	0.4	3.7	0.5	0.2	0.1	0.1	0.9	1.2	0.6	0.5	0.2	0.2	1.0	4.9
28-Sep	0.2	0.1	0.2	0.1	Z	0.1	0.1	0.1	0.0	0.2	0.8	0.4	0.1	0.2	0.5	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.8
29-Sep	0.3	0.3	0.4	0.3	0.2	Z	0.2	0.1	0.3	0.2	0.7	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8
30-Sep	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
	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.3	0.8	1.0	1.4	1.3	0.5	0.7	1.0	0.7	0.7	1.0	0.5	0.2	0.2	0.2	0.2	0.2	Diurnal Average	
	1.5	0.4	0.7	0.6	0.8	0.5	1.4	4.0	6.7	14.1	28.8	22.9	5.2	4.8	15.8	11.5	9.5	15.6	8.9	2.6	0.8	2.8	3.9	2.7	Diurnal Maximum	

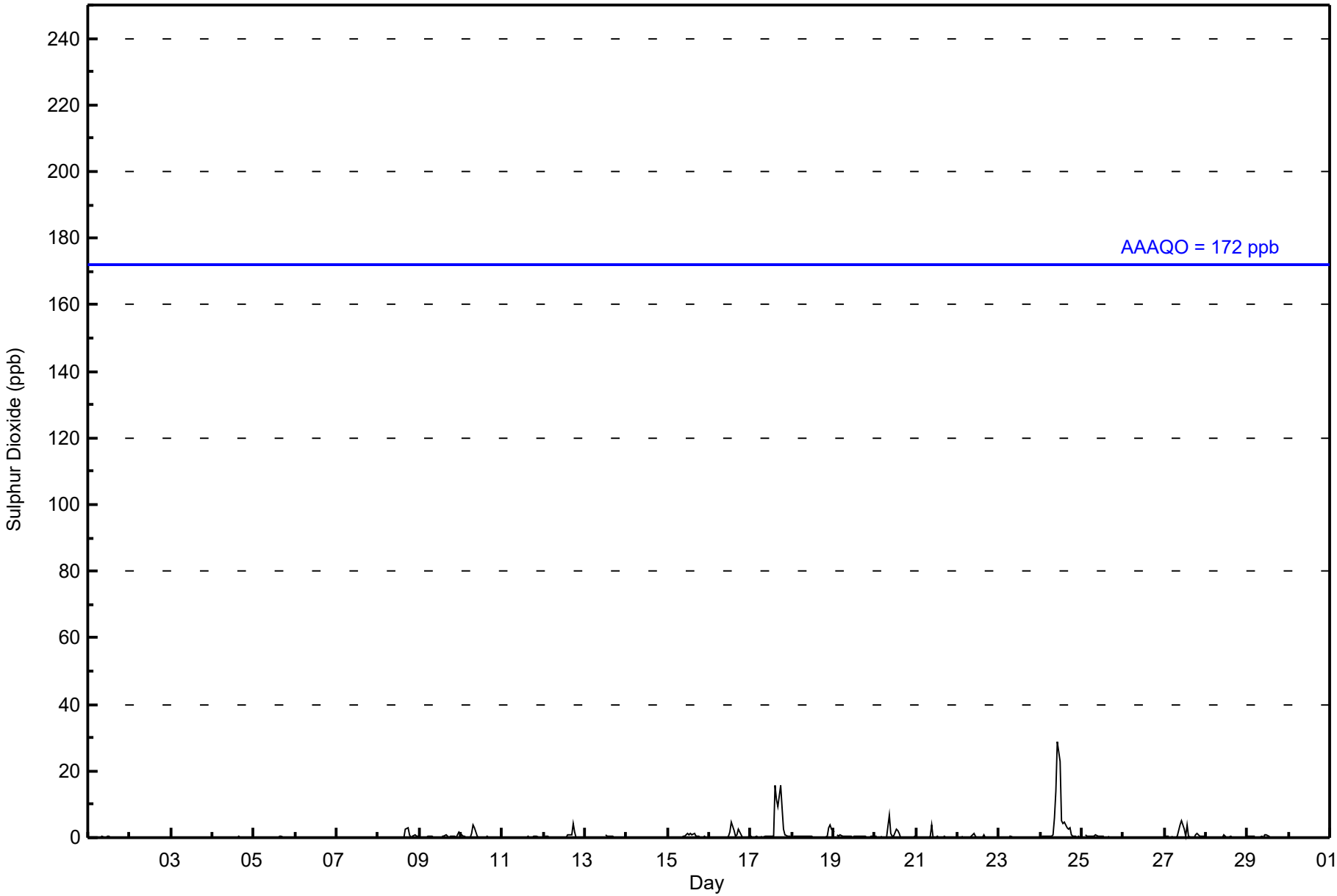
Z - zerospan C - Calibration M - Maintenance PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

EBRT - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	663	99.10	99.10
11 - 20	4	0.60	99.70
21 - 60	2	0.30	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: 669

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

EBRT - September 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	52	16	6	10	18	33	84	76	82	39	35	38	58	19	48	45	659
11 - 20	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4
21 - 60	0	0	0	0	0	0	0	0	0	0	1	1	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	52	16	6	10	18	33	84	76	82	42	37	39	58	19	48	45	665

Total Number of Valid Hours: 665

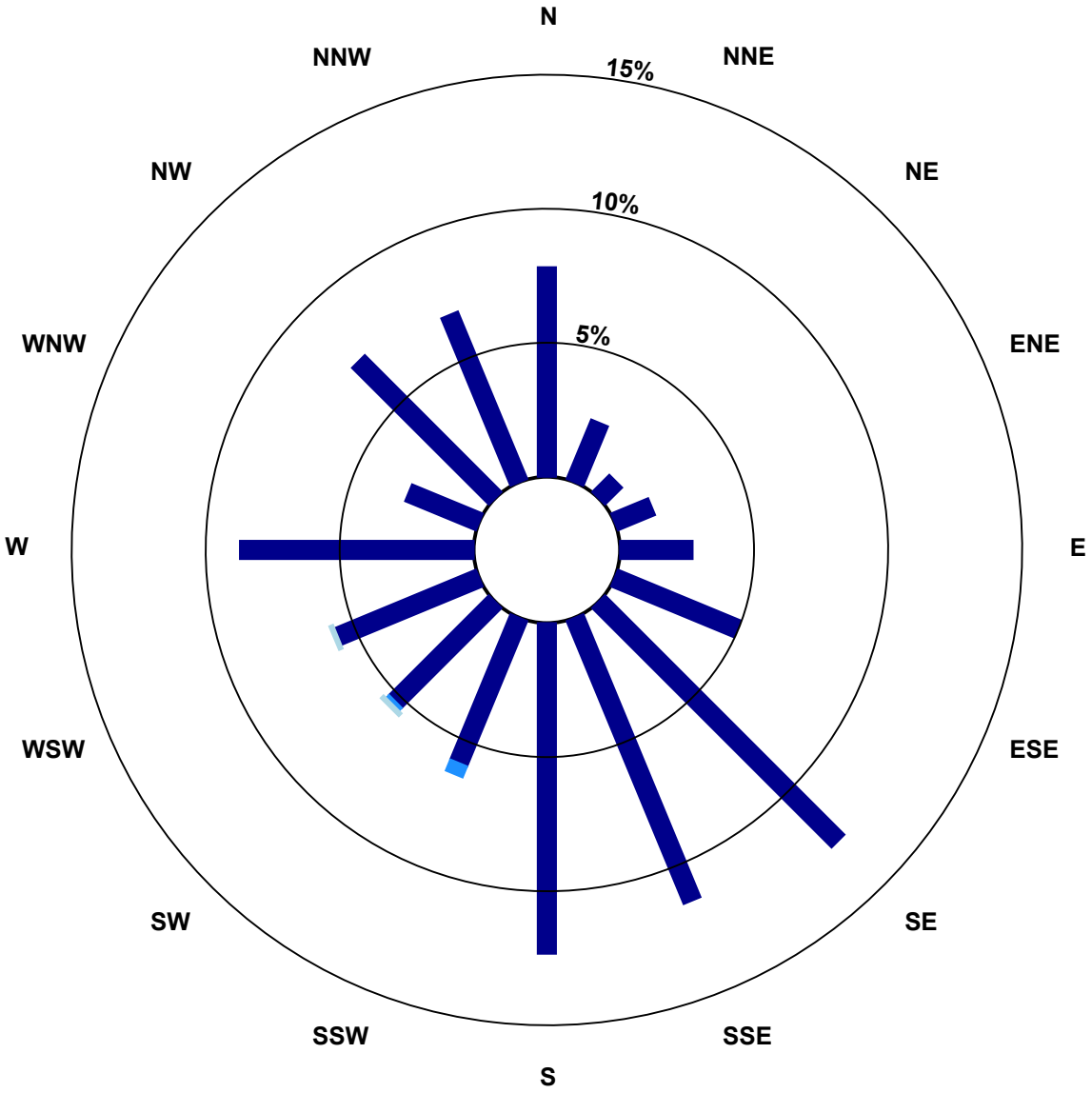
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Sulphur Dioxide (SO_2) - ppb

EBRT



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

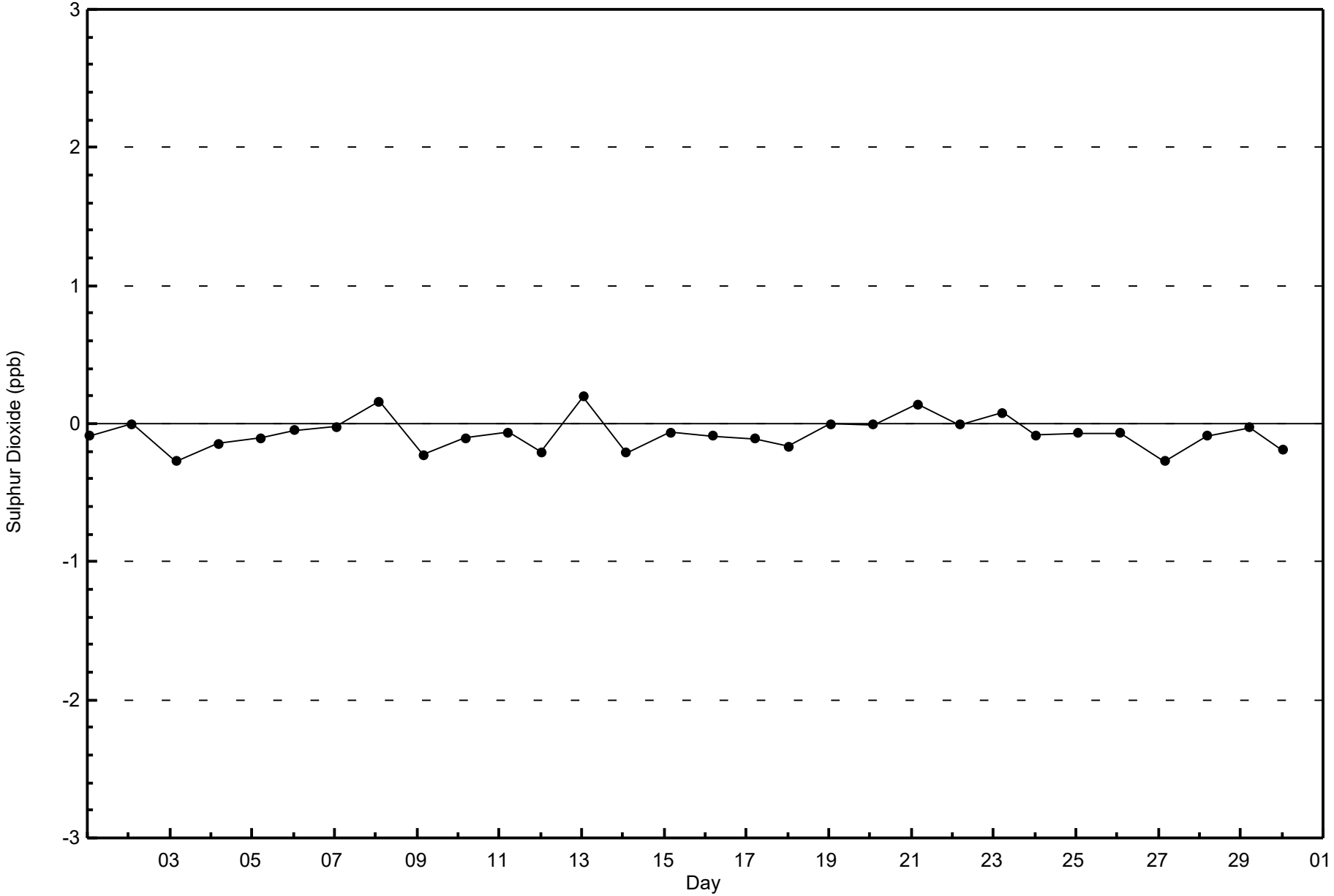
Total Number of Valid Hours: 665

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

EBRT - September 2026

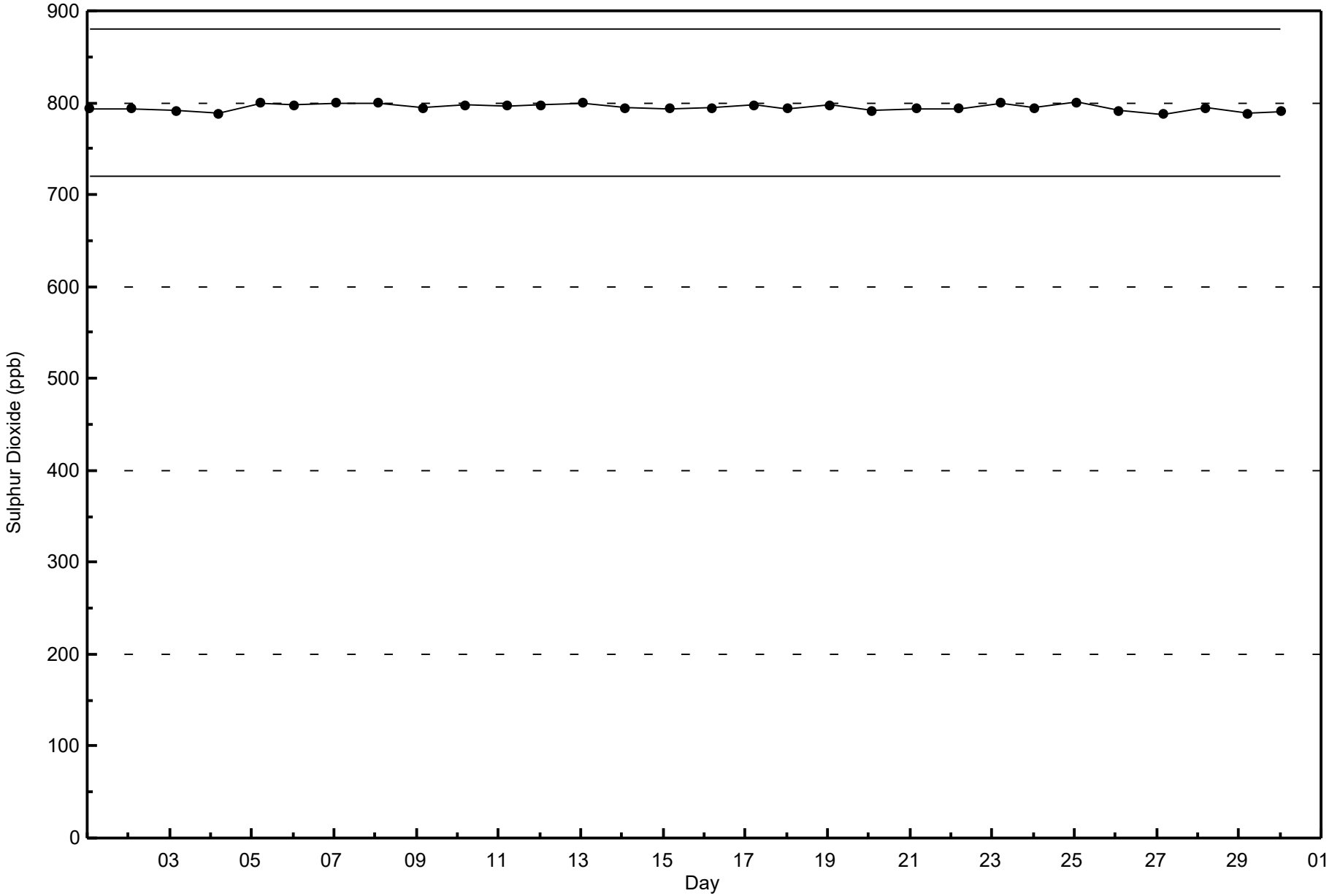


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

EBRT - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

EBRT - September 2026

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

Maximum Value: 1.0 ppb on Sep 27 21:00 Maximum Daily Average: 0.3 ppb on Sep 18

Minimum Value: 0.0 ppb on Sep 20 21:00 Minimum Daily Average: 0.0 ppb on Sep 7

Maximum Diurnal Average: 0.2 ppb at hour 7 Minimum Diurnal Average: 0.1 ppb at hour 17

Monthly Average: 0.14 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.3 P_{99} = 0.7

Hours in Service:	720
Hours of Data:	660
Hours of Missing Data:	60
Hours of Calibration:	35
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-Sep	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
2-Sep	0.1	0.1	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	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1
3-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1
4-Sep	0.1	0.1	0.1	0.1	0.1	Z	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.4
5-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	PF	PF	PF	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2
6-Sep	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
7-Sep	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	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1
8-Sep	0.1	0.1	0.0	Z	0.6	0.3	0.2	0.2	0.2	0.2	0.2	PF	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.6
9-Sep	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	PF	PF	PF	0.2	0.4	0.2	0.2	0.7	0.6	0.6	0.8	0.4	0.3	0.2	0.3	0.8
10-Sep	0.3	0.7	0.1	0.1	0.1	Z	0.5	0.2	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.7
11-Sep	Z	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	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-Sep	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.5	0.3	0.1	0.0	0.0	0.1	0.1	0.5
13-Sep	0.1	0.2	Z	PF	PF	PF	PF	PF	PF	PF	PF	PF	0.3	0.4	0.6	0.4	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.2	--	0.6
14-Sep	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
15-Sep	0.1	0.1	0.2	0.2	Z	0.3	0.4	0.2	0.3	0.5	0.6	0.9	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.3	0.3	0.2	0.1	0.3	0.9
16-Sep	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.2	0.1	0.1	0.1	0.4	0.6	0.4	0.2	0.1	0.1	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.6
17-Sep	Z	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.4	0.2	0.2	0.7	0.5	0.3	0.2	0.2	0.3	0.3	0.2	0.7
18-Sep	0.3	Z	0.6	0.6	0.6	0.4	0.5	0.6	0.4	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	0.3	0.2	0.3	0.6
19-Sep	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20-Sep	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
21-Sep	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
22-Sep	0.1	0.1	0.3	0.2	0.2	Z	0.2	0.1	0.2	0.9	0.4	0.3	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.3	0.4	0.2	0.3	0.3	0.2	0.9
23-Sep	Z	0.2	0.2	0.1	0.1	0.2	0.6	0.5	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	0.6
24-Sep	0.1	Z	0.3	0.2	0.5	0.5	0.3	0.2	UO	UO	C	C	C	C	C	0.1	0.2	0.2	0.3	0.3	0.2	0.1	0.0	0.0	--	0.5
25-Sep	0.0	0.1	Z	0.1	0.0	0.0	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	M	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
26-Sep	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	0.0	0.1	0.1	0.1	0.1	0.1	0.2
27-Sep	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	1.0	0.8	0.1	0.1	0.2	1.0
28-Sep	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	UO	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4
29-Sep	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	UO	UO	0.1	0.1	0.1	0.3
30-Sep	0.1	Z	UO	UO	UO	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	0.0	0.1	0.1	0.2	0.2	0.1	0.2
	0.1	0.1	0.1	0.1	0.2	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	0.1	0.1	0.2	0.1	0.1	0.1	Diurnal Average	
	0.3	0.7	0.6	0.6	0.6	0.5	0.6	0.6	0.5	0.9	0.6	0.9	0.6	0.4	0.6	0.4	0.3	0.7	0.6	0.6	1.0	0.8	0.3	0.3	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation PF - Power Failure

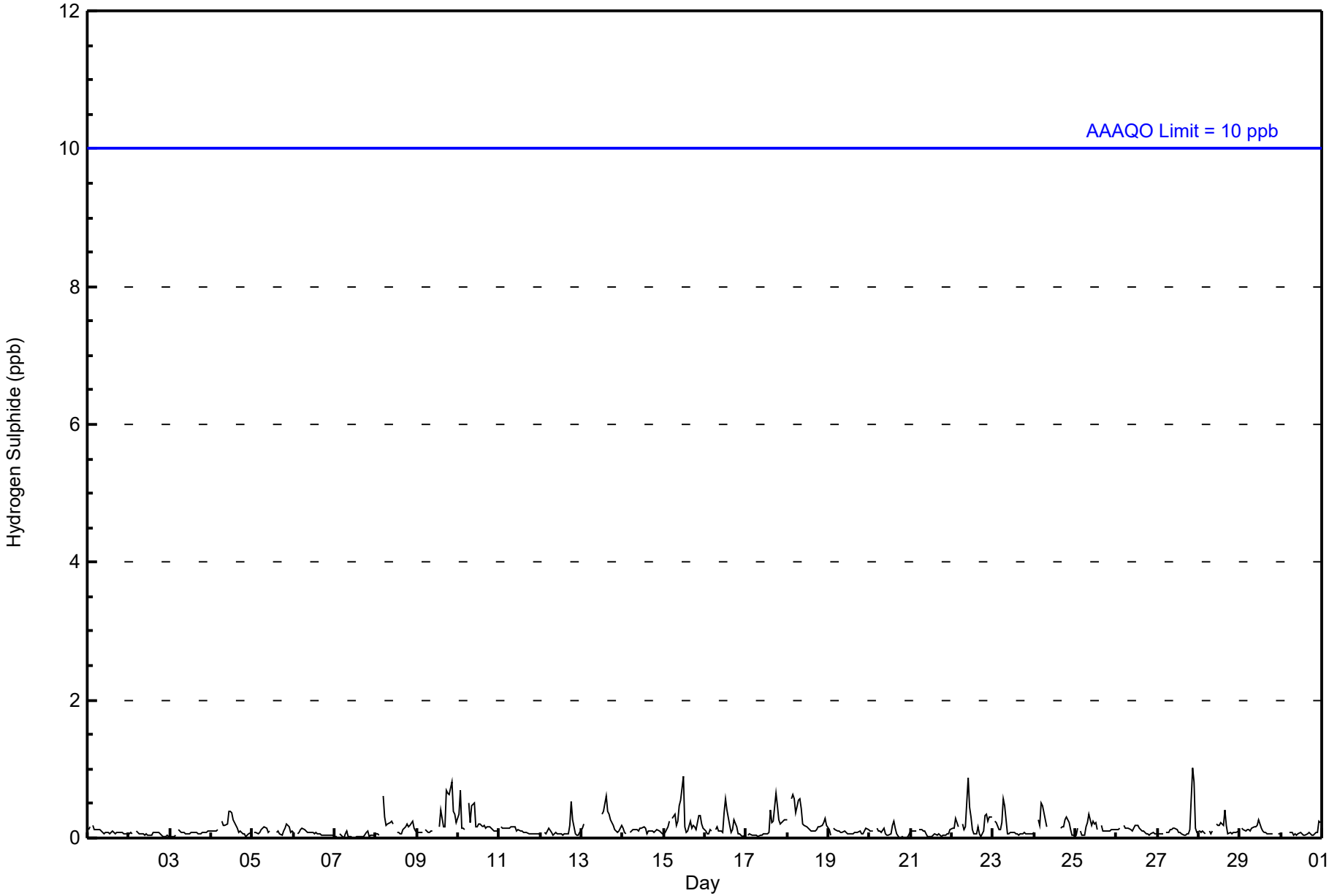
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

EBRT - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	660	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: 660

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

EBRT - September 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	51	17	6	10	17	35	84	77	85	40	35	34	56	17	49	44	657
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	51	17	6	10	17	35	84	77	85	40	35	34	56	17	49	44	657

Total Number of Valid Hours: 657

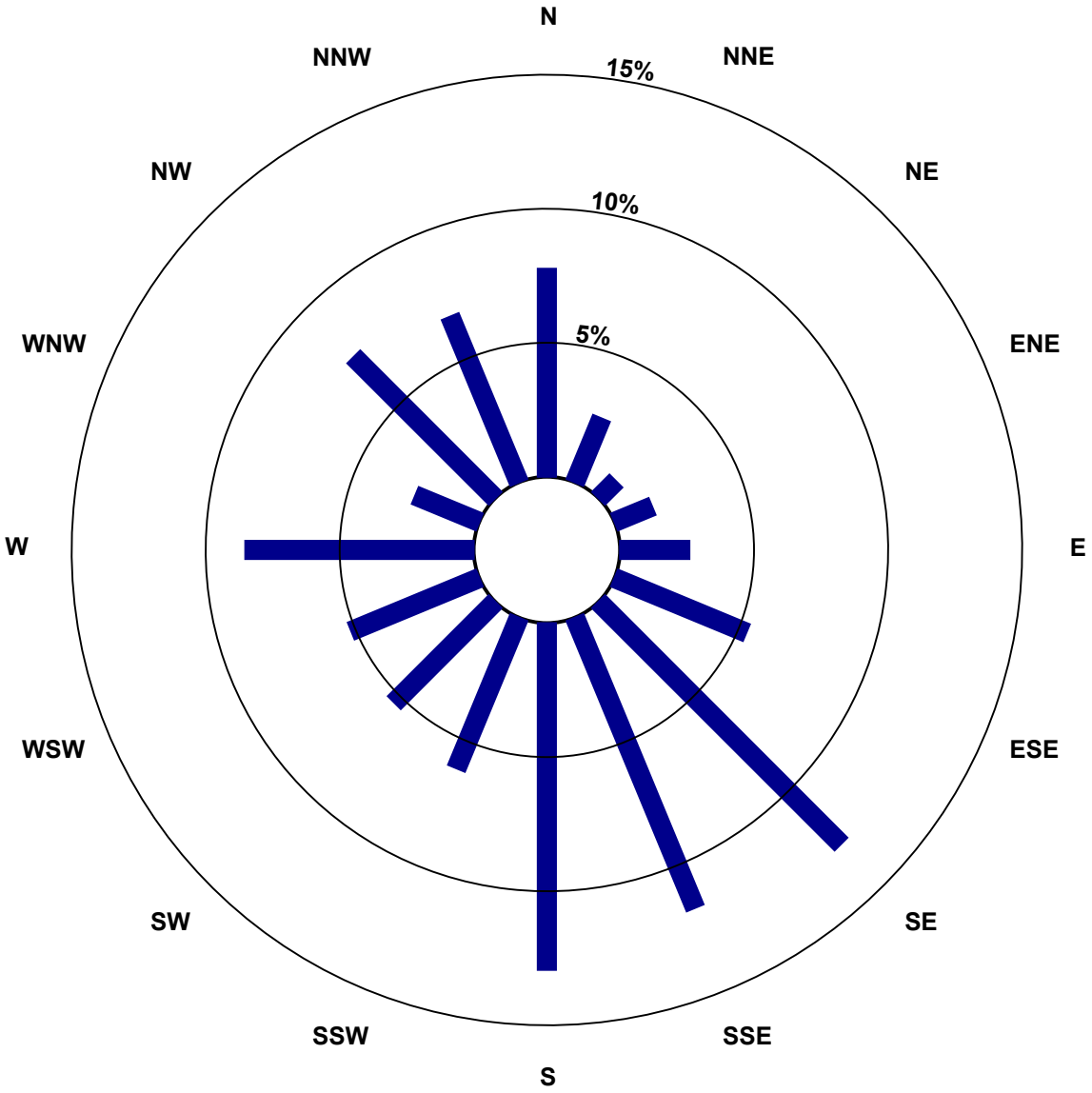
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Hydrogen Sulphide (H_2S) - ppb

EBRT



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

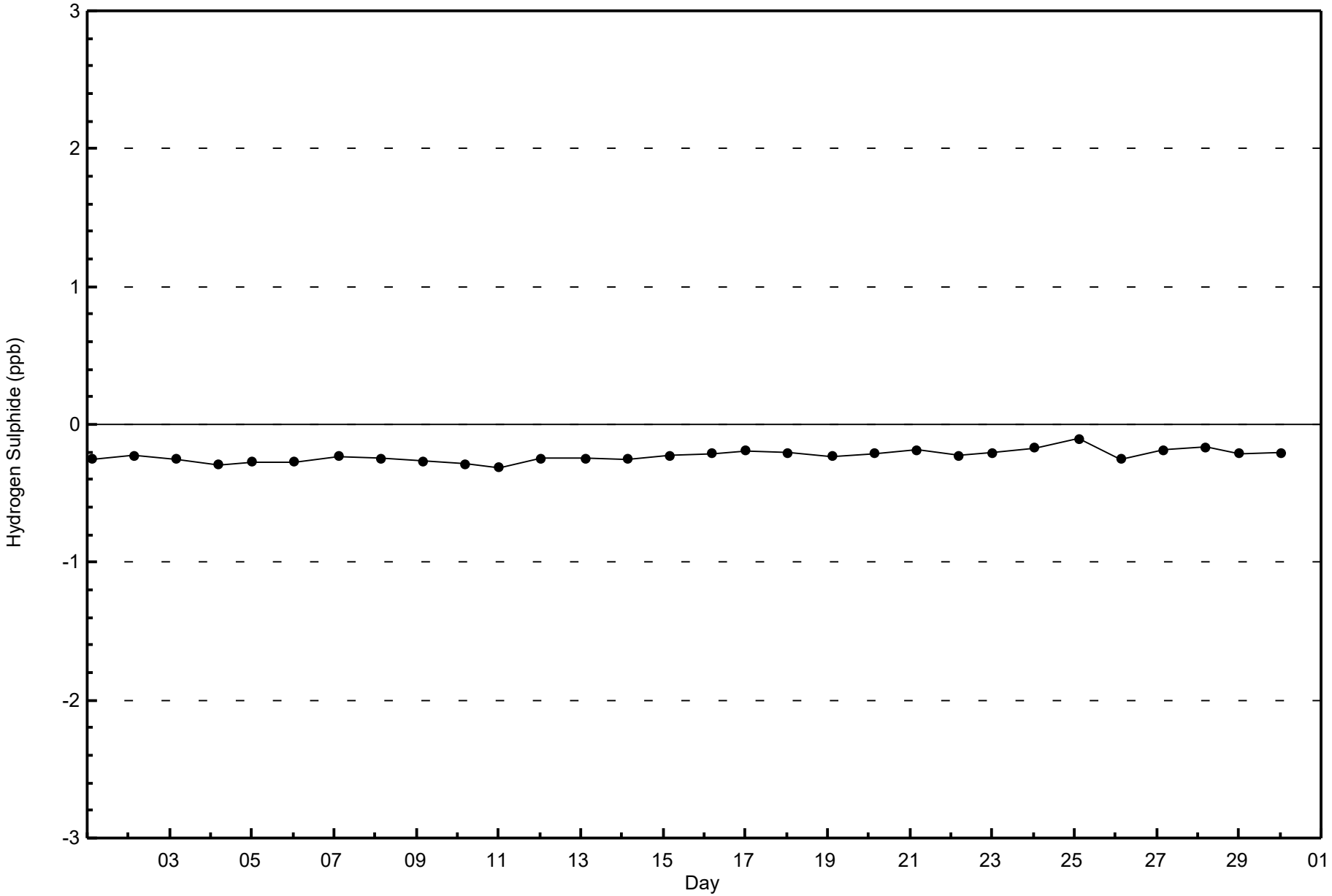
Total Number of Valid Hours: 657

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

EBRT - September 2026

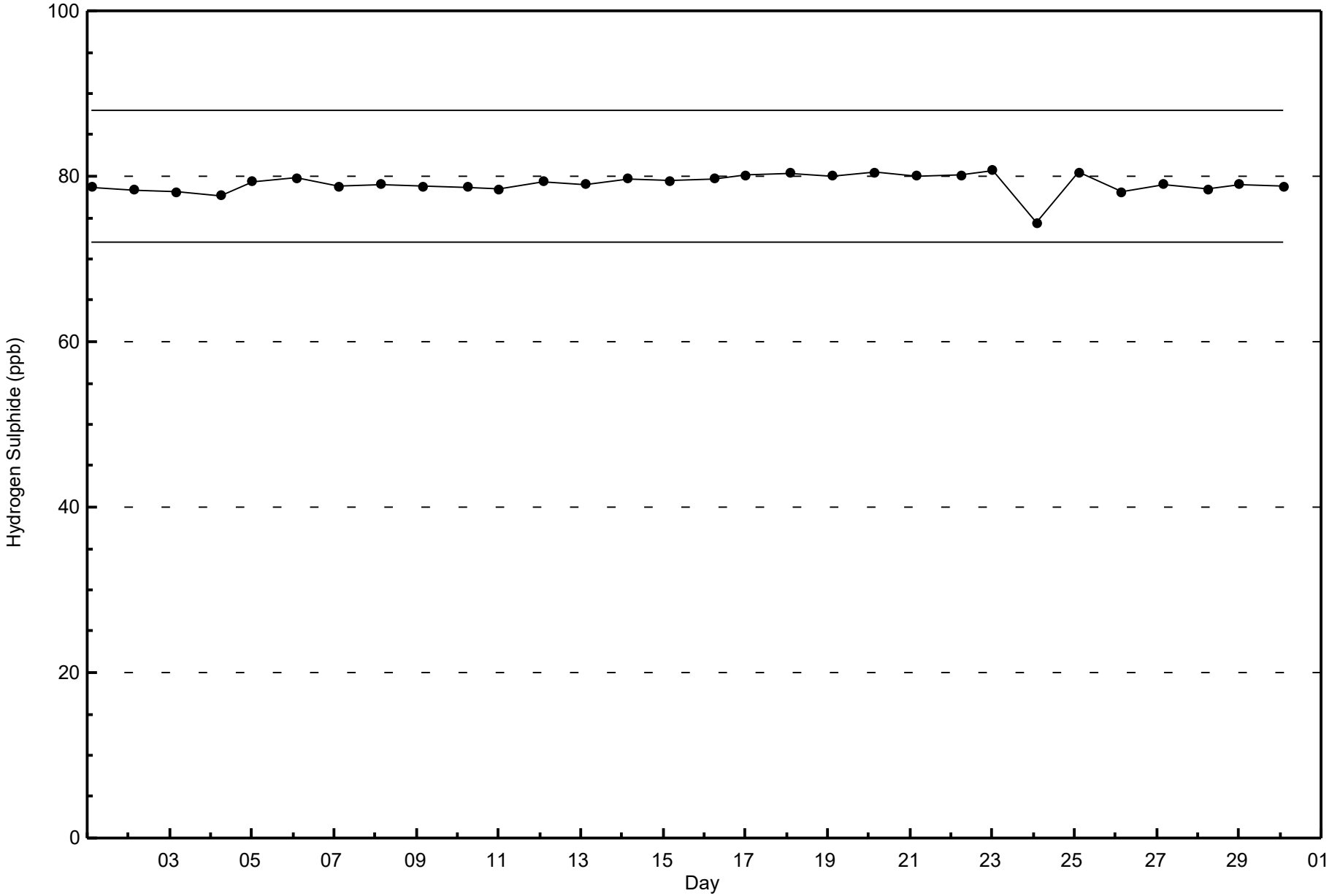


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

EBRT - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

EBRT - September 2026

Maximum Value: 53.6 ppb on Sep 23 07:00

Maximum Daily Average: 5.3 ppb on Sep 18

Minimum Value: 0.0 ppb on Sep 4 19:00

Minimum Daily Average: 0.0 ppb on Sep 26

Maximum Diurnal Average: 4.7 ppb at hour 8

Minimum Diurnal Average: 0.3 ppb at hour 17

Monthly Average: 1.18 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.2 Q_3 = 1.0 P_{90} = 2.5 P_{99} = 14.9

Hours in Service:	720
Hours of Data:	669
Hours of Missing Data:	51
Hours of Calibration:	35
Percent Operational Time:	97.8

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-Sep	0.5	1.7	2.2	0.2	0.8	Z	1.1	1.0	0.1	0.1	0.1	2.3	4.1	1.8	3.9	0.3	0.1	0.0	0.0	0.5	0.4	0.2	0.1	0.2	0.9	4.1
2-Sep	Z	0.2	0.5	0.6	0.3	0.4	0.4	1.2	2.1	0.8	1.8	0.9	1.3	0.9	2.0	0.7	0.4	0.3	0.5	0.4	0.4	0.4	0.6	0.3	0.8	2.1
3-Sep	0.4	Z	0.5	0.9	1.1	1.0	1.2	1.7	1.5	1.2	1.3	1.2	2.5	1.9	3.3	2.8	1.2	1.0	0.9	0.8	0.8	0.7	0.9	0.8	1.3	3.3
4-Sep	0.8	1.0	Z	0.9	1.4	0.9	2.1	0.0	0.4	0.2	1.4	1.7	1.3	1.1	0.9	0.8	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.1
5-Sep	0.0	0.0	0.0	Z	0.0	0.0	1.1	5.4	13.3	2.7	3.2	PF	PF	PF	7.3	8.6	1.2	0.4	0.2	0.0	0.0	0.0	0.2	0.1	2.2	13.3
6-Sep	0.1	0.3	0.2	0.2	Z	0.1	3.2	2.4	0.3	0.0	0.1	0.6	0.1	1.4	0.3	0.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.4	3.2
7-Sep	0.1	0.1	0.1	0.1	0.1	Z	3.0	11.7	1.0	0.0	0.0	0.2	0.2	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.7	11.7
8-Sep	Z	0.1	0.1	0.1	0.3	0.1	0.3	2.0	3.2	4.6	4.5	PF	0.0	0.2	0.2	0.2	0.5	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.8	4.6
9-Sep	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.6	0.6	0.8	PF	PF	PF	0.4	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8
10-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.4	0.5	0.3	0.0	0.0	0.2	0.5	0.2	0.6	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.6
11-Sep	0.1	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
12-Sep	0.0	0.0	0.0	0.0	Z	0.1	0.5	1.0	0.4	0.1	0.2	1.0	0.6	0.3	0.5	0.3	0.2	0.5	0.1	2.3	0.0	0.0	0.0	0.0	0.3	2.3
13-Sep	0.0	0.0	0.0	PF	PF	PF	PF	PF	PF	PF	PF	PF	0.7	0.4	0.2	0.2	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	--	0.7
14-Sep	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.6	0.3	0.4	1.0	0.7	0.6	0.6	0.2	0.8	0.6	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.3	1.0
15-Sep	0.0	Z	1.3	5.7	1.6	0.9	2.2	2.7	3.2	3.0	2.0	3.2	0.7	0.4	0.3	0.2	0.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	5.7
16-Sep	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.4	0.7	0.8	0.6	2.2	3.2	3.9	2.5	1.0	0.4	0.3	3.2	0.9	0.6	1.5	1.3	1.1	1.1	3.9
17-Sep	1.2	1.3	1.1	Z	0.9	0.9	0.3	0.0	0.3	0.2	0.4	0.1	0.1	0.6	4.2	2.2	1.7	2.1	4.6	8.1	4.3	1.8	4.0	4.8	2.0	8.1
18-Sep	4.6	4.9	3.9	1.1	Z	4.3	28.4	37.9	17.7	2.9	2.8	2.8	2.3	0.6	0.3	0.4	0.0	0.1	1.1	1.5	0.6	0.6	1.0	0.9	5.3	37.9
19-Sep	1.4	1.5	1.8	1.5	0.7	Z	1.0	0.5	0.3	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.0	0.4	1.8
20-Sep	Z	0.0	0.8	1.9	1.0	0.0	0.2	0.4	0.8	0.2	0.2	0.6	0.4	0.5	0.2	0.1	0.1	0.0	0.5	0.7	0.0	0.0	0.1	0.1	0.4	1.9
21-Sep	0.0	Z	0.2	1.3	1.1	1.6	1.7	0.4	1.0	0.2	0.1	0.0	0.1	0.1	1.2	0.3	0.9	0.7	0.4	0.1	0.0	0.0	0.0	1.5	0.6	1.7
22-Sep	1.6	0.5	Z	0.6	1.8	1.7	1.8	0.3	0.8	2.8	4.8	6.4	3.2	0.1	0.8	0.2	0.1	0.0	0.2	0.0	1.2	0.8	0.4	0.3	1.3	6.4
23-Sep	2.0	0.8	1.5	Z	5.2	3.0	53.6	39.7	0.5	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.5	1.5	2.5	1.2	1.5	2.3	2.5	0.8	5.2	53.6
24-Sep	0.9	4.6	4.4	6.4	Z	7.0	11.2	6.2	4.4	5.4	6.4	4.0	1.4	0.6	0.5	0.3	0.2	0.9	2.7	1.3	1.7	1.7	1.3	1.8	3.3	11.2
25-Sep	1.4	1.3	0.3	0.2	0.1	Z	13.6	18.5	33.8	13.2	C	C	C	C	C	C	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	33.8
26-Sep	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
27-Sep	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.6	1.7	2.2	1.9	1.1	0.5	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	2.2
28-Sep	0.0	0.2	Z	2.6	1.4	2.8	3.2	0.3	0.4	0.5	0.8	0.6	0.3	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2	1.0	0.7	3.2
29-Sep	0.9	2.0	1.5	Z	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.5	0.4	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.0
30-Sep	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
	0.6	0.8	0.8	1.0	0.8	1.0	4.5	4.7	3.1	1.5	1.3	1.2	0.9	0.6	1.0	0.7	0.3	0.3	0.6	0.6	0.4	0.4	0.4	0.5	Diurnal Average	
	4.6	4.9	4.4	6.4	5.2	7.0	53.6	39.7	33.8	13.2	6.4	6.4	4.1	3.9	7.3	8.6	1.7	2.1	4.6	8.1	4.3	2.3	4.0	4.8	Diurnal Maximum	

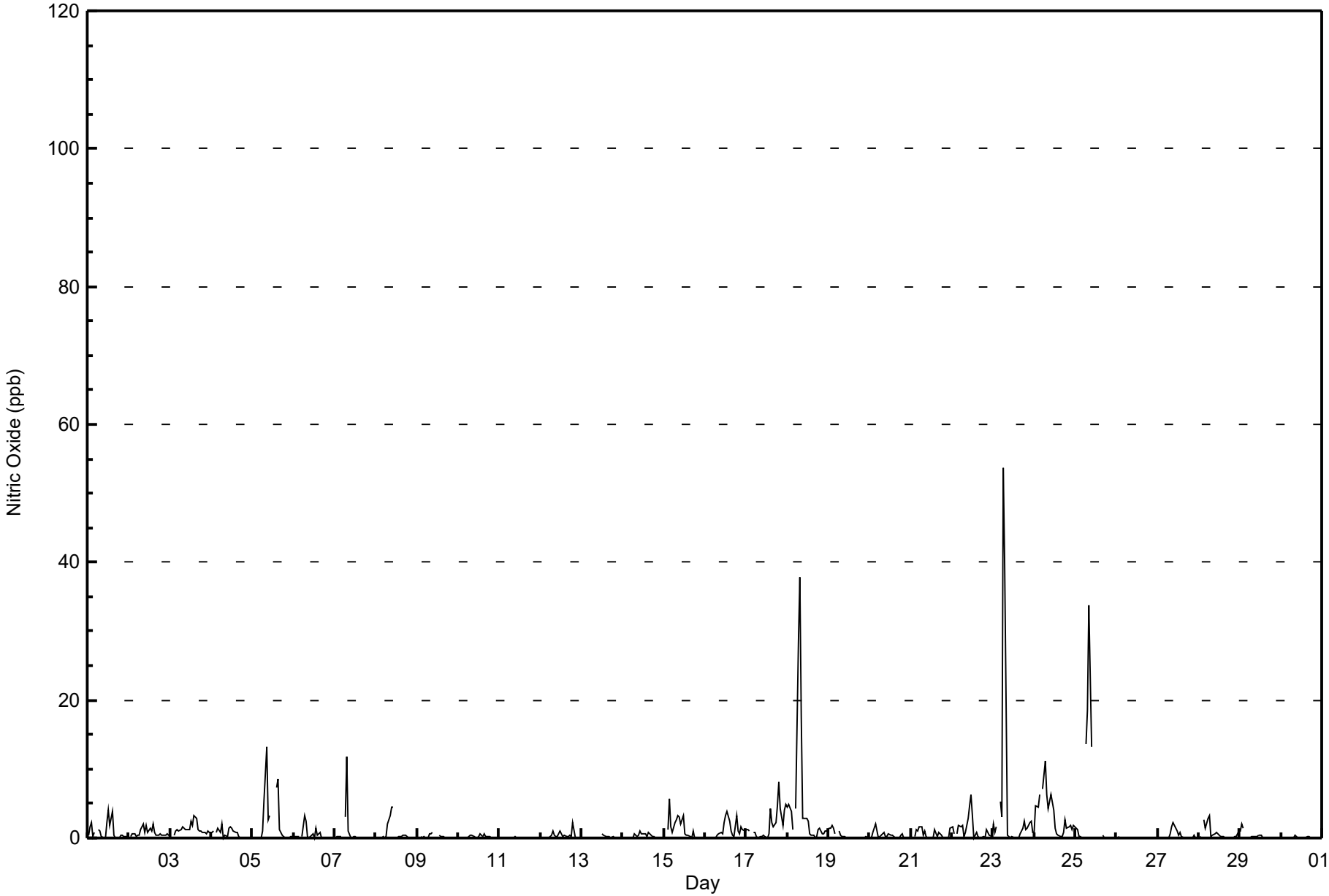
Z - zerospan C - Calibration PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

EBRT - September 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	664	99.25	99.25
21 - 40	4	0.60	99.85
11 - 80	1	0.15	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 669

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

EBRT - September 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	50	17	5	4	14	34	83	77	86	42	37	39	58	19	49	46	660
21 - 40	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	4
11 - 80	0	0	0	0	0	1	0	0	0	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	50	17	6	4	16	36	83	77	86	42	37	39	58	19	49	46	665

Total Number of Valid Hours: 665

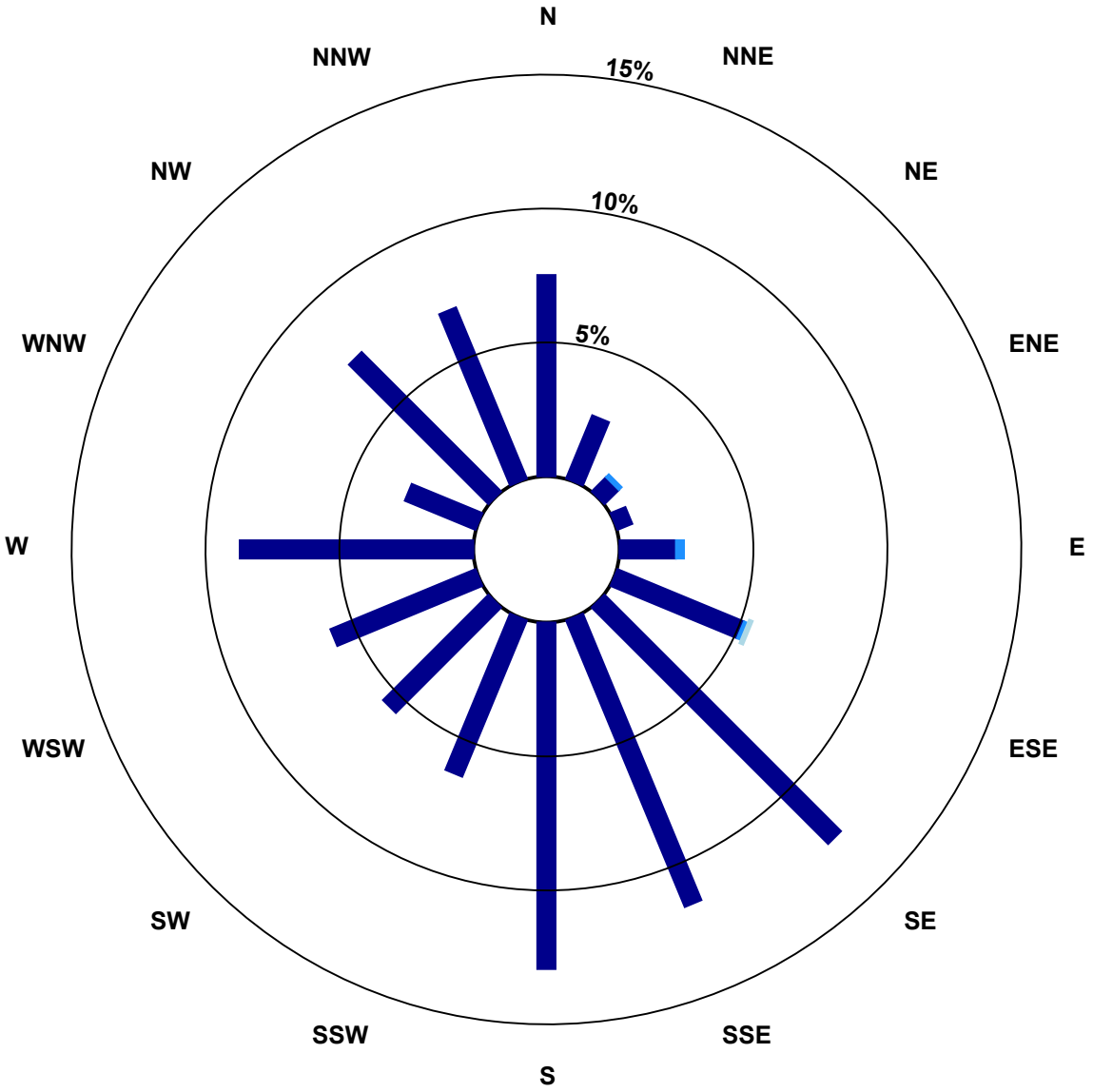
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitric Oxide (NO) - ppb

EBRT



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

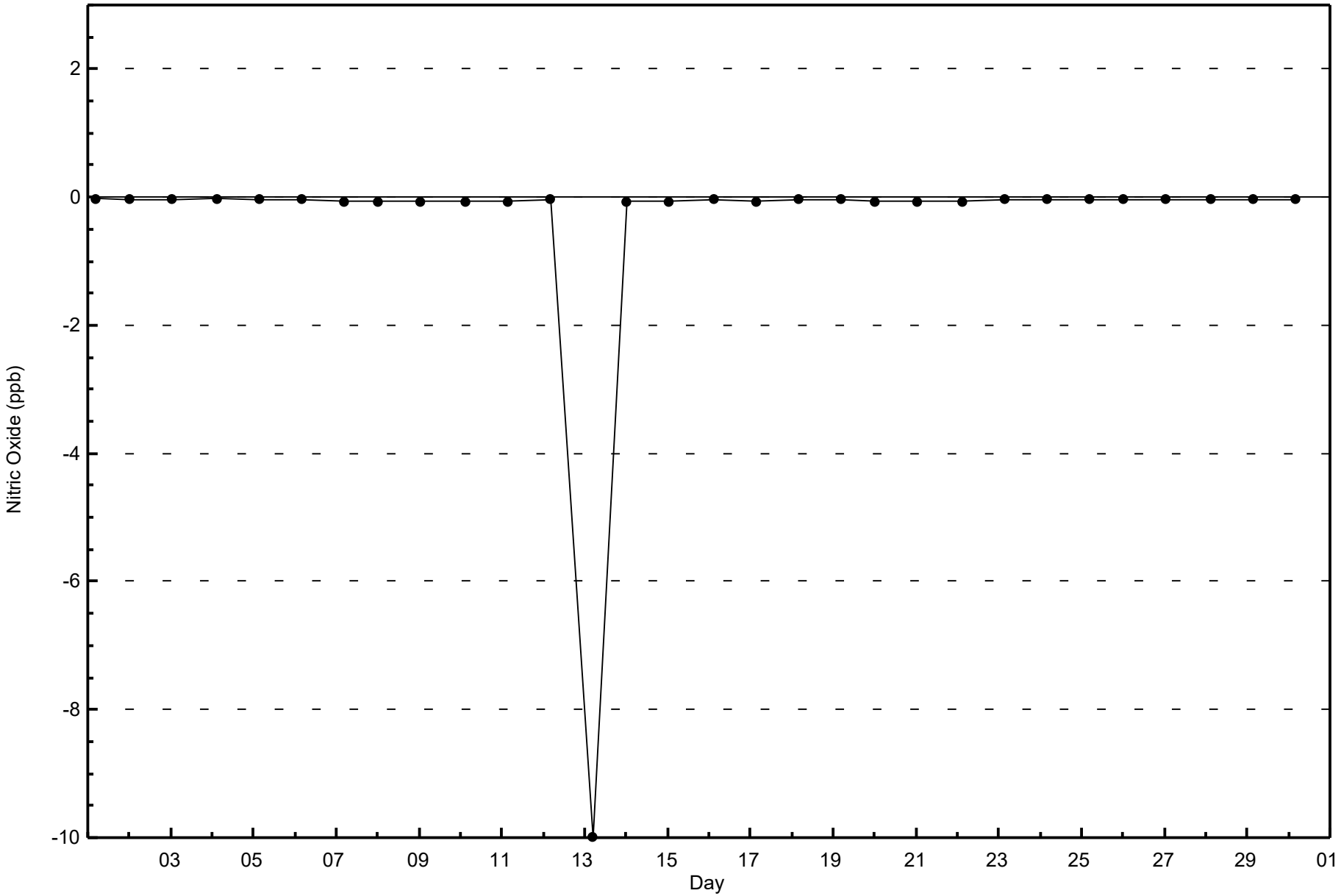
Total Number of Valid Hours: 665

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

EBRT - September 2026

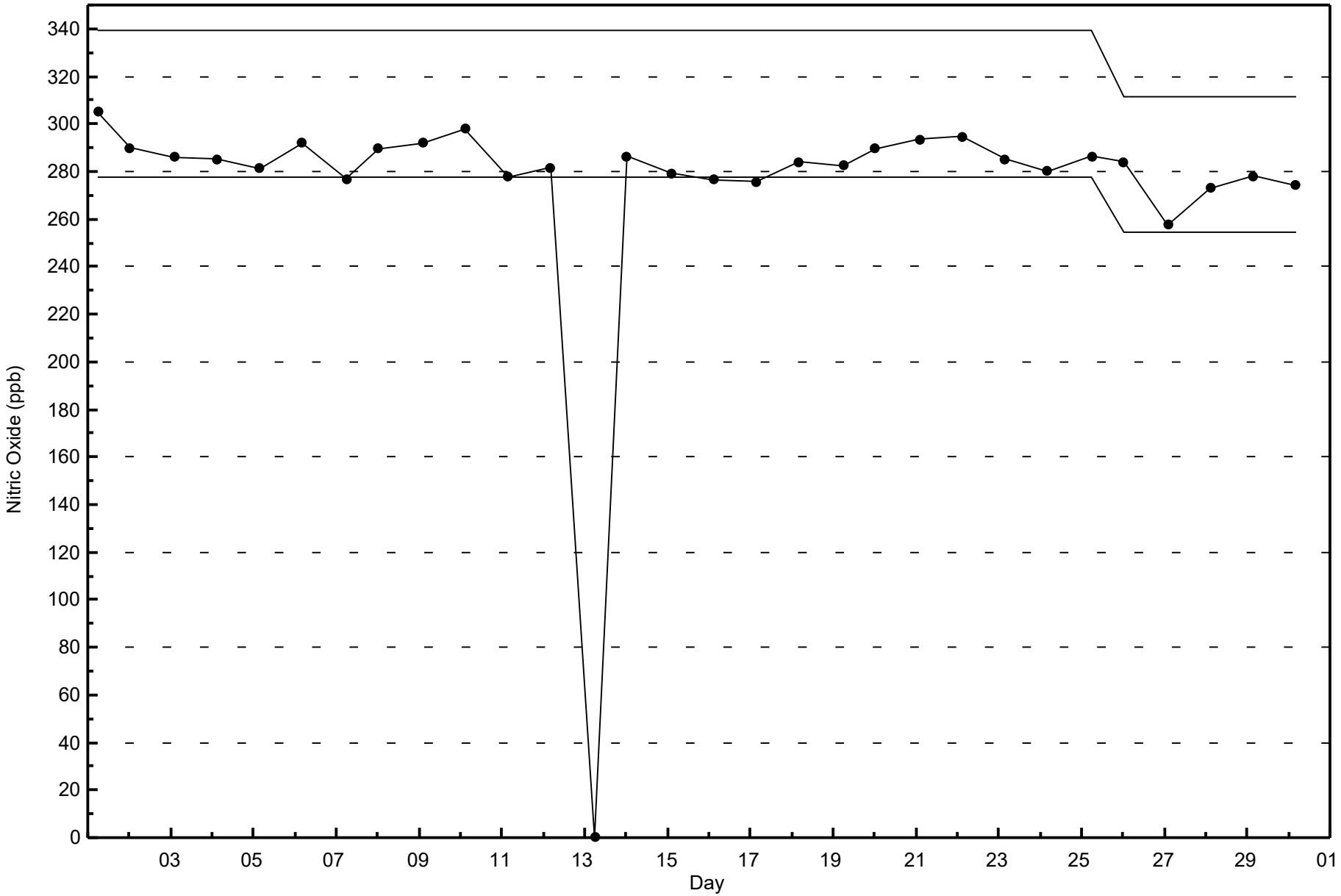


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

EBRT - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

EBRT - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 18.4 ppb on Sep 23 08:00 Maximum Daily Average: 4.9 ppb on Sep 24

Minimum Value: 0.0 ppb on Sep 7 08:00 Minimum Daily Average: 0.2 ppb on Sep 11
Maximum Diurnal Average: 3.3 ppb at hour 7 Minimum Diurnal Average: 1.4 ppb at hour 17
Monthly Average: 2.11 ppb Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.6 Median = 1.4 Q_3 = 2.7 P_{90} = 4.6 P_{99} = 13.2

Hours in Service:	720
Hours of Data:	669
Hours of Missing Data:	51
Hours of Calibration:	35
Percent Operational Time:	97.8

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-Sep	2.0	3.8	4.9	1.6	2.2	Z	2.4	0.9	0.8	0.5	0.4	1.6	6.0	3.3	5.4	0.5	0.3	0.4	0.3	1.1	0.9	0.4	0.4	0.5	1.8	6.0
2-Sep	Z	0.7	0.9	1.1	0.7	0.9	0.8	1.4	1.2	0.8	1.7	0.7	1.0	0.8	1.9	0.9	0.8	0.9	1.2	1.0	1.0	1.0	1.2	0.7	1.0	1.9
3-Sep	0.6	Z	0.9	1.6	1.8	1.6	1.4	1.8	1.0	0.7	1.4	1.5	2.6	2.4	2.9	3.0	1.7	1.9	1.9	2.2	1.8	1.8	1.8	1.5	1.7	3.0
4-Sep	1.7	2.4	Z	1.8	2.8	2.9	3.1	0.4	1.7	1.3	1.7	1.9	1.7	1.6	1.5	1.6	1.1	1.4	0.7	0.2	0.2	1.6	1.1	1.0	1.5	3.1
5-Sep	1.2	0.3	0.5	Z	0.7	1.3	0.8	1.6	8.0	3.4	2.3	PF	PF	PF	1.2	4.6	2.1	2.2	3.2	2.7	1.2	0.6	0.6	0.5	2.0	8.0
6-Sep	0.3	0.6	0.4	1.1	Z	1.4	2.3	1.7	0.3	0.2	0.3	0.4	0.2	2.9	0.5	0.8	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.7	2.9
7-Sep	0.1	0.2	0.2	0.2	0.2	Z	1.3	0.0	0.4	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.3	0.7	0.8	0.5	0.3	0.3	0.2	0.2	0.3	1.3
8-Sep	Z	0.3	0.5	5.1	10.8	7.2	2.2	5.2	6.3	5.7	5.4	PF	0.3	0.1	0.3	1.0	2.3	3.4	2.4	1.4	1.7	1.9	1.3	0.9	3.0	10.8
9-Sep	0.7	Z	1.1	0.7	0.7	0.6	0.6	0.7	0.6	1.5	PF	PF	PF	1.0	0.9	0.9	0.9	1.0	1.2	1.7	1.9	1.8	3.1	1.8	1.2	3.1
10-Sep	1.8	1.8	Z	3.0	0.7	2.0	2.2	2.8	3.1	2.1	0.5	0.4	1.5	2.2	0.7	2.0	2.2	3.2	3.3	0.2	0.2	0.2	0.2	0.2	1.6	3.3
11-Sep	0.1	0.2	0.1	Z	0.3	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	0.1	0.3	0.3	0.2	0.3
12-Sep	0.4	0.4	1.6	2.9	Z	3.1	4.2	3.3	1.1	0.3	0.5	2.1	1.5	0.9	1.2	0.9	1.0	2.9	2.4	3.8	1.1	2.7	3.9	3.6	2.0	4.2
13-Sep	3.2	4.6	4.9	PF	PF	PF	PF	PF	PF	PF	PF	PF	1.8	1.5	1.3	1.1	1.1	0.8	3.4	0.4	0.2	0.3	0.6	1.2	--	4.9
14-Sep	Z	0.6	0.3	0.2	0.5	2.6	3.2	4.1	1.3	1.0	2.4	1.8	1.5	1.4	0.4	2.7	2.9	2.6	3.5	5.7	4.4	0.6	0.4	3.3	2.1	5.7
15-Sep	3.8	Z	9.9	14.0	9.8	5.4	6.2	4.5	4.1	4.1	3.3	4.3	1.7	1.5	1.5	1.4	1.1	2.1	1.5	0.4	0.7	2.1	3.0	5.1	4.0	14.0
16-Sep	1.9	1.0	Z	0.5	0.9	2.2	2.0	3.6	2.6	2.5	1.8	5.0	5.6	5.8	3.5	2.0	2.1	3.1	4.6	2.4	1.5	1.7	1.5	1.2	2.6	5.8
17-Sep	1.3	1.1	1.0	Z	0.9	0.8	0.5	0.5	0.6	0.6	0.8	0.7	0.7	2.9	9.2	7.8	7.4	11.7	14.0	17.1	14.2	7.0	3.1	3.4	4.7	17.1
18-Sep	2.1	3.5	5.4	4.6	Z	2.5	8.7	12.8	12.1	3.2	2.3	2.6	2.3	1.5	1.2	0.7	0.6	1.2	1.8	2.5	2.6	4.3	5.4	4.5	3.8	12.8
19-Sep	4.3	4.0	4.3	3.9	2.8	Z	2.4	1.4	0.9	0.7	0.5	0.5	0.4	0.5	0.6	0.7	0.7	0.8	0.7	0.7	0.7	0.9	1.3	1.2	1.5	4.3
20-Sep	Z	1.7	3.0	4.8	2.6	3.1	2.4	1.9	2.2	0.8	0.7	1.8	1.5	1.8	1.0	0.6	0.8	1.1	2.3	2.6	0.6	0.4	0.7	1.1	1.7	4.8
21-Sep	1.4	Z	1.9	4.0	3.6	4.2	2.8	1.0	1.2	0.9	0.4	0.5	0.7	0.6	0.2	0.9	2.5	1.8	0.9	0.6	0.8	0.9	0.9	5.1	1.6	5.1
22-Sep	5.5	3.5	Z	2.9	4.6	6.2	4.0	1.6	2.8	7.4	9.2	10.8	5.0	0.7	2.7	1.3	0.9	0.8	1.4	1.4	3.4	1.9	1.4	1.8	3.5	10.8
23-Sep	1.9	1.6	2.1	Z	4.1	3.0	14.1	18.4	0.4	0.6	0.4	0.8	0.7	0.4	0.4	0.2	0.9	1.9	3.0	1.7	1.8	3.0	2.8	1.6	2.9	18.4
24-Sep	2.3	5.9	2.9	4.1	Z	13.1	8.3	8.2	6.1	6.9	8.7	6.9	2.8	1.5	1.5	1.4	1.3	2.7	4.7	3.4	4.4	5.9	4.8	4.8	4.9	13.1
25-Sep	4.0	4.5	3.2	3.2	4.8	Z	7.7	8.9	13.4	6.3	C	C	C	C	C	C	0.5	0.3	0.3	0.4	0.6	0.5	0.3	0.7	--	13.4
26-Sep	Z	1.8	0.6	1.6	1.7	1.5	2.4	1.3	0.4	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.6	2.4
27-Sep	0.1	Z	2.0	0.6	0.9	1.9	2.9	2.1	2.4	2.5	2.5	1.7	1.0	1.5	0.7	0.4	0.5	1.0	0.8	1.4	4.0	5.2	9.3	10.8	2.4	10.8
28-Sep	8.2	6.1	Z	4.6	3.5	3.9	3.2	1.3	0.8	1.1	1.6	1.4	1.0	0.8	0.7	0.9	1.9	0.8	0.5	0.5	0.4	0.6	0.9	1.8	2.0	8.2
29-Sep	2.1	3.5	3.2	Z	1.6	2.8	1.9	2.5	2.3	1.7	1.8	2.3	1.6	0.4	0.3	0.4	0.2	0.2	0.2	0.3	1.0	0.4	0.4	0.2	1.4	3.5
30-Sep	1.6	1.7	1.6	2.2	Z	1.5	2.7	1.7	4.4	1.1	0.2	0.2	0.2	0.5	0.7	1.1	2.7	1.0	1.1	3.3	2.1	0.6	0.6	1.4	1.5	4.4
	2.1	2.2	2.3	2.9	2.6	3.0	3.3	3.3	2.9	2.0	1.9	2.0	1.6	1.4	1.5	1.4	1.4	1.8	2.1	2.0	1.8	1.6	1.7	2.0	Diurnal Average	
	8.2	6.1	9.9	14.0	10.8	13.1	14.1	18.4	13.4	7.4	9.2	10.8	6.0	5.8	9.2	7.8	7.4	11.7	14.0	17.1	14.2	7.0	9.3	10.8	Diurnal Maximum	

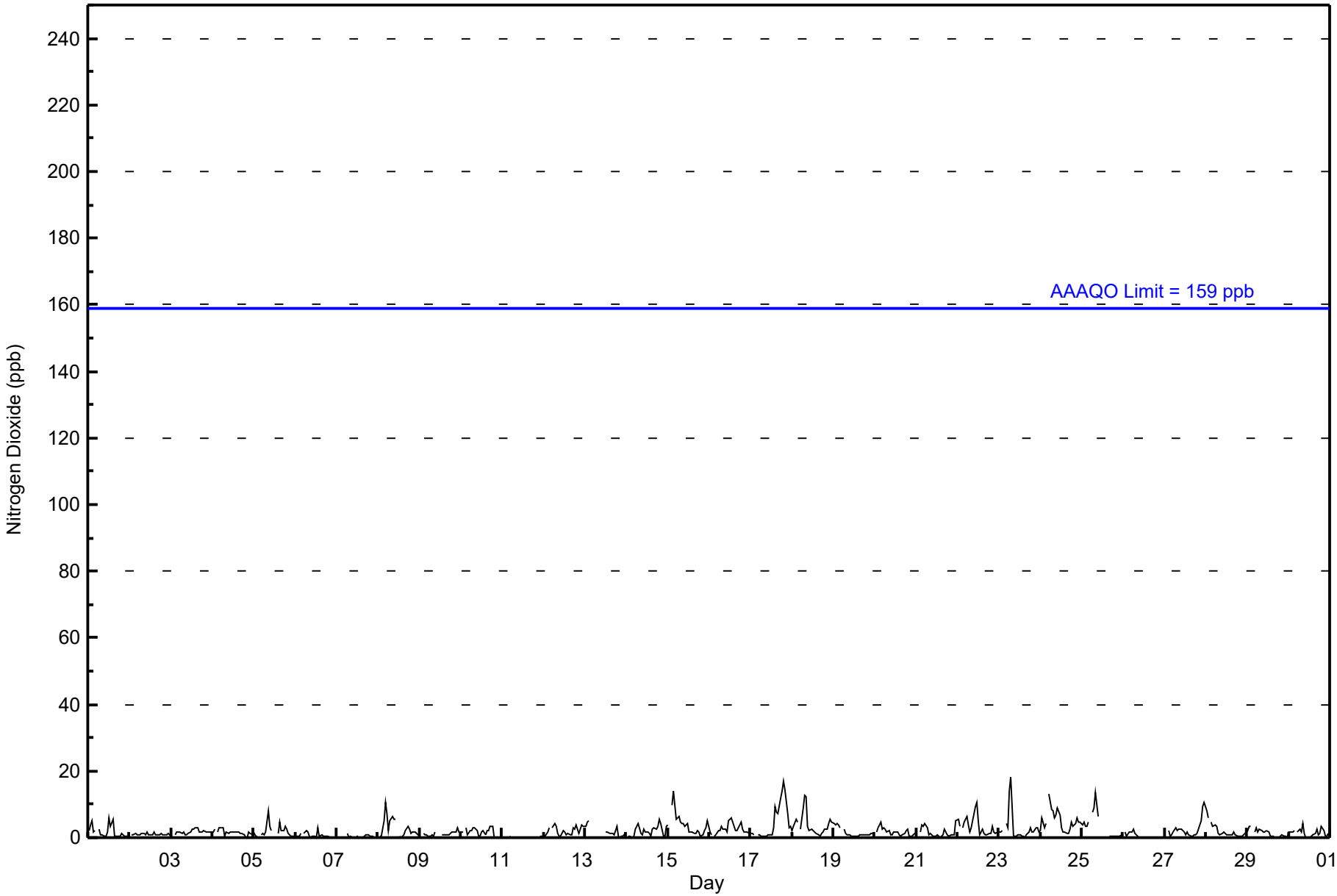
Z - zerospan C - Calibration PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

EBRT - September 2026



Nitrogen Dioxide (NO_2) - ppb

EBRT - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	669	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: 669

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

EBRT - September 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	50	17	6	4	16	36	83	77	86	42	37	39	58	19	49	46	665
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	50	17	6	4	16	36	83	77	86	42	37	39	58	19	49	46	665

Total Number of Valid Hours: 665

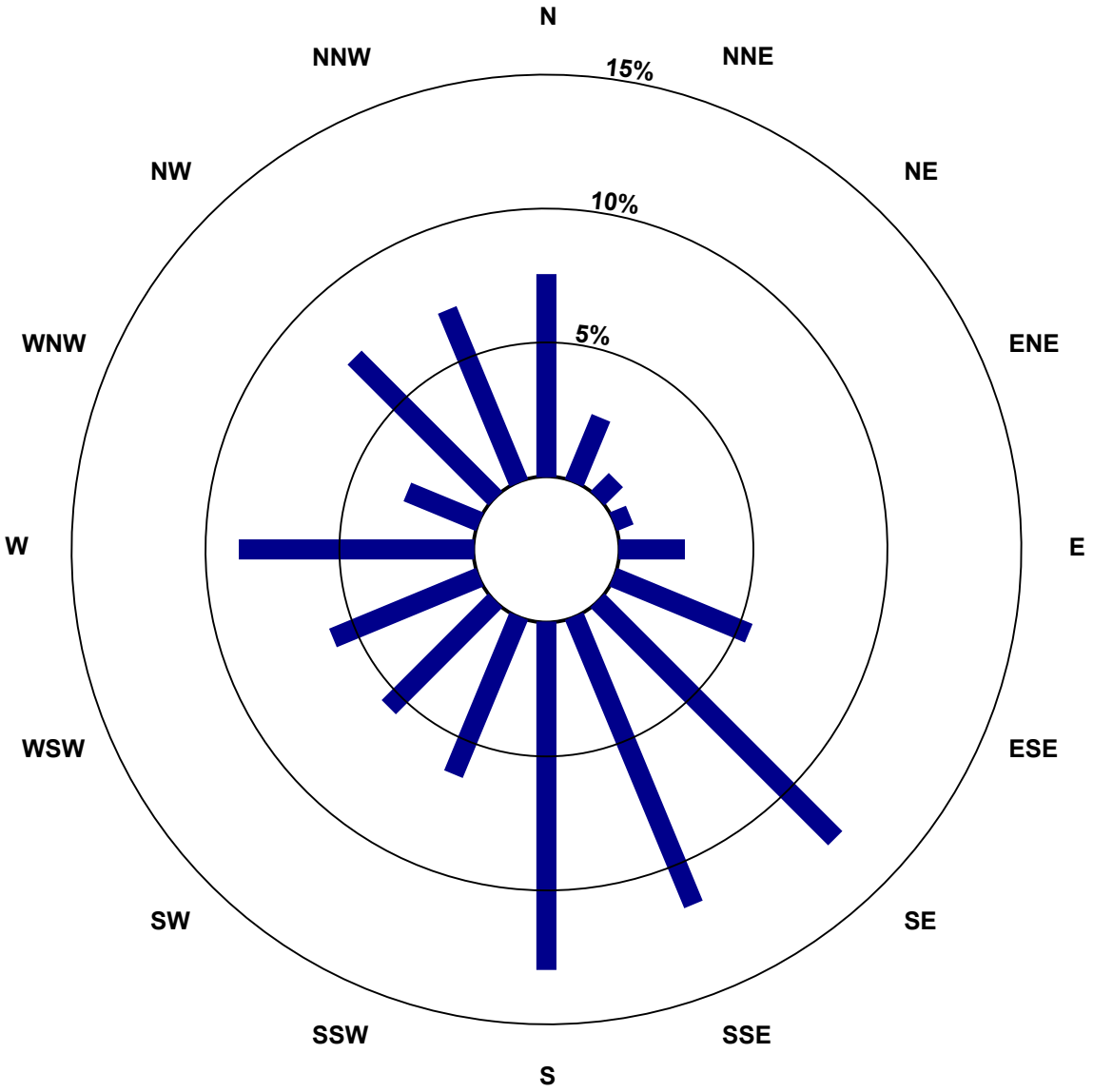
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Dioxide (NO_2) - ppb

EBRT



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

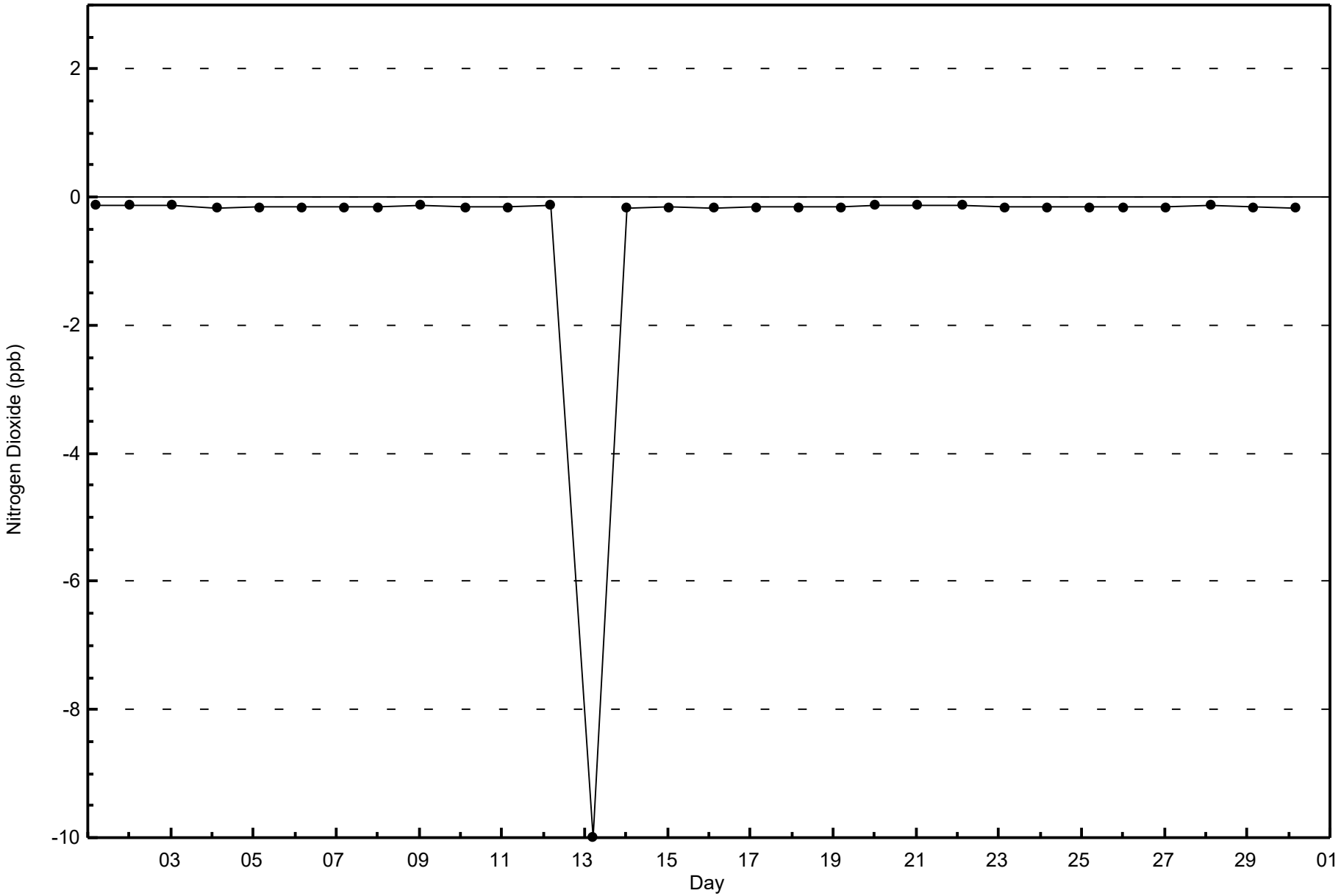
Total Number of Valid Hours: 665

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

EBRT - September 2026

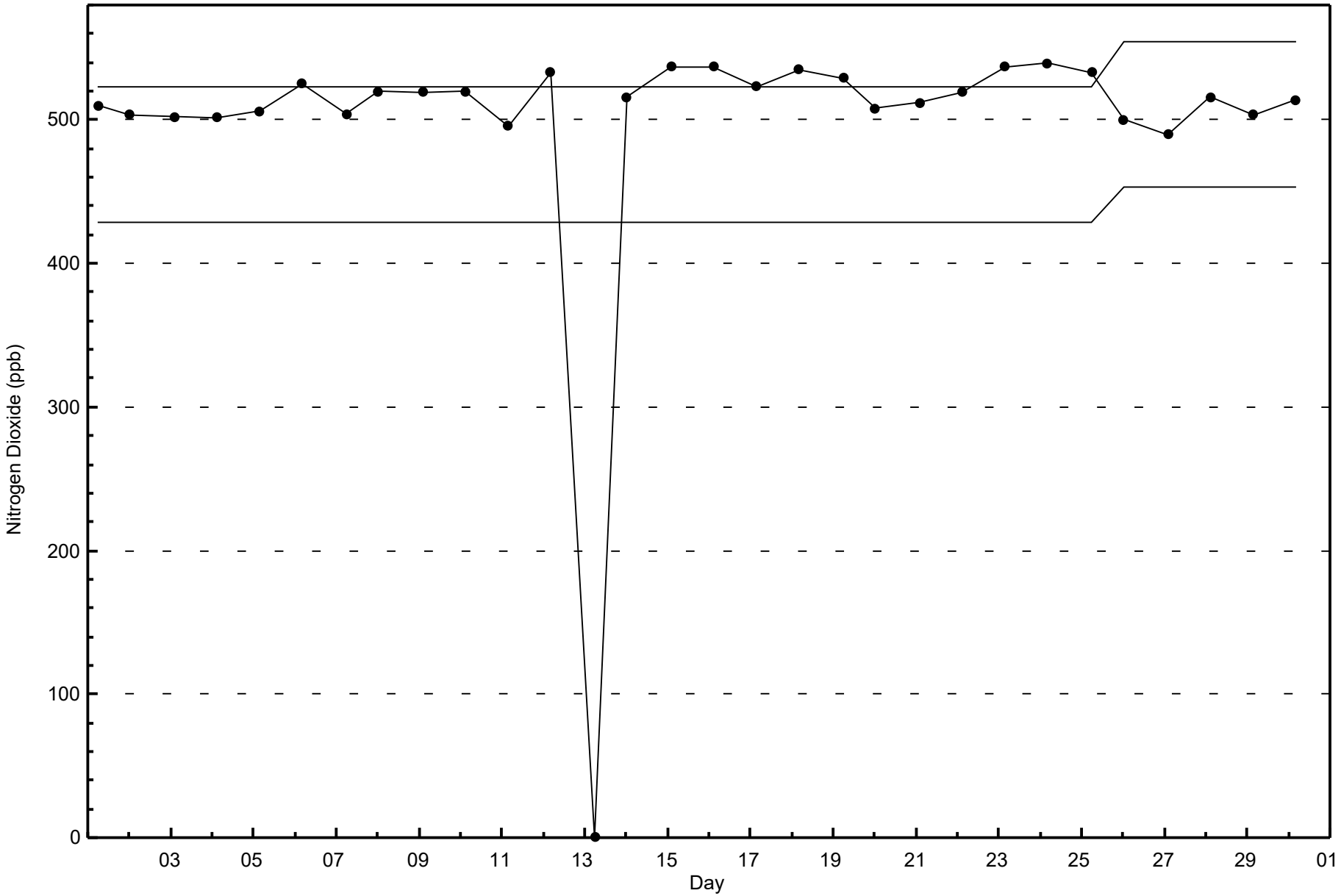


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

EBRT - September 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

EBRT - September 2026

Maximum Value: 67.7 ppb on Sep 23 07:00

Maximum Daily Average: 9.1 ppb on Sep 18

Minimum Value: 0.1 ppb on Sep 11 22:00

Minimum Daily Average: 0.2 ppb on Sep 11

Maximum Diurnal Average: 8.0 ppb at hour 8

Minimum Diurnal Average: 1.7 ppb at hour 17

Monthly Average: 3.28 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.3 Q_1 = 0.7 Median = 1.7 Q_3 = 3.5 P_{90} = 7.1 P_{99} = 25.9

Hours in Service:	720
Hours of Data:	669
Hours of Missing Data:	51
Hours of Calibration:	35
Percent Operational Time:	97.8

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-Sep	2.5	5.5	7.1	1.8	3.0	Z	3.5	1.9	0.9	0.6	0.5	3.9	10.1	5.1	9.3	0.8	0.4	0.4	0.3	1.6	1.3	0.6	0.5	0.7	2.7	10.1
2-Sep	Z	0.9	1.4	1.7	1.0	1.3	1.2	2.6	3.3	1.6	3.5	1.6	2.3	1.7	3.9	1.6	1.2	1.2	1.7	1.4	1.4	1.4	1.8	1.0	1.8	3.9
3-Sep	1.0	Z	1.4	2.5	2.9	2.6	2.6	3.5	2.5	1.9	2.7	2.7	5.1	4.3	6.2	5.8	2.9	2.9	2.8	3.0	2.6	2.5	2.7	2.3	3.0	6.2
4-Sep	2.5	3.4	Z	2.7	4.2	3.8	5.2	0.4	2.1	1.5	3.1	3.6	3.0	2.7	2.4	2.4	1.3	1.5	0.7	0.2	0.2	1.6	1.1	1.0	2.2	5.2
5-Sep	1.2	0.3	0.5	Z	0.7	1.3	1.9	7.0	21.3	6.1	5.5	PF	PF	PF	8.5	13.2	3.3	2.6	3.4	2.7	1.2	0.6	0.8	0.6	4.1	21.3
6-Sep	0.4	0.9	0.6	1.3	Z	1.5	5.5	4.1	0.6	0.2	0.4	1.0	0.3	4.3	0.8	1.6	0.4	0.3	0.3	0.4	0.2	0.2	0.2	0.2	1.1	5.5
7-Sep	0.2	0.3	0.3	0.3	0.3	Z	4.3	11.7	1.4	0.2	0.2	0.4	0.6	0.2	0.3	0.2	0.3	0.8	0.8	0.5	0.3	0.3	0.2	0.3	1.1	11.7
8-Sep	Z	0.4	0.6	5.2	11.1	7.3	2.5	7.2	9.5	10.3	9.9	PF	0.3	0.3	0.5	1.2	2.8	3.8	2.5	1.4	1.7	1.9	1.3	0.9	3.8	11.1
9-Sep	0.7	Z	1.2	0.8	0.8	0.7	0.7	1.3	1.2	2.3	PF	PF	PF	1.4	1.1	1.1	1.0	1.1	1.2	1.7	1.9	1.8	3.1	1.8	1.3	3.1
10-Sep	1.8	1.8	Z	3.0	0.7	2.0	2.3	3.2	3.6	2.4	0.5	0.4	1.7	2.7	0.9	2.6	2.5	3.4	3.4	0.2	0.2	0.2	0.2	0.2	1.7	3.6
11-Sep	0.2	0.2	0.2	Z	0.4	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	0.1	0.2	0.1	0.1	0.3	0.3	0.2	0.4
12-Sep	0.4	0.4	1.6	2.9	Z	3.2	4.7	4.3	1.5	0.4	0.7	3.1	2.1	1.2	1.7	1.2	1.2	3.4	2.5	6.1	1.1	2.7	3.9	3.6	2.3	6.1
13-Sep	3.2	4.6	4.9	PF	PF	PF	PF	PF	PF	PF	PF	PF	2.5	1.9	1.5	1.3	1.3	0.9	3.6	0.4	0.2	0.3	0.6	1.2	--	4.9
14-Sep	Z	0.6	0.3	0.2	0.5	2.6	3.3	4.7	1.6	1.4	3.4	2.5	2.1	2.0	0.6	3.5	3.5	2.8	3.6	5.7	4.4	0.6	0.4	3.3	2.3	5.7
15-Sep	3.8	Z	11.2	19.7	11.4	6.3	8.4	7.2	7.3	7.1	5.3	7.5	2.4	1.9	1.8	1.6	1.2	3.1	1.5	0.4	0.7	2.1	3.0	5.1	5.2	19.7
16-Sep	1.9	1.0	Z	0.5	0.9	2.2	2.1	4.0	3.3	3.3	2.4	7.2	8.8	9.7	6.0	3.0	2.5	3.4	7.8	3.3	2.1	3.2	2.8	2.3	3.6	9.7
17-Sep	2.5	2.4	2.1	Z	1.8	1.7	0.8	0.5	0.9	0.8	1.2	0.8	0.8	3.5	13.4	10.0	9.1	13.8	18.6	25.2	18.5	8.8	7.1	8.2	6.6	25.2
18-Sep	6.7	8.4	9.3	5.7	Z	6.8	37.1	50.7	29.8	6.1	5.1	5.4	4.6	2.1	1.5	1.1	0.6	1.3	2.9	4.0	3.2	4.9	6.4	5.4	9.1	50.7
19-Sep	5.7	5.5	6.1	5.4	3.5	Z	3.4	1.9	1.2	0.8	0.6	0.5	0.5	0.5	0.7	0.8	0.7	0.8	0.7	0.7	0.8	1.0	1.5	1.2	1.9	6.1
20-Sep	Z	1.7	3.8	6.7	3.6	3.1	2.6	2.3	3.0	1.0	0.9	2.4	1.9	2.3	1.2	0.7	0.9	1.1	2.8	3.3	0.6	0.4	0.8	1.2	2.1	6.7
21-Sep	1.4	Z	2.1	5.3	4.7	5.8	4.5	1.4	2.2	1.1	0.5	0.5	0.8	0.7	1.4	1.2	3.4	2.5	1.3	0.7	0.8	0.9	0.9	6.6	2.2	6.6
22-Sep	7.1	4.0	Z	3.5	6.4	7.9	5.8	1.9	3.6	10.2	14.0	17.2	8.2	0.8	3.5	1.5	1.0	0.8	1.6	1.4	4.6	2.7	1.8	2.1	4.9	17.2
23-Sep	3.9	2.4	3.6	Z	9.3	6.0	67.7	58.1	0.9	0.8	0.5	0.9	0.8	0.4	0.5	0.2	1.4	3.4	5.5	2.9	3.3	5.3	5.3	2.4	8.1	67.7
24-Sep	3.2	10.5	7.3	10.5	Z	20.1	19.5	14.4	10.5	12.3	15.1	10.9	4.2	2.1	2.0	1.7	1.5	3.6	7.4	4.7	6.1	7.6	6.1	6.6	8.2	20.1
25-Sep	5.4	5.8	3.5	3.4	4.9	Z	21.3	27.4	47.2	19.5	C	C	C	C	C	C	0.9	0.3	0.3	0.4	0.6	0.5	0.3	0.7	--	47.2
26-Sep	Z	2.0	0.7	1.6	1.7	1.5	2.4	1.3	0.4	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.6	2.4
27-Sep	0.1	Z	2.0	0.6	0.9	1.9	3.0	2.7	4.1	4.7	4.4	2.8	1.5	2.2	0.9	0.4	0.5	1.0	0.8	1.4	4.0	5.6	9.3	10.8	2.9	10.8
28-Sep	8.2	6.3	Z	7.2	4.9	6.7	6.4	1.6	1.2	1.6	2.4	2.0	1.3	0.9	0.8	1.0	2.0	0.8	0.5	0.5	0.4	0.7	1.1	2.8	2.7	8.2
29-Sep	3.0	5.5	4.7	Z	1.6	2.8	1.9	2.6	2.5	1.9	2.1	2.8	2.0	0.5	0.4	0.5	0.2	0.2	0.2	0.3	1.0	0.4	0.4	0.2	1.6	5.5
30-Sep	1.6	1.7	1.6	2.2	Z	1.5	2.7	1.8	4.7	1.2	0.3	0.3	0.3	0.6	0.8	1.2	3.0	1.0	1.1	3.3	2.1	0.6	0.6	1.4	1.5	4.7
	2.7	3.1	3.1	3.9	3.4	4.0	7.8	8.0	6.0	3.5	3.2	3.2	2.5	2.0	2.5	2.1	1.7	2.1	2.7	2.6	2.2	2.0	2.2	2.5	Diurnal Average	
	8.2	10.5	11.2	19.7	11.4	20.1	67.7	58.1	47.2	19.5	15.1	17.2	10.1	9.7	13.4	13.2	9.1	13.8	18.6	25.2	18.5	8.8	9.3	10.8	Diurnal Maximum	

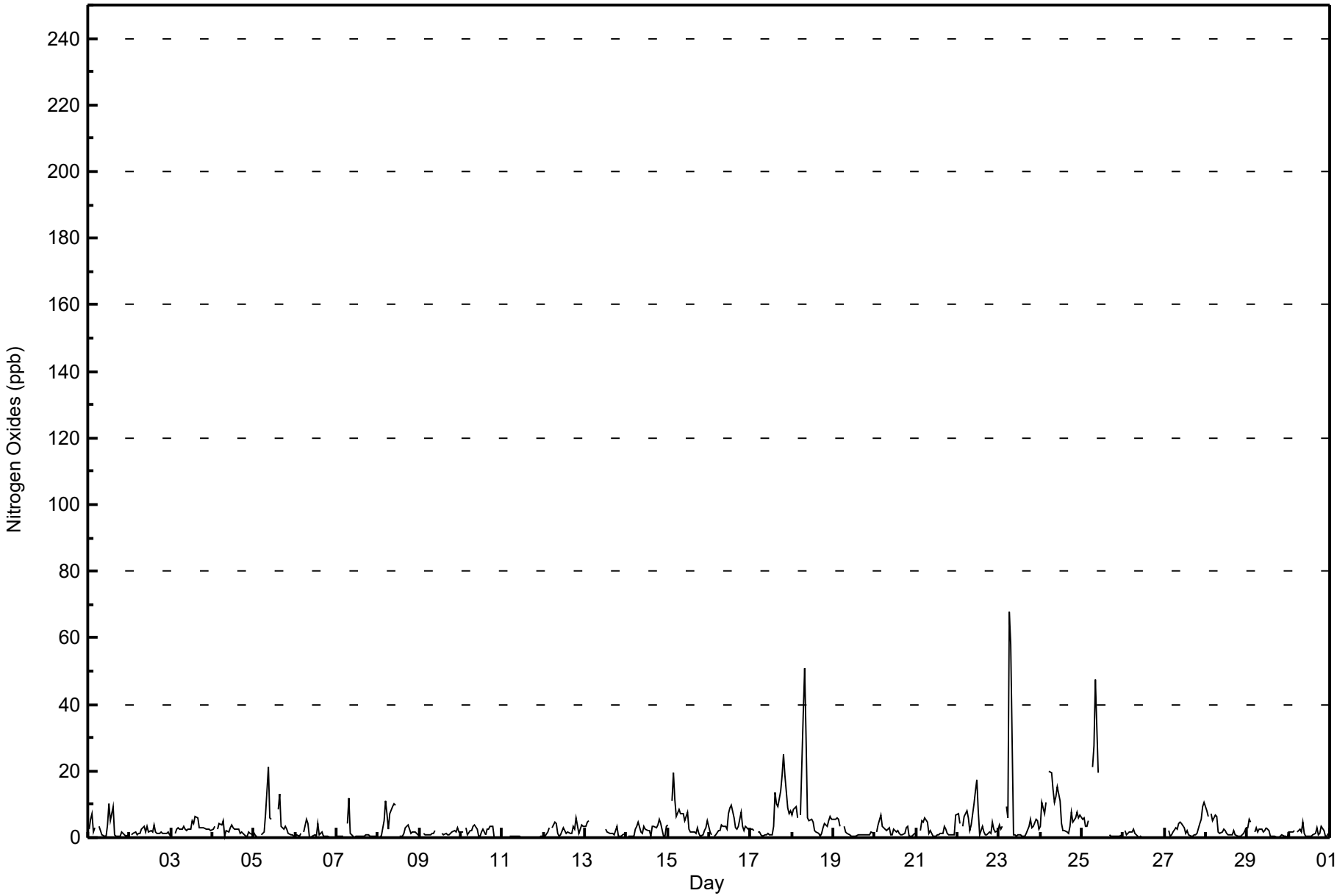
Z - zerospan C - Calibration PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

EBRT - September 2026



Nitrogen Oxides (NO_X) - ppb

EBRT - September 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	659	98.51	98.51
21 - 40	6	0.90	99.40
11 - 80	4	0.60	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 669

Total Number of Hours: 720

Nitrogen Oxides (NO_X) - ppb

EBRT - September 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	50	15	5	4	12	34	83	77	85	42	37	39	58	19	49	46	655
21 - 40	0	2	1	0	2	0	0	0	1	0	0	0	0	0	0	0	6
11 - 80	0	0	0	0	2	2	0	0	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	50	17	6	4	16	36	83	77	86	42	37	39	58	19	49	46	665

Total Number of Valid Hours: 665

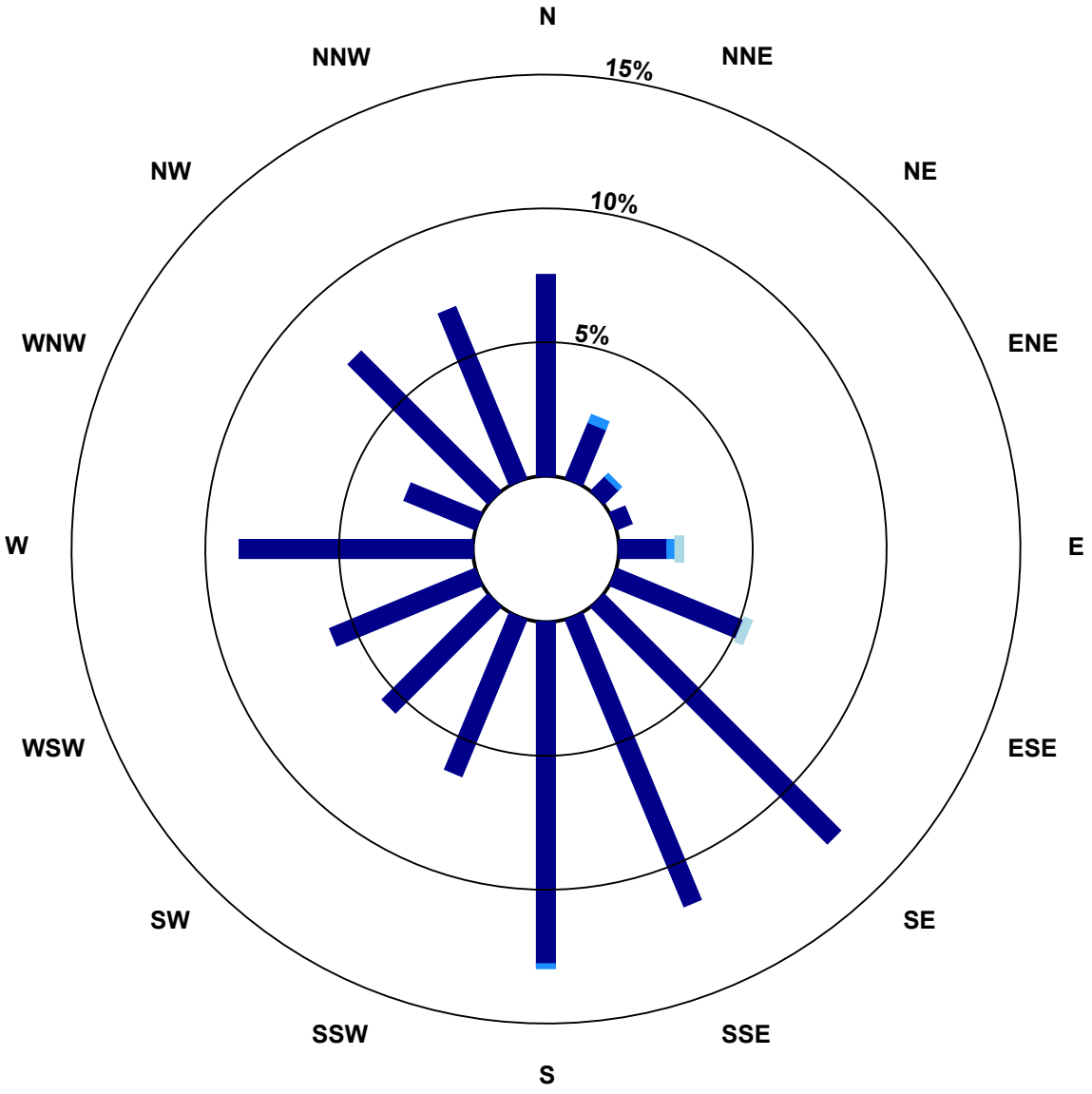
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Nitrogen Oxides (NO_X) - ppb

EBRT



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

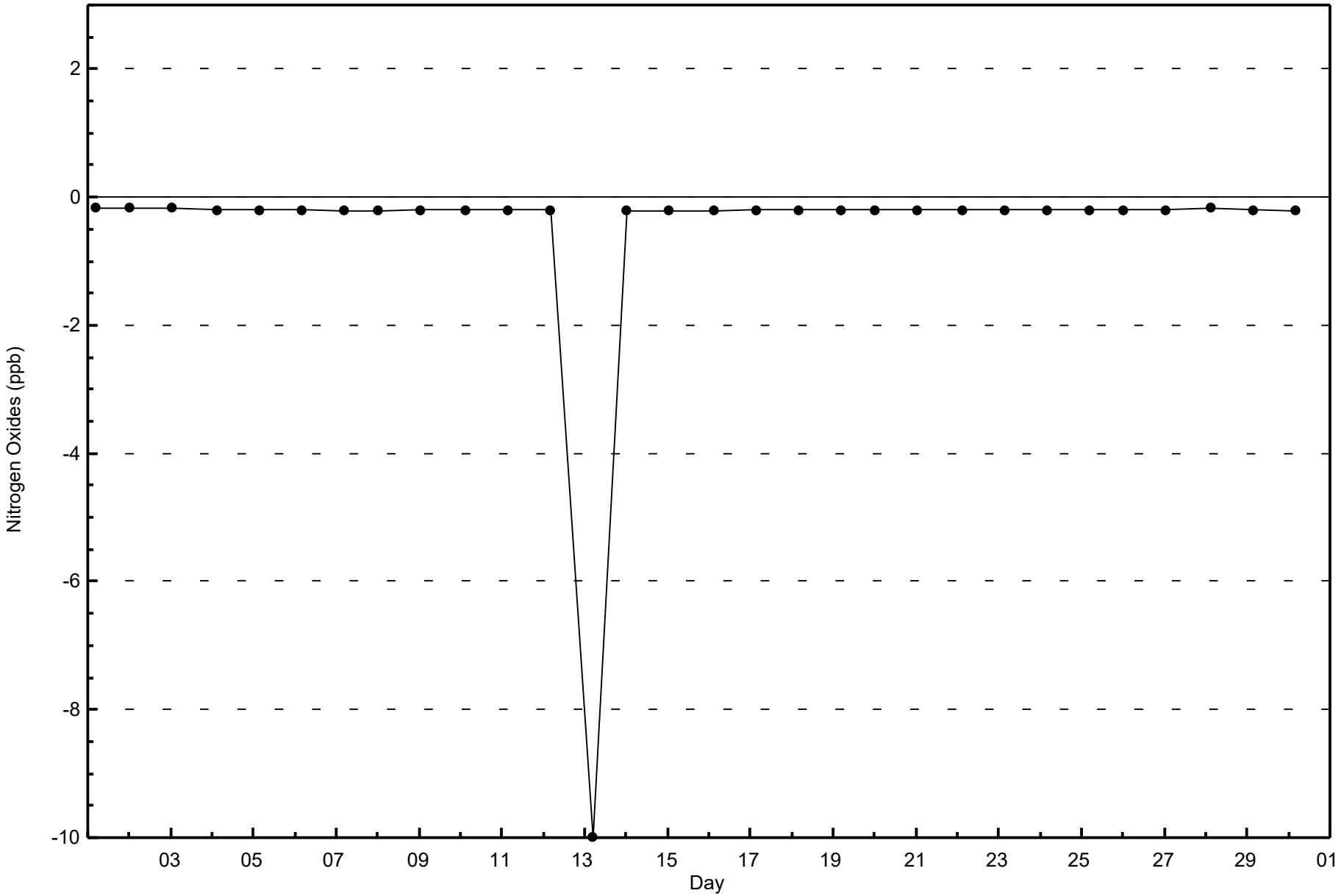
Total Number of Valid Hours: 665

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

EBRT - September 2026

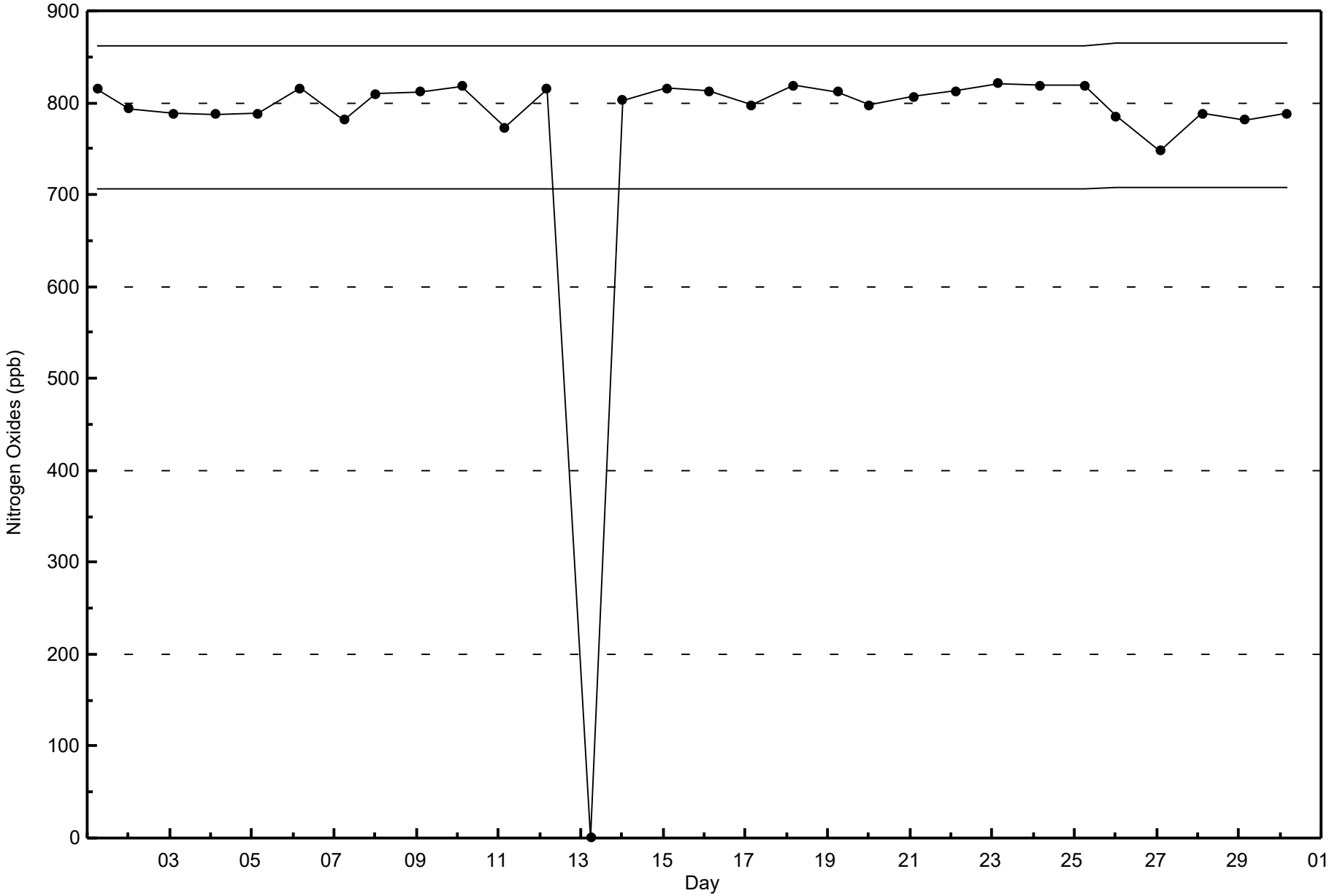


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Span Responses

Nitrogen Oxides (NO_X) - ppb

EBRT - September 2026



Maximum Value: 25.6 C on Sep 2 14:00

Maximum Daily Average: 20.4 C on Sep 2

Minimum Value: 0.3 C on Sep 30 23:00

Minimum Daily Average: 2.9 C on Sep 30

Maximum Diurnal Average: 15.2 C at hour 16

Minimum Diurnal Average: 7.5 C at hour 7

Monthly Average: 10.96 C

Percentiles: P_1 = 1.4 P_{10} = 4.4 Q_1 = 7.0 Median = 10.0 Q_3 = 15.3 P_{90} = 18.3 P_{99} = 24.3

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

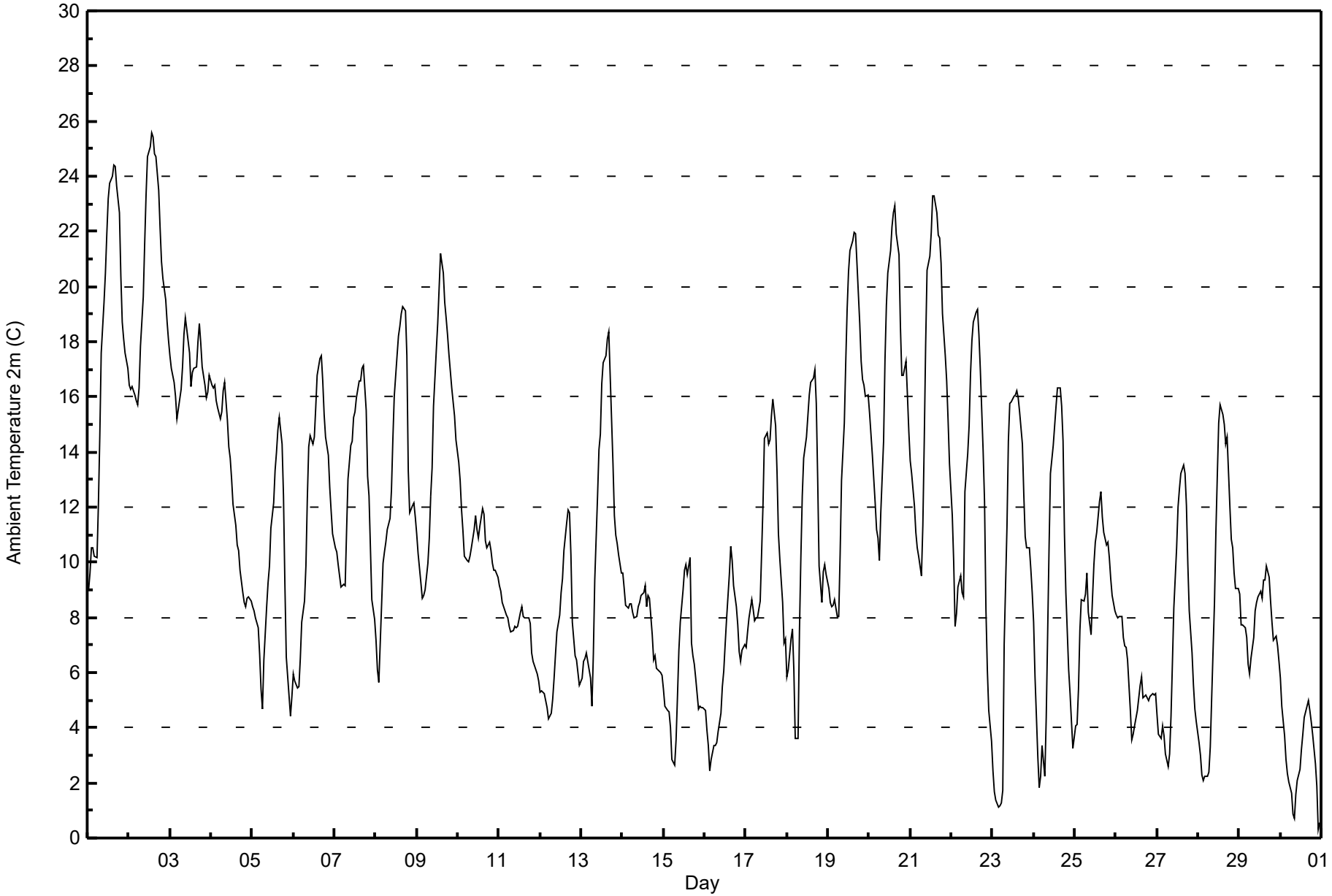
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	9.0	9.6	10.5	10.5	10.2	10.2	12.1	14.6	17.6	19.4	20.5	21.9	23.2	23.8	24.0	24.4	24.4	23.6	22.7	20.4	18.7	18.1	17.6	17.0	17.7	24.4
2-Sep	16.4	16.3	16.3	16.1	15.8	15.7	16.3	17.9	19.6	21.6	23.3	24.7	25.1	25.6	25.4	24.8	24.7	23.5	22.1	20.9	20.3	19.5	18.7	18.1	20.4	25.6
3-Sep	17.5	17.0	16.5	16.0	15.2	15.5	16.3	17.1	18.3	18.8	18.5	17.6	16.4	16.9	17.0	17.1	18.0	18.7	18.0	17.1	16.4	16.0	16.2	16.8	17.0	18.8
4-Sep	16.4	16.3	16.4	15.9	15.6	15.2	15.4	16.2	16.5	15.1	14.2	13.8	13.0	12.1	11.3	10.6	10.4	9.7	8.9	8.5	8.4	8.7	8.7	8.6	12.8	16.5
5-Sep	8.4	8.2	8.0	7.6	6.6	5.4	4.7	6.4	8.4	9.2	9.9	11.2	12.2	13.3	14.0	14.8	15.3	14.3	12.4	9.2	6.6	5.1	4.4	5.2	9.2	15.3
6-Sep	5.9	5.7	5.4	5.5	6.5	7.8	8.6	9.9	12.3	14.2	14.6	14.3	14.6	15.6	16.8	17.4	17.5	16.6	15.4	14.5	13.9	12.7	11.8	11.0	12.0	17.5
7-Sep	10.5	10.4	9.9	9.5	9.1	9.2	9.2	11.1	13.0	14.3	14.4	15.2	15.5	16.0	16.6	16.6	17.1	17.1	15.5	13.1	12.4	10.5	8.6	7.9	12.6	17.1
8-Sep	7.2	6.1	5.6	8.5	9.9	10.4	10.7	11.2	11.6	12.6	14.5	16.0	17.5	18.2	18.6	19.0	19.3	19.1	17.5	13.3	11.8	12.0	12.1	11.6	13.1	19.3
9-Sep	11.1	10.3	9.3	8.7	8.8	9.0	9.9	10.9	12.4	13.4	15.7	17.7	18.6	19.9	21.2	20.5	19.4	18.9	18.3	17.5	16.3	15.8	15.3	14.5	14.7	21.2
10-Sep	13.7	13.0	11.9	11.1	10.2	10.1	10.0	10.2	10.5	11.2	11.7	11.2	10.9	11.3	12.0	11.8	10.8	10.5	10.7	10.4	10.0	9.7	9.7	9.5	10.9	13.7
11-Sep	9.2	8.9	8.6	8.3	8.1	8.0	7.7	7.5	7.5	7.7	7.6	7.7	8.2	8.4	8.1	8.0	8.0	8.0	7.8	6.7	6.4	6.1	6.0	5.7	7.7	9.2
12-Sep	5.3	5.3	5.2	5.0	4.7	4.3	4.5	5.0	5.8	6.7	7.5	8.1	8.9	9.4	10.4	11.4	11.9	11.8	10.3	7.8	6.6	6.5	6.0	5.5	7.3	11.9
13-Sep	5.8	6.4	6.5	6.7	6.4	5.8	4.8	6.7	9.4	12.4	14.1	14.6	16.5	17.2	17.5	18.1	18.3	16.8	13.6	11.7	11.0	10.7	10.3	9.6	11.3	18.3
14-Sep	9.6	9.0	8.4	8.3	8.5	8.5	8.2	8.0	8.0	8.4	8.6	8.8	8.9	9.1	8.4	8.8	8.7	7.4	6.5	6.6	6.2	6.1	6.0	5.9	8.0	9.6
15-Sep	5.4	4.8	4.6	4.6	4.0	2.9	2.7	3.6	5.1	6.8	7.8	9.0	9.7	9.9	9.6	10.2	7.1	6.6	6.3	5.8	4.7	4.8	4.7	4.7	6.1	10.2
16-Sep	4.6	3.9	3.4	2.4	2.9	3.3	3.4	3.5	3.8	4.5	5.5	6.0	7.0	7.9	9.6	10.6	10.1	9.1	8.4	7.7	6.8	6.4	6.8	7.0	6.0	10.6
17-Sep	6.9	7.5	8.0	8.6	8.3	7.9	8.0	8.0	8.6	10.3	12.1	14.5	14.7	14.3	14.5	15.3	15.9	15.0	13.3	11.0	10.1	8.5	7.1	7.2	10.6	15.9
18-Sep	5.8	6.1	7.2	7.6	6.1	3.6	3.6	7.5	10.2	12.4	13.8	14.6	15.3	16.1	16.5	16.7	17.0	15.8	13.0	9.9	8.5	9.7	9.9	9.6	10.7	17.0
19-Sep	9.1	8.6	8.4	8.5	8.7	8.0	8.0	10.3	12.9	15.0	17.2	19.2	20.5	21.3	21.7	21.9	21.9	20.9	18.7	17.3	16.6	16.4	16.0	16.1	15.1	21.9
20-Sep	15.4	14.7	13.9	12.1	11.2	10.9	10.1	11.8	14.4	17.3	19.3	20.5	21.3	22.2	22.7	22.9	21.9	21.2	18.5	16.8	16.8	17.3	16.1	14.7	16.8	22.9
21-Sep	13.7	13.2	12.1	11.1	10.5	10.2	9.5	11.3	14.4	17.9	20.6	21.1	21.9	23.3	23.3	22.7	21.9	21.7	20.8	19.0	17.5	16.6	15.2	13.6	16.8	23.3
22-Sep	11.7	10.0	7.7	8.2	9.1	9.5	8.9	8.8	12.5	13.9	14.9	16.8	18.1	18.7	19.1	19.2	18.3	17.0	14.0	12.2	8.3	6.1	4.6	3.5	12.1	19.2
23-Sep	2.4	1.7	1.4	1.1	1.1	1.3	1.7	7.0	11.3	14.4	15.8	15.8	16.0	16.1	16.2	16.0	15.5	14.3	12.5	10.9	10.5	10.5	9.8	8.9	9.7	16.2
24-Sep	7.8	5.9	2.9	1.8	2.2	3.3	2.2	4.4	7.4	10.5	13.2	14.2	15.0	15.7	16.3	16.3	15.6	14.4	11.0	8.9	6.1	5.3	4.2	3.3	8.7	16.3
25-Sep	4.1	4.1	5.4	7.5	8.7	8.6	8.8	9.6	8.2	7.4	8.7	9.9	10.7	11.1	12.2	12.6	11.6	11.1	10.6	10.7	10.2	9.4	8.8	8.2	9.1	12.6
26-Sep	8.1	8.0	8.0	8.0	7.3	7.0	6.9	6.5	4.6	3.5	3.8	4.0	4.7	5.1	5.5	5.8	5.1	5.2	5.1	5.0	5.1	5.2	5.2	5.2	5.7	8.1
27-Sep	4.5	3.8	3.6	4.1	3.7	3.0	2.6	3.0	4.4	6.4	8.4	10.5	12.0	12.7	13.2	13.5	13.2	12.0	9.9	8.3	6.7	5.6	4.7	4.2	7.3	13.5
28-Sep	3.5	3.0	2.3	2.1	2.3	2.2	2.4	3.3	5.1	8.6	11.1	13.1	15.1	15.7	15.4	15.0	14.3	14.5	12.0	10.8	10.5	9.6	9.1	9.1	8.7	15.7
29-Sep	8.8	7.7	7.7	7.6	7.3	6.3	5.9	6.5	7.3	8.3	8.5	8.7	9.0	8.7	9.3	9.4	9.9	9.5	8.6	7.8	7.2	7.3	6.9	6.4	7.9	9.9
30-Sep	5.8	4.8	3.7	2.8	2.3	2.0	1.6	0.9	0.7	1.6	2.1	2.5	3.2	3.7	4.4	4.8	5.0	4.7	4.2	3.8	2.7	1.9	0.3	0.6	2.9	5.8
	8.8	8.3	8.0	7.9	7.7	7.5	7.5	8.6	10.1	11.5	12.6	13.4	14.1	14.6	15.0	15.2	14.9	14.3	12.9	11.5	10.4	9.9	9.4	9.0	Diurnal Average	
	17.5	17.0	16.5	16.1	15.8	15.7	16.3	17.9	19.6	21.6	23.3	24.7	25.1	25.6	25.4	24.8	24.7	23.6	22.7	20.9	20.3	19.5	18.7	18.1	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

EBRT - September 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	360	50.00	50.00
10 - 20	314	43.61	93.61
> 20	46	6.39	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

EBRT - September 2026

Maximum Value: 100.0 % on Sep 8 04:00

Maximum Daily Average: 94.9 % on Sep 4

Minimum Value: 29.7 % on Sep 24 16:00

Minimum Daily Average: 57.6 % on Sep 20

Maximum Diurnal Average: 90.0 % at hour 7

Minimum Diurnal Average: 57.6 % at hour 16

Monthly Average: 76.12 %

Percentiles: P_1 = 34.9 P_{10} = 48.5 Q_1 = 62.3 Median = 80.4 Q_3 = 92.1 P_{90} = 97.4 P_{99} = 100.0

Hours in Service:	720
Hours of Data:	714
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	Average	Maximum
1-Sep	94.5	95.3	92.1	86.2	85.0	84.7	77.4	68.7	58.8	52.1	49.3	42.4	38.3	34.8	35.3	36.1	36.4	39.3	41.4	49.6	55.8	60.7	63.4	66.1	60.2	95.3
2-Sep	70.6	73.1	72.9	73.9	75.6	76.0	72.8	65.7	58.7	51.8	43.9	37.4	37.2	39.1	43.0	46.5	46.9	50.1	52.9	54.0	54.6	59.1	63.4	68.5	57.8	76.0
3-Sep	72.3	74.9	78.9	81.9	85.8	85.4	82.9	80.2	75.9	73.6	75.1	82.4	94.8	92.1	91.5	91.2	87.3	83.0	83.6	86.8	89.5	91.4	91.2	88.4	84.2	94.8
4-Sep	88.8	89.5	90.3	93.1	94.5	96.6	96.5	95.3	94.0	98.3	98.2	95.7	96.1	97.2	96.6	96.9	93.6	96.5	97.2	96.8	96.5	93.9	94.5	91.3	94.9	98.3
5-Sep	89.0	90.1	88.1	89.9	94.5	98.2	99.0	95.8	84.1	76.5	70.7	61.2	56.8	54.1	51.9	45.8	43.7	51.3	61.9	78.0	89.5	91.7	89.4	84.9	76.5	99.0
6-Sep	81.5	83.1	82.7	84.5	83.3	84.1	84.7	83.1	73.8	62.7	61.9	66.5	67.0	62.4	57.5	56.5	55.9	61.2	67.6	73.1	81.1	86.0	87.0	89.6	74.0	89.6
7-Sep	90.6	89.4	90.9	91.9	92.0	94.0	94.7	90.2	81.4	72.0	71.5	68.9	70.5	70.3	68.7	69.3	67.5	66.7	76.5	86.2	87.8	90.7	93.0	96.6	82.1	96.6
8-Sep	98.0	99.9	99.8	100.0	100.0	OR	OR	OR	OR	96.3	82.0	67.9	57.8	52.0	50.6	49.6	49.6	51.4	64.2	79.6	81.1	77.7	77.0	78.8	75.7	100.0
9-Sep	81.5	84.1	88.1	90.9	91.9	92.5	91.1	91.3	87.6	84.3	73.6	64.0	59.7	53.8	44.6	45.4	50.9	54.2	56.9	60.1	69.2	71.3	74.1	79.0	72.5	92.5
10-Sep	85.0	87.4	97.2	95.9	96.2	95.7	95.4	96.0	94.2	90.1	86.8	95.5	98.5	98.6	93.0	91.8	97.6	99.5	98.9	97.7	97.3	97.2	95.9	96.1	94.9	99.5
11-Sep	97.8	97.7	98.7	99.1	98.4	97.6	99.1	99.4	99.5	98.7	96.4	97.2	94.6	93.5	92.8	87.2	84.2	82.8	80.7	91.5	94.0	92.6	93.5	95.6	94.3	99.5
12-Sep	98.5	98.8	97.4	97.8	98.1	99.0	96.5	94.3	89.1	81.3	75.5	71.0	61.2	57.2	53.3	50.3	49.4	52.7	62.8	72.2	75.3	75.5	78.3	81.5	77.8	99.0
13-Sep	83.3	84.2	85.5	85.3	86.8	88.8	91.5	83.4	72.1	59.3	53.5	53.0	48.6	45.6	43.6	42.7	43.2	51.8	74.1	81.7	84.5	87.5	91.8	97.8	71.6	97.8
14-Sep	99.8	98.7	98.1	97.3	98.5	98.6	100.0	OR	OR	98.0	96.5	92.4	90.6	83.1	83.9	80.8	80.6	94.2	96.9	95.2	97.8	98.2	97.8	95.5	94.2	100.0
15-Sep	96.6	97.6	98.2	98.2	98.9	99.9	100.0	99.8	94.8	84.9	76.8	71.0	57.8	55.0	60.7	56.6	83.4	92.3	95.2	97.3	98.8	100.0	100.0	100.0	88.1	100.0
16-Sep	100.0	98.8	98.2	99.7	100.0	100.0	100.0	98.9	95.6	91.8	85.2	85.3	77.3	70.8	62.8	54.3	58.6	67.6	72.4	75.2	77.5	75.5	71.4	71.2	82.8	100.0
17-Sep	73.3	70.7	67.2	66.6	70.8	75.2	77.4	79.3	78.6	72.0	66.3	60.2	61.2	65.9	63.1	62.2	61.7	68.3	75.0	83.7	87.0	91.5	94.1	93.6	73.5	94.1
18-Sep	95.4	95.6	94.8	93.1	94.4	97.1	96.6	87.0	85.0	73.6	66.2	62.9	60.5	55.3	51.2	50.0	48.8	60.0	76.3	85.4	86.6	78.2	74.8	73.5	76.8	97.1
19-Sep	75.8	80.0	81.5	80.5	77.2	78.5	78.3	69.6	59.2	52.5	45.8	39.4	36.6	35.6	36.9	36.9	38.5	43.8	52.4	60.1	63.3	64.5	66.1	66.1	59.1	81.5
20-Sep	69.0	72.3	75.2	81.5	85.4	85.5	87.4	80.8	70.4	57.8	49.8	42.2	36.6	34.3	32.3	31.0	34.0	38.7	46.1	50.0	48.9	48.9	57.5	66.2	57.6	87.4
21-Sep	73.3	78.0	83.6	88.1	90.3	90.9	93.1	86.3	72.9	55.1	43.5	39.1	40.1	38.3	40.3	42.8	47.8	45.7	42.3	49.3	55.5	59.4	65.6	73.1	62.3	93.1
22-Sep	80.2	84.9	90.5	90.5	83.7	81.8	86.2	89.1	77.3	73.3	66.2	55.7	50.1	45.2	41.7	40.3	41.9	46.2	58.5	60.3	78.6	83.8	85.4	86.5	69.9	90.5
23-Sep	88.5	90.0	90.8	91.5	92.0	92.9	92.7	81.0	68.4	55.7	49.9	49.1	49.5	48.7	48.8	50.5	52.9	58.5	67.8	74.8	78.0	77.0	80.8	85.5	71.5	92.9
24-Sep	90.3	92.1	93.4	95.0	97.2	96.0	94.5	86.3	74.6	60.0	46.3	41.0	38.3	35.2	31.2	29.7	31.6	40.2	54.2	61.0	72.9	75.2	74.5	78.4	66.2	97.2
25-Sep	75.6	76.3	69.4	59.8	56.0	58.2	57.3	52.6	68.6	84.2	83.3	77.6	71.8	70.8	65.1	63.4	69.0	71.6	73.9	72.7	79.4	84.6	90.6	92.1	71.8	92.1
26-Sep	93.9	95.7	98.3	99.9	100.0	100.0	100.0	100.0	100.0	98.7	96.6	92.1	88.5	85.2	82.3	80.4	83.7	81.7	80.7	81.9	81.2	78.6	78.4	76.3	89.7	100.0
27-Sep	77.5	78.8	84.9	82.1	82.1	84.6	87.1	86.8	82.4	73.7	64.1	54.3	44.7	46.3	40.8	35.5	37.1	43.8	60.8	66.8	72.6	77.7	82.0	84.0	67.9	87.1
28-Sep	87.9	89.7	91.7	92.7	93.0	93.3	92.9	90.3	86.0	72.2	61.1	54.7	48.4	45.7	44.1	46.8	49.4	47.2	55.6	58.9	59.6	62.3	64.5	64.4	68.8	93.3
29-Sep	64.4	67.5	66.6	67.3	70.4	81.6	89.9	94.1	97.4	97.0	97.2	96.7	96.7	95.6	86.5	80.3	63.7	61.8	64.4	68.4	75.5	73.0	75.4	71.7	79.3	97.4
30-Sep	70.5	74.4	83.8	91.1	94.1	96.4	95.9	98.4	99.3	95.0	92.5	94.3	90.4	88.5	82.4	78.5	78.3	79.9	81.4	86.4	92.1	93.5	97.3	97.9	88.8	99.3
	84.8	86.3	87.6	88.2	88.9	89.8	90.0	86.6	81.4	76.4	70.8	67.0	64.0	61.7	59.2	57.6	58.9	62.7	69.1	74.5	78.7	79.9	81.6	83.0	Diurnal Average	
	100.0	99.9	99.8	100.0	100.0	100.0	100.0	100.0	100.0	98.7	98.2	97.2	98.5	98.6	96.6	96.9	97.6	99.5	98.9	97.7	98.8	100.0	100.0	100.0	Diurnal Maximum	

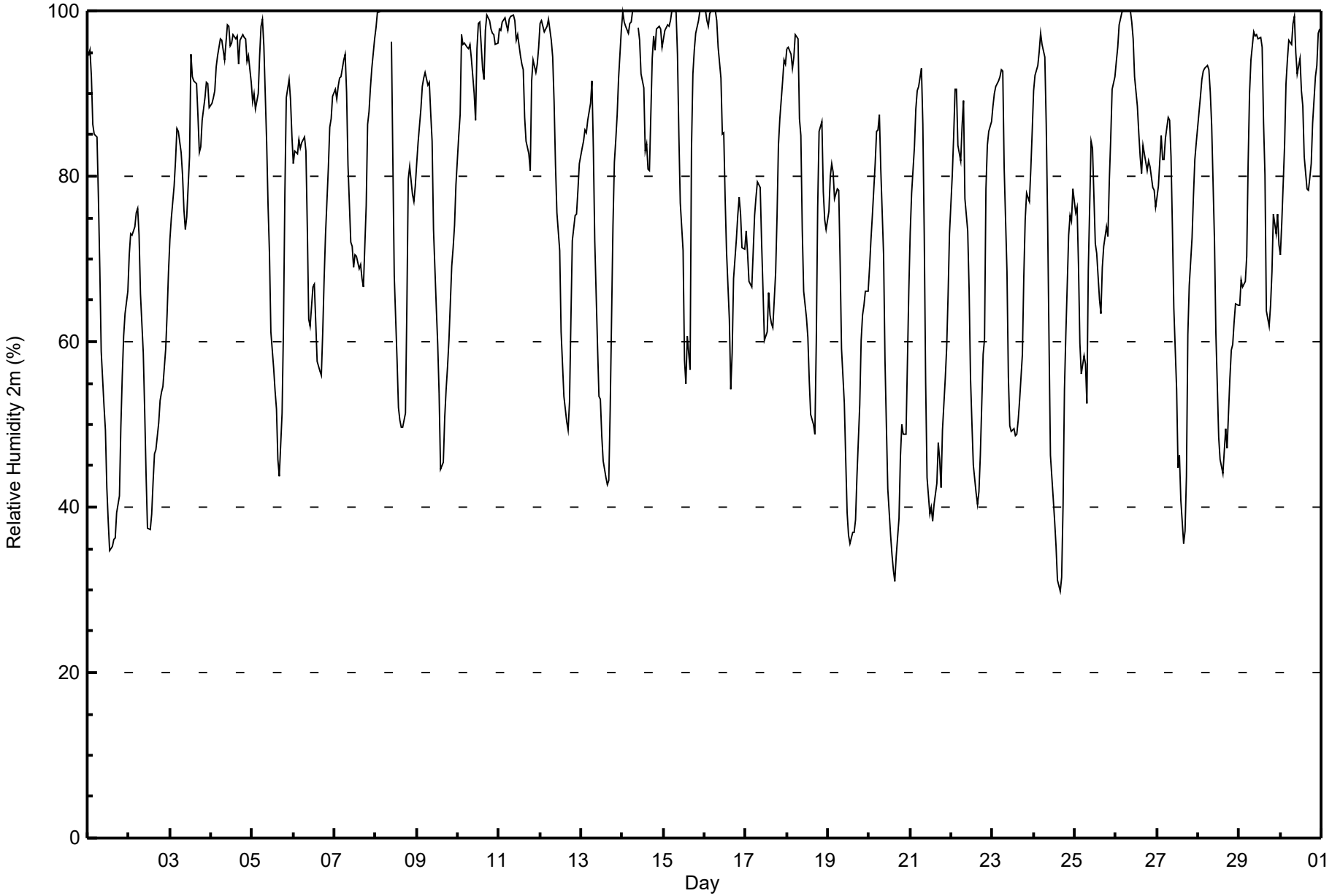
OR - Out of Range

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

EBRT - September 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	30	4.20	4.20
40 - 60	130	18.21	22.41
60 - 80	193	27.03	49.44
80 - 100	345	48.32	97.76

Total Number of Valid Hours: 714

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

EBRT - September 2026

Maximum Speed: 29 km/h on Sep 11 12:00

Maximum Daily Speed Average: 20.3 km/h on Sep 11

Minimum Speed Value: 1 km/h on Sep 18 00:00

Minimum Daily Speed Average: 0.3 km/h on Sep 18

Maximum Diurnal Speed Average: 6.3 km/h at hour 13

Minimum Diurnal Speed Average: 1.6 km/h at hour 3

Monthly Average Velocity: 2.8 km/h 211.2 deg

Percentiles: $P_1 = 2$ $P_{10} = 5$ $Q_1 = 7$ Median = 10 $Q_3 = 14$ $P_{90} = 19$ $P_{99} = 25$

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Percent Operational Time:	99.4

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-Sep	ESE5	SE8	SE8	SSE9	SE9	SE7	SE8	SE10	SSE11	S13	S12	S18	S16	SSE19	SSE21	SSE19	SSE19	SSE17	SSE16	SE10	SE11	SE13	SE14	SE13	SSE12.3	SSE21
2-Sep	SE13	SE14	SE15	SE15	SE14	SE15	SE17	SE19	SE19	SE20	SE22	SSE24	SE24	SE22	SE22	SE19	SE22	SE19	SE16	SE17	SE16	SE15	SE14	SE14	SE17.7	SE24
3-Sep	SE15	SE13	SE14	ESE10	ESE11	ESE12	ESE15	ESE14	SE17	SE16	SE14	SE14	ESE9	ESE12	ESE11	ESE10	ESE10	ESE8	ESE11	ESE8	ESE9	E8	ESE10	SE13	ESE11.6	SE17
4-Sep	SE11	ESE9	ESE8	SE7	ESE5	ESE3	SE2	W3	W6	NNW12	N15	N17	N16	N19	N21	N20	N19	N19	N18	N15	N13	N12	N11	N11	N8.9	N21
5-Sep	N9	NNE7	N9	N7	N6	N6	N4	N6	NNE6	N9	N9	N5	N7	N7	N9	NE6	NNE4	NNW9	NNW7	N5	N2	ESE2	ESE4	ESE6	N5.5	N9
6-Sep	SE6	SE6	ESE7	SE9	SE9	SE9	SE8	SSE9	SSE10	S13	S14	S14	S16	SSE15	S12	S12	S9	S11	SSE7	SE7	SE14	SE12	SSE10	SE10	SSE9.8	S16
7-Sep	SE8	SE8	SE8	SE9	SE9	SSE9	E5	SE10	SSE12	S12	S13	S13	S13	SSW10	SSW7	SSW7	SSW5	SSW5	SSW2	SSE3	SSE6	SE5	SE5	SE5	SSE7.0	S13
8-Sep	SE4	E3	NNW3	NNW7	NNE6	NNE7	N7	N9	N10	N8	NNW10	NNW11	NW12	NNW12	NW10	WNW9	NW7	NW4	SSE2	ESE4	SE6	SSE8	SSE9	SSE8	NNW3.3	NW12
9-Sep	SSE8	SSE8	SE7	SE8	SE8	SSE10	SSE12	S12	S14	SSW14	SSW17	SSW17	SSW20	SSW21	SW19	WSW18	SW14	SW14	SW15	SW16	SW10	SSW10	WSW12	WSW13	SSW11.2	SSW21
10-Sep	WSW13	W15	WNW13	W12	WSW11	WSW13	WSW15	WSW14	WSW14	WSW13	W15	W16	W15	W14	WNW15	WNW17	W15	NW12	NW14	NW18	NW19	NW15	NW19	NW22	WNW13.0	NW22
11-Sep	NNW25	NW26	NW27	NNW24	NNW27	NNW28	NNW26	NNW25	NNW25	NNW25	NNW25	NNW29	NNW25	NNW23	NNW22	NNW16	NW12	NNW11	NNW14	NNW11	NW11	NW13	NNW11	NNW11	NNW20.3	NNW29
12-Sep	NW9	NW8	NW8	NW5	W5	WNW5	NW6	NW5	NNW7	NNW8	NW7	W6	W9	W10	WSW9	W9	WSW11	SW9	S6	SSE7	S8	S11	S9	S9	W4.5	S11
13-Sep	S7	S8	S9	SSW11	SSW12	S9	SSE7	SSW11	SW14	SW13	SW15	SW16	SW19	SW16	SW13	SW12	SW12	SSW7	N10	NNE11	NNE9	NE8	NE7	N8	SSW6.3	SW19
14-Sep	N9	NNE14	NNE12	NNE10	N10	N13	N13	N12	N13	N14	NNW12	NNW13	N14	N14	N15	NNW14	N12	N9	NNW5	NNW9	NNW6	NNW6	NW6	NW7	N10.4	N15
15-Sep	NW7	NW6	WNW6	WNW6	W4	SW2	WSW4	SSW6	SW8	SW6	WSW8	W11	W11	W7	WNW4	SW7	NNW8	S4	S8	SSW5	SW4	WNW4	NW4	NNW8	W4.4	W11
16-Sep	N7	NNE8	NNE6	NW2	NW2	NNW7	N5	NW2	SSW6	SSW6	WSW6	SSW6	SW7	SW6	SSW9	SW9	SW9	SSW5	SSE6	ESE6	ESE7	SE10	SE11	SE12	S2.3	SE12
17-Sep	SE13	SE14	SE17	SE19	SE19	SSE16	SSE15	SSE13	SSE12	S12	SSE13	SSW10	SSW9	SW8	SW6	SSW6	WSW7	SSW8	S5	S6	S5	S2	W2	N1	SSE8.3	SE19
18-Sep	SE3	S4	SSE3	N2	ENE3	E1	NE4	E2	NNE4	N5	N4	NNW6	WNW7	W9	W7	NW5	NNW5	SSW2	SSE3	SE4	SE6	SE8	SSE8	SE9	ESE0.3	SE9
19-Sep	SSE9	SSE10	SSE9	SSE9	SSE9	SE8	SE9	SSE12	S14	S18	S18	SSW21	S22	S23	S23	S22	S20	S14	S12	S11	S13	S13	S13	S14	S14.0	S23
20-Sep	S12	S10	S6	S7	SSE8	S8	S7	S7	S9	SSW10	SSW11	SW15	WSW16	WSW15	SW13	SW14	SSW10	S8	S7	S8	S10	S12	S11	S11	SSW9.2	WSW16
21-Sep	S10	S10	S9	SSE7	SSE8	SSE7	SSE7	SSE8	S9	S9	SSW13	S14	SSE13	SSE15	SSE15	SSE15	SE10	SSE11	SSE12	S11	S10	S10	S9	S6	SSE10.0	SSE15
22-Sep	SE5	SE4	ENE4	NE7	ESE5	ESE6	E2	NW5	NW7	NW9	NNW12	NNW15	NW15	NW13	WNW14	W14	W16	W10	SW2	WSW5	UO	UO	UO	E3	WNW4.1	W16
23-Sep	UO	ESE4	ESE3	ESE3	ESE2	ESE5	ESE5	SE5	SSE7	SSE8	S13	SSW12	S13	S13	SSE13	SSE13	SSE12	SSE10	SSE9	SE8	SE10	SE9	SSE9	S7	SSE7.7	SSE13
24-Sep	S6	SSW5	SSW4	SSE4	SSW6	SSE5	S5	S6	SSW8	SSW10	SW13	WSW15	WSW19	WSW18	WSW17	WSW15	WSW13	WSW5	SSW6	SSW5	SE4	SSE4	E5	E5	SW6.6	WSW19
25-Sep	E5	ESE5	E8	E9	E9	E10	E12	E13	E11	ENE12	ENE15	ENE22	ENE23	ENE22	E15	E15	ENE15	ENE13	NE9	ENE14	NNE10	NNE10	NNE11	N14	ENE11.4	ENE23
26-Sep	N10	NE9	NE6	N6	WNW9	W10	W13	WSW17	W21	W21	W21	W23	W23	W22	W22	W22	W20	W20	W22	W19	W19	W19	W21	W18	W15.4	W23
27-Sep	W14	WSW14	WSW16	W18	W16	WSW15	WSW14	WSW14	WSW19	WSW16	WSW15	W16	W19	W18	W20	W20	W18	WSW13	WSW12	SW9	SW9	SSW7	S7	S8	WSW13.7	W20
28-Sep	SSW7	S8	SSE6	SE7	SSE9	SSE9	SSE9	S10	SSW12	SW15	SW17	SW19	SW20	SW20	WSW18	SW13	SSW14	SSW14	S10	S13	S12	SSE12	SSE11	SSE10	SSW11.0	SW20
29-Sep	SSE11	SE9	SSE9	SSE9	S10	S10	S7	SSW8	SSW10	SW12	SW13	WSW14	W15	W15	W14	W10	WNW15	WNW18	W17	W11	W13	W19	W17	WNW23	WSW9.2	WNW23
30-Sep	WNW22	WNW20	WNW16	WNW12	WNW15	WNW14	NW14	NW14	NW12	NW18	NNW19	NW16	NNW15	NW13	NW14	NW13	NW13	NW12	NW11	NW7	NNW5	NNW6	NW4	NW4	NW12.4	WNW22
	S1.9	SSE1.9	SE1.6	SE1.8	SSE2.3	SSE2.2	SSE1.9	S2.8	SSW4.3	SW4.4	SW4.9	SW5.8	WSW6.3	WSW5.5	WSW5.5	WSW5.2	WSW4.5	SW3.4	SSW2.3	S1.7	S2.4	S2.7	S2.7	S1.6	Diurnal Average	
	NNW25	NNW26	NW27	NNW24	NNW27	NNW28	NNW26	NNW25	NNW25	NNW25	NNW25	NNW29	NNW25	NNW23	S23	S22	SE22	W20	W22	W19	W19	W19	W21	WNW23	Diurnal Maximum	

UO - Unstable Operation

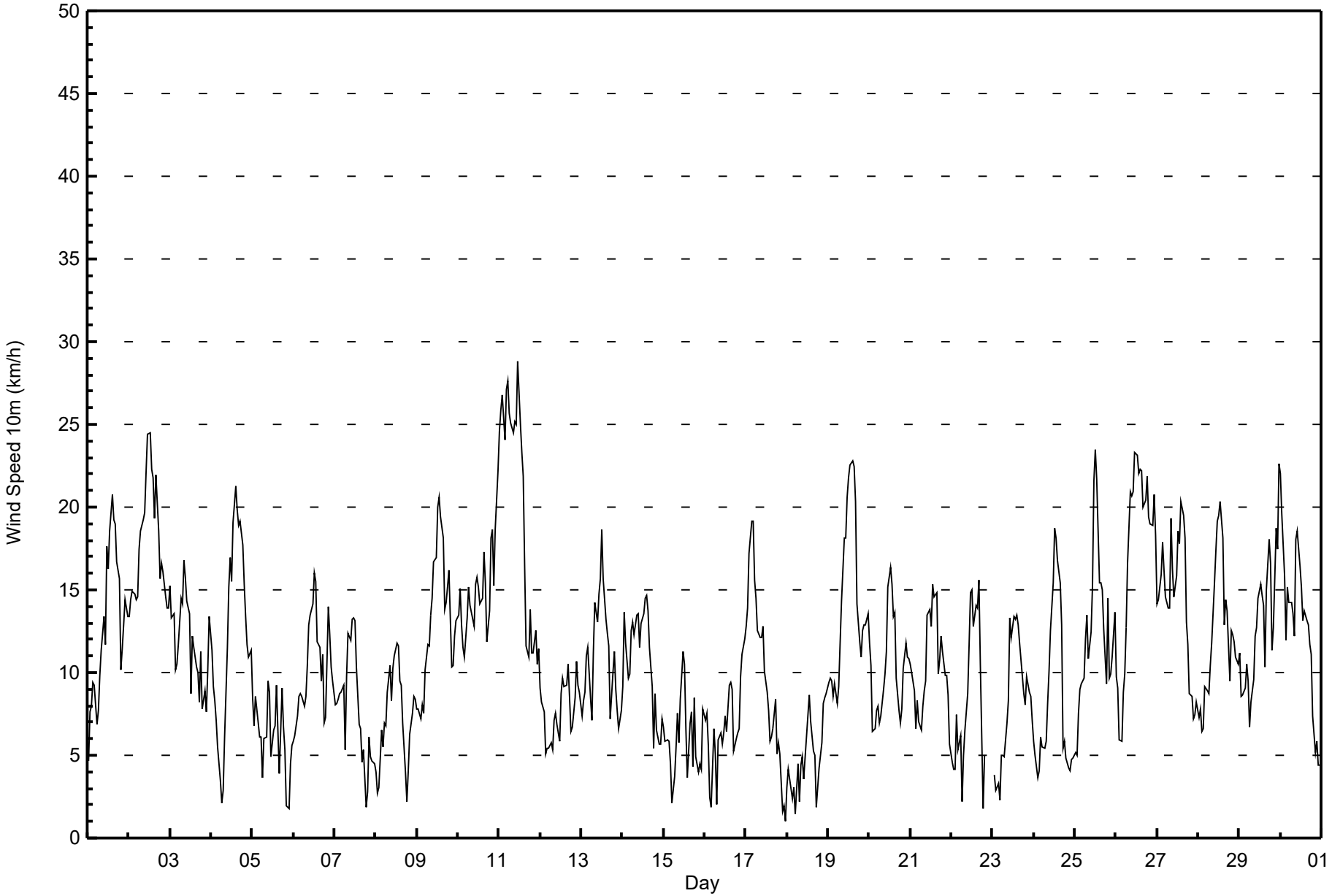
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

EBRT - September 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	98	13.69	13.69
6 - 11	301	42.04	55.73
12 - 19	262	36.59	92.32
20 - 28	54	7.54	99.86
29 - 38	1	0.14	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 716

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

EBRT - September 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	9	2	1	2	9	16	9	7	6	10	2	3	4	3	11	4	98
6 - 11	24	14	5	0	6	18	41	45	47	27	13	6	14	5	16	20	301
12 - 19	20	2	0	5	4	4	35	27	31	9	24	31	28	10	21	11	262
20 - 28	2	0	0	3	0	0	5	3	5	3	2	0	13	3	2	13	54
29 - 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	55	18	6	10	19	38	90	82	89	49	41	40	59	21	50	49	716

Total Number of Valid Hours: 716

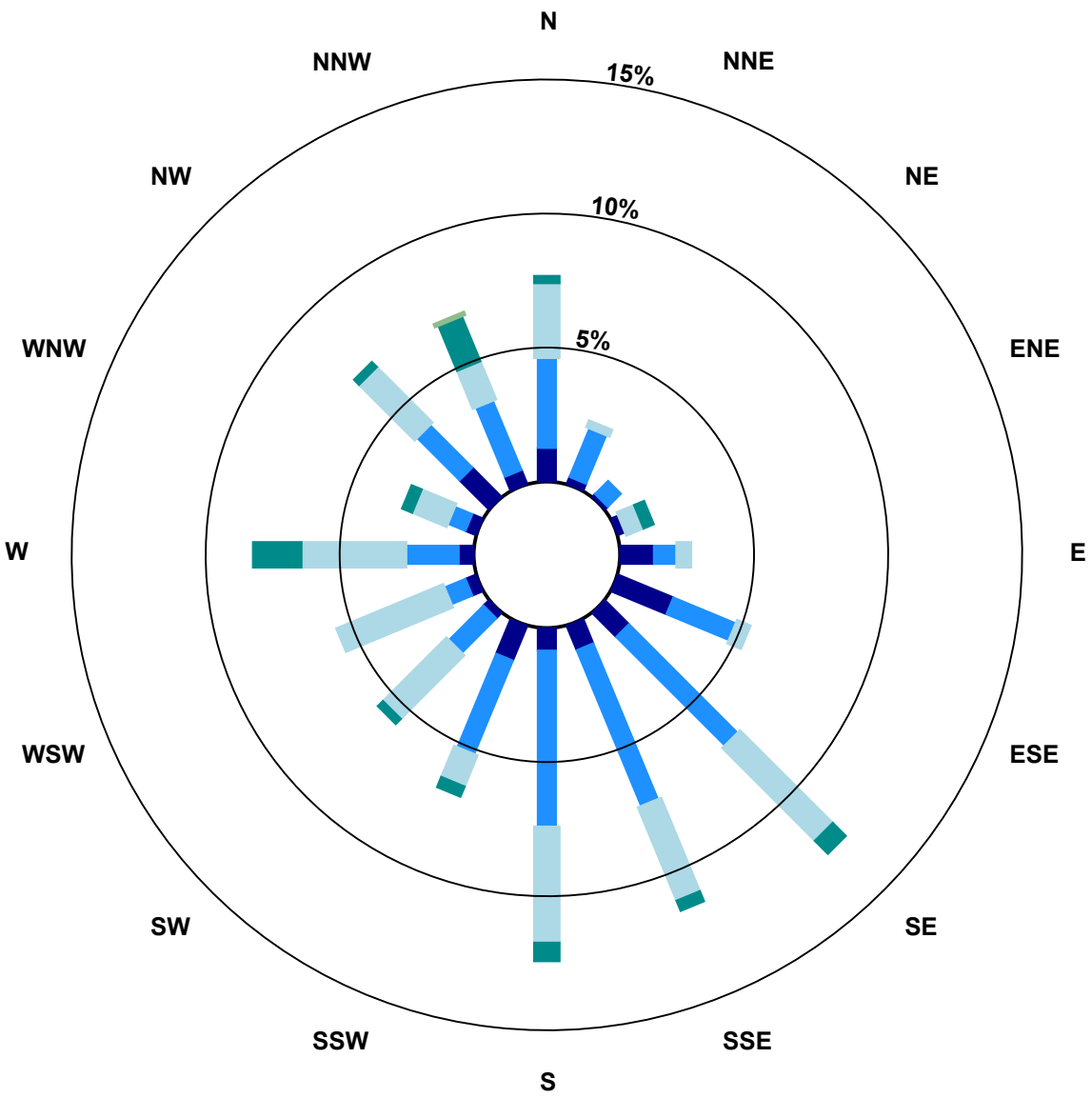
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Sep 2026

Wind Speed 10m (WS10) - km/h

EBRT



Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 716

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 10m (WS10) - km/h

EBRT - September 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8 km/h on Sep 11 06:00

Minimum Value: 0 km/h on Sep 8 02:00

Percentiles: $P_1 = 1$ $P_{10} = 1$ $Q_1 = 2$ Median = 3 $Q_3 = 4$ $P_{90} = 5$ $P_{99} = 7$

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

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-Sep	1	1	1	1	1	2	1	2	2	2	3	4	4	5	5	4	5	4	4	2	3	3	3	3	5
2-Sep	3	3	3	4	4	4	5	5	5	5	6	6	6	7	7	6	6	6	4	5	4	4	3	4	7
3-Sep	4	3	4	3	2	3	4	4	5	4	5	4	2	4	4	3	4	3	4	2	2	2	2	3	5
4-Sep	3	2	2	1	1	1	1	1	2	4	4	5	4	6	6	6	5	6	5	5	4	3	3	3	6
5-Sep	3	2	2	2	1	1	2	3	2	3	4	3	4	3	3	3	2	3	2	1	1	1	2	1	4
6-Sep	1	1	1	1	1	2	2	2	3	3	3	3	4	5	4	4	3	2	2	3	3	3	2	2	5
7-Sep	2	1	1	2	1	2	2	3	3	3	3	3	3	3	3	2	2	1	2	2	2	1	1	1	3
8-Sep	1	0	1	1	1	2	2	3	3	2	3	3	4	4	4	3	3	2	1	1	1	1	1	1	4
9-Sep	1	1	1	1	1	2	2	2	3	3	3	4	4	5	5	5	4	4	3	4	3	2	4	4	5
10-Sep	3	4	3	2	2	3	3	3	3	3	4	4	4	3	4	5	4	4	6	5	5	4	6	6	6
11-Sep	7	7	7	7	7	8	7	7	7	8	7	7	6	6	6	6	3	3	4	3	3	3	2	3	8
12-Sep	2	2	2	1	1	2	1	2	1	2	2	3	4	2	3	3	3	2	1	1	1	1	1	2	4
13-Sep	1	1	1	2	2	2	2	2	3	3	4	4	4	4	3	3	3	2	3	3	2	2	2	2	4
14-Sep	3	4	4	3	3	4	4	3	4	3	3	3	4	4	4	3	3	3	1	2	1	1	1	2	4
15-Sep	2	1	1	1	1	1	2	1	1	3	3	3	3	2	2	3	5	3	2	1	1	1	2	2	5
16-Sep	2	2	2	1	2	2	2	1	2	2	2	3	3	3	3	3	2	2	1	1	2	2	3	3	3
17-Sep	3	4	4	5	5	4	3	3	3	3	2	3	2	2	2	1	2	2	1	1	1	2	1	1	5
18-Sep	1	2	1	3	2	1	2	1	2	2	3	3	3	3	3	2	3	1	1	1	1	1	1	1	3
19-Sep	1	1	1	1	1	2	1	2	3	4	4	5	5	5	6	5	5	3	2	2	2	2	2	3	6
20-Sep	4	2	2	2	2	2	1	2	2	2	3	3	4	4	4	4	3	1	1	1	2	2	2	2	4
21-Sep	2	2	1	2	2	1	1	2	2	2	3	4	4	4	4	4	2	2	3	2	2	2	1	1	4
22-Sep	1	1	1	2	2	1	1	1	2	2	3	4	4	3	4	4	4	4	2	2	UO	UO	UO	1	4
23-Sep	UO	2	2	2	1	1	1	1	2	3	3	3	3	3	4	3	3	2	1	1	2	2	1	1	4
24-Sep	1	1	1	1	1	1	2	1	2	2	3	4	4	5	4	5	4	2	1	1	1	1	2	1	5
25-Sep	1	2	1	2	2	2	3	3	3	3	5	6	7	7	7	5	5	4	4	5	4	3	3	4	7
26-Sep	3	4	4	2	3	5	4	5	6	5	6	6	6	6	6	7	6	6	6	5	5	5	5	6	7
27-Sep	4	3	4	4	4	3	3	3	4	4	4	4	5	5	6	5	5	3	2	2	2	1	1	1	6
28-Sep	1	1	1	2	2	1	2	2	2	3	5	5	5	5	6	3	3	3	2	2	2	2	2	2	6
29-Sep	2	1	2	1	2	2	1	2	2	3	3	4	5	4	4	3	4	5	5	3	5	6	5	7	7
30-Sep	6	6	4	3	4	3	4	4	3	6	5	5	4	4	4	4	4	3	3	2	1	1	1	1	6
	7	7	7	7	7	8	7	7	7	8	7	7	7	7	7	7	6	6	6	5	5	6	6	7	
	Diurnal Maximum																								

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

EBRT - September 2026

Direction of Maximum Speed: 338 deg on Sep 11 12:00
Direction of Maximum Daily Speed Average: 334.1 deg on Sep 11

Direction of Minimum Speed: 9 deg on Sep 18 00:00
Direction of Minimum Daily Speed Average: 0.3 deg on Sep 18

Monthly Average Direction: 211.2 deg

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Percent Operational Time:	99.4

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-Sep	111	133	130	152	138	131	138	144	168	184	182	169	173	163	159	164	158	153	150	135	136	140	142	140	153.6
2-Sep	140	140	134	131	137	133	134	141	144	143	146	150	142	143	145	140	133	136	131	131	134	132	131	136	138.6
3-Sep	136	137	135	114	112	123	122	120	132	139	128	127	104	112	113	118	117	117	119	105	104	97	111	125	121.6
4-Sep	124	120	114	131	122	121	131	264	276	342	350	352	349	354	2	358	3	3	3	9	6	4	10	6	7.4
5-Sep	9	14	8	4	355	5	10	9	21	0	9	358	354	349	352	37	17	332	340	350	5	104	111	108	6.7
6-Sep	125	126	123	124	128	135	129	148	158	170	180	179	171	158	176	173	169	170	158	135	146	143	148	140	154.4
7-Sep	134	133	127	127	130	149	97	143	158	169	172	172	180	195	199	199	212	207	200	153	153	140	132	127	158.9
8-Sep	127	94	340	346	28	21	0	354	355	357	345	338	312	335	314	299	304	317	149	121	141	155	157	153	346.7
9-Sep	159	155	133	137	135	148	161	172	186	194	198	199	206	208	227	243	235	219	221	233	220	209	237	257	204.1
10-Sep	256	270	291	271	253	247	240	245	246	250	265	265	262	266	283	291	280	305	315	326	322	317	323	326	282.3
11-Sep	328	326	326	334	337	340	336	334	335	336	341	338	338	342	341	336	324	329	332	334	325	323	329	331	334.1
12-Sep	322	324	323	313	280	285	320	323	329	328	306	271	273	270	255	269	242	219	184	167	178	187	181	186	263.4
13-Sep	187	190	186	193	192	175	164	204	218	228	233	215	219	226	224	220	220	213	4	30	31	34	51	351	212.8
14-Sep	1	15	24	22	10	356	357	358	356	356	346	347	355	10	8	348	350	358	345	348	333	327	309	311	356.1
15-Sep	313	311	292	287	278	214	238	206	221	230	258	260	260	265	300	226	332	169	186	203	234	295	321	341	262.0
16-Sep	353	14	22	323	315	335	358	319	210	204	245	202	217	231	209	219	231	197	158	119	114	136	136	135	188.9
17-Sep	135	137	141	142	145	147	152	152	158	174	168	201	206	233	226	202	251	210	178	177	181	171	266	9	165.6
18-Sep	126	175	156	9	71	80	38	79	15	5	357	343	285	278	276	325	327	196	159	135	126	146	152	146	113.7
19-Sep	154	151	153	156	149	138	142	158	177	187	189	192	186	179	173	172	172	169	170	170	171	169	169	175	171.5
20-Sep	173	188	184	171	168	187	173	169	189	197	213	220	237	244	233	220	212	188	173	170	173	183	172	171	196.7
21-Sep	184	183	174	158	164	158	150	161	172	185	193	188	166	162	156	149	139	153	165	172	176	187	176	174	168.7
22-Sep	145	124	75	48	103	103	86	320	305	311	336	331	325	309	282	260	261	259	236	241	UO	UO	UO	92	303.0
23-Sep	UO	108	108	107	110	105	120	124	152	158	181	197	188	171	165	166	160	148	148	137	139	146	153	169	156.6
24-Sep	177	195	196	154	192	164	173	174	194	207	235	243	248	239	241	256	256	239	192	193	143	153	98	97	218.3
25-Sep	90	112	80	90	85	90	87	87	99	72	72	78	74	74	89	79	70	57	51	73	21	16	14	354	70.0
26-Sep	9	38	34	7	285	267	259	258	261	263	262	262	262	267	271	275	273	273	271	265	268	267	267	270	271.2
27-Sep	262	249	255	265	259	255	248	237	246	244	251	265	264	260	261	267	265	253	238	228	216	195	190	191	250.6
28-Sep	198	187	168	144	165	158	156	179	197	214	221	217	225	231	240	219	196	194	173	169	173	168	168	160	195.7
29-Sep	158	140	147	159	188	187	180	203	207	219	229	253	268	281	274	272	287	284	274	265	280	279	268	282	250.0
30-Sep	289	288	289	292	285	283	311	308	310	325	329	324	327	316	311	314	306	322	320	326	328	341	310	319	309.0
	173.6	163.5	142.0	139.5	164.6	162.1	155.5	184.8	206.7	221.7	232.0	234.1	238.5	238.2	239.8	237.7	239.5	224.0	207.3	177.2	173.6	181.0	177.6	189.5	
	Diurnal Average																								

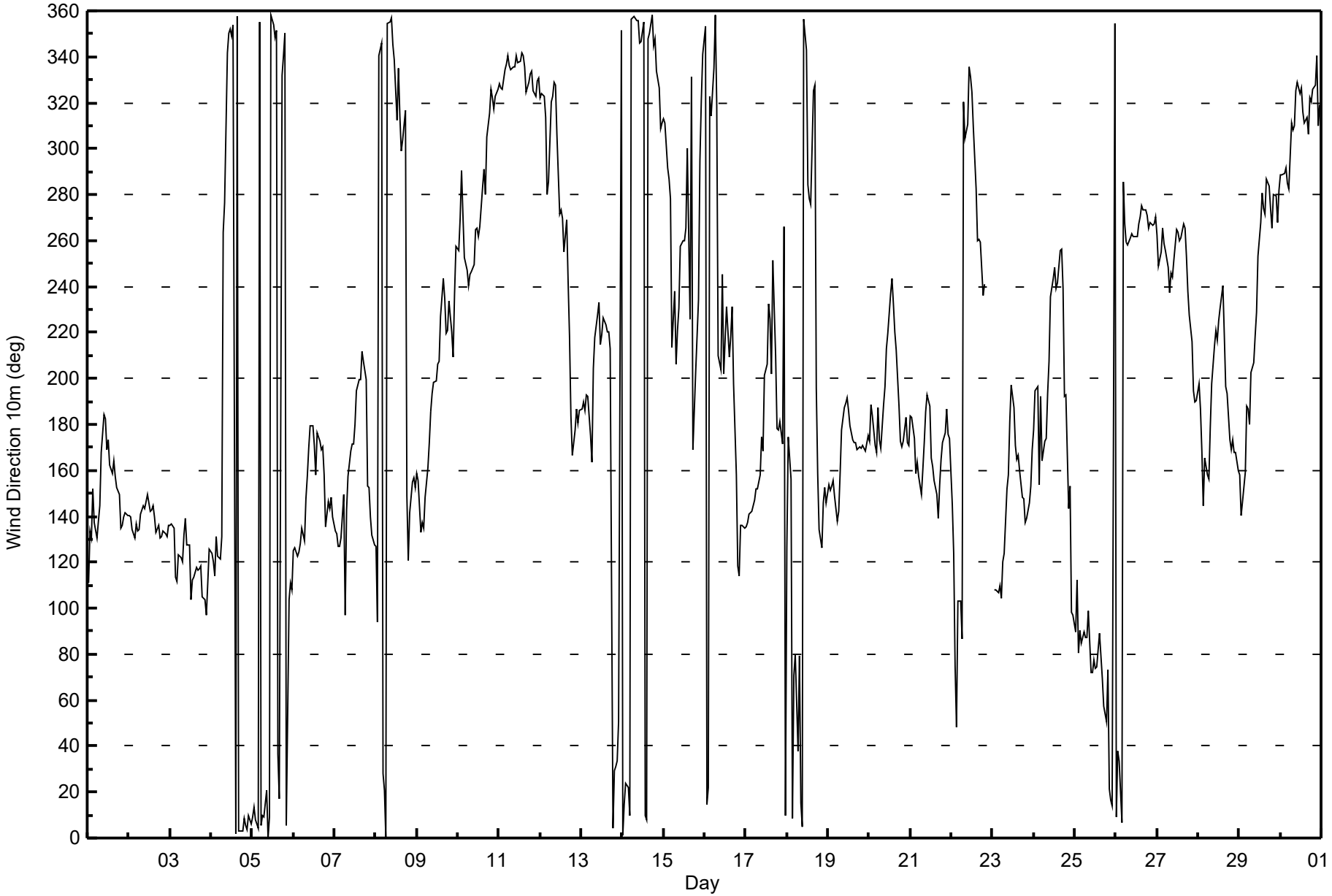
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

EBRT - September 2026



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

Maximum Value: 90 deg on Sep 17 22:00

Minimum Value: 8 deg on Sep 17 20:00

Percentiles: P_1 = 9 P_{10} = 12 Q_1 = 14 Median = 17 Q_3 = 21 P_{90} = 29 P_{99} = 61

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

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-Sep	15	15	12	11	12	13	14	16	14	14	17	17	19	19	18	18	17	14	14	15	15	15	14	15	19
2-Sep	15	15	17	17	17	18	17	15	16	18	16	16	18	19	18	18	18	18	17	17	17	17	17	16	19
3-Sep	15	15	17	19	17	17	16	19	21	21	21	19	21	19	19	17	20	21	18	18	15	17	17	17	21
4-Sep	18	18	18	19	23	29	63	30	36	20	20	22	21	22	23	22	22	24	23	23	22	21	22	21	63
5-Sep	23	22	20	20	19	17	22	35	34	26	42	68	56	61	36	50	72	21	11	12	27	34	16	19	72
6-Sep	16	12	13	13	12	16	16	15	15	18	19	16	17	20	31	25	30	12	21	19	14	15	13	14	31
7-Sep	15	13	12	14	14	15	33	15	16	18	18	20	18	25	39	34	36	19	54	61	14	11	13	15	61
8-Sep	16	24	46	16	19	20	20	20	21	29	27	32	31	39	38	28	32	42	31	15	12	9	8	10	46
9-Sep	10	12	13	12	16	16	12	13	13	13	13	15	15	16	18	17	16	14	14	15	16	14	21	16	21
10-Sep	17	23	17	14	15	15	13	16	15	16	15	16	17	17	16	18	15	26	22	18	18	18	19	18	26
11-Sep	17	18	17	20	19	19	18	18	19	19	20	19	19	20	20	18	17	17	16	17	17	17	15	17	20
12-Sep	17	17	16	16	19	21	17	19	15	25	31	44	27	26	32	29	25	19	13	8	10	10	11	11	44
13-Sep	10	10	12	12	12	16	17	14	13	20	17	15	16	18	17	19	17	15	24	20	19	17	21	20	24
14-Sep	21	23	21	21	22	21	20	21	21	21	19	20	23	23	24	21	23	20	18	17	12	15	17	18	24
15-Sep	16	15	17	18	20	48	13	18	16	32	23	22	26	27	43	29	47	49	16	16	16	26	24	20	49
16-Sep	20	22	20	28	22	16	31	66	29	26	28	33	36	41	27	27	21	20	9	23	22	16	17	17	66
17-Sep	17	17	15	16	14	15	13	15	15	15	18	27	14	24	36	19	21	16	11	8	10	90	21	59	90
18-Sep	21	30	27	52	35	53	23	51	33	42	81	60	46	29	32	39	49	58	18	16	14	12	9	11	81
19-Sep	10	10	9	10	10	13	13	13	15	14	14	15	15	16	15	13	13	12	11	11	11	11	13	11	16
20-Sep	13	11	15	10	12	13	13	13	12	14	20	20	19	20	23	20	15	12	9	10	10	11	10	10	23
21-Sep	11	11	10	23	13	13	14	13	12	14	14	13	16	15	18	15	16	15	14	11	11	11	10	11	23
22-Sep	19	15	17	9	43	15	87	14	17	19	22	19	23	28	21	21	16	14	47	11	UO	UO	UO	13	87
23-Sep	UO	14	42	9	10	8	13	19	15	22	18	18	18	16	17	15	16	12	11	12	15	12	11	13	42
24-Sep	11	12	22	18	21	17	13	13	12	16	19	17	18	18	23	22	18	24	13	19	12	12	22	16	24
25-Sep	19	31	13	15	15	17	19	17	20	18	19	17	19	20	28	20	20	18	21	19	42	22	22	21	42
26-Sep	22	36	54	56	35	35	20	16	16	15	16	15	15	16	17	17	17	16	15	15	15	16	16	15	56
27-Sep	15	19	15	15	14	14	14	14	14	17	19	22	22	21	21	19	16	18	13	14	13	13	11	10	22
28-Sep	9	9	10	22	15	13	14	18	14	15	16	16	18	18	17	16	12	12	12	11	10	11	12	13	22
29-Sep	12	13	16	12	12	12	12	15	13	15	16	17	18	16	16	15	16	17	15	17	18	17	16	17	18
30-Sep	18	17	16	17	16	15	22	20	19	19	18	17	18	20	19	19	19	17	17	16	16	15	15	20	22
	23	36	54	56	43	53	87	66	36	42	81	68	56	61	43	50	72	58	54	61	42	90	24	59	
	Diurnal Maximum																								

UO - Unstable Operation

Appendix 1 - Summary of Ambient Air Quality Objectives (AAAQOs) and Ambient Air Quality Guidelines (AAAQGs) in September 2026

Site	Paramter	Date/Time	Reference	Period	Reported	Final	Status
Ft. McKay S	TRS	1Sep26, 08:30		30-min	7	7.2	exc
Lower Camp	H2S	2Sep26, 03:00	458374	1-hr	14	13.5	exc
Lower Camp	H2S	2Sep26, 04:00	458375	1-hr	11	10.9	exc
Lower Camp	H2S	2Sep26, 05:00	458375	1-hr	10	9.7	nae
Fort Hills	PM2.5	2Sep26, 05:00		1-hr	103	102.9	exc
Lower Camp	H2S	2Sep26, 06:00	458375	1-hr	11	10.9	exc
Lower Camp	H2S	2Sep26, 07:00	458375	1-hr	10	9.7	nae
Lower Camp	H2S	2Sep26, 18:00	458406	1-hr	13	13.0	exc
Lower Camp	H2S	2Sep26, 22:00	458409	1-hr	10	9.6	nae
Lower Camp	H2S	2Sep26, 23:00	458409	1-hr	11	10.4	exc
Lower Camp	H2S	2Sep26, 24:00	458410	24-hr	8	7.5	exc
Lower Camp	H2S	3Sep26, 02:00	458412	1-hr	12	11.9	exc
Lower Camp	H2S	3Sep26, 03:00	458412	1-hr	12	12.2	exc
Pihew Point	H2S	3Sep26, 03:00	458413	1-hr	11	11.0	exc
Lower Camp	H2S	3Sep26, 04:00	458412	1-hr	11	10.7	exc
Lower Camp	H2S	3Sep26, 05:00	458412	1-hr	10	9.8	nae
Lower Camp	H2S	3Sep26, 06:00	458412	1-hr	11	10.4	exc
Lower Camp	H2S	3Sep26, 24:00	458459	24-hr	3	3.3	exc
Lower Camp	H2S	6Sep26, 09:00	458511	1-hr	12	11.8	exc
Fort Hills	TRS	6Sep26, 09:30		30-min	7	6.6	exc
Pihew Point	H2S	8Sep26, 03:00	458542	1-hr	12	12.4	exc
Pihew Point	H2S	10Sep26, 24:00	458717	24-hr	3	3.4	exc
Kirby North	H2S	17Sep26, 14:00		1-hr	0	0	nae
Kirby North	H2S	17Sep26, 15:00		1-hr	0	0	nae
EBRT	H2S	27Sep26, 06:00	459379	1-hr	10	0.1	nae
Jackfish 1	H2S	30Sep26, 21:00	459524	1-hr	11	10.8	exc

*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

October 30, 2026
8:27:32 AM
Request # 4989785

Submitted by: EN6138_DENNY
Submission Date: Oct 30, 2026 8:24:36 AM

File Type	File Name
Ambient Data	AMB-WBEA-202609-V00.xml

Total Number of Files: 1

*** End of Report ***

ELECTRONIC TRANSFER SYSTEM
AIRDATA
SUBMISSION REPORT

October 30, 2026
8:28:16 AM
Request # 4989792

Submitted by: EN6138_DENNY
Submission Date: Oct 30, 2026 8:28:09 AM

File Type	File Name
Airshed Monitoring Report	WBEA-202609.pdf

Total Number of Files: 1

*** End of Report ***

ELECTRONIC TRANSFER SYSTEM
AIRDATA
SUBMISSION REPORT

October 30, 2026
10:15:12 AM
Request # 4989884

Submitted by: EN6138_DENNY
Submission Date: Oct 30, 2026 10:15:02 AM

File Type	File Name
Calibration Report	CAL-WBEA-202609-R01.pdf

Total Number of Files: 1

*** End of Report ***

ELECTRONIC TRANSFER SYSTEM
AIRDATA
SUBMISSION REPORT

October 30, 2026
8:28:56 AM
Request # 4989793

Submitted by: EN6138_DENNY
Submission Date: Oct 30, 2026 8:28:49 AM

File Type	File Name
Calibration Report	CAL-WBEA-202609.pdf

Total Number of Files: 1

*** End of Report ***



End of Report