WOOD BUFFALO
ENVIRONMENTAL ASSOCIATION

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Wood Buffalo Environmental Association

JUNE 2026

MONTHLY REPORT

CONTINUOUS MONITORING

July 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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July 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 June 2026
Wood Buffalo Environmental Association

Enclosed is the June 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 20 – MacKay River
AMS 03 – Lower Camp (Meteorology)	AMS 21 – Conklin
AMS 04 – Buffalo Viewpoint	AMS 22 – Janvier
AMS 05 – Mannix	AMS 23 – Fort Hills
AMS 06 – Patricia McInnes	AMS 25 – Waskōw ohci Pimâtisiwin
AMS 07 – Athabasca Valley	AMS 27 – Jackfish 2/3
AMS 08 – Fort Chipewyan	AMS 29 – Surmont 2
AMS 09 – Barge Landing	AMS 30 – Ells River
AMS 11 – Lower Camp (Air Quality)	AMS 31 – Blackrod
AMS 13 – Fort McKay South	AMS 32 – Pihew Point
AMS 14 – Anzac	AMS 33 – Monday Creek
AMS 17 - Wapasu	AMS 34 – Hangingstone Expansion
AMS 18 – Stony Mountain	AMS 505 – Sawbones Bay
AMS 19 – Firebag	AMS 507 – Kirby South

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	Health Canada
Alberta Environment and Protected Areas	Keyano College
Alberta Primary and Preventative Health Services	Parks Canada
Alberta Health Services	Regional Municipality of Wood Buffalo
Environment and Climate Change Canada	Lac La Biche County

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

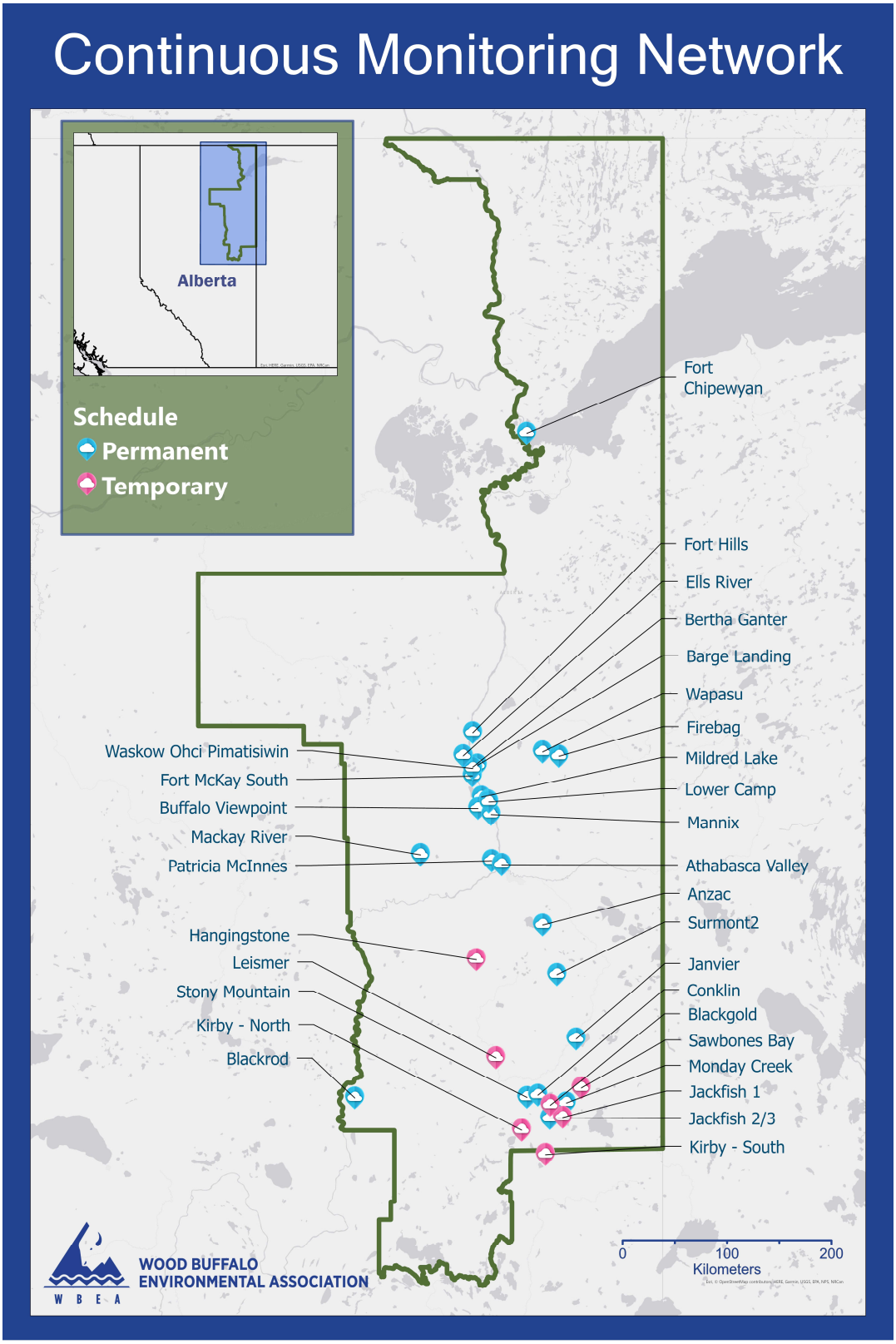


Figure 1. Map of WBEA Continuous Monitoring Network

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, H_2S, NH_3, NO_2, and O_3.

There were nine ambient ground-level concentrations in excess of the 1-hour SO_2 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 24-hour SO_2 objective reported to AB EPA; following data validation and processing, the exceedances were confirmed.

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

There were thirty-three ambient ground-level concentrations in excess of the 24-hour $PM_{2.5}$ objective reported to AB EPA; following data validation and processing, thirty-one 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 June 2026, there were 5 instances of monitoring instruments operating less than 90% of the time.

Station	Parameter	Details
AMS 23	THC/NMHC/CH4	The total hydrocarbon (THC)/non-methane hydrocarbon (NMHC)/methane (CH4) analyzer at the Fort Hills AMS operated less than 90% of June 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 July 21, 2026 (reference number 456390). Throughout June 2026, the THC/NMHC/CH_4 analyzer experienced multiple operational issues, including daily span checks that did not meet AMD criteria, baseline drift, and increased baseline noise affecting analyzer performance. Troubleshooting and maintenance activities were performed to address these issues, including analyzer recalibration, span adjustments, carrier support gas cylinder adjustments, chromatogram reviews, and optimization of analytical window settings. Due to continued performance issues, the analyzer was ultimately replaced with analyzer operations restoring on June 23, 2026. Following data validation, the combined impacts of these issues resulted in an operational time of 80% for the month of June 2026.
AMS 23	$PM_{2.5}$	The PM2.5 analyzer at the Fort Hills AMS operated for less than 90% of June 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 July 21, 2026 (reference number 456391). From June 16 to 29, the PM2.5 analyzer experienced periods of flat-line readings and communication interruptions. Troubleshooting and maintenance activities, including analyzer resets, were conducted on June 19, 22, and 29. Following the final reset on June 29, normal analyzer operation was restored. Following the data validation process, the unstable operations of the PM2.5 analyzer due to this incident resulted in 103 invalid hours and an operational time of 86% for June 2026.
AMS 3	WS/WD/VWS	The WS/WD/VWS at the 163-meter elevation at Lower Camp Met Tower operated less than 90% of May and June 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 June 15, 2026 (reference number 454638). Throughout the month of May, intermittent flat-line readings were observed from the WS/WD/VWS sensor at the 163-m elevation. The issue remains unresolved, as WBEA relies on a qualified third-party contractor to perform tower-climbing activities and conduct the required instrument replacement. WBEA is actively coordinating with the contractor to schedule the maintenance work at the earliest available opportunity. Following data validation, 677 hours of data were invalidated for May, and 150 hours of data have been invalidated to date in June.
AMS 5	AT/RH, WS/WD/VWS	The AT/RH and WS/WD/VWS at the 90-meter elevation at Mannix AMS operated less than 90% for May and June 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 June 23, 2026 (reference number 455030). Throughout May and June 2026, intermittent flat-line readings and data acquisition system (DAS) failures were observed from the AT/RH and WS/WD/VWS sensors at the 90-meter elevation. This resulted in 86% operational time for May and 345 invalid hours thus far in June. The issue remains unresolved, as WBEA relies on a qualified third-party contractor to perform tower-climbing activities and conduct the required sensor replacement. WBEA is actively coordinating with the contractor to complete the required maintenance at the earliest available opportunity. The affected sensors will be replaced once tower access can be scheduled with the qualified contractor.
AMS 18	$PM_{2.5}$	The $PM_{2.5}$ analyzer at the Stony Mountain AMS operated for less than 90% of the time in May and June 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 June 23, 2026 (reference number 455055). Routine daily system checks identified intermittent communication failures between the $PM_{2.5}$ analyzer and the station data logger, resulting in periods where valid $PM_{2.5}$ data were not recorded. Throughout May and June, WBEA conducted multiple site visits to investigate the issue. Troubleshooting activities included analyzer replacement, analyzer reboots, and modifications to the data logger configuration. Investigation determined the communication failures were caused by an internal communication

		component within the $PM_{2.5}$ analyzer. Normal operation of the $PM_{2.5}$ analyzer resumed on June 14, 2026, at 16:00 MST. Following the data validation process the unstable operations of the $PM_{2.5}$ analyzer due to this incident resulted in 165 invalid hours and an operational time of 78% for May 2026, and 238 invalid hours during June 2026.
AMS 5	WS/WD/VWS	The WS/WD/VWS sensor at the 75-meter elevation at Mannix operated less than 90% of June 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 July 24, 2026 (reference number 456573). In June 2026, the WS/WD/VWS sensor at the 20-meter elevation experienced reduced data availability due to Data Acquisition System (DAS) failures causing communication issues and periods of unstable sensor operation resulting in flat-line readings. Following data validation, these issues resulted in an operational time of 83% for June 2026.

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 45 hours this month.

Flatlines in the output signal of the TRS analyzer on June 2 resulted in 1 hour of invalid data.

Failure to record data of the $PM_{2.5}$ analyzer on June 7 and 8 resulted in 2 hours of invalid data.

Cleaning of the manifold on June 16 interrupted the normal operation of the NH_3, $NO/NO_2/NO_x$, O_3, SO_2 and $THC/NMHC/CH_4$ analyzers for 2 hours.

Surface Leaf Wetness sensor operated out of range on June 6 resulting in 1 hour of invalid data.

Flatline in the output signal of the wind sensor on June 26 resulted in 1 hour of invalid data.

Station 3, Lower Camp – Meteorology

Failure to record data of all meteorological sensors at all elevations on June 29 resulted in 1 hour of invalid data.

Flatline in the output signal of the vertical wind speed, wind speed, wind direction at 100-meter elevation on June 29 resulted in 36 hours of downtime.

Flatline in the output signal of the vertical wind speed, wind speed, wind direction at 163-meter elevation throughout the month resulted in 719 hours of downtime.

Station 4, Buffalo Viewpoint

Maintenance to replace the support gas cylinder of the $THC/NMHC/CH_4$ analyzer on June 17 resulted in 2 hours of downtime.

Cleaning of the manifold on June 22 interrupted the normal operation of the H_2S, $NO/NO_2/NO_X$ and $THC/NMHC/CH_4$, SO_2 analyzers for 2 hours.

Maintenance to replace the support gas cylinder of the $THC/NMHC/CH_4$ analyzer on June 26 resulted in 2 hours of downtime.

Flatlines in the output signal of the $PM_{2.5}$ analyzer on June 2 and 19 resulted in 2 hours of invalid data.

Station 5, Mannix

Failure to record data of all meteorological sensors at all elevations on June 1, 3, 23 and 26 resulted in 29 hours of invalid data.

Failure to record data of all meteorological sensors at all 90-meter elevation on June 1 resulted in 8 hours of invalid data.

Flatline in the output signal of the relative humidity and temperature at 90-meter elevation from June 1 to 24 resulted in 533 hours of invalid data.

Flatline in the output signal of all meteorological sensors at 75-meter elevation from June 13 to 26 resulted in 94 hours of invalid data.

Flatline in the output signal of all meteorological sensors at 90-meter elevation from June 1 to 26 resulted in 582 hours of invalid data.

Station 6, Patricia McInnes

The NH_3 analyzer required additional time to stabilize to levels below ambient concentrations following the automated daily spans and routine monthly multipoint calibrations. NH_3 analyzers require additional time for stabilization after being exposed to high concentrations, this is due to the physical properties of the NH_3 gas. Data for 1-3 hours following each daily span has been reported as invalid for a total of 70 hours this month.

Unstable operations due to excessive baseline drift of the THC/NMHC/CH_4 analyzer on June 15 and 20 resulted in 7 hours of invalid data.

Analyzer failure due to an defective sample pump of the THC/NMHC/CH_4 analyzer on June 22-23 resulted in 13 hours of invalid data. Subsequent maintenance to replace the sample pump of the THC/NMHC/CH_4 on June 23 resulted in 3 hours of downtime.

Unstable operations due to a flatline in the THC/NMHC/CH_4 analyzer signal on June 23-24 resulted in 2 hours of invalid data.

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

Station 7, Athabasca Valley

Cleaning of the manifold on June 15 interrupted the normal operation of the NO_2/NO/NO_x, O_3 THC/NMHC/CH_4, TRS, and SO_2 analyzers for 1 hour.

Station 8, Fort Chipewyan

Unstable operation due to flatlining of the $PM_{2.5}$ analyzer on June 1 resulted in 16 hours of invalid data.

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

Station 9, Barge Landing

Cleaning of the manifold on June 12 interrupted the normal operation of the NO_2/NO/NO_x and TRS analyzers for 1 hour.

Station 11, Lower Camp

Maintenance to replace the support gas cylinder for the THC/NMHC/CH_4 analyzer on June 26 resulted in 3 hours of downtime.

A flatline in the output signal of the wind sensor on June 3 and 13 resulted in 2 hours of invalid data.

Station 13, Fort McKay South

Unstable operations of the NO/NO_2/NO_x due to station temperature fluctuations on June 1 resulted in 10 hours of invalid data.

Stabilization period after installing a new NO/NO_2/NO_x analyzer from June 1 to 2 resulted in 21 hours of downtime.

Maintenance to recalibrate and verify performance of the NO/NO_2/NO_x analyzer on June 17 resulted in 8 hours of downtime.

Cleaning of the manifold on June 24 interrupted the normal operation of all gaseous analyzers for 1 hour.

Failure to record data of the $PM_{2.5}$ analyzer on June 27 resulted in 1 hour of invalid data.

Maintenance to re-align the wind sensor on June 1 resulted in 1 hour of downtime.

The wind sensor was out of alignment on June 1, resulting in 10 hours of invalid data.

Station 14, Anzac

Maintenance to verify the daily QA check response of the NO/NO_2/NO_x, O_3 and TRS analyzers on June 1 resulted in 1-2 hours of downtime.

Maintenance to replace the support gas cylinder for the THC/NMHC/CH_4 analyzer on June 30 resulted in 2 hours of downtime.

Station 17, Wapasu

Failure to record data of the $PM_{2.5}$ analyzer on June 2 resulted in 1 hour of invalid data.

Cleaning of the manifold on June 15 interrupted the normal operation of all gaseous analyzers except for NO_x/NO/NO_2 analyzer 1 hour.

The relative humidity sensor operated out of range on June 1 to 8 resulting in 29 hours of invalid data.

Flatline in the output signal of the wind sensor on June 18 resulted in 1 hour of invalid data.

Station 18, Stony Mountain

Station power failure on June 3 and 8 interrupted the normal operation of NO/NO_2/NO_x, O_3, SO_2, THC/NMHC/CH_4 and TRS analyzers for 2 hours.

Unstable operation due to intermittent flatlining of the $PM_{2.5}$ analyzer throughout the month resulted in 308 hours of invalid data. Subsequent maintenance to install a smart switch to help resetting $PM_{2.5}$ analyzer remotely when needed resulted in additional 1 hour of downtime.

Station 19, Firebag

Station power failure on June 4 and 5 interrupted the normal operation of SO_2 analyzer for 26 hours.

Maintenance to replace the support gas cylinder for the THC analyzer on June 15 resulted in 4 hours of downtime.

Station 20, MacKay River

A flatline in the output signal of the wind sensor on June 28 resulted in 1 hour of invalid data.

Station 21, Conklin

Cleaning of the manifold on June 25 interrupted the normal operation of NO/NO_2/NO_x, O_3, SO_2 and THC/NMHC/CH_4 analyzers for 1 hour.

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

Station 22, Janvier

An internal audit on June 2-3 interrupted the normal operations of all air quality analyzers for 1 to 6 hours.

Failure to record data of the $PM_{2.5}$ on June 29 and 30 resulted in 19 hours of invalid data.

Note: The daily span check for O_3 analyzer was outside the 10% AMD criteria on June 6 due to an interruption in the station calibrator configuration.

Station 23, Fort Hills

Unstable operation due to excessive baseline noise of the THC/NMHC/CH_4 analyzer throughout the month resulted in 130 hours of invalid data.

Maintenance activities were performed on June 8, 17, and 19, including recalibration of the THC/NMHC/CH_4 analyzer, replacement of the internal pump, and adjustment of the carrier pressure. These separate maintenance events resulted in a total of 15 hours of downtime.

Maintenance to verify the daily QA check response of the NO/NO_2/NO_x analyzer on June 10 resulted in 2 hours of downtime.

Maintenance to replace the NO/NO_2/NO_x analyzer on June 11 to 12 resulted in 22 hours of downtime.

Cleaning of the manifold on June 15 interrupted the normal operation of NO/NO_2/NO_x, SO_2 and THC/NMHC/CH_4 analyzers for 1 hour.

Unstable operation due to excessive baseline noise of the $PM_{2.5}$ analyzer from June 16 to 29 resulted in 99 hours of invalid data.

Maintenance to reboot the $PM_{2.5}$ analyzer on June 19, 22 and 29 resulted in 4 hours of downtime.

Station 25, Waskōw ohci Pimâtisiwin

Cleaning of the manifold on June 4 interrupted the normal operation of SO_2 analyzer for 1 hour.

Analyzer failure of the H_2S analyzer due to UV lamp failure resulted in 55 hours of invalid data. Further maintenance to replace the H_2S analyzer resulted in an additional 1 hour of downtime.

A flatline in the output signal of the wind sensor on June 4 and 15 resulted in 4 hours of invalid data.

Station 27, Jackfish 2/3

Stabilization period after installing a new NO/NO_2/NO_x analyzer from June 17 to 18 resulted in 16 hours of downtime.

Maintenance to recalibrate the NO/NO_2/NO_x analyzer on June 23 resulted in 4 hours of downtime.

Note: Unstable operation due to AMD non-compliance of the NO/NO_2/NO_x analyzer on June 21-23 resulted in 55 hours of invalid data.

Station 29, Surmont 2

Station power failure on June 2 interrupted the normal operation of the $PM_{2.5}$ analyzer for 1 hour.

Unstable operations due to a flatline in the $PM_{2.5}$ analyzer signal on June 6, 17, and 18 resulted in 35 hours of invalid data.

Maintenance to replace the support gas cylinder of the THC analyzer on June 3 resulted in 3 hours of downtime.

The relative humidity sensor operated out of range on June 3 resulted in 4 hours of invalid data.

Intermittent flatlines in the output signal of the wind sensor throughout the month resulted in 33 hours of invalid data.

Station 30, Ells River

Unstable operation due to AMD non-compliance of the THC/NMHC/CH_4 analyzer on June 1 to 2 resulted in 32 hours of invalid data. Subsequent maintenance to replace the analyzer and left overnight to stabilized on June 2 to 3 resulted in additional 21 hours of downtime.

Unstable operation due to flatline in analyzer output signal of the $PM_{2.5}$ analyzer on June 10 to 11 and 30 resulted in 30 hours of downtime. Subsequent maintenance to reboot the analyzer on June 30 resulted in additional 1 hour of downtime.

Unstable operation due to AMD non-compliance of the NO/NO_2/NO_X analyzer on June 23 to 24 resulted in 29 hours of invalid data. Subsequent maintenance to replace the analyzer on June 24 to 25 resulted in additional 25 hours of downtime.

Unstable operation due to excessive baseline noise of the THC/NMHC/CH_4 analyzer on June 24 resulted in 1 hour of invalid data.

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

Station 31, Blackrod

Unstable operation due to flatline in analyzer output signal of the H_2S analyzer on June 26 and 27 resulted in 5 hours of invalid data.

Station 32, Pihew Point

Cleaning of the manifold on June 10 interrupted the normal operation of the SO_2 and THC/NMHC/CH_4 analyzers for 1 hour.

Station 33, Monday Creek

Cleaning of the manifold on June 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 June 5 and 20 resulted in 2 hours of invalid data.

Flatline in the output signal of the wind sensor on June 28 resulted in 1 hour of invalid data.

Station 34, Hangingstone Expansion

The relative humidity sensor operated out of range on June 8 and 10 resulted in 10 hours of invalid data.

Station 505, Sawbones Bay

Cleaning of the manifold on June 24 interrupted the normal operation of the H_2S and $NO/NO_2/NO_x$ analyzers for 2 hours.

Station 507, Kirby South

Note: The Kirby South portable completed monitoring on June 29, 2026. Removal calibration files are included with routine monthly calibration files, in the monthly calibration report for June 2026.

Maintenance to replace the support gas cylinder of the THC analyzer on June 11 resulted in 5 hours of downtime.

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 Denny Estador, Karina Fenwick, Parampreet Kaur and Shawn Jansen Van Beak 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.

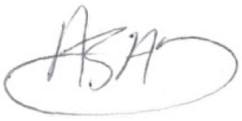
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I certify that I have reviewed and verified this report, and that the information is complete, accurate and representative of the monitoring results, reporting timeframe, and the specified analysis, summarization, and reporting requirements.



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June 2026

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APPROVAL NUMBERS	REPORT DATE MONTH	YEAR
289664-00-00 241311-00-00 20809-02-00 149968-01-00 237382-00-00 48522-01-00 240008-00-00	6	2026

CONTINUOUS AMBIENT MONITORING

PARAMETER	STN. NO.	% TIME OPERATIONAL	30-MIN AVERAGE		ONE-HOUR AVERAGE		24-HOUR AVERAGE	
			MAXIMUM CONCENTRATION	NO. READINGS > REGULATION	MAXIMUM CONCENTRATION	NO. READINGS > REGULATION	MAXIMUM CONCENTRATION	NO. READINGS > REGULATION
SO2(ppb)	1	100	-	-	24	0	2.6	0
SO2(ppb)	4	100	-	-	38.3	0	4.2	0
SO2(ppb)	5	100	-	-	97.7	0	13.9	0
SO2(ppb)	6	100	-	-	358.9	5	61.9	1
SO2(ppb)	7	100	-	-	88.3	0	8.7	0
SO2(ppb)	8	100	-	-	3.5	0	1.1	0
SO2(ppb)	9	100	-	-	12.8	0	2.0	0
SO2(ppb)	11	100	-	-	21.0	0	4.8	0
SO2(ppb)	13	100	-	-	25.1	0	3.3	0
SO2(ppb)	14	100	-	-	2.8	0	0.5	0
SO2(ppb)	17	100	-	-	6.3	0	1.8	0
SO2(ppb)	18	100	-	-	3.3	0	0.5	0
SO2(ppb)	19	96	-	-	10.8	0	1.2	0
SO2(ppb)	20	100	-	-	1146.1	4	140.1	1
SO2(ppb)	21	100	-	-	3.3	0	0.7	0
SO2(ppb)	22	100	-	-	1.2	0	0.5	0
SO2(ppb)	23	100	-	-	9.7	0	1.9	0
SO2(ppb)	25	100	-	-	25.9	0	2.9	0
SO2(ppb)	27	100	-	-	8.1	0	1.2	0
SO2(ppb)	29	100	-	-	2.8	0	0.7	0
SO2(ppb)	30	100	-	-	44.3	0	3.7	0
SO2(ppb)	31	100	-	-	6.3	0	1.0	0
SO2(ppb)	32	100	-	-	42.1	0	7.6	0
SO2(ppb)	33	100	-	-	4.5	0	0.6	0
SO2(ppb)	34	100	-	-	8.3	0	1.2	0
SO2(ppb)	505	100	-	-	27.9	0	6.7	0
SO2(ppb)	507	100	-	-	12.5	0	4.3	0
H2S(ppb)	1	100	-	-	1.8	0	0.5	0
H2S(ppb)	4	100	-	-	3.2	0	0.7	0
H2S(ppb)	5	100	-	-	7.8	0	2.2	0
H2S(ppb)	11	100	-	-	9.1	0	1.3	0
H2S(ppb)	17	100	-	-	1.2	0	0.3	0
H2S(ppb)	19	100	-	-	6.0	0	0.7	0
H2S(ppb)	20	100	-	-	3.1	0	0.6	0
H2S(ppb)	23	100	-	-	1.7	0	0.5	0
H2S(ppb)	25	92	-	-	1.9	0	0.4	0
H2S(ppb)	27	100	-	-	1.3	0	0.4	0
H2S(ppb)	29	100	-	-	0.3	0	0.1	0
H2S(ppb)	31	99	-	-	0.7	0	0.4	0
H2S(ppb)	32	100	-	-	5.2	0	1.0	0
H2S(ppb)	33	100	-	-	0.8	0	0.2	0
H2S(ppb)	34	100	-	-	2.5	0	0.4	0
H2S(ppb)	505	100	-	-	2.8	0	1.1	0
H2S(ppb)	507	100	-	-	0.4	0	0.1	0
TRS(ppb)	1	100	2.3	0	1.9	-	0.6	-
TRS(ppb)	6	100	3.4	0	3.1	-	0.9	-
TRS(ppb)	7	100	2.2	0	2.1	-	0.4	-
TRS(ppb)	8	100	0.7	0	0.7	-	0.3	-
TRS(ppb)	9	100	2.3	0	2.0	-	0.7	-
TRS(ppb)	13	100	4.1	0	2.7	-	0.9	-
TRS(ppb)	14	100	1.7	0	1.6	-	0.6	-
TRS(ppb)	18	100	0.6	0	0.5	-	0.4	-
TRS(ppb)	21	100	0.9	0	0.7	-	0.2	-
TRS(ppb)	22	99	0.7	0	0.9	-	0.3	-
TRS(ppb)	23	100	1.5	0	1.4	-	0.6	-
TRS(ppb)	30	100	4.6	0	4.2	-	1	-
THC(ppm)	1	100	-	-	3.0	-	2.4	-
THC(ppm)	4	99	-	-	3.0	-	2.3	-
THC(ppm)	5	100	-	-	2.9	-	2.3	-
THC(ppm)	6	97	-	-	3.2	-	2.2	-
THC(ppm)	7	100	-	-	2.5	-	2.2	-
THC(ppm)	9	100	-	-	2.8	-	2.3	-

June 2026

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APPROVAL NUMBERS	REPORT DATE MONTH	YEAR
289664-00-00 241311-00-00 20809-02-00 149968-01-00 237382-00-00 48522-01-00	6	2026

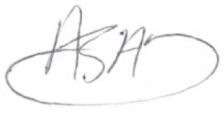
CONTINUOUS AMBIENT MONITORING

				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)	11	100	-	-	3.1	0	2.3	-
48263-01-00	THC(ppm)	13	100	-	-	3.1	0	2.4	-
224816-00-00	THC(ppm)	14	100	-	-	2.2	0	2.0	-
151469-01-00	THC(ppm)	17	100	-	-	2.7	0	2.4	-
189942-00-00	THC(ppm)	18	100	-	-	2.2	0	2.1	-
206355-00-00	THC(ppm)	19	99	-	-	2.8	0	2.3	-
46586-00-00	THC(ppm)	20	100	-	-	3.3	0	2.5	-
73203-02-00	THC(ppm)	21	100	-	-	4.2	0	2.4	-
216466-01-00	THC(ppm)	22	100	-	-	2.5	0	2.1	-
137467-01-00	THC(ppm)	23	80	-	-	8.0	0	2.8	-
236394-00-00	THC(ppm)	29	100	-	-	2.4	0	2.3	-
254465-00-00	THC(ppm)	30	93	-	-	4.1	0	2.2	-
094-03-00	THC(ppm)	31	100	-	-	12.6	0	3.7	-
80105-01-00	THC(ppm)	32	100	-	-	5.2	0	2.3	-
305529-00-00	THC(ppm)	507	99	-	-	2.8	0	2.5	-
318401-00-00	O3(ppb)	1	100	-	-	62.2	0	41.1	-
026-03-00	O3(ppb)	4	100	-	-	59.4	0	38.4	-
364232-00-00	O3(ppb)	6	100	-	-	69.3	0	38.6	-
228044-00-00	O3(ppb)	7	100	-	-	67.1	0	35.4	-
247548-00-00	O3(ppb)	8	100	-	-	59.9	0	47.1	-
231302-00-00	O3(ppb)	13	100	-	-	62.1	0	33.7	-
246984-01-00	O3(ppb)	14	100	-	-	55.1	0	36.1	-
153125-01-00	O3(ppb)	17	100	-	-	58.5	0	42.8	-
	O3(ppb)	18	100	-	-	55.3	0	46.2	-
	O3(ppb)	21	100	-	-	54.5	0	35.1	-
	O3(ppb)	22	100	-	-	60.1	0	36.6	-
	NO2(ppb)	1	100	-	-	30.1	0	10.8	-
	NO2(ppb)	4	100	-	-	29.7	0	9.8	-
	NO2(ppb)	6	100	-	-	24.1	0	8.9	-
	NO2(ppb)	7	100	-	-	15.2	0	5.6	-
	NO2(ppb)	8	100	-	-	6.7	0	2.5	-
	NO2(ppb)	9	100	-	-	30.0	0	11.4	-
	NO2(ppb)	13	94	-	-	26.0	0	8.3	-
	NO2(ppb)	14	100	-	-	6.6	0	2.7	-
	NO2(ppb)	17	100	-	-	17.2	0	4.1	-
	NO2(ppb)	18	100	-	-	2.9	0	1.4	-
	NO2(ppb)	19	100	-	-	15.3	0	3.7	-
	NO2(ppb)	20	100	-	-	21.8	0	5.4	-
	NO2(ppb)	21	100	-	-	10.5	0	2.1	-
	NO2(ppb)	22	100	-	-	7.1	0	1.4	-
	NO2(ppb)	23	97	-	-	47.1	0	19.2	-
	NO2(ppb)	27	90	-	-	11.8	0	1.8	-
	NO2(ppb)	29	100	-	-	4.9	0	1.8	-
	NO2(ppb)	30	93	-	-	32.5	0	12.1	-
	NO2(ppb)	31	100	-	-	20.6	0	9.7	-
	NO2(ppb)	33	100	-	-	12.5	0	2.6	-
	NO2(ppb)	34	100	-	-	22.5	0	4.6	-
	NO2(ppb)	505	100	-	-	14.0	0	6.6	-
	NO2(ppb)	507	100	-	-	8.8	0	3.5	-
	CO(ppm)	7	100	-	-	0.5	0	0.3	-
	NH3(ppb)	1	93	-	-	13.0	0	0.0	-
	NH3(ppb)	6	90	-	-	0.0	0	0.0	0
	PM2.5(ug/m3)	1	100	-	-	90.1	4	50.9	2
	PM2.5(ug/m3)	4	100	-	-	94.4	18	70.1	3
	PM2.5(ug/m3)	6	100	-	-	81.7	1	54.0	2
	PM2.5(ug/m3)	7	100	-	-	96.2	1	58.1	2
	PM2.5(ug/m3)	8	98	-	-	79.7	0	52.4	2
	PM2.5(ug/m3)	9	100	-	-	109.6	10	61.9	2
	PM2.5(ug/m3)	13	100	-	-	100.4	8	57.2	2
	PM2.5(ug/m3)	14	100	-	-	96.2	4	55.7	3
	PM2.5(ug/m3)	17	100	-	-	81.2	1	51.6	2
	PM2.5(ug/m3)	18	57	-	-	94.1	1	6.3	0

APPROVAL NUMBERS	REPORT DATE MONTH	YEAR
289664-00-00 241311-00-00 20809-02-00 149968-01-00 237382-00-00 48522-01-00	6	2026

CONTINUOUS AMBIENT MONITORING

PARAMETER	STN. NO.	% TIME OPERATIONAL	30-MIN AVERAGE		ONE-HOUR AVERAGE		24-HOUR AVERAGE	
			MAXIMUM CONCENTRATION	NO. READINGS > REGULATION	MAXIMUM CONCENTRATION	NO. READINGS > REGULATION	MAXIMUM CONCENTRATION	NO. READINGS > REGULATION
240008-00-00	PM2.5(ug/m3)	21	100	-	-	84.6	1	51.8	2
48263-01-00	PM2.5(ug/m3)	22	97	-	-	74.1	0	18.8	0
224816-00-00	PM2.5(ug/m3)	23	86	-	-	280.1	27	81.4	6
151469-01-00	PM2.5(ug/m3)	29	95	-	-	70.3	0	56.3	2
189942-00-00	PM2.5(ug/m3)	30	96	-	-	105	3	43.6	1
206355-00-00	WS(km/h)	1	100	-	-	-	-	-	-
46586-00-00	WS(km/h)	4	100	-	-	-	-	-	-
73203-02-00	WS(km/h)	5	96	-	-	-	-	-	-
216466-01-00	WS(km/h)	6	100	-	-	-	-	-	-
137467-01-00	WS(km/h)	7	100	-	-	-	-	-	-
236394-00-00	WS(km/h)	8	100	-	-	-	-	-	-
254465-00-00	WS(km/h)	9	100	-	-	-	-	-	-
094-03-00	WS(km/h)	11	100	-	-	-	-	-	-
80105-01-00	WS(km/h)	13	98	-	-	-	-	-	-
305529-00-00	WS(km/h)	14	100	-	-	-	-	-	-
318401-00-00	WS(km/h)	17	100	-	-	-	-	-	-
026-03-00	WS(km/h)	18	100	-	-	-	-	-	-
364232-00-00	WS(km/h)	19	100	-	-	-	-	-	-
228044-00-00	WS(km/h)	20	100	-	-	-	-	-	-
247548-00-00	WS(km/h)	21	100	-	-	-	-	-	-
231302-00-00	WS(km/h)	22	100	-	-	-	-	-	-
246984-01-00	WS(km/h)	23	100	-	-	-	-	-	-
153125-01-00	WS(km/h)	25	99	-	-	-	-	-	-
	WS(km/h)	27	100	-	-	-	-	-	-
	WS(km/h)	29	95	-	-	-	-	-	-
	WS(km/h)	30	100	-	-	-	-	-	-
	WS(km/h)	31	100	-	-	-	-	-	-
	WS(km/h)	32	100	-	-	-	-	-	-
	WS(km/h)	33	100	-	-	-	-	-	-
	WS(km/h)	34	100	-	-	-	-	-	-
	WS(km/h)	505	100	-	-	-	-	-	-
	WS(km/h)	507	100	-	-	-	-	-	-



SIGNATURE OF ASSOCIATION REPRESENTATIVE

FOR ALBERTA ENVIRONMENT USE ONLY

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS01
BERTHA GANTER - FORT MCKAY
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT McKAY - BERTHA GANTER (AMS01)
JUNE 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	683	35	37	99.72	-	-	24.1	0	2.6	0
H2S(ppb) Average	684	36	36	100	-	-	1.8	0	0.5	0
TRS(ppb) Average	683	36	37	99.86	2.3	0	1.9	-	0.6	-
THC(ppm) Average	683	35	37	99.72	-	-	3	-	2.4	-
NMHC(ppm) Average	683	35	37	99.72	-	-	0.231	-	0.093	-
CH4(ppm) Average	683	35	37	99.72	-	-	2.9	-	2.3	-
O3 (ppb) Average	683	35	37	99.72	-	-	62.2	0	41.1	-
NO2 (ppb) Average	683	35	37	99.72	-	-	30.1	0	10.8	-
NO (ppb) Average	683	35	37	99.72	-	-	36.8	-	7.7	-
NOX (ppb) Average	683	35	37	99.72	-	-	49.3	-	18	-
NH3 (ppb) Average	631	42	89	93.47	-	-	13	0	0	-
PM2.5 (ug/m3) Average	717	1	3	99.72	-	-	90.1	4	50.9	2
Temperature 2 m (C) Average	720	0	0	100	-	-	31.2	-	23.9	-
Temperature 10 m (C) Average	720	0	0	100	-	-	30.8	-	24.2	-
Relative Humidity (%) Average	720	0	0	100	-	-	98.6	-	96.1	-
Wind Speed 10 m (km/h) Average	719	0	1	99.86	-	-	26	-	19	-
Wind Direction 10 m (deg) Average	719	0	1	99.86	-	-	-	-	-	-
Precipitation (mm) Total	720	0	0	100	-	-	7.4	-	60.8	-
Leaf Wetness (% of range) Average	719	0	1	99.86	-	-	66.1	-	51.4	-
Global Solar Radiation (W/m2) Average	720	0	0	100	-	-	924.9	-	368.5	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BERTHA GANTER FORT McKAY (AMS01)
JUNE 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	683	0.53	1.9	-	0	0	0	0.1	0.2	0.8	24.1
H2S (ppb) Average	684	0.2	0.2	-	0	0	0.1	0.1	0.3	0.5	1.8
TRS (ppb) Average	683	0.28	0.2	-	0.1	0.1	0.1	0.2	0.3	0.5	1.9
THC (ppm) Average	683	2.12	0.1	-	2	2	2	2.1	2.2	2.3	3
NMHC(ppm) Average	683	0.021	0.04	-	0	0	0	0	0	0.1	0.231
CH4(ppm) Average	683	2.1	0.1	-	2	2	2	2.1	2.1	2.3	2.9
O3 (ppb) Average	683	25.37	13.2	-	1.8	7.5	16.8	24.8	34.2	43.5	62.2
NO2 (ppb) Average	683	4.35	5.3	-	0	0.2	1	2.3	5.8	11.6	30.1
NO (ppb) Average	683	1.51	3.8	-	0	0	0	0	0.9	4	36.8
NOX (ppb) Average	683	5.86	8.3	-	0	0.2	1	2.7	6.5	16.7	49.3
NH3 (ppb) Average	631	0.04	0.7	-	0	0	0	0	0	0	13
PM2.5 (ug/m3) Average	717	9.34	13.2	-	0.4	1.4	2.8	5.1	9.5	20.6	90.1
Temperature 2 m (C) Average	720	16.46	5.9	-	6.4	9.9	11.7	15.3	20.3	25.3	31.2
Temperature 10 m (C) Average	720	16.47	5.6	-	7.1	10	11.8	15.6	20.3	24.6	30.8
Relative Humidity (%) Average	720	64.43	21.1	-	24.4	34	47.8	65.9	81.7	94.3	98.6
Wind Speed 10 m (km/h) Average	719	8.5	5	-	0	3	5	8	12	16	26
Wind Direction 10 m (deg) Average	719	-	-	-	-	-	-	-	-	-	-
Precipitation (mm) Total	720	-	-	104.66	-	-	-	-	-	-	-
Leaf Wetness (% of range) Average	719	6.28	13.4	-	0	0.1	0.6	1.4	2.4	20.4	66.1
Global Solar Radiation (W/m2) Average	720	242.13	273.8	-	0	0	3.8	121.5	424	716.2	924.9

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

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
NH3	01 Jun 2026 06:00	30 Jun 2026 13:00	45	Stabilization after daily QA check
NH3, NO2, O3, SO2, THC/NMHC/CH4	16 Jun 2026 15:00	16 Jun 2026 16:00	2	Maintenance - sample manifold cleaned
TRS	02 Jun 2026 15:00	02 Jun 2026 15:00	1	Unstable Operation - flatline in analyzer output signal
PM2.5	07 Jun 2026 14:00	07 Jun 2026 14:00	1	DAS Failure - data not recorded
PM2.5	08 Jun 2026 03:00	08 Jun 2026 03:00	1	DAS Failure - data not recorded
Surface Leaf Wetness	06 Jun 2026 03:00	06 Jun 2026 03:00	1	Sensor operated out of range
Wind Speed, Wind Direction	26 Jun 2026 06:00	26 Jun 2026 06:00	1	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Fort McKay - Bertha Ganter - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 24.1 ppb on Jun 30 10:00
Maximum Daily Average: 2.6 ppb on Jun 30

Minimum Value: 0.0 ppb on Jun 2 16:00
Minimum Daily Average: 0.0 ppb on Jun 9
Maximum Diurnal Average: 1.8 ppb at hour 10
Minimum Diurnal Average: 0.1 ppb at hour 3
Monthly Average: 0.53 ppb
Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.2 P_{90} = 0.8 P_{99} = 8.5

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	35
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0.1	Z	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.2
2-Jun	0.2	0.2	Z	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.2
3-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.3	0.4	5.6	6.2	4.7	3.2	1.1	0.4	2.1	1.9	0.3	0.1	0.0	1.2	6.2
4-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.2	1.1	0.9	0.2	0.0	0.1	0.3	0.9	3.6	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	3.6
5-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.2	0.1	0.1	0.6	2.2	3.4	3.5	6.4	3.1	5.0	3.0	8.3	7.5	2.0	1.5	0.8	0.3	0.1	2.1	8.3
6-Jun	Z	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
7-Jun	0.0	Z	0.0	0.0	0.1	0.2	0.2	0.6	1.1	2.9	7.0	4.9	2.8	2.2	1.7	0.8	0.3	0.2	0.1	0.1	0.0	0.0	0.1	0.0	1.1	7.0
8-Jun	0.1	0.1	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
9-Jun	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-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1
11-Jun	0.1	0.0	0.0	0.1	0.1	Z	0.5	0.3	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	0.0	0.1	0.1	0.1	0.5
12-Jun	Z	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
13-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.6	0.4	0.3	0.2	0.2	0.8	2.2	0.4	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.3	2.2
14-Jun	0.2	0.3	Z	0.2	0.2	0.2	0.2	0.5	0.5	0.5	0.5	0.3	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.5
15-Jun	0.2	0.2	0.1	Z	0.2	0.2	0.3	0.2	5.2	5.8	2.9	0.8	0.5	0.6	0.7	0.8	0.8	0.7	0.5	0.4	0.3	0.2	0.2	0.2	1.0	5.8
16-Jun	0.2	0.2	0.1	0.2	Z	0.2	0.2	0.1	0.1	0.4	0.4	0.3	0.2	0.1	M	M	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.2	0.2	0.4
17-Jun	0.1	0.1	0.0	0.0	0.0	Z	0.2	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
18-Jun	Z	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.6	0.1	0.1	0.1	0.6	0.0	0.1	0.1	0.1	0.1	0.6
19-Jun	0.1	Z	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
20-Jun	0.1	0.1	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
21-Jun	0.0	0.0	0.0	Z	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1
22-Jun	0.1	0.1	0.1	0.1	Z	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.9	0.4	0.1	0.0	0.1	0.2	0.9
23-Jun	0.1	0.2	0.1	0.1	0.1	Z	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	1.1	0.4	0.1	0.0	0.0	0.0	0.1	1.1
24-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.2	2.1	4.4	2.8	0.8	1.0	1.5	3.1	2.1	2.2	0.5	0.2	0.2	0.2	0.2	0.2	0.1	0.1	1.0	4.4
25-Jun	0.1	Z	0.2	0.2	0.1	0.2	0.6	1.4	7.1	12.9	10.1	0.5	1.0	1.0	1.9	1.3	1.6	1.3	1.6	0.4	0.2	0.1	0.3	1.4	2.0	12.9
26-Jun	2.4	0.7	Z	0.2	0.2	0.1	0.2	9.5	14.4	C	C	C	C	C	2.4	2.6	1.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.9	14.4
27-Jun	0.0	0.1	0.1	Z	0.1	0.1	0.1	0.2	0.3	0.3	0.1	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	0.1	0.3
28-Jun	0.0	0.0	0.0	0.0	Z	0.1	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	0.1	0.1	0.0	0.0	0.0	0.1	0.3
29-Jun	0.1	0.0	0.0	0.1	0.0	Z	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.3	10.4	6.1	3.5	1.0	10.4
30-Jun	Z	0.2	0.1	0.2	0.1	0.1	0.1	0.4	6.3	24.1	22.9	3.8	0.7	0.4	0.3	0.3	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	2.6	24.1
	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.6	1.4	1.8	1.7	0.6	0.5	0.8	0.8	0.7	0.4	0.5	0.4	0.3	0.2	0.4	0.3	0.2	Diurnal Average	
	2.4	0.7	0.2	0.2	0.2	0.2	0.6	9.5	14.4	24.1	22.9	4.9	3.5	6.4	6.2	5.0	3.2	8.3	7.5	2.1	1.9	10.4	6.1	3.5	Diurnal Maximum	

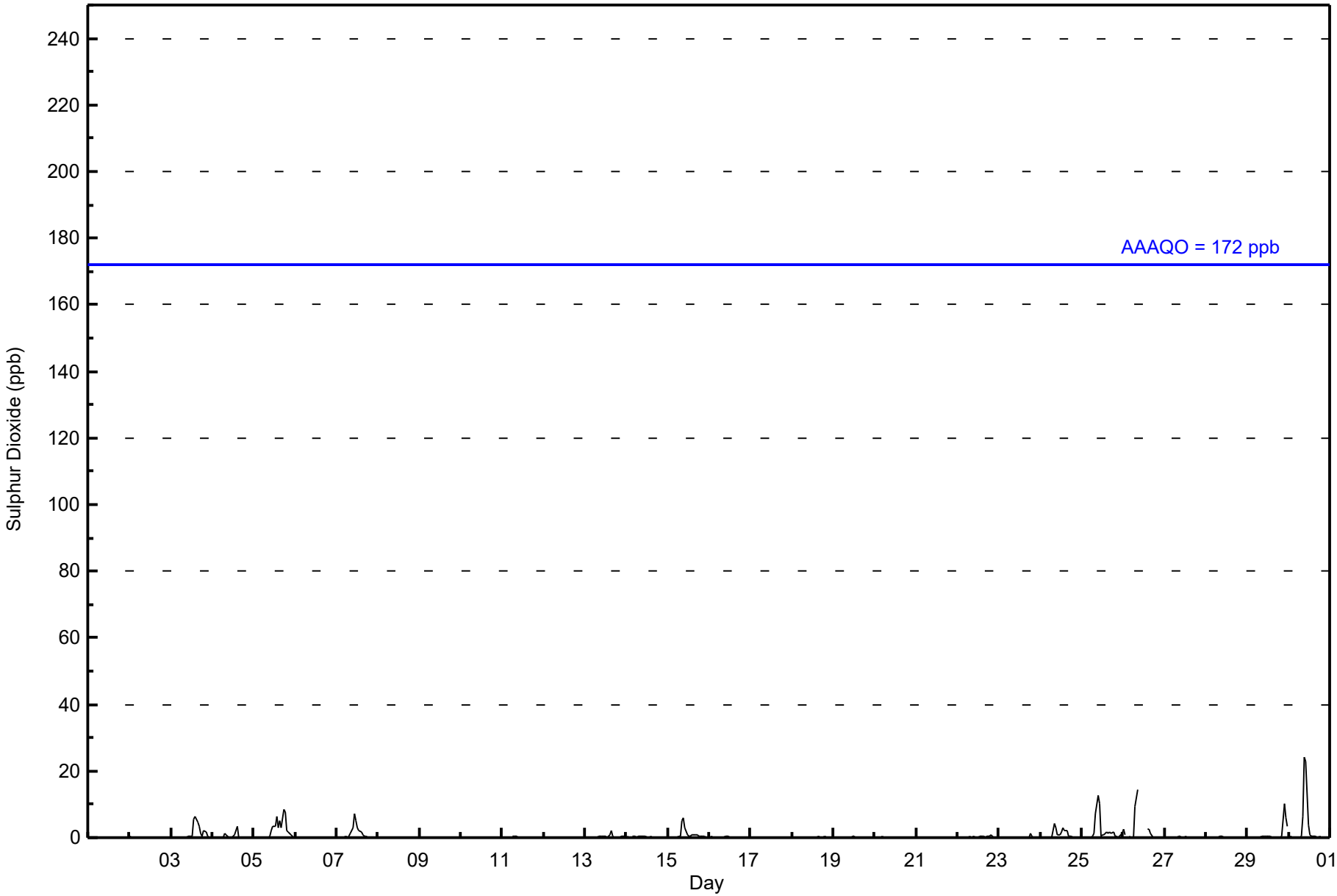
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Fort McKay - Bertha Ganter - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Fort McKay - Bertha Ganter - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	679	99.41	99.41
11 - 20	2	0.29	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: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Fort McKay - Bertha Ganter - June 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	142	64	29	17	5	19	30	90	47	32	12	10	17	49	40	75	678
11 - 20	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
21 - 60	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
61 - 110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111 - 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	142	64	30	17	5	20	30	92	47	32	12	10	17	49	40	75	682

Total Number of Valid Hours: 682

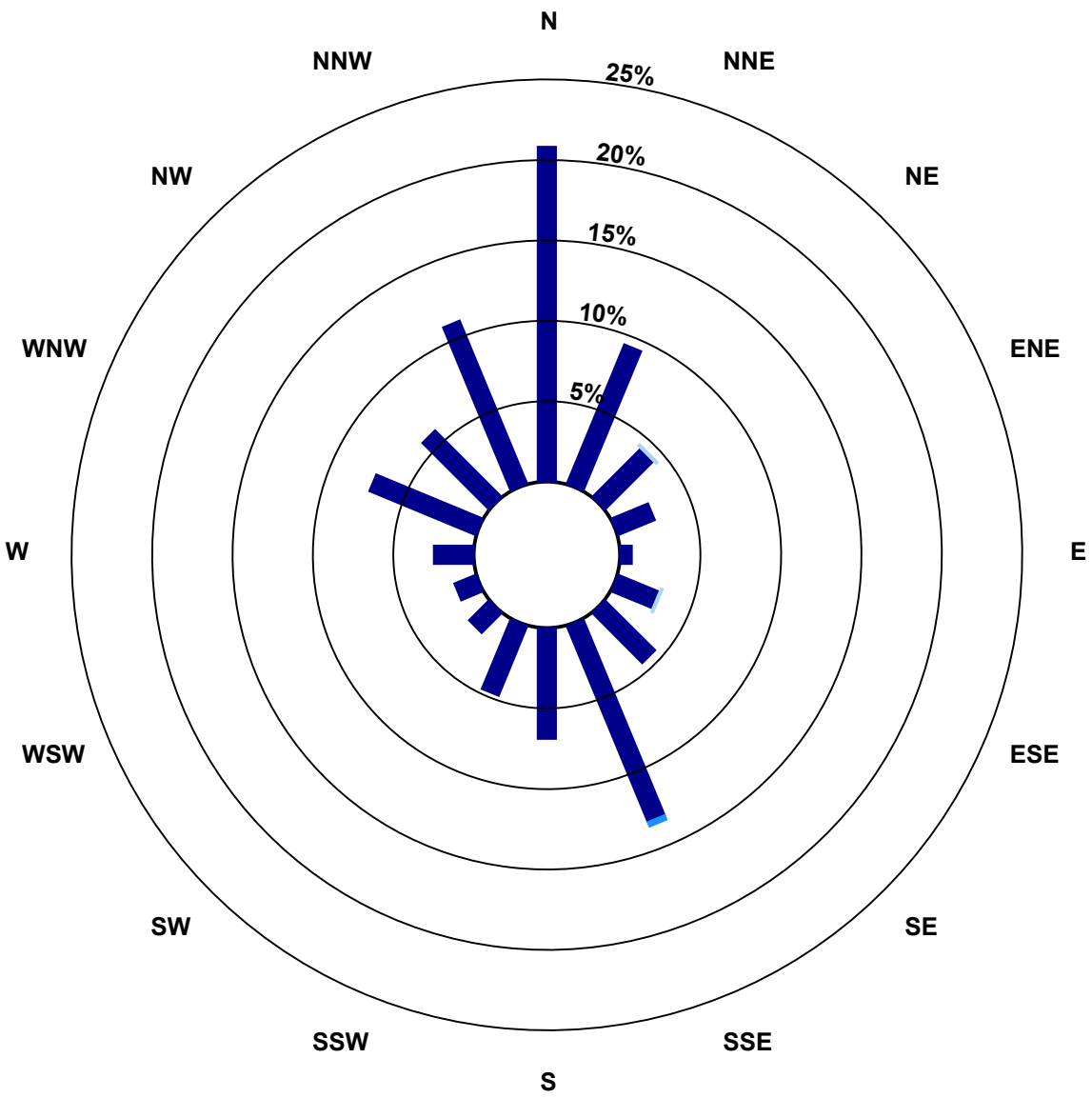
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

- 0 - 10
- 11 - 20
- 21 - 60
- 61 - 110
- 111 - 172
- > 172

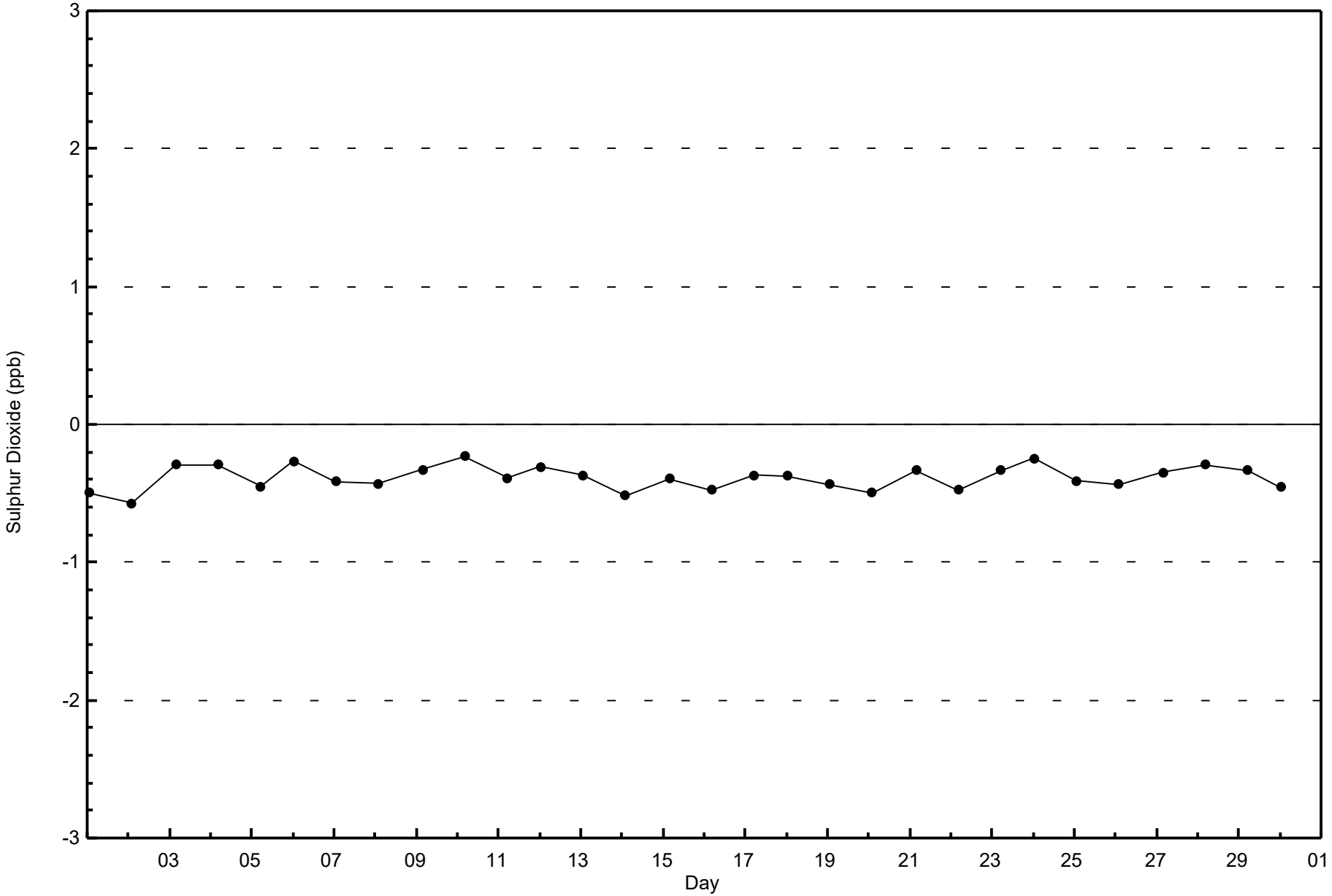
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Fort McKay - Bertha Ganter - June 2026

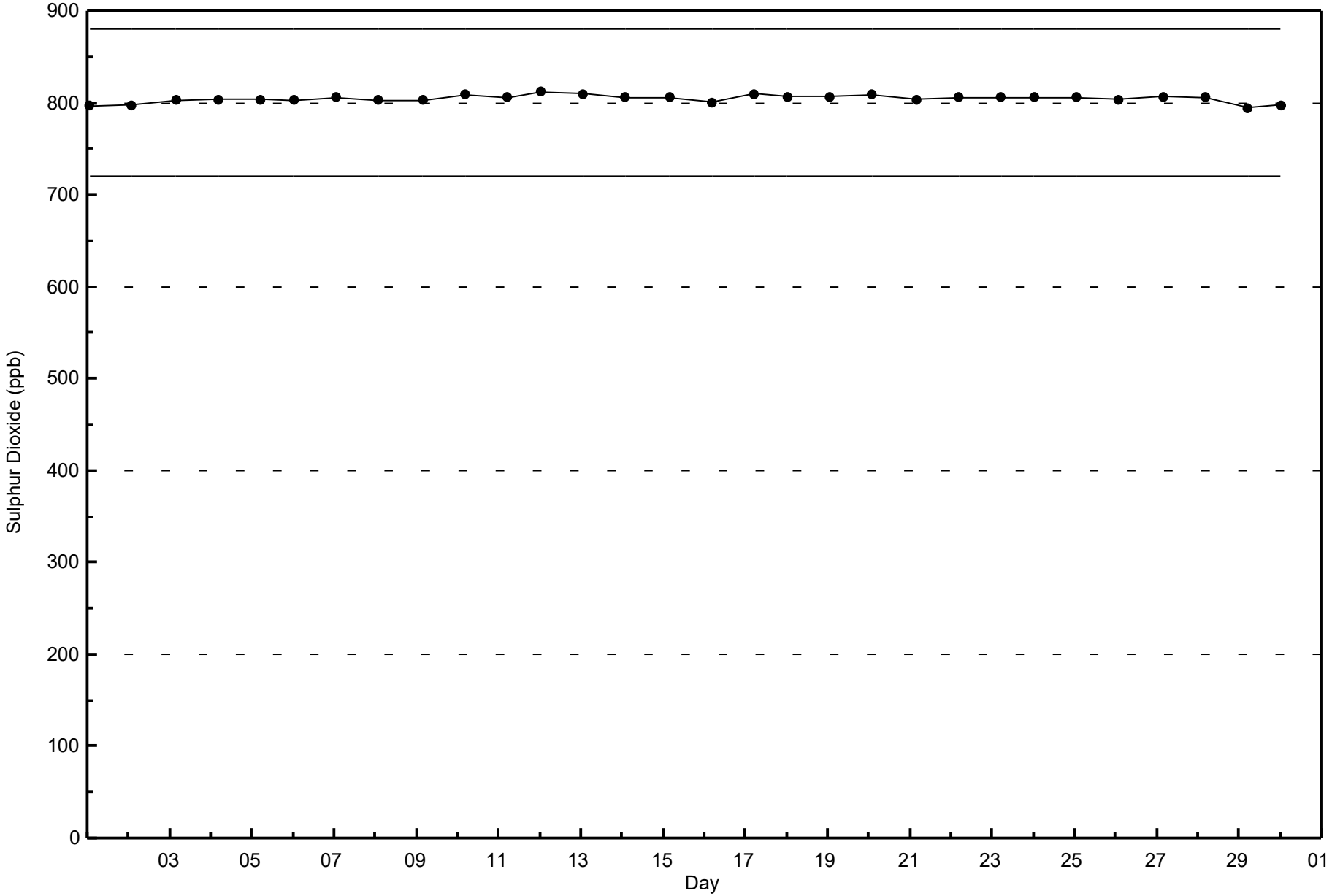


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Fort McKay - Bertha Ganter - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Fort McKay - Bertha Ganter - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.8 ppb on Jun 24 08:00 Maximum Daily Average: 0.5 ppb on Jun 24

Minimum Value: 0.0 ppb on Jun 16 09:00 Minimum Daily Average: 0.1 ppb on Jun 9
Maximum Diurnal Average: 0.4 ppb at hour 6 Minimum Diurnal Average: 0.1 ppb at hour 17
Monthly Average: 0.20 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.3 P_{90} = 0.5 P_{99} = 1.4

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

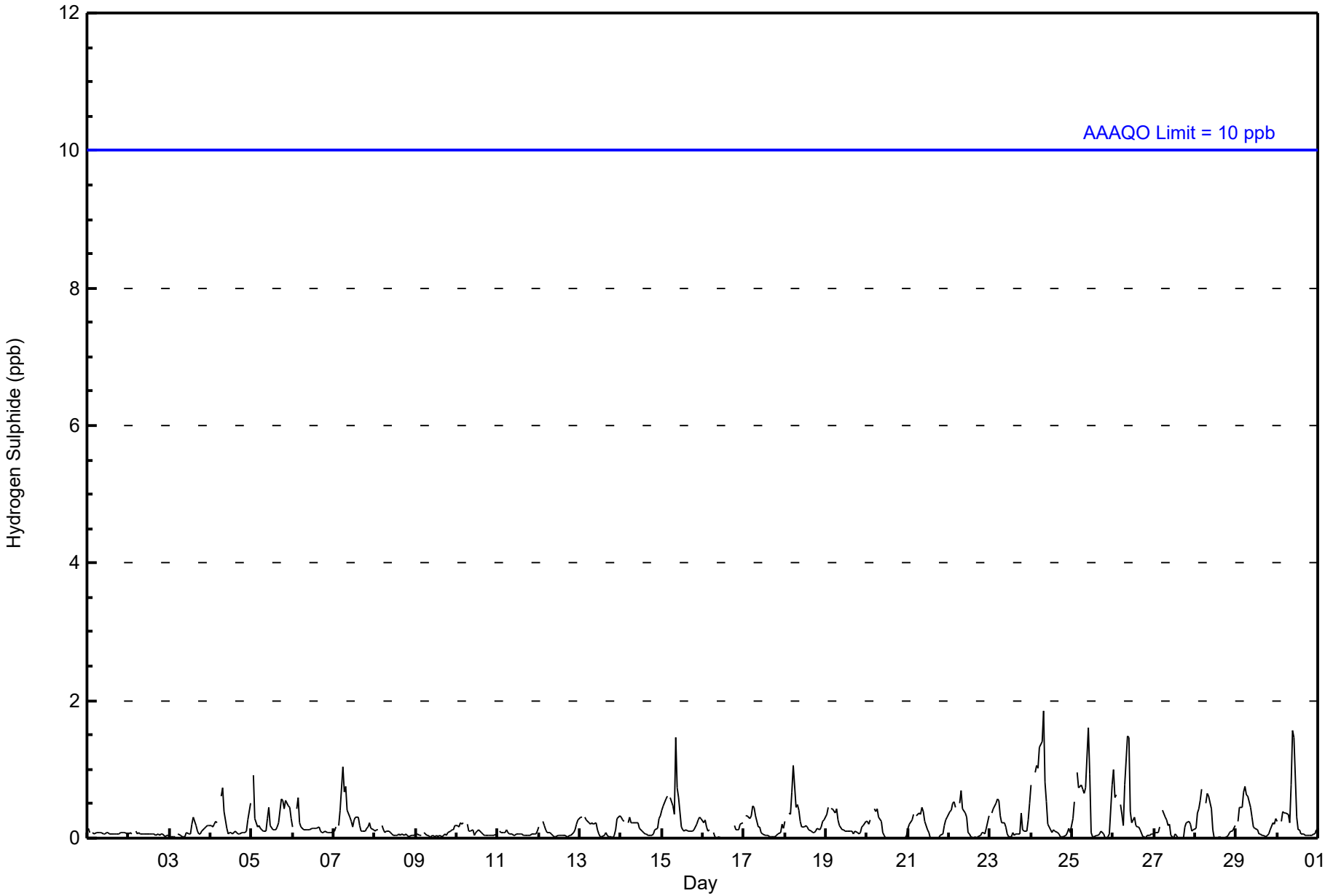
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Fort McKay - Bertha Ganter - June 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

Fort McKay - Bertha Ganter - June 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	143	58	30	18	5	21	28	97	48	33	11	9	17	50	41	74	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	143	58	30	18	5	21	28	97	48	33	11	9	17	50	41	74	683

Total Number of Valid Hours: 683

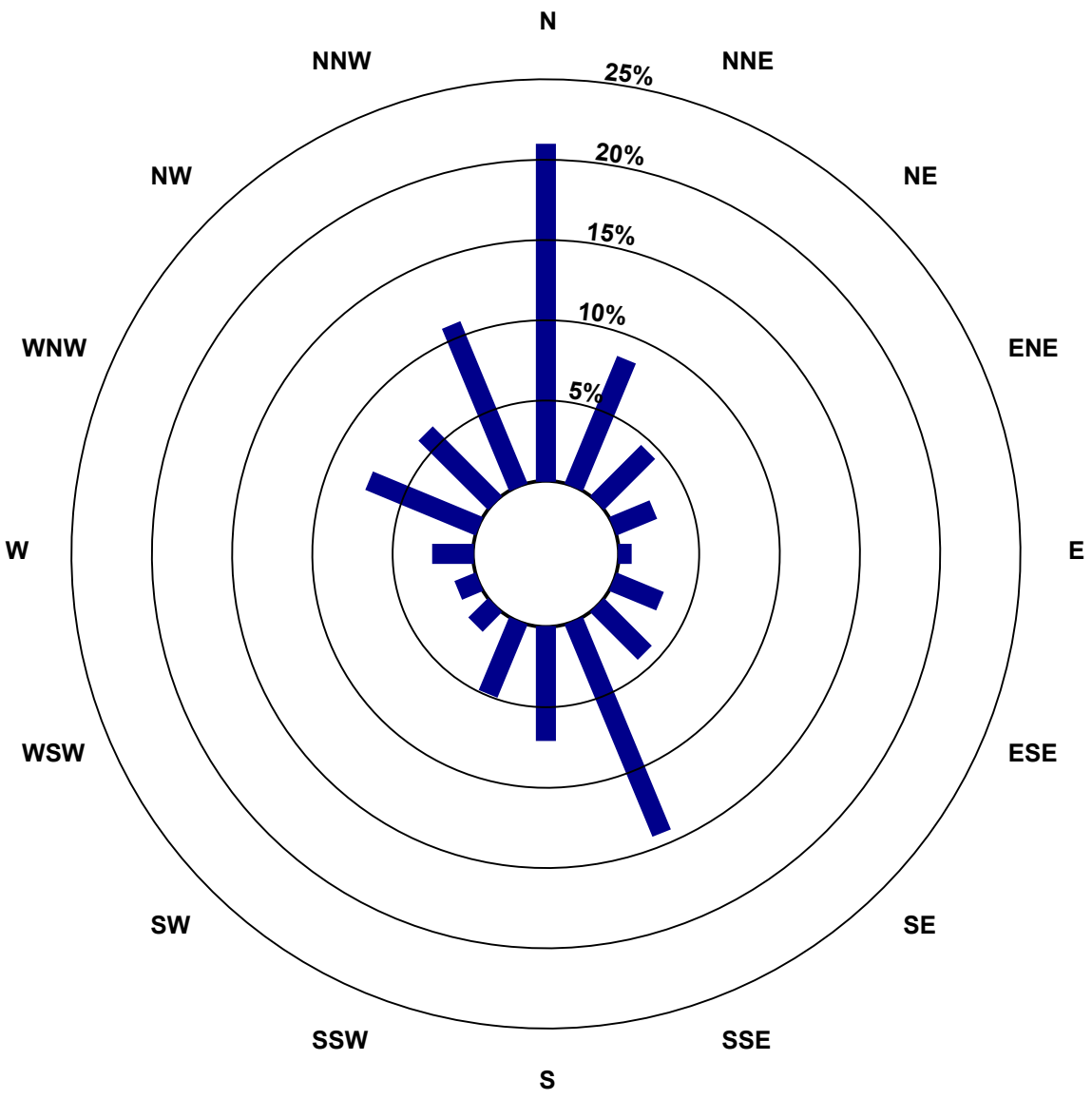
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H_2S) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

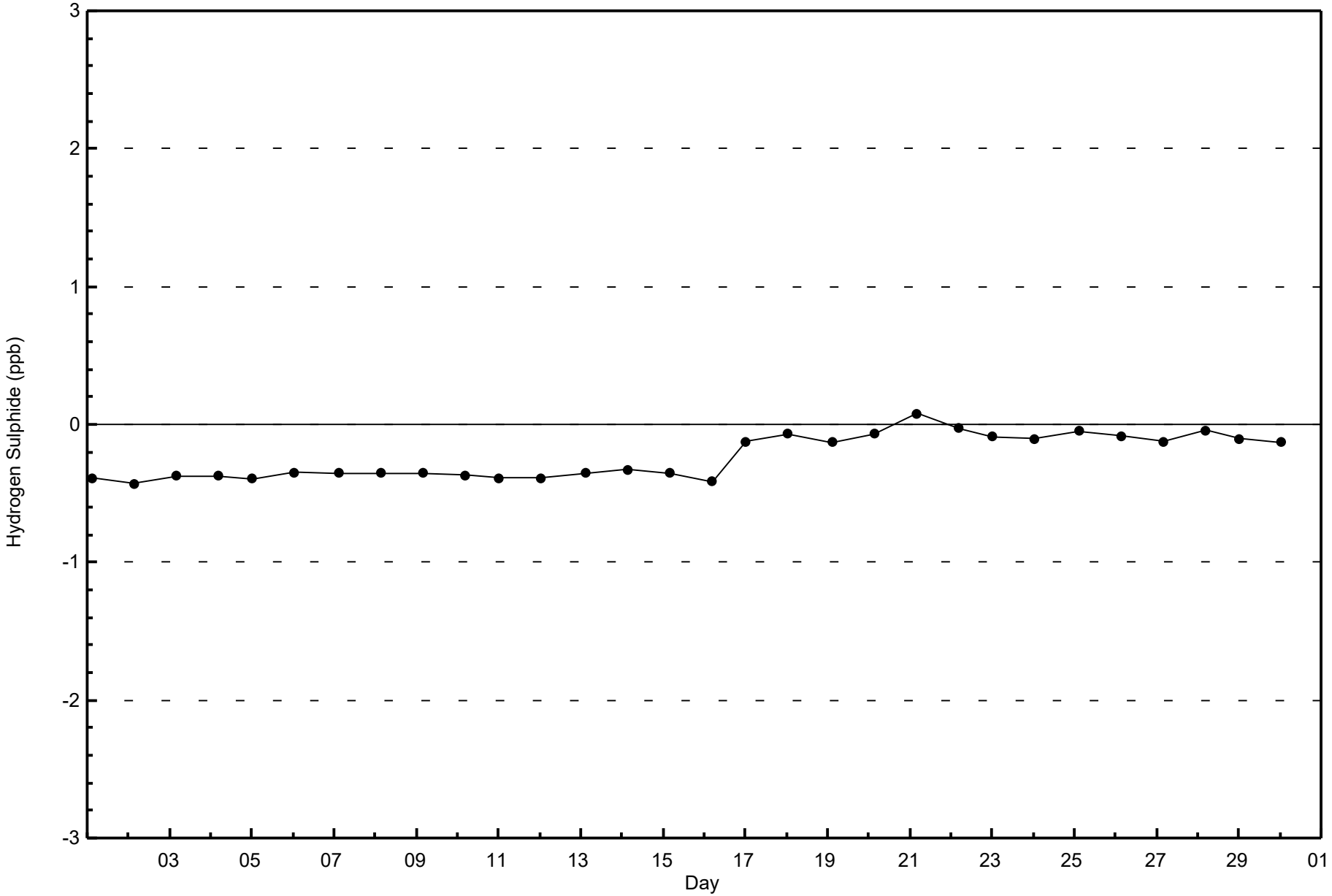
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Fort McKay - Bertha Ganter - June 2026

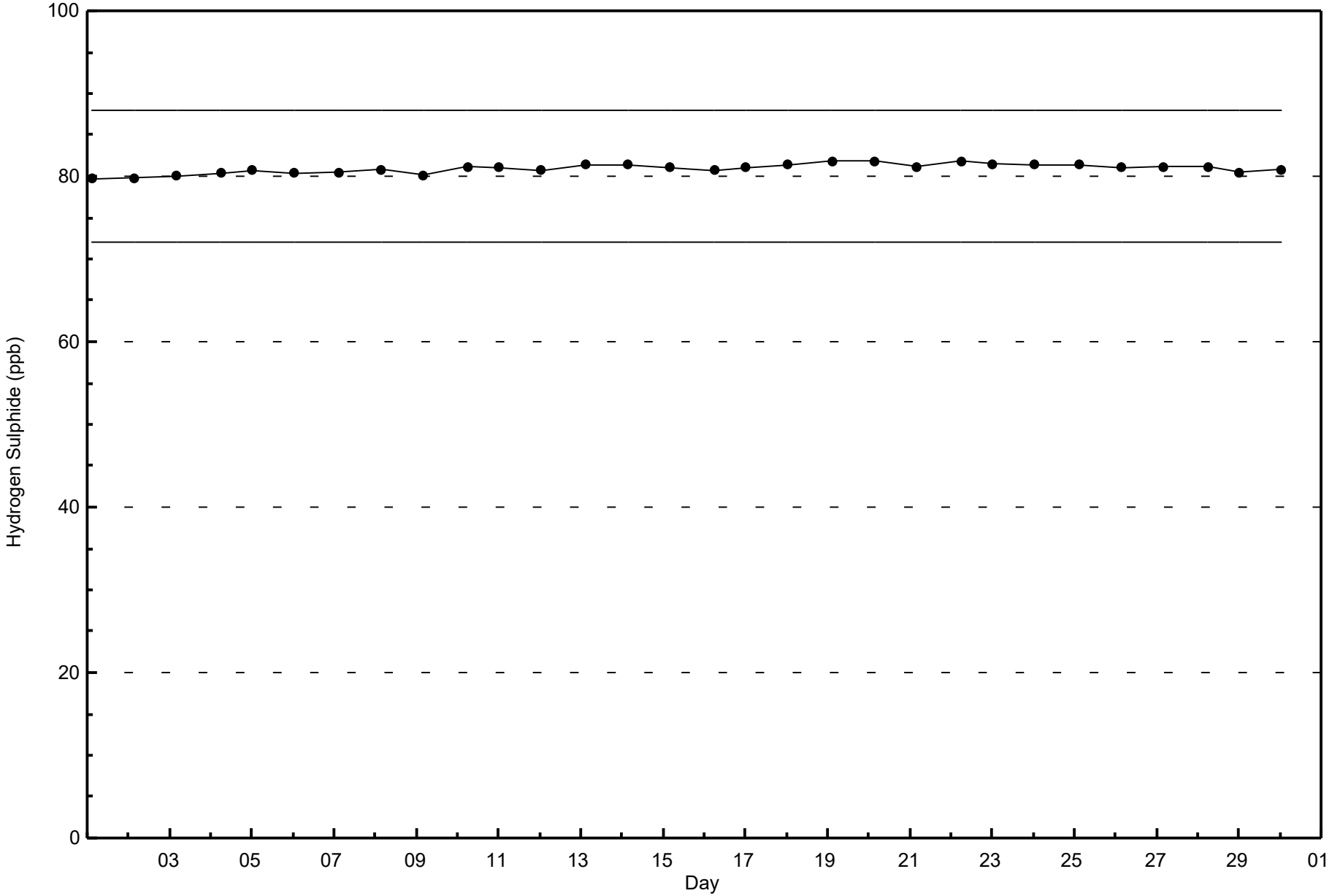


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Fort McKay - Bertha Ganter - June 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Fort McKay - Bertha Ganter - June 2026

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

Maximum Value: 2.3 ppb on Jun 24 08:00

Maximum Daily Average: 0.6 ppb on Jun 24

Minimum Value: 0.1 ppb on Jun 28 13:00

Minimum Daily Average: 0.1 ppb on Jun 11

Maximum Diurnal Average: 0.5 ppb at hour 6

Minimum Diurnal Average: 0.2 ppb at hour 17

Monthly Average: 0.28 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.3 P_{90} = 0.5 P_{99} = 1.3

Periods in Service:	1440
Periods of Valid Data:	1366
Periods of Invalid Data:	74
Periods of Calibration:	70
Percent Operational Time:	99.7

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-Jun	0.2	0.2	Z	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2
	UO	0.2	SP	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
2-Jun	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	UO	UO	0.2	0.1	0.1	0.1	0.2	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	UO	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1		
3-Jun	0.1	0.1	0.1	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.3	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4
	0.2	0.1	0.1	0.1	SP	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.2		
4-Jun	0.2	0.2	0.2	0.3	0.3	Z	0.6	0.6	0.6	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	0.3	0.5	0.2	0.9
	0.2	0.2	0.3	0.3	0.3	SP	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	0.1	0.1	0.2	0.3	0.6		
5-Jun	Z	1.0	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.6	0.3	0.2	0.2	0.2	0.2	0.2	0.7	0.7	0.4	0.7	0.6	0.6	0.4	0.4	1.0
	SP	0.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.2	0.2	0.2	0.2	0.3	0.4	0.7	0.6	0.7	0.7	0.6	0.6	0.3		
6-Jun	0.3	Z	0.4	0.6	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.6
	0.3	SP	0.5	0.6	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
7-Jun	0.2	0.2	Z	0.3	0.3	1.1	0.6	1.0	0.5	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.4	1.1
	0.2	0.3	SP	0.2	0.7	1.1	0.8	0.7	0.5	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2		
8-Jun	0.2	0.2	0.2	Z	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	0.1	0.1	0.1	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	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.1		
9-Jun	0.2	0.2	0.2	0.1	Z	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3
	0.2	0.2	0.2	0.1	SP	0.2	0.2	0.1	0.2	0.1	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	0.3		
10-Jun	0.3	0.3	0.4	0.3	0.3	Z	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4
	0.3	0.3	0.3	0.3	0.3	SP	0.2	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	0.1	0.1		
11-Jun	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	0.2	0.1	0.2
	SP	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	0.2		
12-Jun	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	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.2	0.4
	0.2	SP	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	0.2	0.2	0.2	0.3	0.3		
13-Jun	0.4	0.4	Z	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.2	0.4
	0.4	0.3	SP	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4		
14-Jun	0.4	0.4	0.3	Z	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.3	0.4
	0.4	0.3	0.4	SP	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.4	0.3		
15-Jun	0.3	0.5	0.5	0.6	Z	0.6	0.5	0.4	0.9	0.8	0.7	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	2.0
	0.5	0.5	0.8	0.7	SP	0.5	0.4	0.4	2.0	0.7	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3		

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Fort McKay - Bertha Ganter - June 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-Jun	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	C	C	C	C	C	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3
	0.3	0.3	0.2	0.2	0.2	SP	0.2	0.2	0.1	0.3	0.2	0.2	C	C	C	C	C	0.2	0.2	0.2	0.2	0.2	0.3	0.3		
17-Jun	Z	0.4	0.4	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	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.4
	SP	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2		
18-Jun	0.3	Z	0.4	0.4	0.6	1.3	0.5	0.6	0.5	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	1.3
	0.4	SP	0.4	0.4	0.9	0.9	0.6	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.3		
19-Jun	0.4	0.5	Z	0.4	0.5	0.4	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.3	0.5
	0.4	0.5	SP	0.5	0.4	0.4	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.3	0.3		
20-Jun	0.3	0.3	0.3	Z	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.5
	0.3	0.3	0.4	SP	0.5	0.4	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2		
21-Jun	0.3	0.3	0.3	0.4	Z	0.4	0.4	0.3	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.3	0.4
	0.3	0.3	0.3	0.4	SP	0.4	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.4	0.3		
22-Jun	0.4	0.4	0.5	0.6	0.5	Z	0.4	0.6	0.4	0.3	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	0.4	0.3	0.6
	0.4	0.5	0.6	0.6	0.5	SP	0.5	0.5	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.4		
23-Jun	Z	0.4	0.5	0.5	0.7	0.6	0.5	0.3	0.3	0.3	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.6	0.3	0.7
	SP	0.4	0.5	0.7	0.6	0.6	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.7	0.2	0.2	0.2	0.4	0.6		
24-Jun	0.7	Z	1.0	1.0	1.1	1.3	1.3	1.6	1.2	0.6	0.4	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.6	2.3
	1.0	SP	1.0	1.2	1.0	1.4	1.5	2.3	0.6	0.6	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		
25-Jun	0.3	0.6	Z	0.6	0.8	0.9	0.7	0.7	0.7	1.7	1.3	0.2	0.1	0.2	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.6	0.5	1.7
	0.4	0.7	SP	1.4	0.8	0.8	0.8	0.6	0.9	1.7	0.8	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	1.1		
26-Jun	1.3	0.7	0.7	Z	0.5	0.5	0.2	0.4	1.5	1.9	0.5	0.5	0.4	0.3	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	1.9
	0.9	0.6	0.7	SP	0.5	0.3	0.3	1.3	1.7	1.2	0.5	0.3	0.4	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
27-Jun	0.1	0.2	0.2	0.2	Z	0.5	0.4	0.4	0.2	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.2	0.2	0.2	0.5
	0.1	0.2	0.2	0.3	SP	0.4	0.4	0.3	0.3	0.3	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.4	0.4	0.3	0.2	0.2		
28-Jun	0.2	0.5	0.6	0.6	0.7	Z	0.5	0.6	0.6	0.5	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.7
	0.3	0.5	0.5	0.6	0.7	SP	0.5	0.6	0.5	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.3	0.3	0.3		
29-Jun	Z	0.4	0.5	0.5	0.6	0.8	0.6	0.5	0.5	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.3	0.8
	SP	0.4	0.6	0.5	0.7	0.6	0.5	0.6	0.4	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.3	0.3		
30-Jun	0.3	Z	0.3	0.5	0.5	0.5	0.4	0.2	0.7	1.1	2.2	0.5	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	2.2
	0.3	SP	0.3	0.4	0.4	0.4	0.4	0.3	0.9	2.1	0.9	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2		
	0.3	0.4	0.4	0.4	0.4	0.5	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	0.2	0.2	0.3	0.3	Diurnal Average	
	1.3	1.0	1.0	1.4	1.1	1.4	1.5	2.3	2.0	2.1	2.2	0.5	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.6	0.6	1.1	Diurnal Maximum	

Z - zerospan C - Calibration 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 - June 2026

Maximum Value: 1.9 ppb on Jun 24 08:00

Maximum Daily Average: 0.6 ppb on Jun 24

Minimum Value: 0.1 ppb on Jun 28 13:00

Minimum Daily Average: 0.1 ppb on Jun 11

Maximum Diurnal Average: 0.5 ppb at hour 6

Minimum Diurnal Average: 0.2 ppb at hour 17

Monthly Average: 0.28 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.3 P_{90} = 0.5 P_{99} = 1.4

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-Jun	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
2-Jun	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	UO	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2
3-Jun	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	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	0.2	0.4
4-Jun	0.2	0.2	0.2	0.3	0.3	Z	0.6	0.8	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.5	0.2	0.8
5-Jun	Z	0.9	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.3	0.2	0.2	0.2	0.2	0.3	0.7	0.6	0.5	0.7	0.6	0.6	0.4	0.4	0.9
6-Jun	0.3	Z	0.5	0.6	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.6
7-Jun	0.2	0.2	Z	0.2	0.5	1.1	0.7	0.8	0.5	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.4	1.1
8-Jun	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	0.1	0.1	0.1	0.1	0.2	0.2
9-Jun	0.2	0.2	0.2	0.1	Z	0.2	0.1	0.1	0.2	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	0.3	0.2	0.3
10-Jun	0.3	0.3	0.3	0.3	0.3	Z	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	0.1	0.1	0.1	0.1	0.2	0.3
11-Jun	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	0.2	0.1	0.2
12-Jun	0.2	Z	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.2	0.4
13-Jun	0.4	0.4	Z	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.2	0.4
14-Jun	0.4	0.3	0.3	Z	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.4	0.4	0.3	0.4
15-Jun	0.4	0.5	0.6	0.7	Z	0.6	0.4	0.4	1.5	0.8	0.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.4	1.5
16-Jun	0.3	0.3	0.2	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.2	C	C	C	C	C	C	0.2	0.2	0.2	0.2	0.3	0.3	--	0.3
17-Jun	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.4
18-Jun	0.3	Z	0.4	0.4	0.8	1.1	0.5	0.6	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	1.1
19-Jun	0.4	0.5	Z	0.5	0.5	0.4	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.3	0.3	0.3	0.5
20-Jun	0.3	0.3	0.3	Z	0.5	0.4	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.5
21-Jun	0.3	0.3	0.3	0.4	Z	0.4	0.4	0.3	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.3	0.4
22-Jun	0.4	0.5	0.6	0.6	0.5	Z	0.5	0.6	0.4	0.3	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	0.4	0.3	0.6
23-Jun	Z	0.4	0.5	0.6	0.6	0.6	0.4	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.4	0.2	0.2	0.2	0.3	0.6	0.3	0.6
24-Jun	0.9	Z	1.0	1.1	1.0	1.4	1.4	1.9	0.9	0.6	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	0.6	1.9
25-Jun	0.4	0.6	Z	1.0	0.8	0.9	0.8	0.7	0.8	1.7	1.0	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.8	0.5	1.7
26-Jun	1.1	0.7	0.7	Z	0.5	0.4	0.3	0.8	1.6	1.5	0.5	0.4	0.4	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	1.6
27-Jun	0.1	0.2	0.2	0.3	Z	0.4	0.4	0.3	0.2	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.4
28-Jun	0.3	0.5	0.6	0.6	0.7	Z	0.5	0.6	0.5	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.7
29-Jun	Z	0.4	0.5	0.5	0.7	0.7	0.5	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.3	0.7
30-Jun	0.3	Z	0.3	0.5	0.5	0.5	0.4	0.3	0.8	1.6	1.5	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	1.6
	0.3	0.4	0.4	0.4	0.4	0.5	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	0.2	0.2	0.3	0.3	Diurnal Average	
	1.1	0.9	1.0	1.1	1.0	1.4	1.4	1.9	1.6	1.7	1.5	0.4	0.4	0.4	0.4	0.3	0.3	0.7	0.6	0.5	0.7	0.6	0.6	0.8	Diurnal Maximum	

Z - zerospan C - Calibration UO - Unstable Operation

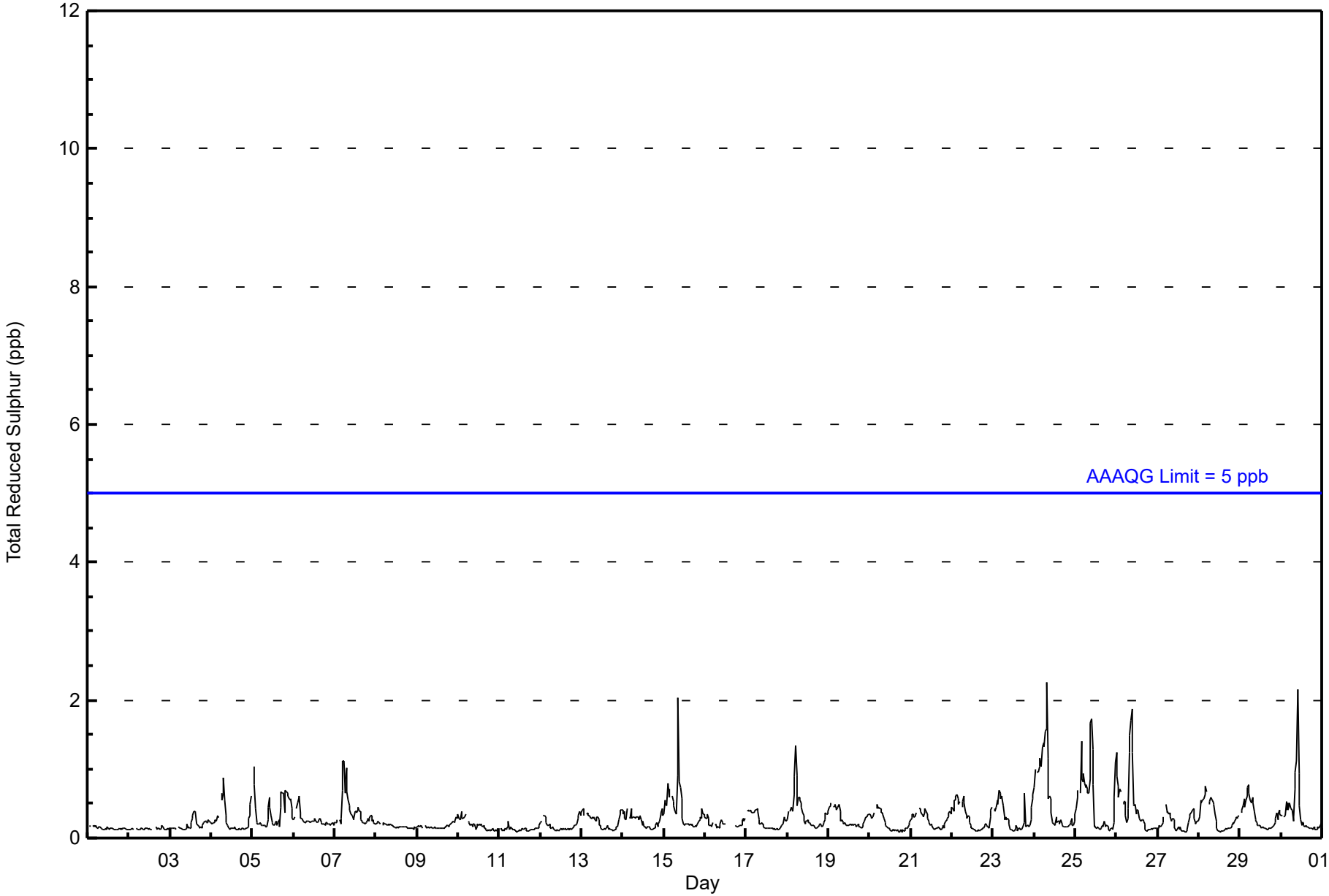
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Fort McKay - Bertha Ganter - June 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

Total Reduced Sulphur (TRS) - ppb

Fort McKay - Bertha Ganter - June 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	143	58	29	18	5	21	28	97	48	33	11	9	17	50	41	74	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	143	58	29	18	5	21	28	97	48	33	11	9	17	50	41	74	682

Total Number of Valid Hours: 682

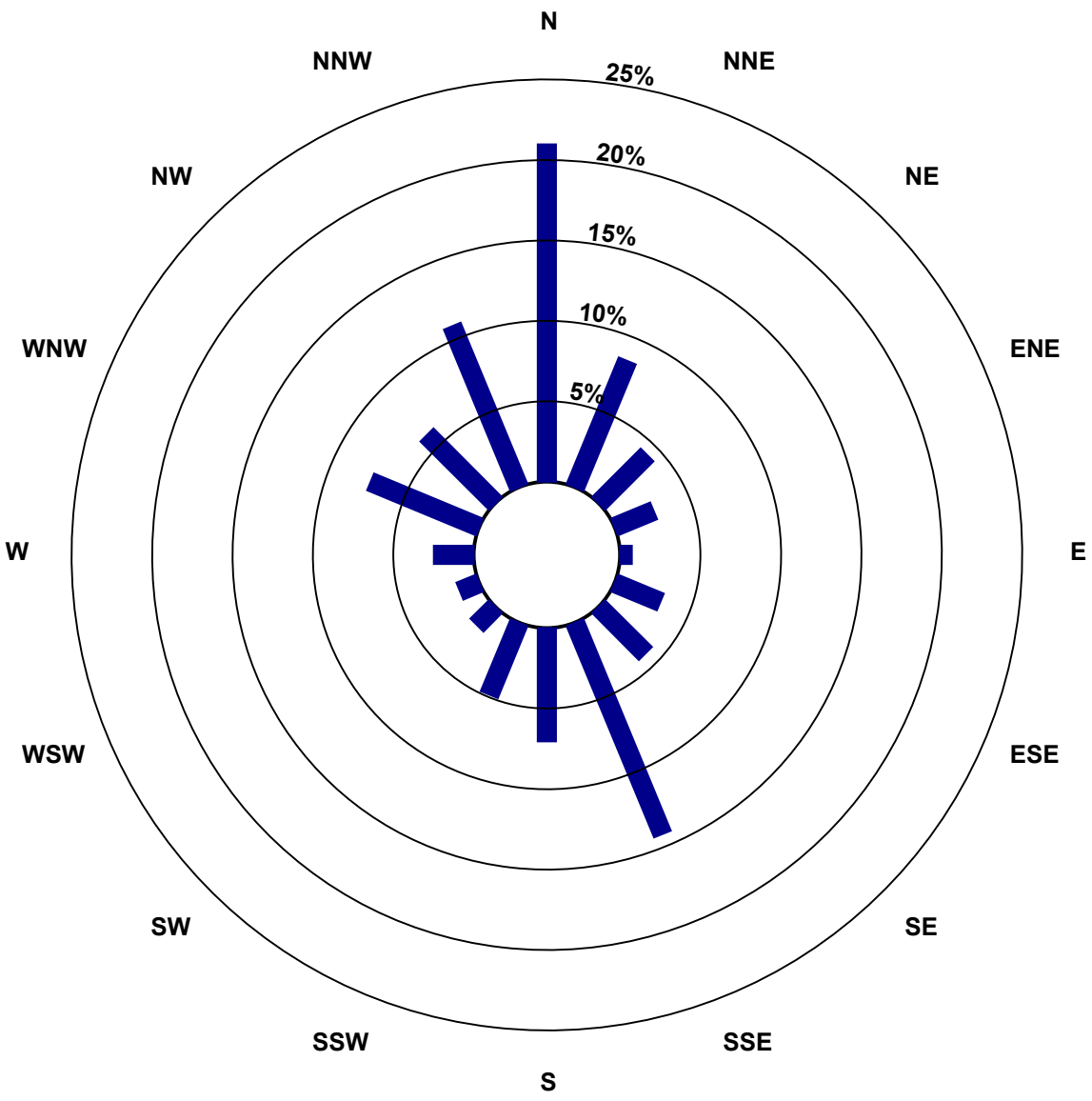
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Reduced Sulphur (TRS) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

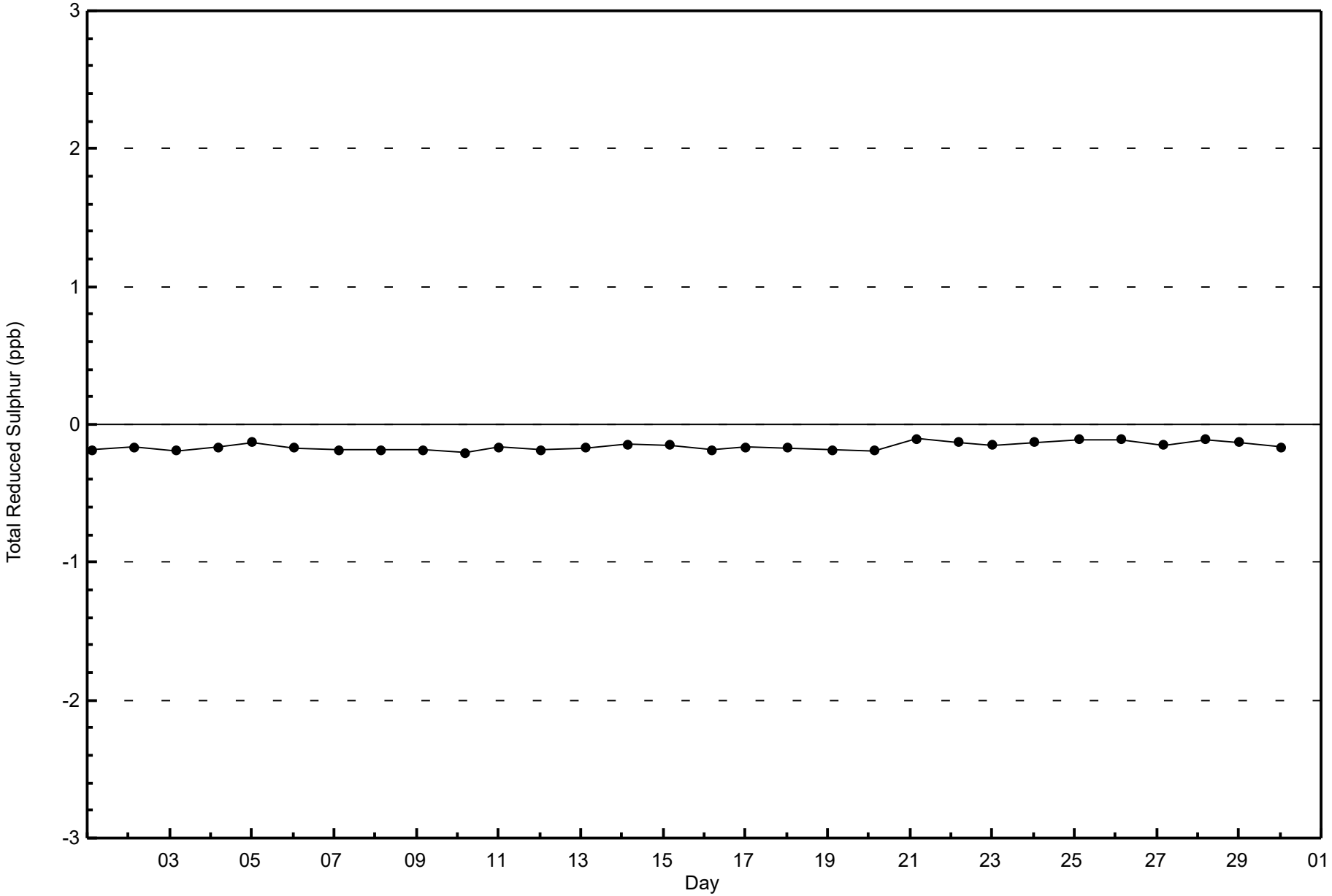
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Fort McKay - Bertha Ganter - June 2026

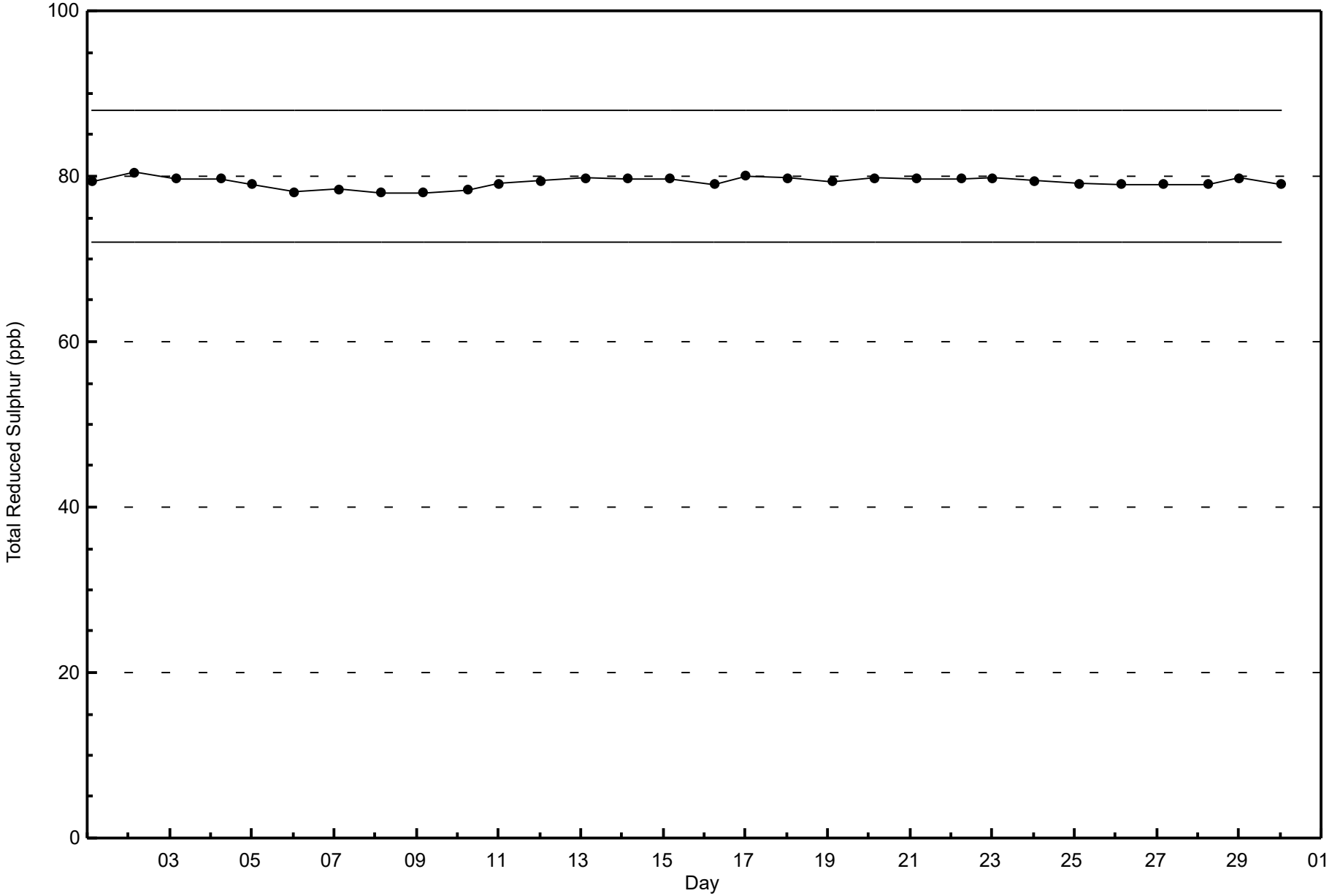


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Fort McKay - Bertha Ganter - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Fort McKay - Bertha Ganter - June 2026

Maximum Value: 3.0 ppm on Jun 22 08:00

Maximum Daily Average: 2.4 ppm on Jun 28

Minimum Value: 2.0 ppm on Jun 2 18:00

Minimum Daily Average: 2.0 ppm on Jun 11

Maximum Diurnal Average: 2.2 ppm at hour 4

Minimum Diurnal Average: 2.0 ppm at hour 18

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} = 2.6

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	35
Percent Operational Time:	99.7

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

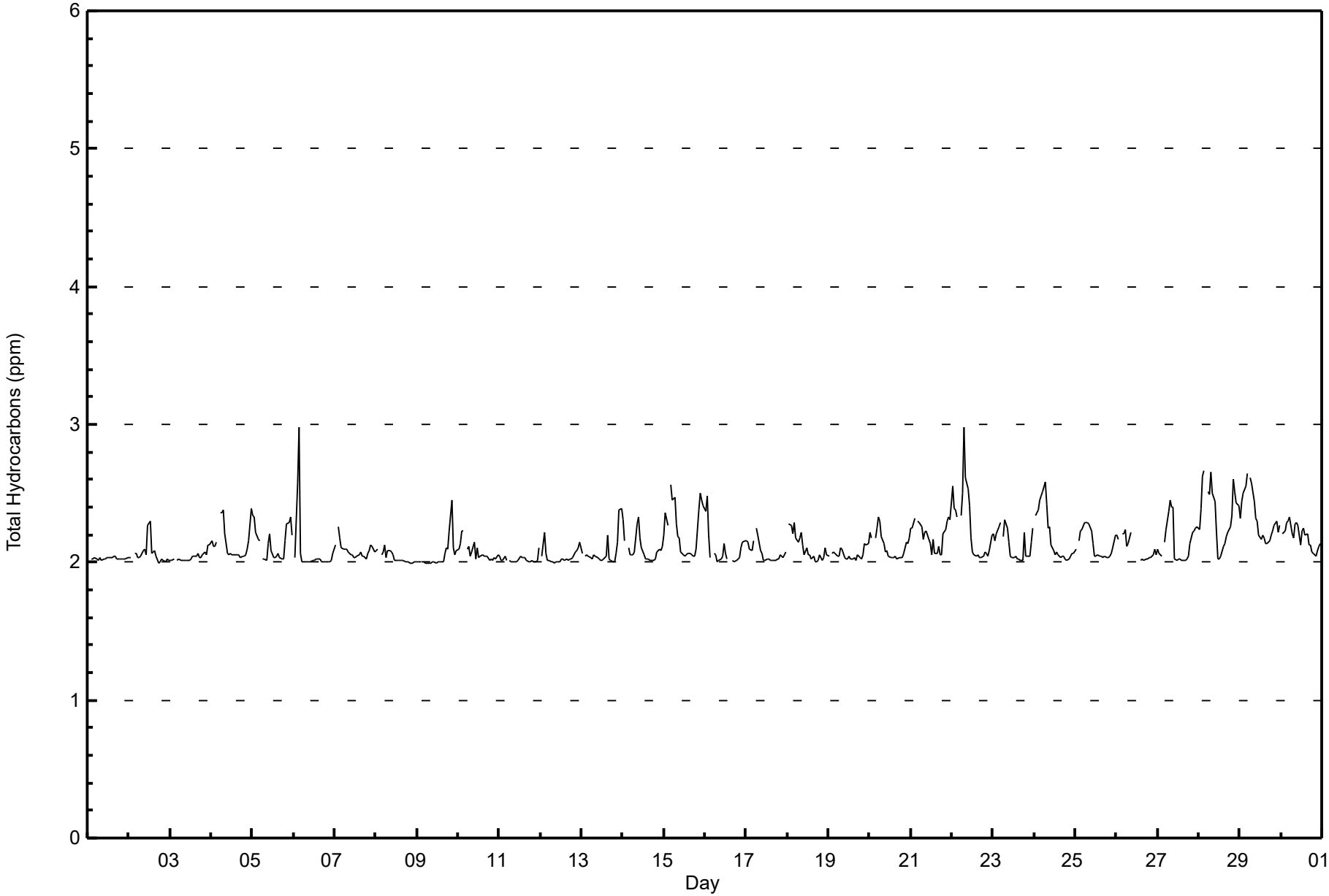
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Fort McKay - Bertha Ganter - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	302	44.22	44.22
2.1 - 3.0	381	55.78	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Fort McKay - Bertha Ganter - June 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	79	27	6	6	2	14	17	41	13	14	7	7	9	30	7	23	302
2.1 - 3.0	63	37	24	11	3	6	13	51	34	18	5	3	8	19	33	52	380
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	142	64	30	17	5	20	30	92	47	32	12	10	17	49	40	75	682

Total Number of Valid Hours: 682

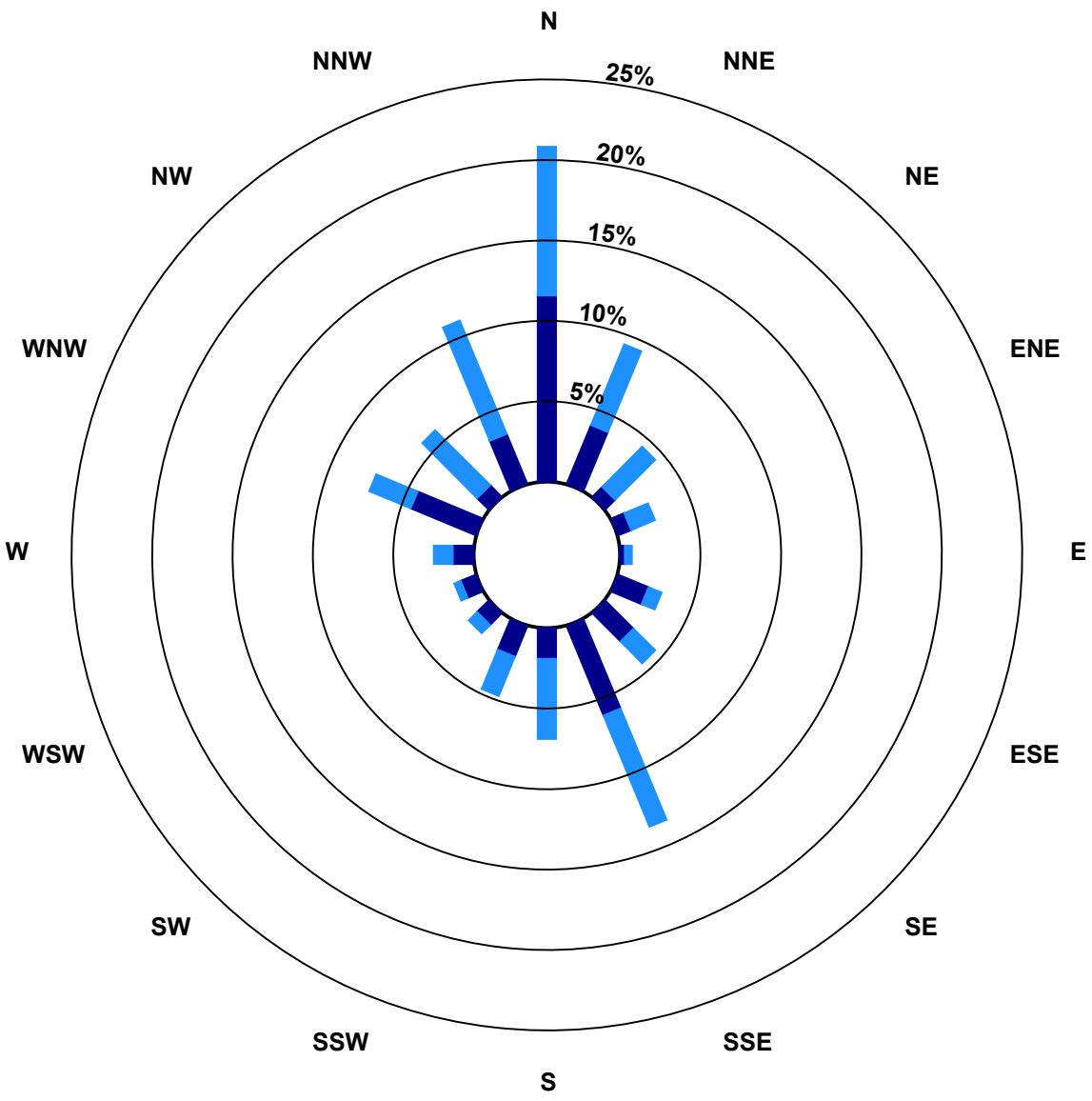
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Fort McKay - Bertha Ganter



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

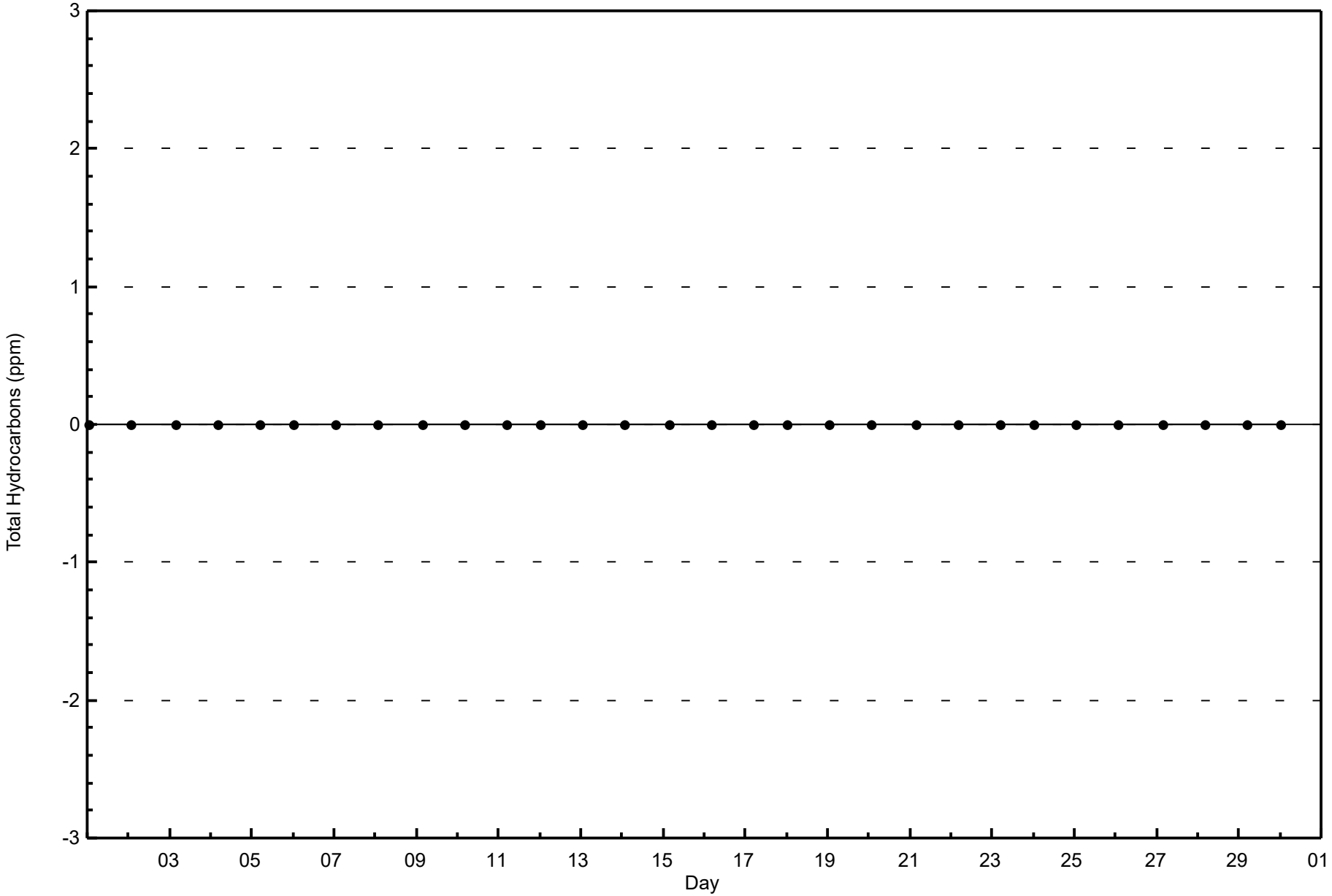
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Fort McKay - Bertha Ganter - June 2026

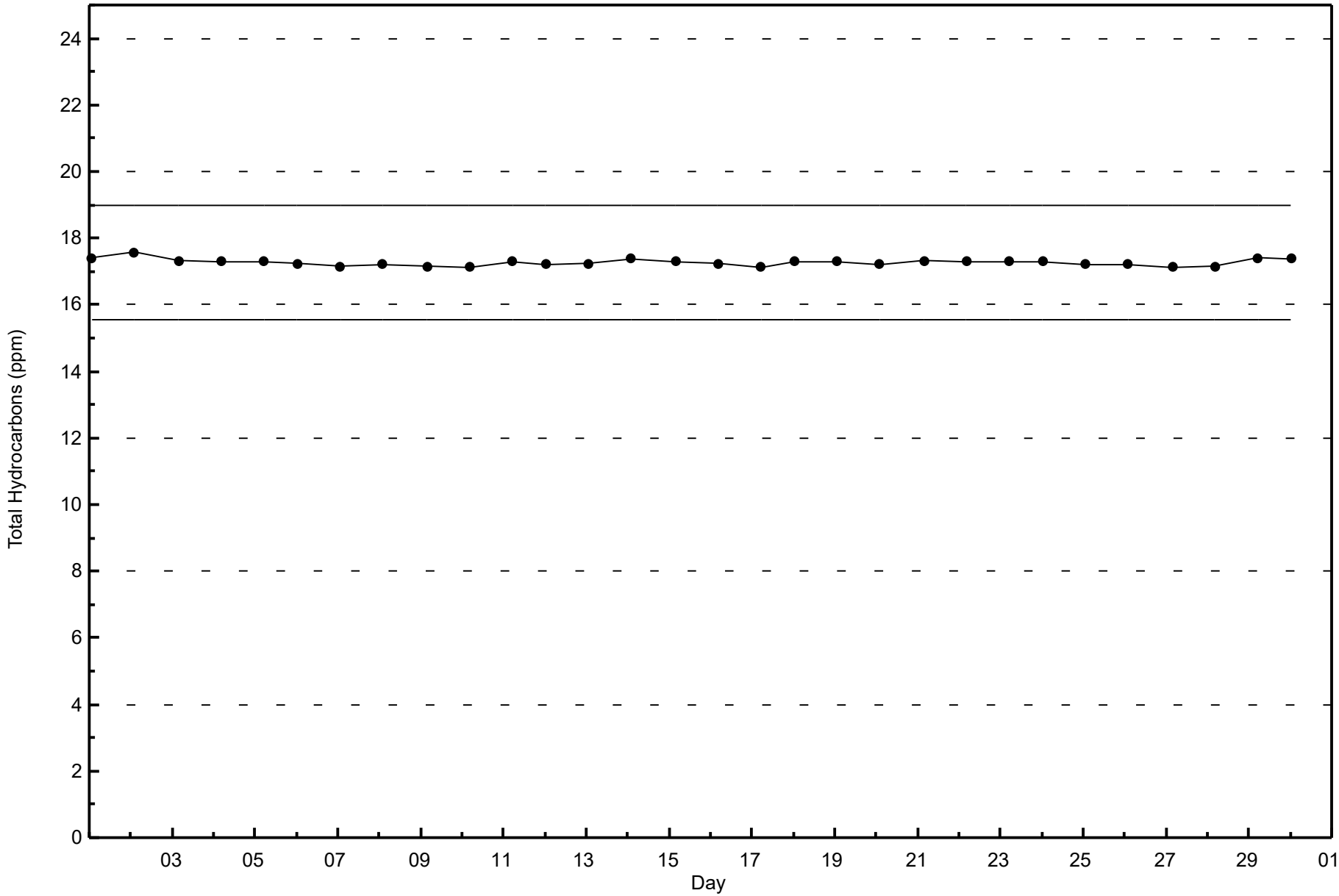


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Fort McKay - Bertha Ganter - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay - Bertha Ganter - June 2026

Maximum Value: 0.231 ppm on Jun 28 21:00

Maximum Daily Average: 0.093 ppm on Jun 29

Minimum Value: 0.000 ppm on Jun 1 01:00

Minimum Daily Average: 0.000 ppm on Jun 9

Maximum Diurnal Average: 0.041 ppm at hour 10

Minimum Diurnal Average: 0.012 ppm at hour 5

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} = 0.2

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	35
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.002	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.013
2-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.008	0.041	0.038	0.000	0.067	0.072	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.016	0.006	0.011	0.072
3-Jun	0.013	0.011	0.008	Z	0.006	0.013	0.006	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.005	0.004	0.003	0.013
4-Jun	0.004	0.005	0.003	0.007	Z	0.102	0.085	0.118	0.070	0.002	0.002	0.004	0.000	0.003	0.002	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.007	0.031	0.020	0.118
5-Jun	0.049	0.048	0.017	0.008	0.003	Z	0.005	0.003	0.003	0.014	0.046	0.032	0.004	0.002	0.004	0.012	0.000	0.001	0.000	0.022	0.040	0.027	0.033	0.009	0.017	0.049
6-Jun	Z	0.002	0.003	0.058	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	0.003	0.004	0.003	0.058
7-Jun	0.000	Z	0.001	0.000	0.001	0.007	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.007	0.001	0.007
8-Jun	0.029	0.000	Z	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.029
9-Jun	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
10-Jun	0.000	0.017	0.061	0.128	Z	0.004	0.001	0.000	0.000	0.000	0.000	0.054	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.002	0.012	0.128
11-Jun	0.014	0.005	0.008	0.010	0.004	Z	0.001	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	0.003	0.000	0.002	0.014
12-Jun	Z	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.003
13-Jun	0.000	Z	0.002	0.005	0.003	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.155	0.001	0.000	0.000	0.000	0.000	0.004	0.018	0.026	0.010	0.155
14-Jun	0.017	0.016	Z	0.000	0.000	0.000	0.000	0.003	0.121	0.153	0.084	0.069	0.039	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.003	0.003	0.006	0.008	0.023	0.153
15-Jun	0.008	0.018	0.011	Z	0.021	0.016	0.023	0.008	0.039	0.077	0.002	0.002	0.002	0.003	0.004	0.004	0.000	0.000	0.001	0.000	0.027	0.017	0.074	0.039	0.017	0.077
16-Jun	0.026	0.106	0.036	0.001	Z	0.006	0.002	0.000	0.000	0.006	0.003	0.065	0.033	0.012	M	M	0.006	0.002	0.002	0.000	0.000	0.051	0.028	0.001	0.018	0.106
17-Jun	0.001	0.000	0.005	0.006	0.003	Z	0.008	0.029	0.003	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	0.009	0.004	0.003	0.029
18-Jun	Z	0.005	0.009	0.005	0.007	0.001	0.004	0.001	0.003	0.004	0.004	0.004	0.000	0.001	0.008	0.004	0.002	0.003	0.009	0.006	0.002	0.005	0.017	0.008	0.005	0.017
19-Jun	0.002	Z	0.013	0.011	0.014	0.008	0.004	0.002	0.002	0.001	0.001	0.000	0.021	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.001	0.004	0.021
20-Jun	0.003	0.001	Z	0.004	0.004	0.005	0.041	0.019	0.067	0.045	0.059	0.026	0.015	0.004	0.001	0.001	0.000	0.001	0.000	0.000	0.019	0.035	0.001	0.001	0.015	0.067
21-Jun	0.003	0.001	0.002	Z	0.002	0.003	0.001	0.002	0.015	0.000	0.000	0.000	0.000	0.126	0.021	0.013	0.047	0.000	0.000	0.059	0.107	0.011	0.001	0.007	0.018	0.126
22-Jun	0.005	0.017	0.007	0.004	Z	0.008	0.084	0.221	0.171	0.162	0.136	0.097	0.010	0.000	0.000	0.005	0.001	0.000	0.002	0.006	0.002	0.000	0.022	0.074	0.045	0.221
23-Jun	0.047	0.026	0.028	0.029	0.027	Z	0.006	0.014	0.015	0.004	0.001	0.000	0.002	0.002	0.002	0.002	0.000	0.000	0.164	0.003	0.003	0.002	0.043	0.085	0.022	0.164
24-Jun	Z	0.084	0.078	0.075	0.076	0.073	0.139	0.124	0.082	0.126	0.054	0.033	0.027	0.032	0.013	0.000	0.012	0.007	0.002	0.002	0.001	0.004	0.010	0.003	0.046	0.139
25-Jun	0.002	Z	0.011	0.023	0.026	0.020	0.021	0.031	0.055	0.062	0.035	0.017	0.006	0.017	0.011	0.012	0.004	0.007	0.006	0.008	0.013	0.013	0.036	0.031	0.020	0.062
26-Jun	0.033	0.021	Z	0.022	0.017	0.031	0.005	0.017	0.083	C	C	C	C	C	0.000	0.002	0.000	0.002	0.005	0.019	0.015	0.016	0.043	0.009	0.019	0.083
27-Jun	0.044	0.013	0.000	Z	0.029	0.052	0.116	0.155	0.155	0.153	0.010	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.002	0.069	0.133	0.136	0.121	0.126	0.057	0.155
28-Jun	0.081	0.101	0.150	0.099	Z	0.035	0.061	0.036	0.000	0.073	0.086	0.002	0.002	0.022	0.086	0.093	0.133	0.161	0.172	0.190	0.231	0.167	0.029	0.045	0.089	0.231
29-Jun	0.034	0.018	0.017	0.010	0.003	Z	0.008	0.113	0.087	0.155	0.186	0.104	0.111	0.137	0.122	0.097	0.091	0.107	0.125	0.141	0.109	0.140	0.119	0.114	0.093	0.186
30-Jun	Z	0.042	0.033	0.052	0.051	0.074	0.012	0.043	0.109	0.124	0.146	0.061	0.140	0.120	0.106	0.130	0.075	0.077	0.030	0.025	0.010	0.027	0.031	0.011	0.066	0.146
	0.017	0.022	0.020	0.022	0.012	0.019	0.021	0.032	0.037	0.041	0.029	0.022	0.017	0.017	0.013	0.019	0.013	0.012	0.017	0.018	0.024	0.022	0.023	0.022	Diurnal Average	
	0.081	0.106	0.150	0.128	0.076	0.102	0.139	0.221	0.171	0.162	0.186	0.104	0.140	0.137	0.122	0.155	0.133	0.161	0.172	0.190	0.231	0.167	0.121	0.126	Diurnal Maximum	

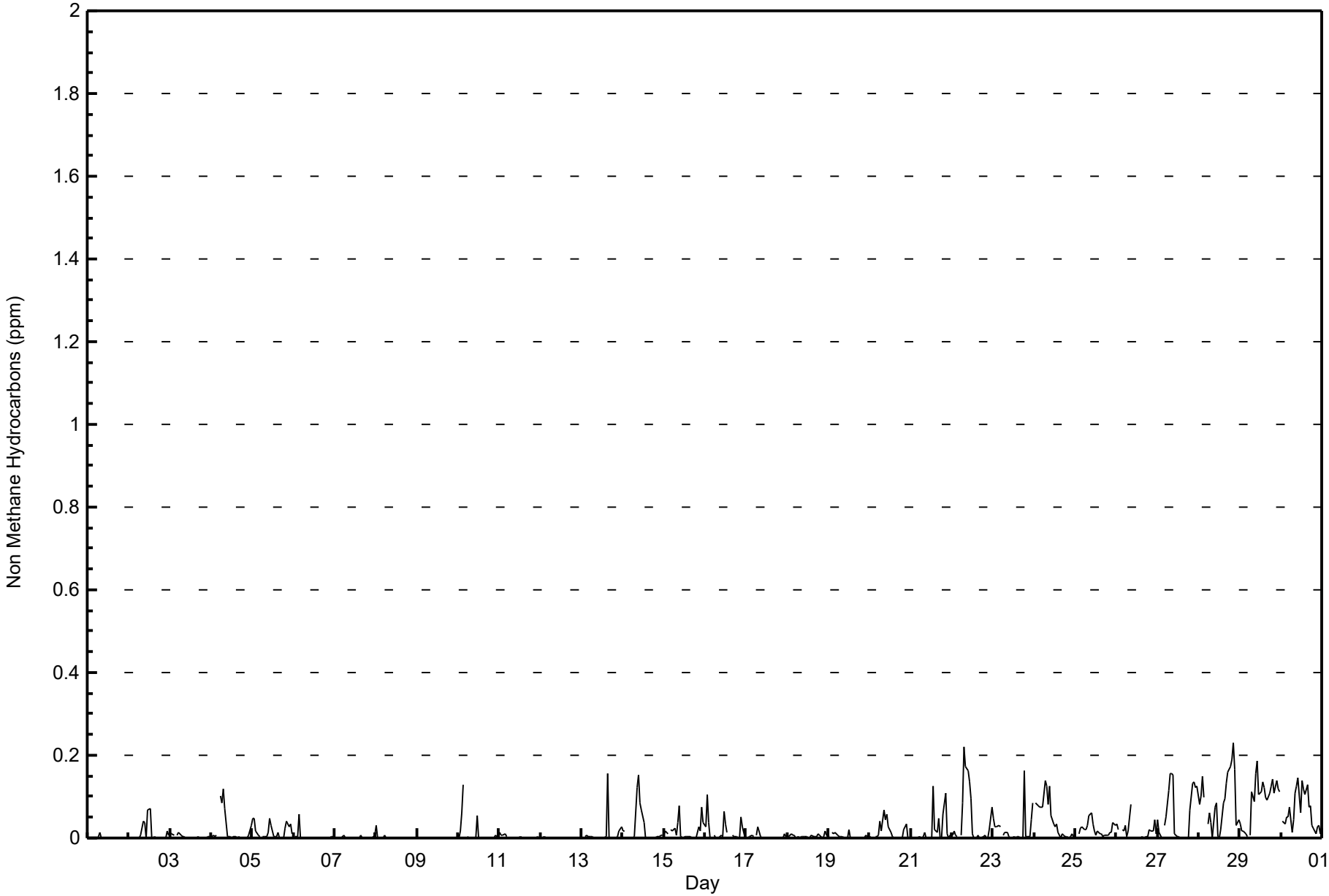
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay - Bertha Ganter - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay - Bertha Ganter - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	412	60.32	60.32
0.006 - 0.05	176	25.77	86.09
0.06 - 0.1	78	11.42	97.51
> 0.1	17	2.49	100.00

Total Number of Valid Hours: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay - Bertha Ganter - June 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	105	27	12	10	1	10	18	41	21	25	10	7	12	36	27	50	412
0.006 - 0.05	21	18	5	4	4	7	9	41	15	7	1	3	5	10	6	19	175
0.06 - 0.1	12	14	11	2	0	3	3	8	11	0	1	0	0	2	6	5	78
> 0.1	4	5	2	1	0	0	0	2	0	0	0	0	0	1	1	1	17
Totals	142	64	30	17	5	20	30	92	47	32	12	10	17	49	40	75	682

Total Number of Valid Hours: 682

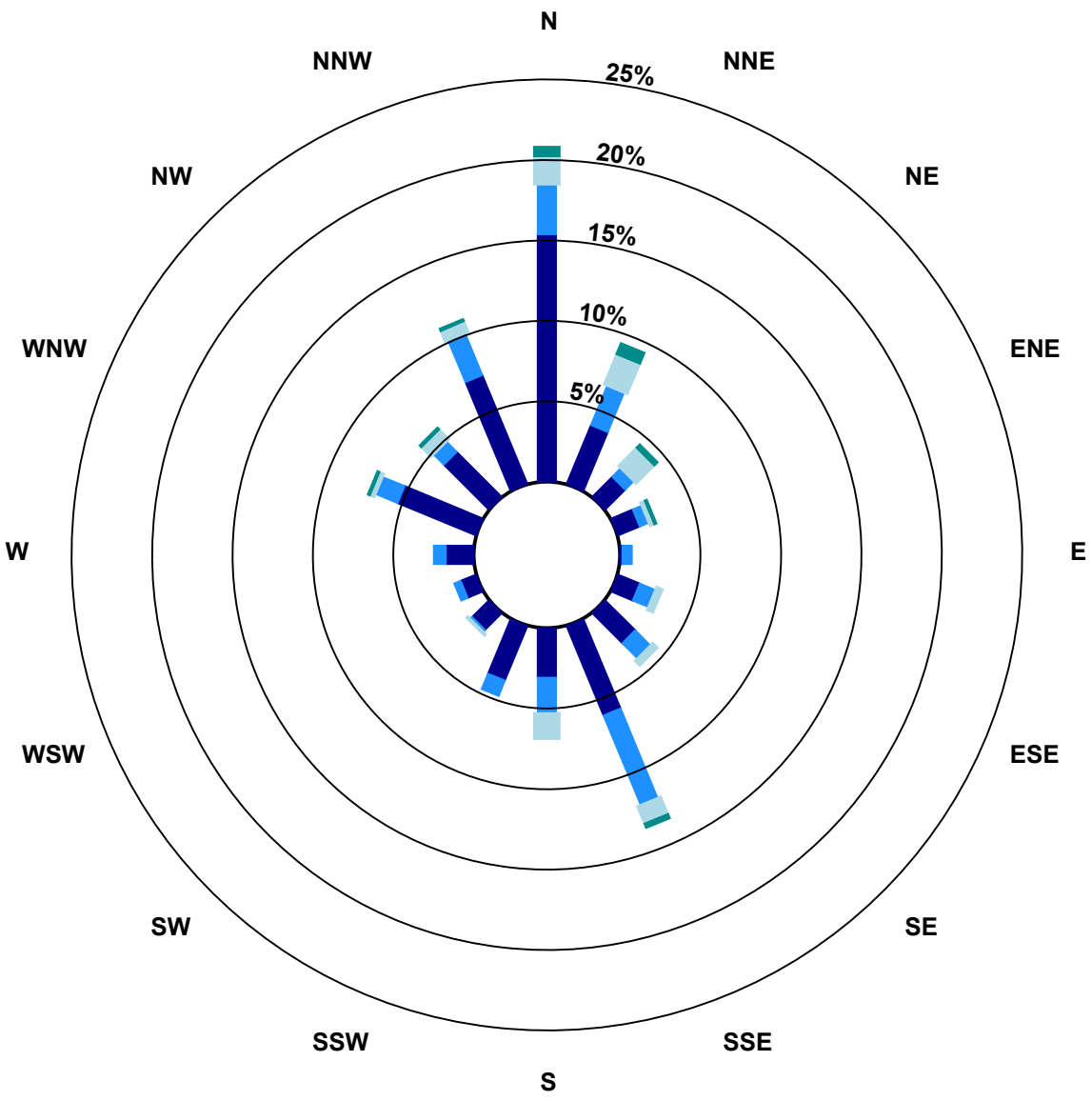
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 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

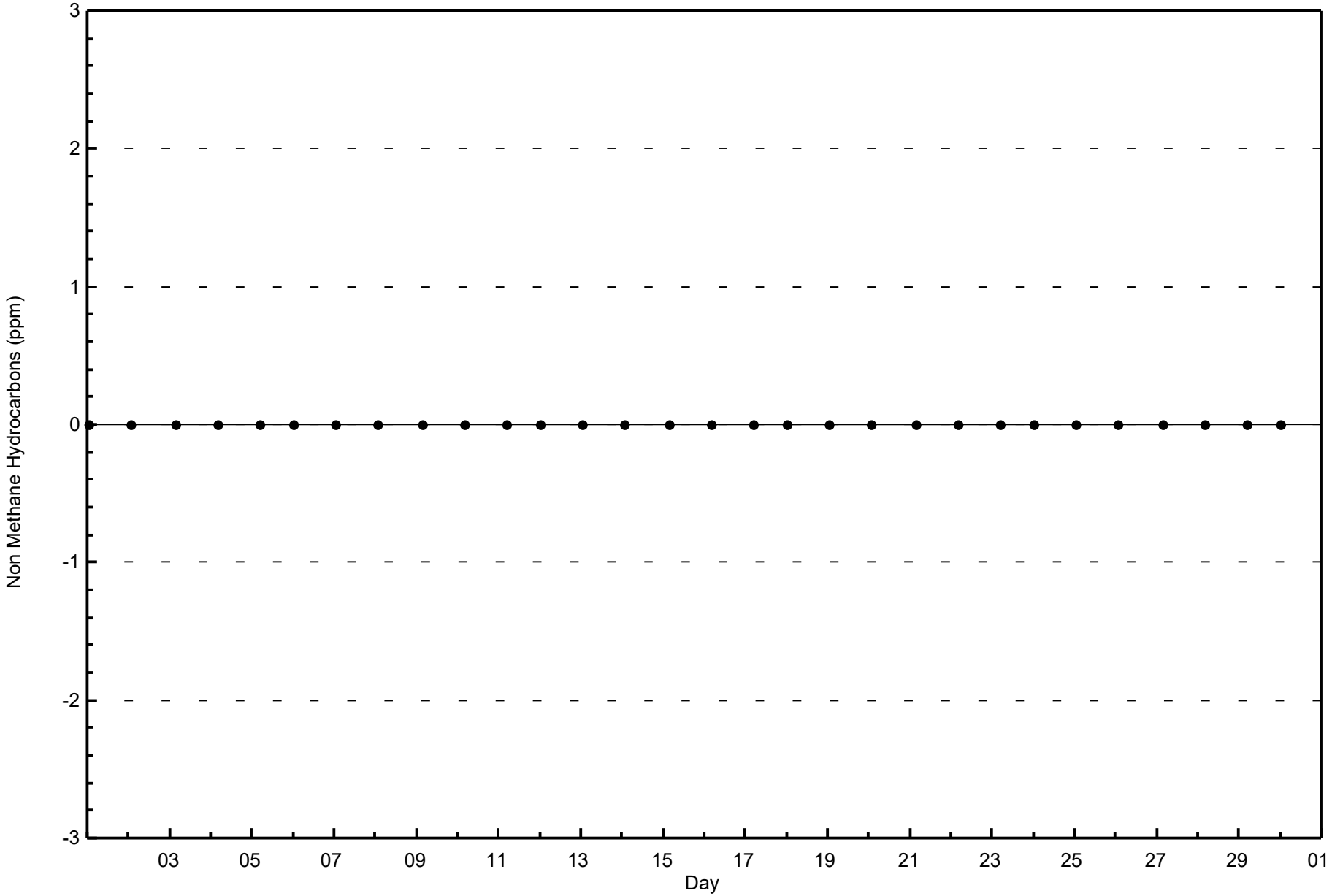
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay - Bertha Ganter - June 2026

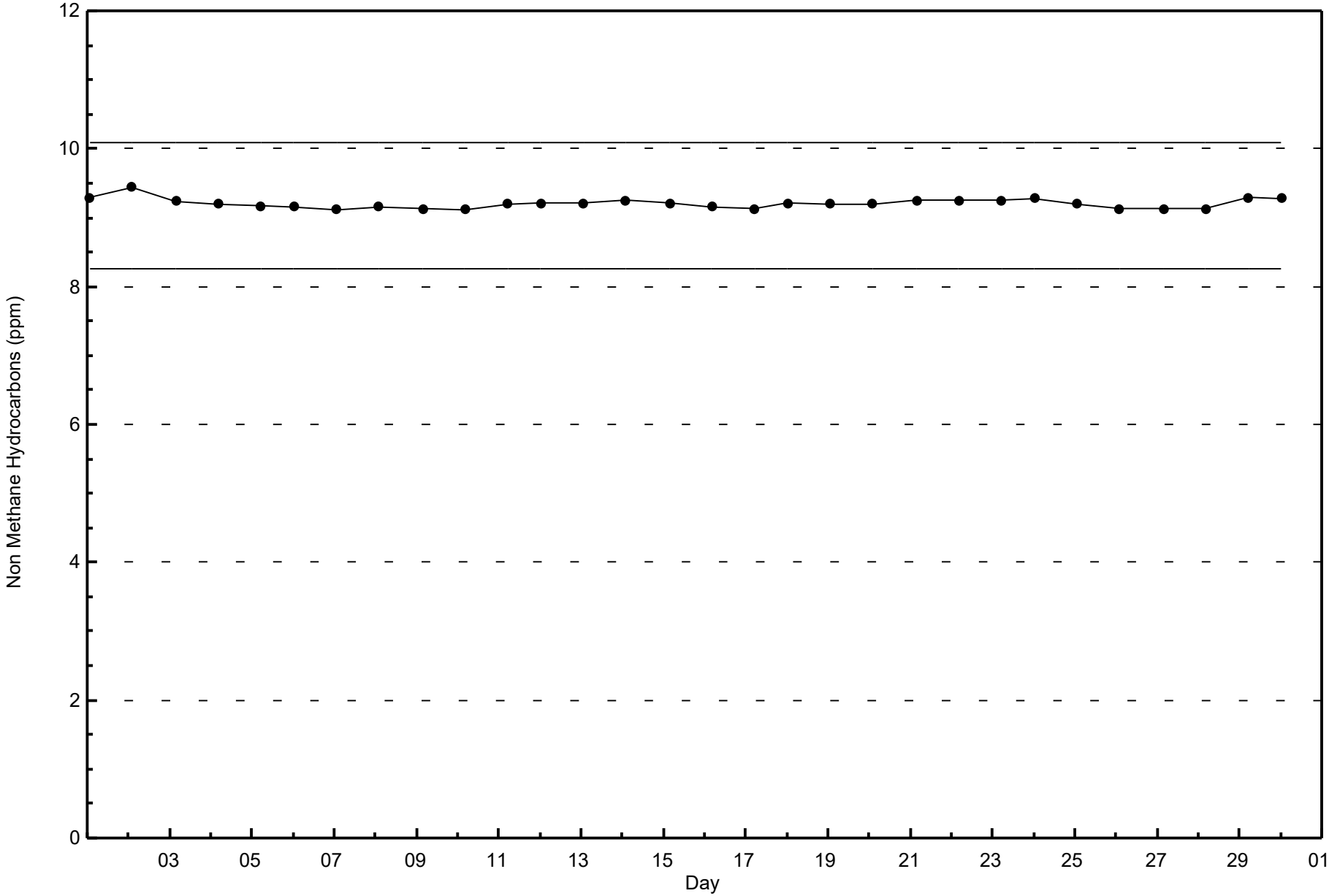


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay - Bertha Ganter - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Fort McKay - Bertha Ganter - June 2026

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

Maximum Value: 2.9 ppm on Jun 6 04:00

Maximum Daily Average: 2.3 ppm on Jun 28

Minimum Value: 2.0 ppm on Jun 2 18:00

Minimum Daily Average: 2.0 ppm on Jun 11

Maximum Diurnal Average: 2.2 ppm at hour 4

Minimum Diurnal Average: 2.0 ppm at hour 18

Monthly Average: 2.10 ppm

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

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	35
Percent Operational Time:	99.7

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

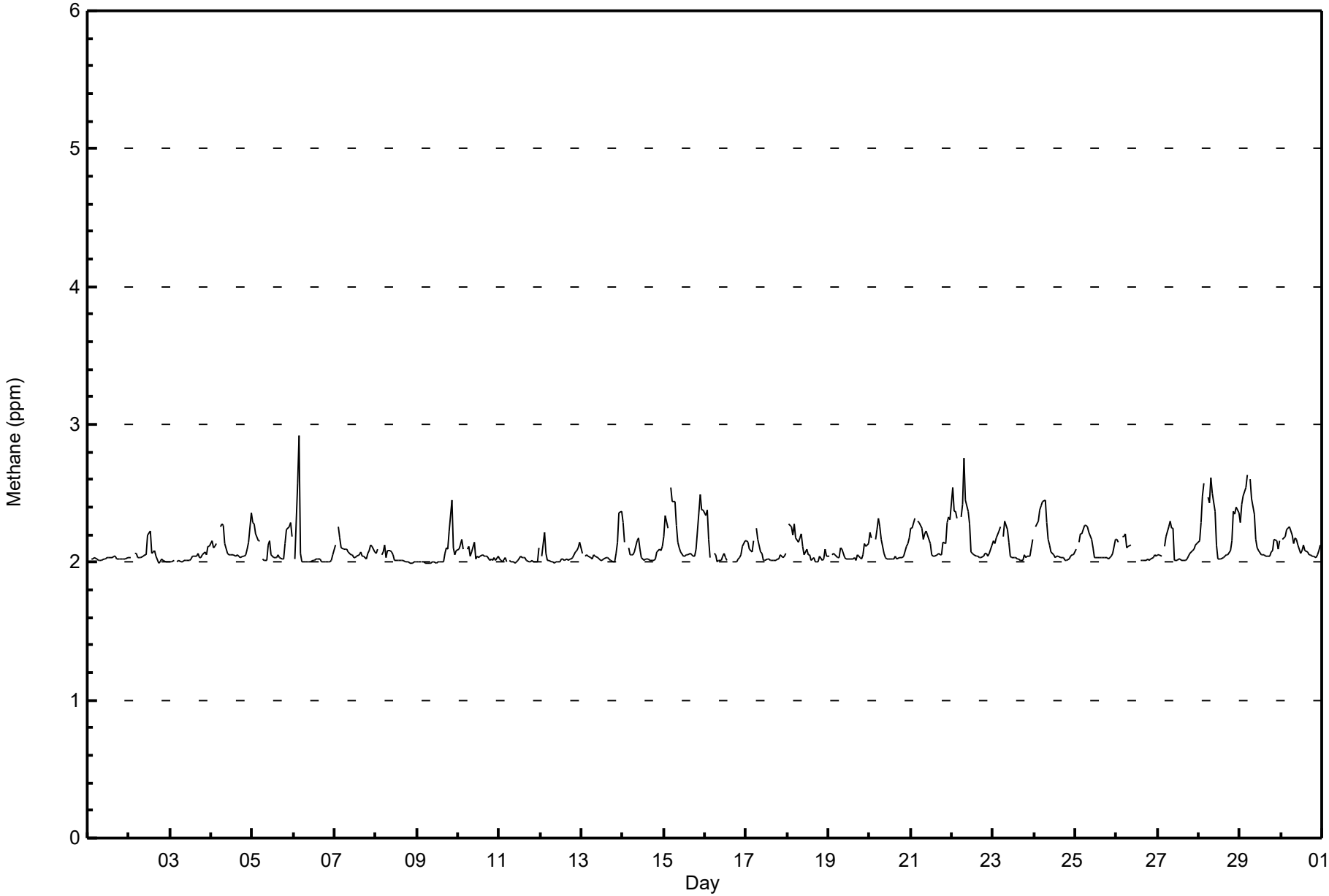
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Fort McKay - Bertha Ganter - June 2026



Methane (CH_4) - ppm

Fort McKay - Bertha Ganter - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	337	49.34	49.34
2.1 - 3.0	346	50.66	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Fort McKay - Bertha Ganter - June 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	82	40	9	8	3	15	17	48	14	14	7	8	9	31	8	24	337
2.1 - 3.0	60	24	21	9	2	5	13	44	33	18	5	2	8	18	32	51	345
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	142	64	30	17	5	20	30	92	47	32	12	10	17	49	40	75	682

Total Number of Valid Hours: 682

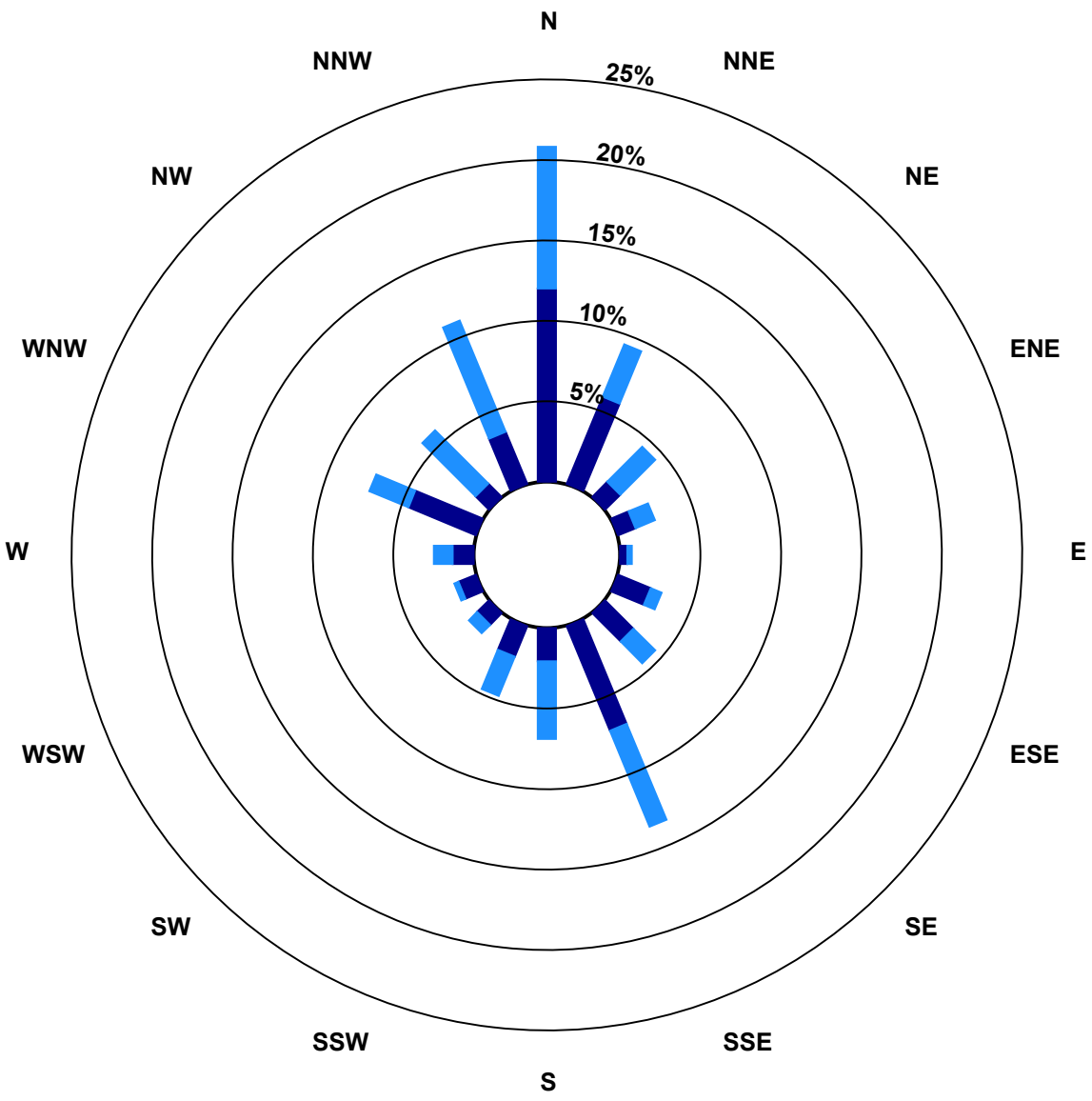
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Methane (CH_4) - ppm

Fort McKay - Bertha Ganter



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

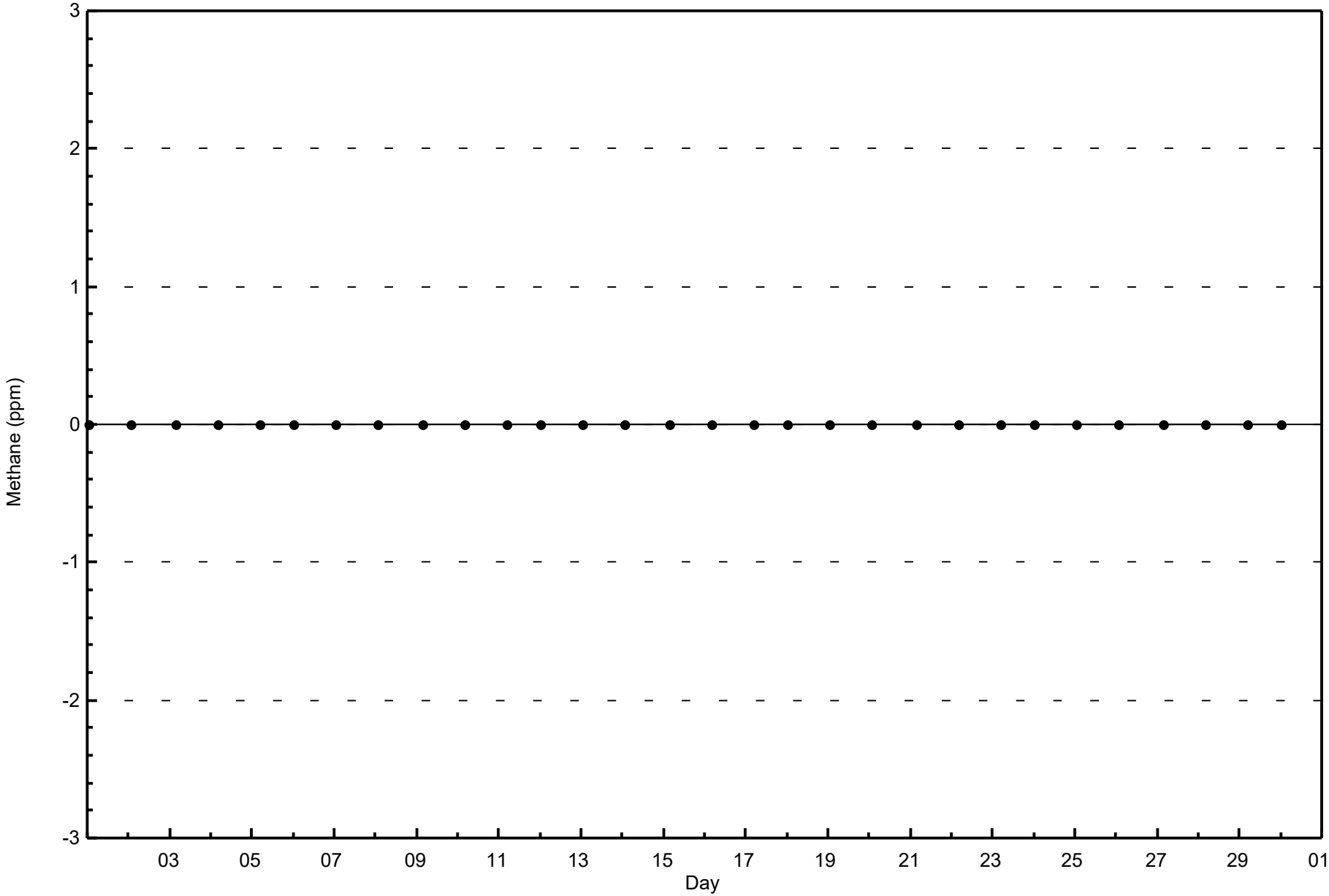
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Fort McKay - Bertha Ganter - June 2026

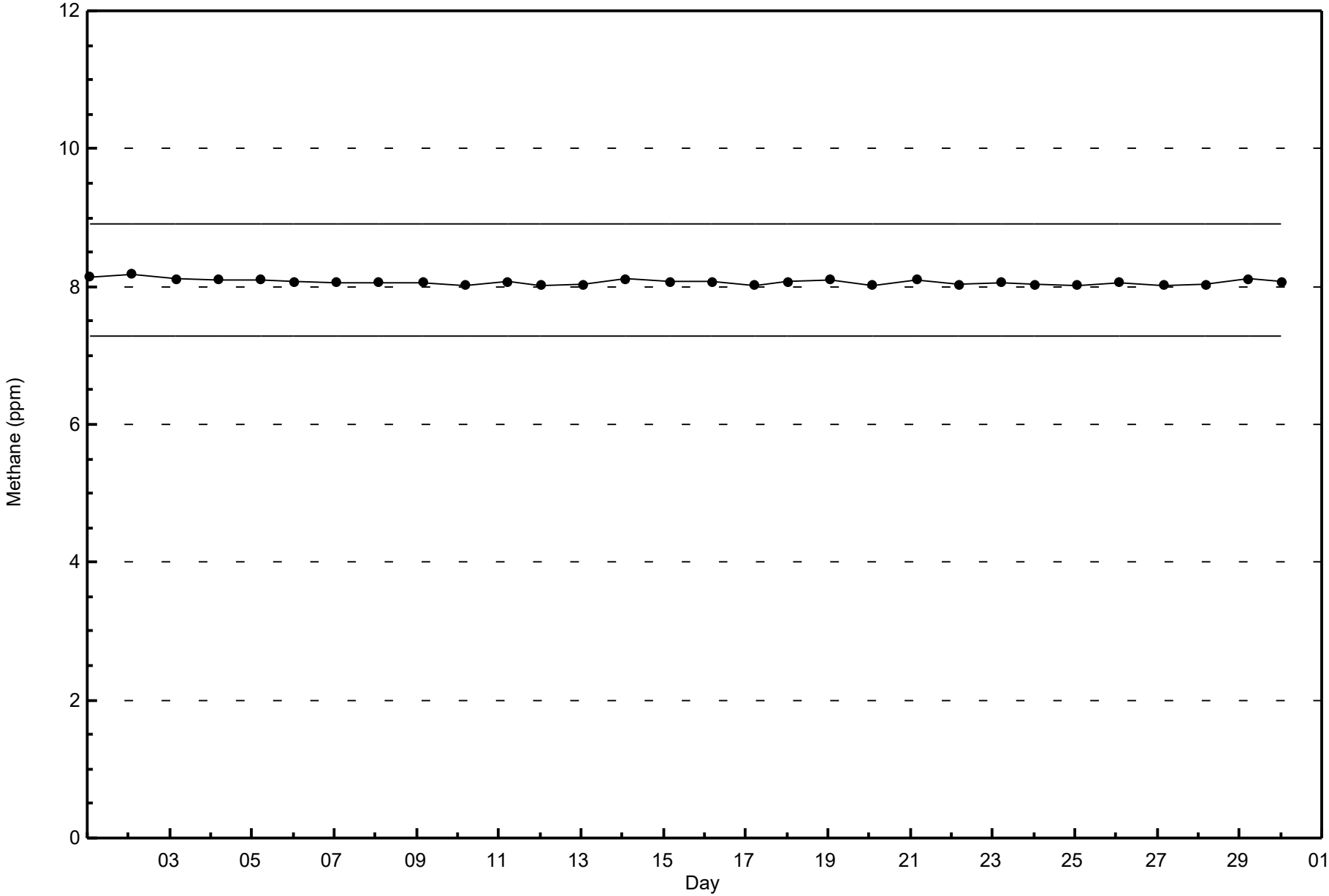


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Fort McKay - Bertha Ganter - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Fort McKay - Bertha Ganter - June 2026

Maximum Value: 36.8 ppb on Jun 22 08:00

Maximum Daily Average: 7.7 ppb on Jun 21

Minimum Value: 0.0 ppb on Jun 1 01:00

Minimum Daily Average: 0.0 ppb on Jun 8

Maximum Diurnal Average: 5.0 ppb at hour 8

Minimum Diurnal Average: 0.2 ppb at hour 21

Monthly Average: 1.51 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.9 P_{90} = 4.0 P_{99} = 19.9

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	35
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	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	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
2-Jun	Z	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.7	0.7	0.2	0.1	0.2	0.3	0.6	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8
3-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
4-Jun	0.0	0.0	Z	0.5	1.0	2.2	3.1	4.0	1.2	0.0	0.0	0.3	0.1	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	4.0
5-Jun	0.0	0.0	0.0	Z	0.6	0.8	0.3	0.0	0.0	1.6	1.1	0.2	0.4	0.5	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.6
6-Jun	0.0	0.0	3.3	17.2	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	0.9	17.2
7-Jun	0.0	0.0	0.0	0.0	0.0	Z	1.4	2.7	2.1	2.1	2.1	0.9	0.9	0.7	0.8	0.9	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.6	2.7
8-Jun	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
9-Jun	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	1.1	0.2	0.1	0.1	0.0	0.0	0.0	0.1	1.1
10-Jun	0.0	0.0	Z	0.0	0.4	0.9	2.8	0.8	0.7	1.4	0.0	0.2	0.1	1.2	0.8	0.9	1.2	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.8
11-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.3	1.2	1.2	0.9	0.7	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.2	1.2
12-Jun	0.3	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.5	0.6	0.5	0.5	0.3	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.6
13-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.6	1.2	0.6	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	10.8	3.3	0.7	10.8
14-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.4	4.8	5.0	3.4	0.9	0.3	1.0	1.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	5.0
15-Jun	1.2	Z	0.0	0.3	3.7	13.9	16.5	7.0	6.4	4.7	1.7	0.7	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.2	2.0	3.8	0.0	0.0	2.7	16.5
16-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.0	0.1	0.3	0.9	1.5	0.6	0.0	M	M	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.2	1.5
17-Jun	0.0	0.0	0.0	Z	5.5	21.5	17.2	10.8	4.3	3.7	0.9	0.5	0.4	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	21.5
18-Jun	1.5	7.1	9.7	2.6	Z	1.1	1.4	1.1	2.6	1.4	0.1	1.7	1.7	1.9	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	9.7
19-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.2	3.3	5.2	2.4	1.8	1.4	1.7	1.2	1.3	1.9	0.2	2.2	1.3	0.4	0.5	0.3	3.3	7.8	1.6	7.8
20-Jun	Z	1.8	3.5	2.2	10.0	7.9	18.6	11.4	7.0	3.8	2.2	1.0	0.7	0.9	0.6	1.1	0.3	0.8	0.6	0.3	0.0	0.3	0.0	2.7	3.4	18.6
21-Jun	10.7	Z	20.0	19.9	11.1	12.4	11.7	9.8	15.0	12.9	9.8	4.3	2.2	3.2	2.0	1.5	2.2	1.0	1.1	1.0	0.7	10.7	13.1	0.4	7.7	20.0
22-Jun	7.2	3.5	Z	0.9	1.8	2.6	15.1	36.8	18.2	19.3	13.9	3.2	2.2	0.6	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	36.8
23-Jun	0.0	0.0	0.0	Z	2.8	5.6	4.6	9.2	6.4	2.3	0.3	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	1.4	9.2
24-Jun	0.0	0.0	1.1	4.6	Z	7.4	5.2	3.3	4.0	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	7.4
25-Jun	0.0	0.0	0.0	0.0	0.1	Z	7.5	5.2	5.4	4.7	2.3	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	1.1	7.5
26-Jun	Z	0.0	0.0	0.0	0.1	0.1	0.2	1.8	3.2	1.6	0.6	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	3.2
27-Jun	0.0	Z	0.0	0.0	0.0	0.2	2.1	4.7	5.0	3.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	5.0
28-Jun	0.0	0.0	Z	10.4	21.0	11.8	10.5	23.1	21.7	9.7	1.6	0.0	0.0	0.1	0.3	1.1	1.7	2.5	2.7	2.9	1.7	1.5	1.2	0.8	5.5	23.1
29-Jun	0.5	1.2	6.2	Z	14.1	16.3	20.6	13.0	8.6	2.0	1.0	0.1	0.3	0.4	0.7	1.0	1.4	1.0	0.6	0.2	0.1	0.0	0.0	0.0	3.9	20.6
30-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.3	0.8	0.5	1.8	1.1	0.0	0.4	0.9	0.2	0.2	0.2	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.3	1.8
	0.9	0.5	1.8	2.3	2.9	4.2	4.7	5.0	4.2	2.9	1.6	0.6	0.5	0.6	0.4	0.4	0.3	0.4	0.2	0.2	0.2	0.6	0.9	0.5	Diurnal Average	
	10.7	7.1	20.0	19.9	21.0	21.5	20.6	36.8	21.7	19.3	13.9	4.3	2.2	3.2	2.0	1.9	2.2	2.5	2.7	2.9	2.0	10.7	13.1	7.8	Diurnal Maximum	

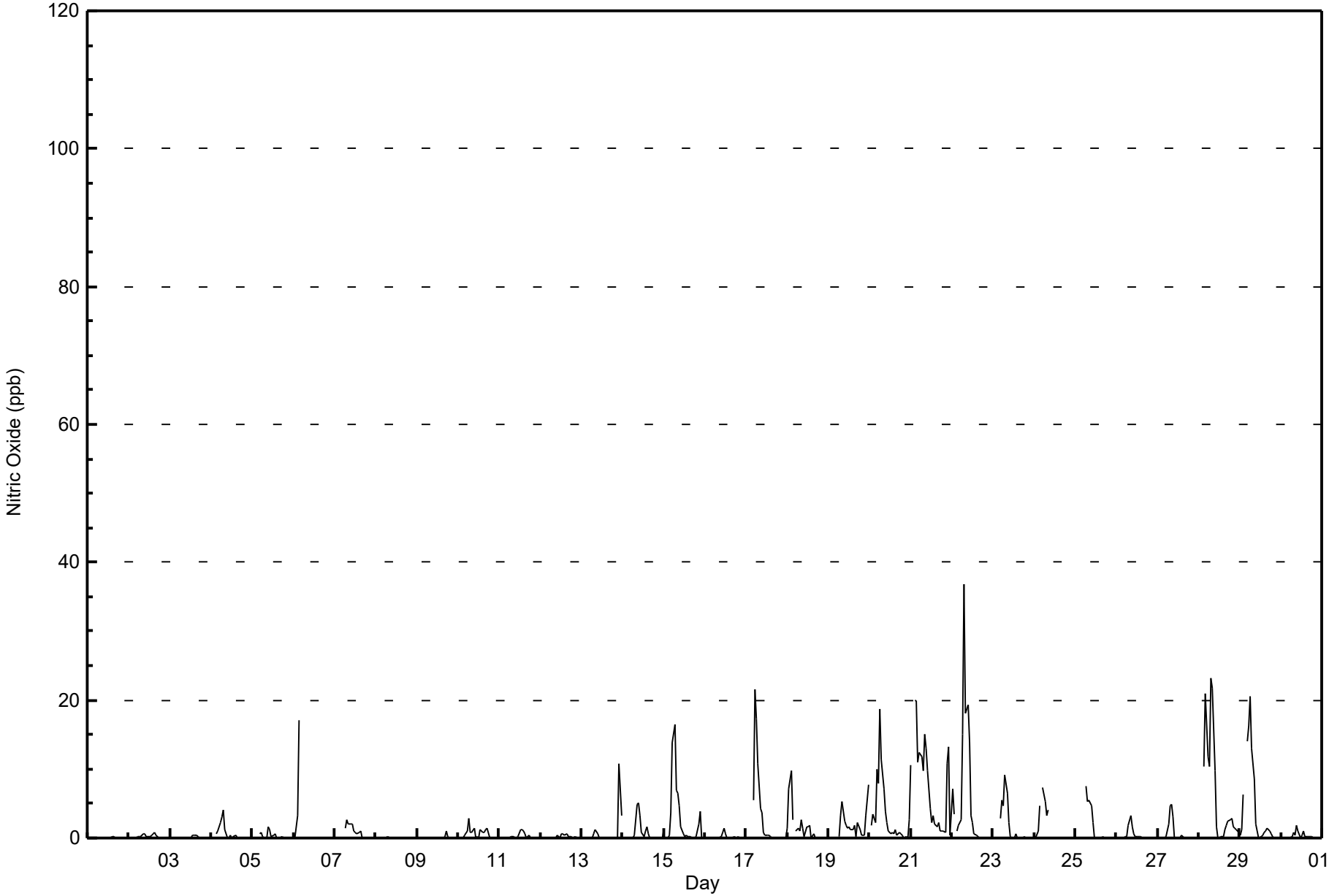
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Fort McKay - Bertha Ganter - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	677	99.12	99.12
21 - 40	6	0.88	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: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Fort McKay - Bertha Ganter - June 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	140	63	30	17	5	20	29	92	47	34	11	10	18	46	40	74	676
21 - 40	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	6
11 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81 - 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	143	63	30	17	5	20	29	92	47	34	11	10	18	46	41	76	682

Total Number of Valid Hours: 682

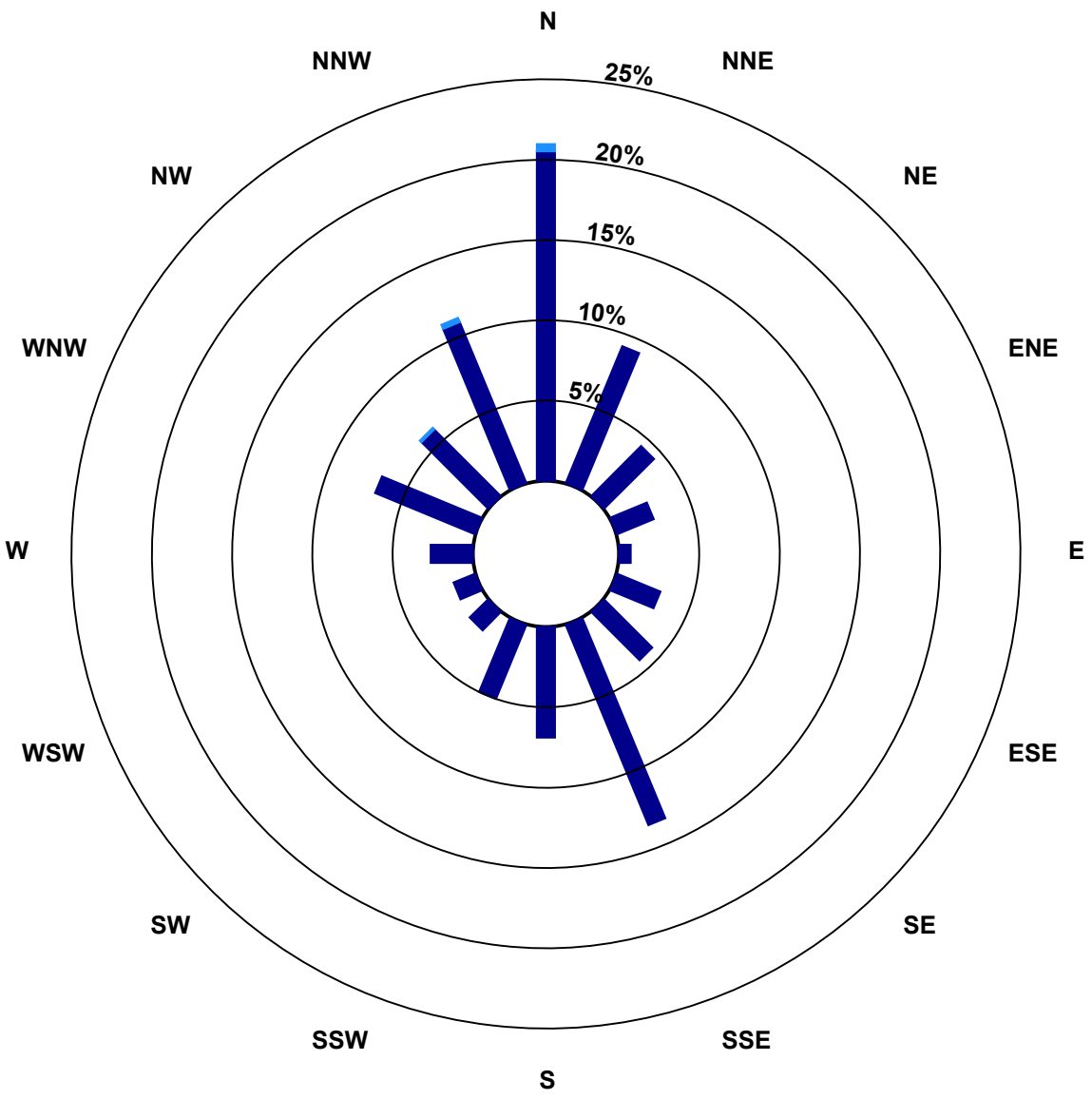
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

- 0 - 20
- 21 - 40
- 11 - 80
- 81 - 159
- > 159

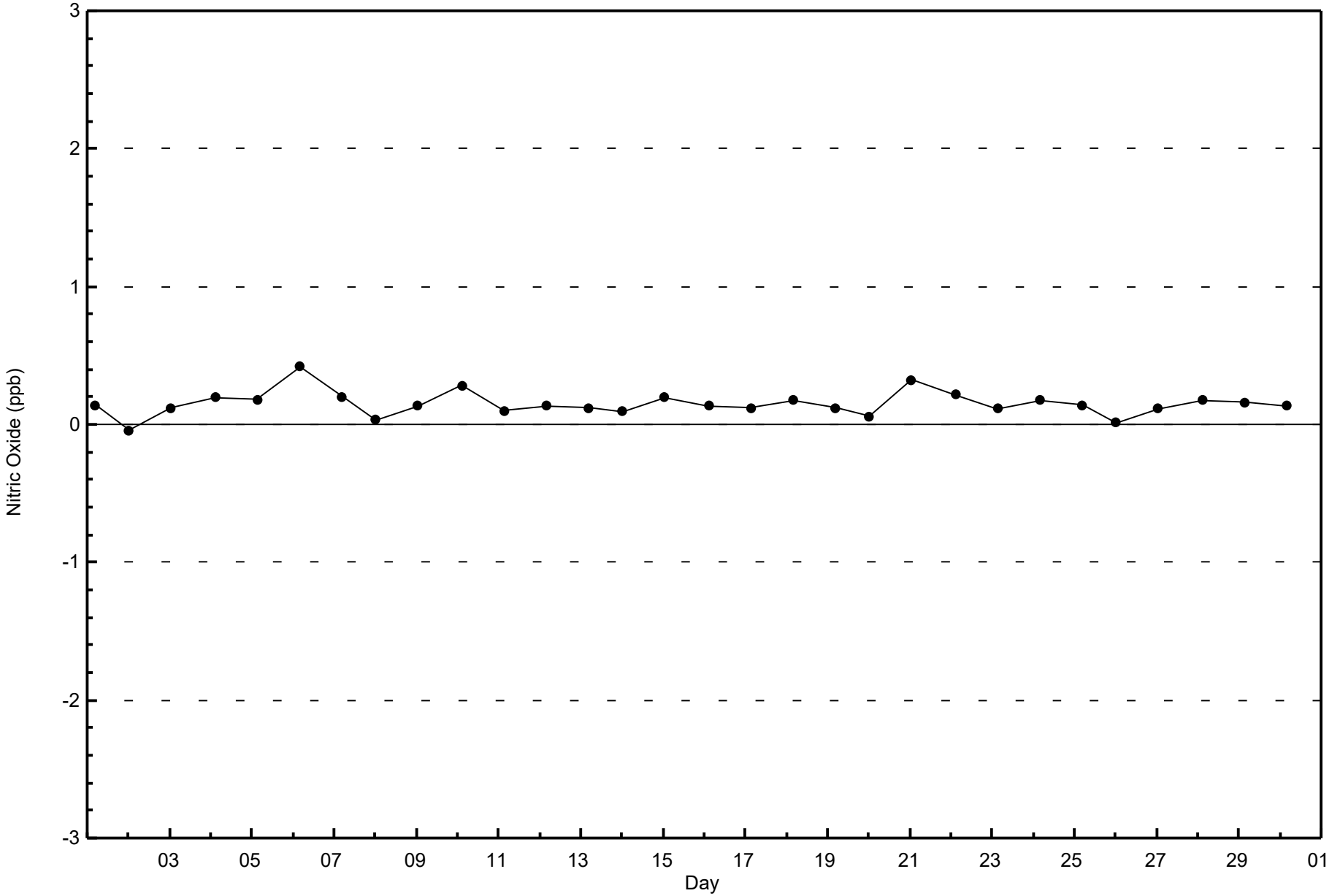
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Fort McKay - Bertha Ganter - June 2026

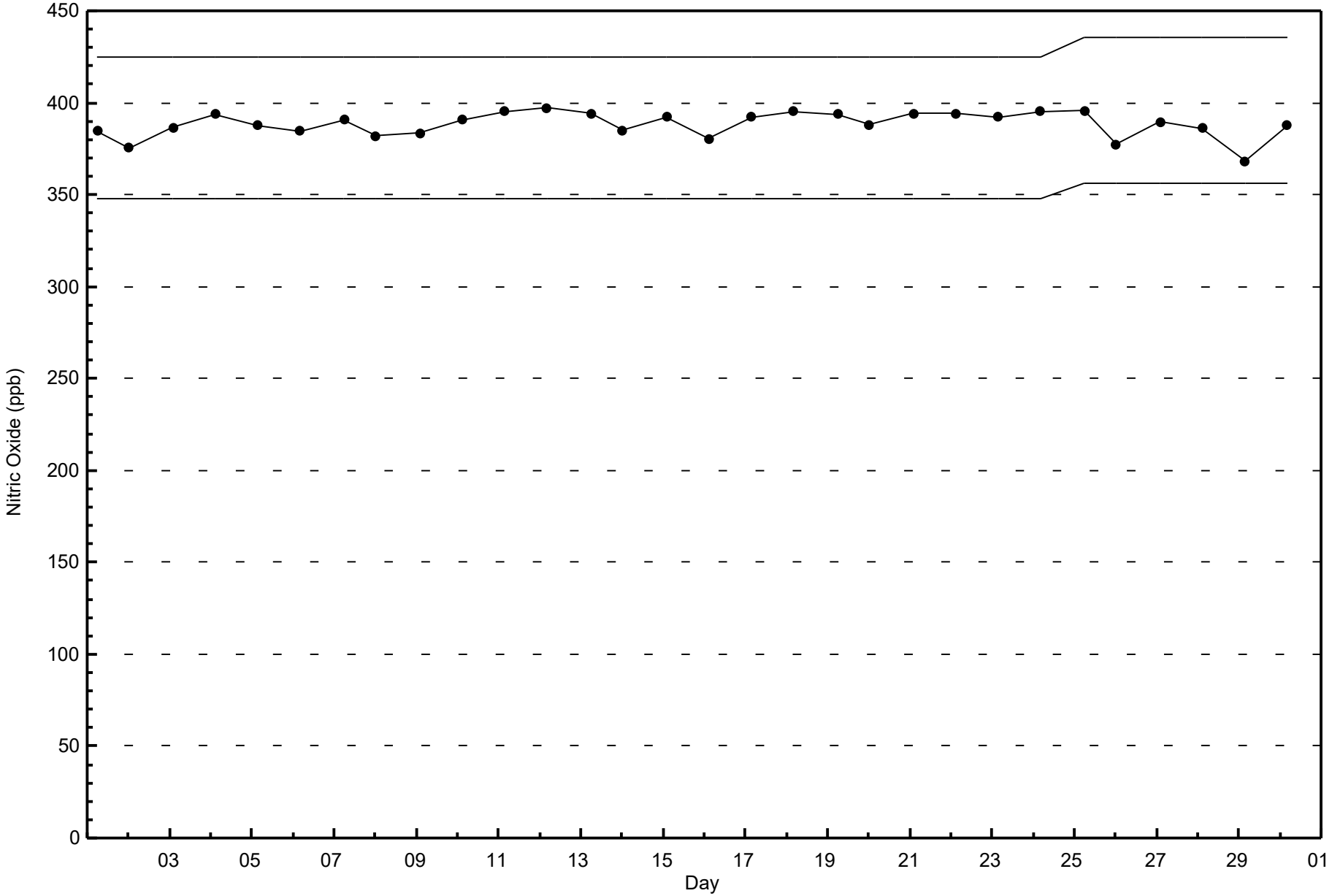


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Fort McKay - Bertha Ganter - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Fort McKay - Bertha Ganter - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 30.1 ppb on Jun 15 22:00 Maximum Daily Average: 10.8 ppb on Jun 29

Minimum Value: 0.0 ppb on Jun 1 07:00 Minimum Daily Average: 0.8 ppb on Jun 1
Maximum Diurnal Average: 7.2 ppb at hour 1 Minimum Diurnal Average: 1.6 ppb at hour 17
Monthly Average: 4.35 ppb Percentiles: P_1 = 0.0 P_{10} = 0.2 Q_1 = 1.0 Median = 2.3 Q_3 = 5.8 P_{90} = 11.6 P_{99} = 24.1

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	35
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	1.9	0.5	0.4	0.4	0.7	Z	0.0	0.2	0.3	0.2	0.4	0.8	0.9	1.3	1.7	1.9	0.7	0.8	0.5	0.6	1.0	1.1	1.6	1.4	0.8	1.9
2-Jun	Z	2.2	2.5	4.7	4.8	2.7	2.3	1.4	3.0	3.1	1.8	2.0	2.1	2.2	3.5	2.8	3.7	4.7	0.7	1.1	0.6	0.0	0.0	0.9	2.3	4.8
3-Jun	0.5	Z	1.1	0.5	0.4	0.2	0.3	0.3	0.2	0.3	0.7	0.7	0.9	3.2	2.7	3.2	3.0	1.4	1.1	2.2	2.2	1.0	1.4	1.2	1.2	3.2
4-Jun	1.5	1.6	Z	2.1	3.6	3.3	3.1	3.8	2.8	1.4	1.4	1.7	1.2	1.5	1.8	0.9	0.5	0.5	1.3	1.7	3.4	5.1	7.8	6.1	2.5	7.8
5-Jun	5.9	7.0	5.8	Z	7.1	4.3	1.6	1.1	0.9	4.5	3.7	2.7	2.4	3.0	1.4	4.2	3.1	5.9	5.8	4.6	6.4	6.0	6.3	5.9	4.3	7.1
6-Jun	1.5	0.1	12.4	23.9	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.4	0.0	0.0	0.5	2.7	1.8	23.9
7-Jun	9.0	5.7	4.7	6.8	3.6	Z	3.0	3.4	2.8	3.3	3.5	2.1	2.2	2.3	3.2	3.9	1.7	1.2	1.0	2.4	4.3	5.8	6.7	5.2	3.8	9.0
8-Jun	Z	5.1	4.9	2.0	3.4	5.1	0.7	2.6	1.2	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	1.1	5.1
9-Jun	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	1.7	4.0	1.8	4.1	6.1	3.9	2.9	5.7	1.3	6.1
10-Jun	7.8	8.0	Z	5.9	4.9	4.9	6.0	2.1	2.5	4.0	0.3	2.7	1.3	3.4	3.1	2.2	2.3	2.0	0.0	0.0	0.0	3.5	2.7	5.8	3.3	8.0
11-Jun	3.2	0.2	0.2	Z	0.0	0.2	0.2	0.3	0.9	0.4	0.0	0.8	2.1	2.5	2.4	1.8	0.8	0.9	1.1	1.8	0.1	0.0	0.1	6.4	1.1	6.4
12-Jun	8.2	0.5	11.5	1.8	Z	0.0	0.1	0.0	0.1	0.2	0.3	0.5	1.8	1.8	1.7	1.8	1.5	1.8	1.9	3.0	7.8	12.2	5.8	7.1	3.1	12.2
13-Jun	1.8	0.7	0.4	0.8	0.7	Z	0.3	1.4	2.8	2.1	0.7	0.4	0.7	1.4	1.5	1.4	1.3	0.5	0.4	0.1	2.8	9.7	24.0	19.2	3.3	24.0
14-Jun	Z	6.7	3.3	2.0	0.8	0.8	0.6	2.2	12.3	12.8	9.6	3.8	1.9	3.0	3.5	2.7	1.3	1.6	1.2	1.4	4.6	10.2	5.9	10.6	4.5	12.8
15-Jun	14.6	Z	10.6	11.7	9.9	13.8	15.1	10.7	11.9	9.7	5.4	3.2	2.7	3.3	3.6	3.6	2.9	2.5	3.4	8.1	23.9	30.1	19.8	16.6	10.3	30.1
16-Jun	13.9	20.0	Z	2.6	1.6	1.8	3.0	1.6	1.5	1.7	3.1	5.4	3.0	1.0	M	M	1.1	1.4	1.7	3.1	4.9	11.4	12.2	21.0	5.6	21.0
17-Jun	19.5	13.3	7.2	Z	16.7	21.9	18.4	12.6	7.5	6.8	2.4	1.8	1.7	1.6	1.4	1.2	0.0	0.3	1.7	1.0	1.8	1.9	1.4	2.6	6.3	21.9
18-Jun	17.9	24.6	22.4	15.7	Z	5.4	5.7	3.2	5.5	3.2	1.1	5.0	4.9	5.2	1.1	1.7	0.3	0.0	0.0	2.4	0.0	0.3	2.2	0.2	5.6	24.6
19-Jun	0.0	0.0	0.2	0.9	0.4	Z	0.6	3.3	5.8	3.1	2.8	2.7	2.8	2.3	2.3	2.4	0.9	4.2	3.3	2.3	4.9	9.0	13.2	12.0	3.5	13.2
20-Jun	Z	10.4	11.0	8.1	8.6	6.0	9.6	7.9	6.1	3.7	2.5	1.7	1.7	1.9	1.4	2.0	1.6	2.2	2.6	3.2	4.7	11.6	11.1	15.3	5.9	15.3
21-Jun	15.5	Z	15.9	15.9	14.5	11.9	11.3	11.7	11.6	10.3	9.3	7.8	5.8	5.3	4.3	4.0	5.9	4.6	8.2	7.5	10.0	17.8	18.3	9.9	10.3	18.3
22-Jun	13.7	9.9	Z	5.7	3.1	1.9	6.0	12.5	12.0	15.2	14.2	6.0	4.6	2.9	2.2	2.9	2.5	1.6	1.5	3.0	2.3	1.5	3.9	7.1	5.9	15.2
23-Jun	6.8	6.3	5.3	Z	8.6	8.4	6.7	9.4	7.5	4.8	1.5	0.7	0.9	3.1	1.0	0.8	1.4	1.0	3.3	2.2	1.8	1.8	3.5	3.5	3.9	9.4
24-Jun	4.7	6.1	9.9	11.6	Z	9.3	7.5	6.1	7.0	C	C	C	C	C	1.1	1.3	1.1	1.7	1.0	0.6	0.5	1.2	2.2	1.7	4.1	11.6
25-Jun	2.3	2.4	2.2	2.2	2.5	Z	11.1	10.3	11.5	12.2	8.0	1.0	1.1	1.3	1.5	1.3	1.8	1.6	1.7	1.0	0.6	1.0	2.3	8.2	3.9	12.2
26-Jun	Z	4.4	8.8	7.5	3.6	1.9	1.6	5.8	10.3	7.0	3.6	2.0	2.1	2.0	2.1	1.9	1.6	1.0	0.7	0.4	0.8	0.3	1.1	0.5	3.1	10.3
27-Jun	0.4	Z	0.2	0.3	0.4	2.0	6.7	11.7	10.4	9.2	1.2	0.4	0.6	0.8	2.3	0.5	0.4	0.7	1.0	0.9	0.9	1.5	3.3	3.0	2.6	11.7
28-Jun	2.4	4.0	Z	15.0	16.7	14.3	16.1	24.4	25.7	20.5	7.1	0.7	0.8	1.7	1.3	1.4	1.7	2.2	3.2	5.2	12.4	15.6	27.1	24.0	10.6	27.1
29-Jun	23.0	26.5	28.0	Z	22.5	19.6	22.1	20.6	18.4	9.5	7.4	3.3	2.4	2.1	1.8	1.9	2.7	2.0	1.9	3.8	8.9	11.4	4.6	4.7	10.8	28.0
30-Jun	2.8	1.8	1.7	1.4	Z	2.2	3.3	5.7	5.3	10.6	8.2	3.1	6.1	9.1	4.2	2.9	1.5	2.2	1.6	1.5	1.8	3.5	1.6	1.0	3.6	10.6
	7.2	6.7	6.8	6.0	5.6	5.7	5.4	5.9	6.3	5.5	3.5	2.2	2.0	2.4	2.0	2.0	1.6	1.8	1.8	2.3	4.0	5.9	6.5	7.0	Diurnal Average	
	23.0	26.5	28.0	23.9	22.5	21.9	22.1	24.4	25.7	20.5	14.2	7.8	6.1	9.1	4.3	4.2	5.9	5.9	8.2	8.1	23.9	30.1	27.1	24.0	Diurnal Maximum	

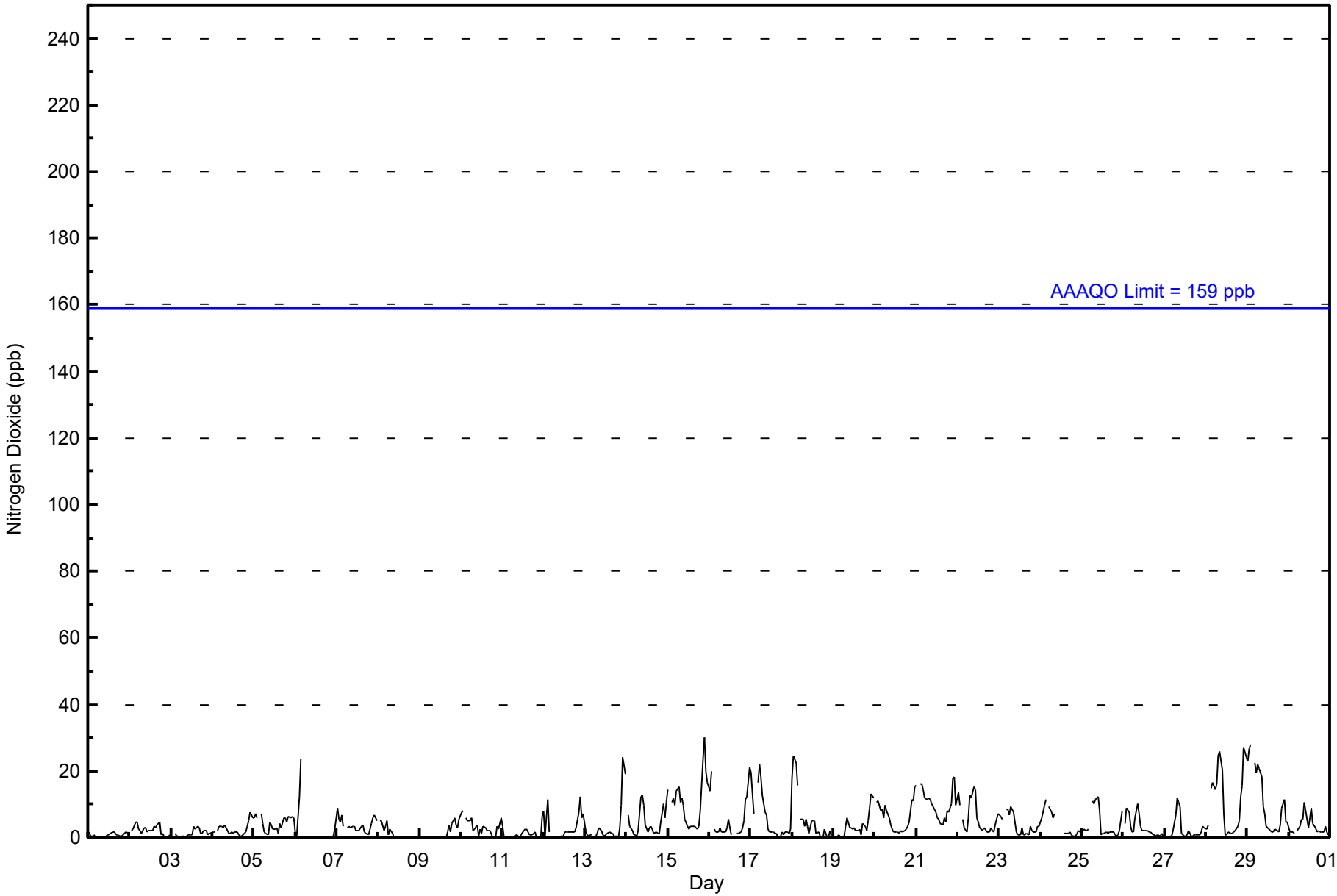
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Fort McKay - Bertha Ganter - June 2026



Nitrogen Dioxide (NO_2) - ppb

Fort McKay - Bertha Ganter - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	664	97.22	97.22
21 - 40	19	2.78	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: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Fort McKay - Bertha Ganter - June 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	136	62	29	17	5	20	29	92	47	33	11	10	18	46	39	69	663
21 - 40	7	1	1	0	0	0	0	0	0	1	0	0	0	0	2	7	19
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	143	63	30	17	5	20	29	92	47	34	11	10	18	46	41	76	682

Total Number of Valid Hours: 682

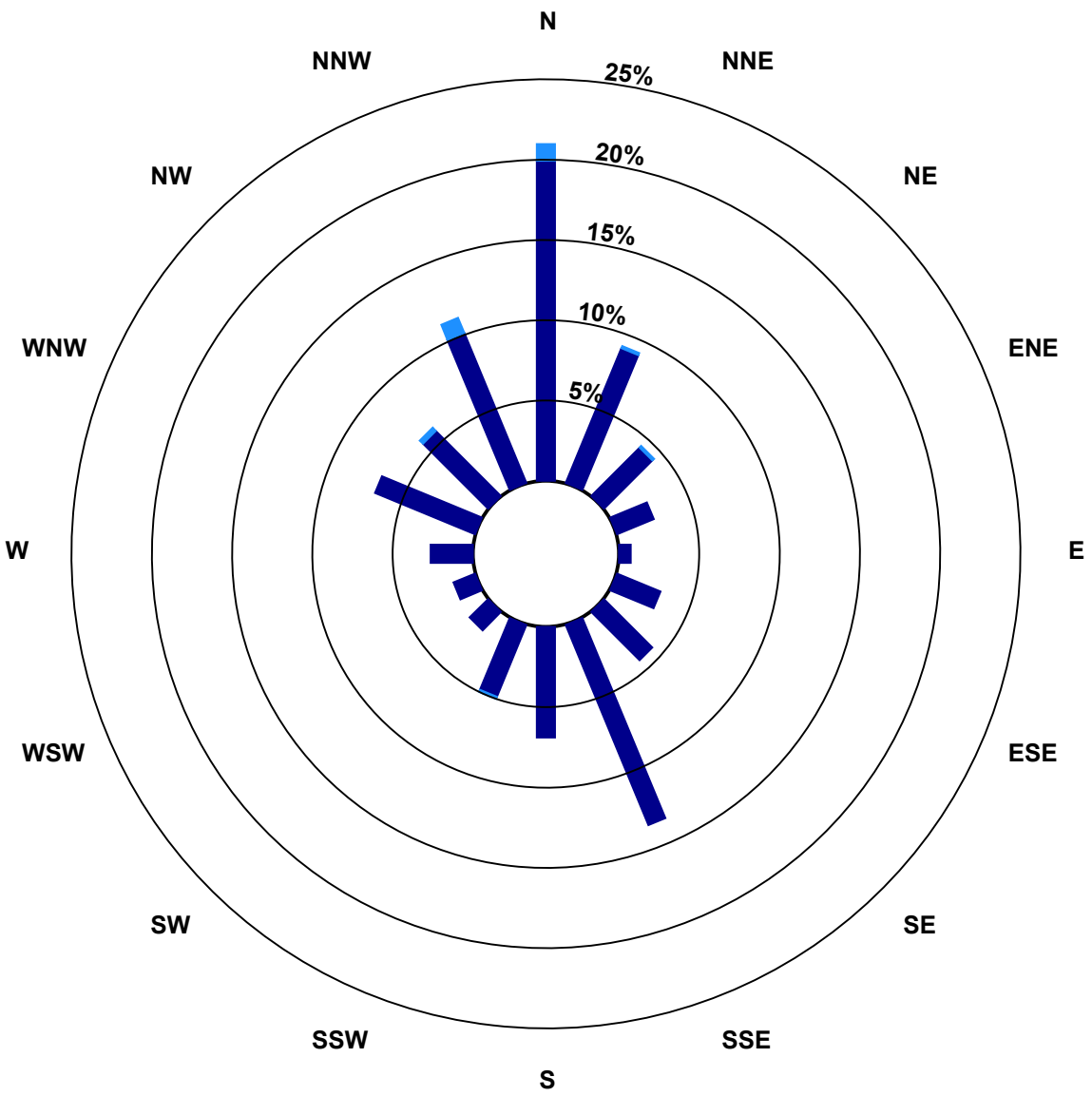
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

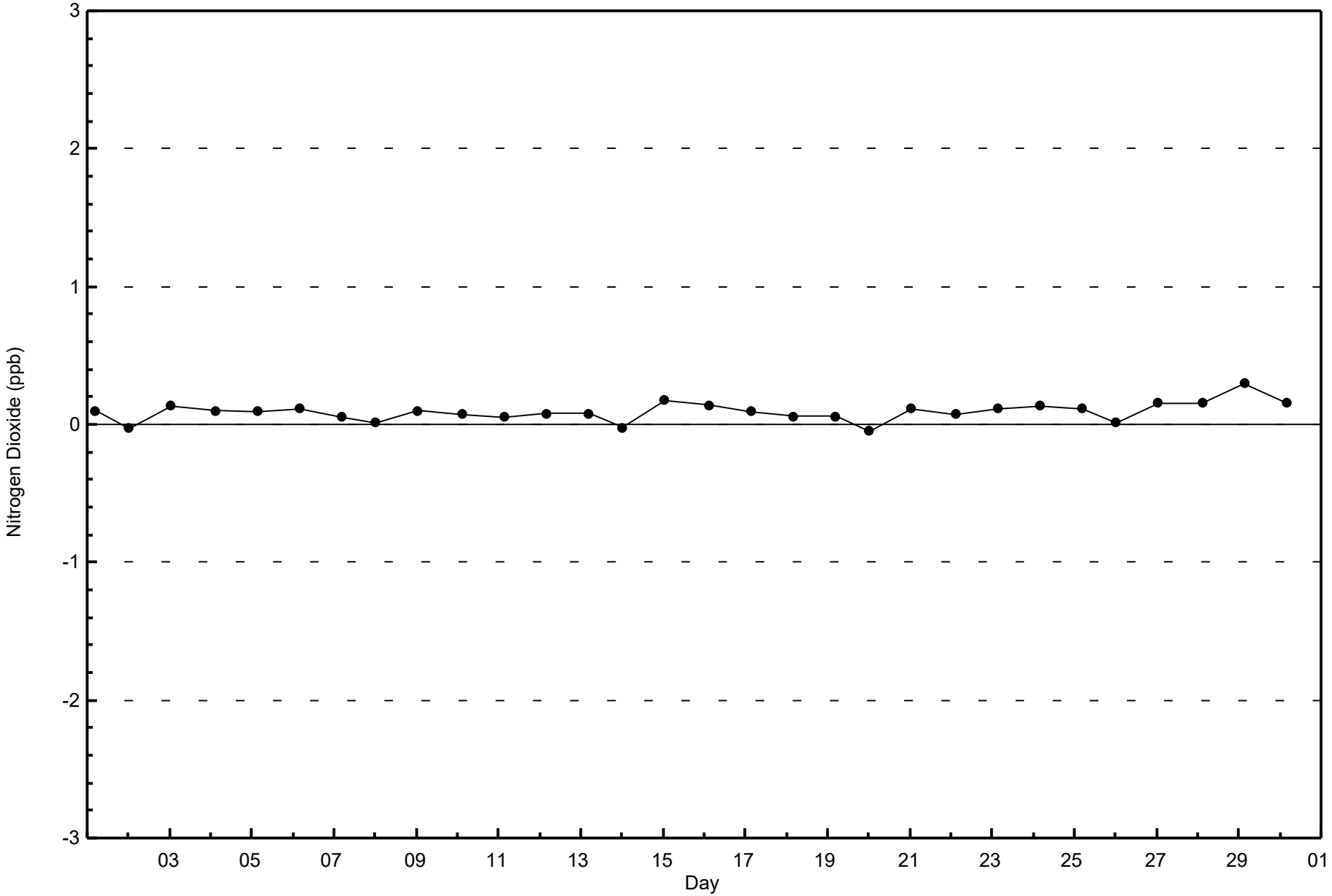
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Fort McKay - Bertha Ganter - June 2026

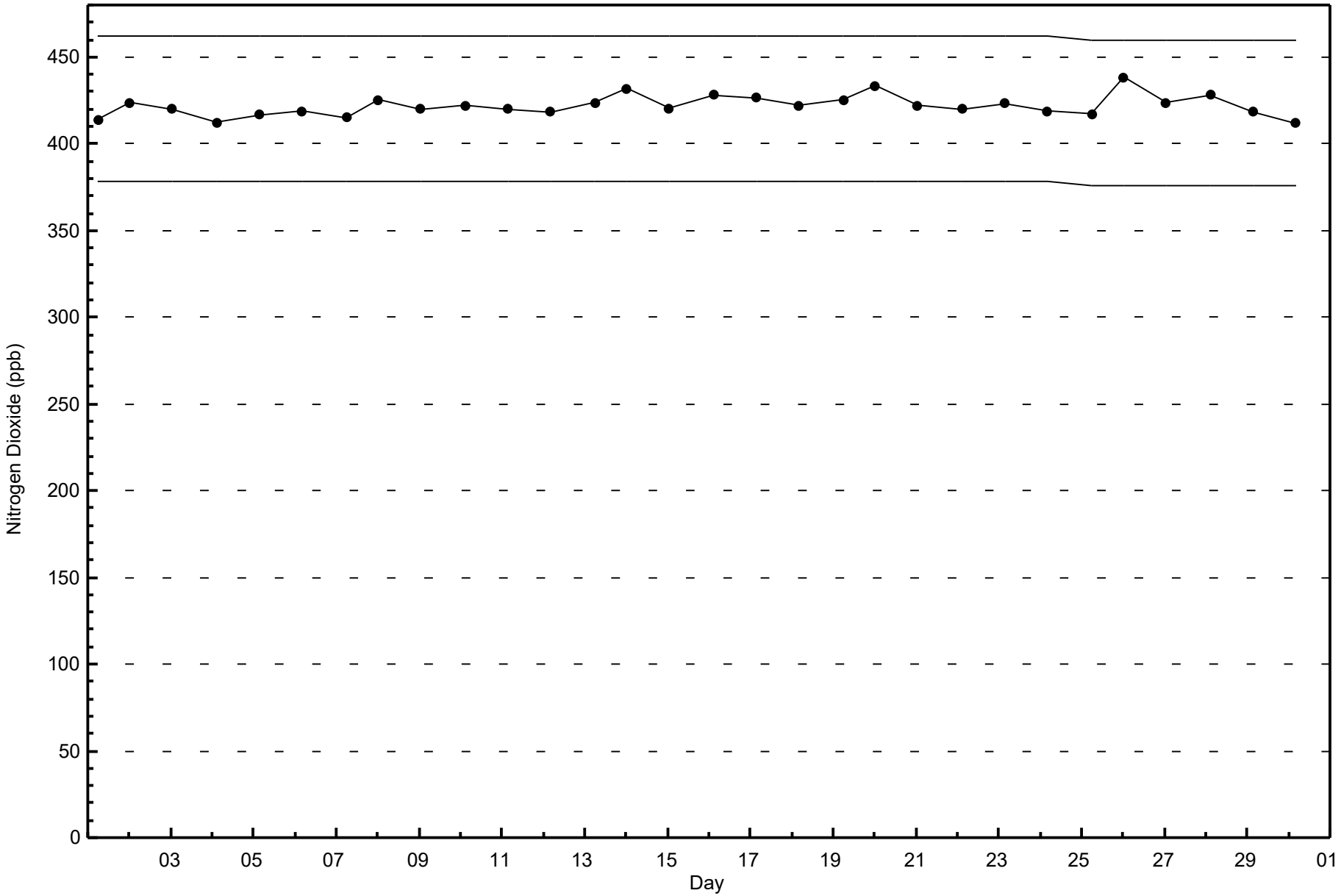


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Fort McKay - Bertha Ganter - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Fort McKay - Bertha Ganter - June 2026

Maximum Value: 49.3 ppb on Jun 22 08:00

Maximum Daily Average: 18.0 ppb on Jun 21

Minimum Value: 0.0 ppb on Jun 1 07:00

Minimum Daily Average: 0.9 ppb on Jun 1

Maximum Diurnal Average: 10.9 ppb at hour 8

Minimum Diurnal Average: 1.9 ppb at hour 17

Monthly Average: 5.86 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.2 Q_1 = 1.0 Median = 2.7 Q_3 = 6.5 P_{90} = 16.7 P_{99} = 36.8

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	35
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	1.9	0.5	0.4	0.4	0.7	Z	0.0	0.2	0.3	0.2	0.4	0.8	0.9	1.3	1.8	2.1	0.7	0.8	0.5	0.6	1.0	1.1	1.6	1.4	0.9	2.1
2-Jun	Z	2.2	2.5	4.7	4.8	2.8	2.6	1.5	3.7	3.8	2.0	2.1	2.3	2.5	4.1	3.6	4.2	4.7	0.7	1.1	0.6	0.0	0.0	0.9	2.5	4.8
3-Jun	0.5	Z	1.1	0.5	0.4	0.2	0.3	0.3	0.2	0.3	0.7	0.7	0.9	3.6	3.1	3.7	3.2	1.4	1.1	2.2	2.2	1.0	1.4	1.2	1.3	3.7
4-Jun	1.5	1.6	Z	2.6	4.6	5.5	6.2	7.8	4.0	1.4	1.4	2.0	1.3	1.7	2.2	0.9	0.5	0.5	1.3	1.7	3.4	5.1	7.8	6.1	3.1	7.8
5-Jun	5.9	7.0	5.8	Z	7.7	5.1	1.9	1.1	0.9	6.1	4.8	2.9	2.8	3.5	1.4	4.2	3.1	6.1	5.8	4.6	6.4	6.0	6.3	5.9	4.6	7.7
6-Jun	1.5	0.1	15.7	41.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.4	0.0	0.0	0.5	2.7	2.7	41.1
7-Jun	9.0	5.7	4.7	6.8	3.6	Z	4.4	6.1	4.9	5.4	5.6	3.0	3.1	3.0	4.0	4.8	1.7	1.2	1.0	2.4	4.4	5.8	6.7	5.2	4.5	9.0
8-Jun	Z	5.1	4.9	2.0	3.4	5.2	0.7	2.8	1.2	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	1.1	5.2
9-Jun	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	1.8	5.1	2.0	4.2	6.2	3.9	2.9	5.7	1.4	6.2
10-Jun	7.8	8.0	Z	5.9	5.3	5.8	8.8	2.9	3.2	5.4	0.3	2.9	1.4	4.6	3.9	3.1	3.5	3.4	0.0	0.0	0.0	3.5	2.7	5.8	3.8	8.8
11-Jun	3.2	0.2	0.2	Z	0.0	0.2	0.2	0.5	1.2	0.4	0.0	1.1	3.3	3.7	3.3	2.5	0.8	1.2	1.1	1.8	0.1	0.0	0.1	6.5	1.4	6.5
12-Jun	8.5	0.5	11.5	1.8	Z	0.0	0.1	0.0	0.1	0.2	0.7	0.5	2.3	2.4	2.2	2.3	1.8	2.1	2.0	3.1	7.9	12.2	5.8	7.1	3.3	12.2
13-Jun	1.8	0.7	0.4	0.8	0.7	Z	0.3	2.0	4.0	2.7	0.7	0.4	0.7	1.5	1.6	1.5	1.4	0.5	0.4	0.1	2.8	9.7	34.8	22.5	4.0	34.8
14-Jun	Z	6.7	3.3	2.0	0.8	0.8	0.6	2.6	17.1	17.8	13.0	4.7	2.2	4.0	5.1	3.3	1.3	1.6	1.2	1.4	4.6	10.2	5.9	10.6	5.2	17.8
15-Jun	15.8	Z	10.6	12.0	13.6	27.7	31.6	17.7	18.3	14.4	7.1	3.9	3.0	3.6	3.8	3.7	2.9	2.5	3.4	8.3	25.9	33.9	19.8	16.6	13.0	33.9
16-Jun	13.9	20.0	Z	2.6	1.6	1.8	3.1	1.6	1.6	2.0	4.0	6.9	3.6	1.0	M	M	1.2	1.5	1.8	3.3	4.9	11.4	12.2	21.0	5.8	21.0
17-Jun	19.5	13.3	7.2	Z	22.2	43.4	35.6	23.4	11.8	10.5	3.3	2.3	2.1	2.0	1.6	1.2	0.0	0.3	1.7	1.0	1.8	1.9	1.4	2.6	9.1	43.4
18-Jun	19.4	31.7	32.1	18.3	Z	6.5	7.1	4.3	8.1	4.6	1.2	6.7	6.6	7.1	1.2	2.2	0.3	0.0	0.0	2.4	0.0	0.3	2.2	0.2	7.1	32.1
19-Jun	0.0	0.0	0.2	0.9	0.4	Z	0.8	6.6	11.0	5.5	4.6	4.1	4.5	3.5	3.6	4.3	1.1	6.4	4.6	2.7	5.4	9.3	16.5	19.8	5.0	19.8
20-Jun	Z	12.2	14.5	10.3	18.6	13.9	28.2	19.3	13.1	7.5	4.7	2.7	2.4	2.8	2.0	3.1	1.9	3.0	3.2	3.5	4.7	11.9	11.1	18.0	9.2	28.2
21-Jun	26.2	Z	35.9	35.8	25.6	24.3	23.0	21.5	26.6	23.2	19.1	12.1	8.0	8.5	6.3	5.5	8.1	5.6	9.3	8.5	10.7	28.5	31.4	10.3	18.0	35.9
22-Jun	20.9	13.4	Z	6.6	4.9	4.5	21.1	49.3	30.2	34.5	28.1	9.2	6.8	3.5	2.5	3.0	2.5	1.6	1.5	3.0	2.3	1.5	3.9	7.1	11.4	49.3
23-Jun	6.8	6.3	5.3	Z	11.4	14.0	11.3	18.6	13.9	7.1	1.8	0.7	0.9	3.7	1.0	0.8	1.4	1.0	3.6	2.2	1.8	1.8	3.5	3.5	5.3	18.6
24-Jun	4.7	6.1	11.0	16.2	Z	16.7	12.7	9.4	11.0	C	C	C	C	C	1.1	1.3	1.1	1.7	1.0	0.6	0.5	1.2	2.2	1.7	5.6	16.7
25-Jun	2.3	2.4	2.2	2.2	2.6	Z	18.6	15.5	16.9	16.9	10.3	1.0	1.1	1.3	1.5	1.3	2.0	1.6	1.7	1.0	0.6	1.0	2.3	8.2	5.0	18.6
26-Jun	Z	4.4	8.8	7.5	3.7	2.0	1.8	7.6	13.5	8.6	4.2	2.1	2.3	2.2	2.2	2.0	1.6	1.0	0.7	0.4	0.8	0.3	1.1	0.5	3.5	13.5
27-Jun	0.4	Z	0.2	0.3	0.4	2.2	8.8	16.4	15.4	12.2	1.2	0.4	0.6	0.8	2.8	0.5	0.4	0.7	1.0	0.9	0.9	1.5	3.3	3.0	3.2	16.4
28-Jun	2.4	4.0	Z	25.4	37.7	26.1	26.6	47.5	47.4	30.2	8.7	0.7	0.8	1.8	1.6	2.5	3.4	4.7	5.9	8.1	14.1	17.1	28.3	24.8	16.1	47.5
29-Jun	23.5	27.7	34.2	Z	36.6	35.9	42.7	33.6	27.0	11.5	8.4	3.4	2.7	2.5	2.5	2.9	4.1	3.0	2.5	4.0	9.0	11.4	4.6	4.7	14.7	42.7
30-Jun	2.8	1.8	1.7	1.4	Z	2.3	3.6	6.5	5.8	12.4	9.3	3.1	6.5	10.0	4.4	3.1	1.7	2.5	1.8	1.6	1.8	3.5	1.6	1.0	3.9	12.4
	8.0	7.3	8.6	8.3	8.5	9.9	10.1	10.9	10.4	8.4	5.0	2.8	2.5	3.0	2.4	2.4	1.9	2.2	2.0	2.5	4.2	6.5	7.4	7.5	Diurnal Average	
	26.2	31.7	35.9	41.1	37.7	43.4	42.7	49.3	47.4	34.5	28.1	12.1	8.0	10.0	6.3	5.5	8.1	6.4	9.3	8.5	25.9	33.9	34.8	24.8	Diurnal Maximum	

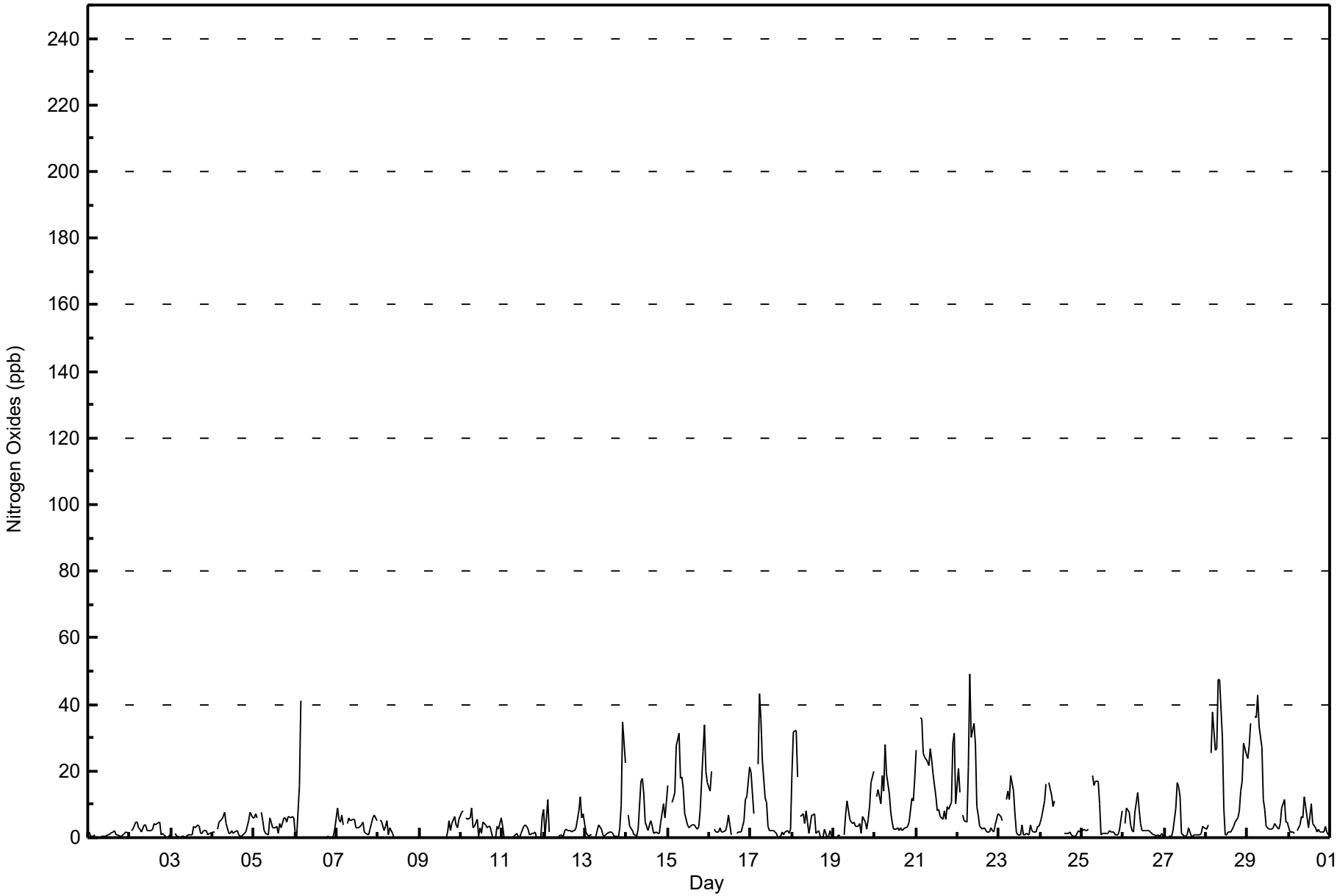
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Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Fort McKay - Bertha Ganter - June 2026



Nitrogen Oxides (NO_X) - ppb

Fort McKay - Bertha Ganter - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	634	92.83	92.83
21 - 40	43	6.30	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: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Fort McKay - Bertha Ganter - June 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	127	59	28	17	5	19	29	92	47	33	10	10	17	45	36	59	633
21 - 40	13	4	2	0	0	1	0	0	0	1	1	0	1	1	3	16	43
11 - 80	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	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	143	63	30	17	5	20	29	92	47	34	11	10	18	46	41	76	682

Total Number of Valid Hours: 682

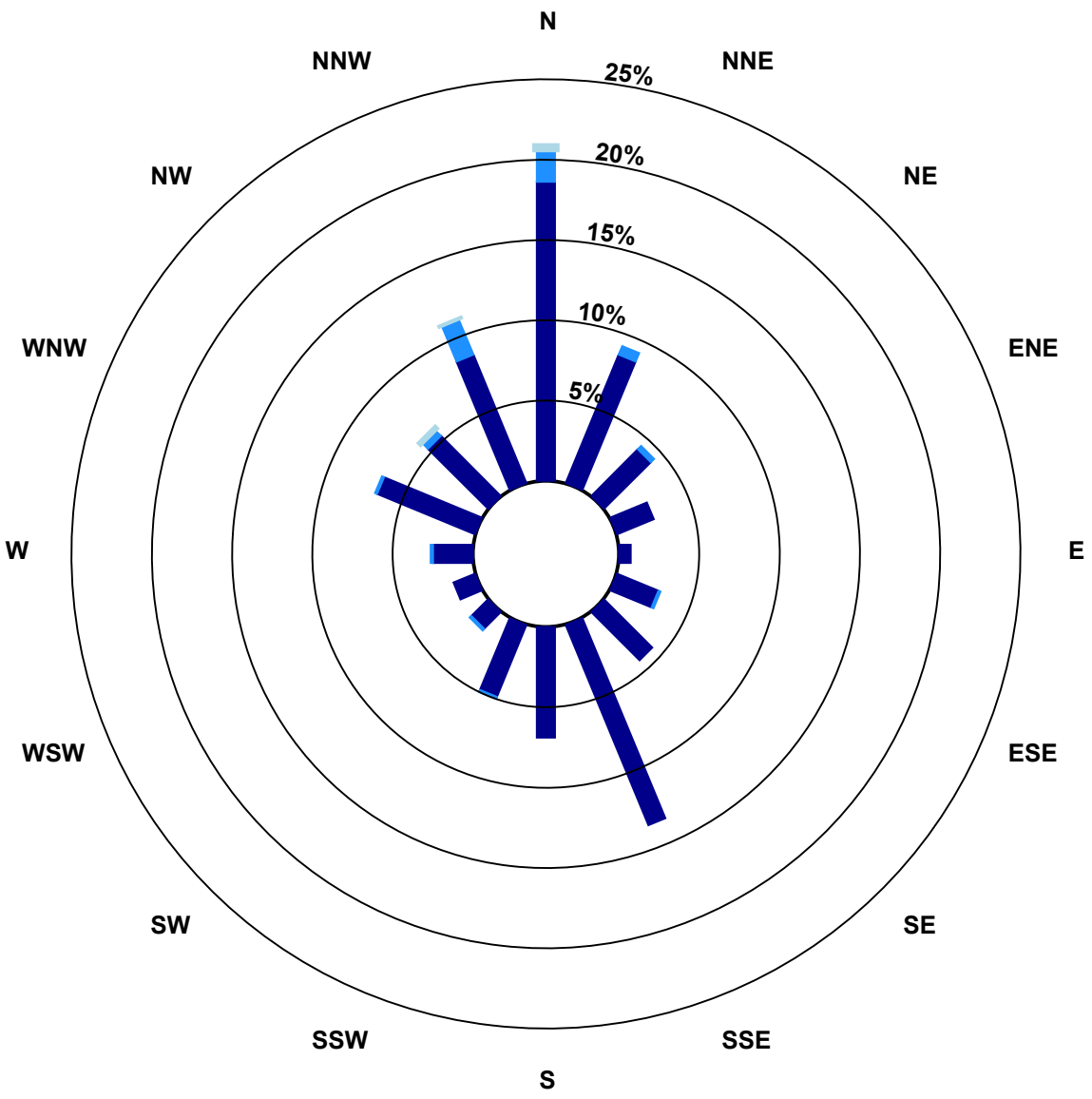
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

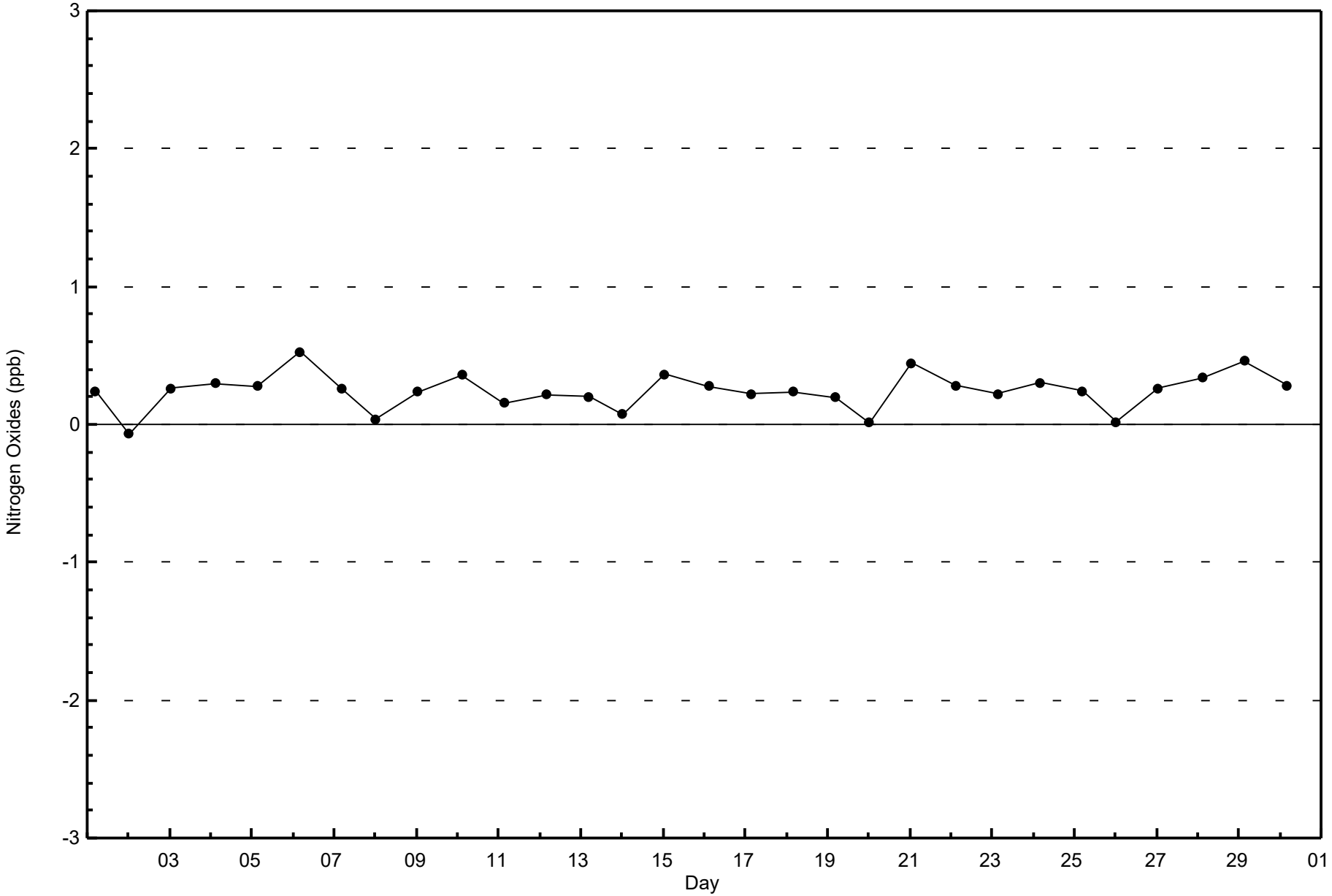
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Fort McKay - Bertha Ganter - June 2026

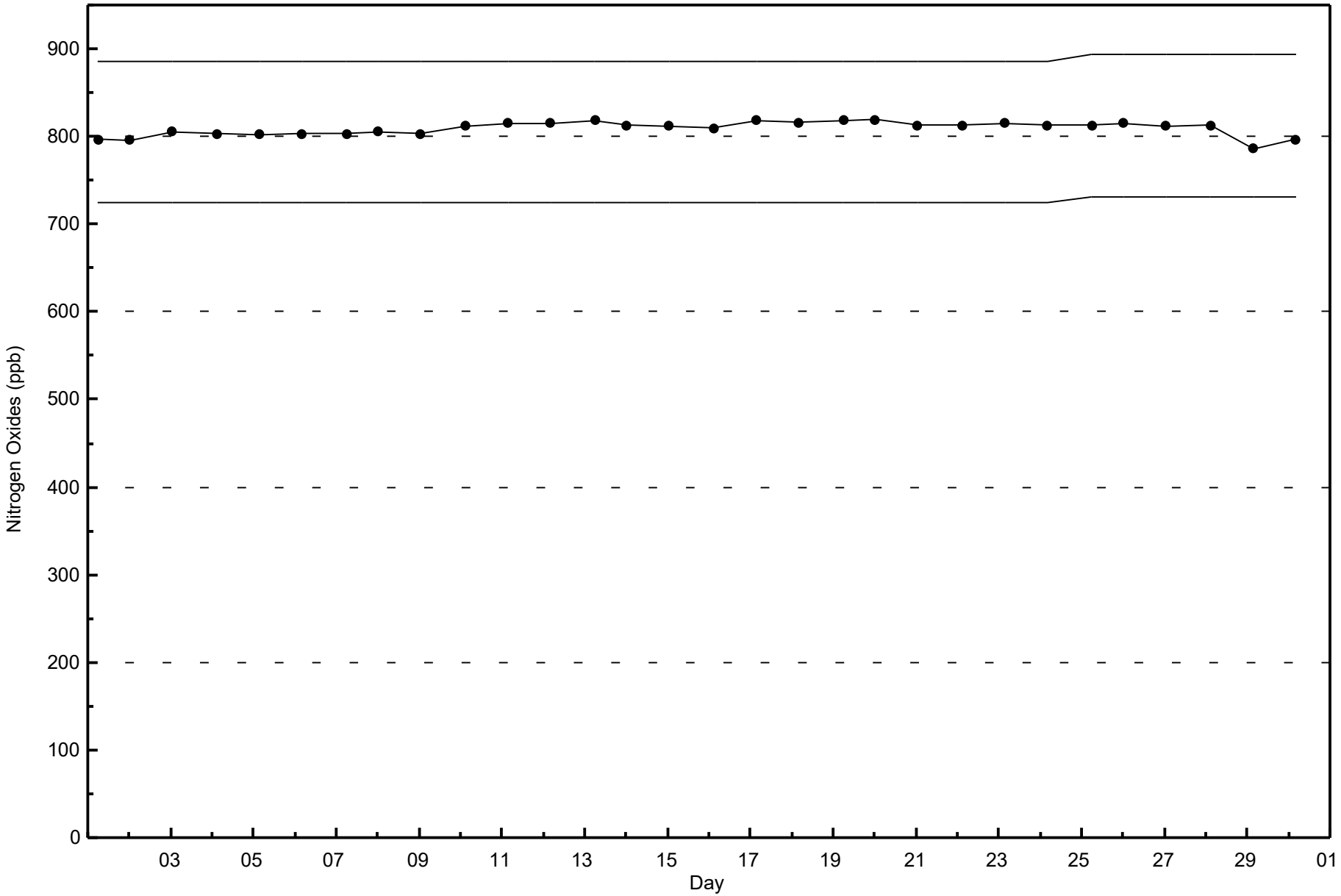


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Fort McKay - Bertha Ganter - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Fort McKay - Bertha Ganter - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 62.2 ppb on Jun 30 15:00 Maximum Daily Average: 41.1 ppb on Jun 30

Minimum Value: 1.8 ppb on Jun 21 23:00 Minimum Daily Average: 10.3 ppb on Jun 21
Maximum Diurnal Average: 35.3 ppb at hour 15 Minimum Diurnal Average: 13.2 ppb at hour 5
Monthly Average: 25.37 ppb Percentiles: P_1 = 2.0 P_{10} = 7.5 Q_1 = 16.8 Median = 24.8 Q_3 = 34.2 P_{90} = 43.5 P_{99} = 57.1

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	35
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	27.1	29.8	32.9	Z	33.7	34.6	35.3	34.7	34.9	33.5	32.2	29.6	29.4	30.6	31.7	30.9	32.7	32.9	31.7	30.9	30.4	30.5	29.1	30.0	31.7	35.3
2-Jun	28.6	29.1	28.2	25.5	Z	27.6	27.6	28.8	27.9	32.0	34.0	34.2	34.7	36.8	34.6	36.9	38.8	36.3	37.7	32.4	34.0	36.8	35.5	32.4	32.6	38.8
3-Jun	31.3	32.1	28.3	27.0	26.7	Z	27.4	26.2	27.0	26.0	26.1	25.7	26.1	24.7	24.5	23.9	22.8	22.7	23.6	21.6	15.0	11.1	6.1	4.4	23.1	32.1
4-Jun	Z	3.6	2.3	2.7	5.1	6.1	7.4	11.0	21.0	24.0	24.7	25.5	28.5	29.4	31.3	33.2	35.1	36.1	35.4	34.6	32.1	26.8	19.4	19.8	21.5	36.1
5-Jun	18.1	Z	17.2	15.4	14.1	17.8	22.1	25.2	26.6	25.1	30.2	36.5	36.2	40.4	41.4	38.5	36.2	34.1	32.5	31.2	25.6	20.5	16.4	17.8	26.9	41.4
6-Jun	19.3	18.7	Z	3.9	25.7	24.2	22.0	20.9	21.2	19.3	17.8	17.3	17.3	18.4	19.9	17.8	20.5	22.2	20.4	20.0	22.4	23.1	20.2	16.8	19.5	25.7
7-Jun	7.0	6.9	4.6	Z	8.1	7.8	11.7	12.3	13.7	16.3	19.1	24.6	25.8	28.8	32.2	32.2	28.3	24.7	31.5	18.1	12.0	9.7	11.3	22.0	17.8	32.2
8-Jun	25.2	19.5	15.2	16.8	Z	18.5	23.8	18.8	17.4	20.4	24.1	22.4	22.5	21.0	18.8	18.4	19.0	22.5	23.1	26.4	29.4	30.8	29.6	28.8	22.3	30.8
9-Jun	27.1	26.4	27.9	28.6	28.7	Z	30.2	27.5	28.4	28.8	30.5	C	C	C	C	C	32.3	31.6	34.0	28.0	26.1	17.1	14.9	11.3	26.6	34.0
10-Jun	Z	4.8	7.0	5.8	7.6	11.5	12.3	22.1	25.8	28.8	32.6	23.9	22.3	20.9	19.2	18.5	16.7	16.8	17.6	18.1	16.9	13.3	14.4	11.9	16.9	32.6
11-Jun	12.7	Z	17.5	14.6	17.7	16.2	16.4	16.3	16.1	17.7	17.9	17.4	17.2	19.8	19.2	20.0	22.0	21.0	19.7	18.6	20.0	19.5	20.6	14.4	17.9	22.0
12-Jun	10.4	15.2	Z	23.4	24.8	24.1	25.4	26.6	27.9	30.8	33.8	34.3	33.9	34.7	34.8	35.4	38.2	38.4	37.2	35.4	28.4	20.1	19.6	17.4	28.3	38.4
13-Jun	20.3	19.2	17.8	Z	15.4	15.7	18.4	17.7	24.6	31.6	35.8	36.7	38.5	39.6	39.8	38.7	36.2	34.1	34.4	33.7	29.9	20.3	2.9	3.8	26.3	39.8
14-Jun	3.9	13.8	17.8	18.4	Z	23.2	26.1	27.9	30.5	32.4	38.3	41.7	41.0	40.0	39.1	39.0	40.7	40.6	39.0	38.1	33.4	23.7	21.7	15.6	29.8	41.7
15-Jun	9.0	2.4	9.1	6.1	4.6	Z	11.0	16.2	22.4	28.7	35.8	38.9	43.6	47.4	51.4	53.3	50.9	46.9	43.4	35.8	13.3	3.7	7.4	10.9	25.7	53.3
16-Jun	Z	10.0	20.6	26.5	24.3	23.6	26.4	28.8	28.8	29.7	32.7	37.1	39.9	38.6	M	M	38.8	39.0	38.2	33.2	29.0	25.4	20.8	11.3	28.7	39.9
17-Jun	9.7	Z	20.4	20.1	9.9	6.9	10.9	17.4	23.6	25.8	30.8	32.1	32.4	33.2	33.2	33.4	34.4	34.5	33.7	34.2	29.3	27.8	25.5	25.0	25.4	34.5
18-Jun	9.2	2.1	Z	5.9	8.3	10.0	9.8	11.2	11.0	17.1	22.6	20.4	18.8	18.9	22.7	26.1	27.6	27.4	27.0	25.4	27.8	23.3	18.5	19.3	17.9	27.8
19-Jun	18.3	16.4	13.9	Z	10.4	11.7	12.0	15.1	16.5	19.9	20.3	22.1	21.4	20.5	19.5	18.8	18.9	17.7	19.6	20.7	15.9	8.3	2.3	2.0	15.8	22.1
20-Jun	2.0	3.4	1.9	2.5	Z	5.1	5.8	7.5	10.9	15.0	17.3	19.3	20.1	19.6	19.8	19.5	19.6	18.9	19.4	19.3	17.6	9.0	7.0	2.7	12.3	20.1
21-Jun	1.9	1.9	1.8	2.0	2.2	Z	4.8	5.7	6.9	8.5	12.6	18.6	19.8	21.6	22.0	19.3	19.1	20.1	14.6	14.2	8.8	3.2	1.8	5.3	10.3	22.0
22-Jun	Z	2.4	1.9	2.0	2.3	2.8	4.2	5.6	10.1	12.2	17.2	25.3	28.7	35.8	39.7	44.4	40.6	38.7	34.9	32.9	28.4	25.6	19.3	12.4	20.3	44.4
23-Jun	13.0	Z	12.5	11.3	5.8	7.6	12.2	12.5	16.4	24.2	29.4	30.4	33.6	30.9	36.1	32.6	34.8	34.7	35.0	34.7	28.5	25.7	17.1	8.2	22.9	36.1
24-Jun	6.7	4.5	Z	3.1	3.1	6.8	11.0	18.8	22.8	29.0	33.7	38.0	41.3	43.1	43.5	44.6	42.8	40.9	39.4	38.5	36.6	29.9	32.3	27.3	27.7	44.6
25-Jun	20.0	14.4	12.8	Z	8.6	8.7	13.9	21.8	25.9	32.7	41.6	45.3	47.4	50.0	50.2	50.3	50.0	51.2	49.7	47.2	43.2	37.5	34.3	25.8	34.0	51.2
26-Jun	25.0	27.9	17.8	18.0	Z	18.7	26.5	29.9	35.1	43.7	50.0	51.1	51.0	50.9	51.5	52.2	51.5	50.2	48.5	47.9	44.2	41.5	37.7	39.1	39.6	52.2
27-Jun	36.4	35.7	35.5	24.8	18.7	Z	23.0	25.3	32.9	39.2	46.2	47.1	46.5	46.1	45.0	44.8	46.6	44.5	44.0	37.8	26.4	24.1	25.6	19.2	35.4	47.1
28-Jun	Z	10.5	2.8	2.5	3.3	6.9	8.9	7.9	13.1	25.4	43.3	45.9	48.9	51.6	52.6	51.9	51.0	50.1	47.8	43.5	30.6	22.6	11.4	13.1	28.1	52.6
29-Jun	11.5	Z	3.8	3.4	4.2	5.6	7.6	13.6	22.7	39.6	48.4	56.8	60.2	59.0	53.2	50.8	49.4	51.2	58.2	52.5	45.5	38.6	41.0	34.6	35.3	60.2
30-Jun	30.5	30.2	Z	19.3	15.8	11.5	20.8	27.0	34.7	37.3	45.3	54.4	57.9	60.9	62.2	55.7	56.6	61.2	56.9	52.2	46.3	38.7	37.7	31.7	41.1	62.2
	17.0	15.2	14.9	13.2	13.2	14.1	17.2	19.4	22.6	26.5	30.8	32.8	34.0	34.9	35.3	35.0	35.1	34.7	34.3	31.9	27.6	22.9	20.0	17.8	Diurnal Average	
	36.4	35.7	35.5	28.6	33.7	34.6	35.3	34.7	35.1	43.7	50.0	56.8	60.2	60.9	62.2	55.7	56.6	61.2	58.2	52.5	46.3	41.5	41.0	39.1	Diurnal Maximum	

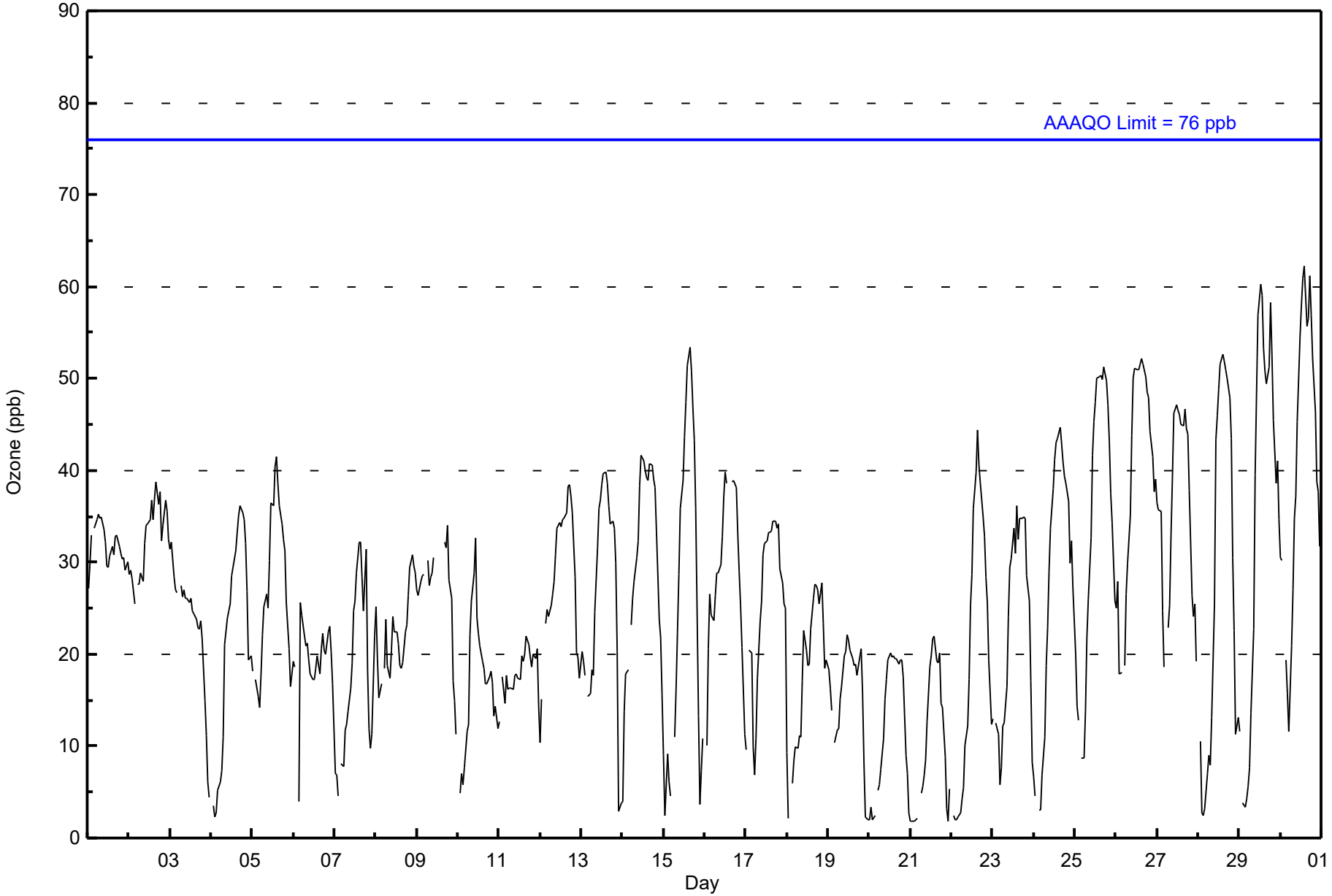
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Fort McKay - Bertha Ganter - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	275	40.26	40.26
21 - 50	377	55.20	95.46
51 - 82	31	4.54	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

Fort McKay - Bertha Ganter - June 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	24	6	1	0	1	6	19	23	13	8	7	8	28	24	48	274
21 - 50	79	32	16	13	4	20	23	71	27	18	4	2	7	21	14	26	377
51 - 82	4	7	8	3	1	0	0	7	0	0	0	0	0	0	0	1	31
> 83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	141	63	30	17	5	21	29	97	50	31	12	9	15	49	38	75	682

Total Number of Valid Hours: 682

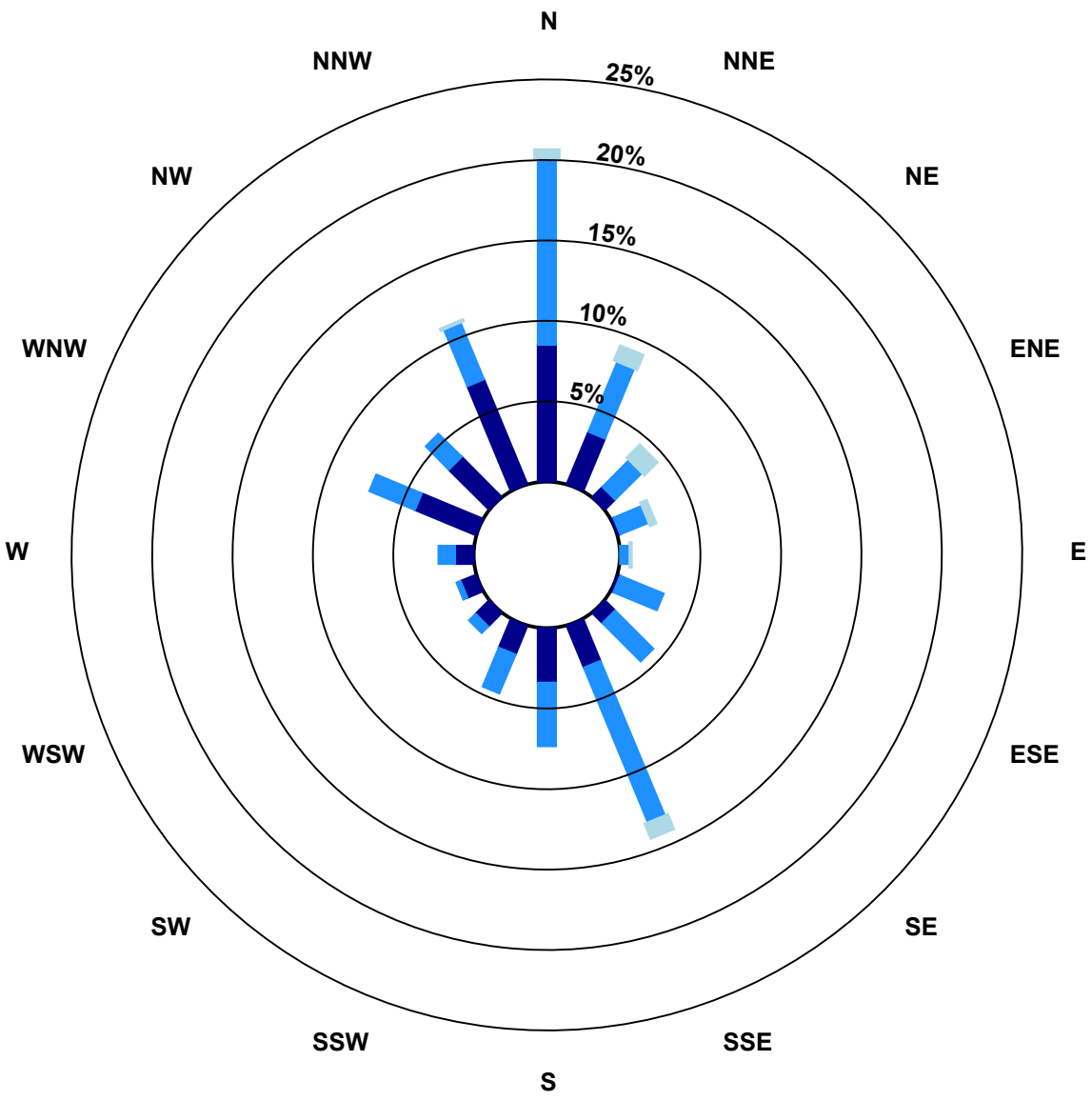
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Ozone (O_3) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

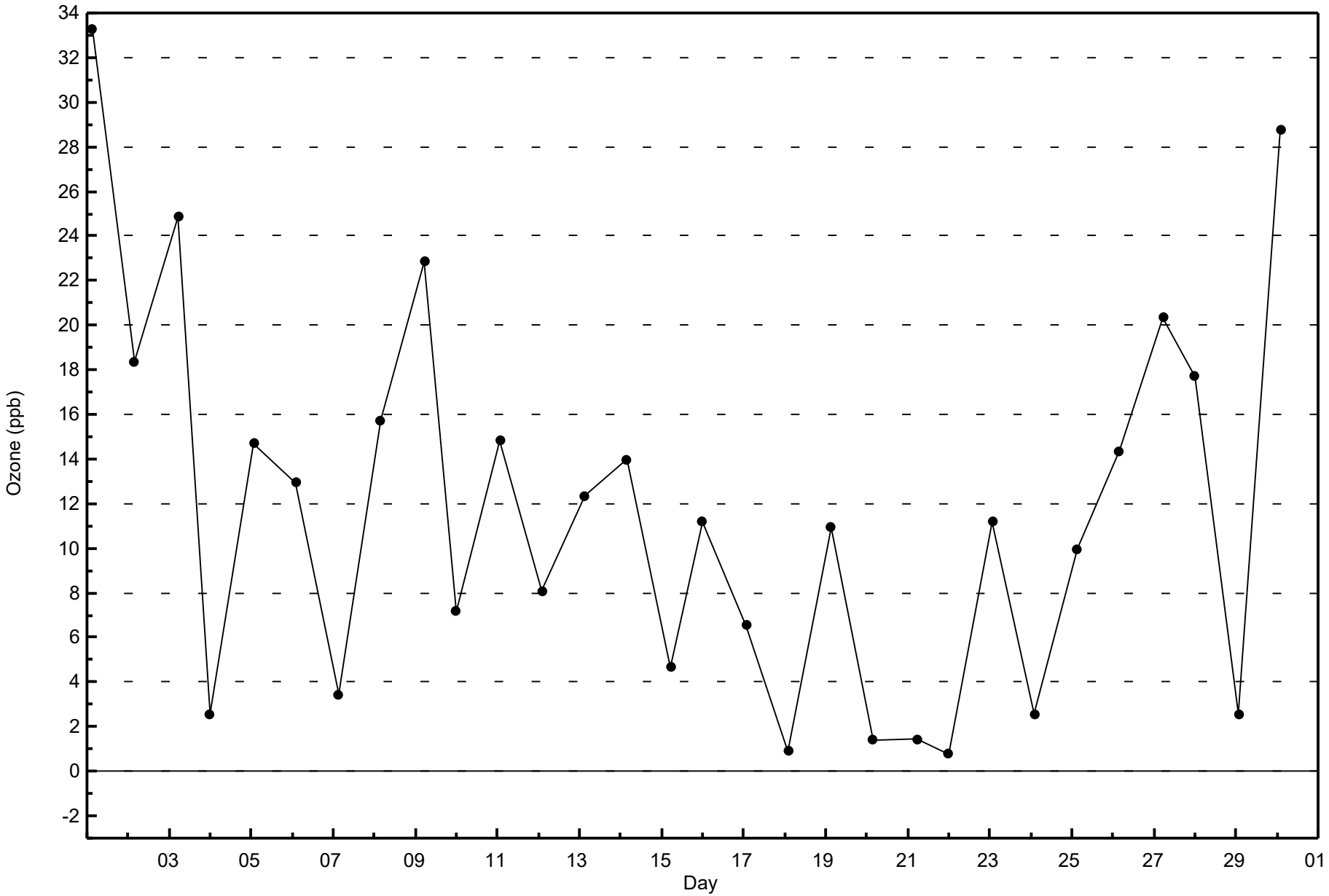
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Fort McKay - Bertha Ganter - June 2026

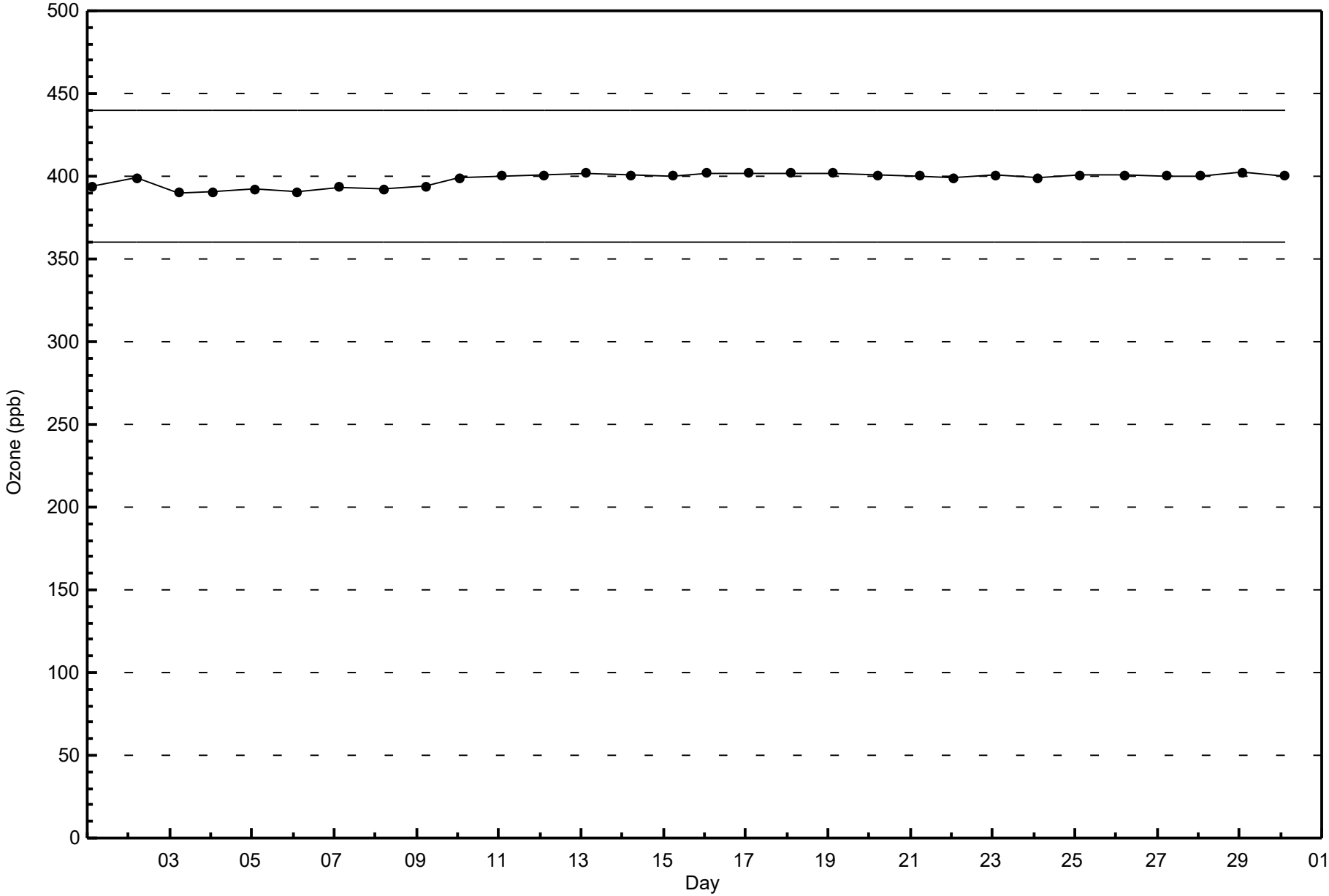


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Fort McKay - Bertha Ganter - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Fort McKay - Bertha Ganter - June 2026

Number of Exceedances (AAAQO): 1-hr: 4 24-hr: 2

Maximum Value: 90.1 $\mu g/m^3$ on Jun 29 13:00

Maximum Daily Average: 50.9 $\mu g/m^3$ on Jun 29

Minimum Value: 0.4 $\mu g/m^3$ on Jun 11 08:00

Minimum Daily Average: 1.3 $\mu g/m^3$ on Jun 1

Maximum Diurnal Average: 12.8 $\mu g/m^3$ at hour 14

Minimum Diurnal Average: 7.0 $\mu g/m^3$ at hour 5

Monthly Average: 9.34 $\mu g/m^3$

Percentiles: $P_1 = 0.7$ $P_{10} = 1.4$ $Q_1 = 2.8$ Median = 5.1 $Q_3 = 9.5$ $P_{90} = 20.6$ $P_{99} = 70.2$

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-Jun	1.5	1.2	1.1	1.1	1.1	1.1	1.2	1.5	1.5	1.2	1.4	1.5	1.5	1.5	1.6	1.7	1.5	1.4	1.6	1.5	0.9	0.7	0.8	1.0	1.3	1.7
2-Jun	1.0	0.8	0.8	0.9	0.9	0.7	0.7	0.8	0.9	1.0	3.1	3.2	1.6	2.5	1.8	1.8	2.8	2.8	1.6	1.4	1.3	1.0	1.0	1.4	1.5	3.2
3-Jun	1.2	1.0	1.5	1.5	1.6	2.1	2.4	2.1	2.0	2.5	3.4	3.5	4.0	7.0	6.8	6.4	5.9	5.0	4.8	6.2	7.2	6.5	11.0	8.2	4.3	11.0
4-Jun	8.8	7.3	7.0	7.1	7.5	7.3	8.1	10.1	13.0	13.8	13.2	12.7	13.7	15.1	15.0	12.4	10.3	9.2	8.5	7.6	8.0	10.7	16.2	12.2	10.6	16.2
5-Jun	10.2	10.2	8.5	8.3	8.2	7.2	6.8	5.9	5.3	7.8	8.8	7.2	6.7	6.7	4.2	7.4	6.4	4.7	4.2	4.8	7.2	8.0	9.4	7.4	7.1	10.2
6-Jun	3.7	2.8	3.6	6.8	3.7	2.8	2.8	3.1	3.2	3.3	3.0	2.8	3.0	2.7	2.4	2.6	2.9	3.0	3.0	2.8	2.6	2.8	2.8	3.1	3.1	6.8
7-Jun	3.1	3.2	3.5	3.3	3.0	3.0	2.7	3.4	4.4	4.8	4.3	3.7	4.1	DF	6.6	8.3	6.7	5.6	3.5	4.8	4.8	4.3	3.7	3.2	4.3	8.3
8-Jun	3.0	3.4	DF	3.4	3.5	3.3	3.1	2.9	1.4	0.9	0.7	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.9	1.3	1.6	1.8	1.6	1.3	1.7	3.5
9-Jun	1.1	1.3	1.2	1.3	1.5	1.6	1.6	1.6	1.7	1.5	1.7	1.8	1.7	1.4	1.5	1.7	2.6	4.2	3.5	3.2	3.7	3.7	3.5	3.4	2.2	4.2
10-Jun	3.6	3.8	3.7	3.7	3.8	3.8	3.7	3.1	3.0	2.5	1.4	1.2	0.6	0.8	1.1	1.2	1.3	1.1	1.2	1.1	1.0	2.1	2.0	1.6	2.2	3.8
11-Jun	1.7	0.8	0.5	1.0	0.7	0.7	0.5	0.4	0.7	0.7	0.6	1.4	2.6	2.4	2.0	2.6	2.4	2.4	2.5	3.0	2.0	1.5	1.5	2.3	1.5	3.0
12-Jun	3.1	1.6	2.4	1.6	1.3	1.3	1.4	1.4	1.5	1.8	2.6	2.6	4.3	4.7	4.2	6.5	5.1	19.4	7.0	6.5	5.4	6.3	4.8	5.6	4.3	19.4
13-Jun	3.5	3.0	2.8	3.4	3.2	3.1	2.3	3.2	3.2	3.9	2.5	4.2	3.1	6.1	4.5	5.0	4.2	2.8	2.7	2.2	5.1	10.2	19.6	20.0	5.2	20.0
14-Jun	16.7	8.0	5.4	5.1	3.7	4.5	7.6	9.7	8.6	14.2	13.6	12.3	7.4	8.7	8.6	7.0	7.3	13.9	9.9	4.9	6.1	7.2	10.0	6.1	8.6	16.7
15-Jun	5.9	6.8	5.4	5.2	5.5	7.1	9.6	10.4	8.7	12.1	9.0	11.4	20.0	20.9	17.7	21.7	23.6	22.3	19.5	18.7	25.2	19.5	10.8	9.5	13.6	25.2
16-Jun	7.2	7.7	6.1	4.4	4.0	7.4	26.2	21.3	4.9	4.4	7.9	19.0	24.3	28.1	21.9	C	13.5	20.9	17.9	11.1	8.4	10.5	5.4	8.2	12.6	28.1
17-Jun	6.1	4.0	3.1	2.6	9.5	9.4	11.1	9.5	6.4	14.1	18.3	11.4	11.0	13.0	10.4	14.4	2.9	5.9	6.1	4.4	3.6	3.2	3.2	2.8	7.8	18.3
18-Jun	5.8	6.0	5.9	4.8	3.7	3.3	3.4	2.6	3.0	2.9	2.6	4.8	6.4	6.9	5.1	2.7	3.7	5.3	3.0	2.9	2.0	2.5	2.8	1.8	3.9	6.9
19-Jun	1.9	1.9	2.2	2.5	2.3	2.2	2.2	4.8	6.7	3.8	7.2	6.0	10.7	8.3	3.8	3.0	1.7	1.1	2.2	1.9	4.3	5.1	5.5	5.2	4.0	10.7
20-Jun	2.7	1.7	1.8	1.7	2.1	2.3	3.0	3.7	3.9	3.5	4.1	3.7	4.0	4.1	4.4	3.9	2.7	3.7	3.7	4.0	6.6	8.7	3.5	4.8	3.7	8.7
21-Jun	5.3	4.5	4.2	3.8	3.7	3.6	3.4	2.5	2.4	2.2	2.3	3.4	4.0	4.8	5.2	4.5	5.1	5.3	6.1	5.4	5.1	4.8	4.2	3.8	4.1	6.1
22-Jun	6.3	5.0	5.3	4.8	4.4	4.8	5.6	7.6	6.4	7.9	7.8	5.7	9.8	10.8	6.7	7.5	7.3	5.7	6.7	10.9	7.5	4.4	8.4	16.5	7.2	16.5
23-Jun	16.3	13.8	12.2	11.1	12.9	11.6	7.7	7.3	10.3	11.8	7.2	5.8	7.1	19.1	5.5	3.8	3.2	3.6	6.9	8.1	7.5	7.8	8.9	11.1	9.2	19.1
24-Jun	16.5	11.3	10.6	10.1	9.8	9.7	9.8	8.8	12.2	11.9	7.3	6.8	6.0	7.7	7.3	7.0	6.9	7.0	7.2	5.0	4.8	5.9	8.8	7.5	8.6	16.5
25-Jun	9.2	9.2	9.1	8.3	8.4	10.1	11.4	10.8	19.4	13.9	9.5	5.0	4.8	5.0	5.6	5.3	5.3	5.5	5.0	4.4	4.1	4.3	5.2	10.7	7.9	19.4
26-Jun	12.1	10.4	12.3	10.4	7.7	6.5	7.1	9.3	10.1	9.4	8.1	7.3	6.3	6.5	5.4	7.8	7.4	5.6	4.9	3.8	7.1	7.3	4.8	4.5	7.6	12.3
27-Jun	4.4	4.4	4.4	4.5	4.7	7.4	12.1	13.7	18.1	18.4	13.3	8.2	7.4	5.2	5.3	12.2	12.8	23.3	5.9	5.9	6.5	13.6	7.3	8.9	9.5	23.3
28-Jun	7.0	7.6	10.8	11.0	10.7	12.4	20.9	25.2	36.0	38.3	35.5	22.0	16.6	25.8	28.1	25.4	25.0	27.2	24.3	37.3	30.9	30.1	26.0	23.3	23.2	38.3
29-Jun	24.0	20.4	18.6	17.6	17.2	17.8	33.7	30.6	40.2	64.0	71.5	80.2	90.1	82.3	50.1	41.2	44.2	39.3	70.3	67.8	75.9	82.0	69.9	72.8	50.9	90.1
30-Jun	68.0	62.5	60.8	59.5	58.3	57.4	57.9	48.2	50.6	44.8	44.2	45.2	59.7	61.2	57.4	51.7	46.3	58.7	36.4	27.0	23.7	24.9	21.1	27.2	48.0	68.0
	8.7	7.5	7.4	7.0	7.0	7.2	9.0	8.9	9.7	10.8	10.5	10.2	11.4	12.8	10.0	9.6	9.1	10.6	9.4	9.0	9.3	10.0	9.5	9.8	Diurnal Average	
	68.0	62.5	60.8	59.5	58.3	57.4	57.9	48.2	50.6	64.0	71.5	80.2	90.1	82.3	57.4	51.7	46.3	58.7	70.3	67.8	75.9	82.0	69.9	72.8	Diurnal Maximum	

C - Calibration DF - DAS Failure

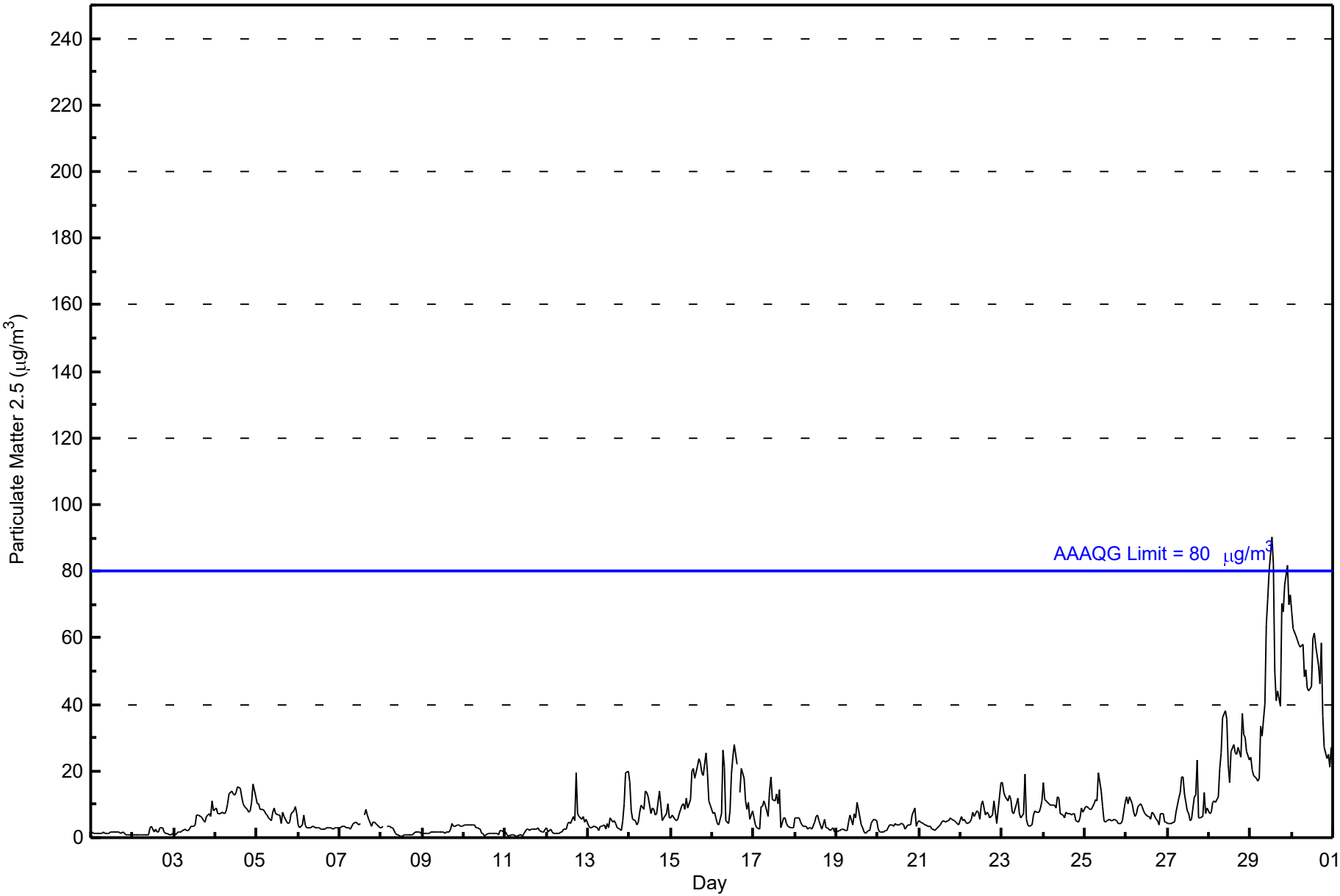
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Fort McKay - Bertha Ganter - June 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Fort McKay - Bertha Ganter - June 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	381	53.14	53.14
6 - 15	238	33.19	86.33
16 - 25	47	6.56	92.89
26 - 80	48	6.69	99.58
> 81.0	3	0.42	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 - Bertha Ganter - June 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	94	26	11	1	2	12	14	39	12	14	8	8	15	42	27	56	381
6 - 15	29	20	5	8	0	5	15	55	33	19	4	2	3	7	14	18	237
16 - 25	11	5	8	6	0	2	1	2	3	2	0	0	1	2	1	3	47
26 - 80	10	12	6	3	3	2	0	2	3	0	0	0	0	3	0	4	48
> 81.0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3
Totals	144	65	30	18	5	21	30	99	51	35	12	10	19	54	42	81	716

Total Number of Valid Hours: 716

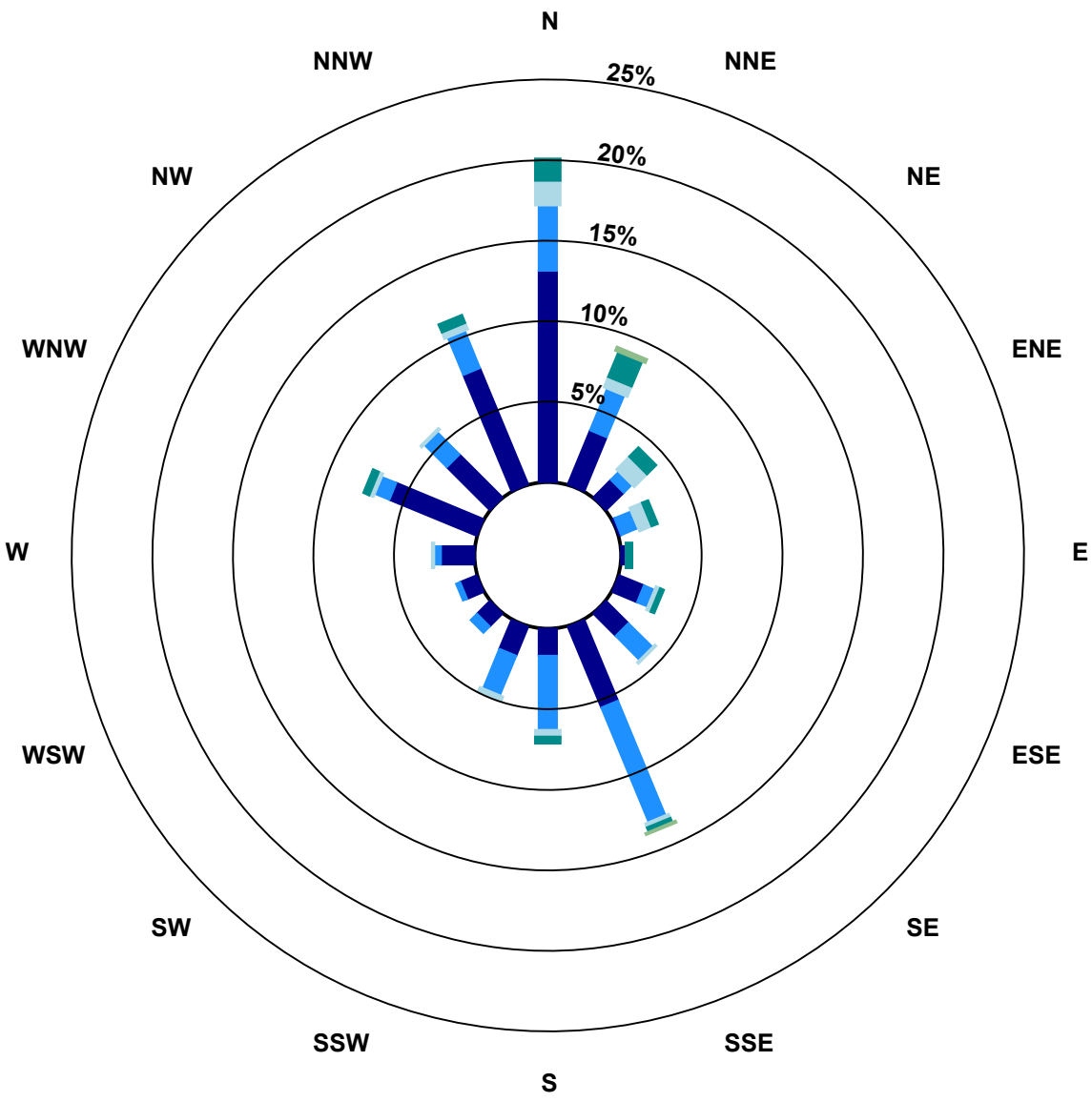
Total Number of Hours: 720

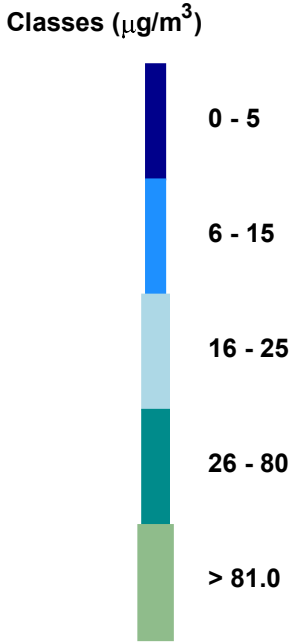
Wood Buffalo Environmental Association

Wind Rose Jun 2026

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

Fort McKay - Bertha Ganter





Total Number of Valid Hours: 716

Wood Buffalo Environmental Association

Summary of Hour Averages

Ammonia (NH_3) - ppb

Fort McKay - Bertha Ganter - June 2026

Number of Exceedences (AAAQO): 1-hr: 0
Maximum Value: 13.0 ppb on Jun 30 14:00
Maximum Daily Average: 0.0 ppb on Jun 1

Minimum Value: 0.0 ppb on Jun 1 01:00
Minimum Daily Average: 0.0 ppb on Jun 1
Maximum Diurnal Average: 0.4 ppb at hour 14
Minimum Diurnal Average: 0.0 ppb at hour 1
Monthly Average: 0.04 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:	631
Hours of Missing Data:	89
Hours of Calibration:	42
Percent Operational Time:	93.5

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-Jun	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
2-Jun	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
3-Jun	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
4-Jun	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
5-Jun	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
6-Jun	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
7-Jun	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
8-Jun	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
9-Jun	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
10-Jun	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
11-Jun	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
12-Jun	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
13-Jun	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
14-Jun	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
15-Jun	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
16-Jun	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	M	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17-Jun	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
18-Jun	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
19-Jun	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
20-Jun	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
21-Jun	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
22-Jun	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
23-Jun	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
24-Jun	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
25-Jun	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
26-Jun	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
27-Jun	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
28-Jun	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
29-Jun	0.0	0.0	Z	RE	RE	0.0	0.0	0.0	0.0	C	C	C	C	C	C	RE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.0
30-Jun	0.0	0.0	0.0	Z	RE	RE	C	C	C	C	C	C	RE	13.0	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	13.0
	0.0	0.0	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	0.0	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	13.0	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Diurnal Maximum	

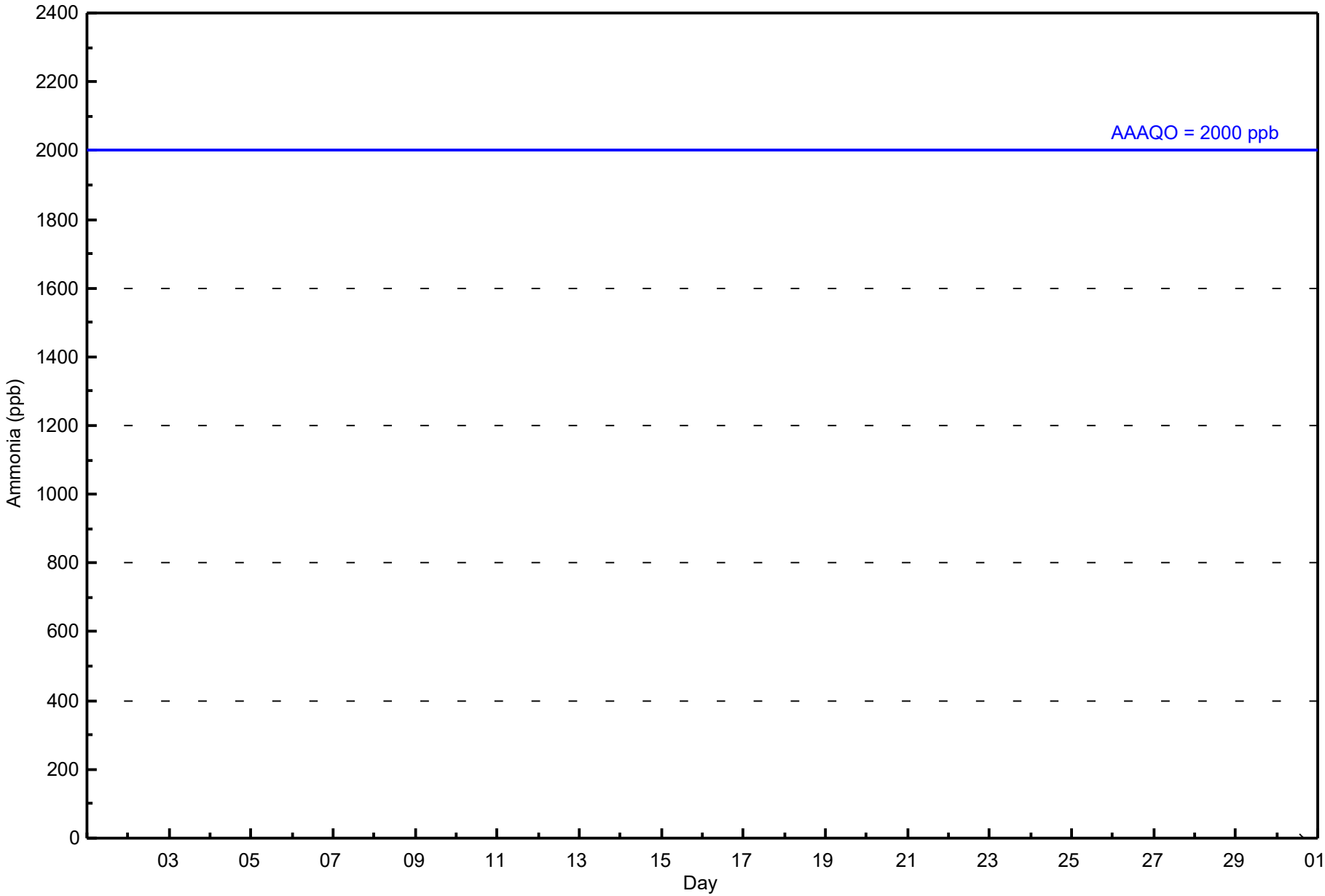
Z - zerospan C - Calibration M - Maintenance RE - Recovery
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 2000 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ammonia (NH_3) - ppb

Fort McKay - Bertha Ganter - June 2026



Ammonia (NH_3) - ppb

Fort McKay - Bertha Ganter - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 5	629	99.68	99.68
6 - 10	1	0.16	99.84
11 - 15	1	0.16	100.00
16 - 20	0	0.00	100.00
21 - 25	0	0.00	100.00
> 26	0	0.00	100.00

Total Number of Valid Hours: 631

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Ammonia (NH_3) - ppb

Fort McKay - Bertha Ganter - June 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	135	58	28	16	3	16	29	91	40	31	10	10	16	45	34	67	629
6 - 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
11 - 15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16 - 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 - 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	136	58	28	16	3	16	29	91	40	31	10	10	16	45	34	68	631

Total Number of Valid Hours: 631

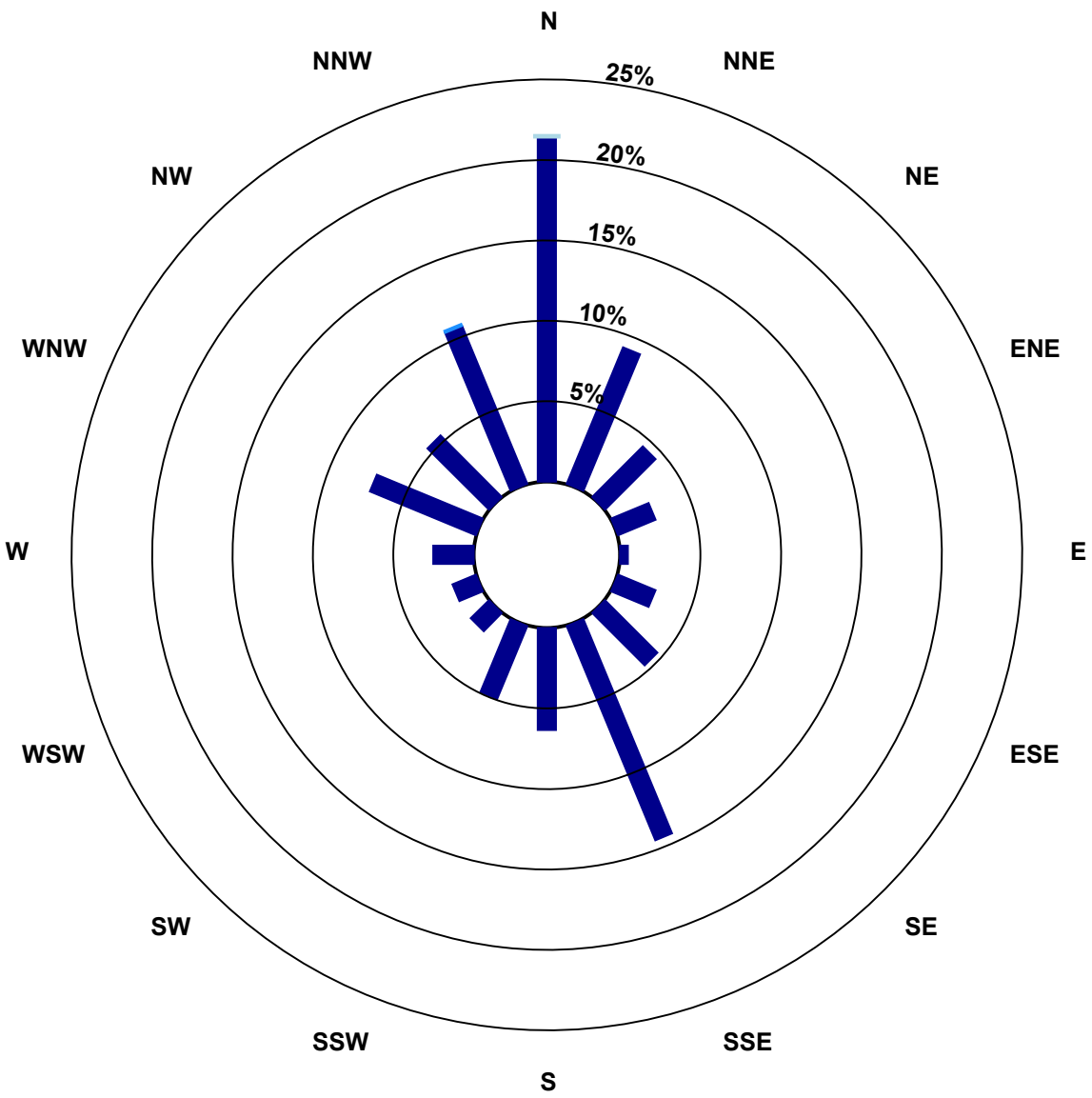
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Ammonia (NH_3) - ppb

Fort McKay - Bertha Ganter



Classes (ppb)

0 - 5

6 - 10

11 - 15

16 - 20

21 - 25

> 26

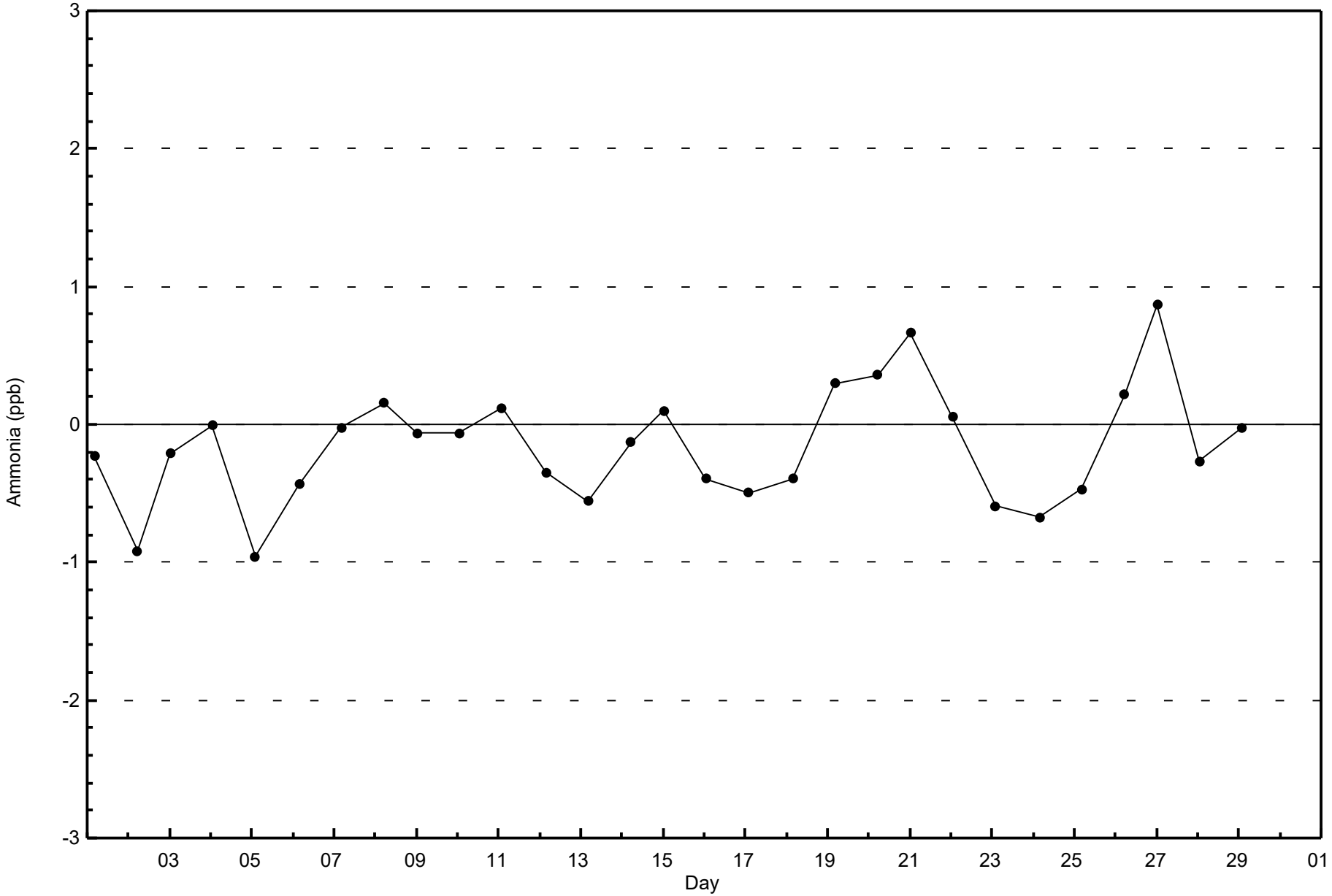
Total Number of Valid Hours: 631

Wood Buffalo Environmental Association

Zero Responses

Ammonia (NH_3) - ppb

Fort McKay - Bertha Ganter - June 2026

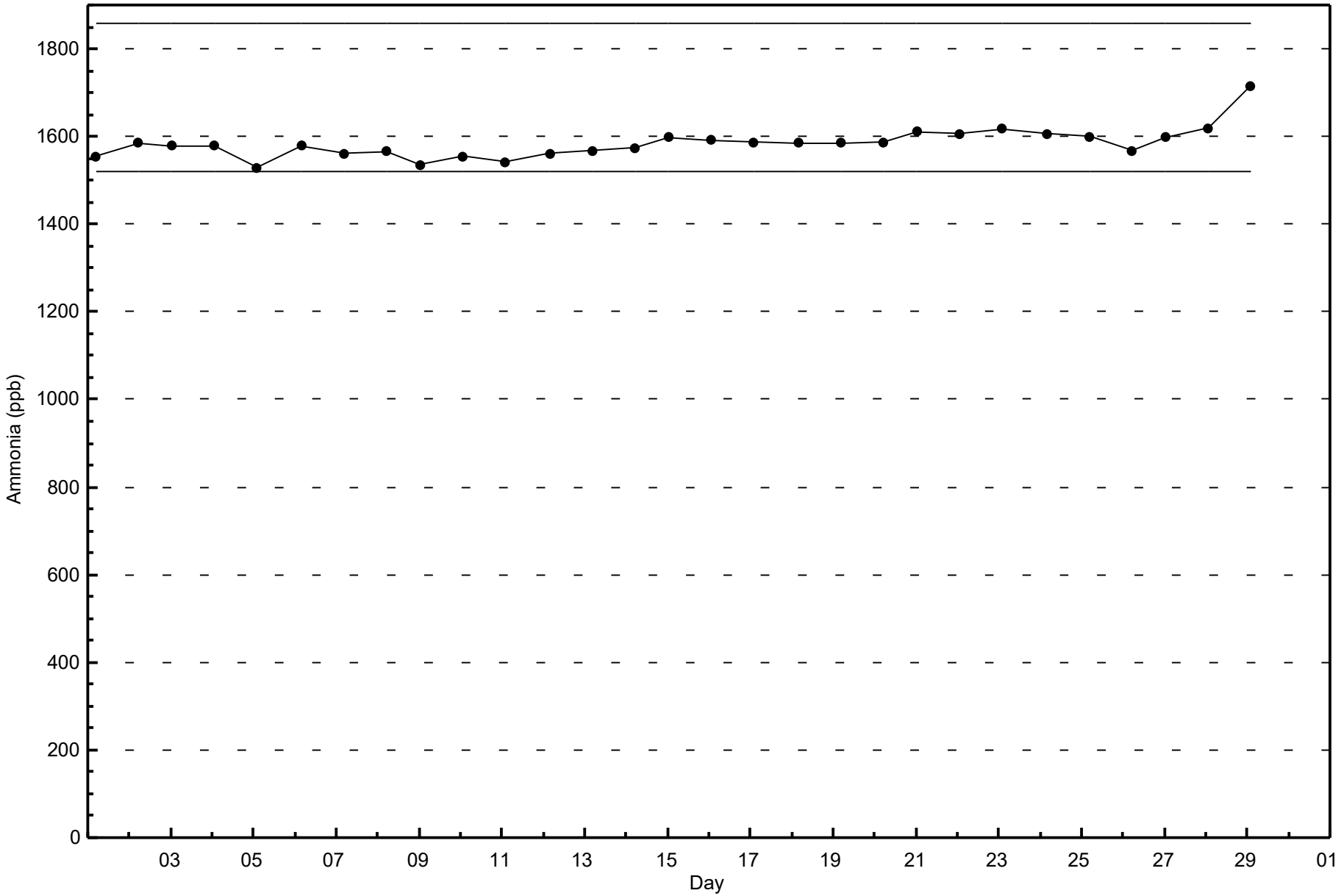


Wood Buffalo Environmental Association

Span Responses

Ammonia (NH_3) - ppb

Fort McKay - Bertha Ganter - June 2026



Maximum Value: 30.8 C on Jun 28 17:00
Maximum Daily Average: 24.2 C on Jun 29

Minimum Value: 7.1 C on Jun 11 06:00
Minimum Daily Average: 9.3 C on Jun 11
Maximum Diurnal Average: 20.3 C at hour 17
Minimum Diurnal Average: 11.3 C at hour 5
Monthly Average: 16.47 C
Percentiles: P_1 = 7.9 P_{10} = 10.0 Q_1 = 11.8 Median = 15.6 Q_3 = 20.3 P_{90} = 24.6 P_{99} = 29.9

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

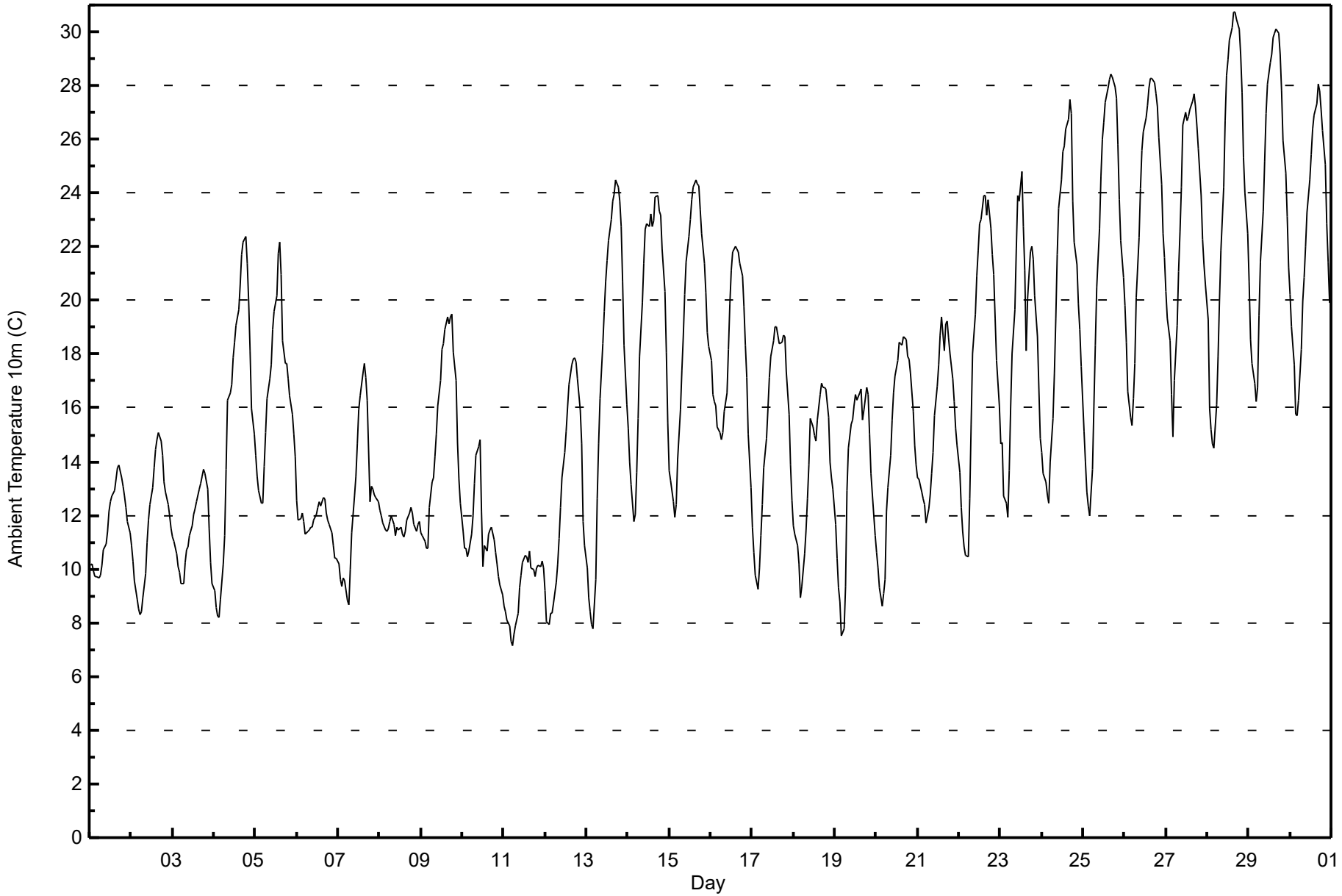
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	10.1	10.2	9.9	9.7	9.7	9.7	9.8	10.2	10.7	10.9	11.4	12.1	12.5	12.7	12.9	13.4	13.8	13.9	13.4	13.1	12.7	12.3	11.8	11.4	11.6	13.9
2-Jun	10.9	10.3	9.6	8.9	8.5	8.3	8.4	8.9	9.8	11.0	11.8	12.4	13.0	13.8	14.5	14.8	15.1	14.8	14.2	13.3	12.9	12.4	12.0	11.5	11.7	15.1
3-Jun	11.2	11.0	10.5	10.1	9.9	9.5	9.4	10.3	10.7	10.8	11.2	11.6	12.0	12.2	12.5	13.0	13.2	13.4	13.7	13.6	13.0	11.5	10.3	9.5	11.4	13.7
4-Jun	9.2	8.6	8.3	8.2	8.9	10.2	11.3	13.7	16.3	16.6	16.9	17.9	18.5	19.0	19.6	20.6	21.7	22.2	22.4	21.4	20.0	18.1	16.0	15.0	15.8	22.4
5-Jun	14.3	13.4	12.9	12.5	12.5	13.8	15.1	16.3	17.1	17.6	18.9	19.6	20.2	21.7	22.2	21.0	18.5	17.6	17.7	17.1	16.5	15.8	15.0	14.2	16.7	22.2
6-Jun	12.5	11.8	11.9	12.1	11.8	11.3	11.4	11.4	11.5	11.6	11.8	12.0	12.3	12.5	12.3	12.7	12.6	12.1	11.8	11.7	11.3	10.9	10.4	10.4	11.8	12.7
7-Jun	10.2	9.6	9.3	9.6	9.6	8.8	8.7	10.0	11.4	12.7	13.5	14.7	15.9	16.5	17.3	17.7	17.1	16.3	12.5	13.1	13.0	12.8	12.7	12.5	12.7	17.7
8-Jun	12.2	12.0	11.7	11.5	11.4	11.5	11.8	12.0	11.7	11.3	11.6	11.5	11.6	11.3	11.2	11.4	11.8	12.1	12.3	12.1	11.7	11.4	11.6	11.8	11.7	12.3
9-Jun	11.4	11.3	11.1	10.7	10.8	12.3	13.3	13.4	14.2	15.0	16.1	17.0	18.2	18.4	18.9	19.4	19.1	19.4	19.5	18.1	17.0	14.7	13.4	12.5	15.2	19.5
10-Jun	11.4	10.8	10.8	10.5	10.6	11.3	12.0	13.2	14.2	14.6	14.8	12.1	10.1	10.9	10.6	11.3	11.5	11.6	11.1	10.6	10.2	9.7	9.4	9.0	11.3	14.8
11-Jun	8.6	8.4	8.1	7.9	7.3	7.1	7.6	7.9	8.4	9.3	9.8	10.3	10.5	10.5	10.2	10.6	10.1	10.0	9.7	10.0	10.1	10.1	10.3	10.0	9.3	10.6
12-Jun	9.2	8.0	7.9	8.4	8.3	8.7	9.5	10.2	11.1	12.3	13.4	14.4	15.1	16.0	16.9	17.6	17.8	17.9	17.7	17.1	15.9	14.7	11.8	10.9	12.9	17.9
13-Jun	10.1	8.9	8.4	8.0	7.8	9.6	12.6	14.6	16.3	18.4	19.6	20.7	21.5	22.2	23.0	23.7	24.0	24.5	24.2	23.7	22.8	20.7	18.3	16.1	17.5	24.5
14-Jun	15.2	14.0	13.2	11.8	12.0	13.6	15.6	17.9	19.9	21.4	22.6	22.9	22.7	23.2	22.8	22.9	23.8	23.9	23.3	23.2	21.9	20.3	18.1	15.4	19.2	23.9
15-Jun	13.6	13.3	12.5	11.9	12.4	14.1	15.9	17.4	18.6	20.2	21.4	22.4	23.0	23.8	24.2	24.5	24.3	24.3	23.4	22.5	21.4	20.3	18.8	18.3	19.3	24.5
16-Jun	17.7	16.5	16.3	16.1	15.3	15.1	14.8	15.1	15.8	16.6	18.2	19.9	21.1	21.8	22.0	21.9	21.8	21.4	20.9	19.8	18.3	17.1	15.0	13.0	18.0	22.0
17-Jun	11.6	10.6	9.8	9.2	10.0	11.2	12.4	13.7	14.9	16.0	17.1	17.9	18.5	19.0	19.0	18.7	18.4	18.4	18.7	18.6	17.4	15.8	13.9	12.6	15.1	19.0
18-Jun	11.6	11.3	10.9	10.2	8.9	9.4	10.6	11.5	12.6	13.9	15.6	15.3	15.0	14.8	15.6	16.5	16.9	16.8	16.8	16.7	15.7	14.0	13.4	13.0	13.6	16.9
19-Jun	11.7	10.4	9.3	8.8	7.5	7.8	9.4	12.9	14.5	15.4	15.6	16.1	16.5	16.3	16.6	16.7	15.5	15.9	16.7	16.5	15.0	13.6	12.8	11.2	13.4	16.7
20-Jun	10.6	10.0	9.3	8.6	9.1	9.6	12.1	13.0	14.2	15.6	16.5	17.2	17.8	18.5	18.4	18.4	18.7	18.5	17.9	17.8	17.3	15.9	14.6	13.9	14.7	18.7
21-Jun	13.4	13.4	12.9	12.6	12.4	11.7	12.2	12.8	13.6	14.4	15.7	16.8	17.6	18.7	19.4	18.1	19.1	19.2	18.6	18.0	17.1	16.2	15.2	14.6	15.6	19.4
22-Jun	13.6	12.3	11.4	10.8	10.5	10.5	12.6	15.4	18.0	19.5	20.9	21.9	22.8	23.0	23.9	23.9	23.2	23.7	22.7	21.7	21.0	19.4	17.8	16.1	18.2	23.9
23-Jun	14.7	14.7	12.7	12.5	11.9	13.7	16.0	18.0	19.6	21.9	23.9	23.7	24.8	22.8	21.1	18.1	20.1	21.8	22.0	21.5	20.2	18.7	16.7	14.9	18.6	24.8
24-Jun	14.3	13.6	13.2	12.8	12.5	14.0	15.6	17.3	19.3	21.7	23.4	24.5	25.5	25.7	26.4	26.8	27.5	27.0	23.7	22.2	21.3	19.9	18.9	17.6	20.2	27.5
25-Jun	15.2	14.0	12.9	12.4	12.0	13.7	16.1	18.4	20.5	22.7	24.6	26.0	26.6	27.4	27.9	28.2	28.4	28.3	27.9	27.5	25.8	23.8	22.2	20.8	21.8	28.4
26-Jun	19.8	18.5	16.6	15.7	15.3	16.3	17.7	20.1	22.3	24.2	25.6	26.3	26.8	27.3	27.9	28.3	28.3	28.1	27.7	27.2	26.1	24.3	22.5	21.6	23.1	28.3
27-Jun	20.3	19.3	18.5	16.5	14.9	17.0	19.1	21.1	22.6	24.2	26.5	27.0	26.7	26.9	27.1	27.4	27.7	27.2	26.5	25.6	23.9	22.3	21.4	20.6	22.9	27.7
28-Jun	19.3	16.0	15.2	14.7	14.5	16.1	17.9	20.0	21.9	24.2	26.7	28.4	28.9	29.7	30.2	30.7	30.8	30.5	30.1	29.2	27.8	25.3	24.0	22.5	23.9	30.8
29-Jun	20.7	18.5	17.6	16.9	16.2	16.8	19.4	21.4	23.3	25.2	27.0	28.1	28.8	29.2	29.8	30.0	30.1	30.0	29.2	27.8	25.9	24.7	23.1	21.3	24.2	30.1
30-Jun	20.2	19.0	17.6	15.8	15.7	16.3	18.2	20.0	20.8	22.0	23.3	24.5	25.4	26.4	26.9	27.3	28.0	27.8	27.1	26.3	25.0	22.9	21.5	19.9	22.4	28.0
	13.5	12.7	12.0	11.5	11.3	12.0	13.2	14.6	15.9	17.0	18.2	18.8	19.3	19.7	20.0	20.2	20.3	20.3	19.8	19.2	18.3	17.0	15.8	14.7	Diurnal Average	
	20.7	19.3	18.5	16.9	16.2	17.0	19.4	21.4	23.3	25.2	27.0	28.4	28.9	29.7	30.2	30.7	30.8	30.5	30.1	29.2	27.8	25.3	24.0	22.5	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 10m (AT10) - C

Fort McKay - Bertha Ganter - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	68	9.44	9.44
10 - 20	463	64.31	73.75
> 20	189	26.25	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Ambient Temperature 2m (AT2) - C

Fort McKay - Bertha Ganter - June 2026

Maximum Value: 31.2 C on Jun 28 16:00

Maximum Daily Average: 23.9 C on Jun 29

Minimum Value: 6.4 C on Jun 13 04:00

Minimum Daily Average: 9.5 C on Jun 11

Maximum Diurnal Average: 20.7 C at hour 16

Minimum Diurnal Average: 10.6 C at hour 4

Monthly Average: 16.46 C

Percentiles: P_1 = 7.3 P_{10} = 9.9 Q_1 = 11.7 Median = 15.3 Q_3 = 20.3 P_{90} = 25.3 P_{99} = 30.3

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

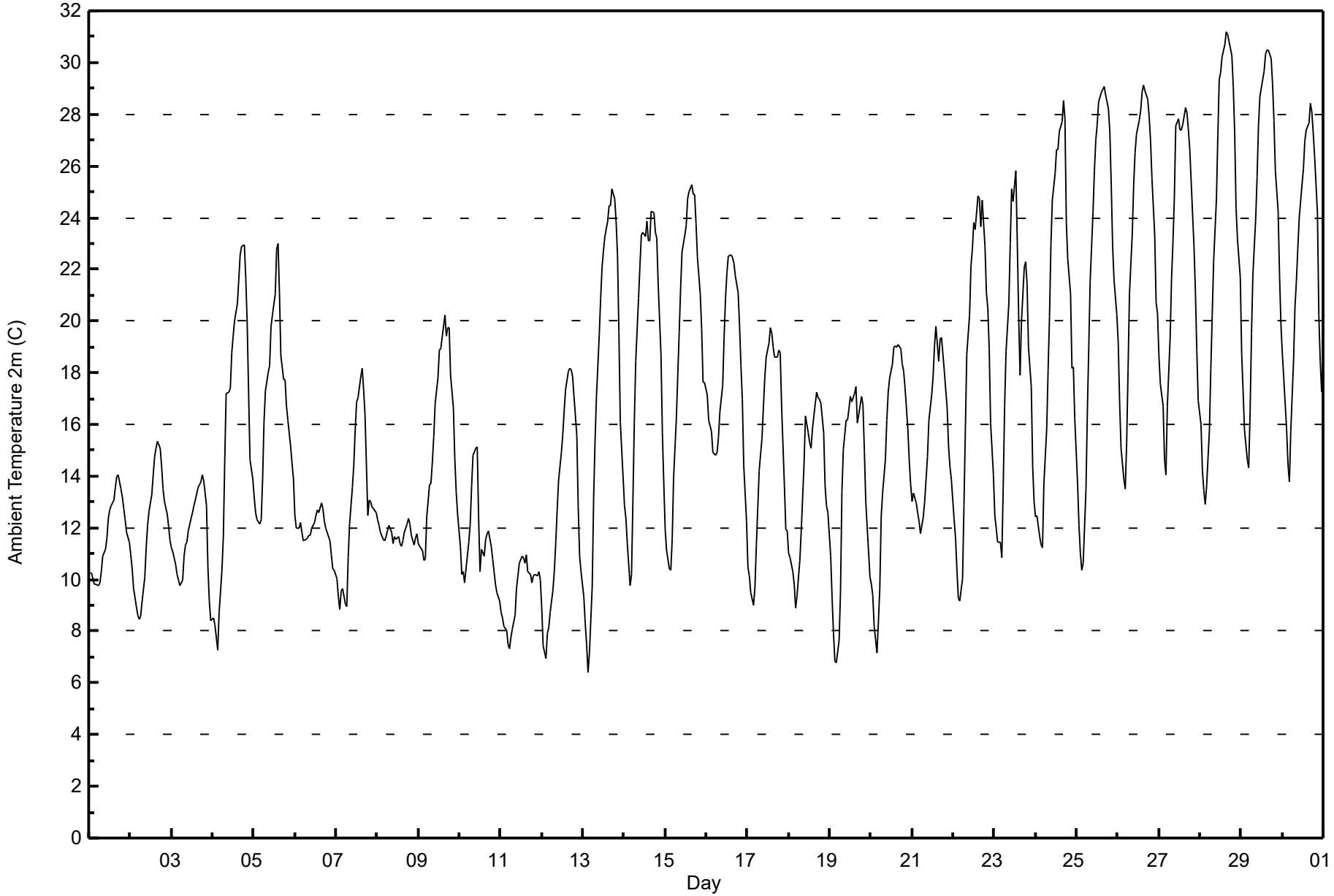
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	10.2	10.3	10.0	9.8	9.8	9.8	9.9	10.3	10.9	11.2	11.6	12.4	12.7	12.9	13.1	13.6	14.0	14.0	13.5	13.2	12.8	12.3	11.8	11.4	11.7	14.0
2-Jun	10.9	10.4	9.6	9.0	8.7	8.4	8.6	9.1	10.1	11.2	12.1	12.6	13.3	14.0	14.8	15.1	15.3	15.1	14.4	13.5	13.0	12.5	12.0	11.5	11.9	15.3
3-Jun	11.2	11.1	10.6	10.2	10.0	9.8	10.0	10.9	11.4	11.4	11.9	12.3	12.6	12.8	13.1	13.6	13.7	13.8	14.0	13.9	12.9	10.5	9.2	8.4	11.6	14.0
4-Jun	8.5	8.2	7.7	7.3	8.7	10.3	11.7	14.6	17.2	17.2	17.4	18.8	19.4	20.0	20.7	21.6	22.5	22.9	22.9	21.6	19.9	17.2	14.6	13.9	16.0	22.9
5-Jun	13.2	12.6	12.3	12.1	12.3	13.9	16.1	17.3	18.0	18.3	19.8	20.2	21.1	22.8	23.0	21.1	18.6	17.8	17.7	16.7	16.2	15.1	14.5	13.9	16.9	23.0
6-Jun	12.5	12.0	12.0	12.2	11.8	11.5	11.6	11.6	11.7	11.7	12.0	12.2	12.5	12.7	12.6	13.0	12.8	12.3	12.0	11.8	11.5	11.0	10.4	10.4	11.9	13.0
7-Jun	10.1	9.3	8.9	9.5	9.7	9.0	9.0	10.9	12.2	13.6	14.4	15.8	16.9	17.0	17.8	18.2	17.4	16.4	12.5	13.1	13.0	12.8	12.7	12.6	13.0	18.2
8-Jun	12.3	12.1	11.8	11.6	11.5	11.7	11.9	12.1	11.8	11.4	11.7	11.6	11.7	11.4	11.3	11.5	11.8	12.2	12.4	12.1	11.7	11.3	11.6	11.8	11.8	12.4
9-Jun	11.4	11.3	11.1	10.7	10.8	12.4	13.7	13.7	14.5	15.5	16.8	17.8	18.8	18.9	19.4	20.2	19.4	19.7	19.7	17.9	16.7	14.7	13.4	12.5	15.5	20.2
10-Jun	11.3	10.2	10.3	9.9	10.4	11.4	12.2	13.6	14.8	15.1	15.2	12.4	10.3	11.2	10.9	11.5	11.8	11.9	11.3	10.8	10.3	9.8	9.5	9.1	11.5	15.2
11-Jun	8.7	8.5	8.2	8.0	7.5	7.3	7.8	8.1	8.6	9.6	10.1	10.6	10.9	10.9	10.6	11.0	10.3	10.2	9.9	10.1	10.2	10.1	10.3	10.0	9.5	11.0
12-Jun	8.9	7.4	7.0	7.9	8.1	8.7	9.6	10.4	11.5	12.7	13.8	14.9	15.6	16.6	17.4	18.1	18.2	18.1	17.8	17.1	15.5	12.8	10.9	10.3	12.9	18.2
13-Jun	9.3	8.3	7.5	6.4	7.2	9.8	13.2	15.3	17.1	19.5	20.9	22.1	22.7	23.3	23.8	24.5	24.5	25.1	24.7	23.8	22.6	19.6	16.1	14.0	17.5	25.1
14-Jun	12.8	12.4	11.4	9.8	10.2	13.1	16.1	18.5	20.9	22.2	23.3	23.4	23.3	23.9	23.1	23.1	24.2	24.2	23.5	23.2	21.4	18.7	15.7	13.7	18.8	24.2
15-Jun	12.0	11.1	10.4	10.3	11.5	13.9	16.3	18.0	19.6	21.3	22.7	23.3	23.7	24.7	25.0	25.3	24.9	24.9	23.8	22.5	21.1	19.7	17.6	17.6	19.2	25.3
16-Jun	17.2	16.2	15.9	15.7	14.9	14.8	14.9	15.5	16.5	17.5	19.4	20.9	21.9	22.5	22.5	22.4	22.2	21.7	21.1	19.9	18.3	17.0	14.4	12.3	18.2	22.5
17-Jun	10.5	10.2	9.5	9.0	9.7	11.3	12.7	14.2	15.5	16.6	17.8	18.6	19.1	19.7	19.5	19.0	18.6	18.6	18.9	18.7	16.7	13.6	11.9	11.9	15.1	19.7
18-Jun	11.0	10.9	10.3	9.8	8.9	9.4	10.7	11.9	13.2	14.5	16.3	15.7	15.3	15.1	15.8	16.8	17.2	17.0	17.0	16.8	15.7	13.6	12.9	12.6	13.7	17.2
19-Jun	10.9	9.3	7.9	6.9	6.8	7.6	9.5	13.4	15.0	16.1	16.2	16.6	17.1	16.9	17.2	17.5	16.1	16.4	17.1	16.8	15.0	13.0	12.0	10.1	13.4	17.5
20-Jun	9.8	9.4	8.2	7.2	8.3	9.6	12.4	13.3	14.7	16.1	17.2	17.8	18.3	19.0	19.0	19.0	19.1	18.9	18.3	18.1	17.4	15.8	14.6	13.7	14.8	19.1
21-Jun	13.0	13.4	12.9	12.6	12.3	11.8	12.4	13.0	13.9	14.7	16.1	17.1	17.9	19.0	19.8	18.4	19.3	19.4	18.7	18.0	16.7	15.2	14.4	13.9	15.6	19.8
22-Jun	12.3	11.6	10.4	9.3	9.2	10.0	12.9	15.8	18.7	20.2	22.1	22.8	23.8	23.5	24.8	24.7	23.6	24.7	22.9	21.1	20.5	18.9	16.1	14.0	18.1	24.8
23-Jun	12.5	12.0	11.4	11.4	10.8	13.6	16.7	18.8	20.7	23.0	25.1	24.6	25.8	23.1	20.2	17.9	19.9	22.1	22.3	21.4	19.0	17.5	14.4	13.0	18.2	25.8
24-Jun	12.4	12.5	11.7	11.3	11.3	13.7	15.8	18.1	20.2	23.0	24.7	25.7	26.6	26.6	27.3	27.7	28.5	27.8	23.8	22.4	21.0	18.2	18.2	16.2	20.2	28.5
25-Jun	13.7	12.1	11.0	10.4	10.6	13.5	16.5	19.1	21.6	24.2	25.8	27.0	27.6	28.5	28.9	29.0	29.1	28.7	28.2	27.3	25.3	22.9	21.6	20.2	21.8	29.1
26-Jun	19.2	16.8	15.1	13.9	13.5	15.3	18.1	21.0	23.4	25.3	26.5	27.2	27.8	28.2	28.9	29.2	28.9	28.6	27.9	27.0	25.5	23.3	20.7	20.3	23.0	29.2
27-Jun	18.6	17.6	16.7	14.7	14.1	16.7	19.4	21.7	23.1	24.8	27.6	27.8	27.4	27.4	27.6	28.2	28.0	27.4	26.6	25.4	22.9	21.1	18.9	16.9	22.5	28.2
28-Jun	16.0	14.2	13.4	12.9	13.6	15.8	18.1	20.3	22.3	24.7	27.2	29.3	29.6	30.2	30.7	31.2	31.1	30.8	30.3	29.1	27.3	24.4	23.2	21.7	23.6	31.2
29-Jun	18.7	17.3	15.8	14.6	14.3	16.5	19.5	21.8	24.0	25.6	27.6	28.7	29.3	29.7	30.3	30.5	30.5	30.2	29.2	27.8	25.8	24.2	21.7	19.8	23.9	30.5
30-Jun	18.7	17.8	15.8	14.5	13.8	15.7	18.5	20.6	21.6	22.8	24.0	25.3	25.9	26.9	27.4	27.6	28.4	28.1	27.3	26.3	24.2	20.3	18.5	17.3	22.0	28.4
	12.6	11.9	11.2	10.6	10.7	11.9	13.5	15.1	16.5	17.7	18.9	19.5	20.0	20.3	20.6	20.7	20.7	20.6	20.0	19.2	18.0	16.2	14.8	13.8	Diurnal Average	
	19.2	17.8	16.7	15.7	14.9	16.7	19.5	21.8	24.0	25.6	27.6	29.3	29.6	30.2	30.7	31.2	31.1	30.8	30.3	29.1	27.3	24.4	23.2	21.7	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Fort McKay - Bertha Ganter - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	75	10.42	10.42
10 - 20	457	63.47	73.89
> 20	188	26.11	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 - June 2026

Maximum Value: 98.6 % on Jun 7 04:00

Maximum Daily Average: 96.1 % on Jun 6

Minimum Value: 24.4 % on Jun 28 16:00

Minimum Daily Average: 43.2 % on Jun 16

Maximum Diurnal Average: 86.5 % at hour 5

Minimum Diurnal Average: 48.2 % at hour 18

Monthly Average: 64.43 %

Percentiles: P_1 = 27.0 P_{10} = 34.0 Q_1 = 47.8 Median = 65.9 Q_3 = 81.7 P_{90} = 94.3 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

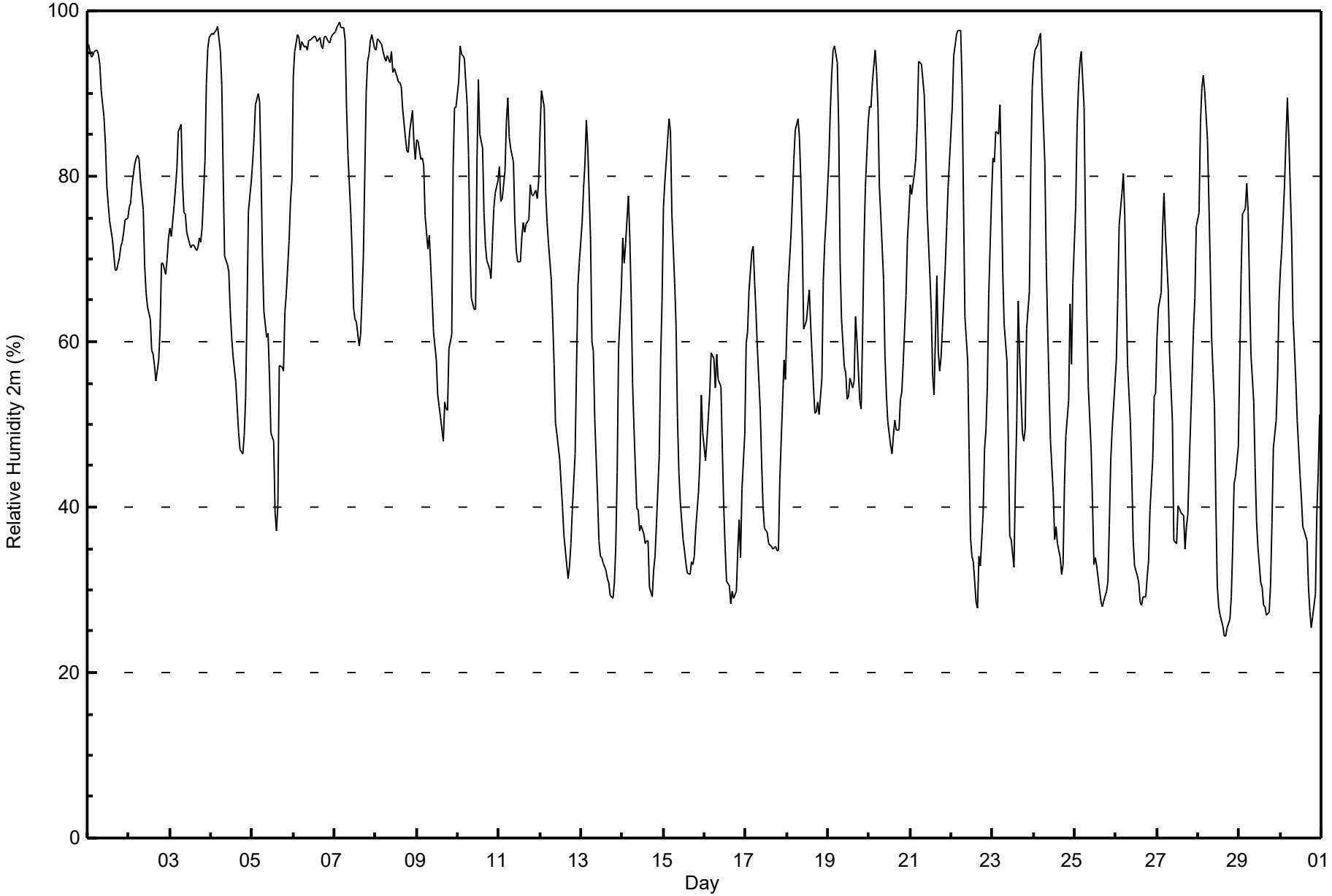
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	96.0	95.1	94.3	94.6	95.1	95.2	94.8	93.6	90.4	87.0	84.0	78.8	76.5	74.5	72.4	70.5	68.7	68.6	70.2	71.5	72.1	73.2	74.7	74.9	81.9	96.0
2-Jun	76.2	76.7	79.0	81.6	82.3	82.5	82.0	79.4	75.9	69.1	65.9	64.3	62.6	59.1	58.5	57.2	55.3	57.7	61.6	69.6	69.4	68.1	70.0	72.6	69.9	82.5
3-Jun	73.7	72.8	76.4	78.6	81.0	85.4	86.2	79.2	75.6	75.5	73.2	71.8	71.4	71.8	71.7	71.0	71.3	72.6	72.0	73.8	81.9	91.2	95.4	96.7	77.9	96.7
4-Jun	97.3	97.2	97.4	97.7	98.1	95.0	91.0	80.2	70.3	69.4	68.5	63.9	60.7	58.2	55.1	52.0	49.0	47.0	46.4	48.6	53.3	63.9	75.8	79.3	71.5	98.1
5-Jun	81.7	84.6	88.6	90.0	89.1	80.7	70.4	63.7	60.6	61.1	56.0	49.1	47.9	39.3	37.0	40.3	57.1	57.0	56.4	63.6	65.7	72.2	76.9	79.6	65.4	90.0
6-Jun	92.0	95.2	97.1	96.7	95.3	96.2	95.6	95.8	95.3	96.4	96.4	96.8	96.9	96.8	96.3	96.7	95.8	95.5	96.7	97.0	96.2	96.1	96.8	97.1	96.1	97.1
7-Jun	97.4	97.9	98.4	98.6	98.0	97.9	96.4	88.2	82.5	75.4	70.5	64.1	62.7	62.3	59.6	60.9	65.2	70.4	90.3	93.9	94.7	96.4	97.1	95.4	83.9	98.6
8-Jun	95.2	96.6	96.4	96.0	95.1	94.4	93.8	94.6	93.7	95.1	92.6	93.0	92.0	91.3	91.4	90.9	88.2	84.5	83.0	82.9	85.4	88.0	84.2	82.0	90.8	96.6
9-Jun	84.3	84.2	82.0	82.3	81.3	75.3	71.2	72.8	69.2	65.4	61.1	57.8	53.5	52.2	50.9	47.9	52.8	51.8	51.7	59.2	60.9	81.2	88.3	88.2	67.7	88.3
10-Jun	91.5	95.7	94.8	94.5	94.3	88.7	82.6	71.3	65.2	63.9	63.8	81.7	91.7	85.0	83.5	75.6	71.6	69.8	68.9	67.6	72.0	76.1	78.0	79.5	79.5	95.7
11-Jun	81.2	76.9	77.3	80.7	86.6	89.5	84.8	83.4	81.7	74.7	71.0	69.7	69.7	72.7	74.4	73.2	74.2	74.7	78.9	77.7	77.6	78.3	77.2	79.5	77.7	89.5
12-Jun	85.5	90.4	88.3	78.1	74.5	71.9	67.5	62.8	57.2	50.1	48.9	45.7	42.9	40.1	36.7	33.0	31.4	32.9	35.7	39.7	46.5	56.9	66.7	69.6	56.4	90.4
13-Jun	74.4	78.5	81.5	86.7	83.5	72.4	60.0	58.8	50.7	41.2	36.0	34.0	33.8	33.2	32.4	31.3	30.9	29.3	28.9	30.8	35.3	44.3	59.2	66.6	50.6	86.7
14-Jun	72.6	69.4	71.8	77.7	72.5	65.3	54.9	49.4	39.9	39.6	37.1	37.7	36.8	35.6	35.9	36.0	30.3	29.1	32.4	34.0	38.0	46.3	58.0	64.9	48.5	77.7
15-Jun	76.2	79.3	84.4	86.9	85.4	75.5	67.1	61.9	50.8	44.3	40.7	36.1	34.7	33.2	32.1	31.9	33.3	33.1	34.1	37.3	41.8	45.6	53.5	48.9	52.0	86.9
16-Jun	45.5	48.1	50.8	53.8	58.6	57.9	54.4	58.4	55.4	54.6	47.0	40.0	35.2	31.1	30.5	28.3	29.8	29.0	29.8	34.7	38.4	34.0	42.2	48.8	43.2	58.6
17-Jun	59.9	61.2	66.1	70.8	71.5	67.3	63.6	59.1	51.9	45.6	40.1	37.5	37.0	35.6	35.5	35.3	34.9	35.3	34.8	34.7	43.5	52.8	57.9	55.5	49.5	71.5
18-Jun	61.8	66.9	73.1	77.4	82.0	85.6	87.0	84.7	79.4	72.6	61.5	62.6	64.4	66.3	62.0	54.6	51.4	51.5	52.8	51.1	55.6	67.2	71.9	74.7	67.4	87.0
19-Jun	82.0	88.0	92.4	95.2	95.7	93.8	85.7	69.4	62.7	56.9	56.3	53.1	53.4	55.6	54.4	55.3	63.0	60.1	52.8	51.9	60.6	71.5	78.6	86.5	69.8	95.7
20-Jun	88.5	88.4	91.4	95.2	92.8	88.2	78.8	75.3	67.4	58.3	53.5	50.3	47.5	46.4	48.6	50.4	49.3	49.4	53.0	54.0	57.4	65.7	72.4	75.4	66.6	95.2
21-Jun	79.0	77.9	80.3	82.2	86.5	93.9	93.5	91.6	89.8	84.2	76.1	68.2	63.7	55.9	53.5	68.0	58.9	56.4	58.1	61.6	69.1	73.8	78.6	81.9	74.3	93.9
22-Jun	88.5	94.6	95.7	97.1	97.7	97.7	91.0	76.8	63.1	57.7	47.0	36.2	34.1	33.4	28.4	27.8	34.1	32.9	39.4	46.9	49.4	54.6	65.8	77.4	61.1	97.7
23-Jun	82.2	81.7	85.4	85.1	88.6	79.7	68.3	62.0	57.6	47.6	36.5	36.0	32.7	43.0	50.5	64.8	58.5	48.9	48.0	49.6	61.5	66.0	81.0	90.6	62.7	90.6
24-Jun	93.9	95.2	96.0	96.8	97.3	90.7	81.7	69.7	61.9	54.8	48.1	41.7	36.1	37.6	35.6	34.0	31.9	33.0	42.8	48.6	52.9	64.5	57.3	67.1	61.2	97.3
25-Jun	76.3	85.9	90.8	93.7	95.1	88.3	74.0	63.1	54.6	47.1	40.6	33.1	33.9	33.0	30.0	28.6	28.0	28.7	29.8	31.0	37.9	45.5	49.2	54.9	53.0	95.1
26-Jun	57.7	65.1	74.2	77.9	80.3	75.3	66.0	57.3	50.3	44.0	36.0	32.8	31.6	30.9	28.5	28.1	29.1	29.2	31.6	33.5	39.6	45.9	53.5	53.8	48.0	80.3
27-Jun	60.5	64.1	65.9	73.8	77.9	73.0	66.2	58.5	54.4	50.4	36.0	35.6	40.1	39.8	39.3	39.0	34.9	37.7	39.2	45.0	55.5	61.3	65.2	73.9	53.6	77.9
28-Jun	75.5	86.5	90.7	92.2	90.3	84.4	77.2	69.0	60.4	52.1	39.9	30.5	28.0	27.0	25.6	24.4	24.5	25.4	26.4	29.2	35.3	42.9	43.8	47.3	51.2	92.2
29-Jun	57.4	68.1	75.5	76.1	79.2	75.8	66.3	58.5	52.7	44.8	38.4	35.1	30.9	30.4	28.1	27.9	27.0	27.4	30.7	38.1	47.1	50.5	55.8	64.8	49.4	79.2
30-Jun	68.7	71.3	79.1	84.5	89.5	84.7	72.9	63.0	59.3	55.2	50.5	43.9	41.1	37.7	37.0	35.9	30.5	27.4	25.4	26.8	29.4	39.3	44.2	51.2	52.0	89.5
	78.4	81.1	83.8	85.8	86.5	83.4	77.5	71.7	66.0	61.1	55.8	52.7	51.5	50.3	49.2	49.0	48.7	48.2	50.1	52.8	57.5	63.8	69.0	72.6	Diurnal Average	
	97.4	97.9	98.4	98.6	98.1	97.9	96.4	95.8	95.3	96.4	96.4	96.8	96.9	96.8	96.3	96.7	95.8	95.5	96.7	97.0	96.2	96.4	97.1	97.1	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Fort McKay - Bertha Ganter - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Precipitation (PC) - mm

Fort McKay - Bertha Ganter - June 2026

Maximum Value: 7.4 mm on Jun 7 19:00

Maximum Daily Total: 60.8 mm on Jun 6

Minimum Value: 0.0 mm on Jun 1 10:00

Minimum Daily Total: 0.0 mm on Jun 2

Maximum Diurnal Total: 10.1 mm at hour 19

Minimum Diurnal Total: 0.1 mm at hour 23

Monthly Total: 104.66 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} = 3.4

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

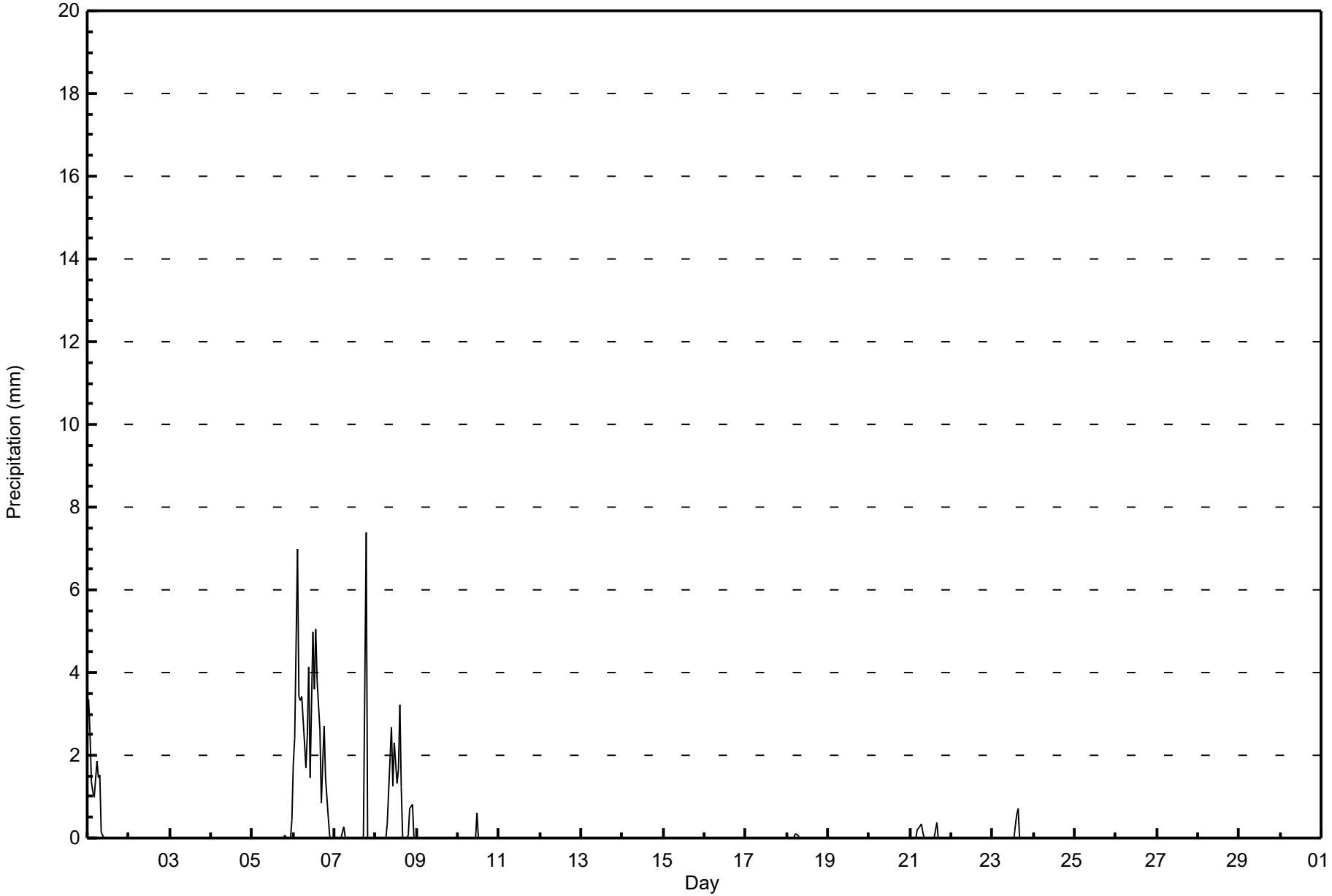
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total	Maximum
1-Jun	3.4	2.6	1.4	1.1	1.0	1.9	1.5	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.4	3.4
2-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.4	0.5	0.4
6-Jun	1.8	2.4	7.0	3.4	3.3	3.4	2.3	1.7	2.5	4.1	1.5	5.0	3.6	5.0	3.8	2.6	0.9	1.8	2.7	1.5	0.5	0.1	0.0	0.0	60.8	7.0
7-Jun	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0	7.7	7.4
8-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.9	2.7	1.3	2.3	1.3	1.7	3.2	1.2	0.0	0.0	0.0	0.1	0.7	0.8	0.1	0.0	17.6	3.2
9-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6
11-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	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	0.0	0.0	0.0	0.2	0.1
19-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.4
22-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	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	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.7
24-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	5.1	5.0	8.3	4.6	4.5	5.9	4.2	3.7	4.5	6.8	2.7	7.9	4.9	7.0	7.6	4.9	0.9	1.8	10.1	1.6	1.2	0.9	0.1	0.4	Diurnal Average	
	3.4	2.6	7.0	3.4	3.3	3.4	2.3	1.7	2.5	4.1	1.5	5.0	3.6	5.0	3.8	2.6	0.9	1.8	7.4	1.5	0.7	0.8	0.1	0.4	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Precipitation (PC) - mm

Fort McKay - Bertha Ganter - June 2026



Concentration Ranges (mm)	Number of Hours	%	Cumulative %
0 - 0.3	675	93.75	93.75
0.4 - 0.5	3	0.42	94.17
0.6 - 0.7	4	0.56	94.72
0.8 - 1.4	8	1.11	95.83
1.5 - 10	27	3.75	99.58
> 10	0	0.00	99.58

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 - June 2026

Maximum Value: 66.1 % on Jun 6 12:00

Maximum Daily Average: 51.4 % on Jun 6

Minimum Value: 0.0 % on Jun 15 11:00

Minimum Daily Average: 0.6 % on Jun 16

Maximum Diurnal Average: 15.1 % at hour 6

Minimum Diurnal Average: 2.3 % at hour 17

Monthly Average: 6.28 %

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.6 Median = 1.4 Q_3 = 2.4 P_{90} = 20.4 P_{99} = 60.7

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	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	64.1	58.6	49.8	50.2	45.2	58.5	50.9	44.9	12.3	5.2	2.0	1.8	1.8	1.7	1.7	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.8	1.8	19.3	64.1
2-Jun	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.8	1.7	1.6	1.5	2.7	2.5	1.8	1.2	1.2	1.2	1.3	1.4	1.5	1.6	1.6	1.6	1.7	1.7	2.7
3-Jun	1.7	1.7	1.8	1.8	1.8	1.9	2.0	1.7	1.6	1.6	1.5	1.5	1.4	1.5	1.5	1.4	1.5	1.5	1.5	1.6	2.3	7.0	12.9	19.0	3.1	19.0
4-Jun	21.9	26.4	31.9	39.8	47.8	45.7	23.8	1.5	1.3	1.4	1.4	1.1	1.0	0.9	0.8	0.7	0.6	0.7	0.7	0.9	1.1	1.5	2.2	2.4	10.7	47.8
5-Jun	2.4	2.9	4.3	4.1	3.4	2.1	1.6	1.1	1.1	1.1	0.8	0.8	0.6	0.3	0.4	0.7	1.0	2.8	3.4	9.2	3.2	2.1	2.4	29.2	3.4	29.2
6-Jun	60.8	56.0	OR	59.4	59.8	60.4	56.6	53.4	57.2	63.1	50.5	66.1	61.1	65.8	62.9	57.3	39.0	53.4	59.8	53.4	33.8	23.8	16.1	13.0	51.4	66.1
7-Jun	18.0	20.4	17.6	14.2	21.0	41.7	12.0	4.5	2.1	1.3	1.3	0.9	0.8	0.9	1.0	1.0	1.3	2.1	27.9	6.6	7.4	8.6	21.1	13.5	10.3	41.7
8-Jun	6.0	5.6	4.9	4.0	3.1	2.9	9.9	34.3	61.5	56.9	44.9	52.8	40.3	47.4	58.2	33.7	7.2	5.7	3.3	17.9	32.2	33.0	9.2	4.1	24.1	61.5
9-Jun	2.7	2.3	2.3	2.3	2.2	2.0	1.7	1.6	1.5	1.3	1.1	1.0	0.9	0.9	0.9	0.8	1.0	0.9	0.9	1.2	1.4	1.8	2.1	2.1	1.5	2.7
10-Jun	4.4	11.1	12.9	16.8	18.2	4.1	1.9	1.4	1.1	1.6	1.3	33.6	11.5	2.4	12.2	6.0	1.8	1.6	1.7	1.7	1.8	1.9	1.9	1.9	6.5	33.6
11-Jun	2.0	1.9	1.9	2.0	2.7	2.4	2.1	2.3	2.0	1.8	1.7	1.6	1.6	1.7	1.7	1.7	1.8	1.8	2.2	1.9	1.9	1.9	1.9	2.0	1.9	2.7
12-Jun	2.8	8.7	15.7	8.3	2.1	1.9	1.8	1.7	1.5	1.2	1.1	1.0	0.9	0.8	0.8	0.7	0.6	0.7	0.7	0.9	1.1	1.4	1.7	1.8	2.5	15.7
13-Jun	2.0	2.3	2.4	2.8	2.4	1.9	1.4	0.9	0.8	0.3	0.2	0.1	0.0	0.0	0.1	0.0	0.2	0.1	0.2	0.3	0.5	0.9	1.3	1.6	0.9	2.8
14-Jun	1.7	1.8	1.9	2.0	1.9	1.6	1.1	0.6	0.3	0.0	0.0	0.3	0.2	0.2	0.3	0.4	0.2	0.2	0.3	0.4	0.6	1.0	1.2	1.5	0.8	2.0
15-Jun	2.0	2.1	2.4	2.5	1.9	1.7	1.3	0.9	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.5	0.6	0.8	0.9	0.9	0.8	2.5
16-Jun	0.9	1.0	1.0	1.0	1.1	1.1	1.0	0.9	0.8	0.6	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.6	0.6	0.8	1.0	0.6	1.1
17-Jun	1.2	1.2	1.3	1.4	1.4	1.3	1.0	0.6	0.6	0.4	0.3	0.3	0.2	0.2	0.3	0.4	0.5	0.5	0.4	0.5	0.8	1.1	1.4	1.3	0.8	1.4
18-Jun	1.3	1.4	1.5	1.7	1.8	16.9	23.4	17.2	8.5	2.8	0.9	1.3	1.2	2.0	1.2	1.0	0.9	0.9	1.1	1.0	1.1	1.4	1.5	1.6	3.9	23.4
19-Jun	2.6	6.1	13.2	20.2	29.1	32.8	16.3	1.1	1.1	0.7	0.8	0.7	0.8	0.8	0.8	1.3	1.1	1.0	0.9	1.0	1.3	1.6	1.8	3.5	5.8	32.8
20-Jun	8.7	12.4	16.0	20.5	21.7	16.8	2.3	1.6	1.3	0.9	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.8	1.0	1.1	1.3	1.5	1.6	4.8	21.7
21-Jun	1.7	1.7	1.7	2.5	27.4	34.3	37.5	19.1	6.7	1.7	1.4	1.3	1.3	1.0	0.9	18.9	2.2	1.1	1.2	1.3	1.5	1.8	2.0	2.0	7.2	37.5
22-Jun	4.0	10.3	19.2	28.7	38.7	45.2	39.9	3.8	0.9	0.5	0.2	0.1	0.0	0.1	0.0	0.0	0.3	0.1	0.4	0.7	0.8	1.0	1.5	2.1	8.3	45.2
23-Jun	2.5	2.4	3.4	3.0	3.7	2.0	1.4	0.8	0.7	0.3	0.0	0.2	0.0	9.0	20.8	21.2	3.9	0.7	0.6	0.9	1.2	1.5	3.4	6.6	3.8	21.2
24-Jun	10.8	14.2	21.5	31.6	43.7	44.4	28.6	1.1	0.9	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.8	1.3	1.2	1.5	8.5	44.4
25-Jun	1.8	3.1	8.2	12.8	16.8	16.3	2.8	0.9	0.7	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.6	0.7	0.9	2.8	16.8
26-Jun	1.0	1.3	1.7	2.2	2.1	1.7	1.2	0.5	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.7	0.9	1.0	0.6	2.2
27-Jun	1.2	1.4	1.5	1.6	1.6	1.5	1.1	0.5	0.5	0.3	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.2	0.3	0.5	0.8	1.1	1.5	1.8	0.7	1.8
28-Jun	1.8	2.7	8.9	13.8	14.8	4.4	1.5	1.1	0.8	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.6	0.7	2.2	14.8
29-Jun	0.9	1.2	1.6	1.7	1.8	1.6	1.1	0.6	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.6	0.8	1.1	0.6	1.8
30-Jun	1.3	1.5	2.0	2.1	1.9	2.1	1.4	0.8	0.8	0.5	0.3	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.3	0.6	0.8	0.9	0.7	2.1
	7.9	8.9	8.8	11.9	14.1	15.1	11.0	6.8	5.7	4.9	3.8	5.7	4.3	4.7	5.6	5.0	2.3	2.7	3.7	3.6	3.4	3.5	3.3	4.1	Diurnal Average	
	64.1	58.6	49.8	59.4	59.8	60.4	56.6	53.4	61.5	63.1	50.5	66.1	61.1	65.8	62.9	57.3	39.0	53.4	59.8	53.4	33.8	33.0	21.1	29.2	Diurnal Maximum	

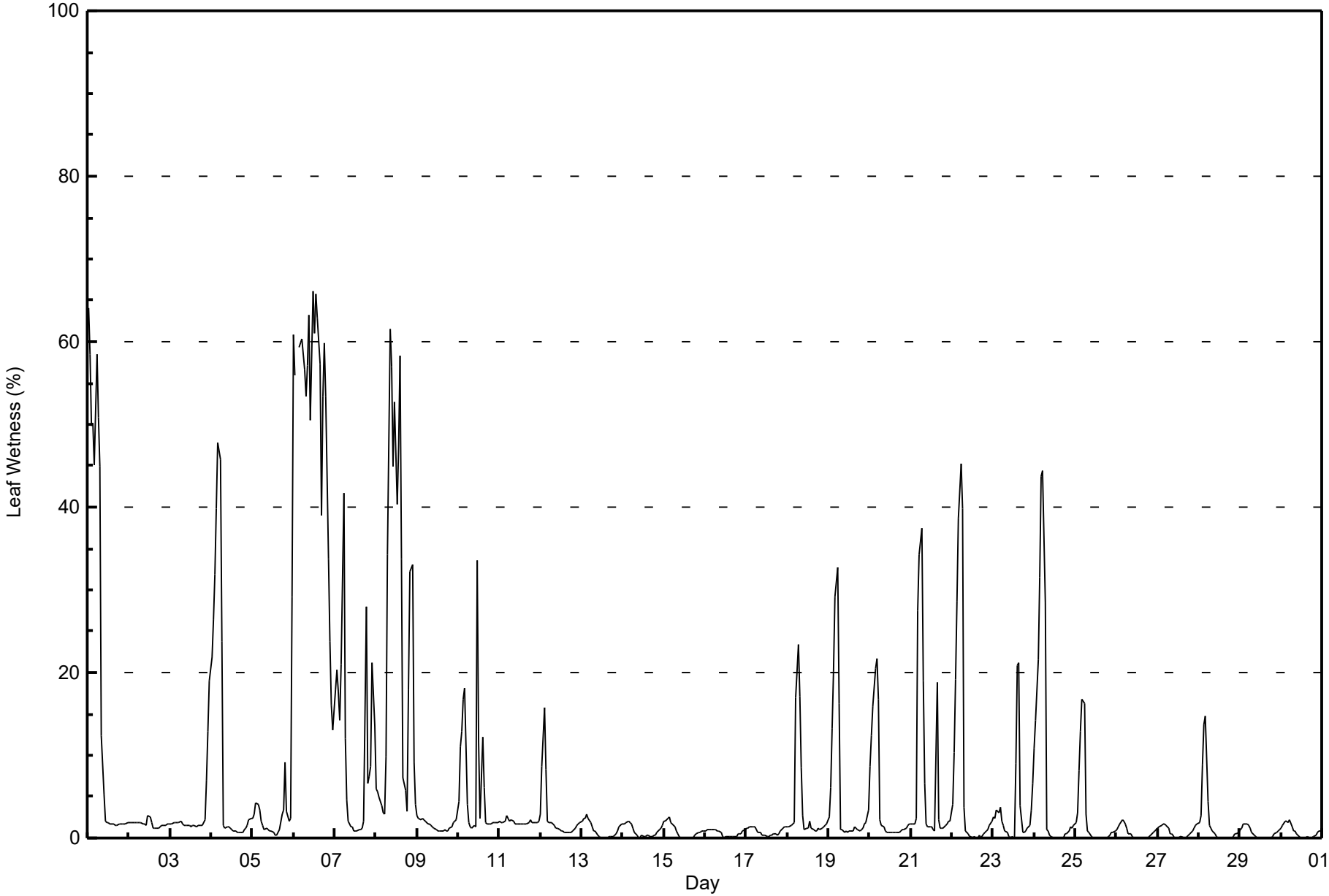
OR - Out of Range

Wood Buffalo Environmental Association

Hourly Averages

Leaf Wetness (LW) - %

Fort McKay - Bertha Ganter - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 0.3	132	18.36	18.36
0.4 - 0.5	27	3.76	22.11
0.6 - 0.7	43	5.98	28.09
0.8 - 1.4	165	22.95	51.04
1.5 - 10	228	31.71	82.75
> 10	110	15.30	98.05

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Global Radiation (GR) - W/m2

Fort McKay - Bertha Ganter - June 2026

Maximum Value: 924.9 W/m2 on Jun 22 13:00

Maximum Daily Average: 368.5 W/m2 on Jun 26

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

Minimum Daily Average: 33.2 W/m2 on Jun 6

Maximum Diurnal Average: 606.2 W/m2 at hour 13

Minimum Diurnal Average: 0.0 W/m2 at hour 1

Monthly Average: 242.13 W/m2

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 3.8 Median = 121.5 Q_3 = 424.0 P_{90} = 716.2 P_{99} = 873.8

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

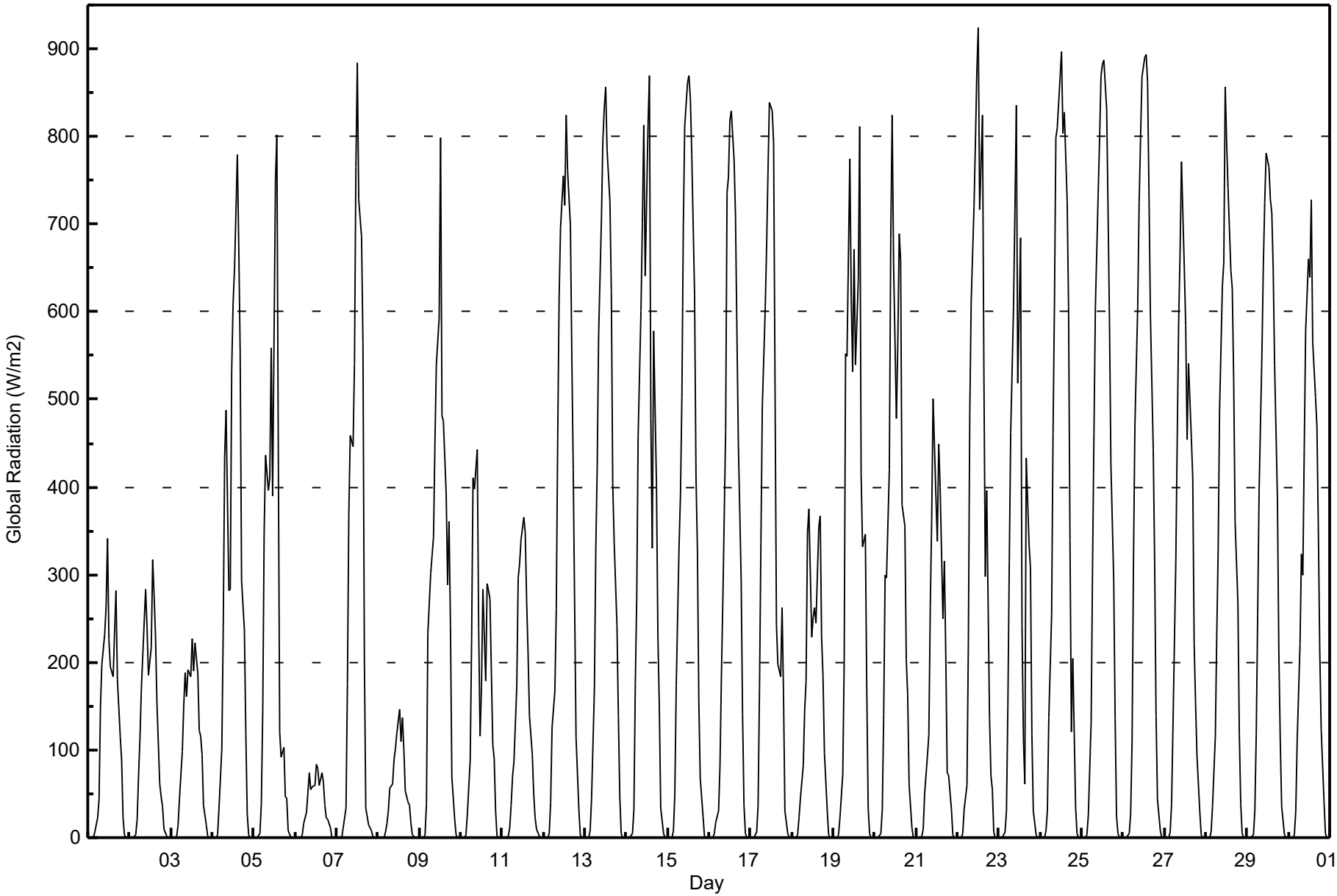
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0.0	0.0	0.0	0.2	5.8	23.0	43.0	149.5	198.2	232.2	263.3	342.1	225.7	194.1	184.0	233.8	281.1	180.4	116.5	88.6	22.9	2.4	0.0	0.0	116.1	342.1
2-Jun	0.0	0.0	0.0	2.6	20.9	70.6	114.7	171.4	247.0	283.9	240.6	184.4	216.7	317.7	277.1	229.7	155.1	61.6	46.1	34.9	9.4	1.4	0.0	0.0	111.9	317.7
3-Jun	0.0	0.0	0.0	1.9	15.0	45.7	98.3	149.6	188.7	160.5	192.4	184.1	226.5	190.1	221.5	187.4	122.9	115.7	95.2	37.1	14.1	1.6	0.0	0.0	93.7	226.5
4-Jun	0.0	0.0	0.0	3.9	33.3	101.7	238.4	434.1	487.5	281.5	283.0	534.3	610.0	648.8	780.1	675.1	554.7	292.7	236.3	119.2	27.1	2.6	0.0	0.0	264.3	780.1
5-Jun	0.0	0.0	0.0	4.6	37.9	144.6	348.8	436.6	396.0	411.3	558.5	390.3	750.8	801.6	449.3	120.1	91.9	102.5	47.2	45.5	7.9	0.3	0.0	0.0	214.4	801.6
6-Jun	0.0	0.0	0.0	0.4	3.6	15.9	28.4	51.4	73.5	54.2	58.4	59.8	84.2	79.4	59.3	73.6	63.4	36.9	22.0	21.4	10.8	0.7	0.0	0.0	33.2	84.2
7-Jun	0.0	0.0	0.0	0.8	11.7	33.8	175.5	370.2	459.5	445.5	541.2	764.8	884.6	728.1	686.0	565.7	208.0	33.5	15.0	10.8	7.6	0.9	0.0	0.0	247.6	884.6
8-Jun	0.0	0.0	0.0	0.4	7.1	16.8	31.3	56.2	61.0	88.0	101.7	118.8	146.2	109.3	137.3	100.5	53.5	39.7	36.7	15.3	3.9	0.2	0.0	0.0	46.8	146.2
9-Jun	0.0	0.0	0.0	3.0	38.8	234.0	301.6	322.3	343.3	449.6	539.0	592.6	798.0	481.4	474.7	391.4	288.7	361.4	243.4	69.8	20.9	2.8	0.0	0.0	248.2	798.0
10-Jun	0.0	0.0	0.0	3.9	28.1	88.1	226.1	411.2	397.5	443.6	238.8	115.4	173.1	283.7	178.4	290.3	281.7	271.6	105.7	89.6	30.5	1.6	0.0	0.0	152.5	443.6
11-Jun	0.0	0.0	0.0	1.0	10.7	37.8	69.7	87.7	171.6	295.9	313.0	340.2	365.6	347.4	269.3	210.5	138.7	95.1	50.2	22.7	9.7	1.9	0.0	0.0	118.3	365.6
12-Jun	0.0	0.0	0.0	4.1	40.5	125.5	166.8	260.5	454.9	614.9	695.3	755.4	722.1	824.6	761.5	699.4	550.0	420.9	266.1	113.9	32.5	3.3	0.0	0.0	313.0	824.6
13-Jun	0.0	0.0	0.0	7.7	44.5	169.0	328.2	423.3	574.0	707.3	796.1	832.2	857.3	783.6	727.0	623.6	404.3	338.3	241.6	138.6	47.5	5.5	0.1	0.0	335.4	857.3
14-Jun	0.0	0.0	0.0	4.3	32.0	176.1	274.0	459.7	600.8	699.8	813.7	640.7	812.0	868.8	478.7	329.9	577.7	400.5	230.7	149.1	33.4	4.8	0.0	0.0	316.1	868.8
15-Jun	0.0	0.0	0.0	8.6	49.7	173.2	332.9	391.0	502.1	696.2	810.9	861.4	870.3	843.8	778.8	618.7	411.8	328.8	156.2	68.0	23.5	1.8	0.0	0.0	330.3	870.3
16-Jun	0.0	0.0	0.0	4.4	17.0	31.3	82.7	183.5	268.4	464.5	735.9	753.1	817.4	829.0	773.3	707.7	574.1	450.5	295.3	140.2	36.3	4.6	0.0	0.0	298.7	829.0
17-Jun	0.0	0.0	0.1	6.5	36.4	170.8	336.8	492.1	600.2	671.8	758.6	839.3	828.5	792.7	514.9	243.8	198.6	183.4	262.2	163.7	31.1	4.9	0.0	0.0	297.4	839.3
18-Jun	0.0	0.0	0.0	3.3	22.1	45.8	82.4	144.2	179.5	347.1	375.5	229.0	251.4	261.8	245.3	354.9	367.5	228.8	182.8	96.8	30.9	3.3	0.0	0.0	143.9	375.5
19-Jun	0.0	0.0	0.0	3.9	22.1	72.7	199.6	551.9	548.8	774.8	616.4	531.6	671.0	539.6	636.8	811.0	415.7	331.3	345.6	168.5	33.0	5.5	0.0	0.0	303.3	811.0
20-Jun	0.0	0.0	0.0	5.5	32.0	139.5	300.0	296.1	420.2	682.9	825.1	655.8	478.0	563.1	688.9	658.9	380.3	356.1	203.2	162.8	61.6	11.7	0.0	0.0	288.4	825.1
21-Jun	0.0	0.0	0.0	1.1	9.2	50.0	93.3	118.0	262.3	361.7	500.6	388.9	338.8	449.8	398.9	250.1	315.4	207.9	74.2	70.8	32.7	3.4	0.0	0.0	163.6	500.6
22-Jun	0.0	0.0	0.0	5.5	32.3	60.3	223.0	484.3	611.9	719.6	793.1	874.7	924.9	716.7	824.5	530.8	298.4	396.9	136.1	70.3	54.8	7.1	0.0	0.0	323.5	924.9
23-Jun	0.0	0.0	0.0	5.7	30.4	151.3	314.8	462.4	605.6	716.1	835.7	518.0	683.5	243.6	114.5	61.5	433.9	335.6	307.5	119.6	30.3	4.0	0.0	0.0	248.9	835.7
24-Jun	0.0	0.0	0.0	8.8	31.0	137.4	253.8	462.3	609.2	798.6	810.7	867.5	896.8	803.7	827.3	726.8	604.8	339.1	120.0	205.2	33.2	4.9	0.0	0.0	355.9	896.8
25-Jun	0.0	0.0	0.0	3.8	25.1	132.4	310.1	462.0	606.0	736.2	799.2	869.3	882.7	886.9	830.3	713.7	587.2	426.0	292.4	135.0	24.2	4.0	0.0	0.0	363.6	886.9
26-Jun	0.0	0.0	0.0	4.9	26.7	110.0	314.0	470.9	605.0	724.2	797.2	868.4	890.0	894.2	862.2	733.1	595.9	443.4	314.1	138.2	44.0	7.5	0.0	0.0	368.5	894.2
27-Jun	0.0	0.0	0.0	6.2	39.4	128.5	316.0	455.9	588.2	666.7	770.9	650.7	583.7	454.8	540.8	455.7	409.9	220.7	152.3	93.7	29.2	3.6	0.0	0.0	273.6	770.9
28-Jun	0.0	0.0	0.0	7.1	35.9	116.3	230.8	328.5	488.4	629.7	656.6	856.2	793.2	741.1	646.8	625.6	523.8	360.7	267.5	117.7	39.0	5.5	0.0	0.0	311.3	856.2
29-Jun	0.0	0.0	0.0	3.5	30.4	119.2	254.7	394.7	550.6	652.9	724.1	780.4	764.1	727.4	713.8	648.3	539.5	386.6	211.0	110.6	35.1	3.7	0.0	0.0	318.8	780.4
30-Jun	0.0	0.0	0.0	3.9	30.2	110.8	220.3	322.9	299.5	442.2	578.2	659.7	638.5	727.4	565.3	502.2	469.1	351.6	212.6	123.5	42.1	5.4	0.0	0.0	262.7	727.4
	0.0	0.0	0.0	4.1	26.7	101.1	210.3	326.8	413.3	508.5	567.5	568.6	606.2	571.1	521.6	445.8	363.3	269.9	176.2	98.0	28.6	3.7	0.0	0.0	Diurnal Average	
	0.0	0.0	0.1	8.8	49.7	234.0	348.8	551.9	611.9	798.6	835.7	874.7	924.9	894.2	862.2	811.0	604.8	450.5	345.6	205.2	61.6	11.7	0.1	0.0	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Global Radiation (GR) - W/m2

Fort McKay - Bertha Ganter - June 2026



Concentration Ranges (W/m2)	Number of Hours	%	Cumulative %
0 - 20	230	31.94	31.94
21 - 100	106	14.72	46.67
101 - 300	143	19.86	66.53
301 - 600	126	17.50	84.03
601 - 900	114	15.83	99.86
> 900	1	0.14	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 - June 2026

Maximum Speed: 26 km/h on Jun 1 12:00

Maximum Daily Speed Average: 18.5 km/h on Jun 1

Minimum Speed Value: 0 km/h on Jun 29 03:00

Minimum Daily Speed Average: 0.8 km/h on Jun 22

Maximum Diurnal Speed Average: 5.1 km/h at hour 17

Minimum Diurnal Speed Average: 1.9 km/h at hour 8

Monthly Average Velocity: 3.1 km/h 4.0 deg

Percentiles: P_1 = 1 P_{10} = 3 Q_1 = 5 Median = 8 Q_3 = 12 P_{90} = 16 P_{99} = 21

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-Jun	N15	N20	N20	N17	N16	N17	NNW15	NNW14	N18	N22	N21	N26	N22	N22	N21	N21	N21	N19	N19	N18	NNE16	NNE15	NNE15	N19	N18.5	N26
2-Jun	NNE15	N15	N17	N16	N18	N20	N18	NNE15	NNE17	NNE18	NE13	NE11	NE11	NE15	NE10	NE12	NE12	E8	ESE7	ESE6	ESE7	ESE6	E5	ESE5	NNE10.6	N20
3-Jun	ESE6	ESE6	ESE4	ESE6	SE5	SE5	SE3	SSE4	SE6	SSE6	SSE5	SSE4	SSE6	S7	SSE8	SSE7	S5	SSE7	SSE8	S4	NNW2	NW3	W1	WNW2	SSE4.2	SSE8
4-Jun	W2	SW1	SW2	S2	S7	S7	SSE7	SSE9	S9	S10	SSW11	SSW10	SSW10	SSW11	S12	S11	S12	SSW8	SSW10	SSW11	SSW7	S5	SSE2	SSE5	S7.2	S12
5-Jun	SSE5	SSE5	SSE5	S7	S6	SSW6	SSW7	SSW7	SSW7	SSE9	SSE11	SSE12	SSE13	SE12	SSE10	SSE11	SSE17	SSE9	S5	W4	SE6	S3	S4	S4	SSE7.2	SSE17
6-Jun	SSE1	WNW5	NNW6	NW12	NW13	W7	W7	W9	WNW9	WSW9	W9	W9	WSW9	WSW8	WSW6	SW4	SW7	WSW6	SW5	SW6	SW5	SW4	S5	SSW4	W5.5	WNW13
7-Jun	S4	SSW2	SW1	SSE4	SSE9	SSE8	SSE9	SSE7	SE3	SW1	SE4	ESE2	NNE4	N6	N8	NNE12	N16	N14	N8	NNW9	NNW7	NNW8	N11	N9	NNE2.8	N16
8-Jun	N8	N8	N11	NNW11	NNW11	N12	NNW14	NW8	NW11	NW13	NW18	NW15	WNW17	WNW17	WNW15	WNW13	WNW12	WNW12	WNW10	WNW10	WNW11	WNW9	WNW9	WNW9	NW10.8	NW18
9-Jun	WNW7	W7	WNW7	W6	WNW8	WNW9	WNW7	WNW8	WNW8	WNW7	W7	W8	WNW10	WNW9	WNW8	WSW5	NNW9	N7	NNW7	NW7	NW10	N12	N8	N11	NW6.7	N12
10-Jun	N6	NNW2	NNW6	NNW5	NNW6	N8	N5	NNE5	NW4	WNW7	NW7	N14	N11	N11	NNE14	N17	NNE17	N17	N19	NNW17	N12	N9	N12	N13	N10.0	N19
11-Jun	NNW9	NNW13	NNW13	N10	NNW12	NNW11	NNW13	NNW15	N13	N16	N18	N16	N17	NNE16	N17	N18	N22	N18	N15	N12	NNW11	NNW10	NNW11	NW7	N13.5	N22
12-Jun	WNW5	WNW5	NW8	NNW10	NNW9	NNW9	N12	N17	N18	N21	N22	N20	N17	N19	N19	N18	NNE20	N19	N17	N13	NNW7	NW6	WNW5	NW5	N12.7	N22
13-Jun	WNW5	WNW2	W2	SSW3	SSW1	SSW2	WNW1	SE5	SE6	SSE6	SSE10	SSE9	SE10	SE11	SSE12	SSE11	S11	SSW8	SW7	SSW6	SSW5	SSW5	SSW3	N1	S4.7	SSE12
14-Jun	WNW3	WSW3	SSE1	SSW1	SSW4	S1	ENE2	SE2	ENE3	ENE5	NE9	NNE10	NNE16	N16	N11	NNW13	N15	N16	N12	N10	NNW7	NW7	NNW6	NNW3	N5.8	N16
15-Jun	NW3	WNW2	WNW3	WNW2	S0	NNW2	N2	ENE2	SSE6	SE5	ESE3	ENE4	NE7	ENE6	NE6	NE8	ENE7	ENE7	ENE6	NE4	NE4	N2	NW4	NNE4	NE2.7	NE8
16-Jun	NNE4	N5	ENE3	ESE4	ENE3	NNE3	ENE4	ESE4	SSE5	S3	SE5	NE3	NNE10	NNE13	NNE15	NNE16	NNE17	N18	N16	N19	N16	NNE15	NNW9	NNW7	NNE7.3	N19
17-Jun	NNW8	NNW9	NNW10	NNW9	NNW8	NNW6	NNE6	N6	N11	NNE10	N12	N14	N15	N13	N13	N15	NNW14	NNW13	NNW12	N10	NNW6	NNW6	NW7	NNW9	N9.7	N15
18-Jun	NNW9	NNW10	NNW6	NW6	NW5	NW6	NW4	SSW2	S2	SE6	ESE4	N10	N14	N13	N13	NNW13	N17	N15	N11	NNW11	NNW10	NW3	W4	WNW4	NNW6.7	N17
19-Jun	WNW4	WNW4	WSW2	W4	W3	WNW3	NW3	N8	NNE11	NNE12	NNE10	NNE9	NNE12	NNE13	NNE14	N16	N18	N11	N11	N13	N8	N8	NNW7	NNW5	N7.7	N18
20-Jun	NNW7	NNW6	NW5	WNW4	NW4	NW5	N8	N9	NNE11	NNE13	NNE14	NNE11	NE9	NNE13	NE12	NNE12	NNE11	NNE11	NE10	NNE8	NNE9	N8	NNW8	NNW5	NNE7.9	NNE14
21-Jun	NNW6	NNW7	N8	N5	NNW4	NW5	NNW5	N7	NNW10	NNW13	N13	N15	N12	NNE10	N11	NE5	N10	N10	NNE6	N5	NW6	NNW6	NW7	NW5	N7.5	N15
22-Jun	W2	SSW4	WNW3	NW3	W2	SSW2	SW1	NW4	NNE3	NE5	ESE5	NE6	NE6	NNE6	ENE4	NE3	S7	SSW7	WNW3	SSE6	SSE6	S6	S2	S4	SE0.8	SSW7
23-Jun	W2	SSW4	S4	S5	SSW4	S4	S6	SSE8	SSE10	SSE11	SSW7	SSW6	S6	N10	NW7	NW12	SSE8	SSE12	SSE13	SSE6	SSE5	SSE3	WSW2	S3	S3.9	SSE13
24-Jun	SSW2	S4	S4	S2	S1	S4	SE4	SSE10	SSE11	SE11	SSE11	SSE12	SSE11	SSE14	SSE12	SSE11	SSW5	SW6	SE13	SSE10	S5	SE4	SSE7	SE3	SSE7.0	SSE14
25-Jun	NW3	WNW2	NW4	SSW2	SSE2	SSE4	SSE10	SSE12	S8	SSE9	SSE12	SSE17	SSE16	SSE12	SSE13	SSE14	SSE13	SSE13	SSE11	SSE15	SE11	SSE7	SSE9	SSE7	SSE8.7	SSE17
26-Jun	SSE6	S4	SSE5	SE3	ENE1	UO	SE5	SSE7	SSE9	S11	SSE18	SSE19	SSE17	SSE17	SSE16	SSE15	SSE14	SSE14	SSE14	SE13	SE10	ESE6	SE4	SSE5	SSE9.9	SSE19
27-Jun	SSE4	S5	S4	NW2	NNW4	N3	N7	N6	N8	N10	ESE13	SE13	SSE13	SSE15	SE15	ESE8	SE12	SE8	S5	NW1	NNW4	N4	NW4	WNW4	ESE2.9	SSE15
28-Jun	NW2	NW3	WNW2	WNW3	NNW5	NNE2	N6	N7	N9	N11	NNE9	ENE10	ENE10	NE11	ENE8	NE10	NE11	NE9	NNE8	NNE7	NNE7	NNW8	NNW9	N7	NNE6.2	NE11
29-Jun	NNW2	N2	NW0	WNW3	NNW4	NNW4	N6	N5	N7	N11	NNE10	NNE11	NNE13	NNE11	NNE10	NNE10	NNE10	NNE10	NNE10	N13	N13	SSE4	S4	SSE6	NNE6.1	N13
30-Jun	S3	SSE4	WNW1	NNW3	WNW1	S1	E2	E1	ESE2	ESE2	NE1	NE3	N7	N7	NNW13	N9	NE9	NE10	ENE7	E5	ESE5	S2	SSE2	WNW1	NNE2.3	NNW13
	NNW2.7	NNW2.7	NNW3.1	NNW2.8	NNW2.8	NNW2.6	N2.6	N1.9	N2.5	N3.1	NNE2.8	NNE3.5	NNE4.1	NNE4.9	NNE4.4	NNE5.0	NNE5.1	NNE4.5	NNE3.6	N3.5	N3.1	NNW2.7	NNW2.6	NNW2.5	Diurnal Average	
	NNE15	N20	N20	N17	N18	N20	N18	N17	N18	N22	N22	N26	N22	N22	N21	N21	N22	N19	N19	N19	NNE16	NNE15	NNE15	N19	Diurnal Maximum	

UO - Unstable Operation

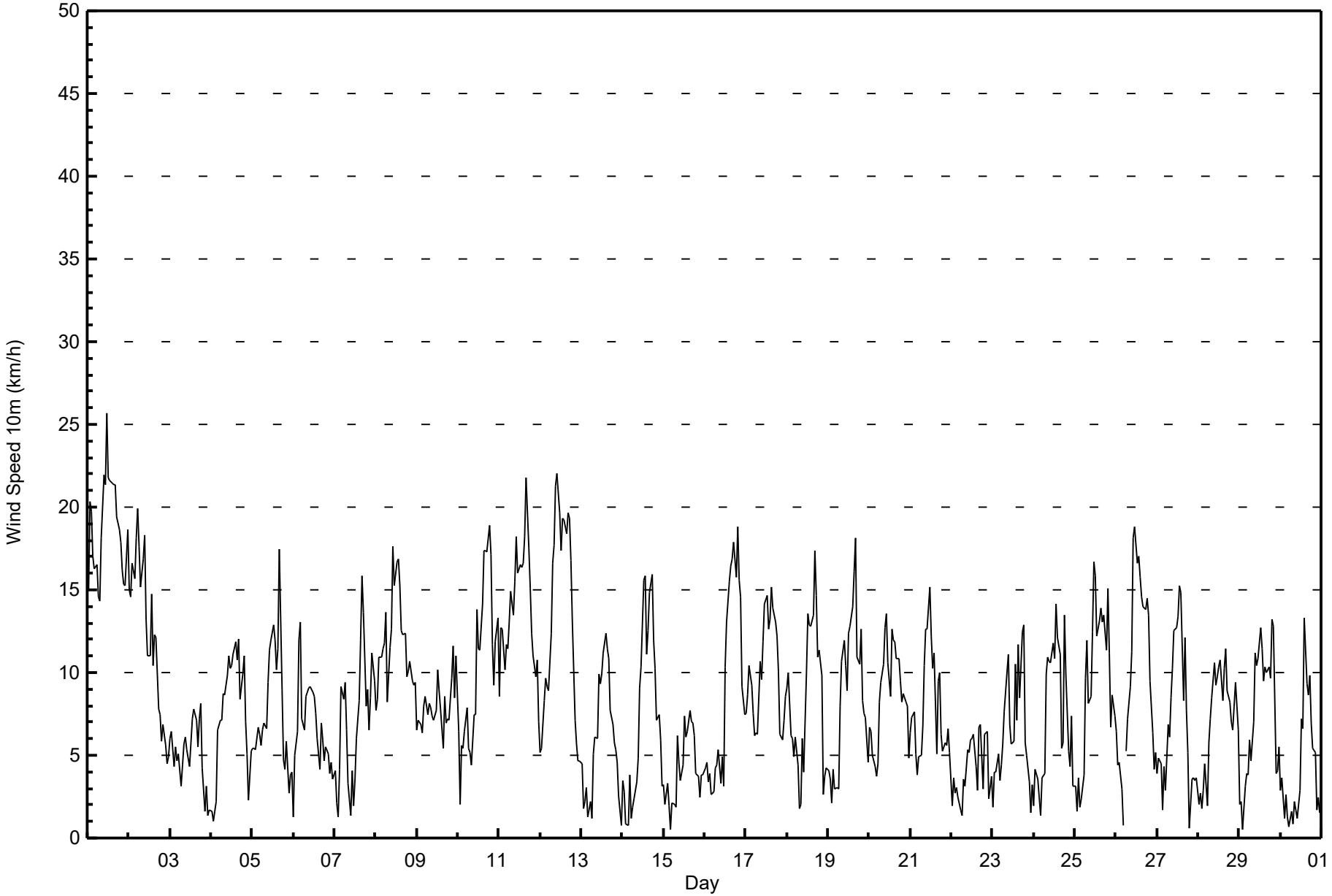
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Fort McKay - Bertha Ganter - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	230	31.99	31.99
6 - 11	303	42.14	74.13
12 - 19	170	23.64	97.77
20 - 28	16	2.23	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

Fort McKay - Bertha Ganter - June 2026

Wind Speed Ranges (km/h)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 5	10	8	8	10	4	11	15	22	34	18	8	5	10	28	22	17	230
6 - 11	52	28	17	8	1	9	10	46	15	17	4	5	9	19	15	48	303
12 - 19	69	29	5	0	0	1	5	31	2	0	0	0	0	7	5	16	170
20 - 28	15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
29 - 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	146	66	30	18	5	21	30	99	51	35	12	10	19	54	42	81	719

Total Number of Valid Hours: 719

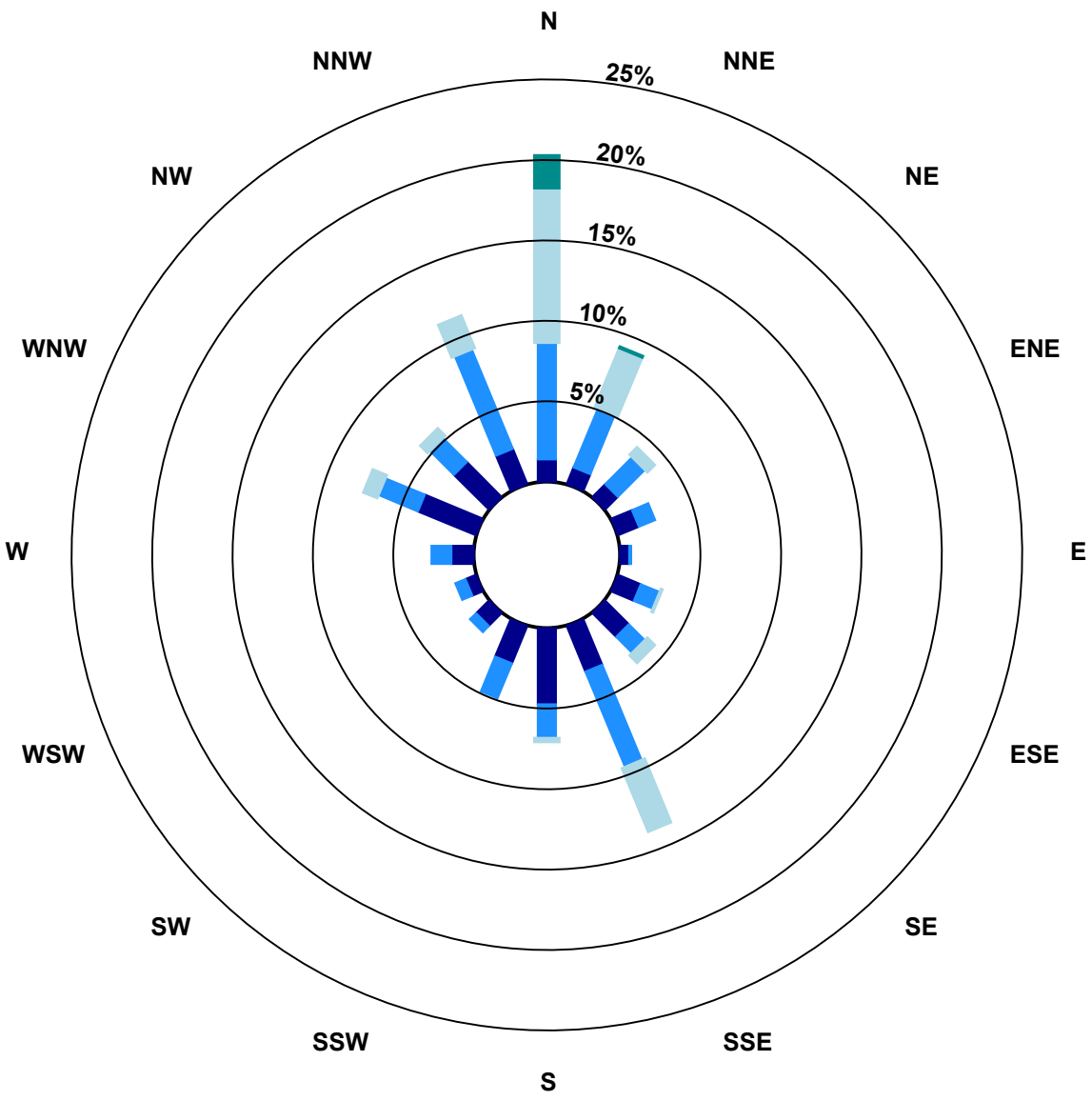
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Fort McKay - Bertha Ganter



Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 719

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 10m (WS10) - km/h

Fort McKay - Bertha Ganter - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 7 km/h on Jun 24 19:00

Minimum Value: 1 km/h on Jun 23 05:00

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

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

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Fort McKay - Bertha Ganter - June 2026

Direction of Maximum Speed: 1 deg on Jun 1 12:00
Direction of Maximum Daily Speed Average: 0.2 deg on Jun 1

Direction of Minimum Speed: 312 deg on Jun 29 03:00
Direction of Minimum Daily Speed Average: 0.8 deg on Jun 22

Monthly Average Direction: 4.0 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-Jun	358	353	353	356	349	353	338	340	350	355	2	1	360	1	4	2	4	8	11	10	12	13	15	9	0.2
2-Jun	12	11	5	7	8	9	8	23	18	21	35	48	43	42	47	40	43	86	104	118	107	107	101	104	31.7
3-Jun	110	113	115	112	133	139	135	166	136	158	151	153	156	171	166	157	172	154	149	182	345	309	277	285	148.8
4-Jun	267	215	226	186	176	170	148	150	188	188	198	193	193	192	187	180	176	203	209	204	196	177	166	164	186.6
5-Jun	162	157	167	174	175	206	203	205	197	164	151	157	157	146	162	167	161	166	184	274	141	178	175	179	168.6
6-Jun	168	301	328	325	304	281	277	273	286	258	261	272	252	251	255	224	226	238	220	215	236	228	173	200	264.2
7-Jun	180	194	215	155	152	159	156	157	141	223	129	112	18	359	10	13	8	11	9	341	335	347	4	3	22.3
8-Jun	360	358	350	348	347	353	348	324	312	309	313	306	300	296	289	286	293	292	285	290	289	284	287	296	311.0
9-Jun	284	280	282	277	290	296	282	290	293	291	275	269	289	287	286	246	346	353	342	326	321	3	6	357	305.9
10-Jun	357	338	333	330	344	353	8	14	314	303	321	5	11	6	12	5	12	3	353	348	355	1	356	359	356.2
11-Jun	348	342	338	351	339	337	339	347	356	356	350	359	8	13	8	359	358	358	356	353	348	336	327	314	351.5
12-Jun	297	290	314	333	334	344	350	350	352	351	354	1	7	8	4	9	12	9	10	7	348	311	302	315	354.1
13-Jun	300	289	274	194	192	195	283	139	138	147	149	148	146	145	154	159	173	199	223	197	201	213	196	0	170.3
14-Jun	287	239	168	201	192	176	68	134	58	57	49	25	14	9	354	345	358	10	356	352	339	319	327	341	2.0
15-Jun	312	292	296	286	177	338	2	73	150	136	104	60	36	74	53	56	58	71	66	55	34	355	326	13	50.2
16-Jun	16	351	74	114	59	31	68	114	157	177	128	37	16	29	20	14	13	11	11	357	357	13	348	332	17.1
17-Jun	328	336	341	341	348	346	12	10	353	20	9	3	4	5	2	352	341	345	348	2	335	332	317	331	351.6
18-Jun	339	343	341	305	304	306	317	210	173	145	109	0	11	5	349	340	351	358	349	341	336	311	279	283	343.7
19-Jun	291	300	253	262	275	283	310	2	18	20	12	13	16	28	13	359	357	356	6	349	353	349	346	336	358.1
20-Jun	337	340	320	303	323	305	3	1	17	18	18	31	45	18	48	30	24	30	51	27	15	351	341	343	12.9
21-Jun	339	344	350	350	337	311	330	351	348	347	1	357	0	20	7	39	2	4	14	358	326	328	310	320	352.1
22-Jun	272	205	284	304	262	201	230	315	26	35	108	48	50	33	58	43	188	192	292	152	157	169	180	177	135.0
23-Jun	270	210	177	180	206	174	179	153	155	148	208	202	183	359	310	317	155	166	155	165	162	168	241	186	177.8
24-Jun	196	183	181	173	175	176	141	162	152	143	151	152	160	151	151	150	209	215	133	159	170	144	153	146	157.1
25-Jun	324	291	310	213	163	158	159	162	174	166	160	159	154	159	151	157	160	161	162	147	143	158	167	164	159.5
26-Jun	168	185	162	145	70	UO	146	155	162	169	159	163	161	162	163	154	153	161	155	141	126	118	143	160	156.0
27-Jun	149	170	172	325	327	354	3	7	7	4	115	131	158	152	144	121	125	134	175	311	338	1	321	288	120.1
28-Jun	306	313	300	299	337	25	356	7	6	0	27	63	59	42	62	41	37	44	30	27	20	342	346	351	20.7
29-Jun	334	11	312	288	337	345	7	11	7	9	19	24	14	13	32	27	25	18	19	352	352	148	174	168	12.4
30-Jun	181	163	303	346	289	191	84	81	115	120	39	37	350	355	345	354	43	40	69	81	111	175	153	300	31.9
	334.6	330.1	333.0	330.9	329.9	333.7	352.6	4.9	6.3	10.5	33.6	29.7	25.8	26.6	22.8	16.8	19.8	17.9	22.5	2.5	357.0	347.8	336.4	337.1	
	Diurnal Average																								

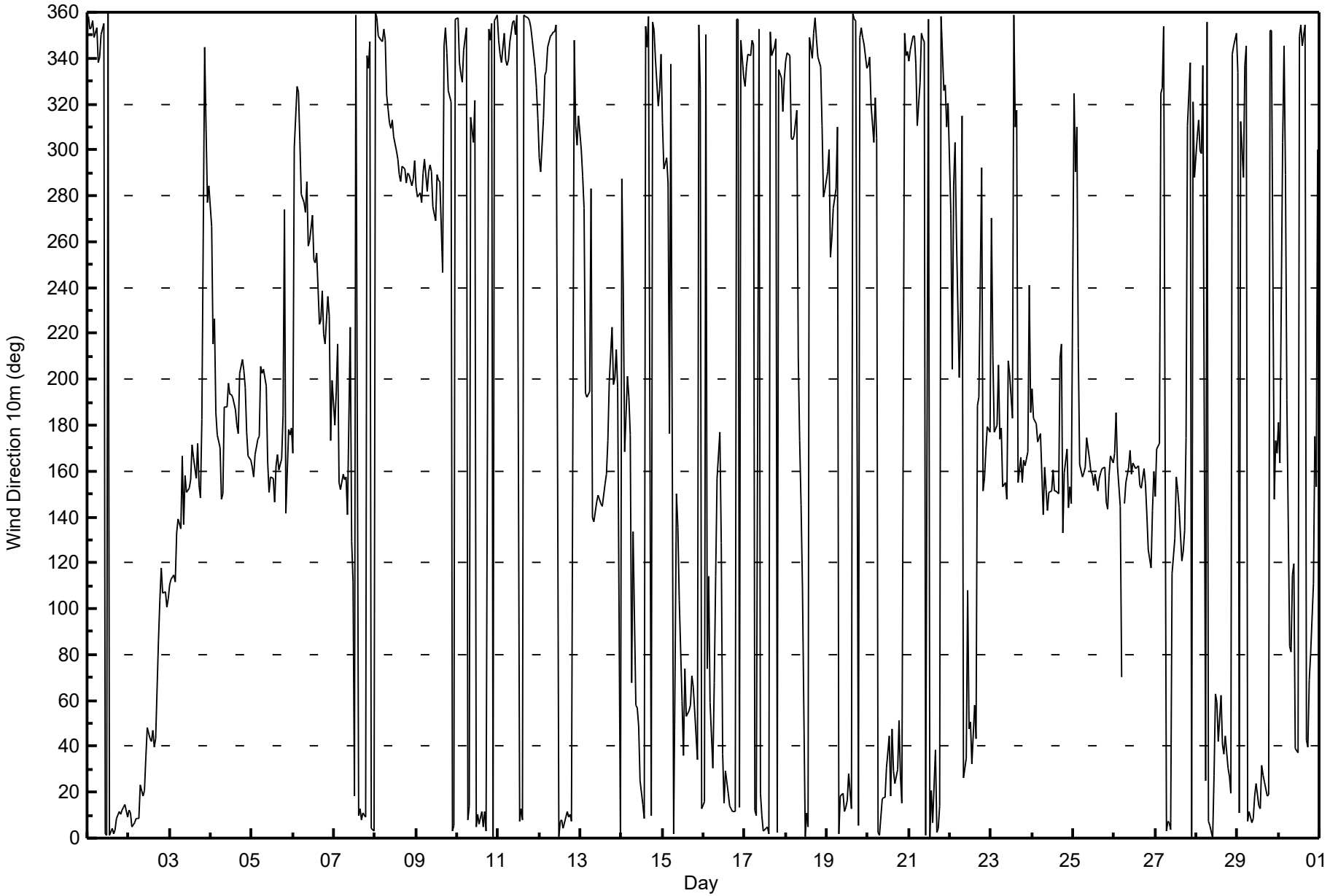
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Fort McKay - Bertha Ganter - June 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Fort McKay - Bertha Ganter - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 95 deg on Jun 14 04:00

Minimum Value: 8 deg on Jun 20 01:00

Percentiles: P_1 = 9 P_{10} = 14 Q_1 = 18 Median = 24 Q_3 = 37 P_{90} = 57 P_{99} = 86

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-Jun	17	19	17	18	16	17	13	15	19	18	20	18	19	19	19	18	18	19	19	19	18	19	18	17	20
2-Jun	18	16	17	17	19	18	19	22	19	21	31	37	31	27	33	28	29	33	24	43	35	26	25	18	43
3-Jun	20	18	18	18	28	28	43	26	39	20	39	56	29	24	21	25	22	16	16	17	61	18	58	33	61
4-Jun	15	66	27	65	15	18	16	18	33	28	31	33	35	32	32	34	29	36	39	31	22	16	61	10	66
5-Jun	15	14	20	12	16	36	33	41	36	21	16	15	16	18	22	15	15	30	26	63	19	27	23	42	63
6-Jun	86	57	59	13	19	37	48	48	40	50	51	49	49	57	50	40	40	47	42	44	51	48	20	39	86
7-Jun	17	62	62	18	11	16	14	36	73	90	54	88	77	48	43	28	19	27	48	13	18	14	16	15	90
8-Jun	19	15	15	15	14	16	16	17	15	16	15	17	21	24	29	31	27	30	37	32	33	36	31	27	37
9-Jun	35	41	42	44	32	28	42	36	36	42	49	56	39	40	50	59	24	32	20	9	14	14	15	14	59
10-Jun	14	38	13	13	15	16	21	44	61	39	24	27	18	19	18	18	20	20	18	17	16	17	17	16	61
11-Jun	14	14	13	16	14	13	13	16	18	20	17	18	19	20	20	18	19	19	17	16	15	11	13	19	20
12-Jun	16	22	9	11	10	13	15	16	18	18	19	23	23	25	23	24	22	24	22	21	18	20	23	15	25
13-Jun	14	28	48	15	74	44	89	19	13	35	20	32	23	19	21	31	21	40	45	26	16	16	39	71	89
14-Jun	20	49	92	95	22	92	61	63	59	53	35	33	25	29	28	22	27	26	24	25	15	8	30	24	95
15-Jun	19	41	16	33	91	21	71	57	22	61	75	71	35	53	46	41	38	39	37	34	29	53	38	38	91
16-Jun	31	26	49	35	47	32	48	32	22	68	54	81	43	32	30	28	28	27	25	25	27	23	20	13	81
17-Jun	17	11	16	16	18	21	25	38	33	36	34	32	30	31	31	27	21	25	25	25	8	9	14	13	38
18-Jun	9	13	14	17	23	21	31	63	61	24	48	42	24	24	24	22	24	26	24	20	20	52	25	24	63
19-Jun	27	33	71	14	41	42	62	31	30	29	29	38	31	31	25	25	23	26	24	21	20	19	14	25	71
20-Jun	8	9	25	16	34	32	20	20	25	28	29	36	40	36	37	30	31	33	35	28	24	20	15	23	40
21-Jun	14	17	19	21	26	21	19	35	17	18	20	18	25	27	28	44	24	22	20	26	12	12	11	15	44
22-Jun	42	49	55	29	27	51	57	37	73	46	52	48	57	54	65	83	34	46	76	12	13	14	69	19	83
23-Jun	46	24	30	14	23	22	25	25	14	20	61	60	68	67	70	81	19	15	14	15	18	23	69	33	81
24-Jun	61	31	30	76	71	31	26	16	15	18	19	20	28	17	20	19	63	46	41	21	27	21	16	74	76
25-Jun	22	58	12	61	61	23	15	13	22	28	17	16	16	20	19	21	19	18	17	15	13	13	12	13	61
26-Jun	16	15	14	23	68	UO	20	20	20	18	18	17	19	18	21	23	19	17	17	13	14	12	32	14	68
27-Jun	17	15	12	71	19	49	21	26	22	35	29	21	21	18	17	28	19	27	19	85	19	14	9	15	85
28-Jun	46	28	63	23	13	66	17	16	21	18	47	43	42	36	41	37	30	36	28	25	19	16	10	37	66
29-Jun	25	18	83	22	20	21	16	21	28	21	26	31	25	31	34	32	29	24	21	16	14	67	22	10	83
30-Jun	33	21	41	56	58	85	49	75	41	79	86	69	32	53	22	30	39	33	38	24	19	60	37	69	86
	86	66	92	95	91	92	89	75	73	90	86	88	77	67	70	83	63	47	76	85	61	67	69	74	
	Diurnal Maximum																								

UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS03
LOWER CAMP METEOROLOGY
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - LOWER CAMP MET TOWER (AMS03)
JUNE 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	719	0	1	99.86	30.8	-	24.2	-
Temperature 45 m (C) Average	719	0	1	99.86	30.8	-	24.4	-
Temperature 100 m (C) Average	719	0	1	99.86	30.2	-	24.7	-
Temperature 163 m (C) Average	719	0	1	99.86	29.5	-	24.9	-
Relative Humidity 20 m (%) Average	719	0	1	99.86	97.6	-	89.5	-
Relative Humidity 45 m (%) Average	719	0	1	99.86	97.7	-	89.7	-
Relative Humidity 100 m (%) Average	719	0	1	99.86	97.3	-	90.4	-
Relative Humidity 163 m (%) Average	719	0	1	99.86	98.3	-	90.2	-
Wind Speed 20 m (km/h) Average	719	0	1	99.86	27	-	17.0	-
Wind Speed 45 m (km/h) Average	719	0	1	99.86	39	-	26.0	-
Wind Speed 100 m (km/h) Average	683	0	37	94.86	48	-	33.0	-
Wind Speed 163 m (km/h) Average	0	0	720	0	--	-	--	-
Wind Direction 20 m (deg) Average	719	0	1	99.86	-	-	-	-
Wind Direction 45 m (deg) Average	719	0	1	99.86	-	-	-	-
Wind Direction 100 m (deg) Average	683	0	37	94.86	-	-	-	-
Wind Direction 163 m (deg) Average	0	0	720	0	-	-	-	-
Vertical Wind Speed 20 m (km/h) Average	719	0	1	99.86	0.7	-	0.0	-
Vertical Wind Speed 45 m (km/h) Average	719	0	1	99.86	1.4	-	0.5	-
Vertical Wind Speed 100 m (km/h) Average	683	0	37	94.86	2.3	-	0.8	-
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)
JUNE 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	719	16.85	5.6	-	7.6	10.2	12.2	16.2	20.7	25.2	30.8
Temperature 45 m (C) Average	719	16.93	5.5	-	7.8	10.3	12.3	16.3	20.9	25.1	30.8
Temperature 100 m (C) Average	719	16.62	5.5	-	7.2	10	11.8	16	20.6	24.7	30.2
Temperature 163 m (C) Average	719	16.29	5.5	-	6.5	9.6	11.5	15.7	20.5	24.4	29.5
Relative Humidity 20 m (%) Average	719	62.52	20.8	-	22.8	32.3	44.4	64.3	80	90	97.6
Relative Humidity 45 m (%) Average	719	61.55	20.9	-	21.1	31.6	43.4	63.3	79	89.1	97.7
Relative Humidity 100 m (%) Average	719	60.27	20.6	-	20.6	31.6	42.8	60.6	77.3	87.7	97.3
Relative Humidity 163 m (%) Average	719	58.76	20.6	-	18.3	31.1	40.9	57.8	76	87.3	98.3
Wind Speed 20 m (km/h) Average	719	8.9	5	-	0	2	5	8	13	16	27
Wind Speed 45 m (km/h) Average	719	13.2	8	-	1	4	7	12	18	24	39
Wind Speed 100 m (km/h) Average	683	17.1	9	-	0	6	10	16	23	30	48
Wind Speed 163 m (km/h) Average	0	--	--	-	--	0	0	0	0	0	--
Wind Direction 20 m (deg) Average	719	-	-	-	-	-	-	-	-	-	-
Wind Direction 45 m (deg) Average	719	-	-	-	-	-	-	-	-	-	-
Wind Direction 100 m (deg) Average	683	-	-	-	-	-	-	-	-	-	-
Wind Direction 163 m (deg) Average	0	-	-	-	-	-	-	-	-	-	-
Vertical Wind Speed 20 m (km/h) Average	719	-0.32	0.3	-	-1.3	-0.7	-0.5	-0.3	-0.1	0	0.7
Vertical Wind Speed 45 m (km/h) Average	719	0.06	0.3	-	-1.4	-0.3	-0.2	0.1	0.3	0.5	1.4
Vertical Wind Speed 100 m (km/h) Average	683	0.06	0.5	-	-2.1	-0.5	-0.3	0	0.3	0.7	2.3
Vertical Wind Speed 163 m (km/h) Average	0	--	--	-	--	0	0	0	0	0	--

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

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
ALL METEOROLOGICAL SENSORS	29 Jun 2026 10:00	29 Jun 2026 10:00	1	DAS Failure - data not recorded
Vertical Wind Speed, Wind Speed, Wind Direction at 100m	29 Jun 2026 13:00	01 Jul 2026 00:00	36	Flat line in sensor output signal
Vertical Wind Speed, Wind Speed, Wind Direction at 163m	01 Jun 2026 01:00	29 Jun 2026 09:00	681	Flat line in sensor output signal
Vertical Wind Speed, Wind Speed, Wind Direction at 163m	29 Jun 2026 11:00	01 Jul 2026 00:00	38	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Ambient Temperature 20m (AT20) - C

Lower Camp Met Tower - June 2026

Maximum Value: 30.8 C on Jun 28 18:00

Maximum Daily Average: 24.2 C on Jun 29

Minimum Value: 7.6 C on Jun 12 05:00

Minimum Daily Average: 9.7 C on Jun 11

Maximum Diurnal Average: 20.5 C at hour 16

Minimum Diurnal Average: 12.0 C at hour 5

Monthly Average: 16.85 C

Percentiles: P_1 = 8.2 P_{10} = 10.2 Q_1 = 12.2 Median = 16.2 Q_3 = 20.7 P_{90} = 25.2 P_{99} = 30.0

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-Jun	10.8	10.5	10.3	10.1	10.1	10.0	10.0	10.2	10.7	11.1	11.7	12.1	12.8	13.0	13.1	13.3	13.6	13.8	13.6	13.3	13.0	12.3	11.9	11.3	11.8	13.8
2-Jun	10.9	10.6	10.3	9.9	9.2	8.4	8.1	8.3	9.1	9.7	9.8	10.3	11.3	11.6	12.6	14.1	14.0	12.6	12.3	11.8	11.7	11.7	11.3	11.0	10.9	14.1
3-Jun	10.7	10.4	10.2	9.8	9.4	9.8	10.1	10.3	10.5	11.0	11.4	11.7	11.8	12.4	13.0	13.4	13.7	13.9	14.3	14.5	13.5	11.6	10.5	9.9	11.6	14.5
4-Jun	9.7	9.5	10.7	10.2	10.1	10.9	12.4	14.3	15.8	16.9	17.3	17.9	18.3	18.8	19.6	21.0	22.2	22.9	22.7	21.7	20.7	19.1	18.4	17.5	16.6	22.9
5-Jun	16.2	14.9	13.8	13.1	13.4	14.0	15.1	16.2	16.8	17.9	18.8	19.3	21.0	22.1	21.2	19.3	17.3	16.9	17.6	17.5	16.8	16.3	15.3	13.7	16.8	22.1
6-Jun	12.8	12.7	12.3	12.1	12.2	12.1	12.0	11.8	11.7	11.7	12.0	12.1	12.4	12.6	12.8	13.0	13.1	13.1	12.8	12.6	12.4	12.0	11.8	11.4	12.3	13.1
7-Jun	11.1	10.5	9.9	9.1	8.7	8.6	9.1	10.3	11.7	12.9	14.0	15.6	16.9	18.1	18.4	18.1	17.6	15.7	13.4	13.3	12.9	12.7	12.4	12.2	13.0	18.4
8-Jun	12.0	12.1	12.2	12.2	12.1	11.8	11.7	11.8	12.1	11.7	11.6	11.5	11.7	11.7	11.6	12.0	12.2	12.9	13.3	13.0	12.8	13.0	13.1	13.0	12.2	13.3
9-Jun	12.8	12.8	12.2	12.0	12.0	12.5	12.2	13.4	14.4	14.9	15.7	17.3	18.6	18.6	19.4	19.6	19.9	19.8	20.4	20.4	18.3	16.0	14.0	13.0	15.8	20.4
10-Jun	12.3	12.0	11.6	10.9	10.9	11.2	12.3	13.8	14.4	15.2	15.7	15.0	11.0	11.2	11.3	10.8	11.5	11.8	11.6	11.1	10.6	10.2	10.0	9.7	11.9	15.7
11-Jun	9.3	9.0	8.8	8.5	8.2	8.1	8.0	8.3	8.5	9.1	9.9	10.4	11.1	10.8	10.8	11.2	10.4	10.2	10.2	10.1	10.3	10.3	10.3	10.1	9.7	11.2
12-Jun	10.2	9.7	8.7	7.9	7.6	8.5	9.6	10.4	11.6	12.6	13.6	14.2	15.2	16.2	17.1	17.7	17.8	17.9	17.9	17.2	16.1	15.2	13.0	11.3	13.2	17.9
13-Jun	10.2	9.1	8.5	8.1	8.0	9.9	12.0	14.5	16.4	18.1	19.5	20.4	21.6	22.4	23.3	23.8	23.7	23.9	24.2	24.1	23.7	22.0	19.9	18.3	17.7	24.2
14-Jun	16.4	15.3	14.8	14.4	14.0	14.6	16.5	18.7	20.2	21.9	23.3	23.4	23.4	24.1	23.6	23.2	24.2	24.3	23.7	23.4	22.3	20.4	16.9	15.0	19.9	24.3
15-Jun	13.8	12.9	12.3	12.0	12.1	14.8	15.7	17.1	18.4	20.2	21.8	22.8	23.7	24.1	24.7	25.6	25.3	24.7	24.0	22.9	21.5	20.5	19.5	19.1	19.6	25.6
16-Jun	18.6	17.8	16.9	16.5	15.9	15.6	15.2	13.8	14.7	15.1	16.4	17.8	19.3	21.1	22.3	22.3	22.4	22.1	21.5	20.9	19.6	17.6	15.8	14.0	18.1	22.4
17-Jun	12.2	11.0	10.2	9.4	9.5	11.0	12.4	14.1	15.6	16.6	17.6	18.2	19.0	19.4	19.9	19.2	19.4	18.7	18.6	19.1	18.1	16.0	13.7	12.5	15.5	19.9
18-Jun	11.2	10.3	9.7	9.4	9.7	10.2	10.5	11.4	12.5	13.7	15.2	16.0	15.4	15.1	15.3	16.5	17.5	17.3	17.2	16.7	16.2	15.2	14.7	14.4	13.8	17.5
19-Jun	14.1	13.1	11.0	10.6	9.6	9.6	9.9	12.8	15.0	16.0	16.0	17.2	17.8	16.8	17.3	18.1	17.7	17.0	16.5	16.8	16.8	14.7	13.2	12.4	14.6	18.1
20-Jun	11.5	10.5	9.7	8.9	8.7	10.0	11.7	14.1	15.3	16.6	17.1	17.9	17.9	18.6	18.9	19.0	19.5	19.4	18.9	17.2	16.6	16.2	15.2	15.0	15.2	19.5
21-Jun	14.4	14.1	13.7	12.8	12.5	12.3	12.5	13.3	15.3	16.5	17.0	17.2	18.2	19.4	19.7	19.1	19.9	20.1	18.6	17.2	17.4	16.9	15.8	14.3	16.2	20.1
22-Jun	14.1	13.4	12.5	11.8	11.6	12.0	13.9	16.5	18.4	20.1	21.1	22.1	22.1	22.8	22.9	23.3	23.2	23.4	22.8	22.4	20.9	20.1	18.5	17.2	18.6	23.4
23-Jun	15.8	14.9	14.2	13.6	13.4	13.8	14.9	16.9	18.9	21.7	23.2	24.0	24.7	25.3	25.6	21.9	18.6	21.4	22.2	22.6	21.2	19.1	17.9	17.2	19.3	25.6
24-Jun	16.1	15.8	15.1	14.5	14.4	14.9	15.5	17.7	19.9	21.8	23.4	24.4	25.2	25.6	26.3	26.6	27.0	27.1	23.9	22.5	22.6	21.6	20.4	19.7	20.9	27.1
25-Jun	18.3	16.8	15.9	15.3	14.5	15.0	16.5	18.9	20.7	23.1	25.3	26.0	26.7	27.3	27.9	28.3	28.3	28.3	28.1	27.4	26.1	24.4	23.5	22.2	22.7	28.3
26-Jun	20.4	19.0	18.3	17.2	16.8	17.6	18.9	20.8	22.8	24.6	25.6	26.0	26.7	27.3	27.8	27.9	28.1	27.9	27.6	27.2	26.2	25.0	23.6	22.5	23.6	28.1
27-Jun	21.5	20.5	19.5	18.2	18.0	18.6	19.3	21.6	23.8	25.2	25.5	26.1	26.3	26.2	26.7	27.4	27.2	26.8	26.8	26.4	24.7	23.2	21.6	20.1	23.4	27.4
28-Jun	19.4	17.2	15.8	15.1	15.3	16.3	17.4	19.5	22.0	24.6	27.0	28.2	29.2	29.6	30.3	30.6	30.6	30.8	30.5	29.9	27.7	25.5	21.8	20.3	23.9	30.8
29-Jun	19.1	18.2	17.4	16.9	16.2	16.7	18.3	21.3	22.9	DF	27.5	28.9	29.2	29.5	29.5	30.1	30.3	30.2	29.8	28.8	26.5	25.0	23.0	22.4	24.2	30.3
30-Jun	21.6	20.6	19.4	17.6	16.6	17.0	18.3	20.2	20.3	21.9	23.5	24.7	25.9	26.1	26.3	27.8	27.7	27.8	27.4	26.2	24.7	23.1	22.5	21.7	22.9	27.8
	14.3	13.5	12.9	12.3	12.0	12.5	13.3	14.7	16.0	17.0	18.3	19.0	19.5	19.9	20.3	20.5	20.5	20.4	20.1	19.6	18.7	17.6	16.3	15.4	Diurnal Average	
	21.6	20.6	19.5	18.2	18.0	18.6	19.3	21.6	23.8	25.2	27.5	28.9	29.2	29.6	30.3	30.6	30.6	30.8	30.5	29.9	27.7	25.5	23.6	22.5	Diurnal Maximum	

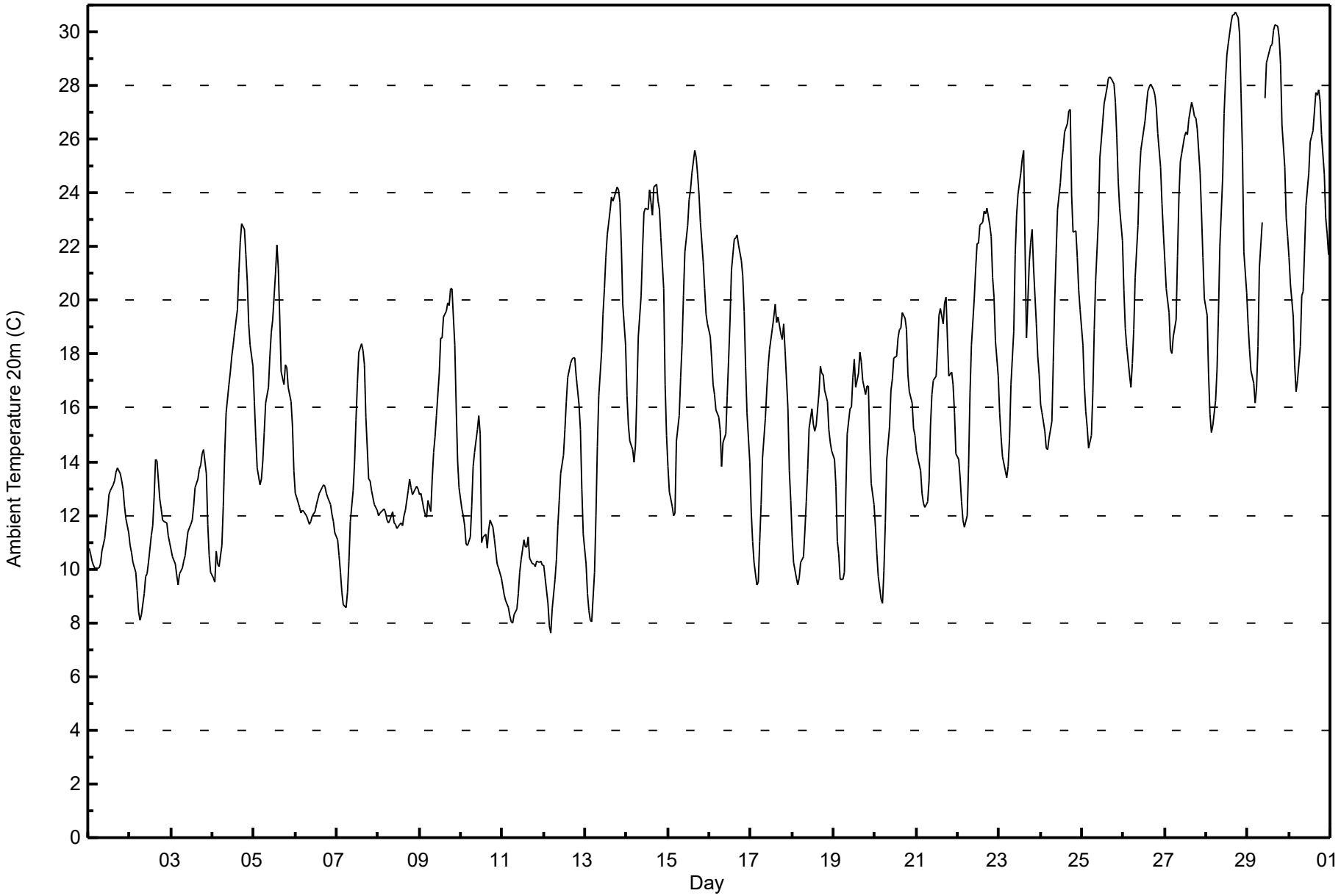
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 20m (AT20) - C

Lower Camp Met Tower - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	54	7.51	7.51
10 - 20	466	64.81	72.32
> 20	199	27.68	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Ambient Temperature 45m (AT45) - C

Lower Camp Met Tower - June 2026

Maximum Value: 30.8 C on Jun 28 18:00

Maximum Daily Average: 24.4 C on Jun 29

Minimum Value: 7.8 C on Jun 12 05:00

Minimum Daily Average: 9.6 C on Jun 11

Maximum Diurnal Average: 20.4 C at hour 18

Minimum Diurnal Average: 12.3 C at hour 5

Monthly Average: 16.93 C

Percentiles: P_1 = 8.3 P_{10} = 10.3 Q_1 = 12.3 Median = 16.3 Q_3 = 20.9 P_{90} = 25.1 P_{99} = 30.0

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-Jun	10.8	10.5	10.3	10.1	10.1	10.0	10.1	10.2	10.7	11.1	11.6	12.0	12.6	12.8	13.0	13.2	13.5	13.7	13.5	13.3	12.9	12.3	11.8	11.3	11.7	13.7
2-Jun	10.9	10.6	10.2	9.8	9.1	8.4	8.1	8.3	9.0	9.7	9.8	10.1	11.2	11.6	12.5	13.9	14.0	12.6	12.2	11.8	11.8	11.8	11.3	11.1	10.8	14.0
3-Jun	10.9	10.7	10.2	9.7	9.3	9.7	9.9	10.1	10.4	10.8	11.3	11.6	11.7	12.2	12.9	13.2	13.6	13.8	14.2	14.5	14.2	12.6	11.6	11.1	11.7	14.5
4-Jun	10.4	10.6	11.0	10.7	10.2	10.9	12.5	14.0	15.6	16.8	17.2	17.8	18.2	18.7	19.5	20.9	22.1	22.8	22.6	21.7	20.9	20.0	19.5	18.3	16.8	22.8
5-Jun	16.6	15.1	13.9	13.2	13.4	14.0	14.9	16.1	16.6	17.6	18.7	19.1	20.6	21.7	21.3	19.4	17.3	17.1	18.0	17.7	17.3	16.6	15.5	13.8	16.9	21.7
6-Jun	13.0	12.9	12.4	12.2	12.3	12.3	12.1	11.9	11.9	11.9	12.1	12.2	12.5	12.7	12.9	13.0	13.1	13.1	12.8	12.6	12.4	12.0	11.8	11.5	12.4	13.1
7-Jun	11.1	10.6	9.9	9.1	8.6	8.5	8.9	10.2	11.6	12.7	13.8	15.3	16.5	17.7	18.2	18.0	17.6	15.9	13.6	13.4	13.0	12.8	12.7	12.3	13.0	18.2
8-Jun	12.1	12.2	12.2	12.3	12.1	11.8	11.7	11.8	12.2	11.8	11.7	11.6	11.8	11.7	12.0	12.3	12.7	13.3	13.5	13.3	13.1	13.2	13.2	13.1	12.4	13.5
9-Jun	12.8	12.9	12.3	12.1	12.0	12.6	12.1	13.1	14.1	14.7	15.5	16.8	18.1	18.3	18.9	19.3	19.7	19.7	20.3	20.3	18.8	17.3	14.4	13.2	15.8	20.3
10-Jun	12.4	12.0	11.6	11.1	11.1	11.2	12.2	13.5	14.0	14.7	15.4	14.9	10.8	11.0	11.2	10.6	11.3	11.6	11.4	11.1	10.6	10.2	10.0	9.7	11.8	15.4
11-Jun	9.3	9.0	8.8	8.5	8.2	8.0	7.9	8.2	8.4	8.9	9.7	10.1	10.8	10.6	10.6	10.9	10.3	10.1	10.1	10.0	10.3	10.3	10.4	10.3	9.6	10.9
12-Jun	10.3	9.9	9.0	8.2	7.8	8.6	9.6	10.2	11.3	12.3	13.2	13.9	14.8	15.8	16.7	17.3	17.5	17.7	17.8	17.3	16.4	15.7	14.4	12.7	13.3	17.8
13-Jun	12.0	11.1	10.3	9.9	9.7	10.6	12.0	14.1	16.3	17.8	19.2	20.1	21.1	22.1	23.0	23.7	23.6	23.8	24.2	24.2	23.8	22.8	20.8	19.3	18.2	24.2
14-Jun	17.7	16.4	15.6	14.6	14.1	14.6	16.2	18.1	19.7	21.4	22.8	23.1	23.1	23.7	23.4	23.1	23.9	24.2	23.7	23.5	22.7	21.4	19.0	16.1	20.1	24.2
15-Jun	14.8	14.2	13.2	13.0	13.2	14.5	15.6	17.1	18.1	19.9	21.6	22.5	23.3	23.7	24.2	25.1	25.0	24.7	24.2	23.5	22.1	21.2	20.7	19.8	19.8	25.1
16-Jun	18.8	17.9	16.9	16.5	15.9	15.7	15.2	13.8	14.5	14.8	16.2	17.6	18.9	20.6	21.9	22.0	22.2	21.8	21.4	20.9	19.7	17.7	16.0	14.3	18.0	22.2
17-Jun	12.6	11.5	10.5	9.7	9.8	11.0	12.2	13.6	15.2	16.2	17.1	17.8	18.6	18.9	19.4	19.0	19.2	18.7	18.6	19.1	18.3	16.9	15.1	13.2	15.5	19.4
18-Jun	11.8	10.7	10.2	10.2	10.2	10.4	10.5	11.3	12.5	13.5	15.0	15.8	15.2	14.9	15.2	16.3	17.2	17.1	17.1	16.7	16.4	15.5	15.1	14.8	13.9	17.2
19-Jun	14.4	13.5	12.4	11.9	10.7	10.0	10.1	12.5	14.5	15.6	15.7	16.7	17.3	16.4	17.0	17.6	17.4	16.7	16.4	16.7	16.8	14.9	13.4	12.7	14.6	17.6
20-Jun	11.9	10.8	10.1	9.3	8.9	10.0	11.6	13.7	14.9	16.1	16.6	17.4	17.6	18.0	18.2	18.4	19.1	19.1	18.7	17.1	16.5	16.3	15.7	15.1	15.0	19.1
21-Jun	14.5	14.2	13.8	13.0	12.7	12.3	12.5	13.2	14.9	16.1	16.7	17.0	17.9	18.9	19.4	18.8	19.7	20.0	18.8	17.6	17.7	17.2	16.2	15.1	16.2	20.0
22-Jun	14.8	14.6	13.1	12.3	12.1	12.2	13.8	16.1	18.0	19.7	20.9	21.8	21.8	22.4	22.7	23.1	23.0	23.3	22.9	22.6	21.0	20.5	19.2	17.9	18.8	23.3
23-Jun	17.1	16.0	14.8	13.9	13.6	13.9	15.2	16.8	18.7	21.4	22.8	23.6	24.4	25.0	25.4	21.9	19.6	21.4	22.1	22.7	21.5	19.7	18.6	17.8	19.5	25.4
24-Jun	16.9	16.6	15.3	14.7	14.5	14.8	15.4	17.6	19.6	21.6	23.2	24.2	24.9	25.4	26.0	26.4	26.9	27.0	23.8	22.6	22.8	21.8	20.6	19.9	20.9	27.0
25-Jun	18.7	17.2	16.2	15.5	14.7	15.2	16.6	18.8	20.5	22.7	25.2	25.9	26.5	27.1	27.7	28.1	28.2	28.3	28.2	27.5	26.4	24.9	23.8	22.5	22.8	28.3
26-Jun	20.7	19.3	18.7	17.4	17.1	17.6	18.8	20.7	22.5	24.4	25.5	25.7	26.4	27.0	27.6	27.7	27.9	27.9	27.7	27.3	26.5	25.2	23.8	22.8	23.6	27.9
27-Jun	21.7	20.7	19.9	18.4	18.1	18.6	19.6	21.7	23.8	25.0	25.3	25.9	26.2	26.2	26.7	27.4	27.3	27.2	27.1	26.8	25.6	24.1	22.1	21.1	23.6	27.4
28-Jun	20.2	19.0	16.8	16.1	15.7	16.3	17.4	19.3	21.4	24.0	26.9	28.0	28.8	29.3	30.1	30.5	30.7	30.8	30.7	30.3	28.7	26.6	24.8	22.4	24.4	30.8
29-Jun	20.9	19.6	18.4	18.1	16.9	16.9	18.4	20.7	22.5	DF	27.0	28.3	28.9	29.2	29.3	29.8	30.0	30.1	29.9	29.0	26.7	25.0	23.9	22.6	24.4	30.1
30-Jun	21.6	20.8	19.8	18.0	16.9	16.9	18.2	19.8	20.2	21.5	22.9	24.4	25.3	25.7	26.2	27.5	27.6	27.8	27.6	26.5	25.2	23.6	22.7	22.3	22.9	27.8
	14.7	14.0	13.3	12.7	12.3	12.6	13.3	14.6	15.8	16.7	18.0	18.7	19.2	19.6	20.1	20.3	20.4	20.4	20.1	19.7	19.0	18.0	16.9	15.9	Diurnal Average	
	21.7	20.8	19.9	18.4	18.1	18.6	19.6	21.7	23.8	25.0	27.0	28.3	28.9	29.3	30.1	30.5	30.7	30.8	30.7	30.3	28.7	26.6	24.8	22.8	Diurnal Maximum	

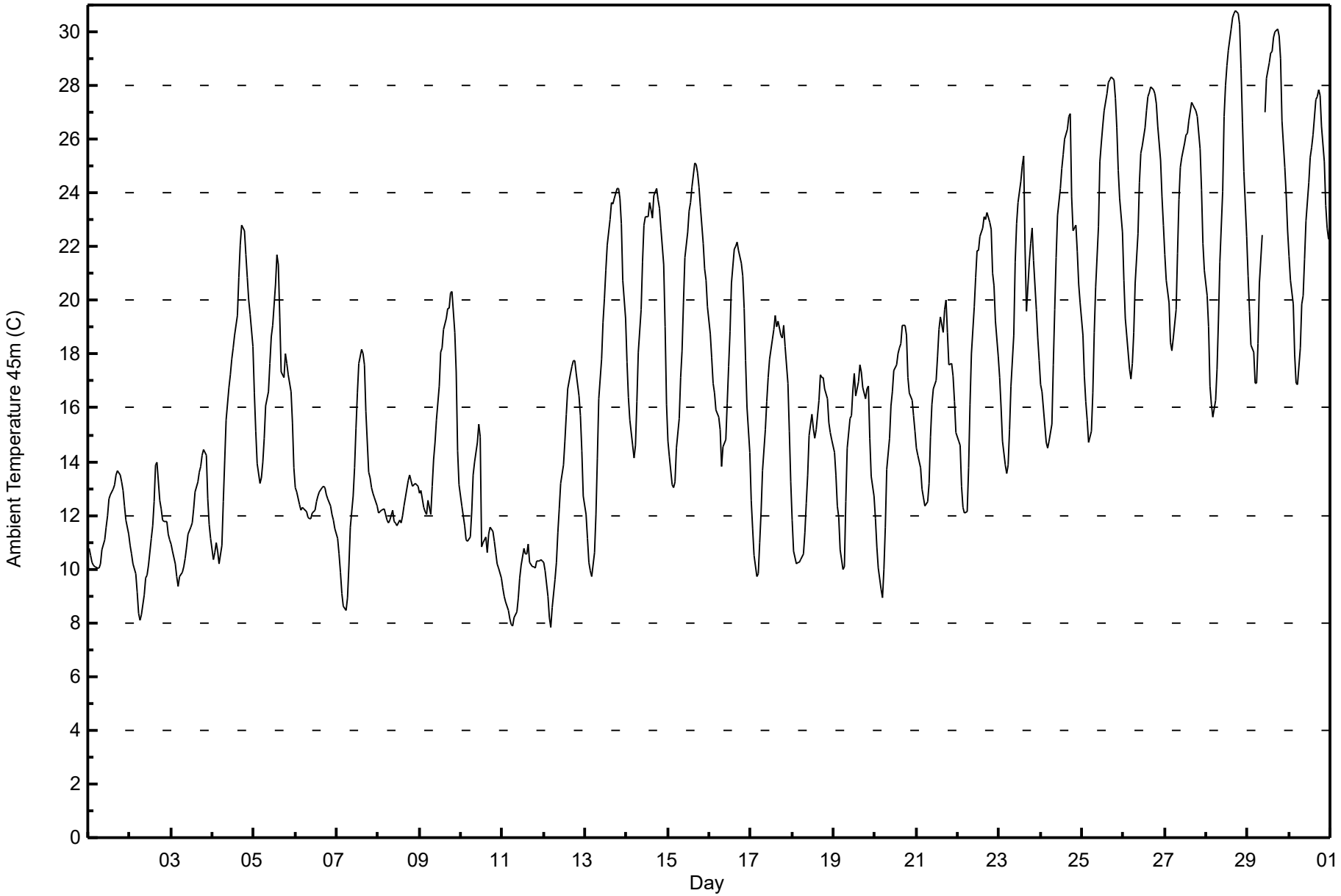
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 45m (AT45) - C

Lower Camp Met Tower - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	42	5.84	5.84
10 - 20	477	66.34	72.18
> 20	200	27.82	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Maximum Value: 30.2 C on Jun 28 18:00

Maximum Daily Average: 24.7 C on Jun 29

Minimum Value: 7.2 C on Jun 11 07:00

Minimum Daily Average: 8.9 C on Jun 11

Maximum Diurnal Average: 19.8 C at hour 17

Minimum Diurnal Average: 12.4 C at hour 5

Monthly Average: 16.62 C

Percentiles: P_1 = 7.8 P_{10} = 10.0 Q_1 = 11.8 Median = 16.0 Q_3 = 20.6 P_{90} = 24.7 P_{99} = 29.6

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-Jun	10.2	10.0	9.7	9.6	9.6	9.5	9.5	9.7	10.2	10.5	10.9	11.3	11.9	12.1	12.3	12.5	12.8	13.0	12.8	12.6	12.3	11.7	11.2	10.7	11.1	13.0
2-Jun	10.3	9.9	9.6	9.2	8.4	7.7	7.5	7.7	8.4	9.1	9.2	9.5	10.6	11.1	12.0	13.3	13.4	12.0	11.7	11.2	11.2	11.2	10.8	10.6	10.2	13.4
3-Jun	10.4	10.3	9.7	9.1	8.8	9.1	9.2	9.4	9.7	10.2	10.6	10.9	11.1	11.6	12.2	12.6	13.0	13.2	13.6	13.9	13.9	13.5	12.9	11.7	11.3	13.9
4-Jun	11.5	11.5	11.4	11.5	10.7	10.9	12.3	13.4	14.9	16.1	16.6	17.1	17.5	18.0	18.8	20.2	21.4	22.1	21.9	21.1	20.5	20.1	19.8	19.3	16.6	22.1
5-Jun	17.8	15.5	14.0	12.7	12.9	13.4	14.3	15.4	16.0	16.9	18.0	18.4	19.9	20.9	20.9	18.9	16.9	17.4	17.9	17.3	17.1	16.4	15.1	13.3	16.6	20.9
6-Jun	12.6	12.5	11.9	11.7	11.8	11.6	11.5	11.3	11.0	11.2	11.4	11.5	11.8	12.1	12.4	12.5	12.5	12.4	12.2	12.1	11.8	11.6	11.4	11.2	11.8	12.6
7-Jun	10.8	10.0	9.6	8.9	8.1	7.9	8.4	9.5	11.0	12.0	13.1	14.5	15.7	16.9	17.5	17.4	17.1	15.6	14.0	13.1	12.9	13.3	12.6	11.9	12.6	17.5
8-Jun	11.6	11.7	11.7	11.7	11.5	11.2	11.1	11.3	11.6	11.2	11.2	10.9	10.9	10.8	11.5	11.7	12.1	12.6	13.0	12.7	12.2	12.7	12.7	12.6	11.8	13.0
9-Jun	12.3	12.4	11.8	11.7	11.6	12.0	11.5	12.4	13.3	14.1	14.8	16.0	17.2	17.5	18.0	18.7	19.2	19.1	19.6	19.8	18.4	17.1	13.9	12.6	15.2	19.8
10-Jun	11.8	11.4	11.0	10.7	10.6	10.6	11.5	12.8	13.3	14.0	14.7	14.2	10.1	10.3	10.5	10.0	10.7	10.9	10.7	10.4	10.0	9.6	9.4	9.0	11.2	14.7
11-Jun	8.6	8.3	8.1	7.8	7.5	7.3	7.2	7.5	7.7	8.2	9.0	9.4	10.0	9.9	9.8	10.2	9.6	9.4	9.4	9.4	9.7	9.8	9.8	9.8	8.9	10.2
12-Jun	9.8	9.7	9.1	8.4	8.2	8.4	9.0	9.6	10.6	11.5	12.4	13.2	14.0	15.0	16.0	16.6	16.9	17.1	17.2	16.8	16.2	15.8	15.5	14.7	13.0	17.2
13-Jun	12.5	12.0	11.2	10.6	10.2	10.5	11.5	13.4	15.9	17.0	18.5	19.4	20.3	21.4	22.3	22.9	23.0	23.2	23.5	23.6	23.5	23.3	22.4	19.4	18.0	23.6
14-Jun	18.5	17.0	15.5	14.4	14.2	14.1	15.7	17.1	18.9	20.6	21.9	22.5	22.5	23.0	22.8	22.4	23.2	23.5	23.2	22.9	22.4	21.4	20.1	18.6	19.9	23.5
15-Jun	17.1	15.6	14.4	13.8	13.7	14.2	15.3	16.5	17.7	19.3	20.8	21.8	22.5	22.9	23.7	24.5	24.4	24.1	23.8	23.7	22.8	21.6	21.0	19.5	19.8	24.5
16-Jun	18.3	17.4	16.4	16.1	15.3	15.2	14.6	13.4	13.9	14.2	15.7	16.8	18.1	19.8	21.2	21.4	21.5	21.2	20.7	20.3	19.2	17.3	15.7	14.0	17.4	21.5
17-Jun	12.3	11.7	10.4	9.5	9.5	10.3	11.5	13.0	14.4	15.5	16.4	17.1	17.9	18.2	18.7	18.4	18.6	18.1	18.1	18.4	18.0	17.3	16.2	14.5	15.2	18.7
18-Jun	12.5	11.2	10.6	10.6	10.3	10.1	10.2	10.8	12.1	13.1	14.2	15.3	14.6	14.2	14.5	15.6	16.5	16.4	16.4	16.2	15.9	15.1	14.8	14.4	13.6	16.5
19-Jun	13.9	13.1	12.4	11.9	11.2	10.2	10.0	11.7	13.9	14.9	15.0	15.9	16.5	15.8	16.3	16.9	16.6	16.0	15.7	16.1	16.2	14.5	13.7	12.3	14.2	16.9
20-Jun	11.7	10.5	9.9	9.2	8.7	9.5	10.9	13.1	14.2	15.4	16.0	16.7	17.0	17.3	17.6	17.8	18.4	18.4	18.1	16.5	15.9	15.8	15.4	14.6	14.5	18.4
21-Jun	14.1	13.8	13.3	12.7	12.2	11.9	12.0	12.6	14.2	15.4	16.0	16.4	17.2	18.2	18.7	18.2	19.0	19.4	18.5	17.5	17.3	16.8	16.0	15.3	15.7	19.4
22-Jun	14.8	16.0	15.3	14.0	12.6	12.4	13.6	15.5	17.6	19.1	20.2	21.1	21.0	21.5	22.0	22.4	22.4	22.5	22.3	22.1	20.6	20.4	19.5	18.0	18.6	22.5
23-Jun	17.3	16.5	15.9	15.2	14.7	14.5	15.3	16.6	18.8	20.9	22.1	22.8	23.6	24.2	24.7	21.5	20.5	21.1	21.5	22.1	21.1	19.8	19.4	18.2	19.5	24.7
24-Jun	18.5	18.0	16.7	15.5	14.9	14.9	15.3	17.3	19.0	21.0	22.5	23.4	24.2	24.7	25.3	25.7	26.1	26.2	23.2	22.2	22.5	21.4	20.3	19.8	20.8	26.2
25-Jun	19.4	17.8	17.4	17.3	16.5	16.6	17.0	18.3	19.8	22.1	24.5	25.2	25.7	26.4	26.9	27.3	27.5	27.7	27.7	27.0	26.3	25.1	23.9	22.7	22.8	27.7
26-Jun	21.4	20.3	19.2	18.3	17.0	17.5	18.6	20.1	21.7	23.7	24.8	25.1	25.7	26.3	26.9	27.0	27.3	27.2	27.1	26.8	26.1	25.0	23.5	22.4	23.3	27.3
27-Jun	21.4	20.6	20.0	18.5	17.9	18.2	19.2	21.2	22.8	24.3	24.7	25.2	25.6	25.7	26.1	26.8	26.8	26.8	26.7	26.5	26.1	24.8	23.1	22.2	23.4	26.8
28-Jun	20.9	19.8	18.9	18.3	17.2	16.5	17.7	19.0	20.6	23.6	26.4	27.4	28.1	28.7	29.4	29.9	30.1	30.2	30.1	29.8	28.9	27.7	25.5	24.6	24.5	30.2
29-Jun	22.6	20.9	19.9	18.9	18.5	18.4	18.7	20.3	22.2	DF	26.6	27.9	28.7	29.0	29.0	29.6	29.8	29.9	29.7	28.9	26.7	24.8	24.1	22.4	24.7	29.9
30-Jun	21.8	21.2	20.5	18.3	17.8	17.9	18.5	19.5	20.3	21.2	22.2	23.9	25.0	25.2	25.9	27.3	27.4	27.6	27.4	26.7	25.8	24.3	23.1	22.8	23.0	27.6
	14.9	14.2	13.5	12.9	12.4	12.4	13.0	14.0	15.2	16.1	17.4	18.0	18.5	19.0	19.5	19.7	19.8	19.8	19.6	19.3	18.7	18.0	17.1	16.1	Diurnal Average	
	22.6	21.2	20.5	18.9	18.5	18.4	19.2	21.2	22.8	24.3	26.6	27.9	28.7	29.0	29.4	29.9	30.1	30.2	30.1	29.8	28.9	27.7	25.5	24.6	Diurnal Maximum	

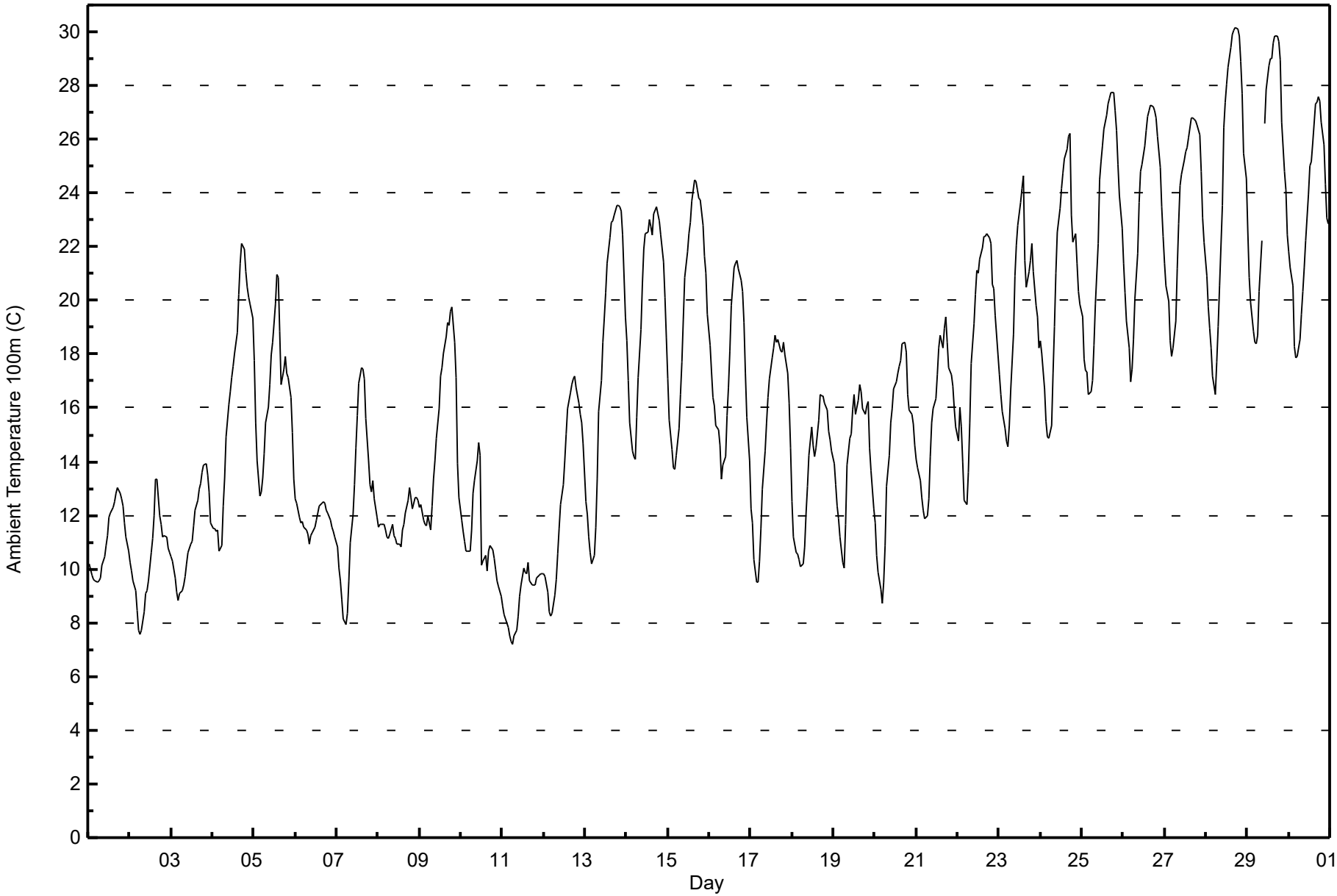
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 100m (AT100) - C

Lower Camp Met Tower - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	72	10.01	10.01
10 - 20	449	62.45	72.46
> 20	198	27.54	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Ambient Temperature 163m (AT163) - C

Lower Camp Met Tower - June 2026

Maximum Value: 29.5 C on Jun 28 18:00

Maximum Daily Average: 24.9 C on Jun 29

Minimum Value: 6.5 C on Jun 11 07:00

Minimum Daily Average: 8.2 C on Jun 11

Maximum Diurnal Average: 19.2 C at hour 18

Minimum Diurnal Average: 12.6 C at hour 6

Monthly Average: 16.29 C

Percentiles: P_1 = 7.1 P_{10} = 9.6 Q_1 = 11.5 Median = 15.7 Q_3 = 20.5 P_{90} = 24.4 P_{99} = 28.9

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-Jun	9.6	9.4	9.2	9.1	9.0	9.0	9.0	9.2	9.5	9.8	10.2	10.6	11.2	11.4	11.6	11.8	12.1	12.3	12.2	11.9	11.7	11.1	10.5	10.0	10.5	12.3
2-Jun	9.6	9.3	8.9	8.5	7.8	7.1	6.9	7.1	7.8	8.5	8.6	9.0	10.1	10.6	11.5	12.7	12.8	11.4	11.1	10.6	10.7	10.6	10.2	10.1	9.6	12.8
3-Jun	9.9	9.6	9.0	8.5	8.4	8.4	8.5	8.7	9.1	9.5	9.9	10.2	10.4	10.9	11.5	11.9	12.3	12.5	13.0	13.2	13.3	13.2	12.7	11.8	10.7	13.3
4-Jun	11.8	11.7	11.5	12.1	11.5	11.6	12.3	12.9	14.4	15.5	15.9	16.5	16.9	17.3	18.2	19.6	20.8	21.5	21.2	20.4	20.0	19.7	19.3	18.9	16.3	21.5
5-Jun	17.7	15.3	14.2	12.9	12.7	12.9	13.6	14.9	15.4	16.3	17.4	17.8	19.2	20.3	20.3	18.3	16.5	17.5	17.7	17.0	16.8	16.4	14.6	13.3	16.2	20.3
6-Jun	12.4	12.1	11.4	11.2	11.3	11.0	11.0	10.7	10.6	10.7	10.8	11.0	11.4	11.6	11.9	11.9	11.8	11.8	11.6	11.5	11.3	11.0	10.9	10.7	11.3	12.4
7-Jun	10.5	9.6	9.1	9.0	8.2	7.7	8.0	9.1	10.4	11.4	12.5	13.9	15.0	16.2	16.8	16.8	16.5	15.2	13.9	13.5	13.0	13.4	12.8	11.8	12.3	16.8
8-Jun	11.1	11.2	11.1	11.1	10.9	10.6	10.5	10.8	11.1	10.6	10.5	10.4	10.4	10.4	10.8	11.2	11.4	12.1	12.5	12.1	11.8	12.1	12.1	12.0	11.2	12.5
9-Jun	11.8	11.8	11.4	11.2	11.2	11.4	11.1	11.7	12.6	13.4	14.2	15.2	16.4	16.8	17.3	17.9	18.6	18.5	19.1	19.2	17.8	16.7	13.4	12.1	14.6	19.2
10-Jun	11.4	10.9	10.6	10.4	10.3	10.2	10.8	12.1	12.5	13.3	14.0	13.5	9.5	9.6	9.8	9.3	10.0	10.2	10.0	9.7	9.3	8.9	8.7	8.3	10.6	14.0
11-Jun	7.9	7.6	7.4	7.1	6.8	6.6	6.5	6.8	7.1	7.5	8.3	8.7	9.3	9.2	9.2	9.5	8.9	8.7	8.7	8.7	9.0	9.1	9.3	9.4	8.2	9.5
12-Jun	9.4	9.4	9.2	8.5	8.6	8.5	8.5	8.9	9.8	10.8	11.7	12.5	13.3	14.3	15.3	15.9	16.2	16.4	16.5	16.2	15.8	15.8	15.8	15.5	12.6	16.5
13-Jun	13.4	12.5	12.0	12.0	11.9	11.2	11.3	12.7	14.7	16.3	17.8	18.6	19.5	20.7	21.6	22.2	22.4	22.6	22.9	22.9	22.9	22.9	22.7	21.4	17.9	22.9
14-Jun	19.7	17.5	15.7	14.9	14.7	14.0	15.2	16.8	18.4	19.9	21.1	21.8	21.9	22.3	22.1	21.8	22.5	22.8	22.6	22.4	21.9	21.2	20.5	19.4	19.6	22.8
15-Jun	17.9	16.1	15.5	15.3	14.9	15.5	15.2	16.0	17.3	18.9	20.6	21.2	21.9	22.6	23.3	24.0	23.8	23.5	23.2	23.2	22.9	21.5	20.6	19.0	19.7	24.0
16-Jun	17.9	16.9	15.9	15.5	14.9	14.8	14.1	13.1	13.2	13.8	15.2	16.1	17.5	19.2	20.6	20.8	20.8	20.5	20.1	19.7	18.5	16.8	15.4	13.8	16.9	20.8
17-Jun	12.5	11.6	10.5	9.7	9.6	9.7	10.7	12.1	13.7	14.7	15.6	16.4	17.1	17.5	18.0	17.7	17.9	17.5	17.4	18.0	17.4	17.0	16.5	14.6	14.7	18.0
18-Jun	13.6	12.4	11.5	10.8	10.8	10.6	10.2	10.6	11.6	12.4	13.5	14.7	14.0	13.5	13.8	14.8	15.8	15.8	15.8	15.6	15.4	14.6	14.5	14.0	13.3	15.8
19-Jun	13.5	12.8	11.9	11.6	10.9	10.7	10.9	11.6	13.1	14.1	14.3	15.1	15.8	15.2	15.6	16.2	15.9	15.3	15.1	15.4	15.6	14.2	13.7	13.0	13.8	16.2
20-Jun	12.2	10.7	10.4	9.6	9.5	9.7	10.3	12.3	13.5	14.8	15.4	16.1	16.3	16.6	17.0	17.2	17.7	17.8	17.4	15.8	15.3	15.2	14.9	14.2	14.2	17.8
21-Jun	14.0	13.4	12.9	12.4	12.3	11.6	11.5	12.1	13.5	14.7	15.2	15.7	16.6	17.6	18.1	17.7	18.4	18.8	17.9	17.5	17.1	16.7	15.9	15.6	15.3	18.8
22-Jun	14.9	16.0	15.1	14.5	14.0	13.9	13.9	14.8	16.7	18.3	19.7	20.6	20.4	20.9	21.3	21.8	21.8	21.9	21.7	21.5	20.2	20.3	19.5	18.4	18.4	21.9
23-Jun	17.4	16.2	15.4	15.3	15.0	14.5	14.8	16.2	18.5	20.3	21.3	22.1	22.9	23.5	24.0	21.1	20.8	20.8	20.9	21.6	20.5	19.8	19.4	18.7	19.2	24.0
24-Jun	18.8	18.0	17.5	16.8	15.7	16.1	16.2	17.2	18.6	20.5	21.9	22.8	23.5	24.1	24.6	25.0	25.5	25.6	22.6	21.8	22.2	21.0	20.1	19.7	20.6	25.6
25-Jun	19.4	18.5	17.9	17.2	16.5	16.6	16.9	18.0	19.5	21.9	23.8	24.5	25.1	25.7	26.3	26.7	26.9	27.1	27.2	26.5	25.9	24.8	23.7	22.8	22.5	27.2
26-Jun	22.0	20.9	19.5	18.5	17.7	18.1	18.6	19.8	21.2	23.0	24.2	24.5	25.1	25.7	26.2	26.4	26.7	26.6	26.5	26.2	25.6	24.6	23.1	22.0	23.0	26.7
27-Jun	21.1	20.3	19.9	18.8	18.2	18.0	18.7	20.7	22.3	23.6	24.1	24.6	24.9	25.1	25.4	26.2	26.2	26.1	26.1	26.0	25.9	25.6	24.5	24.7	23.2	26.2
28-Jun	22.9	21.1	19.7	19.8	18.8	18.5	19.7	19.9	20.7	23.5	25.9	26.7	27.4	28.1	28.8	29.2	29.4	29.5	29.5	29.3	28.7	27.7	26.4	25.1	24.8	29.5
29-Jun	24.3	22.9	21.4	21.1	21.2	21.0	20.0	21.0	22.9	DF	25.9	27.0	27.9	28.2	28.3	28.9	29.2	29.2	28.9	28.3	26.0	24.1	23.5	22.0	24.9	29.2
30-Jun	21.8	21.6	20.6	18.9	18.6	18.3	18.1	18.7	19.8	20.5	21.1	22.7	23.9	24.3	25.1	26.5	26.6	26.9	26.7	26.3	25.5	24.8	23.5	22.9	22.7	26.9
	15.0	14.2	13.6	13.1	12.7	12.6	12.8	13.5	14.6	15.5	16.7	17.3	17.8	18.3	18.8	19.0	19.2	19.2	19.0	18.7	18.3	17.7	17.0	16.2	Diurnal Average	
	24.3	22.9	21.4	21.1	21.2	21.0	20.0	21.0	22.9	23.6	25.9	27.0	27.9	28.2	28.8	29.2	29.4	29.5	29.5	29.3	28.7	27.7	26.4	25.1	Diurnal Maximum	

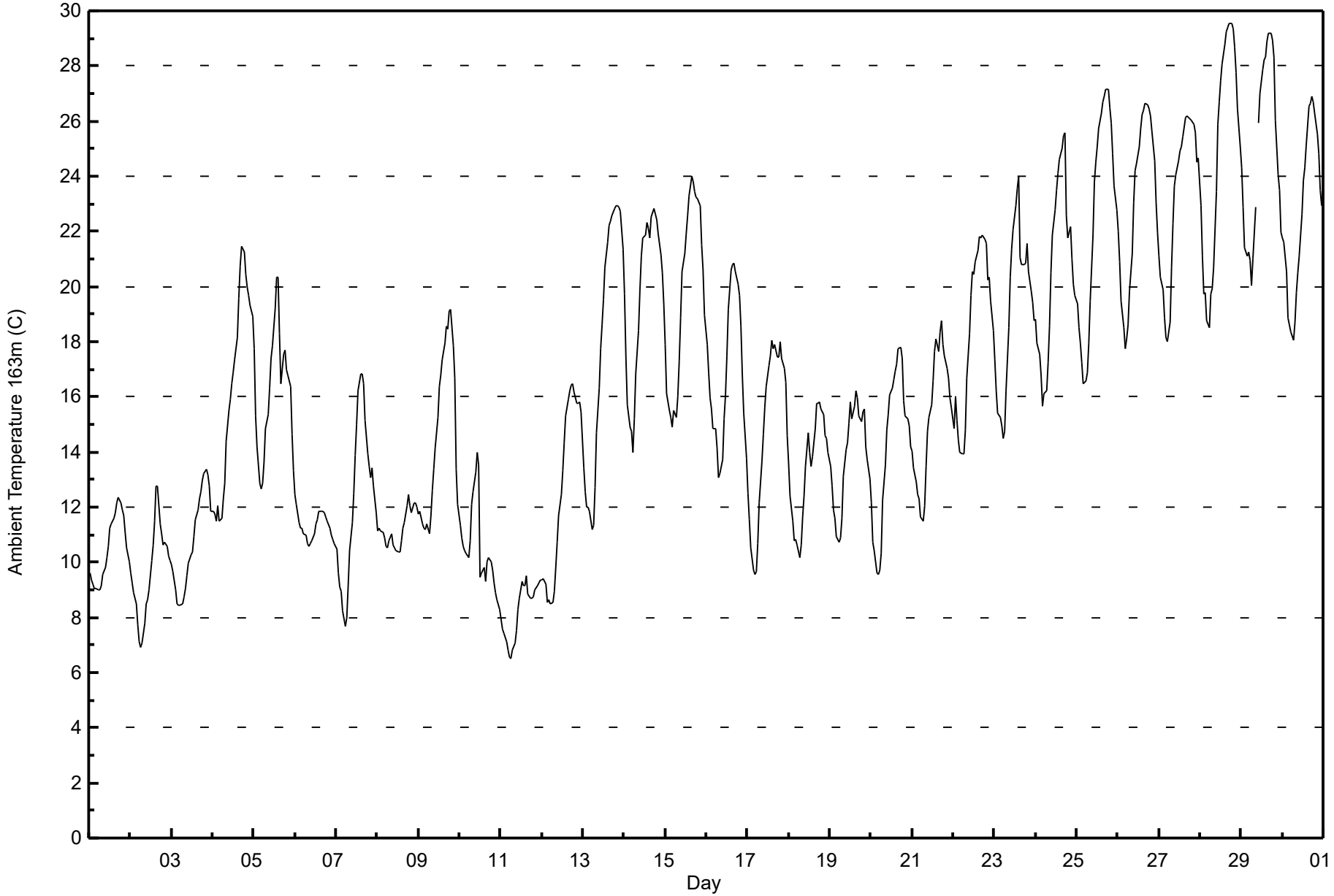
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 163m (AT163) - C

Lower Camp Met Tower - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	89	12.38	12.38
10 - 20	434	60.36	72.74
> 20	196	27.26	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 20m (RH20) - %

Lower Camp Met Tower - June 2026

Maximum Value: 97.6 % on Jun 4 01:00

Maximum Daily Average: 89.5 % on Jun 6

Minimum Value: 22.8 % on Jun 28 16:00

Minimum Daily Average: 43.8 % on Jun 26

Maximum Diurnal Average: 84.0 % at hour 5

Minimum Diurnal Average: 47.1 % at hour 18

Monthly Average: 62.52 %

Percentiles: P_1 = 25.3 P_{10} = 32.3 Q_1 = 44.4 Median = 64.3 Q_3 = 80.0 P_{90} = 90.0 P_{99} = 96.0

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-Jun	93.4	94.1	95.0	95.1	94.1	94.1	94.0	93.1	88.8	86.0	83.3	79.7	75.6	74.9	73.1	71.8	69.4	67.9	69.4	71.0	71.0	72.5	72.7	73.3	81.4	95.1
2-Jun	74.8	75.8	76.4	76.9	81.6	88.2	88.4	87.1	83.1	79.2	83.5	87.1	81.4	78.3	71.2	63.3	65.9	75.7	77.0	80.0	81.5	77.1	80.1	81.8	79.0	88.4
3-Jun	83.7	79.9	81.7	85.5	88.8	84.8	82.5	81.3	80.2	76.4	74.2	74.2	75.5	73.7	72.0	72.0	70.5	70.5	70.4	70.7	78.7	91.5	95.9	97.3	79.7	97.3
4-Jun	97.6	97.3	92.9	93.6	93.7	91.0	85.8	79.1	73.9	69.5	67.8	64.9	62.1	59.3	55.5	51.4	47.0	44.9	45.5	46.6	49.8	55.9	58.2	61.7	68.5	97.6
5-Jun	66.3	72.5	80.2	83.2	81.8	78.7	73.2	66.7	67.1	61.7	54.4	50.9	37.3	36.6	35.5	50.9	60.0	59.3	55.7	57.3	64.1	66.8	70.9	81.8	63.0	83.2
6-Jun	89.0	90.5	94.0	95.4	94.8	90.9	90.2	90.4	90.9	91.3	90.5	92.4	91.9	89.4	89.5	88.4	85.9	84.7	85.4	86.4	87.9	85.8	86.1	87.0	89.5	95.4
7-Jun	86.9	88.2	90.6	91.4	89.8	85.8	83.2	80.3	76.8	72.5	68.8	61.9	56.8	52.1	52.7	58.5	62.8	71.3	90.6	91.3	93.2	96.3	95.2	93.1	78.8	96.3
8-Jun	94.4	94.6	94.1	94.5	94.1	94.0	94.4	95.4	92.9	92.0	92.0	89.5	88.0	87.9	89.4	88.4	87.6	80.0	77.8	78.9	78.9	75.6	74.0	74.3	87.6	95.4
9-Jun	75.2	73.4	74.6	74.2	74.2	70.8	74.8	71.8	67.3	65.3	62.2	56.9	51.4	50.6	46.8	47.9	48.3	48.0	46.6	47.3	56.3	67.9	81.9	88.0	63.4	88.0
10-Jun	90.9	90.3	89.7	91.6	90.6	90.0	82.0	68.7	64.6	62.6	60.7	65.6	88.4	82.8	80.8	82.3	72.4	69.6	69.3	68.8	70.7	74.8	76.8	78.7	77.6	91.6
11-Jun	78.8	77.7	76.5	78.9	82.0	83.8	84.2	82.1	79.9	77.5	71.9	70.0	66.9	70.5	71.8	72.2	76.4	76.8	76.4	79.1	77.7	78.7	79.6	80.7	77.1	84.2
12-Jun	80.0	81.6	84.5	86.2	89.2	82.7	74.2	66.1	58.4	49.6	47.3	43.7	41.6	37.9	35.7	34.2	32.3	32.9	34.3	38.4	44.0	47.4	64.3	80.1	56.9	89.2
13-Jun	87.5	92.3	92.7	91.3	92.1	81.0	68.0	59.6	52.0	41.8	36.3	33.6	31.5	29.8	28.6	28.4	29.0	29.4	28.1	28.4	30.0	35.4	42.6	49.1	50.8	92.7
14-Jun	58.2	64.3	63.3	58.4	58.8	57.1	53.6	49.5	41.6	37.3	34.3	33.9	35.3	32.6	33.4	34.4	30.3	28.3	30.0	31.8	33.5	40.4	63.4	77.0	45.0	77.0
15-Jun	79.7	83.1	87.6	89.2	84.4	64.4	62.9	61.5	53.9	44.9	36.3	34.5	33.7	32.3	30.2	28.4	29.1	30.2	33.0	35.6	41.9	43.8	44.4	37.2	50.1	89.2
16-Jun	35.8	56.0	64.3	67.0	64.9	53.6	51.1	64.2	58.2	57.6	56.9	61.1	54.9	44.9	31.8	28.5	27.5	29.3	27.8	27.2	31.7	36.3	40.9	49.9	46.7	67.0
17-Jun	57.5	70.7	72.3	74.4	77.3	72.6	68.9	61.3	52.7	45.6	40.0	37.8	35.2	34.8	33.0	34.4	34.5	35.0	37.3	36.5	38.5	49.2	70.6	75.7	51.9	77.3
18-Jun	82.6	80.8	82.6	86.3	87.1	84.5	83.4	83.0	83.4	74.2	62.4	58.1	64.3	65.2	64.2	56.7	50.7	49.3	49.7	53.3	55.5	58.6	59.7	67.9	68.5	87.1
19-Jun	70.8	74.7	90.5	90.1	96.0	96.0	89.9	74.7	62.1	56.4	53.9	50.6	47.4	54.3	53.1	49.6	51.7	56.0	56.1	56.6	53.0	62.3	70.9	75.1	66.3	96.0
20-Jun	81.9	88.7	92.8	92.4	96.1	90.7	82.0	72.0	65.2	55.4	53.8	51.3	48.6	47.5	44.5	46.6	44.6	42.9	47.1	58.2	60.8	62.1	72.0	72.6	65.4	96.1
21-Jun	75.5	78.5	82.9	89.1	91.7	93.3	93.6	91.5	79.0	70.2	65.9	64.7	62.9	59.4	54.0	57.0	57.1	53.2	61.6	72.2	68.3	66.5	72.3	86.1	72.8	93.6
22-Jun	82.3	88.2	93.1	96.0	94.6	93.3	83.3	69.2	62.1	51.1	41.9	37.6	39.5	34.7	31.7	30.3	31.6	34.0	35.5	37.1	44.6	48.6	56.5	64.6	57.6	96.0
23-Jun	73.8	79.1	82.8	85.0	82.8	79.1	74.3	66.8	61.6	50.0	37.9	33.7	32.1	30.8	29.7	44.2	61.9	49.7	44.2	42.7	49.4	61.4	66.6	69.8	57.9	85.0
24-Jun	78.5	79.9	81.9	81.8	80.4	76.3	75.2	66.1	58.3	53.1	43.5	40.4	37.1	34.8	31.7	31.5	30.6	30.6	40.3	45.1	40.5	44.1	51.6	56.6	53.7	81.9
25-Jun	63.1	70.6	75.0	77.0	81.8	78.5	71.8	59.8	54.7	50.6	37.2	33.1	33.6	30.8	27.7	26.7	27.3	27.1	26.9	31.3	36.2	41.5	42.4	46.3	48.0	81.8
26-Jun	51.9	57.1	60.1	65.7	69.3	66.4	62.0	56.1	50.1	41.4	34.0	33.0	31.3	29.3	27.3	27.8	28.2	29.4	30.7	32.8	36.1	39.7	43.1	48.2	43.8	69.3
27-Jun	50.8	51.9	55.0	59.7	60.7	60.3	64.4	56.4	51.2	44.3	42.0	41.2	40.2	40.2	38.6	35.1	34.7	32.5	34.3	37.1	44.0	46.7	50.1	52.4	46.8	64.4
28-Jun	53.7	76.7	85.0	87.6	85.6	82.4	79.4	70.7	60.4	52.7	36.9	28.9	27.3	25.6	23.7	22.8	23.1	23.0	23.4	24.8	30.1	36.1	54.5	63.5	49.1	87.6
29-Jun	69.4	73.1	79.5	78.3	84.1	79.6	69.3	59.3	55.9	DF	40.1	34.9	29.7	27.6	29.4	27.0	26.9	25.8	27.9	31.4	40.2	45.0	54.8	54.9	49.7	84.1
30-Jun	57.6	60.8	67.4	71.4	76.2	76.8	70.6	62.6	60.2	57.0	53.2	46.0	41.7	40.7	40.3	33.5	29.6	26.2	23.2	25.2	26.9	33.5	36.9	42.7	48.3	76.8
	74.1	78.1	81.3	82.9	84.0	80.7	77.0	71.5	66.2	60.9	55.4	53.1	51.4	49.6	47.6	47.5	47.6	47.1	48.5	50.8	53.8	58.0	64.3	68.9	Diurnal Average	
	97.6	97.3	95.0	96.0	96.1	96.0	94.4	95.4	92.9	92.0	92.0	92.4	91.9	89.4	89.5	88.4	87.6	84.7	90.6	91.3	93.2	96.3	95.9	97.3	Diurnal Maximum	

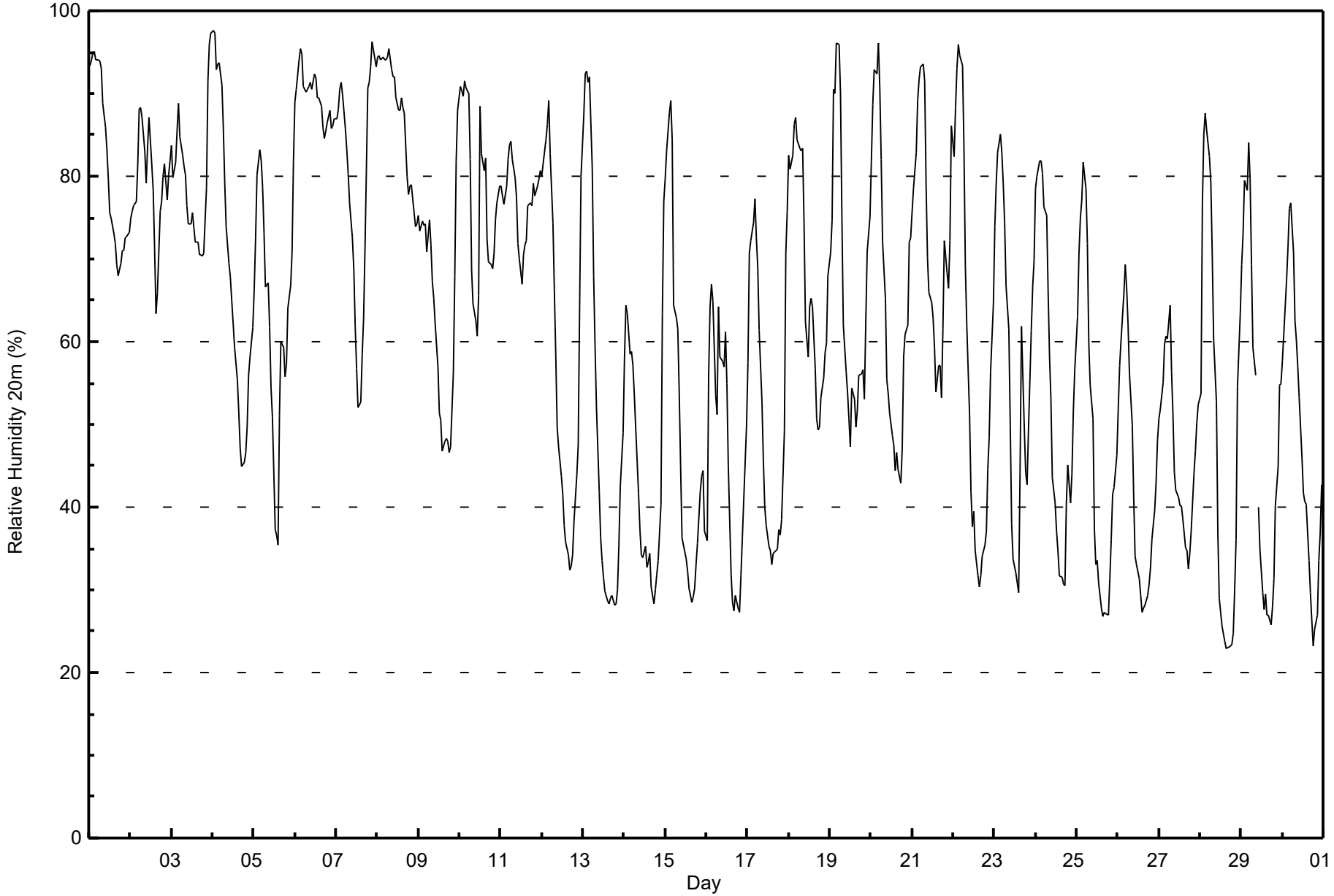
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 20m (RH20) - %

Lower Camp Met Tower - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	143	19.89	19.89
40 - 60	173	24.06	43.95
60 - 80	221	30.74	74.69
80 - 100	182	25.31	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 45m (RH45) - %

Lower Camp Met Tower - June 2026

Maximum Value: 97.7 % on Jun 20 05:00

Maximum Daily Average: 89.7 % on Jun 6

Minimum Value: 21.1 % on Jun 30 19:00

Minimum Daily Average: 42.3 % on Jun 14

Maximum Diurnal Average: 82.7 % at hour 5

Minimum Diurnal Average: 46.6 % at hour 18

Monthly Average: 61.55 %

Percentiles: P_1 = 23.2 P_{10} = 31.6 Q_1 = 43.4 Median = 63.3 Q_3 = 79.0 P_{90} = 89.1 P_{99} = 95.8

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	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	94.3	95.1	96.3	96.3	94.8	94.8	94.7	93.6	89.3	86.8	84.5	81.1	76.9	76.1	74.0	72.7	70.2	68.5	70.1	71.6	71.5	73.0	73.4	73.9	82.2	96.3
2-Jun	75.6	76.6	77.2	77.9	82.6	88.6	88.3	87.3	83.6	79.4	83.0	87.4	80.5	76.5	70.8	63.2	65.9	76.4	77.6	81.0	82.3	76.9	80.2	79.8	79.1	88.6
3-Jun	78.3	77.4	82.1	86.8	90.2	86.4	84.5	83.2	81.8	77.8	75.5	75.5	76.9	74.9	73.4	73.2	71.7	71.4	71.3	71.2	73.9	83.9	89.2	90.4	79.2	90.4
4-Jun	94.6	93.0	92.7	93.2	95.2	92.8	86.6	81.5	75.8	70.7	69.0	66.1	63.2	60.3	56.4	52.2	47.7	45.3	45.8	46.7	49.0	51.0	52.2	57.8	68.3	95.2
5-Jun	64.8	72.2	80.3	84.1	82.8	79.9	74.7	67.7	68.2	62.8	54.8	51.0	37.1	36.7	33.7	50.5	59.8	55.3	50.8	55.4	60.1	64.7	69.4	81.0	62.4	84.1
6-Jun	88.0	89.8	94.2	95.7	95.7	90.7	90.1	90.3	90.1	90.8	90.4	92.2	91.9	89.5	89.6	88.9	86.4	85.8	86.5	87.3	88.9	86.7	86.6	87.0	89.7	95.7
7-Jun	87.2	88.9	91.2	93.0	91.6	87.5	85.5	82.2	78.3	73.9	69.7	63.4	57.9	52.9	53.1	58.6	62.8	70.4	88.8	90.3	93.7	97.0	94.9	93.7	79.4	97.0
8-Jun	95.2	95.7	95.5	96.1	95.6	95.8	96.1	96.6	93.4	92.2	92.1	89.2	87.2	88.8	87.0	85.9	84.8	78.3	77.4	77.2	76.9	74.7	74.3	74.7	87.5	96.6
9-Jun	75.8	73.7	75.0	74.6	74.6	71.2	75.7	73.2	68.5	66.2	63.1	58.1	52.4	51.2	47.6	48.6	47.7	47.5	46.5	47.7	53.3	58.7	81.1	88.7	63.4	88.7
10-Jun	91.8	91.6	90.9	92.5	91.0	91.4	83.7	70.5	66.0	64.4	61.8	65.9	89.8	84.5	82.0	83.5	72.9	70.8	70.1	69.4	71.4	75.5	77.7	79.8	78.7	92.5
11-Jun	80.0	78.7	77.5	79.9	83.2	85.3	85.9	83.6	81.3	78.8	73.2	71.1	68.2	71.7	73.1	73.5	77.6	78.0	77.5	80.2	78.6	79.4	80.0	80.8	78.2	85.9
12-Jun	80.2	80.7	83.4	85.0	88.1	82.8	74.3	66.4	59.0	49.9	47.6	43.7	41.5	37.7	35.4	33.8	31.6	32.0	33.4	37.0	42.2	45.7	53.5	65.2	55.4	88.1
13-Jun	68.0	73.3	79.4	78.7	78.8	75.6	67.1	61.2	52.2	42.4	36.7	33.8	32.1	30.0	28.8	28.3	28.5	28.7	27.5	27.5	28.8	31.2	38.3	43.2	46.7	79.4
14-Jun	48.9	54.1	56.1	57.3	57.6	56.1	54.2	50.8	42.2	37.3	34.2	33.5	34.7	32.6	32.7	33.6	29.8	27.7	28.8	30.8	31.4	35.9	46.5	67.5	42.3	67.5
15-Jun	71.3	74.8	78.9	80.2	79.0	63.6	62.5	61.9	53.9	45.4	36.7	34.9	34.1	32.5	30.5	28.1	28.8	29.1	31.3	32.6	38.0	40.1	34.2	32.1	47.3	80.2
16-Jun	35.0	56.3	64.4	68.1	65.6	53.3	50.7	63.3	58.3	57.8	57.5	62.3	56.1	45.5	31.4	27.8	26.6	28.6	26.8	26.1	30.4	34.7	38.9	47.9	46.4	68.1
17-Jun	55.8	65.7	72.3	73.7	77.9	73.4	70.2	62.9	53.6	46.0	39.8	37.5	34.8	34.2	32.7	33.4	33.7	33.6	35.9	35.0	35.6	38.6	53.4	69.3	50.0	77.9
18-Jun	74.7	79.0	80.5	81.1	83.5	83.9	82.1	83.6	83.8	75.1	63.7	57.9	64.6	66.1	64.7	57.0	50.9	49.2	49.4	52.4	54.3	56.6	58.0	65.1	67.4	83.9
19-Jun	69.0	72.0	77.8	76.3	85.3	92.4	88.4	75.0	64.0	57.3	54.0	51.3	48.0	54.8	52.5	50.5	52.3	56.8	56.1	56.7	52.5	60.7	69.7	73.9	64.5	92.4
20-Jun	80.5	89.1	93.7	93.6	97.7	92.1	83.5	73.9	66.9	56.7	54.5	52.2	49.2	48.3	45.5	47.4	45.2	43.0	47.1	58.5	61.3	61.0	67.4	72.0	65.8	97.7
21-Jun	75.8	78.8	83.1	88.8	91.1	93.6	94.3	92.4	81.0	71.7	66.9	65.2	63.6	60.3	53.9	57.5	57.7	53.2	58.0	68.5	66.2	64.2	70.1	79.3	72.3	94.3
22-Jun	79.5	80.2	90.8	95.3	93.3	93.3	84.7	71.4	63.6	52.2	42.2	38.1	39.4	34.9	31.6	30.1	31.7	33.9	34.1	35.5	43.5	46.2	52.6	58.4	56.5	95.3
23-Jun	61.4	69.9	79.4	84.3	82.7	79.4	72.5	66.9	62.0	50.2	38.4	34.0	32.1	30.9	29.8	43.3	53.5	48.5	43.6	41.9	48.0	57.9	63.3	66.8	55.9	84.3
24-Jun	73.0	72.8	81.4	80.7	80.5	77.4	75.9	66.5	59.3	53.4	44.0	40.8	37.4	35.0	31.9	31.6	30.7	30.4	40.2	44.2	39.2	43.2	50.5	55.3	53.1	81.4
25-Jun	61.7	69.6	73.9	77.1	82.0	78.2	71.4	59.7	55.3	51.1	37.4	33.3	33.8	30.9	27.6	26.5	26.9	26.3	25.7	30.5	34.9	39.7	40.8	44.6	47.4	82.0
26-Jun	50.2	55.1	57.7	64.6	68.1	66.5	62.2	56.4	50.6	41.5	33.9	32.7	31.2	29.0	26.9	27.3	27.5	28.7	30.0	32.1	35.2	38.8	42.2	46.6	43.1	68.1
27-Jun	50.1	51.0	53.4	58.5	60.3	60.5	61.3	55.2	51.1	44.0	41.5	41.2	39.8	39.2	38.0	34.2	33.5	30.3	32.7	35.2	38.8	42.0	46.9	47.7	45.3	61.3
28-Jun	50.0	59.7	74.7	78.9	83.9	82.1	78.6	71.4	61.9	53.0	35.3	28.3	26.7	24.9	23.0	21.7	21.8	21.8	22.1	23.0	26.6	31.6	37.1	50.1	45.3	83.9
29-Jun	55.2	62.1	69.4	68.5	78.6	79.7	68.3	61.8	57.5	DF	39.7	34.3	28.6	26.4	28.3	25.8	25.8	24.7	26.4	29.4	38.3	43.6	48.3	52.6	46.7	79.7
30-Jun	56.0	58.7	62.3	68.0	70.4	76.4	70.5	62.7	58.4	56.1	52.6	44.8	41.4	40.0	38.4	32.2	27.9	24.3	21.1	22.8	24.4	30.7	34.7	36.7	46.3	76.4
	70.7	74.5	78.9	81.0	82.7	80.8	77.3	72.4	67.0	61.5	55.8	53.4	51.7	49.9	47.5	47.4	47.1	46.6	47.8	49.9	52.3	55.5	60.2	65.4	Diurnal Average	
	95.2	95.7	96.3	96.3	97.7	95.8	96.1	96.6	93.4	92.2	92.1	92.2	91.9	89.5	89.6	88.9	86.4	85.8	88.8	90.3	93.7	97.0	94.9	93.7	Diurnal Maximum	

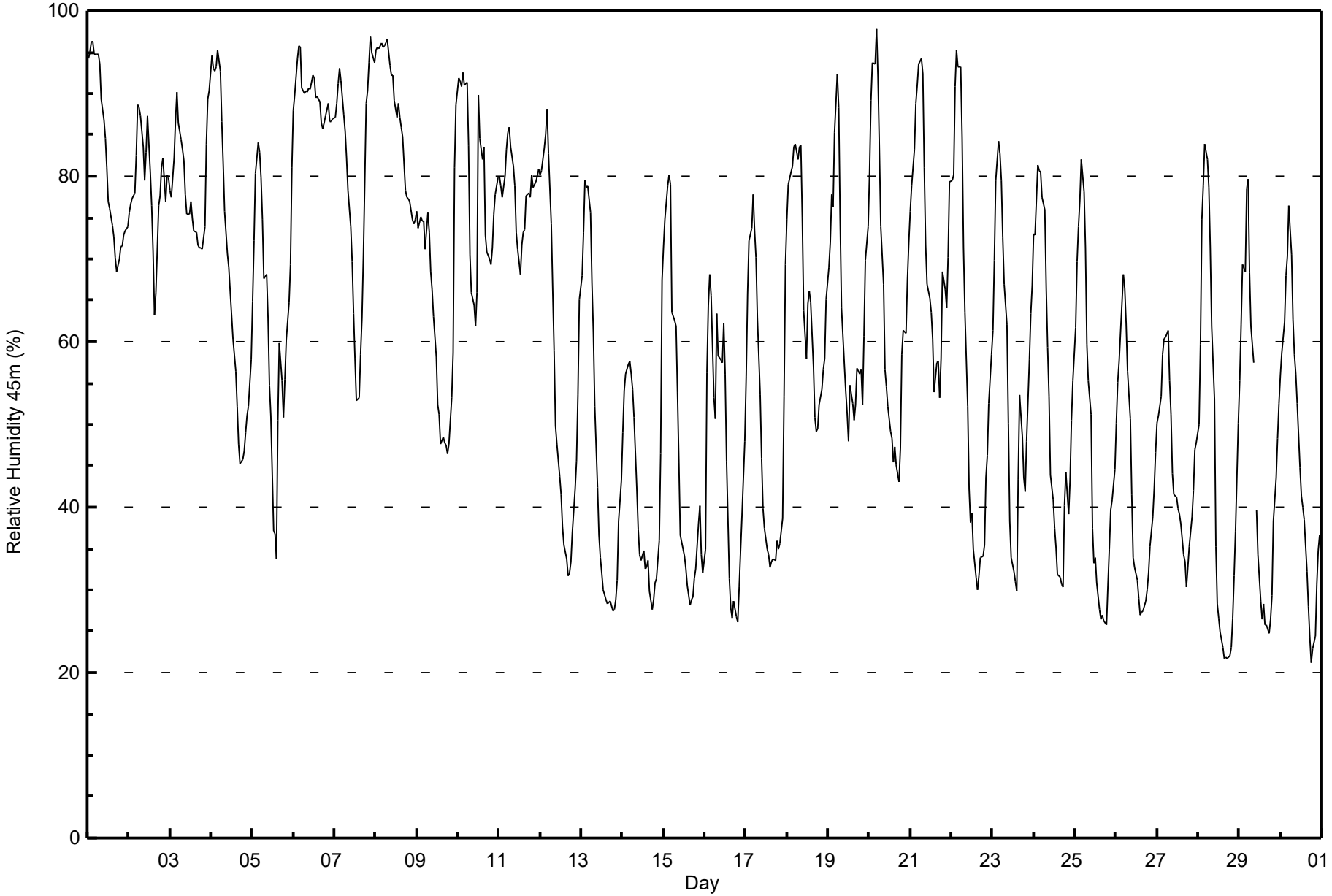
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 45m (RH45) - %

Lower Camp Met Tower - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	160	22.25	22.25
40 - 60	170	23.64	45.90
60 - 80	223	31.02	76.91
80 - 100	166	23.09	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 100m (RH100) - %

Lower Camp Met Tower - June 2026

Maximum Value: 97.3 % on Jun 8 07:00

Maximum Daily Average: 90.4 % on Jun 6

Minimum Value: 20.6 % on Jun 30 20:00

Minimum Daily Average: 39.8 % on Jun 14

Maximum Diurnal Average: 78.4 % at hour 5

Minimum Diurnal Average: 46.7 % at hour 18

Monthly Average: 60.27 %

Percentiles: P_1 = 23.2 P_{10} = 31.6 Q_1 = 42.8 Median = 60.6 Q_3 = 77.3 P_{90} = 87.7 P_{99} = 96.4

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-Jun	94.2	95.0	96.1	96.4	94.9	94.9	94.7	93.3	89.3	87.5	85.6	82.0	77.7	77.0	74.9	73.5	71.0	69.3	70.8	72.5	72.2	73.7	74.1	75.1	82.7	96.4
2-Jun	76.8	77.8	78.3	79.1	83.8	88.4	87.9	87.2	83.6	79.6	82.8	86.5	78.9	74.7	69.7	63.0	66.4	77.0	78.4	82.5	82.4	76.7	79.3	77.8	79.1	88.4
3-Jun	77.0	76.2	82.7	87.9	89.7	87.5	86.2	85.1	83.6	79.3	76.9	77.0	78.5	76.5	74.9	74.5	73.3	72.8	72.6	72.7	74.2	77.1	79.9	84.6	79.2	89.7
4-Jun	85.8	88.1	89.1	88.0	91.6	91.2	86.0	82.8	77.1	72.1	70.7	67.7	64.8	61.8	57.8	53.5	48.8	46.4	46.9	47.6	48.6	48.2	49.5	51.6	67.3	91.6
5-Jun	59.3	72.5	79.7	85.0	83.7	81.4	75.9	68.5	68.7	63.2	54.9	51.8	37.0	37.4	33.1	51.1	59.1	45.7	45.7	52.7	56.5	62.9	67.7	80.2	61.4	85.0
6-Jun	86.8	89.4	94.4	95.7	96.1	93.1	91.7	91.4	94.2	92.5	92.0	93.5	93.3	90.1	89.5	89.4	87.1	86.4	87.0	87.4	89.2	86.8	86.9	86.9	90.4	96.1
7-Jun	85.5	89.1	91.1	92.6	92.0	88.2	87.0	83.6	79.5	75.2	70.6	64.4	59.4	53.8	54.2	59.4	63.2	69.6	78.1	87.3	92.3	86.6	89.2	92.9	78.5	92.9
8-Jun	95.5	95.7	96.5	96.9	96.6	97.0	97.3	96.9	93.1	92.2	92.2	91.3	90.8	92.0	87.5	87.2	85.9	79.9	77.6	79.0	80.5	75.5	74.6	75.3	88.6	97.3
9-Jun	76.6	74.3	75.4	74.9	74.7	71.9	76.2	74.8	70.1	67.6	64.5	59.7	54.0	52.5	49.0	49.6	48.1	48.1	47.2	48.1	52.5	57.5	82.6	89.9	64.2	89.9
10-Jun	92.4	92.6	91.7	92.3	91.2	92.1	85.1	71.4	67.8	66.0	63.1	67.4	91.1	85.8	83.1	84.6	73.0	71.8	70.9	70.2	72.4	76.5	79.0	81.4	79.7	92.6
11-Jun	81.3	79.9	78.6	81.3	84.7	87.2	87.7	85.2	82.8	80.3	74.4	72.5	69.7	72.9	74.3	74.9	79.3	79.2	78.8	81.6	80.0	80.4	80.8	81.0	79.5	87.7
12-Jun	80.1	78.5	78.1	79.5	78.2	77.5	73.4	66.8	59.9	50.4	48.3	44.0	42.0	37.9	35.7	33.8	31.5	32.0	33.4	36.1	40.4	43.6	45.0	46.6	53.0	80.1
13-Jun	55.6	63.2	71.4	72.9	75.1	73.0	67.3	63.2	51.9	43.5	37.8	35.1	33.2	31.0	30.0	29.1	29.3	29.5	28.0	27.7	27.7	28.0	30.6	41.1	44.8	75.1
14-Jun	40.5	44.7	52.0	55.3	54.1	56.3	54.6	50.4	43.1	38.4	35.0	33.9	34.9	33.1	33.0	33.6	30.3	27.9	28.5	30.5	30.3	33.9	37.8	43.6	39.8	56.3
15-Jun	50.2	56.4	62.1	66.3	64.0	60.5	61.5	62.7	53.2	44.2	37.1	35.8	35.2	33.1	30.7	28.8	29.2	29.6	30.1	28.9	33.6	33.7	28.6	31.1	42.8	66.3
16-Jun	35.2	58.6	66.7	72.7	67.4	53.9	51.1	62.5	59.5	58.9	59.5	64.3	57.3	46.6	31.4	27.9	26.8	28.8	26.9	26.2	30.3	34.4	38.1	47.0	47.2	72.7
17-Jun	54.6	58.1	69.9	73.9	78.1	75.3	71.7	64.8	54.8	46.7	40.8	37.8	35.2	34.6	33.2	33.5	33.6	33.6	35.3	34.2	32.8	33.1	37.7	45.5	47.9	78.1
18-Jun	56.9	65.9	71.5	73.5	77.1	78.0	79.6	83.9	78.6	73.4	65.4	57.2	65.1	67.0	65.6	57.8	51.6	49.5	49.9	52.6	53.7	54.5	56.8	66.7	64.6	83.9
19-Jun	69.4	71.6	73.8	74.0	78.0	81.1	80.6	73.3	65.1	58.8	54.9	52.5	48.9	55.6	53.1	51.6	53.2	58.0	56.9	57.1	52.4	59.4	66.6	74.0	63.3	81.1
20-Jun	77.8	87.0	90.8	93.4	97.1	92.5	84.7	75.2	68.0	57.4	55.2	52.6	49.8	49.0	46.1	48.1	45.7	43.6	48.0	59.7	62.3	61.2	65.4	73.0	66.0	97.1
21-Jun	75.6	79.4	81.7	86.4	91.1	93.6	94.4	92.0	82.4	73.0	68.2	65.8	64.0	60.9	54.1	57.4	58.2	53.6	55.7	64.5	63.9	62.7	67.4	72.7	71.6	94.4
22-Jun	76.3	68.2	72.9	77.8	85.2	84.8	80.3	73.6	63.4	53.1	43.0	39.0	39.3	35.4	32.4	30.4	32.1	34.5	34.8	35.6	43.4	44.3	48.0	53.9	53.4	85.2
23-Jun	56.9	62.5	66.1	67.5	70.0	72.9	68.1	65.3	57.6	47.9	39.4	35.0	33.1	31.8	30.6	42.8	43.9	46.3	43.8	41.9	47.3	54.0	55.9	60.6	51.7	72.9
24-Jun	57.3	58.3	65.8	71.3	73.5	74.5	73.8	65.0	59.8	53.6	44.9	41.8	38.4	35.9	32.8	32.5	31.7	31.2	40.9	43.6	37.8	43.0	49.9	54.1	50.5	74.5
25-Jun	56.7	64.8	64.7	64.5	68.6	66.4	64.7	59.9	55.1	50.3	37.9	34.2	34.7	31.6	28.2	27.1	27.3	26.5	25.7	30.6	33.3	37.0	38.9	42.0	44.6	68.6
26-Jun	45.1	49.7	55.0	59.7	65.3	64.0	60.1	56.0	51.3	41.8	34.5	33.1	31.7	29.6	27.6	27.8	27.8	29.0	30.4	32.3	35.1	38.5	42.3	46.4	42.3	65.3
27-Jun	49.6	51.1	52.7	57.2	60.1	61.1	61.1	56.4	53.5	44.1	42.2	41.9	40.3	39.6	38.6	34.7	33.3	29.9	32.4	34.3	34.3	37.5	40.9	43.3	44.6	61.1
28-Jun	47.3	51.5	54.7	58.5	64.8	70.6	63.5	66.7	63.4	52.9	34.0	28.7	27.2	25.3	23.5	22.2	22.4	22.3	22.5	23.2	25.2	27.5	32.5	37.7	40.3	70.6
29-Jun	45.5	50.4	53.4	57.7	60.1	60.9	60.9	60.6	57.2	DF	40.3	34.6	28.8	26.6	28.7	26.2	25.7	25.1	26.7	29.3	38.5	44.8	47.4	54.0	42.8	60.9
30-Jun	55.7	56.4	59.8	67.1	67.2	68.6	72.3	61.3	57.5	57.8	55.1	46.1	42.8	41.4	38.7	32.4	28.0	24.2	20.9	20.6	22.1	27.8	32.9	35.2	45.5	72.3
	66.6	70.2	73.9	76.6	78.4	77.9	76.0	72.7	67.5	62.1	56.7	54.2	52.6	50.7	48.1	47.9	47.2	46.7	47.5	49.7	51.5	53.4	56.9	61.5	Diurnal Average	
	95.5	95.7	96.5	96.9	97.1	97.0	97.3	96.9	94.2	92.5	92.2	93.5	93.3	92.0	89.5	89.4	87.1	86.4	87.0	87.4	92.3	86.8	89.2	92.9	Diurnal Maximum	

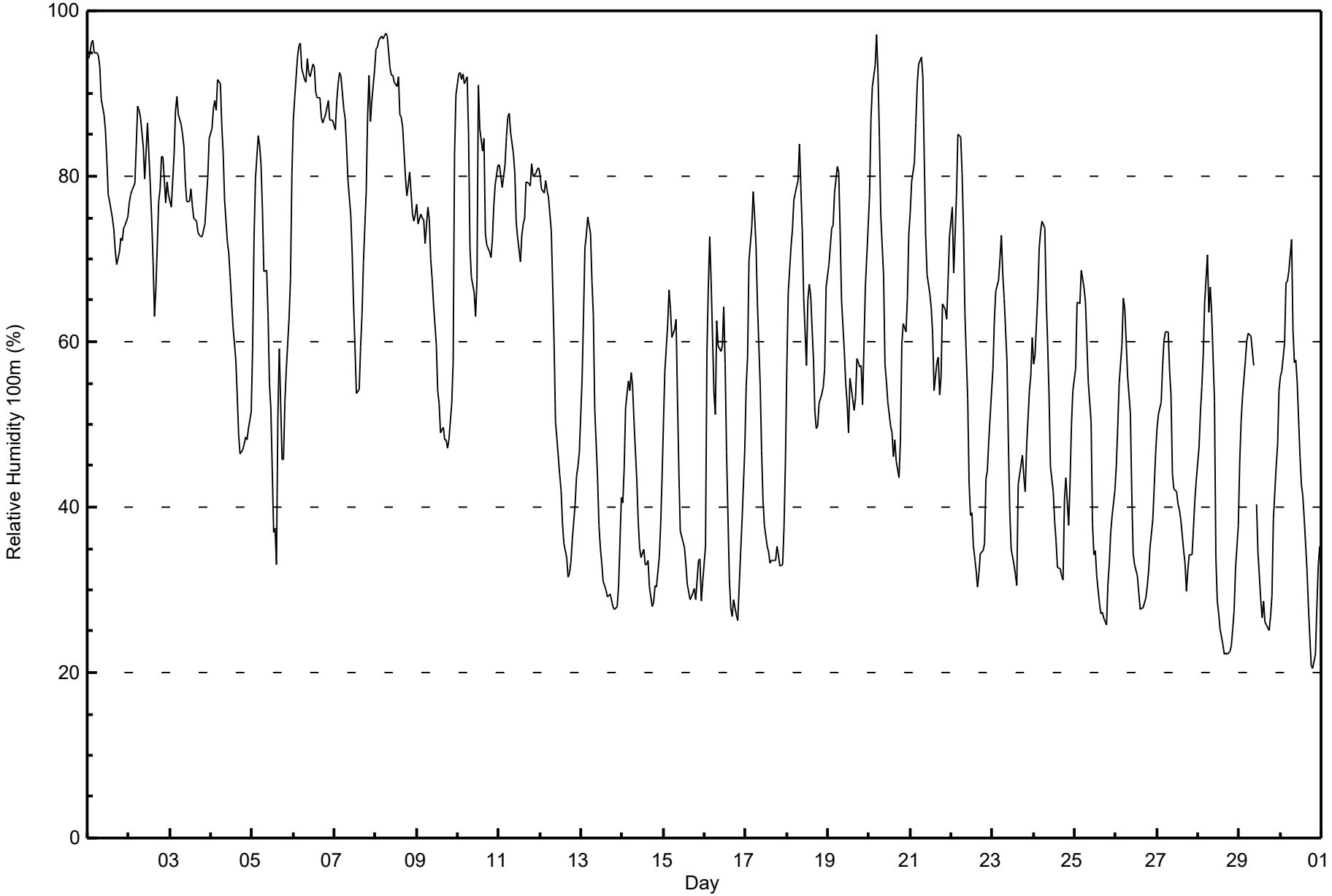
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 100m (RH100) - %

Lower Camp Met Tower - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	162	22.53	22.53
40 - 60	192	26.70	49.24
60 - 80	222	30.88	80.11
80 - 100	143	19.89	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 163m (RH163) - %

Lower Camp Met Tower - June 2026

Maximum Value: 98.3 % on Jun 8 07:00

Maximum Daily Average: 90.2 % on Jun 6

Minimum Value: 18.3 % on Jun 30 20:00

Minimum Daily Average: 36.2 % on Jun 28

Maximum Diurnal Average: 73.5 % at hour 6

Minimum Diurnal Average: 46.5 % at hour 18

Monthly Average: 58.76 %

Percentiles: P_1 = 22.9 P_{10} = 31.1 Q_1 = 40.9 Median = 57.8 Q_3 = 76.0 P_{90} = 87.3 P_{99} = 96.2

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-Jun	94.0	94.8	96.0	96.4	94.9	94.9	94.5	93.2	89.6	88.1	86.4	82.7	78.5	77.6	75.4	74.0	71.4	69.9	71.4	72.9	72.5	74.0	74.4	75.7	83.0	96.4
2-Jun	77.5	78.5	78.9	79.9	84.5	88.2	88.2	87.6	83.8	79.6	81.8	83.8	76.2	72.4	67.5	62.1	66.0	76.8	78.8	82.8	81.1	76.5	78.3	77.1	78.7	88.2
3-Jun	76.1	77.1	83.8	89.0	88.0	88.4	87.5	86.6	85.0	80.4	78.0	78.1	79.6	77.5	75.9	75.5	74.2	73.7	73.3	73.5	74.8	76.4	78.2	82.2	79.7	89.0
4-Jun	83.5	85.7	86.8	84.0	86.5	86.5	84.2	83.3	77.6	72.9	71.5	68.5	65.4	62.4	58.3	53.9	49.2	46.7	47.2	47.8	47.8	47.5	49.1	51.1	66.6	86.8
5-Jun	59.9	74.1	78.3	82.5	82.5	81.3	76.6	68.1	68.7	62.9	54.3	51.9	37.1	37.4	33.1	50.4	56.9	40.5	41.9	48.5	53.3	56.2	65.8	74.6	59.9	82.5
6-Jun	84.0	88.7	94.5	96.0	96.3	92.3	90.7	91.6	91.7	92.1	93.0	93.5	92.2	89.6	88.8	89.7	87.6	87.0	86.9	87.3	89.5	87.5	87.3	87.1	90.2	96.3
7-Jun	84.8	88.4	91.2	91.6	90.4	88.1	87.8	84.3	80.1	76.1	71.2	64.4	59.9	53.9	54.3	59.6	63.3	68.9	73.8	78.4	87.2	77.3	81.6	88.9	76.9	91.6
8-Jun	94.4	94.8	97.2	97.7	97.7	98.0	98.3	97.4	93.3	92.2	92.4	89.8	90.0	91.6	88.3	86.1	85.8	78.6	77.3	79.3	78.5	74.8	74.2	75.3	88.5	98.3
9-Jun	76.5	74.2	74.6	73.9	73.8	71.7	75.1	75.3	70.7	68.1	65.1	60.1	54.4	52.7	49.3	49.9	48.4	48.0	47.0	48.2	52.0	56.0	84.1	90.7	64.2	90.7
10-Jun	92.3	92.3	90.9	89.9	91.4	91.3	85.6	72.3	68.7	67.0	63.8	67.8	92.1	87.1	84.1	84.9	73.5	72.4	71.5	70.7	73.1	77.0	79.8	82.5	80.1	92.3
11-Jun	82.1	80.8	79.5	82.3	85.8	88.6	89.2	86.6	84.1	81.6	75.2	73.3	70.5	73.4	75.0	75.7	80.3	80.2	79.9	82.6	81.0	81.1	80.9	80.8	80.4	89.2
12-Jun	79.0	76.0	73.2	74.4	70.7	70.5	70.8	66.5	60.1	50.5	48.6	44.0	42.0	38.0	35.5	33.8	31.4	32.0	33.3	35.7	39.4	40.9	40.5	41.4	51.2	79.0
13-Jun	50.7	55.9	57.3	54.7	55.0	60.8	63.3	62.6	52.3	44.0	37.7	35.4	33.5	31.2	30.3	29.3	29.4	29.6	27.9	27.4	27.4	27.8	27.9	31.3	40.9	63.3
14-Jun	31.9	38.5	44.7	46.9	46.5	52.6	51.4	46.0	42.3	38.3	35.4	34.2	35.0	33.2	33.1	33.2	30.2	28.0	28.4	30.2	29.7	32.5	35.6	39.5	37.4	52.6
15-Jun	44.2	49.2	52.9	53.7	54.6	52.7	56.1	60.5	51.6	42.3	36.3	36.0	35.1	32.7	30.2	28.7	29.2	29.7	29.5	28.6	28.6	29.8	26.6	30.6	39.6	60.5
16-Jun	35.1	59.6	69.1	75.7	68.8	57.7	50.4	60.7	60.0	60.0	60.9	64.7	56.7	46.5	31.4	28.0	26.8	28.8	26.8	26.1	30.1	33.8	37.8	45.5	47.5	75.7
17-Jun	51.3	56.8	64.2	70.7	73.6	75.0	72.5	65.8	55.1	47.1	41.1	37.9	35.4	34.7	33.3	33.6	33.3	33.0	34.8	33.3	32.2	31.2	33.2	41.8	46.7	75.0
18-Jun	47.3	57.1	64.5	70.2	72.2	74.8	79.9	82.5	76.1	72.6	65.7	56.6	65.1	67.7	65.8	58.0	51.8	49.6	49.9	52.2	52.9	52.9	52.8	65.6	62.6	82.5
19-Jun	67.7	69.9	72.3	71.6	74.2	72.2	68.6	67.1	65.8	59.4	55.2	53.2	49.4	55.3	53.2	51.8	53.2	58.1	57.1	57.0	52.3	59.0	63.5	64.1	61.3	74.2
20-Jun	71.8	80.5	84.2	88.7	91.1	86.6	84.8	76.7	68.4	57.7	55.1	52.9	49.9	49.1	46.5	47.9	45.8	43.7	48.3	59.6	61.8	60.3	64.3	72.9	64.5	91.1
21-Jun	70.7	75.4	78.3	82.7	83.9	91.0	92.7	90.2	82.8	73.3	68.7	66.1	64.4	60.6	53.0	56.4	58.1	53.7	54.9	56.5	58.6	57.6	63.0	67.9	69.2	92.7
22-Jun	72.6	62.0	69.8	76.3	71.8	66.0	69.7	71.7	64.6	52.7	42.9	39.1	38.5	35.5	32.7	30.5	32.1	34.4	35.0	35.4	41.5	41.0	44.2	47.2	50.3	76.3
23-Jun	54.9	63.1	66.5	64.6	64.2	66.8	67.5	63.8	55.0	46.8	39.8	35.3	33.3	32.0	30.7	41.0	38.4	43.0	43.5	41.3	47.0	50.3	51.7	53.6	49.8	67.5
24-Jun	52.0	56.1	57.3	59.6	66.1	65.0	66.1	61.5	59.3	53.2	45.2	41.9	38.6	36.2	33.0	32.7	31.9	31.4	40.5	42.1	36.1	42.1	48.5	53.4	47.9	66.1
25-Jun	55.5	59.2	61.1	63.8	66.8	64.1	62.0	58.8	54.6	47.4	37.8	34.4	34.8	31.7	28.4	27.3	27.3	26.6	25.7	30.3	32.1	35.2	37.7	39.1	43.4	66.8
26-Jun	39.6	43.4	51.4	55.9	59.6	58.6	57.8	54.5	50.7	41.5	34.6	33.4	31.9	29.7	27.7	27.8	27.9	29.0	30.4	32.1	34.8	37.8	41.9	45.7	40.7	59.6
27-Jun	48.1	50.0	51.3	54.3	57.7	60.3	61.4	55.9	52.8	43.9	42.4	42.2	40.5	39.8	38.8	34.9	33.4	30.1	32.4	33.7	32.8	32.0	34.3	34.8	43.2	61.4
28-Jun	40.1	45.6	49.7	50.5	54.0	55.0	50.5	52.1	59.0	50.6	33.1	28.8	27.3	25.3	23.5	22.2	22.4	22.2	22.3	22.7	24.1	25.6	28.4	32.5	36.2	59.0
29-Jun	34.5	40.9	45.2	43.3	41.7	43.6	49.6	52.1	49.9	DF	40.2	34.9	28.9	26.5	28.5	26.0	25.4	24.9	26.5	28.5	38.0	44.8	46.9	52.9	38.0	52.9
30-Jun	52.7	50.4	56.1	61.7	60.7	62.9	66.7	59.1	57.5	57.8	55.4	47.8	43.7	41.4	38.2	32.1	27.5	23.5	20.2	18.3	20.8	24.5	29.2	32.9	43.4	66.7
	63.5	67.3	70.7	72.7	73.5	73.5	73.3	71.1	67.0	62.1	56.9	54.4	52.7	50.8	48.1	47.9	47.1	46.5	47.2	48.8	50.4	51.5	54.7	58.6	Diurnal Average	
	94.4	94.8	97.2	97.7	97.7	98.0	98.3	97.4	93.3	92.2	93.0	93.5	92.2	91.6	88.8	89.7	87.6	87.0	86.9	87.3	89.5	87.5	87.3	90.7	Diurnal Maximum	

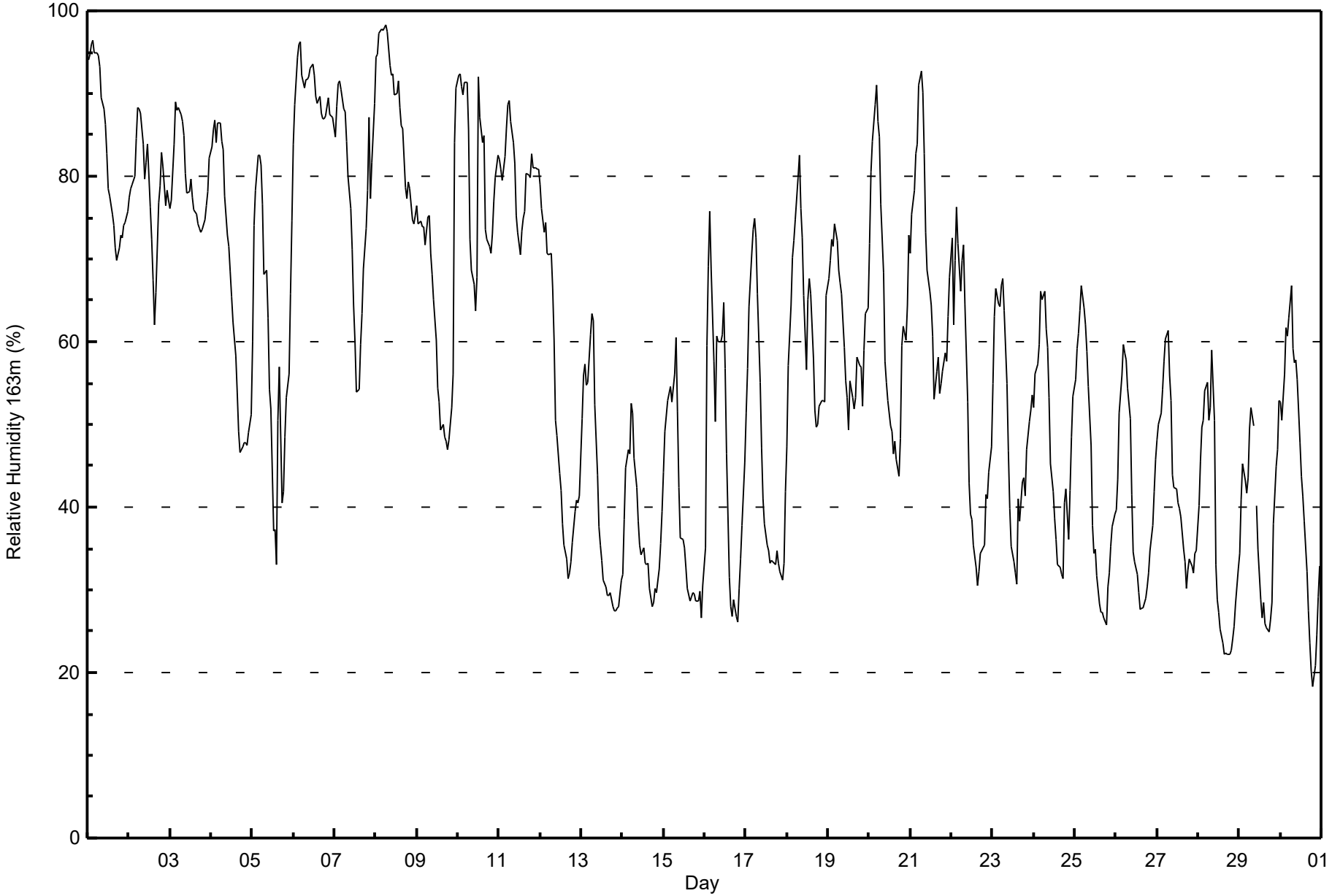
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 163m (RH163) - %

Lower Camp Met Tower - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	1	0.14	0.14
20 - 40	172	23.92	24.06
40 - 60	209	29.07	53.13
60 - 80	200	27.82	80.95
80 - 100	137	19.05	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 20m (WS20) - km/h

Lower Camp Met Tower - June 2026

Maximum Speed: 27 km/h on Jun 8 18:00

Maximum Daily Speed Average: 16.3 km/h on Jun 1

Minimum Speed Value: 0 km/h on Jun 13 02:00

Minimum Daily Speed Average: 1.6 km/h on Jun 15

Maximum Diurnal Speed Average: 4.4 km/h at hour 16

Minimum Diurnal Speed Average: 0.1 km/h at hour 24

Monthly Average Velocity: 1.6 km/h 354.4 deg

Percentiles: P_1 = 1 P_{10} = 2 Q_1 = 5 Median = 8 Q_3 = 13 P_{90} = 16 P_{99} = 25

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-Jun	NNW18	NNW17	NNW14	NNW14	NNW15	NNW15	NNW15	NNW13	NNW17	NNW16	NNW19	NNW22	N20	N17	N20	NNW19	N20	N20	N17	N16	N14	N12	N15	N13	NNW16.3	NNW22
2-Jun	N14	N13	N12	N13	NNW14	N14	N14	N14	N12	NNE11	N8	N5	NNE7	NNE7	NNE9	NE10	E8	SE9	ESE6	SE4	SE3	E3	SE3	E2	NNE6.7	NNW14
3-Jun	NE2	ENE3	E4	E5	ENE3	E6	E6	E5	ESE4	E3	SE6	SE6	SE6	SSE7	SE5	SE6	SSE9	SE7	SSE7	SE7	NNE1	NNW2	NNW2	NNW2	ESE3.6	SSE9
4-Jun	NNW2	E0	SSE7	SE10	SE7	SE8	SE10	SE7	SE11	S13	S16	S16	S17	S16	S14	SSE14	S14	SSW15	SW21	SSW20	SSW11	S13	S15	S14	S11.0	SW21
5-Jun	S17	SSW15	S9	SE7	SSE7	SW7	S5	S5	ESE3	ESE5	ESE7	SE9	E6	E5	SE10	SSE16	SE16	ESE6	SE3	SSE5	SE8	ESE7	SSW8	WSW15	SSE6.6	S17
6-Jun	W9	W8	NNW3	WNW6	WNW5	WNW18	W17	WSW20	WSW25	WSW24	WSW25	WSW26	WSW26	WSW27	WSW19	WSW18	SW18	SW16	SW14	SW14	SW11	SSW10	SSW10	S9	WSW14.6	WSW27
7-Jun	S8	SE3	SE8	SE13	SE14	SE12	SE9	SE6	SE9	SE6	ESE6	ESE5	ENE3	E3	N7	NNW12	N15	NE7	NNW7	NNW4	N3	N5	NNW4	NNW4	E2.5	NNW15
8-Jun	NNW5	NNW8	NNW8	NNW9	NNW9	NNW11	NNW10	NW8	NW12	WNW15	WNW19	WNW20	WNW25	WNW27	WNW26	W23	WNW21	WNW27	W19	W20	WNW23	W20	W19	W18	WNW15.7	WNW27
9-Jun	W13	W15	W15	W15	W15	WNW17	W13	W11	W11	WSW10	WSW11	W11	W11	W12	WSW14	W5	N6	NNW6	N5	NNW5	NNW4	NW2	NNW6	NNW10	W8.8	WNW17
10-Jun	NNW5	NNW4	NNW5	NNW4	NW4	NNW5	NNW8	NNW8	NW6	W4	NNW5	NW12	N11	N11	N11	N13	N16	N15	N17	NNW14	NNW13	NNW11	NNW11	NNW14	NNW9.2	N17
11-Jun	NNW14	NNW11	NNW10	N10	NNW9	NNW10	NW10	NNW11	NNW11	NNW10	NNW14	NNW13	NNW14	N16	N18	NNW12	NNW18	NNW15	NNW14	NNW11	NNW11	NW6	NW7	NW5	NNW11.5	N18
12-Jun	NW6	NW6	NW5	NNW4	NNW7	NNW7	NW6	NNW10	NNW13	NNW18	NNW20	NNW22	NNW20	NNW18	NNW18	N16	N19	N18	N16	N12	NNW6	WNW3	WNW2	W1	NNW11.1	NNW22
13-Jun	SSE1	WSW0	ESE1	ESE2	ESE2	SE4	SSW5	ESE1	SE2	WSW4	SW5	SW5	WSW3	SW3	SSW5	SSE5	SSE11	SSE11	SW12	SW11	SSW10	SSW9	S4	ESE6	S3.9	SW12
14-Jun	SSE2	S5	SSE4	SSW4	S5	SSW5	SW2	N3	NW4	NNW6	NNW9	N9	N12	N15	NNW13	NW10	NNW11	N15	NNW13	NNW10	NNW6	NW4	NW2	NW2	NNW5.0	N15
15-Jun	NW2	N2	NW3	NNW2	ESE1	ENE1	ENE0	SE3	ESE5	ESE5	SSE4	S3	NNW2	ENE4	NE3	N5	N2	ESE6	ENE6	ENE4	NNE2	E1	NNE2	NE4	ENE1.6	ESE6
16-Jun	ESE10	SE13	SE9	ESE9	SE8	SE8	ESE4	ENE5	ESE6	ESE6	SE6	WSW6	W6	W7	N11	N16	N17	N17	N18	N17	N15	N14	N11	NNW6	NNE4.3	N18
17-Jun	NNW4	NNW6	NNW5	NNW5	NNW3	NNW3	N6	NW6	NNW9	NNW9	NNW12	NNW13	NNW14	NNW13	N13	N13	N13	NNW9	NNW8	NNW2	N6	NNW4	NNW3	NNW2	NNW7.5	NNW14
18-Jun	NNW2	NNE3	N1	E1	NE1	N2	NW3	NNW2	NNE2	NNE3	S1	NNW4	N11	N15	NNW10	NNW11	NNW12	NNW14	NNW10	NNW7	NW8	NW7	NW4	WSW1	NNW5.1	N15
19-Jun	WSW4	WSW3	W0	NNW3	NNW3	NNW3	NNW3	N4	N5	NNW9	NNW9	NNW7	NNW9	WNW10	NNW9	N12	N15	NNW12	N9	N6	N8	N7	NNW5	NNW4	NNW6.2	N15
20-Jun	NNW3	NNW3	NNE2	N2	N1	NW2	NNW5	NNW8	NNW12	N13	NNE10	N9	NNE7	NNE9	N13	NNE15	N12	NNE13	NNE12	E8	E4	ESE2	NNW3	N5	N6.4	NNE15
21-Jun	N3	NNW3	N4	NNW4	NNW5	NW6	NNW6	NNW6	NNW10	NNW12	NNW14	NNW13	N14	N11	N11	N10	NNW11	N12	NNE9	NW4	NNW4	NNW5	NW3	NW2	NNW7.2	N14
22-Jun	SE2	NNW4	NNW3	NNE1	N2	NNW3	N2	NE2	NE3	N3	S2	E3	ESE5	SE11	SE11	SE7	NE2	ESE3	SSE4	ESE6	SE10	SE7	ESE2	ESE4	ESE2.6	SE11
23-Jun	ESE7	SE6	SE7	ESE6	ESE8	ESE9	SE9	SE8	SE8	SE3	WSW7	W8	SW5	S3	S8	NNW14	N5	SE13	SE12	SE7	SE7	ESE3	SSE1	SSW2	SE4.1	NNW14
24-Jun	SE8	ESE6	SE8	ESE8	SE7	ESE7	SE9	SE9	SE9	SSE12	SSE13	S11	S13	S13	SSE11	SSE11	SSE8	SSE10	ESE14	ESE7	SE11	SE12	SE15	SE11	SE9.5	SE15
25-Jun	SE9	E3	ESE6	ESE9	ESE8	ESE8	SE8	SE11	SE10	SE9	SSE16	SSE17	SSE17	SSE14	SSE13	SSE13	SE13	SE15	SE14	ESE16	SE12	SSE9	SE15	SE17	SE11.3	SSE17
26-Jun	SE12	SE10	SE8	SE6	SE3	SE4	SE8	SE10	SE11	ESE13	SSE24	SE20	SE17	SE17	SE16	ESE14	SE14	SE16	ESE16	ESE16	ESE11	ESE12	SE12	SE13	SE12.3	SSE24
27-Jun	ESE9	ESE9	E9	E9	ESE11	E7	N6	N3	NW0	SE9	SE20	SE21	SE18	SE18	SE17	E10	SE15	SE16	SE10	E5	E3	NE3	ESE2	NE2	ESE8.4	SE21
28-Jun	ENE5	NNW6	NNW5	NNW5	NNW3	N2	NNW4	N4	NNW4	NW5	ENE7	ENE11	ENE10	NE10	NE10	NE10	ENE10	ENE11	ENE8	ENE7	NE5	NNW3	NNW6	NNW6	NE5.2	ENE11
29-Jun	NNW7	NNW4	NNW2	NW1	NW3	NNE1	ENE1	WNW0	WNW2	DF	NNW8	NNW7	NNE7	NNE9	N13	N12	N13	N16	NNE11	NE7	SE9	SSW9	SE4	SE8	N4.1	N16
30-Jun	ESE8	SE8	E4	NE3	NNE2	N2	NNE2	ESE2	ESE6	NNE1	N5	N6	NNW7	NW8	NW7	N11	NNE9	NE8	ENE8	ENE7	E6	ESE2	SSE6	ESE5	NE3.0	N11
	NNE0.5	N1.2	NNE1.0	NE1.3	NNE0.9	NNW1.5	NNW1.5	NNW1.4	NNW1.7	NNW1.9	WNW1.1	NW2.1	NNW2.6	NNW2.3	NNW2.9	N4.4	N4.3	NNE3.4	NNE3.0	NNE1.6	NNE1.1	NW0.4	W0.3	WNW0.1	Diurnal Average	
	NNW18	NNW17	W15	W15	NNW15	WNW18	W17	WSW20	WSW25	WSW24	WSW25	WSW26	WSW26	WSW27	WNW26	W23	WNW21	WNW27	SW21	SSW20	WNW23	W20	W19	W18	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

Lower Camp Met Tower - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10 km/h on Jun 8 14:00

Minimum Value: 0 km/h on Jun 13 02:00

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:	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-Jun	7	7	6	6	6	6	7	6	7	7	7	8	7	6	7	7	7	7	6	6	5	4	5	5	8
2-Jun	5	5	4	4	5	5	5	5	5	4	3	2	3	3	4	5	4	4	2	3	1	1	1	1	5
3-Jun	1	1	2	2	2	3	3	2	2	2	2	2	3	3	2	3	3	2	2	3	2	1	1	1	3
4-Jun	1	1	4	4	2	3	3	4	3	4	4	4	4	4	4	4	4	4	5	4	2	2	2	2	5
5-Jun	2	2	4	2	3	3	3	3	2	3	2	3	3	2	3	7	6	4	2	2	2	1	5	5	7
6-Jun	4	5	2	3	4	8	7	7	7	7	6	6	7	6	5	7	4	3	3	3	2	2	2	3	8
7-Jun	3	3	3	4	3	3	4	2	3	2	3	2	2	3	6	5	5	7	3	2	2	2	2	2	7
8-Jun	2	4	3	3	4	4	4	3	6	5	6	7	9	10	9	9	8	9	7	7	8	8	7	7	10
9-Jun	6	6	5	6	5	7	5	4	5	4	3	5	5	4	4	3	3	3	2	2	2	2	3	4	7
10-Jun	3	2	2	2	2	2	3	4	3	3	4	6	4	4	4	6	7	6	6	6	5	5	5	6	7
11-Jun	5	4	5	4	3	5	4	4	5	4	6	6	5	6	7	6	7	6	5	5	4	3	3	2	7
12-Jun	2	2	2	2	2	3	3	4	5	7	7	7	7	7	6	6	6	6	6	5	3	0	1	1	7
13-Jun	1	0	1	1	1	1	2	2	2	2	3	3	3	3	3	3	4	3	3	2	2	2	3	2	4
14-Jun	1	2	2	2	2	2	2	1	2	4	4	4	4	6	5	5	5	5	5	3	3	1	1	1	6
15-Jun	1	1	1	1	1	1	1	1	2	2	1	2	3	3	2	3	1	3	2	1	2	1	2	2	3
16-Jun	4	4	4	3	2	3	3	3	3	3	3	2	3	4	5	6	6	6	6	5	5	5	4	2	6
17-Jun	1	2	2	2	2	2	3	3	4	4	5	5	6	5	5	6	5	4	3	3	3	1	2	1	6
18-Jun	1	2	1	1	1	1	2	1	1	2	2	3	5	5	5	4	5	5	4	3	2	3	2	1	5
19-Jun	1	2	1	1	2	1	1	2	2	4	4	4	4	4	5	5	5	5	3	3	4	3	2	1	5
20-Jun	1	2	1	1	1	2	2	4	4	5	4	4	4	5	5	5	5	5	5	4	2	2	2	2	5
21-Jun	1	2	1	2	2	2	2	3	5	4	5	4	4	4	5	4	4	4	4	2	1	2	1	1	5
22-Jun	3	2	1	1	1	1	1	1	1	2	2	2	3	3	4	3	1	4	3	2	3	3	2	2	4
23-Jun	3	2	3	2	2	2	2	1	2	2	3	4	4	3	4	7	5	5	5	2	3	2	1	3	7
24-Jun	3	3	2	3	3	3	3	4	3	4	4	4	5	6	4	5	4	5	7	4	4	5	5	3	7
25-Jun	4	2	3	2	2	2	2	3	4	3	6	5	6	5	5	5	5	5	5	6	4	3	4	3	6
26-Jun	3	2	3	2	2	3	3	3	4	5	7	7	6	7	6	5	5	5	6	6	4	4	4	4	7
27-Jun	3	3	3	4	4	4	3	2	1	6	5	6	6	6	6	5	5	5	4	1	1	2	2	1	6
28-Jun	2	2	2	2	2	2	1	2	2	3	5	5	6	6	5	5	5	5	4	3	2	2	3	3	6
29-Jun	2	2	1	1	1	1	1	1	2	DF	3	4	4	5	5	5	6	6	6	2	5	3	2	3	6
30-Jun	3	2	2	2	2	1	1	2	2	1	2	2	4	4	3	5	5	4	3	3	3	2	3	3	5
	7	7	6	6	6	8	7	7	7	7	7	8	9	10	9	9	8	9	7	7	8	8	7	7	
	Diurnal Maximum																								

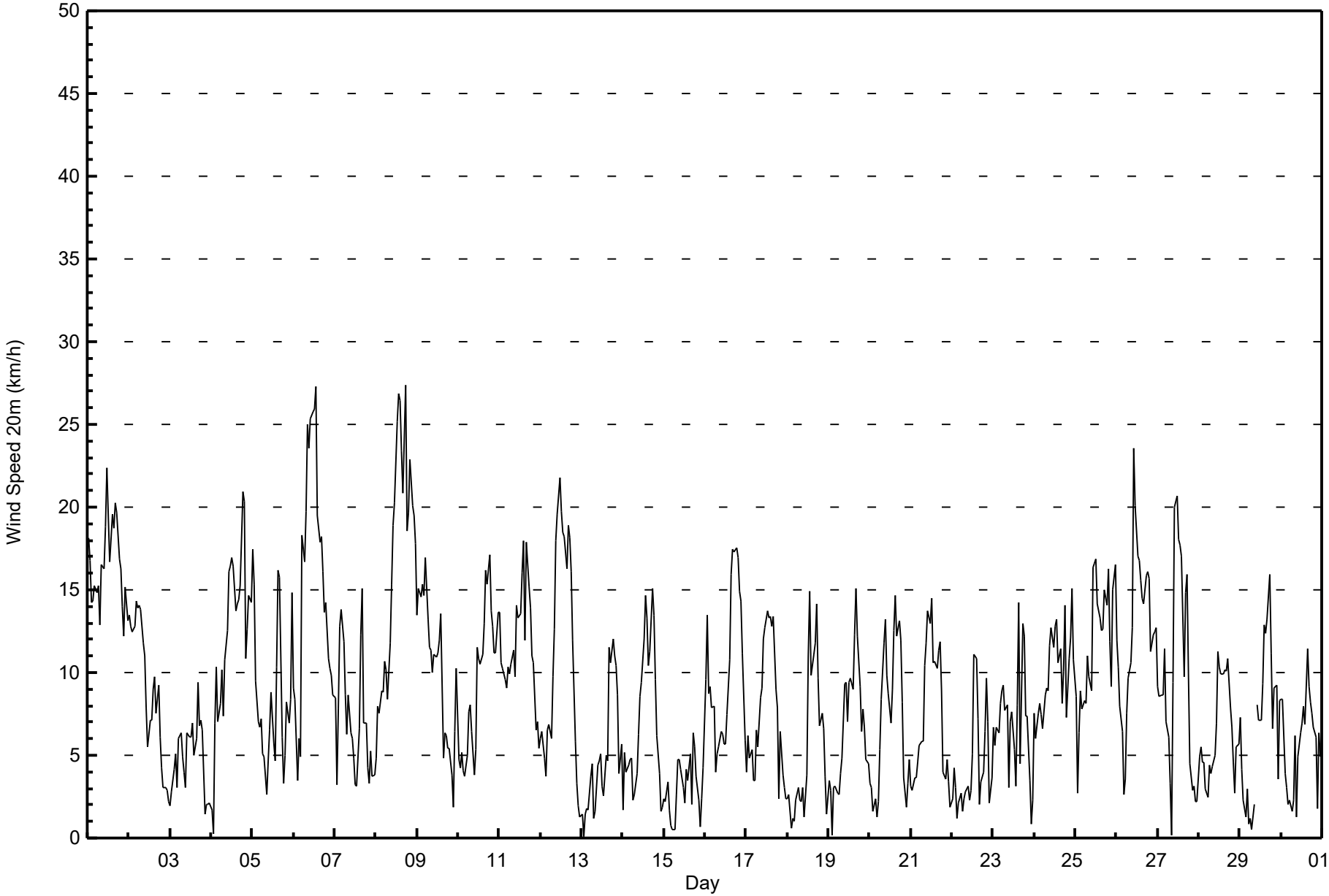
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 20m (WS20) - km/h

Lower Camp Met Tower - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	232	32.27	32.27
6 - 11	272	37.83	70.10
12 - 19	184	25.59	95.69
20 - 28	31	4.31	100.00
29 - 38	0	0.00	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 719

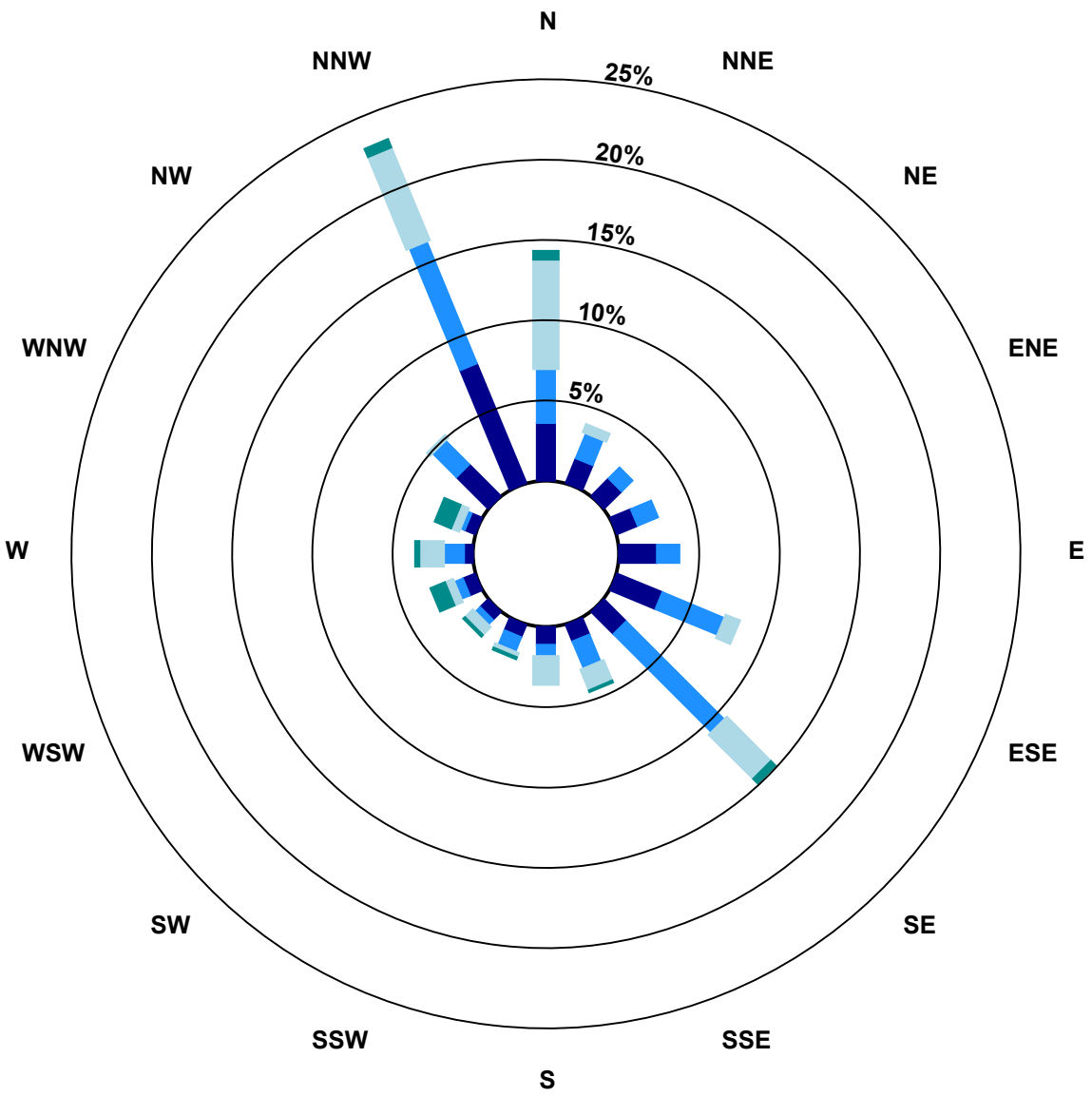
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 20m (WS20) - 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: 719

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 45m (WS45) - km/h

Lower Camp Met Tower - June 2026

Maximum Speed: 39 km/h on Jun 8 18:00

Maximum Daily Speed Average: 25.3 km/h on Jun 1

Minimum Speed Value: 1 km/h on Jun 15 07:00

Minimum Daily Speed Average: 2.6 km/h on Jun 15

Maximum Diurnal Speed Average: 7.6 km/h at hour 17

Minimum Diurnal Speed Average: 0.8 km/h at hour 23

Monthly Average Velocity: 3.3 km/h 0.2 deg

Percentiles: P_1 = 1 P_{10} = 4 Q_1 = 7 Median = 12 Q_3 = 18 P_{90} = 24 P_{99} = 34

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-Jun	NNW28	NNW26	NNW23	NNW22	NNW25	NNW25	NNW26	NNW22	NNW26	NNW26	NNW27	N33	N29	N25	N29	N28	N30	N32	N26	N25	N22	N18	N23	N20	N25.3	N33
2-Jun	N20	N20	N19	N19	N21	N20	N22	N21	N19	NNE17	N13	N8	NNE12	NNE13	NNE15	NE17	E12	SE14	ESE10	SE7	ESE4	E5	ESE4	E3	NNE10.8	N22
3-Jun	NE4	ENE7	E7	E8	E6	E10	E10	E8	ESE6	E5	SE8	SE8	SE8	SSE8	SE6	SE7	SSE11	SE9	SSE8	SE8	E2	N3	NNW4	N3	ESE5.3	SSE11
4-Jun	NNW3	SE3	SE11	SE16	SE9	SE12	SE13	SE11	SE13	S14	S17	S18	S18	S17	S15	SSE16	S16	SSW17	SW23	SSW23	SSW14	S18	S21	S21	S13.2	SW23
5-Jun	S23	SSW20	S13	SE9	S9	SW9	S6	S5	ESE3	SE6	ESE8	SE12	E8	E5	SE14	SE20	SE22	ESE8	SSE5	SSE7	SE10	SE9	SW12	WSW21	SSE8.4	S23
6-Jun	WSW16	W15	NW6	WNW10	WNW8	WNW27	W25	WSW28	WSW34	WSW33	WSW33	WSW34	WSW35	WSW35	WSW26	WSW23	SW23	SW19	SW16	SW17	SW14	SW13	SSW13	SSW12	WSW19.9	WSW35
7-Jun	S12	SSE4	SE10	SE18	SE17	SE15	SE12	SE7	SE11	ESE8	ESE8	ESE5	ENE3	E5	N9	NNW18	N23	NE11	N12	NNW8	NNW6	N9	NNW7	NNW7	ENE3.5	N23
8-Jun	NNW9	NNW13	NNW13	NNW14	NNW15	NNW17	NNW17	NW14	NW18	WNW23	WNW27	WNW30	WNW37	WNW39	W39	W34	W30	WNW39	W27	W29	WNW34	W29	W28	W26	WNW23.2	WNW39
9-Jun	W20	W24	W21	W23	W22	WNW26	W19	W16	W16	WSW13	WSW13	W15	WNW15	W16	WSW17	W6	N9	NNW10	N8	NNW9	NNW9	NNW7	NNW13	NNW18	WNW12.8	WNW26
10-Jun	N8	NNW7	NNW9	NNW8	NNW6	NNW8	NNW11	NNW11	NW9	WNW5	NNW8	NW16	N16	N14	N16	N19	N25	N22	N27	NNW21	NNW19	NNW17	NNW17	NNW21	NNW14.0	N27
11-Jun	NNW20	N16	NNW16	N15	NNW15	NNW17	NNW16	NNW17	NNW18	NNW16	NNW21	NNW20	NNW20	N24	N26	NNW19	NNW27	NNW22	N20	NNW18	NNW17	NNW12	NW12	NNW10	NNW17.8	NNW27
12-Jun	NW10	WNW11	NW9	NNW8	NNW12	NNW12	NNW11	NNW16	NNW19	NNW26	NNW29	NNW32	NNW29	N28	NNW27	N25	N29	N28	N26	N20	NNW11	NW8	NW5	NNW5	NNW17.6	NNW32
13-Jun	WSW1	W3	SW2	SSW1	SSE2	SSW3	SW6	ESE1	SSE1	WSW5	SW5	WSW5	W5	WSW3	SW6	S5	SSE13	SSE12	SW14	SW13	SSW13	SSW15	SSW10	ESE7	SSW5.1	SSW15
14-Jun	SSW4	SW9	SSW5	SW6	SSW6	SW6	WSW2	NNW3	NW5	NW9	NNW12	N14	N18	N21	NNW20	NNW16	NNW17	N23	N21	NNW16	N13	NNW8	NNW8	NNW6	NNW8.7	N23
15-Jun	NNW6	NNW4	NNW6	NW4	N2	ENE1	SE1	ESE3	ESE6	ESE5	SE4	SSW3	NNW3	NE5	NE4	N6	NNW2	E10	E10	E8	ENE4	ESE4	E5	E8	ENE2.6	E10
16-Jun	ESE15	SE17	SE13	ESE14	SE9	ESE12	E7	ENE9	ESE8	ESE10	SE7	W6	W6	W9	N16	N24	N26	N26	N27	N26	N23	N23	N18	NNW12	NNE7.7	N27
17-Jun	NNW9	NNW11	NNW10	NNW11	NNW7	NNW6	N9	NW7	NNW12	NNW13	NNW17	NNW18	NNW19	NNW20	N19	N19	N20	NNW15	NNW13	N6	N12	NNW7	NNW7	NW3	NNW12.0	N20
18-Jun	NNW6	NNW6	NNW4	WSW2	WNW1	NNW4	NNW6	NW4	N3	NNE4	SSW1	NNW6	N17	N22	NNW15	NNW17	NNW18	NNW21	NNW15	NNW12	NW12	NW12	NW7	WSW3	NNW8.6	N22
19-Jun	W5	W4	WNW3	WNW7	NW7	NNW6	NNW5	NNW5	NNW6	NNW13	NNW13	NNW10	NNW13	WNW14	NNW13	N17	N21	N17	N14	N10	N13	N12	N9	NNW8	NNW9.5	N21
20-Jun	N6	NNW7	N2	N5	NNW3	NNW4	NNW8	NNW11	NNW16	N19	NNE15	N13	NNE11	NE15	NNE19	NNE22	N18	NNE20	NNE18	E13	E6	E2	NNW5	N9	NNE10.0	NNE22
21-Jun	N6	NNW6	N6	NNW7	NNW9	NW10	NNW10	NNW10	NNW15	NNW17	NNW21	N19	N21	N16	N17	N15	N16	N18	NNE17	NNW9	NNW7	NNW9	NW7	NW5	N11.8	N21
22-Jun	SE3	NNW6	NNW8	NNW4	N2	NNW4	NNW2	NNE2	NE3	N3	SSW2	E3	ESE6	SE14	SE12	SE9	ENE2	ESE5	S5	SE8	SE13	SSE10	SSE5	SSE3	ESE2.9	SE14
23-Jun	SE8	SE8	SE10	SE10	SE12	SE11	SE8	SE8	ESE9	SSE3	WSW9	W10	SW6	SSW4	S8	NNW22	N10	SE17	ESE19	SE10	SE10	SE7	SE5	SSW4	SE5.4	NNW22
24-Jun	SE12	SE9	SE12	SE12	SE11	ESE10	SE14	SE12	SE12	SSE14	SSE14	SSE13	S14	S14	SSE12	SSE12	SSE9	SSE11	ESE23	ESE12	SE18	SE17	SE24	SE18	SE12.9	SE24
25-Jun	SE14	SE6	ESE11	SE12	ESE11	ESE12	SE10	SE15	SE14	ESE13	SSE18	SSE19	SSE19	SE17	SE15	SSE15	SE17	SE20	SE22	ESE26	ESE20	SE15	SE21	SE20	SE15.4	ESE26
26-Jun	SE18	SE16	ESE15	ESE11	ESE6	ESE10	ESE14	ESE15	ESE17	ESE19	SE29	SE28	SE22	SE21	SE20	ESE21	SE22	ESE24	ESE25	ESE25	ESE19	ESE21	SE20	SE21	SE18.9	SE29
27-Jun	ESE14	ESE14	ESE15	E17	ESE19	E10	NNW6	N4	NNE1	ESE14	SE27	SE28	SE26	SE26	SE24	E16	SE24	SE26	SE18	E8	E8	E8	E5	E7	ESE14.0	SE28
28-Jun	E9	N7	NNW8	NNW9	NNW7	NNW4	NNW6	NNW4	NW5	NW8	ENE12	ENE18	ENE17	NE17	NE17	NE18	ENE18	ENE18	ENE14	ENE13	ENE11	NE4	NNW10	NNW12	NE8.5	ENE18
29-Jun	NNW14	NNW10	NNW8	NNW5	NW4	NNW3	N2	WNW1	W3	DF	NNW10	NNW9	NNE11	NNE14	N19	N18	N20	N24	NNE19	NE12	SE13	S12	SE7	SE10	N6.9	N24
30-Jun	ESE13	SE12	ESE7	ENE2	NNE1	NW3	N2	ESE3	ESE9	N1	NNW6	NNW7	NNW9	NW11	NW11	N17	NNE16	NE14	ENE14	E13	E13	ESE6	SE9	SE9	ENE4.5	N17
	N1.5	NNW2.4	NNE2.0	NNE2.1	N2.2	NNW3.0	NNW2.9	NNW2.7	NNW2.9	NNW3.3	NNW2.4	NNW3.6	NNW4.6	NNW4.4	N5.6	N7.6	N7.6	NNE6.4	NNE6.1	NNE3.7	NNE3.1	N1.4	NNW0.8	NNW0.9		Diurnal Average	
	NNW28	NNW26	NNW23	W23	NNW25	WNW27	NNW26	WSW28	WSW34	WSW33	WSW33	WSW34	WNW37	WNW39	W39	W34	W30	WNW39	W27	W29	WNW34	W29	W28	W26		Diurnal Maximum	

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: 9 km/h on Jun 23 16:00

Minimum Value: 1 km/h on Jun 13 05:00

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

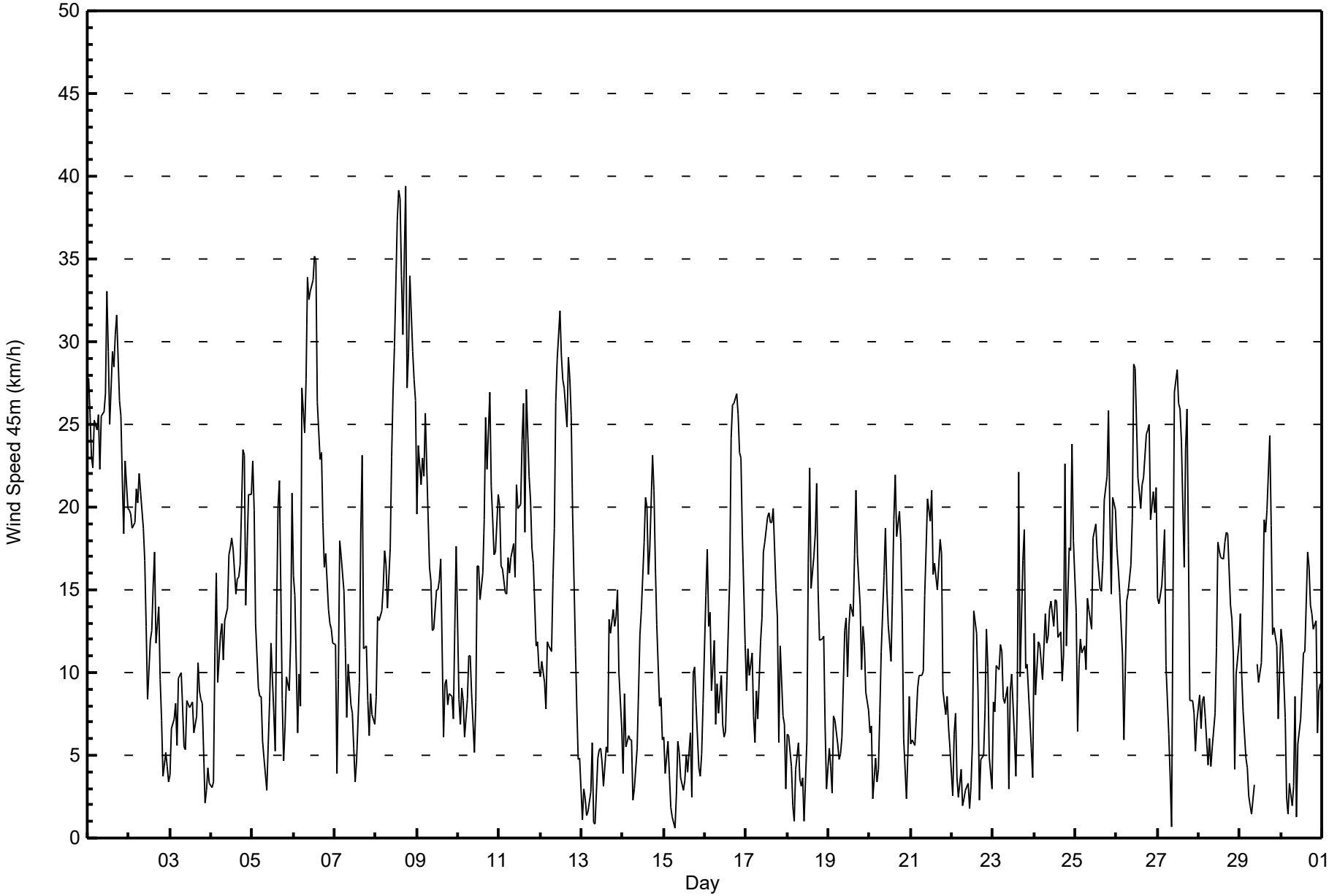
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 45m (WS45) - km/h

Lower Camp Met Tower - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	118	16.41	16.41
6 - 11	214	29.76	46.18
12 - 19	239	33.24	79.42
20 - 28	122	16.97	96.38
29 - 38	23	3.20	99.58
> 38	3	0.42	100.00

Total Number of Valid Hours: 719

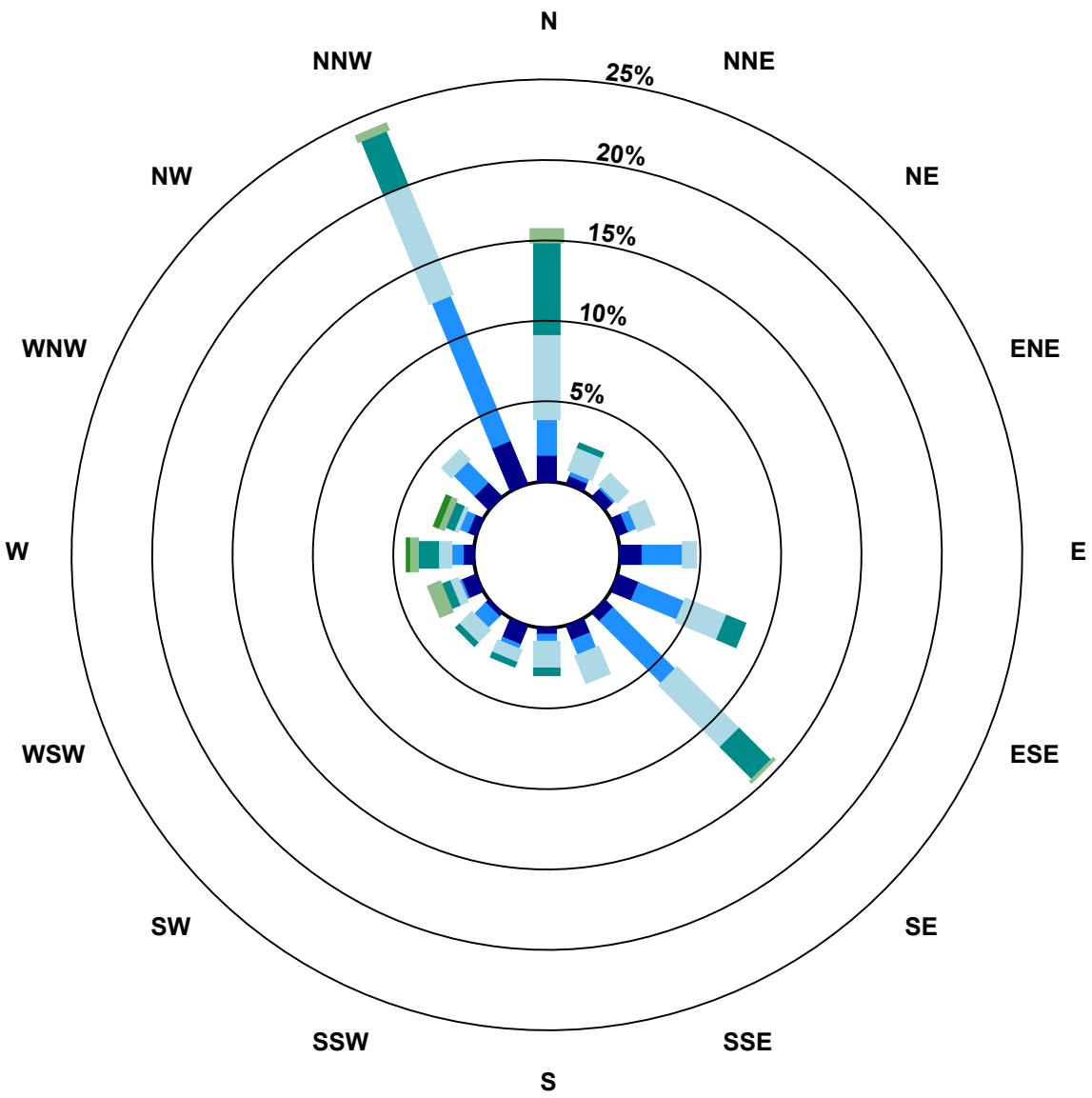
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 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: 719

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 100m (WS100) - km/h

Lower Camp Met Tower - June 2026

Maximum Speed: 48 km/h on Jun 8 18:00

Maximum Daily Speed Average: 32.2 km/h on Jun 1

Minimum Speed Value: 0 km/h on Jun 22 11:00

Minimum Daily Speed Average: 3.3 km/h on Jun 22

Maximum Diurnal Speed Average: 8.4 km/h at hour 16

Minimum Diurnal Speed Average: 2.0 km/h at hour 23

Monthly Average Velocity: 4.2 km/h 355.4 deg

Percentiles: P_1 = 2 P_{10} = 6 Q_1 = 10 Median = 16 Q_3 = 23 P_{90} = 30 P_{99} = 42

Hours in Service: 720

Hours of Data: 683

Hours of Missing Data: 37

Percent Operational Time: 94.9

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-Jun	N36	N33	NNW32	NNW30	NNW34	NNW32	NNW35	NNW31	NNW33	NNW33	N34	N40	N36	N31	N35	N35	N37	N37	N33	N32	N27	N24	N29	N25	N32.2	N40
2-Jun	N24	N24	N24	N24	N25	N26	N27	N26	N24	NNE22	NNE18	N13	NNE18	NNE19	NNE21	NE23	E15	ESE17	ESE12	ESE8	E4	E7	ESE5	E6	NNE14.7	N27
3-Jun	ENE6	E8	E10	E11	E10	E13	E12	E9	ESE7	ESE8	ESE10	SE9	SE10	SSE10	SE8	SE9	SSE11	SE11	SSE10	SSE9	SE4	ESE4	E4	ESE5	ESE7.7	E13
4-Jun	SSE3	SE17	SE17	SSE22	SSE15	SE14	SE12	SE13	SE14	S15	S18	S19	S20	S18	S16	SSE17	S17	SSW18	SW27	SW27	SSW20	SSW23	SSW25	S26	S16.4	SW27
5-Jun	SSW35	SW28	SSW20	S12	SSW14	SW13	SSW7	S5	SSE2	SE7	SE9	SE13	ESE7	E5	SE15	SSE23	SE25	SE11	S6	S10	S10	S10	SW17	WSW28	S10.4	SSW35
6-Jun	W23	W21	NW11	WNW14	NW12	WNW37	W31	WSW35	WSW43	WSW41	WSW40	WSW41	WSW44	WSW41	WSW33	WSW28	WSW28	SW24	SW21	SW23	SW18	SW17	SW16	SW15	WSW25.7	WSW44
7-Jun	SSW17	S7	SSE7	SE17	SE18	SE17	SE13	SE8	SSE11	SE9	ESE8	ESE6	E4	ESE6	N10	N22	N28	ENE14	N13	N11	N7	NE10	NNE10	N11	ENE4.2	N28
8-Jun	N12	N19	NNW18	N19	NNW21	NNW23	NNW22	NNW20	NW24	NW30	WNW35	WNW37	WNW47	WNW48	W47	W43	W37	WNW48	W35	W36	WNW42	W36	W36	W34	WNW28.7	WNW48
9-Jun	W25	W30	W29	W31	W30	WNW32	W25	W20	W19	WSW14	WSW14	W18	WNW18	W18	WSW19	W7	N10	NNW11	N9	N9	NNW12	NNW11	N17	N23	WNW15.7	WNW32
10-Jun	N13	N10	N12	N14	N10	NNW12	NNW13	NNW13	NW10	WNW5	NNW10	NW19	N20	N17	N20	N23	N31	N27	N32	NNW27	N25	N22	N22	NNW26	N17.6	N32
11-Jun	N25	N21	N22	N18	NNW19	NNW22	NNW20	NNW21	NNW22	NNW20	NNW25	NNW25	NNW24	N27	N31	N24	N33	N28	N26	NNW23	NNW21	NNW16	NNW17	NNW15	NNW22.5	N33
12-Jun	NW14	WNW17	NW17	NNW17	NNW23	NNW20	NNW16	NNW20	NNW23	NNW32	NNW34	NNW37	N34	N33	N32	N30	N35	N33	N30	N26	N19	NNW16	NNW14	NW11	NNW23.7	NNW37
13-Jun	N5	WNW3	W7	W8	WSW8	WSW8	SW7	SW3	WSW1	W5	WSW7	WSW6	W5	WSW4	WSW6	S6	SSE14	SSE13	SW16	SW15	SW18	SW21	SW21	SSW8	SW7.3	SW21
14-Jun	SW15	WSW22	WSW15	WSW11	WSW12	WSW9	W4	WNW6	NW6	NW10	NNW14	N16	N21	N23	N24	NNW21	NNW21	N27	N26	NNW23	N20	NNW15	N15	N13	NNW12.0	N27
15-Jun	NNW13	N7	NNW9	NW8	N4	E4	S1	SE3	SE6	SE5	SE3	SSW2	NW4	NE4	NNE4	N6	N3	E12	E16	E15	E12	ESE14	ESE13	ESE13	ENE4.2	E16
16-Jun	ESE22	SE19	SE18	SE16	SE12	ESE18	ESE11	E13	ESE9	ESE12	SSE6	W6	W6	W10	NNE18	N29	N30	N30	N32	NNE30	N29	NNE30	NNE26	N16	NE9.8	N32
17-Jun	NNW13	NNW19	NNW16	NNW17	N14	N9	NNW10	NW8	NNW13	NNW16	NNW20	NNW22	N23	NNW24	N22	N22	N24	NNW20	NNW18	N9	N17	NNE15	N13	NNW13	NNW16.2	NNW24
18-Jun	NNW17	NNW14	NNW12	NNW8	NW8	NNW10	NNW10	NW7	NW6	NNW4	WSW2	NNW8	N20	N26	NNW18	NNW21	NNW22	NNW26	NNW19	NNW16	NW17	NNW17	NW11	W6	NNW13.0	N26
19-Jun	WNW8	WNW6	NW6	WNW11	WNW13	NW11	NW8	NW6	NNW7	NNW14	NNW16	NNW12	NNW14	NW16	NNW15	N19	N24	N19	N16	N13	N16	N19	NNE18	N10	NNW11.9	N24
20-Jun	N11	N11	N8	NNW8	NNW8	NNW8	N10	N12	N17	N22	NNE17	NNE15	NNE13	NE18	NNE21	NNE24	NNE22	NNE23	NNE20	E15	E7	ENE3	N6	NNE11	NNE12.5	NNE24
21-Jun	NNE10	N7	N7	N11	N11	NNW11	N13	N14	NNW17	NNW20	NNW24	N24	N25	N19	NNE19	N18	N19	N21	NE21	NNE11	N10	N12	NNW12	NNW12	N14.7	N25
22-Jun	ENE2	N7	N12	NNE8	NNE4	N4	W1	WNW2	N1	NW3	SW0	ENE3	ESE7	SE16	SE13	SE9	ESE5	ESE7	S6	SE8	SE16	SSE15	S11	SSW5	ESE3.3	SE16
23-Jun	SSW6	SSW6	S7	S11	S12	S10	SSW8	SSE7	SSE7	SW4	WSW10	WSW11	SW7	SSW5	S8	NNW26	N11	SSE20	ESE23	SE13	SE13	SE12	SE14	S9	SSE5.8	NNW26
24-Jun	SSE9	SSW8	SSE9	SSE8	SSE12	SE8	SE16	SE13	SE14	SSE15	SSE15	S14	S16	S16	SSE14	SSE13	SSE10	SSE12	ESE29	ESE17	SE24	SE23	SE31	SE23	SE14.4	SE31
25-Jun	SE22	SE16	SE20	SE19	SE18	SE17	SE16	SE15	SE18	SE18	SSE20	SSE20	SSE21	SE20	SE18	SSE17	SE21	SE24	SE28	ESE33	SE29	SE27	SE29	SSE25	SE20.9	ESE33
26-Jun	SSE24	SE21	SE21	SE19	ESE16	SE22	SE23	ESE21	ESE21	ESE24	SE32	SE34	SE26	SE24	SE23	ESE25	SE26	ESE30	ESE30	ESE32	ESE27	ESE31	ESE28	SE27	SE25.0	SE34
27-Jun	ESE22	ESE21	ESE22	ESE23	ESE26	ESE15	ENE4	NE2	ENE1	ESE19	SE29	SE32	SE30	SE30	SE27	E19	SE29	SE30	SE22	E14	E17	E16	E16	ESE16	ESE19.3	SE32
28-Jun	E12	ENE6	NE6	N6	NNW14	NNW9	N10	NNW7	NW6	NNW8	ENE15	ENE20	ENE20	NE20	NE20	NE20	ENE21	ENE21	ENE17	ENE17	ENE17	E11	N8	NNW18	NE10.9	ENE21
29-Jun	NNW19	NNW16	N15	N8	NNW12	NNW12	N6	NNW4	NW3	DF	NNW12	NW10	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	---	NNW19
30-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	---	---
	NNW2.9	NW3.9	NNW3.4	N2.9	NNW3.9	NNW4.5	NNW3.9	NNW3.9	NNW4.2	NNW4.0	NNW3.5	NNW4.6	NNW5.4	NNW5.0	N6.3	N8.4	N8.3	NNE6.5	NNE6.6	NNE4.5	NNE4.3	NE3.2	N2.0	NNW2.5	Diurnal Average	
	N36	N33	NNW32	W31	NNW34	WNW37	NNW35	WSW35	WSW43	WSW41	WSW40	WSW41	WNW47	WNW48	W47	W43	W37	WNW48	W35	W36	WNW42	W36	W36	W34	Diurnal Maximum	

DF - DAS Failure UO - Unstable Operation

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

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 100m (WS100) - km/h

Lower Camp Met Tower - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 11 km/h on Jun 23 16:00

Minimum Value: 1 km/h on Jun 29 02:00

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:	683
Hours of Missing Data:	37
Hours of Calibration:	0
Percent Operational Time:	94.9

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

Diurnal Maximum

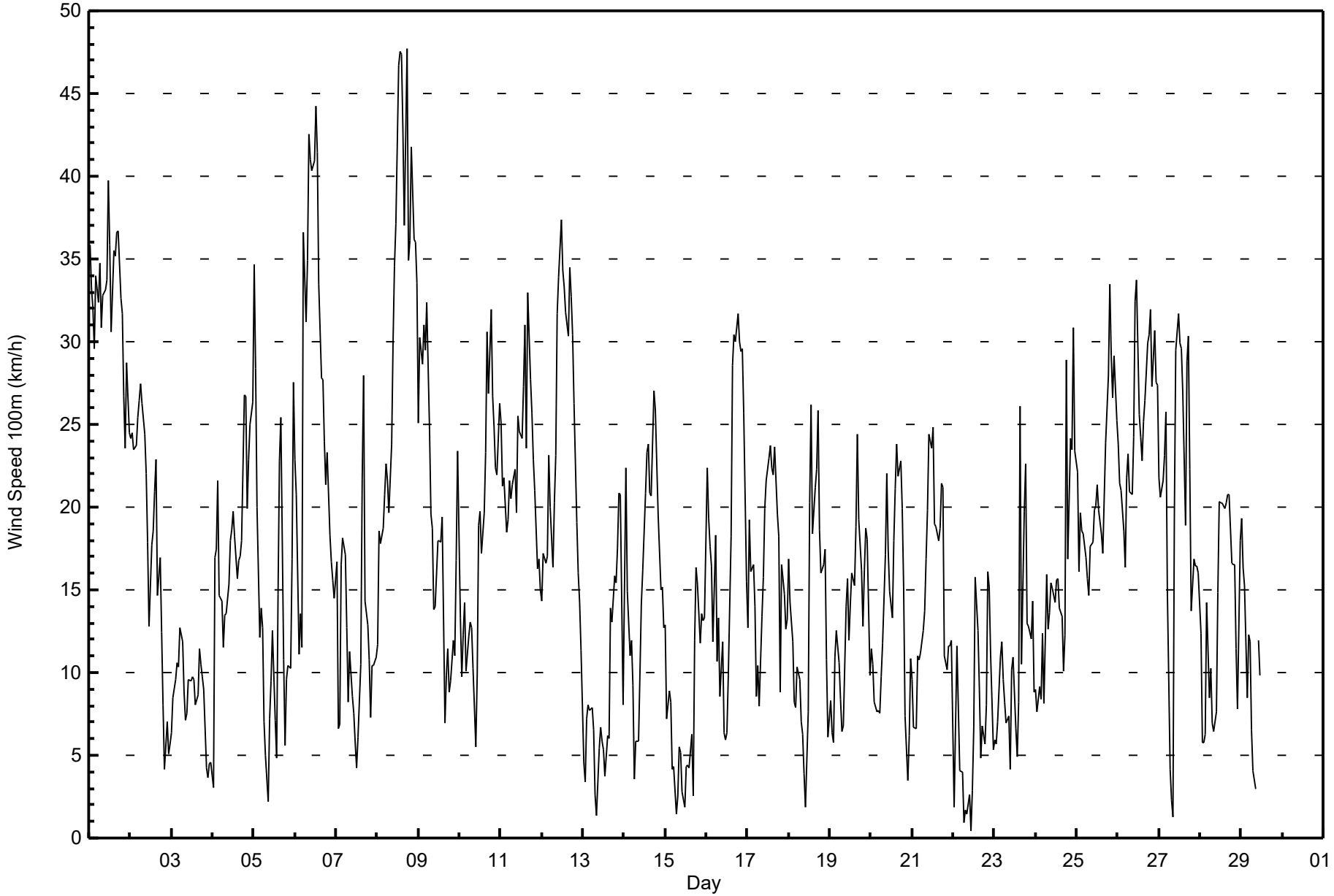
DF - DAS Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 100m (WS100) - km/h

Lower Camp Met Tower - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	52	7.61	7.61
6 - 11	163	23.87	31.48
12 - 19	214	31.33	62.81
20 - 28	164	24.01	86.82
29 - 38	77	11.27	98.10
> 38	13	1.90	100.00

Total Number of Valid Hours: 683

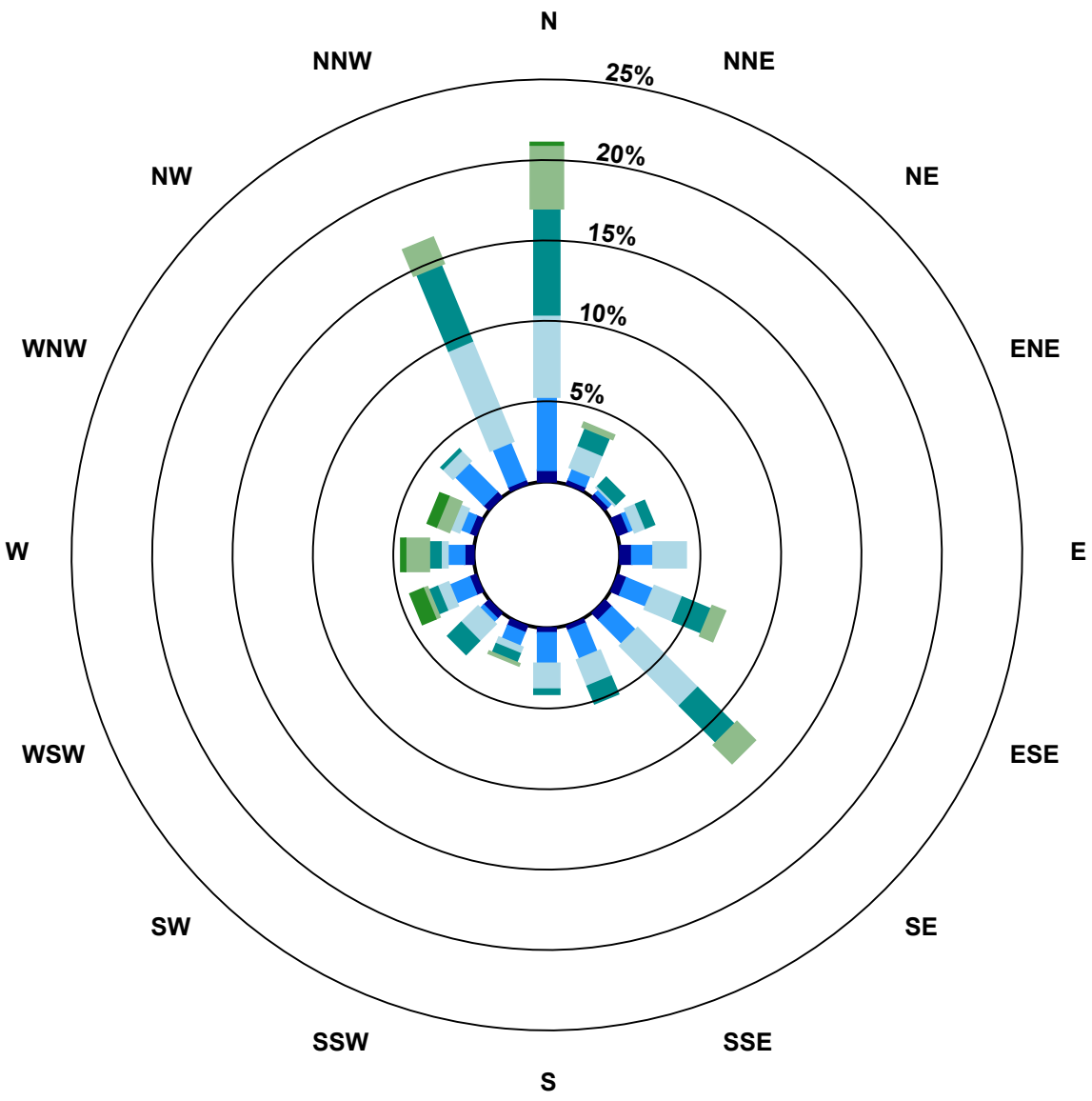
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 100m (WS100) - 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: 683

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 163m (WS163) - km/h

Lower Camp Met Tower - June 2026

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

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

Minimum Speed Value: -- km/h on Jun 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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
3-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
4-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
6-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
30-Jun	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

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 - June 2026

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

Minimum Value: -- km/h on Jun 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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
3-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
4-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
6-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
30-Jun	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																								

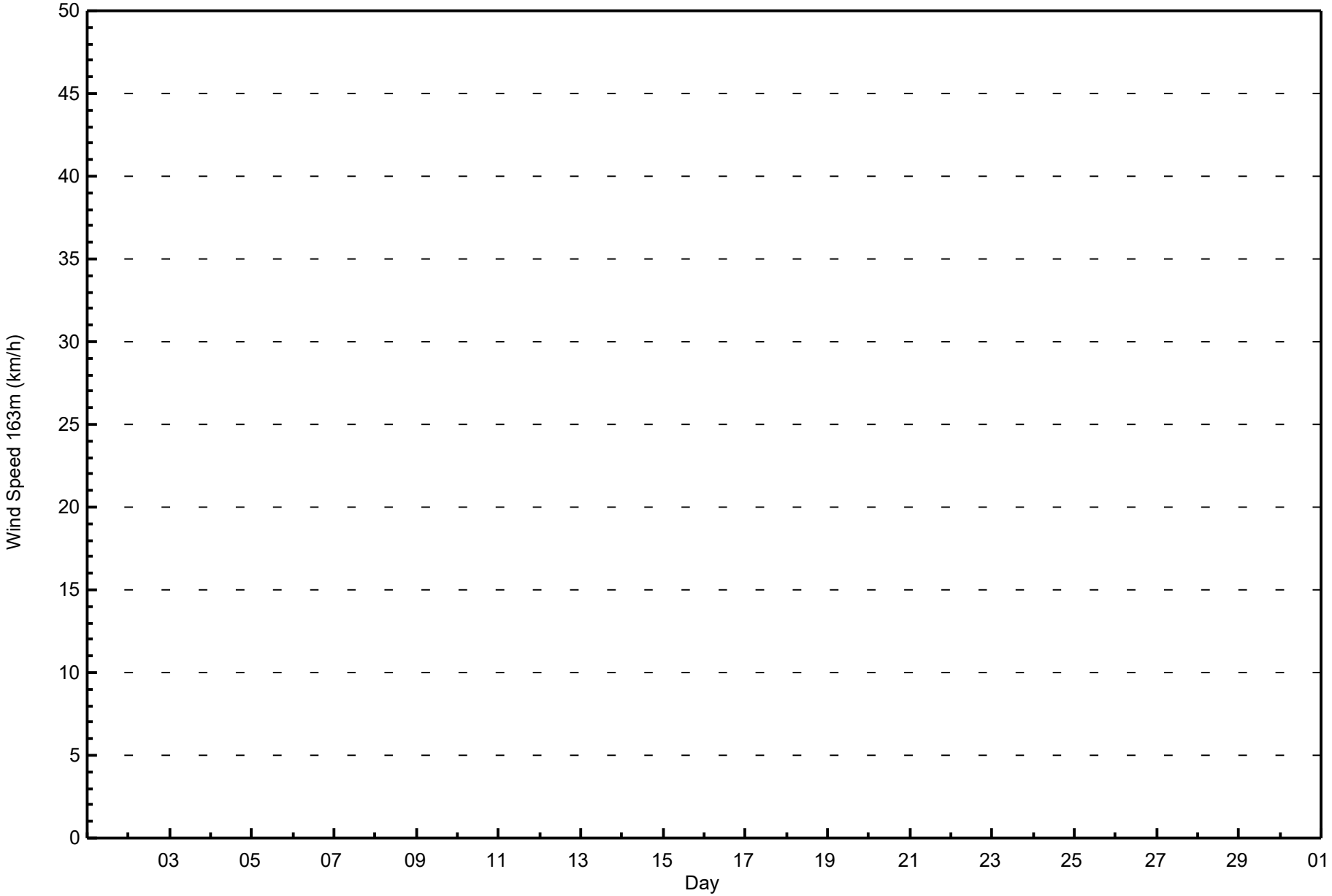
DF - DAS Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 163m (WS163) - km/h

Lower Camp Met Tower - June 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

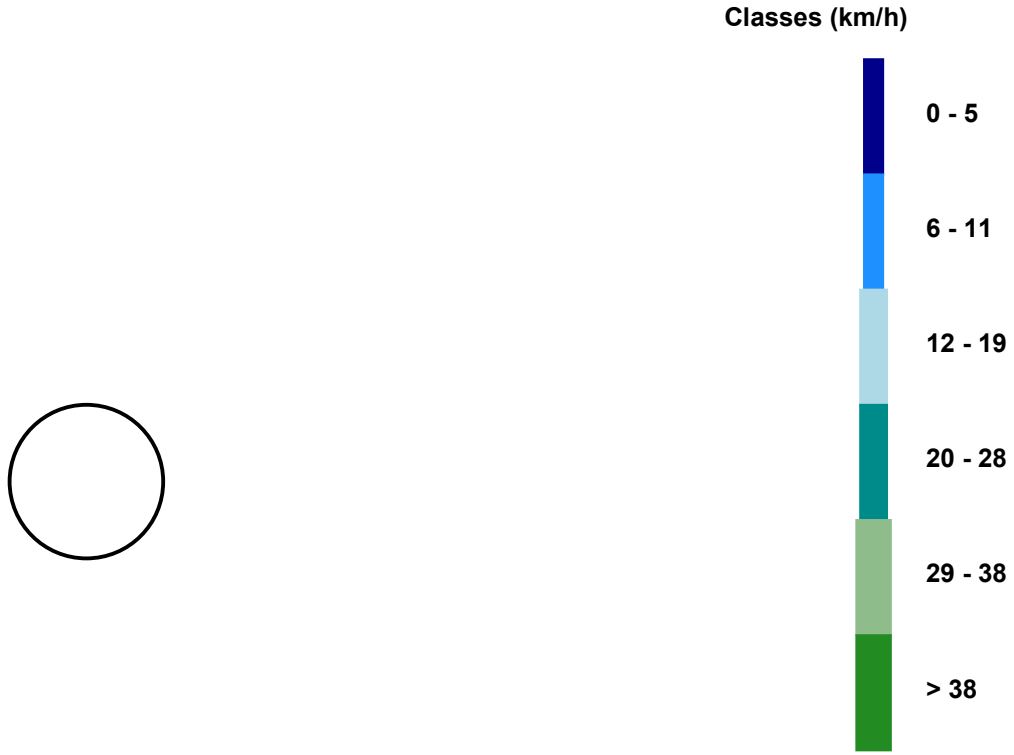
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 163m (WS163) - km/h

Lower Camp Met Tower



Total Number of Valid Hours: 0

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 20m (WD20) - deg

Lower Camp Met Tower - June 2026

Direction of Maximum Speed: 285 deg on Jun 8 18:00
Direction of Maximum Daily Speed Average: 345.9 deg on Jun 1

Direction of Minimum Speed: 254 deg on Jun 13 02:00
Direction of Minimum Daily Speed Average: 1.6 deg on Jun 15

Monthly Average Direction: 354.4 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-Jun	340	344	333	335	334	333	329	330	336	338	343	348	355	354	349	346	351	1	354	352	2	349	355	359	345.9
2-Jun	358	1	359	359	348	354	0	356	1	14	9	352	18	28	32	37	99	132	119	130	127	85	131	93	16.5
3-Jun	41	57	86	89	75	94	96	99	110	101	135	134	137	156	133	144	164	136	166	146	22	328	347	342	122.3
4-Jun	332	97	158	141	133	130	133	136	141	177	188	186	178	176	177	162	175	196	214	212	201	178	175	172	176.3
5-Jun	182	192	170	131	164	219	188	171	121	122	123	124	88	86	141	148	137	123	143	148	124	119	207	237	157.1
6-Jun	263	278	332	287	297	291	262	250	248	247	242	241	243	239	241	238	236	224	219	228	221	212	203	187	243.0
7-Jun	177	140	129	134	143	143	134	140	146	127	123	110	62	81	358	345	349	47	347	328	351	352	336	343	95.7
8-Jun	342	343	333	341	334	339	336	323	307	302	302	297	288	287	282	276	282	285	275	281	284	279	269	275	292.9
9-Jun	279	278	267	270	271	288	261	265	280	251	240	266	278	260	252	270	3	347	355	346	330	315	336	337	280.1
10-Jun	345	334	334	337	326	334	341	345	322	275	344	316	356	355	353	354	357	352	353	340	341	344	343	338	343.3
11-Jun	343	346	342	355	333	328	326	330	335	334	343	337	340	351	351	342	345	342	348	339	337	326	314	322	339.8
12-Jun	310	314	323	337	343	340	326	329	338	340	345	345	346	347	347	349	356	357	359	352	334	297	303	280	343.3
13-Jun	155	254	119	121	115	130	199	107	138	240	221	231	254	236	208	164	148	152	224	223	205	202	181	115	189.7
14-Jun	147	185	151	192	184	209	227	3	314	328	341	351	353	350	343	326	338	353	345	340	343	319	305	321	336.9
15-Jun	313	1	309	337	111	73	60	125	123	118	147	191	337	58	50	357	350	105	78	72	21	83	18	56	65.2
16-Jun	119	140	138	121	144	134	102	75	117	120	131	251	259	262	7	355	354	6	5	8	5	7	4	329	29.9
17-Jun	328	347	332	334	334	338	352	323	341	340	335	345	347	341	349	356	350	328	335	333	358	338	345	333	342.2
18-Jun	337	17	9	81	44	350	323	330	27	31	170	341	351	356	341	332	334	342	343	331	313	320	311	238	340.4
19-Jun	245	254	274	330	344	335	333	358	350	344	336	341	339	298	339	355	350	348	5	351	0	353	341	337	341.7
20-Jun	347	331	23	6	349	317	348	344	344	358	15	6	14	33	11	14	5	12	21	94	93	103	342	353	9.6
21-Jun	354	343	350	334	328	318	329	337	340	337	338	345	349	352	5	356	348	354	27	315	337	344	312	323	345.2
22-Jun	141	341	341	13	7	328	356	37	56	360	185	94	117	140	137	138	44	114	166	123	144	142	122	115	119.5
23-Jun	123	129	124	120	119	119	129	131	128	145	252	261	222	189	177	343	4	140	125	136	140	118	166	212	138.3
24-Jun	127	122	126	122	143	116	128	134	127	148	156	169	169	170	159	164	149	157	106	114	131	139	127	135	140.9
25-Jun	144	84	111	121	113	119	137	138	138	131	164	165	157	152	158	155	138	142	133	120	131	149	141	141	141.2
26-Jun	135	130	134	135	145	144	134	133	124	121	147	136	146	144	142	121	129	125	117	116	110	117	135	128	131.0
27-Jun	123	104	96	95	105	95	351	349	320	126	139	138	137	137	134	91	133	136	132	84	86	45	102	55	120.4
28-Jun	65	347	339	340	331	351	348	351	335	312	60	65	64	43	45	52	62	71	62	61	49	347	346	348	34.8
29-Jun	346	340	332	323	325	18	72	303	283	DF	333	336	12	19	4	353	355	0	25	36	137	192	127	132	6.2
30-Jun	123	128	95	35	14	360	17	108	109	16	353	355	339	318	323	354	29	47	60	76	86	118	151	115	47.7
	20.3	352.8	31.7	45.8	19.1	342.8	338.3	343.6	342.1	330.9	297.2	312.2	333.5	331.6	348.1	355.3	4.6	21.3	22.0	17.3	23.3	322.0	277.3	297.0	
	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: 111 deg on Jun 4 02:00

Minimum Value: 4 deg on Jun 4 22:00

Percentiles: P_1 = 9 P_{10} = 16 Q_1 = 19 Median = 23 Q_3 = 34 P_{90} = 56 P_{99} = 92

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-Jun	20	18	23	18	19	20	21	21	20	20	19	18	20	19	19	19	18	20	19	19	19	20	19	22	23
2-Jun	18	19	19	18	18	19	19	19	21	23	21	29	25	24	29	32	38	20	21	24	34	24	21	20	38
3-Jun	30	27	24	27	32	25	28	35	33	54	22	25	25	18	27	25	19	19	23	20	70	51	28	40	70
4-Jun	56	111	41	15	16	22	15	31	17	27	13	14	13	15	17	21	21	21	12	11	15	4	4	7	111
5-Jun	10	8	25	22	26	21	45	46	45	36	20	21	34	27	14	19	21	19	59	53	11	14	41	16	59
6-Jun	28	41	45	20	39	22	21	16	14	14	12	12	12	11	13	16	11	12	10	11	11	13	10	13	45
7-Jun	21	72	15	16	12	13	22	21	20	29	22	33	53	57	64	19	18	57	20	24	43	19	21	40	72
8-Jun	22	20	20	19	20	19	20	18	19	19	17	19	19	19	19	19	19	18	20	19	18	20	19	20	22
9-Jun	26	20	20	20	19	20	23	24	26	31	19	30	32	27	21	52	24	26	23	14	30	67	19	18	67
10-Jun	32	25	22	28	30	23	24	28	32	65	74	30	24	21	20	21	20	20	20	21	20	19	19	18	74
11-Jun	20	23	24	23	21	23	21	22	20	23	22	22	20	21	20	22	22	20	19	23	21	24	18	19	24
12-Jun	13	15	18	27	18	19	21	21	22	19	19	19	20	20	20	21	21	20	21	19	29	11	29	42	42
13-Jun	39	93	46	21	32	22	35	67	63	49	63	53	75	86	53	63	23	19	18	14	7	8	82	29	93
14-Jun	58	36	40	33	28	23	83	34	44	38	29	23	20	22	23	22	23	19	16	17	18	30	61	47	83
15-Jun	47	40	34	45	76	92	88	41	29	29	37	74	85	46	54	35	67	23	21	19	63	84	61	44	92
16-Jun	23	23	21	21	19	24	52	37	34	32	36	35	41	40	39	23	22	23	21	19	18	17	18	21	52
17-Jun	19	14	21	22	40	48	23	34	27	30	24	22	25	25	26	21	20	21	21	73	22	12	40	61	73
18-Jun	29	36	91	35	72	34	31	39	43	47	108	40	25	20	25	24	26	18	20	21	12	18	45	64	108
19-Jun	28	52	100	38	24	59	38	29	29	24	24	42	27	34	24	23	20	20	23	26	26	19	25	18	100
20-Jun	24	46	48	41	79	68	25	23	18	24	29	28	42	38	28	22	27	26	28	31	42	56	47	28	79
21-Jun	33	49	19	25	16	19	23	44	22	20	19	18	17	28	32	22	22	23	28	26	17	29	34	56	56
22-Jun	72	29	24	49	25	26	57	28	38	61	64	58	42	20	21	35	52	71	58	26	20	17	76	31	76
23-Jun	19	21	22	15	13	15	9	10	16	60	44	37	70	90	38	45	95	21	20	23	19	28	76	73	95
24-Jun	17	11	14	15	32	25	19	21	21	22	20	25	29	29	31	26	45	34	30	32	18	16	16	17	45
25-Jun	18	52	20	9	11	12	12	15	18	24	17	18	18	22	23	25	23	21	20	18	23	19	12	8	52
26-Jun	11	13	16	24	81	79	26	22	22	22	16	19	24	21	23	21	23	18	20	19	19	18	17	17	81
27-Jun	17	17	18	22	17	36	14	44	101	78	14	15	15	15	22	35	17	15	17	27	45	52	67	55	101
28-Jun	21	10	18	20	31	60	18	31	30	41	49	33	43	40	38	37	32	30	29	26	32	74	17	62	74
29-Jun	11	21	38	65	14	78	67	94	60	DF	25	33	41	35	24	22	27	20	30	20	47	31	39	25	94
30-Jun	19	13	47	62	56	22	43	49	17	74	32	27	38	27	30	26	26	37	23	22	17	63	30	43	74
	72	111	100	65	81	92	88	94	101	78	108	74	85	90	64	63	95	71	59	73	70	84	82	73	
	Diurnal Maximum																								

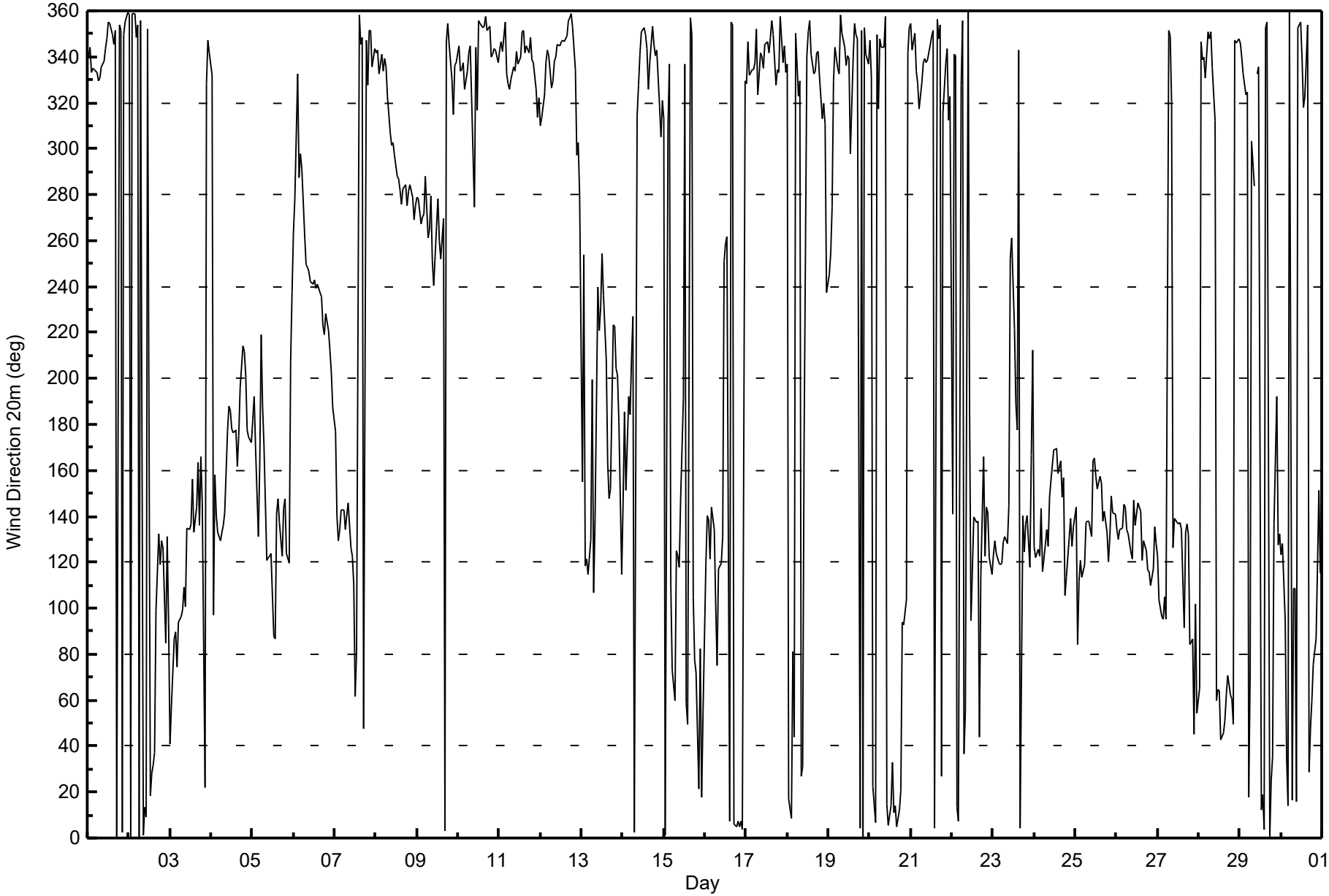
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 20m (WD20) - deg

Lower Camp Met Tower - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 45m (WD45) - deg

Lower Camp Met Tower - June 2026

Direction of Maximum Speed: 283 deg on Jun 8 18:00
Direction of Maximum Daily Speed Average: 348.8 deg on Jun 1

Direction of Minimum Speed: 133 deg on Jun 15 07:00
Direction of Minimum Daily Speed Average: 2.6 deg on Jun 15

Monthly Average Direction: 0.2 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-Jun	345	348	338	337	337	336	332	333	337	341	346	352	358	358	352	349	355	3	358	356	4	355	359	3	348.8
2-Jun	1	3	1	2	352	355	2	359	2	13	11	359	18	26	31	37	94	127	117	126	115	82	122	92	19.0
3-Jun	56	65	91	89	79	94	94	97	102	98	126	126	128	149	127	140	162	133	166	146	80	350	343	353	112.8
4-Jun	339	135	145	139	132	129	134	128	137	177	188	186	178	176	178	162	175	195	214	213	205	191	184	176	175.1
5-Jun	186	199	183	136	177	225	191	176	121	124	120	124	96	88	131	145	132	120	152	164	137	130	215	238	161.1
6-Jun	257	275	319	290	303	291	261	249	247	245	241	240	242	238	240	238	235	225	221	230	222	217	209	197	244.3
7-Jun	186	151	130	133	136	137	128	128	141	121	122	107	74	88	357	347	352	51	352	337	347	355	342	348	76.1
8-Jun	345	346	337	343	337	341	337	326	304	302	301	297	288	286	281	276	281	283	275	280	285	279	268	273	293.6
9-Jun	280	279	267	269	272	286	261	265	279	252	243	268	282	263	255	271	0	345	353	346	337	331	341	339	284.3
10-Jun	352	344	339	344	336	334	343	346	326	283	339	316	0	357	354	356	359	356	357	344	344	348	346	340	346.5
11-Jun	347	351	346	356	336	329	327	331	336	336	345	337	340	354	354	345	347	343	353	340	339	331	319	328	341.9
12-Jun	309	297	326	336	344	344	332	331	337	341	346	346	347	349	348	351	357	359	3	356	341	324	319	336	344.7
13-Jun	244	259	219	207	164	202	221	119	158	255	233	244	262	249	224	171	148	151	225	223	209	207	200	123	204.2
14-Jun	200	231	212	220	210	222	247	327	305	326	336	349	357	350	347	328	338	355	349	343	350	328	336	337	334.4
15-Jun	335	347	327	311	6	76	133	122	116	120	140	198	330	50	37	356	339	100	83	86	77	117	98	85	67.5
16-Jun	114	136	128	122	136	121	98	77	110	115	135	261	264	268	9	359	357	7	7	9	8	9	6	336	30.4
17-Jun	331	344	341	337	344	343	352	320	340	342	337	346	348	342	351	356	352	328	337	350	3	343	335	317	343.5
18-Jun	339	344	328	251	289	336	331	325	1	18	213	339	353	359	345	330	335	345	345	333	316	324	308	250	337.5
19-Jun	270	274	302	303	322	337	339	340	342	342	336	336	339	303	338	356	353	352	6	356	3	359	360	342	341.5
20-Jun	353	343	349	349	328	336	348	346	347	1	18	8	20	36	15	15	8	14	21	93	87	85	344	356	11.5
21-Jun	2	347	354	344	340	326	335	341	341	337	339	349	352	354	9	2	352	358	32	333	345	347	326	324	349.1
22-Jun	140	328	347	347	356	334	340	33	47	352	198	81	111	130	130	130	76	106	169	124	134	149	163	152	116.3
23-Jun	136	142	131	129	129	126	137	125	120	158	253	262	223	193	178	344	8	140	120	127	133	128	142	206	136.9
24-Jun	131	130	129	127	141	118	126	129	124	148	155	167	170	169	158	162	152	157	102	112	125	130	126	125	136.5
25-Jun	135	129	123	125	121	123	132	133	128	121	159	162	154	143	146	149	130	135	126	118	121	124	137	142	134.6
26-Jun	133	127	123	122	119	120	122	122	120	118	143	131	139	138	135	120	124	121	115	114	111	116	127	124	124.8
27-Jun	118	109	103	97	104	99	345	350	15	119	133	132	130	131	127	91	127	131	127	94	90	80	101	87	116.0
28-Jun	82	349	338	335	331	332	338	335	321	312	63	64	62	43	50	53	64	70	62	64	57	50	337	338	37.4
29-Jun	342	341	336	331	324	339	10	300	268	DF	332	331	16	23	8	353	355	3	31	44	127	189	128	134	6.5
30-Jun	121	127	114	72	29	313	356	112	113	351	339	344	333	315	325	359	33	51	62	82	94	109	135	124	58.3
	5.7	341.5	13.7	23.0	0.2	342.3	340.5	345.0	342.9	338.7	328.1	329.3	344.3	346.8	356.3	359.7	9.1	24.0	29.7	26.5	31.7	11.2	341.8	345.9	
	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 45m (WD45) - deg

Lower Camp Met Tower - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 102 deg on Jun 27 09:00

Minimum Value: 3 deg on Jun 29 01:00

Percentiles: P_1 = 6 P_{10} = 9 Q_1 = 11 Median = 15 Q_3 = 24 P_{90} = 41 P_{99} = 80

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-Jun	12	11	15	12	11	10	11	12	12	12	12	11	12	13	12	11	11	10	11	11	11	12	11	14	15
2-Jun	12	11	11	11	11	11	10	10	13	14	12	16	14	12	15	17	30	12	11	14	33	14	15	16	33
3-Jun	22	11	15	17	16	13	17	24	24	36	18	18	18	18	21	21	18	14	19	17	61	28	14	23	61
4-Jun	30	52	18	7	12	11	8	21	14	28	12	13	12	15	17	19	21	19	11	9	11	4	7	6	52
5-Jun	11	7	21	20	25	18	43	49	64	28	15	16	25	21	12	16	16	18	39	46	12	12	35	10	64
6-Jun	14	25	30	15	31	15	16	9	9	8	7	7	7	6	8	13	7	9	9	8	9	12	8	10	31
7-Jun	11	76	14	9	9	12	14	15	19	25	16	27	54	44	62	12	11	47	10	15	31	10	11	19	76
8-Jun	13	11	10	12	10	12	11	11	12	10	11	13	11	10	12	12	11	10	13	12	10	12	12	12	13
9-Jun	19	12	13	12	13	11	17	15	19	25	15	19	25	22	15	48	13	20	13	9	18	22	10	9	48
10-Jun	16	21	12	14	21	14	14	24	24	61	52	28	16	14	13	13	11	12	12	13	14	13	14	11	61
11-Jun	12	14	14	14	12	12	13	12	12	13	12	13	13	13	13	15	14	14	12	13	12	14	11	10	15
12-Jun	11	11	11	15	10	10	12	11	14	12	13	12	14	14	14	15	13	12	12	11	12	5	13	35	35
13-Jun	43	15	26	41	24	23	17	78	86	41	57	44	50	80	45	62	22	17	18	10	6	5	40	23	86
14-Jun	43	37	45	22	22	17	87	41	33	24	21	16	15	16	18	17	17	13	9	9	10	13	9	10	87
15-Jun	24	29	17	26	33	48	80	34	18	24	45	72	73	41	53	30	66	13	10	7	33	34	40	27	80
16-Jun	16	22	17	14	17	17	38	16	26	18	35	32	27	30	33	16	16	15	14	11	10	9	10	15	38
17-Jun	10	8	9	9	20	24	16	26	19	18	14	16	18	18	18	17	13	11	16	39	13	8	13	26	39
18-Jun	15	15	24	32	68	22	14	25	46	49	97	29	17	12	17	15	19	12	12	13	7	10	15	48	97
19-Jun	19	35	31	14	8	10	13	19	27	18	14	31	22	29	14	19	12	15	17	18	15	9	16	11	35
20-Jun	16	12	37	23	41	35	14	12	11	17	20	22	29	27	18	13	18	17	18	21	26	47	51	14	51
21-Jun	23	17	13	11	8	9	13	19	12	11	10	11	10	20	26	14	15	15	13	18	8	12	16	12	26
22-Jun	71	23	8	29	37	14	42	32	37	51	67	56	44	16	19	21	58	70	54	29	19	17	52	29	71
23-Jun	12	15	8	7	7	9	16	9	10	65	32	28	62	82	42	46	83	21	11	19	13	17	22	51	83
24-Jun	8	9	7	8	29	15	10	14	13	22	18	28	28	27	27	24	38	31	19	23	9	11	8	9	38
25-Jun	10	31	14	6	8	7	8	10	12	15	20	18	17	21	25	24	19	18	12	9	11	13	12	8	31
26-Jun	5	5	7	11	57	25	13	12	11	12	13	13	20	18	19	12	16	11	12	9	9	10	11	9	57
27-Jun	11	9	9	8	8	31	12	41	102	49	8	9	8	7	17	25	10	7	8	18	22	21	38	12	102
28-Jun	11	32	13	11	11	47	12	37	23	25	44	20	28	27	25	23	15	17	16	11	17	79	9	14	79
29-Jun	3	11	9	24	21	31	43	61	39	DF	19	30	36	29	19	16	17	14	20	12	39	25	15	21	61
30-Jun	11	9	25	36	85	25	26	38	11	69	23	24	29	19	21	20	16	27	9	10	8	23	19	13	85
	71	76	45	41	85	48	87	78	102	69	97	72	73	82	62	62	83	70	54	46	61	79	52	51	
	Diurnal Maximum																								

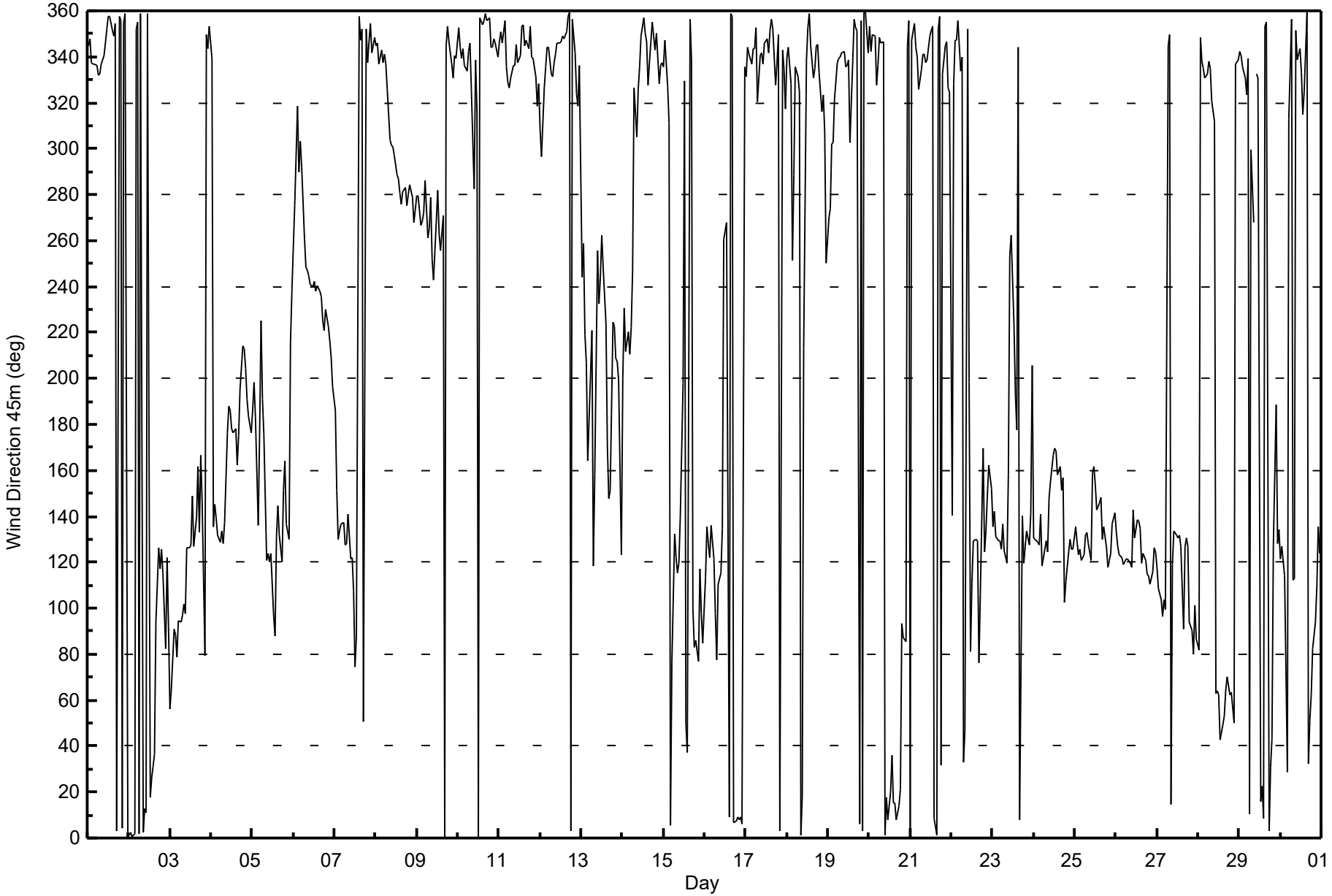
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 45m (WD45) - deg

Lower Camp Met Tower - June 2026



Direction of Maximum Speed: 282 deg on Jun 8 18:00
Direction of Maximum Daily Speed Average: 351.9 deg on Jun 1

Direction of Minimum Speed: 235 deg on Jun 22 11:00

Direction of Minimum Daily Speed Average: 3.3 deg on Jun 22

Monthly Average Direction: 355.4 deg

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Percent Operational Time:	94.9

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-Jun	349	352	343	344	342	342	338	337	342	346	350	354	0	359	353	352	356	4	360	358	5	360	2	5	351.9
2-Jun	5	6	6	5	357	358	3	1	4	15	16	9	22	28	33	40	90	123	116	118	89	81	111	83	22.3
3-Jun	71	81	99	91	90	99	99	99	104	106	122	124	126	147	128	143	164	138	168	150	137	110	96	103	117.5
4-Jun	165	139	144	156	157	145	145	135	146	183	190	188	180	177	182	168	179	195	216	214	209	205	199	190	180.0
5-Jun	204	221	210	175	208	234	195	190	147	131	127	135	108	95	132	149	136	129	180	189	171	170	232	245	183.3
6-Jun	259	275	304	293	314	290	262	251	248	246	244	243	245	242	244	240	240	229	225	236	230	228	225	218	248.7
7-Jun	205	188	160	140	138	142	137	126	148	125	121	107	96	111	3	352	357	59	5	354	3	44	16	5	77.5
8-Jun	356	354	347	349	346	346	343	332	305	304	302	297	288	286	280	276	279	282	276	280	284	279	270	274	295.4
9-Jun	280	281	268	270	275	288	264	271	281	255	245	270	282	261	257	269	357	345	352	349	345	348	355	349	287.1
10-Jun	2	359	354	355	355	341	345	345	326	292	330	319	6	0	356	359	0	357	358	347	349	351	350	345	350.6
11-Jun	350	353	349	355	340	330	330	333	339	339	348	342	343	355	355	349	349	349	355	346	345	338	327	335	344.8
12-Jun	313	300	322	328	336	344	339	337	339	341	347	348	349	350	350	351	359	1	2	358	349	343	328	324	344.4
13-Jun	358	289	259	261	258	246	232	221	244	269	247	252	265	258	243	177	154	160	226	224	222	228	219	192	226.3
14-Jun	233	247	246	248	245	238	276	289	312	325	332	349	1	351	349	331	340	357	353	348	356	343	352	353	328.9
15-Jun	347	352	337	326	11	100	172	140	142	130	140	210	319	48	25	1	359	99	90	94	101	114	117	105	77.3
16-Jun	111	139	129	134	127	118	106	95	114	120	157	263	269	276	14	2	1	9	9	13	11	15	14	354	38.5
17-Jun	340	342	347	343	357	357	348	326	341	345	340	348	350	344	354	359	353	330	342	354	7	12	352	333	347.8
18-Jun	335	346	346	327	326	331	328	313	317	346	244	341	355	1	347	332	336	347	347	337	323	333	305	267	337.1
19-Jun	289	289	312	297	297	314	314	318	341	340	337	334	341	311	339	358	355	355	8	360	6	8	23	6	342.2
20-Jun	4	351	351	348	337	347	357	352	350	5	20	13	20	35	18	18	12	17	26	93	92	64	355	14	14.3
21-Jun	31	4	3	358	354	342	349	351	343	342	343	352	356	360	12	11	358	4	35	13	9	8	344	336	358.4
22-Jun	64	350	1	13	21	350	279	302	353	326	235	64	103	127	124	129	103	109	187	131	126	166	184	196	118.8
23-Jun	202	205	187	179	177	179	195	163	156	222	254	258	222	192	184	341	5	151	121	124	137	144	132	178	168.1
24-Jun	160	195	165	154	152	141	135	141	137	162	160	171	171	173	161	164	160	160	104	116	127	130	130	130	144.4
25-Jun	134	137	134	139	138	138	142	141	132	125	157	161	152	142	142	147	131	137	129	121	127	130	145	152	138.1
26-Jun	154	144	134	134	123	126	124	123	121	121	144	134	139	138	135	122	126	123	116	118	116	120	122	124	128.2
27-Jun	119	123	118	108	108	112	62	40	71	117	134	133	131	132	126	94	127	132	127	101	94	89	93	102	117.5
28-Jun	101	60	39	357	342	339	351	336	321	328	70	65	65	45	53	55	63	71	66	66	70	89	5	345	46.2
29-Jun	347	347	350	356	342	341	352	338	319	DF	338	320	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
30-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
	336.4	325.2	346.1	350.8	345.4	335.9	337.1	334.9	329.9	337.3	329.6	330.7	345.5	348.6	357.8	0.8	10.3	26.0	30.5	26.8	29.0	35.4	9.2	338.5	
	Diurnal Average																								

DF - DAS Failure 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 100m (WD100) - deg

Lower Camp Met Tower - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 107 deg on Jun 13 09:00

Minimum Value: 2 deg on Jun 4 22:00

Percentiles: P_1 = 3 P_{10} = 6 Q_1 = 8 Median = 11 Q_3 = 17 P_{90} = 30 P_{99} = 79

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	0
Percent Operational Time:	94.9

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-Jun	8	6	9	8	7	7	7	8	8	8	8	7	8	8	7	7	6	7	7	7	9	8	8	11	11
2-Jun	8	9	9	9	7	7	7	7	8	10	9	11	10	8	10	13	27	8	9	15	31	10	16	13	31
3-Jun	14	11	10	10	7	7	11	17	15	24	12	12	12	17	17	18	15	12	16	17	40	25	10	14	40
4-Jun	47	9	7	4	8	10	9	10	14	23	12	12	11	15	18	18	18	18	9	8	7	2	4	5	47
5-Jun	10	3	13	20	14	11	30	49	85	17	13	15	25	29	11	16	13	12	43	33	12	16	21	5	85
6-Jun	9	15	18	12	20	11	11	6	5	4	4	5	4	4	4	10	5	8	7	6	7	9	7	10	20
7-Jun	6	37	20	8	5	8	15	14	22	24	16	23	49	39	51	9	10	51	17	15	29	15	13	13	51
8-Jun	8	7	6	7	7	8	7	10	9	7	8	9	7	7	8	9	9	7	9	9	8	9	9	10	10
9-Jun	16	10	10	8	9	8	14	13	15	23	12	14	21	19	11	50	12	16	10	12	12	14	8	5	50
10-Jun	9	17	9	9	16	8	12	18	19	53	50	25	12	9	8	9	7	8	7	9	8	8	8	8	53
11-Jun	8	7	9	8	10	8	9	9	8	9	8	8	9	10	10	10	9	9	7	9	9	10	8	7	10
12-Jun	11	6	7	5	4	6	9	8	10	9	10	9	9	11	11	12	10	8	8	6	6	5	4	4	12
13-Jun	12	25	6	5	4	9	9	51	107	29	47	45	38	71	45	56	18	17	15	8	4	3	11	30	107
14-Jun	14	7	11	8	11	10	51	16	27	19	17	15	14	13	15	13	16	12	7	6	7	8	9	13	51
15-Jun	5	13	17	13	35	16	59	51	21	18	47	78	65	48	51	29	65	10	6	3	10	15	13	14	78
16-Jun	10	24	12	12	15	10	24	10	22	13	33	28	23	26	30	11	13	11	10	7	7	6	7	12	33
17-Jun	8	4	6	4	10	15	9	19	17	16	12	16	14	15	15	16	8	9	13	27	8	10	8	9	27
18-Jun	3	5	7	16	8	7	6	7	16	33	92	24	12	7	14	11	17	9	9	10	6	7	15	18	92
19-Jun	17	19	13	7	4	8	8	24	24	16	11	21	18	24	11	18	9	13	13	12	11	5	10	13	24
20-Jun	10	9	10	14	9	16	12	11	8	14	15	17	21	20	14	10	13	12	15	20	13	36	39	15	39
21-Jun	17	20	13	8	8	8	8	14	8	7	7	7	6	17	26	10	13	13	11	17	10	15	11	4	26
22-Jun	73	24	5	8	15	19	75	56	83	60	99	60	37	13	20	20	31	41	50	39	12	19	25	21	99
23-Jun	26	23	12	7	4	13	14	19	18	55	27	22	66	70	43	46	75	20	7	14	11	14	7	35	75
24-Jun	16	15	13	19	22	21	9	13	14	20	17	26	21	25	23	21	36	28	15	12	5	7	5	4	36
25-Jun	4	10	6	5	5	4	6	9	7	8	21	15	18	18	22	21	17	15	9	5	5	7	8	6	22
26-Jun	7	9	6	5	5	4	3	5	6	8	11	10	18	15	17	8	13	7	8	6	5	5	8	6	18
27-Jun	7	7	8	5	4	22	37	92	95	22	6	6	6	5	16	22	7	3	6	12	9	11	8	5	95
28-Jun	7	23	32	50	4	16	6	28	16	22	34	17	23	23	21	20	14	14	12	8	11	12	42	6	50
29-Jun	3	3	7	18	4	6	17	26	41	DF	19	37	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	41
30-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
	73	37	32	50	35	22	75	92	107	60	99	78	66	71	51	56	75	51	50	39	40	36	42	35	
	Diurnal Maximum																								

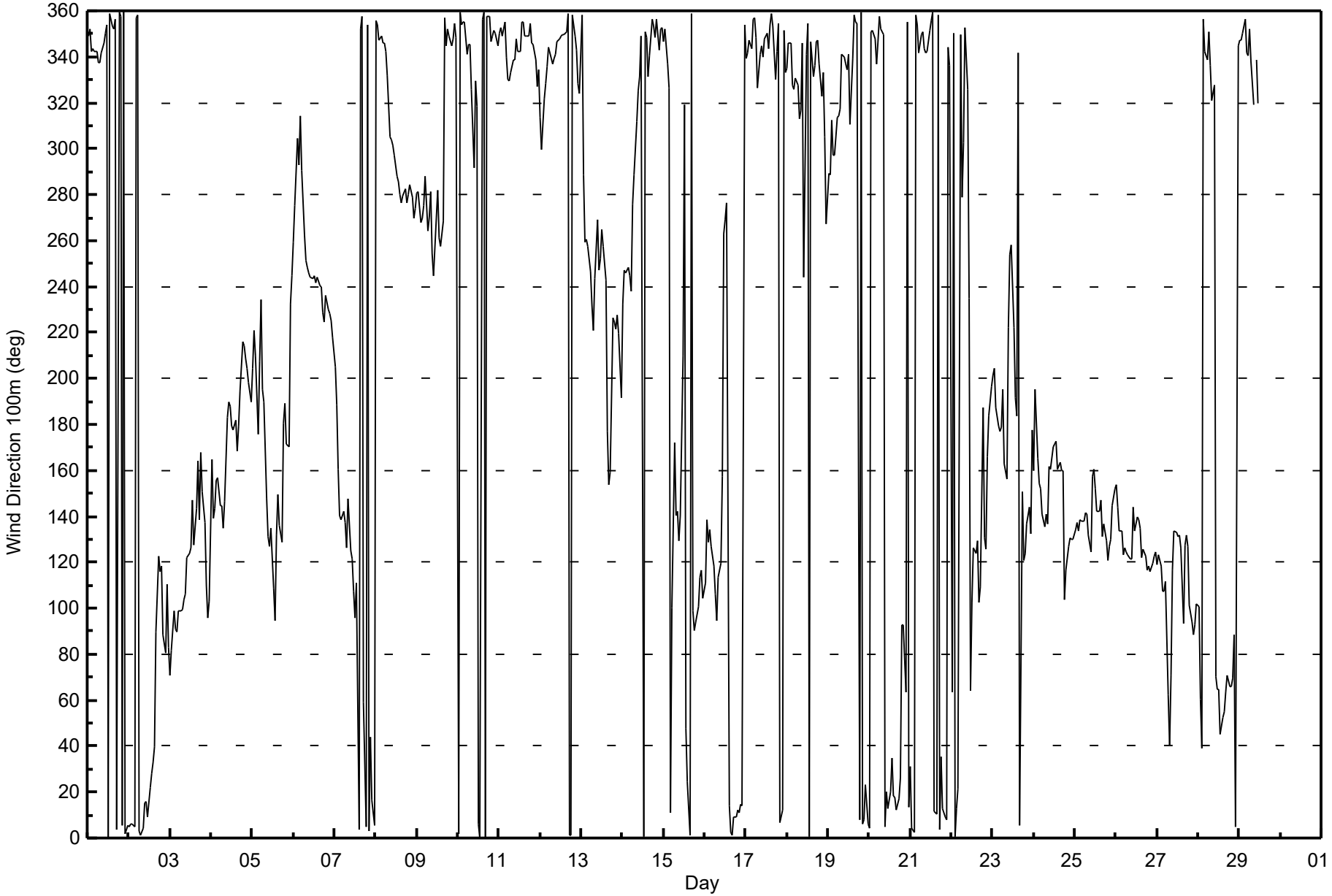
DF - DAS Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 100m (WD100) - deg

Lower Camp Met Tower - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 163m (WD163) - deg

Lower Camp Met Tower - June 2026

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

Direction of Minimum Speed: -- deg on Jun 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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
3-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
4-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
6-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
30-Jun	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
All monthly, daily, and diurnal averages have been calculated using vector methods

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

Minimum Value: -- deg on Jun 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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
3-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
4-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
6-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
30-Jun	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																								

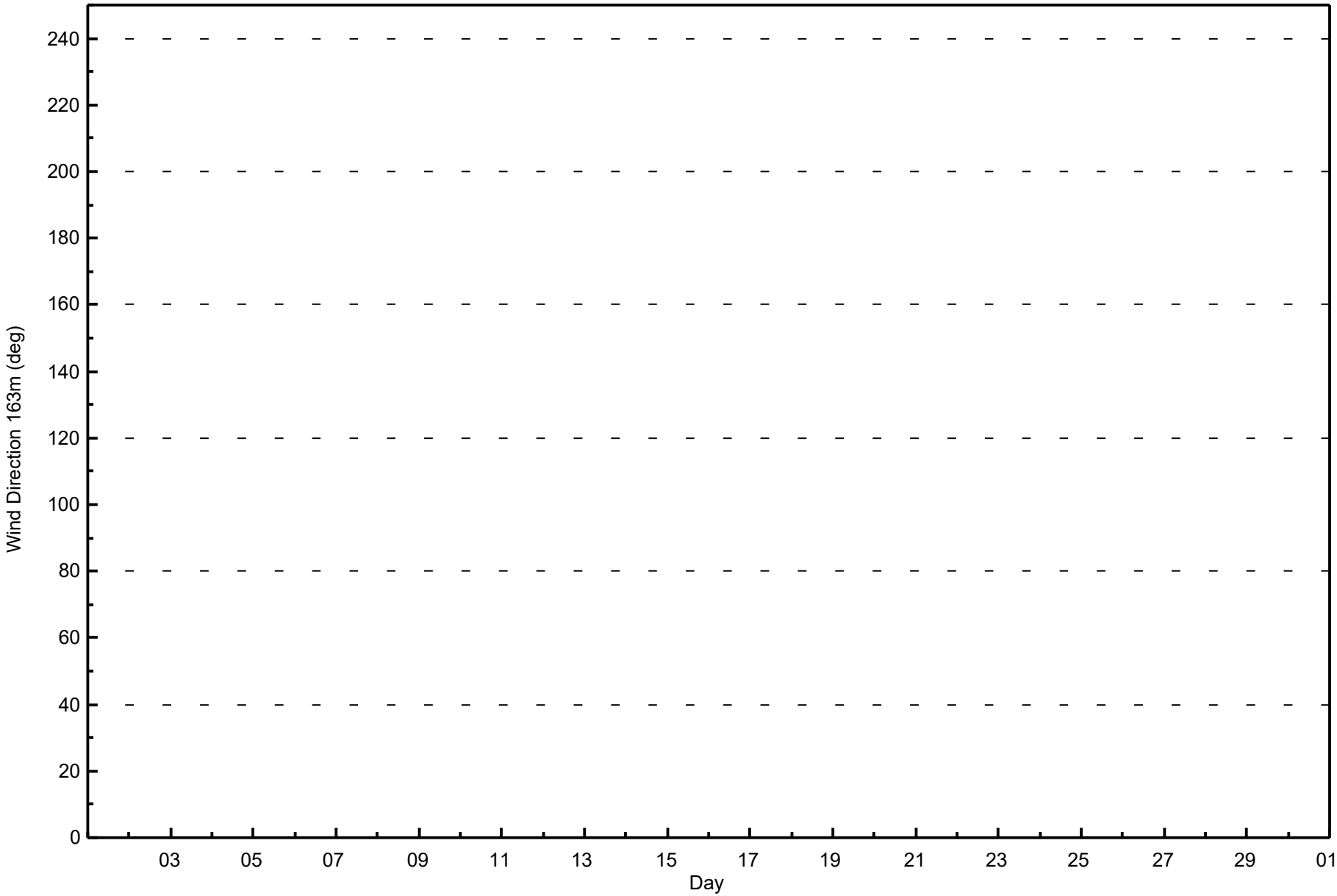
DF - DAS Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 163m (WD163) - deg

Lower Camp Met Tower - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Lower Camp Met Tower - June 2026

Maximum Value: 0.7 km/h on Jun 29 09:00

Maximum Daily Average: 0.0 km/h on Jun 13

Minimum Value: -1.3 km/h on Jun 8 14:00

Minimum Daily Average: -0.8 km/h on Jun 8

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

Minimum Diurnal Average: -0.5 km/h at hour 15

Monthly Average: -0.32 km/h

Percentiles: P_1 = -1.1 P_{10} = -0.7 Q_1 = -0.5 Median = -0.3 Q_3 = -0.1 P_{90} = 0.0 P_{99} = 0.2

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

DF - DAS Failure

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

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

Lower Camp Met Tower - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 1
Maximum Value: 5.2 km/h on Jun 8 14:00

Minimum Value: 0.1 km/h on Jun 13 00:00

Percentiles: P_1 = 0.2 P_{10} = 0.5 Q_1 = 1.0 Median = 1.7 Q_3 = 2.6 P_{90} = 3.2 P_{99} = 4.3

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
	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-Jun	3.7	3.5	3.4	3.2	3.4	3.3	3.5	3.1	3.5	3.4	3.7	4.4	4.1	3.5	3.9	3.8	3.9	4.3	3.5	3.4	3.0	2.5	3.2	2.9	4.4
2-Jun	2.8	2.8	2.5	2.8	2.9	2.9	2.9	2.9	2.6	2.5	1.7	1.3	1.8	1.8	2.4	2.8	2.1	2.0	1.3	1.2	0.7	0.7	0.5	0.4	2.9
3-Jun	0.4	0.7	1.0	1.2	0.9	1.5	1.8	1.5	1.1	1.2	1.3	1.3	1.3	1.2	1.2	1.3	1.3	1.3	1.0	0.9	0.5	0.3	0.2	0.3	1.8
4-Jun	0.3	0.5	1.1	1.6	1.1	1.6	1.8	1.9	1.9	1.6	1.8	1.8	1.9	1.9	1.9	2.0	1.7	1.9	2.3	2.3	1.1	0.4	0.6	1.0	2.3
5-Jun	1.4	1.6	1.5	1.2	1.2	1.3	1.3	1.3	0.9	1.4	1.5	1.8	1.8	1.4	1.4	2.2	2.6	1.0	0.8	1.1	0.8	0.8	1.4	2.1	2.6
6-Jun	2.0	2.2	1.0	1.2	1.4	3.9	3.4	3.1	4.0	3.5	3.5	3.4	3.7	3.3	2.7	2.3	2.2	2.1	1.7	1.8	1.3	1.0	1.0	0.8	4.0
7-Jun	1.0	0.8	1.2	2.3	1.9	1.9	1.8	1.3	1.5	1.5	1.4	1.6	1.4	1.6	1.8	2.4	3.0	2.4	1.2	0.9	0.7	0.9	0.7	0.8	3.0
8-Jun	1.0	1.6	1.7	1.9	2.0	2.3	2.3	1.7	2.4	3.1	3.4	4.0	4.8	5.2	5.0	4.7	4.2	5.0	3.7	4.0	4.3	3.9	3.8	3.7	5.2
9-Jun	2.8	3.1	3.0	3.2	2.7	3.4	2.5	2.6	2.6	1.9	1.7	2.8	2.8	2.4	2.6	1.6	1.6	1.3	1.1	0.9	0.6	0.6	1.4	2.2	3.4
10-Jun	1.2	0.9	1.1	1.0	0.8	1.1	1.7	2.0	1.7	1.9	1.9	2.6	2.5	2.3	2.4	2.8	3.6	3.2	3.7	3.0	2.8	2.3	2.3	2.9	3.7
11-Jun	2.8	2.5	2.3	2.2	2.2	2.4	2.4	2.4	2.6	2.4	3.0	2.9	2.8	3.5	3.7	2.7	3.7	3.1	2.8	2.6	2.4	1.5	1.4	1.0	3.7
12-Jun	0.9	1.0	0.9	0.9	1.3	1.4	1.5	2.3	2.8	3.6	3.8	4.3	4.0	3.7	3.7	3.5	3.9	3.8	3.5	2.6	1.2	0.2	0.1	0.1	4.3
13-Jun	0.1	0.1	0.2	0.2	0.2	0.5	0.9	1.1	1.1	1.6	1.7	1.6	1.8	1.7	1.8	1.6	1.6	1.5	1.6	1.2	1.0	0.9	1.1	0.9	1.8
14-Jun	0.6	1.1	1.1	0.9	0.8	0.9	1.0	0.8	1.5	1.9	2.2	2.1	2.6	3.0	2.9	2.2	2.5	3.1	2.4	1.9	1.2	0.4	0.3	0.3	3.1
15-Jun	0.3	0.2	0.3	0.2	0.2	0.3	0.5	1.0	1.2	1.5	1.5	1.8	2.0	1.8	1.7	1.3	0.8	1.4	1.2	0.5	0.4	0.5	0.8	1.2	2.0
16-Jun	2.1	2.1	1.6	1.8	1.2	1.8	1.3	1.5	1.4	1.8	1.5	1.7	1.8	2.1	2.9	3.4	3.5	3.7	3.9	3.5	3.2	3.0	2.2	1.1	3.9
17-Jun	0.7	1.0	1.0	1.1	1.0	1.0	1.5	1.8	2.1	2.3	2.8	2.8	3.1	3.0	3.0	2.8	2.9	2.1	1.7	0.9	1.4	0.3	0.2	0.2	3.1
18-Jun	0.5	0.7	0.4	0.3	0.2	0.5	0.7	0.5	0.6	1.1	1.2	1.2	2.5	3.2	2.2	2.5	2.8	2.9	2.0	1.4	1.1	1.2	0.6	0.4	3.2
19-Jun	0.5	0.5	0.2	0.4	0.3	0.4	0.6	1.2	1.6	2.1	2.0	2.1	2.3	2.3	2.1	2.8	2.9	2.5	1.9	1.5	1.7	1.3	1.0	0.7	2.9
20-Jun	0.6	0.6	0.4	0.4	0.4	0.7	1.4	1.8	2.3	2.9	2.6	2.3	2.0	2.9	3.2	3.2	3.0	2.8	2.9	2.1	1.0	0.4	0.6	1.0	3.2
21-Jun	0.8	0.6	0.6	0.7	0.8	1.1	1.4	1.5	2.3	2.6	2.8	2.6	2.7	2.6	2.8	2.3	2.3	2.6	2.5	0.8	0.5	0.9	0.5	0.2	2.8
22-Jun	0.6	0.5	0.5	0.2	0.3	0.5	0.7	0.7	1.3	1.5	1.6	1.7	1.6	2.4	1.9	1.6	0.6	1.3	0.8	0.9	1.4	0.9	0.6	0.4	2.4
23-Jun	0.7	0.6	0.8	1.0	1.1	1.3	1.0	1.1	1.5	1.6	2.1	2.1	2.0	1.7	1.7	3.2	1.6	2.2	2.7	1.4	1.0	0.7	0.4	0.6	3.2
24-Jun	0.8	0.5	1.2	1.3	1.5	1.3	2.0	1.8	2.1	2.0	2.0	2.1	2.1	2.1	2.0	1.9	1.9	1.6	3.8	1.8	2.3	2.1	2.8	1.9	3.8
25-Jun	1.4	1.0	1.1	0.9	1.1	1.2	1.2	1.8	2.2	2.1	2.2	2.1	2.5	2.3	2.3	2.0	2.4	2.6	2.9	3.3	2.5	1.7	2.1	1.7	3.3
26-Jun	1.6	1.5	1.4	1.2	1.0	1.7	2.1	2.3	2.7	3.0	3.2	3.7	3.1	2.8	2.8	3.1	3.0	3.3	3.5	3.4	2.4	2.6	2.4	2.5	3.7
27-Jun	1.9	1.6	1.6	2.1	2.4	1.5	1.0	0.9	1.1	2.5	3.2	3.5	3.4	3.2	3.1	2.6	3.1	3.0	2.2	0.7	0.5	0.6	0.5	0.5	3.5
28-Jun	0.8	0.6	0.7	0.6	0.7	0.6	0.9	1.0	1.4	1.7	2.4	3.1	3.3	3.0	2.9	2.9	2.9	2.9	2.2	1.7	0.8	0.6	0.7	1.0	3.3
29-Jun	0.9	0.4	0.3	0.2	0.3	0.3	0.5	0.8	1.1	DF	1.9	1.8	2.1	2.6	2.9	2.6	2.8	3.4	2.8	1.5	1.7	1.0	0.6	1.6	3.4
30-Jun	1.6	1.0	0.7	0.5	0.3	0.3	0.4	1.0	1.0	1.0	1.5	1.4	2.0	2.0	1.6	2.6	2.5	2.5	1.9	1.5	1.3	0.6	1.1	0.7	2.6
	3.7	3.5	3.4	3.2	3.4	3.9	3.5	3.1	4.0	3.6	3.8	4.4	4.8	5.2	5.0	4.7	4.2	5.0	3.9	4.0	4.3	3.9	3.8	3.7	
	Diurnal Maximum																								

DF - DAS Failure

Wood Buffalo Environmental Association

Summary of Hour Averages

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

Lower Camp Met Tower - June 2026

Maximum Value: 1.4 km/h on Jun 13 23:00

Maximum Daily Average: 0.5 km/h on Jun 6

Minimum Value: -1.4 km/h on Jun 8 18:00

Minimum Daily Average: -0.3 km/h on Jun 8

Maximum Diurnal Average: 0.2 km/h at hour 23

Minimum Diurnal Average: -0.1 km/h at hour 16

Monthly Average: 0.06 km/h

Percentiles: P_1 = -0.6 P_{10} = -0.3 Q_1 = -0.2 Median = 0.1 Q_3 = 0.3 P_{90} = 0.5 P_{99} = 1.0

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

DF - DAS Failure

Summary of Hour Standard Deviations

Lower Camp Met Tower - June 2026

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

Maximum Value: 4.9 km/h on Jun 8 14:00

Minimum Value: 0.2 km/h on Jun 13 01:00

Percentiles: P_1 = 0.3 P_{10} = 0.6 Q_1 = 1.0 Median = 1.7 Q_3 = 2.4 P_{90} = 3.0 P_{99} = 4.0

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

DF - DAS Failure

Wood Buffalo Environmental Association

Summary of Hour Averages

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

Lower Camp Met Tower - June 2026

Maximum Value: 2.3 km/h on Jun 25 23:00

Maximum Daily Average: 0.8 km/h on Jun 25

Minimum Value: -2.1 km/h on Jun 8 18:00

Minimum Daily Average: -0.5 km/h on Jun 8

Maximum Diurnal Average: 0.3 km/h at hour 23

Minimum Diurnal Average: -0.1 km/h at hour 8

Monthly Average: 0.06 km/h

Percentiles: P_1 = -1.0 P_{10} = -0.5 Q_1 = -0.3 Median = 0.0 Q_3 = 0.3 P_{90} = 0.7 P_{99} = 1.8

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	0
Percent Operational Time:	94.9

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-Jun	0.4	0.4	-0.1	0.3	-0.1	0.0	-0.4	-0.5	-0.1	0.5	0.5	-0.1	0.3	0.3	-0.4	0.5	0.1	-0.8	-0.3	0.1	-0.3	-0.2	0.1	0.0	0.0	0.5
2-Jun	-0.5	-0.4	-0.5	-0.1	-0.3	0.4	-0.4	-0.1	0.0	-0.2	-0.3	-0.1	-0.1	-0.1	-0.4	-0.4	0.1	0.4	0.4	0.1	-0.2	-0.3	0.1	-0.1	-0.1	0.4
3-Jun	-0.1	0.0	0.0	-0.2	0.0	0.0	0.1	0.2	0.2	0.4	0.5	0.2	0.3	0.6	0.4	0.4	0.2	0.1	0.9	0.0	0.1	0.2	0.1	0.0	0.2	0.9
4-Jun	-0.1	0.9	1.5	1.5	-0.6	0.3	-0.4	0.8	0.1	-0.3	-0.3	0.1	-1.0	-0.1	0.0	0.2	0.5	0.6	0.3	0.0	0.2	0.3	0.4	0.8	0.2	1.5
5-Jun	1.1	1.4	2.3	0.5	1.1	0.3	-0.1	0.5	0.2	0.2	-0.2	0.4	-0.4	-0.4	0.7	0.7	0.6	-0.1	-0.1	0.7	-0.3	-0.3	1.0	0.9	0.5	2.3
6-Jun	1.8	0.7	0.1	-0.1	-0.6	-0.9	0.1	0.3	0.4	0.7	1.0	0.8	0.7	1.0	0.7	0.5	0.7	0.6	0.7	0.6	0.5	0.3	0.5	0.7	0.5	1.8
7-Jun	1.4	0.5	0.2	0.1	1.2	0.6	0.4	-0.2	-0.2	-0.1	-0.5	-0.5	-0.3	0.0	-0.3	-0.4	-0.2	0.2	-0.1	0.2	-0.2	-0.1	-0.3	0.1	0.1	1.4
8-Jun	0.1	-0.1	-0.2	-0.1	-0.2	-0.5	-0.3	-0.6	-0.6	-1.1	-1.1	-0.5	-0.9	-1.2	-0.3	0.5	0.0	-2.1	-0.2	0.0	-1.6	-0.8	-0.5	-0.3	-0.5	0.5
9-Jun	-0.5	-0.2	-0.3	-0.7	-0.5	-0.8	0.2	0.1	-0.2	0.0	-0.4	-0.5	0.4	0.0	-0.6	0.6	-0.3	-0.3	-0.4	-0.3	0.0	-0.2	-0.1	-0.1	-0.2	0.6
10-Jun	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.9	-0.1	-0.6	0.8	-0.3	-0.3	0.7	0.1	0.0	-0.4	-0.6	0.2	-0.3	0.2	0.0	0.4	0.3	-0.2	-0.1	0.8
11-Jun	0.2	0.6	0.3	0.3	-0.5	-0.7	-0.4	-0.8	-0.8	-0.7	-0.2	-0.1	-0.4	-0.5	-0.6	0.2	-0.5	0.5	0.2	0.1	-0.3	-0.1	-0.3	-0.1	-0.2	0.6
12-Jun	-0.7	-0.8	-0.3	-0.1	-0.2	-0.2	0.0	-0.6	-0.4	-0.7	-0.6	-1.3	-0.6	-0.8	-0.5	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.2	-0.1	-0.1	-0.4	0.0
13-Jun	0.0	0.0	0.0	-0.1	0.0	0.0	0.1	-0.1	0.2	0.5	1.0	0.0	0.1	-0.6	0.3	0.4	0.2	0.2	0.6	0.2	0.2	1.0	2.2	-0.6	0.2	2.2
14-Jun	0.2	1.1	0.5	-0.5	-0.3	0.2	0.2	-0.2	0.7	-0.4	0.0	-0.2	0.0	-0.8	-0.4	-0.5	-0.4	-0.3	-0.4	-0.3	-0.1	-0.2	0.0	0.1	-0.1	1.1
15-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	-0.1	-0.2	0.8	0.1	-0.8	-1.0	-0.5	-0.5	-0.2	-0.2	0.1	0.5	0.4	0.2	0.3	0.0	0.8
16-Jun	1.1	0.4	1.0	-0.1	-0.8	1.2	0.0	0.4	0.1	0.2	0.2	0.7	0.0	-0.2	0.3	-0.3	-0.5	-0.1	0.6	-0.3	-0.2	-0.1	0.3	-0.1	0.2	1.2
17-Jun	-0.2	-0.2	-0.1	0.1	0.4	0.3	-0.6	0.2	-0.4	0.4	-0.1	-0.1	-0.6	-0.5	-0.4	-0.5	0.0	-0.5	-0.1	-0.1	0.1	0.4	-0.1	-0.2	-0.1	0.4
18-Jun	-0.3	-0.2	0.0	-0.1	-0.2	-0.3	0.0	-0.2	-0.4	-0.3	-0.1	-0.1	0.0	-0.3	-0.1	-0.8	-0.3	-0.3	-0.4	-0.4	-0.5	-0.3	-0.4	-0.2	-0.3	0.0
19-Jun	-0.3	-0.1	-0.2	-0.4	-0.4	-0.4	-0.2	-0.5	-0.2	0.0	-0.6	1.1	-0.6	-0.6	-0.2	-0.7	-0.3	-0.1	-0.3	0.0	0.2	0.4	0.7	0.0	-0.2	1.1
20-Jun	-0.2	-0.1	-0.1	-0.1	-0.2	0.1	-0.2	-0.7	-0.9	-0.5	-0.1	0.7	0.9	-0.2	-0.1	-0.6	0.9	-0.1	0.0	0.2	0.0	-0.1	0.0	-0.1	-0.1	0.9
21-Jun	0.0	0.0	-0.3	-0.2	-0.2	-0.1	0.0	0.0	-0.7	-0.8	-0.5	-0.1	-0.3	-0.1	0.0	0.4	0.2	0.2	-0.2	0.3	0.0	-0.2	0.0	-0.1	-0.1	0.4
22-Jun	-0.2	-0.1	0.0	0.3	0.1	-0.1	0.0	0.0	0.0	0.3	0.1	0.6	-0.5	0.8	-0.1	-0.1	0.3	0.2	-0.1	0.6	0.0	0.3	1.3	-0.2	0.1	1.3
23-Jun	-0.1	0.0	-0.2	-0.3	-0.3	0.0	0.1	0.0	0.2	-0.2	-0.3	-0.6	1.1	0.7	0.3	-0.2	-0.8	0.5	0.2	0.6	0.1	0.5	0.6	0.1	0.1	1.1
24-Jun	-0.2	-0.2	0.0	-0.2	-0.2	-0.2	0.6	-0.3	0.2	0.5	0.2	1.4	0.7	0.2	0.6	0.4	-0.2	0.4	1.1	0.0	0.5	0.5	-0.3	0.6	0.3	1.4
25-Jun	1.6	1.4	-0.2	-0.2	-0.4	-0.5	0.0	0.3	1.3	0.8	1.1	-0.2	-0.1	1.1	1.9	0.6	0.9	1.6	1.1	0.3	1.5	2.2	2.3	1.7	0.8	2.3
26-Jun	0.8	0.5	1.0	0.7	1.5	2.1	1.2	0.7	0.4	0.6	1.2	1.0	1.9	1.0	1.4	0.1	0.4	0.5	0.4	0.4	0.2	0.5	0.4	0.3	0.8	2.1
27-Jun	0.4	-0.4	-0.2	0.5	0.3	-0.6	-0.3	-0.3	0.2	0.8	0.5	0.2	0.3	0.5	0.4	0.0	0.7	0.8	0.4	0.2	0.4	0.2	0.4	0.6	0.2	0.8
28-Jun	0.3	-0.1	0.0	0.0	0.4	0.0	0.0	-0.4	0.0	0.4	0.2	-0.8	-0.3	0.6	0.1	0.2	-0.6	-0.9	-0.2	-0.3	0.0	0.3	-0.2	-0.1	-0.1	0.6
29-Jun	-0.2	-0.2	-0.1	0.1	-0.1	-0.1	-0.1	0.0	0.4	DF	-0.7	-0.3	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	0.4
30-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
	0.2	0.2	0.1	0.0	0.0	0.0	-0.1	-0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.3	0.1	Diurnal Average	
	1.8	1.4	2.3	1.5	1.5	2.1	1.2	0.8	1.3	0.8	1.2	1.4	1.9	1.1	1.9	0.7	0.9	1.6	1.1	0.7	1.5	2.2	2.3	1.7	Diurnal Maximum	

DF - DAS Failure

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

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

Lower Camp Met Tower - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 5.3 km/h on Jun 8 16:00

Minimum Value: 0.2 km/h on Jun 13 03:00

Percentiles: P_1 = 0.3 P_{10} = 0.6 Q_1 = 1.0 Median = 1.7 Q_3 = 2.6 P_{90} = 3.2 P_{99} = 4.3

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	0
Percent Operational Time:	94.9

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-Jun	3.3	3.0	3.2	3.1	3.2	2.9	3.0	3.0	3.2	3.4	3.4	3.7	3.7	3.3	3.1	3.3	3.2	3.7	3.1	3.0	3.1	2.3	3.0	3.4	3.7
2-Jun	2.7	2.8	2.5	2.8	2.3	2.5	2.6	2.3	2.6	2.8	2.1	1.5	2.2	2.0	2.7	3.2	2.2	1.2	1.0	0.6	0.9	1.0	0.7	0.8	3.2
3-Jun	0.5	0.9	0.8	1.0	0.6	1.5	1.6	1.5	1.4	1.4	1.4	1.4	1.4	1.6	1.3	1.4	1.8	1.7	1.5	1.6	1.1	0.7	0.5	0.7	1.8
4-Jun	0.7	1.4	1.2	1.2	1.0	1.1	0.9	1.6	1.9	2.3	3.0	3.3	2.9	3.4	3.3	3.1	2.9	2.9	2.5	2.3	1.1	0.5	0.5	0.4	3.4
5-Jun	0.8	0.9	1.6	2.1	1.8	1.4	1.4	1.5	1.1	1.8	1.5	1.7	1.7	1.8	1.3	2.3	2.4	0.8	1.0	1.9	0.9	1.3	1.2	1.1	2.4
6-Jun	1.5	2.1	2.0	1.1	1.9	3.4	3.3	2.3	2.5	2.5	2.3	2.2	2.2	1.9	1.7	1.9	1.7	2.1	1.7	1.7	1.1	0.7	0.9	0.8	3.4
7-Jun	1.0	1.6	1.2	1.4	1.1	1.4	1.6	1.2	1.6	1.7	1.3	1.6	1.8	2.0	1.4	1.7	1.9	2.8	1.2	1.1	0.5	0.8	1.0	1.3	2.8
8-Jun	0.9	1.3	1.2	1.5	1.8	2.0	1.9	1.5	2.1	2.8	3.6	4.5	4.2	4.6	5.0	5.3	4.5	4.3	4.1	4.2	4.0	4.1	3.8	3.8	5.3
9-Jun	3.2	3.6	3.4	2.9	2.8	2.9	2.4	2.7	3.0	1.9	2.1	2.8	3.4	2.3	2.5	2.1	1.0	1.2	1.0	0.8	0.7	1.0	1.3	1.3	3.6
10-Jun	1.1	1.3	1.1	1.3	0.7	1.1	1.7	2.2	2.0	2.3	2.1	2.7	2.8	2.0	2.1	2.4	2.6	2.7	2.8	2.6	2.6	2.1	2.3	2.6	2.8
11-Jun	2.5	2.3	2.7	2.1	2.3	2.2	2.3	2.2	2.2	2.3	2.4	2.7	2.7	2.6	2.7	2.7	3.0	3.0	2.3	2.4	2.4	1.6	1.4	0.9	3.0
12-Jun	0.9	0.9	1.1	0.9	0.8	1.3	1.6	2.2	2.8	3.1	3.3	3.0	3.2	3.1	3.3	3.1	3.2	3.0	2.8	2.1	1.2	0.6	0.4	0.3	3.3
13-Jun	0.2	0.3	0.2	0.2	0.3	0.5	0.9	1.0	1.4	2.0	2.6	2.1	2.8	2.4	2.9	2.6	2.2	2.1	1.9	1.3	0.6	0.5	1.5	2.3	2.9
14-Jun	1.2	1.7	1.8	0.8	0.8	1.0	1.0	0.9	1.9	2.2	2.8	2.2	2.3	2.8	2.4	2.0	2.9	2.6	1.9	1.5	1.2	1.2	0.8	0.7	2.9
15-Jun	0.3	0.4	0.5	0.5	0.3	0.4	0.6	0.8	0.9	1.1	1.4	2.5	2.8	2.0	1.8	1.6	1.0	1.2	0.9	0.4	0.6	1.0	1.6	2.2	2.8
16-Jun	2.7	1.5	1.4	1.8	1.9	1.7	1.5	1.2	1.3	1.2	1.4	2.5	2.4	2.9	3.5	3.5	3.2	3.5	3.7	3.0	2.7	2.6	1.8	1.1	3.7
17-Jun	0.7	0.7	1.0	0.7	1.5	1.3	1.3	2.3	2.5	2.5	2.8	3.0	3.3	3.1	2.9	2.4	2.3	1.8	1.4	1.0	1.3	0.7	0.6	0.5	3.3
18-Jun	0.4	0.6	0.6	0.7	0.6	0.6	0.7	0.4	0.6	0.9	1.6	1.2	2.0	2.7	2.3	2.5	2.9	2.3	2.0	1.3	0.8	1.1	1.1	0.7	2.9
19-Jun	1.1	0.8	0.8	0.4	0.4	0.4	0.3	1.2	2.1	2.8	2.0	3.1	2.2	2.0	2.0	2.8	2.6	2.3	1.7	1.5	1.3	0.9	1.0	1.3	3.1
20-Jun	1.2	0.8	0.8	0.3	0.5	1.1	1.1	1.3	2.0	2.5	2.7	2.6	3.4	3.2	3.5	3.4	3.3	3.0	2.8	2.1	1.0	0.6	0.5	1.1	3.5
21-Jun	1.0	0.8	0.6	0.8	0.8	0.6	1.1	1.4	2.1	2.0	2.4	1.8	1.6	2.7	3.0	2.2	2.3	2.0	2.2	1.3	0.8	1.7	0.5	0.3	3.0
22-Jun	0.6	0.4	0.3	0.4	0.4	0.4	0.5	0.8	1.3	1.9	2.1	1.7	1.5	2.3	2.3	2.0	1.0	1.7	1.6	1.2	1.6	1.1	1.8	1.0	2.3
23-Jun	1.0	0.8	0.8	0.7	0.6	0.9	1.3	1.0	1.2	1.9	2.7	2.7	3.1	2.5	2.9	2.6	1.6	2.5	2.0	1.5	1.7	1.8	1.1	1.1	3.1
24-Jun	0.8	0.5	0.6	0.6	1.3	1.1	1.1	1.4	1.8	2.5	3.0	3.0	3.5	3.7	3.3	3.2	3.0	2.6	3.9	2.0	1.9	2.0	1.8	1.2	3.9
25-Jun	1.3	1.5	1.5	1.0	1.0	0.9	1.1	1.4	1.4	1.7	3.4	3.5	4.0	3.7	3.3	3.2	2.9	2.9	2.4	2.4	2.1	2.1	2.5	2.3	4.0
26-Jun	1.8	1.5	1.1	1.1	0.9	1.1	1.0	1.6	1.8	2.4	4.6	3.9	4.0	3.7	3.2	2.6	2.7	2.8	2.6	2.3	1.6	2.1	2.5	2.0	4.6
27-Jun	2.0	1.7	1.1	1.3	1.6	1.1	0.9	0.9	1.3	2.5	2.0	2.7	2.3	2.2	2.6	2.7	2.1	1.5	1.3	0.7	0.6	0.5	0.7	0.9	2.7
28-Jun	0.6	0.8	1.0	0.7	0.5	0.6	0.6	0.8	1.4	1.7	2.9	3.3	3.7	4.2	3.7	3.5	2.8	2.6	2.1	1.6	0.7	0.8	0.8	1.1	4.2
29-Jun	0.4	0.3	0.3	0.4	0.3	0.5	0.4	0.8	1.1	DF	2.1	2.3	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	2.3
30-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
	3.3	3.6	3.4	3.1	3.2	3.4	3.3	3.0	3.2	3.4	4.6	4.5	4.2	4.6	5.0	5.3	4.5	4.3	4.1	4.2	4.0	4.1	3.8	3.8	
	Diurnal Maximum																								

DF - DAS Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

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

Lower Camp Met Tower - June 2026

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

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

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

Minimum Daily Average: -- km/h on May 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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
3-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
4-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
6-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
30-Jun	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

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

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

Lower Camp Met Tower - June 2026

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

Minimum Value: -- km/h on Jun 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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
3-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
4-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
6-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
30-Jun	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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS04
BUFFALO VIEWPOINT
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BUFFALO VIEWPOINT (AMS04)
JUNE 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	38.3	0	4.2	0
H2S (ppb) Average	684	36	36	100	3.2	0	0.7	0
THC (ppm) Average	680	34	40	99.17	3	-	2.3	-
NMHC(ppm) Average	680	34	40	99.17	0.058	-	0.003	-
CH4(ppm) Average	680	34	40	99.17	3	-	2.3	-
O3(ppb) Average	683	35	37	99.72	59.4	0	38.4	-
NO2(ppb) Average	682	36	38	99.72	29.7	0	9.8	-
NO(ppb) Average	682	36	38	99.72	35.8	-	6.6	-
NOX(ppb) Average	682	36	38	99.72	58.4	-	15.9	-
PM2.5(ug/m3) Average	716	2	4	99.72	94.4	18	70.1	3
Temperature (C) Average	720	0	0	100	30.5	-	24.3	-
Relative Humidity (%) Average	720	0	0	100	97.7	-	93.4	-
Wind Speed 10 m (km/h) Average	720	0	0	100	25	-	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 - BUFFALO VIEWPOINT (AMS04)
JUNE 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	0.67	2.9	-	0	0	0	0.1	0.2	0.8	38.3
H2S (ppb) Average	684	0.27	0.4	-	0	0	0.1	0.1	0.3	0.6	3.2
THC (ppm) Average	680	2.11	0.1	-	2	2	2	2.1	2.1	2.3	3
NMHC(ppm) Average	680	0	0.004	-	0	0	0	0	0	0	0.058
CH4(ppm) Average	680	2.11	0.1	-	2	2	2	2.1	2.1	2.3	3
O3(ppb) Average	683	25.35	12	-	1.5	9.3	16.8	25.2	33.4	41.7	59.4
NO2(ppb) Average	682	4.04	5.1	-	0.1	0.5	0.8	2.1	4.9	10.4	29.7
NO(ppb) Average	682	1.41	3.9	-	0	0.1	0.1	0.2	0.7	2.9	35.8
NOX(ppb) Average	682	5.45	8	-	0.2	0.6	1	2.4	5.9	15	58.4
PM2.5(ug/m3) Average	716	12.35	17.3	-	0.9	2.5	3.6	6.6	11.2	29	94.4
Temperature 2 m (C) Average	720	16.37	5.8	-	7.2	9.6	11.5	15.4	20.2	25	30.5
Relative Humidity (%) Average	720	64.41	20.8	-	24.3	34.6	46.7	65.9	81.8	92.6	97.7
Wind Speed 10 m (km/h) Average	720	9.4	5	-	1	4	6	8	13	17	25
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

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

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
H2S, NO2, O3, THC/NMHC/CH4, SO2	22 Jun 2026 13:00	22 Jun 2026 14:00	2	Maintenance - sample manifold cleaned
THC/NMHC/CH4	17 Jun 2026 15:00	17 Jun 2026 16:00	2	Maintenance - replaced support gas cylinder
THC/NMHC/CH4	26 Jun 2026 14:00	26 Jun 2026 15:00	2	Maintenance - replaced support gas cylinder
PM2.5	02 Jun 2026 09:00	02 Jun 2026 09:00	1	Unstable Operation - flatline in analyzer output signal
PM2.5	19 Jun 2026 13:00	19 Jun 2026 13:00	1	Unstable Operation - flatline in analyzer output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Buffalo Viewpoint - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 38.3 ppb on Jun 15 14:00 Maximum Daily Average: 4.2 ppb on Jun 15

Minimum Value: 0.0 ppb on Jun 1 18:00 Minimum Daily Average: 0.0 ppb on Jun 20
Maximum Diurnal Average: 3.1 ppb at hour 14 Minimum Diurnal Average: 0.1 ppb at hour 3
Monthly Average: 0.67 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.2 P_{90} = 0.8 P_{99} = 13.2

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-Jun	0.1	0.1	Z	0.6	0.2	0.2	1.5	1.9	2.6	0.5	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.6
2-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	C	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.5
3-Jun	1.1	1.8	0.2	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	0.1	1.8
4-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
5-Jun	Z	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.2
6-Jun	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
7-Jun	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	1.0	3.3	0.6	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.2	3.3
8-Jun	0.0	0.0	0.0	Z	0.3	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	0.3
9-Jun	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	2.7	1.6	0.7	0.1	0.1	0.0	0.0	0.2	2.7
10-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.4	1.2	0.9	0.3	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	0.1	1.2
11-Jun	Z	0.1	0.1	0.3	0.6	2.3	2.8	3.1	3.0	1.2	0.4	0.2	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.5	1.8	1.4	0.8	3.1
12-Jun	0.5	Z	0.1	0.3	0.8	0.4	0.4	1.9	2.0	2.6	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	0.5	2.6
13-Jun	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.2	0.3	0.5	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	0.5
14-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.1	8.0	14.5	21.7	7.1	0.4	0.1	0.0	3.2	3.6	0.2	0.0	0.0	0.0	0.0	0.2	0.1	2.6	21.7
15-Jun	0.1	0.1	0.1	0.1	Z	0.1	0.4	0.7	0.2	0.0	5.0	2.6	12.9	38.3	10.1	8.3	10.1	4.3	1.9	0.5	0.5	0.3	0.2	0.1	4.2	38.3
16-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.0	0.0	3.3	15.5	32.9	22.0	0.4	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.1	3.3	32.9
17-Jun	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.8	0.4	0.3	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.2	0.6	0.1	0.0	0.0	0.1	0.1	0.2	0.8
18-Jun	0.1	Z	0.1	0.1	0.1	0.3	0.2	0.8	0.5	2.5	0.7	1.9	0.6	0.2	0.1	2.6	3.5	0.4	0.3	1.2	0.5	0.3	0.1	0.1	0.7	3.5
19-Jun	0.1	0.0	Z	0.1	0.0	0.0	0.2	1.9	0.4	0.2	1.7	4.2	3.3	0.8	2.6	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.7	4.2
20-Jun	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
21-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
22-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.4	7.2	6.8	10.1	5.2	M	M	5.3	2.0	1.3	1.4	0.4	0.4	0.4	0.4	0.7	0.6	2.0	10.1
23-Jun	Z	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.4	0.3	0.3	0.2	2.2	0.4	0.7	0.5	0.5	0.3	0.2	0.1	0.1	0.3	2.2
24-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.2
25-Jun	0.0	0.0	Z	0.1	0.0	0.1	0.2	0.3	0.3	0.2	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.3
26-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.2	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
27-Jun	0.0	0.0	0.0	0.0	Z	0.3	0.1	0.1	0.8	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	0.8
28-Jun	0.6	0.4	0.1	0.0	0.0	Z	0.2	0.3	0.3	2.3	1.1	0.6	0.4	0.1	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.5	0.3	0.2	0.4	2.3
29-Jun	Z	0.2	0.1	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.5	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.5
30-Jun	0.1	Z	0.3	0.3	0.1	0.2	0.2	0.2	0.1	0.1	0.4	7.0	29.3	11.1	0.9	0.8	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.3	2.3	29.3
	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.5	0.9	1.1	1.5	1.2	2.3	3.1	1.5	0.7	0.7	0.4	0.2	0.2	0.1	0.1	0.1	0.1	Diurnal Average	
	1.1	1.8	0.3	0.6	0.8	2.3	2.8	3.1	8.0	14.5	21.7	7.1	29.3	38.3	22.0	8.3	10.1	4.3	1.9	1.2	0.5	0.5	1.8	1.4	Diurnal Maximum	

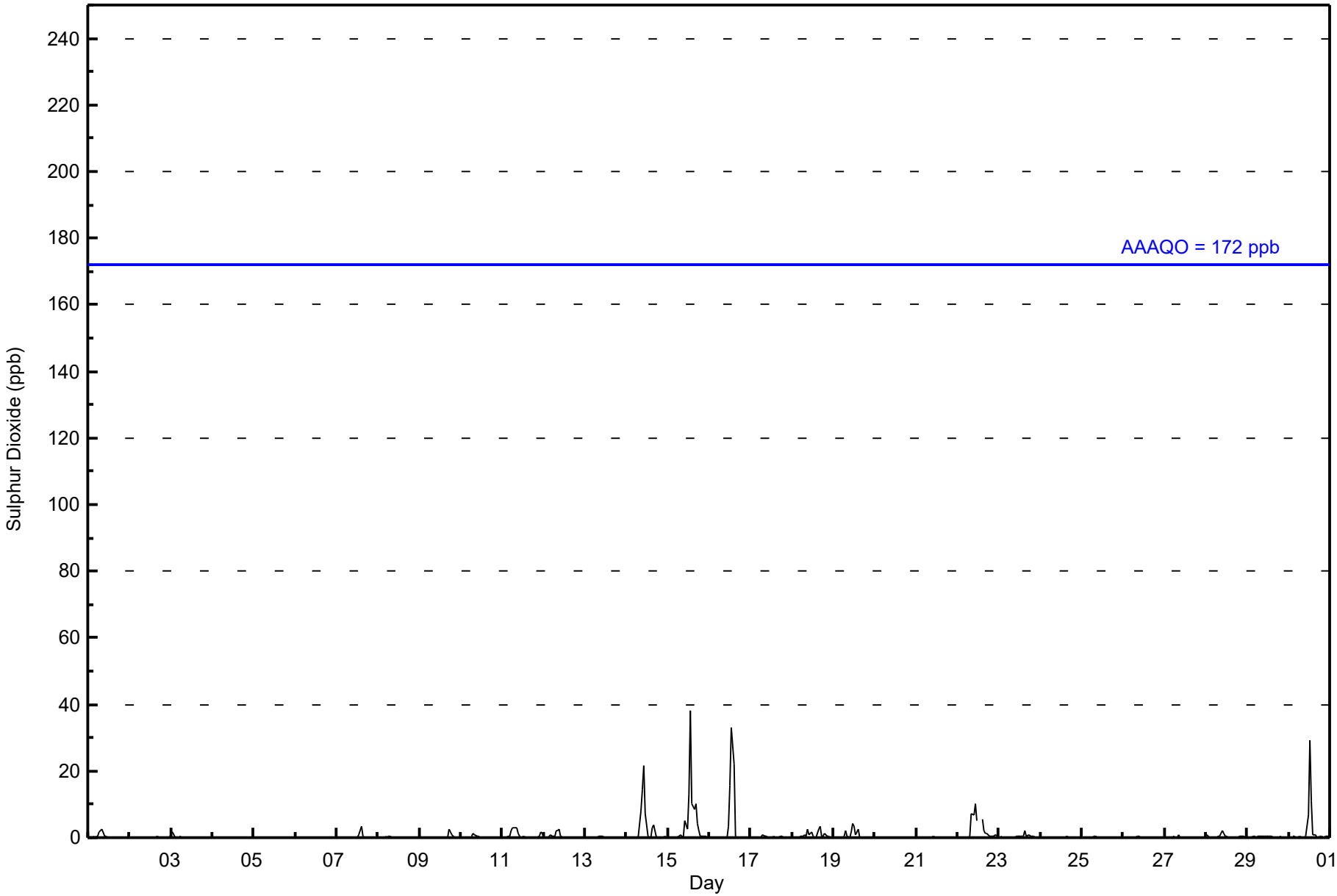
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Buffalo Viewpoint - June 2026



Sulphur Dioxide (SO_2) - ppb
Buffalo Viewpoint - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	675	98.68	98.68
11 - 20	4	0.58	99.27
21 - 60	5	0.73	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

Buffalo Viewpoint - June 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	189	52	12	13	17	41	61	67	40	22	14	19	33	26	25	44	675
11 - 20	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	4
21 - 60	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2	5
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	189	52	13	13	17	41	61	67	40	22	14	19	34	28	27	47	684

Total Number of Valid Hours: 684

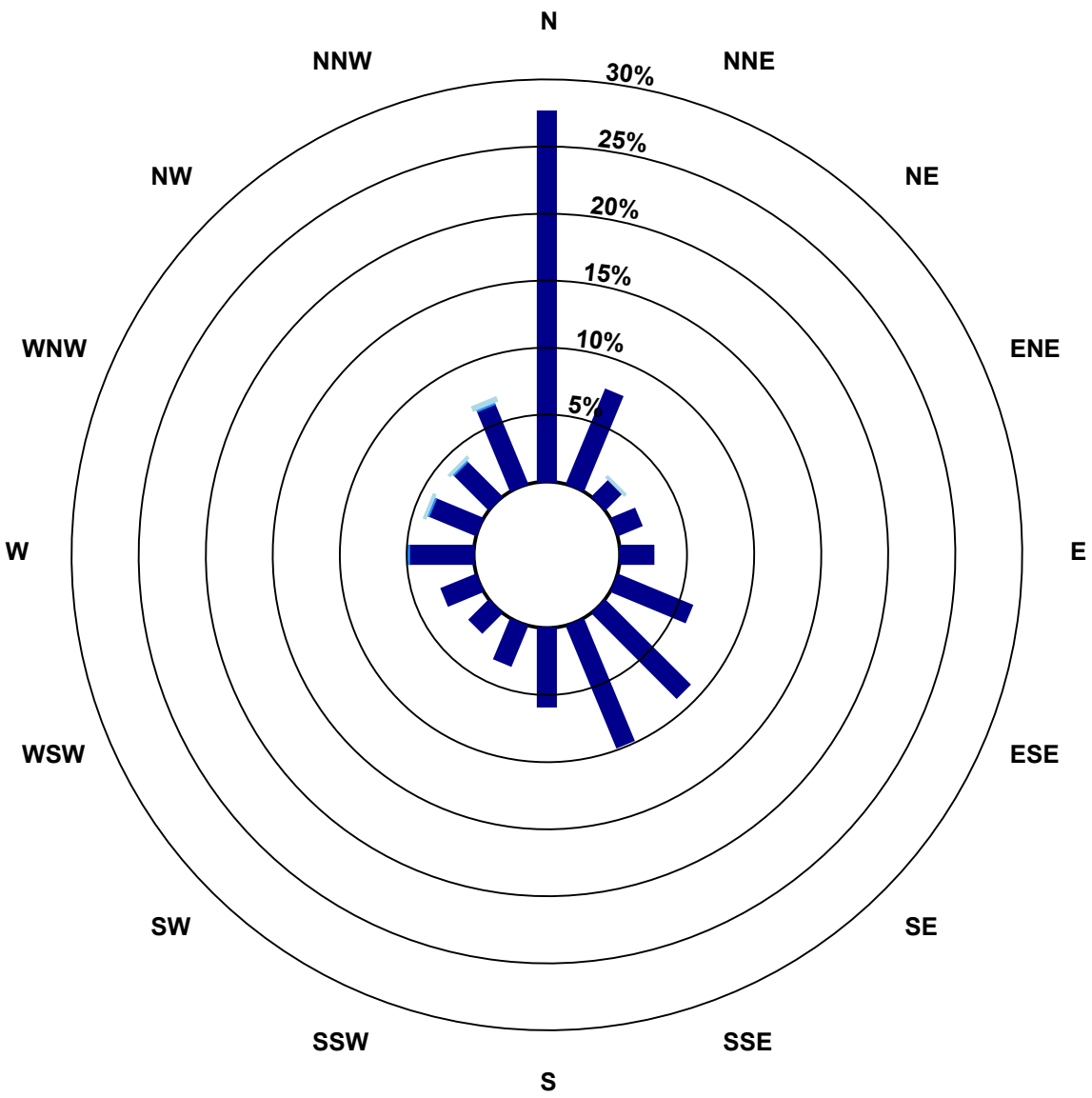
Total Number of Hours: 720

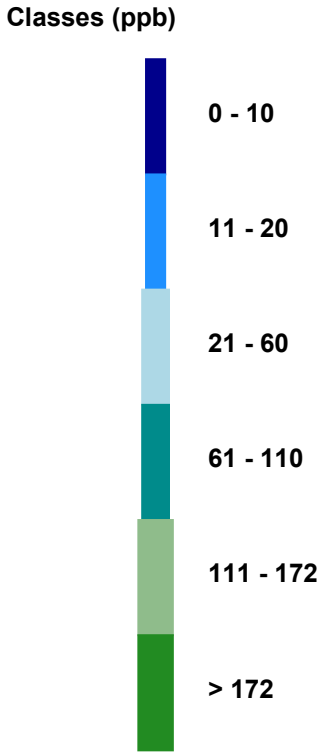
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Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Buffalo Viewpoint





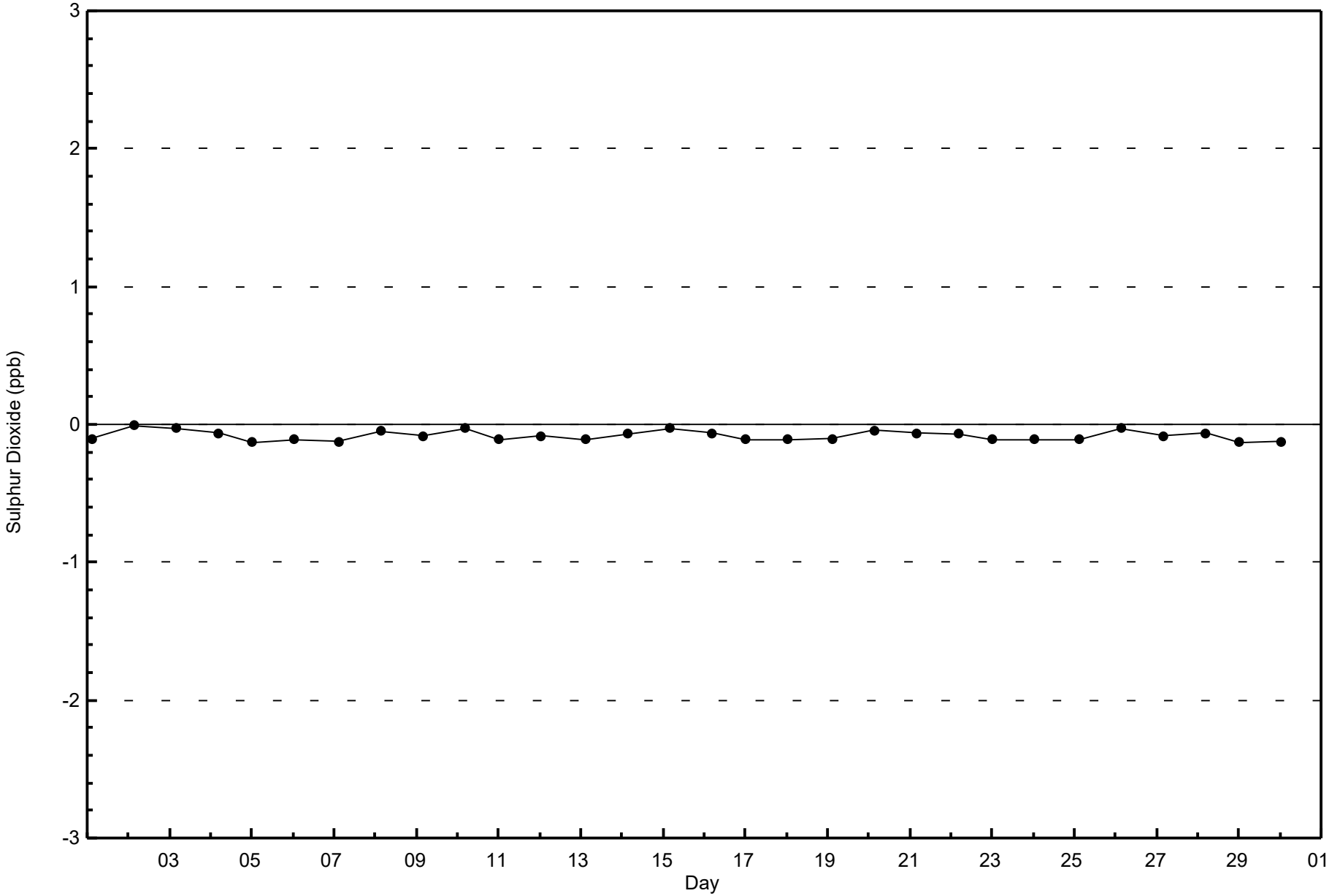
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Buffalo Viewpoint - June 2026

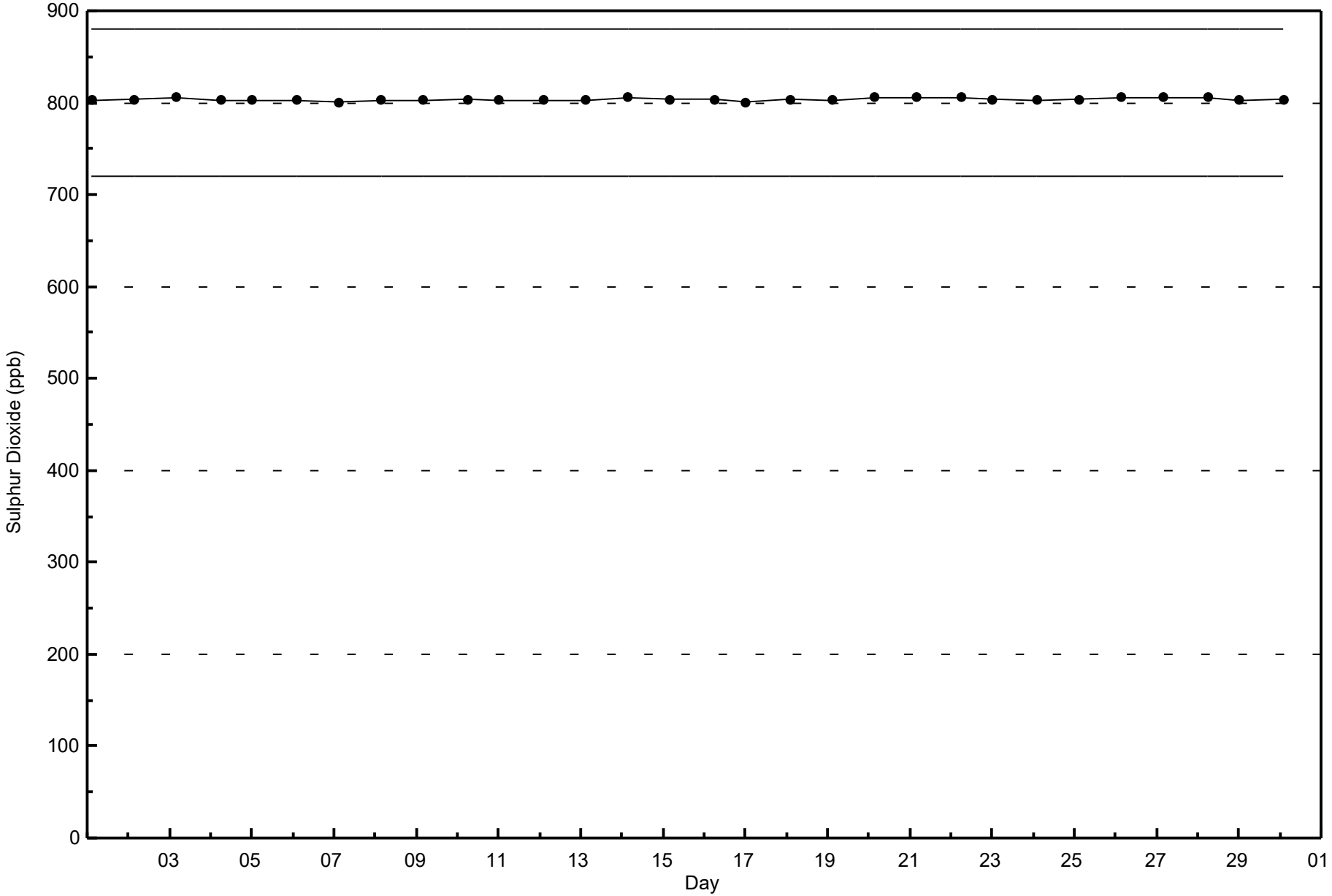


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Buffalo Viewpoint - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Buffalo Viewpoint - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.2 ppb on Jun 19 13:00 Maximum Daily Average: 0.7 ppb on Jun 18

Minimum Value: 0.0 ppb on Jun 3 09:00 Minimum Daily Average: 0.1 ppb on Jun 3
Maximum Diurnal Average: 0.7 ppb at hour 5 Minimum Diurnal Average: 0.1 ppb at hour 17
Monthly Average: 0.27 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.3 P_{90} = 0.6 P_{99} = 1.8

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-Jun	0.1	0.1	0.1	Z	0.1	0.1	1.1	1.2	0.6	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	0.0	0.0	0.2	1.2
2-Jun	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.4	0.3	0.2	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.4
3-Jun	0.4	0.1	0.2	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	0.1	0.0	0.1	0.1	0.1	0.4
4-Jun	Z	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	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.3
5-Jun	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	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2
6-Jun	0.1	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	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2
7-Jun	0.4	0.4	0.5	Z	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.5
8-Jun	0.2	0.1	0.1	0.1	Z	0.3	0.4	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.4
9-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.2	0.6	0.4	0.2	0.1	0.6
10-Jun	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.6	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.6
11-Jun	0.1	Z	0.1	0.2	0.1	0.6	0.5	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.6
12-Jun	0.2	0.2	Z	0.3	0.7	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.2	0.1	0.7
13-Jun	0.3	0.3	0.6	Z	0.3	0.3	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	0.2	0.2	0.3	0.4	0.2	0.6
14-Jun	0.4	0.2	0.2	0.4	Z	0.2	0.1	0.1	0.4	0.5	0.3	0.1	0.2	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.7	0.2	0.2	0.7
15-Jun	1.1	1.1	1.5	1.3	1.0	Z	0.8	1.3	0.7	0.1	0.3	0.1	0.2	0.2	0.0	0.1	0.2	0.3	0.3	0.9	1.2	0.8	0.5	0.3	0.6	1.5
16-Jun	Z	0.2	0.4	0.5	0.6	0.6	0.3	0.2	0.1	0.0	0.0	0.2	0.4	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.2	0.6
17-Jun	0.3	Z	0.5	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5	0.4	0.2	0.5
18-Jun	1.6	0.6	Z	1.1	0.9	1.8	1.3	2.4	0.8	0.5	0.3	0.2	0.3	0.3	0.3	0.4	0.3	0.2	0.1	0.4	0.9	1.4	0.6	0.3	0.7	2.4
19-Jun	0.2	0.6	0.8	Z	0.6	0.3	0.5	0.8	0.2	0.2	0.2	0.5	3.2	0.4	0.5	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.5	3.2
20-Jun	0.3	0.3	0.5	1.0	Z	1.3	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.4	0.3	0.2	1.3
21-Jun	0.2	0.3	0.6	0.7	0.7	Z	0.4	0.4	0.4	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.5	1.9	0.3	1.9
22-Jun	Z	0.5	0.9	1.3	1.5	0.9	0.8	0.7	0.9	0.9	C	C	C	C	C	C	0.3	0.2	0.1	0.1	0.2	0.2	0.3	0.4	--	1.5
23-Jun	0.5	Z	1.0	0.6	0.6	0.5	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.1	0.1	0.1	0.2	0.4	0.6	0.4	0.3	1.0
24-Jun	0.6	0.6	Z	0.8	0.6	0.5	0.3	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.1	0.2	0.3	0.4	0.2	0.8
25-Jun	0.5	0.5	0.5	Z	0.7	0.6	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.5	0.2	0.7
26-Jun	0.5	0.6	0.6	0.6	Z	0.6	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	0.1	0.2	0.2	0.2	0.6
27-Jun	0.3	0.5	0.5	0.2	1.8	Z	1.2	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.0	1.5	2.7	0.5	2.7
28-Jun	Z	1.1	0.8	1.4	1.3	1.2	0.9	0.7	0.5	0.7	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.3	0.4	0.4	1.4
29-Jun	0.4	Z	0.4	1.1	0.8	0.8	0.9	0.7	0.4	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.7	0.3	1.1
30-Jun	0.8	0.4	Z	0.6	2.7	1.8	1.0	0.4	0.2	0.1	0.1	0.3	0.3	0.2	0.1	0.1	0.1	0.0	0.0	1.7	2.6	0.4	0.2	0.2	0.6	2.7
	0.4	0.4	0.5	0.5	0.7	0.6	0.4	0.4	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.4	Diurnal Average	
	1.6	1.1	1.5	1.4	2.7	1.8	1.3	2.4	0.9	0.9	0.4	0.5	3.2	0.5	0.5	0.4	0.3	0.4	0.4	1.7	2.6	1.4	1.5	2.7	Diurnal Maximum	

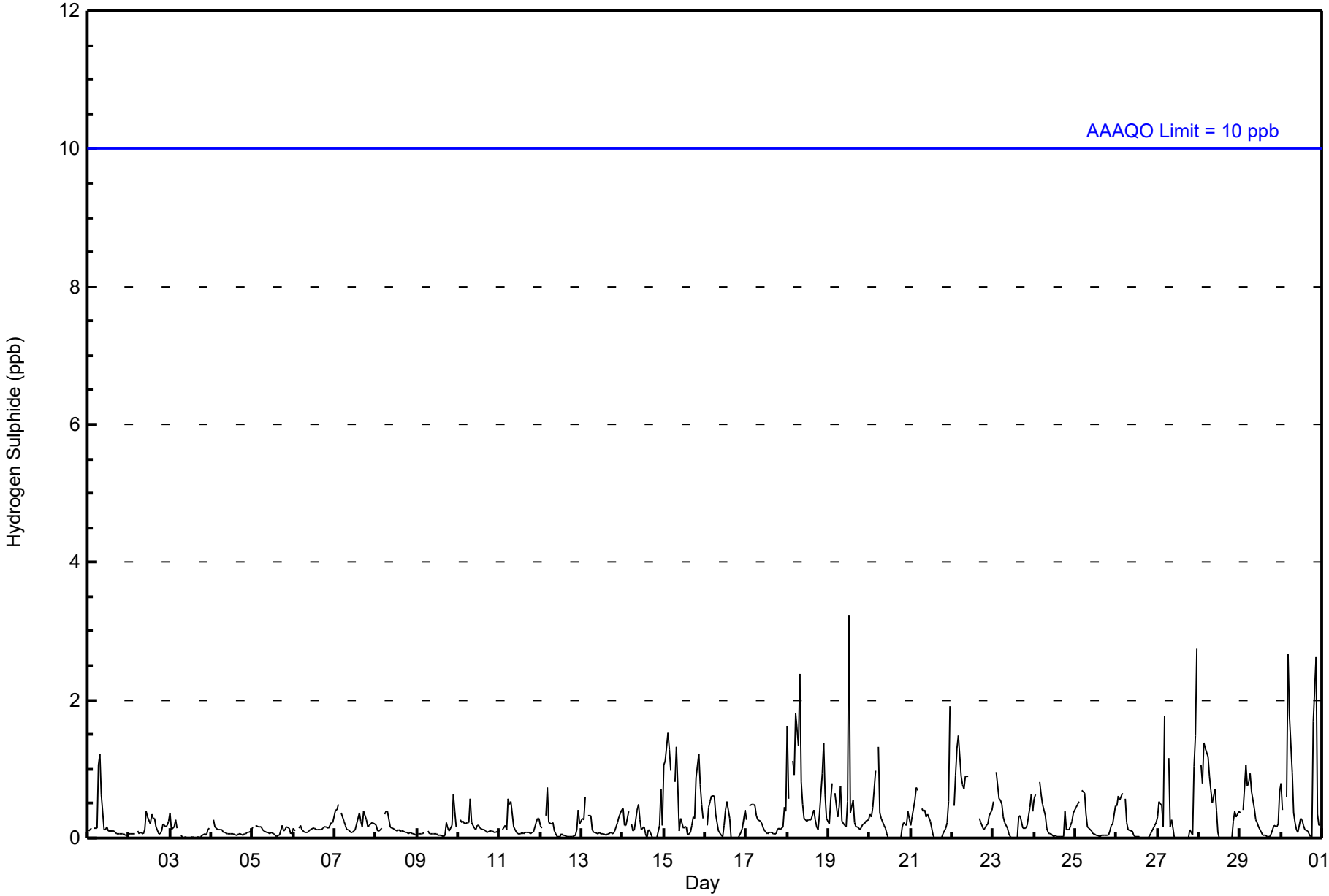
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Buffalo Viewpoint - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Buffalo Viewpoint - June 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

Buffalo Viewpoint - June 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	190	52	14	13	15	39	58	68	40	21	15	19	34	28	25	49	680
3 - 4	0	0	0	0	1	1	0	0	0	1	0	0	0	0	1	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	190	52	14	13	16	40	58	68	40	22	15	19	34	28	26	49	684

Total Number of Valid Hours: 684

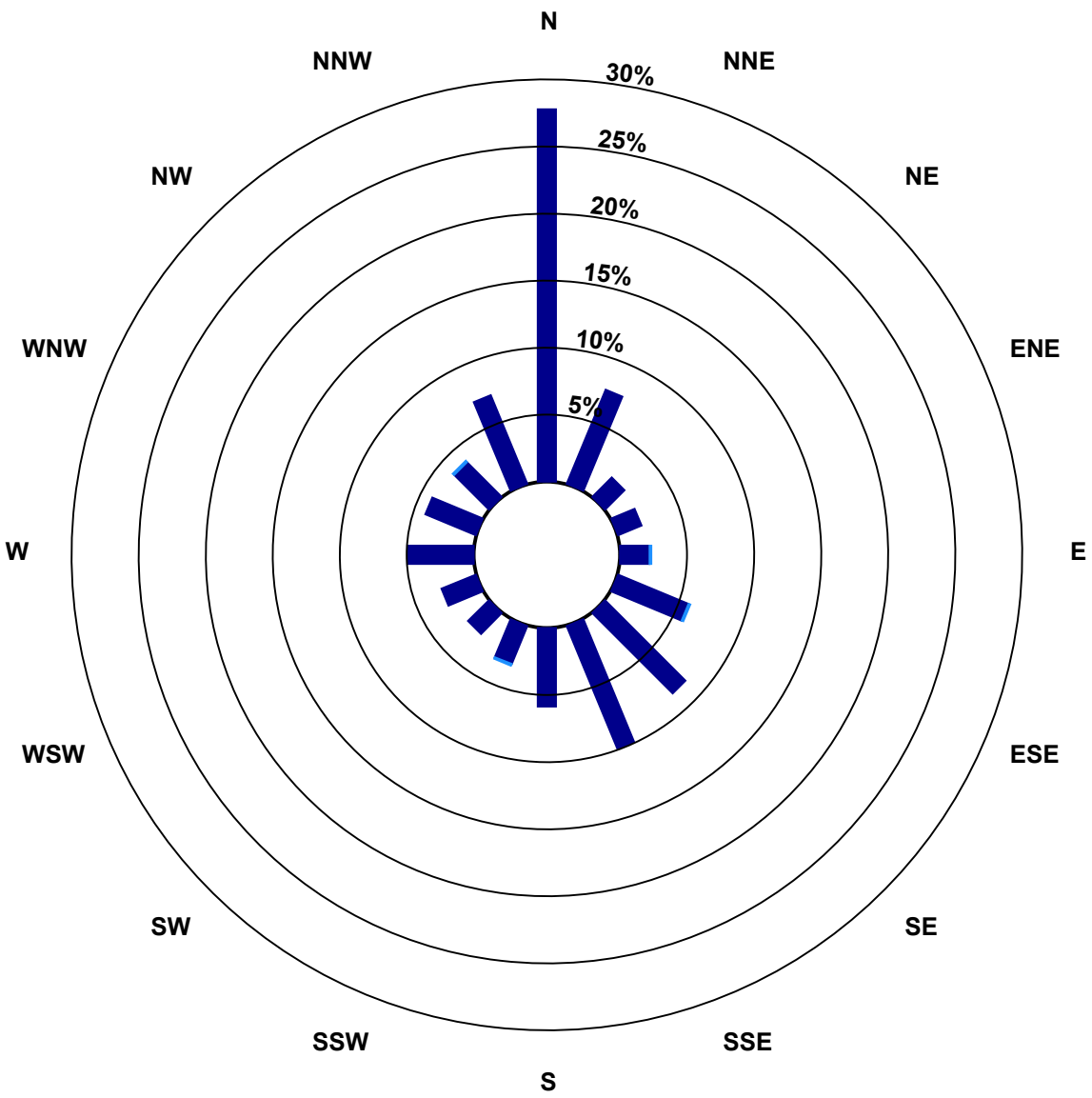
Total Number of Hours: 720

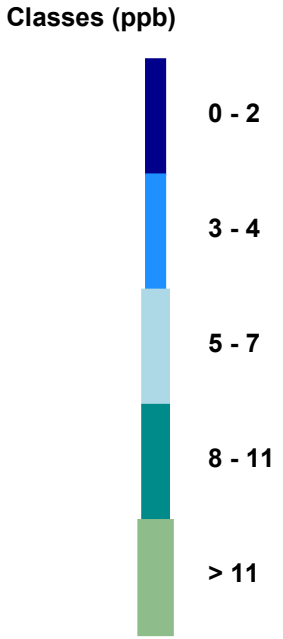
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H_2S) - ppb

Buffalo Viewpoint





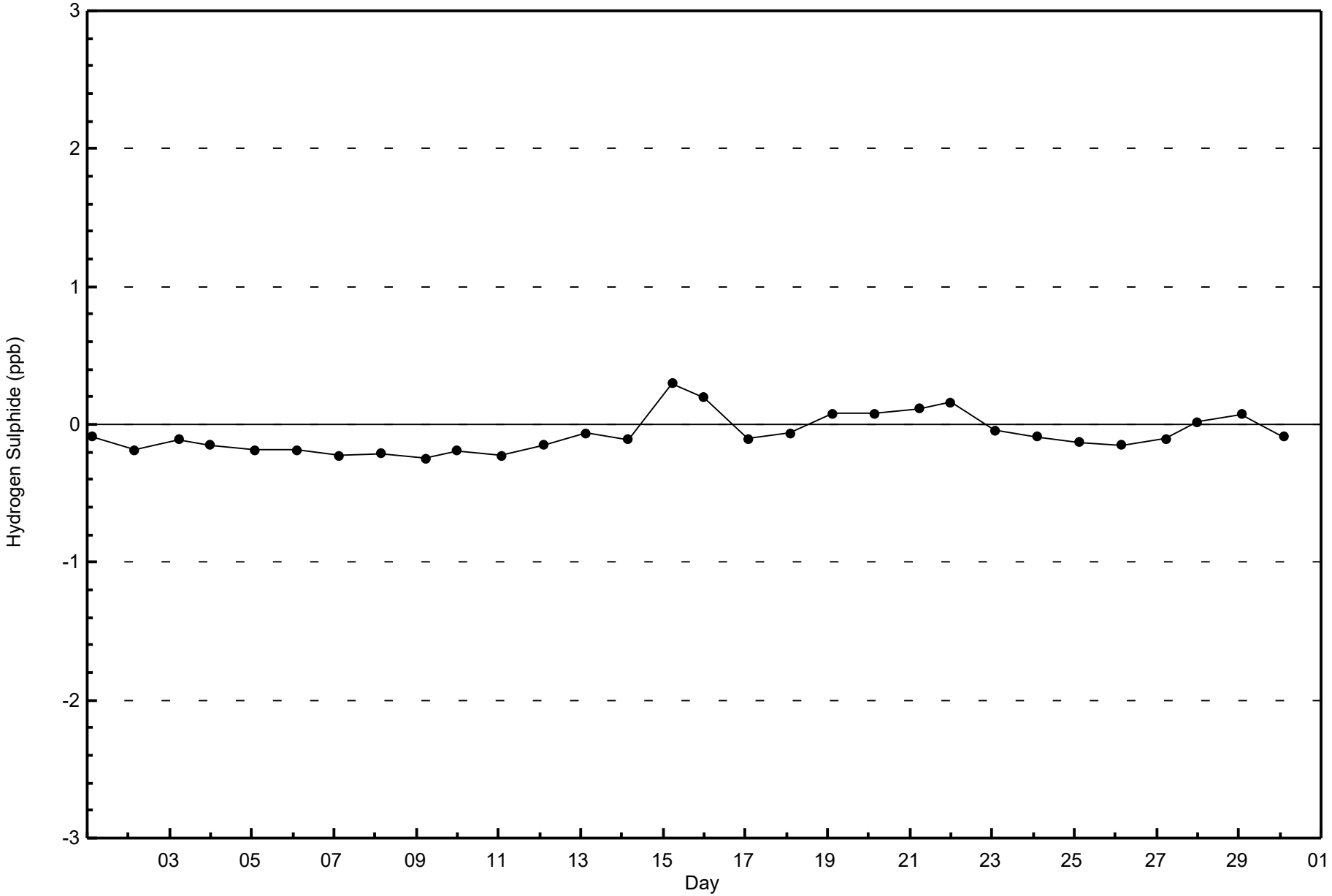
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Buffalo Viewpoint - June 2026

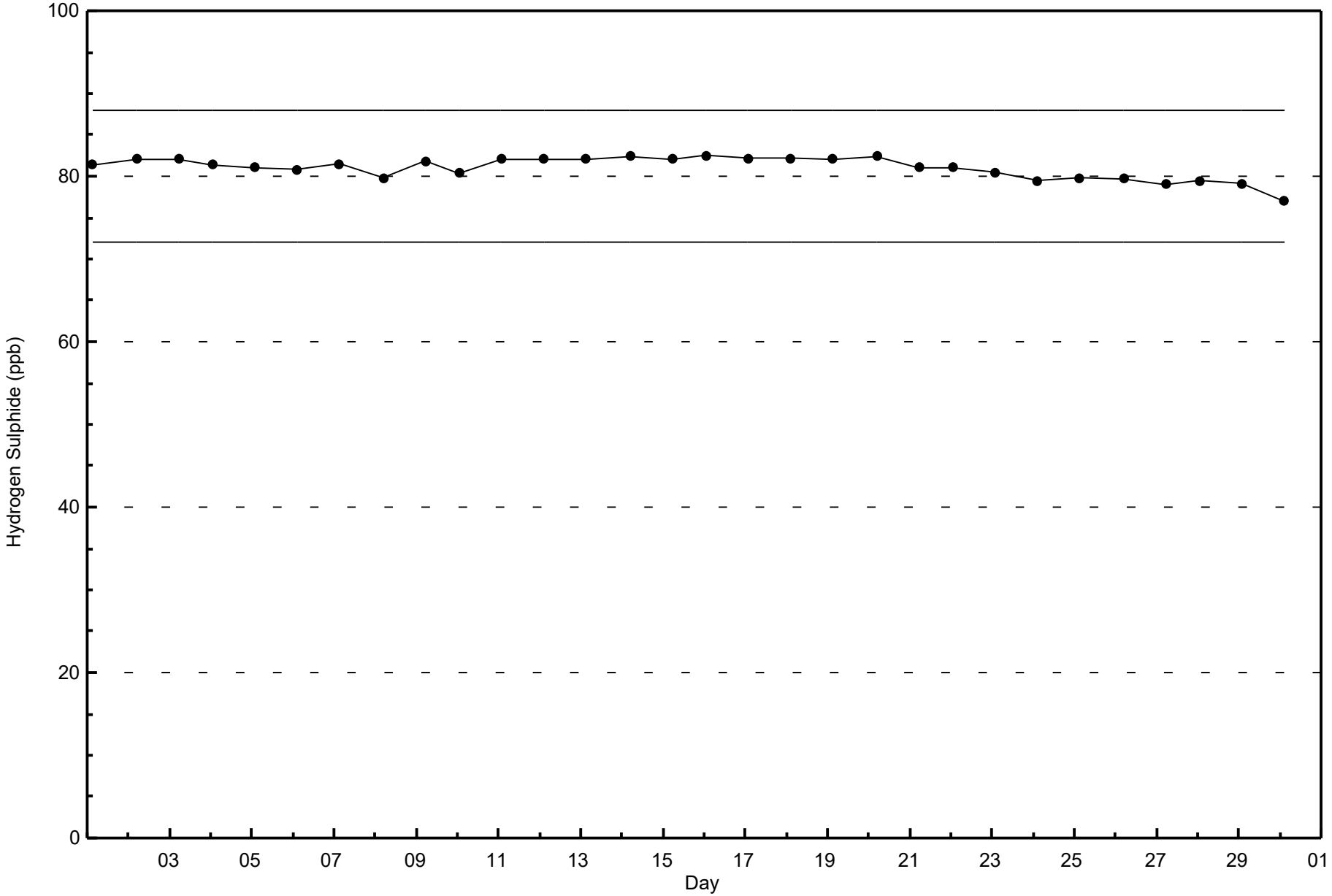


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Buffalo Viewpoint - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Buffalo Viewpoint - June 2026

Maximum Value: 3.0 ppm on Jun 15 20:00

Maximum Daily Average: 2.3 ppm on Jun 15

Minimum Value: 2.0 ppm on Jun 9 15:00

Minimum Daily Average: 2.0 ppm on Jun 6

Maximum Diurnal Average: 2.2 ppm at hour 6

Minimum Diurnal Average: 2.0 ppm at hour 17

Monthly Average: 2.11 ppm

Percentiles: P_1 = 2.0 P_{10} = 2.0 Q_1 = 2.0 Median = 2.1 Q_3 = 2.1 P_{90} = 2.3 P_{99} = 2.7

Hours in Service:	720
Hours of Data:	680
Hours of Missing Data:	40
Hours of Calibration:	34
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-Jun	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	2.0	2.1	2.1
2-Jun	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	C	C	C	C	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.0	2.1	2.1	2.1	2.1
3-Jun	2.2	2.0	2.1	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	2.1	2.1	2.1	2.2
4-Jun	2.2	2.2	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2
5-Jun	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	2.1	2.1	2.0	2.0	2.0	2.1
6-Jun	2.0	Z	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	2.0	2.0	2.0	2.0	2.1	2.0	2.1
7-Jun	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	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1
8-Jun	2.1	2.1	2.1	Z	2.2	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	2.0	2.1	2.2
9-Jun	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	2.2	2.1	2.1	2.0	2.2
10-Jun	2.1	2.1	2.1	2.1	2.1	Z	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2
11-Jun	Z	2.1	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	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.2
12-Jun	2.3	Z	2.1	2.3	2.2	2.1	2.1	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.1	2.3
13-Jun	2.2	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2
14-Jun	2.1	2.0	2.1	Z	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.4	2.3	2.1	2.4
15-Jun	2.5	2.5	2.7	2.8	Z	2.7	2.4	2.6	2.2	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.2	3.0	2.8	2.4	2.1	2.2	2.3	3.0
16-Jun	2.1	2.0	2.1	2.0	2.1	Z	2.2	2.2	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2
17-Jun	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	M	M	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.2
18-Jun	2.3	Z	2.2	2.4	2.6	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.6
19-Jun	2.1	2.1	Z	2.1	2.1	2.1	2.5	2.5	2.1	2.1	2.0	2.1	2.2	2.0	2.1	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.5
20-Jun	2.1	2.2	2.3	Z	2.3	2.4	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.4
21-Jun	2.1	2.1	2.2	2.2	Z	2.2	2.2	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.2	2.4	2.1	2.4
22-Jun	2.4	2.3	2.3	2.3	2.4	Z	2.3	2.3	2.4	2.4	2.2	2.1	M	M	2.1	2.1	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.4
23-Jun	Z	2.2	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.0	2.1	2.2	2.2	2.2	2.1	2.3
24-Jun	2.2	Z	2.2	2.3	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.3
25-Jun	2.1	2.1	Z	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.3
26-Jun	2.1	2.1	2.1	Z	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	M	M	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
27-Jun	2.1	2.1	2.2	2.1	Z	2.6	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.7	2.7	2.7	2.2	2.7
28-Jun	2.3	2.2	2.2	2.3	2.5	Z	2.6	2.5	2.4	2.6	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.6
29-Jun	Z	2.4	2.4	2.4	2.4	2.6	2.7	2.5	2.3	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.4	2.2	2.7
30-Jun	2.6	Z	2.3	2.3	2.4	2.8	2.7	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.4	2.4	2.2	2.3	2.2	2.2	2.8
	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	Diurnal Average	
	2.6	2.5	2.7	2.8	2.6	2.8	2.7	2.6	2.4	2.6	2.3	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	3.0	2.8	2.7	2.7	2.7	Diurnal Maximum	

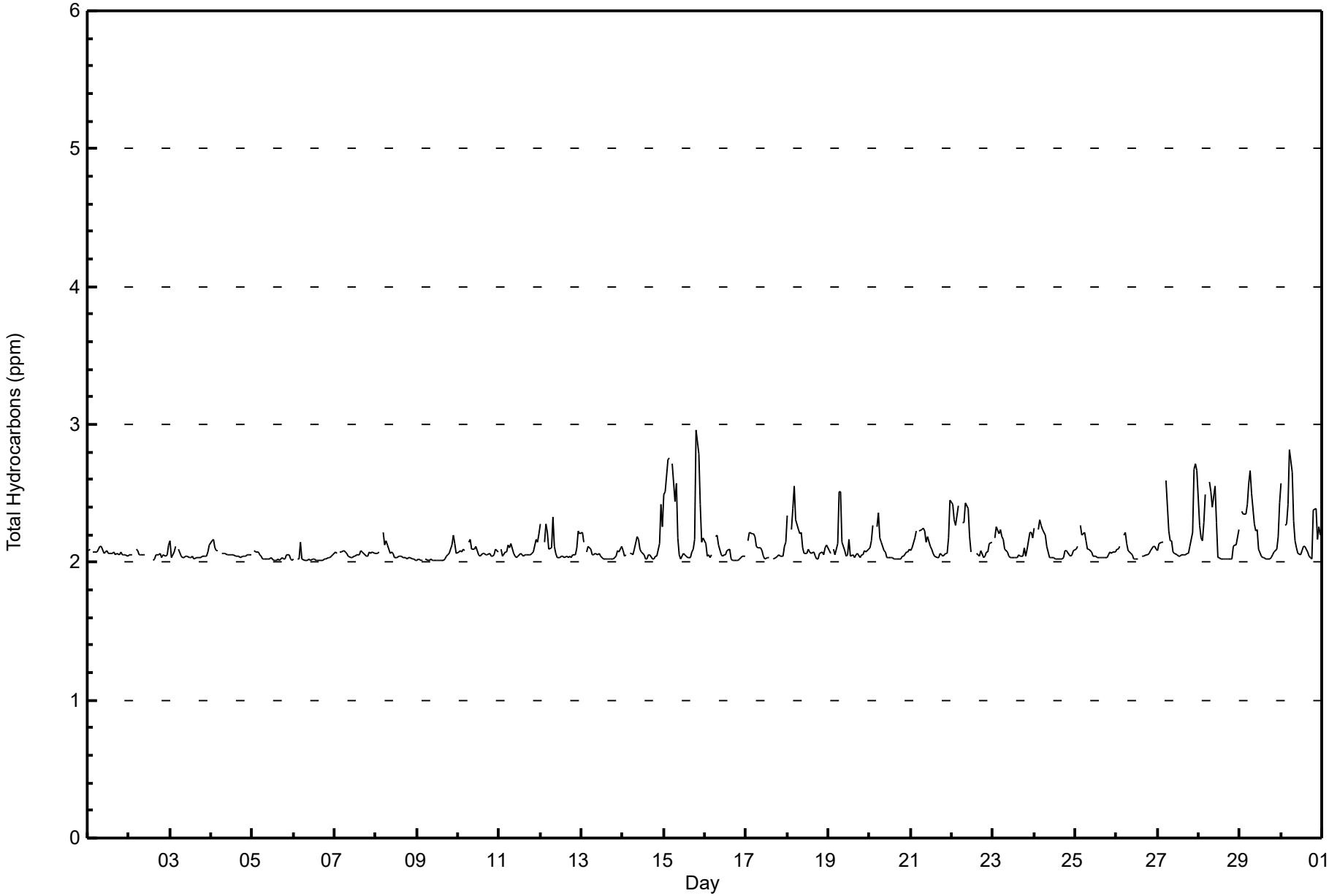
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Buffalo Viewpoint - June 2026



Total Hydrocarbons (THC) - ppm
Buffalo Viewpoint - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	249	36.62	36.62
2.1 - 3.0	431	63.38	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 680

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Buffalo Viewpoint - June 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	53	22	8	9	4	13	22	16	16	13	11	15	23	15	3	6	249
2.1 - 3.0	134	30	5	4	13	28	37	51	24	9	3	4	11	13	24	41	431
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	187	52	13	13	17	41	59	67	40	22	14	19	34	28	27	47	680

Total Number of Valid Hours: 680

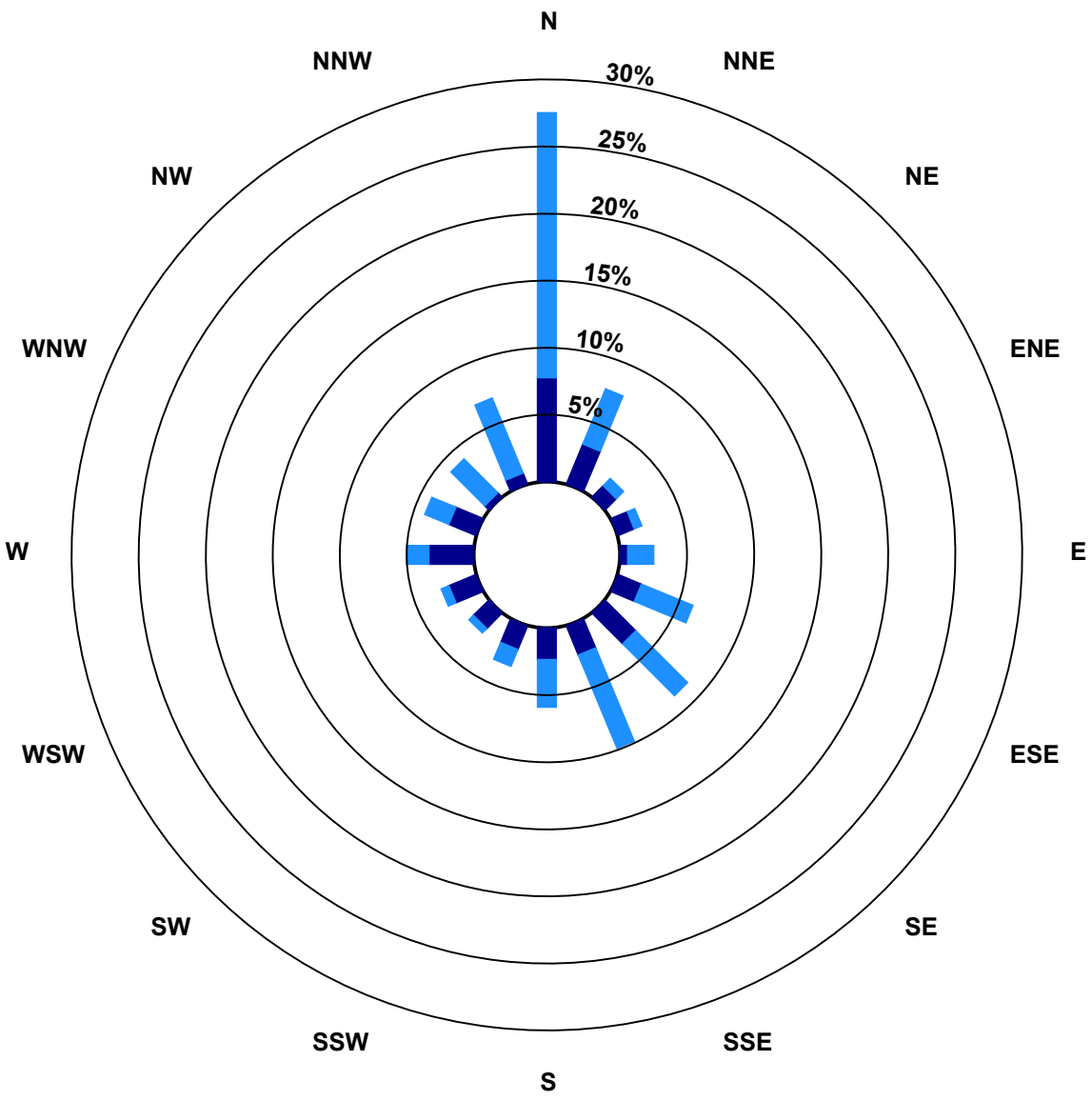
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Buffalo Viewpoint



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

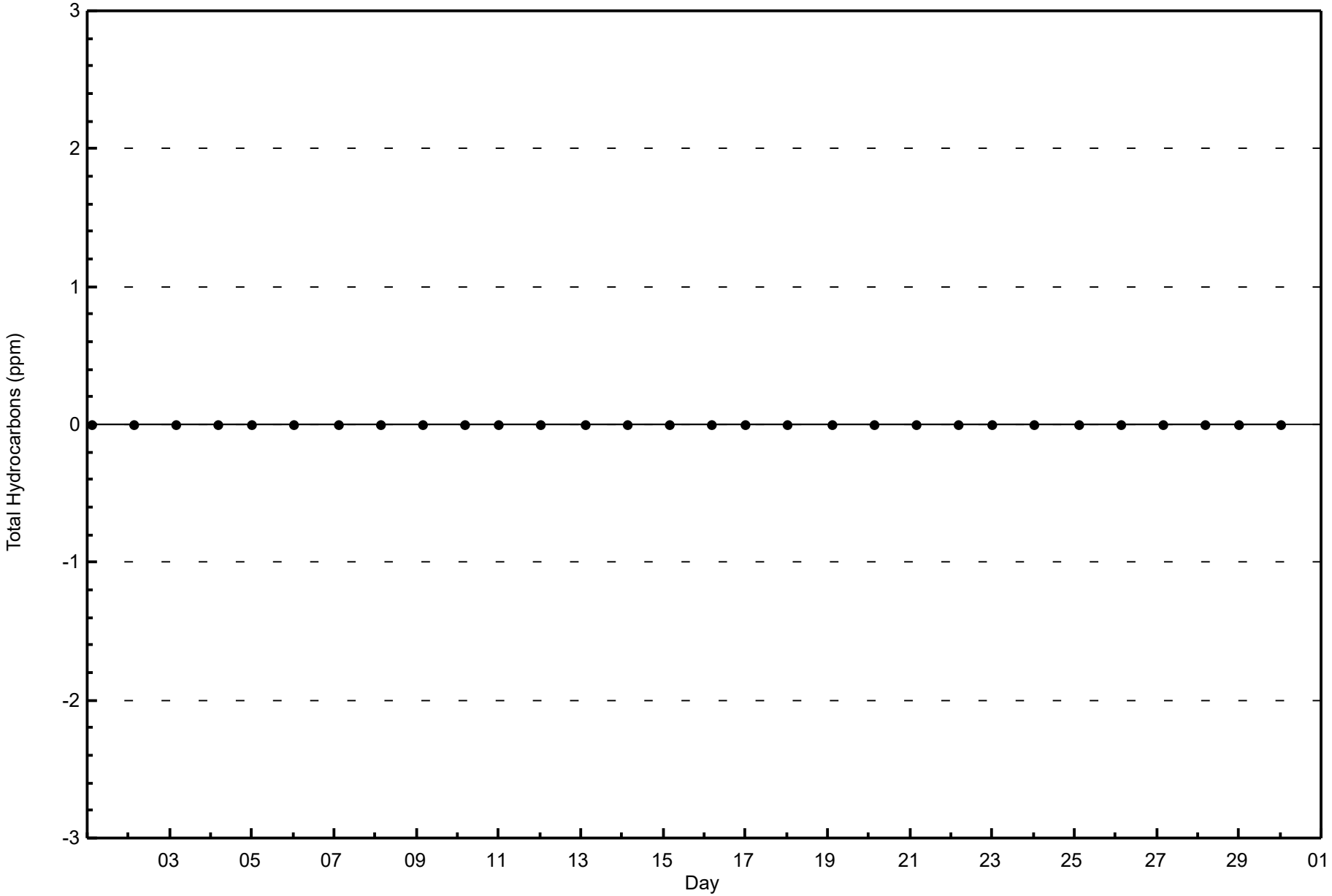
Total Number of Valid Hours: 680

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Buffalo Viewpoint - June 2026

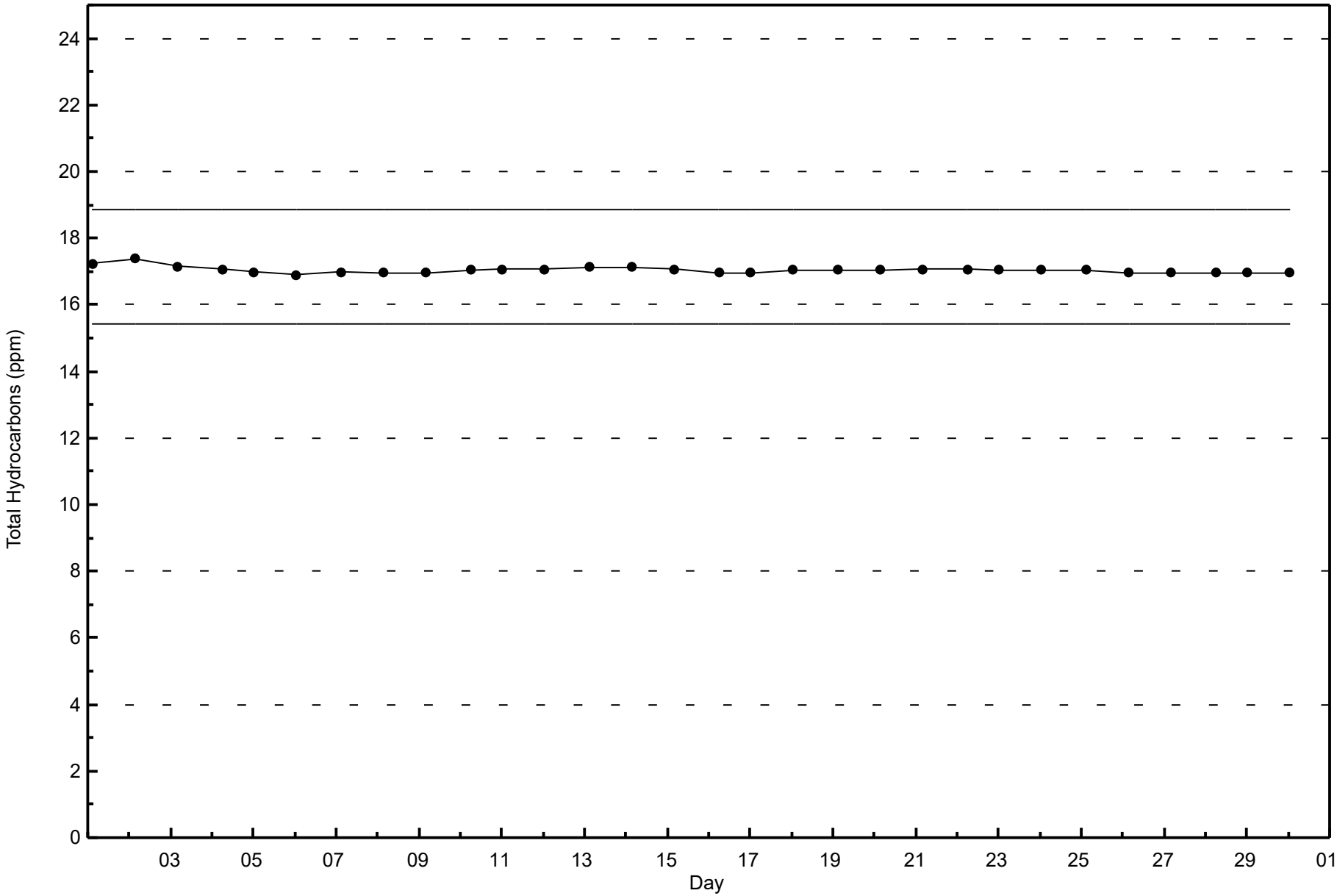


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Buffalo Viewpoint - June 2026



Maximum Value: 0.058 ppm on Jun 19 13:00

Maximum Daily Average: 0.003 ppm on Jun 19

Minimum Value: 0.000 ppm on Jun 1 01:00

Minimum Daily Average: 0.000 ppm on Jun 1

Maximum Diurnal Average: 0.004 ppm at hour 22

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:	680
Hours of Missing Data:	40
Hours of Calibration:	34
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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	C	C	C	C	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3-Jun	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-Jun	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-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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-Jun	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-Jun	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	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.006
11-Jun	Z	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	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
12-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.054	0.000	0.000	0.002	0.054
13-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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	0.053	0.002	0.000	0.002	0.053
15-Jun	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-Jun	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-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	M	M	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.058	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
20-Jun	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	0.000	0.000	0.000	0.000	0.001
21-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.016	0.000	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	0.016
22-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.001	0.002	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	0.002
23-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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	M	M	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27-Jun	0.000	0.000	0.000	0.000	Z	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	0.000	0.000	0.002
28-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
29-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.003	0.001	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
30-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.005	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	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	Diurnal Average	
	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.002	0.016	0.002	0.058	0.003	0.005	0.002	0.000	0.000	0.006	0.000	0.000	0.054	0.002	0.002	Diurnal Maximum	

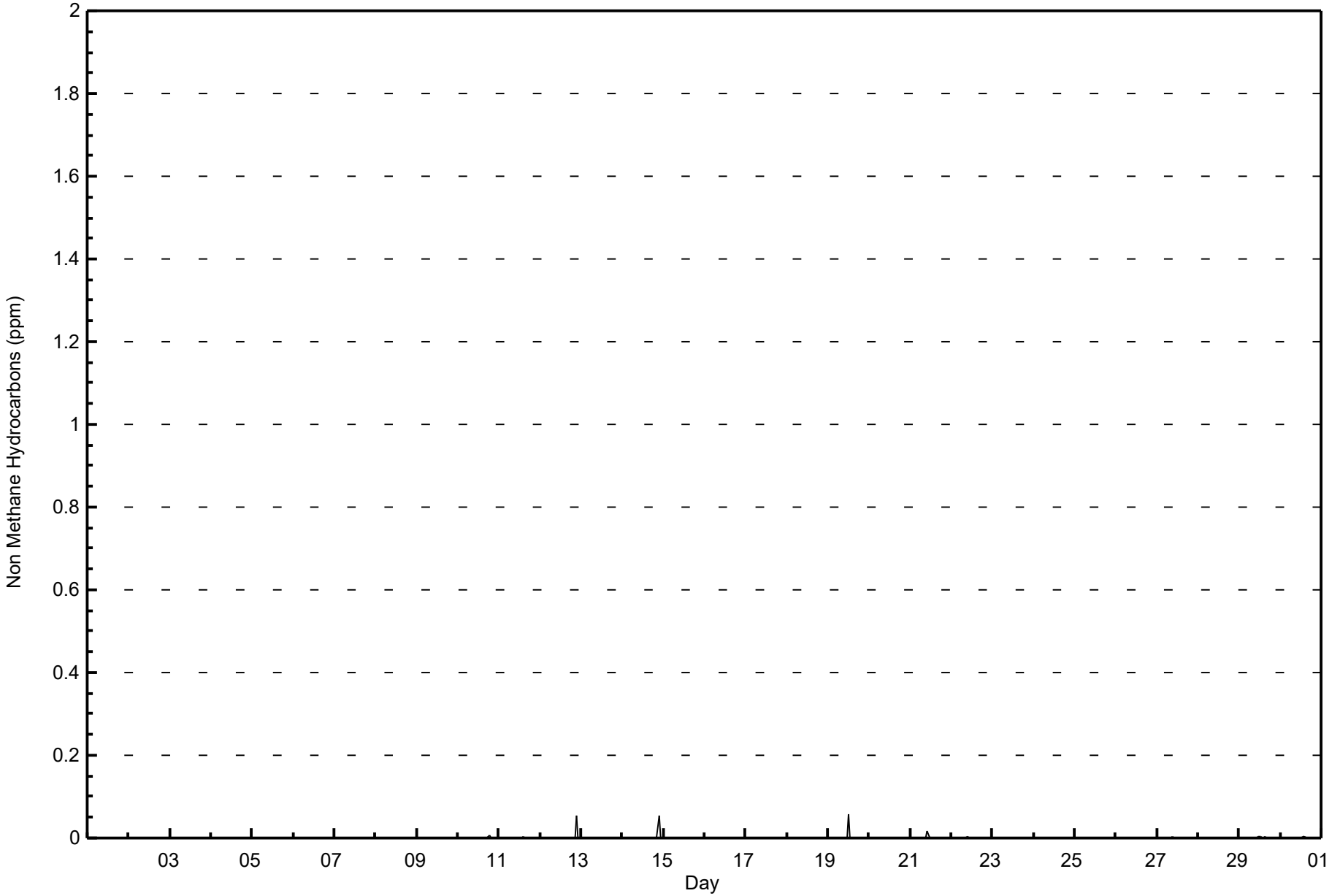
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Buffalo Viewpoint - June 2026



Non Methane Hydrocarbons (NMHC) - ppm
Buffalo Viewpoint - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	675	99.26	99.26
0.006 - 0.05	4	0.59	99.85
0.06 - 0.1	1	0.15	100.00
> 0.1	0	0.00	100.00

Total Number of Valid Hours: 680

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Buffalo Viewpoint - June 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	184	52	13	13	17	41	59	67	40	22	14	19	34	28	26	46	675
0.006 - 0.05	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
0.06 - 0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
> 0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	187	52	13	13	17	41	59	67	40	22	14	19	34	28	27	47	680

Total Number of Valid Hours: 680

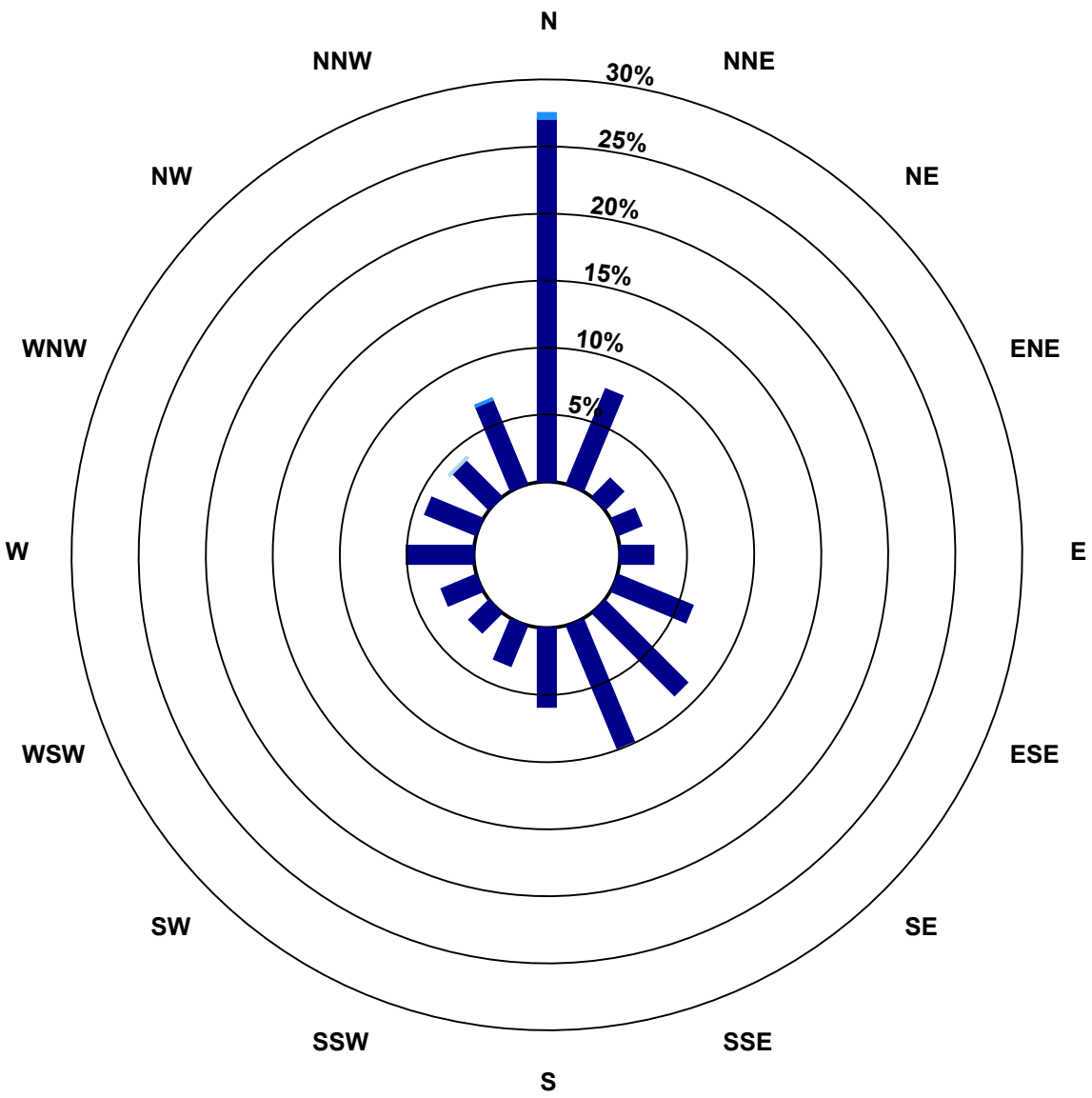
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Non Methane Hydrocarbons (NMHC) - ppm

Buffalo Viewpoint



Classes (ppm)

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

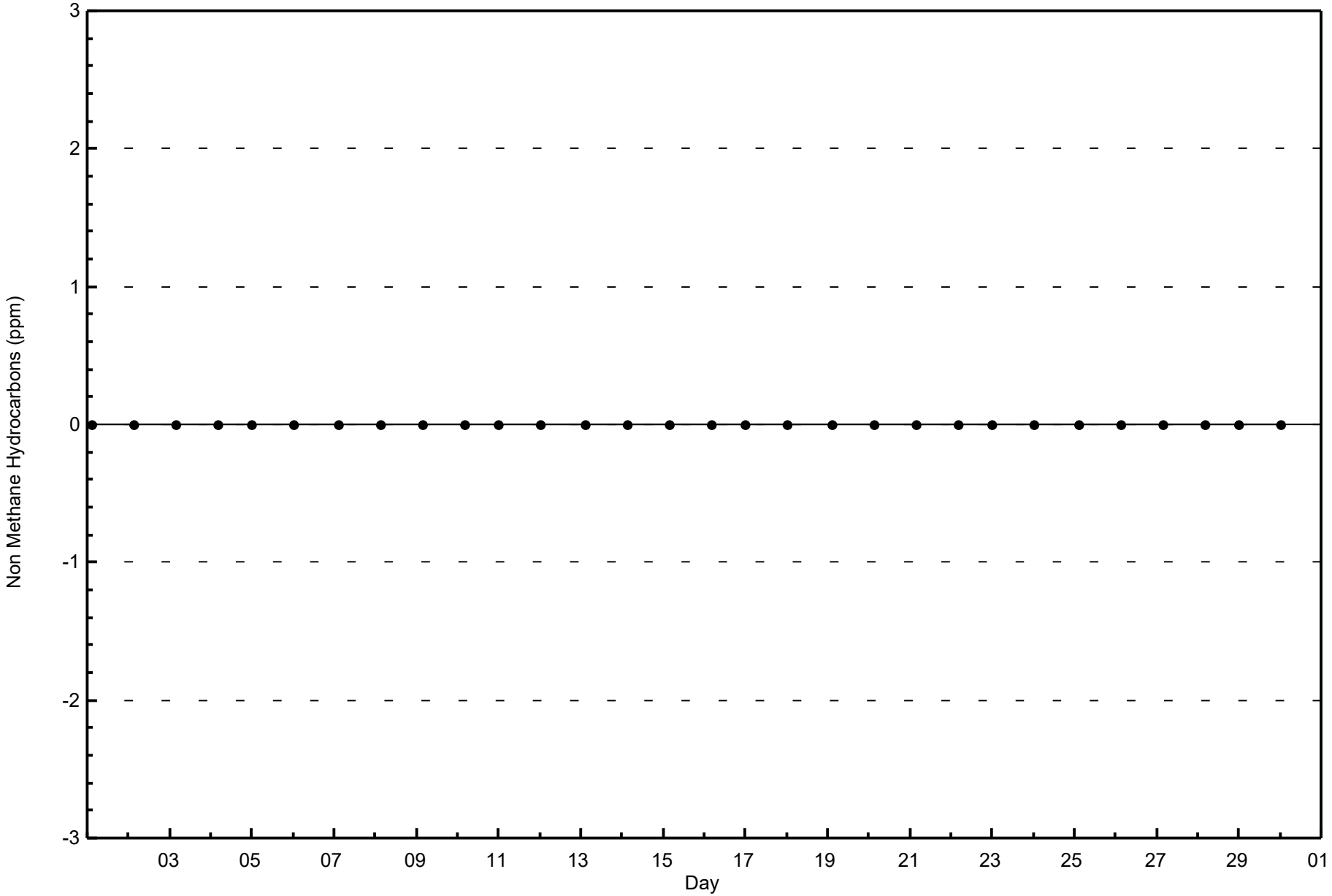
Total Number of Valid Hours: 680

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Buffalo Viewpoint - June 2026

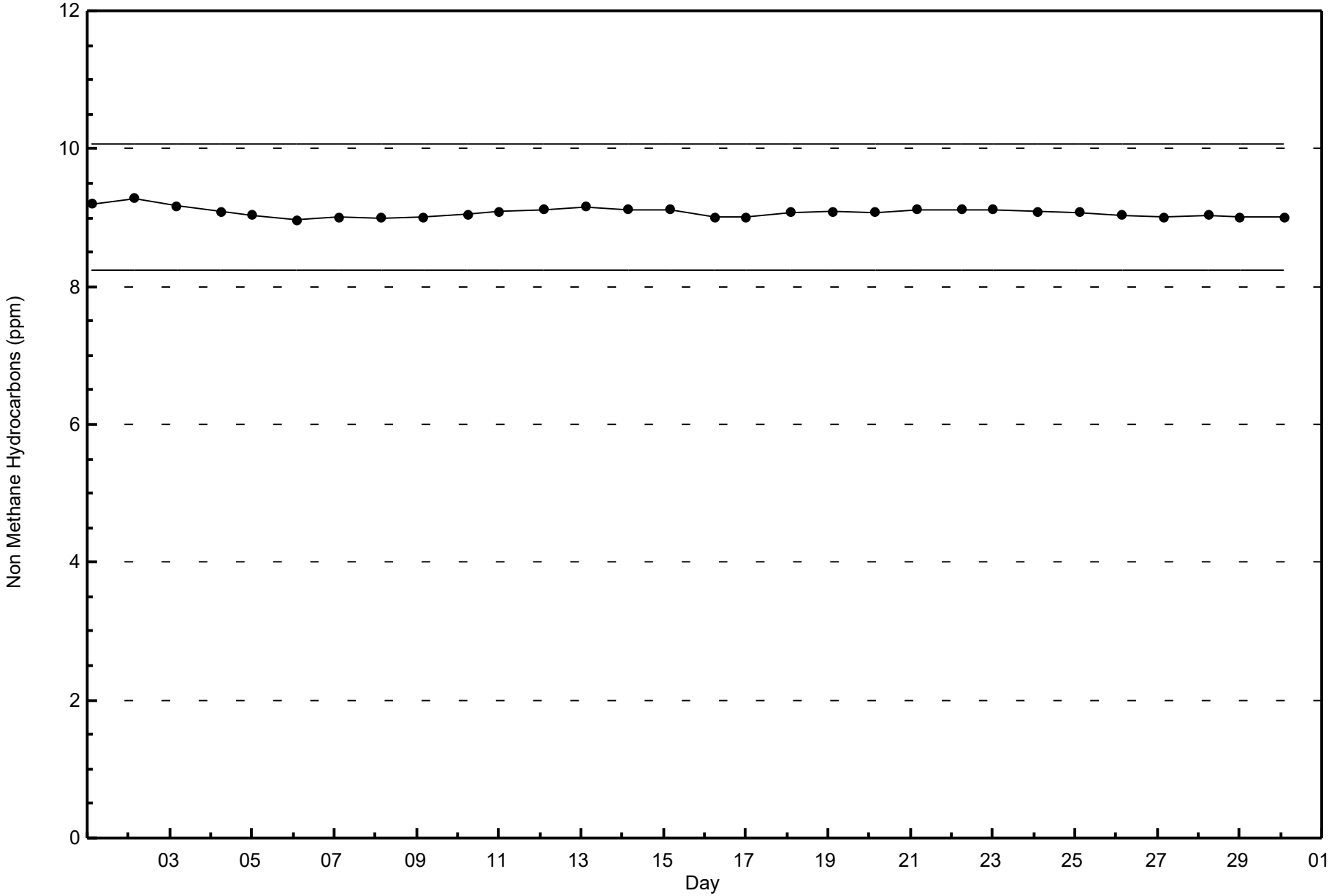


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Buffalo Viewpoint - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Buffalo Viewpoint - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.0 ppm on Jun 15 20:00 Maximum Daily Average: 2.3 ppm on Jun 15

Minimum Value: 2.0 ppm on Jun 9 15:00
Maximum Diurnal Average: 2.2 ppm at hour 6
Monthly Average: 2.11 ppm

Minimum Daily Average: 2.0 ppm on Jun 6
Minimum Diurnal Average: 2.0 ppm at hour 17
Percentiles: P_1 = 2.0 P_{10} = 2.0 Q_1 = 2.0 Median = 2.1 Q_3 = 2.1 P_{90} = 2.3 P_{99} = 2.7

Hours in Service:	720
Hours of Data:	680
Hours of Missing Data:	40
Hours of Calibration:	34
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-Jun	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	2.0	2.1	2.1
2-Jun	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	C	C	C	C	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.0	2.1	2.1	2.1	2.1
3-Jun	2.2	2.0	2.1	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	2.1	2.1	2.1	2.2
4-Jun	2.2	2.2	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2
5-Jun	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	2.1	2.1	2.0	2.0	2.0	2.1
6-Jun	2.0	Z	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	2.0	2.0	2.0	2.0	2.1	2.0	2.1
7-Jun	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	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1
8-Jun	2.1	2.1	2.1	Z	2.2	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	2.0	2.1	2.2
9-Jun	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	2.2	2.1	2.1	2.0	2.2
10-Jun	2.1	2.1	2.1	2.1	2.1	Z	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2
11-Jun	Z	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.2
12-Jun	2.3	Z	2.1	2.3	2.2	2.1	2.1	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.1	2.3
13-Jun	2.2	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2
14-Jun	2.1	2.0	2.1	Z	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.4	2.3	2.1	2.4
15-Jun	2.5	2.5	2.7	2.8	Z	2.7	2.4	2.6	2.2	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.2	3.0	2.8	2.4	2.1	2.2	2.3	3.0
16-Jun	2.1	2.0	2.1	2.0	2.1	Z	2.2	2.2	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2
17-Jun	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	M	M	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.2
18-Jun	2.3	Z	2.2	2.4	2.6	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.6
19-Jun	2.1	2.1	Z	2.1	2.1	2.1	2.5	2.5	2.1	2.1	2.0	2.1	2.1	2.0	2.1	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.5
20-Jun	2.1	2.2	2.3	Z	2.3	2.4	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.4
21-Jun	2.1	2.1	2.2	2.2	Z	2.2	2.2	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.2	2.4	2.1	2.4
22-Jun	2.4	2.3	2.3	2.3	2.4	Z	2.3	2.3	2.4	2.4	2.2	2.1	M	M	2.1	2.1	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.4
23-Jun	Z	2.2	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.0	2.1	2.2	2.2	2.2	2.1	2.3
24-Jun	2.2	Z	2.2	2.3	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.3
25-Jun	2.1	2.1	Z	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.3
26-Jun	2.1	2.1	2.1	Z	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	M	M	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
27-Jun	2.1	2.1	2.2	2.1	Z	2.6	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.7	2.7	2.7	2.2	2.7
28-Jun	2.3	2.2	2.2	2.3	2.5	Z	2.6	2.5	2.4	2.6	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.6
29-Jun	Z	2.4	2.4	2.4	2.4	2.6	2.7	2.5	2.3	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.4	2.2	2.7
30-Jun	2.6	Z	2.3	2.3	2.4	2.8	2.7	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.4	2.4	2.2	2.3	2.2	2.2	2.8
	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	2.0	2.0	2.1	2.1	2.1	2.1	2.2	Diurnal Average	
	2.6	2.5	2.7	2.8	2.6	2.8	2.7	2.6	2.4	2.6	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	3.0	2.8	2.7	2.7	2.7	Diurnal Maximum	

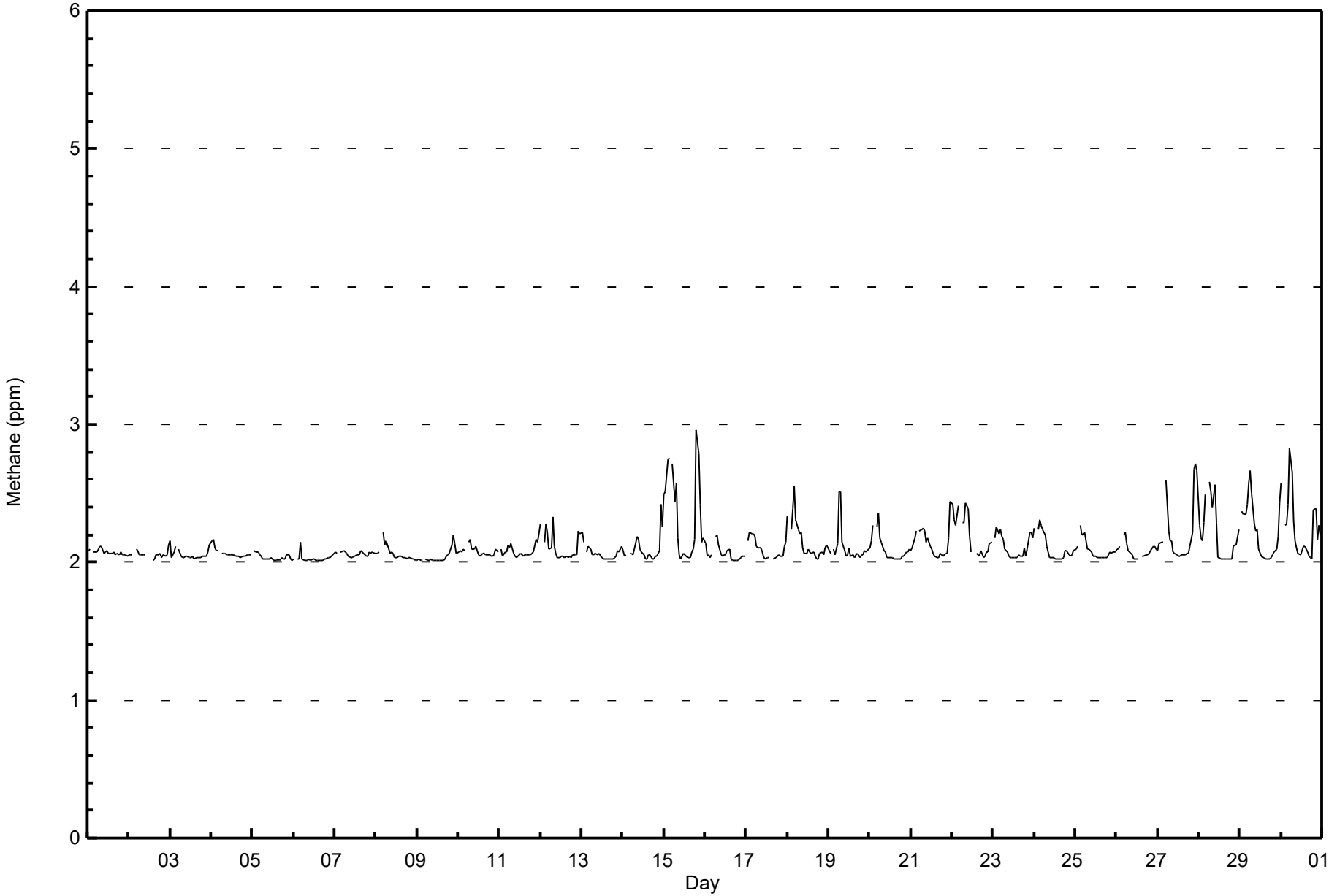
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Buffalo Viewpoint - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	250	36.76	36.76
2.1 - 3.0	430	63.24	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 680

Total Number of Hours: 720

Methane (CH_4) - ppm
Buffalo Viewpoint - June 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	54	22	8	9	4	13	22	16	16	13	11	15	23	15	3	6	250
2.1 - 3.0	133	30	5	4	13	28	37	51	24	9	3	4	11	13	24	41	430
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	187	52	13	13	17	41	59	67	40	22	14	19	34	28	27	47	680

Total Number of Valid Hours: 680

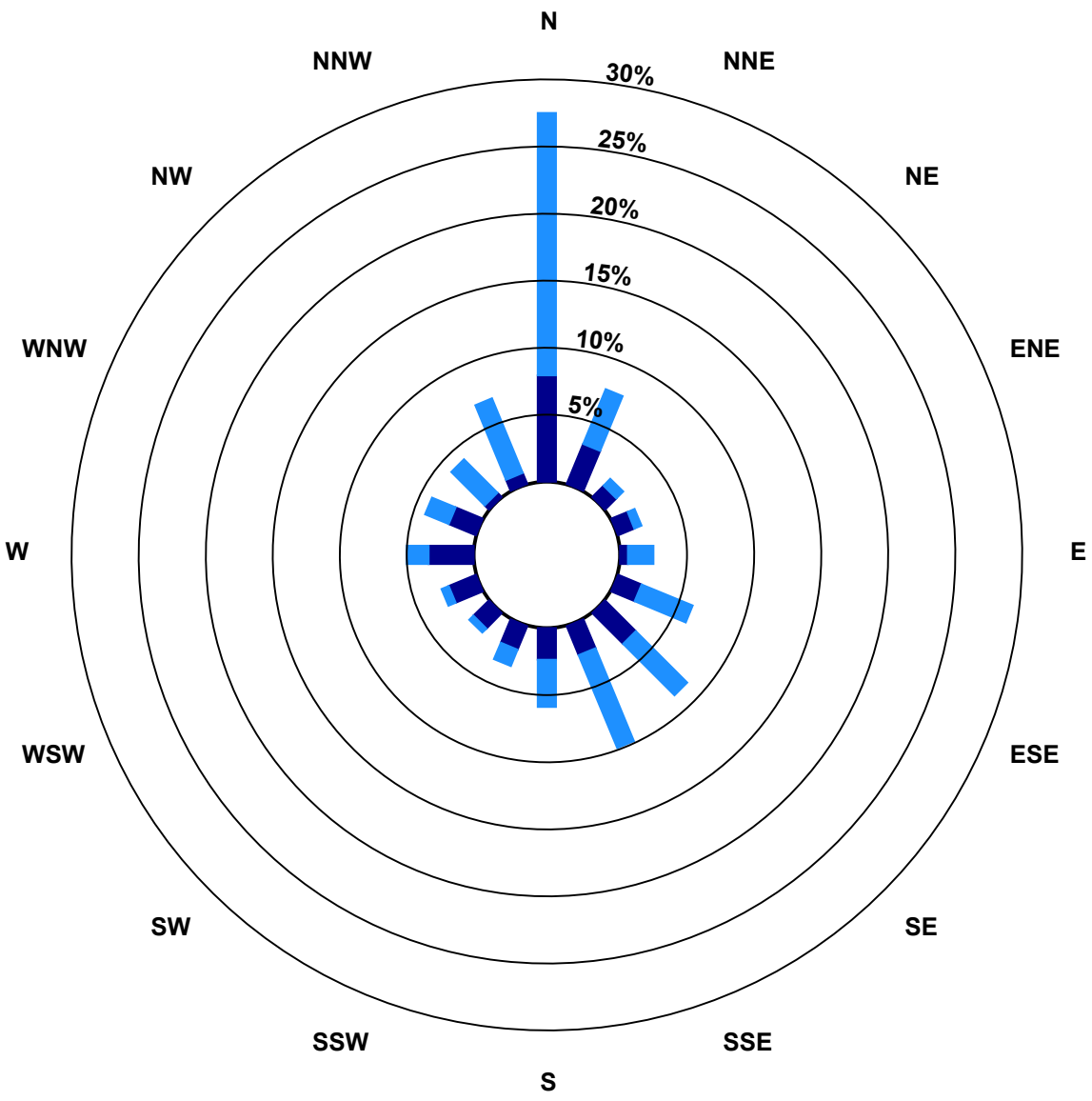
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Methane (CH_4) - ppm

Buffalo Viewpoint



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

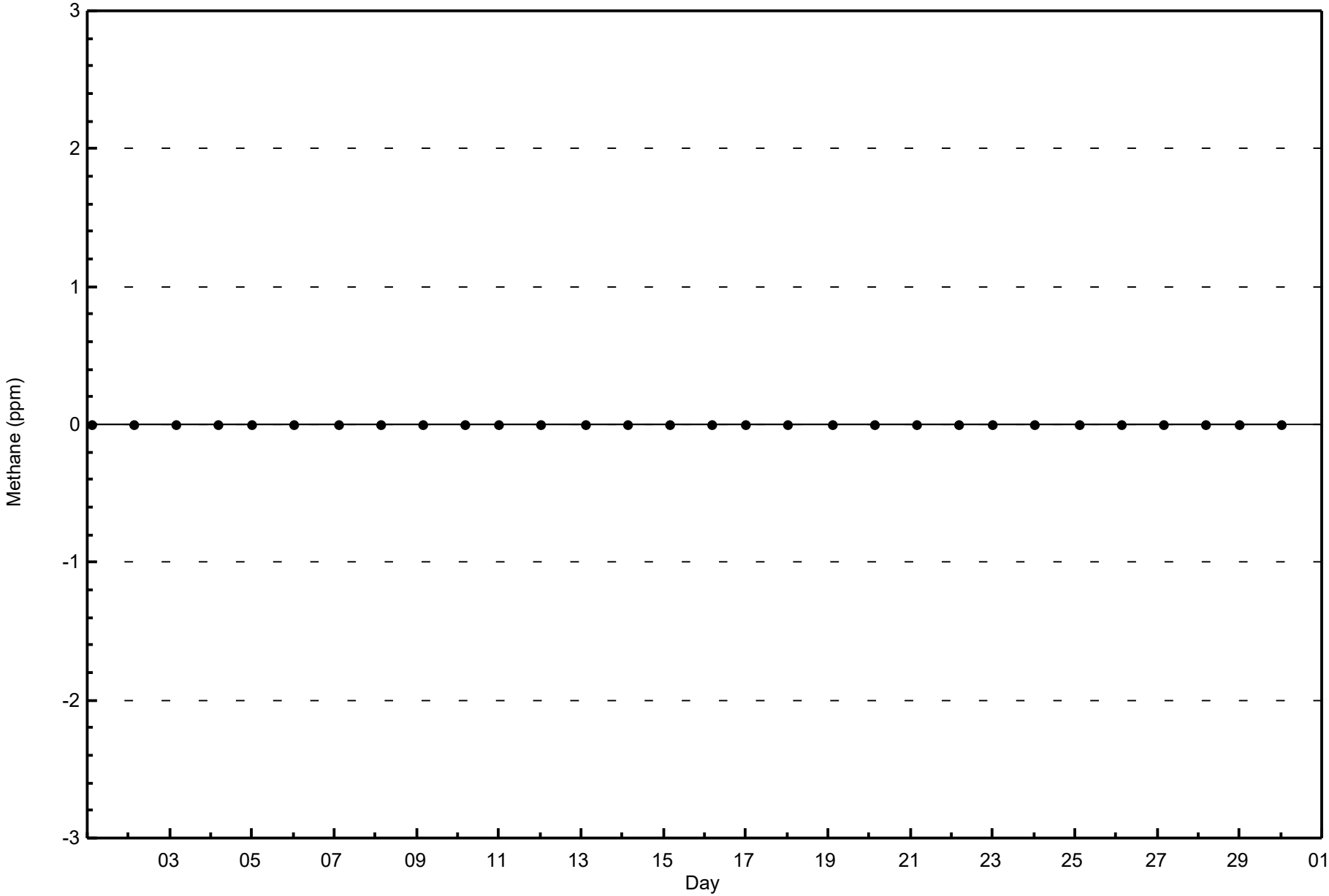
Total Number of Valid Hours: 680

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Buffalo Viewpoint - June 2026

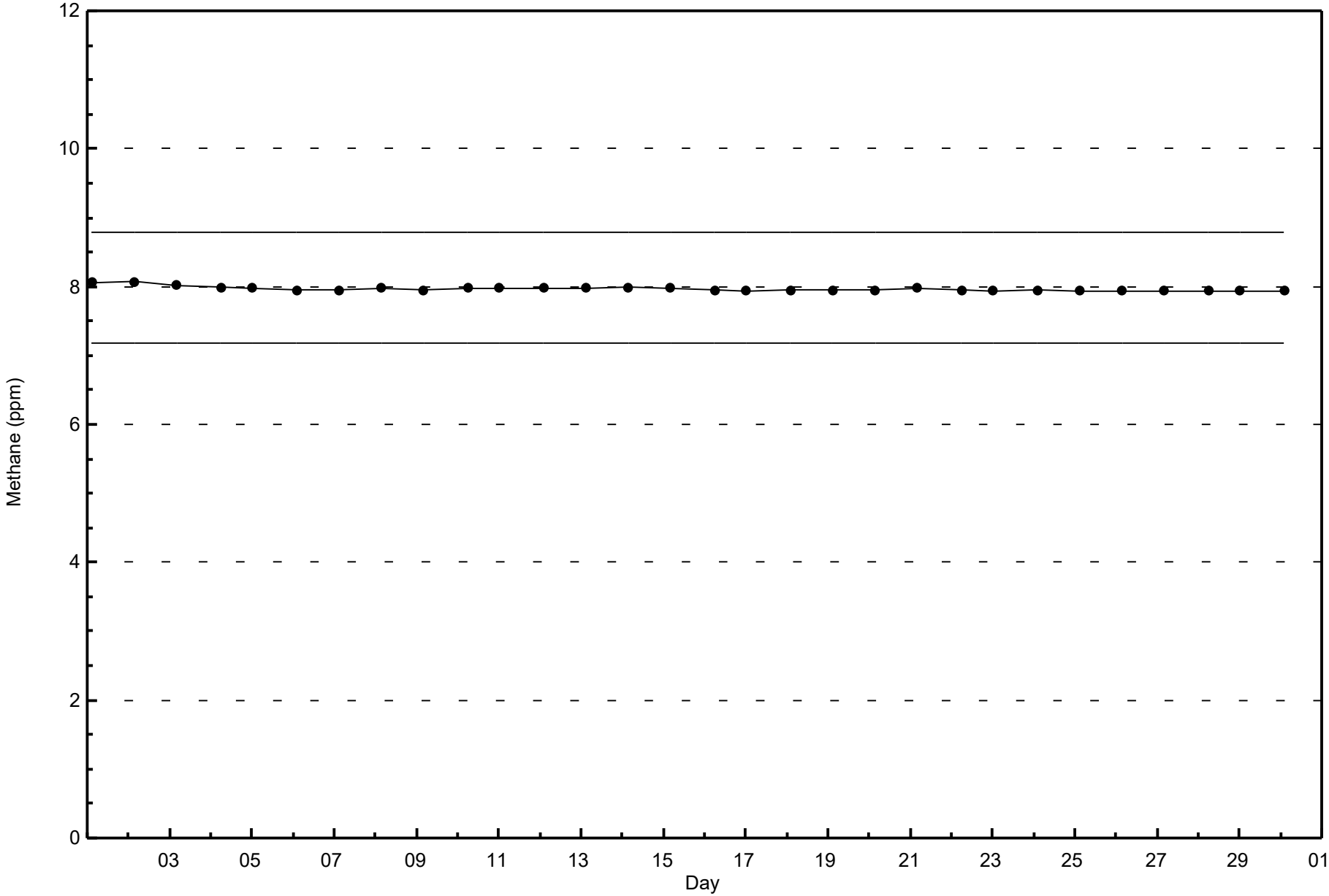


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Buffalo Viewpoint - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Buffalo Viewpoint - June 2026

Maximum Value: 35.8 ppb on Jun 28 06:00

Maximum Daily Average: 6.6 ppb on Jun 15

Minimum Value: 0.0 ppb on Jun 17 22:00

Minimum Daily Average: 0.2 ppb on Jun 6

Maximum Diurnal Average: 5.0 ppb at hour 7

Minimum Diurnal Average: 0.1 ppb at hour 22

Monthly Average: 1.41 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.7 P_{90} = 2.9 P_{99} = 21.7

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-Jun	0.1	0.2	0.4	0.3	0.1	Z	1.0	0.7	1.1	0.5	0.4	0.4	0.5	0.4	0.3	0.4	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.4	1.1
2-Jun	Z	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.6	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.6
3-Jun	0.1	Z	0.1	0.1	0.2	0.2	0.5	0.2	0.3	0.6	0.5	0.2	0.3	0.8	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.1	0.1	2.6	0.4	2.6
4-Jun	0.5	0.9	Z	0.2	0.4	0.7	0.8	0.9	0.5	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	0.3	0.9
5-Jun	0.1	0.1	0.1	Z	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.4
6-Jun	0.1	0.1	0.1	0.1	Z	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3
7-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.6	0.8	1.0	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	1.0
8-Jun	Z	0.2	0.1	0.2	0.3	0.5	0.7	0.6	0.8	0.7	0.5	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.8
9-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.3	0.1	0.2	0.1	0.3	0.7	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.7
10-Jun	0.2	0.2	Z	0.4	0.5	1.7	3.4	2.4	1.6	1.4	1.4	0.6	0.5	0.6	0.8	0.9	0.8	0.8	0.8	0.3	0.1	0.1	0.1	0.1	0.9	3.4
11-Jun	0.1	0.3	0.1	Z	0.5	0.6	1.0	1.7	2.4	1.3	1.0	0.6	1.4	1.2	0.8	1.1	0.6	0.4	0.2	0.2	0.2	0.3	0.3	0.5	0.7	2.4
12-Jun	3.0	0.3	1.5	0.8	Z	1.4	2.6	2.7	2.1	1.2	0.5	0.4	0.8	0.9	0.8	0.8	0.8	0.6	0.4	0.3	0.2	0.1	0.2	1.1	1.0	3.0
13-Jun	0.6	0.1	0.1	0.1	0.2	Z	0.3	0.4	0.7	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	0.2	0.7
14-Jun	Z	0.1	0.1	0.0	0.1	0.1	0.1	1.9	4.3	4.0	2.0	1.1	0.7	0.3	0.3	0.7	0.7	0.4	0.3	0.2	0.1	0.1	0.6	0.1	0.8	4.3
15-Jun	2.1	Z	18.4	35.6	34.6	23.9	12.6	9.7	3.2	0.7	1.3	0.8	1.8	3.4	0.6	0.4	0.5	0.3	0.3	0.1	0.2	0.2	0.1	0.1	6.6	35.6
16-Jun	0.1	0.1	Z	0.1	0.1	0.2	8.7	6.7	2.9	1.3	0.3	0.8	2.5	4.3	2.4	0.3	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.1	1.4	8.7
17-Jun	0.1	0.1	0.2	Z	4.3	4.7	3.1	3.2	4.4	C	C	C	C	C	C	0.5	0.5	0.4	0.3	0.2	0.0	0.0	0.0	0.0	--	4.7
18-Jun	0.3	0.1	2.8	11.1	Z	7.9	12.1	6.1	4.0	3.1	2.1	1.1	2.0	1.3	1.7	1.6	0.9	0.5	0.2	0.3	0.2	0.1	0.1	0.1	2.6	12.1
19-Jun	0.1	0.1	0.1	0.2	0.2	Z	29.2	29.0	9.9	4.0	1.7	1.7	0.9	2.2	3.1	1.1	1.5	1.8	0.3	0.8	0.2	0.3	0.1	0.2	3.9	29.2
20-Jun	Z	4.9	12.2	11.3	12.4	12.8	6.3	3.4	1.1	1.3	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	3.0	12.8
21-Jun	0.1	Z	0.2	1.2	5.8	9.6	9.1	9.5	12.0	6.3	11.6	4.7	3.2	1.0	0.5	0.4	0.4	0.6	0.3	0.3	0.3	0.2	1.1	9.9	3.8	12.0
22-Jun	12.5	12.8	Z	8.2	11.4	9.5	9.7	8.4	14.0	10.4	7.4	2.2	M	M	0.9	0.6	0.2	1.1	0.2	0.1	0.1	0.1	0.1	0.1	5.2	14.0
23-Jun	0.1	0.1	0.1	Z	0.2	0.2	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.4	0.5	0.3	1.4	0.5	0.1	0.1	0.1	0.1	0.3	1.4
24-Jun	0.1	0.1	0.1	0.1	Z	0.4	0.7	0.7	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.4	0.2	0.1	0.1	0.1	0.2	0.7
25-Jun	0.1	0.2	0.2	0.2	0.3	Z	0.7	0.9	0.5	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	0.2	0.9
26-Jun	Z	0.1	0.2	0.2	0.2	0.5	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	0.2	0.1	0.1	0.2	0.5
27-Jun	0.1	Z	0.1	0.3	0.9	1.4	0.9	2.8	1.6	0.4	0.5	0.2	0.2	0.1	0.3	0.2	0.2	0.3	0.4	0.2	0.2	0.2	0.1	0.2	0.5	2.8
28-Jun	0.2	0.2	Z	0.3	9.1	35.8	24.0	12.3	8.3	8.0	1.8	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	4.4	35.8
29-Jun	0.4	0.3	0.3	Z	3.8	12.4	21.2	11.5	2.5	1.3	1.2	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	2.5	21.2
30-Jun	0.2	0.1	0.1	0.1	Z	0.3	0.5	2.5	0.9	0.3	0.3	0.9	1.8	0.8	0.7	0.3	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.5	2.5
	0.9	0.9	1.5	2.9	3.5	5.0	5.0	4.0	2.7	1.7	1.3	0.7	0.7	0.7	0.6	0.4	0.4	0.4	0.3	0.2	0.2	0.1	0.2	0.6	Diurnal Average	
	12.5	12.8	18.4	35.6	34.6	35.8	29.2	29.0	14.0	10.4	11.6	4.7	3.2	4.3	3.1	1.6	1.5	1.8	1.4	0.8	0.3	0.3	1.1	9.9	Diurnal Maximum	

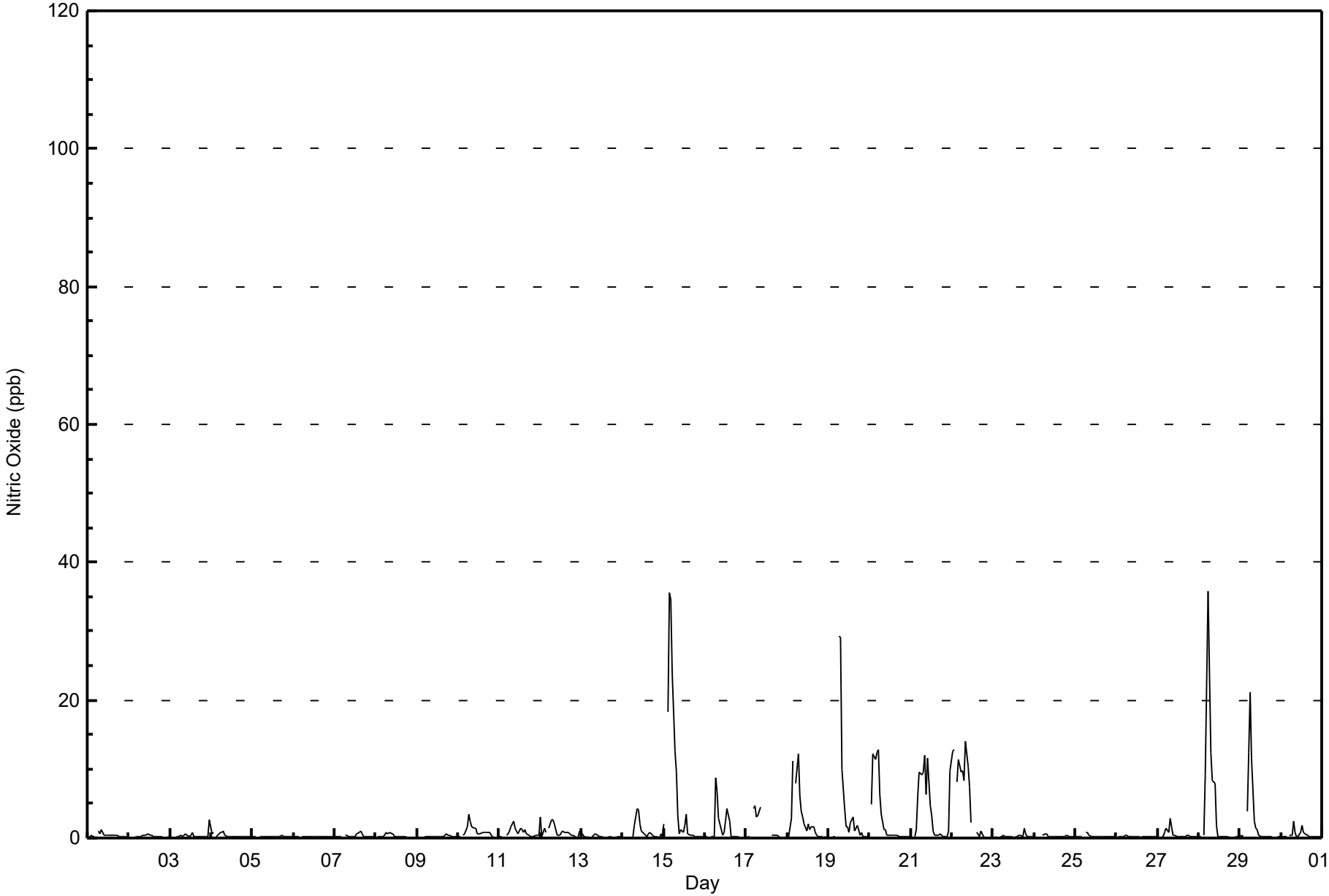
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Buffalo Viewpoint - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	674	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: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Buffalo Viewpoint - June 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	184	50	15	14	16	41	60	69	38	20	15	18	36	30	23	45	674
21 - 40	3	0	0	0	0	0	0	0	1	0	0	0	0	0	2	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	187	50	15	14	16	41	60	69	39	20	15	18	36	30	25	47	682

Total Number of Valid Hours: 682

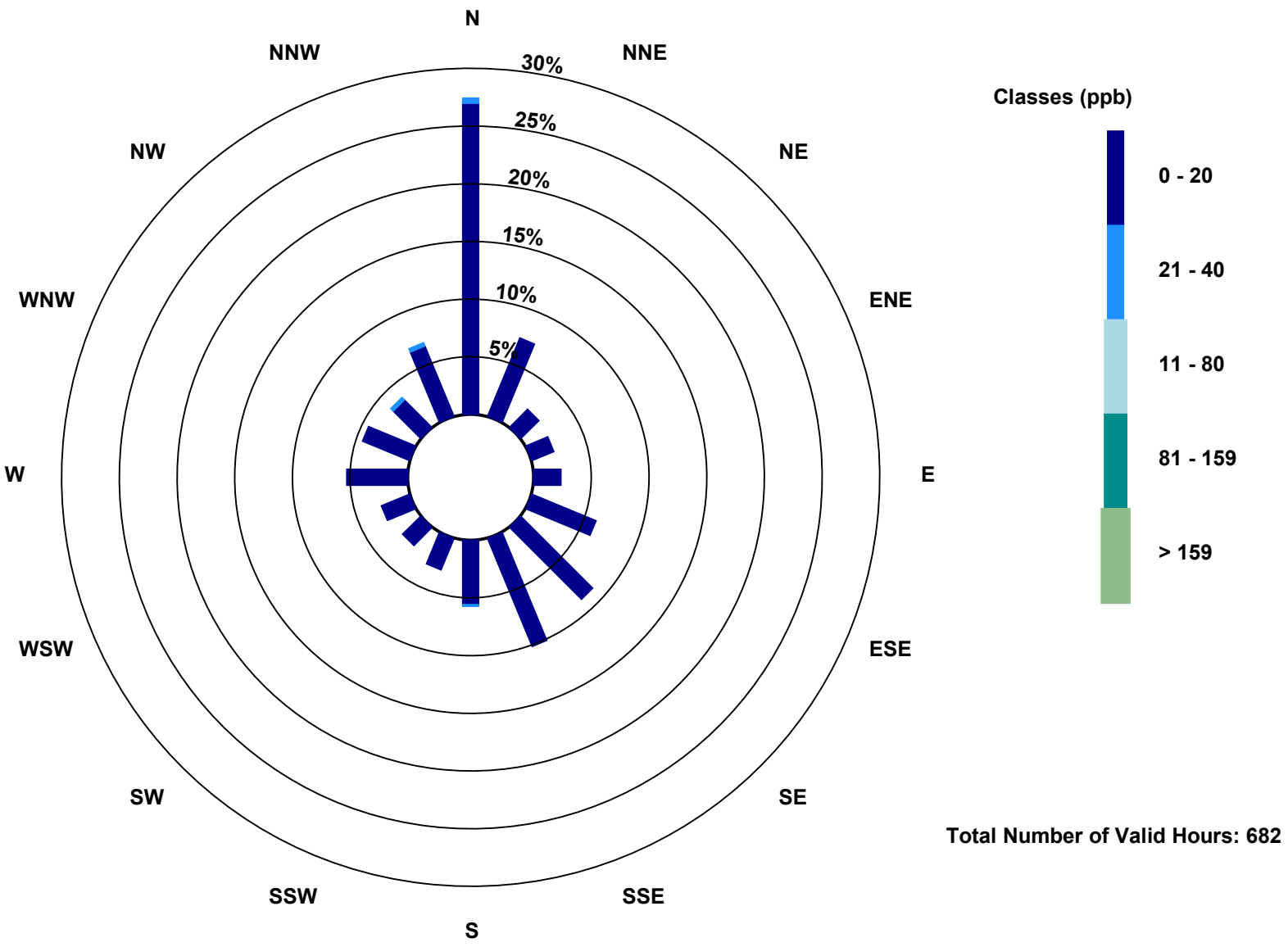
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Buffalo Viewpoint



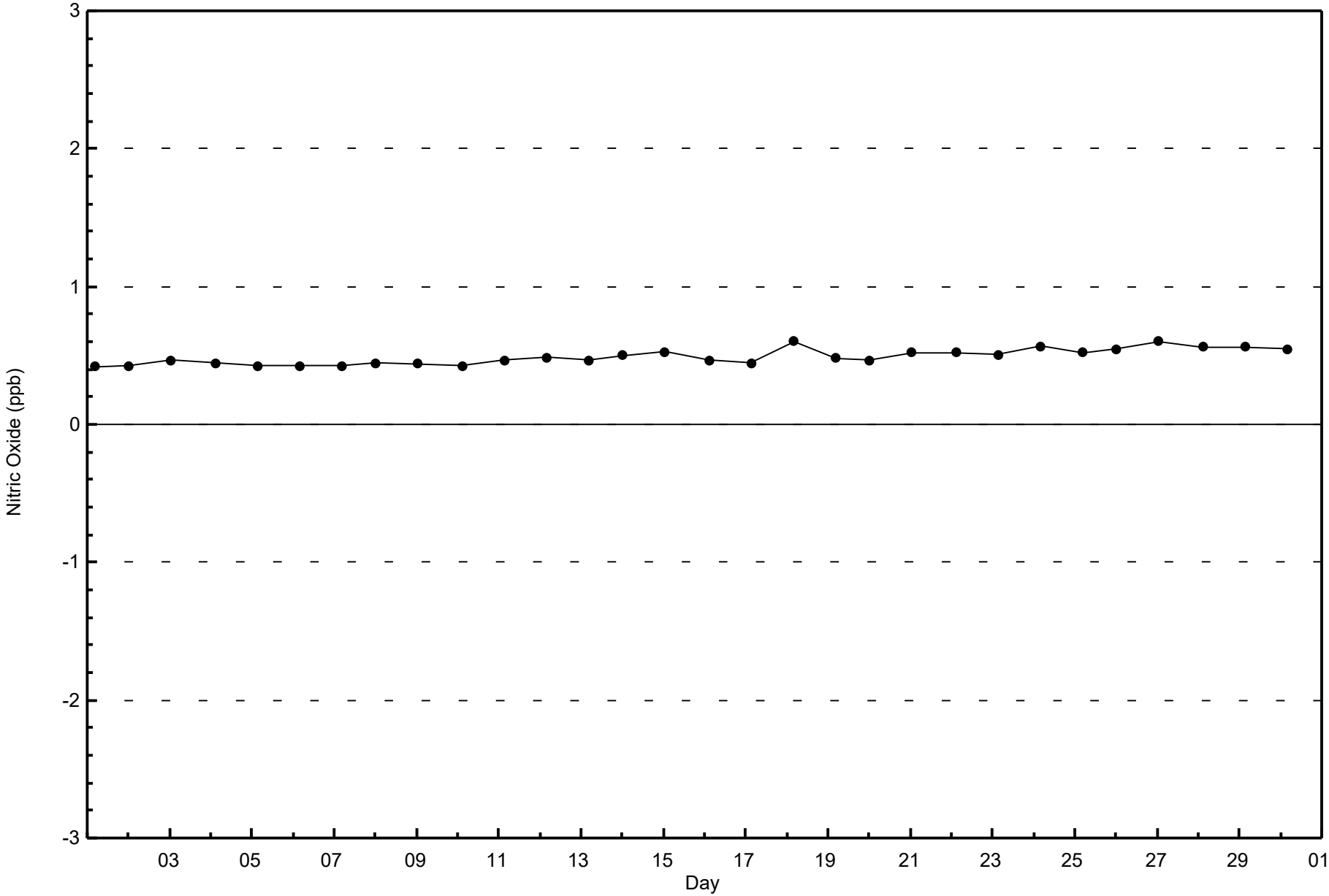
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Buffalo Viewpoint - June 2026

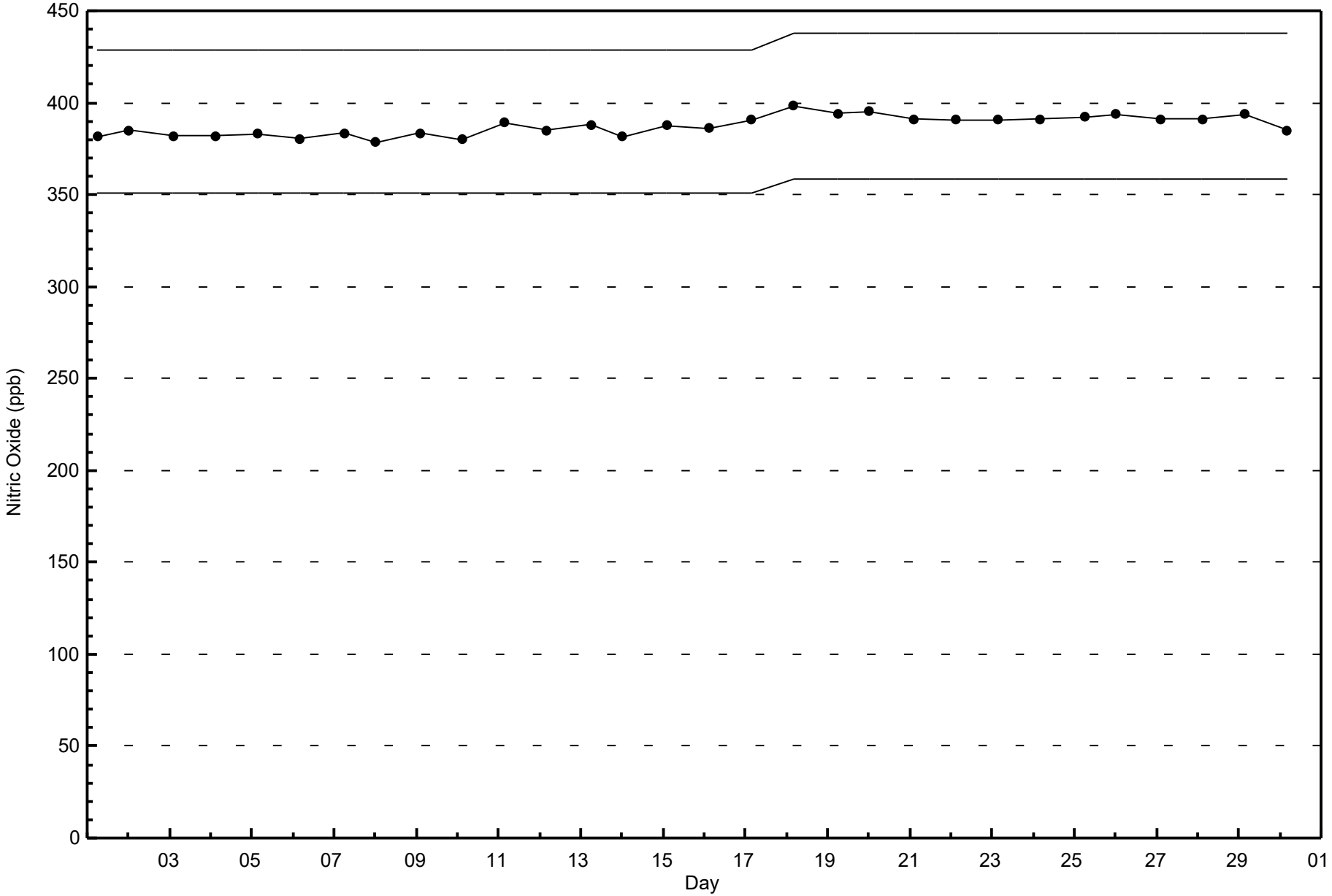


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Buffalo Viewpoint - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Buffalo Viewpoint - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 29.7 ppb on Jun 29 01:00
Maximum Daily Average: 9.8 ppb on Jun 29

Minimum Value: 0.1 ppb on Jun 13 19:00
Minimum Daily Average: 0.6 ppb on Jun 6
Maximum Diurnal Average: 8.3 ppb at hour 1
Minimum Diurnal Average: 1.7 ppb at hour 16
Monthly Average: 4.04 ppb
Percentiles: P_1 = 0.2 P_{10} = 0.5 Q_1 = 0.8 Median = 2.1 Q_3 = 4.9 P_{90} = 10.4 P_{99} = 24.3

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-Jun	2.0	5.2	10.4	6.7	4.2	Z	10.3	7.4	9.2	2.3	1.9	1.4	1.7	1.9	1.6	1.5	1.9	1.9	1.9	1.8	2.0	1.7	1.3	0.3	3.5	10.4
2-Jun	Z	0.8	1.2	1.1	2.9	2.0	0.8	1.2	1.8	1.7	1.5	1.9	1.3	1.3	1.0	0.9	2.2	3.0	5.1	2.2	1.6	1.9	2.1	2.5	1.8	5.1
3-Jun	4.0	Z	1.6	1.0	3.2	3.0	3.0	1.0	1.6	2.2	2.0	0.8	0.9	2.5	0.5	0.4	0.6	0.8	0.8	1.2	2.6	1.7	7.3	14.2	2.5	14.2
4-Jun	9.9	3.4	Z	2.0	1.4	1.1	0.9	1.1	0.8	0.5	0.5	0.5	0.5	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	1.6	0.7	1.2	9.9
5-Jun	0.7	0.6	0.9	Z	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.5	0.7	1.0	1.1	3.0	1.1	0.6	1.4	2.9	0.4	0.3	0.9	3.0
6-Jun	0.3	0.3	0.5	0.8	Z	0.8	0.5	0.6	0.5	0.4	0.6	0.5	0.4	0.4	0.5	0.7	0.8	0.5	0.3	1.0	0.7	1.0	0.6	0.9	0.6	1.0
7-Jun	0.4	0.4	0.3	0.3	0.5	Z	0.6	0.5	0.4	0.4	0.4	0.7	0.7	1.6	2.5	4.2	3.9	3.5	2.4	2.9	3.2	3.5	3.8	2.3	1.7	4.2
8-Jun	Z	5.1	5.7	4.8	6.6	5.5	8.6	5.1	2.4	2.5	1.9	0.6	0.5	0.8	0.9	0.4	0.4	0.9	0.4	0.3	0.4	0.4	0.2	0.2	2.4	8.6
9-Jun	0.2	Z	0.3	0.2	0.2	0.8	0.3	0.4	0.5	0.3	0.3	0.3	0.6	0.3	0.3	0.4	1.0	2.9	2.0	2.5	3.7	4.3	4.2	2.8	1.3	4.3
10-Jun	2.0	3.5	Z	4.9	2.6	6.0	6.7	3.9	3.4	2.8	3.9	2.9	1.7	1.5	3.1	3.4	2.2	1.8	2.9	1.7	1.0	2.0	5.4	4.7	3.2	6.7
11-Jun	4.8	6.8	1.8	Z	5.0	5.0	5.8	5.6	5.3	3.1	1.8	1.1	2.7	2.2	1.7	2.5	2.8	2.6	2.7	4.0	5.2	6.9	8.9	11.3	4.3	11.3
12-Jun	16.2	9.0	11.5	14.7	Z	7.4	8.6	7.9	4.6	2.6	1.3	1.3	2.4	2.5	2.3	2.5	2.7	2.9	2.4	3.5	4.5	7.7	17.3	27.2	7.1	27.2
13-Jun	18.2	8.6	6.9	3.3	2.4	Z	1.0	1.1	1.8	1.3	1.0	1.0	0.7	0.3	0.2	0.2	0.3	0.4	0.1	0.2	0.3	1.0	1.1	1.1	2.3	18.2
14-Jun	Z	0.9	0.4	0.5	0.4	0.4	0.6	4.3	10.4	11.3	6.5	5.6	2.9	1.5	1.4	4.3	3.3	2.4	2.2	2.9	3.5	7.9	20.2	19.0	4.9	20.2
15-Jun	25.1	Z	24.3	22.4	20.2	11.3	13.1	12.6	6.4	1.8	3.2	3.0	6.0	9.4	3.1	2.8	4.1	4.6	4.4	2.1	6.1	12.2	8.7	8.1	9.3	25.1
16-Jun	12.5	2.2	Z	1.2	1.5	1.3	17.9	19.2	10.8	4.7	1.2	2.2	6.0	11.8	8.2	1.0	0.8	1.0	0.8	0.6	0.9	1.5	2.5	2.2	4.9	19.2
17-Jun	7.1	11.0	18.0	Z	17.4	11.1	6.1	5.7	7.5	C	C	C	C	C	C	2.5	2.4	3.9	4.3	2.8	3.2	6.3	9.7	8.8	--	18.0
18-Jun	21.1	16.1	20.9	20.8	Z	12.6	14.3	9.6	9.2	7.9	4.6	4.5	5.3	3.5	4.3	3.8	2.6	1.9	1.0	2.9	3.5	2.7	6.5	0.5	7.8	21.1
19-Jun	0.7	0.3	0.9	6.7	0.8	Z	14.2	15.8	9.3	6.4	3.3	2.5	2.3	4.2	4.1	1.8	3.5	3.7	1.0	2.9	2.1	5.9	3.6	7.9	4.5	15.8
20-Jun	Z	9.7	11.4	7.7	7.4	6.8	4.4	2.4	1.1	1.1	0.7	0.5	0.8	0.7	0.7	0.7	0.7	0.7	0.6	1.2	2.6	7.6	4.4	5.7	3.5	11.4
21-Jun	5.8	Z	7.1	7.1	10.4	10.8	10.5	10.1	9.4	7.3	9.3	8.0	4.9	1.7	1.1	0.9	1.0	3.2	1.9	1.8	2.3	3.4	10.8	17.5	6.4	17.5
22-Jun	17.1	16.2	Z	12.3	11.1	6.9	8.1	8.8	13.3	13.1	12.2	4.9	M	M	3.6	2.8	2.1	4.8	1.6	1.2	2.4	2.8	1.9	1.6	7.1	17.1
23-Jun	1.8	1.5	2.5	Z	1.6	1.0	1.0	0.8	0.6	0.4	0.5	0.6	0.5	0.6	0.5	4.2	3.4	0.9	5.9	3.8	2.4	2.9	2.4	1.7	1.8	5.9
24-Jun	3.1	2.0	2.6	2.1	Z	1.8	1.8	1.5	0.7	0.4	0.5	0.6	0.4	0.4	0.4	0.6	0.5	0.4	0.8	3.6	1.4	0.7	1.2	1.0	1.2	3.6
25-Jun	1.9	2.1	1.4	2.3	2.3	Z	2.0	2.3	1.7	1.2	0.8	0.7	0.8	0.6	0.5	0.6	0.5	0.7	0.7	0.7	0.7	0.8	1.2	2.1	1.2	2.3
26-Jun	Z	1.8	2.3	2.0	1.8	2.4	1.5	1.2	1.3	1.1	0.6	0.6	0.5	0.5	0.5	0.7	0.5	0.5	0.5	0.5	1.1	7.1	10.0	7.8	2.0	10.0
27-Jun	7.1	Z	8.6	14.7	12.4	7.0	3.6	7.7	4.9	1.7	1.9	1.2	1.0	0.5	1.2	1.1	1.1	2.0	3.1	2.2	2.8	2.7	2.7	2.1	4.1	14.7
28-Jun	6.6	7.8	Z	10.7	18.8	22.6	21.4	18.3	16.7	18.0	8.1	1.3	0.9	0.9	0.8	1.1	1.5	1.3	1.2	1.0	2.7	4.1	6.8	19.3	8.3	22.6
29-Jun	29.7	26.0	26.2	Z	23.6	24.4	24.6	19.5	8.7	6.7	7.7	4.3	1.9	1.5	1.8	1.3	1.4	1.4	2.1	2.4	1.8	1.5	2.8	5.0	9.8	29.7
30-Jun	10.1	2.1	2.3	1.9	Z	2.0	2.4	9.3	4.8	1.6	1.0	4.5	9.2	6.0	7.3	3.4	2.5	1.6	2.1	2.0	3.9	23.6	9.8	4.7	5.1	23.6
	8.3	5.7	6.8	6.1	6.4	6.2	6.5	6.2	5.0	3.6	2.8	2.0	2.1	2.1	1.9	1.7	1.7	2.0	1.9	1.9	2.3	4.3	5.3	6.1	Diurnal Average	
	29.7	26.0	26.2	22.4	23.6	24.4	24.6	19.5	16.7	18.0	12.2	8.0	9.2	11.8	8.2	4.3	4.1	4.8	5.9	4.0	6.1	23.6	20.2	27.2	Diurnal Maximum	

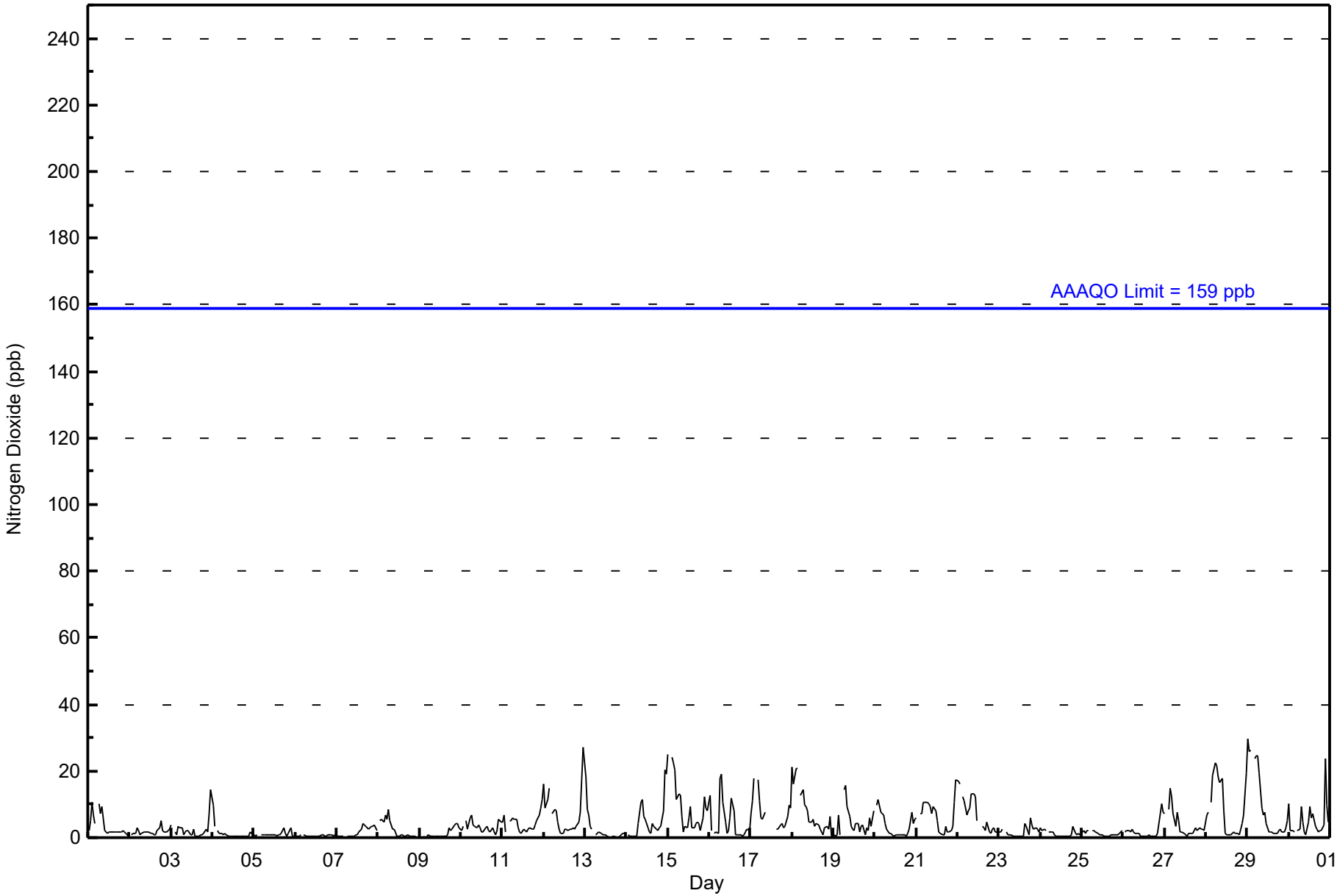
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Buffalo Viewpoint - June 2026



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

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	666	97.65	97.65
21 - 40	16	2.35	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

Buffalo Viewpoint - June 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	177	50	15	14	16	41	59	69	39	20	15	18	36	29	24	44	666
21 - 40	10	0	0	0	0	0	1	0	0	0	0	0	0	1	1	3	16
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	187	50	15	14	16	41	60	69	39	20	15	18	36	30	25	47	682

Total Number of Valid Hours: 682

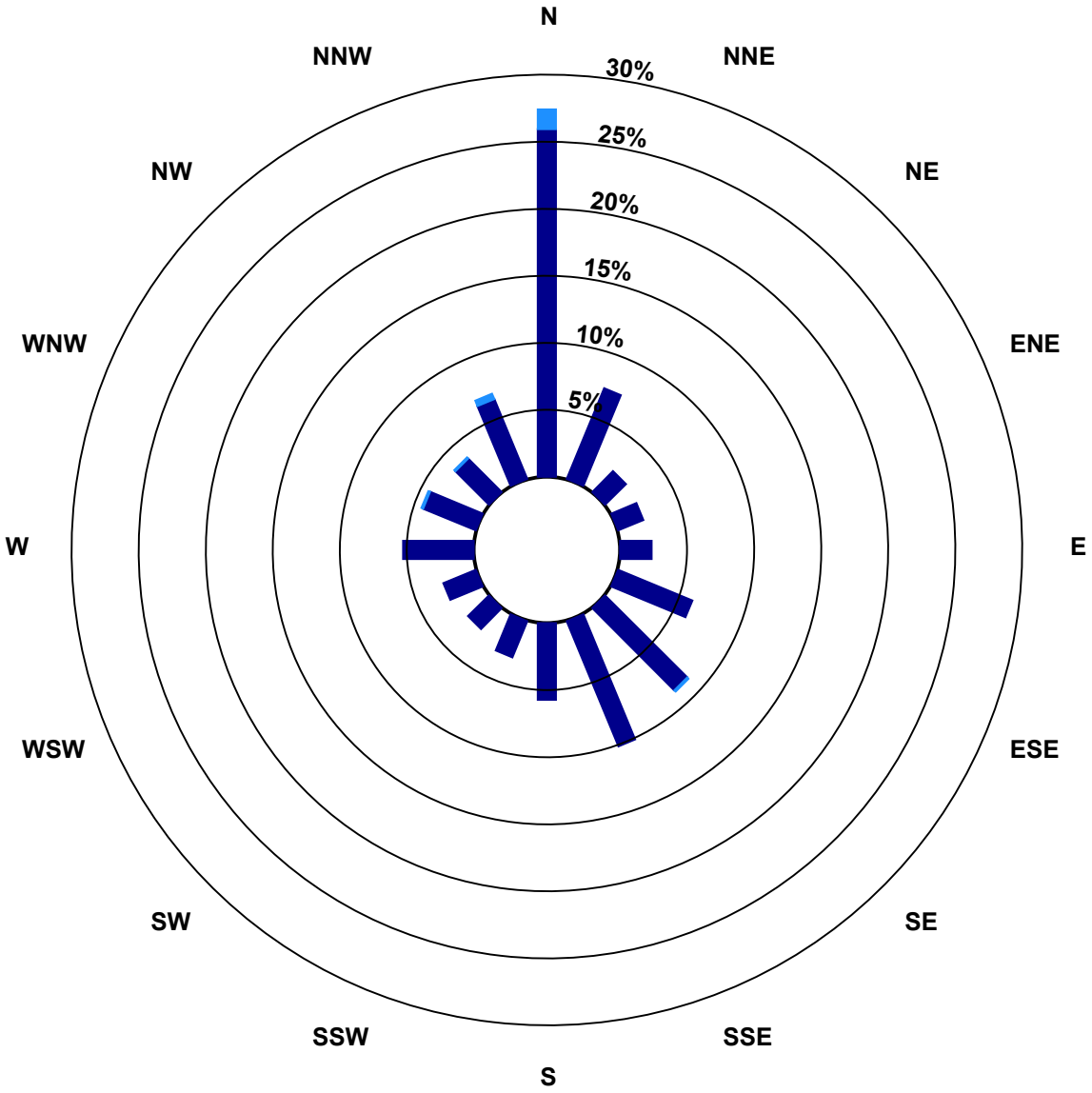
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Buffalo Viewpoint



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

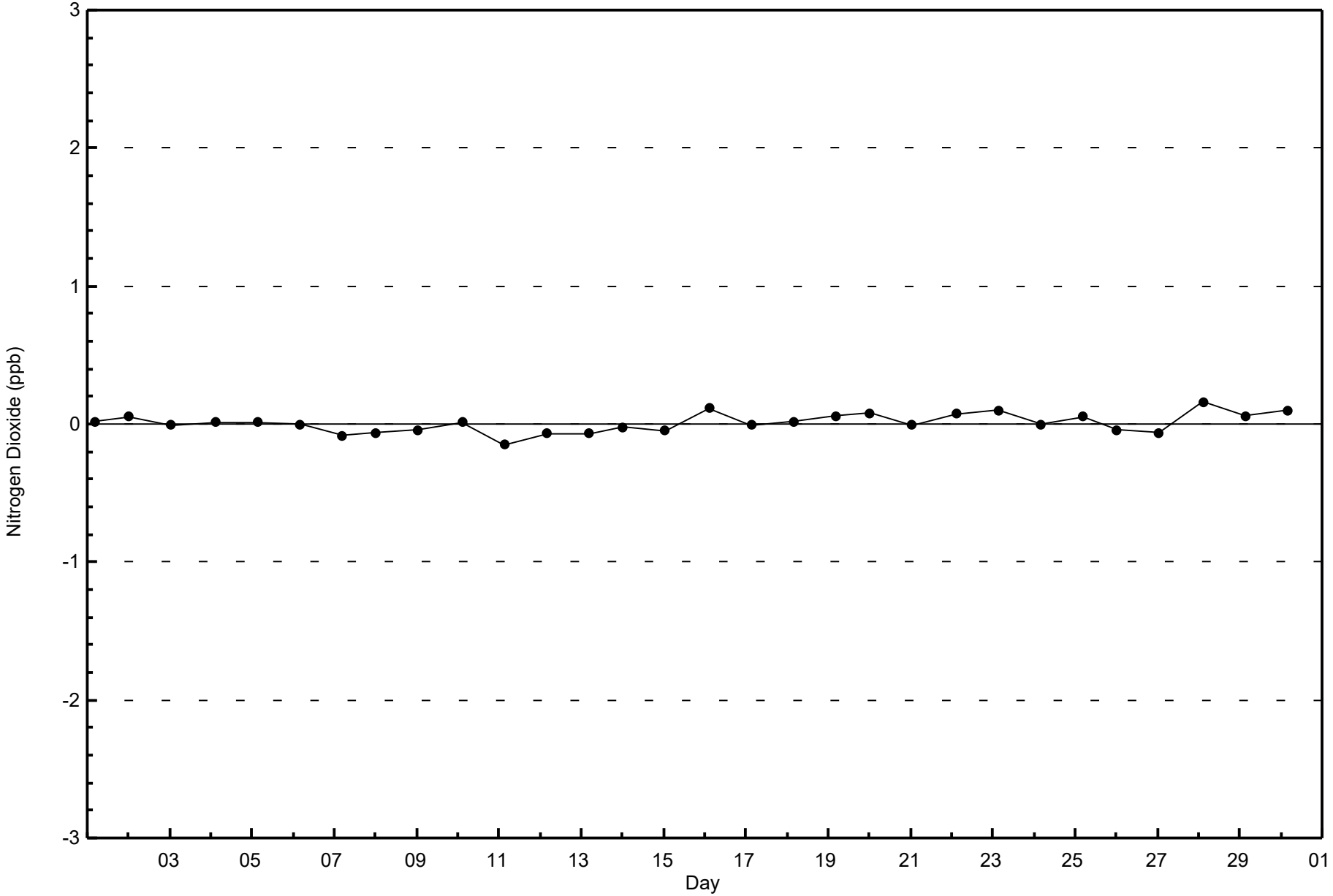
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Buffalo Viewpoint - June 2026

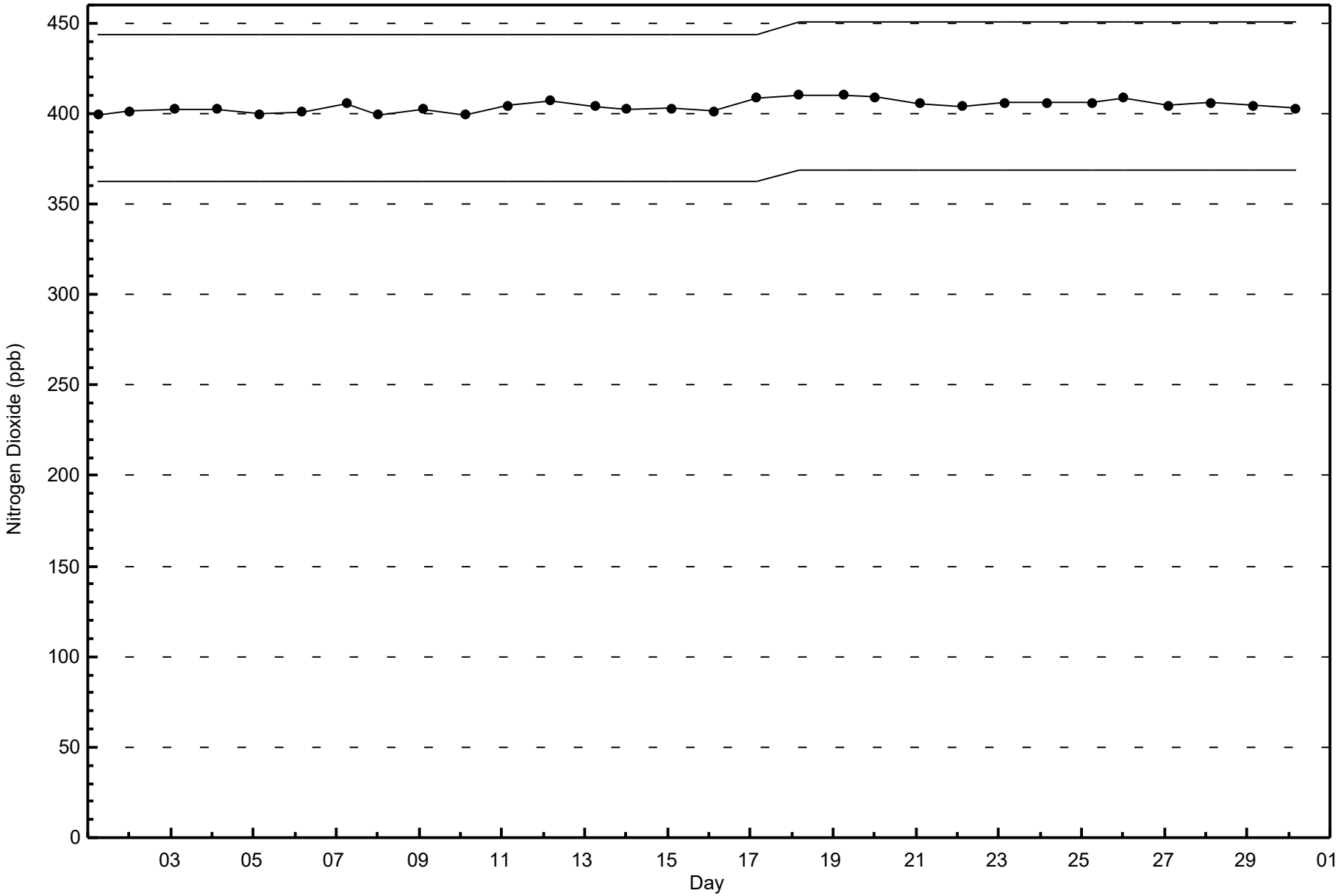


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Buffalo Viewpoint - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Buffalo Viewpoint - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 58.4 ppb on Jun 28 06:00
Maximum Daily Average: 15.9 ppb on Jun 15

Minimum Value: 0.2 ppb on Jun 13 19:00
Maximum Diurnal Average: 11.5 ppb at hour 7
Monthly Average: 5.45 ppb
Minimum Daily Average: 0.8 ppb on Jun 6
Minimum Diurnal Average: 2.1 ppb at hour 20
Percentiles: P_1 = 0.3 P_{10} = 0.6 Q_1 = 1.0 Median = 2.4 Q_3 = 5.9 P_{90} = 15.0 P_{99} = 42.8

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-Jun	2.1	5.4	10.8	7.0	4.3	Z	11.3	8.1	10.3	2.8	2.3	1.8	2.2	2.3	1.9	1.9	2.4	2.3	2.2	2.0	2.2	1.8	1.4	0.4	3.9	11.3
2-Jun	Z	0.9	1.3	1.2	3.1	2.2	1.0	1.4	2.2	2.1	1.9	2.5	1.7	1.7	1.3	1.2	2.5	3.3	5.4	2.3	1.7	2.0	2.2	2.6	2.1	5.4
3-Jun	4.1	Z	1.7	1.1	3.4	3.2	3.5	1.2	1.9	2.8	2.5	1.0	1.2	3.3	0.7	0.6	0.7	1.0	1.0	1.4	2.9	1.8	7.4	16.8	2.8	16.8
4-Jun	10.4	4.3	Z	2.2	1.8	1.8	1.7	2.0	1.3	0.7	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.7	0.8	1.5	10.4
5-Jun	0.8	0.7	1.0	Z	1.0	1.0	1.0	1.0	0.9	0.9	1.0	1.0	0.9	0.7	0.8	1.1	1.3	3.4	1.3	0.7	1.5	3.0	0.5	0.4	1.1	3.4
6-Jun	0.4	0.4	0.6	0.9	Z	1.0	0.6	0.7	0.6	0.6	0.8	0.7	0.6	0.6	0.7	1.0	1.1	0.7	0.5	1.2	0.9	1.1	0.7	1.0	0.8	1.2
7-Jun	0.5	0.5	0.4	0.4	0.6	Z	1.0	0.8	0.6	0.6	0.6	0.9	1.0	2.2	3.3	5.2	4.4	3.8	2.7	3.1	3.4	3.7	4.0	2.5	2.0	5.2
8-Jun	Z	5.3	5.8	5.0	6.9	6.0	9.3	5.7	3.2	3.2	2.4	0.8	0.7	1.0	1.1	0.6	0.5	1.0	0.5	0.4	0.5	0.5	0.3	0.3	2.7	9.3
9-Jun	0.3	Z	0.4	0.3	0.3	0.9	0.4	0.5	0.7	0.4	0.4	0.4	0.9	0.4	0.5	0.5	1.3	3.6	2.5	2.9	4.0	4.5	4.4	3.0	1.5	4.5
10-Jun	2.2	3.7	Z	5.3	3.1	7.7	10.1	6.3	5.0	4.2	5.3	3.5	2.2	2.1	3.9	4.3	3.0	2.6	3.7	2.0	1.1	2.1	5.5	4.8	4.1	10.1
11-Jun	4.9	7.1	1.9	Z	5.5	5.6	6.8	7.3	7.7	4.4	2.8	1.7	4.1	3.4	2.5	3.6	3.4	3.0	2.9	4.2	5.4	7.2	9.2	11.8	5.1	11.8
12-Jun	19.2	9.3	13.0	15.5	Z	8.8	11.2	10.6	6.7	3.8	1.8	1.7	3.2	3.4	3.1	3.3	3.5	3.5	2.8	3.8	4.7	7.8	17.5	28.3	8.1	28.3
13-Jun	18.8	8.7	7.0	3.4	2.6	Z	1.3	1.5	2.5	1.7	1.3	1.2	0.8	0.4	0.3	0.3	0.4	0.5	0.2	0.3	0.4	1.1	1.2	1.2	2.5	18.8
14-Jun	Z	1.0	0.5	0.5	0.5	0.5	0.7	6.2	14.7	15.3	8.5	6.7	3.6	1.8	1.7	5.0	4.0	2.8	2.5	3.1	3.6	8.0	20.8	19.1	5.7	20.8
15-Jun	27.2	Z	42.7	58.0	54.8	35.2	25.7	22.3	9.6	2.5	4.5	3.8	7.8	12.8	3.7	3.2	4.6	4.9	4.7	2.2	6.3	12.4	8.8	8.2	15.9	58.0
16-Jun	12.6	2.3	Z	1.3	1.6	1.5	26.6	25.9	13.7	6.0	1.5	3.0	8.5	16.1	10.6	1.3	1.0	1.2	0.9	0.7	1.0	1.5	2.5	2.3	6.2	26.6
17-Jun	7.2	11.1	18.2	Z	21.7	15.8	9.2	8.9	11.9	C	C	C	C	C	C	3.0	2.9	4.3	4.6	3.0	3.2	6.3	9.7	8.8	--	21.7
18-Jun	21.4	16.2	23.7	31.9	Z	20.5	26.4	15.7	13.2	11.0	6.7	5.6	7.3	4.8	6.0	5.4	3.5	2.4	1.2	3.2	3.7	2.8	6.6	0.6	10.4	31.9
19-Jun	0.8	0.4	1.0	6.9	1.0	Z	43.4	44.8	19.2	10.4	5.0	4.2	3.2	6.4	7.2	2.9	5.0	5.5	1.3	3.7	2.3	6.2	3.7	8.1	8.4	44.8
20-Jun	Z	14.6	23.6	19.0	19.8	19.6	10.7	5.8	2.2	2.4	1.1	0.8	1.2	1.0	1.1	1.1	1.0	0.9	0.8	1.4	2.8	7.8	4.5	5.8	6.5	23.6
21-Jun	5.9	Z	7.3	8.3	16.2	20.4	19.6	19.6	21.4	13.6	20.9	12.7	8.1	2.7	1.6	1.3	1.4	3.8	2.2	2.1	2.6	3.6	11.9	27.4	10.2	27.4
22-Jun	29.6	29.0	Z	20.5	22.5	16.4	17.8	17.2	27.3	23.5	19.6	7.1	M	M	4.5	3.4	2.3	5.9	1.8	1.3	2.5	2.9	2.0	1.7	12.3	29.6
23-Jun	1.9	1.6	2.6	Z	1.8	1.2	1.4	1.1	0.8	0.6	0.6	0.7	0.6	0.7	0.6	4.6	3.9	1.2	7.3	4.3	2.5	3.0	2.5	1.8	2.1	7.3
24-Jun	3.2	2.1	2.7	2.2	Z	2.2	2.5	2.2	0.9	0.6	0.7	0.7	0.6	0.6	0.6	0.7	0.6	0.5	1.0	4.0	1.6	0.8	1.3	1.1	1.5	4.0
25-Jun	2.0	2.3	1.6	2.5	2.6	Z	2.7	3.2	2.2	1.5	1.0	0.9	1.0	0.8	0.7	0.8	0.7	0.8	0.8	0.8	0.8	0.9	1.3	2.2	1.5	3.2
26-Jun	Z	1.9	2.5	2.2	2.0	2.9	1.8	1.5	1.6	1.3	0.8	0.7	0.6	0.6	0.6	0.8	0.6	0.6	0.6	0.6	1.2	7.3	10.1	7.9	2.2	10.1
27-Jun	7.2	Z	8.7	15.0	13.3	8.4	4.5	10.5	6.5	2.1	2.4	1.4	1.2	0.6	1.5	1.3	1.3	2.3	3.5	2.4	3.0	2.9	2.8	2.3	4.6	15.0
28-Jun	6.8	8.0	Z	11.0	27.9	58.4	45.4	30.6	25.0	26.0	9.9	1.5	1.1	1.0	1.0	1.3	1.7	1.4	1.3	1.1	2.8	4.2	6.9	19.5	12.8	58.4
29-Jun	30.1	26.3	26.5	Z	27.4	36.8	45.8	31.0	11.2	8.0	8.9	4.7	2.1	1.7	2.0	1.5	1.6	1.6	2.2	2.5	1.9	1.6	2.9	5.1	12.3	45.8
30-Jun	10.3	2.2	2.4	2.0	Z	2.3	2.9	11.8	5.7	1.9	1.3	5.4	11.0	6.8	8.0	3.7	2.8	1.8	2.3	2.1	4.1	23.8	9.9	4.8	5.6	23.8
	9.2	6.6	8.3	9.0	9.8	11.2	11.5	10.2	7.7	5.3	4.0	2.7	2.8	2.9	2.5	2.2	2.1	2.4	2.2	2.1	2.5	4.4	5.5	6.7	Diurnal Average	
	30.1	29.0	42.7	58.0	54.8	58.4	45.8	44.8	27.3	26.0	20.9	12.7	11.0	16.1	10.6	5.4	5.0	5.9	7.3	4.3	6.3	23.8	20.8	28.3	Diurnal Maximum	

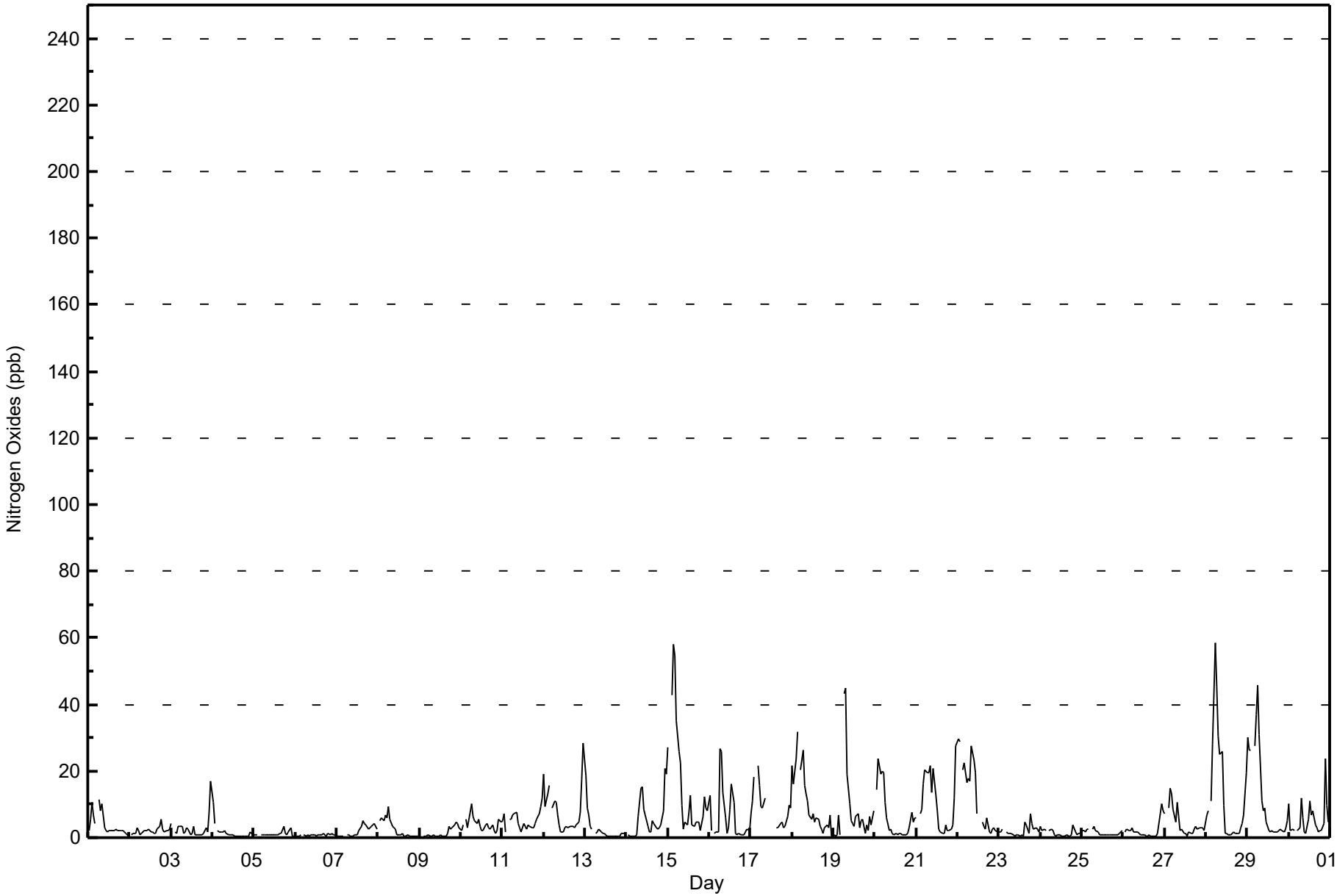
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Buffalo Viewpoint - June 2026



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

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	640	93.84	93.84
21 - 40	34	4.99	98.83
11 - 80	8	1.17	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 Oxides (NO_X) - ppb

Buffalo Viewpoint - June 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	170	46	14	14	15	41	58	68	37	20	15	18	36	28	23	37	640
21 - 40	14	4	1	0	1	0	2	1	2	0	0	0	0	2	0	7	34
11 - 80	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	8
81 - 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	187	50	15	14	16	41	60	69	39	20	15	18	36	30	25	47	682

Total Number of Valid Hours: 682

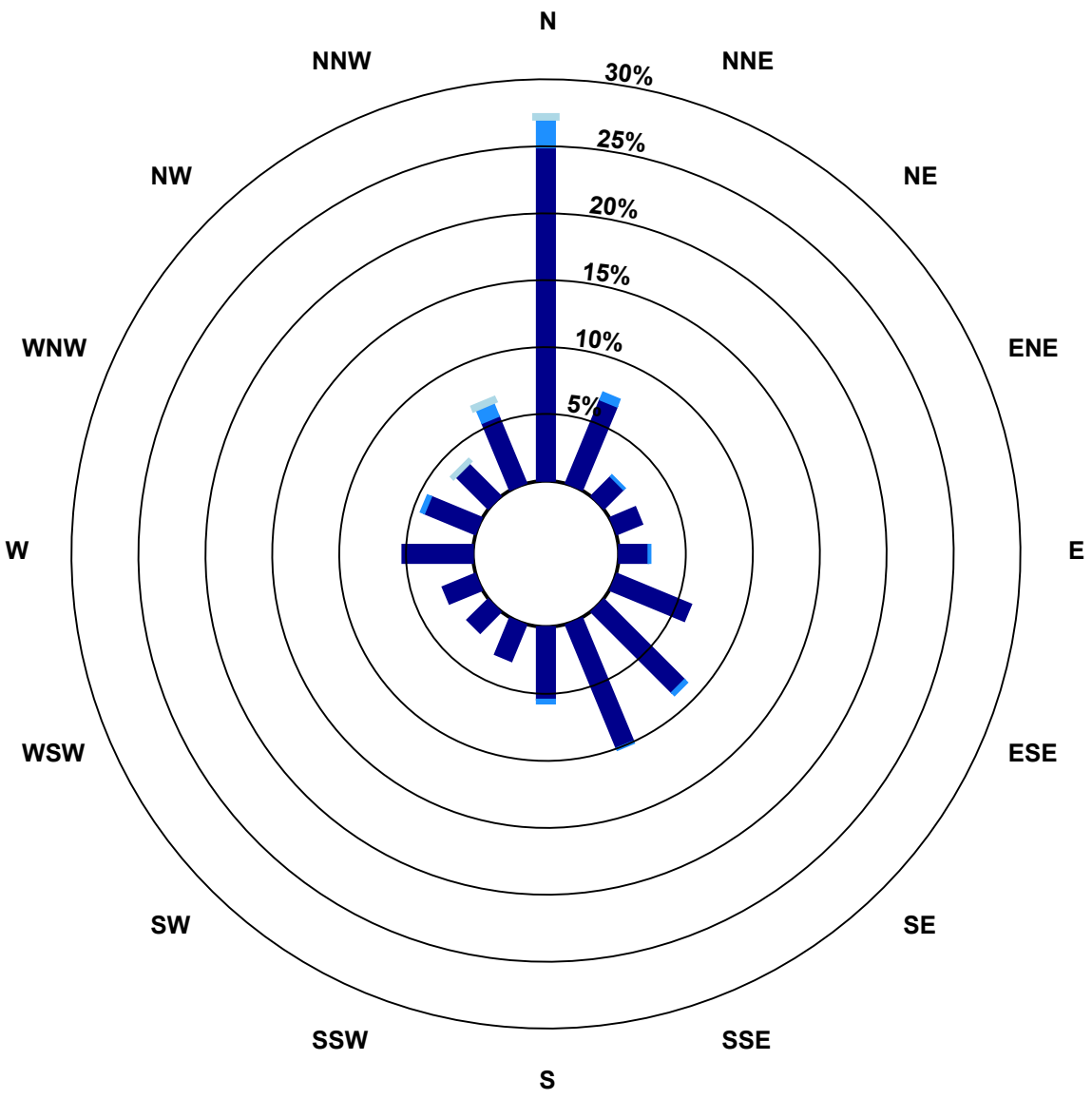
Total Number of Hours: 720

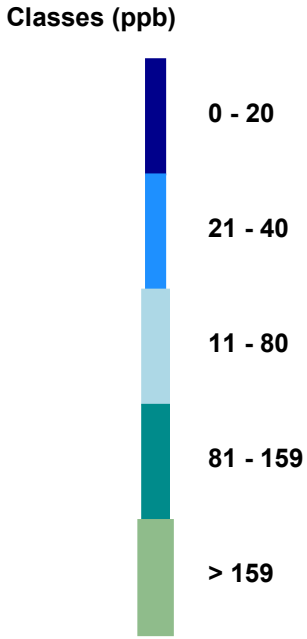
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Buffalo Viewpoint





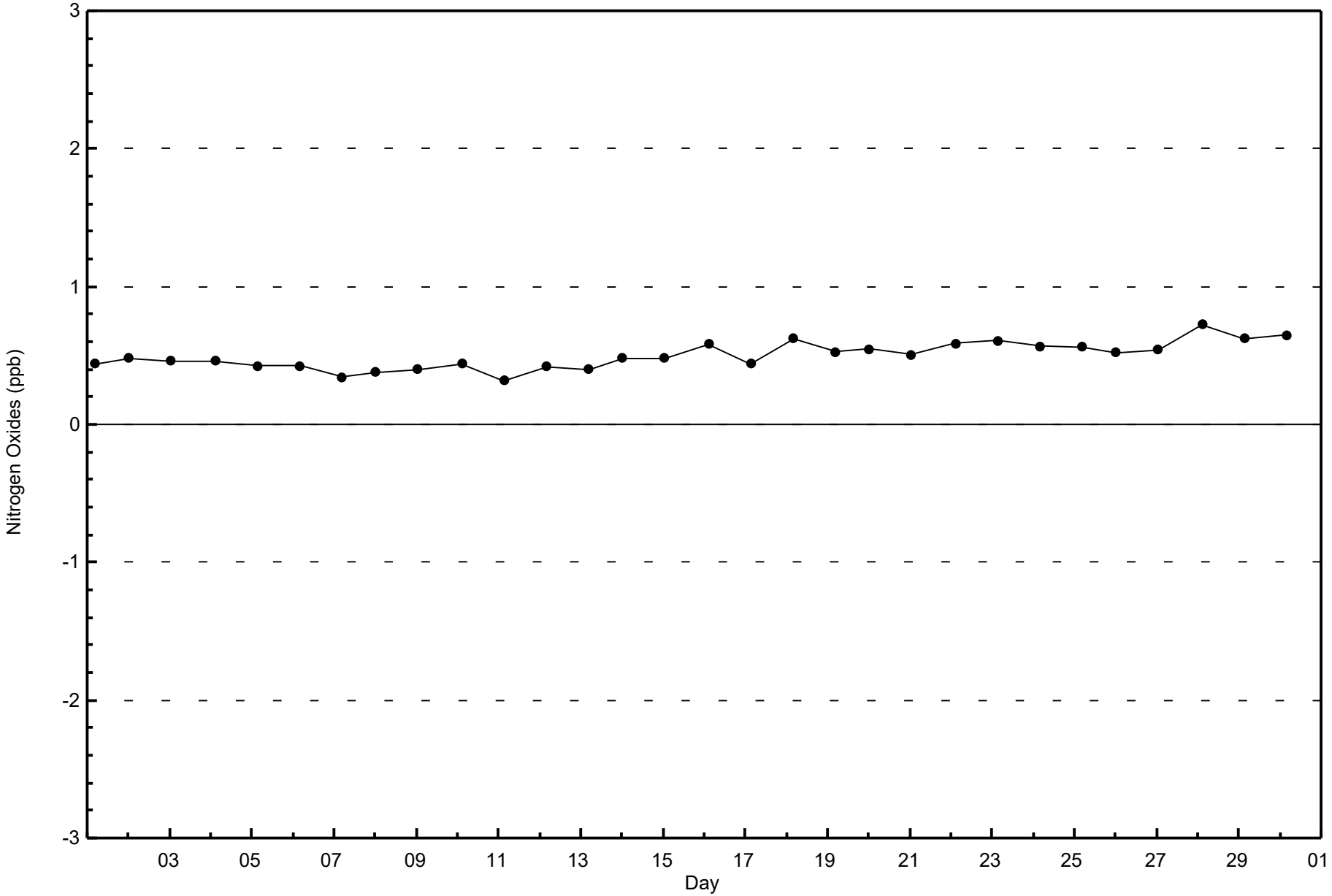
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Buffalo Viewpoint - June 2026

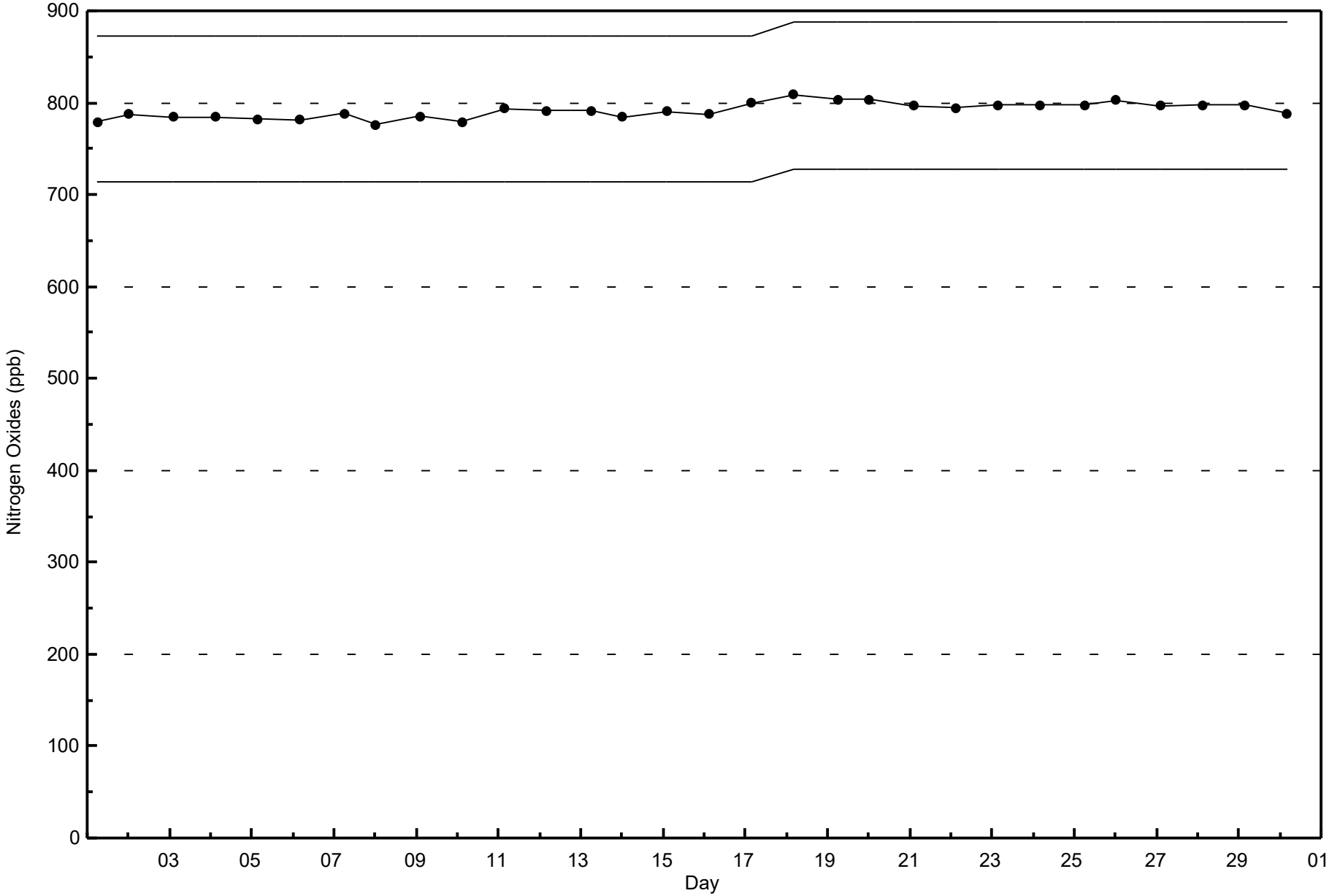


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Buffalo Viewpoint - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Buffalo Viewpoint - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 59.4 ppb on Jun 30 14:00
Maximum Daily Average: 38.4 ppb on Jun 30

Minimum Value: 1.5 ppb on Jun 20 03:00
Minimum Daily Average: 12.0 ppb on Jun 21
Maximum Diurnal Average: 34.2 ppb at hour 15
Minimum Diurnal Average: 13.5 ppb at hour 5
Monthly Average: 25.35 ppb
Percentiles: P_1 = 2.0 P_{10} = 9.3 Q_1 = 16.8 Median = 25.2 Q_3 = 33.4 P_{90} = 41.7 P_{99} = 53.6

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	35
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	27.3	23.0	21.6	26.6	Z	25.7	24.4	26.3	24.9	30.4	C	C	C	C	C	27.7	28.2	28.6	27.8	27.2	26.2	27.3	28.7	30.3	26.8	30.4
2-Jun	28.5	27.9	26.2	26.6	23.0	Z	26.9	25.2	24.6	26.9	28.1	27.0	28.4	29.4	32.7	35.0	34.4	29.3	24.3	28.1	27.0	23.9	20.2	20.1	27.1	35.0
3-Jun	Z	28.5	26.1	27.1	21.9	23.7	25.0	26.9	26.9	26.1	25.9	27.1	25.8	23.8	24.6	24.4	24.8	25.1	23.1	20.9	15.0	18.8	11.4	3.0	22.9	28.5
4-Jun	3.9	Z	7.0	6.2	6.2	6.3	8.7	12.0	16.7	25.1	24.8	27.4	30.1	30.7	33.4	34.6	36.3	38.1	36.5	37.3	34.9	32.8	30.3	28.4	23.8	38.1
5-Jun	25.3	23.1	Z	20.3	19.4	22.0	24.9	27.9	27.8	30.9	32.3	31.7	37.4	39.2	40.5	37.8	38.4	37.4	35.4	33.4	27.3	25.5	32.0	29.2	30.4	40.5
6-Jun	25.0	25.3	24.3	Z	19.5	26.0	26.3	26.1	25.0	23.4	21.3	20.0	20.9	23.2	24.0	25.0	23.5	23.1	22.7	21.9	20.5	19.1	15.3	12.9	22.4	26.3
7-Jun	11.1	10.4	9.1	8.8	Z	13.4	13.1	13.9	18.3	21.8	22.5	23.4	26.8	28.7	29.8	27.8	23.8	22.2	26.1	21.4	18.4	16.0	12.2	16.5	18.9	29.8
8-Jun	19.8	20.9	22.0	15.6	12.4	Z	12.8	16.0	15.5	16.7	17.1	18.5	19.0	19.9	19.9	20.8	20.6	23.0	26.4	26.7	27.2	31.0	32.5	32.7	21.2	32.7
9-Jun	Z	30.5	30.8	31.4	29.9	30.3	28.9	29.0	30.2	28.0	29.8	32.5	35.1	36.1	36.7	37.4	36.2	30.8	28.2	28.5	22.8	25.5	14.7	13.1	29.4	37.4
10-Jun	12.2	Z	10.7	6.8	8.0	7.2	9.0	16.9	23.2	28.1	28.3	27.6	19.7	20.4	18.9	17.2	16.8	16.1	14.4	15.5	16.0	14.4	11.6	12.5	16.2	28.3
11-Jun	12.3	9.4	Z	12.8	13.1	12.3	10.8	10.3	11.0	13.8	15.8	16.3	15.1	17.0	19.5	17.6	18.2	18.3	17.6	15.8	14.2	11.9	9.3	7.0	13.9	19.5
12-Jun	2.4	9.6	8.6	Z	9.3	19.1	17.2	17.6	21.9	26.4	32.5	32.9	32.2	33.9	33.7	33.3	33.5	34.5	35.3	31.9	28.3	23.0	12.6	3.5	23.2	35.3
13-Jun	8.0	13.9	6.7	19.4	Z	16.9	22.8	26.0	30.7	33.0	34.5	37.1	37.4	34.6	34.5	34.5	34.8	34.8	35.0	33.5	30.3	21.7	20.0	18.2	26.9	37.4
14-Jun	23.3	36.8	36.9	34.6	34.7	Z	33.1	27.6	28.7	33.4	40.0	43.2	39.3	39.4	38.4	34.8	37.0	38.6	36.5	33.5	30.2	26.1	12.8	13.3	32.7	43.2
15-Jun	Z	2.6	2.3	2.1	2.4	3.6	9.9	14.9	25.4	32.8	35.4	40.5	41.0	39.4	45.0	46.0	50.1	49.5	42.6	41.0	31.0	22.0	25.7	24.8	27.4	50.1
16-Jun	18.4	Z	21.5	21.4	19.3	19.1	7.9	6.4	16.5	21.6	25.3	26.4	31.5	35.1	38.6	35.3	36.2	36.0	37.4	36.7	32.7	30.6	28.6	26.5	26.5	38.6
17-Jun	21.2	14.7	Z	5.2	6.8	11.2	16.9	19.2	20.6	23.5	27.7	30.3	31.5	32.1	31.8	30.3	31.0	29.8	28.2	28.5	27.3	23.3	19.1	17.3	22.9	32.1
18-Jun	4.8	6.9	2.6	Z	3.2	7.1	4.6	8.4	12.1	20.6	23.9	25.2	19.8	19.1	18.3	20.4	24.7	25.4	25.9	22.2	21.1	20.2	16.4	19.6	16.2	25.9
19-Jun	23.0	18.6	17.7	11.6	Z	11.0	5.1	6.0	13.4	16.4	20.2	23.8	26.1	19.1	18.3	19.6	16.7	15.3	16.9	15.7	15.6	11.9	11.3	6.4	15.6	26.1
20-Jun	9.1	2.7	1.5	1.6	1.9	Z	7.6	9.3	12.8	15.4	18.3	19.7	21.5	22.5	24.2	23.7	22.7	22.1	20.8	22.3	21.0	14.3	14.2	10.9	14.8	24.2
21-Jun	Z	6.5	4.9	3.7	2.0	2.7	4.5	5.6	9.4	15.6	13.6	15.3	18.5	20.5	22.1	22.4	22.2	20.1	19.2	16.3	13.1	9.8	5.9	1.7	12.0	22.4
22-Jun	1.8	Z	1.7	1.5	2.4	2.8	7.6	13.0	13.4	18.9	23.1	28.5	M	M	37.7	40.2	40.6	30.9	35.3	34.6	28.1	27.6	29.5	29.0	21.3	40.6
23-Jun	24.2	20.1	Z	14.3	13.7	12.9	15.6	18.0	21.4	25.8	31.1	35.6	34.1	34.0	33.4	27.8	27.9	33.6	30.5	32.0	28.9	21.9	18.8	23.5	25.2	35.6
24-Jun	16.3	16.2	16.8	Z	13.8	13.2	13.3	20.7	24.9	32.2	35.8	38.4	39.6	40.1	40.9	42.0	42.0	40.8	38.1	34.9	34.2	35.0	32.1	28.5	30.0	42.0
25-Jun	24.6	22.1	18.9	16.1	Z	15.8	20.6	25.8	30.1	36.7	41.5	43.2	45.6	46.2	45.9	46.4	46.5	46.7	47.0	43.5	40.2	38.9	36.5	32.4	35.3	47.0
26-Jun	30.6	29.6	27.9	26.3	23.6	Z	26.6	32.3	36.8	41.7	47.3	46.1	45.9	46.2	47.2	46.9	46.8	45.9	45.3	43.8	41.5	33.0	29.5	30.3	37.9	47.3
27-Jun	Z	26.2	23.8	18.8	18.5	17.9	30.3	27.1	33.3	41.0	43.5	44.2	43.8	41.8	43.9	43.8	44.7	44.7	41.9	39.7	35.0	35.7	36.1	35.0	35.3	44.7
28-Jun	28.2	Z	11.6	15.6	5.3	3.0	5.2	10.2	17.5	23.0	39.5	44.4	45.3	46.5	49.8	49.3	50.1	49.9	48.2	46.4	43.6	40.7	29.4	13.0	31.1	50.1
29-Jun	4.1	6.1	Z	8.1	6.2	4.8	6.2	15.2	31.6	41.5	49.8	58.7	54.5	55.1	54.9	50.4	48.2	49.9	53.5	49.3	48.1	44.2	38.5	27.7	35.1	58.7
30-Jun	22.9	31.3	29.2	Z	20.4	14.5	18.9	23.5	30.4	35.8	40.5	44.7	49.8	59.4	54.2	50.9	50.2	53.4	55.8	51.4	44.7	26.1	34.2	40.0	38.4	59.4
	17.1	18.5	16.4	15.3	13.5	13.7	16.2	18.6	22.5	26.9	30.0	32.1	32.7	33.3	34.2	33.4	33.6	33.1	32.5	31.1	28.1	25.1	22.3	20.2	Diurnal Average	
	30.6	36.8	36.9	34.6	34.7	30.3	33.1	32.3	36.8	41.7	49.8	58.7	54.5	59.4	54.9	50.9	50.2	53.4	55.8	51.4	48.1	44.2	38.5	40.0	Diurnal Maximum	

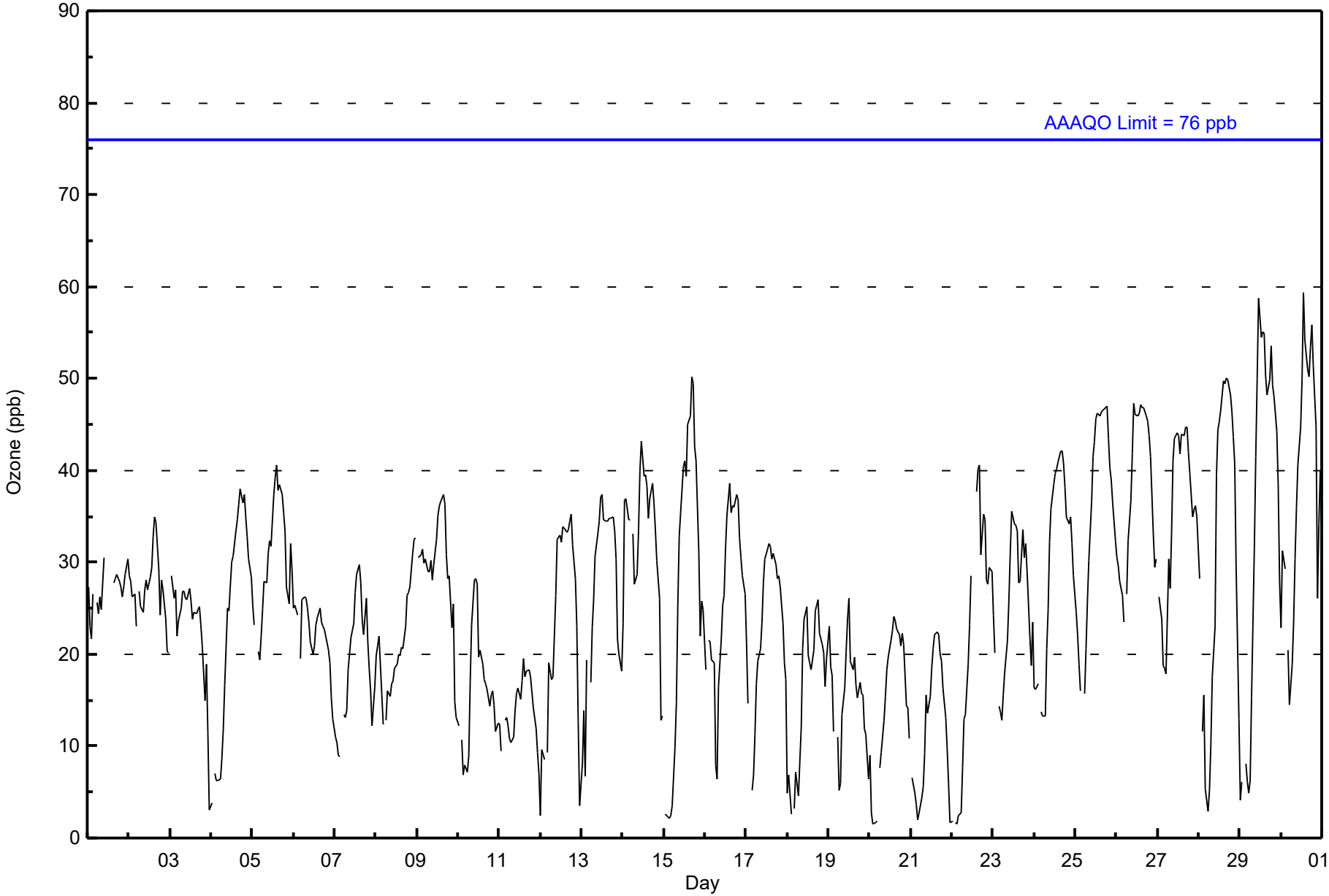
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Buffalo Viewpoint - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	243	35.58	35.58
21 - 50	429	62.81	98.39
51 - 82	11	1.61	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

Buffalo Viewpoint - June 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	95	26	2	2	4	3	10	21	17	2	4	4	3	10	15	25	243
21 - 50	87	23	12	11	11	38	48	48	23	20	11	14	31	19	10	23	429
51 - 82	3	3	1	1	1	0	0	0	0	0	0	0	0	0	1	1	11
> 83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	185	52	15	14	16	41	58	69	40	22	15	18	34	29	26	49	683

Total Number of Valid Hours: 683

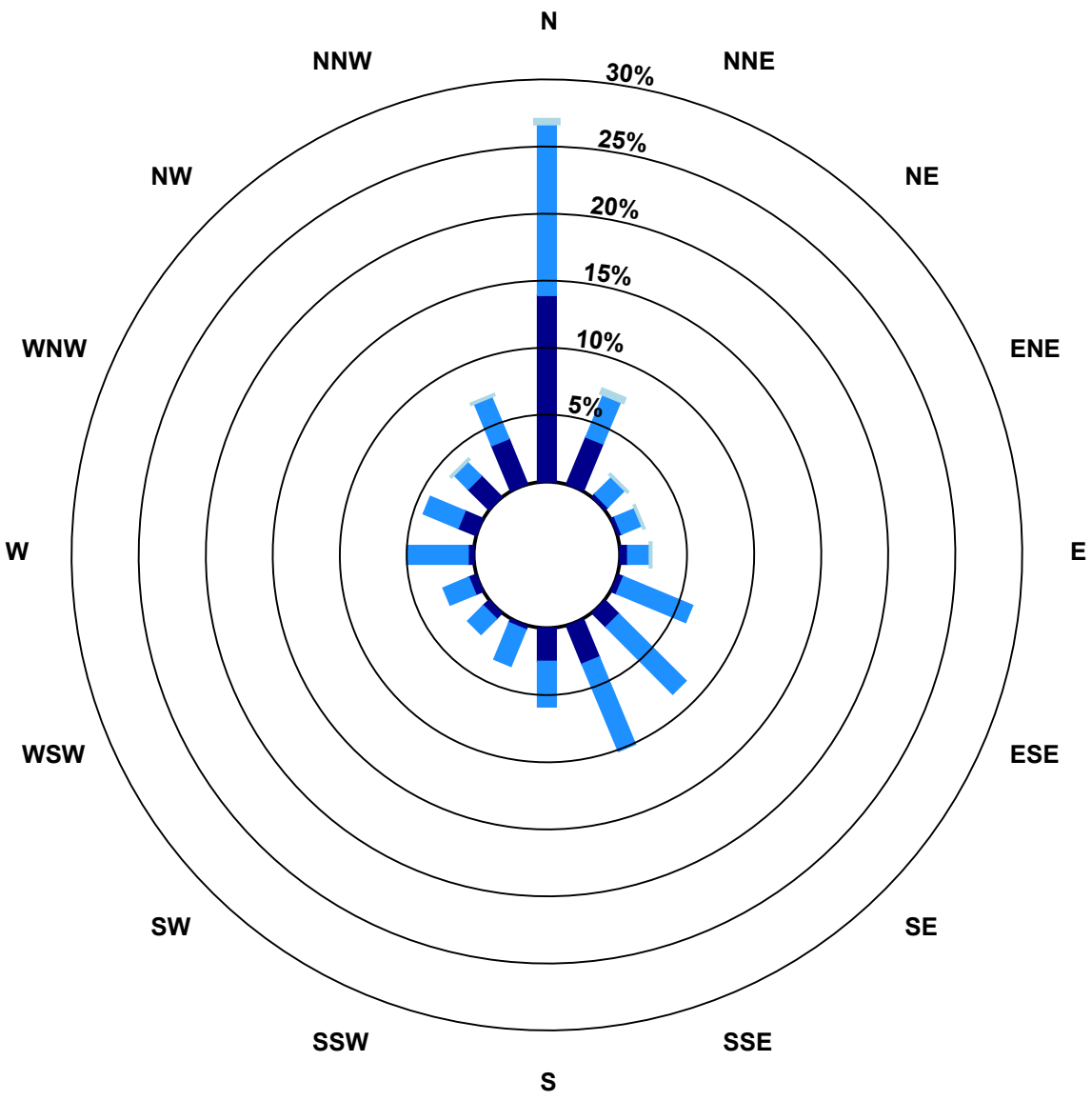
Total Number of Hours: 720

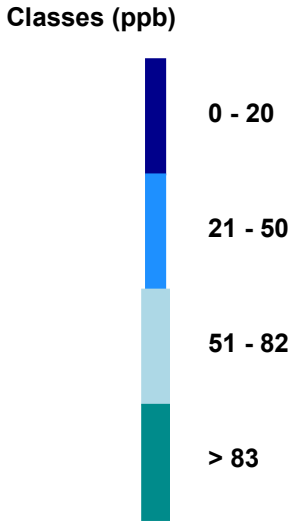
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Ozone (O_3) - ppb

Buffalo Viewpoint





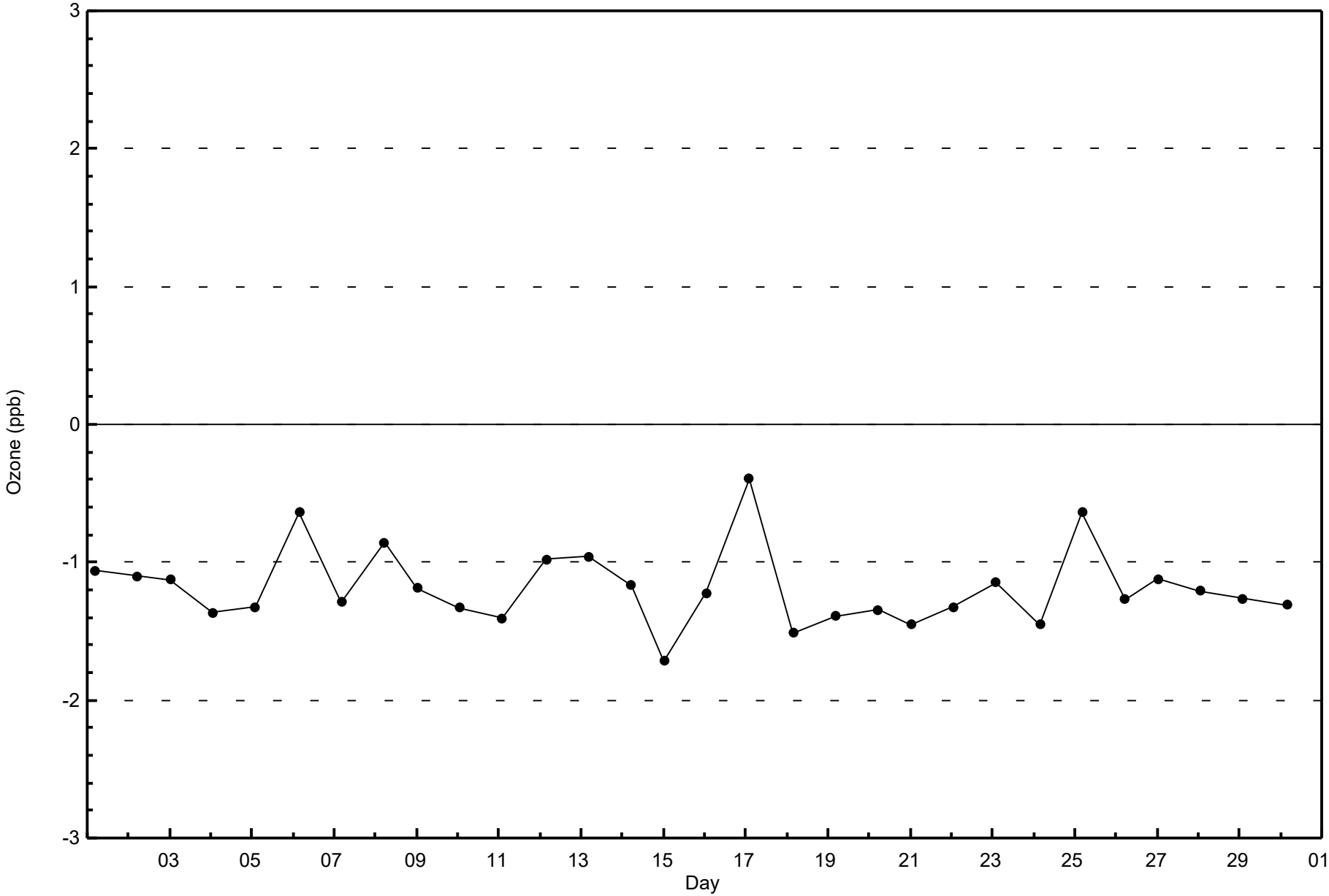
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Buffalo Viewpoint - June 2026

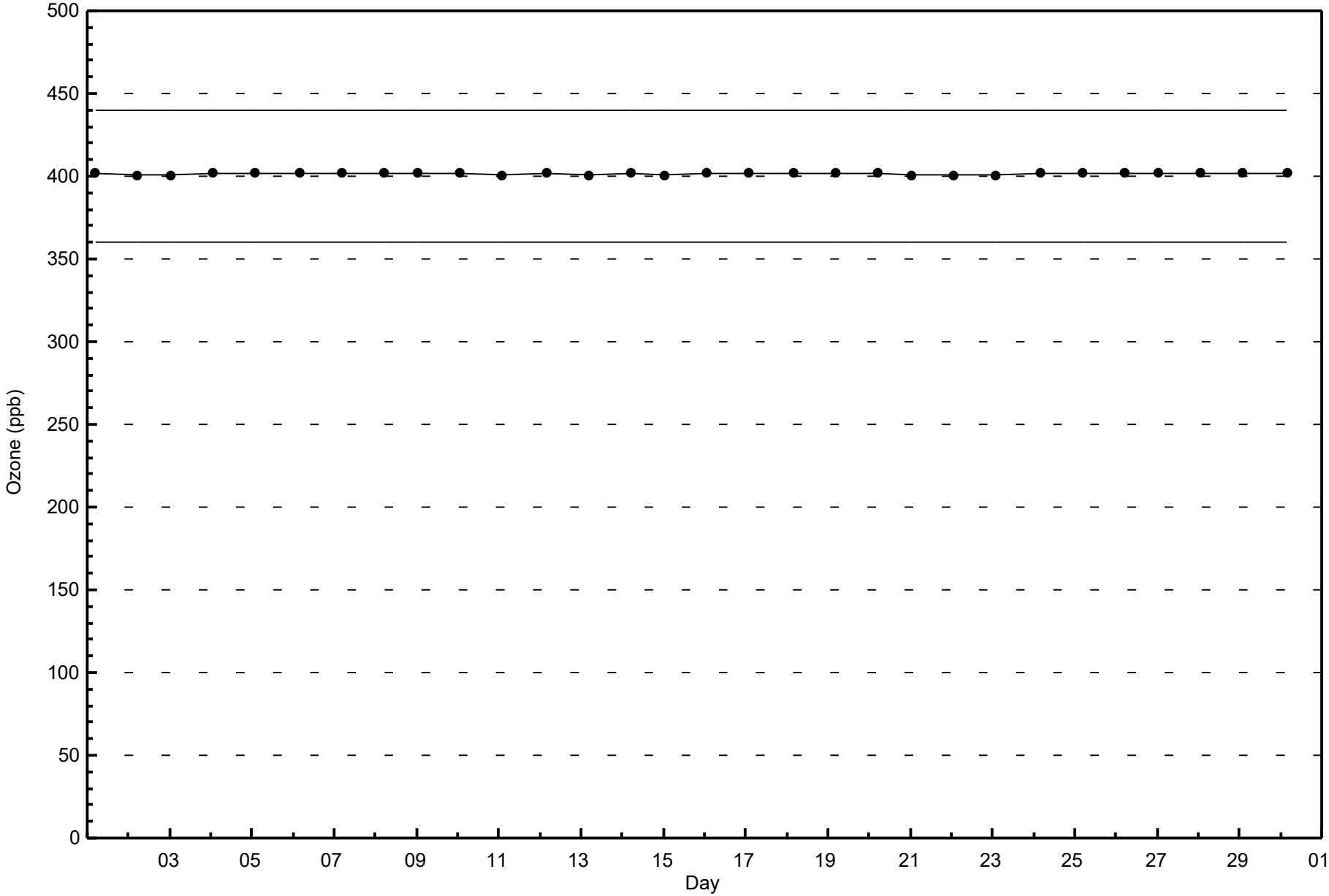


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Buffalo Viewpoint - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Buffalo Viewpoint - June 2026

Number of Exceedances (AAAQO): 1-hr: 18 24-hr: 3

Maximum Value: 94.4 $\mu g/m^3$ on Jun 29 15:00

Maximum Daily Average: 70.1 $\mu g/m^3$ on Jun 30

Minimum Value: 0.9 $\mu g/m^3$ on Jun 2 04:00

Minimum Daily Average: 1.5 $\mu g/m^3$ on Jun 2

Maximum Diurnal Average: 14.9 $\mu g/m^3$ at hour 23

Minimum Diurnal Average: 10.5 $\mu g/m^3$ at hour 3

Monthly Average: 12.35 $\mu g/m^3$

Percentiles: P_1 = 1.1 P_{10} = 2.5 Q_1 = 3.6 Median = 6.6 Q_3 = 11.2 P_{90} = 29.0 P_{99} = 89.8

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Hours of Calibration:	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-Jun	1.5	2.3	4.4	4.2	1.6	2.6	10.2	4.4	8.1	1.9	2.3	2.6	2.5	2.5	2.6	2.7	2.7	2.6	2.6	2.2	1.5	1.1	1.1	1.2	3.0	10.2
2-Jun	1.1	1.0	1.0	0.9	1.1	1.1	1.0	1.5	UO	0.9	1.6	2.7	1.8	1.4	1.4	1.4	1.4	1.3	1.6	2.1	2.0	2.1	2.4	2.6	1.5	2.7
3-Jun	2.6	2.1	2.2	2.6	3.2	3.5	2.6	2.4	2.8	3.2	3.5	3.7	4.1	5.1	4.6	4.2	4.9	5.9	5.8	6.4	7.5	7.7	8.0	7.1	4.4	8.0
4-Jun	7.0	6.7	7.7	8.3	8.5	8.7	10.1	12.1	13.8	16.3	15.6	15.1	15.7	14.7	12.2	11.1	10.1	9.2	8.9	8.2	7.3	7.3	7.5	7.9	10.4	16.3
5-Jun	8.5	8.8	8.8	9.8	9.8	9.5	9.2	7.3	6.8	5.6	6.0	7.2	6.1	4.8	4.7	6.7	3.7	3.7	3.1	2.9	3.6	5.3	2.5	2.6	6.1	9.8
6-Jun	2.9	2.9	2.9	3.0	3.7	3.1	2.9	3.0	2.9	2.7	2.6	2.7	2.8	2.8	3.1	3.5	3.3	3.2	3.3	3.4	3.3	2.9	3.0	3.1	3.0	3.7
7-Jun	3.2	3.3	3.2	3.1	2.9	2.8	2.9	3.0	2.7	2.7	2.8	3.0	3.1	3.5	4.3	7.2	8.2	6.6	4.7	4.3	5.1	5.2	5.6	4.3	4.1	8.2
8-Jun	4.0	4.6	4.2	5.2	6.6	5.8	7.6	4.8	2.7	1.4	1.3	1.0	1.5	2.7	2.6	2.2	2.0	1.9	1.5	1.7	2.0	2.1	2.2	2.5	3.1	7.6
9-Jun	2.6	2.5	2.4	2.3	2.4	2.4	2.6	2.6	2.6	2.7	2.6	2.7	2.7	2.9	3.0	3.1	4.2	5.8	4.5	4.9	5.3	4.4	4.8	4.0	3.3	5.8
10-Jun	3.8	4.1	4.2	4.9	4.5	5.0	5.8	5.3	4.8	4.8	4.9	4.3	1.4	1.1	1.7	1.6	2.0	1.9	2.3	2.3	1.6	1.8	2.5	2.1	3.3	5.8
11-Jun	1.8	2.5	1.6	3.8	4.7	5.6	3.3	6.3	11.1	4.2	4.1	3.7	5.4	5.0	4.2	3.4	4.4	3.6	3.8	3.3	3.7	7.5	7.4	7.8	4.7	11.1
12-Jun	5.3	3.5	3.2	4.8	7.8	3.5	3.6	10.2	10.3	6.1	4.5	3.6	6.3	6.9	9.0	8.0	9.1	8.9	6.4	5.5	5.6	5.9	16.0	12.6	6.9	16.0
13-Jun	8.9	6.9	7.0	4.8	4.6	4.4	4.7	4.8	3.9	3.8	3.8	3.6	3.6	3.3	2.9	4.4	3.4	3.9	3.0	3.0	3.1	3.4	3.7	4.0	4.3	8.9
14-Jun	3.7	3.8	4.6	5.4	6.7	7.2	6.0	6.9	18.1	24.6	13.9	11.0	8.7	6.7	7.0	8.6	11.2	9.9	7.8	9.9	11.8	14.9	31.4	26.3	11.1	31.4
15-Jun	27.7	26.9	21.5	16.6	15.1	13.2	12.7	13.4	12.0	6.6	4.2	8.0	16.4	18.6	13.6	15.2	20.5	21.1	18.8	18.0	23.4	28.8	19.6	13.3	16.9	28.8
16-Jun	13.9	8.7	9.6	8.3	8.4	11.2	13.4	16.9	15.0	9.1	6.0	11.0	23.9	39.8	40.5	15.4	13.9	10.8	14.1	10.1	5.9	5.9	4.2	4.1	13.3	40.5
17-Jun	5.9	7.7	11.0	15.8	14.1	13.8	8.3	8.7	13.7	14.4	9.7	13.0	23.4	15.1	22.0	25.5	15.7	11.8	14.4	6.4	13.7	14.3	17.8	11.8	13.7	25.5
18-Jun	26.5	20.4	11.6	16.0	22.3	29.2	16.6	8.7	5.4	6.1	6.4	8.2	8.1	7.4	11.3	20.7	11.2	6.6	5.4	5.4	8.9	9.3	7.7	2.9	11.8	29.2
19-Jun	2.5	2.8	3.0	4.5	6.2	9.1	16.7	18.5	13.0	8.7	11.5	9.3	UO	7.2	7.0	3.2	3.6	5.5	1.7	2.3	2.8	4.6	2.9	2.7	6.5	18.5
20-Jun	2.2	4.0	4.5	3.8	6.2	8.8	3.5	4.2	4.1	3.4	5.2	3.4	3.6	3.4	5.1	8.4	5.1	7.5	3.3	4.2	6.2	13.2	8.9	4.9	5.3	13.2
21-Jun	4.1	5.5	4.2	3.7	4.2	3.9	3.9	3.3	3.3	3.2	4.3	4.8	4.6	4.7	5.0	4.7	5.4	6.1	4.8	3.9	4.1	4.5	6.6	9.1	4.7	9.1
22-Jun	7.2	5.8	5.5	6.2	6.3	6.1	6.7	7.1	20.2	23.5	13.5	9.3	9.5	9.9	10.6	10.1	11.6	20.9	10.6	8.0	7.9	8.0	10.1	10.1	10.2	23.5
23-Jun	10.1	10.0	10.3	9.9	10.3	10.1	7.1	6.5	7.3	8.9	9.1	10.8	10.2	10.8	11.1	14.5	6.0	6.9	15.4	13.4	10.4	10.0	10.0	10.5	10.0	15.4
24-Jun	10.7	10.0	9.9	9.3	9.5	9.3	8.9	7.6	7.3	6.1	5.7	5.8	6.2	6.2	6.1	6.5	6.4	6.7	11.4	26.5	10.8	6.7	7.9	8.6	8.8	26.5
25-Jun	8.7	11.6	9.8	8.0	9.5	14.3	10.2	9.4	10.1	8.6	6.0	5.4	5.6	5.1	5.0	5.5	5.6	5.7	6.0	7.0	6.2	7.4	7.9	6.4	7.7	14.3
26-Jun	8.0	7.2	9.1	10.3	11.7	30.3	12.0	9.1	8.9	7.0	5.4	4.9	5.0	C	C	5.4	5.4	5.4	5.6	5.9	6.9	13.8	17.5	12.7	9.4	30.3
27-Jun	11.9	10.6	10.8	13.9	18.7	32.4	16.1	15.7	16.9	10.4	10.3	9.0	7.9	5.9	8.4	7.5	7.2	8.0	9.6	10.8	11.9	13.8	12.3	11.0	12.1	32.4
28-Jun	13.8	14.0	22.0	26.1	42.2	41.3	44.9	36.0	34.5	43.9	46.6	31.8	21.5	24.8	32.3	35.7	40.2	44.5	34.7	29.3	37.2	45.7	43.5	49.8	34.8	49.8
29-Jun	44.9	37.3	34.2	33.8	35.3	44.3	51.2	58.8	56.2	59.1	72.6	82.7	85.0	89.9	94.4	59.4	51.2	52.9	90.8	91.2	90.0	84.4	81.7	79.9	65.0	94.4
30-Jun	85.4	81.0	80.9	77.5	77.3	73.3	72.6	66.5	57.2	45.8	39.1	43.7	80.7	84.6	89.4	76.2	71.2	63.2	55.5	46.4	40.1	91.3	90.7	93.6	70.1	93.6
	11.3	10.6	10.5	10.9	12.2	13.9	12.6	12.2	13.0	11.5	10.8	10.9	13.0	13.7	14.7	12.7	11.7	11.7	12.0	11.6	11.7	14.4	14.9	14.0	Diurnal Average	
	85.4	81.0	80.9	77.5	77.3	73.3	72.6	66.5	57.2	59.1	72.6	82.7	85.0	89.9	94.4	76.2	71.2	63.2	90.8	91.2	90.0	91.3	90.7	93.6	Diurnal Maximum	

C - Calibration UO - Unstable Operation

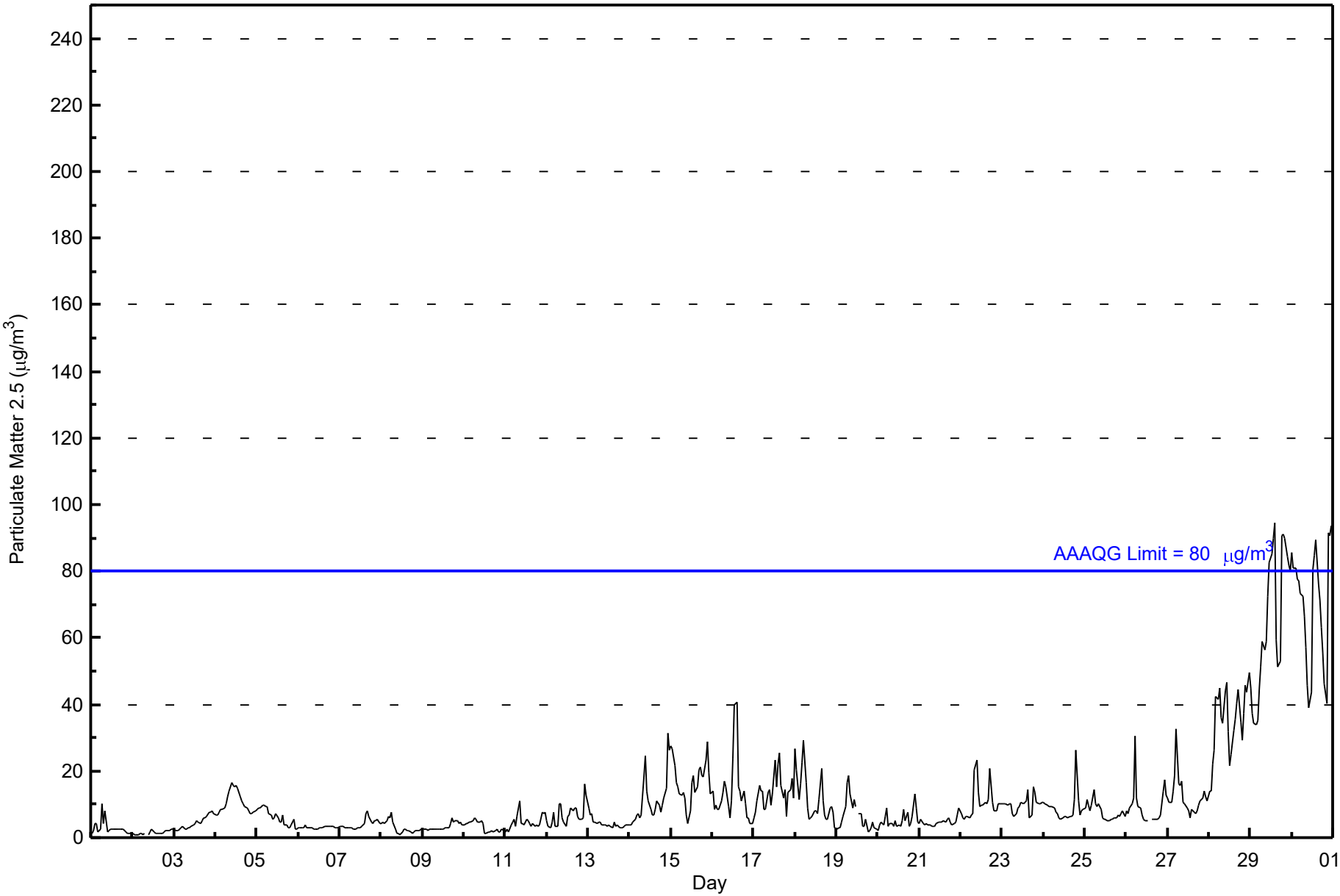
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Buffalo Viewpoint - June 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Buffalo Viewpoint - June 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	301	42.04	42.04
6 - 15	294	41.06	83.10
16 - 25	42	5.87	88.97
26 - 80	61	8.52	97.49
> 81.0	18	2.51	100.00

Total Number of Valid Hours: 716

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Buffalo Viewpoint - June 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	101	30	6	0	8	12	19	13	7	5	7	15	28	19	15	16	301
6 - 15	66	15	2	4	7	20	35	51	31	13	8	4	7	6	3	22	294
16 - 25	7	1	2	4	2	5	1	1	1	2	0	0	1	4	4	7	42
26 - 80	21	7	4	6	1	3	1	5	2	2	0	0	1	0	3	5	61
> 81.0	3	3	1	0	0	1	4	3	1	0	0	0	0	1	1	0	18
Totals	198	56	15	14	18	41	60	73	42	22	15	19	37	30	26	50	716

Total Number of Valid Hours: 716

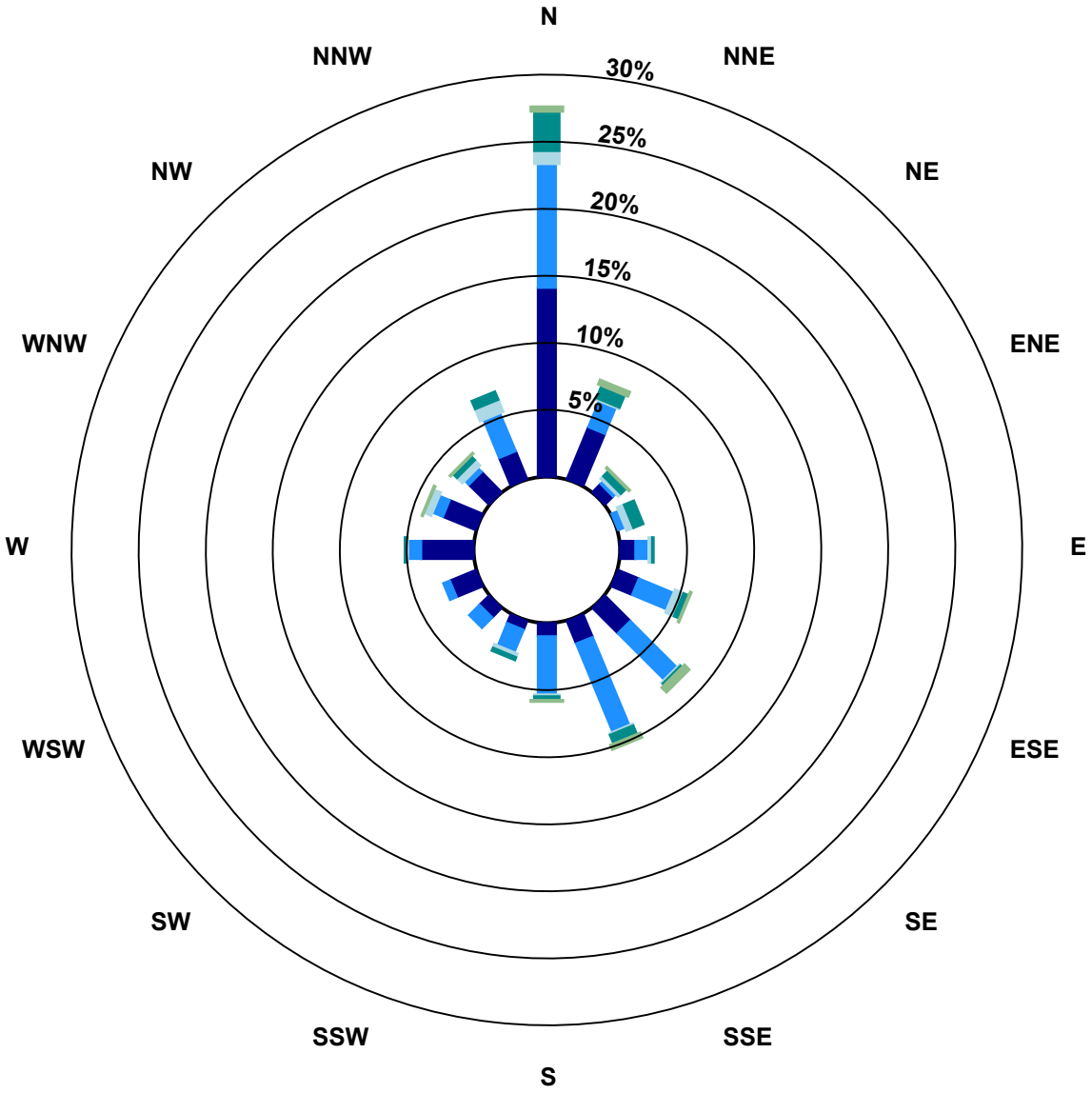
Total Number of Hours: 720

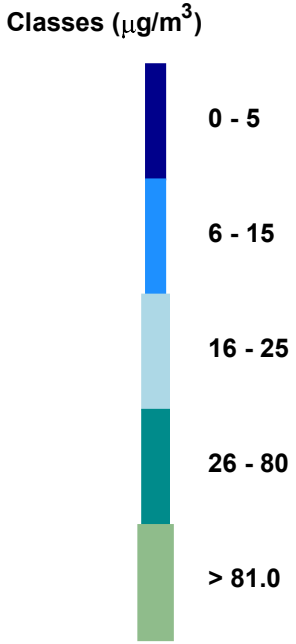
Wood Buffalo Environmental Association

Wind Rose Jun 2026

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

Buffalo Viewpoint





Total Number of Valid Hours: 716

Maximum Value: 30.5 C on Jun 29 16:00

Maximum Daily Average: 24.3 C on Jun 29

Minimum Value: 7.2 C on Jun 7 06:00

Minimum Daily Average: 9.3 C on Jun 11

Maximum Diurnal Average: 20.4 C at hour 15

Minimum Diurnal Average: 11.2 C at hour 5

Monthly Average: 16.37 C

Percentiles: P_1 = 7.7 P_{10} = 9.6 Q_1 = 11.5 Median = 15.4 Q_3 = 20.2 P_{90} = 25.0 P_{99} = 30.0

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

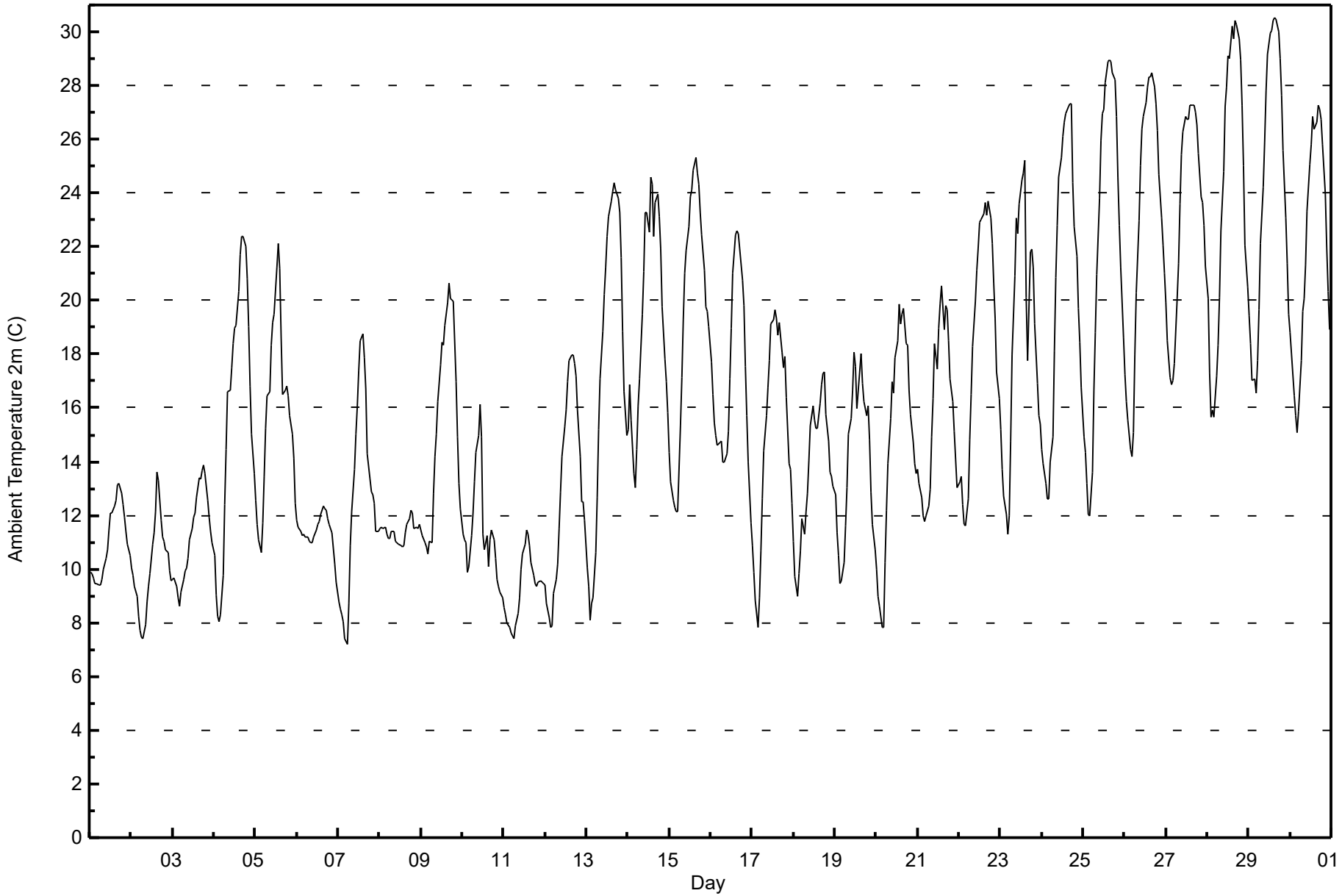
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	9.9	9.8	9.7	9.5	9.4	9.4	9.4	9.6	10.0	10.4	10.7	11.5	12.1	12.1	12.3	12.6	13.2	13.2	12.8	12.4	11.9	11.4	10.9	10.5	11.0	13.2
2-Jun	10.0	9.8	9.3	9.0	8.3	7.7	7.5	7.4	7.9	8.8	9.4	9.8	10.9	11.3	12.2	13.6	13.3	11.8	11.2	11.0	10.7	10.6	9.9	9.6	10.0	13.6
3-Jun	9.6	9.7	9.3	8.9	8.6	9.1	9.6	9.9	10.0	10.4	11.1	11.5	11.9	12.1	12.7	13.4	13.3	13.6	13.9	13.6	12.6	11.9	11.4	11.0	11.2	13.9
4-Jun	10.5	9.1	8.3	8.0	8.3	9.8	12.4	14.4	16.6	16.7	17.5	18.4	19.0	19.1	20.3	21.7	22.4	22.4	22.0	20.8	19.0	16.8	15.0	13.6	15.9	22.4
5-Jun	12.6	11.7	11.1	10.6	11.7	13.4	15.2	16.4	16.6	18.3	19.2	19.5	21.2	22.1	21.2	18.6	16.5	16.6	16.8	16.5	15.7	15.0	14.2	12.4	16.0	22.1
6-Jun	11.8	11.6	11.4	11.3	11.3	11.2	11.2	11.0	11.0	11.0	11.2	11.5	11.7	11.8	12.0	12.4	12.2	12.2	11.8	11.7	11.3	10.7	10.2	9.5	11.4	12.4
7-Jun	8.8	8.5	8.3	8.1	7.4	7.2	8.7	10.9	12.2	13.7	15.0	16.1	17.4	18.5	18.7	17.9	16.7	14.3	13.3	12.9	12.8	12.5	11.4	11.4	12.6	18.7
8-Jun	11.5	11.5	11.5	11.6	11.3	11.1	11.2	11.4	11.4	11.0	11.0	10.9	10.9	10.8	10.9	11.4	11.7	11.9	12.2	12.1	11.5	11.6	11.5	11.7	11.4	12.2
9-Jun	11.4	11.2	11.0	10.8	10.5	11.0	11.0	12.8	14.2	15.0	16.2	17.6	18.5	18.4	19.1	19.9	20.6	20.1	20.0	20.0	17.0	14.9	13.2	12.3	15.3	20.6
10-Jun	11.3	11.1	11.0	9.9	10.1	11.3	12.1	13.2	14.3	15.0	16.1	14.9	11.3	10.7	11.3	10.1	11.1	11.4	11.1	10.4	9.6	9.4	9.2	8.9	11.4	16.1
11-Jun	8.6	8.3	8.0	7.8	7.6	7.5	7.4	7.9	8.3	8.9	10.0	10.6	10.9	11.4	11.3	10.9	10.3	9.8	9.4	9.4	9.5	9.6	9.5	9.5	9.3	11.4
12-Jun	9.4	8.7	8.2	7.9	7.9	9.1	9.6	10.2	11.5	12.9	14.2	15.3	15.9	17.0	17.7	18.0	17.9	17.7	17.2	15.9	14.2	12.5	12.5	11.8	13.1	18.0
13-Jun	10.1	9.4	8.1	8.7	8.9	10.6	12.7	15.2	17.1	18.8	20.2	21.2	22.4	23.1	23.7	24.0	24.4	24.1	23.8	23.3	21.6	18.9	16.6	15.0	17.6	24.4
14-Jun	15.2	16.9	15.5	13.6	13.0	14.4	16.1	17.1	19.5	21.1	23.3	23.3	22.6	24.6	24.3	22.4	23.6	24.0	23.1	21.9	19.7	17.8	17.0	15.8	19.4	24.6
15-Jun	14.3	13.2	12.5	12.3	12.2	12.1	15.4	17.1	19.3	21.0	21.8	22.7	23.9	24.1	24.8	25.3	24.8	24.3	23.3	22.4	21.1	19.8	19.6	19.0	19.4	25.3
16-Jun	17.7	16.5	15.5	15.0	14.6	14.7	14.8	14.0	14.0	14.3	15.1	17.1	19.0	21.0	22.4	22.6	22.5	21.9	20.8	19.8	17.6	15.7	14.0	11.7	17.2	22.6
17-Jun	10.9	9.9	8.8	7.9	8.9	10.7	12.6	14.4	15.7	16.8	17.7	19.1	19.3	19.6	19.3	18.7	19.2	18.1	17.5	17.9	16.4	13.9	13.7	12.5	15.0	19.6
18-Jun	11.0	9.7	9.0	9.8	10.7	11.9	11.3	12.1	12.8	14.0	15.3	16.1	15.5	15.2	15.2	16.2	16.9	17.3	17.3	15.8	14.8	13.6	13.5	13.1	13.7	17.3
19-Jun	12.8	11.4	10.5	9.5	9.5	10.3	11.6	13.1	15.0	15.6	16.7	18.1	17.6	16.0	17.4	18.0	16.9	16.3	15.7	16.1	14.8	12.9	11.6	10.7	14.1	18.1
20-Jun	10.0	9.0	8.6	7.8	7.8	10.2	12.2	13.9	15.6	17.0	16.6	17.8	18.5	19.8	19.1	19.5	19.7	18.4	18.4	16.6	15.8	14.7	13.9	13.6	14.8	19.8
21-Jun	13.7	13.2	12.6	12.0	11.8	12.0	12.4	13.0	14.9	16.3	18.4	17.4	19.0	19.9	20.6	18.9	19.8	19.6	18.5	17.1	16.2	15.1	14.1	13.0	15.8	20.6
22-Jun	13.2	13.4	12.4	11.7	11.6	12.6	14.8	16.5	18.3	20.0	21.1	21.9	22.9	23.0	23.2	23.6	23.2	23.7	23.1	22.1	20.6	19.3	17.4	16.3	18.6	23.7
23-Jun	15.2	13.7	12.7	12.0	11.3	12.0	14.8	18.0	20.9	23.1	22.5	23.6	24.5	24.7	25.2	20.2	17.7	21.8	21.9	21.2	19.1	16.9	15.7	15.4	18.5	25.2
24-Jun	14.5	13.9	13.2	12.6	12.6	14.0	14.9	18.1	20.8	22.8	24.6	25.3	26.1	26.6	27.0	27.2	27.3	27.3	24.4	22.8	21.7	19.7	18.5	16.8	20.5	27.3
25-Jun	14.9	14.4	13.2	12.0	12.0	13.6	16.7	18.8	21.0	23.8	26.0	27.0	27.1	28.1	28.9	29.0	28.9	28.5	28.2	26.9	24.6	22.8	21.2	18.6	21.9	29.0
26-Jun	17.3	16.3	15.5	14.4	14.2	15.1	17.9	20.3	22.9	25.0	26.4	26.8	27.4	28.0	28.3	28.3	28.5	28.0	27.3	26.3	24.7	23.1	22.1	21.0	22.7	28.5
27-Jun	19.9	18.5	17.1	16.8	17.0	17.7	20.1	21.4	23.6	25.4	26.3	26.8	26.8	26.8	27.2	27.3	27.3	27.0	26.6	25.5	23.8	23.6	22.8	21.3	23.2	27.3
28-Jun	20.0	17.3	15.7	15.9	15.7	17.2	18.3	20.1	22.6	24.8	27.2	28.0	29.1	29.0	30.2	29.7	30.4	30.3	29.7	29.0	27.3	25.0	22.1	20.5	24.0	30.4
29-Jun	19.4	18.4	17.0	17.1	16.6	17.8	19.7	22.1	24.2	25.9	27.8	29.2	29.9	30.0	30.4	30.5	30.5	30.0	29.0	27.6	25.6	23.0	21.4	19.5	24.3	30.5
30-Jun	18.8	18.0	16.5	15.7	15.1	15.9	17.7	19.6	20.1	21.3	23.4	25.1	25.8	26.9	26.4	26.7	27.3	27.1	26.8	25.8	24.0	22.0	20.3	18.9	21.9	27.3
	13.1	12.5	11.7	11.3	11.2	12.0	13.3	14.7	16.1	17.3	18.4	19.1	19.6	20.1	20.4	20.3	20.3	20.1	19.6	18.8	17.5	16.2	15.1	14.2	Diurnal Average	
	20.0	18.5	17.1	17.1	17.0	17.8	20.1	22.1	24.2	25.9	27.8	29.2	29.9	30.0	30.4	30.5	30.5	30.3	29.7	29.0	27.3	25.0	22.8	21.3	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Buffalo Viewpoint - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	91	12.64	12.64
10 - 20	443	61.53	74.17
> 20	186	25.83	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) - %

Buffalo Viewpoint - June 2026

Maximum Value: 97.7 % on Jun 8 05:00

Maximum Daily Average: 93.4 % on Jun 6

Minimum Value: 24.3 % on Jun 28 17:00

Minimum Daily Average: 45.1 % on Jun 14

Maximum Diurnal Average: 85.2 % at hour 5

Minimum Diurnal Average: 49.8 % at hour 15

Monthly Average: 64.41 %

Percentiles: P_1 = 26.5 P_{10} = 34.6 Q_1 = 46.7 Median = 65.9 Q_3 = 81.8 P_{90} = 92.6 P_{99} = 97.5

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

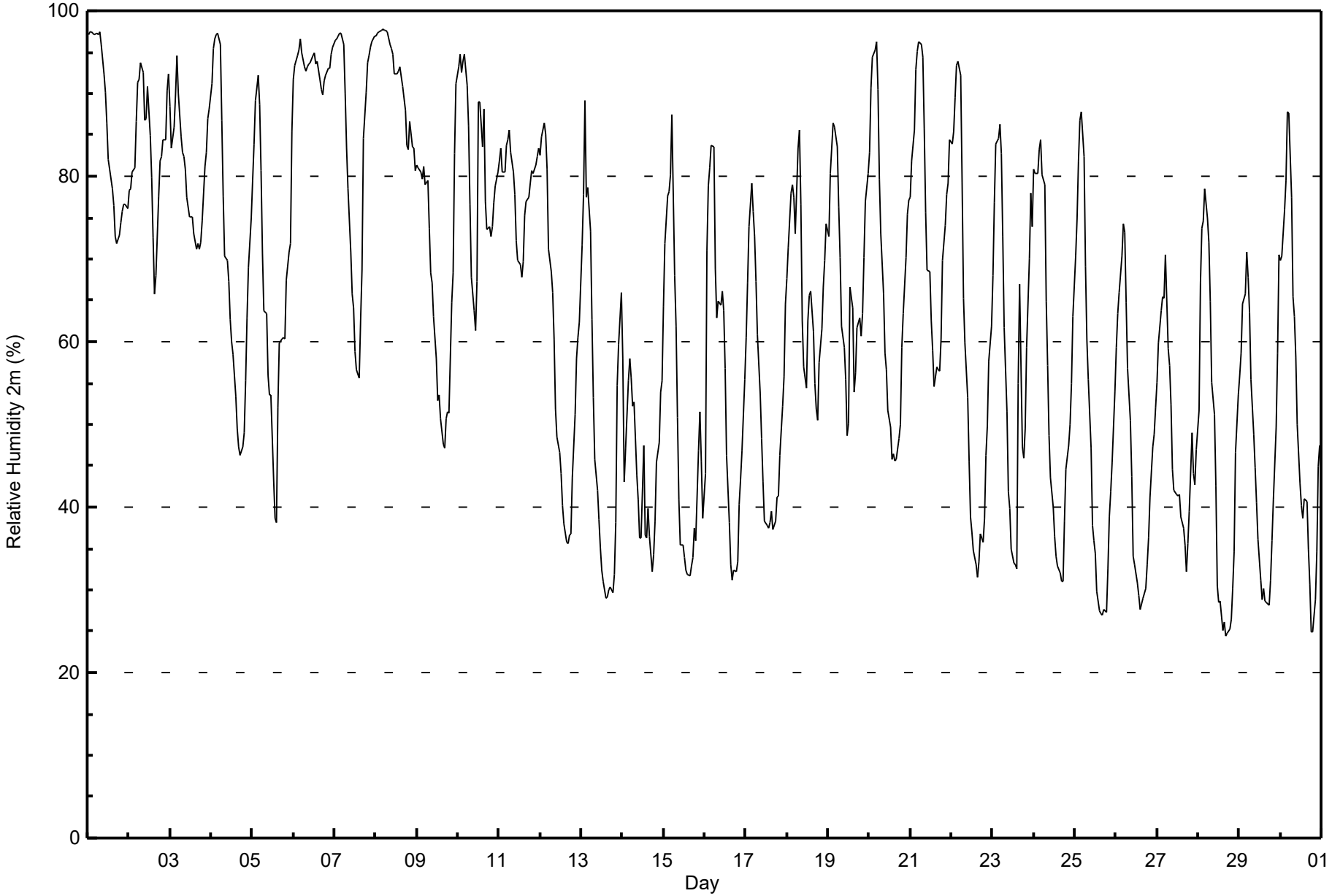
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	97.2	97.5	97.5	97.2	97.2	97.3	97.2	97.4	96.0	92.4	90.3	86.5	82.1	80.8	78.4	76.4	72.7	71.8	72.9	74.4	75.8	76.6	76.6	76.1	85.8	97.5
2-Jun	78.3	78.5	80.5	81.0	86.5	91.3	91.7	93.7	92.5	86.8	86.9	90.9	85.0	79.8	72.6	65.7	67.9	77.7	81.8	82.3	84.4	84.4	90.4	92.3	83.5	93.7
3-Jun	88.4	83.4	86.0	89.8	94.6	89.9	84.8	82.8	82.3	80.9	77.4	75.0	75.0	75.0	73.1	71.2	71.9	71.1	72.0	74.5	81.2	82.9	87.0	88.2	80.8	94.6
4-Jun	91.3	95.5	96.6	97.1	97.2	95.9	86.9	77.7	70.3	69.8	67.4	62.7	60.0	58.4	53.3	49.5	47.4	46.3	47.3	49.0	55.2	62.9	69.0	74.9	70.1	97.2
5-Jun	79.5	83.9	89.1	92.2	88.6	80.7	70.6	63.8	63.5	56.0	53.6	53.5	43.3	38.6	38.1	52.1	59.9	60.3	60.5	60.3	67.4	70.9	71.9	85.5	66.0	92.2
6-Jun	91.7	93.5	94.6	95.3	96.7	95.0	93.2	92.8	93.3	93.6	93.7	94.5	94.8	93.6	93.9	91.8	90.5	89.8	91.5	92.3	93.0	93.0	94.7	95.6	93.4	96.7
7-Jun	96.5	96.6	96.9	97.2	97.3	96.0	89.9	83.4	78.4	70.8	65.7	64.0	58.8	56.5	55.6	62.5	68.6	84.5	90.2	93.7	94.6	95.5	96.3	96.9	82.8	97.3
8-Jun	96.9	97.3	97.5	97.7	97.7	97.6	97.6	97.5	96.0	95.5	94.7	92.5	92.3	92.7	93.2	92.1	90.8	87.9	83.7	83.2	86.6	83.5	83.4	80.7	92.0	97.7
9-Jun	81.4	81.1	80.4	79.7	81.1	79.0	79.4	73.8	68.3	67.1	63.0	58.0	52.9	53.6	50.7	47.7	47.1	50.7	51.5	51.3	64.8	68.2	82.7	91.1	66.9	91.1
10-Jun	93.2	94.8	92.6	93.9	94.7	91.0	86.1	76.7	67.7	63.8	61.3	67.2	89.0	88.9	83.5	88.1	77.0	73.6	74.0	72.8	73.9	76.8	78.8	80.5	80.8	94.8
11-Jun	81.8	83.4	80.6	80.5	83.7	84.5	85.7	82.9	80.6	77.8	72.2	69.8	69.4	67.8	69.6	75.3	76.9	77.5	79.1	80.7	80.3	81.3	82.4	83.4	78.6	85.7
12-Jun	82.6	84.7	86.5	85.1	80.9	71.2	68.5	66.0	60.3	51.9	48.5	46.6	44.1	40.2	38.0	35.8	35.6	36.6	36.7	43.6	51.1	57.9	60.5	62.4	57.3	86.5
13-Jun	71.7	77.7	89.1	77.4	78.6	73.4	62.8	53.3	45.8	42.1	38.5	35.0	32.4	31.0	29.1	29.1	30.0	30.3	29.6	31.9	38.1	54.7	59.7	65.9	50.3	89.1
14-Jun	58.0	43.1	47.2	55.3	57.9	55.6	52.3	52.7	43.8	40.9	36.3	36.3	47.5	36.6	36.3	39.8	36.5	32.2	34.2	38.4	45.3	47.8	53.9	55.2	45.1	58.0
15-Jun	64.2	71.8	77.6	78.2	80.2	87.5	68.0	61.9	50.8	40.9	35.4	35.4	34.0	32.4	31.8	31.6	33.0	33.9	37.5	36.0	46.8	51.5	45.5	38.6	50.2	87.5
16-Jun	44.1	71.1	78.9	81.0	83.8	83.6	68.8	62.9	64.8	64.5	66.1	63.6	56.7	46.2	38.1	33.1	31.2	32.4	32.2	33.4	40.3	43.3	46.7	55.4	55.1	83.8
17-Jun	60.5	67.1	73.8	79.1	75.7	72.8	67.3	60.8	53.7	48.3	43.1	38.3	37.8	37.5	38.1	39.5	37.3	38.4	41.2	41.4	46.2	52.2	55.7	64.6	52.9	79.1
18-Jun	67.7	71.4	77.9	79.0	77.4	73.1	83.3	85.7	76.7	62.5	56.9	54.4	62.5	65.6	66.1	61.1	55.0	51.9	50.6	57.4	61.5	66.6	69.8	74.3	67.0	85.7
19-Jun	72.6	80.4	83.3	86.5	86.0	83.6	76.3	70.1	61.8	59.2	55.4	48.7	50.1	66.7	64.2	53.8	56.3	61.7	62.9	60.6	63.4	70.1	76.9	80.3	68.0	86.5
20-Jun	82.8	90.6	94.4	95.3	96.3	90.5	79.7	73.0	65.8	58.6	56.7	51.7	49.7	45.8	46.4	45.6	45.8	48.2	50.0	59.3	63.4	70.1	75.4	77.0	67.2	96.3
21-Jun	77.4	81.8	85.5	92.9	95.2	96.3	96.0	94.5	85.8	75.6	68.6	68.5	62.5	59.0	54.6	56.9	56.6	56.5	60.4	69.9	74.0	77.8	79.1	84.5	75.4	96.3
22-Jun	84.0	85.4	89.6	93.4	93.8	92.3	79.4	65.2	59.8	53.3	45.5	38.9	36.9	34.8	33.1	31.6	33.4	36.7	35.7	38.7	46.3	49.8	57.7	61.9	57.4	93.8
23-Jun	68.0	76.8	84.0	84.6	86.3	82.8	72.8	61.7	51.5	41.9	39.8	34.9	33.2	33.1	32.6	54.9	67.0	47.2	45.9	49.5	59.3	69.9	78.0	74.0	59.6	86.3
24-Jun	80.9	80.4	80.4	83.2	84.4	80.1	79.0	65.0	57.1	48.6	43.5	40.1	36.5	34.0	32.8	32.0	31.1	31.0	38.2	44.5	47.4	49.9	55.0	63.0	54.9	84.4
25-Jun	70.3	74.9	81.9	86.7	87.8	82.3	69.2	60.2	55.4	47.0	37.8	36.0	34.4	29.8	27.4	27.1	26.9	27.6	27.3	32.5	38.8	41.9	45.4	54.0	50.1	87.8
26-Jun	59.3	63.4	65.9	70.4	74.2	73.2	64.8	56.8	50.5	43.7	34.2	33.1	30.8	29.4	27.6	28.4	29.0	30.1	33.0	36.2	41.2	47.3	48.8	52.0	46.8	74.2
27-Jun	55.2	59.8	63.8	65.5	65.2	70.5	59.1	57.0	52.4	44.6	41.9	41.5	41.4	41.5	38.9	37.5	35.4	32.2	35.6	39.6	49.0	44.0	42.7	46.9	48.4	70.5
28-Jun	51.7	67.1	73.8	74.6	78.5	74.9	72.0	64.9	55.0	51.3	42.5	30.5	28.5	28.6	25.0	26.1	24.3	24.7	25.3	26.4	30.1	34.6	46.6	53.6	46.3	78.5
29-Jun	56.0	58.7	64.6	65.8	70.9	67.8	63.5	55.4	48.8	44.7	40.5	36.2	31.3	28.8	30.2	28.7	28.5	28.2	31.2	35.9	40.8	49.6	58.6	70.5	47.3	70.9
30-Jun	69.8	70.3	76.0	79.5	87.8	87.6	77.5	65.4	63.0	58.1	50.1	42.9	40.1	38.6	41.0	40.7	34.9	30.6	25.0	24.8	28.8	34.6	44.9	47.4	52.5	87.8
	75.1	78.7	82.2	83.8	85.2	83.2	77.4	71.8	66.4	61.1	56.9	54.2	53.1	51.5	49.8	50.2	49.9	50.1	51.2	53.8	59.0	63.0	67.1	70.9	Diurnal Average	
	97.2	97.5	97.5	97.7	97.7	97.6	97.6	97.5	96.0	95.5	94.7	94.5	94.8	93.6	93.9	92.1	90.8	89.8	91.5	93.7	94.6	95.5	96.3	96.9	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Buffalo Viewpoint - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Buffalo Viewpoint - June 2026

Maximum Speed: 25 km/h on Jun 8 14:00

Maximum Daily Speed Average: 20.4 km/h on Jun 1

Minimum Speed Value: 1 km/h on Jun 15 07:00

Minimum Daily Speed Average: 0.8 km/h on Jun 22

Maximum Diurnal Speed Average: 5.9 km/h at hour 16

Minimum Diurnal Speed Average: 1.6 km/h at hour 23

Monthly Average Velocity: 3.3 km/h 356.7 deg

Percentiles: $P_1 = 2$ $P_{10} = 4$ $Q_1 = 6$ Median = 8 $Q_3 = 13$ $P_{90} = 17$ $P_{99} = 23$

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-Jun	N24	N21	NNW22	N23	N22	NNW22	NNW20	NNW14	NNW19	N22	N24	N23	N22	N21	N22	N22	N22	N21	N19	N20	N15	N17	N18	N17	N20.4	N24
2-Jun	N16	N17	N15	N15	N17	N18	N18	N15	N15	NNE15	NNE13	NNE11	NNE13	NE12	NE14	NE13	E10	SE8	SE5	ESE6	ESE4	E3	SE2	ESE3	NNE9.5	N18
3-Jun	E4	E8	E4	E6	NE5	E6	ESE7	SE5	ESE6	ESE5	SE3	SE4	ESE7	ESE8	ESE6	S7	S6	SSE6	SSE5	SE4	ENE3	E4	ESE4	E3	ESE4.4	E8
4-Jun	SE2	SSE4	S7	S7	S5	SSE6	SSE7	SE7	S7	SSW10	SSW11	SSW11	S11	SSW10	SSW11	SSW10	SSW12	SSW12	SW14	SW12	SSW5	S5	S5	SSE5	SSW7.7	SW14
5-Jun	SSE5	SSE8	S8	S8	S6	SW6	SSW5	SW4	WSW3	SSE5	ESE7	SE8	SE5	SE6	SE8	S10	SE10	SE6	SSW5	SW4	SE6	S4	W9	W13	S4.8	WSW13
6-Jun	W11	W15	W12	W13	NW13	WNW19	W18	W18	WSW19	WSW17	WSW17	WSW17	WSW17	WSW16	WSW13	WSW13	WSW12	SW10	SW8	WSW8	SW6	SSW3	S4	SSE6	WSW11.8	WNW19
7-Jun	SSE5	SSE6	SSE5	SE7	SE7	SSE9	SSE8	SE6	SSE7	S5	ESE4	NNW2	N5	NNW8	N9	N13	N16	NE8	N2	NNE9	NNE5	NE7	NNE6	NNE8	ENE2.4	N16
8-Jun	NNE9	N10	N9	NNW9	NNW11	N14	NNW13	NNW10	NW15	NW19	NW22	NW24	WNW25	WNW25	WNW23	W22	WNW20	WNW19	W20	W20	WNW17	W20	W21	W19	WNW15.2	WNW25
9-Jun	W18	W17	W19	W18	W15	WNW13	W13	W14	WNW11	WSW7	WNW9	WNW12	WNW12	W11	W10	WNW5	N5	NNW6	NNW6	N5	N6	N4	N10	N14	WNW9.1	W19
10-Jun	N8	N6	N8	N7	N6	N7	N8	NNW8	NW7	WNW6	NW9	NNW12	NNE16	NNE13	N12	N16	N17	N18	N18	N17	N16	N14	N15	N17	N11.1	N18
11-Jun	N15	N12	N13	N13	N12	NNW13	NNW13	NNW12	N15	N15	N15	N16	N15	N17	N19	N17	N20	N20	N17	N17	N14	N10	NNW10	NNW9	N14.3	N20
12-Jun	NW9	NW9	NW10	NW10	NNW12	N16	N15	N14	N15	N18	N21	N20	N20	N20	N20	N20	N20	N19	N19	N14	N11	N9	NW8	WNW6	N14.1	N21
13-Jun	WSW2	WSW3	SW5	W5	WSW4	WSW4	W5	NW4	NNW2	NW4	NW5	NW6	NNW5	WNW5	S3	SSW2	S5	SW6	SW10	SW7	SSW5	SSE7	SSE7	SSE7	WSW2.8	SW10
14-Jun	SSW7	WSW11	W12	W9	W8	W7	WNW6	WNW6	WNW6	WNW5	NNW7	NNE9	NNE11	N14	N15	N12	NNW12	N15	N14	N11	N7	NNW8	NNW5	N5	NNW6.8	N15
15-Jun	N6	N4	NNW5	NW4	N2	S2	S1	SSE3	SE5	ESE6	ESE7	SSE6	NNW1	NE4	NNE6	NNE7	ENE6	ESE7	ESE6	E7	ESE5	SSE2	ESE2	ENE8	ENE2.4	ENE8
16-Jun	SE5	S5	SE6	SSE6	SE4	SE3	SE5	E5	ESE6	ESE6	S5	SW5	W7	NW5	NNW9	N15	N16	N18	N20	N17	N13	N14	N12	N8	NNE4.6	N20
17-Jun	N6	N8	N8	N8	NNE8	NNE8	N8	N8	N10	N11	N13	N15	N14	N13	N13	N13	N15	N12	N11	N7	N9	N6	WNW7	NW5	N9.5	N15
18-Jun	NNW7	N7	N6	NNW6	NNW6	N7	NNW6	NNW6	NW5	WNW4	W2	N4	N15	N14	N13	NNW11	NNW13	N14	N13	NNW9	NNW9	NNW8	W6	W7	NNW7.6	N15
19-Jun	W11	WNW8	WNW6	WNW6	WNW7	NW7	NW6	NNW5	N10	N9	NNW8	NNW8	NW6	N7	N11	N11	N14	N13	N10	N8	N8	N9	NNE7	NNE7	NNW7.2	N14
20-Jun	NNE7	NNE7	NNE5	N6	N7	N7	NNE8	NNE6	N11	N14	NNE10	NNE11	NNE10	NNE13	NE15	NNE14	NNE13	NNE13	NNE13	E8	SE3	SW2	NW4	NNE8	NNE8.1	NE15
21-Jun	NNE6	NNE5	N5	N5	N6	N7	N8	N9	N12	N14	N16	N14	N14	N15	N13	NNE13	NNE13	N12	NNE11	NNE7	N5	NNW5	N6	NNW6	N9.2	N16
22-Jun	NE5	NNE6	NNE5	N4	NNW3	N5	N2	SW2	WNW6	N5	NNE4	NE5	NNE3	E5	SE4	ESE4	WSW2	NW6	S5	SSE4	SSE6	SSE5	SSW6	SSW6	NE0.8	NNE6
23-Jun	S5	SSE4	SE6	S6	S7	S6	S6	S4	S4	WNW6	W8	W8	W4	SSW1	S1	N15	ENE5	SSE11	SE9	SSE6	SSE5	SE5	SSE4	S5	S2.9	N15
24-Jun	SSE6	SSE7	SSE8	SE8	SSE7	SSE6	SE6	SSE8	SSE8	S10	S9	SSE9	S10	SSE10	S10	S9	SSW8	SSW8	ESE11	ESE12	SSE7	SSE8	SSE8	SSE7	SSE7.8	ESE12
25-Jun	SSE5	SSE6	S6	S5	SSE5	SSE5	SSE6	SSE8	SE9	SE10	SSE11	SSE10	SSE9	SE10	SSE10	SE10	SE10	SE12	SE10	SE13	SE9	SSE8	SSE7	SSE7	SSE8.2	SE13
26-Jun	SSE6	SSE8	SSE8	SSE6	SSE4	SSE5	SSE8	SSE11	SE9	SE10	SSE15	SE16	SE14	SE14	SE13	ESE13	SE13	SE14	ESE14	SE11	ESE9	ESE8	SE9	SE9	SE10.0	SE16
27-Jun	SE7	SE6	SE4	E4	ENE5	NNE1	ESE6	SSE1	ENE4	ESE11	ESE16	SE14	SE13	SE13	ESE14	ESE11	ESE13	ESE12	ESE10	ESE5	SE5	E7	E8	E6	ESE7.7	ESE16
28-Jun	ENE4	NNE6	N7	NW5	N6	N4	N6	N6	N5	NNW6	N3	ENE14	ENE14	NE13	NE12	NE12	ENE13	ENE13	ENE11	ENE10	ESE4	NNE2	N6	NNE8	NE6.9	ENE14
29-Jun	N8	N7	N7	NNE6	N6	N4	N4	N5	NE3	N5	N6	N8	N9	NNE11	NNE13	NNE11	N12	NNE14	NNE13	NE6	SE7	SSE2	ESE6	SE5	NNE6.1	NNE14
30-Jun	SE7	SSE4	SSE4	SSE3	SSW2	S3	SSE2	SSE3	S4	SW4	W5	NW6	WNW6	NW7	N9	NNW11	NNE10	NE11	ENE10	E9	ESE7	SE5	S5	SE4	ENE1.2	NNW11
	N2.3	NNW2.2	NNW2.5	NNW2.6	NNW3.3	NNW3.6	NNW2.8	NNW2.4	NNW3.0	NNW3.1	NNW3.3	N3.9	N4.7	N5.0	N5.2	N5.9	NNE5.7	NNE5.0	NNE4.4	NNE3.4	NNE2.2	NNE1.9	NNW1.6	N1.9	Diurnal Average	
	N24	N21	NNW22	N23	N22	NNW22	NNW20	W18	WSW19	N22	N24	NW24	WNW25	WNW25	WNW23	W22	N22	N21	W20	N20	WNW17	W20	W21	W19	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: 8 km/h on Jun 24 19:00

Minimum Value: 1 km/h on Jun 3 22:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 3 Q_3 = 4 P_{90} = 5 P_{99} = 6

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

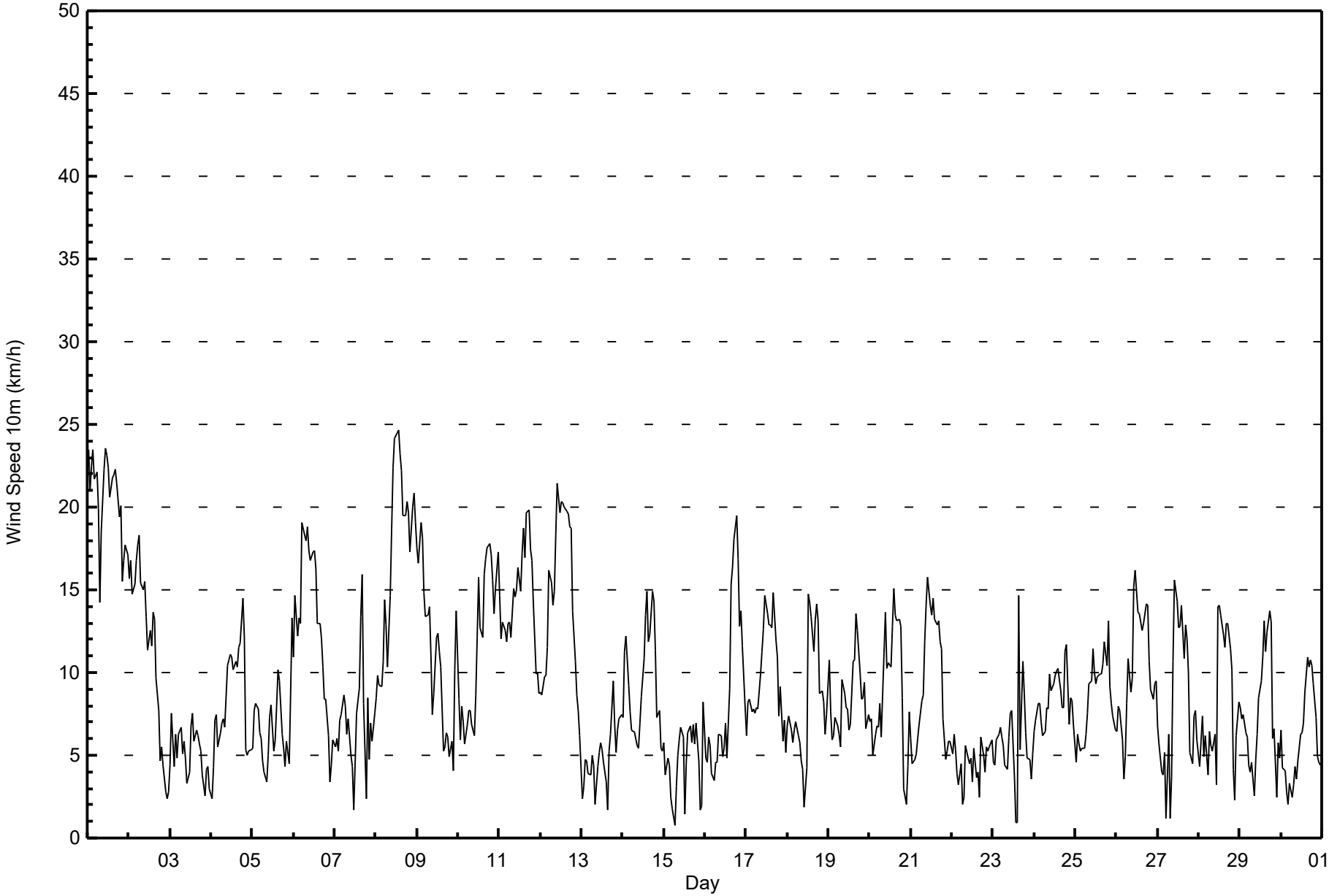
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	6	6	6	6	6	6	6	4	6	6	6	7	6	6	6	6	6	6	5	6	5	5	5	5	7
2-Jun	4	5	4	4	4	5	5	4	4	5	4	3	4	3	4	5	4	3	2	2	1	3	1	1	5
3-Jun	2	2	2	2	1	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Buffalo Viewpoint - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	176	24.44	24.44
6 - 11	324	45.00	69.44
12 - 19	182	25.28	94.72
20 - 28	38	5.28	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

Buffalo Viewpoint - June 2026

Wind Speed Ranges (km/h)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 5	20	10	4	5	8	11	20	26	22	9	6	6	5	4	9	11	176
6 - 11	65	31	4	5	10	22	32	46	20	11	7	3	13	16	13	26	324
12 - 19	90	15	7	4	0	8	10	1	0	2	2	10	14	6	3	10	182
20 - 28	24	0	0	0	0	0	0	0	0	0	0	0	5	4	2	3	38
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	199	56	15	14	18	41	62	73	42	22	15	19	37	30	27	50	720

Total Number of Valid Hours: 720

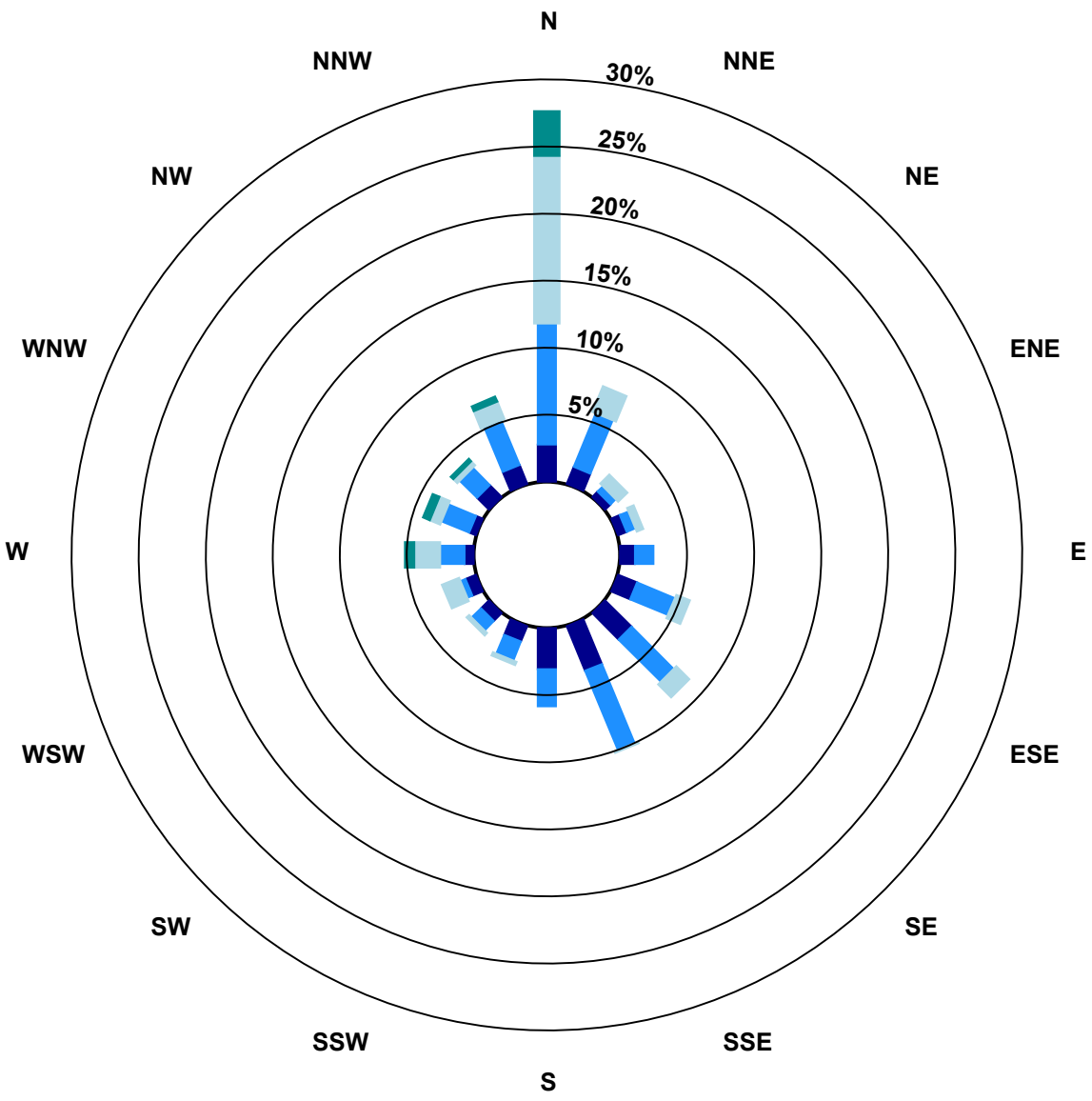
Total Number of Hours: 720

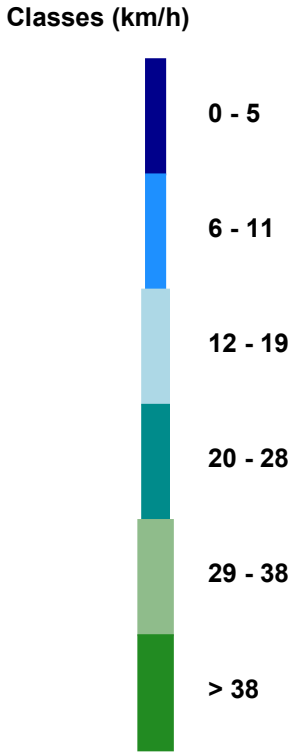
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Buffalo Viewpoint





Total Number of Valid Hours: 720

Direction of Maximum Speed: 291 deg on Jun 8 14:00
Direction of Maximum Daily Speed Average: 355.0 deg on Jun 1

Direction of Minimum Speed: 187 deg on Jun 15 07:00
Direction of Minimum Daily Speed Average: 0.8 deg on Jun 22

Monthly Average Direction: 356.7 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-Jun	353	352	347	351	351	348	343	338	348	353	353	355	359	357	356	357	360	2	3	359	1	2	3	10	355.0
2-Jun	9	9	8	8	360	2	8	7	8	18	25	17	27	34	36	43	87	129	143	114	117	96	127	121	24.3
3-Jun	91	83	96	95	51	101	121	138	111	123	144	142	116	110	119	188	175	165	161	129	76	97	105	82	118.5
4-Jun	144	164	181	181	175	162	155	144	177	207	208	202	190	208	199	193	211	206	224	220	203	179	172	168	193.5
5-Jun	157	156	169	178	190	235	212	224	237	159	121	136	129	129	124	171	139	127	206	224	139	188	261	259	174.5
6-Jun	278	271	273	275	312	290	264	260	255	251	248	253	255	255	254	246	248	234	226	241	235	212	177	167	257.3
7-Jun	156	159	149	143	145	150	164	133	162	190	114	344	1	343	351	2	0	47	7	15	28	45	18	20	58.5
8-Jun	16	9	3	345	342	351	347	329	311	317	317	308	296	291	286	281	283	286	277	279	286	275	270	272	301.2
9-Jun	270	274	272	272	281	292	263	274	283	238	287	284	282	271	263	291	349	347	347	357	350	349	7	1	289.5
10-Jun	3	358	1	358	3	352	354	338	317	291	314	330	13	16	10	6	7	2	3	356	358	358	355	355	356.3
11-Jun	357	358	358	354	356	336	335	342	352	355	1	0	359	359	359	360	360	360	358	356	355	350	333	331	353.9
12-Jun	317	304	309	324	337	351	352	349	350	352	357	353	357	355	357	357	5	4	5	6	9	356	318	292	350.5
13-Jun	242	241	222	261	256	243	263	314	336	322	321	323	341	298	183	204	185	226	225	220	206	166	161	156	236.5
14-Jun	208	246	269	278	268	281	286	291	296	302	339	30	13	0	357	350	348	358	358	355	357	345	333	356	330.8
15-Jun	349	351	331	316	349	188	187	150	124	115	111	149	333	37	20	16	72	116	102	95	122	163	108	70	76.6
16-Jun	134	172	138	160	131	139	129	90	102	118	185	230	280	321	336	8	6	4	6	3	3	9	6	354	15.0
17-Jun	6	358	1	360	22	12	10	4	3	358	353	359	360	0	357	358	358	352	351	357	0	3	286	321	357.4
18-Jun	347	3	351	331	331	352	338	331	309	288	275	357	5	8	5	337	344	355	360	342	334	338	279	279	343.6
19-Jun	268	286	294	297	294	321	319	333	6	359	348	337	320	356	353	4	0	9	9	358	0	5	16	21	344.3
20-Jun	18	15	14	358	351	354	12	15	1	7	14	16	23	16	36	28	18	18	21	96	134	229	324	16	17.4
21-Jun	30	17	10	7	9	357	358	354	356	358	350	356	1	9	7	19	13	8	30	18	10	341	350	347	4.6
22-Jun	39	26	14	1	347	357	1	225	303	11	13	34	22	90	142	115	245	308	176	159	148	168	199	209	36.8
23-Jun	175	154	137	173	170	169	190	180	185	284	268	264	280	198	184	353	77	152	132	162	157	145	153	174	174.5
24-Jun	151	158	149	140	160	147	140	161	166	175	189	164	169	168	175	184	198	209	108	122	165	151	148	160	160.3
25-Jun	160	166	171	173	158	166	150	161	139	146	154	148	150	142	151	135	136	128	142	124	137	149	161	162	147.4
26-Jun	159	162	162	157	149	161	148	148	145	129	147	141	142	135	136	119	126	126	118	125	119	120	126	131	136.4
27-Jun	143	135	140	101	76	28	113	158	77	116	121	124	129	138	119	116	121	120	118	107	131	90	93	87	117.3
28-Jun	60	21	358	326	356	4	5	3	351	338	358	57	61	37	54	49	60	65	63	63	105	24	8	18	37.6
29-Jun	359	6	1	22	353	5	2	6	36	1	350	4	4	19	14	18	11	18	16	54	137	155	120	131	17.7
30-Jun	130	163	158	152	213	186	147	157	177	214	267	326	289	323	349	348	20	40	70	92	113	139	181	145	76.6
	352.6	341.3	332.4	328.5	339.7	337.1	338.4	329.8	339.3	342.3	343.5	350.7	355.5	1.5	6.2	4.8	12.3	17.3	20.9	24.4	25.5	16.2	344.0	356.2	
	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: 105 deg on Jun 27 08:00

Minimum Value: 10 deg on Jun 3 22:00

Percentiles: P_1 = 10 P_{10} = 17 Q_1 = 21 Median = 24 Q_3 = 33 P_{90} = 47 P_{99} = 93

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

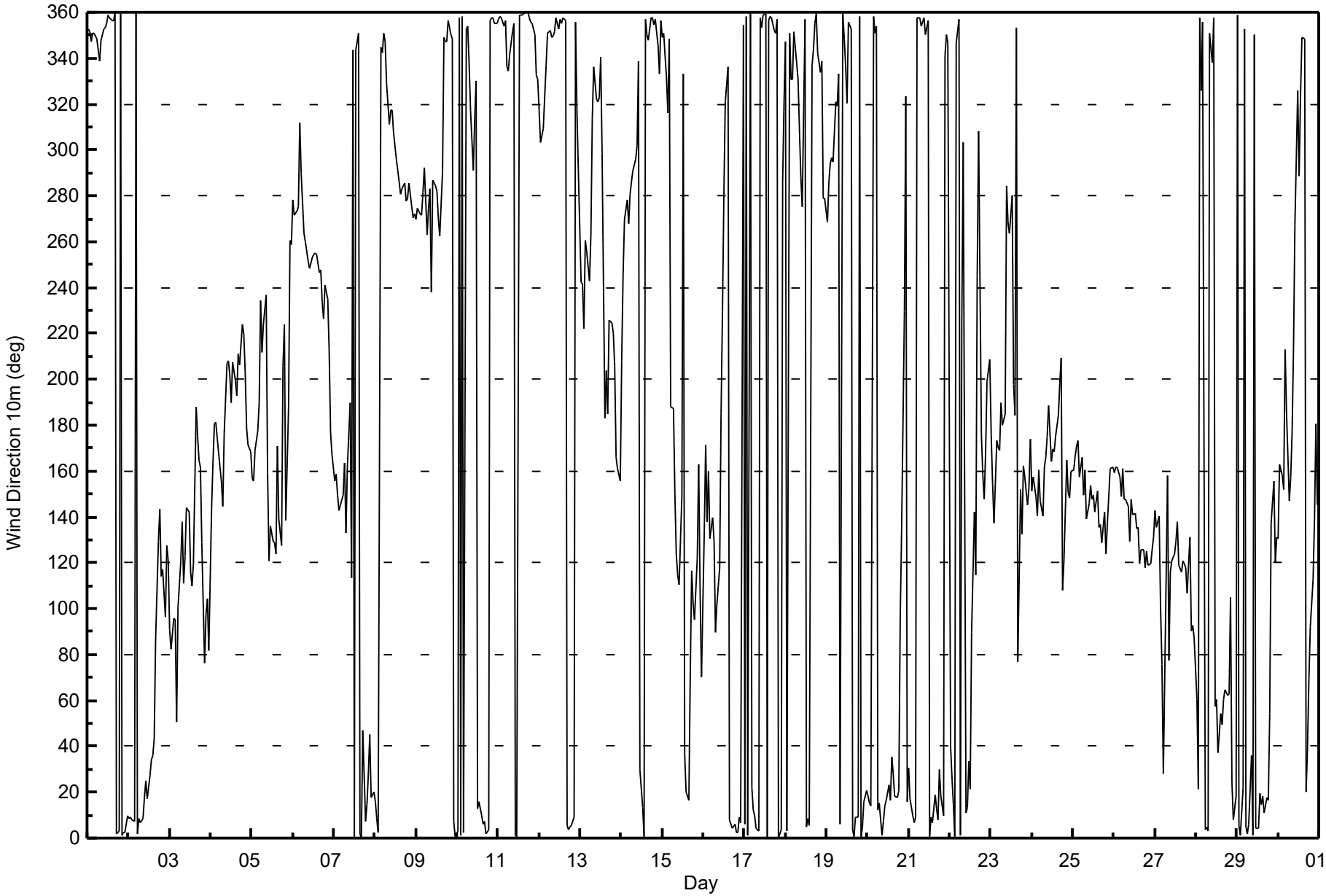
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	22	22	21	21	21	20	20	19	22	22	22	24	23	22	22	24	24	24	23	23	23	22	24	23	24
2-Jun	22	22	22	22	22	22	22	22	23	23	23	22	23	22	23	23	27	36	35	28	25	47	30	34	47
3-Jun	19	15	29	19	16	29	30	39	27	37	62	58	29	25	32	37	36	45	39	31	25	10	12	25	62
4-Jun	47	34	31	23	20	27	29	32	39	27	26	30	34	29	30	32	27	26	21	20	23	14	15	18	47
5-Jun	25	14	13	17	22	32	35	46	48	52	37	33	64	51	32	42	35	35	25	33	18	40	17	22	64
6-Jun	23	17	18	22	23	24	17	19	20	20	21	20	20	21	22	22	21	22	22	22	25	40	23	20	40
7-Jun	18	20	16	22	29	26	26	35	39	55	74	99	72	32	26	22	21	62	94	21	74	27	20	20	99
8-Jun	17	22	19	18	19	20	20	29	23	22	22	23	23	24	22	19	21	22	19	19	22	18	15	16	29
9-Jun	16	18	16	16	21	25	16	21	34	29	29	29	32	28	29	51	39	22	23	28	18	35	18	20	51
10-Jun	17	21	22	17	17	19	26	33	36	50	28	23	26	24	23	24	25	23	22	22	20	22	20	21	50
11-Jun	23	21	20	20	24	20	20	21	22	22	23	24	24	23	24	23	22	22	21	21	21	19	19	21	24
12-Jun	20	20	20	19	21	21	21	22	23	24	23	23	23	24	24	22	24	24	23	21	18	15	21	15	24
13-Jun	54	40	19	10	17	20	19	30	71	52	54	42	58	69	83	93	56	48	21	19	13	11	10	13	93
14-Jun	26	21	27	18	20	34	25	23	29	41	36	33	25	27	24	22	22	23	21	21	13	17	27	10	41
15-Jun	15	40	15	21	64	65	78	54	45	41	41	48	105	62	32	30	40	30	22	18	15	70	93	19	105
16-Jun	49	43	25	29	29	40	44	21	24	28	46	45	31	58	46	26	25	24	23	24	21	22	21	16	58
17-Jun	20	14	13	15	20	20	23	24	25	23	25	26	26	25	25	24	24	22	20	20	17	17	17	23	26
18-Jun	16	13	13	19	21	20	24	23	32	32	93	56	23	24	25	26	28	23	24	20	19	18	24	17	93
19-Jun	13	16	18	18	21	20	23	29	23	27	30	41	51	45	24	27	24	25	22	22	21	18	17	15	51
20-Jun	15	12	16	10	11	18	22	29	24	25	29	26	29	28	24	27	28	24	25	39	40	61	30	19	61
21-Jun	19	20	17	15	18	21	18	22	24	23	23	22	23	25	27	23	25	24	24	20	20	16	10	10	27
22-Jun	36	22	22	53	18	14	67	72	29	44	50	56	83	65	83	70	78	36	40	27	33	28	35	21	83
23-Jun	37	29	18	17	18	17	22	39	50	46	29	27	83	99	102	29	69	35	33	32	37	30	36	47	102
24-Jun	28	15	13	13	27	20	23	33	42	33	41	42	42	42	41	45	42	32	41	31	36	32	35	32	45
25-Jun	35	28	22	25	29	29	32	34	32	36	39	43	43	48	46	44	38	32	36	27	31	34	31	34	48
26-Jun	33	33	34	41	45	38	36	33	43	35	37	35	35	39	36	32	32	27	25	32	29	27	31	32	45
27-Jun	37	29	24	27	19	87	32	105	74	34	30	31	34	36	31	32	28	28	27	22	16	14	17	15	105
28-Jun	37	11	10	26	14	53	15	20	37	26	78	26	29	27	30	24	22	20	21	17	39	75	14	14	78
29-Jun	14	12	12	23	12	29	21	21	62	35	39	29	30	29	29	29	29	24	23	30	52	65	14	20	65
30-Jun	21	34	23	65	56	27	37	50	38	54	41	32	47	38	24	25	31	29	16	18	23	34	21	26	65
	54	43	34	65	64	87	78	105	74	55	93	99	105	99	102	93	78	62	94	39	74	75	93	47	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Buffalo Viewpoint - June 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS05
MANNIX
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MANNIX (AMS05)

JUNE 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	97.7	0	13.9	0
H2S (ppb) Average	685	35	35	100	8	0	2.2	0
THC (ppm) Average	686	34	34	100	2.9	-	2.3	-
NMHC(ppm) Average	686	34	34	100	0.265	-	0.088	-
CH4(ppm) Average	686	34	34	100	2.9	-	2.2	-
Temperature 2 m (C) Average	691	0	29	95.97	30.1	-	23.7	-
Temperature 20 m (C) Average	691	0	29	95.97	30.3	-	24.9	-
Temperature 45 m (C) Average	691	0	29	95.97	30	-	25.1	-
Temperature 75 m (C) Average	691	0	29	95.97	29.5	-	25	-
Temperature 90 m (C) Average	159	0	561	22.08	29.4	-	25.1	-
Relative Humidity 2 m (%) Average	691	0	29	95.97	100	-	98	-
Relative Humidity 20 m (%) Average	691	0	29	95.97	96	-	92	-
Relative Humidity 45 m (%) Average	691	0	29	95.97	97	-	91	-
Relative Humidity 75 m (%) Average	691	0	29	95.97	99	-	92	-
Relative Humidity 90 m (%) Average	159	0	561	22.08	67	-	45	-
Wind Speed 20 m (km/h) Average	691	0	29	95.97	37	-	23	-
Wind Speed 45 m (km/h) Average	691	0	29	95.97	43	-	29	-
Wind Speed 75 m (km/h) Average	597	0	123	82.92	46	-	32	-
Wind Speed 90 m (km/h) Average	110	0	610	15.28	26	-	18	-
Wind Direction 20 m (deg) Average	691	0	29	95.97	-	-	-	-
Wind Direction 45 m (deg) Average	691	0	29	95.97	-	-	-	-
Wind Direction 75 m (deg) Average	597	0	123	82.92	-	-	-	-
Wind Direction 90 m (deg) Average	110	0	610	15.28	-	-	-	-
Vertical Wind Speed 20 m (km/h) Average	691	0	29	95.97	0.9	-	0.5	-
Vertical Wind Speed 45 m (km/h) Average	691	0	29	95.97	2.2	-	1.3	-
Vertical Wind Speed 75 m (km/h) Average	597	0	123	82.92	7.7	-	0.9	-
Vertical Wind Speed 90 m (km/h) Average	110	0	610	15.28	1	-	0.3	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MANNIX (AMS05)
JUNE 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	1.45	6.4	-	0	0	0	0.1	0.4	2.4	97.7
H2S (ppb) Average	685	0.5	1	-	0	0.1	0.1	0.2	0.4	1.2	7.8
THC (ppm) Average	686	2.05	0.1	-	1.9	2	2	2	2.1	2.2	2.9
NMHC(ppm) Average	686	0.013	0.028	-	0	0	0	0	0	0	0.265
CH4(ppm) Average	686	2.04	0.1	-	1.9	1.9	2	2	2.1	2.2	2.9
Temperature 2 m (C) Average	691	16.27	5.8	-	6.3	9.5	11.3	15.4	20.1	25.3	30.1
Temperature 20 m (C) Average	691	16.48	5.6	-	6.6	9.7	11.6	15.7	20.6	24.7	30.3
Temperature 45 m (C) Average	691	16.37	5.6	-	6.2	9.6	11.5	15.7	20.6	24.7	30
Temperature 75 m (C) Average	691	16.31	5.5	-	6.3	9.6	11.5	15.7	20.5	24.3	29.5
Temperature 90 m (C) Average	159	23.24	3.5	-	15.6	18.4	20.4	23.6	26	27.7	29.4
Relative Humidity 2 m (%) Average	691	66.9	21	-	24	37	49	68	85	95	100
Relative Humidity 20 m (%) Average	691	61.2	20	-	21	32	44	62	79	88	96
Relative Humidity 45 m (%) Average	691	60.2	20	-	21	32	43	60	78	88	97
Relative Humidity 75 m (%) Average	691	60.5	21	-	21	32	43	59	79	89	99
Relative Humidity 90 m (%) Average	159	42.4	12	-	20	27	32	41	53	61	67
Wind Speed 20 m (km/h) Average	691	11.2	6	-	1	5	7	10	15	19	37
Wind Speed 45 m (km/h) Average	691	15.6	8	-	1	6	10	15	20	26	43
Wind Speed 75 m (km/h) Average	597	17.4	9	-	1	7	11	17	23	31	46
Wind Speed 90 m (km/h) Average	110	15.3	7	-	3	5	10	16	21	24	26
Wind Direction 20 m (deg) Average	691	-	-	-	-	-	-	-	-	-	-
Wind Direction 45 m (deg) Average	691	-	-	-	-	-	-	-	-	-	-
Wind Direction 75 m (deg) Average	597	-	-	-	-	-	-	-	-	-	-
Wind Direction 90 m (deg) Average	110	-	-	-	-	-	-	-	-	-	-
Vertical Wind Speed 20 m (km/h) Average	691	-0.27	0.5	-	-1.6	-1	-0.7	-0.2	0.2	0.4	0.9
Vertical Wind Speed 45 m (km/h) Average	691	0.05	1	-	-2.4	-1.2	-0.7	0.1	0.8	1.3	2.2
Vertical Wind Speed 75 m (km/h) Average	597	0.15	0.9	-	-1.4	-0.6	-0.3	0	0.4	1	7.7
Vertical Wind Speed 90 m (km/h) Average	110	0.12	0.4	-	-1.2	-0.3	-0.1	0.1	0.4	0.6	1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MANNIX (AMS05)

JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
ALL METEOROLOGICAL SENSORS, all elevations	01 Jun 2026 06:00	26 Jun 2026 10:00	7	DAS Failure - data not recorded
ALL METEOROLOGICAL SENSORS, 90m	01 Jun 2026 06:00	01 Jun 2026 13:00	8	DAS Failure - data not recorded
ALL METEOROLOGICAL SENSORS, all elevations	03 Jun 2026 11:00	03 Jun 2026 21:00	11	DAS Failure - data not recorded
ALL METEOROLOGICAL SENSORS, all elevations	23 Jun 2026 06:00	23 Jun 2026 15:00	10	DAS Failure - data not recorded
ALL METEOROLOGICAL SENSORS, all elevations	26 Jun 2026 10:00	26 Jun 2026 10:00	1	DAS Failure - data not recorded
Relative Humidity, Temperature 90m	01 Jun 2026 01:00	24 Jun 2026 08:00	533	Flat line in sensor output signal
Vertical Wind Speed, Wind Speed, Wind Direction 75m	13 Jun 2026 22:00	26 Jun 2026 08:00	94	Unstable Operation - flatline in analyzer output signal
Vertical Wind Speed, Wind Speed, Wind Direction 90m	01 Jun 2026 01:00	26 Jun 2026 09:00	582	Unstable Operation - flatline in analyzer output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Mannix - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 97.7 ppb on Jun 2 06:00 Maximum Daily Average: 13.9 ppb on Jun 2

Minimum Value: 0.0 ppb on Jun 3 16:00 Minimum Daily Average: 0.0 ppb on Jun 4
Maximum Diurnal Average: 4.4 ppb at hour 6 Minimum Diurnal Average: 0.3 ppb at hour 4
Monthly Average: 1.45 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.4 P_{90} = 2.4 P_{99} = 26.3

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-Jun	0.5	Z	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.4	12.5	13.6	8.4	3.8	7.7	13.2	24.4	42.6	19.8	31.8	46.9	24.9	10.9	46.9
2-Jun	13.3	5.7	1.0	Z	54.1	97.7	58.9	57.7	25.4	2.3	1.0	0.6	0.4	0.5	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	13.9	97.7
3-Jun	0.1	0.1	0.1	Z	0.2	0.1	0.2	0.1	0.2	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	0.1	0.2
4-Jun	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	0.0	0.0	0.0	0.0	0.0	0.1
5-Jun	0.0	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	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
6-Jun	Z	0.1	0.1	0.0	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
7-Jun	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	2.5	1.8	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.2	2.5
8-Jun	0.0	0.0	Z	1.8	0.2	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	0.1	1.8
9-Jun	0.0	0.0	0.0	Z	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.8	1.4	0.1	0.0	0.4	4.1	0.4	4.1
10-Jun	4.2	0.3	0.3	0.2	Z	1.7	1.1	0.6	0.4	1.8	9.4	3.3	0.3	0.1	0.2	0.9	1.0	1.9	1.5	0.9	0.2	0.1	0.2	0.1	1.3	9.4
11-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.3	0.8	1.1	0.2	0.1	0.7	0.2	0.1	0.1	0.0	0.0	0.2	1.1
12-Jun	Z	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.3	0.4	2.8	1.9	1.4	3.5	2.2	6.2	0.2	0.2	0.0	0.0	0.9	6.2
13-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.1	4.8	6.9	0.6	0.6	6.2	1.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.9	6.9
14-Jun	0.0	0.0	Z	0.0	0.0	0.1	1.6	2.4	5.4	2.4	0.3	0.2	0.7	1.4	0.1	0.1	0.0	0.4	0.9	0.5	1.1	0.3	3.5	0.6	1.0	5.4
15-Jun	0.3	0.2	0.1	Z	0.2	0.3	0.4	0.4	0.1	0.0	0.0	0.2	2.4	4.2	13.1	13.5	4.1	2.4	1.1	0.3	0.2	0.1	0.0	0.0	1.9	13.5
16-Jun	0.1	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	7.8	5.2	1.2	0.6	1.4	2.8	0.2	0.0	0.0	0.0	0.2	1.0	7.8
17-Jun	0.6	1.0	2.9	2.8	3.2	Z	9.1	6.0	2.3	0.5	0.2	0.6	1.2	0.7	0.5	0.6	0.3	0.1	0.0	0.4	0.0	0.0	0.0	0.1	1.4	9.1
18-Jun	Z	0.8	2.9	0.9	0.4	0.8	1.0	0.3	0.2	0.7	14.3	16.1	1.9	1.5	0.8	0.3	0.4	0.1	0.1	0.1	0.2	0.0	0.0	0.0	1.9	16.1
19-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.1	1.9	7.7	1.9	0.4	0.6	0.5	0.4	0.3	0.3	0.2	0.5	0.4	0.1	0.0	0.0	0.0	0.0	0.7	7.7
20-Jun	0.0	0.0	Z	0.0	0.1	3.3	2.7	1.2	5.5	1.9	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	5.5
21-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.7	1.7	1.9	0.8	0.3	5.2	0.7	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.5	5.2
22-Jun	0.1	0.0	0.0	0.0	Z	0.2	0.2	0.1	0.6	5.9	5.4	3.0	3.6	1.8	0.4	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	1.0	5.9
23-Jun	0.1	0.1	0.1	0.0	0.1	Z	0.2	0.2	0.2	0.1	0.2	0.4	0.4	0.3	0.2	0.5	0.1	0.3	0.5	0.3	0.1	0.1	0.0	0.0	0.2	0.5
24-Jun	Z	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2
25-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.2	0.0	0.1	0.2	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.3
26-Jun	0.0	0.0	Z	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	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.3
27-Jun	0.1	0.0	0.0	Z	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	0.2	0.0	0.1	0.1	0.1	0.2	0.1	0.2
28-Jun	0.1	0.1	0.2	0.2	0.3	Z	2.0	5.3	3.0	3.4	1.0	0.4	0.2	0.2	0.1	0.2	0.2	0.2	0.4	0.3	0.1	0.2	0.3	1.2	0.8	5.3
29-Jun	2.3	2.6	1.9	1.1	1.8	Z	4.8	2.1	2.3	4.6	5.3	2.1	0.6	0.2	0.2	0.6	0.1	0.2	0.2	0.4	0.2	0.2	0.2	0.3	1.5	5.3
30-Jun	Z	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.3	5.9	15.6	1.6	0.8	0.6	0.8	0.6	0.1	0.4	0.5	0.3	0.3	1.3	15.6
	0.9	0.5	0.4	0.3	2.4	4.4	2.8	2.8	2.1	1.0	1.4	1.2	1.4	1.7	1.2	1.0	0.7	0.9	1.3	1.8	0.8	1.1	1.8	1.1	Diurnal Average	
	13.3	5.7	2.9	2.8	54.1	97.7	58.9	57.7	25.4	5.9	14.3	16.1	12.5	15.6	13.1	13.5	7.7	13.2	24.4	42.6	19.8	31.8	46.9	24.9	Diurnal Maximum	

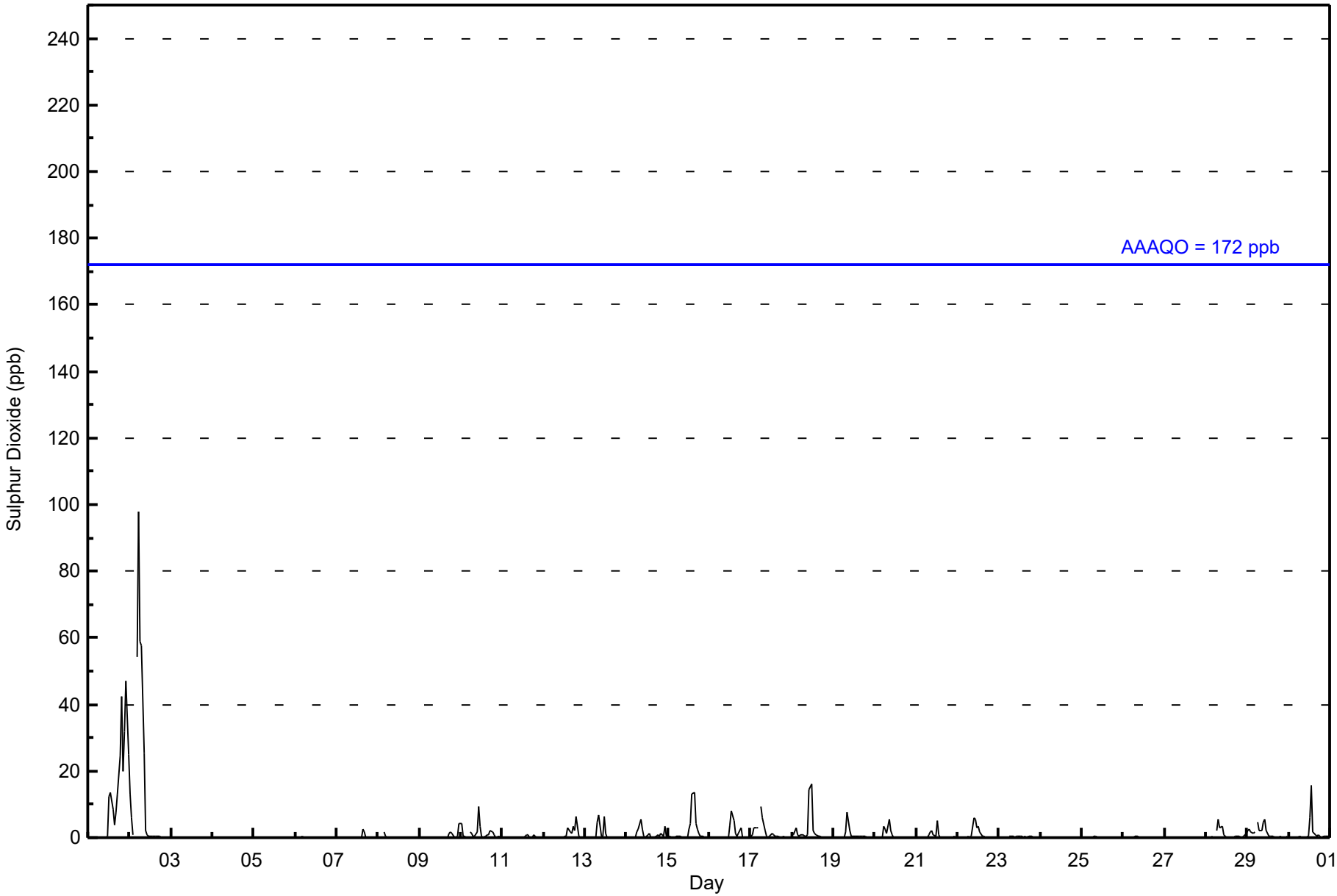
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Mannix - June 2026



Sulphur Dioxide (SO_2) - ppb

Mannix - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	666	97.08	97.08
11 - 20	10	1.46	98.54
21 - 60	9	1.31	99.85
61 - 110	1	0.15	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

Mannix - June 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	79	79	16	15	30	31	53	89	23	27	14	29	37	30	17	73	642
11 - 20	1	5	0	0	1	0	0	0	0	0	0	0	1	0	2	0	10
21 - 60	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
61 - 110	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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	80	94	16	15	31	31	53	89	23	27	14	29	38	30	19	73	662

Total Number of Valid Hours: 662

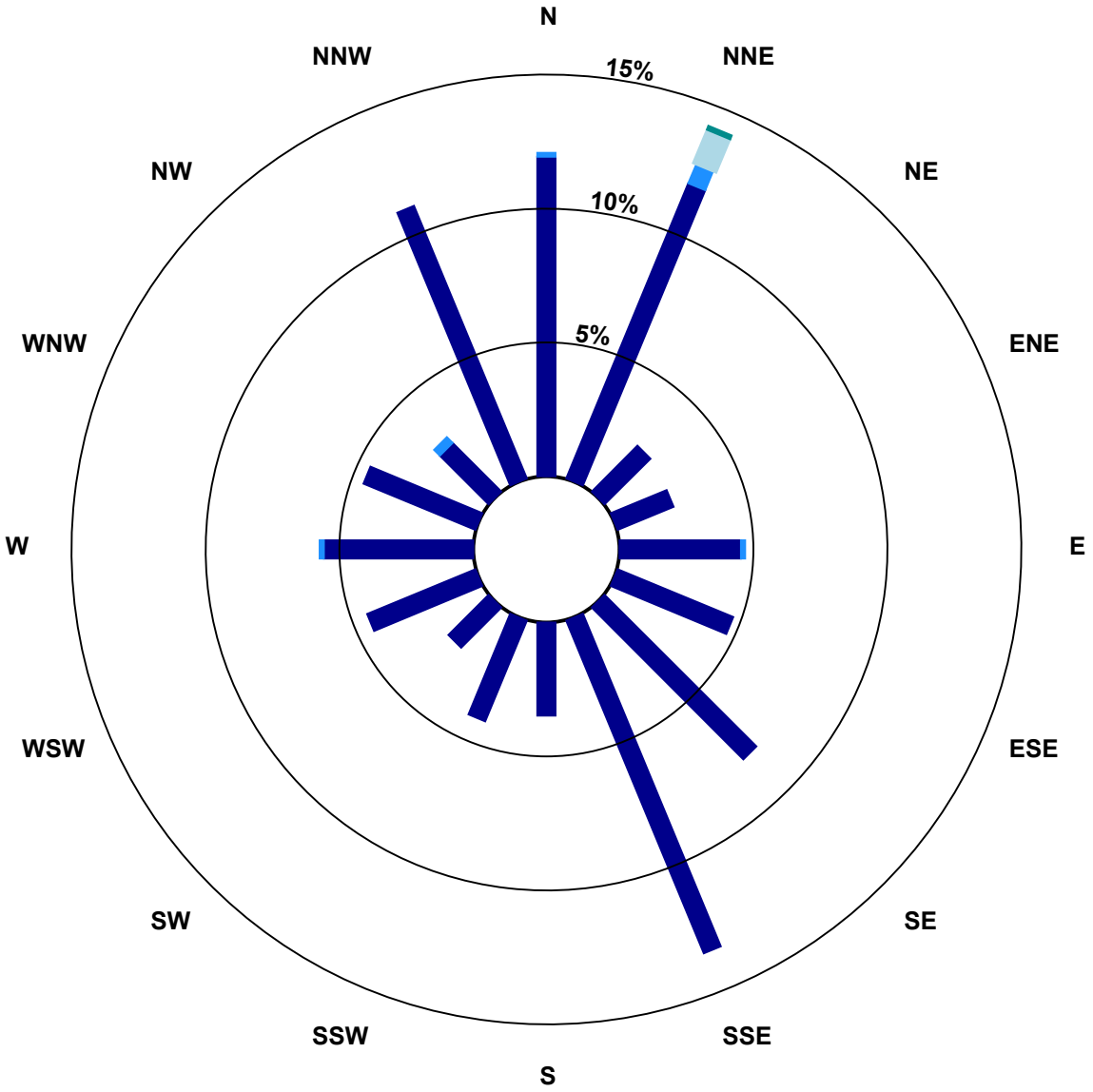
Total Number of Hours: 720

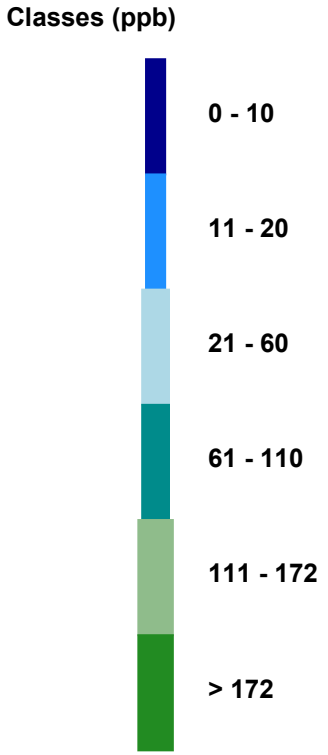
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Mannix





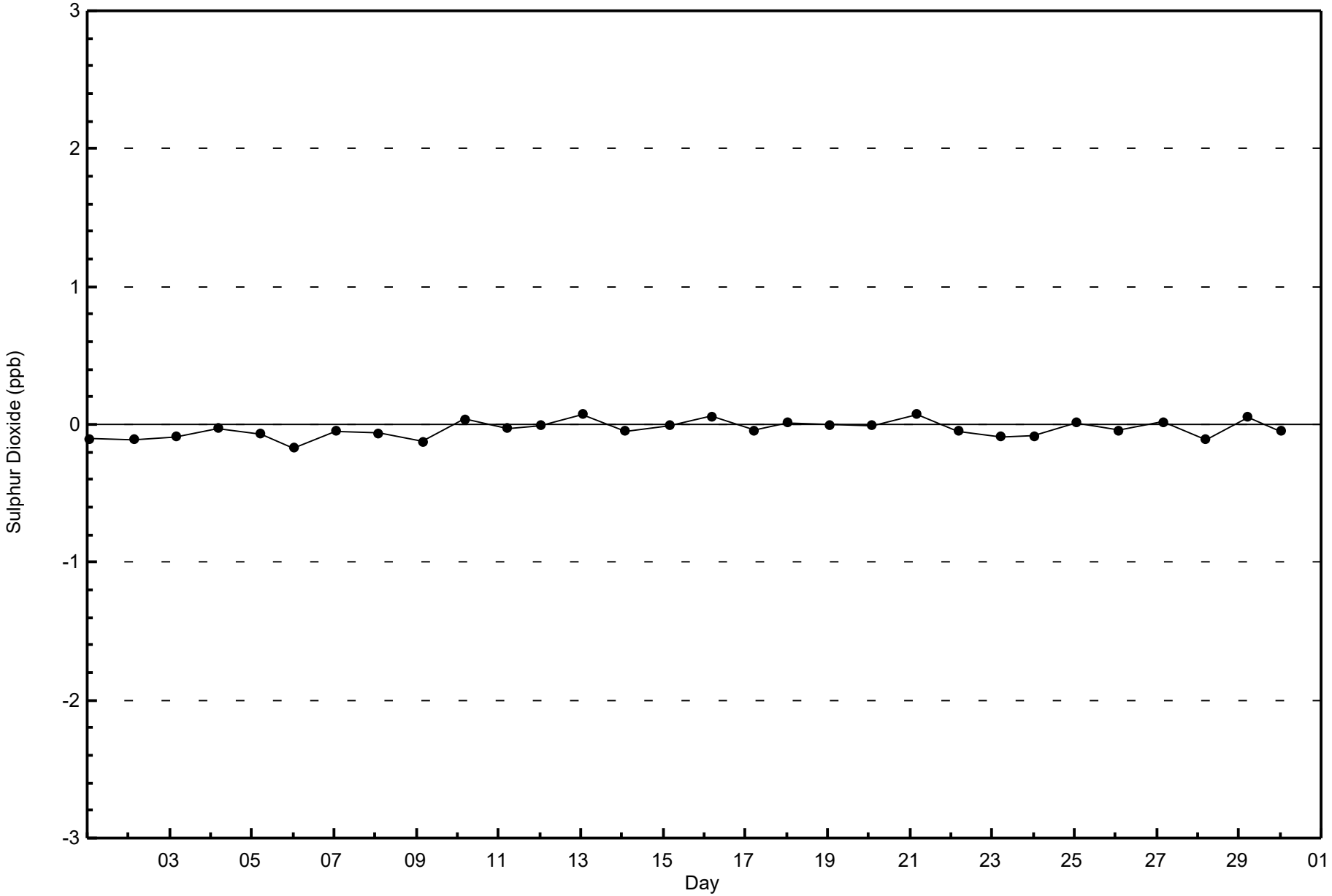
Total Number of Valid Hours: 662

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Zero Responses

Sulphur Dioxide (SO_2) - ppb

Mannix - June 2026

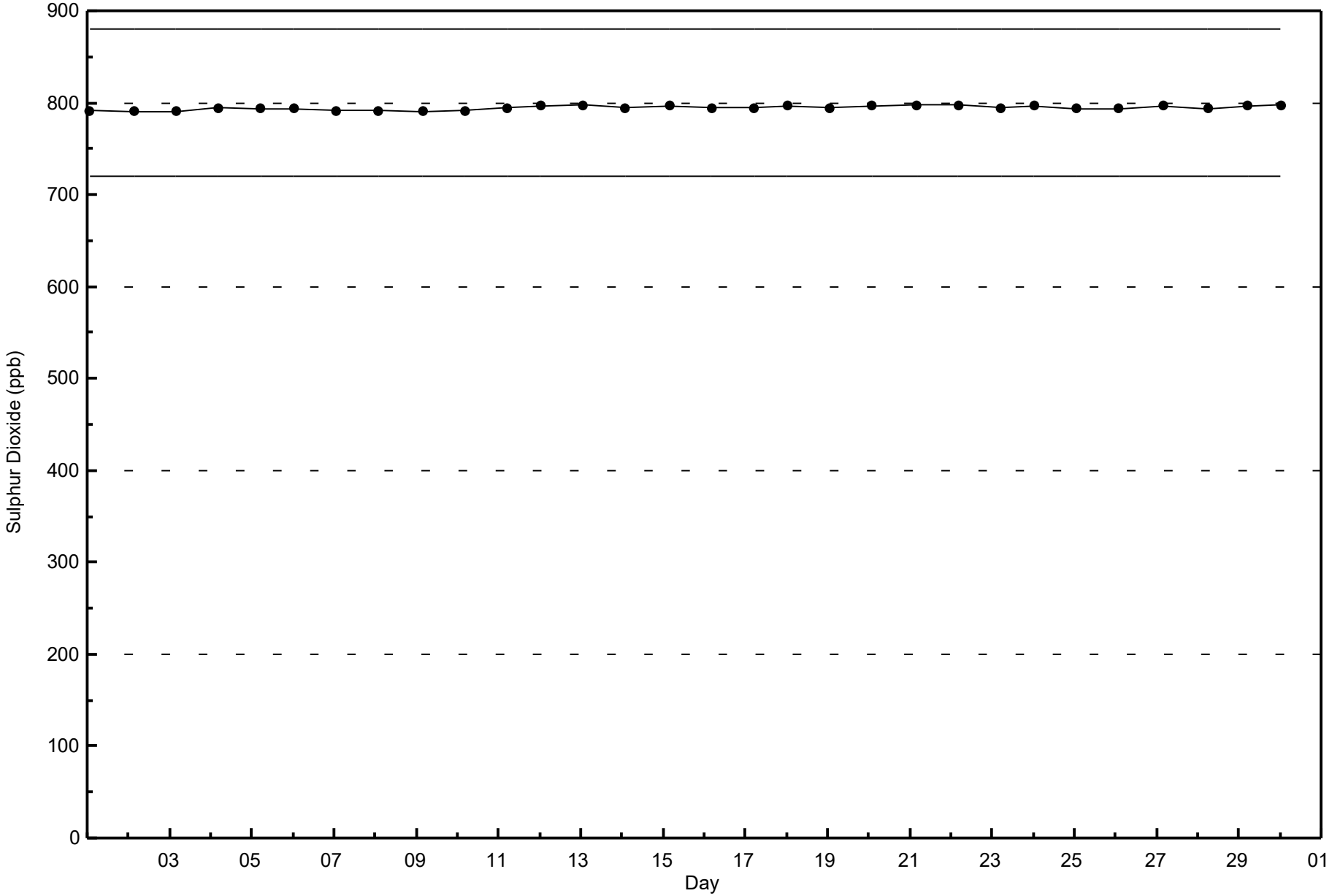


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Span Responses

Sulphur Dioxide (SO_2) - ppb

Mannix - June 2026



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Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Mannix - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 7.8 ppb on Jun 18 03:00 Maximum Daily Average: 2.2 ppb on Jun 28

Minimum Value: 0.0 ppb on Jun 3 12:00 Minimum Daily Average: 0.1 ppb on Jun 4
Maximum Diurnal Average: 1.2 ppb at hour 3 Minimum Diurnal Average: 0.2 ppb at hour 12
Monthly Average: 0.50 ppb Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.4 P_{90} = 1.2 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-Jun	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	2.1	1.8	1.0	0.3	1.2	0.8	1.2	2.6	0.5	0.9	1.4	0.8	0.7	2.6
2-Jun	0.6	0.2	0.1	0.2	Z	3.1	1.5	1.9	0.7	0.2	0.1	0.2	0.2	0.3	0.2	0.3	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.4	3.1
3-Jun	0.7	0.5	0.1	0.5	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	0.2	0.1	0.7
4-Jun	0.1	0.1	0.1	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	0.2	0.1	0.2
5-Jun	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	C	C	C	C	C	0.2	0.1	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.5
6-Jun	0.1	Z	0.1	0.1	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.4
7-Jun	0.2	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.7	1.0	0.2	0.2	0.7	0.5	0.7	0.8	0.4	0.3	1.0
8-Jun	0.7	1.2	2.0	Z	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	2.0
9-Jun	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	0.2	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.3	1.5	1.9	0.2	1.9
10-Jun	2.4	0.3	0.7	0.4	0.3	Z	0.5	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.9	0.5	0.3	0.4	0.2	0.1	0.2	0.3	0.1	0.4	2.4
11-Jun	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	0.2	0.3	0.4	0.1	0.2	0.6	0.1	0.1	0.1	0.1	0.2	0.2	0.6
12-Jun	0.2	Z	0.1	0.3	0.3	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.7	0.4	0.5	0.4	0.7	0.1	0.1	0.4	0.4	0.3	0.7
13-Jun	0.4	0.6	Z	0.6	0.5	0.4	0.3	0.4	0.5	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	0.2	0.2	0.6
14-Jun	0.2	0.2	0.3	Z	0.5	0.3	0.2	0.4	1.2	0.5	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.1	2.7	1.7	0.4	2.7
15-Jun	1.9	6.9	1.1	1.5	Z	2.5	1.9	1.3	0.2	0.0	0.0	0.0	0.3	0.2	0.2	0.5	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.0	0.9	6.9
16-Jun	0.1	0.1	0.1	0.2	0.2	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.8	0.8	0.3	0.3	0.2	0.3	0.3	0.1	0.0	0.1	0.1	0.7	0.2	0.8
17-Jun	Z	1.8	1.1	1.4	4.0	0.6	2.7	1.2	0.3	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.2	0.2	0.4	0.7	4.0
18-Jun	0.8	Z	7.8	0.7	0.7	1.7	3.3	0.7	0.3	0.5	0.4	0.3	0.2	0.4	0.2	0.1	0.2	0.1	0.1	0.1	0.5	0.7	0.5	0.4	0.9	7.8
19-Jun	0.4	0.4	Z	0.6	0.6	0.6	1.2	1.8	2.6	0.4	0.1	0.1	0.1	0.4	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.5	2.6
20-Jun	0.3	1.2	2.2	Z	2.2	6.4	2.4	0.4	0.9	0.4	0.2	0.1	0.5	1.2	0.0	0.1	0.2	0.1	0.2	0.6	0.3	1.6	1.0	1.0	1.0	6.4
21-Jun	0.6	3.1	1.6	1.2	1.0	Z	0.8	2.3	0.9	1.2	0.4	0.4	0.6	0.1	0.2	0.1	0.1	0.0	0.2	0.3	0.4	0.3	0.9	0.8	0.8	3.1
22-Jun	2.2	0.9	1.5	0.4	0.8	Z	1.0	0.4	0.6	3.0	1.2	0.6	0.6	1.5	0.3	0.2	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.7	3.0
23-Jun	Z	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.5	0.3	0.2	0.1	0.1	0.2	0.2	0.3	0.2	0.5
24-Jun	0.2	Z	0.4	0.3	0.3	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4
25-Jun	0.1	0.2	Z	0.2	0.3	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
26-Jun	0.2	0.2	0.3	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.3
27-Jun	0.2	0.2	0.2	0.2	Z	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	2.0	0.6	1.5	0.3	2.0
28-Jun	1.8	5.6	7.6	2.5	2.7	2.2	Z	6.5	1.9	1.3	0.6	0.3	0.5	0.5	0.6	0.6	0.4	0.5	1.2	1.6	0.2	0.7	3.9	6.8	2.2	7.6
29-Jun	Z	5.5	2.4	5.1	4.8	5.0	6.7	1.5	0.9	1.2	1.0	0.4	0.1	0.3	0.3	0.3	0.3	0.4	0.6	2.3	0.3	0.1	0.2	0.4	1.7	6.7
30-Jun	0.2	Z	0.2	0.4	0.7	0.7	0.5	0.3	0.2	0.1	0.1	0.1	0.4	0.4	0.3	0.4	0.6	0.4	3.3	0.2	0.2	0.3	0.3	0.3	0.5	3.3
	0.6	1.2	1.2	0.7	0.9	1.0	0.9	0.7	0.4	0.4	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.4	0.4	0.2	0.3	0.6	0.7	Diurnal Average	
	2.4	6.9	7.8	5.1	4.8	6.4	6.7	6.5	2.6	3.0	1.2	0.6	2.1	1.8	1.0	0.9	1.2	0.8	3.3	2.6	0.5	2.0	3.9	6.8	Diurnal Maximum	

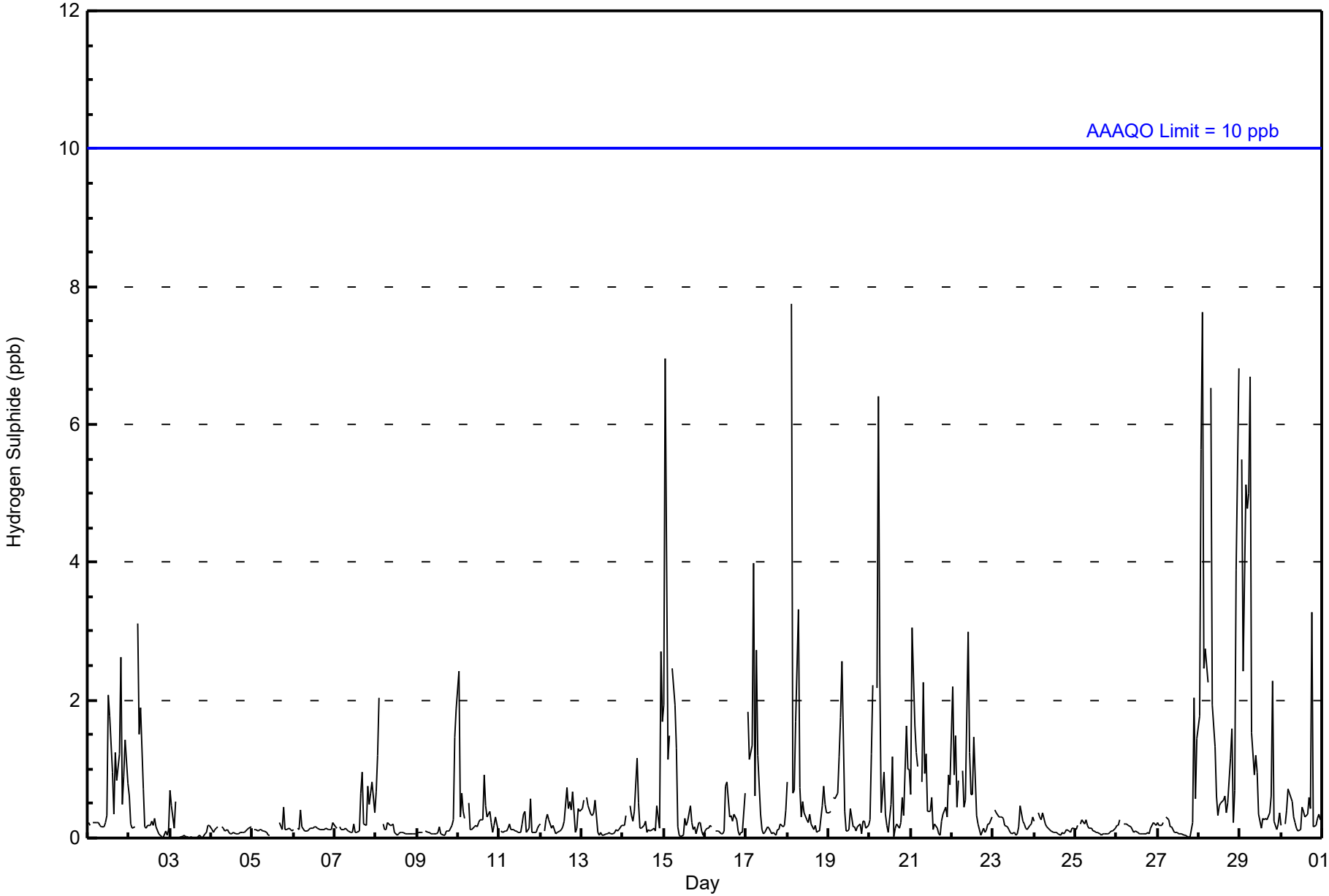
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Mannix - June 2026



Hydrogen Sulphide (H_2S) - ppb

Mannix - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	661	96.50	96.50
3 - 4	12	1.75	98.25
5 - 7	10	1.46	99.71
8 - 11	2	0.29	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

Mannix - June 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	71	85	15	13	29	30	51	89	19	26	15	31	38	30	20	70	632
3 - 4	3	4	1	1	2	0	0	0	0	0	0	0	0	0	0	1	12
5 - 7	3	5	0	0	0	1	0	0	0	0	0	0	0	0	0	1	10
8 - 11	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
> 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	78	95	16	14	31	31	51	89	19	26	15	31	38	30	20	72	656

Total Number of Valid Hours: 656

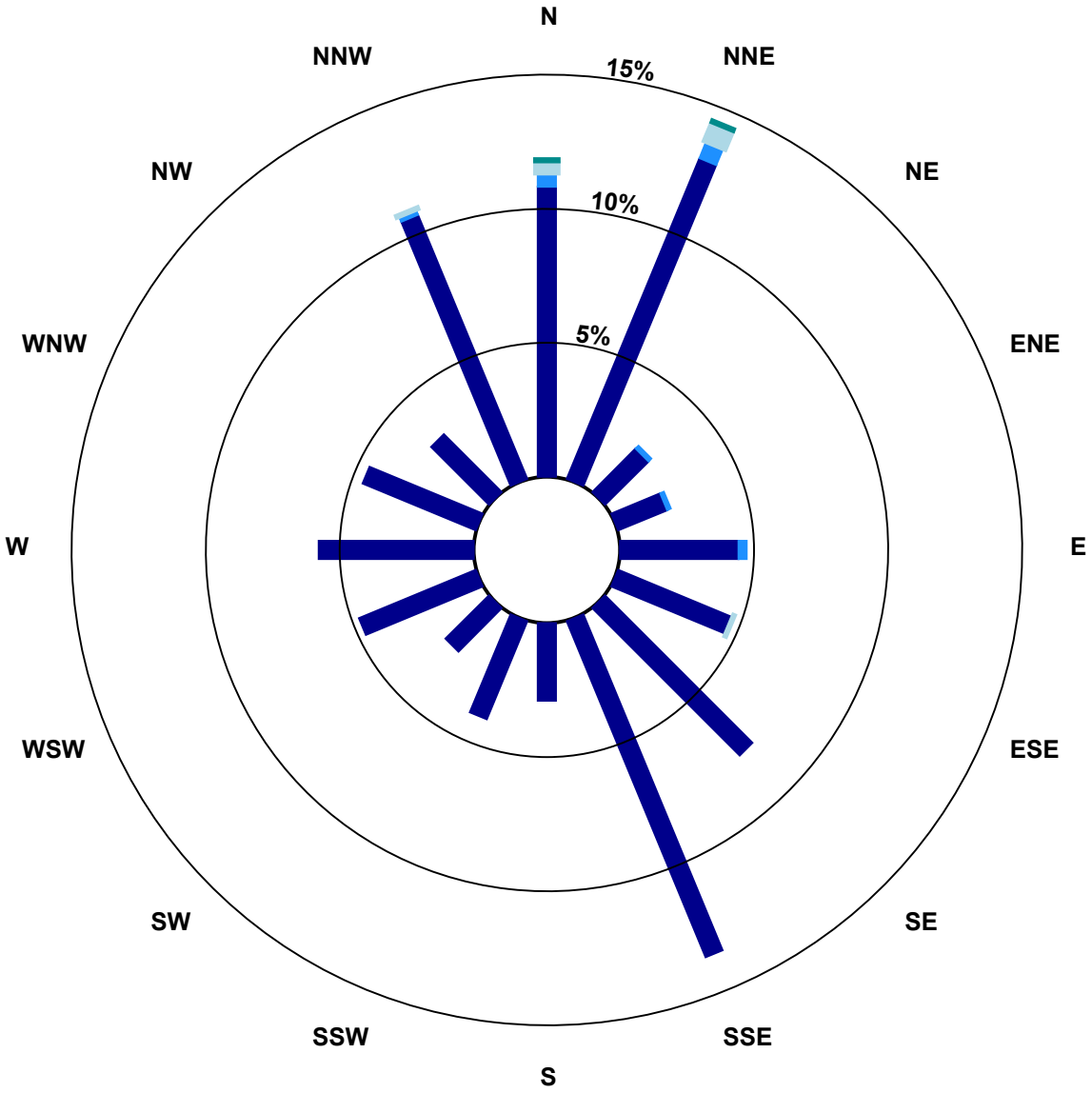
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H_2S) - ppb

Mannix



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

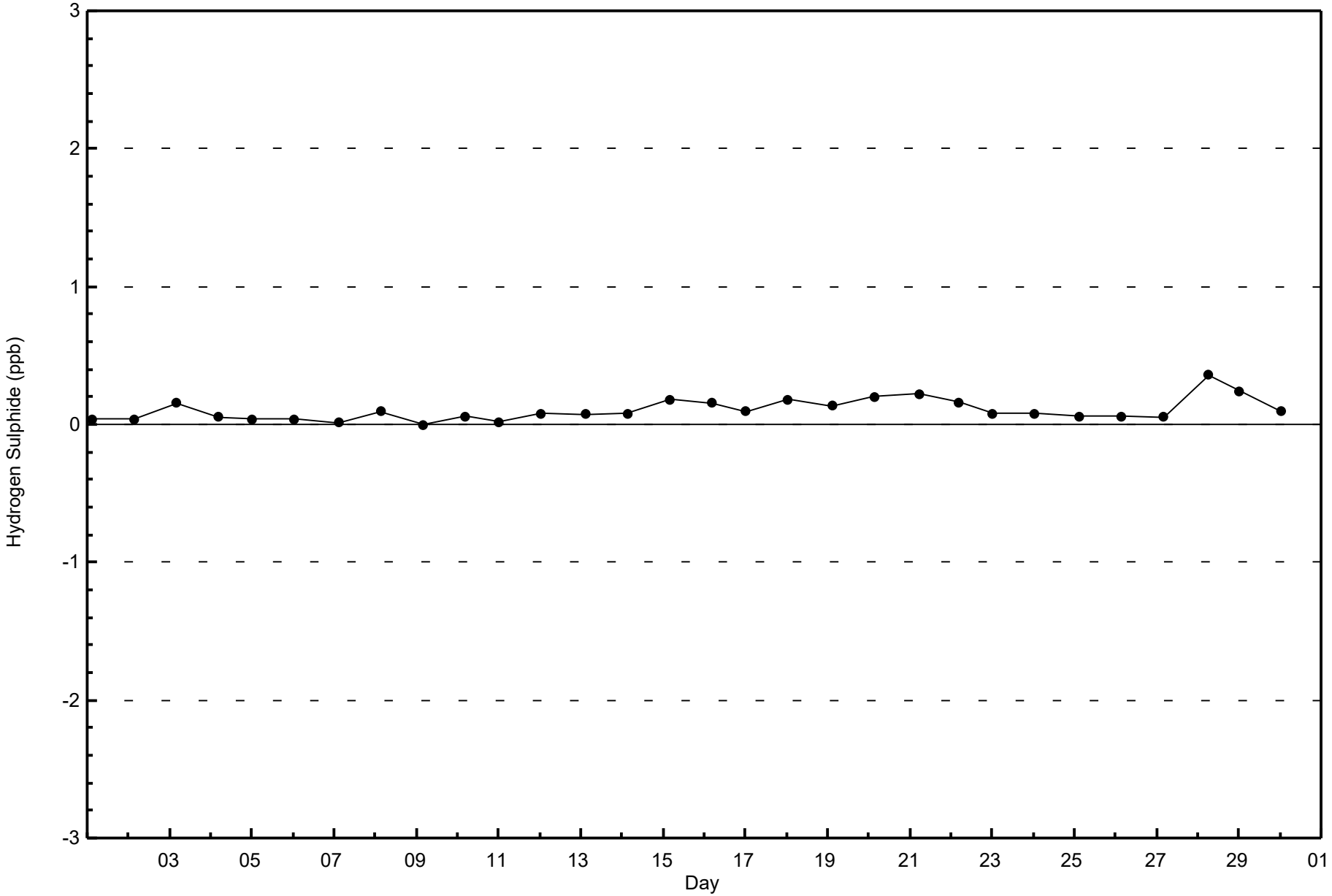
Total Number of Valid Hours: 656

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Mannix - June 2026

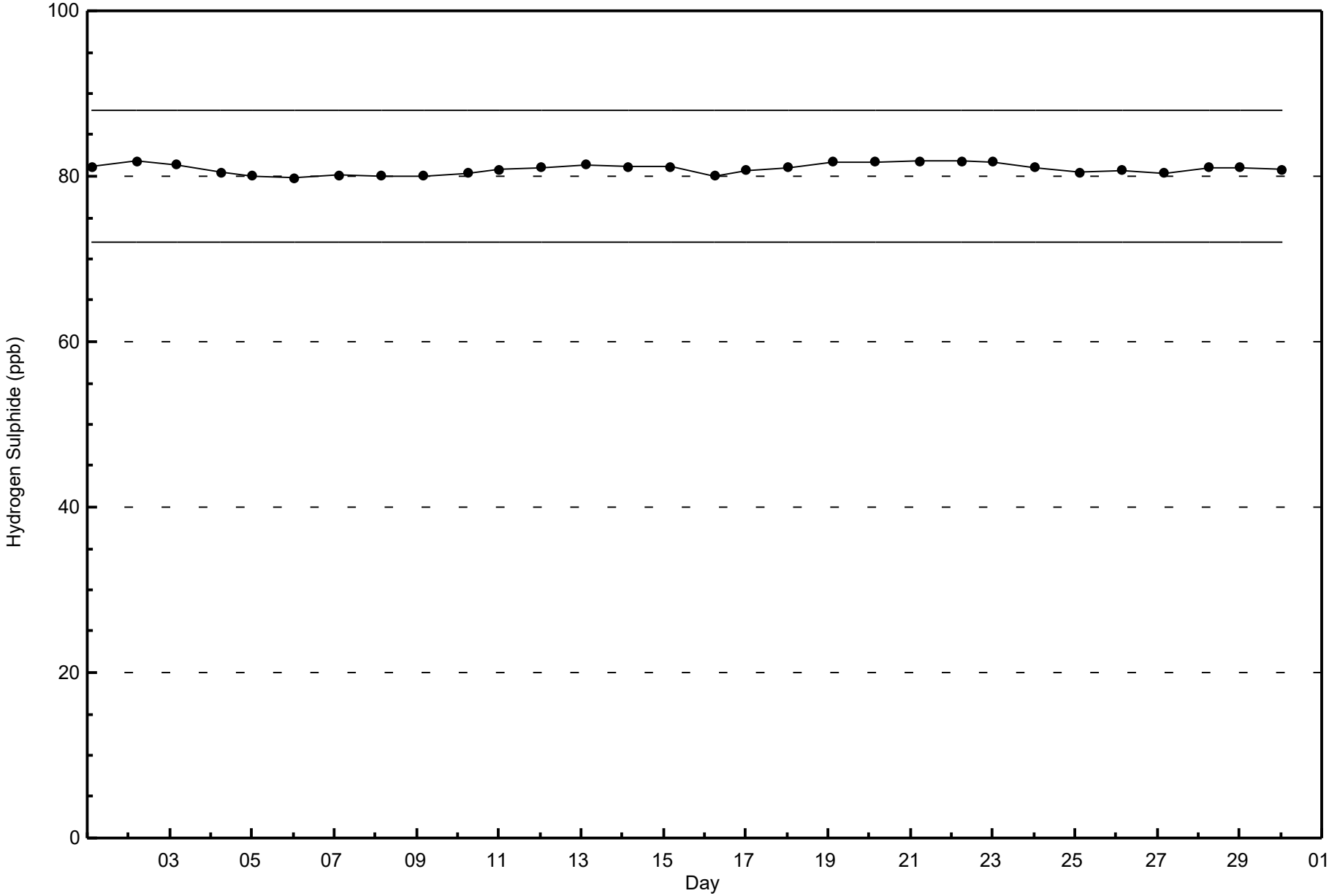


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Mannix - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Mannix - June 2026

Maximum Value: 2.9 ppm on Jun 29 05:00

Maximum Daily Average: 2.3 ppm on Jun 28

Minimum Value: 1.9 ppm on Jun 6 11:00

Minimum Daily Average: 2.0 ppm on Jun 6

Maximum Diurnal Average: 2.2 ppm at hour 5

Minimum Diurnal Average: 2.0 ppm at hour 18

Monthly Average: 2.05 ppm

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

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-Jun	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-Jun	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	2.1	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.1
3-Jun	2.1	2.1	2.0	Z	2.1	2.0	2.0	2.0	2.0	2.0	2.0	C	C	C	C	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.0	2.1
4-Jun	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
5-Jun	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	1.9	1.9	2.0	2.0	1.9	1.9	2.0	2.0
6-Jun	Z	2.0	2.0	2.0	2.1	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	2.0	2.0	2.0	2.0	2.0	2.0	2.1
7-Jun	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.1	2.0	2.2
8-Jun	2.0	2.0	Z	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	1.9	2.0	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.1
9-Jun	1.9	2.0	2.0	Z	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.4	2.2	2.0	2.0	2.4
10-Jun	2.1	2.1	2.1	2.1	Z	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	2.0	2.0	2.1
11-Jun	2.0	2.0	2.0	2.0	2.0	Z	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.2	2.3	2.0	2.3
12-Jun	Z	2.2	2.0	2.2	2.4	2.1	2.0	2.1	2.1	2.0	2.0	2.0	1.9	2.0	2.0	2.0	1.9	2.0	2.0	2.0	1.9	2.1	2.7	2.4	2.1	2.7
13-Jun	2.2	Z	2.1	2.1	2.1	2.1	2.0	2.1	2.3	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.3
14-Jun	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.1	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.0	2.3
15-Jun	2.3	2.4	2.2	Z	2.4	2.4	2.4	2.3	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.2	2.1	2.0	2.0	2.1	2.4
16-Jun	2.1	2.0	2.0	2.0	Z	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1
17-Jun	2.1	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.2	2.0	2.2
18-Jun	Z	2.2	2.3	2.1	2.3	2.2	2.2	2.2	2.0	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.3	2.1	2.1	2.1	2.3
19-Jun	2.1	Z	2.1	2.1	2.1	2.1	2.5	2.6	2.2	2.1	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.6
20-Jun	2.1	2.1	Z	2.2	2.2	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.3
21-Jun	2.0	2.2	2.2	2.3	Z	2.2	2.2	2.1	2.1	2.0	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.1	2.1	2.1	2.1	2.1	2.1	2.3
22-Jun	2.3	2.1	2.1	2.1	Z	2.7	2.1	2.1	2.1	2.3	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.0	2.1	2.7
23-Jun	2.1	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	2.0	2.1	2.1	2.0	2.1
24-Jun	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	1.9	1.9	1.9	2.0	2.0	1.9	2.0	1.9	2.0	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.1
25-Jun	2.0	Z	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.1
26-Jun	2.0	2.0	Z	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.1	2.1	2.0	2.3
27-Jun	2.1	2.0	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.2	2.1	2.1	2.0	2.2
28-Jun	2.2	2.5	2.4	2.5	2.6	Z	2.9	2.5	2.1	2.4	2.2	2.1	2.1	2.4	2.4	2.5	2.1	2.1	2.1	2.4	2.1	2.2	2.6	2.3	2.3	2.9
29-Jun	2.5	2.4	2.3	2.3	2.9	Z	2.7	2.4	2.5	2.4	2.3	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.0	2.1	2.3	2.2	2.9
30-Jun	Z	2.1	2.1	2.2	2.2	2.3	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.2	2.1	2.0	2.1	2.1	2.1	2.1	2.3
	2.1	2.1	2.1	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	2.1	2.1	2.1	Diurnal Average	
	2.5	2.5	2.4	2.5	2.9	2.7	2.9	2.6	2.5	2.4	2.3	2.1	2.1	2.4	2.4	2.5	2.1	2.1	2.2	2.4	2.2	2.4	2.7	2.4	Diurnal Maximum	

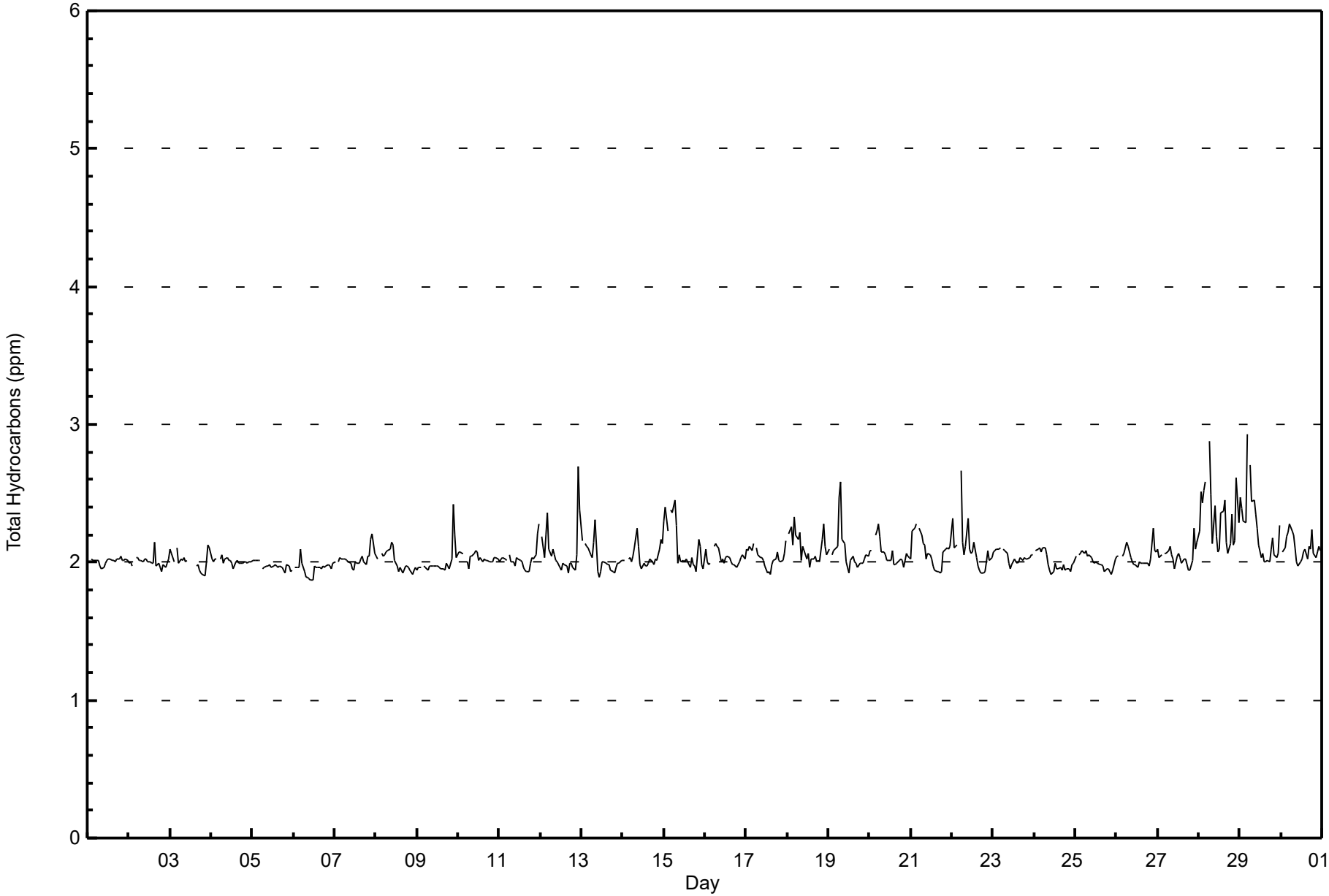
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Mannix - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	448	65.31	65.31
2.1 - 3.0	238	34.69	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

Mannix - June 2026

Concentration Ranges (ppm)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 2.0	49	64	10	1	10	24	32	63	16	25	12	23	33	12	7	46	427
2.1 - 3.0	31	30	6	14	21	7	21	26	7	2	2	6	5	18	12	27	235
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	80	94	16	15	31	31	53	89	23	27	14	29	38	30	19	73	662

Total Number of Valid Hours: 662

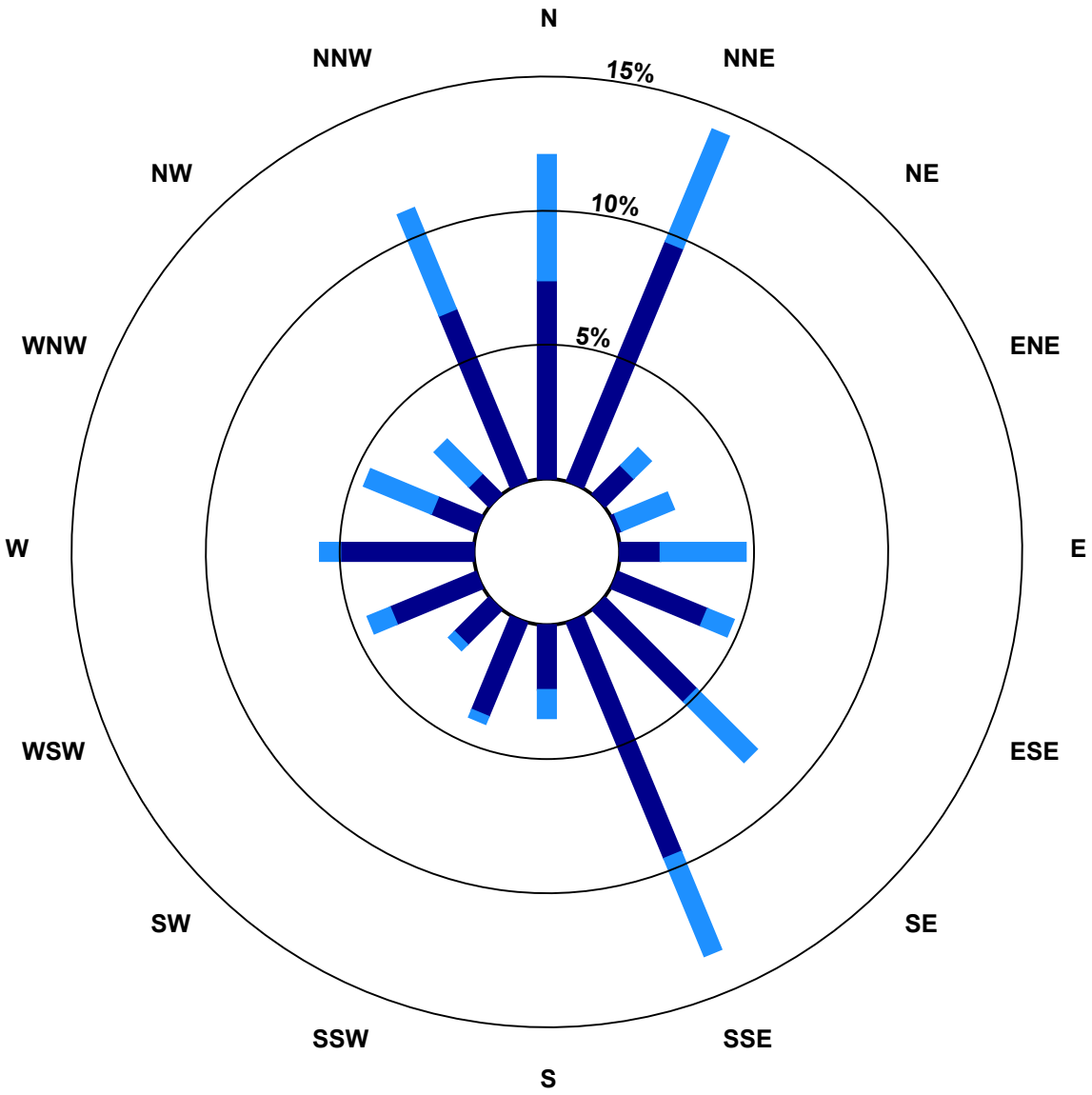
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Mannix



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

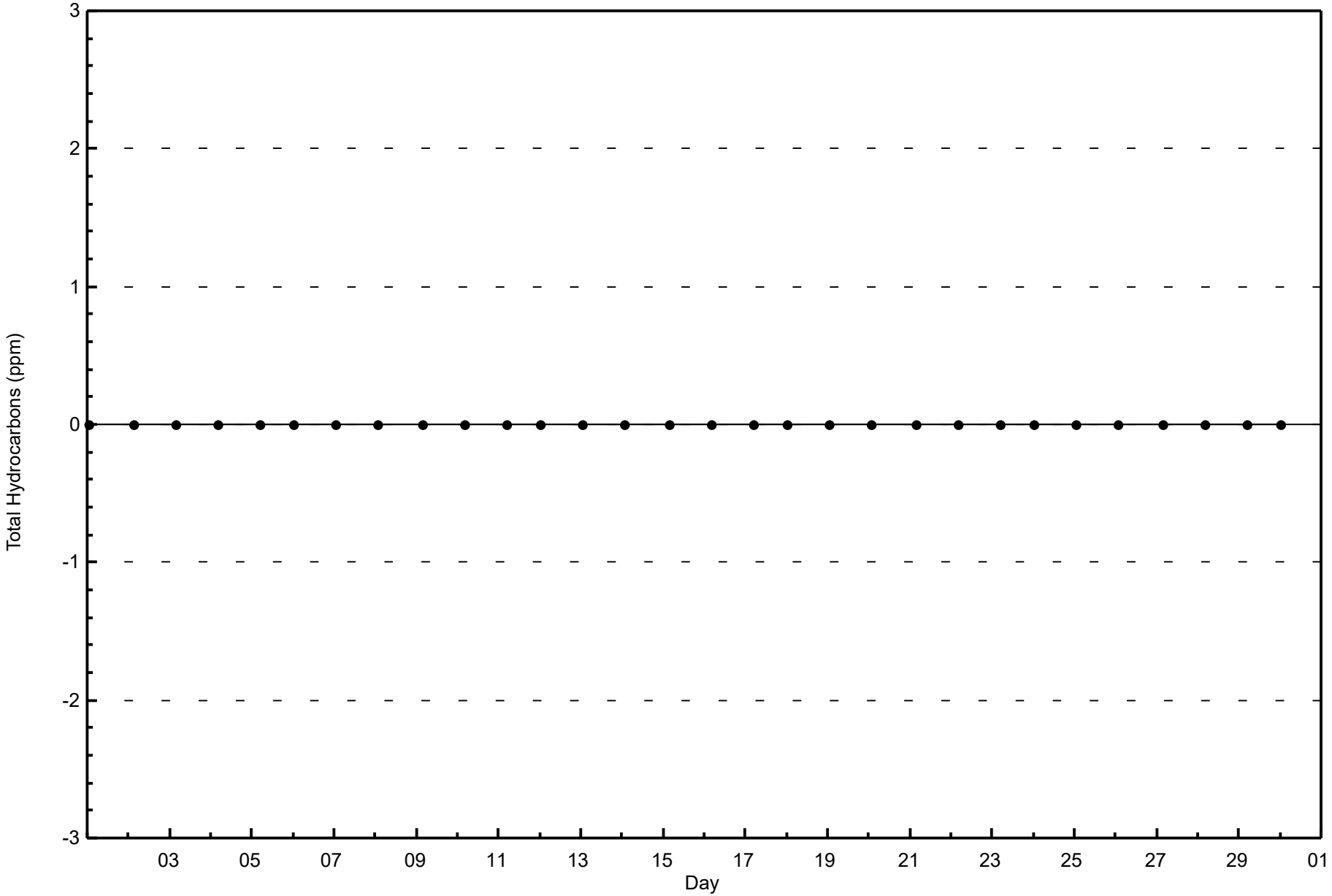
Total Number of Valid Hours: 662

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Mannix - June 2026

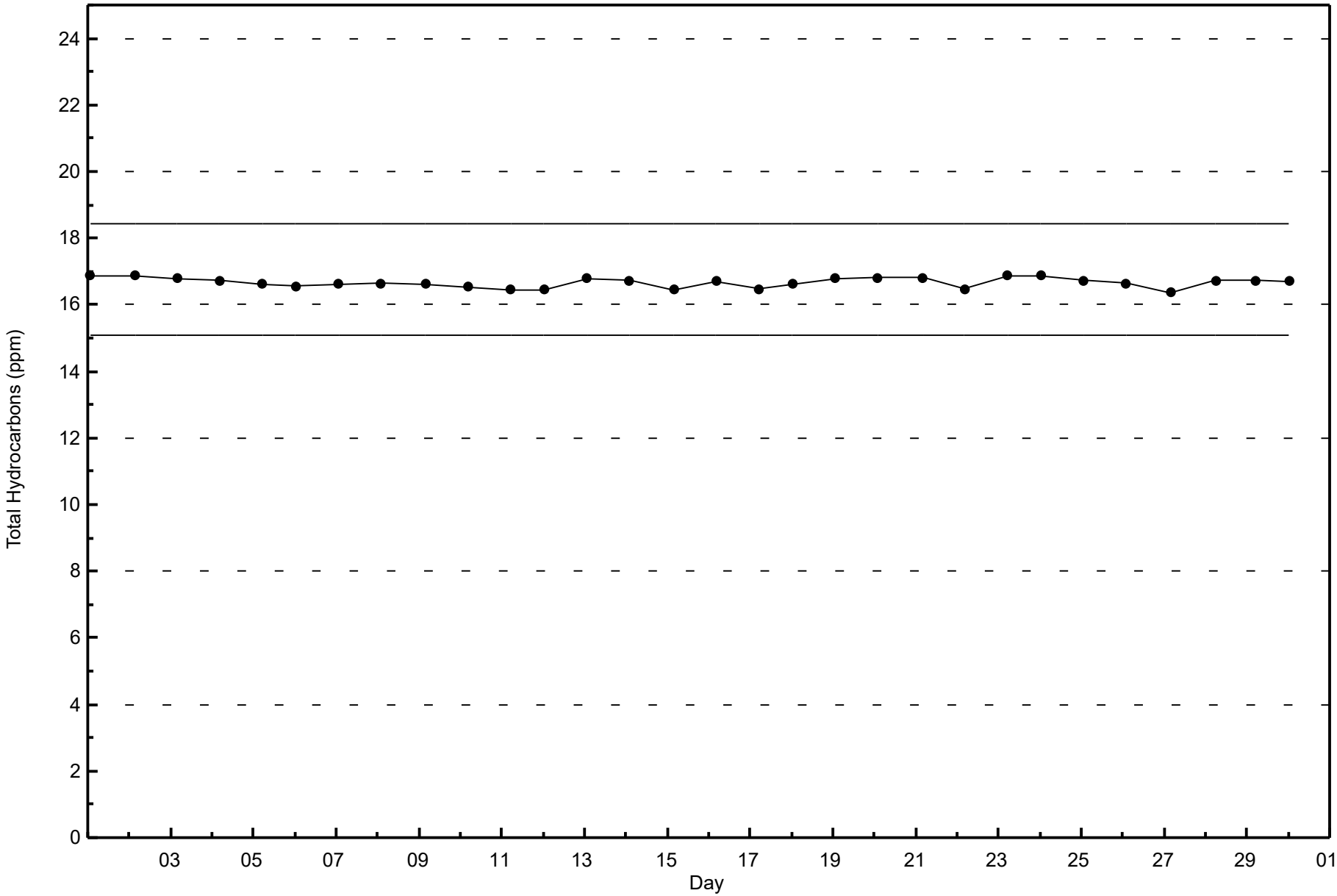


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Mannix - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Mannix - June 2026

Maximum Value: 0.265 ppm on Jun 28 07:00

Maximum Daily Average: 0.088 ppm on Jun 28

Minimum Value: 0.000 ppm on Jun 8 22:00

Minimum Daily Average: 0.001 ppm on Jun 6

Maximum Diurnal Average: 0.022 ppm at hour 1

Minimum Diurnal Average: 0.007 ppm at hour 12

Monthly Average: 0.013 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-Jun	0.000	Z	0.003	0.005	0.002	0.002	0.001	0.000	0.001	0.001	0.001	0.001	0.011	0.013	0.002	0.001	0.004	0.012	0.014	0.020	0.012	0.012	0.024	0.017	0.007	0.024
2-Jun	0.012	0.028	0.041	Z	0.013	0.005	0.004	0.001	0.005	0.019	0.015	0.007	0.009	0.003	0.005	0.163	0.011	0.011	0.016	0.003	0.001	0.001	0.000	0.010	0.017	0.163
3-Jun	0.047	0.032	0.005	Z	0.058	0.009	0.007	0.001	0.002	0.001	0.002	C	C	C	C	0.001	0.000	0.000	0.001	0.000	0.000	0.004	0.001	0.001	0.009	0.058
4-Jun	0.001	0.002	0.002	0.001	Z	0.001	0.026	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.000	0.001	0.001	0.003	0.001	0.002	0.026
5-Jun	0.000	0.001	0.001	0.000	0.001	Z	0.000	0.002	0.002	0.001	0.002	0.000	0.002	0.020	0.001	0.001	0.003	0.003	0.004	0.000	0.001	0.001	0.001	0.001	0.002	0.020
6-Jun	Z	0.001	0.001	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.001	0.002	0.001	0.001	0.003	0.001	0.003
7-Jun	0.000	Z	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.009	0.008	0.003	0.006	0.011	0.028	0.011	0.001	0.056	0.025	0.031	0.044	0.056	0.013	0.056
8-Jun	0.009	0.020	Z	0.031	0.004	0.002	0.002	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.000	0.003	0.031
9-Jun	0.000	0.000	0.000	Z	0.001	0.001	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.000	0.001	0.011	0.007	0.001	0.011
10-Jun	0.040	0.031	0.012	0.056	Z	0.016	0.003	0.007	0.014	0.003	0.001	0.000	0.021	0.043	0.010	0.029	0.017	0.022	0.002	0.002	0.001	0.004	0.003	0.001	0.015	0.056
11-Jun	0.002	0.001	0.006	0.000	0.001	Z	0.001	0.000	0.000	0.000	0.003	0.008	0.003	0.007	0.001	0.002	0.001	0.000	0.002	0.006	0.004	0.015	0.000	0.000	0.003	0.015
12-Jun	Z	0.000	0.000	0.001	0.001	0.002	0.002	0.012	0.009	0.000	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.007	0.000	0.000	0.082	0.003	0.006	0.082
13-Jun	0.006	Z	0.002	0.002	0.002	0.001	0.001	0.003	0.032	0.000	0.000	0.001	0.000	0.001	0.012	0.012	0.002	0.000	0.000	0.000	0.002	0.001	0.000	0.001	0.003	0.032
14-Jun	0.001	0.000	Z	0.003	0.006	0.001	0.002	0.004	0.009	0.004	0.002	0.019	0.004	0.010	0.001	0.003	0.001	0.001	0.005	0.004	0.002	0.001	0.029	0.022	0.006	0.029
15-Jun	0.046	0.132	0.032	Z	0.097	0.053	0.038	0.014	0.001	0.041	0.003	0.001	0.001	0.003	0.003	0.002	0.003	0.002	0.010	0.006	0.000	0.001	0.001	0.011	0.022	0.132
16-Jun	0.001	0.001	0.000	0.000	Z	0.001	0.003	0.002	0.004	0.000	0.000	0.001	0.002	0.002	0.001	0.023	0.012	0.010	0.005	0.020	0.020	0.031	0.043	0.006	0.008	0.043
17-Jun	0.046	0.013	0.004	0.004	0.038	Z	0.051	0.005	0.009	0.006	0.001	0.005	0.005	0.009	0.004	0.002	0.002	0.000	0.001	0.014	0.015	0.001	0.001	0.000	0.010	0.051
18-Jun	Z	0.041	0.049	0.001	0.003	0.004	0.017	0.020	0.002	0.044	0.005	0.004	0.011	0.016	0.011	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.000	0.001	0.010	0.049
19-Jun	0.001	Z	0.001	0.000	0.001	0.001	0.002	0.009	0.032	0.013	0.001	0.001	0.002	0.004	0.001	0.008	0.005	0.007	0.010	0.013	0.009	0.019	0.022	0.009	0.007	0.032
20-Jun	0.028	0.004	Z	0.025	0.031	0.037	0.041	0.005	0.008	0.002	0.005	0.004	0.013	0.092	0.002	0.011	0.006	0.013	0.023	0.030	0.018	0.053	0.019	0.036	0.022	0.092
21-Jun	0.019	0.143	0.058	0.006	Z	0.011	0.000	0.011	0.005	0.002	0.001	0.002	0.013	0.005	0.008	0.008	0.001	0.003	0.018	0.040	0.072	0.078	0.006	0.008	0.022	0.143
22-Jun	0.145	0.003	0.037	0.062	Z	0.155	0.027	0.002	0.012	0.145	0.029	0.011	0.006	0.087	0.016	0.014	0.007	0.000	0.003	0.000	0.003	0.001	0.000	0.001	0.033	0.155
23-Jun	0.002	0.001	0.001	0.001	0.001	Z	0.003	0.001	0.002	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.003	0.002	0.002	0.000	0.001	0.003	0.002	0.002	0.003
24-Jun	Z	0.003	0.003	0.001	0.001	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.003	0.001	0.002	0.012	0.002	0.000	0.001	0.002	0.001	0.002	0.012
25-Jun	0.002	Z	0.004	0.003	0.004	0.002	0.002	0.001	0.003	0.003	0.002	0.003	0.004	0.001	0.001	0.001	0.001	0.003	0.001	0.006	0.001	0.001	0.002	0.003	0.002	0.006
26-Jun	0.002	0.001	Z	0.001	0.001	0.002	0.001	0.001	0.003	0.004	0.006	0.014	0.002	0.006	0.005	0.004	0.003	0.003	0.006	0.005	0.005	0.011	0.002	0.001	0.004	0.014
27-Jun	0.006	0.001	0.001	Z	0.022	0.013	0.008	0.002	0.014	0.009	0.008	0.052	0.045	0.025	0.007	0.006	0.020	0.015	0.007	0.005	0.017	0.041	0.026	0.044	0.017	0.052
28-Jun	0.034	0.015	0.055	0.019	0.005	Z	0.265	0.121	0.031	0.037	0.110	0.047	0.075	0.180	0.157	0.197	0.137	0.063	0.047	0.220	0.023	0.054	0.065	0.073	0.088	0.265
29-Jun	0.113	0.060	0.047	0.082	0.037	Z	0.128	0.054	0.041	0.051	0.033	0.015	0.010	0.017	0.014	0.016	0.018	0.017	0.071	0.056	0.008	0.002	0.003	0.005	0.039	0.128
30-Jun	Z	0.002	0.002	0.016	0.002	0.002	0.002	0.003	0.004	0.005	0.004	0.007	0.009	0.017	0.027	0.011	0.025	0.031	0.057	0.040	0.003	0.001	0.000	0.002	0.012	0.057
	0.022	0.021	0.014	0.013	0.013	0.014	0.021	0.010	0.008	0.013	0.008	0.007	0.009	0.020	0.010	0.018	0.010	0.008	0.011	0.019	0.008	0.012	0.013	0.011	Diurnal Average	
	0.145	0.143	0.058	0.082	0.097	0.155	0.265	0.121	0.041	0.145	0.110	0.052	0.075	0.180	0.157	0.197	0.137	0.063	0.071	0.220	0.072	0.078	0.082	0.073	Diurnal Maximum	

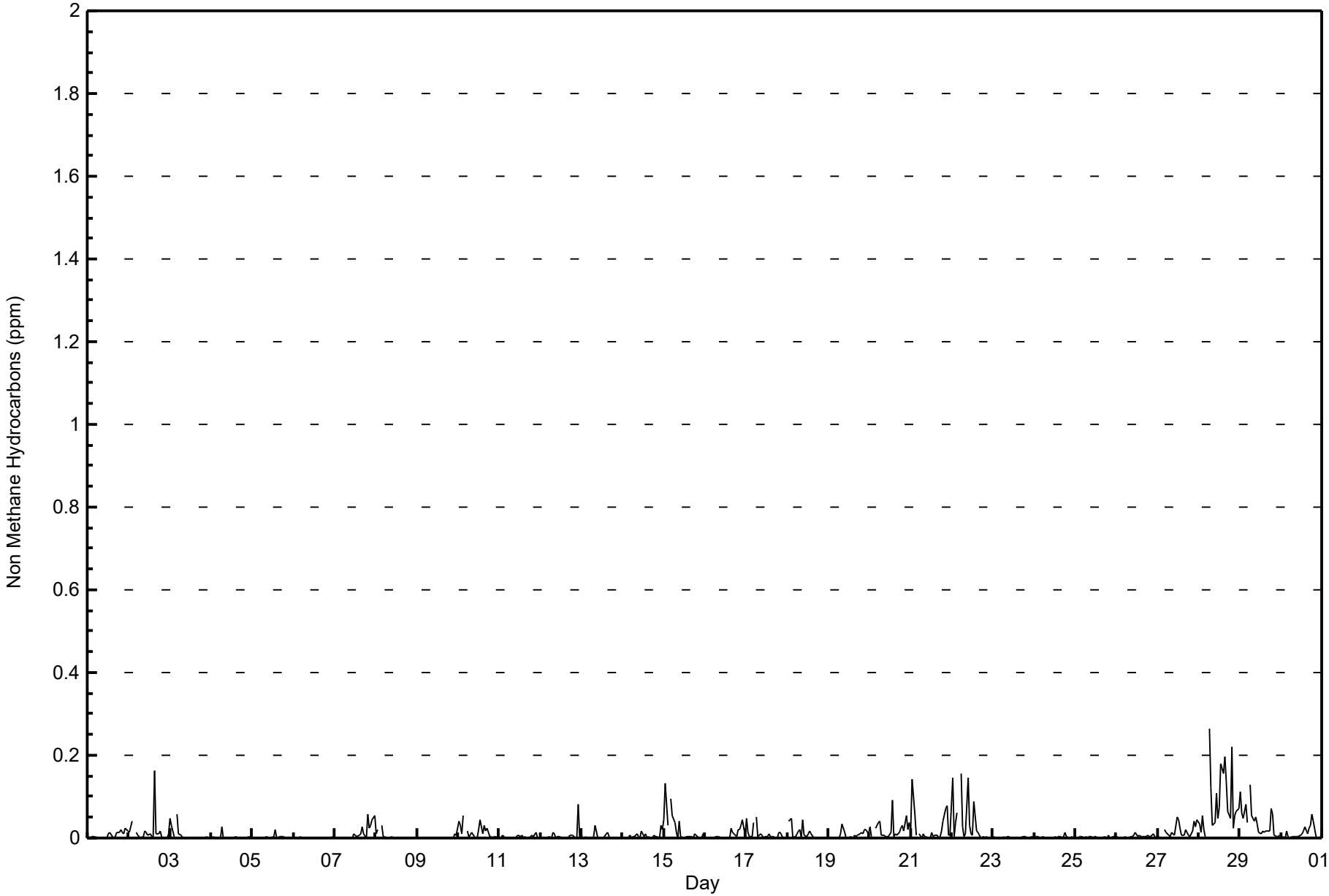
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Mannix - June 2026



Non Methane Hydrocarbons (NMHC) - ppm

Mannix - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	438	63.85	63.85
0.006 - 0.05	211	30.76	94.61
0.06 - 0.1	30	4.37	98.98
> 0.1	7	1.02	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Mannix - June 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	47	15	2	0	3	10	35	83	23	27	12	28	35	27	13	54	414
0.006 - 0.05	28	68	12	4	20	21	18	6	0	0	2	1	3	3	6	19	211
0.06 - 0.1	4	11	2	6	7	0	0	0	0	0	0	0	0	0	0	0	30
> 0.1	1	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	7
Totals	80	94	16	15	31	31	53	89	23	27	14	29	38	30	19	73	662

Total Number of Valid Hours: 662

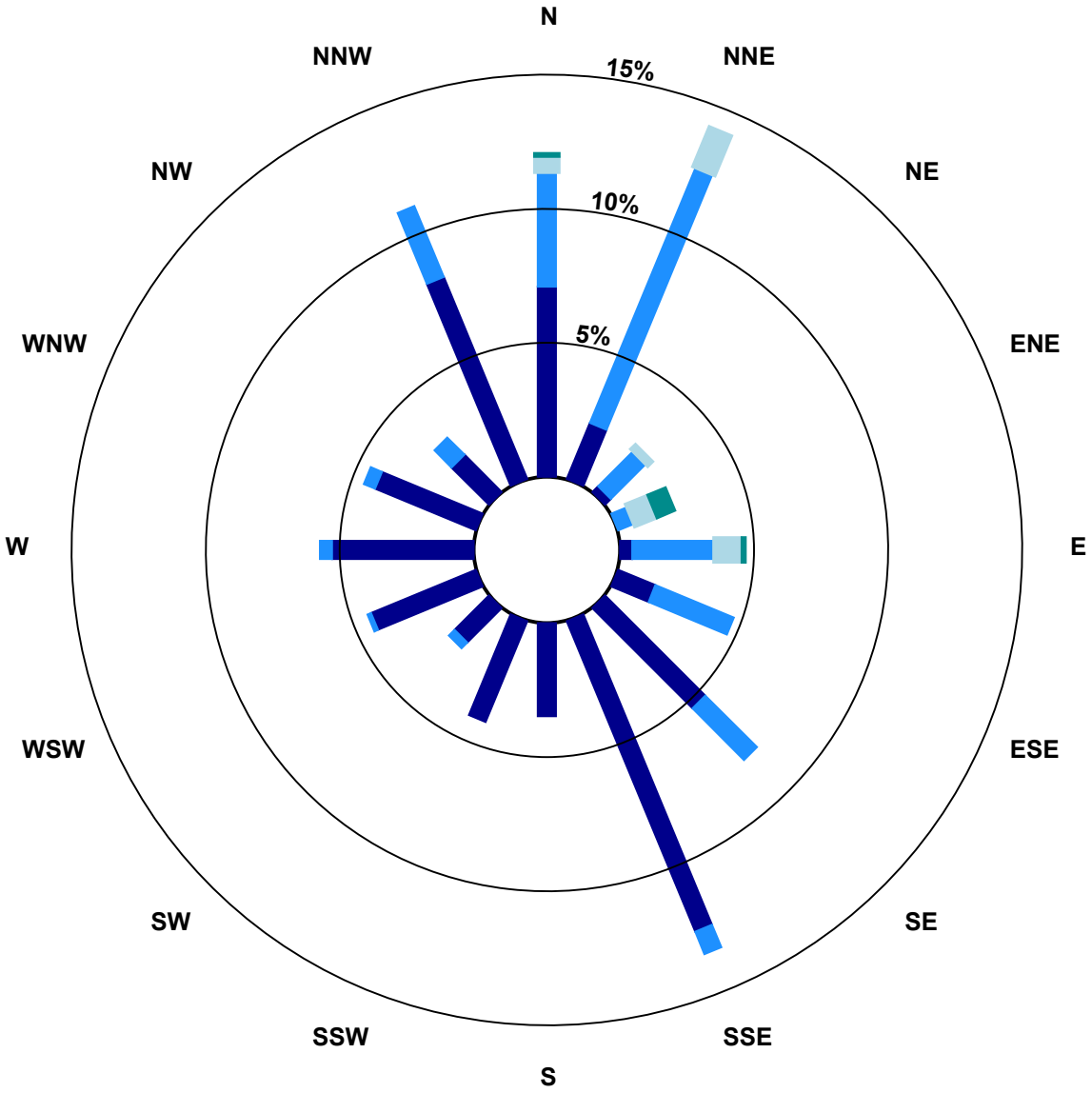
Total Number of Hours: 720

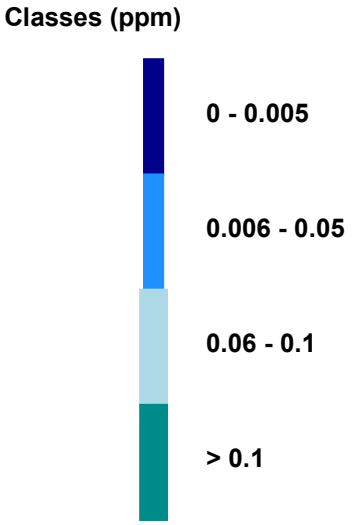
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Non Methane Hydrocarbons (NMHC) - ppm

Mannix





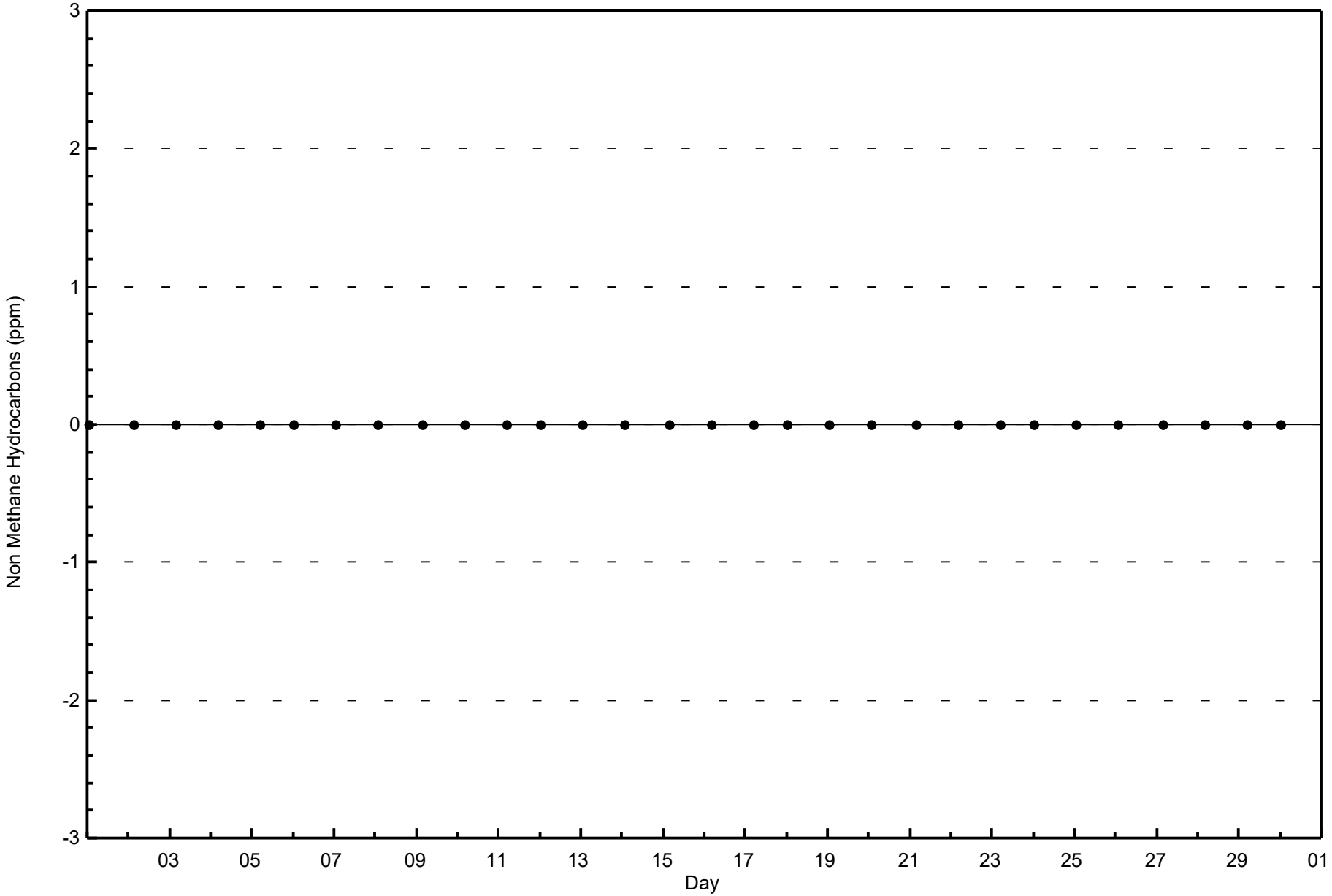
Total Number of Valid Hours: 662

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Mannix - June 2026

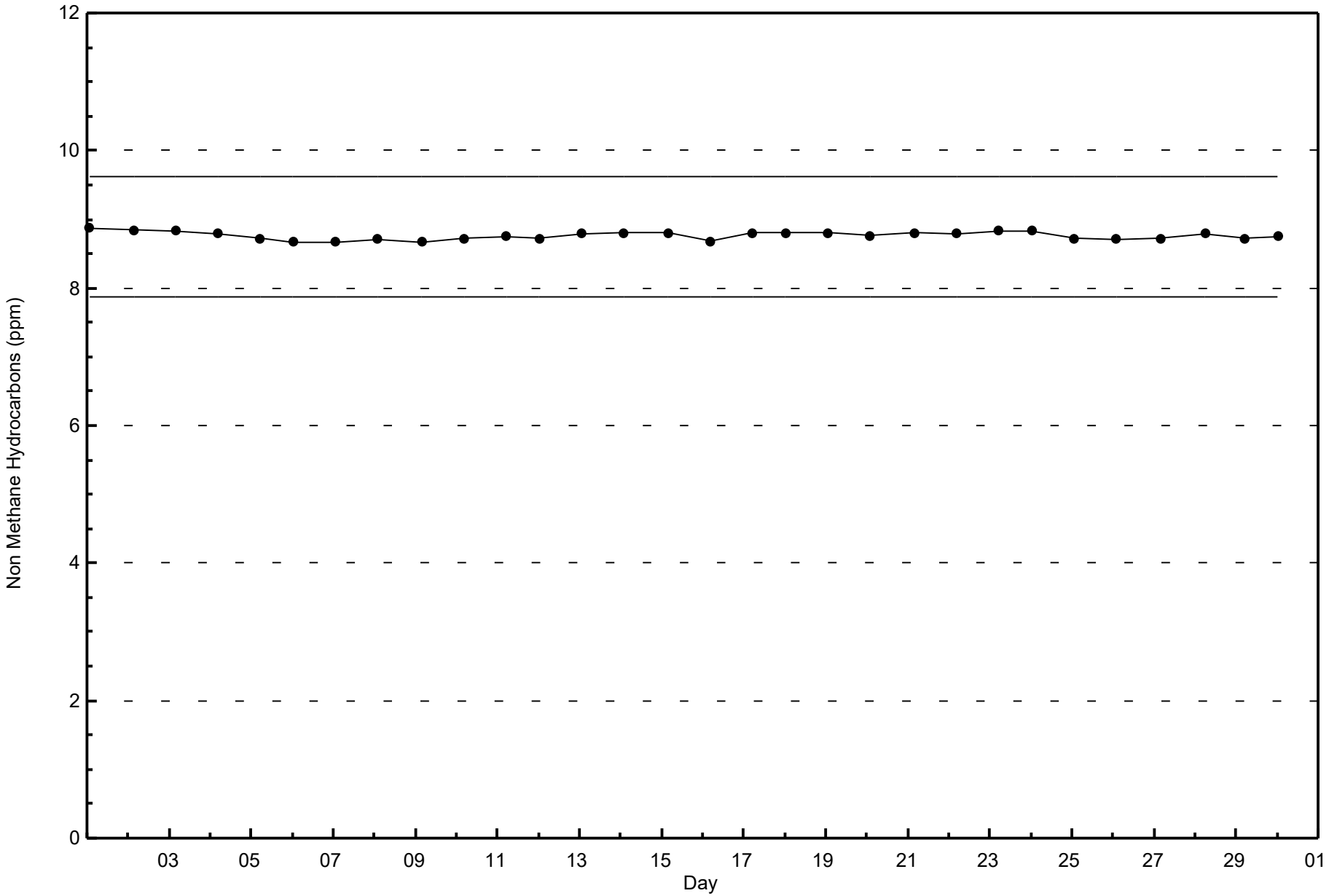


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Mannix - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Mannix - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.9 ppm on Jun 29 05:00 Maximum Daily Average: 2.2 ppm on Jun 28

Minimum Value: 1.9 ppm on Jun 6 11:00 Minimum Daily Average: 2.0 ppm on Jun 6
Maximum Diurnal Average: 2.2 ppm at hour 5 Minimum Diurnal Average: 2.0 ppm at hour 18
Monthly Average: 2.04 ppm Percentiles: P_1 = 1.9 P_{10} = 1.9 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:	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-Jun	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-Jun	2.0	2.0	1.9	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	1.9	2.0	2.0	2.0	2.0	2.0	2.0
3-Jun	2.1	2.0	2.0	Z	2.1	2.0	2.0	2.0	2.0	2.0	2.0	C	C	C	C	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.0	2.1
4-Jun	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
5-Jun	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	1.9	1.9	2.0	2.0	1.9	1.9	2.0	2.0
6-Jun	Z	2.0	2.0	2.0	2.1	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	2.0	2.0	2.0	2.0	2.0	2.0	2.1
7-Jun	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.0	2.0	2.2
8-Jun	2.0	2.0	Z	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	1.9	2.0	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.1
9-Jun	1.9	2.0	2.0	Z	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.4	2.2	2.0	2.0	2.4
10-Jun	2.0	2.0	2.1	2.0	Z	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	2.0	2.0	2.1
11-Jun	2.0	2.0	2.0	2.0	2.0	Z	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.2	2.3	2.0	2.3
12-Jun	Z	2.2	2.0	2.2	2.4	2.1	2.0	2.1	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	1.9	2.0	2.0	2.0	1.9	2.1	2.6	2.4	2.1	2.6
13-Jun	2.2	Z	2.1	2.1	2.1	2.1	2.0	2.1	2.3	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.3
14-Jun	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.2
15-Jun	2.3	2.3	2.2	Z	2.3	2.3	2.4	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.2	2.1	2.0	1.9	2.1	2.4
16-Jun	2.1	2.0	2.0	2.0	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	2.1
17-Jun	2.0	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.2	2.0	2.2
18-Jun	Z	2.2	2.2	2.1	2.3	2.2	2.2	2.2	2.0	2.1	2.1	2.0	2.1	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.3	2.1	2.1	2.1	2.3
19-Jun	2.1	Z	2.1	2.1	2.1	2.1	2.5	2.6	2.1	2.1	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.6
20-Jun	2.1	2.1	Z	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.2
21-Jun	2.0	2.1	2.2	2.3	Z	2.2	2.2	2.1	2.1	2.0	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.3
22-Jun	2.2	2.1	2.1	2.1	Z	2.5	2.1	2.0	2.1	2.2	2.1	2.0	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.0	2.1	2.5
23-Jun	2.1	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	2.0	2.1	2.1	2.0	2.1
24-Jun	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	1.9	1.9	1.9	2.0	2.0	1.9	2.0	1.9	2.0	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.1
25-Jun	2.0	Z	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.1
26-Jun	2.0	2.0	Z	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.1	2.0	2.2
27-Jun	2.1	2.0	2.1	Z	2.0	2.0	2.1	2.1	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.2	2.1	2.1	2.0	2.2
28-Jun	2.2	2.5	2.4	2.5	2.6	Z	2.6	2.4	2.1	2.4	2.1	2.0	2.0	2.2	2.2	2.3	2.0	2.0	2.1	2.1	2.1	2.1	2.5	2.2	2.2	2.6
29-Jun	2.4	2.3	2.2	2.2	2.9	Z	2.6	2.4	2.4	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.3	2.2	2.9
30-Jun	Z	2.1	2.1	2.2	2.2	2.3	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.2	2.0	2.0	2.1	2.1	2.1	2.1	2.3
	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	2.0	2.0	2.0	2.0	2.1	2.1	2.1	Diurnal Average	
	2.4	2.5	2.4	2.5	2.9	2.5	2.6	2.6	2.4	2.4	2.2	2.1	2.1	2.2	2.2	2.3	2.1	2.1	2.2	2.1	2.2	2.4	2.6	2.4	Diurnal Maximum	

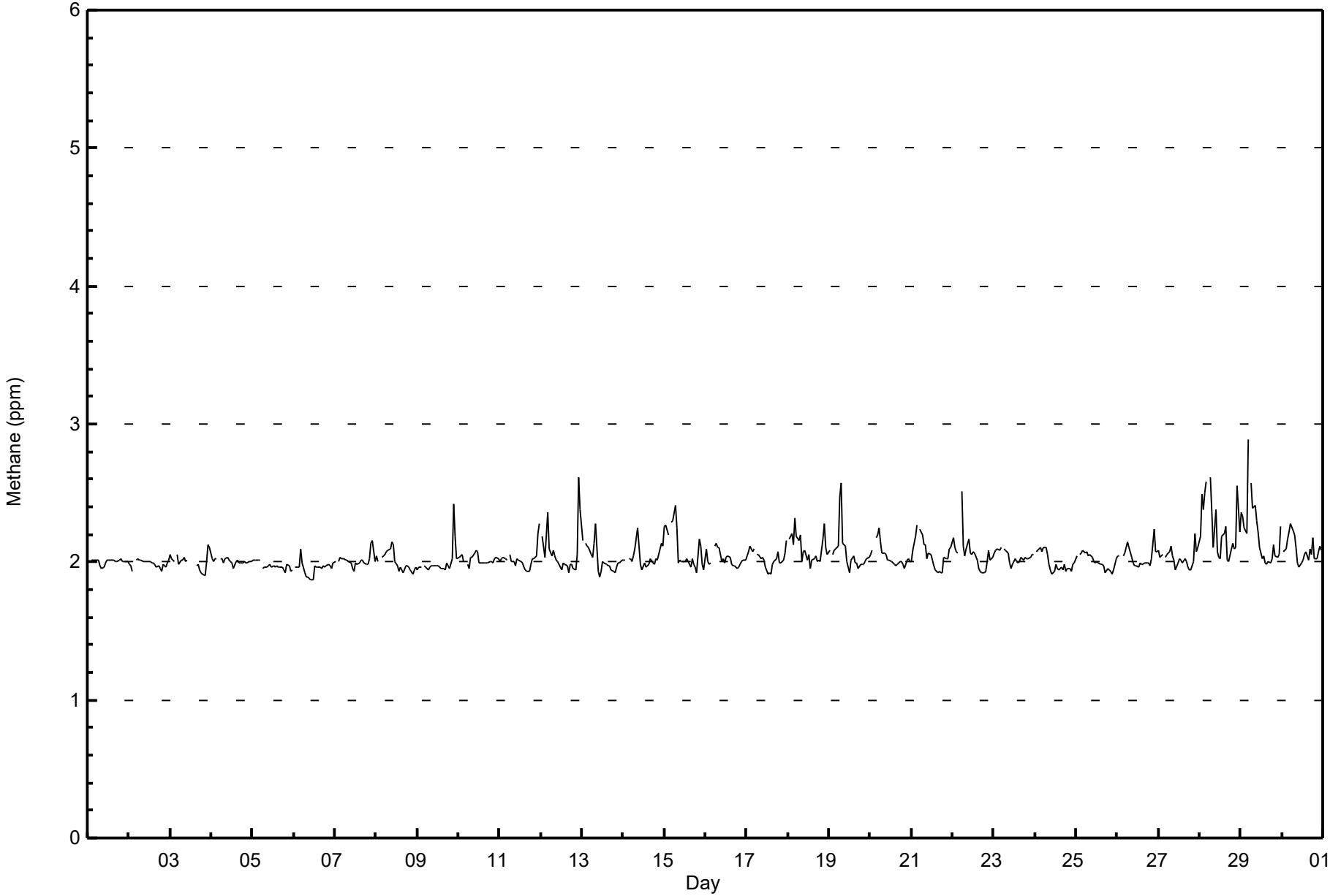
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Mannix - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	480	69.97	69.97
2.1 - 3.0	206	30.03	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

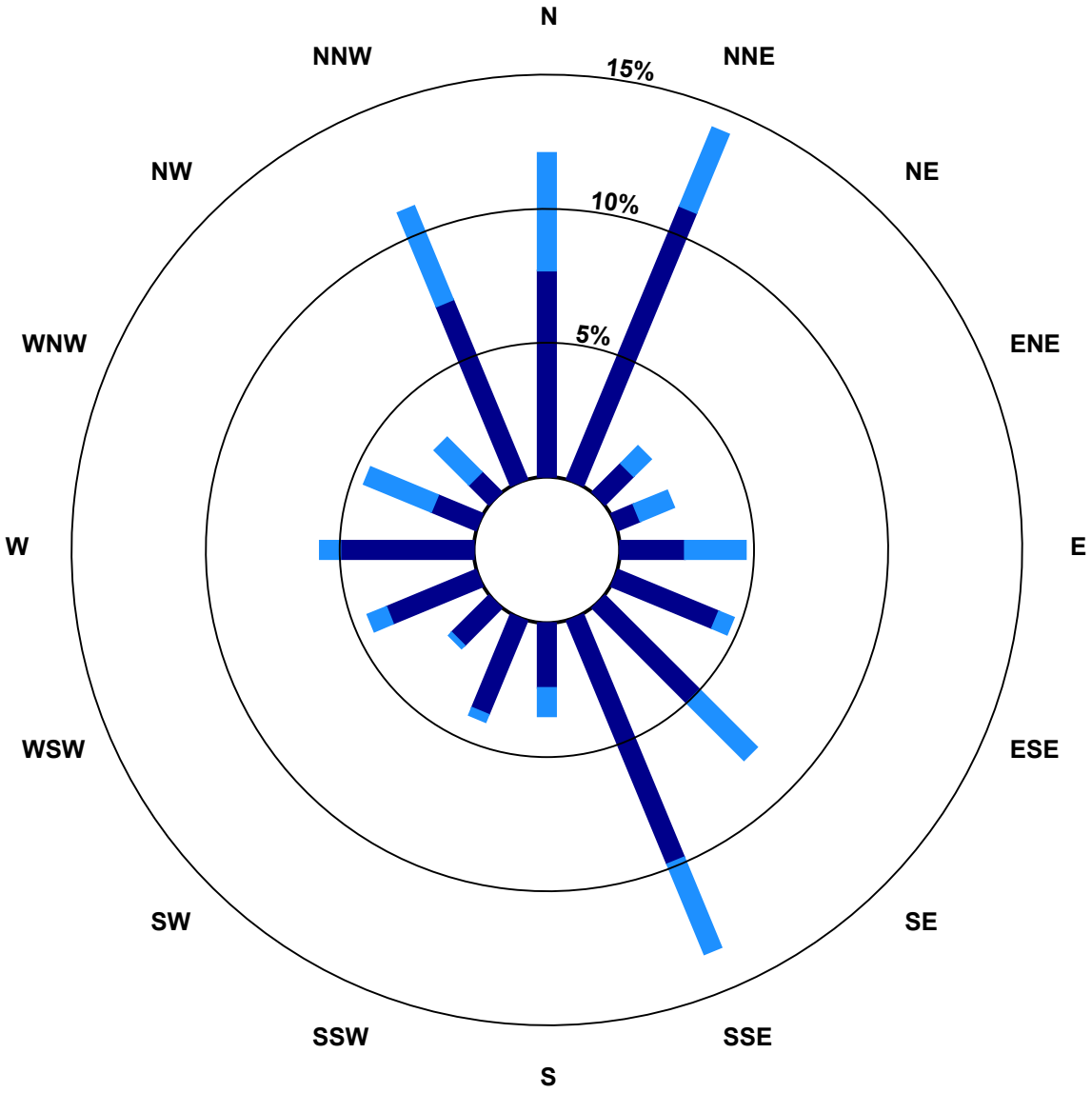
Mannix - June 2026

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	51	73	10	6	16	27	33	65	16	25	13	24	33	12	7	48	459
2.1 - 3.0	29	21	6	9	15	4	20	24	7	2	1	5	5	18	12	25	203
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	80	94	16	15	31	31	53	89	23	27	14	29	38	30	19	73	662

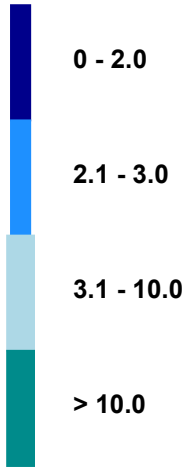
Total Number of Valid Hours: 662

Total Number of Hours: 720

Methane (CH_4) - ppm
Mannix



Classes (ppm)



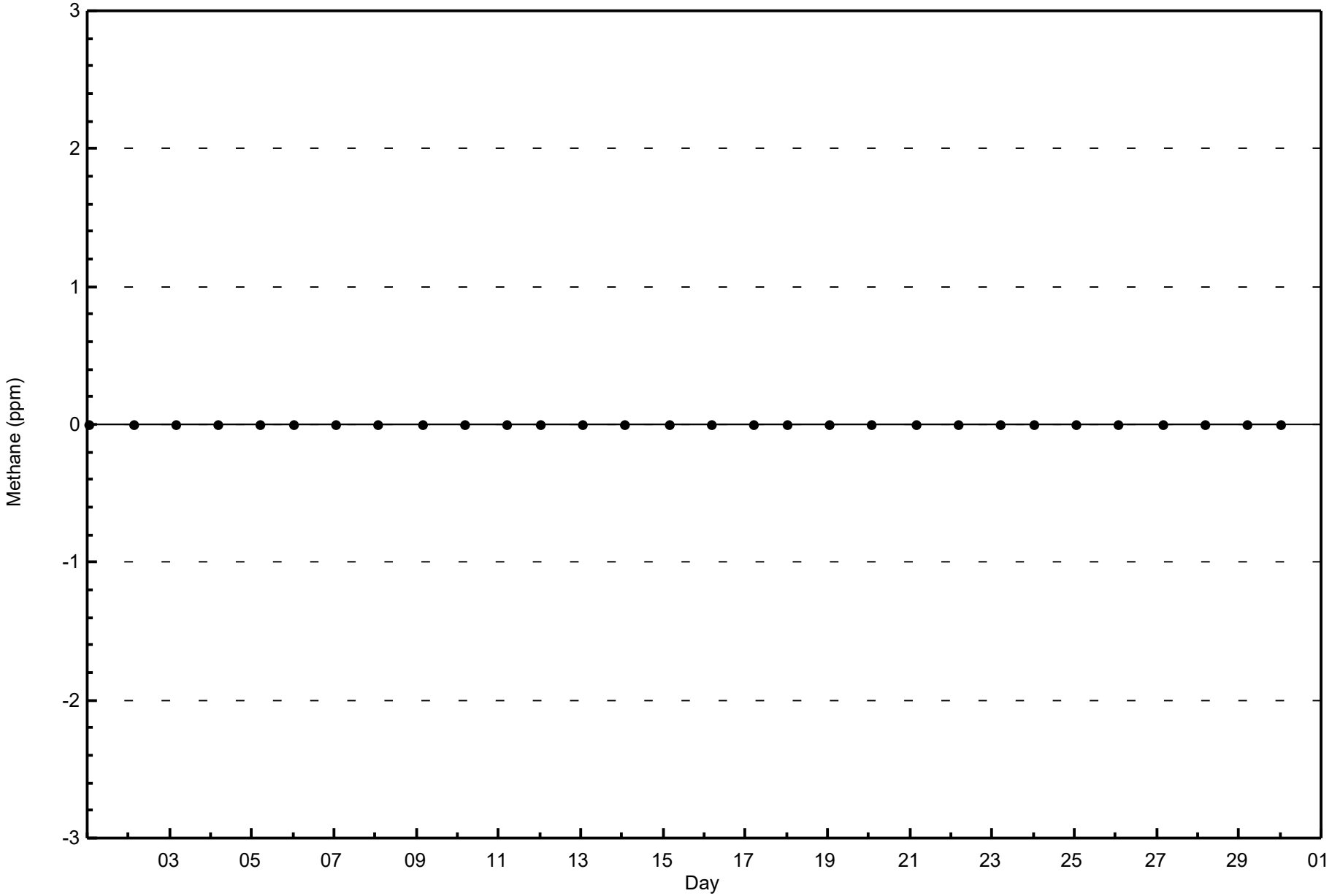
Total Number of Valid Hours: 662

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Mannix - June 2026

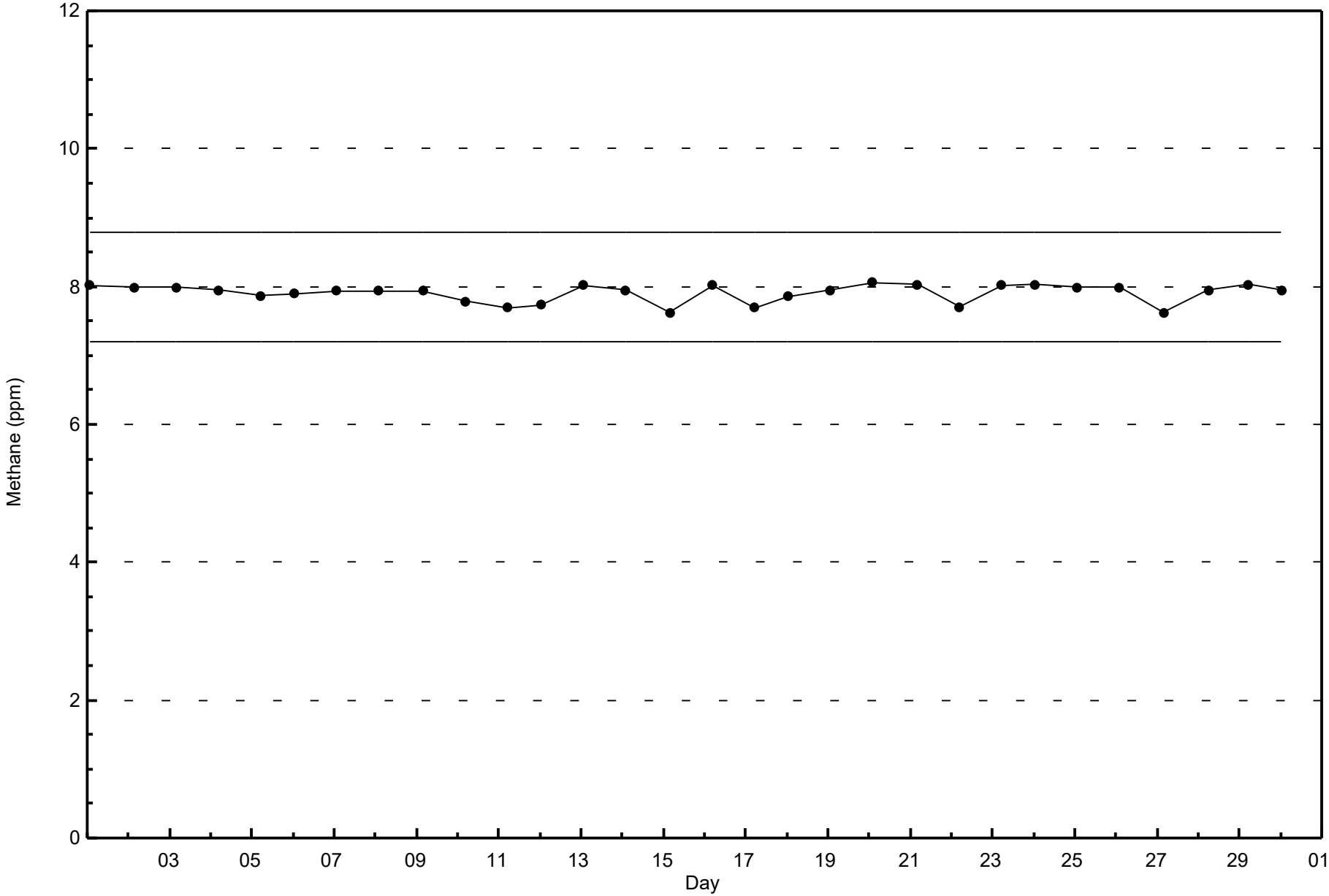


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Mannix - June 2026



Maximum Value: 30.1 C on Jun 28 16:00

Maximum Daily Average: 23.7 C on Jun 28

Minimum Value: 6.3 C on Jun 12 04:00

Minimum Daily Average: 9.2 C on Jun 11

Maximum Diurnal Average: 20.5 C at hour 15

Minimum Diurnal Average: 10.8 C at hour 4

Monthly Average: 16.27 C

Percentiles: P_1 = 7.6 P_{10} = 9.5 Q_1 = 11.3 Median = 15.4 Q_3 = 20.1 P_{90} = 25.3 P_{99} = 29.3

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	9.8	9.6	9.5	9.4	9.3	DF	DF	DF	DF	DF	DF	DF	12.2	12.2	12.6	12.9	13.1	13.0	12.8	12.6	12.1	11.5	11.0	10.4	--	13.1
2-Jun	9.9	9.7	9.5	9.2	8.7	8.2	7.8	7.9	8.6	8.9	9.2	9.4	10.0	11.1	12.1	13.3	12.6	11.6	11.2	10.9	10.6	10.2	9.5	9.6	10.0	13.3
3-Jun	10.1	9.9	9.6	9.0	9.1	9.3	9.6	9.8	10.2	10.9	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	10.9	10.6	10.1	--	10.9
4-Jun	9.5	9.1	8.3	8.4	9.0	10.8	13.4	15.1	17.5	17.3	18.4	19.7	19.7	20.9	21.8	22.2	22.8	23.1	22.4	20.4	17.9	15.4	13.8	12.4	16.2	23.1
5-Jun	11.7	11.1	10.4	10.4	11.5	13.5	16.1	16.3	16.9	18.4	19.0	20.2	21.1	21.8	20.7	17.8	15.9	16.2	17.2	15.9	14.6	13.7	12.9	11.9	15.6	21.8
6-Jun	11.6	11.4	11.3	11.2	11.4	11.2	11.1	10.8	10.8	10.8	11.0	11.3	11.5	11.7	11.8	12.3	12.2	12.1	11.7	11.5	11.1	10.2	9.2	8.4	11.2	12.3
7-Jun	8.0	7.6	7.9	7.4	6.6	7.5	9.7	11.5	13.1	14.0	14.3	15.8	17.0	18.0	18.4	18.3	17.4	14.4	13.0	13.0	13.0	13.1	12.1	11.7	12.6	18.4
8-Jun	11.5	11.4	11.5	11.8	11.5	11.3	11.2	11.3	11.4	11.0	10.9	10.7	10.8	10.7	10.8	11.2	11.5	11.6	11.6	11.4	11.1	10.8	10.7	11.0	11.2	11.8
9-Jun	10.9	10.6	10.3	10.4	10.3	11.1	11.2	14.2	15.0	15.7	17.4	18.7	19.5	19.7	19.3	20.2	20.3	19.9	19.3	18.6	16.3	14.3	13.6	12.5	15.4	20.3
10-Jun	12.0	11.5	11.2	10.6	10.9	11.8	12.3	13.6	14.9	15.3	16.1	15.2	11.2	10.6	11.1	10.0	10.6	11.3	11.4	10.3	9.3	8.8	9.0	8.8	11.6	16.1
11-Jun	8.4	8.0	7.8	7.6	7.6	7.6	7.8	8.0	8.2	8.6	9.6	10.5	11.5	11.3	11.0	11.0	10.4	9.5	9.5	9.3	9.3	9.3	9.4	9.4	9.2	11.5
12-Jun	9.2	8.1	6.7	6.3	6.8	8.5	9.6	10.3	12.0	13.5	15.2	15.7	16.4	17.6	18.2	18.1	17.9	17.4	16.7	15.8	14.3	12.5	11.6	11.0	12.9	18.2
13-Jun	9.0	8.3	7.6	7.0	7.8	10.9	13.2	15.7	17.4	19.7	21.3	21.5	22.4	22.9	22.9	22.9	23.3	23.0	23.3	22.4	19.9	17.5	15.3	14.0	17.1	23.3
14-Jun	13.1	12.2	11.0	9.9	10.8	15.0	17.4	18.0	21.3	22.7	24.7	25.1	23.6	24.2	24.9	23.2	24.6	24.3	22.9	21.6	19.7	18.1	16.9	15.4	19.2	25.1
15-Jun	13.4	12.1	11.4	10.8	11.8	12.8	15.6	17.3	19.3	21.1	22.1	22.9	24.2	25.2	25.7	24.4	24.1	23.8	23.4	22.7	20.6	19.4	19.4	19.1	19.3	25.7
16-Jun	17.2	15.4	15.1	14.5	14.6	14.8	14.4	14.0	13.5	14.0	15.8	18.3	19.9	21.4	21.2	21.7	21.7	21.3	20.2	19.4	18.0	16.3	14.5	12.9	17.1	21.7
17-Jun	12.1	10.0	9.1	8.4	9.2	10.7	12.7	14.8	17.0	18.0	18.5	18.9	19.2	19.9	19.9	19.3	19.1	18.7	17.4	17.3	17.2	13.9	12.2	11.0	15.2	19.9
18-Jun	10.2	9.8	9.2	9.1	10.0	11.3	11.1	11.9	12.8	13.7	15.5	16.0	15.2	15.1	15.2	16.7	17.6	17.5	17.6	15.8	14.8	13.5	13.0	12.0	13.5	17.6
19-Jun	10.9	9.6	8.6	7.6	7.7	9.6	11.7	13.5	14.9	16.3	17.3	19.2	18.6	17.5	19.0	18.4	17.5	16.2	15.9	15.5	15.1	14.0	12.2	11.0	14.1	19.2
20-Jun	10.2	9.0	9.4	9.2	9.1	11.5	12.2	14.3	16.5	17.6	18.4	17.9	18.6	18.5	19.2	18.9	18.4	18.9	17.8	15.8	15.4	14.7	13.4	13.3	14.9	19.2
21-Jun	13.9	13.7	12.8	12.3	12.0	12.2	12.6	14.5	17.5	18.1	19.6	18.0	18.6	19.8	20.0	19.2	20.1	19.7	18.3	17.2	17.0	16.3	14.1	13.0	16.3	20.1
22-Jun	14.0	12.2	12.7	11.7	11.8	13.3	15.9	17.6	18.7	19.8	21.5	23.3	22.7	22.2	22.9	22.9	22.8	21.9	21.8	20.3	19.1	16.7	14.5	13.6	18.1	23.3
23-Jun	13.0	11.8	11.1	10.2	10.8	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	23.1	16.5	19.5	21.1	20.6	17.3	15.3	14.4	13.5	--	23.1
24-Jun	13.4	13.3	12.3	11.6	12.7	14.3	15.0	18.5	20.9	23.3	26.0	26.6	27.3	26.8	27.3	26.9	27.2	26.3	23.8	21.5	20.5	18.7	17.9	15.8	20.3	27.3
25-Jun	14.3	13.1	13.1	12.8	12.1	15.1	17.8	19.6	21.7	24.2	26.7	27.4	27.8	28.2	28.3	28.4	28.1	27.4	26.5	25.3	23.3	21.8	20.9	18.4	21.8	28.4
26-Jun	16.0	14.7	14.0	13.4	15.4	17.2	18.8	21.3	23.5	DF	26.6	27.0	27.3	27.0	27.7	27.8	27.7	27.0	26.0	24.9	23.8	22.7	21.4	19.7	22.2	27.8
27-Jun	19.8	18.5	17.7	16.2	18.1	18.5	20.1	22.4	23.8	25.4	26.4	25.9	25.6	26.1	27.2	26.6	26.4	25.9	25.9	25.4	23.3	22.5	22.1	20.5	22.9	27.2
28-Jun	18.1	17.0	16.7	15.4	15.1	17.3	19.7	21.5	23.5	26.2	27.3	28.1	28.4	28.9	29.8	30.1	30.0	29.6	29.2	28.6	24.6	21.8	21.0	20.4	23.7	30.1
29-Jun	18.9	17.5	16.9	16.7	15.7	17.4	19.5	21.9	23.8	25.6	27.4	29.5	29.3	29.1	29.4	29.4	29.0	29.3	29.0	28.1	24.4	21.2	19.2	19.7	23.7	29.5
30-Jun	19.1	18.2	16.1	15.2	15.1	16.7	18.9	20.5	20.8	22.7	24.6	25.3	26.7	26.1	25.7	25.9	26.4	25.6	26.3	25.5	23.8	21.3	18.7	17.5	21.8	26.7
	12.6	11.8	11.3	10.8	11.1	12.5	13.8	15.2	16.6	17.5	19.3	19.9	19.9	20.2	20.5	20.5	20.2	19.9	19.4	18.5	17.1	15.5	14.5	13.6	Diurnal Average	
	19.8	18.5	17.7	16.7	18.1	18.5	20.1	22.4	23.8	26.2	27.4	29.5	29.3	29.1	29.8	30.1	30.0	29.6	29.2	28.6	24.6	22.7	22.1	20.5	Diurnal Maximum	

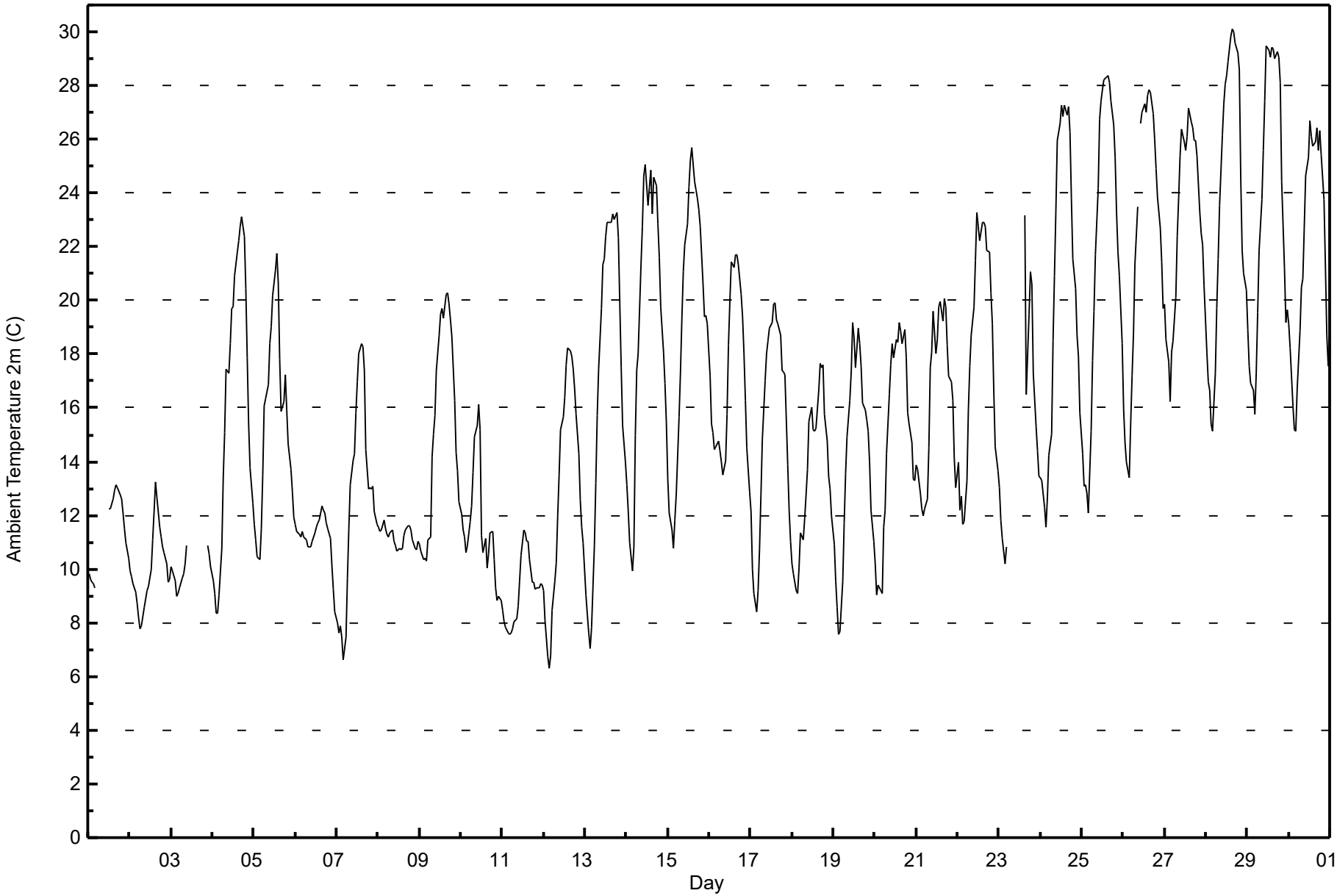
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Mannix - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	92	13.31	13.31
10 - 20	424	61.36	74.67
> 20	175	25.33	100.00

Total Number of Valid Hours: 691

Total Number of Hours: 720

Maximum Value: 30.3 C on Jun 28 17:00 — Maximum Daily Average: 24.9 C on Jun 28

Minimum Value: 6.6 C on Jun 7 05:00 — Minimum Daily Average: 8.8 C on Jun 11

Maximum Diurnal Average: 20.0 C at hour 16 — Minimum Diurnal Average: 12.0 C at hour 5

Monthly Average: 16.48 C — Percentiles: P_1 = 7.6 P_{10} = 9.7 Q_1 = 11.6 Median = 15.7 Q_3 = 20.6 P_{90} = 24.7 P_{99} = 29.5

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	10.0	9.8	9.6	9.5	9.4	DF	DF	DF	DF	DF	DF	DF	11.8	11.9	12.2	12.4	12.7	12.8	12.7	12.5	12.1	11.6	11.1	10.5	--	12.8
2-Jun	10.0	9.7	9.4	9.1	8.6	8.0	7.6	7.7	8.2	8.6	8.9	9.1	9.8	10.8	11.7	12.8	12.4	11.3	11.0	10.7	10.6	10.2	9.6	9.9	9.8	12.8
3-Jun	10.1	9.9	9.5	8.8	8.9	9.0	9.1	9.3	9.6	10.2	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	13.5	12.8	12.2	--	13.5
4-Jun	11.4	10.5	9.5	9.5	9.6	10.4	12.1	13.4	15.4	16.0	16.7	17.5	17.9	18.6	19.6	20.9	21.9	22.4	21.9	20.8	19.6	18.3	17.2	15.9	16.1	22.4
5-Jun	14.3	13.1	12.1	11.7	11.9	12.7	14.3	15.3	16.0	17.3	18.0	19.0	20.5	21.3	20.7	17.7	15.8	16.8	17.4	16.5	15.6	15.0	14.1	12.6	15.8	21.3
6-Jun	12.0	11.6	11.4	11.2	11.4	11.4	11.2	10.9	10.9	10.9	11.0	11.3	11.6	11.8	11.9	12.4	12.3	12.3	11.9	11.6	11.4	10.9	10.4	9.8	11.4	12.4
7-Jun	9.1	8.4	8.1	7.4	6.6	7.0	8.3	10.1	11.5	12.6	13.6	15.0	16.2	17.5	17.9	17.8	17.3	15.1	13.5	13.5	13.5	13.5	12.7	12.0	12.4	17.9
8-Jun	11.7	11.5	11.6	11.8	11.4	11.1	11.0	11.2	11.4	11.0	10.9	10.9	11.0	10.9	11.0	11.4	11.8	12.1	12.2	12.1	11.7	11.5	11.4	11.7	11.4	12.2
9-Jun	11.5	11.3	11.0	11.0	10.8	11.2	10.9	12.7	13.7	14.1	15.3	16.5	17.4	17.7	18.0	18.8	19.3	19.1	19.2	19.1	18.1	17.4	14.7	13.0	15.1	19.3
10-Jun	12.2	11.6	11.3	10.8	10.8	11.3	11.6	12.4	13.1	13.8	14.6	14.6	10.7	10.2	10.5	9.8	10.4	10.8	10.9	10.2	9.7	9.3	9.1	8.8	11.2	14.6
11-Jun	8.4	8.0	7.8	7.6	7.4	7.3	7.2	7.4	7.6	8.0	8.7	9.3	9.9	10.0	10.0	10.1	9.7	9.1	9.3	9.1	9.4	9.5	9.7	9.8	8.8	10.1
12-Jun	9.6	9.0	8.0	7.9	8.2	8.6	9.0	9.4	10.4	11.5	12.5	13.3	14.1	15.2	16.1	16.6	16.9	17.0	16.9	16.5	15.9	15.0	14.4	14.2	12.8	17.0
13-Jun	12.5	11.8	9.7	9.3	9.1	10.2	11.5	13.9	15.8	17.4	18.6	19.8	20.8	21.7	22.5	22.8	23.0	23.1	23.5	23.2	22.2	20.9	19.3	18.6	17.6	23.5
14-Jun	16.0	15.0	14.8	14.5	14.3	14.7	15.9	16.7	19.0	20.5	21.9	22.6	22.6	23.0	23.0	22.4	23.1	23.6	23.2	22.6	21.9	21.0	20.0	18.3	19.6	23.6
15-Jun	16.8	15.5	13.9	12.8	13.2	13.5	14.0	16.3	17.7	19.7	21.0	21.9	22.7	23.3	24.0	24.2	24.2	24.2	23.8	23.3	22.6	21.7	20.8	19.5	19.6	24.2
16-Jun	18.1	16.3	16.0	15.4	15.2	15.1	14.7	14.0	13.3	13.6	14.6	16.3	18.2	19.8	20.6	21.4	21.5	21.3	20.6	20.0	18.9	17.1	15.3	14.1	17.1	21.5
17-Jun	13.1	11.9	11.0	9.9	9.7	10.0	11.4	13.1	14.4	15.4	16.2	17.0	17.7	18.4	18.7	18.6	18.6	18.2	17.9	17.8	17.7	16.5	14.9	13.8	15.1	18.7
18-Jun	13.3	12.2	11.3	11.0	11.2	11.3	11.1	11.5	12.4	13.1	14.3	15.2	14.7	14.5	14.4	15.5	16.3	16.5	16.5	16.0	15.7	15.0	14.1	13.1	13.8	16.5
19-Jun	12.5	11.8	11.0	9.7	9.4	10.2	11.1	12.5	13.6	14.5	15.3	16.0	16.4	15.4	16.6	17.0	16.9	16.0	15.7	15.7	15.7	14.6	13.3	12.4	13.9	17.0
20-Jun	11.8	11.1	10.5	9.9	9.5	10.6	10.9	12.8	14.5	15.6	16.6	16.7	17.4	17.6	17.8	18.1	18.1	18.5	17.6	15.7	15.5	15.4	15.0	14.6	14.7	18.5
21-Jun	14.3	14.1	13.8	13.1	12.1	12.2	12.2	13.3	14.6	15.8	16.8	16.6	17.5	18.5	19.2	18.7	19.3	19.5	18.3	17.6	17.3	16.8	16.0	15.4	16.0	19.5
22-Jun	15.1	16.0	14.8	13.7	13.1	14.2	14.9	15.4	16.9	19.0	20.6	21.2	21.2	21.8	22.5	22.7	22.8	22.2	22.4	21.7	20.4	19.4	17.6	16.3	18.6	22.8
23-Jun	15.6	14.9	13.7	12.4	12.0	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	23.0	18.2	20.4	21.7	21.5	19.9	18.7	17.8	16.6	--	23.0
24-Jun	15.9	15.6	14.4	13.6	13.3	14.0	14.7	17.3	19.2	21.3	22.9	23.8	24.6	25.1	25.8	26.2	26.5	26.1	23.9	22.2	22.0	20.8	19.5	18.3	20.3	26.5
25-Jun	17.1	16.0	15.7	15.0	14.4	15.3	16.7	18.1	20.0	22.6	24.7	25.4	26.1	26.9	27.3	27.7	27.9	27.8	27.8	26.9	25.5	24.2	22.9	21.1	22.2	27.9
26-Jun	19.4	18.5	17.4	16.9	17.2	17.4	18.2	20.0	21.9	DF	25.0	25.4	26.0	26.5	27.1	27.4	27.5	27.4	27.1	26.5	25.8	24.6	23.0	21.8	23.0	27.5
27-Jun	21.3	20.2	19.7	18.7	18.6	18.6	19.5	20.9	22.9	24.5	25.1	25.4	25.6	25.8	26.7	26.8	27.1	26.8	26.7	26.2	25.7	24.7	23.4	22.8	23.5	27.1
28-Jun	22.3	20.7	19.6	18.5	17.4	17.4	18.8	20.5	22.3	24.4	26.7	27.6	28.1	28.7	29.6	30.1	30.3	30.1	30.0	29.6	28.1	27.3	25.9	24.2	24.9	30.3
29-Jun	22.4	21.0	20.0	19.4	18.8	18.6	18.9	21.0	22.8	24.6	26.5	27.6	28.5	28.9	29.1	29.3	29.4	29.7	29.5	28.6	25.2	23.4	22.7	22.2	24.5	29.7
30-Jun	21.0	20.3	19.3	18.6	17.3	16.8	18.0	19.4	19.7	21.1	22.9	23.8	24.5	25.1	25.7	26.4	26.9	26.7	27.0	26.2	25.2	23.8	22.7	21.7	22.5	27.0
	14.3	13.6	12.9	12.3	12.0	12.4	13.0	14.2	15.3	16.2	17.8	18.5	18.7	19.2	19.7	20.0	19.9	19.9	19.7	19.1	18.4	17.4	16.4	15.5	Diurnal Average	
	22.4	21.0	20.0	19.4	18.8	18.6	19.5	21.0	22.9	24.6	26.7	27.6	28.5	28.9	29.6	30.1	30.3	30.1	30.0	29.6	28.1	27.3	25.9	24.2	Diurnal Maximum	

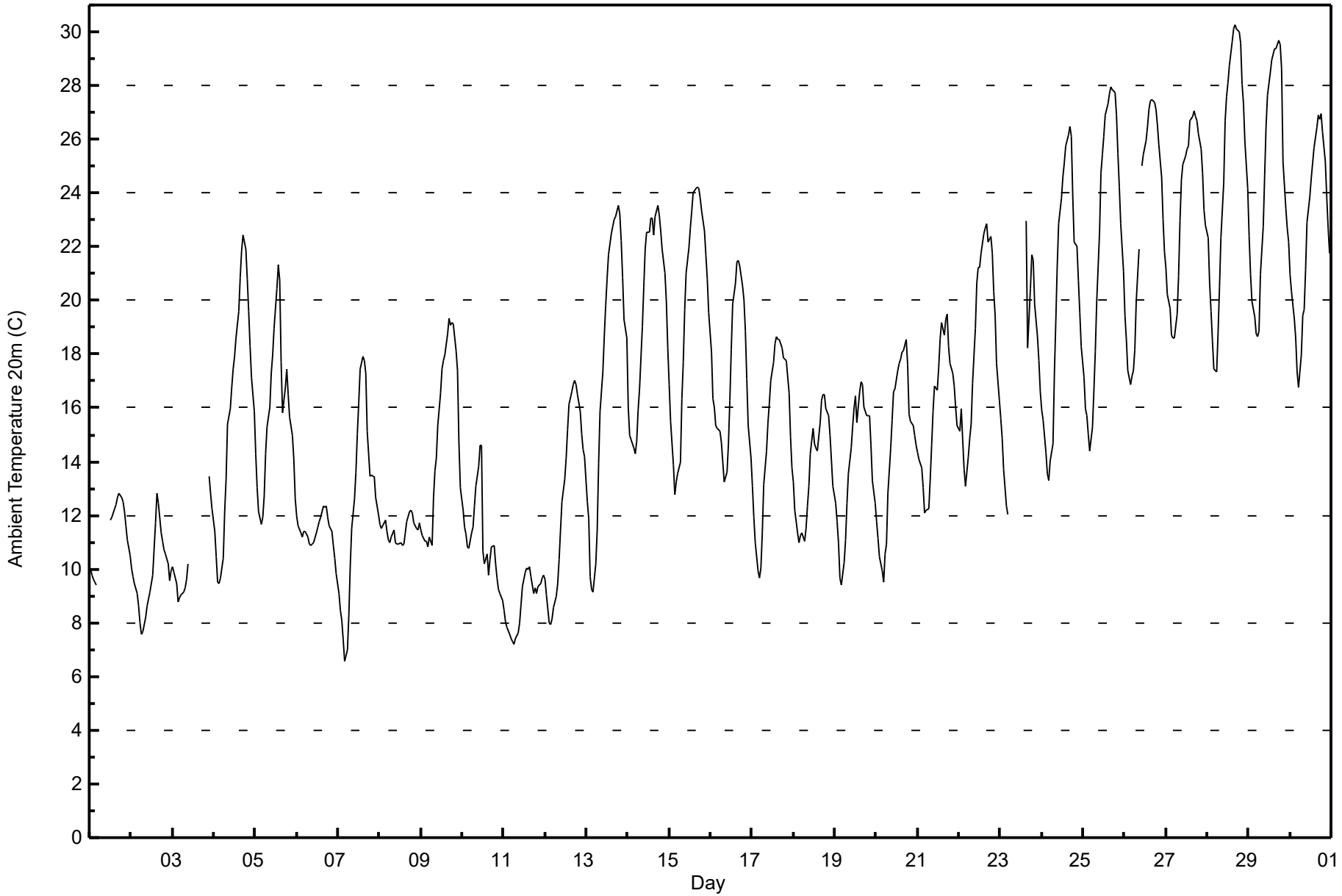
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 20m (AT20) - C

Mannix - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	82	11.87	11.87
10 - 20	427	61.79	73.66
> 20	182	26.34	100.00

Total Number of Valid Hours: 691

Total Number of Hours: 720

Maximum Value: 30.0 C on Jun 28 17:00

Maximum Daily Average: 25.1 C on Jun 28

Minimum Value: 6.2 C on Jun 7 05:00

Minimum Daily Average: 8.4 C on Jun 11

Maximum Diurnal Average: 19.7 C at hour 18

Minimum Diurnal Average: 12.2 C at hour 5

Monthly Average: 16.37 C

Percentiles: P_1 = 7.2 P_{10} = 9.6 Q_1 = 11.5 Median = 15.7 Q_3 = 20.6 P_{90} = 24.7 P_{99} = 29.4

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	9.8	9.6	9.4	9.3	9.2	DF	DF	DF	DF	DF	DF	DF	11.5	11.6	11.9	12.0	12.4	12.5	12.4	12.3	11.9	11.4	10.8	10.2	--	12.5
2-Jun	9.8	9.4	9.1	8.8	8.3	7.7	7.2	7.3	7.8	8.3	8.5	8.8	9.5	10.4	11.3	12.4	12.1	11.1	10.7	10.4	10.3	10.0	9.5	9.7	9.5	12.4
3-Jun	9.8	9.6	9.2	8.5	8.6	8.7	8.7	8.9	9.2	9.8	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	13.4	12.7	12.2	--	13.4
4-Jun	11.5	10.6	9.8	9.7	9.8	10.1	11.6	12.9	14.9	15.5	16.1	16.8	17.2	17.7	18.9	20.3	21.4	22.0	21.5	20.6	19.8	19.3	18.6	16.9	16.0	22.0
5-Jun	14.9	13.5	12.7	11.8	11.8	12.4	13.7	14.8	15.6	16.8	17.6	18.5	20.2	21.0	20.6	17.5	15.8	16.8	17.2	16.4	16.2	15.5	14.3	12.5	15.7	21.0
6-Jun	11.8	11.4	11.1	10.9	11.2	11.2	10.9	10.7	10.7	10.7	10.8	11.1	11.4	11.6	11.7	12.1	12.0	12.1	11.7	11.4	11.2	10.9	10.5	10.1	11.2	12.1
7-Jun	9.4	8.5	8.2	7.1	6.2	6.4	7.7	9.5	11.0	12.1	13.2	14.6	15.9	17.1	17.6	17.4	17.1	15.0	13.4	13.4	13.5	13.4	12.6	11.9	12.2	17.6
8-Jun	11.5	11.3	11.4	11.6	11.1	10.8	10.7	10.9	11.2	10.7	10.6	10.6	10.6	10.6	10.7	11.1	11.5	11.9	12.0	11.9	11.6	11.4	11.4	11.6	11.2	12.0
9-Jun	11.3	11.1	11.0	10.9	10.7	11.0	10.6	12.2	13.2	13.6	14.9	16.0	16.9	17.2	17.5	18.4	19.0	18.8	18.9	18.8	18.1	17.7	14.7	12.9	14.8	19.0
10-Jun	11.9	11.3	11.0	10.7	10.4	10.9	11.2	12.0	12.6	13.3	14.1	14.3	10.3	9.8	10.1	9.5	10.0	10.4	10.5	9.9	9.4	9.0	8.8	8.5	10.8	14.3
11-Jun	8.1	7.7	7.5	7.3	7.0	6.9	6.8	7.0	7.2	7.6	8.2	8.9	9.4	9.6	9.5	9.6	9.3	8.7	9.0	8.8	9.1	9.2	9.4	9.5	8.4	9.6
12-Jun	9.4	9.0	8.1	8.4	8.2	8.3	8.7	9.0	9.9	11.0	11.9	12.8	13.6	14.6	15.6	16.1	16.5	16.7	16.7	16.4	15.9	15.2	14.6	14.5	12.6	16.7
13-Jun	13.1	12.3	11.1	11.2	10.6	10.2	11.1	13.5	15.6	16.9	18.2	19.4	20.4	21.3	22.1	22.5	22.8	22.9	23.3	23.2	22.8	22.1	22.0	20.8	17.9	23.3
14-Jun	17.5	16.5	15.9	14.9	14.5	14.6	15.6	16.4	18.6	20.1	21.4	22.2	22.3	22.6	22.7	22.2	22.8	23.3	23.0	22.5	22.0	21.1	20.3	18.8	19.7	23.3
15-Jun	17.8	16.8	15.7	14.1	13.4	13.5	13.7	15.8	17.2	19.1	20.5	21.6	22.3	22.8	23.6	23.9	24.0	24.0	23.7	23.3	22.7	21.8	20.8	19.4	19.7	24.0
16-Jun	18.0	16.3	15.9	15.3	15.1	15.0	14.5	13.7	13.0	13.4	14.3	16.0	17.8	19.4	20.3	21.1	21.2	21.0	20.3	19.9	18.8	17.1	15.3	14.1	16.9	21.2
17-Jun	13.1	12.1	11.2	10.1	9.5	9.6	10.9	12.6	13.9	14.9	15.7	16.5	17.2	17.9	18.2	18.2	18.2	18.0	17.7	17.6	17.6	16.7	15.5	14.6	14.9	18.2
18-Jun	13.7	12.4	11.6	11.0	11.1	11.1	10.8	11.2	12.1	12.7	13.9	14.9	14.4	14.1	14.0	15.1	15.9	16.2	16.1	15.8	15.6	14.9	14.1	13.4	13.6	16.2
19-Jun	12.9	12.3	11.3	10.4	10.0	10.2	10.8	12.0	13.1	14.1	14.8	15.4	15.9	15.0	16.1	16.4	16.4	15.7	15.4	15.5	15.5	14.5	13.3	12.5	13.7	16.4
20-Jun	11.8	11.2	10.4	9.9	9.4	10.1	10.5	12.3	14.0	15.0	16.0	16.2	16.9	17.2	17.3	17.6	17.7	18.2	17.2	15.5	15.2	15.1	14.9	14.5	14.3	18.2
21-Jun	14.2	14.0	13.7	13.0	12.1	12.0	11.9	12.9	14.1	15.3	16.3	16.2	17.0	18.1	18.8	18.3	18.8	19.3	18.1	17.6	17.2	16.8	16.1	15.5	15.7	19.3
22-Jun	15.4	16.7	15.2	14.0	13.5	14.2	14.4	15.0	16.6	18.7	20.1	20.9	20.8	21.5	22.2	22.4	22.6	22.0	22.3	21.7	20.3	20.0	18.4	17.2	18.6	22.6
23-Jun	16.2	15.7	15.2	14.4	13.4	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	22.8	18.9	20.4	21.6	21.3	20.0	19.5	18.6	18.0	--	22.8
24-Jun	17.8	16.4	15.1	14.1	13.2	13.9	14.4	16.9	18.8	20.8	22.5	23.3	24.0	24.5	25.2	25.7	26.0	25.9	23.7	22.1	22.0	20.8	19.5	18.5	20.2	26.0
25-Jun	17.3	16.3	16.0	15.4	14.9	15.4	16.4	17.7	19.7	22.3	24.3	25.1	25.8	26.5	27.1	27.4	27.7	27.7	27.7	26.9	25.6	24.3	22.9	21.3	22.2	27.7
26-Jun	20.1	19.3	18.1	17.4	17.5	17.4	18.0	19.7	21.8	DF	24.7	25.2	25.7	26.3	26.9	27.3	27.3	27.2	27.1	26.5	25.8	24.6	23.0	21.8	23.0	27.3
27-Jun	21.2	20.2	19.8	18.9	18.5	18.3	19.2	20.6	22.7	24.2	24.7	25.2	25.5	25.6	26.4	26.7	27.0	26.8	26.6	26.2	25.8	24.9	23.5	23.0	23.4	27.0
28-Jun	22.7	21.9	20.9	19.6	18.4	17.7	18.7	20.2	22.0	24.0	26.4	27.3	27.8	28.5	29.4	29.9	30.0	29.9	29.9	29.5	28.4	27.7	26.3	25.0	25.1	30.0
29-Jun	23.2	21.8	20.7	21.0	20.2	18.9	18.7	20.7	22.6	24.4	26.1	27.3	28.4	28.8	28.9	29.2	29.3	29.6	29.4	28.6	25.1	23.5	23.1	22.3	24.7	29.6
30-Jun	21.1	20.6	19.8	18.8	18.2	17.5	18.1	19.2	19.4	20.8	22.5	23.6	24.2	24.9	25.6	26.4	26.8	26.7	26.9	26.2	25.2	24.0	23.1	22.4	22.6	26.9
	14.5	13.9	13.2	12.6	12.2	12.3	12.7	13.8	14.9	15.8	17.3	18.1	18.3	18.8	19.3	19.6	19.7	19.7	19.5	19.0	18.4	17.5	16.6	15.8	Diurnal Average	
	23.2	21.9	20.9	21.0	20.2	18.9	19.2	20.7	22.7	24.4	26.4	27.3	28.4	28.8	29.4	29.9	30.0	29.9	29.9	29.5	28.4	27.7	26.3	25.0	Diurnal Maximum	

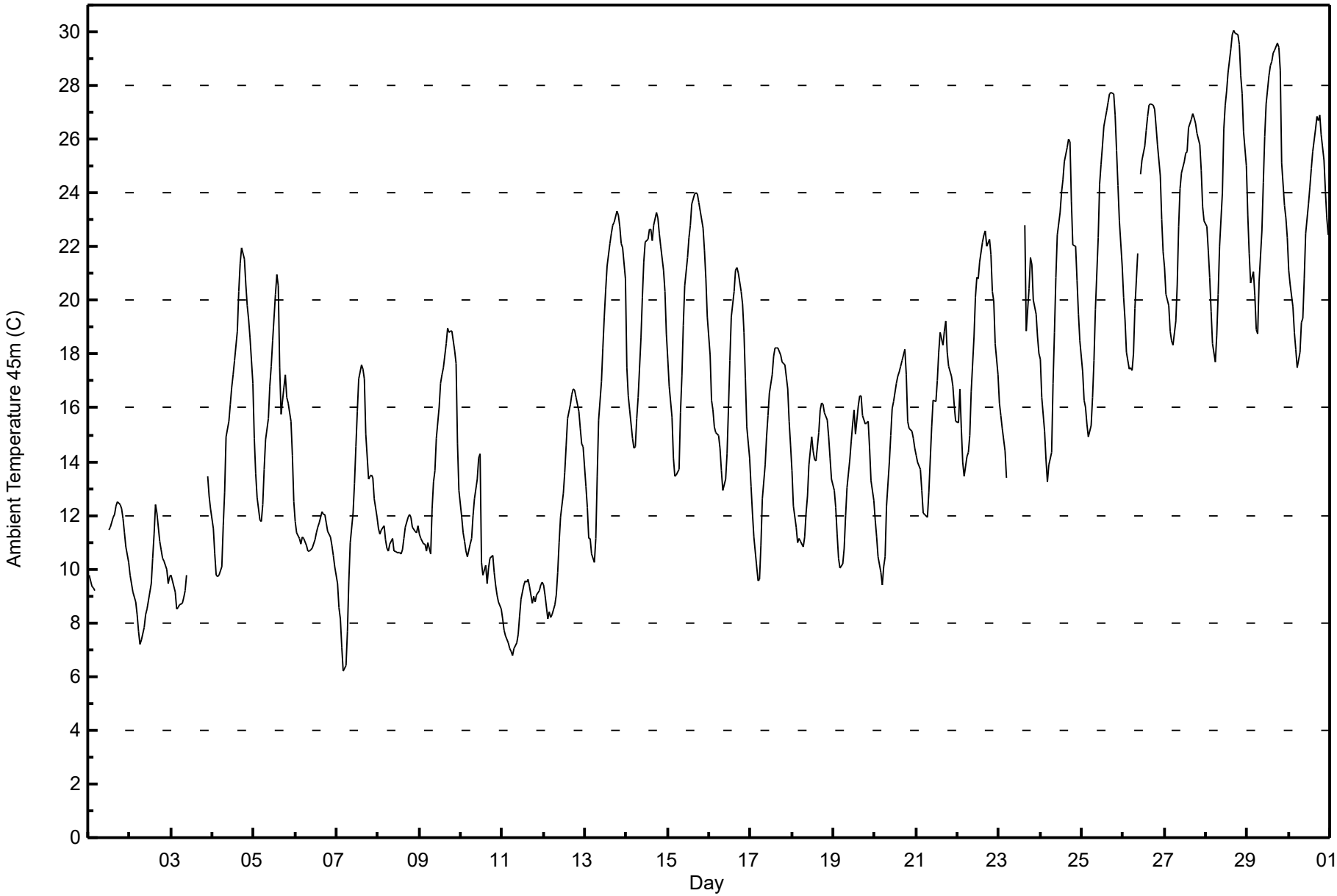
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 45m (AT45) - C

Mannix - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	86	12.45	12.45
10 - 20	415	60.06	72.50
> 20	190	27.50	100.00

Total Number of Valid Hours: 691

Total Number of Hours: 720

Maximum Value: 29.5 C on Jun 28 17:00 — Maximum Daily Average: 25.0 C on Jun 28

Minimum Value: 6.3 C on Jun 7 05:00 — Minimum Daily Average: 8.3 C on Jun 11

Maximum Diurnal Average: 19.4 C at hour 18 — Minimum Diurnal Average: 12.5 C at hour 6

Monthly Average: 16.31 C — Percentiles: P_1 = 7.1 P_{10} = 9.6 Q_1 = 11.5 Median = 15.7 Q_3 = 20.5 P_{90} = 24.3 P_{99} = 28.8

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	9.5	9.3	9.2	9.1	9.0	DF	DF	DF	DF	DF	DF	DF	11.3	11.4	11.7	11.9	12.2	12.3	12.2	12.1	11.8	11.2	10.7	10.1	--	12.3
2-Jun	9.7	9.3	9.0	8.7	8.2	7.6	7.1	7.3	7.7	8.2	8.4	8.8	9.4	10.3	11.1	12.1	11.9	10.9	10.6	10.3	10.2	9.9	9.6	9.7	9.4	12.1
3-Jun	9.7	9.5	9.1	8.4	8.5	8.6	8.6	8.8	9.1	9.7	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	13.4	12.7	12.3	--	13.4
4-Jun	11.7	11.0	10.5	10.7	10.4	10.5	11.7	12.7	14.6	15.3	15.8	16.4	16.9	17.4	18.5	20.0	21.0	21.6	21.2	20.3	19.8	19.4	19.0	18.2	16.0	21.6
5-Jun	16.0	14.3	13.5	12.6	12.2	12.5	13.5	14.6	15.4	16.6	17.3	18.3	19.8	20.6	20.3	17.4	15.8	16.8	17.1	16.4	16.5	15.9	14.3	12.4	15.8	20.6
6-Jun	11.7	11.3	11.1	10.9	11.2	11.1	10.8	10.6	10.6	10.6	10.7	11.0	11.3	11.5	11.7	12.0	11.9	11.9	11.7	11.3	11.2	10.8	10.5	10.3	11.1	12.0
7-Jun	9.9	9.2	9.0	7.5	6.3	6.5	7.6	9.4	10.8	11.9	13.0	14.3	15.6	16.7	17.3	17.1	16.8	14.9	13.4	13.6	13.7	13.4	12.6	12.1	12.2	17.3
8-Jun	11.7	11.3	11.4	11.5	11.0	10.7	10.6	10.9	11.1	10.6	10.6	10.5	10.5	10.5	10.7	11.1	11.5	11.9	12.0	11.9	11.6	11.4	11.4	11.6	11.2	12.0
9-Jun	11.3	11.1	11.0	10.9	10.7	10.9	10.5	12.0	13.0	13.4	14.6	15.7	16.6	16.9	17.2	18.0	18.6	18.5	18.6	18.6	17.9	17.6	14.6	12.9	14.6	18.6
10-Jun	11.8	11.2	11.0	10.7	10.3	10.8	11.0	11.8	12.4	13.1	13.9	14.1	10.1	9.6	10.0	9.4	9.9	10.2	10.4	9.8	9.4	9.0	8.7	8.4	10.7	14.1
11-Jun	8.1	7.7	7.5	7.2	7.0	6.9	6.7	6.9	7.1	7.5	8.1	8.7	9.2	9.4	9.3	9.4	9.2	8.6	8.9	8.7	9.0	9.1	9.4	9.4	8.3	9.4
12-Jun	9.4	9.3	8.5	8.7	8.4	8.4	8.6	8.9	9.7	10.7	11.6	12.5	13.3	14.3	15.2	15.8	16.2	16.4	16.4	16.2	15.9	15.4	14.9	14.7	12.5	16.4
13-Jun	13.4	12.9	12.6	12.4	12.1	11.1	11.2	13.3	15.3	16.7	17.9	19.0	20.0	21.0	21.7	22.1	22.5	22.6	22.9	22.9	22.8	22.5	22.4	21.1	18.0	22.9
14-Jun	19.2	17.4	16.6	15.1	14.6	14.4	15.5	16.2	18.3	19.8	21.0	21.7	21.9	22.2	22.2	21.8	22.4	22.8	22.7	22.2	21.8	21.0	20.4	19.3	19.6	22.8
15-Jun	18.3	17.1	16.2	15.5	14.8	14.5	14.7	15.8	17.0	18.9	20.1	21.2	21.9	22.4	23.1	23.5	23.5	23.6	23.3	23.1	22.5	21.7	20.6	19.2	19.7	23.6
16-Jun	17.8	16.2	15.9	15.4	15.0	14.9	14.4	13.5	12.8	13.3	14.2	15.6	17.4	19.1	20.1	20.8	20.8	20.6	20.0	19.6	18.6	16.9	15.2	14.1	16.8	20.8
17-Jun	13.1	12.1	11.3	10.3	9.8	9.6	10.9	12.4	13.6	14.6	15.4	16.2	16.9	17.5	17.9	17.9	17.9	17.7	17.5	17.4	17.4	16.9	15.9	15.1	14.8	17.9
18-Jun	14.1	12.7	11.8	11.2	11.1	11.0	10.8	11.1	11.9	12.5	13.6	14.7	14.2	13.8	13.8	14.8	15.6	15.9	15.8	15.6	15.4	14.8	14.3	13.7	13.5	15.9
19-Jun	13.2	12.6	11.9	11.2	10.8	10.5	10.8	11.8	12.8	13.8	14.5	15.1	15.6	14.8	15.8	16.1	16.1	15.4	15.1	15.2	15.3	14.5	13.5	12.9	13.7	16.1
20-Jun	12.1	11.2	10.8	10.3	9.8	10.1	10.5	12.2	13.7	14.7	15.6	15.9	16.6	16.7	17.0	17.2	17.4	17.8	16.9	15.2	15.0	15.0	14.8	14.5	14.2	17.8
21-Jun	14.2	14.0	13.7	12.9	12.3	12.0	11.9	12.7	13.8	15.0	15.9	15.9	16.7	17.7	18.4	18.0	18.5	18.9	17.8	17.5	17.1	16.9	16.0	15.7	15.6	18.9
22-Jun	15.6	16.9	15.4	14.6	14.3	14.3	14.3	14.7	16.3	18.5	19.8	20.5	20.5	20.9	21.7	22.0	22.2	21.7	21.9	21.5	20.2	20.0	18.9	18.0	18.5	22.2
23-Jun	16.7	16.1	15.4	15.1	15.0	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	22.4	19.5	20.4	21.3	21.2	20.2	19.8	19.8	18.9	--	22.4
24-Jun	18.4	17.6	17.0	16.0	14.9	15.2	14.5	16.8	18.5	20.5	21.9	22.8	23.5	24.0	24.7	25.2	25.6	25.6	23.3	21.8	21.9	20.6	19.4	18.6	20.4	25.6
25-Jun	17.7	17.2	16.7	16.2	15.7	15.8	16.4	17.6	19.4	22.0	23.9	24.6	25.3	26.0	26.6	27.0	27.2	27.3	27.2	26.5	25.3	24.1	22.8	21.3	22.1	27.3
26-Jun	20.5	19.7	18.6	17.9	17.7	17.6	18.0	19.4	21.4	DF	21.5	24.7	25.3	25.8	26.4	26.7	26.9	26.8	26.6	26.1	25.5	24.3	22.8	21.6	22.7	26.9
27-Jun	21.1	20.1	19.7	18.9	18.3	18.1	19.1	20.3	22.2	23.7	24.3	24.7	25.0	25.1	25.9	26.2	26.5	26.4	26.2	25.9	25.5	24.8	23.5	22.9	23.1	26.5
28-Jun	22.8	22.3	21.3	20.5	19.4	18.4	19.2	20.1	21.7	23.6	25.8	26.7	27.2	27.9	28.7	29.2	29.5	29.4	29.4	29.1	28.1	27.6	26.4	25.0	25.0	29.5
29-Jun	24.2	22.8	21.9	22.2	21.2	20.1	19.2	20.5	22.3	23.9	25.6	26.9	27.9	28.2	28.4	28.6	28.8	29.0	28.9	28.1	24.8	23.3	22.9	22.2	24.7	29.0
30-Jun	21.2	20.7	19.9	19.0	18.7	18.3	18.2	19.1	19.1	20.5	22.1	23.2	23.8	24.5	25.1	25.9	26.4	26.3	26.5	25.9	25.0	23.9	23.1	22.5	22.5	26.5
	14.8	14.1	13.6	13.0	12.6	12.5	12.7	13.6	14.7	15.5	16.9	17.8	18.0	18.4	18.9	19.3	19.4	19.4	19.2	18.8	18.3	17.5	16.7	16.0	Diurnal Average	
	24.2	22.8	21.9	22.2	21.2	20.1	19.2	20.5	22.3	23.9	25.8	26.9	27.9	28.2	28.7	29.2	29.5	29.4	29.4	29.1	28.1	27.6	26.4	25.0	Diurnal Maximum	

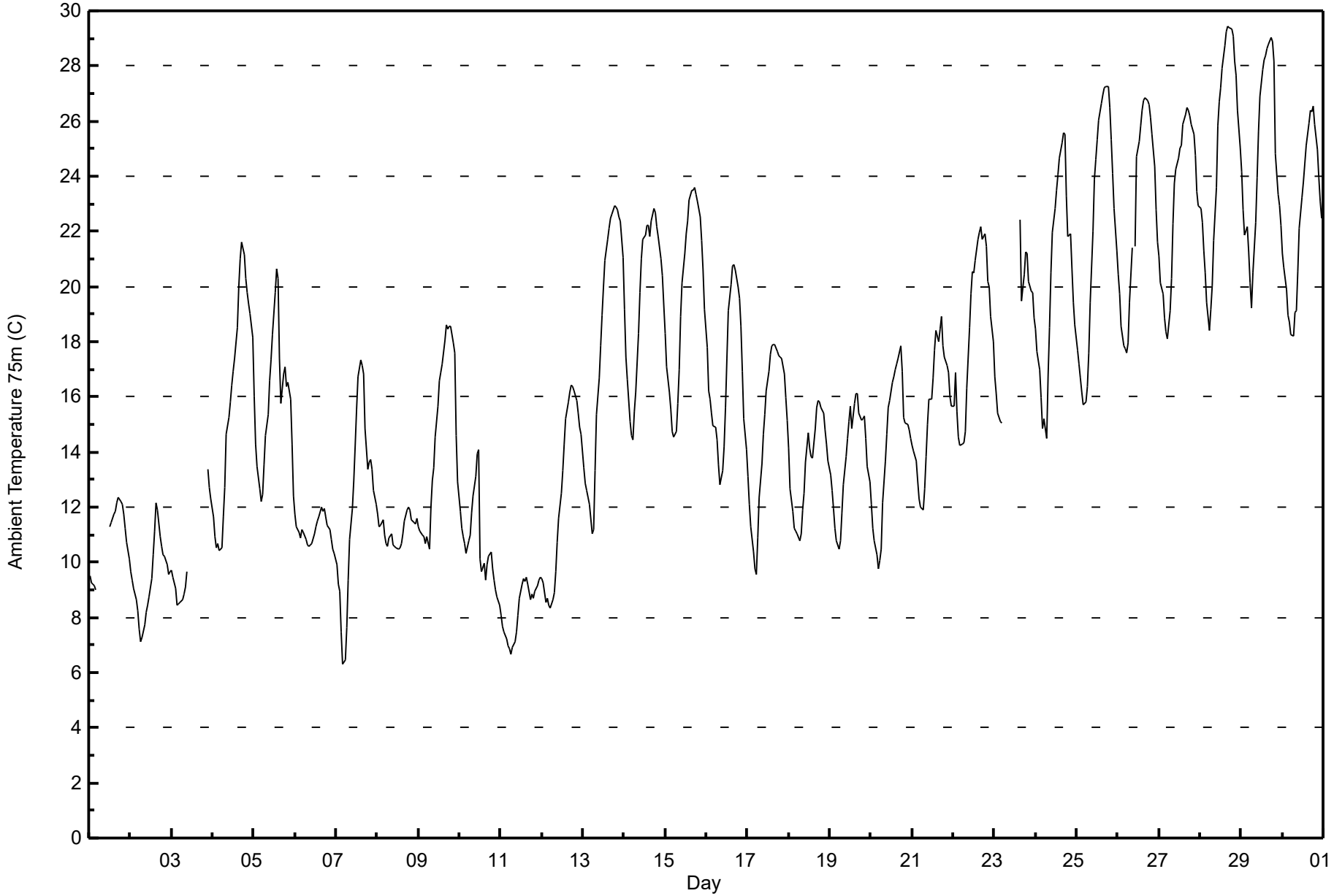
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 75m (AT75) - C

Mannix - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	84	12.16	12.16
10 - 20	421	60.93	73.08
> 20	186	26.92	100.00

Total Number of Valid Hours: 691

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Ambient Temperature 90m (AT90) - C

Mannix - June 2026

Maximum Value: 29.4 C on Jun 28 17:00

Maximum Daily Average: 25.1 C on Jun 28

Minimum Value: 15.6 C on Jun 25 05:00

Minimum Daily Average: 22.0 C on Jun 25

Maximum Diurnal Average: 27.2 C at hour 18

Minimum Diurnal Average: 18.3 C at hour 6

Monthly Average: 23.24 C

Percentiles: P_1 = 15.9 P_{10} = 18.4 Q_1 = 20.4 Median = 23.6 Q_3 = 26.0 P_{90} = 27.7 P_{99} = 29.4

Hours in Service:	720
Hours of Data:	159
Hours of Missing Data:	561
Hours of Calibration:	0
Percent Operational Time:	22.1

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-Jun	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
3-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	--	--
4-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
6-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
24-Jun	UO	UO	UO	UO	UO	UO	UO	UO	18.2	20.2	21.7	22.6	23.3	23.8	24.4	25.0	25.4	25.4	23.1	21.6	21.8	20.5	19.2	18.5	--	25.4
25-Jun	17.6	17.2	16.6	16.1	15.6	15.7	16.2	17.3	19.3	21.8	23.7	24.4	25.2	25.9	26.5	26.8	27.1	27.2	27.2	26.5	25.3	24.0	22.8	21.2	22.0	27.2
26-Jun	20.4	19.7	18.5	17.7	17.5	17.4	17.8	19.4	21.3	DF	24.1	24.6	25.3	25.8	26.3	26.7	26.8	26.7	26.6	26.1	25.5	24.3	22.8	21.6	22.7	26.8
27-Jun	21.1	20.2	19.8	19.0	18.4	18.1	19.1	20.3	22.3	23.6	24.2	24.6	25.0	25.1	25.8	26.2	26.4	26.3	26.2	25.9	25.5	24.9	23.6	23.0	23.1	26.4
28-Jun	23.0	22.5	21.5	21.0	19.9	19.1	19.5	20.1	21.6	23.5	25.8	26.6	27.1	27.8	28.6	29.1	29.4	29.4	29.4	29.1	28.2	27.7	26.6	25.1	25.1	29.4
29-Jun	24.4	23.0	22.3	22.5	21.8	20.8	19.7	20.5	22.4	23.8	25.5	26.8	27.8	28.1	28.3	28.5	28.7	29.0	28.8	28.1	24.8	23.3	22.9	22.3	24.8	29.0
30-Jun	21.3	20.8	20.0	19.1	19.1	18.5	18.3	19.1	19.0	20.4	22.0	23.1	23.7	24.4	25.1	25.9	26.4	26.3	26.5	25.9	25.0	24.0	23.1	22.6	22.5	26.5
	21.3	20.6	19.8	19.2	18.7	18.3	18.4	19.5	20.6	22.2	23.9	24.7	25.3	25.8	26.4	26.9	27.2	27.2	26.8	26.2	25.2	24.1	23.0	22.0	Diurnal Average	
	24.4	23.0	22.3	22.5	21.8	20.8	19.7	20.5	22.4	23.8	25.8	26.8	27.8	28.1	28.6	29.1	29.4	29.4	29.4	29.1	28.2	27.7	26.6	25.1	Diurnal Maximum	

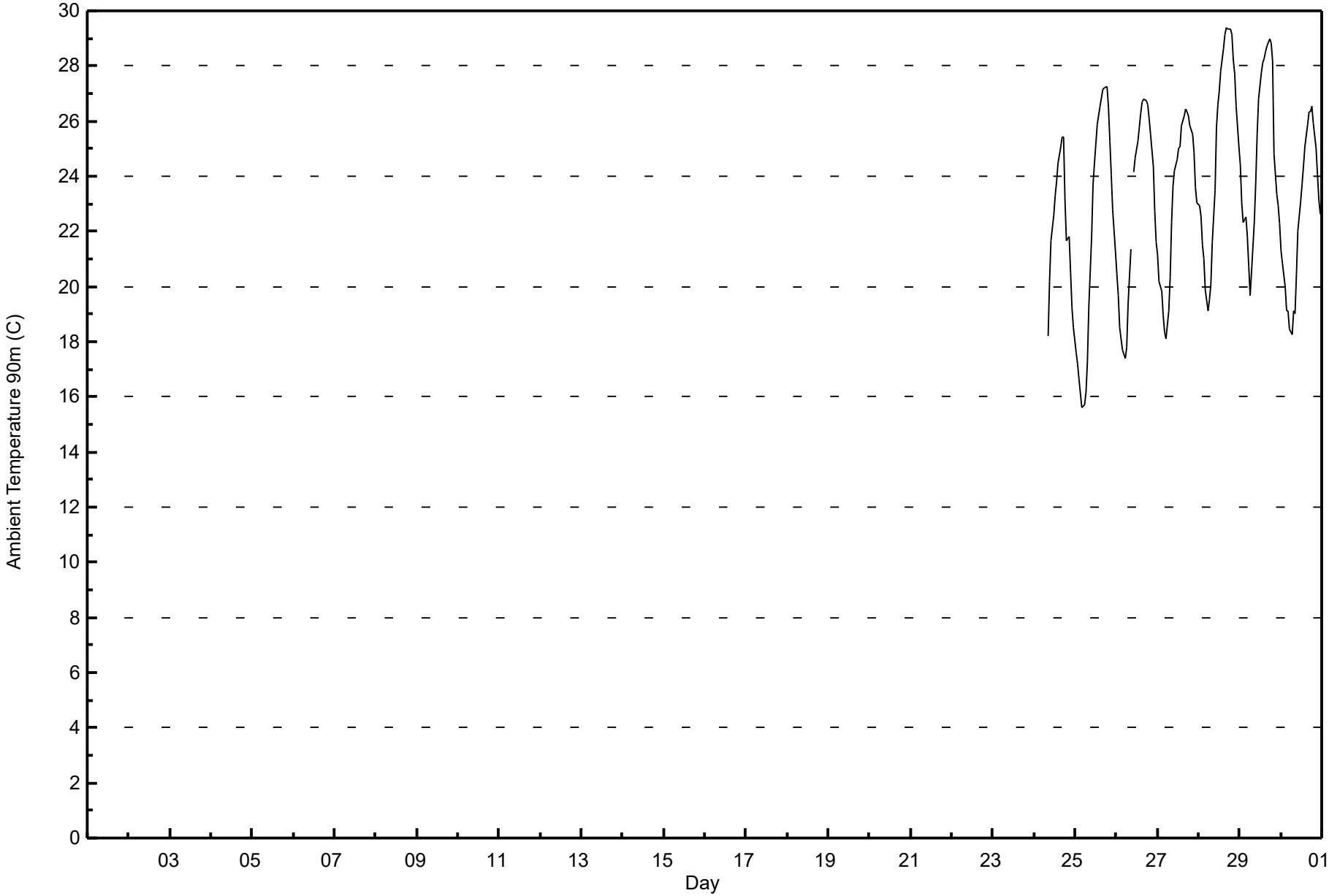
DF - DAS Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 90m (AT90) - C

Mannix - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	0	0.00	0.00
10 - 20	35	22.01	22.01
> 20	124	77.99	100.00

Total Number of Valid Hours: 159

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity (RH) - %

Mannix - June 2026

Maximum Value: 100 % on Jun 1 04:00

Maximum Daily Average: 98.3 % on Jun 6

Minimum Value: 24 % on Jun 28 17:00

Minimum Daily Average: 47.0 % on Jun 28

Maximum Diurnal Average: 89.0 % at hour 4

Minimum Diurnal Average: 51.6 % at hour 16

Monthly Average: 66.9 %

Percentiles: P_1 = 28 P_{10} = 37 Q_1 = 49 Median = 68 Q_3 = 85 P_{90} = 95 P_{99} = 99

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	99	99	100	100	100	DF	DF	DF	DF	DF	DF	DF	81	80	79	77	75	74	75	75	75	76	77	78	--	100
2-Jun	80	81	80	81	83	86	88	89	86	85	89	91	91	84	77	72	75	83	84	85	87	91	96	91	84.8	96
3-Jun	83	83	86	93	91	88	87	87	85	80	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	92	92	94	--	94
4-Jun	97	97	98	99	99	94	83	77	71	73	69	63	62	57	53	51	49	48	52	56	64	72	80	85	72.9	99
5-Jun	89	90	94	96	94	85	72	73	71	63	59	50	42	39	41	62	69	70	63	73	80	84	91	95	72.9	96
6-Jun	97	98	99	99	99	98	98	98	98	99	99	99	99	99	99	99	97	96	97	98	98	98	98	99	98.3	99
7-Jun	99	99	100	99	99	94	84	79	76	73	71	65	61	56	54	61	67	83	96	94	92	88	90	92	82.2	100
8-Jun	94	97	98	96	98	98	98	99	99	99	98	97	96	96	97	96	96	94	92	93	94	94	93	88	95.9	99
9-Jun	88	88	87	84	85	82	83	72	68	70	62	59	55	54	55	51	50	54	54	57	66	73	82	91	69.6	91
10-Jun	91	93	93	92	92	87	83	75	66	66	64	69	92	91	87	91	84	75	75	76	79	83	83	85	82.3	93
11-Jun	85	83	83	84	86	87	88	86	85	83	78	74	71	71	74	76	79	84	80	84	85	85	86	87	81.8	88
12-Jun	87	91	96	96	91	82	74	72	64	54	49	47	45	40	38	37	36	36	38	43	50	57	64	67	60.6	96
13-Jun	81	88	91	92	92	76	65	56	51	41	34	36	35	32	33	34	36	37	36	37	46	51	59	64	54.3	92
14-Jun	65	66	72	76	74	61	51	54	45	41	36	36	40	38	36	39	35	33	33	39	42	45	50	57	48.5	76
15-Jun	70	78	88	92	88	82	73	63	52	44	39	38	36	34	33	34	34	35	35	36	45	47	37	37	51.9	92
16-Jun	49	76	84	87	86	71	56	63	67	67	65	63	58	49	45	34	31	33	32	31	35	41	44	53	55.0	87
17-Jun	58	69	75	80	80	75	69	61	52	47	45	42	39	39	38	40	40	41	44	41	39	48	59	71	53.8	80
18-Jun	73	73	80	84	84	78	88	89	84	75	64	58	67	68	69	62	56	53	52	59	65	69	69	79	70.8	89
19-Jun	89	95	97	98	99	94	82	73	65	61	56	50	50	64	55	52	53	58	60	61	61	63	73	81	70.4	99
20-Jun	84	91	91	93	94	86	82	73	62	58	55	55	52	51	48	49	49	45	54	66	66	68	77	81	67.9	94
21-Jun	77	78	85	96	97	98	98	91	78	72	65	69	65	61	54	57	57	55	64	67	67	67	76	84	74.1	98
22-Jun	83	95	90	94	94	89	69	66	59	58	46	39	41	40	37	35	36	44	42	49	55	64	71	76	61.3	95
23-Jun	79	86	91	95	95	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	43	86	65	52	57	68	76	82	87	--	95
24-Jun	85	87	91	93	88	83	79	65	60	54	44	42	39	39	35	35	36	37	43	49	51	55	61	73	59.3	93
25-Jun	78	85	86	87	91	79	67	60	55	51	40	39	37	35	32	31	33	33	34	38	44	46	48	58	53.6	91
26-Jun	68	73	78	81	74	68	64	59	52	DF	39	38	36	36	33	35	35	36	38	41	44	48	51	58	51.5	81
27-Jun	57	60	63	70	63	64	62	57	53	48	46	47	49	50	43	43	38	38	38	41	49	49	47	52	51.1	70
28-Jun	61	67	70	78	82	77	69	59	52	49	39	32	31	28	26	24	24	25	27	28	38	44	46	51	47.0	82
29-Jun	61	66	68	69	77	75	67	55	50	45	41	38	36	32	32	31	31	29	30	32	47	58	67	66	50.2	77
30-Jun	66	69	79	83	86	81	71	63	64	58	50	47	45	46	47	42	39	40	27	24	30	38	48	53	53.9	86
	79.1	83.3	86.3	89.0	88.7	82.8	76.8	72.0	66.9	63.4	57.1	54.9	55.3	53.9	51.7	51.6	52.7	53.0	53.3	56.3	60.8	65.7	69.9	74.4	Diurnal Average	
	99	99	100	100	100	98	98	99	99	99	99	99	99	99	99	99	97	96	97	98	98	98	98	99	Diurnal Maximum	

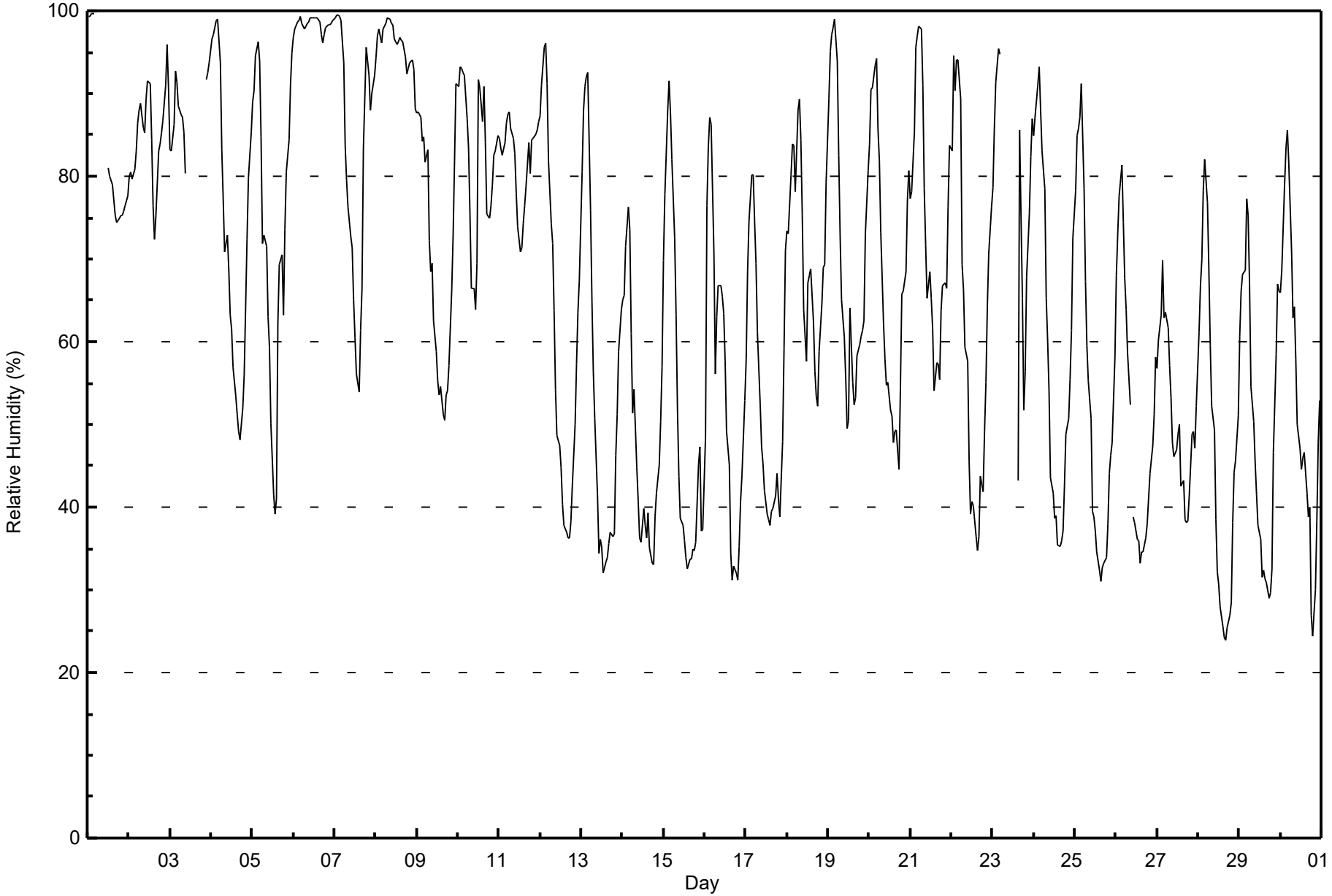
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity (RH) - %

Mannix - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	108	15.63	15.63
40 - 60	162	23.44	39.07
60 - 80	183	26.48	65.56
80 - 100	238	34.44	100.00

Total Number of Valid Hours: 691

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 20m (RH20) - %

Mannix - June 2026

Maximum Value: 96 % on Jun 8 07:00

Maximum Daily Average: 91.7 % on Jun 6

Minimum Value: 21 % on Jun 28 17:00

Minimum Daily Average: 39.9 % on Jun 28

Maximum Diurnal Average: 80.3 % at hour 5

Minimum Diurnal Average: 47.2 % at hour 18

Monthly Average: 61.2 %

Percentiles: P_1 = 25 P_{10} = 32 Q_1 = 44 Median = 62 Q_3 = 79 P_{90} = 88 P_{99} = 95

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	94	94	95	95	95	DF	DF	DF	DF	DF	DF	DF	78	77	76	74	72	72	72	73	72	73	74	75	--	95
2-Jun	77	78	77	79	81	85	86	86	84	82	85	87	87	81	74	70	73	80	81	83	84	87	91	84	81.8	91
3-Jun	80	80	84	91	89	86	86	85	84	79	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	76	79	81	--	91
4-Jun	85	89	94	95	94	91	86	81	75	75	71	67	64	60	56	52	48	46	48	50	54	57	62	66	69.5	95
5-Jun	73	78	85	87	87	84	76	74	71	63	57	48	39	36	33	59	65	54	55	65	70	72	75	85	66.3	87
6-Jun	90	93	94	95	96	92	92	92	93	93	93	94	94	92	93	90	88	86	88	91	91	91	91	92	91.7	96
7-Jun	94	94	94	96	94	90	86	82	78	74	69	63	57	53	51	58	63	73	85	85	86	82	85	88	78.3	96
8-Jun	91	94	95	93	96	96	96	96	94	94	92	89	89	90	90	89	88	85	83	84	85	84	83	79	89.8	96
9-Jun	80	81	80	77	78	76	80	73	67	69	63	60	55	53	53	49	48	50	49	50	55	55	75	87	65.2	87
10-Jun	88	91	90	89	90	86	82	75	68	67	64	65	89	88	85	87	79	72	71	72	72	76	79	81	79.4	91
11-Jun	81	79	78	80	83	85	86	84	82	80	76	72	70	71	74	76	77	81	77	81	81	81	80	81	79.1	86
12-Jun	81	84	87	84	78	75	70	68	62	53	48	45	43	38	35	34	32	32	34	37	41	46	50	51	54.5	87
13-Jun	60	63	73	76	80	74	67	58	51	41	34	36	34	31	30	30	30	31	29	30	34	37	41	41	46.3	80
14-Jun	49	49	50	50	51	51	50	52	45	40	36	34	36	35	34	34	32	29	29	32	33	35	39	45	40.4	52
15-Jun	53	60	70	78	76	72	75	63	52	43	37	36	35	33	32	31	30	30	31	32	35	36	30	35	46.0	78
16-Jun	44	73	77	81	80	64	49	58	62	62	65	67	59	49	42	30	28	30	28	28	32	37	40	46	51.3	81
17-Jun	52	58	63	71	74	75	73	64	55	48	44	39	37	36	35	34	35	34	36	36	34	37	47	56	48.8	75
18-Jun	54	60	68	71	73	73	80	82	77	72	63	56	63	66	67	59	53	50	49	52	55	58	62	71	63.9	82
19-Jun	78	81	84	89	87	83	79	72	66	61	55	52	51	60	54	52	51	55	57	57	56	58	66	72	65.8	89
20-Jun	74	78	84	88	91	87	85	76	65	60	56	54	51	50	47	48	47	42	52	63	64	63	67	71	65.2	91
21-Jun	73	73	77	86	92	92	92	89	82	74	67	67	64	60	52	55	55	52	60	61	63	62	65	70	70.2	92
22-Jun	71	61	76	81	83	76	68	68	62	57	44	39	39	37	33	31	32	36	33	38	47	49	55	61	53.2	83
23-Jun	63	70	76	83	84	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	37	62	49	43	46	53	58	64	68	--	84
24-Jun	69	73	76	80	80	79	76	66	61	53	45	42	39	37	33	33	32	33	39	44	42	46	53	59	53.7	80
25-Jun	63	69	71	74	77	73	69	61	56	49	38	37	35	31	28	28	28	27	27	32	36	37	40	46	47.2	77
26-Jun	51	54	59	62	63	63	62	59	51	DF	36	35	32	30	28	29	29	30	31	34	37	40	44	49	43.9	63
27-Jun	50	52	54	57	59	61	60	59	52	45	43	43	42	44	38	36	31	30	33	37	39	40	42	43	45.4	61
28-Jun	44	51	55	60	66	72	67	59	52	50	36	30	28	26	23	22	21	22	24	25	26	27	32	38	39.9	72
29-Jun	47	52	54	55	60	64	65	54	49	44	40	37	32	28	29	27	27	26	27	30	43	49	51	54	43.5	65
30-Jun	56	58	62	66	72	77	69	63	63	58	50	46	43	41	39	35	33	31	24	22	25	29	33	37	47.1	77
	68.9	72.3	76.1	79.0	80.3	78.0	75.5	71.4	66.5	62.4	55.8	53.3	53.0	51.2	48.7	47.9	47.9	47.2	48.2	50.7	53.2	55.9	59.8	63.8	Diurnal Average	
	94	94	95	96	96	96	96	96	94	94	93	94	94	92	93	90	88	86	88	91	91	91	91	92	Diurnal Maximum	

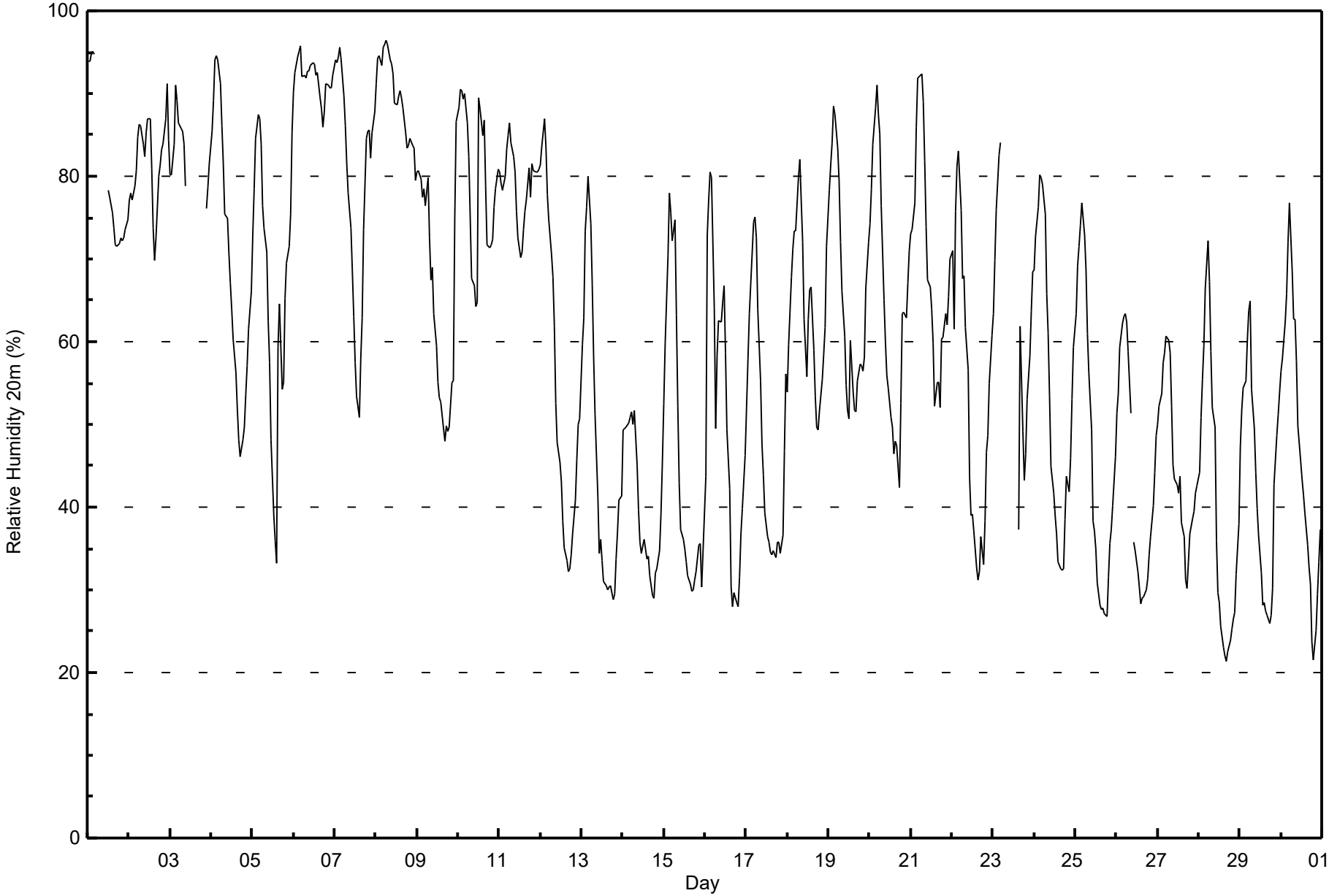
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 20m (RH20) - %

Mannix - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	151	21.85	21.85
40 - 60	174	25.18	47.03
60 - 80	206	29.81	76.85
80 - 100	160	23.15	100.00

Total Number of Valid Hours: 691

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 45m (RH45) - %

Mannix - June 2026

Maximum Value: 97 % on Jun 8 07:00

Maximum Daily Average: 91.0 % on Jun 6

Minimum Value: 21 % on Jun 30 20:00

Minimum Daily Average: 38.0 % on Jun 28

Maximum Diurnal Average: 77.7 % at hour 5

Minimum Diurnal Average: 46.6 % at hour 18

Monthly Average: 60.2 %

Percentiles: P_1 = 24 P_{10} = 32 Q_1 = 43 Median = 60 Q_3 = 78 P_{90} = 88 P_{99} = 95

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	93	93	95	95	94	DF	DF	DF	DF	DF	DF	DF	79	78	76	74	72	72	72	73	72	72	74	75	--	95
2-Jun	77	78	77	79	81	85	87	86	84	82	85	86	86	80	73	70	73	80	82	84	84	87	90	83	81.7	90
3-Jun	80	80	84	91	90	87	86	86	85	80	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	75	78	81	--	91
4-Jun	84	88	93	93	93	92	87	83	76	76	72	68	65	62	57	52	48	46	48	49	51	52	54	61	68.8	93
5-Jun	69	76	82	86	87	85	78	74	71	63	58	48	39	36	32	58	62	50	54	63	60	63	70	83	64.5	87
6-Jun	90	92	94	95	96	92	92	91	92	92	93	93	93	91	92	89	87	85	87	91	90	89	88	90	91.0	96
7-Jun	90	91	92	95	94	91	88	83	78	75	69	63	57	53	51	58	63	72	83	83	82	80	84	87	77.6	95
8-Jun	90	94	95	94	96	97	97	96	94	94	92	89	89	90	90	89	88	85	82	83	84	82	82	79	89.6	97
9-Jun	80	80	79	77	78	76	80	73	67	69	64	60	55	53	53	49	48	50	49	49	54	51	75	86	64.7	86
10-Jun	89	91	91	89	91	87	83	75	68	67	65	65	90	88	85	86	78	72	72	72	72	76	79	81	79.7	91
11-Jun	81	79	79	80	84	86	87	85	83	81	76	73	71	71	74	76	78	81	78	82	81	81	81	81	79.5	87
12-Jun	81	82	85	78	76	74	70	68	62	52	48	45	43	38	35	33	32	32	34	36	40	44	48	48	53.5	85
13-Jun	55	60	63	60	63	69	67	58	51	41	34	36	33	31	30	30	30	30	28	28	30	31	31	34	42.5	69
14-Jun	41	42	44	48	49	50	50	51	45	39	35	34	36	35	33	34	31	29	28	31	31	34	37	42	38.7	51
15-Jun	48	49	56	67	71	71	75	63	52	43	37	36	35	33	31	30	30	30	31	31	34	34	30	34	43.8	75
16-Jun	44	73	77	80	80	64	49	58	63	62	65	67	59	50	42	30	27	29	28	27	31	36	39	45	51.0	80
17-Jun	51	56	62	69	74	76	73	65	55	47	44	39	36	35	34	34	34	33	35	35	34	35	42	49	47.8	76
18-Jun	51	57	66	70	73	74	79	82	76	72	63	56	63	67	67	59	53	49	49	51	55	57	60	70	63.3	82
19-Jun	73	76	80	84	82	82	79	72	67	61	55	52	51	59	54	52	52	55	57	57	56	58	66	71	64.5	84
20-Jun	73	77	83	88	91	89	86	77	66	61	57	55	51	50	47	48	47	42	53	64	64	63	66	70	65.4	91
21-Jun	72	73	76	84	89	91	92	89	83	75	68	67	64	60	52	55	55	52	60	59	62	61	65	69	69.6	92
22-Jun	67	55	71	80	78	73	68	68	62	56	44	38	39	37	32	31	32	36	33	36	45	45	50	53	51.3	80
23-Jun	59	64	65	69	73	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	37	54	46	43	45	51	54	58	58	--	73
24-Jun	56	64	69	75	78	78	75	66	61	53	45	41	39	37	33	32	32	32	39	43	41	45	53	58	51.9	78
25-Jun	61	67	69	72	74	71	68	61	56	49	38	37	35	30	28	27	27	27	26	31	35	36	39	45	46.2	74
26-Jun	48	50	55	59	61	63	62	59	51	DF	35	34	32	30	28	29	29	30	31	34	36	40	44	48	42.9	63
27-Jun	50	51	53	56	58	61	61	59	52	45	44	43	41	43	38	36	31	30	33	36	38	38	41	42	45.0	61
28-Jun	42	46	48	53	60	68	65	58	52	49	36	30	28	25	23	22	21	22	24	25	25	26	30	34	38.0	68
29-Jun	44	49	52	46	51	60	63	54	49	44	40	36	31	28	28	27	26	25	27	30	42	48	49	53	41.8	63
30-Jun	55	56	60	64	67	69	66	62	62	58	50	45	43	41	39	35	32	30	23	21	25	29	32	34	45.7	69
	66.5	69.7	73.2	75.9	77.7	77.1	75.5	71.6	66.6	62.5	55.9	53.2	52.9	51.1	48.5	47.7	47.3	46.6	47.8	50.0	51.9	54.0	57.8	61.4	Diurnal Average	
	93	94	95	95	96	97	97	96	94	94	93	93	93	91	92	89	88	85	87	91	90	89	90	90	Diurnal Maximum	

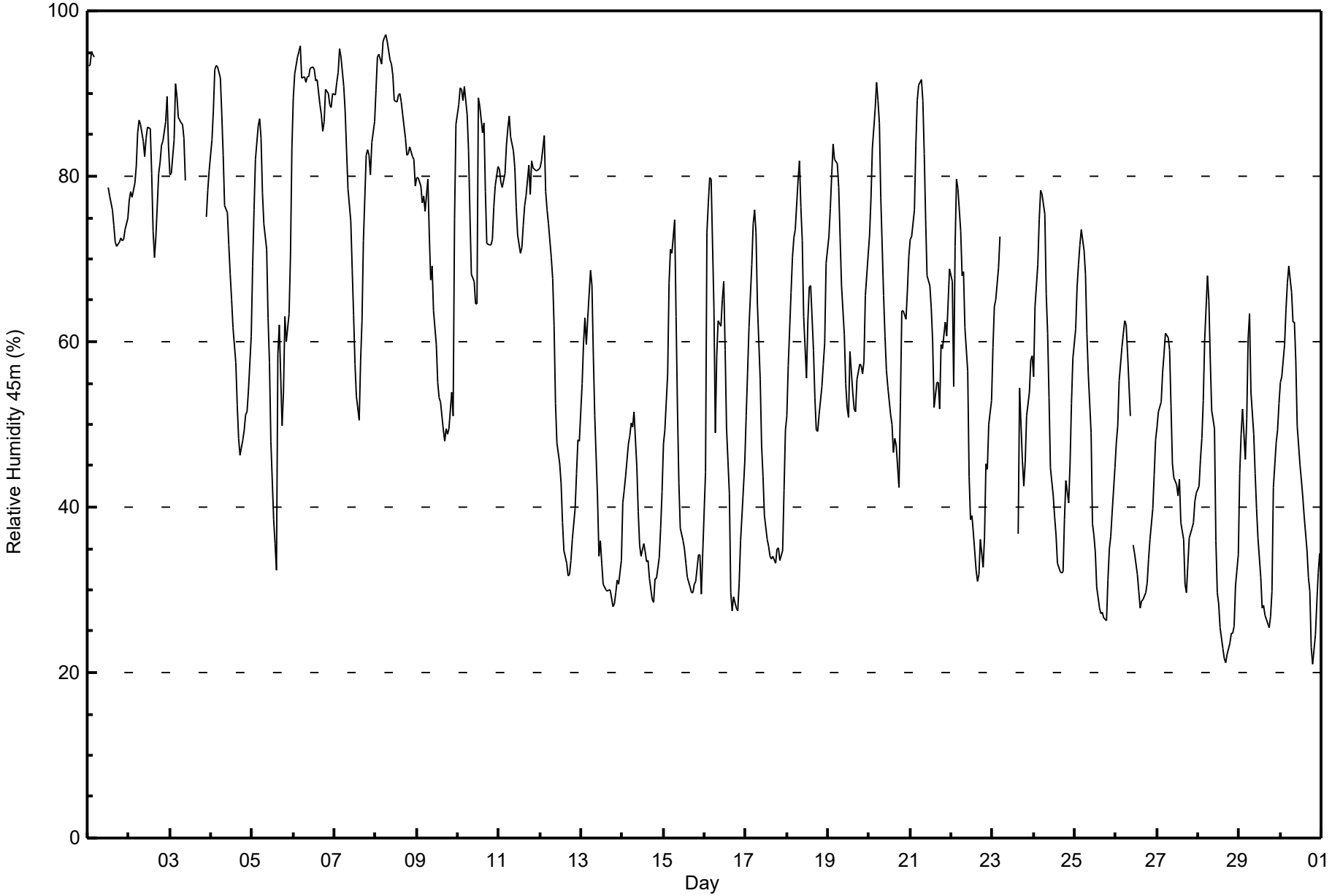
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 45m (RH45) - %

Mannix - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	156	22.58	22.58
40 - 60	187	27.06	49.64
60 - 80	196	28.36	78.00
80 - 100	152	22.00	100.00

Total Number of Valid Hours: 691

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 75m (RH75) - %

Mannix - June 2026

Maximum Value: 99 % on Jun 8 07:00

Maximum Daily Average: 92.3 % on Jun 6

Minimum Value: 21 % on Jun 30 20:00

Minimum Daily Average: 37.2 % on Jun 28

Maximum Diurnal Average: 76.3 % at hour 6

Minimum Diurnal Average: 47.4 % at hour 18

Monthly Average: 60.5 %

Percentiles: P_1 = 24 P_{10} = 32 Q_1 = 43 Median = 59 Q_3 = 79 P_{90} = 89 P_{99} = 98

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	97	98	98	98	98	DF	DF	DF	DF	DF	DF	DF	81	79	78	76	74	73	74	74	74	74	75	77	--	98
2-Jun	79	80	79	81	83	87	89	88	86	84	86	87	86	81	75	72	75	82	84	86	86	88	89	85	83.3	89
3-Jun	82	82	87	93	92	89	89	88	87	82	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	76	80	82	--	93
4-Jun	85	89	92	92	93	92	88	85	79	78	74	70	67	64	59	54	50	48	49	50	51	51	53	56	69.5	93
5-Jun	65	75	82	85	86	85	80	76	73	64	59	49	40	36	33	58	61	48	54	61	57	60	70	84	64.2	86
6-Jun	91	94	96	97	97	93	94	93	94	93	94	95	94	93	93	90	89	87	87	92	91	90	90	91	92.3	97
7-Jun	88	90	91	95	95	92	90	85	81	77	71	65	59	55	52	59	64	73	82	80	79	80	84	86	78.1	95
8-Jun	89	96	96	95	98	99	99	98	96	95	94	91	91	91	91	90	89	85	83	84	84	83	83	80	90.8	99
9-Jun	81	81	80	78	79	77	81	75	69	71	66	61	57	55	54	51	49	51	50	51	55	51	76	87	66.0	87
10-Jun	90	92	92	90	93	90	85	77	70	69	66	66	91	90	87	88	80	74	73	73	74	78	81	83	81.4	93
11-Jun	83	81	80	82	86	88	90	87	85	83	78	75	72	73	76	78	80	83	80	84	83	83	82	82	81.4	90
12-Jun	82	81	84	77	75	75	71	69	63	54	49	47	44	39	36	34	32	33	34	37	40	44	47	47	53.9	84
13-Jun	55	59	59	58	56	61	65	59	52	42	35	37	34	31	31	31	31	31	29	28	29	30	30	33	41.8	65
14-Jun	34	39	41	47	49	50	50	52	46	40	36	35	36	35	34	34	32	29	29	32	32	34	37	40	38.6	52
15-Jun	43	47	52	57	64	62	67	61	53	43	39	37	36	34	32	31	31	30	31	31	34	34	30	35	42.3	67
16-Jun	46	75	77	80	81	66	50	59	64	63	67	69	61	51	42	30	28	30	28	28	31	36	39	46	52.1	81
17-Jun	51	56	62	70	75	77	74	66	57	49	45	40	37	36	35	34	35	34	36	36	34	33	39	45	48.2	77
18-Jun	47	54	66	71	74	75	81	83	78	74	65	57	64	68	68	61	55	51	50	52	55	58	58	69	63.9	83
19-Jun	71	74	75	78	79	80	79	74	68	62	56	53	52	59	55	53	53	57	59	59	57	58	66	69	64.6	80
20-Jun	72	78	83	87	91	91	88	79	67	63	59	56	53	52	48	50	49	44	54	66	65	64	66	71	66.4	91
21-Jun	73	73	76	84	88	92	92	90	85	77	70	69	66	62	54	56	57	53	60	59	62	59	65	69	70.3	92
22-Jun	66	53	71	77	70	71	68	70	63	57	44	39	40	38	33	32	33	37	33	37	46	44	47	50	50.9	77
23-Jun	58	62	64	65	65	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	37	50	44	44	45	50	52	50	53	--	65
24-Jun	54	56	59	64	70	70	75	66	63	54	46	43	40	38	34	33	33	33	40	44	40	45	53	58	50.4	75
25-Jun	60	63	66	67	69	68	68	62	57	50	39	38	35	31	28	28	28	27	27	32	35	37	40	45	45.9	69
26-Jun	46	48	54	58	60	62	62	60	52	DF	37	35	33	31	29	29	30	30	32	34	37	41	45	49	43.2	62
27-Jun	50	52	53	57	60	63	62	60	54	47	45	44	43	45	39	37	32	30	34	37	38	37	40	42	45.8	63
28-Jun	42	44	47	50	56	62	58	57	53	50	37	31	29	26	24	22	22	23	24	25	24	25	29	34	37.2	62
29-Jun	39	42	46	40	44	52	58	55	50	45	41	37	32	28	29	28	27	26	27	30	43	48	50	53	40.4	58
30-Jun	55	55	59	63	64	65	65	63	64	59	51	46	44	42	40	36	32	30	23	21	25	29	32	34	45.7	65
	65.9	69.1	72.2	74.5	76.3	76.3	75.6	72.9	68.2	63.9	57.3	54.5	54.2	52.3	49.6	48.7	48.1	47.4	48.6	50.6	52.0	54.0	57.6	61.1	Diurnal Average	
	97	98	98	98	98	99	99	98	96	95	94	95	94	93	93	90	89	87	87	92	91	90	90	91	Diurnal Maximum	

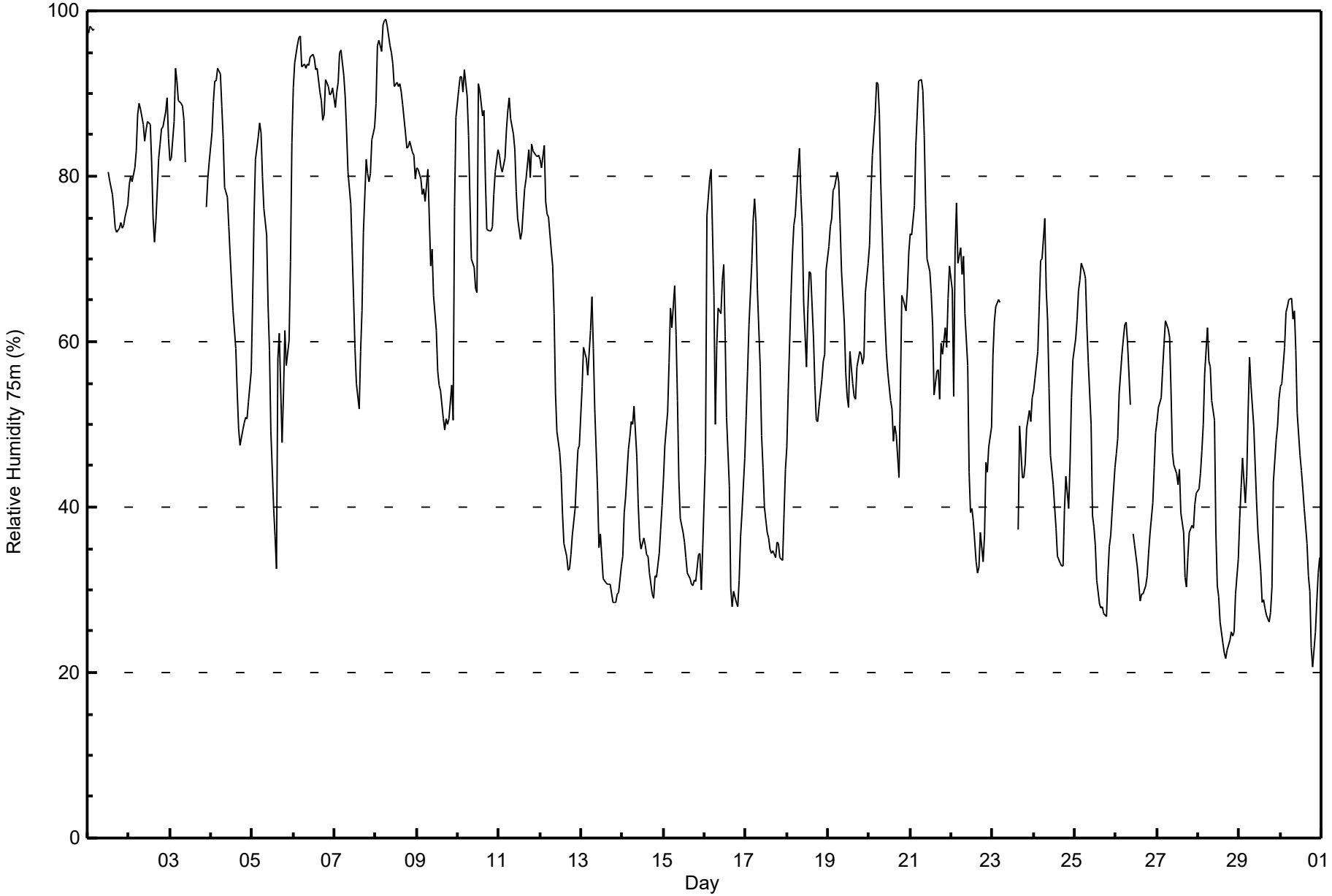
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 75m (RH75) - %

Mannix - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	158	22.87	22.87
40 - 60	192	27.79	50.65
60 - 80	180	26.05	76.70
80 - 100	161	23.30	100.00

Total Number of Valid Hours: 691

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 90m (RH90) - %

Mannix - June 2026

Maximum Value: 67 % on Jun 25 05:00

Maximum Daily Average: 45.3 % on Jun 25

Minimum Value: 20 % on Jun 30 20:00

Minimum Daily Average: 36.2 % on Jun 28

Maximum Diurnal Average: 60.0 % at hour 7

Minimum Diurnal Average: 28.2 % at hour 18

Monthly Average: 42.4 %

Percentiles: P_1 = 22 P_{10} = 27 Q_1 = 32 Median = 41 Q_3 = 53 P_{90} = 61 P_{99} = 67

Hours in Service:	720
Hours of Data:	159
Hours of Missing Data:	561
Hours of Calibration:	0
Percent Operational Time:	22.1

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-Jun	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
3-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	--	--
4-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
6-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
24-Jun	UO	UO	UO	UO	UO	UO	UO	UO	63	55	46	43	40	38	34	33	33	33	40	44	39	45	53	57	--	63
25-Jun	59	61	64	65	67	67	66	62	57	50	39	38	36	31	29	28	28	27	27	32	35	36	39	44	45.3	67
26-Jun	45	48	53	58	60	61	62	59	52	DF	36	35	32	30	28	29	29	30	31	34	36	40	44	48	42.6	62
27-Jun	50	51	53	56	59	62	61	60	53	46	45	44	42	44	39	36	31	30	33	36	37	36	39	41	45.2	62
28-Jun	41	43	45	47	53	57	54	56	52	50	36	30	29	26	23	22	21	22	24	24	24	24	28	33	36.2	57
29-Jun	36	40	42	39	41	47	53	54	49	45	40	37	32	28	29	28	27	26	27	30	43	48	49	52	39.2	54
30-Jun	53	54	58	62	62	64	64	62	63	59	51	46	44	42	40	35	31	29	22	20	24	28	32	33	45.0	64
	47.5	49.4	52.5	54.4	57.1	59.8	60.0	58.6	55.7	50.9	42.1	38.9	36.4	34.2	31.7	30.2	28.7	28.2	29.2	31.4	34.0	36.8	40.7	44.1	Diurnal Average	
	59	61	64	65	67	67	66	62	63	59	51	46	44	44	40	36	33	33	40	44	43	48	53	57	Diurnal Maximum	

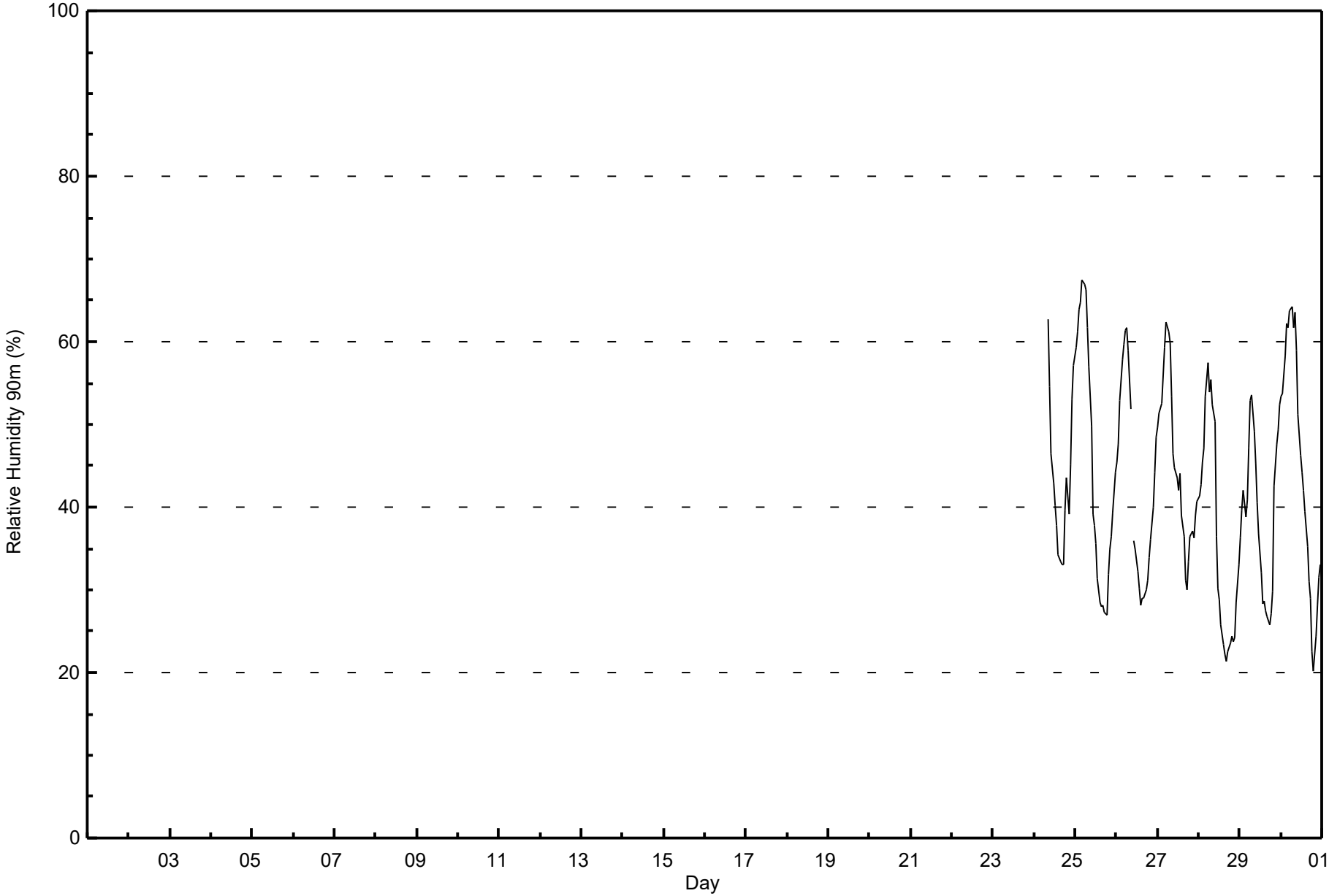
DF - DAS Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 90m (RH90) - %

Mannix - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	77	48.43	48.43
40 - 60	64	40.25	88.68
60 - 80	18	11.32	100.00
80 - 100	0	0.00	100.00

Total Number of Valid Hours: 159

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 20m (WS20) - km/h

Mannix - June 2026

Maximum Speed: 37 km/h on Jun 8 15:00

Maximum Daily Speed Average: 19.7 km/h on Jun 8

Minimum Speed Value: 1 km/h on Jun 21 03:00

Minimum Daily Speed Average: 2.0 km/h on Jun 22

Maximum Diurnal Speed Average: 5.2 km/h at hour 16

Minimum Diurnal Speed Average: 0.8 km/h at hour 23

Monthly Average Velocity: 2.2 km/h 3.8 deg

Percentiles: P_1 = 2 P_{10} = 5 Q_1 = 7 Median = 10 Q_3 = 15 P_{90} = 19 P_{99} = 27

Hours in Service: 720

Hours of Data: 691

Hours of Missing Data: 29

Percent Operational Time: 96.0

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-Jun	N24	N23	NNW21	N21	NNW22	DF	DF	DF	DF	DF	DF	DF	NNE23	NNE21	N21	N23	N22	NNE21	NNE22	NNE23	NNE23	NNE25	NNE26	NNE21	----	NNE26
2-Jun	NNE19	NNE18	NNE21	NNE17	NNE20	NNE23	NNE22	NNE20	NNE18	NNE17	NNE15	NNE14	NNE11	NE12	NE16	ENE14	E12	SE9	ESE9	ESE9	ESE8	SE5	SSW2	ESE6	NE11.2	NNE23
3-Jun	E7	E8	E8	E9	E9	ESE10	SE8	SE6	SE6	SE6	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	SSE7	SE6	SE7	----	ESE10
4-Jun	SSE8	SSE8	SSE10	SSE9	SSE10	SSE9	SSE10	SSE10	SSE8	SSE9	SSW11	SSW12	S13	SSW12	SSW11	S10	SSW12	SSW12	SW16	SW16	SW9	SSW10	S10	S12	S9.8	SW16
5-Jun	S11	SSW10	SSW10	SSW9	SSW6	SW6	S5	SSE5	SSE6	SSE6	SSE7	SSE8	ESE5	SE5	SSE9	S17	SSE13	SSE3	SW6	SSW5	S8	SSW8	WSW9	W13	S6.7	S17
6-Jun	W16	W16	W15	W15	WNW13	WNW22	W25	W23	WSW25	WSW23	WSW23	WSW23	WSW23	WSW21	WSW17	WSW19	WSW18	WSW16	WSW13	WSW10	SW9	SSW6	SSW5	S6	WSW15.8	W25
7-Jun	S6	S7	S6	SSE9	SSE9	SSE9	SSE9	SSE5	SSE8	SSE5	SE7	E8	ESE7	ESE5	NE5	N13	N16	ENE8	W4	NNE7	NE6	ENE9	NE9	NNE10	E3.3	N16
8-Jun	NNE8	N9	N11	N13	NNW13	N16	NNW15	NNW13	WNW16	WNW20	WNW25	WNW30	WNW33	WNW34	W37	W34	W29	W27	W27	W27	W25	W25	W25	W28	WNW19.7	W37
9-Jun	W23	W20	W22	W25	W22	W19	W15	W18	WNW18	WSW13	W12	W14	WNW16	W19	W15	W10	WNW6	NNW8	NNW7	NNW6	N7	NNW7	N14	N18	WNW12.4	W25
10-Jun	NNE13	NNE9	NNE10	NNE11	NNE9	N8	N9	NNW11	NNW7	NW6	NW7	NW12	NNE18	NNE13	N10	NNE15	NNE17	N17	N17	N17	N18	N16	N16	NNW16	N11.8	N18
11-Jun	NNW17	N17	NNW16	NNW13	NNW13	NNW13	NNW14	NNW14	NNW15	NNW14	NNW15	NNW16	NNW16	N18	N17	N14	N20	NNW16	N15	NNW14	NNW14	NNW11	NW10	NW10	NNW14.6	NNW20
12-Jun	NW10	WNW11	W11	WNW11	NNW10	N13	NNW15	NNW14	NNW15	NNW19	N22	N22	N22	N21	N21	N22	N21	N21	NNE19	N15	NNW14	N7	N5	NNW6	NNW14.0	NNW22
13-Jun	NW2	WNW6	W8	WNW7	WNW6	W5	W4	WNW3	W1	WNW7	WNW7	NW3	NW4	WSW4	ESE3	ESE7	SE8	SSE8	WSW10	WSW10	SW8	SSW10	SW10	SSW10	WSW3.9	SSW10
14-Jun	WSW10	WSW10	WSW6	SSW2	SW3	WSW4	WNW7	WNW7	NW5	NNW7	NNW10	NNW12	N10	N13	N17	NNW15	NNW15	N16	N16	NNW13	N10	N10	N9	NNE7	NNW7.4	N17
15-Jun	N6	NNE5	WNW5	W3	NE3	ESE1	SW3	SSE4	SSE6	SSE5	E5	ESE4	WSW4	WNW5	NW4	E7	ESE9	ESE9	E10	E11	SE6	SE8	SE9	ESE14	ESE3.2	ESE14
16-Jun	SE9	SSE9	SSE10	SSE9	SSE9	SE10	SE10	ESE10	SE8	SSE7	S5	WSW5	W5	WSW5	NNW2	NNE17	NNE17	NNE21	NNE24	NNE21	NNE18	NNE17	NNE15	NNE15	NE4.9	NNE24
17-Jun	NNE13	N10	N13	N10	N13	NNE9	NNE7	N5	NNW9	NNW10	NNW12	N12	N14	N13	N13	N14	N13	NNW13	NNW11	NNE9	NNE8	N7	WNW6	WNW6	N9.9	N14
18-Jun	NNW4	N6	N8	NNW6	NNW4	N7	N6	NW6	NNW6	NNW2	W5	N3	N12	N15	N13	NNW14	NNW14	N16	NNW13	NNW11	NW9	NNW9	WNW9	WSW7	NNW7.7	N16
19-Jun	WSW8	WSW8	WNW4	WSW5	WNW8	WNW6	NW4	NNW3	NNE7	NNW8	NNW9	NW10	NW9	NW11	NNW12	NNE11	NNE14	NNE16	NNE12	NNE11	NNE8	NNE10	NNE10	NNE12	N6.7	NNE16
20-Jun	NNE8	N10	NNE8	NNE8	N8	N6	NNE10	NNE6	NNE13	NNE14	NNE13	NNE12	NE10	ENE15	NNE15	NNE16	NE14	NE13	E10	ESE10	E8	E5	NW3	NE3	NE8.8	NNE16
21-Jun	NE6	ENE6	E1	WNW4	N7	NNW6	NNW7	N9	NNW12	N13	NNW14	N12	NNE14	NNE15	NNE12	NNE14	NNE14	NNE12	NNE15	NNE10	NNE10	NNE10	NNW7	NNW4	N9.0	NNE15
22-Jun	NNE5	N10	NNE10	NNE7	NE6	ENE2	SSE4	SW4	W2	E2	E2	WSW3	N5	E9	ESE6	E6	ESE6	SE8	SE3	S6	SE8	S9	SSW7	SW7	ESE2.0	N10
23-Jun	S6	S8	SSE8	S10	S11	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	NNW9	NNW9	S15	SE11	SSE10	SSE10	SSE9	SSE9	SSW6	----	S15
24-Jun	SSE6	S5	SSE7	SSE6	SSE9	SSE5	SSE10	SSE11	SSE8	SSW8	SW9	SSW9	SSW10	S11	SSW9	SSW7	S8	SSE12	ESE18	SE15	SSE14	SSE15	SSE14	SSE11	SSE8.9	ESE18
25-Jun	SSE10	SSE9	SSE11	SSE10	SSE10	SSE8	SSE6	SSE9	SSE11	SE12	SSE15	SSE13	SSE16	SSE15	SSE14	SSE13	SSE13	SSE16	SSE16	SE17	SSE14	SSE15	SSE15	SSE12	SSE12.4	SE17
26-Jun	SSE13	SSE11	SSE11	SSE12	SSE13	SE15	SE14	SE11	SE14	DF	SE20	SE20	SSE18	SE16	SSE15	SE16	SSE17	SE18	SE16	SE17	SE14	SE13	SE12	SE13	SSE14.6	SE20
27-Jun	SE13	SE14	SE11	ESE8	ESE11	ESE12	ESE9	SSE4	ESE9	ESE15	SE18	SE17	SE17	SSE16	ESE15	SE16	SE16	SE15	ESE12	ESE10	ESE7	E8	E9	E8	ESE11.6	SE18
28-Jun	E6	NNE6	NNE9	N3	NNW3	WNW3	N4	NNE4	NNE3	NNW4	ENE11	E18	ENE18	ENE18	ENE19	ENE18	E18	E14	E12	E10	SE3	ENE4	NE6	NNE9	ENE8.0	ENE19
29-Jun	N9	N8	N9	N7	NNW3	ESE1	NNE3	NE5	SE3	NE4	NE5	NW4	NNE4	NE11	NNE14	NNE15	NNE15	NE16	ENE14	ENE13	SSE15	SSE5	SSE9	SE10	NE5.3	NE16
30-Jun	SE12	SE11	SSE7	ESE2	WSW3	WSW4	S3	SSE5	SSW4	SW3	SW3	W5	NW8	NW9	NNW12	NNE11	E6	E7	E12	E14	ESE10	SE7	SSE9	SSE8	SE2.6	E14
	N1.5	NNW1.7	NNW1.7	NNW1.8	N2.1	NNW1.8	NNW1.4	NW1.6	NW1.6	NW2.2	NW2.2	NW2.7	NNW3.8	N3.5	N4.6	NNE5.2	NNE4.7	NE3.9	NE4.1	NE3.1	ENE1.9	ENE1.5	NNE0.8	N1.0	Diurnal Average	
	N24	N23	W22	W25	NNW22	NNE23	W25	W23	WSW25	WSW23	WNW25	WNW30	WNW33	WNW34	W37	W34	W29	W27	W27	W27	W25	NNE25	NNE26	W28	Diurnal Maximum	

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: 10 km/h on Jun 23 16:00

Minimum Value: 1 km/h on Jun 13 03:00

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:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

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

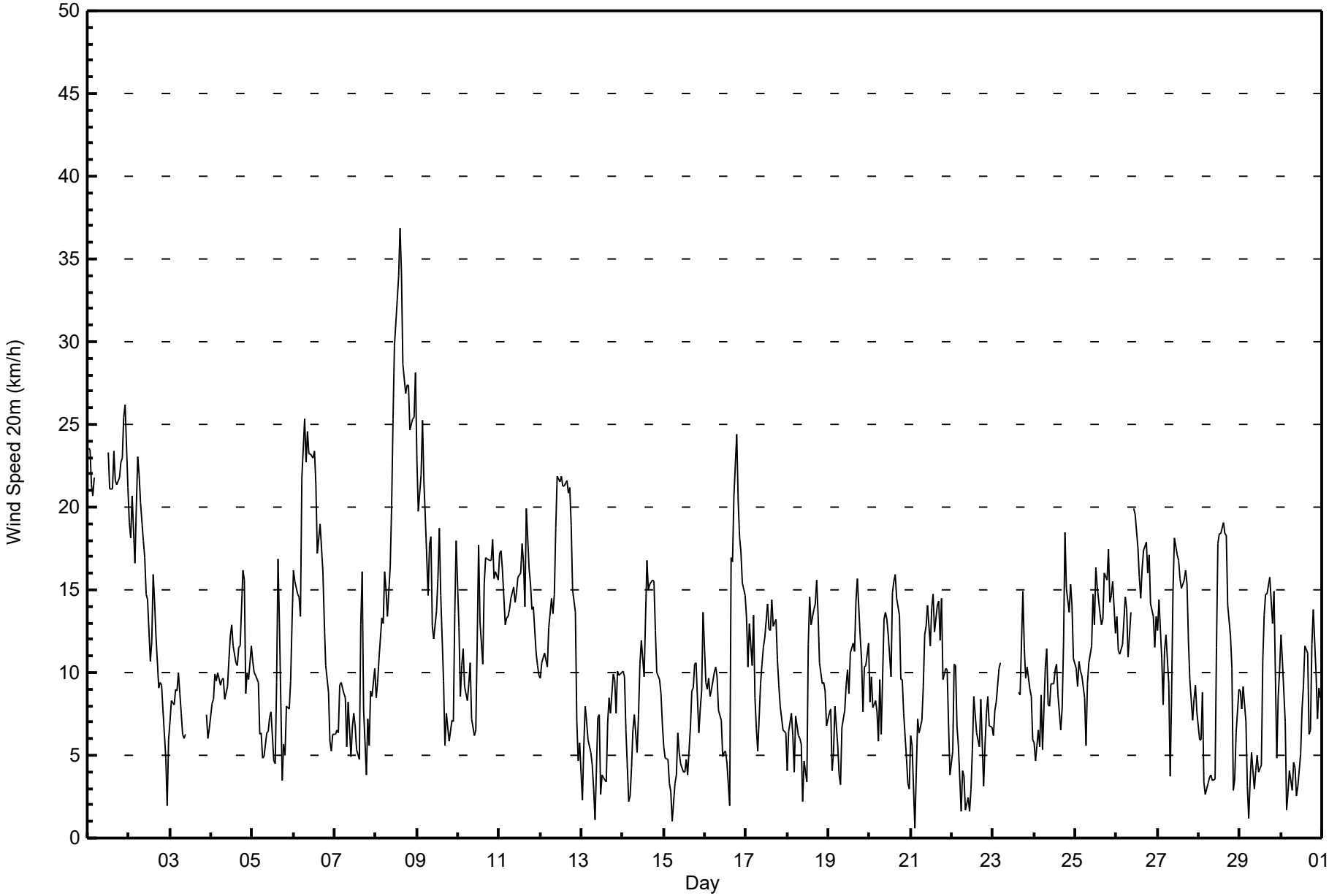
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 20m (WS20) - km/h

Mannix - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	103	14.91	14.91
6 - 11	300	43.42	58.32
12 - 19	223	32.27	90.59
20 - 28	59	8.54	99.13
29 - 38	6	0.87	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 691

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 20m (WS20) - km/h

Mannix - June 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	7	6	2	5	7	5	11	4	5	5	9	9	6	8	9	103
6 - 11	29	33	6	5	20	20	24	56	16	18	8	10	3	16	11	25	300
12 - 19	36	41	5	8	7	6	23	27	4	4	2	6	12	4	1	37	223
20 - 28	13	17	0	0	0	0	2	0	0	0	0	6	14	3	0	4	59
29 - 38	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	6
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	83	98	17	15	32	33	54	94	24	27	15	31	41	32	20	75	691

Total Number of Valid Hours: 691

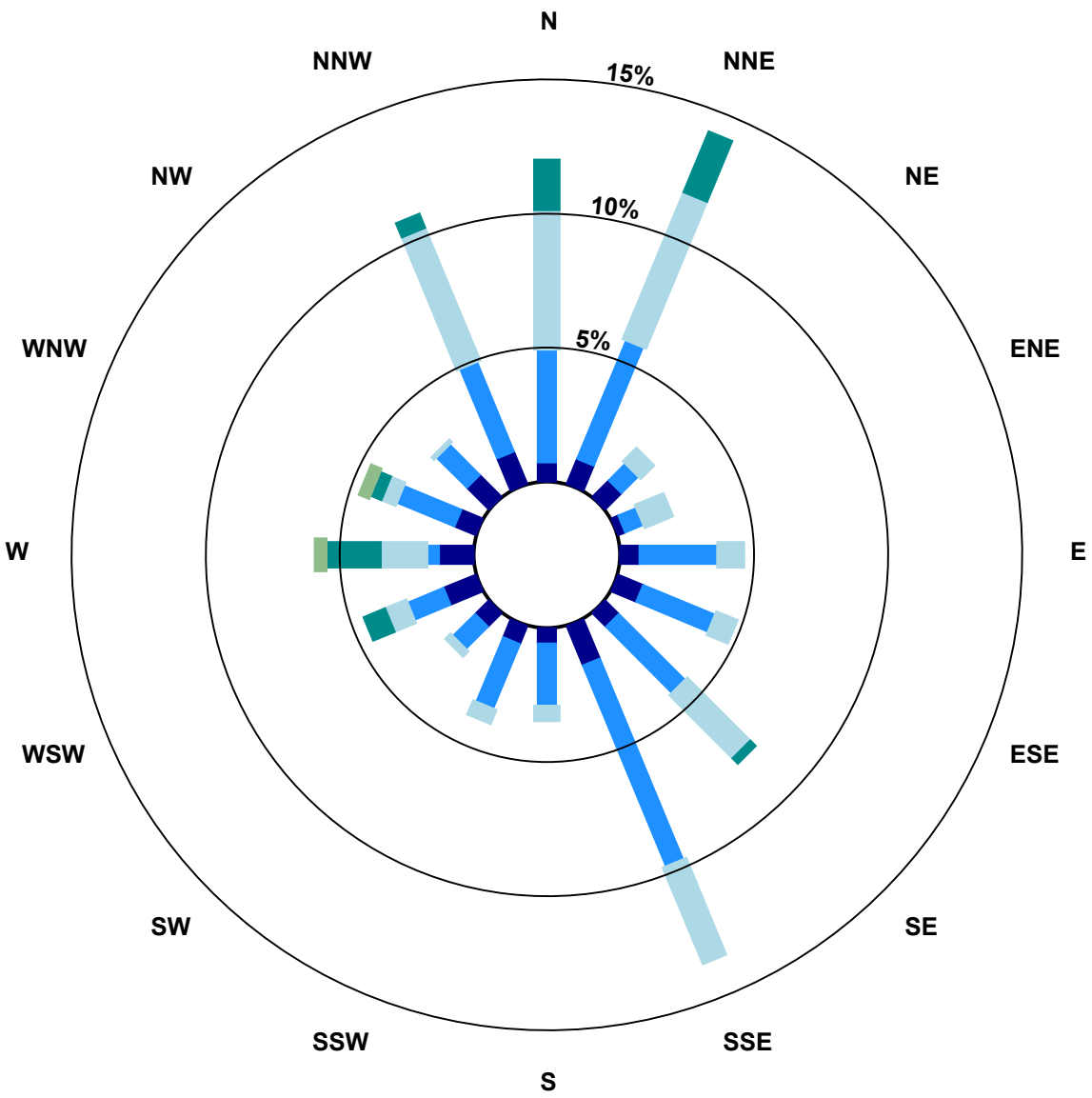
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 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: 691

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 45m (WS45) - km/h

Mannix - June 2026

Maximum Speed: 43 km/h on Jun 8 15:00

Maximum Daily Speed Average: 24.6 km/h on Jun 8

Minimum Speed Value: 1 km/h on Jun 13 09:00

Minimum Daily Speed Average: 2.6 km/h on Jun 22

Maximum Diurnal Speed Average: 7.3 km/h at hour 16

Minimum Diurnal Speed Average: 1.3 km/h at hour 23

Monthly Average Velocity: 3.4 km/h 357.2 deg

Percentiles: P_1 = 2 P_{10} = 6 Q_1 = 10 Median = 15 Q_3 = 20 P_{90} = 26 P_{99} = 35

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Percent Operational Time:	96.0

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-Jun	NNW35	NNW34	NNW30	NNW30	NNW31	DF	DF	DF	DF	DF	DF	DF	N31	N29	N29	NNW33	N30	N29	N29	N31	N32	N34	N35	N29	----	N35
2-Jun	N27	NNE26	NNE28	NNE23	N28	N31	N31	N29	N25	NNE23	NNE20	NNE20	NNE16	NNE16	NNE22	ENE17	E15	SE12	ESE11	E12	ESE10	ESE6	SE3	E8	NNE15.7	N31
3-Jun	ENE9	E10	E9	ENE11	E10	ESE13	ESE10	ESE8	ESE7	SE8	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	SE11	SE9	SE10	----	ESE13
4-Jun	SSE13	SE14	SSE17	SSE16	SSE17	SSE15	SE13	SE12	SSE11	SSE12	S16	S18	S18	S17	SSW15	S14	S17	S18	SSW23	SW22	SSW16	SSW20	S19	S22	S15.2	SSW23
5-Jun	S20	SSW20	SSW20	SSW19	SSW12	SW9	S6	SE7	SE9	SSE9	SSE10	SSE10	ESE5	ESE5	SE12	SSE24	SE16	SSE5	SSW8	SSW8	SSE13	S16	WSW14	WSW18	S10.4	SSE24
6-Jun	W20	W19	W18	W18	WNW18	WNW29	W30	WSW29	WSW32	WSW31	WSW30	WSW30	WSW31	WSW28	WSW23	WSW26	WSW23	SW21	SW19	SW15	SW13	SSW10	SSW9	S9	WSW20.9	WSW32
7-Jun	S12	S13	S10	SSE14	SSE14	SSE12	SSE11	SSE7	SE11	SSE6	ESE9	E8	ESE8	E6	NNE6	N17	N24	ENE10	W6	NNE11	NE9	ENE13	NE13	NNE15	E4.3	N24
8-Jun	N13	N14	N17	N20	NNW20	NNW24	NNW22	NNW21	WNW23	WNW28	WNW35	WNW39	W41	W41	W43	W39	W34	W32	W33	W32	W29	W30	W31	W33	WNW24.6	W43
9-Jun	W27	W25	W27	W31	W27	W25	W19	W21	W22	SW16	W14	W16	W19	W22	WSW18	W11	W7	NNW10	NNW10	NNW9	N10	NNW12	N20	N26	W15.3	W31
10-Jun	NNE18	NNE13	N15	NNE17	NNE13	N12	N14	NNW15	NNW10	NW9	NW9	NW18	N24	NNE17	N15	N21	N24	N24	N24	NNW24	NNW26	NNW23	NNW24	NNW23	N17.0	NNW26
11-Jun	NNW25	NNW26	NNW24	NNW19	NNW20	NW20	NW21	NNW21	NNW22	NNW21	NNW21	NNW22	NNW23	NNW25	N23	N20	NNW28	NNW25	N22	NNW21	NNW21	NNW18	NW16	NW16	NNW21.4	NNW28
12-Jun	NW15	WNW16	W15	NW17	NNW18	NNW19	NNW22	NNW20	NNW21	NNW26	NNW31	NNW30	NNW30	NNW29	NNW29	N29	N29	N29	N26	N22	NNW22	NNW13	NNW8	NNW10	NNW20.8	NNW31
13-Jun	NNE3	WNW8	W12	WNW14	WNW13	W8	W5	WNW3	W1	W9	W9	NW4	NW4	SW3	ESE4	ESE8	SE10	SE10	SW13	WSW13	SW14	SSW18	SSW23	SSW19	WSW5.8	SSW23
14-Jun	WSW19	WSW18	WSW14	WSW7	WSW7	WSW6	WNW8	WNW9	NW7	NW10	NW15	NNW16	N13	N19	NNW22	NNW21	NNW21	NNW22	N22	NNW20	N16	N13	N14	NNE11	NW11.2	NNW22
15-Jun	N10	NNE8	NNW6	NW4	NNE6	NE2	SW3	SSE5	SSE8	SSE7	E6	ESE5	SW5	WNW6	WNW5	ENE8	E10	E11	E13	E14	SE10	SE12	ESE12	E16	E4.3	E16
16-Jun	SE12	SSE14	SE15	SSE14	SE14	SE13	SE14	ESE12	SE10	SE10	S6	SW6	W6	WSW5	NNW3	NNE22	NNE22	N28	N34	NNE28	NNE25	NNE25	NNE22	N22	NE7.0	N34
17-Jun	N19	N17	N20	N17	N20	NNE12	N8	NNW7	NNW13	NNW16	NNW16	NNW17	N19	N18	N17	NNW20	N19	NNW20	NW17	NNE13	NNE12	N11	NW9	NW12	N14.7	NNW20
18-Jun	NNW9	N12	N14	NNW11	NNW8	NNW11	NNW10	NW9	NNW8	NNW3	W6	N5	N17	N20	N18	NNW20	NW21	NNW22	NNW20	NNW16	NW15	NW16	WNW13	W10	NNW12.1	NNW22
19-Jun	W12	W12	WNW10	W10	WNW14	WNW9	NW5	NNW5	N9	NNW11	NNW13	NW14	NW12	NW16	NNW16	N15	N19	NNE20	NNE17	NNE14	NNE11	NNE16	NNE16	NNE17	NNW10.4	NNE20
20-Jun	NNE13	N14	N12	N13	N12	N9	NNE12	N8	N17	N18	NNE16	NNE16	NNE12	NE17	NNE19	NNE21	NNE19	NNE17	ENE12	E11	E9	E6	NW4	NNE4	NNE11.8	NNE21
21-Jun	NE9	ENE7	E2	NW6	NNW12	NNW9	NNW11	N13	NNW17	N17	NNW20	NNW17	N18	N19	NNE17	NNE18	N19	N15	NNE20	NNE14	NNE15	NNE16	NNW11	N9	N12.9	NNW20
22-Jun	NNE8	N13	NNE16	NNE11	NE8	E2	SSE5	SW4	W2	E2	ESE2	W3	N7	ENE9	ESE7	E7	ESE7	SE10	ESE4	SSE8	ESE10	S15	S12	SW12	E2.6	NNE16
23-Jun	SSW7	SSW10	S10	SSE15	SSE16	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	NNW12	NNW15	SSE23	ESE14	SSE13	SSE16	SSE16	SSE15	SSW12	----	SSE23
24-Jun	SSE10	S9	SSE14	SSE10	SSE15	SSE8	SSE15	SSE15	SSE12	S11	SSW12	S13	SSW14	S15	S12	S9	S11	SSE15	ESE22	SE19	SE19	SE21	SE20	SSE17	SSE12.8	ESE22
25-Jun	SE17	SE16	SE18	SE17	SE17	SE13	SE8	SSE12	SE13	SE15	SSE20	SSE17	SSE21	SSE20	SSE17	SSE17	SSE17	SE20	SE21	SE23	SE20	SE22	SE23	SSE19	SE17.5	SE23
26-Jun	SSE22	SSE18	SE18	SE19	SE19	SE20	SE18	SE15	SE17	DF	SE25	SE25	SE22	SE20	SE18	SE20	SE22	SE23	SE21	SE22	SE17	SE16	SE15	SE16	SE19.3	SE25
27-Jun	ESE15	SE18	SE14	E11	E14	E14	ESE11	SSE5	E10	ESE18	ESE22	ESE20	SE21	SE21	ESE18	SE20	ESE19	SE19	ESE14	E13	E10	E12	E13	E11	ESE14.6	ESE22
28-Jun	E10	ENE8	NE9	NE6	N7	NW6	N5	N5	N5	NNW5	ENE14	ENE21	NE22	ENE22	ENE23	ENE22	ENE23	ENE17	ENE15	ENE13	ESE6	E7	NE9	N13	ENE10.6	ENE23
29-Jun	N15	N13	N15	NNE11	N7	NNE3	N5	NNE6	ESE3	NE4	NNE6	NW5	N6	NE13	NNE17	NNE19	NNE20	NNE21	NE18	ENE17	SSE21	SSE9	SE12	SE13	NE7.7	SSE21
30-Jun	SE17	SE15	SE12	E3	ENE1	SSW4	SE3	SSE5	S6	SW3	SW4	WSW6	WNW10	NW12	NNW17	NNE15	ENE7	E9	ENE16	E18	ESE13	ESE10	SE13	SE14	ESE4.1	E18
	N2.6	NNW2.4	NNW2.4	NNW2.9	NNW3.8	NNW3.1	NNW2.5	NW2.7	NW2.6	NW3.3	NW3.3	NW3.9	NNW5.4	N5.0	N6.4	N7.3	N7.1	NNE5.6	NNE6.0	NNE4.8	NE3.0	ENE2.2	NE1.3	N1.7	Diurnal Average	
	NNW35	NNW34	NNW30	W31	NNW31	N31	N31	WSW29	WSW32	WSW31	WNW35	WNW39	W41	W41	W43	W39	W34	W32	N34	W32	N32	N34	N35	W33	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 45m (WS45) - km/h

Mannix - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 13 km/h on Jun 23 16:00

Minimum Value: 1 km/h on Jun 13 21:00

Percentiles: P_1 = 1 P_{10} = 2 Q_1 = 2 Median = 3 Q_3 = 5 P_{90} = 6 P_{99} = 7

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

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

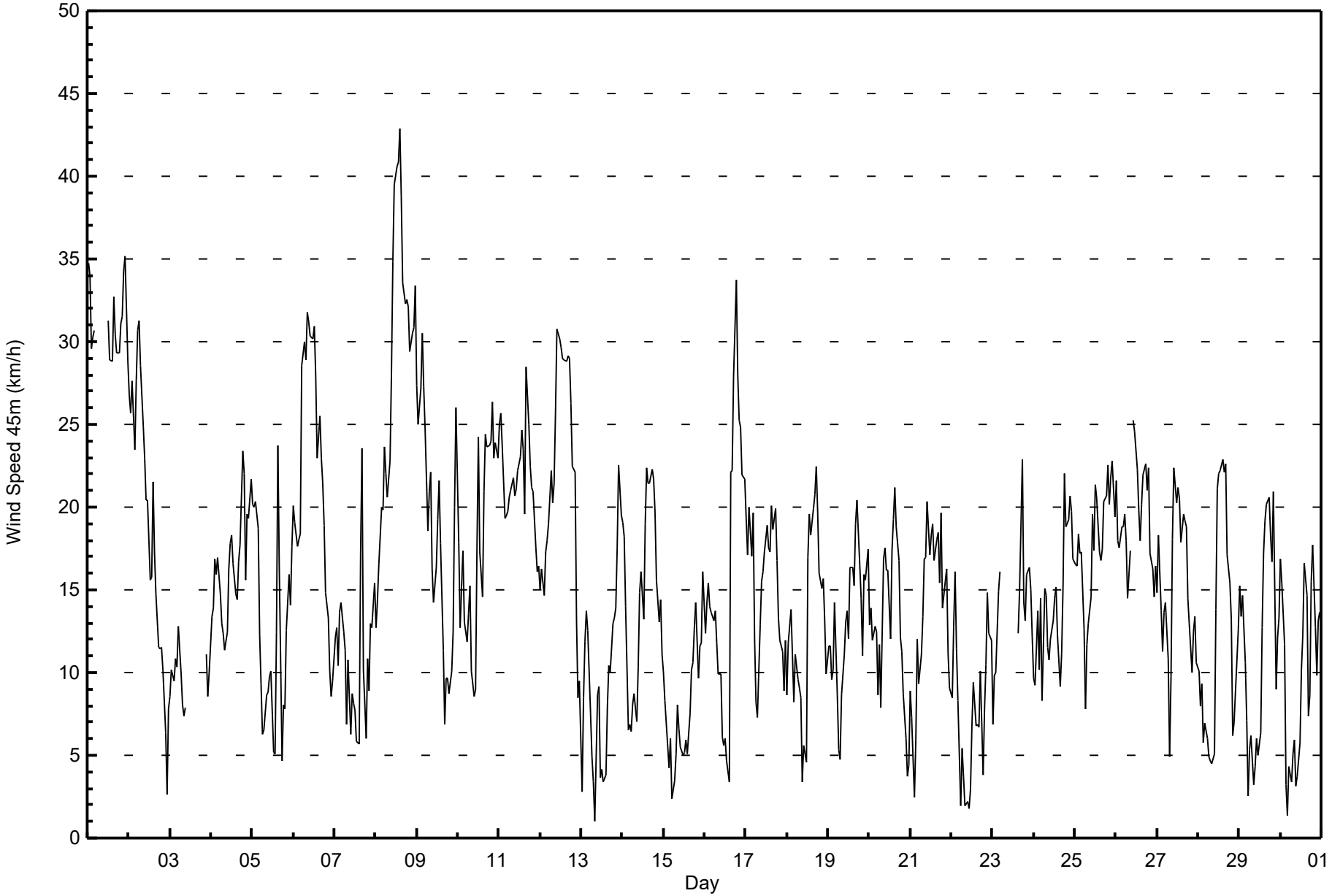
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 45m (WS45) - km/h

Mannix - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	53	7.67	7.67
6 - 11	166	24.02	31.69
12 - 19	275	39.80	71.49
20 - 28	145	20.98	92.47
29 - 38	47	6.80	99.28
> 38	5	0.72	100.00

Total Number of Valid Hours: 691

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 45m (WS45) - km/h

Mannix - June 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	3	2	1	4	7	2	5	0	1	6	1	4	2	6	4	53
6 - 11	12	11	6	8	21	15	14	14	10	6	2	4	10	7	8	18	166
12 - 19	42	34	4	9	10	11	42	32	15	10	7	7	10	8	13	21	275
20 - 28	22	18	1	5	0	3	21	7	2	5	2	4	9	2	3	41	145
29 - 38	18	0	0	0	0	0	0	0	0	0	0	6	10	2	0	11	47
> 38	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	5
Totals	99	66	13	23	35	36	79	58	27	22	17	22	47	22	30	95	691

Total Number of Valid Hours: 691

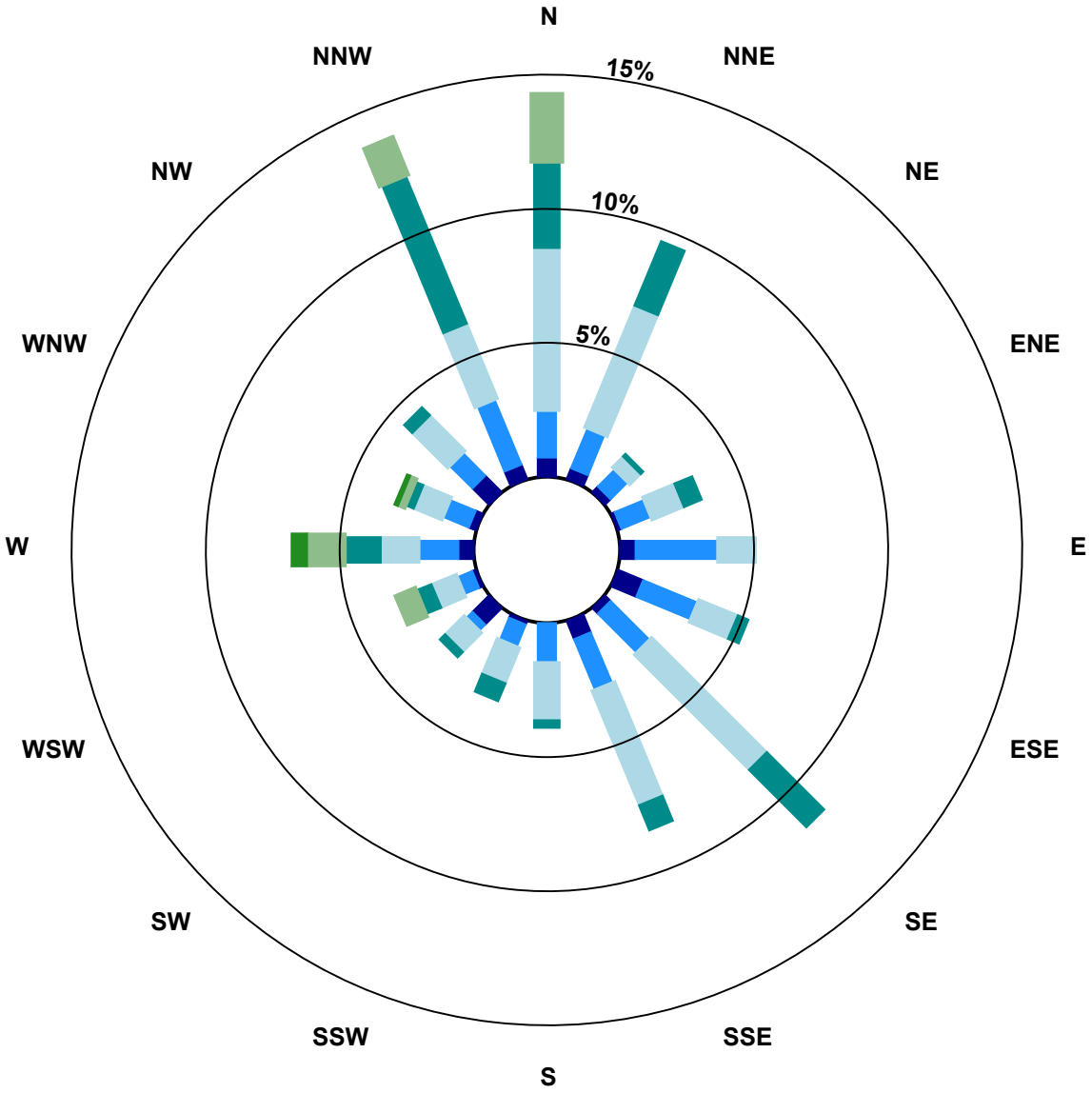
Total Number of Hours: 720

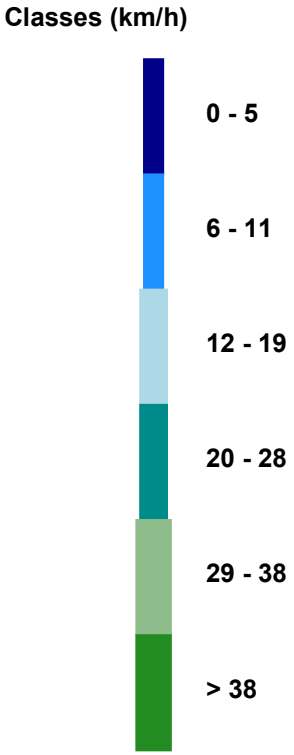
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 45m (WS45) - km/h

Mannix





Total Number of Valid Hours: 691

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 75m (WS75) - km/h

Mannix - June 2026

Maximum Speed: 46 km/h on Jun 8 15:00

Maximum Daily Speed Average: 26.8 km/h on Jun 8

Minimum Speed Value: 1 km/h on Jun 13 09:00

Minimum Daily Speed Average: 3.0 km/h on Jun 22

Maximum Diurnal Speed Average: 8.4 km/h at hour 17

Minimum Diurnal Speed Average: 2.8 km/h at hour 22

Monthly Average Velocity: 5.0 km/h 2.6 deg

Percentiles: P_1 = 3 P_{10} = 7 Q_1 = 11 Median = 17 Q_3 = 23 P_{90} = 31 P_{99} = 41

Hours in Service:	720
Hours of Data:	597
Hours of Missing Data:	123
Percent Operational Time:	82.9

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-Jun	N41	N38	NNW35	N35	NNW36	DF	DF	DF	DF	DF	DF	DF	N35	NNE33	N32	N38	N35	NNE35	NNE33	NNE35	NNE35	NNE38	NNE39	NNE33	----	N41
2-Jun	NNE30	NNE29	NNE31	NNE27	NNE31	N34	NNE36	N33	NNE29	NNE26	NNE24	NNE24	NNE19	NE18	NE24	ENE20	E14	SE9	ESE9	ESE11	E10	ESE6	E2	E9	NNE18.4	NNE36
3-Jun	E10	E11	E9	E11	E12	ESE11	SE9	SE7	ESE7	SE8	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	SE12	SE7	SE9	----	E12
4-Jun	SSE17	SSE18	SSE24	SSE25	SSE24	SSE20	SSE16	SSE13	SSE12	S13	S18	SSW19	S20	S18	SSW16	S16	S18	SSW20	SW26	SW25	SSW20	SSW23	SSW23	S27	S18.1	S27
5-Jun	SSW29	SSW24	SSW23	SSW24	SW18	SW13	S7	SSE7	SSE9	SSE10	SSE10	SSE11	ESE6	SE5	SSE13	SSE27	SSE16	SE5	SSW8	SSW10	S12	SSW17	WSW16	W21	SSW11.7	SSW29
6-Jun	W23	W21	W20	W20	WNW21	WNW32	W33	WSW32	WSW36	WSW36	WSW35	WSW34	WSW36	WSW32	WSW26	WSW28	WSW25	SW24	SW22	SW17	SW16	SW12	SW9	SSW11	WSW23.6	WSW36
7-Jun	SSW14	SSW15	SSW11	SSE17	SSE19	SSE15	SSE12	SSE7	SSE11	SSE7	ESE8	E8	ESE8	ESE6	NE6	N19	N27	ENE11	WNW7	NNE15	ENE12	ENE15	NE15	NE19	E4.6	N27
8-Jun	NNE15	N17	N19	N23	N23	N27	NNW25	NNW23	WNW25	WNW31	WNW38	WNW44	WNW44	W44	W46	W42	W36	W35	W36	W35	W32	W34	W35	W37	WNW26.8	W46
9-Jun	W30	W29	W31	W34	W31	WNW27	W21	W22	WNW23	WSW17	W15	W17	W20	W22	W18	W12	WNW7	NNW10	N10	NNW10	N11	NNW14	NNE22	N31	WNW16.2	W34
10-Jun	NNE22	NNE16	NNE18	NNE22	NNE16	N14	N16	NNW16	NNW10	NW9	NW9	NW19	NNE27	NNE19	N16	NNE24	NNE27	N27	N27	N27	N30	N27	N27	NNW26	N19.5	N30
11-Jun	N29	N29	N27	N22	NNW22	NNW21	NNW22	NNW23	NNW24	NNW22	NNW23	NNW24	NNW25	N27	N26	N22	N32	N28	N25	NNW24	NNW24	NNW20	NNW19	NNW18	NNW24.0	N32
12-Jun	NW17	WNW19	WNW17	NNW20	NNW23	N23	N26	NNW22	NNW23	NNW28	N34	N33	N32	N31	N32	N31	N32	N32	NNE30	N26	N28	N19	NNW14	NNW12	N24.1	N34
13-Jun	N6	NW9	NW11	NW13	NW12	WNW11	WNW6	NW3	WNW1	WNW9	WNW9	NW4	NW4	SW2	ESE4	ESE7	SE9	SSE10	SW14	WSW15	SW17	UO	UO	UO	W4.3	SW17
14-Jun	UO	UO	UO	UO	UO	UO	WNW8	UO	NW7	NNW10	NNW15	NNW17	N19	N21	N24	N22	N23	UO	NNE28	N25	UO	UO	UO	UO	----	NNE28
15-Jun	UO	UO	UO	UO	UO	UO	UO	ESE8	SSE9	SSE7	E7	ESE6	SW4	NNW3	N5	ENE8	E15	E14	E25	E28	E18	UO	UO	UO	----	E28
16-Jun	ESE16	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	SW5	W6	WSW4	N3	NNE26	NNE28	NNE37	NNE42	UO	UO	UO	UO	UO	----	NNE42
17-Jun	UO	UO	UO	UO	UO	UO	UO	N8	NNW13	NNW16	NNW17	N18	N21	N22	N19	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	N22
18-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	NNE4	W6	N5	N19	N22	N21	NNW21	NNW22	N25	NNW21	NNW18	NW17	NNW18	WNW15	WNW13	----	N25
19-Jun	WNW13	WNW14	UO	UO	NW16	NW11	NNW7	NNW5	N9	NNW12	NNW14	NW14	NW12	NNW18	NNW17	NNE16	NNE21	NNE23	NNE18	NNE17	NNE14	NNE21	NNE22	NNE23	N12.8	NNE23
20-Jun	NNE18	NNE16	NNE15	NNE16	N15	NNE11	NNE14	N8	N18	NNE19	NNE18	NNE18	NE13	NE19	NNE21	NNE23	NE21	NE18	ENE12	E11	E9	E7	NNW4	NE7	NNE13.6	NNE23
21-Jun	ENE10	E9	E4	NW5	N12	N11	N14	N15	NNW18	N18	NNW21	N19	NNE20	NNE20	NNE18	NNE19	NNE19	NNE17	NNE23	NNE18	NNE21	NNE22	N13	N13	NNE14.7	NNE23
22-Jun	NE11	N12	NNE18	NE14	ENE8	SE2	SSE6	SW4	W1	E3	E2	W3	NNE7	E10	ESE7	E7	ESE7	SE9	ESE4	SSE9	SE10	S17	SSW15	WSW15	ESE3.0	NNE18
23-Jun	WSW10	SW10	SSW8	S10	S9	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	NNW14	N18	S28	SE12	SSE15	SSE19	S20	S21	UO	----	S28
24-Jun	UO	UO	UO	UO	UO	S13	UO	SSE17	SSE13	SSW12	SSW13	SSW14	SSW16	S16	S14	S10	S12	SSE16	ESE20	SE14	SE21	SE22	UO	UO	----	SE22
25-Jun	UO	UO	UO	UO	UO	SE17	SE10	SSE12	SSE13	SE14	SSE21	SSE19	SSE23	SSE22	SSE19	SSE18	SSE18	SE20	SE20	UO	UO	UO	UO	UO	----	SSE23
26-Jun	UO	UO	UO	UO	UO	UO	UO	UO	SE16	DF	SE12	SE21	SE22	SE18	SSE18	SE16	SE21	SE21	SE19	SE19	SE12	ESE12	SE12	SE12	----	SE22
27-Jun	ESE11	SE11	SE9	ESE10	ESE11	E13	ESE9	SSE5	E9	ESE14	SE17	ESE15	SE18	SE20	ESE15	SE16	ESE14	SE13	ESE12	E11	E9	E17	E15	E13	ESE12.3	SE20
28-Jun	E11	E10	ENE11	ENE5	NNE8	N5	NNE7	N5	N5	NNW6	ENE16	ENE23	ENE25	ENE25	ENE26	ENE25	ENE24	E18	ENE18	E16	ESE8	E9	ENE13	NNE13	ENE12.6	ENE26
29-Jun	N16	NNE17	NNE18	NE11	NE7	NNE6	NNE8	NNE7	ESE3	NNE5	NNE6	NW4	NNE7	NE14	NNE19	NNE21	NNE23	NNE23	NE21	ENE21	SSE24	SSE12	SE11	SE9	NE9.3	SSE24
30-Jun	SE14	SE13	SE11	ESE4	E4	SSE6	ESE3	SSE4	S6	SSW3	SW4	W5	WNW10	NW13	NNW18	NNE17	ENE9	E11	ENE20	E21	ESE11	ESE8	SE10	SE13	E4.5	E21
	N5.3	NNW5.7	N5.8	N5.9	NNW7.5	NNW4.8	NNW5.4	NNW4.0	NNW3.1	NW4.1	NNW4.4	NNW4.5	N6.2	N6.0	N7.3	NNE8.1	NNE8.4	NE6.7	NE7.9	NE5.8	NE2.9	NE2.8	N3.3	N5.0	Diurnal Average	
	N41	N38	NNW35	N35	NNW36	N34	NNE36	N33	WSW36	WSW36	WNW38	WNW44	WNW44	W44	W46	W42	W36	NNE37	NNE42	W35	NNE35	NNE38	NNE39	W37	Diurnal Maximum	

DF - DAS Failure 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: 15 km/h on Jun 23 16:00

Minimum Value: 1 km/h on Jun 13 21:00

Percentiles: $P_1 = 1$ $P_{10} = 2$ $Q_1 = 3$ Median = 4 $Q_3 = 5$ $P_{90} = 6$ $P_{99} = 9$

Hours in Service:	720
Hours of Data:	597
Hours of Missing Data:	123
Hours of Calibration:	0
Percent Operational Time:	82.9

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

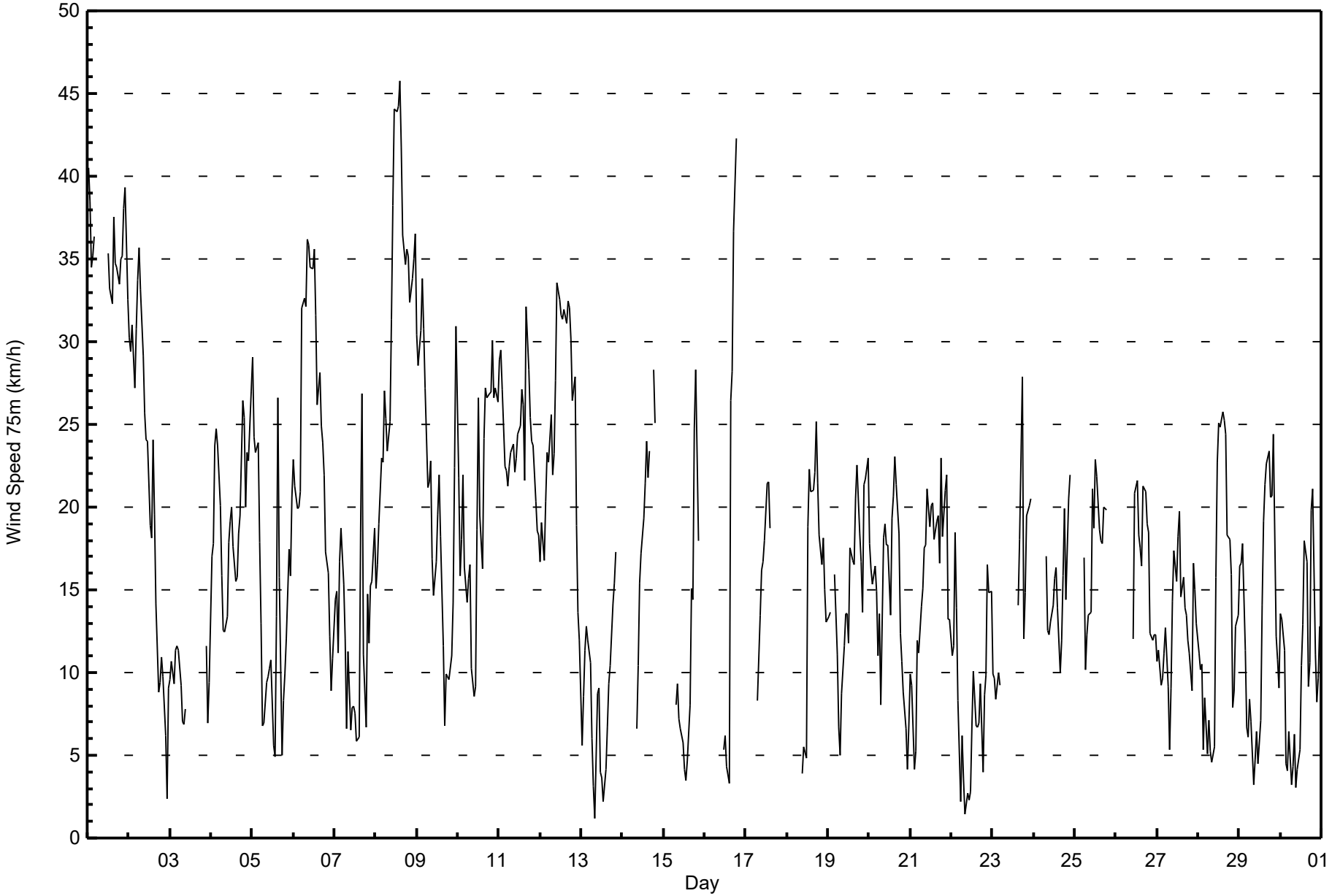
DF - DAS Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 75m (WS75) - km/h

Mannix - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	43	7.20	7.20
6 - 11	134	22.45	29.65
12 - 19	201	33.67	63.32
20 - 28	148	24.79	88.11
29 - 38	63	10.55	98.66
> 38	8	1.34	100.00

Total Number of Valid Hours: 597

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 75m (WS75) - km/h

Mannix - June 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	2	0	1	5	5	3	2	0	1	5	1	3	1	5	3	43
6 - 11	7	9	5	6	21	21	16	14	5	5	2	1	1	9	6	6	134
12 - 19	23	30	8	6	11	7	21	24	11	10	7	4	4	6	9	20	201
20 - 28	29	29	2	10	3	1	9	9	5	7	4	3	9	4	0	24	148
29 - 38	20	15	0	0	0	0	0	0	0	1	0	7	14	3	0	3	63
> 38	1	2	0	0	0	0	0	0	0	0	0	0	3	2	0	0	8
Totals	86	87	15	23	40	34	49	49	21	24	18	16	34	25	20	56	597

Total Number of Valid Hours: 597

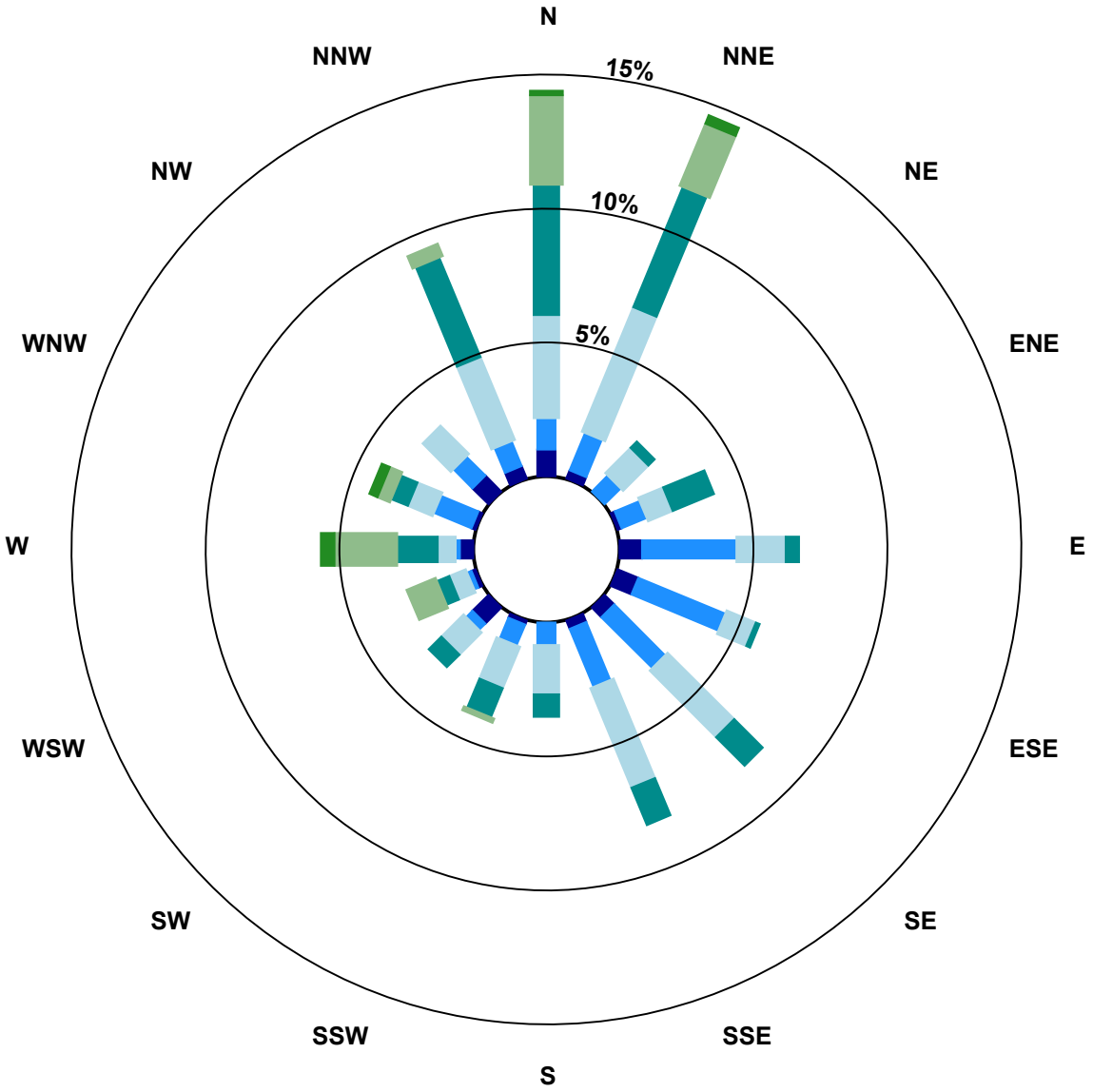
Total Number of Hours: 720

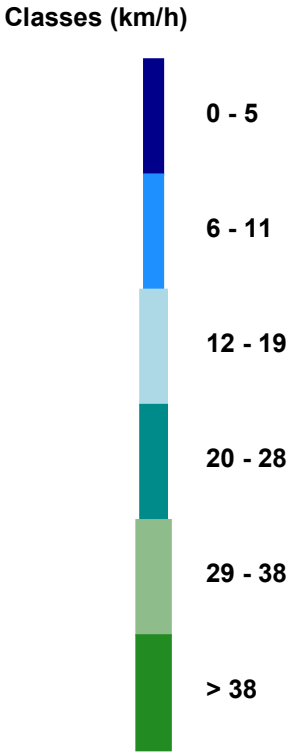
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 75m (WS75) - km/h

Mannix





Total Number of Valid Hours: 597

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 90m (WS90) - km/h

Mannix - June 2026

Maximum Speed: 26 km/h on Jun 28 15:00

Maximum Daily Speed Average: 17.0 km/h on Jun 27

Minimum Speed Value: 3 km/h on Jun 30 10:00

Minimum Daily Speed Average: 6.2 km/h on Jun 30

Maximum Diurnal Speed Average: 19.4 km/h at hour 20

Minimum Diurnal Speed Average: 2.6 km/h at hour 8

Monthly Average Velocity: 11.0 km/h 91.4 deg

Percentiles: $P_1 = 4$ $P_{10} = 5$ $Q_1 = 10$ Median = 16 $Q_3 = 21$ $P_{90} = 24$ $P_{99} = 26$

Hours in Service:	720
Hours of Data:	110
Hours of Missing Data:	610
Percent Operational Time:	15.3

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-Jun	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
3-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	----	----
4-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
6-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	----	----
24-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	SE26	SE25	SE24	SE21	SE19	ESE21	SE23	SE24	SE23	SE23	ESE18	ESE18	ESE17	ESE17	----	SE26
27-Jun	ESE18	ESE17	ESE15	ESE13	ESE15	E17	ESE13	SE6	E11	ESE20	ESE23	ESE22	SE23	SE22	ESE20	ESE20	ESE21	ESE19	ESE18	E16	E13	E21	E21	E16	ESE17.0	ESE23
28-Jun	E15	E13	ENE11	ENE4	NE8	NNE4	NNE7	N5	N4	NNW5	ENE17	ENE24	NE25	ENE25	ENE26	ENE26	ENE26	ENE20	ENE19	ENE17	ESE11	E12	ENE15	NNE13	ENE13.5	ENE26
29-Jun	N16	N17	N18	NE10	NE6	NNE5	N8	NNE7	E4	NNE5	NNE6	NW4	N7	NE14	NNE19	NNE22	NNE23	NNE24	NE21	ENE22	SE25	SE14	SE13	ESE13	NE9.4	SE25
30-Jun	SE18	SE18	SE14	ESE7	E6	SE8	ESE5	SE5	S7	SSW3	SW5	WSW5	WNW11	WNW13	NNW19	NNE17	ENE10	E12	ENE21	E25	ESE17	ESE13	ESE13	SE15	E6.2	E25
	E11.7	E11.2	E9.5	E8.0	ENE7.5	E6.3	ENE5.6	ENE2.6	ESE3.8	E4.5	ESE11.5	ESE11.1	E9.2	E10.2	ENE11.9	ENE14.6	E15.0	E14.9	E17.8	E19.4	ESE15.9	ESE14.7	ESE14.6	ESE11.8	Diurnal Average	
	SE18	SE18	N18	ESE13	ESE15	E17	ESE13	NNE7	E11	ESE20	SE26	SE25	NE25	ENE25	ENE26	ENE26	ENE26	NNE24	SE23	E25	SE25	E21	E21	ESE17	Diurnal Maximum	

DF - DAS Failure 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 Jun 30 18:00

Minimum Value: 1 km/h on Jun 28 08:00

Percentiles: P_1 = 1 P_{10} = 2 Q_1 = 3 Median = 4 Q_3 = 5 P_{90} = 6 P_{99} = 8

Hours in Service:	720
Hours of Data:	110
Hours of Missing Data:	610
Hours of Calibration:	0
Percent Operational Time:	15.3

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-Jun	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
3-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	--
4-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
6-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
24-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	7	6	6	6	5	6	5	5	5	6	5	5	5	4	7
27-Jun	5	4	4	5	3	4	5	3	5	5	6	6	6	5	5	6	5	5	4	4	3	3	4	3	6
28-Jun	3	4	2	3	3	2	1	1	2	2	8	4	4	6	6	5	5	5	4	3	3	2	3	2	8
29-Jun	1	1	2	4	1	1	2	2	2	2	3	3	6	6	6	5	7	6	5	4	3	6	2	3	7
30-Jun	4	3	5	2	2	2	1	2	2	2	2	3	4	4	5	4	5	8	4	3	7	4	5	2	8
	5	4	5	5	3	4	5	3	5	5	8	6	6	6	6	6	7	8	5	6	7	6	5	4	

Diurnal Maximum

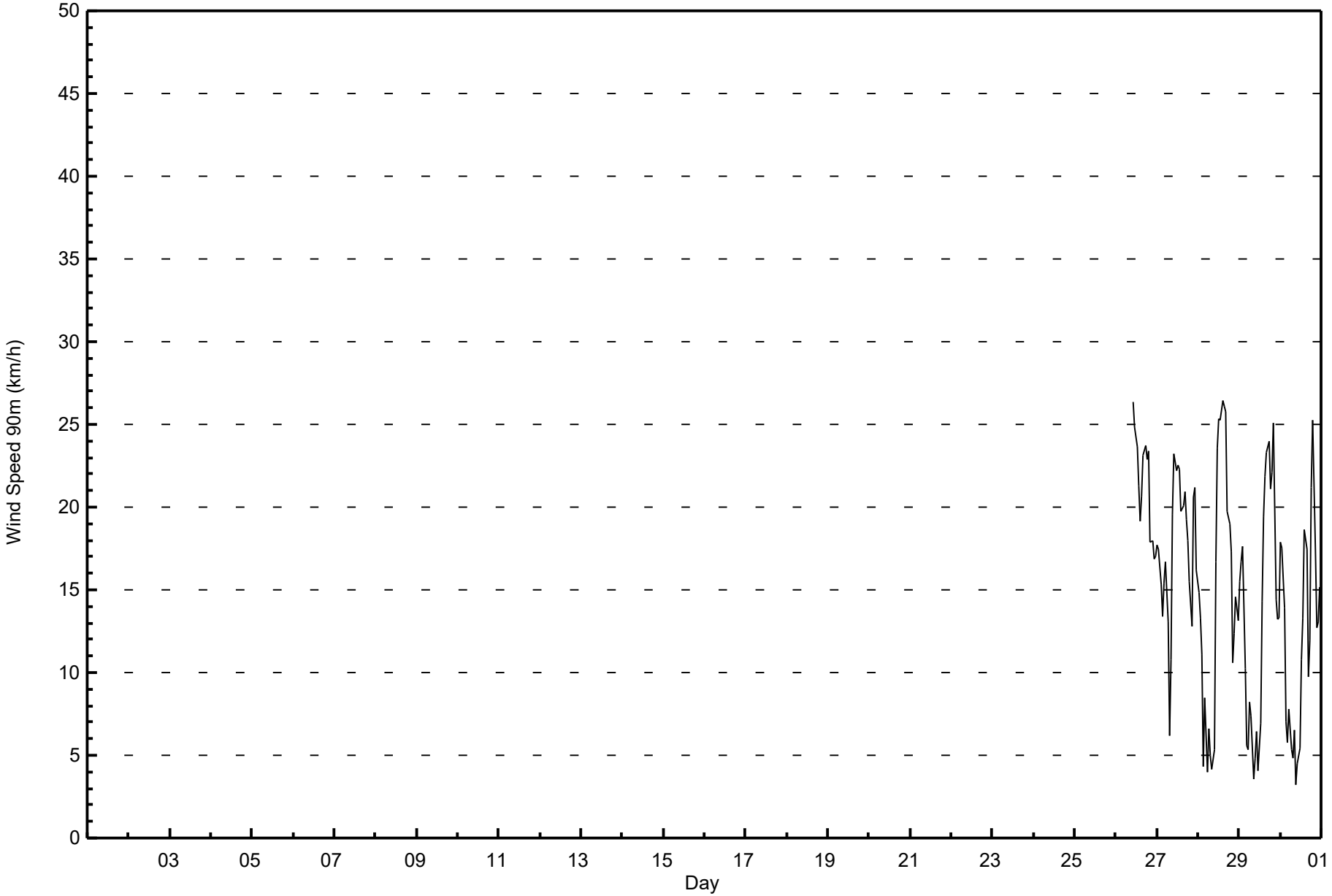
DF - DAS Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 90m (WS90) - km/h

Mannix - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	14	12.73	12.73
6 - 11	18	16.36	29.09
12 - 19	44	40.00	69.09
20 - 28	34	30.91	100.00
29 - 38	0	0.00	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 110

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 90m (WS90) - km/h

Mannix - June 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	3	0	1	1	1	1	0	0	1	1	1	0	0	1	1	14
6 - 11	2	3	3	2	1	3	2	0	1	0	0	0	0	1	0	0	18
12 - 19	3	3	1	4	8	16	7	0	0	0	0	0	0	1	0	1	44
20 - 28	0	3	2	8	3	7	11	0	0	0	0	0	0	0	0	0	34
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	7	12	6	15	13	27	21	0	1	1	1	1	0	2	1	2	110

Total Number of Valid Hours: 110

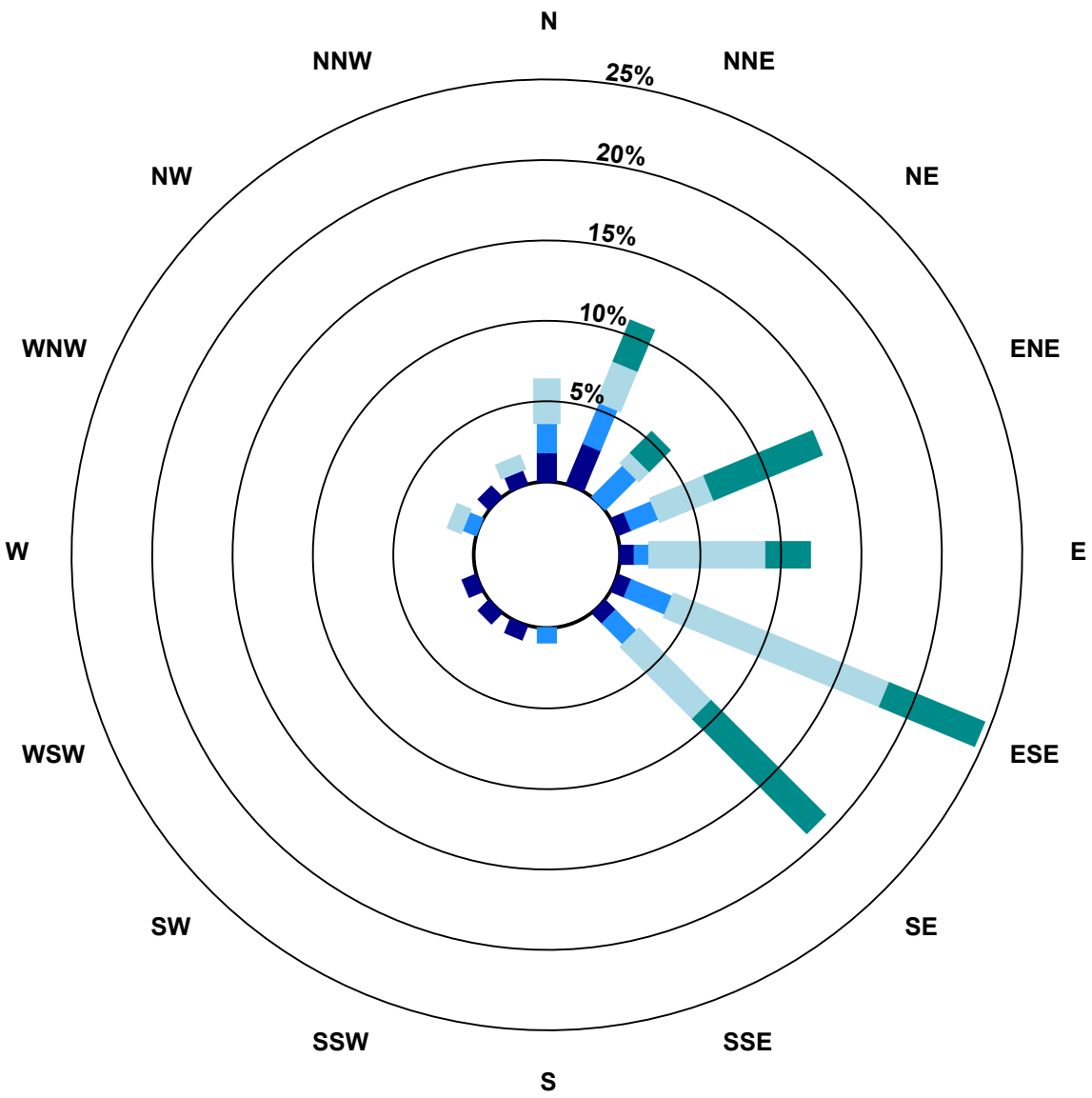
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 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: 110

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 20m (WD20) - deg

Mannix - June 2026

Direction of Maximum Speed: 278 deg on Jun 8 15:00
Direction of Maximum Daily Speed Average: 292.1 deg on Jun 8

Direction of Minimum Speed: 82 deg on Jun 21 03:00
Direction of Minimum Daily Speed Average: 2.0 deg on Jun 22

Monthly Average Direction: 3.8 deg

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Percent Operational Time:	96.0

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-Jun	349	350	344	349	347	DF	DF	DF	DF	DF	DF	DF	12	14	359	353	357	17	16	15	17	17	17	19	--
2-Jun	14	21	23	24	15	12	14	12	18	27	20	19	30	41	37	73	100	141	117	109	116	139	193	102	35.1
3-Jun	92	98	99	80	93	110	131	133	136	141	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	150	135	143	--
4-Jun	162	147	160	162	165	155	155	150	161	167	195	200	186	195	203	190	194	200	223	228	215	197	182	177	185.1
5-Jun	187	193	199	200	206	217	187	148	153	167	164	160	121	124	154	169	150	159	216	201	169	192	239	263	183.3
6-Jun	274	272	269	274	292	289	271	261	255	254	248	252	252	250	248	245	248	239	238	238	224	207	195	178	255.4
7-Jun	182	190	176	162	155	156	163	153	151	163	128	101	123	104	41	8	2	72	278	25	39	67	46	30	101.0
8-Jun	14	1	4	9	348	351	346	337	298	299	299	295	286	282	278	276	276	280	272	272	277	270	269	274	292.1
9-Jun	274	271	271	276	280	280	269	280	285	244	273	275	282	269	264	281	288	345	348	338	3	328	10	7	286.5
10-Jun	28	21	15	22	20	9	356	338	338	309	314	321	17	28	11	15	16	9	357	352	349	352	353	345	1.2
11-Jun	345	349	348	347	341	329	332	336	337	338	344	343	342	353	358	356	349	348	357	342	344	340	326	322	343.6
12-Jun	306	291	264	297	334	352	348	337	340	345	349	349	353	351	355	359	357	8	13	6	346	355	7	327	346.5
13-Jun	311	289	266	289	282	274	264	296	266	283	287	304	320	247	120	116	141	152	242	246	218	204	218	206	241.5
14-Jun	238	241	245	200	230	242	285	282	313	331	327	343	1	2	349	339	336	349	7	343	0	2	1	14	334.6
15-Jun	360	13	303	268	50	105	234	159	165	166	97	122	238	284	304	86	104	110	96	100	138	136	124	103	113.0
16-Jun	140	168	150	168	147	137	138	121	134	148	188	245	274	246	341	22	25	19	13	22	21	20	21	13	49.5
17-Jun	17	358	2	4	11	28	18	3	346	344	343	352	7	8	3	353	1	338	333	22	27	7	295	300	358.2
18-Jun	328	6	360	337	331	355	351	308	336	344	281	10	359	11	360	347	333	350	345	347	317	328	287	255	340.6
19-Jun	254	255	286	256	285	293	304	346	13	341	338	310	323	325	340	17	20	20	27	22	30	26	21	18	349.4
20-Jun	16	9	20	22	9	5	29	13	14	18	27	32	42	59	21	33	39	44	79	109	94	92	321	40	34.4
21-Jun	41	64	82	298	351	345	347	5	345	359	343	350	15	15	32	24	16	18	32	28	32	27	348	346	10.8
22-Jun	27	1	23	28	39	59	159	234	266	98	98	258	11	90	113	96	120	145	124	173	135	182	194	223	104.2
23-Jun	181	180	167	175	174	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	343	346	171	136	165	162	167	159	204	--
24-Jun	161	190	168	158	160	158	157	165	153	192	216	204	206	181	194	193	186	157	116	135	149	148	148	161	164.1
25-Jun	154	154	150	155	155	153	151	156	154	143	165	165	162	161	156	167	156	150	147	142	152	149	152	162	154.7
26-Jun	167	160	158	154	147	146	146	144	143	DF	146	145	148	144	152	137	149	145	143	144	142	139	144	144	146.8
27-Jun	130	141	137	107	105	104	116	167	108	118	134	127	139	147	119	140	132	138	116	103	103	92	100	87	123.6
28-Jun	90	25	23	5	337	293	7	12	13	336	78	85	67	74	78	75	85	88	84	87	128	64	34	16	66.1
29-Jun	4	353	6	9	339	102	14	37	126	52	38	320	15	56	30	26	28	34	62	78	159	167	158	138	46.8
30-Jun	141	145	154	110	253	243	177	160	197	233	233	259	304	308	341	25	82	98	80	97	117	133	152	163	127.6
	356.0	336.4	338.5	336.5	349.1	344.2	336.2	322.2	324.7	321.4	314.4	318.3	346.7	0.4	0.2	14.3	21.9	39.8	38.6	47.0	58.8	68.3	32.7	9.2	
	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

Mannix - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 93 deg on Jun 16 15:00

Minimum Value: 5 deg on Jun 13 03:00

Percentiles: P_1 = 8 P_{10} = 11 Q_1 = 14 Median = 18 Q_3 = 26 P_{90} = 42 P_{99} = 81

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

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-Jun	15	15	15	15	14	DF	DF	DF	DF	DF	DF	DF	16	17	16	15	17	17	16	16	13	12	12	14	17
2-Jun	14	15	13	15	13	14	14	13	16	14	16	17	19	16	18	18	19	16	16	13	9	26	55	32	55
3-Jun	15	15	18	20	17	23	23	23	26	28	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	15	13	18	28
4-Jun	11	10	9	9	11	14	16	14	29	23	25	26	25	26	32	31	25	25	18	14	13	11	10	8	32
5-Jun	15	12	13	15	16	17	29	23	20	29	22	31	57	77	14	20	27	31	40	33	10	14	12	11	77
6-Jun	11	11	12	12	19	12	11	12	11	12	11	12	12	12	12	12	12	13	12	13	16	17	13	14	19
7-Jun	12	17	23	13	14	17	18	31	25	44	37	29	37	52	62	19	18	61	53	21	18	17	24	14	62
8-Jun	13	15	16	19	16	15	16	18	15	12	12	11	9	9	8	8	9	9	8	8	8	9	9	8	19
9-Jun	9	10	9	8	9	11	12	15	18	17	21	21	25	15	19	20	49	29	24	23	16	12	18	15	49
10-Jun	21	18	15	15	18	27	22	20	35	35	42	19	20	18	23	19	20	21	19	16	15	15	17	16	42
11-Jun	15	14	14	17	16	16	16	17	16	16	18	17	17	19	21	23	15	17	18	18	15	17	16	17	23
12-Jun	17	11	9	16	17	15	16	16	19	18	17	18	18	20	18	18	16	17	17	19	15	19	28	39	39
13-Jun	34	12	5	9	10	18	21	50	87	23	30	73	66	72	81	29	23	20	34	14	11	7	9	13	87
14-Jun	9	6	53	38	61	22	23	22	38	36	31	23	34	30	23	18	19	21	20	17	16	14	14	14	61
15-Jun	28	25	51	76	48	71	32	32	27	33	55	60	70	62	63	46	16	15	11	9	18	24	25	16	76
16-Jun	23	20	12	15	12	18	21	20	21	14	31	42	59	74	93	18	20	16	14	14	13	13	12	13	93
17-Jun	12	16	11	12	13	19	21	38	30	30	24	33	27	29	32	26	25	20	22	19	22	16	42	17	42
18-Jun	24	18	18	13	28	17	18	26	25	79	37	55	21	21	23	19	22	18	18	16	19	16	19	15	79
19-Jun	10	10	30	16	18	18	31	49	34	31	30	27	32	20	23	35	23	16	20	15	19	15	11	9	49
20-Jun	14	10	11	11	17	25	17	33	20	25	26	25	35	27	22	21	18	24	43	21	19	27	34	77	77
21-Jun	16	29	92	38	12	23	24	22	19	22	22	23	18	23	28	18	16	16	16	16	15	16	24	48	92
22-Jun	53	24	8	12	10	57	36	37	73	76	85	81	39	25	37	36	39	22	51	18	31	20	18	19	85
23-Jun	18	16	7	9	9	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	79	67	22	20	13	10	11	8	31	79
24-Jun	23	34	14	22	17	19	14	14	22	41	30	33	31	26	38	42	33	17	23	15	13	12	13	14	42
25-Jun	9	11	11	11	9	11	20	15	17	13	18	25	20	22	20	24	25	15	14	12	13	13	12	11	25
26-Jun	8	10	8	9	10	10	12	15	14	DF	16	16	16	16	22	17	15	13	14	12	13	15	20	12	22
27-Jun	14	11	13	20	15	15	39	56	26	19	18	18	16	19	21	16	17	14	17	12	22	13	14	15	56
28-Jun	30	17	10	60	87	49	26	26	46	54	46	17	17	18	17	17	18	18	15	16	41	30	19	11	87
29-Jun	10	9	25	28	40	84	58	29	55	50	53	65	84	26	28	21	23	21	27	15	22	57	11	15	84
30-Jun	10	11	21	39	40	19	30	22	25	55	62	52	41	32	30	24	56	66	15	10	17	23	15	13	66
	53	34	92	76	87	84	58	56	87	79	85	81	84	77	93	79	67	66	53	33	41	57	55	77	
	Diurnal Maximum																								

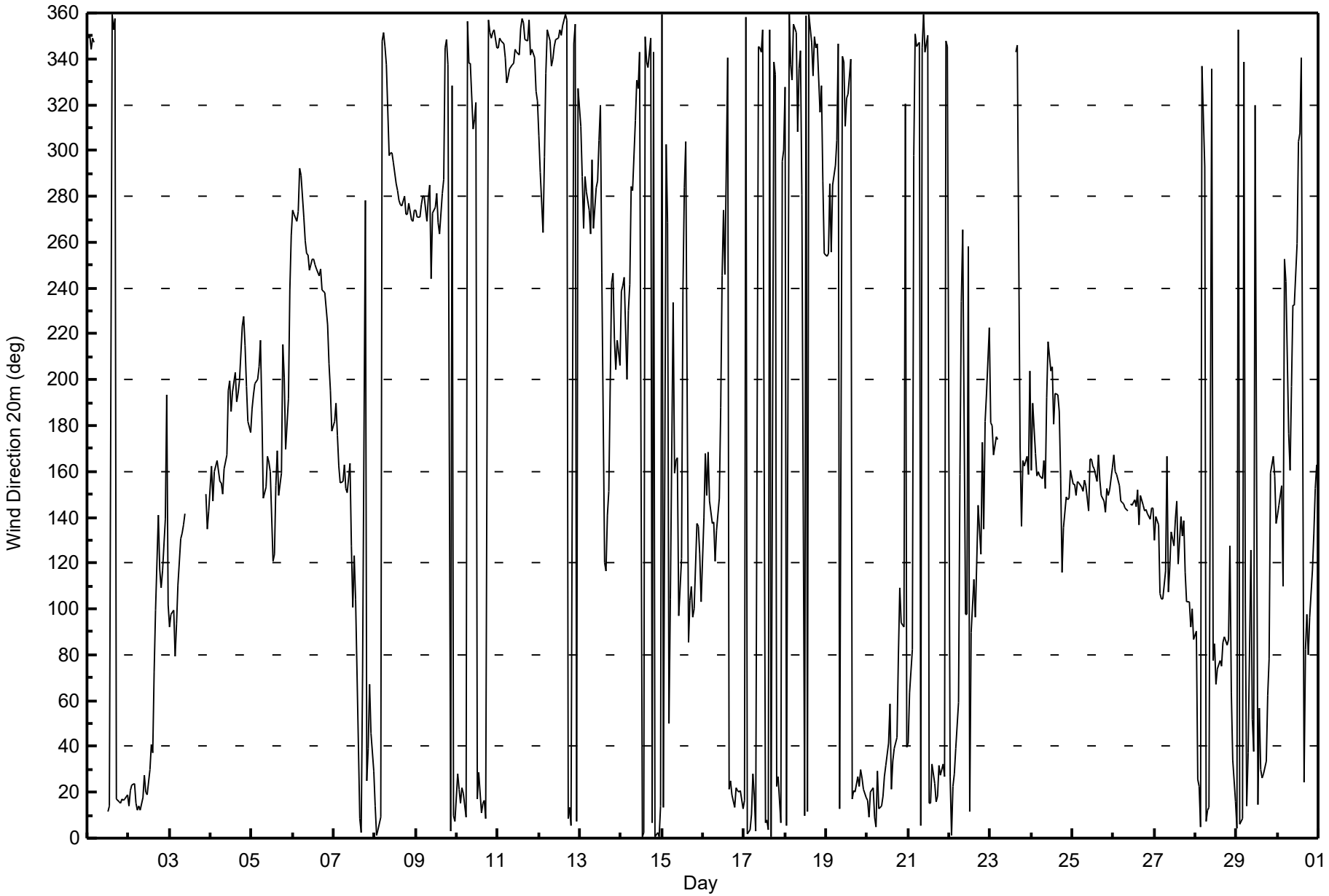
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 20m (WD20) - deg

Mannix - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 45m (WD45) - deg

Mannix - June 2026

Direction of Maximum Speed: 270 deg on Jun 8 15:00
Direction of Maximum Daily Speed Average: 287.8 deg on Jun 8

Direction of Minimum Speed: 272 deg on Jun 13 09:00

Direction of Minimum Daily Speed Average: 2.6 deg on Jun 22

Monthly Average Direction: 357.2 deg

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Percent Operational Time:	96.0

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-Jun	344	345	339	342	339	DF	DF	DF	DF	DF	DF	DF	4	6	352	347	352	7	7	6	9	8	7	11	--
2-Jun	6	12	15	14	6	3	5	3	9	17	14	12	20	30	28	58	89	128	107	99	102	119	141	84	24.7
3-Jun	77	84	87	70	79	102	121	120	121	127	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	136	126	129	--
4-Jun	147	141	151	153	156	147	145	141	158	163	186	190	178	186	193	182	185	191	213	217	209	196	182	172	177.1
5-Jun	182	192	193	192	206	218	181	142	145	157	154	151	112	123	145	160	142	147	201	195	165	187	239	256	179.7
6-Jun	268	266	264	266	291	284	262	252	248	246	240	244	246	241	240	237	240	230	230	230	218	207	203	186	247.3
7-Jun	189	186	177	155	147	148	156	147	144	149	117	92	113	100	33	359	355	63	277	20	40	57	38	22	95.2
8-Jun	8	357	359	1	341	344	339	331	293	294	293	289	279	274	270	268	268	272	265	265	270	263	261	266	287.8
9-Jun	266	263	264	269	274	274	262	272	278	234	265	267	272	259	256	272	280	336	341	332	353	327	3	0	281.2
10-Jun	16	13	8	14	12	2	350	332	331	304	310	313	10	19	2	7	10	1	350	346	341	344	346	339	353.6
11-Jun	339	342	341	340	333	323	324	328	329	330	336	338	334	347	351	349	342	342	352	335	337	334	320	316	336.5
12-Jun	304	289	272	308	330	346	341	329	333	338	341	342	345	343	347	351	350	360	6	359	340	341	340	337	339.6
13-Jun	13	296	281	297	288	280	264	298	272	280	280	305	310	236	115	109	131	141	233	238	220	208	210	207	240.0
14-Jun	237	246	255	251	253	251	283	282	311	322	320	337	354	355	340	332	331	343	0	337	355	352	359	15	324.9
15-Jun	1	25	347	314	23	52	230	156	158	158	89	120	229	286	297	69	94	99	87	93	125	125	114	98	94.7
16-Jun	132	164	142	159	138	124	127	113	125	137	175	228	270	246	331	13	16	10	6	14	12	14	15	7	42.7
17-Jun	11	357	356	358	1	14	6	346	336	336	334	345	357	358	356	344	352	331	324	14	20	9	312	307	350.6
18-Jun	345	360	1	335	327	348	348	307	328	332	278	354	351	4	351	339	326	342	339	340	314	323	289	273	335.6
19-Jun	272	273	286	277	288	303	314	335	2	336	331	307	315	317	333	8	10	13	17	17	24	18	19	14	341.3
20-Jun	15	2	10	10	0	0	17	2	5	10	17	22	30	45	12	23	28	32	67	98	84	79	319	32	23.5
21-Jun	40	65	81	305	347	343	342	357	338	351	336	342	5	8	24	14	8	11	22	20	22	19	347	353	3.4
22-Jun	30	355	15	20	42	82	153	226	266	88	102	265	5	78	105	92	117	136	104	161	123	169	185	226	97.4
23-Jun	212	193	177	166	166	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	336	339	165	123	152	150	161	155	194	--
24-Jun	150	172	162	156	154	157	150	157	147	184	205	191	195	173	185	184	178	147	104	124	137	136	136	147	155.4
25-Jun	143	144	137	142	140	137	138	147	144	134	156	158	155	153	148	158	147	140	137	131	143	141	144	150	144.6
26-Jun	155	149	145	141	131	133	134	135	132	DF	135	135	139	134	141	127	140	135	132	132	126	124	130	131	135.6
27-Jun	119	127	125	100	98	96	109	155	96	108	123	118	129	138	110	129	120	126	108	95	96	85	92	81	113.5
28-Jun	88	68	45	46	349	315	354	359	357	329	66	73	54	61	65	63	75	76	72	75	114	80	44	9	58.1
29-Jun	358	354	360	26	354	20	5	27	112	34	17	314	6	41	20	17	19	23	50	68	151	148	137	125	36.1
30-Jun	129	132	137	98	68	200	139	148	186	214	228	251	297	305	334	15	69	86	68	85	107	121	134	142	108.1
	357.9	336.5	343.8	342.3	345.7	343.6	339.9	322.5	321.4	315.9	313.0	315.8	339.3	352.2	351.8	4.6	10.5	27.4	25.1	33.5	46.1	60.1	35.8	5.1	
	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 45m (WD45) - deg

Mannix - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 91 deg on Jun 13 09:00

Minimum Value: 3 deg on Jun 14 02:00

Percentiles: P_1 = 4 P_{10} = 7 Q_1 = 9 Median = 13 Q_3 = 19 P_{90} = 32 P_{99} = 81

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

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-Jun	8	8	9	8	9	DF	DF	DF	DF	DF	DF	DF	11	11	11	10	11	12	11	10	7	6	7	8	12
2-Jun	7	8	8	9	7	8	7	8	9	9	9	9	12	10	12	15	19	11	14	10	8	23	53	19	53
3-Jun	13	14	19	16	15	20	21	21	21	26	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	13	9	11	26
4-Jun	6	7	4	5	4	8	8	8	21	18	14	14	15	17	24	22	17	17	12	9	6	6	6	4	24
5-Jun	9	5	4	6	10	11	22	14	11	19	16	20	50	69	10	14	25	20	35	28	8	9	8	8	69
6-Jun	9	8	7	9	15	10	9	8	7	8	7	8	8	8	8	7	7	9	7	8	11	11	8	17	17
7-Jun	10	12	22	10	8	10	9	22	14	38	31	27	33	42	65	13	12	61	51	17	17	13	20	8	65
8-Jun	8	8	8	12	9	8	9	11	11	7	7	8	7	7	6	6	7	7	6	6	7	7	6	6	12
9-Jun	7	8	7	6	7	9	8	12	16	11	18	17	22	11	14	17	40	25	17	18	13	7	13	8	40
10-Jun	16	11	8	9	12	16	14	16	28	28	37	13	15	11	17	14	12	16	14	12	8	10	11	9	37
11-Jun	9	8	8	10	9	9	9	10	9	9	12	10	11	16	17	19	9	10	14	11	10	10	9	9	19
12-Jun	13	7	9	11	11	9	10	8	10	12	11	13	12	14	13	13	11	12	12	14	9	13	22	18	22
13-Jun	26	12	4	6	6	16	15	31	91	17	23	62	76	78	82	31	19	14	28	9	6	4	3	6	91
14-Jun	5	3	14	16	26	13	20	18	23	29	20	16	30	24	17	13	13	16	16	10	13	10	9	8	30
15-Jun	13	14	27	43	32	63	26	19	19	20	48	48	58	53	57	41	12	11	9	7	14	18	19	14	63
16-Jun	25	20	6	10	6	16	18	18	19	8	27	36	49	74	83	13	13	11	8	8	7	8	7	7	83
17-Jun	8	10	5	5	6	13	14	32	23	18	17	26	20	23	24	20	18	15	16	13	14	15	43	12	43
18-Jun	13	8	10	10	16	11	12	22	21	76	30	48	16	15	17	13	16	11	12	10	11	10	16	8	76
19-Jun	7	5	10	8	9	13	20	33	22	20	20	20	22	12	16	27	16	10	11	9	12	9	7	5	33
20-Jun	8	6	7	6	9	14	11	22	13	17	19	17	26	20	15	13	12	20	40	19	17	19	38	63	63
21-Jun	11	21	54	39	5	18	14	11	12	14	16	16	10	14	20	11	10	11	9	10	8	10	16	31	54
22-Jun	47	25	5	6	15	45	29	36	77	83	81	86	32	22	29	28	38	21	45	17	22	17	16	13	86
23-Jun	18	15	13	4	4	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	80	63	20	15	9	6	6	4	24	80
24-Jun	12	18	8	16	12	15	8	8	14	34	22	24	23	15	24	32	26	13	22	11	9	9	8	8	34
25-Jun	5	5	5	5	5	7	12	9	9	8	12	17	15	17	15	18	21	12	9	9	8	8	7	6	21
26-Jun	4	4	4	8	5	5	7	8	8	DF	12	13	13	11	20	15	11	9	10	8	9	11	16	9	20
27-Jun	10	6	8	18	14	15	33	49	22	16	15	14	13	16	18	13	13	11	14	7	15	10	11	11	49
28-Jun	14	17	15	26	58	35	17	17	31	37	31	14	12	15	14	13	15	17	12	15	30	17	18	12	58
29-Jun	4	4	17	15	9	47	16	24	45	40	41	58	82	22	21	17	16	16	24	11	20	51	7	12	82
30-Jun	5	5	11	17	87	25	19	18	20	48	52	44	34	30	23	17	58	52	12	9	14	16	9	8	87
	47	25	54	43	87	63	33	49	91	83	81	86	82	78	83	80	63	61	51	28	30	51	53	63	
	Diurnal Maximum																								

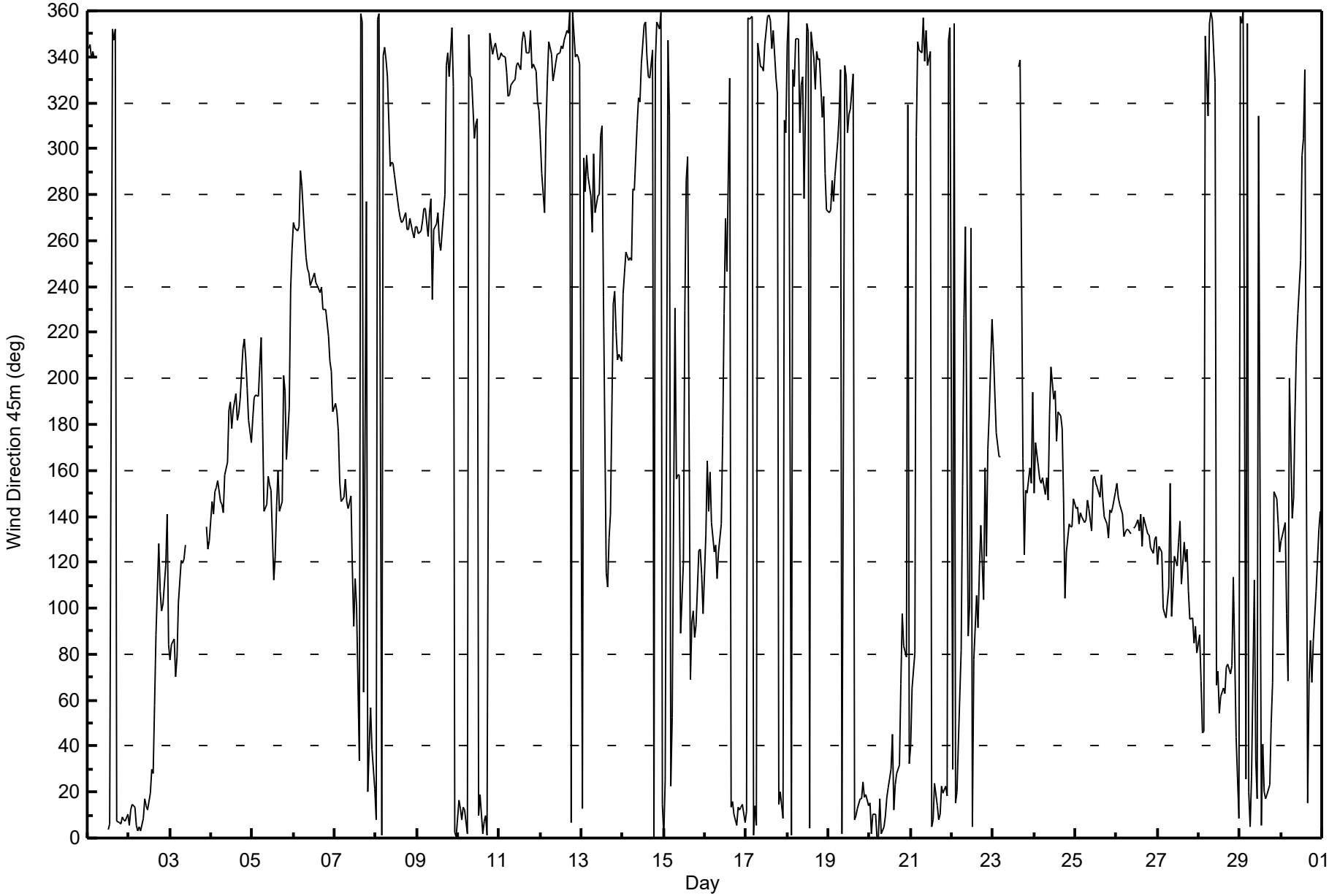
DF - DAS Failure

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 45m (WD45) - deg

Mannix - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 75m (WD75) - deg

Mannix - June 2026

Direction of Maximum Speed: 277 deg on Jun 8 15:00
Direction of Maximum Daily Speed Average: 295.4 deg on Jun 8

Direction of Minimum Speed: 297 deg on Jun 13 09:00
Direction of Minimum Daily Speed Average: 3.0 deg on Jun 22

Monthly Average Direction: 2.6 deg

Hours in Service:	720
Hours of Data:	597
Hours of Missing Data:	123
Percent Operational Time:	82.9

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-Jun	352	355	348	352	348	DF	DF	DF	DF	DF	DF	DF	10	12	0	355	1	14	14	12	15	15	14	18	--
2-Jun	14	19	21	20	13	9	12	11	16	24	21	21	27	36	35	62	91	127	109	103	101	105	99	83	29.4
3-Jun	79	87	89	80	86	108	125	125	123	125	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	138	128	133	--
4-Jun	147	149	153	164	167	155	149	147	163	173	189	193	181	190	196	186	189	193	217	220	213	206	194	185	182.0
5-Jun	198	212	212	210	223	231	189	155	155	161	156	156	117	128	149	164	152	138	200	203	181	202	250	262	193.6
6-Jun	274	272	272	271	300	290	267	257	252	250	244	248	250	245	244	241	243	233	233	235	225	219	219	205	252.3
7-Jun	213	205	205	166	155	158	165	155	150	149	121	98	115	107	42	8	4	69	286	33	59	68	52	35	101.2
8-Jun	22	7	8	10	350	352	347	340	300	301	301	295	285	280	277	274	275	279	271	271	277	271	267	272	295.4
9-Jun	272	269	270	275	281	282	267	277	284	238	268	271	275	263	259	274	285	346	350	343	359	337	12	10	287.4
10-Jun	24	23	17	20	19	11	358	341	340	310	319	320	16	26	9	14	18	9	360	354	350	353	354	347	2.3
11-Jun	349	350	349	349	343	332	331	335	338	339	345	346	342	354	359	357	350	352	0	344	345	343	331	328	345.4
12-Jun	316	302	295	327	345	357	351	339	341	345	349	351	353	352	355	359	358	8	14	7	351	350	340	348	348.8
13-Jun	349	318	317	324	318	297	282	318	297	285	284	320	319	235	114	119	135	147	236	242	234	UO	UO	UO	277.4
14-Jun	UO	UO	UO	UO	UO	UO	286	UO	326	330	330	345	9	2	355	356	354	UO	22	5	UO	UO	UO	UO	--
15-Jun	UO	UO	UO	UO	UO	UO	UO	113	149	156	100	114	228	333	351	71	92	94	86	86	96	UO	UO	UO	--
16-Jun	113	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	234	275	252	350	26	31	30	23	UO	UO	UO	UO	UO	--
17-Jun	UO	UO	UO	UO	UO	UO	UO	2	346	345	342	353	3	8	5	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
18-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	33	281	4	359	11	359	346	334	350	347	347	324	334	303	293	--
19-Jun	293	293	UO	UO	310	322	335	348	9	344	339	316	323	328	342	16	18	21	25	25	32	25	33	27	357.3
20-Jun	28	12	19	21	11	13	21	10	11	18	27	31	40	51	21	31	35	40	66	100	88	83	345	44	31.0
21-Jun	61	80	89	312	356	354	353	4	347	359	346	352	14	17	32	23	17	19	30	28	29	25	1	6	13.9
22-Jun	43	3	27	34	65	133	155	228	280	87	98	277	14	81	110	99	121	141	102	164	129	171	193	239	103.9
23-Jun	248	225	199	184	188	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	344	350	170	126	150	153	170	171	UO	--
24-Jun	UO	UO	UO	UO	UO	190	UO	162	157	192	204	193	198	177	188	183	180	151	108	126	140	133	UO	UO	--
25-Jun	UO	UO	UO	UO	UO	139	143	151	147	139	161	162	158	156	153	162	152	145	138	UO	UO	UO	UO	UO	--
26-Jun	UO	UO	UO	UO	UO	UO	UO	UO	138	DF	137	140	145	140	147	132	144	140	138	136	127	123	130	133	--
27-Jun	122	129	127	105	104	99	117	150	100	112	127	123	134	144	114	133	123	127	111	99	101	90	96	91	116.2
28-Jun	97	92	74	74	26	352	19	5	5	345	72	75	59	66	69	68	78	79	76	79	117	91	67	21	66.7
29-Jun	11	13	15	51	35	23	12	28	103	32	22	321	13	46	27	23	24	29	56	76	154	149	139	127	44.0
30-Jun	137	138	140	102	90	150	118	147	185	213	236	259	303	311	342	23	69	84	73	90	111	120	132	141	100.5
	358.4	343.1	350.9	353.5	347.1	340.1	340.9	338.8	330.9	325.9	326.6	327.3	350.3	3.3	2.6	15.9	20.7	44.3	36.8	36.1	50.1	45.8	3.8	356.6	
	Diurnal Average																								

DF - DAS Failure 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 75m (WD75) - deg

Mannix - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 99 deg on Jun 13 14:00

Minimum Value: 2 deg on Jun 13 21:00

Percentiles: P_1 = 3 P_{10} = 6 Q_1 = 8 Median = 13 Q_3 = 18 P_{90} = 34 P_{99} = 84

Hours in Service:	720
Hours of Data:	597
Hours of Missing Data:	123
Hours of Calibration:	0
Percent Operational Time:	82.9

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-Jun	6	7	8	7	7	DF	DF	DF	DF	DF	DF	DF	10	10	10	8	10	10	9	9	6	5	5	7	10
2-Jun	6	7	7	7	6	7	5	4	7	7	7	7	9	8	11	13	18	13	14	11	12	24	44	13	44
3-Jun	11	12	20	14	11	18	20	19	20	23	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	14	13	13	23
4-Jun	6	6	3	4	5	7	6	8	18	15	13	13	13	15	21	19	15	16	10	7	5	5	4	3	21
5-Jun	9	3	3	4	7	9	18	15	12	15	15	17	38	66	10	14	26	18	34	20	9	10	7	8	66
6-Jun	8	8	7	9	14	10	9	8	6	6	6	7	6	6	6	7	6	8	6	7	9	9	10	15	15
7-Jun	8	12	23	11	7	9	9	24	13	34	27	25	31	36	51	12	12	60	52	16	16	11	18	6	60
8-Jun	10	7	7	9	7	7	7	10	11	6	6	7	7	7	6	6	6	7	6	6	7	7	6	6	11
9-Jun	7	8	7	6	7	9	7	11	16	11	18	16	22	11	12	16	38	26	16	16	12	7	12	6	38
10-Jun	13	8	7	6	9	13	13	14	27	29	36	14	14	9	15	12	11	14	12	11	6	8	11	7	36
11-Jun	7	5	6	7	8	8	8	8	8	8	10	9	9	14	16	17	8	9	12	9	9	9	8	7	17
12-Jun	11	7	12	9	9	7	8	8	9	10	9	11	11	12	12	12	9	11	10	13	7	9	12	11	13
13-Jun	18	6	3	5	5	13	14	38	93	17	22	62	88	99	63	34	19	12	26	7	2	UO	UO	UO	99
14-Jun	UO	UO	UO	UO	UO	UO	25	UO	26	27	19	15	31	21	16	17	16	UO	21	18	UO	UO	UO	UO	31
15-Jun	UO	UO	UO	UO	UO	UO	UO	56	28	27	35	45	71	83	71	40	12	16	10	7	16	UO	UO	UO	83
16-Jun	18	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	39	38	74	95	14	15	15	11	UO	UO	UO	UO	UO	95
17-Jun	UO	UO	UO	UO	UO	UO	UO	33	23	17	16	22	27	18	15	UO	UO	UO	UO	UO	UO	UO	UO	UO	33
18-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	70	38	47	16	14	15	11	17	9	10	8	9	8	15	6	70
19-Jun	17	13	UO	UO	19	13	15	34	24	20	18	20	23	10	15	25	15	8	8	6	9	6	5	3	34
20-Jun	5	5	6	3	6	11	10	20	11	15	16	15	21	18	12	10	10	17	39	18	16	17	36	50	50
21-Jun	10	15	38	43	7	14	10	10	11	13	15	14	8	12	17	9	8	9	7	7	5	7	12	24	43
22-Jun	49	31	5	7	27	26	23	39	82	52	75	88	34	18	24	25	33	19	43	13	18	15	17	13	88
23-Jun	10	18	14	7	10	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	87	63	21	15	9	4	3	3	UO	87
24-Jun	UO	UO	UO	UO	UO	21	UO	7	13	29	19	19	19	13	20	27	24	12	21	13	8	16	UO	UO	29
25-Jun	UO	UO	UO	UO	UO	6	12	9	8	9	11	15	13	16	12	16	18	12	13	UO	UO	UO	UO	UO	18
26-Jun	UO	UO	UO	UO	UO	UO	UO	UO	8	DF	64	13	12	12	20	16	9	10	12	12	14	15	17	14	64
27-Jun	14	12	14	18	15	14	24	40	22	17	16	16	14	15	18	14	15	14	14	10	14	7	10	11	40
28-Jun	12	14	17	34	33	25	11	15	23	37	22	12	10	13	12	10	13	15	10	13	24	13	15	16	37
29-Jun	5	3	9	7	9	20	9	23	42	33	30	63	84	20	17	14	14	13	22	8	18	40	8	15	84
30-Jun	11	8	14	15	19	13	20	22	17	51	38	45	29	30	21	16	53	45	10	7	15	16	15	9	53
	49	31	38	43	33	26	25	56	93	70	75	88	88	99	95	87	63	60	52	20	24	40	44	50	
	Diurnal Maximum																								

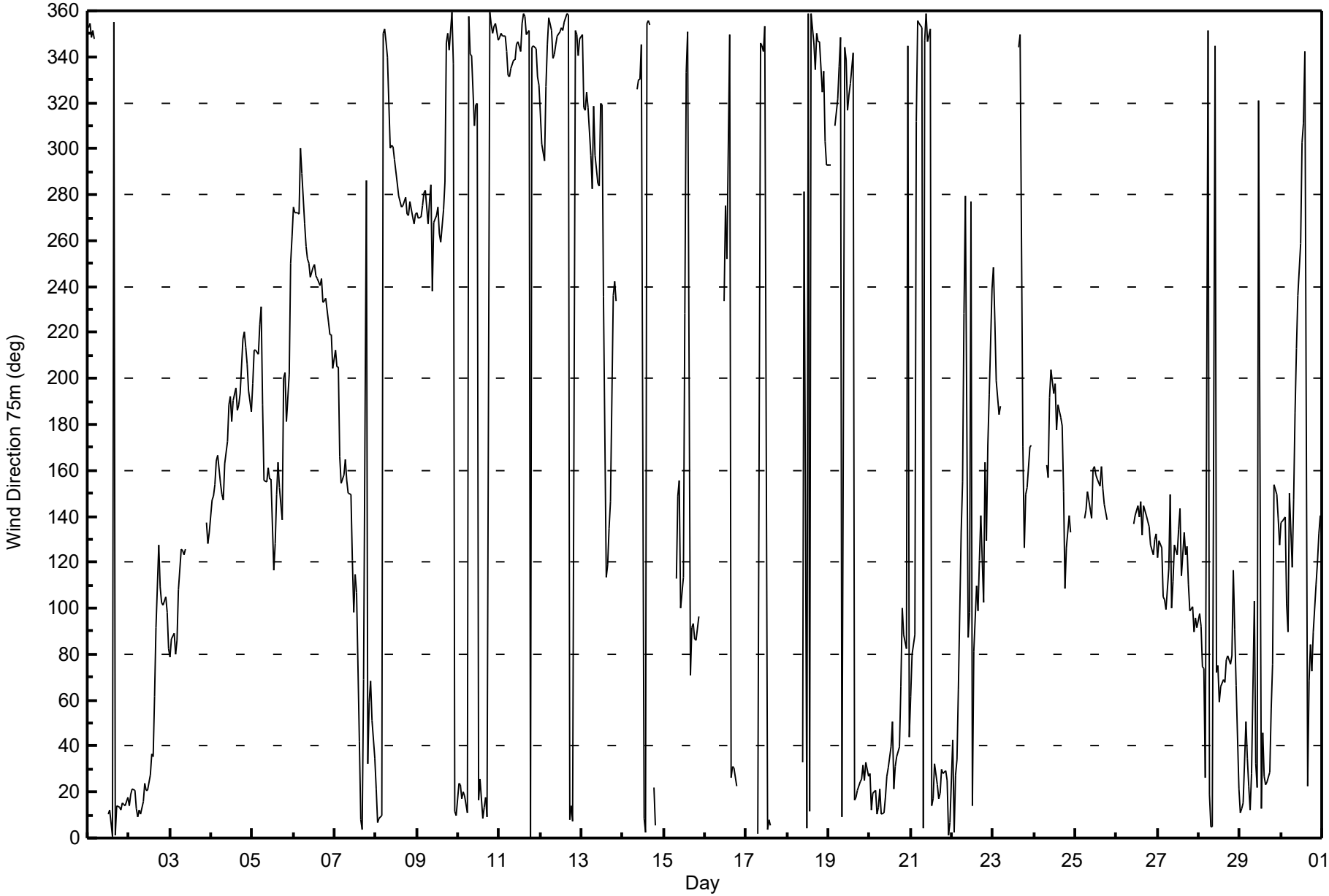
DF - DAS Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 75m (WD75) - deg

Mannix - June 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 90m (WD90) - deg

Mannix - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 88 deg on Jun 29 13:00

Minimum Value: 3 deg on Jun 29 02:00

Percentiles: P_1 = 4 P_{10} = 8 Q_1 = 10 Median = 12 Q_3 = 19 P_{90} = 35 P_{99} = 69

Hours in Service:	720
Hours of Data:	110
Hours of Missing Data:	610
Hours of Calibration:	0
Percent Operational Time:	15.3

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-Jun	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
3-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	--
4-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
6-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
24-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	11	12	11	11	19	13	9	8	10	8	9	10	13	9	19
27-Jun	9	6	8	13	13	13	20	37	21	14	12	12	11	14	15	11	11	10	10	7	11	6	8	9	37
28-Jun	10	11	15	35	26	24	11	16	26	40	21	12	10	15	12	11	14	15	9	13	19	11	14	18	40
29-Jun	6	3	8	10	9	16	9	23	39	36	39	71	88	20	16	13	13	14	23	8	17	26	5	10	88
30-Jun	9	4	12	9	14	11	12	19	16	52	34	43	29	28	22	15	52	49	9	6	11	11	11	6	52
Diurnal Maximum	10	11	15	35	26	24	20	37	39	52	39	71	88	28	22	15	52	49	23	13	19	26	14	18	

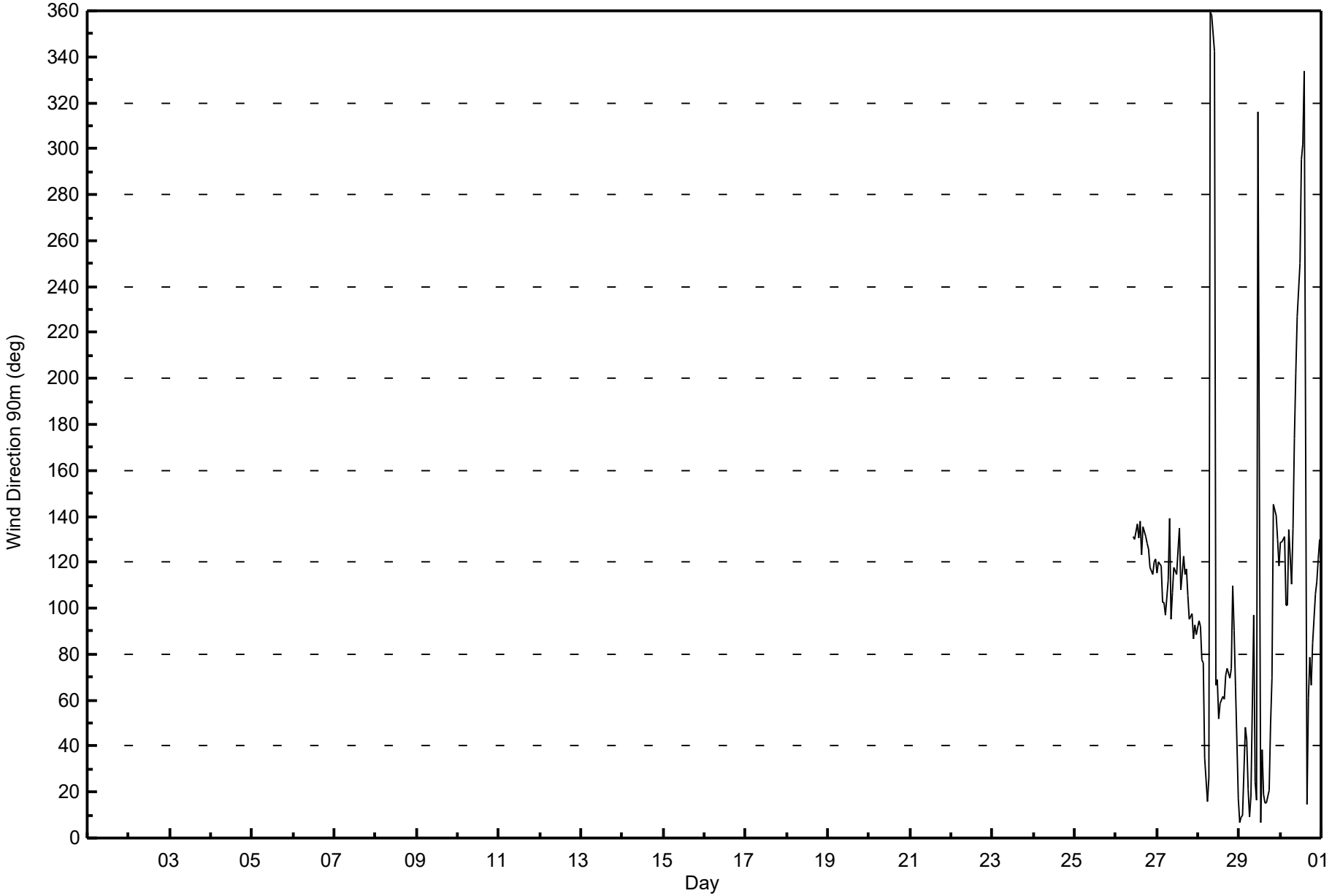
DF - DAS Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 90m (WD90) - deg

Mannix - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Mannix - June 2026

Maximum Value: 0.9 km/h on Jun 27 19:00

Maximum Daily Average: 0.5 km/h on Jun 27

Minimum Value: -1.6 km/h on Jun 16 19:00

Minimum Daily Average: -1.0 km/h on Jun 11

Maximum Diurnal Average: -0.2 km/h at hour 8

Minimum Diurnal Average: -0.4 km/h at hour 16

Monthly Average: -0.27 km/h

Percentiles: P_1 = -1.4 P_{10} = -1.0 Q_1 = -0.7 Median = -0.2 Q_3 = 0.2 P_{90} = 0.4 P_{99} = 0.7

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	-0.8	-1.1	-1.1	-1.1	-0.9	DF	DF	DF	DF	DF	DF	DF	-1.4	-1.0	-1.3	-1.1	-1.2	-0.8	-1.0	-1.4	-1.4	-1.6	-1.5	-1.2	--	-0.8
2-Jun	-1.2	-0.8	-1.0	-1.1	-1.0	-1.4	-1.3	-1.5	-0.9	-0.8	-0.6	-0.6	-0.3	-0.7	-0.9	-0.1	0.3	0.5	0.3	0.3	0.2	0.1	-0.1	0.1	-0.5	0.5
3-Jun	0.2	0.1	0.2	0.1	0.2	0.5	0.4	0.5	0.4	0.3	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	0.2	0.0	0.0	--	0.5
4-Jun	0.1	0.1	0.3	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.2	0.0	0.1	0.0	0.1	0.0	0.0	0.0	-0.3	-0.2	0.1	0.3	0.1	0.3
5-Jun	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	0.0	0.3	0.2	0.2	0.1	0.2	0.1	0.3	0.3	0.6	0.5	-0.1	-0.2	-0.1	0.1	-0.1	-0.2	-0.1	0.0	0.6
6-Jun	-0.1	0.0	-0.2	0.0	-0.3	-0.1	0.2	0.2	0.2	0.6	0.5	0.3	0.5	0.4	0.3	0.4	0.1	0.0	0.1	-0.1	-0.2	-0.2	-0.2	0.0	0.1	0.6
7-Jun	-0.1	0.0	0.0	0.3	0.3	0.3	0.3	0.0	0.2	0.1	0.4	0.2	0.2	0.0	-0.2	-0.9	-1.0	0.1	-0.3	-0.6	-0.3	-0.1	-0.5	-0.6	-0.1	0.4
8-Jun	-0.6	-0.7	-0.7	-0.7	-0.8	-1.0	-0.9	-0.7	-0.5	-0.5	-0.6	-0.3	0.4	0.4	0.8	0.6	0.5	0.3	0.1	0.3	0.5	0.6	0.4	0.5	-0.1	0.8
9-Jun	0.2	0.1	0.2	0.1	0.1	-0.1	-0.1	-0.1	-0.2	0.1	-0.2	0.0	0.0	0.0	0.0	-0.3	-0.4	-0.7	-0.5	-0.5	-0.7	-0.7	-1.0	-1.1	-0.2	0.2
10-Jun	-0.8	-0.6	-0.7	-0.6	-0.6	-0.5	-0.4	-0.9	-0.4	-0.3	-0.4	-0.8	-1.0	-0.7	-0.6	-1.0	-0.7	-0.9	-0.8	-1.2	-1.0	-1.0	-0.9	-1.0	-0.8	-0.3
11-Jun	-1.1	-1.1	-1.0	-0.9	-1.1	-0.9	-1.0	-1.0	-1.1	-1.0	-1.0	-0.9	-1.0	-1.2	-1.0	-0.9	-1.1	-0.9	-0.9	-0.9	-1.0	-0.7	-0.9	-0.6	-1.0	-0.6
12-Jun	-0.7	-0.5	-0.2	-0.6	-0.8	-0.8	-0.9	-0.9	-0.8	-1.2	-1.4	-1.1	-1.3	-1.5	-1.3	-1.4	-1.3	-1.4	-1.1	-0.8	-0.8	-0.6	-0.5	-0.7	-0.9	-0.2
13-Jun	-0.4	-0.2	-0.3	-0.3	-0.2	-0.4	-0.4	-0.1	-0.2	-0.6	-0.6	-0.1	-0.1	-0.3	0.2	0.3	0.2	0.1	-0.1	0.0	-0.2	-0.2	-0.3	-0.3	-0.2	0.3
14-Jun	-0.2	-0.3	-0.3	-0.2	-0.3	-0.3	-0.4	-0.3	-0.2	-0.6	-0.5	-0.9	-0.8	-0.7	-1.2	-1.1	-1.1	-1.0	-1.1	-0.7	-0.8	-0.9	-0.8	-0.7	-0.6	-0.2
15-Jun	-0.6	-0.6	-0.5	-0.3	-0.2	-0.1	-0.3	0.0	0.1	-0.2	-0.1	-0.1	0.1	-0.1	-0.1	0.1	0.2	0.4	0.3	0.3	0.2	0.4	0.4	0.5	0.0	0.5
16-Jun	0.5	0.3	0.3	0.2	0.3	0.4	0.2	0.5	0.2	0.2	-0.2	-0.4	-0.4	-0.2	-0.4	-0.9	-1.0	-1.2	-1.6	-1.2	-1.1	-1.2	-1.1	-1.0	-0.4	0.5
17-Jun	-1.0	-0.7	-1.0	-0.9	-0.9	-0.4	-0.4	-0.1	-0.5	-0.5	-0.7	-0.6	-1.0	-0.7	-0.6	-1.1	-0.8	-0.8	-0.8	-0.6	-0.5	-0.7	-0.4	-0.4	-0.7	-0.1
18-Jun	-0.6	-0.6	-0.7	-0.6	-0.3	-0.6	-0.5	-0.5	-0.4	-0.1	-0.4	-0.3	-0.7	-0.9	-0.7	-1.0	-0.9	-1.0	-0.9	-0.8	-0.7	-0.8	-0.4	-0.2	-0.6	-0.1
19-Jun	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.1	-0.4	-0.5	-0.6	-0.5	-0.5	-0.7	-0.8	-0.4	-0.8	-1.0	-0.8	-0.9	-0.5	-0.6	-0.8	-0.9	-0.5	-0.1
20-Jun	-0.7	-0.8	-0.7	-0.7	-0.6	-0.5	-0.6	-0.4	-0.8	-0.9	-0.8	-0.6	-0.3	-0.2	-1.0	-0.5	-0.7	-0.4	0.1	0.5	0.1	0.0	-0.4	-0.3	-0.5	0.5
21-Jun	-0.4	-0.1	-0.2	-0.3	-0.7	-0.6	-0.6	-0.2	-0.7	-0.6	-0.7	-0.7	-0.9	-0.9	-0.4	-0.9	-1.0	-0.8	-0.8	-0.8	-0.6	-0.6	-0.8	-0.5	-0.6	-0.1
22-Jun	-0.5	-0.8	-0.9	-0.6	-0.5	-0.2	0.0	-0.4	-0.3	0.2	0.3	-0.2	-0.4	-0.1	0.1	0.0	0.3	0.1	0.0	-0.1	0.3	-0.1	-0.2	-0.3	-0.2	0.3
23-Jun	-0.2	-0.2	-0.1	0.1	0.1	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	-0.8	-0.8	0.4	0.7	0.1	0.4	0.2	0.2	-0.2	--	0.7
24-Jun	0.0	-0.2	0.0	-0.1	0.2	0.1	0.4	0.2	0.3	0.0	-0.2	0.0	-0.1	0.1	0.1	0.2	0.1	0.3	0.7	0.5	0.3	0.3	0.4	0.3	0.2	0.7
25-Jun	0.2	0.2	0.2	0.1	0.1	-0.1	0.0	0.1	0.2	0.0	0.6	0.3	0.3	0.5	0.2	0.2	0.5	0.4	0.3	0.3	0.4	0.5	0.4	0.5	0.3	0.6
26-Jun	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	DF	0.7	0.7	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.4	0.6	0.7	0.5	0.1	0.4	0.7
27-Jun	0.5	0.2	0.3	0.3	0.6	0.6	0.6	0.0	0.3	0.7	0.8	0.9	0.6	0.6	0.8	0.7	0.8	0.9	0.9	0.3	0.2	0.2	0.4	0.0	0.5	0.9
28-Jun	0.1	-0.6	-0.9	-0.6	-0.5	-0.4	-0.3	-0.1	-0.2	-0.3	0.0	0.3	-0.3	0.0	0.4	0.4	0.4	0.3	0.4	0.1	-0.1	-0.2	-0.5	-0.8	-0.1	0.4
29-Jun	-0.8	-0.8	-0.9	-0.8	-0.5	-0.1	-0.3	-0.2	-0.2	0.0	0.2	-0.5	-0.5	-0.2	-0.9	-0.9	-0.9	-0.9	-0.4	0.0	0.5	-0.1	0.0	0.2	-0.4	0.5
30-Jun	0.2	0.2	0.0	-0.1	-0.3	-0.5	-0.2	-0.1	-0.1	-0.3	-0.3	-0.2	-0.5	-0.6	-0.9	-0.9	0.1	-0.1	0.3	0.5	0.4	0.2	0.3	0.1	-0.1	0.5
	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.4	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	Diurnal Average	
	0.5	0.3	0.3	0.3	0.6	0.6	0.6	0.5	0.4	0.7	0.8	0.9	0.6	0.6	0.8	0.7	0.8	0.9	0.9	0.5	0.6	0.7	0.5	0.5	Diurnal Maximum	

DF - DAS Failure

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

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

Mannix - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.0 km/h on Jun 1 01:00

Minimum Value: 0.3 km/h on Jun 13 03:00

Percentiles: P_1 = 0.3 P_{10} = 0.7 Q_1 = 1.1 Median = 1.7 Q_3 = 2.4 P_{90} = 2.9 P_{99} = 3.7

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

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

DF - DAS Failure

Wood Buffalo Environmental Association

Summary of Hour Averages

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

Mannix - June 2026

Maximum Value: 2.2 km/h on Jun 23 19:00

Maximum Daily Average: 1.3 km/h on Jun 25

Minimum Value: -2.4 km/h on Jun 1 22:00

Minimum Daily Average: -1.3 km/h on Jun 11

Maximum Diurnal Average: 0.2 km/h at hour 9

Minimum Diurnal Average: 0.0 km/h at hour 2

Monthly Average: 0.05 km/h

Percentiles: P_1 = -2.0 P_{10} = -1.2 Q_1 = -0.7 Median = 0.1 Q_3 = 0.8 P_{90} = 1.3 P_{99} = 1.9

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	-2.3	-2.3	-2.1	-2.2	-1.8	DF	DF	DF	DF	DF	DF	DF	-1.8	-1.0	-1.6	-2.0	-1.2	-1.1	-1.1	-1.5	-1.9	-2.4	-2.3	-1.6	--	-1.0
2-Jun	-1.6	-1.0	-1.5	-1.4	-1.7	-1.7	-1.7	-1.8	-1.0	-1.2	-0.8	-1.0	-0.6	-0.4	-0.8	0.4	0.6	1.6	0.7	0.5	0.2	0.6	0.6	0.5	-0.5	1.6
3-Jun	0.6	0.4	0.6	0.5	0.6	0.9	1.3	1.4	1.3	1.2	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	0.9	1.2	0.6	--	1.4
4-Jun	0.9	1.0	1.2	1.2	1.5	1.4	1.2	1.0	1.1	1.5	1.3	1.2	1.7	0.9	1.3	0.8	1.3	1.0	1.0	0.7	0.4	0.6	1.2	1.5	1.1	1.7
5-Jun	1.1	0.9	0.9	0.8	0.4	0.1	0.9	1.1	1.1	0.9	0.7	1.0	0.7	1.2	1.3	2.0	1.4	0.3	0.4	0.4	0.9	1.0	0.1	0.0	0.8	2.0
6-Jun	0.2	0.2	0.2	0.3	-0.2	0.1	0.3	0.1	0.4	0.3	0.6	0.5	0.3	0.5	0.4	0.6	0.2	0.5	0.6	0.3	0.4	0.3	0.2	0.5	0.3	0.6
7-Jun	0.6	0.7	0.7	1.4	1.5	1.3	1.6	0.6	1.0	0.7	1.1	0.4	0.6	0.8	0.2	-0.8	-1.3	0.6	0.0	-0.3	-0.1	0.1	-0.2	-0.5	0.4	1.6
8-Jun	-0.6	-1.0	-0.7	-1.1	-1.3	-1.7	-1.7	-1.4	-0.5	-0.5	-0.7	-0.4	0.3	0.5	0.6	0.7	0.5	0.4	0.2	0.4	0.5	0.3	0.1	0.2	-0.3	0.7
9-Jun	0.3	0.2	0.2	0.3	0.0	-0.1	0.3	0.4	0.0	0.7	0.3	0.1	0.5	0.2	0.2	0.1	-0.1	-0.4	-0.5	-0.4	-0.6	-0.8	-1.2	-1.5	-0.1	0.7
10-Jun	-0.9	-0.4	-0.7	-0.8	-0.3	-0.1	-0.3	-0.9	0.1	0.3	-0.2	-0.7	-1.1	-0.4	-0.6	-0.8	-1.1	-0.9	-1.1	-1.5	-1.9	-1.5	-1.7	-1.6	-0.8	0.3
11-Jun	-2.0	-1.9	-1.7	-1.2	-1.1	-1.0	-1.1	-1.3	-1.5	-1.4	-1.5	-1.3	-1.3	-1.4	-1.3	-0.7	-1.9	-1.5	-0.8	-1.1	-1.3	-1.0	-0.8	-0.7	-1.3	-0.7
12-Jun	-0.7	-0.5	-0.2	-0.8	-1.1	-1.1	-1.5	-1.5	-1.2	-1.5	-2.1	-1.8	-1.9	-1.9	-1.5	-1.8	-1.9	-1.9	-1.0	-0.8	-1.4	-0.4	-0.2	-1.0	-1.2	-0.2
13-Jun	-0.1	-0.1	-0.4	-0.5	-0.2	-0.1	-0.1	0.0	0.0	-0.6	-0.3	0.4	0.3	0.2	0.8	1.1	1.1	0.9	0.4	0.2	0.2	0.4	0.6	0.4	0.2	1.1
14-Jun	0.0	0.0	0.1	0.1	0.0	-0.1	0.0	0.1	0.3	-0.2	-0.4	-1.3	-0.3	-0.8	-1.6	-1.4	-1.2	-1.0	-1.1	-1.0	-0.5	-1.2	-0.8	-0.7	-0.5	0.3
15-Jun	-0.5	-0.2	-0.2	-0.1	0.0	0.2	0.0	0.6	0.8	0.4	0.2	0.6	1.1	0.4	0.6	0.5	0.2	0.8	0.6	0.5	1.3	1.5	1.0	0.7	0.5	1.5
16-Jun	1.3	1.3	1.4	1.2	1.2	1.2	0.8	1.1	0.7	0.9	0.5	0.0	-0.2	0.2	0.0	-1.0	-0.8	-1.1	-1.9	-1.3	-1.2	-1.3	-1.1	-1.2	0.0	1.4
17-Jun	-1.0	-1.1	-1.4	-1.0	-1.3	-0.4	-0.2	0.8	0.2	-0.5	-0.8	-0.6	-1.2	-0.4	-0.5	-1.2	-1.0	-1.2	-0.8	-0.6	-0.2	-0.5	-0.2	-0.4	-0.7	0.8
18-Jun	-0.4	-0.7	-0.5	-0.6	-0.2	-0.7	-0.8	-0.4	-0.3	0.4	0.1	0.0	-0.8	-0.6	-0.6	-0.8	-1.1	-1.6	-1.3	-1.2	-0.6	-1.0	-0.4	-0.2	-0.6	0.4
19-Jun	-0.2	-0.2	-0.4	-0.3	-0.4	-0.3	-0.2	0.1	-0.2	-0.3	-0.6	-0.1	-0.5	-0.9	-1.0	-0.3	-0.7	-0.9	-0.7	-0.7	-0.1	-0.6	-0.6	-0.8	-0.5	0.1
20-Jun	-0.6	-1.0	-0.8	-0.8	-0.7	-0.4	-0.6	-0.2	-0.9	-1.0	-0.6	-0.9	0.5	0.3	-1.0	-0.6	-0.2	-0.2	0.3	1.1	0.2	0.4	-0.2	0.0	-0.3	1.1
21-Jun	0.0	0.3	0.4	-0.1	-0.6	-0.7	-0.7	-0.2	-0.9	-0.5	-0.4	-0.8	-1.1	-1.0	-0.1	-0.7	-1.0	-0.9	-0.6	-0.4	-0.5	-0.6	-0.8	-0.4	-0.5	0.4
22-Jun	-0.3	-0.6	-0.9	-0.6	-0.3	0.2	0.4	0.0	-0.1	0.6	1.2	0.4	-0.3	0.3	0.8	0.4	0.9	0.9	0.7	0.6	1.0	1.0	0.6	0.1	0.3	1.2
23-Jun	0.1	0.4	0.5	0.9	0.8	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	-0.7	-1.0	1.9	2.2	0.8	1.3	1.0	1.1	0.5	--	2.2
24-Jun	0.8	0.5	0.9	0.7	1.2	0.7	1.7	1.2	1.3	1.0	0.9	1.4	1.0	1.1	1.1	1.4	1.4	1.1	1.4	1.0	1.2	1.3	1.3	1.3	1.1	1.7
25-Jun	1.2	1.3	1.3	1.0	1.2	0.8	0.4	1.0	1.2	0.4	2.0	1.5	1.5	1.9	1.5	1.4	1.6	1.3	1.3	1.3	1.5	1.8	2.0	1.8	1.3	2.0
26-Jun	1.7	1.3	1.2	1.3	1.2	1.1	0.8	0.9	0.7	DF	1.7	1.8	1.5	1.5	1.4	1.6	1.4	1.5	1.6	1.2	1.4	1.8	1.8	0.5	1.3	1.8
27-Jun	1.7	0.6	0.9	1.0	1.2	0.8	1.3	0.8	0.9	1.3	1.6	1.8	1.2	1.9	1.6	1.7	1.9	1.9	1.6	0.5	0.7	0.5	0.5	0.4	1.2	1.9
28-Jun	0.5	0.2	-0.2	-0.1	-0.4	-0.4	-0.2	-0.1	0.2	0.3	0.6	0.6	0.1	0.4	0.4	0.7	0.7	0.9	0.7	0.5	0.6	0.1	-0.3	-0.7	0.2	0.9
29-Jun	-0.9	-0.8	-1.0	-0.4	-0.5	0.1	-0.2	0.2	0.3	0.4	0.6	0.0	-0.4	0.2	-0.5	-0.7	-0.7	-0.7	-0.1	0.5	1.8	0.8	0.8	1.0	0.0	1.8
30-Jun	1.1	1.0	1.0	0.1	0.1	0.0	0.2	0.4	0.5	0.2	0.0	0.3	-0.2	-0.4	-0.8	-0.5	0.7	0.3	0.7	0.7	1.2	1.5	1.3	1.1	0.4	1.5
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.2	0.1	0.0	Diurnal Average	
	1.7	1.3	1.4	1.4	1.5	1.4	1.7	1.4	1.3	1.5	2.0	1.8	1.7	1.9	1.6	2.0	1.9	1.9	2.2	1.3	1.8	1.8	2.0	1.8	Diurnal Maximum	

DF - DAS Failure

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

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

Mannix - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.2 km/h on Jun 1 02:00

Minimum Value: 0.2 km/h on Jun 13 03:00

Percentiles: P_1 = 0.3 P_{10} = 0.7 Q_1 = 1.1 Median = 2.0 Q_3 = 2.6 P_{90} = 3.0 P_{99} = 3.9

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

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

DF - DAS Failure

Wood Buffalo Environmental Association

Summary of Hour Averages

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

Mannix - June 2026

Maximum Value: 7.7 km/h on Jun 15 20:00

Maximum Daily Average: 0.9 km/h on Jun 8

Minimum Value: -1.4 km/h on Jun 1 23:00

Minimum Daily Average: -0.4 km/h on Jun 28

Maximum Diurnal Average: 0.5 km/h at hour 19

Minimum Diurnal Average: -0.2 km/h at hour 24

Monthly Average: 0.15 km/h

Percentiles: P_1 = -1.2 P_{10} = -0.6 Q_1 = -0.3 Median = 0.0 Q_3 = 0.4 P_{90} = 1.0 P_{99} = 3.4

Hours in Service:	720
Hours of Data:	597
Hours of Missing Data:	123
Hours of Calibration:	0
Percent Operational Time:	82.9

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-Jun	-0.7	-0.8	-0.6	-0.9	-0.6	DF	DF	DF	DF	DF	DF	DF	0.0	0.3	0.1	-0.7	0.0	0.2	-0.1	-0.4	-1.2	-1.3	-1.4	-1.1	--	0.3
2-Jun	-0.8	-0.6	-0.7	-0.9	-0.6	-0.5	-0.5	-0.7	-0.1	-0.9	-0.5	-0.3	-0.2	-0.3	-1.0	-0.4	-0.6	0.9	-0.2	-0.4	-0.8	0.0	0.1	0.2	-0.4	0.9
3-Jun	0.4	-0.3	0.0	-0.2	-0.2	-0.1	0.5	1.2	1.1	0.9	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	-0.4	0.9	-0.3	--	1.2
4-Jun	-0.3	-0.2	-0.1	0.3	0.6	0.3	-0.1	-0.2	0.3	0.6	0.4	0.5	0.8	-0.2	0.5	0.1	0.5	0.4	0.7	0.2	0.0	-0.1	0.4	0.5	0.2	0.8
5-Jun	0.1	-0.1	0.0	0.1	0.2	0.0	0.5	0.5	0.2	0.2	-0.1	0.1	0.3	1.0	0.0	0.5	0.1	-0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	1.0
6-Jun	0.9	0.7	0.7	0.9	0.8	1.4	1.5	0.9	1.0	0.8	0.9	1.1	0.9	0.8	0.7	0.8	0.5	0.3	0.4	0.4	0.2	0.1	0.0	0.1	0.7	1.5
7-Jun	0.0	0.1	0.1	0.5	0.2	0.2	0.7	0.2	-0.1	0.6	0.7	-0.4	0.2	0.5	0.1	-0.2	-0.2	0.0	0.3	-0.3	-0.2	-0.3	-0.4	-0.4	0.1	0.7
8-Jun	-0.3	-0.4	0.1	-0.4	-0.4	-0.7	-0.8	-0.3	0.7	1.0	1.3	1.6	2.4	2.3	2.1	2.1	1.6	1.8	1.5	1.2	1.5	1.4	1.2	1.2	0.9	2.4
9-Jun	1.2	0.9	1.0	1.2	1.0	0.8	0.8	1.1	1.0	0.7	0.5	0.7	1.4	0.8	0.6	0.6	0.1	0.0	-0.2	-0.1	0.0	-0.2	-0.6	-0.6	0.5	1.4
10-Jun	-0.7	-0.2	-0.3	-0.5	0.1	0.4	0.6	-0.3	0.8	0.8	0.2	0.2	-0.1	0.1	-0.1	0.1	-0.1	0.1	0.2	-0.2	-0.5	-0.4	-0.3	-0.6	0.0	0.8
11-Jun	-0.9	-1.0	-0.8	-0.3	-0.4	0.1	0.1	0.0	-0.3	-0.2	-0.6	-0.2	-0.3	-0.1	-0.1	0.4	-0.5	-0.3	0.7	0.1	-0.2	-0.2	0.0	0.2	-0.2	0.7
12-Jun	-0.1	0.4	0.1	-0.3	-0.3	-0.2	-0.3	-0.4	-0.2	-0.2	-0.8	-0.3	-0.1	-0.8	-0.3	-0.6	-0.5	-0.2	0.2	0.5	-0.1	0.7	0.6	-0.7	-0.2	0.7
13-Jun	-0.1	0.1	0.1	0.0	0.2	0.2	0.0	0.0	-0.1	-0.6	-0.4	0.8	0.4	0.3	0.6	0.6	0.3	-0.2	0.3	0.2	0.1	UO	UO	UO	0.1	0.8
14-Jun	UO	UO	UO	UO	UO	UO	0.9	UO	0.6	0.4	0.0	-0.7	-0.8	0.1	0.6	3.7	3.3	UO	3.4	4.2	UO	UO	UO	UO	--	4.2
15-Jun	UO	UO	UO	UO	UO	UO	UO	2.7	1.5	0.0	-0.1	0.3	1.4	2.1	1.3	0.1	2.0	3.0	5.6	7.7	5.7	UO	UO	UO	--	7.7
16-Jun	3.2	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	-0.2	-0.2	0.4	0.0	1.0	2.2	4.0	2.0	UO	UO	UO	UO	UO	--	4.0
17-Jun	UO	UO	UO	UO	UO	UO	UO	1.5	1.3	0.5	-0.1	-0.2	-0.5	-0.3	1.5	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	1.5
18-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	1.0	0.2	0.2	0.1	0.6	0.1	0.1	0.0	-0.7	-0.5	-0.6	0.1	-0.2	0.1	0.2	--	1.0
19-Jun	2.5	1.6	UO	UO	2.7	0.0	-0.3	0.1	-0.1	0.2	-0.1	0.7	0.0	-0.3	-0.1	0.4	-0.1	-0.5	-0.4	-0.6	0.1	-0.3	-0.4	-0.5	0.2	2.7
20-Jun	-0.2	-0.6	-0.5	-0.5	-0.4	-0.4	-0.6	-0.2	-0.7	-0.7	-0.1	-0.8	0.4	0.0	-0.4	-0.4	-0.1	-0.1	-0.1	0.2	-0.6	-0.1	-0.2	-0.1	-0.3	0.4
21-Jun	0.0	-0.2	0.3	0.0	-0.2	-0.4	-0.3	0.2	-0.1	0.5	1.1	0.0	-0.4	-0.5	0.0	-0.2	-0.4	-0.5	-0.1	-0.2	-0.5	-0.3	-0.2	0.1	-0.1	1.1
22-Jun	-0.5	-0.2	-0.5	-0.3	-0.4	0.2	-0.1	-0.2	-0.5	0.2	1.1	0.4	-0.5	-0.2	0.6	-0.1	0.2	0.1	0.5	0.0	0.2	0.2	0.1	0.1	0.0	1.1
23-Jun	0.0	0.0	0.0	0.1	0.0	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	0.1	-0.2	0.3	1.2	-0.3	0.1	0.2	0.3	UO	--	1.2
24-Jun	UO	UO	UO	UO	UO	0.0	UO	0.3	0.3	0.3	0.6	1.1	0.4	-0.2	0.8	1.2	0.8	-0.1	-0.1	-0.4	-0.6	-1.1	UO	UO	--	1.2
25-Jun	UO	UO	UO	UO	UO	-0.1	-0.3	0.0	-0.2	-1.1	0.6	0.2	-0.2	0.2	0.2	0.1	0.3	-0.5	-0.4	UO	UO	UO	UO	UO	--	0.6
26-Jun	UO	UO	UO	UO	UO	UO	UO	UO	-1.1	DF	-0.5	0.3	0.0	0.2	0.6	0.3	0.0	-0.3	0.0	-0.3	0.3	0.5	0.7	-0.9	--	0.7
27-Jun	0.4	-0.5	0.0	0.2	0.4	-0.6	0.6	0.7	0.4	0.1	-0.3	0.2	-0.5	0.9	0.2	0.3	0.1	0.6	0.1	-0.7	-0.4	-0.7	-0.9	-0.5	0.0	0.9
28-Jun	0.0	-0.3	-0.8	-0.3	-0.2	-0.2	-0.3	-0.3	0.2	0.4	-0.2	-0.8	-1.2	-1.0	-1.1	-0.8	-0.8	-0.1	-0.3	-0.4	0.3	-0.6	-0.8	-0.9	-0.4	0.4
29-Jun	-0.7	-0.8	-1.0	-0.6	-0.2	-0.2	-0.3	0.0	0.1	-0.2	0.2	0.0	-0.5	-0.4	-0.9	-1.2	-1.3	-1.2	-0.8	-0.5	1.1	0.1	-0.3	0.2	-0.4	1.1
30-Jun	-0.2	-0.3	0.1	-0.4	0.0	0.2	-0.1	0.1	0.3	0.4	-0.6	0.4	0.3	0.2	-0.4	-0.9	0.4	-0.2	-0.4	-0.8	0.3	0.9	0.1	0.0	0.0	0.9
	0.1	-0.1	-0.1	-0.1	0.1	0.0	0.1	0.3	0.3	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.5	0.3	0.2	-0.1	0.0	-0.2	Diurnal Average	
	3.2	1.6	1.0	1.2	2.7	1.4	1.5	2.7	1.5	1.0	1.3	1.6	2.4	2.3	2.1	3.7	3.3	4.0	5.6	7.7	5.7	1.4	1.2	1.2	Diurnal Maximum	

DF - DAS Failure

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

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

Mannix - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6.1 km/h on Jun 14 17:00

Minimum Value: 0.2 km/h on Jun 13 03:00

Percentiles: P_1 = 0.3 P_{10} = 0.7 Q_1 = 1.4 Median = 2.3 Q_3 = 2.9 P_{90} = 3.5 P_{99} = 4.5

Hours in Service:	720
Hours of Data:	597
Hours of Missing Data:	123
Hours of Calibration:	0
Percent Operational Time:	82.9

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-Jun	3.9	3.8	3.5	3.3	3.6	DF	DF	DF	DF	DF	DF	DF	4.0	3.9	3.9	3.9	3.9	3.6	3.5	3.5	3.0	2.6	3.0	2.8	4.0
2-Jun	2.4	2.7	2.8	2.7	2.7	3.4	2.7	2.3	2.7	2.5	2.1	2.1	1.7	2.0	2.7	2.5	2.5	2.2	2.4	2.2	1.9	1.3	0.9	1.5	3.4
3-Jun	1.4	1.7	1.7	1.5	1.6	2.5	1.8	1.8	1.7	1.8	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	1.5	1.6	1.6	2.5
4-Jun	0.9	0.4	0.5	0.9	0.8	0.8	1.3	1.4	2.2	2.0	2.5	3.1	2.9	3.1	3.1	2.8	2.7	2.6	2.4	2.2	0.7	0.3	0.3	0.3	3.1
5-Jun	0.7	0.5	0.3	0.5	0.8	0.9	1.7	1.4	1.3	2.1	1.8	2.2	2.5	2.5	1.6	2.3	2.1	0.9	0.9	0.4	0.4	0.6	0.9	1.4	2.5
6-Jun	1.5	1.6	1.7	1.7	1.7	3.0	2.8	3.1	3.0	3.0	2.8	3.0	2.8	2.9	2.4	2.8	2.3	2.1	1.6	1.3	1.2	0.7	0.3	0.4	3.1
7-Jun	0.4	0.6	0.4	0.9	1.2	1.2	1.4	1.6	2.0	2.4	2.6	2.4	2.7	2.5	2.3	2.0	2.5	2.7	0.9	1.0	0.7	0.9	0.9	0.7	2.7
8-Jun	0.8	1.2	1.6	1.4	2.1	2.2	2.1	2.4	2.1	2.7	3.3	3.6	3.5	3.8	3.8	3.3	3.0	3.0	2.9	2.8	2.7	2.6	2.7	2.8	3.8
9-Jun	2.3	2.1	2.4	2.6	2.4	2.3	1.7	2.7	2.7	2.6	2.7	2.9	3.0	2.9	2.5	2.5	2.1	1.7	1.6	1.2	0.9	0.6	1.3	2.5	3.0
10-Jun	2.0	1.3	1.3	1.6	1.7	2.0	2.1	2.0	2.4	2.6	2.6	2.4	2.4	2.1	2.1	2.8	2.8	2.7	3.1	3.0	2.4	2.3	2.8	2.7	3.1
11-Jun	2.7	2.0	2.3	2.0	2.1	2.1	2.4	2.5	2.3	2.3	2.3	2.9	3.0	2.9	3.0	3.2	3.1	2.9	3.1	2.8	2.3	2.1	1.9	1.6	3.2
12-Jun	1.0	0.6	0.9	1.5	2.1	2.4	2.5	2.1	2.9	3.5	3.8	3.9	4.1	4.1	3.9	3.7	3.6	3.5	3.1	2.8	2.5	2.0	1.5	1.5	4.1
13-Jun	0.5	0.3	0.2	0.2	0.3	0.6	0.8	1.3	1.5	2.0	2.5	2.3	2.8	2.7	2.5	2.5	2.3	1.9	1.6	1.2	0.2	UO	UO	UO	2.8
14-Jun	UO	UO	UO	UO	UO	UO	1.6	UO	2.0	2.4	3.2	3.0	4.0	3.8	4.0	4.1	6.1	UO	4.5	4.3	UO	UO	UO	UO	6.1
15-Jun	UO	UO	UO	UO	UO	UO	UO	4.2	3.2	2.3	2.6	3.2	3.5	3.7	3.4	2.6	4.5	4.4	5.2	4.1	5.7	UO	UO	UO	5.7
16-Jun	3.8	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	2.6	2.6	2.8	2.4	4.3	4.8	4.7	4.3	UO	UO	UO	UO	UO	4.8
17-Jun	UO	UO	UO	UO	UO	UO	UO	2.7	3.1	3.2	3.2	3.3	3.0	3.2	3.9	UO	UO	UO	UO	UO	UO	UO	UO	UO	3.9
18-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	2.2	2.2	2.0	2.2	2.8	2.9	2.9	2.9	2.4	2.6	1.7	1.3	1.5	0.6	0.4	2.9
19-Jun	3.1	2.6	UO	UO	3.4	1.0	0.9	1.5	2.2	2.4	2.8	3.1	3.1	2.1	2.8	3.0	2.9	2.3	2.2	1.5	1.4	1.2	1.0	0.7	3.4
20-Jun	0.9	0.8	0.6	0.6	0.6	1.5	1.6	2.1	2.3	2.7	3.4	2.6	3.1	3.3	3.0	3.1	2.6	2.6	2.9	2.7	1.9	1.3	0.5	0.8	3.4
21-Jun	0.8	0.9	0.8	0.4	0.4	1.0	1.2	2.0	2.7	3.2	3.5	2.5	2.3	2.7	2.7	2.1	2.4	1.9	2.3	1.3	1.3	1.3	1.0	0.9	3.5
22-Jun	1.3	1.3	0.4	0.4	0.3	0.5	1.2	1.6	1.5	2.0	2.2	2.4	2.1	2.9	3.0	2.4	2.4	2.3	1.6	0.5	1.8	0.6	0.5	0.4	3.0
23-Jun	0.7	0.6	0.6	0.4	0.4	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	2.4	1.5	2.0	3.0	1.1	0.7	0.3	0.3	UO	3.0
24-Jun	UO	UO	UO	UO	UO	0.6	UO	1.6	2.1	2.3	3.2	3.0	3.2	2.7	3.2	3.0	2.9	2.2	4.4	3.4	1.7	3.8	UO	UO	4.4
25-Jun	UO	UO	UO	UO	UO	1.4	1.3	1.7	2.0	2.1	3.1	3.1	3.0	3.1	3.2	2.9	3.2	2.5	3.0	UO	UO	UO	UO	UO	3.2
26-Jun	UO	UO	UO	UO	UO	UO	UO	UO	2.2	DF	3.4	3.7	3.2	3.3	3.1	3.7	3.0	2.7	2.9	2.8	3.1	3.7	3.2	2.3	3.7
27-Jun	3.3	2.1	2.3	1.9	2.9	3.1	2.9	2.0	2.9	4.2	4.1	4.2	3.2	3.7	4.3	3.6	4.0	3.7	3.8	2.1	2.1	1.9	2.5	2.0	4.3
28-Jun	2.4	1.8	0.9	0.6	0.5	0.4	0.6	0.9	1.7	2.1	3.0	3.1	2.9	3.2	3.3	3.0	3.1	2.7	2.1	1.7	1.5	1.2	1.1	1.3	3.3
29-Jun	0.7	0.4	0.5	0.6	0.3	0.4	0.7	1.4	1.6	2.2	2.7	3.1	3.0	3.0	3.1	3.0	3.0	2.7	2.3	1.9	2.1	1.3	1.0	2.1	3.1
30-Jun	1.4	1.4	1.1	1.1	0.7	1.1	1.0	1.5	1.3	1.8	2.6	2.7	2.9	3.0	3.0	2.3	2.1	2.0	2.1	2.2	3.4	2.7	2.1	1.1	3.4
	3.9	3.8	3.5	3.3	3.6	3.4	2.9	4.2	3.2	4.2	4.1	4.2	4.1	4.1	4.3	4.3	6.1	4.7	5.2	4.3	5.7	3.8	3.2	2.8	
	Diurnal Maximum																								

DF - DAS Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Vertical Wind Speed 90m (VW90) - km/h

Mannix - June 2026

Maximum Value: 1.0 km/h on Jun 29 21:00

Maximum Daily Average: 0.3 km/h on Jun 27

Minimum Value: -1.2 km/h on Jun 27 00:00

Minimum Daily Average: 0.0 km/h on Jun 29

Maximum Diurnal Average: 0.5 km/h at hour 21

Minimum Diurnal Average: -0.3 km/h at hour 2

Monthly Average: 0.12 km/h

Percentiles: P_1 = -1.0 P_{10} = -0.3 Q_1 = -0.1 Median = 0.1 Q_3 = 0.4 P_{90} = 0.6 P_{99} = 1.0

Hours in Service:	720
Hours of Data:	110
Hours of Missing Data:	610
Hours of Calibration:	0
Percent Operational Time:	15.3

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-Jun	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
3-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	--	--
4-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
6-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
24-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	0.2	0.4	0.1	0.4	0.5	0.4	0.2	-0.1	0.1	-0.2	0.2	0.6	0.6	-1.2	--	0.6
27-Jun	0.3	-1.0	-0.3	0.6	0.7	0.1	0.6	0.7	0.6	0.6	0.1	0.5	0.0	1.0	0.6	0.4	0.4	0.6	0.5	-0.1	0.1	0.0	-0.1	0.0	0.3	1.0
28-Jun	0.4	0.2	-0.3	-0.1	0.0	-0.1	-0.1	-0.3	0.2	0.4	0.5	0.1	-0.1	-0.1	0.0	0.3	0.3	0.7	0.6	0.5	0.7	-0.1	-0.2	-0.4	0.1	0.7
29-Jun	-0.2	-0.3	-0.4	-0.2	-0.1	-0.1	-0.1	0.2	0.2	0.0	0.5	-0.3	-0.3	0.0	-0.3	-0.4	-0.7	-0.2	0.2	0.4	1.0	0.5	-0.2	0.0	0.0	1.0
30-Jun	-0.1	-0.1	0.5	-0.3	0.0	0.2	-0.1	0.1	0.0	0.2	-0.8	0.1	0.0	0.2	-0.2	-0.4	0.6	0.2	0.3	0.0	0.5	0.9	0.1	0.3	0.1	0.9
	0.1	-0.3	-0.2	0.0	0.2	0.0	0.1	0.2	0.3	0.3	0.1	0.2	-0.1	0.3	0.1	0.1	0.2	0.2	0.4	0.1	0.5	0.4	0.1	-0.3	Diurnal Average	
	0.4	0.2	0.5	0.6	0.7	0.2	0.6	0.7	0.6	0.6	0.5	0.5	0.1	1.0	0.6	0.4	0.6	0.7	0.6	0.5	1.0	0.9	0.6	0.3	Diurnal Maximum	

DF - DAS Failure

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Vertical Wind Speed 90m (VW90) - km/h

Mannix - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.1 km/h on Jun 26 12:00

Minimum Value: 0.3 km/h on Jun 29 05:00

Percentiles: P_1 = 0.4 P_{10} = 0.7 Q_1 = 1.3 Median = 2.0 Q_3 = 2.9 P_{90} = 3.4 P_{99} = 3.7

Hours in Service:	720
Hours of Data:	110
Hours of Missing Data:	610
Hours of Calibration:	0
Percent Operational Time:	15.3

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-Jun	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
3-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	--
4-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
6-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	DF	DF	DF	DF	DF	DF	DF	DF	DF	UO	UO	UO	UO	UO	UO	UO	UO	UO	--
24-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	DF	3.6	4.1	3.5	3.4	3.0	3.4	3.0	2.8	2.8	2.7	2.9	3.3	3.0	2.1	4.1
27-Jun	2.9	1.9	2.1	1.6	2.0	2.2	2.3	2.0	2.5	3.6	3.7	3.6	2.9	3.6	3.7	3.3	3.4	3.5	2.7	1.2	1.2	1.5	1.7	1.6	3.7
28-Jun	1.9	1.4	0.8	0.5	0.6	0.5	0.5	0.8	1.6	1.9	2.9	2.9	2.9	3.1	3.0	2.8	2.9	2.5	1.9	1.5	1.3	0.7	1.3	1.4	3.1
29-Jun	0.8	0.4	0.5	0.5	0.3	0.4	0.5	1.3	1.4	2.0	2.6	3.0	3.0	2.9	3.1	3.0	3.0	2.8	2.2	1.7	1.9	1.2	0.7	1.9	3.1
30-Jun	1.5	1.1	0.9	0.8	0.5	1.2	0.9	1.3	1.2	1.6	2.3	2.5	2.9	3.0	3.0	2.3	2.0	1.9	1.8	1.8	2.5	2.4	1.9	1.0	3.0
	2.9	1.9	2.1	1.6	2.0	2.2	2.3	2.0	2.5	3.6	3.7	4.1	3.5	3.6	3.7	3.4	3.4	3.5	2.8	2.7	2.9	3.3	3.0	2.1	
	Diurnal Maximum																								

DF - DAS Failure UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS06
PATRICIA MCINNES
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - PATRICIA McINNES (AMS06)
JUNE 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	-	-	358.9	5	61.9	1
TRS (ppb) Average	684	36	36	100	3.4	0	3.1	0	0.9	0
THC (ppm) Average	661	34	59	96.53	-	-	3.2	-	2.2	-
NMHC(ppm) Average	661	34	59	96.53	-	-	0.189	-	0.029	-
CH4(ppm) Average	661	34	59	96.53	-	-	3.2	-	2.2	-
O3 (ppb) Average	686	34	34	100	-	-	69.3	0	38.6	-
NO2 (ppb) Average	684	36	36	100	-	-	24.1	0	8.9	-
NO (ppb) Average	684	36	36	100	-	-	14.3	-	2.1	-
NOX (ppb) Average	684	36	36	100	-	-	32.3	-	10.1	-
NH3 (ppb) Average	611	39	109	90.28	-	-	0	0	0	-
PM2.5 (ug/m3) Average	719	1	1	100	-	-	81.7	1	54	2
Temperature 2 m (C) Average	720	0	0	100	-	-	30.5	-	23.5	-
Relative Humidity (%) Average	709	0	11	98.47	-	-	99.4	-	91	-
Wind Speed 10 m (km/h) Average	720	0	0	100	-	-	34	-	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 - PATRICIA McINNES (AMS06)
JUNE 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	2.58	22.7	-	0	0	0.1	0.2	0.5	1.5	358.9
TRS (ppb) Average	684	0.27	0.3	-	0.1	0.1	0.1	0.2	0.3	0.5	3.1
THC (ppm) Average	661	1.99	0.2	-	1.8	1.9	1.9	2	2	2.1	3.2
NMHC(ppm) Average	661	0.001	0.012	-	0	0	0	0	0	0	0.189
CH4(ppm) Average	661	1.99	0.2	-	1.8	1.9	1.9	2	2	2.1	3.2
O3 (ppb) Average	686	27.11	11.1	-	1.5	13.6	19.2	26.3	33.9	42.2	69.3
NO2 (ppb) Average	684	2.85	3.2	-	0	0.5	1	2	3.2	6	24.1
NO (ppb) Average	684	0.78	1.4	-	0	0	0.1	0.3	0.8	2.1	14.3
NOX (ppb) Average	684	3.64	4.2	-	0	0.6	1.2	2.5	4.1	7.7	32.3
NH3 (ppb) Average	611	0	0	-	0	0	0	0	0	0	0
PM2.5 (ug/m3) Average	719	8.57	13.4	-	0.8	1.8	2.8	4.6	6.7	14.3	81.7
Temperature 2 m (C) Average	720	16.04	5.8	-	5.6	9.4	11.3	15	20.1	24.8	30.5
Relative Humidity (%) Average	709	64.44	21	-	23.1	33.7	46.3	67.7	82.3	91.4	99.4
Wind Speed 10 m (km/h) Average	720	10.9	6	-	0	4	7	9	14	19	34
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

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

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
THC/NMHC/CH4	15 Jun 2026 13:00	15 Jun 2026 15:00	3	Unstable Operation - excessive baseline drift
THC/NMHC/CH4	20 Jun 2026 09:00	20 Jun 2026 12:00	4	Unstable Operation - excessive baseline drift
THC/NMHC/CH4	22 Jun 2026 21:00	23 Jun 2026 09:00	13	Analyzer Failure - sample pump failure
THC/NMHC/CH4	23 Jun 2026 10:00	23 Jun 2026 12:00	3	Maintenance - replaced sample pump
THC/NMHC/CH4	23 Jun 2026 23:00	23 Jun 2026 23:00	1	Unstable Operation - flatline in analyzer output signal
THC/NMHC/CH4	24 Jun 2026 01:00	24 Jun 2026 01:00	1	Unstable Operation - flatline in analyzer output signal
NH3	01 Jun 2026 02:00	30 Jun 2026 08:00	70	Stabilization after daily QA check
Relative Humidity	01 Jun 2026 01:00	01 Jun 2026 01:00	1	Sensor operated out of range
Relative Humidity	04 Jun 2026 00:00	04 Jun 2026 00:00	1	Sensor operated out of range
Relative Humidity	04 Jun 2026 04:00	04 Jun 2026 05:00	2	Sensor operated out of range
Relative Humidity	07 Jun 2026 03:00	07 Jun 2026 03:00	1	Sensor operated out of range
Relative Humidity	08 Jun 2026 04:00	08 Jun 2026 09:00	6	Sensor operated out of range

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Patricia McInnes - June 2026

Number of Exceedances (AAAQO): 1-hr: 5 24-hr: 1

Maximum Value: 358.9 ppb on Jun 29 03:00

Maximum Daily Average: 61.9 ppb on Jun 29

Minimum Value: 0.0 ppb on Jun 2 08:00

Minimum Daily Average: 0.0 ppb on Jun 6

Maximum Diurnal Average: 14.5 ppb at hour 3

Minimum Diurnal Average: 0.1 ppb at hour 2

Monthly Average: 2.58 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.2 Q_3 = 0.5 P_{90} = 1.5 P_{99} = 23.5

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-Jun	0.3	0.2	0.3	Z	0.1	0.1	0.3	0.9	1.3	0.3	0.7	0.8	4.0	0.4	0.8	1.9	1.2	1.1	0.2	0.9	0.3	0.1	0.1	0.1	0.7	4.0
2-Jun	0.0	0.0	0.0	0.1	Z	0.7	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	0.0	0.0	0.0	0.0	0.1	0.7
3-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.2	0.1	0.3	0.3	0.2	0.0	0.1	0.0	0.1	0.3
4-Jun	Z	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2
5-Jun	0.1	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	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2
6-Jun	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	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1
7-Jun	0.1	0.1	0.1	Z	0.2	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.4	0.3	0.2	1.4	0.3	0.0	0.2	0.1	0.0	0.0	0.0	0.2	1.4
8-Jun	0.0	0.0	0.2	0.7	Z	0.6	0.6	2.3	0.6	0.1	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	2.3
9-Jun	0.1	0.1	0.0	0.1	0.1	Z	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	1.0	4.7	1.5	0.5	0.6	0.4	4.7
10-Jun	Z	0.5	0.2	0.0	0.0	0.0	0.3	0.6	3.0	3.4	3.2	0.1	0.7	1.2	2.5	1.6	0.1	0.3	0.9	0.2	0.0	0.0	0.1	0.0	0.8	3.4
11-Jun	0.0	Z	0.0	0.0	0.5	0.5	0.1	0.5	1.4	1.7	0.8	3.0	0.9	1.0	1.7	1.3	0.5	0.4	0.2	0.4	0.2	0.1	1.0	1.9	0.8	3.0
12-Jun	0.3	0.1	Z	0.1	0.7	1.1	1.8	0.6	7.8	10.1	4.4	0.6	0.3	0.5	0.6	0.7	0.5	0.8	0.5	0.1	1.8	1.0	0.2	1.0	1.6	10.1
13-Jun	0.3	0.2	0.2	Z	0.3	0.2	0.2	0.5	0.6	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.1	0.3	0.6
14-Jun	0.0	0.1	0.1	0.3	Z	0.1	0.3	0.5	5.7	3.8	5.8	6.9	2.8	3.2	1.9	2.0	0.6	1.3	0.8	0.2	0.2	0.0	1.2	1.3	1.7	6.9
15-Jun	0.6	0.4	0.3	0.2	0.4	Z	0.5	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.4	0.6	2.2	1.6	0.6	0.3	0.2	0.1	0.1	0.4	2.2
16-Jun	Z	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	0.2	1.0	0.9	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	1.0
17-Jun	0.2	Z	0.3	0.3	0.3	0.5	0.4	0.8	4.2	2.2	1.7	1.1	0.9	0.8	0.8	0.7	0.7	1.1	0.3	0.7	0.2	0.4	0.3	0.2	0.8	4.2
18-Jun	0.1	0.1	Z	0.4	0.2	0.3	2.0	0.4	3.1	1.9	0.3	0.1	0.6	3.1	1.4	2.0	6.7	3.0	3.3	1.1	0.5	0.6	0.2	0.2	1.4	6.7
19-Jun	0.3	0.2	0.1	Z	0.0	0.4	5.5	1.6	1.5	3.2	4.5	5.6	3.5	2.1	2.6	4.2	2.0	1.0	0.3	0.5	0.3	0.3	0.3	0.2	1.8	5.6
20-Jun	0.4	0.2	0.3	0.2	Z	0.7	0.9	0.5	0.3	0.3	0.4	0.3	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.1	0.3	0.9
21-Jun	0.1	0.2	0.1	0.0	0.0	Z	0.0	0.0	2.1	1.9	1.3	1.3	1.2	0.3	0.2	0.1	0.0	0.0	0.1	0.0	0.2	0.1	0.2	0.3	0.4	2.1
22-Jun	Z	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	C	C	C	C	C	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.4	0.7	0.5	0.2	0.7
23-Jun	0.3	Z	0.1	0.3	0.4	0.3	0.2	0.2	0.2	0.4	0.6	0.6	0.5	0.3	0.5	0.5	3.3	1.6	1.2	0.3	0.1	0.2	0.0	0.0	0.5	3.3
24-Jun	0.1	0.0	Z	0.1	0.2	0.2	0.1	0.0	0.0	0.2	0.2	0.6	0.5	0.5	0.4	0.4	0.3	0.6	0.6	0.2	0.1	0.2	0.1	0.1	0.3	0.6
25-Jun	0.2	0.2	0.2	Z	0.1	0.2	0.2	0.3	0.2	0.4	0.4	0.3	0.1	0.0	0.1	0.1	0.2	0.2	0.4	0.2	0.3	0.1	0.2	0.1	0.2	0.4
26-Jun	0.0	0.1	0.1	0.0	Z	0.2	0.2	0.2	0.4	0.5	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
27-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.4	0.4	0.1	0.1	0.1	0.4
28-Jun	Z	0.1	0.0	0.0	0.0	0.6	0.4	0.4	0.3	0.3	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	0.1	0.2	0.6
29-Jun	25.3	Z	358.9	340.4	189.7	189.6	178.0	80.7	14.5	23.1	15.5	2.9	0.5	0.5	0.4	0.4	0.4	0.2	0.2	0.3	0.5	0.6	1.3	0.9	61.9	358.9
30-Jun	0.6	0.5	Z	0.1	0.0	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.3	4.3	6.3	4.2	2.6	1.8	1.0	0.4	0.6	0.4	0.3	1.1	6.3
	1.2	0.1	14.5	13.7	7.7	7.9	6.4	3.1	1.6	1.9	1.4	0.9	0.6	0.6	0.7	0.8	0.8	0.6	0.5	0.3	0.4	0.3	0.3	0.3	Diurnal Average	
	25.3	0.5	358.9	340.4	189.7	189.6	178.0	80.7	14.5	23.1	15.5	6.9	4.0	3.2	4.3	6.3	6.7	3.0	3.3	1.1	4.7	1.5	1.3	1.9	Diurnal Maximum	

Z - zerospan C - Calibration

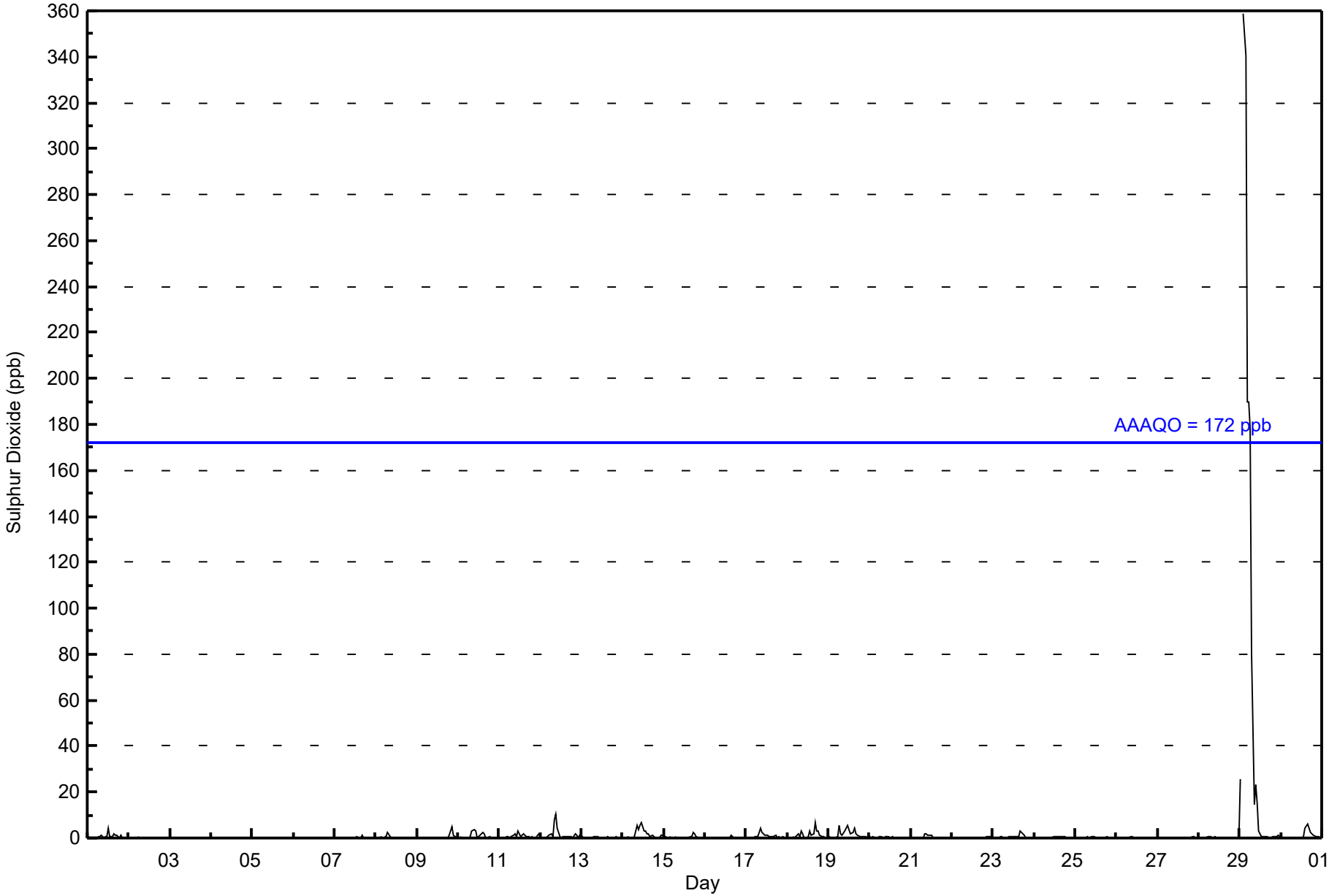
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Patricia McInnes - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	675	98.54	98.54
11 - 20	2	0.29	98.83
21 - 60	2	0.29	99.12
61 - 110	1	0.15	99.27
111 - 172	0	0.00	99.27
> 172	5	0.73	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 - June 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	128	32	21	25	24	65	57	16	24	40	33	32	21	32	34	91	675
11 - 20	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
21 - 60	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
61 - 110	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
111 - 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 172	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	5
Totals	131	33	23	25	24	65	57	16	24	40	33	32	21	32	35	94	685

Total Number of Valid Hours: 685

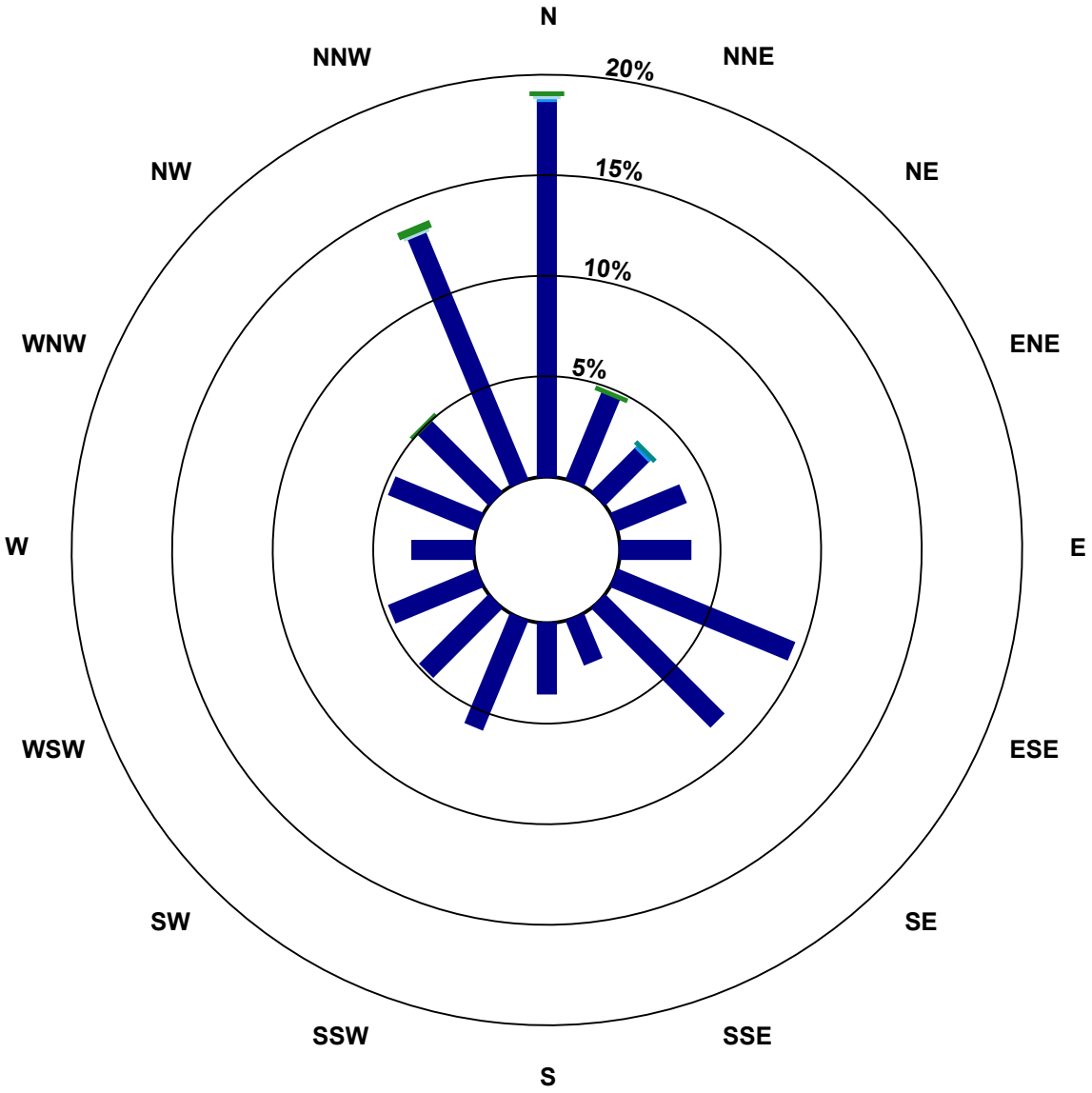
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Patricia McInnes



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

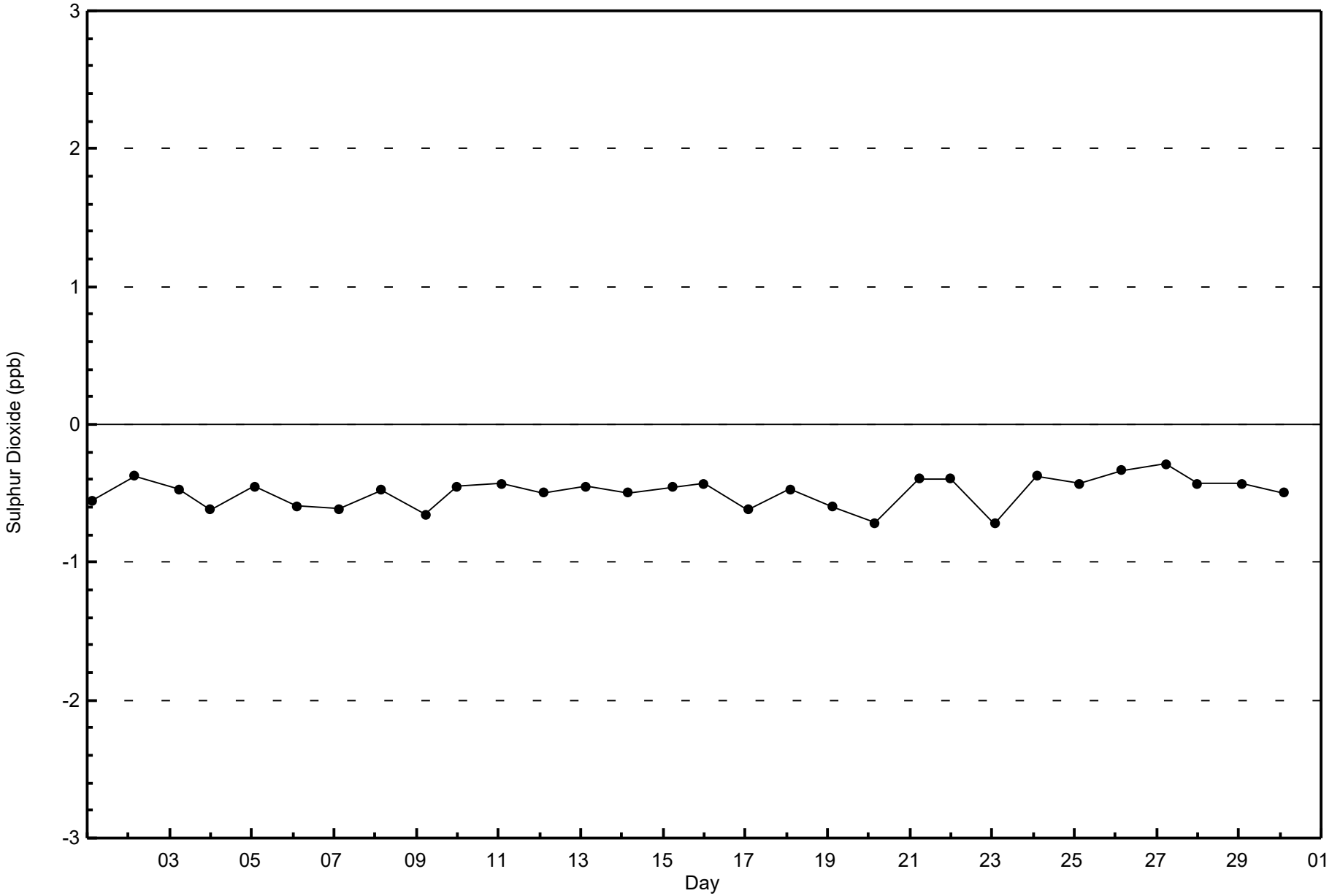
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Patricia McInnes - June 2026

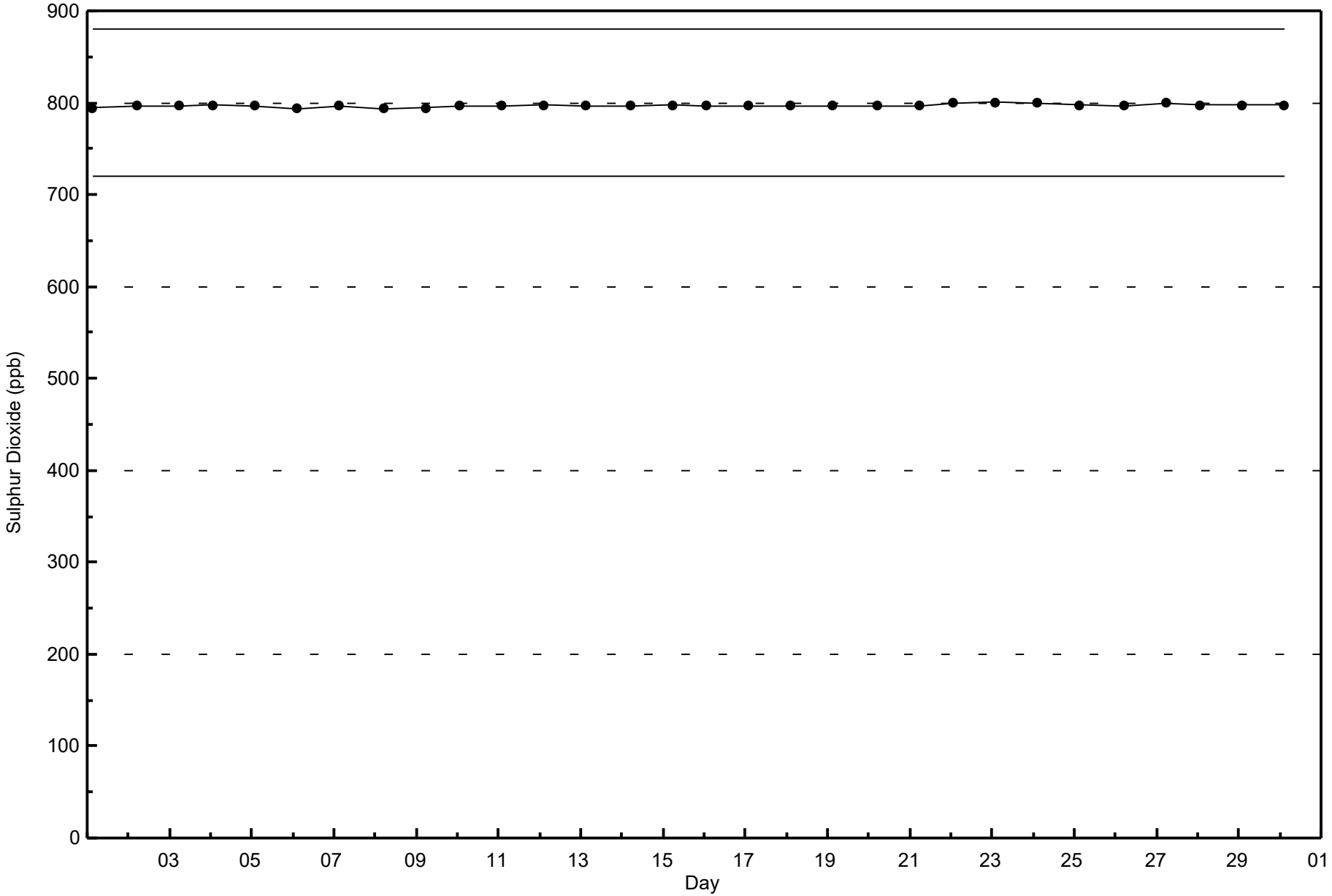


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Patricia McInnes - June 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Patricia McInnes - June 2026

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

Maximum Value: 3.4 ppb on Jun 29 05:00

Maximum Daily Average: 0.9 ppb on Jun 29

Minimum Value: 0.0 ppb on Jun 5 13:00

Minimum Daily Average: 0.1 ppb on Jun 5

Maximum Diurnal Average: 0.6 ppb at hour 5

Minimum Diurnal Average: 0.1 ppb at hour 20

Monthly Average: 0.27 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.3 P_{90} = 0.5 P_{99} = 2.0

Periods in Service:	1440
Periods of Valid Data:	1368
Periods of Invalid Data:	72
Periods of Calibration:	71
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-Jun	0.4	0.3	0.3	0.2	Z	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4
	0.3	0.3	0.2	0.2	SP	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
2-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	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	0.1	0.1	0.1	0.2
	0.1	0.1	0.1	0.1	0.1	SP	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
3-Jun	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	0.2	0.5	0.1	0.5
	SP	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	M	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.4		
4-Jun	0.1	Z	0.1	0.2	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	0.1	0.2	0.1	--	0.3
	0.1	SP	0.2	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	0.1	0.1	0.1	0.2	0.2	0.1		
5-Jun	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	0.2	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.3
	0.1	0.1	SP	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2		
6-Jun	0.2	0.2	0.2	Z	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	0.2	0.1	0.1	SP	0.2	0.1	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	0.1	0.2	0.2	0.2	0.2		
7-Jun	0.2	0.2	0.2	0.2	Z	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.4	0.2	0.2	0.2	0.4	0.3	0.2	0.3	0.2	0.5
	0.2	0.2	0.2	0.2	SP	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.4	0.2	0.2	0.2	0.5	0.2	0.2	0.2		
8-Jun	0.2	0.4	0.3	0.6	0.4	Z	0.3	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.6
	0.3	0.4	0.6	0.5	0.3	SP	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	0.1		
9-Jun	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	0.5	0.6	0.4	0.2	0.7
	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	0.3	0.7	0.5	0.3		
10-Jun	0.2	Z	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.1	0.1	0.3	0.5	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.5
	0.3	SP	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2		
11-Jun	0.2	0.2	Z	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.3	0.2	0.4
	0.1	0.2	SP	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.2		
12-Jun	0.2	0.2	0.2	Z	0.2	0.3	0.4	0.2	0.3	0.4	0.3	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.4	0.4	0.5	0.3	0.6
	0.2	0.2	0.2	SP	0.3	0.3	0.4	0.2	0.4	0.4	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.3	0.3	0.4	0.6		
13-Jun	0.8	1.2	1.3	0.4	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	0.4	0.3	0.2	0.3	2.2
	0.8	2.2	0.5	0.4	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	0.5	0.3	0.2	0.2		
14-Jun	0.2	0.1	0.1	0.1	0.2	Z	0.1	0.2	0.4	0.3	0.4	0.2	0.2	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.4	0.6	0.7	0.2	1.0
	0.1	0.1	0.1	0.1	0.2	SP	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.4	0.5	0.6	1.0		
15-Jun	Z	0.8	2.2	2.7	1.0	0.6	0.6	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.5	2.7
	SP	1.0	2.6	1.3	2.0	0.5	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2		

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Patricia McInnes - June 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-Jun	0.2	Z	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.2	0.4
	0.2	SP	0.2	0.2	0.2	0.3	0.2	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	0.2	0.3	0.3	0.3		
17-Jun	0.3	0.4	Z	0.7	1.0	0.9	0.6	0.4	0.6	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.4	1.0
	0.3	0.5	SP	0.9	1.0	0.9	0.5	0.4	0.6	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3		
18-Jun	0.3	0.3	0.4	Z	0.4	0.5	0.6	0.5	0.5	0.4	0.3	0.2	0.1	0.2	0.3	0.3	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	1.1
	0.3	0.2	0.5	SP	0.6	0.4	1.1	0.6	0.6	0.3	0.2	0.1	0.2	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.4	0.2	0.3	0.3		
19-Jun	0.5	0.2	0.2	0.5	Z	0.3	0.4	0.5	0.5	0.5	0.3	0.2	0.2	0.2	0.4	0.2	0.1	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.8
	0.4	0.2	0.2	0.5	SP	0.3	0.8	0.4	0.4	0.6	0.2	0.2	0.2	0.3	0.5	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.4		
20-Jun	0.4	0.7	0.8	0.4	0.7	Z	0.8	0.6	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.9
	0.5	0.8	0.6	0.6	0.6	SP	0.9	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2		
21-Jun	Z	0.1	0.3	0.3	0.6	0.3	0.4	0.4	0.6	0.8	0.5	0.4	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.4	0.2	0.3	0.8
	SP	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.6	0.6	0.5	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.2		
22-Jun	0.3	Z	0.4	1.4	1.1	1.3	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	0.2	0.2	0.2	2.1
	0.3	SP	0.6	2.1	1.2	0.7	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1		
23-Jun	0.2	0.2	Z	0.1	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.3	0.4	0.3	0.2	0.7
	0.2	0.2	SP	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	0.2	0.2	0.2	0.2	0.7	0.3	0.3		
24-Jun	0.2	1.0	0.5	Z	0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.4
	0.8	1.4	0.4	SP	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2		
25-Jun	0.2	0.4	0.3	0.3	Z	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.4
	0.3	0.3	0.2	0.3	SP	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2		
26-Jun	0.3	0.3	0.2	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.5
	0.5	0.2	0.2	0.2	0.2	SP	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2		
27-Jun	Z	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.8	0.2	0.8
	SP	0.3	0.3	0.3	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	0.2	0.4	0.7		
28-Jun	0.4	Z	2.1	1.4	1.1	0.6	0.8	0.5	0.5	0.5	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.8	1.0	0.5	2.3
	0.5	SP	2.3	0.8	1.1	0.9	0.7	0.5	0.5	0.5	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.5	0.9	1.1		
29-Jun	1.0	1.0	Z	2.4	2.8	3.2	1.8	1.3	0.8	1.1	1.3	0.5	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.5	1.3	0.9	3.4
	0.8	1.2	SP	2.4	3.4	2.2	1.7	1.1	0.8	0.9	1.2	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	1.2	1.9		
30-Jun	1.6	0.4	1.0	Z	1.8	1.7	0.5	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.8	1.0	0.5	2.2
	0.6	0.3	2.2	SP	1.9	0.8	0.3	0.3	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	1.0	0.8		
	0.3	0.4	0.5	0.5	0.6	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.4	Diurnal Average	
	1.6	2.2	2.6	2.7	3.4	3.2	1.8	1.3	0.8	1.1	1.3	0.5	0.5	0.4	0.5	0.4	0.4	0.3	0.2	0.2	0.5	0.7	1.2	1.9	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

Patricia McInnes - June 2026

Maximum Value: 3.1 ppb on Jun 29 05:00

Maximum Daily Average: 0.9 ppb on Jun 29

Minimum Value: 0.1 ppb on Jun 5 14:00

Minimum Daily Average: 0.1 ppb on Jun 5

Maximum Diurnal Average: 0.6 ppb at hour 5

Minimum Diurnal Average: 0.1 ppb at hour 20

Monthly Average: 0.27 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.3 P_{90} = 0.5 P_{99} = 1.8

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-Jun	0.4	0.3	0.3	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4
2-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
3-Jun	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	0.3	0.4	0.1	0.4
4-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	C	C	C	C	C	C	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	--	0.2
5-Jun	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	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2
6-Jun	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
7-Jun	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	0.1	0.1	0.2	0.4	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.4
8-Jun	0.2	0.4	0.4	0.5	0.4	Z	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	0.1	0.1	0.1	0.1	0.2	0.5
9-Jun	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	0.6	0.5	0.3	0.2	0.6
10-Jun	0.3	Z	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.1	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.4
11-Jun	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
12-Jun	0.2	0.2	0.2	Z	0.2	0.3	0.4	0.2	0.4	0.4	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.3	0.4	0.6	0.3	0.6
13-Jun	0.8	1.7	0.9	0.4	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	0.3	0.3	0.3	0.2	0.3	1.7
14-Jun	0.1	0.1	0.1	0.1	0.2	Z	0.1	0.2	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.5	0.6	0.9	0.2	0.9
15-Jun	Z	0.9	2.4	2.0	1.5	0.6	0.6	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	0.5	2.4
16-Jun	0.2	Z	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.2	0.4
17-Jun	0.3	0.5	Z	0.8	1.0	0.9	0.6	0.4	0.6	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	1.0
18-Jun	0.3	0.2	0.4	Z	0.5	0.5	0.8	0.5	0.5	0.4	0.3	0.2	0.1	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.8
19-Jun	0.5	0.2	0.2	0.5	Z	0.3	0.6	0.4	0.5	0.5	0.2	0.2	0.2	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.6
20-Jun	0.4	0.7	0.7	0.5	0.7	Z	0.9	0.5	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.9
21-Jun	Z	0.2	0.3	0.4	0.4	0.4	0.4	0.3	0.6	0.7	0.5	0.4	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.3	0.2	0.3	0.7
22-Jun	0.3	Z	0.5	1.7	1.2	1.0	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.3	1.7
23-Jun	0.2	0.2	Z	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.5	0.4	0.3	0.2	0.5
24-Jun	0.5	1.2	0.4	Z	0.2	0.3	0.2	0.2	0.2	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	0.2	1.2
25-Jun	0.3	0.4	0.3	0.3	Z	0.3	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	0.2	0.2	0.2	0.2	0.2	0.2	0.4
26-Jun	0.4	0.3	0.2	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.4
27-Jun	Z	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.7	0.2	0.7
28-Jun	0.4	Z	2.2	1.1	1.1	0.7	0.7	0.5	0.5	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5	0.8	1.0	0.5	2.2
29-Jun	0.9	1.1	Z	2.4	3.1	2.7	1.7	1.2	0.8	1.0	1.3	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.8	1.6	0.9	3.1
30-Jun	1.1	0.3	1.6	Z	1.9	1.3	0.4	0.3	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	0.9	0.9	0.5	1.9
	0.3	0.4	0.5	0.5	0.6	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.4	Diurnal Average	
	1.1	1.7	2.4	2.4	3.1	2.7	1.7	1.2	0.8	1.0	1.3	0.4	0.4	0.3	0.5	0.3	0.4	0.3	0.2	0.2	0.4	0.6	0.9	1.6	Diurnal Maximum	

Z - zerospan C - Calibration

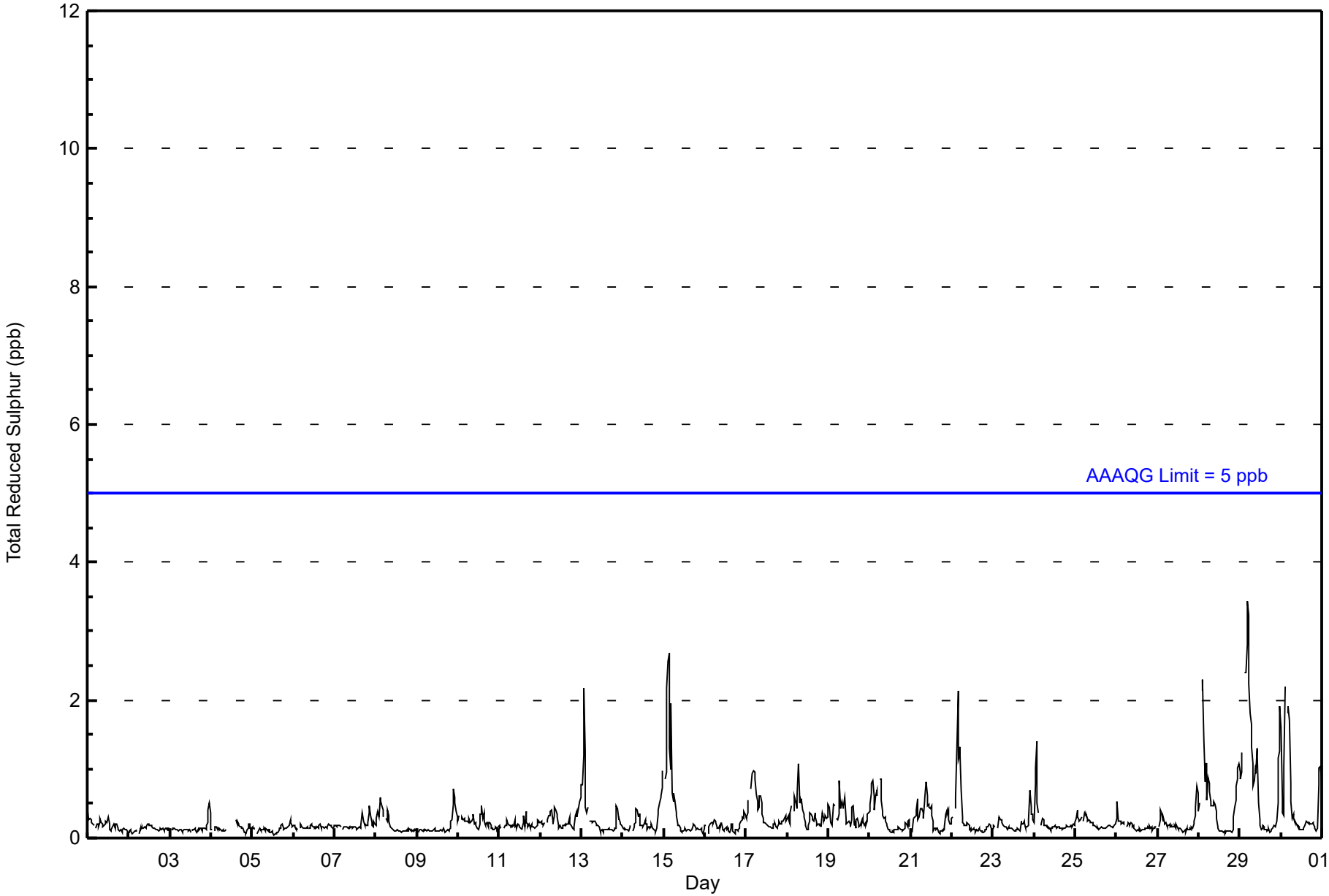
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Patricia McInnes - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	682	99.71	99.71
3 - 4	2	0.29	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 - June 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	129	34	22	26	26	65	57	17	24	33	32	33	21	33	32	98	682
3 - 4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
5 - 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 - 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	130	34	22	26	26	65	57	17	24	33	32	33	21	33	33	98	684

Total Number of Valid Hours: 684

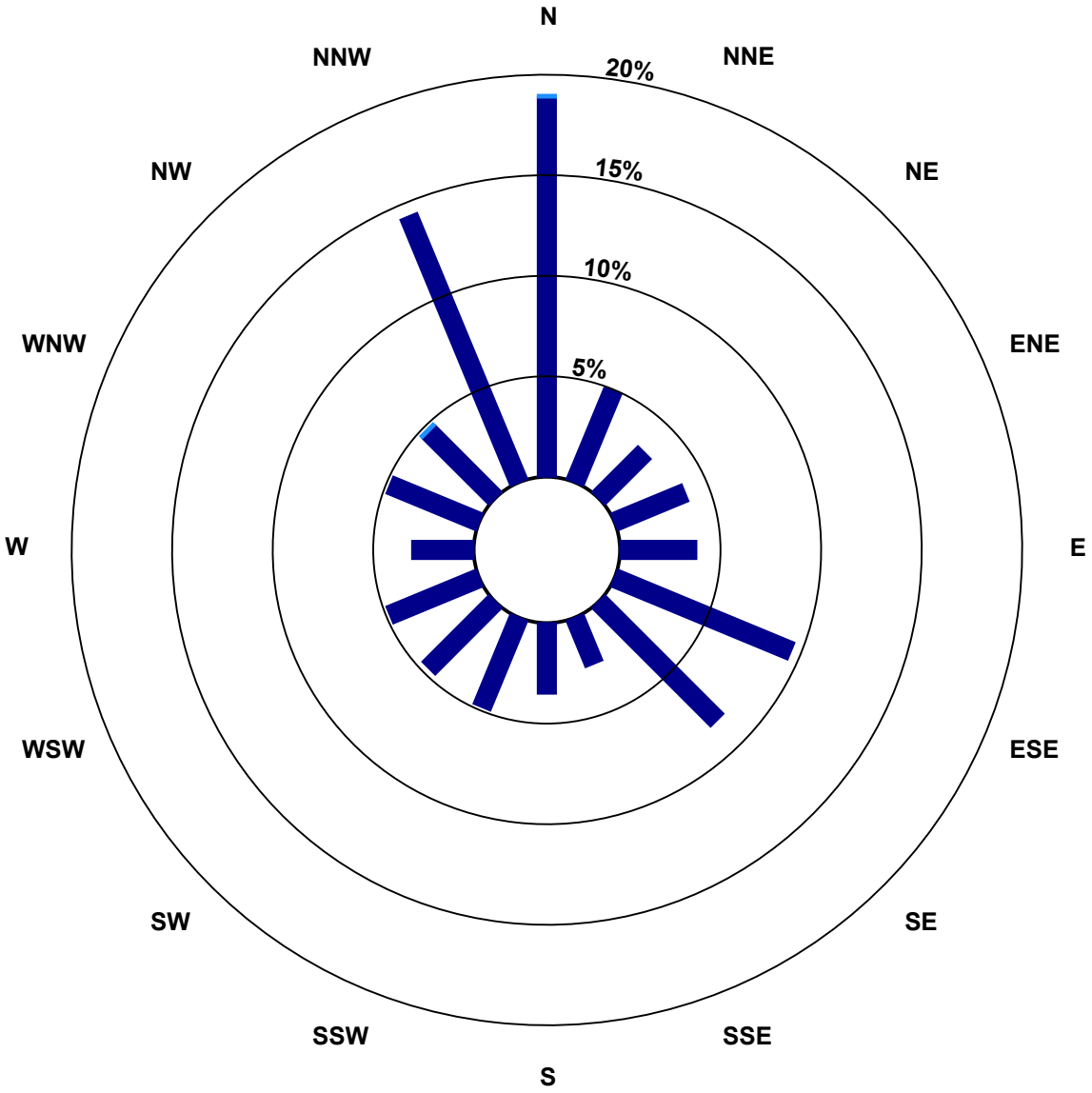
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Reduced Sulphur (TRS) - ppb

Patricia McInnes



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

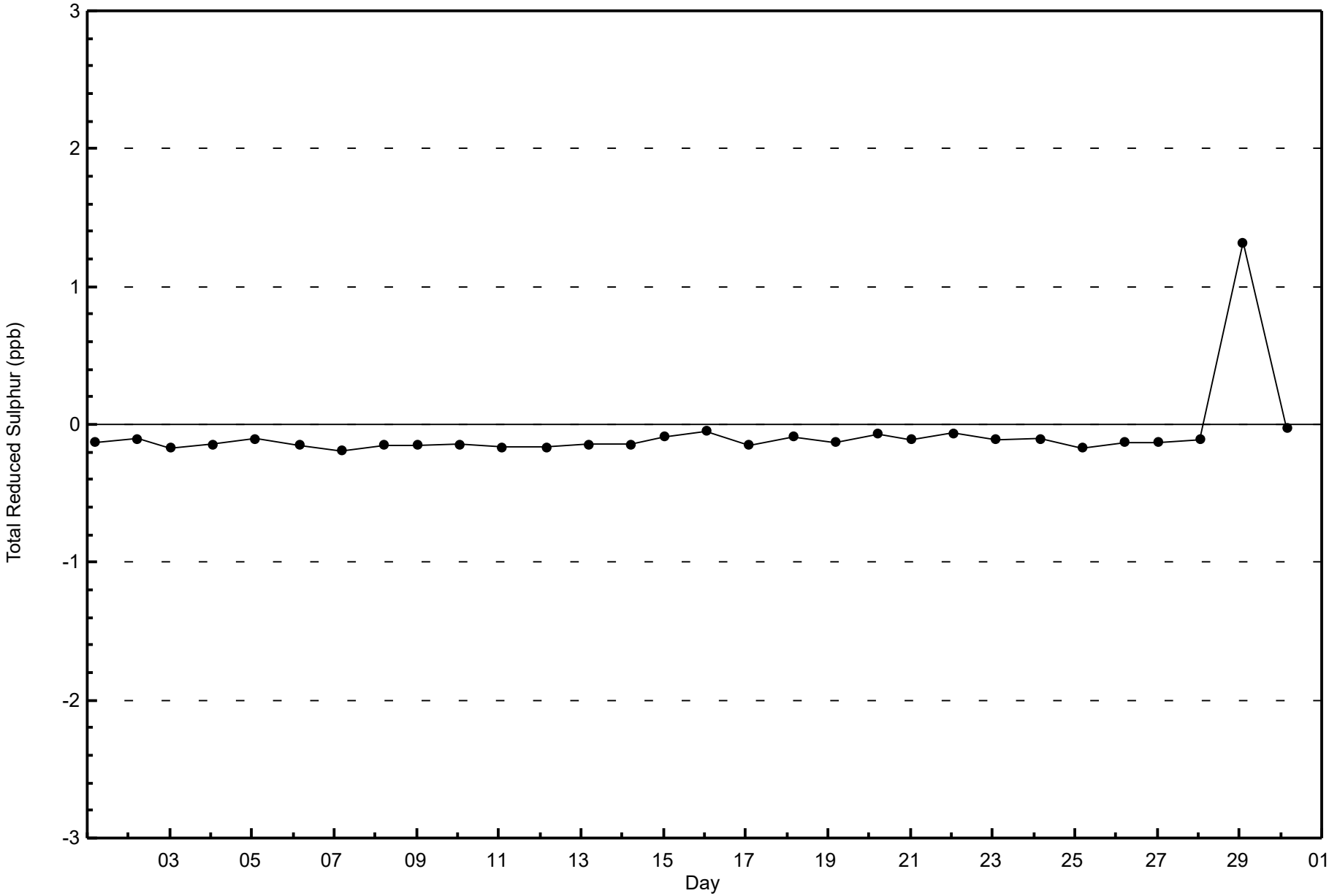
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Patricia McInnes - June 2026

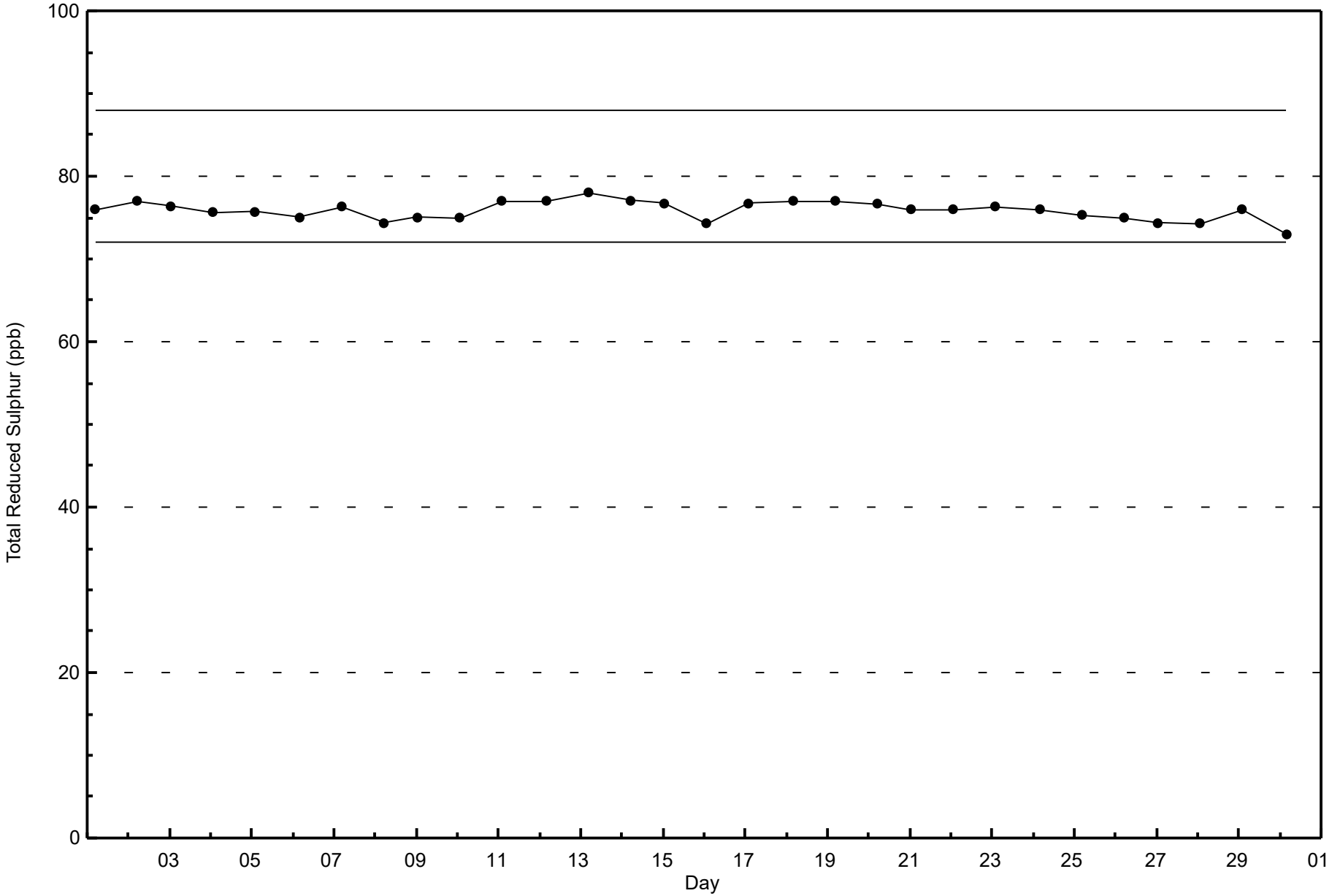


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Patricia McInnes - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Patricia McInnes - June 2026

Maximum Value: 3.2 ppm on Jun 30 00:00

Maximum Daily Average: 2.2 ppm on Jun 29

Minimum Value: 1.8 ppm on Jun 15 12:00

Minimum Daily Average: 1.9 ppm on Jun 14

Maximum Diurnal Average: 2.1 ppm at hour 5

Minimum Diurnal Average: 1.9 ppm at hour 16

Monthly Average: 1.99 ppm

Percentiles: P_1 = 1.8 P_{10} = 1.9 Q_1 = 1.9 Median = 2.0 Q_3 = 2.0 P_{90} = 2.1 P_{99} = 2.8

Hours in Service:	720
Hours of Data:	661
Hours of Missing Data:	59
Hours of Calibration:	34
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-Jun	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
2-Jun	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	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.0	2.0	1.9	2.0	2.0
3-Jun	1.9	2.0	1.9	1.9	1.9	Z	2.0	1.9	2.0	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.2	2.2	2.0	2.2
4-Jun	Z	2.0	2.1	2.1	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.2
5-Jun	2.0	Z	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0
6-Jun	1.9	1.9	Z	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
7-Jun	2.0	2.0	2.0	Z	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
8-Jun	2.0	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
9-Jun	1.9	1.9	2.0	2.0	2.0	Z	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.2	2.1	2.1	1.9	2.2
10-Jun	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
11-Jun	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
12-Jun	2.0	1.9	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
13-Jun	2.1	2.2	2.2	Z	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	2.2
14-Jun	1.9	1.9	1.9	1.9	Z	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	1.9	2.1
15-Jun	2.1	2.1	2.3	2.3	2.4	Z	2.2	2.0	1.9	1.8	1.8	1.8	UO	UO	UO	1.8	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.4
16-Jun	Z	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0
17-Jun	2.0	Z	2.0	2.1	2.2	2.2	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2
18-Jun	2.0	2.0	Z	2.2	2.2	2.2	2.2	2.2	2.1	2.0	2.0	1.9	1.9	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.2
19-Jun	1.9	1.9	2.0	Z	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0
20-Jun	2.0	2.0	2.0	2.1	Z	2.1	2.1	1.9	UO	UO	UO	UO	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1
21-Jun	1.9	1.9	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0
22-Jun	Z	2.3	2.2	2.4	2.2	2.2	2.0	1.9	1.9	C	C	C	C	C	2.0	2.0	2.0	2.0	2.0	2.0	AF	AF	AF	AF	--	2.4
23-Jun	AF	AF	AF	AF	AF	AF	AF	AF	AF	M	M	M	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	UO	2.2	--	2.2
24-Jun	UO	2.4	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	1.9	1.9	2.0	2.4
25-Jun	2.0	2.1	2.0	Z	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	2.0	2.0	2.0	2.0	2.0	2.1
26-Jun	2.1	1.9	1.9	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	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.1
27-Jun	2.0	2.0	1.9	2.0	2.0	Z	2.0	2.0	2.0	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	2.3	2.5	2.0	2.5
28-Jun	Z	2.2	2.9	2.3	2.4	2.3	2.4	2.2	2.2	2.2	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.7	2.7	2.6	2.2	2.9
29-Jun	2.4	Z	2.4	2.4	2.7	2.8	2.4	2.2	2.1	2.2	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.7	3.2	2.2	3.2
30-Jun	2.8	2.1	Z	3.2	3.0	2.5	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.8	3.0	2.2	3.2
	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.1	Diurnal Average	
	2.8	2.4	2.9	3.2	3.0	2.8	2.4	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	2.1	2.7	2.8	3.2	Diurnal Maximum	

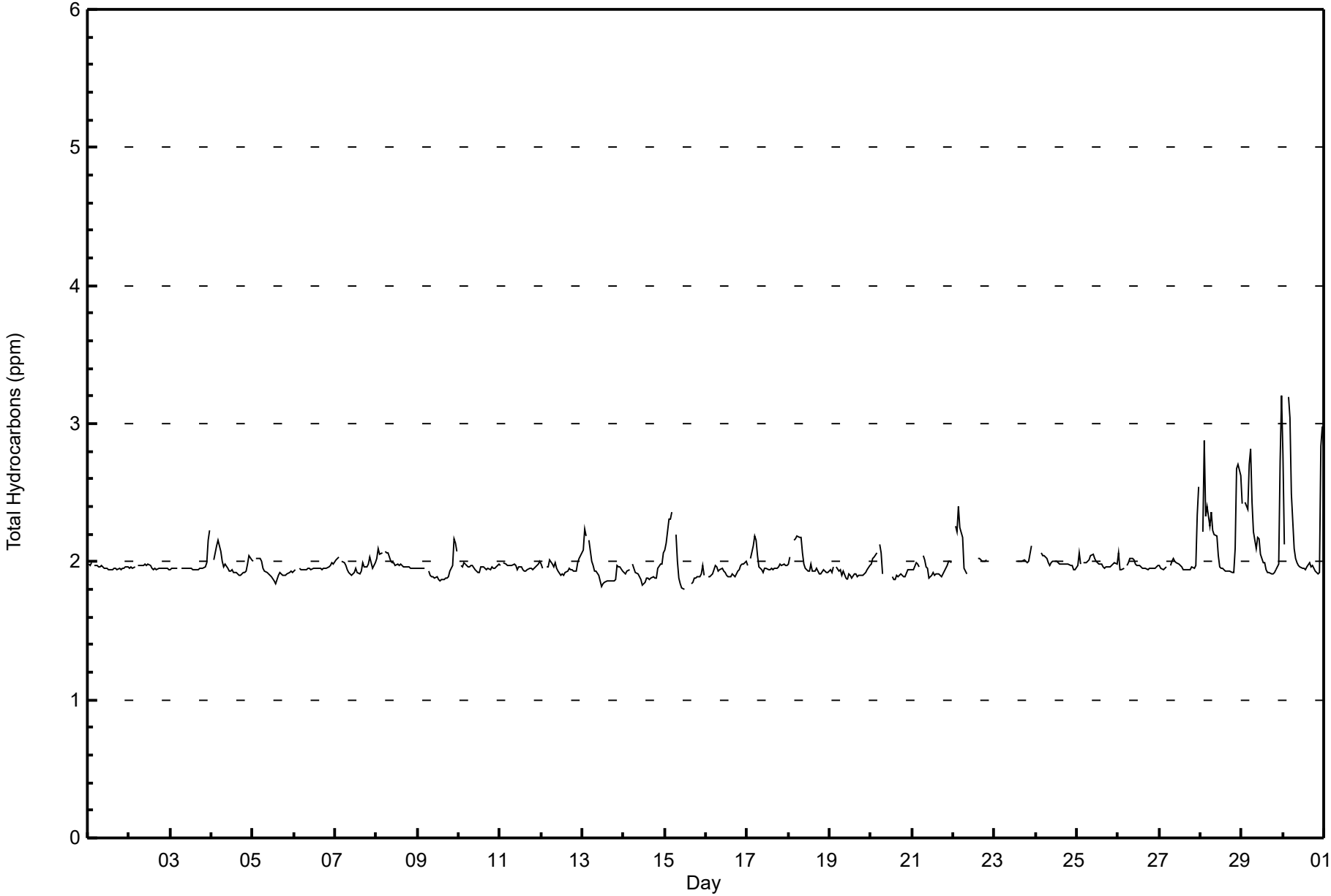
Z - zerospan C - Calibration M - Maintenance AF - Analyzer Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Patricia McInnes - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	575	86.99	86.99
2.1 - 3.0	84	12.71	99.70
3.1 - 10.0	2	0.30	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 661

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Patricia McInnes - June 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	115	24	12	23	21	61	52	15	20	28	28	29	21	27	25	74	575
2.1 - 3.0	16	6	9	2	0	3	5	1	2	3	2	0	0	5	10	20	84
3.1 - 10.0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	131	30	21	25	22	65	57	16	22	31	30	29	21	32	35	94	661

Total Number of Valid Hours: 661

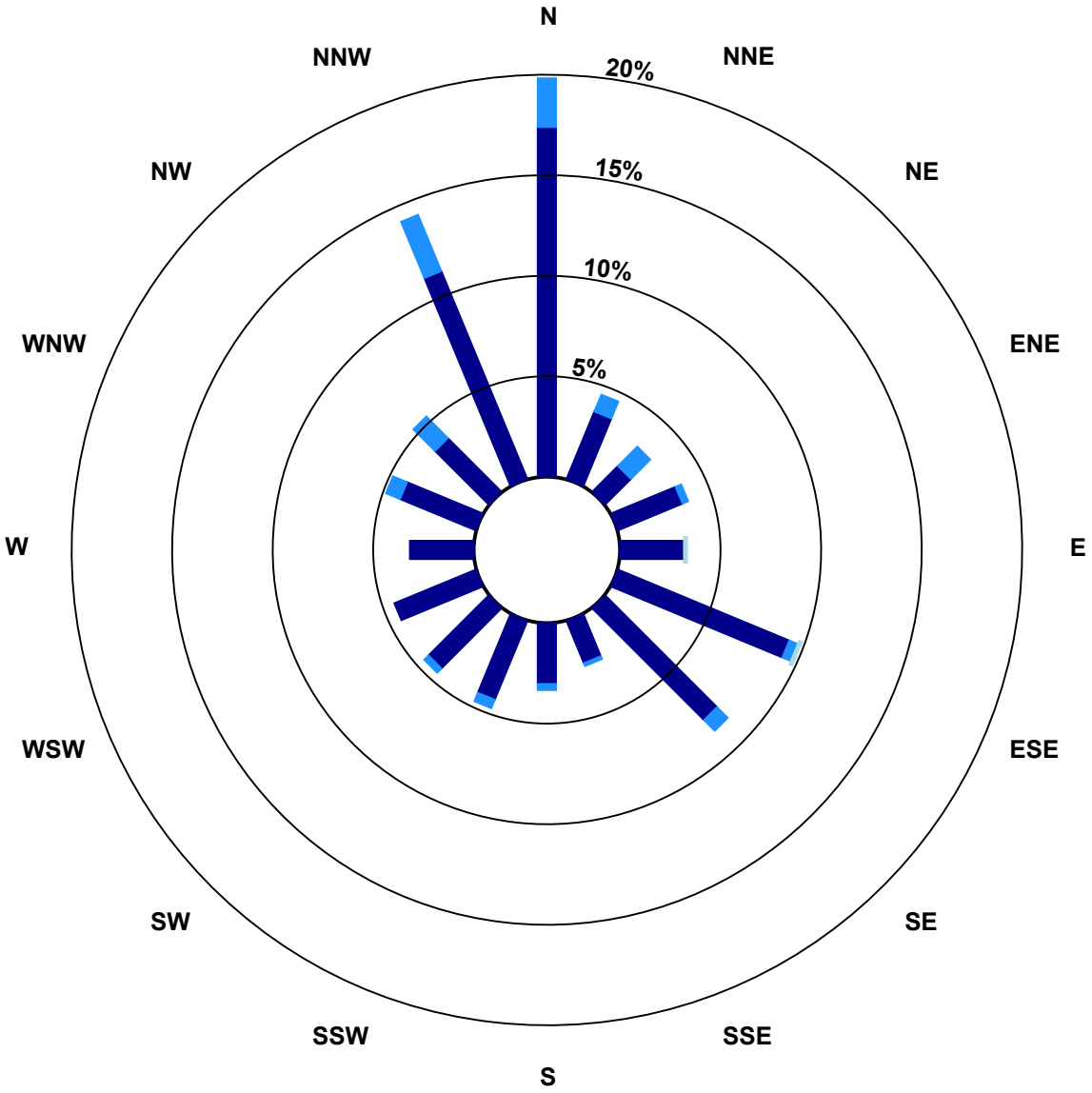
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Patricia McInnes



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

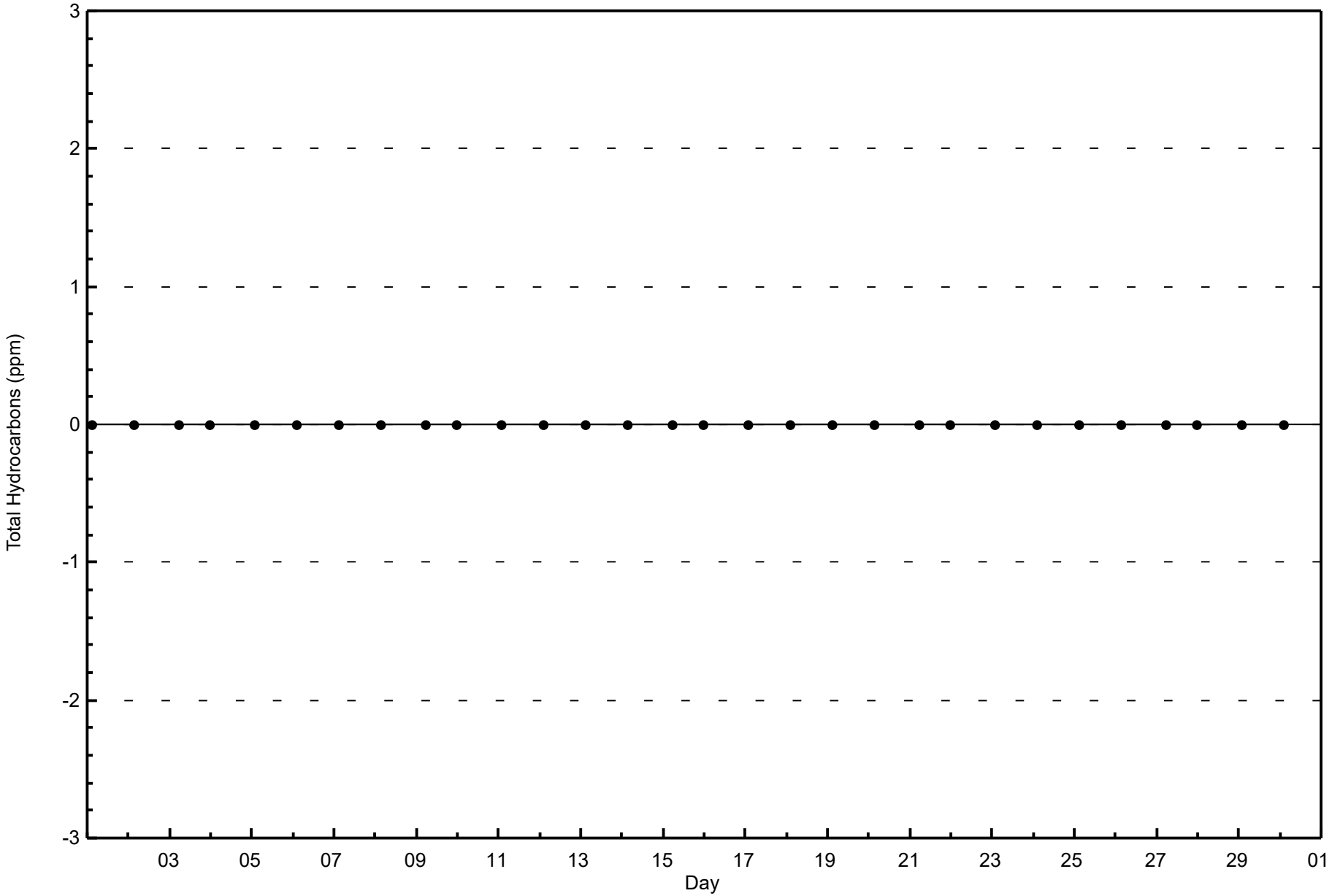
Total Number of Valid Hours: 661

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Patricia McInnes - June 2026

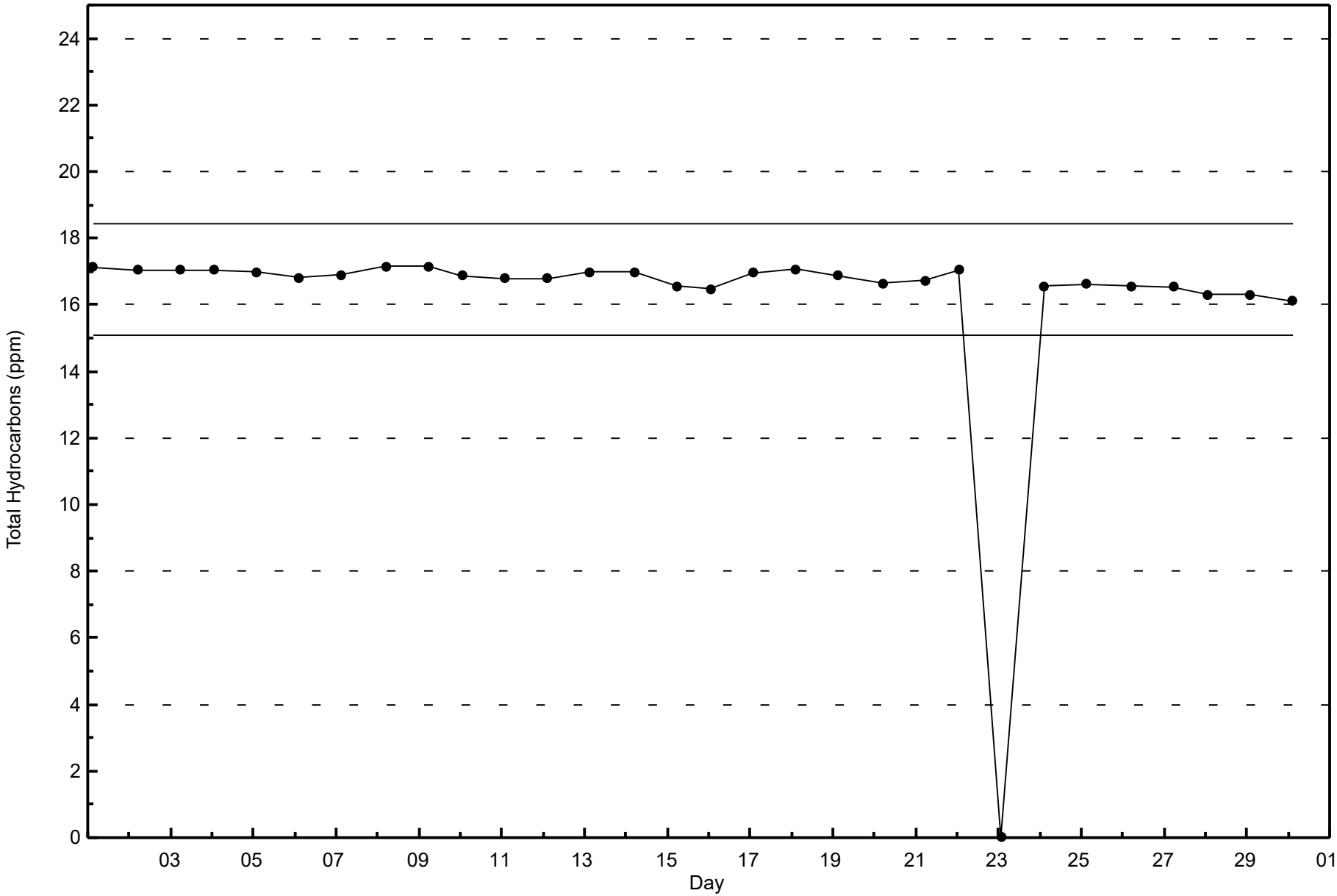


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Patricia McInnes - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Patricia McInnes - June 2026

Maximum Value: 0.189 ppm on Jun 29 03:00

Maximum Daily Average: 0.029 ppm on Jun 29

Minimum Value: 0.000 ppm on Jun 1 01:00

Minimum Daily Average: 0.000 ppm on Jun 1

Maximum Diurnal Average: 0.008 ppm at hour 3

Minimum Diurnal Average: 0.000 ppm at hour 11

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:	661
Hours of Missing Data:	59
Hours of Calibration:	34
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-Jun	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
2-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4-Jun	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	0.001	0.000	0.000	0.001
5-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.006	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006
6-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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	0.004
13-Jun	0.000	0.000	0.000	Z	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	0.000	0.000	0.003
14-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	UO	UO	UO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16-Jun	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	0.000	0.000	0.002
17-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	0.000	Z	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	0.003
20-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	UO	UO	UO	UO	0.000	0.000	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-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22-Jun	Z	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	AF	AF	AF	AF	--	0.000
23-Jun	AF	AF	AF	AF	AF	AF	AF	AF	AF	M	M	M	0.001	0.003	0.002	0.005	0.001	0.002	0.003	0.002	0.004	0.045	UO	0.000	--	0.045
24-Jun	UO	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001
25-Jun	0.000	0.005	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	0.000	0.000	0.000	0.000	0.005
26-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27-Jun	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	0.014	0.000	0.000	0.000	0.000	0.001	0.014
28-Jun	Z	0.000	0.000	0.000	0.000	0.033	0.077	0.026	0.006	0.005	0.000	0.000	0.000	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.003	0.000	0.007	0.077
29-Jun	0.009	Z	0.189	0.127	0.105	0.103	0.083	0.033	0.002	0.022	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	0.029	0.189
30-Jun	0.000	0.000	Z	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	0.000	0.000	0.004	0.000	0.001	0.000	0.000	0.000	0.006
	0.000	0.000	0.008	0.005	0.004	0.006	0.006	0.002	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.002	0.000	0.000	Diurnal Average	
	0.009	0.005	0.189	0.127	0.105	0.103	0.083	0.033	0.006	0.022	0.000	0.000	0.003	0.019	0.006	0.006	0.003	0.002	0.003	0.014	0.004	0.045	0.004	0.000	Diurnal Maximum	

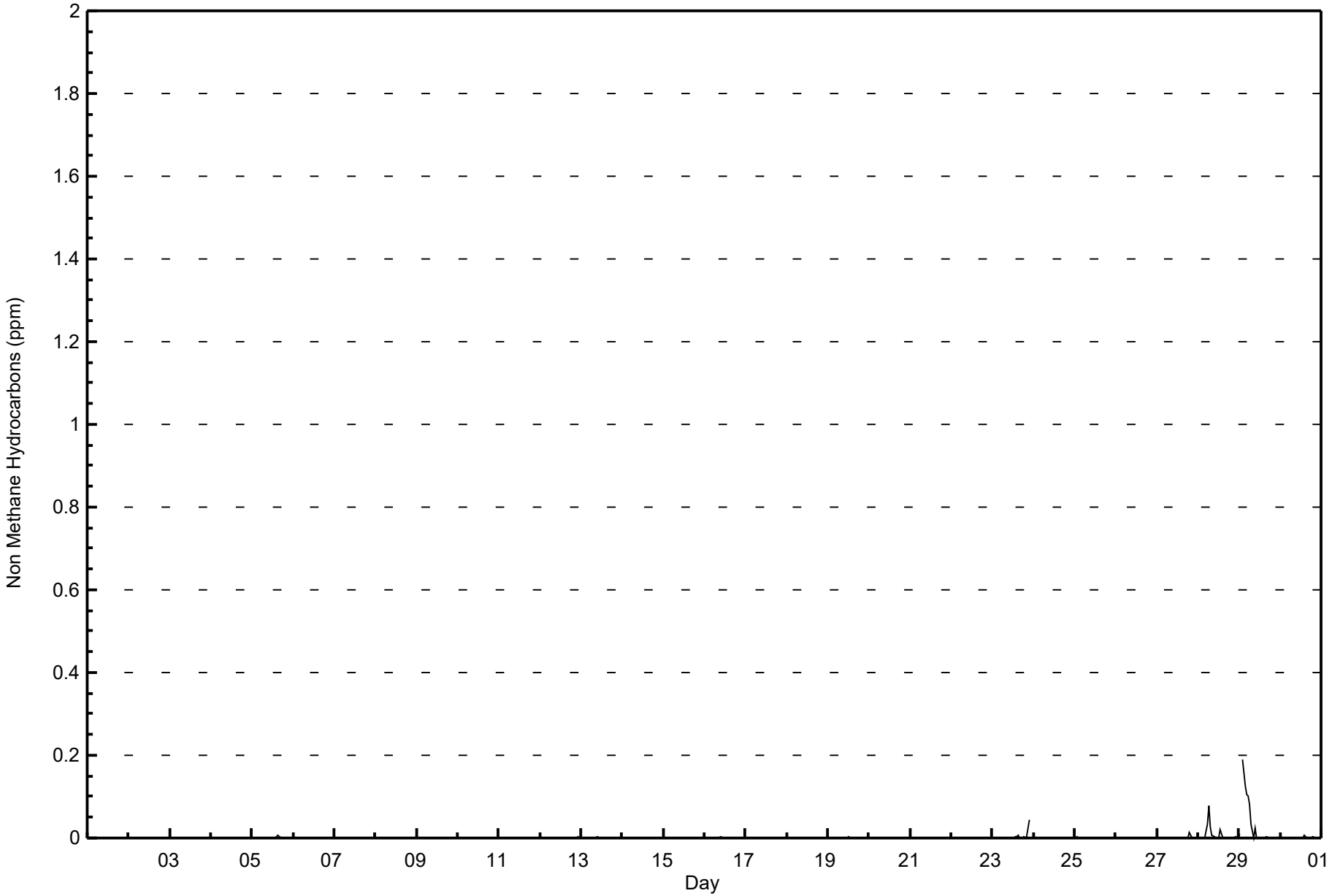
Z - zerospan C - Calibration M - Maintenance AF - Analyzer Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Patricia McInnes - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	645	97.58	97.58
0.006 - 0.05	10	1.51	99.09
0.06 - 0.1	5	0.76	99.85
> 0.1	1	0.15	100.00

Total Number of Valid Hours: 661

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Patricia McInnes - June 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	128	27	19	24	22	64	57	16	20	31	30	29	21	32	34	91	645
0.006 - 0.05	2	1	2	1	0	1	0	0	2	0	0	0	0	0	0	1	10
0.06 - 0.1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	5
> 0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Totals	131	30	21	25	22	65	57	16	22	31	30	29	21	32	35	94	661

Total Number of Valid Hours: 661

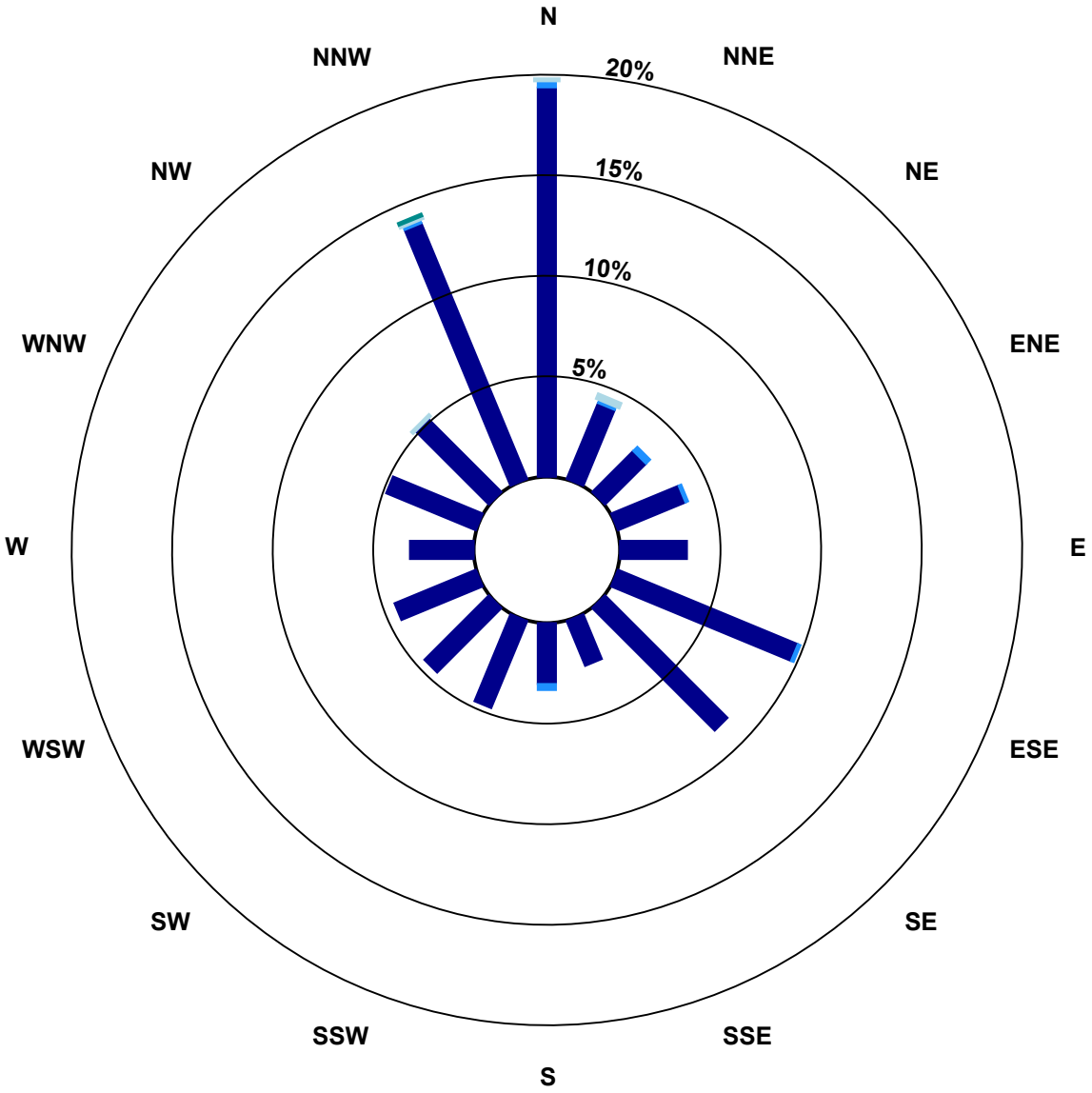
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Non Methane Hydrocarbons (NMHC) - ppm

Patricia McInnes



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

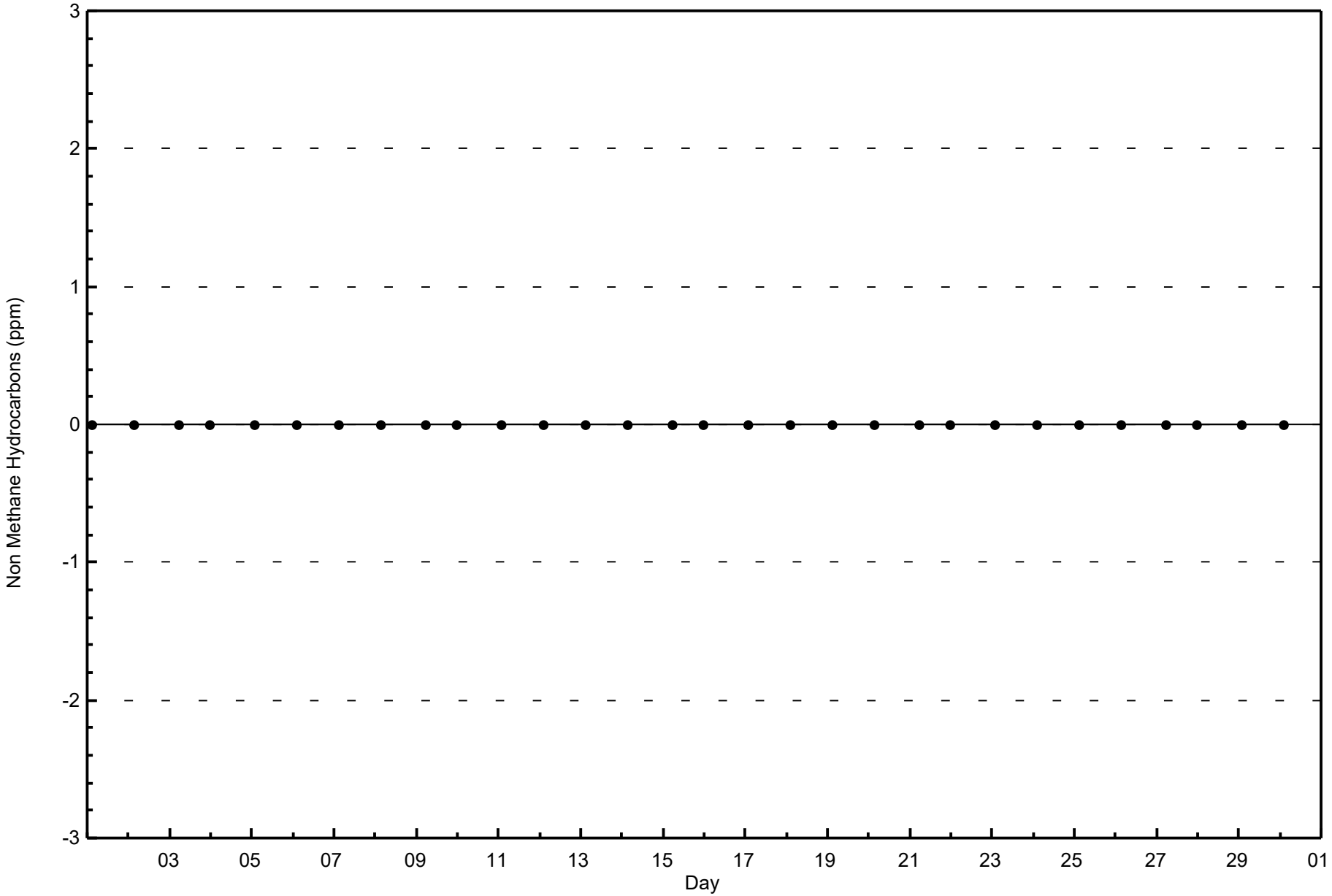
Total Number of Valid Hours: 661

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Patricia McInnes - June 2026

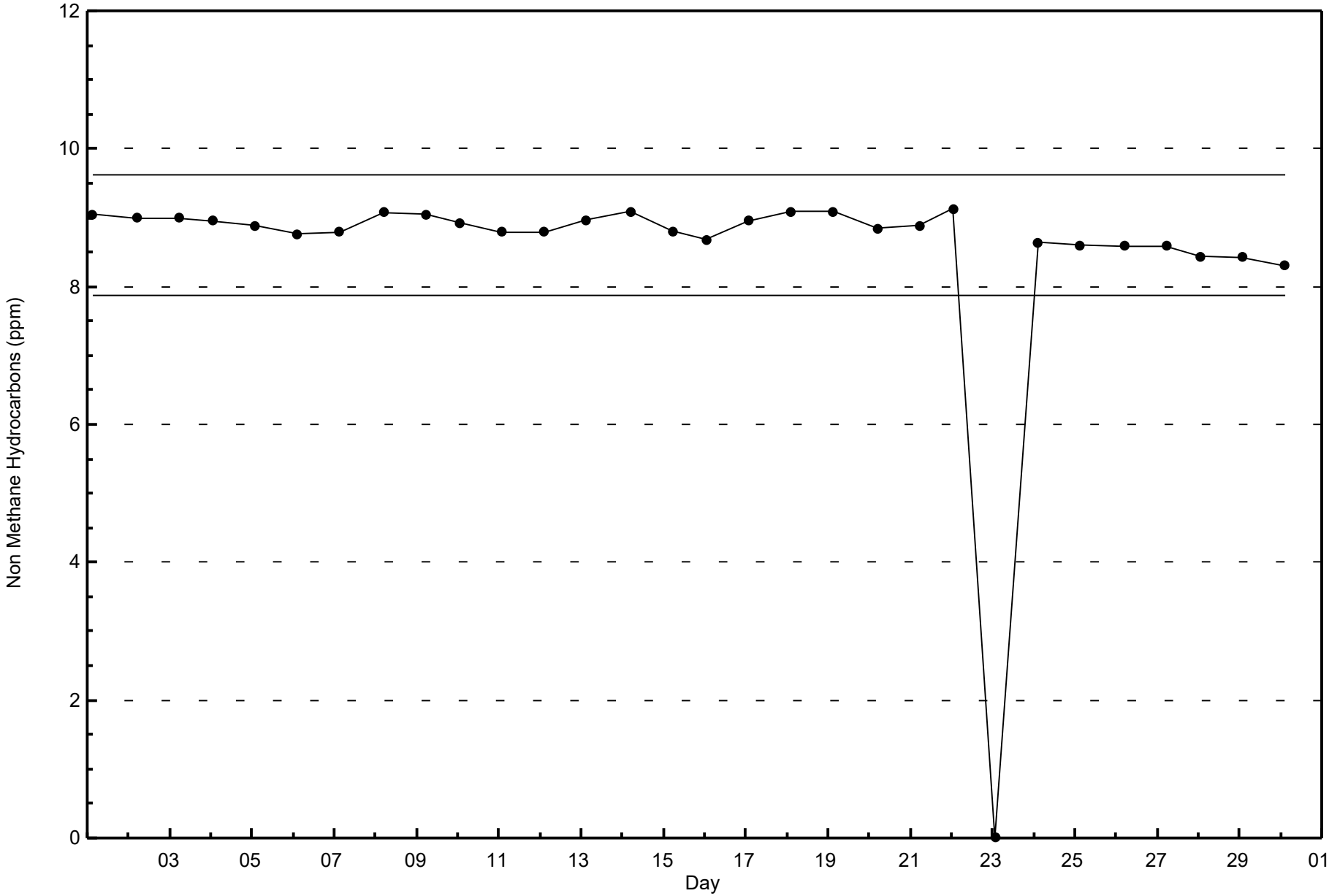


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Patricia McInnes - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Patricia McInnes - June 2026

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

Maximum Value: 3.2 ppm on Jun 30 00:00

Maximum Daily Average: 2.2 ppm on Jun 30

Minimum Value: 1.8 ppm on Jun 15 12:00

Minimum Daily Average: 1.9 ppm on Jun 14

Maximum Diurnal Average: 2.1 ppm at hour 5

Minimum Diurnal Average: 1.9 ppm at hour 16

Monthly Average: 1.99 ppm

Percentiles: $P_1 = 1.8$ $P_{10} = 1.9$ $Q_1 = 1.9$ Median = 2.0 $Q_3 = 2.0$ $P_{90} = 2.1$ $P_{99} = 2.7$

Hours in Service:	720
Hours of Data:	661
Hours of Missing Data:	59
Hours of Calibration:	34
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-Jun	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
2-Jun	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	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.0	2.0	1.9	2.0	2.0
3-Jun	1.9	2.0	1.9	1.9	1.9	Z	2.0	1.9	2.0	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.2	2.2	2.0	2.2
4-Jun	Z	2.0	2.1	2.1	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.2
5-Jun	2.0	Z	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0
6-Jun	1.9	1.9	Z	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
7-Jun	2.0	2.0	2.0	Z	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
8-Jun	2.0	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
9-Jun	1.9	1.9	2.0	2.0	2.0	Z	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.2	2.1	2.1	1.9	2.2
10-Jun	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
11-Jun	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0
12-Jun	2.0	1.9	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0
13-Jun	2.1	2.2	2.2	Z	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	2.2
14-Jun	1.9	1.9	1.9	1.9	Z	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	1.9	2.1
15-Jun	2.1	2.1	2.3	2.3	2.4	Z	2.2	2.0	1.9	1.8	1.8	1.8	UO	UO	UO	1.8	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.4
16-Jun	Z	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0
17-Jun	2.0	Z	2.0	2.1	2.2	2.2	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2
18-Jun	2.0	2.0	Z	2.2	2.2	2.2	2.2	2.2	2.1	2.0	2.0	1.9	1.9	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.2
19-Jun	1.9	1.9	2.0	Z	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0
20-Jun	2.0	2.0	2.0	2.1	Z	2.1	2.1	1.9	UO	UO	UO	UO	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1
21-Jun	1.9	1.9	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0
22-Jun	Z	2.3	2.2	2.4	2.2	2.2	2.0	1.9	1.9	C	C	C	C	C	2.0	2.0	2.0	2.0	2.0	2.0	AF	AF	AF	AF	--	2.4
23-Jun	AF	AF	AF	AF	AF	AF	AF	AF	AF	M	M	M	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	UO	2.2	--	2.2
24-Jun	UO	2.4	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	1.9	1.9	2.0	2.4
25-Jun	2.0	2.1	2.0	Z	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	2.0	2.0	2.0	2.0	2.0	2.1
26-Jun	2.1	1.9	1.9	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	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.1
27-Jun	2.0	2.0	1.9	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.3	2.5	2.0	2.5
28-Jun	Z	2.2	2.9	2.3	2.4	2.2	2.3	2.2	2.2	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.7	2.7	2.6	2.2	2.9
29-Jun	2.4	Z	2.2	2.3	2.6	2.7	2.3	2.2	2.1	2.1	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.7	3.2	2.2	3.2
30-Jun	2.8	2.1	Z	3.2	3.0	2.5	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.8	3.0	2.2	3.2
	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.1	Diurnal Average	
	2.8	2.4	2.9	3.2	3.0	2.7	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	2.1	2.7	2.8	3.2	Diurnal Maximum	

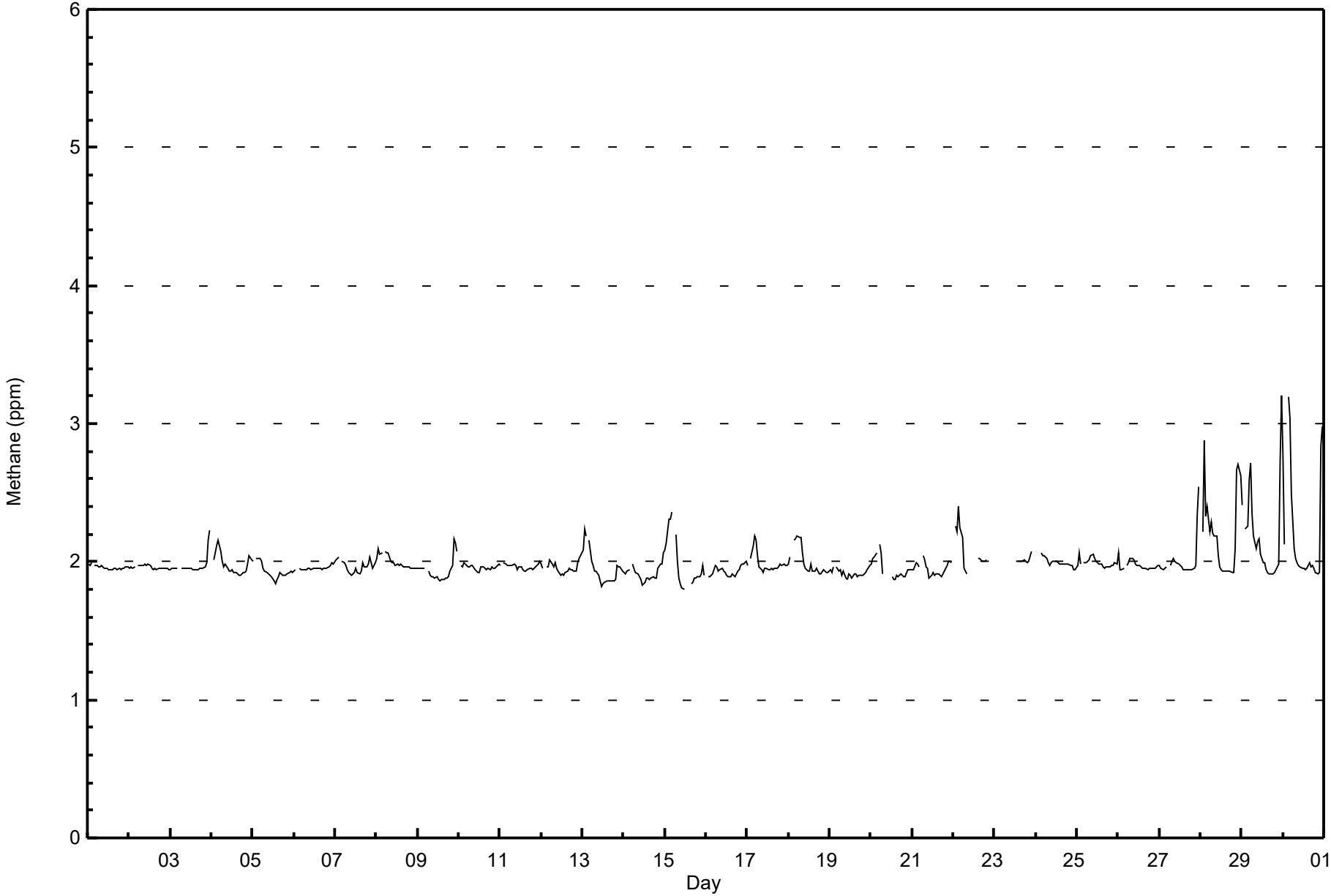
Z - zerospan C - Calibration M - Maintenance AF - Analyzer Failure UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Patricia McInnes - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	575	86.99	86.99
2.1 - 3.0	84	12.71	99.70
3.1 - 10.0	2	0.30	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 661

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Patricia McInnes - June 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	115	24	12	23	21	61	52	15	20	28	28	29	21	27	25	74	575
2.1 - 3.0	16	6	9	2	0	3	5	1	2	3	2	0	0	5	10	20	84
3.1 - 10.0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	131	30	21	25	22	65	57	16	22	31	30	29	21	32	35	94	661

Total Number of Valid Hours: 661

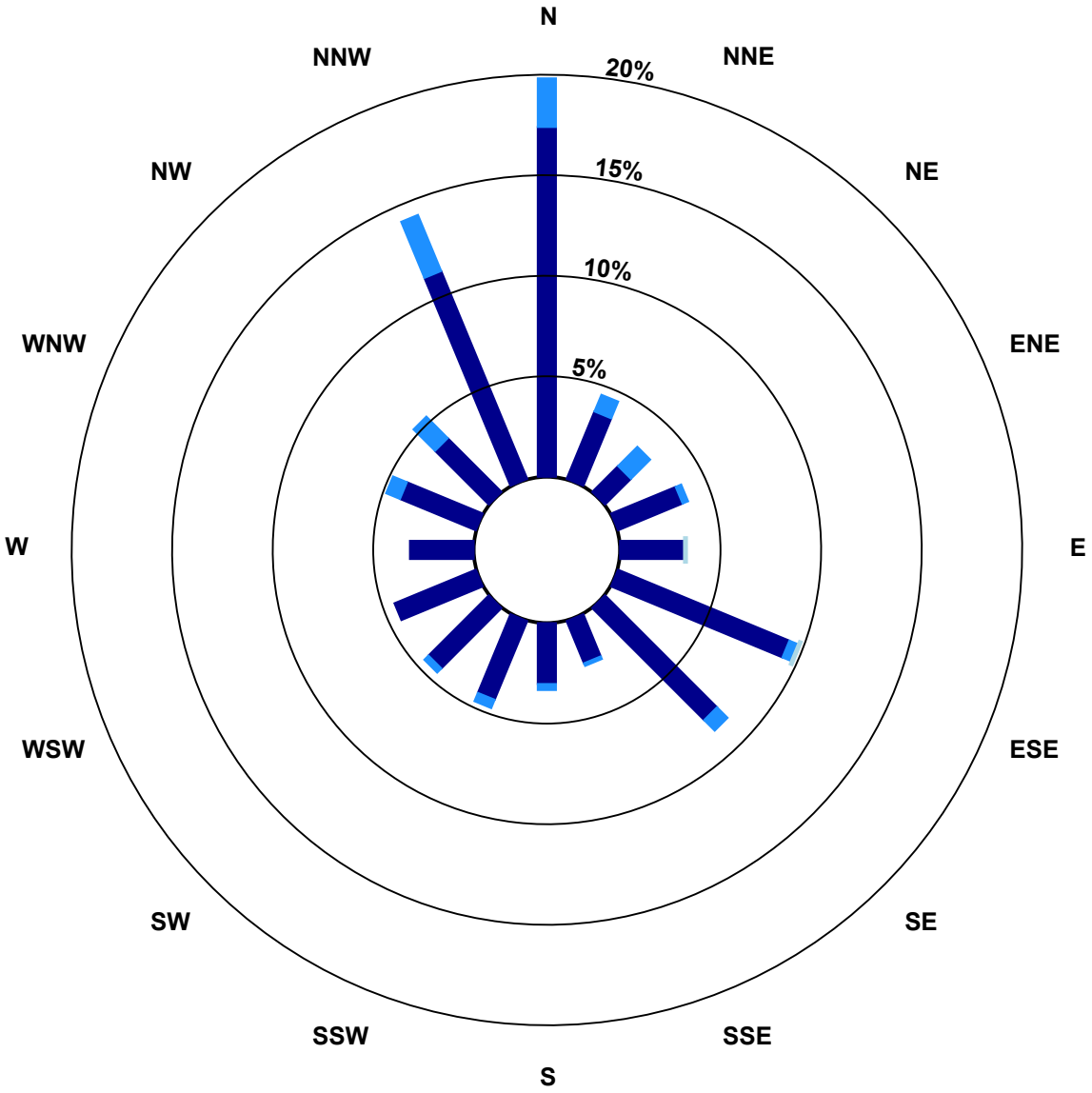
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Methane (CH_4) - ppm

Patricia McInnes



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

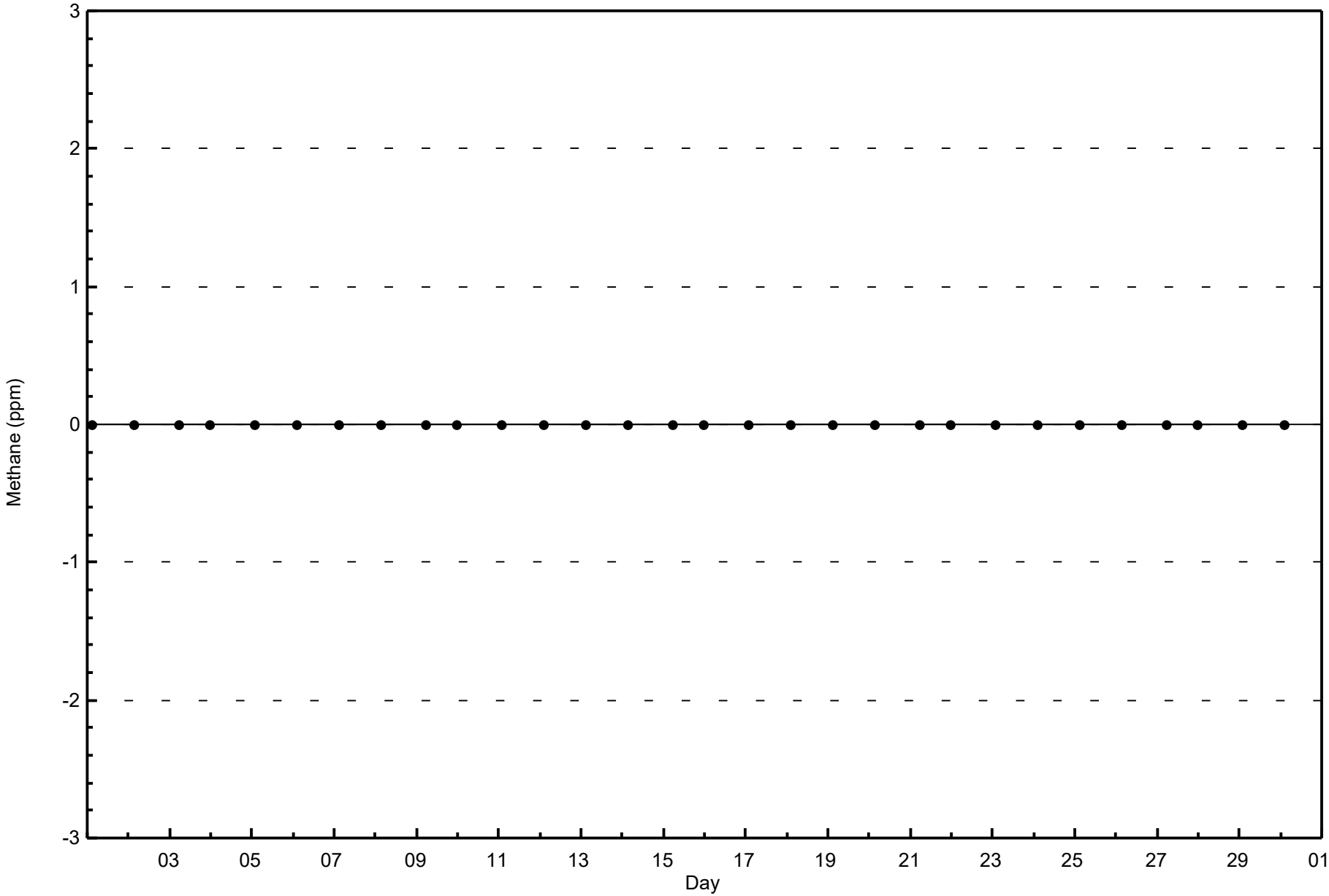
Total Number of Valid Hours: 661

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Patricia McInnes - June 2026

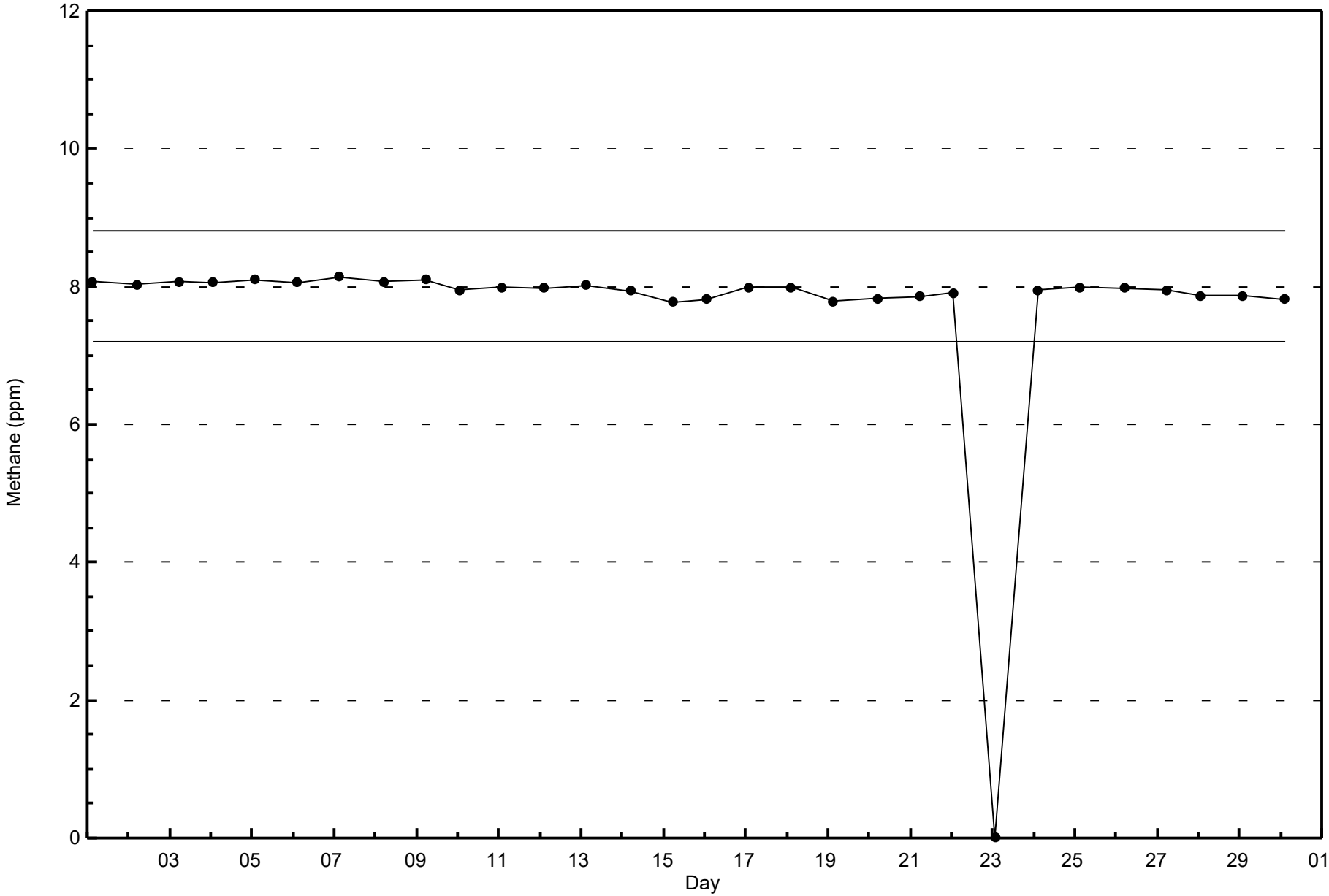


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Patricia McInnes - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Patricia McInnes - June 2026

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

Maximum Value: 69.3 ppb on Jun 30 16:00

Maximum Daily Average: 38.6 ppb on Jun 26

Minimum Value: 1.5 ppb on Jun 22 02:00

Minimum Daily Average: 15.3 ppb on Jun 11

Maximum Diurnal Average: 35.7 ppb at hour 16

Minimum Diurnal Average: 17.2 ppb at hour 6

Monthly Average: 27.11 ppb

Percentiles: P_1 = 3.9 P_{10} = 13.6 Q_1 = 19.2 Median = 26.3 Q_3 = 33.9 P_{90} = 42.2 P_{99} = 57.4

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-Jun	27.9	28.2	26.7	31.3	32.4	Z	34.6	33.7	33.9	34.2	32.6	31.7	31.4	30.6	28.8	29.5	29.7	31.2	29.9	29.3	28.9	29.7	28.6	28.9	30.6	34.6
2-Jun	Z	25.3	25.3	24.3	24.5	24.9	23.1	22.5	23.0	23.1	24.9	25.4	25.2	27.6	29.0	28.5	30.1	28.7	27.7	27.1	26.7	25.5	27.7	27.7	26.0	30.1
3-Jun	27.5	Z	27.6	28.2	27.5	26.0	26.5	27.4	27.2	27.0	27.2	25.8	24.4	22.7	22.8	22.7	21.6	21.3	20.7	20.3	16.4	11.1	6.4	4.5	22.3	28.2
4-Jun	11.0	8.0	Z	3.8	4.2	6.2	7.7	10.2	12.8	21.4	24.8	26.6	29.9	32.2	33.4	37.0	37.9	36.3	35.9	37.1	33.3	24.8	18.0	26.3	22.5	37.9
5-Jun	24.8	22.4	20.7	Z	18.4	18.6	24.1	26.3	25.6	C	C	C	C	40.0	36.7	37.1	31.8	32.6	36.0	29.6	25.4	25.0	23.3	28.9	27.8	40.0
6-Jun	29.0	29.6	28.2	27.0	Z	29.6	30.5	29.1	27.4	25.8	24.5	22.2	24.0	25.4	24.6	25.1	25.6	25.2	23.6	21.9	18.6	11.7	12.2	14.5	24.2	30.5
7-Jun	9.6	9.2	9.6	12.0	14.1	Z	16.2	18.3	21.7	23.6	25.0	26.3	28.7	32.5	33.7	33.6	29.8	37.3	33.3	29.8	28.9	28.3	31.9	25.9	24.3	37.3
8-Jun	Z	20.0	20.1	21.8	23.9	16.6	16.6	18.5	19.7	20.4	19.2	19.7	19.4	21.3	22.8	23.3	24.0	26.3	28.2	28.4	28.5	30.4	31.0	32.6	23.2	32.6
9-Jun	31.8	Z	30.1	30.4	27.4	28.3	28.1	27.5	32.1	33.4	34.4	35.6	35.8	35.8	35.6	36.6	37.2	37.4	36.7	35.1	27.0	16.5	13.3	16.9	30.6	37.4
10-Jun	13.9	13.5	Z	9.6	9.5	12.2	12.6	14.7	21.8	28.3	32.6	32.5	30.9	21.5	20.6	20.4	19.1	16.9	15.5	14.3	15.5	14.8	13.7	13.0	18.2	32.6
11-Jun	13.4	14.0	11.3	Z	14.5	14.1	13.3	13.1	12.9	13.9	16.1	14.5	15.5	16.8	16.8	19.8	18.8	18.7	18.2	17.8	16.1	15.3	14.1	12.8	15.3	19.8
12-Jun	13.6	14.7	15.6	17.0	Z	18.4	19.6	20.2	22.3	25.0	31.8	35.4	36.7	36.1	35.8	35.0	34.2	34.2	36.1	35.2	32.3	26.4	23.7	17.0	26.8	36.7
13-Jun	15.4	7.7	6.7	3.3	5.7	Z	19.6	20.4	23.0	29.4	32.7	34.3	34.4	33.4	34.1	35.5	34.4	33.8	34.2	32.8	24.6	15.4	15.8	23.0	23.9	35.5
14-Jun	Z	29.4	31.0	33.1	26.7	28.2	31.5	32.5	38.7	43.0	44.3	43.3	44.2	45.9	44.1	40.4	40.4	41.6	40.5	38.1	34.6	30.0	29.8	24.5	36.3	45.9
15-Jun	18.8	Z	6.8	5.1	4.8	7.4	11.6	17.6	25.8	31.2	35.6	36.8	37.9	38.7	39.3	41.4	43.6	47.0	44.6	38.5	38.0	36.2	33.5	31.4	29.2	47.0
16-Jun	30.9	29.8	Z	29.4	27.0	18.9	18.1	21.1	19.1	20.5	25.0	26.7	30.5	34.4	37.8	41.7	40.4	38.9	37.8	38.6	35.0	30.9	26.9	24.8	29.7	41.7
17-Jun	24.9	22.8	20.1	Z	9.6	12.2	16.6	20.8	24.7	29.1	29.9	32.4	33.4	34.4	35.7	35.1	33.8	31.7	30.9	29.4	27.1	26.1	25.7	26.0	26.6	35.7
18-Jun	24.6	18.9	11.8	9.7	Z	7.9	10.8	8.8	11.8	21.4	26.2	30.0	30.4	23.5	22.3	22.0	23.3	27.3	26.4	26.2	23.9	22.3	21.3	20.3	20.5	30.4
19-Jun	19.5	19.4	16.0	17.0	17.5	Z	16.3	19.5	18.0	20.6	22.1	23.3	25.9	28.4	28.9	26.1	24.9	21.0	19.1	18.6	17.1	16.1	14.4	12.2	20.1	28.9
20-Jun	Z	9.5	7.0	3.7	3.6	5.7	8.6	12.3	16.4	17.1	19.3	21.3	23.2	25.3	25.7	27.0	26.7	24.9	23.0	23.5	24.4	21.4	20.6	18.1	17.8	27.0
21-Jun	14.8	Z	12.6	14.9	15.7	7.0	8.6	11.5	16.5	17.1	21.3	21.9	23.0	23.9	25.6	25.3	23.6	23.8	24.7	19.1	16.6	16.3	15.5	13.8	18.0	25.6
22-Jun	3.9	1.5	Z	1.9	3.9	8.0	14.8	16.9	19.9	20.9	25.1	25.6	30.0	32.9	34.1	32.7	31.9	31.9	32.5	31.5	25.9	23.4	29.9	25.2	21.9	34.1
23-Jun	23.3	22.9	20.4	Z	17.1	16.4	15.2	16.5	20.6	23.7	31.8	35.9	37.0	38.0	38.7	37.5	32.6	31.2	33.5	34.8	30.0	22.4	15.0	18.1	26.6	38.7
24-Jun	19.0	14.2	17.2	16.7	Z	14.9	20.2	25.6	33.2	37.5	40.6	43.1	43.3	42.2	42.9	41.9	41.0	42.3	40.2	35.1	35.5	34.4	31.1	28.1	32.2	43.3
25-Jun	23.4	15.7	21.5	19.8	18.8	Z	21.6	24.5	27.6	31.0	40.8	43.6	44.6	44.9	45.2	45.0	44.8	44.7	46.1	43.2	40.2	38.3	35.4	32.6	34.5	46.1
26-Jun	Z	30.2	29.9	29.5	29.0	29.0	28.8	29.3	32.3	38.8	44.7	46.4	46.6	46.3	47.1	46.1	44.8	44.9	43.8	42.4	41.8	41.2	39.7	36.0	38.6	47.1
27-Jun	34.0	Z	32.7	29.7	28.2	30.0	30.9	31.0	33.5	36.9	40.2	42.8	42.1	44.0	48.4	46.2	44.1	42.2	41.1	39.3	34.9	31.0	22.9	19.3	35.9	48.4
28-Jun	22.5	21.8	Z	23.0	17.9	19.2	20.8	24.6	27.7	33.6	43.1	43.4	45.7	46.9	48.4	51.7	54.9	52.1	51.3	49.4	40.8	20.9	18.5	22.6	34.8	54.9
29-Jun	23.3	17.9	12.9	11.2	10.7	11.9	16.7	23.2	36.0	Z	47.7	60.2	62.9	64.0	59.4	56.3	50.4	50.1	52.8	49.2	45.8	38.3	21.1	15.8	36.4	64.0
30-Jun	21.4	25.1	16.6	12.1	Z	17.6	24.8	26.0	32.9	38.9	41.0	44.5	46.4	50.1	59.9	69.3	57.3	58.0	56.4	52.8	48.5	44.6	24.7	19.1	38.6	69.3
	20.9	18.9	19.1	17.9	17.3	17.2	19.6	21.4	24.6	27.4	31.2	32.8	33.9	34.7	35.3	35.7	34.4	34.5	34.0	32.3	29.4	25.6	22.9	22.0	Diurnal Average	
	34.0	30.2	32.7	33.1	32.4	30.0	34.6	33.7	38.7	43.0	47.7	60.2	62.9	64.0	59.9	69.3	57.3	58.0	56.4	52.8	48.5	44.6	39.7	36.0	Diurnal Maximum	

Z - zerospan C - Calibration

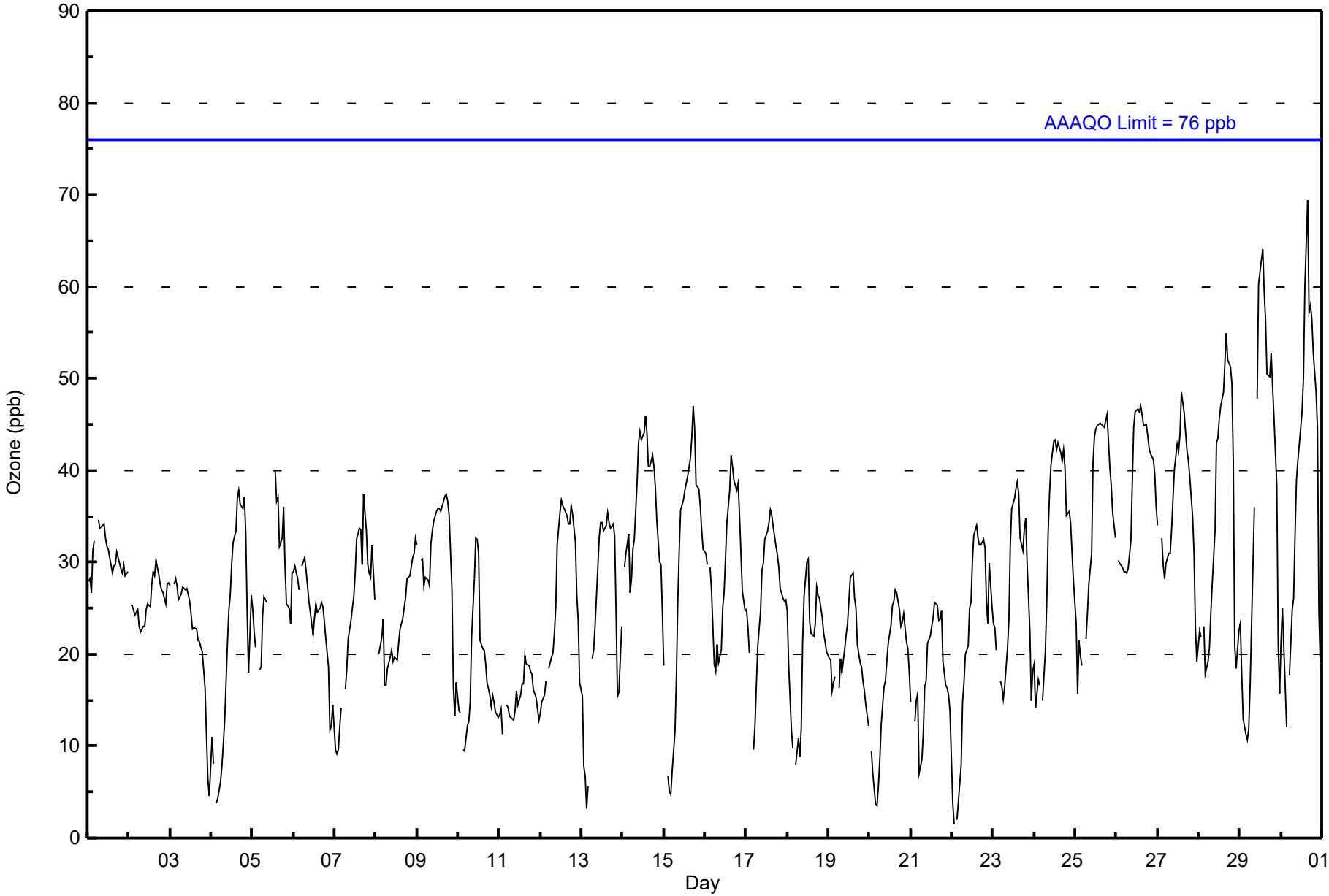
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Patricia McInnes - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	197	28.72	28.72
21 - 50	473	68.95	97.67
51 - 82	16	2.33	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

Patricia McInnes - June 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	8	3	4	3	6	10	2	9	12	12	2	0	12	19	59	197
21 - 50	92	22	19	18	21	60	45	13	13	26	22	28	23	21	15	35	473
51 - 82	0	3	2	3	3	1	0	0	0	0	0	0	0	0	1	3	16
> 83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	128	33	24	25	27	67	55	15	22	38	34	30	23	33	35	97	686

Total Number of Valid Hours: 686

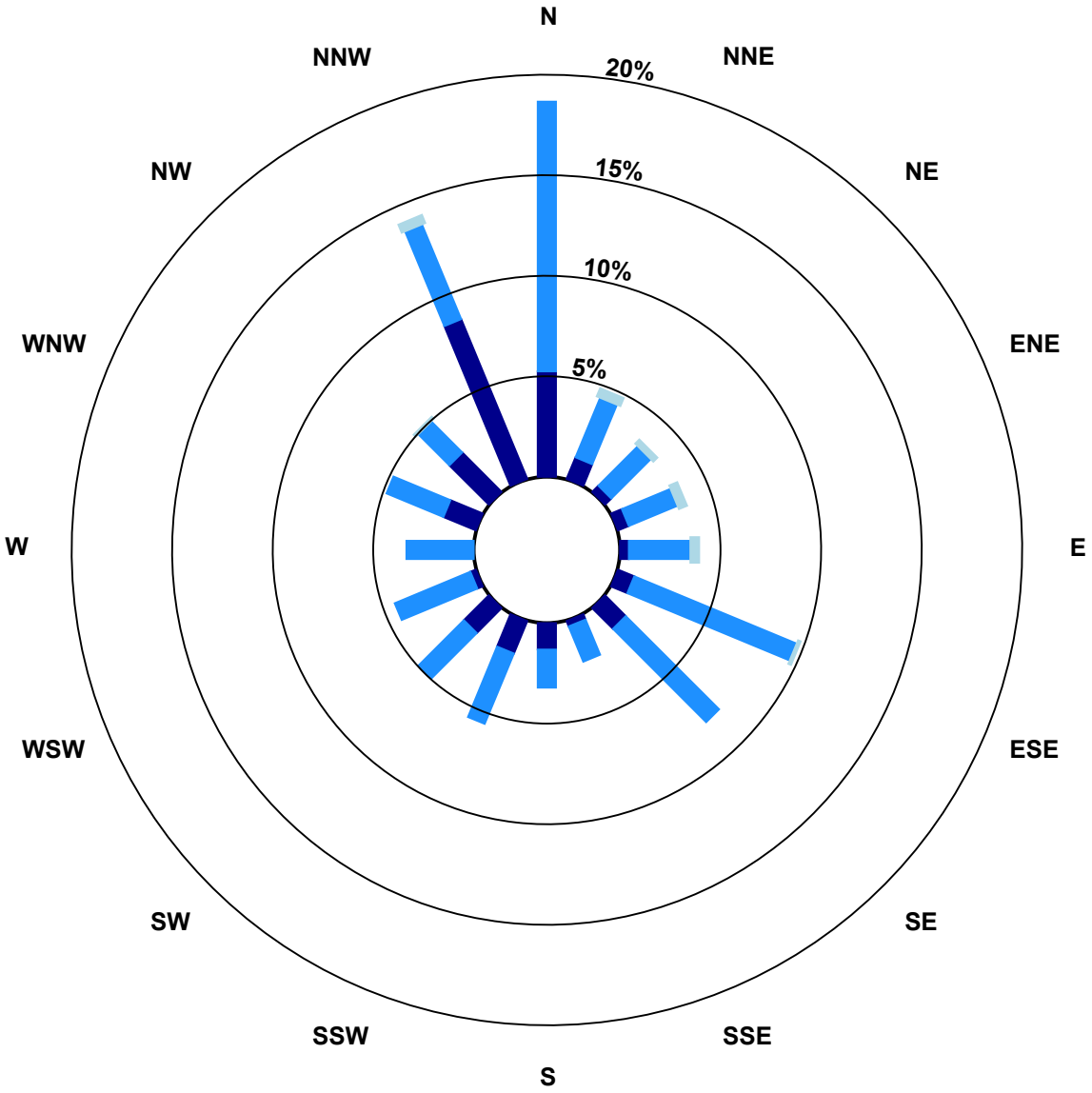
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Ozone (O_3) - ppb

Patricia McInnes



Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

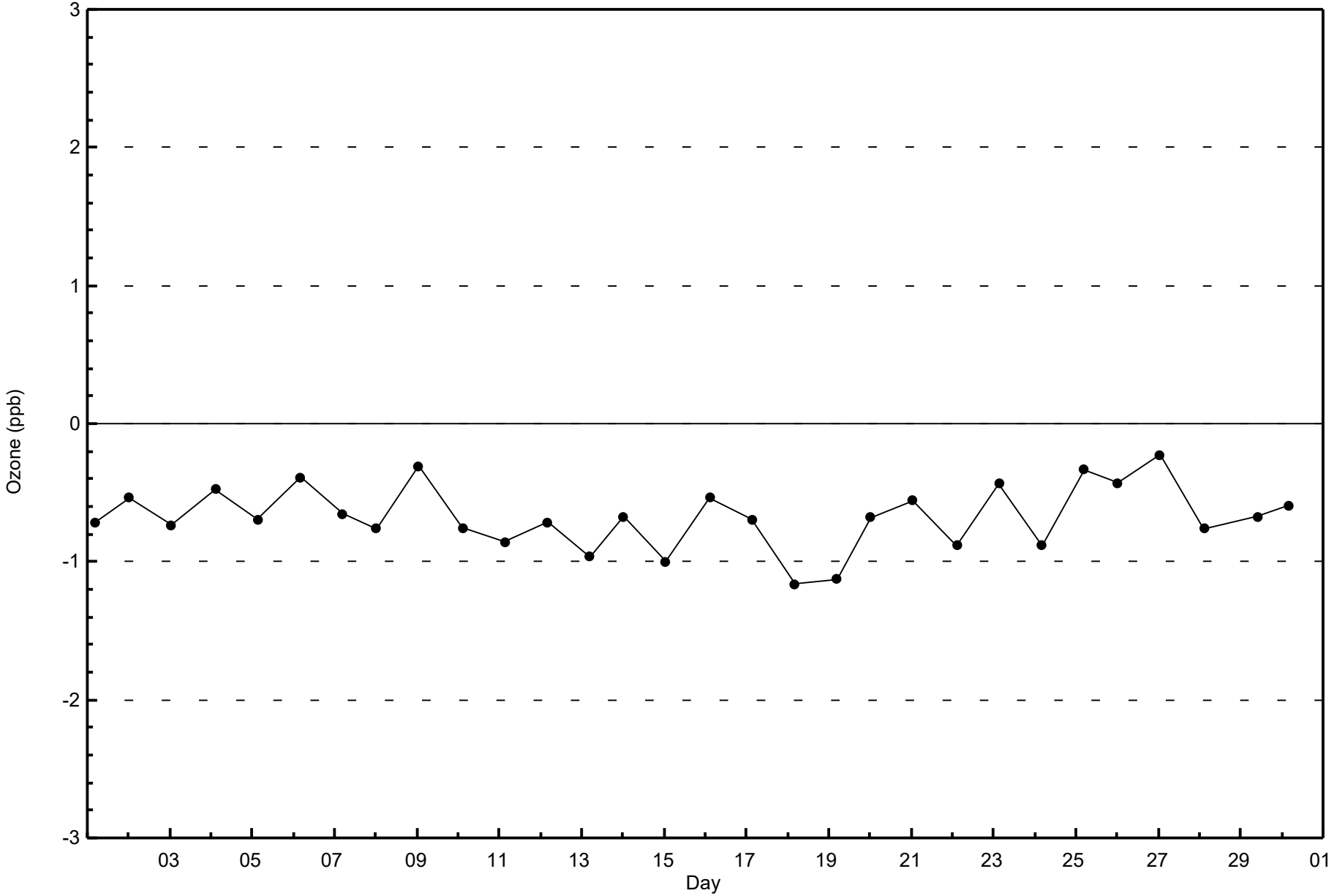
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Patricia McInnes - June 2026

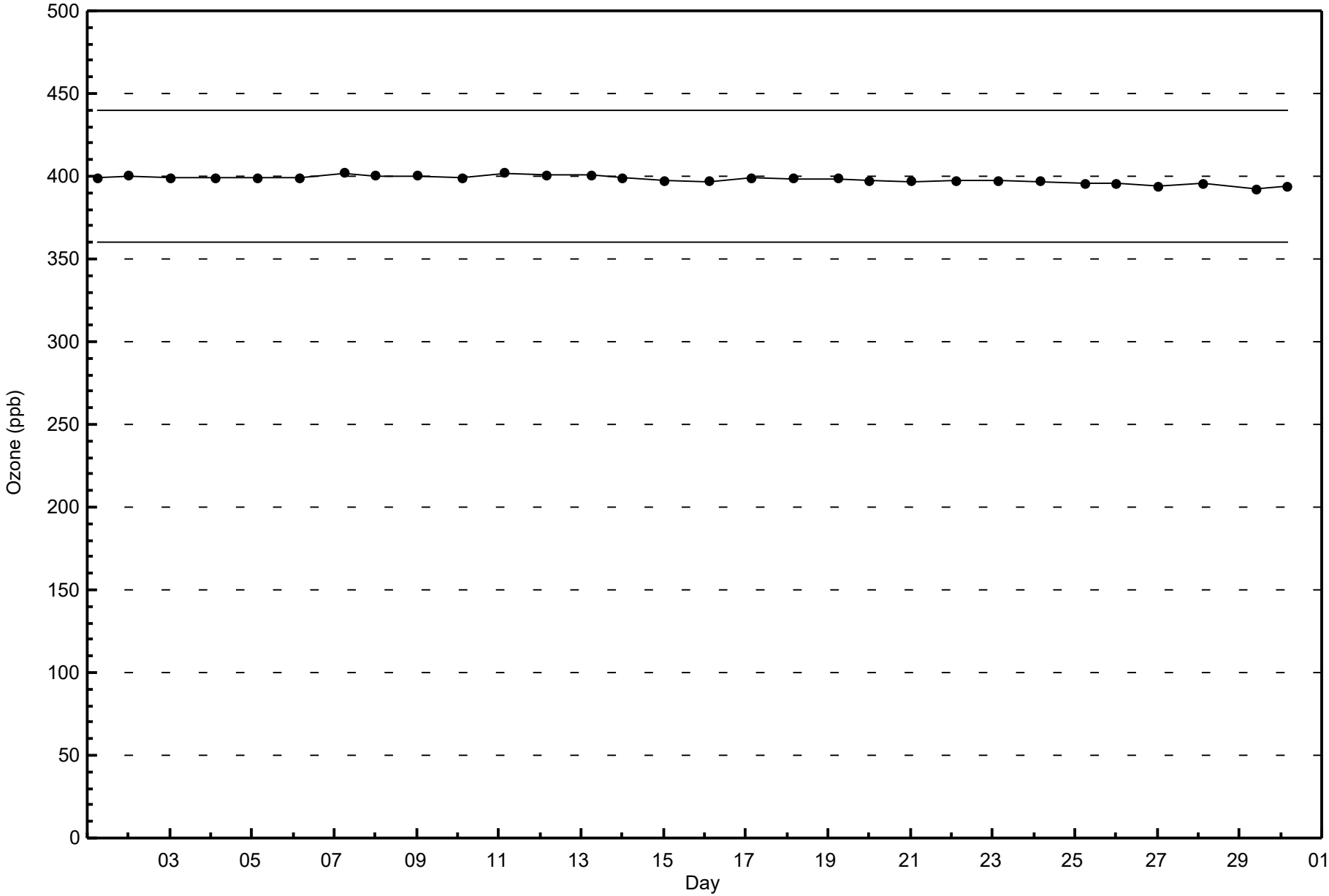


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Patricia McInnes - June 2026



Maximum Value: 14.3 ppb on Jun 15 06:00

Maximum Daily Average: 2.1 ppb on Jun 18

Minimum Value: 0.0 ppb on Jun 1 01:00

Minimum Daily Average: 0.1 ppb on Jun 8

Maximum Diurnal Average: 2.2 ppb at hour 6

Minimum Diurnal Average: 0.2 ppb at hour 24

Monthly Average: 0.78 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.3 Q_3 = 0.8 P_{90} = 2.1 P_{99} = 7.4

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-Jun	0.0	Z	0.0	0.0	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.4	0.3	0.5	0.3	0.3	0.3	0.4	0.3	0.2	0.4	0.2	0.3	0.5
2-Jun	0.2	0.1	Z	0.1	0.1	0.4	0.6	0.9	0.6	0.8	0.7	0.9	0.8	0.9	0.8	1.1	1.1	1.6	1.4	0.7	0.4	0.1	0.0	0.0	0.6	1.6
3-Jun	0.0	0.0	0.0	Z	0.8	1.0	0.5	0.8	0.7	0.8	C	C	C	C	C	C	0.9	1.0	1.3	1.6	2.7	1.0	0.4	0.3	--	2.7
4-Jun	0.2	0.4	4.2	2.7	Z	3.6	2.2	1.9	1.1	0.6	0.6	0.3	0.1	0.0	1.3	0.4	0.6	0.2	0.1	0.1	0.1	0.8	0.6	0.0	1.0	4.2
5-Jun	0.0	0.0	0.1	0.3	0.5	Z	0.3	0.2	0.1	0.0	0.3	0.4	0.0	0.1	0.1	0.6	3.3	2.2	0.2	0.0	0.7	0.1	6.6	1.0	0.7	6.6
6-Jun	Z	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	0.0	0.1	0.1	0.1	0.2	1.0	0.4	0.0	0.1	1.0
7-Jun	0.6	Z	0.6	0.5	0.4	0.4	0.2	0.0	0.1	0.0	0.0	0.4	0.5	0.2	0.1	0.2	0.1	0.2	0.7	0.1	0.1	0.1	0.3	0.1	0.3	0.7
8-Jun	0.0	0.0	Z	0.0	0.0	0.2	0.3	0.3	0.2	0.0	0.1	0.2	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.0	0.0	0.1	0.3
9-Jun	0.0	0.1	0.0	Z	0.0	0.0	0.3	0.5	0.3	0.4	0.5	0.4	0.2	0.3	0.4	0.3	0.1	0.2	0.1	0.3	0.4	0.1	0.4	0.0	0.2	0.5
10-Jun	0.1	0.0	0.1	0.1	Z	0.8	0.8	1.6	2.3	1.7	1.1	0.2	0.5	1.3	1.4	0.9	1.1	0.9	1.0	0.6	0.3	0.1	0.0	0.0	0.7	2.3
11-Jun	0.0	0.0	0.0	0.1	0.2	Z	0.7	0.6	0.7	1.3	2.7	1.1	0.8	1.1	1.7	0.8	0.6	0.6	0.4	0.3	0.1	0.0	0.0	0.1	0.6	2.7
12-Jun	Z	1.4	0.8	1.0	0.1	1.6	2.2	2.4	2.5	2.7	0.8	0.4	0.3	0.4	0.4	0.3	0.5	0.5	0.0	0.0	0.0	0.5	0.2	3.7	1.0	3.7
13-Jun	4.2	Z	4.8	7.5	9.7	0.9	0.7	1.2	0.9	0.2	0.0	0.0	0.0	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.3	0.9	0.3	0.0	1.4	9.7
14-Jun	0.0	0.0	Z	0.1	0.4	0.4	0.1	0.2	0.8	0.5	0.8	0.5	0.1	0.5	0.1	0.1	0.3	0.2	0.2	0.0	0.0	0.1	0.0	0.2	0.2	0.8
15-Jun	0.5	0.4	1.3	Z	6.5	14.3	9.9	4.0	1.7	0.9	0.5	0.4	0.1	0.2	0.5	0.4	0.4	1.6	0.8	1.1	0.5	0.2	0.0	0.1	2.0	14.3
16-Jun	0.1	0.2	0.1	0.0	Z	1.4	1.4	0.6	0.9	1.7	1.0	0.8	0.0	0.0	0.0	0.1	0.3	0.5	0.1	0.1	0.2	0.0	0.1	0.0	0.4	1.7
17-Jun	0.0	0.0	0.0	0.2	2.9	Z	4.1	2.5	2.3	1.2	1.5	0.8	0.5	0.6	0.4	0.3	0.4	0.4	0.3	0.1	0.0	0.1	0.1	0.0	0.8	4.1
18-Jun	Z	0.0	0.1	0.2	3.3	7.4	8.6	7.5	5.9	1.7	3.6	0.3	0.3	2.3	0.9	1.0	1.7	0.7	1.2	0.4	0.1	0.1	0.0	0.0	2.1	8.6
19-Jun	0.0	Z	0.0	0.0	0.0	0.2	4.0	2.4	3.6	3.0	3.2	2.6	1.2	0.6	0.9	1.7	2.9	2.9	0.3	0.5	0.3	0.0	0.0	0.0	1.3	4.0
20-Jun	0.1	0.0	Z	0.7	4.8	8.0	6.8	3.5	2.6	2.7	1.5	0.9	0.8	0.7	0.4	0.4	0.5	0.7	0.8	0.5	0.3	0.1	0.1	0.2	1.6	8.0
21-Jun	0.6	0.1	0.1	Z	0.4	1.5	2.3	3.8	3.3	3.4	1.7	2.4	1.4	0.4	0.4	0.3	0.8	0.5	0.1	0.7	0.1	0.0	0.0	0.0	1.1	3.8
22-Jun	2.6	7.4	3.8	2.8	Z	5.8	2.1	1.5	0.9	1.8	0.5	0.7	1.7	1.3	0.9	1.1	1.0	1.2	1.0	0.9	0.8	0.6	0.2	0.2	1.8	7.4
23-Jun	0.3	0.2	0.2	0.3	0.4	Z	0.8	0.9	0.3	0.3	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.8	1.6	0.6	1.0	0.4	1.2	0.3	0.4	1.6
24-Jun	Z	0.0	0.0	0.0	0.1	0.5	0.2	0.5	0.0	0.1	0.0	0.0	0.0	0.3	0.2	0.1	0.0	0.0	0.6	1.3	0.8	0.4	0.5	0.2	0.3	1.3
25-Jun	0.1	Z	0.1	0.3	0.6	0.6	0.5	0.4	0.5	1.7	0.5	0.0	0.2	0.2	0.1	0.4	0.2	0.3	0.1	0.3	0.2	0.1	0.0	0.0	0.3	1.7
26-Jun	0.0	0.0	Z	0.0	0.0	0.1	0.2	0.4	0.7	0.4	0.5	0.2	0.2	0.1	0.2	0.5	0.9	0.8	0.9	0.9	0.3	0.1	0.0	0.1	0.3	0.9
27-Jun	0.0	0.0	0.0	Z	0.5	0.8	0.4	0.9	1.1	0.6	0.7	0.3	0.3	0.3	0.2	0.6	0.5	0.8	0.6	1.1	2.3	0.5	0.0	0.0	0.5	2.3
28-Jun	0.0	0.0	0.0	0.0	Z	2.0	3.3	3.3	2.9	1.7	0.4	0.8	1.3	0.4	0.9	0.3	0.7	0.7	0.3	0.4	0.6	0.6	2.4	0.0	1.0	3.3
29-Jun	0.0	0.0	0.1	0.4	2.0	4.6	5.2	5.3	2.3	1.6	3.6	Z	0.8	0.0	0.2	0.3	0.2	0.4	0.3	0.5	0.3	0.2	0.0	0.0	1.2	5.3
30-Jun	Z	0.0	0.1	0.1	0.1	0.1	1.1	1.3	0.6	0.5	0.2	0.1	0.0	0.0	0.0	0.1	0.2	0.0	0.8	0.8	1.1	0.5	0.0	0.0	0.3	1.3
	0.4	0.4	0.7	0.7	1.4	2.2	2.0	1.7	1.3	1.1	0.9	0.5	0.4	0.4	0.5	0.5	0.7	0.7	0.5	0.5	0.5	0.3	0.5	0.2	Diurnal Average	
	4.2	7.4	4.8	7.5	9.7	14.3	9.9	7.5	5.9	3.4	3.6	2.6	1.7	2.3	1.7	1.7	3.3	2.9	1.6	1.6	2.7	1.0	6.6	3.7	Diurnal Maximum	

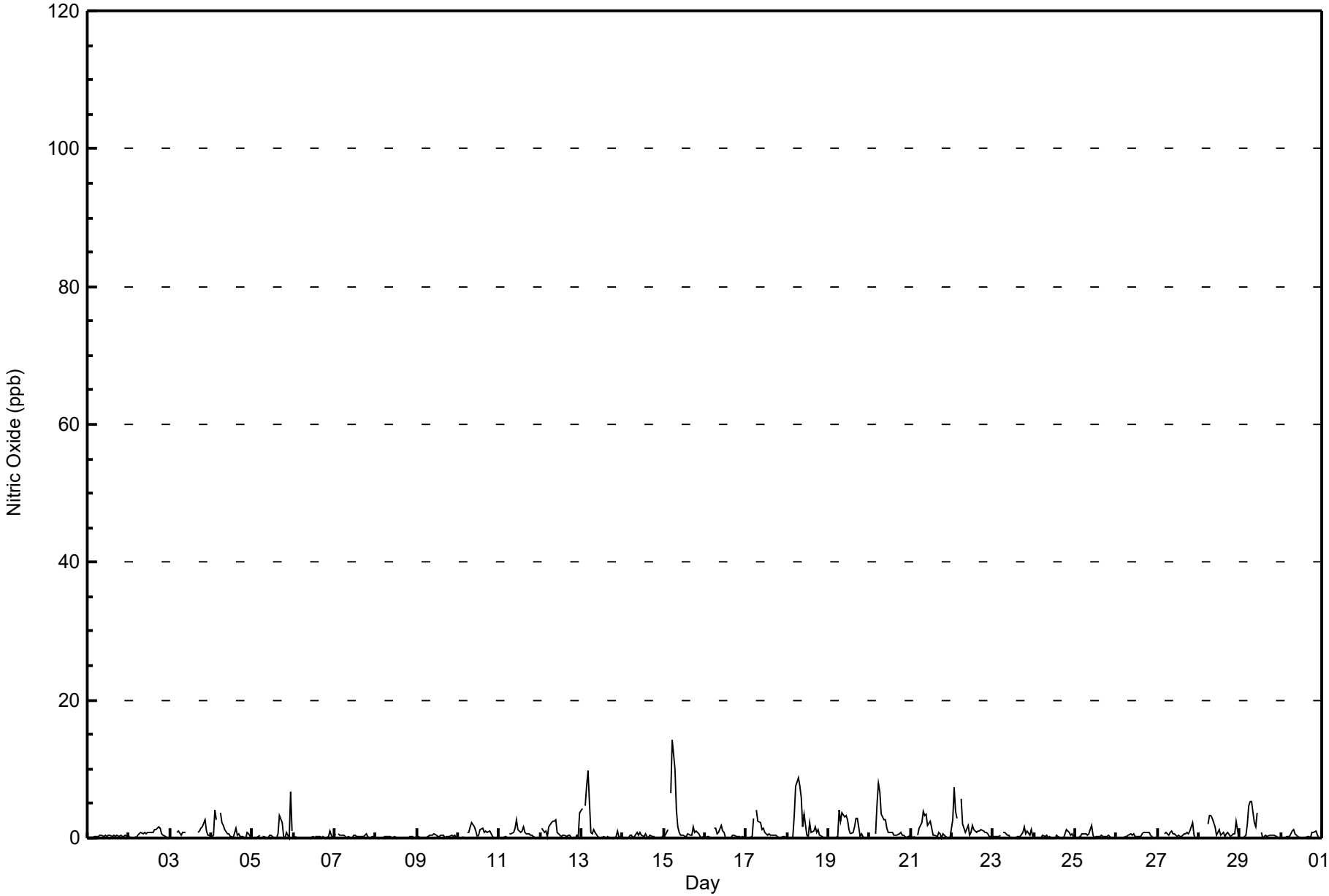
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Patricia McInnes - June 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

Patricia McInnes - June 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	129	33	23	26	27	63	53	17	25	38	33	31	21	31	34	100	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	129	33	23	26	27	63	53	17	25	38	33	31	21	31	34	100	684

Total Number of Valid Hours: 684

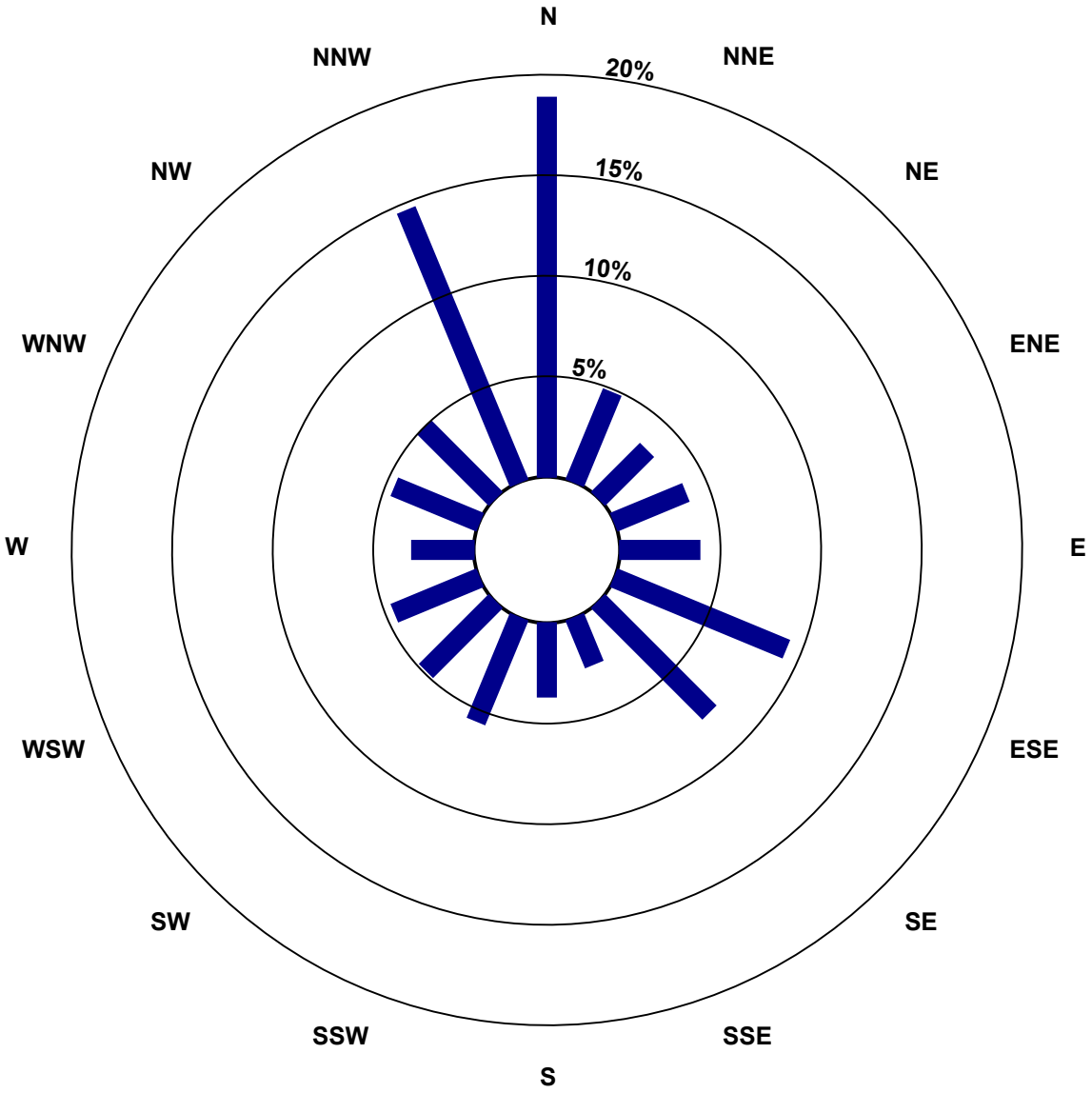
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Patricia McInnes



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

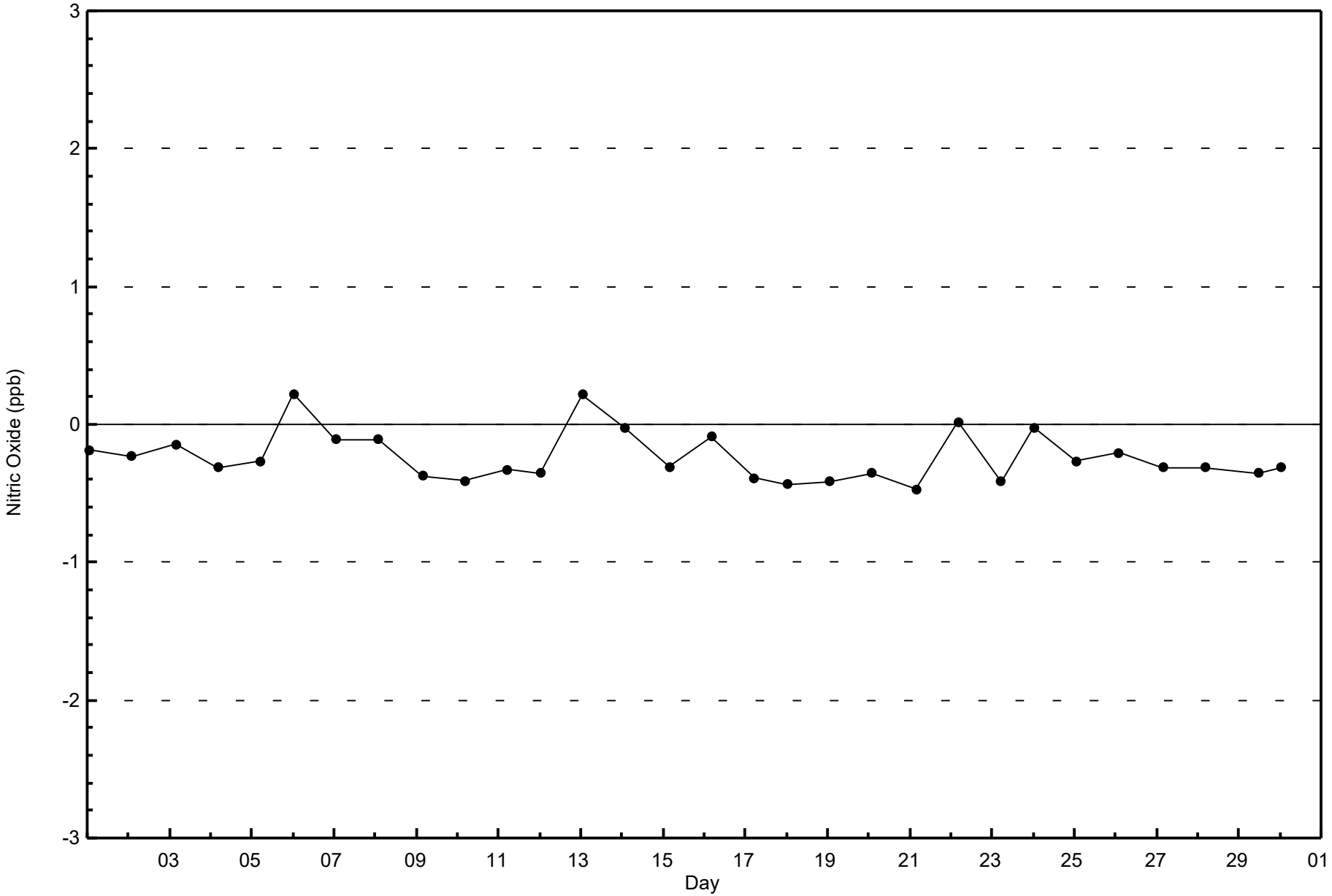
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Patricia McInnes - June 2026

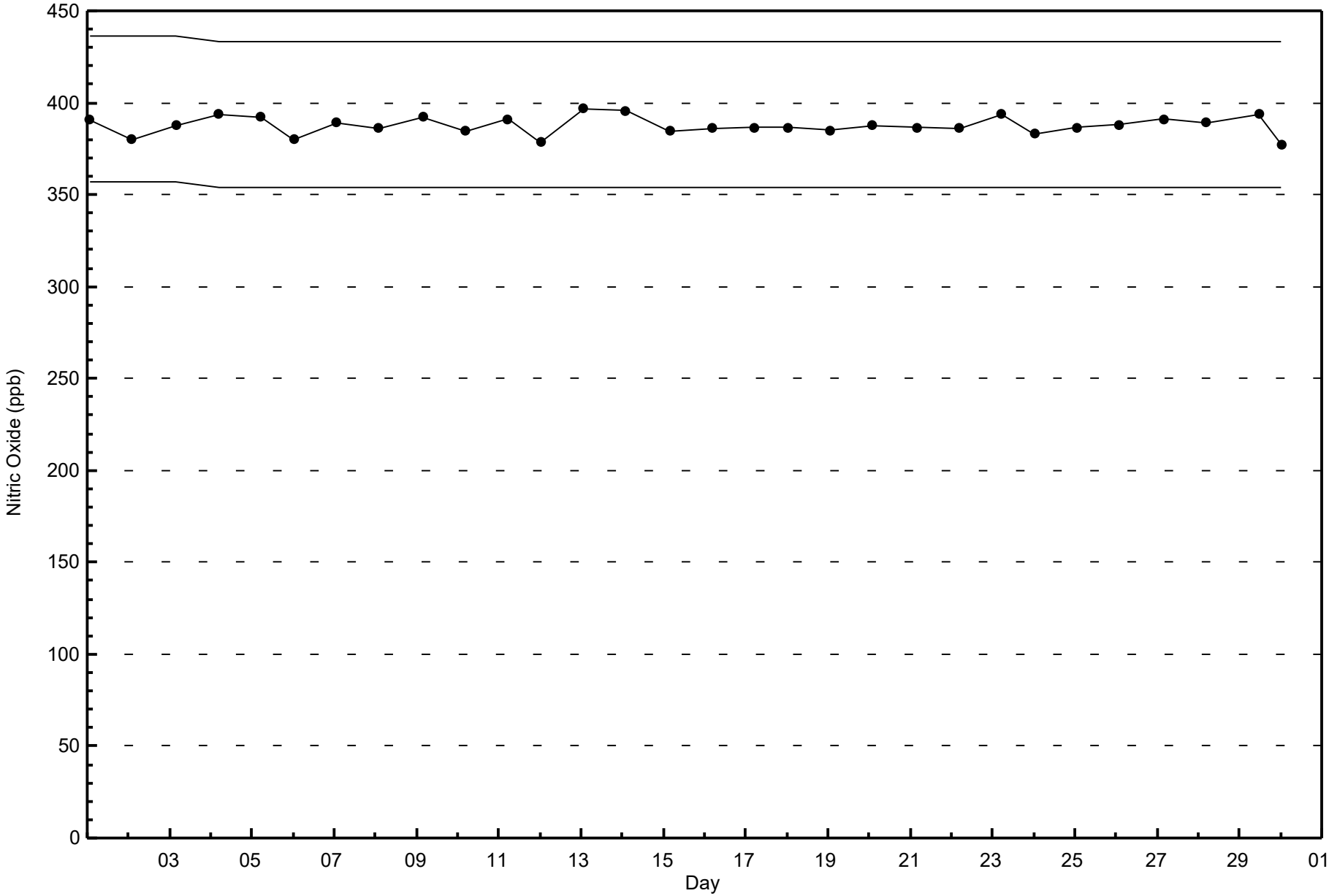


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Patricia McInnes - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Patricia McInnes - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 24.1 ppb on Jun 29 04:00
Maximum Daily Average: 8.9 ppb on Jun 29

Minimum Value: 0.0 ppb on Jun 6 03:00
Minimum Daily Average: 0.7 ppb on Jun 6
Maximum Diurnal Average: 4.9 ppb at hour 5
Minimum Diurnal Average: 1.3 ppb at hour 13
Monthly Average: 2.85 ppb
Percentiles: P_1 = 0.1 P_{10} = 0.5 Q_1 = 1.0 Median = 2.0 Q_3 = 3.2 P_{90} = 6.0 P_{99} = 16.6

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-Jun	1.2	Z	2.0	1.4	0.6	0.8	1.5	3.0	3.0	0.9	1.1	1.2	0.8	0.8	0.7	1.4	1.5	0.9	1.0	0.8	0.9	1.7	2.1	1.7	1.3	3.0
2-Jun	1.4	2.0	Z	1.8	1.9	2.1	2.2	2.3	2.2	3.1	2.3	2.2	2.3	2.5	2.1	2.9	2.5	3.5	3.6	2.4	2.1	2.2	1.3	0.9	2.3	3.6
3-Jun	0.7	0.6	1.0	Z	2.6	2.3	1.5	1.3	1.3	1.4	C	C	C	C	C	C	1.1	2.1	2.7	2.5	4.7	6.5	4.3	1.9	--	6.5
4-Jun	1.4	2.7	6.5	4.9	Z	2.6	1.0	1.0	1.1	0.7	0.5	0.4	0.4	0.3	1.5	0.5	0.6	0.7	0.7	0.9	2.5	7.7	10.5	1.6	2.2	10.5
5-Jun	1.1	0.8	0.9	0.9	1.2	Z	0.4	0.7	0.6	0.8	1.0	0.9	0.5	0.5	1.9	3.5	9.2	7.1	4.7	4.1	4.0	2.3	6.6	0.7	2.4	9.2
6-Jun	Z	0.4	0.0	0.0	0.0	0.1	0.2	0.1	0.3	0.1	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.6	0.7	0.8	1.1	5.7	3.0	1.0	0.7	5.7
7-Jun	5.0	Z	1.6	1.6	2.0	1.4	0.6	0.4	0.4	0.3	0.5	1.0	0.8	1.0	1.2	1.4	3.6	1.7	2.2	2.0	3.7	4.0	2.5	1.6	1.8	5.0
8-Jun	2.4	4.8	Z	4.8	3.3	5.0	5.1	4.4	1.6	0.4	0.4	0.5	0.2	0.2	0.2	0.1	0.2	0.3	0.4	0.2	0.2	0.1	0.1	0.2	1.5	5.1
9-Jun	0.2	0.2	0.1	Z	0.5	0.3	0.4	0.6	0.6	0.4	0.9	0.8	0.5	0.6	0.6	0.5	0.3	0.8	0.7	2.4	6.4	4.0	3.4	4.1	1.3	6.4
10-Jun	2.9	2.5	3.1	4.2	Z	2.6	2.7	3.2	4.1	3.7	3.2	1.2	1.2	2.4	2.8	2.8	1.4	1.6	2.2	2.8	1.4	1.4	2.0	3.5	2.6	4.2
11-Jun	3.4	2.4	5.1	3.4	2.5	Z	2.1	2.8	3.0	3.1	2.2	2.9	2.0	1.8	3.0	1.7	2.4	2.9	3.0	2.6	3.8	4.0	4.6	4.7	3.0	5.1
12-Jun	Z	2.5	1.6	2.1	2.3	5.8	6.1	7.1	5.6	4.5	2.5	1.7	1.6	2.1	2.2	2.3	2.8	3.0	1.7	1.3	2.4	6.0	4.8	10.3	3.6	10.3
13-Jun	8.9	Z	10.0	12.4	11.9	3.3	2.1	2.1	2.4	1.2	0.4	0.0	0.1	0.3	0.6	0.8	0.3	0.4	0.1	0.5	2.9	6.1	4.1	2.6	3.2	12.4
14-Jun	0.3	0.3	Z	0.8	2.7	1.7	0.7	0.9	3.0	2.5	3.7	3.2	2.8	3.2	1.9	2.0	2.2	1.9	1.9	1.9	2.9	5.3	3.2	5.1	2.4	5.3
15-Jun	8.4	11.5	14.5	Z	16.6	18.0	12.0	6.9	3.2	2.5	1.3	0.9	0.9	0.7	1.4	1.1	2.0	7.0	6.0	6.5	3.7	2.8	1.9	0.6	5.7	18.0
16-Jun	0.4	0.4	0.6	0.7	Z	7.3	5.8	2.9	3.4	5.9	3.3	1.8	0.8	0.7	1.0	1.8	2.2	1.3	1.5	1.8	2.8	3.5	4.4	3.9	2.5	7.3
17-Jun	3.0	3.6	5.7	12.5	14.8	Z	6.8	4.1	4.2	2.7	3.5	2.3	1.5	1.2	1.4	1.5	2.0	2.3	2.8	1.6	1.1	1.1	0.5	0.3	3.5	14.8
18-Jun	Z	5.5	10.9	12.4	15.5	13.7	11.0	12.1	9.9	4.1	3.1	0.7	1.1	4.9	2.1	3.1	3.9	2.3	2.9	2.3	2.2	1.3	0.2	0.1	5.4	15.5
19-Jun	0.0	Z	1.0	0.6	0.1	0.5	5.9	3.6	4.9	4.5	5.4	5.2	3.0	2.1	2.6	3.1	3.0	2.5	1.1	2.1	1.9	1.4	2.4	3.5	2.6	5.9
20-Jun	5.6	4.2	Z	8.7	8.8	7.0	5.4	3.3	3.0	3.0	1.9	1.5	1.5	1.3	1.1	1.1	1.7	2.3	1.8	1.2	2.0	0.9	0.3	3.3	3.1	8.8
21-Jun	6.1	2.2	2.7	Z	3.9	6.7	6.3	6.2	4.7	4.3	2.9	3.8	3.0	1.5	1.1	2.1	1.8	1.6	1.2	3.2	2.9	1.7	1.0	3.2	3.2	6.7
22-Jun	13.7	17.6	16.8	12.6	Z	8.7	3.1	2.3	1.5	2.7	1.1	1.2	1.7	2.6	1.9	1.7	1.7	2.2	1.5	2.4	4.5	2.6	1.8	0.6	4.6	17.6
23-Jun	0.6	0.7	1.0	1.5	2.5	Z	0.7	0.9	0.3	0.6	0.5	0.6	0.5	0.6	0.9	0.9	2.8	2.9	3.0	2.3	4.7	4.2	5.2	3.0	1.8	5.2
24-Jun	Z	1.6	1.1	1.2	1.1	2.7	1.8	1.8	0.7	0.8	0.7	0.9	0.9	1.0	0.6	0.7	0.6	0.7	1.9	2.3	1.7	1.5	1.8	2.1	1.3	2.7
25-Jun	3.1	Z	3.1	3.1	3.4	2.3	1.5	1.5	1.5	3.7	1.6	0.9	0.6	0.8	1.1	0.9	1.2	1.5	1.6	2.7	2.8	1.9	1.7	2.1	1.9	3.7
26-Jun	1.5	1.3	Z	1.0	1.3	1.4	1.4	1.7	2.2	1.9	1.7	1.2	0.8	0.9	1.2	1.3	1.5	2.0	2.2	2.5	2.1	1.4	1.0	1.9	1.5	2.5
27-Jun	1.5	1.2	0.9	Z	3.1	2.1	1.0	1.5	1.7	1.0	1.1	0.7	1.0	0.7	0.8	1.1	1.7	2.1	1.9	3.2	7.6	7.7	5.7	3.1	2.3	7.7
28-Jun	2.8	2.9	0.3	0.4	Z	8.4	10.6	9.3	7.9	6.7	2.2	1.1	1.3	0.9	0.8	1.0	2.4	3.0	2.7	3.3	7.1	6.3	6.0	1.7	3.9	10.6
29-Jun	6.0	15.5	22.2	24.1	18.5	17.2	16.1	12.2	8.0	8.6	16.1	Z	4.8	2.6	1.9	2.1	2.0	2.2	3.4	3.6	3.3	5.7	6.3	2.5	8.9	24.1
30-Jun	Z	3.0	1.5	2.0	0.9	0.6	3.3	4.9	2.8	2.2	1.5	0.9	0.6	0.8	2.1	4.5	3.6	2.6	4.6	4.5	3.4	5.2	4.2	2.1	2.7	5.2
	3.3	3.6	4.6	4.8	4.9	4.8	4.0	3.5	3.0	2.6	2.3	1.4	1.3	1.4	1.4	1.7	2.1	2.2	2.2	2.4	3.1	3.5	3.2	2.5	Diurnal Average	
	13.7	17.6	22.2	24.1	18.5	18.0	16.1	12.2	9.9	8.6	16.1	5.2	4.8	4.9	3.0	4.5	9.2	7.1	6.0	6.5	7.6	7.7	10.5	10.3	Diurnal Maximum	

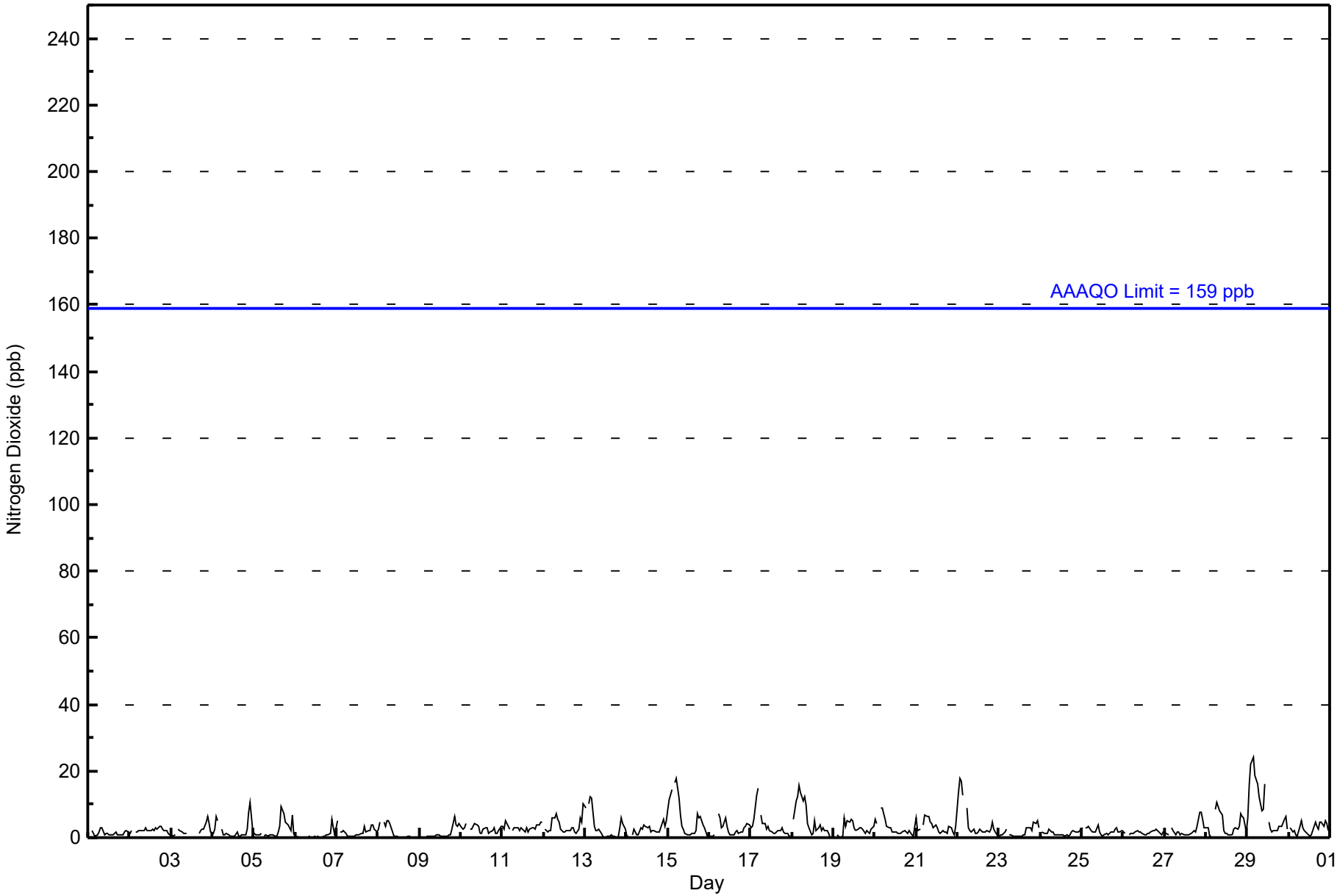
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Patricia McInnes - June 2026



Nitrogen Dioxide (NO_2) - ppb

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 Dioxide (NO_2) - ppb

Patricia McInnes - June 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	129	33	23	26	27	63	53	17	25	38	33	31	21	31	34	98	682
21 - 40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	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	129	33	23	26	27	63	53	17	25	38	33	31	21	31	34	100	684

Total Number of Valid Hours: 684

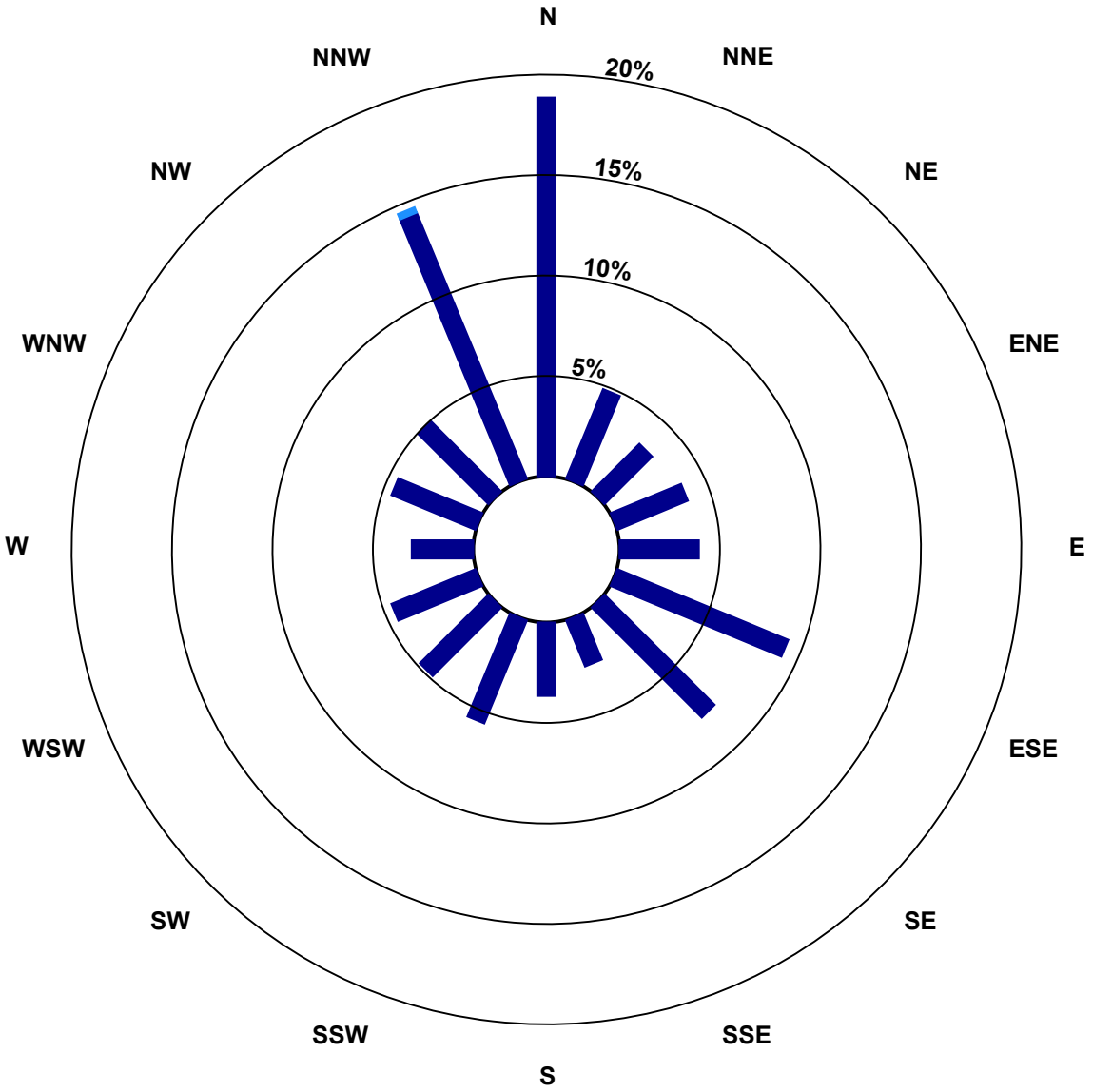
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Patricia McInnes



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

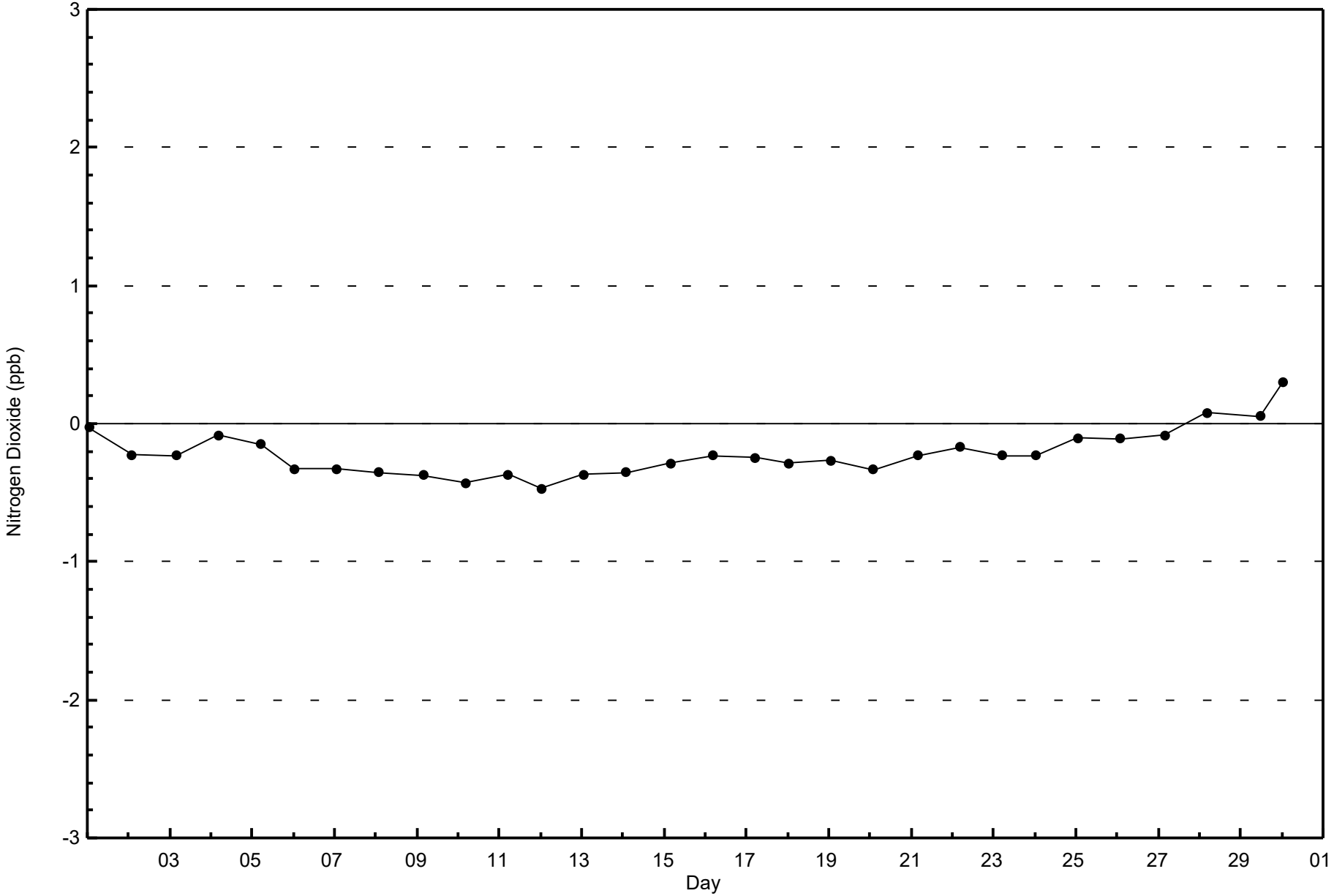
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Patricia McInnes - June 2026

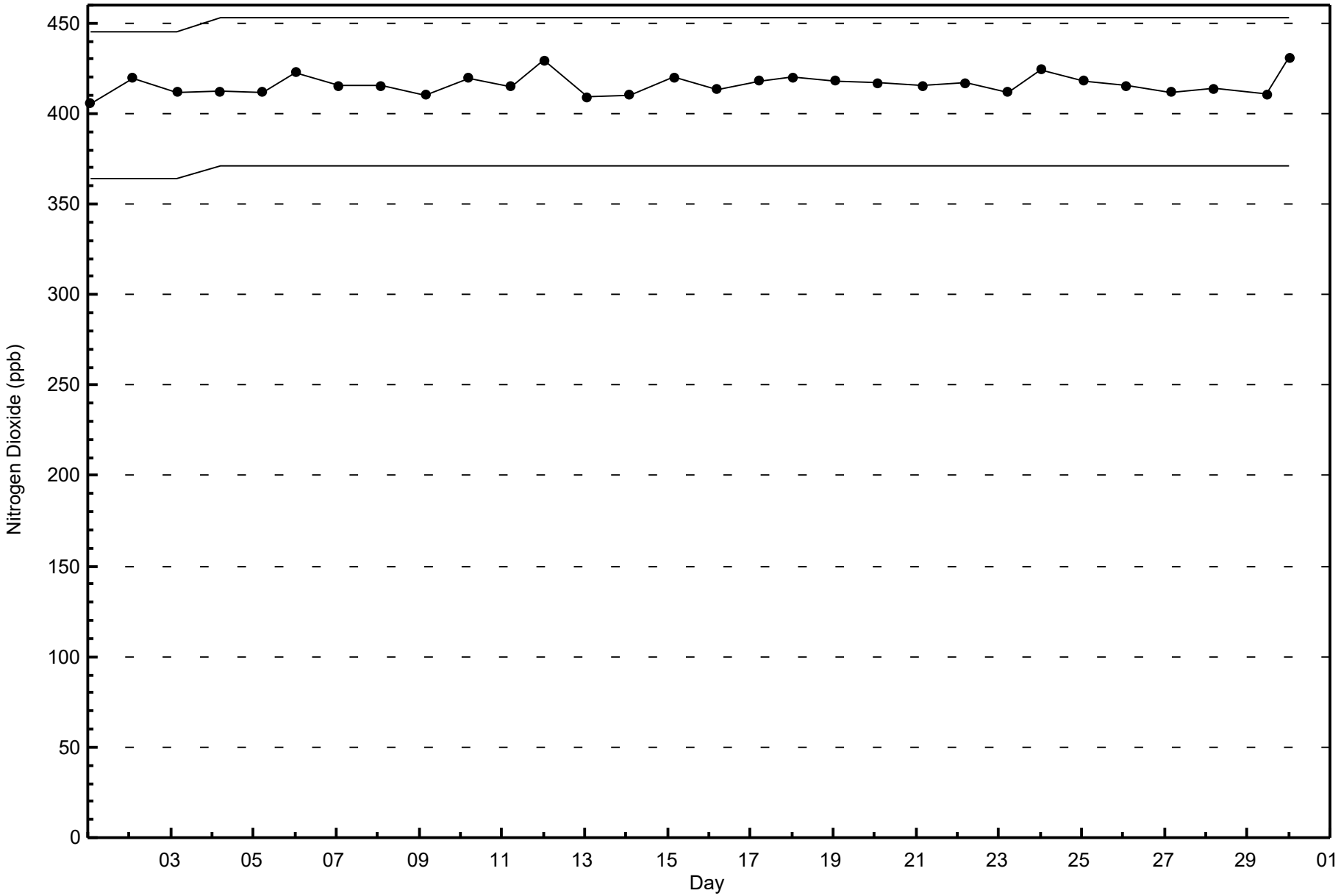


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Patricia McInnes - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Patricia McInnes - June 2026

Maximum Value: 32.3 ppb on Jun 15 06:00

Maximum Daily Average: 10.1 ppb on Jun 29

Minimum Value: 0.0 ppb on Jun 6 04:00

Minimum Daily Average: 0.8 ppb on Jun 6

Maximum Diurnal Average: 7.0 ppb at hour 6

Minimum Diurnal Average: 1.7 ppb at hour 13

Monthly Average: 3.64 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.6 Q_1 = 1.2 Median = 2.5 Q_3 = 4.1 P_{90} = 7.7 P_{99} = 21.7

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-Jun	1.2	Z	2.0	1.4	0.8	1.0	1.8	3.3	3.3	1.2	1.4	1.4	1.2	1.2	1.0	1.9	1.8	1.2	1.3	1.2	1.2	1.9	2.5	1.9	1.6	3.3
2-Jun	1.6	2.1	Z	1.9	2.0	2.5	2.8	3.2	2.8	3.9	3.0	3.1	3.1	3.4	2.9	4.0	3.6	5.1	5.0	3.1	2.5	2.3	1.3	0.9	2.9	5.1
3-Jun	0.7	0.6	1.0	Z	3.4	3.3	2.0	2.1	2.0	2.2	C	C	C	C	C	C	2.0	3.1	4.0	4.1	7.4	7.5	4.7	2.2	--	7.5
4-Jun	1.6	3.1	10.7	7.6	Z	6.2	3.2	2.9	2.2	1.3	1.1	0.7	0.5	0.3	2.8	0.9	1.2	0.9	0.8	1.0	2.6	8.5	11.1	1.6	3.2	11.1
5-Jun	1.1	0.8	1.0	1.2	1.7	Z	0.7	0.9	0.7	0.8	1.3	1.3	0.5	0.6	2.0	4.1	12.5	9.3	4.9	4.1	4.7	2.4	13.2	1.7	3.1	13.2
6-Jun	Z	0.5	0.0	0.0	0.0	0.1	0.2	0.1	0.3	0.1	0.3	0.4	0.2	0.4	0.3	0.3	0.3	0.7	0.8	0.9	1.3	6.7	3.4	1.0	0.8	6.7
7-Jun	5.6	Z	2.2	2.1	2.4	1.8	0.8	0.4	0.5	0.3	0.5	1.4	1.3	1.2	1.3	1.6	3.7	1.9	2.9	2.1	3.8	4.1	2.8	1.7	2.0	5.6
8-Jun	2.4	4.8	Z	4.8	3.3	5.2	5.4	4.7	1.8	0.4	0.5	0.7	0.2	0.3	0.3	0.2	0.2	0.3	0.4	0.3	0.3	0.3	0.1	0.2	1.6	5.4
9-Jun	0.2	0.3	0.1	Z	0.5	0.3	0.7	1.1	0.9	0.8	1.4	1.2	0.7	0.9	1.0	0.8	0.4	1.0	0.8	2.7	6.8	4.1	3.8	4.1	1.5	6.8
10-Jun	3.0	2.5	3.2	4.3	Z	3.4	3.5	4.8	6.4	5.4	4.3	1.4	1.7	3.7	4.2	3.7	2.5	2.5	3.2	3.4	1.7	1.5	2.0	3.5	3.3	6.4
11-Jun	3.4	2.4	5.1	3.5	2.7	Z	2.8	3.4	3.7	4.4	4.9	4.0	2.8	2.9	4.7	2.5	3.0	3.5	3.4	2.9	3.9	4.0	4.6	4.8	3.6	5.1
12-Jun	Z	3.9	2.4	3.1	2.4	7.4	8.3	9.5	8.1	7.2	3.3	2.1	1.9	2.5	2.6	2.6	3.3	3.5	1.7	1.3	2.4	6.5	5.0	14.0	4.6	14.0
13-Jun	13.1	Z	14.8	19.9	21.6	4.2	2.8	3.3	3.3	1.4	0.4	0.0	0.1	0.5	0.7	1.0	0.3	0.4	0.1	0.5	3.2	7.0	4.4	2.6	4.6	21.6
14-Jun	0.3	0.3	Z	0.9	3.1	2.1	0.8	1.1	3.8	3.0	4.5	3.7	2.9	3.7	2.0	2.1	2.5	2.1	2.1	1.9	2.9	5.4	3.2	5.3	2.6	5.4
15-Jun	8.9	11.9	15.8	Z	23.1	32.3	21.9	10.9	4.9	3.4	1.8	1.3	1.0	0.9	1.9	1.5	2.4	8.6	6.8	7.6	4.2	3.0	1.9	0.7	7.7	32.3
16-Jun	0.5	0.6	0.7	0.7	Z	8.7	7.2	3.5	4.3	7.6	4.3	2.6	0.8	0.7	1.0	1.9	2.5	1.8	1.6	1.9	3.0	3.5	4.5	3.9	3.0	8.7
17-Jun	3.0	3.6	5.7	12.7	17.7	Z	10.9	6.6	6.5	3.9	5.0	3.1	2.0	1.8	1.8	1.8	2.4	2.7	3.1	1.7	1.1	1.2	0.6	0.3	4.3	17.7
18-Jun	Z	5.5	11.0	12.6	18.8	21.1	19.6	19.6	15.8	5.8	6.7	1.0	1.4	7.2	3.0	4.1	5.6	3.0	4.1	2.7	2.3	1.4	0.2	0.1	7.5	21.1
19-Jun	0.0	Z	1.0	0.6	0.1	0.7	9.9	6.0	8.5	7.5	8.6	7.8	4.2	2.7	3.5	4.8	5.9	5.4	1.4	2.6	2.2	1.4	2.4	3.5	3.9	9.9
20-Jun	5.7	4.2	Z	9.4	13.6	15.0	12.2	6.8	5.6	5.7	3.4	2.4	2.3	2.0	1.5	1.5	2.2	3.0	2.6	1.7	2.3	1.0	0.4	3.5	4.7	15.0
21-Jun	6.7	2.3	2.8	Z	4.3	8.2	8.6	10.0	8.0	7.7	4.6	6.2	4.4	1.9	1.5	2.4	2.6	2.1	1.3	3.9	3.0	1.7	1.0	3.2	4.3	10.0
22-Jun	16.3	25.0	20.6	15.4	Z	14.5	5.2	3.8	2.4	4.5	1.6	1.9	3.4	3.9	2.8	2.8	2.7	3.4	2.5	3.3	5.3	3.2	2.0	0.8	6.4	25.0
23-Jun	0.9	0.9	1.2	1.8	2.9	Z	1.5	1.8	0.6	0.9	0.6	0.6	0.5	0.6	1.1	1.0	2.9	3.7	4.6	2.9	5.7	4.6	6.4	3.3	2.2	6.4
24-Jun	Z	1.6	1.1	1.2	1.2	3.2	2.0	2.3	0.7	0.9	0.7	0.9	0.9	1.3	0.8	0.8	0.6	0.7	2.5	3.6	2.5	1.9	2.3	2.3	1.6	3.6
25-Jun	3.2	Z	3.2	3.4	4.0	2.9	2.0	1.9	2.0	5.4	2.1	0.9	0.8	1.0	1.2	1.3	1.4	1.8	1.7	3.0	3.0	2.0	1.7	2.1	2.3	5.4
26-Jun	1.5	1.3	Z	1.0	1.3	1.5	1.6	2.1	2.9	2.3	2.2	1.4	1.0	1.0	1.4	1.8	2.4	2.8	3.1	3.4	2.4	1.5	1.0	2.0	1.9	3.4
27-Jun	1.5	1.2	0.9	Z	3.6	2.9	1.4	2.4	2.8	1.6	1.8	1.0	1.3	1.0	1.0	1.7	2.2	2.9	2.5	4.3	9.9	8.2	5.7	3.1	2.8	9.9
28-Jun	2.8	2.9	0.3	0.4	Z	10.4	13.9	12.6	10.8	8.4	2.6	1.9	2.6	1.3	1.7	1.3	3.1	3.7	3.0	3.7	7.7	6.9	8.4	1.7	4.9	13.9
29-Jun	6.0	15.5	22.3	24.5	20.5	21.8	21.3	17.5	10.3	10.2	19.7	Z	5.6	2.6	2.1	2.4	2.2	2.6	3.7	4.1	3.6	5.9	6.3	2.5	10.1	24.5
30-Jun	Z	3.0	1.6	2.1	1.0	0.7	4.4	6.2	3.4	2.7	1.7	1.0	0.6	0.8	2.1	4.6	3.8	2.6	5.4	5.3	4.5	5.7	4.2	2.1	3.0	6.2
	3.6	4.0	5.2	5.5	6.2	7.0	6.0	5.2	4.3	3.7	3.2	2.0	1.7	1.8	1.9	2.1	2.7	2.9	2.7	2.8	3.6	3.9	3.7	2.7	Diurnal Average	
	16.3	25.0	22.3	24.5	23.1	32.3	21.9	19.6	15.8	10.2	19.7	7.8	5.6	7.2	4.7	4.8	12.5	9.3	6.8	7.6	9.9	8.5	13.2	14.0	Diurnal Maximum	

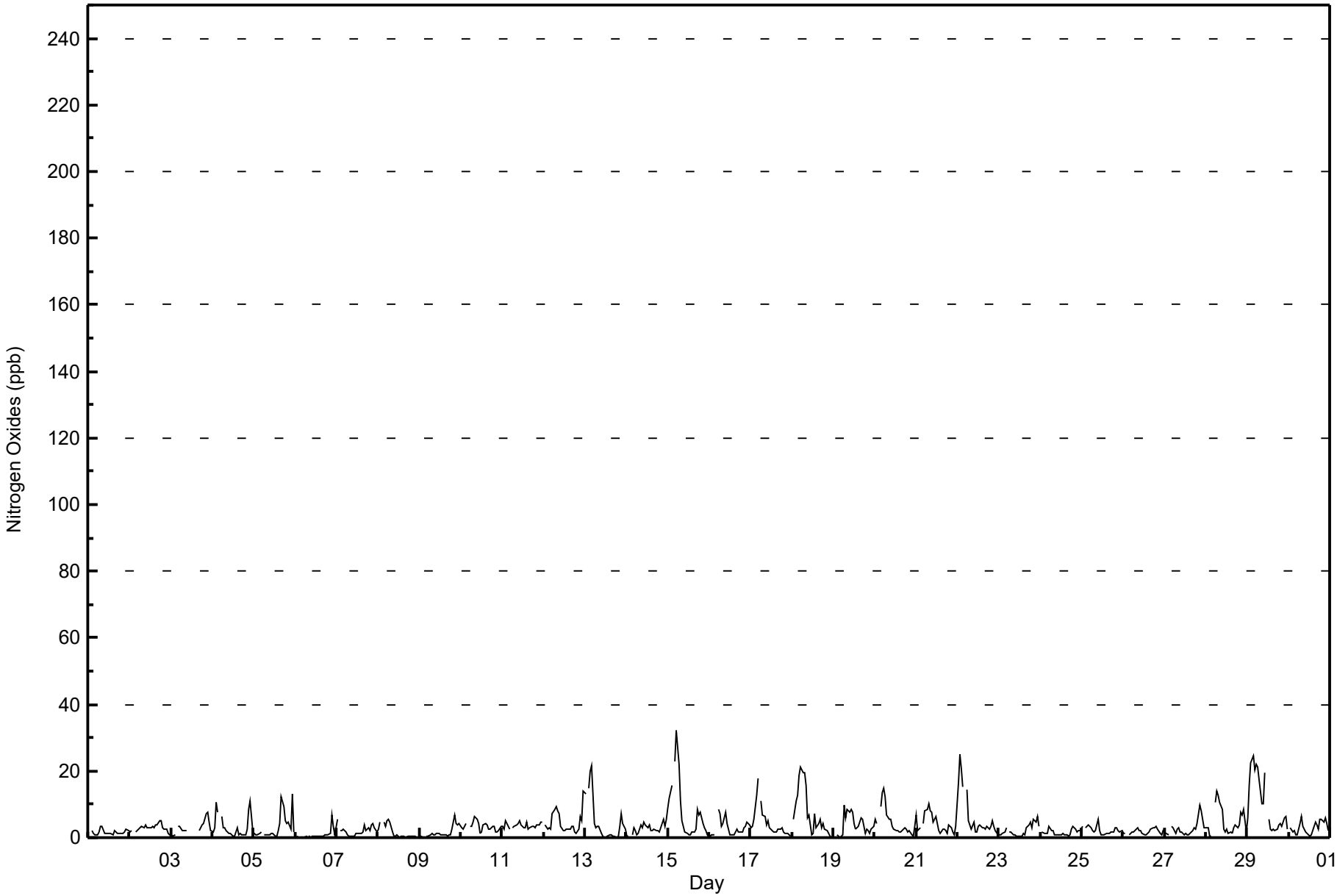
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Patricia McInnes - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	673	98.39	98.39
21 - 40	11	1.61	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

Patricia McInnes - June 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	127	32	22	25	27	63	53	17	25	37	32	31	21	31	34	96	673
21 - 40	2	1	1	1	0	0	0	0	0	1	1	0	0	0	0	4	11
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	129	33	23	26	27	63	53	17	25	38	33	31	21	31	34	100	684

Total Number of Valid Hours: 684

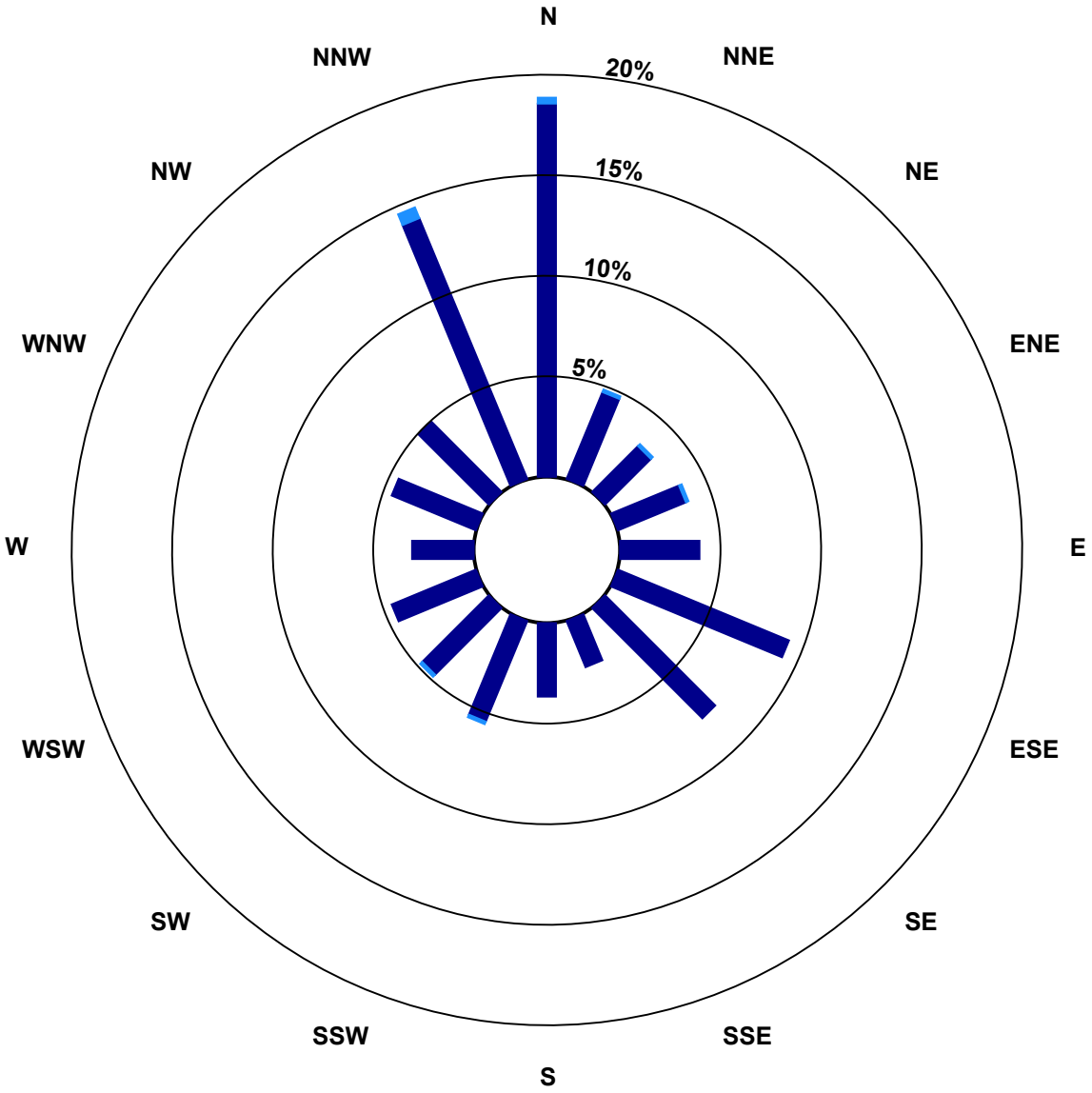
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Patricia McInnes



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

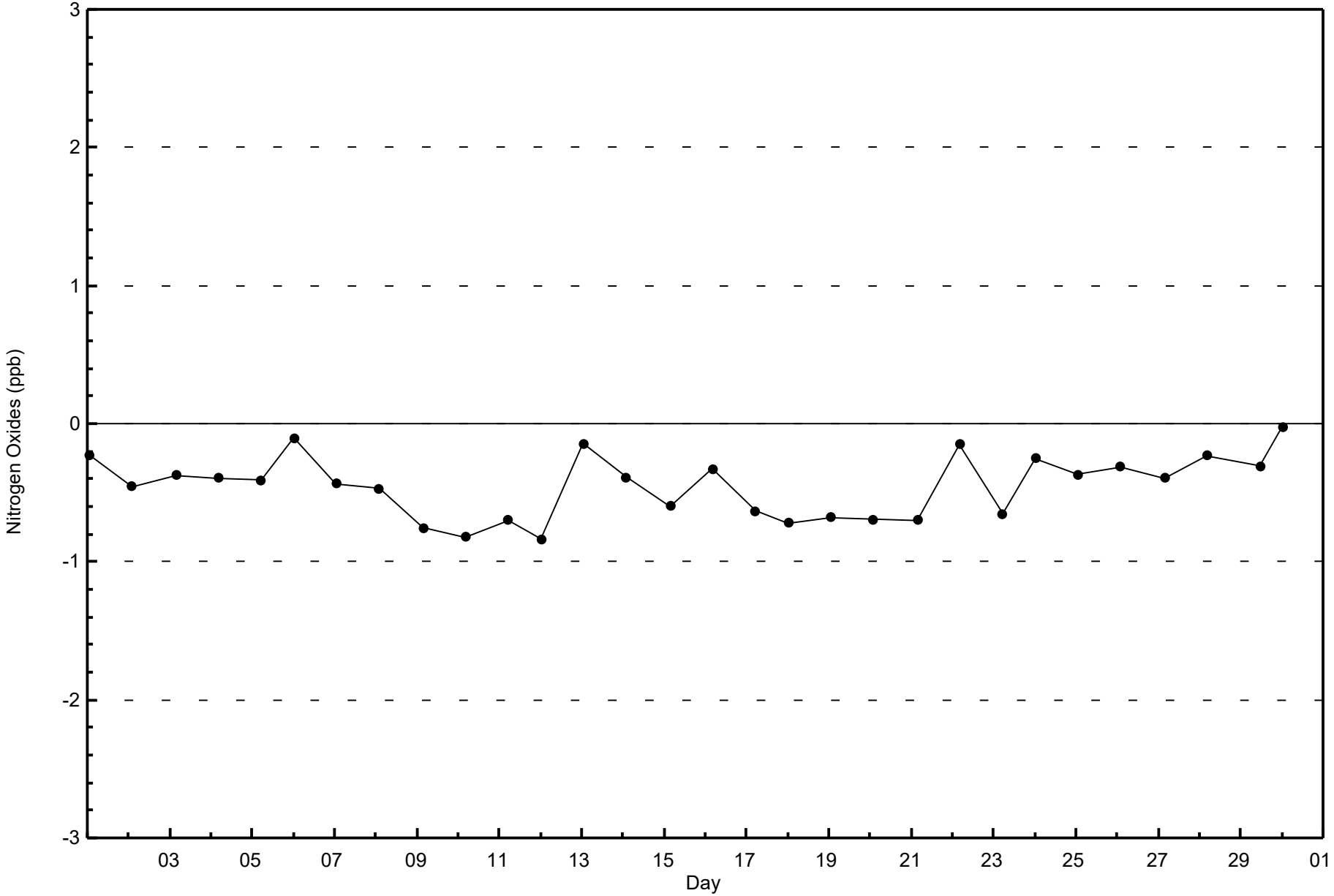
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Patricia McInnes - June 2026

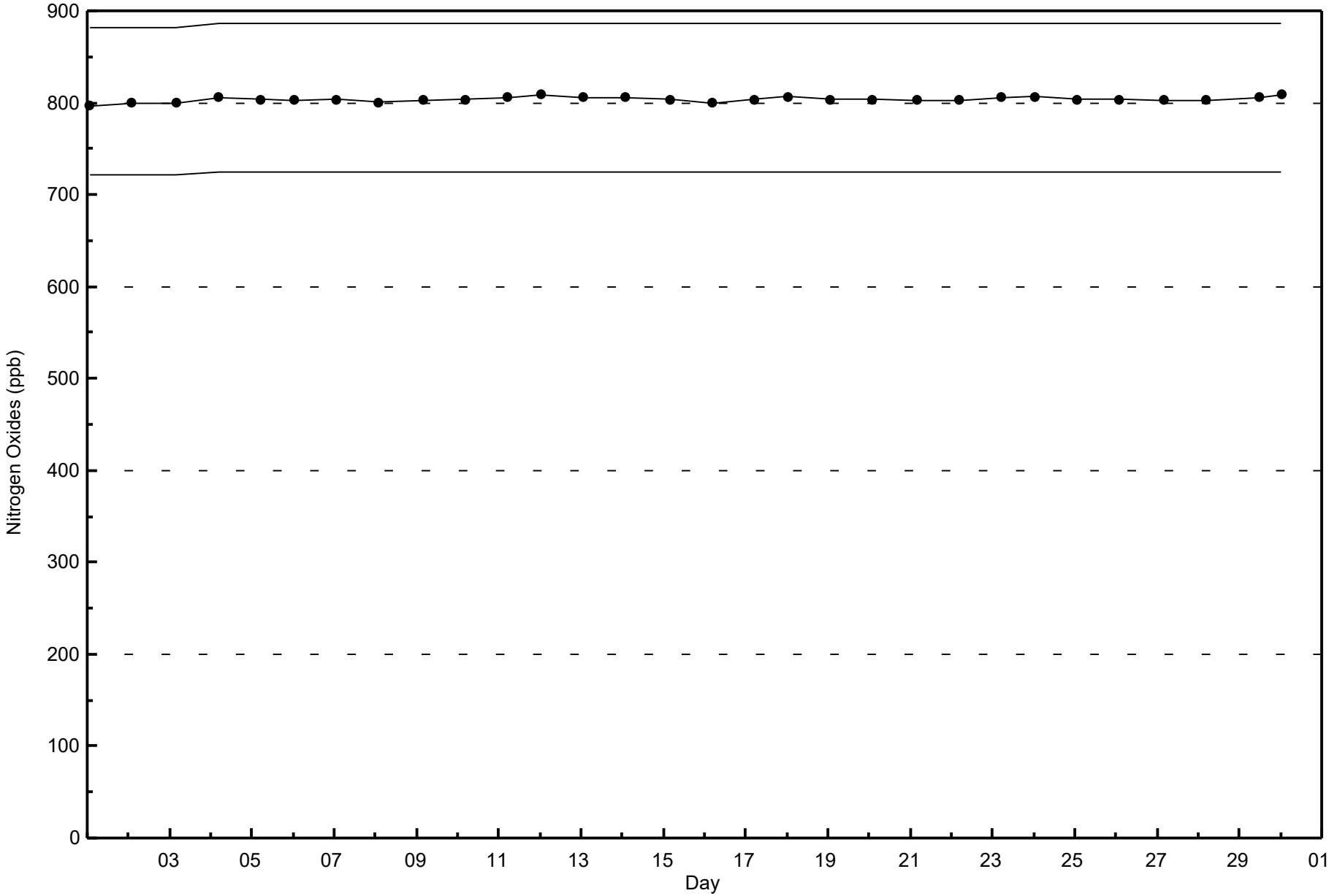


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Patricia McInnes - June 2026



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

Maximum Value: 0.0 ppb on Jun 1 04:00

Maximum Daily Average: 0.0 ppb on Jun 1

Minimum Value: 0.0 ppb on Jun 1 04:00

Minimum Daily Average: 0.0 ppb on Jun 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:	611
Hours of Missing Data:	109
Hours of Calibration:	39
Percent Operational Time:	90.3

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-Jun	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-Jun	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-Jun	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-Jun	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
5-Jun	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
6-Jun	0.0	0.0	0.0	0.0	0.0	Z	RE	RE	RE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7-Jun	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-Jun	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
9-Jun	0.0	0.0	Z	RE	RE	0.0	0.0	0.0	0.0	C	C	C	C	C	C	C	C	C	RE	RE	0.0	0.0	0.0	0.0	--	0.0
10-Jun	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
11-Jun	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-Jun	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
13-Jun	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-Jun	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-Jun	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-Jun	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
17-Jun	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
18-Jun	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-Jun	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
20-Jun	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-Jun	0.0	0.0	Z	RE	RE	RE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22-Jun	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
23-Jun	0.0	0.0	0.0	0.0	Z	RE	RE	RE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24-Jun	0.0	0.0	0.0	0.0	0.0	Z	RE	RE	RE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25-Jun	Z	RE	RE	RE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26-Jun	0.0	Z	RE	RE	RE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27-Jun	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
28-Jun	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
29-Jun	0.0	0.0	0.0	0.0	0.0	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
30-Jun	0.0	0.0	0.0	0.0	0.0	Z	RE	RE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

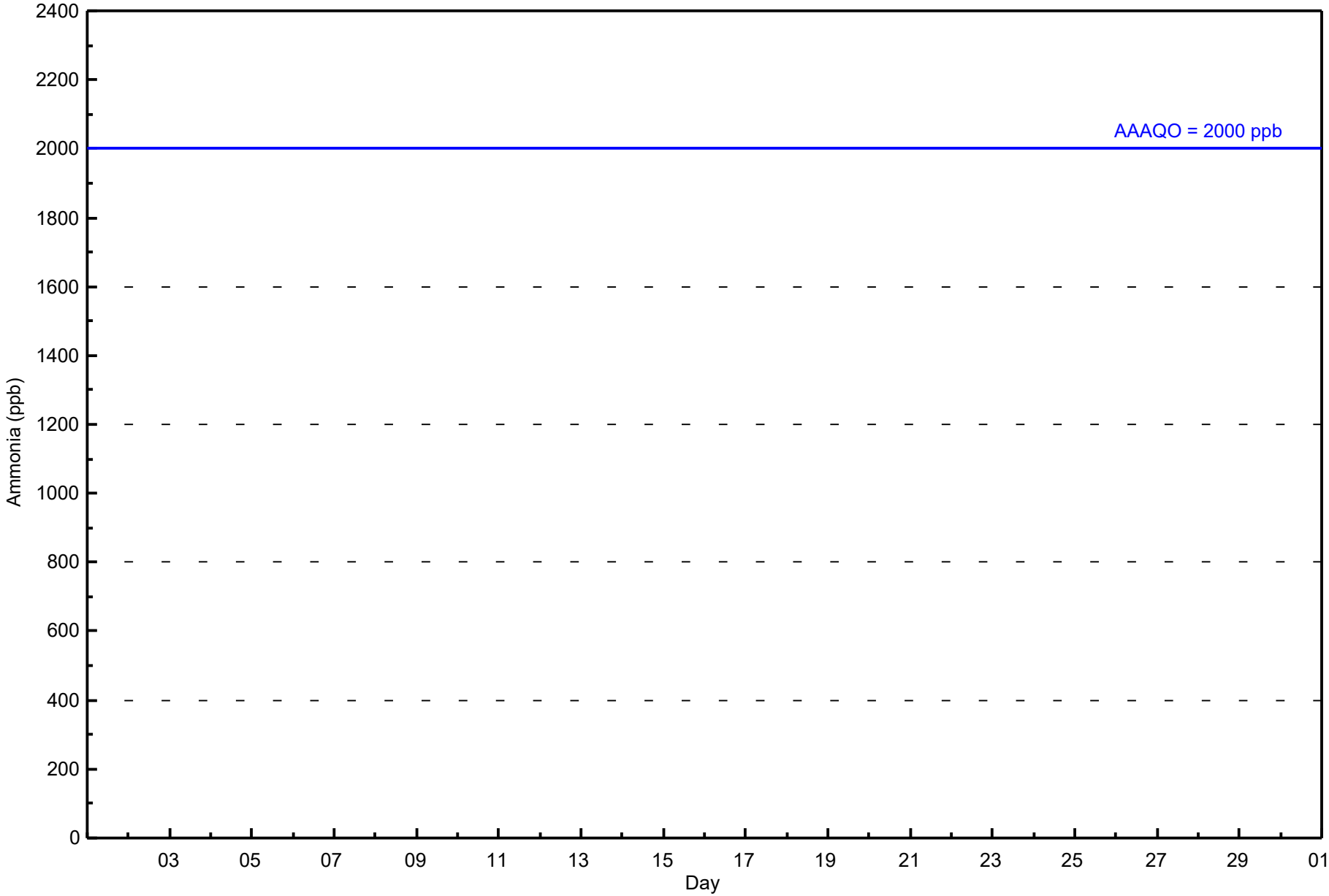
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 2000 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ammonia (NH_3) - ppb

Patricia McInnes - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 5	611	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: 611

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 - 5	113	29	20	26	23	64	51	15	22	33	31	25	17	24	31	87	611
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	113	29	20	26	23	64	51	15	22	33	31	25	17	24	31	87	611

Total Number of Valid Hours: 611

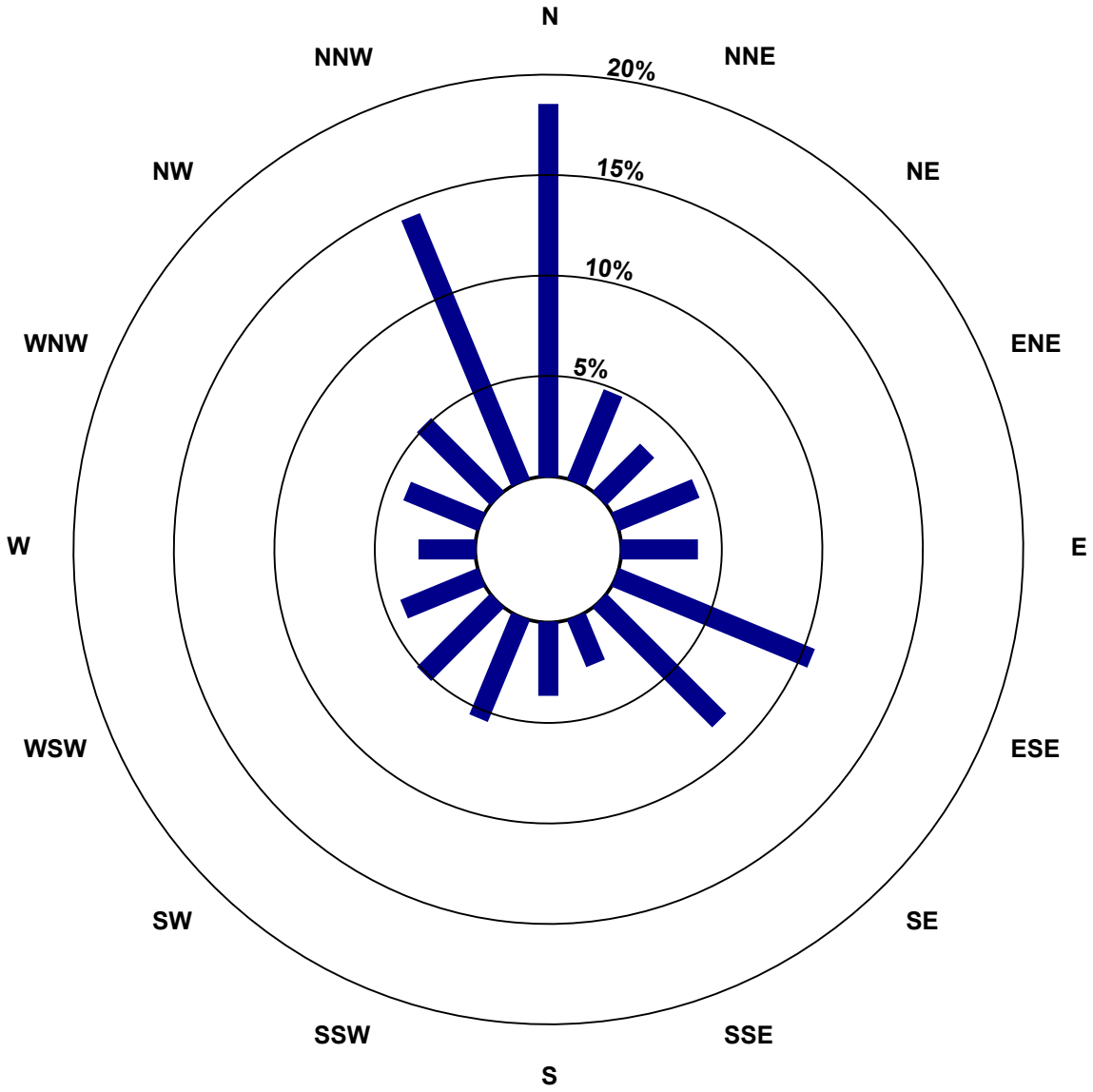
Total Number of Hours: 720

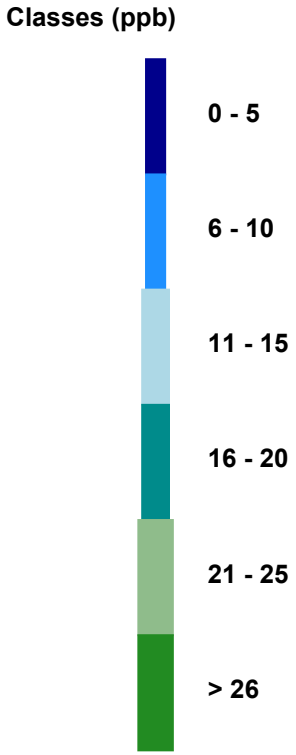
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Ammonia (NH_3) - ppb

Patricia McInnes





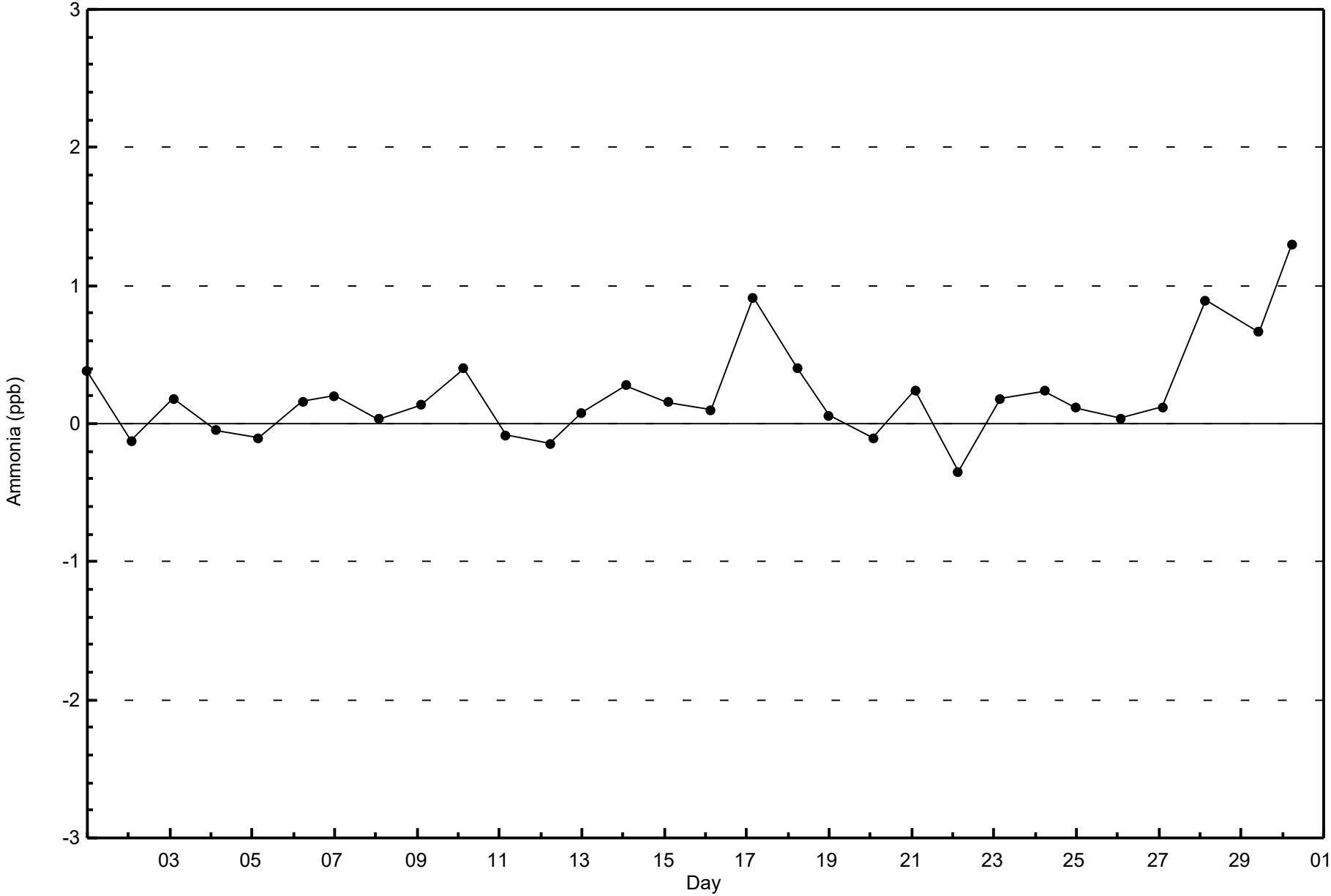
Total Number of Valid Hours: 611

Wood Buffalo Environmental Association

Zero Responses

Ammonia (NH_3) - ppb

Patricia McInnes - June 2026

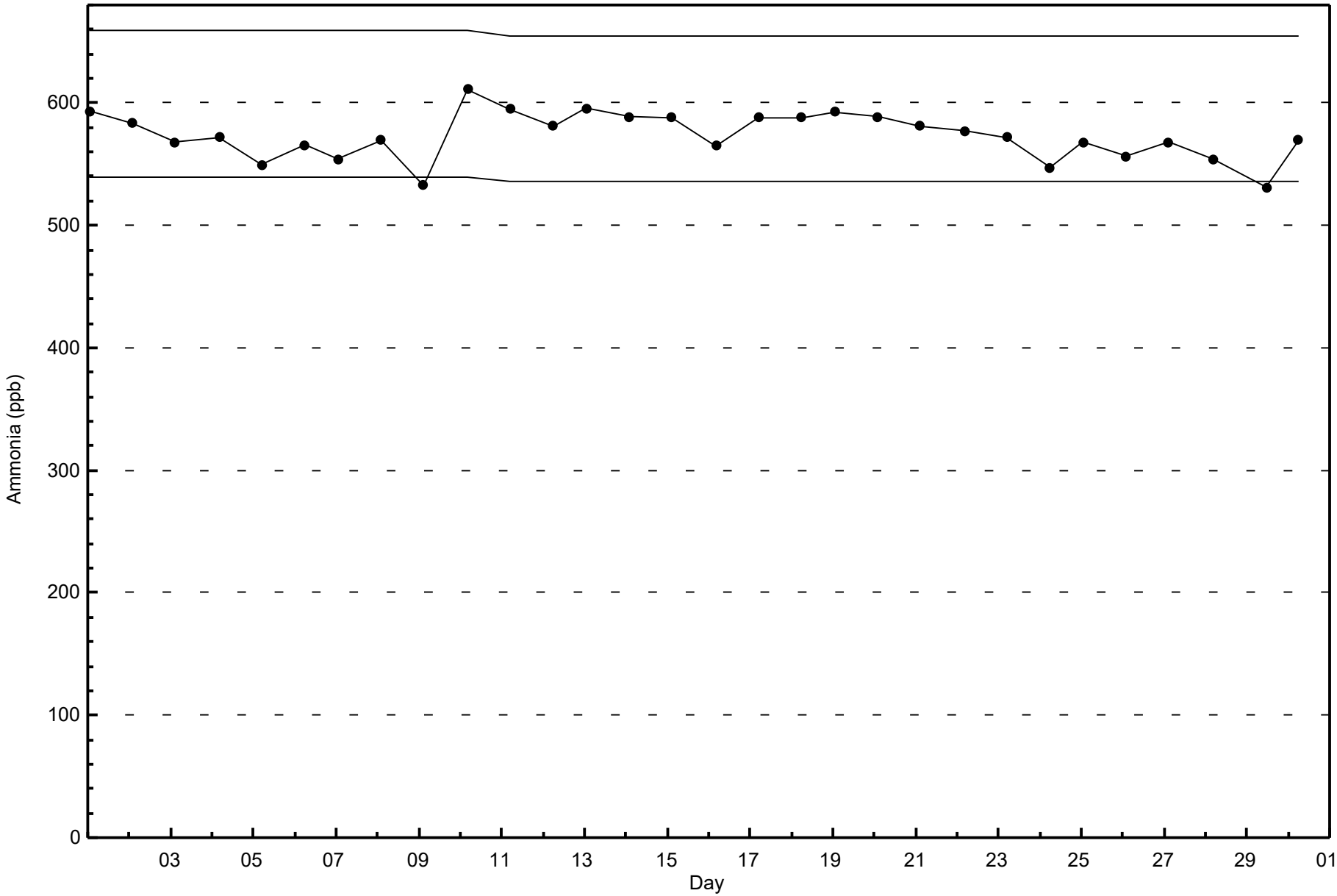


Wood Buffalo Environmental Association

Span Responses

Ammonia (NH_3) - ppb

Patricia McInnes - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Patricia McInnes - June 2026

Number of Exceedances (AAAQO): 1-hr: 1 24-hr: 2

Maximum Value: 81.7 $\mu g/m^3$ on Jun 30 22:00

Maximum Daily Average: 54.0 $\mu g/m^3$ on Jun 30

Minimum Value: 0.8 $\mu g/m^3$ on Jun 8 11:00

Minimum Daily Average: 1.2 $\mu g/m^3$ on Jun 2

Maximum Diurnal Average: 10.9 $\mu g/m^3$ at hour 22

Minimum Diurnal Average: 6.8 $\mu g/m^3$ at hour 11

Monthly Average: 8.57 $\mu g/m^3$

Percentiles: P_1 = 0.9 P_{10} = 1.8 Q_1 = 2.8 Median = 4.6 Q_3 = 6.7 P_{90} = 14.3 P_{99} = 64.9

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-Jun	1.3	0.8	1.7	1.6	0.8	0.9	1.5	3.5	3.4	1.8	2.0	2.4	2.6	2.5	2.2	2.0	2.3	2.1	2.4	1.7	1.3	1.0	1.2	1.3	1.8	3.5
2-Jun	1.0	1.0	0.8	0.8	0.9	1.0	1.3	1.2	1.4	1.6	1.2	1.2	1.3	1.0	0.9	1.1	1.1	1.3	1.2	1.3	1.3	1.5	1.5	1.6	1.2	1.6
3-Jun	1.5	1.9	2.1	2.2	2.3	2.8	2.8	2.9	2.9	3.1	3.2	3.5	3.4	4.9	4.8	5.1	4.8	8.1	6.8	6.4	8.5	6.2	6.9	7.4	4.4	8.5
4-Jun	9.6	7.3	7.5	5.7	4.8	13.3	10.1	10.9	11.9	12.4	11.6	12.6	12.8	10.6	10.1	8.0	7.3	7.1	6.8	7.2	7.3	10.1	19.8	8.5	9.7	19.8
5-Jun	7.2	7.4	7.3	7.8	7.9	7.8	6.6	5.5	5.7	5.2	4.5	3.7	2.8	2.7	3.1	2.9	3.0	4.8	4.2	4.0	4.9	3.5	2.8	2.5	4.9	7.9
6-Jun	2.4	2.2	2.1	1.8	1.6	1.7	1.5	1.7	2.1	1.5	1.8	1.6	1.8	1.9	2.1	1.9	2.2	2.1	2.0	2.4	2.2	3.1	3.1	2.4	2.1	3.1
7-Jun	3.0	2.7	2.6	2.6	2.5	2.4	2.2	2.1	2.0	2.2	2.3	2.6	2.2	2.2	2.2	3.0	4.7	3.5	2.9	3.2	5.5	4.6	3.0	3.2	2.9	5.5
8-Jun	4.1	5.2	4.7	7.1	5.5	8.0	8.0	7.3	3.1	1.4	0.8	0.9	2.0	3.1	3.1	2.9	2.7	2.8	2.7	2.1	1.5	1.6	1.9	1.9	3.5	8.0
9-Jun	2.0	2.1	2.2	1.9	2.0	2.0	2.0	2.2	1.9	1.6	1.5	1.5	1.6	1.6	1.9	2.1	C	2.2	2.8	3.6	4.9	4.4	4.3	5.0	2.5	5.0
10-Jun	4.0	3.8	4.0	4.3	4.4	4.6	4.5	4.7	6.3	4.5	4.8	2.9	1.7	2.6	2.9	2.4	1.2	1.6	1.5	1.9	1.9	1.4	1.8	1.9	3.1	6.3
11-Jun	1.8	1.4	1.7	1.7	1.6	2.2	1.6	2.5	2.8	2.9	1.9	3.1	2.9	2.7	3.1	2.2	2.6	3.2	3.1	2.8	2.9	3.1	3.4	3.7	2.5	3.7
12-Jun	2.3	1.7	1.8	1.9	2.6	3.5	3.0	2.9	5.4	5.3	3.9	4.3	4.5	5.0	5.1	5.2	5.4	5.2	3.9	3.4	4.0	4.3	5.9	6.7	4.0	6.7
13-Jun	5.6	4.8	11.2	21.5	6.1	3.7	3.4	3.6	4.8	3.1	2.4	1.8	1.8	2.0	2.3	2.6	2.3	2.4	2.5	2.8	3.3	5.2	4.4	4.8	4.5	21.5
14-Jun	3.0	3.0	3.1	3.1	3.6	3.5	3.4	3.6	5.6	5.6	6.4	6.8	6.1	7.6	6.7	5.6	5.8	6.3	6.2	4.9	5.7	7.7	6.9	8.3	5.3	8.3
15-Jun	10.7	13.7	14.6	12.0	11.8	12.9	11.2	9.1	6.1	4.9	3.6	3.7	3.9	4.2	4.9	6.0	7.8	14.3	13.4	12.1	10.5	9.5	8.9	6.2	9.0	14.6
16-Jun	5.2	5.2	5.1	5.2	5.4	6.5	6.6	4.8	4.1	4.5	4.2	4.8	6.1	7.5	9.0	11.0	9.6	4.7	5.2	4.1	6.0	7.4	9.0	8.3	6.2	11.0
17-Jun	4.9	4.7	5.0	8.8	8.0	7.2	5.4	4.0	3.6	3.4	3.7	3.8	3.6	3.9	4.0	4.2	4.0	3.9	4.8	4.7	3.8	3.8	3.1	2.9	4.6	8.8
18-Jun	2.7	4.3	6.7	6.9	6.3	5.3	5.6	6.5	6.9	4.0	3.0	2.2	2.5	4.7	3.6	4.2	6.3	4.4	5.4	4.2	4.1	3.1	2.0	2.0	4.5	6.9
19-Jun	2.0	2.2	2.6	2.5	2.3	2.4	4.4	3.2	3.4	3.2	4.6	5.9	5.6	5.1	5.3	4.1	3.2	3.1	2.6	4.3	4.0	1.8	2.4	3.4	3.5	5.9
20-Jun	4.2	3.4	3.3	3.4	3.8	3.1	3.0	2.8	2.8	3.7	3.3	2.5	3.0	3.6	4.6	5.0	5.5	5.1	2.0	2.0	2.5	2.1	1.4	3.9	3.3	5.5
21-Jun	5.8	2.7	4.3	2.8	3.1	3.9	3.1	2.9	2.7	2.9	3.0	3.2	3.4	4.1	4.5	6.4	5.9	4.3	4.9	5.4	6.1	5.5	4.1	4.3	4.1	6.4
22-Jun	8.0	6.9	5.8	5.4	6.1	5.8	4.6	4.9	4.9	5.6	3.9	3.6	5.0	7.0	6.3	7.7	4.6	4.4	3.7	4.3	7.8	7.8	7.8	5.8	5.7	8.0
23-Jun	5.5	5.0	4.9	5.3	5.8	5.4	5.3	5.7	5.0	5.1	6.3	8.0	8.6	9.3	9.6	8.7	10.4	7.9	8.1	8.1	10.4	18.1	12.3	8.3	7.8	18.1
24-Jun	8.1	7.8	6.4	6.3	6.3	6.8	6.1	5.6	4.5	4.5	4.7	4.9	4.6	4.8	4.9	5.0	5.3	5.6	6.2	6.2	6.0	5.8	6.1	8.4	5.9	8.4
25-Jun	10.3	14.3	10.7	9.2	6.8	6.3	6.1	6.1	5.9	6.5	4.6	4.2	3.7	3.9	4.3	4.3	4.6	4.5	4.6	5.5	6.1	5.2	6.3	6.5	6.3	14.3
26-Jun	6.9	6.1	6.0	6.3	6.5	6.7	6.7	6.6	6.8	6.0	4.6	4.1	3.9	4.1	4.2	4.1	4.8	4.6	4.8	5.1	5.0	5.2	5.5	6.0	5.4	6.9
27-Jun	5.6	5.9	5.7	6.0	6.2	5.8	5.5	5.9	6.0	5.5	5.2	5.1	4.9	4.7	3.9	4.0	4.7	5.0	5.1	6.2	7.9	9.1	8.2	10.8	5.9	10.8
28-Jun	8.0	7.4	5.9	6.0	6.7	14.6	18.6	19.2	17.6	16.8	15.4	16.9	17.5	18.7	21.1	27.4	53.0	53.2	45.3	40.8	46.6	37.9	39.0	44.0	24.9	53.2
29-Jun	49.7	51.3	51.8	48.7	42.5	43.0	44.7	47.7	47.7	53.3	52.9	54.9	50.5	58.5	65.1	55.4	38.0	33.4	58.7	69.1	69.2	65.0	63.9	59.4	53.1	69.2
30-Jun	62.2	64.4	58.0	56.4	53.7	56.0	54.4	48.7	42.1	32.1	31.4	40.1	44.2	48.5	52.2	65.4	54.9	55.1	54.9	46.6	54.7	81.7	72.4	65.6	54.0	81.7
	8.3	8.3	8.3	8.5	7.6	8.3	8.1	7.9	7.6	7.1	6.8	7.2	7.3	8.1	8.6	9.0	9.2	8.9	9.3	9.2	10.2	10.9	10.6	10.2	Diurnal Average	
	62.2	64.4	58.0	56.4	53.7	56.0	54.4	48.7	47.7	53.3	52.9	54.9	50.5	58.5	65.1	65.4	54.9	55.1	58.7	69.1	69.2	81.7	72.4	65.6	Diurnal Maximum	

C - Calibration

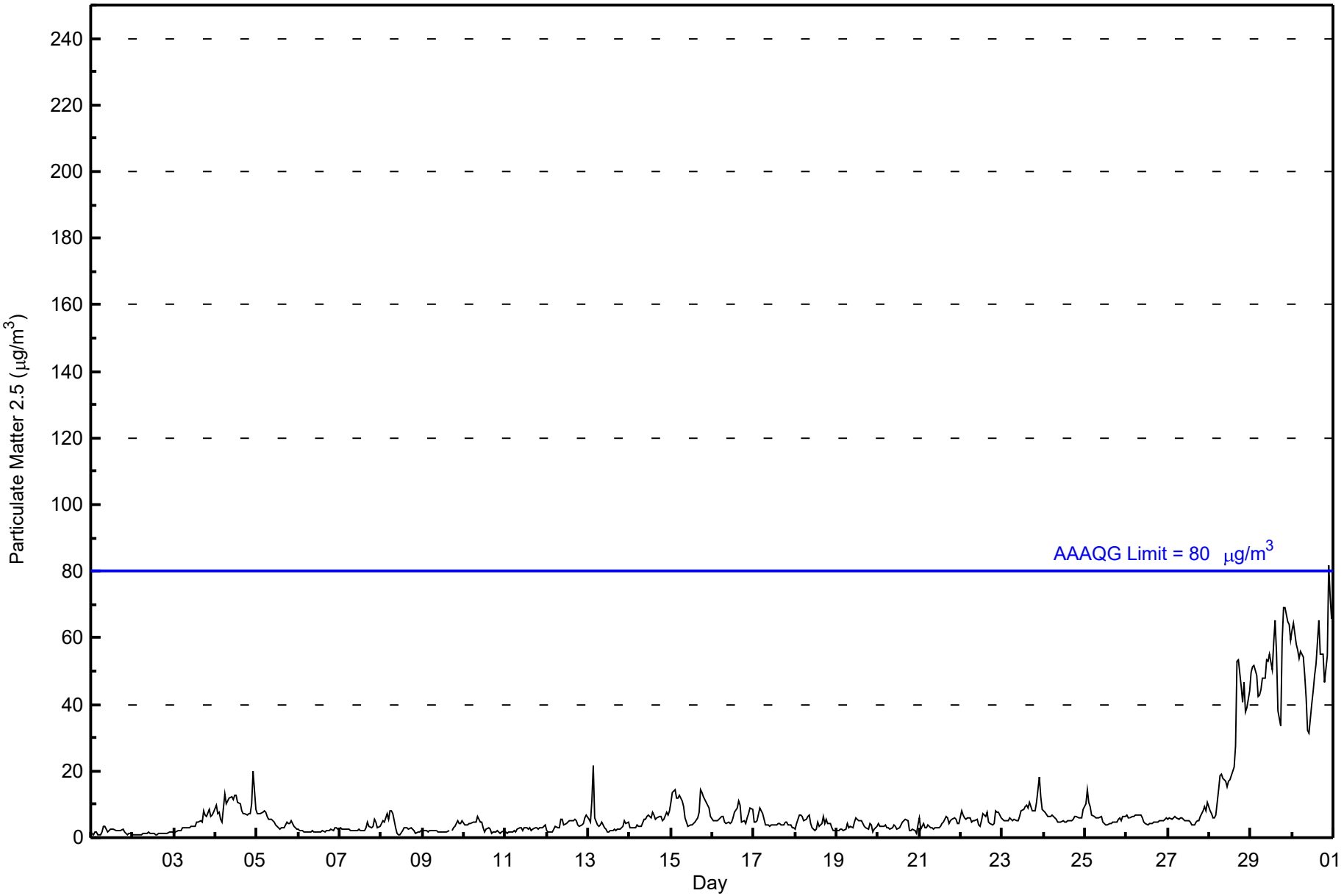
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Patricia McInnes - June 2026



Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	453	63.00	63.00
6 - 15	198	27.54	90.54
16 - 25	11	1.53	92.07
26 - 80	56	7.79	99.86
> 81.0	1	0.14	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Patricia McInnes - June 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	105	20	12	13	10	30	29	9	17	19	20	29	22	26	21	71	453
6 - 15	23	4	7	6	10	28	27	7	7	22	15	4	1	5	9	23	198
16 - 25	0	3	1	3	1	0	0	0	2	0	0	0	0	0	0	1	11
26 - 80	4	7	4	5	6	9	2	1	0	0	0	0	0	2	6	10	56
> 81.0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Totals	132	34	24	27	27	67	59	17	26	41	35	33	23	33	36	105	719

Total Number of Valid Hours: 719

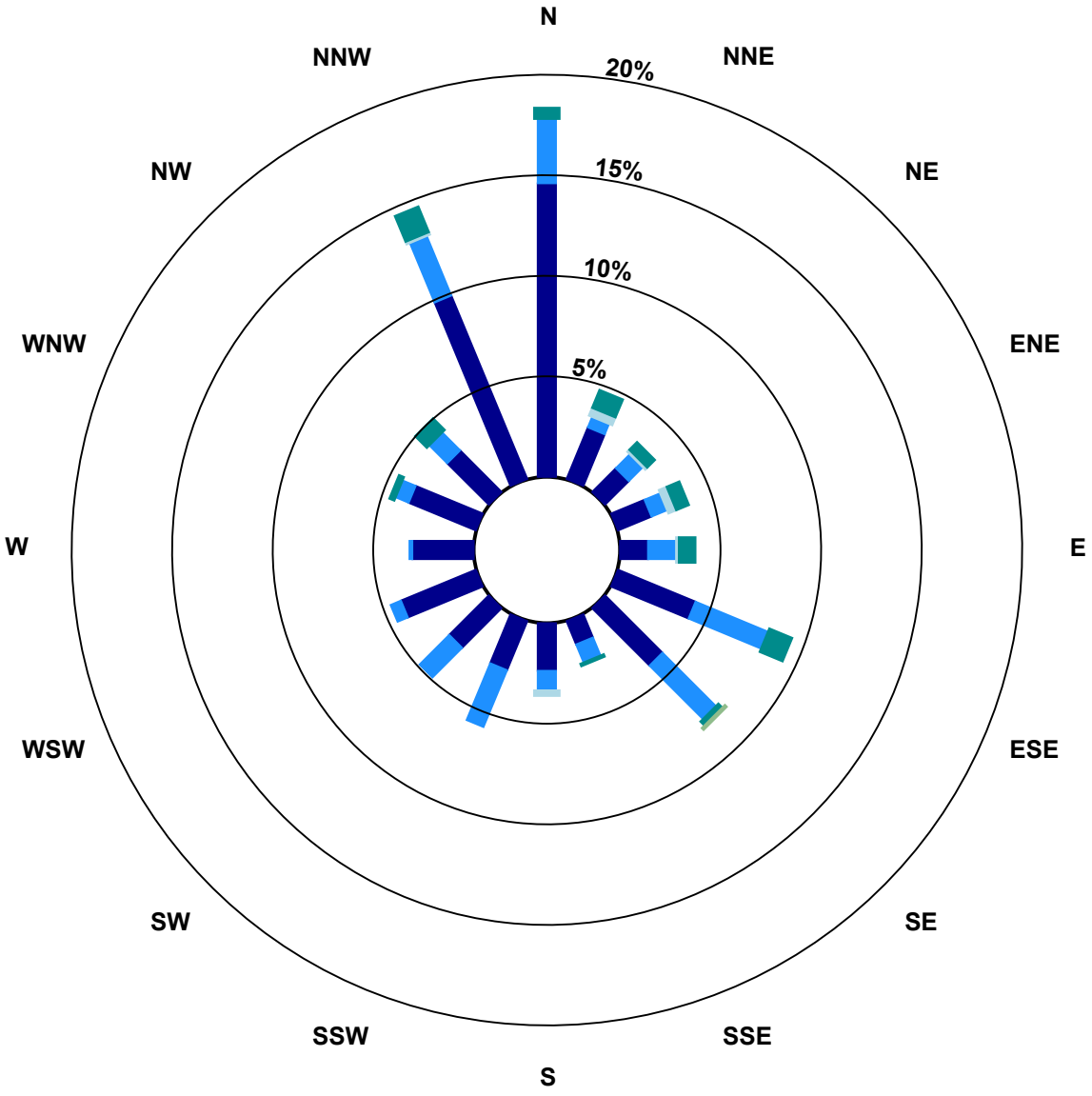
Total Number of Hours: 720

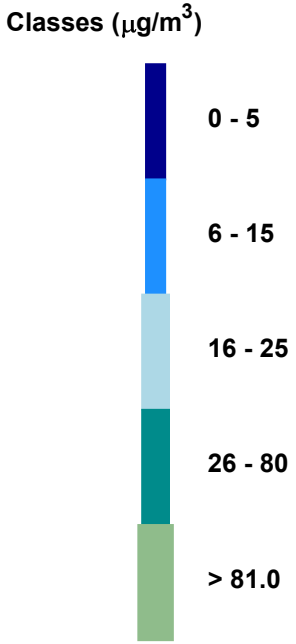
Wood Buffalo Environmental Association

Wind Rose Jun 2026

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

Patricia McInnes





Total Number of Valid Hours: 719

Maximum Value: 30.5 C on Jun 28 16:00

Maximum Daily Average: 23.5 C on Jun 29

Minimum Value: 5.6 C on Jun 7 04:00

Minimum Daily Average: 9.0 C on Jun 11

Maximum Diurnal Average: 20.4 C at hour 16

Minimum Diurnal Average: 10.8 C at hour 4

Monthly Average: 16.04 C

Percentiles: P_1 = 6.8 P_{10} = 9.4 Q_1 = 11.3 Median = 15.0 Q_3 = 20.1 P_{90} = 24.8 P_{99} = 29.8

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

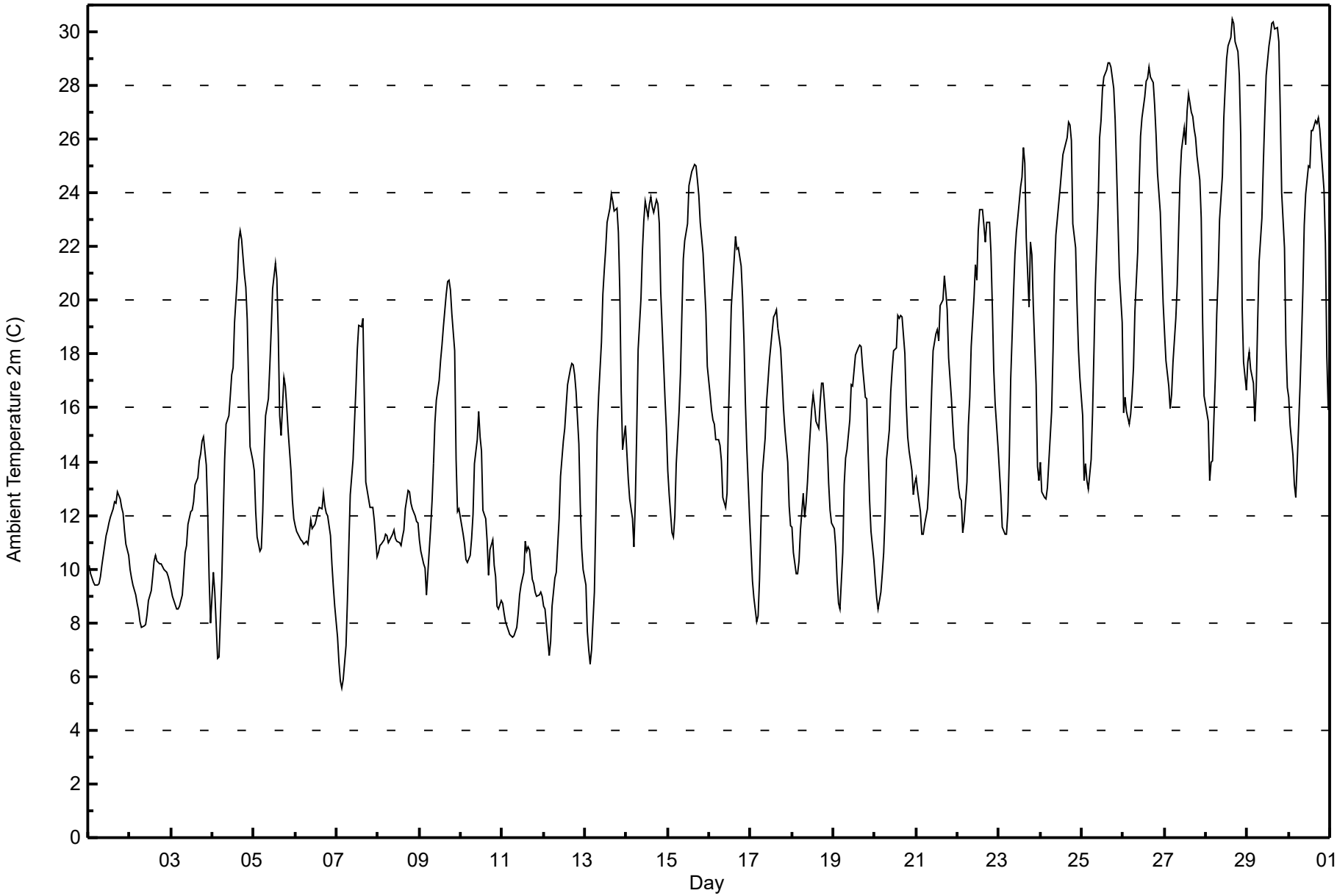
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	10.2	9.8	9.7	9.5	9.4	9.4	9.4	9.7	10.1	10.9	11.3	11.4	11.7	11.9	12.2	12.5	12.4	12.9	12.6	12.3	12.1	11.5	10.9	10.5	11.0	12.9
2-Jun	10.0	9.7	9.4	9.0	8.7	8.5	8.1	7.8	7.9	8.0	8.3	8.8	9.2	9.7	10.3	10.5	10.3	10.2	10.2	10.1	10.0	9.9	9.7	9.5	9.3	10.5
3-Jun	9.3	9.0	8.7	8.5	8.5	8.6	9.0	9.8	10.6	10.9	11.7	12.1	12.2	12.5	13.1	13.4	14.0	14.3	14.7	14.9	13.9	12.1	9.7	8.0	11.2	14.9
4-Jun	9.9	9.1	7.9	6.6	6.7	9.7	11.9	14.1	15.4	15.7	16.4	17.2	17.5	19.2	20.8	22.2	22.6	22.3	21.0	20.5	19.3	16.8	14.6	14.1	15.5	22.6
5-Jun	13.7	12.1	11.2	10.7	10.8	12.1	14.3	15.7	16.3	17.5	18.9	20.4	21.4	20.8	18.7	15.7	15.0	17.1	16.8	16.0	15.1	13.7	12.6	11.9	15.4	21.4
6-Jun	11.6	11.4	11.2	11.1	11.0	10.9	11.0	10.9	11.3	11.8	11.5	11.7	11.9	12.2	12.3	12.3	12.8	12.4	12.1	12.0	11.3	10.2	9.3	8.6	11.4	12.8
7-Jun	7.5	6.5	5.8	5.6	5.9	7.1	8.8	10.9	12.8	14.1	15.4	16.7	18.2	19.1	19.0	19.3	16.3	13.3	12.6	12.3	12.3	12.3	11.8	10.5	12.2	19.3
8-Jun	10.6	10.9	10.9	11.1	11.3	11.2	11.0	11.1	11.3	11.4	11.1	11.1	11.0	10.9	11.2	11.4	12.2	12.9	12.8	12.5	12.2	12.0	11.8	11.7	11.5	12.9
9-Jun	11.1	10.7	10.2	10.0	9.1	9.9	11.6	12.6	13.9	15.5	16.3	17.0	17.8	18.3	19.0	20.2	20.7	20.7	20.4	19.5	18.1	14.1	12.2	12.3	15.0	20.7
10-Jun	11.6	11.3	10.9	10.3	10.2	10.5	11.1	12.0	13.9	14.8	15.9	14.9	14.4	12.2	11.8	11.1	9.8	10.7	11.1	10.2	9.7	8.6	8.5	8.8	11.4	15.9
11-Jun	8.7	8.3	8.1	7.7	7.6	7.5	7.5	7.5	7.8	8.3	9.0	9.4	9.9	11.0	10.7	10.8	10.7	9.6	9.5	9.1	9.0	9.0	9.1	9.0	9.0	11.0
12-Jun	8.6	8.5	7.4	6.8	7.3	8.6	9.7	9.9	10.9	11.9	13.5	14.8	15.2	16.1	16.9	17.5	17.6	17.6	17.2	16.6	14.7	12.4	10.8	10.0	12.5	17.6
13-Jun	9.4	7.7	7.0	6.4	7.0	9.2	11.9	15.1	16.5	18.5	20.2	21.1	21.9	22.9	23.5	23.9	23.7	23.3	23.4	22.5	20.4	16.6	14.4	15.3	16.7	23.9
14-Jun	14.3	13.3	12.6	11.9	10.8	12.5	15.2	18.2	20.1	21.8	23.0	23.7	23.1	23.6	23.9	23.5	23.3	23.7	23.6	22.8	20.4	17.7	16.4	15.2	18.9	23.9
15-Jun	13.6	12.8	11.3	11.2	12.0	13.9	15.9	17.3	19.5	21.5	22.2	22.9	24.3	24.5	24.8	25.1	25.0	24.5	23.9	22.9	21.8	20.7	19.6	17.5	19.5	25.1
16-Jun	16.5	15.9	15.5	15.4	14.8	14.8	14.6	14.0	12.6	12.3	12.8	15.7	17.6	19.8	21.5	22.4	21.9	21.9	21.3	20.1	18.5	16.2	14.5	11.9	16.8	22.4
17-Jun	10.7	9.5	8.9	8.0	8.2	9.6	11.7	13.6	14.9	16.2	17.0	17.8	18.9	19.4	19.5	19.7	19.0	18.2	17.2	16.0	15.2	14.0	12.3	11.6	14.5	19.7
18-Jun	11.6	10.6	9.8	9.8	10.3	11.5	12.8	11.9	12.5	13.2	14.3	16.0	16.5	16.1	15.5	15.2	16.2	16.9	16.9	16.3	14.7	13.2	12.2	11.7	13.6	16.9
19-Jun	11.5	10.8	9.6	8.7	8.5	10.6	13.1	14.1	14.5	15.5	16.8	16.8	17.4	18.0	18.2	18.3	18.3	17.5	16.4	16.4	14.3	12.5	11.4	10.4	14.2	18.3
20-Jun	9.6	8.9	8.5	9.1	9.8	10.6	12.0	14.1	15.2	16.6	17.5	18.1	18.2	19.4	19.3	19.4	19.4	18.0	16.1	14.9	14.4	13.6	12.8	13.2	14.5	19.4
21-Jun	13.4	12.9	12.1	11.3	11.3	11.7	12.2	13.2	14.9	16.7	18.1	18.7	18.9	18.5	19.8	20.0	20.9	20.3	19.7	17.8	16.3	15.4	14.5	14.3	16.0	20.9
22-Jun	13.0	12.7	12.5	11.3	11.8	13.2	15.3	16.4	18.3	20.1	21.3	20.8	22.6	23.4	23.4	22.8	22.2	22.9	22.9	21.8	19.7	17.4	16.1	14.5	18.2	23.4
23-Jun	13.7	12.8	11.5	11.3	11.3	12.1	14.2	17.1	20.3	21.7	22.5	23.1	24.2	24.6	25.7	25.1	22.3	19.8	22.2	21.7	19.8	16.9	13.8	13.3	18.4	25.7
24-Jun	14.0	12.9	12.6	12.6	13.0	14.0	15.9	18.1	21.0	22.4	23.0	24.1	24.8	25.4	25.6	26.1	26.6	26.5	26.0	22.9	21.9	19.8	18.2	17.1	20.2	26.6
25-Jun	15.7	13.3	13.9	13.3	13.0	14.1	15.8	18.2	20.6	23.7	26.0	26.7	27.9	28.3	28.6	28.9	28.8	28.7	27.9	26.8	24.9	22.9	21.0	19.2	22.0	28.9
26-Jun	15.8	16.4	15.9	15.4	15.8	16.5	17.5	19.6	21.8	24.2	26.1	26.8	27.6	28.2	28.3	28.7	28.3	28.1	27.2	26.2	24.7	23.3	21.6	19.9	22.7	28.7
27-Jun	18.8	17.8	16.8	16.0	16.5	17.7	19.3	20.6	22.6	24.5	25.6	26.5	25.8	27.1	27.7	27.0	26.9	26.4	26.0	25.4	24.5	23.0	19.3	16.5	22.4	27.7
28-Jun	15.8	15.5	13.3	14.0	14.0	17.2	19.5	20.9	23.0	24.6	26.8	27.9	29.0	29.5	29.8	30.5	30.3	29.6	29.3	28.4	26.1	19.8	17.7	16.6	22.9	30.5
29-Jun	17.7	18.1	17.4	16.9	15.5	16.8	19.2	21.4	23.1	25.1	26.8	28.4	29.5	29.8	30.3	30.4	30.1	30.2	29.6	27.1	24.0	22.0	18.4	16.7	23.5	30.4
30-Jun	16.4	15.4	14.2	13.1	12.7	13.9	16.8	18.4	20.3	22.8	23.9	25.0	25.0	26.3	26.3	26.7	26.6	26.8	26.4	25.6	24.1	22.1	17.9	15.9	20.9	26.8
	12.5	11.8	11.2	10.8	10.8	11.8	13.2	14.5	15.8	17.1	18.1	18.9	19.4	20.0	20.3	20.4	20.1	19.9	19.6	18.7	17.4	15.7	14.1	13.2	Diurnal Average	
	18.8	18.1	17.4	16.9	16.5	17.7	19.5	21.4	23.1	25.1	26.8	28.4	29.5	29.8	30.3	30.5	30.3	30.2	29.6	28.4	26.1	23.3	21.6	19.9	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Patricia McInnes - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	107	14.86	14.86
10 - 20	431	59.86	74.72
> 20	182	25.28	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 - June 2026

Maximum Value: 99.4 % on Jun 1 03:00

Maximum Daily Average: 91.0 % on Jun 6

Minimum Value: 23.1 % on Jun 28 16:00

Minimum Daily Average: 45.0 % on Jun 14

Maximum Diurnal Average: 84.4 % at hour 5

Minimum Diurnal Average: 48.8 % at hour 16

Monthly Average: 64.44 %

Percentiles: P_1 = 25.9 P_{10} = 33.7 Q_1 = 46.3 Median = 67.7 Q_3 = 82.3 P_{90} = 91.4 P_{99} = 98.8

Hours in Service:	720
Hours of Data:	709
Hours of Missing Data:	11
Hours of Calibration:	0
Percent Operational Time:	98.5

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	OR	97.0	99.4	98.8	97.6	98.2	97.7	94.0	91.0	86.7	84.2	82.7	80.3	77.9	76.9	74.8	73.9	71.1	73.1	74.3	74.6	74.0	75.9	76.4	83.9	99.4
2-Jun	78.4	79.0	79.9	82.3	82.6	83.5	87.1	91.8	93.6	95.3	94.5	94.7	93.8	89.9	88.7	90.5	88.8	90.0	89.3	89.2	88.6	88.9	87.5	88.2	88.2	95.3
3-Jun	89.5	92.0	96.2	96.1	92.9	92.2	89.9	84.3	79.3	77.4	74.1	73.0	74.5	75.0	72.2	71.9	71.3	70.9	69.7	70.1	75.8	83.5	94.3	OR	81.1	96.2
4-Jun	96.2	99.1	99.2	OR	OR	94.1	84.5	77.9	76.2	74.5	70.7	66.7	64.3	58.8	53.8	47.9	46.6	47.2	50.0	49.1	53.7	63.2	72.7	74.1	69.1	99.2
5-Jun	77.3	84.1	89.4	92.6	93.7	88.5	75.9	67.9	66.8	60.8	52.4	43.9	36.3	36.1	48.7	66.0	72.5	63.6	57.7	68.3	74.8	83.9	90.5	92.7	70.2	93.7
6-Jun	93.5	93.2	95.0	95.7	96.1	96.0	93.5	93.4	91.8	89.3	91.8	93.0	93.1	91.0	89.6	88.1	83.6	82.3	83.8	84.4	86.4	92.9	95.3	91.2	91.0	96.1
7-Jun	97.5	98.9	OR	99.1	94.6	88.0	82.8	77.7	71.6	67.3	63.4	58.2	51.4	48.2	48.8	50.6	69.6	81.0	87.2	87.9	95.4	92.7	91.8	97.3	78.3	99.1
8-Jun	98.9	98.1	98.7	OR	OR	OR	OR	OR	OR	94.6	93.7	92.2	91.4	90.1	90.1	90.1	87.1	83.3	81.3	83.0	80.0	80.1	80.0	78.6	88.4	98.9
9-Jun	81.4	83.3	84.6	82.7	86.8	83.0	78.1	75.4	68.4	62.8	58.9	56.1	54.0	51.9	50.4	46.1	44.4	43.8	46.6	49.7	56.6	81.0	88.1	85.8	66.7	88.1
10-Jun	96.2	95.9	95.7	97.6	96.0	94.8	92.7	84.9	72.1	65.1	59.8	69.5	73.1	85.3	82.0	84.2	91.8	79.3	73.2	78.0	74.4	78.5	81.0	81.0	82.6	97.6
11-Jun	81.3	82.9	83.4	82.7	82.8	84.3	83.7	84.5	82.3	79.7	75.7	74.8	72.0	66.7	70.0	71.2	73.1	79.8	78.3	80.2	83.8	84.2	83.6	85.4	79.4	85.4
12-Jun	87.5	86.1	89.8	89.3	83.7	76.5	71.0	67.7	62.4	56.2	45.4	43.3	39.2	38.7	35.5	33.6	33.8	31.7	32.8	36.7	44.8	56.4	63.6	67.7	57.2	89.8
13-Jun	72.0	87.5	82.7	82.9	80.6	72.2	65.9	57.6	53.9	46.3	38.0	33.4	32.3	31.1	30.7	29.5	30.2	30.6	29.8	32.6	45.8	61.7	66.3	54.6	52.0	87.5
14-Jun	53.6	53.6	55.2	58.7	64.6	61.7	56.4	50.5	41.3	38.2	35.2	33.1	34.7	35.3	35.5	35.2	34.7	32.9	30.8	31.7	41.7	50.8	54.4	60.5	45.0	64.6
15-Jun	66.4	69.0	80.8	80.2	76.8	68.9	64.0	59.2	48.9	39.8	34.2	36.2	32.6	32.1	31.2	30.9	30.8	31.1	32.8	36.2	38.8	42.1	46.7	67.0	49.0	80.8
16-Jun	73.6	75.4	77.0	77.6	80.8	82.9	79.0	68.4	82.4	89.3	83.3	69.9	69.2	56.2	43.3	36.7	32.9	29.7	31.4	31.1	34.4	40.4	45.9	54.9	60.2	89.3
17-Jun	59.8	65.9	69.7	76.0	77.5	75.6	70.2	64.1	56.7	49.7	45.3	41.6	37.4	35.0	35.0	34.0	36.3	38.8	41.2	46.3	52.0	58.9	65.4	68.1	54.2	77.5
18-Jun	71.5	71.1	72.3	74.0	75.6	72.7	69.6	78.8	78.1	71.1	63.3	52.5	51.1	57.9	63.5	63.7	58.4	53.1	50.9	51.4	60.6	71.8	78.1	79.6	66.3	79.6
19-Jun	80.5	81.8	88.5	88.1	87.9	79.1	68.7	63.7	63.9	58.8	51.6	50.8	50.3	47.5	47.0	46.8	46.6	50.0	55.5	54.8	63.2	72.7	77.1	79.1	64.8	88.5
20-Jun	82.9	89.1	90.7	91.6	90.2	87.8	80.6	71.1	64.3	59.6	54.1	49.7	49.2	46.3	45.3	43.6	43.9	50.3	62.2	69.1	69.6	75.3	79.1	76.5	67.6	91.6
21-Jun	75.6	80.9	92.6	96.5	97.6	98.9	97.0	92.9	82.0	73.3	65.6	63.1	61.4	56.0	53.6	52.9	43.6	44.9	53.5	62.9	73.6	75.2	76.9	75.2	72.7	98.9
22-Jun	80.9	84.1	83.4	90.2	88.8	79.9	63.9	61.6	56.1	50.5	40.5	41.6	36.2	34.7	34.5	37.4	37.3	34.5	32.8	36.2	47.9	61.1	60.3	69.4	56.0	90.2
23-Jun	74.5	77.5	82.6	83.9	84.9	82.5	76.4	67.6	55.9	48.5	41.2	37.4	34.5	32.7	28.9	29.4	42.0	53.9	42.9	43.9	51.8	66.5	80.0	78.7	58.3	84.9
24-Jun	72.9	82.1	80.3	80.4	79.7	78.5	70.6	64.3	50.7	42.0	41.8	38.8	38.9	36.5	35.7	33.1	31.1	31.7	33.1	42.5	44.5	51.2	58.5	63.7	53.4	82.1
25-Jun	69.4	80.1	78.4	81.2	82.7	77.7	70.6	62.9	56.7	50.4	39.9	35.0	30.0	26.9	28.1	26.8	26.2	26.1	27.7	31.6	36.1	40.1	46.9	52.9	49.4	82.7
26-Jun	68.1	63.0	65.5	69.1	68.9	67.2	65.0	60.3	54.9	47.3	37.0	30.9	28.4	29.0	28.3	28.1	29.7	30.1	33.9	37.3	41.1	44.1	50.7	57.7	47.3	69.1
27-Jun	62.9	66.0	68.5	71.9	69.7	65.9	62.4	61.2	57.0	51.1	48.6	44.2	44.7	39.0	29.2	32.4	35.2	37.6	39.0	40.0	41.8	46.8	64.0	75.6	52.3	75.6
28-Jun	72.0	71.2	86.7	78.3	79.5	66.9	60.6	56.4	53.7	51.8	40.1	32.0	27.7	26.2	24.8	23.1	23.5	24.8	25.4	25.9	34.0	66.0	71.9	72.1	49.8	86.7
29-Jun	63.3	60.1	63.2	65.7	74.5	70.8	61.9	51.8	44.2	43.3	39.1	32.1	28.4	29.1	26.5	25.9	27.7	24.8	26.8	36.3	45.9	53.5	76.4	85.7	48.2	85.7
30-Jun	84.4	82.6	91.1	95.3	95.5	91.1	75.3	67.4	60.2	52.1	47.8	43.1	43.5	40.2	39.3	40.0	40.4	40.2	39.4	33.6	32.6	38.3	69.7	77.3	59.2	95.5
	78.0	81.0	83.5	84.2	84.4	81.4	75.7	71.0	66.1	62.4	57.0	53.8	51.8	50.0	48.9	48.8	49.6	49.6	50.4	53.1	58.1	65.9	72.4	74.7	Diurnal Average	
	98.9	99.1	99.4	99.1	97.6	98.9	97.7	94.0	93.6	95.3	94.5	94.7	93.8	91.0	90.1	90.5	91.8	90.0	89.3	89.2	95.4	92.9	95.3	97.3	Diurnal Maximum	

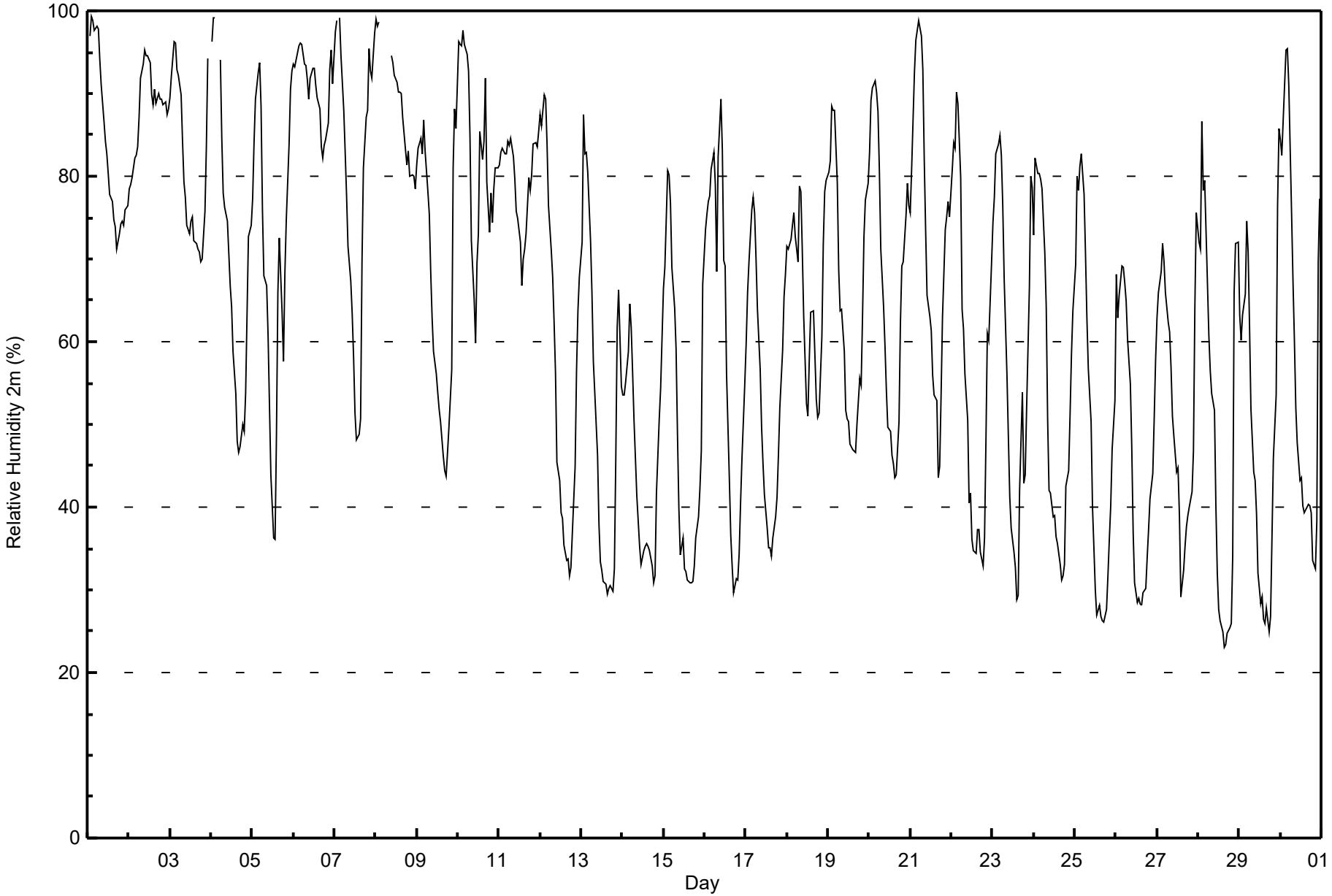
OR - Out of Range

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Patricia McInnes - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Patricia McInnes - June 2026

Maximum Speed: 34 km/h on Jun 8 14:00

Maximum Daily Speed Average: 22.8 km/h on Jun 1

Minimum Speed Value: 0 km/h on Jun 13 14:00

Minimum Daily Speed Average: 0.5 km/h on Jun 7

Maximum Diurnal Speed Average: 5.4 km/h at hour 17

Minimum Diurnal Speed Average: 1.8 km/h at hour 22

Monthly Average Velocity: 3.4 km/h 352.0 deg

Percentiles: $P_1 = 1$ $P_{10} = 4$ $Q_1 = 7$ Median = 9 $Q_3 = 14$ $P_{90} = 19$ $P_{99} = 27$

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-Jun	N21	N24	N18	NNW22	N24	NNW22	NNW23	N26	N25	N26	N26	N25	N26	N25	N23	N24	N25	N26	N25	N22	N21	N18	N17	NNE19	N22.8	N26
2-Jun	NNE18	NNE21	NNE19	N18	N20	N18	N17	N14	N15	N17	N17	NNE17	NNE18	NNE19	NE14	E10	E12	E10	ENE9	NE10	NE8	ENE7	ENE7	NE8	NNE12.9	NNE21
3-Jun	NE8	ENE7	NE7	ENE9	E8	ESE8	SE6	SE7	ESE6	E7	SE6	ESE8	SE9	SE6	ESE6	SE7	ESE7	ESE8	ESE8	ESE7	ESE7	E4	ENE4	ESE1	ESE6.0	ENE9
4-Jun	SSE6	SE7	SSE4	SSW3	S2	SE7	SE7	SE7	S6	SW11	SSW13	SSW15	SSW13	SW10	SSW10	SSW12	SSW12	SW16	SSW14	SW14	SSW6	SSW4	S4	SSW7	SSW7.7	SW16
5-Jun	SSW8	SSW6	SSW7	SSW7	SW8	SW8	SW10	SW8	SW7	S5	SE7	SSE4	S2	S8	SSW10	S5	N5	ENE6	SSE4	SW6	SW5	SW4	W7	W12	SW4.8	W12
6-Jun	W14	WNW16	W17	W18	WSW21	W17	W24	W24	WSW27	WSW26	WSW24	WSW23	WSW23	WSW24	WSW23	WSW21	WSW21	WSW17	WSW13	SW14	SW10	SW5	SW7	SW7	WSW17.6	WSW27
7-Jun	SSW4	SW6	S7	S7	S6	S6	SSW7	SSW8	S9	SSE7	S6	ESE6	ENE8	ENE7	NE10	N15	NW8	WSW11	WNW7	NNW7	N10	NE9	ENE9	NNW4	SSE0.5	N15
8-Jun	NNW8	N9	N9	N11	NNW13	NNW15	NNW16	NNW16	NW17	NW22	NW25	WNW29	WNW31	WNW34	WNW31	W28	W26	WNW27	WNW23	WNW24	W24	W23	W21	W22	WNW19.1	WNW34
9-Jun	W18	WSW17	W17	W16	WSW13	W13	WSW13	WSW14	W17	W12	WNW11	WNW13	W13	WNW13	WNW9	WNW5	N7	NW10	N12	N9	N5	NW2	NW6	NNW13	WNW9.7	W18
10-Jun	NNW13	NNW10	NNW9	NNW11	NNW9	N11	NNW10	NNW10	NNW9	NNW11	NNW8	NNW10	NNW17	N17	N15	NNE18	N15	N15	N17	N15	NNW16	NNW12	NNW12	NNW14	N12.5	NNE18
11-Jun	NNW15	NNW12	N11	N12	NNW8	NNW12	NW13	NW15	NNW14	NNW15	N15	NNW12	NNW15	NNW19	N18	N18	NNW18	N20	N18	N15	N14	N12	NNW9	NW8	NNW13.8	N20
12-Jun	WNW8	WNW11	WNW9	NW11	NNW12	NNW14	N14	N17	NNW18	NNW21	N25	N25	N27	N26	N25	N25	N22	N21	NNE19	N15	NNW8	NW6	WNW6	WNW6	NNW15.4	N27
13-Jun	NW6	WNW4	WNW4	NNW1	SSW3	SSW3	S4	SE5	SE6	SSE2	WSW1	SW2	WNW4	SSE0	ESE3	SE5	WSW8	SW10	SW8	WSW7	WSW3	SW4	SW5	SW8	SW2.8	SW10
14-Jun	WSW12	WSW13	WSW11	WSW8	S7	SSW6	SW5	NNW6	N10	N6	N11	N14	N17	N15	N16	N19	N18	NNW17	N16	N13	NNW8	NW7	NW8	NW8	NNW7.2	N19
15-Jun	NW7	N6	NW5	N4	NE2	ENE2	SW1	ESE5	ESE5	ESE7	ESE8	SSE3	E3	NE3	E10	E6	E8	E9	ESE9	ESE8	ESE10	SE8	SSE8	WSW19	ESE3.0	WSW19
16-Jun	WSW12	SW7	S5	SSW5	SSW3	E5	ESE7	SE9	SE5	ENE4	NE5	NNE3	WNW8	NW6	N9	NNE11	NNE14	N21	N22	N19	N15	N11	N11	NNW9	N5.0	N22
17-Jun	NNW10	NNW10	NNW11	NNW11	NNW12	NNW11	N11	N11	N12	N12	N15	N13	N15	NNE15	N14	N15	N15	NNW13	NNW11	NW8	WNW11	WNW10	WNW11	NW10	NNW11.1	NNE15
18-Jun	NW9	NNW8	NNW10	NNW10	NNW8	NNW9	N12	NNW10	NNW9	NNW7	W5	NNW8	N12	NNE18	N18	N15	NNW16	NNW16	N15	NNW12	NW7	WNW10	WNW9	WNW6	NNW9.9	NNE18
19-Jun	WNW7	WSW6	WSW4	NW5	NW7	NW8	NNW10	NNE12	N13	N10	N10	NNW10	NNW9	N12	N16	N14	N14	N16	N14	N14	N7	NNW8	NNW7	NNW8	N9.0	N16
20-Jun	NNW8	NNW8	NNW8	N9	N9	N8	N8	N7	NNE10	NNE12	NNE12	NE11	NNE13	N12	NNE17	N14	NNE15	NE12	E12	ESE10	ENE3	NNW5	NNW6	NNE3	NNE8.3	NNE17
21-Jun	ENE2	ENE3	N4	NNW7	NNW7	NNW9	N11	N13	N16	N16	N14	N16	N17	N4	NW8	N10	ENE7	SE8	W5	N11	NW7	NNW8	NNW8	NNW10	N7.9	N17
22-Jun	NNW8	NNW8	N5	NNW4	N3	NE2	SE4	NW3	NNW4	NE5	E5	SE8	ENE4	E9	E8	SE11	SE9	SE6	SE9	SSE7	S5	SSW5	WSW9	WSW11	ESE1.8	SE11
23-Jun	SW10	SW8	S6	SSW5	SSW5	SSW6	SSW6	SSW6	SW5	SSW8	SW10	WSW9	W7	SW6	S9	S7	NNW10	NE9	ESE12	SE8	S5	S2	SSW2	SW5	SSW4.2	ESE12
24-Jun	SSW3	WNW1	SW4	SSW6	SW7	S7	SSE8	SSE7	S12	SSW14	SSW13	SSW12	SSW13	S13	SSW10	SSW10	SSW7	S6	ESE9	ESE13	SE14	SE11	ESE8	SE7	S7.4	SSW14
25-Jun	SE6	SE6	SE7	SE8	SE7	SE8	SE10	SE8	SE8	SE9	ESE13	SSE12	SE14	SE14	SE13	SE16	SE15	SE16	SE16	SE14	SE12	SSE11	SSE9	SSE6	SE10.6	SE16
26-Jun	SE4	SE7	SE7	SE8	ESE12	ESE14	ESE11	ESE12	ESE13	ESE14	SE20	SE22	SE19	SE18	ESE18	ESE19	ESE19	ESE18	ESE19	ESE15	ESE15	ESE14	ESE11	SE8	ESE13.8	SE22
27-Jun	ESE7	SE8	ESE5	ESE5	E6	E8	ESE9	ESE12	ESE14	E16	ESE18	ESE22	ESE21	ESE21	ESE22	ESE16	ESE13	ESE12	ESE11	ESE8	E7	ENE6	NE5	NE4	ESE11.2	ESE22
28-Jun	NNE5	NE4	N3	NNW4	NW3	N6	NNE7	NE6	NNE6	NNE8	ENE14	ENE18	E18	ENE17	ENE17	ENE15	E18	E15	E11	E9	ENE5	NW4	NW5	NNW7	ENE7.4	E18
29-Jun	NNW9	NNW10	NNW10	NNW9	NW5	N3	NNE4	NE7	NE7	N9	N9	NE7	NNE4	NNE10	NE12	NNE14	N14	NNE12	ENE9	ESE12	SE10	ESE4	ESE2	ESE2	NNE5.8	NNE14
30-Jun	ESE4	SE4	NNW0	E1	NNW2	WNW4	NNE4	E5	NE2	ESE2	ESE5	SSE4	NW7	NW7	NNW9	NNW14	NW12	NNW9	ENE4	ESE9	ESE12	SE6	WNW1	NNE0	NNE1.6	NNW14
	NW4.1	NW3.6	NW3.4	NW3.6	NW3.1	NNW3.0	NNW3.1	N3.2	NNW3.6	N3.9	N3.6	N2.9	N4.5	N4.9	NNE5.3	NNE5.2	N5.4	N5.0	NNE4.6	NNE3.6	NNE2.3	NNW1.8	NW2.6	NW4.0	Diurnal Average	
	N21	N24	NNE19	NNW22	NNW24	NNW22	W24	N26	WSW27	N26	N26	WNW29	WNW31	WNW34	WNW31	W28	W26	WNW27	N25	WNW24	W24	W23	W21	W22	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 Jun 8 14:00

Minimum Value: 1 km/h on Jun 13 22:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 3 Q_3 = 4 P_{90} = 5 P_{99} = 6

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

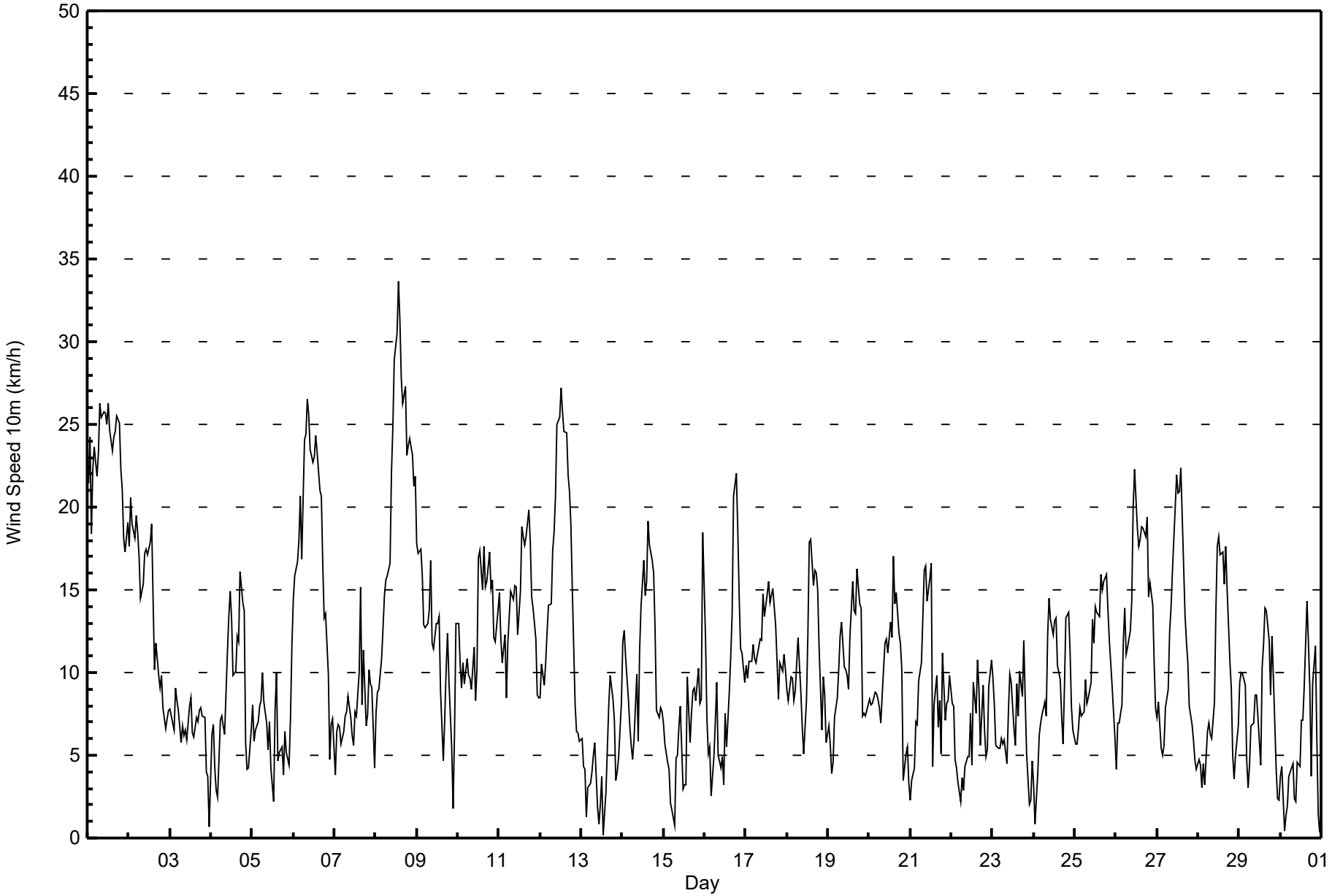
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	7	6	5	5	5	5	5	6	6	6	6	6	6	6	6	6	5	7	6	5	6	5	4	4	7
2-Jun	4	4	4	4	4	4	4	3	3	3	3	4	4	4	5	2	3	2	2	3	2	2	2	2	5
3-Jun	2	2	2	2	2	2	2	2	2	2	3	2	3	3	3	2	2	2	2	2	2	1	1	2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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Patricia McInnes - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	126	17.50	17.50
6 - 11	314	43.61	61.11
12 - 19	213	29.58	90.69
20 - 28	63	8.75	99.44
29 - 38	4	0.56	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 - June 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	7	8	10	6	12	6	7	10	12	11	3	2	7	8	8	126
6 - 11	31	6	13	12	15	27	39	9	14	19	21	9	2	16	22	59	314
12 - 19	65	20	3	5	6	24	12	1	2	10	3	10	12	3	4	33	213
20 - 28	28	1	0	0	0	4	2	0	0	0	0	11	7	3	2	5	63
29 - 38	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	133	34	24	27	27	67	59	17	26	41	35	33	23	33	36	105	720

Total Number of Valid Hours: 720

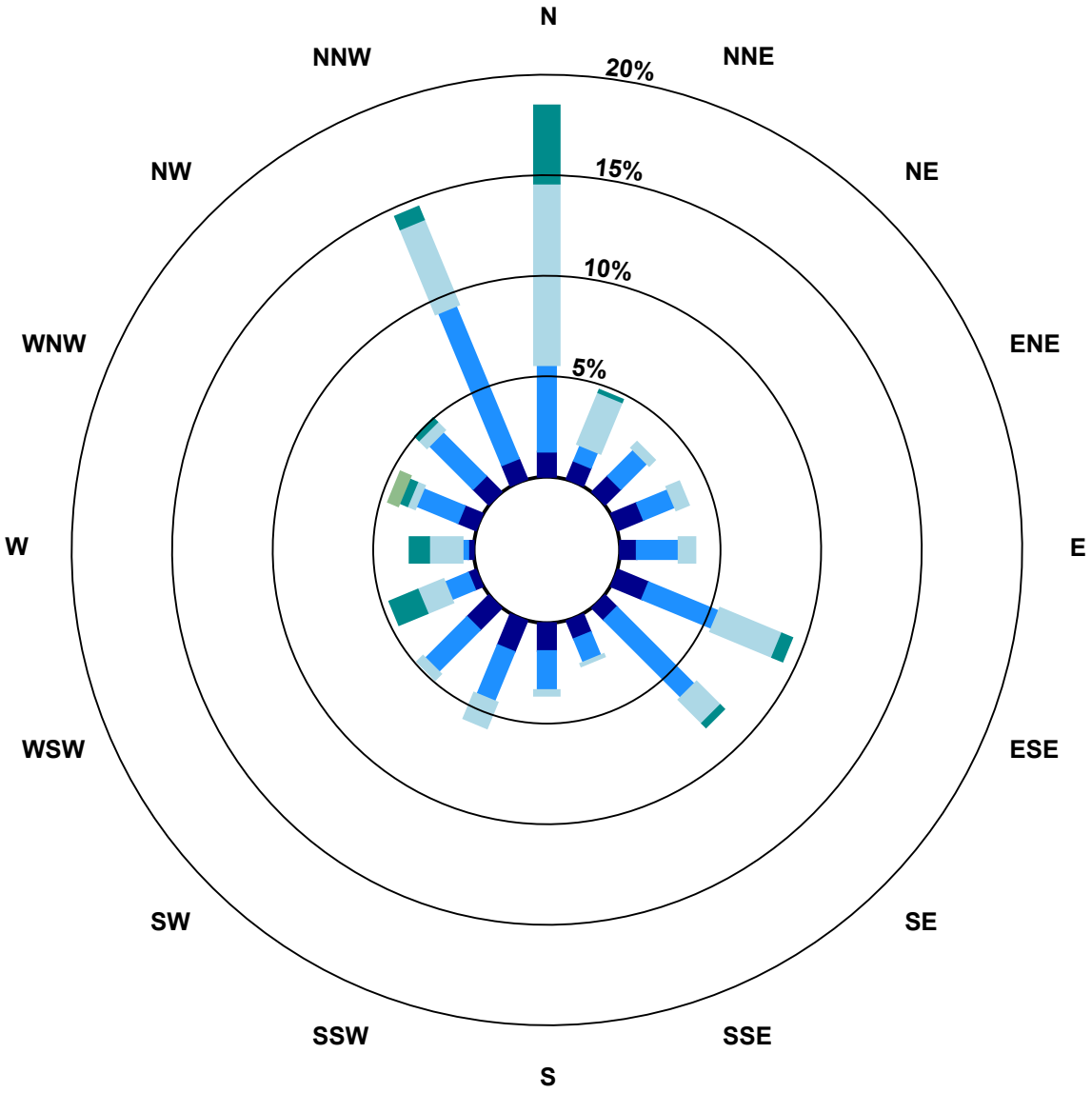
Total Number of Hours: 720

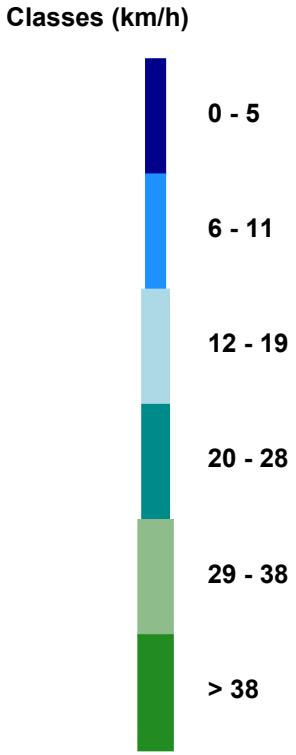
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Patricia McInnes





Total Number of Valid Hours: 720

Direction of Maximum Speed: 284 deg on Jun 8 14:00

Direction of Maximum Daily Speed Average: 359.3 deg on Jun 1

Direction of Minimum Speed: 162 deg on Jun 13 14:00

Direction of Minimum Daily Speed Average: 0.5 deg on Jun 7

Monthly Average Direction: 352.0 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-Jun	352	350	350	348	349	346	348	349	351	351	354	359	7	10	7	5	3	11	10	6	10	9	11	14	359.3
2-Jun	12	13	12	9	6	9	6	359	7	5	10	13	13	23	40	85	83	79	72	50	49	70	59	48	23.5
3-Jun	52	67	44	74	83	105	128	125	119	97	129	118	133	138	120	136	117	118	115	109	108	99	67	109	105.2
4-Jun	147	136	167	207	182	128	125	135	172	215	211	207	211	214	213	200	210	218	213	222	209	192	187	201	197.7
5-Jun	203	205	197	207	231	223	234	233	223	184	140	167	180	180	209	175	350	66	149	221	234	230	278	275	214.7
6-Jun	278	286	278	261	255	263	266	259	255	251	248	243	239	242	243	247	246	244	241	233	236	221	231	223	251.5
7-Jun	196	221	188	183	180	176	207	203	181	167	185	115	76	69	37	7	309	254	301	338	4	49	77	348	149.8
8-Jun	345	357	351	351	348	339	341	335	308	310	307	297	285	284	283	280	281	287	288	285	280	275	272	281	297.1
9-Jun	265	256	262	264	254	265	258	253	269	280	288	286	279	294	293	284	356	324	357	3	359	313	322	336	285.0
10-Jun	343	340	340	338	345	357	346	342	346	347	342	335	340	3	5	14	359	7	5	357	346	345	341	343	351.0
11-Jun	346	348	1	355	338	330	318	323	337	343	349	336	337	344	359	6	348	3	358	0	349	350	336	318	346.1
12-Jun	303	300	292	313	330	338	349	350	337	339	352	356	2	356	355	355	355	359	14	4	347	322	302	300	346.2
13-Jun	307	301	303	339	198	193	182	136	137	167	250	232	286	162	121	126	256	221	228	238	250	231	228	231	226.0
14-Jun	239	237	241	239	178	192	224	344	359	5	3	11	3	360	357	358	349	344	5	5	329	308	305	321	337.1
15-Jun	316	352	323	5	35	69	229	115	121	120	104	157	85	36	80	84	97	81	104	112	118	135	166	250	103.8
16-Jun	239	228	191	197	201	97	103	127	128	63	38	14	298	314	352	19	24	3	4	4	2	359	1	340	4.7
17-Jun	341	339	341	335	345	346	355	354	354	355	352	352	2	12	4	10	350	346	334	307	296	297	302	306	343.7
18-Jun	315	333	337	337	336	348	350	341	335	336	274	328	358	13	11	351	336	337	351	347	320	290	296	291	339.5
19-Jun	298	255	244	307	304	312	348	16	10	6	359	345	340	2	0	354	357	6	0	9	349	334	338	340	349.4
20-Jun	347	332	332	350	350	352	10	5	23	27	22	42	30	10	18	9	25	34	93	104	75	331	333	28	17.7
21-Jun	76	73	6	336	330	338	350	350	351	360	6	355	1	4	324	360	60	145	262	0	326	331	332	346	353.0
22-Jun	334	332	8	344	5	55	128	310	334	56	91	130	64	81	97	135	133	124	129	148	185	198	239	242	112.9
23-Jun	232	231	187	194	193	210	204	203	217	207	233	237	264	225	174	191	344	41	110	133	171	172	194	228	203.7
24-Jun	206	291	231	200	217	186	162	162	186	193	199	197	192	175	212	208	193	188	109	110	128	125	115	133	173.7
25-Jun	139	134	145	137	134	144	134	132	125	126	121	157	136	140	133	134	140	137	136	131	138	149	151	157	137.3
26-Jun	139	140	140	132	123	121	114	108	109	110	126	134	136	130	116	111	115	114	109	110	109	115	122	127	119.7
27-Jun	118	129	112	102	100	99	123	108	105	99	103	114	114	103	112	117	116	107	108	110	94	69	47	36	106.9
28-Jun	31	55	350	346	307	6	15	37	30	22	66	72	83	76	66	76	88	87	95	99	68	312	305	330	60.6
29-Jun	332	337	338	342	310	0	15	54	40	351	8	39	16	15	39	22	9	20	69	111	130	119	110	115	23.2
30-Jun	111	127	348	79	331	302	21	97	56	120	117	167	309	318	339	331	321	330	73	112	103	136	301	33	19.3
	316.1	320.8	318.1	324.9	323.1	338.9	340.9	353.0	346.9	351.6	3.2	358.2	355.4	6.4	13.4	15.0	4.3	10.1	32.3	32.0	17.3	343.2	319.8	306.7	
	Diurnal Average																								

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

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

Maximum Value: 104 deg on Jun 13 11:00

Minimum Value: 6 deg on Jun 13 00:00

Percentiles: P_1 = 7 P_{10} = 11 Q_1 = 14 Median = 17 Q_3 = 26 P_{90} = 45 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

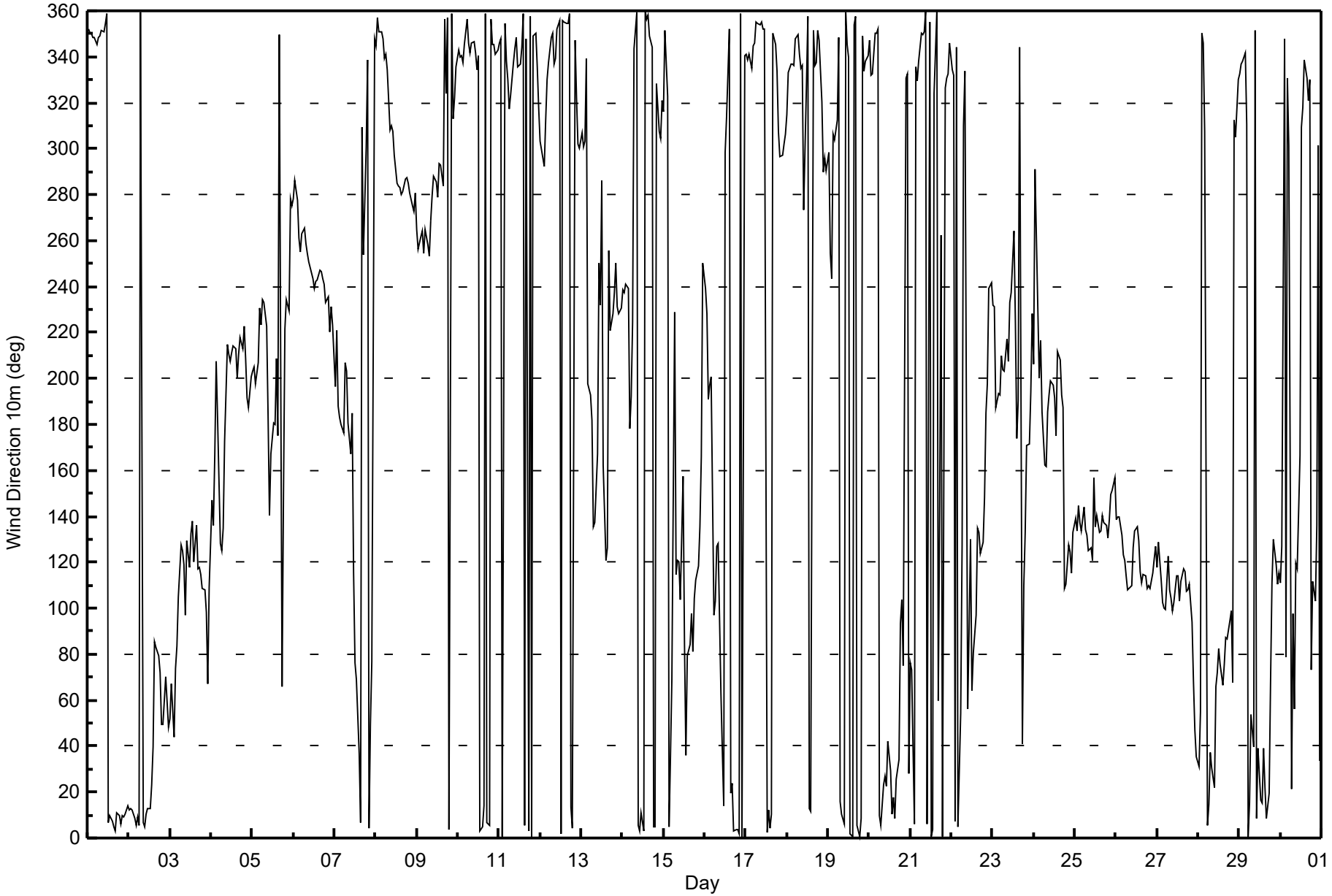
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	16	16	15	15	14	15	15	15	16	15	16	17	16	14	15	16	17	14	16	14	14	14	14	14	17
2-Jun	14	14	13	14	14	15	15	15	13	15	14	13	13	13	18	15	14	15	16	14	17	19	20	14	20
3-Jun	17	15	16	15	15	17	19	20	23	26	45	32	27	34	41	29	24	23	20	18	12	18	23	97	97
4-Jun	19	12	12	25	37	12	15	20	27	20	21	23	30	31	38	29	26	19	18	17	18	26	14	16	38
5-Jun	19	14	16	14	12	15	15	20	30	44	28	79	93	30	39	66	39	39	29	15	15	20	16	12	93
6-Jun	12	12	13	11	12	13	11	11	11	11	11	11	11	12	11	12	13	14	12	12	12	15	9	16	16
7-Jun	15	17	13	15	21	22	25	27	25	39	51	79	51	53	28	17	74	28	26	23	24	15	14	48	79
8-Jun	13	12	13	15	14	14	13	11	13	11	11	12	13	12	12	12	12	12	12	12	13	12	12	14	15
9-Jun	16	10	10	11	10	13	15	16	14	20	18	17	20	18	35	73	54	34	18	21	12	32	10	11	73
10-Jun	11	11	11	12	13	15	13	17	35	20	29	25	25	16	17	17	18	17	17	16	14	13	14	12	35
11-Jun	13	14	15	16	12	12	14	12	13	13	14	18	19	17	19	18	16	16	16	18	15	14	21	11	21
12-Jun	12	9	9	15	9	12	16	14	16	15	16	19	18	18	18	18	17	17	15	16	18	16	10	6	19
13-Jun	7	11	9	55	17	27	28	25	29	89	104	98	80	101	85	69	44	24	29	22	26	15	8	7	104
14-Jun	7	8	10	55	25	22	21	25	23	53	40	30	22	25	20	22	16	17	19	16	12	8	7	12	55
15-Jun	11	22	8	39	56	78	84	28	30	33	42	78	81	83	42	76	47	22	15	13	13	19	32	14	84
16-Jun	13	23	54	42	63	26	16	19	25	60	23	54	30	69	29	28	23	20	16	15	15	14	14	7	69
17-Jun	10	8	10	9	12	12	16	22	22	28	21	26	22	26	22	28	17	13	12	12	8	8	8	10	28
18-Jun	9	12	9	10	10	13	14	16	16	20	45	35	30	17	18	21	16	16	16	14	19	9	10	11	45
19-Jun	10	18	32	48	12	17	16	18	18	34	30	31	39	24	21	23	29	19	16	14	13	7	7	8	48
20-Jun	10	7	7	11	13	19	23	31	23	23	29	31	24	30	18	22	17	37	18	19	50	30	10	47	50
21-Jun	67	40	9	10	16	11	15	15	15	16	20	16	20	82	30	19	49	34	44	18	10	8	8	14	82
22-Jun	11	9	27	23	18	45	27	49	49	47	55	31	82	34	44	25	27	62	21	22	17	30	12	9	82
23-Jun	18	22	21	33	21	20	28	29	49	41	37	36	60	56	39	38	69	47	17	16	30	61	26	16	69
24-Jun	50	85	42	25	24	17	16	24	20	21	22	23	28	26	37	33	37	53	38	22	15	12	15	15	85
25-Jun	13	7	13	11	16	13	14	19	18	21	19	25	26	25	25	20	21	20	15	15	14	14	19	20	26
26-Jun	21	14	13	12	13	14	16	17	19	18	21	18	19	20	21	17	19	17	16	14	14	14	12	11	21
27-Jun	11	15	16	16	15	21	19	15	18	18	19	19	16	18	18	17	18	15	14	13	15	12	16	17	21
28-Jun	13	28	18	38	57	15	15	30	34	26	23	22	19	21	21	21	19	16	17	15	28	21	21	11	57
29-Jun	6	7	8	10	11	25	37	26	33	28	29	43	68	40	25	26	19	18	33	20	14	16	78	33	78
30-Jun	9	11	82	66	52	13	35	37	63	85	55	67	42	45	34	14	15	14	65	15	14	17	64	86	86
	67	85	82	66	63	78	84	49	63	89	104	98	93	101	85	76	74	62	65	23	50	61	78	97	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Patricia McInnes - June 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS07
ATHABASCA VALLEY
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ATHABASCA VALLEY (AMS07)
JUNE 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	-	-	88.3	0	8.7	0
TRS (ppb) Average	684	35	36	99.86	2.2	0	2.1	0	0.4	0
THC (ppm) Average	685	34	35	99.86	-	-	2.5	-	2.2	-
NMHC (ppm) Average	685	34	35	99.86	-	-	0.108	-	0.015	-
CH4(ppm) Average	685	34	35	99.86	-	-	2.5	-	2.2	-
O3 (ppb) Average	686	33	34	99.86	-	-	67.1	0	35.4	-
NO2 (ppb) Average	684	35	36	99.86	-	-	15.2	0	5.6	-
NO (ppb) Average	684	35	36	99.86	-	-	9.3	-	2.1	-
NOX (ppb) Average	684	35	36	99.86	-	-	21.5	-	7.5	-
PM2.5 (ug/m3) Average	719	1	1	100	-	-	96.2	1	58.1	2
CO(ppm) Average	685	35	35	100	-	-	0.5	0	0.3	-
Temperature 2 m (C) Average	720	0	0	100	-	-	30.8	-	23.2	-
Relative Humidity (%) Average	720	0	0	100	-	-	97.9	-	86.1	-
Barometric Pressure (inHg) Average	720	0	0	100	-	-	29.4	-	29.4	-
Wind Speed 10 m (km/h) Average	720	0	0	100	-	-	41	-	24	-
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 - ATHABASCA VALLEY (AMS07)
JUNE 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	0.61	4	-	0	0	0	0.1	0.3	0.8	88.3
TRS (ppb) Average	684	0.21	0.2	-	0	0.1	0.1	0.2	0.2	0.4	2.1
THC (ppm) Average	685	2.09	0.1	-	2	2	2	2.1	2.1	2.2	2.5
NMHC (ppm) Average	685	0.001	0.007	-	0	0	0	0	0	0	0.108
CH4(ppm) Average	685	2.09	0.1	-	2	2	2	2.1	2.1	2.2	2.5
O3 (ppb) Average	686	24.88	11.4	-	2.3	10.5	16	24.6	32.3	40	67.1
NO2 (ppb) Average	684	3.35	2.6	-	0.1	0.9	1.5	2.5	4.4	7.1	15.2
NO (ppb) Average	684	0.89	1.4	-	0	0	0.1	0.4	0.9	2.3	9.3
NOX (ppb) Average	684	4.24	3.6	-	0.1	1	1.8	3.2	5.4	8.6	21.5
PM2.5 (ug/m3) Average	719	9.03	14.3	-	0.6	2	3	4.9	6.8	12.5	96.2
CO(ppm) Average	685	0.09	0.1	-	0	0	0.1	0.1	0.1	0.2	0.5
Temperature 2 m (C) Average	720	16.72	5.6	-	6.5	10.5	12.3	15.5	20.2	25.3	30.8
Relative Humidity (%) Average	720	65.15	19.7	-	24.5	35.3	47.5	70.4	80.9	88.7	97.9
Barometric Pressure (inHg) Average	720	28.96	0.3	-	28.3	28.6	28.8	29	29.2	29.3	29.4
Wind Speed 10 m (km/h) Average	720	9.8	7	-	0	3	5	8	14	19	41
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ATHABASCA VALLEY (AMS07)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
NMHC,NO2, O3, SO2, TRS	15 Jun 2026 12:00	15 Jun 2026 12:00	1	Maintenance - sample manifold cleaned

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Athabasca Valley - June 2026

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

Maximum Value: 88.3 ppb on Jun 29 09:00

Maximum Daily Average: 8.7 ppb on Jun 29

Minimum Value: 0.0 ppb on Jun 4 20:00

Minimum Daily Average: 0.0 ppb on Jun 6

Maximum Diurnal Average: 3.3 ppb at hour 9

Minimum Diurnal Average: 0.1 ppb at hour 24

Monthly Average: 0.61 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.3 P_{90} = 0.8 P_{99} = 5.5

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-Jun	1.4	3.6	Z	1.2	1.8	1.2	0.8	0.7	0.7	3.2	3.9	1.8	0.8	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	1.0	3.9
2-Jun	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	0.1	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-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.0	0.0	0.1	0.3
4-Jun	0.0	0.0	0.0	0.1	0.0	Z	0.1	0.1	0.1	C	C	C	C	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
5-Jun	Z	0.2	0.1	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	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.2
6-Jun	0.1	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
7-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.2
8-Jun	0.0	0.0	0.0	Z	0.0	0.6	0.3	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.6
9-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.6	2.1	0.7	0.3	0.3	0.2	2.1
10-Jun	0.4	0.1	0.1	0.1	0.1	Z	0.1	0.3	1.4	2.4	3.6	3.2	0.8	0.3	0.2	0.2	0.1	0.1	0.1	0.0	0.4	0.2	0.2	0.3	0.6	3.6
11-Jun	Z	0.4	0.2	0.3	0.1	0.2	0.5	1.1	1.0	0.3	0.4	0.7	0.6	1.0	0.4	0.5	0.1	0.3	0.3	0.1	0.2	0.3	0.3	0.5	0.4	1.1
12-Jun	0.9	Z	0.2	0.2	0.3	0.6	0.4	0.6	1.8	0.8	0.9	1.9	1.2	0.8	0.8	0.9	0.4	0.2	0.1	0.1	0.1	0.3	0.3	0.1	0.6	1.9
13-Jun	0.1	0.1	Z	0.1	0.1	0.1	0.2	0.2	0.3	0.8	0.5	0.3	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.2	0.8
14-Jun	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.5	1.5	3.7	2.7	1.3	2.0	0.7	0.7	0.9	0.5	0.3	0.1	0.3	0.4	0.2	0.1	0.7	3.7
15-Jun	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.2	0.3	0.2	0.1	M	0.1	0.1	0.2	0.2	0.4	1.4	1.1	0.4	0.3	0.2	0.1	0.1	0.3	1.4
16-Jun	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	0.1	0.1	0.7	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.1
17-Jun	Z	0.1	0.2	0.3	0.5	0.3	0.2	0.2	0.1	0.3	0.3	0.2	0.4	0.4	0.6	0.7	0.4	0.1	0.1	0.7	0.3	0.2	0.3	0.1	0.3	0.7
18-Jun	0.1	Z	0.1	0.1	0.1	0.2	0.5	1.5	0.8	3.6	5.8	1.0	0.7	1.4	0.6	2.1	3.0	4.0	0.8	1.4	0.8	0.3	0.2	0.1	1.3	5.8
19-Jun	0.1	0.1	Z	0.1	0.1	0.1	0.4	1.0	0.5	0.6	1.9	2.8	3.1	5.4	4.2	2.5	1.5	0.3	0.1	0.1	0.1	0.1	0.1	0.1	1.1	5.4
20-Jun	0.1	0.1	0.0	Z	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
21-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.2	1.0	1.5	0.2	0.2	0.3	0.3	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	1.5
22-Jun	0.1	0.1	0.0	0.0	0.1	Z	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
23-Jun	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.6	0.6	0.4	0.4	0.3	2.0	3.9	1.1	0.3	0.2	0.1	0.1	0.1	0.5	3.9
24-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.7	0.4	0.3	0.3	0.3	0.3	0.5	0.5	0.1	0.1	0.1	0.1	0.0	0.2	0.7
25-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.3	0.3	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.1	0.2	0.3	0.1	0.1	0.2	0.3
26-Jun	0.1	0.1	0.0	Z	0.0	0.0	0.1	0.2	0.4	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4
27-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.2
28-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.2	0.3	0.4	0.2	0.0	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	0.4
29-Jun	Z	0.1	1.0	3.8	4.9	7.8	6.3	46.5	88.3	28.8	5.5	2.4	0.6	0.4	0.3	0.2	0.1	0.1	0.1	0.2	0.3	0.5	0.5	0.4	8.7	88.3
30-Jun	0.3	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.6	4.6	2.1	3.1	2.5	0.4	0.2	0.3	0.2	0.2	0.8	4.6
	0.2	0.2	0.1	0.3	0.4	0.5	0.4	1.8	3.3	1.6	1.0	0.7	0.4	0.5	0.4	0.5	0.5	0.5	0.3	0.2	0.2	0.2	0.1	0.1	Diurnal Average	
	1.4	3.6	1.0	3.8	4.9	7.8	6.3	46.5	88.3	28.8	5.8	3.2	3.1	5.4	4.2	4.6	3.0	4.0	2.5	1.4	2.1	0.7	0.5	0.5	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

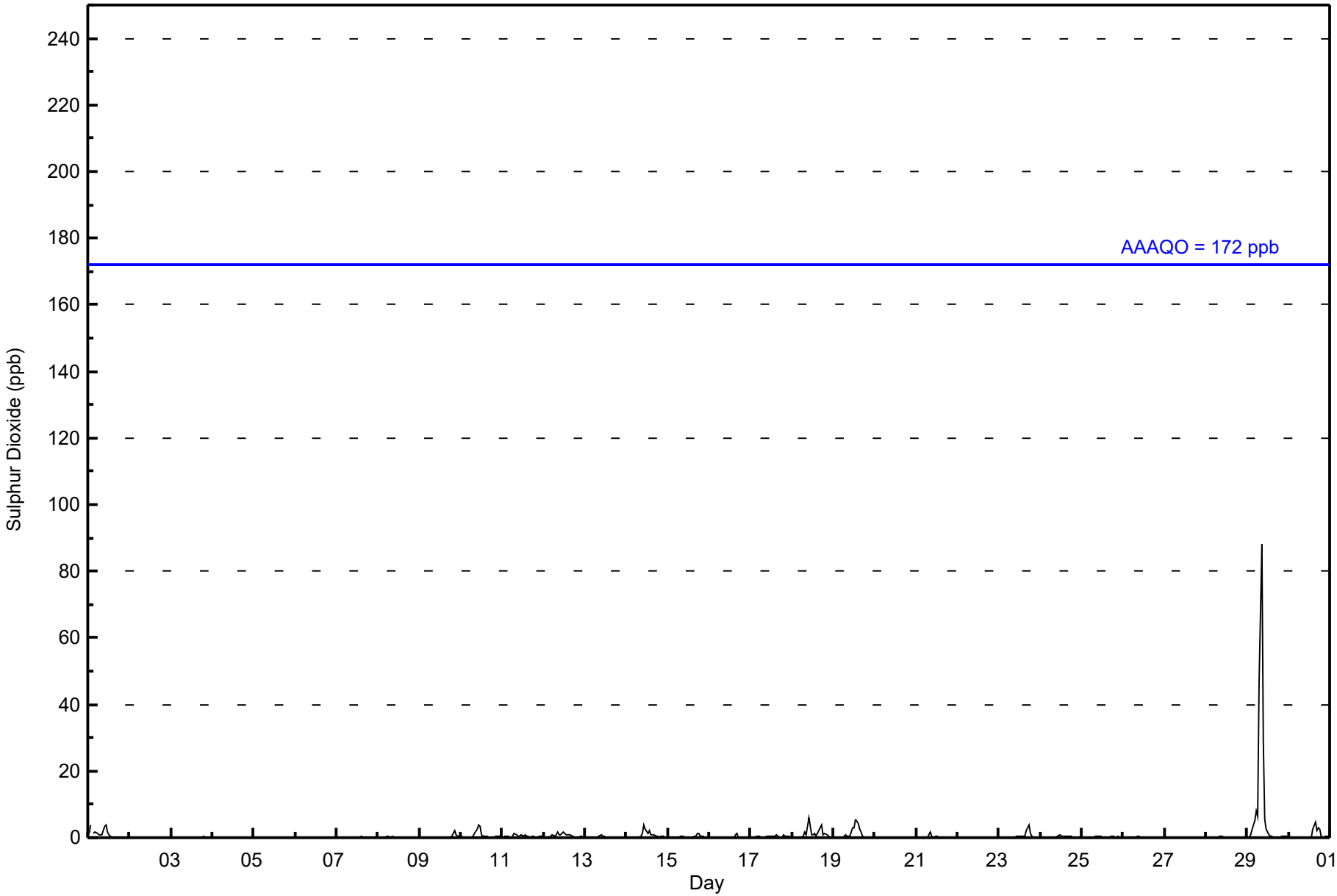
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Athabasca Valley - June 2026



Sulphur Dioxide (SO_2) - ppb
Athabasca Valley - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	682	99.56	99.56
11 - 20	0	0.00	99.56
21 - 60	2	0.29	99.85
61 - 110	1	0.15	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

Athabasca Valley - June 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	10	22	43	48	69	43	18	14	38	53	23	25	24	106	119	682
11 - 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 - 60	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
61 - 110	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
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	28	10	22	43	48	69	43	18	14	38	53	23	25	25	107	119	685

Total Number of Valid Hours: 685

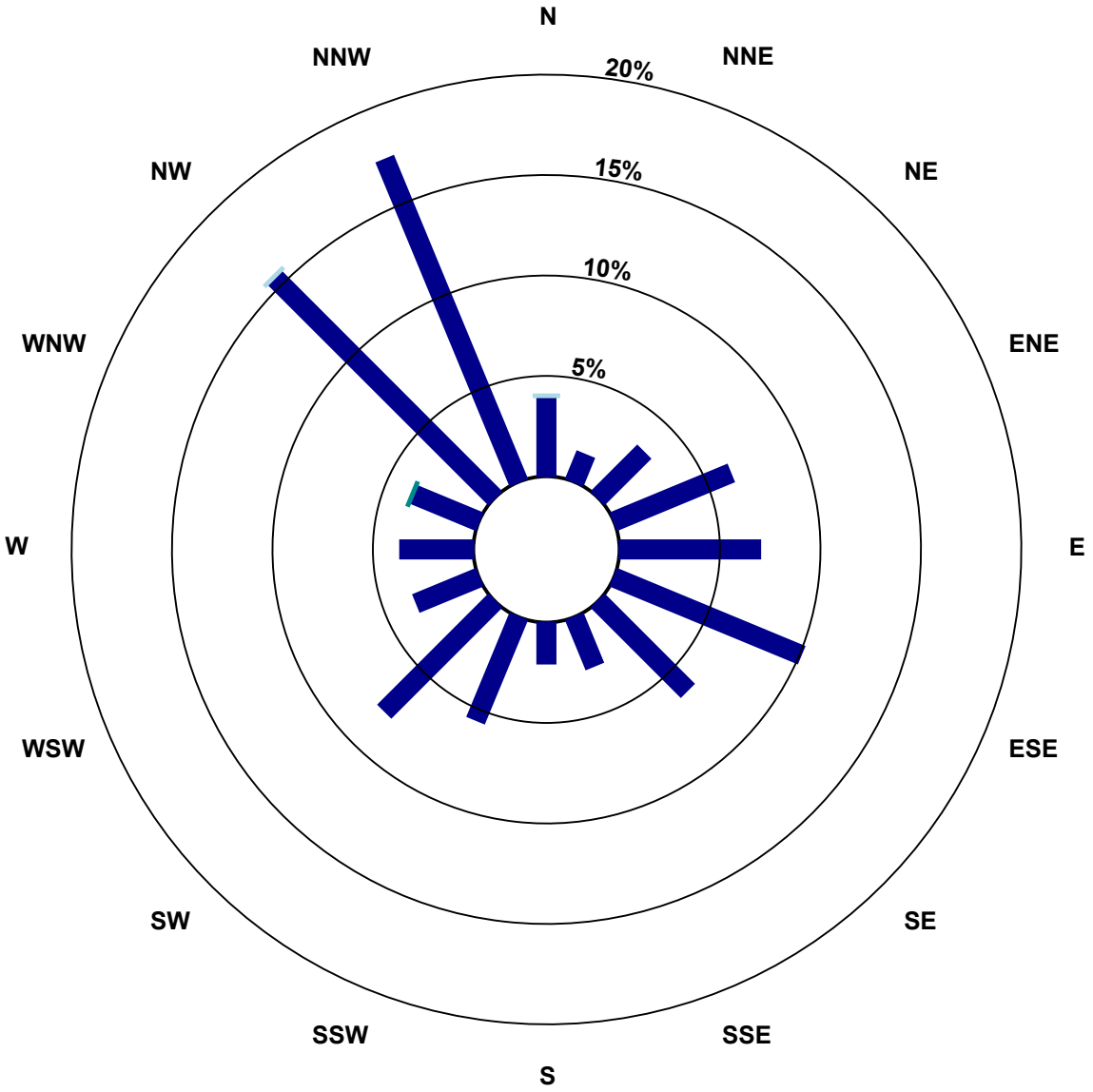
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Athabasca Valley



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

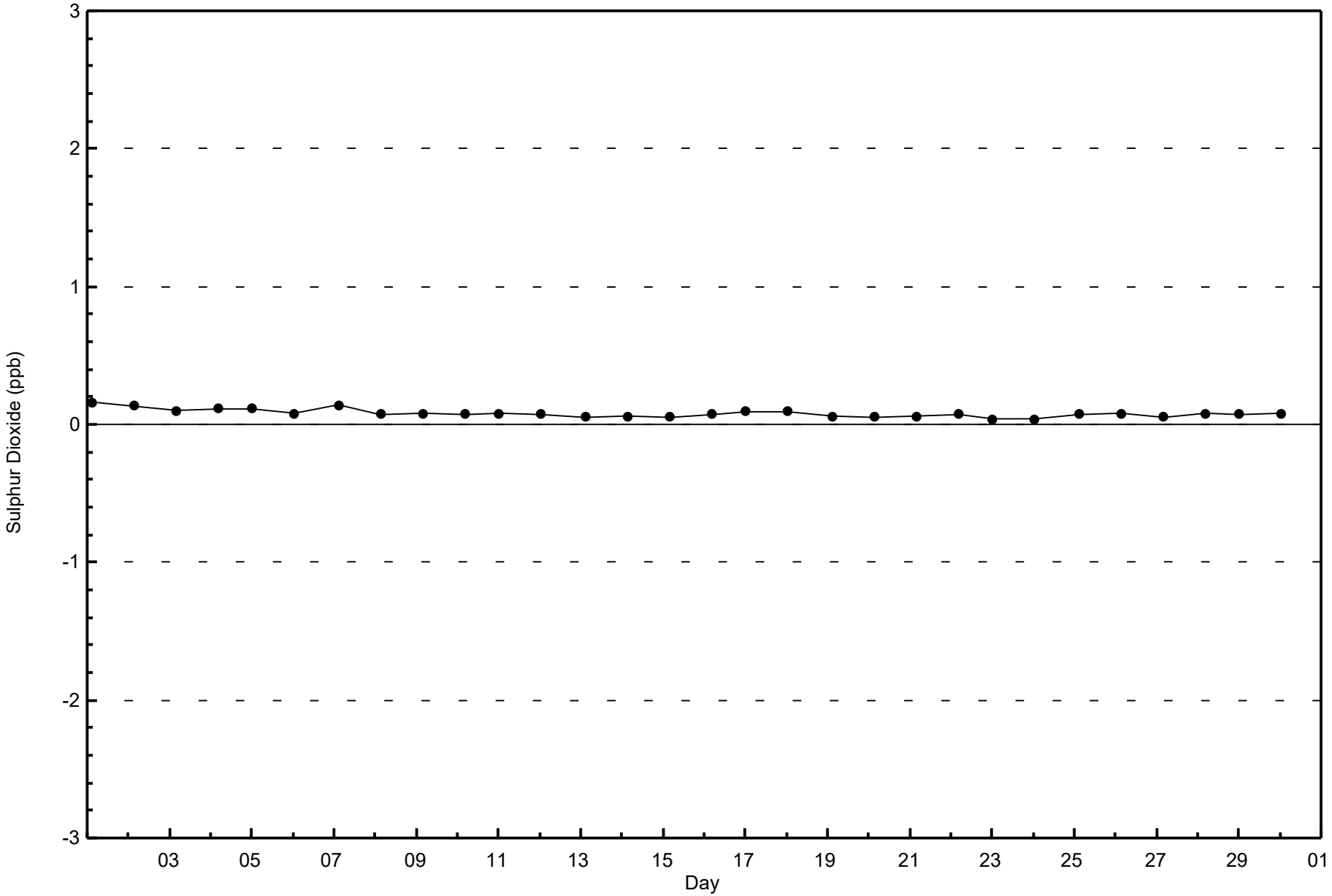
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Athabasca Valley - June 2026

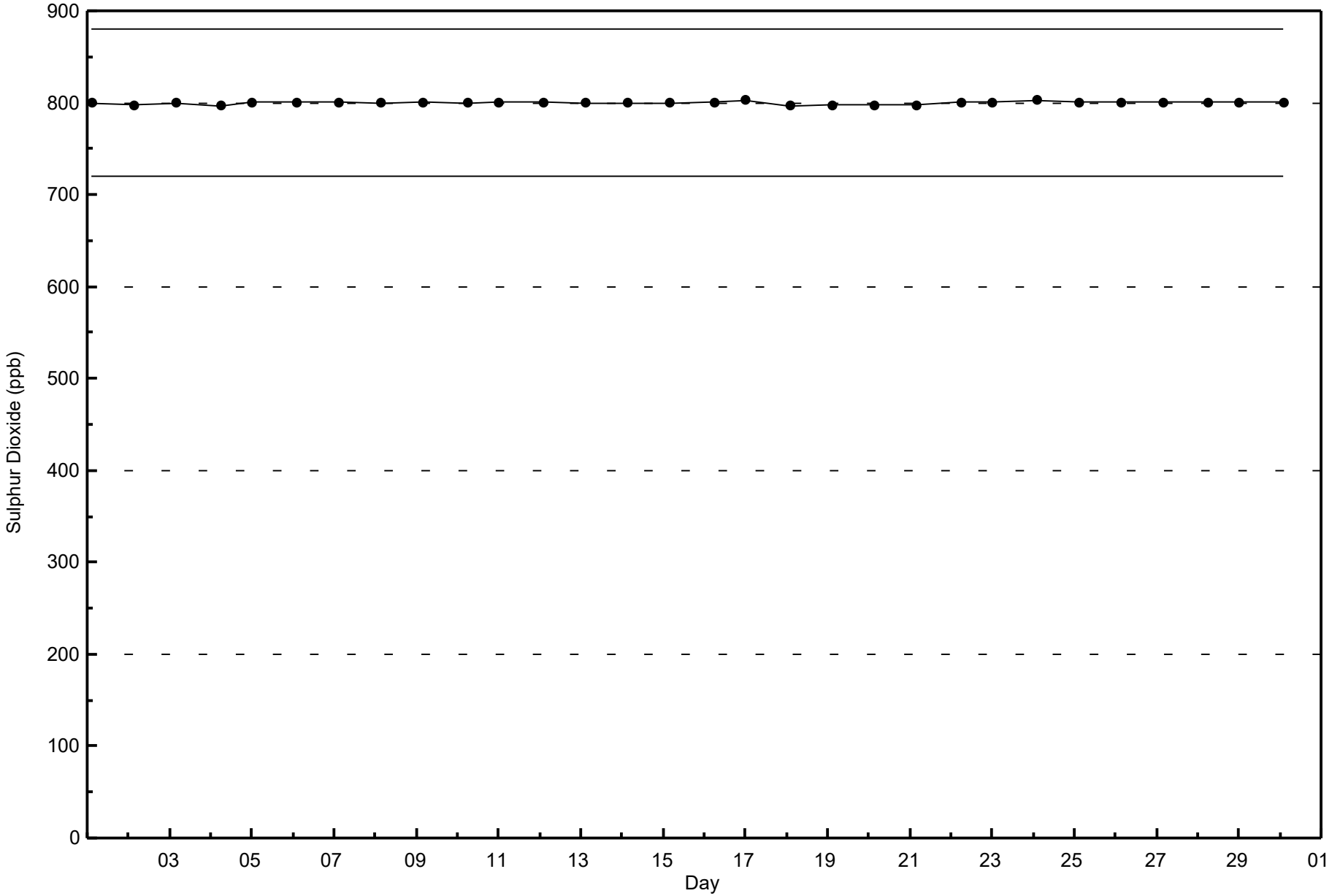


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Athabasca Valley - June 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Athabasca Valley - June 2026

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

Maximum Value: 2.2 ppb on Jun 21 08:00 Maximum Daily Average: 0.4 ppb on Jun 21

Minimum Value: 0.0 ppb on Jun 8 20:00 Minimum Daily Average: 0.0 ppb on Jun 2

Maximum Diurnal Average: 0.4 ppb at hour 7 Minimum Diurnal Average: 0.1 ppb at hour 19

Monthly Average: 0.21 ppb Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.2 P_{90} = 0.4 P_{99} = 0.9

Periods in Service:	1440
Periods of Valid Data:	1369
Periods of Invalid Data:	71
Periods of Calibration:	69
Percent Operational Time:	99.9

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-Jun	0.2	0.6	0.5	Z	0.5	0.5	0.5	0.4	0.3	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.7
	0.4	0.7	0.3	SP	0.5	0.5	0.3	0.4	0.3	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
2-Jun	0.0	0.0	0.1	0.1	Z	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	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.1	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3-Jun	0.0	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	0.1	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	SP	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		
4-Jun	Z	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.4
	SP	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2		
5-Jun	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	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2
	0.2	SP	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	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1		
6-Jun	0.1	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
	0.1	0.1	SP	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1		
7-Jun	0.2	0.1	0.1	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	0.2	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.2	0.3
	0.2	0.1	0.2	SP	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.3	0.3	0.1	0.1		
8-Jun	0.1	0.2	0.4	0.4	Z	0.4	0.4	0.2	0.3	C	C	C	C	C	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.5
	0.1	0.3	0.4	0.3	SP	0.5	0.3	0.2	0.2	C	C	C	C	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0		
9-Jun	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	0.2	0.2	0.2	0.2	0.1	0.3
	0.0	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	0.2	0.2	0.2	0.3		
10-Jun	Z	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.3	0.2	0.1	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.3	0.1	0.2	0.2	0.2	0.5
	SP	0.3	0.4	0.3	0.4	0.2	0.3	0.3	0.4	0.5	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2		
11-Jun	0.2	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.4
	0.2	SP	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2		
12-Jun	0.2	0.1	Z	0.2	0.2	0.3	0.3	0.2	0.4	0.3	0.1	0.3	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	0.5
	0.2	0.1	SP	0.2	0.2	0.3	0.2	0.4	0.5	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2		
13-Jun	0.2	0.2	0.2	Z	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	0.2	0.2	0.2	0.2	0.3
	0.2	0.2	0.2	SP	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	0.2	0.2	0.2	0.2		
14-Jun	0.2	0.2	0.2	0.2	Z	0.2	0.2	0.1	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.5
	0.2	0.2	0.2	0.2	SP	0.2	0.2	0.1	0.2	0.3	0.5	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.3		
15-Jun	0.3	0.3	0.3	0.3	0.4	Z	0.5	0.4	0.4	0.3	0.1	0.1	M	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.5
	0.3	0.3	0.3	0.3	0.4	SP	0.5	0.4	0.3	0.2	0.1	M	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1		

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Athabasca Valley - June 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-Jun	Z	0.2	0.1	0.2	0.2	0.3	0.4	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.3	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.4
	SP	0.1	0.1	0.1	0.2	0.4	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1		
17-Jun	0.2	Z	0.6	0.8	1.1	0.9	0.8	0.5	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.3	1.2
	0.3	SP	0.6	0.8	1.2	0.8	0.7	0.4	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2		
18-Jun	0.2	0.2	Z	0.7	0.7	0.7	0.7	0.7	0.8	0.5	0.4	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.4	0.2	0.2	0.2	0.4	1.6
	0.2	0.2	SP	1.0	0.8	0.5	0.6	1.6	0.6	0.5	0.2	0.2	0.2	0.3	0.3	0.4	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.2		
19-Jun	0.2	0.2	0.2	Z	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.4	0.2	0.1	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.4	0.3	0.3	0.3	0.6
	0.2	0.2	0.2	SP	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.2	0.1	0.2	0.6	0.3	0.2	0.2	0.2	0.1	0.2	0.4	0.3	0.2		
20-Jun	0.3	0.5	0.3	0.7	Z	0.4	0.8	0.7	0.6	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.9
	0.5	0.3	0.4	0.6	SP	0.5	0.9	0.7	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2		
21-Jun	0.2	0.2	0.2	0.4	0.3	Z	1.0	2.0	1.8	0.5	0.3	0.3	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.5	0.5	0.4	2.2
	0.2	0.2	0.2	0.5	0.3	SP	1.5	2.2	0.9	0.4	0.3	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.5	0.5	0.5		
22-Jun	Z	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.5
	SP	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2		
23-Jun	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	0.5	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.6
	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	0.1	0.1	0.1	0.6	0.2	0.1	0.1	0.1	0.2	0.2	0.2		
24-Jun	0.2	0.3	Z	0.4	0.5	0.5	0.7	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	0.2	0.2	0.2	0.7
	0.3	0.3	SP	0.5	0.4	0.6	0.5	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	0.2		
25-Jun	0.2	0.3	0.3	Z	0.5	0.7	0.6	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	0.2	0.2	0.2	0.7
	0.2	0.3	0.3	SP	0.7	0.7	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2		
26-Jun	0.2	0.3	0.3	0.3	Z	0.6	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.6
	0.2	0.3	0.3	0.4	SP	0.5	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		
27-Jun	0.2	0.3	0.3	0.4	0.5	Z	0.6	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	0.2	0.2	0.2	0.2	0.2	0.6
	0.2	0.3	0.3	0.4	0.5	SP	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2		
28-Jun	Z	0.3	0.3	0.3	0.3	0.3	0.5	0.6	0.7	1.0	0.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	1.0
	SP	0.3	0.3	0.3	0.3	0.4	0.5	0.8	0.8	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2		
29-Jun	0.2	Z	0.4	0.4	0.5	0.7	0.7	0.8	1.0	0.9	0.4	0.4	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	1.0
	0.3	SP	0.3	0.5	0.6	0.7	0.8	0.8	1.0	0.8	0.5	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		
30-Jun	0.3	0.3	Z	0.5	0.6	0.5	0.6	0.4	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.3	0.9
	0.3	0.3	SP	0.6	0.4	0.5	0.5	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.9	0.2		
	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	Diurnal Average	
	0.5	0.7	0.6	1.0	1.2	0.9	1.5	2.2	1.8	1.0	0.7	0.4	0.4	0.4	0.6	0.4	0.6	0.5	0.3	0.3	0.4	0.5	0.9	0.5	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 - June 2026

Maximum Value: 2.1 ppb on Jun 21 08:00

Maximum Daily Average: 0.4 ppb on Jun 21

Minimum Value: 0.0 ppb on Jun 8 20:00

Minimum Daily Average: 0.0 ppb on Jun 2

Maximum Diurnal Average: 0.4 ppb at hour 7

Minimum Diurnal Average: 0.1 ppb at hour 19

Monthly Average: 0.21 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.2 P_{90} = 0.4 P_{99} = 0.9

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-Jun	0.3	0.6	0.4	Z	0.5	0.5	0.4	0.4	0.3	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.6
2-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
4-Jun	Z	0.1	0.1	0.1	0.2	0.2	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	0.1	0.2	0.2	0.2	0.1	0.3
5-Jun	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	0.2	0.2	0.1	0.1	0.1	0.2
6-Jun	0.1	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
7-Jun	0.2	0.1	0.1	Z	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.2	0.3
8-Jun	0.1	0.3	0.4	0.3	Z	0.5	0.3	0.2	0.2	C	C	C	C	C	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.5
9-Jun	0.0	0.0	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.1	0.3
10-Jun	Z	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.3	0.2	0.1	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.4
11-Jun	0.2	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3
12-Jun	0.2	0.1	Z	0.2	0.2	0.3	0.3	0.3	0.4	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.4
13-Jun	0.2	0.2	0.2	Z	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	0.2	0.2	0.2	0.2	0.3
14-Jun	0.2	0.2	0.2	0.2	Z	0.2	0.2	0.1	0.2	0.3	0.4	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	0.4
15-Jun	0.3	0.3	0.3	0.3	0.4	Z	0.5	0.4	0.4	0.2	0.1	M	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	0.5
16-Jun	Z	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.3
17-Jun	0.3	Z	0.6	0.8	1.1	0.8	0.7	0.5	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.3	1.1
18-Jun	0.2	0.2	Z	0.8	0.7	0.6	0.7	1.2	0.7	0.5	0.3	0.2	0.2	0.3	0.3	0.4	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.4	1.2
19-Jun	0.2	0.2	0.2	Z	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.3	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.4	0.3	0.3	0.3	0.5
20-Jun	0.4	0.4	0.3	0.7	Z	0.4	0.8	0.7	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.8
21-Jun	0.2	0.2	0.2	0.4	0.3	Z	1.3	2.1	1.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.4	0.5	0.5	0.4	2.1
22-Jun	Z	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.5
23-Jun	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	0.3	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3
24-Jun	0.2	0.3	Z	0.5	0.4	0.6	0.6	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	0.2	0.2	0.2	0.6
25-Jun	0.2	0.3	0.3	Z	0.6	0.7	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.7
26-Jun	0.2	0.3	0.3	0.4	Z	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.5
27-Jun	0.2	0.3	0.3	0.4	0.5	Z	0.6	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.6
28-Jun	Z	0.3	0.3	0.3	0.3	0.3	0.5	0.7	0.8	1.0	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	1.0
29-Jun	0.2	Z	0.4	0.4	0.5	0.7	0.7	0.8	1.0	0.8	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	1.0
30-Jun	0.3	0.3	Z	0.6	0.5	0.5	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.5	0.2	0.3	0.6
	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	Diurnal Average	
	0.4	0.6	0.6	0.8	1.1	0.8	1.3	2.1	1.3	1.0	0.5	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.3	0.3	0.4	0.5	0.5	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

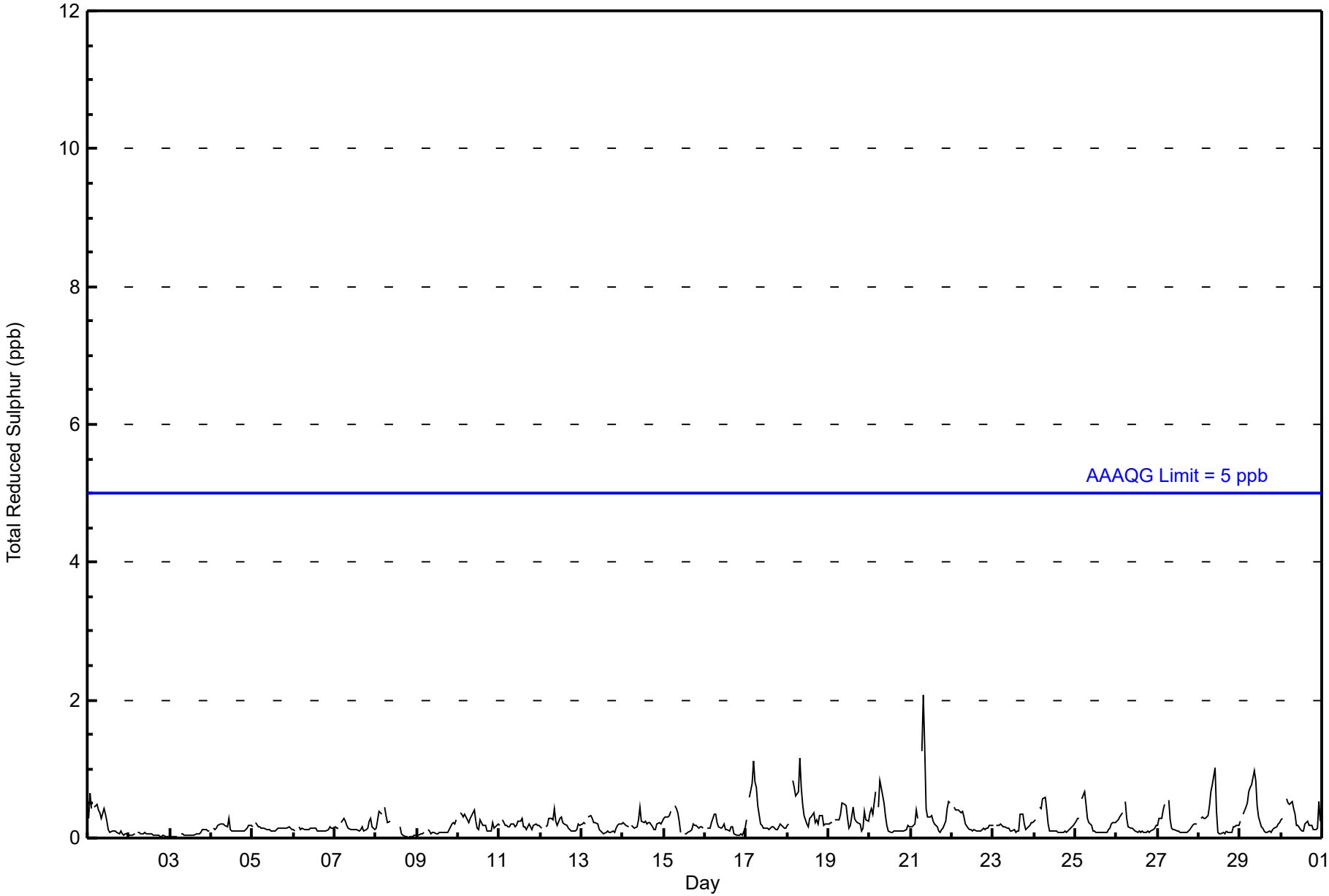
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Athabasca Valley - June 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 - June 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	10	22	44	48	70	43	17	14	41	51	25	24	22	106	118	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	10	22	44	48	70	43	17	14	41	51	25	24	22	106	118	684

Total Number of Valid Hours: 684

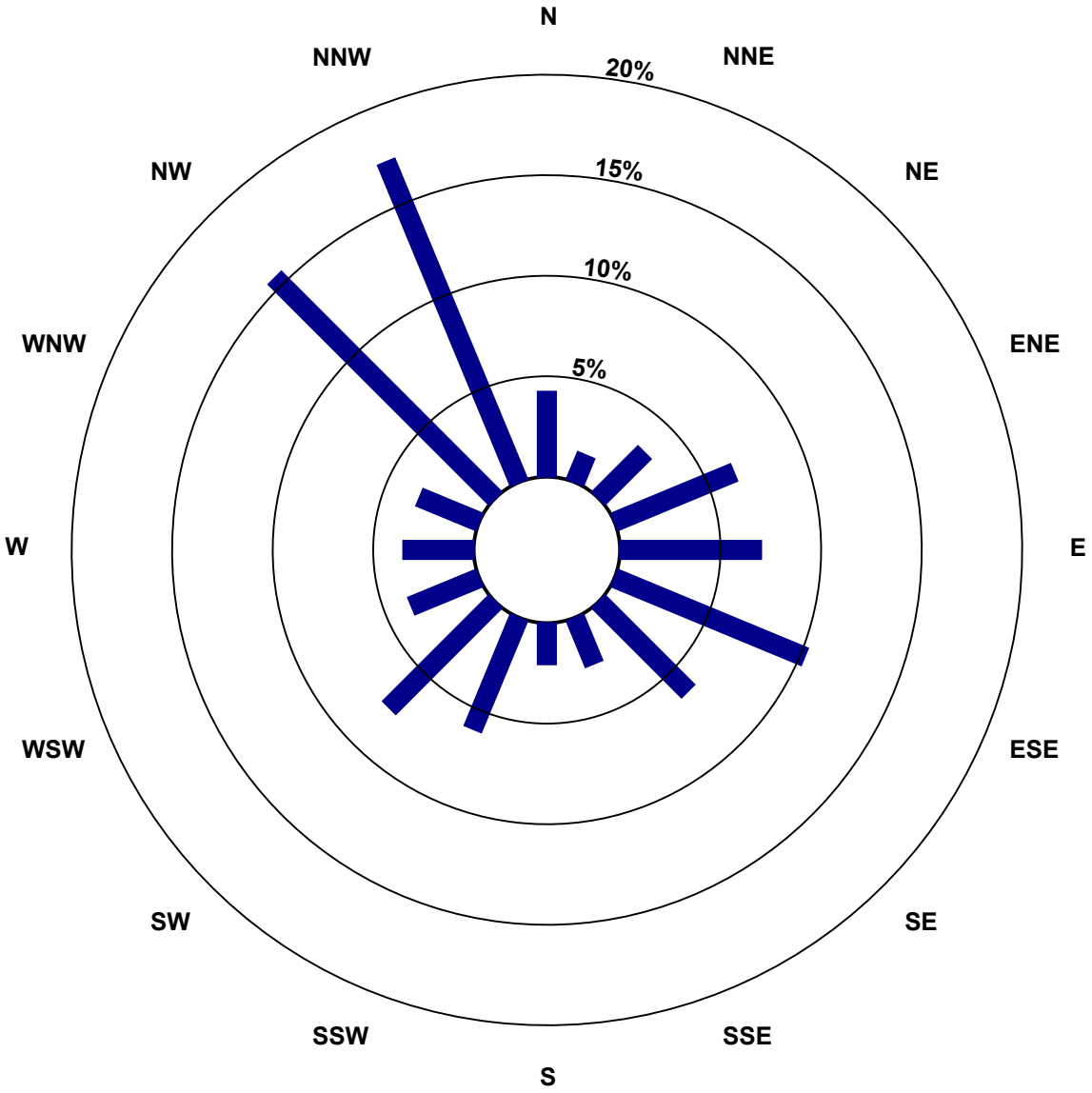
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Reduced Sulphur (TRS) - ppb

Athabasca Valley



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

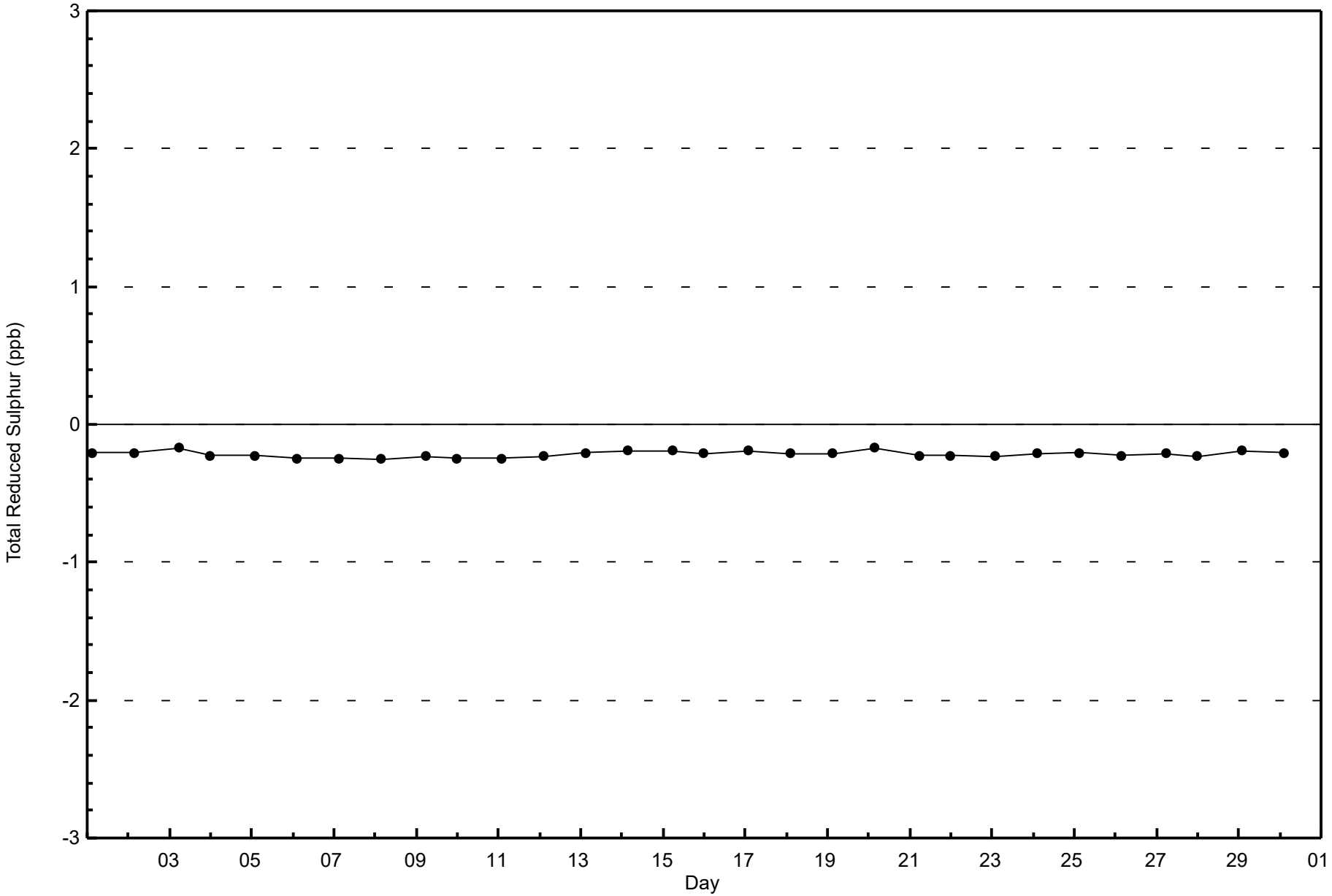
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Athabasca Valley - June 2026

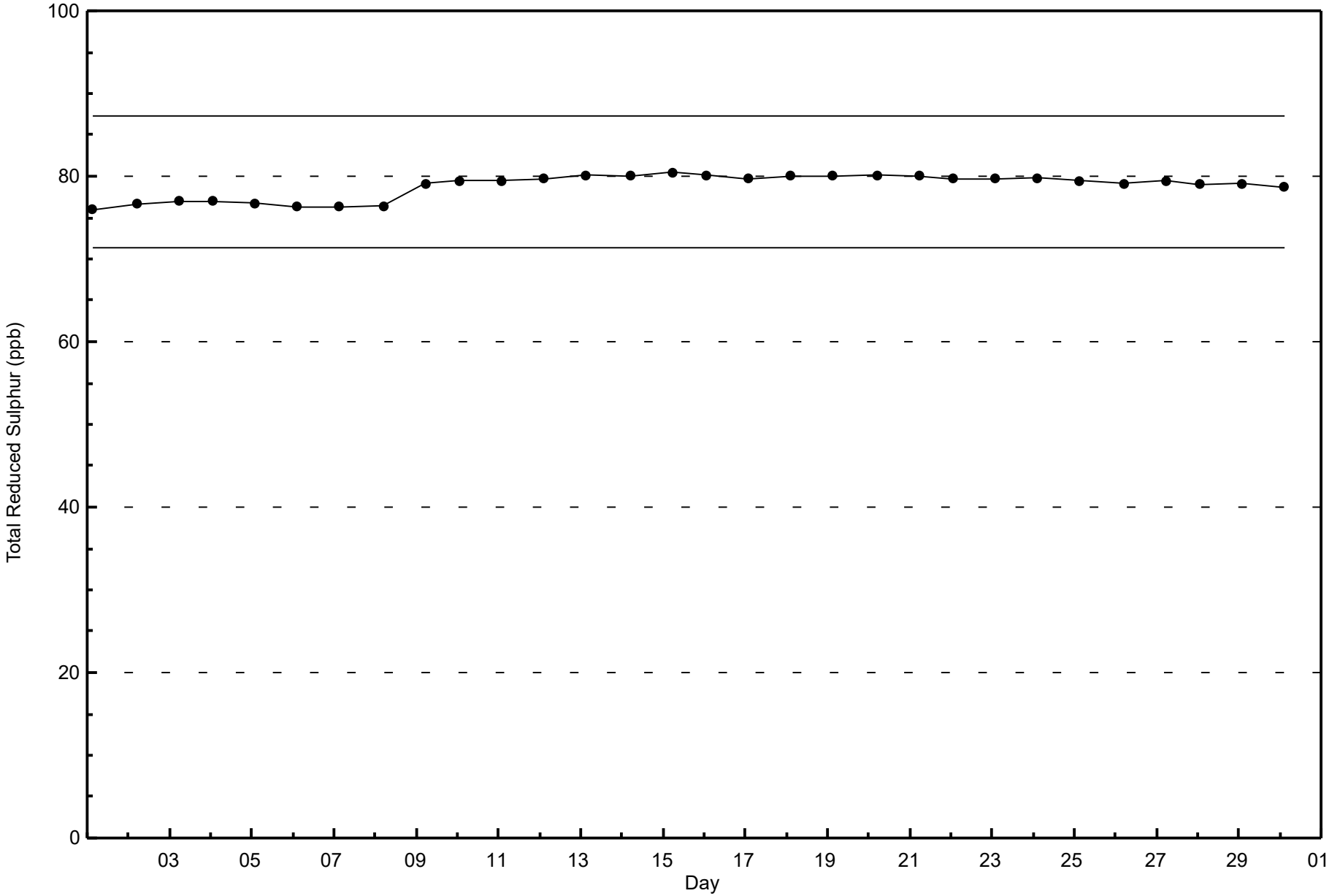


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Athabasca Valley - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Athabasca Valley - June 2026

Maximum Value: 2.5 ppm on Jun 29 06:00

Maximum Daily Average: 2.2 ppm on Jun 29

Minimum Value: 2.0 ppm on Jun 3 02:00

Minimum Daily Average: 2.0 ppm on Jun 2

Maximum Diurnal Average: 2.2 ppm at hour 5

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} = 2.4

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-Jun	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
2-Jun	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
3-Jun	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	2.1	2.0	2.1
4-Jun	2.1	2.1	2.1	2.1	2.1	Z	2.0	2.0	2.0	C	C	C	C	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.3	2.2	2.1	2.3
5-Jun	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.1
6-Jun	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	2.1	2.0	2.1
7-Jun	2.1	2.1	Z	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.3
8-Jun	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2
9-Jun	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	2.2	2.1	2.1	2.0	2.2
10-Jun	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
11-Jun	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	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1
12-Jun	2.1	Z	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	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3	2.2	2.1	2.3
13-Jun	2.2	2.1	Z	2.3	2.4	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	2.1	2.2	2.4	2.1	2.4
14-Jun	2.3	2.2	2.2	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.3
15-Jun	2.2	2.1	2.3	2.2	Z	2.4	2.2	2.3	2.2	2.1	2.0	M	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.1	2.0	2.1	2.4
16-Jun	2.0	2.0	2.0	2.1	2.2	Z	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.2
17-Jun	Z	2.1	2.1	2.2	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	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.3
18-Jun	2.1	Z	2.1	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	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.3
19-Jun	2.1	2.0	Z	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	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1
20-Jun	2.1	2.1	2.1	Z	2.2	2.3	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.3
21-Jun	2.1	2.1	2.1	2.1	Z	2.2	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.3
22-Jun	2.1	2.2	2.2	2.2	2.2	Z	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
23-Jun	Z	2.1	2.1	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
24-Jun	2.2	Z	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.2
25-Jun	2.1	2.1	Z	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	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
26-Jun	2.1	2.1	2.2	Z	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.1	2.3
27-Jun	2.2	2.2	2.2	2.2	Z	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.2
28-Jun	2.1	2.2	2.3	2.2	2.2	Z	2.2	2.4	2.5	2.4	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	2.5
29-Jun	Z	2.2	2.2	2.2	2.5	2.5	2.4	2.4	2.5	2.3	2.2	2.2	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.2	2.2	2.5
30-Jun	2.2	Z	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.3
	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	Diurnal Average	
	2.3	2.2	2.3	2.3	2.5	2.5	2.4	2.4	2.5	2.4	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	2.4	Diurnal Maximum	

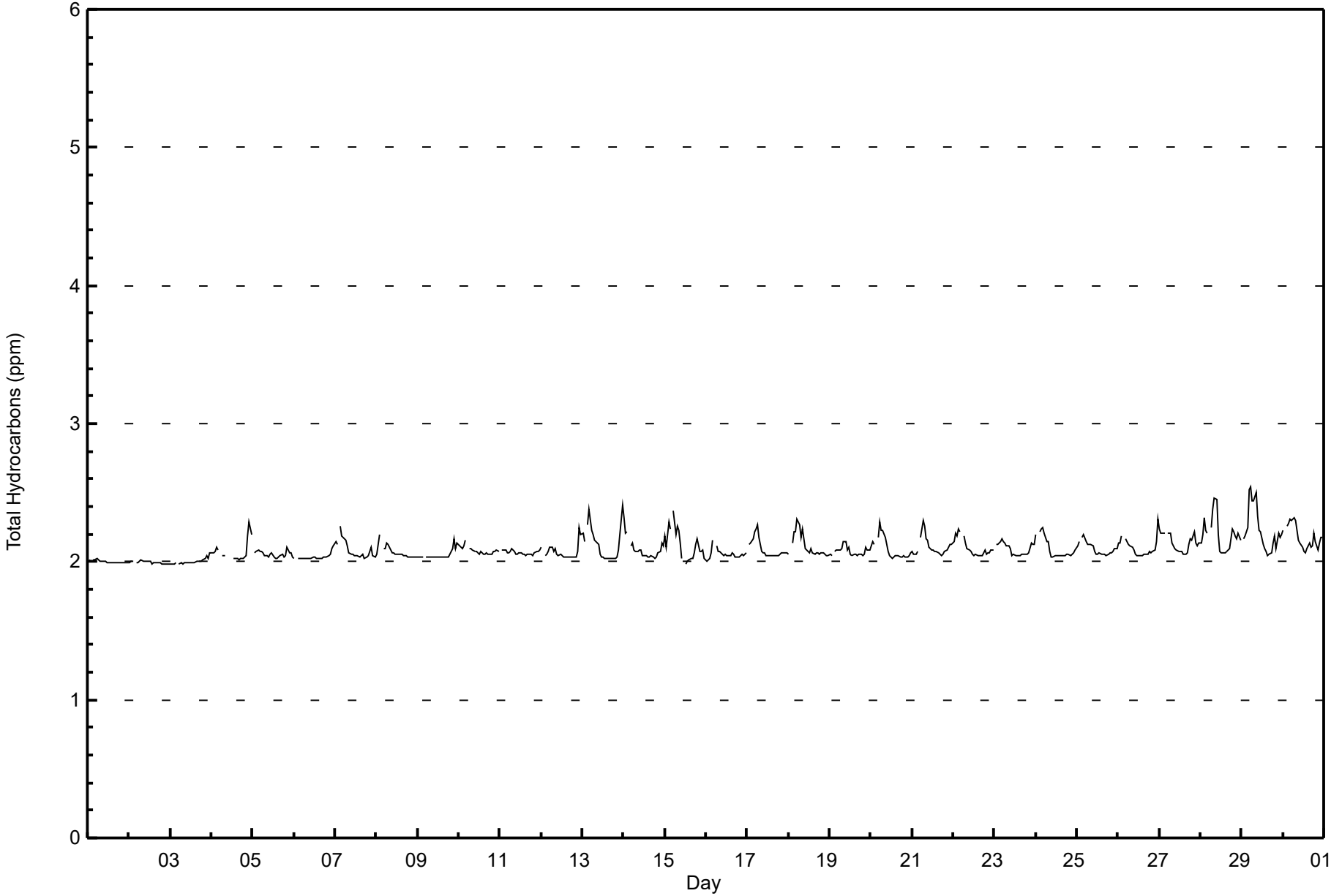
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Athabasca Valley - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	255	37.23	37.23
2.1 - 3.0	430	62.77	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

Athabasca Valley - June 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	7	9	14	9	16	5	2	6	26	36	9	11	7	23	57	255
2.1 - 3.0	10	3	13	29	39	53	38	16	8	12	17	14	14	18	84	62	430
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	28	10	22	43	48	69	43	18	14	38	53	23	25	25	107	119	685

Total Number of Valid Hours: 685

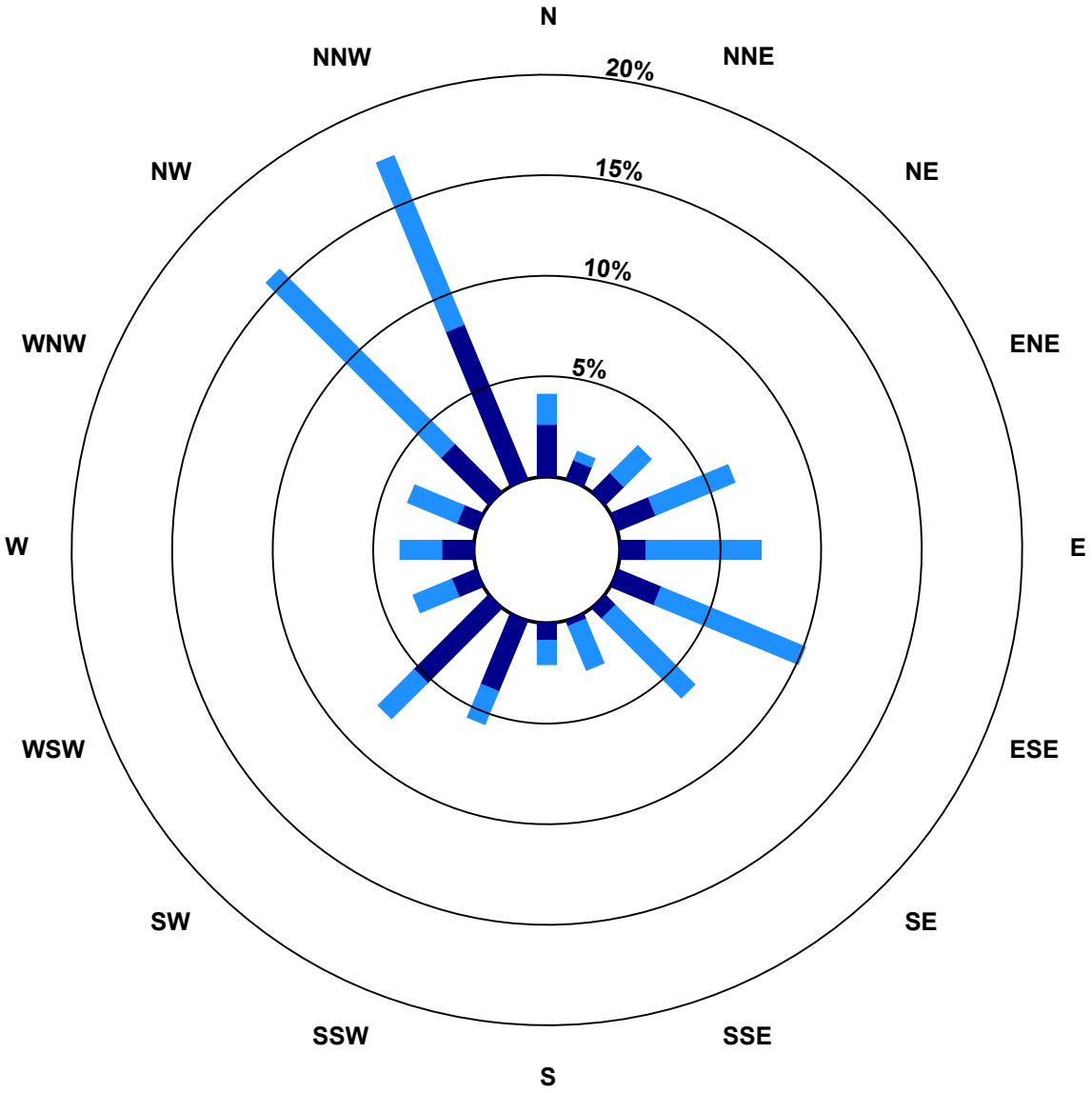
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Athabasca Valley



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

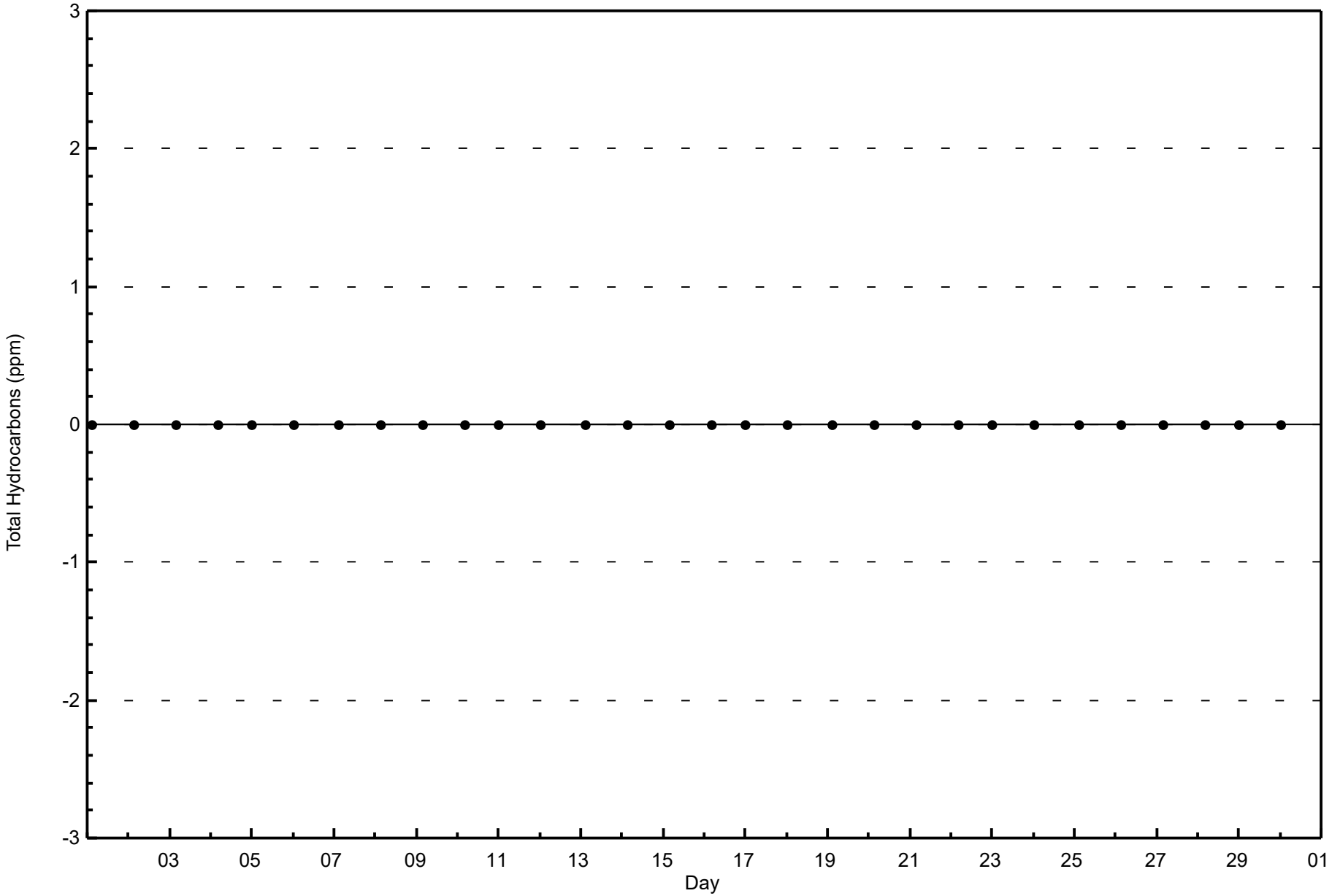
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Athabasca Valley - June 2026

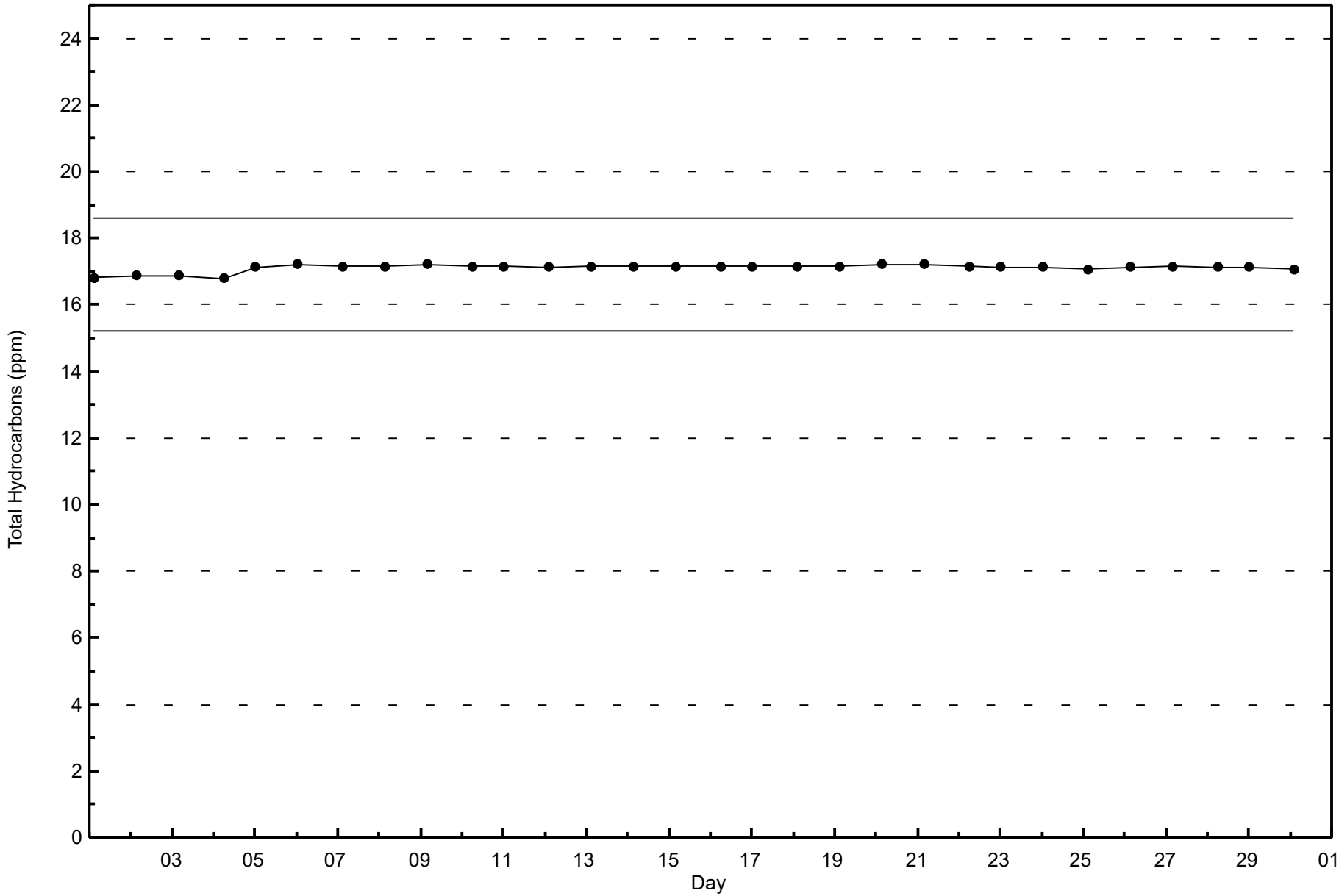


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Athabasca Valley - June 2026



Maximum Value: 0.108 ppm on Jun 28 21:00

Maximum Daily Average: 0.015 ppm on Jun 28

Minimum Value: 0.000 ppm on Jun 1 01:00

Minimum Daily Average: 0.000 ppm on Jun 1

Maximum Diurnal Average: 0.005 ppm at hour 21

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:	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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-Jun	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-Jun	0.000	0.000	0.000	0.000	0.000	Z	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	0.002	0.000	0.000	0.000	0.002
5-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001
10-Jun	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-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.002
14-Jun	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-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	M	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.001
16-Jun	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-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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-Jun	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-Jun	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	0.001	0.000	0.000	0.000	0.000	0.001
23-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	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	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.003
25-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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	0.000	0.000	0.000	0.000	0.001
27-Jun	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	0.001	0.005	0.000	0.001	0.043	0.045	0.010	0.001	0.005	0.045
28-Jun	0.000	0.000	0.028	0.002	0.000	Z	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.108	0.092	0.070	0.048	0.015	0.108
29-Jun	Z	0.008	0.005	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	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.008
30-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.016	0.010	0.016	0.030	0.012	0.001	0.013	0.032	0.001	0.006	0.032
	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.001	0.005	0.005	0.004	0.002	Diurnal Average	
	0.000	0.008	0.028	0.002	0.000	0.001	0.000	0.003	0.000	0.003	0.000	0.000	0.002	0.000	0.000	0.016	0.010	0.016	0.030	0.012	0.108	0.092	0.070	0.048	Diurnal Maximum	

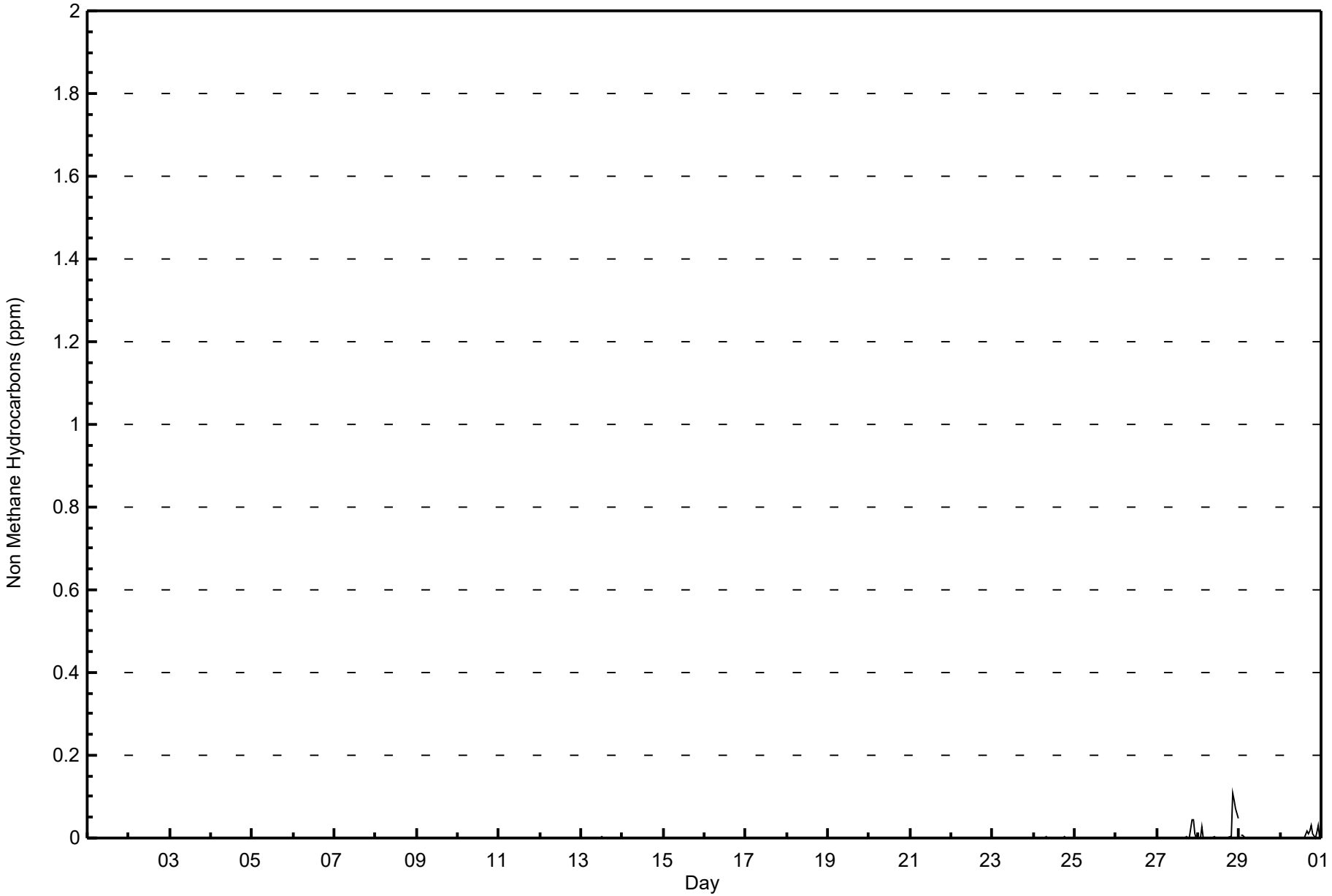
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Athabasca Valley - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Athabasca Valley - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	669	97.66	97.66
0.006 - 0.05	13	1.90	99.56
0.06 - 0.1	3	0.44	100.00
> 0.1	0	0.00	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Concentration	Wind Direction																
Ranges (ppm)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 0.005	28	10	21	43	46	69	41	18	14	38	49	21	24	25	105	117	669
0.006 - 0.05	0	0	1	0	2	0	2	0	0	0	2	1	1	0	2	2	13
0.06 - 0.1	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3
> 0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	28	10	22	43	48	69	43	18	14	38	53	23	25	25	107	119	685

Total Number of Valid Hours: 685

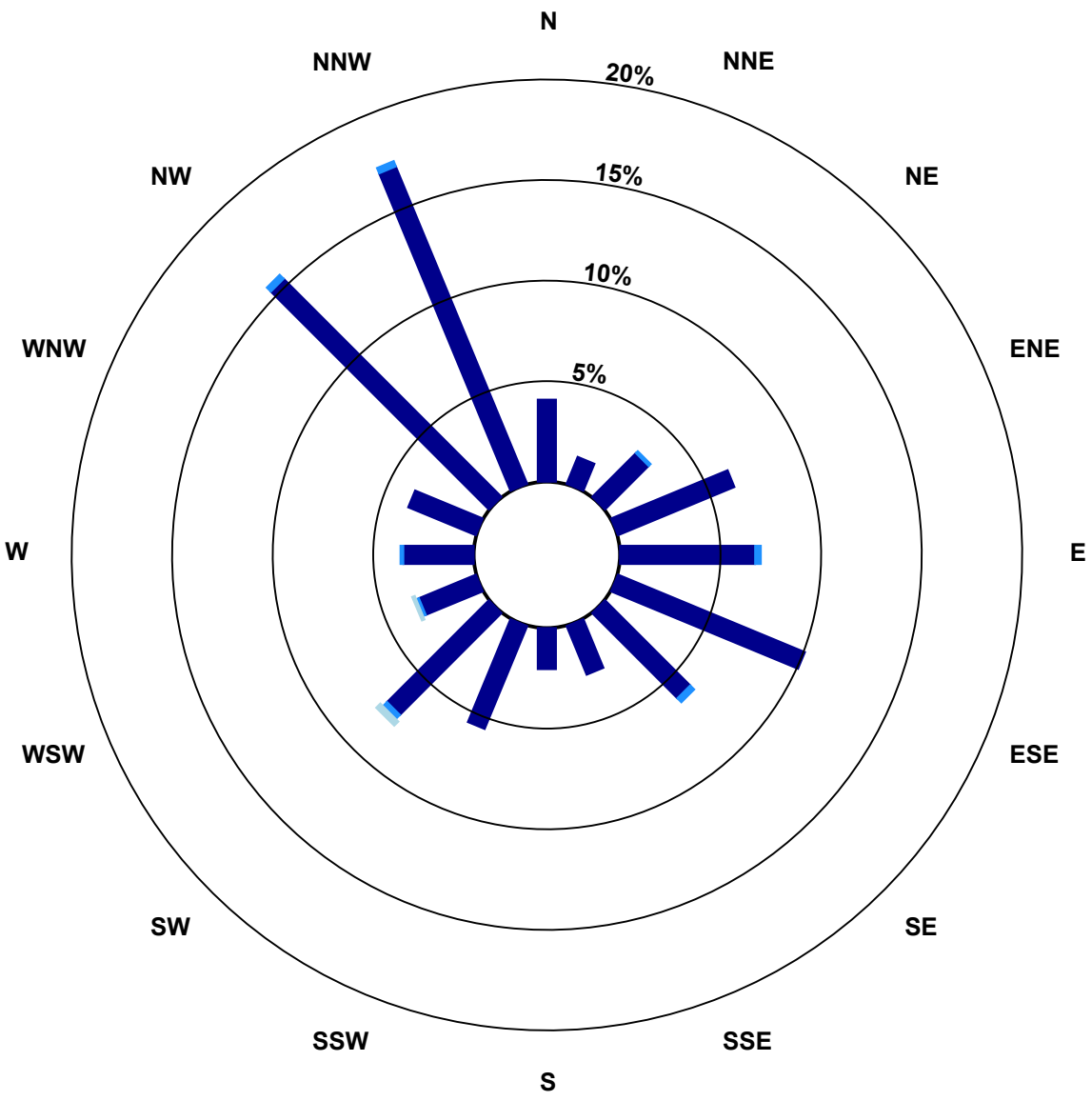
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Non Methane Hydrocarbons (NMHC) - ppm

Athabasca Valley



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

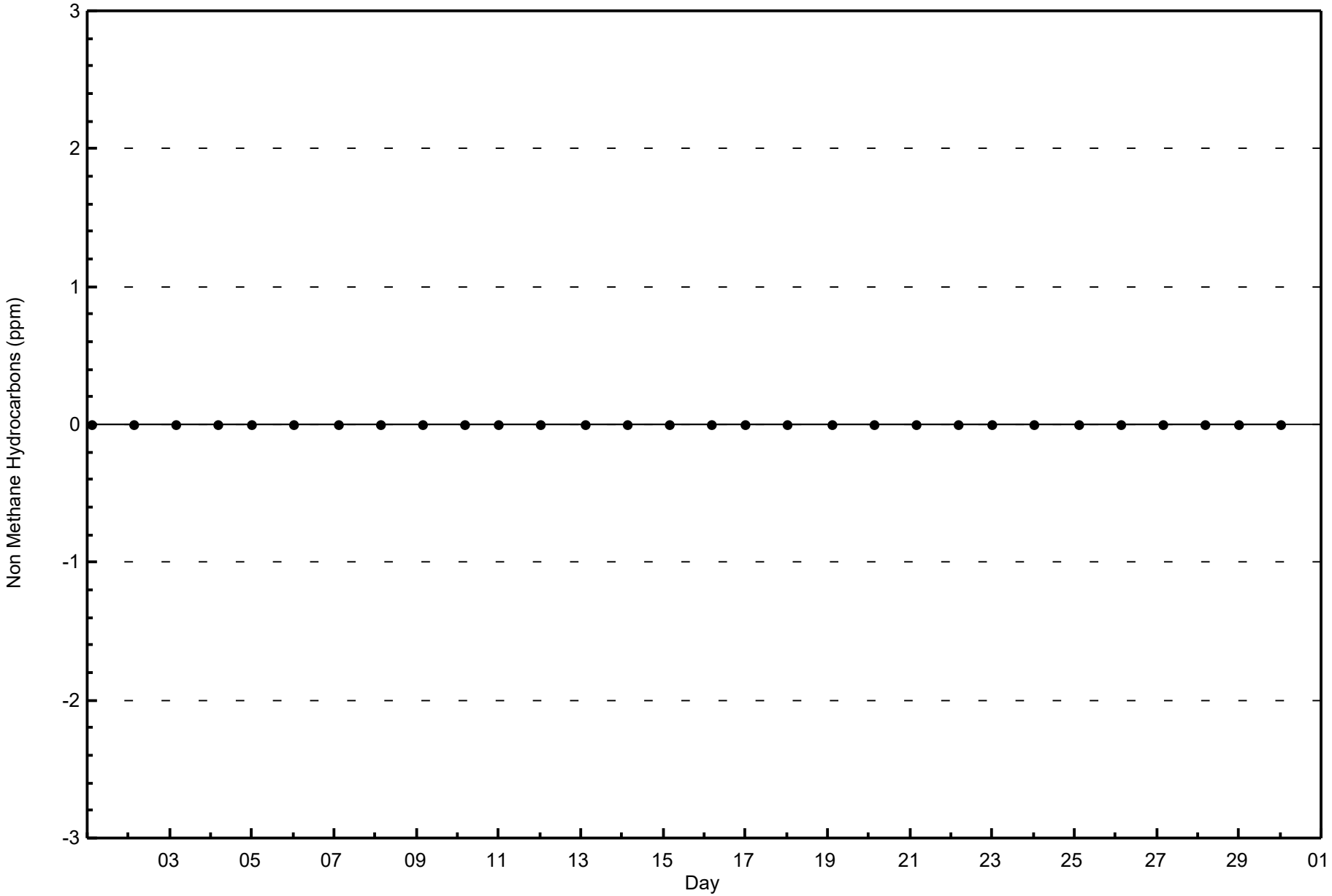
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Athabasca Valley - June 2026

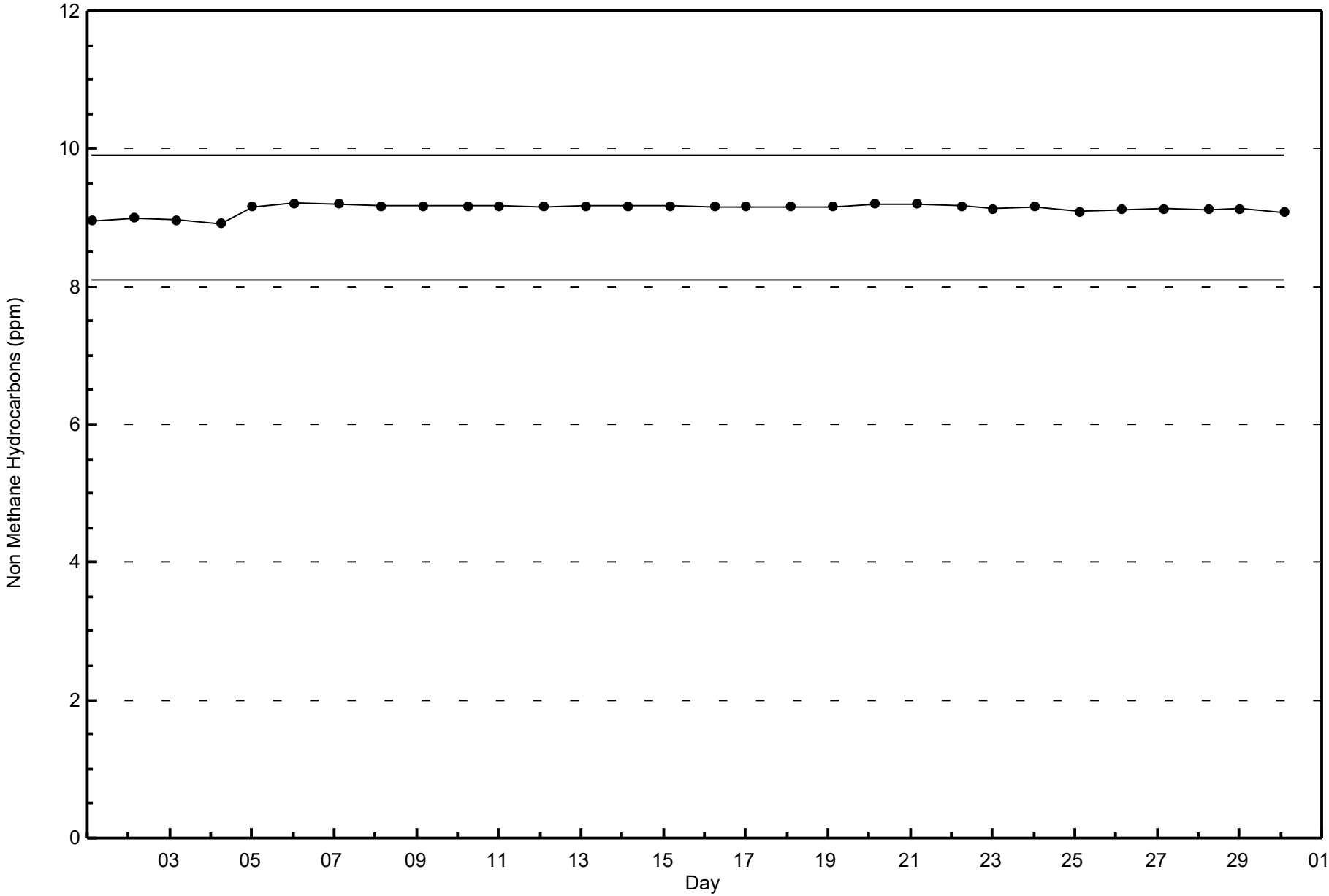


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Athabasca Valley - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Athabasca Valley - June 2026

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

Maximum Value: 2.5 ppm on Jun 29 06:00

Maximum Daily Average: 2.2 ppm on Jun 29

Minimum Value: 2.0 ppm on Jun 3 02:00

Minimum Daily Average: 2.0 ppm on Jun 2

Maximum Diurnal Average: 2.2 ppm at hour 5

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} = 2.4

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-Jun	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
2-Jun	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
3-Jun	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	2.1	2.0	2.1
4-Jun	2.1	2.1	2.1	2.1	2.1	Z	2.0	2.0	2.0	C	C	C	C	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.3	2.2	2.1	2.3
5-Jun	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.1
6-Jun	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	2.1	2.0	2.1
7-Jun	2.1	2.1	Z	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.3
8-Jun	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2
9-Jun	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	2.2	2.1	2.1	2.0	2.2
10-Jun	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
11-Jun	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	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1
12-Jun	2.1	Z	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	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3	2.2	2.1	2.3
13-Jun	2.2	2.1	Z	2.3	2.4	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	2.1	2.2	2.4	2.1	2.4
14-Jun	2.3	2.2	2.2	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.3
15-Jun	2.2	2.1	2.3	2.2	Z	2.4	2.2	2.3	2.2	2.1	2.0	M	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.1	2.0	2.1	2.4
16-Jun	2.0	2.0	2.0	2.1	2.2	Z	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.2
17-Jun	Z	2.1	2.1	2.2	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	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.3
18-Jun	2.1	Z	2.1	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	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.3
19-Jun	2.1	2.0	Z	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	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1
20-Jun	2.1	2.1	2.1	Z	2.2	2.3	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.3
21-Jun	2.1	2.1	2.1	2.1	Z	2.2	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.3
22-Jun	2.1	2.2	2.2	2.2	2.2	Z	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
23-Jun	Z	2.1	2.1	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
24-Jun	2.2	Z	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.2
25-Jun	2.1	2.1	Z	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	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
26-Jun	2.1	2.1	2.2	Z	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.1	2.3
27-Jun	2.2	2.2	2.2	2.2	Z	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.2
28-Jun	2.1	2.2	2.3	2.2	2.2	Z	2.2	2.4	2.5	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.5
29-Jun	Z	2.2	2.2	2.2	2.5	2.5	2.4	2.4	2.5	2.3	2.2	2.2	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.2	2.2	2.5
30-Jun	2.2	Z	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.3
	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	Diurnal Average	
	2.3	2.2	2.3	2.3	2.5	2.5	2.4	2.4	2.5	2.4	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	2.4	Diurnal Maximum	

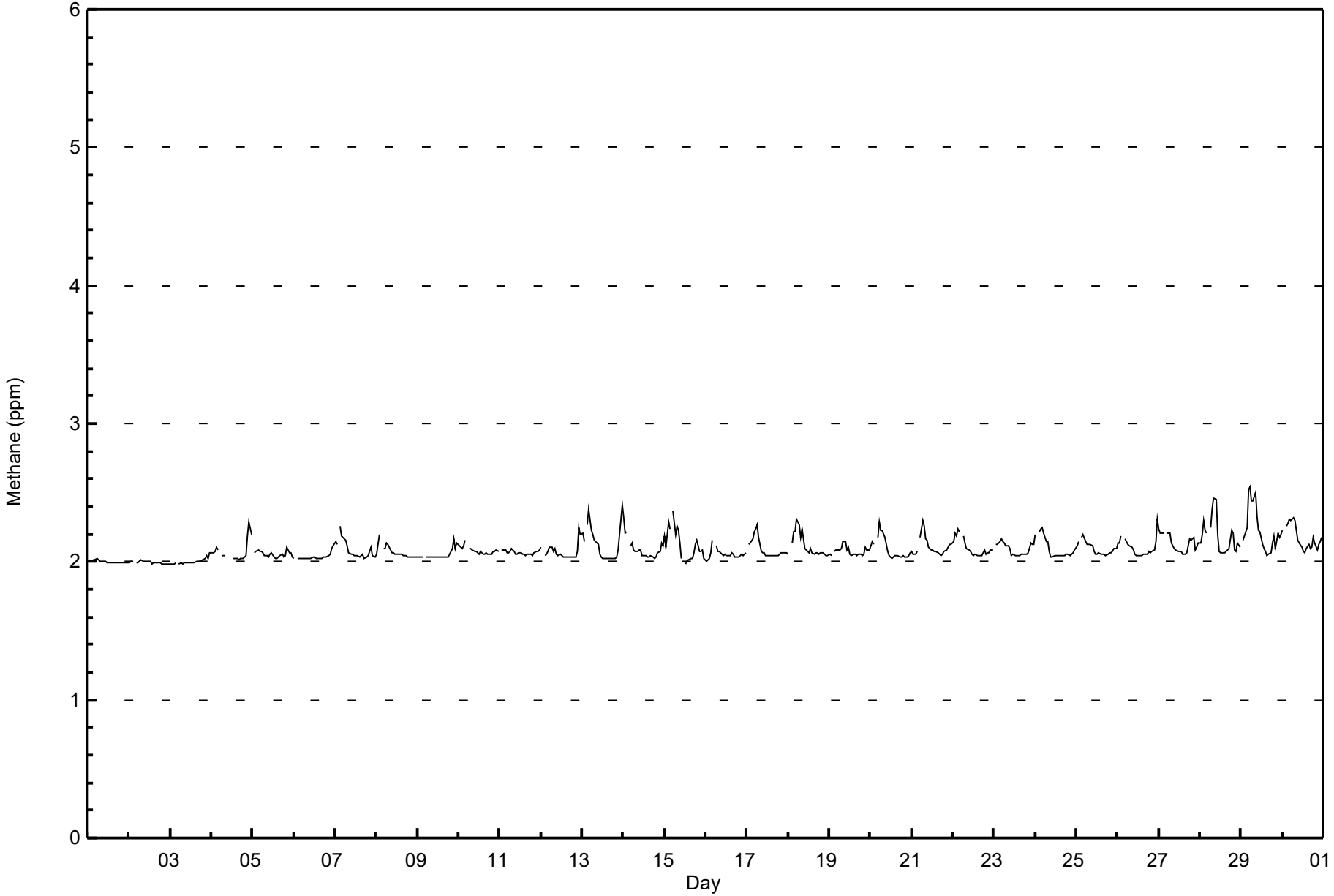
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Athabasca Valley - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	256	37.37	37.37
2.1 - 3.0	429	62.63	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

Athabasca Valley - June 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	19	7	9	14	9	16	5	2	6	26	36	9	11	7	23	57	256
2.1 - 3.0	9	3	13	29	39	53	38	16	8	12	17	14	14	18	84	62	429
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	28	10	22	43	48	69	43	18	14	38	53	23	25	25	107	119	685

Total Number of Valid Hours: 685

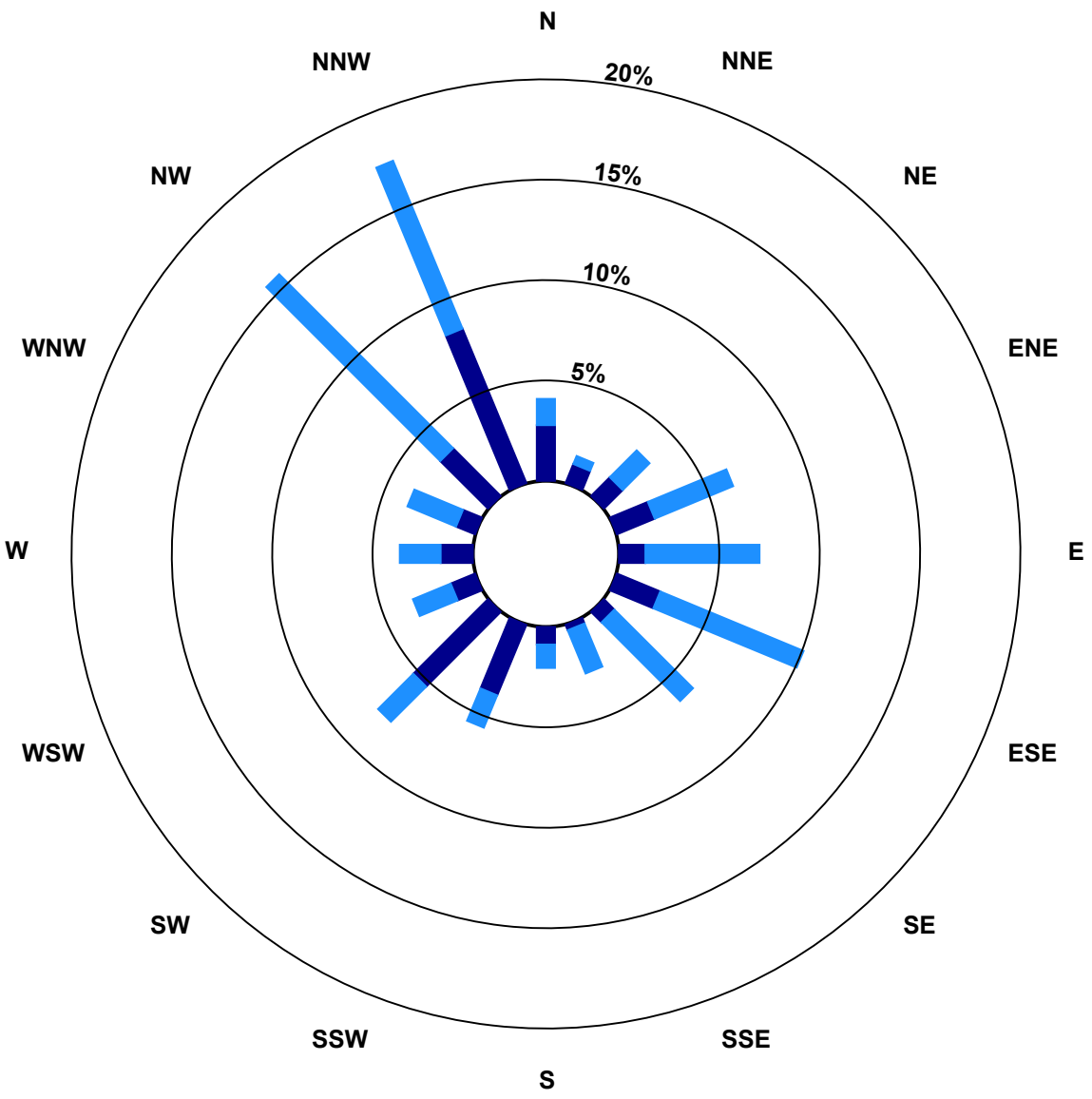
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Methane (CH_4) - ppm

Athabasca Valley



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

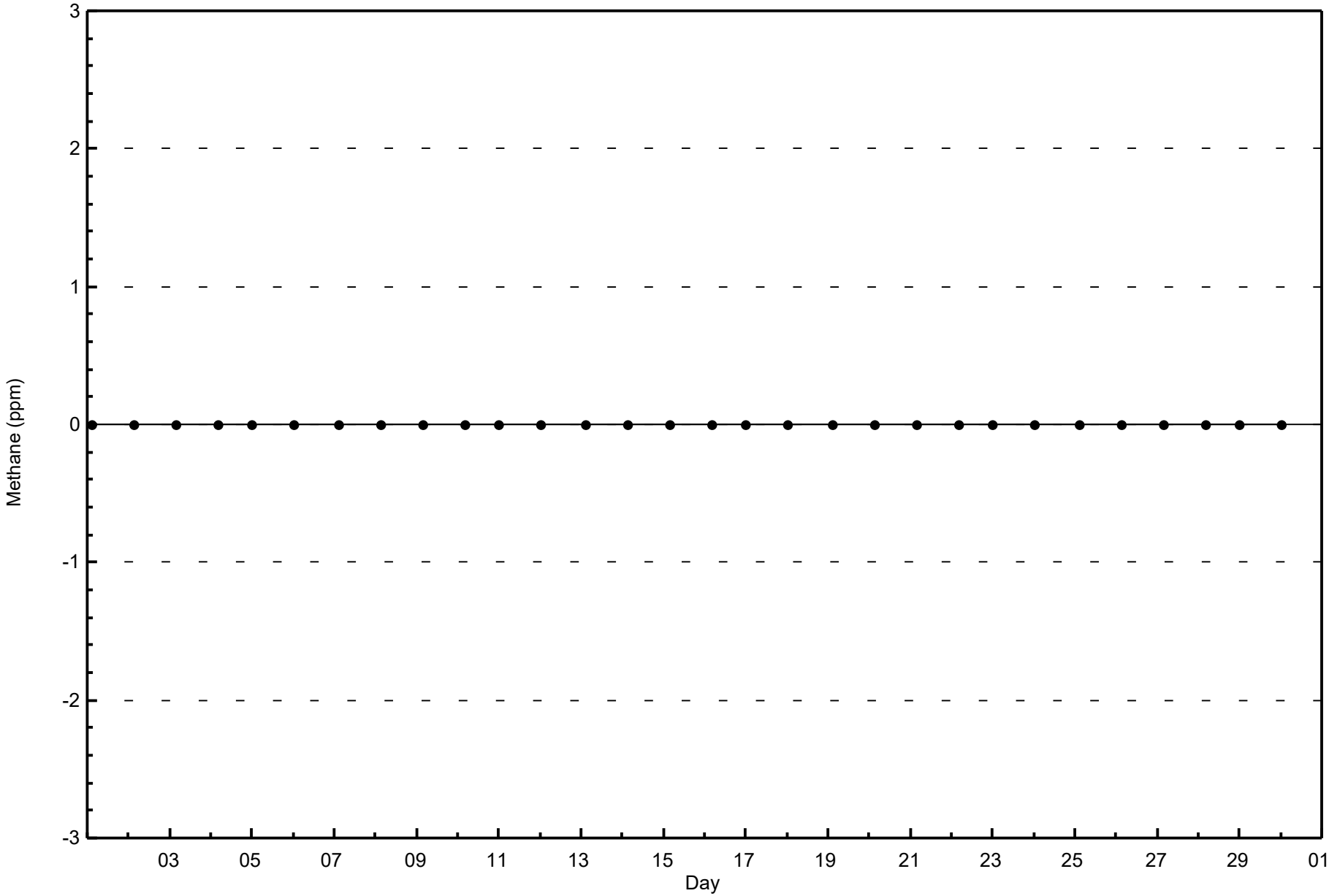
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Athabasca Valley - June 2026

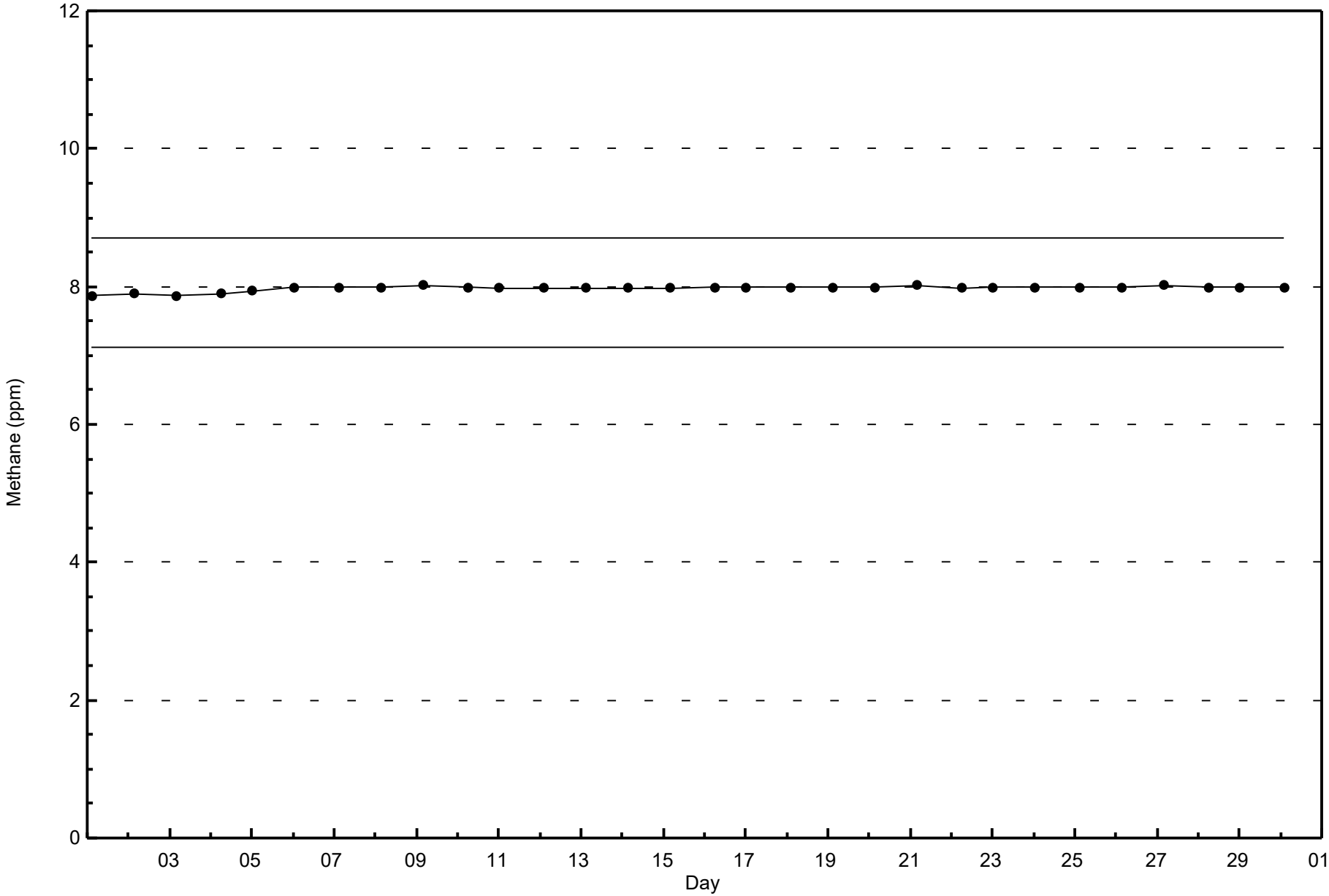


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Athabasca Valley - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Athabasca Valley - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 67.1 ppb on Jun 30 16:00 Maximum Daily Average: 35.4 ppb on Jun 26

Minimum Value: 2.3 ppb on Jun 22 04:00 Minimum Daily Average: 15.1 ppb on Jun 11
Maximum Diurnal Average: 34.6 ppb at hour 16 Minimum Diurnal Average: 13.4 ppb at hour 6
Monthly Average: 24.88 ppb Percentiles: P_1 = 3.7 P_{10} = 10.5 Q_1 = 16.0 Median = 24.6 Q_3 = 32.3 P_{90} = 40.0 P_{99} = 55.6

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-Jun	29.5	26.2	26.8	26.7	Z	27.5	30.3	33.2	33.9	33.0	32.8	32.9	31.7	32.1	29.8	30.1	30.4	31.0	30.7	29.4	29.9	31.8	31.3	29.9	30.5	33.9
2-Jun	27.5	25.8	25.1	24.5	25.3	Z	25.7	25.8	24.8	23.9	24.2	24.6	24.6	29.0	29.8	33.3	32.3	31.1	29.8	27.6	27.3	27.1	27.6	26.7	27.1	33.3
3-Jun	Z	27.6	27.0	27.6	28.5	28.0	27.4	27.3	27.2	27.5	C	C	C	22.2	22.6	21.4	21.5	21.9	20.8	20.1	17.7	10.4	9.1	6.7	22.1	28.5
4-Jun	5.9	Z	9.1	6.5	5.2	4.5	4.9	5.7	7.7	10.2	21.0	24.8	27.6	31.1	32.5	35.4	36.7	36.1	35.5	34.7	23.1	14.2	14.1	15.5	19.2	36.7
5-Jun	23.7	21.2	Z	19.9	18.2	17.1	20.8	23.9	24.9	27.6	30.4	35.6	39.5	35.2	33.5	32.0	29.1	29.7	26.1	24.2	18.6	15.5	21.1	26.6	25.8	39.5
6-Jun	26.6	28.7	28.0	Z	28.7	30.0	30.1	28.9	27.2	26.4	24.4	22.5	23.9	25.3	24.5	24.6	25.5	25.0	23.7	22.6	17.7	7.6	3.7	4.5	23.0	30.1
7-Jun	7.6	10.6	11.6	12.9	Z	8.0	8.5	11.7	17.2	21.0	23.8	26.4	29.5	31.5	31.8	32.5	32.7	39.5	36.5	32.8	26.2	21.0	26.2	26.8	22.9	39.5
8-Jun	20.4	14.6	12.1	18.6	21.0	Z	14.3	15.9	19.7	20.5	19.5	19.9	19.5	20.8	22.4	22.7	22.8	25.4	27.7	28.6	28.5	29.5	29.6	32.1	22.0	32.1
9-Jun	Z	31.7	31.1	29.4	27.6	26.6	25.8	26.4	32.9	34.1	34.2	35.6	36.0	35.7	35.1	34.6	35.7	35.8	35.7	34.3	25.0	12.7	11.3	10.1	29.5	36.0
10-Jun	12.7	Z	11.0	9.4	6.0	9.3	13.2	14.2	21.4	28.4	31.9	31.6	29.5	20.0	21.1	20.5	18.1	16.6	15.9	14.9	13.5	12.6	10.7	13.1	17.2	31.9
11-Jun	12.0	11.4	Z	13.8	15.2	13.1	11.8	10.8	12.6	14.0	14.8	15.5	15.3	16.5	17.4	19.4	20.2	18.6	18.7	19.5	16.3	14.2	12.9	12.8	15.1	20.2
12-Jun	11.9	13.8	16.5	Z	14.6	13.9	19.7	22.1	19.7	25.4	30.1	32.3	33.1	34.1	34.2	33.3	33.5	34.0	35.2	34.1	31.8	24.3	19.3	13.0	25.2	35.2
13-Jun	11.0	9.8	7.3	4.3	Z	7.9	11.0	14.5	18.8	24.9	31.2	33.6	35.0	34.8	35.0	34.4	32.3	32.0	30.9	29.7	16.8	9.7	10.5	8.1	21.0	35.0
14-Jun	6.9	7.8	9.8	16.1	13.4	Z	27.2	28.9	31.3	40.0	44.5	44.7	44.5	44.2	41.9	39.4	38.4	39.0	38.5	37.1	31.3	25.9	22.0	18.8	30.1	44.7
15-Jun	Z	13.2	8.4	8.0	4.0	7.3	10.9	13.2	17.5	27.3	34.3	M	35.1	35.9	37.6	39.6	40.6	44.9	40.8	32.8	32.0	26.0	29.2	31.8	25.9	44.9
16-Jun	31.7	Z	28.8	24.1	19.0	17.8	16.8	20.7	23.3	20.8	20.6	21.0	28.4	32.6	34.7	40.2	39.8	37.9	36.8	37.4	32.8	27.9	24.6	21.2	27.8	40.2
17-Jun	19.6	19.6	Z	15.8	8.6	10.3	12.6	17.1	25.9	28.9	32.0	33.0	32.7	33.2	35.1	34.4	33.6	32.6	30.8	28.7	26.9	25.2	24.7	21.8	25.3	35.1
18-Jun	21.0	18.5	13.0	Z	6.0	5.6	10.5	10.2	7.8	11.1	19.8	25.7	27.1	21.9	21.8	22.1	23.3	25.0	24.9	22.9	18.4	21.3	21.6	18.5	18.2	27.1
19-Jun	17.0	16.1	13.6	11.9	Z	12.9	13.5	15.8	16.9	19.3	22.0	20.7	25.4	27.3	27.9	26.3	25.1	21.2	18.5	17.6	15.6	11.3	8.4	7.0	17.9	27.9
20-Jun	4.5	3.0	2.8	2.5	3.5	Z	8.3	9.3	12.5	14.8	17.6	20.7	21.6	24.2	24.4	25.3	25.5	21.6	23.0	22.2	24.8	23.0	18.8	16.7	16.1	25.5
21-Jun	Z	15.6	12.7	11.4	11.7	6.8	5.1	9.8	16.4	15.7	18.8	22.9	22.7	21.7	24.8	24.2	23.0	22.2	22.1	18.6	13.2	11.5	10.0	11.5	16.2	24.8
22-Jun	9.5	Z	3.3	2.3	2.4	4.3	7.2	11.6	16.1	20.9	22.0	23.3	29.5	29.1	31.3	29.9	32.1	30.5	25.8	25.3	19.8	19.5	14.0	14.7	18.5	32.1
23-Jun	15.6	14.3	Z	9.6	9.7	11.9	12.6	12.9	16.0	20.0	28.7	34.9	38.3	37.2	37.6	36.4	32.6	30.9	34.2	31.8	25.6	19.1	13.9	15.3	23.4	38.3
24-Jun	12.0	12.9	11.1	Z	10.3	7.3	9.6	13.3	25.0	33.6	38.7	40.7	40.3	39.4	40.1	39.5	39.9	40.2	39.7	34.1	32.7	30.8	26.4	24.5	27.9	40.7
25-Jun	20.9	15.0	18.0	15.2	Z	14.0	16.4	19.7	22.7	27.0	40.2	43.1	43.7	43.7	43.6	44.1	44.1	46.2	45.3	39.6	37.4	34.3	31.8	28.4	31.9	46.2
26-Jun	26.1	25.2	23.5	22.6	21.0	Z	25.2	27.7	31.7	36.8	42.7	45.0	44.8	45.3	45.6	45.1	44.3	44.3	43.3	42.2	40.3	35.9	26.0	29.7	35.4	45.6
27-Jun	Z	23.6	21.7	22.0	21.5	20.6	22.0	27.2	32.4	36.4	39.1	42.2	40.9	43.6	47.1	44.9	42.8	40.4	38.7	34.4	26.7	21.3	19.8	17.3	31.6	47.1
28-Jun	16.4	Z	11.2	11.7	11.6	12.3	12.7	15.3	19.5	28.9	39.3	43.1	45.0	46.8	48.8	53.1	55.4	51.4	48.0	46.0	29.0	26.1	24.3	24.1	31.3	55.4
29-Jun	22.2	17.8	Z	12.4	6.6	6.2	9.2	15.2	22.8	36.3	49.1	56.8	62.1	62.5	57.4	50.6	46.3	48.8	50.7	45.8	42.0	34.3	26.2	22.1	34.9	62.5
30-Jun	19.9	17.5	15.8	Z	10.7	10.9	13.0	12.9	21.9	31.6	35.1	37.7	40.9	46.5	56.2	67.1	56.6	54.0	51.6	46.1	40.1	30.8	20.4	21.6	33.0	67.1
	17.3	17.7	16.0	15.2	14.0	13.4	15.9	18.0	21.6	25.5	29.7	31.8	33.4	33.5	34.2	34.6	33.8	33.6	32.7	30.5	26.0	21.8	19.6	19.0	Diurnal Average	
	31.7	31.7	31.1	29.4	28.7	30.0	30.3	33.2	33.9	40.0	49.1	56.8	62.1	62.5	57.4	67.1	56.6	54.0	51.6	46.1	42.0	35.9	31.8	32.1	Diurnal Maximum	

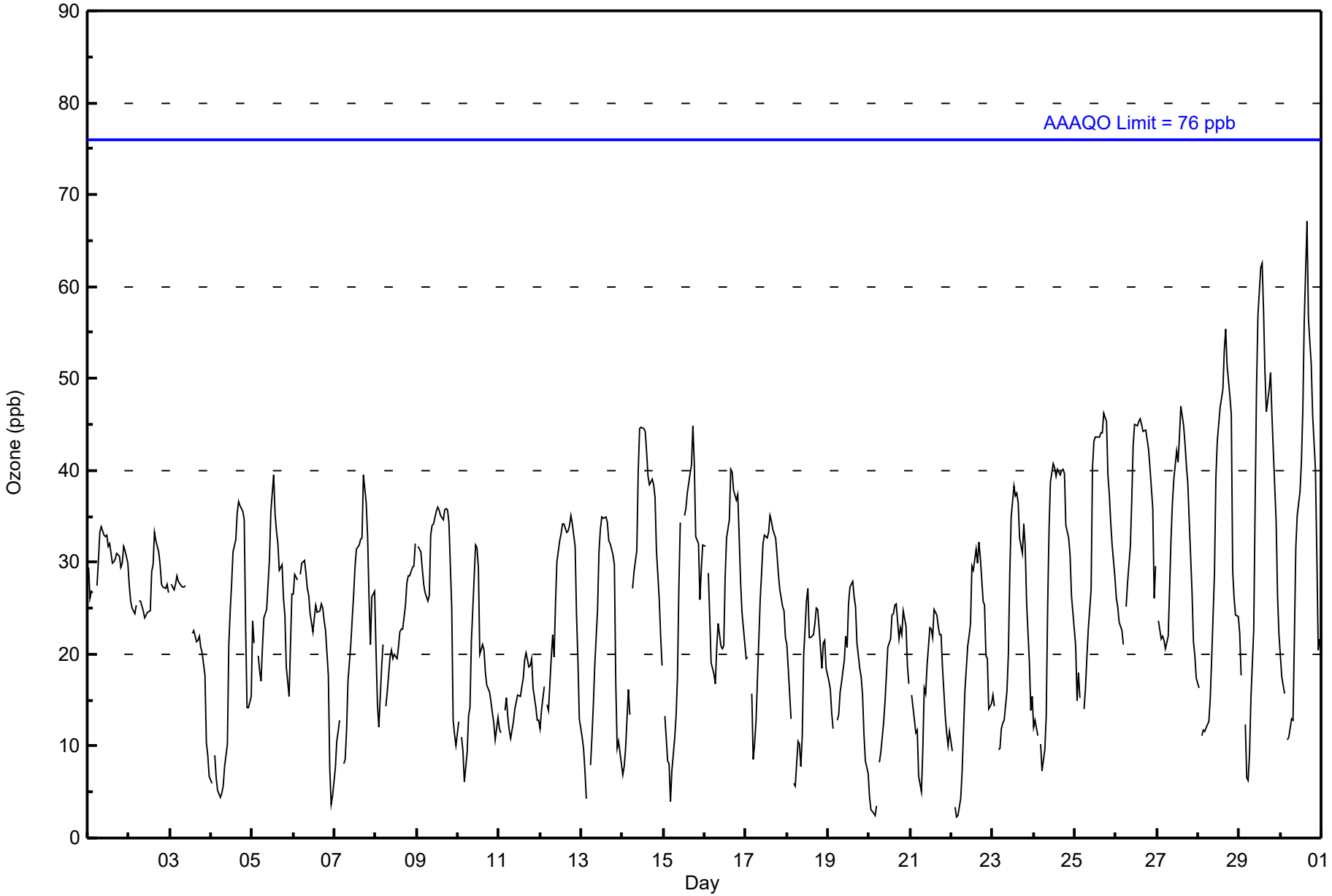
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Athabasca Valley - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	247	36.01	36.01
21 - 50	425	61.95	97.96
51 - 82	14	2.04	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

Athabasca Valley - June 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	4	2	6	10	12	29	25	12	5	13	12	5	7	14	60	31	247
21 - 50	24	7	16	31	35	36	17	7	7	29	41	19	20	9	43	84	425
51 - 82	0	0	1	4	0	0	0	0	0	0	0	0	0	0	5	4	14
> 83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	28	9	23	45	47	65	42	19	12	42	53	24	27	23	108	119	686

Total Number of Valid Hours: 686

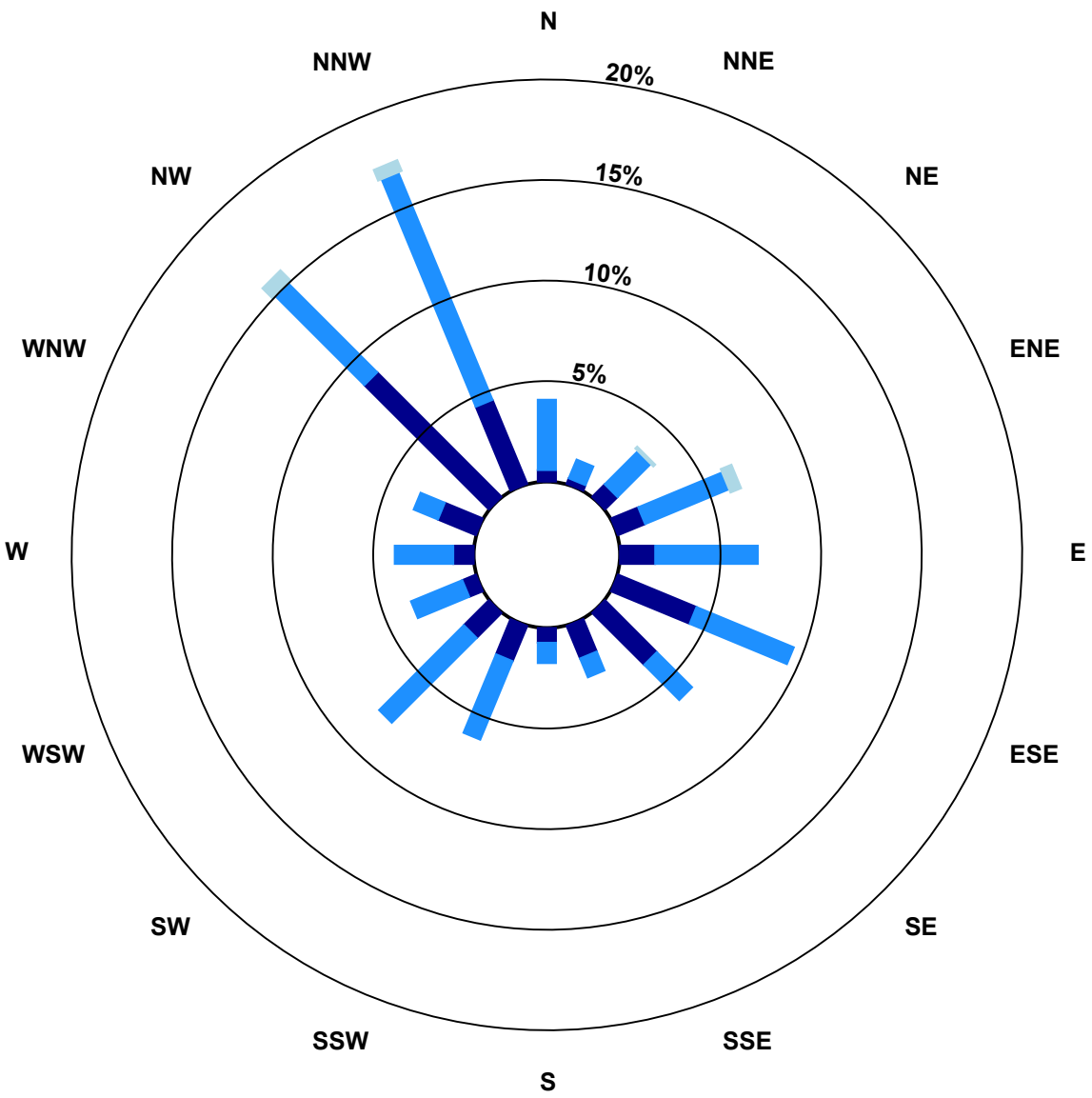
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Ozone (O_3) - ppb

Athabasca Valley



Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

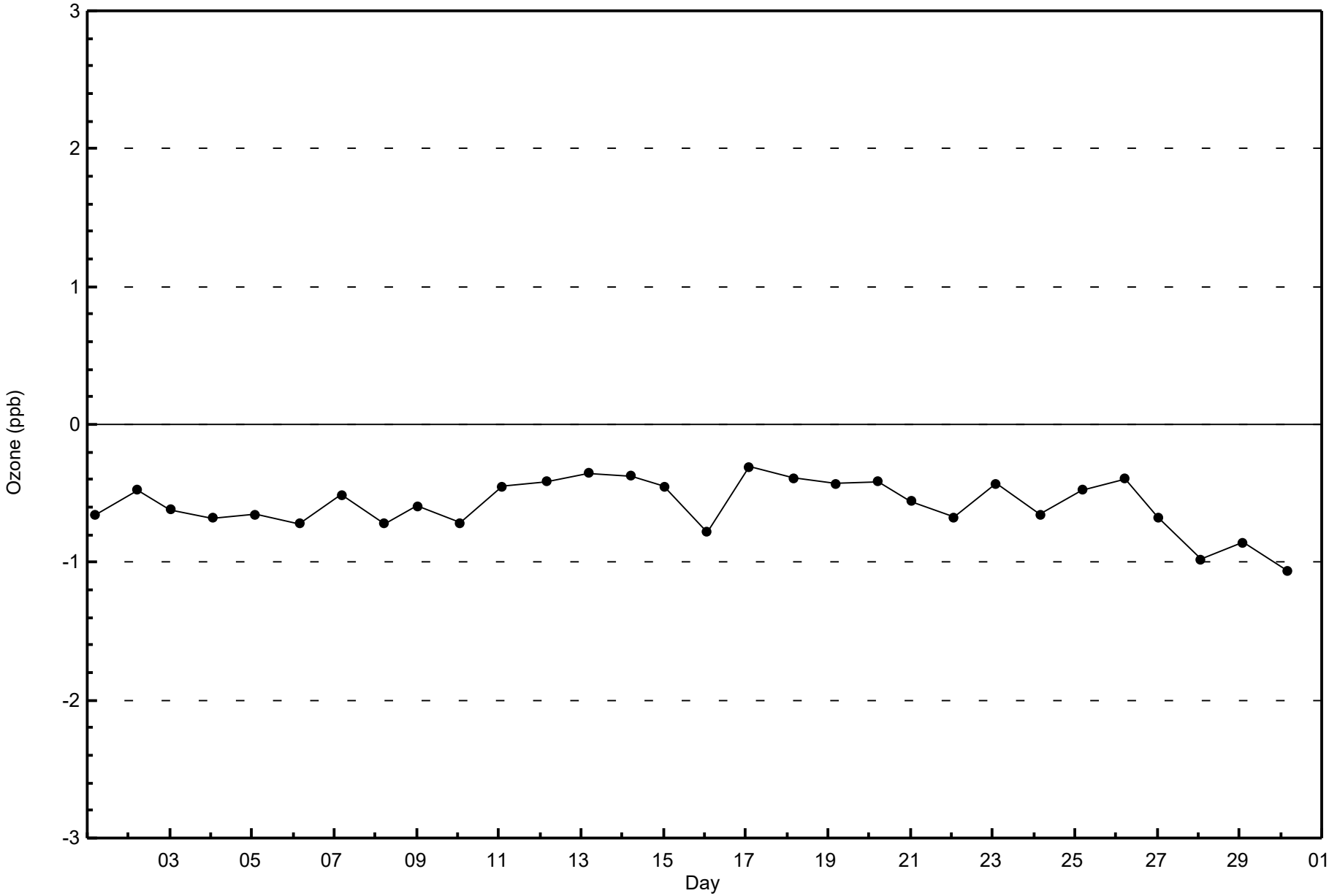
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Athabasca Valley - June 2026

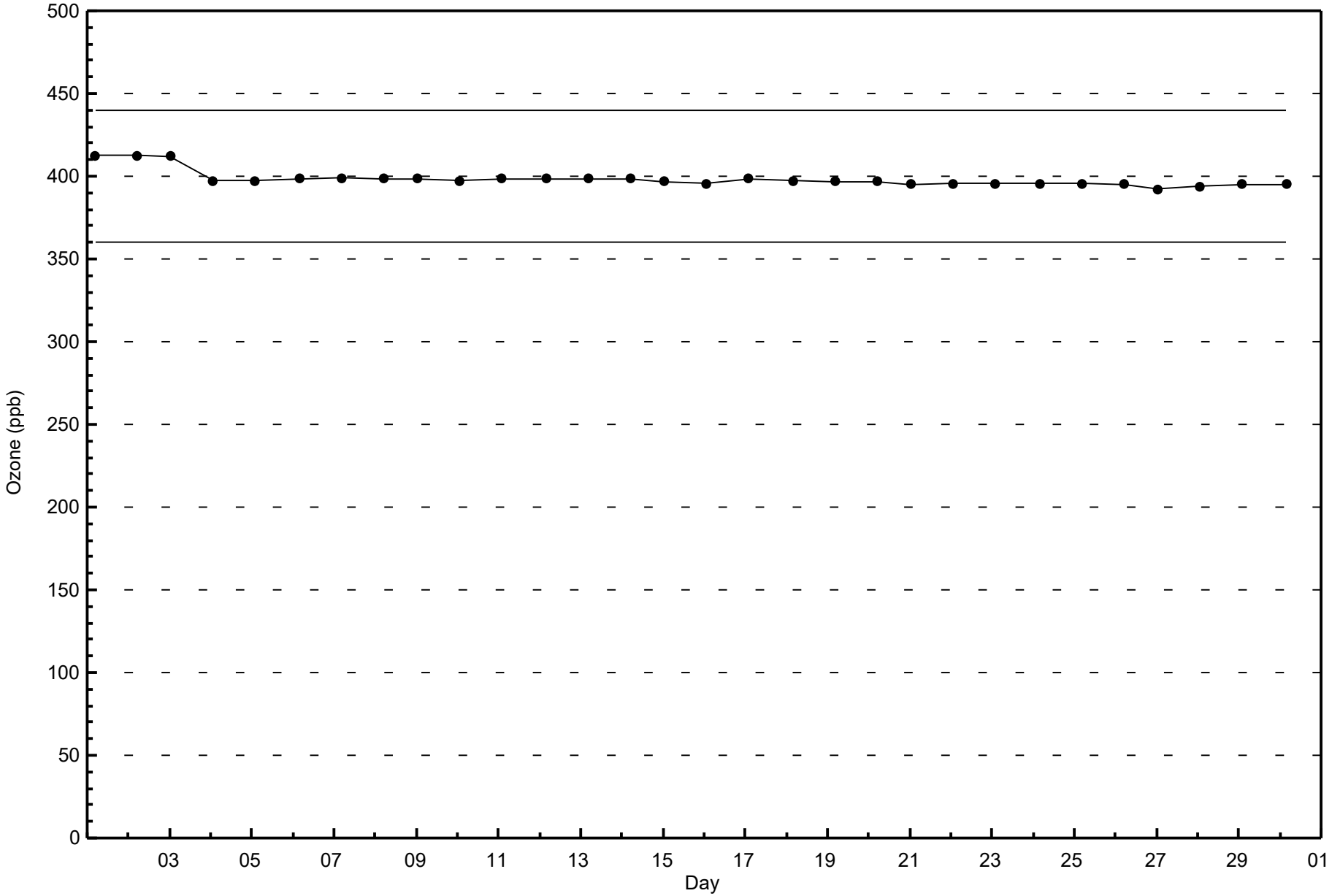


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Athabasca Valley - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Athabasca Valley - June 2026

Maximum Value: 9.3 ppb on Jun 20 08:00

Maximum Daily Average: 2.1 ppb on Jun 20

Minimum Value: 0.0 ppb on Jun 1 02:00

Minimum Daily Average: 0.1 ppb on Jun 1

Maximum Diurnal Average: 2.4 ppb at hour 6

Minimum Diurnal Average: 0.2 ppb at hour 2

Monthly Average: 0.89 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.4 Q_3 = 0.9 P_{90} = 2.3 P_{99} = 7.1

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-Jun	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.5	0.3	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.5
2-Jun	0.0	Z	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.5	0.4	0.5	0.5	0.2	0.4	0.2	0.5	0.4	0.4	0.4	0.3	0.1	0.0	0.0	0.2	0.5
3-Jun	0.0	0.0	Z	0.1	0.2	0.3	0.6	0.8	0.7	0.4	0.6	1.3	0.5	0.7	0.5	0.8	1.0	0.7	0.9	1.0	0.5	2.2	0.7	0.3	0.6	2.2
4-Jun	0.3	0.5	0.6	Z	2.0	2.9	3.7	3.7	3.7	2.5	0.9	1.4	1.0	0.3	0.4	0.4	0.6	0.5	0.4	0.3	1.7	4.2	0.1	0.2	1.4	4.2
5-Jun	0.0	0.1	0.0	0.2	Z	1.0	0.9	1.1	1.2	0.8	0.8	0.3	0.4	1.1	0.6	0.6	0.9	1.0	1.1	0.6	1.3	1.2	0.1	0.1	0.7	1.3
6-Jun	0.0	0.0	0.0	0.1	0.2	Z	0.2	0.2	0.3	0.3	0.3	0.6	0.5	0.3	0.4	0.3	0.2	0.3	0.4	0.3	0.7	6.5	4.0	2.4	0.8	6.5
7-Jun	Z	0.4	0.4	0.6	1.4	2.5	3.1	1.4	0.8	0.6	0.2	0.3	0.4	0.0	0.0	0.1	0.3	0.2	0.1	0.0	0.1	0.2	0.3	0.0	0.6	3.1
8-Jun	0.0	Z	0.0	0.0	0.1	0.1	0.4	0.6	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
9-Jun	0.0	0.0	Z	0.1	0.2	0.4	0.7	0.9	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.7	0.0	0.6	0.4	1.2	0.5	0.2	0.3	1.2
10-Jun	0.0	0.0	0.0	Z	2.7	3.1	0.9	1.2	1.9	1.5	1.3	1.2	0.7	1.1	0.6	0.7	0.7	0.5	0.9	0.6	0.4	0.1	0.1	0.0	0.9	3.1
11-Jun	0.0	0.0	0.0	0.0	Z	0.5	0.7	1.2	0.9	0.9	C	C	C	C	C	0.5	0.2	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.3	1.2
12-Jun	0.0	0.0	0.0	0.0	0.6	Z	1.6	1.1	4.4	1.6	1.3	1.6	0.9	0.6	0.5	0.3	0.2	0.2	0.2	0.2	0.1	0.3	0.2	0.0	0.7	4.4
13-Jun	Z	0.0	0.0	0.9	4.8	4.6	3.6	2.3	2.4	2.1	0.5	0.4	0.2	0.5	0.6	0.7	0.8	0.5	0.5	0.4	1.7	3.6	1.3	1.1	1.5	4.8
14-Jun	2.4	Z	0.8	0.5	2.5	2.1	0.5	0.3	0.5	0.6	0.9	0.6	0.5	0.4	0.2	0.3	0.5	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.6	2.5
15-Jun	0.0	0.0	Z	0.4	7.3	5.0	2.3	4.7	6.0	1.9	0.4	M	0.2	0.2	0.7	0.0	0.2	0.6	0.3	0.6	0.2	0.6	0.4	0.0	1.5	7.3
16-Jun	0.3	0.0	0.0	Z	0.4	0.8	1.1	0.8	0.9	1.0	1.2	2.8	1.5	0.7	0.7	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.6	2.8
17-Jun	0.0	0.0	0.0	0.1	Z	6.7	8.2	5.6	0.9	0.7	0.5	0.3	0.3	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.2	1.1	8.2
18-Jun	0.0	0.1	0.0	0.2	2.9	Z	8.9	3.9	9.0	6.4	2.8	1.2	0.8	1.7	0.8	0.8	1.2	1.1	0.7	0.8	0.6	0.0	0.0	0.2	1.9	9.0
19-Jun	Z	0.2	0.4	0.6	2.2	1.7	2.7	2.7	3.2	4.0	2.7	4.0	1.6	1.4	1.0	1.1	0.6	0.6	0.5	0.8	1.1	0.9	0.6	0.4	1.5	4.0
20-Jun	0.5	Z	0.7	0.9	4.0	8.6	6.9	9.3	6.7	2.9	1.6	0.8	0.3	0.4	0.6	0.4	0.4	0.6	0.3	0.3	0.8	0.0	0.1	0.4	2.1	9.3
21-Jun	0.1	0.2	Z	0.1	0.3	2.2	4.6	5.4	3.5	3.5	1.4	1.1	0.7	0.7	0.7	0.5	0.4	1.0	0.5	0.5	0.5	0.1	0.1	0.0	1.2	5.4
22-Jun	0.0	0.3	0.5	Z	7.9	7.1	4.0	4.1	1.6	0.4	0.4	1.1	0.3	1.3	1.1	0.9	0.7	0.3	1.6	1.0	1.4	1.2	1.8	1.1	1.7	7.9
23-Jun	0.5	0.4	0.4	1.5	Z	1.7	1.8	2.8	2.1	1.3	1.5	0.9	0.6	0.6	0.4	0.5	0.5	0.4	0.5	0.6	1.1	0.8	0.5	0.1	0.9	2.8
24-Jun	0.6	0.2	0.5	0.7	1.5	Z	1.9	2.8	2.4	1.1	0.8	0.8	0.9	0.5	0.5	0.6	0.2	0.5	0.3	0.4	0.4	0.2	0.4	0.0	0.8	2.8
25-Jun	Z	1.6	0.2	0.3	0.6	1.1	1.1	1.4	1.0	1.4	0.4	0.6	0.5	0.4	0.6	0.5	0.6	0.4	0.3	0.4	0.4	0.2	0.2	0.1	0.6	1.6
26-Jun	0.2	Z	0.0	0.0	0.2	0.5	1.1	0.9	0.9	0.5	0.5	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.1	0.2	0.1	0.9	0.0	0.4	1.1
27-Jun	0.0	0.0	Z	0.0	0.1	0.4	0.4	0.6	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.3	0.2	0.4	0.3	0.4	0.2	0.0	0.1	0.1	0.2	0.6
28-Jun	0.0	0.1	0.2	Z	1.2	1.1	1.6	3.5	5.5	3.5	0.9	0.2	0.2	0.2	0.2	0.1	0.1	0.3	0.2	0.3	0.1	0.2	0.1	0.1	0.9	5.5
29-Jun	0.0	0.0	0.1	0.5	Z	6.0	4.0	4.7	5.4	2.4	1.7	1.1	0.5	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.0	1.2	6.0
30-Jun	0.0	0.0	0.0	1.5	2.2	Z	1.6	3.8	2.6	1.4	1.3	0.7	0.5	0.2	0.1	0.2	0.3	0.2	0.2	0.4	0.4	1.2	4.6	1.2	1.1	4.6
	0.2	0.2	0.2	0.4	1.8	2.4	2.3	2.4	2.3	1.5	0.9	0.9	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.9	0.6	0.3	Diurnal Average	
	2.4	1.6	0.8	1.5	7.9	8.6	8.9	9.3	9.0	6.4	2.8	4.0	1.6	1.7	1.1	1.1	1.2	1.1	1.6	1.0	1.7	6.5	4.6	2.4	Diurnal Maximum	

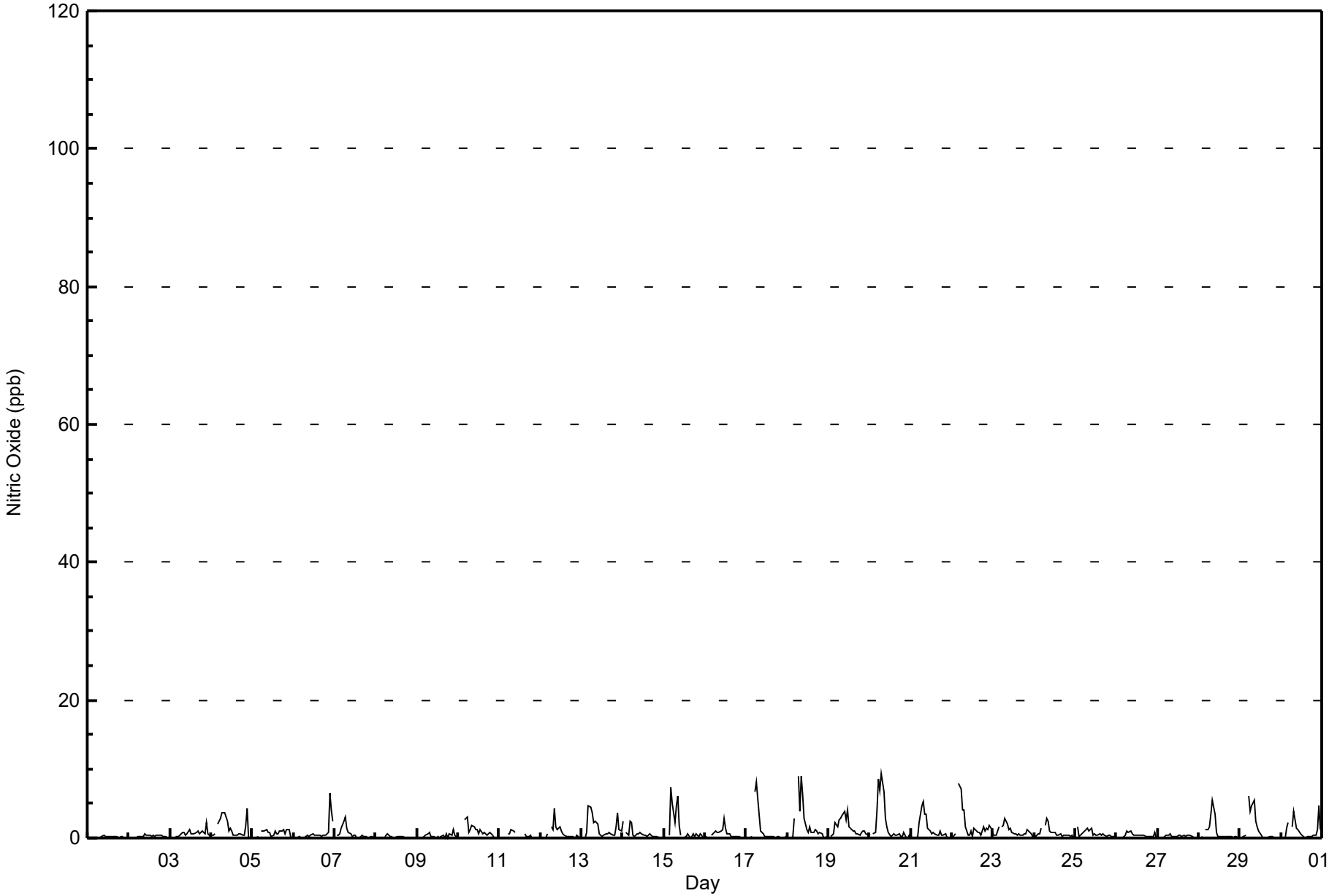
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Athabasca Valley - June 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

Athabasca Valley - June 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	28	9	22	45	48	70	41	19	12	40	54	24	27	25	104	116	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	28	9	22	45	48	70	41	19	12	40	54	24	27	25	104	116	684

Total Number of Valid Hours: 684

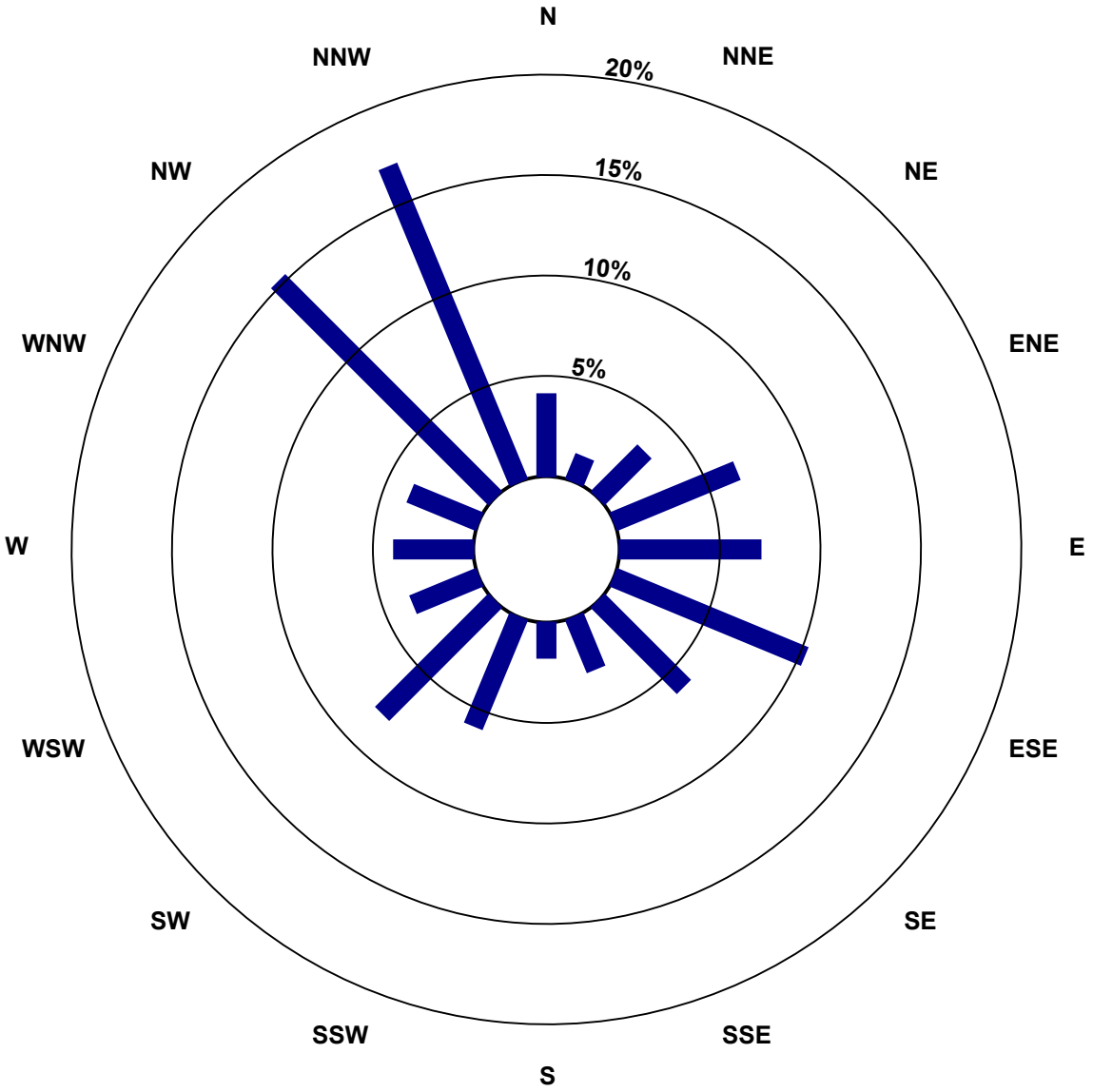
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Athabasca Valley



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

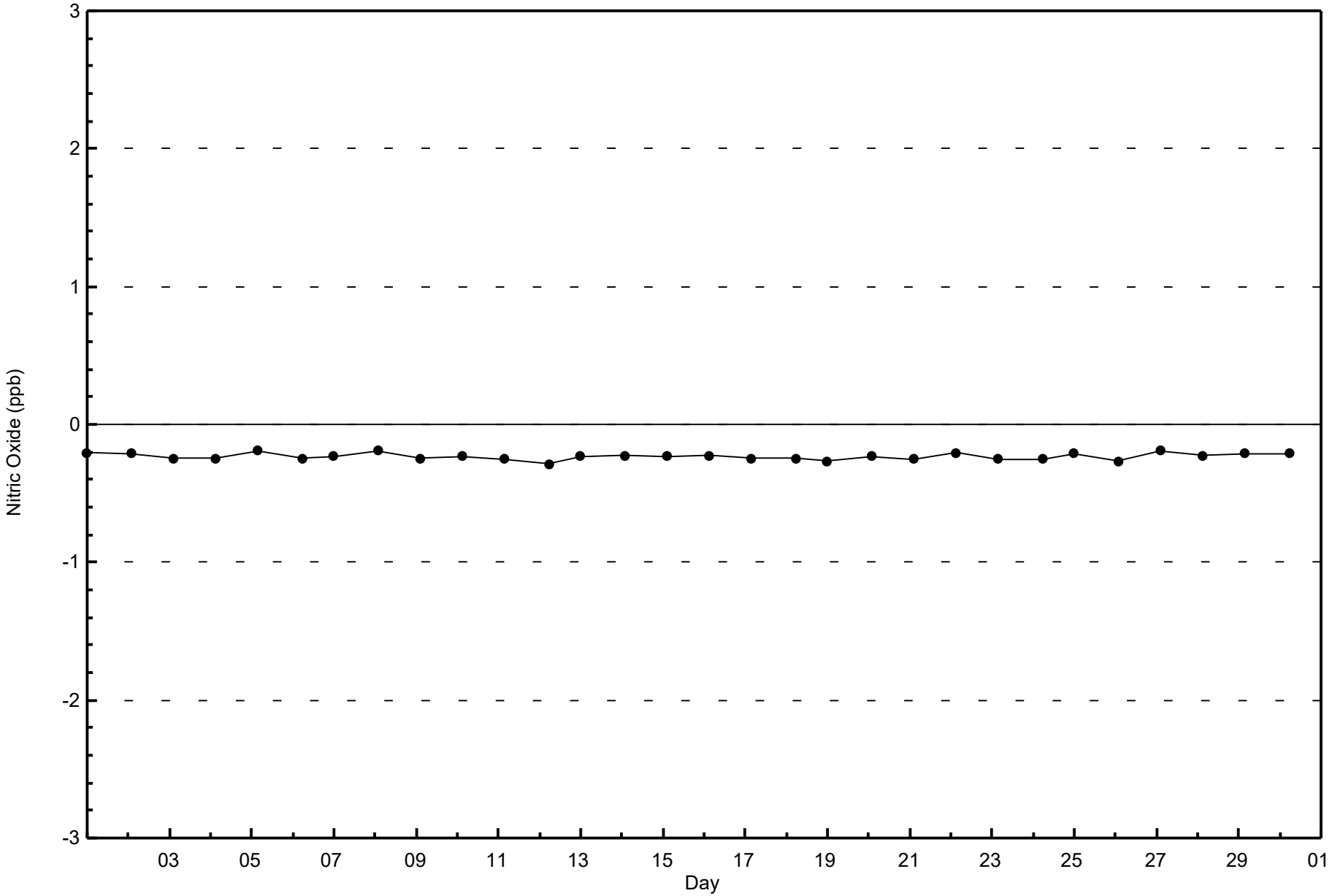
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Athabasca Valley - June 2026

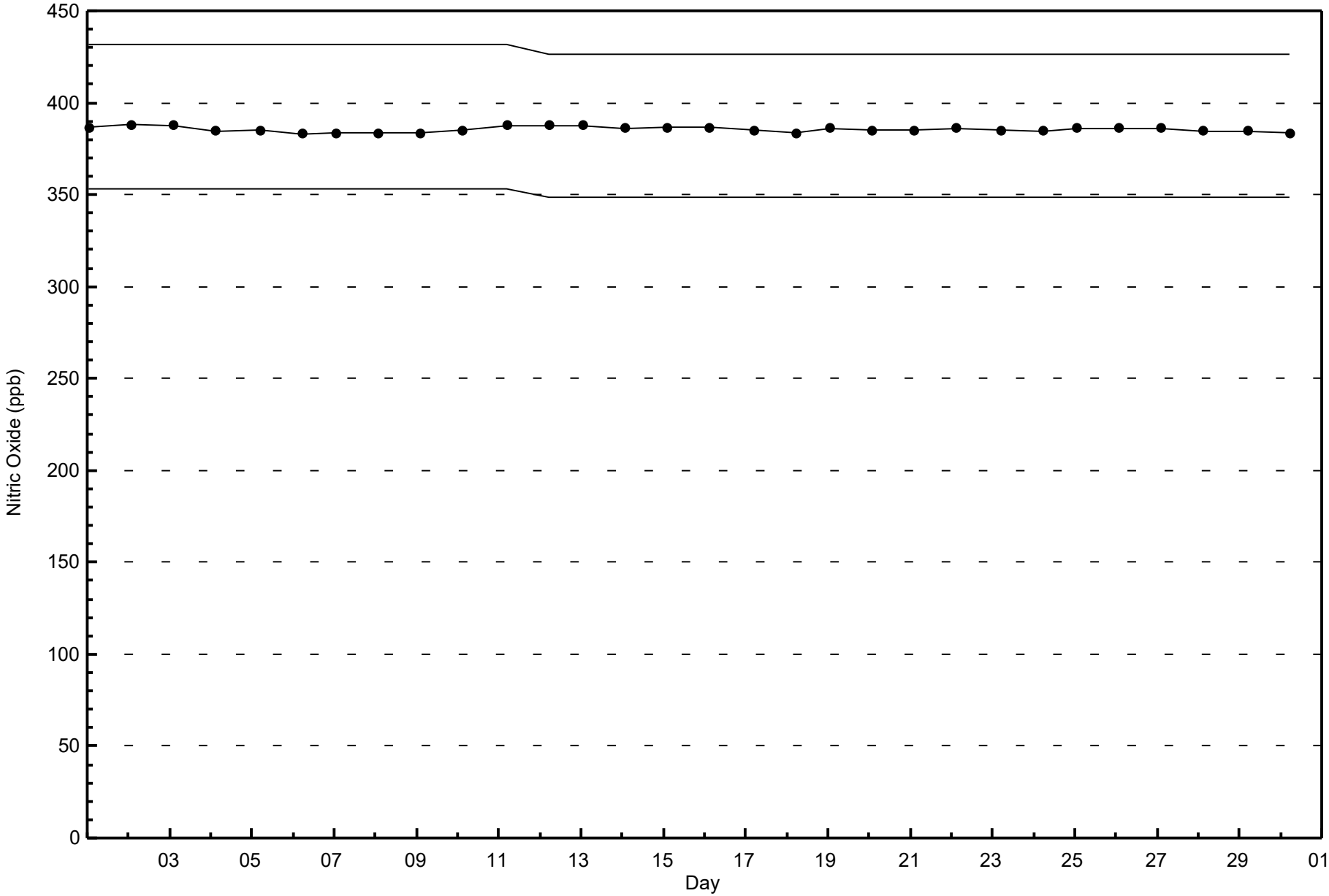


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Athabasca Valley - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Athabasca Valley - June 2026

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

Maximum Value: 15.2 ppb on Jun 4 22:00

Maximum Daily Average: 5.6 ppb on Jun 18

Minimum Value: 0.1 ppb on Jun 3 00:00

Minimum Daily Average: 1.3 ppb on Jun 2

Maximum Diurnal Average: 6.0 ppb at hour 22

Minimum Diurnal Average: 1.7 ppb at hour 15

Monthly Average: 3.35 ppb

Percentiles: P_1 = 0.4 P_{10} = 0.9 Q_1 = 1.5 Median = 2.5 Q_3 = 4.4 P_{90} = 7.1 P_{99} = 12.0

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-Jun	Z	2.5	1.0	1.6	3.0	5.2	3.9	2.8	2.4	2.9	1.6	1.0	0.9	0.7	0.9	1.1	1.2	1.0	0.8	1.1	1.3	1.5	1.2	1.1	1.8	5.2
2-Jun	1.0	Z	1.5	1.7	1.7	2.0	2.0	1.6	2.1	2.6	2.2	1.8	2.0	0.9	0.9	0.3	0.5	0.6	0.7	1.0	1.1	0.7	0.3	0.1	1.3	2.6
3-Jun	0.1	0.2	Z	0.4	0.7	1.2	2.4	2.3	1.7	0.8	1.3	1.1	1.2	1.3	1.1	2.2	2.1	1.6	1.9	2.1	2.3	6.4	2.9	2.2	1.7	6.4
4-Jun	2.0	2.7	1.9	Z	2.5	2.0	1.7	1.5	3.0	3.3	2.3	2.0	1.7	1.1	1.2	1.7	2.2	1.9	1.6	2.8	12.5	15.2	5.0	5.4	3.4	15.2
5-Jun	1.8	2.2	1.8	1.9	Z	3.2	2.1	2.2	2.5	2.3	2.5	1.4	1.7	4.8	4.0	4.9	4.4	4.4	7.8	7.6	8.9	4.5	2.4	1.1	3.5	8.9
6-Jun	1.1	0.6	0.5	0.6	0.8	Z	0.8	0.7	0.7	0.7	0.7	0.9	0.8	0.6	0.6	0.7	0.6	1.1	1.5	1.3	3.4	10.1	10.6	8.1	2.1	10.6
7-Jun	Z	3.4	3.4	4.0	4.6	2.8	2.3	1.3	1.2	0.9	0.8	0.8	1.1	0.8	0.7	1.4	2.6	2.0	2.1	2.3	3.2	5.0	2.5	1.7	2.2	5.0
8-Jun	2.8	Z	8.6	6.0	5.5	4.5	6.1	5.6	3.1	0.9	0.7	0.7	0.7	0.7	0.8	1.1	1.2	0.7	0.9	0.7	0.7	0.8	0.7	0.5	2.3	8.6
9-Jun	0.5	0.4	Z	0.5	0.7	1.2	1.1	1.2	0.6	0.6	0.7	0.7	0.8	0.6	0.9	1.0	0.5	1.3	0.5	2.6	9.1	11.6	7.0	8.2	2.3	11.6
10-Jun	4.0	4.9	4.7	Z	7.3	6.1	3.5	2.9	3.0	3.3	3.8	4.9	2.7	2.7	1.7	2.2	2.4	1.2	1.5	1.5	3.8	3.8	5.4	3.8	3.5	7.3
11-Jun	4.6	6.1	5.8	5.9	Z	4.5	4.8	5.3	3.7	2.8	C	C	C	C	C	1.5	1.2	2.5	2.2	1.0	3.5	4.6	5.7	5.7	4.0	6.1
12-Jun	5.9	2.6	1.1	2.1	5.5	Z	4.4	3.4	8.0	3.7	2.6	3.5	2.4	1.6	1.6	1.2	0.8	0.9	0.9	1.4	2.1	7.1	4.7	4.3	3.1	8.0
13-Jun	Z	4.4	4.2	6.6	8.2	6.6	4.4	3.1	3.4	4.1	1.8	1.4	1.0	1.3	1.2	1.5	2.1	2.0	2.4	3.5	9.5	10.3	5.9	9.6	4.3	10.3
14-Jun	11.3	Z	10.6	7.6	11.1	7.2	2.1	1.6	1.9	3.0	4.4	3.3	3.1	2.5	1.8	2.0	2.8	1.6	1.3	1.2	5.9	6.2	4.0	3.3	4.3	11.3
15-Jun	4.2	3.2	Z	4.3	8.4	6.2	3.1	5.9	7.6	4.4	1.3	M	1.1	0.6	1.6	0.8	1.9	3.3	2.5	3.6	6.4	9.0	3.3	0.9	3.8	9.0
16-Jun	1.4	1.0	2.7	Z	5.6	4.6	4.3	2.7	2.9	3.6	3.6	4.8	3.1	2.1	2.4	2.1	2.1	1.1	1.3	1.5	4.2	6.5	7.8	7.3	3.4	7.8
17-Jun	7.3	6.5	7.5	8.1	Z	12.6	11.0	7.7	2.1	1.9	1.7	1.1	0.9	0.8	1.1	1.4	1.5	0.9	2.3	4.4	3.8	3.3	2.3	2.7	4.0	12.6
18-Jun	1.6	2.6	7.2	10.9	12.0	Z	10.0	9.7	12.5	10.5	6.1	3.0	2.9	4.5	1.9	2.4	3.8	3.7	3.4	5.3	7.8	3.9	2.1	1.6	5.6	12.5
19-Jun	Z	1.1	1.8	1.4	3.4	3.0	3.5	3.8	4.6	5.0	4.6	6.7	3.2	3.2	3.1	2.8	2.1	1.7	1.8	2.5	4.0	6.4	6.0	4.2	3.5	6.7
20-Jun	6.7	Z	5.6	7.7	8.0	6.0	5.5	7.0	5.9	4.1	2.6	1.3	0.4	0.9	1.4	1.3	1.9	2.1	0.5	1.9	1.5	1.6	2.7	3.3	3.5	8.0
21-Jun	2.9	3.0	Z	4.8	6.0	9.0	8.7	8.4	5.2	4.2	3.2	2.4	2.2	2.5	2.1	2.8	1.5	2.2	2.9	4.0	8.1	7.2	6.7	4.3	4.5	9.0
22-Jun	5.7	9.4	7.1	Z	6.7	5.6	3.2	3.9	2.1	1.3	1.5	2.5	1.2	3.2	3.5	2.4	3.1	1.1	4.4	6.0	6.7	6.5	10.0	6.8	4.5	10.0
23-Jun	4.0	5.3	5.2	9.0	Z	3.8	2.5	2.9	2.5	1.8	2.4	2.2	2.2	2.1	1.5	1.9	3.6	3.3	2.2	3.8	7.1	7.7	6.2	3.3	3.8	9.0
24-Jun	6.1	3.7	4.9	4.8	5.5	Z	3.4	3.6	3.6	2.3	2.8	2.8	2.9	1.9	2.0	2.1	1.5	1.7	1.5	1.8	2.5	3.2	4.3	2.5	3.1	6.1
25-Jun	Z	4.5	3.3	3.7	3.7	2.9	2.2	2.7	2.4	3.3	1.9	2.2	1.7	1.8	2.3	1.9	2.1	1.9	2.4	3.7	3.4	4.1	3.4	4.1	2.9	4.5
26-Jun	5.0	Z	1.4	1.5	2.0	2.3	3.0	2.6	2.2	2.0	1.7	1.7	1.5	1.6	1.5	1.2	1.4	1.3	1.2	1.0	2.1	4.8	11.7	2.6	2.5	11.7
27-Jun	3.4	4.9	Z	1.9	2.0	2.3	1.5	2.1	1.2	1.0	1.0	1.0	1.6	1.0	1.2	1.7	1.1	1.2	0.9	2.9	3.3	5.1	4.2	3.3	2.2	5.1
28-Jun	2.1	1.7	3.9	Z	2.8	2.6	3.6	6.6	11.0	11.5	3.9	0.7	0.8	0.8	0.9	1.1	1.5	1.3	1.5	1.6	3.9	3.4	3.5	2.2	3.2	11.5
29-Jun	1.8	1.8	2.5	3.8	Z	8.1	6.5	8.8	12.0	9.7	10.1	8.4	5.8	3.1	2.2	1.6	1.6	1.4	1.9	2.4	5.2	5.9	4.8	4.4	4.9	12.0
30-Jun	3.2	3.6	2.9	6.9	6.3	Z	4.8	7.5	6.3	5.3	5.8	3.4	3.5	2.2	2.8	4.9	4.6	4.3	4.4	3.3	6.3	13.4	14.9	7.1	5.6	14.9
	3.6	3.3	4.0	4.3	5.0	4.6	3.9	4.0	4.0	3.5	2.7	2.4	1.9	1.8	1.7	1.8	2.0	1.8	2.0	2.7	4.8	6.0	5.1	3.9	Diurnal Average	
	11.3	9.4	10.6	10.9	12.0	12.6	11.0	9.7	12.5	11.5	10.1	8.4	5.8	4.8	4.0	4.9	4.6	4.4	7.8	7.6	12.5	15.2	14.9	9.6	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

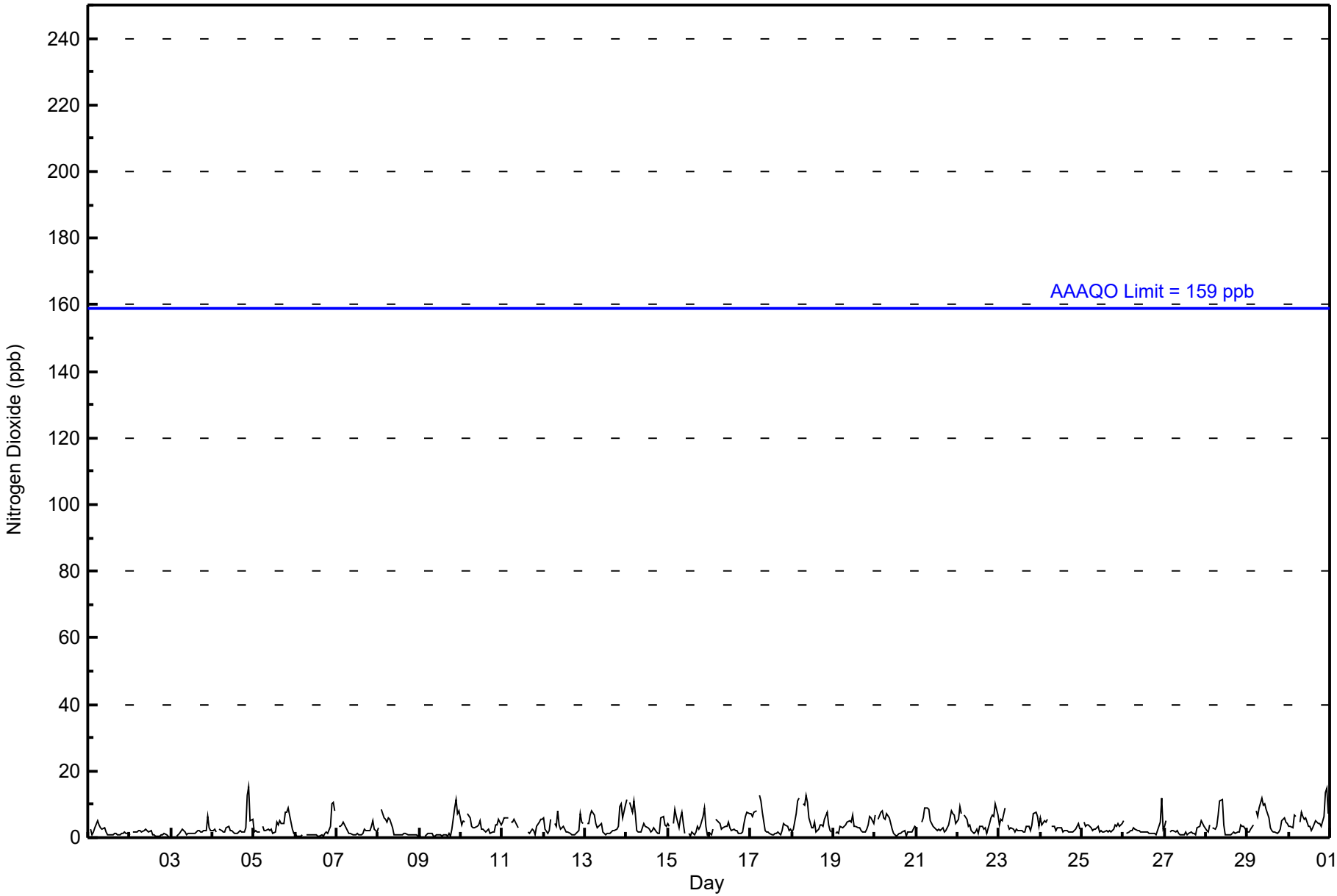
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Athabasca Valley - June 2026



Nitrogen Dioxide (NO_2) - ppb
Athabasca Valley - June 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

Nitrogen Dioxide (NO_2) - ppb
Athabasca Valley - June 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	28	9	22	45	48	70	41	19	12	40	54	24	27	25	104	116	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	28	9	22	45	48	70	41	19	12	40	54	24	27	25	104	116	684

Total Number of Valid Hours: 684

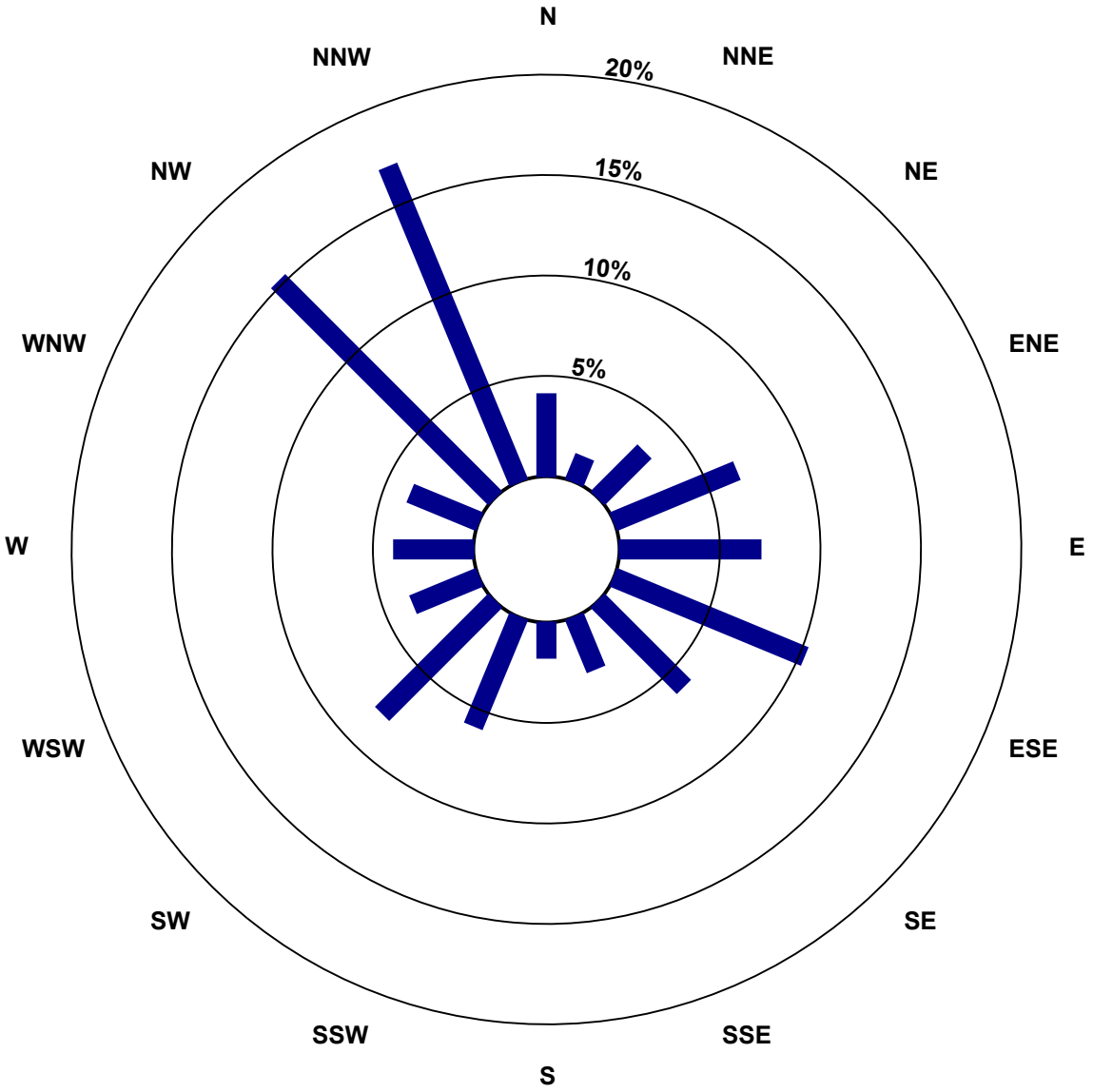
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Athabasca Valley



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

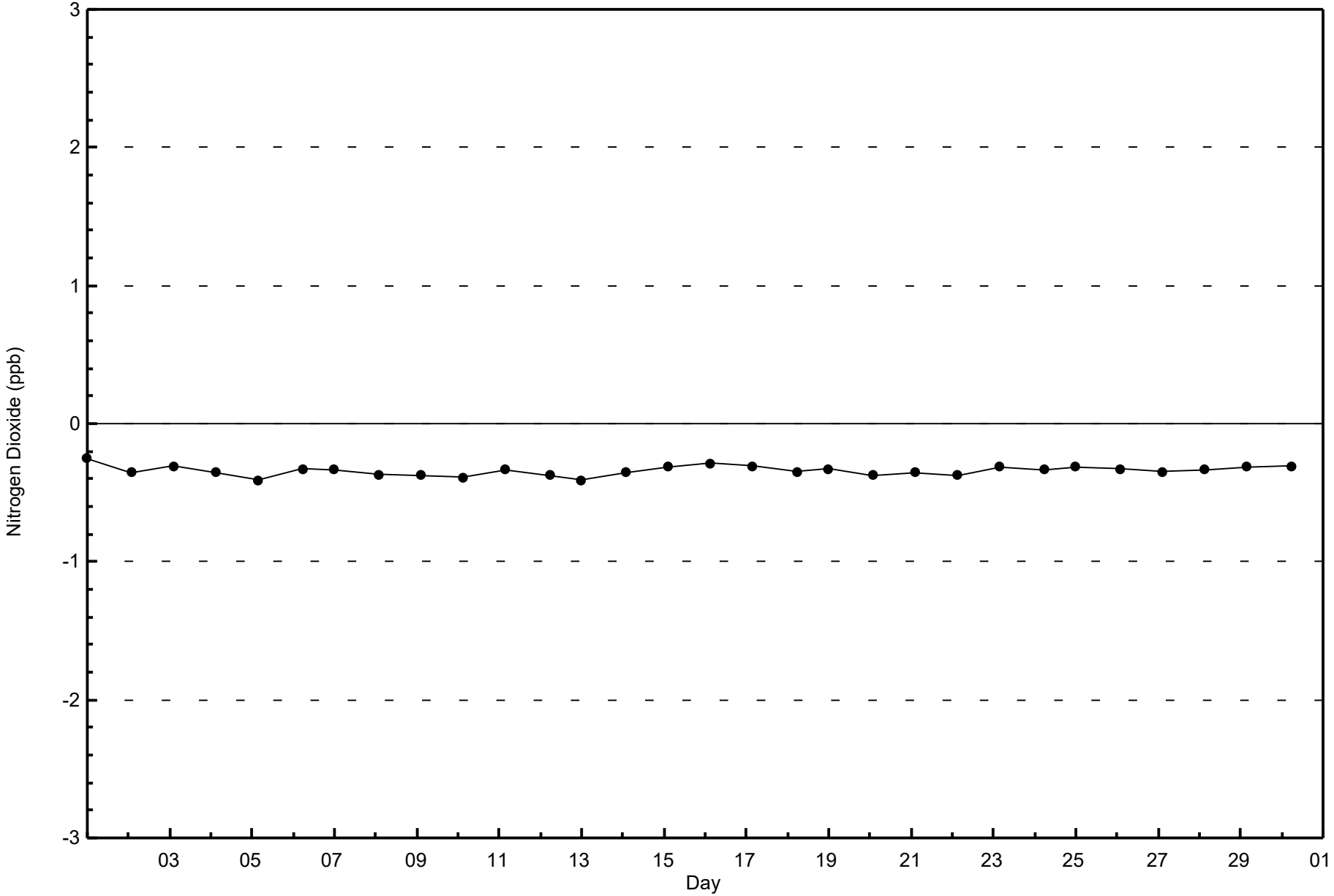
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Athabasca Valley - June 2026

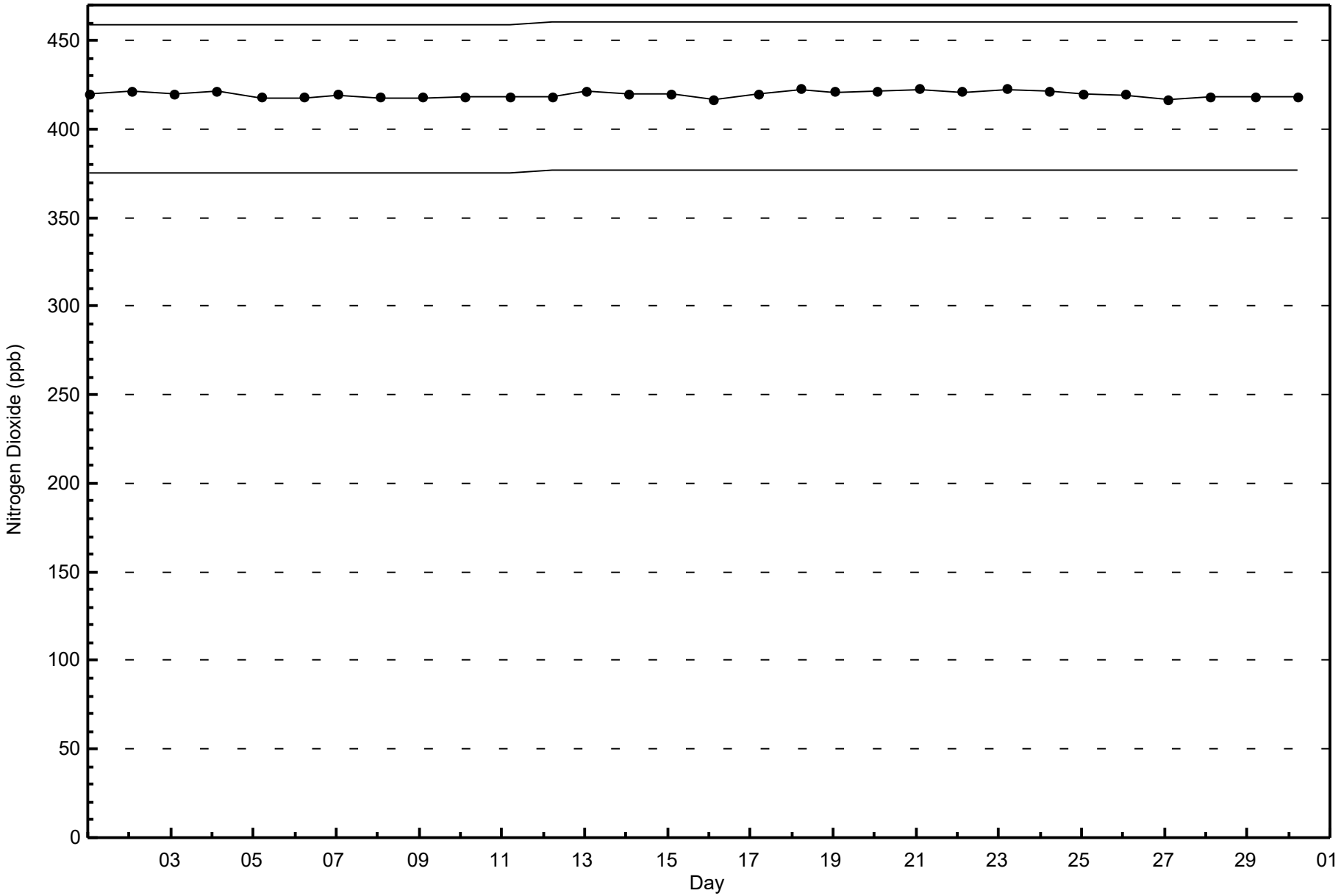


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Athabasca Valley - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Athabasca Valley - June 2026

Maximum Value: 21.5 ppb on Jun 18 09:00

Maximum Daily Average: 7.5 ppb on Jun 18

Minimum Value: 0.1 ppb on Jun 3 01:00

Minimum Daily Average: 1.5 ppb on Jun 2

Maximum Diurnal Average: 7.0 ppb at hour 6

Minimum Diurnal Average: 2.1 ppb at hour 15

Monthly Average: 4.24 ppb

Percentiles: P_1 = 0.5 P_{10} = 1.0 Q_1 = 1.8 Median = 3.2 Q_3 = 5.4 P_{90} = 8.6 P_{99} = 17.0

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-Jun	Z	2.5	1.0	1.6	3.0	5.3	4.0	2.9	2.5	3.4	1.9	1.1	1.0	0.8	1.1	1.3	1.3	1.2	0.9	1.2	1.4	1.5	1.2	1.1	1.9	5.3
2-Jun	1.0	Z	1.5	1.7	1.7	2.1	2.2	1.8	2.4	3.1	2.6	2.3	2.5	1.1	1.3	0.5	1.0	1.0	1.1	1.4	1.4	0.8	0.3	0.1	1.5	3.1
3-Jun	0.1	0.2	Z	0.5	0.9	1.5	3.0	3.1	2.4	1.2	1.9	2.4	1.7	2.0	1.6	3.0	3.1	2.3	2.8	3.1	2.8	8.6	3.6	2.5	2.4	8.6
4-Jun	2.3	3.2	2.5	Z	4.5	4.9	5.4	5.2	6.7	5.8	3.2	3.4	2.7	1.4	1.6	2.1	2.8	2.4	2.0	3.1	14.2	19.4	5.1	5.6	4.8	19.4
5-Jun	1.8	2.3	1.8	2.1	Z	4.2	3.0	3.3	3.7	3.1	3.3	1.7	2.1	5.9	4.6	5.5	5.3	5.4	8.9	8.2	10.2	5.7	2.5	1.2	4.2	10.2
6-Jun	1.1	0.6	0.5	0.7	1.0	Z	1.0	0.9	1.0	1.0	1.0	1.5	1.3	0.9	1.0	1.0	0.8	1.4	1.9	1.6	4.1	16.6	14.6	10.5	2.9	16.6
7-Jun	Z	3.8	3.8	4.6	6.0	5.3	5.4	2.7	2.0	1.5	1.0	1.1	1.5	0.8	0.7	1.5	2.9	2.2	2.2	2.3	3.3	5.2	2.8	1.7	2.8	6.0
8-Jun	2.8	Z	8.6	6.0	5.6	4.6	6.5	6.2	3.4	1.0	0.8	0.8	0.8	0.8	0.9	1.4	1.5	0.7	0.9	0.7	0.7	0.8	0.7	0.5	2.5	8.6
9-Jun	0.5	0.4	Z	0.6	0.9	1.6	1.8	2.1	0.7	0.7	0.8	0.8	0.9	0.7	1.0	1.3	0.6	2.0	0.5	3.2	9.5	12.8	7.5	8.4	2.6	12.8
10-Jun	4.0	4.9	4.7	Z	10.0	9.2	4.4	4.1	4.9	4.8	5.1	6.1	3.4	3.8	2.3	2.9	3.1	1.7	2.4	2.1	4.2	3.9	5.5	3.8	4.4	10.0
11-Jun	4.6	6.1	5.8	5.9	Z	5.0	5.5	6.5	4.6	3.7	C	C	C	C	C	2.0	1.4	2.7	2.5	1.0	3.5	4.6	5.7	5.7	4.3	6.5
12-Jun	5.9	2.6	1.1	2.1	6.1	Z	6.0	4.5	12.4	5.3	3.9	5.1	3.3	2.2	2.1	1.5	1.0	1.1	1.1	1.6	2.2	7.4	4.9	4.3	3.8	12.4
13-Jun	Z	4.4	4.2	7.5	13.0	11.2	8.0	5.4	5.8	6.2	2.3	1.8	1.2	1.8	1.8	2.2	2.9	2.5	2.9	3.9	11.2	13.9	7.2	10.7	5.7	13.9
14-Jun	13.7	Z	11.4	8.1	13.6	9.3	2.6	1.9	2.4	3.6	5.3	3.9	3.6	2.9	2.0	2.3	3.3	1.8	1.5	1.4	6.1	6.3	4.1	3.4	5.0	13.7
15-Jun	4.2	3.2	Z	4.7	15.7	11.2	5.4	10.6	13.6	6.3	1.7	M	1.3	0.8	2.3	0.8	2.1	3.9	2.8	4.2	6.6	9.6	3.7	0.9	5.3	15.7
16-Jun	1.7	1.0	2.7	Z	6.0	5.4	5.4	3.5	3.8	4.6	4.8	7.6	4.6	2.8	3.1	2.2	2.3	1.3	1.5	1.7	4.3	6.6	7.8	7.3	4.0	7.8
17-Jun	7.3	6.5	7.5	8.2	Z	19.3	19.2	13.3	3.0	2.6	2.2	1.4	1.2	1.0	1.4	1.7	1.7	1.0	2.4	4.5	3.9	3.3	2.3	2.9	5.1	19.3
18-Jun	1.6	2.7	7.2	11.1	14.9	Z	18.9	13.6	21.5	16.9	8.9	4.2	3.7	6.2	2.7	3.2	5.0	4.8	4.1	6.1	8.4	3.9	2.1	1.8	7.5	21.5
19-Jun	Z	1.3	2.2	2.0	5.6	4.7	6.2	6.5	7.8	9.0	7.3	10.7	4.8	4.6	4.1	3.9	2.7	2.3	2.3	3.3	5.1	7.3	6.6	4.6	5.0	10.7
20-Jun	7.2	Z	6.3	8.6	12.0	14.6	12.4	16.3	12.6	7.0	4.2	2.1	0.7	1.3	2.0	1.7	2.3	2.7	0.8	2.2	2.3	1.6	2.8	3.7	5.5	16.3
21-Jun	3.0	3.2	Z	4.9	6.3	11.2	13.3	13.8	8.7	7.7	4.6	3.5	2.9	3.2	2.8	3.3	1.9	3.2	3.4	4.5	8.6	7.3	6.8	4.3	5.8	13.8
22-Jun	5.7	9.7	7.6	Z	14.6	12.7	7.2	8.0	3.7	1.7	1.9	3.6	1.5	4.5	4.6	3.3	3.8	1.4	6.0	7.0	8.1	7.7	11.8	7.9	6.2	14.6
23-Jun	4.5	5.7	5.6	10.5	Z	5.5	4.3	5.7	4.6	3.1	3.9	3.1	2.8	2.7	1.9	2.4	4.1	3.7	2.7	4.4	8.2	8.5	6.7	3.4	4.7	10.5
24-Jun	6.7	3.9	5.4	5.5	7.0	Z	5.3	6.4	6.0	3.4	3.6	3.6	3.8	2.4	2.5	2.7	1.7	2.2	1.8	2.2	2.9	3.4	4.7	2.5	3.9	7.0
25-Jun	Z	6.1	3.5	4.0	4.3	4.0	3.3	4.1	3.4	4.7	2.3	2.8	2.2	2.2	2.9	2.4	2.7	2.3	2.7	4.1	3.8	4.3	3.6	4.2	3.5	6.1
26-Jun	5.2	Z	1.4	1.5	2.2	2.8	4.1	3.5	3.1	2.5	2.2	2.0	1.9	2.0	1.9	1.5	1.7	1.6	1.4	1.1	2.3	4.9	12.6	2.6	2.9	12.6
27-Jun	3.4	4.9	Z	1.9	2.1	2.7	1.9	2.7	1.4	1.2	1.2	1.3	2.0	1.3	1.4	2.0	1.3	1.6	1.2	3.3	3.5	5.1	4.3	3.4	2.4	5.1
28-Jun	2.1	1.8	4.1	Z	4.0	3.7	5.2	10.1	16.5	15.0	4.8	0.9	1.0	1.0	1.1	1.2	1.6	1.6	1.7	1.9	4.0	3.6	3.6	2.3	4.0	16.5
29-Jun	1.8	1.8	2.6	4.3	Z	14.1	10.5	13.5	17.4	12.1	11.8	9.5	6.3	3.2	2.2	1.7	1.7	1.5	2.0	2.6	5.3	6.0	4.8	4.4	6.1	17.4
30-Jun	3.2	3.6	2.9	8.4	8.5	Z	6.4	11.3	8.9	6.7	7.1	4.1	4.0	2.4	2.9	5.1	4.9	4.5	4.6	3.7	6.7	14.6	19.5	8.3	6.6	19.5
	3.8	3.5	4.2	4.7	6.8	7.0	6.3	6.5	6.4	5.0	3.6	3.3	2.4	2.3	2.1	2.3	2.4	2.3	2.4	3.0	5.3	6.8	5.6	4.1	Diurnal Average	
	13.7	9.7	11.4	11.1	15.7	19.3	19.2	16.3	21.5	16.9	11.8	10.7	6.3	6.2	4.6	5.5	5.3	5.4	8.9	8.2	14.2	19.4	19.5	10.7	Diurnal Maximum	

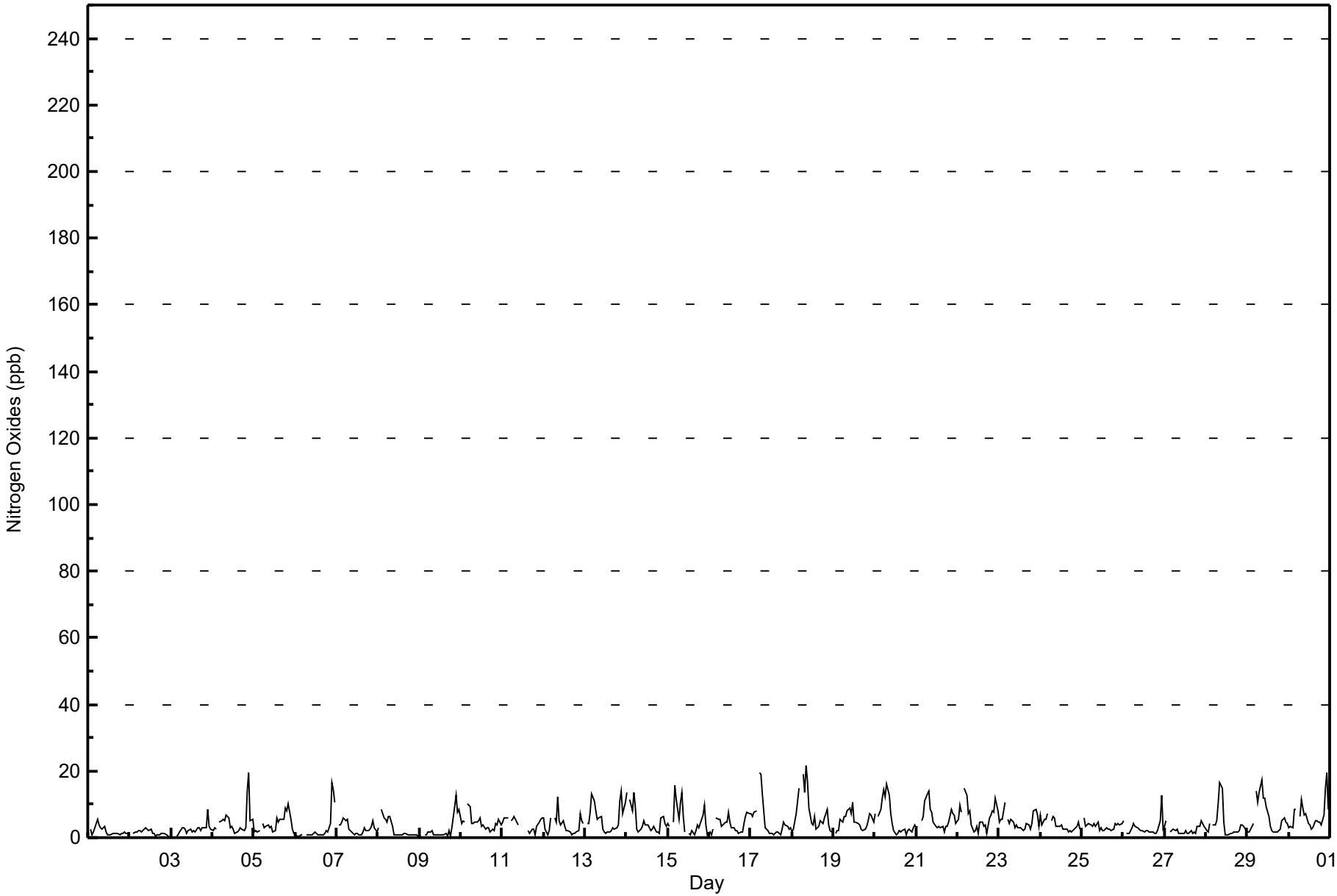
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Athabasca Valley - June 2026



Nitrogen Oxides (NO_X) - ppb
Athabasca Valley - June 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

Nitrogen Oxides (NO_X) - ppb
Athabasca Valley - June 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	28	9	22	45	48	70	41	19	12	40	54	24	27	25	103	116	683
21 - 40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
11 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81 - 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	28	9	22	45	48	70	41	19	12	40	54	24	27	25	104	116	684

Total Number of Valid Hours: 684

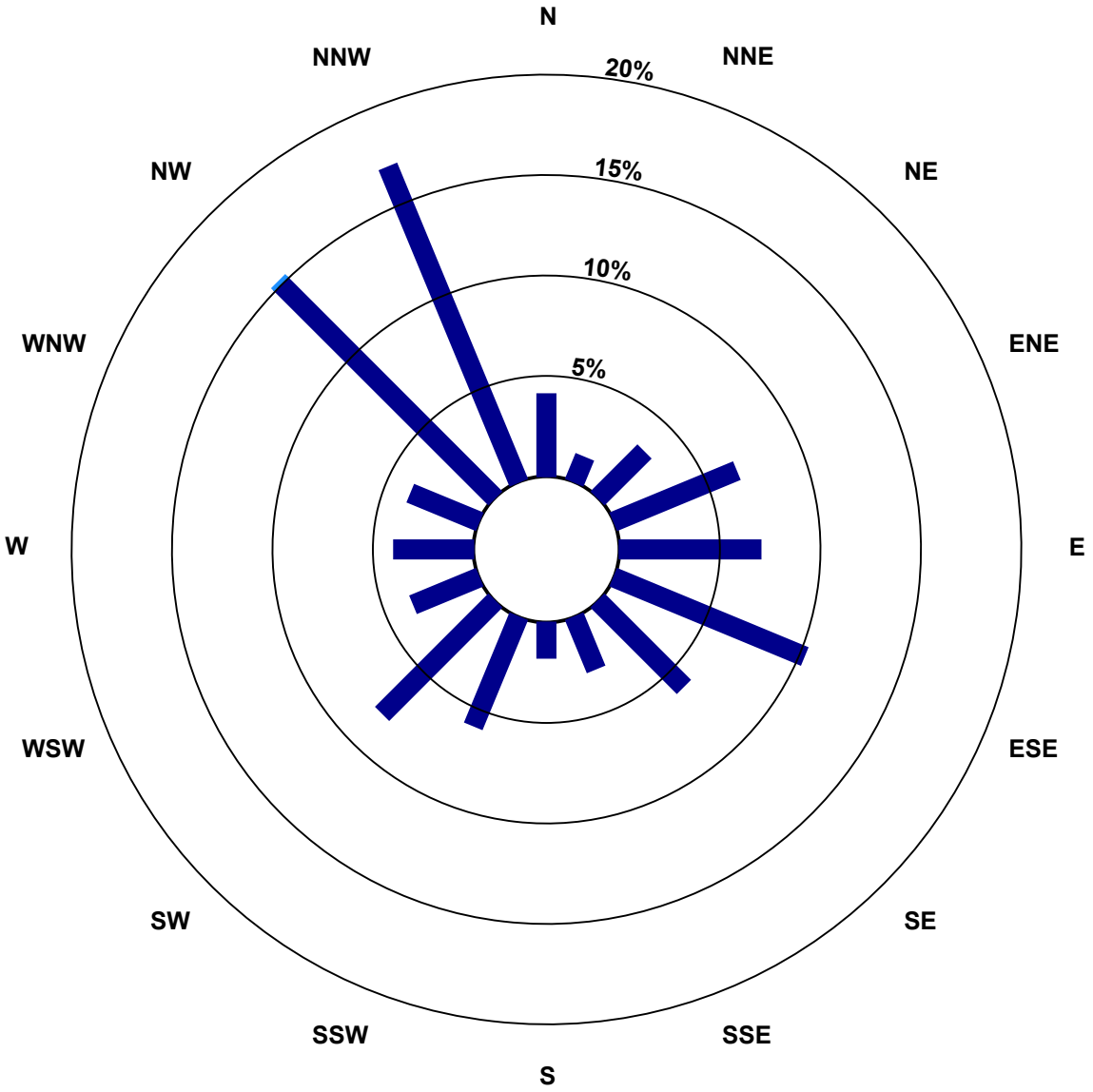
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Athabasca Valley



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

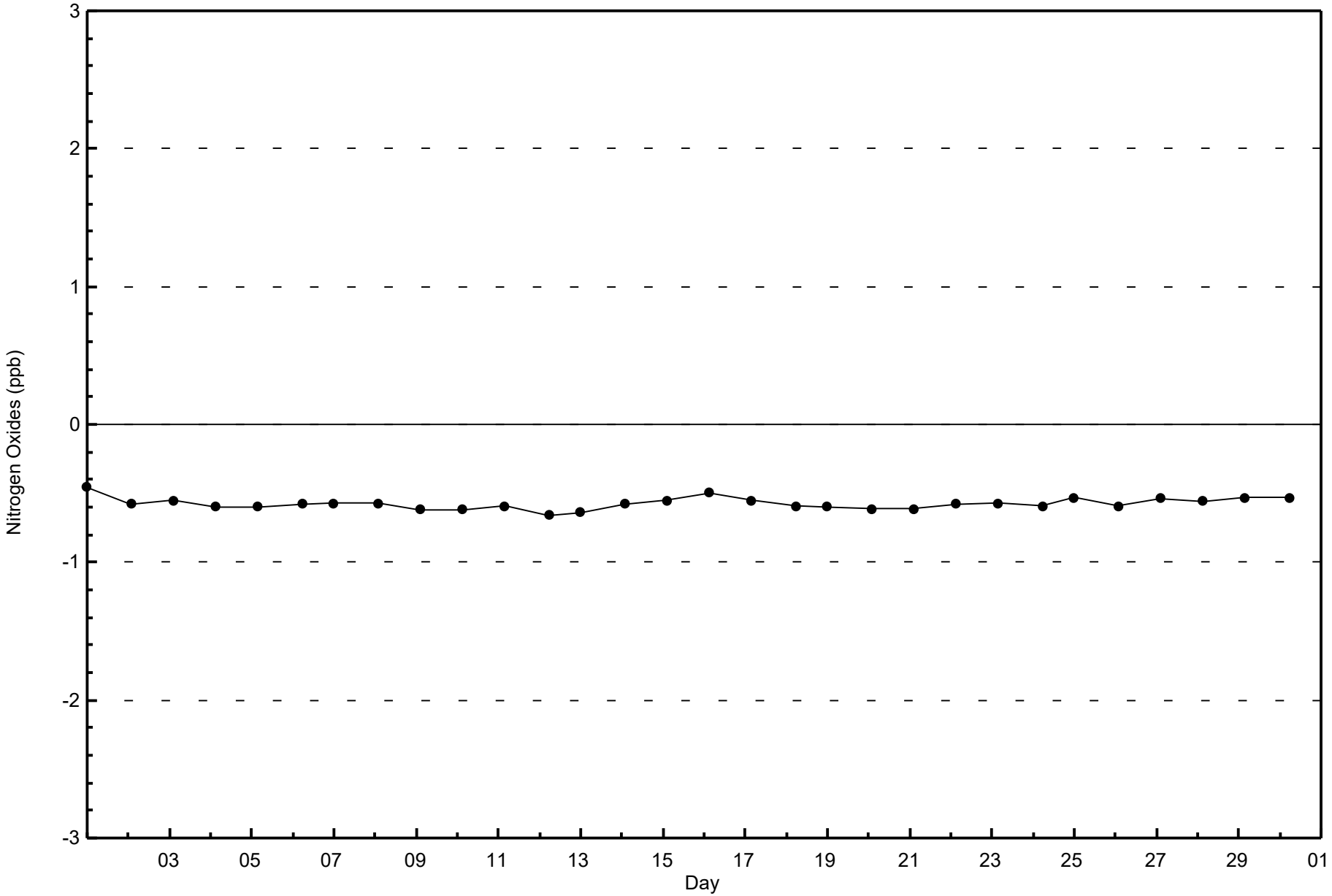
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Athabasca Valley - June 2026

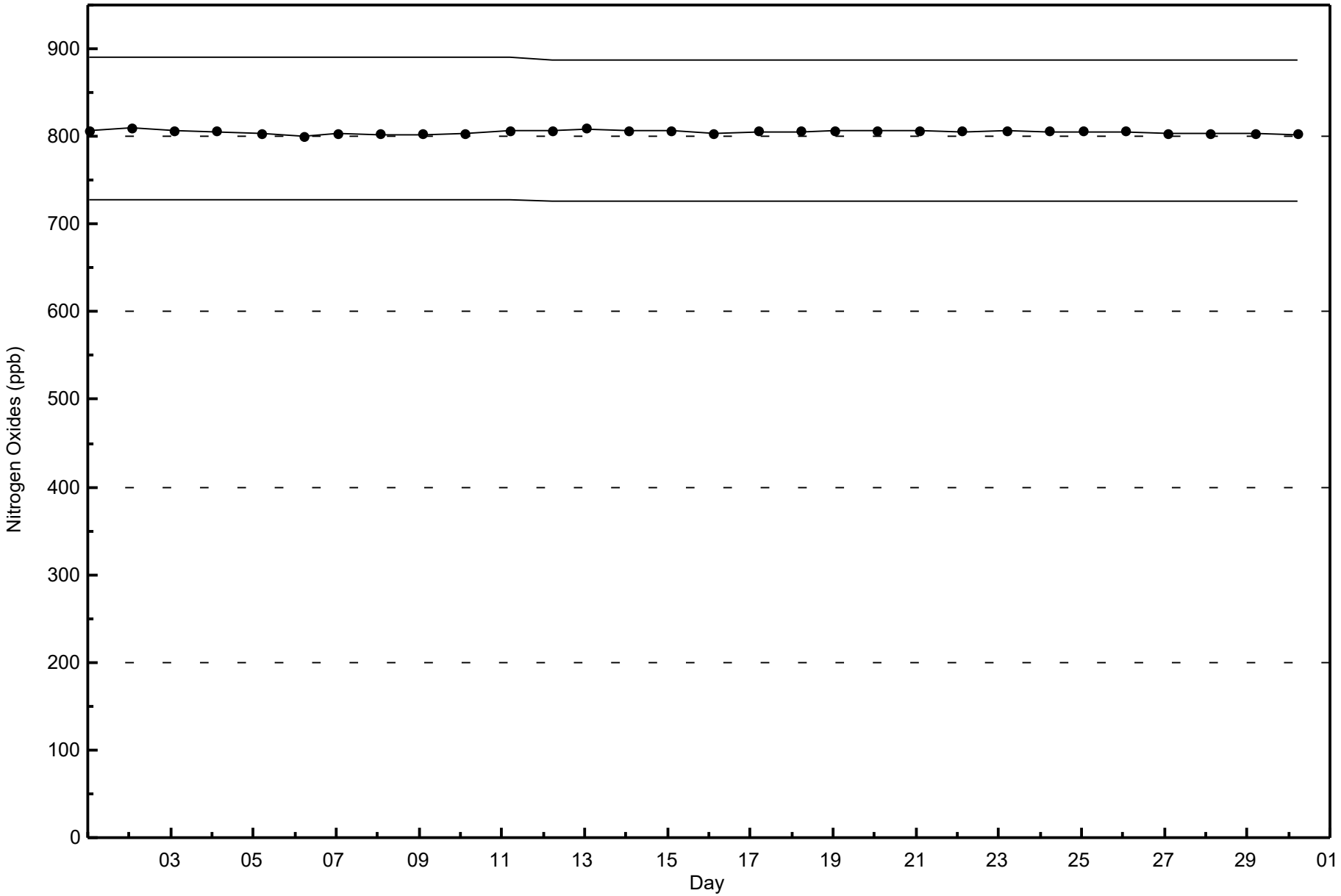


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Athabasca Valley - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Athabasca Valley - June 2026

Number of Exceedances (AAAQO): 1-hr: 1 24-hr: 2

Maximum Value: 96.2 $\mu g/m^3$ on Jun 30 23:00

Maximum Daily Average: 58.1 $\mu g/m^3$ on Jun 29

Minimum Value: 0.6 $\mu g/m^3$ on Jun 2 14:00

Minimum Daily Average: 1.1 $\mu g/m^3$ on Jun 2

Maximum Diurnal Average: 12.0 $\mu g/m^3$ at hour 23

Minimum Diurnal Average: 7.5 $\mu g/m^3$ at hour 12

Monthly Average: 9.03 $\mu g/m^3$

Percentiles: P_1 = 0.9 P_{10} = 2.0 Q_1 = 3.0 Median = 4.9 Q_3 = 6.8 P_{90} = 12.5 P_{99} = 65.0

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-Jun	1.2	1.0	0.8	1.0	1.3	1.6	1.9	1.8	1.9	1.6	1.8	2.5	2.7	2.8	2.5	2.3	2.4	2.3	1.9	1.9	1.4	1.1	1.1	1.1	1.7	2.8
2-Jun	0.9	0.9	0.9	0.8	0.8	0.9	1.3	1.4	1.3	1.5	1.2	1.0	1.0	0.6	0.7	0.7	0.7	0.9	1.2	1.4	1.4	1.6	1.4	1.6	1.1	1.6
3-Jun	1.7	2.0	2.3	2.4	2.2	2.5	2.8	3.3	3.0	3.1	3.4	3.2	3.4	3.5	4.1	5.1	5.3	6.1	6.4	6.5	6.4	6.4	5.7	5.6	4.0	6.5
4-Jun	5.9	6.8	7.8	8.9	9.5	9.9	10.3	12.3	14.6	14.7	12.6	13.0	13.6	12.4	11.0	8.9	8.2	7.6	7.2	8.0	9.0	12.4	11.3	13.3	10.4	14.7
5-Jun	8.2	8.5	8.3	8.7	8.3	9.4	8.5	7.2	6.6	5.5	5.7	5.0	3.8	3.2	4.2	4.3	4.3	4.5	5.1	5.6	6.1	6.1	4.4	3.2	6.0	9.4
6-Jun	3.0	2.6	2.5	2.2	2.0	2.1	1.7	1.8	2.3	2.0	2.2	2.4	2.5	2.5	2.4	2.1	2.5	2.5	2.5	2.7	2.9	4.2	5.8	5.8	2.7	5.8
7-Jun	4.6	3.2	2.8	2.9	2.8	3.5	4.8	4.2	3.0	2.9	2.8	2.6	3.0	2.2	2.0	2.9	3.9	3.3	3.4	3.5	5.1	6.4	3.9	3.2	3.5	6.4
8-Jun	3.9	5.0	5.7	5.5	5.6	5.4	7.5	5.1	3.9	1.8	1.0	1.2	2.0	3.2	3.3	3.3	3.1	3.0	2.9	2.4	1.6	1.7	2.0	2.0	3.4	7.5
9-Jun	2.2	2.4	2.4	2.4	2.5	2.5	2.7	2.7	2.2	1.8	1.9	1.8	1.9	1.8	2.1	2.5	2.6	2.8	2.8	3.9	6.0	7.3	7.6	7.4	3.2	7.6
10-Jun	4.6	4.2	4.3	4.3	5.0	4.9	4.7	4.9	4.7	3.5	4.9	5.4	3.1	2.6	2.4	2.0	1.6	1.4	2.1	2.5	2.7	2.0	2.0	2.0	3.4	5.4
11-Jun	2.0	1.8	2.2	1.7	1.9	1.7	2.9	4.0	3.2	1.9	1.8	1.8	C	2.6	3.0	2.1	2.5	2.9	3.0	3.0	2.9	3.3	3.5	3.7	2.6	4.0
12-Jun	3.9	2.8	2.0	2.2	2.9	3.3	3.1	2.6	4.2	3.9	3.7	4.3	3.9	4.1	4.5	4.1	4.0	4.1	4.0	4.2	3.7	3.8	5.0	4.8	3.7	5.0
13-Jun	5.2	6.2	6.1	7.3	7.0	5.9	5.8	5.1	5.3	5.0	3.5	3.0	2.7	2.6	2.9	2.8	2.6	2.5	2.8	3.1	4.5	7.0	7.4	8.3	4.8	8.3
14-Jun	6.6	6.2	6.3	4.5	4.6	4.8	4.0	3.9	4.5	6.8	7.4	6.8	6.3	6.9	6.2	5.4	5.8	5.3	5.0	4.7	5.7	6.7	7.1	7.3	5.8	7.4
15-Jun	8.0	7.9	9.8	9.1	9.6	10.3	8.9	10.4	11.9	11.1	4.0	3.5	3.7	3.9	5.5	5.5	6.9	12.6	11.8	10.7	11.9	10.2	9.1	6.6	8.5	12.6
16-Jun	5.7	5.3	5.7	6.3	6.9	6.8	6.4	4.9	3.9	3.8	4.1	4.9	6.0	7.4	9.1	12.1	10.9	5.3	8.0	7.9	10.8	7.3	5.7	6.9	6.8	12.1
17-Jun	10.2	7.3	6.6	6.6	8.3	7.1	7.6	6.6	3.3	3.9	3.7	3.6	3.6	3.5	4.0	4.2	4.0	3.5	3.9	5.5	4.7	4.3	4.3	4.0	5.2	10.2
18-Jun	3.6	3.6	5.7	7.6	7.2	6.6	6.3	5.1	7.3	7.7	5.9	3.0	3.2	4.2	3.9	3.5	5.2	5.6	5.2	6.3	6.6	4.2	2.9	2.7	5.1	7.7
19-Jun	2.9	2.7	2.8	3.1	3.7	3.7	3.3	3.6	4.3	4.6	3.6	5.7	6.2	6.7	5.9	4.1	3.3	3.4	3.0	3.9	3.7	4.4	4.1	4.6	4.1	6.7
20-Jun	5.0	5.1	5.1	4.0	4.0	4.7	3.8	4.6	4.9	4.3	3.8	2.4	2.2	2.6	4.0	3.5	3.9	2.5	0.9	2.2	1.7	2.5	2.2	2.7	3.4	5.1
21-Jun	3.4	2.6	2.6	2.8	3.4	4.4	4.1	3.8	3.5	3.0	3.1	3.6	4.3	4.7	6.4	7.5	4.9	3.3	4.5	4.4	6.4	8.1	7.7	5.1	4.5	8.1
22-Jun	4.8	6.7	6.7	6.7	6.5	6.3	5.7	6.1	5.8	5.5	5.0	4.7	4.6	6.6	6.4	4.7	3.8	3.3	3.7	3.8	5.0	5.8	6.3	6.2	5.4	6.7
23-Jun	6.0	5.5	5.2	5.4	5.7	5.4	5.1	5.5	5.7	5.6	7.1	8.5	10.4	9.8	8.8	8.4	9.0	8.5	8.4	8.3	8.7	9.1	9.7	9.3	7.5	10.4
24-Jun	9.6	8.9	9.3	9.3	8.5	9.2	10.1	10.0	7.9	4.8	4.9	5.2	5.2	4.9	5.1	4.9	5.2	5.1	5.8	6.0	6.4	6.3	6.6	6.6	6.9	10.1
25-Jun	6.7	6.9	6.3	6.3	6.6	6.9	6.6	6.6	6.9	6.3	4.8	4.7	4.1	4.3	4.2	4.7	5.1	4.8	4.9	5.0	5.4	5.8	5.6	5.8	5.6	6.9
26-Jun	6.2	6.2	6.2	6.4	6.7	7.1	6.8	7.3	6.6	5.7	5.0	4.6	4.3	4.3	4.4	4.4	4.7	4.3	4.9	4.7	5.1	5.9	6.5	5.9	5.6	7.3
27-Jun	5.8	6.0	6.4	5.8	6.0	5.9	6.3	6.3	5.7	5.4	5.3	5.4	5.1	4.5	4.1	4.2	4.6	4.4	4.3	4.8	5.4	6.0	6.0	5.7	5.4	6.4
28-Jun	6.2	6.3	6.9	7.0	7.0	7.1	8.3	13.0	17.4	22.0	17.3	17.1	17.3	20.1	24.8	33.3	62.7	52.4	45.1	40.7	45.4	52.2	55.3	56.5	26.7	62.7
29-Jun	56.0	55.4	55.0	56.9	59.2	61.8	60.9	59.7	56.2	54.1	59.7	58.6	55.9	58.7	62.5	52.8	34.6	42.0	65.6	69.2	70.0	65.4	63.3	60.7	58.1	70.0
30-Jun	60.3	62.0	61.5	62.8	58.6	57.1	56.5	54.1	50.7	41.1	37.3	36.3	44.3	45.3	51.7	66.6	59.1	55.4	54.7	42.1	44.4	65.3	96.2	68.0	55.5	96.2
	8.5	8.4	8.5	8.7	8.8	9.0	9.0	8.9	8.8	8.2	7.6	7.5	7.9	8.1	8.7	9.1	9.3	8.9	9.5	9.3	10.0	11.1	12.0	10.9	Diurnal Average	
	60.3	62.0	61.5	62.8	59.2	61.8	60.9	59.7	56.2	54.1	59.7	58.6	55.9	58.7	62.5	66.6	62.7	55.4	65.6	69.2	70.0	65.4	96.2	68.0	Diurnal Maximum	

C - Calibration

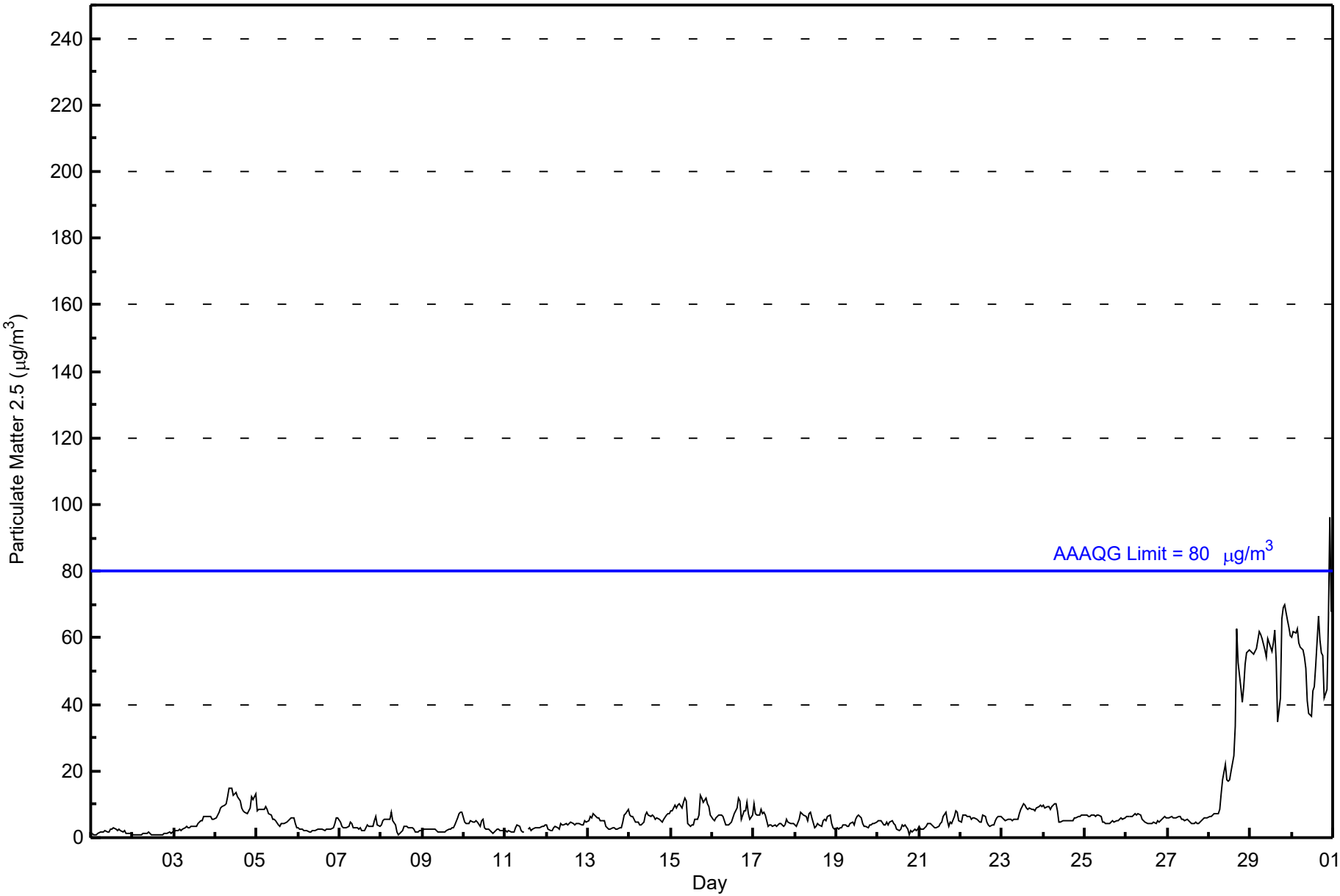
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Athabasca Valley - June 2026



Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	422	58.69	58.69
6 - 15	233	32.41	91.10
16 - 25	7	0.97	92.07
26 - 80	56	7.79	99.86
> 81.0	1	0.14	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Athabasca Valley - June 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	21	7	13	16	30	27	13	7	5	21	38	13	22	18	82	89	422
6 - 15	5	3	4	20	15	44	29	11	8	20	13	7	3	5	22	24	233
16 - 25	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	2	7
26 - 80	3	0	4	7	4	3	4	1	1	1	6	5	2	2	7	6	56
> 81.0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Totals	29	10	23	46	50	74	46	19	14	42	57	25	27	25	111	121	719

Total Number of Valid Hours: 719

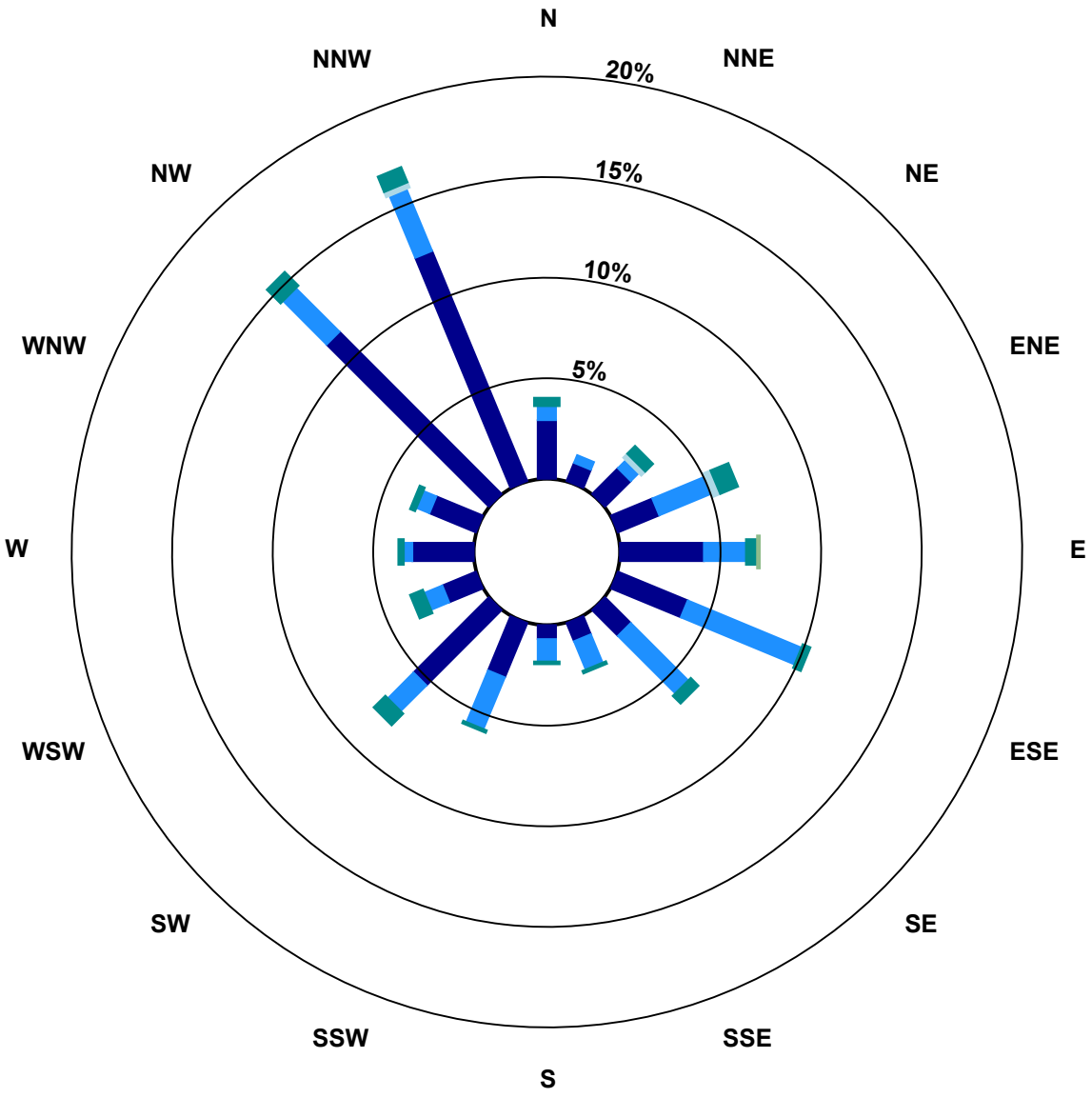
Total Number of Hours: 720

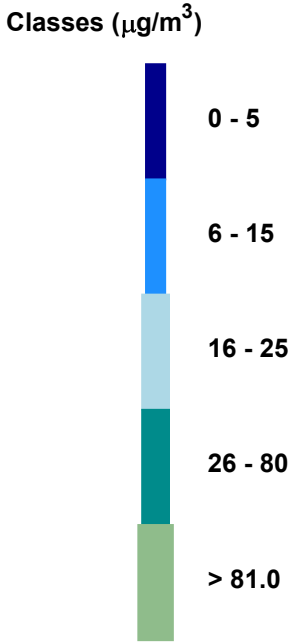
Wood Buffalo Environmental Association

Wind Rose Jun 2026

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

Athabasca Valley





Total Number of Valid Hours: 719

Wood Buffalo Environmental Association

Summary of Hour Averages

Carbon Monoxide (CO) - ppm

Athabasca Valley - June 2026

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

Maximum Value: 0.5 ppm on Jun 30 23:00

Maximum Daily Average: 0.3 ppm on Jun 29

Minimum Value: 0.0 ppm on Jun 7 08:00

Minimum Daily Average: 0.0 ppm on Jun 24

Maximum Diurnal Average: 0.1 ppm at hour 22

Minimum Diurnal Average: 0.1 ppm at hour 10

Monthly Average: 0.09 ppm

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:	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-Jun	0.1	Z	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	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2-Jun	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	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
3-Jun	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
4-Jun	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	0.3	0.2	0.1	0.1	0.3
5-Jun	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	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2
6-Jun	Z	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	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2
7-Jun	0.1	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
8-Jun	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	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
9-Jun	0.1	0.1	0.1	Z	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	0.1	0.1	0.1	0.2
10-Jun	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
11-Jun	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	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1
12-Jun	Z	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
13-Jun	0.1	Z	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	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2
14-Jun	0.2	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
15-Jun	0.1	0.1	0.1	Z	0.1	0.0	0.0	0.0	0.1	C	C	C	C	C	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2
16-Jun	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	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
17-Jun	0.1	0.1	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	0.0	0.1	0.1	0.1
18-Jun	Z	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.2
19-Jun	0.0	Z	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
21-Jun	0.1	0.1	0.1	Z	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
22-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2
23-Jun	0.2	0.2	0.2	0.2	0.1	Z	0.1	0.1	0.1	0.0	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
24-Jun	Z	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1
25-Jun	0.1	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1
26-Jun	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
27-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
28-Jun	0.1	0.2	0.2	0.2	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.3
29-Jun	0.3	0.3	0.3	0.3	0.3	Z	0.3	0.2	0.2	0.1	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4
30-Jun	Z	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	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	0.5	0.3	0.2	0.5
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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	0.3	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	0.2	0.3	0.3	0.4	0.3	0.5	0.3	Diurnal Maximum	

Z - zerospan C - Calibration

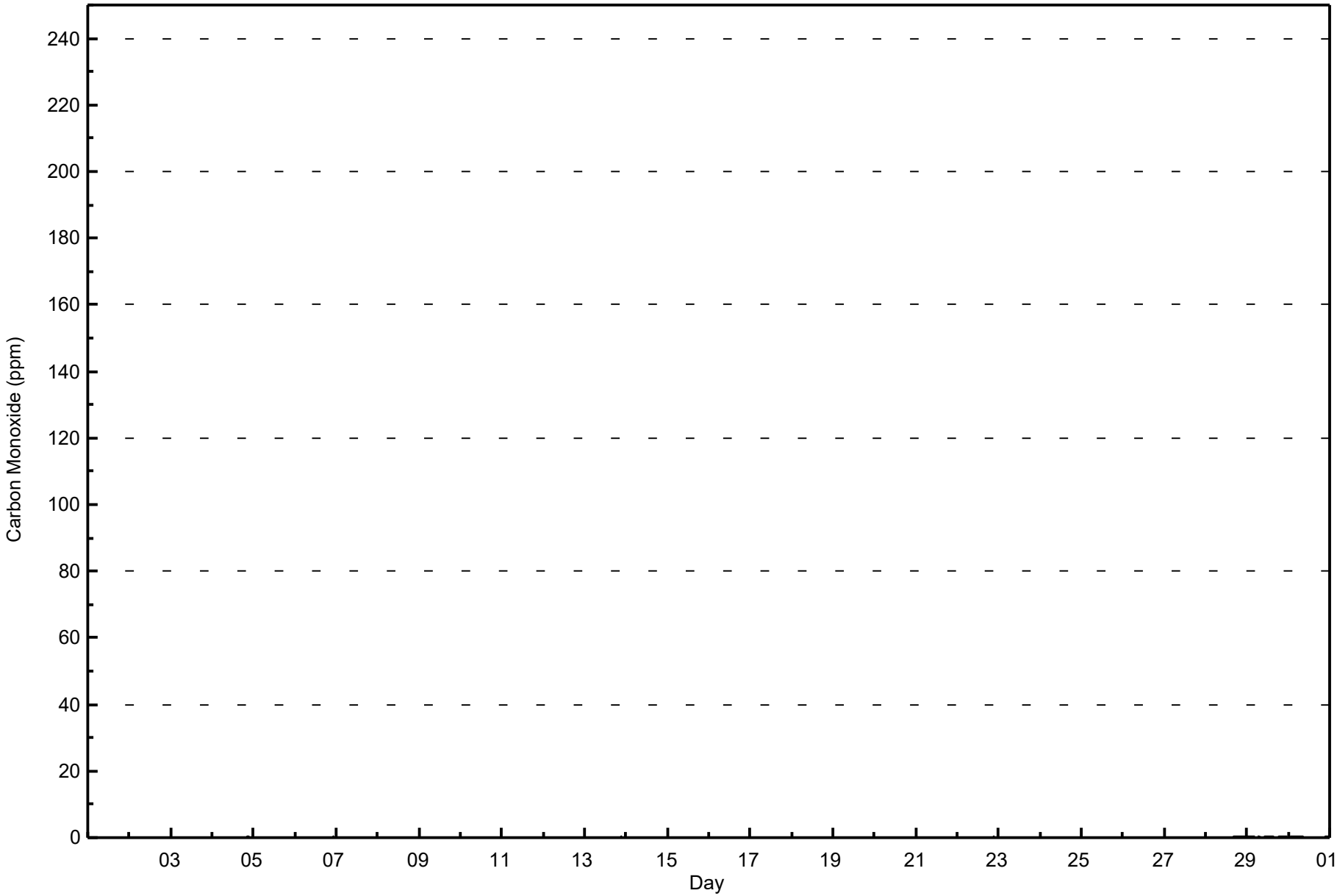
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm

Wood Buffalo Environmental Association

Hourly Averages

Carbon Monoxide (CO) - ppm

Athabasca Valley - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.3	683	99.71	99.71
0.4 - 0.5	2	0.29	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



Wood Buffalo Environmental Association

Frequency Distribution

Carbon Monoxide (CO) - ppm

Athabasca Valley - June 2026

Concentration Ranges (ppm)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 0.3	28	10	21	43	47	72	41	16	14	39	52	25	27	24	105	119	683
0.4 - 0.5	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
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	28	10	21	43	48	72	42	16	14	39	52	25	27	24	105	119	685

Total Number of Valid Hours: 685

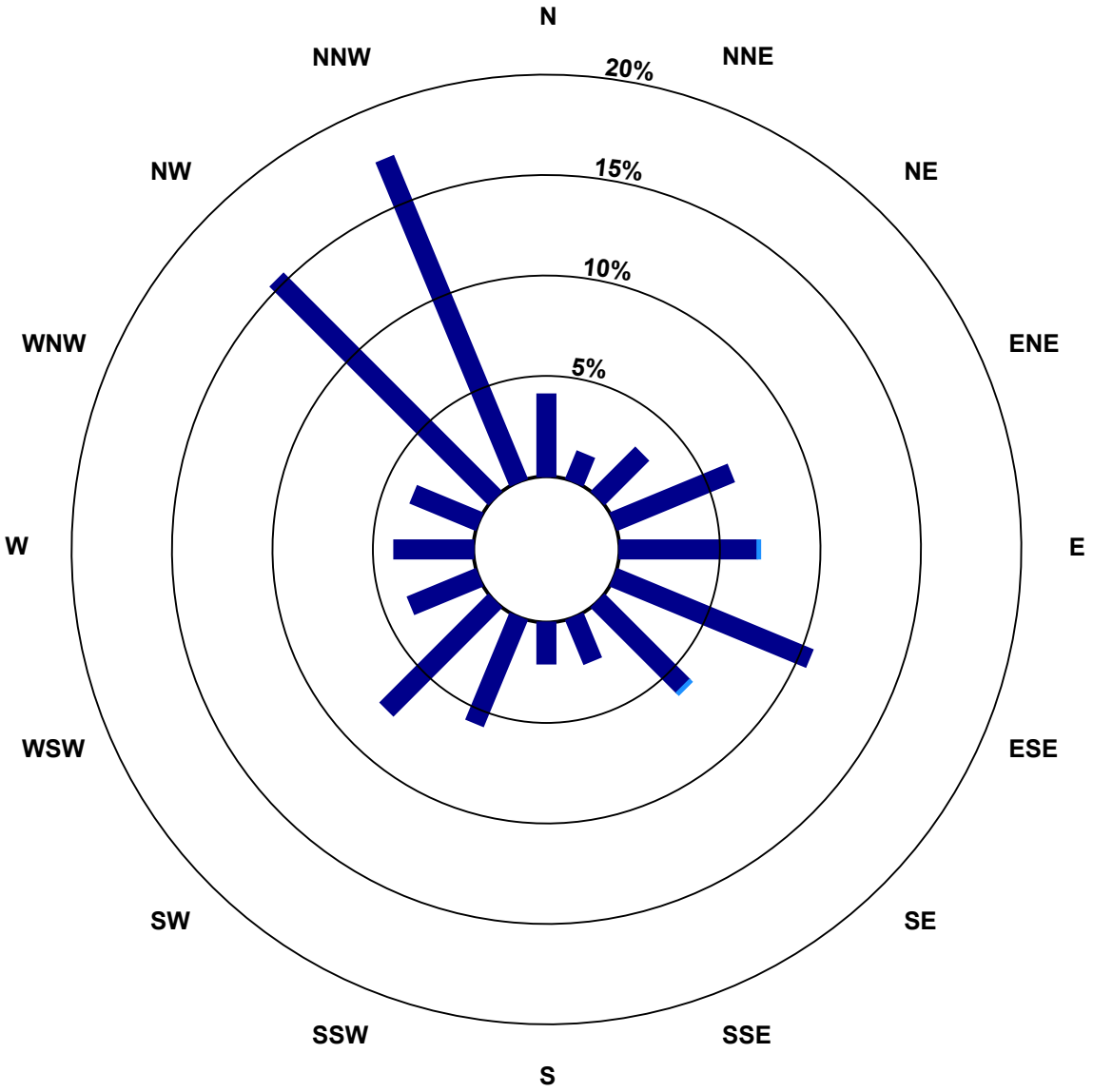
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 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

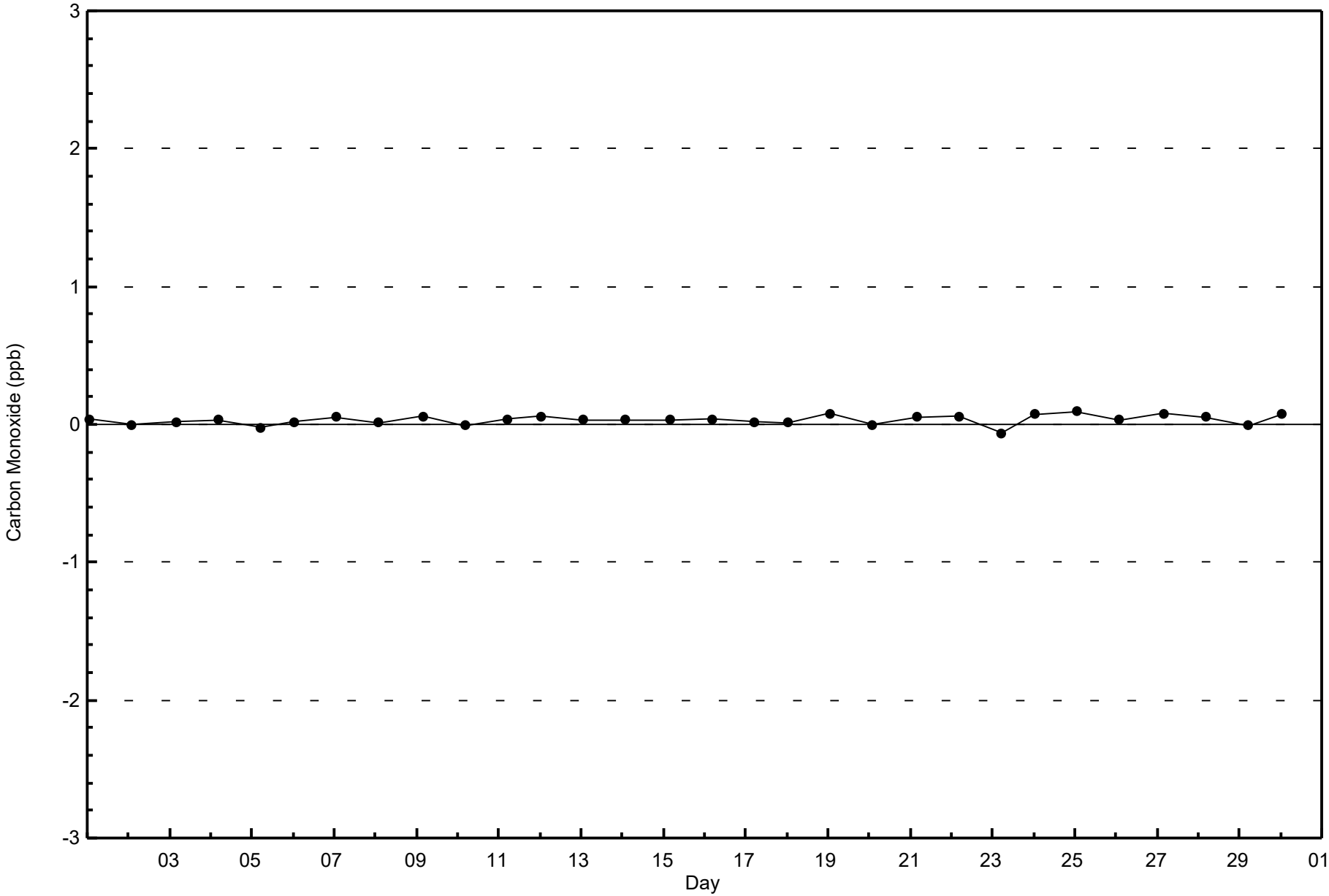
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Carbon Monoxide (CO) - ppb

Athabasca Valley - June 2026

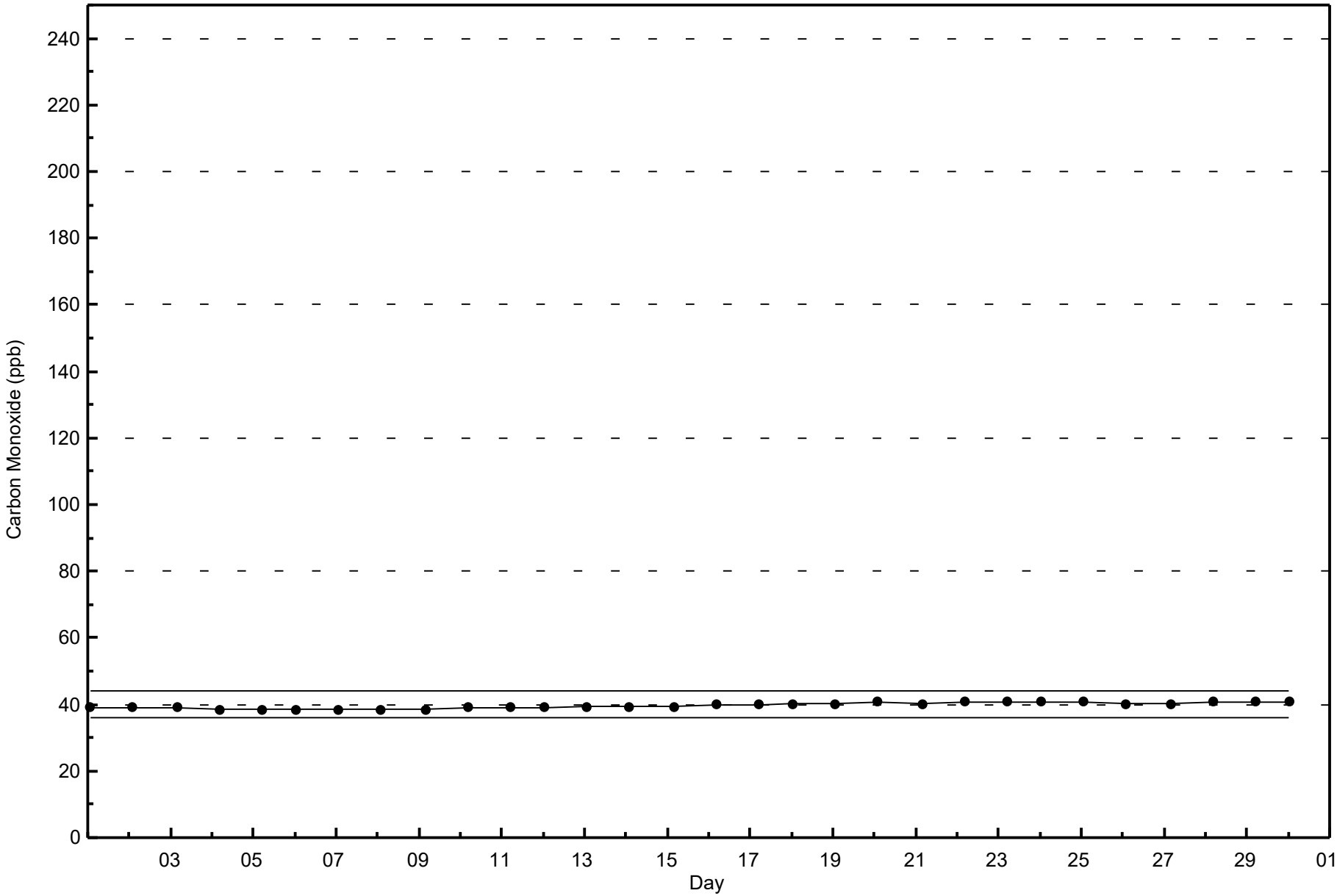


Wood Buffalo Environmental Association

Span Responses

Carbon Monoxide (CO) - ppb

Athabasca Valley - June 2026



Maximum Value: 30.8 C on Jun 28 16:00

Maximum Daily Average: 23.2 C on Jun 26

Minimum Value: 6.5 C on Jun 7 06:00

Minimum Daily Average: 10.2 C on Jun 11

Maximum Diurnal Average: 20.9 C at hour 17

Minimum Diurnal Average: 11.6 C at hour 5

Monthly Average: 16.72 C

Percentiles: P_1 = 7.9 P_{10} = 10.5 Q_1 = 12.3 Median = 15.5 Q_3 = 20.2 P_{90} = 25.3 P_{99} = 29.9

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

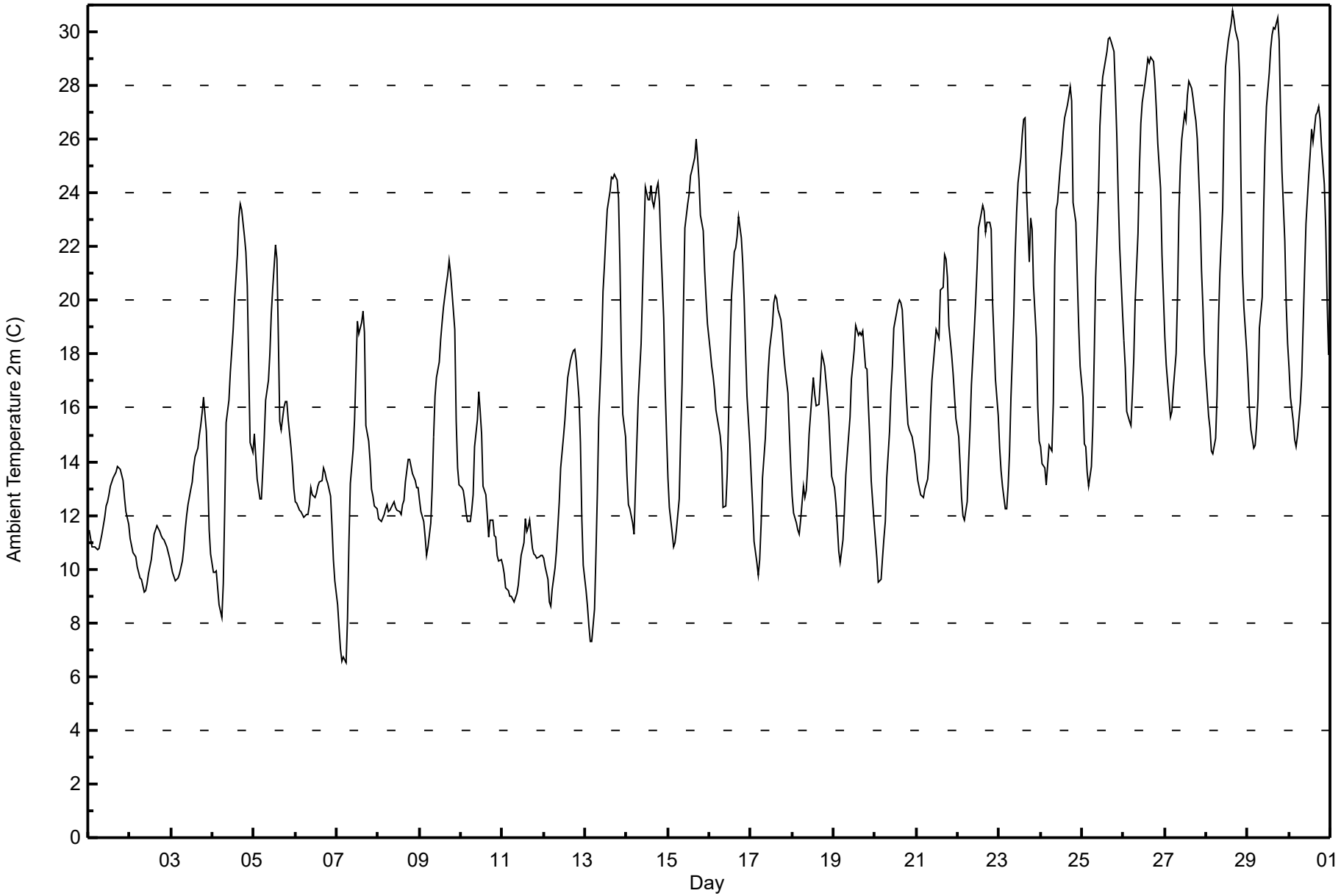
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	11.4	11.1	10.8	10.8	10.8	10.7	10.7	11.0	11.3	11.9	12.3	12.5	12.8	13.1	13.4	13.5	13.6	13.8	13.7	13.5	13.3	12.7	12.1	11.7	12.2	13.8
2-Jun	11.2	10.9	10.6	10.4	10.1	9.9	9.7	9.6	9.1	9.2	9.5	9.9	10.3	10.8	11.3	11.5	11.6	11.4	11.2	11.2	11.1	10.8	10.6	10.4	10.5	11.6
3-Jun	10.2	9.9	9.6	9.6	9.6	9.8	10.3	10.8	11.5	12.0	12.4	13.0	13.2	13.8	14.2	14.5	15.0	15.4	15.8	16.4	15.1	13.5	11.5	10.6	12.4	16.4
4-Jun	9.9	9.9	9.9	9.3	8.6	8.2	9.4	12.2	15.5	16.3	17.3	18.1	18.9	20.0	21.7	23.1	23.6	23.4	22.4	21.8	20.5	17.6	14.7	14.3	16.1	23.6
5-Jun	15.1	14.2	13.4	12.6	12.6	13.7	14.9	16.3	17.0	18.0	19.5	20.5	22.1	21.5	18.7	15.5	15.2	16.0	16.2	16.2	15.5	14.5	13.8	13.0	16.1	22.1
6-Jun	12.5	12.5	12.2	12.1	12.0	11.9	12.0	12.0	12.4	13.0	12.8	12.7	12.8	13.1	13.3	13.3	13.8	13.6	13.3	13.2	12.7	11.6	10.4	9.6	12.4	13.8
7-Jun	8.7	7.8	7.0	6.6	6.7	6.5	8.2	11.0	13.2	14.5	15.6	17.4	19.3	18.8	19.2	19.6	18.8	15.4	14.7	14.0	13.0	12.7	12.3	12.2	13.0	19.6
8-Jun	11.9	11.8	11.8	12.0	12.3	12.4	12.1	12.2	12.4	12.5	12.3	12.2	12.2	12.1	12.4	12.5	13.3	14.1	14.1	13.8	13.6	13.3	13.0	13.0	12.6	14.1
9-Jun	12.5	12.1	11.8	11.2	10.5	10.8	11.7	13.1	14.9	16.4	17.1	17.7	18.6	19.2	19.7	20.6	21.0	21.5	21.0	20.3	18.9	15.5	13.8	13.2	16.0	21.5
10-Jun	13.0	12.9	12.6	12.1	11.8	11.8	12.2	12.8	14.6	15.6	16.6	15.9	15.0	13.1	12.8	12.0	11.2	11.8	11.8	11.2	11.2	10.5	10.3	10.4	12.6	16.6
11-Jun	10.1	9.8	9.3	9.2	9.0	9.0	8.9	8.8	9.1	9.4	10.0	10.5	11.0	11.9	11.4	11.5	11.8	10.8	10.6	10.5	10.4	10.4	10.5	10.5	10.2	11.9
12-Jun	10.4	10.1	9.6	8.8	8.6	9.2	10.0	10.6	11.6	12.5	13.8	14.9	15.5	16.4	17.1	17.7	18.0	18.1	18.2	17.7	16.3	14.7	11.9	10.1	13.4	18.2
13-Jun	9.2	8.6	7.9	7.3	7.3	8.5	10.6	12.8	15.6	18.3	20.3	21.3	22.4	23.4	24.0	24.6	24.5	24.7	24.5	23.8	21.3	18.0	15.8	14.9	17.1	24.7
14-Jun	13.5	12.4	12.3	11.7	11.3	13.1	14.8	16.4	18.4	20.4	22.3	24.2	23.7	23.7	24.3	23.7	23.5	24.2	24.4	23.6	22.1	19.3	16.8	15.0	19.0	24.4
15-Jun	13.4	12.3	11.4	10.8	11.0	11.4	12.6	14.9	16.8	19.8	22.7	23.6	23.9	24.6	24.8	25.3	26.0	25.3	24.5	23.2	22.6	21.1	20.1	19.1	19.2	26.0
16-Jun	18.1	17.6	17.2	16.7	15.9	15.3	15.0	14.3	12.3	12.3	13.5	15.8	18.2	20.1	21.8	22.0	22.4	23.1	22.3	21.4	20.0	18.1	16.5	14.7	17.7	23.1
17-Jun	13.5	12.3	11.0	10.2	9.8	10.4	11.6	13.4	14.9	16.1	17.4	18.2	19.1	19.9	20.2	20.1	19.6	19.3	18.8	18.0	17.4	16.6	15.1	13.8	15.7	20.2
18-Jun	12.7	12.1	11.7	11.4	11.3	11.8	13.1	12.7	12.9	13.8	15.0	16.5	17.1	16.5	16.1	16.1	17.1	18.0	17.8	17.5	16.4	15.7	14.5	13.5	14.6	18.0
19-Jun	13.0	12.4	11.6	10.7	10.2	11.1	12.1	13.5	14.2	15.7	17.1	17.6	18.2	19.1	18.7	18.8	18.7	18.9	17.5	17.5	16.1	14.8	13.3	11.8	15.1	19.1
20-Jun	11.1	10.4	9.5	9.6	10.4	11.2	11.8	13.4	15.1	16.6	17.6	19.0	19.6	19.8	20.0	19.9	19.7	17.3	16.3	15.4	15.2	14.9	14.6	14.3	15.1	20.0
21-Jun	13.8	13.3	12.8	12.7	12.7	13.0	13.4	14.1	15.7	17.0	17.7	18.9	18.8	18.6	20.4	20.5	21.7	21.5	20.9	19.1	17.9	17.3	16.5	15.6	16.8	21.7
22-Jun	14.9	13.9	12.7	12.0	11.8	12.5	14.0	15.2	16.9	18.9	20.0	21.2	22.7	23.0	23.5	23.3	22.6	22.9	22.9	22.6	19.9	18.5	17.1	15.7	18.3	23.5
23-Jun	14.5	13.7	13.1	12.3	12.3	13.1	14.3	16.4	19.4	21.8	23.3	24.4	25.3	26.2	26.7	26.8	24.1	21.4	23.1	22.6	20.5	18.6	16.0	14.8	19.4	26.8
24-Jun	14.5	13.9	13.8	13.1	13.9	14.6	14.4	16.2	21.3	23.4	23.6	25.0	25.6	26.3	26.8	27.3	27.6	28.0	27.4	23.6	22.9	20.8	19.0	17.6	20.9	28.0
25-Jun	16.4	14.6	14.5	13.6	13.1	13.8	15.4	18.0	20.8	23.9	26.5	27.6	28.3	28.7	29.3	29.7	29.8	29.6	29.3	27.8	26.1	23.9	22.0	19.6	22.6	29.8
26-Jun	18.5	17.5	15.9	15.5	15.3	16.5	17.8	20.0	22.5	24.9	26.6	27.4	28.1	28.5	29.0	28.9	29.1	28.9	28.2	27.1	25.9	24.2	21.7	20.2	23.2	29.1
27-Jun	18.7	17.6	16.3	15.7	15.9	16.7	18.0	20.2	23.3	25.0	26.0	27.0	26.7	27.6	28.2	27.9	27.6	27.1	26.7	26.0	23.3	21.1	19.7	18.0	22.5	28.2
28-Jun	16.5	15.7	15.3	14.4	14.3	14.8	16.5	19.1	21.0	23.4	26.9	28.7	29.2	29.7	30.3	30.8	30.5	30.1	29.6	28.3	24.2	21.1	19.7	18.2	22.9	30.8
29-Jun	17.1	15.8	15.2	14.5	14.6	15.3	16.3	19.0	20.1	23.3	25.8	27.2	28.5	29.4	29.9	30.1	30.1	30.5	29.7	27.0	24.8	22.2	19.9	18.4	22.7	30.5
30-Jun	17.5	16.4	15.5	14.8	14.6	15.0	16.2	17.2	19.1	21.0	22.8	24.7	25.5	26.4	25.9	26.9	27.0	27.2	26.7	25.8	24.3	22.7	20.0	18.0	21.3	27.2
	13.5	12.8	12.2	11.7	11.6	12.1	12.9	14.2	15.8	17.2	18.5	19.4	20.1	20.5	20.8	20.9	20.9	20.8	20.4	19.7	18.4	16.9	15.4	14.4	Diurnal Average	
	18.7	17.6	17.2	16.7	15.9	16.7	18.0	20.2	23.3	25.0	26.9	28.7	29.2	29.7	30.3	30.8	30.5	30.5	29.7	28.3	26.1	24.2	22.0	20.2	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Athabasca Valley - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	50	6.94	6.94
10 - 20	480	66.67	73.61
> 20	190	26.39	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 29.4 inHg on Jun 2 00:00

Maximum Daily Average: 29.4 inHg on Jun 2

Minimum Value: 28.3 inHg on Jun 8 13:00

Minimum Daily Average: 28.4 inHg on Jun 8

Maximum Diurnal Average: 29.0 inHg at hour 9

Minimum Diurnal Average: 28.9 inHg at hour 19

Monthly Average: 28.96 inHg

Percentiles: P_1 = 28.4 P_{10} = 28.6 Q_1 = 28.8 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

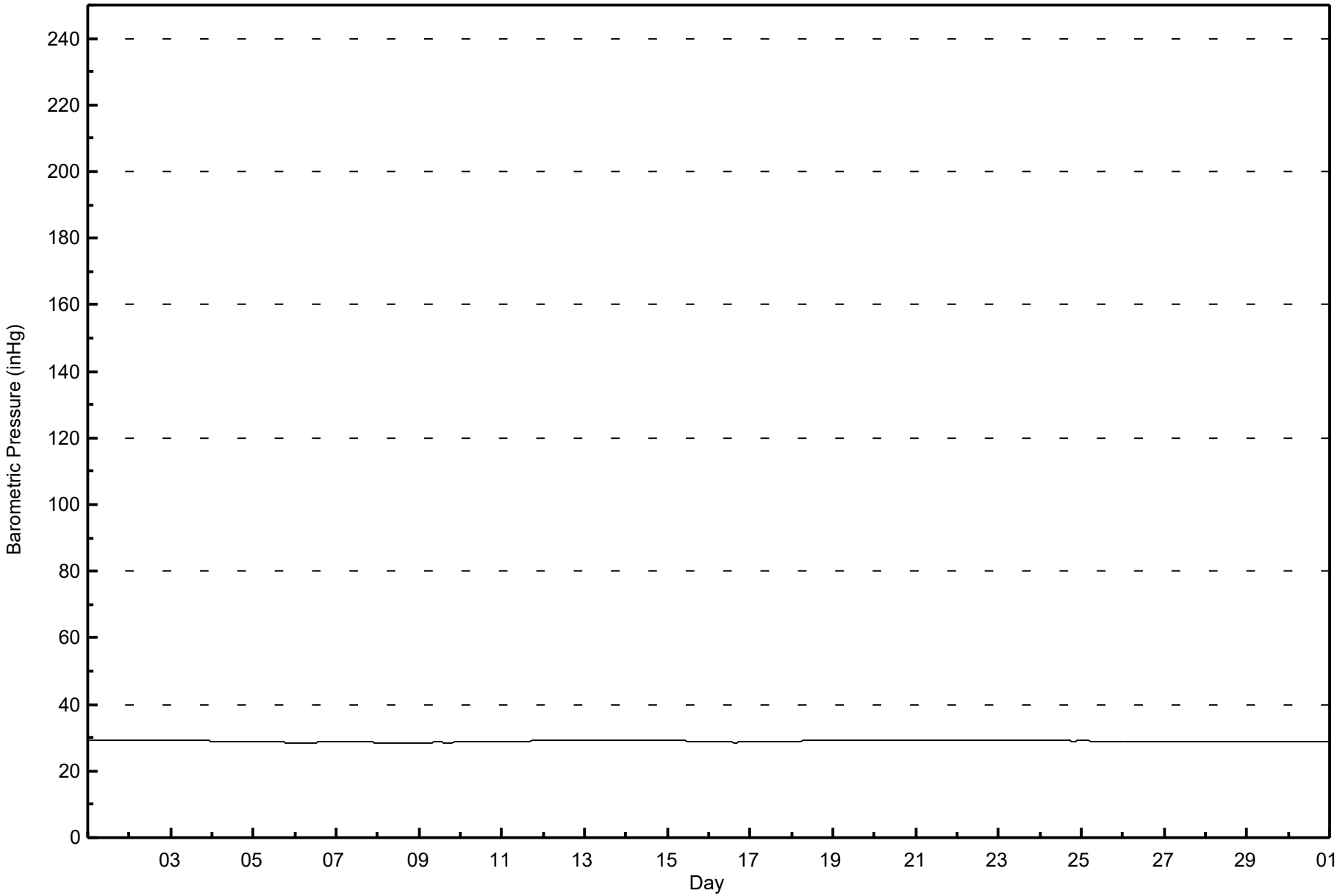
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	29.2	29.2	29.2	29.2	29.3	29.3	29.3	29.3	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4
2-Jun	29.4	29.4	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	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4
3-Jun	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.2	29.3
4-Jun	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.9	29.0
5-Jun	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	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.5	28.7	28.8
6-Jun	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	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.6	28.7
7-Jun	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	28.6	28.6	28.6	28.6	28.7	28.6	28.6	28.6	28.6	28.6	28.6	28.7	28.7
8-Jun	28.6	28.6	28.5	28.5	28.5	28.5	28.5	28.4	28.4	28.4	28.4	28.3	28.3	28.3	28.3	28.3	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.5	28.4	28.6
9-Jun	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	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6
10-Jun	28.6	28.7	28.6	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	28.9	28.9	28.9	28.9	28.9	28.8	28.9
11-Jun	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	29.0	29.0	29.1	29.1	29.1	29.1	29.1	29.0	29.1
12-Jun	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.3	29.3	29.3	29.3	29.2	29.3
13-Jun	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.4	29.4	29.4	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
14-Jun	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	29.2	29.2	29.1	29.2
15-Jun	29.1	29.1	29.1	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	28.9	28.9	28.9	28.8	28.8	28.8	28.8	28.8	28.8	28.8	29.0	29.2
16-Jun	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.7	28.7	28.7	28.8	28.8	28.7	28.8
17-Jun	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	28.9	28.9	29.0	29.0	29.0	29.0	29.0	29.0	28.9	29.0
18-Jun	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
19-Jun	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
20-Jun	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.2	29.1	29.2
21-Jun	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
22-Jun	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	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	29.3	29.3	29.2	29.3
23-Jun	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	29.2	29.2	29.3
24-Jun	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.0	29.1	29.2
25-Jun	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	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.9	28.9	29.0
26-Jun	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	28.7	28.8	28.8	28.8	28.8	28.8	28.8	28.9
27-Jun	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.9	28.9	28.9	28.8	28.9
28-Jun	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	28.9	28.9	28.9	28.9	28.9	28.9
29-Jun	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	28.9	28.9	28.9
30-Jun	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	28.8	28.9
	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	28.9	28.9	28.9	28.9	28.9	28.9	28.9	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	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Barometric Pressure (BP) - inHg

Athabasca Valley - June 2026



Maximum Value: 97.9 % on Jun 4 06:00

Maximum Daily Average: 86.1 % on Jun 8

Minimum Value: 24.5 % on Jun 28 16:00

Minimum Daily Average: 47.9 % on Jun 26

Maximum Diurnal Average: 84.7 % at hour 4

Minimum Diurnal Average: 49.0 % at hour 15

Monthly Average: 65.15 %

Percentiles: P_1 = 25.9 P_{10} = 35.3 Q_1 = 47.5 Median = 70.4 Q_3 = 80.9 P_{90} = 88.7 P_{99} = 94.7

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

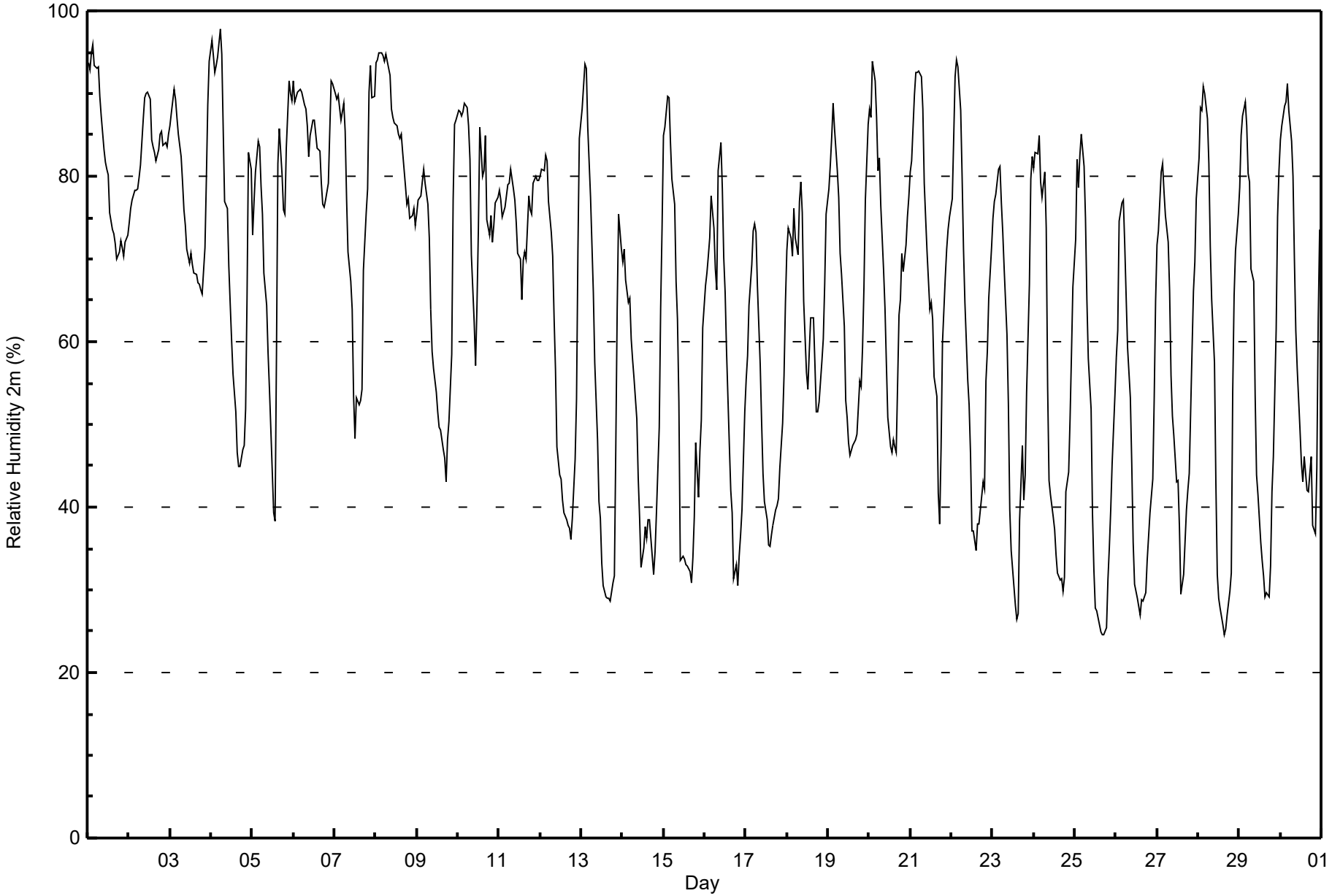
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	93.7	92.8	94.9	95.9	93.4	93.0	93.2	89.6	87.2	83.3	81.7	80.8	80.2	75.7	73.6	73.1	71.9	69.9	70.9	72.3	71.3	70.3	72.1	72.9	81.4	95.9
2-Jun	74.4	76.0	77.1	78.2	78.4	78.5	79.9	81.4	86.9	89.6	90.0	90.1	89.4	84.4	83.5	83.0	81.9	83.3	85.1	85.5	83.7	84.1	83.5	85.1	83.0	90.1
3-Jun	86.1	87.7	90.5	89.3	87.1	85.1	82.4	79.4	76.0	74.0	71.1	69.5	70.6	69.4	68.3	68.2	67.1	66.9	66.2	65.8	71.4	79.7	88.7	93.8	77.3	93.8
4-Jun	96.4	94.7	92.5	93.3	94.4	97.9	94.7	85.8	76.9	76.1	69.2	64.5	60.2	56.1	51.5	46.6	45.0	44.9	46.9	47.4	51.9	65.3	82.9	80.9	71.5	97.9
5-Jun	72.9	77.0	80.5	84.2	83.5	78.8	75.4	68.2	64.4	58.7	54.2	49.4	39.4	38.3	58.5	81.5	85.8	80.2	75.9	75.3	83.4	91.5	90.1	89.2	72.3	91.5
6-Jun	91.5	89.1	90.2	90.3	90.5	90.2	88.7	88.2	86.1	82.4	85.0	86.8	86.8	85.0	83.4	83.1	79.1	76.6	76.3	77.1	79.2	85.4	91.5	91.3	85.6	91.5
7-Jun	90.0	89.4	89.9	88.3	86.8	88.9	85.4	77.3	70.9	67.3	64.0	53.4	48.4	53.2	52.4	52.8	54.3	68.6	75.6	78.5	90.2	93.4	89.5	89.6	74.9	93.4
8-Jun	93.8	94.0	94.9	94.9	94.6	93.8	94.7	93.9	92.2	88.1	87.1	86.5	86.1	85.0	84.5	85.1	82.9	78.8	76.5	77.2	74.9	75.3	76.1	74.0	86.1	94.9
9-Jun	75.4	77.1	77.5	79.2	80.9	79.2	76.6	72.6	63.9	58.8	56.8	53.9	51.6	49.7	49.3	46.9	45.9	43.1	48.1	50.4	58.5	77.1	86.3	86.7	64.4	86.7
10-Jun	87.9	87.8	87.3	87.9	88.9	88.3	86.1	82.1	70.5	62.3	57.2	64.4	73.6	85.9	80.0	80.7	85.0	74.8	72.8	75.3	72.0	74.1	76.8	77.5	78.3	88.9
11-Jun	78.4	77.1	75.0	76.2	77.7	78.9	79.1	80.8	78.5	77.2	74.5	70.7	70.0	65.1	69.7	70.8	69.9	77.6	75.9	75.5	79.1	80.1	79.5	79.4	75.7	80.8
12-Jun	79.9	80.8	80.6	82.5	81.9	77.0	73.3	70.3	62.9	56.6	47.3	44.0	43.4	40.8	39.4	38.4	37.7	37.4	36.1	38.7	45.8	53.0	71.0	84.6	58.5	84.6
13-Jun	88.2	90.9	93.5	93.1	86.0	77.4	71.8	66.0	57.4	48.1	40.7	38.6	33.2	30.6	29.2	29.1	29.0	28.7	30.8	31.7	47.1	63.9	75.5	71.1	56.3	93.5
14-Jun	69.7	71.1	67.5	64.8	65.3	60.4	57.9	55.6	50.6	43.6	38.6	32.8	35.1	37.6	36.2	38.5	38.4	34.0	31.9	34.6	39.4	49.6	64.1	73.8	49.6	73.8
15-Jun	85.0	85.9	89.6	89.5	84.1	79.6	76.6	67.3	62.7	52.7	33.5	34.1	33.8	33.1	32.8	32.2	30.9	33.9	38.8	47.8	41.2	46.8	50.6	61.8	55.2	89.6
16-Jun	66.8	68.3	70.3	72.6	77.6	73.7	68.8	66.3	80.6	84.1	78.5	70.2	65.9	58.9	47.5	42.1	39.4	31.4	33.0	30.6	34.0	36.6	39.6	51.5	57.8	84.1
17-Jun	55.4	58.3	64.4	69.3	73.4	74.2	73.2	66.8	57.3	50.3	44.0	40.7	38.5	35.5	35.3	36.6	37.8	39.6	40.1	41.1	44.8	50.2	56.0	64.7	52.0	74.2
18-Jun	71.0	73.8	72.6	70.3	76.1	72.5	70.5	77.0	79.4	75.6	65.0	56.2	54.2	58.9	62.9	62.9	57.5	51.6	51.5	52.6	57.7	60.3	66.9	75.3	65.5	79.4
19-Jun	78.5	81.4	84.8	88.7	85.7	80.6	77.4	70.7	68.1	61.9	52.9	50.9	47.8	46.2	47.5	47.8	48.2	48.8	55.2	54.6	59.3	66.6	77.1	86.3	65.3	88.7
20-Jun	88.1	87.2	93.9	91.6	87.2	80.7	82.1	76.4	68.7	64.1	57.3	50.8	47.2	46.6	48.1	47.3	46.6	63.2	65.1	70.7	68.5	71.6	75.0	77.4	69.0	93.9
21-Jun	80.5	81.8	89.8	92.5	92.5	92.7	92.0	88.2	79.2	74.8	70.9	63.8	64.8	62.8	55.8	53.5	41.7	38.0	47.2	59.9	67.8	71.2	73.6	75.0	71.2	92.7
22-Jun	77.3	84.6	92.0	94.1	93.2	87.9	80.0	71.2	64.7	55.5	52.4	46.5	37.0	37.1	34.7	38.0	37.9	39.6	43.1	42.2	55.2	58.8	65.2	71.3	60.8	94.1
23-Jun	74.9	76.9	77.7	80.8	81.1	76.7	73.2	68.8	60.8	52.6	39.6	34.8	30.3	28.1	26.5	27.1	38.4	47.5	40.9	43.9	54.0	66.9	79.7	82.3	56.8	82.3
24-Jun	81.1	82.9	82.7	85.0	79.3	77.4	80.4	73.7	54.7	43.2	41.6	38.8	37.3	34.2	32.1	31.2	31.3	29.8	31.5	41.9	44.3	50.7	58.5	66.5	54.6	85.0
25-Jun	72.3	82.0	78.7	82.5	85.1	81.2	74.9	65.1	58.0	51.8	39.1	32.3	27.8	27.4	25.8	25.0	24.5	24.6	25.4	31.2	35.0	39.7	45.3	53.5	49.5	85.1
26-Jun	58.1	61.3	74.6	76.8	77.0	71.6	65.4	59.3	53.3	45.2	35.7	30.6	29.0	28.0	27.0	28.7	28.6	29.7	33.6	36.4	39.2	43.3	53.1	64.9	47.9	77.0
27-Jun	71.7	73.4	80.6	81.5	78.2	75.3	72.1	66.2	56.0	51.0	48.7	43.0	43.2	37.6	29.4	31.8	35.7	39.6	42.0	44.0	59.1	66.1	69.7	77.2	57.2	81.5
28-Jun	82.2	88.4	88.0	90.9	90.0	86.9	81.5	71.4	65.1	57.5	42.8	31.9	28.9	27.8	25.8	24.5	25.2	27.0	29.9	32.0	54.0	65.6	71.1	75.4	56.8	90.9
29-Jun	78.6	85.0	87.2	89.0	86.1	80.4	79.3	68.9	67.4	53.6	44.0	41.5	35.8	33.6	31.6	29.2	29.7	29.2	32.9	41.9	46.1	61.6	75.1	80.8	57.8	89.0
30-Jun	84.4	86.1	88.5	89.0	91.3	88.1	84.2	80.1	70.0	61.3	56.8	49.3	45.2	43.1	46.1	42.1	41.9	44.1	46.1	37.9	36.7	44.8	62.8	73.5	62.2	91.3
	79.5	81.4	83.6	84.7	84.2	81.6	79.0	74.3	69.0	63.4	57.3	53.4	51.2	49.8	49.0	49.3	49.0	49.4	50.8	53.1	58.2	64.8	71.6	76.3	Diurnal Average	
	96.4	94.7	94.9	95.9	94.6	97.9	94.7	93.9	92.2	89.6	90.0	90.1	89.4	85.9	84.5	85.1	85.8	83.3	85.1	85.5	90.2	93.4	91.5	93.8	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Athabasca Valley - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Athabasca Valley - June 2026

Maximum Speed: 41 km/h on Jun 8 14:00

Maximum Daily Speed Average: 22.1 km/h on Jun 8

Minimum Speed Value: 0 km/h on Jun 13 02:00

Minimum Daily Speed Average: 0.3 km/h on Jun 15

Maximum Diurnal Speed Average: 6.4 km/h at hour 10

Minimum Diurnal Speed Average: 1.2 km/h at hour 3

Monthly Average Velocity: 3.1 km/h 319.4 deg

Percentiles: $P_1 = 1$ $P_{10} = 3$ $Q_1 = 5$ Median = 8 $Q_3 = 14$ $P_{90} = 19$ $P_{99} = 30$

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-Jun	NW27	NW27	NW24	NW19	NW22	NW21	NW20	NW26	NW26	NW28	NNW29	NNW26	NNW22	NNW22	NNW21	NNW21	NNW21	N19	NNW18	NNW17	N15	N13	N12	N13	NNW20.5	NNW29
2-Jun	N13	N13	N12	NNW14	NNW16	N13	N15	NNW15	NNW15	NNW15	NNW13	N12	NNW13	N14	NE10	ENE13	ENE12	ENE9	NE6	NNE6	NE6	NE6	NNE5	NNE6	N10.1	NNW16
3-Jun	NNE6	NNE6	NNE5	NE8	ENE8	E7	ESE6	SE7	ESE5	ENE6	ESE7	ESE8	SE7	ESE4	ENE5	S5	E7	ENE8	E8	ENE7	E5	ENE2	NNE3	ESE1	E4.8	ENE8
4-Jun	ESE2	ESE6	SE8	SE8	SE8	ESE9	ESE8	E7	E1	WSW2	SSW8	SSW15	SSW13	WSW7	WSW6	SSW7	SSW10	SSW17	SW18	SSW11	S4	SSE4	ESE2	SSE5	S5.1	SW18
5-Jun	SSE8	SSE8	SE6	ESE5	SE4	SSE4	S7	SSW8	SSW9	SW6	ENE3	W5	WSW3	SSW8	SE16	ESE13	ENE2	SE1	SSW6	S5	SE3	S3	SW5	SW7	S4.2	SE16
6-Jun	SSW6	WSW6	SW12	SW20	SW21	SW20	SW21	SW23	SW25	SW26	SW22	SW21	SW22	SW23	SW21	SW19	SW19	SW14	SW12	SW12	SSW6	SSE4	ESE2	ESE6	SW15.3	SW26
7-Jun	E6	E6	E7	ESE8	SE7	ESE8	E5	ENE5	NW1	NNW3	NNW4	ENE8	E7	NW10	NNW12	NNW16	ESE2	SW10	NW6	WNW8	NNW8	NNW6	ENE3	NNW2	NNE2.1	NNW16
8-Jun	NW5	NW7	NW8	NW11	NW13	NW16	NW16	NW17	WNW18	WNW27	WNW28	W33	W37	W41	W39	WSW35	W30	W32	W27	W29	W30	WSW25	WSW22	WSW24	W22.1	W41
9-Jun	WSW18	SW21	SW19	SW18	SW21	SW17	SSW16	SW17	W21	W15	W10	WNW14	W15	WNW15	WNW9	N6	NNW9	N7	NNW11	NNW8	NNW4	SSW2	WSW4	WNW7	W9.8	SW21
10-Jun	NW13	NW10	NW11	NW11	NW10	NW14	NW14	NW10	NW9	NNW11	N9	NW3	NW15	NW17	NNW15	NNW15	NW15	NNW16	N15	N14	NW18	NW14	NW15	NW19	NNW12.7	NW19
11-Jun	NW17	NNW16	NNW14	NNW13	NNW14	NW15	WNW17	WNW16	NW16	NW18	NW16	NW16	NW16	NNW18	NNW15	NNW17	NNW18	NW24	NNW17	NNW18	NW15	NW12	NW11	WNW9	NW15.3	NW24
12-Jun	WNW9	W5	WNW9	WNW8	NW10	NW13	NNW15	NNW15	NW20	NW22	NNW24	NNW23	NNW22	NNW22	NNW24	NNW20	NNW20	NW20	NNW15	NNW11	NNW7	WSW2	SSW4	SSE2	NW13.4	NNW24
13-Jun	E2	ENE0	ENE3	ENE2	E4	ESE6	E5	ENE7	NE6	NE5	NNE2	N3	NNW4	NE6	ENE7	NE7	SSW10	SSW8	SSW8	SSW6	SW3	SE1	ENE2	SE4	E1.8	SSW10
14-Jun	SE5	SE5	ESE6	ESE8	SE7	ESE6	S6	SSW6	WSW3	NW8	NNW10	NNW11	NNW13	NNW15	NNW14	NNW16	NNW15	NNW16	NNW13	NNW10	NW5	WSW4	SW5	SSW3	NNW4.3	NNW16
15-Jun	E2	SW3	ENE2	SE1	ESE3	ESE5	ENE7	NE3	WNW3	NNW3	SSE5	SW5	NW6	NNW9	NW9	NW8	NNW7	ENE7	ENE6	E5	ESE7	SE4	SSE9	SW22	ENE0.3	SW22
16-Jun	SW12	S5	SE7	SE7	ESE6	ESE9	ESE7	ESE11	ESE9	NE4	NW4	W4	SW8	SW8	WSW6	NW11	NW13	NNW18	NNW18	NNW16	N13	N11	N10	N6	NNW2.5	NNW18
17-Jun	NNW7	NNW7	NNW9	NW9	NNW9	NW11	NW11	NW11	NNW14	NW15	NW16	NW18	NNW17	NNW16	NW19	NW16	NW17	NW15	NW11	NW9	NW7	WNW8	WSW5	SW4	NW11.2	NW19
18-Jun	SW7	W7	NW7	NW8	W5	NW11	NNW11	NNW12	NW8	NW4	SSW2	E1	N4	N13	NNW15	NNW13	NW16	NNW13	NNW11	NNW10	NW4	W9	WNW5	SW7	NW7.1	NW16
19-Jun	SSW6	SSW7	SSW6	SSW8	SW6	WSW4	NW4	NNW8	NW12	NW12	NNW9	NNW9	NW10	NNW13	NNW15	NW15	NNW13	NNW16	NW17	NNW11	NNW7	NW5	NW2	SW5	NW6.9	NW17
20-Jun	WNW3	WSW3	SW4	N4	NE3	E4	NNW6	NNW6	NW8	NW13	NNW12	N11	NNW10	NW16	NNW18	NW18	NNW10	E10	ENE14	ESE7	NE3	W3	WNW3	SSE1	NNW5.1	NNW18
21-Jun	ESE2	SSE4	NNW0	NW8	NW8	NW10	NW13	NW15	NNW15	NNW17	NNW15	NNW15	NW20	W9	NW10	NNW9	E6	SSE8	SW6	NW13	NW8	NW6	NNW6	NW7	NW7.5	NW20
22-Jun	NW6	WNW1	SW3	S1	SSW3	NE1	NNE4	W4	WNW5	NW7	NNW3	W4	NW7	ENE7	ESE3	ESE7	NE2	ENE5	E4	SSW5	SSE5	SSE6	SE5	SE6	ESE0.3	NW7
23-Jun	SE6	SE6	SE7	SE6	ESE5	SE6	SE4	SW4	SSE1	S5	SSW12	SSW11	SSW9	SSW7	SW7	SSW7	N7	N11	E15	ESE8	SSE6	ESE2	S2	SSW5	SSE3.6	E15
24-Jun	SSE4	ESE5	SE5	ESE8	ESE6	ESE7	ESE10	ESE8	SE6	S9	SSW12	SSW13	SSW12	SSW10	S9	SW7	W5	SSW3	ENE10	E13	ESE11	ESE7	ESE8	ESE5	SSE5.4	E13
25-Jun	ESE4	SE3	SE7	SE3	ESE7	ESE7	ESE8	SE8	SE7	SE4	E13	SE13	SE13	ESE9	SE10	ESE11	ESE13	ESE14	ESE15	ESE11	ESE12	ESE11	ESE10	SSE8	ESE8.9	ESE15
26-Jun	SE5	SE6	ENE2	E3	E6	E6	ESE7	ESE11	E11	E13	E18	ESE19	ESE16	ESE15	E15	E17	E16	E15	E16	E11	ESE9	ESE7	SE4	ENE3	E10.2	ESE19
27-Jun	ENE1	ESE3	NE3	ENE2	ENE3	ENE3	NE3	ESE2	E12	E13	E17	E18	E16	E19	E17	E13	E11	ENE9	ENE8	E3	NNW2	W3	WSW2	SW2	E6.9	E19
28-Jun	SW3	S1	SE1	SSW2	SW4	SW4	WNW2	NW1	NNW6	NNW10	NE14	ENE20	ENE20	ENE19	NE16	ENE18	ENE20	ENE15	ENE8	ENE8	WSW3	SW7	SW4	SW9	ENE5.1	ENE20
29-Jun	SW8	SW7	SW6	SSW5	ESE1	E2	E4	N2	WNW4	NW6	NW7	NW6	NW7	NW12	NNW8	NNW8	N7	NE7	ENE9	E12	SE6	NNW1	NNW0	N1	NNW1.8	E12
30-Jun	NE1	SE2	SSE1	ESE3	SE2	S2	NE2	W2	W3	W5	WSW4	WSW5	WSW6	WNW4	NW8	NW12	NW9	NNW5	NE3	E6	SE6	SE4	E1	ENE1	WNW1.1	NW12
	WNW2.2	W1.6	WNW1.2	WNW1.4	WNW1.3	NW1.5	NW2.4	NW3.2	NW4.9	NW6.4	NW4.7	NW3.7	NW5.0	NW6.1	NNW5.6	NNW5.7	NNW5.2	NNW4.6	N4.0	N3.1	NNW1.9	WNW1.5	W1.3	WSW2.4	Diurnal Average	
	NW27	NW27	NW24	SW20	NW22	NW21	SW21	NW26	NW26	NW28	NNW29	W33	W37	W41	W39	WSW35	W30	W32	W27	W29	W30	WSW25	WSW22	WSW24	Diurnal Maximum	

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

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

Minimum Value: 1 km/h on Jun 6 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:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

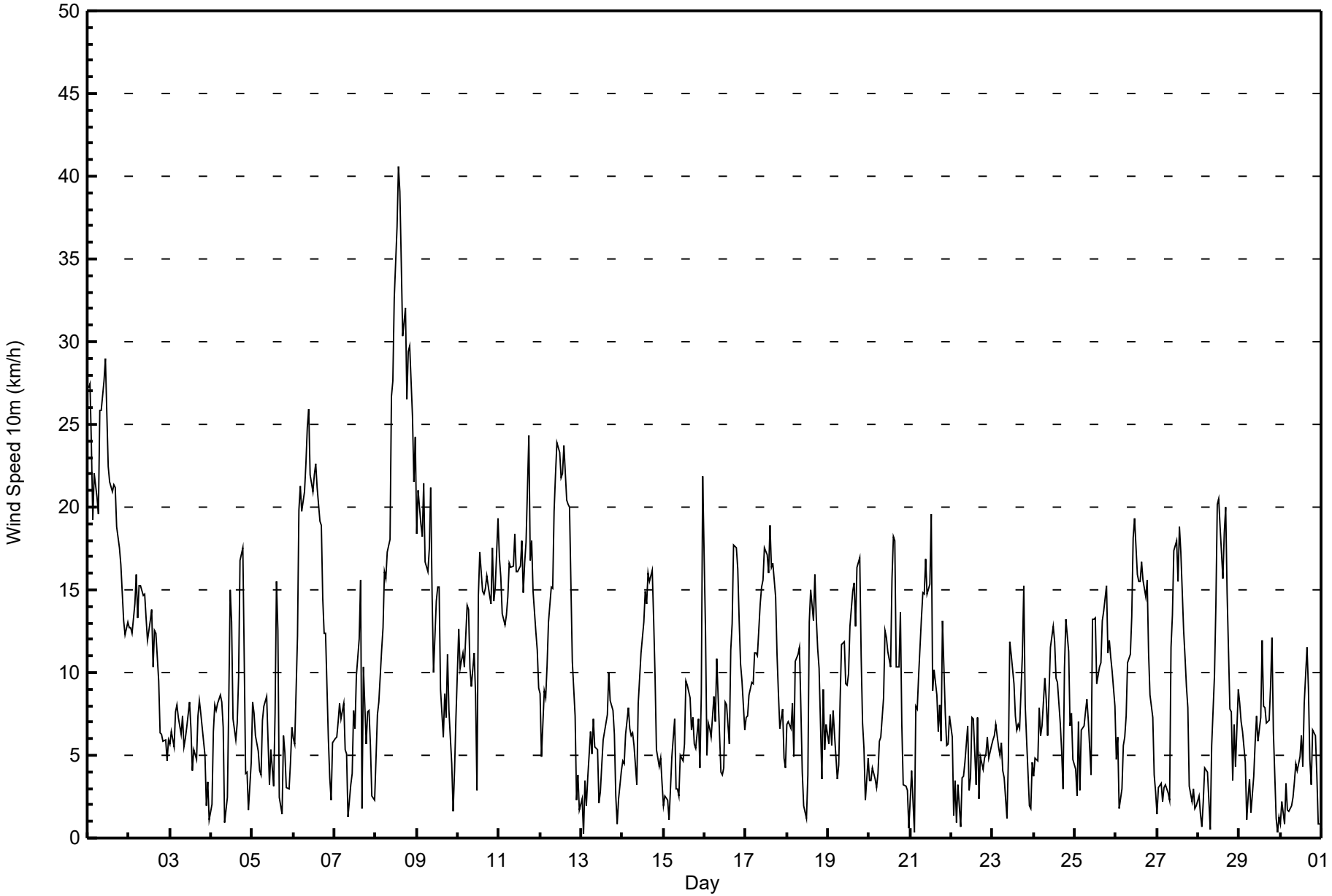
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	5	5	4	5	6	4	4	5	5	6	7	7	7	6	6	6	6	5	5	5	5	4	3	3	7
2-Jun	4	4	3	3	4	3	4	4	3	4	3	3	3	3	3	3	3	3	2	2	2	2	1	1	4
3-Jun	1	1	1	2	2	2	2	2	2	2	2	3	2	2	2	2	3	2	3	2	2	1	1	1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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Athabasca Valley - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	203	28.19	28.19
6 - 11	273	37.92	66.11
12 - 19	182	25.28	91.39
20 - 28	52	7.22	98.61
29 - 38	8	1.11	99.72
> 38	2	0.28	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

Athabasca Valley - June 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	5	12	19	16	22	20	12	10	10	14	15	11	10	10	12	203
6 - 11	8	5	9	18	15	44	23	7	4	24	16	5	4	8	45	38	273
12 - 19	16	0	2	6	19	8	3	0	0	8	12	1	2	5	44	56	182
20 - 28	0	0	0	3	0	0	0	0	0	0	15	3	2	2	13	14	52
29 - 38	0	0	0	0	0	0	0	0	0	0	0	1	6	0	0	1	8
> 38	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
Totals	29	10	23	46	50	74	46	19	14	42	57	25	27	25	112	121	720

Total Number of Valid Hours: 720

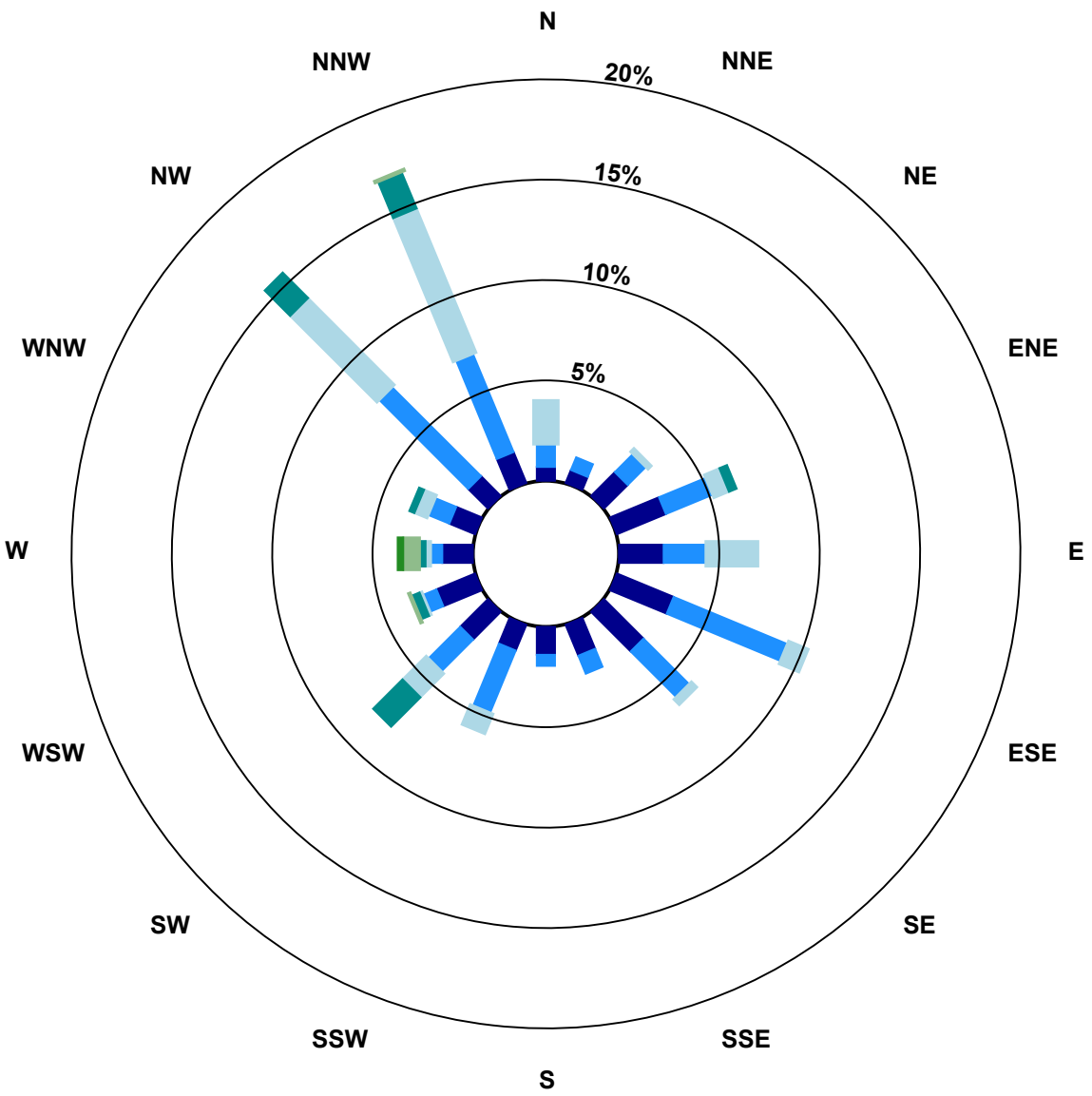
Total Number of Hours: 720

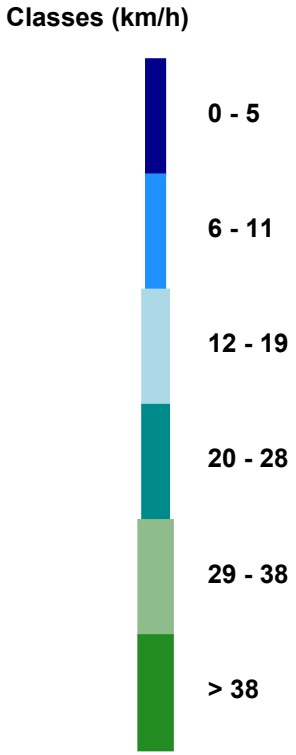
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Athabasca Valley





Total Number of Valid Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Athabasca Valley - June 2026

Direction of Maximum Speed: 262 deg on Jun 8 14:00
Direction of Maximum Daily Speed Average: 272.8 deg on Jun 8

Direction of Minimum Speed: 75 deg on Jun 13 02:00

Direction of Minimum Daily Speed Average: 0.3 deg on Jun 15

Monthly Average Direction: 319.4 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-Jun	322	319	318	322	318	314	315	321	323	326	327	332	329	342	343	343	344	355	348	347	354	357	353	0	332.3
2-Jun	355	355	351	345	346	353	351	339	338	343	347	349	347	359	35	64	62	57	46	30	43	38	13	14	3.4
3-Jun	12	19	16	55	67	87	111	134	112	69	110	110	124	110	76	172	94	78	88	78	86	67	27	122	85.0
4-Jun	119	118	127	126	124	111	111	83	86	242	213	211	208	257	258	213	209	211	220	206	176	157	123	153	185.1
5-Jun	162	167	140	122	140	147	190	202	211	221	60	274	241	210	127	117	61	128	203	183	127	184	236	215	171.7
6-Jun	204	252	229	226	226	234	233	229	230	232	227	225	224	225	225	226	227	226	224	224	205	151	114	122	225.3
7-Jun	95	99	97	110	130	118	96	60	309	331	340	68	80	321	329	331	112	223	309	301	335	340	70	347	22.9
8-Jun	315	326	326	322	322	315	306	309	289	288	285	270	262	262	262	257	259	267	267	265	259	252	247	258	272.8
9-Jun	238	231	230	232	225	228	213	221	263	277	278	282	273	282	290	3	341	360	333	341	335	208	252	299	258.9
10-Jun	317	322	321	314	323	324	321	321	322	340	349	304	311	326	334	346	326	340	357	357	320	314	314	319	327.2
11-Jun	315	339	348	344	328	305	299	300	313	316	320	326	325	330	343	334	332	322	339	338	322	313	309	290	323.6
12-Jun	302	273	282	298	305	320	327	330	316	322	330	339	340	336	327	332	332	326	339	346	332	253	211	164	325.3
13-Jun	89	75	66	69	97	110	94	58	49	51	15	1	337	40	61	56	196	202	207	209	217	125	71	127	93.7
14-Jun	144	135	121	116	124	123	188	204	258	324	328	347	328	328	332	331	327	327	340	340	315	241	224	209	326.9
15-Jun	79	218	61	132	112	112	63	48	301	344	149	232	305	329	318	319	348	62	78	84	111	138	166	220	66.2
16-Jun	216	190	133	142	106	115	108	121	108	47	308	260	219	231	247	326	325	336	341	347	352	2	5	349	346.2
17-Jun	335	336	332	323	331	324	320	323	330	324	326	326	328	330	325	325	325	326	323	325	316	284	238	219	323.1
18-Jun	236	263	309	305	270	321	333	329	306	323	205	85	0	351	342	327	312	334	336	329	307	277	283	217	315.9
19-Jun	208	206	203	209	219	240	317	329	325	325	336	335	319	336	330	325	329	328	325	341	346	325	311	227	316.4
20-Jun	282	240	229	351	40	79	330	332	326	321	328	5	344	324	327	324	328	85	76	113	46	264	282	163	341.1
21-Jun	106	162	337	317	308	318	316	323	332	327	327	327	325	271	310	347	80	148	230	309	324	325	330	326	320.6
22-Jun	314	298	218	176	201	42	31	276	303	322	327	276	319	60	113	116	52	70	97	203	152	150	145	146	107.8
23-Jun	141	138	137	132	120	139	146	223	149	190	197	200	209	206	215	198	6	11	81	116	162	118	182	201	159.3
24-Jun	156	117	124	120	115	121	123	114	125	183	199	195	204	208	182	236	261	208	68	100	110	105	122	117	147.3
25-Jun	108	140	125	135	122	120	115	128	136	136	88	129	136	119	139	123	110	103	110	112	110	108	109	151	118.7
26-Jun	136	136	71	82	100	101	121	109	95	97	100	108	105	106	97	84	96	89	85	84	105	116	127	69	99.9
27-Jun	62	121	46	74	75	57	55	107	92	84	82	91	93	79	92	89	82	75	76	82	329	268	253	234	84.0
28-Jun	217	180	131	205	220	224	294	317	331	340	45	63	63	64	54	61	65	62	67	66	257	219	214	218	59.5
29-Jun	222	225	223	209	122	99	86	354	290	323	321	313	315	326	333	345	360	39	66	92	129	347	332	7	341.2
30-Jun	47	145	153	119	132	186	49	269	264	259	256	248	243	288	326	317	316	334	36	80	124	131	96	72	299.3
	281.3	274.6	296.8	299.0	294.2	317.0	318.0	310.1	308.7	315.9	323.5	314.6	305.9	318.9	327.5	335.8	337.1	344.4	0.6	353.7	337.2	292.4	278.3	250.7	
	Diurnal Average																								

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

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

Maximum Value: 104 deg on Jun 13 02:00

Minimum Value: 8 deg on Jun 13 08:00

Percentiles: P_1 = 9 P_{10} = 12 Q_1 = 15 Median = 21 Q_3 = 37 P_{90} = 65 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

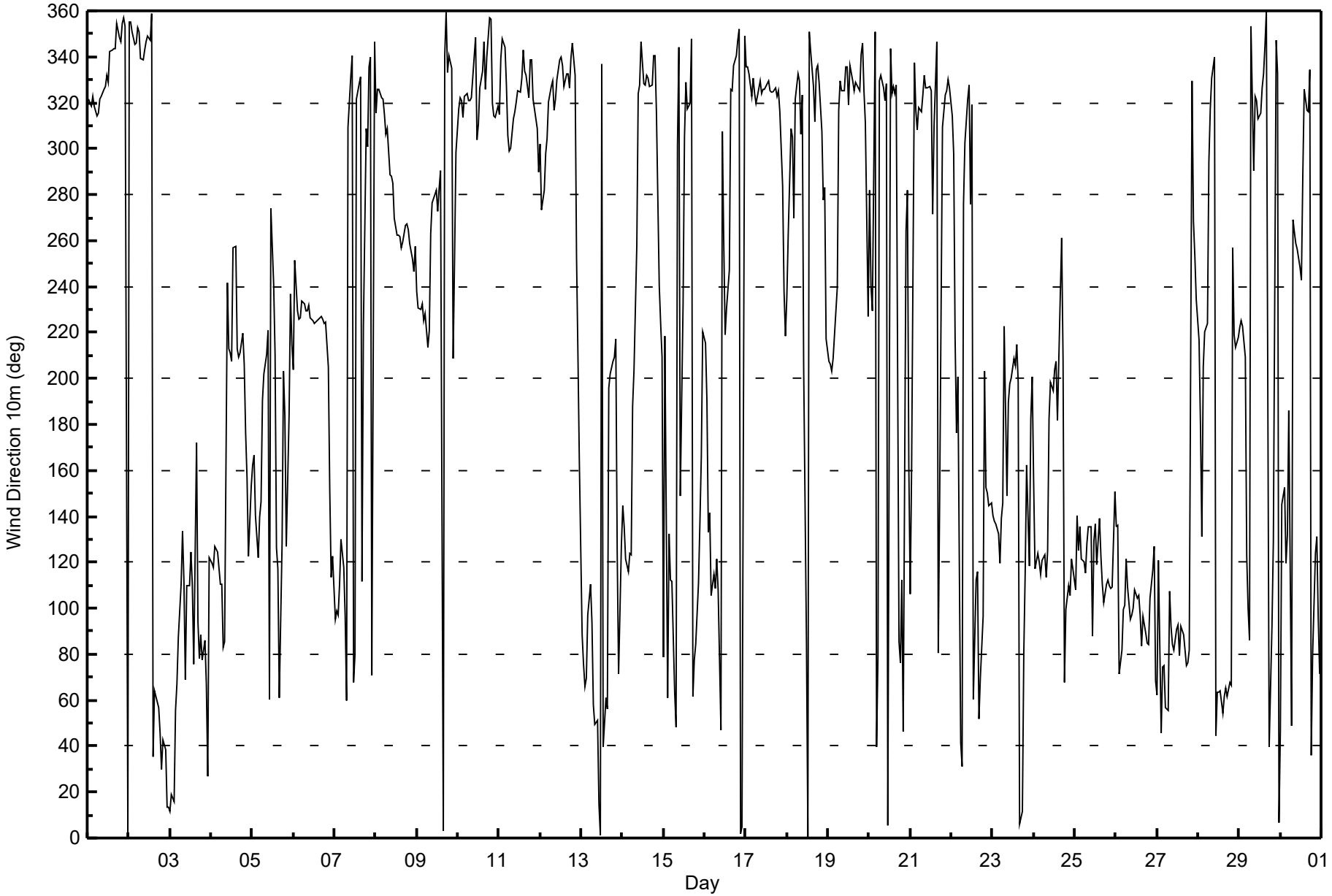
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	9	9	10	13	10	11	10	10	11	14	14	18	17	21	19	19	19	19	19	19	20	20	19	19	21
2-Jun	19	18	18	18	18	19	18	18	18	18	17	18	18	17	26	13	11	14	23	26	19	17	25	13	26
3-Jun	15	16	19	15	19	23	27	26	40	39	32	34	37	59	44	55	34	20	24	21	24	62	22	83	83
4-Jun	70	34	20	20	18	19	18	24	103	66	35	16	25	40	29	51	28	14	10	16	34	23	66	35	103
5-Jun	14	21	23	31	31	28	27	13	13	34	93	46	79	17	29	29	79	80	26	27	47	57	39	27	93
6-Jun	21	30	15	10	10	13	11	11	12	12	12	11	12	12	12	12	13	14	12	11	35	40	44	15	44
7-Jun	21	25	20	17	24	13	29	46	85	59	61	37	57	14	14	19	94	39	36	46	24	30	68	76	94
8-Jun	37	16	17	12	12	14	10	9	16	10	10	11	9	9	9	9	10	10	10	10	10	11	11	13	37
9-Jun	14	10	10	10	8	11	10	13	12	19	31	17	19	17	40	48	26	25	17	19	33	64	22	35	64
10-Jun	12	13	14	11	15	13	12	16	28	20	29	79	51	15	18	20	16	21	21	21	18	13	11	10	79
11-Jun	11	22	20	19	21	11	11	11	14	11	14	13	14	21	21	24	19	12	22	19	15	11	11	13	24
12-Jun	20	29	24	13	10	12	16	17	11	13	18	19	19	18	15	17	17	14	19	20	19	65	71	93	93
13-Jun	62	104	28	63	23	11	24	8	41	13	88	69	63	39	32	39	40	18	18	17	40	91	61	31	104
14-Jun	21	21	12	16	19	30	45	18	54	11	16	25	21	15	17	16	16	14	20	19	17	23	42	72	72
15-Jun	76	77	57	73	50	17	21	81	42	71	60	65	30	21	11	19	32	12	14	24	21	52	43	10	81
16-Jun	18	45	22	22	22	14	20	18	21	54	37	26	27	39	58	15	17	21	19	18	17	13	14	18	58
17-Jun	15	15	12	11	16	13	13	16	15	13	15	15	15	18	14	15	13	13	18	17	20	15	45	38	45
18-Jun	16	26	31	20	33	12	18	16	17	37	80	97	64	21	22	18	13	22	21	17	43	24	47	11	97
19-Jun	21	23	14	17	30	53	25	17	11	12	23	21	37	20	16	12	15	14	12	19	17	17	62	15	62
20-Jun	46	54	36	40	33	29	39	14	13	12	20	35	35	12	15	12	61	26	19	35	43	64	55	91	91
21-Jun	55	28	88	18	23	18	9	12	17	14	14	13	12	50	22	29	58	31	11	21	16	15	13	17	88
22-Jun	26	89	58	79	47	98	52	34	24	10	55	25	21	23	69	57	63	17	48	14	39	26	26	15	98
23-Jun	15	11	11	13	21	20	42	54	87	66	10	12	20	31	35	45	77	45	26	29	40	80	82	30	87
24-Jun	52	61	68	30	21	19	15	14	37	44	27	24	26	24	36	54	38	85	80	28	23	25	25	40	85
25-Jun	48	59	20	79	24	20	19	23	26	74	24	28	27	49	41	36	30	22	17	20	14	13	15	17	79
26-Jun	44	29	76	62	30	35	19	21	25	22	21	20	24	26	30	21	28	20	20	19	22	21	40	34	76
27-Jun	69	69	30	66	47	81	69	93	24	23	21	22	21	19	21	21	20	17	16	55	55	43	73	89	93
28-Jun	75	97	92	79	40	37	43	96	14	16	37	13	16	13	24	15	12	11	11	11	59	17	84	11	97
29-Jun	15	13	13	25	78	50	59	80	21	26	8	10	14	13	27	28	37	44	14	25	37	80	85	65	85
30-Jun	84	56	97	44	71	78	70	55	34	19	17	18	34	51	17	20	19	19	56	21	27	45	81	91	97
	84	104	97	79	78	98	70	96	103	74	93	97	79	59	69	57	94	85	80	55	59	91	85	93	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Athabasca Valley - June 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS08
FORT CHIPEWYAN
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT CHIPEWYAN (AMS08)
JUNE 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	34	34	100	-	-	3.5	0	1.1	0
TRS (ppb) Average	686	34	34	100	0.7	0	0.7	-	0.3	-
O3(ppb) Average	687	33	33	100	-	-	59.9	0	47.1	-
NO2(ppb) Average	685	35	35	100	-	-	6.7	0	2.5	-
NO(ppb) Average	685	35	35	100	-	-	2.7	-	0.6	-
NOX(ppb) Average	685	35	35	100	-	-	7.7	-	3.1	-
PM2.5(ug/m3) Average	703	1	17	97.78	-	-	79.7	0	52.4	2
Temperature 2 m (C) Average	720	0	0	100	-	-	28.5	-	24.3	-
Relative Humidity (%) Average	720	0	0	100	-	-	99.8	-	98.9	-
Wind Speed 10 m (km/h) Average	720	0	0	100	-	-	35	-	25	-
Wind Direction 10 m (deg) Average	720	0	0	100	-		-	-	-	-
PC(mm) Total	720	0	0	100	-	-	4.6	-	37	-
Leaf Wetness (% of range) Average	720	0	0	100	-	-	43.8	-	31.5	-
Global Solar Radiation (W/m2) Average	720	0	0	100	-	-	893.8	-	389.2	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT CHIPEWYAN (AMS08)
JUNE 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	0.12	0.3	-	0	0	0	0	0.1	0.2	3.5
TRS (ppb) Average	686	0.13	0.1	-	0	0.1	0.1	0.1	0.1	0.2	0.7
O3(ppb) Average	687	30.75	10	-	10.8	18.6	21.7	29.9	38.1	44.6	59.9
NO2(ppb) Average	685	0.62	0.9	-	0.1	0.1	0.2	0.3	0.6	1.4	6.7
NO(ppb) Average	685	0.12	0.2	-	0	0	0	0.1	0.1	0.2	2.7
NOX(ppb) Average	685	0.74	1.1	-	0.1	0.2	0.3	0.4	0.7	1.4	7.7
PM2.5(ug/m3) Average	703	6.99	12.9	-	0.3	1	1.5	3	6.6	12.9	79.7
Temperature 2 m (C) Average	720	16.13	5.5	-	5.6	9.3	11.6	15.5	20.7	23.8	28.5
Relative Humidity (%) Average	720	66.46	17.8	-	28.6	42.1	53.2	66.4	79.4	92	99.8
Wind Speed 10 m (km/h) Average	720	14.2	6	-	1	7	10	13	18	24	35
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-
Precipitation (mm) Total	720	-	-	68.51	-	-	-	0	0	0	4.6
Leaf Wetness (% of range) Average	720	3.52	7.9	-	0.1	0.6	0.8	1.1	1.5	7.1	43.8
Global Solar Radiation (W/m2) Average	720	273.38	289	-	0	0	7.3	161.7	495.1	756.7	893.8

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT CHIPEWYAN (AMS08)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
PM2.5	01 Jun 2026 01:00	01 Jun 2026 16:00	16	Unstable Operation - flatline in analyzer output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Fort Chipewyan - June 2026

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

Maximum Value: 3.5 ppb on Jun 4 03:00 Maximum Daily Average: 1.1 ppb on Jun 4

Minimum Value: 0.0 ppb on Jun 1 07:00 Minimum Daily Average: 0.0 ppb on Jun 10

Maximum Diurnal Average: 0.2 ppb at hour 3 Minimum Diurnal Average: 0.1 ppb at hour 22

Monthly Average: 0.12 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} = 1.4

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-Jun	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
2-Jun	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-Jun	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	1.0	2.3	0.2	2.3
4-Jun	2.2	3.1	3.5	Z	1.4	1.2	1.2	1.2	1.0	C	C	C	C	0.7	0.4	0.4	0.6	0.9	0.9	0.7	0.6	0.5	0.3	0.2	1.1	3.5
5-Jun	0.1	0.1	0.0	0.1	Z	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1
6-Jun	0.2	0.1	0.2	0.1	0.1	Z	0.1	0.0	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	0.1	0.1	0.1	0.2
7-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
8-Jun	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
9-Jun	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
10-Jun	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
11-Jun	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
12-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13-Jun	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
14-Jun	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1
15-Jun	0.1	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	0.1
16-Jun	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
17-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19-Jun	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-Jun	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
21-Jun	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
22-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.5	0.1	0.5
24-Jun	1.5	1.9	1.4	0.9	0.8	Z	0.5	0.4	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.6	0.7	0.3	0.2	0.1	0.5	1.9
25-Jun	Z	0.1	0.1	0.1	0.1	0.2	0.4	0.9	1.1	1.2	1.5	1.3	1.0	0.6	0.7	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.5	1.5
26-Jun	0.1	Z	0.1	0.1	0.1	0.4	0.9	0.9	0.8	0.9	0.9	1.1	1.0	0.9	0.6	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.5	1.1
27-Jun	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-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
29-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
30-Jun	0.1	0.1	0.2	0.1	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	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	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	2.2	3.1	3.5	0.9	1.4	1.2	1.2	1.2	1.1	1.2	1.5	1.3	1.0	0.9	0.7	0.5	0.6	0.9	0.9	0.7	0.7	0.5	1.0	2.3	Diurnal Maximum	

Z - zerospan C - Calibration

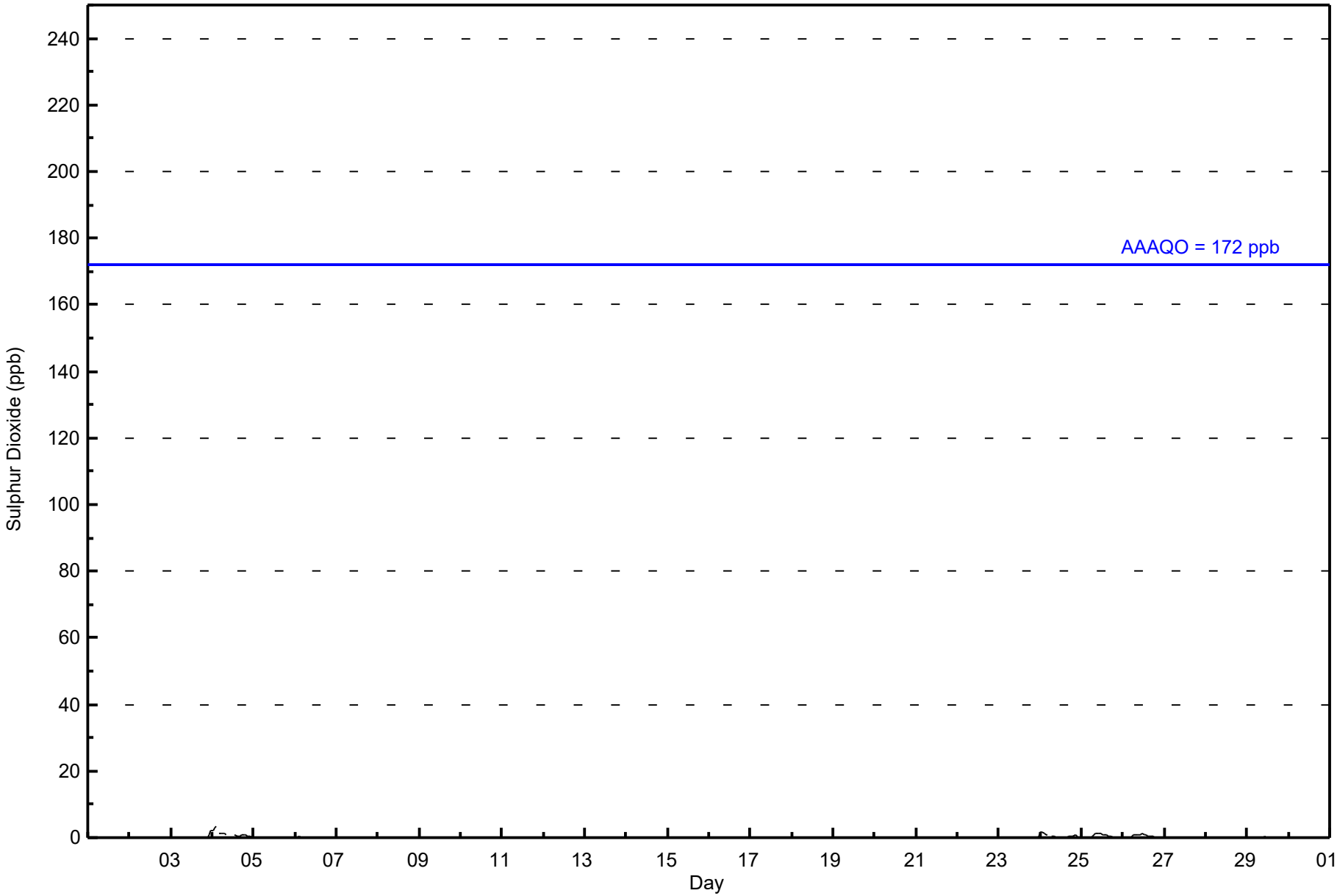
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Fort Chipewyan - June 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

Fort Chipewyan - June 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 10	31	17	78	133	147	30	18	11	21	4	17	13	13	10	35	108	686
11 - 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 - 60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61 - 110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111 - 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	31	17	78	133	147	30	18	11	21	4	17	13	13	10	35	108	686

Total Number of Valid Hours: 686

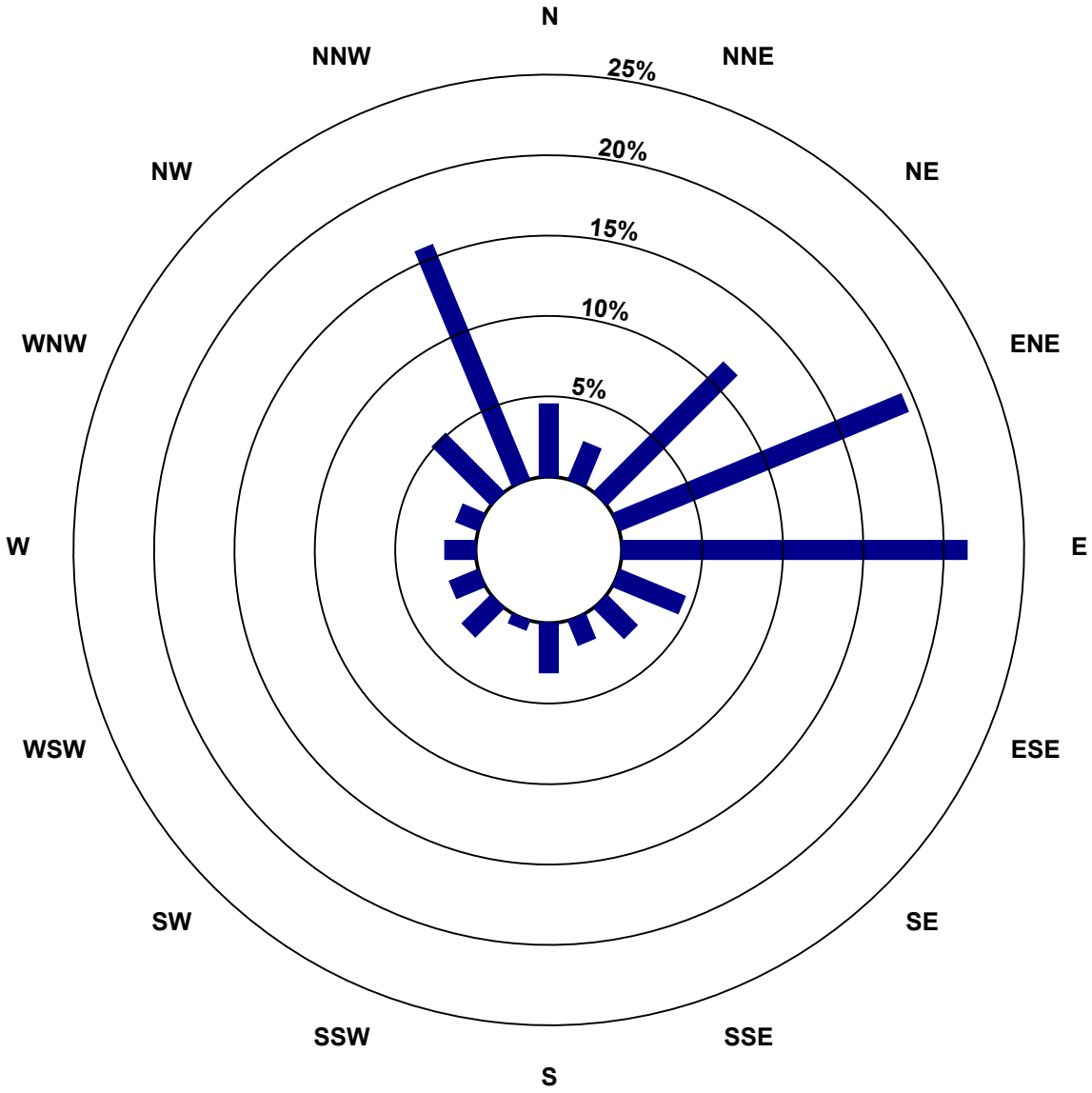
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Fort Chipewyan



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

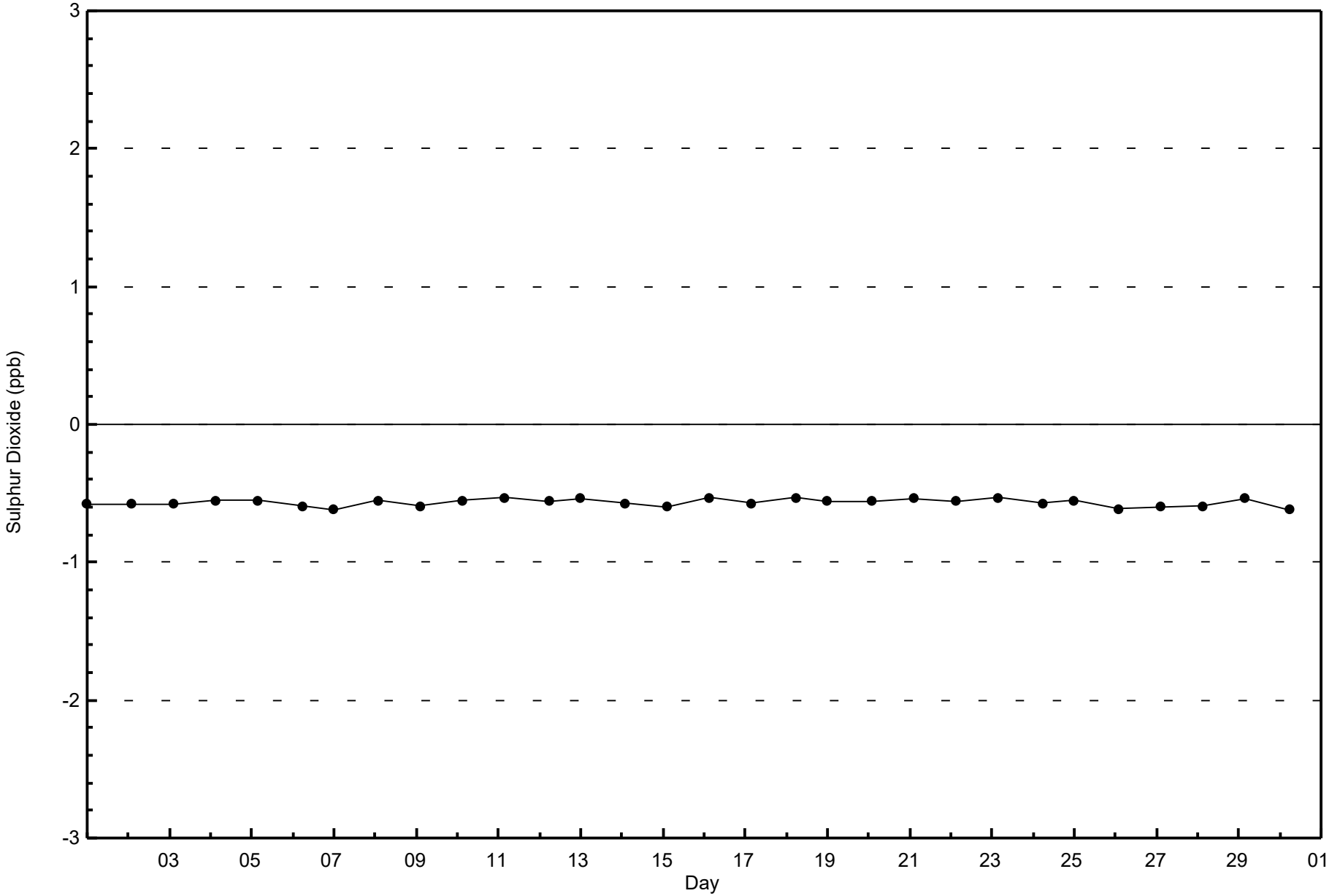
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Fort Chipewyan - June 2026

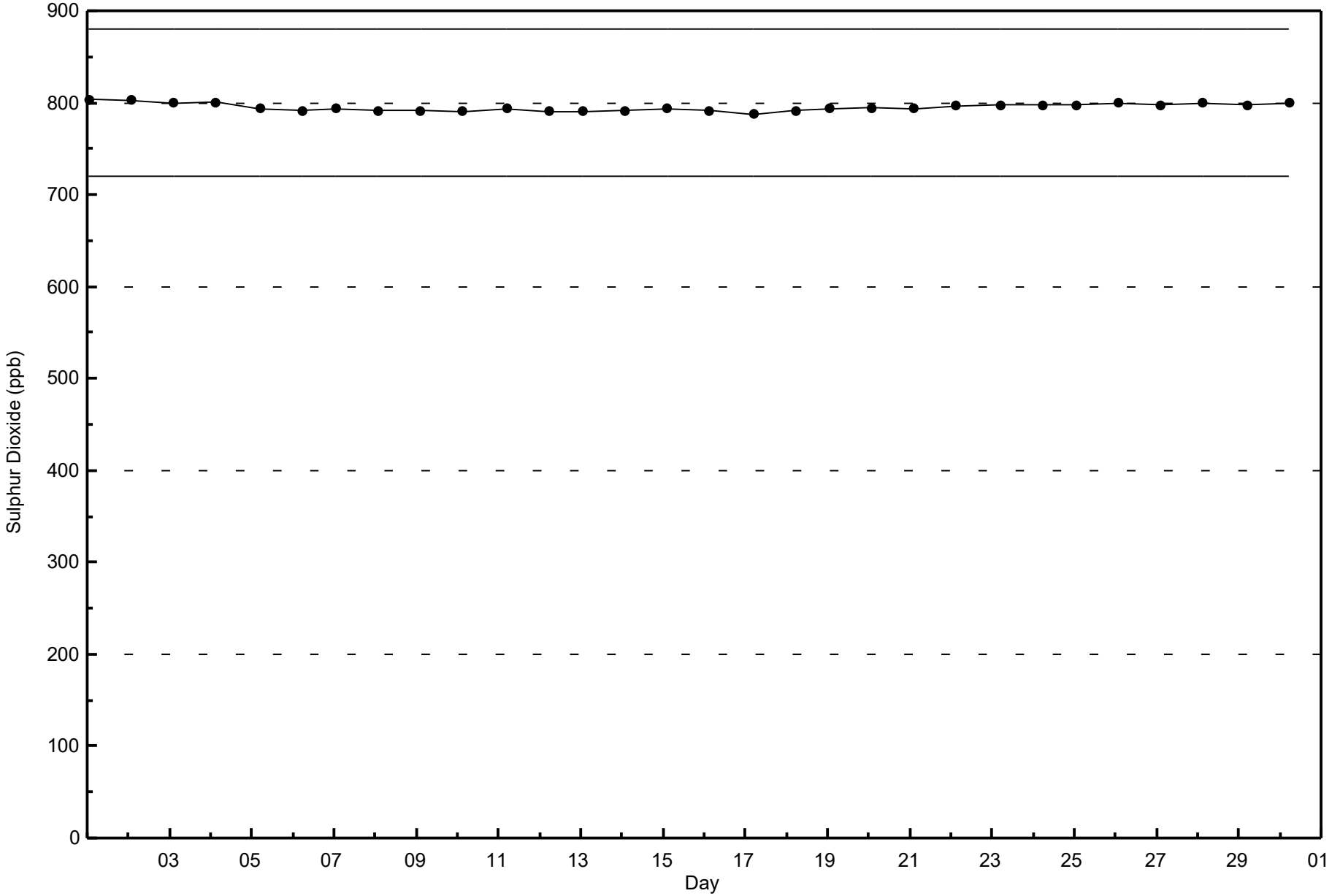


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Fort Chipewyan - June 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Fort Chipewyan - June 2026

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

Maximum Value: 0.7 ppb on Jun 24 05:00

Maximum Daily Average: 0.3 ppb on Jun 24

Minimum Value: 0.0 ppb on Jun 30 10:30

Minimum Daily Average: 0.1 ppb on Jun 30

Maximum Diurnal Average: 0.2 ppb at hour 5

Minimum Diurnal Average: 0.1 ppb at hour 20

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} = 0.4

Periods in Service:	1440
Periods of Valid Data:	1372
Periods of Invalid Data:	68
Periods of Calibration:	68
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-Jun	0.1 0.1	Z SP	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	0.1 0.1	0.1 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 0.1	0.1 0.1	0.0 0.0	0.1	0.2
2-Jun	0.1 0.1	0.0 0.1	Z SP	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 0.1	0.1 0.0	0.1 0.1	0.1 0.1	0.0 0.1	0.0 0.1	0.1 0.1	0.0 0.1	0.1 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
3-Jun	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 0.2	0.1 0.2	0.2 0.3	0.3 0.3	0.1	0.3
4-Jun	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	Z SP	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 0.2	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	0.2	0.4
5-Jun	0.2 0.2	0.2 0.2	0.2 0.3	0.3 0.3	0.4 0.3	Z SP	0.4 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 0.1	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	0.2	0.4
6-Jun	Z SP	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 0.2	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	0.1 0.0	0.1 0.0	0.1 0.1	0.0 0.1	0.1 0.1	0.1 0.1	0.1	0.4
7-Jun	0.1 0.0	Z SP	0.1 0.1	0.1 0.1	0.0 0.0	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	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
8-Jun	0.1 0.2	0.1 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 0.1	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 0.1	0.1 0.1	0.1 0.2	0.1 0.1	0.2 0.1	0.2 0.2	0.1 0.1	0.2 0.2	0.2	0.3
9-Jun	0.1 0.1	0.1 0.1	0.1 0.2	Z SP	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	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.1 0.2	0.2 0.2	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.2 0.2	0.2	0.2
10-Jun	0.1 0.2	0.2 0.2	0.1 0.1	0.1 0.1	Z 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	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.2	0.1 0.1	0.1 0.1	0.1 0.2	0.1 0.1	0.2 0.1	0.1 0.1	0.1 0.2	0.1	0.2
11-Jun	0.1 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 0.1	0.2 0.1	0.1 0.2	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.0	0.0 0.0	0.1 0.0	0.0 0.1	0.1 0.0	0.1 0.1	0.1	0.2
12-Jun	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	C C	C C	C C	C C	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
13-Jun	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	0.2 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 0.1	0.2 0.2	0.1	0.2
14-Jun	0.1 0.1	0.1 0.1	Z SP	0.3 0.3	0.3 0.4	0.3 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.1 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	0.1 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	0.2	0.4
15-Jun	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

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Fort Chipewyan - June 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-Jun	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
	0.1	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		
17-Jun	0.1	0.1	0.1	0.2	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
	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		
18-Jun	Z	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.3
	SP	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	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1		
19-Jun	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	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.2
	0.1	SP	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
20-Jun	0.0	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	0.1	0.1	0.1	0.2
	0.1	0.2	SP	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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-Jun	0.1	0.1	0.2	Z	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
	0.1	0.2	0.2	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		
22-Jun	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	0.1	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	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		
23-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.2	0.1	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	0.2	0.2	0.3	0.2	0.4
	0.1	0.1	0.1	0.1	0.2	SP	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.4		
24-Jun	Z	0.7	0.6	0.6	0.7	0.7	0.6	0.5	0.3	0.3	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	0.3	0.7
	SP	0.6	0.6	0.6	0.7	0.5	0.6	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
25-Jun	0.2	Z	0.3	0.4	0.4	0.5	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.5
	0.2	SP	0.4	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2		
26-Jun	0.2	0.2	Z	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3
	0.2	0.2	SP	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	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		
27-Jun	0.2	0.2	0.3	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	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
	0.2	0.3	0.3	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	0.0	0.1	0.1	0.1		
28-Jun	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	0.0	0.0	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	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1		
29-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
30-Jun	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
	SP	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.7	0.6	0.6	0.7	0.7	0.6	0.5	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	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 Chipewyan - June 2026

Maximum Value: 0.7 ppb on Jun 24 05:00

Maximum Daily Average: 0.3 ppb on Jun 24

Minimum Value: 0.0 ppb on Jun 30 11:00

Minimum Daily Average: 0.1 ppb on Jun 30

Maximum Diurnal Average: 0.2 ppb at hour 5

Minimum Diurnal Average: 0.1 ppb at hour 20

Monthly Average: 0.13 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 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:	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-Jun	0.1	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.2
2-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1
3-Jun	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	0.3	0.1	0.3
4-Jun	0.3	0.3	0.3	0.3	Z	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	0.1	0.2	0.3
5-Jun	0.2	0.2	0.3	0.3	0.4	Z	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.4
6-Jun	Z	0.3	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
7-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
8-Jun	0.1	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2
9-Jun	0.1	0.1	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
10-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
11-Jun	0.2	0.2	0.2	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	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2
12-Jun	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	C	C	C	C	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
13-Jun	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	0.2	0.1	0.2
14-Jun	0.1	0.1	Z	0.3	0.4	0.3	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	0.1	0.1	0.1	0.1	0.1	0.2	0.4
15-Jun	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
16-Jun	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
17-Jun	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
18-Jun	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	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.3
19-Jun	0.1	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
20-Jun	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
21-Jun	0.1	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	0.1	0.2
22-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
23-Jun	0.1	0.1	0.1	0.1	0.1	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	0.1	0.2	0.2	0.2	0.3	0.2	0.3
24-Jun	Z	0.7	0.6	0.6	0.7	0.6	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	0.1	0.1	0.3	0.7
25-Jun	0.2	Z	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.4
26-Jun	0.2	0.2	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	0.1	0.1	0.1	0.2	0.3
27-Jun	0.2	0.2	0.3	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
28-Jun	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	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
29-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
30-Jun	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	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	0.2	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	Diurnal Average	
	0.3	0.7	0.6	0.6	0.7	0.6	0.6	0.5	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	Diurnal Maximum	

Z - zerospan C - Calibration

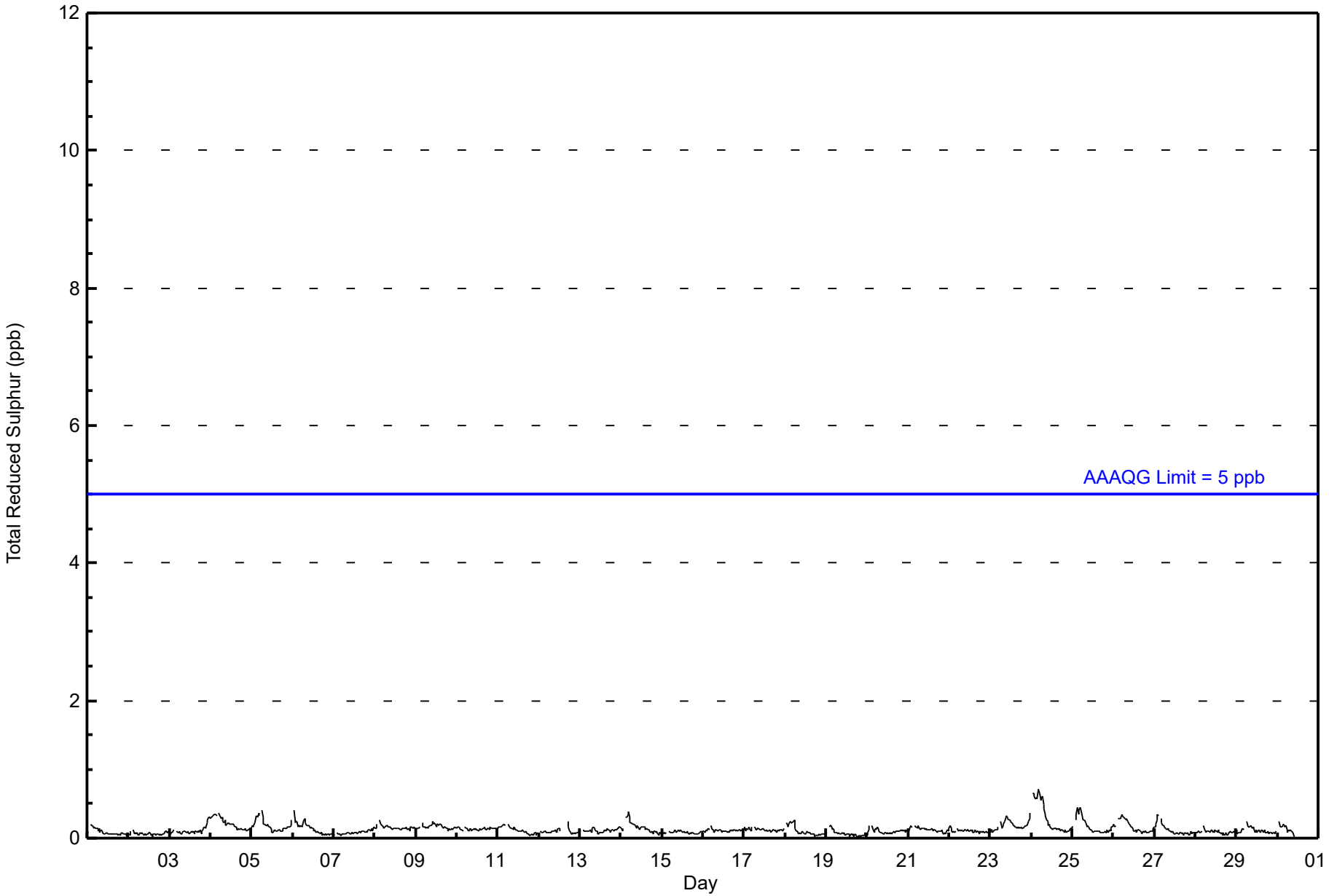
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Fort Chipewyan - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	686	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: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Reduced Sulphur (TRS) - ppb

Fort Chipewyan - June 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	34	18	77	132	152	31	17	11	22	4	16	13	13	9	32	105	686
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	34	18	77	132	152	31	17	11	22	4	16	13	13	9	32	105	686

Total Number of Valid Hours: 686

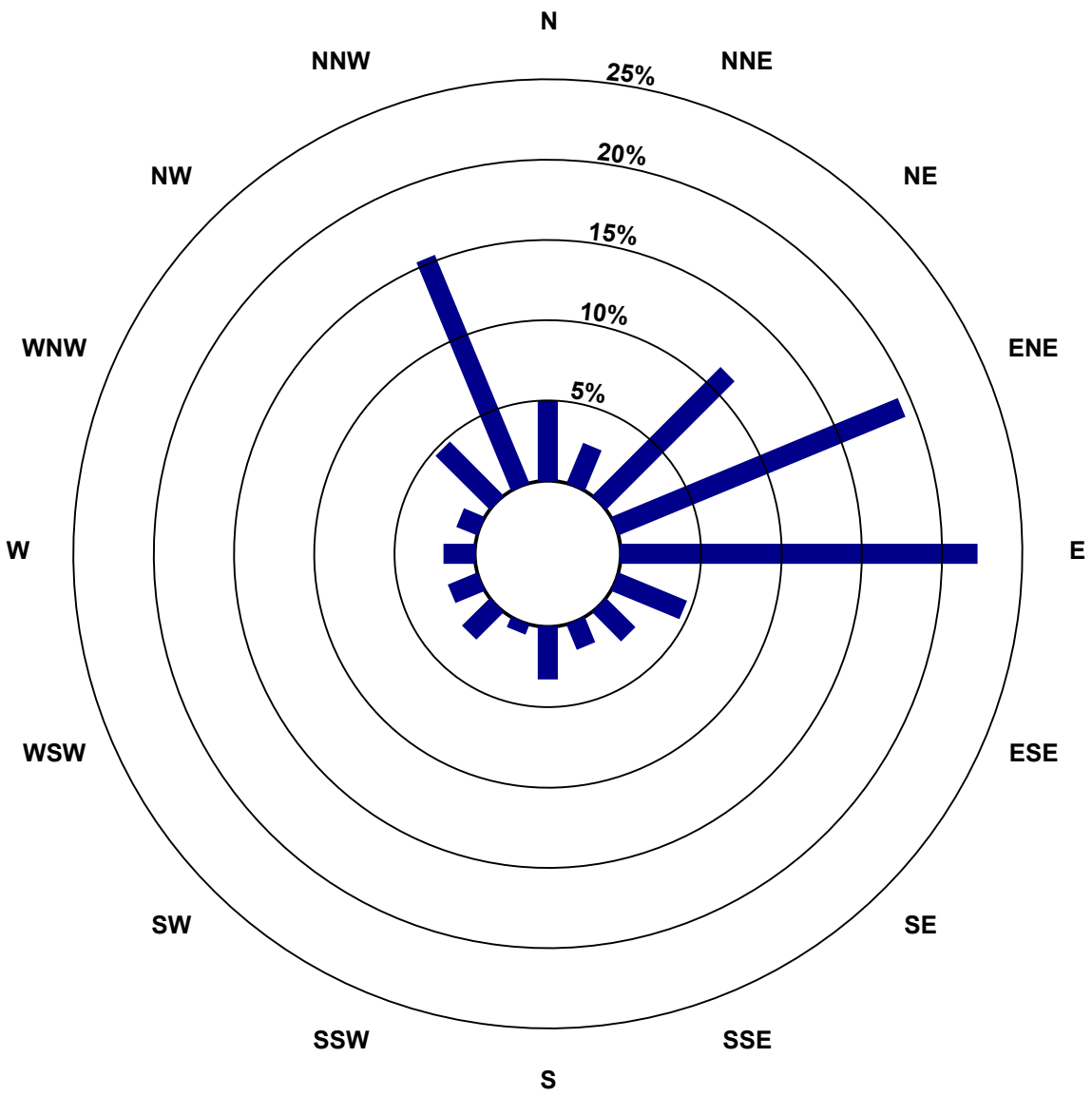
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Reduced Sulphur (TRS) - ppb

Fort Chipewyan



Classes (ppb)

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

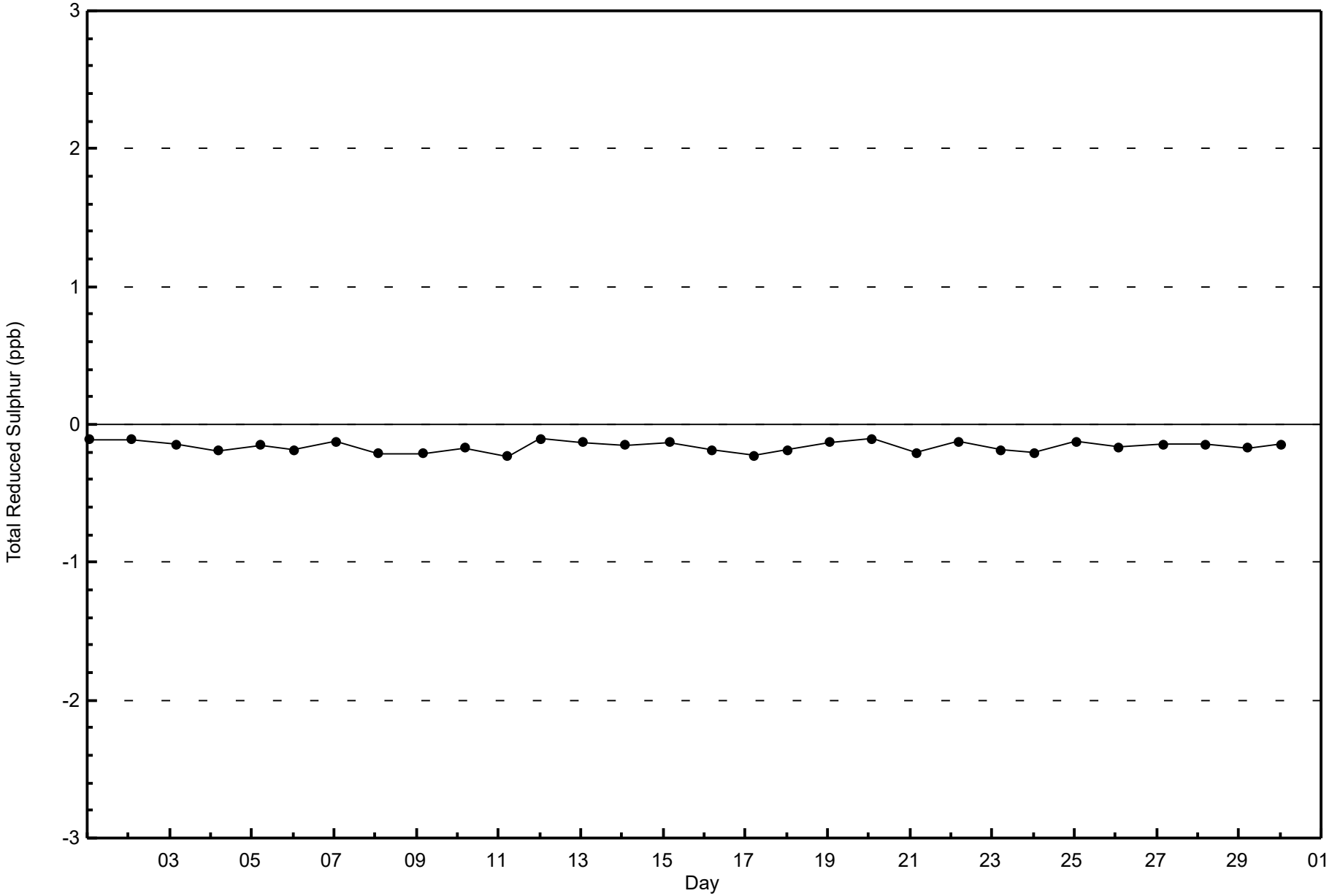
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Fort Chipewyan - June 2026

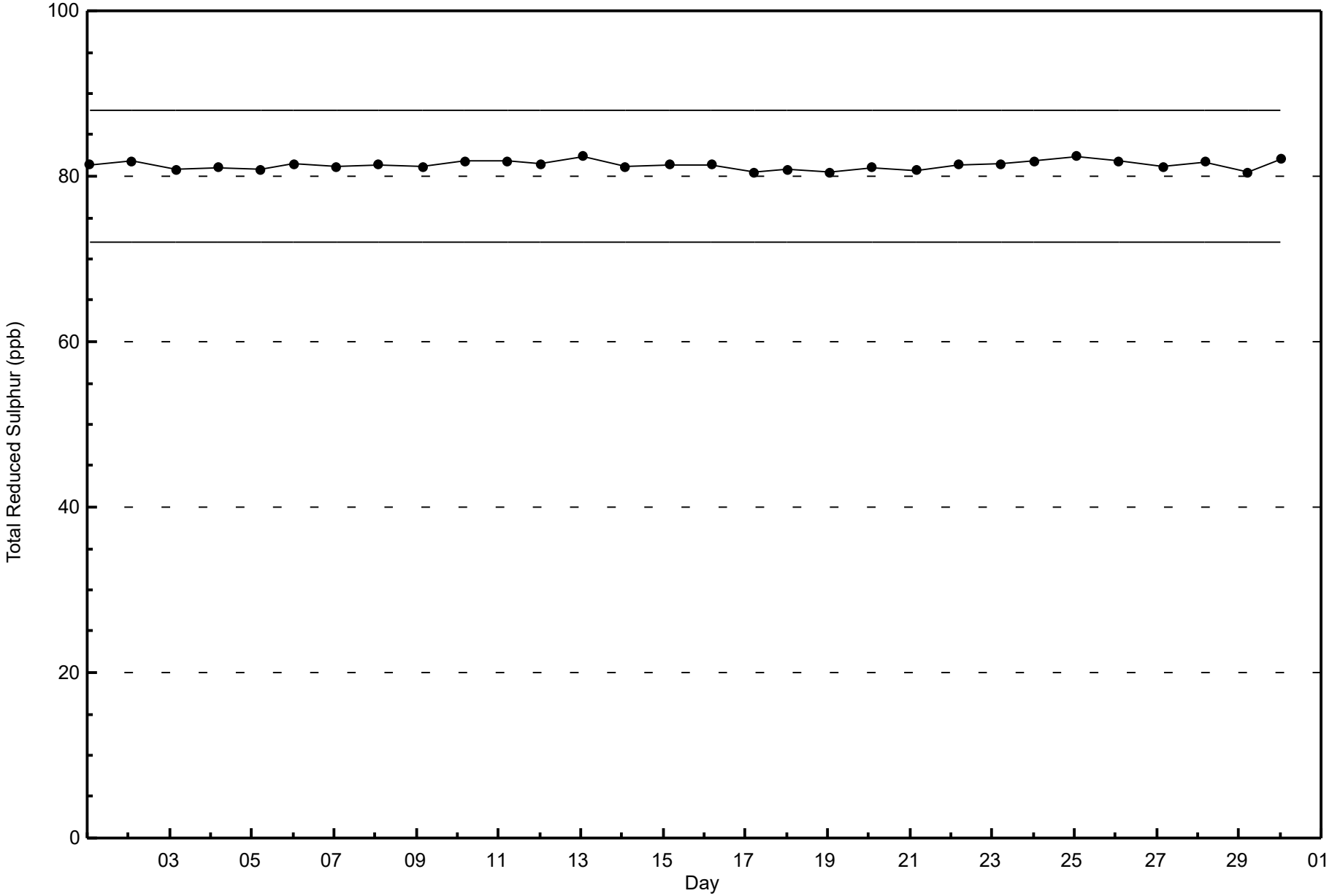


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Fort Chipewyan - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Fort Chipewyan - June 2026

Maximum Value: 2.7 ppb on Jun 4 12:00

Maximum Daily Average: 0.6 ppb on Jun 4

Minimum Value: 0.0 ppb on Jun 5 16:00

Minimum Daily Average: 0.0 ppb on Jun 11

Maximum Diurnal Average: 0.2 ppb at hour 10

Minimum Diurnal Average: 0.1 ppb at hour 4

Monthly Average: 0.12 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.1 P_{90} = 0.2 P_{99} = 1.2

Hours in Service:	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-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2-Jun	0.0	0.0	0.1	0.0	0.0	Z	0.0	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	0.0	0.1	0.1	0.1	0.1
3-Jun	Z	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
4-Jun	0.0	Z	0.1	0.1	0.3	0.4	0.6	0.8	1.2	1.3	2.3	2.7	2.1	0.9	0.7	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.6	2.7
5-Jun	0.0	0.0	Z	0.1	0.4	1.0	1.0	0.1	0.1	2.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.2	2.1
6-Jun	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
7-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.0	0.3	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.3
8-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
9-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1
10-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.3	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.3
11-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
12-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
13-Jun	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	0.1	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-Jun	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	0.0	0.0	0.0	0.0	0.1	0.1
15-Jun	Z	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.3
16-Jun	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	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1
17-Jun	0.0	0.0	Z	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1
18-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1
19-Jun	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	C	C	C	C	C	0.3	0.5	0.7	0.7	0.7	0.6	0.7	0.8	0.8	1.5	0.6	0.5	1.5
20-Jun	0.6	0.9	0.2	0.1	0.6	Z	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.9
21-Jun	Z	0.1	0.1	0.1	0.1	0.2	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	0.1	0.1	0.0	0.1	0.1	0.5
22-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.2	0.2	0.7	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.0	0.0	0.1	0.7
23-Jun	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	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2
24-Jun	0.1	0.1	0.1	Z	0.3	0.5	1.0	1.9	0.9	0.5	0.2	0.1	1.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.3	1.9
25-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.2	0.4	0.4	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	0.1	0.4
26-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.5	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
27-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.4	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	0.1	0.4
28-Jun	0.0	Z	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.3
29-Jun	0.0	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.2
30-Jun	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	0.0	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	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.6	0.9	0.2	0.1	0.6	1.0	1.0	1.9	1.2	2.1	2.3	2.7	2.1	0.9	0.7	0.7	0.7	0.7	0.6	0.7	0.8	0.8	1.5	0.6	Diurnal Maximum	

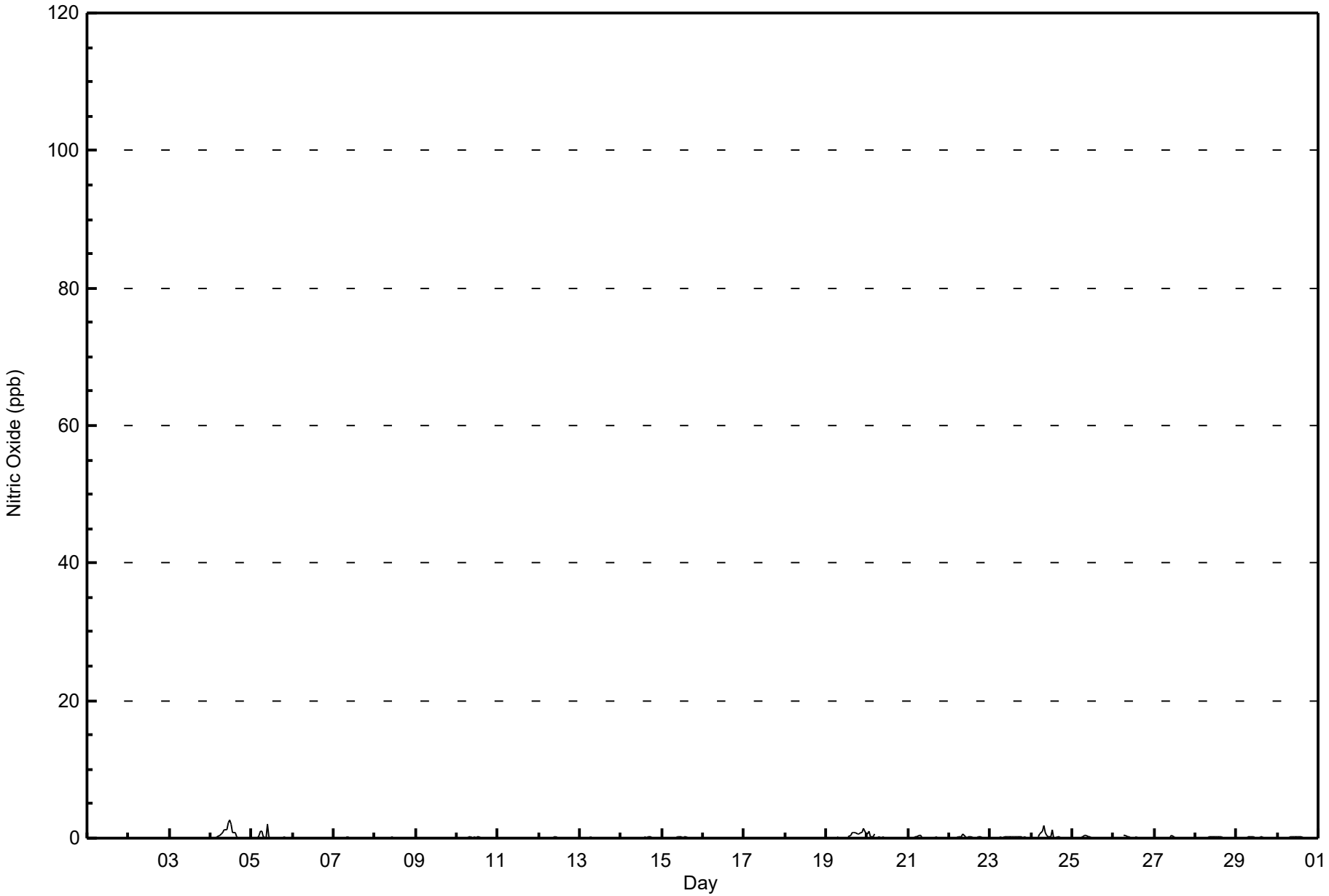
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Fort Chipewyan - June 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

Fort Chipewyan - June 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	32	17	77	132	149	31	16	11	21	4	18	13	13	10	34	107	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	32	17	77	132	149	31	16	11	21	4	18	13	13	10	34	107	685

Total Number of Valid Hours: 685

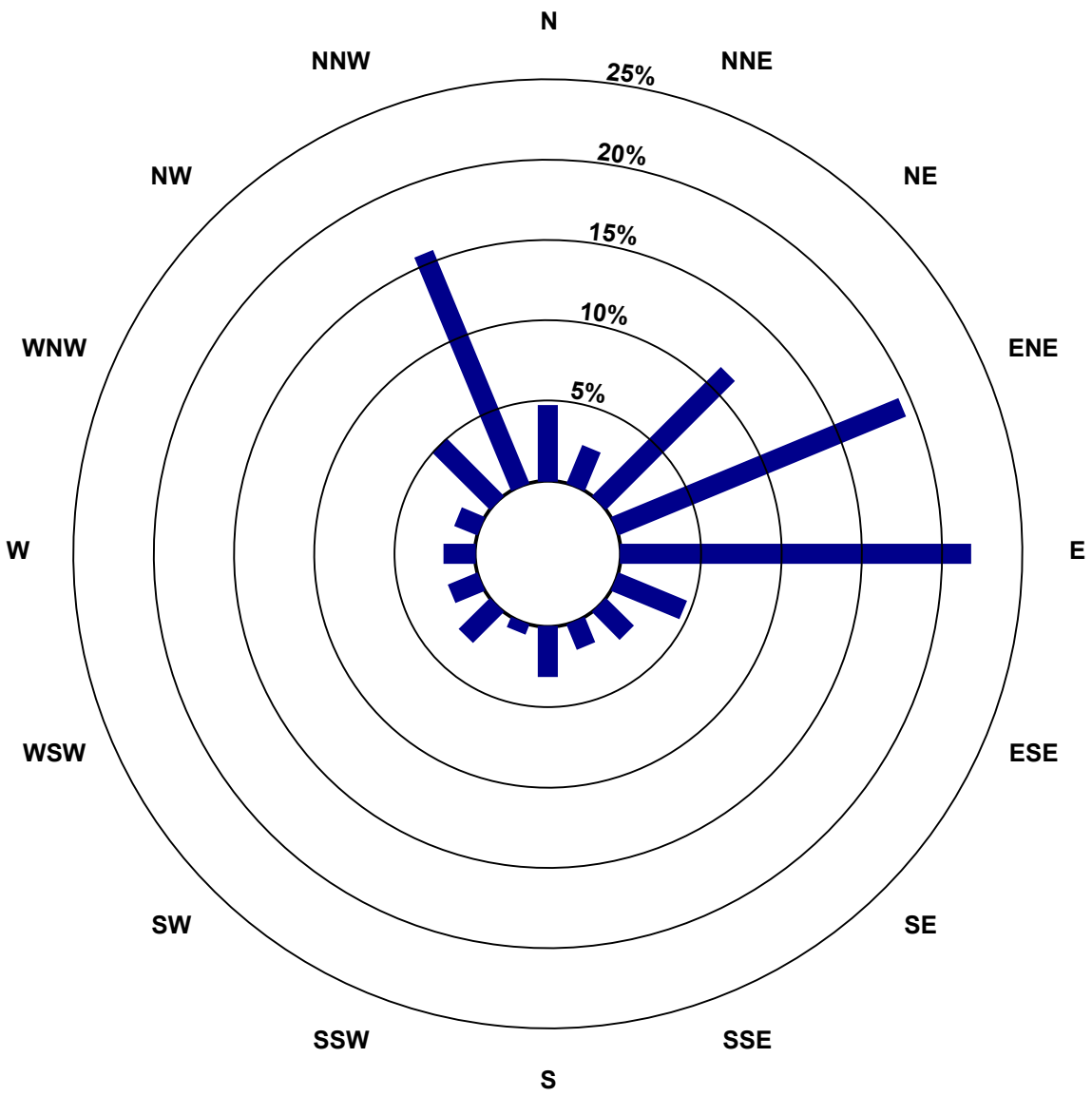
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Fort Chipewyan



Classes (ppb)

- 0 - 20
- 21 - 40
- 11 - 80
- 81 - 159
- > 159

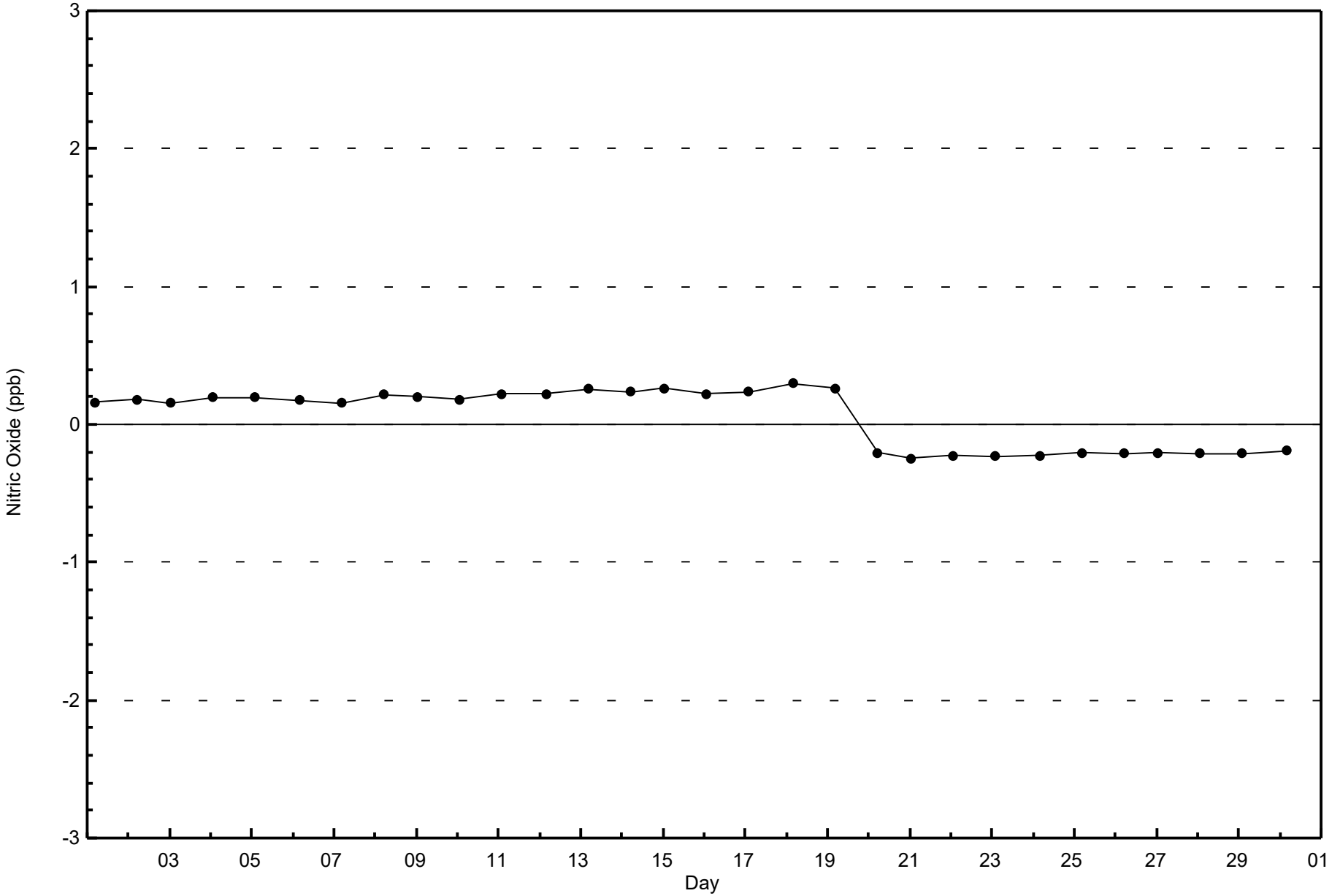
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Fort Chipewyan - June 2026

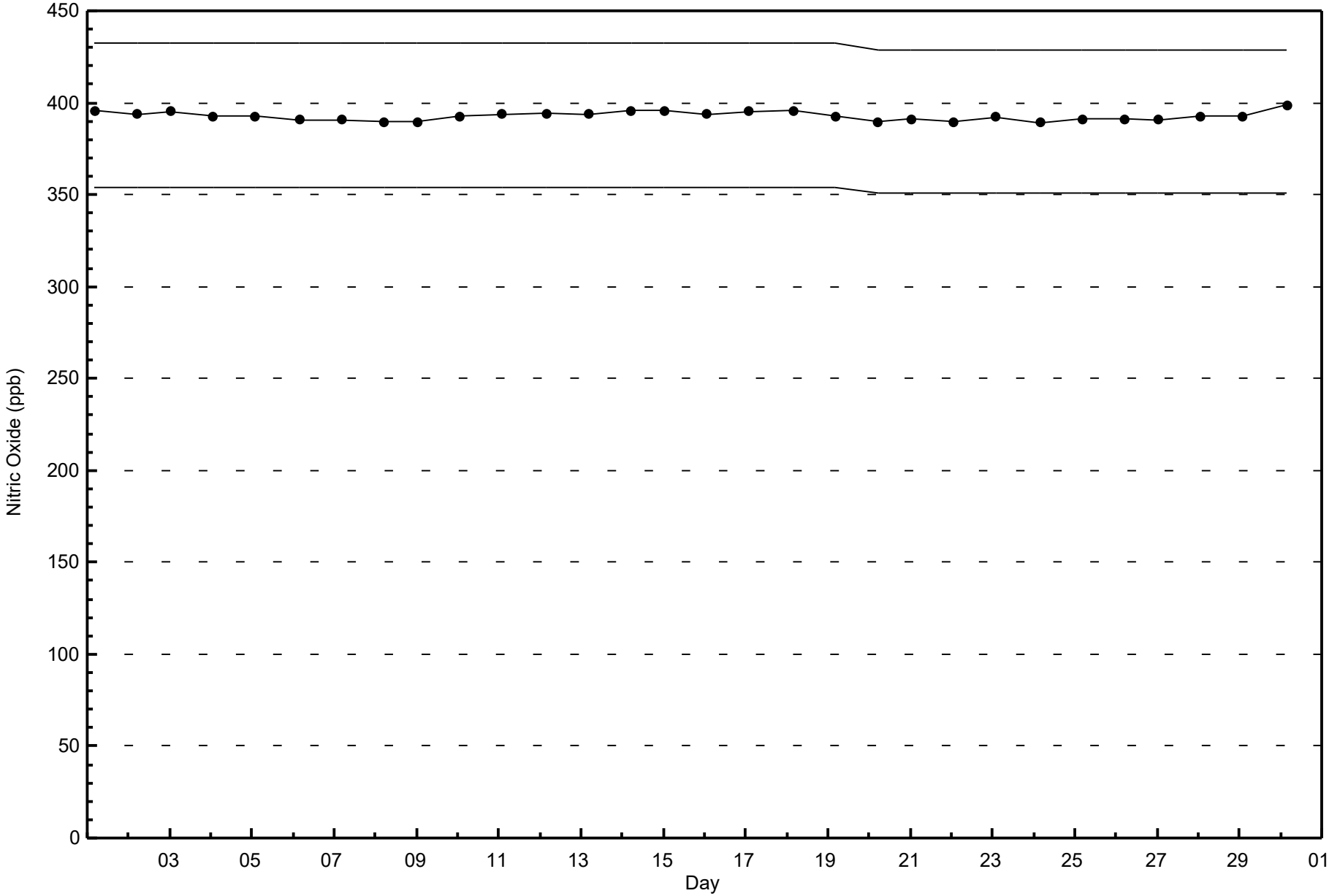


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Fort Chipewyan - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Fort Chipewyan - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6.7 ppb on Jun 4 00:00 Maximum Daily Average: 2.5 ppb on Jun 4

Minimum Value: 0.1 ppb on Jun 20 10:00 Minimum Daily Average: 0.2 ppb on Jun 16
Maximum Diurnal Average: 1.1 ppb at hour 3 Minimum Diurnal Average: 0.4 ppb at hour 19
Monthly Average: 0.62 ppb Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.2 Median = 0.3 Q_3 = 0.6 P_{90} = 1.4 P_{99} = 4.8

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-Jun	0.2	0.2	0.3	0.2	Z	0.2	0.3	0.4	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.3	0.4
2-Jun	0.2	5.8	4.5	0.2	0.2	Z	0.3	0.2	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.7	0.4	0.4	0.7	5.8
3-Jun	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	0.2	0.1	0.1	0.1	0.1	0.3	1.2	1.7	5.1	6.7	0.7	6.7
4-Jun	6.2	Z	6.0	4.5	3.3	2.5	2.1	2.4	2.3	2.4	3.5	3.3	3.6	3.5	2.2	1.0	0.9	0.9	1.0	0.8	1.1	1.0	1.2	0.9	2.5	6.2
5-Jun	0.8	0.7	Z	2.7	4.4	4.0	2.9	0.8	0.6	1.8	0.8	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.5	2.2	1.9	1.4	0.8	0.7	1.3	4.4
6-Jun	0.7	0.8	0.8	Z	0.4	0.6	0.6	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.4	0.8
7-Jun	0.2	0.2	0.3	0.3	Z	0.2	0.2	0.2	0.6	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.6
8-Jun	0.5	0.6	1.2	0.4	0.4	Z	0.4	0.3	0.3	0.3	0.4	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	0.4	1.2
9-Jun	Z	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.3
10-Jun	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3
11-Jun	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.3	0.3	0.3	0.2	0.3
12-Jun	0.2	0.1	0.1	Z	0.2	0.1	0.2	0.1	0.1	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.4
13-Jun	0.3	0.3	0.3	0.3	Z	0.3	0.5	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.5
14-Jun	0.3	0.3	0.3	0.3	0.3	Z	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.3	0.4	0.4	0.2	0.2	0.4	0.3	0.2	2.0	0.4	2.0
15-Jun	Z	0.7	1.0	0.8	0.4	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.2	0.4	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.4	1.0
16-Jun	0.2	Z	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
17-Jun	0.2	0.2	Z	0.1	0.1	0.2	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	0.4	0.8	1.9	0.3	1.9
18-Jun	0.8	0.5	0.3	Z	0.3	0.3	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.3	0.4	0.8	1.2	0.3	1.2
19-Jun	0.2	0.2	0.1	0.2	Z	0.1	0.2	0.3	C	C	C	C	C	1.6	1.8	2.7	2.9	2.9	2.7	2.8	3.1	3.3	6.2	2.4	1.9	6.2
20-Jun	2.3	0.8	0.4	0.4	2.0	Z	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.4	0.2	0.1	0.4	2.3
21-Jun	Z	0.3	0.4	1.3	1.0	0.7	0.8	0.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.3	0.2	1.1	1.0	0.4	1.3
22-Jun	0.8	Z	2.7	1.0	0.6	0.6	0.4	0.6	0.7	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.5	0.3	0.3	0.3	0.2	0.4	0.5	2.7
23-Jun	0.3	0.4	Z	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.3	0.3	0.3	0.2	0.3	0.4	0.8	0.8	0.5	1.2	0.4	1.2
24-Jun	3.3	4.8	4.5	Z	3.4	3.1	3.3	5.0	3.1	2.6	1.6	1.4	1.2	1.5	1.7	1.6	1.4	1.2	0.8	0.9	1.0	0.7	0.7	1.2	2.2	5.0
25-Jun	1.0	1.4	1.5	1.2	Z	1.3	1.5	2.0	2.0	1.5	1.4	1.1	0.9	0.6	0.7	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	1.0	2.0
26-Jun	0.5	0.5	0.6	0.7	0.8	Z	2.6	2.2	1.7	1.5	1.2	1.1	1.0	0.9	0.7	0.6	0.7	0.6	0.5	0.5	0.6	0.6	0.5	0.4	0.9	2.6
27-Jun	Z	0.4	0.4	0.5	0.4	0.4	0.4	0.3	0.4	0.5	0.9	0.5	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.7	0.9	0.6	0.5	0.9
28-Jun	0.5	Z	0.5	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.8	0.5	0.3	0.4	0.3	0.3	0.3	0.2	0.4	0.3	0.4	0.4	0.4	0.8
29-Jun	0.4	0.2	Z	0.4	0.4	0.6	0.7	0.9	0.9	0.9	1.1	0.6	0.7	0.9	1.1	1.2	0.9	1.0	0.7	0.7	0.7	0.8	0.7	0.7	0.7	1.2
30-Jun	0.6	0.9	1.0	Z	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.9	1.1	1.1	1.0	0.8	0.5	0.3	0.4	0.4	0.4	0.5	0.8	0.8	1.1
	0.8	0.8	1.1	0.7	0.9	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.8	0.9	Diurnal Average	
	6.2	5.8	6.0	4.5	4.4	4.0	3.3	5.0	3.1	2.6	3.5	3.3	3.6	3.5	2.2	2.7	2.9	2.9	2.7	2.8	3.1	3.3	6.2	6.7	Diurnal Maximum	

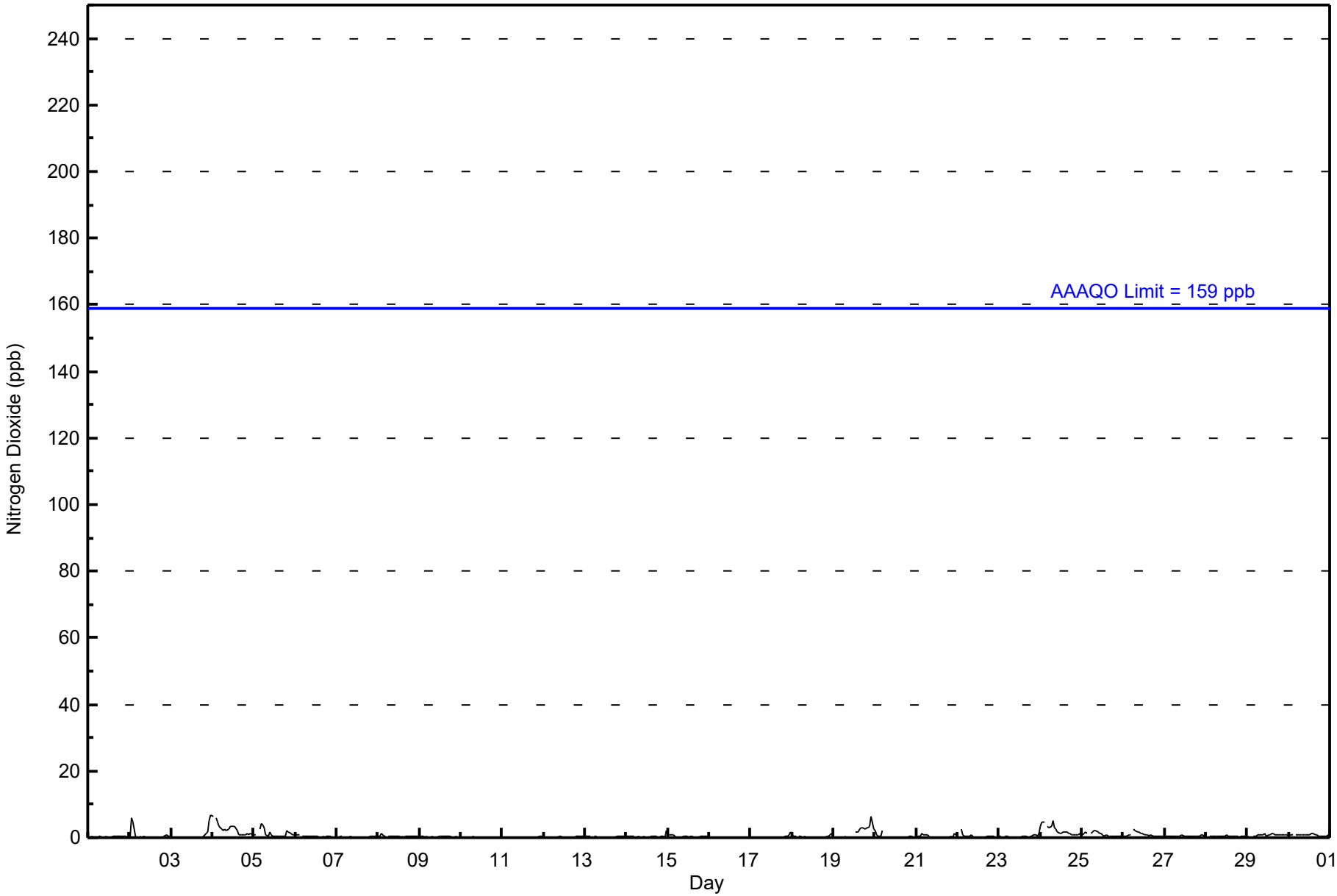
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Fort Chipewyan - June 2026



Nitrogen Dioxide (NO_2) - ppb
Fort Chipewyan - June 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

Fort Chipewyan - June 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	32	17	77	132	149	31	16	11	21	4	18	13	13	10	34	107	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	32	17	77	132	149	31	16	11	21	4	18	13	13	10	34	107	685

Total Number of Valid Hours: 685

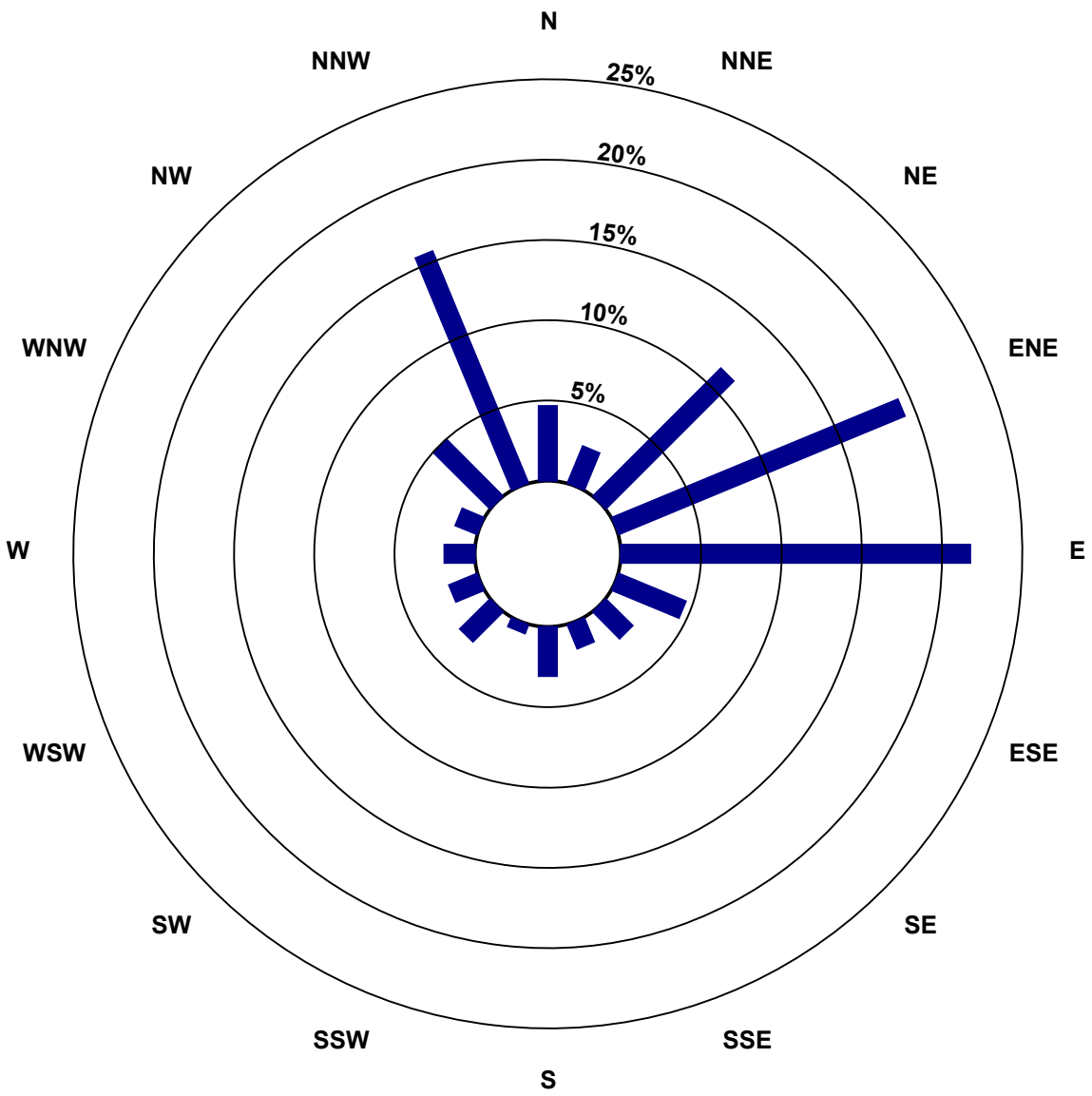
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Fort Chipewyan



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

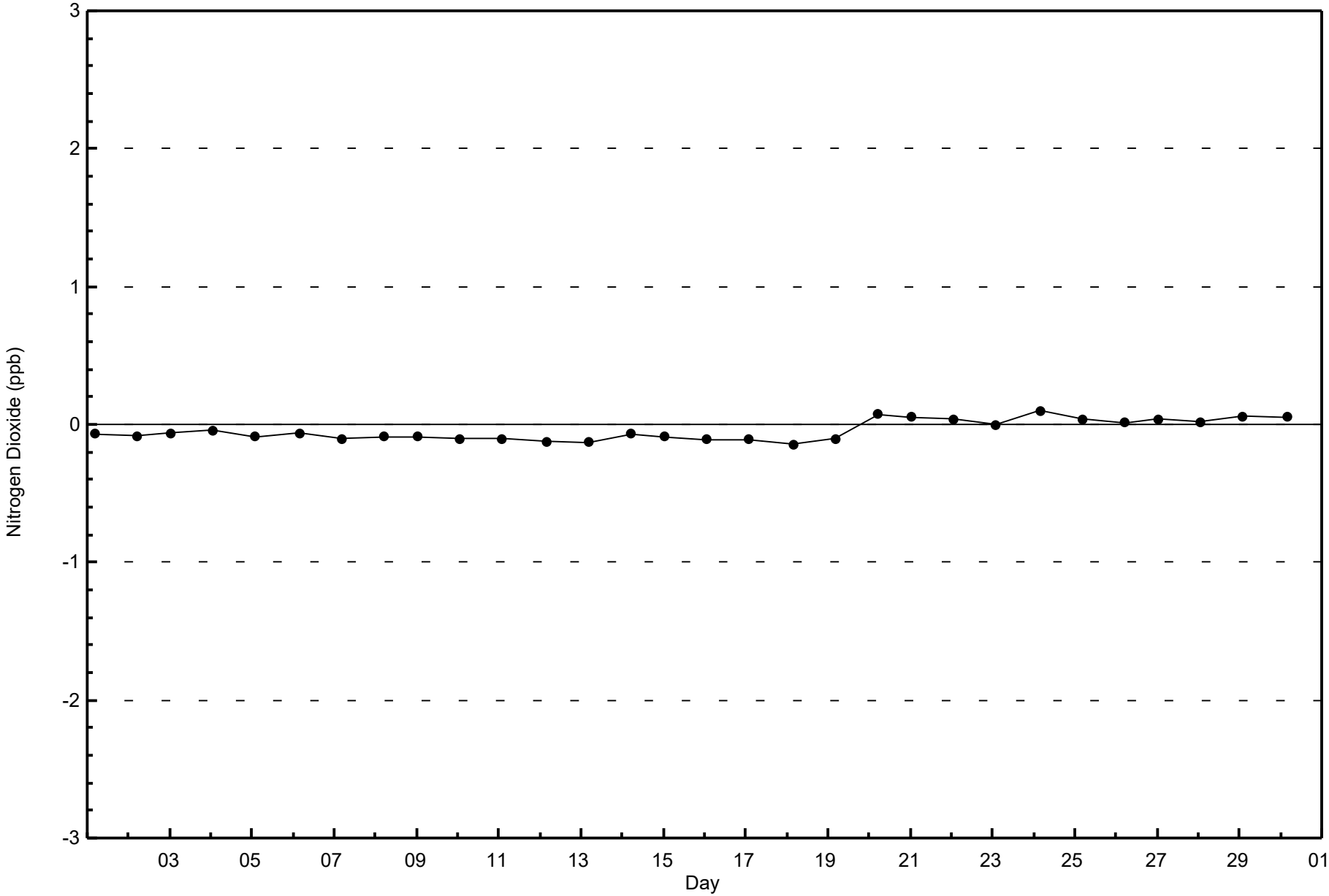
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Fort Chipewyan - June 2026

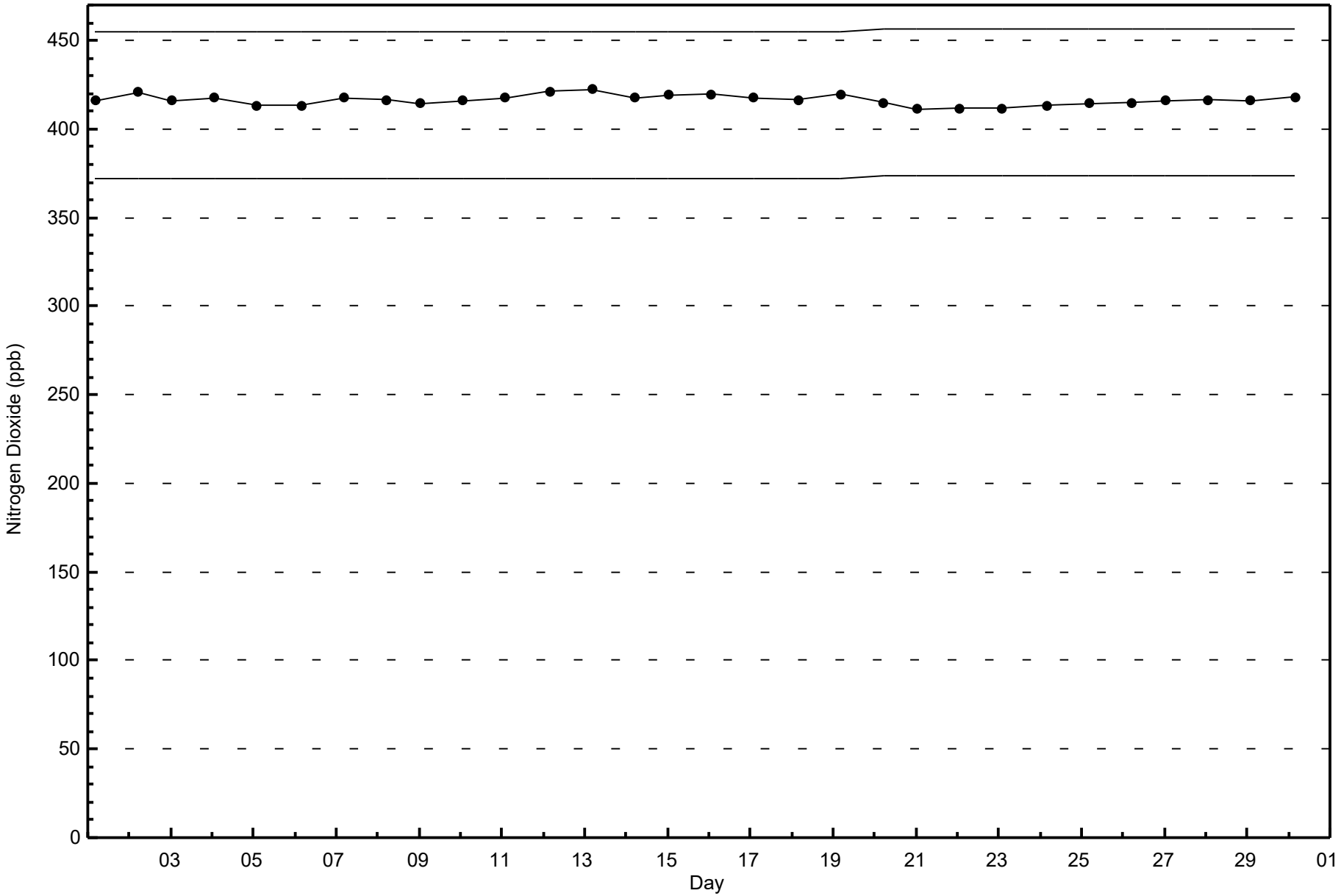


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Fort Chipewyan - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Fort Chipewyan - June 2026

Maximum Value: 7.7 ppb on Jun 19 23:00

Maximum Daily Average: 3.1 ppb on Jun 4

Minimum Value: 0.1 ppb on Jun 20 15:00

Minimum Daily Average: 0.2 ppb on Jun 11

Maximum Diurnal Average: 1.2 ppb at hour 3

Minimum Diurnal Average: 0.5 ppb at hour 18

Monthly Average: 0.74 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.3 Median = 0.4 Q_3 = 0.7 P_{90} = 1.4 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-Jun	0.2	0.2	0.3	0.2	Z	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.3	0.5
2-Jun	0.2	5.8	4.6	0.2	0.2	Z	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.7	0.5	0.5	0.7	5.8
3-Jun	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.4	1.3	1.8	5.2	6.8	0.8	6.8
4-Jun	6.2	Z	6.1	4.6	3.6	2.9	2.7	3.2	3.5	3.7	5.8	6.0	5.7	4.4	2.9	1.1	1.0	1.0	1.1	0.9	1.2	1.0	1.3	0.9	3.1	6.2
5-Jun	0.8	0.7	Z	2.8	4.8	5.0	3.9	0.9	0.7	3.9	0.9	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.5	2.4	2.0	1.4	0.8	0.7	1.5	5.0
6-Jun	0.7	0.8	0.8	Z	0.5	0.7	0.7	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.4	0.8
7-Jun	0.2	0.2	0.3	0.3	Z	0.3	0.3	0.2	0.9	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.9
8-Jun	0.5	0.6	1.2	0.4	0.4	Z	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	1.2
9-Jun	Z	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.4
10-Jun	0.3	Z	0.3	0.3	0.3	0.3	0.3	0.6	0.4	0.3	0.5	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	0.6
11-Jun	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3
12-Jun	0.2	0.1	0.1	Z	0.2	0.1	0.2	0.2	0.2	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.6
13-Jun	0.3	0.3	0.3	0.3	Z	0.4	0.7	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.4	0.4	0.4	0.3	0.7
14-Jun	0.4	0.4	0.4	0.4	0.4	Z	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.5	0.4	0.5	0.5	0.3	0.3	0.4	0.3	0.2	2.0	0.4	2.0
15-Jun	Z	0.7	1.0	0.8	0.5	0.3	0.3	0.3	0.3	0.7	0.6	0.5	0.3	0.6	0.5	0.3	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.4	1.0
16-Jun	0.3	Z	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.3
17-Jun	0.2	0.2	Z	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.8	1.9	0.3	1.9
18-Jun	0.8	0.5	0.3	Z	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.4	0.8	1.3	0.4	1.3
19-Jun	0.3	0.3	0.2	0.3	Z	0.2	0.3	0.4	C	C	C	C	C	1.9	2.3	3.4	3.6	3.6	3.3	3.5	3.9	4.1	7.7	3.0	2.3	7.7
20-Jun	2.9	1.7	0.6	0.5	2.6	Z	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.6	0.4	0.2	0.2	0.5	2.9
21-Jun	Z	0.4	0.5	1.4	1.1	0.9	1.3	1.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.3	1.1	1.1	0.5	1.4
22-Jun	0.9	Z	2.8	1.1	0.7	0.7	0.6	0.8	1.4	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.3	0.4	0.8	0.4	0.4	0.4	0.2	0.4	0.6	2.8
23-Jun	0.4	0.4	Z	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.4	0.4	0.4	0.3	0.5	0.5	0.9	0.9	0.6	1.3	0.5	1.3
24-Jun	3.4	4.9	4.6	Z	3.7	3.6	4.3	6.9	4.0	3.1	1.8	1.5	2.4	1.6	1.8	1.7	1.5	1.3	0.9	0.9	1.0	0.7	0.7	1.2	2.5	6.9
25-Jun	1.0	1.4	1.5	1.2	Z	1.4	1.7	2.4	2.4	1.7	1.5	1.2	1.0	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	1.1	2.4
26-Jun	0.5	0.5	0.6	0.7	0.8	Z	3.1	2.6	1.9	1.6	1.3	1.2	1.1	1.0	0.8	0.7	0.7	0.6	0.5	0.5	0.6	0.6	0.5	0.4	1.0	3.1
27-Jun	Z	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.6	1.3	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.7	0.9	0.6	0.5	1.3
28-Jun	0.5	Z	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	1.1	0.7	0.4	0.5	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.5	1.1
29-Jun	0.4	0.3	Z	0.5	0.5	0.7	0.8	1.0	1.0	1.0	1.3	0.7	0.8	1.0	1.2	1.3	1.0	1.1	0.8	0.8	0.8	0.8	0.7	0.7	0.8	1.3
30-Jun	0.7	1.0	1.1	Z	1.1	1.0	1.0	1.0	0.9	0.9	0.9	1.0	1.0	1.2	1.2	1.1	0.8	0.5	0.3	0.4	0.4	0.4	0.5	0.8	0.8	1.2
	0.9	0.9	1.2	0.7	1.0	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.9	0.9	Diurnal Average	
	6.2	5.8	6.1	4.6	4.8	5.0	4.3	6.9	4.0	3.9	5.8	6.0	5.7	4.4	2.9	3.4	3.6	3.6	3.3	3.5	3.9	4.1	7.7	6.8	Diurnal Maximum	

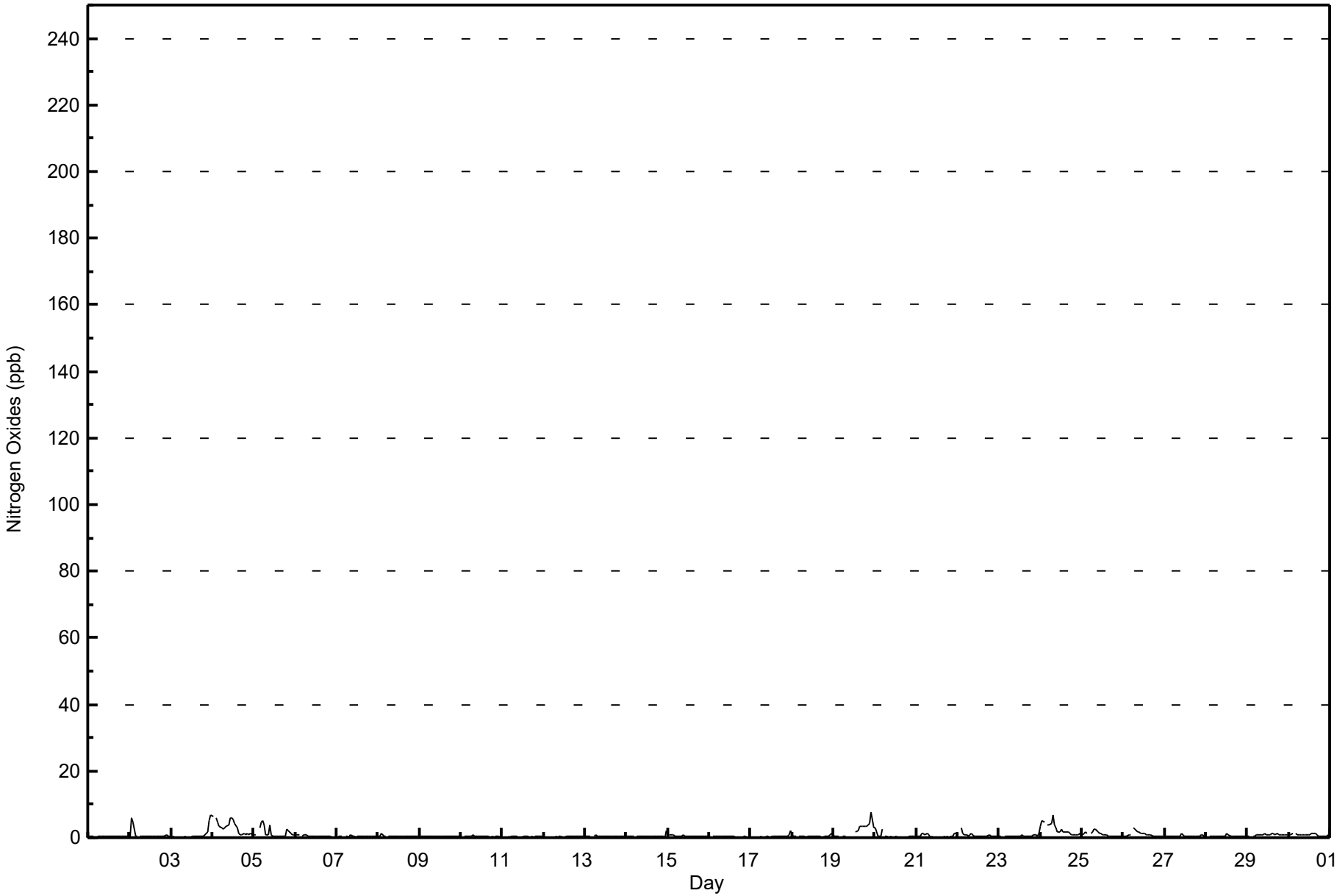
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Fort Chipewyan - June 2026



Nitrogen Oxides (NO_X) - ppb
Fort Chipewyan - June 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

Fort Chipewyan - June 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	32	17	77	132	149	31	16	11	21	4	18	13	13	10	34	107	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	32	17	77	132	149	31	16	11	21	4	18	13	13	10	34	107	685

Total Number of Valid Hours: 685

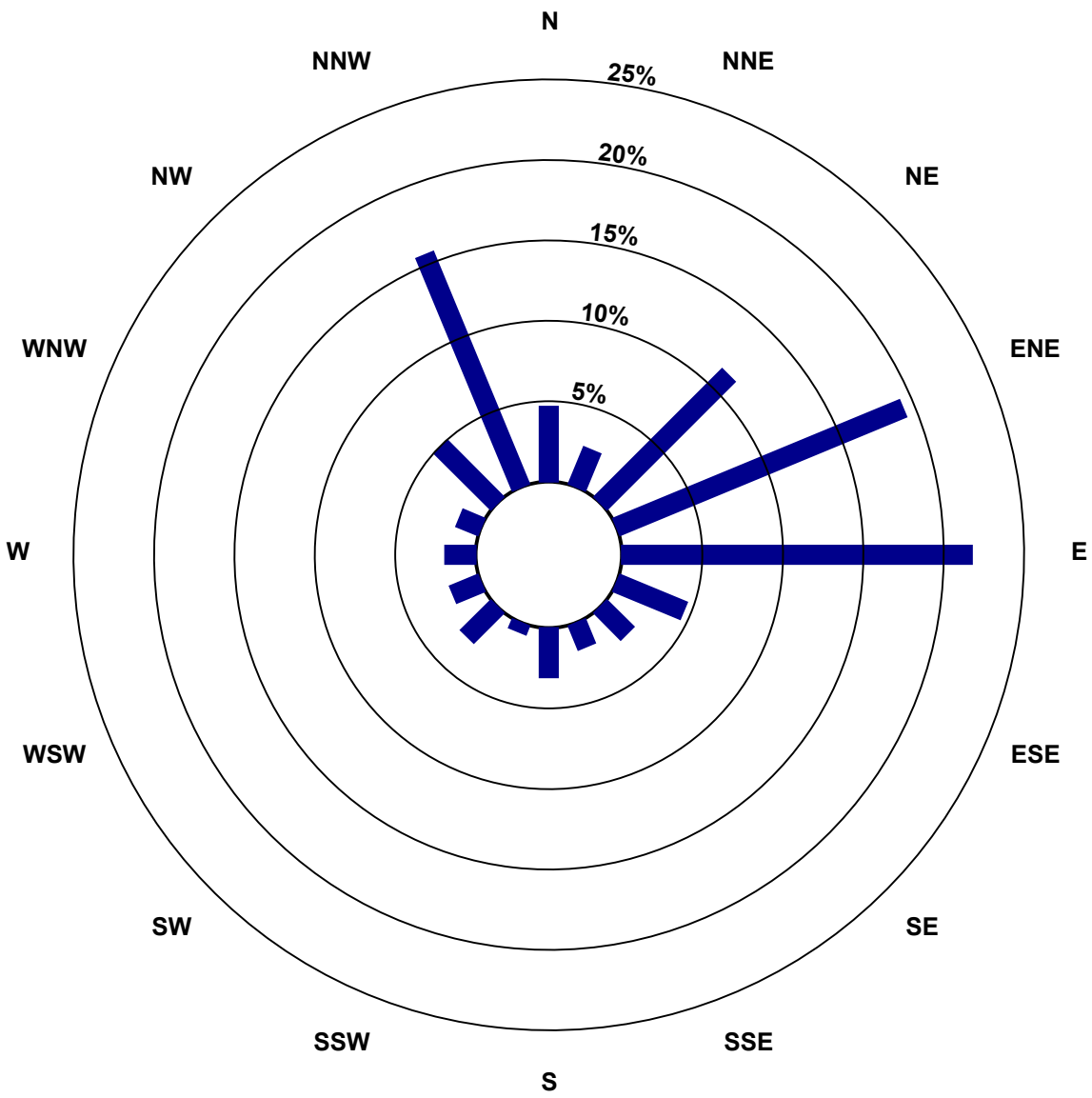
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Fort Chipewyan



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

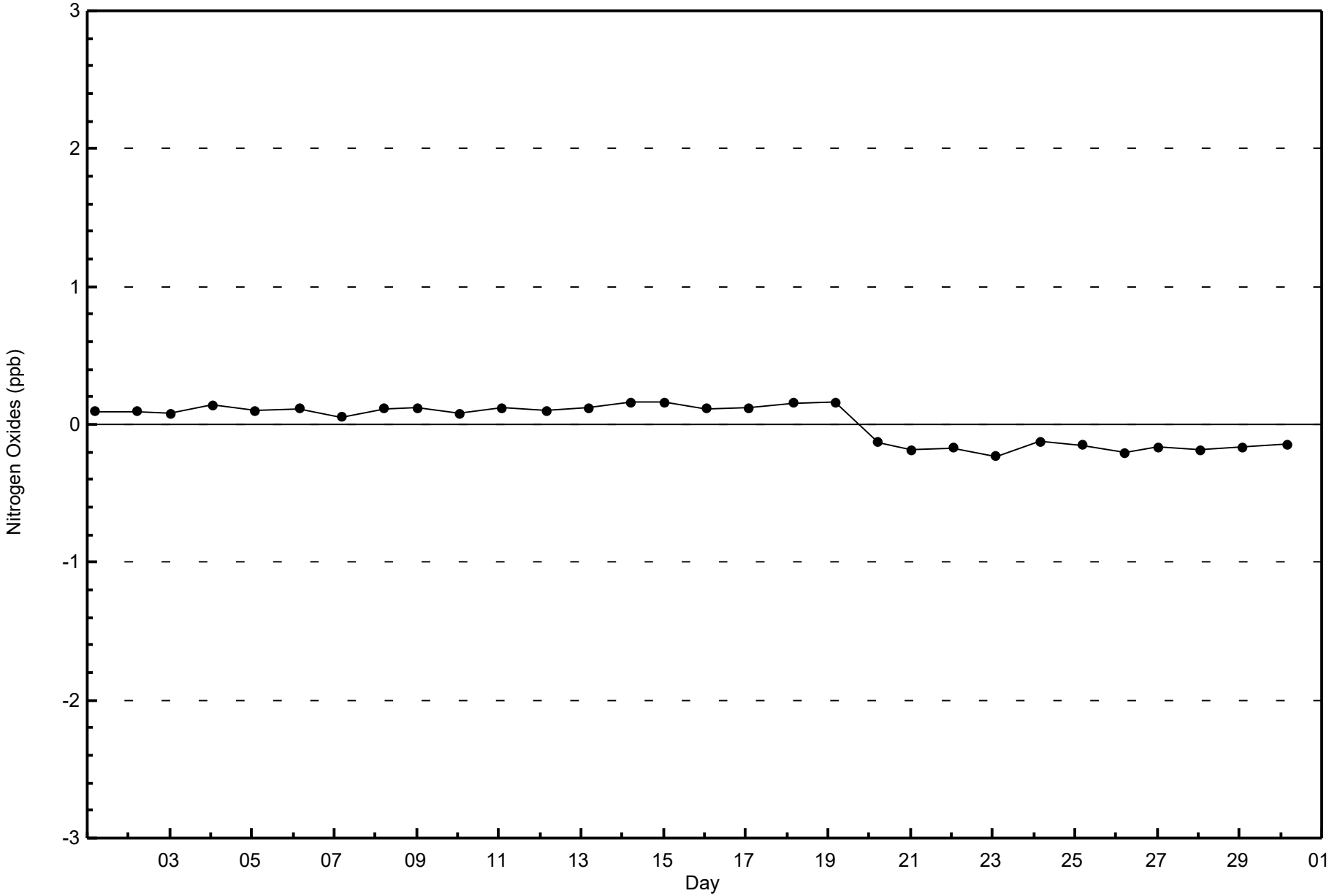
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Fort Chipewyan - June 2026

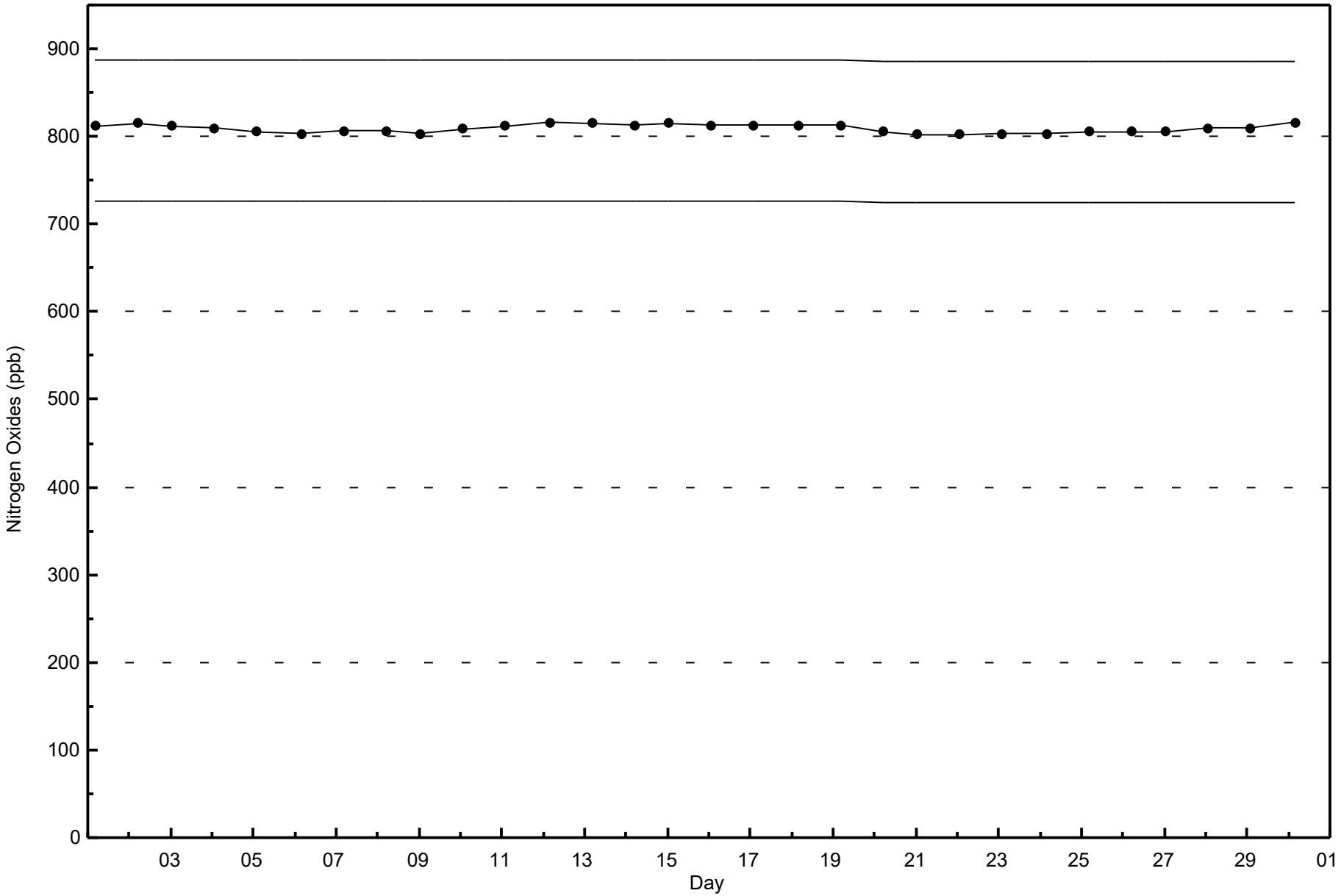


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Fort Chipewyan - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Fort Chipewyan - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 59.9 ppb on Jun 29 18:00
Maximum Daily Average: 47.1 ppb on Jun 29

Minimum Value: 10.8 ppb on Jun 20 06:00
Minimum Daily Average: 17.3 ppb on Jun 19
Maximum Diurnal Average: 34.5 ppb at hour 18
Minimum Diurnal Average: 27.0 ppb at hour 7
Monthly Average: 30.75 ppb
Percentiles: P_1 = 14.8 P_{10} = 18.6 Q_1 = 21.7 Median = 29.9 Q_3 = 38.1 P_{90} = 44.6 P_{99} = 55.5

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-Jun	29.7	28.0	Z	26.2	26.0	25.8	26.4	27.2	28.0	27.3	25.3	27.7	30.6	31.1	32.4	34.1	36.3	38.5	36.2	35.6	35.0	34.7	35.6	35.8	31.0	38.5
2-Jun	35.0	27.0	27.2	Z	38.3	37.1	39.1	44.7	46.5	44.6	42.9	42.0	40.3	40.2	39.9	39.6	39.4	39.3	39.1	39.3	38.1	36.3	35.5	35.2	38.5	46.5
3-Jun	35.5	36.1	37.1	37.1	Z	34.9	34.2	32.1	31.8	34.3	35.6	35.6	35.3	35.6	33.6	31.2	30.6	30.5	29.3	28.3	28.1	25.1	21.6	19.1	31.8	37.1
4-Jun	18.4	16.9	16.6	17.7	17.8	Z	18.0	18.3	19.5	19.5	19.8	22.2	23.9	26.2	25.8	27.7	29.9	32.4	33.3	29.9	29.7	30.5	29.6	28.9	24.0	33.3
5-Jun	Z	28.0	28.0	24.5	21.0	21.7	25.2	30.9	30.8	C	C	C	44.1	43.2	42.7	41.9	41.2	41.3	39.9	34.0	34.7	34.2	33.6	32.9	33.7	44.1
6-Jun	30.7	Z	31.3	34.6	32.3	28.3	25.5	25.5	27.0	24.5	23.3	19.8	20.6	22.4	22.6	22.7	22.4	24.5	23.1	21.5	20.8	20.3	20.4	21.4	24.6	34.6
7-Jun	23.0	22.8	Z	23.9	24.2	24.4	23.9	22.5	21.1	22.2	22.3	22.7	21.9	21.4	21.5	20.9	20.4	20.2	19.6	19.5	20.3	22.1	22.6	23.2	22.0	24.4
8-Jun	25.8	25.0	21.7	Z	21.9	19.4	17.2	15.2	16.0	17.6	18.6	19.2	20.7	21.9	21.9	20.4	20.9	24.4	28.8	29.2	28.3	27.1	26.4	25.5	22.3	29.2
9-Jun	25.4	24.8	24.2	24.5	Z	25.0	24.9	24.5	24.5	22.4	22.6	20.0	18.6	18.8	19.2	19.6	17.9	17.0	19.4	21.5	20.7	18.9	17.8	18.6	21.3	25.4
10-Jun	19.1	18.2	18.3	19.6	18.5	Z	19.3	19.6	18.4	18.5	18.8	18.7	18.7	19.5	20.1	19.2	19.8	19.4	18.9	19.3	19.3	19.9	20.4	20.2	19.2	20.4
11-Jun	Z	19.8	18.9	18.2	18.3	18.5	18.6	18.8	21.5	23.2	23.2	23.3	23.8	23.2	23.1	22.9	25.2	29.6	33.6	33.9	33.8	32.6	31.4	30.2	24.6	33.9
12-Jun	29.4	Z	29.6	29.2	29.3	29.8	29.7	29.9	31.3	30.9	33.9	35.6	36.9	38.0	38.1	38.6	39.0	36.8	36.4	36.3	35.4	35.0	34.5	33.0	33.8	39.0
13-Jun	32.0	31.3	Z	29.9	28.0	25.1	28.7	30.2	31.2	32.9	35.5	35.6	35.2	34.7	35.7	38.3	38.9	38.6	38.2	38.2	35.9	36.6	37.4	39.7	34.2	39.7
14-Jun	40.4	39.2	37.1	Z	34.2	33.9	34.6	33.6	35.7	36.1	36.4	36.5	35.9	35.6	37.3	36.9	35.7	37.8	38.0	37.5	36.3	35.4	33.9	31.1	36.0	40.4
15-Jun	32.4	30.3	30.3	31.1	Z	29.4	29.9	29.7	28.9	29.1	28.4	29.3	32.8	34.9	36.6	38.2	41.4	42.1	41.3	41.2	40.0	38.4	37.7	36.9	34.4	42.1
16-Jun	36.1	36.0	36.3	37.5	34.4	Z	30.7	28.6	27.5	27.3	28.8	34.8	34.4	36.0	36.9	34.3	34.0	34.1	35.1	37.7	36.7	33.0	32.6	33.0	33.7	37.7
17-Jun	Z	31.2	30.3	29.3	29.8	28.5	29.2	29.7	29.8	30.2	30.3	30.6	30.8	31.8	32.9	33.3	31.9	26.5	24.1	22.7	22.1	21.1	20.5	18.5	28.1	33.3
18-Jun	19.7	Z	21.7	19.9	20.4	18.6	19.9	21.8	22.6	24.8	25.7	27.3	29.0	29.2	28.9	30.7	32.2	31.9	30.1	26.1	25.8	24.3	22.3	20.7	24.9	32.2
19-Jun	20.8	19.6	Z	18.9	18.7	17.3	16.1	15.8	16.1	14.5	14.9	15.4	15.5	17.5	16.9	17.8	17.5	19.2	19.1	17.8	16.7	18.9	17.3	15.9	17.3	20.8
20-Jun	16.1	14.3	12.7	Z	11.9	10.8	10.9	12.9	15.8	16.7	16.4	19.4	21.1	21.3	20.2	19.6	23.5	25.5	27.3	25.5	22.3	22.2	21.5	21.2	18.7	27.3
21-Jun	20.5	19.3	19.0	18.1	Z	18.0	17.5	18.2	18.2	17.7	17.4	17.2	18.2	17.5	17.3	16.5	18.8	18.8	20.2	20.7	20.6	22.9	23.5	20.5	19.0	23.5
22-Jun	19.1	21.0	18.6	20.0	20.3	Z	19.1	16.9	16.9	18.0	18.5	19.1	20.2	20.9	22.9	25.2	26.8	27.1	27.0	28.0	28.2	28.2	28.8	28.4	22.6	28.8
23-Jun	Z	28.5	27.6	27.7	26.3	24.9	25.8	24.3	21.1	17.9	17.7	20.4	23.4	26.5	28.0	28.0	28.0	28.3	29.7	33.3	31.9	32.3	33.3	31.4	26.8	33.3
24-Jun	28.6	Z	26.2	26.0	25.3	25.9	25.6	26.9	32.8	38.8	43.3	46.6	50.4	53.3	55.5	54.3	50.4	50.7	47.3	46.9	45.7	41.1	39.9	39.5	40.0	55.5
25-Jun	39.9	37.4	Z	31.9	30.2	29.3	29.8	32.2	35.6	38.1	41.6	42.1	40.7	40.1	43.7	42.9	44.5	45.6	45.0	44.9	43.7	42.7	40.3	39.9	39.2	45.6
26-Jun	40.0	40.1	39.2	Z	35.7	34.2	34.9	38.6	41.1	43.9	45.3	48.6	50.8	51.7	48.3	50.0	52.6	51.4	48.0	46.3	44.7	43.7	42.4	41.2	44.0	52.6
27-Jun	40.2	40.2	37.7	37.5	Z	38.8	37.7	36.3	35.9	35.2	35.0	42.4	44.7	44.0	45.1	46.1	46.5	47.2	46.8	46.8	47.6	46.6	46.8	45.5	42.2	47.6
28-Jun	43.3	42.5	42.0	41.7	41.5	Z	38.8	39.2	39.4	40.4	39.4	41.9	39.5	39.0	40.4	45.7	47.8	45.5	41.9	40.3	38.9	39.3	39.8	39.6	41.2	47.8
29-Jun	Z	38.8	37.9	36.6	37.8	38.8	37.8	38.0	39.3	40.8	45.9	45.9	50.5	53.7	55.6	57.0	57.6	59.9	54.4	52.7	52.9	52.4	50.3	48.2	47.1	59.9
30-Jun	46.6	Z	48.2	44.7	42.9	40.6	41.0	38.3	37.6	38.7	40.6	42.8	45.5	50.3	55.6	59.0	58.4	51.5	49.1	47.9	46.6	45.9	46.2	50.7	46.5	59.0
	29.9	28.7	28.7	28.3	27.4	27.2	27.0	27.3	28.1	28.5	29.2	30.4	31.8	32.7	33.3	33.7	34.3	34.5	34.0	33.4	32.7	32.1	31.5	30.9	Diurnal Average	
	46.6	42.5	48.2	44.7	42.9	40.6	41.0	44.7	46.5	44.6	45.9	48.6	50.8	53.7	55.6	59.0	58.4	59.9	54.4	52.7	52.9	52.4	50.3	50.7	Diurnal Maximum	

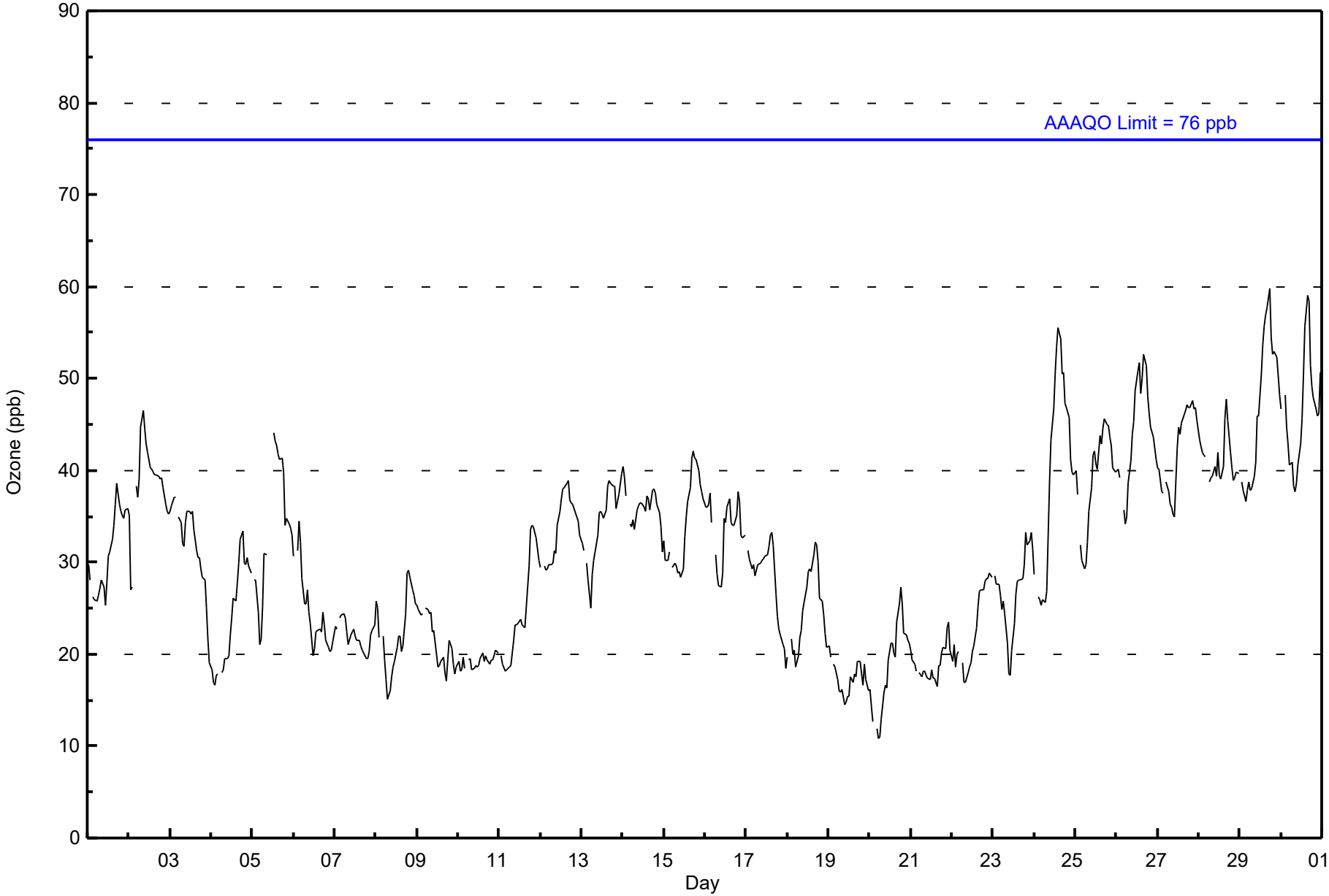
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Fort Chipewyan - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	142	20.67	20.67
21 - 50	522	75.98	96.65
51 - 82	23	3.35	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

Fort Chipewyan - June 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	12	9	7	8	33	4	1	0	7	0	0	0	3	1	10	47	142
21 - 50	22	9	64	115	110	26	16	12	15	3	15	13	10	8	23	61	522
51 - 82	0	0	7	10	6	0	0	0	0	0	0	0	0	0	0	0	23
> 83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	34	18	78	133	149	30	17	12	22	3	15	13	13	9	33	108	687

Total Number of Valid Hours: 687

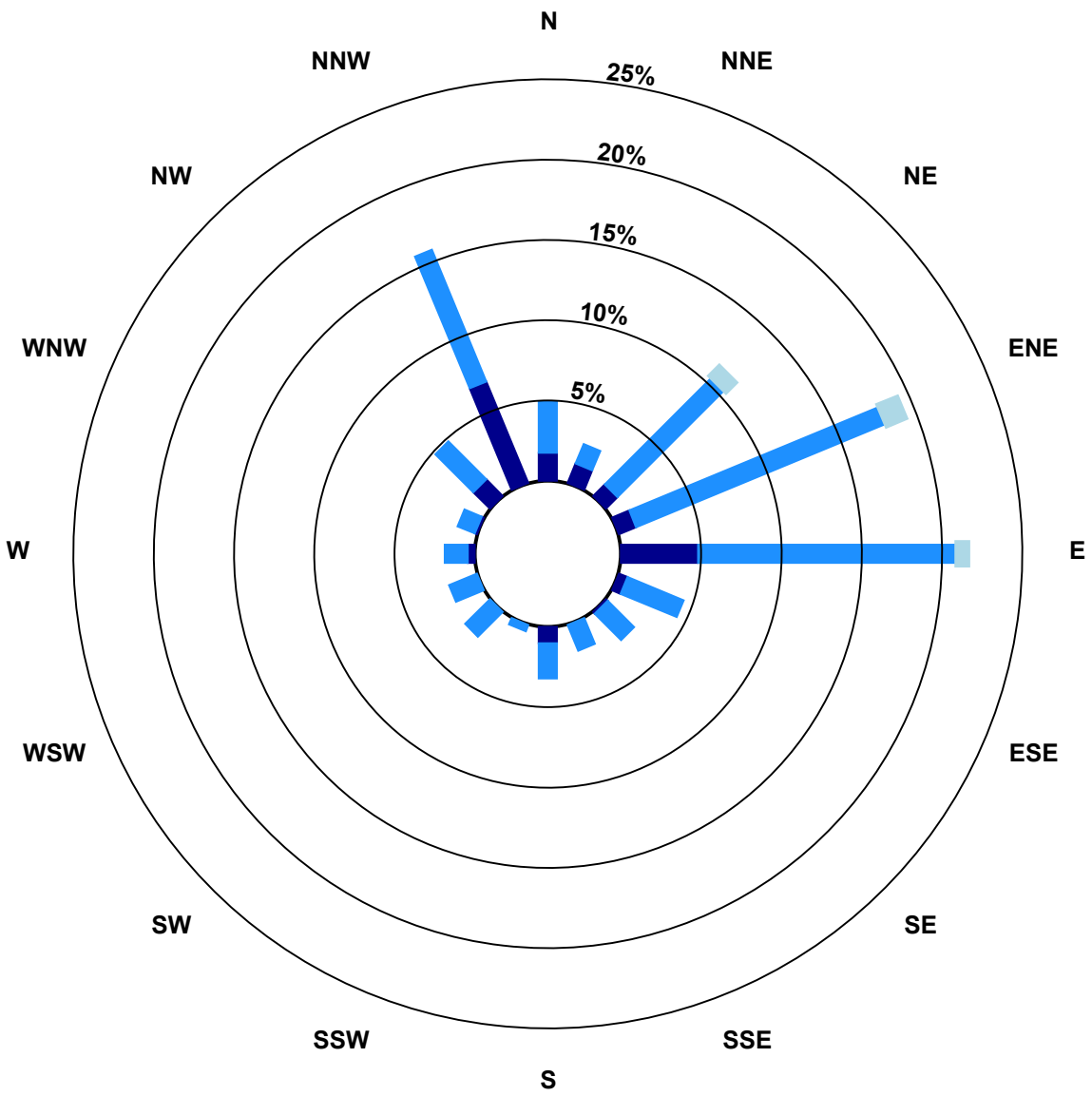
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Ozone (O_3) - ppb

Fort Chipewyan



Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

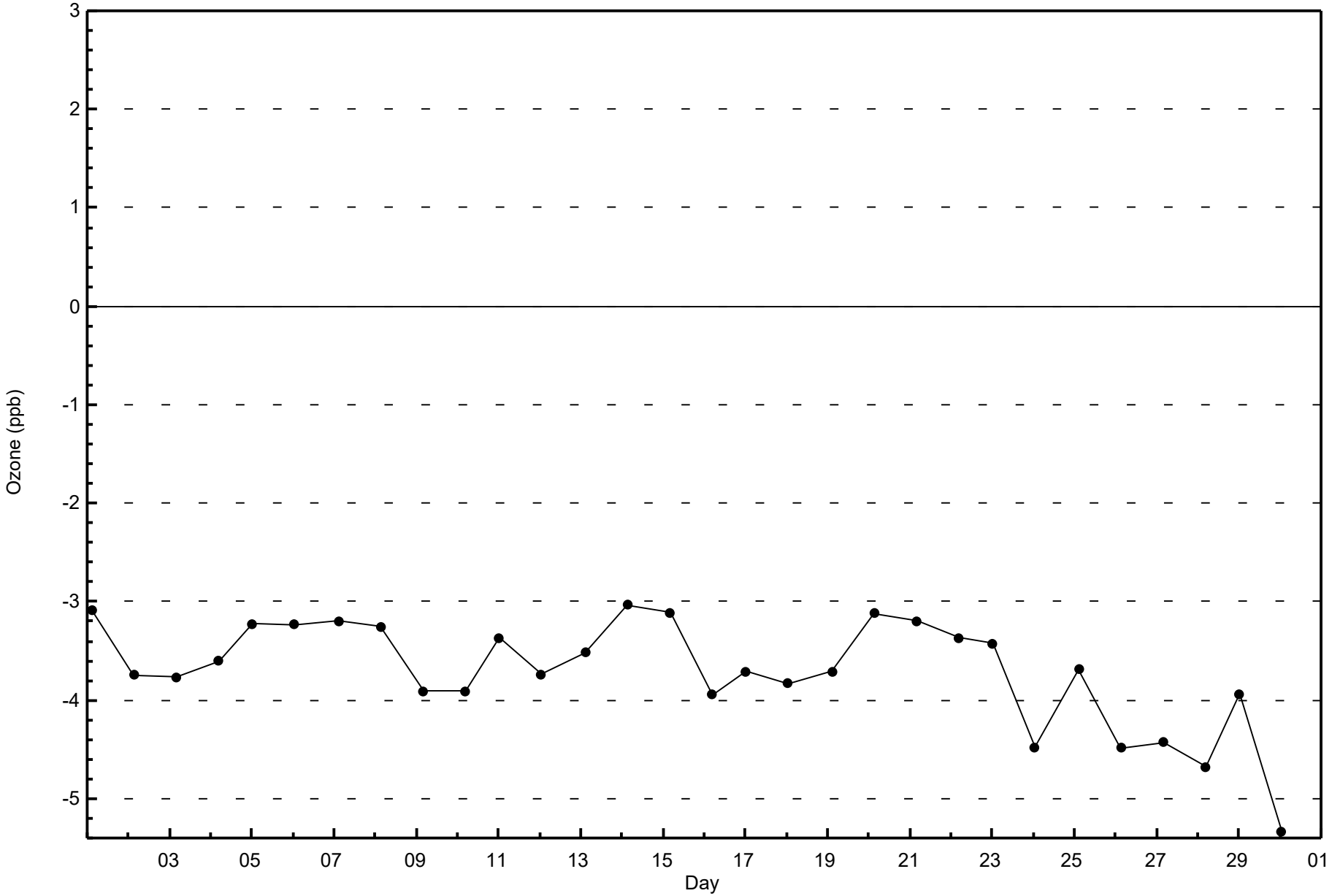
Total Number of Valid Hours: 687

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Fort Chipewyan - June 2026

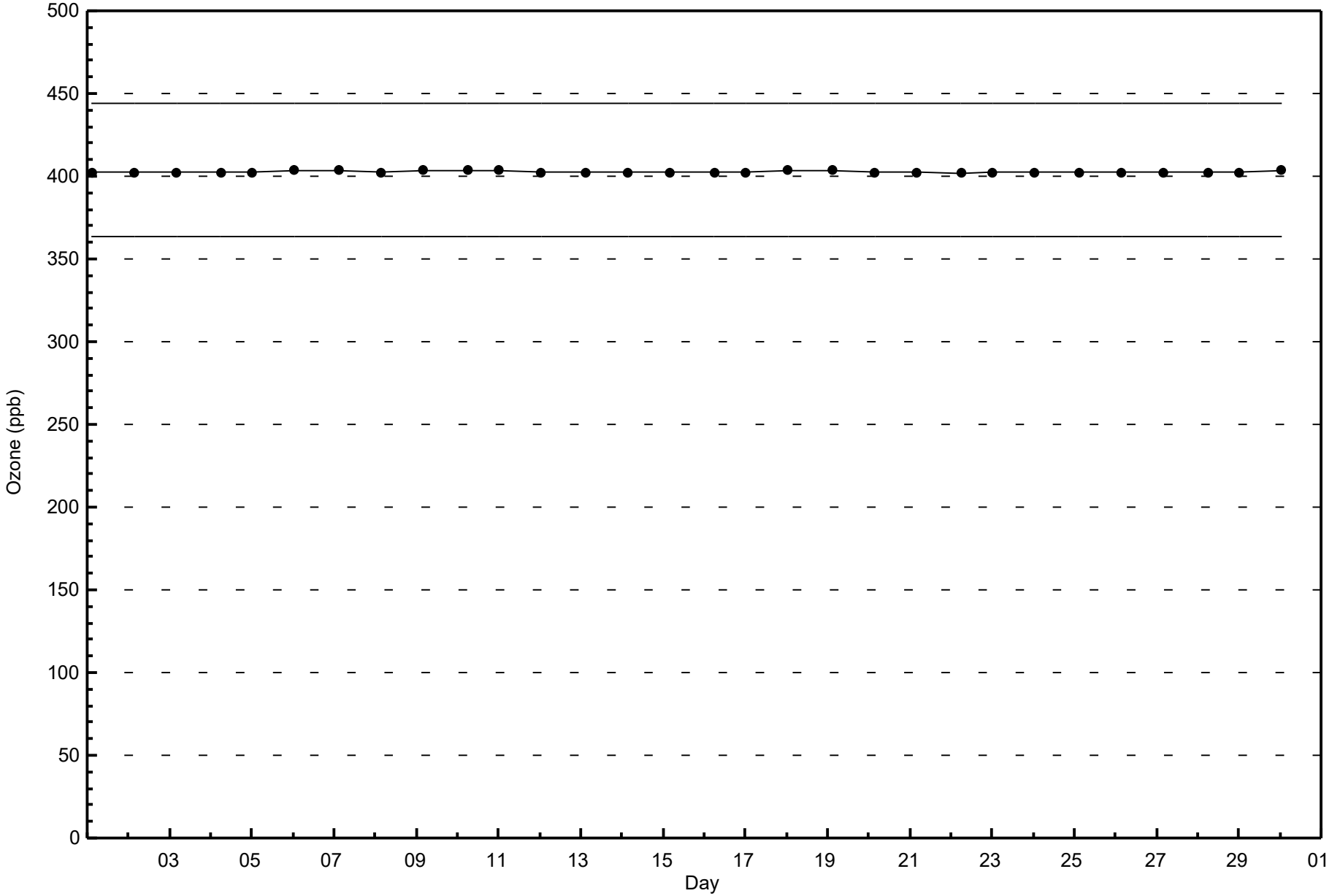


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Fort Chipewyan - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Fort Chipewyan - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 2

Maximum Value: 79.7 $\mu g/m^3$ on Jun 29 16:00

Maximum Daily Average: 52.4 $\mu g/m^3$ on Jun 30

Minimum Value: 0.3 $\mu g/m^3$ on Jun 19 18:00

Maximum Diurnal Average: 8.7 $\mu g/m^3$ at hour 16

Monthly Average: 6.99 $\mu g/m^3$

Minimum Daily Average: 0.9 $\mu g/m^3$ on Jun 19

Minimum Diurnal Average: 5.0 $\mu g/m^3$ at hour 20

Percentiles: $P_1 = 0.5$ $P_{10} = 1.0$ $Q_1 = 1.5$ Median = 3.0 $Q_3 = 6.6$ $P_{90} = 12.9$ $P_{99} = 72.4$

Hours in Service:	720
Hours of Data:	703
Hours of Missing Data:	17
Hours of Calibration:	1
Percent Operational Time:	97.8

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	1.0	0.9	0.7	0.9	1.1	1.1	1.1	1.0	--	1.1
2-Jun	1.0	1.2	1.4	1.0	0.8	0.9	0.7	0.6	0.5	0.5	0.7	0.9	1.4	2.3	2.5	2.3	2.0	1.8	1.8	1.8	2.1	2.2	2.3	1.8	1.4	2.5
3-Jun	1.6	1.5	1.6	1.6	1.6	1.5	1.5	1.6	1.7	1.5	1.4	1.4	1.6	2.4	3.1	3.5	3.6	3.6	3.7	3.6	6.1	6.6	11.7	15.1	3.5	15.1
4-Jun	13.4	14.0	14.0	12.6	11.7	10.6	9.5	8.6	8.0	6.6	6.5	7.4	8.0	9.4	7.9	7.8	7.8	8.5	9.3	7.8	7.9	8.6	8.9	8.7	9.3	14.0
5-Jun	8.6	8.5	8.7	11.3	13.6	13.4	12.2	9.0	8.1	7.3	6.6	4.7	3.0	2.8	2.8	2.5	2.5	2.4	2.5	2.8	3.7	3.7	2.8	3.6	6.1	13.6
6-Jun	3.9	4.1	4.4	4.1	4.4	4.7	6.0	13.5	8.2	9.0	8.0	11.8	10.2	7.9	6.1	5.1	5.0	4.1	3.5	3.0	2.6	2.2	1.9	1.8	5.6	13.5
7-Jun	1.6	2.2	2.3	1.5	1.7	2.0	1.4	0.8	0.5	0.7	0.8	0.6	0.5	0.5	0.4	0.7	0.4	0.4	0.6	0.8	1.3	2.8	2.8	3.3	1.3	3.3
8-Jun	3.8	3.8	4.0	3.8	3.8	3.3	2.8	2.0	2.3	2.9	3.2	3.5	3.6	3.3	2.6	2.6	1.6	1.2	0.9	0.5	0.7	0.9	0.9	0.9	2.5	4.0
9-Jun	0.7	0.7	0.8	0.6	0.7	0.6	0.6	1.0	1.5	1.9	1.7	1.2	2.0	2.9	3.0	3.3	3.8	4.3	3.4	2.9	2.8	3.0	3.2	3.2	2.1	4.3
10-Jun	3.1	3.5	3.3	2.4	2.1	2.1	1.3	1.1	1.2	1.0	1.3	1.0	1.1	1.4	1.8	1.8	2.1	1.9	1.9	1.5	1.3	1.1	1.1	0.9	1.7	3.5
11-Jun	1.0	0.9	1.0	1.2	1.0	1.1	1.0	1.1	0.8	0.9	0.8	1.0	1.2	1.1	1.3	1.7	1.5	1.0	0.7	0.8	1.0	1.4	2.6	2.5	1.2	2.6
12-Jun	2.0	1.7	1.7	1.7	1.5	1.3	1.3	1.1	1.2	1.6	1.4	1.6	1.6	1.7	1.9	2.3	2.0	1.9	1.8	1.8	2.2	2.6	2.5	2.7	1.8	2.7
13-Jun	2.4	2.5	2.5	2.7	2.7	2.7	3.0	2.5	2.5	2.4	2.3	2.6	2.6	2.7	2.9	3.0	2.9	2.9	2.9	3.0	3.1	3.1	3.1	3.4	2.8	3.4
14-Jun	3.9	3.7	3.6	3.7	3.7	3.7	3.6	3.6	3.5	3.5	3.6	3.8	3.8	3.9	3.8	4.0	3.7	3.8	3.5	3.4	3.2	3.0	2.8	2.8	3.6	4.0
15-Jun	2.9	3.2	3.1	2.9	2.9	2.8	2.8	2.9	3.0	3.0	2.9	2.9	2.6	2.6	2.3	2.4	2.7	2.8	3.0	2.9	3.0	3.1	2.9	3.1	2.9	3.2
16-Jun	3.1	2.8	2.6	1.9	1.8	1.5	1.4	1.6	1.7	2.3	2.5	2.2	2.2	2.2	2.6	2.5	2.3	2.2	1.9	1.8	1.8	1.9	2.0	1.8	2.1	3.1
17-Jun	1.7	1.6	1.5	1.4	1.4	1.4	1.5	1.4	1.1	1.0	1.0	1.1	1.3	1.4	1.5	1.4	2.0	1.5	0.9	1.1	1.2	1.4	1.2	1.5	1.3	2.0
18-Jun	1.4	1.4	1.4	1.9	1.9	2.0	1.7	1.2	1.2	2.0	1.9	2.2	1.8	1.8	2.1	2.7	2.3	1.8	1.6	1.8	1.5	2.0	2.2	1.7	1.8	2.7
19-Jun	1.6	1.5	1.2	1.4	1.3	1.0	0.8	0.9	0.9	1.0	0.8	0.7	0.9	0.6	0.8	0.6	0.6	0.3	0.4	0.7	1.1	0.8	0.8	0.9	0.9	1.6
20-Jun	1.0	1.1	1.4	1.5	1.4	1.6	1.7	1.6	1.4	1.3	1.4	1.2	1.2	1.1	0.8	0.9	0.6	0.4	0.5	0.7	1.4	1.3	1.2	1.3	1.2	1.7
21-Jun	1.3	1.7	1.5	1.6	1.5	1.6	2.2	2.5	2.8	2.9	2.8	3.1	3.3	3.2	3.2	3.0	3.1	3.2	3.6	3.4	3.4	3.4	4.5	4.1	2.8	4.5
22-Jun	4.8	3.6	3.6	3.5	3.2	3.3	3.2	3.3	3.4	3.4	3.8	4.2	4.0	3.9	3.9	3.7	3.4	3.1	3.1	3.3	3.5	3.7	3.5	3.7	3.6	4.8
23-Jun	3.6	3.6	3.7	3.7	3.7	3.8	3.4	3.2	3.3	3.6	3.9	4.0	4.3	4.6	C	4.3	4.3	4.3	4.5	6.9	6.7	6.5	4.4	5.2	4.3	6.9
24-Jun	8.4	11.8	11.8	11.2	11.7	12.8	12.9	14.2	12.8	12.7	10.1	11.3	12.6	12.7	13.8	13.5	17.7	17.1	14.2	11.9	13.6	11.1	8.6	6.8	12.3	17.7
25-Jun	5.8	6.2	6.8	6.8	7.0	7.1	7.2	7.4	8.5	7.7	7.6	7.0	6.6	6.2	6.9	7.7	7.7	7.3	7.0	7.1	7.3	7.2	6.2	5.8	7.0	8.5
26-Jun	5.8	5.7	5.8	6.3	6.4	7.2	8.9	9.5	9.7	9.2	8.4	8.7	7.4	6.5	6.6	6.9	6.7	6.5	6.7	6.3	6.3	6.3	5.8	5.3	7.0	9.7
27-Jun	5.4	5.8	5.8	5.8	6.0	5.8	5.7	6.1	6.3	6.1	6.0	5.9	6.3	6.2	6.1	6.2	6.4	6.6	6.1	6.3	6.4	8.2	10.3	8.7	6.4	10.3
28-Jun	8.0	10.8	13.1	16.7	13.2	12.3	13.5	14.4	14.0	15.9	15.4	15.7	17.3	13.1	9.3	9.3	14.6	14.3	12.1	10.8	10.7	11.3	11.1	11.0	12.8	17.3
29-Jun	10.9	11.9	11.7	12.0	20.0	35.7	38.8	46.3	42.1	40.7	69.6	41.1	47.6	60.6	61.4	79.7	72.5	72.5	54.2	38.3	42.7	41.3	39.7	35.9	42.8	79.7
30-Jun	42.4	60.9	76.6	78.5	73.2	71.3	65.8	65.0	62.6	62.7	61.6	68.5	76.4	74.6	66.3	66.4	49.1	28.0	15.7	11.6	13.2	14.9	18.2	33.3	52.4	78.5
	5.4	6.3	6.9	7.1	7.1	7.6	7.5	7.9	7.4	7.4	8.2	7.6	8.1	8.4	8.1	8.7	7.9	7.0	5.8	5.0	5.4	5.6	5.7	6.1	Diurnal Average	
	42.4	60.9	76.6	78.5	73.2	71.3	65.8	65.0	62.6	62.7	69.6	68.5	76.4	74.6	66.3	79.7	72.5	72.5	54.2	38.3	42.7	41.3	39.7	35.9	Diurnal Maximum	

C - Calibration UO - Unstable Operation

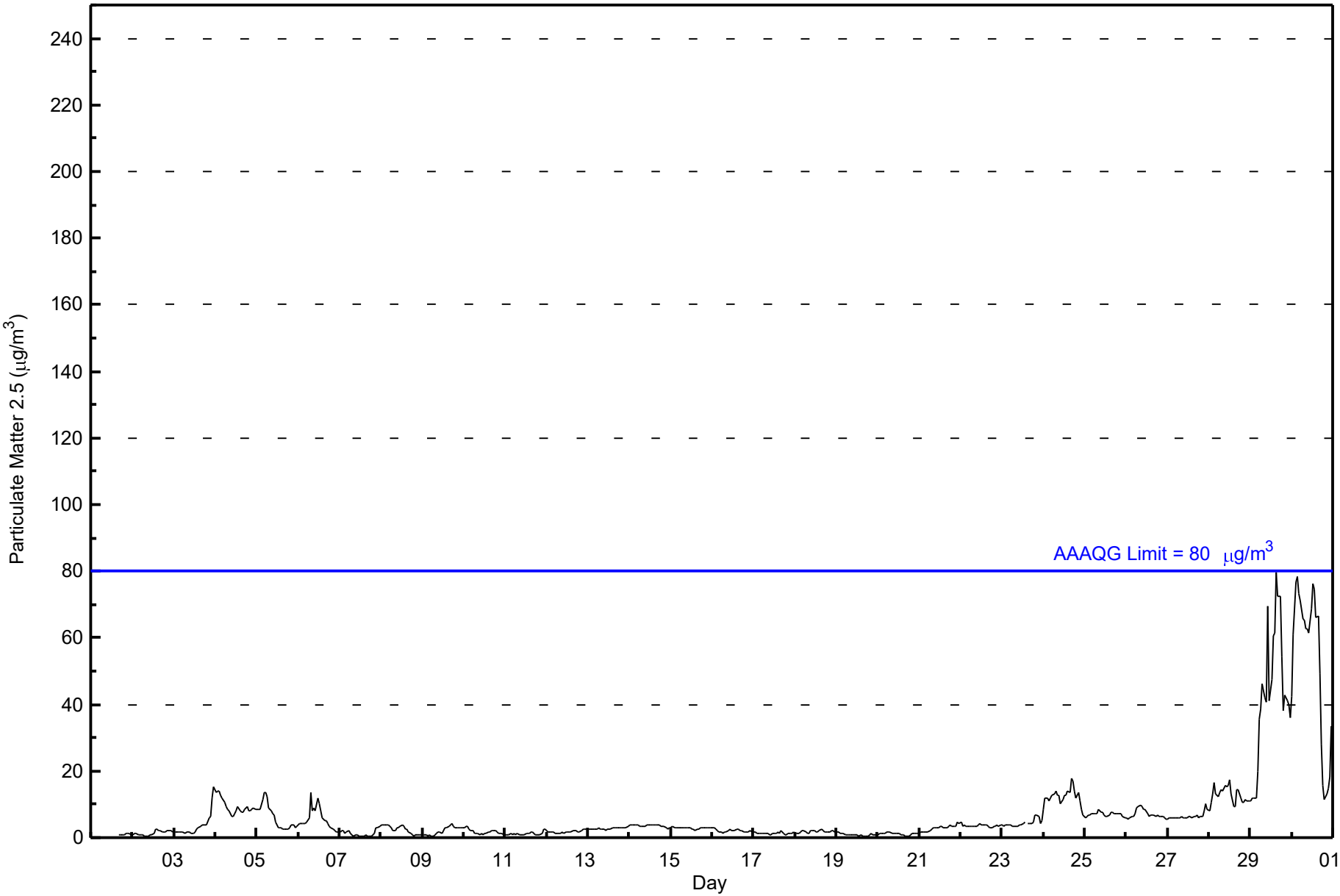
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Fort Chipewyan - June 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Fort Chipewyan - June 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	486	69.13	69.13
6 - 15	170	24.18	93.31
16 - 25	9	1.28	94.59
26 - 80	38	5.41	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 703

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

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

Fort Chipewyan - June 2026

Concentration Ranges ($\mu g/m^3$)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 5	33	19	57	83	88	19	4	5	2	2	10	13	13	10	29	99	486
6 - 15	1	0	14	38	49	10	12	7	22	2	8	0	0	0	1	6	170
16 - 25	0	0	2	2	3	2	0	0	0	0	0	0	0	0	0	0	9
26 - 80	0	0	8	15	12	1	2	0	0	0	0	0	0	0	0	0	38
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	34	19	81	138	152	32	18	12	24	4	18	13	13	10	30	105	703

Total Number of Valid Hours: 703

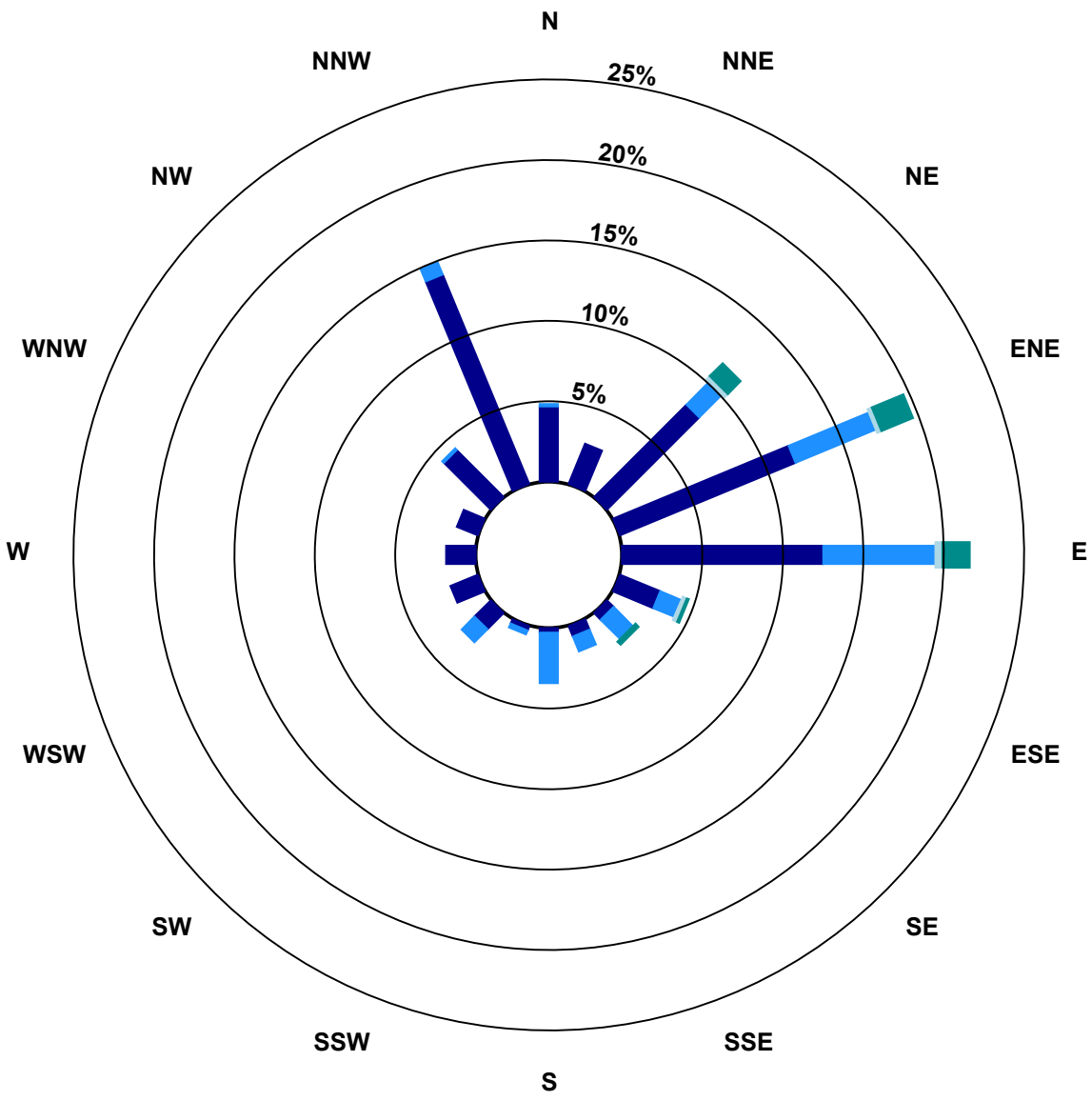
Total Number of Hours: 720

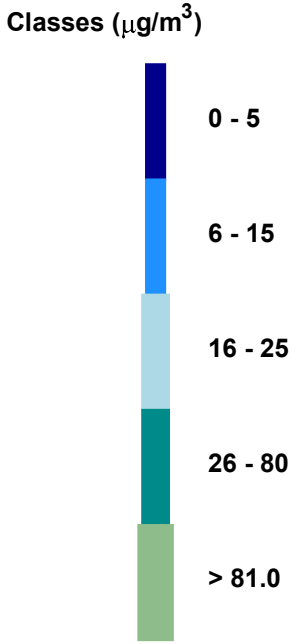
Wood Buffalo Environmental Association

Wind Rose Jun 2026

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

Fort Chipewyan





Total Number of Valid Hours: 703

Maximum Value: 28.5 C on Jun 28 18:00
Maximum Daily Average: 24.3 C on Jun 28

Minimum Value: 5.6 C on Jun 7 08:00
Minimum Daily Average: 8.5 C on Jun 7
Maximum Diurnal Average: 18.8 C at hour 17
Minimum Diurnal Average: 13.1 C at hour 5
Monthly Average: 16.13 C
Percentiles: P_1 = 6.7 P_{10} = 9.3 Q_1 = 11.6 Median = 15.5 Q_3 = 20.7 P_{90} = 23.8 P_{99} = 27.2

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

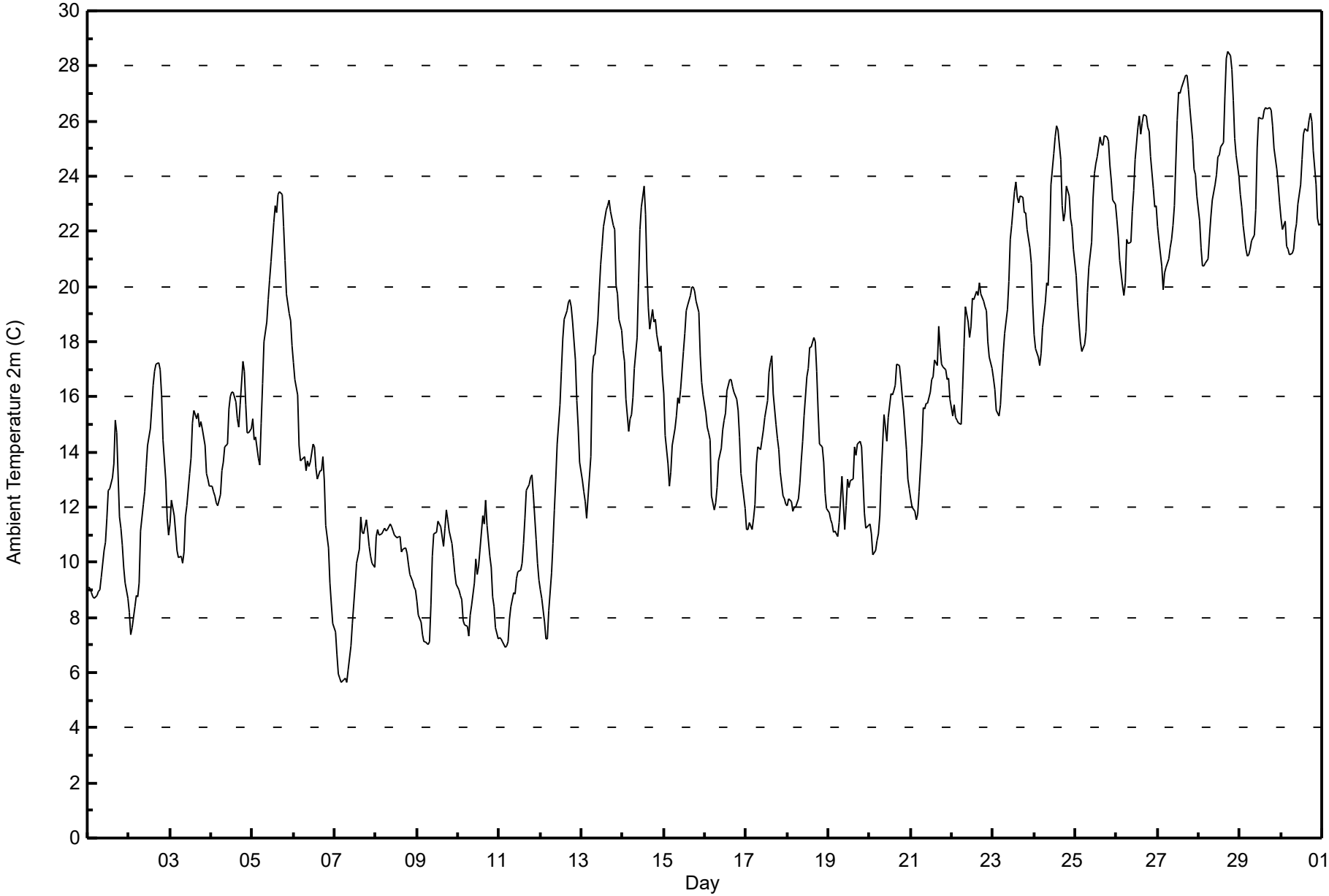
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	9.1	9.0	8.9	8.8	8.7	8.8	8.9	9.0	9.4	10.4	10.7	11.6	12.6	12.6	13.1	13.6	15.1	14.7	11.6	11.2	10.6	9.8	9.3	8.7	10.7	15.1
2-Jun	8.2	7.4	7.6	8.4	8.8	8.8	9.3	11.1	12.1	12.6	13.4	14.2	14.8	15.6	16.4	16.9	17.2	17.2	17.0	16.1	14.4	13.0	11.6	11.0	12.6	17.2
3-Jun	11.4	12.2	11.7	11.1	10.4	10.2	10.2	10.0	10.4	11.6	12.0	13.2	13.8	15.0	15.5	15.2	15.4	14.9	15.1	14.8	14.2	13.2	13.0	12.8	12.8	15.5
4-Jun	12.8	12.6	12.4	12.2	12.0	12.5	13.3	13.6	14.2	14.3	15.5	16.0	16.2	16.2	15.8	15.2	14.9	15.7	17.3	16.9	15.7	14.7	14.7	14.9	14.6	17.3
5-Jun	15.2	14.4	14.6	13.8	13.5	15.0	16.5	18.0	18.7	19.5	20.2	20.9	22.3	23.0	22.7	23.3	23.5	23.3	22.2	21.0	19.7	19.0	18.7	17.9	19.0	23.5
6-Jun	17.2	16.6	16.1	14.3	13.7	13.7	13.8	13.3	13.7	13.5	13.6	14.3	14.2	13.4	13.0	13.3	13.3	13.9	13.0	11.3	10.5	9.3	8.5	7.8	13.1	17.2
7-Jun	7.5	6.7	5.9	5.8	5.6	5.7	5.8	5.6	6.1	7.0	7.8	8.5	9.2	10.0	10.5	11.6	11.1	11.0	11.5	11.1	10.6	10.2	10.0	9.8	8.5	11.6
8-Jun	10.9	11.2	11.0	11.0	11.1	11.2	11.1	11.2	11.4	11.3	11.1	11.0	10.9	10.9	10.9	10.4	10.5	10.6	10.3	9.9	9.6	9.3	9.1	9.0	10.6	11.4
9-Jun	8.6	8.1	7.8	7.4	7.1	7.1	7.0	7.1	8.4	10.2	11.0	11.1	11.5	11.4	11.3	10.6	11.3	11.9	11.5	11.1	10.7	10.2	9.6	9.2	9.6	11.9
10-Jun	9.0	8.8	8.7	7.9	7.7	7.7	7.3	8.1	8.4	9.2	10.1	9.6	9.8	10.5	11.7	11.4	12.2	11.4	10.2	9.8	8.8	8.4	7.6	7.2	9.2	12.2
11-Jun	7.3	7.2	7.1	6.9	7.0	7.1	7.9	8.4	8.9	8.8	9.4	9.6	9.7	10.0	10.7	11.6	12.6	12.8	13.1	13.2	12.4	10.9	10.0	9.3	9.7	13.2
12-Jun	9.0	8.7	7.8	7.2	7.2	8.2	9.6	10.7	11.9	13.0	14.3	15.7	16.9	18.1	18.8	19.1	19.4	19.5	19.3	18.7	17.3	15.8	14.9	13.7	14.0	19.5
13-Jun	13.0	12.6	12.2	11.6	12.3	13.8	16.8	17.5	17.6	18.8	19.8	20.8	21.5	22.2	22.8	22.9	23.1	22.7	22.2	22.1	20.0	19.7	18.8	18.4	18.5	23.1
14-Jun	17.7	17.3	15.9	14.7	15.2	15.3	16.0	17.0	18.2	20.2	22.1	22.9	23.6	22.6	20.6	19.2	18.5	19.2	18.7	18.8	18.2	17.7	17.8	16.8	18.5	23.6
15-Jun	16.1	14.6	13.6	12.8	13.3	14.2	14.9	15.3	16.0	15.7	16.3	17.7	18.3	19.1	19.3	19.7	20.0	20.0	19.8	19.5	19.1	17.5	16.5	16.1	16.9	20.0
16-Jun	15.4	14.9	14.7	14.5	12.4	11.9	12.1	12.7	13.7	14.2	14.8	15.2	15.4	16.2	16.6	16.6	16.4	16.2	15.9	15.5	14.5	13.2	12.8	11.9	14.5	16.6
17-Jun	11.2	11.2	11.5	11.2	11.6	12.1	13.6	14.2	14.1	14.5	14.8	15.3	15.9	16.9	17.2	17.5	16.1	15.0	14.5	14.1	13.3	12.4	12.3	12.1	13.8	17.5
18-Jun	12.0	12.3	12.2	11.8	12.0	12.0	12.3	12.9	13.7	14.4	15.3	16.7	17.0	17.8	17.8	18.1	18.0	16.9	15.5	14.3	14.2	13.6	12.5	11.9	14.4	18.1
19-Jun	11.8	11.5	11.4	11.1	11.1	10.9	11.5	12.3	13.1	11.2	12.1	13.0	12.7	13.0	13.0	14.2	13.9	14.3	14.4	14.2	13.0	11.8	11.3	11.3	12.4	14.4
20-Jun	11.4	11.0	10.2	10.4	10.8	11.0	11.7	13.2	15.3	14.9	14.4	15.3	16.1	16.1	16.2	16.4	17.2	17.2	16.6	16.0	15.5	14.1	13.0	12.7	14.0	17.2
21-Jun	12.3	12.0	11.9	11.5	11.7	12.5	14.3	15.6	15.5	15.8	15.7	16.2	16.6	16.7	17.4	17.1	18.6	17.8	17.2	17.1	17.0	16.6	16.7	15.9	15.4	18.6
22-Jun	15.3	15.7	15.3	15.1	15.1	15.0	16.3	17.8	19.3	18.7	18.2	18.6	19.6	19.5	19.8	19.7	20.2	19.7	19.5	19.3	19.1	18.0	17.4	17.1	17.9	20.2
23-Jun	16.7	16.3	15.5	15.3	15.7	16.7	17.6	18.3	19.2	20.2	21.7	22.2	23.4	23.8	23.2	23.1	23.3	23.2	22.7	22.7	22.1	21.4	20.9	19.4	20.2	23.8
24-Jun	18.3	17.7	17.4	17.2	17.6	18.5	19.4	20.2	20.0	21.4	23.7	24.8	25.4	25.8	25.7	24.6	23.0	22.4	22.7	23.7	23.3	22.5	22.2	21.3	21.6	25.8
25-Jun	20.4	19.4	18.7	18.0	17.7	17.9	18.3	19.8	20.7	21.6	23.2	24.1	24.4	24.7	25.4	25.2	25.1	25.5	25.4	25.3	24.4	23.9	23.1	23.0	22.3	25.5
26-Jun	22.4	21.8	20.9	20.0	19.7	20.1	21.7	21.6	21.6	22.7	23.5	24.6	25.8	26.2	25.5	25.9	26.2	26.2	25.8	25.6	24.7	23.5	22.9	22.9	23.4	26.2
27-Jun	22.2	21.6	20.7	19.9	20.5	20.7	21.0	21.4	21.7	22.2	22.9	26.0	27.0	27.0	27.2	27.5	27.7	27.7	27.2	26.5	25.3	24.3	24.1	23.3	24.0	27.7
28-Jun	22.4	21.4	20.8	20.8	20.9	21.0	21.8	22.5	23.1	23.7	24.0	24.7	24.8	25.0	25.2	26.9	28.3	28.5	28.4	27.9	26.8	25.4	24.8	24.0	24.3	28.5
29-Jun	23.3	22.9	22.2	21.4	21.1	21.1	21.3	21.7	21.8	22.8	25.0	26.1	26.1	26.1	26.4	26.5	26.4	26.5	26.4	25.8	25.0	24.3	23.7	23.0	24.0	26.5
30-Jun	22.5	22.1	22.4	21.5	21.3	21.2	21.2	21.3	22.0	22.3	23.0	23.7	24.6	25.5	25.7	25.6	26.0	26.3	26.0	24.9	23.7	22.5	22.2	22.3	23.3	26.3
	14.3	14.0	13.6	13.1	13.1	13.4	14.1	14.7	15.3	15.9	16.7	17.5	18.0	18.4	18.5	18.6	18.8	18.7	18.4	17.9	17.1	16.2	15.7	15.2	Diurnal Average	
	23.3	22.9	22.4	21.5	21.3	21.2	21.8	22.5	23.1	23.7	25.0	26.1	27.0	27.0	27.2	27.5	28.3	28.5	28.4	27.9	26.8	25.4	24.8	24.0	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Fort Chipewyan - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	95	13.19	13.19
10 - 20	432	60.00	73.19
> 20	193	26.81	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 99.8 % on Jun 8 13:00

Maximum Daily Average: 98.9 % on Jun 8

Minimum Value: 28.6 % on Jun 30 19:00

Minimum Daily Average: 46.2 % on Jun 13

Maximum Diurnal Average: 77.6 % at hour 6

Minimum Diurnal Average: 55.6 % at hour 18

Monthly Average: 66.46 %

Percentiles: P_1 = 31.5 P_{10} = 42.1 Q_1 = 53.2 Median = 66.4 Q_3 = 79.4 P_{90} = 92.0 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

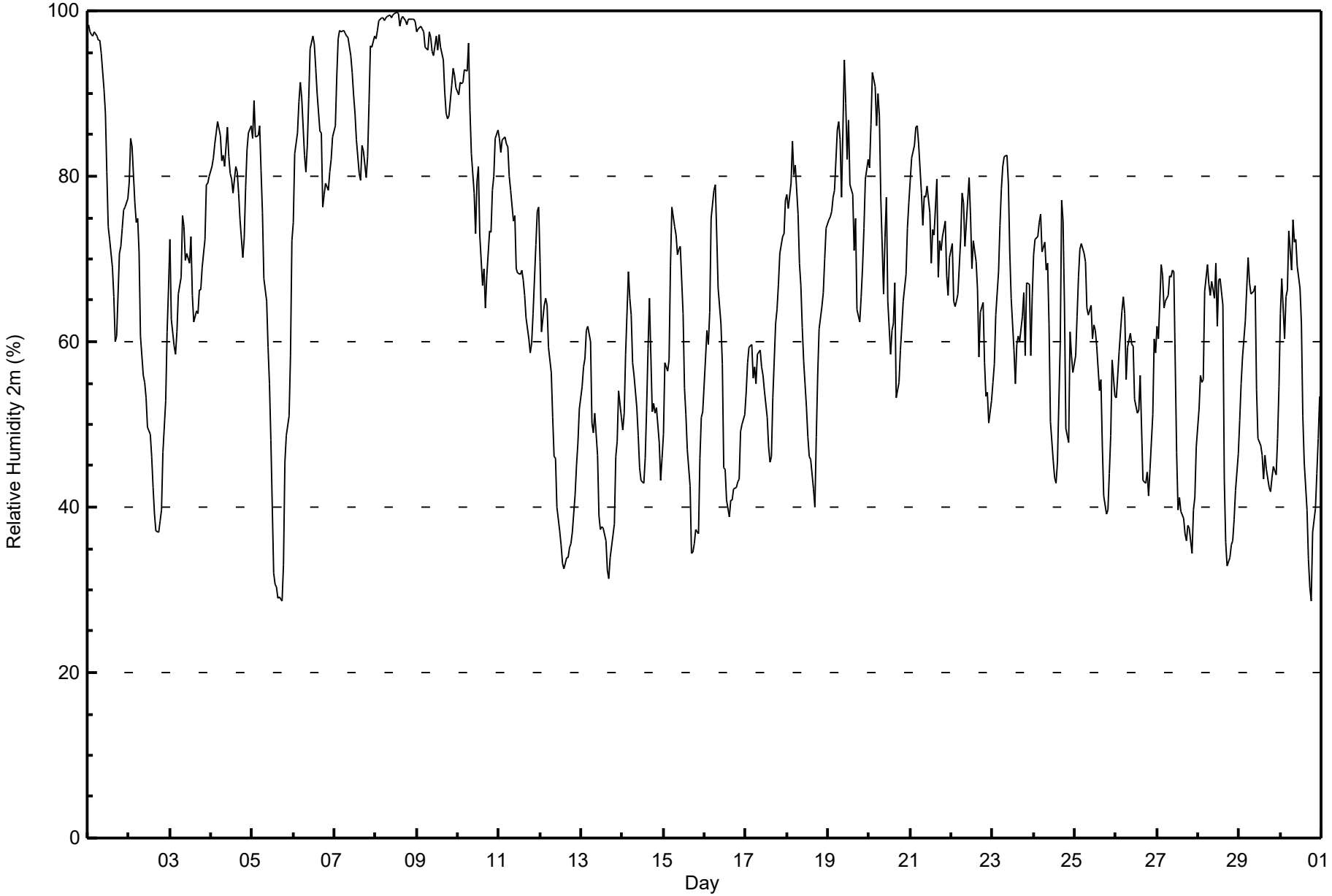
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	98.3	97.5	97.1	97.0	97.4	96.9	96.5	96.5	95.0	90.4	87.6	80.5	74.0	72.3	68.9	65.4	60.0	60.6	70.7	71.6	73.7	76.0	76.2	77.3	82.4	98.3
2-Jun	79.3	84.5	83.6	76.7	74.5	74.9	70.8	60.6	56.0	55.1	53.2	49.6	48.8	46.1	42.4	39.2	37.1	37.0	38.3	39.7	46.6	52.9	61.2	66.4	57.3	84.5
3-Jun	72.4	62.8	59.5	58.5	61.2	65.7	67.8	75.2	73.9	69.9	70.7	69.6	72.7	65.7	62.4	63.7	63.5	66.3	66.2	69.1	72.4	79.0	79.1	80.0	68.6	80.0
4-Jun	81.3	82.3	83.8	85.3	86.7	85.0	81.9	82.5	81.2	86.0	82.4	80.3	79.7	77.9	81.2	80.6	78.0	74.8	70.2	72.6	78.6	83.1	85.3	86.1	81.1	86.7
5-Jun	84.6	89.1	84.7	84.9	86.1	80.7	75.5	67.7	64.9	59.4	54.9	48.2	32.0	30.7	30.3	29.0	29.1	28.7	33.1	45.5	48.6	51.0	58.3	72.2	57.0	89.1
6-Jun	74.5	82.8	85.3	88.9	91.4	89.5	82.6	80.5	83.6	89.4	95.4	96.9	95.9	93.0	90.0	85.3	85.2	76.3	77.8	79.1	78.2	80.6	82.0	84.8	85.4	96.9
7-Jun	86.0	92.0	96.7	97.6	97.5	97.6	97.2	97.0	96.9	94.5	92.5	89.8	87.7	84.4	80.3	79.6	83.7	83.1	79.9	82.4	88.8	95.7	95.6	97.0	90.6	97.6
8-Jun	96.6	97.7	98.9	99.1	99.1	98.8	99.2	99.4	99.4	99.2	99.6	99.7	99.8	99.7	98.2	99.0	99.4	98.9	98.4	99.0	98.9	98.9	99.0	98.6	98.9	99.8
9-Jun	97.5	97.8	98.1	97.7	97.4	95.5	95.3	97.5	96.8	95.1	94.5	96.9	95.2	97.0	95.6	94.1	90.2	87.7	87.0	87.3	91.1	93.1	92.2	90.6	94.2	98.1
10-Jun	89.9	91.4	91.1	91.3	92.8	92.7	96.1	88.0	82.7	78.0	73.1	79.3	81.2	72.9	66.8	68.8	64.1	67.9	73.4	73.2	78.2	80.1	84.5	85.7	81.0	96.1
11-Jun	84.5	82.9	84.5	84.7	83.8	83.6	80.0	78.3	74.7	75.3	68.7	68.3	68.2	68.7	67.5	65.5	62.9	60.3	58.6	59.7	63.5	71.7	75.8	76.3	72.8	84.7
12-Jun	69.6	61.2	64.4	65.2	64.5	59.3	56.2	50.8	46.2	46.0	40.1	37.2	35.4	33.2	32.6	33.9	33.9	35.1	35.6	36.9	41.4	45.0	47.9	51.9	46.8	69.6
13-Jun	54.6	57.0	58.0	61.4	61.8	60.0	50.1	49.0	51.3	46.3	39.0	37.3	37.5	37.5	35.9	32.3	31.3	33.8	36.5	38.0	46.0	47.9	54.1	50.8	46.2	61.8
14-Jun	49.3	51.3	58.5	68.5	65.3	63.2	57.4	56.0	52.1	48.6	44.8	43.3	42.8	46.0	52.0	59.2	65.2	51.5	52.5	51.4	52.0	47.8	43.3	46.0	52.8	68.5
15-Jun	48.8	57.5	56.5	57.7	69.2	76.3	73.9	72.9	70.6	71.3	71.5	63.4	54.4	51.2	47.0	42.6	34.5	34.5	35.7	37.2	36.7	45.9	50.9	51.6	54.7	76.3
16-Jun	58.0	61.4	59.7	63.6	74.9	78.4	78.9	72.8	66.4	62.3	57.2	44.7	44.6	40.9	38.8	40.9	40.9	42.2	42.4	43.0	43.4	49.2	50.1	51.2	54.4	78.9
17-Jun	54.0	57.5	59.2	59.7	55.6	56.9	55.0	58.5	59.0	56.9	55.9	54.0	50.8	47.3	45.4	46.1	53.2	62.3	63.9	67.0	70.8	72.8	73.0	77.1	58.8	77.1
18-Jun	77.9	76.2	79.1	84.2	80.1	81.4	75.5	69.5	66.8	61.7	57.7	52.0	48.5	46.1	45.8	42.1	40.0	48.5	56.0	61.5	64.2	66.0	69.9	73.6	63.5	84.2
19-Jun	74.8	75.0	75.8	77.4	78.3	85.6	86.6	84.3	77.5	94.0	88.8	82.1	86.7	79.0	77.8	71.0	75.0	63.9	62.4	65.5	69.0	73.7	79.7	82.0	77.7	94.0
20-Jun	81.0	86.3	92.6	90.9	86.1	90.0	87.4	77.5	65.8	72.5	77.4	65.0	58.5	61.4	62.1	67.2	53.3	55.1	59.0	61.8	64.9	68.1	73.8	76.8	72.3	92.6
21-Jun	79.6	82.3	83.7	86.0	86.2	83.9	78.0	74.1	77.6	77.5	78.7	75.6	69.6	73.5	72.9	79.6	67.7	72.3	71.0	72.8	74.6	68.0	65.6	70.1	75.9	86.2
22-Jun	71.9	64.9	64.2	65.0	65.7	72.5	78.0	76.8	71.6	77.0	79.8	75.3	68.8	72.1	69.6	66.3	58.1	63.6	64.8	57.5	53.5	53.9	50.2	52.8	66.4	79.8
23-Jun	55.2	57.4	63.2	68.4	74.0	78.5	81.2	82.3	82.5	79.2	70.9	65.3	59.0	54.9	59.7	60.7	60.0	63.1	66.0	58.3	67.2	66.9	58.3	65.4	66.6	82.5
24-Jun	70.5	72.4	72.7	74.4	75.3	70.9	72.0	68.7	69.4	62.1	50.3	45.5	43.5	42.9	45.4	59.8	77.1	74.6	64.4	49.6	47.8	61.2	58.2	56.3	61.9	77.1
25-Jun	58.2	63.0	67.8	71.2	71.8	70.6	69.6	64.1	63.3	64.4	60.4	62.0	61.3	59.5	54.0	55.4	47.4	41.4	39.1	39.7	44.1	48.6	57.8	53.3	57.8	71.8
26-Jun	53.3	56.0	58.8	63.7	65.4	63.4	55.4	59.4	61.0	59.6	59.4	53.0	51.4	51.6	55.9	49.5	43.1	42.9	44.3	41.3	44.5	51.2	60.4	58.6	54.3	65.4
27-Jun	61.8	60.3	69.3	67.9	64.0	64.9	65.7	68.0	67.8	68.6	68.5	46.5	39.6	41.2	39.5	38.6	36.8	35.9	37.8	37.5	34.4	39.6	41.2	47.3	51.8	69.3
28-Jun	51.8	56.0	55.1	55.4	66.0	69.3	66.9	65.5	67.3	65.2	69.5	61.8	67.4	67.7	64.5	43.4	35.7	32.9	34.0	35.4	36.0	38.5	42.0	46.4	53.9	69.5
29-Jun	50.5	54.9	58.1	62.6	66.5	70.2	67.1	65.7	66.1	66.8	54.3	48.3	47.4	46.4	43.5	46.2	44.6	42.4	41.8	43.6	44.9	44.0	48.2	54.6	53.3	70.2
30-Jun	63.4	67.6	60.3	65.5	66.4	73.3	68.6	74.8	72.0	72.4	69.1	66.4	62.2	51.1	45.5	39.7	33.7	30.3	28.6	36.9	39.8	44.1	48.4	53.4	55.6	74.8
	71.0	72.6	74.0	75.7	76.8	77.6	75.5	73.8	72.0	71.5	68.9	64.6	62.2	60.4	59.0	58.2	56.2	55.6	56.3	57.1	59.8	63.1	65.4	67.8	Diurnal Average	
	98.3	97.8	98.9	99.1	99.1	98.8	99.2	99.4	99.4	99.2	99.6	99.7	99.8	99.7	98.2	99.0	99.4	98.9	98.4	99.0	98.9	98.9	99.0	98.6	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Fort Chipewyan - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	60	8.33	8.33
40 - 60	203	28.19	36.53
60 - 80	285	39.58	76.11
80 - 100	172	23.89	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 43.8 % on Jun 7 03:00

Maximum Daily Average: 31.5 % on Jun 8

Minimum Value: 0.1 % on Jun 13 12:00

Minimum Daily Average: 0.7 % on Jun 28

Maximum Diurnal Average: 6.1 % at hour 3

Minimum Diurnal Average: 1.7 % at hour 18

Monthly Average: 3.52 %

Percentiles: P_1 = 0.3 P_{10} = 0.6 Q_1 = 0.8 Median = 1.1 Q_3 = 1.5 P_{90} = 7.1 P_{99} = 36.9

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

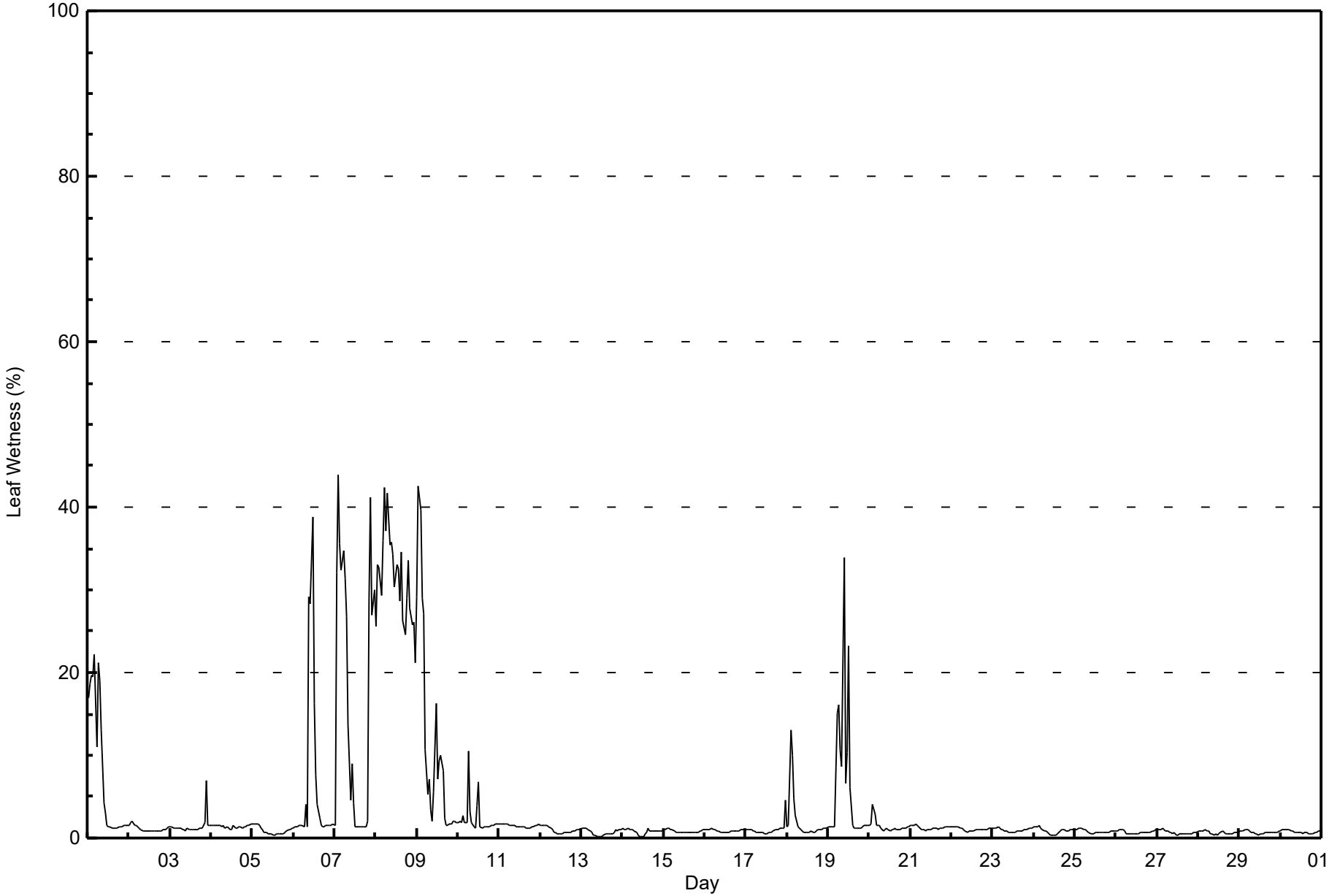
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	16.9	18.7	19.7	19.5	22.2	11.1	21.2	18.9	13.1	4.2	3.1	1.4	1.4	1.3	1.2	1.2	1.1	1.1	1.3	1.3	1.4	1.5	1.5	1.5	7.7	22.2
2-Jun	1.6	1.9	2.0	1.6	1.5	1.4	1.2	1.0	0.9	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.1	2.0
3-Jun	1.3	1.3	1.3	1.2	1.2	1.2	1.1	1.0	1.0	0.9	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.2	1.2	1.8	7.0	1.6	1.5	1.4	7.0
4-Jun	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.6	1.3	1.3	1.1	0.9	1.1	1.5	1.2	1.3	1.3	1.3	1.3	1.3	1.4	1.5	1.6	1.6	1.4	1.6
5-Jun	1.6	1.8	1.7	1.8	1.6	1.3	1.1	0.7	0.6	0.5	0.6	0.5	0.3	0.3	0.5	0.5	0.5	0.5	0.6	0.8	0.9	0.9	1.0	1.1	0.9	1.8
6-Jun	1.3	1.3	1.4	1.5	1.5	1.5	1.4	4.1	1.4	29.1	28.2	38.9	16.3	7.6	4.1	2.4	1.5	1.4	1.4	1.4	1.4	1.5	1.5	1.6	6.4	38.9
7-Jun	1.6	32.0	43.8	35.6	32.4	34.8	31.4	26.7	13.8	4.5	9.0	4.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.0	28.6	41.2	27.0	30.0	17.0	43.8
8-Jun	25.6	33.0	32.7	29.2	36.0	42.3	37.1	41.7	35.4	35.8	34.2	30.3	33.0	32.5	28.7	34.7	26.3	24.5	29.0	33.5	27.9	25.8	26.2	21.2	31.5	42.3
9-Jun	29.1	42.6	39.6	29.0	27.1	10.6	5.3	7.1	3.3	2.1	5.7	16.3	7.1	9.3	10.1	8.1	2.4	1.6	1.6	1.6	1.7	2.0	2.0	1.9	11.1	42.6
10-Jun	1.8	2.0	1.8	2.7	1.8	1.8	10.6	3.1	1.8	1.4	1.2	3.8	6.8	1.4	1.3	1.4	1.3	1.3	1.4	1.5	1.5	1.6	1.6	1.7	2.4	10.6
11-Jun	1.6	1.6	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.5	1.6	1.6	1.5	1.7
12-Jun	1.6	1.5	1.5	1.5	1.5	1.3	1.1	1.0	0.7	0.6	0.5	0.5	0.4	0.5	0.6	0.7	0.7	0.7	0.7	0.8	0.9	1.0	1.0	1.1	0.9	1.6
13-Jun	1.1	1.2	1.2	1.2	1.1	0.9	0.7	0.3	0.4	0.2	0.2	0.1	0.2	0.3	0.4	0.5	0.5	0.5	0.6	0.7	1.0	0.9	1.0	1.0	0.7	1.2
14-Jun	1.2	1.0	1.0	1.1	1.1	1.0	0.9	0.8	0.7	0.4	0.1	0.1	0.2	0.5	0.7	1.2	0.9	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.8	1.2
15-Jun	0.9	1.0	1.1	1.1	1.0	1.0	0.9	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.9	0.9	0.8	1.1
16-Jun	1.0	1.0	1.0	1.1	1.1	1.1	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0	0.9	1.1
17-Jun	1.0	1.1	1.1	1.1	0.9	0.8	0.7	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.2	1.2	4.6	1.0	4.6
18-Jun	1.4	1.5	13.0	10.0	4.8	2.7	1.4	1.3	1.0	0.8	0.7	0.6	0.7	0.7	0.8	0.8	0.7	0.8	0.9	1.0	1.1	1.1	1.2	1.3	2.1	13.0
19-Jun	1.3	1.3	1.3	1.4	1.4	15.0	16.1	10.7	8.7	33.9	6.7	10.3	23.2	6.1	1.5	1.2	1.3	1.2	1.2	1.3	1.3	1.4	1.5	1.5	6.3	33.9
20-Jun	1.5	1.6	4.1	2.9	1.6	1.6	1.5	1.2	0.8	0.9	1.1	1.0	0.8	0.9	1.0	1.1	1.0	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.4	4.1
21-Jun	1.5	1.5	1.6	1.7	1.6	1.3	1.0	1.0	1.0	0.9	1.0	1.0	1.1	1.1	1.1	1.2	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.2	1.7
22-Jun	1.3	1.3	1.3	1.3	1.3	1.3	1.1	1.1	0.8	0.7	0.8	0.8	0.8	0.9	1.0	1.1	1.0	1.1	1.1	1.1	1.0	1.1	1.1	1.1	1.1	1.3
23-Jun	1.2	1.2	1.3	1.3	1.2	1.1	1.0	0.8	0.8	0.7	0.6	0.6	0.6	0.6	0.8	0.9	0.9	0.9	1.0	1.0	1.1	1.1	1.1	1.2	1.0	1.3
24-Jun	1.3	1.4	1.4	1.5	1.2	1.0	0.9	0.8	0.6	0.5	0.4	0.3	0.3	0.4	0.6	0.8	1.0	1.1	1.0	0.9	0.8	1.0	1.0	1.0	0.9	1.5
25-Jun	1.0	1.1	1.1	1.2	1.1	1.1	1.0	0.8	0.7	0.6	0.5	0.5	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.9	0.9	0.8	1.2
26-Jun	0.9	0.9	1.0	1.0	1.0	0.9	0.5	0.5	0.6	0.5	0.5	0.5	0.4	0.5	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.8	0.9	0.9	0.7	1.0
27-Jun	1.0	1.0	1.1	1.1	1.0	0.9	0.8	0.7	0.6	0.6	0.6	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7	1.1
28-Jun	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.6	0.5	0.4	0.4	0.4	0.5	0.6	0.8	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.9
29-Jun	0.8	0.8	0.9	0.9	0.9	0.9	0.8	0.7	0.7	0.6	0.5	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.7	0.9
30-Jun	0.9	1.0	0.9	1.0	1.0	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.7	1.0
	3.5	5.3	6.1	5.3	5.1	4.8	4.9	4.4	3.2	4.2	3.5	4.0	3.5	2.5	2.2	2.3	1.8	1.7	1.9	2.1	2.9	3.5	2.9	2.9	Diurnal Average	
	29.1	42.6	43.8	35.6	36.0	42.3	37.1	41.7	35.4	35.8	34.2	38.9	33.0	32.5	28.7	34.7	26.3	24.5	29.0	33.5	28.6	41.2	27.0	30.0	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Leaf Wetness (LW) - %

Fort Chipewyan - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 0.3	13	1.81	1.81
0.4 - 0.5	52	7.22	9.03
0.6 - 0.7	115	15.97	25.00
0.8 - 1.4	357	49.58	74.58
1.5 - 10	94	13.06	87.64
> 10	66	9.17	96.81

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 4.6 mm on Jun 8 11:00

Maximum Daily Total: 37.0 mm on Jun 8

Minimum Value: 0.0 mm on Jun 1 10:00

Minimum Daily Total: 0.0 mm on Jun 2

Maximum Diurnal Total: 6.9 mm at hour 10

Minimum Diurnal Total: 0.4 mm at hour 18

Monthly Total: 68.51 mm

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.0 P_{90} = 0.0 P_{99} = 2.5

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

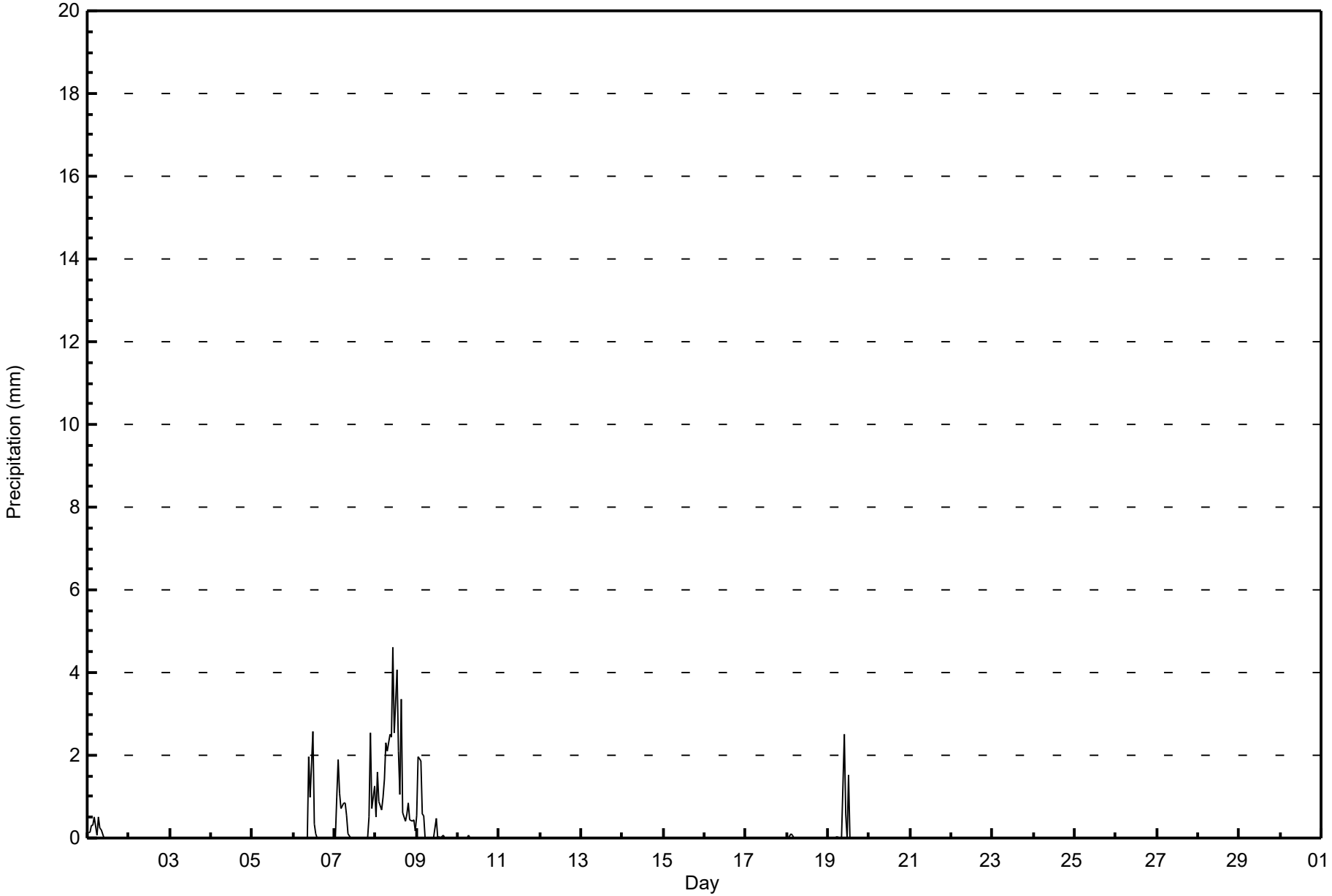
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0.1	0.2	0.3	0.3	0.5	0.1	0.5	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.5
2-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0	2.6	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	2.6
7-Jun	0.0	1.0	1.9	1.1	0.7	0.9	0.9	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	0.5	2.6	0.7	1.2	12.0	2.6
8-Jun	0.5	1.6	0.9	0.7	1.0	1.4	2.3	2.1	2.5	2.5	4.6	2.5	4.1	2.1	1.0	3.4	0.6	0.4	0.6	0.8	0.5	0.4	0.5	0.2	37.0	4.6
9-Jun	0.5	2.0	1.9	0.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	2.0
10-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
11-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	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	0.0	0.2	0.1
19-Jun	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	2.5	0.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	2.5
20-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.2	4.7	5.1	2.7	2.7	2.4	3.7	2.9	2.8	6.9	6.2	5.6	5.9	2.2	1.0	3.4	0.6	0.4	0.6	0.8	1.0	3.0	1.2	1.4	Diurnal Average	
	0.5	2.0	1.9	1.1	1.0	1.4	2.3	2.1	2.5	2.5	4.6	2.6	4.1	2.1	1.0	3.4	0.6	0.4	0.6	0.8	0.5	2.6	0.7	1.2	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Precipitation (PC) - mm

Fort Chipewyan - June 2026



Concentration Ranges (mm)	Number of Hours	%	Cumulative %
0 - 0.3	672	93.33	93.33
0.4 - 0.5	12	1.67	95.00
0.6 - 0.7	7	0.97	95.97
0.8 - 1.4	11	1.53	97.50
1.5 - 10	18	2.50	100.00
> 10	0	0.00	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 893.8 W/m2 on Jun 15 13:00

Maximum Daily Average: 389.2 W/m2 on Jun 15

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

Minimum Daily Average: 34.2 W/m2 on Jun 8

Maximum Diurnal Average: 652.6 W/m2 at hour 13

Minimum Diurnal Average: 0.0 W/m2 at hour 24

Monthly Average: 273.38 W/m2

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 7.3 Median = 161.7 Q_3 = 495.1 P_{90} = 756.7 P_{99} = 866.3

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

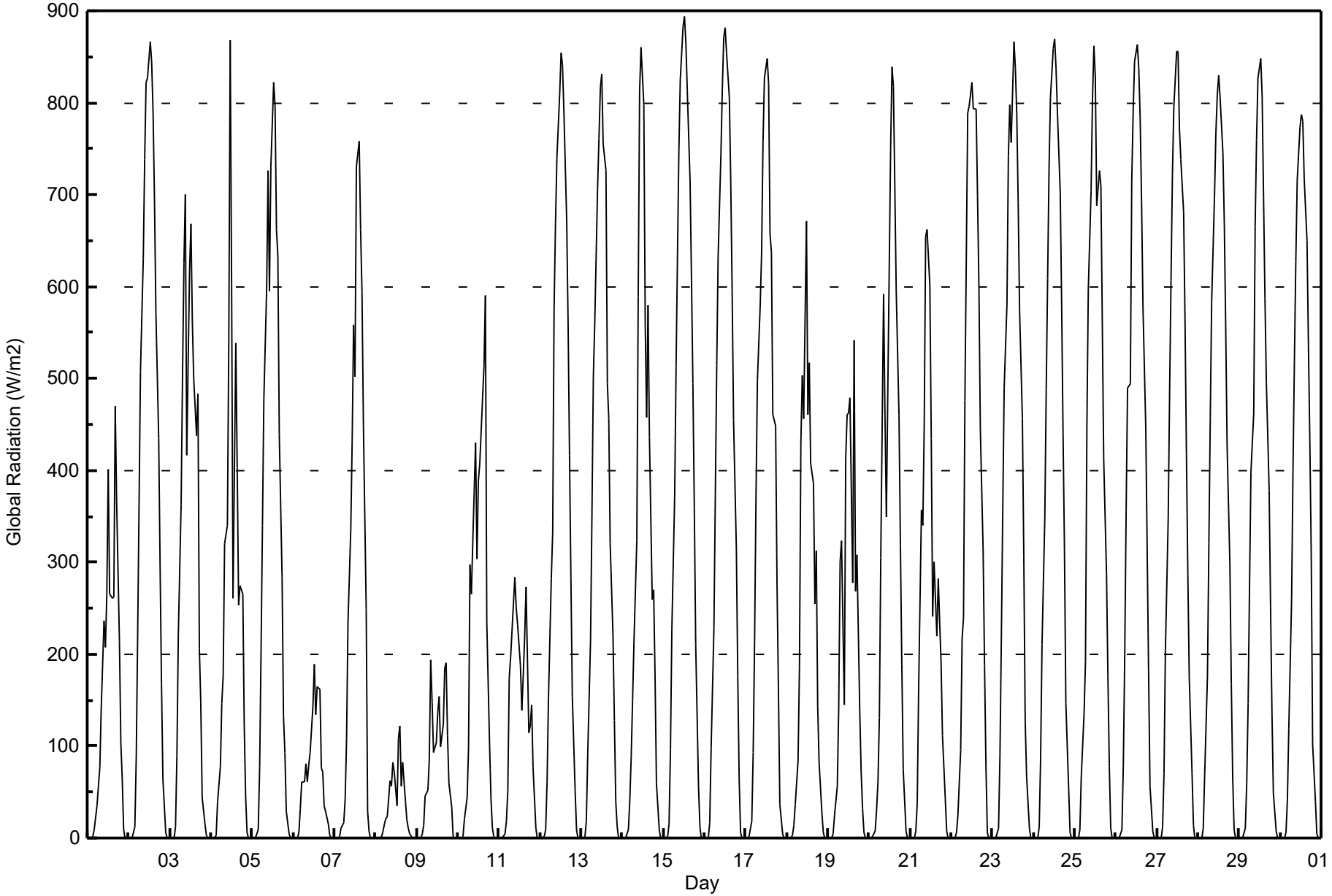
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0.0	0.0	0.0	1.1	9.8	35.2	56.2	76.0	140.5	237.0	206.8	264.8	401.9	265.5	260.8	262.8	470.4	366.1	212.9	104.2	63.5	8.5	0.1	0.0	143.5	470.4
2-Jun	0.0	0.0	0.6	12.9	87.8	221.6	363.2	507.6	629.6	738.8	822.2	826.1	866.6	843.5	788.1	693.9	572.8	435.1	295.5	167.5	63.5	5.6	0.1	0.0	372.6	866.6
3-Jun	0.0	0.0	0.4	11.8	89.4	221.0	363.6	502.7	625.1	700.8	416.8	616.0	667.5	561.3	498.4	437.8	484.3	206.2	147.4	44.6	15.5	3.0	0.0	0.0	275.6	700.8
4-Jun	0.0	0.0	0.1	3.5	39.8	77.9	146.0	176.4	321.0	339.5	543.0	868.0	602.2	260.9	538.5	403.1	253.7	275.3	264.7	123.1	45.5	5.6	0.1	0.0	220.3	868.0
5-Jun	0.0	0.0	0.3	9.3	76.3	202.3	340.6	478.1	598.0	726.5	595.1	730.1	822.2	795.6	662.3	632.5	438.6	283.6	132.9	93.1	29.6	4.6	0.1	0.0	318.8	822.2
6-Jun	0.0	0.0	0.0	6.0	32.2	60.5	60.3	81.4	61.2	78.6	92.9	143.0	189.1	134.9	164.5	161.7	77.0	71.9	35.5	28.7	15.8	2.8	0.0	0.0	62.4	189.1
7-Jun	0.0	0.0	0.0	2.2	10.5	16.4	43.0	107.6	235.3	335.4	433.0	557.7	502.2	731.4	758.4	661.4	593.2	450.3	248.4	29.3	7.1	0.6	0.0	0.0	238.5	758.4
8-Jun	0.0	0.0	0.0	1.1	8.3	15.5	21.0	23.1	61.8	56.5	82.4	72.1	34.9	107.7	122.4	56.5	82.4	39.7	19.9	9.9	4.2	0.5	0.0	0.0	34.2	122.4
9-Jun	0.0	0.0	0.0	4.4	13.2	45.9	52.5	85.8	194.4	148.4	93.6	104.4	136.4	153.6	98.9	123.1	184.3	190.8	112.0	59.2	34.0	1.9	0.0	0.0	76.5	194.4
10-Jun	0.0	0.0	0.0	1.1	20.0	44.3	98.8	296.9	264.9	377.1	430.9	303.2	388.9	407.4	479.5	511.8	590.4	235.0	101.3	42.2	10.2	1.1	0.0	0.0	191.9	590.4
11-Jun	0.0	0.0	0.2	4.6	19.0	52.1	174.7	196.5	254.5	283.6	250.5	232.4	188.2	138.8	176.5	218.6	272.3	114.8	121.7	145.3	75.6	10.1	0.5	0.0	122.1	283.6
12-Jun	0.0	0.0	1.5	9.0	60.8	152.9	282.3	333.2	576.8	668.4	739.9	810.5	853.7	840.0	790.3	671.5	558.5	416.3	282.7	153.7	52.4	9.7	0.6	0.0	344.4	853.7
13-Jun	0.0	0.0	1.7	18.9	91.1	215.7	351.7	501.2	560.4	705.8	761.3	816.6	830.8	755.6	726.3	494.9	456.5	320.4	221.8	128.5	40.1	12.9	0.2	0.0	333.9	830.8
14-Jun	0.0	0.0	0.5	9.8	40.6	88.2	151.5	214.5	323.3	588.9	813.0	860.5	798.3	558.9	457.4	579.1	436.1	258.8	269.3	176.3	60.1	9.4	0.4	0.0	279.0	860.5
15-Jun	0.0	0.0	0.9	15.7	96.3	227.6	372.5	512.8	632.8	748.1	825.5	882.5	893.8	864.8	812.7	714.3	607.4	494.5	359.3	210.0	56.2	12.6	0.5	0.0	389.2	893.8
16-Jun	0.0	0.0	0.7	16.4	97.9	228.3	373.3	514.7	632.5	743.7	815.4	871.7	881.0	853.5	805.8	714.6	592.8	454.9	313.9	175.8	64.6	5.6	0.3	0.0	381.5	881.0
17-Jun	0.0	0.0	0.8	18.8	93.6	215.3	370.6	497.8	579.6	635.8	756.6	827.0	848.4	821.1	656.9	636.9	461.2	448.3	276.4	161.7	36.2	4.0	0.1	0.0	347.8	848.4
18-Jun	0.0	0.0	0.1	3.4	14.4	35.9	83.6	185.4	428.3	503.8	455.4	671.8	460.7	517.4	407.1	386.3	255.1	312.7	143.2	82.7	27.1	6.6	0.2	0.0	207.5	671.8
19-Jun	0.0	0.0	0.2	5.2	24.3	57.1	142.5	300.7	323.1	144.3	413.3	461.1	461.6	479.5	278.3	542.2	269.2	308.4	139.5	72.3	31.4	6.1	0.4	0.0	185.9	542.2
20-Jun	0.0	0.0	0.8	7.9	31.2	61.5	131.0	305.7	591.7	459.2	349.3	485.0	746.9	838.4	817.8	708.7	597.1	459.8	319.3	189.9	75.3	7.8	0.4	0.0	299.3	838.4
21-Jun	0.0	0.0	0.4	8.3	38.7	161.6	357.4	339.6	452.2	655.1	661.3	601.1	434.6	240.8	300.3	220.3	282.1	234.6	191.1	111.0	43.3	7.3	0.1	0.0	222.6	661.3
22-Jun	0.0	0.0	0.4	6.8	25.0	96.2	216.5	239.8	476.1	787.9	795.7	809.0	822.9	792.7	793.9	698.5	598.8	445.7	313.4	187.2	79.2	6.6	0.5	0.0	341.4	822.9
23-Jun	0.0	0.0	0.8	11.3	90.2	217.5	357.4	489.4	581.6	741.4	797.6	756.3	866.8	837.8	787.7	691.6	573.7	456.5	307.0	127.3	66.8	10.8	0.5	0.0	365.4	866.8
24-Jun	0.0	0.0	0.6	11.5	86.6	211.2	350.0	488.0	608.7	727.1	804.7	859.5	869.8	836.9	788.0	701.9	580.0	439.1	313.8	145.8	53.8	6.6	0.2	0.0	370.2	869.8
25-Jun	0.0	0.0	0.2	9.0	67.7	136.1	192.0	447.3	596.5	704.9	803.7	862.3	827.9	688.1	726.5	708.8	560.3	411.3	286.1	175.5	77.3	11.0	0.5	0.0	345.6	862.3
26-Jun	0.0	0.0	0.3	9.2	81.2	199.6	357.0	490.2	494.4	715.2	789.5	844.6	862.8	837.3	782.2	693.0	577.7	445.9	312.1	181.1	56.9	7.5	0.5	0.0	364.1	862.8
27-Jun	0.0	0.0	0.6	11.5	70.8	204.7	348.6	485.8	606.5	721.2	794.1	855.1	855.4	772.1	738.7	680.9	561.5	417.4	287.1	174.9	70.2	13.7	0.7	0.0	361.3	855.4
28-Jun	0.0	0.0	0.6	11.1	68.2	177.1	320.4	458.1	584.0	697.2	766.6	808.5	829.2	805.0	745.9	668.9	557.2	427.3	297.3	167.7	65.3	8.6	0.4	0.0	352.7	829.2
29-Jun	0.0	0.0	0.5	10.5	60.0	146.1	274.6	397.5	462.4	665.0	759.7	826.8	848.5	806.9	696.4	587.7	495.9	378.4	251.7	135.2	48.9	7.4	0.2	0.0	327.5	848.5
30-Jun	0.0	0.0	0.2	6.4	40.6	119.2	260.0	401.0	519.0	626.7	715.1	773.4	786.4	779.0	717.0	649.1	536.7	432.5	310.2	102.0	39.7	5.0	0.3	0.0	325.8	786.4
	0.0	0.0	0.4	8.6	52.8	131.5	233.8	337.8	447.2	542.1	586.2	646.7	652.6	610.9	579.2	530.4	452.6	341.1	229.6	123.5	47.0	6.8	0.3	0.0	Diurnal Average	
	0.0	0.0	1.7	18.9	97.9	228.3	373.3	514.7	632.8	787.9	825.5	882.5	893.8	864.8	817.8	714.6	607.4	494.5	359.3	210.0	79.2	13.7	0.7	0.0	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Global Radiation (GR) - W/m2

Fort Chipewyan - June 2026



Concentration Ranges (W/m2)	Number of Hours	%	Cumulative %
0 - 20	226	31.39	31.39
21 - 100	94	13.06	44.44
101 - 300	125	17.36	61.81
301 - 600	140	19.44	81.25
601 - 900	135	18.75	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 Chipewyan - June 2026

Maximum Speed: 35 km/h on Jun 16 04:00

Maximum Daily Speed Average: 24.6 km/h on Jun 16

Minimum Speed Value: 1 km/h on Jun 13 06:00

Minimum Daily Speed Average: 3.5 km/h on Jun 14

Maximum Diurnal Speed Average: 14.1 km/h at hour 19

Minimum Diurnal Speed Average: 4.7 km/h at hour 3

Monthly Average Velocity: 8.1 km/h 60.8 deg

Percentiles: P_1 = 3 P_{10} = 7 Q_1 = 10 Median = 13 Q_3 = 18 P_{90} = 24 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-Jun	NNW12	NW15	NW13	NW14	NW14	NW13	NW14	NNW13	NNW15	NNW11	NNW13	NNW12	NNW14	NNW14	NNW12	N13	N14	NE16	ENE23	ENE19	ENE17	ENE15	NE15	NE14	N11.0	ENE23
2-Jun	NE11	NNE9	NE13	NE17	ENE24	ENE25	ENE25	NE24	NE27	NE25	NE24	ENE26	NE29	ENE33	NE31	ENE32	ENE30	ENE26	ENE21	ENE21	NE16	ENE13	ENE11	ENE12	NE21.8	ENE33
3-Jun	E16	ESE22	ESE23	ESE29	ESE30	ESE29	ESE26	E23	ENE22	E21	E19	E15	E15	SE18	SSE21	S22	S22	SSE18	SSE16	SSE15	S15	S17	S17	S14	SE16.0	ESE30
4-Jun	S14	S14	S11	S10	S7	S6	S5	E6	ESE11	E13	E12	E15	E21	ENE13	E20	E25	E27	ENE27	ENE24	ENE19	E17	E17	E12	E10	E11.9	ENE27
5-Jun	E11	E13	SSE7	SSW10	SW9	SW8	SW12	SW13	SW14	SW14	SW15	SW14	WSW16	WSW14	W14	WSW12	WSW9	W7	WSW6	SSE3	E2	E4	E6	ESE3	SW6.6	WSW16
6-Jun	SE4	E9	E9	E15	ENE10	N4	NNW11	NNW15	NE9	N4	NW7	NW10	NNW14	NNW15	NNW15	NNW12	NW9	NNW11	NE11	ENE19	ENE23	ENE26	ENE25	ENE23	NNE8.8	ENE26
7-Jun	ENE19	NE15	NE14	NE13	NE14	NE15	NE13	NNE10	NNE9	NE9	ENE11	E20	E22	E23	E18	E15	E21	E21	E16	E19	ENE22	ENE19	NE16	NE12	ENE15.1	E23
8-Jun	NE19	NE12	N9	N11	N10	N12	N13	NNE11	N10	N12	NNW17	NNW19	NNW19	NNW19	NNW18	NNW18	NNW19	NNW16	NNW15	NNW13	NNW11	NNW11	NW11	NW14	N13.2	NNW19
9-Jun	NNW12	NW13	NW12	NW14	NW12	WNW14	WNW13	WNW12	W12	W10	W11	W11	W16	W15	WNW11	NW10	NW10	NW8	NNW7	NNW5	N5	NNW5	NW6	NW8	WNW9.7	W16
10-Jun	NW8	NW6	N5	N4	NW6	NW8	NW9	NNW11	NNW12	NNW11	NNW12	NNW11	NNW12	NNW14	NNW13	NNW16	NNW17	NNW16	NNW13	NNW14	NNW12	NNW13	NNW13	NNW12	NNW11.1	NNW17
11-Jun	NNW11	NNW10	NNW10	NNW10	NNW10	NNW10	NNW11	NNW11	N12	N13	NNW14	NNW13	N13	N10	N10	N12	N12	N11	N11	NNW9	NW9	WNW9	NW9	NNW8	NNW10.4	NNW14
12-Jun	NNW11	NNW10	NNW11	NNW11	NNW11	N9	N8	N11	NNW12	NW13	NNW13	NNW13	NNW13	NNW12	NNW13	NW14	NNW14	NNW12	NNW12	NNW9	NNW7	NNW7	NNW8	NNW10	NNW10.8	NNW14
13-Jun	NNW11	NNW11	NNW10	NNW6	NNW3	NW1	ESE2	SW9	SW13	SW13	SW16	SW14	WSW13	WSW15	WSW16	WSW17	WSW17	SW14	SW12	SW12	SW8	W9	W7	WNW12	WSW8.4	WSW17
14-Jun	NW8	NNW6	WNW8	WNW11	WNW10	NNW10	N8	W3	WNW9	W9	WSW13	WSW14	WSW15	W18	ENE9	E17	E10	ENE27	ENE23	ENE18	ENE9	NE9	NE11	NNE11	N3.5	ENE27
15-Jun	N10	N7	NE8	ENE8	E8	E9	E12	E12	E12	E15	E12	E14	E20	E19	E21	E24	E29	ENE28	ENE28	ENE22	ENE19	ENE13	NE14	ENE16	ENE15.1	E29
16-Jun	ENE23	ENE22	E34	E35	ENE27	ENE28	ENE28	ENE28	ENE28	ENE28	NE28	NE27	ENE30	ENE27	ENE28	ENE30	ENE29	ENE26	ENE25	ENE22	NE14	NE13	NE12	NE12	ENE24.6	E35
17-Jun	NE10	NE13	NE13	NE14	NE12	NE10	ENE10	E12	E20	E18	ESE14	ESE16	ESE15	SE14	SE16	ESE18	E28	ENE27	ENE24	ENE22	ENE14	NE9	NNE7	NNW6	ENE13.0	E28
18-Jun	NNW6	NNW5	NNW5	NNW5	NNW6	N5	NNE8	NNE10	N9	NNW8	NW11	NW12	NW13	NW14	NW15	NW14	NNW13	NE10	ENE19	ENE20	ENE14	NE8	NNE7	N7	N7.2	ENE20
19-Jun	NNW6	NNW6	NNW6	NNW7	N7	N7	N5	NNW6	NNE7	ENE8	E8	E9	NE6	ENE9	ENE8	ESE7	E14	E10	E10	ENE8	NNE7	NNW7	NNW8	NNW9	NE5.4	E14
20-Jun	NNW9	NNW9	NNW9	N9	N6	NNW5	N7	N7	N8	E10	E13	NE10	ENE12	E20	E17	E16	E12	E14	E21	ENE18	NE13	NE13	NE13	NE12	ENE8.9	E21
21-Jun	NE9	NNE8	NNE6	NNE8	NNE8	NNE7	NE6	ESE6	E12	E12	E14	E18	E14	E11	E7	E10	ESE4	E10	E14	E15	ENE11	NE5	ENE4	NNW6	ENE8.0	E18
22-Jun	NNW7	NNE5	NE3	ENE5	NE6	ENE5	NE3	NNE2	SE2	E14	E16	E13	E11	E17	E17	E18	E17	E17	E18	E16	ENE13	ENE8	NE7	ENE8	E9.5	E18
23-Jun	ENE7	ENE6	ENE7	ENE7	ENE6	ENE8	E9	E9	E9	E10	E11	E11	E13	E15	E18	E17	E14	E14	E14	E10	E12	E5	SSW12	SSW11	E9.3	E18
24-Jun	SW8	SSW8	S6	S6	S6	S6	SE6	SE7	ESE10	SE11	SSE12	SE11	ESE9	E8	E11	E17	E21	E19	E20	ENE16	NE14	E13	S21	S24	ESE8.7	S24
25-Jun	S21	S16	SE9	SE12	SE13	SE14	SE14	SE14	SE17	ESE17	ESE17	E15	E17	E17	E19	E21	ENE24	ENE23	ENE23	ENE21	ENE20	E19	ESE15	SSE18	ESE14.4	ENE24
26-Jun	SSE22	SSE21	SSE23	S19	S13	S11	S6	ESE9	E11	E14	E18	E20	E17	E18	E21	E22	ENE24	ENE26	ENE27	NE24	ENE19	ENE15	E14	ESE12	E13.2	ENE27
27-Jun	ESE14	SE12	ESE11	E10	ESE15	ESE14	E12	E14	E16	E18	E19	E20	ENE23	ENE24	ENE25	ENE26	ENE25	ENE22	ENE18	NE16	NE15	NE15	NE17	ENE16	ENE16.2	ENE26
28-Jun	ENE14	ENE13	NE12	ENE11	ENE15	ENE13	ENE12	E11	E10	E11	E13	ESE8	E10	E12	E16	E23	ENE21	ENE19	ENE18	ENE17	NE14	NE14	NE15	ENE15	ENE13.5	E23
29-Jun	ENE17	ENE21	ENE15	ENE13	ENE19	ENE23	ENE20	ENE21	ENE20	E19	E20	E24	ENE26	ENE26	ENE25	ENE25	NE27	NE24	NE24	NE25	NE22	NE19	NE20	ENE20	ENE21.0	NE27
30-Jun	ENE18	E18	SE18	SE15	ESE14	E18	E15	E16	E16	E20	E19	E20	E23	ENE26	ENE29	ENE26	ENE25	NE23	NE27	NE24	NE18	NE17	NE17	ENE18	ENE18.5	ENE29
	NE5.5	NE5.1	ENE4.7	ENE5.2	ENE5.8	ENE5.9	NE6.0	NE6.1	ENE7.2	ENE7.7	ENE6.9	ENE7.5	ENE8.4	ENE8.6	ENE10.0	ENE11.0	ENE11.8	ENE13.4	ENE14.1	ENE13.2	NE10.9	NE8.8	NE7.0	NE5.7	Diurnal Average	
	ENE23	ENE22	E34	E35	ESE30	ESE29	ENE28	ENE28	ENE28	ENE28	NE28	NE27	ENE30	ENE33	NE31	ENE32	ENE30	ENE28	ENE28	NE25	ENE23	ENE26	ENE25	S24	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 Jun 7 21:00

Minimum Value: 1 km/h on Jun 22 04:00

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

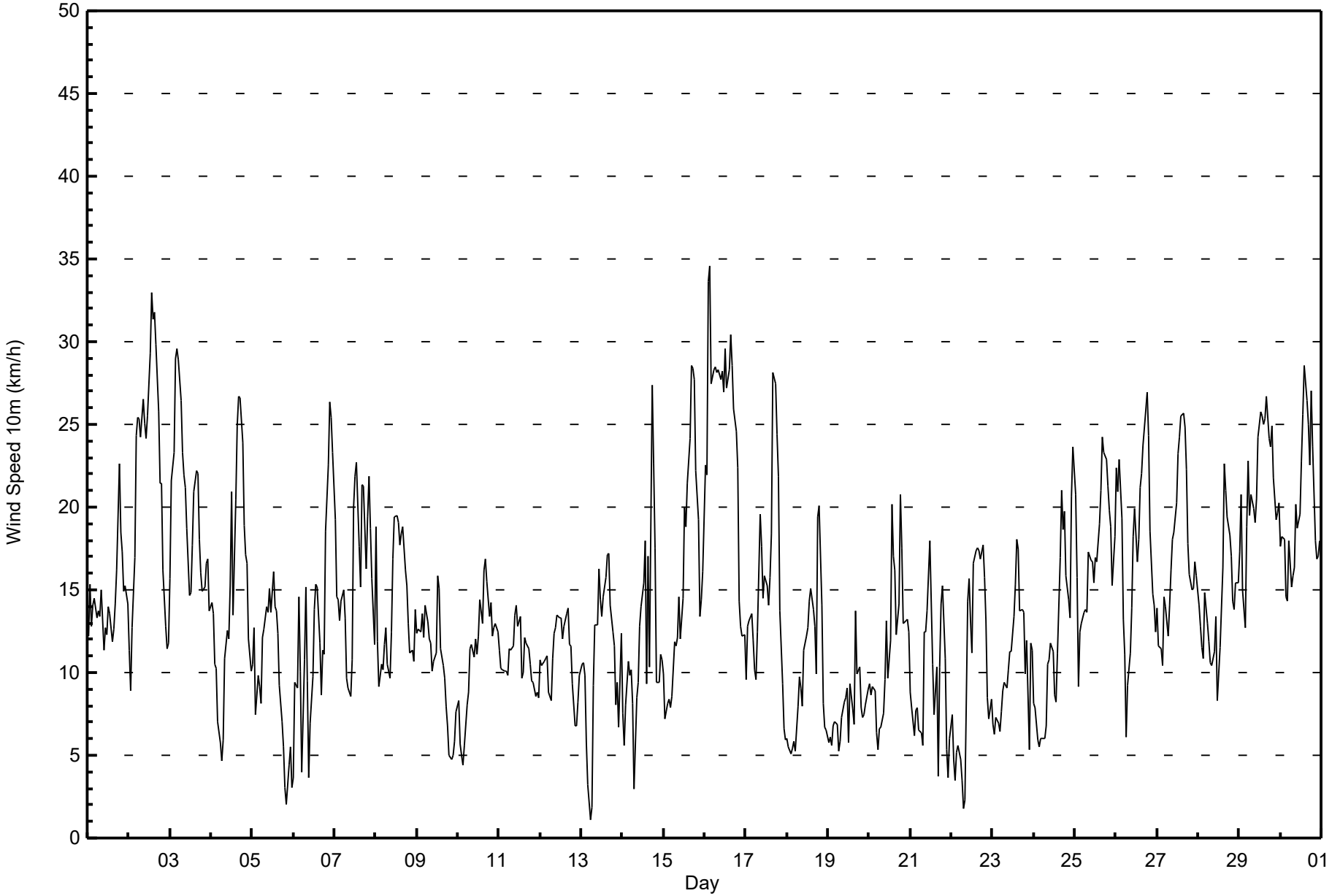
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	4	5	4	5	5	5	5	4	5	5	4	5	5	5	5	5	5	6	3	3	3	2	2	2	6
2-Jun	2	1	3	3	4	4	4	5	5	5	5	4	5	6	5	6	5	4	4	3	3	2	1	1	6
3-Jun	3	3	4	3	3	2	3	3	2	3	2	2	2	4	3	3	4	3	3	2	2	3	2	2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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Fort Chipewyan - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	34	4.72	4.72
6 - 11	229	31.81	36.53
12 - 19	317	44.03	80.56
20 - 28	125	17.36	97.92
29 - 38	15	2.08	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 Chipewyan - June 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	2	3	3	3	3	2	1	1	0	0	0	1	0	1	8	34
6 - 11	20	17	18	21	33	9	5	1	10	3	5	2	7	6	17	55	229
12 - 19	9	0	42	40	84	14	11	5	9	1	13	11	5	4	18	51	317
20 - 28	0	0	16	67	30	3	0	5	4	0	0	0	0	0	0	0	125
29 - 38	0	0	2	7	3	3	0	0	0	0	0	0	0	0	0	0	15
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	35	19	81	138	153	32	18	12	24	4	18	13	13	10	36	114	720

Total Number of Valid Hours: 720

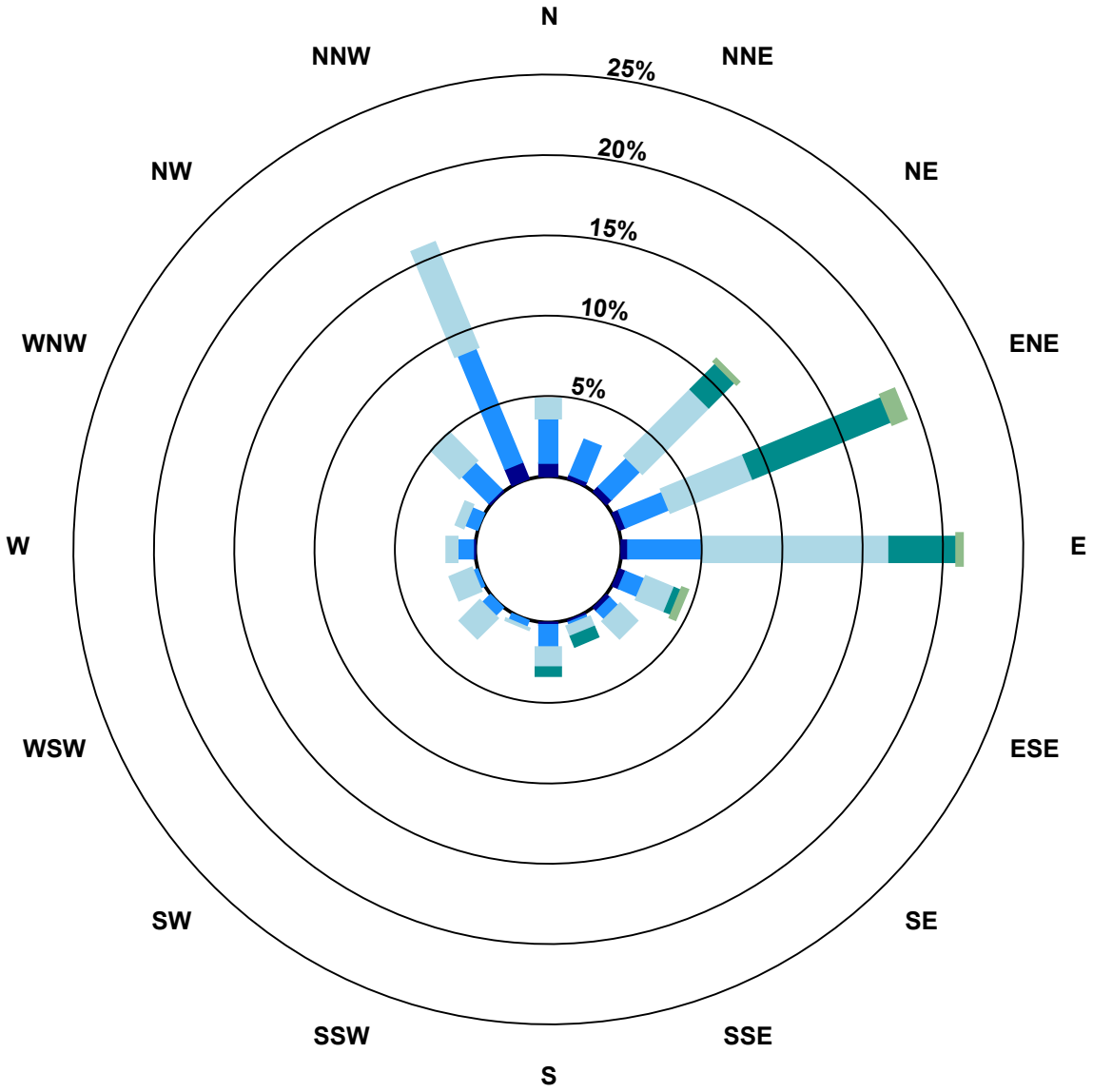
Total Number of Hours: 720

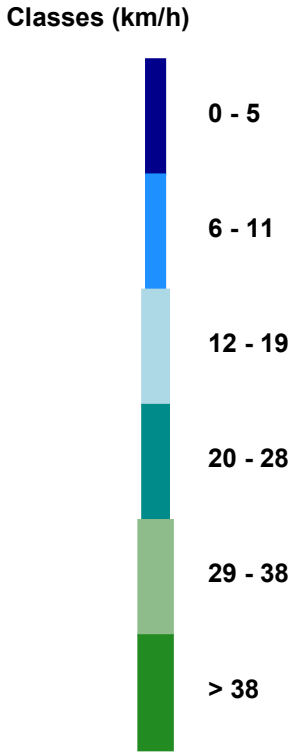
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Fort Chipewyan





Total Number of Valid Hours: 720

Direction of Maximum Speed: 87 deg on Jun 16 04:00
Direction of Maximum Daily Speed Average: 64.4 deg on Jun 16

Direction of Minimum Speed: 324 deg on Jun 13 06:00

Direction of Minimum Daily Speed Average: 3.5 deg on Jun 14

Monthly Average Direction: 60.8 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-Jun	328	323	323	326	323	321	322	327	332	341	332	343	345	341	347	2	7	47	70	64	60	58	51	45	1.3
2-Jun	40	25	36	48	63	59	57	50	50	54	56	57	55	60	55	57	57	60	61	64	56	58	59	63	55.5
3-Jun	80	114	105	105	105	114	107	82	76	79	82	84	89	138	163	172	173	153	162	156	176	180	187	189	123.9
4-Jun	182	177	180	177	189	178	177	95	108	86	84	89	86	78	88	84	79	77	73	78	85	84	85	90	96.8
5-Jun	101	97	157	208	218	217	215	233	224	223	233	222	243	245	264	249	252	260	242	165	92	96	93	113	220.7
6-Jun	133	91	93	86	72	353	333	332	40	353	326	324	330	339	339	342	322	341	38	57	60	65	66	67	30.8
7-Jun	60	48	47	48	45	55	46	32	29	43	77	88	90	92	92	100	90	87	79	80	77	64	52	50	69.6
8-Jun	47	38	358	8	6	7	351	14	0	353	336	335	341	345	343	334	332	341	344	348	348	332	321	325	349.2
9-Jun	329	319	310	311	306	301	295	282	263	275	276	276	269	277	301	317	317	325	328	336	5	328	317	304	300.4
10-Jun	308	306	349	7	320	326	323	329	335	346	336	330	343	338	338	327	330	329	329	338	336	329	333	332	332.3
11-Jun	341	340	334	334	343	345	344	344	351	358	347	346	349	349	356	358	358	4	2	338	310	298	307	329	343.7
12-Jun	344	344	336	336	343	353	350	7	344	326	343	337	338	334	334	322	331	328	330	331	329	327	333	338	337.1
13-Jun	345	346	344	345	342	324	121	221	225	227	232	232	240	237	241	240	239	233	223	231	233	271	261	285	249.0
14-Jun	313	331	286	288	303	328	358	272	301	267	251	258	253	259	78	84	97	66	67	70	60	51	44	20	5.1
15-Jun	9	1	49	66	80	82	84	87	87	88	92	89	87	87	85	82	79	77	75	75	69	58	56	59	75.1
16-Jun	63	69	93	87	68	70	70	63	64	59	56	56	60	57	59	59	70	71	66	64	45	36	37	44	64.4
17-Jun	37	42	45	46	38	43	58	88	90	101	119	118	120	126	124	103	81	72	68	69	62	43	28	346	77.7
18-Jun	341	330	343	335	343	353	22	18	11	329	309	309	319	311	309	318	330	55	77	63	64	43	13	349	357.1
19-Jun	345	346	345	334	351	6	357	338	23	71	88	86	45	70	57	103	98	94	80	69	16	347	341	347	38.8
20-Jun	346	341	340	349	359	329	349	360	354	83	98	53	70	92	92	93	97	93	84	71	54	50	44	47	58.3
21-Jun	40	29	26	12	25	19	49	111	97	93	98	101	96	88	87	90	123	96	81	83	68	42	67	343	74.8
22-Jun	330	22	37	61	50	70	56	31	133	92	87	93	92	93	90	90	90	88	85	79	73	57	48	64	79.0
23-Jun	67	65	77	78	71	76	85	84	86	90	87	86	86	88	88	90	88	85	87	82	84	95	195	213	89.5
24-Jun	215	205	183	172	188	175	133	132	107	127	152	141	122	90	89	94	86	86	80	67	54	93	169	175	119.9
25-Jun	174	170	143	124	132	137	134	141	126	111	112	95	86	86	84	85	76	67	65	64	64	79	109	156	103.7
26-Jun	162	162	167	176	179	179	187	117	89	86	86	85	86	86	85	79	69	64	60	56	58	75	85	122	99.0
27-Jun	111	140	114	87	104	102	93	86	87	88	91	80	73	60	58	59	61	63	59	52	41	52	55	58	74.2
28-Jun	65	60	54	62	75	71	77	89	96	101	98	103	100	95	89	83	76	67	58	57	52	51	55	57	73.0
29-Jun	58	62	64	60	69	73	70	78	78	88	81	80	72	70	62	57	56	53	49	54	50	47	54	58	64.2
30-Jun	68	82	133	132	109	94	97	85	82	85	88	88	85	64	62	61	59	49	55	56	50	51	55	62	74.0
	48.1	55.1	64.0	61.6	58.2	59.2	55.6	55.3	61.6	70.0	70.9	68.2	61.8	61.8	62.7	65.1	63.7	63.2	63.8	61.8	55.6	52.1	54.8	50.3	
	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 Chipewyan - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 95 deg on Jun 22 09:00

Minimum Value: 2 deg on Jun 15 10:00

Percentiles: P_1 = 4 P_{10} = 6 Q_1 = 9 Median = 12 Q_3 = 23 P_{90} = 28 P_{99} = 58

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

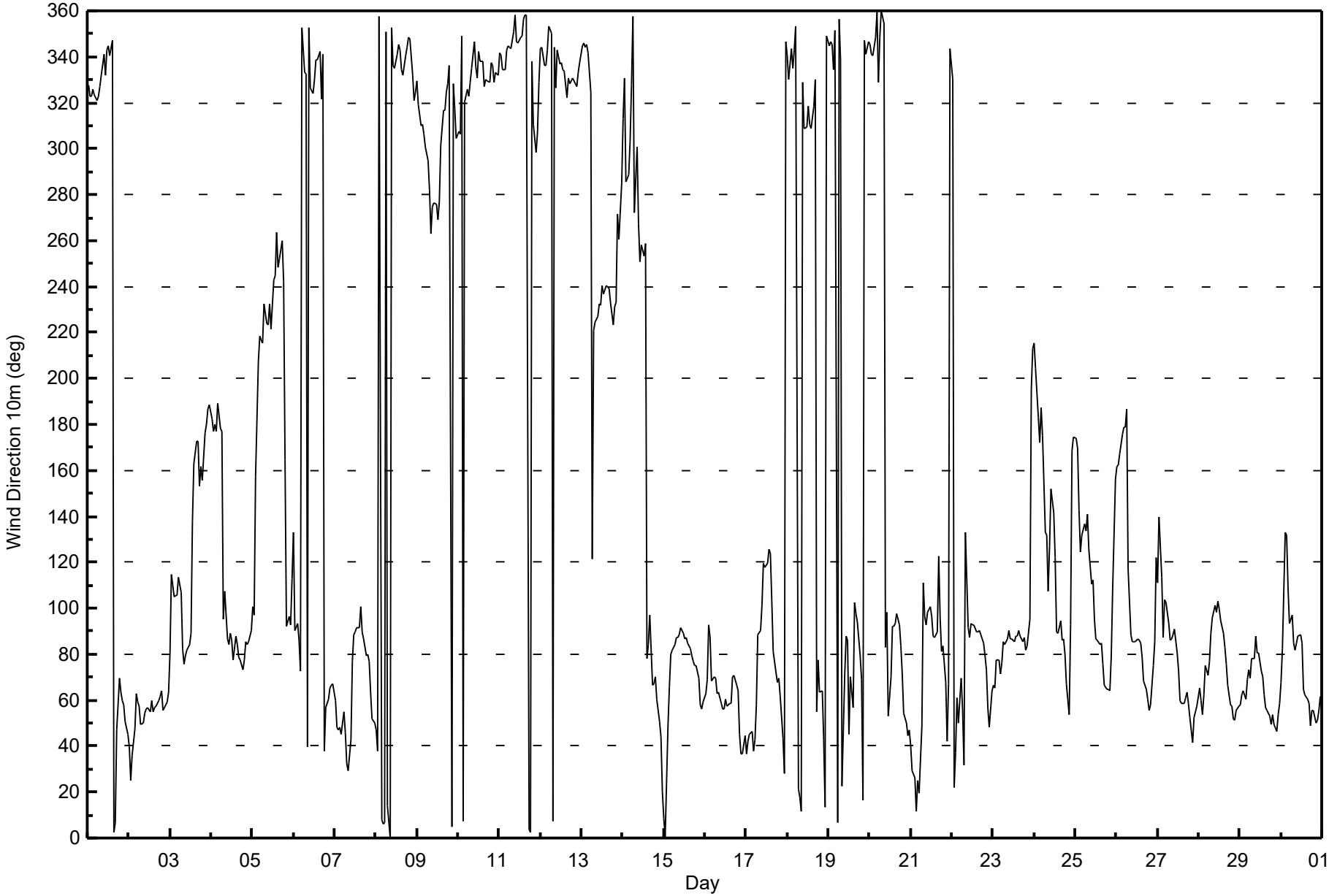
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	27	25	28	26	26	26	24	25	26	29	28	28	28	26	30	27	26	31	10	9	10	9	10	10	31
2-Jun	9	13	13	10	10	10	11	11	12	14	14	12	12	11	12	12	11	10	10	9	9	8	7	8	14
3-Jun	12	7	6	6	6	7	8	11	8	7	5	5	9	29	16	13	10	10	12	19	16	11	8	10	29
4-Jun	8	10	12	11	13	13	24	19	8	4	4	3	3	17	6	4	5	5	8	6	6	5	8	7	24
5-Jun	11	7	40	12	11	11	9	17	17	17	15	16	21	26	24	26	28	27	32	37	38	22	12	84	84
6-Jun	41	18	18	7	14	44	23	22	40	34	24	26	23	23	24	25	24	24	45	11	11	9	9	8	45
7-Jun	11	12	12	11	10	11	11	15	23	23	19	7	6	6	7	8	8	6	11	9	10	13	15	15	23
8-Jun	10	21	22	19	20	22	24	20	27	26	23	24	28	25	27	27	24	24	26	24	24	25	27	27	28
9-Jun	25	24	25	23	22	19	18	16	17	17	17	16	16	15	32	25	25	31	26	26	20	24	18	19	32
10-Jun	19	23	29	23	19	28	28	28	27	30	28	28	33	27	31	27	26	26	26	25	24	24	24	24	33
11-Jun	26	24	22	24	23	22	24	25	27	24	27	28	25	28	28	26	26	25	26	28	21	15	14	15	28
12-Jun	16	15	14	13	16	20	25	25	29	29	29	31	32	34	35	32	30	31	26	24	19	14	12	14	35
13-Jun	14	15	14	34	84	67	50	12	11	18	16	17	23	19	20	16	16	13	15	11	12	18	12	17	84
14-Jun	25	31	12	9	16	23	33	58	20	19	25	27	19	16	70	14	21	12	9	9	12	6	8	14	70
15-Jun	14	36	15	6	11	6	5	4	3	2	4	4	3	5	4	4	6	6	6	7	8	9	7	9	36
16-Jun	10	10	8	8	8	7	8	10	11	11	13	14	12	14	13	10	11	10	10	9	12	10	10	9	14
17-Jun	13	9	6	7	11	11	16	13	6	7	10	7	7	15	16	14	7	9	10	10	13	9	19	12	19
18-Jun	11	11	17	17	19	21	17	24	30	42	33	28	27	25	25	31	29	58	16	10	10	22	13	13	58
19-Jun	13	15	14	20	22	21	27	35	36	29	12	13	34	21	24	28	13	11	16	16	24	14	14	16	36
20-Jun	15	13	15	19	31	31	24	29	35	58	9	39	25	8	6	5	6	5	8	10	11	10	12	9	58
21-Jun	20	22	15	16	19	28	32	24	8	7	9	6	6	9	10	5	44	30	14	6	11	23	37	26	44
22-Jun	14	39	39	17	19	12	17	60	95	8	5	5	6	4	4	4	5	4	4	5	10	11	12	9	95
23-Jun	10	11	9	11	10	10	7	5	7	7	4	6	4	3	4	4	5	4	5	4	7	52	13	11	52
24-Jun	12	14	21	29	17	16	24	18	8	15	16	17	31	8	5	4	4	5	6	10	10	27	8	7	31
25-Jun	7	9	21	18	14	9	13	13	12	6	6	11	4	4	4	4	10	8	9	9	9	7	28	11	28
26-Jun	10	10	9	8	10	15	26	32	6	5	4	4	4	5	5	9	11	9	9	9	9	10	7	19	32
27-Jun	14	16	17	20	7	9	6	6	5	4	5	9	10	11	9	10	9	11	11	11	10	10	8	8	20
28-Jun	8	8	7	12	7	8	7	10	7	6	8	34	18	7	4	6	8	14	11	10	7	7	7	7	34
29-Jun	9	8	9	9	9	6	9	7	9	5	7	6	12	12	10	12	12	12	11	9	9	9	10	9	12
30-Jun	11	10	14	18	18	9	8	5	5	4	3	4	8	11	10	11	12	12	11	10	9	8	8	9	18
	41	39	40	34	84	67	50	60	95	58	33	39	34	34	70	32	44	58	45	37	38	52	37	84	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Fort Chipewyan - June 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS09
BARGE LANDING
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BARGE LANDING (AMS09)
JUNE 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	34	34	100	-	-	12.8	0	2	0
TRS(ppb) Average	683	36	37	99.86	2.3	0	2	0	0.7	0
THC(ppm) Average	686	34	34	100	-	-	2.8	-	2.3	-
NMHC(ppm) Average	686	34	34	100	-	-	0.386	-	0.073	-
CH4(ppm) Average	686	34	34	100	-	-	2.8	-	2.3	0
NO2 (ppb) Average	683	36	37	99.86	-	-	30	0	11.4	-
NO (ppb) Average	683	36	37	99.86	-	-	52.9	-	10.8	-
NOX (ppb) Average	683	36	37	99.86	-	-	58.5	-	20.6	-
PM2.5(ug/m3) Average	717	3	3	100	-	-	109.6	10	61.9	2
Temperature (C) Average	720	0	0	100	-	-	32.5	-	24.6	-
Relative Humidity (%) Average	720	0	0	100	-	-	100	-	98.9	-
Barometric Pressure (inHg) Average	720	0	0	100	-	-	29.4	-	29.3	-
Wind Speed 20 m (km/h) Average	720	0	0	100	-	-	25	-	21	-
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)
JUNE 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	0.41	1.3	-	0	0	0	0.1	0.2	0.7	12.8
TRS(ppb) Average	683	0.36	0.2	-	0.1	0.2	0.2	0.3	0.4	0.6	2
THC(ppm) Average	686	2.11	0.1	-	1.9	2	2	2.1	2.2	2.3	2.8
NMHC(ppm) Average	686	0.02	0.046	-	0	0	0	0	0	0.1	0.386
CH4(ppm) Average	686	2.09	0.1	-	1.9	2	2	2	2.1	2.3	2.8
NO2 (ppb) Average	683	5.03	5.1	-	0.1	0.7	1.7	3.2	6.6	11.9	30
NO (ppb) Average	683	2.61	5.4	-	0	0	0.2	0.6	2.2	8.1	52.9
NOX (ppb) Average	683	7.65	9.1	-	0.1	0.7	2.1	4.5	8.9	19.4	58.5
PM2.5(ug/m3) Average	717	11.42	15.8	-	0.8	2.1	3.4	6.8	11.6	22.4	109.6
Temperature (C) Average	720	16.63	6.3	-	5.7	9.5	11.5	15.4	20.6	26.3	32.5
Relative Humidity (%) Average	720	65.02	23.1	-	22.1	31.4	46.1	66.7	84.2	97.9	100
Barometric Pressure (inHg) Average	720	28.86	0.3	-	28.2	28.5	28.7	28.9	29.1	29.2	29.4
Wind Speed 20 m (km/h) Average	720	11.3	5	-	1	5	8	10	15	19	25
Wind Direction 20 m (deg) Average	720	21.9	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BARGE LANDING (AMS09)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
NO2, TRS	12 Jun 2026 14:00	12 Jun 2026 14:00	1	Maintenance - sample manifold cleaned

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Barge Landing - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 12.8 ppb on Jun 25 10:00 Maximum Daily Average: 2.0 ppb on Jun 25

Minimum Value: 0.0 ppb on Jun 1 07:00 Minimum Daily Average: 0.0 ppb on Jun 6
Maximum Diurnal Average: 1.3 ppb at hour 10 Minimum Diurnal Average: 0.1 ppb at hour 2
Monthly Average: 0.41 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} = 7.0

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-Jun	Z	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1
2-Jun	0.0	Z	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1
3-Jun	0.1	0.0	Z	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.5	0.7	1.1	1.0	1.9	1.5	0.6	0.5	0.2	0.7	0.5	0.1	0.1	0.4	1.9
4-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.5	1.3	1.3	1.1	0.2	0.7	2.9	2.9	6.8	0.5	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.8	6.8
5-Jun	0.1	0.1	0.1	0.1	Z	0.2	0.2	0.1	0.2	0.9	1.9	3.2	4.9	4.2	2.7	4.2	4.5	4.2	2.5	2.0	1.1	0.5	0.3	0.3	1.7	4.9
6-Jun	0.1	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
7-Jun	Z	0.0	0.0	0.0	0.0	0.2	0.3	0.9	1.7	2.9	5.9	3.8	2.2	1.6	1.3	0.5	0.3	0.1	0.1	0.0	0.0	0.0	0.1	0.0	1.0	5.9
8-Jun	0.0	Z	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1
9-Jun	0.0	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	0.0	0.1	0.1	0.1	0.2	0.1	0.2
10-Jun	0.2	0.1	0.2	Z	0.2	0.1	0.1	0.1	1.6	0.8	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.6
11-Jun	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	0.1	0.2	0.1	0.0	0.2
12-Jun	0.2	0.2	0.2	0.2	0.1	Z	0.2	0.1	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	0.1	0.2
13-Jun	Z	0.1	0.0	0.1	0.0	0.1	0.1	0.2	0.5	0.7	0.3	0.1	0.1	0.1	0.3	1.9	1.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.3	1.9
14-Jun	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.4	0.3	0.3	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	0.1	0.4
15-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	1.1	5.1	2.8	0.1	0.1	0.2	0.5	0.5	0.5	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.5	5.1
16-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.2
17-Jun	0.1	0.1	0.0	0.1	Z	0.2	0.2	0.2	0.1	0.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
18-Jun	0.0	0.0	0.1	0.1	0.2	Z	0.1	0.0	0.1	0.2	0.2	0.2	0.1	0.0	0.1	0.4	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.4
19-Jun	Z	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20-Jun	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	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.2
21-Jun	0.1	0.1	Z	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	0.0	0.0	0.1
22-Jun	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.2
23-Jun	0.0	0.1	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.2	1.1	0.2	0.1	0.1	0.0	0.0	0.1	1.1
24-Jun	0.1	0.1	0.2	0.1	0.2	Z	0.2	1.8	7.6	2.4	1.1	2.5	3.5	4.4	2.3	2.9	1.4	0.1	0.2	0.1	0.0	0.0	0.0	0.0	1.4	7.6
25-Jun	Z	0.0	0.0	0.0	0.0	0.0	1.3	2.7	7.7	12.8	10.8	1.4	1.3	1.5	1.5	1.6	2.1	1.2	0.6	0.0	0.0	0.0	0.0	0.0	2.0	12.8
26-Jun	0.0	Z	0.1	0.1	0.0	0.0	0.1	2.6	9.8	4.3	0.3	0.5	0.6	0.2	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	9.8
27-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
28-Jun	0.0	0.1	0.0	Z	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.2	0.4
29-Jun	0.4	0.3	0.4	0.4	Z	0.4	0.5	0.4	0.6	0.6	0.6	0.6	0.5	0.3	0.2	0.2	0.2	0.1	0.3	0.3	0.3	3.4	9.4	0.6	0.9	9.4
30-Jun	0.1	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	6.1	11.8	3.1	1.0	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	11.8
	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	1.1	1.3	1.3	0.6	0.7	0.6	0.6	0.5	0.4	0.3	0.2	0.1	0.1	0.2	0.4	0.1	Diurnal Average	
	0.4	0.3	0.4	0.4	0.2	0.4	1.3	2.7	9.8	12.8	11.8	3.8	4.9	4.4	6.8	4.2	4.5	4.2	2.5	2.0	1.1	3.4	9.4	0.6	Diurnal Maximum	

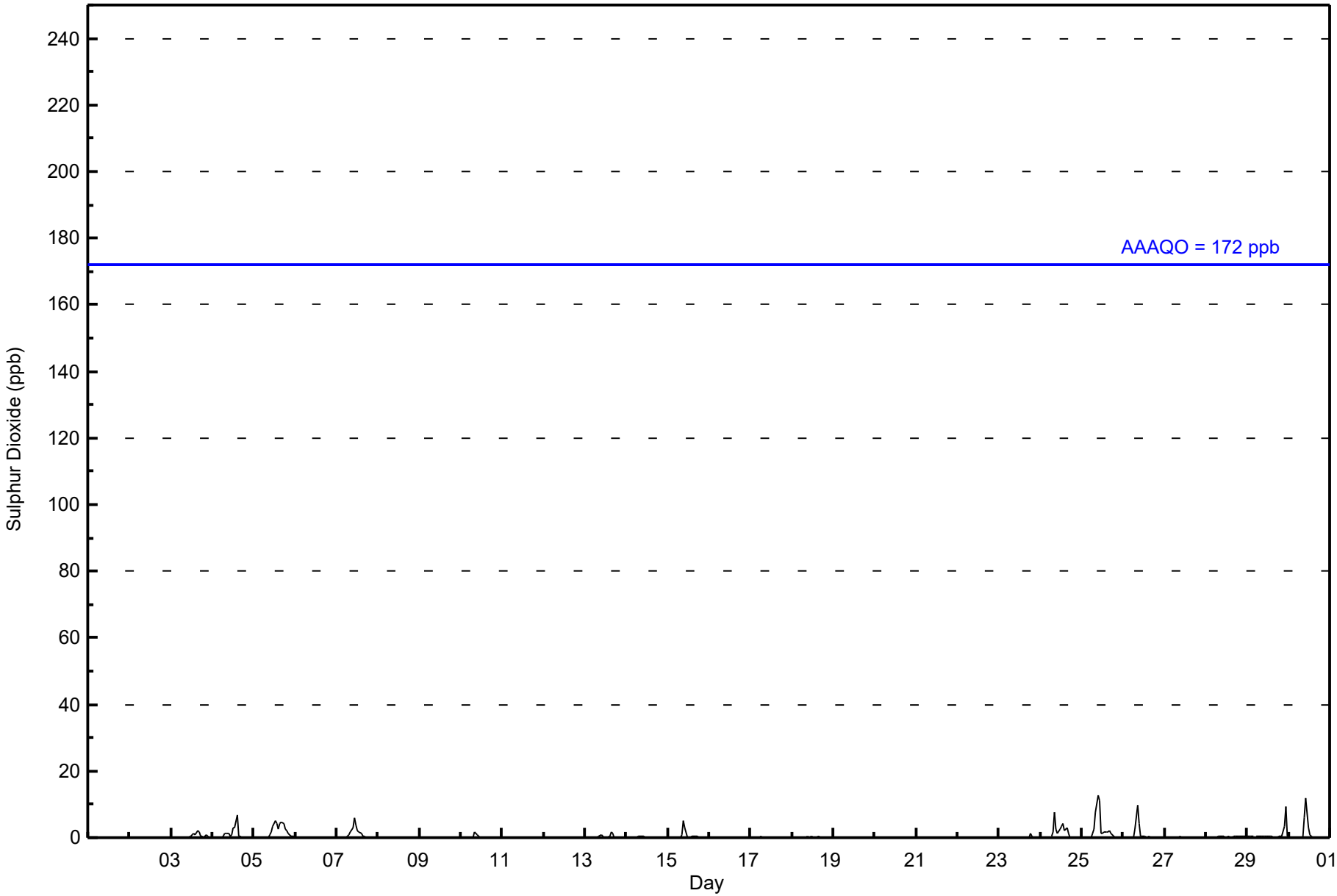
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Barge Landing - June 2026



Sulphur Dioxide (SO_2) - ppb
Barge Landing - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	683	99.56	99.56
11 - 20	3	0.44	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

Barge Landing - June 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	113	63	34	20	17	23	60	55	31	26	31	21	33	17	33	106	683
11 - 20	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	3
21 - 60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61 - 110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111 - 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	113	63	34	20	17	23	60	55	32	26	31	22	33	18	33	106	686

Total Number of Valid Hours: 686

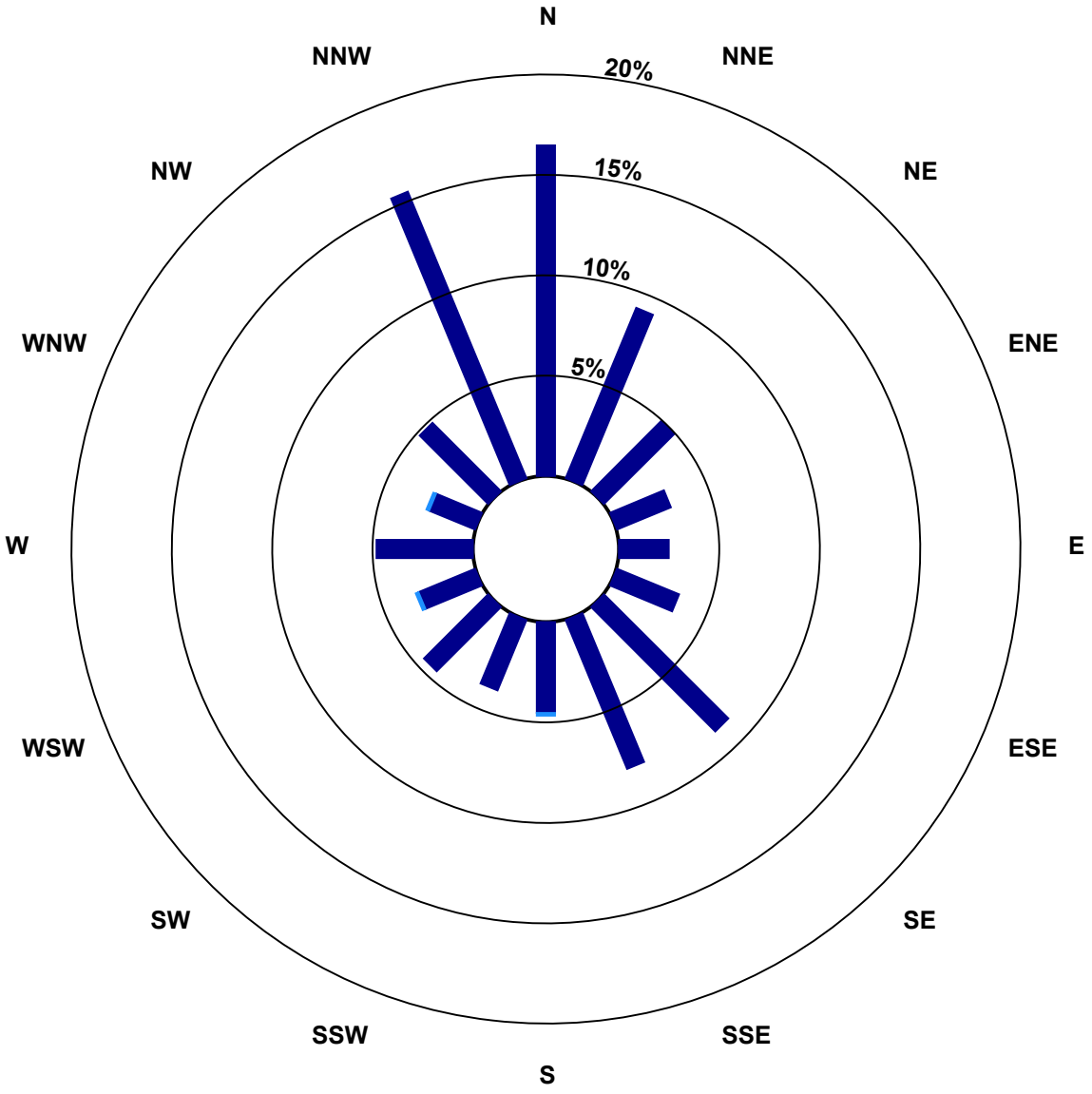
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Barge Landing



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

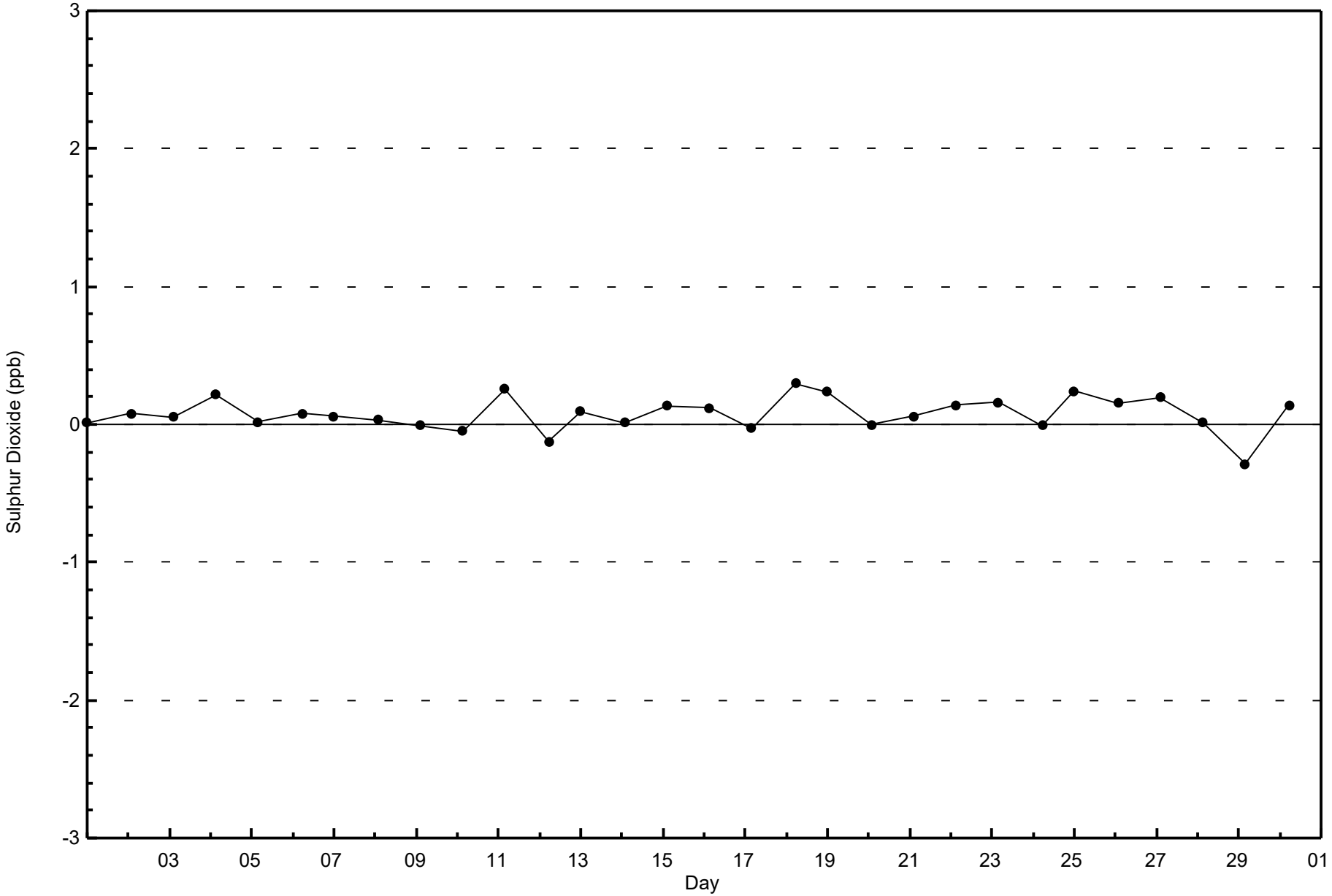
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Barge Landing - June 2026

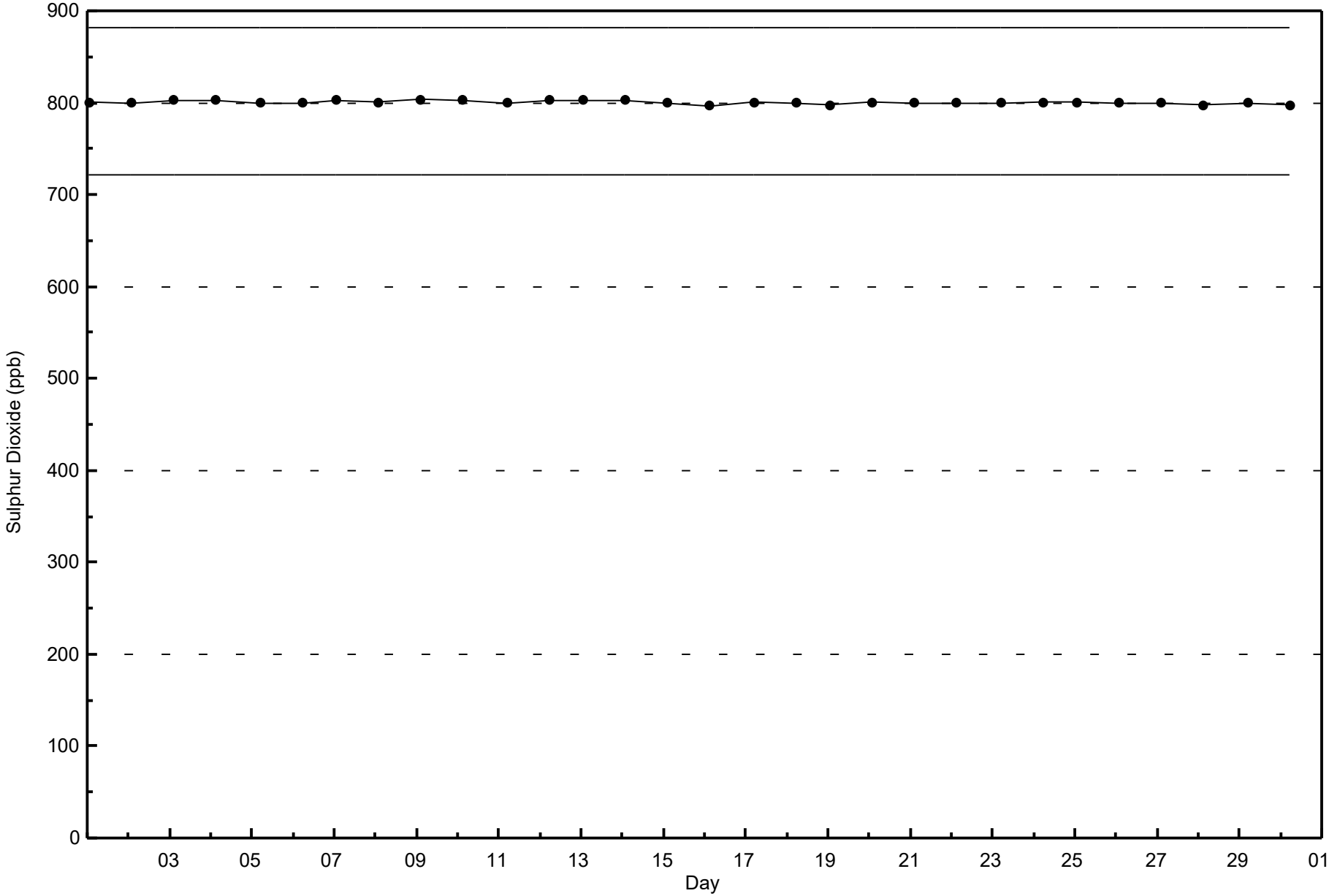


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Barge Landing - June 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Barge Landing - June 2026

Number of Exceedences (AAAQG): 30-Min: 0
Maximum Value: 2.3 ppb on Jun 7 07:30 Maximum Daily Average: 0.7 ppb on Jun 24

Minimum Value: 0.1 ppb on Jun 27 19:00 Minimum Daily Average: 0.2 ppb on Jun 27
Maximum Diurnal Average: 0.6 ppb at hour 6 Minimum Diurnal Average: 0.2 ppb at hour 18
Monthly Average: 0.36 ppb Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.2 Median = 0.3 Q_3 = 0.4 P_{90} = 0.6 P_{99} = 1.5

Periods in Service:	1440
Periods of Valid Data:	1365
Periods of Invalid Data:	75
Periods of Calibration:	71
Percent Operational Time:	99.7

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-Jun	0.3	Z	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5
	0.3	SP	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3		
2-Jun	0.3	0.2	Z	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.3
	0.3	0.2	SP	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2		
3-Jun	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	0.3	0.3	0.4	0.3	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4
	0.2	0.2	0.2	SP	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.4		
4-Jun	0.4	0.3	0.3	0.3	Z	1.0	0.9	0.9	0.7	0.5	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.8	1.5	0.4	1.5
	0.3	0.3	0.3	0.4	SP	1.0	1.0	0.8	0.6	0.4	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	1.4	0.8		
5-Jun	0.8	1.2	0.4	0.3	0.4	Z	0.4	0.4	0.3	0.5	0.6	0.4	0.3	0.3	0.3	0.3	0.6	0.6	0.4	0.5	0.7	0.6	0.6	0.5	0.5	1.2
	1.1	0.8	0.3	0.3	0.4	SP	0.4	0.3	0.3	0.5	0.5	0.4	0.3	0.3	0.3	0.4	0.6	0.4	0.6	0.5	0.6	0.6	0.6	0.4		
6-Jun	Z	0.4	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.7
	SP	0.5	0.5	0.7	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
7-Jun	0.2	Z	0.3	0.4	0.4	1.2	1.2	2.3	1.2	0.7	0.4	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	0.5	2.3
	0.2	SP	0.4	0.3	0.7	1.5	1.5	1.7	0.8	0.6	0.4	0.4	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
8-Jun	0.3	0.3	Z	0.4	0.4	0.4	0.3	0.3	0.3	0.3	C	C	C	C	C	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	--	0.4
	0.3	0.3	SP	0.4	0.4	0.3	0.3	0.3	0.3	C	C	C	C	C	C	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
9-Jun	0.2	0.2	0.2	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.4
	0.2	0.2	0.2	SP	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4		
10-Jun	0.3	0.4	0.3	0.3	Z	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4
	0.3	0.3	0.3	0.3	SP	0.4	0.4	0.3	0.4	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		
11-Jun	0.2	0.3	0.2	0.2	0.2	Z	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3
	0.3	0.2	0.2	0.3	0.2	SP	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2		
12-Jun	Z	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	M	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	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	0.3	0.2	M	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3		
13-Jun	0.4	Z	0.4	0.6	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.6	0.3	0.6
	0.4	SP	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.6		
14-Jun	0.6	0.4	Z	0.3	0.3	0.5	0.4	0.4	0.4	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.6	0.6	0.4	0.6
	0.6	0.4	SP	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.5	0.4		
15-Jun	0.4	0.5	0.5	Z	0.6	0.8	0.6	0.5	0.5	0.9	0.9	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4	1.0
	0.4	0.5	0.5	SP	0.8	0.7	0.5	0.5	0.8	1.0	0.5	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.4	0.5	0.4	0.4		

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Barge Landing - June 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-Jun	0.4	0.4	0.3	0.3	0.3	0.2	Z	SP	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.2	0.4
17-Jun	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.5	0.6	0.6	Z	SP	0.6	0.7	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.4	0.7
18-Jun	Z	SP	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	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	0.6
19-Jun	0.3	0.3	Z	SP	0.7	0.6	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	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	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7
20-Jun	0.4	0.4	0.5	0.5	Z	SP	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	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	0.2	0.2	0.3	0.3	0.5
21-Jun	0.3	0.3	0.4	0.4	0.4	0.5	Z	SP	0.5	0.6	0.7	0.7	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.8
22-Jun	0.5	0.5	0.5	0.5	0.5	0.8	Z	SP	0.6	0.5	0.8	0.9	0.7	0.8	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.9
23-Jun	0.7	0.7	0.8	0.5	0.3	0.3	0.4	1.5	1.7	1.5	Z	SP	0.8	0.7	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.4	0.4	0.6	1.7
24-Jun	Z	SP	1.3	1.1	1.2	1.3	1.7	1.7	1.9	1.7	1.5	1.7	2.1	1.5	1.5	1.8	1.1	0.7	0.6	0.7	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.7	2.1
25-Jun	0.3	0.3	Z	SP	0.7	0.6	0.9	0.7	0.6	0.5	0.4	0.4	0.6	1.0	0.9	0.9	0.8	0.8	1.4	2.0	1.7	0.7	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.3	UO	0.4	0.4	0.4	0.4	0.3	0.2	UO	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.6	2.0
26-Jun	0.3	0.3	0.4	0.4	Z	SP	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.5	1.2	0.7	1.0	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	1.2
27-Jun	0.2	0.2	0.2	0.2	0.2	Z	SP	0.6	0.6	0.6	0.6	0.6	0.5	0.3	0.3	0.3	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.6
28-Jun	0.1	0.1	0.4	0.4	0.5	0.5	0.6	0.6	Z	SP	1.0	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.5	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.3	0.2	0.2	0.4	1.0
29-Jun	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	Z	SP	1.0	0.9	0.8	0.9	0.8	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.7	0.4	0.4	0.4	0.5	0.4	0.4	0.4	1.0
30-Jun	Z	SP	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.4	0.8	0.9	0.8	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	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	0.4	0.9
	0.4	1.1	0.4	1.3	0.4	1.3	0.5	1.7	0.5	1.9	0.6	1.7	0.6	2.1	0.5	2.3	0.5	1.2	0.5	2.0	0.4	1.7	0.3	0.5	0.3	0.5	0.3	0.5	0.2	0.4	0.2	0.6	0.2	0.6	0.2	0.7	0.3	0.5	0.3	0.7	0.3	0.6	0.3	1.4	0.4	1.5	Diurnal Average	Diurnal Maximum

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

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

Wood Buffalo Environmental Association

Summary of Hour Averages

Total Reduced Sulphur (TRS) - ppb

Barge Landing - June 2026

Maximum Value: 2.0 ppb on Jun 7 08:00

Maximum Daily Average: 0.7 ppb on Jun 24

Minimum Value: 0.1 ppb on Jun 27 19:00

Minimum Daily Average: 0.2 ppb on Jun 27

Maximum Diurnal Average: 0.6 ppb at hour 6

Minimum Diurnal Average: 0.2 ppb at hour 18

Monthly Average: 0.36 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.2 Median = 0.3 Q_3 = 0.4 P_{90} = 0.6 P_{99} = 1.6

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-Jun	0.3	Z	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
2-Jun	0.3	0.2	Z	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3
3-Jun	0.2	0.2	0.2	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.3	0.3	0.4
4-Jun	0.3	0.3	0.3	0.3	Z	1.0	0.9	0.9	0.6	0.4	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	1.1	1.2	0.4	1.2
5-Jun	1.0	1.0	0.4	0.3	0.4	Z	0.4	0.3	0.3	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.4	0.5	1.0
6-Jun	Z	0.5	0.5	0.7	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.7
7-Jun	0.2	Z	0.4	0.3	0.5	1.4	1.4	2.0	1.0	0.6	0.4	0.4	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	2.0
8-Jun	0.3	0.3	Z	0.4	0.4	0.4	0.3	0.3	0.3	C	C	C	C	C	C	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	--	0.4
9-Jun	0.2	0.2	0.2	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3
10-Jun	0.3	0.4	0.3	0.3	Z	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4
11-Jun	0.2	0.3	0.2	0.2	0.2	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	0.3	0.3	0.2	0.2	0.2	0.2	0.3
12-Jun	Z	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	M	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.3	0.4
13-Jun	0.4	Z	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.6	0.3	0.6
14-Jun	0.6	0.4	Z	0.3	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.5	0.4	0.4	0.6
15-Jun	0.4	0.5	0.5	Z	0.7	0.7	0.6	0.5	0.7	0.9	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.5	0.4	0.4	0.4	0.9
16-Jun	0.4	0.3	0.3	0.3	Z	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.4
17-Jun	0.4	0.5	0.5	0.6	0.6	Z	0.6	0.6	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.6
18-Jun	Z	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5
19-Jun	0.3	Z	0.7	0.6	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.7
20-Jun	0.4	0.5	Z	0.4	0.5	0.5	0.5	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.5
21-Jun	0.3	0.4	0.5	Z	0.5	0.7	0.8	0.7	0.8	0.8	0.6	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.8
22-Jun	0.5	0.5	0.7	0.6	Z	0.9	0.8	0.7	0.5	0.5	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.5	0.4	0.9
23-Jun	0.7	0.7	0.3	0.9	1.6	Z	0.7	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.2	0.2	0.3	0.4	0.5	0.4	1.6
24-Jun	Z	1.2	1.2	1.7	1.8	1.6	1.8	1.6	0.9	0.7	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	0.7	1.8
25-Jun	0.3	Z	0.6	0.8	0.6	0.4	0.8	0.9	0.8	1.7	1.2	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.3	0.5	1.7
26-Jun	0.3	0.4	Z	0.4	0.4	0.3	0.3	0.4	1.0	0.7	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	0.4	1.0
27-Jun	0.2	0.2	0.2	Z	0.6	0.6	0.4	0.3	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.6
28-Jun	0.1	0.4	0.5	0.6	Z	0.9	0.9	0.9	0.8	0.7	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.3	0.2	0.4	0.9
29-Jun	0.3	0.3	0.3	0.4	0.6	Z	1.0	0.9	0.7	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.4	0.4	1.0
30-Jun	Z	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.3	0.6	0.9	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	0.9
	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.5	0.5	0.5	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	0.4	Diurnal Average	
	1.0	1.2	1.2	1.7	1.8	1.6	1.8	2.0	1.0	1.7	1.2	0.4	0.5	0.5	0.5	0.4	0.6	0.5	0.6	0.5	0.6	0.6	1.1	1.2	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

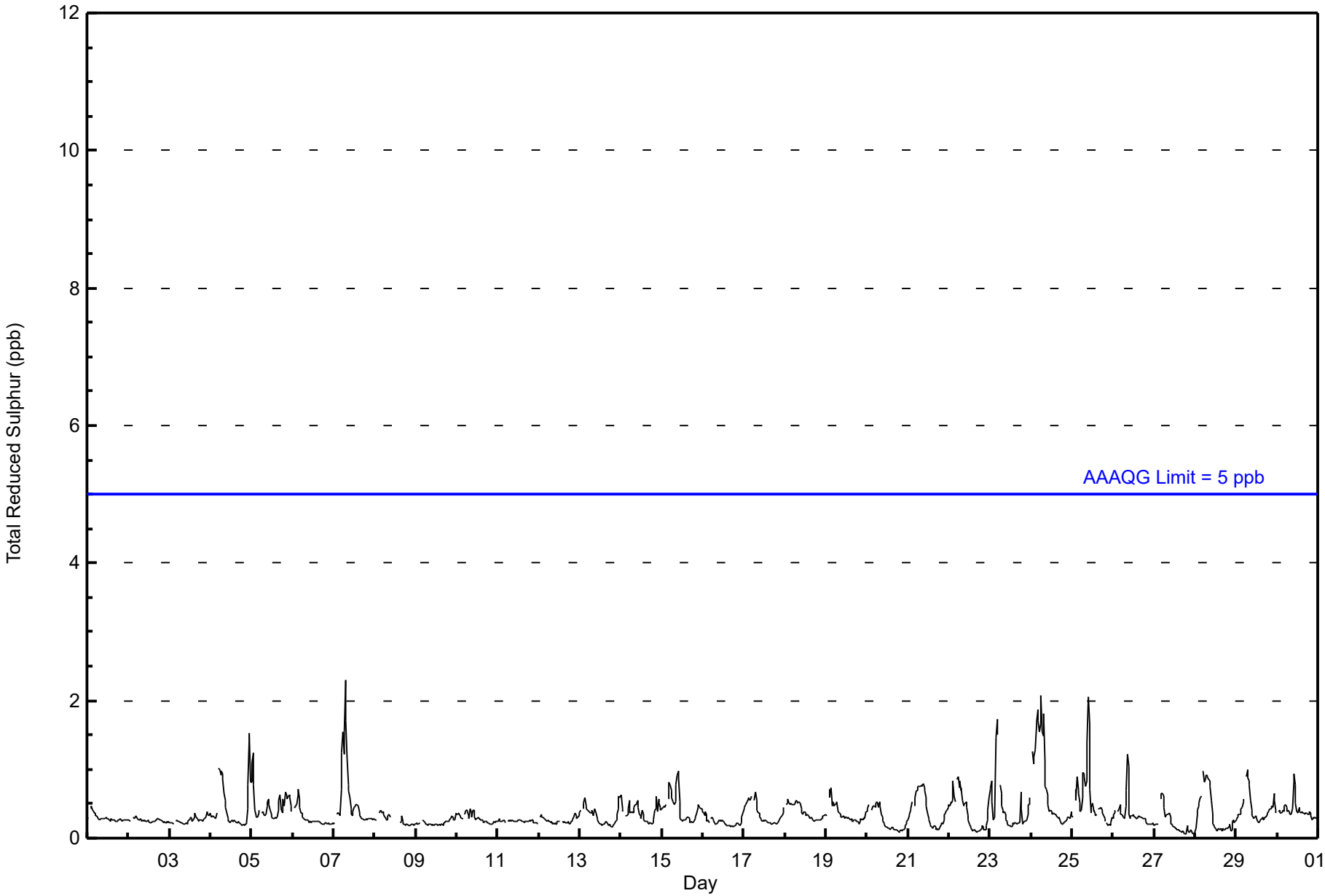
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Barge Landing - June 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

Total Reduced Sulphur (TRS) - ppb

Barge Landing - June 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	118	64	34	20	17	22	61	57	30	25	32	21	32	14	30	106	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	118	64	34	20	17	22	61	57	30	25	32	21	32	14	30	106	683

Total Number of Valid Hours: 683

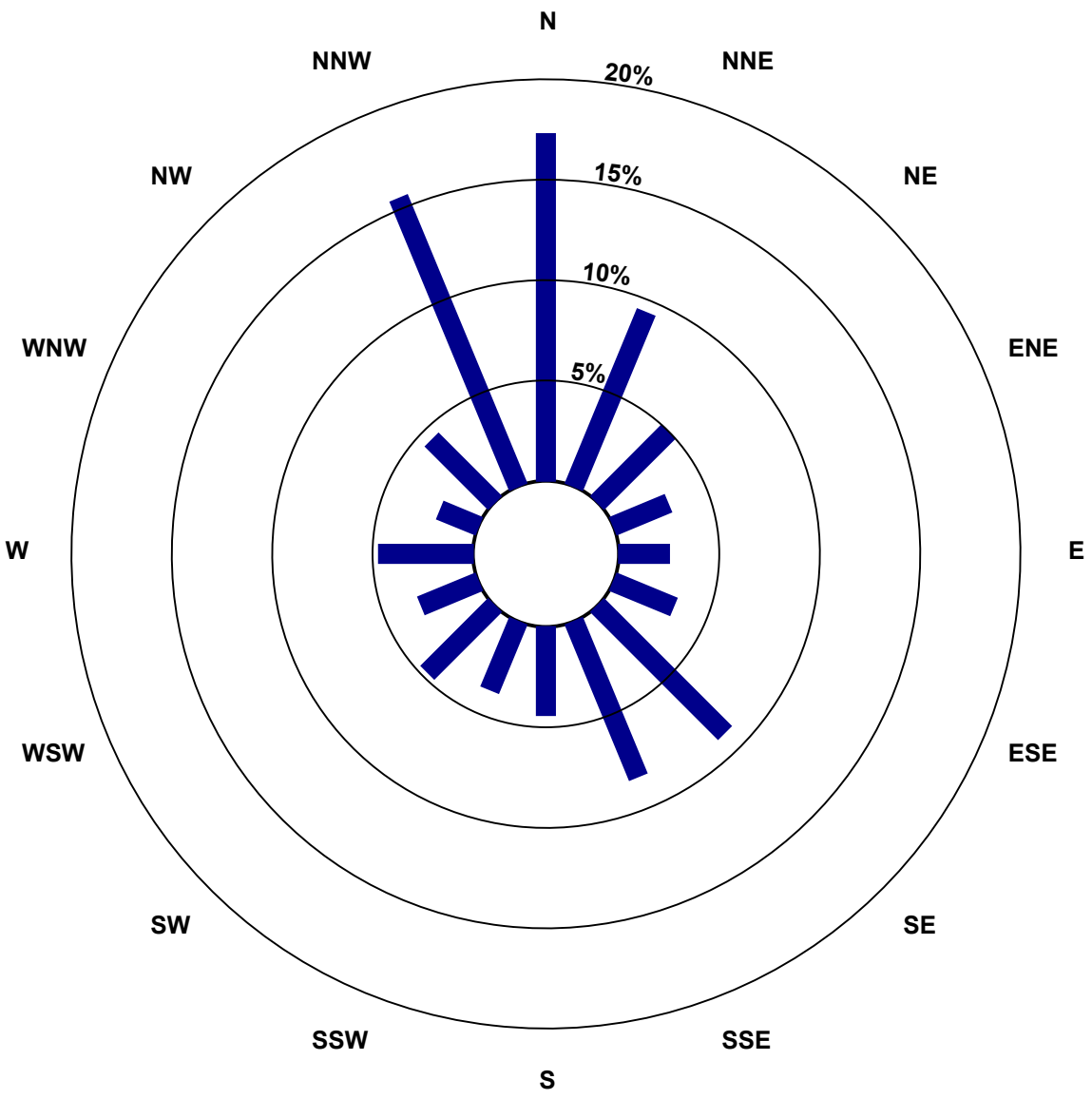
Total Number of Hours: 720

Wood Buffalo Environmental Association

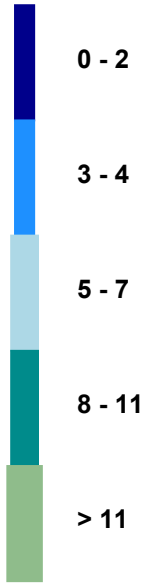
Wind Rose Jun 2026

Total Reduced Sulphur (TRS) - ppb

Barge Landing



Classes (ppb)



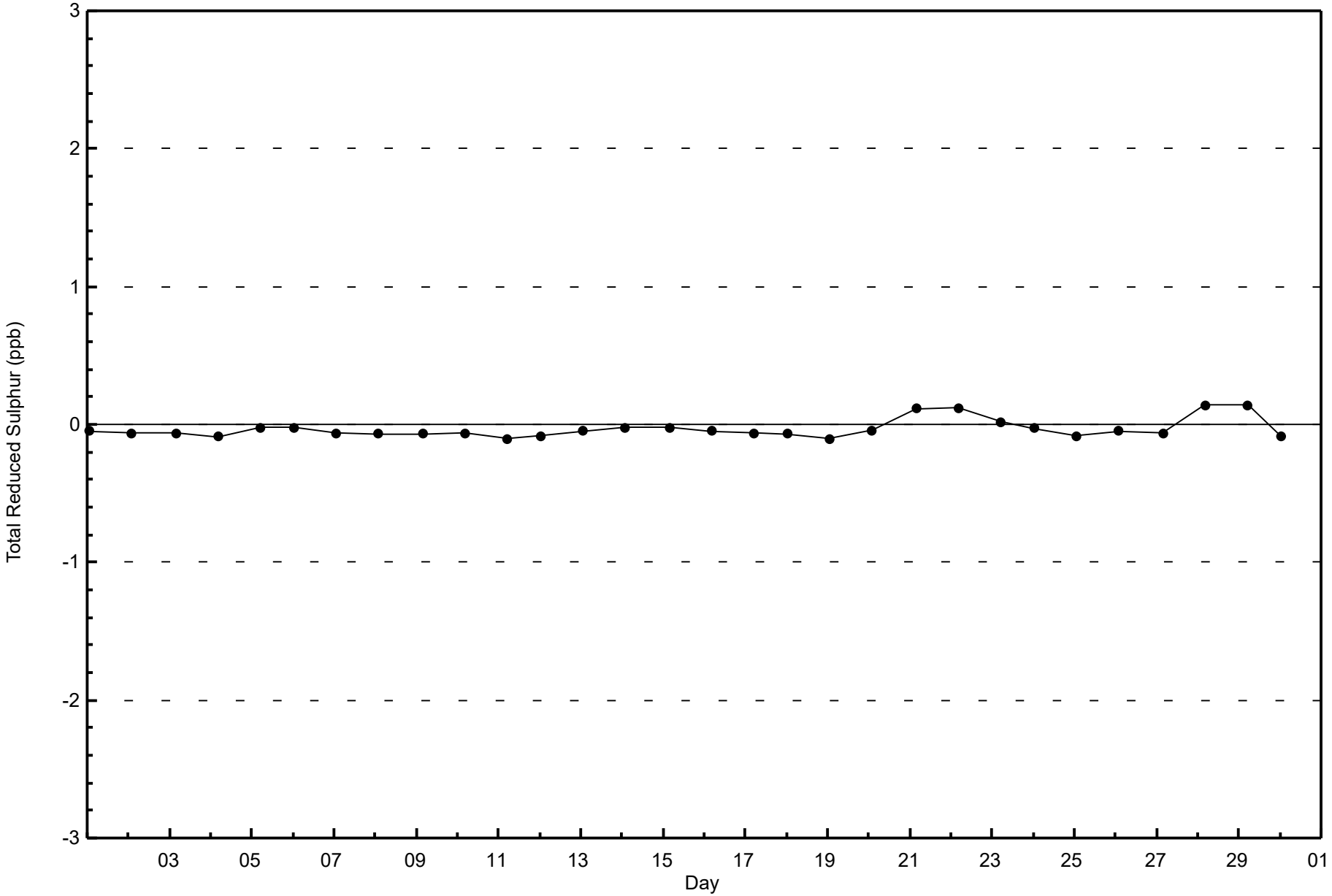
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Barge Landing - June 2026

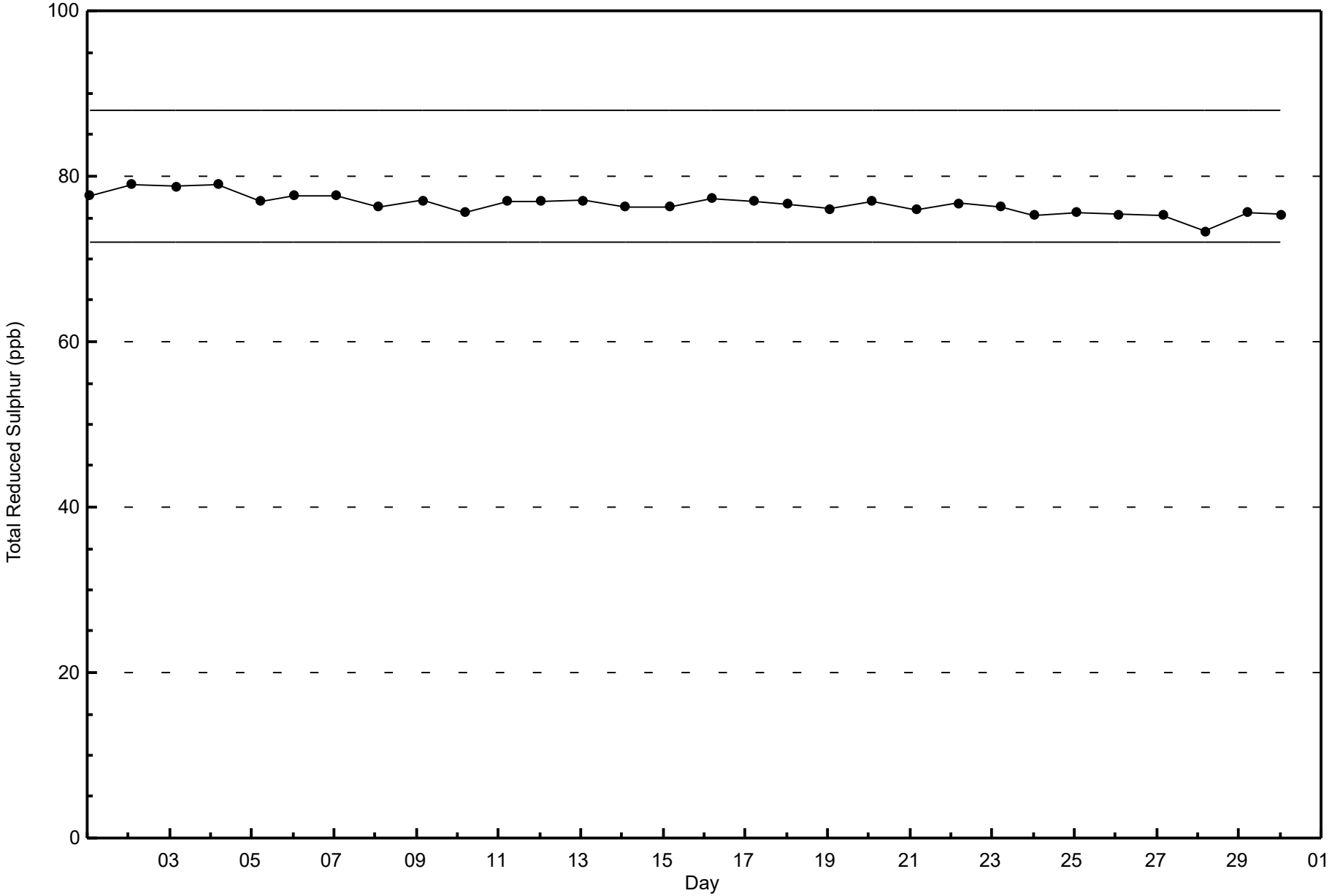


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Barge Landing - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Barge Landing - June 2026

Maximum Value: 2.8 ppm on Jun 15 22:00

Maximum Daily Average: 2.3 ppm on Jun 28

Minimum Value: 1.9 ppm on Jun 6 07:00

Minimum Daily Average: 2.0 ppm on Jun 8

Maximum Diurnal Average: 2.2 ppm at hour 5

Minimum Diurnal Average: 2.0 ppm at hour 17

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} = 2.6

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 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-Jun	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	2.1	2.1	2.1	2.1	2.2	2.0	2.2
2-Jun	2.2	Z	2.1	2.1	2.1	2.2	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	2.1	2.2
3-Jun	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1
4-Jun	2.2	2.3	2.2	Z	2.2	2.2	2.2	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	2.1	2.6	2.6	2.2	2.6
5-Jun	2.3	2.4	2.1	2.1	Z	2.1	2.0	2.0	2.0	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.2	2.1	2.1	2.4
6-Jun	2.1	2.0	2.4	2.6	2.2	Z	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6
7-Jun	Z	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1
8-Jun	2.1	Z	2.1	2.1	2.1	2.1	2.0	2.0	2.2	2.1	2.1	2.0	2.0	1.9	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2
9-Jun	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	2.0	2.2	2.1	2.1	2.1	2.0	2.2
10-Jun	2.4	2.3	2.1	Z	2.3	2.1	2.1	2.1	2.0	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	2.0	2.0	2.1	2.4
11-Jun	2.1	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.1
12-Jun	2.2	2.2	2.1	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	C	C	C	C	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.0	2.2
13-Jun	Z	2.2	2.2	2.2	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.2
14-Jun	2.3	Z	2.1	2.0	2.1	2.1	2.1	2.2	2.5	2.6	2.4	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.5	2.2	2.2	2.6
15-Jun	2.1	2.2	Z	2.2	2.4	2.5	2.3	2.3	2.3	2.2	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.4	2.8	2.7	2.4	2.2	2.8
16-Jun	2.3	2.2	2.1	Z	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	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.3
17-Jun	2.1	2.1	2.1	2.2	Z	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	2.0	2.0	2.1	2.1	2.2	2.2	2.1	2.3
18-Jun	2.2	2.2	2.2	2.2	2.2	Z	2.2	2.1	2.2	2.2	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2
19-Jun	Z	2.1	2.2	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.2	2.3	2.4	2.3	2.1	2.4
20-Jun	2.2	Z	2.2	2.3	2.3	2.2	2.3	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	2.1	2.1	2.5
21-Jun	2.3	2.3	Z	2.2	2.4	2.4	2.3	2.2	2.4	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.5	2.6	2.3	2.3	2.2	2.6
22-Jun	2.3	2.4	2.4	Z	2.5	2.6	2.7	2.6	2.3	2.6	2.4	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.7
23-Jun	2.3	2.3	2.1	2.3	Z	2.4	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.3	2.1	2.4
24-Jun	2.3	2.5	2.4	2.6	2.6	Z	2.7	2.4	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	2.1	2.1	2.2	2.7
25-Jun	Z	2.3	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.3
26-Jun	2.1	Z	2.2	2.1	2.2	2.3	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	2.3
27-Jun	2.1	2.0	Z	2.1	2.1	2.2	2.3	2.2	2.3	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.3
28-Jun	2.4	2.6	2.5	Z	2.5	2.5	2.6	2.5	2.5	2.4	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.4	2.2	2.4	2.3	2.3	2.6
29-Jun	2.3	2.4	2.3	2.5	Z	2.5	2.5	2.5	2.6	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.3	2.4	2.3	2.3	2.6
30-Jun	2.2	2.2	2.2	2.2	2.4	Z	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.1	2.4
	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	2.0	2.1	2.1	2.2	2.2	Diurnal Average	
	2.4	2.6	2.5	2.6	2.6	2.6	2.7	2.6	2.6	2.6	2.4	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.3	2.5	2.8	2.7	2.6	Diurnal Maximum	

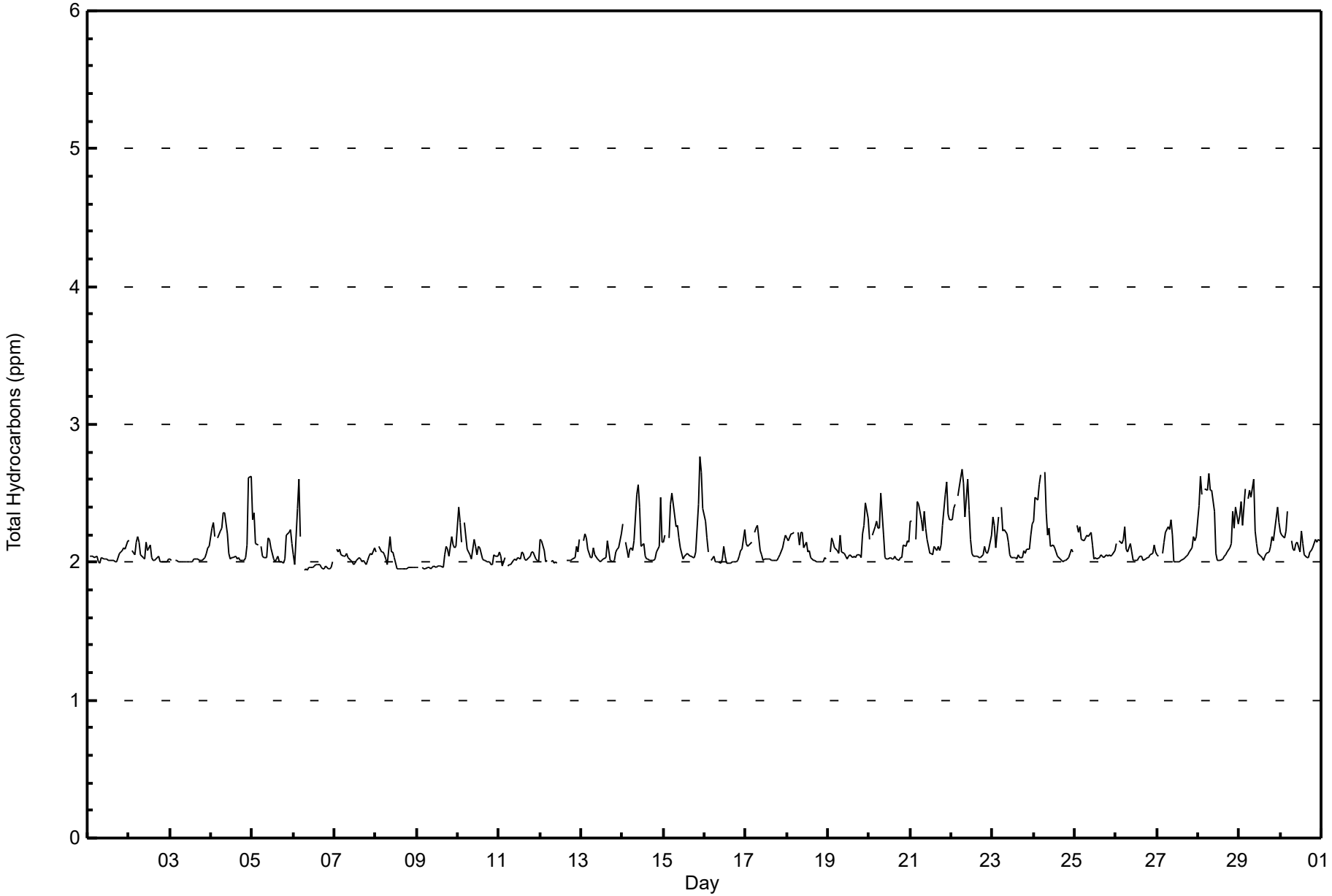
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Barge Landing - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	315	45.92	45.92
2.1 - 3.0	371	54.08	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

Barge Landing - June 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	55	26	14	10	11	12	19	27	6	12	25	15	26	7	4	46	315
2.1 - 3.0	58	37	20	10	6	11	41	28	26	14	6	7	7	11	29	60	371
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	113	63	34	20	17	23	60	55	32	26	31	22	33	18	33	106	686

Total Number of Valid Hours: 686

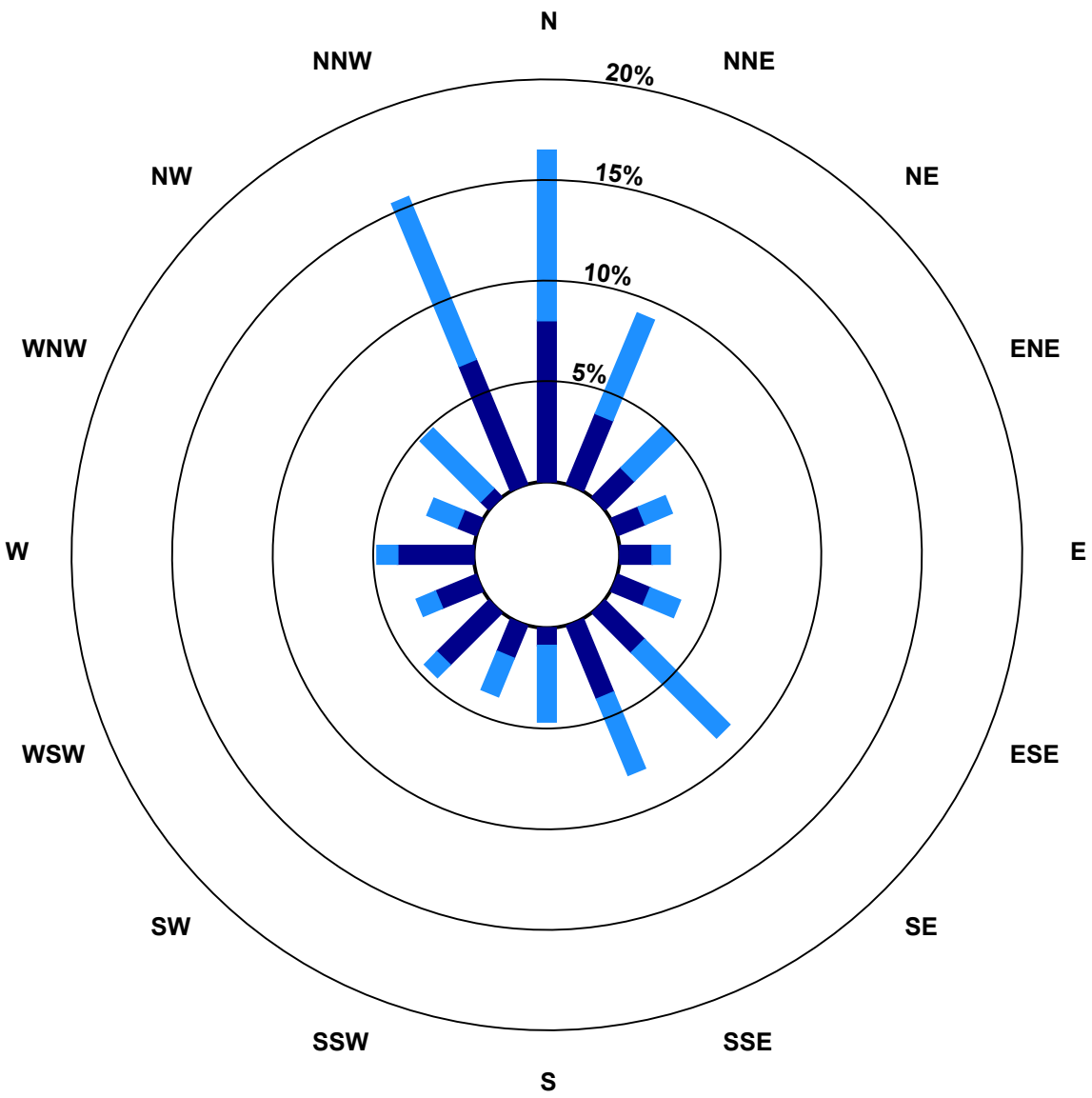
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Barge Landing



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

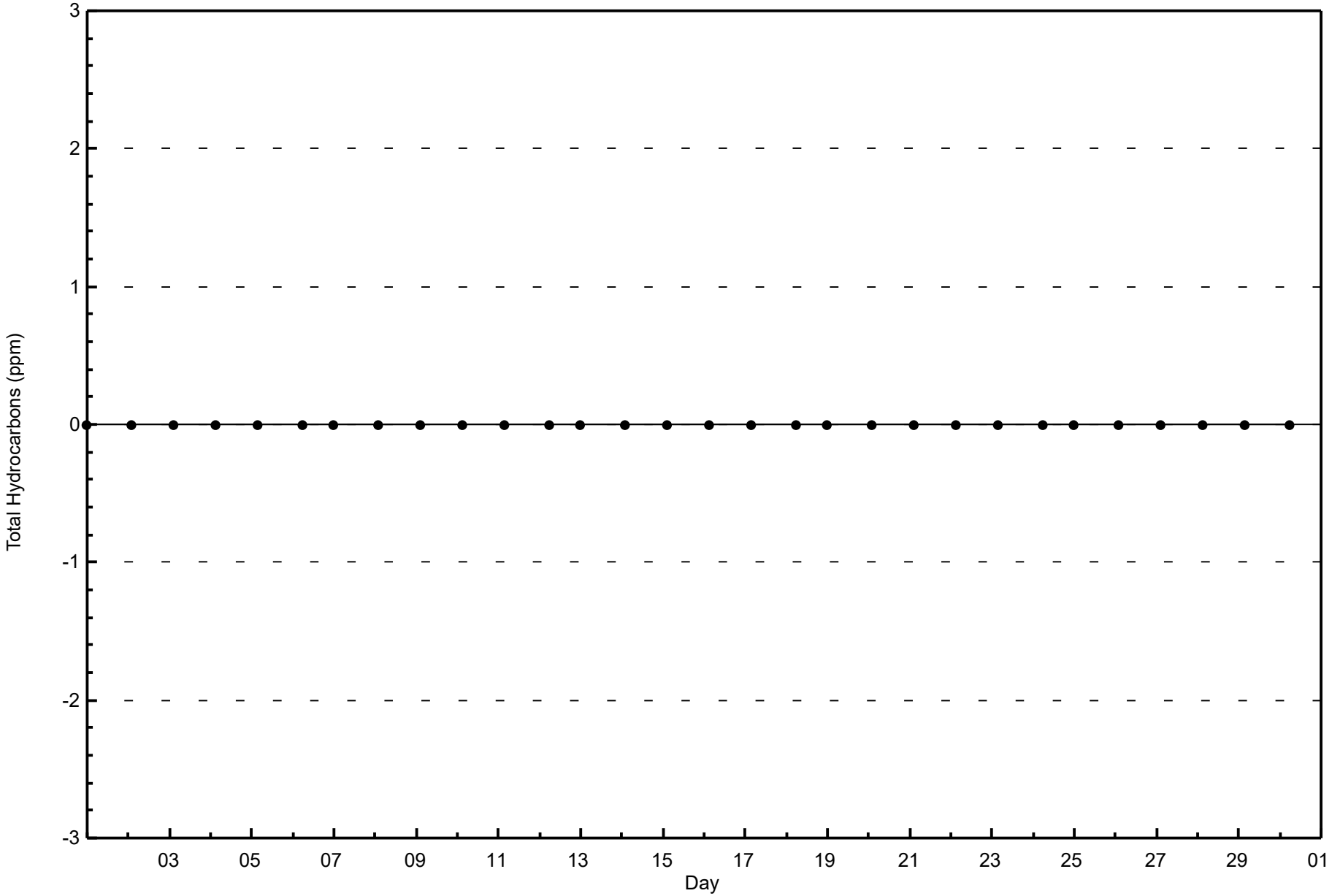
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Barge Landing - June 2026

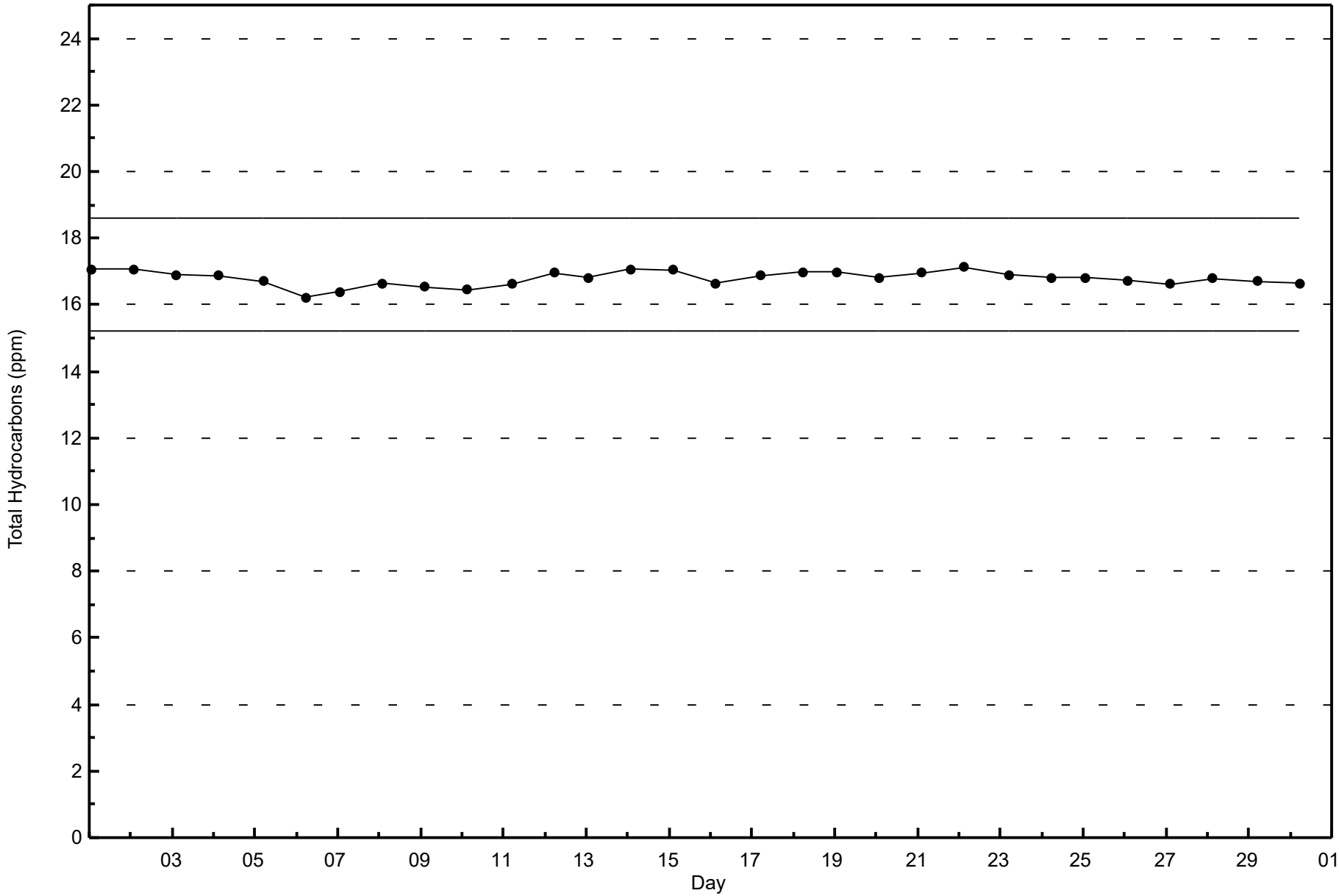


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Barge Landing - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Barge Landing - June 2026

Maximum Value: 0.386 ppm on Jun 21 22:00

Maximum Daily Average: 0.073 ppm on Jun 21

Minimum Value: 0.000 ppm on Jun 1 02:00

Minimum Daily Average: 0.001 ppm on Jun 12

Maximum Diurnal Average: 0.045 ppm at hour 9

Minimum Diurnal Average: 0.002 ppm at hour 18

Monthly Average: 0.020 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:	686
Hours of Missing Data:	34
Hours of Calibration:	34
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-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046	0.058	0.050	0.054	0.036	0.112	0.015	0.112
2-Jun	0.118	Z	0.061	0.027	0.120	0.170	0.113	0.015	0.000	0.000	0.017	0.003	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.029	0.170
3-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.001	0.011	0.001	0.011
4-Jun	0.007	0.004	0.001	Z	0.005	0.014	0.028	0.134	0.182	0.103	0.015	0.000	0.002	0.000	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.081	0.134	0.032	0.182
5-Jun	0.088	0.062	0.001	0.000	Z	0.000	0.000	0.000	0.001	0.042	0.071	0.076	0.026	0.009	0.024	0.027	0.000	0.000	0.000	0.006	0.042	0.028	0.039	0.015	0.024	0.088
6-Jun	0.000	0.001	0.010	0.054	0.004	Z	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.054
7-Jun	Z	0.004	0.000	0.001	0.000	0.002	0.004	0.011	0.002	0.000	0.000	0.000	0.000	0.008	0.002	0.001	0.001	0.006	0.000	0.015	0.006	0.001	0.002	0.003	0.003	0.015
8-Jun	0.033	Z	0.001	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	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.002	0.033
9-Jun	0.000	0.000	Z	0.000	0.002	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.001	0.000	0.001	0.058	0.025	0.054	0.006	0.058
10-Jun	0.331	0.091	0.002	Z	0.200	0.070	0.000	0.000	0.000	0.000	0.001	0.030	0.099	0.107	0.015	0.003	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.042	0.331
11-Jun	0.001	0.000	0.001	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.066	0.051	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.066
12-Jun	0.001	0.008	0.001	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	C	C	C	C	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.008
13-Jun	Z	0.002	0.000	0.000	0.000	0.000	0.000	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.003	0.124	0.049	0.000	0.000	0.000	0.003	0.001	0.000	0.008	0.009	0.124
14-Jun	0.019	Z	0.000	0.000	0.000	0.000	0.003	0.023	0.214	0.335	0.261	0.084	0.111	0.029	0.001	0.001	0.000	0.004	0.000	0.000	0.004	0.000	0.129	0.021	0.054	0.335
15-Jun	0.038	0.025	Z	0.019	0.017	0.017	0.004	0.003	0.014	0.070	0.033	0.000	0.000	0.002	0.009	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.009	0.068	0.014	0.070
16-Jun	0.000	0.006	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.068	0.029	0.000	0.000	0.000	0.009	0.008	0.001	0.011	0.009	0.018	0.025	0.119	0.013	0.119
17-Jun	0.002	0.000	0.000	0.000	Z	0.000	0.004	0.041	0.004	0.023	0.007	0.014	0.007	0.008	0.013	0.000	0.000	0.000	0.000	0.022	0.036	0.041	0.046	0.004	0.012	0.046
18-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.005	0.011	0.013	0.006	0.032	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.045
19-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.025	0.060	0.004	0.000	0.022	0.043	0.009	0.012	0.000	0.006	0.022	0.015	0.177	0.096	0.085	0.078	0.028	0.177
20-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.028	0.338	0.111	0.000	0.000	0.000	0.000	0.002	0.001	0.000	0.000	0.000	0.000	0.001	0.028	0.012	0.045	0.000	0.025	0.338
21-Jun	0.128	0.081	Z	0.018	0.216	0.097	0.000	0.000	0.145	0.000	0.000	0.000	0.033	0.008	0.066	0.014	0.064	0.018	0.041	0.055	0.254	0.386	0.065	0.001	0.073	0.386
22-Jun	0.001	0.012	0.009	Z	0.004	0.013	0.055	0.081	0.072	0.218	0.093	0.059	0.000	0.000	0.001	0.001	0.001	0.004	0.002	0.016	0.006	0.000	0.000	0.040	0.030	0.218
23-Jun	0.092	0.061	0.005	0.037	Z	0.054	0.025	0.002	0.006	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.000	0.000	0.000	0.001	0.003	0.014	0.092
24-Jun	0.007	0.064	0.102	0.085	0.072	Z	0.155	0.103	0.065	0.124	0.045	0.065	0.069	0.045	0.022	0.015	0.008	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.045	0.155
25-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.030	0.044	0.048	0.053	0.026	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.002	0.009	0.053
26-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.045	0.025	0.002	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.001	0.000	0.003	0.045
27-Jun	0.000	0.000	Z	0.002	0.029	0.064	0.064	0.038	0.068	0.052	0.002	0.003	0.000	0.000	0.002	0.005	0.000	0.000	0.002	0.052	0.033	0.001	0.001	0.000	0.018	0.068
28-Jun	0.020	0.159	0.009	Z	0.016	0.009	0.000	0.004	0.055	0.016	0.020	0.003	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.010	0.052	0.131	0.030	0.000	0.023	0.159
29-Jun	0.000	0.000	0.000	0.002	Z	0.000	0.000	0.079	0.259	0.069	0.036	0.023	0.013	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.005	0.156	0.129	0.039	0.035	0.259
30-Jun	0.009	0.006	0.000	0.002	0.003	Z	0.006	0.007	0.015	0.060	0.071	0.040	0.156	0.013	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.003	0.003	0.018	0.156
	0.036	0.023	0.008	0.010	0.028	0.020	0.017	0.031	0.045	0.042	0.024	0.016	0.021	0.013	0.008	0.007	0.005	0.002	0.005	0.009	0.024	0.034	0.025	0.024	Diurnal Average	
	0.331	0.159	0.102	0.085	0.216	0.170	0.155	0.338	0.259	0.335	0.261	0.084	0.156	0.107	0.066	0.124	0.064	0.018	0.046	0.058	0.254	0.386	0.129	0.134	Diurnal Maximum	

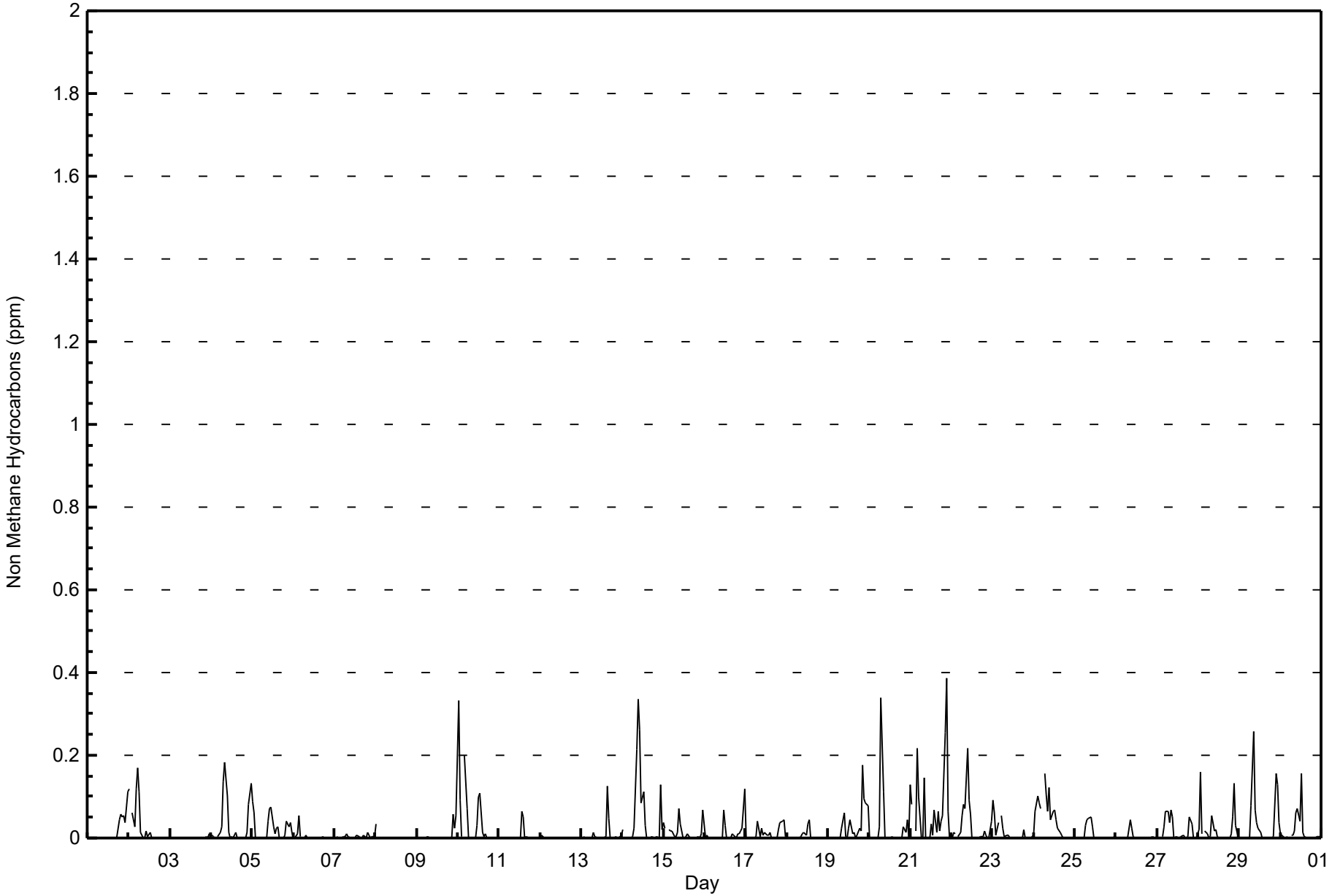
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Barge Landing - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	453	66.03	66.04
0.006 - 0.05	151	22.01	88.05
0.06 - 0.1	64	9.33	97.38
> 0.1	18	2.62	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Barge Landing - June 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	25	24	17	14	20	49	31	10	18	29	17	29	10	22	81	453
0.006 - 0.05	33	26	7	3	3	3	7	15	14	6	1	5	3	5	4	16	151
0.06 - 0.1	15	11	2	0	0	0	3	9	7	1	1	0	1	3	4	7	64
> 0.1	8	1	1	0	0	0	1	0	1	1	0	0	0	0	3	2	18
Totals	113	63	34	20	17	23	60	55	32	26	31	22	33	18	33	106	686

Total Number of Valid Hours: 686

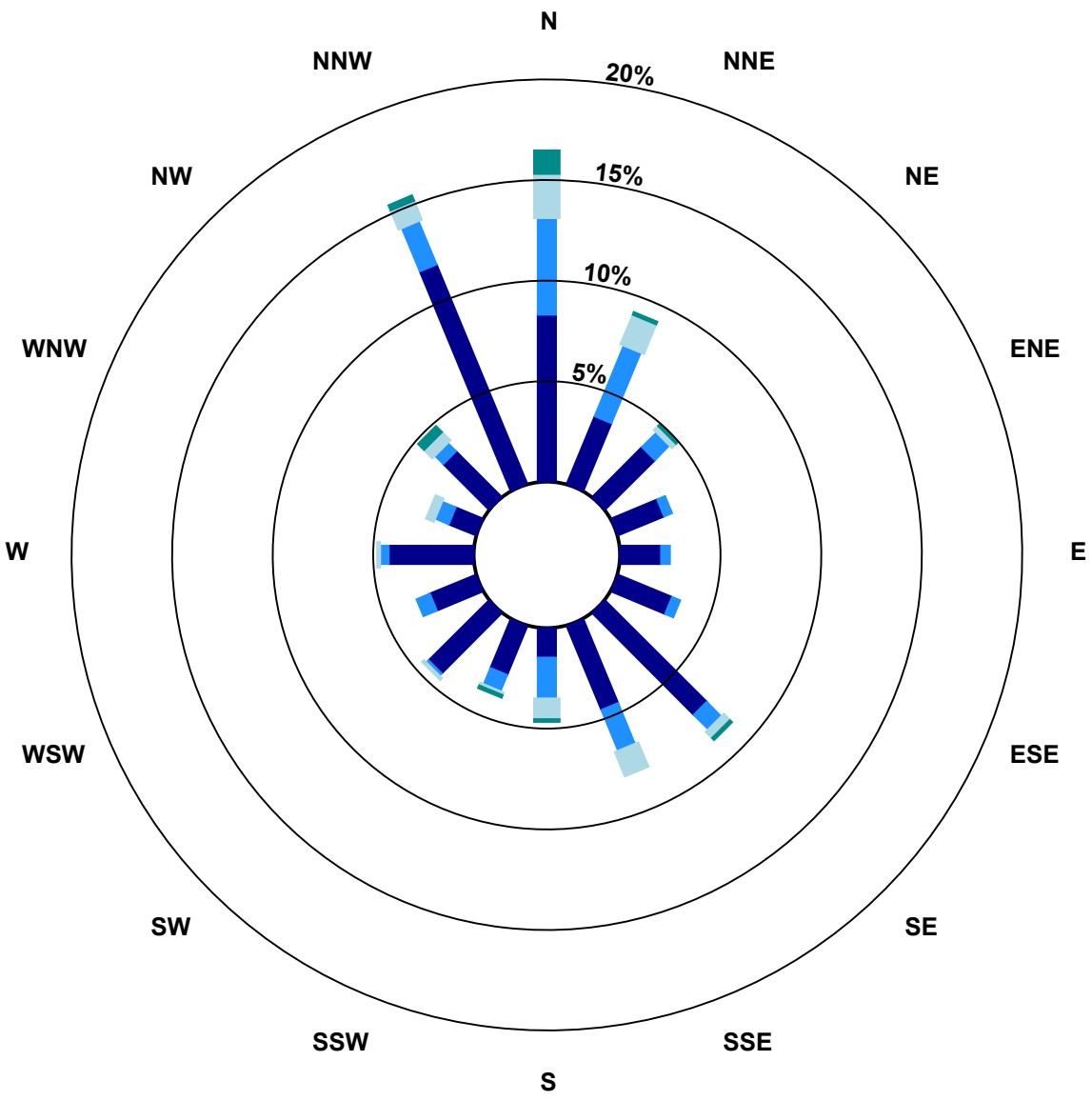
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Non Methane Hydrocarbons (NMHC) - ppm

Barge Landing



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

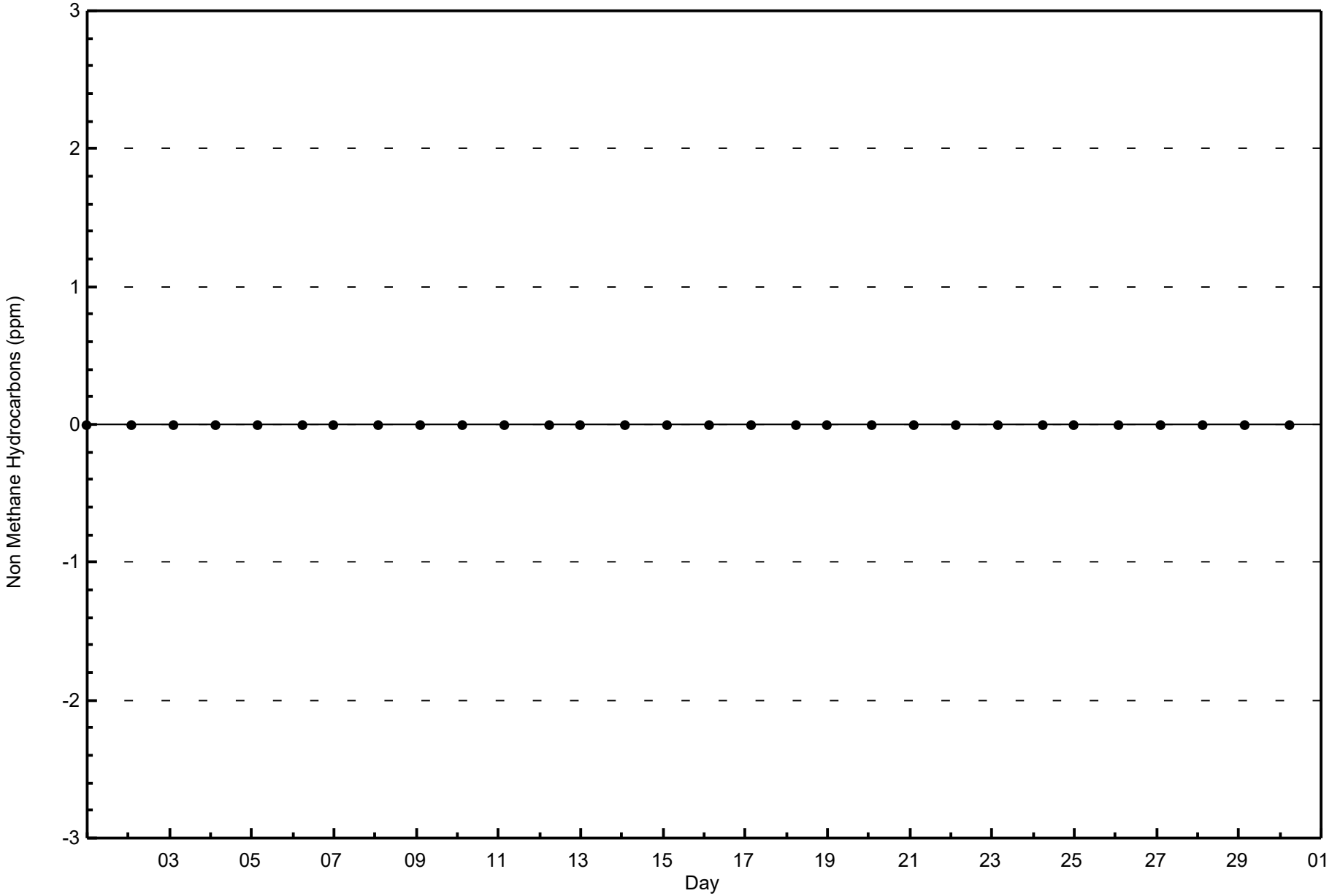
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Barge Landing - June 2026

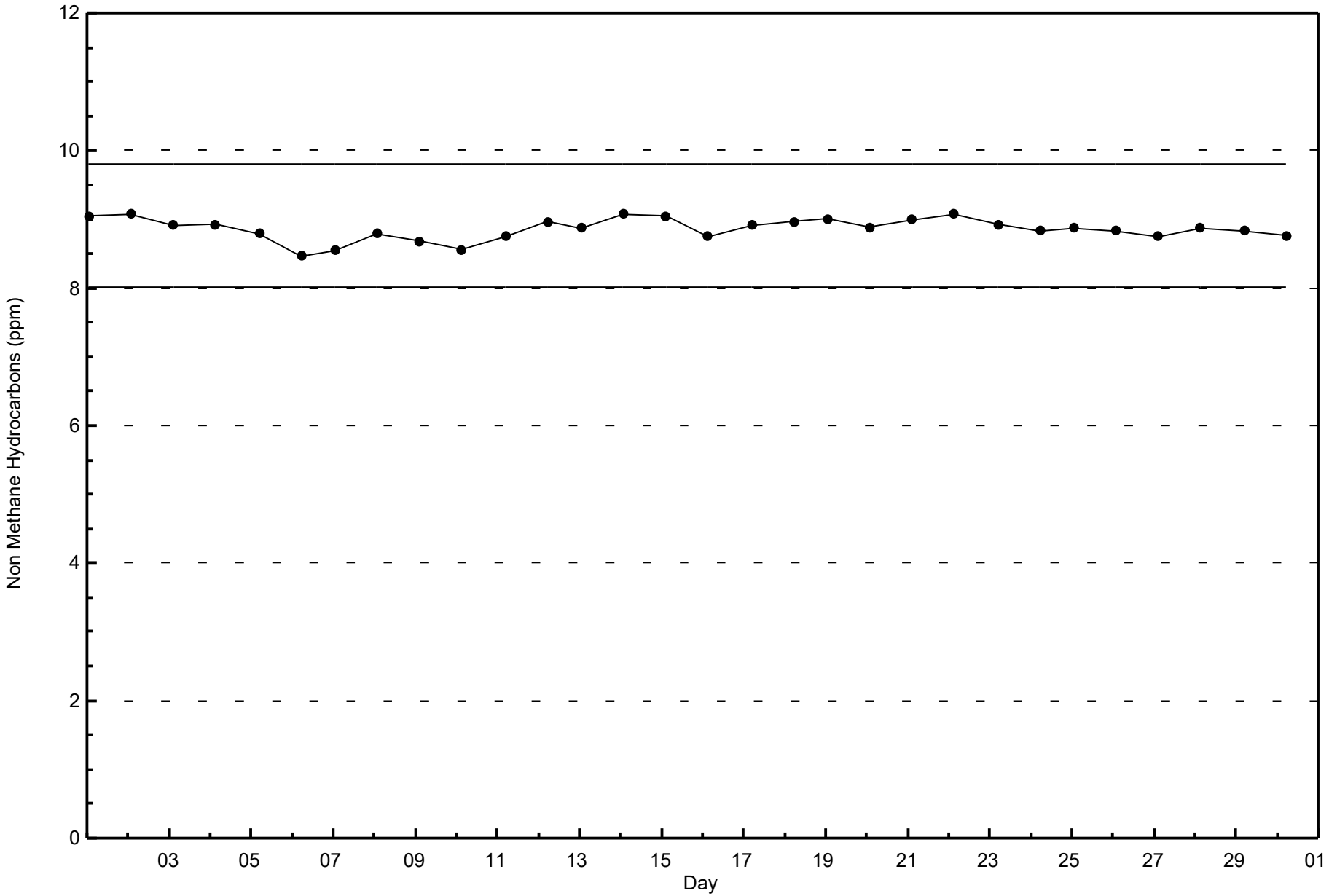


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Barge Landing - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Barge Landing - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.8 ppm on Jun 15 22:00 Maximum Daily Average: 2.3 ppm on Jun 28

Minimum Value: 1.9 ppm on Jun 6 07:00 Minimum Daily Average: 2.0 ppm on Jun 9
Maximum Diurnal Average: 2.2 ppm at hour 2 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 = 2.0 Q_3 = 2.1 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 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-Jun	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	2.0	2.1
2-Jun	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
3-Jun	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1
4-Jun	2.2	2.3	2.2	Z	2.2	2.2	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.5	2.5	2.1	2.5
5-Jun	2.2	2.3	2.1	2.1	Z	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.2	2.1	2.1	2.3
6-Jun	2.1	2.0	2.4	2.5	2.2	Z	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5
7-Jun	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	2.1	2.1	2.1	2.0	2.1
8-Jun	2.0	Z	2.1	2.1	2.1	2.1	2.0	2.0	2.2	2.1	2.1	2.0	2.0	1.9	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2
9-Jun	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	2.0	2.2	2.1	2.1	2.1	2.0	2.2
10-Jun	2.1	2.2	2.1	Z	2.1	2.0	2.1	2.1	2.0	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.2
11-Jun	2.1	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.1
12-Jun	2.2	2.1	2.1	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	C	C	C	C	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.0	2.2
13-Jun	Z	2.2	2.2	2.2	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.2
14-Jun	2.3	Z	2.1	2.0	2.1	2.1	2.1	2.1	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.1	2.1	2.3
15-Jun	2.1	2.2	Z	2.2	2.4	2.5	2.3	2.3	2.3	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.4	2.8	2.6	2.3	2.2	2.8
16-Jun	2.3	2.2	2.1	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.3
17-Jun	2.1	2.1	2.1	2.2	Z	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.2
18-Jun	2.2	2.2	2.2	2.2	2.2	Z	2.2	2.1	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2
19-Jun	Z	2.1	2.2	2.1	2.1	2.1	2.1	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.3	2.2	2.1	2.3
20-Jun	2.2	Z	2.2	2.3	2.3	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	2.1	2.1	2.1	2.1	2.3
21-Jun	2.2	2.2	Z	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.0	2.1	2.0	2.1	2.0	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.2	2.3
22-Jun	2.3	2.4	2.4	Z	2.5	2.6	2.6	2.5	2.3	2.4	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	2.2	2.2	2.6
23-Jun	2.2	2.2	2.1	2.3	Z	2.3	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.3	2.1	2.3
24-Jun	2.3	2.4	2.3	2.5	2.6	Z	2.5	2.3	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	2.2	2.6
25-Jun	Z	2.3	2.2	2.3	2.2	2.2	2.1	2.2	2.1	2.2	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	2.1	2.1	2.3
26-Jun	2.1	Z	2.2	2.1	2.2	2.3	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	2.3
27-Jun	2.1	2.0	Z	2.1	2.1	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	2.1	2.0	2.1	2.2	2.2	2.2	2.1	2.2
28-Jun	2.4	2.5	2.5	Z	2.5	2.5	2.6	2.5	2.5	2.4	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.3	2.1	2.4	2.3	2.3	2.6
29-Jun	2.3	2.4	2.3	2.5	Z	2.5	2.5	2.4	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.2	2.5
30-Jun	2.2	2.2	2.2	2.2	2.4	Z	2.2	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.1	2.4
	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	Diurnal Average	
	2.4	2.5	2.5	2.5	2.6	2.6	2.6	2.5	2.5	2.4	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.4	2.8	2.6	2.5	Diurnal Maximum	

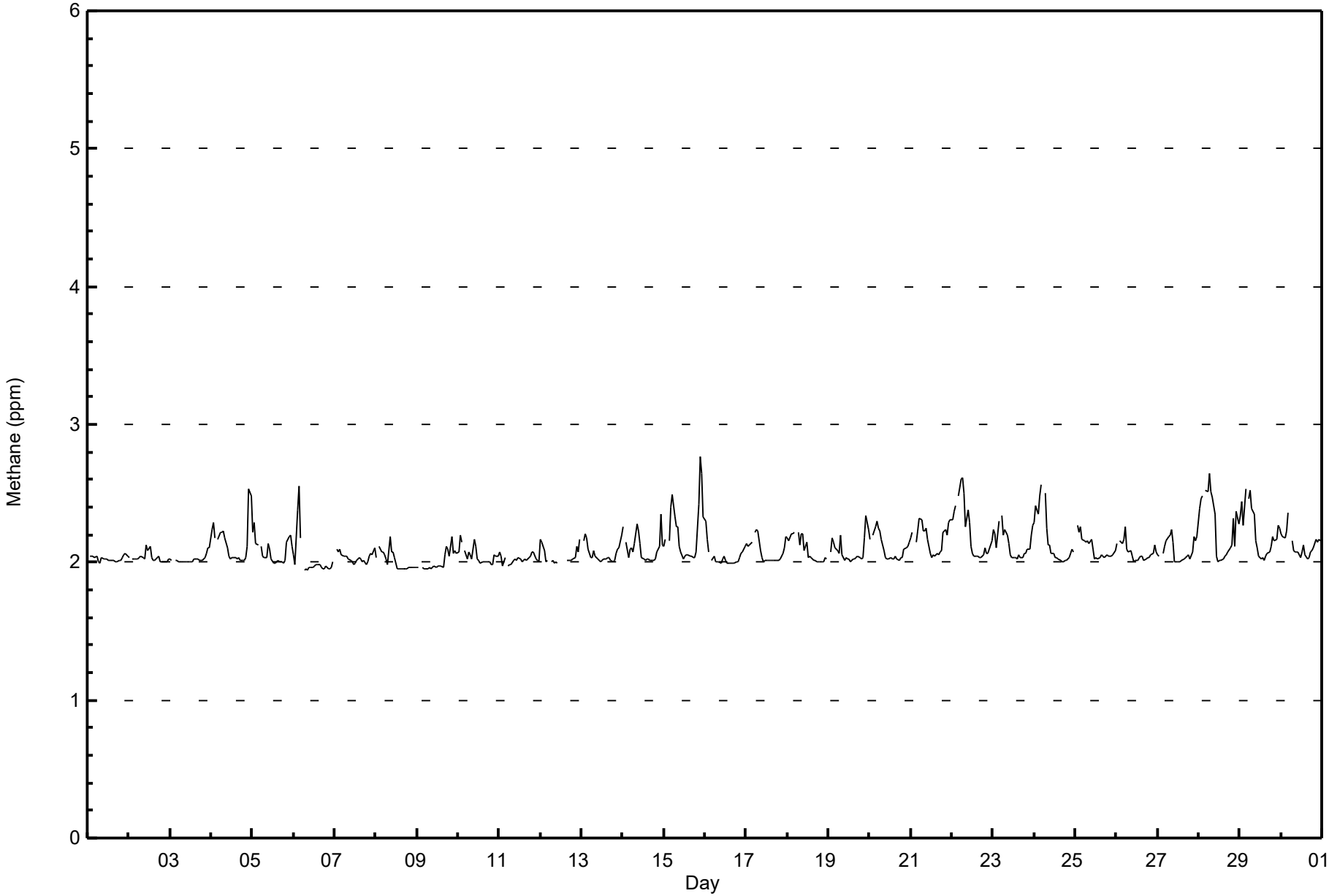
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Barge Landing - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	360	52.48	52.48
2.1 - 3.0	326	47.52	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

Barge Landing - June 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	79	33	14	11	12	12	19	32	8	13	26	15	26	7	6	47	360
2.1 - 3.0	34	30	20	9	5	11	41	23	24	13	5	7	7	11	27	59	326
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	113	63	34	20	17	23	60	55	32	26	31	22	33	18	33	106	686

Total Number of Valid Hours: 686

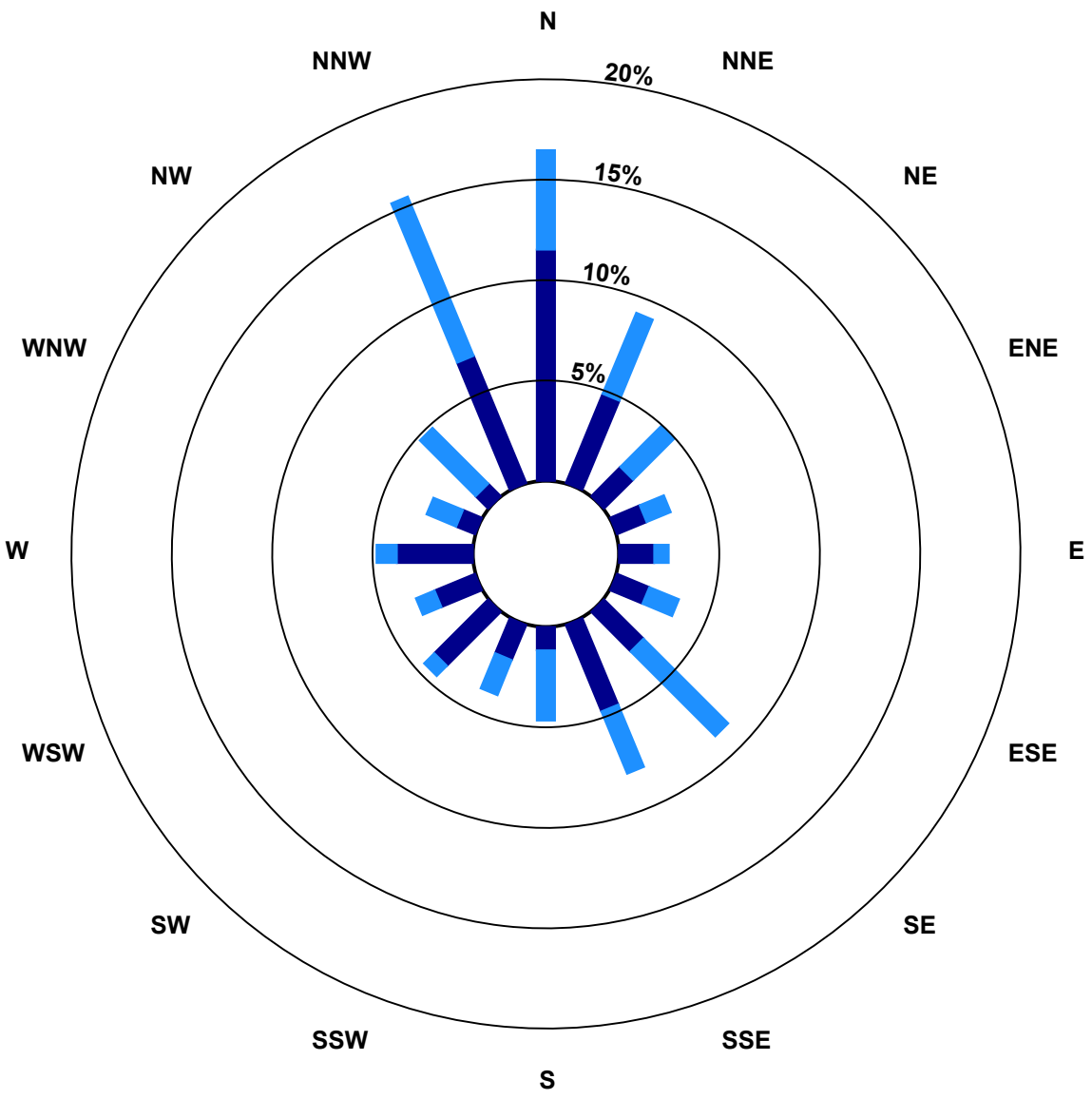
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Methane (CH_4) - ppm

Barge Landing



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

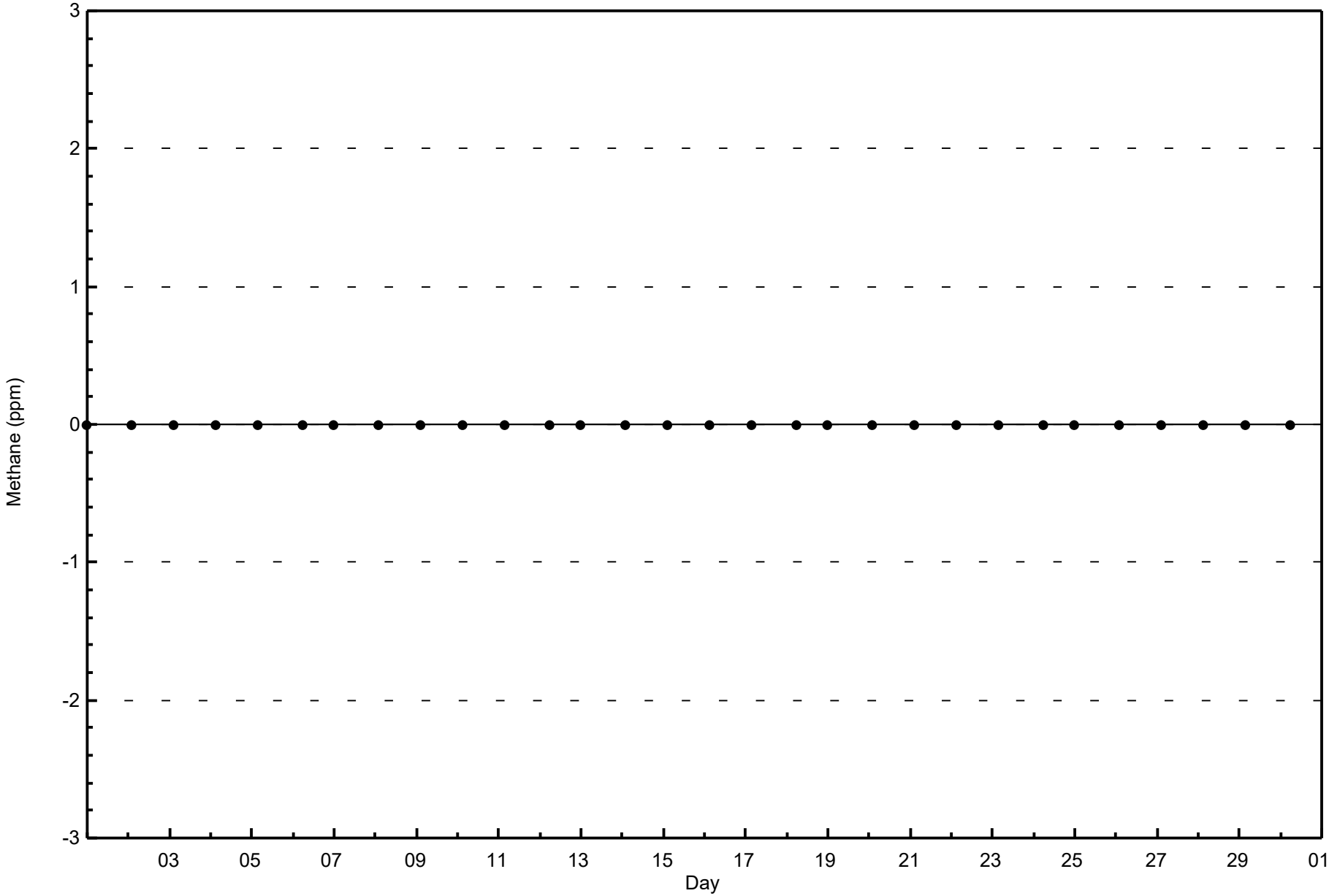
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Barge Landing - June 2026

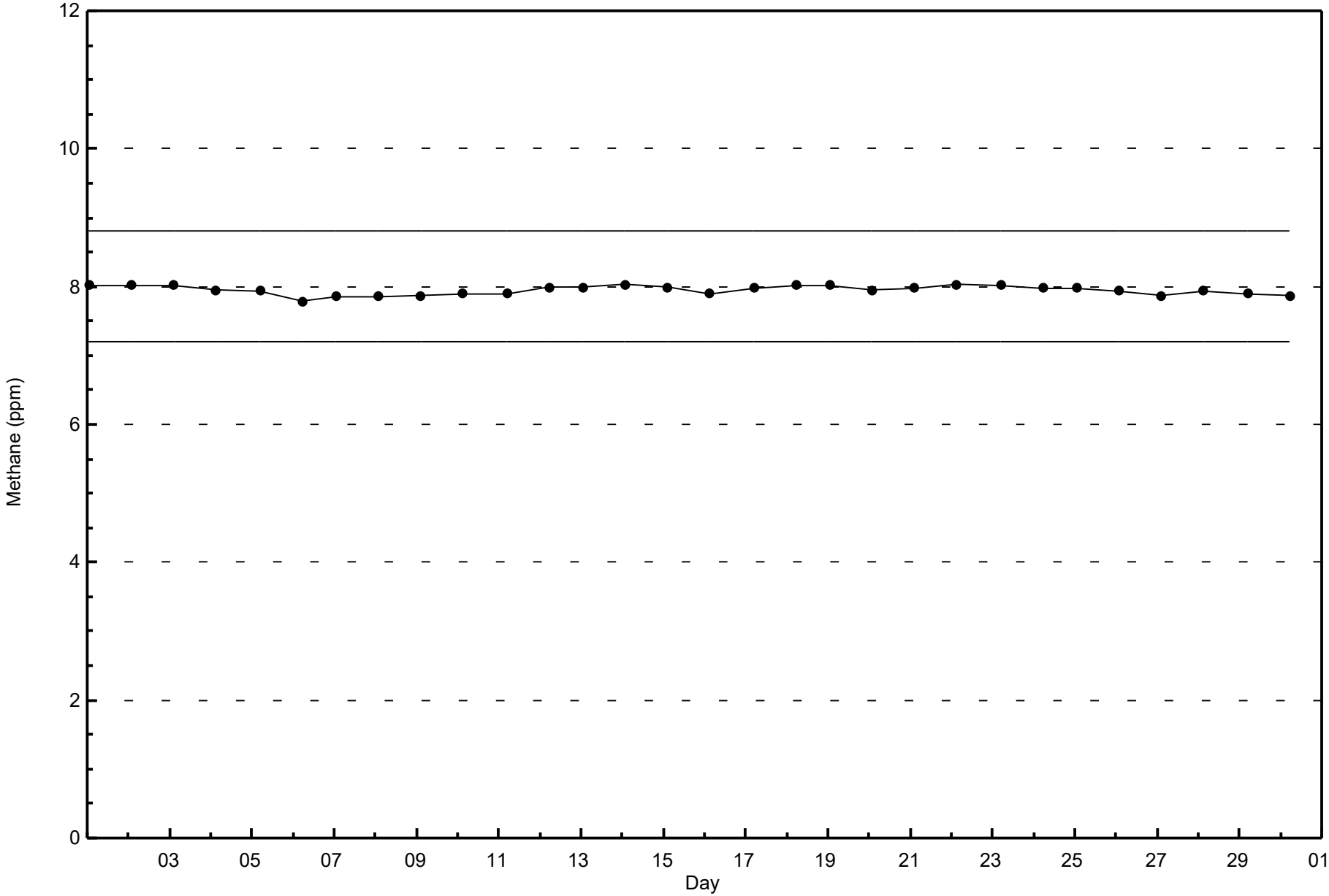


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Barge Landing - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Barge Landing - June 2026

Maximum Value: 52.9 ppb on Jun 22 06:00

Maximum Daily Average: 10.8 ppb on Jun 22

Minimum Value: 0.0 ppb on Jun 1 07:00

Minimum Daily Average: 0.1 ppb on Jun 6

Maximum Diurnal Average: 7.4 ppb at hour 6

Minimum Diurnal Average: 0.9 ppb at hour 13

Monthly Average: 2.61 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.2 Median = 0.6 Q_3 = 2.2 P_{90} = 8.1 P_{99} = 23.6

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-Jun	0.2	0.1	0.0	0.0	Z	0.1	0.0	0.0	0.2	C	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	--	0.2
2-Jun	0.1	0.0	0.1	0.1	0.1	Z	0.6	1.1	0.9	0.5	0.6	0.3	0.8	0.5	0.5	0.5	0.5	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.3	1.1
3-Jun	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.3	0.5	0.7	0.5	0.4	0.3	0.1	0.1	0.3	1.2	2.5	0.3	2.5
4-Jun	3.4	Z	5.5	3.8	4.5	4.2	4.1	5.0	1.9	0.7	0.2	0.4	0.6	0.6	1.0	0.1	0.1	0.0	0.1	0.0	0.1	0.4	0.3	1.2	1.7	5.5
5-Jun	0.6	0.3	Z	0.4	0.8	1.7	1.2	0.9	1.3	2.8	1.0	0.9	1.0	0.5	0.2	0.7	0.7	0.4	0.2	0.2	0.3	0.2	0.3	0.4	0.7	2.8
6-Jun	0.1	0.0	1.0	Z	1.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.4
7-Jun	0.2	0.3	0.2	1.1	Z	2.8	4.7	6.3	4.0	3.7	2.1	1.5	1.1	1.3	1.7	2.0	0.8	0.2	0.0	0.2	0.2	0.2	0.2	0.2	1.5	6.3
8-Jun	0.2	0.1	0.3	0.3	0.2	Z	0.2	0.1	2.6	0.7	0.7	0.2	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	2.6
9-Jun	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	2.1	1.8	0.7	1.0	0.4	0.3	1.3	0.4	2.1
10-Jun	2.4	Z	1.0	0.4	3.4	1.0	2.7	2.0	1.5	2.8	1.8	0.5	0.9	1.1	0.9	1.5	0.8	0.9	0.5	0.0	0.0	0.7	0.3	0.2	1.2	3.4
11-Jun	0.6	0.3	Z	0.3	0.1	0.0	0.0	0.2	0.9	1.0	1.0	1.9	2.0	1.9	1.3	1.2	0.8	1.0	0.9	0.6	0.6	0.2	0.0	0.0	0.7	2.0
12-Jun	0.4	0.3	0.1	Z	0.1	0.3	0.3	0.6	0.3	0.9	0.6	1.4	0.9	M	0.9	1.0	0.8	0.7	0.4	0.7	1.3	1.2	0.6	0.6	0.6	1.4
13-Jun	0.5	0.4	1.2	2.5	Z	0.1	0.2	2.9	1.2	0.4	0.1	0.0	0.0	0.2	0.3	0.3	0.3	0.1	0.1	0.0	0.1	0.7	2.1	4.3	0.8	4.3
14-Jun	0.9	0.6	0.7	0.0	0.5	Z	1.0	2.3	10.4	8.8	5.1	1.0	1.1	0.9	0.5	0.3	0.3	0.2	0.2	0.2	0.8	0.8	10.4	0.6	2.1	10.4
15-Jun	Z	1.2	0.4	0.8	9.3	23.3	8.6	7.7	7.8	5.2	2.4	0.8	0.9	0.9	0.7	0.4	0.3	0.3	0.4	1.0	9.4	28.2	12.1	2.1	5.4	28.2
16-Jun	0.9	Z	0.2	0.0	0.1	0.5	0.6	0.4	0.7	0.3	1.0	1.7	0.9	0.5	0.4	0.8	0.3	0.3	0.2	0.5	0.4	0.3	0.3	2.6	0.6	2.6
17-Jun	1.0	1.1	Z	0.7	2.6	9.6	20.0	16.9	4.1	2.6	1.3	0.9	0.7	0.8	0.5	0.4	0.1	0.2	0.3	0.1	0.2	0.4	0.4	0.1	2.8	20.0
18-Jun	0.3	0.8	3.8	Z	3.3	1.2	2.8	2.1	2.2	4.6	0.6	3.8	1.7	2.2	0.8	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.3	4.6
19-Jun	0.0	0.0	0.2	0.4	Z	0.1	0.5	6.4	5.9	3.3	2.8	2.6	3.1	2.3	3.2	2.3	1.8	2.3	1.5	0.5	0.9	1.1	8.6	4.9	2.4	8.6
20-Jun	0.9	0.7	0.6	3.3	7.1	Z	17.4	16.9	9.1	4.3	2.0	1.7	1.5	1.5	0.9	1.9	1.2	1.0	1.0	0.8	0.7	1.7	1.5	1.4	3.4	17.4
21-Jun	Z	10.4	14.1	9.9	24.0	22.6	17.8	11.6	17.8	17.8	12.6	5.7	2.2	3.0	1.8	2.1	1.5	2.5	1.0	2.5	3.0	5.1	9.3	11.5	9.1	24.0
22-Jun	7.3	Z	15.0	14.0	22.3	52.9	47.6	28.0	12.9	19.4	16.2	5.0	1.9	0.9	0.7	0.7	0.4	0.2	0.2	0.3	0.2	0.1	1.2	0.3	10.8	52.9
23-Jun	0.3	0.5	Z	3.5	9.6	3.7	3.1	6.6	6.1	2.1	0.6	0.1	0.1	0.9	0.3	0.2	1.2	0.2	0.7	0.2	0.2	0.2	0.3	0.4	1.8	9.6
24-Jun	0.8	3.2	2.1	Z	20.4	14.3	8.8	3.8	4.4	1.5	0.4	0.5	0.5	0.4	0.2	0.2	0.2	0.1	0.1	0.2	0.0	0.0	0.0	0.3	2.7	20.4
25-Jun	0.0	0.3	0.3	2.4	Z	2.1	1.7	3.1	3.8	5.4	2.9	0.4	0.5	0.3	0.4	0.8	2.5	3.8	4.7	4.0	1.4	0.1	0.0	0.2	1.8	5.4
26-Jun	0.3	0.4	0.1	0.1	0.3	Z	0.8	0.7	2.3	0.9	0.4	0.3	0.3	0.3	0.3	1.4	3.5	4.9	6.6	5.3	1.6	0.1	0.1	0.2	1.3	6.6
27-Jun	Z	0.0	0.4	0.1	0.2	0.7	2.4	4.1	3.9	4.2	0.3	0.3	0.3	0.3	0.4	0.4	0.7	0.6	0.1	0.1	0.1	0.3	0.2	0.3	0.9	4.2
28-Jun	0.7	Z	8.3	12.4	14.7	17.2	27.4	18.8	19.8	10.5	0.8	0.2	0.2	2.2	4.5	9.5	12.9	14.9	14.8	10.7	2.9	0.6	4.4	1.3	9.1	27.4
29-Jun	1.2	6.3	Z	6.8	14.3	11.9	29.8	13.7	8.2	1.1	1.4	1.0	0.3	0.2	2.3	7.3	18.1	23.0	23.5	20.9	14.8	6.2	0.9	0.3	9.3	29.8
30-Jun	0.2	0.1	0.1	Z	10.2	15.8	6.1	3.1	1.9	1.5	1.3	0.6	1.6	2.3	0.3	1.1	4.2	10.5	12.2	12.0	5.9	0.7	0.2	0.2	4.0	15.8
	0.9	1.1	2.2	2.5	6.0	7.4	7.0	5.5	4.5	3.7	2.1	1.2	0.9	0.9	0.9	1.3	1.9	2.4	2.4	2.1	1.5	1.7	1.9	1.3	Diurnal Average	
	7.3	10.4	15.0	14.0	24.0	52.9	47.6	28.0	19.8	19.4	16.2	5.7	3.1	3.0	4.5	9.5	18.1	23.0	23.5	20.9	14.8	28.2	12.1	11.5	Diurnal Maximum	

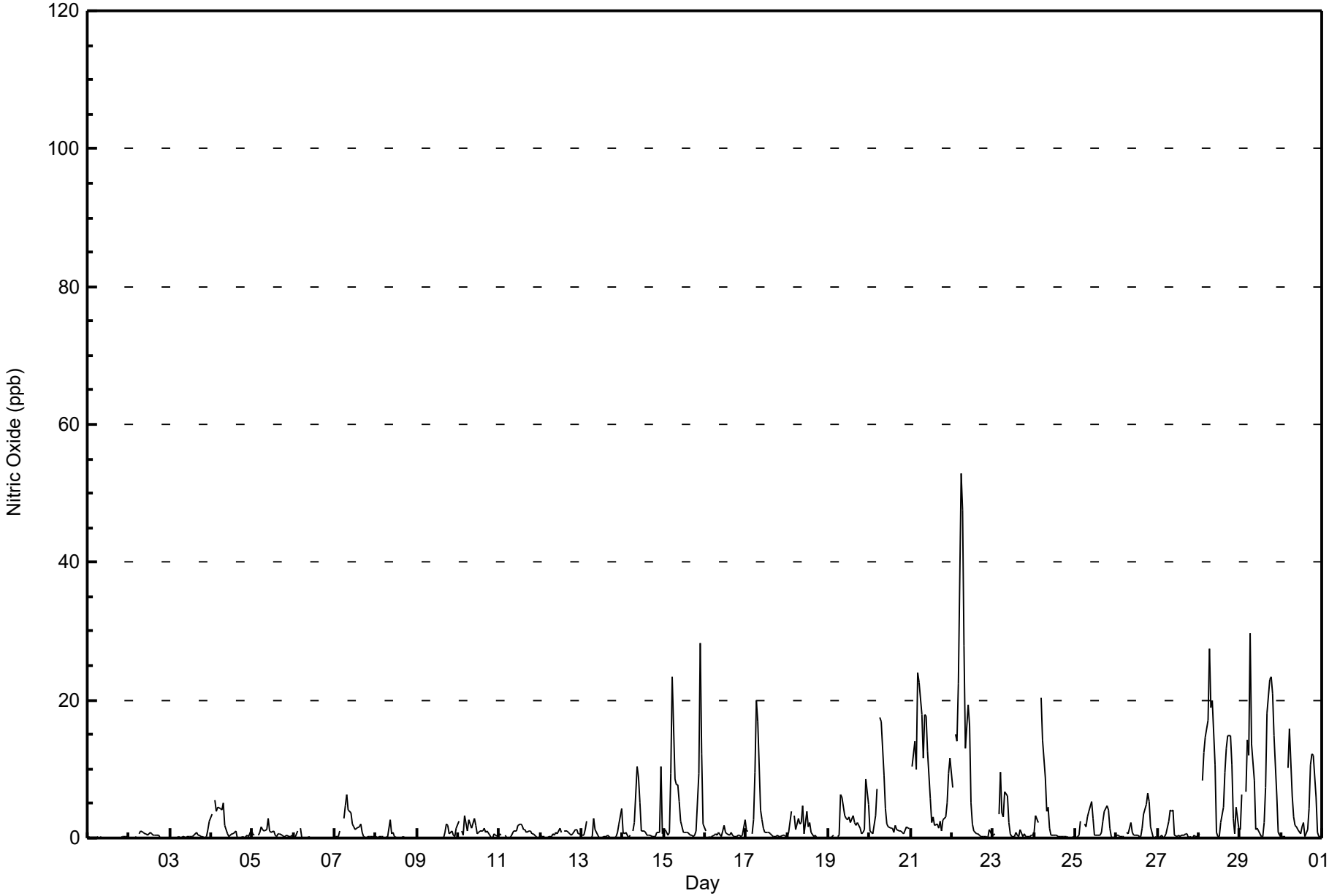
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Barge Landing - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	670	98.10	98.10
21 - 40	11	1.61	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: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Barge Landing - June 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	110	62	31	19	16	22	59	57	32	24	32	21	33	18	31	103	670
21 - 40	3	2	1	1	0	0	0	0	0	0	0	0	0	1	0	3	11
11 - 80	0	0	0	0	1	1	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	113	64	32	20	17	23	59	57	32	24	32	21	33	19	31	106	683

Total Number of Valid Hours: 683

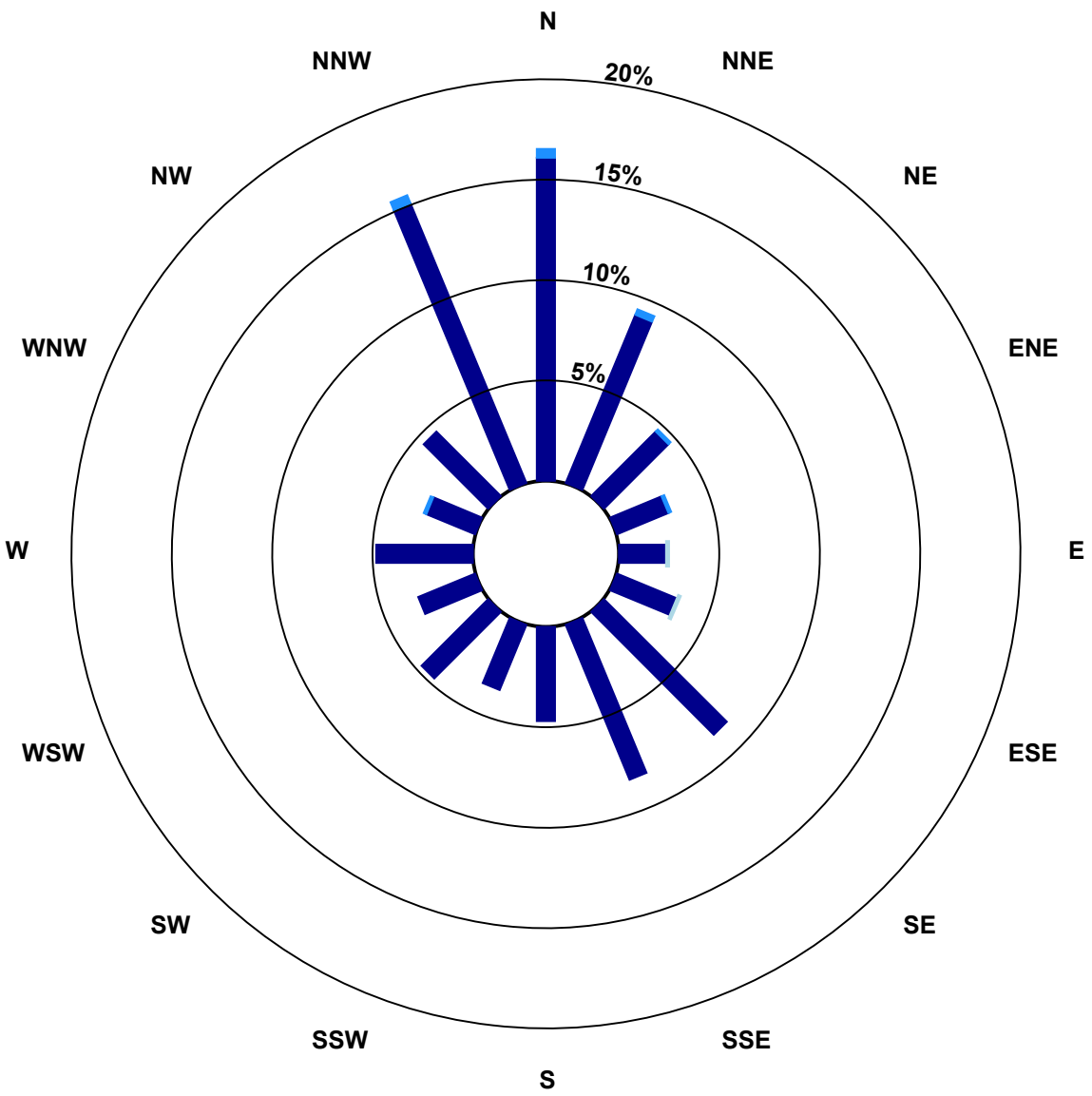
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Barge Landing



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

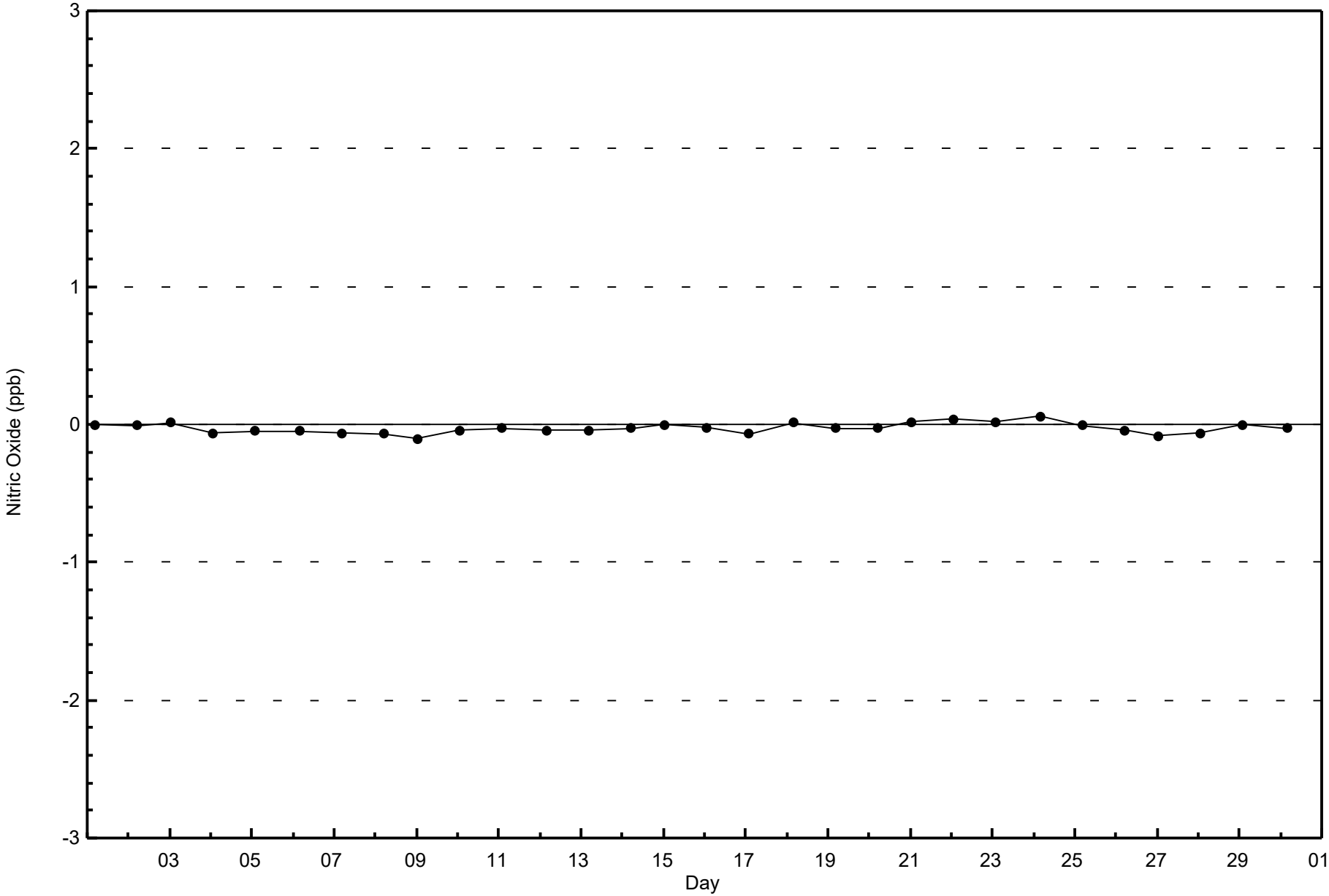
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Barge Landing - June 2026

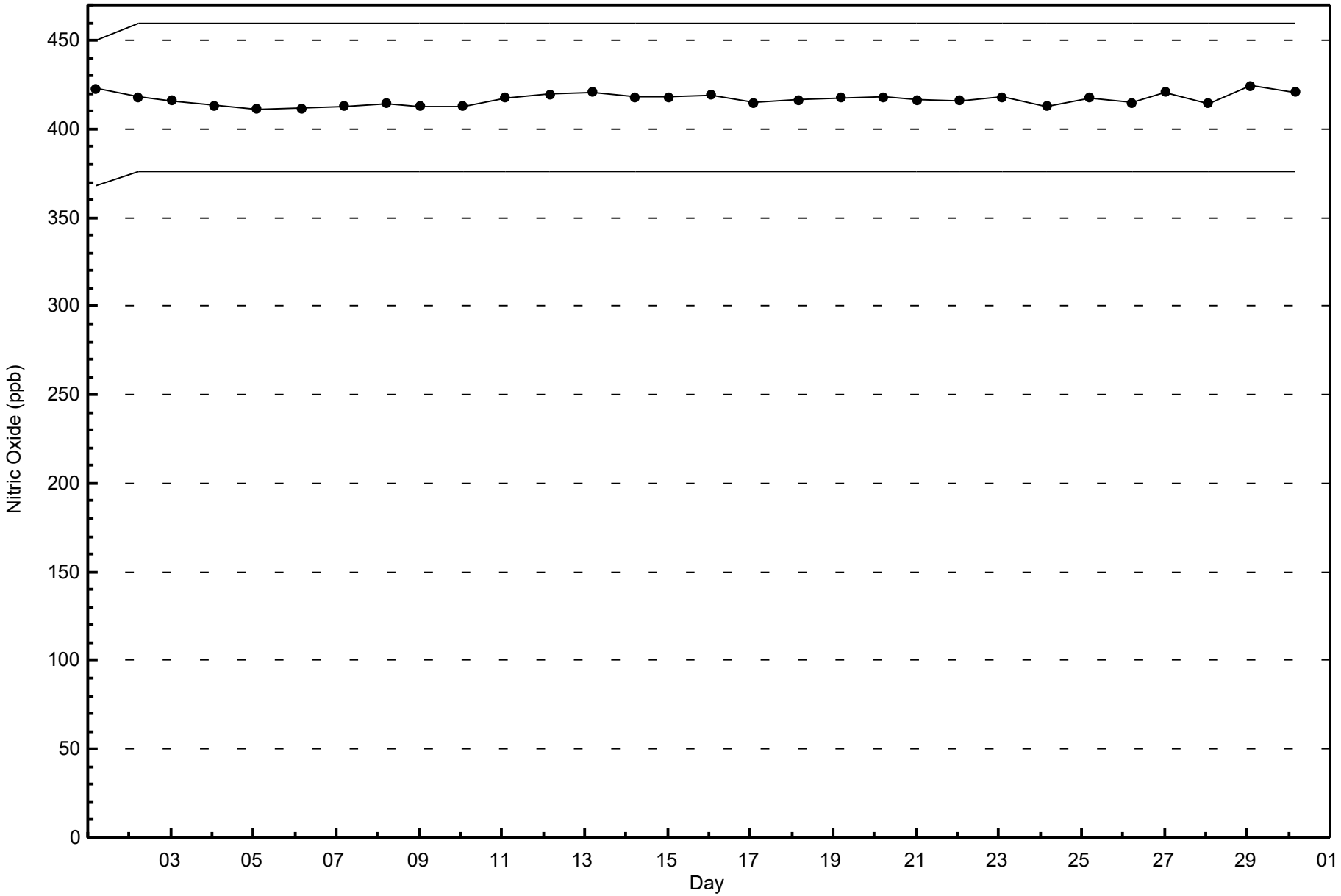


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Barge Landing - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Barge Landing - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 30.0 ppb on Jun 15 22:00 Maximum Daily Average: 11.4 ppb on Jun 29

Minimum Value: 0.1 ppb on Jun 8 16:00 Minimum Daily Average: 1.3 ppb on Jun 6
Maximum Diurnal Average: 8.4 ppb at hour 1 Minimum Diurnal Average: 2.3 ppb at hour 17
Monthly Average: 5.03 ppb Percentiles: P_1 = 0.2 P_{10} = 0.7 Q_1 = 1.7 Median = 3.2 Q_3 = 6.6 P_{90} = 11.9 P_{99} = 24.5

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-Jun	1.7	2.7	1.7	1.9	Z	1.5	1.0	0.7	1.7	C	C	C	C	C	C	0.9	0.7	1.2	1.7	2.1	5.1	8.0	7.7	6.2	--	8.0
2-Jun	5.6	2.0	4.5	3.4	2.7	Z	3.2	4.1	2.9	2.0	2.8	1.8	3.7	2.4	2.3	2.7	3.7	5.3	1.7	1.5	0.8	0.5	0.7	0.5	2.6	5.6
3-Jun	Z	0.8	0.7	0.9	1.3	1.4	1.1	1.1	1.0	0.7	0.8	1.0	0.9	1.4	2.0	3.1	2.6	2.2	2.0	1.7	1.7	5.0	4.3	4.7	1.8	5.0
4-Jun	6.2	Z	4.0	3.6	3.7	4.2	3.9	4.7	3.7	2.3	1.1	1.2	1.7	1.8	2.6	0.6	0.7	0.7	1.1	1.1	2.6	7.6	6.3	9.3	3.2	9.3
5-Jun	9.1	7.6	Z	6.5	6.3	5.6	3.0	2.4	2.8	5.9	3.4	4.0	3.3	2.1	1.4	6.2	5.4	4.2	3.8	2.9	5.6	5.6	6.9	7.4	4.8	9.1
6-Jun	2.9	1.0	10.8	Z	6.4	0.3	0.3	0.4	0.4	0.5	0.3	0.3	0.3	0.3	0.2	0.4	0.7	0.2	0.2	1.0	0.3	0.2	0.7	2.8	1.3	10.8
7-Jun	5.1	5.5	3.6	4.8	Z	6.8	6.0	6.3	4.9	4.4	3.7	2.8	2.4	3.1	4.5	4.9	3.0	2.6	1.2	2.4	2.6	4.7	5.1	4.1	4.1	6.8
8-Jun	3.8	2.5	6.1	5.7	4.6	Z	2.8	0.9	9.2	3.1	3.9	1.3	0.2	0.2	0.3	0.1	0.4	0.1	0.1	0.1	0.1	0.2	0.1	0.1	2.0	9.2
9-Jun	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	3.3	6.5	5.8	5.4	10.6	6.8	5.2	8.8	2.4	10.6
10-Jun	13.1	Z	8.3	5.0	9.0	4.1	5.9	4.0	3.2	6.4	5.4	2.6	3.4	3.0	2.9	2.8	1.8	2.1	1.9	0.2	0.9	8.4	6.6	5.2	4.6	13.1
11-Jun	9.5	5.2	Z	6.2	2.1	0.2	0.2	0.9	2.3	1.9	1.8	2.9	2.7	3.0	2.9	3.0	3.0	4.3	5.2	5.7	6.9	2.9	1.5	0.6	3.3	9.5
12-Jun	7.5	5.2	2.9	Z	0.9	1.6	1.4	2.0	0.9	1.8	1.3	3.1	2.1	M	2.4	2.5	2.4	2.5	2.2	5.2	12.6	18.2	10.9	10.1	4.5	18.2
13-Jun	8.4	5.0	3.5	4.1	Z	0.6	0.6	5.1	2.8	1.5	0.6	0.4	0.6	1.3	1.6	1.8	1.4	0.6	0.6	0.3	2.2	10.7	13.4	13.7	3.5	13.7
14-Jun	12.3	10.7	6.6	0.6	2.3	Z	3.8	6.3	19.1	18.6	13.9	4.0	3.4	2.9	2.6	2.2	1.5	1.6	2.1	2.7	10.0	14.0	27.3	10.8	7.8	27.3
15-Jun	Z	15.0	8.1	10.7	10.9	15.1	10.9	11.6	10.6	9.8	5.8	2.7	3.4	3.8	4.1	3.4	3.1	2.6	4.2	10.0	25.8	30.0	28.9	22.0	11.0	30.0
16-Jun	17.0	Z	4.0	1.4	2.1	4.7	4.1	2.3	3.0	1.4	3.1	4.9	3.3	1.9	1.4	2.2	1.4	1.3	1.3	3.4	4.8	5.4	6.2	21.7	4.4	21.7
17-Jun	15.1	14.7	Z	8.3	11.4	14.2	17.9	16.3	7.1	5.3	2.7	2.1	2.1	2.2	2.1	1.9	1.3	1.5	2.1	1.6	3.3	8.2	9.3	3.6	6.7	17.9
18-Jun	6.3	12.9	18.5	Z	11.2	5.6	6.6	4.5	4.1	6.3	1.8	8.5	4.5	5.2	2.5	0.7	1.4	0.4	0.8	0.3	0.7	0.2	1.6	0.7	4.6	18.5
19-Jun	0.3	0.4	1.3	2.3	Z	0.5	1.0	5.9	5.9	4.1	4.0	3.7	3.6	2.8	3.9	3.1	3.1	4.3	3.4	2.4	6.6	9.2	13.0	11.0	4.2	13.0
20-Jun	6.5	4.5	4.6	5.1	5.0	Z	7.8	9.7	6.7	3.6	2.2	2.0	2.1	2.1	1.2	2.4	2.2	2.0	2.5	3.7	5.9	12.3	13.0	12.6	5.2	13.0
21-Jun	Z	12.9	14.3	13.7	13.5	12.4	11.2	10.4	11.8	12.0	11.1	8.2	4.8	4.8	4.4	4.4	4.0	6.9	5.9	9.1	12.2	15.5	13.6	13.7	10.0	15.5
22-Jun	11.6	Z	7.3	6.9	5.6	5.6	10.8	9.9	10.8	15.1	15.8	7.7	4.1	2.8	2.7	3.3	2.9	1.9	1.8	3.4	2.7	1.5	4.3	6.5	6.3	15.8
23-Jun	6.6	6.6	Z	7.3	9.3	7.4	5.1	7.6	7.5	4.3	2.0	1.0	1.1	2.9	2.0	1.9	4.0	1.5	3.6	2.6	3.6	3.5	6.6	7.1	4.6	9.3
24-Jun	12.6	10.4	11.5	Z	13.9	13.0	10.0	7.1	8.0	4.2	1.8	2.4	2.4	2.2	1.8	2.0	1.4	1.6	1.6	2.0	1.2	1.0	1.4	3.9	5.1	13.9
25-Jun	1.5	4.1	6.0	6.8	Z	5.2	4.8	7.7	9.0	12.0	8.5	1.9	2.6	2.3	2.2	2.0	2.1	2.3	2.0	1.3	1.7	1.6	1.2	4.1	4.0	12.0
26-Jun	6.9	7.8	3.1	2.2	3.0	Z	2.7	2.4	6.9	3.7	2.1	1.8	1.9	2.1	2.0	1.8	1.7	1.1	1.2	1.4	2.2	0.9	1.2	4.3	2.8	7.8
27-Jun	Z	1.1	5.0	1.9	2.1	3.2	7.7	11.0	10.7	10.8	1.6	1.8	1.7	1.4	2.1	2.3	1.6	1.3	1.2	1.5	1.7	7.0	5.2	5.9	3.9	11.0
28-Jun	11.4	Z	18.1	15.5	15.5	14.5	19.5	20.1	22.5	18.9	3.9	1.5	1.7	2.0	2.2	2.2	2.6	2.6	4.1	5.4	11.9	8.3	25.8	23.9	11.0	25.8
29-Jun	23.6	29.5	Z	25.8	24.2	18.0	21.4	18.9	17.3	5.5	6.9	6.4	3.5	2.5	2.4	3.0	2.0	2.0	3.7	7.9	11.1	9.1	10.3	6.1	11.4	29.5
30-Jun	5.5	2.9	3.2	Z	12.0	16.3	13.8	11.1	7.6	7.3	6.9	4.7	9.9	12.6	4.2	2.8	2.1	2.9	2.1	2.3	2.0	4.0	4.2	4.2	6.3	16.3
	8.4	6.9	6.3	6.0	7.2	6.5	6.3	6.5	6.8	6.0	4.1	3.0	2.7	2.7	2.3	2.4	2.3	2.3	2.4	3.0	5.3	7.0	8.1	7.9	Diurnal Average	
	23.6	29.5	18.5	25.8	24.2	18.0	21.4	20.1	22.5	18.9	15.8	8.5	9.9	12.6	4.5	6.2	5.4	6.9	5.9	10.0	25.8	30.0	28.9	23.9	Diurnal Maximum	

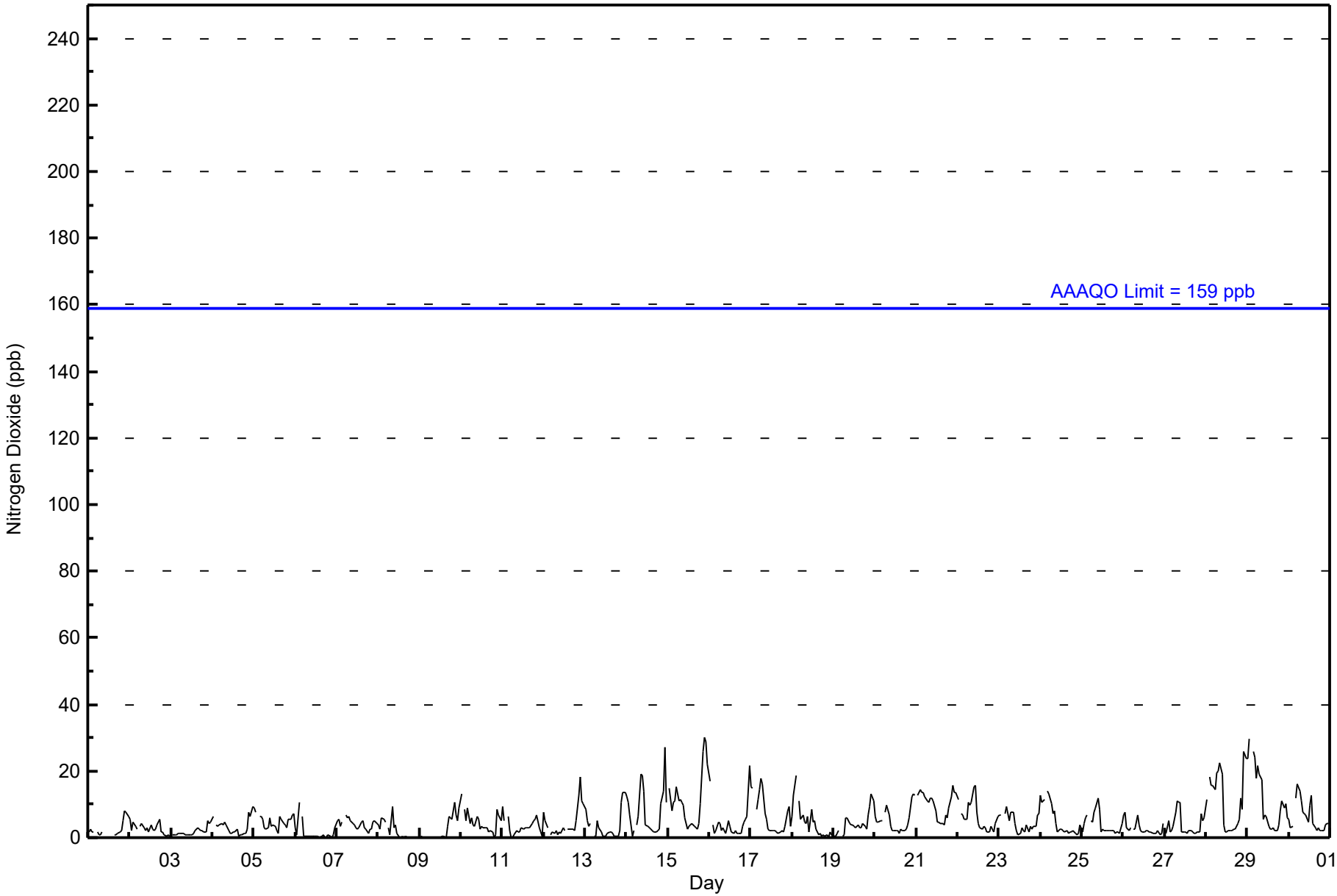
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Barge Landing - June 2026



Nitrogen Dioxide (NO_2) - ppb
Barge Landing - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	669	97.95	97.95
21 - 40	14	2.05	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: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Barge Landing - June 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	110	62	30	20	17	23	59	57	32	24	32	21	33	19	31	99	669
21 - 40	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	7	14
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	113	64	32	20	17	23	59	57	32	24	32	21	33	19	31	106	683

Total Number of Valid Hours: 683

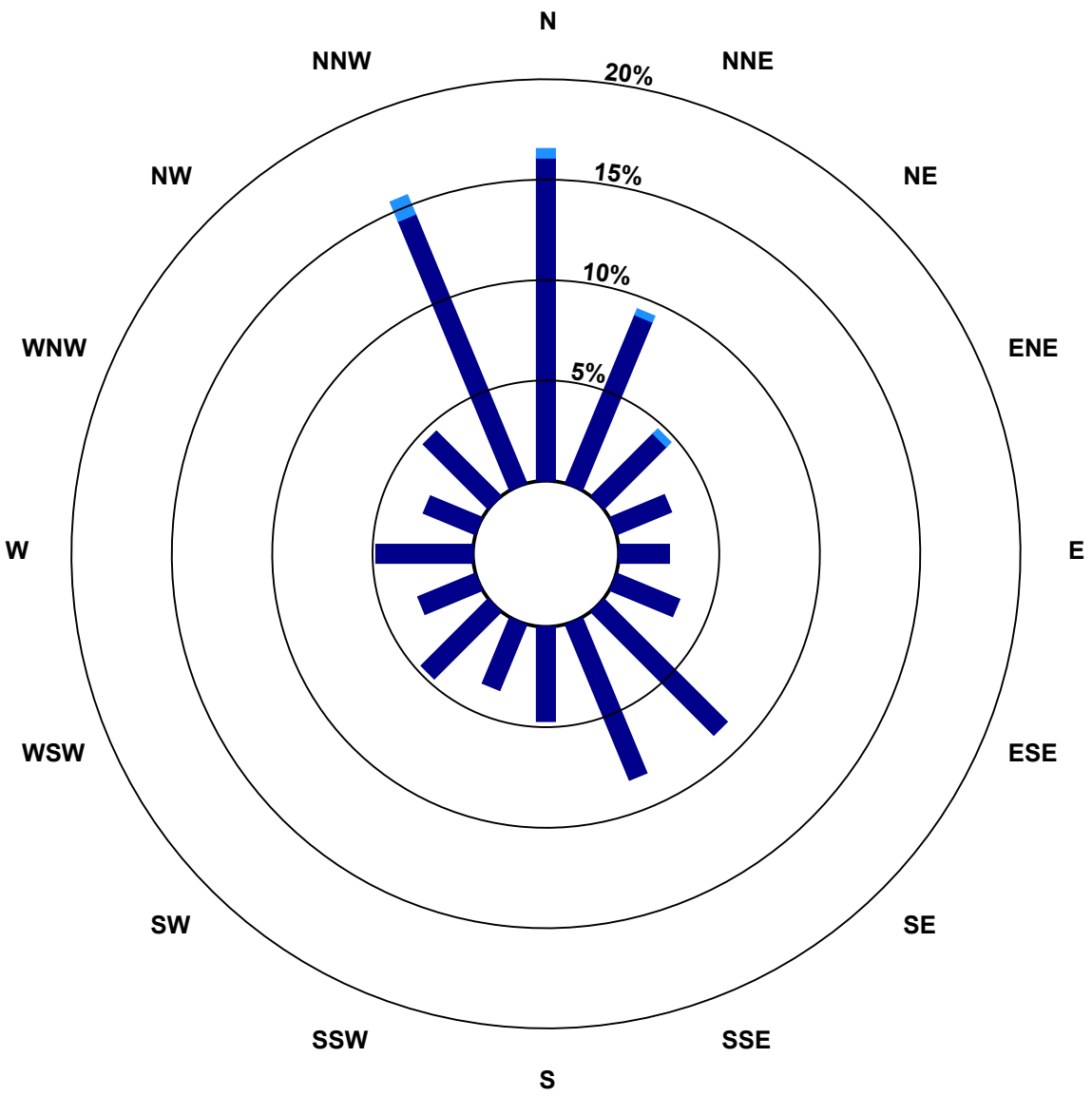
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Barge Landing



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

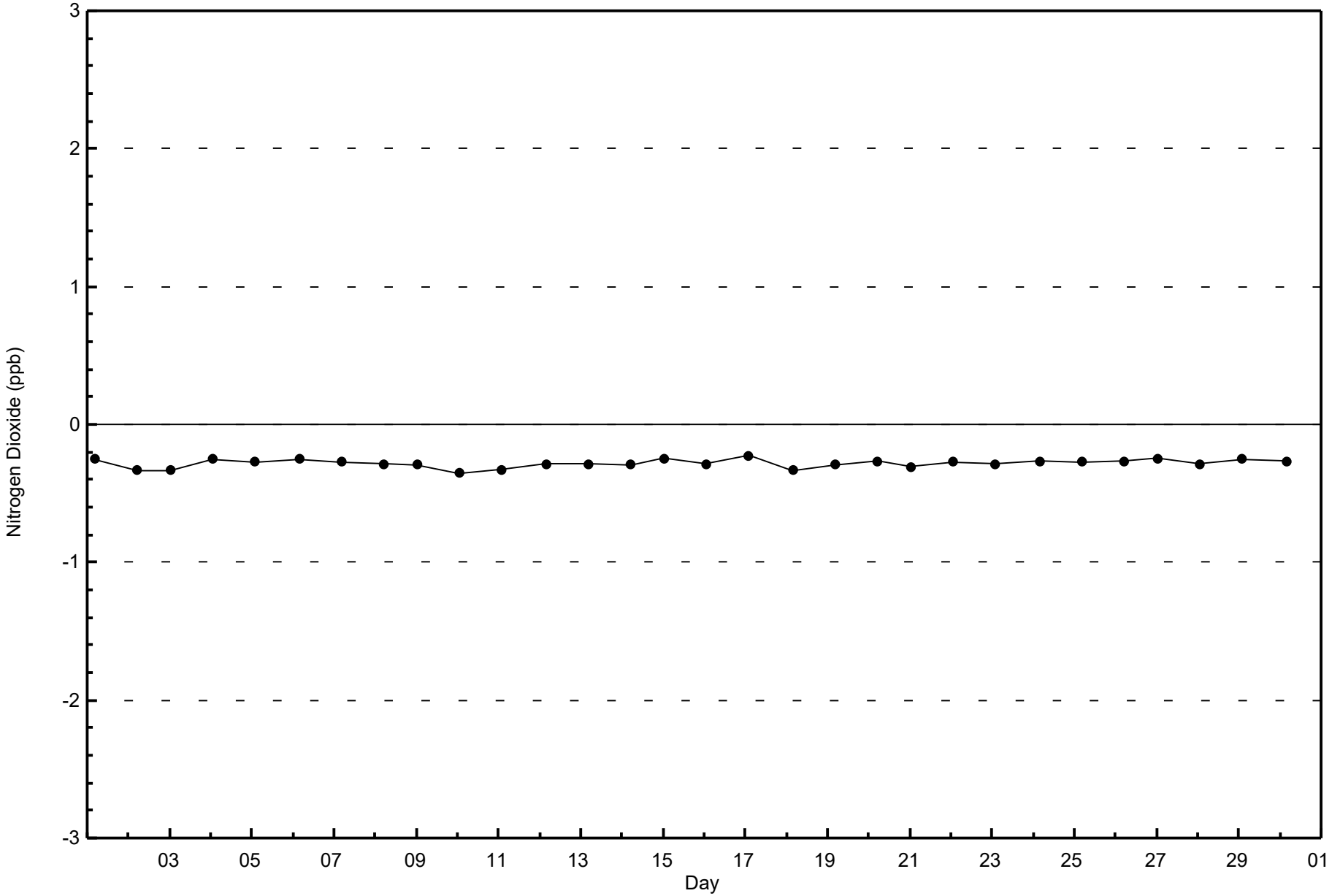
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Barge Landing - June 2026

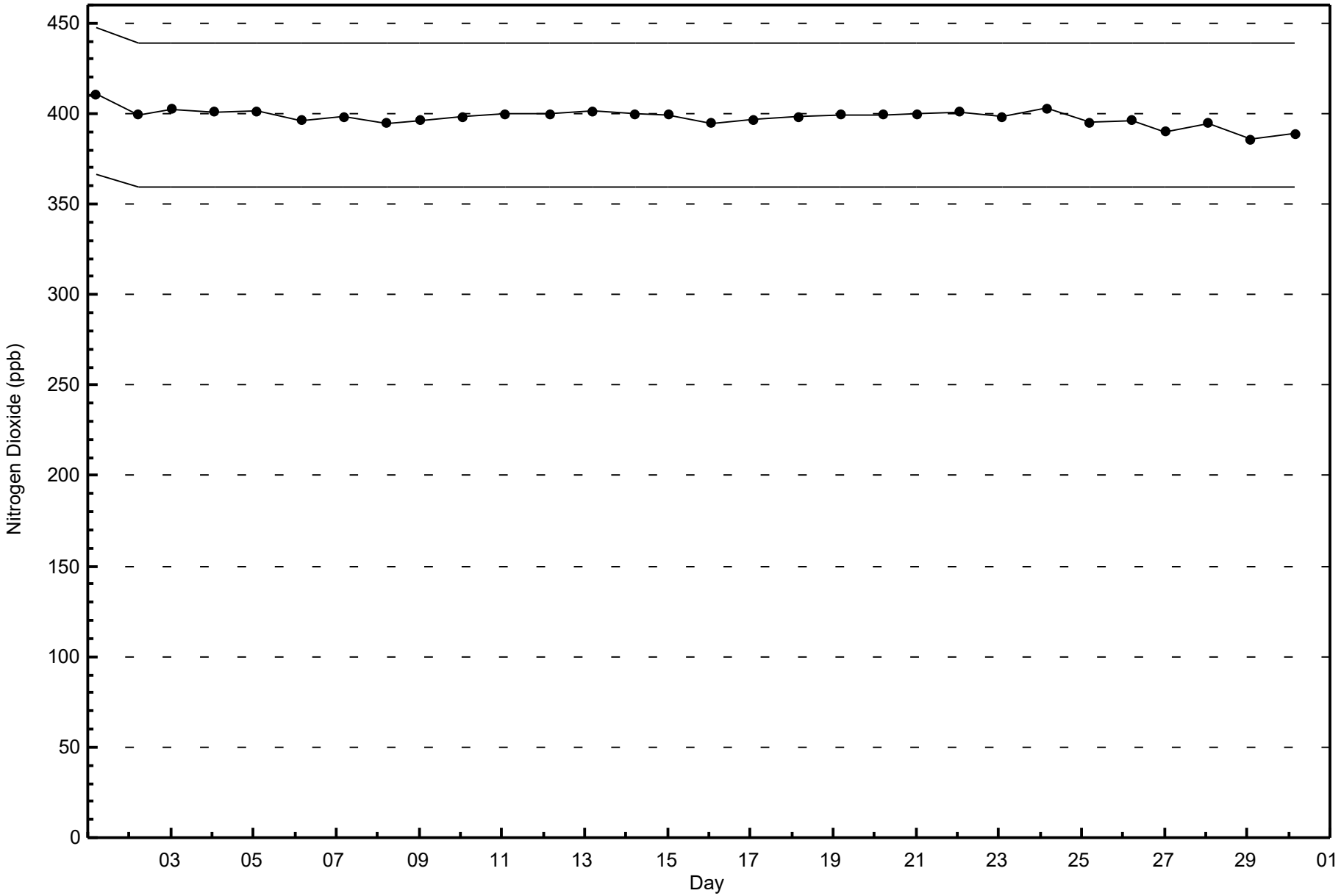


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Barge Landing - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Barge Landing - June 2026

Maximum Value: 58.5 ppb on Jun 22 06:00

Maximum Daily Average: 20.6 ppb on Jun 29

Minimum Value: 0.1 ppb on Jun 8 16:00

Minimum Daily Average: 1.5 ppb on Jun 6

Maximum Diurnal Average: 13.9 ppb at hour 6

Minimum Diurnal Average: 3.2 ppb at hour 15

Monthly Average: 7.65 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.7$ $Q_1 = 2.1$ Median = 4.5 $Q_3 = 8.9$ $P_{90} = 19.4$ $P_{99} = 39.3$

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 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-Jun	1.9	2.8	1.7	1.9	Z	1.6	1.0	0.7	1.9	C	C	C	C	C	C	0.9	0.7	1.2	1.7	2.1	5.2	8.2	7.9	6.3	--	8.2
2-Jun	5.7	2.0	4.6	3.5	2.8	Z	3.8	5.2	3.8	2.5	3.4	2.1	4.5	2.9	2.8	3.2	4.2	5.7	1.8	1.5	0.8	0.5	0.7	0.5	3.0	5.7
3-Jun	Z	0.8	0.7	0.9	1.3	1.5	1.2	1.3	1.1	0.8	0.9	1.2	1.0	1.7	2.5	3.8	3.1	2.6	2.3	1.8	1.8	5.3	5.5	7.2	2.2	7.2
4-Jun	9.6	Z	9.5	7.4	8.2	8.4	8.0	9.7	5.6	3.0	1.3	1.6	2.3	2.4	3.6	0.7	0.8	0.7	1.2	1.1	2.7	8.0	6.6	10.5	4.9	10.5
5-Jun	9.7	7.9	Z	6.9	7.1	7.3	4.2	3.3	4.1	8.7	4.4	4.9	4.3	2.6	1.6	6.9	6.1	4.6	4.0	3.1	5.9	5.8	7.2	7.8	5.6	9.7
6-Jun	3.0	1.0	11.8	Z	7.8	0.3	0.3	0.4	0.4	0.6	0.3	0.3	0.4	0.3	0.2	0.5	0.7	0.2	0.2	1.0	0.3	0.2	0.7	2.9	1.5	11.8
7-Jun	5.3	5.8	3.8	5.9	Z	9.6	10.7	12.6	8.9	8.1	5.8	4.3	3.5	4.4	6.2	6.9	3.8	2.8	1.2	2.6	2.8	4.9	5.3	4.3	5.6	12.6
8-Jun	4.0	2.6	6.4	6.0	4.8	Z	3.0	1.0	11.8	3.8	4.6	1.5	0.2	0.2	0.3	0.1	0.6	0.1	0.1	0.1	0.1	0.2	0.1	0.1	2.2	11.8
9-Jun	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	4.2	8.6	7.6	6.1	11.6	7.2	5.5	10.1	2.8	11.6
10-Jun	15.5	Z	9.3	5.4	12.4	5.1	8.6	6.0	4.7	9.2	7.2	3.1	4.3	4.1	3.8	4.3	2.6	3.0	2.4	0.2	0.9	9.1	6.9	5.4	5.8	15.5
11-Jun	10.1	5.5	Z	6.5	2.2	0.2	0.2	1.1	3.2	2.9	2.8	4.8	4.7	4.9	4.2	4.2	3.8	5.3	6.1	6.3	7.5	3.1	1.5	0.6	4.0	10.1
12-Jun	7.9	5.5	3.0	Z	1.0	1.9	1.7	2.6	1.2	2.7	1.9	4.5	3.0	M	3.3	3.5	3.2	3.2	2.6	5.9	13.9	19.4	11.5	10.7	5.2	19.4
13-Jun	8.9	5.4	4.7	6.6	Z	0.7	0.8	8.0	4.0	1.9	0.7	0.4	0.6	1.5	1.9	2.1	1.7	0.7	0.7	0.3	2.3	11.4	15.5	18.0	4.3	18.0
14-Jun	13.2	11.3	7.3	0.6	2.8	Z	4.8	8.6	29.5	27.4	19.0	5.0	4.5	3.8	3.1	2.5	1.8	1.8	2.3	2.9	10.8	14.8	37.7	11.4	9.9	37.7
15-Jun	Z	16.2	8.5	11.5	20.2	38.4	19.5	19.3	18.4	15.0	8.2	3.5	4.3	4.7	4.8	3.8	3.4	2.9	4.6	11.0	35.2	58.2	41.0	24.1	16.4	58.2
16-Jun	17.9	Z	4.2	1.4	2.2	5.2	4.7	2.7	3.7	1.7	4.1	6.6	4.2	2.4	1.8	3.0	1.7	1.6	1.5	3.9	5.2	5.7	6.5	24.3	5.0	24.3
17-Jun	16.1	15.8	Z	9.0	14.0	23.8	37.9	33.2	11.2	7.9	4.0	3.0	2.8	3.0	2.6	2.3	1.4	1.7	2.4	1.7	3.5	8.6	9.7	3.7	9.5	37.9
18-Jun	6.6	13.7	22.3	Z	14.5	6.8	9.4	6.6	6.3	10.9	2.4	12.3	6.2	7.4	3.3	0.8	1.8	0.4	0.8	0.3	0.7	0.2	1.7	0.7	5.9	22.3
19-Jun	0.3	0.4	1.5	2.7	Z	0.6	1.5	12.3	11.8	7.4	6.8	6.3	6.7	5.1	7.1	5.4	4.9	6.6	4.9	2.9	7.5	10.3	21.6	15.9	6.6	21.6
20-Jun	7.4	5.2	5.2	8.4	12.1	Z	25.2	26.6	15.8	7.9	4.2	3.7	3.6	3.6	2.1	4.3	3.4	3.0	3.5	4.5	6.6	14.0	14.5	14.0	8.6	26.6
21-Jun	Z	23.3	28.4	23.6	37.5	35.0	29.0	22.0	29.6	29.8	23.7	13.9	7.0	7.8	6.2	6.5	5.5	9.4	6.9	11.6	15.2	20.6	22.9	25.2	19.2	37.5
22-Jun	18.9	Z	22.3	20.9	27.9	58.5	58.4	37.9	23.7	34.5	32.0	12.7	6.0	3.7	3.4	4.0	3.3	2.1	2.0	3.7	2.9	1.6	5.5	6.8	17.1	58.5
23-Jun	6.9	7.1	Z	10.8	18.9	11.1	8.2	14.2	13.6	6.4	2.6	1.1	1.2	3.8	2.3	2.1	5.2	1.7	4.3	2.8	3.8	3.7	6.9	7.5	6.4	18.9
24-Jun	13.4	13.6	13.6	Z	34.3	27.3	18.8	10.9	12.4	5.7	2.2	2.9	2.9	2.6	2.0	2.2	1.6	1.7	1.7	2.2	1.2	1.0	1.4	4.2	7.8	34.3
25-Jun	1.5	4.4	6.3	9.2	Z	7.3	6.5	10.8	12.8	17.4	11.4	2.3	3.1	2.6	2.6	2.8	4.6	6.1	6.7	5.3	3.1	1.7	1.2	4.3	5.8	17.4
26-Jun	7.2	8.2	3.2	2.3	3.3	Z	3.5	3.1	9.2	4.6	2.5	2.1	2.2	2.4	2.3	3.2	5.2	6.0	7.8	6.7	3.8	1.0	1.3	4.5	4.2	9.2
27-Jun	Z	1.1	5.4	2.0	2.3	3.9	10.1	15.1	14.6	15.0	1.9	2.1	2.0	1.7	2.5	2.7	2.3	1.9	1.3	1.6	1.8	7.3	5.4	6.2	4.8	15.1
28-Jun	12.1	Z	26.4	27.9	30.2	31.7	46.9	38.9	42.3	29.4	4.7	1.7	1.9	4.2	6.7	11.7	15.5	17.5	18.9	16.1	14.8	8.9	30.2	25.2	20.2	46.9
29-Jun	24.8	35.8	Z	32.6	38.5	29.9	51.2	32.6	25.5	6.6	8.3	7.4	3.8	2.7	4.7	10.3	20.1	25.0	27.2	28.8	25.9	15.3	11.2	6.4	20.6	51.2
30-Jun	5.7	3.0	3.3	Z	22.2	32.1	19.9	14.2	9.5	8.8	8.2	5.3	11.5	14.9	4.5	3.9	6.3	13.4	14.3	14.3	7.9	4.7	4.4	4.4	10.3	32.1
	9.3	7.9	8.5	8.6	13.1	13.9	13.3	12.0	11.4	9.7	6.2	4.2	3.5	3.6	3.2	3.6	4.1	4.7	4.8	5.1	6.9	8.7	9.9	9.1	Diurnal Average	
	24.8	35.8	28.4	32.6	38.5	58.5	58.4	38.9	42.3	34.5	32.0	13.9	11.5	14.9	7.1	11.7	20.1	25.0	27.2	28.8	35.2	58.2	41.0	25.2	Diurnal Maximum	

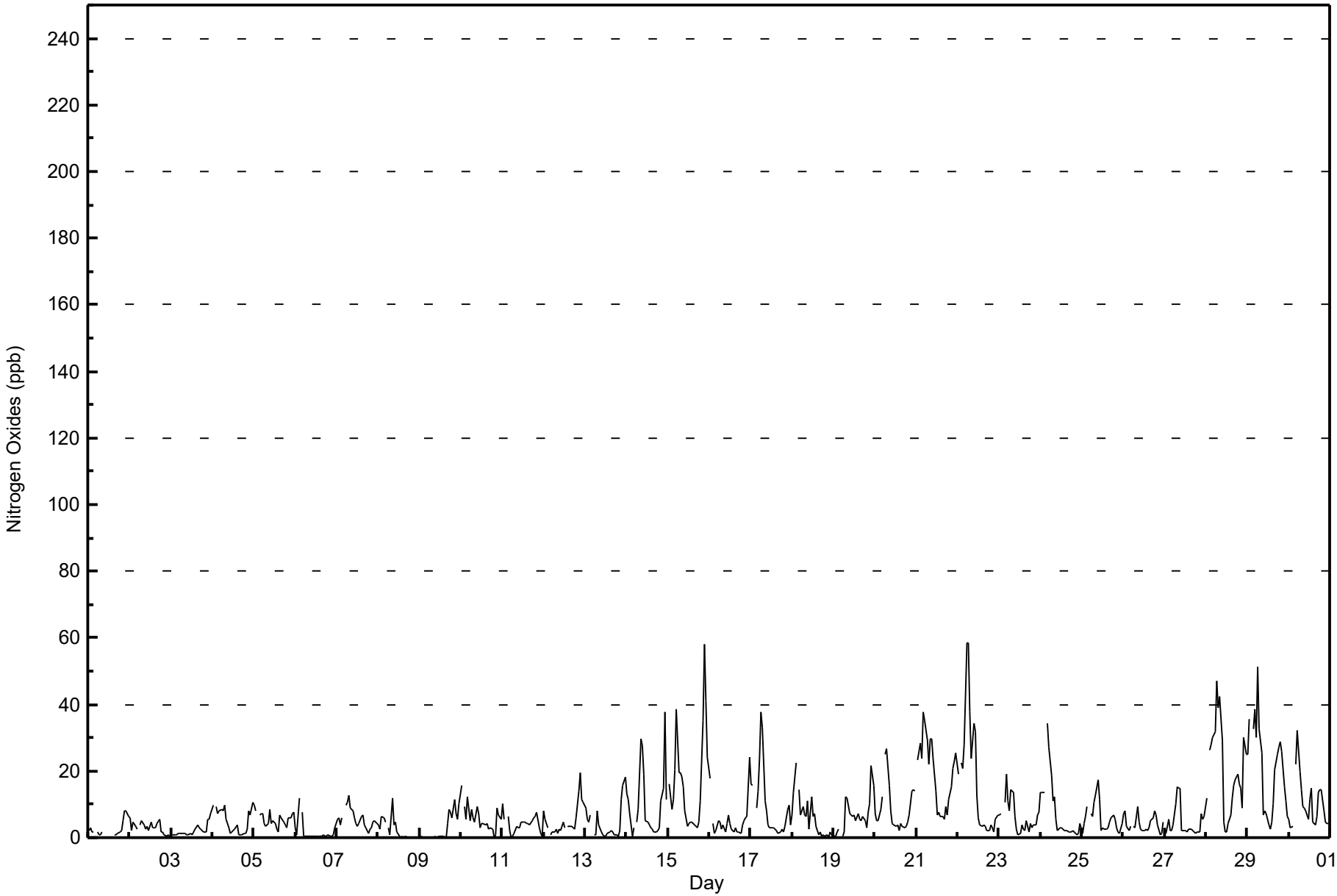
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Barge Landing - June 2026



Nitrogen Oxides (NO_X) - ppb
Barge Landing - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	619	90.63	90.63
21 - 40	57	8.35	98.98
11 - 80	7	1.02	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Barge Landing - June 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	98	58	30	19	16	22	56	56	32	24	32	21	32	18	24	81	619
21 - 40	14	5	1	1	0	0	3	1	0	0	0	0	1	1	7	23	57
11 - 80	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	2	7
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	113	64	32	20	17	23	59	57	32	24	32	21	33	19	31	106	683

Total Number of Valid Hours: 683

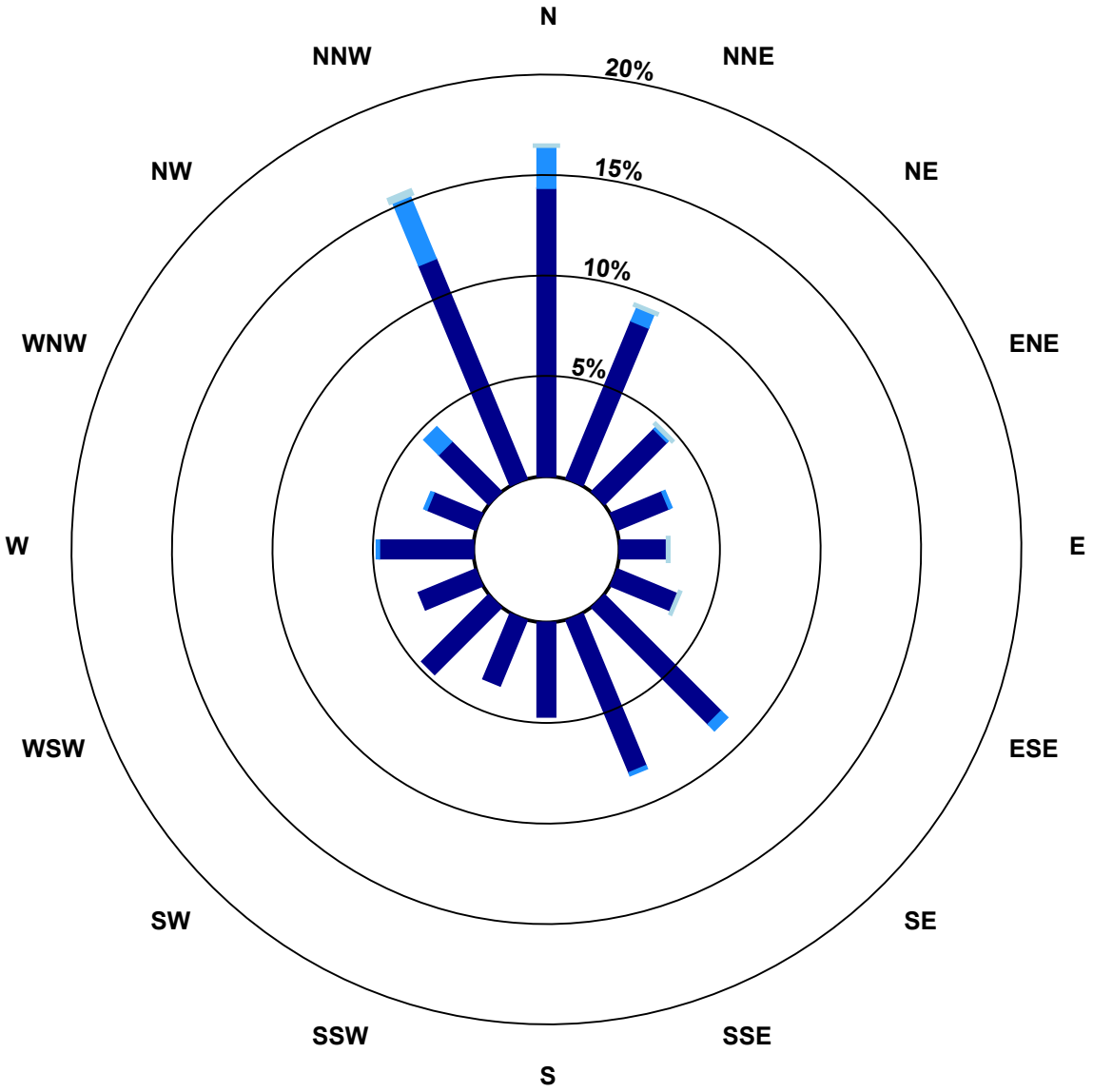
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Barge Landing



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

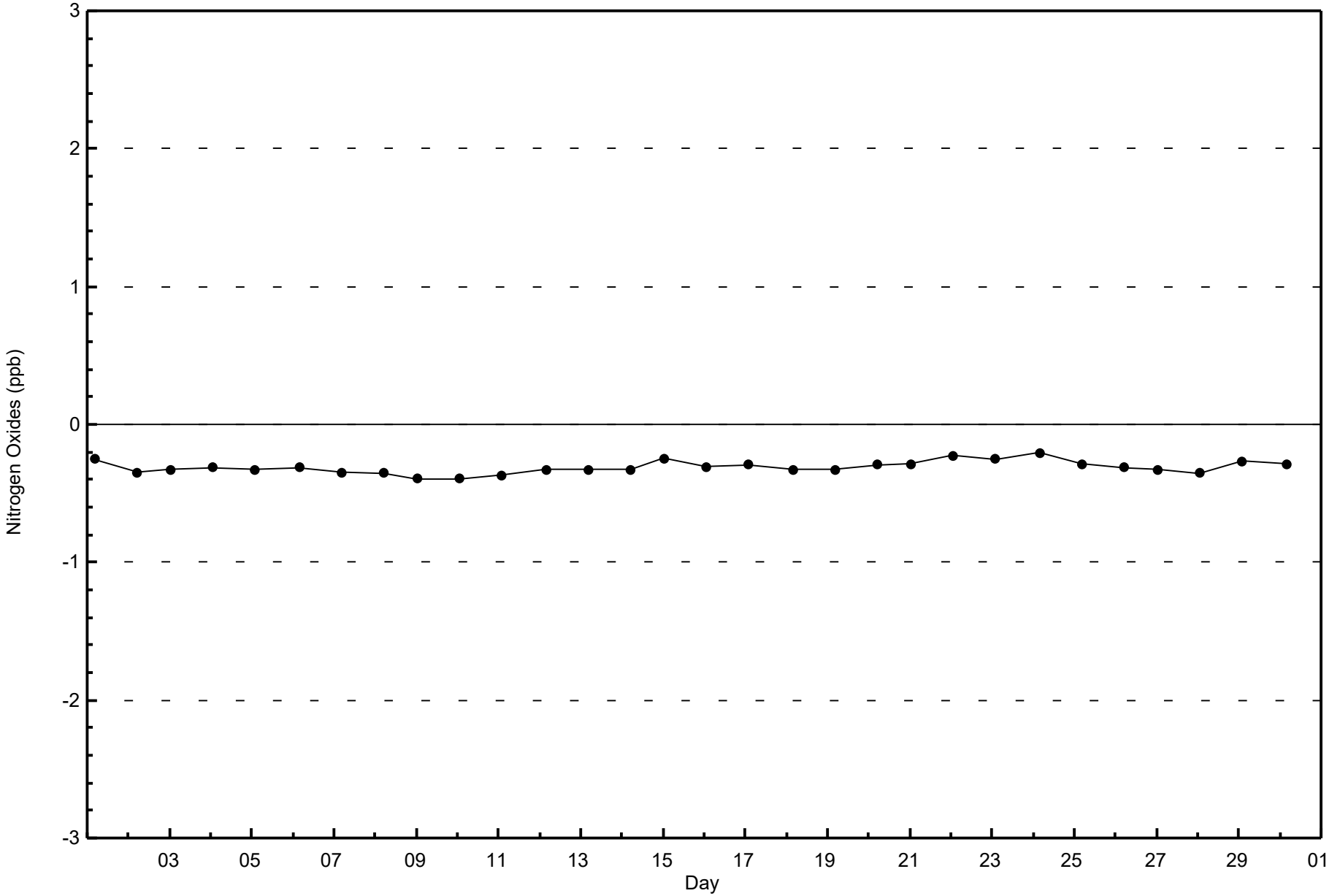
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Barge Landing - June 2026

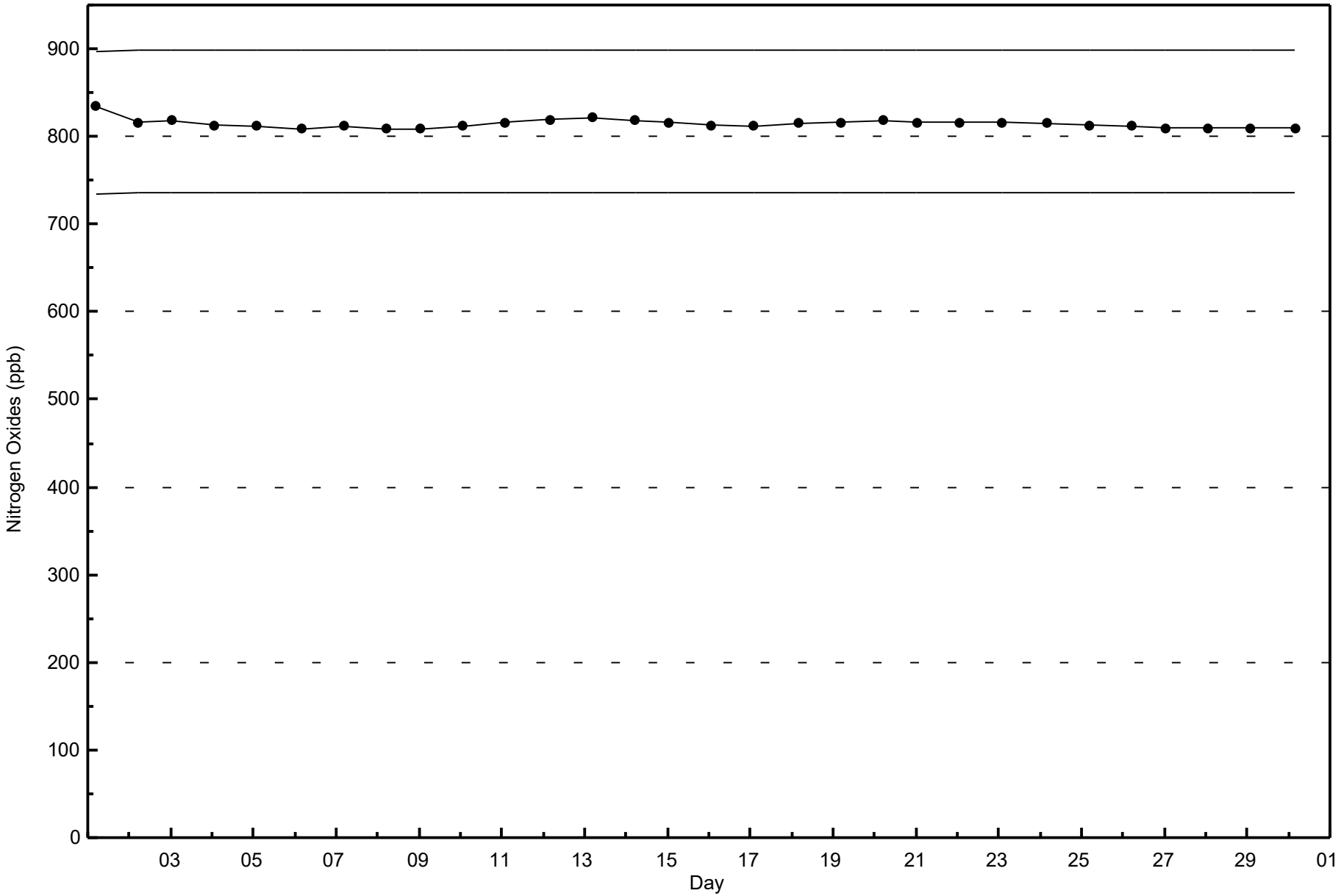


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Barge Landing - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Barge Landing - June 2026

Number of Exceedances (AAAQO): 1-hr: 10 24-hr: 2
Maximum Value: 109.6 $\mu g/m^3$ on Jun 29 21:00 Maximum Daily Average: 61.9 $\mu g/m^3$ on Jun 29

Minimum Value: 0.8 $\mu g/m^3$ on Jun 11 07:00 Minimum Daily Average: 1.9 $\mu g/m^3$ on Jun 1
Maximum Diurnal Average: 15.0 $\mu g/m^3$ at hour 10 Minimum Diurnal Average: 9.4 $\mu g/m^3$ at hour 4
Monthly Average: 11.42 $\mu g/m^3$ Percentiles: P_1 = 1.1 P_{10} = 2.1 Q_1 = 3.4 Median = 6.8 Q_3 = 11.6 P_{90} = 22.4 P_{99} = 89.5

Hours in Service:	720
Hours of Data:	717
Hours of Missing Data:	3
Hours of Calibration:	3
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-Jun	1.5	1.7	1.3	1.2	1.3	1.3	1.4	1.6	1.6	C	C	C	2.4	2.5	2.5	2.5	2.5	2.8	3.3	2.7	1.4	1.1	1.1	1.4	1.9	3.3
2-Jun	1.4	1.4	1.2	1.1	1.1	1.1	1.5	2.1	2.3	7.9	4.6	2.1	1.6	1.8	1.5	2.1	2.6	3.2	2.3	2.2	1.6	1.4	1.5	1.2	2.1	7.9
3-Jun	1.5	1.4	1.4	1.6	2.2	2.6	2.3	2.5	2.8	3.0	3.3	3.7	5.6	6.3	6.6	7.0	7.5	5.8	5.7	6.4	6.3	7.3	8.6	9.4	4.6	9.4
4-Jun	10.1	9.7	8.7	8.9	8.1	8.7	9.8	12.4	15.6	17.8	15.6	15.0	16.3	17.8	18.8	12.4	12.3	10.7	9.5	8.9	8.5	16.4	12.8	11.9	12.4	18.8
5-Jun	10.3	11.4	9.8	10.1	10.2	9.1	8.5	8.2	7.9	11.4	12.3	8.9	8.6	7.8	6.8	9.1	8.9	4.9	5.1	4.0	6.2	6.9	6.6	7.1	8.3	12.3
6-Jun	4.6	3.6	4.5	6.8	5.0	3.2	3.1	3.4	3.8	3.8	3.3	3.1	3.6	2.8	2.8	2.8	3.0	3.4	3.3	3.1	3.0	3.0	2.8	3.1	3.5	6.8
7-Jun	3.3	3.9	3.4	3.7	3.4	3.2	2.9	3.4	4.9	5.1	5.2	5.0	5.0	6.6	9.1	9.3	7.4	6.3	3.9	5.2	5.2	5.2	4.2	3.1	4.9	9.3
8-Jun	3.0	3.0	3.9	4.3	4.3	4.0	3.7	3.2	2.5	1.4	1.0	0.9	0.8	1.0	1.0	1.3	1.2	1.3	1.4	1.9	2.4	2.6	2.3	1.9	2.3	4.3
9-Jun	1.6	1.8	1.8	1.8	2.2	2.3	2.5	2.3	2.3	2.1	2.3	2.1	2.0	1.8	2.0	2.1	4.2	6.8	6.0	4.1	6.2	4.4	3.9	3.7	3.0	6.8
10-Jun	3.8	3.8	3.8	4.0	4.1	4.0	4.2	3.6	3.4	3.8	3.4	1.5	0.9	1.5	1.9	1.9	2.1	1.8	2.3	1.7	1.7	2.7	2.8	1.9	2.8	4.2
11-Jun	2.7	2.1	1.1	1.6	1.7	1.0	0.8	1.1	1.2	1.9	2.6	3.5	3.0	3.6	3.6	3.3	3.5	4.0	3.5	3.6	4.3	3.7	3.0	2.5	2.6	4.3
12-Jun	3.3	3.4	2.9	2.1	2.3	2.6	2.8	4.1	5.1	6.8	7.1	6.6	8.2	7.9	8.9	10.0	6.8	6.4	5.3	5.1	5.7	8.0	10.9	8.7	5.9	10.9
13-Jun	6.0	5.7	4.5	6.1	3.5	3.7	4.0	3.9	3.4	3.2	2.9	2.5	5.5	6.0	6.7	6.5	5.2	3.5	3.3	3.0	5.0	14.7	22.9	24.0	6.5	24.0
14-Jun	21.2	11.3	6.9	4.1	4.7	7.9	6.5	6.2	9.9	11.3	11.4	10.2	11.6	12.5	7.8	8.1	5.8	7.1	6.1	5.6	7.9	8.8	15.9	8.3	9.0	21.2
15-Jun	7.2	7.6	6.3	6.9	9.2	11.8	9.4	11.4	11.7	11.6	11.3	7.9	11.7	12.8	15.9	19.5	18.8	16.2	15.8	16.2	23.8	23.4	14.8	10.2	13.0	23.8
16-Jun	9.8	8.6	7.5	4.3	5.8	8.3	9.4	4.7	5.1	5.7	8.3	16.3	18.0	12.5	8.6	11.5	6.5	7.7	7.6	8.5	13.1	17.5	11.1	11.6	9.5	18.0
17-Jun	8.4	7.4	5.2	4.9	5.4	8.3	9.6	10.0	7.8	6.1	9.1	6.5	8.0	11.7	7.8	7.0	6.8	8.9	4.9	4.1	5.0	7.3	8.8	5.9	7.3	11.7
18-Jun	6.6	7.8	8.2	7.0	8.2	7.2	5.4	4.3	3.5	4.1	3.7	5.4	5.8	6.5	5.3	2.6	4.3	3.1	3.8	2.5	2.6	2.1	3.1	2.8	4.8	8.2
19-Jun	2.8	3.4	5.4	5.1	4.0	3.5	3.8	5.2	9.9	7.5	5.2	5.2	7.5	9.5	3.3	4.7	3.5	2.2	3.1	2.9	3.5	4.1	6.0	9.5	5.0	9.9
20-Jun	3.5	3.0	2.7	2.8	3.1	6.5	4.3	5.7	10.4	12.3	4.2	9.3	5.1	3.5	3.3	3.0	2.6	3.4	3.2	2.7	4.1	5.4	5.8	5.8	4.8	12.3
21-Jun	7.2	5.7	5.1	5.7	6.0	5.3	4.7	3.4	2.9	3.2	4.8	11.4	7.8	11.1	7.7	5.6	6.7	7.2	7.2	6.8	8.4	8.4	6.7	5.8	6.5	11.4
22-Jun	5.8	7.9	8.4	12.2	11.6	21.3	20.9	11.6	9.0	12.9	13.2	9.4	10.8	9.4	9.0	11.9	19.6	11.2	8.3	12.1	8.5	4.1	5.3	13.3	11.1	21.3
23-Jun	19.9	19.9	13.2	16.6	21.2	15.3	13.6	12.9	15.9	15.4	13.4	9.5	10.5	13.7	6.8	5.1	5.0	6.4	9.9	13.9	18.0	12.5	18.2	18.4	13.5	21.2
24-Jun	20.7	20.4	18.6	18.6	22.0	15.9	15.7	12.2	20.0	14.9	10.5	12.7	12.0	12.5	12.4	14.9	12.5	12.1	11.0	8.8	7.1	6.6	6.4	7.6	13.6	22.0
25-Jun	8.1	11.3	11.9	11.6	9.5	9.8	9.9	14.5	19.9	22.1	16.9	9.0	8.2	8.6	7.9	8.1	10.1	10.6	10.0	7.1	8.0	9.1	6.7	10.9	10.8	22.1
26-Jun	14.0	17.0	11.0	8.1	9.8	10.0	10.2	11.8	22.1	22.0	12.9	15.0	12.7	11.4	10.5	9.9	8.3	8.0	7.2	8.7	8.3	7.0	6.5	8.8	11.3	22.1
27-Jun	10.1	6.6	7.6	7.3	9.2	11.0	15.1	28.0	22.0	44.3	6.4	6.6	8.4	7.5	7.9	8.7	8.0	8.6	8.4	23.2	9.6	14.5	14.9	12.4	12.8	44.3
28-Jun	13.0	22.8	22.0	20.9	19.7	25.0	27.0	30.4	36.2	42.7	41.3	18.5	22.2	29.4	30.3	31.9	26.3	27.3	27.7	30.4	28.9	35.6	35.7	29.7	28.1	42.7
29-Jun	27.9	26.0	24.0	23.9	22.7	20.8	31.8	39.6	54.2	78.8	77.1	97.9	105.7	90.7	51.6	44.1	35.5	48.8	94.1	100.4	109.6	104.0	94.9	80.9	61.9	109.6
30-Jun	82.7	76.8	71.5	69.4	67.5	77.0	59.7	53.1	55.5	52.0	46.0	55.7	74.8	78.5	74.2	61.2	56.1	68.2	45.6	35.0	24.4	25.7	29.6	42.8	57.6	82.7
	10.7	10.6	9.5	9.4	9.6	10.4	10.2	10.6	12.4	15.0	12.4	12.5	13.5	13.6	11.4	10.9	10.1	10.6	11.0	11.4	11.6	12.5	12.5	12.2	Diurnal Average	
	82.7	76.8	71.5	69.4	67.5	77.0	59.7	53.1	55.5	78.8	77.1	97.9	105.7	90.7	74.2	61.2	56.1	68.2	94.1	100.4	109.6	104.0	94.9	80.9	Diurnal Maximum	

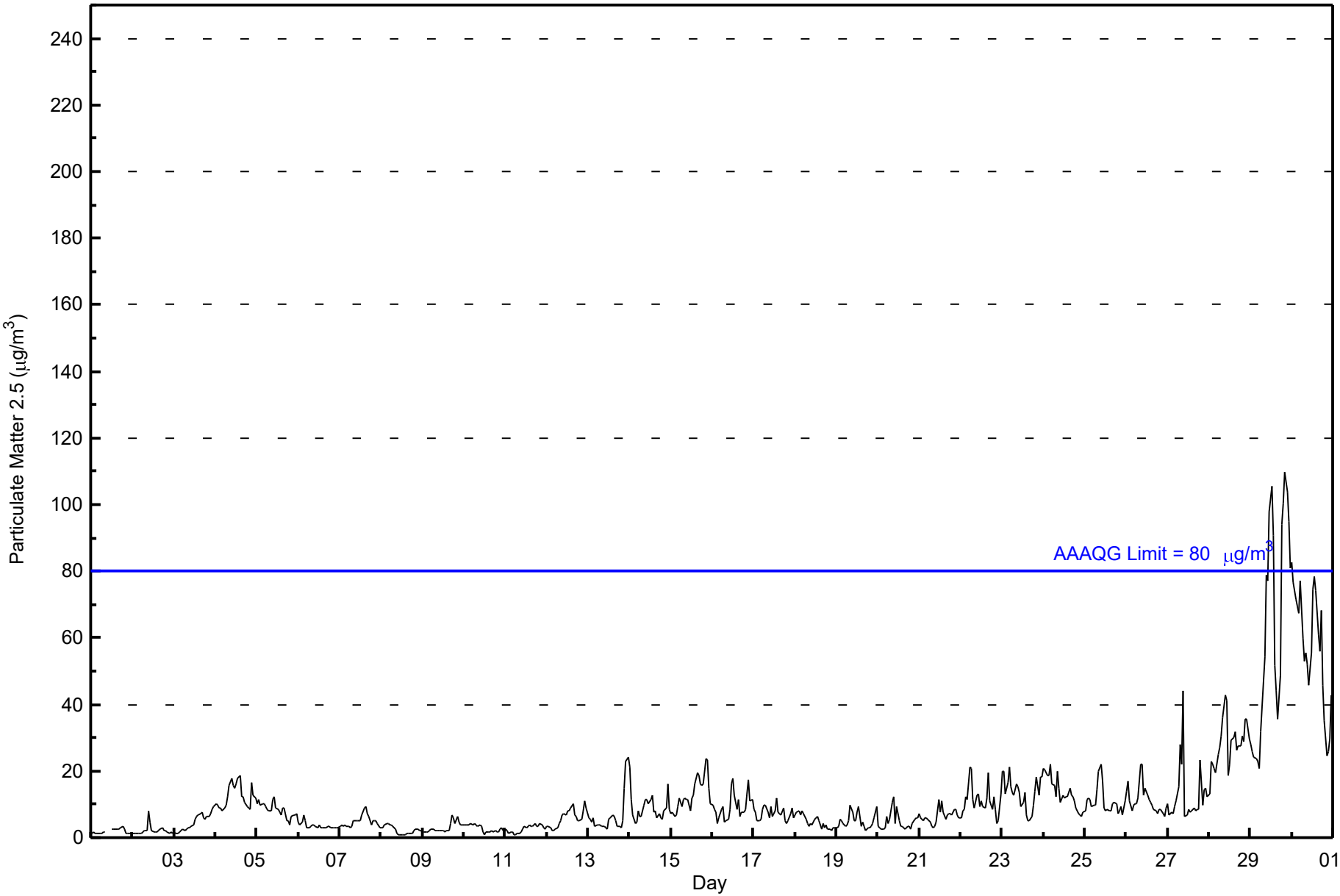
C - Calibration
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Barge Landing - June 2026



Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	292	40.73	40.73
6 - 15	303	42.26	82.98
16 - 25	61	8.51	91.49
26 - 80	51	7.11	98.61
> 81.0	10	1.39	100.00

Total Number of Valid Hours: 717

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Barge Landing - June 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	69	18	11	2	11	7	6	6	5	6	16	19	29	12	16	59	292
6 - 15	44	32	10	7	5	10	43	44	21	14	15	1	5	3	14	35	303
16 - 25	3	2	2	7	2	2	8	7	7	6	1	2	1	1	1	9	61
26 - 80	2	8	11	4	1	3	6	0	0	0	0	0	0	3	4	9	51
> 81.0	2	4	0	0	0	1	1	1	1	0	0	0	0	0	0	0	10
Totals	120	64	34	20	19	23	64	58	34	26	32	22	35	19	35	112	717

Total Number of Valid Hours: 717

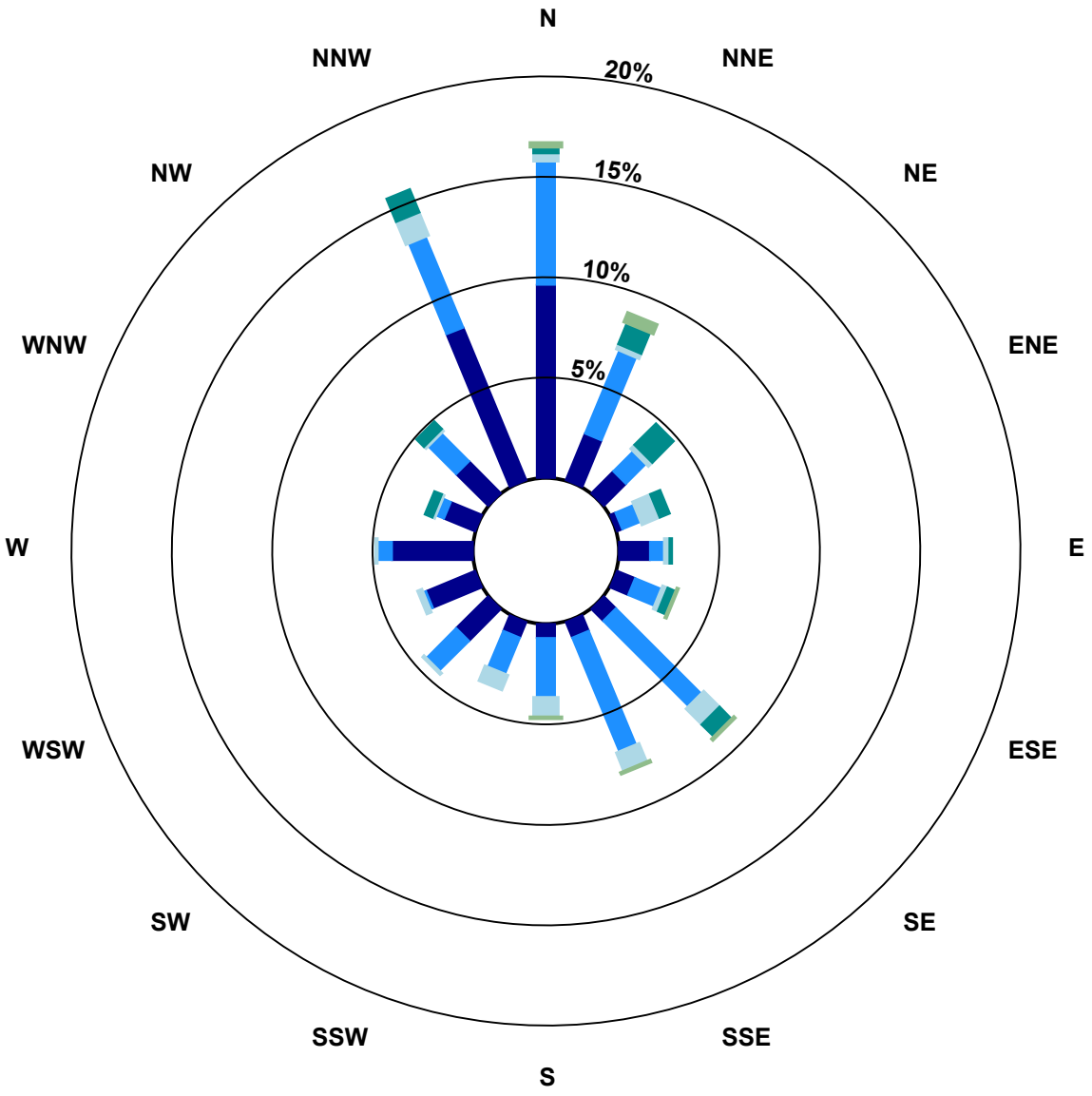
Total Number of Hours: 720

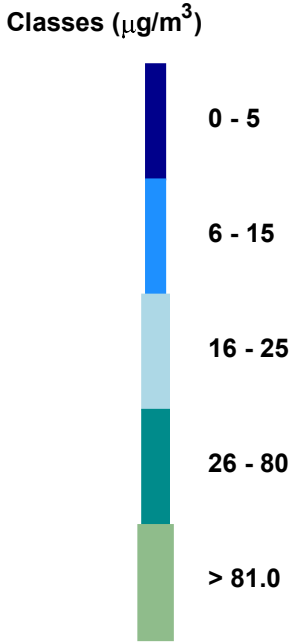
Wood Buffalo Environmental Association

Wind Rose Jun 2026

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

Barge Landing





Total Number of Valid Hours: 717

Wood Buffalo Environmental Association

Summary of Hour Averages

Ambient Temperature 2m (AT2) - C

Barge Landing - June 2026

Maximum Value: 32.5 C on Jun 28 16:00

Maximum Daily Average: 24.6 C on Jun 29

Minimum Value: 5.7 C on Jun 13 04:00

Minimum Daily Average: 9.5 C on Jun 11

Maximum Diurnal Average: 21.4 C at hour 16

Minimum Diurnal Average: 10.6 C at hour 4

Monthly Average: 16.63 C

Percentiles: P_1 = 6.9 P_{10} = 9.5 Q_1 = 11.5 Median = 15.4 Q_3 = 20.6 P_{90} = 26.3 P_{99} = 31.6

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

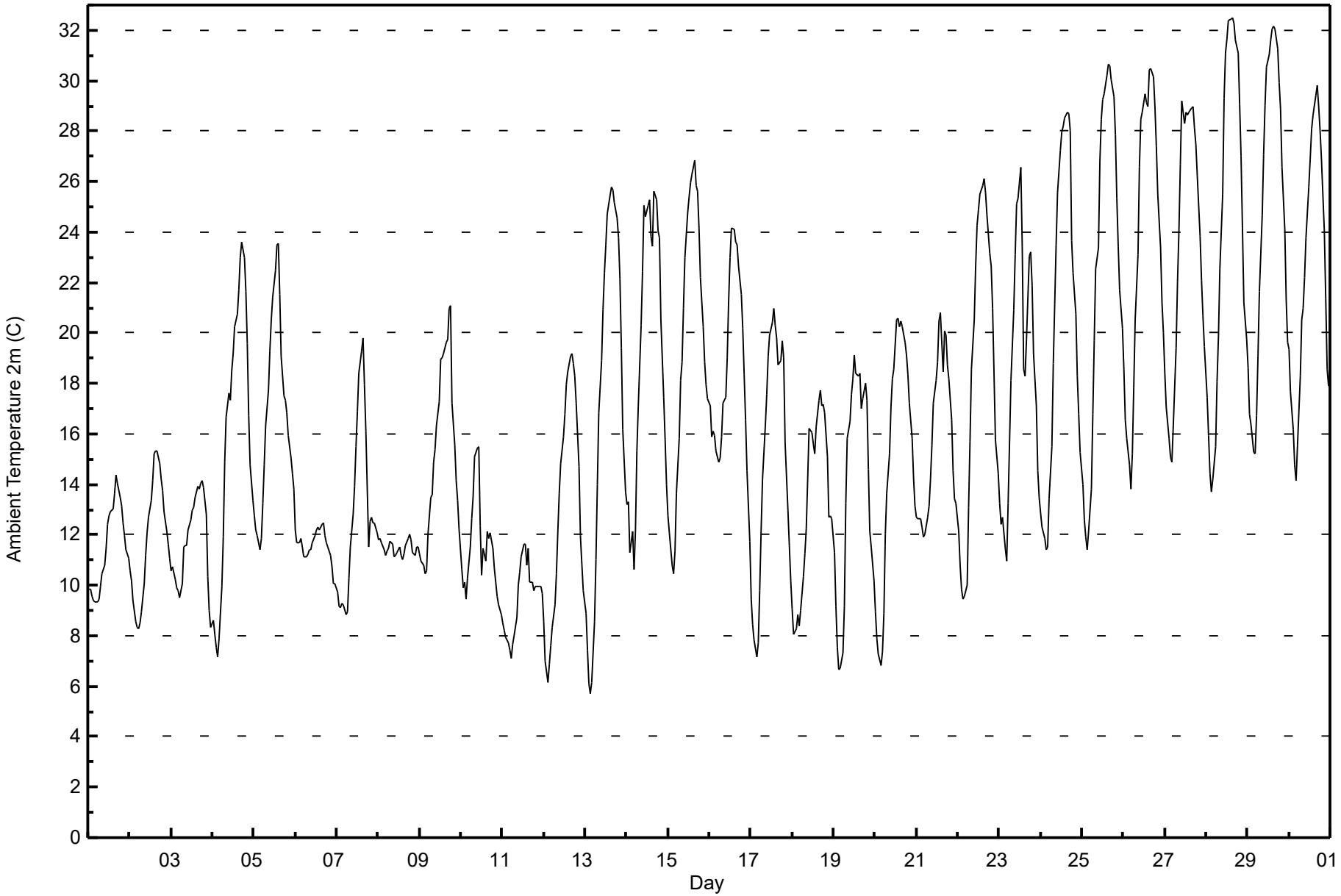
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	9.9	9.8	9.6	9.4	9.3	9.4	9.5	9.9	10.4	10.8	11.5	12.4	12.7	12.9	13.0	13.6	14.4	14.0	13.5	13.1	12.5	12.0	11.4	11.1	11.5	14.4
2-Jun	10.6	10.2	9.4	8.6	8.3	8.3	8.5	9.0	10.1	11.2	12.1	12.7	13.4	14.2	15.2	15.3	15.3	14.8	14.2	13.8	12.9	12.2	11.7	11.1	11.8	15.3
3-Jun	10.6	10.7	10.2	9.9	9.8	9.5	10.1	11.5	11.6	11.6	12.2	12.6	13.0	13.1	13.5	13.9	13.8	14.0	14.2	13.9	12.8	10.3	9.0	8.3	11.7	14.2
4-Jun	8.6	8.0	7.6	7.2	7.9	10.0	11.9	14.9	16.7	17.6	17.3	18.5	19.2	20.3	20.8	21.7	23.0	23.6	23.0	21.6	19.6	16.7	14.7	13.4	16.0	23.6
5-Jun	12.7	12.2	12.0	11.4	11.8	13.2	14.7	16.3	17.7	19.3	20.5	21.4	22.5	23.5	23.6	21.6	19.1	17.5	17.3	16.8	15.9	15.1	14.4	13.8	16.9	23.6
6-Jun	12.2	11.7	11.7	11.8	11.5	11.1	11.1	11.3	11.4	11.4	11.7	12.0	12.2	12.3	12.2	12.4	12.5	12.0	11.7	11.5	11.2	10.7	10.1	10.1	11.6	12.5
7-Jun	9.7	9.2	9.1	9.3	9.2	8.8	8.9	10.3	11.5	12.8	13.9	15.5	16.9	18.4	19.3	19.8	17.9	16.1	11.5	12.6	12.7	12.5	12.5	12.1	12.9	19.8
8-Jun	11.8	11.9	11.7	11.4	11.2	11.4	11.5	11.7	11.7	11.1	11.2	11.3	11.5	11.2	11.0	11.2	11.6	11.8	12.0	11.8	11.3	11.2	11.5	11.5	11.5	12.0
9-Jun	11.3	11.0	10.8	10.5	10.6	12.0	13.5	13.6	14.9	15.4	16.3	17.3	19.0	19.0	19.2	19.6	19.7	21.0	21.1	17.2	15.5	14.1	13.4	12.2	15.3	21.1
10-Jun	10.6	9.9	10.1	9.5	10.3	11.5	12.6	13.6	15.1	15.4	15.5	12.4	10.4	11.4	11.0	12.2	11.9	12.1	11.5	10.7	10.1	9.5	9.2	8.8	11.5	15.5
11-Jun	8.5	8.2	8.0	7.7	7.5	7.1	7.7	8.0	8.7	10.0	10.5	11.1	11.6	11.6	10.8	11.5	10.1	10.1	9.8	10.0	10.0	10.0	9.9	9.7	9.5	11.6
12-Jun	8.6	7.0	6.1	6.9	7.6	8.3	9.2	10.4	12.1	13.6	14.8	15.9	16.8	18.0	18.5	19.1	19.2	18.8	18.3	17.2	14.7	12.0	10.8	9.8	13.1	19.2
13-Jun	8.9	7.4	6.1	5.7	6.1	8.6	11.0	14.0	16.8	18.9	20.9	22.4	23.5	24.7	25.5	25.8	25.7	25.2	24.5	23.8	22.2	19.4	16.2	13.7	17.4	25.8
14-Jun	13.2	13.3	11.3	12.1	10.6	12.2	15.4	17.1	20.3	22.4	25.0	24.6	25.1	25.3	23.8	23.4	25.6	25.3	24.0	23.8	20.5	17.5	15.8	14.0	19.2	25.6
15-Jun	12.8	12.1	10.8	10.5	11.4	13.6	15.8	18.1	18.9	21.0	23.0	24.8	25.4	26.0	26.3	26.9	25.9	25.6	24.2	22.2	20.2	18.8	18.0	17.4	19.6	26.9
16-Jun	17.1	15.9	16.1	16.0	15.3	14.9	15.0	15.9	17.2	17.5	19.0	21.3	23.0	24.2	24.1	23.6	23.5	22.7	21.6	20.2	18.3	16.5	14.5	11.8	18.6	24.2
17-Jun	9.4	8.5	7.9	7.2	7.7	9.8	12.1	14.2	16.3	17.6	19.1	19.9	20.4	21.0	20.3	19.8	18.7	18.9	19.7	19.0	15.7	13.0	11.6	10.2	14.9	21.0
18-Jun	9.0	8.0	8.3	8.8	8.4	9.0	10.3	11.3	12.3	14.2	16.2	16.1	15.6	15.2	16.3	17.3	17.8	17.1	17.2	16.8	15.1	12.7	12.8	12.6	13.3	17.8
19-Jun	11.3	9.2	7.5	6.7	6.7	7.3	9.2	13.2	15.8	16.5	17.6	18.2	19.1	18.4	18.3	18.4	17.0	17.4	18.0	17.4	14.6	12.2	11.5	10.2	13.8	19.1
20-Jun	9.0	7.9	7.3	6.8	7.4	8.9	12.0	13.6	15.2	17.1	18.2	18.6	20.5	20.6	20.3	20.5	20.2	19.6	19.2	18.4	17.2	15.8	14.3	13.1	15.1	20.6
21-Jun	12.7	12.7	12.6	12.3	11.9	12.0	12.7	13.1	14.2	15.5	17.2	18.1	18.9	20.4	20.8	18.5	20.1	19.9	18.8	18.2	16.5	14.5	13.4	13.2	15.8	20.8
22-Jun	12.1	10.8	9.8	9.4	9.6	10.0	13.1	15.7	18.6	20.5	22.7	24.3	24.9	25.5	25.9	26.1	25.6	24.6	23.1	22.6	21.0	18.4	15.8	14.4	18.5	26.1
23-Jun	13.3	12.4	12.7	11.5	10.9	13.3	15.7	18.1	20.9	23.1	25.1	25.4	26.6	23.4	18.6	18.3	19.7	23.0	23.2	21.9	19.2	17.1	14.5	13.5	18.4	26.6
24-Jun	12.9	12.3	11.9	11.4	11.5	13.5	15.5	18.8	21.2	23.5	25.6	27.2	28.0	28.2	28.5	28.7	28.7	28.0	23.7	22.3	20.7	18.3	16.8	15.3	20.5	28.7
25-Jun	14.0	12.6	11.9	11.4	12.2	13.8	16.8	19.7	22.5	23.4	26.8	28.5	29.3	29.5	30.2	30.6	30.6	30.0	29.3	27.9	25.3	23.4	21.7	20.2	22.6	30.6
26-Jun	18.6	16.6	15.8	14.8	13.8	15.2	17.8	20.5	23.1	26.6	28.5	28.7	29.5	29.1	29.0	30.5	30.5	30.1	29.0	27.4	25.5	23.4	21.2	20.0	23.6	30.5
27-Jun	18.4	17.0	15.8	15.1	14.9	16.3	19.4	22.0	24.0	26.7	29.2	28.3	28.7	28.6	28.7	28.9	29.0	28.1	27.5	26.3	23.8	22.1	20.7	19.5	23.3	29.2
28-Jun	17.4	16.0	14.4	13.7	14.2	15.5	18.1	19.8	22.5	25.5	29.3	31.1	31.6	32.4	32.5	32.5	32.3	31.6	31.1	29.1	27.0	24.2	21.2	19.8	24.3	32.5
29-Jun	18.6	16.8	16.4	15.3	15.2	16.7	19.1	21.7	24.7	27.1	29.0	30.5	31.0	31.6	32.1	32.1	32.0	31.3	29.9	28.8	26.6	24.1	21.3	19.7	24.6	32.1
30-Jun	19.3	17.7	16.1	14.7	14.2	15.5	18.3	20.6	21.0	22.2	23.8	25.8	26.9	28.1	28.6	29.4	29.8	29.0	28.0	26.9	24.1	21.3	18.6	17.9	22.4	29.8
	12.4	11.6	11.0	10.6	10.6	11.6	13.2	14.9	16.6	18.0	19.5	20.2	20.9	21.3	21.3	21.4	21.4	21.1	20.3	19.4	17.8	16.0	14.6	13.6	Diurnal Average	
	19.3	17.7	16.4	16.0	15.3	16.7	19.4	22.0	24.7	27.1	29.3	31.1	31.6	32.4	32.5	32.5	32.3	31.6	31.1	29.1	27.0	24.2	21.7	20.2	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Barge Landing - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	94	13.06	13.06
10 - 20	426	59.17	72.22
> 20	200	27.78	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) - %

Barge Landing - June 2026

Maximum Value: 100.0 % on Jun 4 04:00

Maximum Daily Average: 98.9 % on Jun 6

Minimum Value: 22.1 % on Jun 28 16:00

Minimum Daily Average: 41.0 % on Jun 16

Maximum Diurnal Average: 89.3 % at hour 5

Minimum Diurnal Average: 47.4 % at hour 18

Monthly Average: 65.02 %

Percentiles: P_1 = 24.1 P_{10} = 31.4 Q_1 = 46.1 Median = 66.7 Q_3 = 84.2 P_{90} = 97.9 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

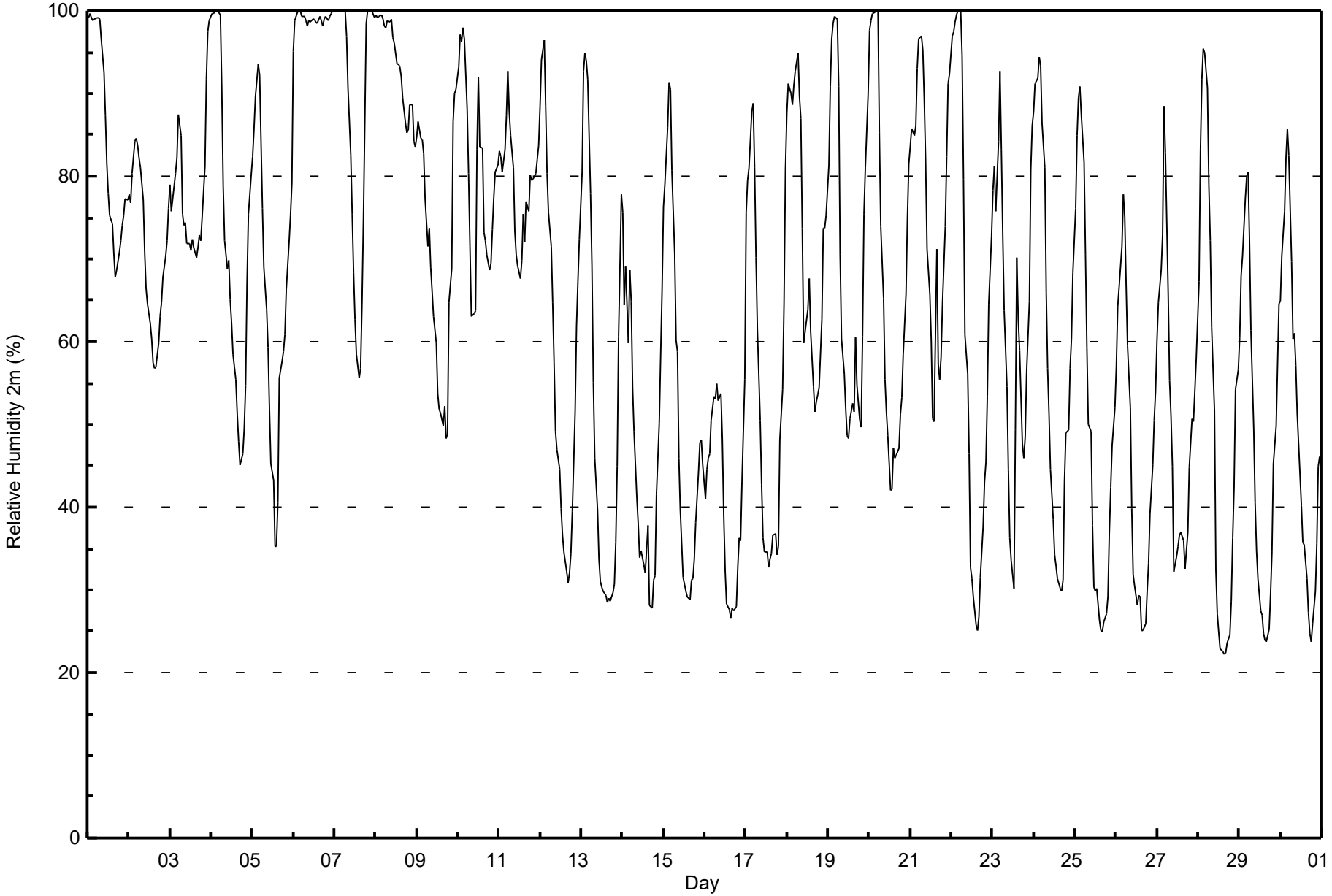
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	99.1	99.7	99.2	98.9	98.9	99.1	99.1	99.0	96.7	92.6	87.3	81.5	77.9	75.3	74.2	70.7	67.7	68.7	70.9	72.2	74.1	75.3	77.3	77.1	84.7	99.7
2-Jun	77.8	76.8	80.3	84.3	84.6	83.8	82.2	81.1	77.2	70.9	66.4	64.5	62.2	60.4	57.5	56.8	56.9	59.8	63.1	64.8	67.8	70.3	72.2	76.1	70.7	84.6
3-Jun	78.9	75.8	78.8	80.4	82.1	87.4	84.9	75.3	74.1	74.4	71.9	71.9	71.0	72.4	71.3	70.2	71.3	72.9	72.2	75.1	81.2	91.7	97.5	98.7	78.4	98.7
4-Jun	99.7	99.6	99.8	100.0	100.0	99.6	90.6	78.9	72.3	68.8	69.8	65.1	62.3	58.4	55.4	51.4	47.9	45.1	46.5	49.5	54.7	67.1	75.3	80.1	72.4	100.0
5-Jun	82.4	85.7	89.7	93.5	92.2	84.0	76.1	69.0	63.9	59.3	51.8	45.2	43.3	35.2	35.3	40.5	55.6	57.6	58.8	60.9	66.3	72.0	75.2	79.1	65.5	93.5
6-Jun	95.1	98.8	99.8	100.0	99.9	99.4	99.3	98.8	98.1	98.9	98.6	99.0	98.9	98.6	98.5	99.3	98.9	98.1	99.0	99.4	98.7	99.3	99.6	100.0	98.9	100.0
7-Jun	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.0	90.7	82.5	75.4	68.4	62.7	58.4	55.6	56.8	64.7	74.5	98.4	100.0	100.0	100.0	100.0	99.2	86.8	100.0
8-Jun	99.5	99.1	99.3	99.5	99.0	98.1	97.9	98.8	98.6	99.0	96.7	96.1	93.6	93.6	93.2	92.1	89.6	86.5	85.3	85.6	88.6	88.7	84.2	83.6	93.6	99.5
9-Jun	84.7	86.6	84.6	84.4	82.8	77.3	71.4	73.7	69.0	66.1	63.0	59.9	53.7	51.9	51.4	49.9	52.2	48.4	48.8	64.8	68.8	86.7	90.0	90.5	69.2	90.5
10-Jun	93.2	97.1	96.3	97.9	96.6	88.1	80.3	71.6	63.1	63.5	63.7	83.2	92.0	83.6	83.3	73.2	72.3	70.6	68.6	69.5	73.5	77.5	80.5	81.3	80.0	97.9
11-Jun	83.1	82.4	80.5	83.1	87.3	92.7	87.9	85.0	81.0	73.5	70.4	69.1	67.6	69.8	75.5	72.1	76.9	75.8	80.1	79.4	79.6	80.3	82.0	83.8	79.1	92.7
12-Jun	88.5	94.1	96.4	88.4	80.3	75.6	71.5	64.7	57.4	49.2	46.9	44.6	39.8	36.6	34.6	32.1	30.9	32.0	34.4	39.6	51.6	61.8	67.3	72.4	57.9	96.4
13-Jun	80.6	92.7	95.0	94.0	91.7	78.0	69.2	55.1	46.0	39.6	33.8	31.0	30.4	29.7	29.4	28.5	29.1	28.6	29.6	30.7	35.8	44.9	60.6	77.8	52.6	95.0
14-Jun	75.7	64.5	69.1	59.8	68.6	64.9	54.4	49.2	41.1	38.0	33.9	34.7	33.0	32.1	34.9	37.7	28.1	27.7	31.2	31.7	41.6	50.2	58.3	66.1	46.9	75.7
15-Jun	76.3	78.9	85.9	91.4	90.6	80.6	70.7	60.2	58.7	45.9	39.7	31.4	30.7	29.8	29.1	28.8	31.2	31.4	33.7	38.2	44.3	47.8	48.1	45.1	52.0	91.4
16-Jun	40.9	44.5	46.0	46.4	50.6	53.5	53.0	55.0	52.9	53.7	48.1	39.1	32.4	28.4	27.7	26.7	27.7	27.4	28.0	32.7	36.2	35.9	43.1	55.4	41.0	55.4
17-Jun	75.6	79.6	81.1	87.8	88.8	81.1	70.2	61.6	50.6	42.7	36.2	34.6	34.5	32.8	33.7	34.4	36.6	36.8	34.2	35.3	48.1	54.2	64.7	80.9	54.8	88.8
18-Jun	87.6	91.2	90.0	88.6	91.0	92.7	94.9	89.7	86.9	73.8	59.8	62.5	64.0	67.6	61.2	54.6	51.5	52.7	53.5	54.3	62.7	73.8	73.8	75.2	73.1	94.9
19-Jun	81.3	90.8	96.7	98.5	99.4	99.0	90.8	70.5	60.4	56.1	51.9	48.6	48.4	50.7	52.6	51.6	60.5	54.7	50.6	49.6	60.6	75.4	81.0	89.9	69.6	99.4
20-Jun	97.6	98.8	99.6	99.9	100.0	100.0	85.3	73.8	65.3	55.4	51.6	48.7	42.1	42.2	47.0	45.9	46.2	47.2	51.2	53.2	58.5	65.8	75.0	81.4	68.0	100.0
21-Jun	83.5	85.8	84.9	86.1	93.1	96.6	96.9	95.3	89.4	81.8	71.2	65.7	60.2	50.8	50.4	71.2	57.3	55.4	58.2	64.6	73.9	82.4	91.2	92.4	76.6	96.9
22-Jun	97.0	97.5	98.7	99.5	99.9	100.0	94.6	79.7	60.8	56.1	46.4	32.6	31.3	29.2	25.8	25.2	26.8	31.5	37.6	43.1	45.4	53.3	64.5	72.6	60.4	100.0
23-Jun	78.2	81.2	75.7	84.2	92.7	83.3	72.9	63.8	54.7	44.5	36.2	33.5	30.2	49.4	70.1	62.8	59.0	47.5	46.0	48.4	56.3	65.0	80.8	86.1	62.6	92.7
24-Jun	87.7	91.1	91.9	94.4	93.4	86.5	81.0	66.0	56.8	51.2	44.6	38.4	34.3	32.9	31.4	30.2	29.9	31.1	43.0	49.0	49.4	56.7	60.4	68.3	58.3	94.4
25-Jun	76.1	84.9	89.5	90.8	87.4	81.7	70.6	59.3	50.0	49.2	37.8	30.3	29.8	30.3	26.3	25.1	24.9	26.0	27.2	29.2	36.8	42.4	47.4	52.0	50.2	90.8
26-Jun	57.0	64.3	66.5	71.5	77.9	75.1	66.8	59.4	52.0	39.8	31.8	30.4	28.1	29.3	29.1	25.1	25.1	26.0	29.8	33.2	39.2	45.1	50.6	54.0	46.1	77.9
27-Jun	60.1	64.7	68.7	73.0	88.6	82.9	65.8	55.3	51.0	44.9	32.2	34.1	35.2	36.7	36.9	36.0	32.6	34.8	36.9	44.7	50.6	50.4	54.0	57.9	51.2	88.6
28-Jun	67.3	83.2	91.7	95.5	94.9	90.7	78.9	72.1	61.7	51.7	32.4	27.1	24.8	22.8	22.5	22.1	22.4	23.5	24.7	28.7	36.3	42.6	54.2	56.6	51.2	95.5
29-Jun	60.5	68.0	70.4	77.3	80.0	80.5	72.0	61.3	49.4	40.6	34.8	31.4	27.5	26.9	24.7	24.0	23.7	25.3	29.4	34.5	45.2	49.9	57.3	64.5	48.3	80.5
30-Jun	65.0	70.3	75.8	82.2	85.8	82.6	69.7	60.3	61.1	57.2	51.3	43.8	40.2	35.8	35.5	31.4	27.3	24.8	23.7	25.9	29.9	35.7	45.0	46.1	50.3	85.8
	81.0	84.3	86.1	87.7	89.3	86.5	80.0	72.7	66.4	60.7	54.5	51.5	49.4	48.4	48.5	47.5	47.5	47.4	49.8	52.9	58.5	64.7	70.4	74.8	Diurnal Average	
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	98.6	99.0	98.6	99.0	98.9	98.6	98.5	99.3	98.9	98.1	99.0	100.0	100.0	100.0	100.0	100.0	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Barge Landing - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Barometric Pressure (BP) - inHg

Barge Landing - June 2026

Maximum Value: 29.4 inHg on Jun 2 06:00

Maximum Daily Average: 29.3 inHg on Jun 2

Minimum Value: 28.2 inHg on Jun 8 14:00

Minimum Daily Average: 28.3 inHg on Jun 8

Maximum Diurnal Average: 28.9 inHg at hour 7

Minimum Diurnal Average: 28.8 inHg at hour 18

Monthly Average: 28.86 inHg

Percentiles: P_1 = 28.2 P_{10} = 28.5 Q_1 = 28.7 Median = 28.9 Q_3 = 29.1 P_{90} = 29.2 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

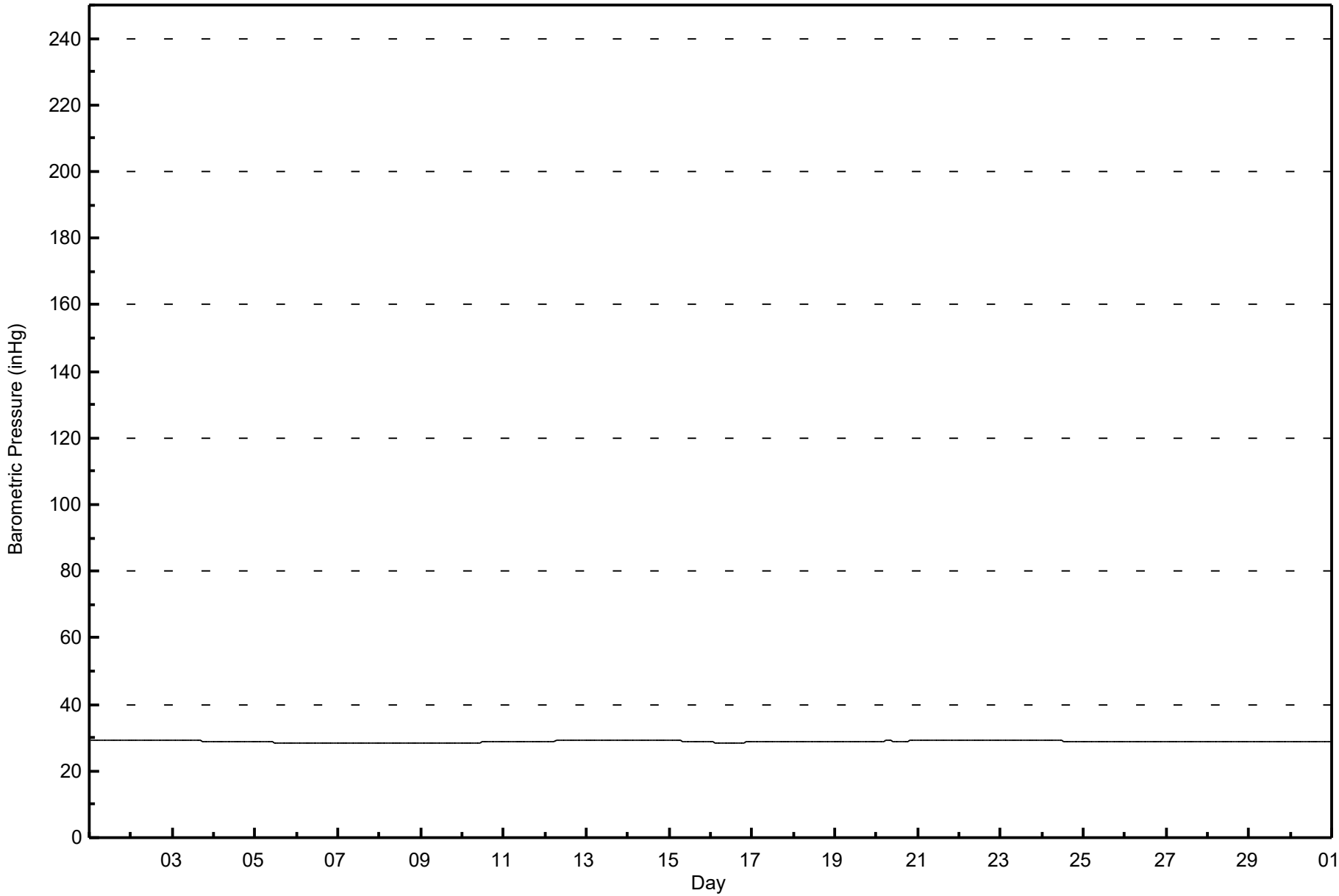
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.4	29.4	29.4	29.3	29.4
2-Jun	29.4	29.4	29.3	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	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.4
3-Jun	29.3	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	29.0	28.9	28.9	29.1	29.3
4-Jun	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	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.8	28.9
5-Jun	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	28.5	28.5	28.4	28.4	28.6	28.7
6-Jun	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.3	28.3	28.4	28.4	28.4	28.4	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.6	28.6	28.6	28.6	28.4	28.6
7-Jun	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	28.5	28.5	28.6	28.5	28.5	28.5	28.5	28.5	28.6	28.6
8-Jun	28.5	28.5	28.5	28.4	28.4	28.4	28.4	28.3	28.3	28.3	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.3	28.3	28.3	28.3	28.3	28.3	28.5
9-Jun	28.3	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	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
10-Jun	28.5	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.8	28.8	28.8	28.8	28.8	28.7	28.8
11-Jun	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	28.9	28.9	28.9	29.0	29.0	29.0	29.0	29.0	28.9	29.0
12-Jun	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	29.1	29.1	29.2	29.2	29.2	29.1	29.2
13-Jun	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	29.1	29.2	29.2
14-Jun	29.1	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	29.0	29.0	29.0	29.0	29.1
15-Jun	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	28.7	28.7	28.7	28.7	28.7	28.6	28.9	29.0
16-Jun	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.6	28.6	28.6	28.6	28.6	28.7	28.7	28.6	28.7
17-Jun	28.7	28.7	28.7	28.7	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.9	28.9	28.9	28.8	28.9
18-Jun	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	29.0	29.0	29.0	29.0	29.0	29.0	29.0	28.9	29.0
19-Jun	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
20-Jun	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1	29.0	29.1
21-Jun	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
22-Jun	29.1	29.1	29.1	29.1	29.1	29.1	29.1	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	29.2
23-Jun	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2
24-Jun	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	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	29.0	29.1
25-Jun	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	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.8	28.9
26-Jun	28.7	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
27-Jun	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.8	28.8	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.8	28.8	28.8	28.8	28.8	28.7	28.8
28-Jun	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8
29-Jun	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	28.7	28.7	28.7	28.7	28.8	28.8	28.8
30-Jun	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	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.8
	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.8	28.8	28.8	28.8	28.8	28.8	28.9	28.9	28.9	Diurnal Average	
	29.4	29.4	29.3	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	29.3	29.3	29.3	29.3	29.3	29.4	29.4	29.4	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Barometric Pressure (BP) - inHg

Barge Landing - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 20m (WS20) - km/h

Barge Landing - June 2026

Maximum Speed: 25 km/h on Jun 2 10:00

Maximum Daily Speed Average: 20.5 km/h on Jun 1

Minimum Speed Value: 1 km/h on Jun 15 08:00

Minimum Daily Speed Average: 1.3 km/h on Jun 22

Maximum Diurnal Speed Average: 6.0 km/h at hour 18

Minimum Diurnal Speed Average: 2.2 km/h at hour 6

Monthly Average Velocity: 3.5 km/h 5.0 deg

Percentiles: P_1 = 2 P_{10} = 5 Q_1 = 8 Median = 10 Q_3 = 15 P_{90} = 19 P_{99} = 23

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 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-Jun	N19	NNW19	N22	N21	N20	NNW21	NNW18	NNW17	NNW19	NNW21	N22	N24	N24	N23	N20	N23	N22	N24	N22	N22	N19	N19	N17	N19	N20.5	N24
2-Jun	N19	NNE23	N19	N17	N18	N20	N21	NNE21	NNE23	NNE25	NNE22	NE20	NE18	NE21	NE18	NE18	NE17	ENE13	E11	ENE13	E13	E10	E8	E5	NNE15.6	NNE25
3-Jun	E6	E7	E7	E8	ESE6	ESE7	SE5	ESE8	ESE7	ESE10	ESE9	ESE9	SSE7	SSE8	SSE7	SSE9	S8	SSE9	SSE9	S6	SW2	N3	NE3	E5	SE5.5	ESE10
4-Jun	SE5	SSE4	SSE5	SSE8	SSE10	SSE9	SSE8	S8	SSW10	SSW11	SSW13	SW15	SSW14	SSW14	SSW16	SSW14	SW13	SW13	SSW15	SSW15	SSW10	S11	S10	S11	SSW10.1	SSW16
5-Jun	S13	S12	S10	S10	S8	SSW9	SW8	SSW8	SSW9	SSE11	S11	SSE11	SSE12	SW10	S9	S13	SSE20	SE14	SW6	WSW6	SE10	SE7	S9	SSW8	S9.1	SSE20
6-Jun	S4	WNW7	NNW9	NW12	NW14	W9	WSW7	WSW12	WSW16	WSW18	WSW18	WSW19	WSW17	WSW17	WSW12	SW8	SW10	SW11	SW10	SW10	SW10	SW8	SSW8	SSW7	WSW9.8	WSW19
7-Jun	S9	S6	S6	SSE6	SE9	SSE10	SSE9	SSE7	SSE3	NW3	NW2	NNW5	NNW6	NNW10	N9	NNE14	N17	NNE18	N10	NNW8	N6	NNW8	NNE15	NNE13	NNE3.4	NNE18
8-Jun	N10	N11	NNW12	NNW10	NNW12	N14	NNW15	NW10	NW11	NW13	NW20	NNW18	WNW21	WNW23	W25	W24	W20	W21	W20	W19	W20	W20	W18	W16	WNW14.7	W25
9-Jun	W14	W15	W16	W15	W15	W12	W14	W12	W10	W13	WSW12	WSW15	W13	W14	W13	WSW9	NW8	N10	NNW7	NNW7	NNW10	N11	NNE10	N11	WNW9.5	W16
10-Jun	N9	NE9	NNE8	N8	N8	NNW8	N5	NW7	NNW4	NNW5	NW7	N15	N14	N13	N17	N19	N21	N19	NNW19	NNW18	N15	N14	N12	N16	N11.7	N21
11-Jun	N10	NNW12	NNW14	N13	NNW14	NW12	NNW15	NNW16	NNW16	NNW18	NNW17	N17	N19	N21	N19	N18	N19	N18	N17	N13	NNW14	NNW14	NNW12	NNW10	NNW15.1	N21
12-Jun	WNW8	WNW10	NNW13	NNW15	NNW17	NNW15	NNW13	NNW16	NNW16	N19	N22	N20	N20	N21	N23	N22	N21	N22	N20	N15	N10	NNW8	NW7	NW9	N15.2	N23
13-Jun	NW8	W5	W4	SW8	WSW6	WSW5	SW3	WSW4	SW4	SW6	WSW4	W4	SW4	SSE9	SSE11	SSE12	S11	SW14	SW11	SW11	SSW8	SSW9	S6	SSE6	SSW5.8	SW14
14-Jun	WSW4	SW8	WSW3	W9	SW8	SW4	E2	W2	N3	N5	NE11	NNE12	NNE19	N17	NNW11	NNW11	NNW15	N17	NNW14	N13	N9	NNW8	N9	NNW11	NNW6.7	NNE19
15-Jun	NNW8	NNW9	NNW8	NNW7	N4	ENE2	ENE3	E1	W5	W6	WNW2	NE6	NNE8	NE10	NNE9	ENE11	ENE12	ENE14	ENE13	ENE12	NE12	NE9	NNE6	NNE9	NE5.8	ENE14
16-Jun	NE11	NE9	ESE13	E13	E9	ENE8	E11	E9	SE7	SW5	SW4	NW8	N12	NNE18	NNE21	NNE22	NNE21	NNE23	NNE23	N22	N22	NNE21	NNE15	N11	NNE10.6	NNE23
17-Jun	NNW10	NNW11	NW11	NNW10	NNW7	NW5	N5	NW7	N10	N12	N16	N14	N14	N14	N15	NNW15	NNW13	NNW13	N10	N10	N7	N8	NNW9	NNW11	NNW10.4	N16
18-Jun	NNW10	NNW10	NNW9	NW8	NW7	NW5	NNW4	WSW4	SSW2	SSW4	WNW2	N11	N15	N16	NNW15	NNW15	NNW15	NNW15	NNW10	NNW12	NNW12	WNW7	W6	WNW7	NNW8.1	N16
19-Jun	WNW8	WNW6	SSW1	SW4	W7	WSW6	WNW4	NNW6	NNE15	NNE14	N10	N9	NNE16	NNE16	NNE15	N14	N18	NNE12	N13	N12	N10	NNE10	NNE10	NNW7	N8.5	N18
20-Jun	NNW8	NNW7	NW6	NNW6	NW5	NW4	N9	N10	NNE13	NNE17	NNE16	N13	NNE13	NE13	NE18	NNE17	NNE16	NNE17	NE17	NE12	NNE13	NNE10	NNW8	N6	NNE10.4	NE18
21-Jun	NNW7	NNW8	N8	N7	N5	NNW4	NW5	NNW5	NNW10	NNW12	N14	NNW14	N12	NNE12	NNE12	NE11	N9	NNE14	NNE10	NNE5	NW5	NNW7	NW8	NNW8	N8.2	NNW14
22-Jun	NNW5	S7	W3	N6	NNW4	ESE5	E4	WNW5	NW4	NW6	NNW6	NE8	NNE11	NNE9	NNE6	NE1	W6	SSE4	SE6	SSE7	SE12	SE10	SSE8	SSE10	E1.3	SE12
23-Jun	SSE6	SW7	SSW8	S9	SSE8	S8	S6	S8	S8	SSW9	SSW10	SW9	SW10	N6	WNW9	NW14	SE16	SSE14	SSE15	SE10	SE11	SE8	SE7	SE7	S6.1	SE16
24-Jun	S6	SE8	SSE8	SE7	SE8	SSE6	SE5	SSE9	S11	SSE9	SSE12	SSE12	SSE12	S9	SSE8	S7	SSW6	SW10	SE20	SE17	SE12	SE11	SE12	SE11	SSE8.9	SE20
25-Jun	SE8	SE7	SE8	SE10	SE11	SE9	SSE11	SSE11	SSE8	WSW9	S11	S14	SSE15	SSE13	SSE13	SSE13	SSE14	SSE15	SSE16	SE19	SE16	SE17	SE16	SE15	SSE11.6	SE19
26-Jun	SE13	SE11	SE13	SE11	SE7	SE3	SE4	SW3	WNW5	SSE9	SSE20	SSE20	SE18	SE18	SE17	SE16	SSE15	SSE17	SE19	SE17	ESE15	ESE11	ESE13	SE11	SE12.1	SSE20
27-Jun	SE7	SE7	SE10	SE6	NNW5	N4	NNE8	NNE7	N8	NE11	ESE16	ESE14	SE17	SE17	SE17	ESE13	ESE16	ESE14	ESE9	E3	ENE8	ENE11	ENE12	ENE12	E7.9	SE17
28-Jun	NE7	NNW10	NNW9	NNW8	NNW12	NNW7	NNW7	NNW9	NNW8	NNW9	ENE15	ENE16	ENE16	NE16	ENE13	NE18	NE19	NE17	NE14	NE15	NE14	NNE10	NNW10	NNW9	NNE9.9	NE19
29-Jun	NNW8	NNW10	NNW7	NNW8	NNW11	NNW9	N7	NW4	NNE9	NNE13	NNE13	NNE14	NNE15	NNE14	NE13	NNE15	NNE15	NNE17	NNE17	N15	N17	S7	SSE10	SE12	NNE9.0	NNE17
30-Jun	ESE11	SE9	SE5	E6	SE4	SE4	ESE3	SE3	WNW3	WNW5	WNW6	NW7	NW9	NW9	NNW10	N10	NE18	NE18	ENE15	ENE11	ESE10	ESE10	ESE8	SE7	ENE3.5	NE18
	N2.5	NNW2.6	NNW2.6	NNW2.6	NNW3.0	NNW2.2	N2.5	NW2.5	NNW3.7	NNW4.2	N3.2	N4.1	N5.2	N5.6	N5.1	N5.7	NNE6.0	NNE6.0	NNE4.9	NNE4.1	NNE4.3	NNE3.2	NNE2.5	NNE2.3	Diurnal Average	
	N19	NNE23	NNW22	N21	N20	NNW21	N21	NNE21	NNE23	NNE25	N22	N24	N24	WNW23	W25	W24	N22	N24	NNE23	N22	NNE22	NNE21	W18	N19	Diurnal Maximum	

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

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 20m (WS20) - km/h

Barge Landing - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8 km/h on Jun 7 18:00

Minimum Value: 0 km/h on Jun 3 23:00

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

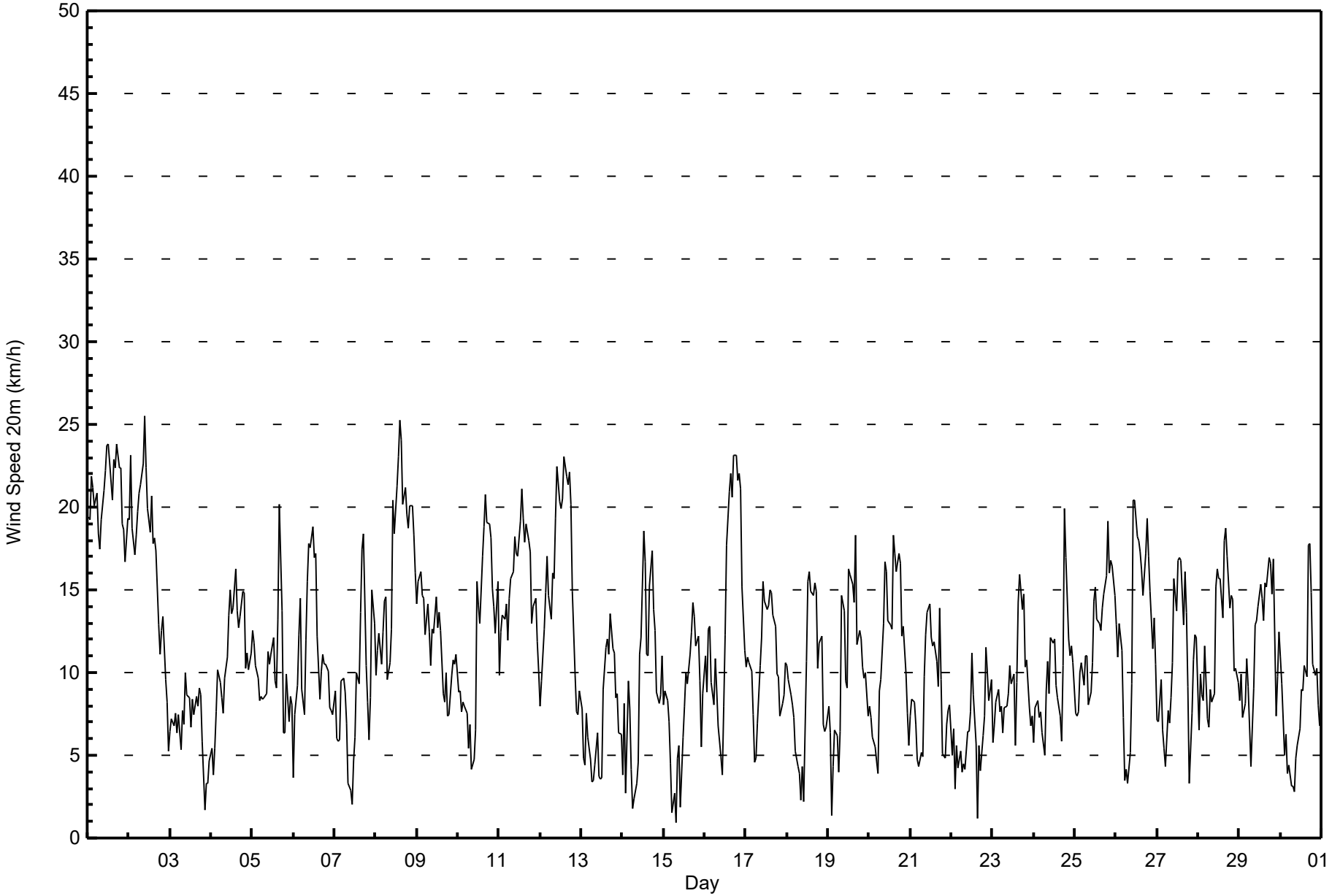
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	6	6	7	6	6	6	6	7	6	6	7	7	7	7	7	7	7	7	6	6	5	5	5	5	7
2-Jun	5	6	6	5	6	6	6	6	6	7	6	5	5	6	5	5	6	4	3	5	3	3	2	1	7
3-Jun	2	2	2	2	1	2	2	2	2	3	3	2	2	2	3	2	2	2	2	2	2	1	0	2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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 20m (WS20) - km/h

Barge Landing - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	85	11.81	11.81
6 - 11	323	44.86	56.67
12 - 19	255	35.42	92.08
20 - 28	57	7.92	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 20m (WS20) - km/h

Barge Landing - June 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	1	2	2	6	2	9	4	1	4	8	6	6	7	10	9	85
6 - 11	36	17	11	5	11	13	31	35	29	15	20	6	7	9	19	59	323
12 - 19	52	34	19	13	2	8	23	16	4	7	4	10	15	1	5	42	255
20 - 28	26	12	2	0	0	0	1	3	0	0	0	0	7	2	1	3	57
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	122	64	34	20	19	23	64	58	34	26	32	22	35	19	35	113	720

Total Number of Valid Hours: 720

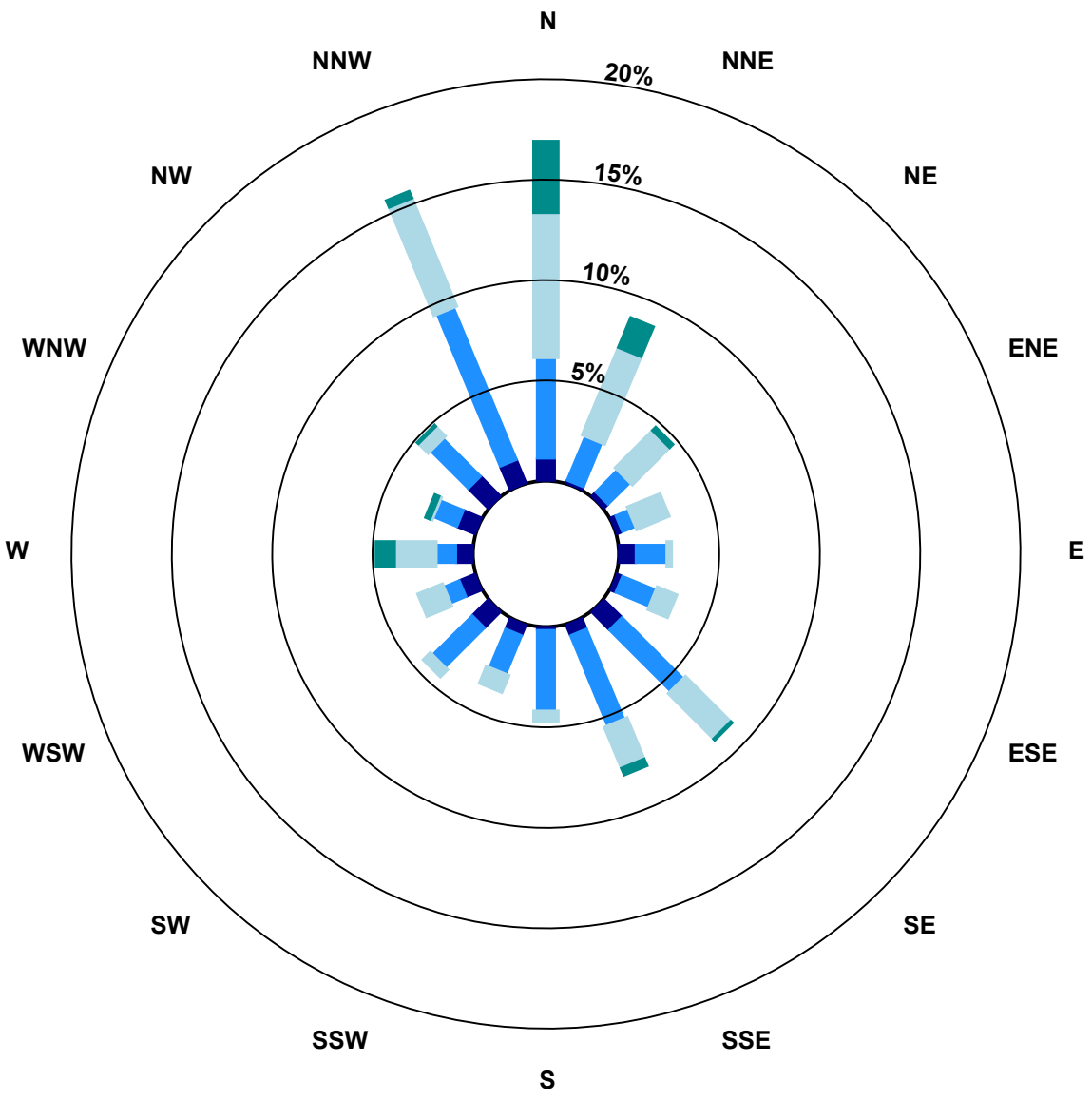
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 20m (WS20) - km/h

Barge Landing



Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 720

Direction of Maximum Speed: 20 deg on Jun 2 10:00
Direction of Maximum Daily Speed Average: 355.9 deg on Jun 1

Direction of Minimum Speed: 98 deg on Jun 15 08:00

Direction of Minimum Daily Speed Average: 1.3 deg on Jun 22

Monthly Average Direction: 5.0 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-Jun	356	347	349	352	350	345	342	343	346	347	351	352	354	357	354	356	1	6	10	8	10	9	8	6	355.9
2-Jun	11	18	4	4	4	4	10	16	16	20	33	44	40	37	55	38	39	68	79	72	83	82	80	92	31.8
3-Jun	95	95	92	91	102	115	143	123	123	111	112	122	157	149	154	161	189	156	159	187	233	354	37	89	128.8
4-Jun	129	151	160	149	155	168	159	174	205	195	207	216	212	205	207	208	215	219	213	212	205	175	175	170	194.2
5-Jun	172	173	182	174	176	209	214	202	194	168	180	159	152	224	190	169	151	134	220	237	124	145	174	194	175.4
6-Jun	185	299	341	322	304	270	247	249	258	246	252	253	246	243	245	233	228	230	225	221	232	228	194	202	249.7
7-Jun	178	169	181	155	140	154	154	153	153	307	308	338	333	329	356	21	3	23	5	347	355	340	17	26	19.2
8-Jun	356	355	346	337	345	350	345	323	307	305	307	302	295	285	276	272	277	277	270	272	270	268	272	277	295.5
9-Jun	268	261	260	261	269	281	280	276	281	260	250	248	273	268	260	252	326	349	342	332	330	357	17	2	283.7
10-Jun	6	42	12	358	356	347	353	317	347	332	310	5	8	2	1	360	4	358	348	343	350	354	349	354	355.9
11-Jun	355	347	346	349	339	322	335	343	346	347	348	352	356	11	2	353	355	355	350	349	343	340	332	333	348.2
12-Jun	292	293	335	339	343	341	344	345	337	353	354	358	359	355	357	359	1	6	6	3	358	335	314	318	349.2
13-Jun	313	269	262	233	243	238	233	246	225	228	247	267	214	158	166	165	181	214	222	215	204	192	185	151	209.8
14-Jun	258	228	242	264	222	214	100	262	358	359	50	18	12	5	335	329	348	6	348	356	1	342	352	335	347.1
15-Jun	333	332	336	340	5	78	75	98	266	259	289	48	19	38	33	63	64	67	63	63	50	50	24	32	34.0
16-Jun	51	56	103	98	101	76	91	100	144	215	233	304	4	20	20	16	15	18	19	8	11	19	14	3	30.0
17-Jun	342	337	325	329	338	318	349	324	355	357	3	7	359	1	360	346	333	348	353	1	357	354	332	329	347.8
18-Jun	331	333	330	309	314	307	328	250	205	195	302	350	9	6	338	329	340	342	332	328	343	293	277	291	331.0
19-Jun	287	303	210	231	265	255	295	345	13	19	352	355	13	13	22	353	353	12	11	358	6	20	16	336	356.6
20-Jun	329	334	324	330	317	314	11	2	18	18	18	7	32	36	46	26	32	20	48	36	23	17	341	355	16.9
21-Jun	346	341	349	352	359	335	325	339	344	339	352	348	353	17	13	46	353	17	23	19	313	347	325	330	354.5
22-Jun	346	182	277	351	348	106	94	289	319	310	333	36	21	33	24	41	265	157	133	151	131	146	151	158	82.4
23-Jun	150	218	202	181	168	177	189	187	175	205	195	219	218	351	296	311	126	160	151	136	132	140	130	142	175.1
24-Jun	171	138	162	135	133	157	127	162	171	165	160	159	162	177	160	181	201	235	126	129	143	134	133	138	153.0
25-Jun	133	136	126	137	134	143	155	161	161	254	179	169	147	161	154	151	163	148	154	135	130	127	137	134	148.3
26-Jun	135	137	136	137	132	136	137	216	297	160	147	153	145	133	133	141	147	153	129	125	118	108	113	126	137.2
27-Jun	143	146	136	137	339	357	24	20	6	35	106	106	128	141	128	108	107	115	111	88	69	74	75	76	99.3
28-Jun	37	339	339	343	340	341	336	334	332	335	60	63	60	52	60	43	38	46	38	37	34	18	341	331	23.8
29-Jun	334	337	332	341	342	336	351	317	14	15	25	24	19	21	35	29	25	26	26	7	358	169	163	129	14.4
30-Jun	123	139	145	97	133	127	108	124	295	291	290	309	305	309	328	5	41	41	63	76	102	109	111	145	65.9
	357.6	340.1	342.3	345.0	339.8	329.4	351.6	324.0	333.8	332.6	355.7	0.4	8.1	8.9	9.3	9.0	16.2	23.2	33.5	22.6	28.1	33.4	30.3	23.4	
	Diurnal Average																								

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

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 108 deg on Jun 22 16:00

Minimum Value: 4 deg on Jun 27 23:00

Percentiles: P_1 = 5 P_{10} = 10 Q_1 = 15 Median = 19 Q_3 = 25 P_{90} = 39 P_{99} = 80

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

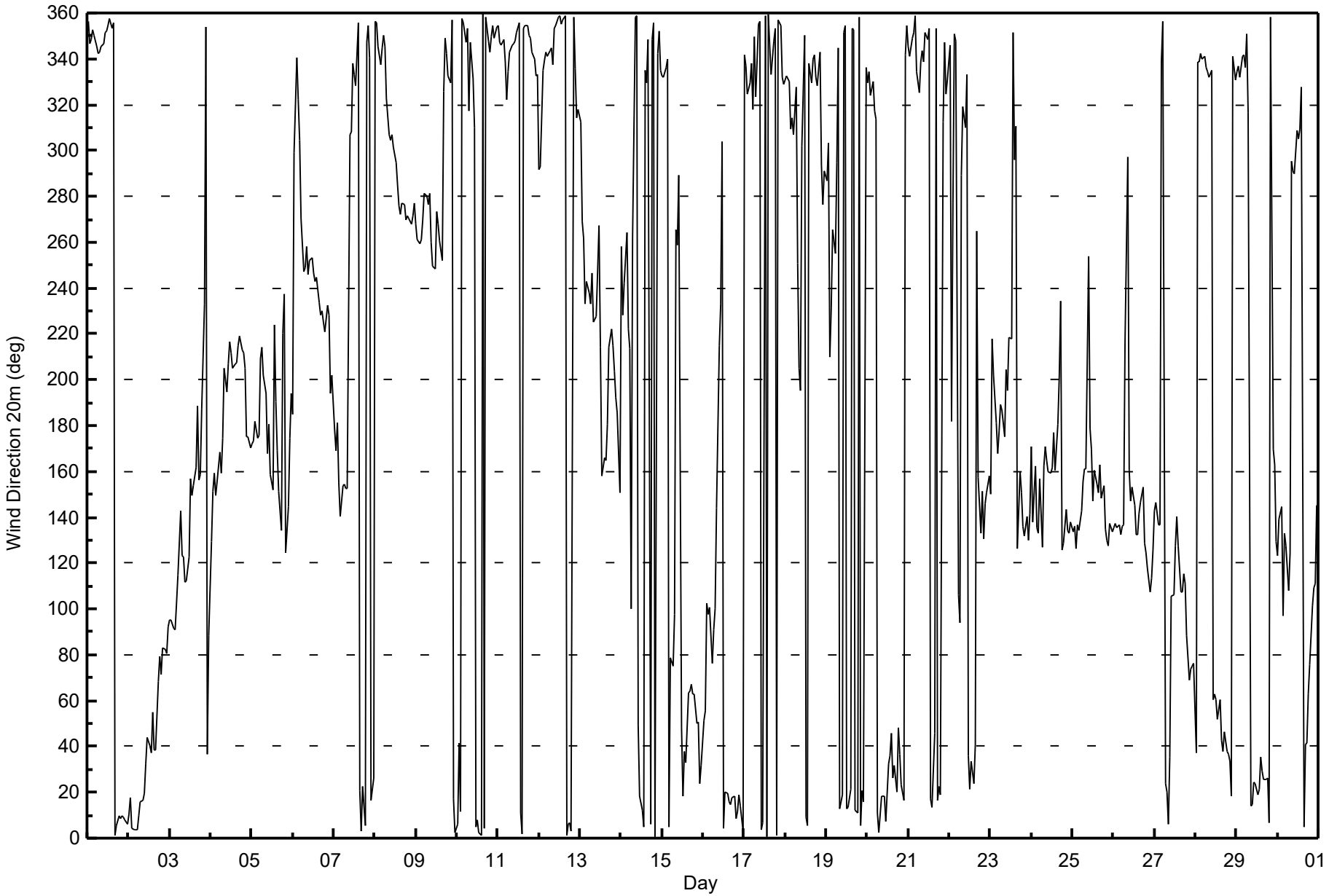
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	18	16	17	18	19	15	15	18	17	17	18	19	18	20	19	19	19	18	16	18	16	16	17	17	20
2-Jun	15	15	18	17	17	18	18	14	16	15	16	16	16	15	12	15	17	19	15	16	15	14	16	17	19
3-Jun	14	14	14	13	18	20	28	24	27	21	21	22	29	25	28	23	25	20	19	29	61	19	14	33	61
4-Jun	19	13	12	9	9	14	16	34	31	28	23	24	26	31	24	25	25	24	20	19	19	9	21	8	34
5-Jun	10	12	11	12	17	20	21	24	33	25	28	23	25	33	40	16	13	13	43	56	11	18	21	21	56
6-Jun	48	30	35	14	18	20	26	21	18	16	15	15	16	15	17	17	19	18	16	17	17	16	22	21	48
7-Jun	12	18	13	26	10	13	19	23	57	70	84	55	45	25	31	28	18	27	38	22	30	20	20	20	84
8-Jun	19	21	15	15	15	18	15	21	16	17	15	18	17	19	16	15	17	16	16	16	15	15	15	16	21
9-Jun	17	14	13	14	15	22	23	20	27	22	20	24	27	20	23	31	33	22	21	8	18	17	18	16	33
10-Jun	19	14	16	13	14	20	34	31	64	62	34	31	19	18	17	19	19	19	20	16	16	17	18	18	64
11-Jun	17	15	15	18	18	18	16	17	17	18	19	20	20	17	19	20	19	19	17	17	16	14	17	18	20
12-Jun	14	13	9	11	12	13	14	16	19	31	25	20	21	21	19	20	18	18	17	17	13	17	7	6	31
13-Jun	12	19	26	6	9	14	25	28	39	27	65	77	76	45	30	31	30	25	18	15	14	11	21	17	77
14-Jun	38	18	59	23	11	31	83	56	51	51	24	30	18	19	26	19	25	20	19	19	15	13	25	6	83
15-Jun	13	15	10	15	23	64	66	87	33	49	88	54	43	35	33	24	18	15	12	10	10	17	33	28	88
16-Jun	17	12	13	13	15	18	19	15	23	47	59	33	66	19	17	16	18	15	15	17	18	13	13	15	66
17-Jun	12	8	10	10	17	25	40	25	26	23	22	27	25	26	24	22	15	20	24	17	15	13	12	8	40
18-Jun	6	5	9	7	12	14	26	20	53	38	75	25	18	19	19	17	20	18	18	14	16	14	19	19	75
19-Jun	12	11	88	38	20	10	25	36	20	19	37	37	24	23	21	26	23	21	21	22	16	11	13	16	88
20-Jun	12	10	8	19	16	43	28	20	18	17	18	21	21	22	21	19	26	17	18	19	16	15	16	30	43
21-Jun	9	11	15	17	23	25	19	42	17	19	18	21	24	22	25	24	21	18	27	49	29	16	10	9	49
22-Jun	44	37	32	18	49	11	52	24	52	35	42	46	27	39	67	108	53	81	39	10	9	13	9	11	108
23-Jun	19	31	17	17	13	18	24	26	26	34	36	42	44	86	61	67	15	17	22	13	9	14	14	33	86
24-Jun	22	16	15	21	34	23	20	24	21	31	26	30	28	48	50	52	57	20	35	16	12	8	8	6	57
25-Jun	12	12	6	5	6	12	15	20	30	26	54	29	27	30	37	38	28	23	18	11	9	8	9	8	54
26-Jun	8	5	5	5	9	50	48	66	28	57	20	24	25	19	20	24	24	17	17	12	11	8	8	10	66
27-Jun	10	10	7	16	46	17	21	28	24	39	24	21	22	19	21	22	19	16	14	42	8	8	4	7	46
28-Jun	36	6	10	9	5	49	16	14	17	33	32	27	25	28	28	20	18	17	18	13	10	28	18	9	49
29-Jun	7	7	13	10	5	9	20	34	30	20	18	18	21	21	25	22	19	16	14	19	18	45	14	12	45
30-Jun	8	9	13	15	36	20	27	47	40	24	28	27	23	41	38	44	16	15	13	13	10	7	20	16	47
	48	37	88	38	49	64	83	87	64	70	88	77	76	86	67	108	57	81	43	56	61	45	33	33	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 20m (WD20) - deg

Barge Landing - June 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS11
LOWER CAMP
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - LOWER CAMP (AMS11)
JUNE 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	21	0	4.8	0
H2S (ppb) Average	685	35	35	100	9.1	0	1.3	0
THC (ppm) Average	683	34	37	99.58	3.1	-	2.3	-
CH4(ppm) Average	683	34	37	99.58	3.1	-	2.3	-
NMHC(ppm) Average	683	34	37	99.58	0.038	-	0.006	-
Temperature (C) Average	720	0	0	100	29.8	-	23.5	-
Relative Humidity (%) Average	720	0	0	100	98.9	-	92.1	-
Barometric Pressure (inHg) Average	720	0	0	100	29.5	-	29.5	-
Wind Speed 10 m (km/h) Average	718	0	2	99.72	33	-	20	-
Wind Direction 10 m (deg) Average	718	0	2	99.72	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - LOWER CAMP (AMS11)
JUNE 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	0.87	2.4	-	0	0	0	0.1	0.4	1.8	21
H2S (ppb) Average	685	0.45	0.7	-	0	0	0.1	0.2	0.6	1.1	9.1
THC (ppm) Average	683	2.14	0.2	-	2	2	2	2.1	2.2	2.3	3.1
CH4(ppm) Average	683	2.14	0.2	-	2	2	2	2.1	2.2	2.3	3.1
NMHC(ppm) Average	683	0.001	0.003	-	0	0	0	0	0	0	0.038
Temperature 2 m (C) Average	720	16.65	5.5	-	7.1	10.3	12.1	15.8	20.1	24.7	29.8
Relative Humidity (%) Average	720	66.93	19.8	-	27.8	37.3	51.2	70	83.7	92.2	98.9
Barometric Pressure (inHg) Average	720	29.03	0.3	-	28.4	28.7	28.9	29	29.2	29.3	29.5
Wind Speed 10 m (km/h) Average	718	9.6	6	-	0	3	5	8	13	18	33
Wind Direction 10 m (deg) Average	718	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - LOWER CAMP (AMS11)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
THC/NMHC/CH4	26 Jun 2026 10:00	26 Jun 2026 12:00	3	Maintenance - replaced support gas cylinder
Wind Speed, Wind Direction	03 Jun 2026 01:00	03 Jun 2026 01:00	1	Flat line in sensor output signal
Wind Speed, Wind Direction	13 Jun 2026 00:00	13 Jun 2026 00:00	1	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Lower Camp - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 21.0 ppb on Jun 26 11:00 Maximum Daily Average: 4.8 ppb on Jun 8

Minimum Value: 0.0 ppb on Jun 1 01:00 Minimum Daily Average: 0.0 ppb on Jun 1
Maximum Diurnal Average: 2.5 ppb at hour 14 Minimum Diurnal Average: 0.2 ppb at hour 4
Monthly Average: 0.87 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.4 P_{90} = 1.8 P_{99} = 13.7

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-Jun	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
2-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.7	5.1	1.6	0.5	0.3	0.2	0.2	0.2	0.4	0.1	0.6	5.1
4-Jun	0.1	0.1	0.5	0.7	Z	6.2	5.2	0.7	0.5	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.4	1.3	3.1	4.2	0.6	0.3	0.1	1.1	6.2
5-Jun	0.2	0.1	0.2	0.1	0.8	Z	1.3	1.2	0.6	0.3	0.6	0.2	1.3	6.5	1.3	0.6	4.2	0.4	0.2	1.3	0.2	0.7	1.1	0.1	1.0	6.5
6-Jun	Z	1.0	0.6	0.2	0.0	2.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.3	2.8
7-Jun	0.0	Z	0.2	0.3	0.7	0.8	0.8	0.2	0.2	0.2	0.3	0.8	2.5	3.2	1.0	0.5	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.5	3.2
8-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	10.3	16.5	8.1	14.6	13.6	5.9	10.3	13.1	9.4	1.1	2.4	4.8	16.5
9-Jun	3.1	5.1	1.1	Z	1.0	5.0	2.3	1.4	7.7	3.6	0.4	0.3	8.6	7.9	0.3	0.7	1.0	0.1	0.1	0.1	0.1	0.7	0.2	0.0	2.2	8.6
10-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	1.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.7
11-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
12-Jun	Z	0.2	0.1	0.2	0.2	0.3	0.3	0.3	0.4	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	0.4
13-Jun	0.1	Z	0.1	0.1	0.2	0.5	0.8	3.0	5.8	10.3	11.6	15.6	19.7	16.9	1.0	0.1	0.1	0.2	0.9	4.1	1.0	0.3	0.1	0.2	4.0	19.7
14-Jun	0.0	0.0	Z	0.8	1.8	0.5	0.6	1.1	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	0.1	0.0	0.1	0.2	1.8
15-Jun	0.7	0.7	0.5	Z	0.2	0.1	0.3	0.4	0.3	0.1	0.1	0.3	0.7	1.2	4.2	6.1	7.1	1.1	0.4	0.3	0.2	0.2	0.1	0.1	1.1	7.1
16-Jun	0.1	0.1	0.1	0.2	Z	0.1	0.4	0.1	0.1	0.1	1.2	1.9	7.0	10.7	0.7	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	1.0	10.7
17-Jun	0.1	0.1	0.0	0.0	0.1	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	0.4	0.7	1.1	0.1	1.1
18-Jun	Z	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	1.2	0.8	0.2	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.2	0.1	0.0	0.1	0.1	1.2
19-Jun	0.2	Z	0.2	0.7	0.2	0.1	0.0	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	0.0	0.0	0.0	0.0	0.1	0.7
20-Jun	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-Jun	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	0.0	0.1
22-Jun	0.4	0.3	0.1	0.1	Z	0.1	0.1	0.7	1.6	5.8	7.6	3.1	0.6	0.2	0.2	1.2	0.4	0.3	1.3	0.5	0.2	0.3	0.4	0.6	1.1	7.6
23-Jun	0.3	0.2	0.1	0.1	0.2	Z	0.3	0.5	0.3	1.4	0.4	0.4	0.5	0.5	0.4	0.7	0.2	2.5	0.6	0.3	0.1	0.0	0.1	0.2	0.4	2.5
24-Jun	Z	0.1	0.0	0.0	0.7	0.5	0.3	1.5	0.6	0.4	0.1	0.1	0.2	0.3	0.2	0.1	0.3	0.3	0.2	0.2	0.2	0.3	0.1	0.1	0.3	1.5
25-Jun	0.2	Z	0.8	0.2	0.2	0.2	0.2	0.6	0.4	0.3	2.8	6.5	3.8	9.3	6.8	6.3	2.5	4.7	1.5	0.1	0.3	0.8	11.5	2.4	2.7	11.5
26-Jun	0.4	0.1	Z	0.1	0.1	0.1	0.1	0.2	0.2	1.0	21.0	14.1	7.2	3.8	4.2	0.1	0.6	0.0	0.1	0.0	0.0	0.0	0.0	0.9	2.4	21.0
27-Jun	0.1	0.1	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.0	0.1	1.4	1.1	0.1	0.3	0.0	0.0	0.1	0.1	0.1	0.1	0.0	1.9	1.3	0.3	1.9
28-Jun	0.6	1.9	0.3	0.1	Z	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	0.0	0.1	0.1	0.6	0.9	0.2	0.3	1.9
29-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.2	0.1	0.2	0.3	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.7	5.8	0.6	0.2	0.4	5.8
30-Jun	Z	0.1	0.1	0.1	0.2	0.1	0.0	0.4	0.2	0.6	2.5	1.6	2.7	1.1	0.4	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.4	0.5	2.7
	0.3	0.4	0.2	0.2	0.3	0.7	0.5	0.4	0.7	0.9	1.8	1.6	2.1	2.5	1.4	1.0	1.1	0.8	0.4	0.7	0.7	0.7	0.7	0.4	Diurnal Average	
	3.1	5.1	1.1	0.8	1.8	6.2	5.2	3.0	7.7	10.3	21.0	15.6	19.7	16.9	16.5	8.1	14.6	13.6	5.9	10.3	13.1	9.4	11.5	2.4	Diurnal Maximum	

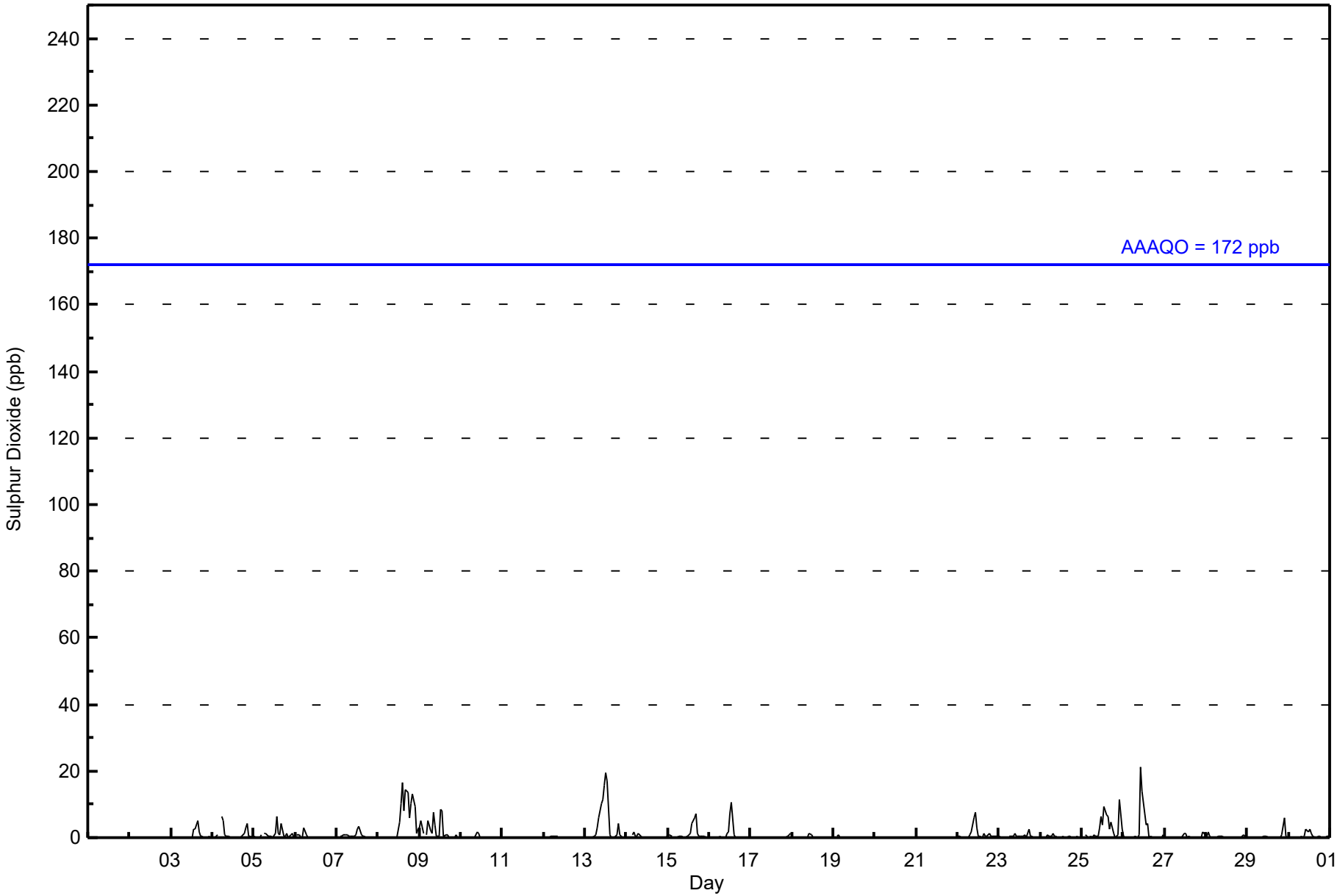
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Lower Camp - June 2026



Sulphur Dioxide (SO_2) - ppb
Lower Camp - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	674	98.25	98.25
11 - 20	11	1.60	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

Lower Camp - June 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	111	55	22	16	15	42	133	44	11	11	8	15	18	40	51	80	672
11 - 20	0	1	0	0	0	0	1	1	0	0	0	0	0	6	1	1	11
21 - 60	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
61 - 110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111 - 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	111	56	22	16	15	42	134	46	11	11	8	15	18	46	52	81	684

Total Number of Valid Hours: 684

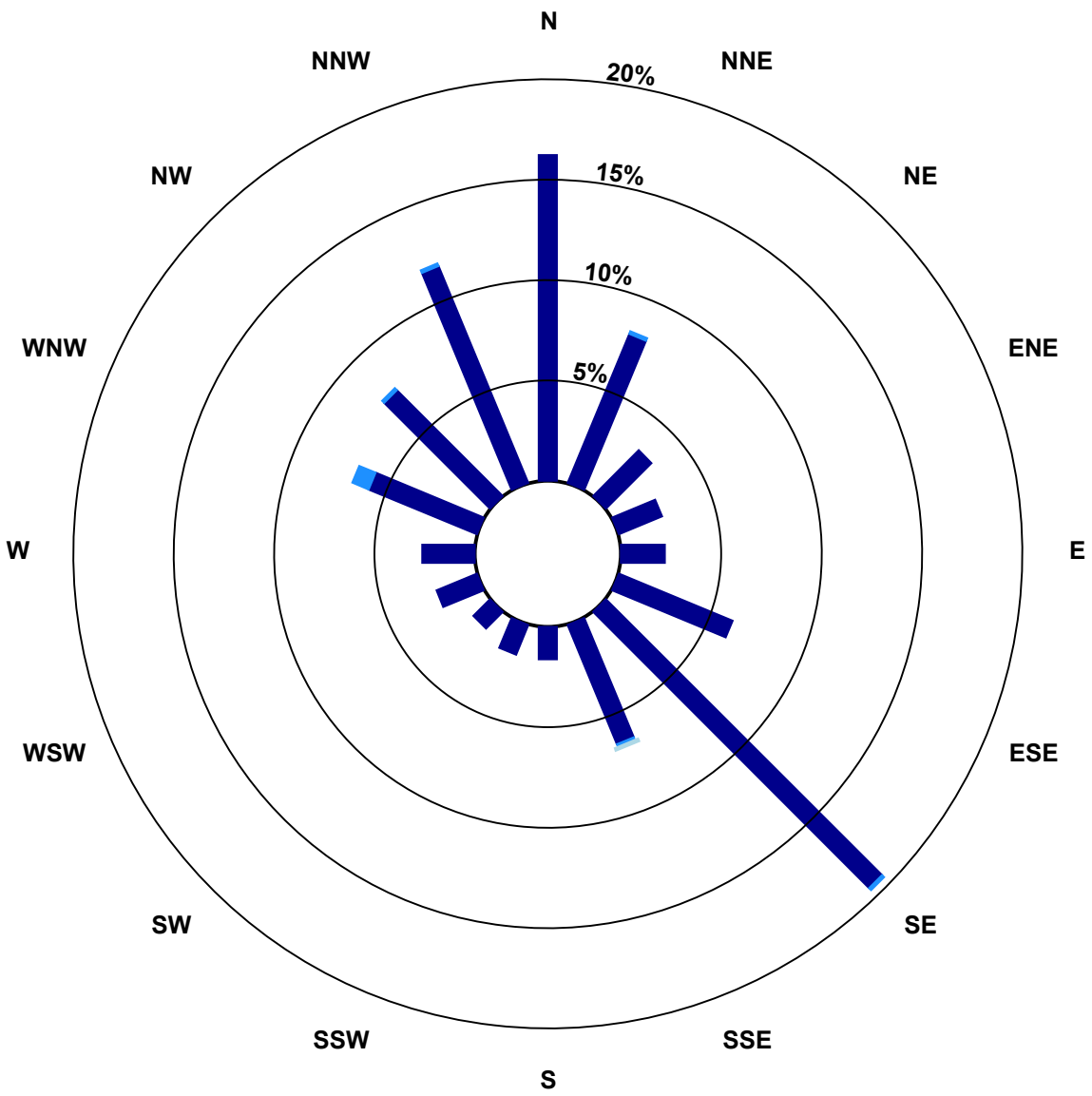
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Lower Camp



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

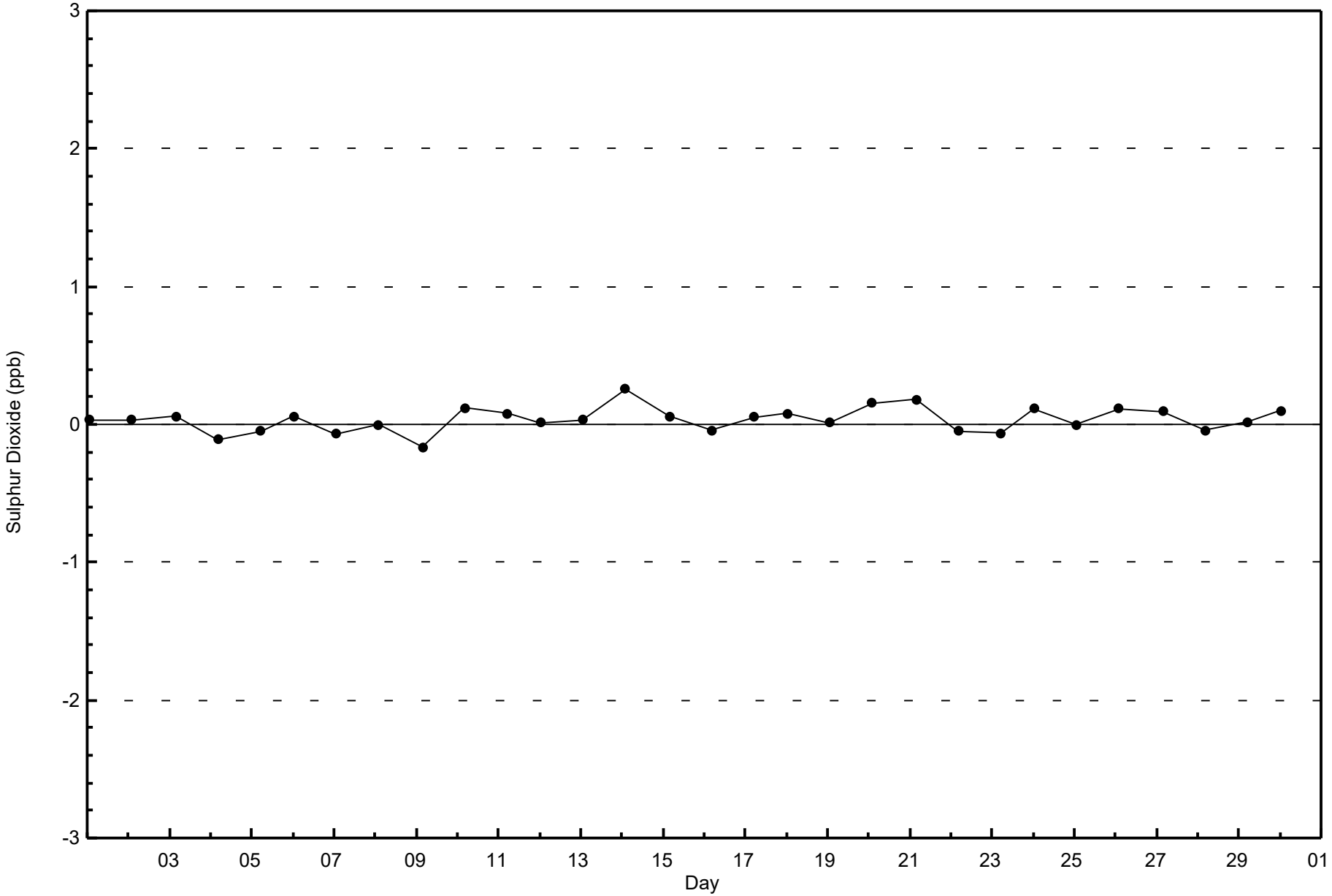
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Lower Camp - June 2026

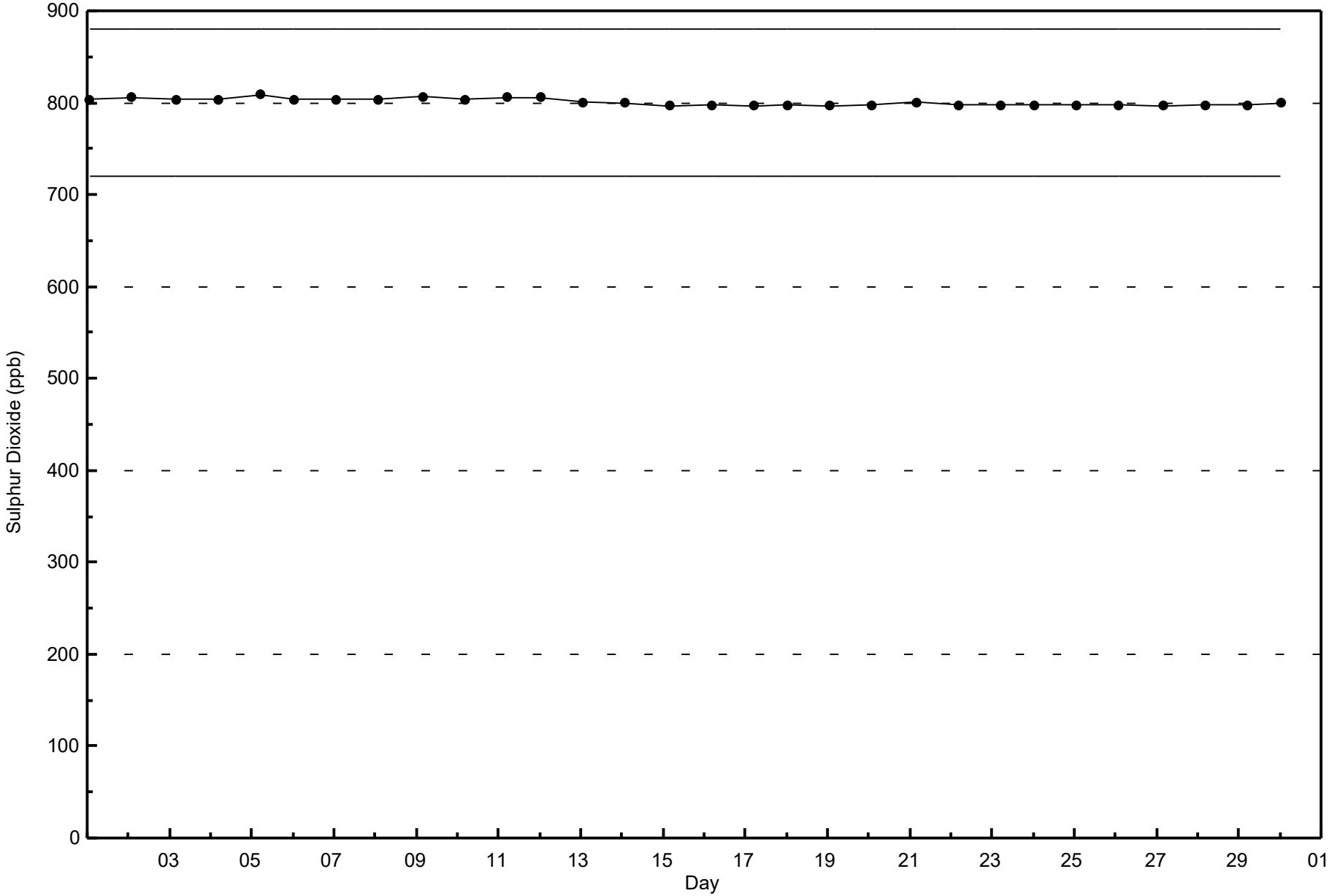


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Lower Camp - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Lower Camp - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9.1 ppb on Jun 25 23:00 Maximum Daily Average: 1.3 ppb on Jun 25

Minimum Value: 0.0 ppb on Jun 13 15:00 Minimum Daily Average: 0.1 ppb on Jun 2
Maximum Diurnal Average: 1.0 ppb at hour 24 Minimum Diurnal Average: 0.1 ppb at hour 16
Monthly Average: 0.45 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.2 Q_3 = 0.6 P_{90} = 1.1 P_{99} = 3.0

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-Jun	0.2	0.1	Z	0.5	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.5
2-Jun	0.0	0.0	0.0	Z	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.5	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.5
3-Jun	0.1	0.1	0.0	0.0	Z	0.0	0.0	0.0	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.3	0.4	0.4	0.1	0.4
4-Jun	0.4	0.5	1.4	1.3	1.4	Z	0.7	0.6	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8	0.4	0.2	0.4	1.4
5-Jun	Z	0.4	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.4	0.5	0.7	0.3	0.4	0.5	0.3	0.1	0.3	0.7
6-Jun	0.1	Z	2.5	1.3	0.5	1.2	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	0.3	0.3	0.1	0.2	0.4	2.5
7-Jun	0.4	0.4	Z	0.4	1.1	1.5	0.9	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.5	0.3	0.2	0.6	0.3	0.4	1.5
8-Jun	0.4	0.2	0.4	Z	0.3	0.2	0.2	0.4	0.5	0.2	0.1	0.7	0.9	0.6	0.5	0.2	0.3	0.6	0.1	0.2	0.5	0.3	0.1	0.1	0.4	0.9
9-Jun	0.2	0.2	0.1	0.1	Z	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	0.1	0.5	0.5	0.8	0.4	0.2	0.8
10-Jun	0.3	0.4	0.5	0.6	0.4	Z	0.2	0.1	0.1	0.2	C	C	C	C	C	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.6
11-Jun	Z	0.1	0.1	0.1	0.3	0.3	0.4	0.3	0.2	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.5	0.2	0.5
12-Jun	0.2	Z	0.9	0.6	0.4	0.3	0.6	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	4.2	3.4	0.5	4.2
13-Jun	1.2	0.6	Z	0.7	0.8	0.9	1.1	0.7	0.9	0.6	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.8	0.4	1.2
14-Jun	0.6	0.7	0.5	Z	0.2	0.5	0.3	1.0	0.4	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.1	0.0	0.0	0.1	0.3	0.4	0.9	4.0	0.5	4.0
15-Jun	1.9	1.4	2.4	1.4	0.7	Z	0.6	1.6	0.8	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.3	1.2	1.2	0.2	0.6	2.4
16-Jun	0.0	0.5	0.6	0.8	0.8	Z	0.4	0.0	0.1	0.1	0.6	0.4	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.3	0.8
17-Jun	Z	0.7	0.9	1.8	0.9	0.3	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.4	0.5	0.1	0.1	0.3	0.5	1.1	0.4	1.8
18-Jun	1.3	Z	0.5	0.9	0.8	0.8	1.5	1.0	0.5	0.2	0.2	0.2	0.3	0.1	0.2	0.2	0.1	0.1	0.1	0.4	0.2	0.4	0.3	0.4	0.5	1.5
19-Jun	0.4	0.8	Z	1.3	3.2	2.7	1.2	0.5	0.3	0.2	0.1	0.1	0.1	0.2	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.8	0.6	3.2
20-Jun	0.4	0.5	0.5	Z	1.3	0.8	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	1.1	0.5	0.3	1.3
21-Jun	0.2	0.4	0.2	0.8	Z	0.9	0.8	0.5	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.9	0.2	0.4	0.9	0.3	0.9
22-Jun	0.6	1.7	1.7	1.1	0.5	Z	0.7	1.1	0.8	0.6	1.0	0.4	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.7	1.2	0.7	0.7	0.6	1.7
23-Jun	Z	0.3	0.4	0.5	0.6	0.3	0.6	0.8	0.7	0.6	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.8	0.4	0.4	1.1	0.6	0.9	1.5	0.5	1.5
24-Jun	0.7	Z	0.5	0.5	0.6	1.0	0.6	0.9	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.5	1.4	1.7	1.4	0.5	1.7
25-Jun	0.5	3.0	Z	0.7	0.8	0.9	1.7	1.3	0.4	0.5	0.5	1.0	0.4	0.7	0.4	0.3	0.2	0.5	0.5	1.3	2.1	1.3	9.1	2.8	1.3	9.1
26-Jun	0.4	0.3	0.6	Z	0.7	1.1	1.2	1.3	0.6	0.6	2.8	1.7	0.7	0.4	0.4	0.2	0.3	0.5	0.5	0.9	1.2	0.7	1.5	4.2	1.0	4.2
27-Jun	2.3	1.2	0.6	0.2	Z	0.2	0.3	0.6	0.4	0.3	0.4	0.3	0.5	0.2	0.2	0.1	0.6	0.7	1.0	1.1	1.1	1.3	0.3	0.4	0.6	2.3
28-Jun	0.3	1.3	1.7	2.1	1.5	Z	0.9	0.6	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9	3.2	1.8	0.7	3.2
29-Jun	Z	1.5	2.7	1.3	1.2	1.2	0.9	0.6	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.3	0.7	0.6	2.7
30-Jun	2.4	Z	1.4	2.0	1.2	0.8	0.4	1.0	0.5	0.5	0.7	0.4	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.2	0.6	2.4
	0.6	0.7	0.9	0.9	0.8	0.7	0.6	0.6	0.4	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.5	0.5	1.0	1.0	Diurnal Average	
	2.4	3.0	2.7	2.1	3.2	2.7	1.7	1.6	0.9	0.6	2.8	1.7	0.9	0.7	0.5	0.3	0.6	0.8	1.0	1.3	2.1	1.4	9.1	4.2	Diurnal Maximum	

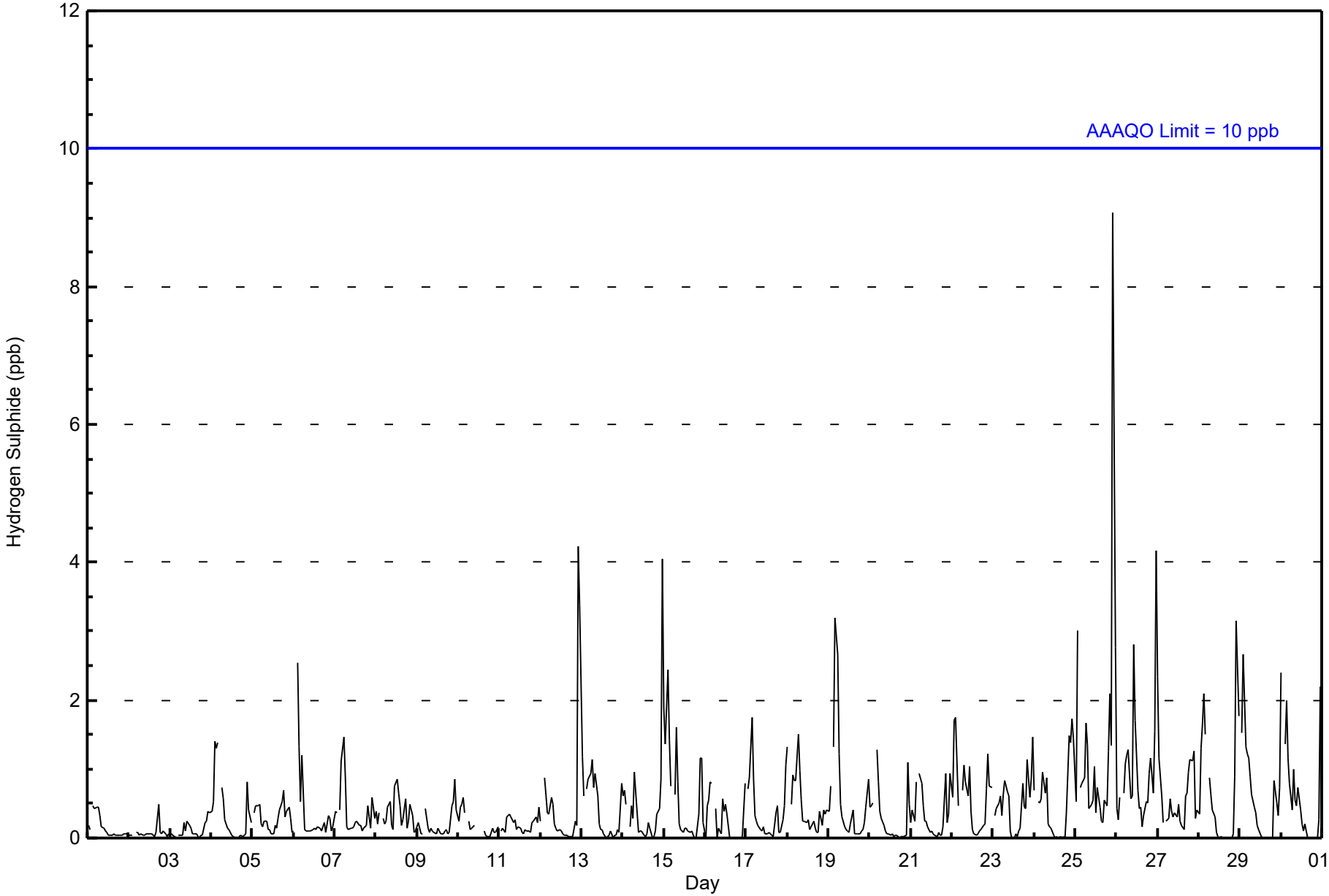
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Lower Camp - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Lower Camp - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	672	98.10	98.10
3 - 4	12	1.75	99.85
5 - 7	0	0.00	99.85
8 - 11	1	0.15	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

Lower Camp - June 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	111	54	23	18	14	43	132	42	10	11	9	15	19	44	46	80	671
3 - 4	1	0	0	0	0	0	1	3	0	0	0	0	0	1	4	1	11
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	1	0	0	0	0	0	0	0	0	1
> 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	112	54	23	18	14	43	133	46	10	11	9	15	19	45	50	81	683

Total Number of Valid Hours: 683

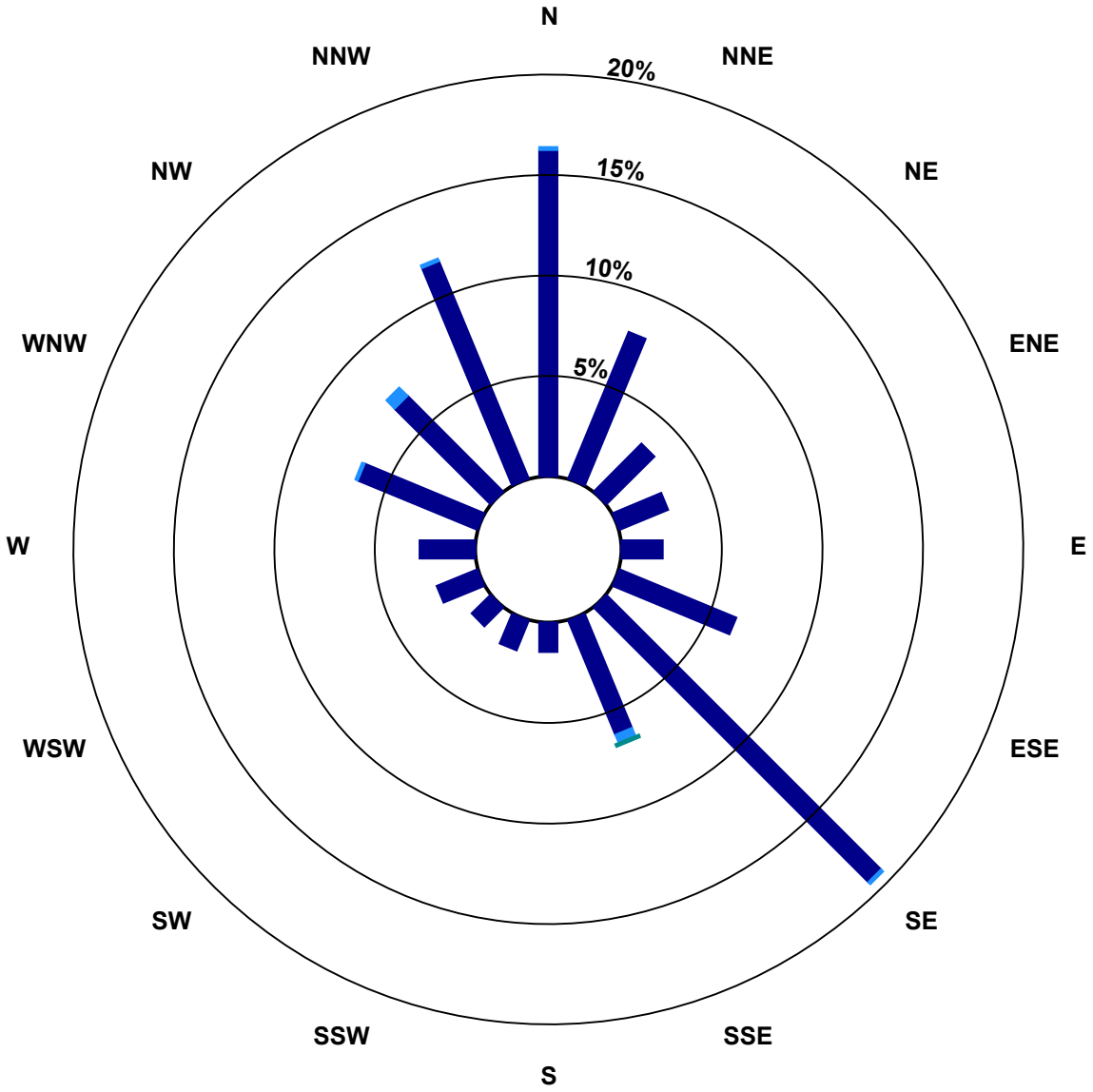
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H_2S) - ppb

Lower Camp



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

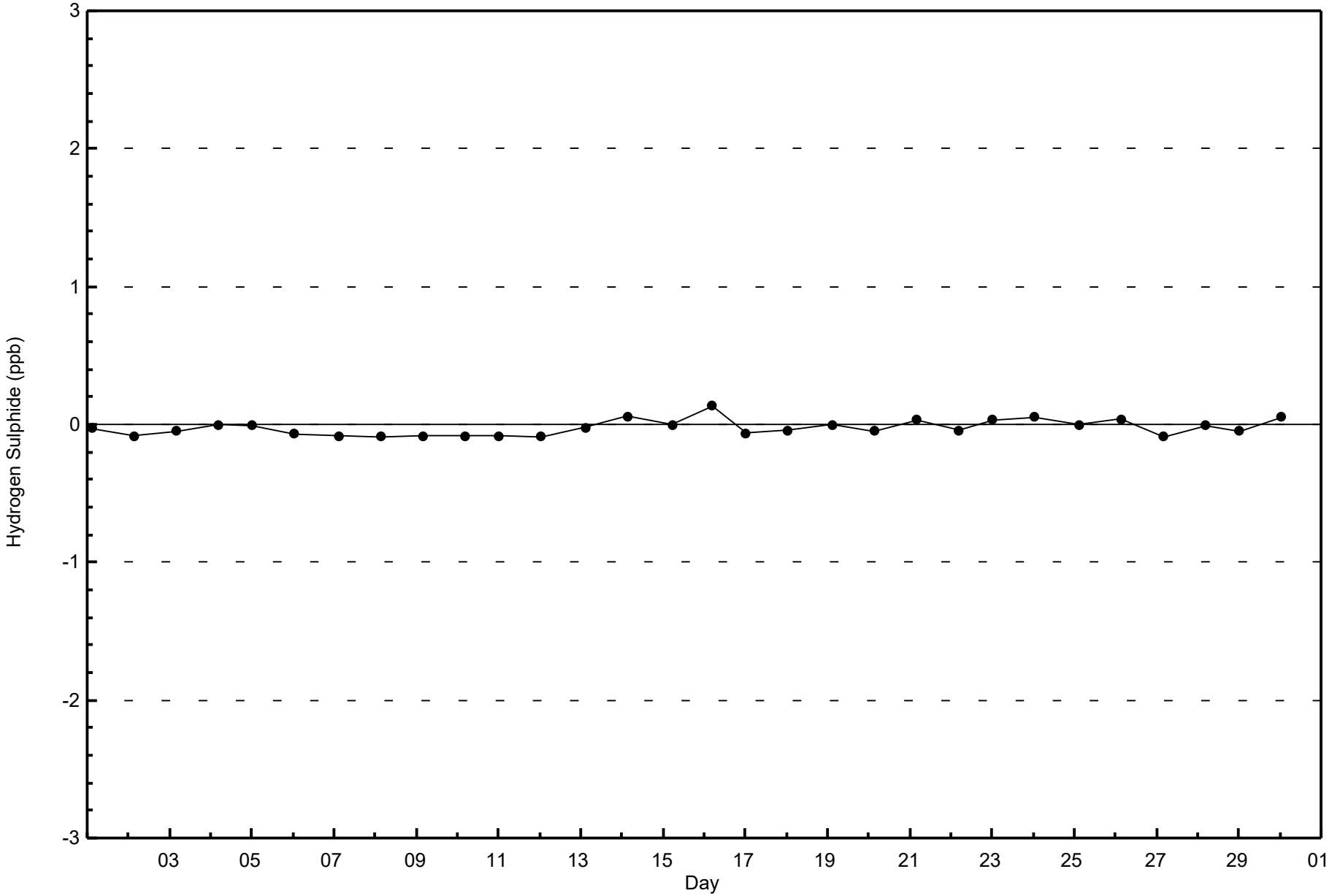
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Lower Camp - June 2026

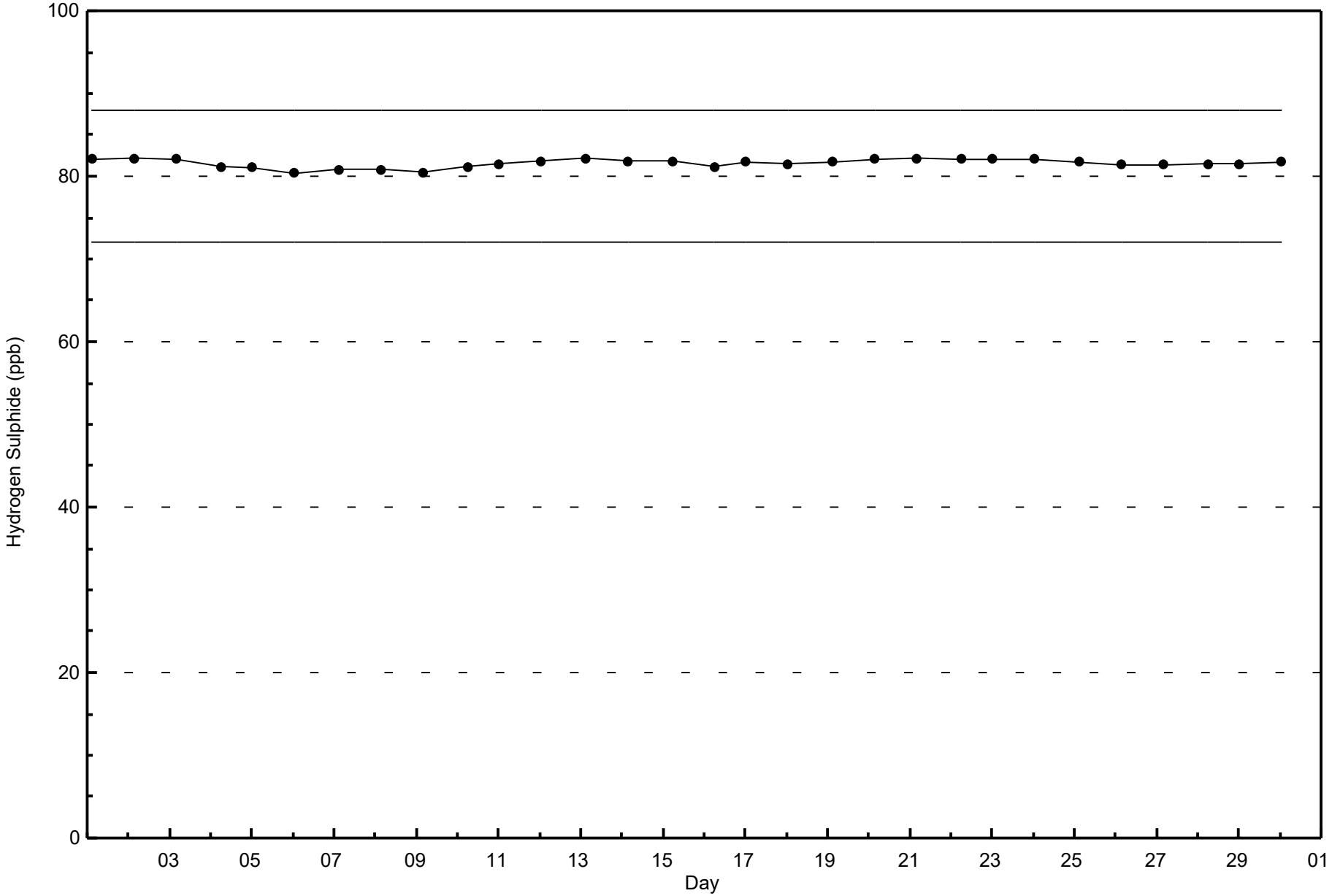


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Lower Camp - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Lower Camp - June 2026

Maximum Value: 3.1 ppm on Jun 4 22:00

Maximum Daily Average: 2.3 ppm on Jun 29

Minimum Value: 2.0 ppm on Jun 13 15:00

Minimum Daily Average: 2.0 ppm on Jun 1

Maximum Diurnal Average: 2.3 ppm at hour 3

Minimum Diurnal Average: 2.0 ppm at hour 17

Monthly Average: 2.14 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} = 2.8

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-Jun	2.1	Z	2.1	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
2-Jun	2.0	2.0	Z	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	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1
3-Jun	2.1	2.1	2.1	Z	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.3	2.3	2.4	2.1	2.4
4-Jun	2.4	2.2	2.2	2.2	Z	2.2	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	3.1	2.7	2.2	2.2	3.1
5-Jun	2.4	2.4	2.6	2.3	2.2	Z	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.2	2.4	2.2	2.1	2.1	2.1	2.0	2.2	2.6
6-Jun	Z	2.1	2.4	2.2	2.4	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	2.1	2.0	2.2	2.1	2.4
7-Jun	2.4	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	2.4
8-Jun	2.1	2.1	Z	2.1	2.2	2.1	2.1	2.1	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	2.0	2.0	2.1	2.3
9-Jun	2.0	2.1	2.0	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	2.1	2.0	2.1	2.1	2.2	2.3	2.2	2.1	2.1	2.3
10-Jun	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	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
11-Jun	2.1	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
12-Jun	Z	2.4	2.5	2.2	2.2	2.1	2.1	2.1	2.1	C	C	C	C	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.3	2.1	2.5
13-Jun	2.3	Z	2.3	2.3	2.5	2.8	3.1	2.5	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.1	2.4	2.2	3.1
14-Jun	2.3	2.3	Z	2.1	2.1	2.5	2.2	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.5	2.1	2.5
15-Jun	2.4	2.3	2.4	Z	2.3	2.2	2.6	3.0	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.3	2.2	2.1	2.2	3.0
16-Jun	2.1	2.2	2.1	2.2	Z	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2
17-Jun	2.1	2.1	2.2	2.2	2.2	Z	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.2	2.3	2.4	2.1	2.4
18-Jun	Z	2.1	2.2	2.3	2.3	2.3	2.3	2.3	2.2	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	2.1	2.2	2.1	2.3
19-Jun	2.2	Z	2.3	2.5	3.1	2.7	2.2	2.1	2.2	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	3.1
20-Jun	2.1	2.2	Z	2.2	2.3	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.1	2.3
21-Jun	2.1	2.1	2.2	Z	2.3	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	2.1	2.1	2.1	2.2	2.3	2.3
22-Jun	2.3	2.4	2.6	2.4	Z	2.4	2.3	2.3	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.2	2.2	2.6
23-Jun	2.2	2.2	2.2	2.2	2.1	Z	2.3	2.2	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.4	2.4	2.2	2.4
24-Jun	Z	2.6	2.2	2.2	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	2.2	2.1	2.1	2.2	2.1	2.6
25-Jun	2.2	Z	2.1	2.6	2.4	2.5	2.9	2.5	2.3	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.3	2.4	2.2	2.2	2.1	2.2	2.9
26-Jun	2.1	2.2	Z	2.2	2.3	2.4	2.3	2.3	2.1	M	M	M	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.3	2.2	2.4
27-Jun	2.3	2.2	2.2	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	2.1	2.0	2.1	2.3	2.4	2.6	2.2	2.2	2.2	2.6
28-Jun	2.2	2.3	2.4	2.4	Z	2.5	2.6	2.6	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	2.3	2.8	2.5	2.3	2.8
29-Jun	2.4	2.5	2.9	2.6	2.5	Z	2.6	2.6	2.5	2.4	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.9
30-Jun	Z	2.3	2.4	2.6	2.4	2.3	2.2	2.4	2.3	2.3	2.3	2.2	2.1	2.2	2.2	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.3	2.2	2.6
	2.2	2.2	2.3	2.3	2.2	2.3	2.3	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	2.1	2.2	2.2	2.2	Diurnal Average	
	2.4	2.6	2.9	2.6	3.1	2.8	3.1	3.0	2.6	2.5	2.3	2.2	2.1	2.2	2.2	2.1	2.1	2.2	2.4	2.3	2.4	3.1	2.8	2.5	Diurnal Maximum	

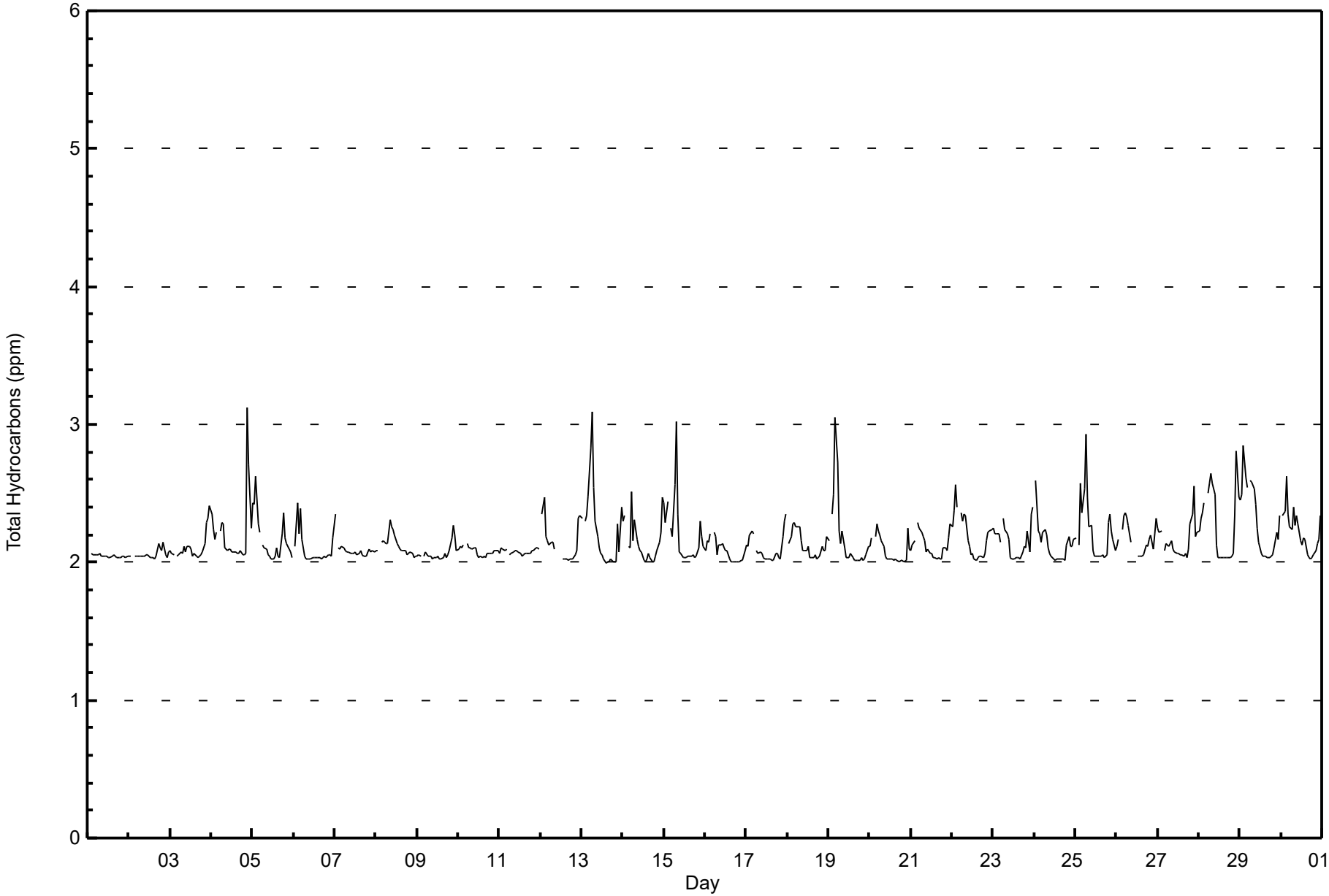
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Lower Camp - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	221	32.36	32.36
2.1 - 3.0	459	67.20	99.56
3.1 - 10.0	3	0.44	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Lower Camp - June 2026

Concentration Ranges (ppm)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 2.0	49	44	14	10	6	9	21	16	3	1	3	12	13	9	0	11	221
2.1 - 3.0	62	12	8	6	9	33	110	29	7	10	5	3	5	36	52	70	457
3.1 - 10.0	0	0	0	0	0	0	1	0	1	0	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	111	56	22	16	15	42	132	45	11	11	8	15	18	46	52	81	681

Total Number of Valid Hours: 681

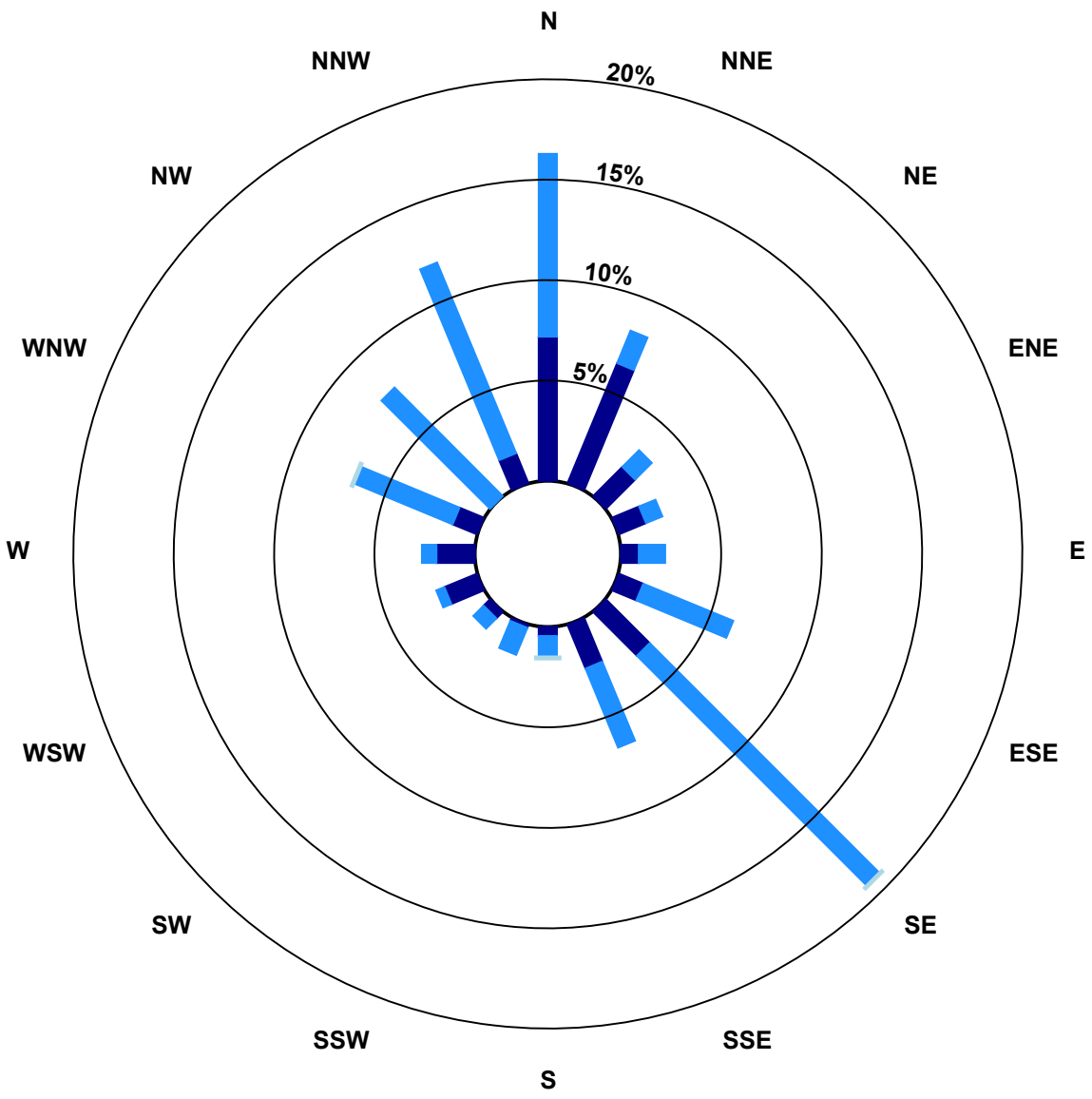
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Lower Camp



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

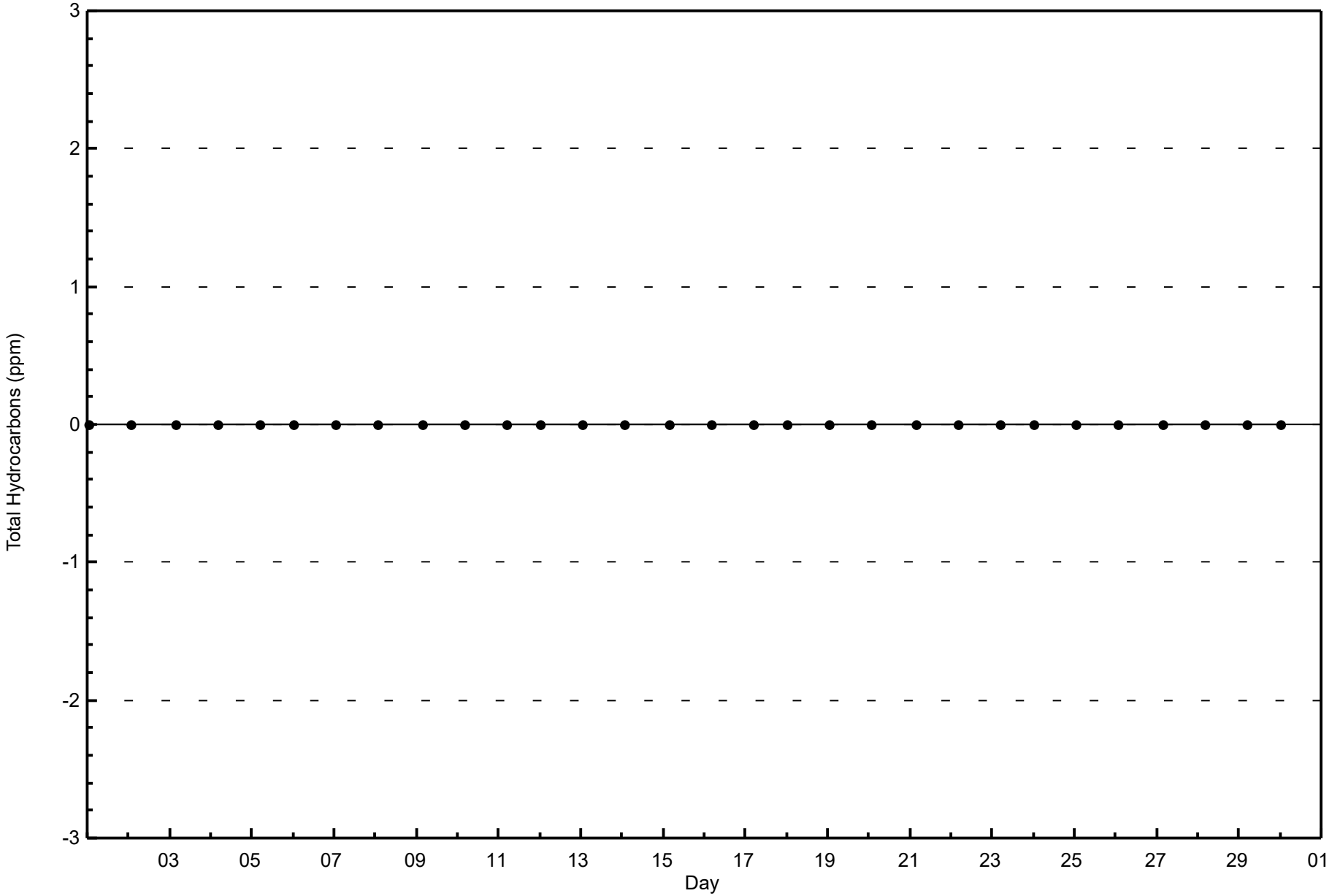
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Lower Camp - June 2026

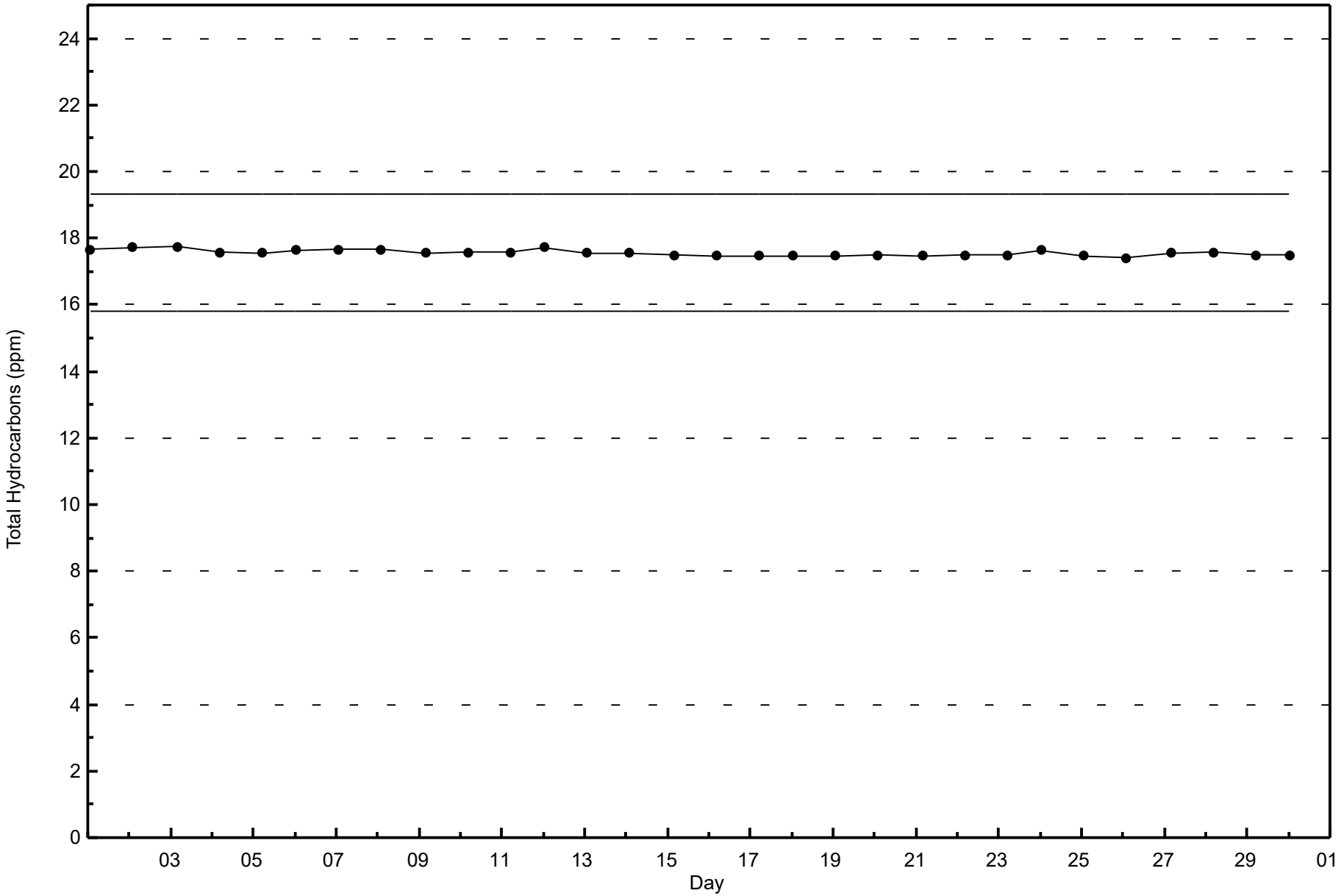


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Lower Camp - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Lower Camp - June 2026

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

Maximum Value: 3.1 ppm on Jun 4 22:00

Maximum Daily Average: 2.3 ppm on Jun 29

Minimum Value: 2.0 ppm on Jun 13 15:00

Minimum Daily Average: 2.0 ppm on Jun 1

Maximum Diurnal Average: 2.3 ppm at hour 3

Minimum Diurnal Average: 2.0 ppm at hour 16

Monthly Average: 2.14 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} = 2.8

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-Jun	2.1	Z	2.1	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
2-Jun	2.0	2.0	Z	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	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1
3-Jun	2.1	2.1	2.1	Z	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.3	2.3	2.4	2.1	2.4
4-Jun	2.4	2.2	2.2	2.2	Z	2.2	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	3.1	2.7	2.2	2.2	3.1
5-Jun	2.4	2.4	2.6	2.3	2.2	Z	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.2	2.4	2.2	2.1	2.1	2.1	2.0	2.2	2.6
6-Jun	Z	2.1	2.4	2.2	2.4	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	2.1	2.0	2.2	2.1	2.4
7-Jun	2.4	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	2.4
8-Jun	2.1	2.1	Z	2.1	2.2	2.1	2.1	2.1	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	2.0	2.0	2.1	2.3
9-Jun	2.0	2.1	2.0	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	2.1	2.0	2.1	2.1	2.2	2.3	2.2	2.1	2.1	2.3
10-Jun	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	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
11-Jun	2.1	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
12-Jun	Z	2.4	2.5	2.2	2.2	2.1	2.1	2.1	2.1	C	C	C	C	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.3	2.1	2.5
13-Jun	2.3	Z	2.3	2.3	2.5	2.8	3.1	2.5	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.1	2.4	2.2	3.1
14-Jun	2.3	2.3	Z	2.1	2.1	2.5	2.2	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.5	2.1	2.5
15-Jun	2.4	2.3	2.4	Z	2.2	2.2	2.6	3.0	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.3	2.2	2.1	2.2	3.0
16-Jun	2.1	2.2	2.1	2.2	Z	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2
17-Jun	2.1	2.1	2.2	2.2	2.2	Z	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.2	2.3	2.3	2.1	2.3
18-Jun	Z	2.1	2.2	2.3	2.3	2.3	2.3	2.3	2.2	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	2.1	2.2	2.1	2.3
19-Jun	2.2	Z	2.3	2.5	3.1	2.7	2.2	2.1	2.2	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	3.1
20-Jun	2.1	2.2	Z	2.2	2.3	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.1	2.3
21-Jun	2.1	2.1	2.2	Z	2.3	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	2.1	2.1	2.1	2.2	2.3	2.3
22-Jun	2.3	2.4	2.6	2.4	Z	2.4	2.3	2.3	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.2	2.2	2.6
23-Jun	2.2	2.2	2.2	2.2	2.1	Z	2.3	2.2	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.4	2.4	2.2	2.4
24-Jun	Z	2.6	2.2	2.2	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	2.2	2.1	2.1	2.2	2.1	2.6
25-Jun	2.2	Z	2.1	2.6	2.4	2.5	2.9	2.5	2.3	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.3	2.4	2.2	2.2	2.1	2.2	2.9
26-Jun	2.1	2.2	Z	2.2	2.3	2.4	2.3	2.3	2.1	M	M	M	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.3	2.2	2.4
27-Jun	2.3	2.2	2.2	Z	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.1	2.3	2.4	2.6	2.2	2.2	2.2	2.6
28-Jun	2.2	2.3	2.4	2.4	Z	2.5	2.6	2.6	2.5	2.5	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3	2.8	2.5	2.3	2.8
29-Jun	2.4	2.5	2.9	2.6	2.5	Z	2.6	2.6	2.5	2.4	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.9
30-Jun	Z	2.3	2.4	2.6	2.4	2.3	2.2	2.4	2.3	2.3	2.3	2.2	2.1	2.2	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.3	2.2	2.6
	2.2	2.2	2.3	2.3	2.2	2.3	2.3	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	2.1	2.2	2.2	2.2	Diurnal Average	
	2.4	2.6	2.9	2.6	3.1	2.8	3.1	3.0	2.5	2.5	2.3	2.2	2.1	2.2	2.1	2.1	2.1	2.2	2.4	2.3	2.4	3.1	2.8	2.5	Diurnal Maximum	

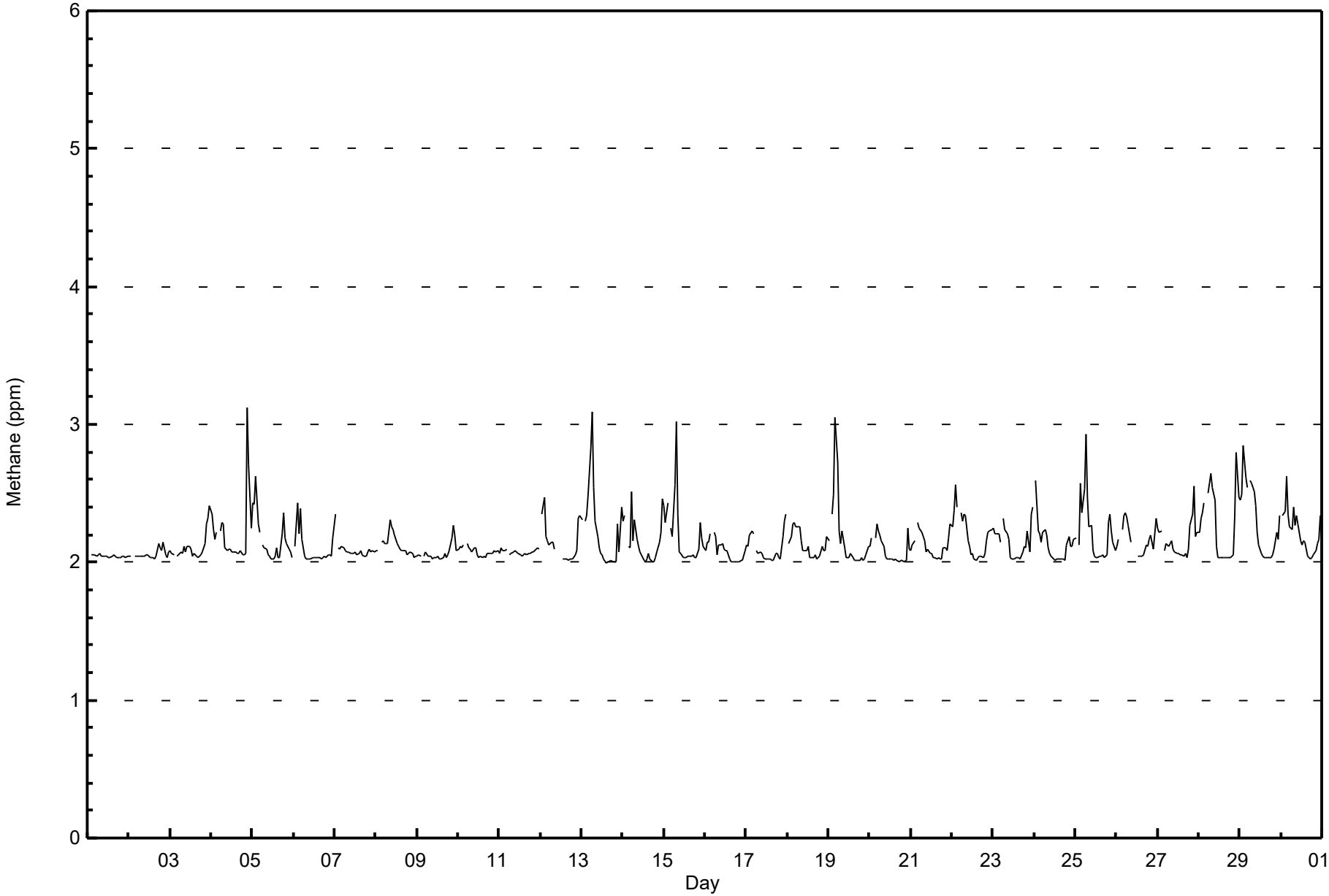
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Lower Camp - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	222	32.50	32.50
2.1 - 3.0	458	67.06	99.56
3.1 - 10.0	3	0.44	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Lower Camp - June 2026

Concentration Ranges (ppm)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 2.0	49	44	14	10	6	9	22	16	3	1	3	12	13	9	0	11	222
2.1 - 3.0	62	12	8	6	9	33	109	29	7	10	5	3	5	36	52	70	456
3.1 - 10.0	0	0	0	0	0	0	1	0	1	0	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	111	56	22	16	15	42	132	45	11	11	8	15	18	46	52	81	681

Total Number of Valid Hours: 681

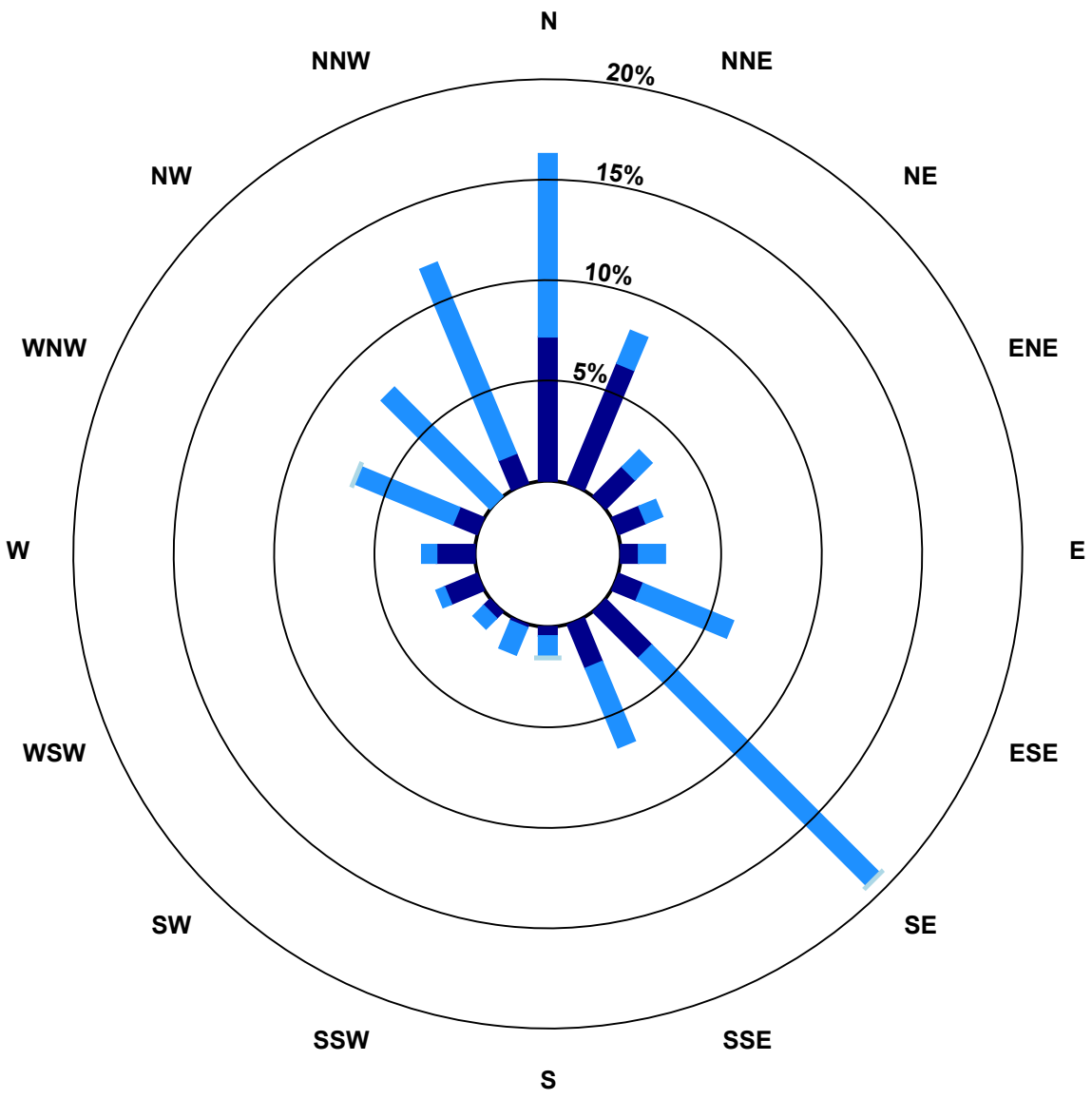
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Methane (CH_4) - ppm

Lower Camp



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

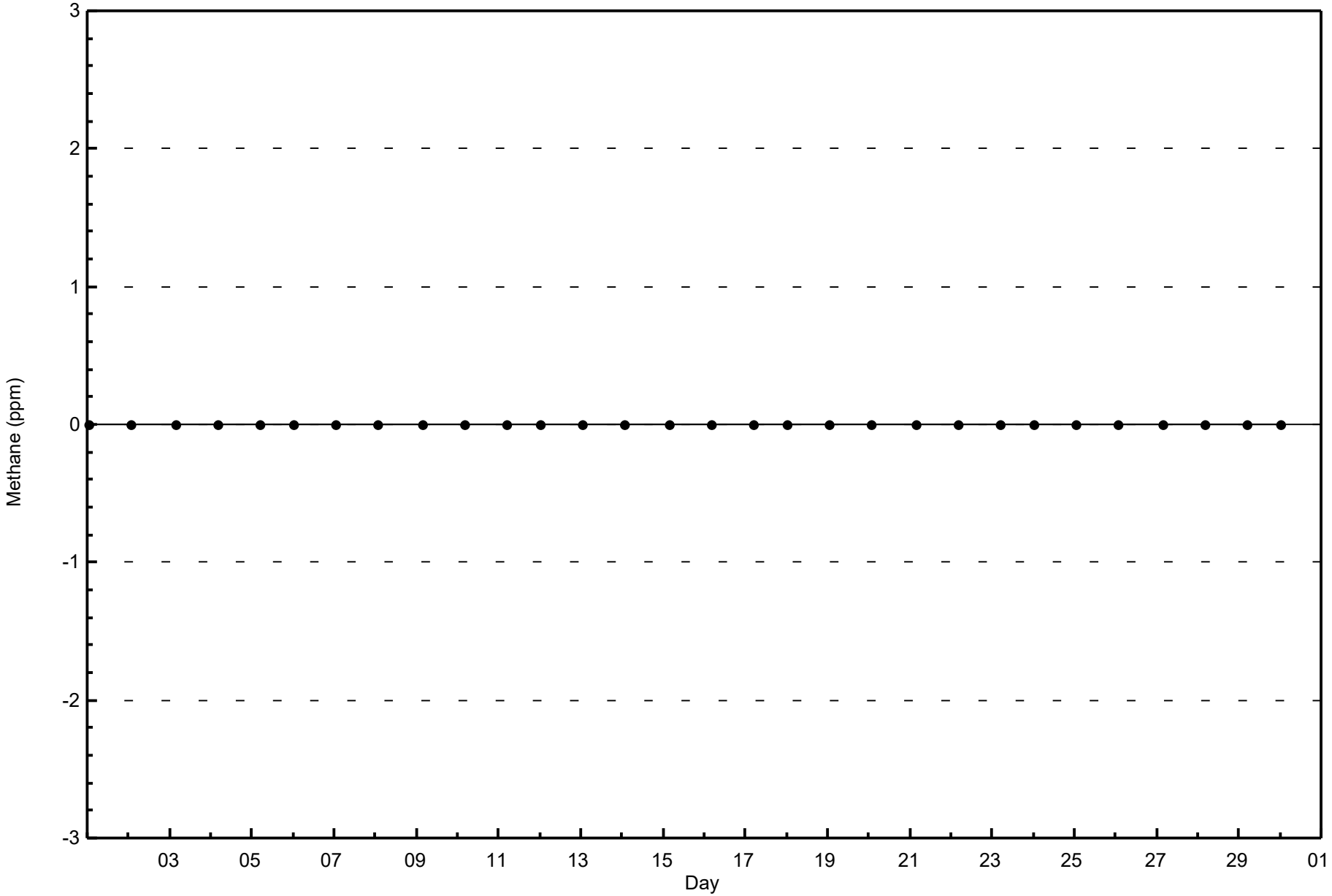
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Lower Camp - June 2026

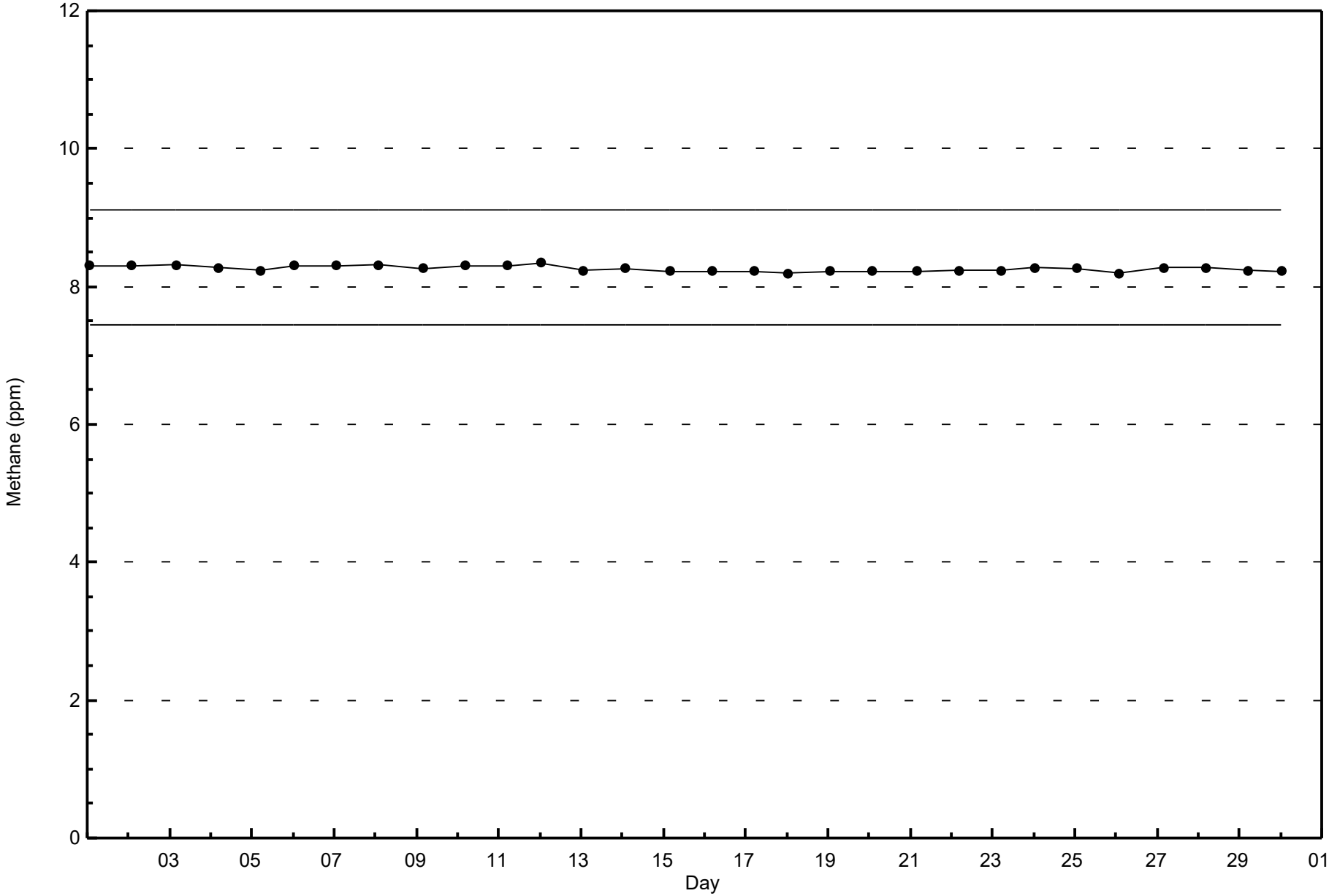


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Lower Camp - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Lower Camp - June 2026

Maximum Value: 0.038 ppm on Jun 28 10:00

Maximum Daily Average: 0.006 ppm on Jun 28

Minimum Value: 0.000 ppm on Jun 1 01:00

Minimum Daily Average: 0.000 ppm on Jun 2

Maximum Diurnal Average: 0.003 ppm at hour 11

Minimum Diurnal Average: 0.000 ppm at hour 7

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:	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-Jun	0.000	Z	0.001	0.003	0.001	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	0.000	0.000	0.000	0.000	0.000	0.000	0.003
2-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4-Jun	0.000	0.000	0.000	0.000	Z	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.001
5-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.001	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
6-Jun	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	0.001	0.000	0.000	0.000	0.000	0.001
7-Jun	0.000	Z	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.001	0.000	0.000	0.002
8-Jun	0.000	0.000	Z	0.001	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
9-Jun	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	0.001	0.000	0.001
10-Jun	0.000	0.001	0.001	0.000	Z	0.000	0.000	0.009	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.004	0.004	0.002	0.002	0.017
11-Jun	0.001	0.003	0.002	0.001	0.001	Z	0.000	0.000	0.000	0.000	0.009	0.010	0.009	0.002	0.000	0.000	0.001	0.000	0.000	0.010	0.010	0.014	0.000	0.000	0.003	0.014
12-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	C	C	C	C	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.009	0.001	0.009
13-Jun	0.008	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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	0.008
14-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.009	0.016	0.000	0.000	0.000	0.005	0.003	0.000	0.000	0.002	0.001	0.002	0.005	0.008	0.002	0.016
15-Jun	0.015	0.001	0.004	Z	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	0.001	0.003	0.007	0.005	0.004	0.000	0.002	0.015
16-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.001
17-Jun	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	0.003	0.005	0.000	0.005
18-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	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	0.001
19-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.005	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	0.000	0.000	0.005
20-Jun	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001
21-Jun	0.002	0.001	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.004	0.001	0.004
22-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.002
23-Jun	0.000	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	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
24-Jun	Z	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.001	0.002	0.001	0.001	0.000	0.001	0.000	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002
25-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.001	0.003	0.004	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.012	0.001	0.001	0.012
26-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	M	M	M	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
27-Jun	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.004	0.002	0.004	0.001	0.004
28-Jun	0.017	0.003	0.001	0.001	Z	0.003	0.000	0.001	0.029	0.038	0.009	0.000	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.009	0.008	0.009	0.007	0.006	0.038
29-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.002	0.016	0.004	0.037	0.024	0.003	0.001	0.002	0.003	0.002	0.003	0.002	0.002	0.003	0.000	0.000	0.000	0.004	0.037
30-Jun	Z	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.023	0.018	0.002	0.001	0.000	0.001	0.001	0.002	0.000	0.000	0.000	0.002	0.023
	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.003	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	Diurnal Average	
	0.017	0.003	0.004	0.003	0.001	0.003	0.001	0.009	0.029	0.038	0.037	0.024	0.009	0.023	0.018	0.005	0.003	0.003	0.002	0.010	0.010	0.014	0.012	0.009	Diurnal Maximum	

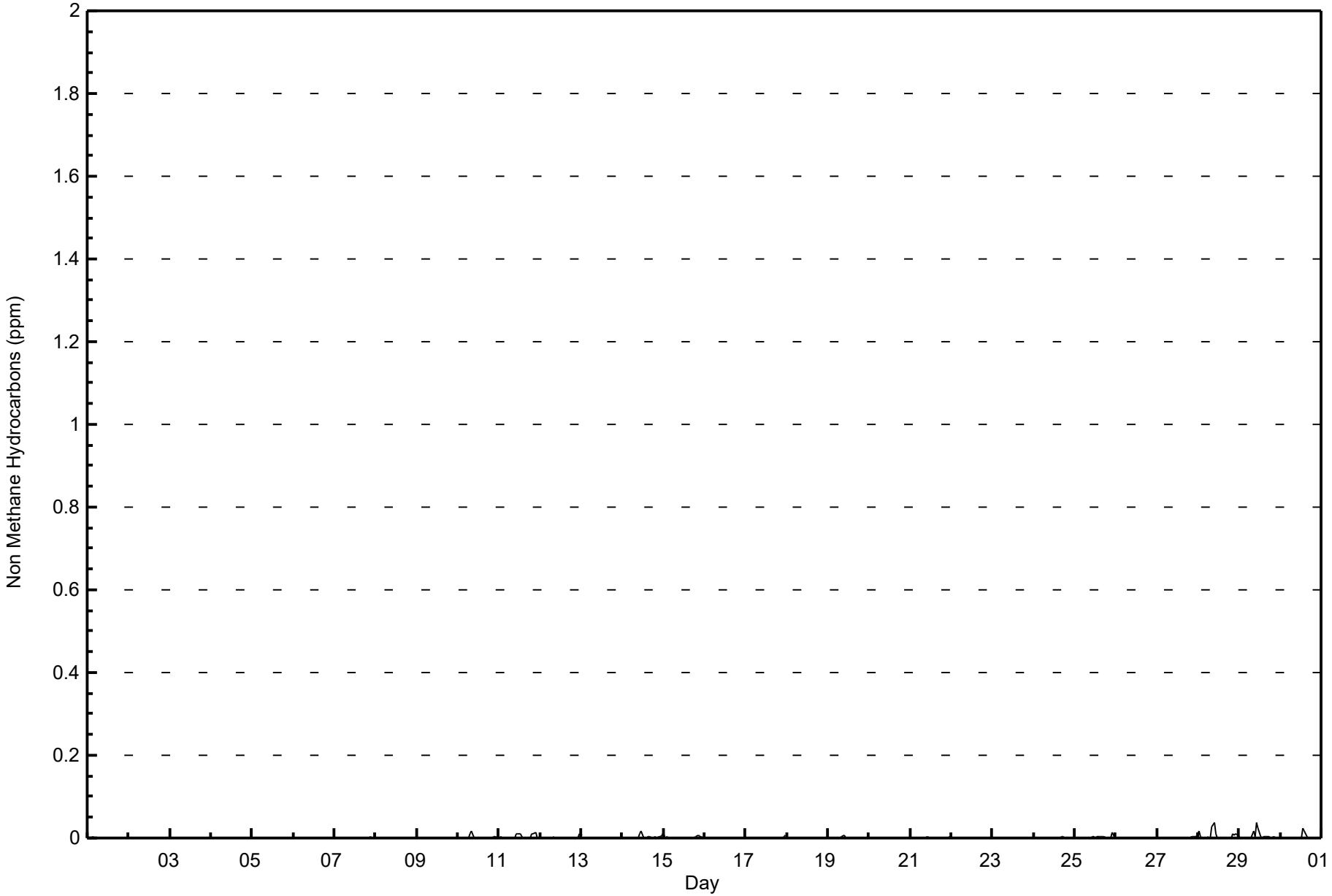
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Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Lower Camp - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	654	95.75	95.75
0.006 - 0.05	29	4.25	100.00
0.06 - 0.1	0	0.00	100.00
> 0.1	0	0.00	100.00

Total Number of Valid Hours: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Lower Camp - June 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	107	56	20	16	14	41	132	44	11	11	8	15	18	44	44	72	653
0.006 - 0.05	4	0	2	0	1	1	0	1	0	0	0	0	0	2	8	9	28
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	111	56	22	16	15	42	132	45	11	11	8	15	18	46	52	81	681

Total Number of Valid Hours: 681

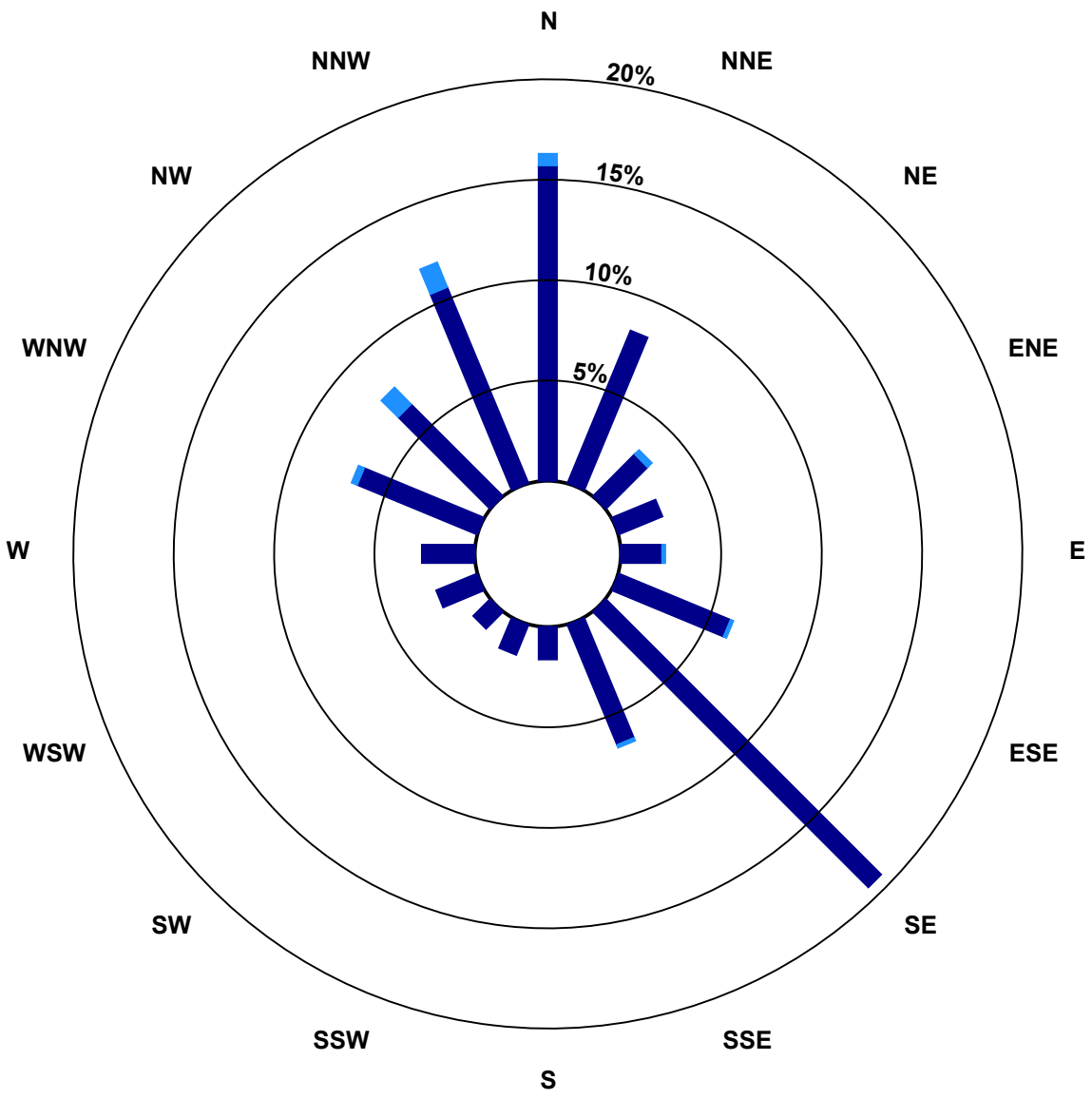
Total Number of Hours: 720

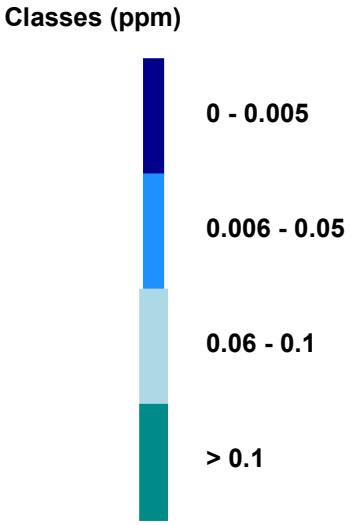
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Wind Rose Jun 2026

Non Methane Hydrocarbons (NMHC) - ppm

Lower Camp





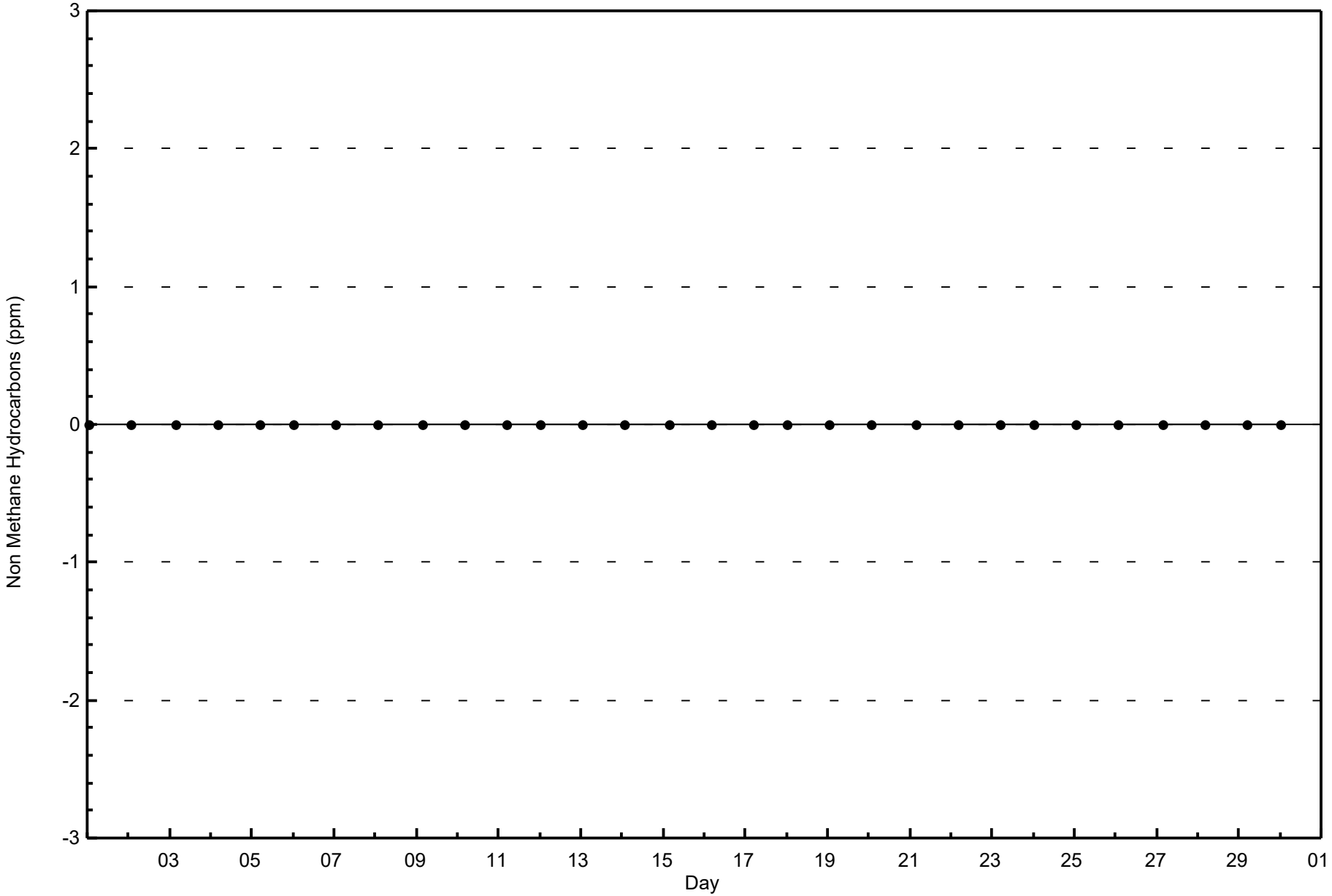
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Lower Camp - June 2026

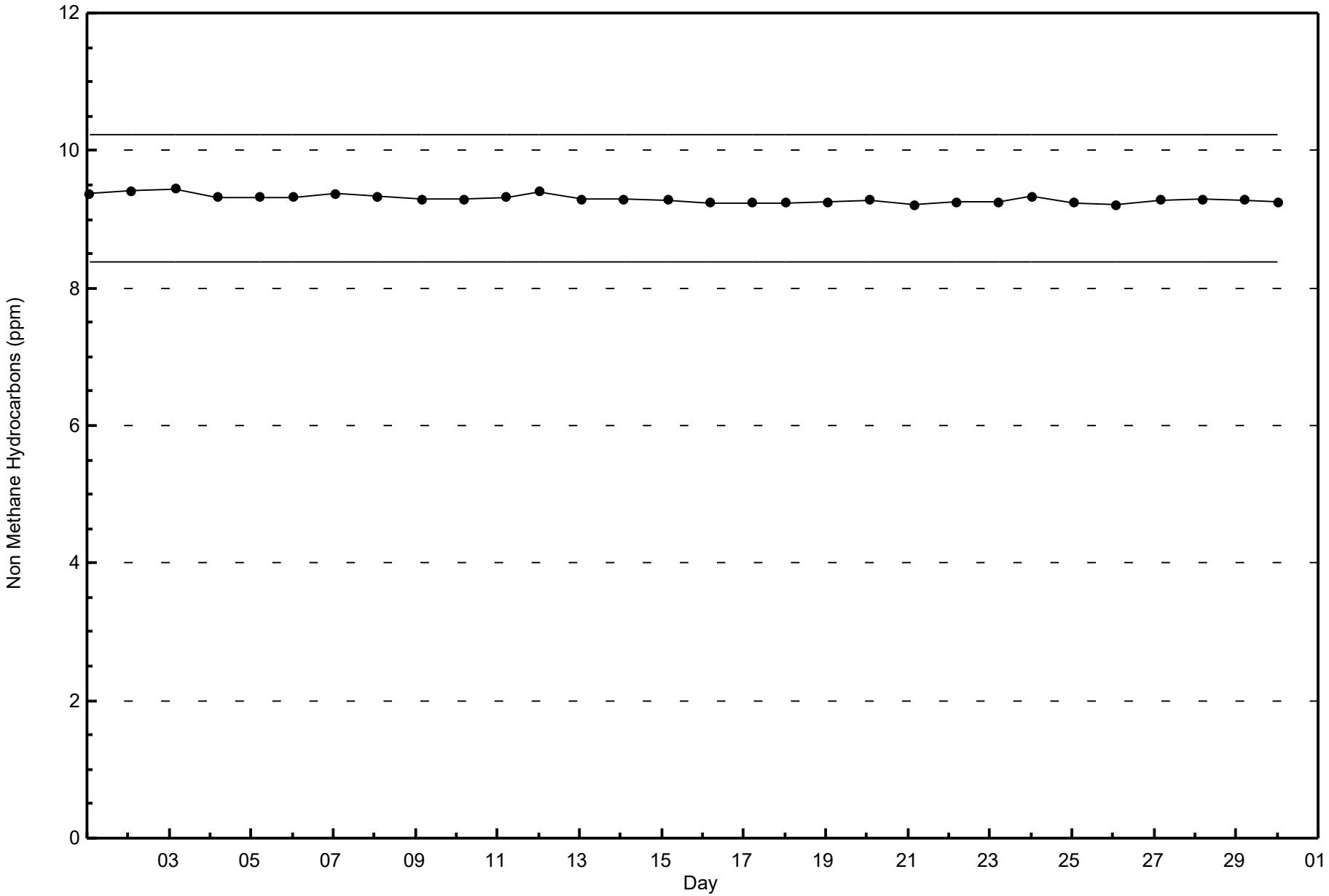


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Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Lower Camp - June 2026



Maximum Value: 29.8 C on Jun 28 18:00

Maximum Daily Average: 23.5 C on Jun 29

Minimum Value: 7.1 C on Jun 13 04:00

Minimum Daily Average: 9.9 C on Jun 11

Maximum Diurnal Average: 20.5 C at hour 15

Minimum Diurnal Average: 11.7 C at hour 4

Monthly Average: 16.65 C

Percentiles: P_1 = 8.3 P_{10} = 10.3 Q_1 = 12.1 Median = 15.8 Q_3 = 20.1 P_{90} = 24.7 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

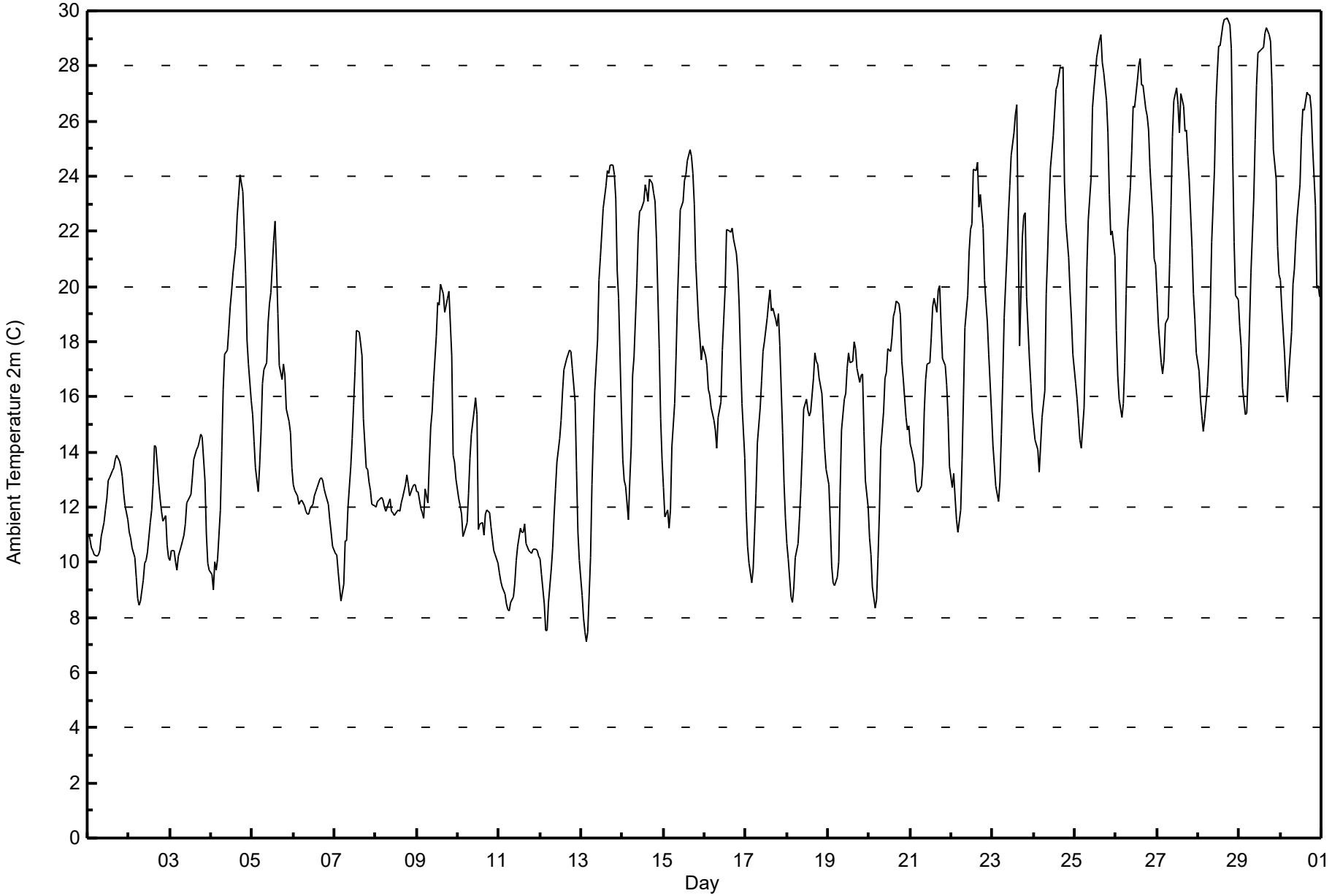
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	11.0	10.8	10.6	10.4	10.3	10.2	10.3	10.4	10.9	11.4	11.9	12.3	12.9	13.1	13.3	13.4	13.7	13.9	13.7	13.4	13.1	12.5	12.0	11.5	12.0	13.9
2-Jun	11.1	10.9	10.5	10.1	9.5	8.7	8.4	8.6	9.4	10.0	10.1	10.4	11.4	11.9	12.8	14.2	14.2	12.9	12.3	11.9	11.5	11.7	10.6	10.2	11.0	14.2
3-Jun	10.1	10.4	10.4	10.0	9.7	10.2	10.6	10.8	11.0	11.4	12.2	12.3	12.4	13.1	13.7	14.1	14.2	14.4	14.6	14.5	12.9	11.0	10.0	9.7	11.8	14.6
4-Jun	9.6	9.0	10.0	9.7	10.1	11.9	14.0	16.3	17.5	17.7	18.5	19.3	19.8	20.5	21.5	22.6	23.3	24.0	23.4	22.0	20.4	18.0	17.2	15.9	17.2	24.0
5-Jun	15.4	14.4	13.4	12.5	13.5	14.7	16.5	17.0	17.2	18.7	19.4	19.8	21.7	22.4	20.8	19.0	17.1	16.6	17.2	16.8	15.6	15.1	14.7	13.4	16.8	22.4
6-Jun	12.8	12.6	12.4	12.1	12.2	12.3	12.1	11.8	11.7	11.7	11.9	12.1	12.4	12.6	12.7	13.0	13.1	13.0	12.7	12.4	12.1	11.5	11.1	10.6	12.2	13.1
7-Jun	10.3	10.2	9.6	9.1	8.6	9.2	10.8	10.8	12.0	13.5	14.5	15.7	16.9	18.4	18.4	18.0	17.5	15.2	13.4	13.4	12.9	12.6	12.1	12.1	13.1	18.4
8-Jun	12.0	12.2	12.3	12.4	12.3	12.0	11.9	12.0	12.3	11.9	11.8	11.7	11.9	11.9	11.8	12.1	12.4	12.8	13.2	12.8	12.4	12.7	12.8	12.8	12.3	13.2
9-Jun	12.5	12.6	12.0	11.8	11.6	12.7	12.2	13.6	14.9	15.5	16.5	18.2	19.4	19.3	20.1	19.7	19.1	19.3	19.6	19.8	17.5	13.9	13.6	13.0	15.8	20.1
10-Jun	12.3	12.0	11.7	11.0	11.1	11.4	12.5	13.8	14.6	15.5	15.9	15.4	11.2	11.4	11.4	11.0	11.7	11.9	11.8	11.3	10.8	10.4	10.3	9.9	12.1	15.9
11-Jun	9.6	9.3	9.1	8.8	8.5	8.3	8.3	8.5	8.7	9.3	10.1	10.6	11.3	11.1	11.1	11.4	10.7	10.4	10.4	10.3	10.5	10.5	10.4	10.2	9.9	11.4
12-Jun	10.1	9.6	8.5	7.5	7.5	8.6	9.8	10.5	11.7	12.7	13.6	14.5	15.2	16.2	17.0	17.4	17.5	17.7	17.6	17.0	15.8	13.3	11.1	10.1	12.9	17.7
13-Jun	8.8	8.0	7.5	7.1	7.5	10.2	12.8	14.7	16.2	18.1	20.3	21.1	21.9	22.8	23.7	24.2	24.1	24.4	24.4	24.1	23.2	20.6	19.6	15.5	17.5	24.4
14-Jun	13.7	13.0	12.7	11.6	13.0	14.2	16.8	17.4	20.1	21.9	22.7	22.8	23.1	23.7	23.4	23.1	23.9	23.8	23.4	23.1	21.7	17.8	15.2	13.8	19.0	23.9
15-Jun	12.7	11.6	11.9	11.2	11.9	14.2	15.8	17.5	19.5	21.1	22.8	23.1	23.8	24.0	24.6	25.0	24.7	24.1	23.0	20.9	18.8	18.1	17.3	17.8	19.0	25.0
16-Jun	17.5	17.2	16.3	16.0	15.6	15.1	14.8	14.1	15.3	15.8	17.7	18.8	19.9	22.1	22.0	22.0	22.1	21.7	21.2	20.6	19.3	17.4	15.8	13.8	18.0	22.1
17-Jun	11.8	10.6	10.0	9.3	9.7	11.1	12.5	14.3	15.6	16.6	17.6	18.0	18.9	19.4	19.9	19.1	19.2	18.8	18.6	19.0	17.8	14.7	12.9	11.6	15.3	19.9
18-Jun	10.7	10.1	8.8	8.6	9.1	10.2	10.7	11.6	12.7	14.0	15.6	15.9	15.5	15.3	15.5	16.7	17.6	17.3	17.2	16.7	16.1	15.1	14.1	13.4	13.7	17.6
19-Jun	12.8	11.4	9.9	9.2	9.1	9.5	10.0	12.6	14.8	15.9	16.1	17.0	17.6	17.2	17.3	18.0	17.7	17.0	16.5	16.8	16.8	14.7	13.0	12.0	14.3	18.0
20-Jun	10.9	10.3	9.1	8.3	8.6	10.1	11.8	14.1	15.5	16.7	16.9	17.7	17.7	18.2	18.9	19.1	19.5	19.4	19.0	17.3	16.7	15.3	14.8	14.9	15.0	19.5
21-Jun	14.3	14.1	13.6	12.9	12.6	12.6	12.8	13.5	15.5	16.6	17.2	17.2	18.1	19.3	19.6	19.0	19.9	20.0	18.6	17.4	17.1	16.4	15.3	13.5	16.1	20.0
22-Jun	12.7	13.2	12.4	11.5	11.1	11.9	13.7	16.0	18.5	19.7	21.3	22.0	22.2	24.3	24.2	24.5	22.9	23.3	22.1	20.2	19.4	18.7	17.6	15.4	18.3	24.5
23-Jun	14.2	13.5	12.7	12.2	12.9	14.6	16.6	18.9	21.2	22.6	23.6	24.7	25.6	26.2	26.6	21.9	17.9	21.8	22.6	22.7	19.6	17.4	16.5	15.4	19.3	26.6
24-Jun	15.0	14.4	14.1	13.3	14.2	15.2	16.2	19.7	21.2	23.0	24.3	25.5	26.3	27.1	27.3	28.0	27.9	28.0	23.8	22.3	21.1	19.9	18.8	17.5	21.0	28.0
25-Jun	16.5	15.9	15.2	14.4	14.1	15.6	18.0	20.7	22.4	23.9	26.5	27.2	27.7	28.3	29.0	29.1	28.1	27.8	26.7	25.6	23.4	21.9	22.0	21.1	22.5	29.1
26-Jun	18.4	16.8	15.9	15.2	15.8	17.2	19.7	22.0	23.6	24.9	26.6	26.5	27.4	28.0	28.3	27.3	27.3	26.5	26.2	25.7	24.3	22.5	21.0	20.8	22.8	28.3
27-Jun	19.7	18.6	17.2	16.8	17.4	18.7	18.9	20.8	23.0	25.4	26.8	27.2	26.6	25.6	27.0	26.5	25.6	25.7	24.7	23.8	21.4	19.7	18.8	17.6	22.2	27.2
28-Jun	16.9	15.9	15.3	14.8	15.2	16.4	17.4	19.2	21.6	24.3	26.6	27.7	28.7	28.8	29.5	29.7	29.7	29.8	29.5	28.6	24.7	21.6	19.7	19.5	23.0	29.8
29-Jun	18.5	17.9	16.3	15.4	15.4	16.8	18.6	20.5	23.2	25.3	27.3	28.5	28.6	28.7	28.7	29.2	29.4	29.2	28.9	27.3	25.0	23.9	21.5	20.5	23.5	29.4
30-Jun	20.2	19.2	17.5	16.4	15.8	16.8	18.4	20.1	20.7	21.7	22.5	23.7	25.4	26.4	26.4	27.0	26.9	27.0	26.5	25.1	22.9	19.9	20.0	19.6	21.9	27.0
	13.4	12.9	12.2	11.7	11.8	12.7	13.8	15.1	16.4	17.6	18.6	19.2	19.7	20.2	20.5	20.5	20.3	20.3	19.8	19.1	17.8	16.3	15.3	14.4	Diurnal Average	
	20.2	19.2	17.5	16.8	17.4	18.7	19.7	22.0	23.6	25.4	27.3	28.5	28.7	28.8	29.5	29.7	29.7	29.8	29.5	28.6	25.0	23.9	22.0	21.1	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Lower Camp - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	52	7.22	7.22
10 - 20	483	67.08	74.31
> 20	185	25.69	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 98.9 % on Jun 4 02:00

Maximum Daily Average: 92.1 % on Jun 6

Minimum Value: 27.8 % on Jun 28 16:00

Minimum Daily Average: 51.2 % on Jun 16

Maximum Diurnal Average: 88.2 % at hour 4

Minimum Diurnal Average: 50.8 % at hour 15

Monthly Average: 66.93 %

Percentiles: P_1 = 30.2 P_{10} = 37.3 Q_1 = 51.2 Median = 70.0 Q_3 = 83.7 P_{90} = 92.2 P_{99} = 97.6

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

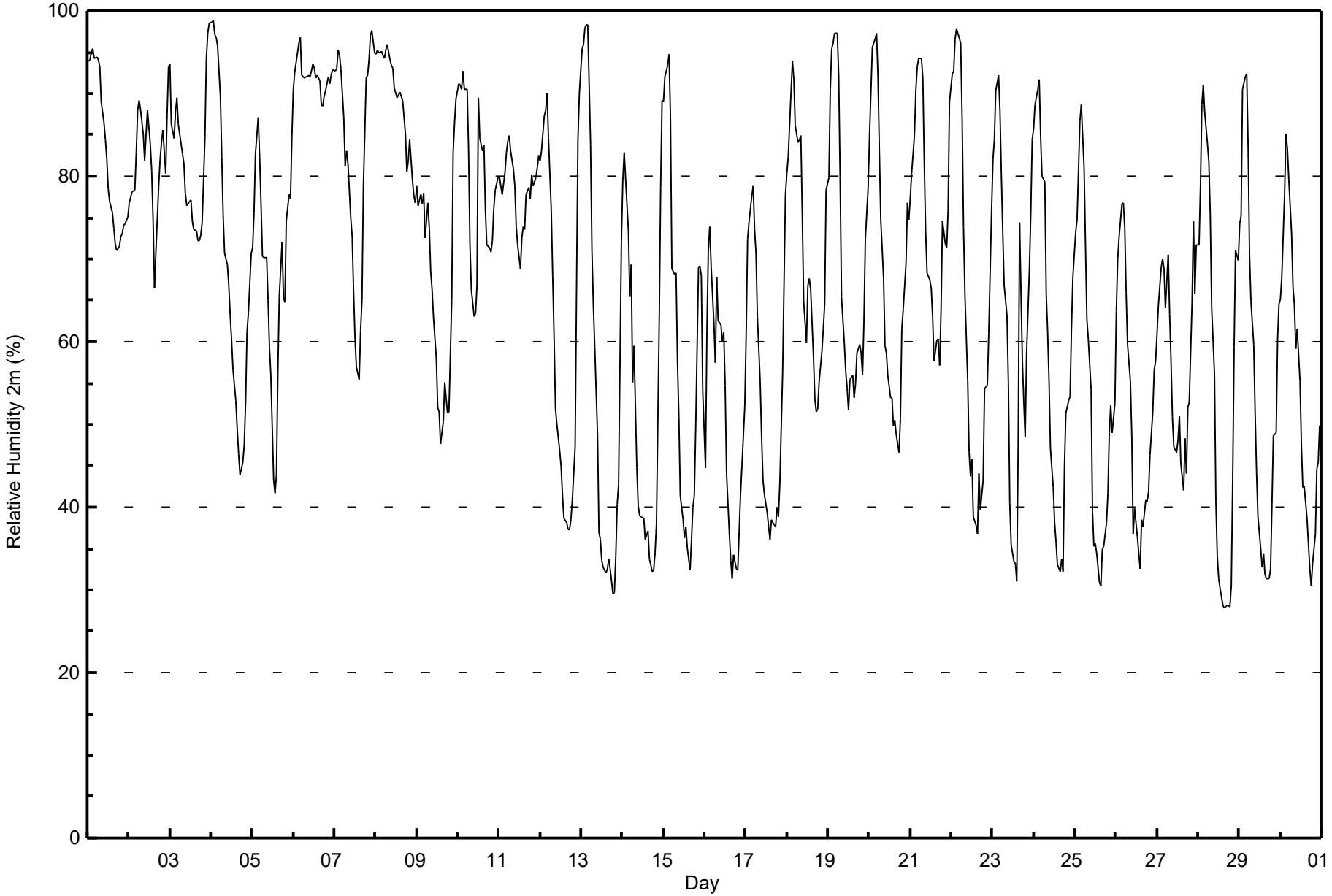
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	93.8	94.1	95.1	95.5	94.2	94.5	94.0	93.2	89.0	86.4	84.5	82.1	78.4	76.9	75.6	73.7	71.9	71.0	71.5	72.7	73.1	74.0	74.3	75.1	82.7	95.5
2-Jun	76.8	77.5	78.1	78.4	82.8	88.0	89.2	88.2	85.0	81.9	85.2	87.9	84.0	80.7	74.7	66.4	70.8	78.9	82.0	84.1	85.6	80.4	87.4	93.2	82.0	93.2
3-Jun	93.6	86.2	84.5	87.8	89.5	86.3	83.8	82.6	81.6	78.0	76.5	76.9	77.2	74.5	73.6	73.3	72.1	72.2	72.9	74.4	84.7	94.2	97.3	98.5	82.2	98.5
4-Jun	98.6	98.9	97.2	96.8	95.8	89.6	82.4	75.2	70.7	69.4	66.8	63.2	60.2	56.6	52.9	49.5	46.5	44.0	45.4	47.4	52.6	61.3	63.6	70.7	69.0	98.9
5-Jun	71.3	75.7	82.7	87.2	82.4	76.6	70.4	70.2	70.1	65.1	59.3	56.0	43.2	41.6	43.9	56.2	65.4	72.1	65.5	64.8	74.5	77.8	77.4	84.7	68.1	87.2
6-Jun	90.5	92.6	95.0	96.0	96.8	92.2	91.9	92.0	92.1	92.2	92.1	93.6	93.1	91.8	92.2	91.5	88.7	88.5	89.7	90.4	92.0	91.2	92.1	92.9	92.1	96.8
7-Jun	92.8	93.1	95.2	94.5	92.9	87.1	81.1	83.1	81.5	74.9	72.8	66.2	60.5	57.0	55.4	61.3	65.0	78.7	91.9	92.3	94.0	96.9	97.7	95.0	81.7	97.7
8-Jun	94.8	95.3	94.8	95.0	94.6	94.3	95.2	95.9	94.0	93.5	93.0	90.7	89.5	89.8	90.1	89.7	89.2	85.1	80.5	81.9	84.4	79.5	77.6	76.8	89.4	95.9
9-Jun	78.8	76.4	77.7	76.6	77.9	72.6	76.7	73.7	68.5	66.2	63.0	57.9	52.0	51.5	47.7	50.3	55.0	53.2	51.4	51.5	65.1	82.9	86.5	89.3	66.8	89.3
10-Jun	91.1	91.0	90.5	92.7	90.5	90.6	83.3	71.7	66.2	63.1	63.3	66.8	89.5	84.5	83.1	83.8	75.9	71.7	71.3	70.9	72.3	76.1	78.3	79.9	79.1	92.7
11-Jun	80.0	78.8	77.8	80.5	82.8	84.3	84.9	83.0	80.9	78.8	73.9	71.7	68.8	72.5	74.0	73.6	77.8	78.6	77.3	80.1	78.9	79.8	80.9	82.6	78.4	84.9
12-Jun	81.9	83.0	87.3	87.9	90.0	84.6	75.8	68.0	60.5	51.9	50.0	46.7	44.8	41.3	38.7	38.2	37.3	37.3	38.5	40.9	47.3	66.2	84.4	90.1	61.4	90.1
13-Jun	95.5	96.0	98.0	98.3	98.4	83.9	71.0	64.4	59.3	48.6	37.0	36.2	33.6	32.7	32.1	32.6	33.8	32.6	29.5	29.6	34.0	40.4	42.7	72.2	55.5	98.4
14-Jun	79.4	82.8	79.6	73.4	65.4	69.3	55.2	59.4	44.8	40.2	39.1	38.8	38.6	36.1	36.6	37.1	33.7	32.2	32.5	34.4	38.0	62.9	78.6	89.2	53.2	89.2
15-Jun	89.0	92.0	93.4	94.7	87.2	68.9	68.2	68.3	57.6	50.9	41.4	38.4	36.2	37.6	35.1	32.3	36.1	40.0	41.4	49.4	69.0	69.1	68.0	54.1	59.1	94.7
16-Jun	44.7	61.3	71.1	73.9	69.2	62.2	57.4	67.8	62.5	62.0	59.9	61.1	54.7	44.1	36.8	33.5	31.4	34.2	32.5	32.5	37.2	41.7	45.0	52.3	51.2	73.9
17-Jun	61.0	72.4	74.4	77.7	78.9	73.5	70.6	63.1	55.1	48.4	43.2	41.6	39.3	37.6	36.1	38.4	38.2	37.6	40.1	38.7	42.9	56.2	67.1	77.7	54.6	78.9
18-Jun	80.3	82.4	90.1	94.0	91.7	86.1	84.1	84.4	84.8	75.4	64.9	59.9	66.8	67.7	66.2	58.1	53.1	51.4	51.9	55.2	58.8	61.5	64.6	78.3	71.3	94.0
19-Jun	79.9	90.5	95.4	96.1	97.3	97.3	92.0	79.8	65.5	59.8	56.4	54.3	51.6	55.4	56.0	53.3	54.9	58.6	59.7	58.7	56.0	62.6	72.4	78.6	70.1	97.3
20-Jun	85.0	90.4	95.6	96.5	97.3	92.0	83.0	74.8	67.6	59.5	58.6	55.9	53.2	53.2	49.8	50.6	48.8	46.5	50.7	61.6	63.9	69.5	76.7	74.8	69.0	97.3
21-Jun	77.4	80.3	84.8	90.3	93.2	94.2	94.3	91.9	81.7	73.3	68.3	67.4	66.4	62.9	57.6	60.1	60.4	57.1	64.0	74.6	71.8	71.3	75.8	89.0	75.3	94.3
22-Jun	92.3	92.8	96.6	97.8	97.3	96.1	87.2	73.8	65.8	55.3	46.6	43.7	45.7	38.8	37.8	36.8	44.1	39.7	43.2	54.3	54.6	54.8	61.0	75.8	63.8	97.8
23-Jun	82.0	84.5	90.4	92.2	88.0	80.2	73.1	66.8	63.2	55.1	40.6	35.4	33.5	33.3	31.0	47.5	74.4	57.6	52.7	48.4	58.6	68.8	75.5	84.5	63.2	92.2
24-Jun	85.8	88.7	90.4	91.7	84.8	80.0	79.3	65.8	61.1	55.3	47.0	42.3	38.2	35.7	33.1	32.2	33.7	32.3	44.9	51.3	52.9	53.4	61.5	67.9	58.7	91.7
25-Jun	73.2	74.8	80.8	86.6	88.6	81.0	71.7	62.7	60.3	54.3	39.4	35.3	35.6	34.4	30.9	30.6	34.9	35.2	38.1	41.7	48.9	52.3	49.0	52.6	53.9	88.6
26-Jun	63.8	70.0	72.8	76.6	76.8	73.7	65.9	59.6	55.3	48.8	36.8	39.8	36.5	34.5	32.6	38.5	37.6	40.9	40.6	41.8	46.3	51.5	56.6	57.6	52.3	76.8
27-Jun	60.8	64.4	69.1	70.0	68.8	64.0	70.5	63.4	57.6	50.9	47.2	46.6	48.2	51.0	45.3	42.0	48.3	44.1	52.1	52.6	64.7	74.5	65.8	71.7	58.1	74.5
28-Jun	71.6	78.9	88.6	91.1	87.8	83.9	81.6	75.3	64.1	56.1	40.7	34.1	31.4	30.1	28.1	27.8	28.0	28.2	27.9	30.6	43.5	59.4	70.9	69.8	55.4	91.1
29-Jun	74.3	75.2	90.5	92.1	92.3	83.6	70.5	64.9	59.7	51.3	44.2	38.8	34.9	32.7	34.4	31.9	31.4	31.3	32.6	40.3	48.6	49.0	60.2	64.5	55.4	92.3
30-Jun	65.0	67.8	77.8	85.0	83.5	79.7	73.0	66.7	64.3	59.2	61.6	55.3	47.5	42.4	42.5	38.7	35.5	32.5	30.4	33.2	36.9	44.5	45.4	49.8	54.9	85.0
	80.2	82.9	86.5	88.2	87.2	83.0	78.6	74.3	69.0	63.5	58.5	56.2	54.4	52.6	50.8	51.0	52.5	52.1	53.4	56.0	61.0	66.8	71.1	76.3	Diurnal Average	
	98.6	98.9	98.0	98.3	98.4	97.3	95.2	95.9	94.0	93.5	93.0	93.6	93.1	91.8	92.2	91.5	89.2	88.5	91.9	92.3	94.0	96.9	97.7	98.5	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Lower Camp - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Barometric Pressure (BP) - inHg

Lower Camp - June 2026

Maximum Value: 29.5 inHg on Jun 2 11:00

Maximum Daily Average: 29.5 inHg on Jun 2

Minimum Value: 28.4 inHg on Jun 8 13:00

Minimum Daily Average: 28.5 inHg on Jun 8

Maximum Diurnal Average: 29.1 inHg at hour 6

Minimum Diurnal Average: 29.0 inHg at hour 18

Monthly Average: 29.03 inHg

Percentiles: P_1 = 28.4 P_{10} = 28.7 Q_1 = 28.9 Median = 29.0 Q_3 = 29.2 P_{90} = 29.3 P_{99} = 29.5

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

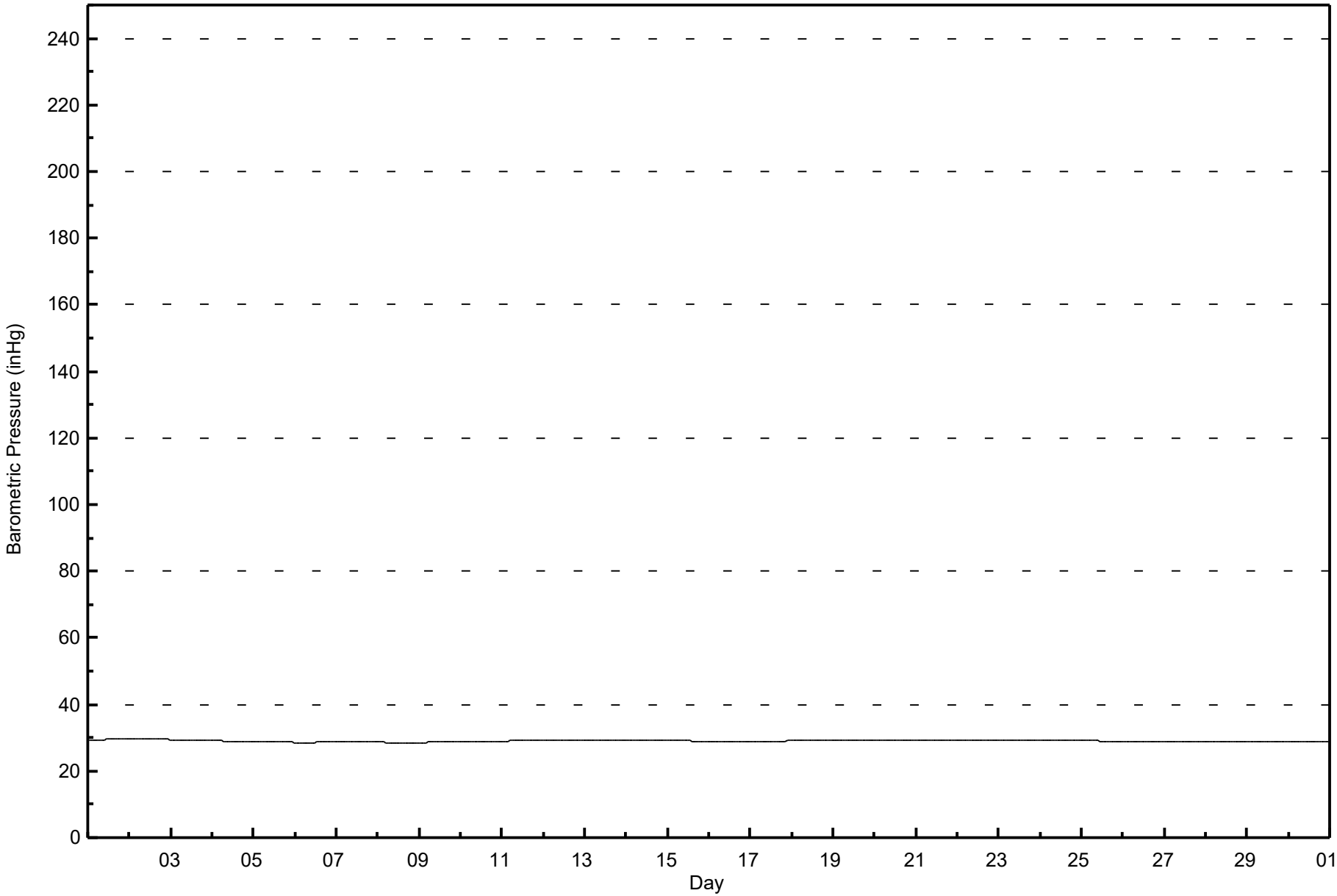
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	29.3	29.3	29.3	29.3	29.4	29.4	29.4	29.4	29.4	29.4	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.4	29.5
2-Jun	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.4	29.5	29.5
3-Jun	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	29.3	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.3	29.4
4-Jun	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	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	29.0	29.1
5-Jun	28.9	28.9	28.9	28.9	28.9	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.6	28.6	28.6	28.6	28.6	28.8	28.9
6-Jun	28.6	28.6	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.6	28.6	28.6	28.6	28.6	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.8	28.8	28.8	28.6	28.8
7-Jun	28.8	28.8	28.7	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	28.8
8-Jun	28.7	28.6	28.6	28.6	28.6	28.6	28.5	28.5	28.5	28.5	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.5	28.5	28.5	28.5	28.5	28.7
9-Jun	28.5	28.5	28.6	28.6	28.6	28.6	28.6	28.6	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.6	28.7
10-Jun	28.7	28.7	28.7	28.7	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.9	28.9	28.9	28.9	28.9	29.0	29.0	29.0	29.0	28.8	29.0
11-Jun	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.1	29.2
12-Jun	29.1	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.2	29.3
13-Jun	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	29.3	29.3	29.3	29.3	29.3	29.2	29.2	29.2	29.3	29.4
14-Jun	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
15-Jun	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.0	29.0	29.0	28.9	28.9	28.9	28.9	28.8	28.8	28.8	28.8	29.0	29.2
16-Jun	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	28.8	28.8	28.9	28.7	28.9
17-Jun	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	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
18-Jun	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.2	29.1	29.2
19-Jun	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	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
20-Jun	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
21-Jun	29.2	29.2	29.2	29.2	29.3	29.2	29.3	29.3	29.3	29.3	29.2	29.3	29.3	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
22-Jun	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3
23-Jun	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	29.3	29.3	29.3	29.3	29.3	29.3
24-Jun	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.2	29.2	29.2	29.2	29.2	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.3
25-Jun	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	28.9	28.9	28.9	29.0	29.1
26-Jun	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	28.9	28.9	28.9
27-Jun	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-Jun	28.9	28.9	28.9	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	28.9	29.0
29-Jun	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	28.9	28.9	29.0
30-Jun	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	28.9	28.9	28.9	28.9	28.9	28.9
	29.0	29.0	29.0	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	Diurnal Average	
	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Barometric Pressure (BP) - inHg

Lower Camp - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Lower Camp - June 2026

Maximum Speed: 33 km/h on Jun 8 15:00

Maximum Daily Speed Average: 18.6 km/h on Jun 8

Minimum Speed Value: 0 km/h on Jun 27 21:00

Minimum Daily Speed Average: 1.8 km/h on Jun 13

Maximum Diurnal Speed Average: 5.6 km/h at hour 17

Minimum Diurnal Speed Average: 0.9 km/h at hour 1

Monthly Average Velocity: 2.2 km/h 16.6 deg

Percentiles: P_1 = 1 P_{10} = 3 Q_1 = 5 Median = 8 Q_3 = 13 P_{90} = 18 P_{99} = 26

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-Jun	N17	N18	NNW17	NNW15	NNW17	NNW16	NNW19	NNW17	NNW17	N17	N19	N21	NNE20	NNE19	N19	N21	N21	NNE20	NNE19	N18	NNE16	N13	N16	NNE14	N17.2	N21
2-Jun	NNE13	NNE14	NNE13	NNE13	N15	N15	NNE15	N14	NNE13	NNE12	NNE9	N6	NNE8	NE8	NE10	ENE13	ESE13	SE12	SE10	SE7	SE1	ESE6	SSE3	SE1	NE7.2	NNE15
3-Jun	UO	E6	ESE9	ESE8	E6	ESE10	ESE12	ESE9	SE7	ESE6	SE9	SE9	SE8	SE7	SE7	SE6	SSE5	SE7	SSE3	SE4	NW1	WNW4	WNW3	WNW3	SE5.3	ESE12
4-Jun	WNW2	SE3	SSE7	SSE8	SE7	SE10	SE12	SE13	SE12	SSW7	SSW8	SSW9	SSW8	S8	S7	SSE8	S7	SSW8	SW12	SW13	SW5	S5	S6	SSE7	S6.7	SE13
5-Jun	S7	SSW8	SSE4	SE7	SSE4	SW3	SSE5	SE7	SE5	SE9	SE10	SE11	ESE10	SE8	SE10	SSE12	SE15	SE5	SSE3	SSE4	SE6	SE6	SW7	WSW16	SSE6.0	WSW16
6-Jun	W15	W11	NW6	WNW10	WNW8	WNW22	W22	W23	W26	W25	WSW25	WSW25	W27	WSW25	W18	W16	WSW17	WSW13	WSW10	WSW12	WSW9	SW6	SSW5	SSW4	W15.1	W27
7-Jun	SSE4	SE4	SE8	SSE12	SSE9	SE11	SE13	SE7	SE8	SE8	SE8	ESE4	ESE5	ESE6	N5	N11	N14	ENE9	N6	NNW5	NNW3	N3	NW4	NNW4	ESE3.0	N14
8-Jun	NNW4	N7	NNW7	N8	N9	N11	NNW10	NW11	NW15	NW21	NW26	NW28	WNW30	WNW31	WNW33	WNW31	WNW26	WNW24	WNW25	WNW27	WNW22	WNW24	W22	WNW23	WNW18.6	WNW33
9-Jun	WNW15	WNW19	W19	W20	WNW18	WNW21	W17	W15	WNW14	W11	W10	WNW13	WNW16	W14	W14	WNW6	N9	N6	N6	N5	NW4	NNE1	NW7	NNW10	WNW10.9	WNW21
10-Jun	NNW6	NNW5	NNW7	NNW5	NW5	NNW6	NNW8	N9	NNW8	WNW7	N6	NW14	NNE13	NNE12	N12	N12	NNE19	N17	N19	N15	N13	N12	N12	N14	N10.2	N19
11-Jun	N15	N14	N13	NNE12	NNW11	NNW14	NNW14	NNW14	NNW13	NNW11	N16	NNW15	NNW14	N16	N18	N14	N18	N16	N16	N12	NNW11	NNW8	NW9	NW6	N12.8	N18
12-Jun	NW7	NW8	NW6	NW5	NNW6	NNW7	NNW9	NNW12	NNW14	NNW19	N20	N20	N20	N19	N19	N19	NNE21	NNE20	NNE18	N14	NW6	WNW2	N1	UO	N12.0	NNE21
13-Jun	ESE1	E0	ESE2	ESE2	ESE1	SE6	SE6	ESE4	ESE4	N3	WNW6	NNE1	NW5	NNW3	NNW5	SE6	SE9	SSE7	WSW9	WSW9	SW5	SSW7	SSW8	ESE4	S1.8	WSW9
14-Jun	SE4	SE5	SE5	SSE3	SSW4	SSE4	W2	NNE5	NW6	NNW8	N9	N10	N13	N14	N14	NNW12	NNW12	N16	N13	NNW9	NNW6	NW3	NNW1	NNW2	N5.3	N16
15-Jun	NW2	NNE1	NW3	ENE1	ENE2	NE2	ENE3	SE5	SE7	SE8	SE5	NE2	N4	NE6	NE5	N5	NNW2	SE8	ESE8	ESE2	NW1	WNW2	NNW2	E7	E2.1	ESE8
16-Jun	SE13	SE11	SE8	SE9	SSE5	SE11	E5	E9	ESE7	SE11	SE8	NNE1	NW8	WNW8	NE12	NNE16	N18	NNE21	NNE21	NNE19	NNE15	NNE14	NNE11	NW7	NE6.1	NNE21
17-Jun	NW5	NNW5	NW5	NNW6	NNW4	N5	N8	NW8	NNW9	N11	NNW13	N13	N14	N14	N14	NNE13	N14	NNW10	NNW9	N5	N6	WNW3	W3	NW3	NNW7.9	N14
18-Jun	NW3	N3	ENE0	ESE1	E1	N3	NNW5	NNW4	NNE3	NE4	ENE2	N5	N12	N16	N11	NNW13	NNW15	N14	N11	NNW7	NW8	NW7	WNW3	N2	N5.8	N16
19-Jun	WNW4	NE1	E0	N1	WNW4	NW4	NW4	NNE4	NNW6	N10	NNW10	N9	N10	NW12	N10	NNE12	N15	N13	NNE11	N8	NNE9	N7	NNW5	NNW5	N6.5	N15
20-Jun	NNW3	NW4	ENE1	NNW2	NNW3	NNW5	N6	N8	N12	NNE15	NNE13	NE10	NNE10	ENE14	NE15	NE17	NE15	NE14	NE14	ESE13	ESE6	SE3	NNW3	N5	NNE7.1	NE17
21-Jun	NNW4	N4	N4	NNW5	NW6	NW8	NNW7	NNW7	NNW11	NNW13	NNW13	N13	N14	NNE12	NNE13	NNE12	N12	NNE13	NE15	NW5	NW4	NW5	WNW4	WNW1	N7.7	NE15
22-Jun	S1	NW4	W5	NW1	N1	NW4	N3	NE3	ENE4	NNE3	N3	ESE3	SE5	SE13	SE10	SE9	SE4	ESE6	S3	SE5	SSE6	SSE5	SSE3	SE3	SE2.4	SE13
23-Jun	SE5	SE4	SE6	SE7	SE8	SE11	SE9	SE9	SE10	SE6	WNW7	WNW9	SW4	SSE5	S4	N15	NNE6	SE12	SE16	SSE7	SSE5	SE4	SSE2	WSW1	SE4.1	SE16
24-Jun	SE8	SE5	SE7	SE7	SE8	SE10	SE11	SE12	SE14	SSE9	SSE8	SSE10	S8	S7	SSE8	SSE7	SE7	SSE7	SE25	ESE9	SE11	SE11	SE15	SE9	SE9.5	SE25
25-Jun	SE8	SSE7	SE10	ESE8	ESE9	ESE10	SE9	SE12	SE13	SE12	SSE9	SSE10	SSE11	SE13	SSE11	SSE11	SE14	SE15	SE17	SE23	SE12	SE6	SSE11	SSE10	SE11.0	SE23
26-Jun	SE8	SE8	SE7	SE6	SE7	SE12	SE13	SE13	SE18	SE19	SSE18	SE23	SE16	SE16	SE17	SE21	SE19	SE23	SE22	SE22	ESE17	SE17	SE12	SE18	SE15.4	SE23
27-Jun	SE12	ESE8	ESE7	ESE12	ESE13	ESE5	N8	N4	NE3	SE14	SE20	SE22	SE20	SE20	SE19	ESE16	SE19	SE18	SE12	ESE1	SSE0	WNW3	W2	WNW4	SE9.1	SE22
28-Jun	WNW4	NW3	NW4	NW4	NW5	NNW3	NNW5	NNW5	NW7	NW7	E12	E16	E17	ENE17	ENE18	ENE15	ENE16	E16	E14	E9	NE2	WNW3	NW4	NW5	ENE5.3	ENE18
29-Jun	NW4	WNW4	NW2	N1	N1	NE2	NE2	NNW4	NE1	E2	NNW7	NNW8	NE7	NE11	NNE13	N12	NNE13	NNE15	ENE14	ENE7	SE8	SW5	SE3	SSE4	NNE4.0	NNE15
30-Jun	SE7	SSE5	ESE4	WSW1	NNW1	N2	N2	E2	ESE5	NNE2	NNE7	N7	N8	NW11	NW9	NNE12	NE13	ENE12	E10	ESE11	ESE8	W2	S3	SE4	NE3.0	NE13
	NW0.9	N1.4	NNE0.9	NE1.0	N1.1	N1.7	N1.8	N1.8	N1.6	N2.1	N2.4	N3.0	N4.0	NNE3.5	NNE4.3	NNE5.5	NNE5.6	NE5.1	NE4.7	NE2.1	NNE1.4	NW0.9	WNW1.1	NW1.2	Diurnal Average	
	N17	WNW19	W19	W20	WNW18	WNW22	W22	W23	W26	W25	NW26	NW28	WNW30	WNW31	WNW33	WNW31	WNW26	WNW24	SE25	WNW27	WNW22	WNW24	W22	WNW23	Diurnal Maximum	

UO - Unstable Operation

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

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 10m (WS10) - km/h

Lower Camp - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9 km/h on Jun 24 19:00

Minimum Value: 1 km/h on Jun 22 08:00

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

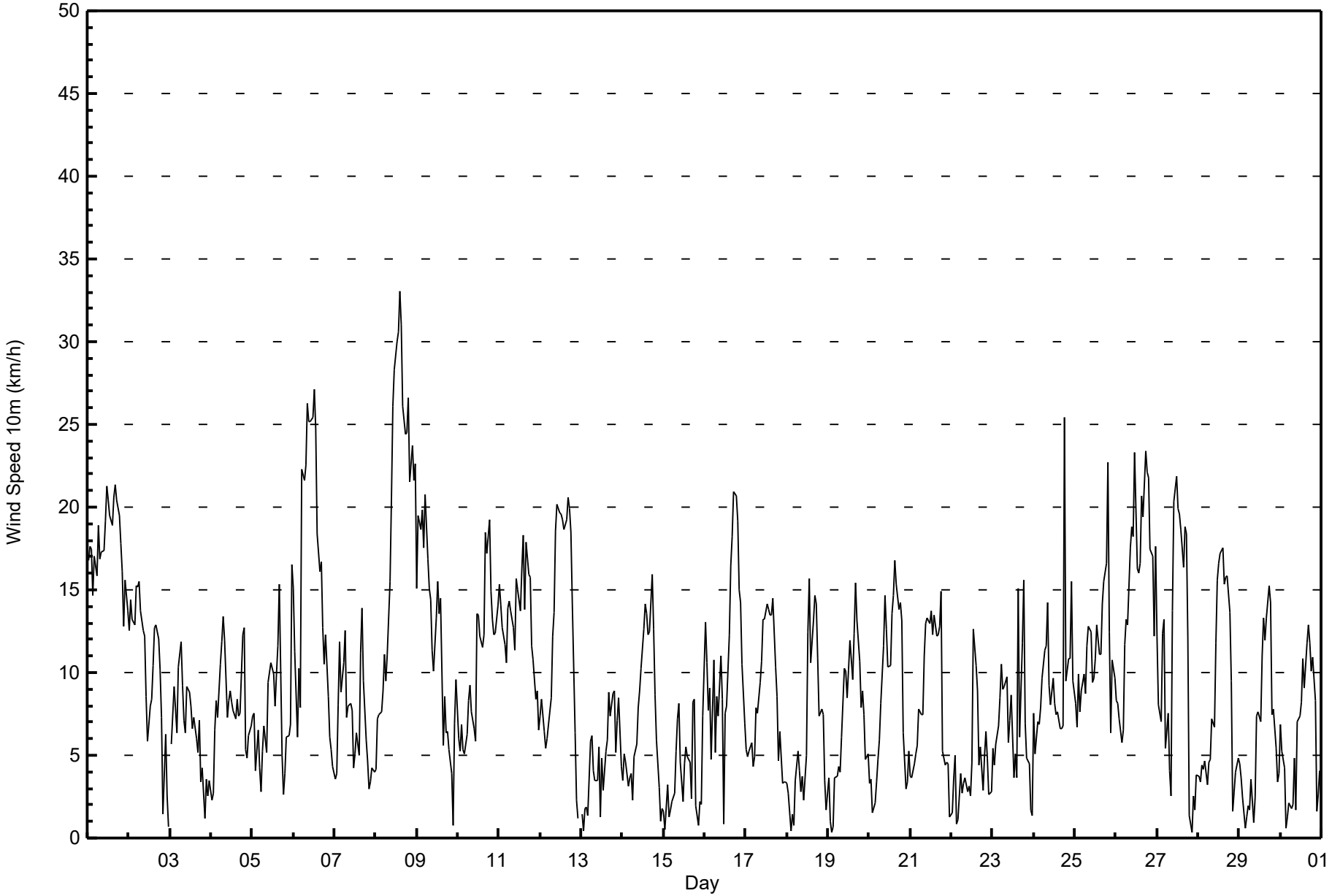
UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Lower Camp - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	215	29.94	29.94
6 - 11	248	34.54	64.48
12 - 19	206	28.69	93.18
20 - 28	45	6.27	99.44
29 - 38	4	0.56	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

Lower Camp - June 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	25	9	11	7	6	18	21	20	5	3	5	2	4	19	29	31	215
6 - 11	30	8	6	2	6	20	69	25	6	8	2	4	3	8	20	31	248
12 - 19	56	34	7	9	4	7	39	3	0	0	2	6	6	6	3	24	206
20 - 28	6	6	0	0	0	0	11	0	0	0	0	3	7	9	3	0	45
29 - 38	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	117	57	24	18	16	45	140	48	11	11	9	15	20	46	55	86	718

Total Number of Valid Hours: 718

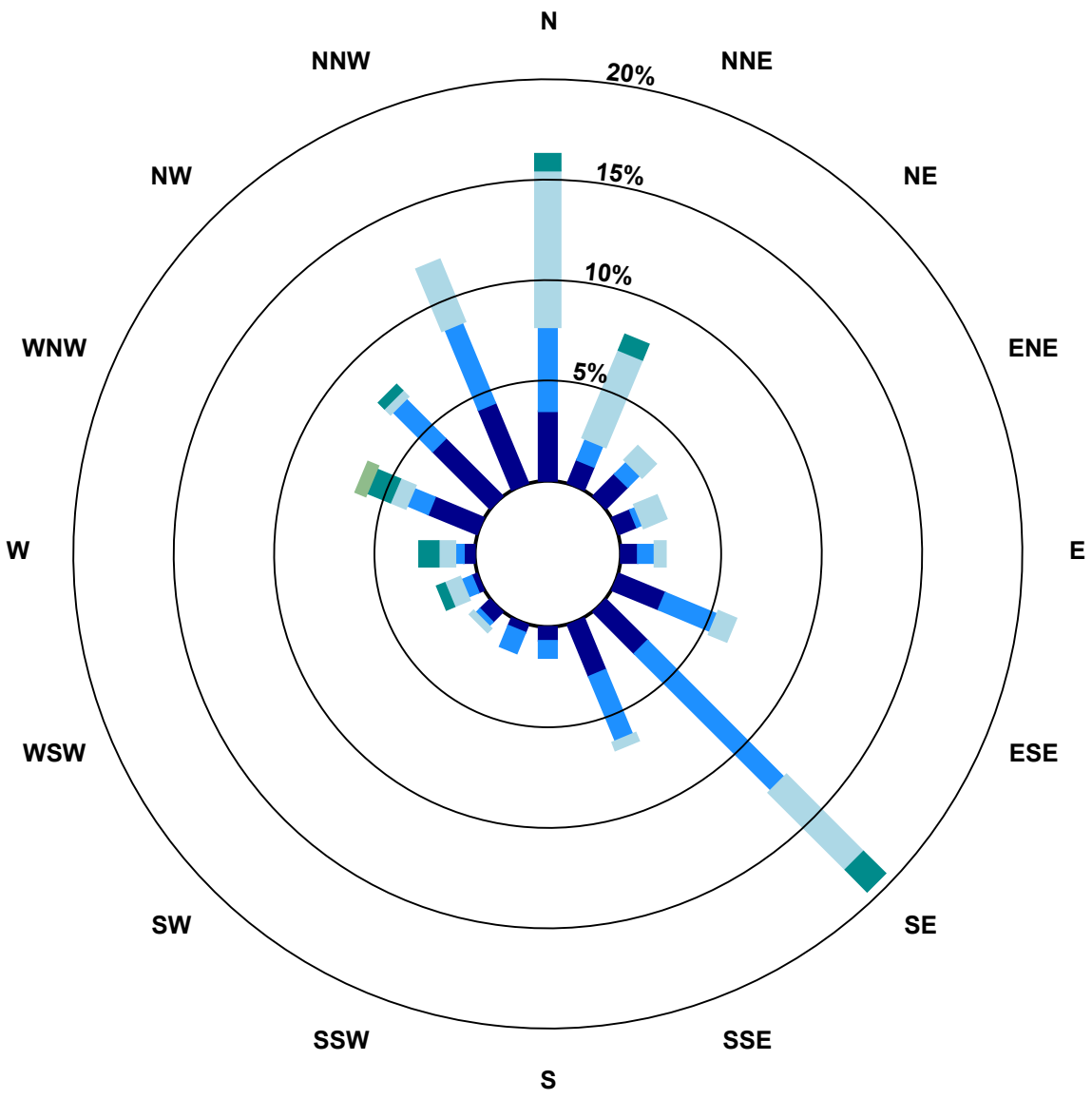
Total Number of Hours: 720

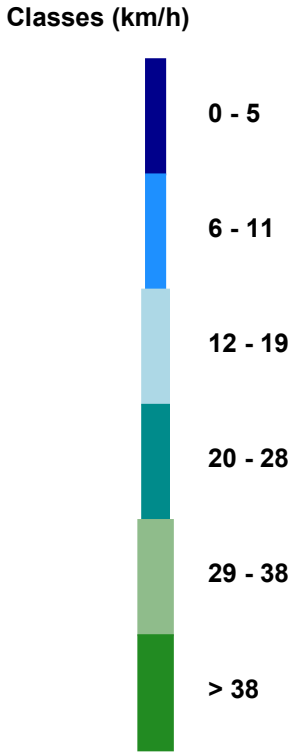
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Lower Camp





Total Number of Valid Hours: 718

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Lower Camp - June 2026

Direction of Maximum Speed: 287 deg on Jun 8 15:00
Direction of Maximum Daily Speed Average: 298.7 deg on Jun 8

Direction of Minimum Speed: 147 deg on Jun 27 21:00

Direction of Minimum Daily Speed Average: 1.8 deg on Jun 13

Monthly Average Direction: 16.6 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-Jun	351	358	341	344	336	337	334	333	339	350	1	6	13	12	6	3	8	17	12	7	19	7	7	17	358.9
2-Jun	13	17	14	14	8	5	12	6	17	31	31	3	30	51	55	62	122	140	130	134	142	104	151	142	38.0
3-Jun	UO	92	113	108	97	115	107	113	131	119	136	136	139	146	138	141	160	140	152	145	324	288	296	283	126.8
4-Jun	288	134	164	154	137	140	137	140	141	193	209	206	193	179	191	160	178	207	228	231	215	183	178	163	177.3
5-Jun	180	200	167	140	158	216	160	144	129	127	129	130	116	125	146	150	143	132	156	165	141	142	231	254	153.7
6-Jun	267	279	323	291	297	299	274	265	264	262	258	257	259	258	259	259	258	243	239	250	241	234	213	192	262.7
7-Jun	166	124	135	148	152	143	132	139	143	128	131	103	109	112	6	352	0	70	352	331	346	350	306	335	103.6
8-Jun	345	350	335	350	352	352	343	326	309	305	306	305	300	297	287	285	286	291	284	286	289	286	280	283	298.7
9-Jun	285	286	278	281	283	297	268	275	284	271	260	289	291	275	276	290	7	356	358	354	320	29	324	336	290.2
10-Jun	345	339	333	333	326	330	341	351	330	303	358	323	16	17	7	6	17	7	8	1	353	1	3	351	355.5
11-Jun	360	10	1	15	344	332	332	333	338	339	356	347	348	7	7	356	357	2	6	349	345	335	312	318	351.1
12-Jun	311	306	313	318	338	336	332	330	345	348	358	353	357	2	359	7	16	16	16	9	321	303	8	UO	353.4
13-Jun	119	84	116	123	108	133	139	103	108	3	293	17	323	339	329	130	146	149	239	237	214	206	207	116	176.0
14-Jun	133	138	133	163	199	153	280	12	319	331	353	2	8	2	354	327	345	7	355	343	335	308	335	333	352.8
15-Jun	316	27	304	65	74	50	59	134	137	140	129	47	3	50	38	10	337	126	106	122	307	287	347	80	83.7
16-Jun	132	140	137	128	155	131	99	91	120	127	134	13	312	301	34	17	11	22	25	23	24	24	20	325	49.7
17-Jun	304	336	315	335	335	351	2	326	343	356	346	7	360	352	355	13	5	334	340	349	9	294	281	314	348.1
18-Jun	308	6	69	107	89	355	330	340	26	53	59	353	5	10	355	335	340	355	355	336	311	317	297	353	349.3
19-Jun	288	34	90	350	292	306	317	21	345	352	344	351	352	305	350	19	8	6	26	4	17	1	336	333	352.9
20-Jun	336	305	73	330	337	335	0	356	352	13	33	43	30	63	39	38	42	38	54	109	111	124	334	360	33.4
21-Jun	345	8	4	335	326	321	331	346	340	338	346	358	2	14	30	21	6	16	49	316	321	326	294	297	356.5
22-Jun	190	324	279	320	1	320	354	53	66	32	4	108	127	135	140	136	127	112	172	139	155	153	149	128	126.4
23-Jun	140	144	143	144	141	138	141	138	140	124	290	297	223	147	188	357	22	140	135	147	149	142	153	239	140.3
24-Jun	146	138	143	135	139	130	135	139	131	147	150	149	169	169	156	166	146	160	125	121	133	139	133	135	140.2
25-Jun	146	147	135	108	120	122	137	142	142	134	158	163	157	143	149	148	140	141	138	129	133	144	147	148	140.1
26-Jun	143	137	143	144	145	136	134	133	131	131	151	140	143	145	138	131	134	133	129	128	120	126	139	136	135.1
27-Jun	124	104	104	105	122	103	3	351	41	138	143	140	141	141	137	111	139	142	139	113	147	291	273	294	129.3
28-Jun	290	311	313	318	316	347	347	348	314	319	91	94	79	77	74	77	77	92	86	85	38	292	307	310	60.7
29-Jun	311	296	324	3	355	54	53	327	39	97	335	335	41	52	18	10	21	19	57	65	141	224	134	161	26.3
30-Jun	136	152	120	254	329	351	8	89	122	33	16	11	352	319	323	19	51	68	83	112	113	272	184	144	55.4
	325.3	359.4	16.0	43.0	5.2	3.7	1.0	4.8	359.9	6.5	359.1	357.9	3.1	17.6	14.2	21.0	30.1	48.3	55.1	43.8	27.2	325.0	291.7	311.4	
	Diurnal Average																								

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

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 100 deg on Jun 24 00:00

Minimum Value: 8 deg on Jun 26 21:00

Percentiles: P_1 = 9 P_{10} = 13 Q_1 = 18 Median = 23 Q_3 = 34 P_{90} = 54 P_{99} = 89

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-Jun	21	21	23	22	17	18	16	17	19	21	21	19	19	18	20	20	18	18	18	19	16	19	19	19	23
2-Jun	19	17	18	19	20	20	17	19	19	16	20	33	33	16	16	21	25	15	11	20	69	18	25	17	69
3-Jun	UO	21	15	18	17	14	14	22	22	28	16	16	16	25	22	27	40	19	32	27	87	27	27	17	87
4-Jun	82	57	30	22	37	14	11	10	15	46	41	43	46	48	52	41	45	46	31	26	33	27	29	23	82
5-Jun	35	37	68	25	41	71	52	27	40	15	17	22	16	30	17	28	21	24	73	69	15	21	47	15	73
6-Jun	14	30	39	15	17	14	13	12	12	13	12	13	12	13	13	16	14	22	21	16	21	32	28	30	39
7-Jun	39	49	18	18	23	25	13	20	25	22	17	34	43	48	54	19	21	56	39	25	25	30	26	36	56
8-Jun	25	22	17	22	23	21	22	14	13	12	11	12	12	13	12	11	12	13	12	12	12	12	12	12	25
9-Jun	16	12	12	12	13	13	15	16	18	21	21	22	20	20	19	54	20	26	19	17	38	90	24	16	90
10-Jun	19	18	16	22	23	16	22	27	28	40	56	28	24	20	23	21	15	20	20	22	23	21	21	22	56
11-Jun	22	16	24	19	22	15	15	18	17	20	22	22	23	22	20	23	22	22	21	23	21	23	16	15	24
12-Jun	16	21	17	26	22	16	17	15	21	22	22	23	23	22	22	19	18	18	17	20	28	45	37	UO	45
13-Jun	36	47	36	20	66	14	9	26	20	58	69	89	63	74	74	51	28	23	37	21	23	22	49	43	89
14-Jun	35	33	35	54	36	47	82	23	22	27	28	22	25	25	26	21	25	21	22	19	31	57	72	47	82
15-Jun	52	89	38	74	60	44	42	9	14	9	33	81	56	25	39	38	78	18	14	80	75	47	66	45	89
16-Jun	16	27	28	27	33	20	52	20	24	16	16	86	32	50	33	25	24	18	17	13	14	14	18	22	86
17-Jun	27	27	25	17	34	35	24	24	28	26	26	26	25	25	28	24	22	20	22	37	33	18	15	30	37
18-Jun	30	38	51	48	84	36	15	26	42	38	65	31	28	20	29	21	26	22	22	21	13	20	57	60	84
19-Jun	47	83	94	71	28	24	23	38	32	26	22	31	31	29	26	32	22	22	21	25	23	21	28	19	94
20-Jun	29	47	77	64	49	30	29	25	24	22	23	24	32	33	25	23	24	27	19	22	24	53	72	34	77
21-Jun	33	41	27	19	17	14	20	29	21	19	21	22	20	24	32	19	27	19	13	34	14	34	22	53	53
22-Jun	71	24	15	81	48	22	45	18	11	42	46	41	63	18	14	29	45	43	53	25	31	27	79	48	81
23-Jun	21	23	27	22	18	12	11	10	8	29	50	31	74	82	78	40	89	24	11	24	30	26	79	100	100
24-Jun	26	24	28	24	41	15	14	12	10	30	38	35	49	56	48	56	61	44	14	26	20	28	14	22	61
25-Jun	21	25	14	15	20	11	10	11	10	16	39	41	35	28	34	36	22	18	15	9	27	37	27	21	41
26-Jun	18	19	20	30	30	13	9	10	9	11	26	15	22	20	23	10	19	10	11	10	8	10	14	11	30
27-Jun	12	21	21	13	11	50	18	44	37	45	11	12	11	10	18	24	10	10	10	72	90	38	70	22	90
28-Jun	22	29	24	25	22	43	23	26	12	35	61	25	32	26	24	26	19	20	15	13	58	56	31	39	61
29-Jun	16	23	57	81	28	48	60	29	73	54	30	42	53	23	29	28	29	21	27	20	40	42	43	43	81
30-Jun	23	23	24	96	57	30	38	47	27	61	13	17	37	23	24	32	21	29	14	12	18	68	54	48	96
	82	89	94	96	84	71	82	47	73	61	69	89	74	82	78	56	89	56	73	80	90	90	79	100	
	Diurnal Maximum																								

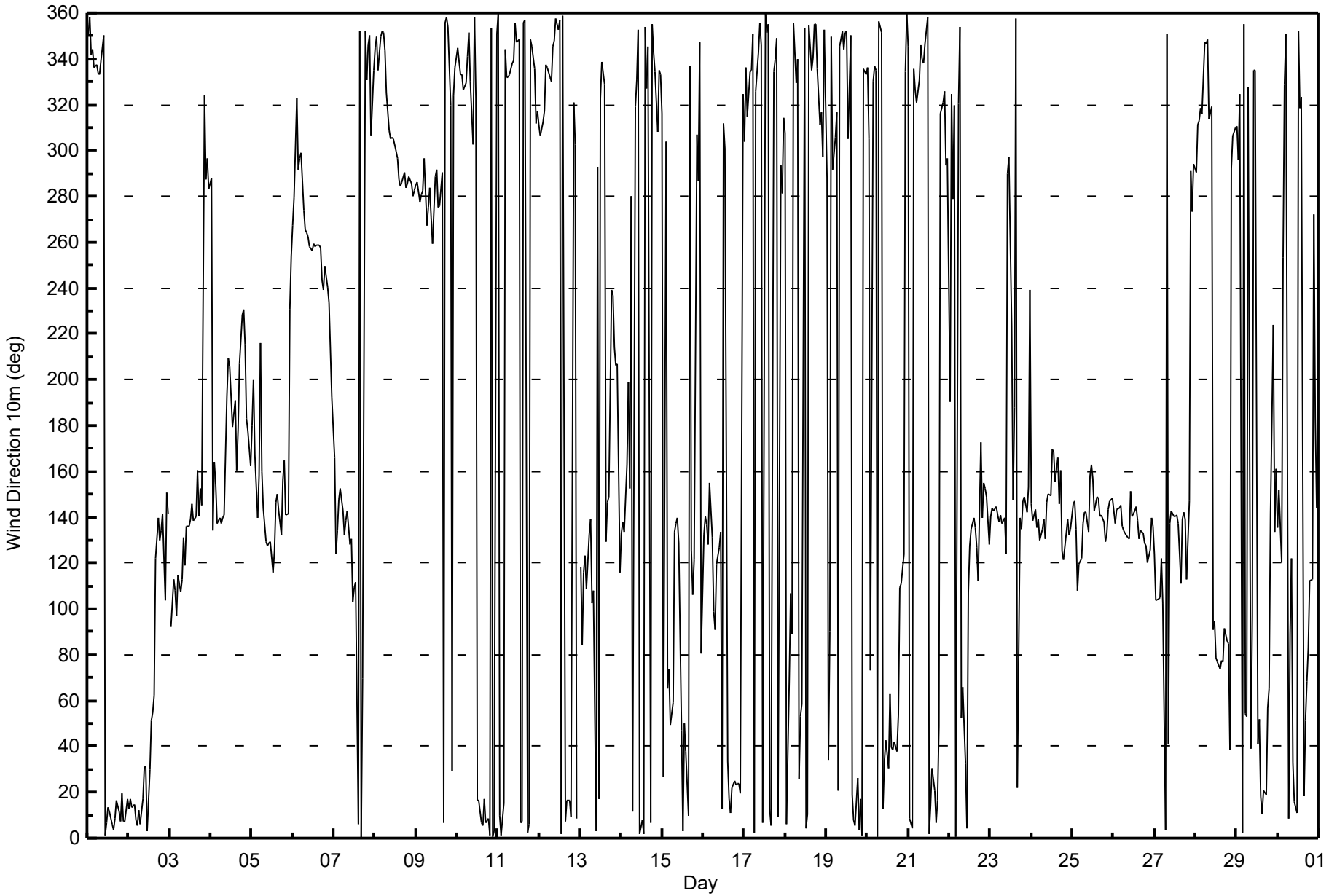
UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Lower Camp - June 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS13
FORT MCKAY SOUTH
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT McKAY SOUTH (AMS13)
JUNE 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	35	36	99.86	-	-	25.1	0	3.3	0
TRS(ppb) Average	685	35	35	100	4.1	0	2.7	0	0.9	0
THC(ppm) Average	684	35	36	99.86	-	-	3.1	-	2.4	-
NMHC(ppm) Average	684	35	36	99.86	-	-	0.589	-	0.19	-
CH4(ppm) Average	684	35	36	99.86	-	-	2.6	-	2.2	-
O3(ppb) Average	686	33	34	99.86	-	-	62.1	0	33.7	-
NO2(ppb) Average	645	35	75	94.44	-	-	26	0	8.3	-
NO(ppb) Average	645	35	75	94.44	-	-	25.3	-	6.1	-
NOX(ppb) Average	645	35	75	94.44	-	-	49.1	-	14.3	-
PM2.5(ug/m3) Average	717	1	3	99.72	-	-	100.4	8	57.2	2
ET(C) Average	720	0	0	100	-	-	31.5	-	23.5	-
RH(%) Average	720	0	0	100	-	-	99.6	-	95.7	-
WS(km/h) Average	709	0	11	98.47	-	-	23	-	12	-
WD(deg) Average	709	0	11	98.47	-	-	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT McKAY SOUTH (AMS13)
JUNE 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	0.64	2.3	-	0	0	0	0.1	0.2	1.1	25.1
TRS(ppb) Average	685	0.56	0.3	-	0.2	0.3	0.4	0.4	0.6	1	2.7
THC(ppm) Average	684	2.13	0.2	-	1.9	2	2	2.1	2.2	2.4	3.1
NMHC(ppm) Average	684	0.075	0.078	-	0	0	0	0.1	0.1	0.2	0.589
CH4(ppm) Average	684	2.06	0.1	-	1.9	2	2	2	2.1	2.2	2.6
O3(ppb) Average	686	22.86	14	-	0.3	3.5	12	21.6	32.9	41.8	62.1
NO2(ppb) Average	645	3.89	4.1	-	0	0.4	1.1	2.5	5.2	9	26
NO(ppb) Average	645	1.45	3.4	-	0	0	0	0.2	1	3.9	25.3
NOX(ppb) Average	645	5.34	6.8	-	0	0.5	1.2	3	6.5	12.7	49.1
PM2.5(ug/m3) Average	717	8.72	14.2	-	0.6	1.5	2.6	4.4	8	15.1	100.4
Temperature 2 m (C) Average	720	16.15	6.2	-	4.8	9.1	11.5	14.8	20	25.5	31.5
Relative Humidity (%) Average	720	64.93	21.8	-	22.8	32.7	47.8	67.5	82.9	94.5	99.6
Wind Speed 10 m (km/h) Average	709	8	5	-	0	2	4	7	11	15	23
Wind Direction 10 m (deg) Average	709	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT McKAY SOUTH (AMS13)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
AIR QUALITY ANALYZERS	24 Jun 2026 12:00	24 Jun 2026 12:00	1	Maintenance - sample manifold cleaned
NO2/NO/NOx	01 Jun 2026 01:00	01 Jun 2026 10:00	10	Unstable Operation - inconsistent response
NO2/NO/NOx	01 Jun 2026 14:00	02 Jun 2026 10:00	21	Maintenance - stabilization post maintenance
NO2/NO/NOx	17 Jun 2026 08:00	17 Jun 2026 15:00	8	Maintenance - station operator activities
PM2.5	27 Jun 2026 01:00	27 Jun 2026 01:00	1	DAS Failure - data not recorded
Wind Speed, Wind Direction	01 Jun 2026 01:00	01 Jun 2026 10:00	10	Unstable Operation - inconsistent response
Wind Speed, Wind Direction	01 Jun 2026 11:00	01 Jun 2026 11:00	1	Maintenance - station operator activities

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Fort McKay South - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 25.1 ppb on Jun 30 11:00 Maximum Daily Average: 3.3 ppb on Jun 30

Minimum Value: 0.0 ppb on Jun 1 20:00 Minimum Daily Average: 0.0 ppb on Jun 9
Maximum Diurnal Average: 2.7 ppb at hour 11 Minimum Diurnal Average: 0.0 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 = 0.2 P_{90} = 1.1 P_{99} = 13.5

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-Jun	0.0	0.0	0.0	0.0	Z	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	0.0	0.0	0.0	0.0	0.0	0.2
2-Jun	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	0.1	0.1	0.0	0.1
3-Jun	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	C	C	C	C	C	10.4	3.6	1.5	5.3	5.2	0.9	0.2	0.1	0.1	1.6	10.4
4-Jun	0.0	Z	0.1	0.0	0.1	0.3	0.7	1.4	2.4	1.1	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.4
5-Jun	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.2	1.0	1.2	6.3	7.8	4.2	2.0	6.2	12.7	7.7	2.9	1.1	0.6	0.4	0.2	2.4	12.7
6-Jun	0.1	0.1	0.2	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	0.2
7-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.2	0.9	3.2	4.0	17.0	7.6	2.9	2.0	1.8	0.9	0.4	0.2	0.1	0.1	0.1	0.1	0.0	0.0	1.8	17.0
8-Jun	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
9-Jun	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-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
11-Jun	0.0	0.1	Z	0.1	0.0	0.5	0.5	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	0.2	0.1	0.5
12-Jun	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	0.0	0.0	0.2
13-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.2	0.5	0.3	0.1	0.1	0.1	1.5	1.4	1.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	1.5
14-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.4	0.4	1.1	0.9	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	0.2	1.1
15-Jun	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.2	3.6	2.6	3.0	1.6	0.5	0.7	0.8	0.7	0.8	0.7	0.4	0.3	0.2	0.1	0.1	0.1	0.7	3.6
16-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.0	0.0	0.5	12.9	13.9	1.4	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.3	13.9
17-Jun	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	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2
18-Jun	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.4	0.1	0.0	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.4
19-Jun	0.1	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.2
20-Jun	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	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1
21-Jun	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	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
22-Jun	0.0	Z	0.1	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	0.2	0.3	0.8	0.5	0.2	0.1	0.1	0.1	0.2	0.8
23-Jun	0.1	0.0	Z	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	0.6	1.2	0.6	0.2	0.1	0.1	0.1	0.2	1.2
24-Jun	0.1	0.1	0.1	Z	0.1	0.2	0.7	1.6	4.9	1.1	0.3	M	2.3	3.6	2.2	2.0	1.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.0	4.9
25-Jun	0.1	0.1	0.1	0.1	Z	0.2	0.7	1.5	5.7	15.7	10.2	0.7	1.2	1.7	1.4	1.5	0.6	0.8	0.8	0.4	0.2	0.2	0.6	0.5	2.0	15.7
26-Jun	0.2	0.2	0.1	0.1	0.1	Z	0.7	6.6	13.8	16.4	4.3	2.3	2.5	1.5	1.2	2.4	1.9	0.1	0.1	0.1	0.1	0.3	0.2	0.2	2.4	16.4
27-Jun	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.1	0.2	1.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	1.1
28-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.5	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5
29-Jun	0.1	0.1	Z	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	12.7	1.9	0.8	0.9	12.7
30-Jun	0.2	0.1	0.1	Z	0.1	0.1	0.1	1.5	17.5	12.7	25.1	13.5	2.2	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	3.3	25.1
	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.6	1.8	2.4	2.7	1.1	0.7	0.7	0.5	0.8	0.6	0.6	0.6	0.4	0.1	0.5	0.1	0.1	Diurnal Average	
	0.2	0.2	0.2	0.1	0.2	0.5	0.7	6.6	17.5	16.4	25.1	13.5	6.3	7.8	4.2	10.4	6.2	12.7	7.7	5.2	1.1	12.7	1.9	0.8	Diurnal Maximum	

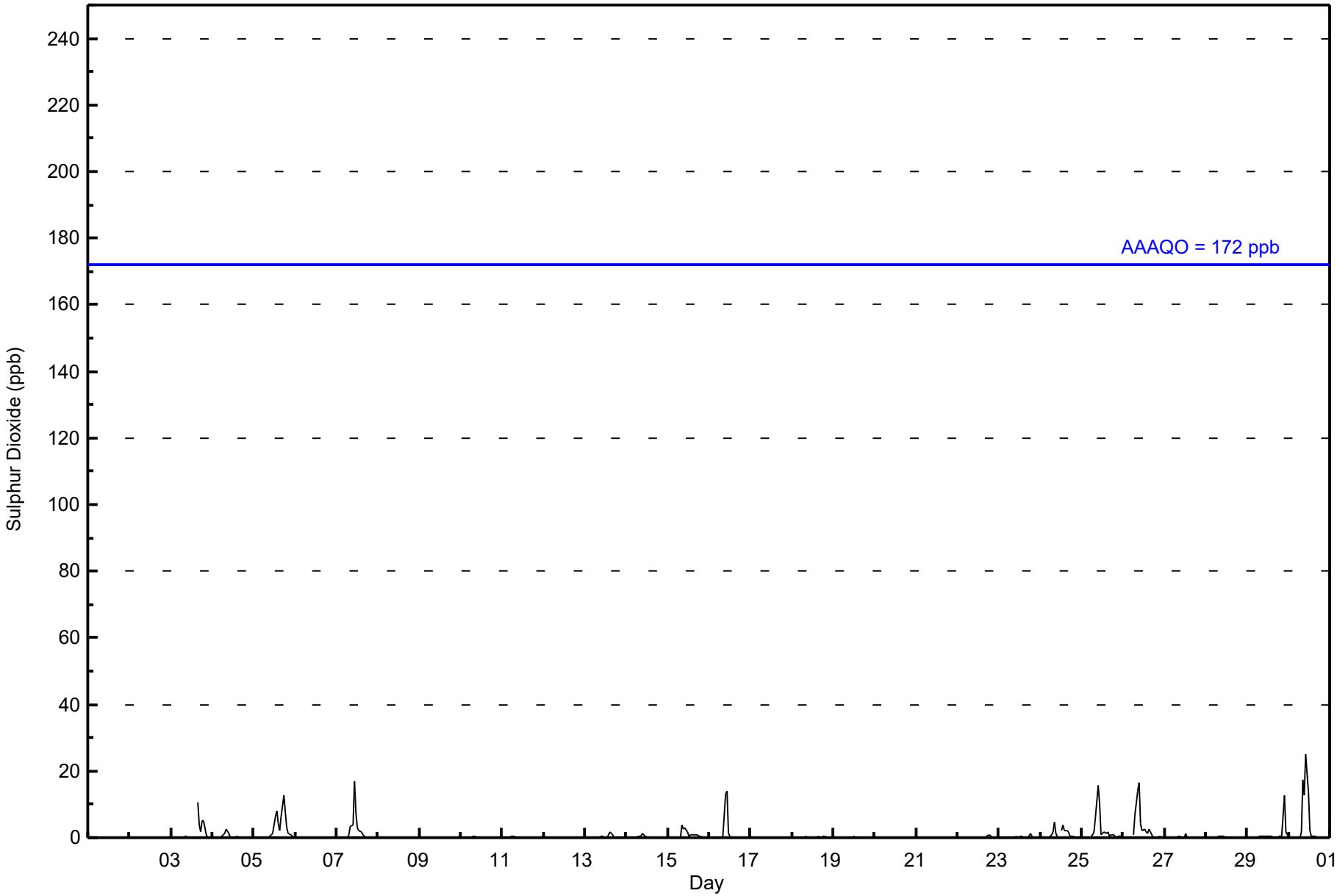
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Fort McKay South - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	672	98.25	98.25
11 - 20	11	1.61	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: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Fort McKay South - June 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	122	98	29	7	8	12	19	69	36	57	23	27	34	34	32	55	662
11 - 20	0	1	0	0	0	0	3	4	2	1	0	0	0	0	0	0	11
21 - 60	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
61 - 110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111 - 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	122	99	29	7	8	13	22	73	38	58	23	27	34	34	32	55	674

Total Number of Valid Hours: 674

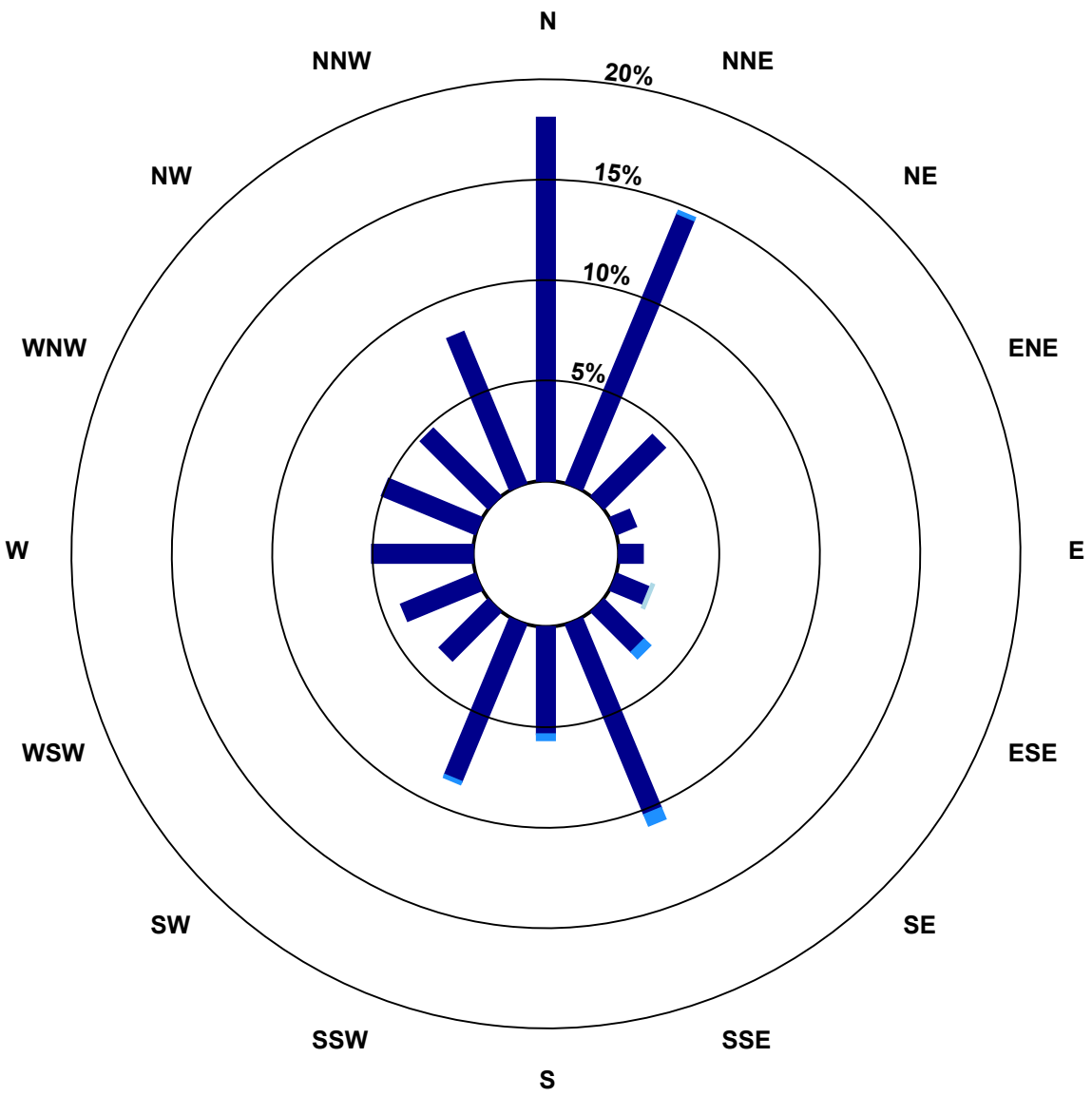
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Fort McKay South



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

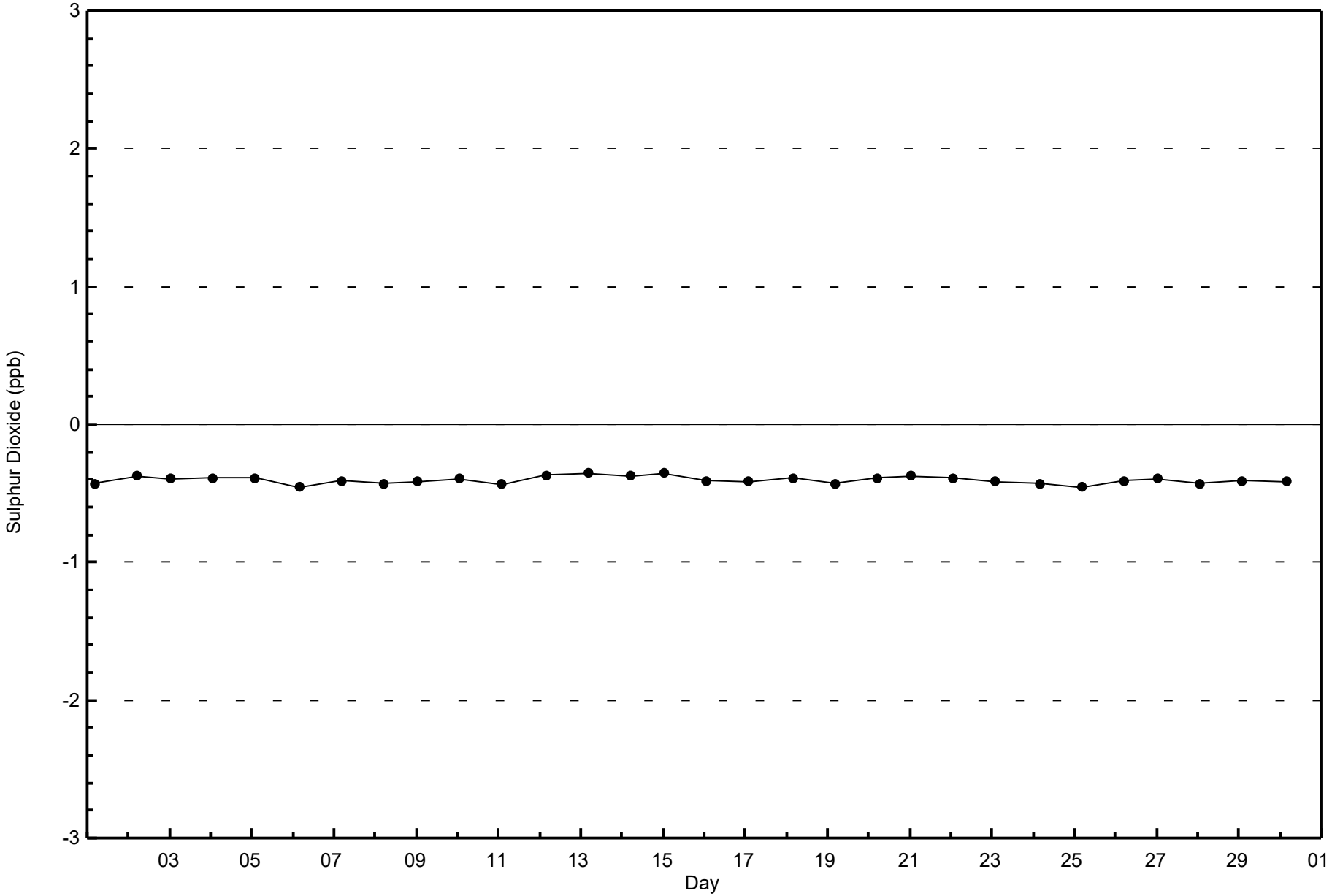
Total Number of Valid Hours: 674

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Fort McKay South - June 2026

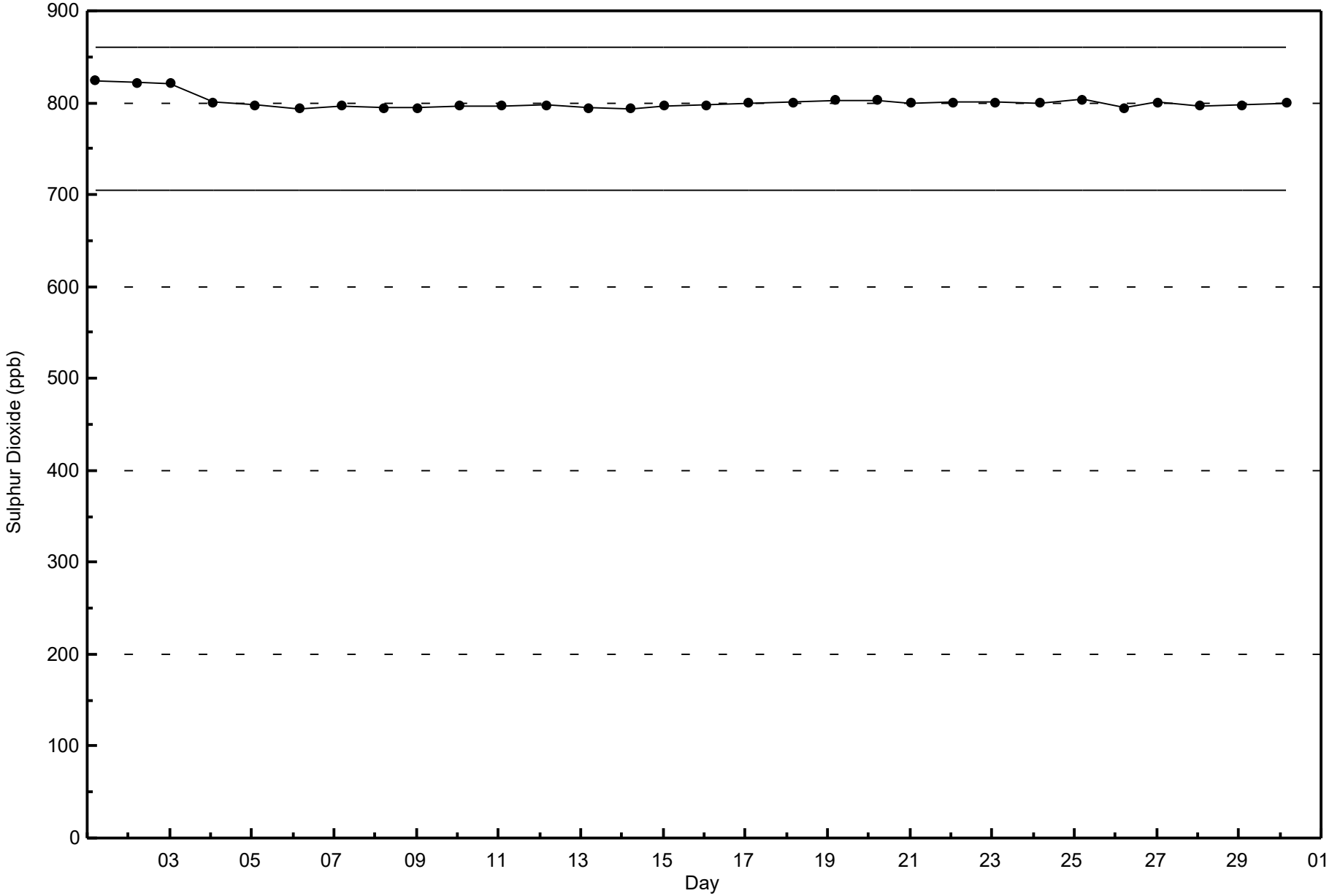


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Fort McKay South - June 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Fort McKay South - June 2026

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

Maximum Value: 4.1 ppb on Jun 16 10:00 Maximum Daily Average: 0.9 ppb on Jun 24

Minimum Value: 0.2 ppb on Jun 28 15:30 Minimum Daily Average: 0.4 ppb on Jun 8

Maximum Diurnal Average: 0.8 ppb at hour 6 Minimum Diurnal Average: 0.4 ppb at hour 17

Monthly Average: 0.56 ppb Percentiles: P_1 = 0.2 P_{10} = 0.3 Q_1 = 0.4 Median = 0.4 Q_3 = 0.6 P_{90} = 1.0 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

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-Jun	0.5	0.5	0.5	0.5	0.5	Z	0.6	0.6	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.6
	0.5	0.5	0.5	0.5	0.5	SP	0.5	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4		
2-Jun	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.5	0.5	0.5	0.4	0.4	0.6
	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	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4		
3-Jun	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.7	0.5	0.5	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.7
	0.4	SP	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.6	0.6	0.4	0.5	0.5	0.4	0.4	0.5	0.5	0.5		
4-Jun	0.5	0.4	Z	0.4	0.6	0.8	0.8	0.9	0.8	0.6	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.5	0.8	0.6	0.6	1.2
	0.4	0.4	SP	0.5	0.7	1.2	0.7	1.0	0.9	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.8	0.6	1.2		
5-Jun	1.4	0.4	0.5	Z	0.5	0.5	0.5	0.5	0.5	0.6	0.9	0.4	0.4	0.4	0.4	0.3	0.4	0.9	0.9	1.8	0.6	0.6	0.7	0.4	0.6	1.8
	0.6	0.4	0.5	SP	0.5	0.5	0.5	0.5	0.6	0.7	0.6	0.4	0.4	0.4	0.4	0.3	0.6	1.1	0.9	0.9	0.6	0.6	0.6	0.4		
6-Jun	0.4	0.4	0.5	0.8	Z	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.9
	0.3	0.4	0.5	0.9	SP	0.5	0.4	0.3	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	0.3	0.3	0.3		
7-Jun	0.3	0.3	0.3	0.3	0.5	Z	0.6	1.0	0.8	0.6	0.7	0.5	0.5	0.6	0.7	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	1.1
	0.3	0.3	0.3	0.3	0.9	SP	1.0	1.1	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4		
8-Jun	Z	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
	SP	0.4	0.4	0.4	0.3	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	0.4	0.4	0.4	0.4	0.4	0.4		
9-Jun	0.4	Z	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5
	0.4	SP	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	0.5	0.5	0.5	0.5			
10-Jun	0.5	0.5	Z	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
	0.5	0.4	SP	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3		
11-Jun	0.4	0.4	0.3	Z	0.4	0.5	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	0.4	0.6
	0.4	0.4	0.3	SP	0.4	0.6	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	0.3	0.4	0.4		
12-Jun	0.4	0.4	0.4	0.5	Z	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	0.3	0.4	0.4	0.5	0.6	0.5	0.4	0.6
	0.4	0.4	0.4	0.5	SP	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5		
13-Jun	0.5	0.5	0.5	0.5	0.6	Z	0.5	0.5	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.4	0.9
	0.5	0.5	0.5	0.6	0.9	SP	0.5	0.5	0.4	0.5	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.6	0.5	0.6	0.7		
14-Jun	Z	0.6	0.5	0.4	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.7	0.6	0.8	0.5	0.8
	SP	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.4	0.4	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.6	0.7	0.7	0.8		
15-Jun	0.7	Z	1.2	1.2	1.1	1.2	0.8	0.7	1.3	1.1	1.0	0.8	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.7	1.3
	1.0	SP	1.2	1.2	1.0	1.1	0.8	0.8	1.2	0.7	1.0	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.7	0.6	0.6		

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Fort McKay South - June 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-Jun	0.6	0.6	Z	0.5	0.5	0.9	0.6	0.4	0.4	1.4	2.3	0.8	0.5	0.4	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.5	0.5	0.6	4.1
	0.7	0.8	SP	0.5	0.6	1.2	0.4	0.4	0.6	4.1	1.2	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.6		
17-Jun	0.7	1.1	0.8	Z	1.0	1.1	0.8	0.7	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.7	0.7	0.8	0.6	1.1
	0.8	1.0	0.8	SP	1.1	0.8	0.8	0.6	0.4	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.6	0.8	0.8	0.8		
18-Jun	0.7	1.0	1.0	0.9	Z	1.4	1.1	0.8	0.7	0.5	0.4	0.3	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	1.4
	0.8	1.0	1.2	0.7	SP	1.3	0.9	0.7	0.6	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.6		
19-Jun	0.6	0.5	0.6	0.7	0.7	Z	0.7	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.8	0.5	0.9
	0.5	0.6	0.7	0.8	0.6	SP	0.7	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	0.5	0.8	0.9		
20-Jun	Z	0.9	1.0	0.8	0.7	0.7	0.8	0.6	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	1.0
	SP	0.7	0.9	0.8	0.7	0.7	0.7	0.6	0.5	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4		
21-Jun	0.5	Z	0.6	0.7	0.8	1.0	0.8	0.8	0.9	0.9	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.7	0.6	0.6	1.0
	0.5	SP	0.6	0.8	0.9	0.9	0.8	0.8	0.9	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.6		
22-Jun	0.6	0.7	Z	0.9	0.8	0.6	0.9	1.0	0.7	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.5	0.6	0.8	0.6	1.0
	0.7	0.7	SP	0.8	0.8	0.7	1.0	0.7	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.7	0.8		
23-Jun	0.8	1.2	1.1	Z	1.2	1.1	0.9	0.5	0.5	0.5	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.6	0.4	0.6	0.6	1.2	1.6	0.7	1.9
	1.2	1.1	1.3	SP	1.1	1.0	0.5	0.5	0.5	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.9	0.5	0.6	0.8	1.5	1.9		
24-Jun	1.7	1.5	1.1	1.3	Z	1.4	1.6	2.1	0.9	C	C	C	C	C	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.4	1.1	1.5	0.9	2.1
	1.7	1.3	1.2	1.2	SP	1.5	1.7	1.5	0.8	C	C	C	C	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.6	1.2	1.7		
25-Jun	1.8	2.0	1.6	1.6	1.6	Z	1.1	1.0	1.2	1.9	1.8	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.3	0.4	0.9	1.2	0.9	2.0
	2.0	1.8	1.6	1.3	1.5	SP	0.9	1.1	1.6	1.9	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	1.3	0.8		
26-Jun	Z	0.6	0.6	0.9	1.1	1.3	0.9	1.0	1.9	2.3	0.8	0.5	0.5	0.4	0.4	0.4	0.5	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.7	2.3
	SP	0.6	0.8	1.1	1.2	1.3	0.7	1.5	2.3	1.7	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.5	0.5	0.5		
27-Jun	0.5	Z	0.6	0.5	0.8	0.8	0.7	0.5	0.5	0.5	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.5	0.5	0.5	0.5	0.6	0.7	0.5	1.2
	0.4	SP	0.6	0.7	0.8	1.2	0.5	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.6	0.5	0.4	0.6	0.7	0.8		
28-Jun	0.9	1.0	Z	1.4	1.5	1.3	1.0	0.9	1.1	1.0	0.6	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.4	0.6	0.6	1.6
	1.0	0.9	SP	1.6	1.4	1.1	0.9	1.1	1.0	0.7	0.4	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.5	0.7		
29-Jun	0.8	1.0	1.0	Z	1.3	1.0	1.1	1.0	0.8	0.6	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.5	0.7	0.6	1.5
	0.9	1.0	1.1	SP	1.1	1.5	0.9	0.9	0.8	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.8		
30-Jun	0.8	0.8	0.8	0.9	Z	1.6	1.1	0.9	1.8	1.7	1.3	1.0	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.6	0.8	1.8
	0.8	0.8	0.9	0.9	SP	1.8	1.0	1.4	1.6	1.3	1.1	0.8	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.7		
	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.7	Diurnal Average	
	2.0	2.0	1.6	1.6	1.6	1.8	1.7	2.1	2.3	4.1	2.3	1.0	0.6	0.6	0.7	0.6	0.6	1.1	0.9	1.8	0.6	0.8	1.5	1.9	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 - June 2026

Maximum Value: 2.7 ppb on Jun 16 10:00

Maximum Daily Average: 0.9 ppb on Jun 24

Minimum Value: 0.2 ppb on Jun 28 16:00

Minimum Daily Average: 0.4 ppb on Jun 8

Maximum Diurnal Average: 0.8 ppb at hour 6

Minimum Diurnal Average: 0.4 ppb at hour 17

Monthly Average: 0.56 ppb

Percentiles: P_1 = 0.3 P_{10} = 0.3 Q_1 = 0.4 Median = 0.4 Q_3 = 0.6 P_{90} = 1.0 P_{99} = 1.8

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-Jun	0.5	0.5	0.5	0.5	0.5	Z	0.5	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.6
2-Jun	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	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.5	0.5	0.5	0.4	0.4	0.6
3-Jun	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.6	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.6
4-Jun	0.4	0.4	Z	0.4	0.7	1.0	0.8	0.9	0.9	0.6	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.6	0.7	0.9	0.6	1.0
5-Jun	1.0	0.4	0.5	Z	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.4	0.4	0.4	0.4	0.3	0.5	1.0	0.9	1.4	0.6	0.6	0.6	0.4	0.6	1.4
6-Jun	0.4	0.4	0.5	0.9	Z	0.5	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.9
7-Jun	0.3	0.3	0.3	0.3	0.7	Z	0.8	1.1	0.7	0.6	0.6	0.5	0.5	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	1.1
8-Jun	Z	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
9-Jun	0.4	Z	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.5
10-Jun	0.5	0.5	Z	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
11-Jun	0.4	0.4	0.3	Z	0.4	0.6	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	0.3	0.4	0.4	0.4	0.6
12-Jun	0.4	0.4	0.4	0.5	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.5
13-Jun	0.5	0.5	0.5	0.6	0.7	Z	0.5	0.5	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.5	0.5	0.6	0.6	0.4	0.7
14-Jun	Z	0.6	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.7	0.7	0.8	0.5	0.8
15-Jun	0.9	Z	1.2	1.2	1.1	1.1	0.8	0.7	1.3	0.9	1.0	0.7	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.7	1.3
16-Jun	0.7	0.7	Z	0.5	0.5	1.1	0.5	0.4	0.5	2.7	1.7	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	2.7
17-Jun	0.8	1.1	0.8	Z	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.8	0.7	0.8	0.6	1.1
18-Jun	0.7	1.0	1.1	0.8	Z	1.3	1.0	0.7	0.6	0.5	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	1.3
19-Jun	0.5	0.6	0.7	0.7	0.7	Z	0.7	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	0.5	0.7	0.8	0.5	0.8
20-Jun	Z	0.8	0.9	0.8	0.7	0.7	0.7	0.6	0.5	0.4	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.9
21-Jun	0.5	Z	0.6	0.7	0.9	0.9	0.8	0.8	0.9	0.8	0.6	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	0.9
22-Jun	0.7	0.7	Z	0.8	0.8	0.7	0.9	0.9	0.6	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.5	0.6	0.8	0.6	0.9
23-Jun	1.0	1.1	1.2	Z	1.1	1.1	0.7	0.5	0.5	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.7	0.5	0.6	0.7	1.3	1.7	0.7	1.7
24-Jun	1.7	1.4	1.2	1.2	Z	1.4	1.6	1.8	0.9	C	C	C	C	C	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.5	1.2	1.6	0.9	1.8
25-Jun	1.9	1.9	1.6	1.4	1.5	Z	1.0	1.1	1.4	1.9	1.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	1.1	1.0	0.9	1.9
26-Jun	Z	0.6	0.7	1.0	1.2	1.3	0.8	1.2	2.1	2.0	0.7	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.5	0.4	0.6	0.7	2.1
27-Jun	0.4	Z	0.6	0.6	0.8	1.0	0.6	0.5	0.5	0.5	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.3	0.6	0.5	0.5	0.5	0.7	0.8	0.5	1.0
28-Jun	0.9	0.9	Z	1.5	1.5	1.2	0.9	1.0	1.0	0.9	0.5	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.5	0.7	0.6	1.5
29-Jun	0.8	1.0	1.0	Z	1.2	1.2	1.0	0.9	0.8	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.5	0.7	0.6	1.2
30-Jun	0.8	0.8	0.9	0.9	Z	1.7	1.0	1.2	1.7	1.5	1.2	0.9	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.7	0.8	1.7
	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.7	Diurnal Average	
	1.9	1.9	1.6	1.5	1.5	1.7	1.6	1.8	2.1	2.7	1.7	0.9	0.6	0.6	0.6	0.5	0.5	1.0	0.9	1.4	0.6	0.8	1.3	1.7	Diurnal Maximum	

Z - zerospan C - Calibration

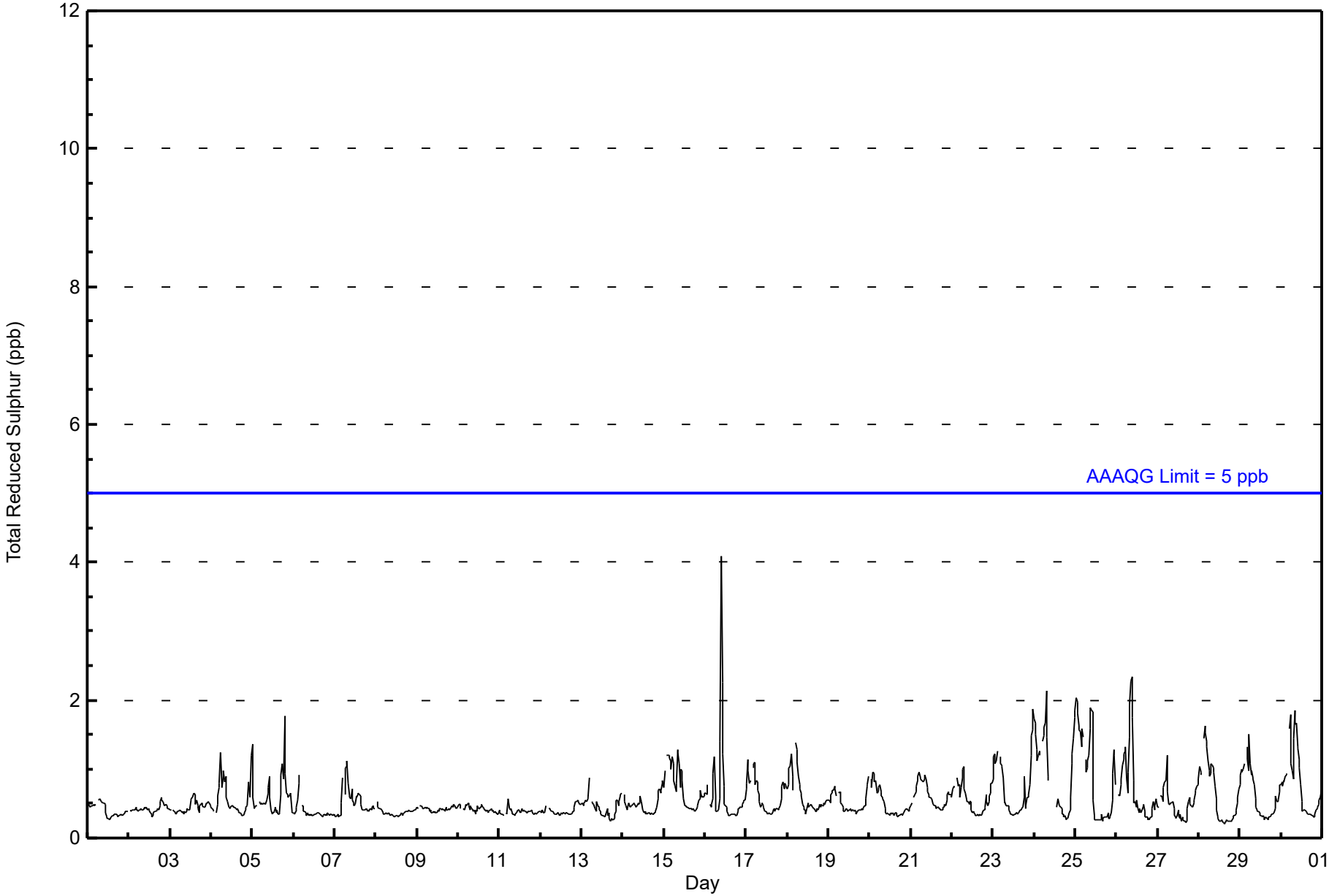
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Fort McKay South - June 2026



Total Reduced Sulphur (TRS) - ppb
Fort McKay South - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	684	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Reduced Sulphur (TRS) - ppb

Fort McKay South - June 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	124	98	29	7	8	12	22	74	36	57	25	23	35	36	29	59	674
3 - 4	0	0	0	0	0	0	0	1	0	0	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	124	98	29	7	8	12	22	75	36	57	25	23	35	36	29	59	675

Total Number of Valid Hours: 675

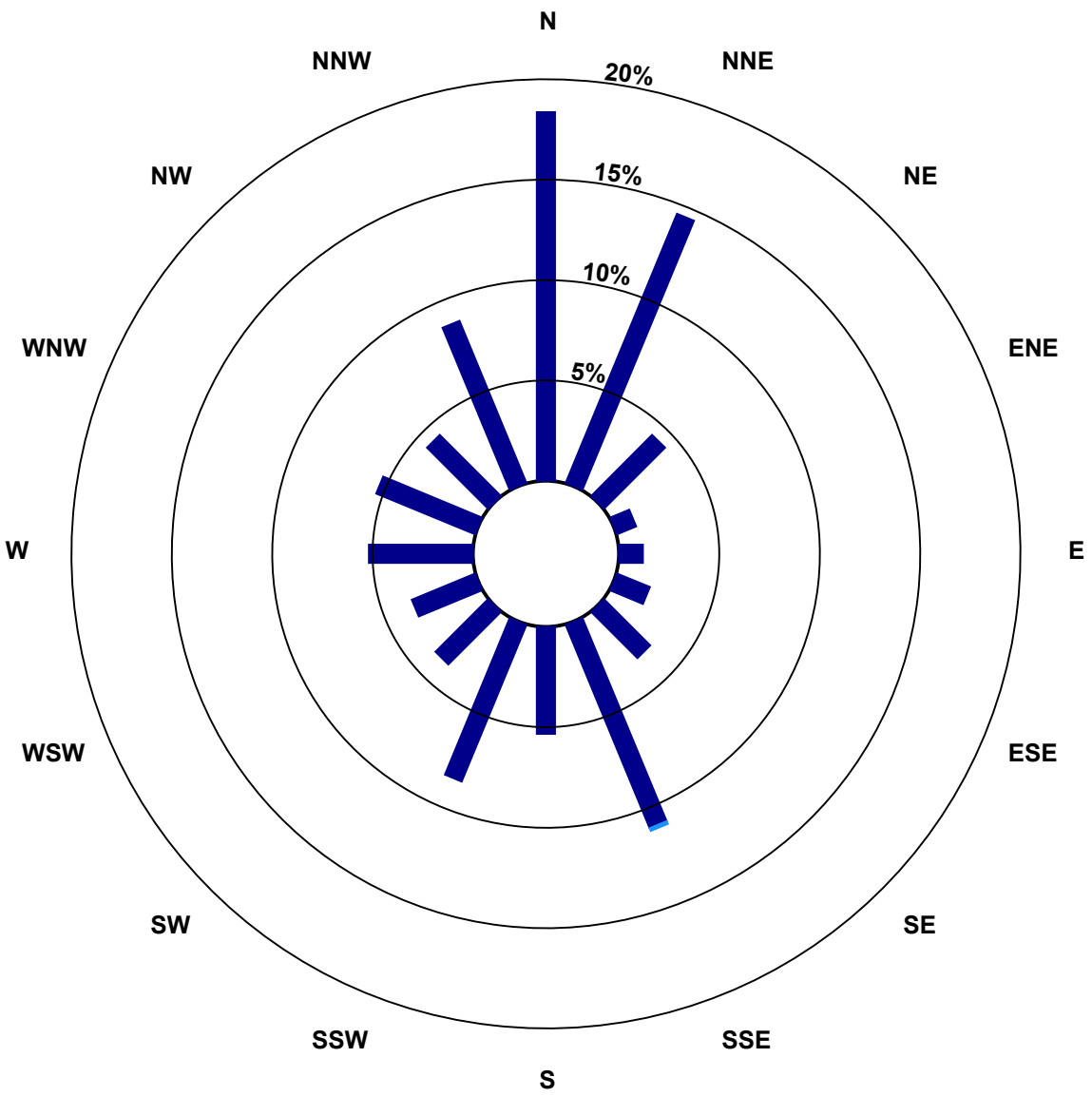
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Reduced Sulphur (TRS) - ppb

Fort McKay South



Classes (ppb)

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

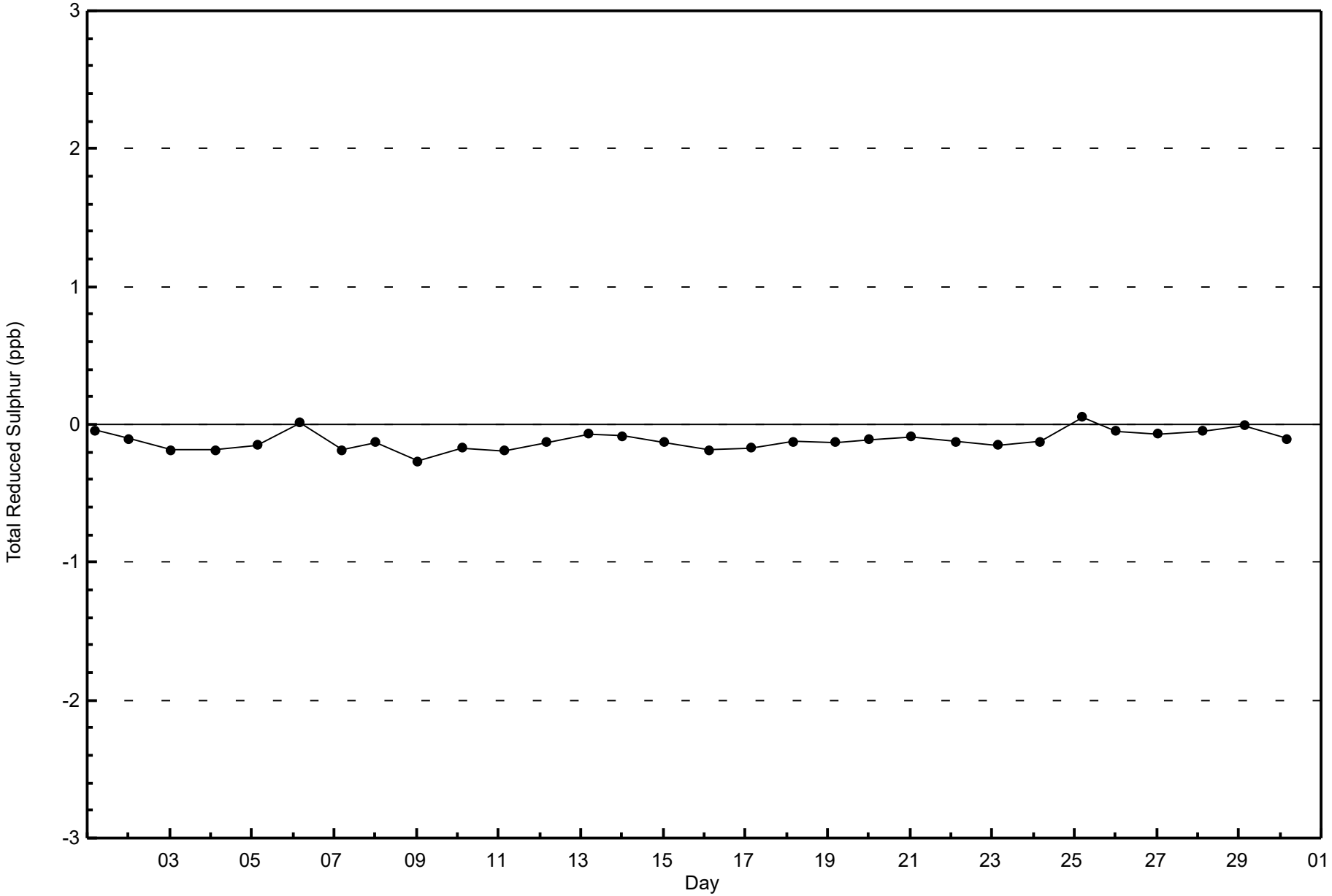
Total Number of Valid Hours: 675

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Fort McKay South - June 2026

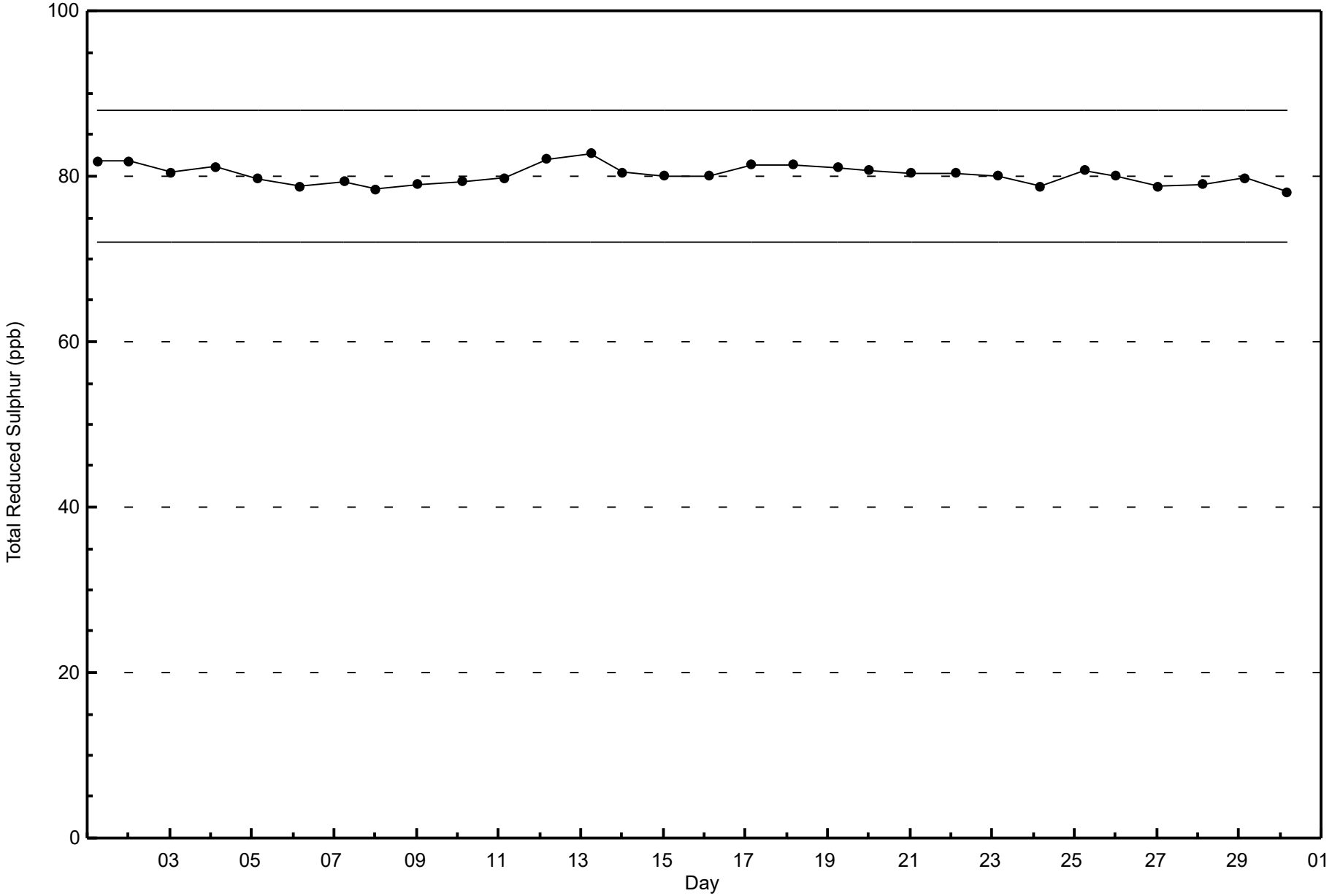


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Fort McKay South - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Fort McKay South - June 2026

Maximum Value: 3.1 ppm on Jun 28 08:00

Maximum Daily Average: 2.4 ppm on Jun 29

Minimum Value: 1.9 ppm on Jun 8 21:00

Minimum Daily Average: 2.0 ppm on Jun 8

Maximum Diurnal Average: 2.3 ppm at hour 6

Minimum Diurnal Average: 2.0 ppm at hour 17

Monthly Average: 2.13 ppm

Percentiles: P_1 = 1.9 P_{10} = 2.0 Q_1 = 2.0 Median = 2.1 Q_3 = 2.2 P_{90} = 2.4 P_{99} = 2.8

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-Jun	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	2.1	2.1	2.0	2.0	2.1
2-Jun	2.0	2.0	2.0	2.0	2.0	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	2.0	2.0	2.0	2.0	2.0	2.0	2.1
3-Jun	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	C	C	C	C	C	2.3	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.3
4-Jun	2.0	Z	2.1	2.2	2.5	2.8	2.5	2.9	2.6	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.4	2.2	2.9
5-Jun	2.4	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	2.5	2.3	2.3	2.4	2.1	2.2	2.5
6-Jun	2.0	1.9	2.2	Z	2.1	1.9	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	2.0	2.0	2.0	2.1	2.0	2.2
7-Jun	2.1	2.1	2.1	2.1	Z	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.1	2.2
8-Jun	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	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.1
9-Jun	Z	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.2	2.2	2.2	2.1	2.1	2.0	2.2
10-Jun	2.1	Z	2.2	2.2	2.2	2.1	2.2	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2
11-Jun	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	2.0	2.2
12-Jun	2.1	2.0	2.0	Z	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.0	2.2
13-Jun	2.1	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.1	2.0	2.0	2.0	2.2	2.2	2.3	2.4	2.1	2.4
14-Jun	2.4	2.2	2.0	2.0	2.0	Z	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.4
15-Jun	Z	2.3	2.4	2.4	2.6	2.6	2.5	2.3	2.4	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	2.4	2.2	2.6
16-Jun	2.4	Z	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.4
17-Jun	2.2	2.1	Z	2.0	2.0	2.3	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	2.2	2.1	2.5
18-Jun	2.2	2.2	2.2	Z	2.3	2.2	2.1	2.2	2.2	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.3
19-Jun	2.0	2.0	2.0	2.0	Z	2.0	2.0	2.1	2.2	2.1	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.2
20-Jun	2.2	2.1	2.1	2.1	2.2	Z	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	2.2	2.2	2.2	2.1	2.4
21-Jun	Z	2.3	2.4	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.3	2.2	2.1	2.2	2.1	2.0	2.1	2.1	2.1	2.1	2.3	2.3	2.3	2.3	2.3	2.5
22-Jun	2.4	Z	2.5	2.4	2.3	2.3	2.5	2.7	2.4	2.3	2.4	2.3	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	2.7
23-Jun	2.2	2.2	Z	2.2	2.3	2.3	2.2	2.4	2.2	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.3	2.4	2.2	2.4
24-Jun	2.4	2.4	2.5	Z	2.6	2.6	2.7	2.4	2.3	2.3	2.1	M	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.2	2.2	2.3	2.7
25-Jun	2.3	2.2	2.2	2.3	Z	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	2.1	2.2	2.3	2.2	2.2	2.5
26-Jun	2.1	2.1	2.1	2.2	2.2	Z	2.2	2.2	2.3	2.2	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.3
27-Jun	Z	2.1	2.0	2.0	2.1	2.2	2.3	2.3	2.3	2.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.4
28-Jun	2.2	Z	2.2	2.4	2.6	2.8	2.8	3.1	3.1	2.8	2.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.4	2.4	2.4	3.1
29-Jun	2.5	2.5	Z	2.6	2.6	2.8	2.9	2.8	2.9	2.4	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.2	2.3	2.4	2.9
30-Jun	2.3	2.3	2.3	Z	2.3	2.5	2.3	2.4	2.4	2.5	2.2	2.2	2.1	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.2	2.5
	2.2	2.1	2.2	2.2	2.2	2.3	2.2	2.3	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	2.1	2.1	2.2	Diurnal Average	
	2.5	2.5	2.5	2.6	2.6	2.8	2.9	3.1	3.1	2.8	2.4	2.3	2.2	2.3	2.2	2.3	2.1	2.2	2.2	2.5	2.3	2.3	2.4	2.4	Diurnal Maximum	

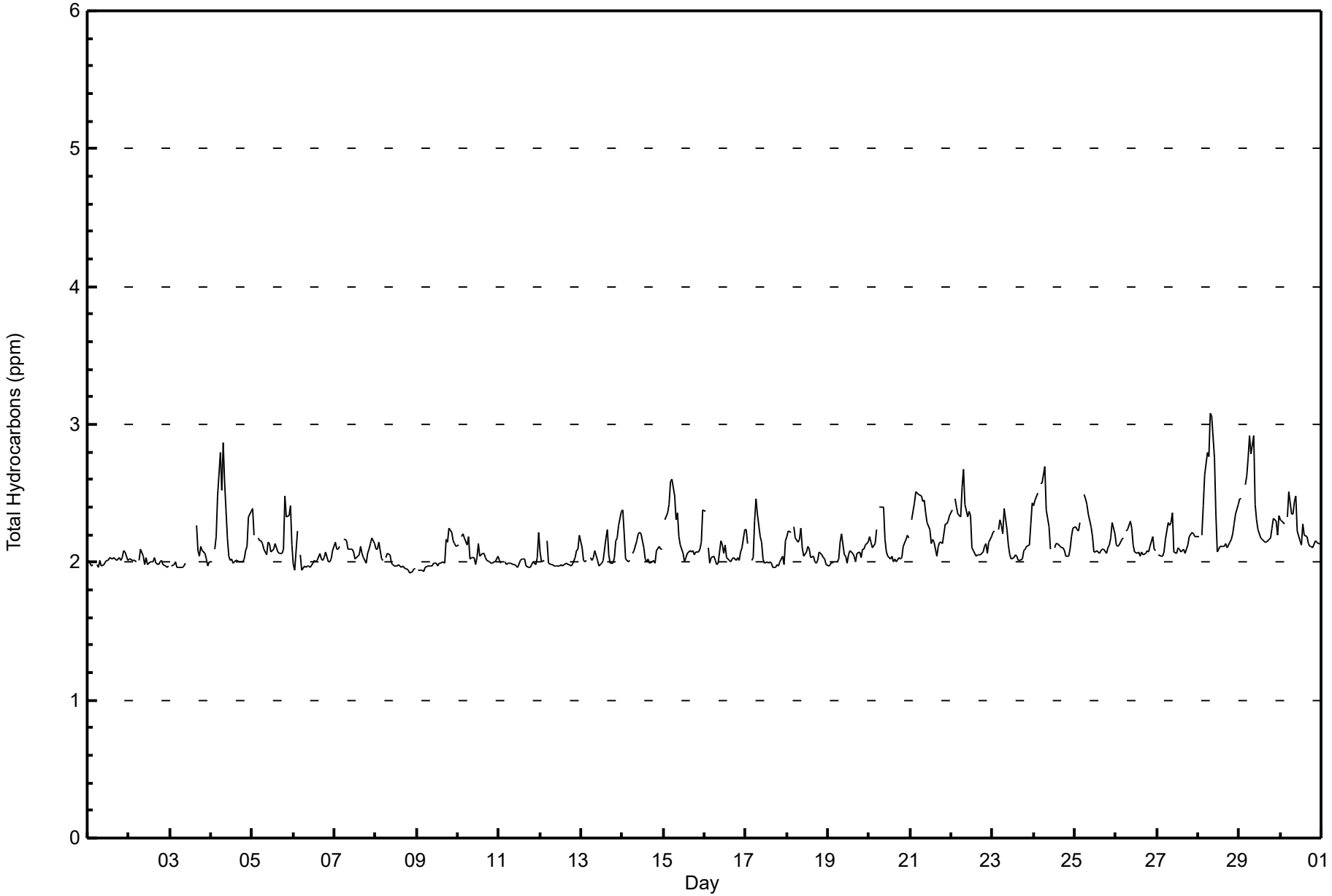
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Fort McKay South - June 2026



Total Hydrocarbons (THC) - ppm
Fort McKay South - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	275	40.20	40.20
2.1 - 3.0	407	59.50	99.71
3.1 - 10.0	2	0.29	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

Fort McKay South - June 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	66	47	10	2	4	8	6	11	7	14	10	14	26	17	8	15	265
2.1 - 3.0	56	50	19	5	4	5	16	62	31	44	13	13	8	17	24	40	407
3.1 - 10.0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	122	99	29	7	8	13	22	73	38	58	23	27	34	34	32	55	674

Total Number of Valid Hours: 674

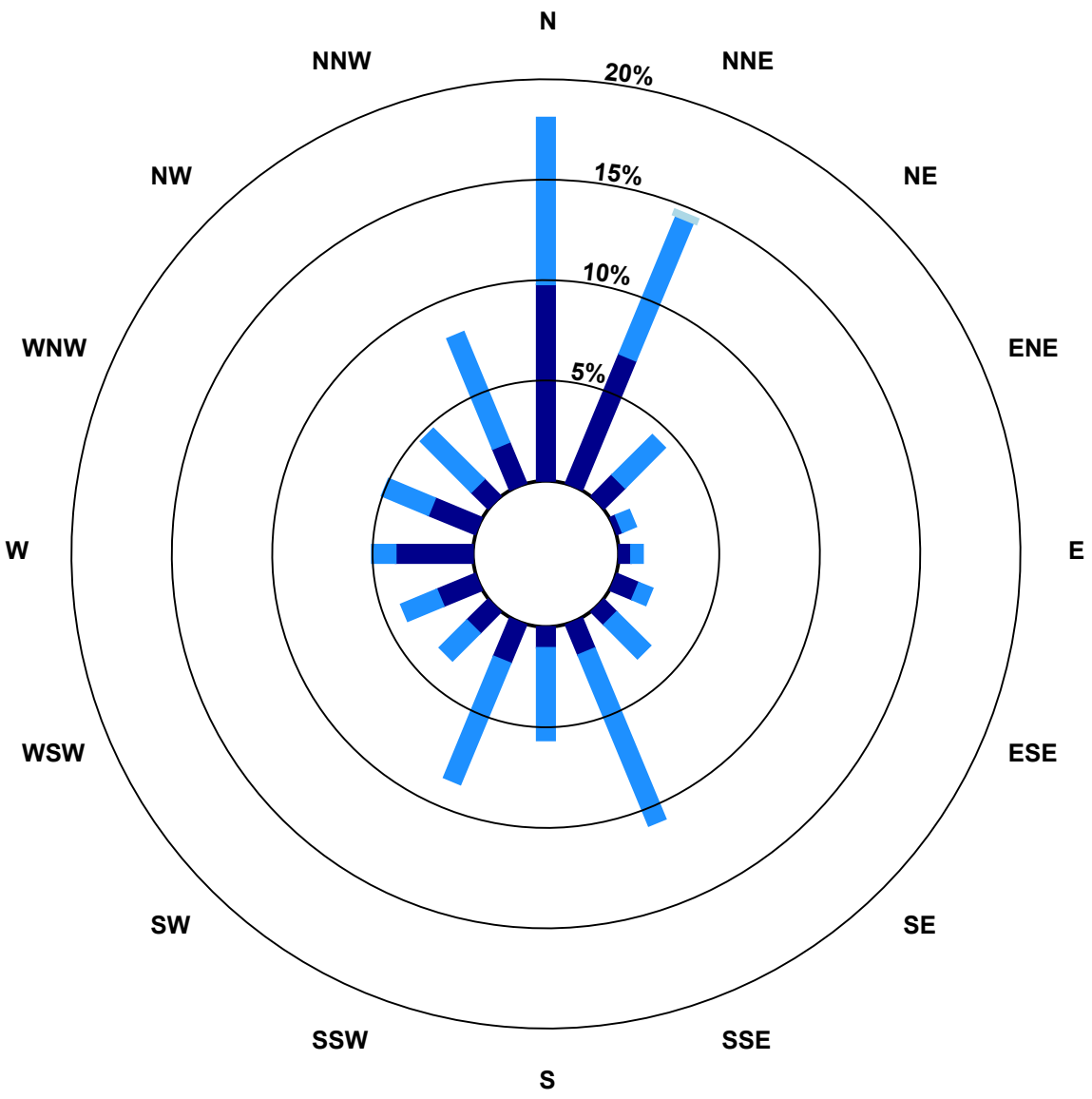
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Fort McKay South



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

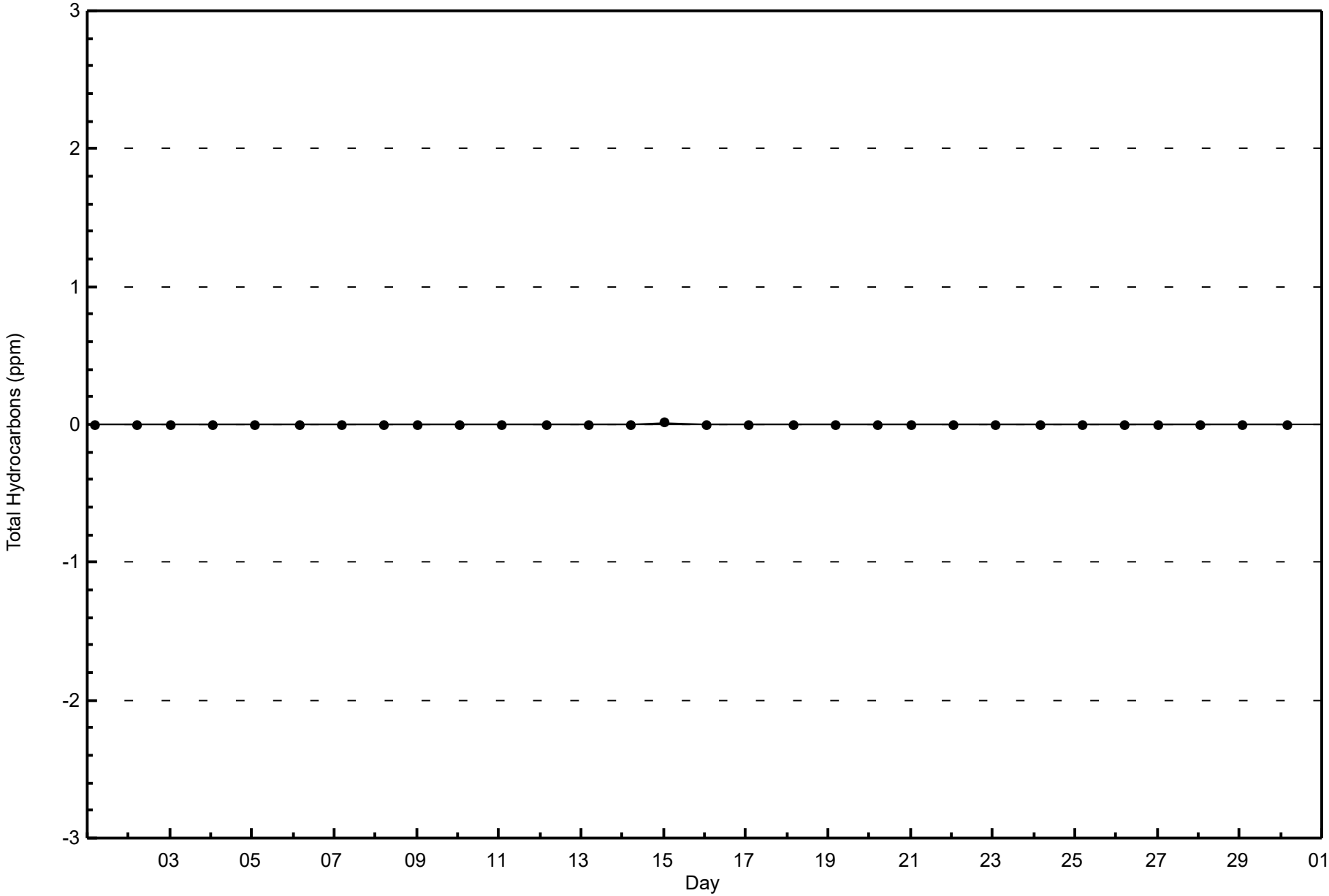
Total Number of Valid Hours: 674

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Fort McKay South - June 2026

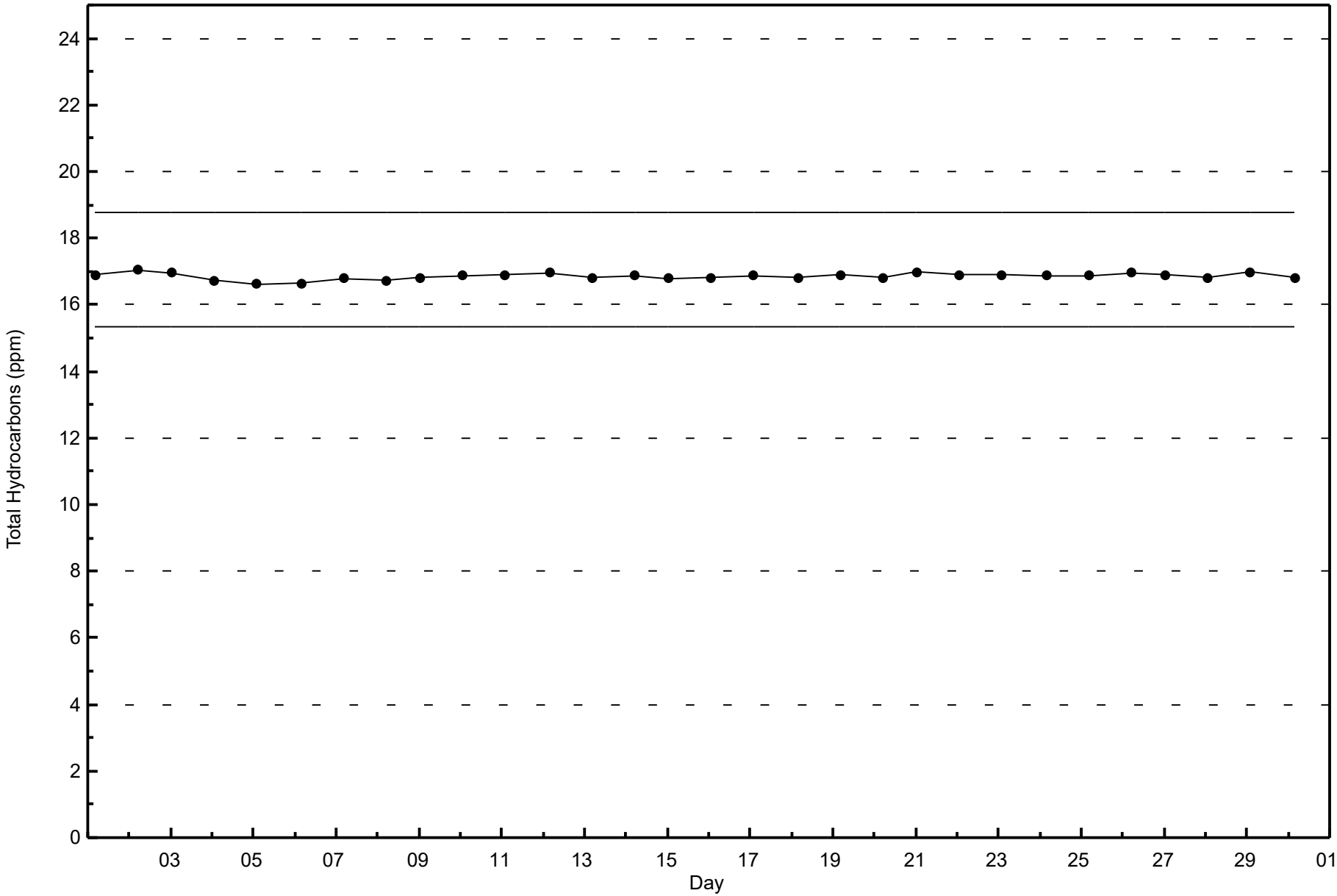


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Fort McKay South - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay South - June 2026

Maximum Value: 0.589 ppm on Jun 28 09:00

Maximum Daily Average: 0.190 ppm on Jun 29

Minimum Value: 0.000 ppm on Jun 2 16:00

Minimum Daily Average: 0.007 ppm on Jun 11

Maximum Diurnal Average: 0.136 ppm at hour 9

Minimum Diurnal Average: 0.040 ppm at hour 17

Monthly Average: 0.075 ppm

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.1 P_{90} = 0.2 P_{99} = 0.3

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	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0.002	0.000	0.001	0.001	Z	0.000	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.027	0.011	0.030	0.089	0.080	0.043	0.013	0.089
2-Jun	0.048	0.026	0.011	0.005	0.006	Z	0.020	0.088	0.038	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.011	0.009	0.001	0.000	0.000	0.000	0.012	0.088
3-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	C	C	C	C	C	0.174	0.066	0.027	0.057	0.072	0.067	0.043	0.024	0.022	0.031	0.174
4-Jun	0.024	Z	0.018	0.073	0.191	0.307	0.274	0.481	0.350	0.112	0.030	0.027	0.030	0.018	0.016	0.020	0.026	0.017	0.025	0.027	0.066	0.080	0.165	0.120	0.109	0.481
5-Jun	0.156	0.078	Z	0.075	0.071	0.060	0.064	0.049	0.037	0.073	0.091	0.087	0.106	0.111	0.084	0.070	0.077	0.079	0.082	0.181	0.121	0.130	0.143	0.044	0.090	0.181
6-Jun	0.014	0.012	0.074	Z	0.061	0.008	0.006	0.010	0.006	0.014	0.013	0.025	0.019	0.022	0.028	0.047	0.026	0.026	0.028	0.034	0.012	0.009	0.006	0.026	0.023	0.074
7-Jun	0.048	0.029	0.034	0.036	Z	0.077	0.071	0.077	0.072	0.073	0.073	0.059	0.037	0.045	0.069	0.101	0.078	0.051	0.015	0.069	0.078	0.085	0.100	0.086	0.064	0.101
8-Jun	0.092	0.085	0.078	0.022	0.013	Z	0.020	0.030	0.036	0.006	0.013	0.009	0.003	0.007	0.007	0.008	0.012	0.003	0.003	0.005	0.003	0.001	0.002	0.002	0.020	0.092
9-Jun	Z	0.004	0.002	0.000	0.002	0.003	0.002	0.001	0.001	0.004	0.002	0.007	0.001	0.004	0.003	0.003	0.004	0.060	0.060	0.049	0.070	0.084	0.102	0.080	0.024	0.102
10-Jun	0.080	Z	0.114	0.146	0.138	0.113	0.125	0.017	0.015	0.016	0.009	0.057	0.152	0.060	0.054	0.034	0.020	0.012	0.001	0.000	0.000	0.000	0.003	0.006	0.051	0.152
11-Jun	0.001	0.000	Z	0.003	0.001	0.002	0.001	0.003	0.000	0.001	0.001	0.000	0.016	0.031	0.018	0.022	0.001	0.000	0.000	0.001	0.000	0.000	0.007	0.045	0.007	0.045
12-Jun	0.036	0.002	0.002	Z	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.003	0.009	0.007	0.001	0.010	0.002	0.010	0.046	0.096	0.074	0.065	0.017	0.096
13-Jun	0.055	0.016	0.004	0.002	Z	0.000	0.003	0.022	0.060	0.014	0.000	0.001	0.002	0.003	0.146	0.214	0.057	0.004	0.011	0.038	0.123	0.143	0.158	0.179	0.055	0.214
14-Jun	0.172	0.086	0.006	0.005	0.001	Z	0.026	0.065	0.112	0.152	0.176	0.194	0.127	0.045	0.020	0.034	0.009	0.018	0.023	0.011	0.079	0.106	0.099	0.084	0.072	0.194
15-Jun	Z	0.123	0.127	0.121	0.135	0.156	0.154	0.119	0.213	0.132	0.085	0.053	0.014	0.035	0.047	0.058	0.058	0.061	0.034	0.050	0.086	0.093	0.095	0.130	0.095	0.213
16-Jun	0.126	Z	0.045	0.007	0.026	0.024	0.003	0.002	0.008	0.100	0.083	0.032	0.099	0.021	0.017	0.019	0.025	0.026	0.006	0.035	0.020	0.056	0.080	0.133	0.043	0.133
17-Jun	0.131	0.071	Z	0.003	0.020	0.150	0.229	0.197	0.112	0.101	0.038	0.023	0.023	0.012	0.012	0.008	0.000	0.000	0.001	0.001	0.029	0.050	0.021	0.070	0.057	0.229
18-Jun	0.088	0.112	0.112	Z	0.094	0.071	0.049	0.044	0.099	0.068	0.021	0.034	0.088	0.085	0.025	0.007	0.001	0.004	0.003	0.039	0.051	0.011	0.019	0.001	0.049	0.112
19-Jun	0.003	0.000	0.001	0.001	Z	0.000	0.005	0.044	0.109	0.062	0.049	0.013	0.058	0.089	0.059	0.052	0.018	0.068	0.077	0.045	0.080	0.095	0.092	0.096	0.048	0.109
20-Jun	0.107	0.071	0.047	0.024	0.029	Z	0.151	0.235	0.292	0.117	0.030	0.021	0.017	0.025	0.008	0.013	0.006	0.022	0.003	0.007	0.057	0.112	0.124	0.107	0.071	0.292
21-Jun	Z	0.167	0.203	0.220	0.217	0.209	0.207	0.228	0.242	0.188	0.130	0.142	0.107	0.149	0.131	0.065	0.108	0.128	0.137	0.097	0.189	0.200	0.188	0.133	0.164	0.242
22-Jun	0.141	Z	0.145	0.140	0.125	0.123	0.207	0.242	0.173	0.159	0.220	0.244	0.073	0.033	0.012	0.029	0.027	0.046	0.055	0.110	0.119	0.068	0.120	0.146	0.120	0.244
23-Jun	0.144	0.129	Z	0.102	0.109	0.091	0.088	0.126	0.092	0.064	0.031	0.013	0.024	0.036	0.030	0.022	0.038	0.053	0.086	0.077	0.109	0.118	0.167	0.209	0.085	0.209
24-Jun	0.212	0.227	0.234	Z	0.224	0.236	0.372	0.146	0.190	0.181	0.064	M	0.085	0.106	0.098	0.091	0.077	0.067	0.047	0.052	0.065	0.093	0.128	0.150	0.143	0.372
25-Jun	0.152	0.129	0.120	0.152	Z	0.227	0.180	0.165	0.140	0.130	0.100	0.049	0.066	0.054	0.049	0.056	0.050	0.056	0.055	0.077	0.079	0.121	0.173	0.114	0.108	0.227
26-Jun	0.081	0.075	0.075	0.090	0.106	Z	0.104	0.122	0.167	0.134	0.077	0.062	0.056	0.057	0.044	0.068	0.056	0.061	0.068	0.057	0.065	0.121	0.083	0.069	0.082	0.167
27-Jun	Z	0.036	0.029	0.022	0.036	0.079	0.105	0.093	0.121	0.152	0.061	0.065	0.075	0.076	0.072	0.075	0.067	0.078	0.098	0.145	0.186	0.178	0.157	0.125	0.093	0.186
28-Jun	0.107	Z	0.099	0.158	0.225	0.265	0.264	0.493	0.589	0.420	0.200	0.067	0.072	0.080	0.087	0.077	0.088	0.076	0.099	0.101	0.118	0.161	0.213	0.228	0.186	0.589
29-Jun	0.219	0.209	Z	0.197	0.218	0.234	0.284	0.346	0.572	0.183	0.173	0.131	0.115	0.115	0.108	0.099	0.105	0.110	0.110	0.136	0.175	0.190	0.149	0.190	0.190	0.572
30-Jun	0.164	0.140	0.129	Z	0.131	0.193	0.140	0.179	0.221	0.243	0.132	0.103	0.093	0.185	0.148	0.126	0.092	0.082	0.069	0.062	0.093	0.112	0.101	0.084	0.131	0.243
	0.096	0.073	0.068	0.064	0.088	0.105	0.105	0.121	0.136	0.097	0.066	0.054	0.054	0.052	0.048	0.053	0.040	0.042	0.043	0.054	0.074	0.088	0.096	0.093	Diurnal Average	
	0.219	0.227	0.234	0.220	0.225	0.307	0.372	0.493	0.589	0.420	0.220	0.244	0.152	0.185	0.148	0.214	0.108	0.128	0.137	0.181	0.189	0.200	0.213	0.228	Diurnal Maximum	

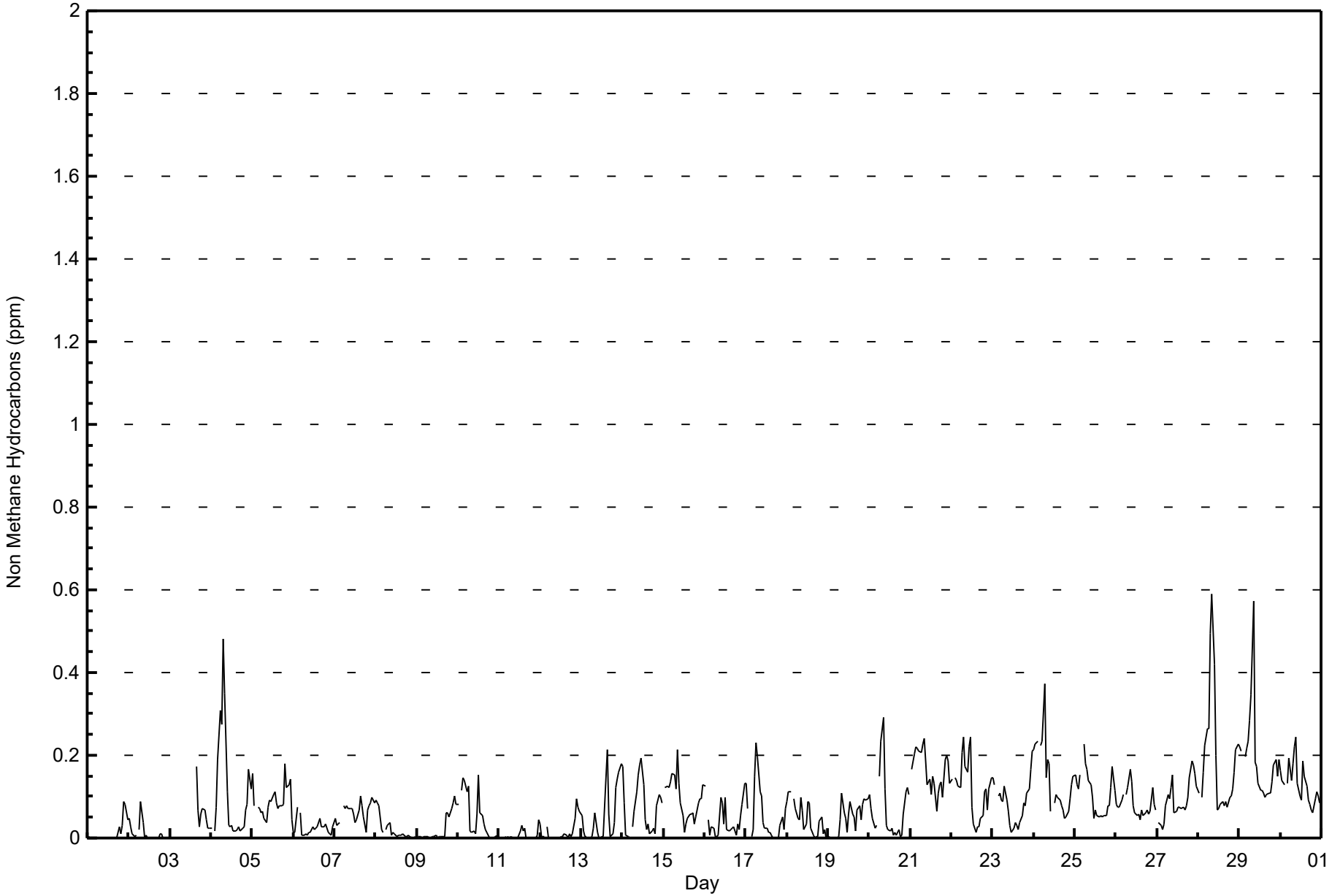
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay South - June 2026



Non Methane Hydrocarbons (NMHC) - ppm
Fort McKay South - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	127	18.57	18.57
0.006 - 0.05	195	28.51	47.08
0.06 - 0.1	267	39.04	86.11
> 0.1	95	13.89	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay South - June 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	7	6	1	3	6	5	5	1	2	1	4	17	10	4	6	117
0.006 - 0.05	30	42	7	2	1	4	2	11	8	22	12	12	10	8	7	17	195
0.06 - 0.1	37	34	15	4	3	3	9	50	20	27	6	10	5	12	10	22	267
> 0.1	16	16	1	0	1	0	6	7	9	7	4	1	2	4	11	10	95
Totals	122	99	29	7	8	13	22	73	38	58	23	27	34	34	32	55	674

Total Number of Valid Hours: 674

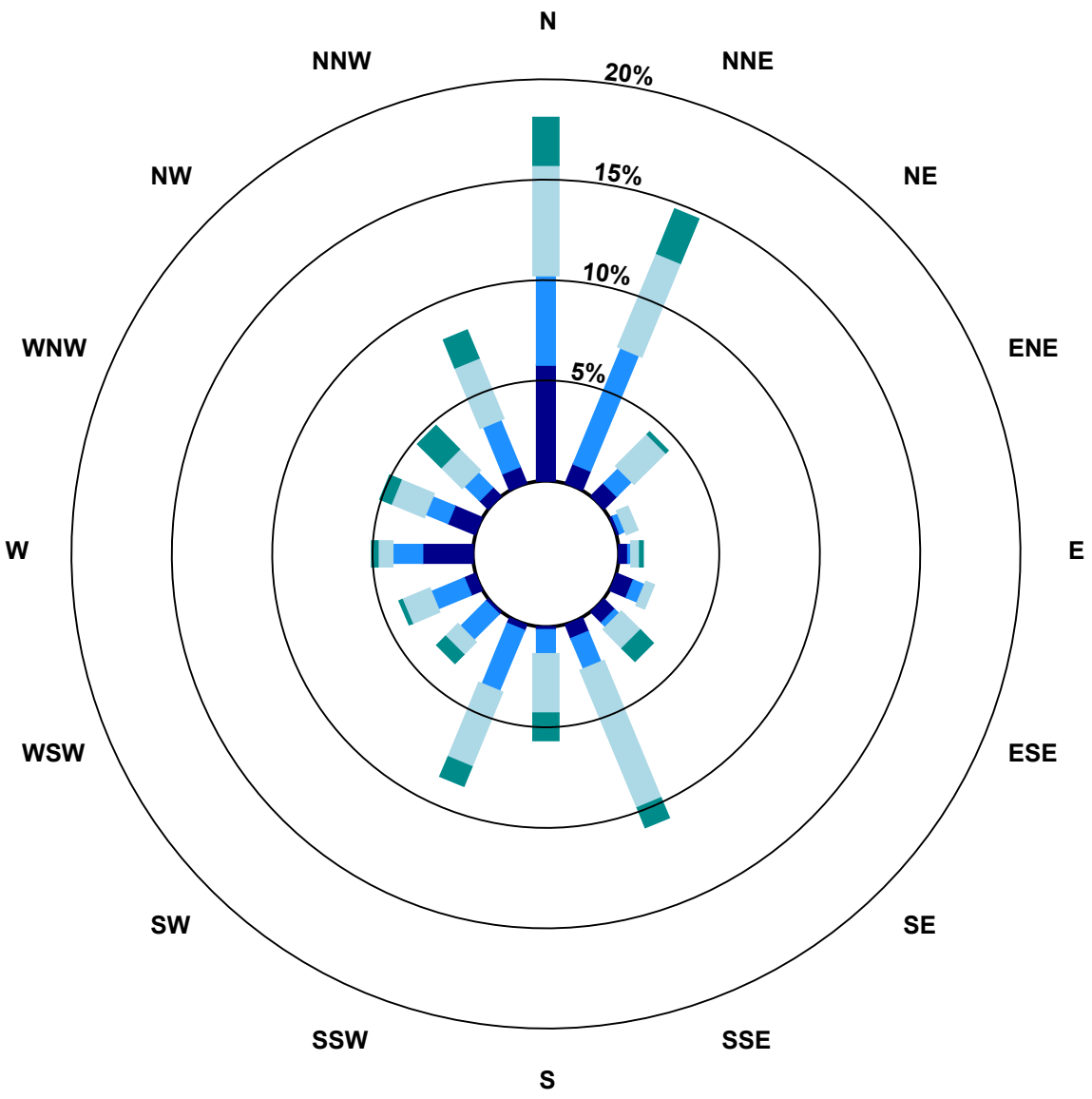
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay South



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

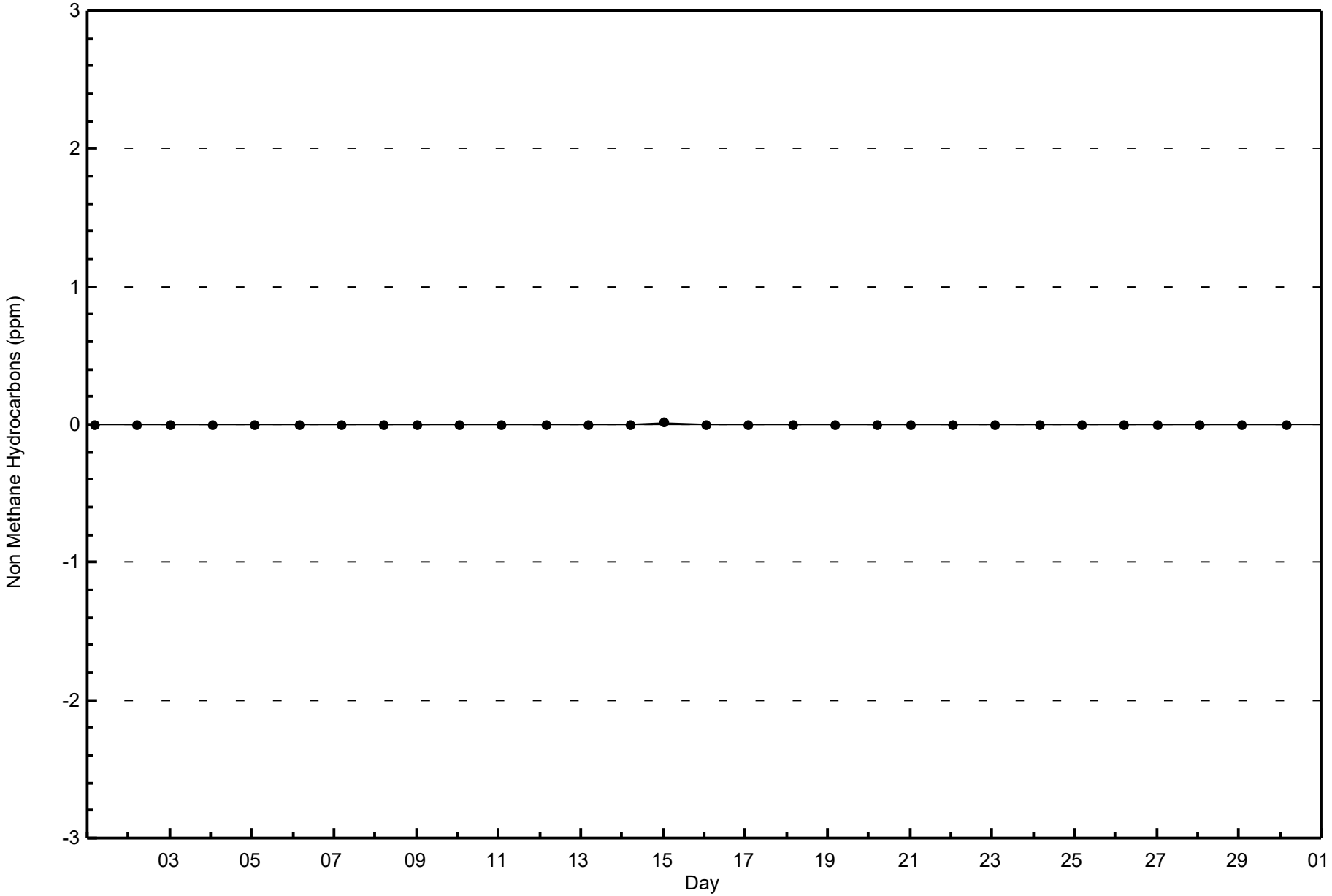
Total Number of Valid Hours: 674

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay South - June 2026

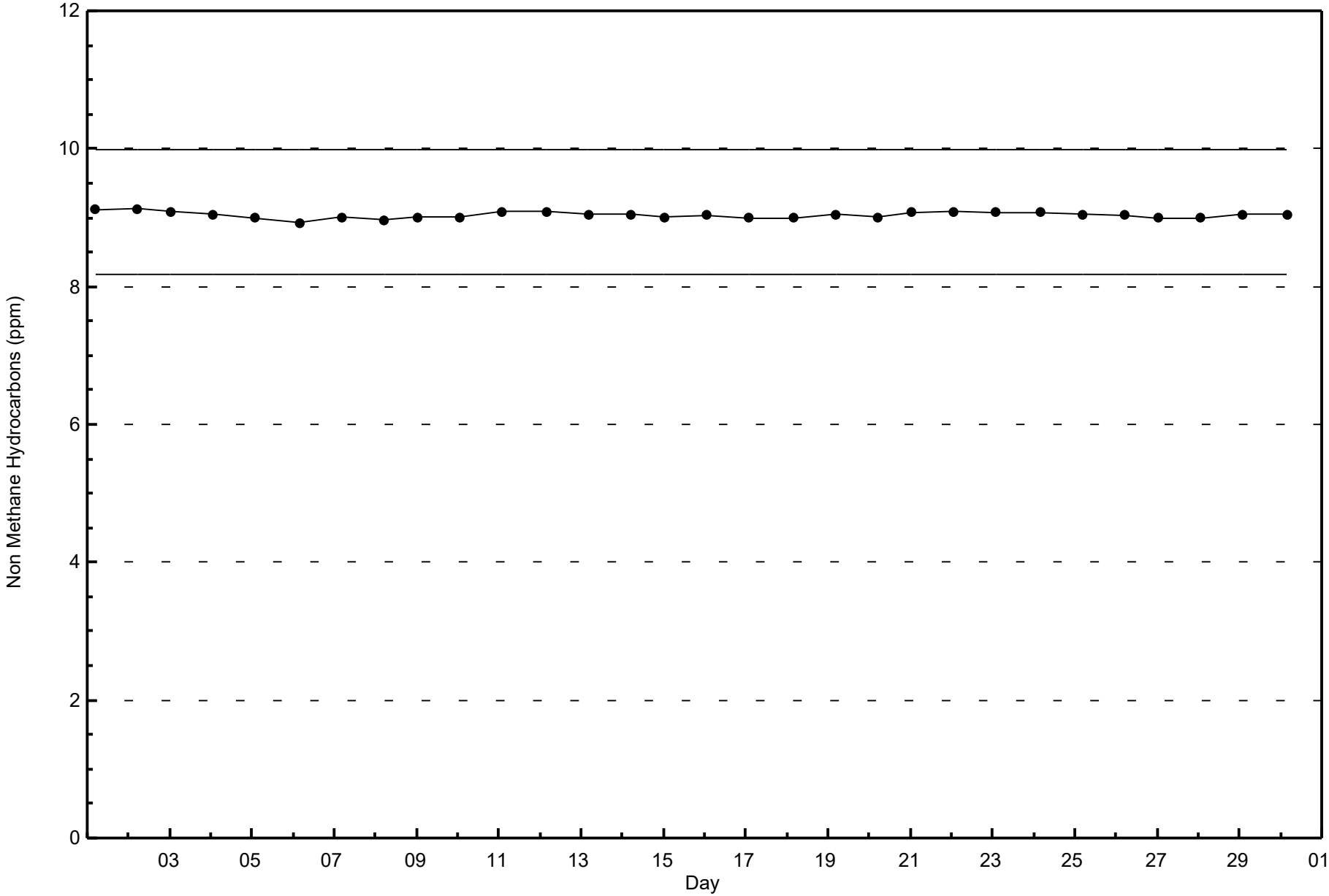


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Fort McKay South - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Fort McKay South - June 2026

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

Maximum Value: 2.6 ppm on Jun 29 07:00

Maximum Daily Average: 2.2 ppm on Jun 29

Minimum Value: 1.9 ppm on Jun 8 21:00

Minimum Daily Average: 2.0 ppm on Jun 8

Maximum Diurnal Average: 2.2 ppm at hour 6

Minimum Diurnal Average: 2.0 ppm at hour 17

Monthly Average: 2.06 ppm

Percentiles: P_1 = 1.9 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:	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-Jun	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
2-Jun	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
3-Jun	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	C	C	C	C	C	2.1	2.0	2.0	2.1	2.0	2.0	2.0	1.9	2.0	2.0	2.1
4-Jun	2.0	Z	2.1	2.1	2.3	2.5	2.2	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	2.3	2.1	2.5
5-Jun	2.2	2.1	Z	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.2	2.2	2.3	2.1	2.1	2.3
6-Jun	2.0	1.9	2.2	Z	2.0	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.2
7-Jun	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	2.0	2.1	2.1	2.0	2.0	2.1
8-Jun	2.0	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	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1
9-Jun	Z	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.2
10-Jun	2.0	Z	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
11-Jun	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	2.0	2.2
12-Jun	2.0	2.0	2.0	Z	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1
13-Jun	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	2.2	2.0	2.2
14-Jun	2.2	2.1	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2
15-Jun	Z	2.2	2.2	2.3	2.5	2.4	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	2.3	2.1	2.5
16-Jun	2.2	Z	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	2.0	2.0	2.0	2.1	2.0	2.2
17-Jun	2.1	2.1	Z	2.0	2.0	2.1	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.2
18-Jun	2.1	2.1	2.1	Z	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	2.0	2.0	2.0	2.1	2.2
19-Jun	2.0	2.0	2.0	2.0	Z	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	2.0	2.1
20-Jun	2.1	2.1	2.1	2.1	2.2	Z	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	2.1	2.1	2.1	2.1	2.1	2.3
21-Jun	Z	2.1	2.2	2.3	2.3	2.3	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	2.1	2.1	2.1	2.2	2.1	2.3
22-Jun	2.2	Z	2.3	2.3	2.2	2.2	2.3	2.4	2.2	2.2	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.4
23-Jun	2.1	2.1	Z	2.1	2.2	2.2	2.1	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	2.1	2.2	2.1	2.3
24-Jun	2.2	2.2	2.3	Z	2.3	2.3	2.3	2.2	2.1	2.1	2.0	M	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	2.3
25-Jun	2.1	2.1	2.1	2.1	Z	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	2.1	2.1	2.1	2.1	2.3
26-Jun	2.0	2.0	2.0	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	2.1	2.1	2.0	2.0	2.0	2.1
27-Jun	Z	2.0	2.0	2.0	2.0	2.1	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	2.1	2.1	2.2
28-Jun	2.1	Z	2.1	2.2	2.4	2.5	2.5	2.6	2.5	2.3	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.6
29-Jun	2.2	2.3	Z	2.4	2.4	2.5	2.6	2.4	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	2.0	2.2	2.2	2.6
30-Jun	2.1	2.2	2.2	Z	2.2	2.3	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	2.1	2.0	2.0	2.1	2.1	2.3
	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	2.0	2.0	2.0	2.0	2.0	2.1	Diurnal Average	
	2.2	2.3	2.3	2.4	2.5	2.5	2.6	2.6	2.5	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.3	2.2	2.2	2.3	2.3	Diurnal Maximum	

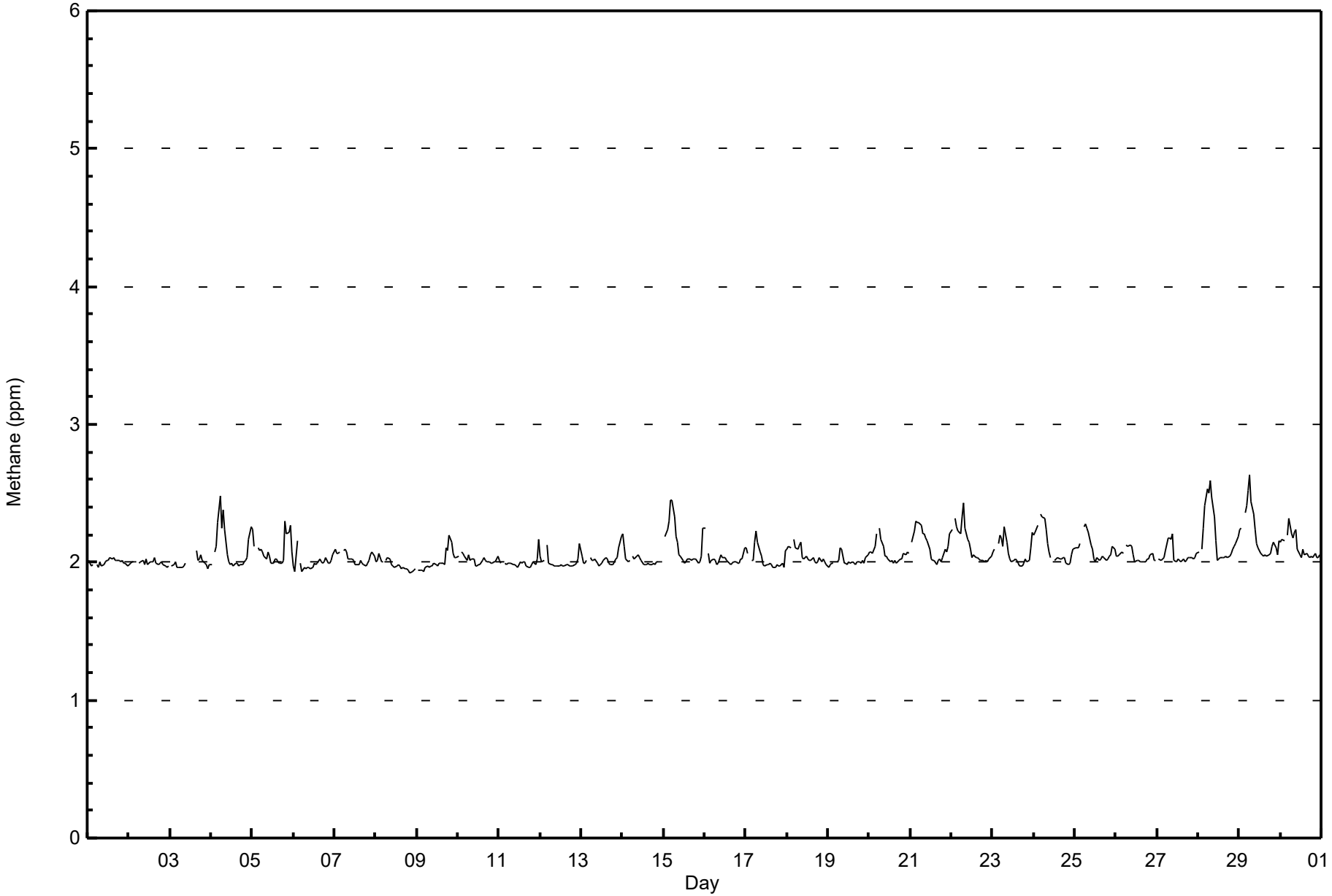
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Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Fort McKay South - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	463	67.69	67.69
2.1 - 3.0	221	32.31	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

Methane (CH_4) - ppm

Fort McKay South - June 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	92	72	23	7	7	10	12	48	25	32	16	16	27	23	15	28	453
2.1 - 3.0	30	27	6	0	1	3	10	25	13	26	7	11	7	11	17	27	221
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	122	99	29	7	8	13	22	73	38	58	23	27	34	34	32	55	674

Total Number of Valid Hours: 674

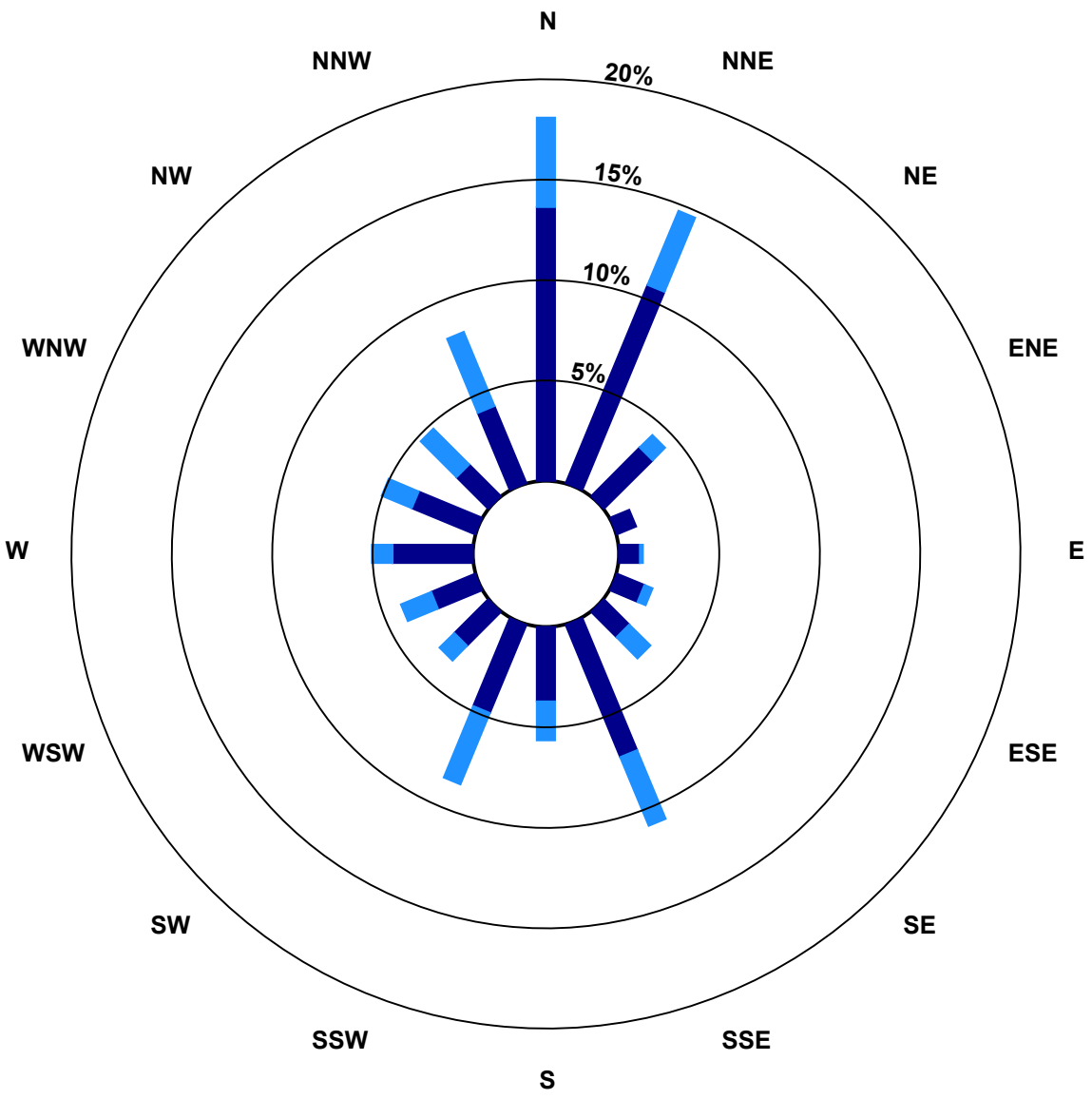
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Methane (CH_4) - ppm

Fort McKay South



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

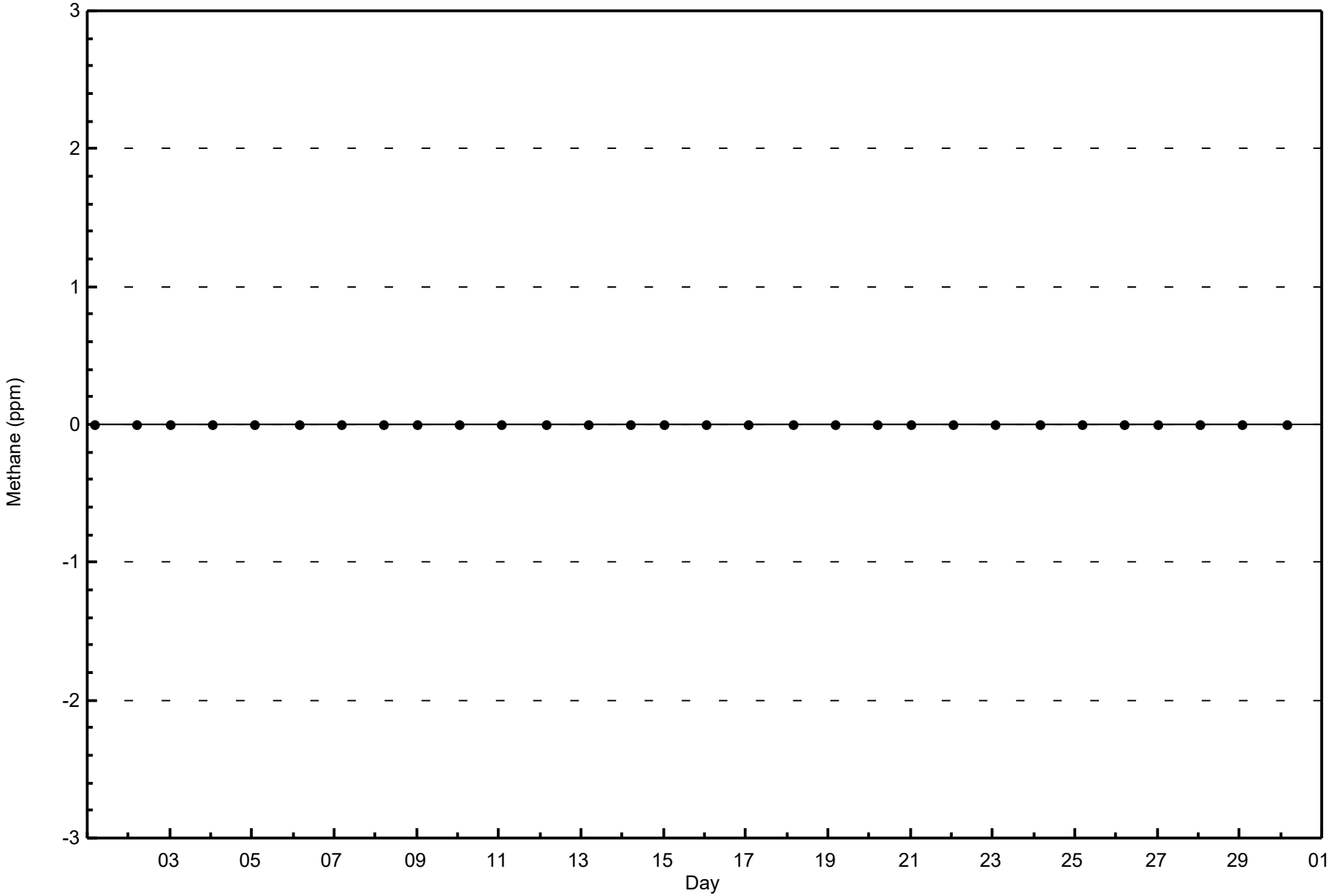
Total Number of Valid Hours: 674

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Fort McKay South - June 2026

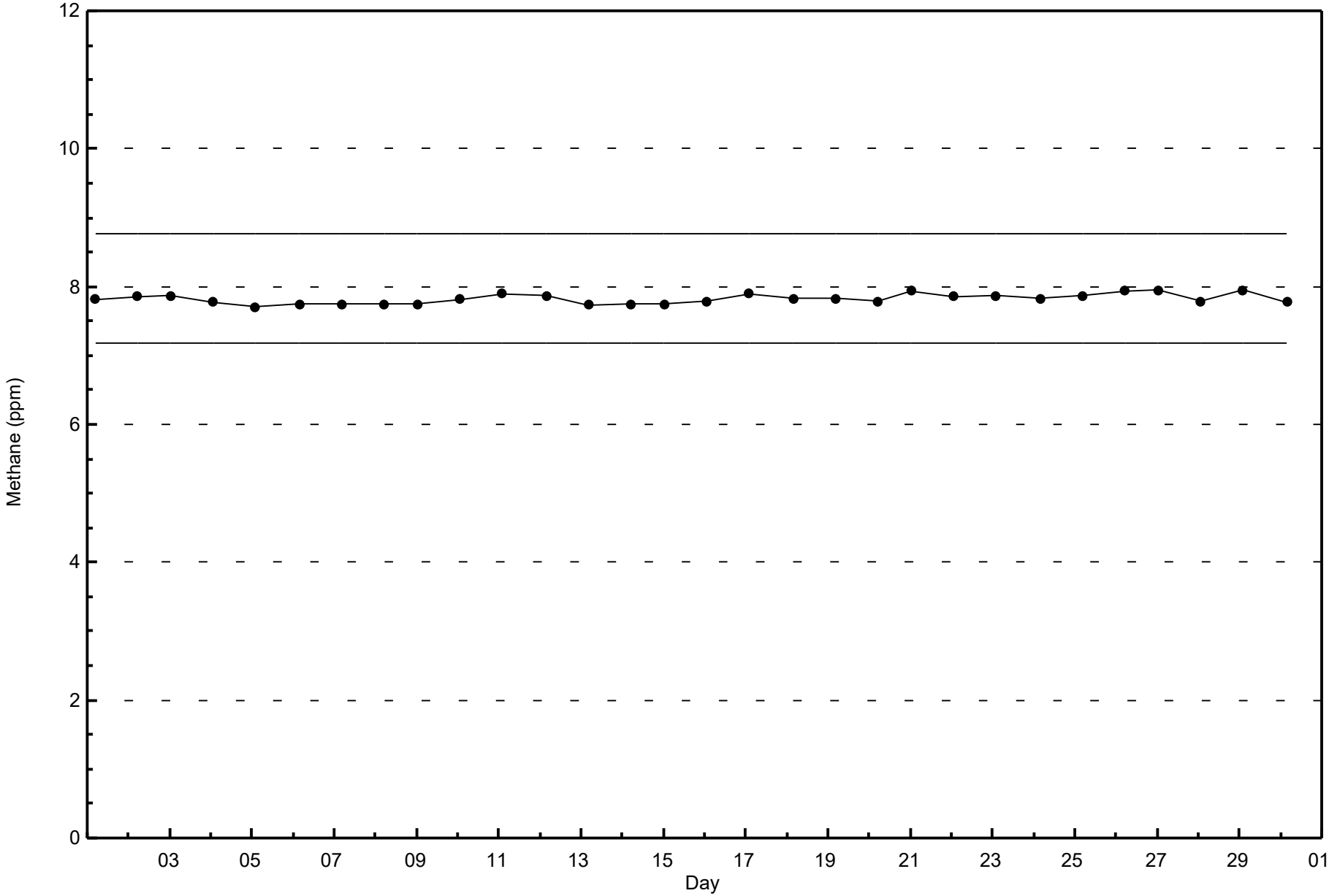


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Fort McKay South - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Fort McKay South - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 62.1 ppb on Jun 30 15:00 Maximum Daily Average: 33.7 ppb on Jun 26

Minimum Value: 0.3 ppb on Jun 20 01:00 Minimum Daily Average: 9.2 ppb on Jun 21
Maximum Diurnal Average: 34.7 ppb at hour 15 Minimum Diurnal Average: 9.5 ppb at hour 3
Monthly Average: 22.86 ppb Percentiles: P_1 = 0.5 P_{10} = 3.5 Q_1 = 12.0 Median = 21.6 Q_3 = 32.9 P_{90} = 41.8 P_{99} = 56.4

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-Jun	Z	29.5	32.7	33.4	33.1	34.0	34.6	31.6	34.4	33.4	32.0	29.5	29.0	29.9	31.1	30.7	32.3	32.7	30.9	30.6	29.1	27.3	26.8	28.1	31.2	34.6
2-Jun	28.5	Z	28.4	25.7	25.6	27.4	27.9	26.8	27.1	32.2	33.1	31.8	33.8	34.7	36.1	37.3	38.5	38.4	29.9	24.6	26.0	37.4	36.1	34.5	31.4	38.5
3-Jun	30.6	23.9	Z	19.2	27.3	25.9	26.0	26.3	26.1	26.1	26.2	26.3	25.9	24.1	23.9	22.1	21.7	22.2	22.7	19.6	8.4	2.5	1.4	0.9	20.8	30.6
4-Jun	0.5	0.5	0.5	Z	1.5	3.0	6.2	15.9	21.8	24.2	24.0	25.6	27.8	29.5	31.9	33.3	35.2	36.6	35.4	34.4	27.6	18.4	21.7	18.8	20.6	36.6
5-Jun	17.7	18.8	17.5	14.2	Z	13.4	17.6	20.6	24.6	24.0	C	C	C	41.2	40.0	37.6	33.6	33.4	32.6	31.3	22.1	7.9	7.9	21.2	23.9	41.2
6-Jun	19.2	19.9	9.7	1.2	23.8	Z	21.4	21.2	21.5	20.0	18.5	17.6	18.4	18.5	18.4	17.8	21.8	21.7	19.4	19.4	22.1	22.1	14.9	7.8	18.1	23.8
7-Jun	Z	4.7	2.7	1.2	5.5	7.1	10.9	11.1	10.6	12.7	18.5	22.5	24.9	28.0	31.5	32.3	27.7	24.0	25.7	16.8	9.9	7.4	8.9	20.8	15.9	32.3
8-Jun	24.9	Z	14.3	13.9	14.8	16.2	21.1	16.9	15.8	17.7	19.6	16.8	18.7	19.9	18.2	17.9	17.9	20.8	22.1	24.8	27.1	29.1	28.6	27.8	20.2	29.1
9-Jun	27.8	26.7	Z	27.5	27.2	27.5	26.6	27.2	27.9	27.5	30.6	33.1	31.9	32.2	32.1	32.3	32.1	29.9	31.4	30.6	22.3	15.0	12.2	12.6	27.1	33.1
10-Jun	7.9	1.5	1.0	Z	3.1	6.8	12.8	21.3	23.0	31.7	31.2	24.2	20.8	21.8	19.0	17.7	16.0	16.0	16.3	17.0	16.3	13.7	13.3	11.4	15.8	31.7
11-Jun	11.3	15.3	16.4	14.7	Z	14.6	13.9	14.4	15.0	16.8	17.3	16.7	16.0	19.1	18.6	18.9	21.1	20.5	19.1	17.7	18.6	17.6	16.5	11.6	16.6	21.1
12-Jun	14.1	13.6	8.9	9.0	17.9	Z	23.4	24.9	27.1	30.5	33.9	33.8	33.6	34.1	34.0	34.5	36.9	37.8	36.8	36.0	23.6	11.5	9.3	9.6	25.0	37.8
13-Jun	Z	14.5	8.2	7.1	6.3	7.3	10.0	17.7	20.3	32.1	35.9	37.7	37.6	37.9	38.9	36.5	34.7	33.7	33.4	30.7	16.3	6.6	1.9	0.8	22.0	38.9
14-Jun	0.7	Z	15.3	16.0	13.1	21.8	25.4	28.4	36.1	35.9	39.7	42.2	40.9	40.1	39.8	39.4	40.3	40.3	39.0	37.4	26.8	9.9	9.6	5.1	28.0	42.2
15-Jun	3.3	1.3	Z	1.3	2.0	4.9	9.2	15.6	19.4	29.3	35.7	40.2	43.6	48.2	51.6	52.6	50.2	45.9	42.1	34.1	21.6	10.6	9.5	4.5	25.1	52.6
16-Jun	5.4	10.8	21.1	Z	19.4	16.0	24.1	28.1	27.0	25.6	27.8	37.0	39.5	39.0	36.2	37.4	38.5	38.1	39.1	34.2	29.4	31.1	26.1	13.2	28.0	39.5
17-Jun	7.1	10.5	13.9	15.3	Z	7.3	9.6	15.2	23.4	25.1	30.2	31.6	31.8	33.0	33.0	32.7	33.5	33.7	32.9	33.8	21.5	9.7	11.6	11.5	22.1	33.8
18-Jun	9.2	2.6	0.8	4.6	6.8	Z	9.2	11.8	12.7	19.3	22.2	22.1	18.5	18.1	20.4	24.4	27.0	26.6	26.3	24.4	23.4	20.4	20.0	19.6	17.0	27.0
19-Jun	Z	15.5	10.8	3.9	12.2	10.8	10.4	13.3	14.6	18.9	19.4	21.4	19.9	19.9	19.0	18.2	17.9	17.3	17.3	19.4	16.0	7.1	2.5	0.7	14.2	21.4
20-Jun	0.3	Z	1.0	0.6	0.5	2.8	4.5	5.7	9.5	13.8	16.2	18.0	19.8	19.8	19.2	18.8	19.7	18.5	19.2	19.9	14.5	12.2	4.8	3.9	11.4	19.9
21-Jun	1.0	0.5	Z	0.8	0.6	1.3	2.2	3.4	5.9	8.5	11.3	16.8	18.5	20.9	21.6	18.2	18.9	16.9	18.2	13.7	7.1	1.5	1.0	3.1	9.2	21.6
22-Jun	0.5	0.4	0.3	Z	0.7	0.5	3.6	7.2	11.9	15.6	19.9	23.5	27.7	36.2	38.8	40.4	35.2	35.9	35.3	20.3	14.0	17.6	5.2	5.1	17.2	40.4
23-Jun	4.0	2.6	3.1	1.6	Z	7.2	10.5	10.7	16.1	23.5	29.0	31.3	33.6	33.7	33.4	29.5	32.1	33.0	33.5	28.6	10.7	6.9	3.1	2.5	18.3	33.7
24-Jun	1.3	0.7	0.4	0.5	1.1	Z	11.5	16.9	21.4	29.8	33.6	M	39.8	41.2	41.8	42.8	42.3	39.9	38.4	37.4	29.0	12.0	13.4	9.4	22.9	42.8
25-Jun	Z	4.1	1.8	1.8	1.4	2.9	9.6	18.3	24.2	30.2	39.3	43.6	46.3	48.3	48.0	48.0	47.8	48.9	47.3	45.2	39.7	26.9	17.1	21.9	28.8	48.9
26-Jun	25.0	Z	21.0	7.6	4.6	6.7	21.7	29.0	35.5	40.3	47.6	48.8	48.2	48.0	49.0	49.9	49.9	48.2	47.1	45.6	41.5	14.5	24.1	21.2	33.7	49.9
27-Jun	30.9	23.3	Z	14.8	6.9	10.6	24.6	28.4	33.0	38.2	44.9	45.1	45.3	45.4	45.3	43.9	44.9	43.6	41.9	28.4	14.8	7.6	5.3	6.1	29.3	45.4
28-Jun	4.5	4.4	2.0	Z	1.3	1.5	4.9	5.1	12.0	24.2	42.4	45.6	47.1	49.8	52.0	51.0	49.5	49.4	47.8	44.8	32.9	17.2	8.1	4.0	26.2	52.0
29-Jun	2.5	1.7	0.8	0.8	Z	2.9	4.9	11.0	24.5	40.8	49.2	57.8	61.7	60.2	54.6	51.1	50.0	50.8	56.5	52.2	45.4	39.2	22.2	15.4	32.9	61.7
30-Jun	6.8	8.0	5.5	2.8	2.1	Z	16.6	27.8	30.6	32.9	42.9	52.1	55.3	61.4	62.1	55.4	55.9	60.1	56.4	52.2	32.9	17.7	13.7	11.7	33.2	62.1
	11.4	10.2	9.5	9.6	10.3	11.2	15.2	18.4	21.8	26.0	30.1	31.9	33.0	34.5	34.7	34.1	34.1	33.8	33.1	30.2	23.0	16.0	13.2	12.2	Diurnal Average	
	30.9	29.5	32.7	33.4	33.1	34.0	34.6	31.6	36.1	40.8	49.2	57.8	61.7	61.4	62.1	55.4	55.9	60.1	56.5	52.2	45.4	39.2	36.1	34.5	Diurnal Maximum	

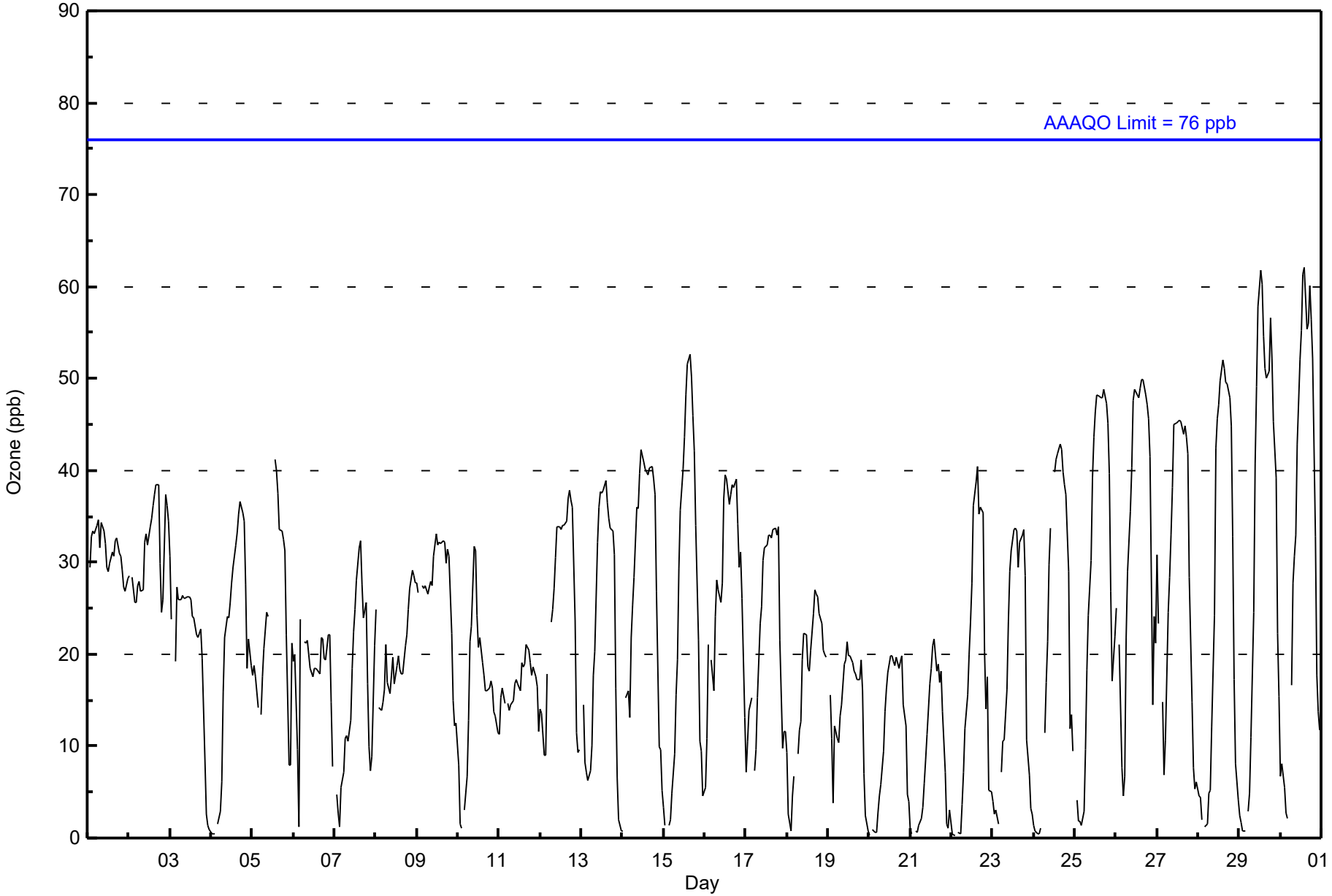
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Fort McKay South - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	325	47.38	47.38
21 - 50	340	49.56	96.94
51 - 82	21	3.06	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

Fort McKay South - June 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	33	4	0	2	3	5	13	18	29	14	20	19	28	28	47	325
21 - 50	58	55	21	5	6	9	16	60	21	29	8	5	17	6	3	11	330
51 - 82	4	10	4	2	1	0	0	0	0	0	0	0	0	0	0	0	21
> 83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	124	98	29	7	9	12	21	73	39	58	22	25	36	34	31	58	676

Total Number of Valid Hours: 676

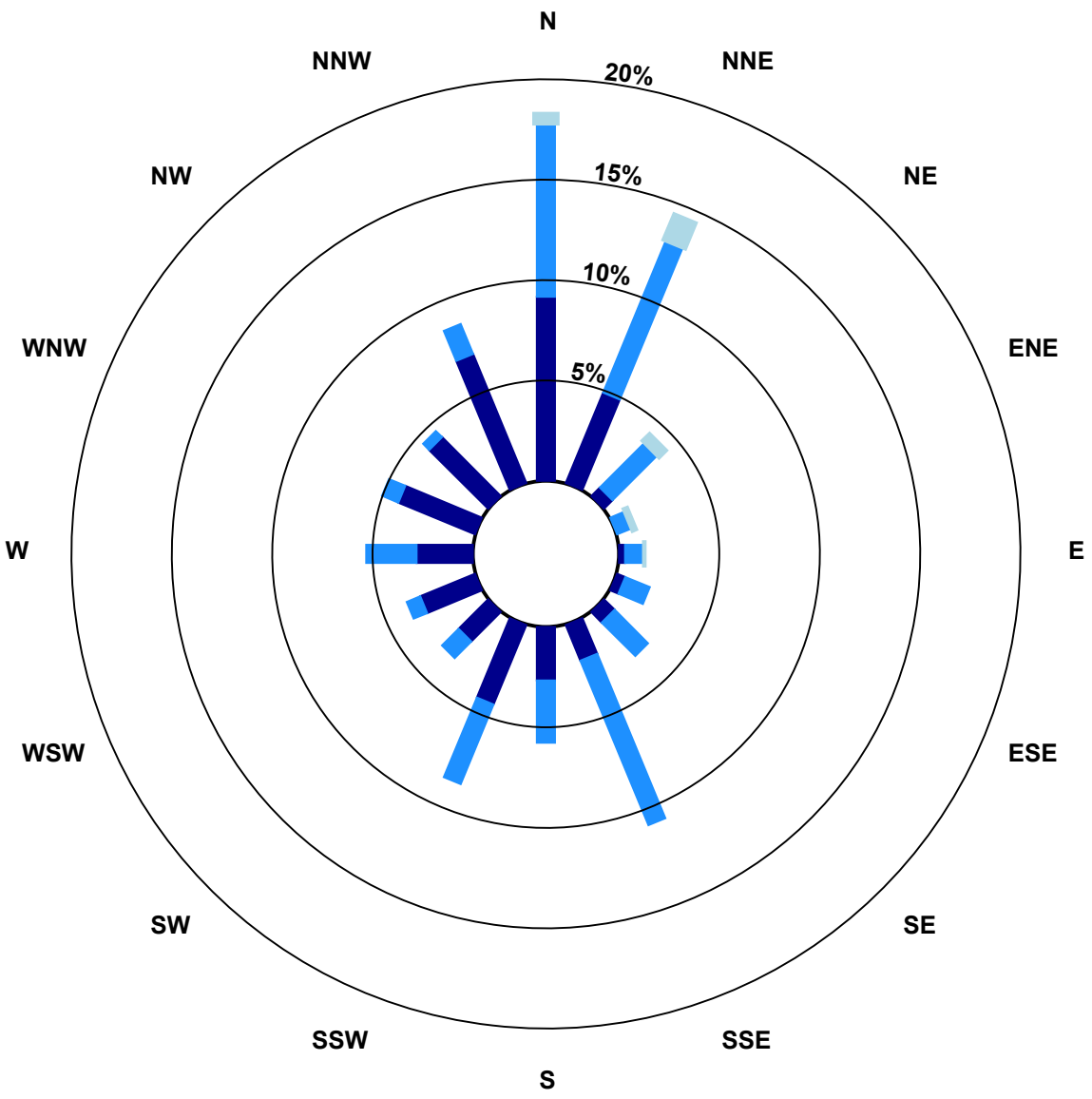
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Ozone (O_3) - ppb

Fort McKay South



Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

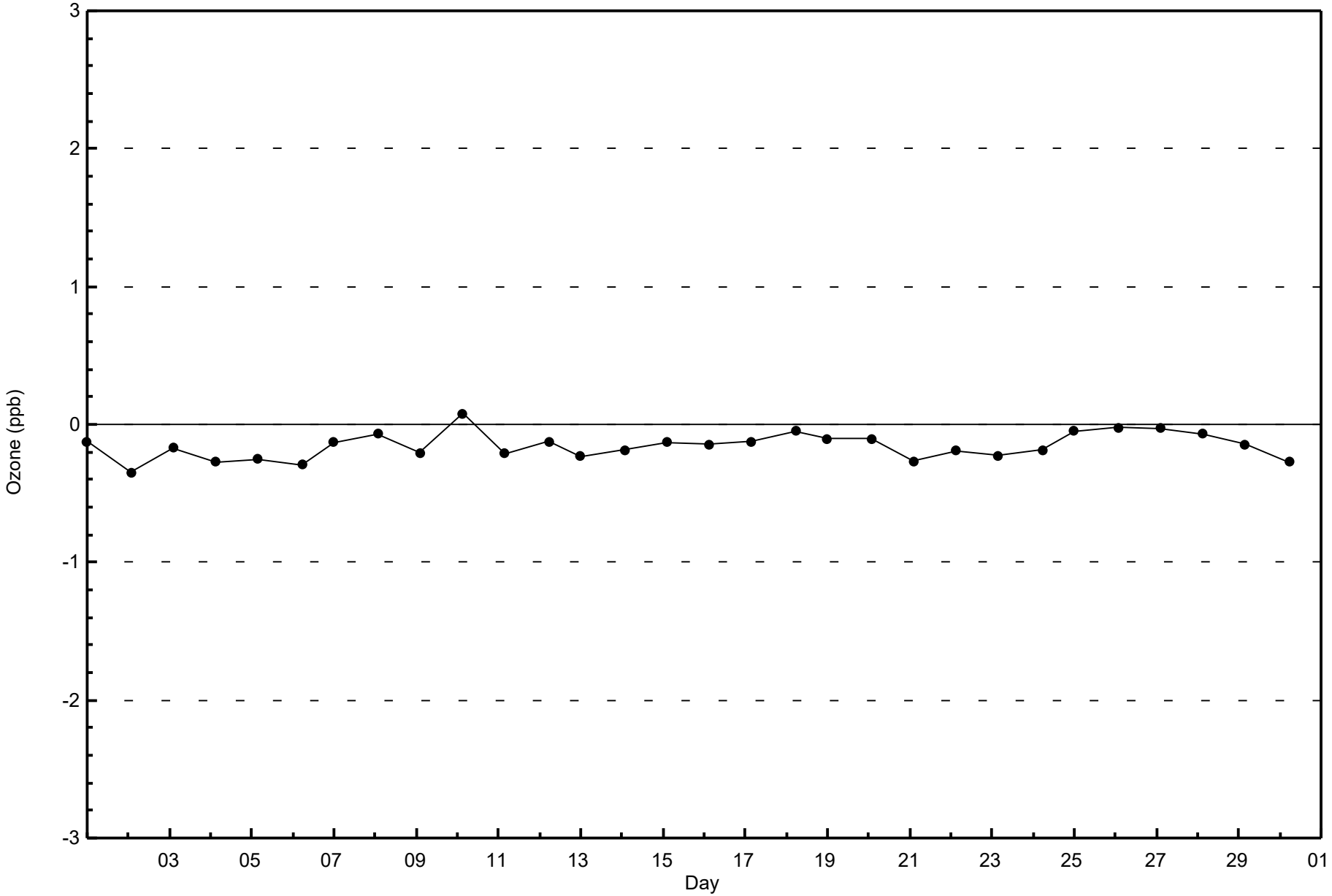
Total Number of Valid Hours: 676

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Fort McKay South - June 2026

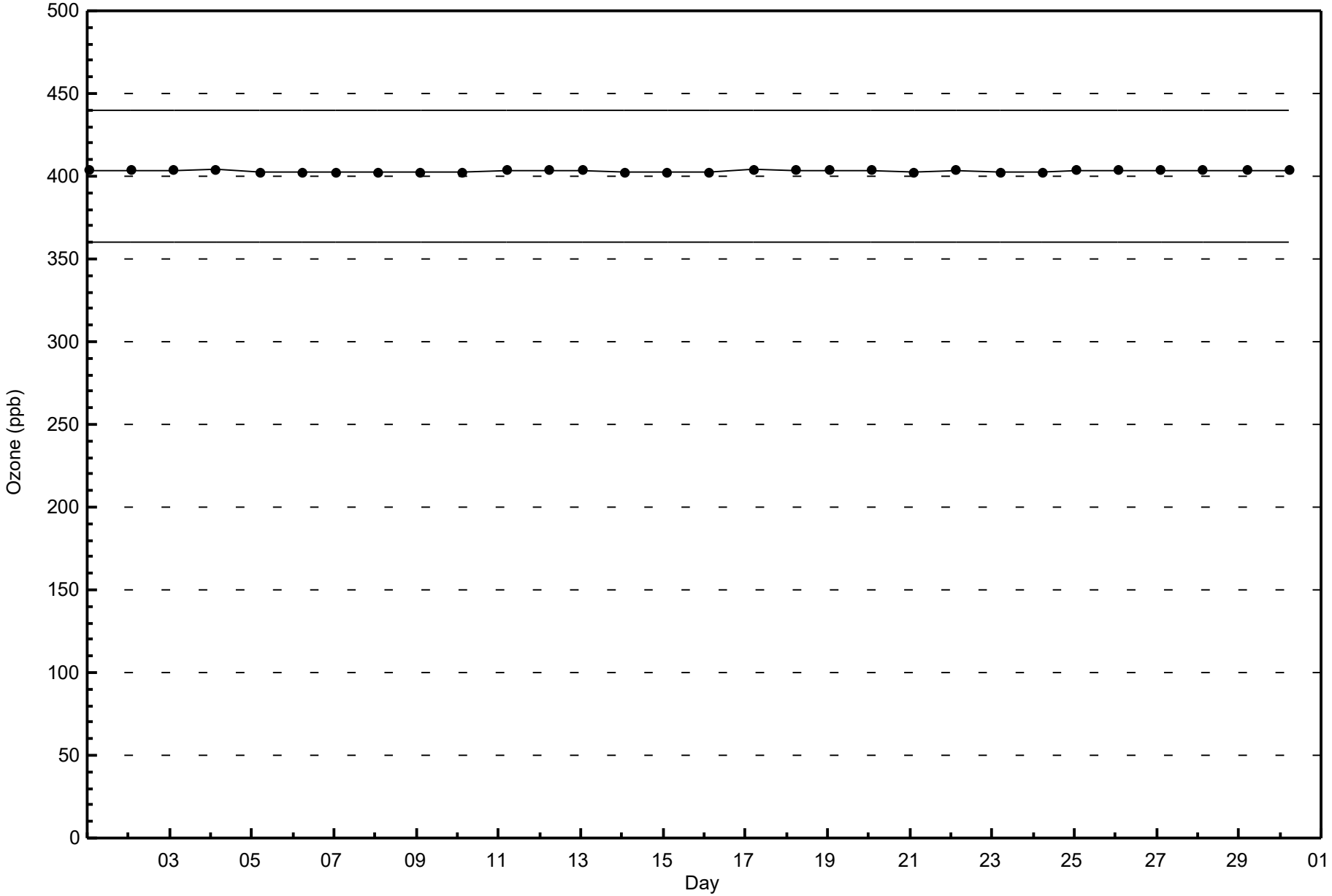


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Fort McKay South - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Fort McKay South - June 2026

Maximum Value: 25.3 ppb on Jun 28 08:00

Maximum Daily Average: 6.1 ppb on Jun 21

Minimum Value: 0.0 ppb on Jun 2 18:00

Minimum Daily Average: 0.0 ppb on Jun 8

Maximum Diurnal Average: 6.1 ppb at hour 7

Minimum Diurnal Average: 0.1 ppb at hour 22

Monthly Average: 1.45 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.2 Q_3 = 1.0 P_{90} = 3.9 P_{99} = 17.0

Hours in Service:	720
Hours of Data:	645
Hours of Missing Data:	75
Hours of Calibration:	35
Percent Operational Time:	94.4

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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	C	C	C	M	M	M	M	M	M	M	M	M	M	M	--	--
2-Jun	M	M	M	M	M	M	M	M	M	M	C	C	C	C	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.2
3-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.5	0.8	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.8
4-Jun	0.0	0.0	0.0	0.2	2.6	Z	5.4	3.1	1.3	0.4	0.2	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.1	0.2	0.7	5.4
5-Jun	Z	0.2	0.2	0.3	1.1	3.6	3.3	2.6	1.4	2.5	0.5	0.2	1.3	0.7	0.2	0.3	0.4	0.9	0.3	0.3	0.3	0.2	0.3	0.1	0.9	3.6
6-Jun	0.1	Z	3.2	14.2	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.8	14.2
7-Jun	0.1	0.1	Z	0.2	0.3	0.8	1.8	3.3	3.5	2.8	3.9	1.7	1.1	0.9	0.9	1.3	0.3	0.1	0.1	0.1	0.2	0.2	0.2	0.1	1.0	3.9
8-Jun	0.1	0.1	0.1	Z	0.1	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
9-Jun	0.0	0.1	0.1	0.1	Z	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	1.3	1.0	0.1	0.0	0.0	0.0	0.0	0.2	1.3
10-Jun	0.1	0.1	0.3	0.4	0.9	Z	2.1	1.1	0.9	0.6	0.0	0.6	0.7	0.8	0.9	1.3	1.1	1.0	0.2	0.1	0.0	0.0	0.1	0.1	0.6	2.1
11-Jun	Z	0.0	0.0	0.1	0.1	0.2	0.5	0.4	0.3	0.2	0.1	0.4	1.6	1.4	1.3	0.9	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.2	0.4	1.6
12-Jun	0.0	Z	0.1	0.4	0.5	0.1	0.0	0.1	0.0	0.1	0.0	0.2	0.7	0.9	0.9	0.8	0.5	0.5	0.4	0.2	0.3	0.1	0.1	0.2	0.3	0.9
13-Jun	0.1	0.0	Z	0.3	1.4	8.8	10.8	3.6	3.8	1.0	0.5	0.4	0.3	0.4	0.2	0.1	0.1	0.0	0.0	0.1	0.4	0.5	2.1	6.9	1.8	10.8
14-Jun	6.2	2.1	0.3	Z	0.8	1.5	0.8	0.7	2.1	3.1	2.8	1.3	0.5	0.7	0.2	0.3	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.1	1.1	6.2
15-Jun	0.2	0.5	0.5	0.6	Z	10.5	15.5	6.1	7.7	4.2	2.1	1.0	0.3	0.3	0.2	0.1	0.0	0.0	0.1	0.2	0.2	0.1	0.2	0.5	2.2	15.5
16-Jun	0.5	0.3	0.1	0.1	0.2	Z	0.2	0.2	0.4	3.9	4.8	1.1	1.0	0.4	0.3	0.3	0.2	0.2	0.1	0.3	0.3	0.1	0.1	0.2	0.7	4.8
17-Jun	Z	0.2	0.1	0.1	0.8	11.2	19.5	M	M	M	M	M	M	M	M	0.2	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.1	--	19.5
18-Jun	0.2	Z	1.6	1.0	1.1	0.7	1.4	1.1	1.7	0.8	0.3	1.0	2.2	2.1	0.8	0.5	0.2	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.7	2.2
19-Jun	0.0	0.1	Z	0.1	0.1	0.1	0.5	4.7	6.7	2.0	1.9	1.5	1.6	1.1	1.3	1.9	1.0	1.9	1.5	0.8	0.5	0.2	0.2	0.3	1.3	6.7
20-Jun	1.8	0.9	0.6	Z	1.4	7.7	17.2	15.2	11.2	4.6	1.9	1.0	0.7	1.1	0.6	1.0	0.5	0.9	0.7	0.3	0.8	0.1	0.4	0.2	3.1	17.2
21-Jun	4.4	9.3	12.8	17.4	Z	13.5	15.5	11.0	13.8	11.4	10.3	4.6	2.5	1.9	1.7	0.5	1.4	2.1	0.5	0.8	0.7	0.4	3.4	1.0	6.1	17.4
22-Jun	2.0	8.2	8.1	3.3	1.4	Z	13.8	21.7	11.2	8.1	7.0	5.5	1.7	0.5	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	4.1	21.7
23-Jun	Z	0.2	0.1	0.6	3.1	2.1	5.8	10.6	4.9	2.6	0.6	0.2	0.1	0.0	0.0	0.0	0.2	0.5	0.6	0.2	0.1	0.1	0.1	0.1	1.4	10.6
24-Jun	0.1	Z	6.0	6.4	6.6	15.6	4.7	3.8	4.5	0.3	0.1	M	0.1	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.1	2.2	15.6
25-Jun	0.1	0.1	Z	0.2	0.5	3.9	10.9	6.3	5.4	4.8	2.1	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	1.5	10.9
26-Jun	0.1	0.1	0.1	Z	0.5	0.9	1.8	2.3	2.4	2.4	0.8	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	0.5	2.4
27-Jun	0.1	0.1	0.1	0.1	Z	0.4	0.8	2.4	2.5	2.2	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	0.1	0.4	2.5
28-Jun	0.0	0.0	0.1	2.0	7.7	Z	14.8	25.3	18.3	10.4	1.6	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	3.5	25.3
29-Jun	Z	0.6	1.7	3.3	7.3	11.1	22.6	16.9	8.1	1.7	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.2	22.6
30-Jun	0.1	Z	0.1	0.2	0.6	1.0	0.4	0.9	1.9	2.7	1.3	0.5	0.1	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.5	2.7
	0.7	1.0	1.5	2.1	1.7	4.1	6.1	5.3	4.2	2.7	1.6	0.8	0.6	0.6	0.4	0.4	0.2	0.3	0.2	0.2	0.2	0.1	0.3	0.4	Diurnal Average	
	6.2	9.3	12.8	17.4	7.7	15.6	22.6	25.3	18.3	11.4	10.3	5.5	2.5	2.1	1.7	1.9	1.4	2.1	1.5	0.8	0.8	0.5	3.4	6.9	Diurnal Maximum	

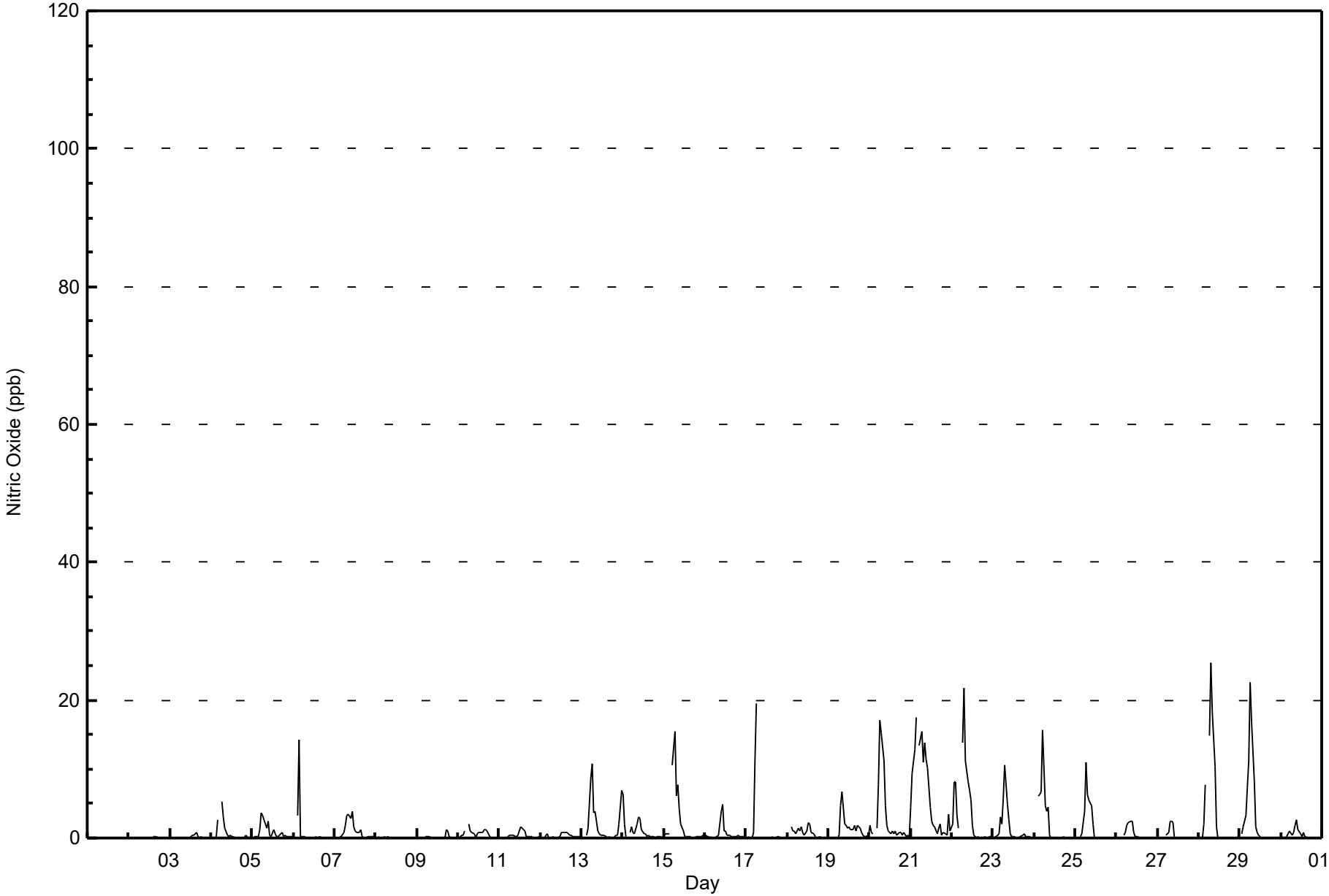
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Fort McKay South - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	642	99.53	99.53
21 - 40	3	0.47	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: 645

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Fort McKay South - June 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	111	78	25	7	8	13	22	76	41	58	25	24	36	33	28	57	642
21 - 40	0	2	0	0	1	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	111	80	25	7	9	13	22	76	41	58	25	24	36	33	28	57	645

Total Number of Valid Hours: 645

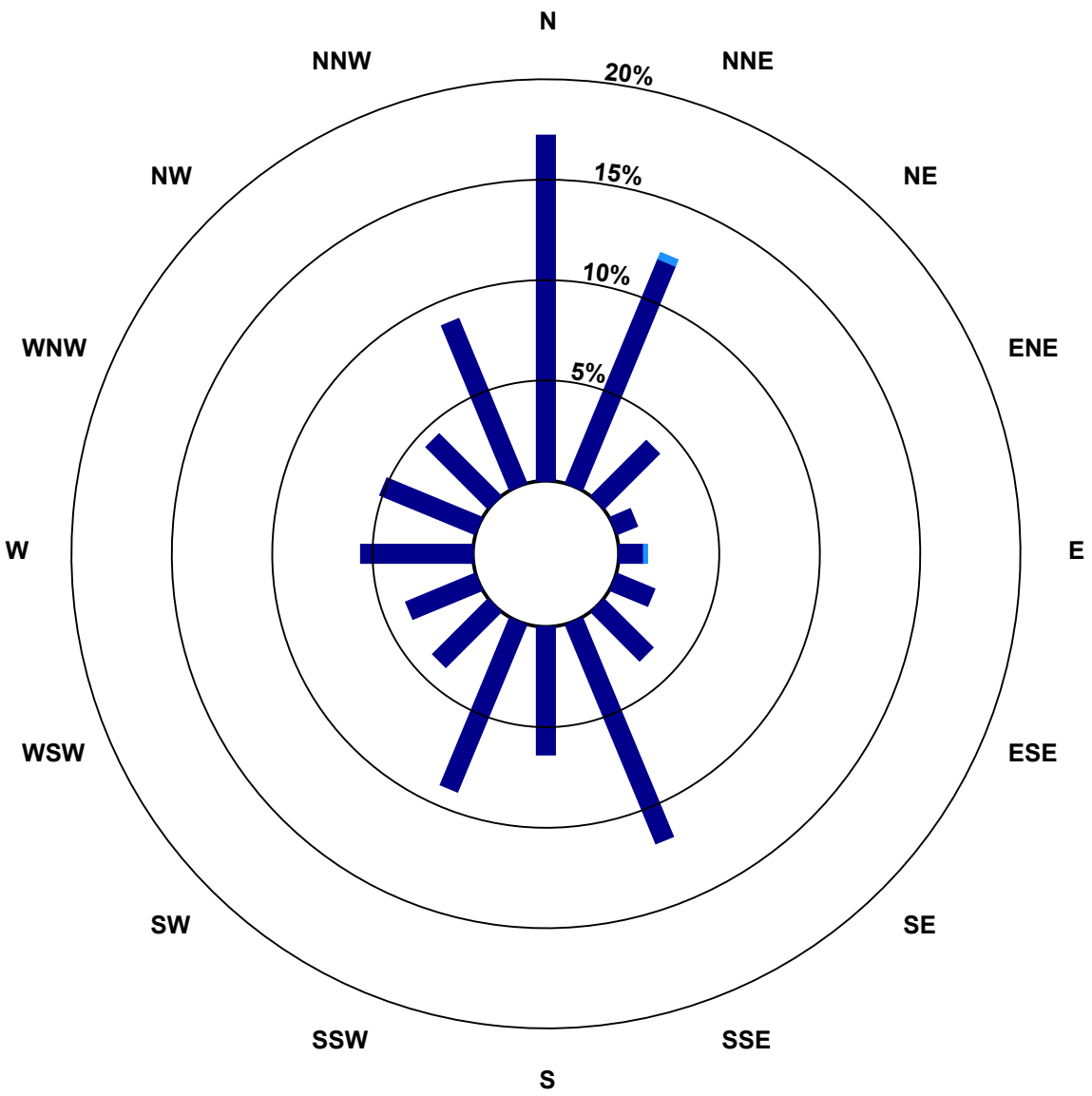
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Fort McKay South



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

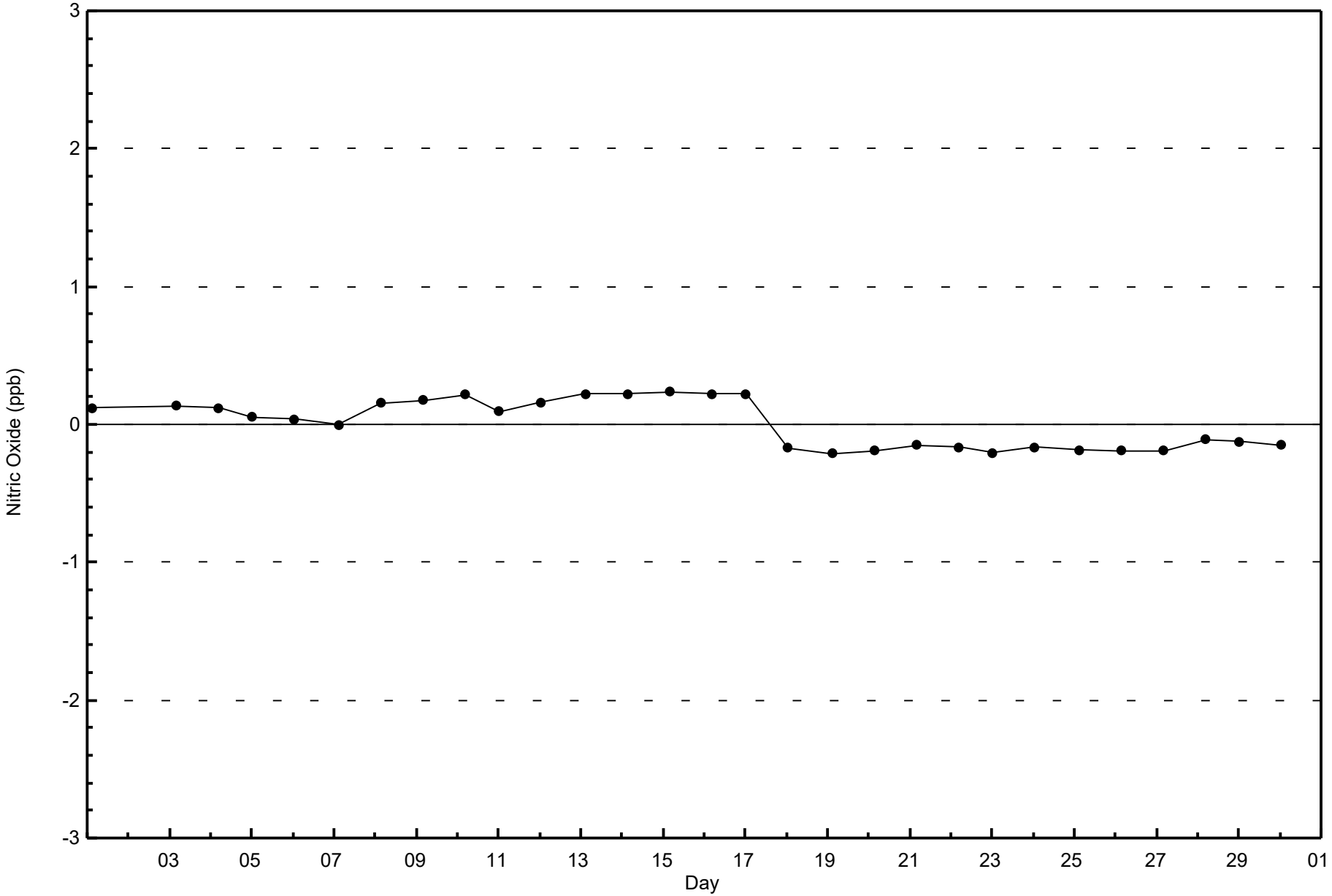
Total Number of Valid Hours: 645

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Fort McKay South - June 2026

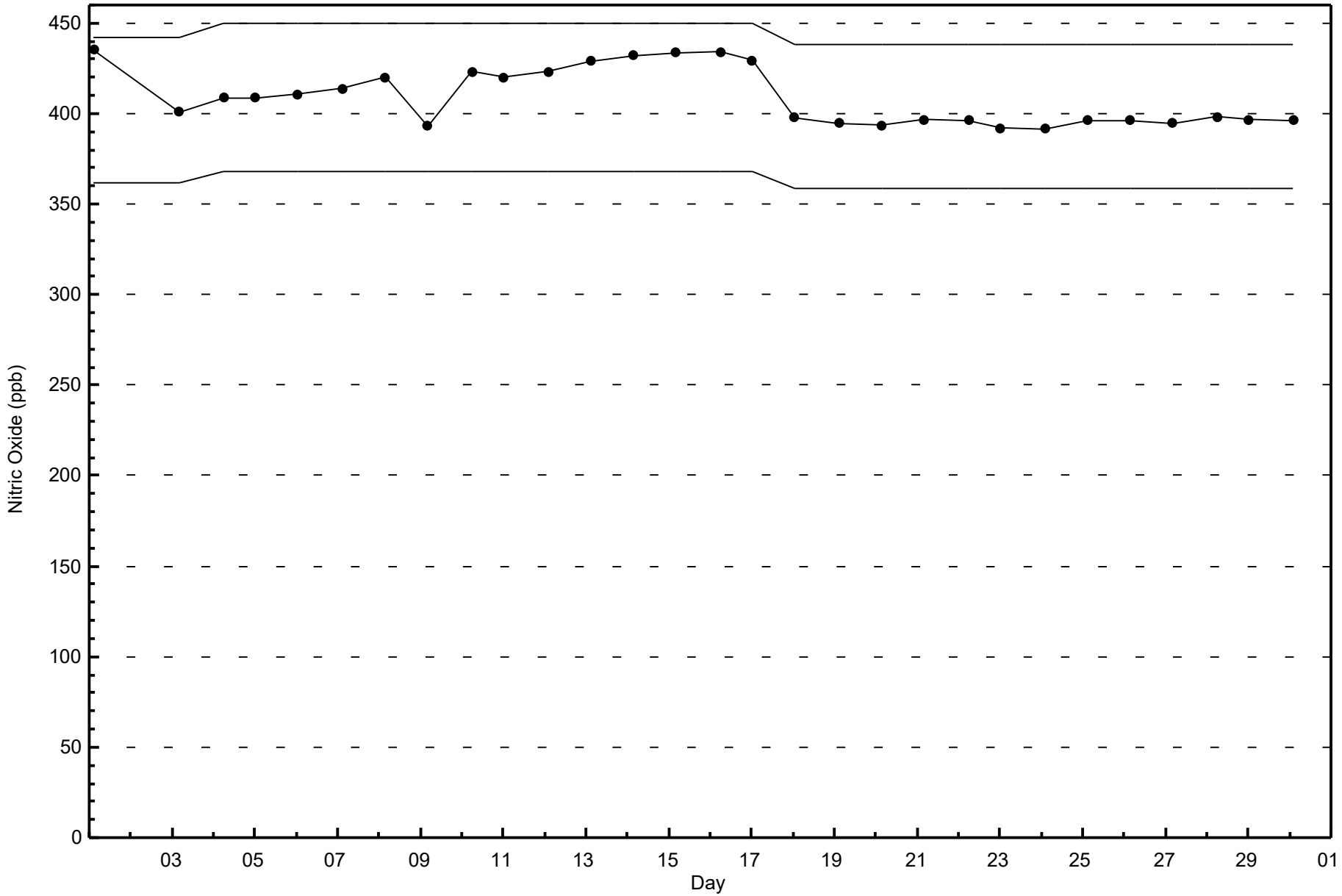


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Fort McKay South - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Fort McKay South - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 26.0 ppb on Jun 28 09:00
Maximum Daily Average: 8.3 ppb on Jun 29

Minimum Value: 0.0 ppb on Jun 8 12:00
Minimum Daily Average: 1.2 ppb on Jun 8
Maximum Diurnal Average: 6.7 ppb at hour 9
Minimum Diurnal Average: 1.6 ppb at hour 17
Monthly Average: 3.89 ppb
Percentiles: P_1 = 0.1 P_{10} = 0.4 Q_1 = 1.1 Median = 2.5 Q_3 = 5.2 P_{90} = 9.0 P_{99} = 20.3

Hours in Service:	720
Hours of Data:	645
Hours of Missing Data:	75
Hours of Calibration:	35
Percent Operational Time:	94.4

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	C	C	C	M	M	M	M	M	M	M	M	M	M	M	--	--
2-Jun	M	M	M	M	M	M	M	M	M	M	C	C	C	C	1.6	2.3	2.8	2.7	1.3	1.9	1.0	0.3	0.3	0.4	--	2.8
3-Jun	0.2	0.2	0.1	0.4	Z	0.5	0.5	0.3	0.6	0.6	0.8	1.0	2.5	3.6	3.2	4.9	2.8	1.8	2.7	2.4	0.9	0.6	0.5	0.2	1.4	4.9
4-Jun	0.1	0.1	0.1	0.6	2.7	Z	4.6	4.2	3.4	1.6	1.1	1.1	0.9	0.8	0.5	0.4	0.5	0.5	0.8	1.9	7.1	6.3	4.8	8.6	2.3	8.6
5-Jun	Z	7.5	7.3	8.5	8.6	8.8	5.9	4.7	3.2	4.7	1.7	1.7	3.6	2.6	1.7	3.9	4.7	7.1	4.2	6.3	8.6	7.6	9.6	4.4	5.5	9.6
6-Jun	2.4	Z	9.1	22.8	2.6	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.5	1.0	0.2	2.1	1.1	0.7	1.6	2.6	0.6	0.9	1.2	3.7	2.4	22.8
7-Jun	5.2	4.5	Z	1.9	3.2	4.0	3.0	3.7	4.8	3.9	5.4	2.8	2.3	2.2	2.7	4.5	2.4	1.9	1.6	2.1	3.3	4.2	7.2	4.9	3.6	7.2
8-Jun	4.0	4.4	5.7	Z	2.2	4.7	1.4	2.2	0.5	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	1.2	5.7
9-Jun	0.3	0.2	0.2	0.2	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	4.7	4.2	2.0	0.7	3.4	4.9	4.3	1.2	4.9
10-Jun	6.4	3.5	5.8	3.4	3.0	Z	4.7	2.5	2.2	1.9	0.4	2.4	2.7	2.0	3.4	2.8	2.3	1.8	0.5	0.1	0.2	2.1	3.1	5.8	2.7	6.4
11-Jun	Z	0.9	0.5	2.8	0.4	1.4	1.8	1.2	0.8	0.5	0.3	0.6	2.4	2.7	2.8	2.2	1.0	0.9	1.4	1.9	0.6	0.4	2.0	9.6	1.7	9.6
12-Jun	2.6	Z	2.0	10.6	6.3	0.5	0.5	0.6	0.4	0.4	0.3	0.8	2.0	2.3	2.3	2.3	1.9	2.2	2.1	2.8	4.6	4.6	4.9	8.7	2.9	10.6
13-Jun	3.1	1.0	Z	2.7	5.7	8.7	11.0	5.5	6.2	2.5	1.8	1.6	1.5	1.8	1.5	1.0	1.1	0.5	0.6	1.7	6.7	11.7	17.2	15.9	4.8	17.2
14-Jun	13.8	12.2	14.1	Z	7.3	7.3	3.0	2.6	6.4	8.8	8.6	6.1	2.4	2.4	1.6	2.2	1.6	1.5	1.8	1.0	3.6	2.8	3.9	2.9	5.1	14.1
15-Jun	6.2	9.5	8.0	5.3	Z	11.1	16.6	10.6	13.1	8.3	6.2	4.1	2.2	2.7	3.0	2.9	2.4	2.4	2.8	5.6	4.7	3.6	6.8	20.2	6.9	20.2
16-Jun	16.4	9.6	5.2	2.6	5.1	Z	1.6	1.6	1.8	9.3	9.3	3.9	4.2	2.1	1.3	1.1	1.2	1.4	1.2	2.8	4.6	5.4	8.9	17.7	5.1	17.7
17-Jun	Z	9.6	6.8	3.5	4.7	14.8	20.3	M	M	M	M	M	M	M	M	1.7	0.5	0.4	1.7	1.5	1.2	1.2	1.3	6.0	--	20.3
18-Jun	8.6	Z	12.1	11.4	6.9	3.3	5.0	2.8	4.5	2.3	1.3	3.2	4.8	5.3	2.2	1.6	0.6	0.3	0.4	2.3	1.0	1.4	1.6	1.0	3.6	12.1
19-Jun	0.7	0.4	Z	0.5	0.3	0.3	0.7	4.5	7.1	3.4	3.1	2.2	3.5	2.6	2.1	2.5	1.4	3.5	4.0	2.7	4.4	5.2	4.9	3.8	2.8	7.1
20-Jun	5.4	4.9	3.8	Z	1.3	4.6	8.6	9.2	7.2	3.9	2.2	1.4	1.2	1.7	1.0	1.4	0.9	1.7	1.7	1.9	7.8	7.6	12.4	8.3	4.4	12.4
21-Jun	13.3	14.9	15.1	14.4	Z	10.6	11.3	10.0	10.2	9.4	9.2	7.8	5.5	4.7	4.1	1.7	3.6	6.5	4.1	6.0	5.0	3.4	8.5	8.0	8.1	15.1
22-Jun	4.9	6.8	2.5	1.3	0.5	Z	6.2	11.2	9.5	8.5	9.6	8.8	3.9	2.2	1.4	2.1	2.0	1.3	1.6	1.9	1.8	2.7	6.2	5.4	4.4	11.2
23-Jun	Z	3.7	4.2	4.3	4.8	3.5	7.4	10.2	6.4	4.7	1.9	1.0	1.1	1.2	1.3	0.8	1.3	1.9	3.7	2.5	2.3	4.0	2.9	2.9	3.4	10.2
24-Jun	3.3	Z	6.4	5.6	4.9	10.3	8.2	6.6	8.0	1.6	1.0	M	1.3	1.6	1.1	1.2	1.3	3.0	1.4	0.7	0.9	1.2	3.5	3.3	3.5	10.3
25-Jun	4.4	5.0	Z	2.1	1.5	4.1	13.2	11.4	11.5	11.7	7.1	1.1	1.4	1.6	1.4	1.2	0.9	1.3	1.4	1.5	1.9	3.1	6.2	5.6	4.4	13.2
26-Jun	3.6	3.4	3.1	Z	2.6	2.4	5.5	7.3	8.3	8.6	3.9	1.8	1.6	1.7	1.5	2.0	1.6	1.0	0.9	0.7	2.0	1.6	1.0	0.9	2.9	8.6
27-Jun	1.0	0.7	0.8	1.4	Z	1.6	2.9	6.9	7.4	7.6	1.1	0.8	1.0	0.8	0.6	0.6	0.4	0.9	1.1	1.1	1.2	1.2	1.0	0.8	1.9	7.6
28-Jun	0.7	0.7	1.8	4.5	5.3	Z	16.4	23.8	26.0	21.5	8.2	0.9	0.7	0.7	1.0	0.7	1.1	1.0	2.0	3.0	3.0	5.7	10.4	12.6	6.6	26.0
29-Jun	Z	14.1	16.1	12.5	12.8	10.7	21.8	21.7	20.3	7.6	6.2	4.6	2.9	2.1	1.7	1.4	1.2	1.3	2.1	3.9	8.6	7.8	3.6	5.9	8.3	21.8
30-Jun	8.7	Z	4.3	3.8	3.0	2.1	2.6	5.6	10.3	13.1	8.0	5.0	3.0	8.5	4.7	3.4	2.2	2.4	1.4	0.9	0.9	1.1	1.3	3.2	4.3	13.1
	5.0	5.1	5.6	5.3	4.2	5.0	6.6	6.4	6.7	5.4	3.7	2.5	2.2	2.3	1.8	1.9	1.6	2.0	1.9	2.3	3.1	3.5	4.8	6.0	Diurnal Average	
	16.4	14.9	16.1	22.8	12.8	14.8	21.8	23.8	26.0	21.5	9.6	8.8	5.5	8.5	4.7	4.9	4.7	7.1	4.2	6.3	8.6	11.7	17.2	20.2	Diurnal Maximum	

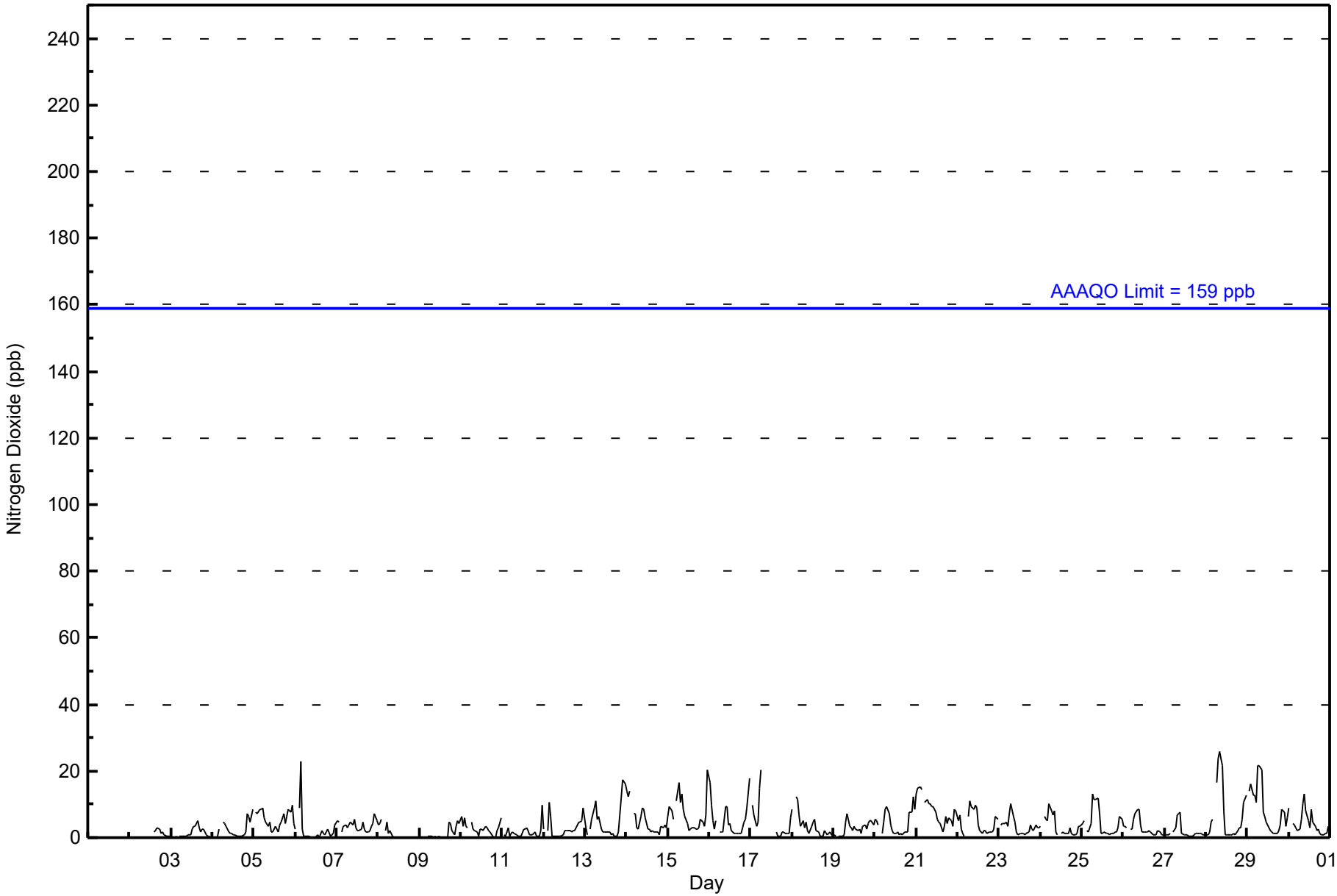
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Fort McKay South - June 2026



Nitrogen Dioxide (NO_2) - ppb
Fort McKay South - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	639	99.07	99.07
21 - 40	6	0.93	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: 645

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Fort McKay South - June 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	111	75	25	7	9	13	22	76	41	58	25	24	36	33	28	56	639
21 - 40	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6
11 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81 - 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	111	80	25	7	9	13	22	76	41	58	25	24	36	33	28	57	645

Total Number of Valid Hours: 645

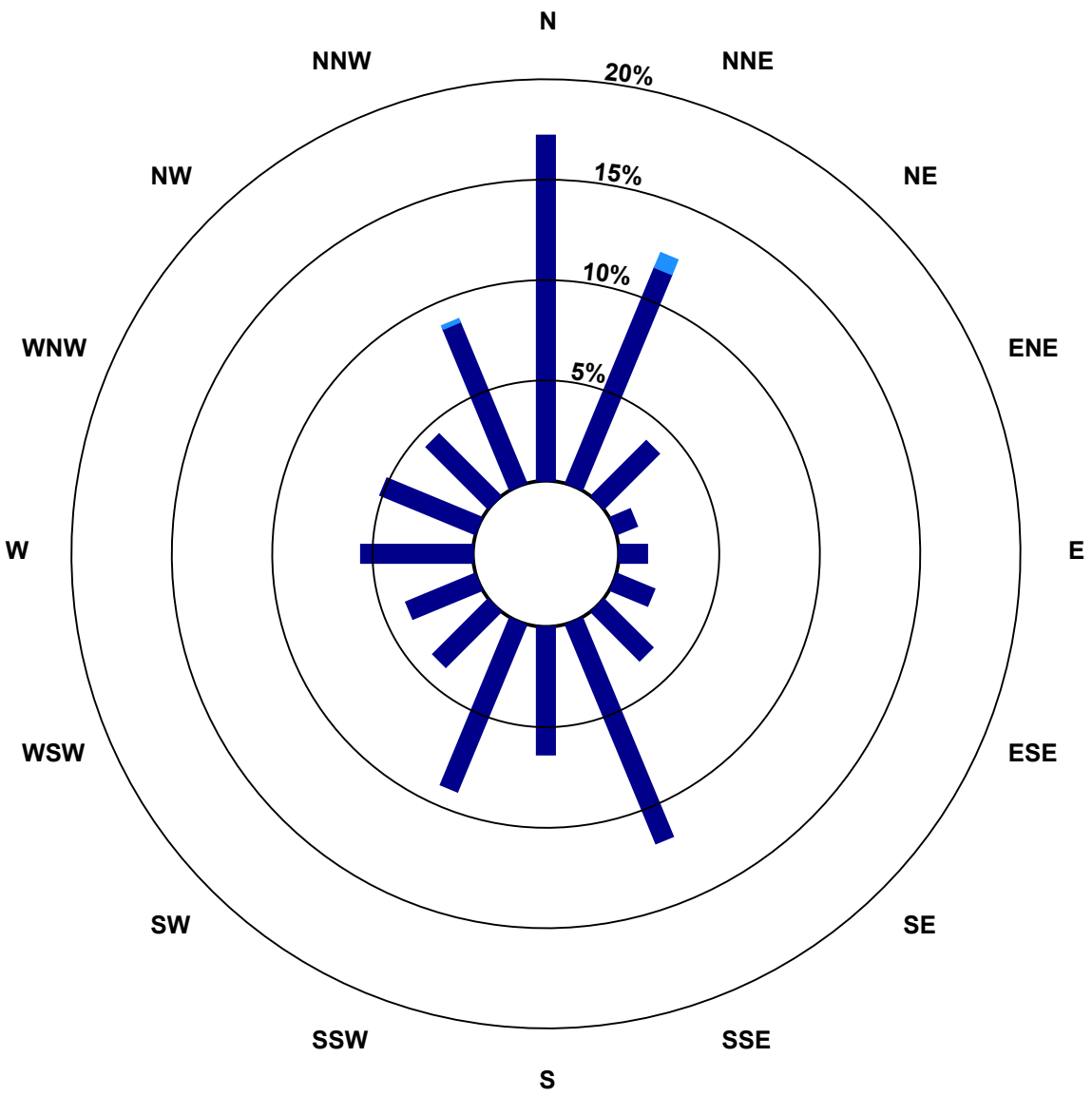
Total Number of Hours: 720

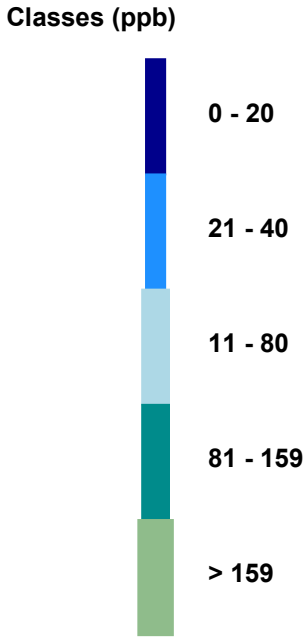
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Fort McKay South





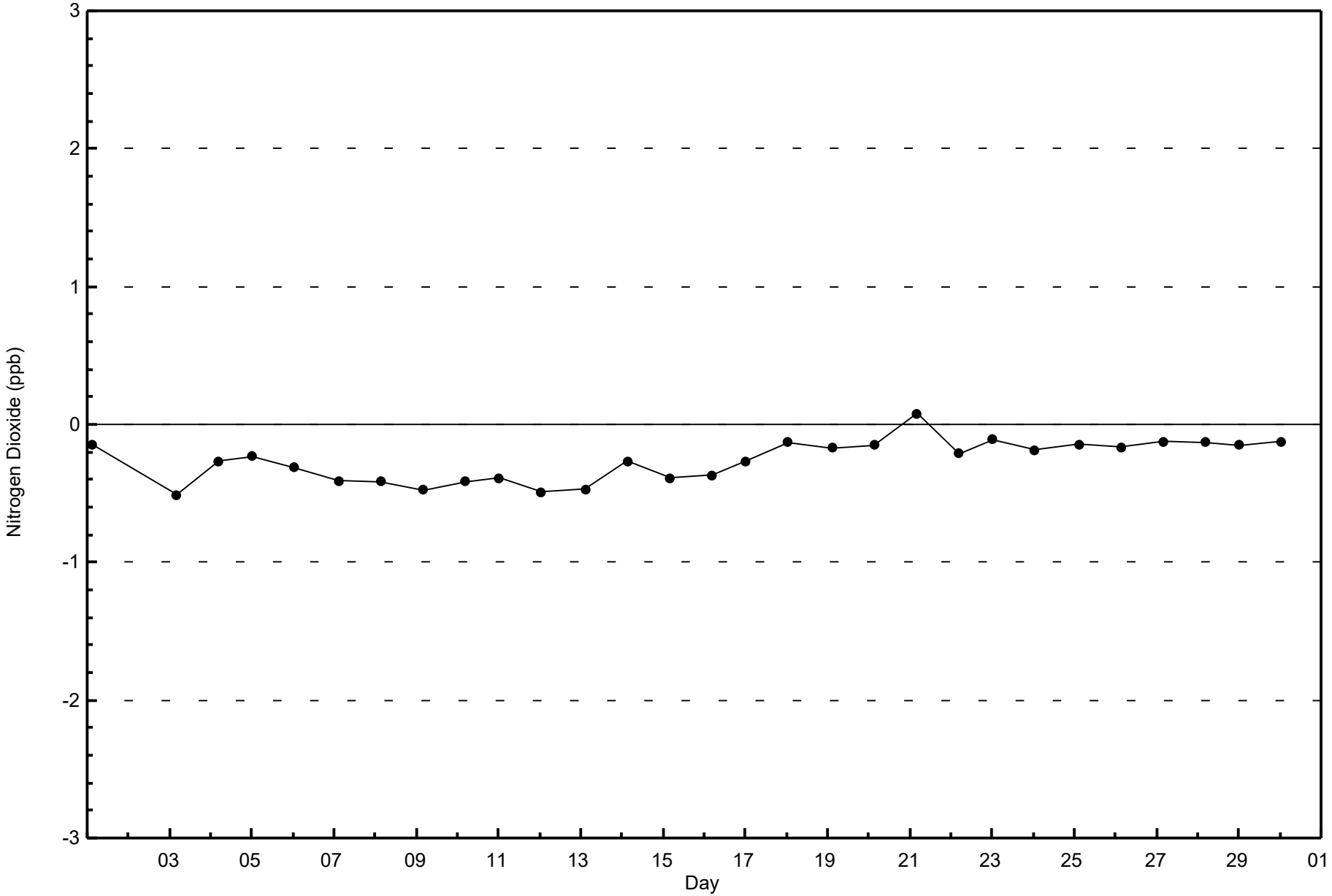
Total Number of Valid Hours: 645

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Fort McKay South - June 2026

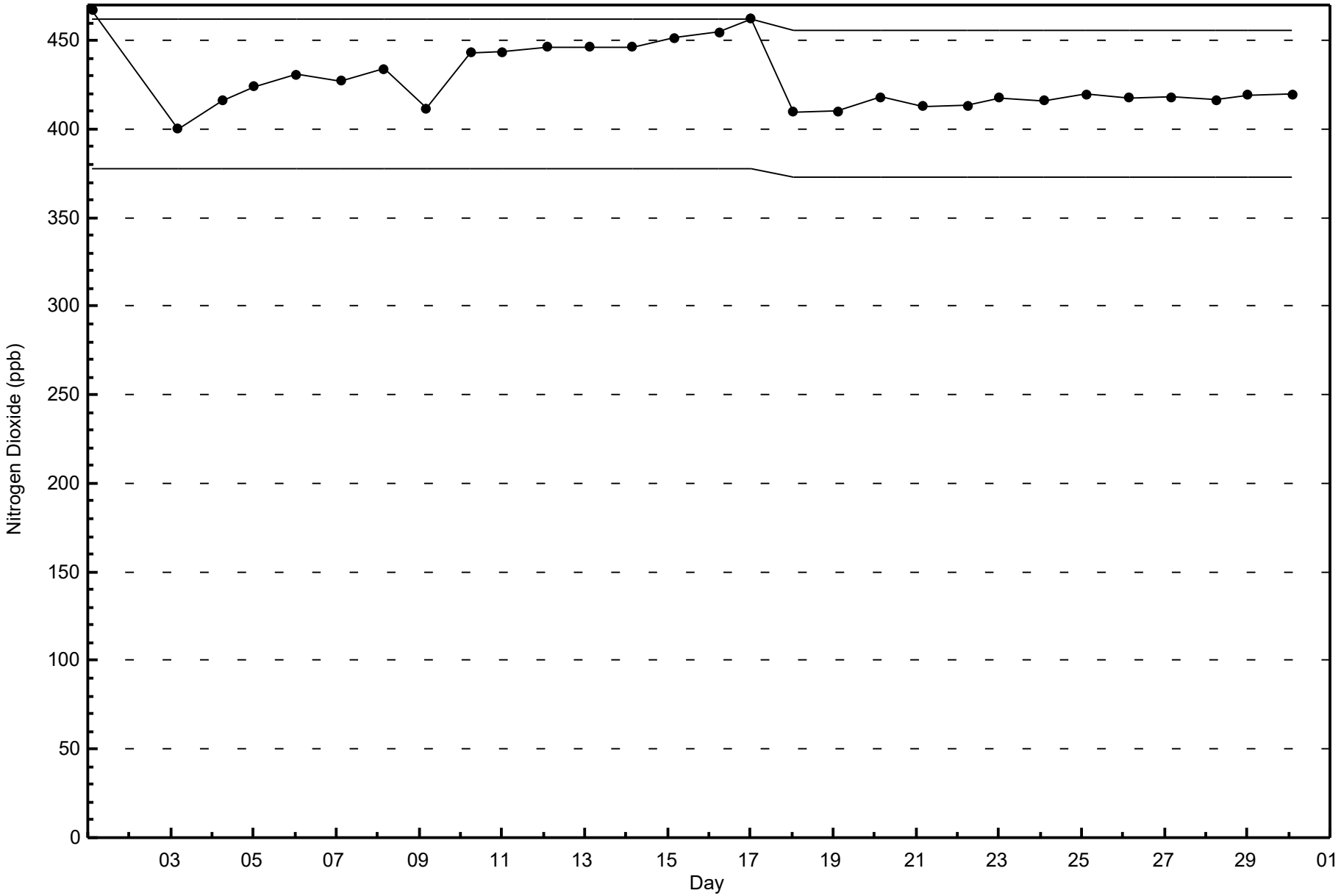


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Fort McKay South - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Fort McKay South - June 2026

Maximum Value: 49.1 ppb on Jun 28 08:00

Maximum Daily Average: 14.3 ppb on Jun 21

Minimum Value: 0.0 ppb on Jun 8 12:00

Minimum Daily Average: 1.2 ppb on Jun 8

Maximum Diurnal Average: 12.7 ppb at hour 7

Minimum Diurnal Average: 1.8 ppb at hour 17

Monthly Average: 5.34 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.5 Q_1 = 1.2 Median = 3.0 Q_3 = 6.5 P_{90} = 12.7 P_{99} = 32.6

Hours in Service:	720
Hours of Data:	645
Hours of Missing Data:	75
Hours of Calibration:	35
Percent Operational Time:	94.4

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	C	C	C	M	M	M	M	M	M	M	M	M	M	M	--	--
2-Jun	M	M	M	M	M	M	M	M	M	M	C	C	C	C	1.7	2.5	2.9	2.7	1.3	1.9	1.0	0.3	0.3	0.4	--	2.9
3-Jun	0.2	0.2	0.1	0.4	Z	0.5	0.5	0.3	0.6	0.6	0.8	1.0	2.7	4.1	3.7	5.7	3.0	1.8	2.9	2.4	0.9	0.6	0.5	0.2	1.5	5.7
4-Jun	0.1	0.1	0.1	0.8	5.3	Z	10.0	7.3	4.7	2.0	1.3	1.4	1.2	1.0	0.6	0.4	0.5	0.5	0.8	1.9	7.5	6.4	4.9	8.8	2.9	10.0
5-Jun	Z	7.7	7.5	8.8	9.7	12.4	9.2	7.3	4.6	7.2	2.2	1.9	4.9	3.3	1.9	4.2	5.1	8.0	4.5	6.6	8.9	7.8	9.9	4.5	6.4	12.4
6-Jun	2.5	Z	12.3	37.0	2.9	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.5	1.1	0.2	2.3	1.2	0.7	1.6	2.7	0.6	0.9	1.2	3.7	3.2	37.0
7-Jun	5.3	4.6	Z	2.1	3.5	4.8	4.8	7.0	8.3	6.7	9.3	4.5	3.4	3.1	3.6	5.8	2.7	2.0	1.7	2.2	3.5	4.4	7.4	5.0	4.6	9.3
8-Jun	4.1	4.5	5.8	Z	2.3	4.9	1.4	2.4	0.5	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	1.2	5.8
9-Jun	0.3	0.3	0.3	0.3	Z	0.6	0.5	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	6.0	5.2	2.1	0.7	3.4	4.9	4.3	1.4	6.0
10-Jun	6.5	3.6	6.1	3.8	3.9	Z	6.8	3.6	3.1	2.5	0.4	3.0	3.4	2.8	4.3	4.1	3.4	2.8	0.7	0.2	0.2	2.1	3.2	5.9	3.3	6.8
11-Jun	Z	0.9	0.5	2.9	0.5	1.6	2.3	1.6	1.1	0.7	0.4	1.0	4.0	4.1	4.1	3.1	1.3	1.1	1.6	2.0	0.6	0.4	2.0	9.8	2.1	9.8
12-Jun	2.6	Z	2.1	11.0	6.8	0.6	0.5	0.7	0.4	0.5	0.3	1.0	2.7	3.2	3.2	3.1	2.4	2.7	2.5	3.0	4.9	4.7	5.0	8.9	3.2	11.0
13-Jun	3.2	1.0	Z	3.0	7.1	17.5	21.8	9.1	10.0	3.5	2.3	2.0	1.8	2.2	1.7	1.1	1.2	0.5	0.6	1.8	7.1	12.2	19.3	22.8	6.7	22.8
14-Jun	20.0	14.3	14.4	Z	8.1	8.8	3.8	3.3	8.5	11.9	11.4	7.4	2.9	3.1	1.8	2.5	1.9	1.7	2.0	1.1	3.8	2.9	4.0	3.0	6.2	20.0
15-Jun	6.4	10.0	8.5	5.9	Z	21.6	32.1	16.7	20.8	12.5	8.3	5.1	2.5	3.0	3.2	3.0	2.4	2.4	2.9	5.8	4.9	3.7	7.0	20.7	9.1	32.1
16-Jun	16.9	9.9	5.3	2.7	5.3	Z	1.8	1.8	2.2	13.2	14.1	5.0	5.2	2.5	1.6	1.4	1.4	1.6	1.3	3.1	4.9	5.5	9.0	17.9	5.8	17.9
17-Jun	Z	9.8	6.9	3.6	5.5	26.0	39.8	M	M	M	M	M	M	M	M	1.9	0.5	0.4	1.9	1.6	1.2	1.2	1.3	6.1	--	39.8
18-Jun	8.8	Z	13.7	12.4	8.0	4.0	6.4	3.9	6.2	3.1	1.6	4.2	7.0	7.4	3.0	2.1	0.8	0.4	0.5	2.5	1.1	1.4	1.6	1.0	4.4	13.7
19-Jun	0.7	0.5	Z	0.6	0.4	0.4	1.2	9.2	13.8	5.4	5.0	3.7	5.1	3.7	3.4	4.4	2.4	5.4	5.5	3.5	4.9	5.4	5.1	4.1	4.1	13.8
20-Jun	7.2	5.8	4.4	Z	2.7	12.3	25.8	24.4	18.4	8.5	4.1	2.4	1.9	2.8	1.6	2.4	1.4	2.6	2.4	2.2	8.6	7.7	12.8	8.5	7.4	25.8
21-Jun	17.7	24.2	27.9	31.8	Z	24.1	26.8	21.0	24.0	20.8	19.5	12.4	8.0	6.6	5.8	2.2	5.0	8.6	4.6	6.8	5.7	3.8	11.9	9.0	14.3	31.8
22-Jun	6.9	15.0	10.6	4.6	1.9	Z	20.0	32.9	20.7	16.6	16.6	14.3	5.6	2.7	1.5	2.2	2.1	1.4	1.6	2.0	1.9	2.8	6.3	5.5	8.5	32.9
23-Jun	Z	3.9	4.3	4.9	7.9	5.6	13.2	20.8	11.3	7.3	2.5	1.2	1.2	1.2	1.3	0.8	1.5	2.4	4.3	2.7	2.4	4.1	3.0	3.0	4.8	20.8
24-Jun	3.4	Z	12.4	12.0	11.5	25.9	12.9	10.4	12.5	1.9	1.1	M	1.4	1.7	1.1	1.2	1.3	3.2	1.4	0.7	0.9	1.2	3.6	3.4	5.7	25.9
25-Jun	4.5	5.1	Z	2.3	2.0	8.0	24.1	17.7	16.9	16.5	9.2	1.2	1.4	1.6	1.4	1.2	0.9	1.3	1.4	1.5	1.9	3.1	6.3	5.7	5.9	24.1
26-Jun	3.7	3.5	3.2	Z	3.1	3.3	7.3	9.6	10.7	11.0	4.7	2.0	1.7	1.8	1.5	2.0	1.6	1.0	0.9	0.7	2.0	1.6	1.0	1.0	3.4	11.0
27-Jun	1.1	0.8	0.9	1.5	Z	2.0	3.7	9.3	9.9	9.8	1.1	0.8	1.0	0.8	0.6	0.6	0.4	0.9	1.1	1.1	1.2	1.2	1.1	0.9	2.3	9.9
28-Jun	0.7	0.7	1.9	6.5	13.0	Z	31.2	49.1	44.3	31.9	9.8	0.9	0.7	0.7	1.0	0.7	1.1	1.0	2.0	3.0	3.0	5.7	10.5	12.8	10.1	49.1
29-Jun	Z	14.7	17.8	15.8	20.1	21.8	44.4	38.6	28.4	9.3	7.1	4.9	2.9	2.1	1.7	1.4	1.2	1.3	2.1	3.9	8.6	7.8	3.6	6.0	11.5	44.4
30-Jun	8.8	Z	4.4	4.0	3.6	3.1	3.0	6.5	12.2	15.8	9.3	5.5	3.1	9.3	4.9	3.4	2.2	2.4	1.4	0.9	0.9	1.1	1.4	3.3	4.8	15.8
	5.7	6.1	7.1	7.4	5.9	9.1	12.7	11.7	10.9	8.1	5.3	3.4	2.8	2.8	2.2	2.3	1.8	2.3	2.1	2.4	3.2	3.6	5.1	6.4	Diurnal Average	
	20.0	24.2	27.9	37.0	20.1	26.0	44.4	49.1	44.3	31.9	19.5	14.3	8.0	9.3	5.8	5.8	5.1	8.6	5.5	6.8	8.9	12.2	19.3	22.8	Diurnal Maximum	

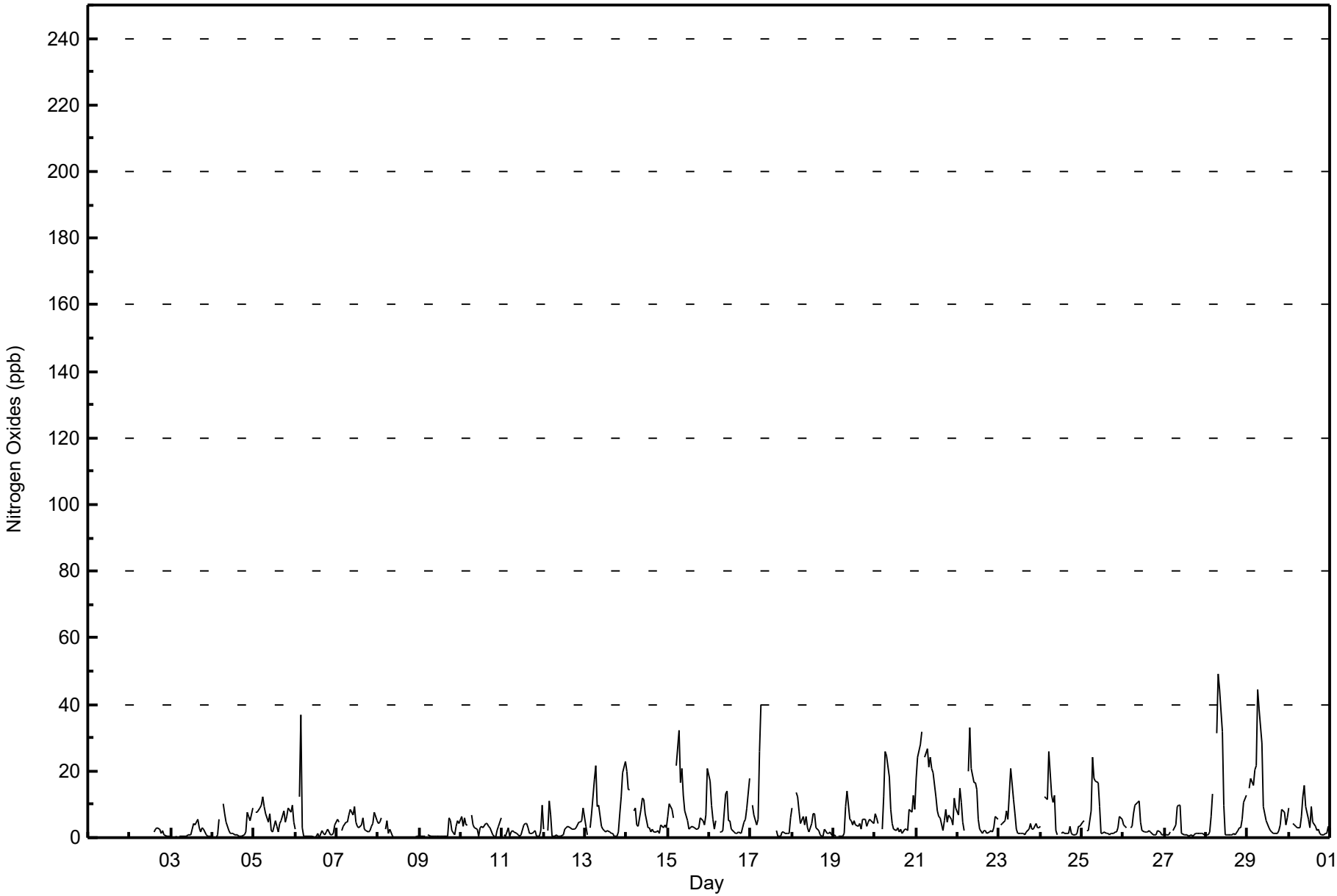
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Fort McKay South - June 2026



Nitrogen Oxides (NO_X) - ppb
Fort McKay South - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	613	95.04	95.04
21 - 40	29	4.50	99.53
11 - 80	3	0.47	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 645

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Fort McKay South - June 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	102	73	25	7	8	13	21	74	41	57	25	24	36	32	26	49	613
21 - 40	9	4	0	0	1	0	1	2	0	1	0	0	0	1	2	8	29
11 - 80	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
81 - 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	111	80	25	7	9	13	22	76	41	58	25	24	36	33	28	57	645

Total Number of Valid Hours: 645

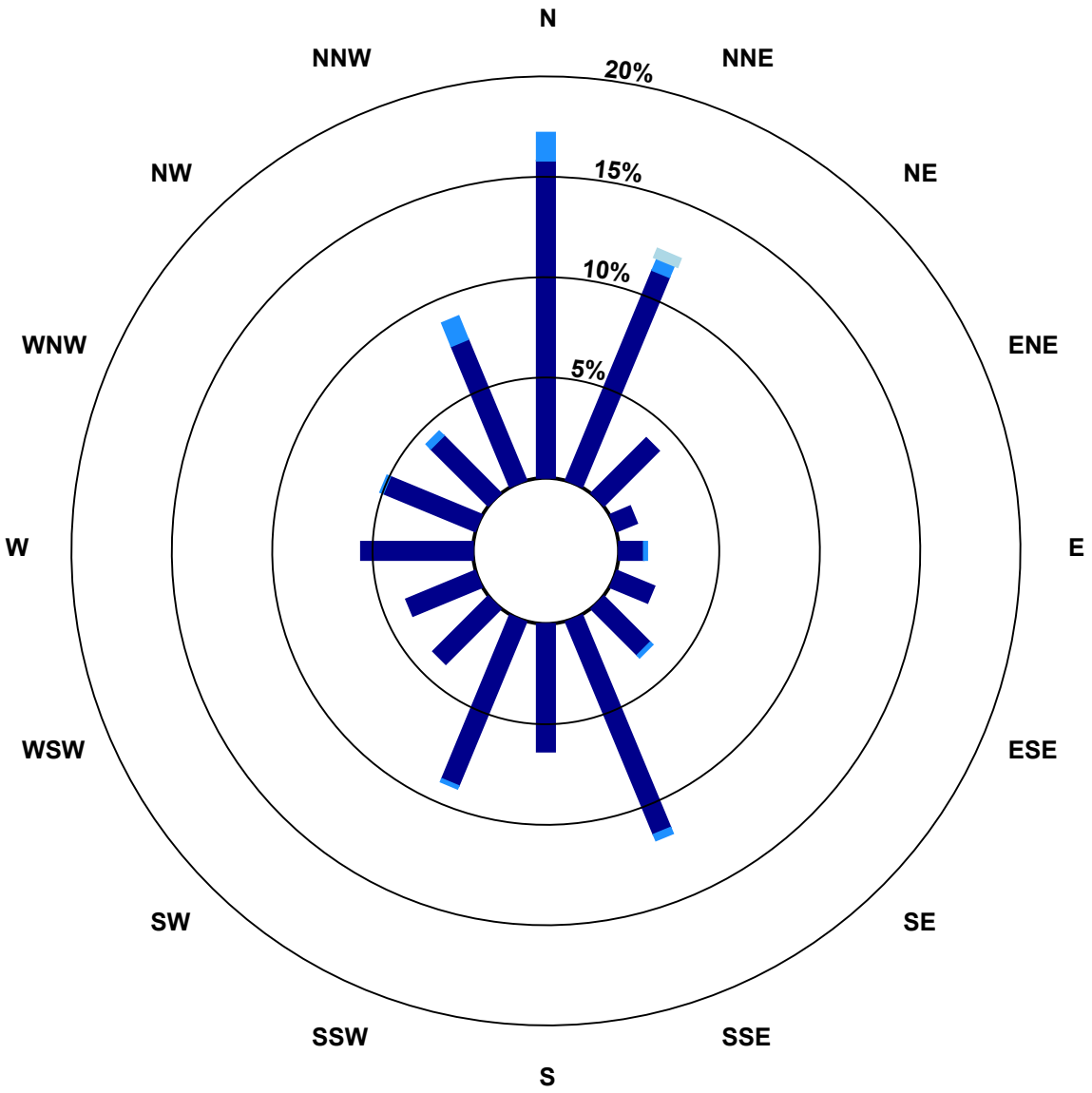
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Fort McKay South



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

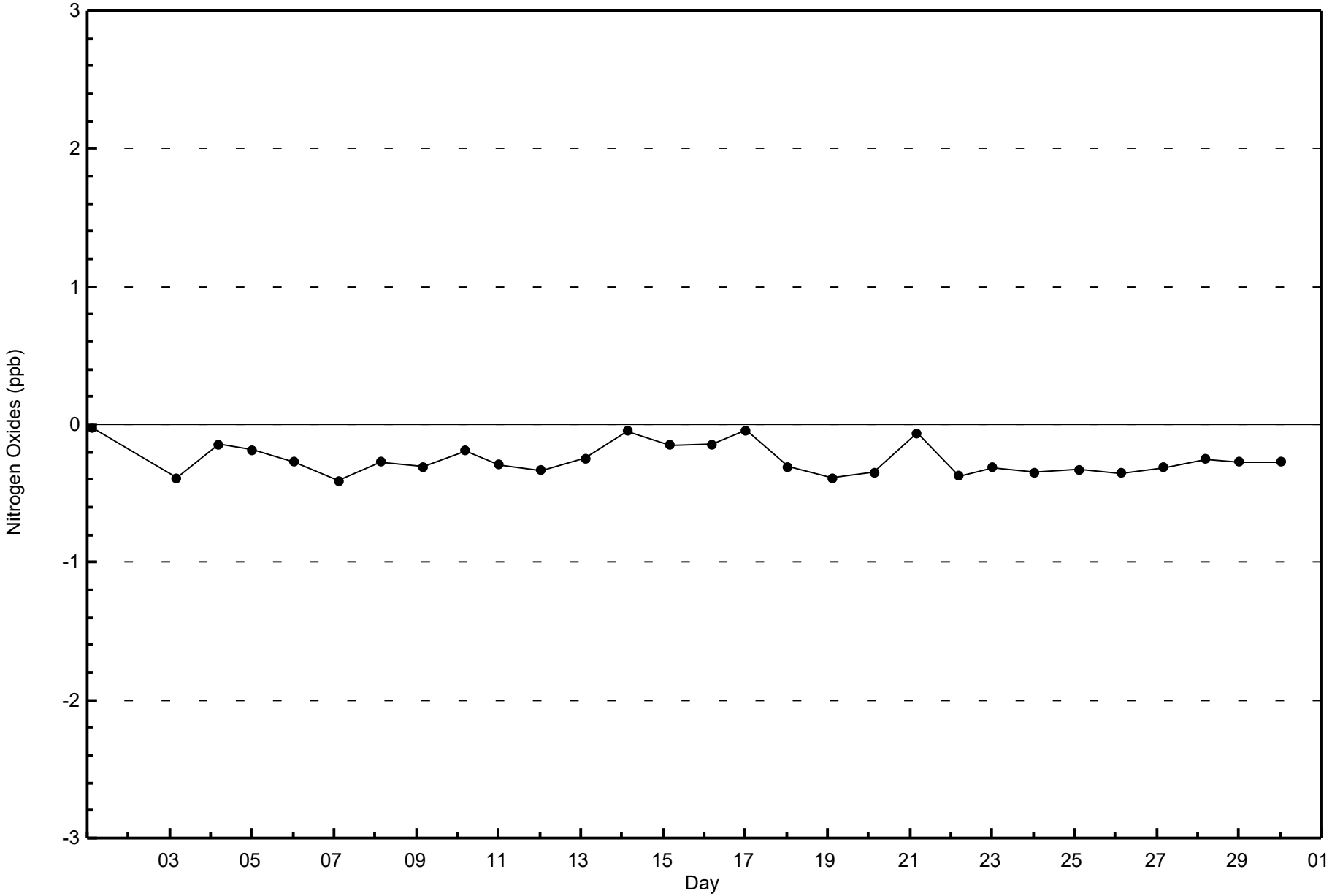
Total Number of Valid Hours: 645

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Fort McKay South - June 2026

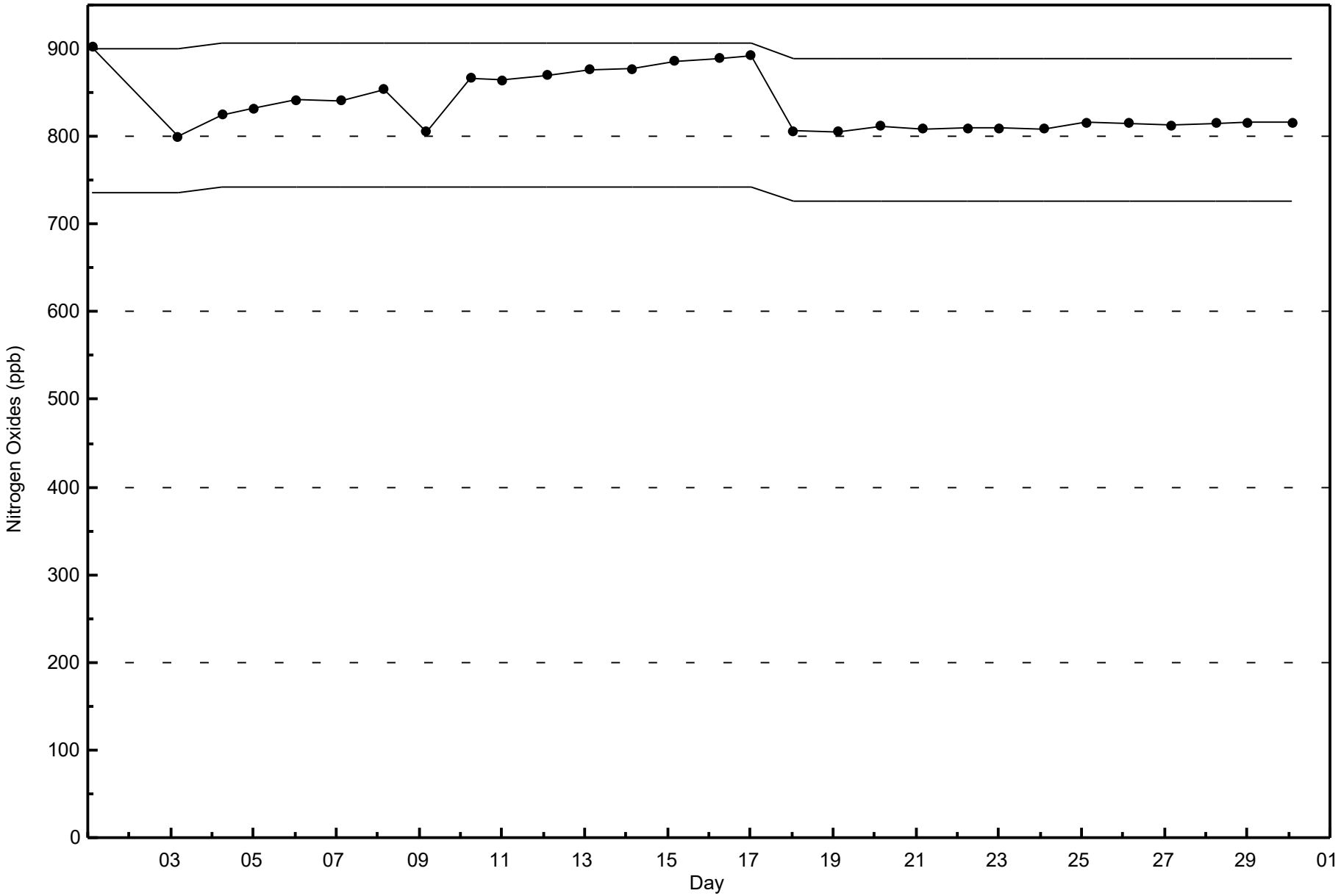


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Fort McKay South - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Fort McKay South - June 2026

Number of Exceedances (AAAQO): 1-hr: 8 24-hr: 2

Maximum Value: 100.4 $\mu g/m^3$ on Jun 30 01:00

Maximum Daily Average: 57.2 $\mu g/m^3$ on Jun 30

Minimum Value: 0.6 $\mu g/m^3$ on Jun 8 12:00

Minimum Daily Average: 1.5 $\mu g/m^3$ on Jun 2

Maximum Diurnal Average: 10.5 $\mu g/m^3$ at hour 10

Minimum Diurnal Average: 7.1 $\mu g/m^3$ at hour 6

Monthly Average: 8.72 $\mu g/m^3$

Percentiles: P_1 = 0.8 P_{10} = 1.5 Q_1 = 2.6 Median = 4.4 Q_3 = 8.0 P_{90} = 15.1 P_{99} = 79.4

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-Jun	1.5	1.4	1.2	1.1	1.2	1.2	1.3	1.9	1.6	1.3	1.5	1.7	1.9	1.9	2.1	2.1	1.9	1.9	2.1	1.8	1.3	1.1	1.2	1.2	1.6	2.1
2-Jun	1.2	1.1	1.0	1.1	1.1	1.0	0.9	1.1	1.2	2.8	2.9	1.5	1.6	1.5	2.2	2.2	2.5	2.8	1.3	1.2	1.3	1.0	0.9	1.0	1.5	2.9
3-Jun	1.0	1.3	1.3	1.5	1.8	1.7	1.9	1.6	2.2	3.0	3.4	3.2	5.9	7.6	6.6	6.7	5.2	4.5	5.9	6.0	5.9	6.0	6.0	6.5	4.0	7.6
4-Jun	6.2	6.2	6.0	6.2	6.3	7.2	8.4	11.4	13.1	14.0	12.3	12.2	12.7	14.2	12.3	10.8	10.0	8.7	8.1	7.9	10.1	15.5	11.0	10.9	10.1	15.5
5-Jun	9.9	8.8	7.8	7.7	7.9	7.7	7.5	6.7	6.2	8.1	7.0	5.5	7.6	6.2	4.7	7.3	8.6	5.2	3.9	6.6	8.8	9.9	14.7	5.3	7.5	14.7
6-Jun	2.9	2.6	3.3	5.8	3.8	2.6	2.6	2.8	2.9	2.9	2.8	2.4	2.5	2.6	2.6	2.5	3.1	3.0	2.8	2.7	2.7	2.5	2.7	2.8	2.9	5.8
7-Jun	2.7	2.8	2.7	2.8	3.1	3.0	2.8	3.4	4.6	4.4	4.9	3.8	3.9	4.4	6.0	8.2	6.9	5.8	3.9	4.1	4.9	4.9	4.3	3.3	4.2	8.2
8-Jun	3.0	3.3	3.7	3.7	3.6	3.5	3.3	3.1	1.6	1.2	0.9	0.6	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.3	1.7	1.9	1.8	1.7	1.9	3.7
9-Jun	1.5	1.5	1.5	1.6	1.6	1.6	1.8	1.8	1.7	1.6	1.7	1.8	1.7	1.5	1.7	1.8	2.0	4.1	4.6	3.6	3.1	3.7	3.9	3.5	2.3	4.6
10-Jun	3.8	3.9	4.0	4.2	4.2	4.0	3.8	3.0	3.2	2.2	1.3	1.3	0.7	1.0	1.4	1.4	1.4	1.3	1.4	1.2	1.1	1.8	2.3	1.9	2.3	4.2
11-Jun	1.8	1.0	0.7	1.1	0.8	1.0	0.7	0.8	0.7	0.7	0.7	1.3	2.4	2.4	1.9	2.3	2.3	2.5	2.3	2.8	2.1	1.7	2.0	3.1	1.6	3.1
12-Jun	2.4	1.9	2.3	2.7	2.2	1.6	1.5	1.5	1.4	1.5	1.6	2.3	3.8	4.1	4.0	3.8	3.5	3.8	3.4	3.4	3.8	4.2	4.5	5.6	2.9	5.6
13-Jun	3.9	3.1	2.8	2.8	2.8	2.7	2.7	2.7	3.4	2.6	2.6	3.0	3.2	4.2	4.7	3.9	3.7	2.6	3.0	2.9	7.2	18.2	21.1	20.3	5.4	21.1
14-Jun	16.7	9.4	4.4	3.9	4.1	3.9	3.8	4.3	5.4	6.1	6.5	8.2	4.4	4.2	3.9	4.4	4.4	5.1	5.1	3.8	5.3	5.5	5.9	5.2	5.6	16.7
15-Jun	5.8	5.7	5.4	5.1	5.3	6.0	10.6	8.7	12.0	11.5	7.1	7.5	7.8	10.4	12.1	14.6	14.3	13.2	11.4	14.1	12.1	10.4	11.9	11.8	9.8	14.6
16-Jun	8.8	7.6	5.7	4.8	5.7	5.5	3.8	3.2	3.8	6.0	11.1	10.2	15.1	10.6	5.6	4.0	3.3	3.6	3.7	5.8	6.0	8.3	6.4	6.9	6.5	15.1
17-Jun	6.4	4.3	3.3	2.7	2.7	4.5	6.2	5.8	4.0	4.8	3.6	3.7	4.0	4.3	4.1	4.2	2.6	2.4	3.6	3.3	3.2	3.5	3.3	5.2	4.0	6.4
18-Jun	5.0	5.2	4.7	4.2	3.5	2.9	3.3	2.7	2.9	2.5	2.1	2.6	4.2	4.7	3.8	2.5	2.3	2.0	2.0	2.6	2.4	2.0	2.5	2.1	3.1	5.2
19-Jun	2.2	2.1	2.1	2.4	2.3	2.4	2.5	3.3	4.3	3.3	3.2	3.1	3.8	2.8	2.5	2.7	2.3	1.3	2.1	2.1	2.7	3.5	3.9	3.4	2.8	4.3
20-Jun	3.3	2.3	1.8	1.6	1.6	2.2	3.0	3.7	4.3	3.1	2.6	2.3	2.0	2.4	2.7	1.7	1.7	2.2	2.4	1.4	2.6	3.7	4.2	3.4	2.6	4.3
21-Jun	4.5	4.6	3.7	3.9	3.7	3.5	3.7	3.2	2.6	2.4	2.4	3.2	3.7	4.4	4.5	3.9	4.3	5.3	5.0	4.9	4.9	4.8	4.6	4.1	4.0	5.3
22-Jun	4.2	4.7	4.4	4.2	4.1	3.7	5.5	6.4	5.4	5.6	6.9	7.0	5.6	7.1	6.2	6.6	6.3	5.7	6.6	7.0	6.1	6.2	14.4	15.7	6.5	15.7
23-Jun	13.6	13.1	12.4	12.1	14.0	9.5	8.3	8.2	11.9	10.7	8.1	6.2	7.7	7.6	5.6	4.3	3.3	4.4	7.1	8.6	9.1	9.8	9.9	9.4	9.0	14.0
24-Jun	9.0	9.4	9.3	8.7	8.5	9.9	10.9	9.9	16.5	8.6	C	M	6.9	8.0	7.6	7.7	8.0	9.1	7.4	5.7	5.7	6.4	10.5	10.4	8.8	16.5
25-Jun	13.5	13.6	10.7	9.7	9.0	10.6	13.0	11.1	13.5	14.6	10.8	5.3	5.4	5.7	5.7	4.8	5.1	5.8	5.5	5.7	5.9	7.4	11.4	13.1	9.0	14.6
26-Jun	12.7	11.8	10.6	10.3	10.6	9.9	10.6	11.3	11.7	10.7	9.0	7.5	6.5	6.2	5.3	6.3	6.4	6.3	5.6	5.0	6.6	6.6	5.3	4.8	8.2	12.7
27-Jun	DF	5.1	5.2	6.4	8.0	7.1	7.5	10.9	11.0	12.9	4.9	4.9	7.6	6.2	5.4	4.8	4.4	6.3	6.4	6.4	6.4	6.2	5.9	5.9	6.8	12.9
28-Jun	5.7	5.7	6.5	8.0	9.1	9.1	12.4	19.3	28.4	34.9	35.2	15.1	18.0	22.1	25.4	23.0	22.1	22.5	23.1	24.5	22.8	23.8	27.0	23.0	19.4	35.2
29-Jun	19.7	18.1	16.2	15.6	15.6	15.4	21.9	30.0	42.4	62.4	71.5	74.1	89.3	80.4	55.7	34.6	30.3	34.1	72.5	82.7	81.6	82.1	70.7	83.8	50.0	89.3
30-Jun	100.4	83.9	72.2	72.1	71.6	67.5	64.5	57.8	59.7	69.9	51.6	53.9	60.9	70.7	65.9	57.7	50.4	59.4	45.4	33.0	23.5	22.2	22.5	35.6	57.2	100.4
	9.4	8.2	7.2	7.3	7.3	7.1	7.7	8.0	9.5	10.5	9.7	8.8	10.0	10.3	9.1	8.1	7.5	7.9	8.6	8.7	8.7	9.5	9.9	10.4	Diurnal Average	
	100.4	83.9	72.2	72.1	71.6	67.5	64.5	57.8	59.7	69.9	71.5	74.1	89.3	80.4	65.9	57.7	50.4	59.4	72.5	82.7	81.6	82.1	70.7	83.8	Diurnal Maximum	

C - Calibration M - Maintenance DF - DAS Failure

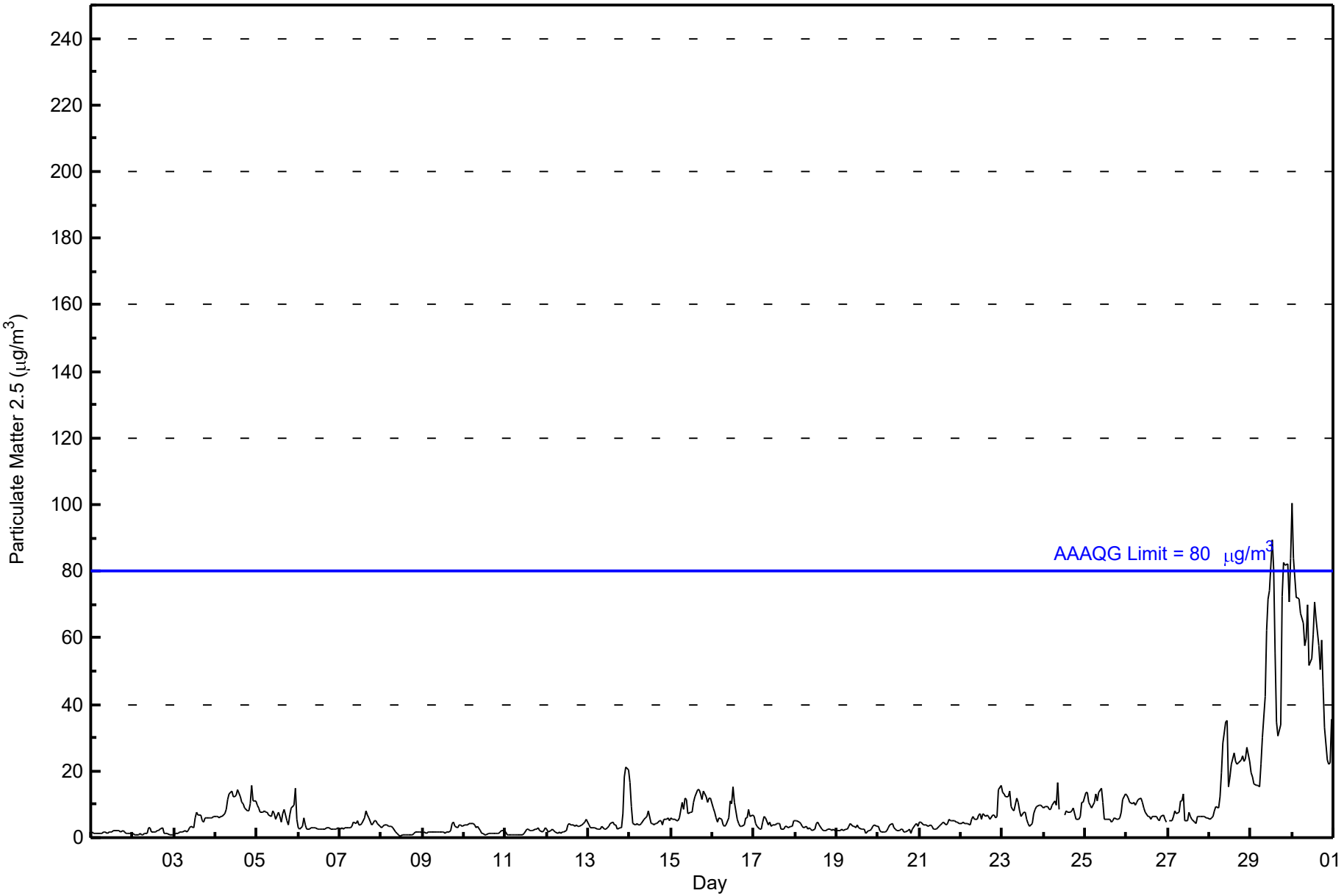
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Fort McKay South - June 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Fort McKay South - June 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	422	58.86	58.86
6 - 15	226	31.52	90.38
16 - 25	27	3.77	94.14
26 - 80	35	4.88	99.02
> 81.0	7	0.98	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 - June 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	98	62	13	3	6	9	9	24	16	11	14	15	32	25	22	52	411
6 - 15	19	19	7	3	2	3	10	51	23	46	8	8	4	9	5	9	226
16 - 25	1	5	5	0	0	0	0	2	0	1	2	2	0	1	6	2	27
26 - 80	5	13	4	1	1	1	3	0	0	1	1	1	2	2	0	0	35
> 81.0	3	0	0	0	0	0	0	0	1	2	0	1	0	0	0	0	7
Totals	126	99	29	7	9	13	22	77	40	61	25	27	38	37	33	63	706

Total Number of Valid Hours: 706

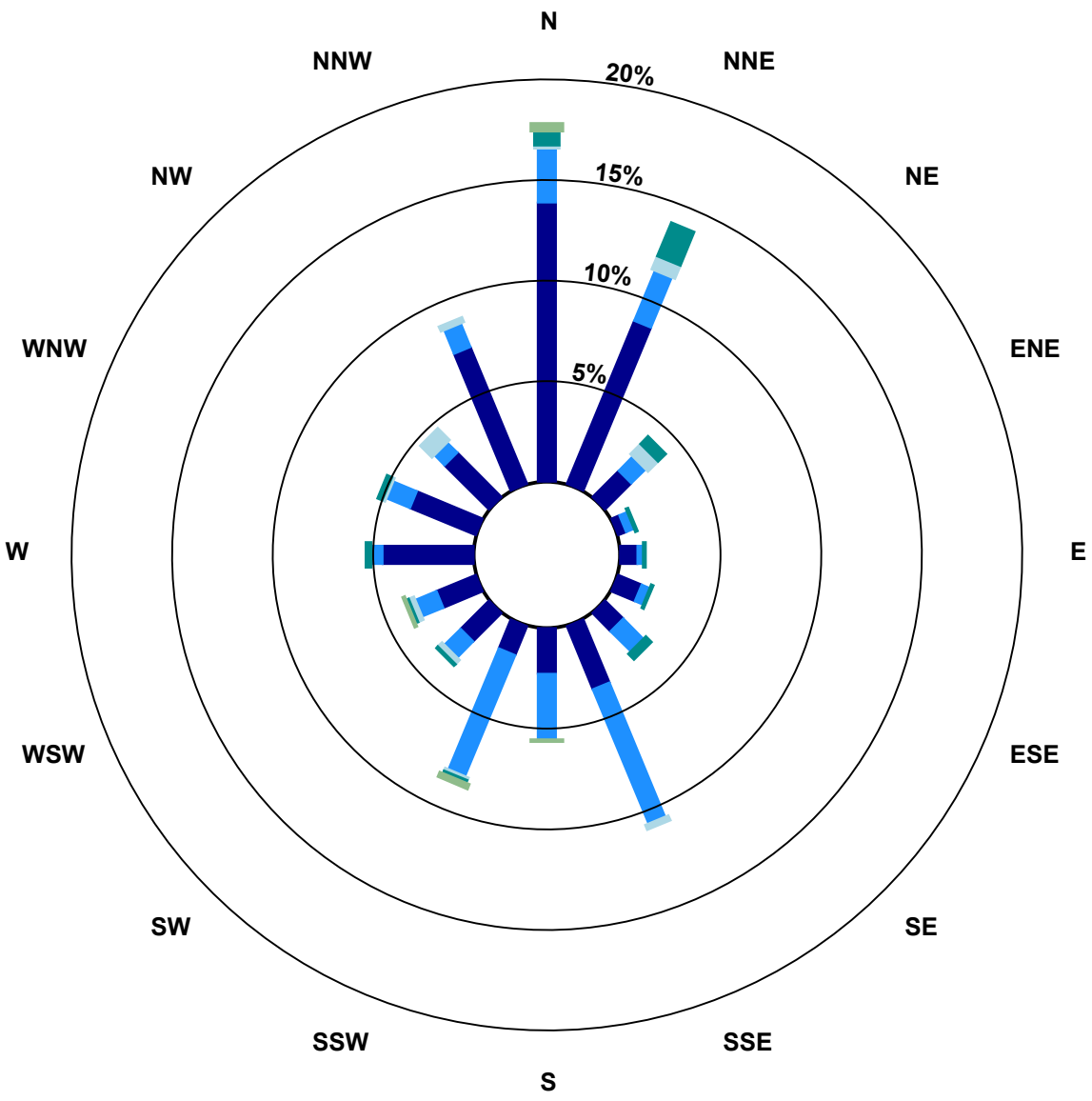
Total Number of Hours: 720

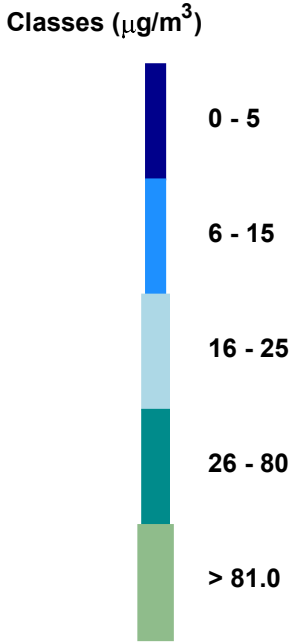
Wood Buffalo Environmental Association

Wind Rose Jun 2026

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

Fort McKay South





Total Number of Valid Hours: 706

Maximum Value: 31.5 C on Jun 28 15:00

Maximum Daily Average: 23.5 C on Jun 29

Minimum Value: 4.8 C on Jun 20 05:00

Minimum Daily Average: 9.7 C on Jun 11

Maximum Diurnal Average: 21.0 C at hour 17

Minimum Diurnal Average: 9.3 C at hour 4

Monthly Average: 16.15 C

Percentiles: P_1 = 5.6 P_{10} = 9.1 Q_1 = 11.5 Median = 14.8 Q_3 = 20.0 P_{90} = 25.5 P_{99} = 30.9

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

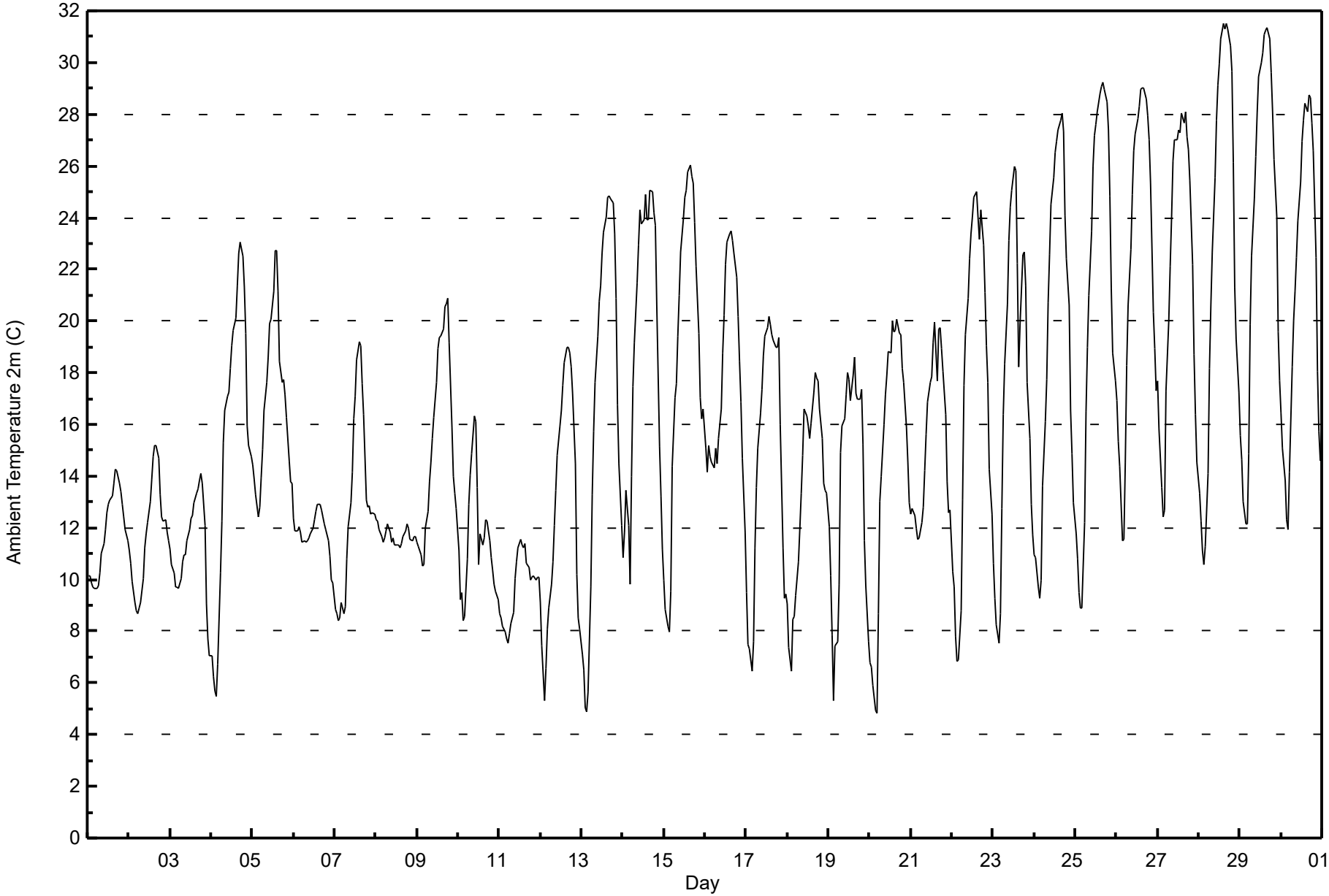
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	10.1	10.1	9.9	9.7	9.7	9.7	9.7	10.2	11.0	11.4	11.9	12.6	12.9	13.1	13.2	13.7	14.3	14.2	13.7	13.4	12.9	12.4	11.9	11.5	11.8	14.3
2-Jun	11.1	10.7	9.9	9.1	8.8	8.7	8.9	9.1	10.0	11.2	11.8	12.2	13.0	13.9	14.7	15.2	15.2	14.7	13.3	12.4	12.3	12.3	11.8	11.5	11.7	15.2
3-Jun	11.2	10.6	10.3	9.7	9.7	9.7	10.1	10.7	11.0	11.0	11.5	12.0	12.3	12.5	12.9	13.3	13.5	13.8	14.1	13.7	12.1	9.1	7.7	7.1	11.2	14.1
4-Jun	7.0	6.2	5.7	5.5	6.8	10.2	12.3	15.3	16.6	17.1	17.3	18.2	19.0	19.6	20.1	21.4	22.6	23.1	22.5	21.3	19.5	16.0	15.2	14.7	15.5	23.1
5-Jun	14.4	13.9	13.3	12.4	12.8	13.9	15.0	16.6	17.6	18.6	19.9	20.1	21.2	22.7	22.7	21.1	18.4	17.6	17.7	17.1	16.3	14.6	13.8	13.7	16.9	22.7
6-Jun	12.3	11.9	11.9	12.1	11.8	11.4	11.5	11.4	11.5	11.6	11.7	12.0	12.3	12.6	12.9	12.9	12.7	12.4	12.1	11.9	11.5	10.9	10.0	9.9	11.8	12.9
7-Jun	8.9	8.7	8.4	8.5	9.1	8.7	9.0	10.8	12.0	13.0	14.2	16.2	17.1	18.5	19.2	19.0	17.6	16.4	13.1	12.8	12.8	12.5	12.6	12.5	13.0	19.2
8-Jun	12.3	12.2	11.9	11.6	11.5	11.6	11.9	12.2	11.8	11.5	11.6	11.4	11.4	11.4	11.2	11.4	11.7	11.9	12.1	12.0	11.5	11.5	11.7	11.7	11.7	12.3
9-Jun	11.4	11.3	10.9	10.5	10.6	12.0	12.6	13.8	14.5	15.5	16.3	17.6	18.9	19.4	19.4	19.7	20.6	20.7	20.9	19.1	15.9	14.0	13.4	12.7	15.5	20.9
10-Jun	11.1	9.2	9.5	8.4	8.6	10.8	12.9	14.1	14.8	16.3	16.1	13.5	10.6	11.8	11.3	11.6	12.3	12.2	11.5	10.8	10.4	9.8	9.5	9.2	11.5	16.3
11-Jun	8.7	8.5	8.2	8.0	7.7	7.6	7.9	8.3	8.7	10.0	10.7	11.2	11.5	11.3	11.2	11.4	10.6	10.5	10.0	10.1	10.2	10.0	10.1	10.1	9.7	11.5
12-Jun	9.1	7.4	5.3	6.6	8.1	8.9	9.8	10.7	12.1	13.5	14.8	15.9	16.5	17.5	18.4	19.0	19.0	18.8	18.2	17.2	14.5	10.2	8.5	8.1	12.8	19.0
13-Jun	7.1	6.5	5.1	4.9	5.6	9.7	13.3	15.7	17.6	19.4	20.8	21.4	22.6	23.5	24.0	24.8	24.8	24.7	24.6	23.4	20.9	16.7	14.5	12.1	16.8	24.8
14-Jun	10.9	11.8	13.5	12.1	9.8	14.0	17.4	19.1	21.5	22.9	24.3	23.7	23.9	24.9	23.9	23.9	25.1	25.0	24.2	23.7	20.6	15.2	13.2	11.1	19.0	25.1
15-Jun	10.0	8.8	8.2	8.0	9.5	14.4	17.0	17.6	19.4	21.0	22.7	24.0	24.8	25.1	25.8	26.0	25.6	25.4	23.8	22.1	19.5	17.0	16.2	16.6	18.7	26.0
16-Jun	15.1	14.2	15.2	14.8	14.5	14.3	15.1	14.5	15.5	16.6	18.8	20.2	22.2	23.0	23.4	23.5	23.1	22.6	21.7	20.2	18.4	16.9	14.7	11.8	17.9	23.5
17-Jun	9.5	7.5	7.3	6.4	7.6	11.2	13.6	15.1	16.5	17.3	18.6	19.4	19.7	20.2	19.8	19.5	19.3	19.0	19.0	19.3	16.0	11.2	9.3	9.4	14.7	20.2
18-Jun	9.1	7.4	6.5	8.4	8.6	9.4	10.7	12.0	13.3	14.8	16.6	16.3	15.9	15.5	16.0	17.2	18.0	17.8	17.7	16.6	15.4	13.7	13.5	13.3	13.5	18.0
19-Jun	12.0	10.1	7.9	5.3	7.4	7.6	9.8	14.9	15.9	16.2	17.1	18.0	17.7	16.9	17.9	18.6	17.2	17.0	16.9	17.4	15.2	11.5	9.7	7.6	13.6	18.6
20-Jun	6.8	6.6	5.9	4.9	4.8	8.7	13.0	14.0	16.0	17.1	17.9	18.8	18.8	20.0	19.6	19.6	20.1	19.5	19.4	18.2	17.6	15.9	14.5	13.0	14.6	20.1
21-Jun	12.5	12.7	12.5	12.0	11.6	11.6	12.2	12.8	14.2	15.6	16.9	17.6	17.9	19.2	19.9	17.7	19.7	19.7	18.9	18.1	16.4	13.8	12.6	12.7	15.4	19.9
22-Jun	10.3	9.7	7.8	6.8	6.9	8.8	13.1	17.5	19.5	20.9	22.4	23.4	24.0	24.8	25.0	24.0	23.2	24.3	22.9	21.1	19.0	17.6	14.3	12.5	17.5	25.0
23-Jun	10.7	9.3	8.3	7.6	8.7	12.7	16.4	18.3	20.6	23.1	24.4	25.0	26.0	25.8	22.2	18.2	19.9	22.6	22.6	21.4	17.6	15.5	12.9	11.7	17.6	26.0
24-Jun	11.0	10.8	9.7	9.3	10.0	13.6	16.1	17.8	20.7	22.6	24.5	25.5	26.5	26.9	27.4	27.8	28.1	27.4	24.1	22.4	20.6	16.5	14.8	13.0	19.5	28.1
25-Jun	11.8	10.8	9.5	8.9	8.9	12.2	16.5	19.0	21.0	23.5	26.0	27.2	27.6	28.1	28.8	29.1	29.2	29.0	28.5	27.4	24.8	21.3	18.8	17.7	21.1	29.2
26-Jun	16.9	15.4	14.4	11.5	11.6	14.5	18.3	20.6	22.8	24.9	26.6	27.2	27.8	28.3	29.0	29.0	29.0	28.6	27.9	27.0	25.3	20.4	18.9	17.3	22.2	29.0
27-Jun	17.7	15.9	13.6	12.4	12.7	17.3	20.0	22.1	24.0	26.2	27.0	27.0	27.4	27.3	28.0	27.6	28.1	27.1	26.6	25.4	22.2	18.7	16.4	14.5	21.9	28.1
28-Jun	13.3	12.3	11.1	10.6	11.3	14.1	18.2	20.6	22.7	25.5	27.8	29.1	30.0	30.9	31.5	31.3	31.5	31.3	30.7	29.7	26.1	21.3	19.3	17.2	22.8	31.5
29-Jun	15.6	14.6	13.0	12.2	12.2	14.8	19.9	22.5	24.7	26.4	28.1	29.5	30.0	30.4	31.1	31.3	31.4	30.9	29.6	28.1	26.2	24.0	19.6	17.7	23.5	31.4
30-Jun	16.4	15.1	13.9	12.3	12.0	14.1	18.2	20.0	21.1	22.5	23.8	25.4	27.0	27.7	28.4	28.1	28.7	28.6	27.6	26.6	22.5	18.1	15.7	14.6	21.2	28.7
	11.5	10.7	9.9	9.3	9.6	11.5	13.7	15.2	16.6	17.9	19.1	19.7	20.2	20.8	21.0	20.9	21.0	20.9	20.2	19.3	17.5	15.0	13.5	12.5	Diurnal Average	
	17.7	15.9	15.2	14.8	14.5	17.3	20.0	22.5	24.7	26.4	28.1	29.5	30.0	30.9	31.5	31.3	31.5	31.3	30.7	29.7	26.2	24.0	19.6	17.7	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Fort McKay South - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	111	15.42	15.42
10 - 20	427	59.31	74.72
> 20	182	25.28	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 99.6 % on Jun 7 04:00

Maximum Daily Average: 95.7 % on Jun 6

Minimum Value: 22.8 % on Jun 28 16:00

Minimum Daily Average: 46.5 % on Jun 16

Maximum Diurnal Average: 87.9 % at hour 5

Minimum Diurnal Average: 47.1 % at hour 18

Monthly Average: 64.93 %

Percentiles: P_1 = 25.0 P_{10} = 32.7 Q_1 = 47.8 Median = 67.5 Q_3 = 82.9 P_{90} = 94.5 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

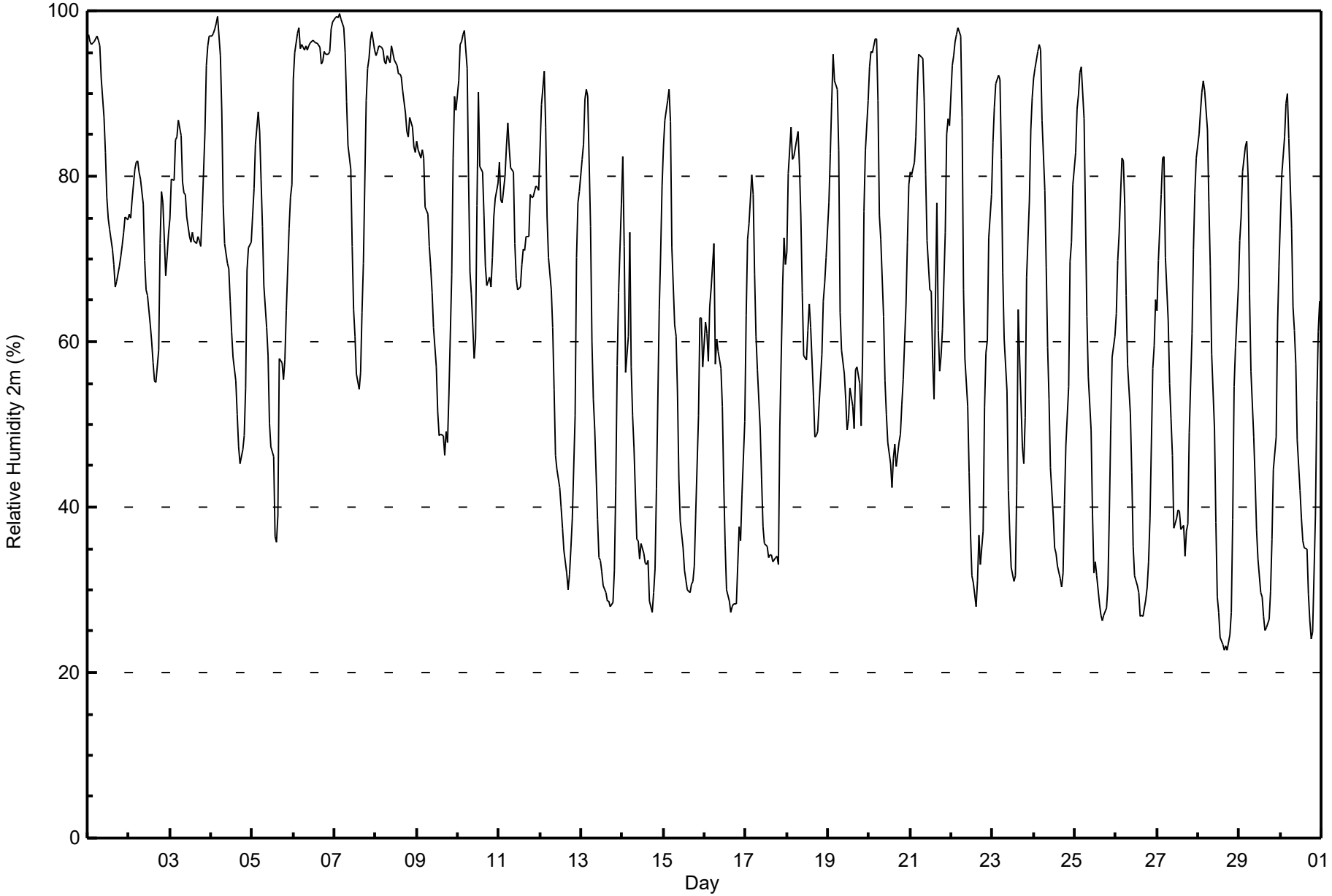
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	97.1	96.3	95.9	96.2	96.3	96.9	96.5	95.8	91.8	87.1	82.8	77.5	74.9	73.6	71.2	69.3	66.6	67.3	69.2	70.3	71.6	73.2	75.0	74.8	82.0	97.1
2-Jun	75.5	75.0	77.2	80.8	81.8	81.9	80.5	79.7	76.7	69.9	66.3	65.7	62.1	60.0	57.5	55.3	55.1	59.0	71.9	78.1	76.8	68.0	70.3	73.0	70.8	81.9
3-Jun	74.9	79.6	79.4	84.4	84.7	86.8	84.9	79.4	78.0	77.8	75.1	72.6	72.1	73.2	72.2	71.8	72.6	72.2	71.5	75.6	85.4	93.4	95.7	96.9	79.6	96.9
4-Jun	97.0	97.4	97.9	98.5	99.3	94.6	87.8	76.6	71.8	69.4	68.8	64.8	61.1	58.2	55.3	51.3	47.2	45.3	46.9	48.6	54.3	68.7	71.3	72.0	71.0	99.3
5-Jun	75.3	78.4	83.9	87.9	85.5	79.6	73.9	66.8	61.8	58.3	50.1	47.4	46.2	36.5	35.8	38.9	58.0	57.4	55.5	57.9	63.8	73.8	77.4	79.0	63.7	87.9
6-Jun	91.7	95.0	97.4	98.0	95.5	95.9	95.3	95.7	95.3	95.8	96.1	96.4	96.3	96.2	96.2	95.6	93.6	93.9	95.1	94.8	94.7	95.1	97.9	98.6	95.7	98.6
7-Jun	99.1	99.3	99.2	99.6	99.1	98.0	94.8	88.9	83.8	80.9	71.6	63.9	60.6	56.2	54.3	56.3	63.6	69.5	89.1	93.0	94.2	96.5	97.4	95.2	83.5	99.6
8-Jun	94.6	95.1	95.8	95.7	95.3	94.0	93.6	94.5	93.8	95.8	94.9	94.1	93.4	92.4	92.4	92.0	90.3	87.7	85.5	84.8	87.2	85.9	83.5	82.8	91.5	95.8
9-Jun	84.3	83.2	82.3	83.3	82.2	76.3	75.4	71.5	69.0	65.9	61.7	57.0	51.4	48.6	48.9	48.7	46.2	49.1	47.8	53.7	68.1	82.2	89.6	88.0	67.3	89.6
10-Jun	91.6	96.0	96.2	97.0	97.7	93.0	79.9	68.5	65.8	58.0	60.3	76.4	90.2	81.2	80.5	75.3	69.2	66.7	67.8	66.5	70.2	75.2	77.4	79.1	78.3	97.7
11-Jun	81.6	77.0	76.9	79.9	83.6	86.4	83.4	81.1	80.6	71.8	67.6	66.3	66.6	69.3	71.2	71.0	72.7	72.6	77.8	77.4	77.5	78.9	78.7	78.3	76.2	86.4
12-Jun	83.3	88.7	92.7	86.0	75.2	70.1	66.3	61.6	54.3	46.3	44.6	42.4	40.0	37.5	34.8	32.1	30.0	31.8	35.0	38.6	51.1	70.1	76.8	78.1	57.0	92.7
13-Jun	82.0	83.9	89.3	90.5	89.7	73.8	60.0	53.0	49.4	38.4	34.0	33.5	32.1	30.5	29.7	28.6	28.6	28.0	28.4	32.3	42.5	57.1	65.9	76.6	52.4	90.5
14-Jun	82.4	71.5	56.3	60.6	73.2	57.0	50.9	47.1	36.0	35.9	33.7	35.5	34.4	33.2	33.1	33.6	28.6	27.2	29.7	32.6	42.3	64.0	70.7	78.8	47.8	82.4
15-Jun	83.6	86.7	89.1	90.6	86.7	71.4	62.0	60.7	53.9	43.4	38.4	35.1	32.3	31.3	30.1	29.7	30.6	31.1	32.8	39.2	51.1	62.8	62.9	56.9	53.8	90.6
16-Jun	62.3	61.0	57.6	64.2	66.5	71.9	57.3	60.4	58.8	56.8	52.2	42.8	35.4	30.1	28.7	27.3	27.9	28.3	28.2	33.0	37.7	36.0	41.4	50.4	46.5	71.9
17-Jun	63.2	72.4	74.3	80.2	77.8	68.2	60.6	56.5	49.5	43.4	37.6	35.6	35.2	33.9	34.2	34.2	33.4	33.9	34.1	33.0	49.7	66.7	72.6	69.4	52.1	80.2
18-Jun	70.9	80.3	85.9	82.0	82.4	83.3	85.4	81.1	75.0	65.9	58.3	57.8	61.4	64.7	61.7	53.3	48.5	48.6	49.2	52.4	58.4	64.9	67.1	70.1	67.0	85.9
19-Jun	76.8	82.7	89.0	94.7	91.5	90.6	83.1	63.5	59.0	56.1	53.0	49.3	50.7	54.4	52.1	49.4	56.7	56.9	54.9	49.9	58.2	75.8	83.0	89.1	67.5	94.7
20-Jun	93.2	95.2	95.0	96.6	96.6	89.2	75.2	72.3	63.0	55.2	51.2	47.8	45.2	42.4	46.0	47.7	45.0	47.8	48.8	52.4	55.4	64.5	72.1	79.0	65.7	96.6
21-Jun	80.5	80.1	81.7	84.8	90.3	94.8	94.4	94.3	89.1	80.2	72.2	66.3	66.1	57.8	53.1	76.7	61.4	56.4	58.3	61.5	73.1	85.1	87.0	86.0	76.3	94.8
22-Jun	93.3	94.7	96.3	97.1	98.0	97.0	87.2	66.3	58.0	52.2	44.3	36.8	31.8	30.9	28.0	31.3	36.7	33.1	37.2	52.1	58.7	60.1	72.6	77.8	61.3	98.0
23-Jun	84.1	88.3	91.1	92.2	91.7	82.1	68.3	60.4	54.1	42.1	36.7	32.7	31.0	31.6	42.5	63.9	58.2	47.3	45.2	50.9	67.8	77.1	85.6	89.5	63.1	92.2
24-Jun	91.9	93.0	95.1	95.9	95.3	86.8	78.3	69.0	59.3	53.0	44.7	39.1	35.0	34.4	33.0	31.3	30.4	32.0	40.3	47.4	54.6	69.6	72.0	78.9	60.8	95.9
25-Jun	82.9	88.1	89.8	92.5	93.2	87.0	75.1	63.1	55.8	49.3	39.1	32.0	33.4	31.6	28.3	27.0	26.2	27.0	27.9	30.4	39.2	49.4	58.2	60.7	53.6	93.2
26-Jun	63.4	69.8	73.1	82.1	81.9	76.7	65.5	57.3	51.4	44.2	35.2	31.8	30.6	29.7	26.7	27.0	26.7	28.8	30.3	33.4	38.7	56.8	59.5	65.0	49.4	82.1
27-Jun	63.7	69.8	77.7	82.3	82.4	70.2	62.5	54.9	50.8	46.2	37.5	38.6	39.7	39.5	37.3	37.7	34.1	37.0	37.9	48.9	61.1	71.2	77.9	82.2	55.9	82.4
28-Jun	85.0	87.8	90.2	91.6	90.4	85.5	76.8	69.1	58.5	49.5	38.2	29.2	27.2	24.2	23.5	22.8	23.2	22.8	24.7	27.2	38.5	54.6	59.4	66.5	52.8	91.6
29-Jun	72.2	75.1	80.5	83.5	84.2	79.8	65.7	56.4	48.5	43.2	37.2	33.7	29.6	29.1	26.7	25.0	25.5	26.4	29.9	36.1	44.5	48.5	62.3	69.2	50.5	84.2
30-Jun	74.9	80.2	84.7	88.9	89.9	84.6	73.7	64.3	61.4	57.2	48.1	42.1	38.7	35.9	35.0	35.0	29.4	26.2	24.1	24.9	39.0	52.9	61.2	64.9	54.9	89.9
	81.7	84.0	85.7	87.9	87.9	83.4	76.5	70.3	65.1	59.6	54.4	51.5	50.2	48.3	47.3	48.0	47.2	47.1	49.2	52.6	60.2	69.3	74.1	76.9	Diurnal Average	
	99.1	99.3	99.2	99.6	99.3	98.0	96.5	95.8	95.3	95.8	96.1	96.4	96.3	96.2	96.2	95.6	93.6	93.9	95.1	94.8	94.7	96.5	97.9	98.6	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Fort McKay South - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Fort McKay South - June 2026

Maximum Speed: 23 km/h on Jun 1 12:00

Maximum Daily Speed Average: 12.0 km/h on Jun 11

Minimum Speed Value: 0 km/h on Jun 22 07:00

Minimum Daily Speed Average: 0.5 km/h on Jun 22

Maximum Diurnal Speed Average: 4.6 km/h at hour 17

Minimum Diurnal Speed Average: 1.7 km/h at hour 8

Monthly Average Velocity: 2.3 km/h 3.0 deg

Percentiles: $P_1 = 1$ $P_{10} = 2$ $Q_1 = 4$ Median = 7 $Q_3 = 11$ $P_{90} = 15$ $P_{99} = 19$

Hours in Service:	720
Hours of Data:	709
Hours of Missing Data:	11
Percent Operational Time:	98.5

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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	N23	N21	N19	N21	N18	N21	N18	NNE18	NNE19	NNE16	NNE15	NNE14	N17	----	N23
2-Jun	NNE16	NNE17	N17	N17	N18	N18	N17	NNE16	NNE17	NNE18	NNE14	NE11	NE13	NE12	NE12	NNE15	NE11	E7	SSE6	SSW4	ESE3	E5	ESE5	ESE5	NNE10.4	N18
3-Jun	E3	E3	SE4	SSE4	SSE6	ESE3	ESE3	SE6	SSE6	SSE6	S6	S5	SSE6	SSE8	SSE7	SSW6	SSE6	S8	S7	SSW4	WNW2	W2	WSW1	WSW1	SSE4.0	SSE8
4-Jun	WSW2	SW2	SSW2	SSE0	S6	SSE5	SSE7	S9	S9	SSW11	SSW13	SSW13	SW13	SSW14	SSW14	SSW12	SSW11	SSW11	SSW12	SSW13	SSW8	S7	SSW8	SSW8	SSW8.4	SSW14
5-Jun	SSW8	SSW9	SSW9	SSW8	SSW6	SW8	SSW8	SSW7	SSW6	S9	S10	SSE10	SSE12	S9	S10	S14	SSE17	SSE10	SSW5	W7	SSE4	SSW2	S3	SSW5	S7.5	SSE17
6-Jun	W4	WNW8	NW7	NNW6	NW11	W9	W8	WSW11	W12	WSW13	WSW14	WSW11	WSW13	WSW10	WSW8	SW7	SW9	SW6	SW7	SW8	SW7	SW4	S5	SSW4	WSW7.2	WSW14
7-Jun	SSW4	SSW4	NNW1	SSE1	SSE7	SSE8	SSE8	ESE5	SE2	NNW3	S6	NE2	NE5	N7	NNE10	N14	N15	NNE13	N7	NNW7	NNW5	NNW7	N8	N8	NNE2.9	N15
8-Jun	N8	N8	N10	NNW10	NNW10	N10	N11	NNW6	NW10	NW10	NW12	WNW13	WNW14	WNW14	WNW14	W13	WNW10	WNW11	W11	W11	W9	W9	W10	WNW9	NW9.1	WNW14
9-Jun	W8	W8	W8	WSW8	W7	W8	W8	WNW9	WNW8	W6	WSW9	W10	WNW10	W9	W8	WSW6	NNW7	NE7	NNE7	N7	NW6	N8	N8	N11	WNW5.8	N11
10-Jun	N6	W2	NNW3	NNW3	NW4	NNW6	N5	N6	ENE2	NNW9	NNW7	N12	N13	NNE11	N13	N15	NNE16	N18	N16	N14	N10	N8	N11	N12	N8.9	N18
11-Jun	N8	N12	NNW10	N10	N10	NNW9	NNW10	N13	N11	N14	N16	N14	NNE15	NNE16	N16	N16	N18	N18	N14	N11	N10	NNW8	NNW8	NNW7	N12.0	N18
12-Jun	WNW4	WNW6	NW3	NNW8	NNW12	NNW11	NNW10	N13	N16	N20	N20	N18	NNE17	NNE17	NNE16	NNE16	NNE17	NNE17	NNE15	N13	N6	WNW3	WNW4	NE0	N10.9	N20
13-Jun	SW1	SW2	SSW2	SSW3	NNW1	WSW2	WNW1	ESE2	E5	S4	SE5	ESE8	SE5	SSE8	S10	S11	SSW11	SW9	SW8	SSW6	SSW5	SW6	WSW6	NW2	S3.8	SSW11
14-Jun	NNW2	WSW5	W8	NW4	S2	W3	ENE3	NE3	NE6	NNE6	NNE10	NNE11	N16	NNE15	N12	N10	N12	NNE15	N13	N9	NNW6	WNW5	NW4	NW3	N6.0	N16
15-Jun	NNW2	WSW1	SW2	SW2	WSW1	NNW2	NNE1	SE3	SE5	SSE6	E4	NNE5	NE6	NE4	NE7	ENE8	ENE6	ENE7	NE6	NNE4	NNW4	WNW3	NNW5	N4	NE2.3	ENE8
16-Jun	N4	N4	ESE4	ESE4	SE3	NNE3	ENE4	SE5	S5	SSE5	S2	N1	NNE8	NNE15	NNE18	NNE15	NNE16	NNE16	NNE16	N17	N17	NNE13	N9	NNW7	NNE6.7	NNE18
17-Jun	NNW6	NNW5	NNW6	NW5	NNW4	NNW6	N7	NNE7	NE9	NNE12	NNE13	NNE11	NNE14	NNE13	NNE13	N12	N12	N9	N11	N10	NNW4	NW3	WNW3	NNW6	N7.8	NNE14
18-Jun	NNW6	NNW6	NNW3	WNW5	WNW4	NW3	NW3	WSW3	W1	S2	E5	NNE9	NNE13	NNE13	N10	NNW11	N14	N14	N11	NNW8	NNW6	WNW5	W6	W7	NNW5.5	N14
19-Jun	WNW6	W5	W2	W3	W6	W3	NW3	NNE8	NNE12	NNE12	NNE11	NNE10	NNE10	N11	N13	NNE15	N17	N11	N9	N11	N8	NNW6	NNW3	WNW4	N6.9	N17
20-Jun	NW4	NNW5	NNW5	NW3	W2	NNW4	N8	N9	NNE12	N16	NNE14	N14	NNE10	NNE10	NE13	NNE13	NNE13	NNE12	NE12	NNE9	NNE9	N6	NNW6	NNW3	NNE8.2	N16
21-Jun	NNW5	NNW5	NNW6	NNW4	NW3	NW5	NNW5	NNW5	N9	N11	N13	N13	N11	NNE9	NNE11	NNE2	N7	N9	NNE7	N5	NNW3	NW3	NW4	NW3	N6.2	N13
22-Jun	S2	SW3	W2	WSW2	SSW2	WSW2	NNE0	E3	NNE6	NNE8	NNE5	N7	N11	NE6	NNE6	ESE6	SSW5	WSW7	SSW6	ESE0	S5	S5	SSW3	SSW3	NNE0.5	N11
23-Jun	WNW2	WSW3	S5	SSW5	SSE4	SSE5	SSW4	SSW6	SSE8	SSW7	SSW8	SSW10	S12	S2	NNW10	NW6	SSE8	SSE14	SSE12	SSE5	S3	SSW1	SW2	S3	S4.3	SSE14
24-Jun	SW1	SSW4	SSW4	SSW2	S4	SSE4	SSE5	SSE10	SSE10	SSE9	S10	S10	S10	SSE11	SSE9	SSE9	SSW8	SW7	SE11	SSE11	SSE4	SSW3	SSW3	SSW3	S6.4	SE11
25-Jun	WNW0	WNW1	NW1	SW3	SSW1	S3	SSE7	SE8	SE9	SSE8	SSE11	SSE15	SSE16	SSE12	SSE14	SSE13	SSE13	SSE14	SSE13	SSE13	SSE9	SSE5	S5	S8	SSE8.1	SSE16
26-Jun	SSW7	SSW7	SSE4	WNW1	WNW1	N2	SE7	SE7	SE9	SSE12	SSE17	SSE19	SSE18	SE15	SSE16	SSE15	SSE15	SSE16	SSE14	SSE10	SSE7	SSE2	SSE4	S4	SSE9.0	SSE19
27-Jun	SSE6	S5	S3	SW1	NNW2	N3	NNE7	NNE6	N10	NNE8	SE10	SSE13	SSE15	SSE17	SSE16	SE8	SE8	SSE9	SSE7	SSE2	NW2	NW2	W2	W2	SE3.5	SSE17
28-Jun	WNW2	NW2	WSW2	WNW2	N4	N1	N5	NNE7	NNE9	NNE11	NE8	NE12	NE12	NE11	NNE13	NE12	NE11	NE11	NNE10	NNE7	N5	NNW5	WNW3	NW4	NNE6.2	NNE13
29-Jun	NW4	NW2	WNW1	NW2	NW1	N3	NNE4	NNE6	N9	N12	N13	NNE12	N15	NNE14	NNE12	NNE12	NNE11	NNE11	NNE10	N10	N11	SSW6	SSW3	S4	N6.6	N15
30-Jun	SSW3	WSW2	W1	WNW1	WSW2	SW1	NE1	SE2	SE4	SE3	ESE3	NNE2	NNE6	N9	NNE9	N10	NE10	NE9	ENE7	E5	SSE2	WSW3	SW3	W1	NE2.0	N10
	NW2.0	WNW2.3	NW2.0	NW2.2	NW1.9	NW2.0	N1.8	NNE1.7	NNE2.5	N2.8	NNE1.8	NNE3.2	NNE4.0	NNE4.1	NNE4.5	NNE4.2	NNE4.6	NNE4.1	NNE3.0	N2.9	NNW2.6	NW2.1	NW2.0	NW2.1		Diurnal Average
	NNE16	NNE17	N17	N17	N18	N18	N17	NNE16	NNE17	N20	N20	N23	N21	N19	N21	N18	N21	N18	NNE18	NNE19	N17	NNE15	NNE14	N17		Diurnal Maximum

M - Maintenance UO - Unstable Operation

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

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 10m (WS10) - km/h

Fort McKay South - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6 km/h on Jun 23 16:00

Minimum Value: 0 km/h on Jun 15 00:00

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

Hours in Service:	720
Hours of Data:	709
Hours of Missing Data:	11
Hours of Calibration:	0
Percent Operational Time:	98.5

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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	6	6	5	5	5	5	5	5	5	4	4	4	6	
2-Jun	5	6	4	4	4	5	5	5	4	6	5	4	4	4	4	4	4	3	2	2	2	3	2	2	6
3-Jun	2	1	1	1	2	2	1	2	2	2	2	2	2	2	2	2	1	2	2	2	1	1	1	1	2
4-Jun	1	1	1	2	2	2	2	2	3	3	4	4	4	4	4	4	3	3	3	4	2	1	1	1	4
5-Jun	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	4	3	4	1	2	2	2	1	2	4
6-Jun	2	2	2	2	3	3	3	4	5	4	4	4	4	3	2	2	3	2	2	2	2	2	2	1	5
7-Jun	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3	3	4	4	2	2	2	2	2	2	4
8-Jun	2	2	2	2	2	3	3	2	3	3	4	4	5	5	5	5	4	4	4	4	3	3	3	3	5
9-Jun	3	3	3	3	2	3	3	4	3	2	3	4	4	4	3	2	3	2	2	2	1	2	2	2	4
10-Jun	3	1	2	1	1	1	2	2	2	3	3	6	4	3	5	5	5	5	5	4	3	2	3	3	6
11-Jun	2	3	2	3	3	3	3	3	3	4	4	4	4	4	5	4	5	5	4	3	3	2	2	2	5
12-Jun	2	2	2	2	2	2	2	3	4	6	6	5	5	4	4	4	4	4	4	4	2	1	1	1	6
13-Jun	1	1	1	1	1	1	1	1	2	2	3	3	3	3	4	4	4	3	3	1	1	1	1	1	4
14-Jun	2	3	4	2	1	2	1	1	1	2	3	3	4	4	4	3	4	4	3	3	3	1	2	0	4
15-Jun	2	1	1	1	1	1	1	1	2	2	3	3	3	3	3	3	3	3	2	1	1	1	1	2	3
16-Jun	1	1	1	1	2	1	2	1	2	2	2	2	4	5	5	5	5	5	5	5	5	4	2	1	5
17-Jun	1	1	2	1	1	2	2	2	2	4	4	4	5	4	4	3	4	3	3	3	1	1	2	2	5
18-Jun	1	1	2	2	1	1	2	1	1	1	2	3	4	4	3	3	4	4	3	2	2	1	2	2	4
19-Jun	2	1	2	2	2	1	1	4	3	3	3	3	3	4	4	4	5	3	3	3	3	1	1	1	5
20-Jun	1	1	1	2	1	3	2	2	3	4	4	4	3	3	4	4	4	3	4	3	3	2	2	2	4
21-Jun	1	1	2	1	2	1	1	2	2	3	3	3	3	3	2	3	2	2	2	2	1	1	1	1	3
22-Jun	3	2	1	1	1	1	1	1	2	2	2	3	3	4	4	2	2	3	2	1	2	2	1	1	4
23-Jun	1	1	1	1	1	1	2	2	3	3	4	4	4	4	4	6	2	4	3	2	1	1	1	1	6
24-Jun	1	2	1	1	1	1	2	2	2	3	4	4	4	4	4	4	3	3	6	3	3	1	1	1	6
25-Jun	1	2	1	1	1	1	2	2	2	2	6	5	5	4	5	4	4	4	3	3	3	1	1	1	6
26-Jun	1	1	3	1	1	1	4	2	3	3	5	5	5	5	4	4	4	4	4	3	3	1	1	1	5
27-Jun	1	1	1	1	1	2	2	2	2	2	3	4	4	4	5	3	3	2	2	2	1	1	1	1	5
28-Jun	1	1	2	1	1	1	1	2	2	3	4	4	4	4	4	4	4	4	3	2	2	1	1	2	4
29-Jun	1	2	1	1	1	1	1	1	2	3	3	4	4	4	3	4	3	3	3	4	4	3	1	1	4
30-Jun	1	1	1	1	1	1	1	1	1	1	2	2	2	4	4	3	3	4	3	2	1	1	1	1	4
	5	6	4	4	4	5	5	5	5	6	6	6	6	5	5	6	5	5	6	5	5	4	4	4	
	Diurnal Maximum																								

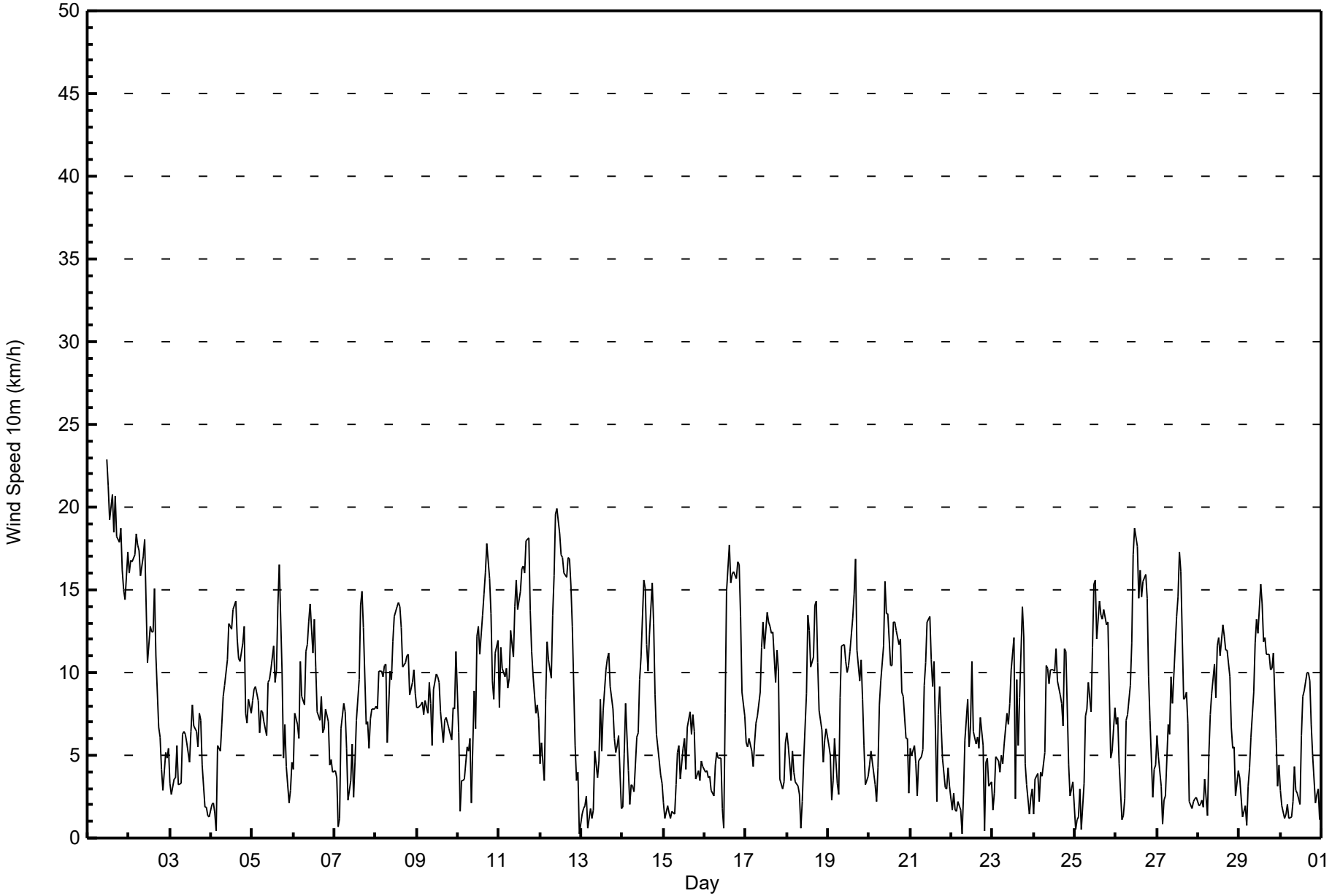
M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Fort McKay South - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	249	35.12	35.12
6 - 11	294	41.47	76.59
12 - 19	160	22.57	99.15
20 - 28	6	0.85	100.00
29 - 38	0	0.00	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 709

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Fort McKay South - June 2026

Wind Speed Ranges (km/h)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 5	13	9	6	3	8	11	11	18	22	28	13	15	15	23	26	28	249
6 - 11	55	38	15	4	1	2	10	34	18	26	11	9	21	10	6	34	294
12 - 19	52	52	8	0	0	0	1	26	2	7	1	3	2	4	1	1	160
20 - 28	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
29 - 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	126	99	29	7	9	13	22	78	42	61	25	27	38	37	33	63	709

Total Number of Valid Hours: 709

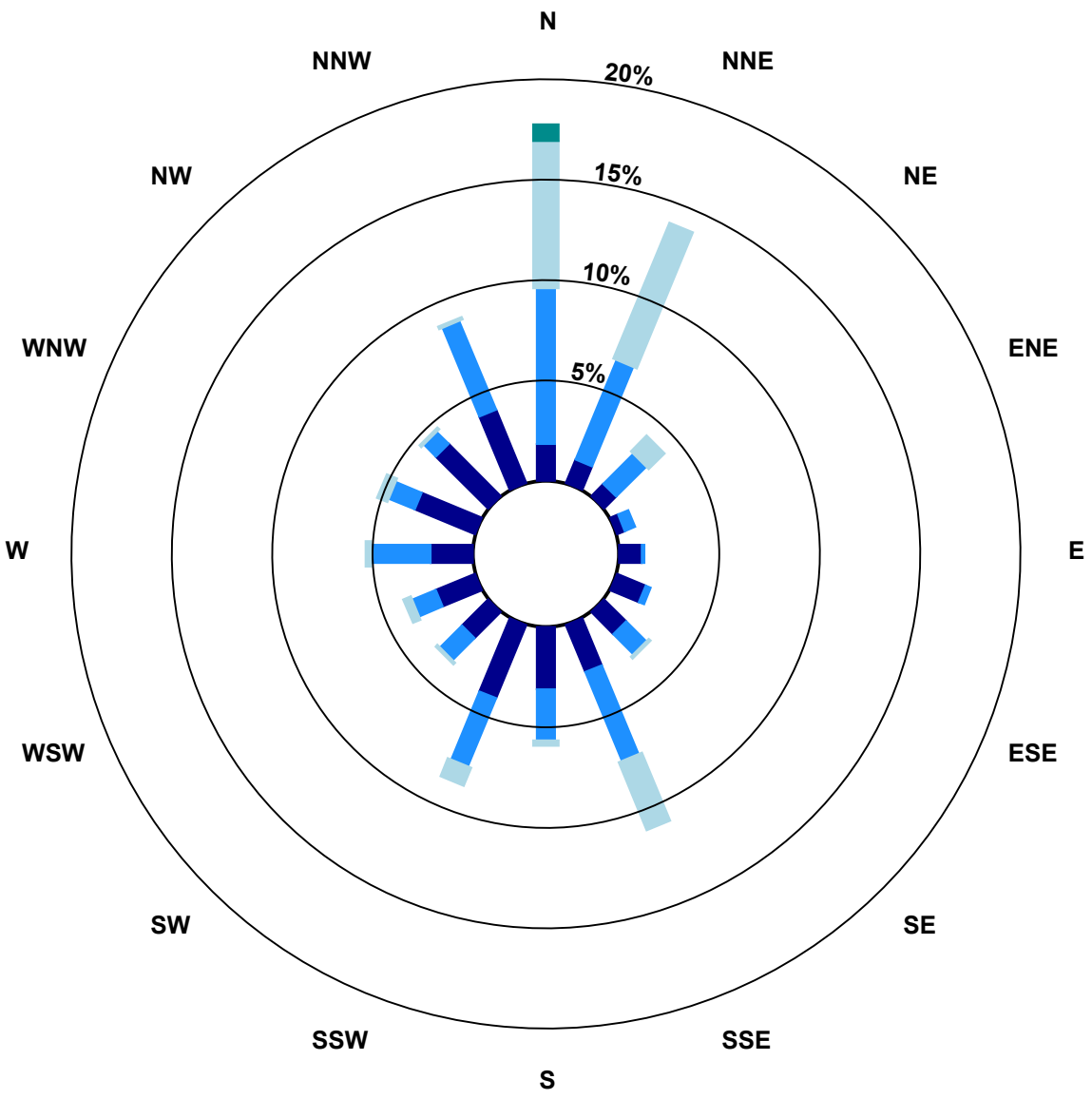
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Fort McKay South



Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 709

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Fort McKay South - June 2026

Direction of Maximum Speed: 3 deg on Jun 1 12:00
Direction of Maximum Daily Speed Average: 358.3 deg on Jun 11

Direction of Minimum Speed: 30 deg on Jun 22 07:00
Direction of Minimum Daily Speed Average: 0.5 deg on Jun 22

Monthly Average Direction: 3.0 deg

Hours in Service:	720
Hours of Data:	709
Hours of Missing Data:	11
Percent Operational Time:	98.5

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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	3	5	5	3	6	10	11	15	12	15	14	13	8	--
2-Jun	15	18	8	5	8	9	11	19	13	22	33	54	38	36	43	32	42	86	168	195	103	94	103	109	28.0
3-Jun	96	99	139	151	148	107	109	126	148	153	171	175	156	158	164	194	158	172	182	203	289	264	244	247	159.8
4-Jun	238	226	206	148	177	157	153	183	190	199	205	207	215	204	197	197	202	207	205	211	205	189	199	204	199.2
5-Jun	205	210	211	203	203	219	199	202	209	185	179	157	157	180	185	170	160	168	213	259	151	210	183	211	188.0
6-Jun	264	285	323	345	311	265	268	257	260	251	243	257	241	237	239	225	229	231	220	226	232	227	191	201	251.2
7-Jun	193	198	328	168	159	162	153	121	135	330	187	46	49	3	25	8	10	19	6	340	332	347	6	358	19.2
8-Jun	3	357	352	348	342	352	351	327	312	311	311	303	295	292	282	274	288	283	271	280	281	274	274	284	305.2
9-Jun	280	274	261	258	273	273	262	290	293	274	255	264	286	274	281	251	344	39	23	350	320	357	10	2	296.3
10-Jun	353	274	327	328	316	343	6	352	60	340	336	4	11	13	10	10	12	9	360	354	4	355	2	3	0.5
11-Jun	358	351	347	352	351	345	344	355	3	360	8	5	13	15	10	6	6	1	360	355	349	336	331	332	358.3
12-Jun	298	288	313	330	337	346	348	354	0	1	359	8	13	18	18	22	17	15	14	10	353	288	282	37	0.7
13-Jun	230	231	209	198	333	243	302	118	91	187	143	115	141	167	176	180	196	217	228	202	205	217	239	305	188.6
14-Jun	330	258	262	308	180	261	78	44	36	33	33	25	10	18	6	352	10	13	8	2	340	296	307	313	1.8
15-Jun	348	245	233	226	256	330	18	137	126	164	97	17	47	42	41	76	69	64	56	28	343	298	346	6	48.4
16-Jun	358	2	102	112	131	33	70	141	171	167	188	357	12	14	14	16	18	13	19	5	1	16	1	334	17.7
17-Jun	331	329	330	325	331	343	8	22	36	19	18	20	17	21	14	5	353	352	356	360	328	312	301	328	1.4
18-Jun	334	340	330	300	290	309	315	248	277	174	79	12	19	17	355	342	2	11	4	332	330	295	274	276	346.2
19-Jun	283	273	272	260	272	265	317	25	21	24	26	33	16	11	10	12	8	7	4	0	358	333	332	301	0.8
20-Jun	326	335	329	322	280	343	6	9	20	10	17	9	22	33	41	30	24	17	38	30	28	8	346	327	14.6
21-Jun	335	341	340	335	311	324	333	345	360	3	3	7	6	22	12	32	9	7	16	358	338	313	304	325	356.3
22-Jun	184	223	274	254	209	255	30	80	25	21	19	9	11	34	22	107	196	246	213	106	183	182	196	200	19.7
23-Jun	293	245	182	208	166	153	194	203	166	200	213	202	179	186	343	326	153	161	157	168	187	199	232	190	185.7
24-Jun	221	203	199	206	191	165	154	151	152	165	184	185	179	164	159	163	212	227	145	161	159	196	192	208	173.4
25-Jun	284	283	312	234	197	185	150	141	144	149	153	161	156	158	159	154	155	156	157	150	155	168	182	185	158.5
26-Jun	193	202	166	288	302	352	146	138	146	152	152	149	152	145	160	149	158	154	151	147	148	150	164	171	154.6
27-Jun	151	176	182	229	329	0	18	13	8	17	144	152	158	159	160	136	125	158	163	163	325	309	269	260	145.0
28-Jun	285	324	255	291	352	6	7	20	18	12	39	51	46	50	27	41	40	41	29	28	6	331	299	321	24.8
29-Jun	310	322	282	323	310	3	24	12	10	11	9	14	7	15	15	19	23	17	21	6	1	197	203	186	9.7
30-Jun	193	256	273	293	252	231	44	137	126	126	111	26	23	9	15	3	37	45	65	88	165	247	232	268	37.8
	315.2	299.3	304.1	312.0	309.7	323.5	6.3	24.1	29.4	10.8	30.9	26.0	26.5	28.7	21.2	24.5	26.0	24.6	28.5	357.1	347.3	318.3	308.2	314.8	
	Diurnal Average																								

M - Maintenance UO - Unstable Operation

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

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Fort McKay South - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 108 deg on Jun 16 12:00

Minimum Value: 8 deg on Jun 4 22:00

Percentiles: P_1 = 10 P_{10} = 16 Q_1 = 20 Median = 25 Q_3 = 36 P_{90} = 53 P_{99} = 91

Hours in Service:	720
Hours of Data:	709
Hours of Missing Data:	11
Hours of Calibration:	0
Percent Operational Time:	98.5

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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	20	21	20	21	19	19	19	19	20	20	20	19	18	21
2-Jun	20	21	20	19	19	19	21	20	19	21	28	28	24	23	26	21	26	33	31	32	79	46	33	32	79
3-Jun	27	33	23	18	18	46	49	27	27	20	33	44	34	22	28	24	26	24	24	21	37	29	44	39	49
4-Jun	35	26	45	95	21	24	21	31	29	27	21	24	28	29	28	32	25	25	20	21	16	8	10	13	95
5-Jun	13	17	16	16	22	23	28	33	47	25	28	30	26	33	34	15	16	26	30	30	44	27	36	42	47
6-Jun	68	24	30	22	23	33	34	29	30	26	24	32	23	24	26	24	26	29	22	24	25	26	19	22	68
7-Jun	17	39	83	89	14	14	17	37	87	54	41	83	70	59	33	21	19	37	39	18	21	13	17	17	89
8-Jun	15	21	16	18	16	19	19	24	21	25	23	24	27	29	32	30	29	31	30	31	32	30	29	30	32
9-Jun	31	30	29	28	30	30	33	35	38	49	33	41	48	40	41	47	41	28	25	22	15	19	14	17	49
10-Jun	14	60	51	15	27	17	29	36	80	29	36	27	20	22	20	21	20	20	20	19	20	17	18	18	80
11-Jun	15	16	17	18	17	18	19	20	20	21	21	22	22	20	20	21	21	21	20	17	18	16	16	24	24
12-Jun	26	22	28	14	13	16	17	19	21	21	22	22	22	21	23	21	20	20	19	19	21	15	19	107	107
13-Jun	70	62	38	28	88	59	85	80	41	75	67	31	74	60	37	38	25	25	25	16	10	9	10	64	88
14-Jun	46	32	36	48	62	60	39	46	27	36	34	27	20	22	26	29	23	19	20	19	22	10	36	14	62
15-Jun	39	45	30	28	49	27	77	34	28	43	83	65	71	83	42	42	45	33	29	26	17	20	14	38	83
16-Jun	20	33	52	36	49	30	32	31	27	45	91	108	45	24	25	24	23	22	22	20	21	19	19	13	108
17-Jun	13	17	11	15	11	17	22	25	27	23	22	28	26	26	25	22	21	21	18	19	23	50	25	17	50
18-Jun	12	11	26	19	25	34	30	39	91	76	62	28	21	20	22	25	24	20	21	20	22	27	19	20	91
19-Jun	25	20	87	29	18	55	48	27	23	23	26	32	31	24	25	22	22	23	20	22	18	10	20	9	87
20-Jun	12	11	12	19	42	39	19	19	23	21	24	23	26	31	27	30	28	26	24	22	20	14	19	16	42
21-Jun	13	13	14	12	51	18	19	39	20	22	20	21	22	24	21	79	18	19	17	25	25	15	20	43	79
22-Jun	81	59	54	36	39	45	99	68	40	23	49	59	33	66	73	50	48	50	30	97	25	19	34	17	99
23-Jun	54	28	33	15	21	14	46	36	32	52	48	38	36	94	43	88	25	14	19	23	22	60	39	37	94
24-Jun	65	44	31	45	23	26	21	14	20	27	38	36	40	34	42	49	45	39	36	19	45	41	25	21	65
25-Jun	83	82	62	16	89	17	14	21	20	31	31	23	23	28	23	22	20	17	17	16	15	13	13	10	89
26-Jun	12	13	38	56	47	40	33	25	22	19	19	20	21	25	20	22	19	17	16	18	15	25	27	16	56
27-Jun	13	11	17	85	39	18	17	24	19	36	28	21	21	16	18	28	29	18	13	57	23	21	24	39	85
28-Jun	30	47	35	45	14	79	19	15	27	19	48	34	35	36	23	34	27	25	24	21	25	16	40	39	79
29-Jun	12	31	46	45	54	26	16	18	21	20	20	25	20	24	23	28	25	23	20	19	39	54	35	19	54
30-Jun	29	51	58	54	34	57	69	77	32	54	55	90	47	35	37	24	28	28	36	32	45	33	27	53	90
	83	82	87	95	89	79	99	80	91	76	91	108	74	94	73	88	48	50	39	97	79	60	44	107	
												Diurnal Maximum													

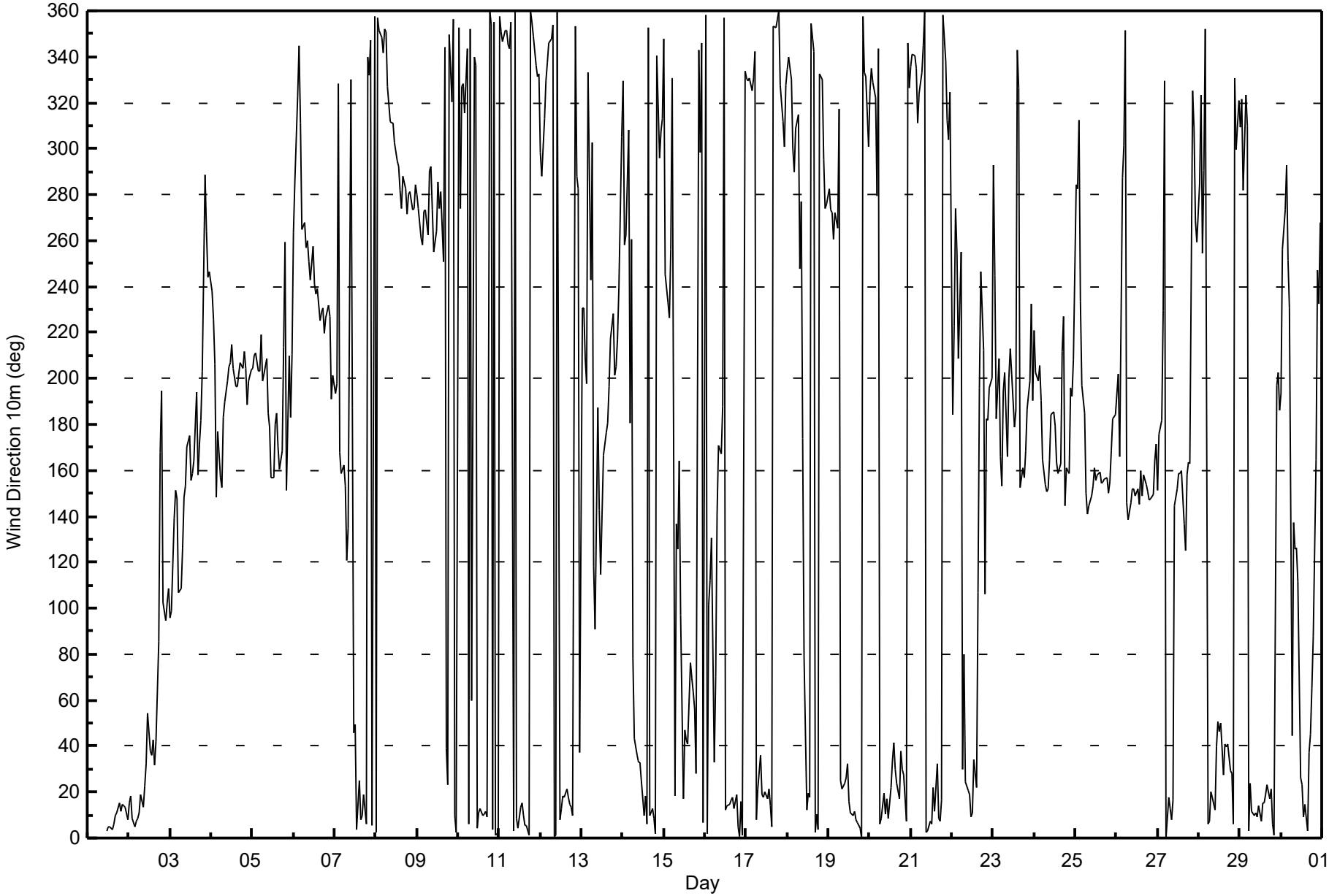
M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Fort McKay South - June 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS14
ANZAC
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ANZAC (AMS14)
JUNE 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	-	-	2.8	0	0.5	0
TRS(ppb) Average	684	35	36	99.86	1.7	0	1.6	-	0.6	-
THC(ppm) Average	685	33	35	99.72	-	-	2.2	-	2	-
NMHC(ppm) Average	685	33	35	99.72	-	-	0.004	-	0	-
CH4(ppm) Average	685	33	35	99.72	-	-	2.2	-	2	-
NO2(ppb) Average	683	36	37	99.86	-	-	6.6	0	2.7	-
NO(ppb) Average	683	36	37	99.86	-	-	3.7	-	0.5	-
NOX(ppb) Average	683	36	37	99.86	-	-	10.3	-	3.2	-
O3(ppb) Average	684	34	36	99.72	-	-	55.1	0	36.1	-
PM2.5(ug/m3) Average	719	1	1	100	-	-	96.2	4	55.7	3
AT 2m(C) Average	720	0	0	100	-	-	28.5	-	20.5	-
RH(%) Average	720	0	0	100	-	-	100	-	93.8	-
WS(km/h) Average	720	0	0	100	-	-	35	-	22	-
WD(deg) Average	720	0	0	100	-	-	-	-	-	-
Leaf Wetness (% of range) Average	720	0	0	100	-	-	72	-	32.2	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ANZAC (AMS14)
JUNE 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	0.15	0.3	-	0	0	0	0.1	0.2	0.3	2.8
TRS(ppb) Average	684	0.43	0.1	-	0.3	0.3	0.4	0.4	0.4	0.5	1.6
THC(ppm) Average	685	2	0	-	2	2	2	2	2	2	2.2
NMHC (ppm) Average	685	0	0	-	0	0	0	0	0	0	0.004
CH4(ppm) Average	685	2	0	-	2	2	2	2	2	2	2.2
NO2(ppb) Average	683	1.31	0.9	-	0.2	0.4	0.7	1	1.6	2.6	6.6
NO(ppb) Average	683	0.16	0.3	-	0	0	0	0.1	0.1	0.4	3.7
NOX(ppb) Average	683	1.46	1.1	-	0.2	0.5	0.7	1.1	1.8	2.8	10.3
O3(ppb) Average	684	26.46	9.4	-	3.7	14.1	19.9	26.5	32.3	39.4	55.1
PM2.5(ug/m3) Average	719	7.47	13.8	-	0.4	1.3	2.2	3.5	5.2	9.1	96.2
Temperature 2 m (C) Average	720	14.79	5.7	-	3.2	7.9	10.4	13.6	18.9	23.3	28.5
Relative Humidity (%) Average	720	69.55	21.7	-	28.4	37.8	48.8	74.1	89	96.3	100
Wind Speed 20 m (km/h) Average	720	11.7	6	-	0	5	7	11	15	21	35
Wind Direction 20 m (deg) Average	720	11.5	-	-	-	-	-	-	-	-	-
Leaf Wetness (% of range) Average	720	5.19	12	-	0	0	0	0	1.4	20.5	72

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ANZAC (AMS14)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
NO2/NO/NOx	01 Jun 2026 08:00	01 Jun 2026 08:00	1	Maintenance - verify daily QA response
TRS	01 Jun 2026 07:00	01 Jun 2026 07:00	1	Maintenance - verify daily QA response
O3	01 Jun 2026 08:00	01 Jun 2026 09:00	2	Maintenance - verify daily QA response
THC/NMHC/CH4	30 Jun 2026 08:00	30 Jun 2026 09:00	2	Maintenance - replaced support gas cylinder

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Anzac - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.8 ppb on Jun 18 12:00 Maximum Daily Average: 0.5 ppb on Jun 19

Minimum Value: 0.0 ppb on Jun 1 02:00 Minimum Daily Average: 0.0 ppb on Jun 9
Maximum Diurnal Average: 0.4 ppb at hour 9 Minimum Diurnal Average: 0.1 ppb at hour 21
Monthly Average: 0.15 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.2 P_{90} = 0.3 P_{99} = 1.1

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-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.2
2-Jun	0.2	Z	0.2	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	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
3-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.0	0.5	0.0	0.0	0.1	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.2	1.0
4-Jun	0.1	0.0	0.0	Z	0.0	0.0	0.2	1.0	0.3	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	1.0
5-Jun	0.0	0.1	0.2	0.2	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.4	0.3	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.4
6-Jun	0.1	0.0	0.1	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	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.0	0.2
7-Jun	Z	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.3	0.7	0.6	0.6	0.5	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.7
8-Jun	0.1	Z	0.3	0.2	0.2	0.2	0.2	0.5	0.6	0.5	0.1	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.6
9-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
10-Jun	0.0	0.2	0.1	Z	0.0	0.0	0.0	0.0	0.0	0.7	0.5	0.3	1.0	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0
11-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.0	0.1	0.2	0.2	0.1	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
12-Jun	0.1	0.6	0.3	0.2	0.2	Z	0.2	0.0	0.0	0.1	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	0.0	0.1	0.6
13-Jun	Z	0.1	0.1	0.2	0.6	0.6	0.5	0.6	1.1	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	0.0	0.1	0.2	1.1
14-Jun	0.1	Z	0.2	0.1	0.1	0.1	0.2	0.1	1.1	0.9	0.4	0.1	0.7	0.1	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	1.1
15-Jun	0.0	0.0	Z	0.2	0.0	0.2	0.2	0.3	0.7	0.2	0.1	0.1	0.0	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.1	0.2	0.7
16-Jun	0.1	0.2	0.1	Z	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.2
17-Jun	0.0	0.0	0.0	0.1	Z	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	0.3	0.1	0.0	0.0	0.3
18-Jun	0.1	0.1	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.3	2.8	1.9	0.0	0.8	0.1	0.1	0.4	0.3	0.2	0.0	0.3	0.6	0.4	0.4	2.8
19-Jun	Z	0.2	0.2	0.1	0.2	0.3	0.5	2.8	1.3	0.2	0.0	0.1	0.5	1.1	0.9	1.8	0.5	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.5	2.8
20-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2
21-Jun	0.1	0.1	Z	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.2	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.3
22-Jun	0.1	0.1	0.2	Z	0.1	0.1	0.1	0.2	0.6	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.6
23-Jun	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	0.2	0.4	0.4	0.4	0.3	0.3	0.2	0.1	0.2	0.2	0.4
24-Jun	0.1	0.1	0.1	0.1	0.1	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	0.2	0.2	0.1	0.2	0.7	0.3	0.2	0.7
25-Jun	Z	0.2	0.2	0.0	0.1	0.2	0.3	0.8	0.8	1.3	0.3	0.3	0.4	0.3	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.3	1.3
26-Jun	0.2	Z	0.3	0.2	0.3	0.3	0.8	0.9	0.8	0.5	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.2	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.9
27-Jun	0.1	0.1	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.2
28-Jun	0.0	0.1	0.0	Z	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.2	0.1	0.2	0.2	0.1	0.3	0.3	0.1	0.3
29-Jun	0.2	0.2	0.1	0.1	Z	0.1	0.6	0.8	0.9	0.5	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.0	0.1	0.1	0.1	0.2	0.9
30-Jun	0.1	0.1	0.0	0.1	0.1	Z	0.1	0.2	1.2	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.2
	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.2	0.2	0.2	0.3	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.2	0.6	0.3	0.2	0.6	0.6	0.8	2.8	1.3	1.3	0.6	2.8	1.9	1.1	0.9	1.8	0.5	0.6	0.6	0.3	0.3	0.3	0.7	0.4	Diurnal Maximum	

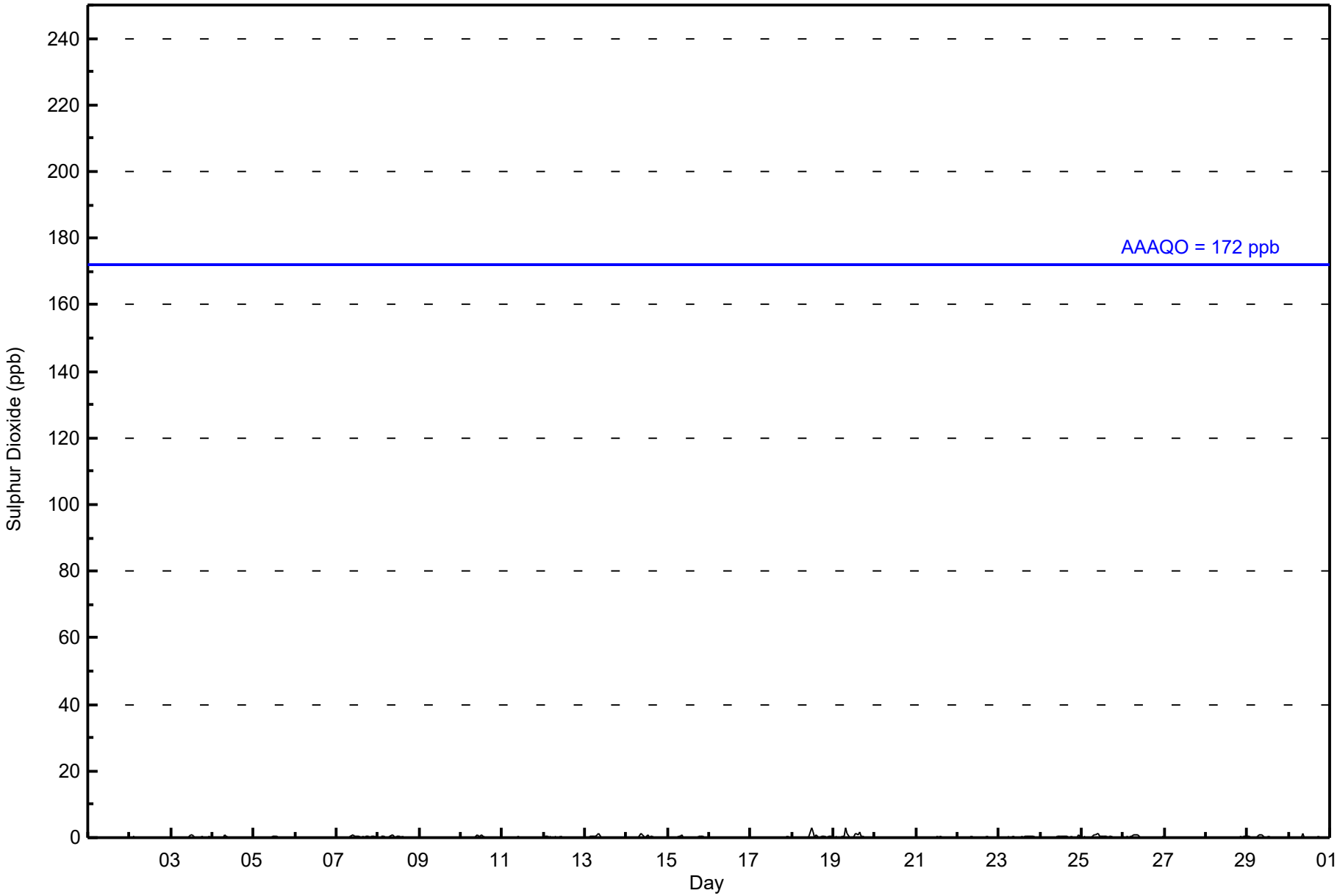
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Anzac - June 2026



Sulphur Dioxide (SO_2) - ppb

Anzac - June 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 - June 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	56	45	31	38	22	47	53	44	23	17	18	18	48	79	51	97	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	56	45	31	38	22	47	53	44	23	17	18	18	48	79	51	97	687

Total Number of Valid Hours: 687

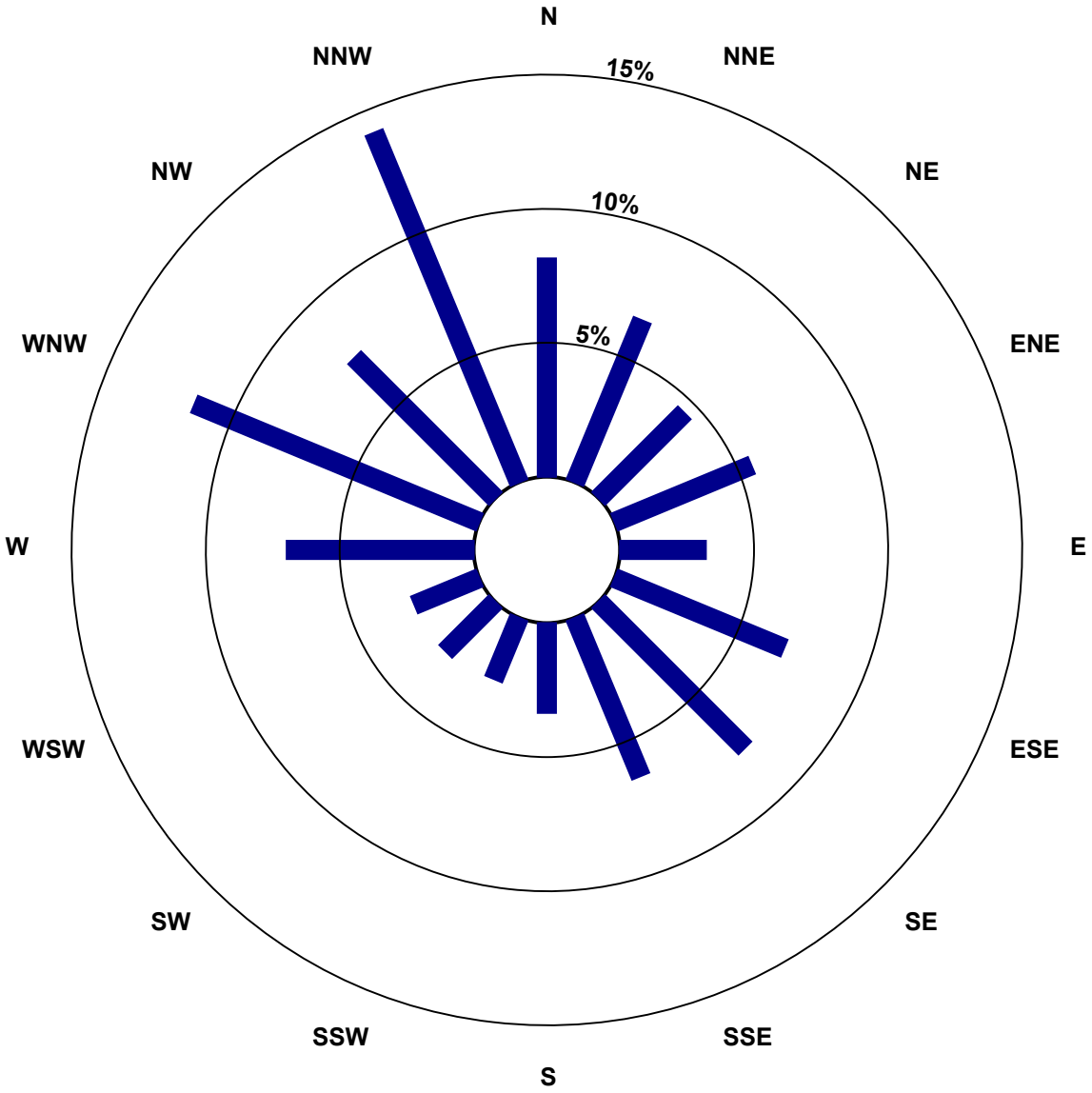
Total Number of Hours: 720

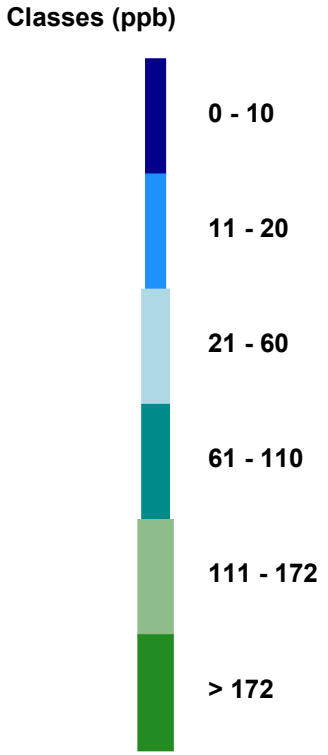
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Anzac





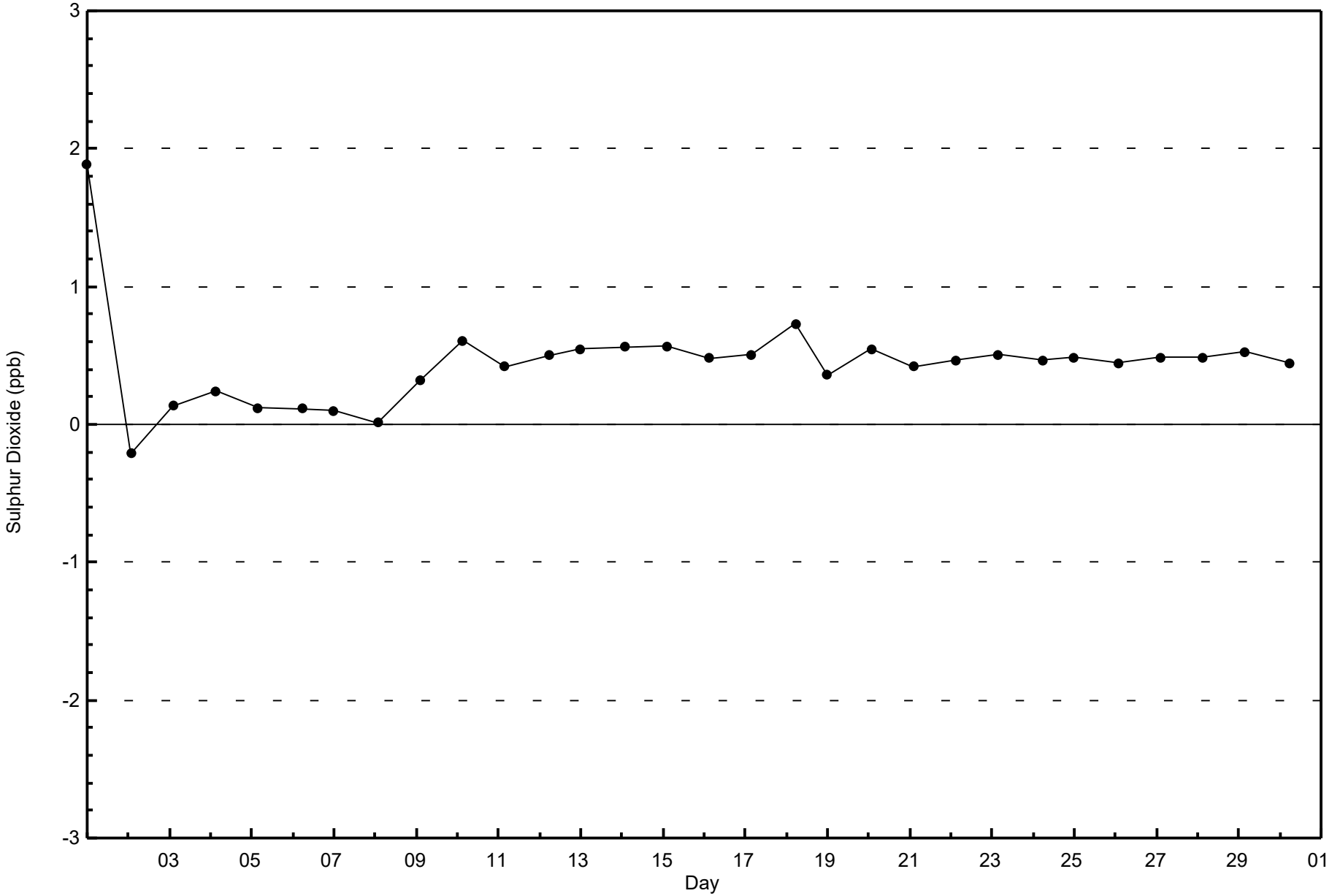
Total Number of Valid Hours: 687

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Anzac - June 2026

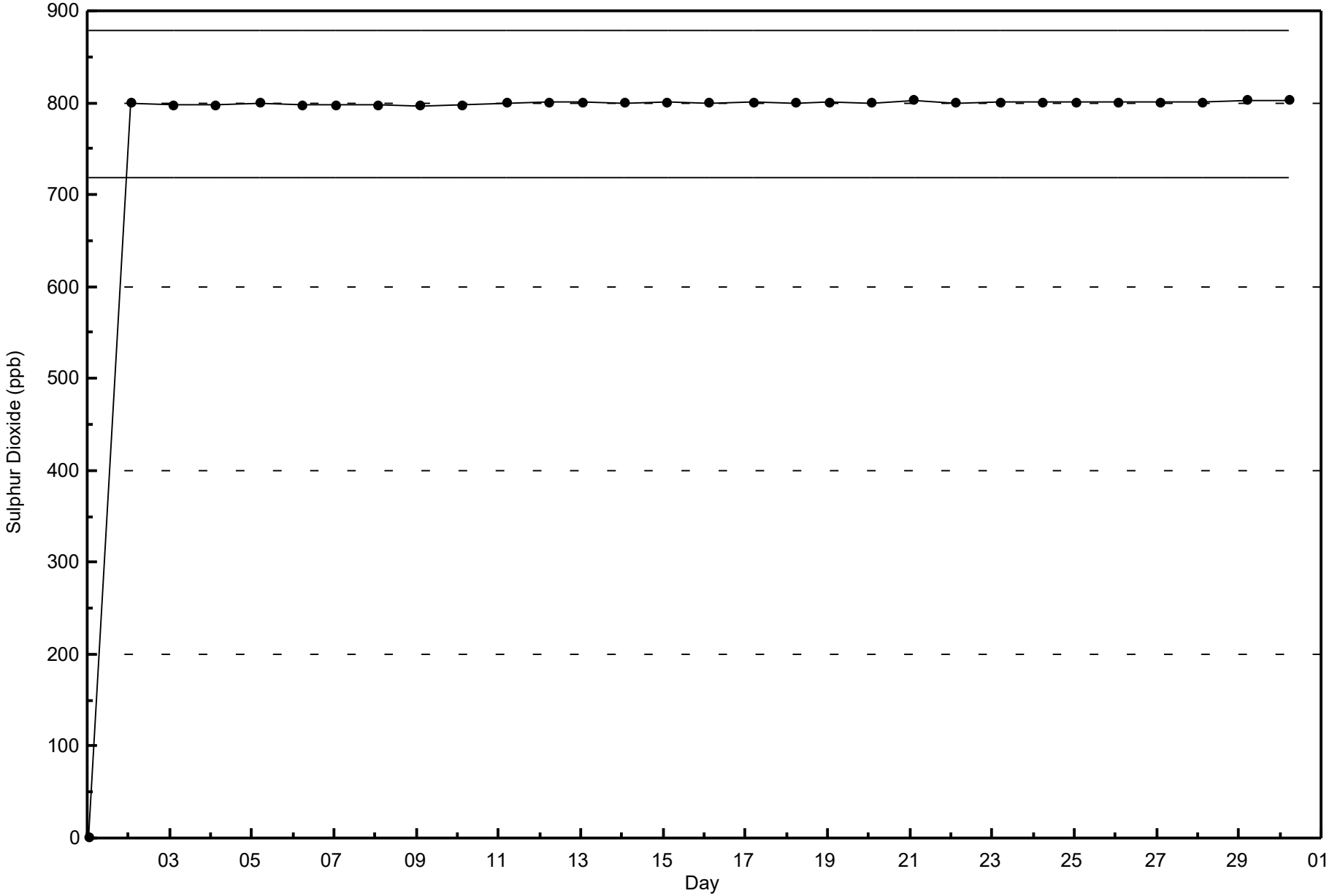


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Anzac - June 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Anzac - June 2026

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

Maximum Value: 1.7 ppb on Jun 26 05:30

Maximum Daily Average: 0.6 ppb on Jun 26

Minimum Value: 0.3 ppb on Jun 29 02:00

Minimum Daily Average: 0.3 ppb on Jun 28

Maximum Diurnal Average: 0.5 ppb at hour 5

Minimum Diurnal Average: 0.4 ppb at hour 20

Monthly Average: 0.43 ppb

Percentiles: P_1 = 0.3 P_{10} = 0.3 Q_1 = 0.4 Median = 0.4 Q_3 = 0.4 P_{90} = 0.5 P_{99} = 1.1

Periods in Service:	1440
Periods of Valid Data:	1368
Periods of Invalid Data:	72
Periods of Calibration:	70
Percent Operational Time:	99.9

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

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Anzac - June 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-Jun	0.5	0.5	0.5	0.5	Z	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	1.0	0.5	1.0
	0.5	0.5	0.5	0.6	SP	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.9	0.6		
17-Jun	0.6	1.0	0.7	0.7	0.6	Z	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	0.4	0.5	1.0
	0.8	0.7	0.6	0.6	0.6	SP	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4		
18-Jun	Z	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.5	0.4	0.5	0.5	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.6
	SP	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.4	0.4	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4		
19-Jun	0.4	Z	0.5	0.5	0.4	0.4	0.4	0.4	0.7	0.5	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	0.5	0.4	0.7
	0.4	SP	0.4	0.4	0.5	0.4	0.4	0.5	0.6	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	0.5		
20-Jun	0.4	0.4	Z	0.7	0.5	0.5	0.4	0.4	0.3	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	0.4	0.7
	0.5	0.4	SP	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4		
21-Jun	0.5	0.5	0.5	Z	0.4	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	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5
	0.4	0.4	0.4	SP	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4		
22-Jun	0.3	0.4	0.4	0.5	Z	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.5
	0.4	0.4	0.5	0.5	SP	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4		
23-Jun	0.4	0.4	0.4	0.4	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
	0.4	0.4	0.4	0.4	0.4	SP	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	0.4	0.4	0.5	0.4	0.4		
24-Jun	Z	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5
	SP	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4		
25-Jun	0.5	Z	0.5	0.5	0.5	0.6	0.9	1.2	1.1	0.7	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	0.5	1.4
	0.6	SP	0.5	0.6	0.5	0.7	1.4	1.0	0.8	0.6	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		
26-Jun	0.4	0.4	Z	0.9	1.5	1.7	1.4	1.2	0.9	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.4	0.6	1.7
	0.4	0.4	SP	1.2	1.7	1.4	1.3	1.0	0.9	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		
27-Jun	0.4	0.4	0.5	Z	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	0.3	0.3	0.3	0.3	0.3	0.4	0.6
	0.4	0.6	0.4	SP	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
28-Jun	0.3	0.3	0.4	0.4	Z	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	0.3	0.3	0.3	0.4
	0.4	0.4	0.3	0.4	SP	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3		
29-Jun	0.3	0.3	0.4	0.3	0.4	Z	0.4	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.7	0.4	0.7
	0.3	0.3	0.3	0.4	0.4	SP	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	0.7	0.6	0.7		
30-Jun	Z	0.5	0.5	0.6	0.5	0.4	0.4	1.0	1.4	0.6	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.5	1.4
	SP	0.5	0.5	0.5	0.5	0.4	0.4	1.2	1.4	0.5	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3		
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Diurnal Average	
	1.1	1.1	1.3	1.2	1.7	1.7	1.4	1.2	1.4	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.9	1.0	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

Anzac - June 2026

Maximum Value: 1.6 ppb on Jun 26 06:00

Maximum Daily Average: 0.6 ppb on Jun 26

Minimum Value: 0.3 ppb on Jun 29 02:00

Minimum Daily Average: 0.3 ppb on Jun 28

Maximum Diurnal Average: 0.5 ppb at hour 5

Minimum Diurnal Average: 0.4 ppb at hour 20

Monthly Average: 0.43 ppb

Percentiles: P_1 = 0.3 P_{10} = 0.3 Q_1 = 0.4 Median = 0.4 Q_3 = 0.4 P_{90} = 0.5 P_{99} = 1.1

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-Jun	0.5	Z	0.5	0.5	0.5	0.4	M	0.7	0.7	0.7	0.6	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.7
2-Jun	0.4	0.5	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
3-Jun	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	0.3	0.3	0.6	0.4	0.4	0.6
4-Jun	0.4	0.4	0.4	0.3	Z	0.4	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	0.4	0.4	0.4	0.4	0.4	0.4	0.6
5-Jun	0.4	0.4	0.5	0.5	0.5	Z	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
6-Jun	Z	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.5
7-Jun	0.5	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	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
8-Jun	0.5	0.7	Z	0.5	0.4	0.5	0.4	0.6	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	0.5	0.7
9-Jun	0.4	0.4	0.4	Z	0.5	0.5	0.4	0.4	0.4	0.4	C	C	C	C	C	0.5	0.5	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5
10-Jun	0.4	0.6	0.5	0.6	Z	0.4	0.3	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	0.3	0.3	0.3	0.4	0.4	0.6
11-Jun	0.4	0.4	0.4	0.4	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4
12-Jun	Z	0.5	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.4	0.6
13-Jun	0.8	Z	1.1	0.8	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	1.1
14-Jun	0.5	0.5	Z	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.5	0.6
15-Jun	1.0	1.0	1.1	Z	1.0	0.7	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	1.1
16-Jun	0.5	0.5	0.5	0.5	Z	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8	0.5	0.8
17-Jun	0.7	0.9	0.6	0.6	0.6	Z	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.9
18-Jun	Z	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.4	0.4	0.5	0.5	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
19-Jun	0.4	Z	0.5	0.5	0.4	0.4	0.4	0.5	0.6	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.6
20-Jun	0.5	0.4	Z	0.7	0.5	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.7
21-Jun	0.5	0.4	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5
22-Jun	0.4	0.4	0.5	0.5	Z	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.5
23-Jun	0.4	0.4	0.4	0.4	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.5
24-Jun	Z	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
25-Jun	0.5	Z	0.5	0.5	0.5	0.7	1.2	1.1	1.0	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	0.5	1.2
26-Jun	0.4	0.4	Z	1.0	1.6	1.6	1.3	1.1	0.9	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	1.6
27-Jun	0.4	0.5	0.5	Z	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	0.3	0.3	0.3	0.3	0.3	0.4	0.5
28-Jun	0.3	0.4	0.3	0.4	Z	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
29-Jun	0.3	0.3	0.3	0.4	0.4	Z	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	0.6	0.6	0.7	0.4	0.7
30-Jun	Z	0.5	0.5	0.6	0.5	0.4	0.4	1.1	1.4	0.5	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	0.3	0.5	1.4
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Diurnal Average	
	1.0	1.0	1.1	1.0	1.6	1.6	1.3	1.1	1.4	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.8	0.8	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

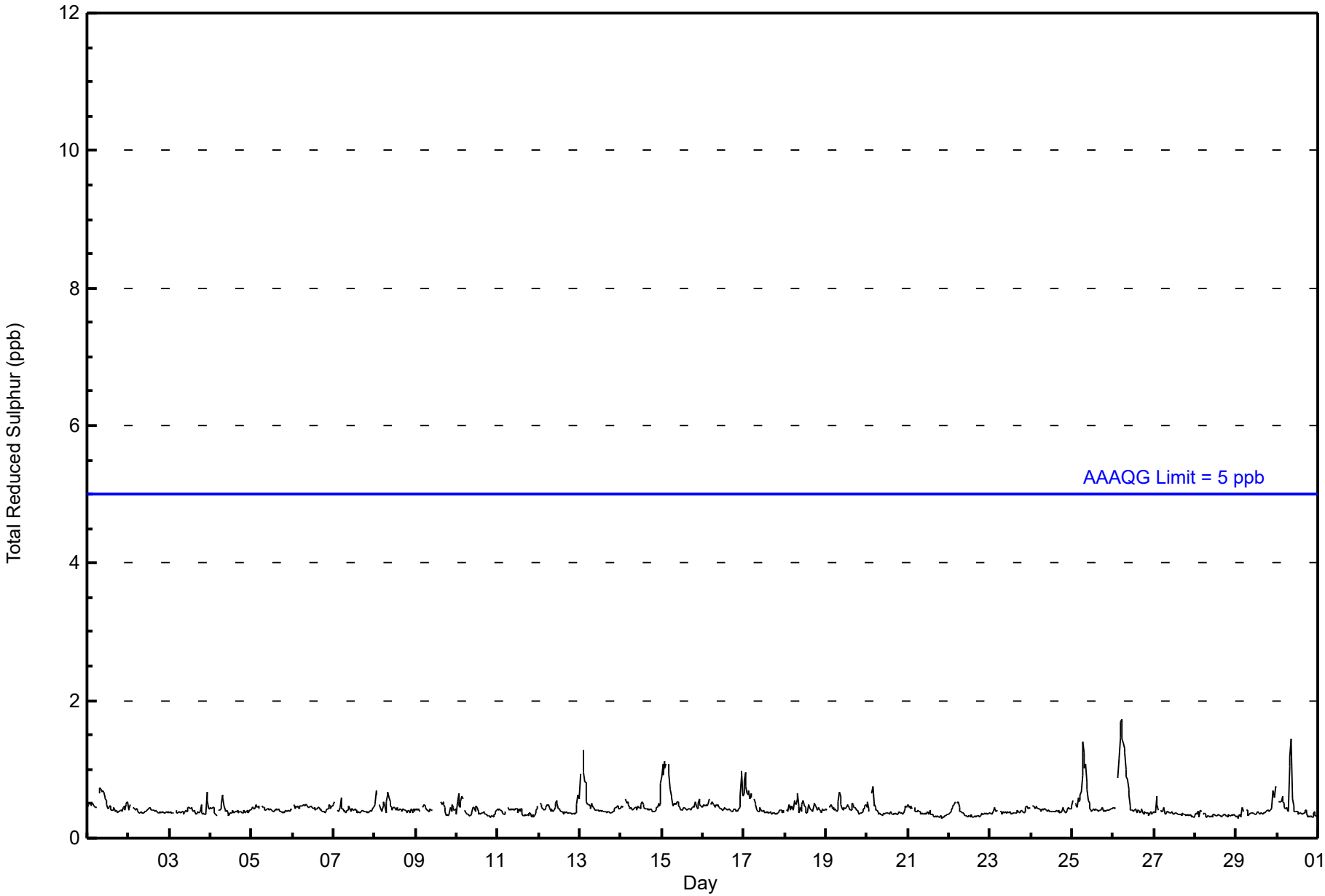
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Anzac - June 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

Anzac - June 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	58	44	30	39	22	48	51	44	23	16	18	20	47	74	53	97	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	58	44	30	39	22	48	51	44	23	16	18	20	47	74	53	97	684

Total Number of Valid Hours: 684

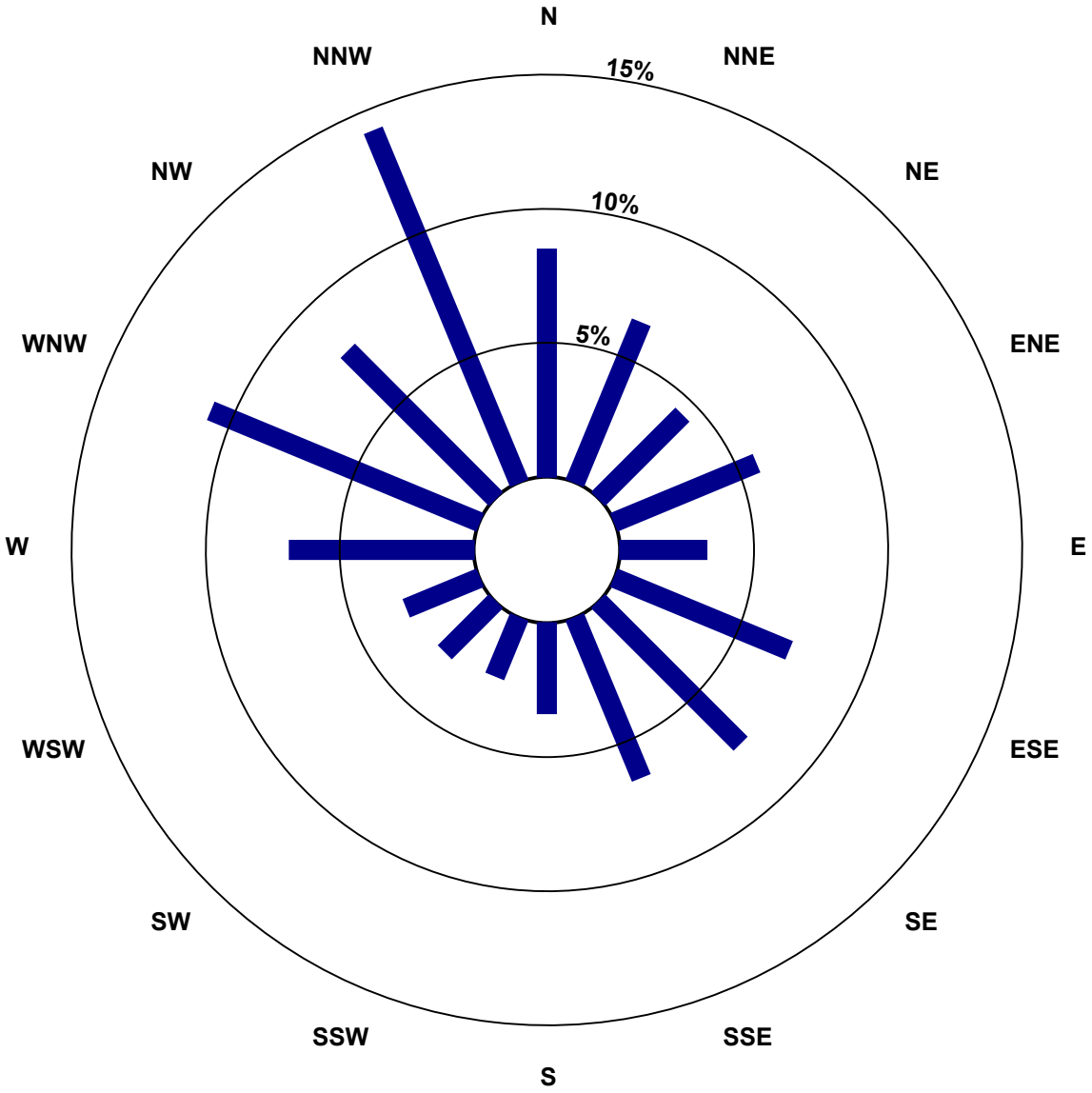
Total Number of Hours: 720

Wood Buffalo Environmental Association

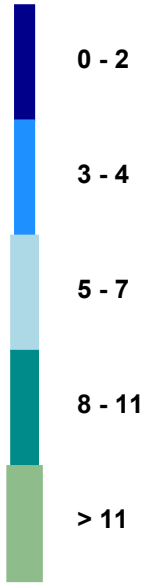
Wind Rose Jun 2026

Total Reduced Sulphur (TRS) - ppb

Anzac



Classes (ppb)



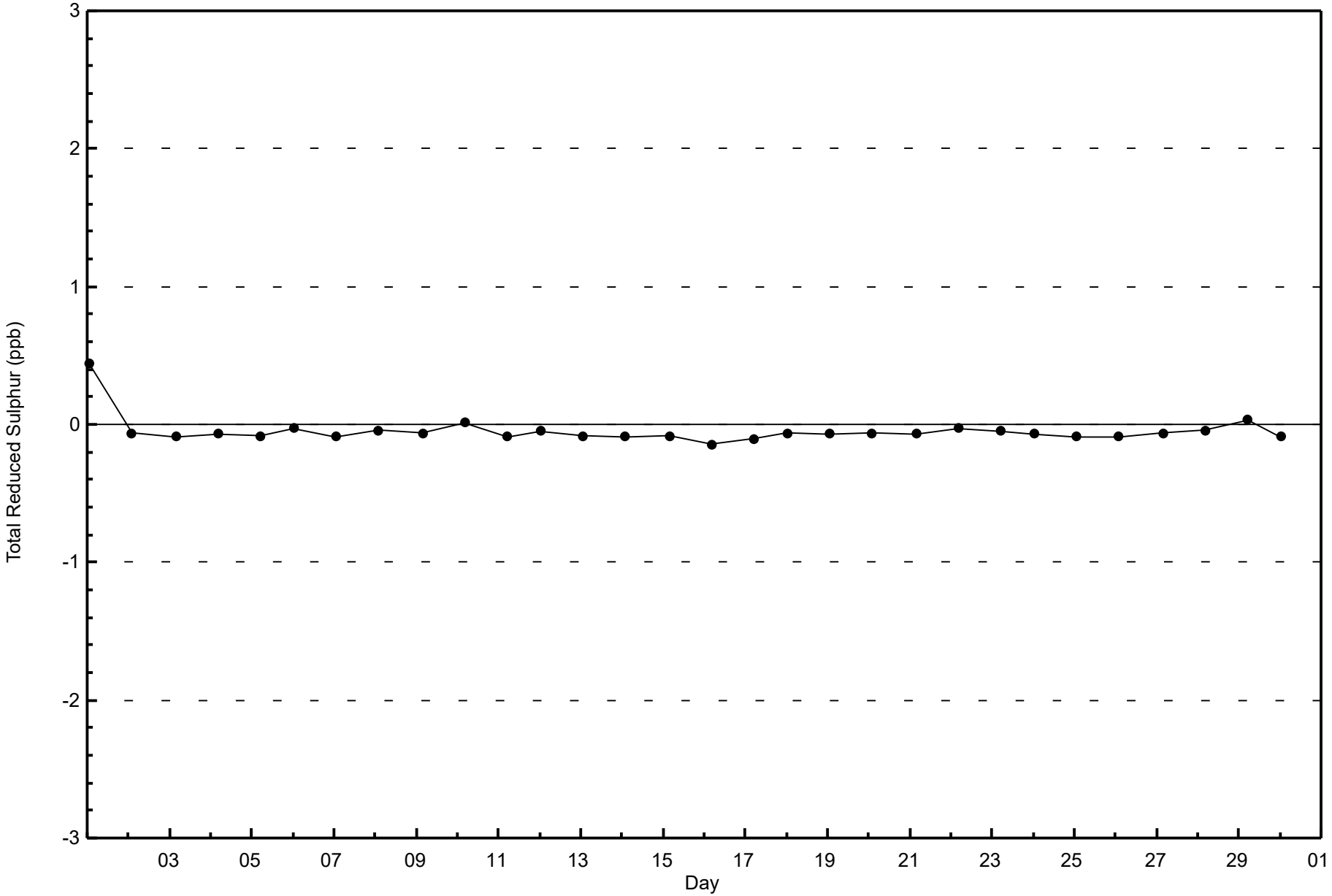
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Anzac - June 2026

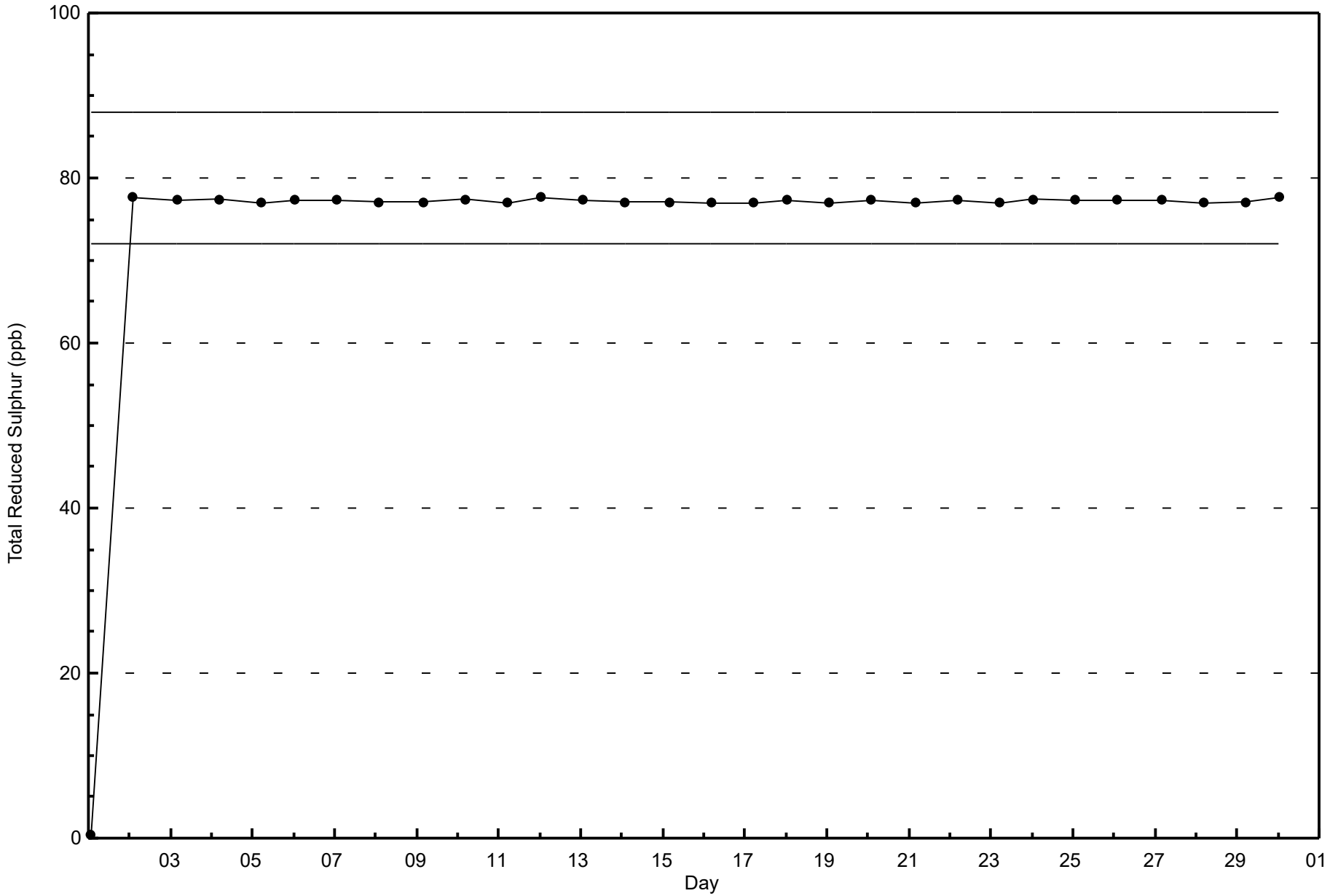


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Anzac - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Anzac - June 2026

Maximum Value: 2.2 ppm on Jun 28 06:00

Maximum Daily Average: 2.0 ppm on Jun 28

Minimum Value: 2.0 ppm on Jun 24 07:00

Minimum Daily Average: 2.0 ppm on Jun 1

Maximum Diurnal Average: 2.0 ppm at hour 6

Minimum Diurnal Average: 2.0 ppm at hour 17

Monthly Average: 2.00 ppm

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

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-Jun	Z	2.0	2.0	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	2.0	2.0	2.0
2-Jun	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
3-Jun	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
4-Jun	2.0	2.0	2.0	Z	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	2.0	2.0	2.1
5-Jun	2.1	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	2.0	2.0	2.0	2.0	2.0	2.0	2.1
6-Jun	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
7-Jun	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
8-Jun	2.0	Z	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
9-Jun	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
10-Jun	2.0	2.1	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
11-Jun	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
12-Jun	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
13-Jun	Z	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	2.0	2.0	2.0	2.0	2.0	2.1
14-Jun	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
15-Jun	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	2.0	2.0	2.0	2.0	2.1
16-Jun	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
17-Jun	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
18-Jun	2.0	2.0	2.0	2.0	2.0	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	2.0	2.0	2.0	2.0	2.0	2.0	2.1
19-Jun	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
20-Jun	2.0	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
21-Jun	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
22-Jun	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
23-Jun	2.0	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	2.0	2.0	2.0	2.0	2.0	2.1
24-Jun	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
25-Jun	Z	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
26-Jun	2.0	Z	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	2.0	2.0	2.0	2.0	2.1
27-Jun	2.0	2.0	Z	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	2.1	2.1	2.1	2.0	2.1
28-Jun	2.2	2.1	2.1	Z	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.2
29-Jun	2.0	2.0	2.1	2.1	Z	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2
30-Jun	2.0	2.0	2.1	2.1	2.1	Z	2.1	M	M	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	Diurnal Average	
	2.2	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	2.1	2.1	2.1	Diurnal Maximum	

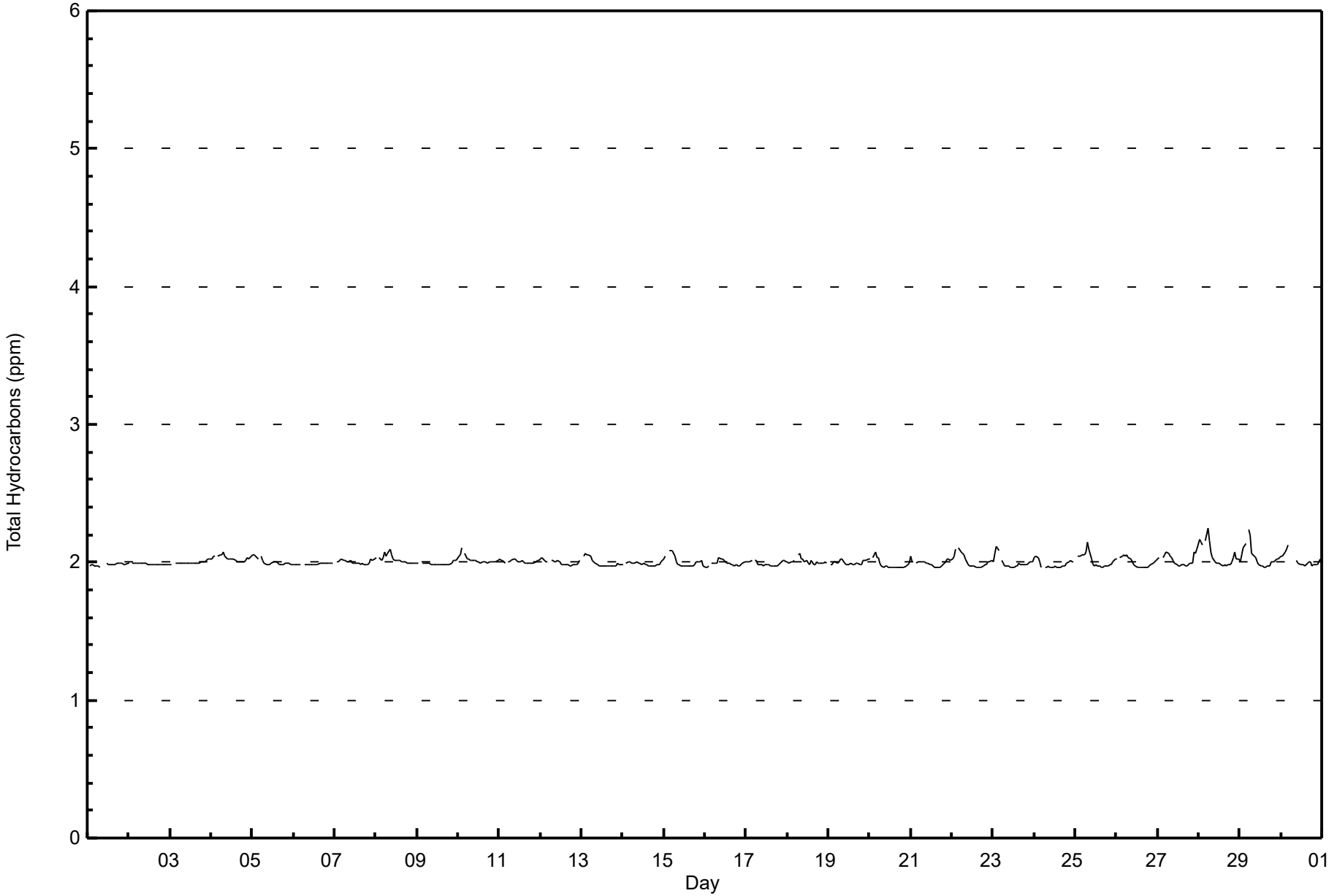
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Anzac - June 2026



Total Hydrocarbons (THC) - ppm

Anzac - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	627	91.53	91.53
2.1 - 3.0	58	8.47	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

Anzac - June 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	52	43	28	33	19	44	45	40	21	17	17	16	47	70	42	93	627
2.1 - 3.0	4	2	3	5	3	3	8	3	1	0	1	2	1	9	9	4	58
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	56	45	31	38	22	47	53	43	22	17	18	18	48	79	51	97	685

Total Number of Valid Hours: 685

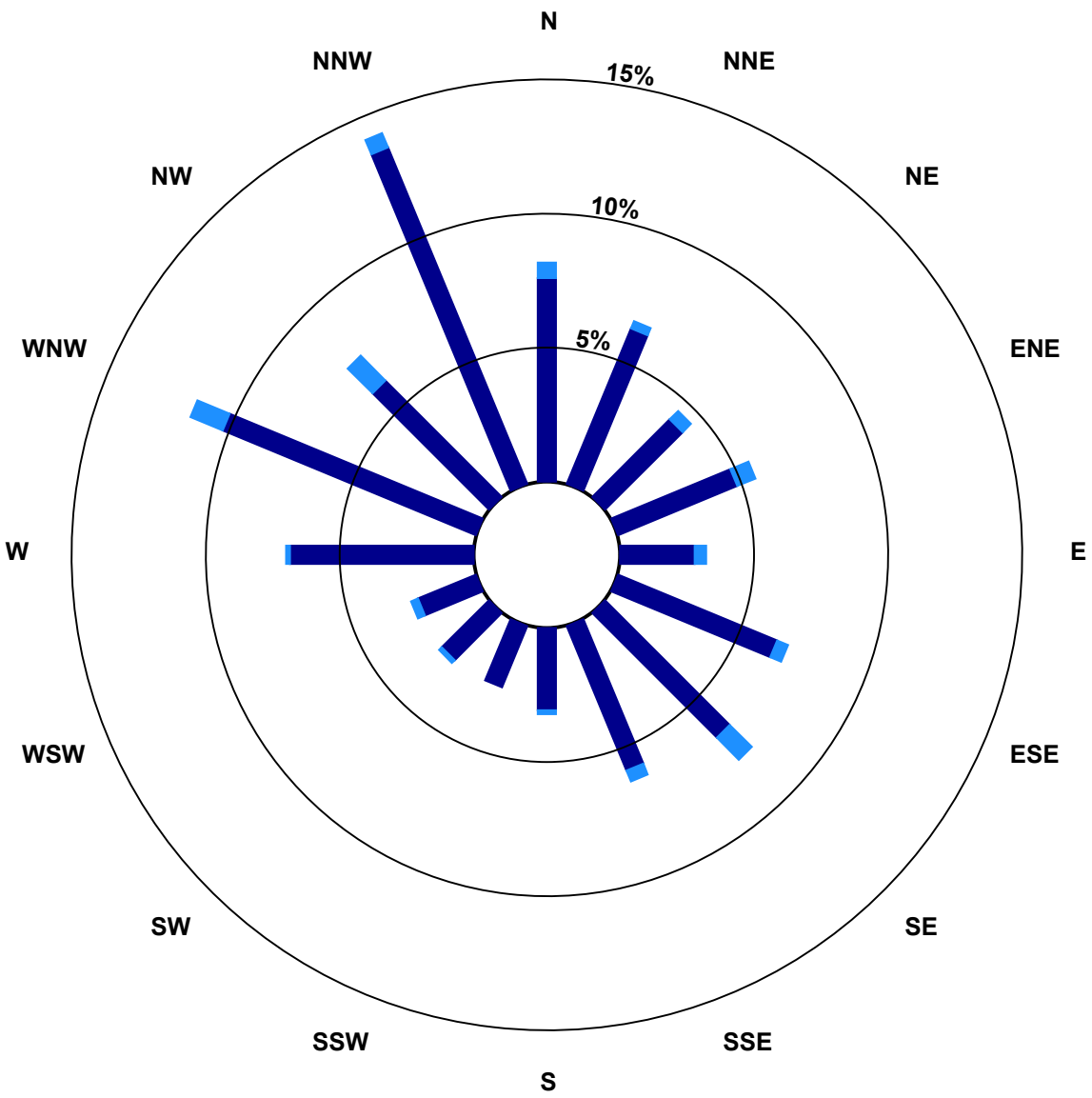
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Anzac



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

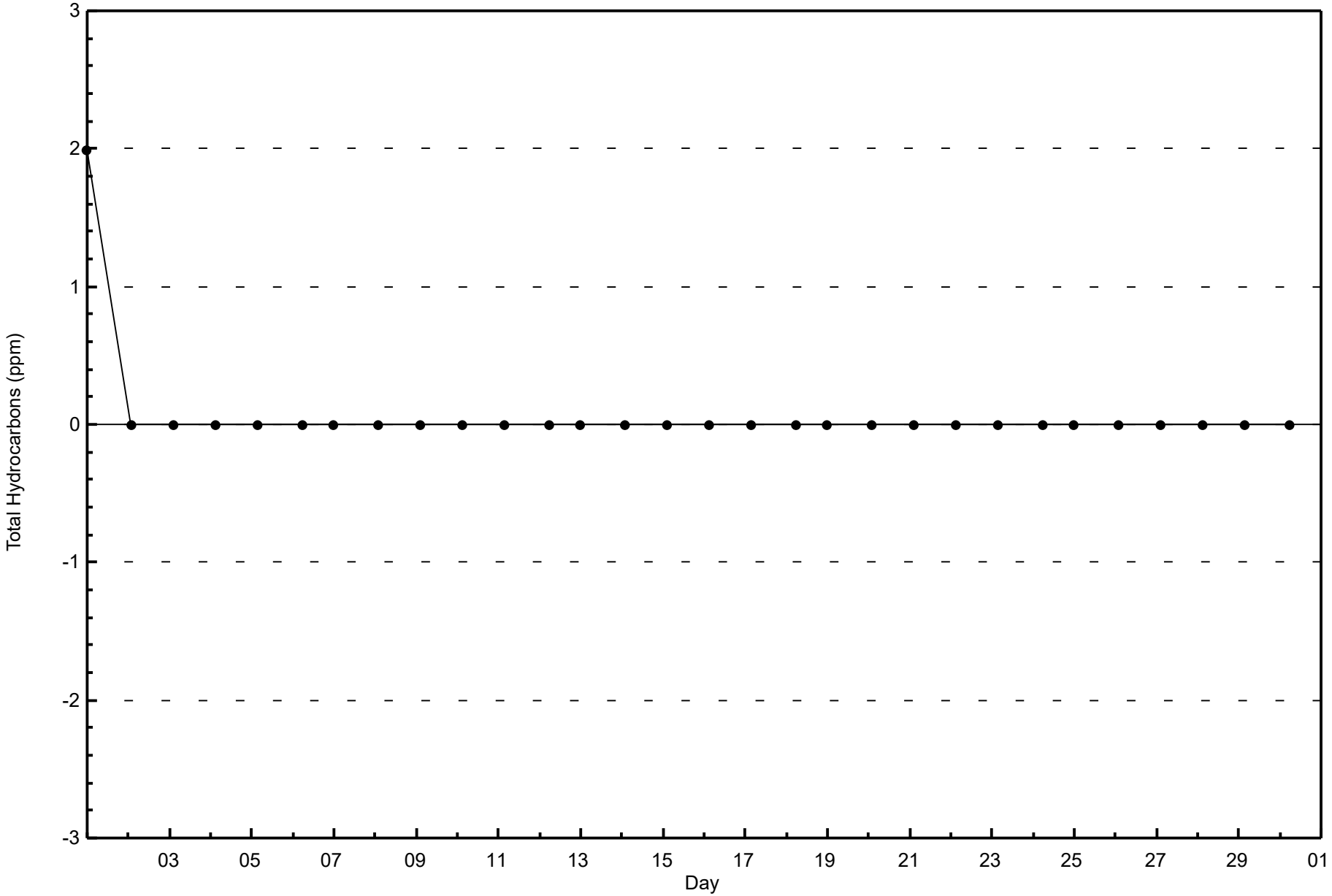
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Anzac - June 2026

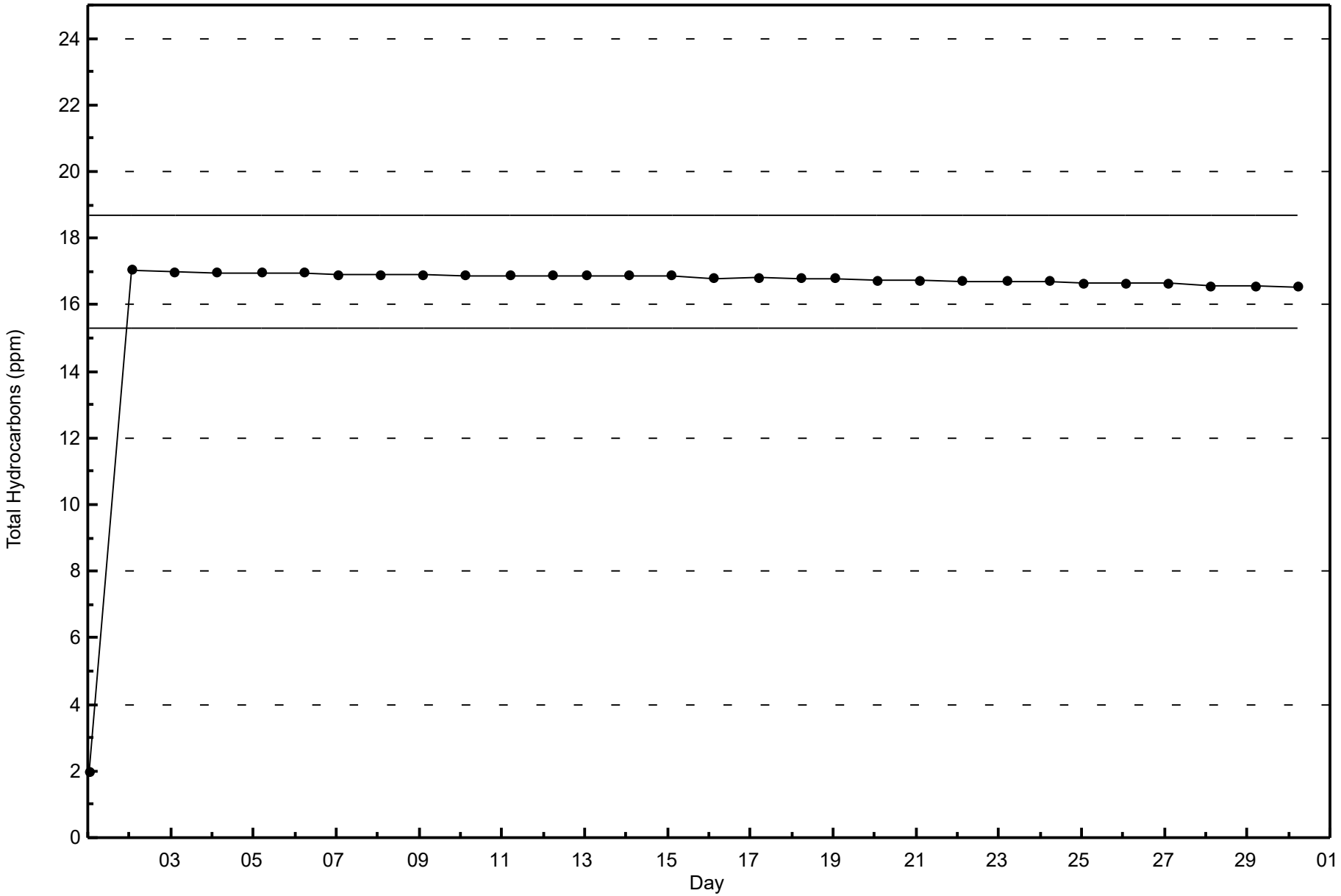


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Anzac - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Anzac - June 2026

Maximum Value: 0.004 ppm on Jun 4 22:00

Maximum Daily Average: 0.000 ppm on Jun 4

Minimum Value: 0.000 ppm on Jun 1 02:00

Minimum Daily Average: 0.000 ppm on Jun 1

Maximum Diurnal Average: 0.000 ppm at hour 22

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:	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-Jun	Z	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	0.000	0.000
2-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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	0.004	0.000	0.000	0.000	0.004
5-Jun	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
6-Jun	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
7-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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
11-Jun	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
12-Jun	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
13-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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
17-Jun	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
18-Jun	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
19-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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
23-Jun	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
24-Jun	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
25-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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
29-Jun	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
30-Jun	0.000	0.000	0.000	0.000	0.000	Z	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	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Diurnal Average	
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	Diurnal Maximum	

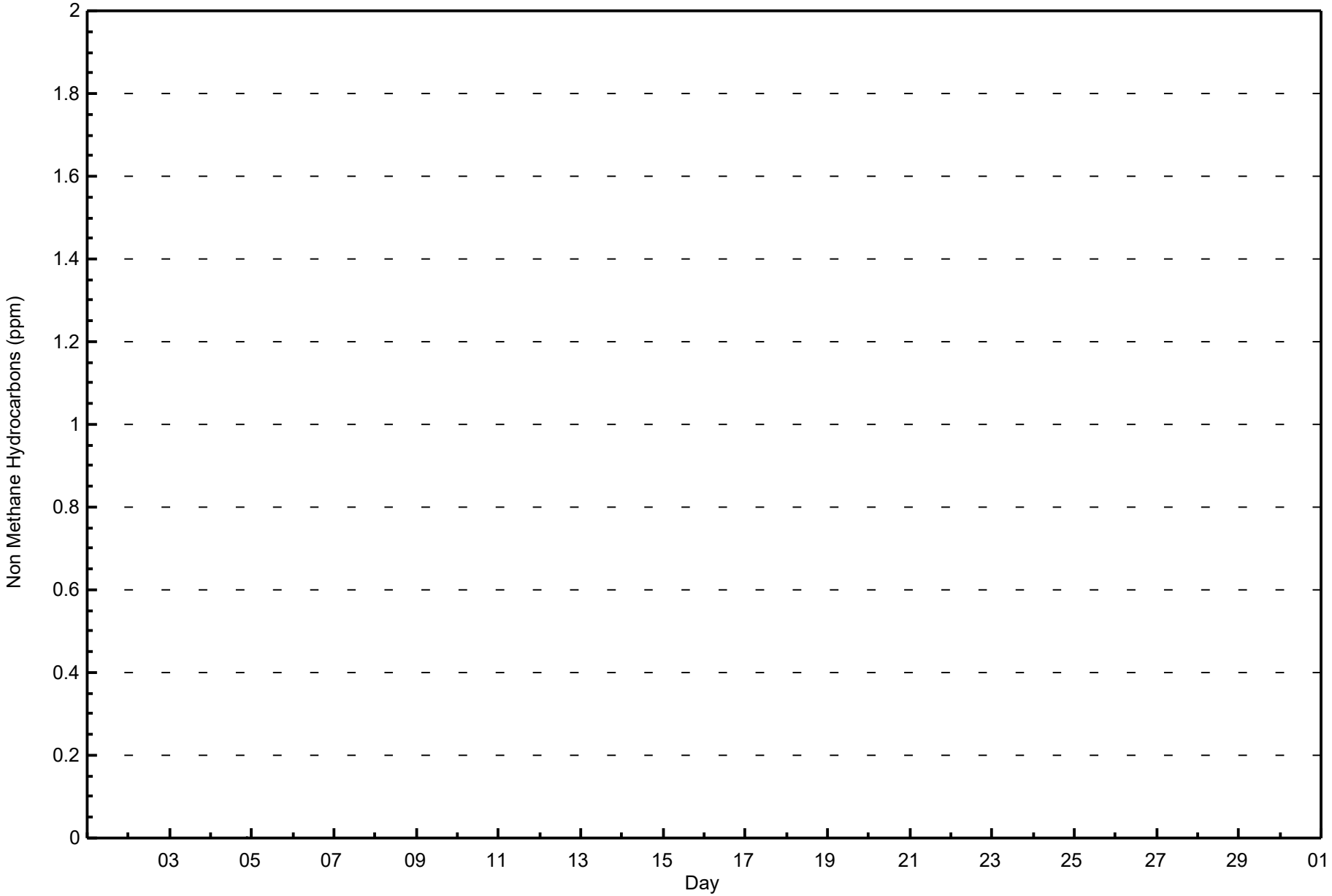
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Anzac - June 2026



Non Methane Hydrocarbons (NMHC) - ppm

Anzac - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	685	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Anzac - June 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	56	45	31	38	22	47	53	43	22	17	18	18	48	79	51	97	685
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	56	45	31	38	22	47	53	43	22	17	18	18	48	79	51	97	685

Total Number of Valid Hours: 685

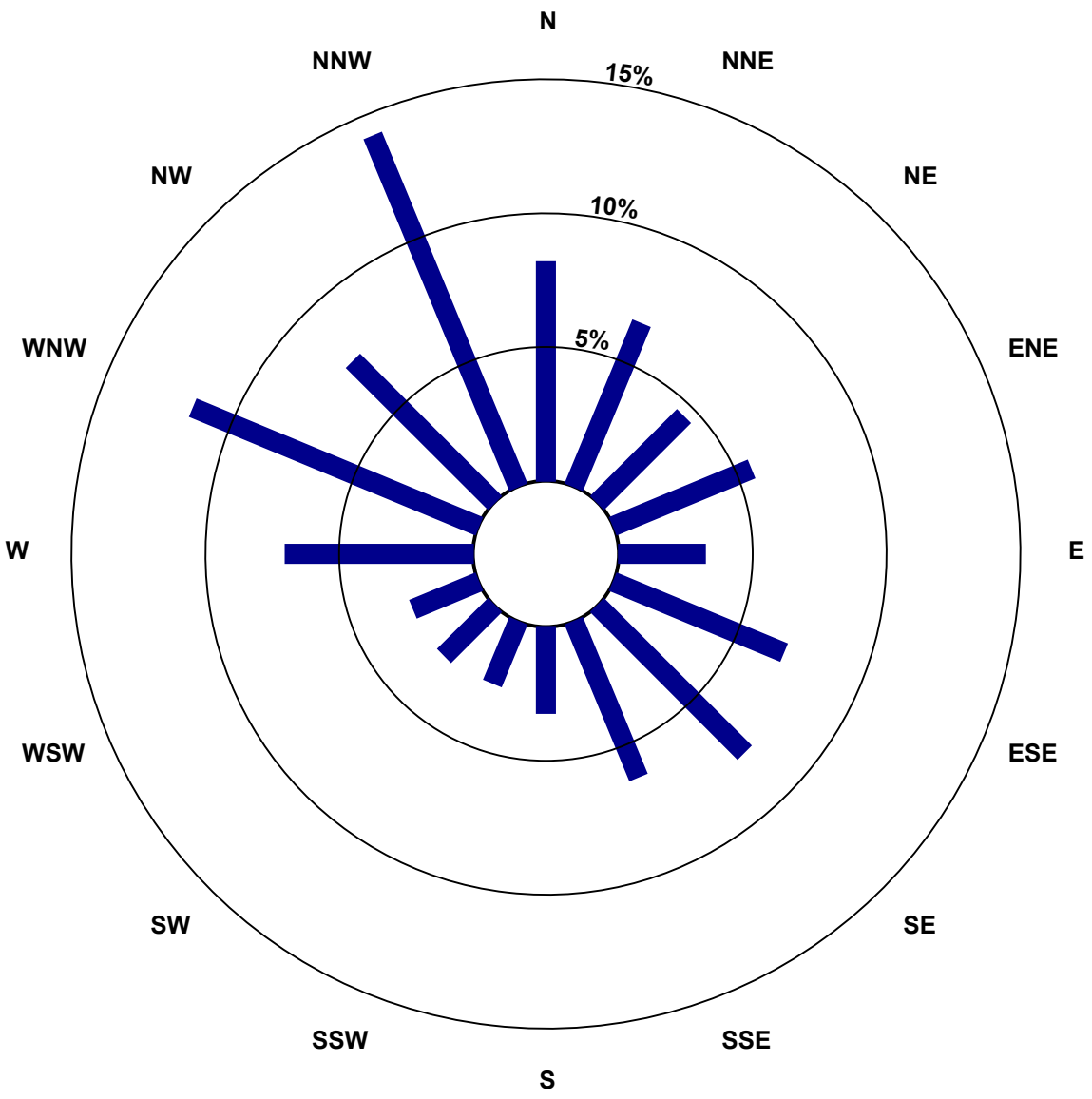
Total Number of Hours: 720

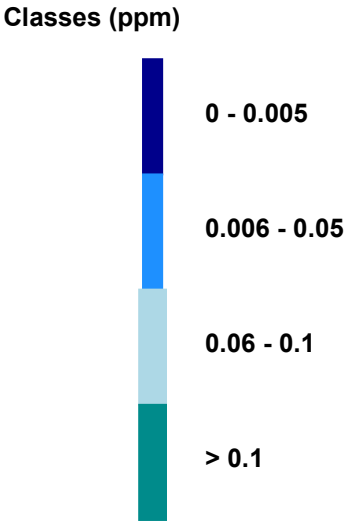
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Non Methane Hydrocarbons (NMHC) - ppm

Anzac





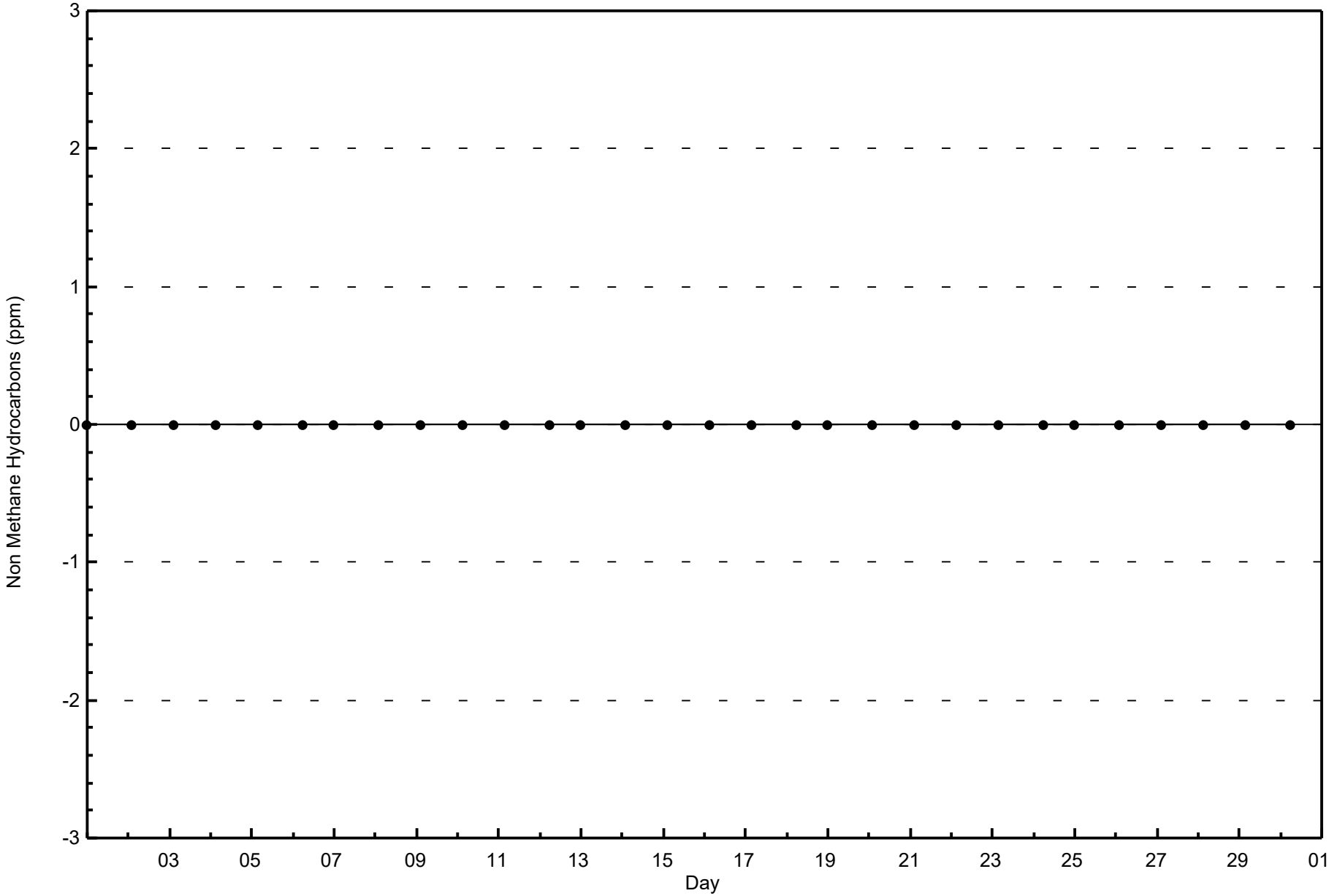
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Anzac - June 2026

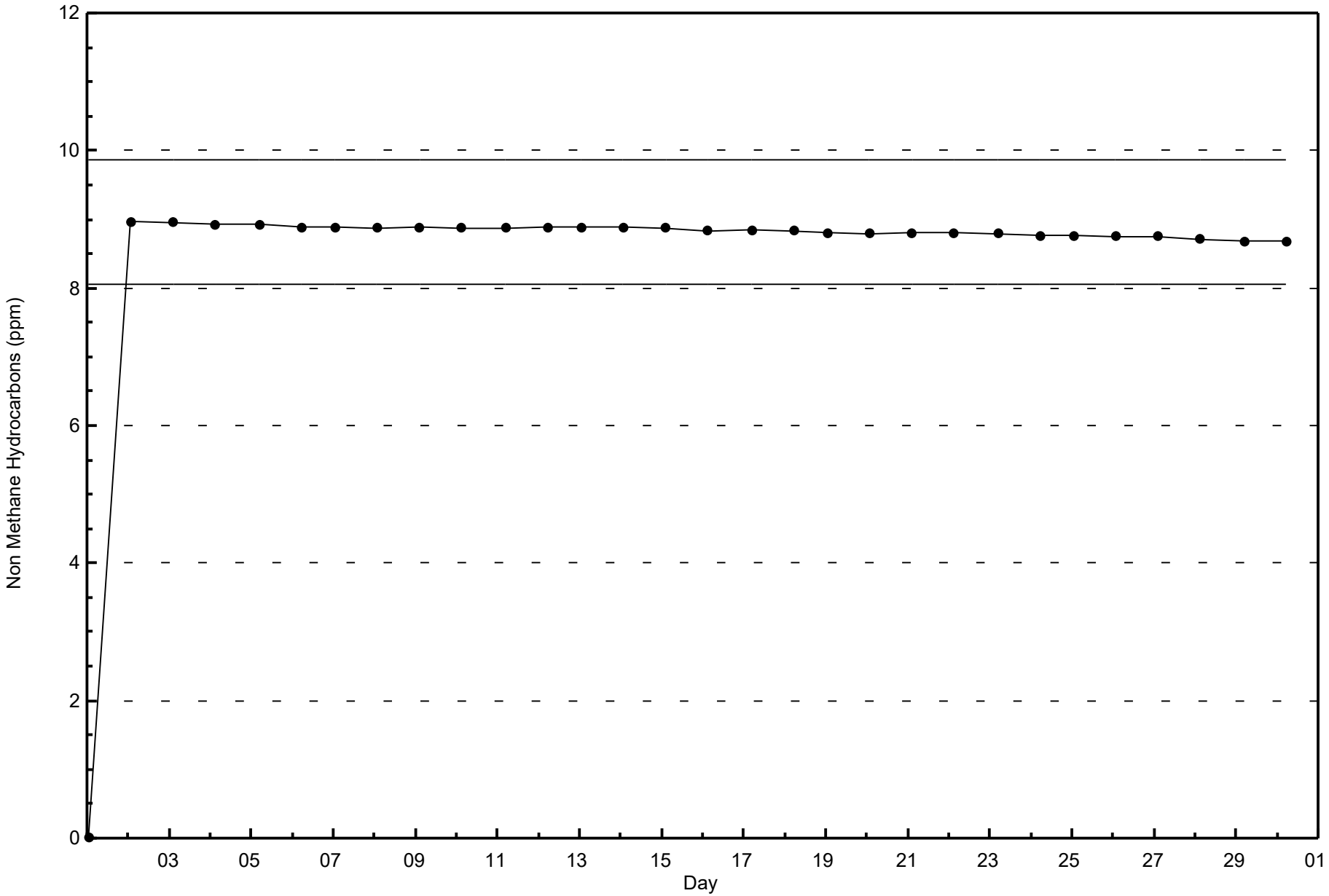


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Anzac - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Anzac - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.2 ppm on Jun 28 06:00 Maximum Daily Average: 2.0 ppm on Jun 28

Minimum Value: 2.0 ppm on Jun 24 07:00 Minimum Daily Average: 2.0 ppm on Jun 1
Maximum Diurnal Average: 2.0 ppm at hour 6 Minimum Diurnal Average: 2.0 ppm at hour 17
Monthly Average: 2.00 ppm Percentiles: P_1 = 2.0 P_{10} = 2.0 Q_1 = 2.0 Median = 2.0 Q_3 = 2.0 P_{90} = 2.0 P_{99} = 2.1

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-Jun	Z	2.0	2.0	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	2.0	2.0	2.0
2-Jun	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
3-Jun	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
4-Jun	2.0	2.0	2.0	Z	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	2.0	2.0	2.1
5-Jun	2.1	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	2.0	2.0	2.0	2.0	2.0	2.0	2.1
6-Jun	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
7-Jun	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
8-Jun	2.0	Z	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
9-Jun	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
10-Jun	2.0	2.1	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
11-Jun	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
12-Jun	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
13-Jun	Z	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	2.0	2.0	2.0	2.0	2.0	2.1
14-Jun	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
15-Jun	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	2.0	2.0	2.0	2.0	2.1
16-Jun	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
17-Jun	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
18-Jun	2.0	2.0	2.0	2.0	2.0	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	2.0	2.0	2.0	2.0	2.0	2.0	2.1
19-Jun	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
20-Jun	2.0	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
21-Jun	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
22-Jun	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
23-Jun	2.0	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	2.0	2.0	2.0	2.0	2.0	2.1
24-Jun	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
25-Jun	Z	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
26-Jun	2.0	Z	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	2.0	2.0	2.0	2.0	2.1
27-Jun	2.0	2.0	Z	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	2.1	2.1	2.1	2.0	2.1
28-Jun	2.2	2.1	2.1	Z	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.2
29-Jun	2.0	2.0	2.1	2.1	Z	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2
30-Jun	2.0	2.0	2.1	2.1	2.1	Z	2.1	M	M	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	Diurnal Average	
	2.2	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	2.1	2.1	2.1	Diurnal Maximum	

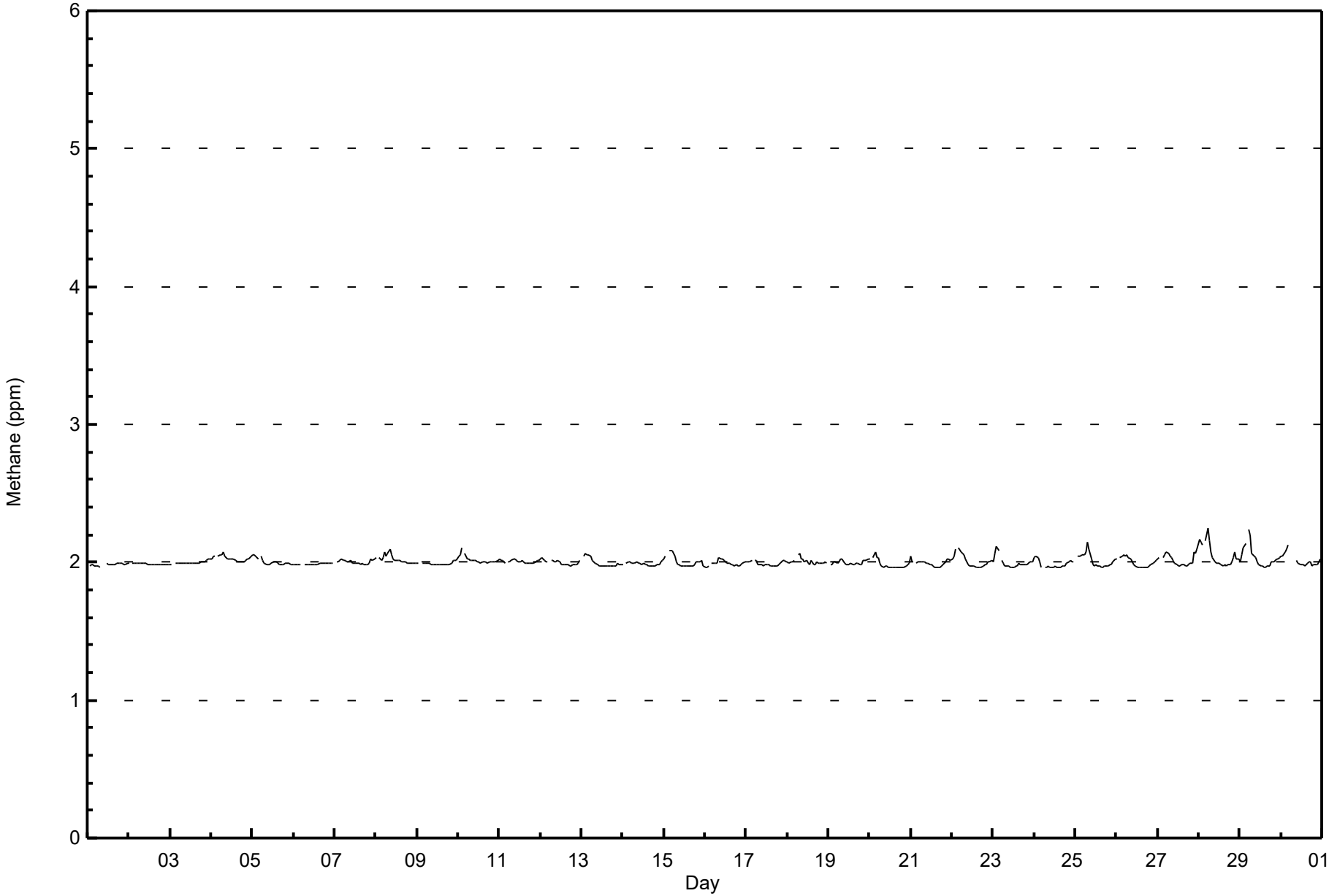
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Anzac - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	627	91.53	91.53
2.1 - 3.0	58	8.47	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

Anzac - June 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	52	43	28	33	19	44	45	40	21	17	17	16	47	70	42	93	627
2.1 - 3.0	4	2	3	5	3	3	8	3	1	0	1	2	1	9	9	4	58
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	56	45	31	38	22	47	53	43	22	17	18	18	48	79	51	97	685

Total Number of Valid Hours: 685

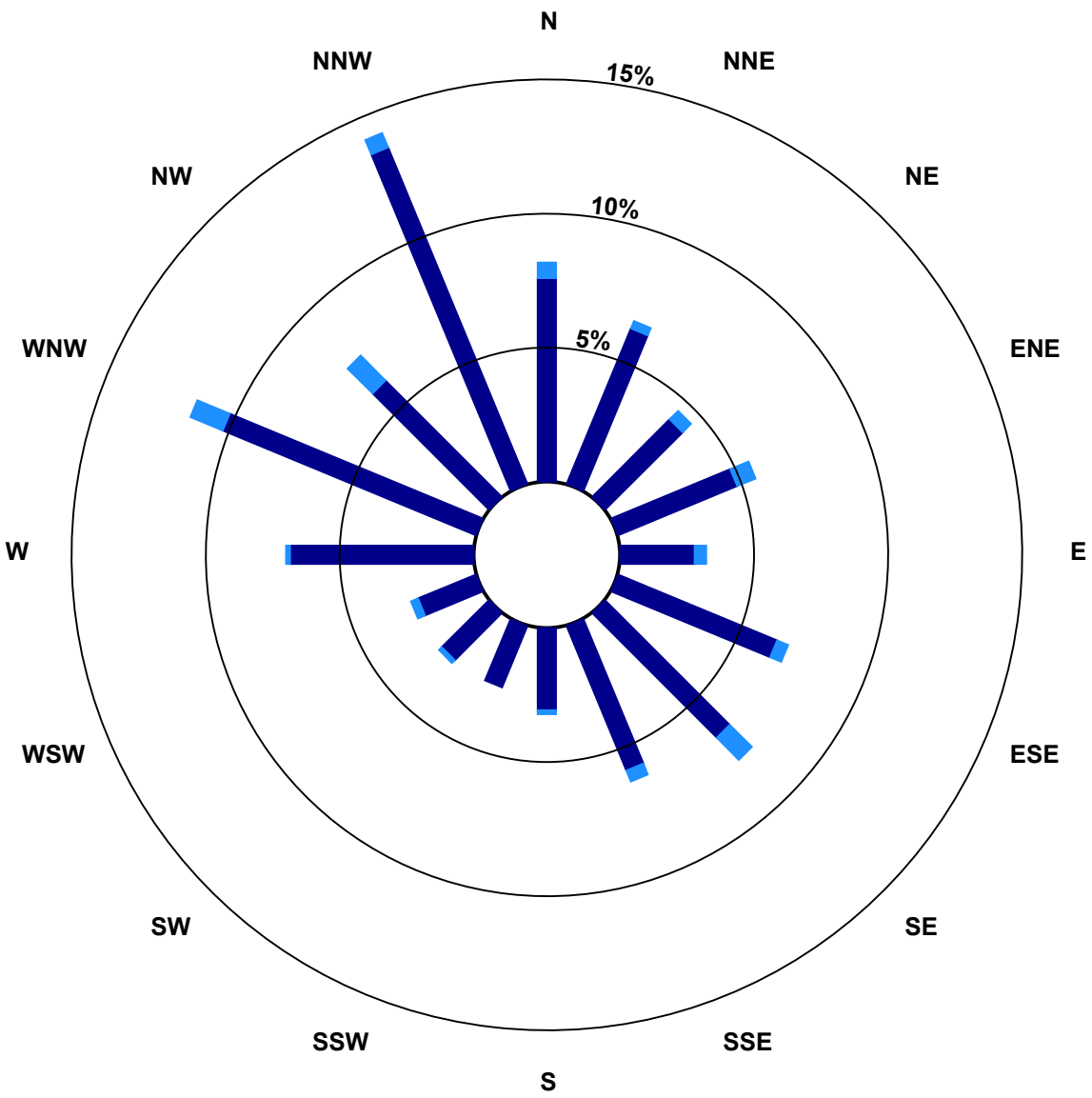
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Methane (CH_4) - ppm

Anzac



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

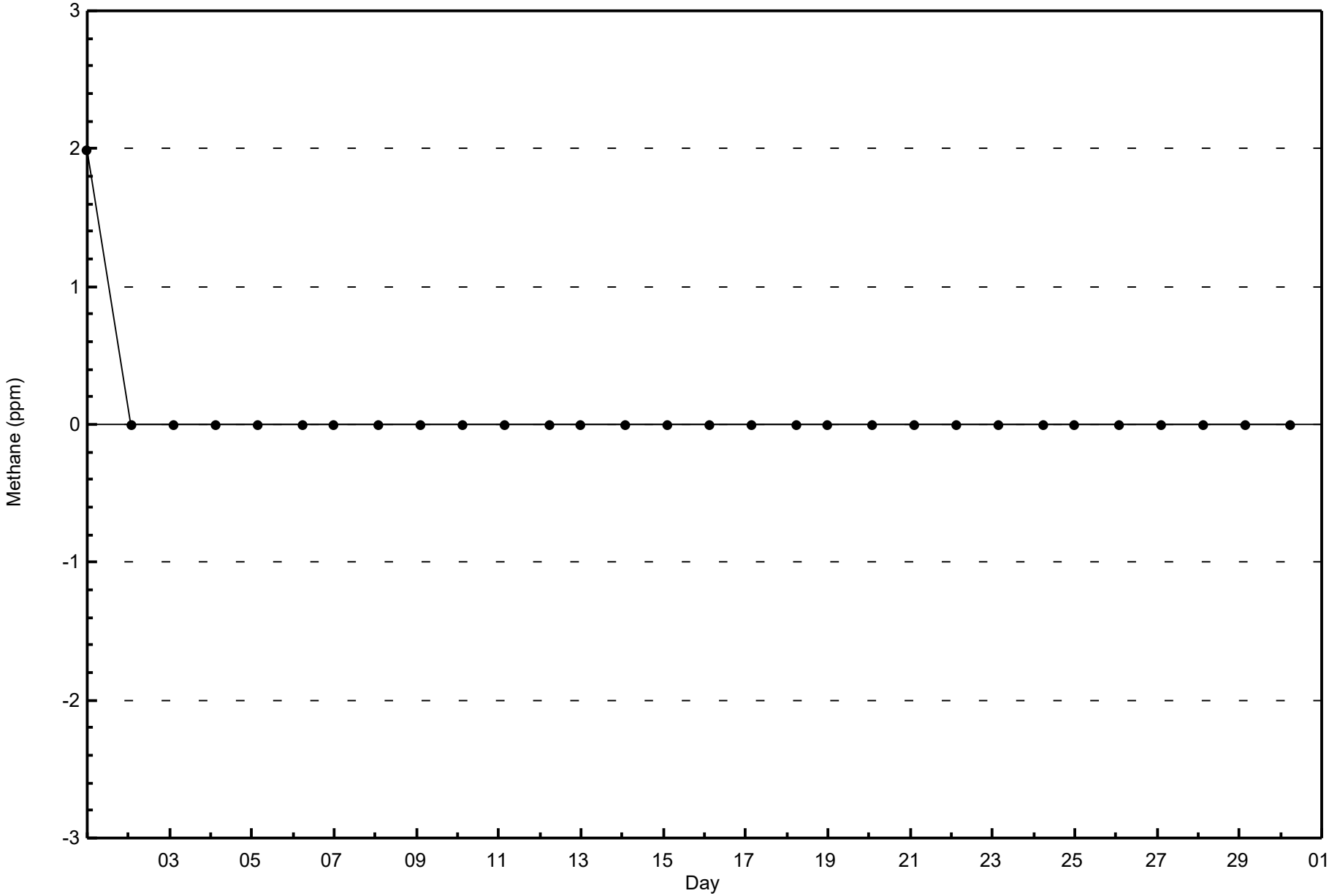
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Anzac - June 2026

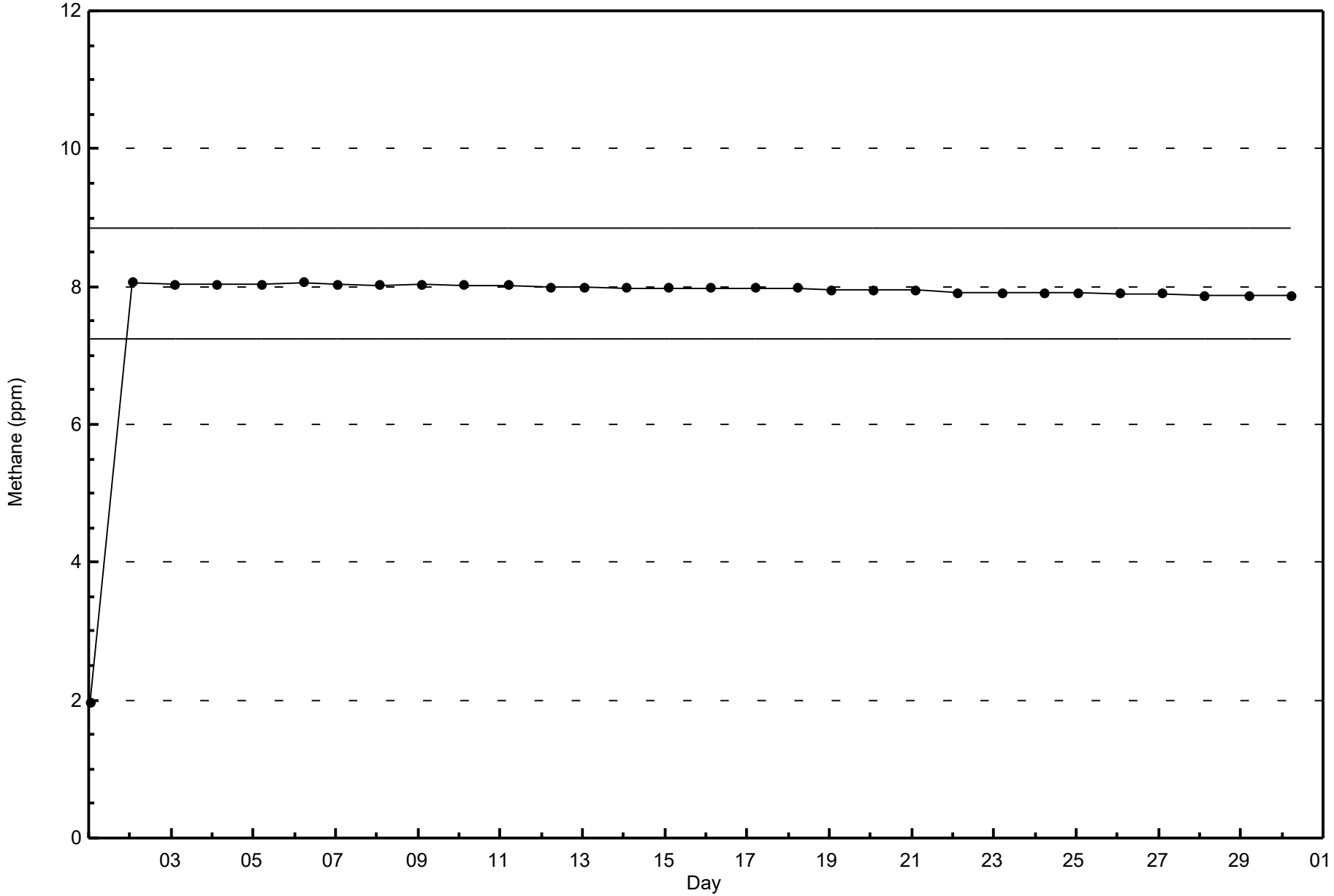


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Anzac - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Anzac - June 2026

Maximum Value: 3.7 ppb on Jun 25 01:00

Maximum Daily Average: 0.5 ppb on Jun 18

Minimum Value: 0.0 ppb on Jun 2 00:00

Minimum Daily Average: 0.0 ppb on Jun 1

Maximum Diurnal Average: 0.4 ppb at hour 8

Minimum Diurnal Average: 0.0 ppb at hour 23

Monthly Average: 0.16 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.1 P_{90} = 0.4 P_{99} = 1.3

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-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	M	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
2-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	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
3-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.3	0.4	0.1	0.1	0.1	0.1	0.3	0.0	0.0	0.0	0.1	0.1	0.1	0.4
4-Jun	0.1	Z	0.6	0.2	0.5	0.8	0.8	1.9	0.4	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	1.9
5-Jun	0.0	0.0	Z	0.0	0.0	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.0	0.1	0.1	0.2
6-Jun	0.1	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	0.0	0.0	0.3	0.1	0.3
7-Jun	0.1	0.1	0.2	0.2	Z	0.2	0.2	0.1	0.3	0.4	0.3	0.4	0.3	0.2	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.4
8-Jun	0.2	0.1	0.1	0.0	0.1	Z	0.2	0.4	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	0.0	0.0	0.1	0.6
9-Jun	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
10-Jun	0.1	Z	0.1	0.2	0.3	0.4	0.5	0.2	0.2	0.5	0.3	0.2	0.3	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5
11-Jun	0.1	0.1	Z	0.0	0.1	0.3	0.3	0.6	0.6	0.8	0.8	0.5	0.7	0.9	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.9
12-Jun	0.1	0.1	0.1	Z	0.2	0.7	0.7	0.6	0.5	0.6	1.3	0.6	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	1.3
13-Jun	0.1	0.1	0.1	0.1	Z	0.6	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	0.3	0.1	0.1	0.1	0.6
14-Jun	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	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
15-Jun	Z	0.1	0.2	0.2	0.4	0.6	0.4	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	0.1	0.1	0.1	0.1	0.1	0.6
16-Jun	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	0.1	0.1	3.6	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.2	3.6
17-Jun	0.1	0.1	Z	0.1	0.1	0.2	0.5	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.5
18-Jun	0.0	0.0	0.0	Z	0.1	1.0	1.5	1.8	1.0	1.0	0.8	1.4	0.5	0.1	0.9	0.3	0.2	0.2	0.3	0.3	0.1	0.0	0.0	0.0	0.5	1.8
19-Jun	0.0	0.0	0.0	0.1	Z	0.3	0.2	1.3	1.2	0.3	0.3	0.2	0.3	0.6	0.3	0.4	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	1.3
20-Jun	0.2	0.2	0.2	0.2	0.2	Z	0.2	0.6	0.1	0.1	0.3	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	0.6
21-Jun	Z	0.1	0.0	0.8	0.1	0.1	0.2	0.5	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	0.1	0.1	0.1	0.1	0.8
22-Jun	0.1	Z	0.2	0.4	0.8	1.2	0.5	0.5	0.5	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.1	0.1	0.4	0.0	0.1	0.1	0.2	1.2
23-Jun	0.1	0.1	Z	0.1	0.1	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.3
24-Jun	0.1	0.1	0.1	Z	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	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.2
25-Jun	3.7	0.1	0.1	0.2	Z	0.8	0.7	0.7	0.6	0.6	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	0.4	3.7
26-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.6	0.6	0.7	0.4	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.2	0.7
27-Jun	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.3
28-Jun	0.1	Z	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	0.1	0.1	0.1	0.1	0.1	0.1
29-Jun	0.1	0.1	Z	0.1	0.1	0.2	0.2	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	0.0	0.1	0.1	0.2	0.1	0.3
30-Jun	0.1	0.1	0.1	Z	0.2	0.3	0.1	0.1	0.5	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.4	0.1	0.0	0.1	0.5
	0.2	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.3	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	Diurnal Average	
	3.7	0.2	0.6	0.8	0.8	1.2	1.5	1.9	1.2	1.0	1.3	1.4	0.7	0.9	0.9	3.6	0.4	0.2	0.3	0.3	0.4	0.4	0.1	0.3	Diurnal Maximum	

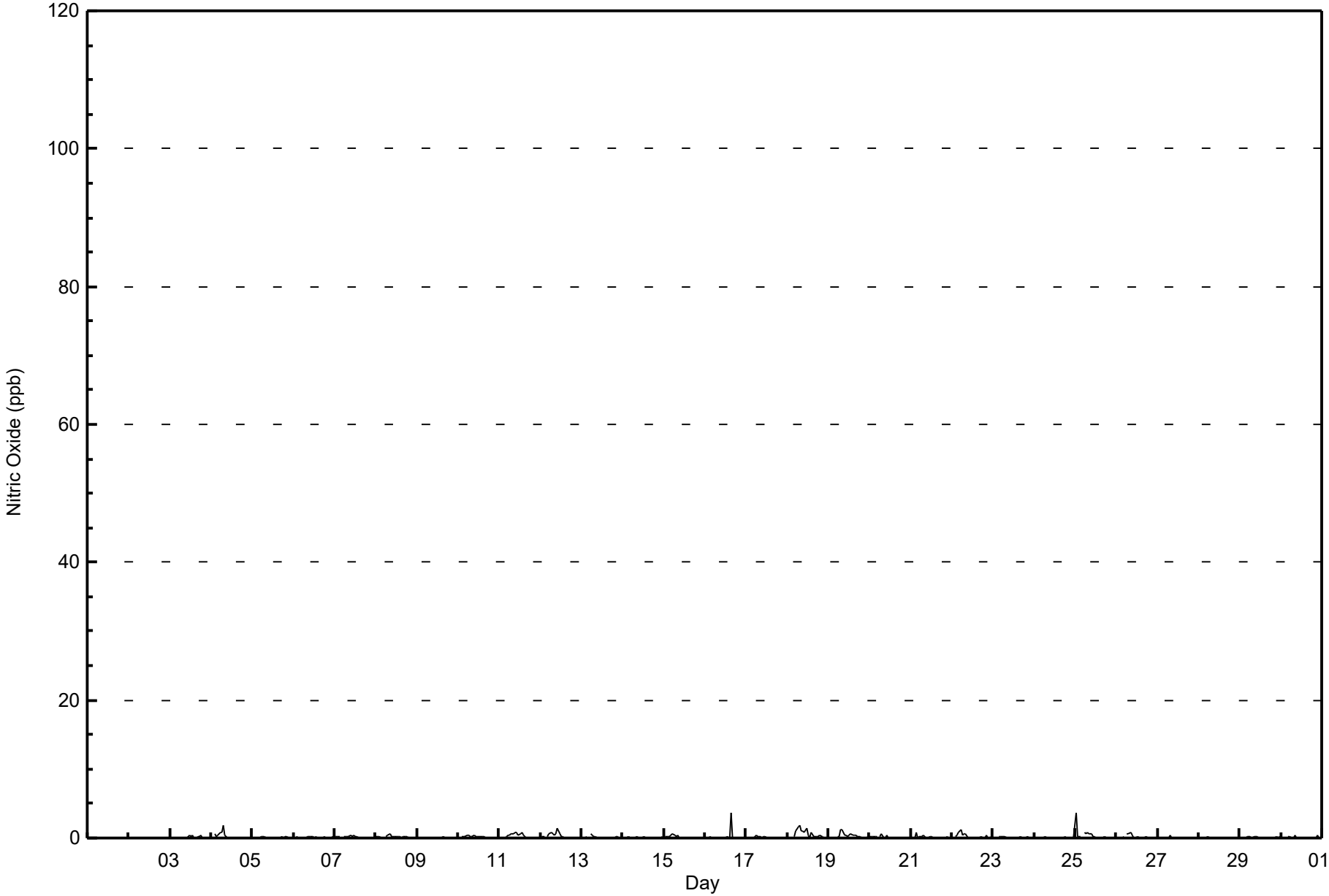
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Anzac - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	683	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: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Anzac - June 2026

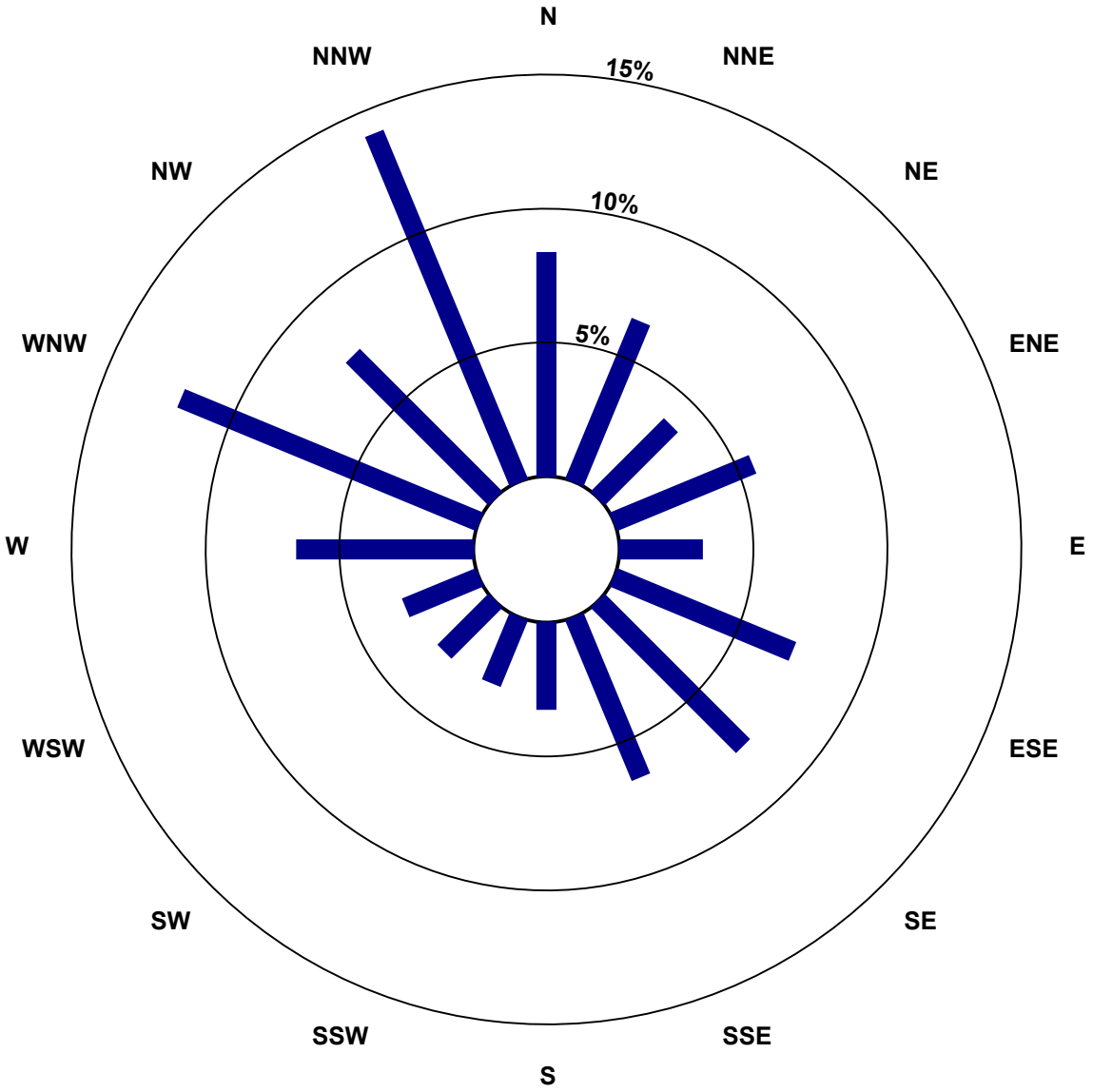
Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	57	44	26	38	21	49	52	44	22	18	18	20	45	82	51	96	683
21 - 40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81 - 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	57	44	26	38	21	49	52	44	22	18	18	20	45	82	51	96	683

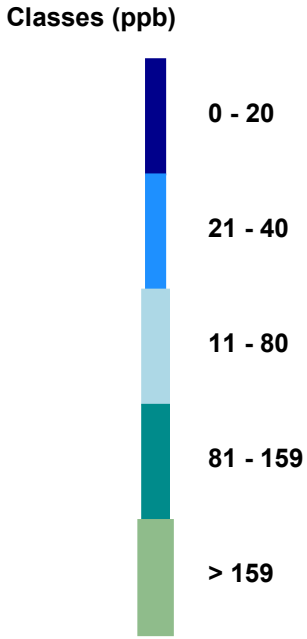
Total Number of Valid Hours: 683

Total Number of Hours: 720

Nitric Oxide (NO) - ppb

Anzac





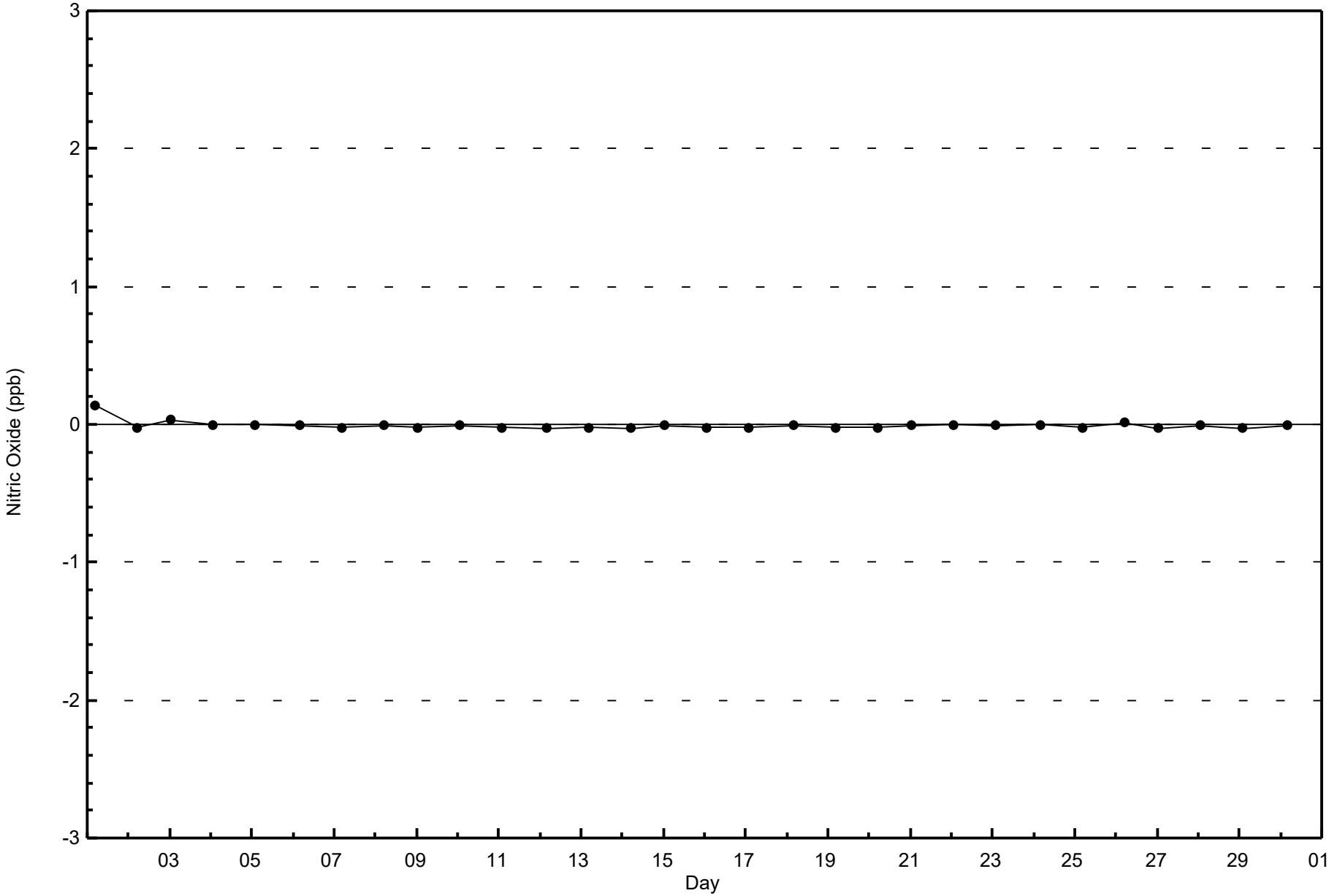
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Anzac - June 2026

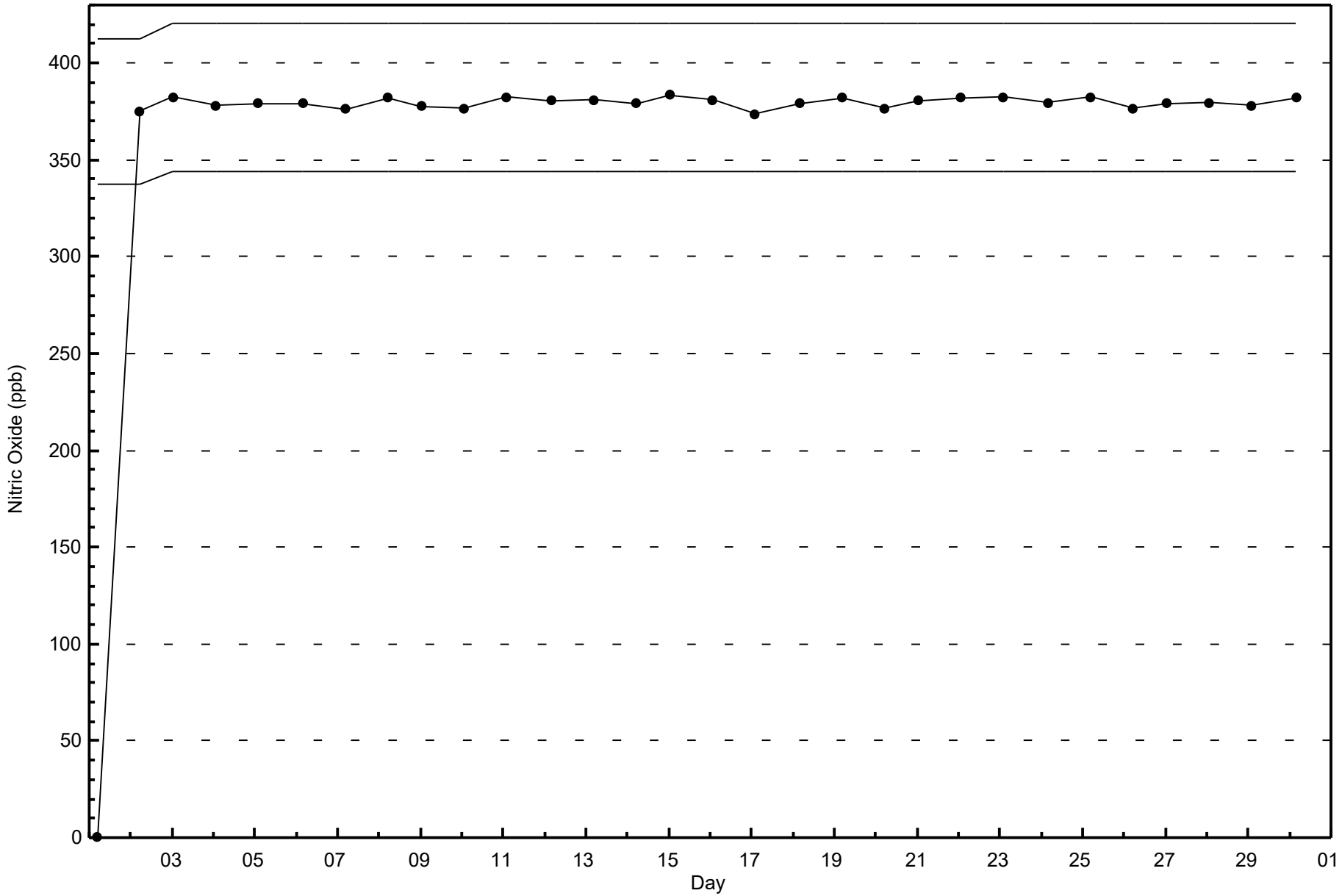


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Anzac - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Anzac - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6.6 ppb on Jun 25 01:00 Maximum Daily Average: 2.7 ppb on Jun 18

Minimum Value: 0.2 ppb on Jun 13 18:00 Minimum Daily Average: 0.7 ppb on Jun 1
Maximum Diurnal Average: 2.0 ppb at hour 8 Minimum Diurnal Average: 0.8 ppb at hour 20
Monthly Average: 1.31 ppb Percentiles: P_1 = 0.3 P_{10} = 0.4 Q_1 = 0.7 Median = 1.0 Q_3 = 1.6 P_{90} = 2.6 P_{99} = 4.7

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-Jun	1.0	0.7	0.9	0.9	Z	0.7	0.7	M	0.9	0.7	0.6	0.6	0.7	0.6	0.7	0.8	0.6	0.7	0.5	0.5	0.5	0.5	0.3	0.3	0.7	1.0
2-Jun	0.3	0.3	0.3	0.3	0.3	Z	0.7	0.5	0.4	0.4	C	C	C	C	C	C	0.3	0.2	0.2	0.2	0.3	0.4	0.5	0.5	--	0.7
3-Jun	Z	0.8	0.6	0.5	0.4	0.5	0.6	0.7	0.8	0.9	1.0	2.0	1.8	2.0	1.0	0.9	1.2	1.1	1.6	0.4	0.3	0.3	1.8	0.9	1.0	2.0
4-Jun	0.8	Z	2.2	1.9	1.5	1.8	1.8	2.9	2.0	1.3	1.1	1.0	0.9	0.8	0.6	0.5	0.5	0.6	0.7	0.9	0.7	0.9	0.7	0.8	1.2	2.9
5-Jun	1.0	1.0	Z	1.7	1.1	1.2	1.5	1.4	1.3	1.0	1.0	1.0	1.1	1.4	1.2	1.1	0.9	1.0	0.9	1.2	1.8	1.3	1.5	1.4	1.2	1.8
6-Jun	1.4	2.0	2.6	Z	1.9	2.2	2.1	2.4	2.7	3.0	2.8	2.4	1.4	1.8	1.6	1.8	1.5	1.1	1.4	1.2	1.4	1.1	1.1	1.2	1.8	3.0
7-Jun	1.0	0.8	0.8	0.9	Z	1.3	1.4	1.2	1.5	1.9	1.6	2.2	1.6	1.5	0.7	0.6	1.0	1.2	0.9	0.8	0.7	1.0	1.0	0.7	1.1	2.2
8-Jun	2.5	1.8	1.1	0.8	2.0	Z	3.1	3.6	4.8	2.7	1.7	1.4	1.3	1.2	1.2	1.2	1.4	1.6	1.9	1.0	1.0	1.2	0.9	0.9	1.8	4.8
9-Jun	Z	1.6	1.3	1.0	0.8	1.2	1.4	1.5	1.4	1.0	0.8	0.8	0.7	0.6	0.7	0.8	0.7	0.4	0.3	0.4	0.6	0.5	0.8	0.9	0.9	1.6
10-Jun	1.0	Z	5.2	4.7	2.9	1.6	2.1	1.5	1.3	2.2	2.4	1.6	2.2	1.2	1.1	1.3	0.6	0.4	0.6	0.5	0.2	0.5	1.7	2.4	1.7	5.2
11-Jun	2.6	2.1	Z	1.6	2.0	1.9	1.9	3.0	2.7	3.0	2.8	2.1	2.4	2.6	2.2	1.1	0.8	0.6	0.4	0.4	0.7	1.1	2.8	3.0	1.9	3.0
12-Jun	4.3	3.8	2.4	Z	1.7	3.3	3.2	3.1	2.6	2.7	4.5	2.8	1.1	0.8	0.7	0.6	0.5	0.4	0.4	0.3	0.4	0.5	1.7	3.3	2.0	4.5
13-Jun	2.7	2.2	2.0	2.8	Z	4.6	3.0	2.5	2.2	1.3	1.0	0.8	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.8	1.1	1.3	0.7	0.7	1.4	4.6
14-Jun	0.7	0.9	0.8	1.3	1.2	Z	1.7	1.5	1.3	1.4	1.3	1.3	1.7	1.3	1.3	1.2	0.8	0.7	0.6	0.5	0.6	0.9	2.6	3.0	1.2	3.0
15-Jun	Z	2.3	1.7	1.6	1.3	1.7	1.9	1.6	2.1	1.1	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.8	0.9	2.3	1.2	1.0	1.0	1.1	2.3
16-Jun	0.8	Z	1.0	2.1	1.2	0.8	0.6	0.6	0.7	0.8	0.6	0.7	0.6	0.8	0.6	3.8	0.8	0.2	0.4	0.3	0.5	0.9	0.5	0.4	0.9	3.8
17-Jun	0.6	0.5	Z	1.0	1.0	1.7	2.2	1.4	0.7	0.8	1.2	1.3	1.1	0.9	0.6	0.8	0.8	0.5	0.8	1.5	2.1	2.5	1.9	1.5	1.2	2.5
18-Jun	1.3	1.0	1.0	Z	2.1	4.7	4.7	5.0	3.9	3.4	2.9	4.7	2.6	0.7	4.1	1.6	1.5	2.7	2.2	3.5	3.1	2.1	2.6	1.2	2.7	5.0
19-Jun	1.0	0.8	0.7	0.7	Z	1.5	1.4	3.5	3.7	1.9	1.8	1.7	2.0	3.2	2.5	2.9	3.2	2.5	1.5	0.7	1.0	1.1	1.1	0.9	1.8	3.7
20-Jun	0.7	0.7	0.6	0.5	0.6	Z	1.3	1.8	0.7	0.5	1.1	0.7	0.4	0.5	0.5	0.4	0.4	0.4	0.6	0.6	0.5	0.6	1.1	0.8	0.7	1.8
21-Jun	Z	0.9	0.7	1.1	1.2	1.1	1.0	1.7	1.2	0.6	0.5	0.8	0.7	0.7	0.6	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.6	1.6	0.8	1.7
22-Jun	2.2	Z	4.2	3.7	2.4	2.5	1.6	1.9	2.2	0.8	0.5	0.4	0.3	0.3	0.4	0.3	0.7	1.4	0.5	0.8	1.6	1.2	1.3	1.2	1.4	4.2
23-Jun	1.2	1.1	Z	1.6	1.1	1.4	1.8	1.5	1.0	0.9	0.9	1.0	0.6	0.6	0.6	0.6	1.0	1.1	1.1	0.8	1.3	1.8	1.3	1.6	1.1	1.8
24-Jun	1.3	1.0	0.9	Z	1.9	1.9	1.4	1.4	1.2	1.0	1.1	0.9	0.8	0.9	0.8	0.6	0.6	0.6	1.0	0.8	0.6	0.8	1.7	1.4	1.1	1.9
25-Jun	6.6	3.1	2.8	2.1	Z	3.9	3.7	3.4	3.5	4.0	1.6	1.2	1.0	0.9	0.8	0.7	0.8	1.2	0.8	0.5	0.8	1.1	1.7	1.5	2.1	6.6
26-Jun	1.4	1.9	2.0	1.8	2.1	Z	3.7	3.8	3.7	2.9	1.1	0.8	1.1	1.1	0.6	0.6	0.7	0.9	0.6	0.6	0.4	0.4	0.6	1.0	1.5	3.8
27-Jun	Z	1.9	1.2	0.7	0.6	1.0	1.2	1.1	1.0	0.6	0.8	0.7	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.3	0.5	0.5	0.6	0.5	0.7	1.9
28-Jun	0.5	Z	1.0	0.7	0.7	0.8	0.6	0.6	0.6	0.4	0.5	0.6	0.6	0.7	0.6	0.6	0.6	1.5	1.4	1.4	1.5	1.5	1.7	1.7	0.9	1.7
29-Jun	1.5	1.3	Z	1.4	1.2	1.1	2.2	1.6	2.6	1.6	1.3	0.9	1.1	1.3	0.8	0.6	0.8	1.1	1.4	1.4	1.4	1.9	1.7	2.8	1.4	2.8
30-Jun	1.9	1.7	1.3	Z	1.4	1.2	1.0	1.2	3.8	1.3	1.1	0.9	1.0	0.9	0.8	1.3	1.8	1.6	0.8	0.9	1.0	2.0	1.5	1.2	1.4	3.8
	1.6	1.4	1.6	1.5	1.4	1.8	1.9	2.0	2.0	1.5	1.4	1.3	1.1	1.1	1.0	1.0	0.9	0.9	0.8	0.8	1.0	1.1	1.3	1.3	Diurnal Average	
	6.6	3.8	5.2	4.7	2.9	4.7	4.7	5.0	4.8	4.0	4.5	4.7	2.6	3.2	4.1	3.8	3.2	2.7	2.2	3.5	3.1	2.5	2.8	3.3	Diurnal Maximum	

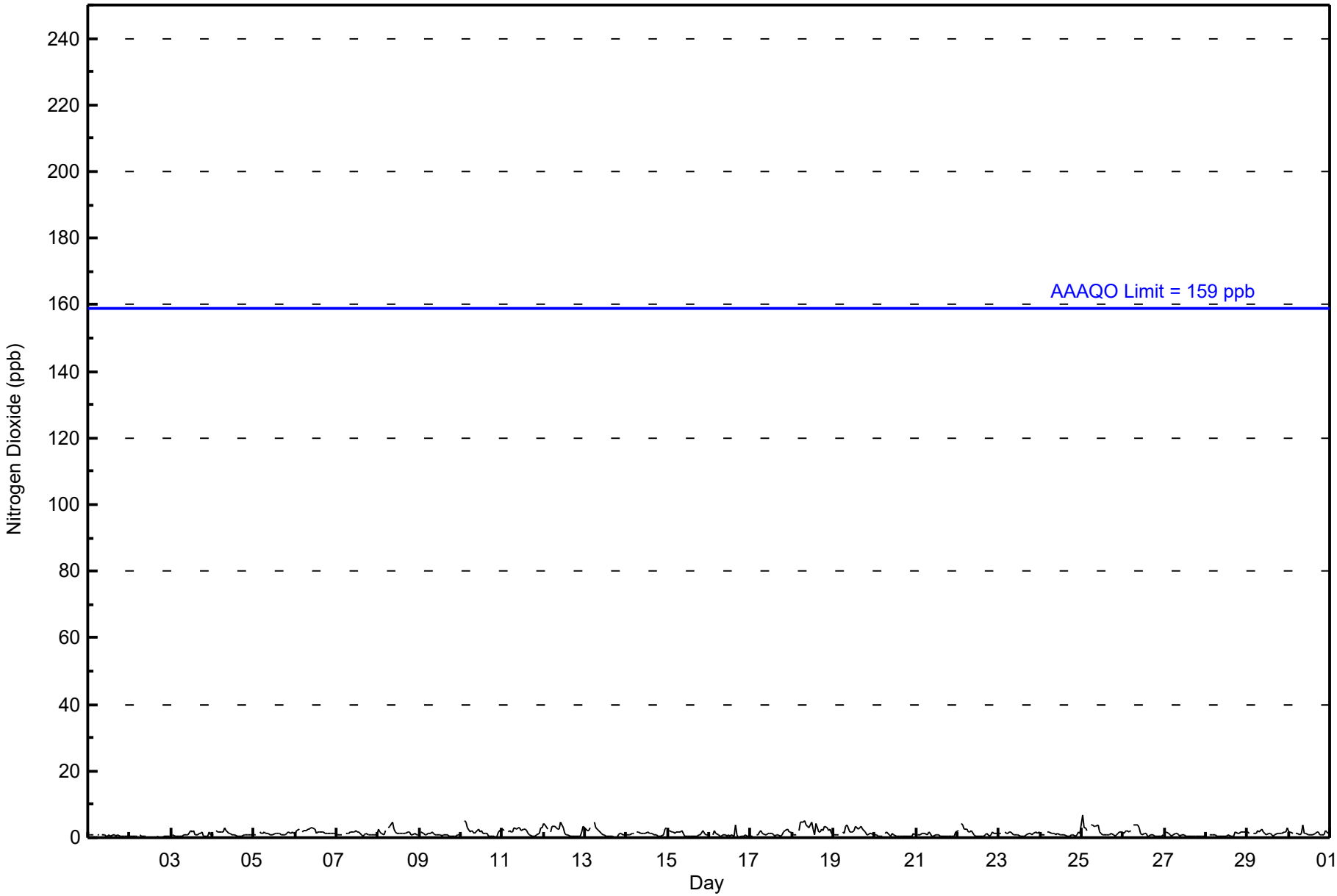
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Anzac - June 2026



Nitrogen Dioxide (NO_2) - ppb

Anzac - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	683	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: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Anzac - June 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	44	26	38	21	49	52	44	22	18	18	20	45	82	51	96	683
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	44	26	38	21	49	52	44	22	18	18	20	45	82	51	96	683

Total Number of Valid Hours: 683

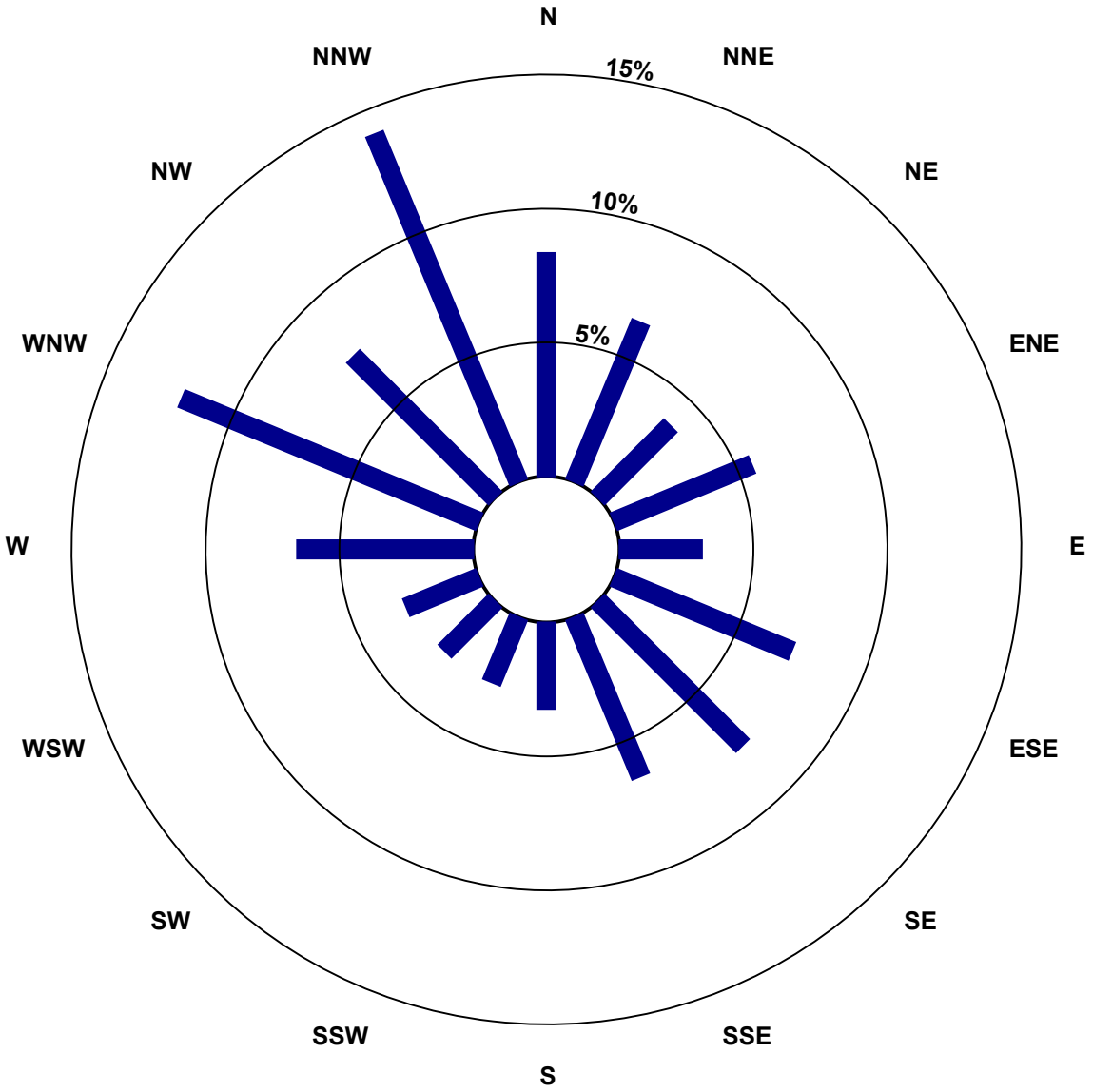
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Anzac



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

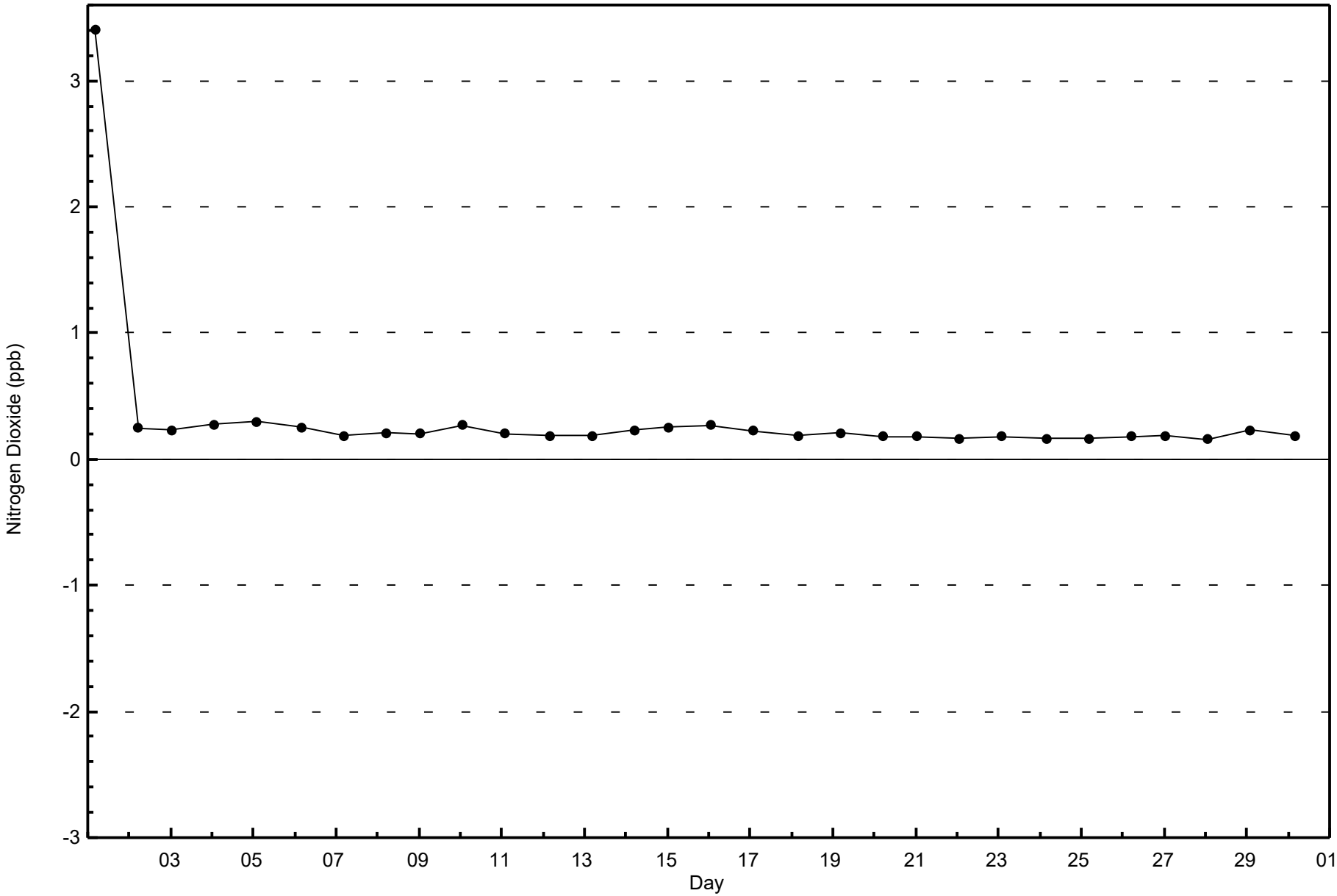
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Anzac - June 2026

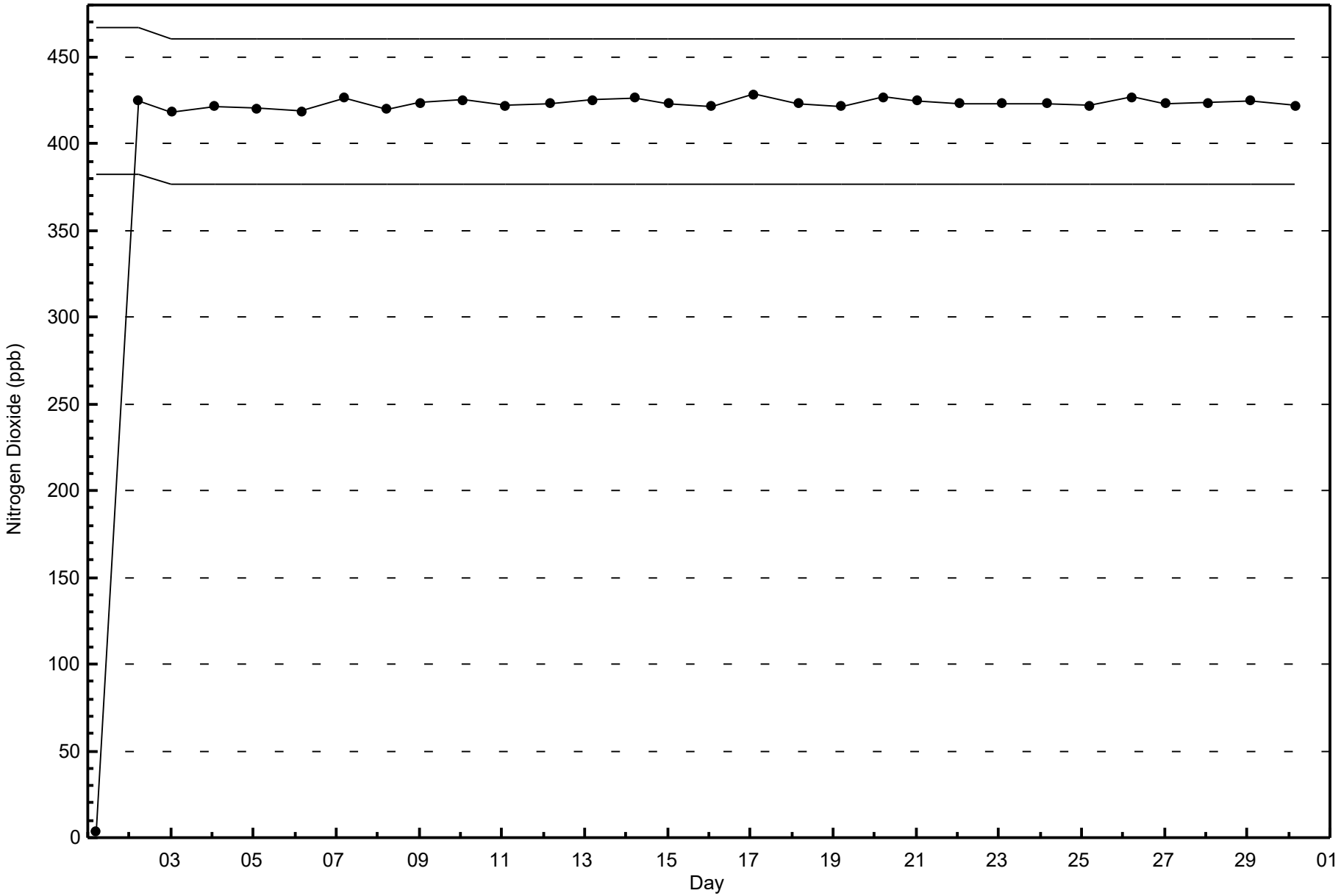


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Anzac - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Anzac - June 2026

Maximum Value: 10.3 ppb on Jun 25 01:00

Maximum Daily Average: 3.2 ppb on Jun 18

Minimum Value: 0.2 ppb on Jun 2 19:00

Minimum Daily Average: 0.7 ppb on Jun 1

Maximum Diurnal Average: 2.4 ppb at hour 8

Minimum Diurnal Average: 0.9 ppb at hour 20

Monthly Average: 1.46 ppb

Percentiles: P_1 = 0.3 P_{10} = 0.5 Q_1 = 0.7 Median = 1.1 Q_3 = 1.8 P_{90} = 2.8 P_{99} = 5.5

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-Jun	1.0	0.7	0.9	0.9	Z	0.7	0.7	M	0.9	0.7	0.6	0.7	0.7	0.6	0.7	0.8	0.6	0.7	0.5	0.5	0.5	0.5	0.3	0.3	0.7	1.0
2-Jun	0.3	0.3	0.3	0.3	0.3	Z	0.7	0.5	0.4	0.4	C	C	C	C	C	C	0.3	0.2	0.2	0.2	0.3	0.4	0.5	0.5	--	0.7
3-Jun	Z	0.8	0.6	0.5	0.4	0.5	0.6	0.8	0.8	0.9	1.0	2.4	2.1	2.4	1.1	1.0	1.3	1.2	1.9	0.4	0.3	0.3	1.9	1.0	1.1	2.4
4-Jun	0.9	Z	2.8	2.1	2.0	2.6	2.6	4.8	2.4	1.4	1.2	1.1	1.0	0.8	0.6	0.5	0.5	0.6	0.7	0.9	0.7	0.9	0.7	0.8	1.4	4.8
5-Jun	1.0	1.0	Z	1.7	1.1	1.4	1.6	1.5	1.4	1.1	1.0	1.1	1.1	1.5	1.3	1.2	1.0	1.1	0.9	1.3	2.0	1.4	1.5	1.5	1.3	2.0
6-Jun	1.5	2.1	2.7	Z	2.0	2.3	2.2	2.5	2.8	3.1	3.0	2.5	1.5	1.9	1.7	1.9	1.6	1.2	1.5	1.3	1.5	1.1	1.1	1.5	1.9	3.1
7-Jun	1.1	0.9	1.0	1.1	Z	1.5	1.6	1.3	1.8	2.3	1.9	2.6	1.9	1.7	0.8	0.6	1.0	1.3	1.0	0.8	0.7	1.0	1.0	0.7	1.3	2.6
8-Jun	2.7	1.9	1.2	0.8	2.1	Z	3.3	4.0	5.4	2.9	1.8	1.5	1.4	1.3	1.3	1.3	1.5	1.7	2.0	1.1	1.1	1.2	0.9	0.9	1.9	5.4
9-Jun	Z	1.6	1.3	1.0	0.8	1.3	1.5	1.6	1.4	1.0	0.9	0.9	0.7	0.6	0.8	0.9	0.8	0.4	0.3	0.4	0.6	0.5	0.9	0.9	0.9	1.6
10-Jun	1.1	Z	5.3	4.9	3.2	2.0	2.6	1.7	1.5	2.7	2.7	1.8	2.5	1.3	1.3	1.5	0.7	0.4	0.6	0.5	0.2	0.5	1.7	2.4	1.9	5.3
11-Jun	2.7	2.2	Z	1.6	2.1	2.2	2.2	3.6	3.3	3.8	3.6	2.6	3.1	3.5	2.6	1.3	0.9	0.7	0.4	0.4	0.7	1.1	2.8	3.1	2.2	3.8
12-Jun	4.4	3.9	2.5	Z	1.9	4.0	3.9	3.7	3.1	3.3	5.8	3.4	1.3	0.9	0.8	0.7	0.5	0.4	0.4	0.3	0.4	0.5	1.7	3.4	2.2	5.8
13-Jun	2.8	2.3	2.1	2.9	Z	5.2	3.3	2.8	2.4	1.4	1.1	0.9	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.9	1.2	1.6	0.8	0.8	1.5	5.2
14-Jun	0.8	1.0	0.9	1.4	1.3	Z	1.8	1.6	1.4	1.5	1.4	1.4	1.8	1.4	1.4	1.3	0.9	0.8	0.6	0.5	0.6	0.9	2.6	3.1	1.3	3.1
15-Jun	Z	2.4	1.9	1.8	1.7	2.3	2.3	1.8	2.5	1.2	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.8	0.9	2.4	1.3	1.1	1.1	1.3	2.5
16-Jun	0.9	Z	1.1	2.2	1.3	0.9	0.7	0.7	0.8	0.9	0.7	0.7	0.7	0.9	0.7	7.4	0.8	0.2	0.4	0.3	0.6	0.9	0.5	0.5	1.1	7.4
17-Jun	0.7	0.6	Z	1.1	1.1	1.9	2.7	1.6	0.8	0.9	1.4	1.5	1.2	1.0	0.7	0.9	0.9	0.5	0.8	1.6	2.1	2.5	1.9	1.5	1.3	2.7
18-Jun	1.3	1.0	1.0	Z	2.2	5.7	6.2	6.8	4.9	4.4	3.7	6.1	3.1	0.8	5.0	1.9	1.7	2.9	2.5	3.8	3.2	2.1	2.6	1.2	3.2	6.8
19-Jun	1.0	0.8	0.7	0.8	Z	1.8	1.6	4.8	4.9	2.2	2.1	1.9	2.3	3.8	2.8	3.3	3.6	2.7	1.6	0.8	1.1	1.2	1.2	1.0	2.1	4.9
20-Jun	0.9	0.9	0.8	0.7	0.8	Z	1.5	2.4	0.8	0.6	1.4	0.8	0.4	0.6	0.6	0.4	0.4	0.4	0.6	0.6	0.5	0.6	1.1	0.9	0.8	2.4
21-Jun	Z	1.0	0.7	1.9	1.3	1.2	1.2	2.2	1.4	0.7	0.6	0.9	0.8	0.8	0.7	0.4	0.3	0.3	0.3	0.4	0.5	0.5	0.7	1.7	0.9	2.2
22-Jun	2.3	Z	4.4	4.1	3.2	3.7	2.1	2.4	2.7	0.9	0.5	0.4	0.3	0.3	0.5	0.3	0.8	1.6	0.6	0.9	2.0	1.2	1.4	1.3	1.7	4.4
23-Jun	1.3	1.2	Z	1.7	1.2	1.6	2.1	1.8	1.1	1.0	1.0	1.1	0.6	0.6	0.6	0.6	1.1	1.2	1.2	0.8	1.4	1.9	1.4	1.7	1.2	2.1
24-Jun	1.4	1.1	1.0	Z	2.0	2.0	1.6	1.5	1.3	1.1	1.2	1.0	0.8	0.9	0.8	0.7	0.6	0.6	1.1	0.9	0.6	0.8	1.8	1.4	1.1	2.0
25-Jun	10.3	3.2	2.9	2.3	Z	4.7	4.4	4.1	4.1	4.6	1.7	1.3	1.0	0.9	0.8	0.8	0.9	1.3	0.9	0.5	0.8	1.1	1.7	1.5	2.4	10.3
26-Jun	1.5	2.0	2.1	1.9	2.2	Z	4.3	4.4	4.4	3.3	1.2	0.8	1.2	1.2	0.7	0.6	0.8	1.0	0.6	0.6	0.5	0.5	0.6	1.0	1.6	4.4
27-Jun	Z	2.0	1.3	0.8	0.7	1.1	1.3	1.4	1.1	0.6	0.9	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.8	2.0
28-Jun	0.6	Z	1.1	0.8	0.8	0.9	0.7	0.6	0.6	0.4	0.5	0.6	0.7	0.8	0.7	0.7	0.7	1.6	1.5	1.5	1.6	1.6	1.8	1.8	1.0	1.8
29-Jun	1.6	1.4	Z	1.5	1.3	1.3	2.4	1.7	2.9	1.8	1.4	1.0	1.2	1.4	0.9	0.7	0.9	1.2	1.5	1.5	1.4	2.0	1.8	3.0	1.6	3.0
30-Jun	2.0	1.8	1.4	Z	1.6	1.5	1.1	1.3	4.3	1.4	1.1	1.0	1.0	0.9	0.8	1.4	1.9	1.7	0.8	0.9	1.0	2.4	1.6	1.2	1.5	4.3
	1.8	1.5	1.7	1.6	1.6	2.2	2.2	2.4	2.3	1.8	1.6	1.5	1.2	1.2	1.1	1.2	0.9	1.0	0.9	0.9	1.0	1.1	1.3	1.4	Diurnal Average	
	10.3	3.9	5.3	4.9	3.2	5.7	6.2	6.8	5.4	4.6	5.8	6.1	3.1	3.8	5.0	7.4	3.6	2.9	2.5	3.8	3.2	2.5	2.8	3.4	Diurnal Maximum	

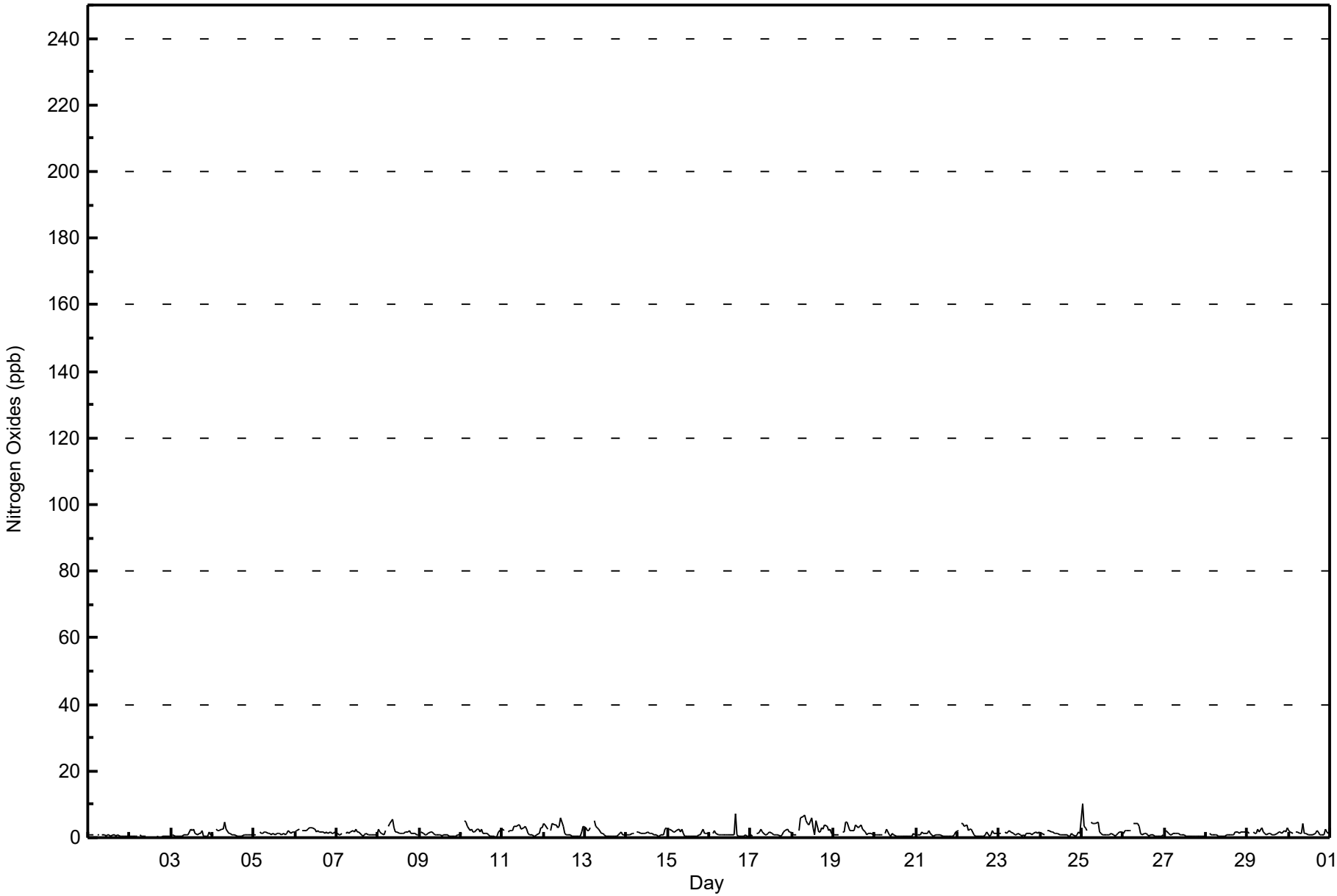
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Anzac - June 2026



Nitrogen Oxides (NO_X) - ppb

Anzac - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	683	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: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Anzac - June 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	44	26	38	21	49	52	44	22	18	18	20	45	82	51	96	683
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	44	26	38	21	49	52	44	22	18	18	20	45	82	51	96	683

Total Number of Valid Hours: 683

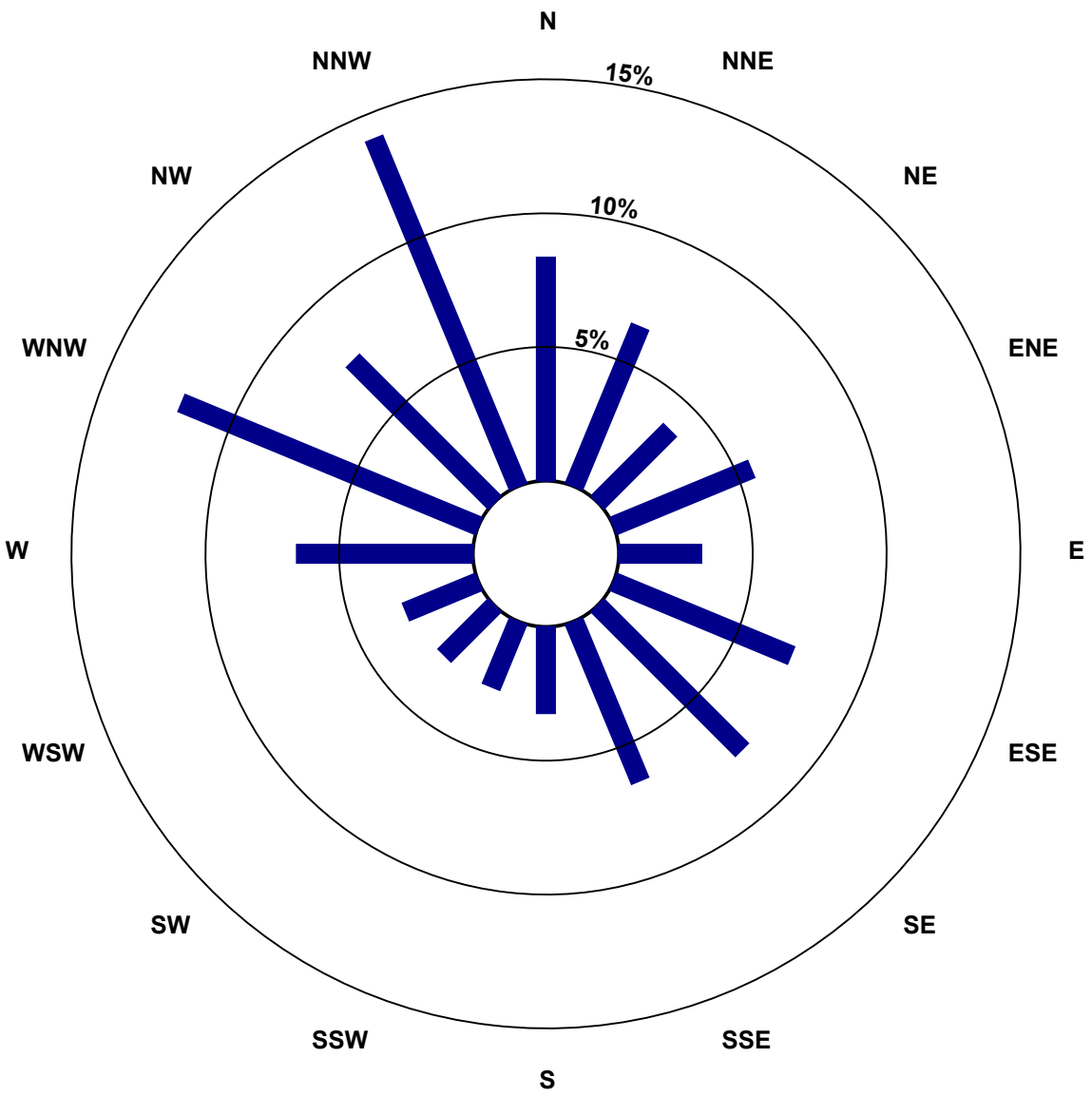
Total Number of Hours: 720

Wood Buffalo Environmental Association

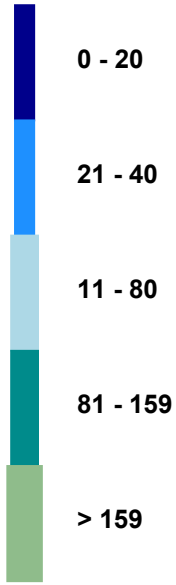
Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Anzac



Classes (ppb)



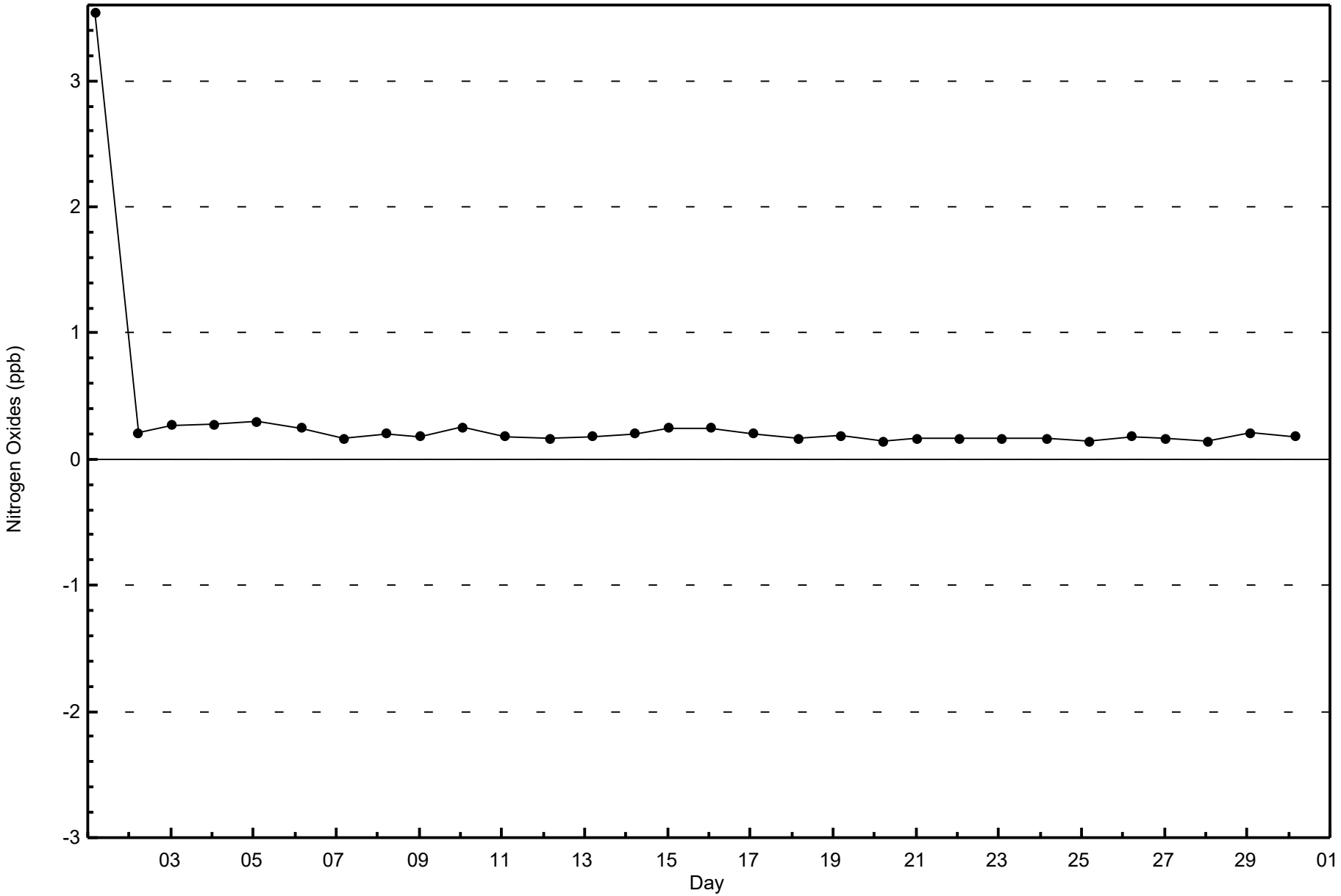
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Anzac - June 2026

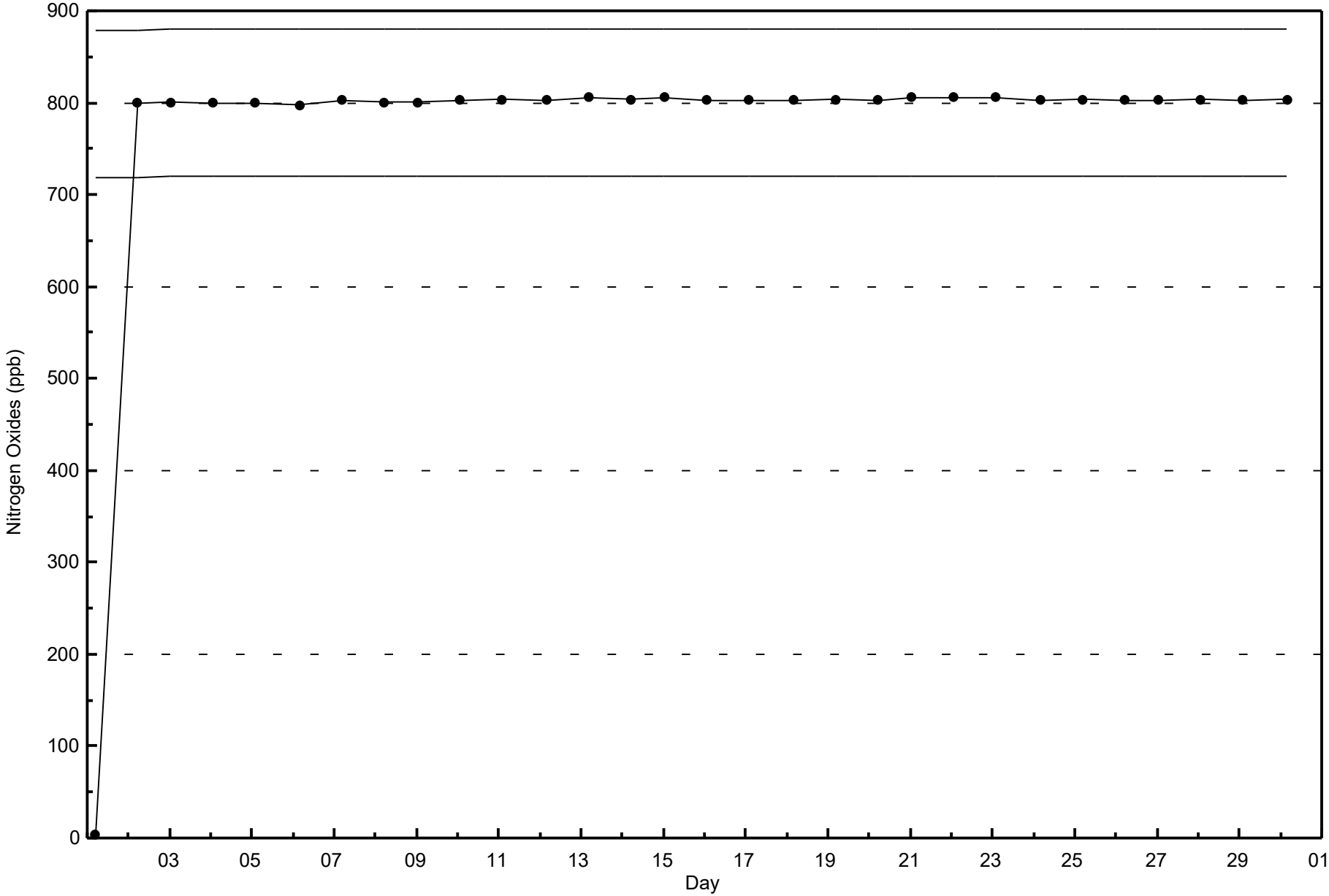


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Anzac - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Anzac - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 55.1 ppb on Jun 29 18:00
Maximum Daily Average: 36.1 ppb on Jun 28

Minimum Value: 3.7 ppb on Jun 22 05:00
Minimum Daily Average: 15.5 ppb on Jun 11
Maximum Diurnal Average: 33.7 ppb at hour 18
Minimum Diurnal Average: 17.5 ppb at hour 4
Monthly Average: 26.46 ppb
Percentiles: P_1 = 7.9 P_{10} = 14.1 Q_1 = 19.9 Median = 26.5 Q_3 = 32.3 P_{90} = 39.4 P_{99} = 50.3

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-Jun	28.9	30.0	Z	26.7	28.2	28.2	28.5	M	M	28.5	26.9	26.4	30.8	31.9	30.4	28.5	29.2	29.8	30.0	29.4	28.7	31.1	31.8	29.5	29.2	31.9
2-Jun	27.8	25.7	25.4	Z	27.6	27.1	27.8	25.9	25.8	25.7	24.9	24.5	24.6	25.8	26.4	27.6	27.8	28.2	28.4	27.4	26.5	27.5	28.0	27.9	26.7	28.4
3-Jun	28.6	27.1	26.7	24.6	Z	23.7	25.4	25.1	24.8	23.6	23.4	21.9	21.9	21.7	21.5	21.3	21.2	21.9	21.7	19.0	17.6	16.7	14.7	13.9	22.1	28.6
4-Jun	13.0	10.5	8.3	7.5	7.3	Z	10.8	11.5	18.9	25.9	24.6	24.5	27.9	30.5	33.1	36.4	37.1	37.4	37.0	36.9	31.8	21.4	21.0	22.3	23.3	37.4
5-Jun	Z	24.6	26.3	26.9	19.9	18.8	26.9	29.2	33.1	35.3	36.1	38.3	37.9	34.2	32.1	28.6	32.4	32.8	31.8	21.2	22.1	25.4	30.1	27.3	29.2	38.3
6-Jun	26.1	Z	27.2	27.4	28.0	26.0	26.8	27.0	26.6	26.3	24.4	25.3	27.7	26.8	27.7	26.7	28.2	30.8	27.4	26.4	22.3	23.6	25.9	24.3	26.5	30.8
7-Jun	14.9	12.2	Z	13.8	14.5	14.2	15.9	19.7	21.5	21.0	25.2	28.0	33.3	36.8	37.7	38.2	37.9	32.9	33.1	31.4	33.1	24.6	26.1	23.1	25.6	38.2
8-Jun	9.9	8.6	20.3	Z	22.2	18.4	19.6	15.4	14.6	19.9	20.5	C	C	C	C	22.1	22.9	22.2	22.4	25.0	27.4	27.7	29.0	31.3	21.0	31.3
9-Jun	31.5	31.2	31.5	30.9	Z	30.1	29.7	29.2	30.4	31.2	30.4	31.1	32.6	31.9	32.7	33.8	34.8	36.1	36.5	36.5	30.6	14.2	20.7	18.2	30.3	36.5
10-Jun	11.4	12.3	12.0	9.3	10.5	Z	13.7	14.4	16.2	21.7	28.4	35.5	33.3	30.8	28.3	24.0	21.7	19.7	16.9	16.2	15.4	14.5	13.4	12.5	18.8	35.5
11-Jun	Z	12.3	12.8	14.5	14.7	15.1	15.6	14.2	12.3	12.3	13.1	14.5	15.4	15.0	15.7	16.9	20.1	19.3	19.8	19.1	18.3	17.0	14.6	14.0	15.5	20.1
12-Jun	13.1	Z	14.1	15.1	16.3	16.7	19.9	22.3	24.1	24.9	24.2	27.6	29.6	31.2	31.5	31.2	32.1	31.4	31.9	32.3	31.7	30.0	27.8	22.9	25.3	32.3
13-Jun	15.3	11.6	Z	16.4	20.3	22.9	26.5	27.6	28.8	30.6	31.0	31.0	31.4	31.7	32.6	32.8	33.2	33.2	32.9	27.9	19.5	19.0	18.5	20.0	25.9	33.2
14-Jun	24.0	26.7	27.3	Z	37.6	39.0	40.9	39.5	37.2	36.0	37.0	41.2	45.0	41.9	43.0	40.2	37.9	38.2	37.1	37.2	33.8	29.2	27.3	20.1	35.5	45.0
15-Jun	15.1	13.3	9.5	7.8	Z	8.7	17.5	25.3	27.7	31.2	31.3	32.0	32.3	33.5	34.7	36.4	37.4	39.5	40.1	34.6	30.4	27.8	25.6	30.7	27.1	40.1
16-Jun	32.6	31.5	28.9	20.0	15.1	Z	22.3	20.4	17.7	20.0	20.1	20.8	22.7	22.8	22.7	23.4	32.8	34.8	32.3	34.7	33.8	31.3	21.5	15.1	25.1	34.8
17-Jun	Z	16.0	20.2	17.8	17.6	17.3	17.9	22.0	24.1	26.7	29.6	32.2	34.0	33.6	32.4	33.3	34.6	34.1	32.0	29.0	28.7	26.7	25.0	26.4	26.6	34.6
18-Jun	25.6	Z	25.4	23.5	20.6	16.5	15.5	14.4	14.6	15.6	18.1	19.1	25.2	28.4	21.6	21.8	24.9	24.6	25.8	24.3	23.6	23.4	21.7	22.9	21.6	28.4
19-Jun	23.4	23.2	Z	17.4	19.1	20.5	19.2	17.9	19.9	24.8	28.5	31.0	31.8	29.8	30.9	29.5	26.9	27.3	24.2	21.3	17.3	13.6	12.6	9.8	22.6	31.8
20-Jun	8.8	9.5	8.3	Z	8.0	10.6	14.6	17.1	18.8	18.3	19.0	21.3	24.9	24.2	23.8	23.8	23.3	22.9	23.1	24.7	26.1	23.2	19.6	14.2	18.6	26.1
21-Jun	14.0	16.3	17.0	16.8	Z	13.4	13.2	13.0	14.1	13.9	15.9	18.8	20.8	22.2	22.6	23.1	23.1	23.1	22.0	17.9	10.7	8.3	13.1	14.1	16.8	23.1
22-Jun	13.0	9.5	5.8	4.4	3.7	Z	13.1	14.9	19.2	21.1	24.4	25.2	25.0	26.3	28.6	31.7	30.5	28.4	23.1	23.7	22.2	21.3	17.8	13.7	19.4	31.7
23-Jun	Z	16.5	11.7	9.9	12.1	18.3	22.5	26.6	26.2	26.5	29.6	32.4	31.9	32.6	34.1	34.7	33.8	33.4	34.2	34.3	30.2	23.0	16.0	17.0	25.5	34.7
24-Jun	11.4	Z	15.9	28.0	32.2	29.7	28.7	24.9	24.6	27.9	34.5	36.5	38.2	36.7	37.1	37.3	38.0	37.0	34.7	32.6	31.3	26.6	29.9	29.0	30.6	38.2
25-Jun	19.6	15.1	Z	8.0	7.6	14.7	20.8	21.5	26.9	33.3	38.3	42.0	43.3	43.7	43.1	43.7	44.4	43.8	43.7	41.7	38.0	34.6	31.2	25.5	31.5	44.4
26-Jun	24.2	22.7	21.5	Z	23.8	27.1	25.3	27.0	30.7	33.9	39.8	41.5	42.4	43.7	43.2	43.1	44.3	44.1	43.1	41.7	40.5	39.4	36.4	33.0	35.3	44.3
27-Jun	23.6	19.1	26.9	26.9	Z	26.6	27.7	29.7	31.7	36.6	39.4	40.3	42.1	41.4	40.8	41.3	42.9	43.0	41.5	40.1	37.6	32.2	32.2	30.3	34.5	43.0
28-Jun	26.5	27.5	21.4	15.2	12.8	Z	23.6	26.9	27.9	35.1	38.2	40.9	44.3	46.3	46.2	46.5	46.5	54.6	52.0	49.2	39.2	31.0	37.6	40.2	36.1	54.6
29-Jun	Z	33.6	22.7	16.5	12.7	13.5	21.8	29.2	32.6	34.1	40.1	46.6	50.3	50.7	49.3	47.5	49.8	55.1	51.3	44.4	34.9	29.3	21.2	19.3	35.1	55.1
30-Jun	21.9	Z	14.0	12.5	8.1	9.5	22.8	27.6	29.3	36.0	39.6	40.9	41.4	42.4	43.9	46.8	51.0	52.0	42.9	40.3	34.9	27.6	24.5	22.3	31.8	52.0
	20.2	19.5	19.3	17.5	17.6	20.3	21.8	22.7	24.2	26.6	28.6	30.7	32.5	32.7	32.7	32.4	33.4	33.7	32.4	30.7	27.9	24.7	23.8	22.4	Diurnal Average	
	32.6	33.6	31.5	30.9	37.6	39.0	40.9	39.5	37.2	36.6	40.1	46.6	50.3	50.7	49.3	47.5	51.0	55.1	52.0	49.2	40.5	39.4	37.6	40.2	Diurnal Maximum	

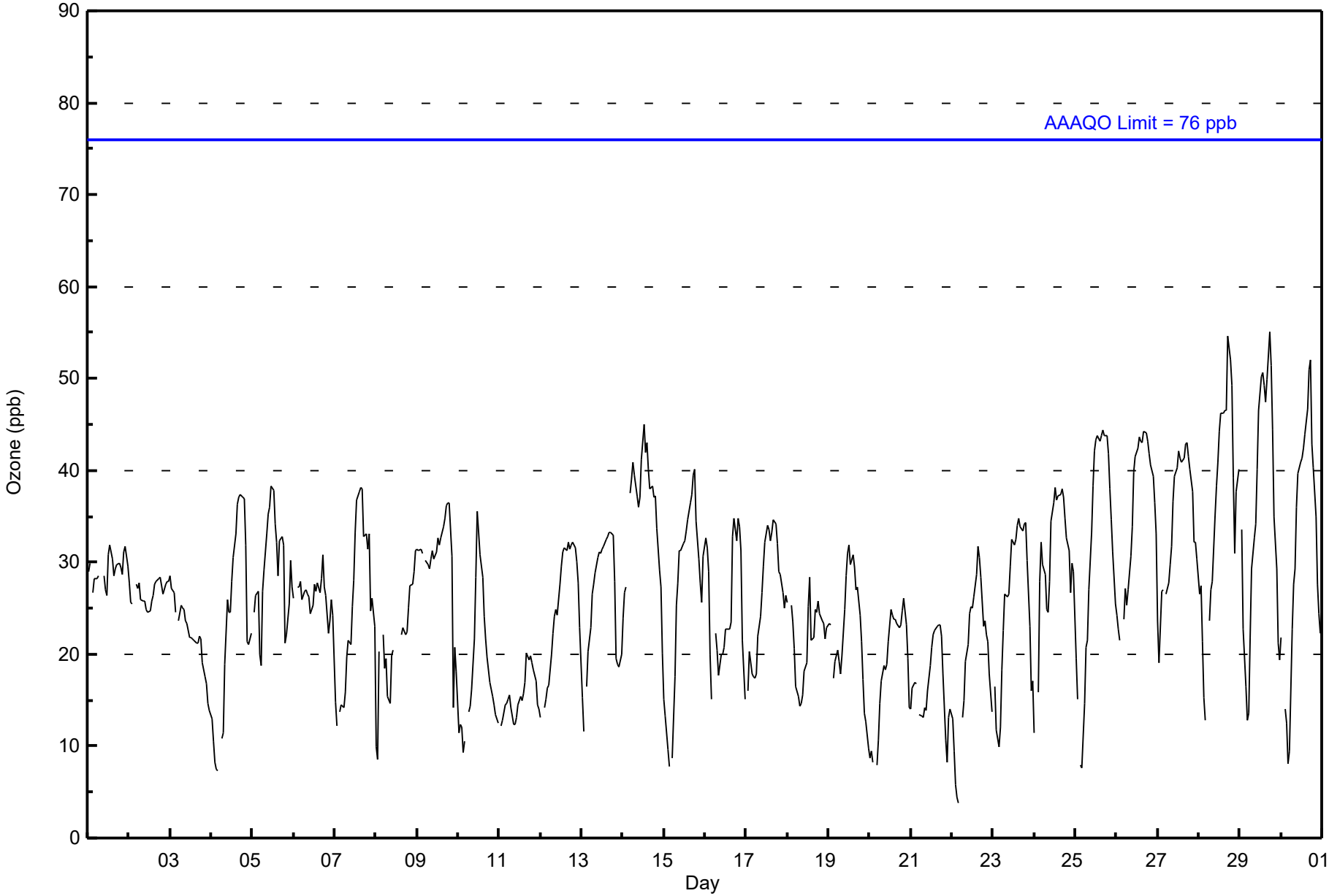
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Anzac - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	184	26.90	26.90
21 - 50	493	72.08	98.98
51 - 82	7	1.02	100.00
> 83	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Ozone (O_3) - ppb

Anzac - June 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	10	5	5	4	3	10	12	5	6	5	6	6	24	29	36	184
21 - 50	40	33	24	29	18	44	41	33	17	12	12	15	40	54	24	57	493
51 - 82	0	1	1	3	0	1	0	0	0	0	0	0	0	0	0	1	7
> 83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	58	44	30	37	22	48	51	45	22	18	17	21	46	78	53	94	684

Total Number of Valid Hours: 684

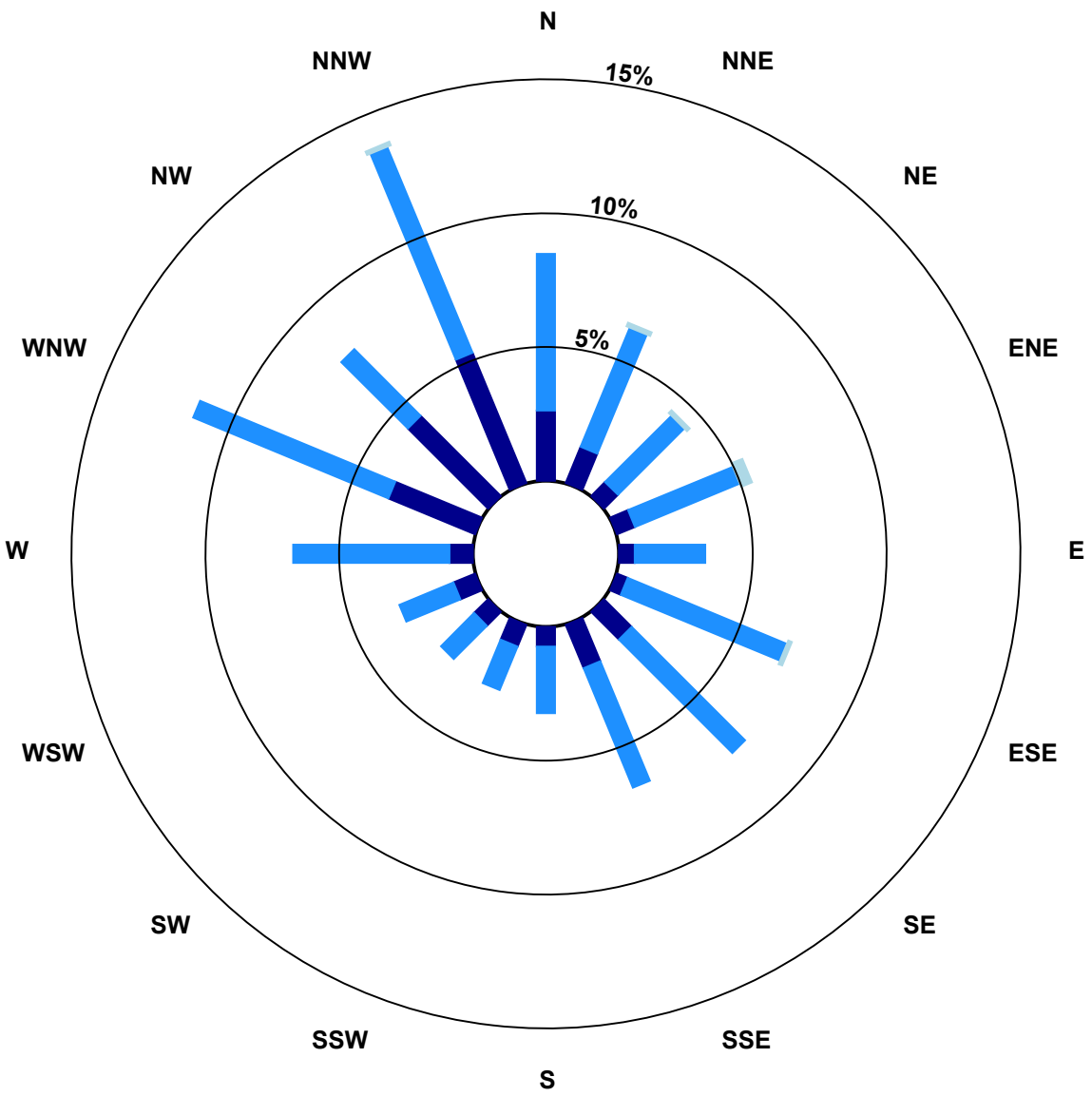
Total Number of Hours: 720

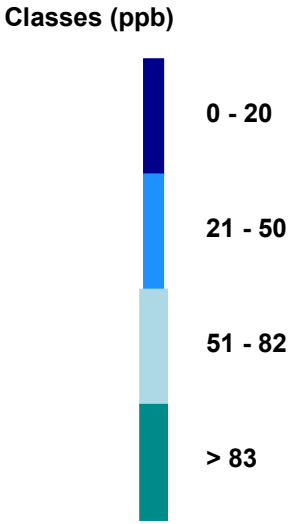
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Ozone (O_3) - ppb

Anzac





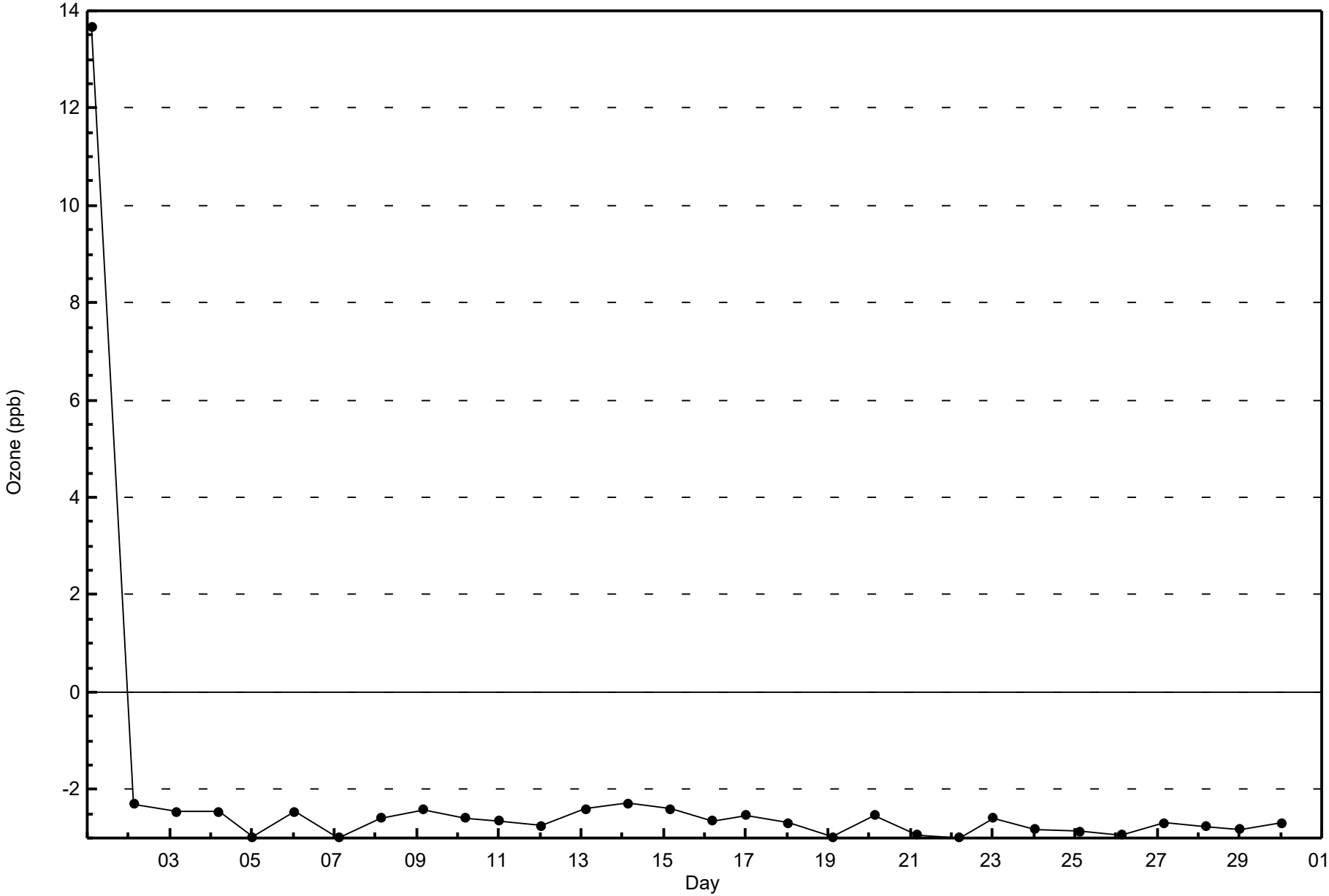
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Anzac - June 2026

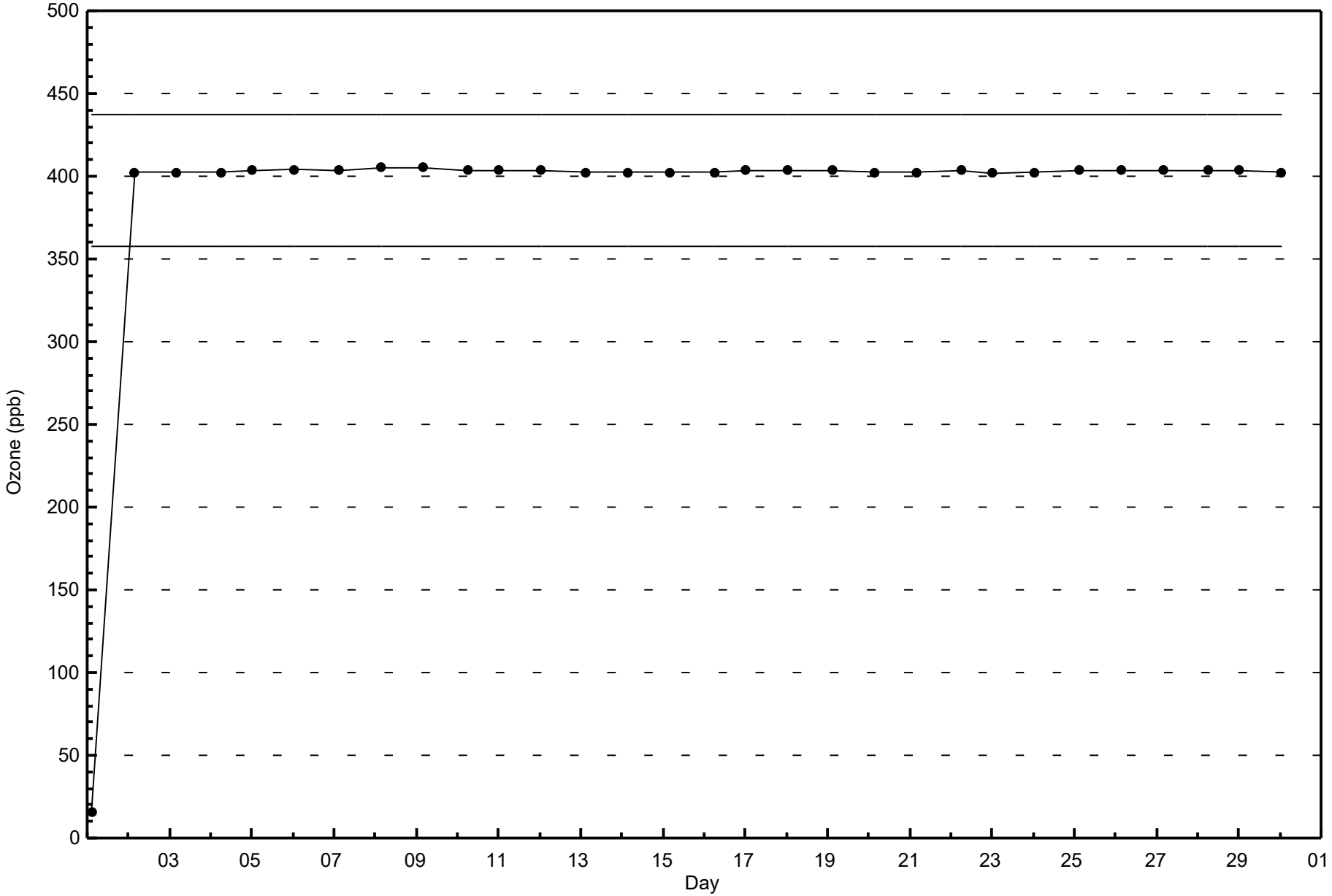


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Anzac - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Anzac - June 2026

Number of Exceedances (AAAQO): 1-hr: 4 24-hr: 3

Maximum Value: 96.2 $\mu g/m^3$ on Jun 28 23:00

Maximum Daily Average: 55.7 $\mu g/m^3$ on Jun 29

Minimum Value: 0.4 $\mu g/m^3$ on Jun 1 07:00

Minimum Daily Average: 0.9 $\mu g/m^3$ on Jun 2

Maximum Diurnal Average: 9.1 $\mu g/m^3$ at hour 24

Minimum Diurnal Average: 5.9 $\mu g/m^3$ at hour 9

Monthly Average: 7.47 $\mu g/m^3$

Percentiles: P_1 = 0.6 P_{10} = 1.3 Q_1 = 2.2 Median = 3.5 Q_3 = 5.2 P_{90} = 9.1 P_{99} = 68.2

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-Jun	0.7	0.4	0.5	0.5	0.5	0.4	0.4	0.6	0.9	1.4	1.8	2.0	2.5	2.6	3.0	2.8	1.9	1.4	1.1	0.9	0.9	0.9	0.9	1.1	1.2	3.0
2-Jun	0.9	0.8	0.9	0.8	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.8	0.8	1.2	1.3	1.3	1.5	1.8	0.9	1.8
3-Jun	2.0	2.1	1.8	1.8	1.8	2.2	2.3	2.0	2.0	2.5	3.0	3.5	3.7	4.7	3.3	3.9	5.5	5.5	5.3	3.6	3.7	4.0	4.7	5.7	3.4	5.7
4-Jun	6.7	7.7	8.8	9.8	9.9	10.3	12.6	14.3	12.7	9.7	10.0	11.4	9.2	8.8	7.4	7.1	6.7	6.3	6.3	6.6	6.3	8.0	8.1	8.2	8.9	14.3
5-Jun	9.1	9.0	7.7	6.9	7.3	8.3	6.0	4.9	3.5	3.3	3.8	4.2	4.6	4.0	3.4	3.7	2.9	3.2	3.6	4.0	4.1	4.0	2.8	2.5	4.9	9.1
6-Jun	2.3	1.7	1.6	1.6	1.4	1.3	1.2	1.1	1.5	2.0	2.1	1.8	1.9	1.8	1.3	1.4	1.7	1.5	1.8	1.5	1.7	1.4	1.3	1.6	1.6	2.3
7-Jun	2.9	2.5	1.9	2.1	1.9	1.7	1.6	1.1	1.3	1.3	1.3	2.0	2.1	2.0	2.2	2.3	2.6	2.8	2.7	2.8	2.7	3.2	3.4	3.0	2.2	3.4
8-Jun	3.5	3.9	3.4	3.1	3.7	7.2	6.4	5.1	4.6	3.0	1.3	1.1	1.9	3.4	4.2	3.7	3.2	3.2	3.1	3.2	2.8	2.2	2.0	1.8	3.4	7.2
9-Jun	2.1	2.2	2.1	2.2	2.3	2.0	2.2	2.1	1.8	1.6	1.7	1.3	1.2	1.4	1.3	1.6	1.6	1.7	1.9	2.2	2.5	4.1	3.4	4.4	2.1	4.4
10-Jun	4.5	4.7	6.5	7.2	5.7	3.9	3.5	3.8	4.3	5.9	5.0	3.3	4.1	2.4	2.3	2.2	1.3	0.9	0.8	0.9	0.8	1.4	1.7	2.0	3.3	7.2
11-Jun	2.4	2.6	2.3	1.5	1.4	1.6	1.8	2.5	3.4	3.4	4.2	1.8	2.3	2.6	2.4	1.1	1.1	1.2	1.9	1.9	2.1	2.3	3.2	3.4	2.3	4.2
12-Jun	3.4	3.6	2.9	2.1	2.3	2.7	2.3	1.7	1.9	2.8	C	4.1	3.2	3.2	3.1	2.7	2.0	2.0	1.6	1.4	1.9	2.3	4.2	6.5	2.8	6.5
13-Jun	6.3	5.9	5.7	5.2	5.2	4.6	3.7	3.5	3.1	2.2	1.8	1.8	1.8	1.6	1.6	1.8	1.7	1.8	1.8	2.7	3.5	4.0	2.9	2.9	3.2	6.3
14-Jun	2.8	2.8	2.9	2.9	3.1	3.0	3.2	3.5	3.4	3.6	4.1	4.7	5.8	4.5	6.3	5.3	4.4	4.4	3.7	3.6	4.0	4.2	6.4	7.3	4.2	7.3
15-Jun	7.6	7.0	7.1	7.0	7.3	6.8	6.2	4.0	3.2	3.4	3.2	3.1	3.1	3.1	3.3	3.9	4.0	5.0	6.9	7.2	5.5	6.1	4.9	5.1	5.2	7.6
16-Jun	4.7	4.8	4.9	5.1	5.5	5.2	4.9	4.8	3.9	3.3	3.3	3.5	3.7	3.9	3.9	4.6	6.7	4.5	3.2	2.3	2.0	2.2	2.3	2.7	4.0	6.7
17-Jun	1.9	2.2	1.8	2.0	2.4	2.8	3.2	1.5	1.2	1.5	2.6	2.9	3.3	3.1	2.6	2.6	2.7	2.9	3.1	4.1	4.8	5.0	4.8	4.1	2.9	5.0
18-Jun	3.7	3.1	2.9	3.0	3.4	4.6	4.5	3.8	2.8	2.7	2.2	4.2	3.5	2.1	3.4	2.4	3.2	4.4	4.3	5.8	5.5	4.5	4.7	2.7	3.6	5.8
19-Jun	2.4	2.2	2.1	2.4	2.4	2.3	2.7	4.9	3.3	3.1	2.5	3.9	4.0	6.2	5.6	6.2	5.5	5.5	3.1	1.7	2.1	2.5	2.3	1.9	3.4	6.2
20-Jun	1.4	1.0	0.9	1.2	1.1	1.2	1.0	0.9	0.5	0.6	1.0	1.1	1.2	1.0	1.3	1.2	1.0	1.0	1.1	1.2	1.3	1.3	1.8	2.0	1.1	2.0
21-Jun	2.2	2.0	2.2	2.4	2.4	2.5	2.5	2.8	3.1	3.3	3.3	3.1	2.9	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.9	3.3	3.4	3.8	2.8	3.8
22-Jun	4.1	4.9	5.6	5.9	5.7	4.9	4.6	4.6	3.9	3.0	2.7	2.6	2.6	2.7	2.6	2.4	2.8	2.9	2.9	3.1	3.8	3.7	4.1	4.4	3.8	5.9
23-Jun	5.2	4.9	5.3	5.2	4.7	4.3	4.2	4.1	4.2	4.4	4.6	4.4	4.8	5.6	6.5	6.1	5.5	5.9	7.3	6.4	6.5	7.3	7.5	7.5	5.5	7.5
24-Jun	6.9	5.3	4.6	4.4	3.5	3.5	3.3	3.2	4.0	4.0	4.4	4.4	4.7	4.3	4.1	4.2	4.6	4.5	4.3	4.6	4.8	5.2	4.8	4.6	4.4	6.9
25-Jun	5.4	5.7	5.8	6.0	5.8	5.3	5.5	7.2	5.7	4.4	3.4	3.6	4.0	4.0	3.9	3.9	3.9	3.9	4.0	3.7	4.0	4.3	4.7	5.2	4.7	7.2
26-Jun	5.7	5.7	6.1	6.4	6.5	6.5	7.3	6.1	5.7	4.9	3.6	3.4	3.5	3.6	4.0	4.2	3.5	4.0	4.3	4.5	4.1	4.7	4.7	5.0	4.9	7.3
27-Jun	5.7	6.0	5.6	5.4	5.4	5.7	5.6	5.1	5.0	5.1	4.6	4.3	3.9	3.9	4.1	4.1	3.9	3.8	3.7	3.7	3.9	3.9	4.2	4.3	4.6	6.0
28-Jun	4.7	4.8	4.8	5.0	5.0	5.0	5.2	5.9	6.3	8.3	13.0	18.1	27.9	33.2	30.0	31.3	27.6	70.6	67.4	68.4	82.9	84.1	96.2	90.8	33.2	96.2
29-Jun	76.0	65.5	63.7	61.7	60.3	58.6	55.8	51.8	51.0	48.7	48.0	49.8	59.5	63.2	47.8	36.9	46.1	63.3	68.5	53.5	50.2	52.0	50.5	53.7	55.7	76.0
30-Jun	51.0	50.4	51.0	49.8	47.8	43.9	37.9	32.9	29.4	39.0	51.2	44.6	44.1	41.0	35.3	39.9	45.1	44.2	37.9	35.9	31.5	24.4	23.5	23.3	39.8	51.2
	7.9	7.5	7.5	7.4	7.2	7.1	6.7	6.4	5.9	6.1	6.7	6.7	7.4	7.6	6.8	6.6	6.9	8.9	8.7	8.2	8.5	8.6	9.0	9.1	Diurnal Average	
	76.0	65.5	63.7	61.7	60.3	58.6	55.8	51.8	51.0	48.7	51.2	49.8	59.5	63.2	47.8	39.9	46.1	70.6	68.5	68.4	82.9	84.1	96.2	90.8	Diurnal Maximum	

C - Calibration

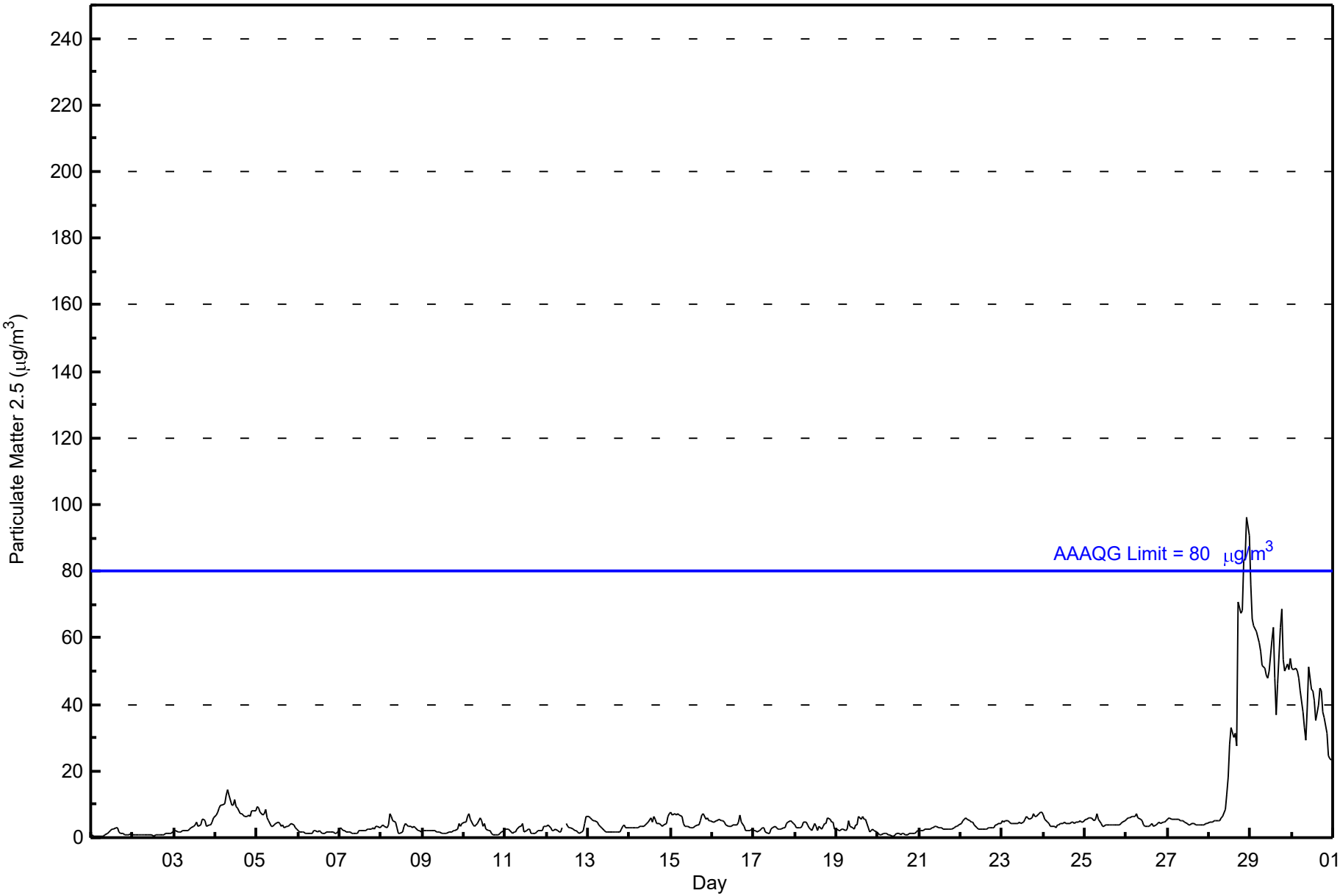
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Anzac - June 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Anzac - June 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	555	77.19	77.19
6 - 15	103	14.33	91.52
16 - 25	4	0.56	92.07
26 - 80	53	7.37	99.44
> 81.0	4	0.56	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 - June 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	56	37	21	23	18	37	29	31	9	10	13	21	46	72	45	87	555
6 - 15	3	1	2	2	2	6	19	11	11	8	5	1	2	13	8	9	103
16 - 25	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	4
26 - 80	1	6	7	12	2	6	5	3	2	0	0	0	1	2	2	4	53
> 81.0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
Totals	60	46	31	39	22	49	54	46	23	18	18	22	49	87	55	100	719

Total Number of Valid Hours: 719

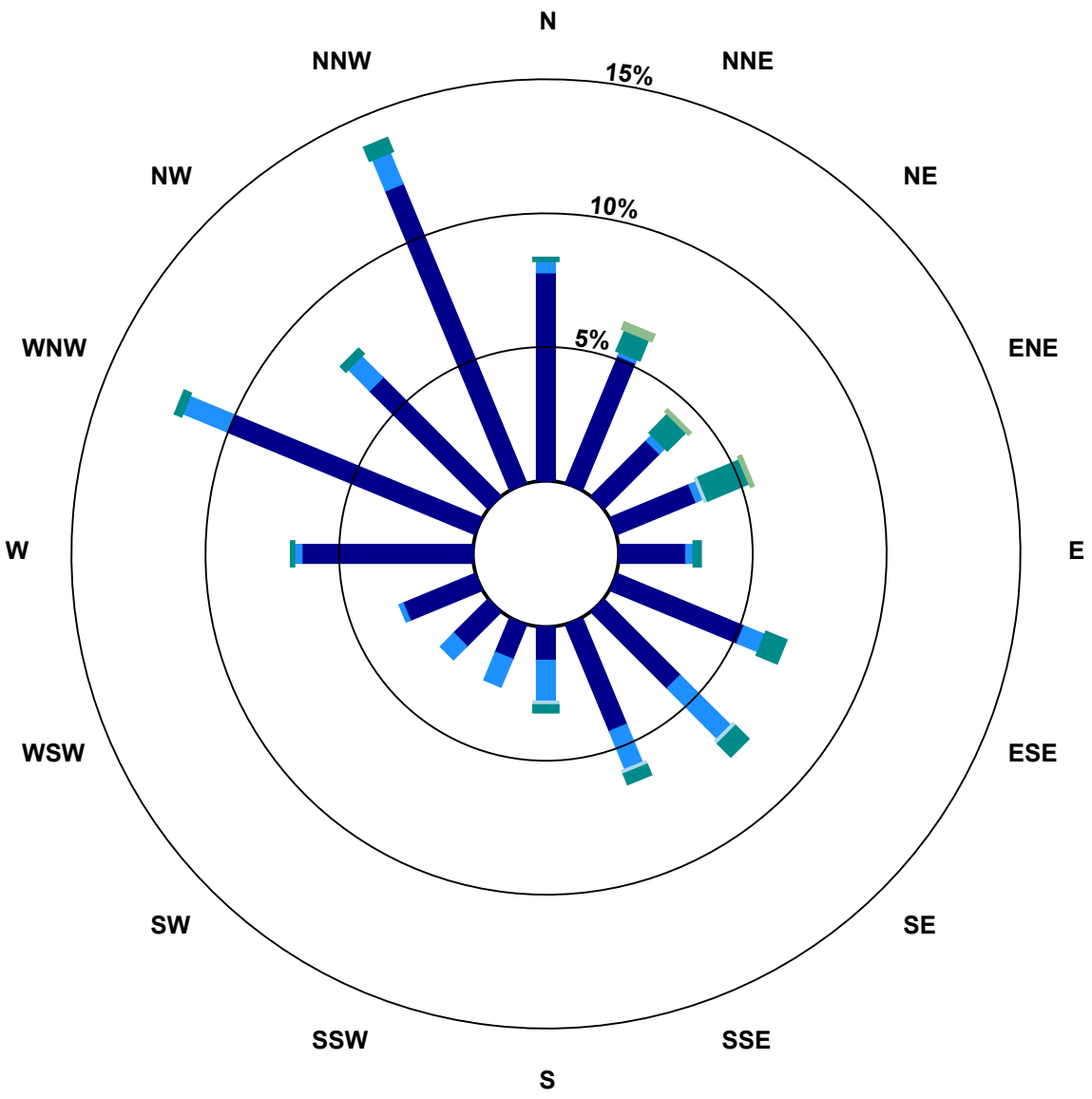
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 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: 28.5 C on Jun 29 15:00

Maximum Daily Average: 20.5 C on Jun 26

Minimum Value: 3.2 C on Jun 7 03:00

Minimum Daily Average: 7.8 C on Jun 11

Maximum Diurnal Average: 19.2 C at hour 15

Minimum Diurnal Average: 9.2 C at hour 4

Monthly Average: 14.79 C

Percentiles: P_1 = 5.2 P_{10} = 7.9 Q_1 = 10.4 Median = 13.6 Q_3 = 18.9 P_{90} = 23.3 P_{99} = 27.6

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

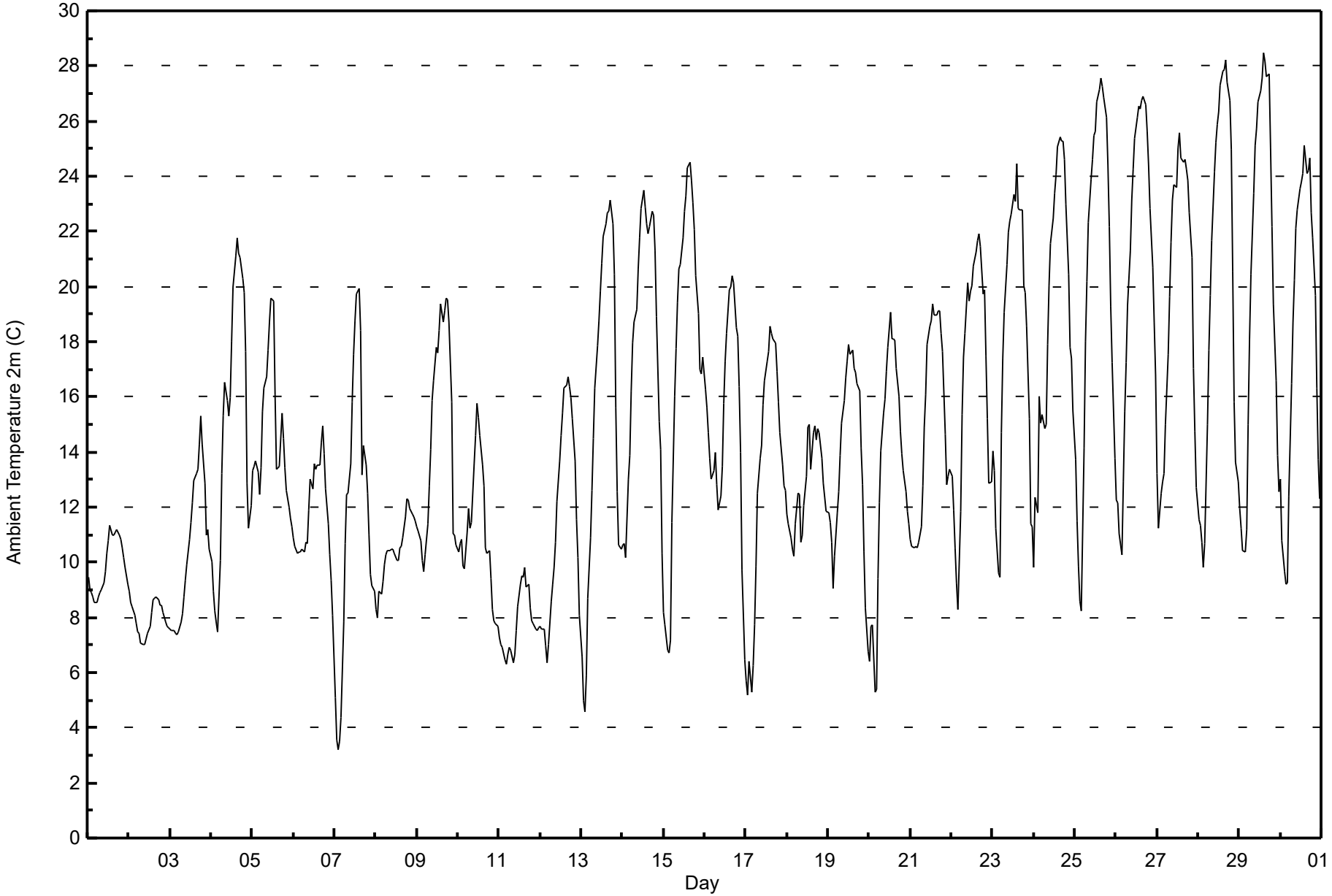
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	9.5	9.0	8.9	8.7	8.5	8.5	8.7	8.9	9.0	9.3	9.6	10.3	10.8	11.3	11.0	11.0	11.1	11.2	11.0	10.8	10.5	10.2	9.8	9.2	9.9	11.3
2-Jun	8.9	8.6	8.4	8.1	7.8	7.5	7.4	7.1	7.0	7.0	7.2	7.4	7.7	8.2	8.6	8.7	8.8	8.7	8.5	8.4	8.2	7.8	7.7	7.6	8.0	8.9
3-Jun	7.6	7.5	7.5	7.4	7.4	7.5	7.8	8.1	8.7	9.3	9.9	10.8	11.4	12.2	13.0	13.2	13.4	14.3	15.3	14.3	12.8	11.0	11.2	10.5	10.5	15.3
4-Jun	10.0	8.9	8.2	7.8	7.5	10.1	13.2	15.3	16.5	15.9	15.3	16.0	18.0	20.0	21.1	21.8	21.2	21.1	20.3	19.8	17.6	12.9	11.2	12.1	15.1	21.8
5-Jun	13.3	13.5	13.7	13.3	12.5	13.4	15.5	16.3	16.7	17.7	18.7	19.6	19.5	16.1	13.4	13.4	13.5	15.4	14.5	13.4	12.6	12.0	11.6	11.3	14.6	19.6
6-Jun	10.9	10.6	10.3	10.4	10.4	10.5	10.4	10.7	10.7	11.9	13.0	12.7	13.6	13.4	13.5	13.5	14.4	14.9	13.9	12.6	11.4	10.2	9.4	8.1	11.7	14.9
7-Jun	5.1	3.6	3.2	3.5	4.4	7.8	10.7	12.4	12.5	13.6	15.8	17.5	18.8	19.7	19.9	18.4	13.2	14.2	13.5	12.5	11.0	9.6	9.1	9.0	11.6	19.9
8-Jun	8.3	8.0	8.9	8.9	9.3	9.9	10.3	10.4	10.4	10.5	10.5	10.3	10.1	10.1	10.5	10.6	10.9	11.7	12.3	12.3	11.9	11.8	11.7	11.5	10.5	12.3
9-Jun	11.3	11.1	10.8	10.1	9.7	10.3	11.4	12.8	14.1	15.9	16.6	17.8	17.6	18.4	19.4	18.7	19.1	19.6	19.5	18.7	15.8	11.0	11.0	10.6	14.6	19.6
10-Jun	10.4	10.7	10.8	9.8	9.8	11.1	12.0	11.2	11.4	13.6	14.6	15.8	15.3	14.6	13.5	12.7	10.5	10.3	10.4	9.4	8.3	7.9	7.8	7.7	11.2	15.8
11-Jun	7.3	7.0	6.9	6.5	6.3	6.7	6.9	6.8	6.4	6.7	7.5	8.4	9.2	9.5	9.4	9.8	9.1	9.2	8.4	7.9	7.8	7.6	7.5	7.6	7.8	9.8
12-Jun	7.7	7.6	7.6	7.0	6.4	7.0	8.6	9.2	9.8	10.7	12.2	13.7	14.6	15.4	16.3	16.4	16.7	16.4	16.0	15.2	13.7	11.6	10.2	8.1	11.6	16.7
13-Jun	6.5	5.0	4.6	5.9	8.7	10.9	12.6	14.5	16.3	17.9	18.7	19.8	20.9	21.8	22.3	22.7	22.7	23.1	22.3	20.5	15.6	12.5	10.6	10.5	15.3	23.1
14-Jun	10.7	10.7	10.2	13.0	13.9	16.2	17.9	18.7	19.2	20.7	21.8	22.8	23.5	22.9	22.3	21.9	22.2	22.7	22.6	21.3	18.9	15.1	14.1	10.3	18.1	23.5
15-Jun	8.2	7.7	6.8	6.7	7.2	11.4	16.0	17.8	19.4	20.6	20.8	21.8	22.8	23.3	24.3	24.5	23.8	23.1	22.1	20.4	19.0	17.0	16.8	17.4	17.5	24.5
16-Jun	16.3	15.6	14.7	13.8	13.0	13.3	14.0	12.8	11.9	12.4	13.5	15.8	17.3	18.3	19.9	20.0	20.4	20.2	18.5	18.2	16.4	14.0	9.7	6.5	15.3	20.4
17-Jun	5.7	5.2	6.4	5.3	6.2	7.8	9.9	12.5	13.8	14.3	15.7	16.6	17.3	17.7	18.5	18.3	18.1	18.0	16.9	15.8	14.7	13.5	12.7	12.6	13.1	18.5
18-Jun	11.8	11.4	10.9	10.5	10.2	11.4	12.5	12.5	10.7	11.0	12.0	13.1	14.9	15.0	13.4	14.7	15.0	14.4	14.8	14.7	13.8	12.9	12.3	11.8	12.7	15.0
19-Jun	11.8	11.5	10.7	9.0	10.2	11.8	12.6	13.9	15.0	15.9	16.7	17.3	17.9	17.5	17.7	17.0	16.9	16.5	16.2	14.1	12.8	10.4	8.3	6.8	13.7	17.9
20-Jun	6.4	7.7	7.7	5.3	5.4	9.4	12.2	14.0	15.4	15.9	16.9	17.8	19.1	18.1	18.1	18.0	17.0	16.0	14.8	13.9	13.3	12.6	11.9	11.4	13.3	19.1
21-Jun	10.8	10.6	10.5	10.6	10.5	10.7	11.3	12.8	14.9	16.1	17.9	18.6	18.8	19.4	19.0	19.0	19.1	19.1	18.3	17.6	14.6	12.8	13.1	13.4	15.0	19.4
22-Jun	13.1	11.9	10.5	9.3	8.3	11.9	15.3	17.4	18.3	20.1	19.5	19.9	20.0	20.8	21.2	21.7	21.9	21.5	19.7	19.9	17.5	15.2	12.8	12.9	16.7	21.9
23-Jun	14.1	13.3	11.2	9.6	9.5	14.7	17.4	19.1	20.8	22.0	22.4	22.6	23.3	23.1	24.5	22.9	22.8	22.8	20.0	19.8	18.6	15.2	11.4	11.3	18.0	24.5
24-Jun	9.8	12.4	11.8	16.0	15.1	15.4	14.8	15.0	17.9	20.0	21.5	22.5	23.4	24.0	25.0	25.4	25.3	25.3	24.6	23.0	20.5	17.8	17.4	15.5	19.1	25.4
25-Jun	13.7	11.5	9.8	8.6	8.2	14.1	18.0	20.2	22.3	23.9	24.6	25.5	25.6	26.7	27.1	27.6	27.3	26.9	26.1	24.4	22.2	19.3	17.3	13.8	20.2	27.6
26-Jun	12.3	12.2	11.1	10.3	12.9	15.5	17.2	19.3	21.3	23.1	24.3	25.4	26.1	26.6	26.5	26.7	26.9	26.6	25.6	24.4	22.8	20.7	18.7	16.8	20.5	26.9
27-Jun	13.2	11.2	12.5	12.9	13.2	15.0	17.5	19.6	21.6	23.2	23.7	23.6	25.0	25.6	24.7	24.5	24.6	24.3	23.9	22.7	21.1	17.0	14.7	12.7	19.5	25.6
28-Jun	11.6	11.4	10.7	9.8	10.7	15.0	17.7	19.7	21.7	24.1	25.2	25.9	26.3	27.3	27.8	27.8	28.2	27.4	26.8	25.0	20.5	15.8	13.6	12.9	20.1	28.2
29-Jun	12.0	11.2	10.4	10.4	11.2	15.0	18.1	20.5	23.4	25.1	25.7	26.7	27.1	27.6	28.5	28.2	27.6	27.7	25.0	22.2	19.4	16.6	13.9	12.5	20.2	28.5
30-Jun	13.0	10.8	9.6	9.2	9.3	12.4	16.5	18.7	20.2	22.1	22.8	23.6	23.8	24.1	25.1	24.1	24.2	24.7	22.7	21.8	19.7	16.3	13.7	12.3	18.4	25.1
	10.4	9.9	9.5	9.2	9.4	11.4	13.1	14.3	15.3	16.3	17.2	18.0	18.7	19.0	19.2	19.1	18.9	18.9	18.1	17.2	15.4	13.3	12.0	11.2	Diurnal Average	
	16.3	15.6	14.7	16.0	15.1	16.2	18.1	20.5	23.4	25.1	25.7	26.7	27.1	27.6	28.5	28.2	28.2	27.7	26.8	25.0	22.8	20.7	18.7	17.4	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Anzac - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	151	20.97	20.97
10 - 20	422	58.61	79.58
> 20	147	20.42	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) - %

Anzac - June 2026

Maximum Value: 100.0 % on Jun 8 07:00

Maximum Daily Average: 93.8 % on Jun 8

Minimum Value: 28.4 % on Jun 25 16:00

Minimum Daily Average: 46.7 % on Jun 14

Maximum Diurnal Average: 90.9 % at hour 4

Minimum Diurnal Average: 52.2 % at hour 15

Monthly Average: 69.55 %

Percentiles: P_1 = 30.4 P_{10} = 37.8 Q_1 = 48.8 Median = 74.1 Q_3 = 89.0 P_{90} = 96.3 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

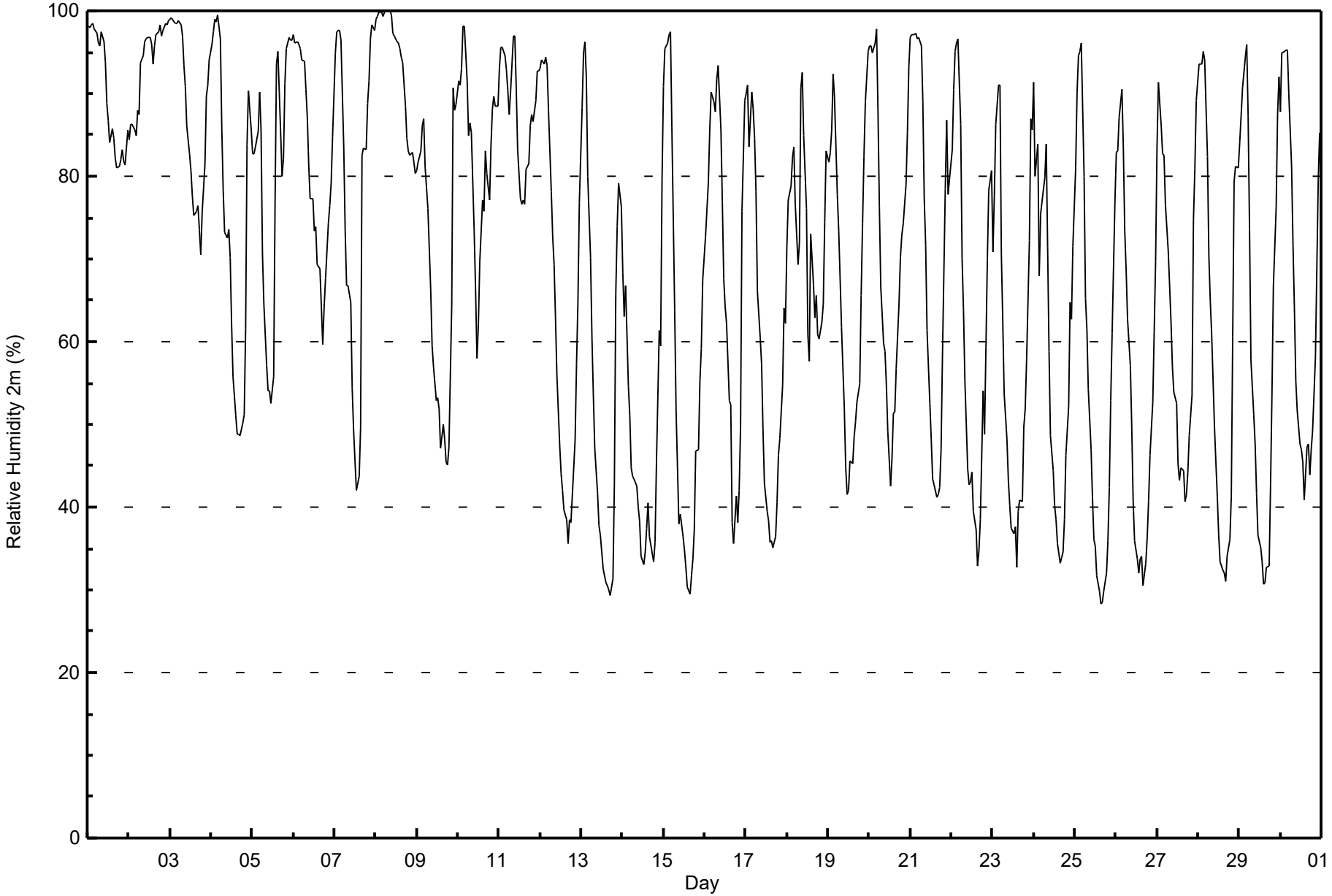
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	98.2	97.9	98.3	98.5	97.8	97.2	96.2	95.8	97.4	96.3	93.8	88.9	86.7	84.0	85.8	84.6	82.1	81.1	81.2	82.1	83.2	81.9	81.4	85.7	89.8	98.5
2-Jun	84.4	86.3	86.3	85.5	84.9	88.0	87.5	93.7	94.6	96.3	96.6	96.8	96.8	95.9	93.5	95.8	97.1	97.5	98.4	97.0	97.6	98.5	98.4	98.8	93.6	98.8
3-Jun	99.0	99.2	98.6	98.6	98.5	98.9	98.3	97.0	93.4	90.9	86.1	82.7	80.7	77.7	75.2	75.8	76.4	73.6	70.5	75.6	81.6	89.7	90.9	94.1	87.6	99.2
4-Jun	95.9	97.5	99.0	98.6	99.5	96.6	85.7	78.3	73.2	72.6	73.6	70.1	62.0	55.7	51.0	48.7	48.7	48.6	50.1	51.2	61.6	84.0	90.4	85.6	74.1	99.5
5-Jun	82.6	82.6	83.6	85.5	90.2	85.6	70.8	64.5	57.2	54.1	54.0	52.6	55.8	76.9	93.5	95.0	90.2	80.0	82.2	91.2	95.4	96.8	96.5	96.5	79.7	96.8
6-Jun	97.1	96.1	96.3	95.9	95.4	94.1	93.9	90.5	87.1	81.3	77.4	77.4	73.5	73.9	69.4	68.8	64.3	59.7	64.3	67.7	74.2	76.5	79.2	84.8	80.8	97.1
7-Jun	95.0	97.5	97.7	97.7	96.5	83.4	73.4	66.7	66.8	64.7	54.4	49.3	45.6	42.1	43.7	49.6	82.5	83.4	83.2	88.9	91.6	96.5	98.4	97.6	76.9	98.4
8-Jun	99.1	99.3	99.8	99.8	99.3	99.9	100.0	100.0	100.0	99.5	97.3	97.0	96.3	96.0	95.4	94.5	93.7	88.5	84.5	83.1	82.5	82.8	81.7	80.4	93.8	100.0
9-Jun	80.6	81.8	83.1	86.1	87.0	81.2	76.1	71.2	66.2	59.4	57.0	52.8	53.2	51.8	47.2	50.0	48.2	45.4	45.1	47.2	64.3	90.6	87.9	88.6	66.8	90.6
10-Jun	91.5	91.0	93.0	98.2	98.1	91.5	85.0	86.5	85.3	73.5	66.3	57.9	62.0	69.7	77.1	75.8	83.0	80.3	77.1	83.8	88.2	89.7	88.4	88.5	82.6	98.2
11-Jun	93.1	95.6	95.5	94.5	92.9	90.4	87.4	90.3	96.9	96.9	90.7	83.3	77.3	76.6	77.1	76.6	80.8	81.4	86.1	87.5	86.6	89.2	92.7	92.7	88.0	96.9
12-Jun	93.0	94.0	93.5	94.5	93.3	88.0	78.2	72.8	69.4	62.9	55.9	47.5	44.0	42.1	39.7	38.5	35.5	38.5	38.2	41.4	48.2	57.2	64.8	76.7	62.8	94.5
13-Jun	88.3	94.9	96.3	91.9	80.1	70.1	60.5	53.5	47.0	41.7	37.9	36.6	34.5	32.5	30.9	30.5	29.9	29.3	31.4	42.9	65.7	73.9	79.1	76.3	56.5	96.3
14-Jun	68.3	63.1	66.7	54.5	50.9	44.7	43.8	43.3	42.6	40.1	38.4	34.0	33.1	34.6	37.4	40.6	36.5	34.5	33.4	35.8	45.2	61.4	59.5	79.7	46.7	79.7
15-Jun	90.9	95.4	96.1	97.2	97.4	85.9	63.9	51.6	44.9	37.9	39.1	36.4	34.7	32.7	30.4	29.4	31.8	33.7	37.3	46.7	46.9	55.3	59.1	67.5	55.9	97.4
16-Jun	72.8	76.0	79.2	85.4	90.2	89.0	87.8	91.7	93.4	85.7	76.8	67.7	64.3	62.2	52.9	52.3	38.1	35.6	41.4	38.1	42.1	49.9	75.7	89.2	68.2	93.4
17-Jun	90.0	91.0	83.5	90.2	88.2	84.5	78.1	66.1	60.6	57.4	49.4	42.9	39.5	38.2	35.8	36.0	35.1	36.4	40.5	46.3	48.3	54.7	64.0	62.2	59.1	91.0
18-Jun	71.4	77.1	78.9	82.2	83.6	76.7	69.2	72.0	90.6	92.5	84.9	76.1	60.8	57.6	73.1	67.0	62.8	65.6	60.9	60.3	62.4	64.6	74.5	83.1	72.8	92.5
19-Jun	81.7	82.9	85.6	92.4	89.5	77.8	73.4	67.6	61.8	51.9	44.8	41.6	42.0	45.5	45.3	48.5	50.3	52.8	54.9	65.6	74.3	82.4	89.1	95.1	66.5	95.1
20-Jun	95.8	95.7	94.9	96.1	97.9	88.0	76.3	66.6	59.8	58.8	54.7	49.1	42.5	45.9	51.3	51.4	56.7	64.5	70.2	72.9	74.3	78.9	85.3	93.3	71.7	97.9
21-Jun	96.7	97.2	97.2	97.3	96.6	96.7	95.8	89.0	77.4	71.7	61.4	52.5	48.2	43.5	42.7	41.2	41.5	42.3	47.0	58.2	78.5	86.8	77.8	79.7	71.5	97.3
22-Jun	83.2	90.6	95.0	96.0	96.6	86.2	70.0	63.8	55.3	44.6	42.8	43.0	44.2	39.6	37.3	32.9	34.7	38.5	54.0	48.9	59.4	69.8	78.4	80.7	61.9	96.6
23-Jun	70.8	77.6	86.3	91.0	91.0	70.4	62.5	53.8	48.2	43.2	40.2	37.4	36.7	37.7	32.8	39.5	40.9	40.7	49.7	51.9	57.8	72.2	87.0	85.6	58.5	91.0
24-Jun	91.4	80.0	83.9	68.0	75.4	77.0	79.9	83.9	71.4	58.8	48.7	44.4	40.2	38.5	35.6	33.2	33.8	34.5	38.5	46.3	52.1	64.8	62.7	71.6	58.9	91.4
25-Jun	81.0	90.2	94.6	95.0	96.0	80.1	65.3	61.4	54.2	46.9	41.0	36.1	35.2	31.8	29.9	28.4	28.5	29.9	32.1	35.9	42.4	52.9	60.9	77.0	55.3	96.0
26-Jun	82.9	83.1	87.2	90.5	83.4	73.4	68.7	62.6	57.1	49.7	40.6	36.0	33.7	32.0	33.8	34.1	30.6	33.2	36.3	40.7	46.3	52.8	61.3	69.7	55.0	90.5
27-Jun	83.4	91.4	86.1	82.7	82.5	76.6	71.1	66.7	62.4	56.9	54.0	52.6	45.3	43.1	44.7	44.4	40.7	41.6	44.3	48.6	53.5	74.7	80.9	89.1	63.2	91.4
28-Jun	93.6	93.6	93.5	95.0	94.0	82.4	70.4	65.0	60.8	49.7	45.4	41.3	36.7	33.3	32.4	32.1	31.1	34.0	36.1	41.3	60.6	79.3	81.2	81.1	61.0	95.0
29-Jun	84.0	87.2	90.8	94.4	95.9	87.2	73.5	57.9	51.2	47.6	41.7	36.6	35.1	33.4	30.7	30.8	32.8	32.8	42.7	53.7	66.7	76.2	87.5	92.1	60.9	95.9
30-Jun	87.8	95.0	95.1	95.2	95.2	90.0	81.3	71.7	64.1	55.2	51.6	47.5	46.9	45.4	40.8	47.2	47.6	43.8	46.9	49.3	58.1	68.8	79.4	85.2	66.2	95.2
	87.4	89.4	90.5	90.9	90.6	84.4	77.5	73.2	69.7	64.6	59.9	55.6	52.9	52.3	52.2	52.4	52.9	52.7	55.3	59.3	66.3	75.1	79.8	84.3	Diurnal Average	
	99.1	99.3	99.8	99.8	99.5	99.9	100.0	100.0	100.0	99.5	97.3	97.0	96.8	96.0	95.4	95.8	97.1	97.5	98.4	97.0	97.6	98.5	98.4	98.8	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Anzac - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	89	12.36	12.36
40 - 60	167	23.19	35.56
60 - 80	159	22.08	57.64
80 - 100	302	41.94	99.58

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 72.0 % on Jun 4 06:00

Maximum Daily Average: 32.2 % on Jun 8

Minimum Value: 0.0 % on Jun 1 12:00

Minimum Daily Average: 0.0 % on Jun 9

Maximum Diurnal Average: 13.6 % at hour 5

Minimum Diurnal Average: 0.8 % at hour 19

Monthly Average: 5.19 %

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 1.4 P_{90} = 20.5 P_{99} = 53.9

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

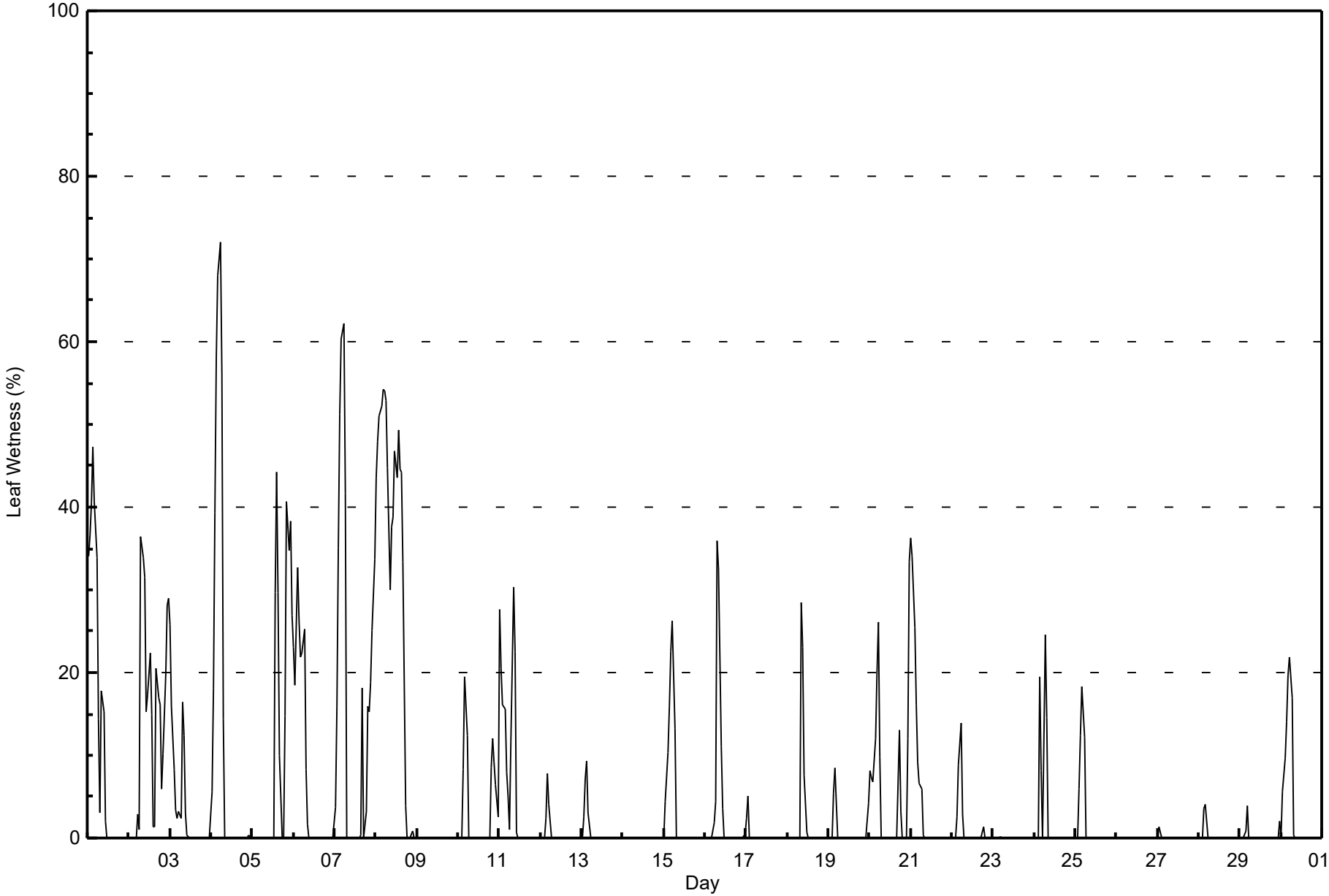
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	34.1	36.6	40.5	47.3	40.6	33.9	14.4	3.0	17.8	15.2	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9	47.3
2-Jun	0.0	0.0	0.0	0.0	0.0	2.9	1.1	36.5	33.9	31.5	15.2	17.2	22.3	14.9	1.4	1.3	20.5	16.9	16.2	5.9	10.2	19.9	28.1	29.0	13.5	36.5
3-Jun	25.8	16.0	8.4	3.3	2.4	3.3	2.4	16.4	12.4	3.1	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	3.9	25.8
4-Jun	5.6	18.2	39.3	57.9	67.9	72.0	55.9	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	0.3	0.0	13.8	72.0
5-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.7	44.2	29.7	10.0	0.0	0.0	14.7	40.7	34.8	38.3	27.0	11.2	44.2
6-Jun	23.1	18.4	32.6	26.2	21.8	22.3	25.3	8.4	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	7.5	32.6
7-Jun	3.7	16.0	35.0	51.2	60.4	62.2	41.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	18.2	0.0	3.3	16.0	15.2	18.9	25.0	33.8	16.7	62.2
8-Jun	43.5	48.0	51.0	52.2	54.2	54.1	52.9	44.7	30.0	37.6	38.8	46.8	43.6	49.3	44.6	44.3	33.4	3.9	0.0	0.0	0.0	0.9	0.0	0.0	32.2	54.2
9-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	8.4	19.5	12.3	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	8.6	12.0	9.2	6.4	2.5	3.3	19.5
11-Jun	27.7	20.6	16.0	15.6	7.9	5.2	1.1	11.7	30.4	22.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	30.4
12-Jun	0.0	0.0	0.0	2.4	7.7	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	0.0	0.6	7.7
13-Jun	0.0	2.5	7.1	9.2	3.1	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	0.9	9.2
14-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	4.5	10.3	15.9	22.5	26.3	13.2	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	3.9	26.3
16-Jun	0.0	0.0	0.0	0.0	0.0	1.9	4.5	36.0	32.5	11.0	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	0.6	3.8	36.0
17-Jun	2.3	5.1	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	0.3	5.1
18-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.4	23.0	7.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	28.4
19-Jun	0.0	0.0	0.0	5.4	8.5	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	4.2	0.8	8.5
20-Jun	8.1	7.3	6.7	12.1	20.1	26.0	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1	3.2	0.0	0.0	0.0	12.0	33.3	6.3	33.3
21-Jun	36.3	34.1	25.5	16.2	9.2	6.6	6.0	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	0.0	5.6	36.3
22-Jun	0.0	0.0	0.0	2.5	8.9	13.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.2	13.8
23-Jun	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
24-Jun	0.0	0.0	0.0	19.4	8.2	0.0	24.6	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	2.8	24.6
25-Jun	0.0	0.0	5.9	12.4	18.4	12.3	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	2.0	18.4
26-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.4
28-Jun	0.0	0.0	0.0	3.6	4.1	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	0.3	4.1
29-Jun	0.0	0.0	0.0	0.8	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	0.0	2.1	0.3	4.0
30-Jun	0.0	5.5	9.7	14.0	19.7	21.9	17.0	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	3.7	21.9
	7.0	7.8	9.6	12.5	13.6	12.7	9.1	6.2	6.2	4.8	2.3	2.2	2.2	3.1	3.0	2.5	2.7	1.1	0.8	1.5	2.6	2.8	3.7	4.4	Diurnal Average	
	43.5	48.0	51.0	57.9	67.9	72.0	55.9	44.7	33.9	37.6	38.8	46.8	43.6	49.3	44.6	44.3	33.4	16.9	16.2	16.0	40.7	34.8	38.3	33.8	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Leaf Wetness (LW) - %

Anzac - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 0.3	528	73.33	73.33
0.4 - 0.5	2	0.28	73.61
0.6 - 0.7	3	0.42	74.03
0.8 - 1.4	8	1.11	75.14
1.5 - 10	60	8.33	83.47
> 10	119	16.53	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 - June 2026

Maximum Speed: 35 km/h on Jun 8 15:00

Maximum Daily Speed Average: 21.3 km/h on Jun 1

Minimum Speed Value: 0 km/h on Jun 30 05:00

Minimum Daily Speed Average: 0.4 km/h on Jun 22

Maximum Diurnal Speed Average: 5.8 km/h at hour 17

Minimum Diurnal Speed Average: 1.8 km/h at hour 23

Monthly Average Velocity: 3.6 km/h 334.1 deg

Percentiles: P_1 = 2 P_{10} = 5 Q_1 = 7 Median = 11 Q_3 = 15 P_{90} = 21 P_{99} = 28

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-Jun	NNW24	NNW23	NNW21	NNW22	NNW22	NNW20	NNW21	NNW22	NNW19	NNW21	N23	N25	N28	N26	N26	N28	N26	N22	N24	N18	N16	N16	N17	N11	NNW21.3	N28
2-Jun	N15	N13	NNE13	NNE13	NNE14	N13	NNE14	NNE11	NNE12	NNE13	NNE14	NNE15	NE15	NE15	NE15	NE13	ENE12	NE12	NE14	NE13	ENE11	ENE12	E9	E7	NE12.1	NE15
3-Jun	E8	ENE5	ENE6	NE6	ENE7	ENE7	E7	E7	E7	ESE8	SE6	ESE9	ESE7	SE6	SSW5	S7	SSE6	SSE5	ESE6	E11	E9	ESE10	SE12	SE11	ESE6.3	SE12
4-Jun	SE11	SSE9	S7	SSE8	SSE8	SSE8	SE8	SE8	SSE9	S13	S12	S11	S12	S12	S10	S12	S14	S13	SW12	SW10	SSW6	SSW7	SSW8	SW9	S9.0	S14
5-Jun	SW11	WSW11	W14	SW3	WNW2	SSW4	W9	WNW9	WNW4	SSW1	SE6	SSE7	SSE10	SW12	W10	NW8	NNW7	W5	WNW4	SSW3	WSW6	WNW8	WNW13	WNW15	W5.2	WNW15
6-Jun	WNW19	W19	W20	W20	W20	W22	W24	W25	WSW24	W28	W30	WSW27	W30	W26	WSW28	W24	W21	W22	W17	WSW14	WSW11	WSW11	SW9	WSW8	W20.4	W30
7-Jun	WSW5	SSE7	S6	SSE10	S6	SW3	SSW5	SSE7	SE8	SE5	SSE9	SSE11	SE9	SE12	ESE13	ESE17	SSE7	NNW2	WNW8	NNW11	NNW10	NW6	ENE8	NNE3	SE3.6	ESE17
8-Jun	N2	NW6	WNW6	NNW10	NW11	NW13	NNW12	NW18	NW18	NW23	NW24	WNW27	WNW31	WNW33	WNW35	WNW31	WNW25	W24	WNW22	WNW19	WNW20	W21	W22	W21	WNW18.9	WNW35
9-Jun	W23	WNW23	WNW23	WNW22	WNW22	W21	WNW23	WNW19	WNW16	WNW12	WNW9	W13	WNW11	WNW11	WNW9	NNW10	N9	NNW12	NNW10	NNW9	NNE6	NNE10	N10	SSW4	WNW12.1	W23
10-Jun	W5	NW7	NW8	WNW8	NW10	NNW8	NNW12	NNW15	NNW13	NW13	NW15	NNW17	NNW18	NNW22	NNW24	NNW22	N20	NNW19	NNW19	N20	NNW18	NNW16	NNW16	NNW16	NNW14.6	NNW24
11-Jun	NNW14	NNW14	NNW14	NNW15	NNW13	NNW15	NNW17	NNW16	NW13	NW14	NW16	NNW18	NNW20	NNW20	NNW19	NNW20	NNW18	N19	N21	NNW18	NNW14	NNW13	NW14	NW13	NNW15.9	N21
12-Jun	NW14	WNW13	WNW14	NW16	NW16	NW15	NNW15	NNW19	NNW23	NNW23	NNW26	NNW28	NNW28	NNW29	NNW25	NNW26	NNW27	NNW23	N23	N20	NNW13	NW11	NW9	NNW9	NNW18.8	NNW29
13-Jun	WNW7	WNW7	WNW9	WNW10	WNW11	WNW11	WNW12	WNW10	WNW10	W12	W12	W12	W11	WNW10	WNW7	WNW9	NW6	WNW6	WNW4	SW4	SW4	SW6	SW7	SW7	W7.9	WNW12
14-Jun	SW9	WSW9	WSW9	W12	W12	W11	W12	WNW15	WNW13	WNW13	WNW13	NNW18	NNW18	NW16	NW15	NW14	NNW21	N21	NNW19	N14	NNW11	NNW11	NNW9	NW6	NW10.8	N21
15-Jun	WNW7	WNW7	NW6	WNW6	NW5	WNW3	SSW2	SSE5	SSE5	ESE6	ENE4	E3	NNE7	NNE8	NNW8	N5	NE8	ENE9	E7	ESE8	SE9	SSE8	WSW7	W15	NNE1.0	W15
16-Jun	W15	NW9	NW7	WSW3	WSW2	ENE6	NE6	NE7	NE4	SE6	ESE6	ENE4	NW8	W10	W12	W10	NE10	NNE12	NNE11	NNE12	NNE11	NE11	NE6	NNE6	N3.9	W15
17-Jun	N6	N14	N14	NNW10	WNW7	WNW7	NNW9	NNE13	N14	NNW15	NNW15	N17	N19	N18	N17	N17	N14	N17	NNW14	NW12	NNW13	NW10	WNW10	NW11	NNW12.2	N19
18-Jun	WNW11	WNW13	WNW11	WNW13	WNW12	WNW13	NW13	NNW16	NNW15	NW12	NW13	NW11	NW15	NNW18	N17	N21	NNW18	NNW14	NNW14	NNW13	NNW11	NW10	WNW11	WNW11	NW12.7	N21
19-Jun	WNW10	WNW11	WNW8	W7	WNW11	WNW14	WNW11	NW11	NNW10	NW10	NW11	WNW13	NW14	NNW14	N12	N14	N11	NNW13	NNE11	NNE7	NW6	N11	N10	NNE8	NNW8.8	N14
20-Jun	NE7	N7	N4	N8	N5	NNW4	NNE4	NNE6	NE9	NNE10	N10	NNE8	NNE7	NNE7	NW9	NNW9	NNE12	NNE12	ENE13	NE13	ENE11	ESE6	SSE10	S3	NNE6.1	ENE13
21-Jun	N6	NNE7	N8	NNE6	NNW7	NW6	NW8	N9	NNE6	ENE4	E4	SE7	SE11	SE13	SE13	SE12	ESE10	ESE7	E7	NE4	N4	N9	N13	NNW11	NE3.7	SE13
22-Jun	NW8	WNW6	WNW6	WNW6	NNW4	N3	ENE1	ENE1	ENE5	ESE7	ESE7	ENE7	NE10	ESE7	E7	ESE6	SE9	SE5	SE3	SSW6	WSW6	W8	W8	W6	ENE0.4	NE10
23-Jun	W8	WNW7	WSW6	W5	WSW3	W5	WNW7	WNW9	WNW9	W7	SW10	SW14	WNW10	WNW9	WNW9	ESE12	ESE11	ESE10	N16	ENE10	SSE6	SSW5	SSW5	S9	WSW2.8	N16
24-Jun	SSW6	WSW8	WSW5	WSW19	SW18	SSW13	SSW13	S11	S14	S14	S13	S13	SSW11	SSW11	SW8	W3	ENE4	SSE7	SE10	SSE8	E9	ESE10	SSE12	SSE12	S8.1	WSW19
25-Jun	SSE12	SE7	SE8	SSE6	SSE6	SSE5	SE6	ESE7	SE9	SE14	SSE17	SSE18	SSE14	SSE13	SSE13	SSE13	SE14	SE16	SSE15	SE16	SSE12	SSE11	SSE12	SSE11	SSE11.3	SSE18
26-Jun	SSE11	SE10	SE10	SE11	SE11	SE12	SE12	SE13	SE13	SE16	SSE19	SSE17	SE18	SE18	ESE18	ESE19	ESE17	SE18	ESE16	ESE14	ESE14	ESE13	ESE11	SE9	SE13.8	SSE19
27-Jun	SE9	SE10	ESE11	ESE12	ESE10	SE9	SE13	ESE13	E15	ESE17	ESE19	ESE20	ESE23	ESE20	ESE19	ESE18	E21	ESE16	ESE12	E11	E10	ENE8	E10	E9	ESE13.5	ESE23
28-Jun	NE8	NE10	ENE4	NNE4	N2	NW3	N5	NNE6	NE8	ENE15	E17	ENE22	ENE22	ENE21	ENE20	ENE19	ENE18	ENE17	ENE13	ENE11	ENE7	NE7	NNE9	NNE10	ENE10.9	ENE22
29-Jun	NE10	NE8	NNW5	WNW6	NW5	WNW3	NNW5	NNE3	NW1	W2	N8	NNE10	NNE10	NNE13	NE13	NE13	NE10	ENE12	ESE12	SSE12	SSE8	ESE10	SE8	SE8	NE4.2	NE13
30-Jun	SE7	SE4	E5	ENE5	S0	ESE3	ESE5	S2	SSE4	ESE5	ENE9	ENE7	NE8	NNE8	NE7	NNW12	NNW9	NE3	E8	ESE9	SE9	SE8	SSE6	S4	E3.5	NNW12
	WNW3.9	NW4.6	WNW4.8	WNW4.7	WNW4.9	WNW4.7	NW4.6	NNW4.9	NNW3.9	NNW2.9	NW2.7	NNW3.0	NNW4.8	NNW4.7	NNW4.8	N5.6	NNE5.8	NNE5.1	N5.1	NNE3.8	N2.9	N2.5	NW1.8	WNW2.5	Diurnal Average	
	NNW24	WNW23	WNW23	WNW22	NNW22	W22	W24	W25	WSW24	W28	W30	NNW28	WNW31	WNW33	WNW35	WNW31	NNW27	W24	N24	N20	WNW20	W21	W22	W21	Diurnal Maximum	

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

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 20m (WS20) - km/h

Anzac - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9 km/h on Jun 8 14:00

Minimum Value: 1 km/h on Jun 28 22:00

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

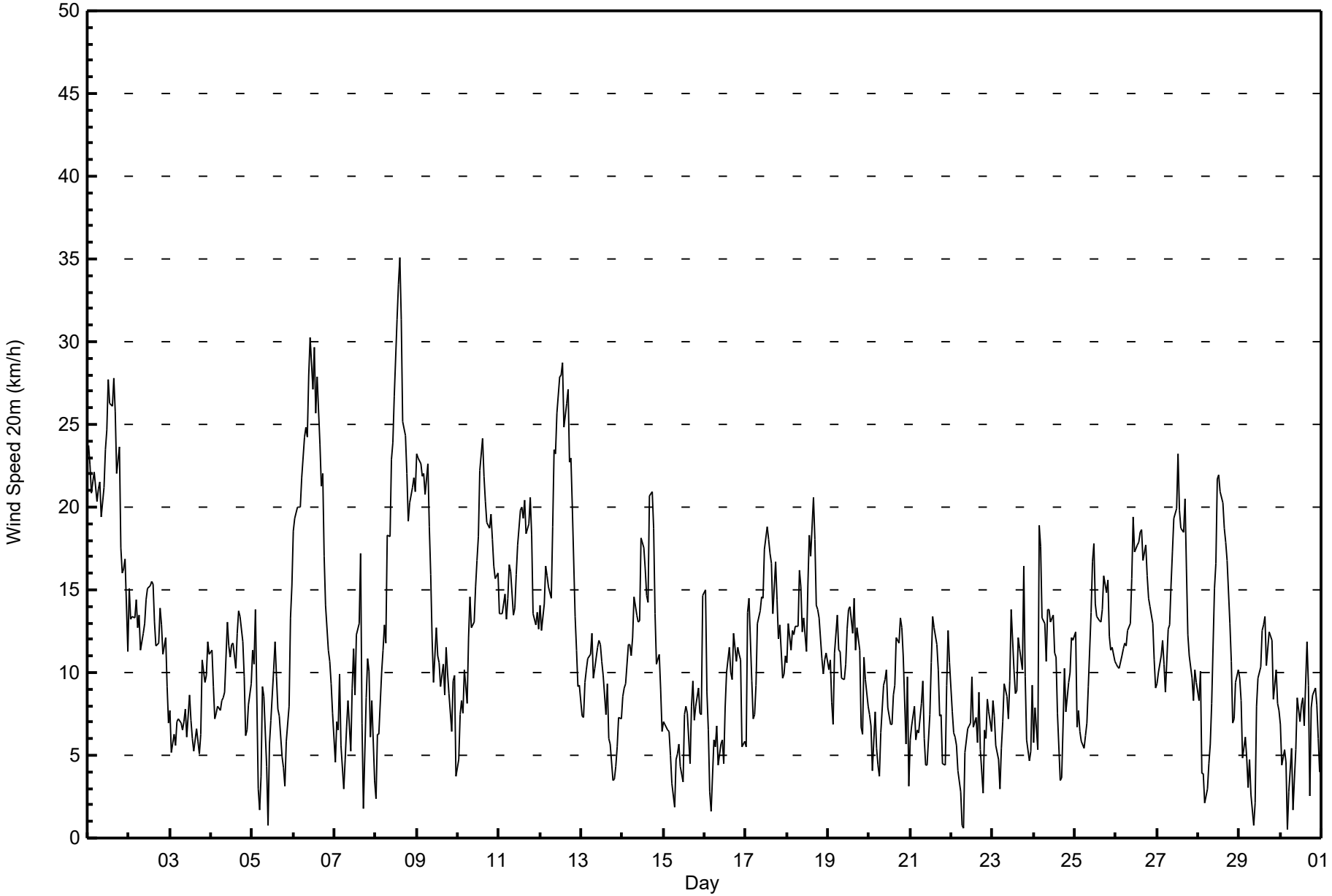
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	6	5	5	6	5	5	5	5	5	5	6	6	6	6	6	6	6	5	5	4	3	4	4	3	6
2-Jun	4	3	4	4	4	3	4	3	4	3	4	4	4	4	4	3	3	3	3	3	3	3	2	2	4
3-Jun	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	2	1	2	2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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 20m (WS20) - km/h

Anzac - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	83	11.53	11.53
6 - 11	316	43.89	55.42
12 - 19	234	32.50	87.92
20 - 28	80	11.11	99.03
29 - 38	7	0.97	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 - June 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	4	3	10	3	3	4	5	4	9	4	5	6	6	4	5	83
6 - 11	14	27	18	16	16	24	32	26	8	7	10	11	12	48	26	21	316
12 - 19	22	15	10	9	2	19	18	15	11	2	4	3	12	20	23	49	234
20 - 28	16	0	0	4	1	3	0	0	0	0	0	3	17	9	2	25	80
29 - 38	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	1	7
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	60	46	31	39	22	49	54	46	23	18	18	22	49	87	55	101	720

Total Number of Valid Hours: 720

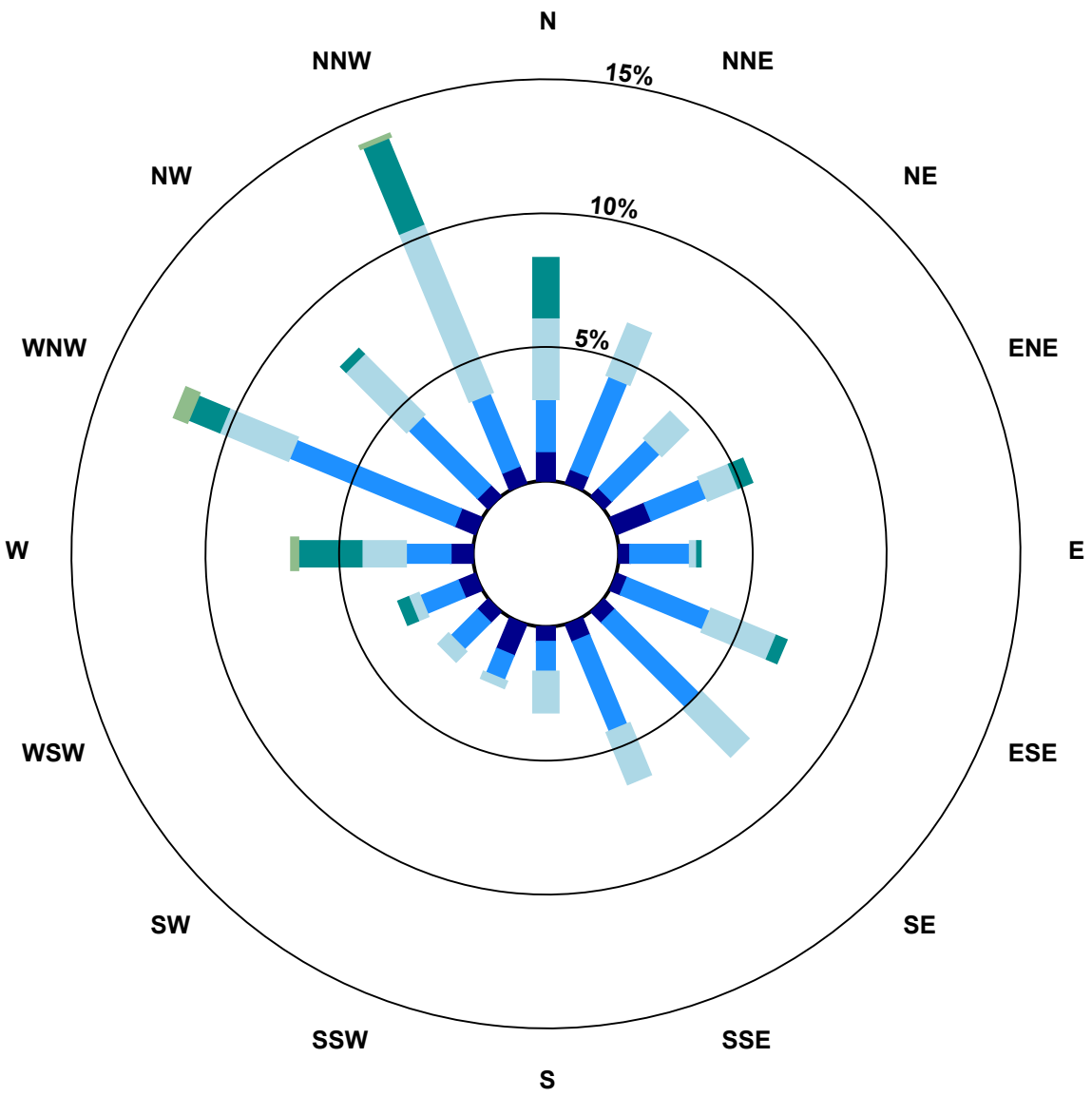
Total Number of Hours: 720

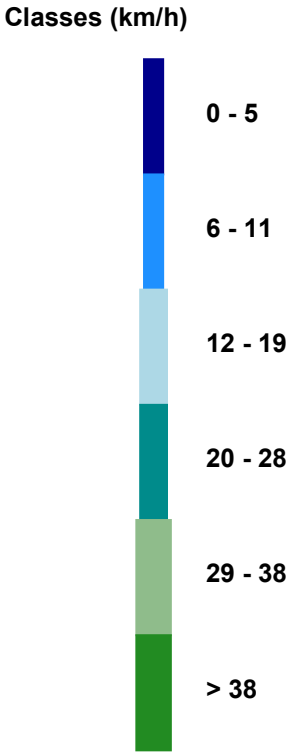
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 20m (WS20) - km/h

Anzac





Total Number of Valid Hours: 720

Direction of Maximum Speed: 282 deg on Jun 8 15:00
Direction of Maximum Daily Speed Average: 347.6 deg on Jun 1

Direction of Minimum Speed: 175 deg on Jun 30 05:00

Direction of Minimum Daily Speed Average: 0.4 deg on Jun 22

Monthly Average Direction: 334.1 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-Jun	333	332	327	335	337	335	338	343	339	346	349	357	353	355	350	353	354	355	356	357	356	1	7	6	347.6
2-Jun	9	5	15	16	13	11	17	18	18	26	23	27	38	49	53	51	58	55	45	56	59	61	79	81	34.8
3-Jun	92	74	68	56	66	77	93	96	99	121	126	111	111	142	206	170	151	147	120	88	90	113	139	145	111.2
4-Jun	142	162	182	167	166	152	135	125	161	178	182	190	174	172	175	173	185	191	223	231	207	200	195	218	179.1
5-Jun	226	246	274	221	282	211	275	290	295	208	139	147	155	232	276	313	339	267	295	207	240	291	284	291	261.9
6-Jun	291	281	266	270	265	271	266	263	256	263	260	256	260	259	248	262	272	266	259	246	242	245	236	237	261.7
7-Jun	247	157	173	161	189	225	211	157	143	130	152	148	131	136	116	114	153	328	298	329	345	322	65	28	141.6
8-Jun	4	322	301	341	325	324	333	324	318	317	307	298	287	283	282	286	286	280	283	288	287	281	276	274	294.9
9-Jun	279	282	283	288	283	279	290	285	289	289	288	280	294	299	292	337	1	348	334	343	14	17	2	194	298.3
10-Jun	277	315	305	302	323	327	331	344	331	311	323	340	334	338	335	347	356	345	346	349	344	341	337	329	335.5
11-Jun	329	327	341	342	337	330	336	335	315	322	322	330	333	328	337	334	338	349	351	348	338	328	324	320	333.9
12-Jun	318	301	303	306	309	325	336	329	334	327	332	339	344	341	341	344	347	348	351	352	337	324	305	329	333.6
13-Jun	290	296	285	285	284	289	287	292	288	281	269	270	275	283	293	295	306	297	285	229	215	235	228	231	278.4
14-Jun	233	239	253	264	260	267	279	287	295	293	299	331	339	319	314	320	348	355	343	11	342	332	332	325	313.1
15-Jun	284	286	312	286	321	295	209	154	156	104	58	84	24	15	334	8	44	64	97	123	132	147	250	278	11.4
16-Jun	279	306	315	237	246	69	53	37	43	126	122	62	310	272	279	276	39	20	14	33	26	46	48	13	360.0
17-Jun	11	354	356	334	303	303	341	13	2	341	348	350	1	349	349	4	356	351	337	325	330	312	301	309	344.2
18-Jun	292	288	299	296	297	301	317	327	337	324	315	304	325	336	7	350	331	345	338	339	337	325	298	290	322.6
19-Jun	291	294	288	269	285	285	299	311	346	319	318	300	318	347	355	5	9	347	30	32	311	352	7	25	329.2
20-Jun	38	6	351	5	350	341	21	13	41	17	5	24	22	14	317	336	16	31	58	41	59	108	164	180	23.9
21-Jun	5	24	359	15	335	311	325	353	15	65	100	128	131	131	127	125	114	113	85	55	7	358	355	344	50.3
22-Jun	304	294	294	294	337	355	61	68	64	114	103	73	43	106	98	104	124	139	134	199	258	263	265	272	77.5
23-Jun	277	288	254	267	251	267	290	291	285	275	224	221	284	288	282	108	103	115	8	71	166	194	192	187	255.1
24-Jun	203	247	251	242	219	212	195	186	181	180	187	186	202	194	215	264	57	151	132	165	84	123	155	159	188.4
25-Jun	162	144	141	150	147	148	141	117	134	127	150	157	160	159	162	147	145	140	156	144	150	151	149	163	148.8
26-Jun	149	144	139	132	135	135	131	139	135	135	149	147	140	127	108	115	123	126	120	120	112	115	114	145	129.9
27-Jun	143	130	122	114	114	140	124	118	96	105	120	113	106	117	116	102	98	105	108	86	86	73	79	81	108.6
28-Jun	52	55	72	33	3	326	3	26	50	73	81	65	66	70	75	71	77	58	71	66	66	43	22	28	61.2
29-Jun	39	35	334	287	320	288	346	17	311	272	5	19	28	15	37	43	41	72	122	157	156	123	131	132	52.3
30-Jun	131	138	88	67	175	119	122	170	150	103	58	70	39	31	34	341	333	36	94	123	124	143	153	182	86.5
	300.3	306.5	303.7	301.0	299.5	299.3	314.1	326.8	333.3	330.2	326.0	338.9	345.7	337.8	338.7	359.2	13.4	12.9	10.6	21.7	10.1	356.2	321.8	291.0	
	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

Anzac - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 101 deg on Jun 5 10:00

Minimum Value: 5 deg on Jun 28 22:00

Percentiles: P_1 = 6 P_{10} = 11 Q_1 = 14 Median = 17 Q_3 = 25 P_{90} = 41 P_{99} = 83

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

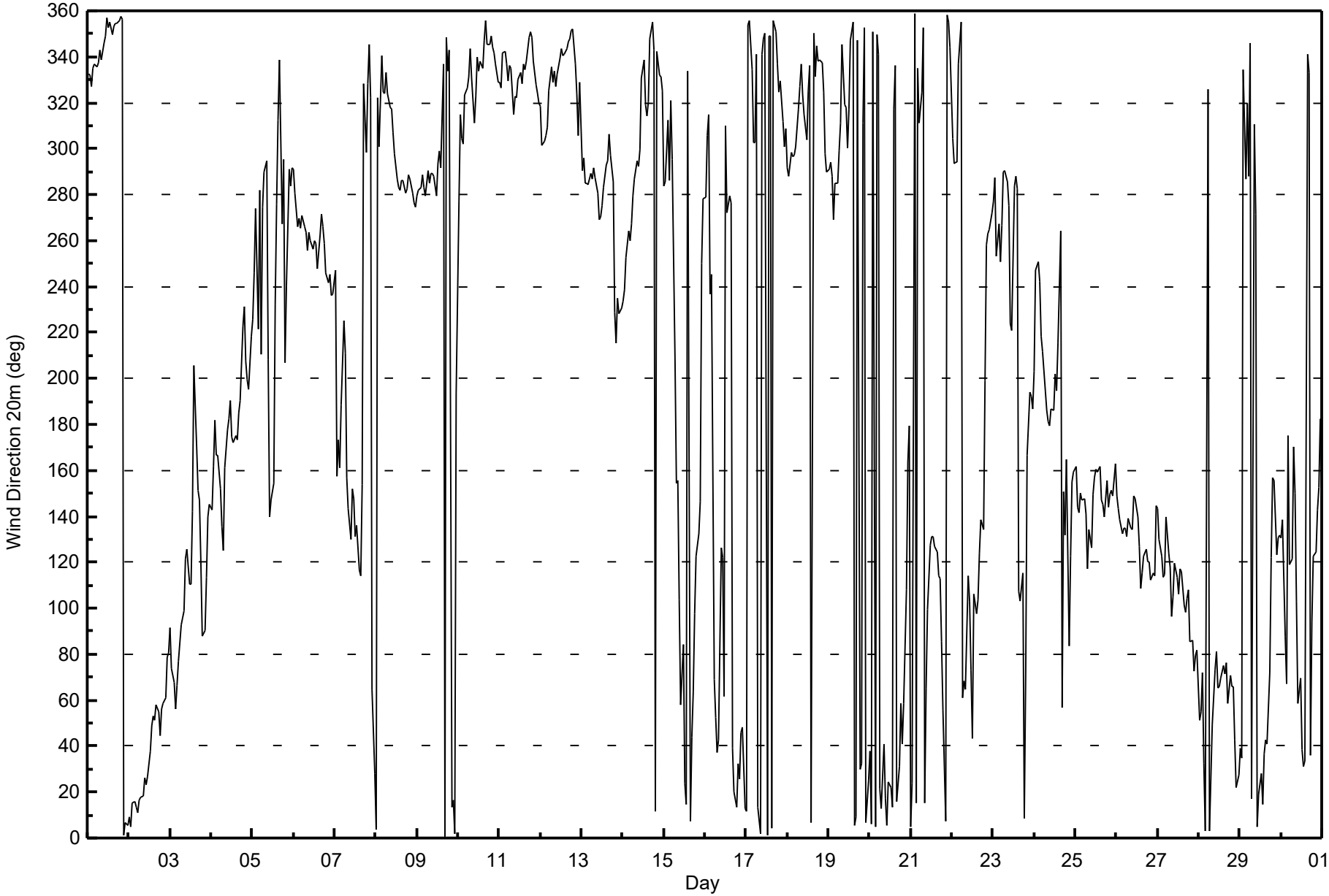
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	13	13	13	14	14	14	14	15	14	15	15	16	16	17	16	17	17	16	15	15	15	16	16	14	17
2-Jun	17	16	17	17	16	15	16	15	15	16	14	17	17	15	16	17	16	17	15	14	17	16	19	19	19
3-Jun	16	14	14	13	14	16	20	19	27	20	30	23	30	41	36	27	36	47	32	16	12	14	12	11	47
4-Jun	11	11	18	8	9	10	16	19	32	22	24	34	34	34	33	26	20	21	21	20	19	10	12	13	34
5-Jun	14	24	13	65	54	34	25	23	56	101	45	41	23	35	19	24	30	45	40	73	22	13	14	18	101
6-Jun	16	18	17	17	16	18	17	17	17	17	16	17	16	19	17	17	17	18	17	16	17	18	19	22	22
7-Jun	37	10	11	8	29	41	36	32	20	52	37	33	58	28	26	20	84	83	21	26	14	23	31	43	84
8-Jun	45	18	20	17	13	13	15	13	14	15	15	17	17	17	15	16	17	15	16	16	17	17	16	17	45
9-Jun	16	15	16	16	15	17	16	17	17	25	22	23	20	21	22	36	41	22	23	20	9	7	9	60	60
10-Jun	42	10	16	19	24	19	16	16	21	23	19	22	22	22	14	17	16	16	16	17	13	13	13	12	42
11-Jun	13	12	15	13	13	13	15	18	15	15	14	14	16	17	17	17	17	19	14	14	16	13	13	13	19
12-Jun	16	13	14	12	14	15	15	15	15	14	17	19	20	17	20	18	17	17	16	14	14	12	13	13	20
13-Jun	11	9	8	9	10	12	13	19	19	22	24	23	25	30	53	36	56	48	44	42	16	12	10	11	56
14-Jun	12	13	13	10	9	12	17	16	19	22	26	23	21	32	31	25	17	18	15	17	11	6	11	25	32
15-Jun	10	11	21	10	25	33	49	26	40	51	58	85	55	44	54	65	26	20	17	11	10	17	42	16	85
16-Jun	17	38	33	45	83	12	13	16	46	20	17	58	44	17	21	31	30	26	18	12	10	16	13	12	83
17-Jun	14	5	8	24	16	25	18	21	22	23	28	23	20	22	23	20	21	18	14	11	11	16	11	13	28
18-Jun	14	12	12	13	12	15	19	16	17	14	16	21	19	18	18	19	19	15	16	13	15	12	13	14	21
19-Jun	13	12	16	13	15	18	17	21	34	32	34	28	24	24	23	17	23	20	19	12	22	8	9	6	34
20-Jun	13	19	25	8	19	19	35	33	30	26	23	49	55	35	37	21	21	17	18	13	22	40	8	67	67
21-Jun	13	15	16	31	16	18	26	20	48	59	68	40	30	21	20	21	20	27	15	13	11	7	9	28	68
22-Jun	14	11	12	10	16	28	97	101	56	53	34	39	31	57	41	45	33	41	52	27	22	11	10	8	101
23-Jun	10	12	20	40	62	21	20	20	19	38	42	26	27	29	38	59	20	16	20	29	44	34	14	9	62
24-Jun	31	15	37	26	18	22	17	17	18	19	25	30	32	39	48	77	71	47	19	30	41	14	11	9	77
25-Jun	7	16	9	7	10	15	20	21	20	19	21	19	28	26	22	27	24	17	15	15	11	9	8	7	28
26-Jun	8	10	9	9	10	13	15	15	17	20	19	22	21	23	21	20	21	17	15	15	13	12	14	15	23
27-Jun	11	8	8	7	15	14	17	20	19	21	18	18	19	21	18	16	16	15	15	12	10	6	6	9	21
28-Jun	15	8	59	64	61	30	25	23	17	18	20	18	18	19	20	19	18	16	14	11	9	5	6	7	64
29-Jun	6	8	31	16	26	55	46	73	101	96	32	32	34	26	25	24	22	18	29	12	12	13	8	16	101
30-Jun	9	10	12	10	77	18	15	65	55	46	29	43	40	45	44	26	19	76	12	16	9	8	13	15	77
	45	38	59	65	83	55	97	101	101	101	68	85	58	57	54	77	84	83	52	73	44	40	42	67	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 20m (WD20) - deg

Anzac - June 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS17
WAPASU
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WAPASU (AMS17)
JUNE 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	6.3	0	1.8	0
H2S (ppb) Average	684	35	36	99.86	1.2	0	0.3	0
THC (ppm) Average	686	33	34	99.86	2.7	-	2.4	-
O3 (ppb) Average	685	34	35	99.86	58.5	0	42.8	-
NO2 (ppb) Average	686	34	34	100	17.2	0	4.1	-
NO (ppb) Average	686	34	34	100	35	-	4.7	-
NOX (ppb) Average	686	34	34	100	38.4	-	7.9	-
PM2.5 (ug/m3) Average	718	1	2	99.86	81.2	1	51.6	2
Temperature 2 m (C) Average	720	0	0	100	29.6	-	23.6	-
Relative Humidity (%) Average	691	0	29	95.97	100	-	94.8	-
Wind Speed 10 m (km/h) Average	719	0	1	99.86	22	-	17	-
Wind Direction 10 m (deg) Average	719	0	1	99.86	-	-	-	-
Precipitation (mm) Total	720	0	0	100	14.8	-	75.1	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WAPASU (AMS17)
JUNE 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	0.19	0.8	-	0	0	0	0	0	0.1	6.3
H2S (ppb) Average	684	0.09	0.1	-	0	0	0	0.1	0.1	0.2	1.2
THC (ppm) Average	686	2.22	0.1	-	2.1	2.1	2.1	2.2	2.3	2.4	2.7
O3 (ppb) Average	685	26.81	12.2	-	0.3	10.5	18.2	27.1	35.8	42.9	58.5
NO2 (ppb) Average	686	1.7	2.1	-	0.1	0.2	0.4	0.9	2.1	4.1	17.2
NO (ppb) Average	686	0.44	2	-	0	0	0	0	0.2	0.8	35
NOX (ppb) Average	686	2.13	3.3	-	0.1	0.2	0.4	1	2.4	5.1	38.4
PM2.5 (ug/m3) Average	718	6.76	11.6	-	0.3	0.8	1.7	3.3	5.3	12.4	81.2
Temperature 2 m (C) Average	720	14.89	6.2	-	2.2	7.7	9.9	14.3	19.4	24	29.6
Relative Humidity (%) Average	691	65.95	23.7	-	22	33.3	44.1	66.2	89.3	98.1	100
Wind Speed 10 m (km/h) Average	719	9.2	4	-	0	4	6	9	12	14	22
Wind Direction 10 m (deg) Average	719	-	-	-	-	-	-	-	-	-	-
Precipitation (mm) Total	720	-	-	146.22	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WAPASU (AMS17)
JUNE 2026

OPERATIONAL NOTES

Parameter	Start	End	(Hours)	Notes
H2S, O3, SO2, THC	15 Jun 2026 14:00	15 Jun 2026 14:00	1	Maintenance - sample manifold cleaned
PM2.5	02 Jun 2026 10:00	02 Jun 2026 10:00	1	DAS Failure - data not recorded
Relative Humidity	01 Jun 2026 03:00	08 Jun 2026 15:00	29	Sensor operated out of range
Wind Speed, Wind Direction	18 Jun 2026 06:00	18 Jun 2026 06:00	1	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Wapasu - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6.3 ppb on Jun 4 07:00 Maximum Daily Average: 1.8 ppb on Jun 5

Minimum Value: 0.0 ppb on Jun 1 02:00 Minimum Daily Average: 0.0 ppb on Jun 1
Maximum Diurnal Average: 0.9 ppb at hour 7 Minimum Diurnal Average: 0.0 ppb at hour 2
Monthly Average: 0.19 ppb 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} = 4.6

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-Jun	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
2-Jun	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-Jun	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-Jun	0.0	0.0	0.0	Z	0.0	2.8	6.3	4.8	0.7	0.4	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.7	6.3
5-Jun	0.0	0.0	0.0	0.6	Z	4.3	5.9	4.6	3.1	2.2	3.1	3.4	6.2	2.1	2.5	2.4	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	1.8	6.2
6-Jun	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
7-Jun	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-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
9-Jun	0.1	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
10-Jun	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
11-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13-Jun	Z	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.6	1.7	0.7	0.2	0.0	0.1	2.7	1.6	0.3	0.0	0.0	0.0	0.0	0.3	2.7
14-Jun	0.0	Z	1.5	1.0	0.7	0.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.5
15-Jun	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	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.9
16-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
17-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19-Jun	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
20-Jun	0.0	Z	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
21-Jun	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
22-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	3.0	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	0.2	3.0
23-Jun	0.0	0.0	0.2	0.1	Z	0.8	5.0	4.4	1.4	2.2	0.5	1.2	4.8	3.7	2.4	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.2	5.0
24-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.1	3.3	1.3	1.0	0.1	0.1	0.0	0.0	0.0	0.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.3
25-Jun	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
26-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
27-Jun	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-Jun	0.0	0.0	0.0	Z	1.0	1.5	4.3	1.3	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	0.3	4.3
29-Jun	0.0	0.0	0.0	1.0	Z	0.2	5.2	1.8	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	0.4	5.2
30-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.6
	0.0	0.0	0.1	0.1	0.1	0.4	0.9	0.7	0.3	0.2	0.1	0.2	0.4	0.2	0.2	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	Diurnal Average	
	0.1	0.0	1.5	1.0	1.0	4.3	6.3	4.8	3.1	2.2	3.1	3.4	6.2	3.7	2.5	2.4	0.6	2.7	1.6	0.3	0.2	0.1	0.9	0.1	Diurnal Maximum	

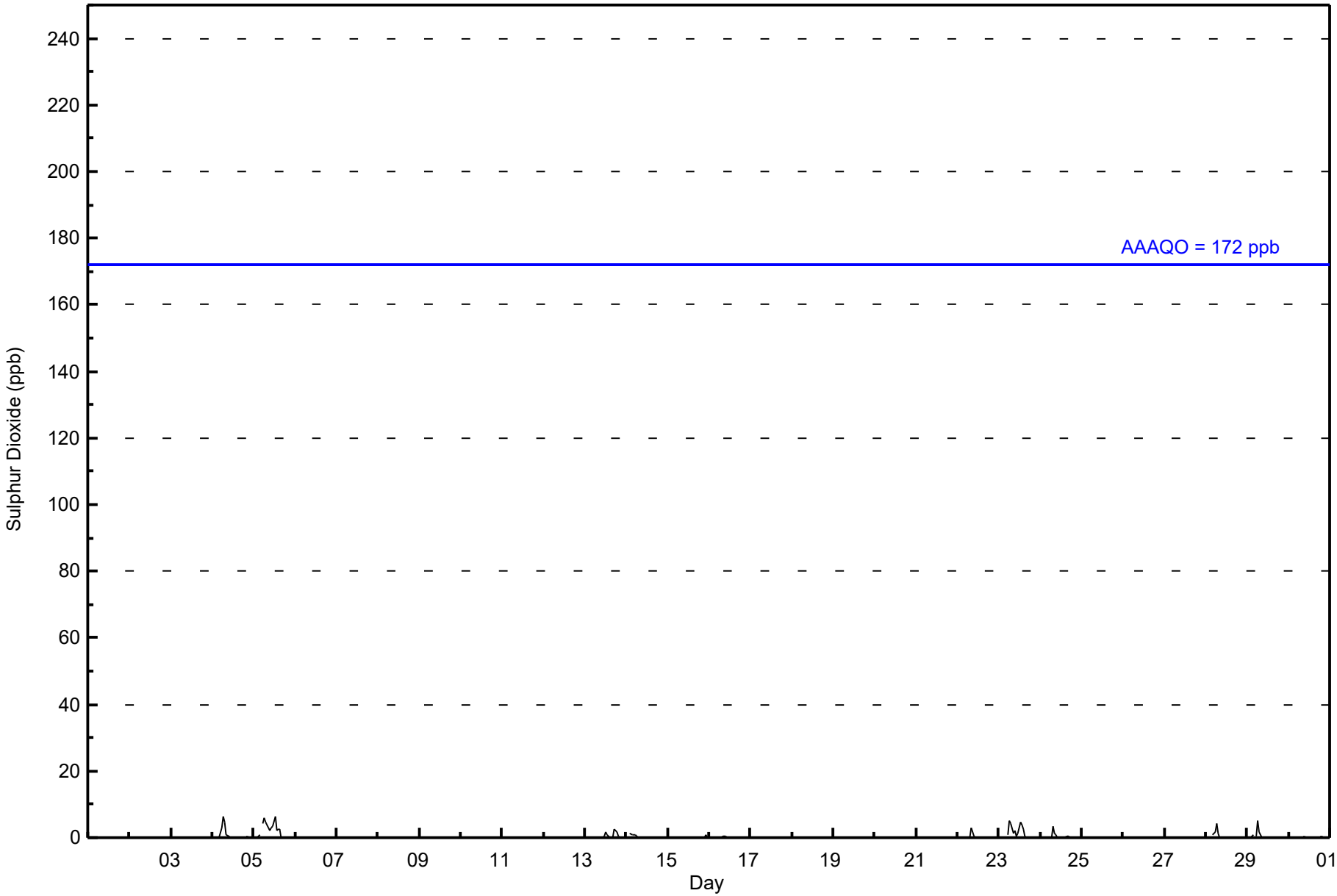
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Wapasu - June 2026



Sulphur Dioxide (SO_2) - ppb
Wapasu - June 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

Wapasu - June 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 10	121	63	42	33	42	41	60	82	40	21	34	27	16	25	12	27	686
11 - 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 - 60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61 - 110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111 - 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	121	63	42	33	42	41	60	82	40	21	34	27	16	25	12	27	686

Total Number of Valid Hours: 686

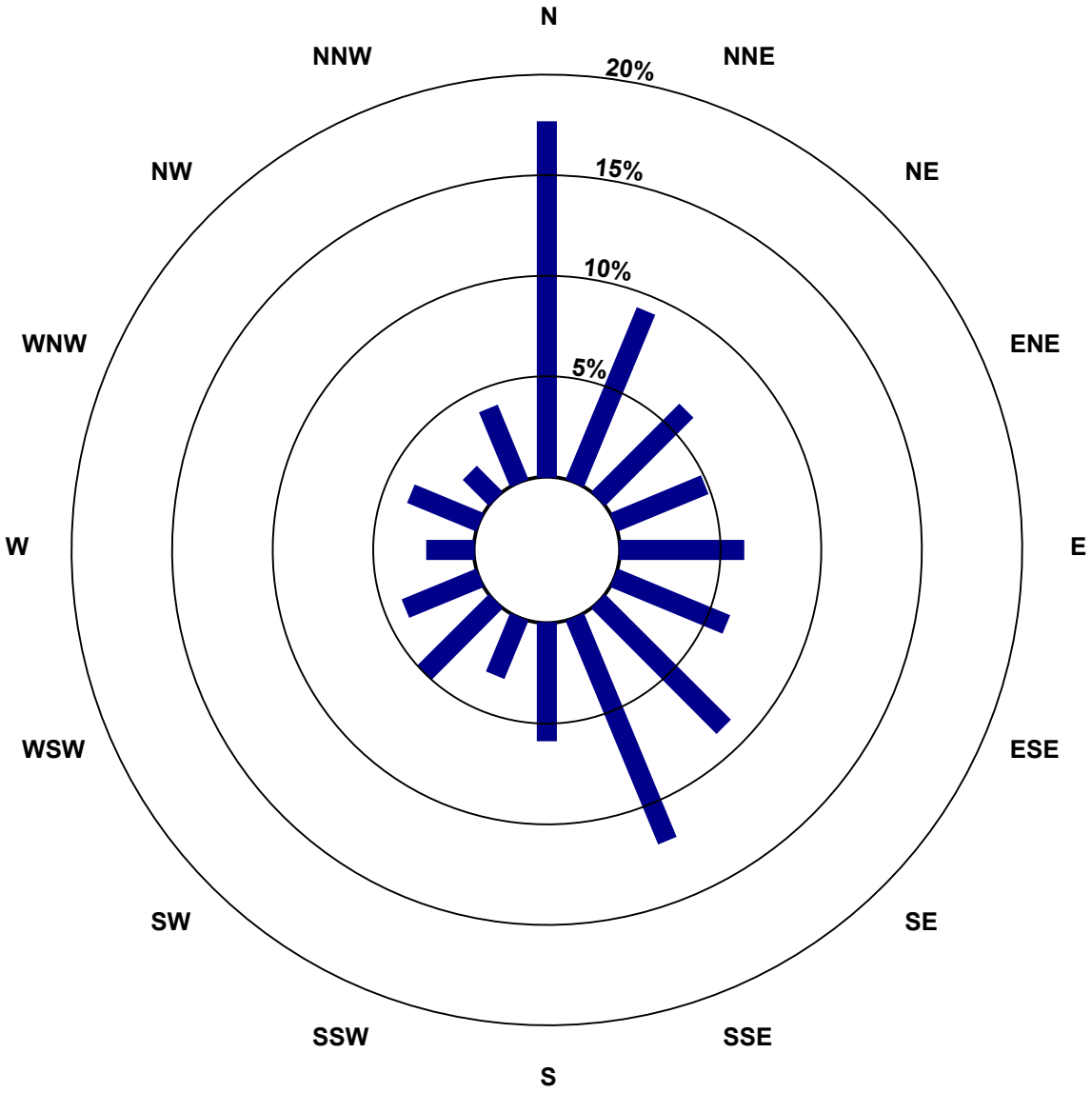
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Wapasu



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

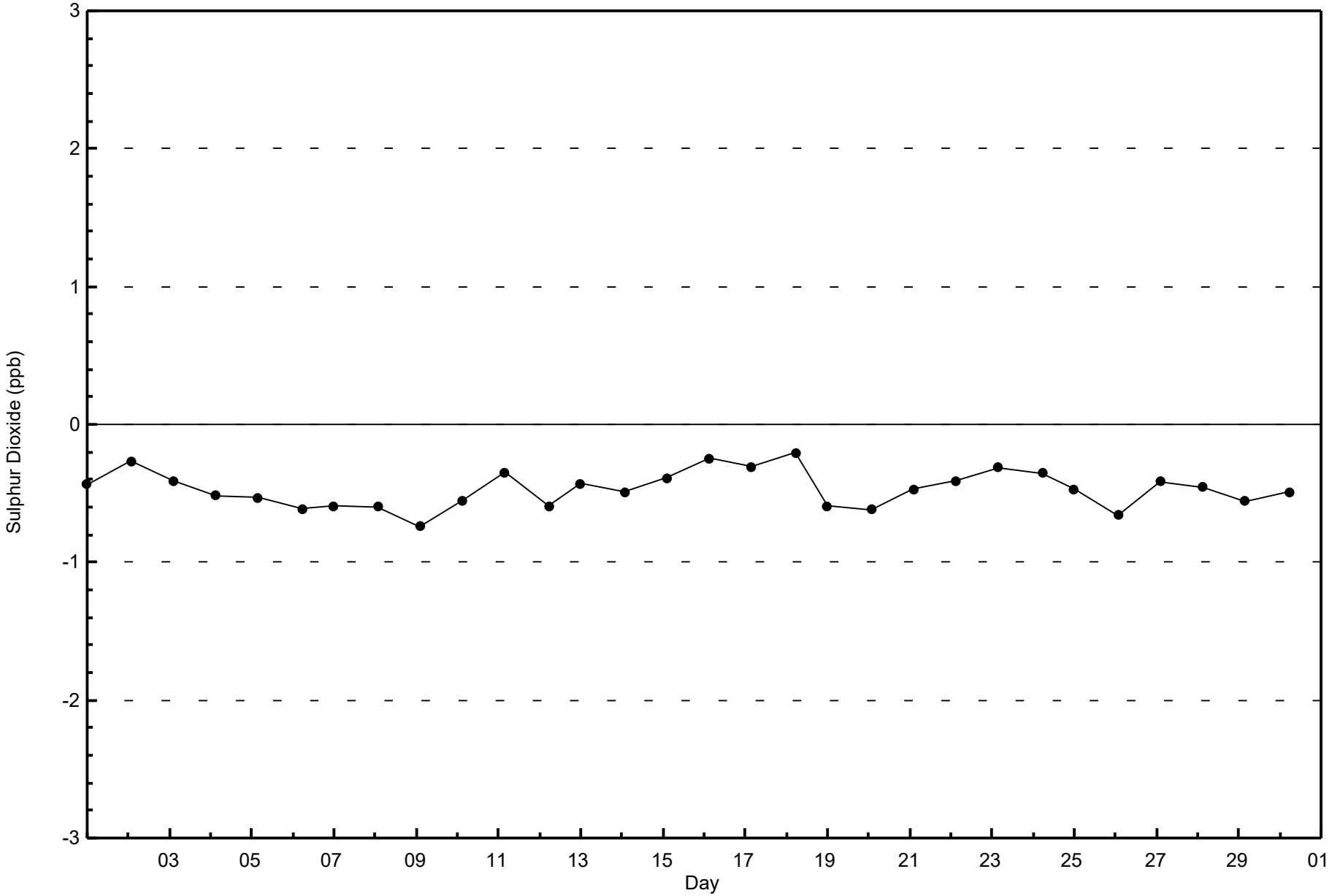
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Wapasu - June 2026

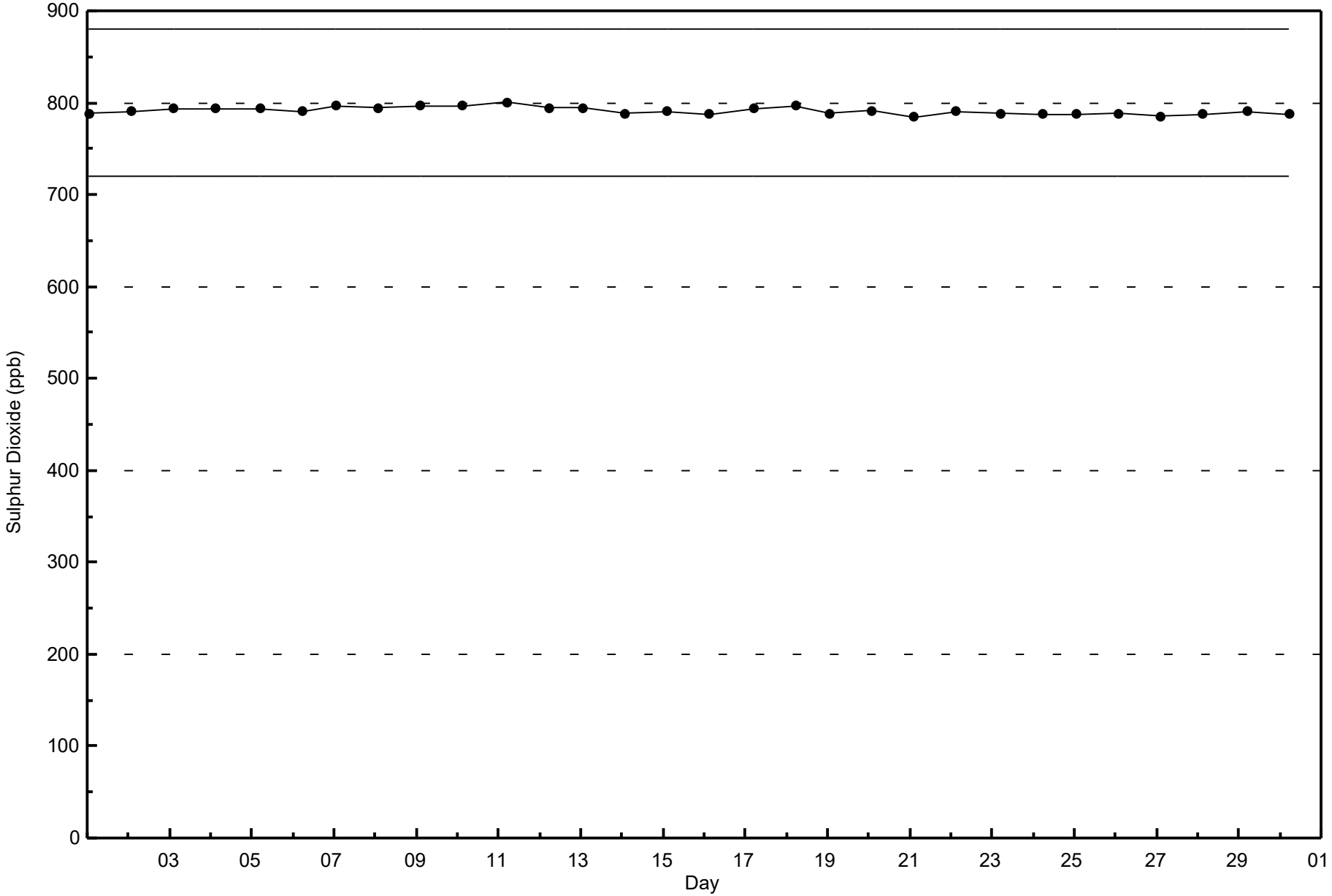


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Wapasu - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Wapasu - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.2 ppb on Jun 28 01:00 Maximum Daily Average: 0.3 ppb on Jun 28

Minimum Value: 0.0 ppb on Jun 1 15:00 Minimum Daily Average: 0.0 ppb on Jun 2
Maximum Diurnal Average: 0.2 ppb at hour 7 Minimum Diurnal Average: 0.0 ppb at hour 16
Monthly Average: 0.09 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.1 P_{90} = 0.2 P_{99} = 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-Jun	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	0.0	0.0	0.0	0.0	0.0	0.1
2-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3-Jun	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	0.1	0.0	0.0	0.1
4-Jun	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	0.1	0.1	0.0	0.0	0.1
5-Jun	0.0	0.0	0.0	0.1	0.1	Z	0.4	0.3	0.1	0.1	0.1	0.1	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.2	0.1	0.4
6-Jun	Z	0.2	0.3	0.3	0.3	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	0.3
7-Jun	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	0.2	0.1	0.0	0.0	0.1	0.2
8-Jun	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	C	C	C	C	C	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
9-Jun	0.1	0.1	0.2	Z	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.2
10-Jun	0.1	0.0	0.1	0.1	Z	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
11-Jun	0.0	0.0	0.1	0.1	0.1	Z	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
12-Jun	Z	0.1	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	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2
13-Jun	0.2	Z	0.3	0.4	0.6	0.4	0.5	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.6
14-Jun	0.1	0.1	Z	0.3	0.2	0.4	0.3	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	0.4
15-Jun	0.1	0.1	0.1	Z	0.9	0.6	0.2	0.2	0.1	0.0	0.0	0.0	0.0	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.1	0.9
16-Jun	0.0	0.0	0.0	0.2	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.2
17-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
18-Jun	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.1	0.3
19-Jun	0.2	Z	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.3
20-Jun	0.0	0.0	Z	0.1	0.0	0.1	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
21-Jun	0.0	0.0	1.0	Z	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	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	1.0
22-Jun	0.1	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	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1
23-Jun	0.1	0.1	0.2	0.2	0.1	Z	0.9	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	0.2	0.9
24-Jun	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
25-Jun	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	0.0	0.1	0.0	0.0	0.1	0.1
26-Jun	0.1	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
27-Jun	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	1.0	0.1	1.0
28-Jun	1.2	0.7	0.7	1.2	Z	1.1	0.8	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	0.0	0.0	0.0	0.3	1.2
29-Jun	0.0	0.0	0.1	0.7	0.5	Z	0.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.7
30-Jun	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	0.0	0.0	0.0	0.0	0.0	0.1
	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	Diurnal Average	
	1.2	0.7	1.0	1.2	0.9	1.1	0.9	0.6	0.3	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	0.7	1.0	Diurnal Maximum	

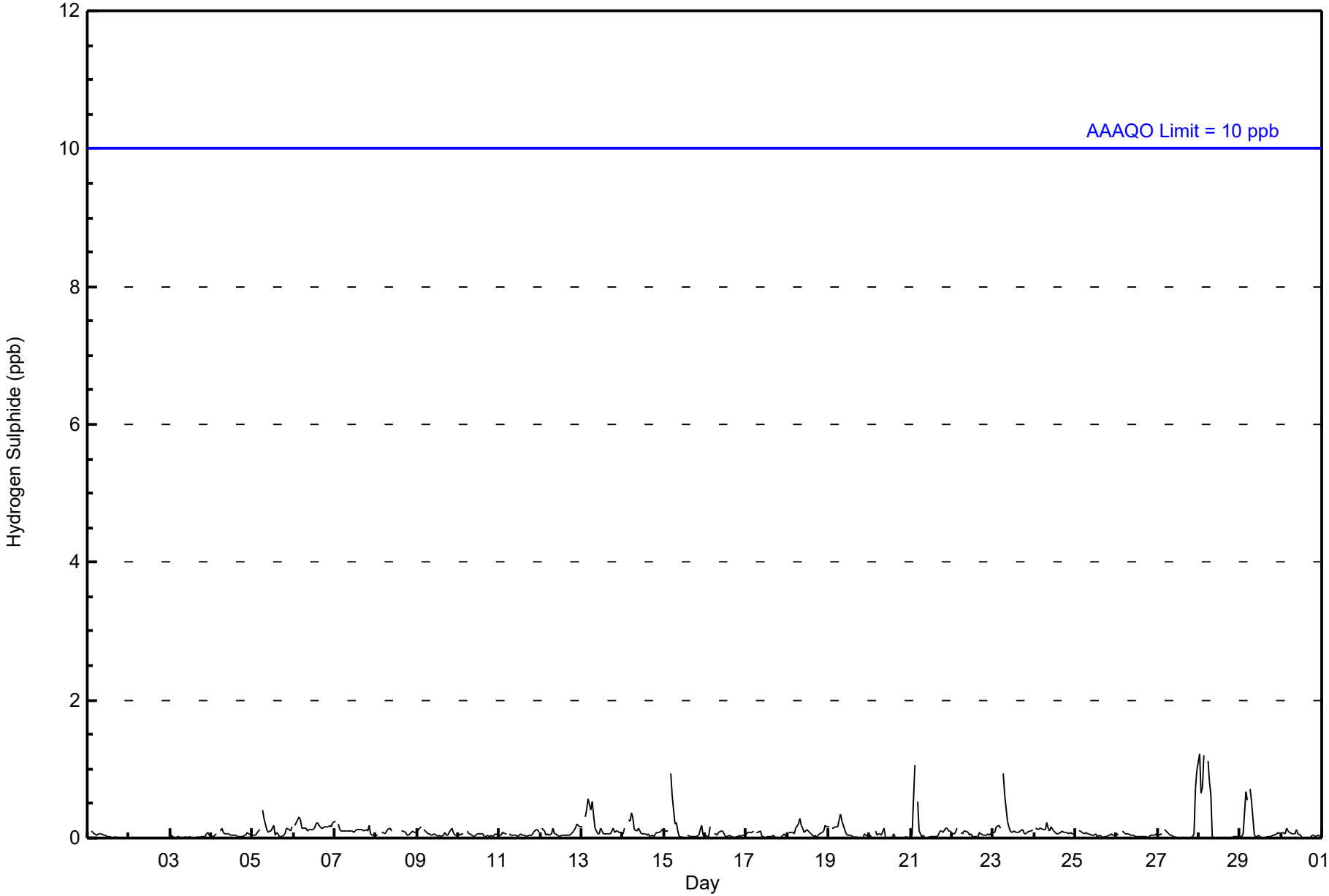
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Wapasu - June 2026



Hydrogen Sulphide (H_2S) - ppb

Wapasu - June 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 - June 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	124	63	42	33	40	45	56	83	40	19	35	27	16	24	11	25	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	124	63	42	33	40	45	56	83	40	19	35	27	16	24	11	25	683

Total Number of Valid Hours: 683

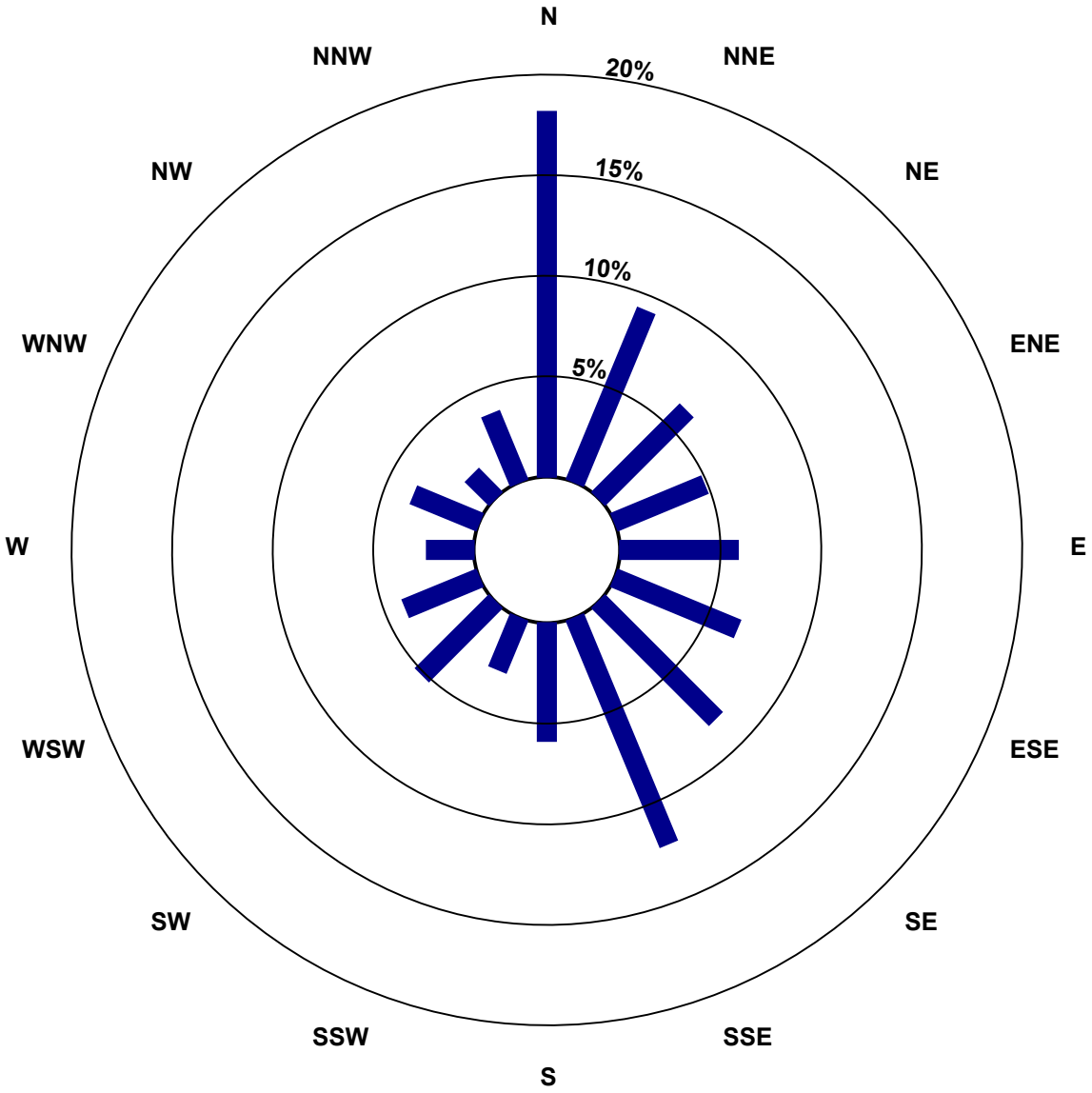
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H_2S) - ppb

Wapasu



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

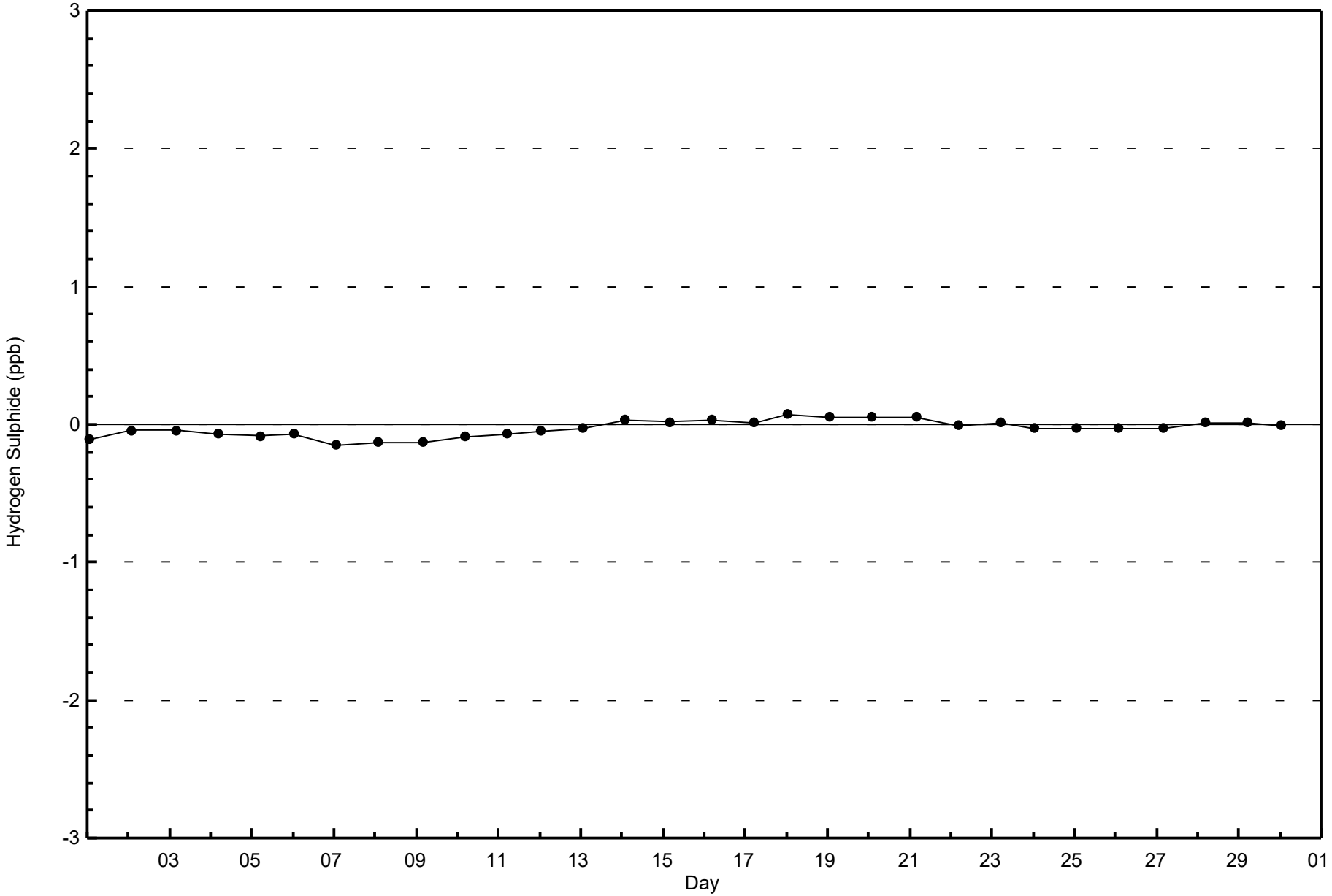
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Wapasu - June 2026

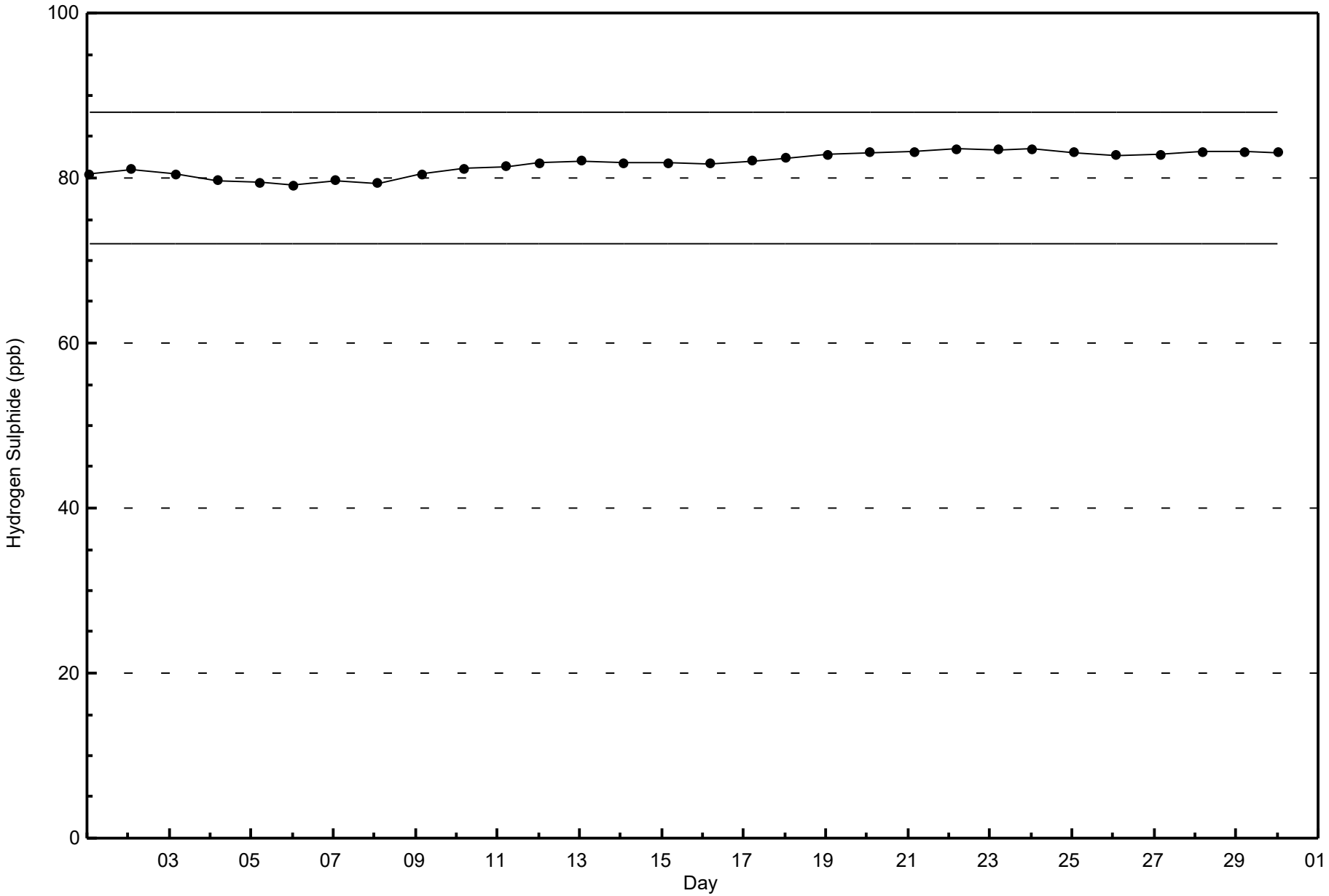


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Wapasu - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Wapasu - June 2026

Maximum Value: 2.7 ppm on Jun 18 23:00

Maximum Daily Average: 2.4 ppm on Jun 18

Minimum Value: 2.1 ppm on Jun 2 17:00

Minimum Daily Average: 2.1 ppm on Jun 2

Maximum Diurnal Average: 2.3 ppm at hour 23

Minimum Diurnal Average: 2.2 ppm at hour 17

Monthly Average: 2.22 ppm

Percentiles: P_1 = 2.1 P_{10} = 2.1 Q_1 = 2.1 Median = 2.2 Q_3 = 2.3 P_{90} = 2.4 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-Jun	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
2-Jun	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
3-Jun	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	2.2	2.2	2.2	2.1	2.2
4-Jun	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	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.1	2.3
5-Jun	2.2	2.2	2.2	2.2	Z	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	2.2	2.2	2.2	2.2	2.2	2.3
6-Jun	2.3	2.2	2.2	2.3	2.3	Z	2.3	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.3
7-Jun	Z	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.2
8-Jun	2.1	Z	2.1	2.2	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.2	2.2	2.3
9-Jun	2.3	2.3	Z	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	2.3	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.3
10-Jun	2.2	2.2	2.2	Z	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.2	2.3
11-Jun	2.2	2.2	2.2	2.2	Z	2.2	2.1	2.1	2.1	2.1	C	C	C	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.3	2.2	2.4
12-Jun	2.3	2.3	2.3	2.2	2.2	Z	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.4	2.5	2.7	2.6	2.5	2.4	2.7
13-Jun	Z	2.3	2.3	2.3	2.4	2.3	2.5	2.5	2.4	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.5
14-Jun	2.2	Z	2.3	2.3	2.3	2.4	2.5	2.3	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.3	2.4	2.4	2.3	2.5
15-Jun	2.3	2.3	Z	2.3	2.3	2.3	2.2	2.2	2.3	2.2	2.2	2.3	2.2	M	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3
16-Jun	2.2	2.2	2.2	Z	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	2.3	2.3	2.3	2.4	2.2	2.4
17-Jun	2.3	2.4	2.3	2.2	Z	2.2	2.2	2.3	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.4	2.4	2.5
18-Jun	2.4	2.4	2.4	2.3	2.3	Z	2.5	2.6	2.4	2.4	2.4	2.4	2.5	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.4	2.5	2.7	2.5	2.4	2.7
19-Jun	Z	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.3	2.3	2.4
20-Jun	2.2	Z	2.2	2.3	2.2	2.2	2.2	2.2	2.5	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.5
21-Jun	2.2	2.2	Z	2.4	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.3	2.3	2.5	2.4	2.5	2.6	2.6	2.5	2.3	2.6
22-Jun	2.3	2.3	2.3	Z	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	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.3
23-Jun	2.3	2.3	2.3	2.3	Z	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.3
24-Jun	2.2	2.2	2.2	2.2	2.2	Z	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	2.1	2.2	2.2	2.2
25-Jun	Z	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.3
26-Jun	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	2.1	2.2	2.1	2.2	2.1	2.2
27-Jun	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	2.3	2.3	2.3	2.2	2.3
28-Jun	2.4	2.3	2.3	Z	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.2	2.2	2.2	2.2	2.4
29-Jun	2.2	2.3	2.3	2.3	Z	2.4	2.4	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.4	2.2	2.4
30-Jun	2.3	2.2	2.3	2.6	2.5	Z	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.3	2.3	2.6
	2.2	2.3	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	2.3	2.3	2.3	Diurnal Average	
	2.4	2.4	2.4	2.6	2.5	2.4	2.5	2.6	2.5	2.4	2.4	2.4	2.5	2.4	2.4	2.4	2.4	2.4	2.5	2.4	2.5	2.7	2.7	2.5	Diurnal Maximum	

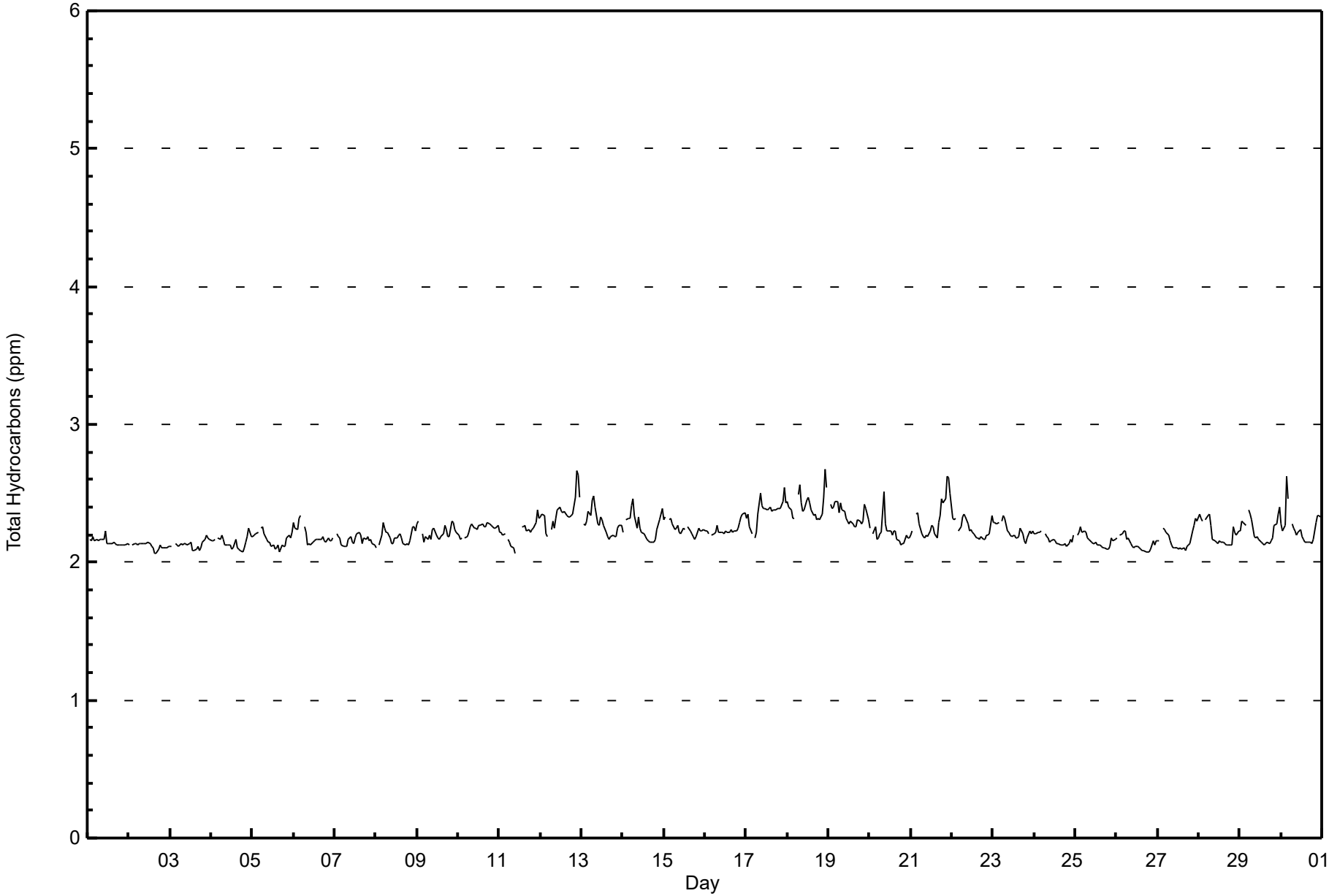
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Wapasu - June 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

Wapasu - June 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	121	63	42	33	42	41	60	82	40	21	34	27	16	25	12	27	686
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	121	63	42	33	42	41	60	82	40	21	34	27	16	25	12	27	686

Total Number of Valid Hours: 686

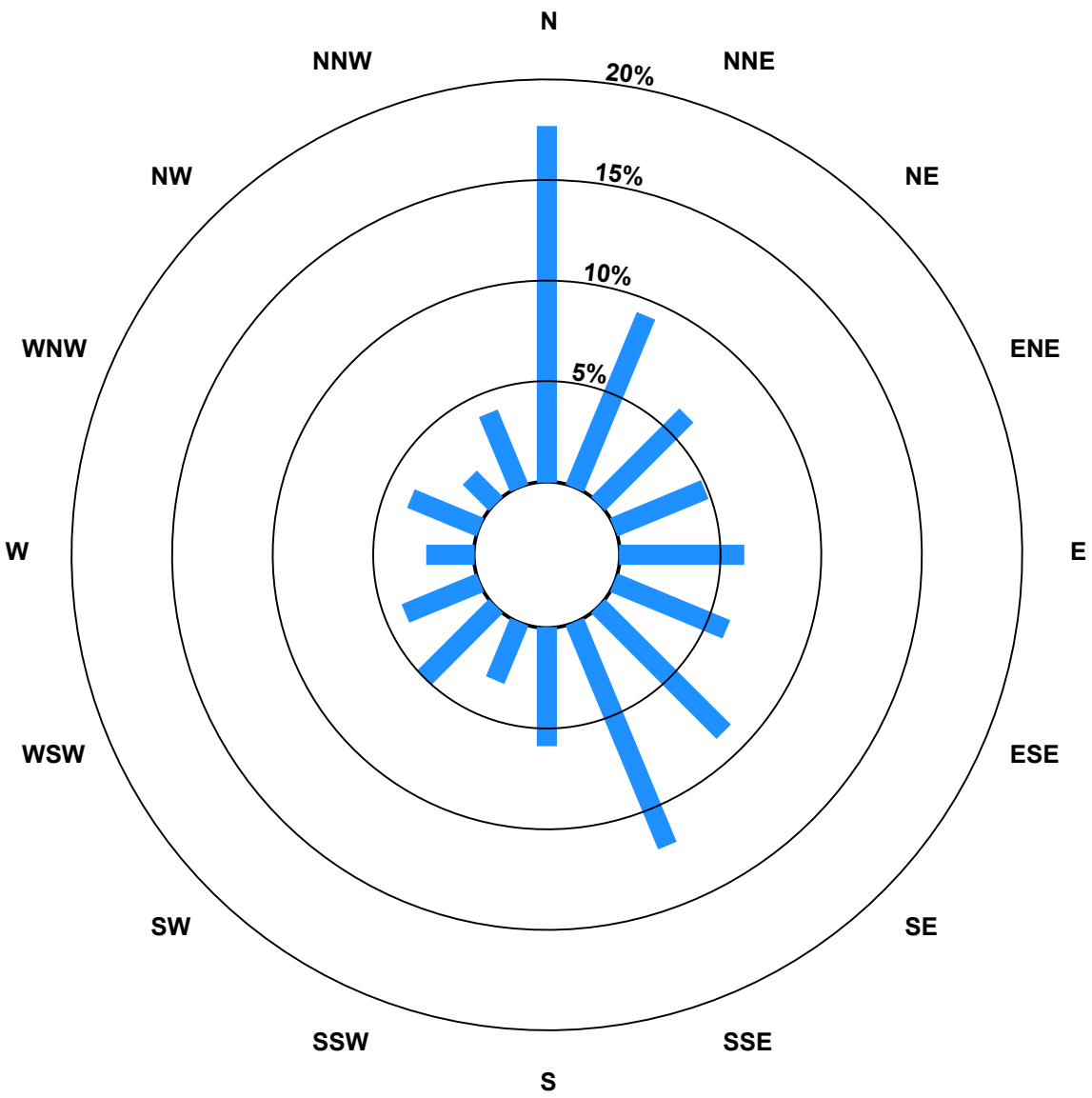
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Wapasu



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

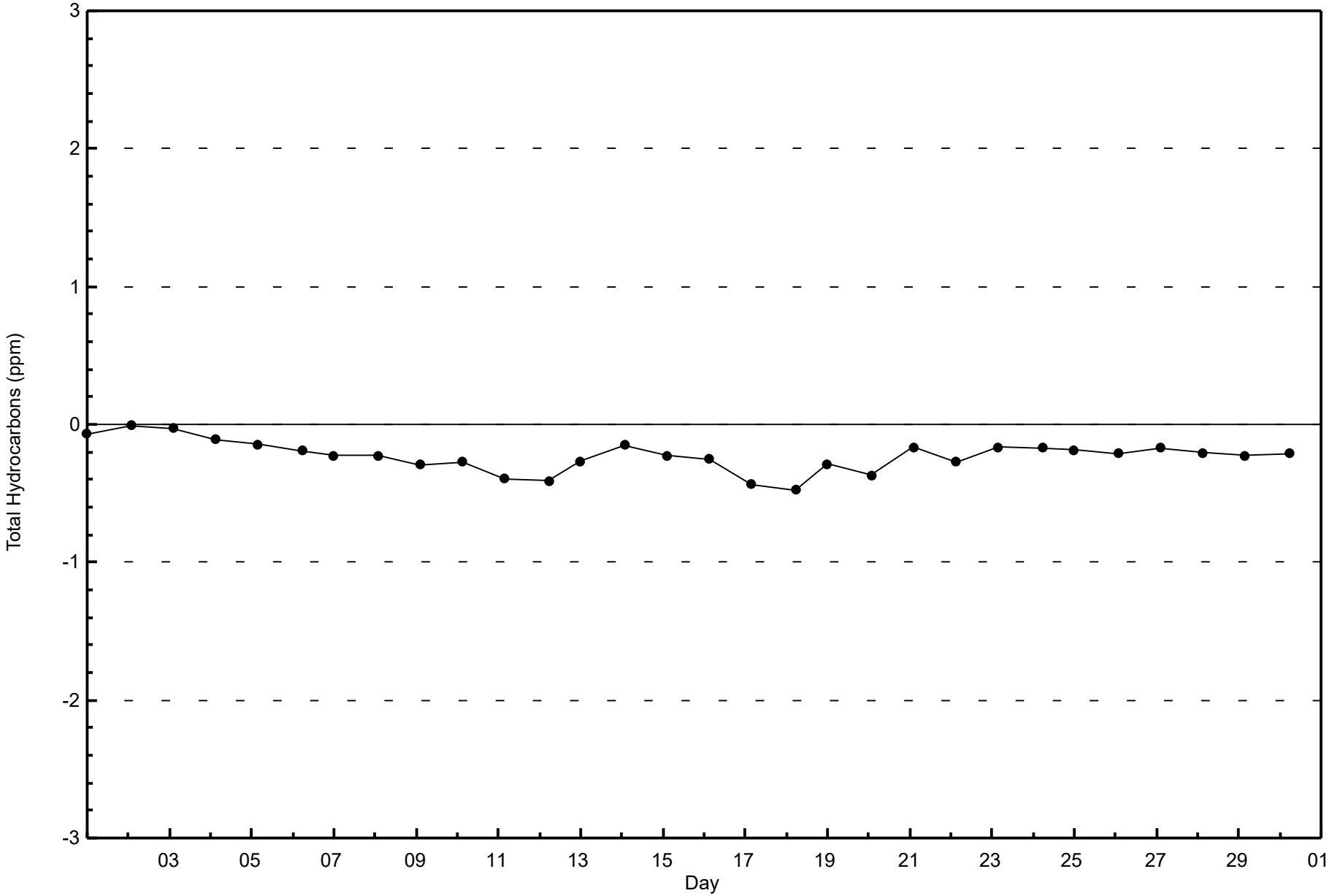
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Wapasu - June 2026

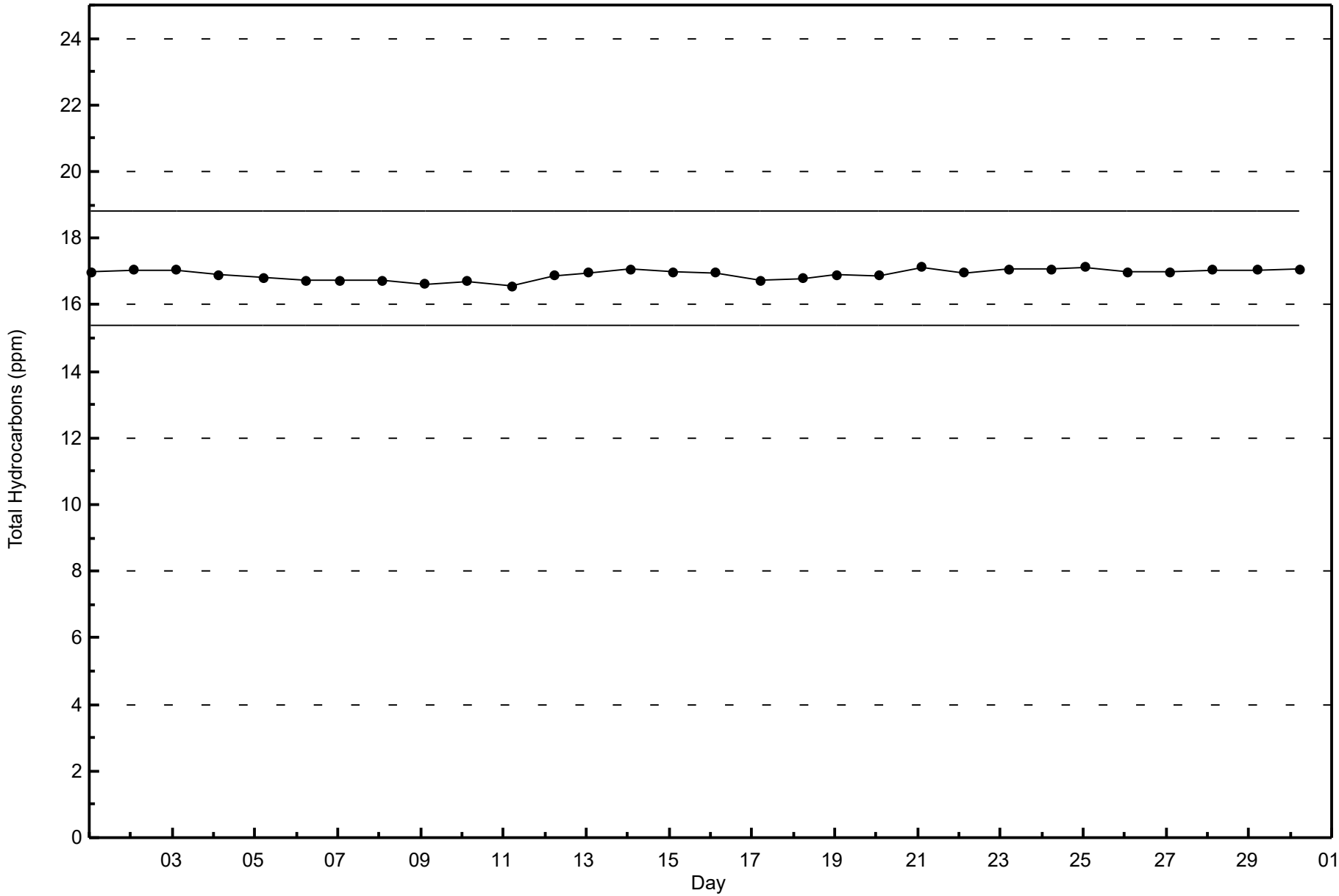


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Wapasu - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Wapasu - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 58.5 ppb on Jun 29 17:00
Maximum Daily Average: 42.8 ppb on Jun 29

Minimum Value: 0.3 ppb on Jun 13 02:00
Minimum Daily Average: 12.3 ppb on Jun 19
Maximum Diurnal Average: 33.8 ppb at hour 16
Minimum Diurnal Average: 16.6 ppb at hour 4
Monthly Average: 26.81 ppb
Percentiles: P_1 = 1.0 P_{10} = 10.5 Q_1 = 18.2 Median = 27.1 Q_3 = 35.8 P_{90} = 42.9 P_{99} = 55.0

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-Jun	30.4	27.4	Z	25.8	24.8	28.0	30.6	31.2	29.1	27.2	28.6	31.3	30.7	27.7	27.6	28.4	28.9	29.7	30.1	31.4	30.5	28.8	28.0	25.2	28.7	31.4
2-Jun	24.2	24.4	24.4	Z	26.0	25.6	26.5	27.1	28.2	28.2	29.1	29.0	31.9	35.4	38.2	39.6	39.9	38.2	37.2	37.2	36.9	36.2	33.9	30.6	31.6	39.9
3-Jun	30.9	28.5	27.9	27.3	Z	22.3	26.5	26.0	26.4	24.9	24.4	23.7	24.3	23.7	24.1	24.0	22.2	21.4	20.6	19.5	19.2	11.9	13.1	14.9	22.9	30.9
4-Jun	15.6	15.2	12.2	10.4	10.4	Z	18.8	25.4	28.8	26.5	C	C	C	C	34.4	35.9	38.9	38.9	39.7	36.6	33.4	25.4	22.8	25.9	26.1	39.7
5-Jun	Z	27.5	23.6	20.7	19.4	18.9	21.3	26.2	31.6	36.1	38.1	43.1	42.8	46.7	47.6	44.3	39.6	38.8	36.8	33.5	26.3	21.3	17.7	15.0	31.2	47.6
6-Jun	12.1	Z	15.8	13.5	15.4	26.5	25.8	22.2	19.9	18.7	18.2	17.0	16.1	17.9	18.8	19.0	19.5	20.9	21.2	21.3	22.4	23.1	23.5	18.9	19.5	26.5
7-Jun	14.1	12.0	Z	9.8	11.8	12.4	15.3	17.0	19.7	21.8	23.0	25.4	23.9	24.7	27.2	28.0	22.0	22.8	21.4	24.1	26.3	29.4	27.9	24.3	21.1	29.4
8-Jun	28.4	25.9	21.6	Z	9.4	11.4	15.3	16.4	16.6	17.6	16.7	17.4	18.1	18.4	16.8	20.1	19.1	21.8	26.2	28.9	27.2	24.3	23.8	21.4	20.1	28.9
9-Jun	18.2	18.9	17.7	21.2	Z	24.6	27.0	25.6	27.6	27.3	27.3	28.8	29.4	30.9	31.7	29.7	25.8	30.9	34.0	26.8	10.6	16.0	14.1	12.2	24.2	34.0
10-Jun	10.4	9.4	8.8	11.1	12.8	Z	20.4	21.2	24.0	28.1	26.2	21.3	21.5	20.3	18.0	16.4	15.3	13.1	13.1	11.8	10.9	10.5	9.4	9.4	15.8	28.1
11-Jun	Z	11.9	12.2	9.7	9.6	9.9	11.2	12.9	12.5	13.6	14.1	17.0	17.2	19.4	18.9	18.2	19.6	17.8	18.7	17.4	14.1	8.4	5.4	10.7	13.9	19.6
12-Jun	6.6	Z	11.0	15.4	15.8	18.1	17.4	17.1	23.2	24.7	28.6	31.5	32.5	32.5	30.6	31.5	31.8	32.7	31.6	29.6	20.9	7.9	3.0	1.7	21.5	32.7
13-Jun	0.6	0.3	Z	0.7	0.5	4.2	15.7	23.5	29.1	35.1	36.5	36.1	38.5	40.7	40.4	36.9	37.5	38.3	35.2	33.0	29.4	26.4	23.0	18.8	25.2	40.7
14-Jun	21.2	21.1	19.7	Z	20.0	21.0	27.4	32.7	37.3	34.0	38.7	38.9	40.0	39.6	39.1	38.0	38.8	39.2	38.5	37.5	32.7	26.5	12.3	9.7	30.6	40.0
15-Jun	12.7	8.0	6.4	5.8	Z	8.6	23.9	29.7	32.1	34.6	35.6	36.5	37.8	M	38.9	40.3	42.1	42.0	37.2	34.0	32.8	34.3	33.1	33.0	29.1	42.1
16-Jun	32.2	33.4	34.3	31.3	31.5	Z	29.6	29.7	31.4	32.4	34.0	35.8	35.2	35.5	36.5	38.6	37.9	39.8	39.3	37.1	34.7	32.3	29.0	25.0	33.8	39.8
17-Jun	Z	14.8	14.6	12.7	7.8	20.2	22.7	23.0	23.3	28.5	30.3	30.7	32.6	34.4	35.8	36.0	35.2	35.3	35.7	34.9	32.3	25.4	11.6	14.4	25.7	36.0
18-Jun	7.3	Z	4.5	3.9	2.7	2.6	3.3	7.0	12.1	17.2	21.6	21.0	17.6	18.6	21.1	23.9	24.0	26.6	25.3	23.8	16.0	12.6	5.3	2.4	13.9	26.6
19-Jun	1.9	0.8	Z	0.9	0.7	1.4	6.4	9.8	13.9	18.1	19.2	19.2	20.4	20.0	19.4	17.9	19.2	19.5	20.4	18.3	17.2	7.9	4.3	6.0	12.3	20.4
20-Jun	4.7	4.5	1.9	Z	4.6	6.7	8.7	14.8	7.4	16.9	20.8	20.7	20.3	19.4	17.1	18.9	18.5	20.7	24.9	22.5	20.2	13.5	13.9	11.2	14.5	24.9
21-Jun	9.7	9.3	4.8	2.8	Z	8.4	11.3	11.2	15.6	17.1	19.4	19.7	19.3	20.2	21.2	21.2	18.6	16.1	13.5	13.4	6.7	2.5	1.0	2.4	12.4	21.2
22-Jun	6.2	3.7	2.3	4.8	14.9	Z	17.7	18.9	21.1	25.0	27.2	28.0	30.6	31.1	32.0	32.8	32.1	32.0	32.2	30.0	27.9	24.9	25.5	16.3	22.5	32.8
23-Jun	Z	22.2	19.2	17.5	15.9	16.9	16.5	20.2	24.9	29.8	35.3	38.1	41.2	42.0	42.0	36.1	33.3	36.4	37.9	37.5	33.9	30.5	29.8	28.0	29.8	42.0
24-Jun	27.7	Z	27.3	26.1	25.1	25.6	23.9	29.0	32.6	34.1	38.6	40.2	41.6	42.7	45.1	46.2	45.2	39.2	34.3	37.1	35.2	34.4	29.2	28.3	34.3	46.2
25-Jun	29.0	29.8	Z	29.1	28.1	28.1	29.8	35.0	39.0	42.4	40.6	41.4	42.7	45.0	46.4	46.2	46.0	46.1	44.4	42.4	40.4	38.0	37.6	36.9	38.4	46.4
26-Jun	36.1	35.3	34.0	Z	32.7	32.5	35.2	38.7	41.7	45.3	46.4	46.1	45.2	44.4	45.6	46.3	46.3	46.2	46.2	45.2	43.0	40.6	40.7	37.5	41.4	46.4
27-Jun	37.6	37.0	35.0	32.6	Z	32.2	33.9	37.5	41.2	42.8	43.8	44.5	44.8	44.6	44.6	44.8	45.5	44.9	43.8	40.6	32.9	28.3	24.3	26.7	38.4	45.5
28-Jun	26.6	29.6	32.2	29.0	30.7	Z	33.2	36.9	44.7	43.1	43.7	46.3	49.2	50.5	50.4	49.4	49.3	49.6	49.6	49.9	38.5	36.4	37.0	38.2	41.0	50.5
29-Jun	Z	35.1	35.4	31.2	21.5	15.4	27.0	34.5	40.9	48.8	55.1	57.0	51.6	48.3	48.3	49.8	58.5	56.2	56.6	54.5	44.6	41.9	35.4	35.8	42.8	58.5
30-Jun	39.2	Z	32.0	20.2	22.7	29.0	35.9	38.9	42.1	45.3	44.7	46.9	47.0	47.9	51.9	55.9	57.6	55.0	49.5	45.8	36.3	32.9	37.5	38.1	41.4	57.6
	19.3	19.4	19.2	16.6	16.6	18.0	21.9	24.6	27.3	29.5	31.2	32.2	32.6	32.9	33.7	33.8	33.6	33.7	33.2	31.8	27.8	24.4	21.8	20.6	Diurnal Average	
	39.2	37.0	35.4	32.6	32.7	32.5	35.9	38.9	44.7	48.8	55.1	57.0	51.6	50.5	51.9	55.9	58.5	56.2	56.6	54.5	44.6	41.9	40.7	38.2	Diurnal Maximum	

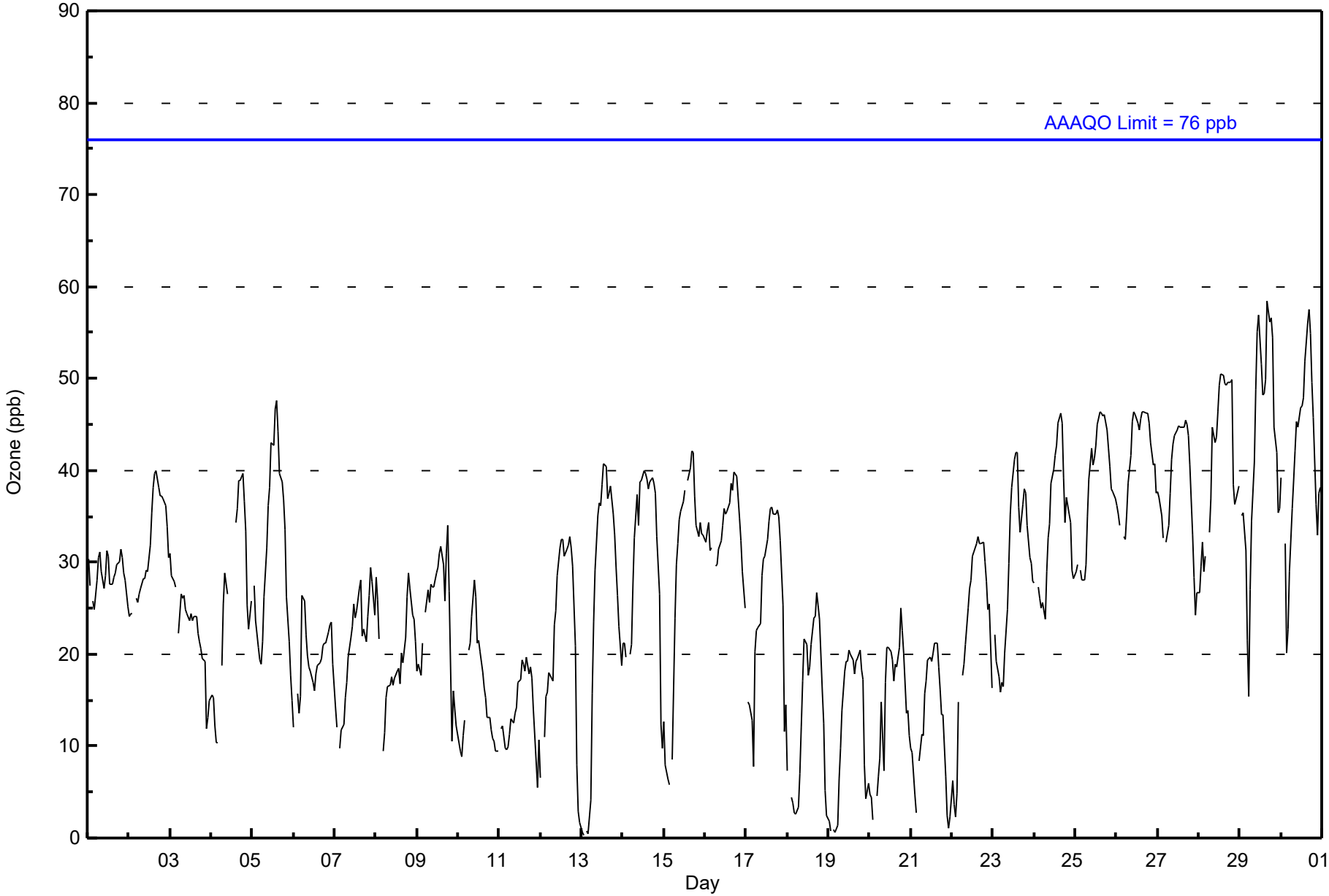
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Wapasu - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	223	32.55	32.55
21 - 50	451	65.84	98.39
51 - 82	11	1.61	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

Wapasu - June 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	16	20	9	14	10	10	20	14	4	6	5	7	7	5	13	222
21 - 50	60	48	20	17	25	34	48	60	28	12	28	21	10	18	8	14	451
51 - 82	0	1	1	5	4	0	0	0	0	0	0	0	0	0	0	0	11
> 83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	122	65	41	31	43	44	58	80	42	16	34	26	17	25	13	27	684

Total Number of Valid Hours: 684

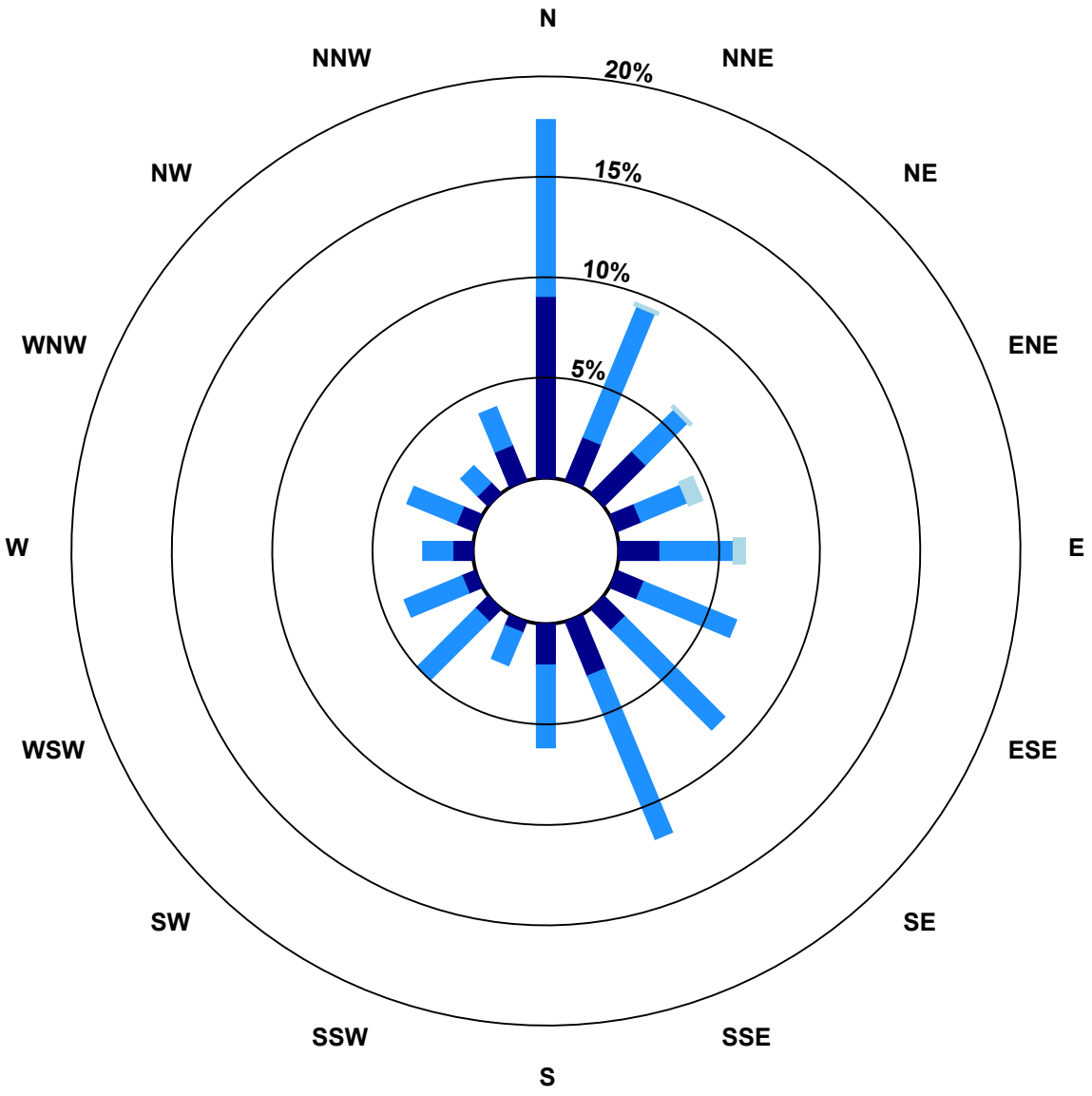
Total Number of Hours: 720

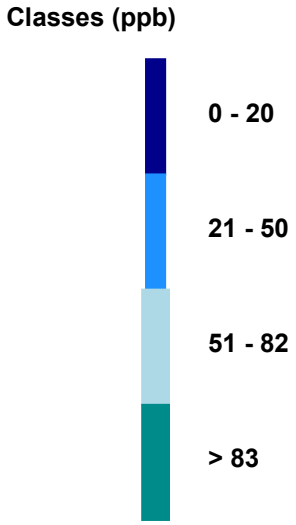
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Ozone (O_3) - ppb

Wapasu





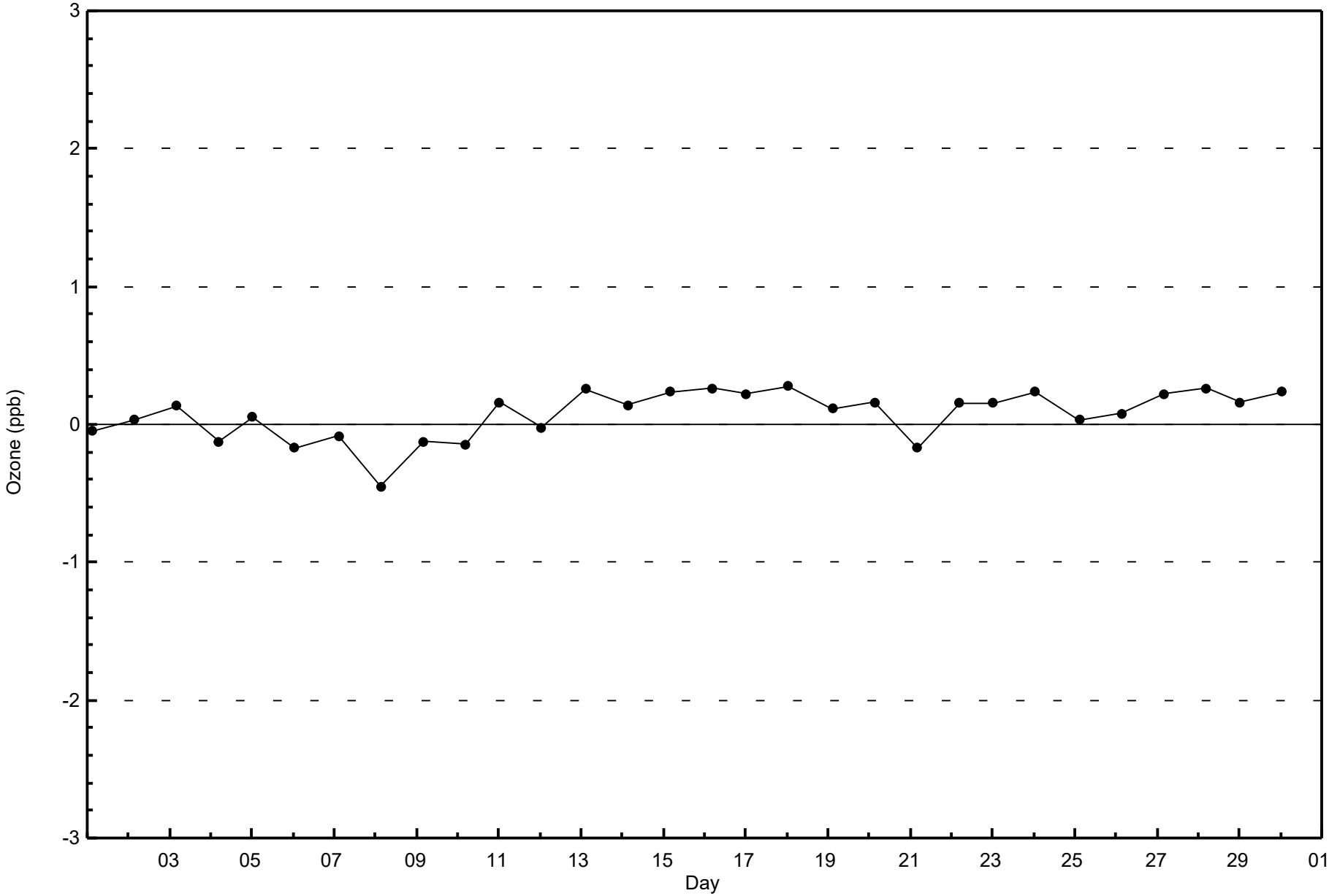
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Wapasu - June 2026

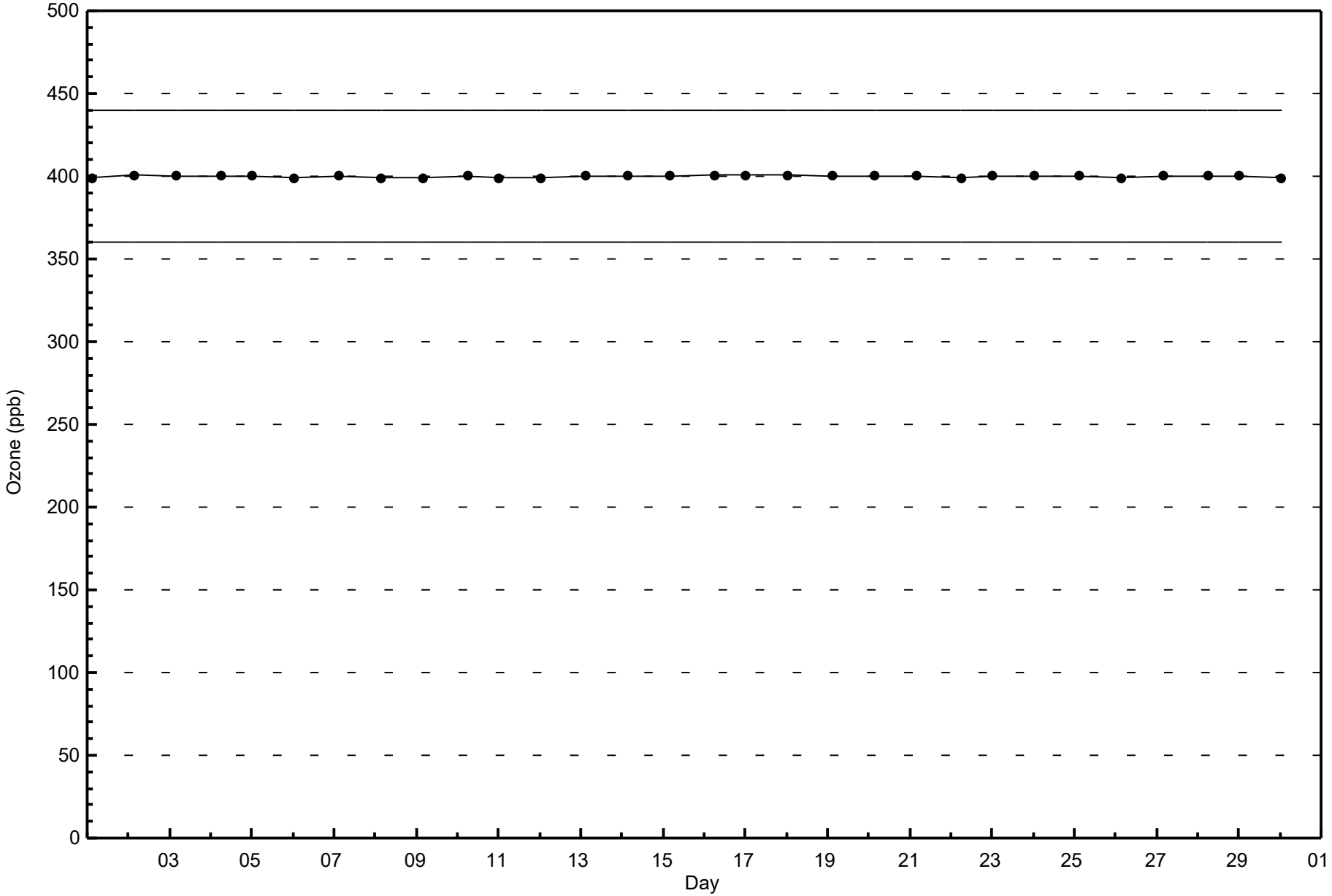


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Wapasu - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Wapasu - June 2026

Maximum Value: 35.0 ppb on Jun 13 04:00

Maximum Daily Average: 4.7 ppb on Jun 13

Minimum Value: 0.0 ppb on Jun 1 01:00

Minimum Daily Average: 0.0 ppb on Jun 2

Maximum Diurnal Average: 1.6 ppb at hour 6

Minimum Diurnal Average: 0.0 ppb at hour 24

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} = 6.1

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-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
2-Jun	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-Jun	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
4-Jun	0.0	Z	0.0	0.0	0.0	0.5	1.6	0.8	0.3	0.4	0.2	0.0	0.0	0.0	0.1	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.6
5-Jun	0.0	0.0	Z	0.0	0.2	1.2	2.4	1.6	0.8	0.3	0.4	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.4
6-Jun	0.0	0.0	0.0	Z	0.0	0.1	0.2	0.1	0.0	0.0	0.1	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.3
7-Jun	0.1	0.0	0.0	0.0	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.7	1.1	1.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.1
8-Jun	0.0	0.0	0.0	0.0	0.1	Z	0.1	0.2	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	0.2
9-Jun	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.3	0.5	0.1	0.0	0.1	0.3	0.1	0.2	0.5	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.5
10-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.6	1.8	0.8	0.5	0.4	0.1	0.8	0.6	1.0	0.4	0.7	0.9	0.7	0.3	0.2	0.1	0.1	0.0	0.4	1.8
11-Jun	0.0	0.0	Z	0.1	0.2	0.5	0.6	0.3	0.9	1.1	1.1	0.1	0.7	0.6	0.8	0.5	0.3	0.3	0.2	0.1	0.2	0.2	0.2	0.1	0.4	1.1
12-Jun	0.3	0.5	0.1	Z	0.0	0.0	0.9	3.2	1.2	1.3	0.8	0.4	0.4	0.5	0.6	0.5	0.6	0.5	0.7	0.7	0.7	0.5	0.3	0.2	0.6	3.2
13-Jun	0.5	11.2	20.5	35.0	Z	22.3	6.9	4.1	1.9	0.5	0.4	1.5	1.2	0.4	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	4.7	35.0
14-Jun	0.0	0.0	0.0	0.1	0.2	Z	1.9	1.8	1.1	3.1	0.8	0.6	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	3.1
15-Jun	Z	0.0	0.0	0.0	1.2	3.3	0.3	0.1	0.1	0.1	0.7	C	C	C	C	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.3
16-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.5	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.5
17-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	1.5	3.1	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	0.3	3.1
18-Jun	0.1	0.1	0.0	Z	0.2	0.8	6.0	5.2	1.5	0.2	0.1	0.6	0.7	0.4	0.9	0.3	0.5	0.2	0.5	0.3	0.5	0.3	0.2	0.2	0.9	6.0
19-Jun	0.2	0.3	1.6	4.5	Z	6.0	4.9	9.2	6.0	2.6	2.2	0.6	0.6	1.1	0.6	0.2	0.2	0.4	0.4	0.2	0.2	0.3	0.2	0.2	1.9	9.2
20-Jun	0.2	0.1	0.1	0.1	0.1	Z	0.6	0.1	7.5	0.5	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	0.4	7.5
21-Jun	Z	0.0	0.0	0.1	1.5	1.2	0.0	0.0	0.0	0.1	0.0	0.3	0.7	0.9	0.3	0.1	2.6	2.4	2.9	1.1	1.0	0.6	1.3	0.0	0.7	2.9
22-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.4	1.0	0.2	0.1	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0
23-Jun	0.0	0.0	Z	0.0	0.3	0.7	2.6	2.9	1.2	0.5	0.0	0.0	0.2	0.0	0.0	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.9
24-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.6	0.2	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
25-Jun	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
26-Jun	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
27-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
28-Jun	0.0	Z	0.0	0.0	0.0	0.4	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	0.0	0.0	0.0	0.4
29-Jun	0.0	0.0	Z	0.0	0.7	3.1	1.8	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	3.1
30-Jun	0.0	0.0	0.0	Z	0.4	0.4	0.0	0.0	0.2	0.2	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
	0.1	0.5	0.9	1.6	0.2	1.6	1.1	1.2	0.9	0.4	0.3	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	Diurnal Average	
	0.5	11.2	20.5	35.0	1.5	22.3	6.9	9.2	7.5	3.1	2.2	1.5	1.2	1.1	1.0	0.7	2.6	2.4	2.9	1.1	1.0	0.6	1.3	0.2	Diurnal Maximum	

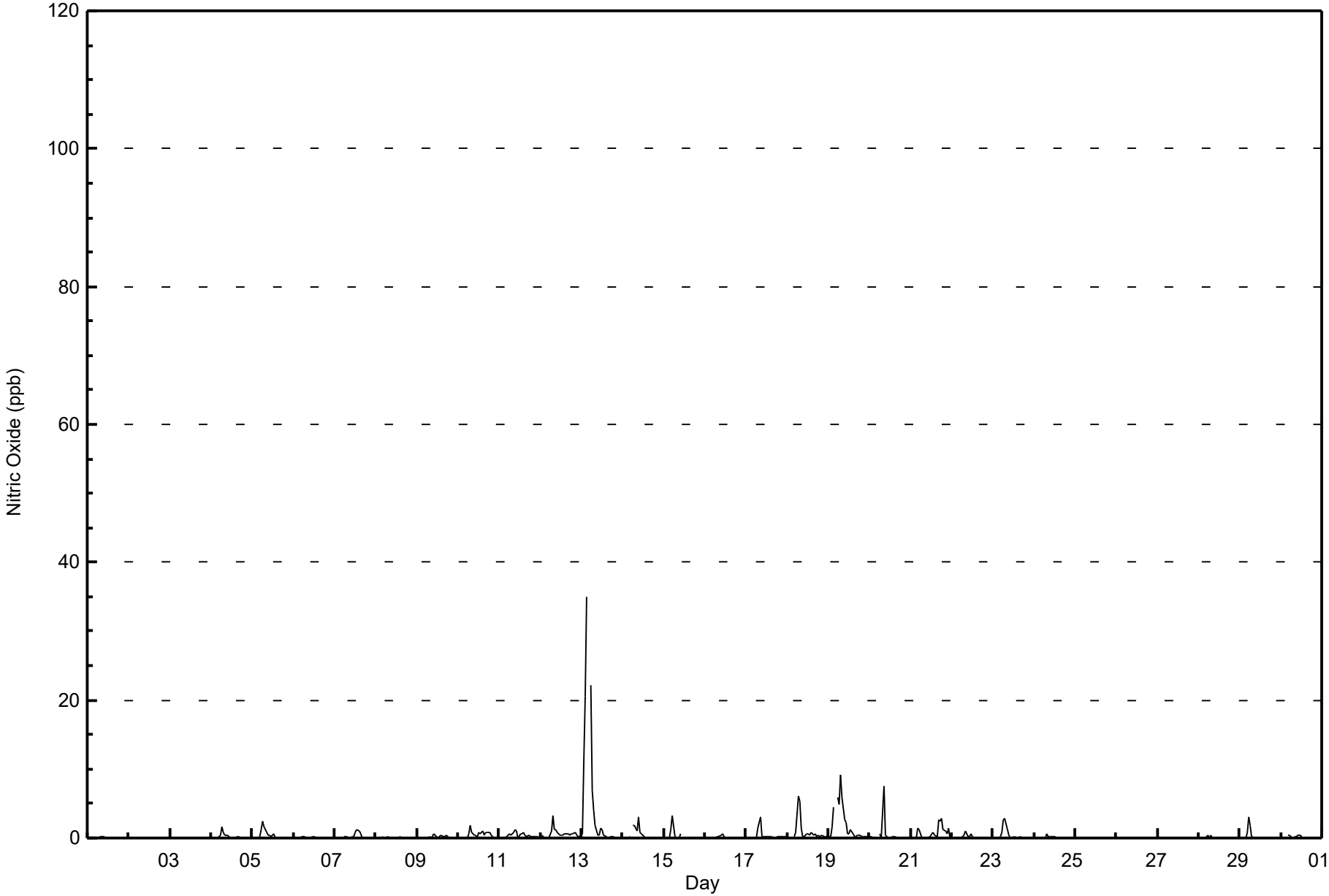
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Wapasu - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	683	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: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Wapasu - June 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	124	63	40	32	41	43	60	77	42	20	35	27	15	25	13	25	682
21 - 40	0	0	0	0	0	0	0	3	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	124	63	40	32	41	43	60	80	42	20	35	27	15	25	13	25	685

Total Number of Valid Hours: 685

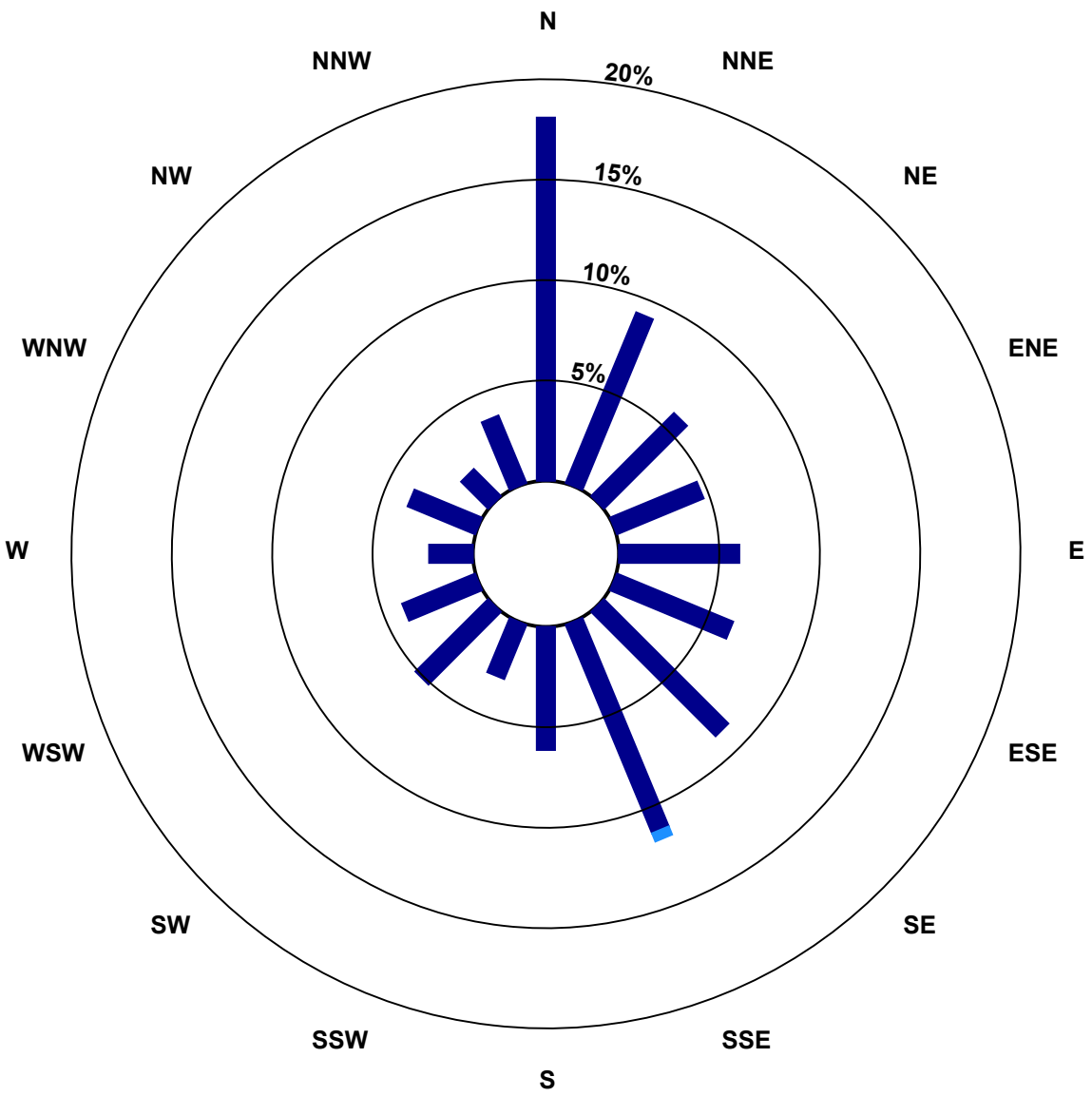
Total Number of Hours: 720

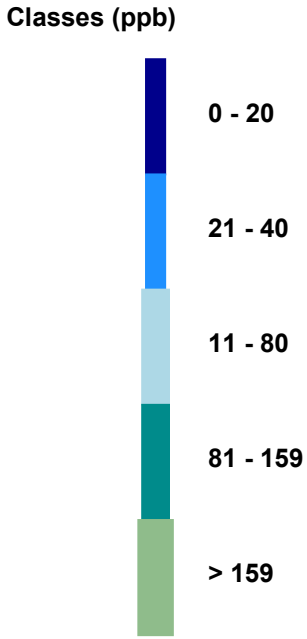
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Wapasu





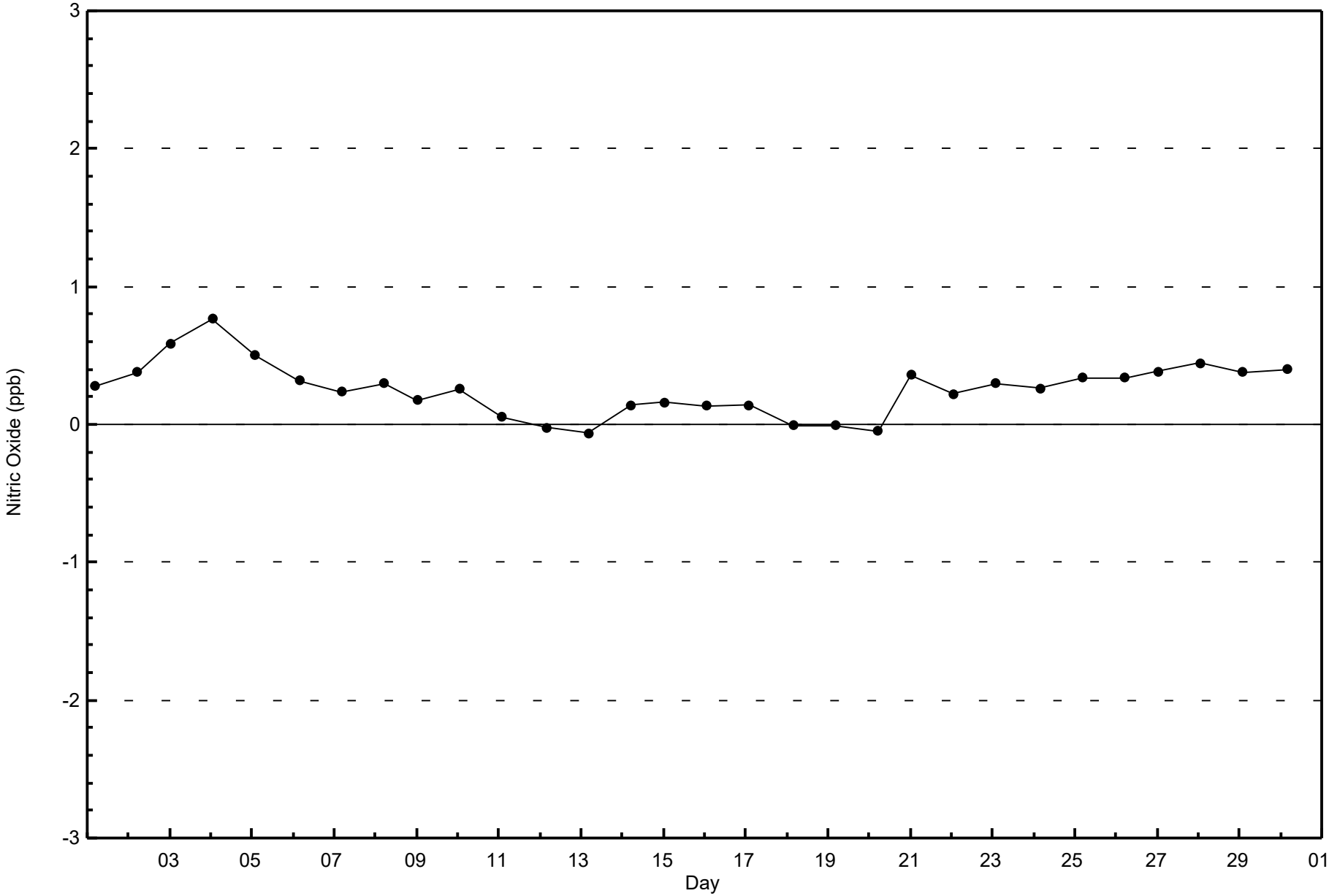
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Wapasu - June 2026

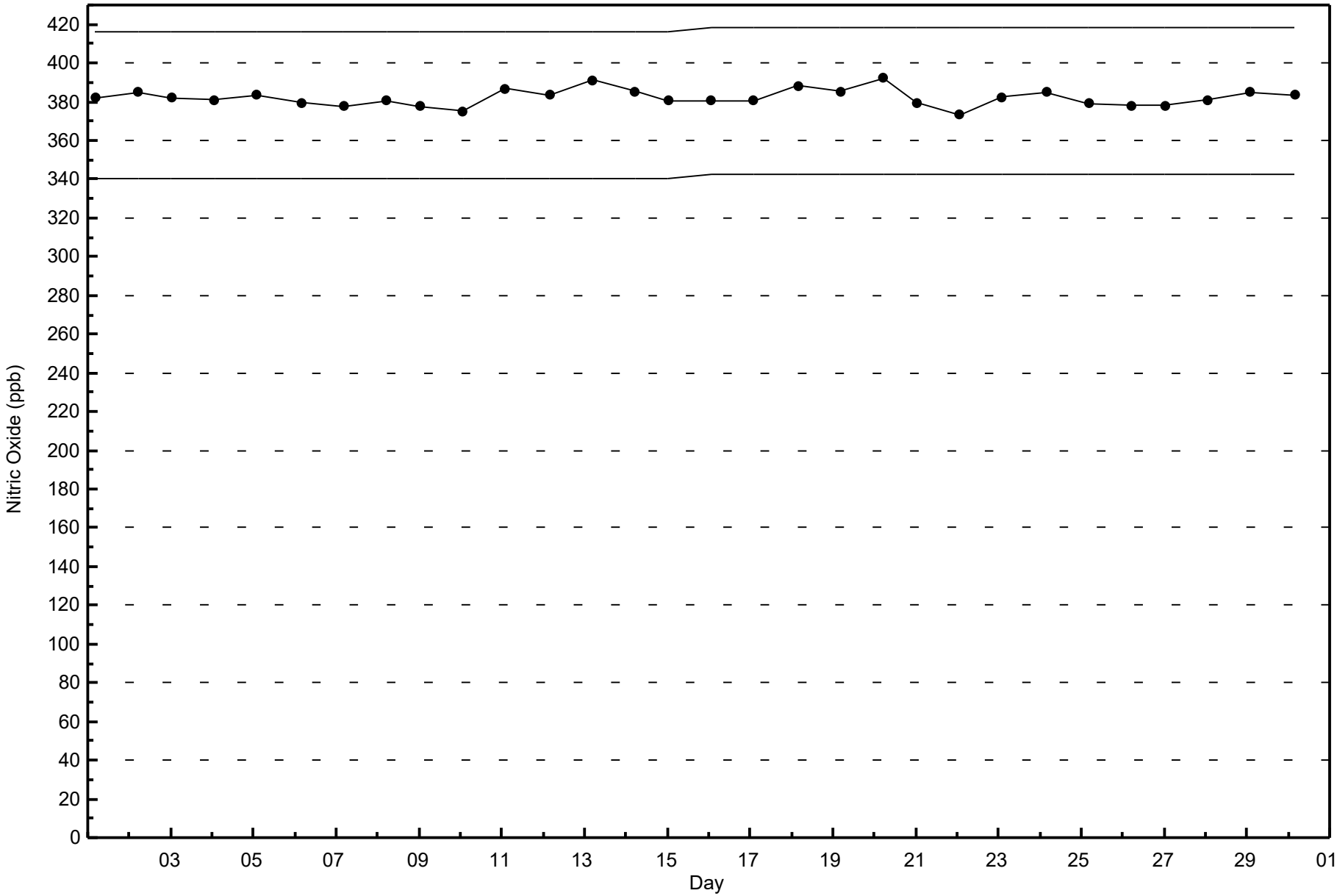


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Wapasu - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Wapasu - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 17.2 ppb on Jun 29 06:00
Maximum Daily Average: 4.1 ppb on Jun 12

Minimum Value: 0.1 ppb on Jun 17 22:00
Minimum Daily Average: 0.1 ppb on Jun 2
Maximum Diurnal Average: 3.4 ppb at hour 6
Minimum Diurnal Average: 0.9 ppb at hour 16
Monthly Average: 1.70 ppb
Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.4 Median = 0.9 Q_3 = 2.1 P_{90} = 4.1 P_{99} = 9.6

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-Jun	1.2	1.1	1.9	1.7	Z	1.1	2.3	2.2	1.7	1.3	0.8	0.3	0.4	0.4	0.4	0.5	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.8	2.3
2-Jun	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	0.1	0.1	0.1	0.1	0.2
3-Jun	Z	1.2	1.3	0.9	3.4	2.4	0.3	0.3	0.4	0.5	0.2	0.5	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.4	0.5	0.4	0.9	0.2	0.7	3.4
4-Jun	0.1	Z	1.3	1.2	0.8	1.5	3.7	2.2	1.5	1.4	1.5	0.7	1.1	0.8	0.9	1.5	2.0	1.3	1.6	1.8	1.4	2.1	3.7	2.2	1.6	3.7
5-Jun	1.1	0.9	Z	2.7	4.2	5.0	5.9	4.1	2.6	2.0	2.3	2.2	3.2	1.4	1.4	1.8	0.9	0.7	1.4	0.9	0.9	1.6	1.6	4.4	2.3	5.9
6-Jun	3.6	2.3	2.6	Z	4.6	5.6	3.7	2.3	0.9	1.0	1.0	1.7	1.4	0.8	1.0	0.9	0.7	1.2	2.0	2.0	1.4	1.9	1.4	3.5	2.1	5.6
7-Jun	4.0	2.9	3.2	3.2	Z	1.1	0.6	0.6	0.5	0.5	0.7	0.6	1.8	3.0	3.6	2.5	0.7	0.5	0.6	0.8	0.9	0.3	0.3	0.3	1.4	4.0
8-Jun	0.3	0.3	0.8	3.9	6.8	Z	2.4	2.8	0.5	0.3	0.3	0.3	0.4	0.7	1.4	1.1	0.7	0.7	1.1	1.1	2.9	5.5	4.7	3.9	1.9	6.8
9-Jun	Z	6.4	5.7	2.7	1.1	2.7	2.1	2.0	0.7	0.9	1.6	0.7	0.4	0.9	1.4	1.9	2.0	2.3	1.5	1.6	1.0	0.7	0.3	0.2	1.8	6.4
10-Jun	0.2	Z	0.2	0.3	0.6	0.7	2.2	4.5	2.6	1.7	1.6	0.5	2.1	2.2	2.2	0.9	1.6	2.5	2.2	3.3	3.7	3.9	5.1	6.0	2.2	6.0
11-Jun	3.7	5.2	Z	5.9	6.0	5.6	4.1	2.4	3.5	2.7	2.2	0.3	1.2	1.3	1.5	1.6	0.8	1.5	0.7	0.9	2.7	7.2	10.4	4.9	3.3	10.4
12-Jun	9.5	14.7	7.9	Z	0.7	0.5	2.3	6.1	2.7	2.2	1.5	0.9	0.7	0.9	1.1	1.1	1.3	1.3	2.6	4.7	11.5	12.6	5.2	2.2	4.1	14.7
13-Jun	1.7	3.7	3.7	3.4	Z	7.9	11.0	7.7	4.2	1.4	1.2	3.8	3.6	1.9	1.1	0.7	0.6	1.6	2.1	1.9	1.9	1.3	2.8	5.9	3.3	11.0
14-Jun	2.4	3.2	5.2	5.6	5.6	Z	6.5	5.9	3.9	7.8	3.0	2.3	1.7	0.9	0.6	0.3	0.2	0.3	0.3	0.7	3.6	0.3	0.4	0.4	2.7	7.8
15-Jun	Z	0.3	0.5	1.8	3.7	5.0	1.2	0.5	0.5	0.5	1.8	C	C	C	C	1.3	1.2	0.7	0.2	0.1	0.1	1.1	2.4	1.1	1.3	5.0
16-Jun	0.8	Z	1.1	2.2	0.7	0.5	0.7	0.7	0.9	1.3	1.6	1.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.6	2.2
17-Jun	0.3	0.6	Z	0.1	0.1	0.2	0.1	2.4	4.4	0.7	0.4	0.3	0.4	0.4	0.4	0.3	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.5	4.4
18-Jun	0.1	0.6	3.0	Z	0.9	1.9	8.8	9.4	3.6	0.5	0.3	1.7	1.9	0.6	1.5	0.6	1.2	0.4	1.7	1.5	5.0	3.0	1.0	0.5	2.2	9.4
19-Jun	0.7	1.2	2.0	1.9	Z	0.9	5.7	8.8	6.6	3.4	2.9	1.0	0.7	1.4	0.8	0.2	0.3	0.7	0.7	0.2	0.2	0.2	0.2	0.4	1.8	8.8
20-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.8	0.1	5.6	1.0	0.2	0.2	0.2	0.7	0.7	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	5.6
21-Jun	Z	0.8	2.8	2.2	3.3	3.5	0.3	0.2	0.2	0.4	0.4	1.1	2.1	2.2	1.1	0.7	4.5	6.4	8.0	6.3	7.9	7.2	8.5	4.9	3.3	8.5
22-Jun	1.9	Z	0.2	1.5	1.3	0.6	1.0	1.1	2.0	1.1	1.0	2.4	2.0	0.9	0.2	0.3	1.0	0.9	0.2	0.3	0.3	0.2	0.4	0.9	0.9	2.4
23-Jun	3.1	1.8	Z	4.5	4.7	3.6	5.8	5.7	3.2	1.9	1.2	1.4	2.2	1.9	1.7	2.5	3.8	1.9	0.8	0.7	0.6	0.6	0.7	0.6	2.4	5.8
24-Jun	0.5	0.7	0.8	Z	0.7	0.6	0.9	2.8	1.5	1.6	1.9	1.9	1.8	1.2	1.4	1.7	1.0	1.1	0.9	0.6	0.6	0.7	0.4	0.3	1.1	2.8
25-Jun	0.5	0.6	0.5	0.7	Z	0.7	0.8	0.9	0.7	0.6	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.4	0.3	0.5	0.9
26-Jun	0.3	0.3	0.5	0.6	0.5	Z	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.5	0.4	0.7	0.5	0.9
27-Jun	Z	0.6	0.9	2.2	1.6	1.3	1.2	1.1	0.7	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.5	1.1	0.6	1.0	0.8	0.5	0.9	0.8	0.8	2.2
28-Jun	0.9	Z	0.9	3.6	3.4	7.1	2.6	3.4	0.6	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.6	0.7	0.6	0.5	0.6	1.3	7.1
29-Jun	0.8	1.0	Z	4.5	13.7	17.2	8.7	2.7	0.7	0.8	1.3	1.2	0.9	0.5	0.5	0.4	1.0	1.0	1.0	1.2	1.5	1.3	1.4	1.2	2.8	17.2
30-Jun	0.9	0.8	0.9	Z	8.8	7.5	1.7	1.7	3.2	2.8	3.9	3.5	1.6	0.9	0.8	0.8	0.7	0.4	0.9	1.0	2.1	2.7	1.4	0.9	2.2	8.8
	1.6	2.1	1.9	2.3	3.1	3.4	2.9	2.9	2.0	1.4	1.2	1.1	1.2	1.0	1.0	0.9	1.0	1.0	1.1	1.2	1.8	1.9	1.9	1.6	Diurnal Average	
	9.5	14.7	7.9	5.9	13.7	17.2	11.0	9.4	6.6	7.8	3.9	3.8	3.6	3.0	3.6	2.5	4.5	6.4	8.0	6.3	11.5	12.6	10.4	6.0	Diurnal Maximum	

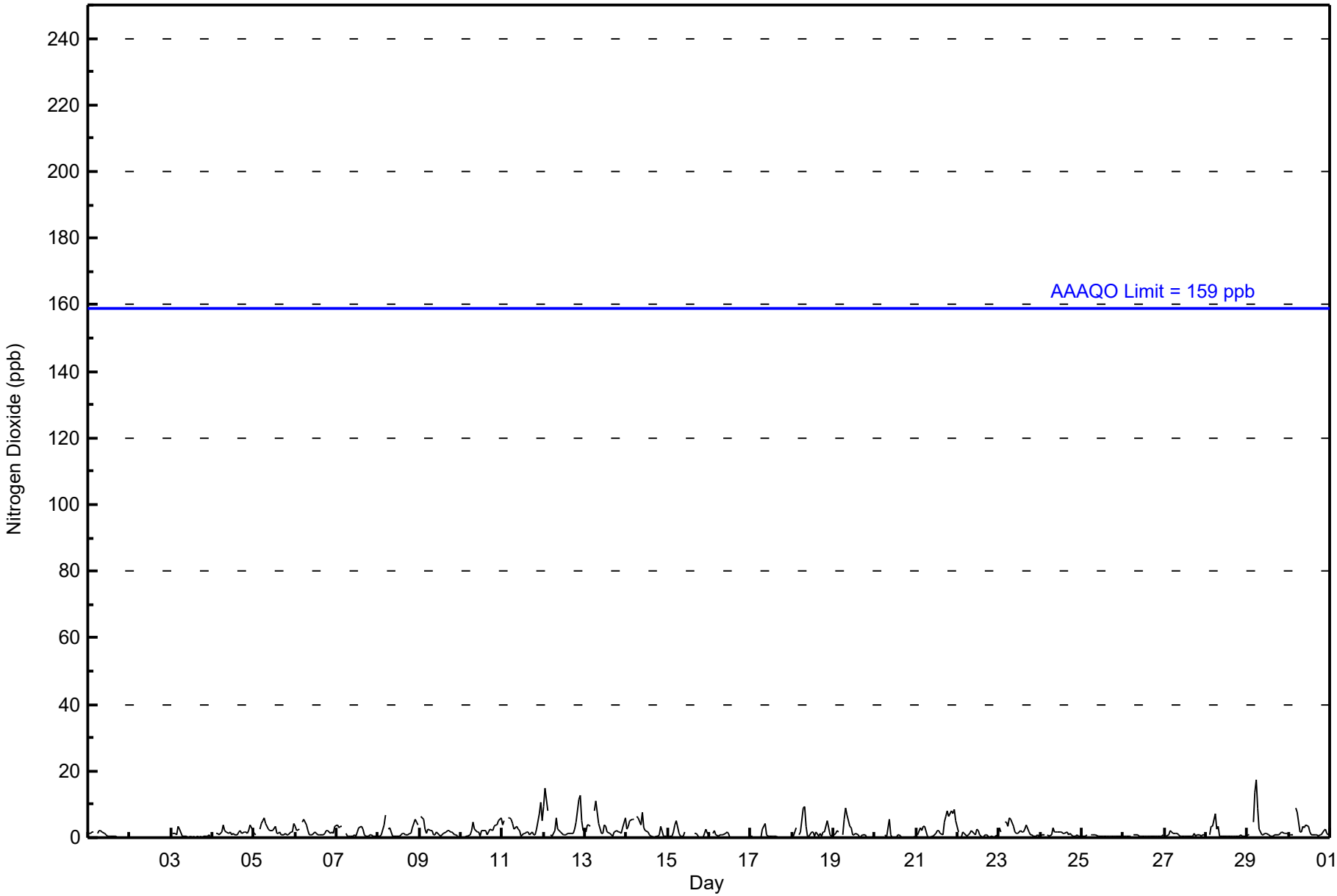
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Wapasu - June 2026



Nitrogen Dioxide (NO_2) - ppb

Wapasu - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	686	100.00	100.00
21 - 40	0	0.00	100.00
11 - 80	0	0.00	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Wapasu - June 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	124	63	40	32	41	43	60	80	42	20	35	27	15	25	13	25	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	124	63	40	32	41	43	60	80	42	20	35	27	15	25	13	25	685

Total Number of Valid Hours: 685

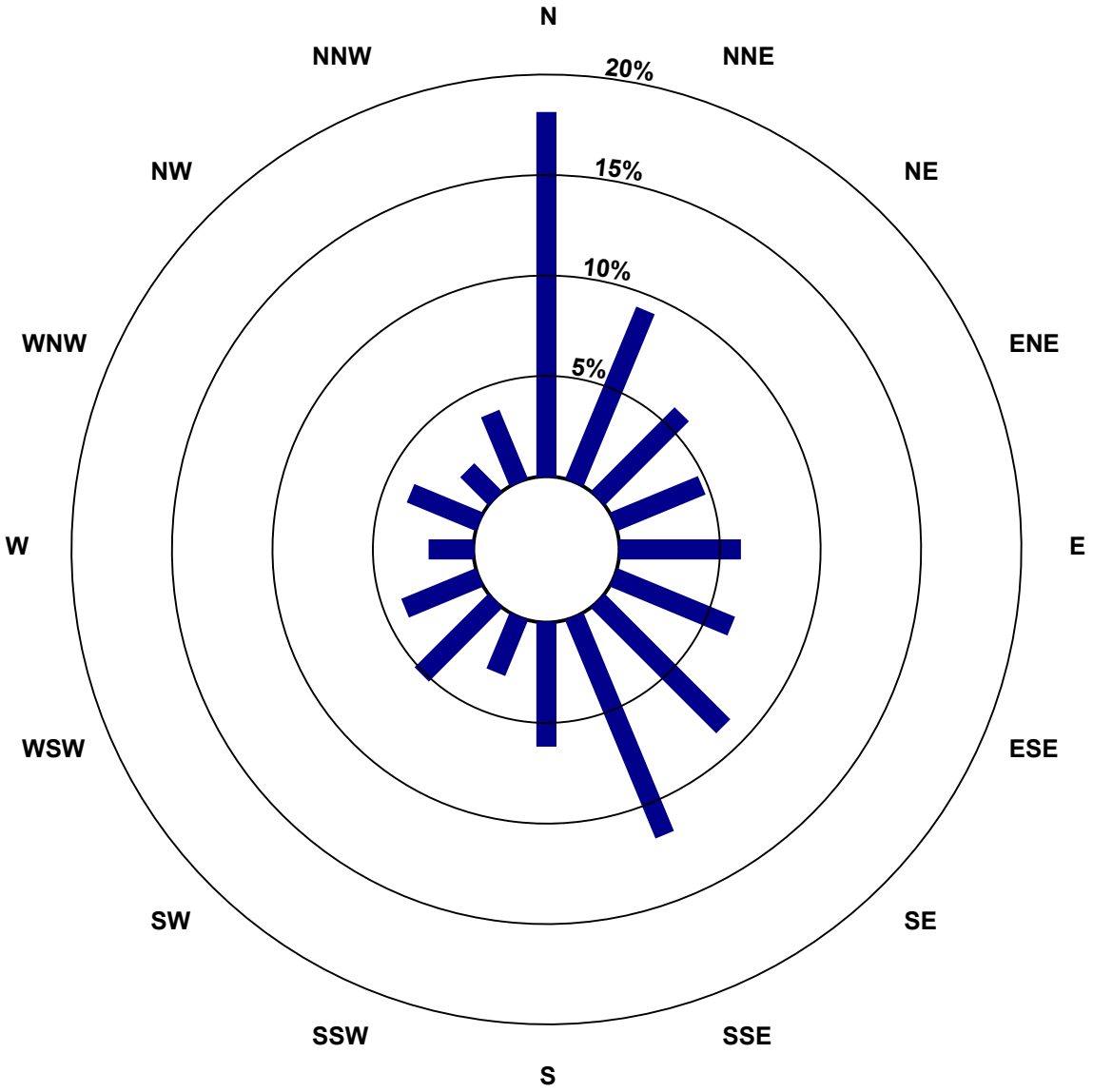
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Wapasu



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

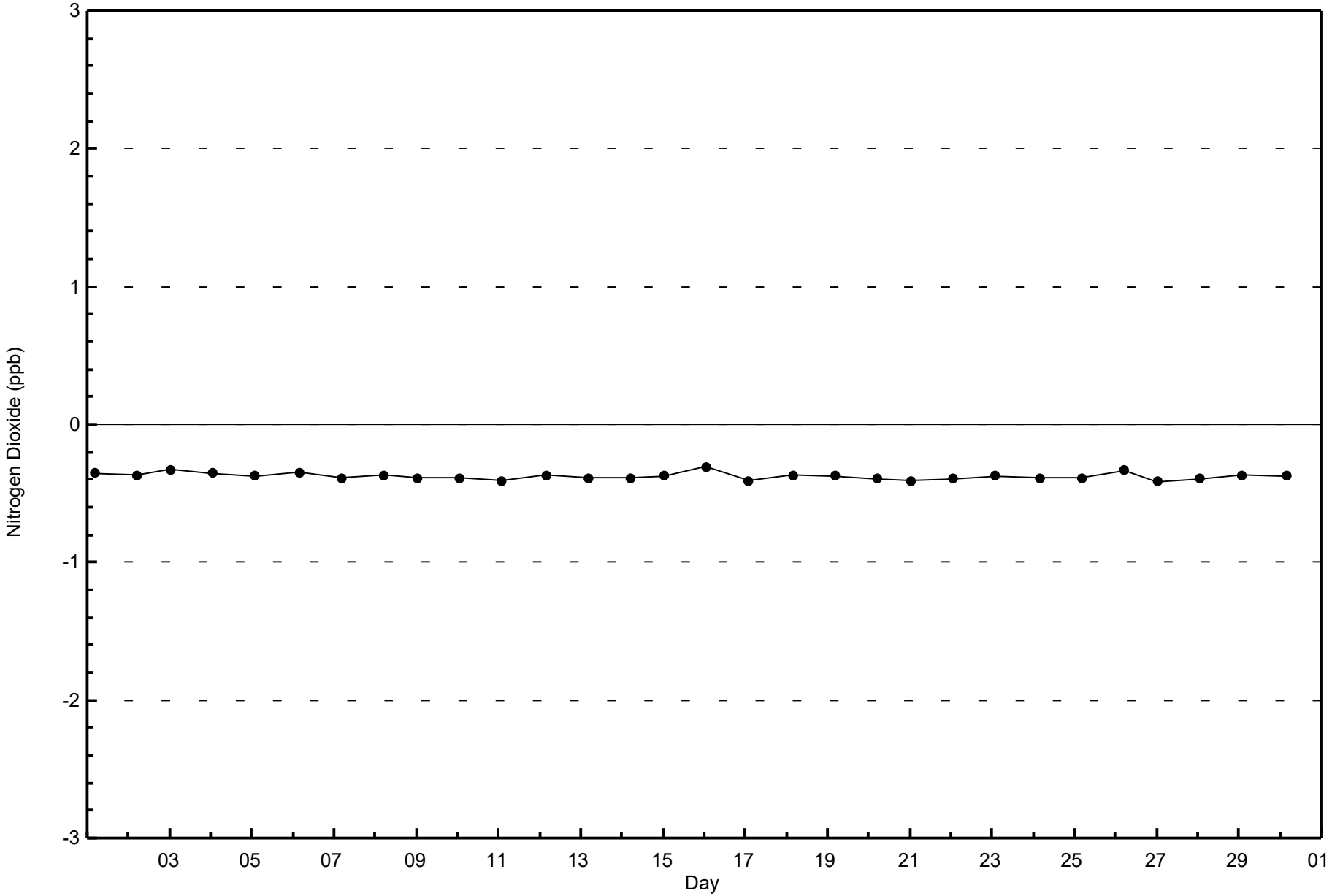
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Wapasu - June 2026

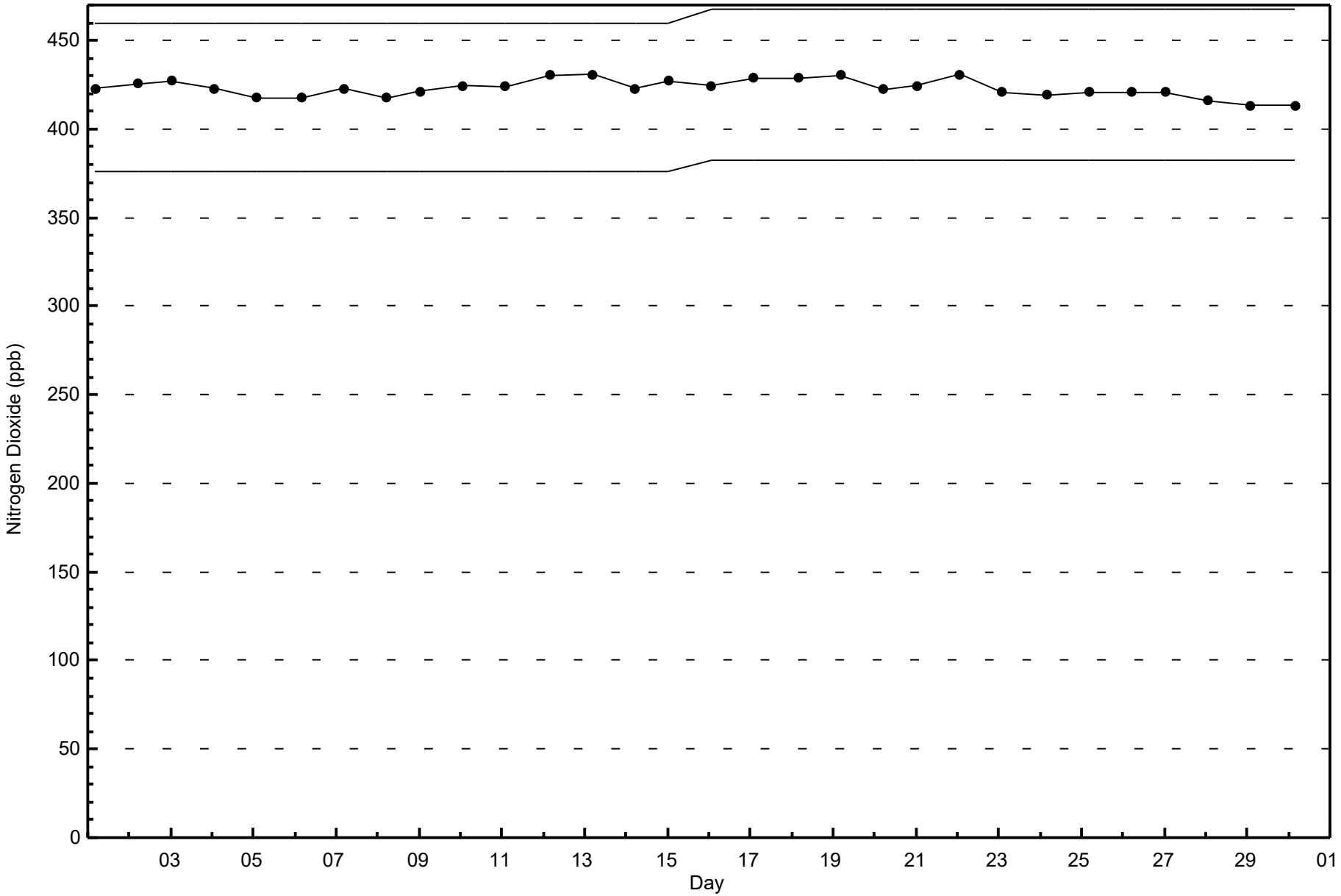


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Wapasu - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Wapasu - June 2026

Maximum Value: 38.4 ppb on Jun 13 04:00

Maximum Daily Average: 7.9 ppb on Jun 13

Minimum Value: 0.1 ppb on Jun 2 17:00

Minimum Daily Average: 0.1 ppb on Jun 2

Maximum Diurnal Average: 5.0 ppb at hour 6

Minimum Diurnal Average: 1.0 ppb at hour 16

Monthly Average: 2.13 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.4 Median = 1.0 Q_3 = 2.4 P_{90} = 5.1 P_{99} = 15.0

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-Jun	1.2	1.1	1.9	1.7	Z	1.1	2.3	2.3	1.8	1.5	0.9	0.3	0.4	0.4	0.4	0.5	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.8	2.3
2-Jun	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	0.1	0.1	0.1	0.1	0.2
3-Jun	Z	1.2	1.3	0.9	3.5	2.5	0.3	0.3	0.4	0.5	0.2	0.5	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.4	0.5	0.4	0.9	0.2	0.7	3.5
4-Jun	0.1	Z	1.3	1.2	0.8	2.0	5.3	3.0	1.8	1.8	1.7	0.7	1.1	0.8	1.0	1.8	2.2	1.3	1.6	1.8	1.4	2.1	3.7	2.2	1.8	5.3
5-Jun	1.1	0.9	Z	2.7	4.4	6.2	8.3	5.7	3.4	2.3	2.7	2.4	3.8	1.4	1.4	1.8	0.9	0.7	1.4	0.9	0.9	1.6	1.6	4.4	2.7	8.3
6-Jun	3.6	2.3	2.6	Z	4.6	5.7	3.9	2.4	0.9	1.0	1.1	2.0	1.6	0.8	1.0	0.9	0.7	1.2	2.1	2.1	1.4	1.9	1.4	3.6	2.1	5.7
7-Jun	4.1	2.9	3.2	3.2	Z	1.3	0.7	0.7	0.6	0.6	0.8	0.7	2.5	4.1	4.6	3.2	0.7	0.5	0.6	0.8	0.9	0.3	0.3	0.3	1.6	4.6
8-Jun	0.3	0.3	0.8	3.9	6.9	Z	2.5	3.0	0.5	0.3	0.3	0.3	0.4	0.7	1.5	1.2	0.7	0.7	1.1	1.1	2.9	5.5	4.7	3.9	1.9	6.9
9-Jun	Z	6.4	5.7	2.7	1.1	2.8	2.2	2.2	0.8	1.2	2.1	0.8	0.4	1.0	1.7	2.0	2.2	2.8	1.7	1.7	1.0	0.7	0.3	0.2	1.9	6.4
10-Jun	0.2	Z	0.2	0.3	0.6	0.7	2.8	6.3	3.4	2.2	2.0	0.6	2.9	2.8	3.2	1.3	2.3	3.4	2.9	3.6	3.9	4.0	5.2	6.0	2.6	6.3
11-Jun	3.7	5.2	Z	6.0	6.2	6.1	4.7	2.7	4.4	3.8	3.3	0.4	1.9	1.9	2.3	2.1	1.1	1.8	0.9	1.0	2.9	7.4	10.6	5.0	3.7	10.6
12-Jun	9.8	15.2	8.0	Z	0.7	0.5	3.2	9.3	3.9	3.5	2.3	1.3	1.1	1.4	1.7	1.6	1.9	1.8	3.3	5.4	12.2	13.1	5.5	2.4	4.7	15.2
13-Jun	2.2	14.9	24.2	38.4	Z	30.2	17.9	11.8	6.1	1.9	1.6	5.3	4.8	2.3	1.3	0.8	0.7	1.8	2.2	2.0	2.0	1.3	2.8	5.9	7.9	38.4
14-Jun	2.4	3.2	5.2	5.7	5.8	Z	8.4	7.7	5.0	10.9	3.8	2.9	2.0	1.0	0.6	0.3	0.2	0.3	0.3	0.7	3.6	0.3	0.4	0.4	3.1	10.9
15-Jun	Z	0.3	0.5	1.8	4.9	8.3	1.5	0.6	0.6	0.6	2.5	C	C	C	C	1.4	1.2	0.7	0.2	0.1	0.1	1.1	2.4	1.1	1.6	8.3
16-Jun	0.8	Z	1.1	2.2	0.7	0.5	0.8	0.8	1.1	1.8	2.1	1.3	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.7	2.2
17-Jun	0.3	0.6	Z	0.1	0.1	0.2	0.1	3.9	7.5	1.0	0.5	0.4	0.5	0.5	0.5	0.4	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.8	7.5
18-Jun	0.2	0.7	3.0	Z	1.1	2.7	14.8	14.6	5.1	0.7	0.4	2.3	2.6	1.0	2.4	0.9	1.7	0.6	2.2	1.8	5.5	3.3	1.2	0.7	3.0	14.8
19-Jun	0.9	1.5	3.6	6.4	Z	6.9	10.6	18.0	12.6	6.0	5.1	1.6	1.3	2.5	1.4	0.4	0.5	1.1	1.1	0.4	0.4	0.5	0.4	0.6	3.7	18.0
20-Jun	0.3	0.2	0.2	0.2	0.2	Z	1.4	0.2	13.1	1.5	0.3	0.3	0.3	0.8	0.9	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	1.0	13.1
21-Jun	Z	0.8	2.8	2.3	4.8	4.7	0.3	0.2	0.2	0.5	0.4	1.4	2.8	3.1	1.4	0.8	7.1	8.8	10.9	7.4	8.9	7.8	9.8	4.9	4.0	10.9
22-Jun	1.9	Z	0.2	1.5	1.3	0.6	1.1	1.5	3.0	1.3	1.1	3.1	2.3	0.9	0.2	0.3	1.0	0.9	0.2	0.3	0.3	0.2	0.4	0.9	1.1	3.1
23-Jun	3.1	1.8	Z	4.5	5.0	4.3	8.4	8.6	4.4	2.4	1.2	1.4	2.4	1.9	1.7	2.6	4.1	2.0	0.8	0.7	0.6	0.6	0.7	0.6	2.8	8.6
24-Jun	0.5	0.7	0.8	Z	0.7	0.6	1.0	3.4	1.7	1.9	2.1	2.1	1.9	1.2	1.4	1.7	1.0	1.1	0.9	0.6	0.6	0.7	0.4	0.3	1.2	3.4
25-Jun	0.5	0.6	0.5	0.7	Z	0.7	0.8	0.9	0.7	0.6	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.4	0.3	0.5	0.9
26-Jun	0.3	0.3	0.5	0.6	0.5	Z	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.5	0.4	0.7	0.5	0.9
27-Jun	Z	0.6	0.9	2.2	1.6	1.3	1.2	1.2	0.7	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.5	1.1	0.6	1.0	0.8	0.5	0.9	0.8	0.8	2.2
28-Jun	0.9	Z	0.9	3.6	3.4	7.5	2.6	3.7	0.6	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.6	0.7	0.6	0.5	0.6	1.3	7.5
29-Jun	0.8	1.0	Z	4.5	14.4	20.3	10.5	2.9	0.7	0.8	1.3	1.2	0.9	0.5	0.5	0.4	1.0	1.0	1.0	1.2	1.5	1.3	1.4	1.2	3.0	20.3
30-Jun	0.9	0.8	0.9	Z	9.2	7.9	1.7	1.7	3.4	3.0	4.4	3.8	1.6	0.9	0.8	0.8	0.7	0.4	0.9	1.0	2.1	2.7	1.4	0.9	2.3	9.2
	1.6	2.5	2.8	3.9	3.3	5.0	4.0	4.0	3.0	1.8	1.5	1.4	1.4	1.2	1.2	1.0	1.2	1.2	1.3	1.3	1.9	2.0	2.0	1.6	Diurnal Average	
	9.8	15.2	24.2	38.4	14.4	30.2	17.9	18.0	13.1	10.9	5.1	5.3	4.8	4.1	4.6	3.2	7.1	8.8	10.9	7.4	12.2	13.1	10.6	6.0	Diurnal Maximum	

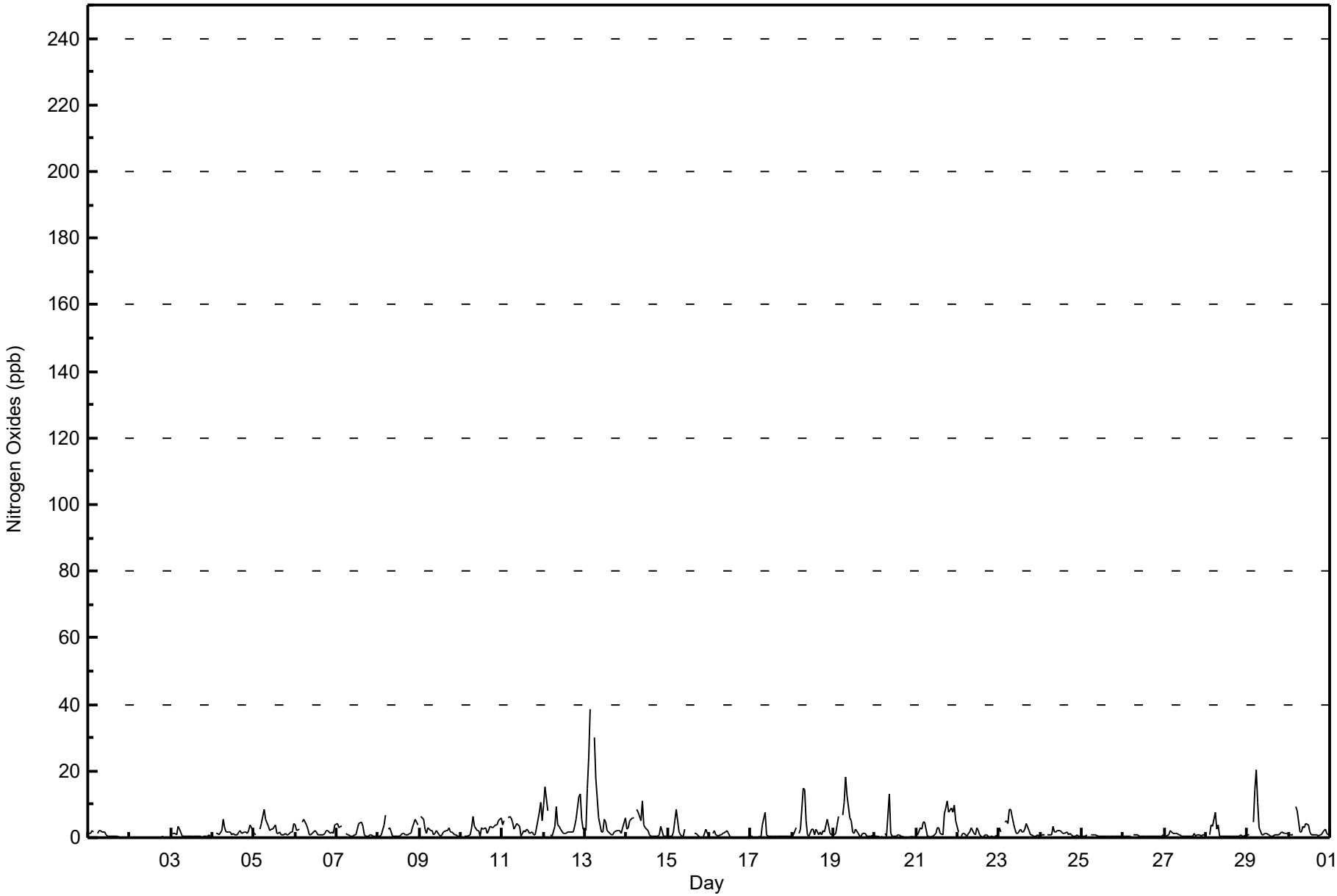
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Wapasu - June 2026



Nitrogen Oxides (NO_X) - ppb
Wapasu - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	683	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: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Wapasu - June 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	124	63	40	32	41	43	60	77	42	20	35	27	15	25	13	25	682
21 - 40	0	0	0	0	0	0	0	3	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	124	63	40	32	41	43	60	80	42	20	35	27	15	25	13	25	685

Total Number of Valid Hours: 685

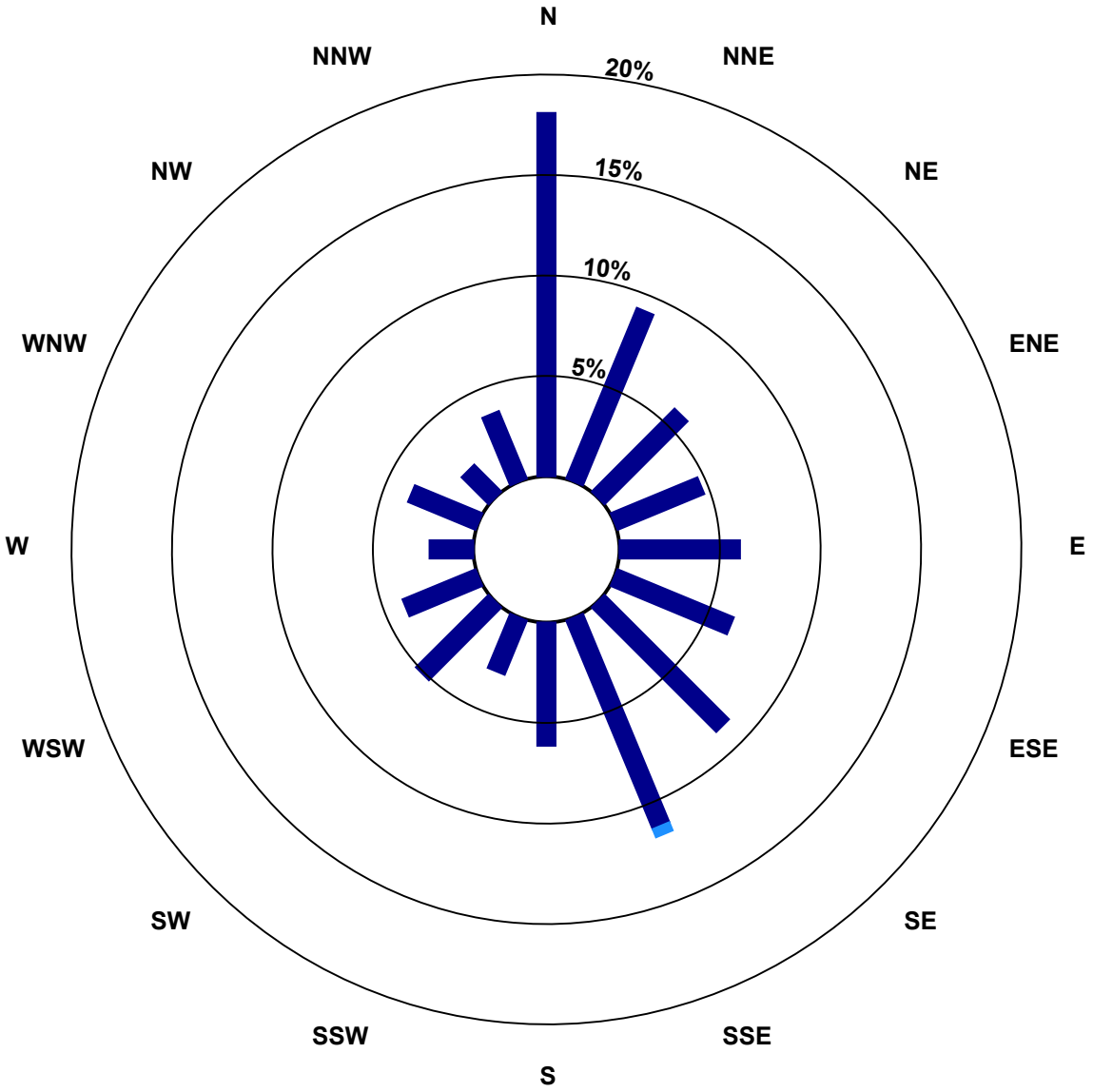
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Wapasu



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

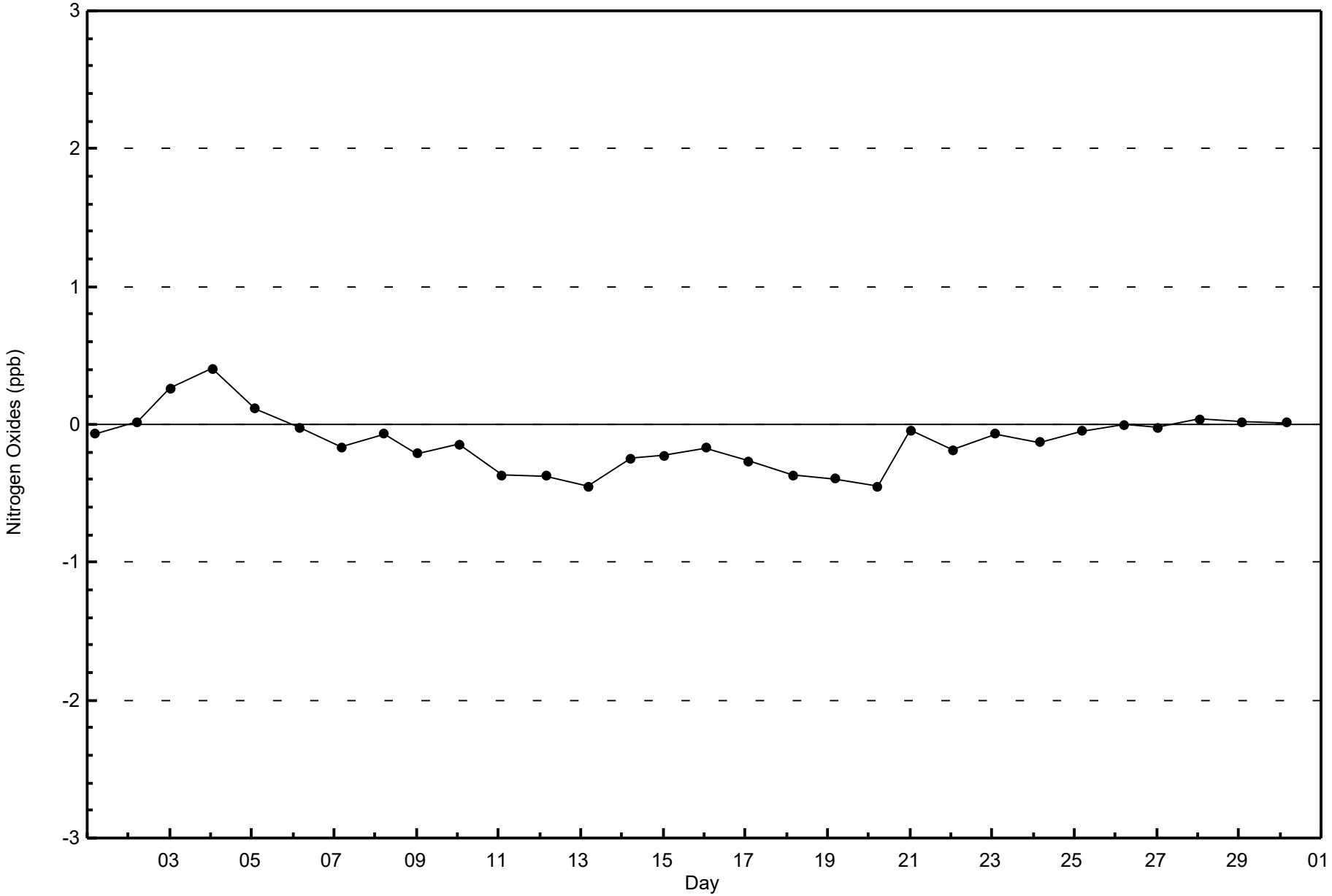
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Wapasu - June 2026

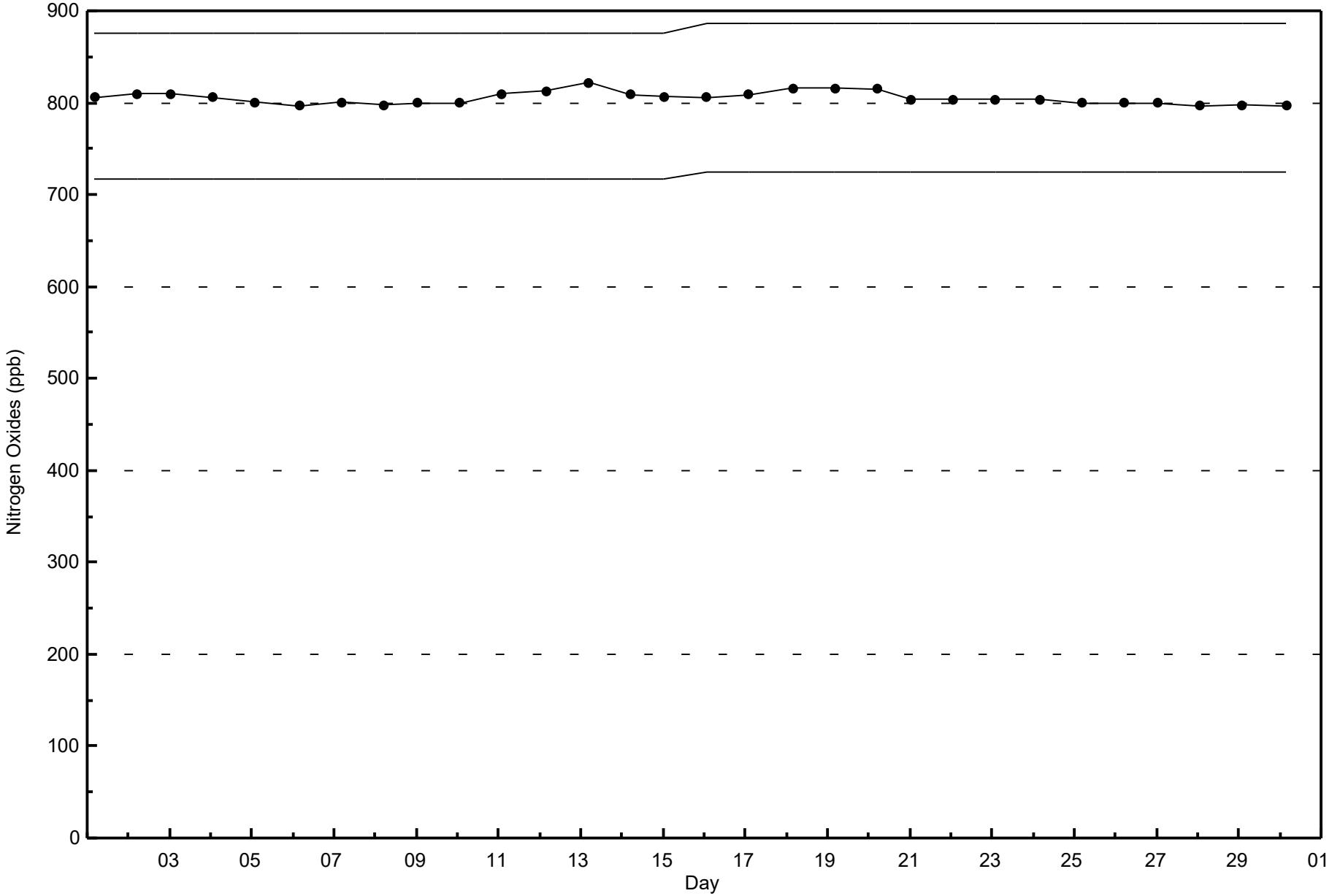


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Wapasu - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Wapasu - June 2026

Number of Exceedances (AAAQO): 1-hr: 1 24-hr: 2

Maximum Value: 81.2 $\mu g/m^3$ on Jun 29 11:00

Maximum Daily Average: 51.6 $\mu g/m^3$ on Jun 29

Minimum Value: 0.3 $\mu g/m^3$ on Jun 20 19:00

Minimum Daily Average: 0.6 $\mu g/m^3$ on Jun 2

Maximum Diurnal Average: 8.0 $\mu g/m^3$ at hour 12

Minimum Diurnal Average: 5.8 $\mu g/m^3$ at hour 2

Monthly Average: 6.76 $\mu g/m^3$

Percentiles: P_1 = 0.4 P_{10} = 0.8 Q_1 = 1.7 Median = 3.3 Q_3 = 5.3 P_{90} = 12.4 P_{99} = 62.3

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-Jun	0.8	0.7	0.7	0.7	0.8	0.7	0.8	0.9	1.0	1.0	1.3	2.0	1.7	1.6	1.1	0.8	0.9	0.8	0.6	0.6	0.7	0.8	0.7	0.6	0.9	2.0
2-Jun	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.4	DF	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.7	0.9	1.1	0.9	0.9	0.8	0.9	0.6	1.1
3-Jun	0.9	1.0	1.1	1.2	1.3	1.2	0.9	1.1	2.3	1.8	2.0	2.8	3.0	2.9	2.9	3.2	3.3	3.6	3.2	3.3	3.4	3.3	3.6	3.6	2.4	3.6
4-Jun	4.1	4.6	5.5	6.2	6.5	6.8	7.9	11.7	11.0	10.2	11.2	10.0	11.5	11.8	11.0	11.3	13.0	11.5	11.2	10.0	6.4	11.2	7.7	6.6	9.1	13.0
5-Jun	6.3	6.2	6.6	7.3	7.5	9.0	10.2	8.2	7.3	6.1	5.3	4.1	4.8	3.6	4.4	5.6	4.5	2.9	3.0	3.3	4.6	3.3	2.8	3.4	5.4	10.2
6-Jun	4.0	3.6	4.0	3.9	3.1	4.2	3.7	4.3	3.1	2.3	1.7	1.3	1.0	1.7	2.3	1.6	1.8	2.6	3.7	3.2	3.4	3.3	2.9	2.7	2.9	4.3
7-Jun	3.8	3.2	3.0	3.0	2.4	1.9	1.7	1.7	1.4	1.0	0.9	1.0	1.7	2.6	3.3	4.2	3.4	3.2	3.1	2.5	2.0	1.7	1.7	1.8	2.3	4.2
8-Jun	1.8	1.9	2.5	1.8	1.8	1.1	1.4	0.9	0.3	0.3	0.3	0.5	0.4	0.6	0.8	0.8	0.7	0.8	1.1	1.3	1.3	2.1	2.2	1.3	1.2	2.5
9-Jun	1.0	1.4	1.9	1.7	1.5	1.7	1.8	1.8	1.2	1.2	1.5	1.8	1.7	2.0	2.4	2.7	3.1	3.4	3.0	2.9	3.0	3.2	3.0	3.1	2.2	3.4
10-Jun	3.0	2.9	3.2	3.6	3.7	3.4	3.0	2.8	2.5	2.1	2.0	0.5	0.7	1.0	0.8	1.0	0.9	1.0	1.0	1.4	1.5	1.4	1.7	1.8	2.0	3.7
11-Jun	1.6	1.2	1.3	1.6	1.7	1.5	1.6	1.4	1.4	0.8	0.6	0.6	0.7	0.7	0.8	1.3	1.5	1.8	1.6	1.8	1.9	2.5	2.3	2.1	1.4	2.5
12-Jun	2.3	2.4	1.9	1.5	1.5	1.4	1.6	2.0	1.6	2.6	2.1	2.2	2.6	2.8	2.9	3.3	3.3	3.1	3.2	3.4	4.4	4.8	5.3	4.5	2.8	5.3
13-Jun	4.0	3.4	4.9	5.8	4.5	3.8	4.2	3.6	3.2	2.3	2.3	3.5	3.7	3.2	3.9	3.4	4.5	6.4	11.5	9.8	23.8	11.5	5.4	5.1	5.7	23.8
14-Jun	3.1	3.5	4.9	5.1	5.4	8.4	6.2	5.0	4.7	6.9	5.5	4.8	4.5	4.2	3.7	3.6	3.2	3.2	3.4	3.4	5.2	3.2	3.4	3.4	4.5	8.4
15-Jun	3.3	3.2	3.2	3.6	5.6	6.8	4.6	2.8	2.8	2.7	4.3	5.0	C	5.5	4.7	5.1	6.7	6.5	3.9	4.4	4.7	2.3	2.9	3.2	4.3	6.8
16-Jun	2.8	2.7	2.5	2.9	3.4	4.1	6.5	8.4	8.2	6.4	7.3	7.5	5.1	3.1	2.2	1.9	1.9	1.5	1.3	1.2	1.1	1.2	1.3	1.3	3.6	8.4
17-Jun	1.4	1.9	2.5	1.8	1.4	1.4	1.2	3.2	5.8	3.5	3.1	2.7	3.1	3.2	3.1	2.8	2.1	1.5	1.4	1.7	1.4	1.2	1.8	2.5	2.3	5.8
18-Jun	2.9	2.8	3.9	3.9	3.5	4.0	5.3	4.3	2.8	1.6	1.2	1.6	1.6	1.7	2.3	1.5	2.3	1.7	3.2	2.1	2.9	2.7	2.5	2.5	2.7	5.3
19-Jun	2.6	3.0	3.9	4.0	3.5	2.9	3.8	4.5	4.2	4.7	4.5	2.5	1.2	1.9	1.4	0.4	1.2	1.4	1.7	0.9	0.3	0.4	0.5	0.5	2.3	4.7
20-Jun	0.6	0.6	0.5	0.7	0.4	1.1	1.2	0.6	5.2	1.8	0.4	0.4	0.6	0.9	1.2	1.1	0.6	0.4	0.3	0.4	0.5	0.7	0.9	0.8	0.9	5.2
21-Jun	0.9	1.1	1.2	1.3	1.6	1.8	2.1	2.4	2.0	2.3	2.5	3.6	4.3	3.8	3.1	3.0	3.1	3.1	3.5	3.3	3.2	3.3	3.2	3.3	2.6	4.3
22-Jun	3.2	3.0	2.9	3.1	2.8	3.1	3.3	3.5	5.2	3.7	2.9	3.5	3.7	3.6	2.5	2.9	4.5	4.9	3.0	3.6	3.4	2.9	3.4	3.1	3.4	5.2
23-Jun	4.8	4.8	6.3	7.5	7.3	6.6	8.6	13.8	7.0	6.9	8.7	9.0	10.5	10.5	9.8	11.6	10.1	8.3	8.3	7.5	7.3	6.1	5.9	6.5	8.1	13.8
24-Jun	5.9	6.6	6.6	6.3	6.3	7.2	7.4	7.0	5.9	5.0	7.4	9.0	9.8	8.7	9.5	9.4	7.8	6.1	3.9	3.7	3.3	3.9	5.0	4.8	6.5	9.8
25-Jun	4.4	4.2	4.1	4.1	4.2	4.1	4.0	5.1	3.6	3.4	3.8	3.7	4.0	3.7	3.9	3.6	3.6	3.5	3.5	3.7	4.4	4.3	4.5	4.5	4.0	5.1
26-Jun	4.6	4.6	4.9	5.0	5.1	5.4	5.1	4.4	4.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.6	3.6	3.7	3.9	3.9	4.9	4.0	5.4	4.2	5.4
27-Jun	4.8	4.4	4.4	4.7	4.9	5.6	5.7	6.0	4.9	4.3	3.9	4.0	3.8	3.9	3.9	4.2	3.9	3.7	4.2	4.6	5.4	5.3	5.7	5.5	4.7	6.0
28-Jun	5.3	5.4	14.1	23.9	18.6	16.7	23.2	23.8	27.6	15.9	12.2	14.2	19.9	20.2	19.5	18.8	18.8	18.7	19.8	27.1	34.1	31.7	28.0	33.4	20.5	34.1
29-Jun	42.5	51.5	57.2	41.4	36.6	38.4	39.3	36.6	37.8	48.4	81.2	78.7	55.3	29.2	26.0	25.5	66.3	62.5	64.7	64.8	60.7	65.9	65.8	61.0	51.6	81.2
30-Jun	48.8	38.4	32.8	30.9	35.7	35.9	34.2	55.3	50.3	47.2	56.1	56.0	48.1	39.6	38.8	40.9	41.5	26.9	17.2	18.8	26.8	25.4	30.1	24.5	37.5	56.1
	5.9	5.8	6.4	6.3	6.1	6.4	6.7	7.6	7.3	6.9	8.0	8.0	7.3	6.1	5.9	6.0	7.4	6.6	6.5	6.7	7.5	7.2	7.0	6.8	Diurnal Average	
	48.8	51.5	57.2	41.4	36.6	38.4	39.3	55.3	50.3	48.4	81.2	78.7	55.3	39.6	38.8	40.9	66.3	62.5	64.7	64.8	60.7	65.9	65.8	61.0	Diurnal Maximum	

C - Calibration DF - DAS Failure

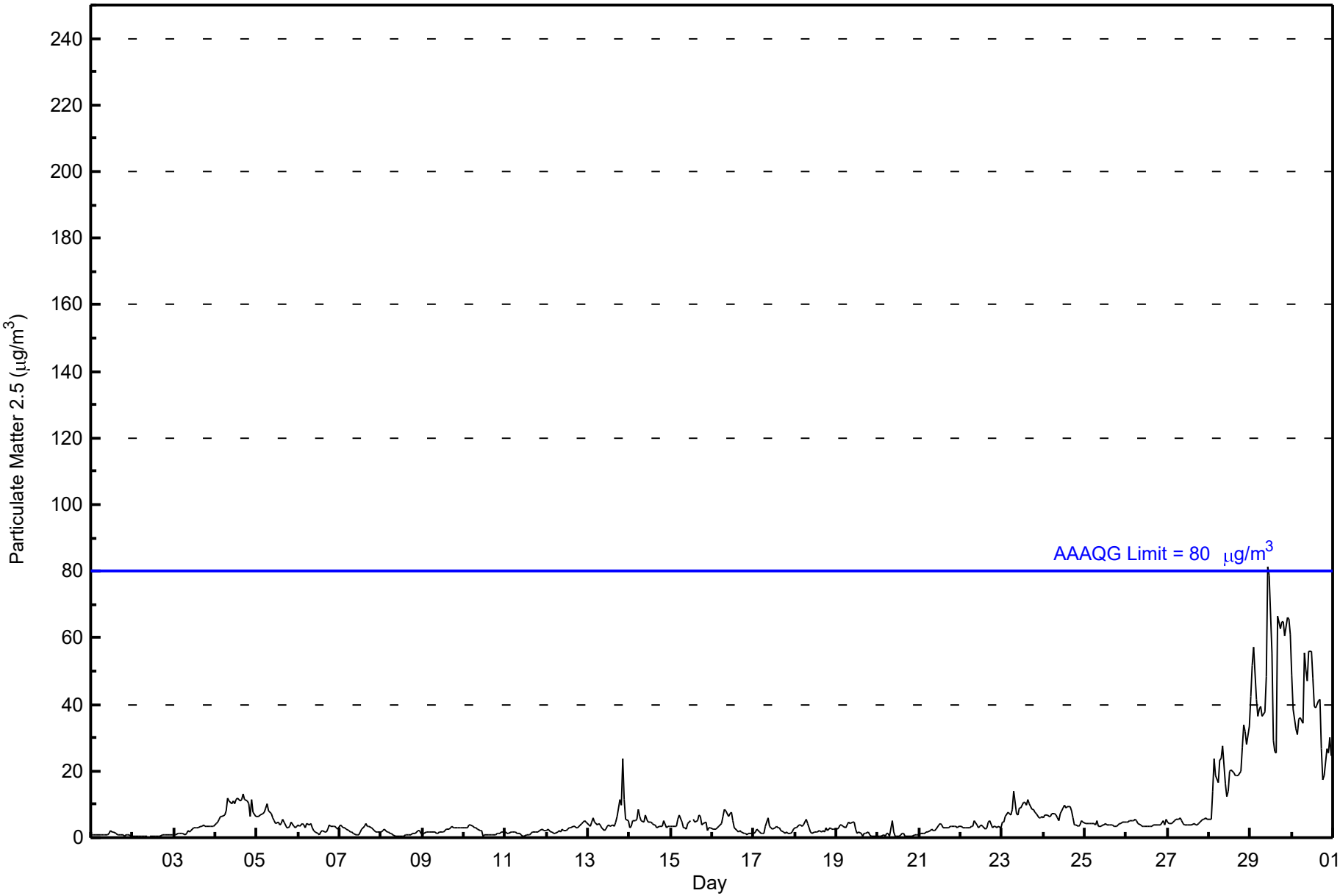
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Wapasu - June 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Wapasu - June 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	553	77.02	77.02
6 - 15	97	13.51	90.53
16 - 25	18	2.51	93.04
26 - 80	49	6.82	99.86
> 81.0	1	0.14	100.00

Total Number of Valid Hours: 718

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Wapasu - June 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	122	61	39	21	27	25	45	66	29	10	14	15	16	24	13	25	552
6 - 15	3	1	0	1	1	6	9	17	13	11	20	12	1	1	0	1	97
16 - 25	0	0	0	3	5	7	2	0	0	0	1	0	0	0	0	0	18
26 - 80	3	4	3	8	9	9	7	5	1	0	0	0	0	0	0	0	49
> 81.0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Totals	128	66	42	33	43	47	63	88	43	21	35	27	17	25	13	26	717

Total Number of Valid Hours: 717

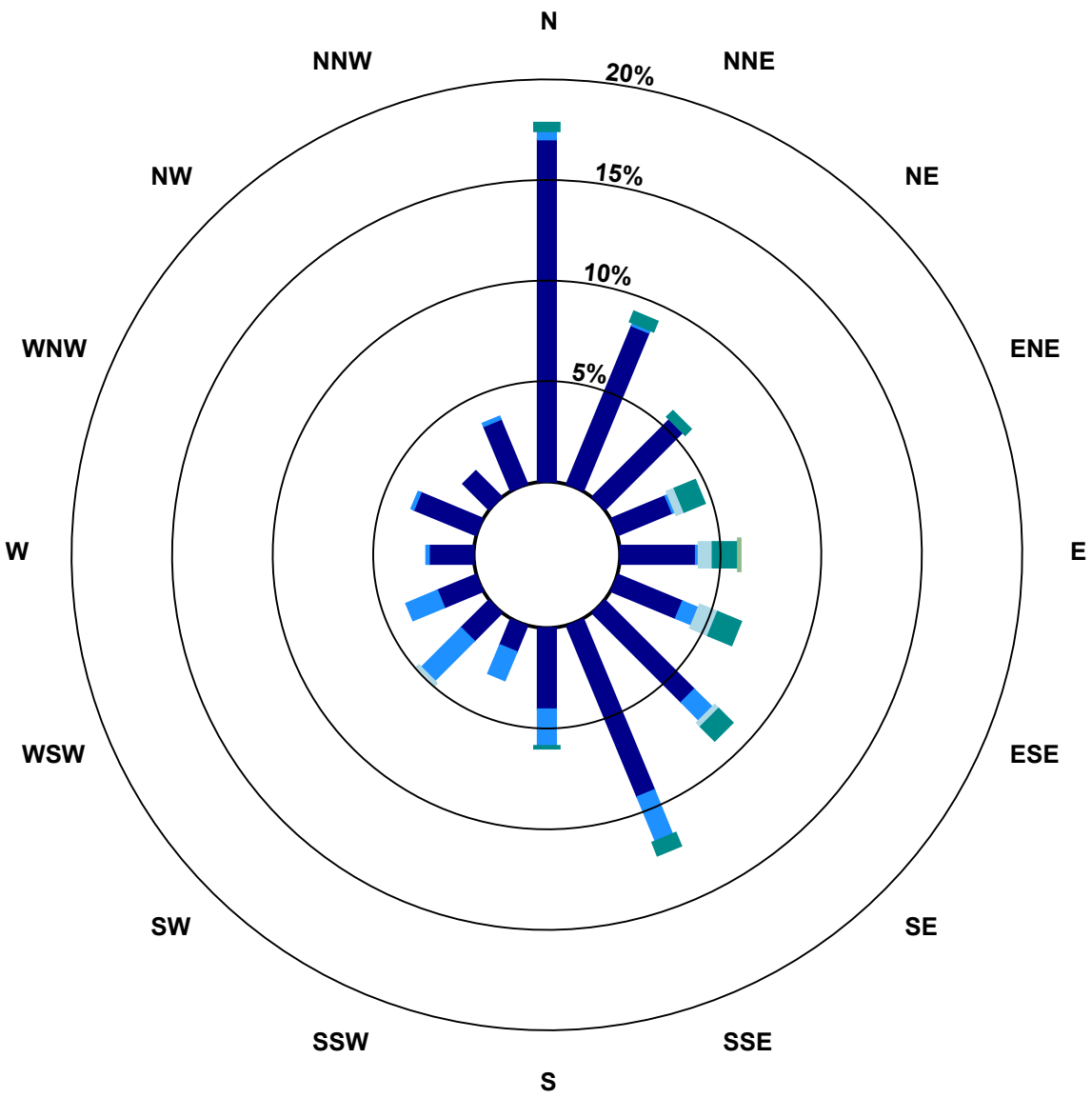
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

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

Wapasu



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

0 - 5

6 - 15

16 - 25

26 - 80

> 81.0

Total Number of Valid Hours: 717

Maximum Value: 29.6 C on Jun 28 16:00

Maximum Daily Average: 23.6 C on Jun 29

Minimum Value: 2.2 C on Jun 13 04:00

Minimum Daily Average: 7.1 C on Jun 11

Maximum Diurnal Average: 19.0 C at hour 16

Minimum Diurnal Average: 9.4 C at hour 4

Monthly Average: 14.89 C

Percentiles: P_1 = 3.0 P_{10} = 7.7 Q_1 = 9.9 Median = 14.3 Q_3 = 19.4 P_{90} = 24.0 P_{99} = 28.6

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

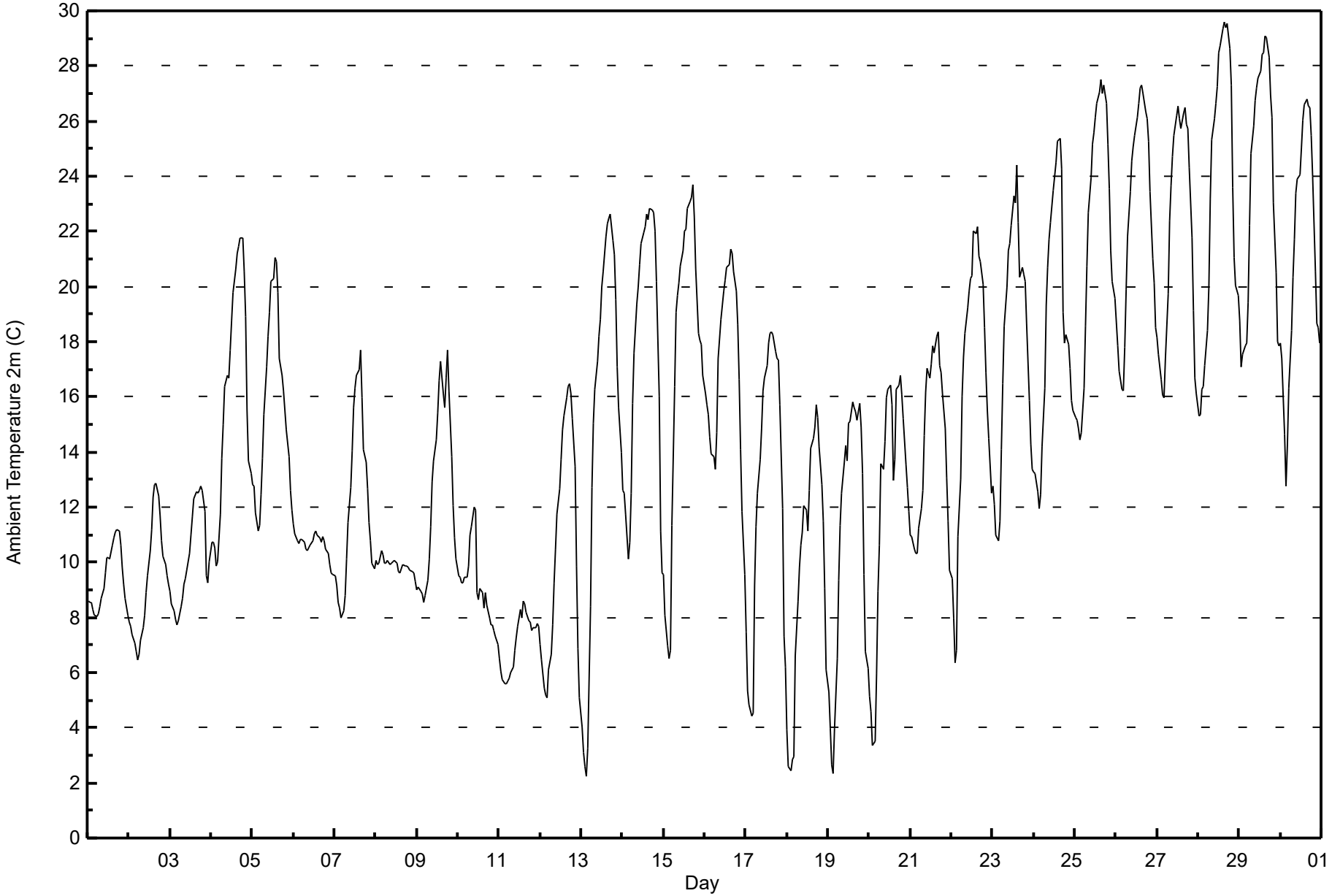
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	8.6	8.5	8.5	8.3	8.1	8.0	8.1	8.4	8.7	9.0	9.6	10.2	10.2	10.1	10.6	10.9	11.1	11.2	11.1	10.6	9.8	9.2	8.7	8.1	9.4	11.2
2-Jun	7.8	7.7	7.4	7.1	6.8	6.5	6.7	7.2	7.6	8.1	8.9	9.5	10.4	11.2	12.3	12.8	12.9	12.4	11.7	10.8	10.2	9.9	9.5	9.2	9.4	12.9
3-Jun	8.9	8.5	8.2	7.9	7.7	7.9	8.4	8.7	9.2	9.4	9.7	10.3	11.0	11.6	12.3	12.6	12.5	12.6	12.7	12.6	11.9	9.5	9.2	10.0	10.1	12.7
4-Jun	10.8	10.7	10.5	9.8	10.0	11.8	13.8	15.0	16.4	16.8	16.7	17.7	18.8	19.8	20.7	21.2	21.4	21.8	21.8	20.5	18.9	15.5	13.7	13.2	16.1	21.8
5-Jun	12.8	12.8	11.8	11.1	11.3	12.5	13.8	15.4	17.1	18.2	19.1	20.2	20.3	21.1	20.9	19.8	17.4	16.8	16.2	15.5	14.8	13.8	12.6	11.9	15.7	21.1
6-Jun	11.4	11.0	10.8	10.7	10.8	10.8	10.7	10.5	10.4	10.5	10.6	10.8	11.0	11.1	11.0	10.9	10.7	10.9	10.8	10.5	10.3	9.9	9.6	9.6	10.6	11.4
7-Jun	9.5	9.1	8.6	8.4	8.0	8.2	8.8	10.1	11.5	12.7	14.0	15.6	16.3	16.8	17.0	17.7	16.0	14.1	13.6	12.7	11.4	10.8	10.0	9.7	12.1	17.7
8-Jun	10.1	9.9	10.0	10.4	10.3	10.0	10.0	10.1	9.9	10.0	10.0	10.1	10.0	9.7	9.6	9.7	9.9	9.9	9.9	9.8	9.7	9.7	9.6	9.3	9.9	10.4
9-Jun	9.0	9.1	8.9	8.9	8.6	8.8	9.3	10.1	11.3	12.9	13.7	14.4	15.4	16.6	17.3	16.1	15.6	16.7	17.7	16.2	13.8	12.1	10.9	10.1	12.6	17.7
10-Jun	9.5	9.5	9.3	9.3	9.5	9.4	9.9	11.0	11.3	12.0	11.9	8.9	8.6	9.1	8.9	8.4	8.9	8.5	8.0	7.8	7.7	7.5	7.3	7.0	9.1	12.0
11-Jun	6.5	6.0	5.7	5.6	5.6	5.7	5.8	6.0	6.2	6.8	7.3	7.7	8.3	8.0	8.6	8.5	8.2	7.9	7.8	7.5	7.6	7.6	7.8	7.7	7.1	8.6
12-Jun	7.0	6.5	5.4	5.2	5.1	6.1	6.7	7.7	9.3	10.5	11.8	12.7	13.8	14.8	15.3	16.0	16.4	16.5	16.1	15.2	13.5	9.9	6.9	5.1	10.5	16.5
13-Jun	4.0	3.1	2.6	2.2	3.3	8.4	12.7	15.1	16.3	17.3	18.2	18.8	20.0	20.6	21.8	22.3	22.5	22.6	21.7	21.2	19.5	17.1	15.6	14.0	15.0	22.6
14-Jun	12.6	12.5	11.7	10.1	10.7	12.5	15.8	17.6	19.4	20.0	20.8	21.6	22.0	22.2	22.6	22.4	22.8	22.8	22.7	22.0	20.2	16.0	11.1	9.6	17.6	22.8
15-Jun	9.5	8.1	6.9	6.5	6.8	11.3	16.4	19.1	19.7	20.1	20.7	21.3	22.0	22.0	22.8	23.1	23.2	23.7	22.5	20.7	18.3	18.1	17.9	16.8	17.4	23.7
16-Jun	16.1	15.7	15.4	14.5	13.9	13.8	13.4	14.7	17.4	18.8	19.3	19.8	20.2	20.7	20.8	21.4	21.2	20.5	19.8	18.6	16.6	14.1	11.8	9.5	17.0	21.4
17-Jun	7.5	5.3	4.8	4.4	4.5	9.2	11.3	12.5	13.7	14.8	16.2	16.7	17.1	18.0	18.3	18.3	18.3	17.6	17.4	17.3	15.7	11.9	7.3	6.2	12.7	18.3
18-Jun	3.9	2.6	2.4	2.8	2.9	6.6	8.6	9.8	10.6	11.1	12.1	11.9	11.1	12.6	14.1	14.5	14.9	15.7	15.2	14.2	12.8	11.5	9.0	6.1	9.9	15.7
19-Jun	5.3	4.0	2.7	2.3	4.0	6.5	9.4	11.3	12.5	13.6	14.3	13.7	15.0	15.1	15.8	15.6	15.4	15.1	15.8	14.9	13.2	9.6	6.8	6.1	10.8	15.8
20-Jun	5.1	4.6	3.4	3.5	5.9	9.0	10.6	13.6	13.4	14.4	16.0	16.3	16.4	15.7	13.0	13.7	16.3	16.4	16.8	16.1	15.2	13.5	12.7	11.9	12.2	16.8
21-Jun	11.0	10.9	10.5	10.3	10.3	11.2	12.0	12.6	14.6	16.2	17.0	16.7	17.2	17.9	17.6	18.2	18.4	17.2	16.9	16.1	14.8	13.1	11.5	9.7	14.2	18.4
22-Jun	9.4	8.0	6.3	6.8	10.9	13.0	16.0	17.4	18.3	19.2	19.8	20.3	20.4	22.0	21.9	22.1	21.1	20.9	20.1	18.5	16.9	15.5	14.5	12.5	16.3	22.1
23-Jun	12.8	12.1	11.0	10.8	11.5	14.1	16.5	18.6	20.0	21.3	21.5	22.2	23.3	23.0	24.4	22.3	20.3	20.7	20.5	20.2	18.7	15.9	14.3	13.3	17.9	24.4
24-Jun	13.3	13.2	12.6	11.9	12.4	14.2	16.3	19.3	20.7	21.7	22.3	23.5	24.0	24.5	25.3	25.4	24.3	19.1	17.9	18.2	17.9	17.0	15.9	15.5	18.6	25.4
25-Jun	15.3	15.2	14.8	14.4	14.7	16.3	18.6	20.8	22.7	24.0	25.1	25.6	26.1	26.7	27.1	27.5	27.0	27.3	26.6	25.2	23.6	21.3	20.2	19.6	21.9	27.5
26-Jun	18.7	17.8	16.9	16.3	16.2	17.8	19.9	21.8	23.5	24.6	25.1	25.5	26.1	26.6	27.2	27.3	27.0	26.4	26.1	25.3	23.5	21.0	20.1	18.5	22.5	27.3
27-Jun	18.2	17.6	16.6	16.1	15.9	17.4	19.8	22.4	23.7	24.7	25.5	26.2	26.5	26.1	25.8	26.3	26.5	25.9	25.7	24.3	21.8	19.1	16.7	16.1	21.9	26.5
28-Jun	15.3	15.3	16.3	16.4	17.2	18.4	20.0	23.2	25.3	26.1	26.6	27.3	28.5	28.7	29.4	29.6	29.4	29.5	28.6	27.3	23.6	21.1	20.0	19.7	23.4	29.6
29-Jun	18.8	17.1	17.5	17.8	17.9	19.4	22.2	24.8	25.9	26.7	27.2	27.5	27.8	28.4	28.5	29.1	29.0	28.3	27.0	26.1	23.0	20.5	18.0	17.9	23.6	29.1
30-Jun	17.9	17.4	14.6	12.7	14.2	16.3	18.4	20.3	21.7	23.4	23.9	24.0	25.0	26.0	26.6	26.8	26.5	26.5	25.5	24.0	20.5	18.7	18.5	18.0	21.1	26.8
	10.9	10.3	9.7	9.4	9.8	11.4	13.0	14.5	15.6	16.5	17.2	17.6	18.1	18.6	18.9	19.0	18.8	18.5	18.1	17.3	15.8	14.0	12.6	11.7	Diurnal Average	
	18.8	17.8	17.5	17.8	17.9	19.4	22.2	24.8	25.9	26.7	27.2	27.5	28.5	28.7	29.4	29.6	29.4	29.5	28.6	27.3	23.6	21.3	20.2	19.7	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Wapasu - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	189	26.25	26.25
10 - 20	366	50.83	77.08
> 20	165	22.92	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) - %

Wapasu - June 2026

Maximum Value: 100.0 % on Jun 1 01:00

Maximum Daily Average: 94.8 % on Jun 11

Minimum Value: 22.0 % on Jun 30 18:00

Minimum Daily Average: 38.5 % on Jun 16

Maximum Diurnal Average: 86.6 % at hour 4

Minimum Diurnal Average: 49.0 % at hour 15

Monthly Average: 65.95 %

Percentiles: P_1 = 25.2 P_{10} = 33.3 Q_1 = 44.1 Median = 66.2 Q_3 = 89.3 P_{90} = 98.1 P_{99} = 100.0

Hours in Service:	720
Hours of Data:	691
Hours of Missing Data:	29
Hours of Calibration:	0
Percent Operational Time:	96.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	100.0	100.0	OR	100.0	OR	OR	100.0	100.0	99.4	97.5	95.0	91.3	90.0	89.7	85.9	83.3	81.8	80.2	79.2	78.5	81.3	84.4	85.0	87.8	90.0	100.0
2-Jun	89.2	88.7	89.1	89.4	90.9	92.8	91.0	88.5	85.8	83.3	80.2	79.7	73.2	69.3	65.8	64.7	65.1	67.5	72.0	75.3	76.4	77.0	78.5	81.1	79.8	92.8
3-Jun	81.1	83.2	85.9	90.0	93.6	94.5	88.7	87.0	84.1	84.2	83.0	80.3	77.8	75.9	74.0	74.1	75.9	76.7	77.1	78.4	81.7	91.3	93.6	91.0	83.5	94.5
4-Jun	89.3	90.1	92.1	95.3	95.3	89.1	81.2	75.7	70.1	69.5	71.1	66.6	64.4	59.7	56.1	53.2	50.6	48.9	48.1	52.8	56.9	69.4	76.0	76.6	70.8	95.3
5-Jun	77.9	79.2	84.8	90.3	91.4	86.5	79.4	69.3	58.1	49.8	45.2	36.9	39.4	30.3	28.5	43.6	60.0	58.0	61.8	68.9	73.7	79.9	90.6	96.6	65.8	96.6
6-Jun	99.4	100.0	100.0	100.0	OR	OR	OR	OR	OR	OR	100.0	100.0	OR	OR	OR	OR	OR	OR	OR	100.0	100.0	100.0	100.0	100.0	--	100.0
7-Jun	100.0	100.0	100.0	100.0	100.0	98.4	95.6	91.0	83.9	76.2	70.5	62.6	64.5	64.0	62.9	62.1	79.0	86.7	90.6	93.9	97.3	96.7	98.4	99.9	86.4	100.0
8-Jun	99.9	99.7	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	OR	100.0	98.9	98.7	98.7	99.0	98.9	99.7	99.8	99.2	--	100.0
9-Jun	98.2	98.0	100.0	100.0	100.0	99.6	96.1	94.0	87.6	79.6	74.6	70.5	66.1	60.0	56.9	65.2	74.7	66.0	56.6	65.1	80.0	89.7	96.4	99.5	82.3	100.0
10-Jun	99.9	98.9	99.4	99.8	98.6	95.9	90.2	81.0	78.8	75.6	78.8	97.8	96.4	93.2	92.7	95.0	92.9	94.9	96.4	94.5	92.9	94.6	96.2	96.7	93.0	99.9
11-Jun	97.4	98.4	99.4	99.8	99.4	99.2	99.9	97.9	98.1	96.8	94.7	94.8	90.0	92.3	89.3	87.9	85.4	87.4	87.0	93.1	94.6	97.3	97.4	98.3	94.8	99.9
12-Jun	98.7	96.7	96.0	98.5	97.7	91.9	89.9	81.8	71.1	64.2	53.2	46.1	42.7	41.2	46.2	42.5	40.3	40.7	44.0	47.4	55.4	71.7	85.5	91.7	68.1	98.7
13-Jun	96.0	97.4	98.8	99.2	98.7	85.1	64.1	51.8	44.8	38.0	36.5	36.4	34.1	31.9	30.0	31.8	31.2	31.5	34.7	36.9	42.0	48.6	52.8	57.3	54.6	99.2
14-Jun	60.6	61.2	62.4	69.2	67.3	62.8	50.4	46.9	43.3	43.6	42.0	40.5	38.0	36.7	35.2	34.9	32.5	30.9	31.8	33.3	39.4	53.7	72.5	79.1	48.7	79.1
15-Jun	81.8	87.3	91.2	92.6	92.1	77.4	55.5	42.7	38.6	35.5	35.6	34.6	29.5	31.7	28.5	27.6	28.3	28.0	28.6	31.5	34.8	30.5	31.0	34.3	47.0	92.6
16-Jun	36.3	37.5	38.8	40.8	44.4	47.4	51.4	48.8	41.7	37.7	36.3	34.4	32.6	30.7	29.4	27.2	29.4	27.4	27.6	30.3	35.3	42.5	52.9	62.3	38.5	62.3
17-Jun	71.1	81.8	88.5	92.8	89.9	77.8	71.5	65.3	57.4	48.8	41.5	39.7	36.9	33.3	30.9	30.9	32.1	32.8	32.0	32.1	36.8	49.6	70.3	72.9	54.9	92.8
18-Jun	81.4	88.6	92.1	94.9	96.2	96.8	93.1	91.1	92.7	90.5	80.7	81.6	92.7	84.2	70.5	64.5	60.9	53.5	53.9	61.6	71.1	77.6	88.0	94.4	81.4	96.8
19-Jun	96.5	97.6	98.7	99.5	99.9	99.4	91.9	79.6	73.5	66.2	60.9	67.9	58.5	57.2	56.1	58.0	56.2	56.2	52.6	60.4	67.0	81.8	90.5	96.0	75.9	99.9
20-Jun	98.1	99.5	99.4	99.6	99.8	94.7	89.3	69.9	74.6	65.0	56.0	53.6	52.6	59.1	84.5	75.8	64.8	61.4	53.1	58.4	67.0	79.9	84.3	87.3	76.1	99.8
21-Jun	93.5	93.0	95.0	96.3	97.4	94.3	91.3	91.3	78.2	71.3	65.6	69.0	68.7	64.9	65.6	59.0	59.1	66.7	68.3	71.9	80.3	86.8	89.3	95.3	79.7	97.4
22-Jun	96.6	97.0	98.2	98.1	81.7	72.2	63.1	57.2	52.9	48.3	44.5	42.6	40.6	37.0	33.8	33.3	38.6	41.3	44.1	50.8	57.7	61.9	63.6	72.3	59.5	98.2
23-Jun	68.1	71.8	77.3	81.0	80.4	72.8	66.2	58.1	50.3	43.8	41.2	37.7	34.1	35.0	31.2	38.6	44.9	48.2	47.6	46.7	51.4	60.4	64.3	68.2	55.0	81.0
24-Jun	72.1	72.9	75.4	77.5	75.7	71.3	66.2	56.2	50.4	47.1	45.1	42.0	39.8	37.1	35.5	34.0	39.2	57.5	62.9	57.1	55.5	59.0	66.8	69.7	56.9	77.5
25-Jun	70.7	70.9	73.2	74.5	72.5	67.0	60.3	52.2	46.5	40.2	36.0	34.0	31.9	30.4	26.5	26.3	26.9	27.1	30.3	35.9	40.7	47.5	51.5	53.8	47.0	74.5
26-Jun	56.3	59.5	63.1	66.0	67.0	62.4	56.5	50.9	45.7	40.0	37.2	35.1	33.5	33.6	31.9	30.3	30.5	32.4	33.2	35.2	38.5	43.5	49.0	56.5	45.3	67.0
27-Jun	58.7	59.8	62.5	66.0	68.3	66.0	60.9	53.2	48.1	43.0	39.6	37.5	35.6	37.7	39.4	38.1	34.4	33.5	35.4	40.6	50.4	58.5	66.0	67.9	50.0	68.3
28-Jun	70.8	70.3	64.2	62.3	60.1	58.6	56.7	48.8	39.4	36.4	33.4	30.8	27.0	25.3	24.8	24.5	24.3	23.7	24.8	28.2	38.7	44.2	46.5	47.7	42.1	70.8
29-Jun	50.5	56.6	55.9	53.8	55.2	54.8	49.3	44.4	39.6	34.7	33.5	31.2	31.9	28.8	28.4	26.1	27.2	30.1	33.3	34.5	44.2	55.5	66.4	67.1	43.0	67.1
30-Jun	63.6	62.4	72.2	84.6	79.7	71.3	63.7	58.5	53.0	45.6	45.8	44.6	42.6	38.6	32.7	29.9	25.7	22.0	23.9	27.9	39.4	45.9	45.5	48.0	48.6	84.6
	81.8	83.3	84.1	86.6	84.9	80.7	75.5	69.0	63.9	59.0	57.2	55.8	52.3	50.3	49.0	50.4	51.4	52.1	52.7	57.3	62.6	69.3	74.9	78.3	Diurnal Average	
	100.0	100.0	100.0	100.0	100.0	99.6	100.0	100.0	99.4	97.5	100.0	100.0	96.4	93.2	92.7	100.0	98.9	98.7	98.7	100.0	100.0	100.0	100.0	100.0	Diurnal Maximum	

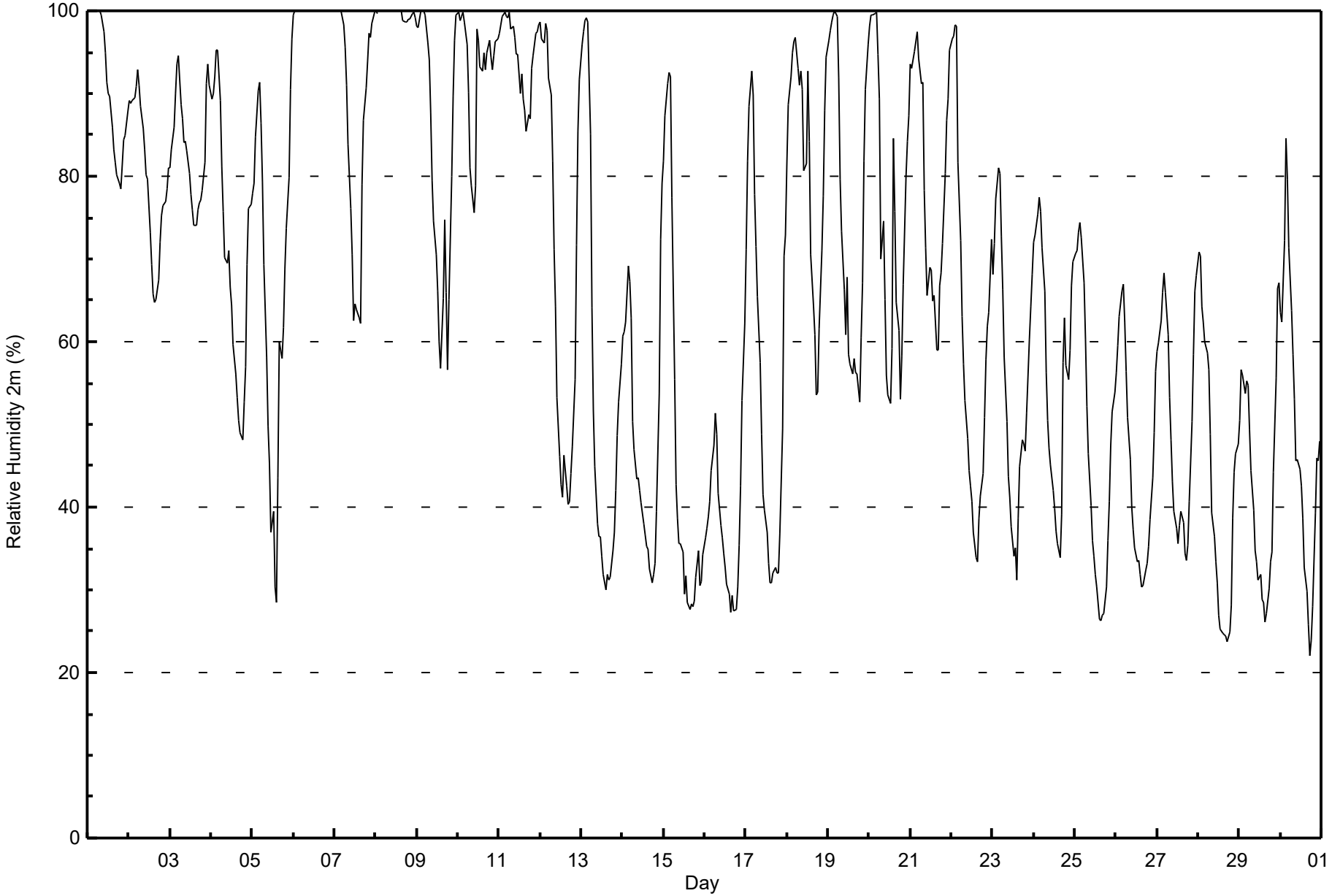
OR - Out of Range

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Wapasu - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	142	20.55	20.55
40 - 60	148	21.42	41.97
60 - 80	165	23.88	65.85
80 - 100	214	30.97	96.82

Total Number of Valid Hours: 691

Total Number of Hours: 720

Maximum Value: 14.8 mm on Jun 6 14:00

Maximum Daily Total: 75.1 mm on Jun 6

Minimum Value: 0.0 mm on Jun 1 10:00

Minimum Daily Total: 0.0 mm on Jun 2

Maximum Diurnal Total: 20.0 mm at hour 15

Minimum Diurnal Total: 0.4 mm at hour 23

Monthly Total: 146.22 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} = 4.1

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

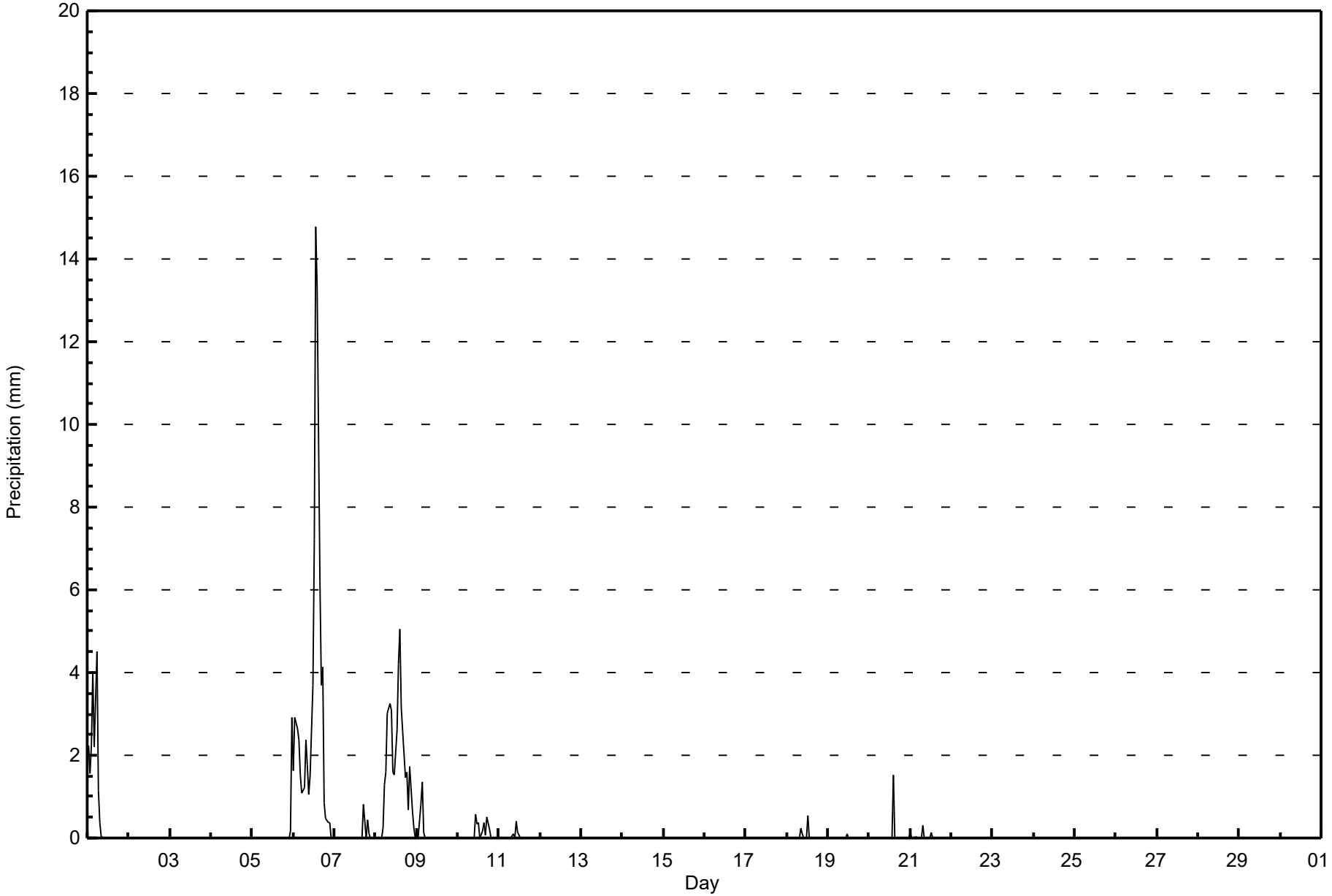
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	2.2	1.6	2.3	4.0	2.2	4.5	1.2	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.4	4.5
2-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.9	3.1	2.9
6-Jun	1.6	2.9	2.6	2.4	1.5	1.1	1.2	2.4	1.8	1.0	1.5	3.7	7.2	14.8	13.3	6.2	3.7	4.1	0.8	0.5	0.4	0.4	0.0	0.0	75.1	14.8
7-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.4	0.1	0.0	0.0	0.0	1.4	0.8
8-Jun	0.0	0.0	0.0	0.0	0.2	1.3	1.6	3.0	3.2	3.1	1.6	1.5	2.6	4.2	5.1	3.2	2.6	1.5	1.6	0.7	1.7	0.7	0.2	0.0	39.5	5.1
9-Jun	0.1	0.0	0.8	1.3	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	0.0	0.0	0.0	0.0	2.3	1.3
10-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.3	0.4	0.0	0.2	0.4	0.1	0.5	0.2	0.0	0.0	0.0	0.0	0.0	2.6	0.6
11-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	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	0.7	0.4
12-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.6
19-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
20-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
21-Jun	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.3	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	0.6	0.3
22-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4.1	4.5	5.7	7.8	4.1	6.9	4.0	6.1	5.4	4.2	4.1	5.8	10.9	19.0	20.0	9.7	6.4	6.9	2.7	1.6	2.2	1.0	0.4	2.9	Diurnal Average	
	2.2	2.9	2.6	4.0	2.2	4.5	1.6	3.0	3.2	3.1	1.6	3.7	7.2	14.8	13.3	6.2	3.7	4.1	1.6	0.7	1.7	0.7	0.2	2.9	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Precipitation (PC) - mm

Wapasu - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Wapasu - June 2026

Maximum Speed: 22 km/h on Jun 8 12:00

Maximum Daily Speed Average: 16.5 km/h on Jun 1

Minimum Speed Value: 0 km/h on Jun 6 02:00

Minimum Daily Speed Average: 1.3 km/h on Jun 22

Maximum Diurnal Speed Average: 4.7 km/h at hour 14

Minimum Diurnal Speed Average: 0.6 km/h at hour 7

Monthly Average Velocity: 1.7 km/h 43.6 deg

Percentiles: P_1 = 2 P_{10} = 4 Q_1 = 6 Median = 9 Q_3 = 12 P_{90} = 14 P_{99} = 19

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-Jun	N17	N18	N19	N17	N18	N18	N18	N19	N19	N20	N19	N19	NNE17	N17	N17	N17	NNE16	NNE16	NNE15	NNE15	NNE13	NNE13	NNE13	NNE12	N16.5	N20
2-Jun	NNE12	NE11	NE11	NE11	NNE10	NNE11	NE12	NE10	NE12	NE11	NE13	NE11	NE12	NE14	ENE15	ENE16	ENE15	E10	E10	E11	E12	E10	E6	E5	NE10.8	ENE16
3-Jun	ESE7	ESE6	ESE7	SE6	ESE5	SE5	SSE9	SE6	SE7	SE7	SE7	SE7	SSE7	S6	SSW8	SSW8	SW8	SSW7	S6	S8	S6	SE5	SSE7	SSE10	SSE5.9	SSE10
4-Jun	SSE12	SSE12	S11	S9	S8	SSW8	SW11	SW12	SW13	SW12	SW11	SSW12	SSW11	SSW11	SW13	SW13	SW13	SW12	SW11	SW12	SW12	S4	S6	S7	SSW9.8	SW13
5-Jun	S7	S8	S7	S8	S8	SSW8	SW11	SW11	WSW10	WSW11	WSW10	SW6	WSW9	WSW8	WSW7	SSW9	S10	SSE7	SE7	SSW3	SW3	SSE4	SE5	SSE3	SSW6.2	SW11
6-Jun	SE2	SSE0	WSW2	W3	WNW5	NW8	WNW9	WSW11	WSW12	WSW11	SW12	SW14	WSW13	W11	W9	W12	W9	WSW10	SW14	SW14	WSW13	SW13	SW10	SW8	WSW8.5	SW14
7-Jun	SW7	SSW5	SSW5	S5	SSE8	S8	S8	S8	S9	SSW7	SSW3	WSW3	N5	NNE7	N7	NNE11	NNE7	ENE8	N5	E5	ESE8	E7	ENE5	ENE5	SE1.6	NNE11
8-Jun	ENE7	NNE4	NNE6	N8	N8	N12	N13	N15	NNW17	NNW18	NNW22	NNW22	NW19	NW18	WNW16	WNW18	WNW17	WNW15	WNW14	WNW12	WNW14	WNW12	W11	W9	NW11.7	NNW22
9-Jun	W9	WNW10	W7	W8	W8	WNW8	WNW7	WNW8	WNW8	WNW10	W12	W13	W13	W12	WNW11	NW8	WNW3	NW6	WNW7	WNW3	WNW1	NE7	NE6	NE6	WNW6.5	W13
10-Jun	ENE5	NE4	NNE5	NNE6	NNE7	N7	N8	N12	N12	N11	N10	NNE12	N13	N13	N14	NNE12	N13	N14	N15	N13	N13	N12	N12	N12	N10.2	N15
11-Jun	N13	N14	NNW12	N11	N11	N11	N12	N12	N12	N13	N14	N14	N13	N14	N13	N14	N17	N13	N13	N11	N10	N10	N9	N7	N12.1	N17
12-Jun	N6	N7	N5	NNE5	NNE5	N7	N9	N12	N14	N18	N19	N18	N21	N20	N21	N20	N18	N17	N17	N14	N8	NNE3	ESE3	SSE4	N11.7	N21
13-Jun	SE4	SE3	SSE4	SSE4	SSE5	SSE5	SW3	W4	WNW6	NW8	NW7	W5	NNW7	WSW7	WNW6	NW6	SW9	WSW10	SW9	SSW7	SW5	S5	S6	SSE6	SW3.2	WSW10
14-Jun	SSE7	S7	S6	SSE6	S6	SSW4	NNW4	N10	N10	N11	NNW13	NNW14	NNW13	N13	NNE13	NNE12	NNE11	N13	NNE12	N10	N7	ENE3	ESE2	E3	N5.4	NNW14
15-Jun	ESE4	ESE4	ESE4	SE4	SE4	SE3	SSE4	N4	N6	N8	N8	NNE7	NNW10	N9	N7	NNE7	N7	NNE6	E7	E6	ESE7	ESE9	SE13	SE12	ENE3.3	SE13
16-Jun	SE14	SE17	SE16	SE15	SE15	SE13	SE13	SE11	ESE11	SE10	E10	ESE6	ENE8	NE11	NNE12	NNE12	NNE15	NNE14	NNE13	NE12	NE11	NE9	NE7	NE5	E8.2	SE17
17-Jun	NE6	ENE4	E4	ENE4	NNE4	NNE4	NNE7	N10	N13	N13	N14	NNE15	NNE14	NNE15	N15	NNE13	N12	NNE12	NNE10	NNE9	NNE6	NE4	E3	E4	NNE8.3	NNE15
18-Jun	E3	NNE4	ENE4	NE4	NE3	UO	NNW2	NNW4	WNW5	NW8	NNW11	NNW13	NNW10	NNW12	N14	NNW14	NNW14	NNW15	NNW13	N9	NNW4	NW3	SSE1	SSE3	NNW6.4	NNW15
19-Jun	SSE4	SE3	SE4	SE3	SSE3	SSW1	NNW3	N6	NNW9	N10	N10	N10	N11	N14	N12	NNE10	N12	N12	N12	NE8	NE6	NE3	ENE4	ENE4	NNE5.4	N14
20-Jun	ENE4	E4	E3	ENE2	NE4	NE4	NE7	NNE9	N10	NNE9	NE11	NNE10	N11	ENE2	NE3	NNE8	NE11	ENE11	E8	E5	ESE2	NE4	NE5	E4	NE5.5	NE11
21-Jun	E4	ESE5	ESE2	E1	ENE3	NE5	NE5	NE5	NNE7	NNE10	N11	N12	N13	NNW11	NNW11	N8	N11	N11	N9	N6	N2	NNE3	NE4	E5	NNE5.7	N13
22-Jun	E4	ENE3	E2	SE6	SE7	SE7	E1	NW2	NW5	NNW6	NNE5	NNE7	N7	NNE9	NE4	NW3	WSW5	S6	S7	SSE7	SSE6	SSE5	SSE5	ESE3	ESE1.3	NNE9
23-Jun	SSE6	SSE6	SSE7	SSE7	SSE7	S6	SSW6	WSW8	WSW9	WSW9	WSW8	W8	WSW9	WSW7	WSW10	WNW13	WSW5	SSE16	SSE15	SSE10	SSE6	SSE6	SSE5	SSE6	SSW5.5	SSE16
24-Jun	SSE6	SSE6	SSE6	SSE6	SSE7	SSE9	S8	SSW8	SSW10	SW10	SW11	SW10	SW10	SW9	WSW11	SW9	SE6	SE19	SSE15	SSE12	SSE9	SE13	SSE12	SSE11	S7.9	SE19
25-Jun	SSE11	SSE11	SSE12	SSE10	SSE10	SSE10	S7	SSW7	S8	S9	S12	S12	S11	S11	S10	S10	SSE9	SSE11	SSE13	SSE15	SSE12	SSE12	SSE13	SSE14	SSE10.5	SSE15
26-Jun	SSE13	SSE13	SSE12	SSE12	SSE11	SSE11	SSE11	SSE11	S10	SSE13	SSE15	SSE14	S13	SSE12	SSE13	S12	SSE12	SSE14	SSE13	SE12	SE9	SE9	SE11	SE11	SSE11.8	SSE15
27-Jun	SE11	SE11	SE10	SE11	SE11	SE11	SE12	SE11	SE14	SE15	ESE15	ESE14	ESE13	SE13	SE13	SE10	SE12	SE8	SE8	SE6	ESE5	ESE6	ESE6	ESE6	SE10.4	ESE15
28-Jun	ESE6	ESE7	ESE7	ESE7	ESE8	ESE7	ESE7	E8	E12	ESE13	ENE13	E13	E13	ENE15	E15	E14	E13	ENE13	ENE11	ENE9	E4	E6	ESE6	ESE6	E9.4	ENE15
29-Jun	ESE7	E6	ESE8	ESE8	ESE7	ESE4	E3	NE4	ENE7	E10	E10	NE8	NNE9	NNE9	NNE10	NE9	ENE10	ENE8	E8	E6	ESE5	SSE7	SSE4	SSE7	E5.6	E10
30-Jun	SSE9	SSE7	S2	SE5	SE7	SE6	SE6	SE3	ESE1	ENE5	N2	N6	N10	NNE11	ENE11	ENE12	ENE10	E10	ESE9	ESE7	SE5	SE7	SE7	SE8	E4.6	ENE12
	ESE3.5	ESE3.0	ESE2.9	ESE2.9	ESE2.7	ESE1.8	ENE0.6	N1.9	NNW2.6	N3.0	N3.6	N3.7	N4.6	N4.7	N4.7	N4.5	NNE3.9	NE3.1	NE2.3	ENE1.9	E1.3	E2.5	ESE3.0	ESE3.4	Diurnal Average	
	N17	N18	N19	N17	N18	N18	N18	N19	N19	N20	NNW22	NNW22	N21	N20	N21	N20	N18	SE19	N17	NNE15	WNW14	SE13	SSE13	SSE14	Diurnal Maximum	

UO - Unstable Operation

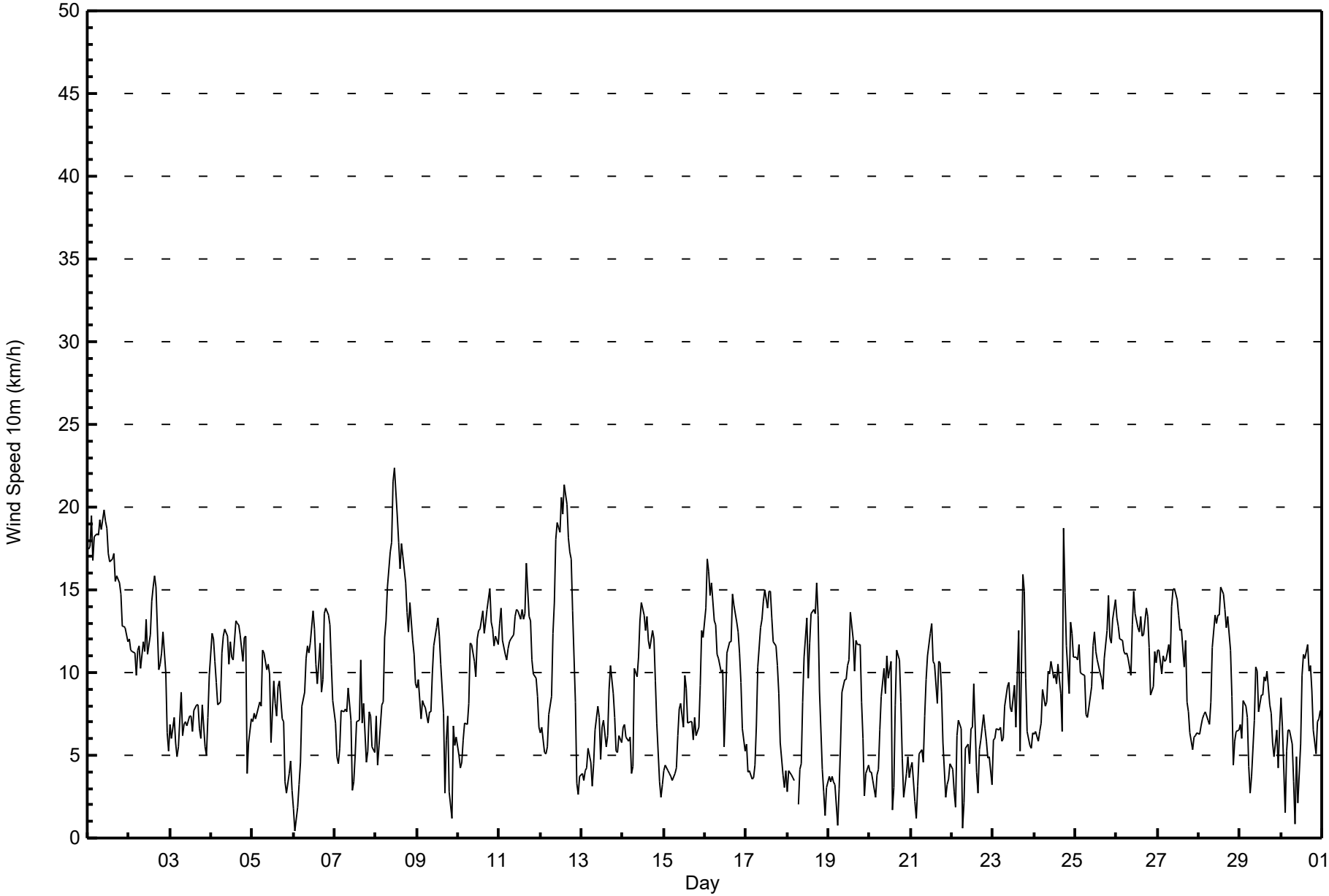
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Wapasu - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	147	20.45	20.45
6 - 11	353	49.10	69.54
12 - 19	212	29.49	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: 719

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Wapasu - June 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	10	17	15	19	14	13	19	4	6	3	4	3	5	4	5	147
6 - 11	48	30	21	11	17	28	33	43	35	14	18	20	9	11	7	8	353
12 - 19	69	26	5	7	7	5	17	26	4	1	14	3	5	9	2	12	212
20 - 28	5	0	0	0	0	0	0	0	0	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	128	66	43	33	43	47	63	88	43	21	35	27	17	25	13	27	719

Total Number of Valid Hours: 719

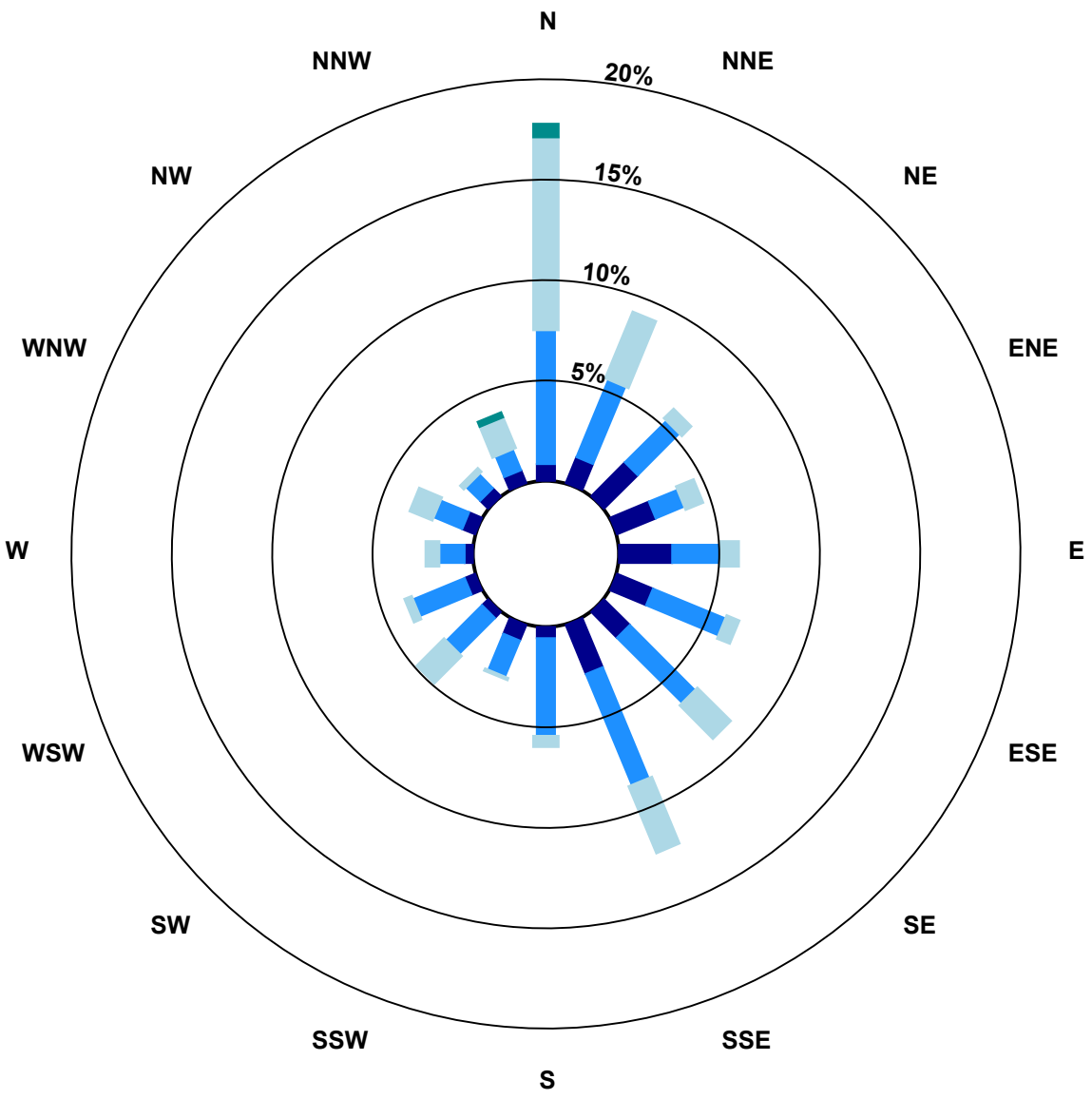
Total Number of Hours: 720

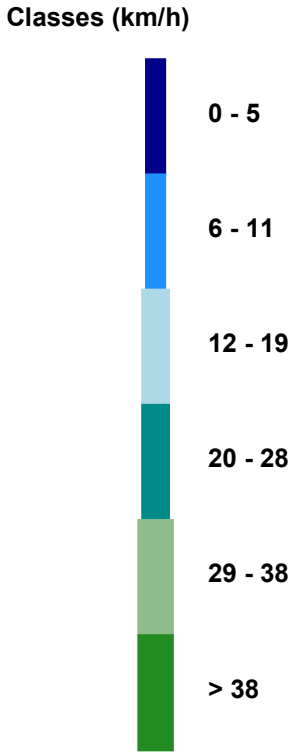
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Wapasu





Total Number of Valid Hours: 719

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 7 km/h on Jun 8 12:00

Minimum Value: 0 km/h on Jun 13 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:	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-Jun	6	5	6	5	6	5	6	6	6	6	6	6	6	5	5	6	5	5	5	5	5	5	5	4	6
2-Jun	4	4	4	4	3	4	4	4	4	4	5	4	5	6	5	5	5	4	4	4	4	3	2	2	6
3-Jun	2	3	2	2	2	2	2	2	2	2	2	2	3	2	3	3	2	3	2	3	2	1	2	2	3
4-Jun	3	3	3	3	2	3	3	3	4	3	4	4	4	4	5	4	5	4	4	4	4	2	1	1	5
5-Jun	2	2	2	2	2	3	3	3	3	3	4	3	4	3	3	4	3	3	3	1	1	1	1	1	4
6-Jun	1	1	1	1	2	3	3	3	3	3	3	3	4	5	4	4	3	4	4	4	4	3	3	2	5
7-Jun	2	2	1	2	2	3	3	3	3	3	2	2	4	3	3	3	3	5	2	2	2	2	2	2	5
8-Jun	2	1	2	2	2	3	3	4	5	5	6	7	6	6	6	6	6	5	5	4	5	4	4	3	7
9-Jun	3	3	2	2	2	3	2	3	3	3	4	4	4	4	4	4	3	2	2	3	1	3	1	2	4
10-Jun	2	1	1	2	2	2	3	3	3	3	4	4	4	4	5	5	4	4	5	3	3	3	3	3	5
11-Jun	4	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	5	4	4	3	3	2	2	2	5
12-Jun	2	2	2	1	2	2	2	3	4	4	5	5	6	6	6	6	5	5	5	4	3	1	1	1	6
13-Jun	0	1	0	1	0	1	1	2	2	3	3	3	3	3	3	3	3	3	3	2	2	1	1	1	3
14-Jun	1	1	1	2	1	1	3	3	3	4	4	5	4	5	5	4	4	5	5	3	3	2	1	1	5
15-Jun	1	1	1	1	1	1	2	2	3	3	4	5	4	4	4	4	3	3	2	1	1	3	4	3	5
16-Jun	4	5	4	4	4	4	4	4	4	3	4	4	3	4	5	5	5	5	4	5	4	3	2	1	5
17-Jun	1	1	1	1	1	1	2	4	4	4	5	5	5	5	5	5	5	4	4	3	2	1	1	0	5
18-Jun	1	1	1	1	1	UO	1	1	2	4	4	5	3	4	5	4	4	5	4	4	1	1	2	1	5
19-Jun	1	1	2	1	1	1	2	2	3	3	3	4	4	4	4	4	4	3	3	3	3	1	1	1	4
20-Jun	1	0	1	2	1	1	2	3	3	3	4	3	4	3	3	4	4	4	3	2	1	1	1	1	4
21-Jun	1	1	1	2	1	1	2	2	2	3	3	3	4	3	3	3	3	3	3	2	1	1	1	1	4
22-Jun	0	1	1	1	1	2	2	2	2	2	2	3	2	3	3	2	2	5	4	3	1	1	1	1	5
23-Jun	1	1	1	1	1	1	2	2	2	3	4	3	4	3	4	5	3	5	5	4	1	1	1	1	5
24-Jun	1	1	1	1	1	3	3	3	3	3	4	4	4	4	4	4	4	6	5	3	2	3	3	2	6
25-Jun	2	2	3	2	2	2	3	2	2	4	4	5	5	5	4	4	4	4	5	4	3	3	3	4	5
26-Jun	3	3	3	3	2	3	3	3	3	5	5	4	5	4	5	4	4	4	4	4	3	3	3	2	5
27-Jun	3	3	2	3	3	3	3	4	4	5	5	5	4	4	4	4	4	3	2	2	1	1	1	1	5
28-Jun	1	1	1	1	1	2	2	3	4	5	4	5	5	6	5	5	4	5	4	3	1	1	1	1	6
29-Jun	1	1	2	2	1	1	1	3	3	4	4	4	3	4	4	4	4	3	3	2	2	1	1	2	4
30-Jun	2	3	2	1	1	1	1	2	1	3	3	4	5	4	4	4	4	4	3	2	1	2	1	1	5
	6	5	6	5	6	5	6	6	6	6	6	7	6	6	6	6	6	6	5	5	5	5	5	4	
	Diurnal Maximum																								

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Wapasu - June 2026

Direction of Maximum Speed: 333 deg on Jun 8 12:00
Direction of Maximum Daily Speed Average: 9.7 deg on Jun 1

Direction of Minimum Speed: 147 deg on Jun 6 02:00

Direction of Minimum Daily Speed Average: 1.3 deg on Jun 22

Monthly Average Direction: 43.6 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-Jun	7	8	2	4	3	3	359	0	3	3	6	10	12	7	9	8	13	14	17	24	27	28	27	27	9.7
2-Jun	31	36	37	35	28	27	37	40	36	41	46	50	50	51	60	62	58	80	93	88	80	80	91	88	53.5
3-Jun	102	119	119	127	122	131	153	139	141	129	140	124	166	172	203	213	216	192	187	177	176	142	152	156	155.2
4-Jun	162	165	177	178	182	195	228	235	228	222	216	197	200	195	223	216	231	218	226	235	232	185	174	173	207.1
5-Jun	181	188	183	183	188	198	230	232	240	255	253	220	248	248	252	207	181	168	138	206	225	167	127	161	210.2
6-Jun	143	147	244	263	301	313	296	251	244	239	234	233	248	268	275	261	273	258	234	234	238	233	235	226	249.6
7-Jun	214	212	212	174	166	177	179	187	189	201	194	248	354	14	356	18	28	66	359	100	108	94	64	65	130.9
8-Jun	70	25	25	359	354	355	354	350	345	340	341	333	320	306	303	294	293	296	297	288	282	283	280	276	320.3
9-Jun	277	282	269	265	259	282	295	287	298	292	270	263	267	280	299	319	294	305	297	290	286	43	53	36	287.8
10-Jun	59	38	23	22	15	7	352	349	352	357	350	17	358	360	354	12	357	356	356	353	349	351	350	354	359.6
11-Jun	355	349	348	353	353	352	352	353	353	352	357	4	0	3	359	5	3	3	7	8	355	349	3	3	357.5
12-Jun	3	358	3	22	24	4	355	357	356	349	356	3	357	357	351	358	355	351	352	350	351	15	104	149	357.5
13-Jun	146	137	147	151	152	158	222	267	285	316	320	278	333	258	303	305	234	242	221	203	218	191	175	166	234.3
14-Jun	156	173	170	168	182	197	335	10	4	355	345	345	348	359	13	16	21	8	16	8	9	65	107	99	9.2
15-Jun	105	116	121	124	141	144	152	353	353	11	358	17	331	2	349	17	352	23	89	92	106	111	125	127	60.0
16-Jun	126	128	125	124	128	131	128	124	116	124	101	117	65	53	25	24	21	27	28	34	40	38	38	39	83.5
17-Jun	55	78	90	63	23	19	13	11	358	5	10	12	12	16	10	16	8	18	16	25	27	55	92	81	19.4
18-Jun	91	24	78	53	41	UO	327	327	298	310	329	347	342	344	350	340	342	341	346	349	342	313	162	163	344.9
19-Jun	147	146	142	143	151	211	341	7	346	359	351	2	354	358	10	31	0	358	4	41	45	52	71	70	14.0
20-Jun	78	83	92	76	46	34	54	30	355	21	39	33	9	65	47	13	53	64	92	87	108	35	49	79	45.1
21-Jun	81	121	115	84	57	43	38	41	21	16	8	356	352	330	340	6	7	353	7	351	356	18	36	83	11.4
22-Jun	81	78	97	142	137	143	87	314	319	340	32	13	360	19	47	312	255	170	176	156	165	153	153	114	107.4
23-Jun	164	160	167	165	166	175	193	239	244	255	257	262	238	248	245	292	238	147	159	164	162	166	158	163	200.5
24-Jun	167	167	164	157	159	167	187	200	210	217	234	219	225	235	247	235	142	137	158	156	149	141	154	155	180.0
25-Jun	158	157	162	165	163	165	177	194	191	190	186	171	176	176	191	177	166	161	162	160	150	151	157	160	168.0
26-Jun	162	160	157	153	150	152	155	160	174	162	162	165	170	148	150	173	157	160	152	143	140	134	140	135	155.4
27-Jun	138	138	136	135	135	134	131	125	129	125	122	123	122	135	144	139	125	124	126	125	107	115	114	112	128.7
28-Jun	113	112	115	122	117	121	122	92	87	103	78	87	82	74	82	82	80	78	71	77	90	99	104	107	91.4
29-Jun	109	84	104	117	123	119	89	40	75	95	90	53	30	22	18	42	62	78	97	93	110	148	160	161	83.8
30-Jun	153	158	170	134	124	130	133	130	104	72	5	357	356	16	61	62	77	89	113	117	124	128	132	135	97.3
	116.2	117.7	120.1	121.7	119.5	111.3	63.9	352.6	343.4	354.6	359.1	3.9	349.4	357.2	354.1	1.6	13.8	39.8	52.4	72.9	83.3	99.7	115.7	121.8	
	Diurnal Average																								

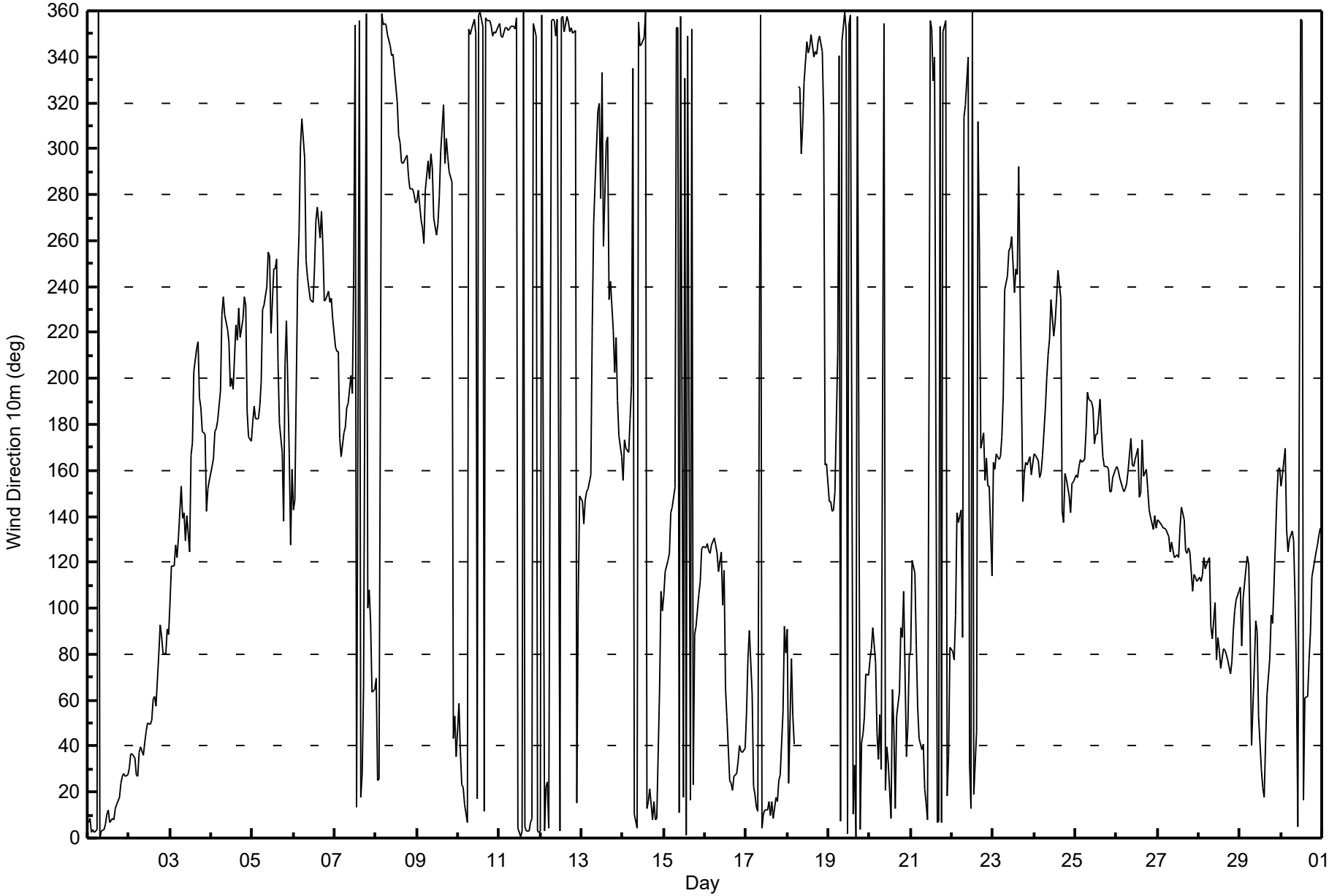
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Wapasu - June 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Wapasu - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 99 deg on Jun 30 11:00

Minimum Value: 4 deg on Jun 13 05:00

Percentiles: P_1 = 8 P_{10} = 15 Q_1 = 20 Median = 26 Q_3 = 32 P_{90} = 41 P_{99} = 78

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-Jun	28	26	24	24	25	24	24	25	24	26	26	28	28	26	28	26	28	28	28	32	31	30	33	29	33
2-Jun	29	30	29	30	31	30	29	29	31	29	27	28	28	29	26	26	27	25	26	26	24	25	28	25	31
3-Jun	25	25	24	23	20	28	23	28	33	29	35	31	39	38	33	36	31	35	32	31	28	13	13	17	39
4-Jun	18	21	24	25	26	29	21	22	27	27	28	31	33	35	30	33	29	27	26	19	18	24	15	15	35
5-Jun	22	24	23	25	28	29	19	19	26	30	39	58	39	45	35	37	28	38	28	52	41	25	29	37	58
6-Jun	55	88	32	31	32	26	29	24	18	18	17	16	22	31	33	27	30	31	18	18	19	17	18	19	88
7-Jun	23	26	26	30	22	26	30	32	30	35	77	71	75	32	48	29	31	35	47	27	19	22	22	24	77
8-Jun	23	30	30	23	19	18	20	20	20	21	20	22	25	28	30	29	29	30	30	30	28	28	28	29	30
9-Jun	30	26	28	26	25	29	31	31	30	33	31	27	29	34	33	29	60	35	32	37	61	28	25	29	61
10-Jun	32	33	32	32	29	28	26	22	24	29	30	27	25	23	25	31	23	23	20	20	20	19	20	18	33
11-Jun	21	18	19	19	19	19	19	20	19	20	23	25	25	24	22	26	24	25	24	25	21	18	22	22	26
12-Jun	23	21	26	27	27	26	20	23	24	22	24	25	25	26	23	25	24	25	23	20	17	22	31	16	31
13-Jun	4	12	7	5	4	9	34	46	42	39	49	72	59	62	64	57	30	29	26	30	18	19	14	16	72
14-Jun	10	12	14	16	22	33	56	28	29	32	30	29	27	34	33	36	34	33	33	33	33	25	10	13	56
15-Jun	10	9	14	20	18	14	61	55	60	46	42	68	41	52	64	52	58	53	26	18	18	20	20	20	68
16-Jun	20	19	20	20	20	19	20	24	28	34	38	69	55	37	38	41	33	32	34	31	28	27	25	22	69
17-Jun	13	13	12	24	22	23	28	31	27	33	34	34	33	33	34	34	31	31	32	35	30	21	11	11	35
18-Jun	13	23	17	17	22	UO	22	25	35	34	25	25	25	31	28	23	20	23	21	25	19	31	88	26	88
19-Jun	24	11	17	15	16	67	34	31	29	34	36	33	37	31	33	38	32	27	27	34	21	17	26	8	67
20-Jun	13	11	15	43	23	25	23	34	25	37	37	38	35	85	86	31	28	34	34	39	58	38	24	17	86
21-Jun	19	13	47	59	29	22	28	34	31	30	31	22	24	24	28	28	26	20	25	20	24	21	17	13	59
22-Jun	7	21	53	11	13	16	80	77	48	50	64	43	27	37	78	74	37	50	27	16	21	12	8	38	80
23-Jun	11	11	8	9	11	20	31	25	27	34	38	42	45	43	38	38	61	22	23	21	15	10	8	14	61
24-Jun	11	12	11	8	11	23	28	30	30	34	29	35	37	40	43	45	53	22	24	18	16	17	17	17	53
25-Jun	18	18	18	19	18	18	28	33	34	36	34	31	39	39	43	40	33	30	29	20	17	16	19	19	43
26-Jun	18	18	16	16	16	18	21	23	32	33	28	30	38	31	34	34	30	23	24	21	17	16	16	16	38
27-Jun	16	17	16	17	19	18	19	25	25	28	25	30	27	26	25	28	25	23	24	18	10	10	10	11	30
28-Jun	14	14	13	12	15	15	18	27	27	29	28	31	33	28	29	31	32	26	25	22	12	11	11	12	33
29-Jun	11	24	21	14	14	40	54	56	45	30	33	57	42	41	37	41	33	37	25	21	27	13	26	16	57
30-Jun	15	21	64	9	12	14	16	33	78	56	99	86	41	33	31	33	31	29	23	17	14	13	13	14	99
	55	88	64	59	32	67	80	77	78	56	99	86	75	85	86	74	61	53	47	52	61	38	88	38	
	Diurnal Maximum																								

UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS18
STONY MOUNTAIN
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - STONY MOUNTAIN (AMS18)
JUNE 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	-	-	3.3	0	0.5	0
TRS(ppb) Average	683	35	37	99.72	0.6	0	0.5	-	0.4	-
THC(ppm) Average	683	35	37	99.72	-	-	2.2	-	2.1	-
NMHC(ppm) Average	683	35	37	99.72	-	-	0.024	-	0.002	-
CH4(ppm) Average	683	35	37	99.72	-	-	2.2	-	2.1	-
O3 (ppb) Average	684	34	36	99.72	-	-	55.3	0	46.2	-
NO2 (ppb) Average	681	37	39	99.72	-	-	2.9	0	1.4	-
NO (ppb) Average	681	37	39	99.72	-	-	0.8	-	0.2	-
NOX (ppb) Average	681	37	39	99.72	-	-	3.6	-	1.5	-
PM2.5 (ug/m3) Average	407	4	313	57.08	-	-	94.1	1	6.3	0
Temperature 2 m (C) Average	720	0	0	100	-	-	26.9	-	20.8	-
Relative Humidity (%) Average	720	0	0	100	-	-	99.9	-	97.2	-
Wind Speed 20 m (km/h) Average	720	0	0	100	-	-	23	-	16	-
Wind Direction 20 m (deg) Average	720	0	0	100	-	-	-	-	-	-
Precipitation (mm) Total	720	0	0	100	-	-	7.3	-	27.3	-
Leaf Wetness (% of range) Average	720	0	0	100	-	-	37.5	-	16.7	-
Global Solar Radiation (W/m2) Average	720	0	0	100	-	-	1027.4	-	321.8	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - STONY MOUNTAIN (AMS18)
JUNE 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	0.18	0.3	-	0	0	0	0.1	0.2	0.5	3.3
TRS (ppb) Average	683	0.38	0	-	0.3	0.3	0.4	0.4	0.4	0.4	0.5
THC (ppm) Average	683	2.05	0	-	2	2	2	2.1	2.1	2.1	2.2
NMHC(ppm) Average	683	0	0.002	-	0	0	0	0	0	0	0.024
CH4(ppm) Average	683	2.05	0	-	2	2	2	2.1	2.1	2.1	2.2
O3 (ppb) Average	684	30.86	9	-	11	19	24.2	30.5	37.1	41.9	55.3
NO2 (ppb) Average	681	0.64	0.4	-	0.1	0.2	0.3	0.5	0.8	1.2	2.9
NO (ppb) Average	681	0.04	0.1	-	0	0	0	0	0	0.1	0.8
NOX (ppb) Average	681	0.67	0.5	-	0.1	0.2	0.3	0.6	0.9	1.4	3.6
PM2.5 (ug/m3) Average	407	7.1	12.2	-	0.1	1.9	3.1	3.9	5.6	8.7	94.1
Temperature 2 m (C) Average	720	14.18	5	-	5	7.9	10.1	13.7	17.4	21.7	26.9
Relative Humidity (%) Average	720	70.46	20.2	-	27	39.9	54.5	72.7	88	97.2	99.9
Wind Speed 20 m (km/h) Average	720	9.7	4	-	1	5	7	9	12	16	23
Wind Direction 20 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-
Precipitation (mm) Total	720	-	-	92.55	-	-	-	-	-	-	-
Surface Wetness (% of range) Average	720	4.17	7.6	-	0	0.2	0.6	1.1	1.7	16.8	37.5
Global Solar Radiation (W/m2) Average	720	210.91	254	-	0	0	1.3	90	399.7	640.3	1027.4

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - STONY MOUNTAIN (AMS18)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
NO2/NO/NOx, O3, SO2, THC/NMHC/CH4, TRS	03 Jun 2026 14:00	03 Jun 2026 14:00	1	Station power failure
NO2/NO/NOx, O3, SO2, THC/NMHC/CH4, TRS	08 Jun 2026 13:00	08 Jun 2026 13:00	1	Station power failure
PM2.5	02 Jun 2026 08:00	02 Jun 2026 13:00	6	Unstable Operations - flatline in analyzer output signal
PM2.5	03 Jun 2026 06:00	04 Jun 2026 12:00	31	Unstable Operations - flatline in analyzer output signal
PM2.5	05 Jun 2026 15:00	08 Jun 2026 12:00	70	Unstable Operations - flatline in analyzer output signal
PM2.5	08 Jun 2026 13:00	08 Jun 2026 13:00	1	Maintenance- smart switch installed
PM2.5	09 Jun 2026 05:00	14 Jun 2026 14:00	130	Unstable Operations - flatline in analyzer output signal
PM2.5	26 Jun 2026 15:00	28 Jun 2026 11:00	45	Unstable Operations - flatline in analyzer output signal
PM2.5	29 Jun 2026 13:00	30 Jun 2026 14:00	26	Unstable Operations - flatline in analyzer output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Stony Mountain - June 2026

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

Maximum Value: 3.3 ppb on Jun 5 10:00

Maximum Daily Average: 0.5 ppb on Jun 11

Minimum Value: 0.0 ppb on Jun 1 01:00

Minimum Daily Average: 0.0 ppb on Jun 6

Maximum Diurnal Average: 0.3 ppb at hour 13

Minimum Diurnal Average: 0.1 ppb at hour 2

Monthly Average: 0.18 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} = 1.3

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-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1
2-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.0	0.1	0.4	0.3	0.5	PF	0.5	0.4	0.7	0.8	0.6	0.5	0.2	0.5	0.2	0.2	0.3	0.8
4-Jun	Z	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
5-Jun	0.1	Z	0.0	0.0	0.0	0.0	0.1	0.0	0.5	3.3	2.5	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.3
6-Jun	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
7-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.1	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.2
8-Jun	0.0	0.0	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	PF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
9-Jun	0.0	0.0	0.1	0.0	0.0	Z	0.1	0.1	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	0.2	0.2	0.1	0.1	0.2
10-Jun	Z	0.2	0.1	0.4	0.2	0.3	0.8	0.8	0.3	0.2	0.1	0.4	C	C	C	C	C	0.0	0.1	0.4	0.1	0.1	0.1	0.1	0.3	0.8
11-Jun	0.3	Z	0.9	0.5	0.4	0.6	0.3	0.2	0.4	0.8	0.6	0.6	0.6	1.0	0.6	0.7	0.9	0.6	0.7	0.6	0.7	0.2	0.2	0.2	0.5	1.0
12-Jun	0.0	0.0	Z	0.1	0.4	1.2	0.7	0.5	0.5	0.2	0.4	1.8	0.7	1.2	0.8	0.4	0.3	0.4	0.6	0.7	0.4	0.3	0.2	0.1	0.5	1.8
13-Jun	0.1	0.0	0.1	Z	0.0	0.3	1.6	1.7	0.8	0.4	0.5	0.4	0.9	0.7	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.7
14-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.2	0.3	0.2	0.1	0.1	0.5	0.1	0.5
15-Jun	0.5	0.3	0.5	0.5	0.9	Z	1.2	0.9	0.6	0.4	0.3	0.4	0.7	0.6	0.4	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.4	1.2
16-Jun	Z	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	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2
17-Jun	0.1	Z	0.0	0.1	0.2	0.4	0.4	0.3	0.3	0.1	0.2	0.2	0.2	0.1	0.1	0.0	0.2	0.2	0.5	0.3	0.7	0.9	1.0	0.6	0.3	1.0
18-Jun	0.5	0.3	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.8	0.6	0.4	0.4	0.1	0.1	0.2	0.1	0.3	0.5	0.3	0.0	0.1	0.0	0.0	0.2	0.8
19-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.3	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.3
20-Jun	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	0.0	0.1
21-Jun	0.0	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	0.0	0.0	0.0	0.0	0.1
22-Jun	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	0.4	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.4
23-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1
24-Jun	0.0	0.1	Z	0.5	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.8	1.3	1.4	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.2	0.3	0.2	0.3	1.4
25-Jun	0.2	0.1	0.3	Z	0.2	0.2	0.2	0.2	0.4	0.4	0.1	0.0	M	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.3	0.1	0.0	0.1	0.4
26-Jun	0.1	0.1	0.2	0.3	Z	0.2	0.2	0.3	1.1	0.6	0.4	0.2	0.1	0.4	0.2	0.2	0.4	0.4	0.3	0.1	0.0	0.7	3.2	0.9	0.5	3.2
27-Jun	1.3	0.9	0.7	0.3	0.3	Z	0.2	0.6	0.4	0.2	0.3	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.3	0.3	0.5	0.1	0.0	0.1	0.3	1.3
28-Jun	Z	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.2
29-Jun	0.1	Z	0.1	0.1	0.2	0.3	0.3	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.0	0.2	0.2	0.5	0.4	0.0	0.0	0.0	0.2	0.5
30-Jun	0.1	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	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2
	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	Diurnal Average	
	1.3	0.9	0.9	0.5	0.9	1.2	1.6	1.7	1.1	3.3	2.5	1.8	1.3	1.4	0.8	0.7	0.9	0.8	0.7	0.7	0.7	0.9	3.2	0.9	Diurnal Maximum	

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

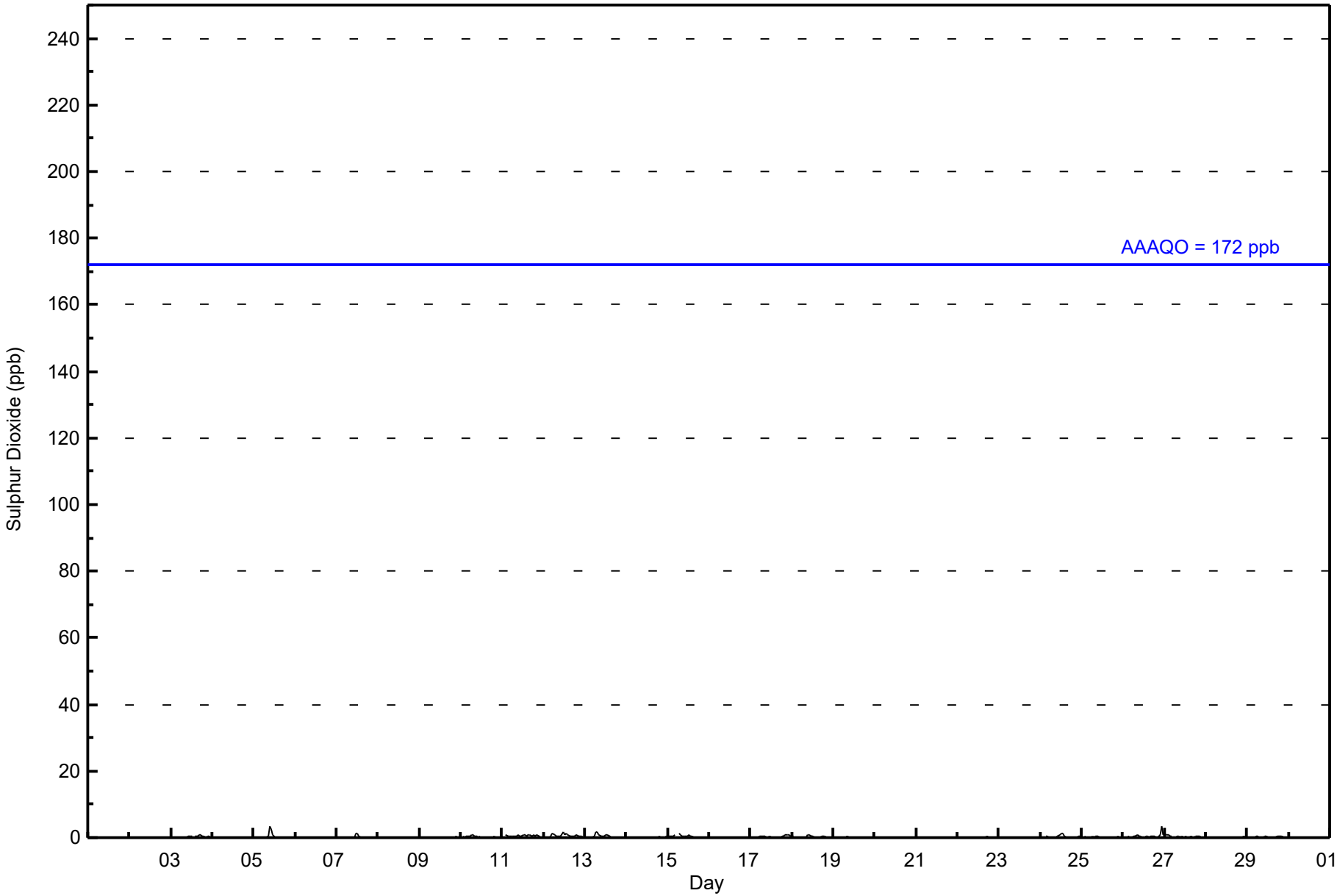
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Stony Mountain - June 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 - June 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	73	57	43	32	33	28	24	19	30	35	28	31	39	67	50	93	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	73	57	43	32	33	28	24	19	30	35	28	31	39	67	50	93	682

Total Number of Valid Hours: 682

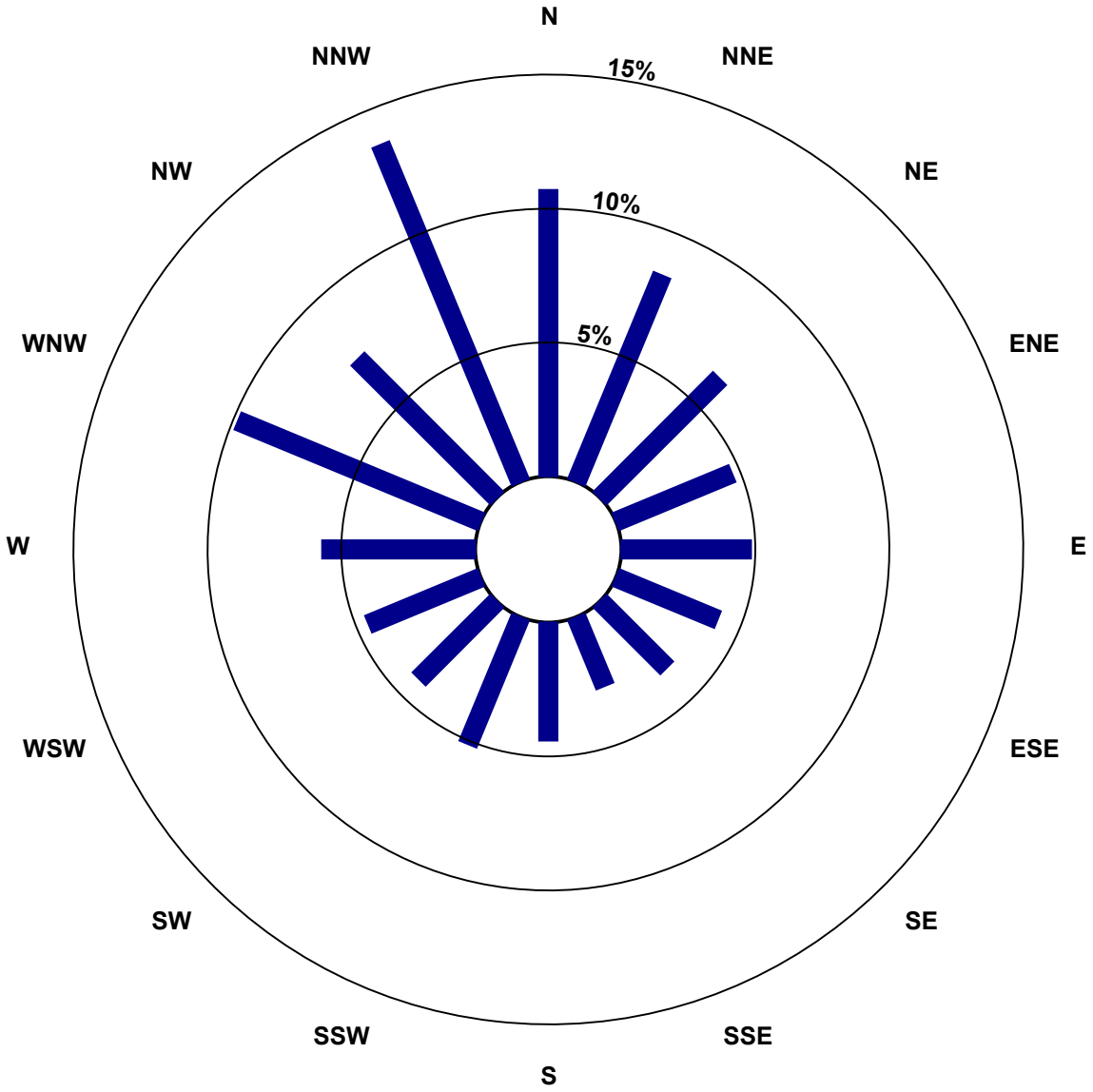
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Stony Mountain



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

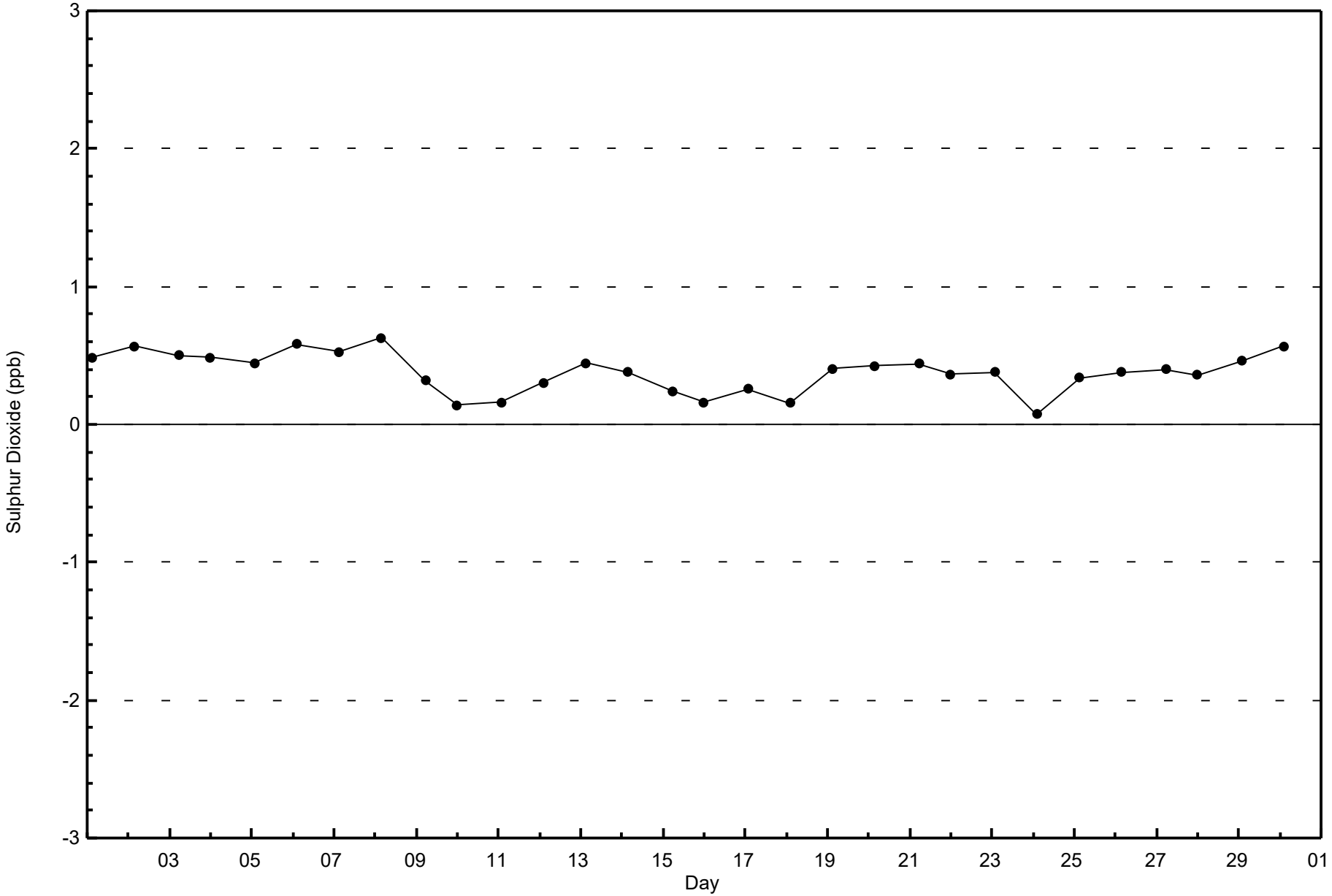
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Stony Mountain - June 2026

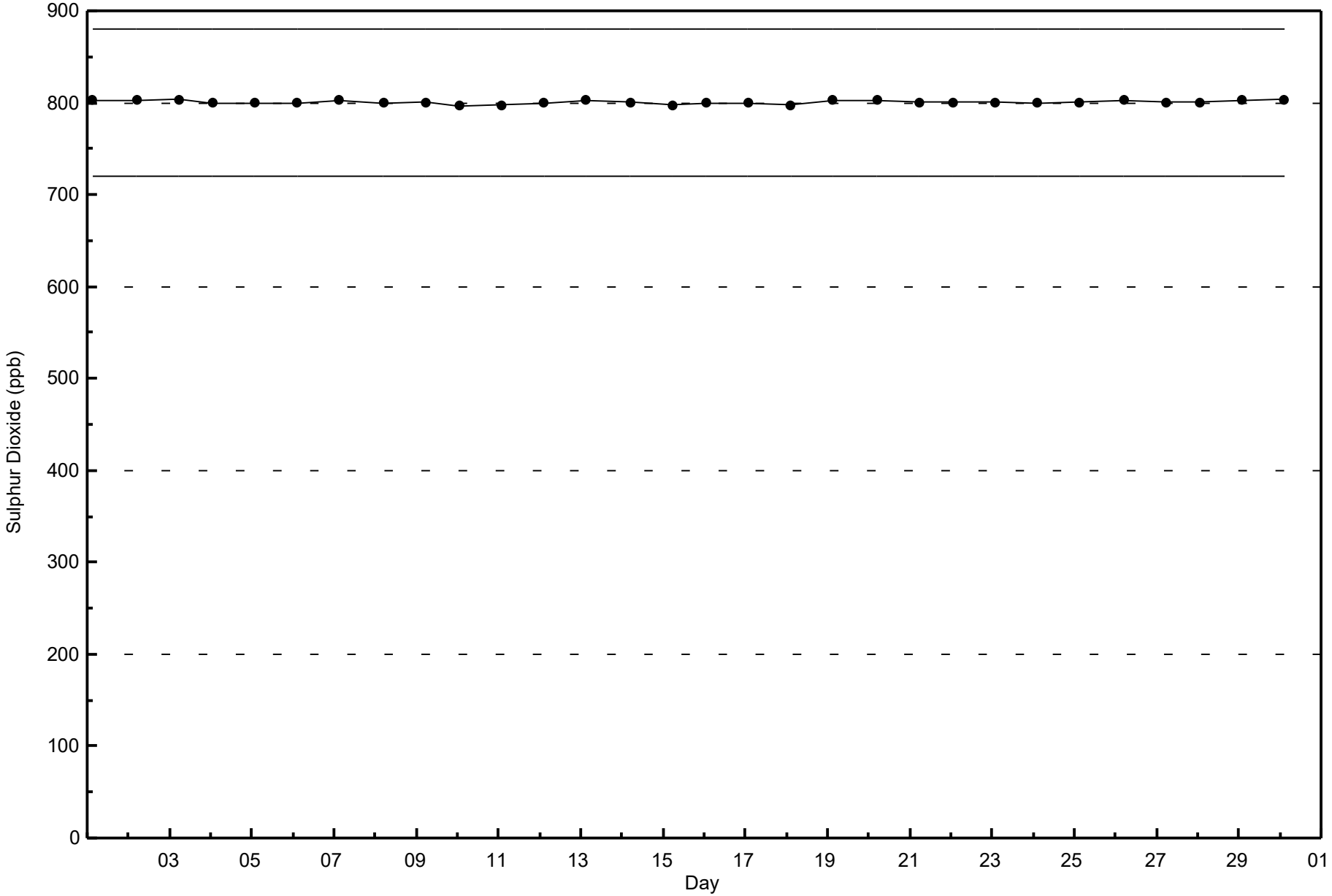


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Stony Mountain - June 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Stony Mountain - June 2026

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

Maximum Value: 0.6 ppb on Jun 1 03:30

Maximum Daily Average: 0.4 ppb on Jun 1

Minimum Value: 0.3 ppb on Jun 22 01:00

Minimum Daily Average: 0.3 ppb on Jun 21

Maximum Diurnal Average: 0.4 ppb at hour 12

Minimum Diurnal Average: 0.4 ppb at hour 19

Monthly Average: 0.38 ppb

Percentiles: P_1 = 0.3 P_{10} = 0.3 Q_1 = 0.4 Median = 0.4 Q_3 = 0.4 P_{90} = 0.4 P_{99} = 0.5

Periods in Service:	1440
Periods of Valid Data:	1360
Periods of Invalid Data:	80
Periods of Calibration:	72
Percent Operational Time:	99.4

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-Jun	0.5 0.5	0.5 0.5	0.5 0.5	0.6 0.5	Z SP	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	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.5	0.5 0.4	0.4 0.4	0.4	0.6
2-Jun	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	Z 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	0.3 0.4	0.4 0.4	0.4 0.4	0.4 0.3	0.3 0.4	0.3 0.4	0.4 0.4	0.4 0.3	0.4 0.4	0.4 0.4	0.4	0.4
3-Jun	Z SP	0.3 0.3	0.4 0.3	0.4 0.3	0.4 0.3	0.3 0.3	0.4 0.4	0.4 0.4	0.4 0.3	PF 0.4	0.4 0.5	0.5 0.5	0.4 0.4	PF 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 0.4	0.4	0.5
4-Jun	0.3 0.4	Z SP	0.3 0.3	0.4 0.4	0.3 0.3	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 0.4	PF 0.4	0.4 0.4	0.4 0.4	M 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4	0.4
5-Jun	0.4 0.4	0.4 0.4	Z 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	0.5 0.5	0.5 0.5	0.5 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4	0.5
6-Jun	0.4 0.4	0.4 0.4	0.4 0.5	Z 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	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 0.4	0.4 0.3	0.4	0.5
7-Jun	0.4 0.4	0.3 0.4	0.3 0.3	0.3 0.4	Z SP	0.4 0.4	0.3 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 0.4	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	0.4
8-Jun	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	Z SP	0.4 0.4	0.4 0.5	0.5 0.6	0.5 0.4	0.4 0.4	0.4 0.4	PF PF	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	0.4 0.4	0.4	0.6
9-Jun	Z 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	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	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4	0.5
10-Jun	0.4 0.5	Z SP	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.5	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.5	PF 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.3 0.3	0.4 0.4	0.3 0.4	0.4 0.4	0.4 0.4	0.4 0.3	0.3 0.4	0.3 0.3	0.4	0.5
11-Jun	0.4 0.4	0.4 0.5	Z SP	0.4 0.4	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	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 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4	0.5
12-Jun	0.4 0.4	0.3 0.4	0.4 0.4	Z 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	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	0.4 0.4	0.4 0.4	0.4 0.4	0.4	0.5
13-Jun	0.4 0.4	0.4 0.4	0.3 0.4	0.4 0.4	Z SP	0.4 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 0.4	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 0.4	0.4	0.5
14-Jun	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	Z SP	0.3 0.4	0.3 0.4	0.4 0.4	0.4 0.3	0.4 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 0.4	0.4 0.3	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4	0.4
15-Jun	Z SP	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.5	0.5 0.5	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.4 0.4	0.3 0.3	0.3 0.4	0.4 0.3	0.3 0.4	0.4 0.4	0.4 0.3	0.4 0.4	0.4 0.4	0.4 0.4	0.4	0.5

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Stony Mountain - June 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-Jun	0.4	Z	0.4	0.4	0.4	0.3	0.3	0.4	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	0.4
	0.4	SP	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
17-Jun	0.3	0.3	Z	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	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.4
	0.3	0.3	SP	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	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4		
18-Jun	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	0.3	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	SP	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	0.3	0.4	0.4	0.4	0.3	0.4	0.4		
19-Jun	0.4	0.4	0.4	0.4	Z	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	0.4	0.4
	0.4	0.3	0.3	0.4	SP	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4		
20-Jun	0.4	0.4	0.4	0.4	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	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	SP	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4		
21-Jun	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
	SP	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
22-Jun	0.3	Z	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	C	C	C	C	C	C	0.4	0.3	0.3	0.3	0.3	0.4	0.4	--	0.5
	0.3	SP	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	C	C	C	C	C	C	0.5	0.4	0.3	0.3	0.3	0.4	0.3	0.3		
23-Jun	0.4	0.4	Z	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	0.3	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	0.4	0.4	0.4		
24-Jun	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	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.5
	0.4	0.4	0.4	SP	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	0.4	0.4	0.4	0.4	0.4		
25-Jun	0.3	0.4	0.4	0.4	Z	0.4	0.4	0.4	0.5	0.4	0.4	0.4	M	0.4	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.3	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	0.4	0.4	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.4		
26-Jun	0.4	0.3	0.3	0.3	0.4	Z	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
	0.3	0.4	0.4	0.3	0.3	SP	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.4	0.4		
27-Jun	Z	0.4	0.4	0.4	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	0.4	0.4	0.4
	SP	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4		
28-Jun	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	0.4	SP	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	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		
29-Jun	0.4	0.4	Z	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	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
	0.4	0.4	SP	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4		
30-Jun	0.4	0.4	0.3	Z	0.3	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
	0.4	0.4	0.4	SP	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	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	0.4	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	Diurnal Average	
	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.4	Diurnal Maximum	

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

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

Wood Buffalo Environmental Association

Summary of Hour Averages

Total Reduced Sulphur (TRS) - ppb

Stony Mountain - June 2026

Maximum Value: 0.5 ppb on Jun 1 04:00

Maximum Daily Average: 0.4 ppb on Jun 1

Minimum Value: 0.3 ppb on Jun 22 01:00

Minimum Daily Average: 0.3 ppb on Jun 22

Maximum Diurnal Average: 0.4 ppb at hour 12

Minimum Diurnal Average: 0.4 ppb at hour 19

Monthly Average: 0.38 ppb

Percentiles: P_1 = 0.3 P_{10} = 0.3 Q_1 = 0.4 Median = 0.4 Q_3 = 0.4 P_{90} = 0.4 P_{99} = 0.5

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	35
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0.5	0.5	0.5	0.5	Z	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	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
2-Jun	0.4	0.4	0.4	0.4	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
3-Jun	Z	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4	PF	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
4-Jun	0.4	Z	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	0.4	0.4	0.4	0.4	0.4
5-Jun	0.4	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
6-Jun	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	0.4	0.4	0.4	0.4	0.4
7-Jun	0.4	0.3	0.3	0.3	Z	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	0.4	0.4	0.4	0.4	0.4
8-Jun	0.4	0.4	0.4	0.4	0.4	Z	0.4	0.4	0.5	0.5	0.4	0.4	PF	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
9-Jun	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
10-Jun	0.5	Z	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.5
11-Jun	0.4	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
12-Jun	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	0.5	0.5	0.4	0.4	0.4	0.4	0.5
13-Jun	0.4	0.4	0.4	0.4	Z	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
14-Jun	0.4	0.4	0.4	0.4	0.4	Z	0.3	0.3	0.4	0.4	0.4	0.4	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
15-Jun	Z	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
16-Jun	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
17-Jun	0.3	0.3	Z	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	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	0.3	0.4
18-Jun	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	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
19-Jun	0.4	0.4	0.3	0.4	Z	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-Jun	0.4	0.4	0.4	0.4	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
21-Jun	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
22-Jun	0.3	Z	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	C	C	C	C	C	0.5	0.4	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.5
23-Jun	0.4	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
24-Jun	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	0.4	0.4	0.4	0.4	0.4
25-Jun	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	0.4	0.4	0.4	0.4
26-Jun	0.4	0.4	0.3	0.3	0.3	Z	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
27-Jun	Z	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
28-Jun	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
29-Jun	0.4	0.4	Z	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
30-Jun	0.4	0.4	0.3	Z	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	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	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Diurnal Average	
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.4	0.4	0.4	Diurnal Maximum	

Z - zerospan C - Calibration PF - Power Failure

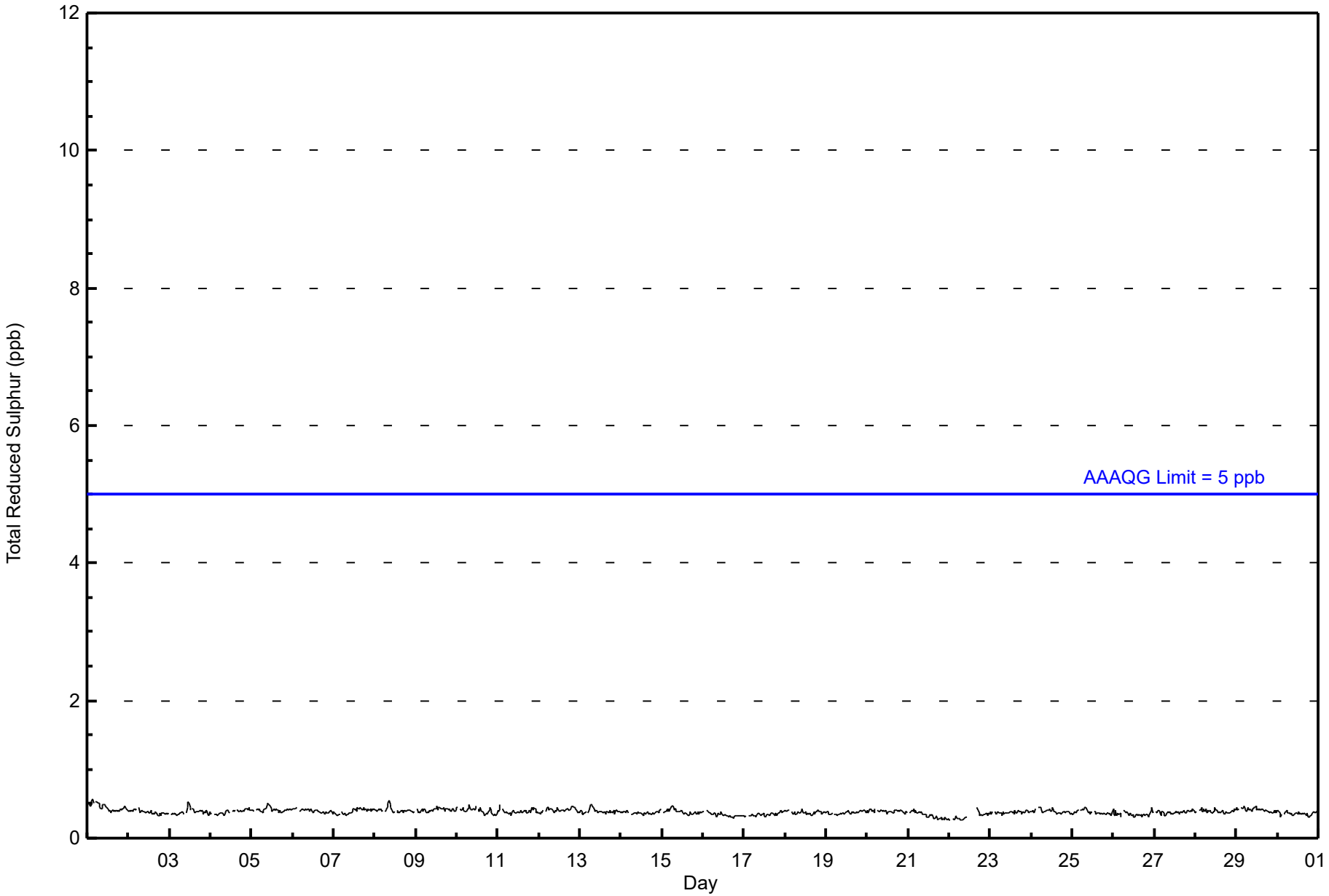
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Stony Mountain - June 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

Total Reduced Sulphur (TRS) - ppb

Stony Mountain - June 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	72	56	42	35	29	28	23	20	30	38	25	29	40	69	50	97	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	72	56	42	35	29	28	23	20	30	38	25	29	40	69	50	97	683

Total Number of Valid Hours: 683

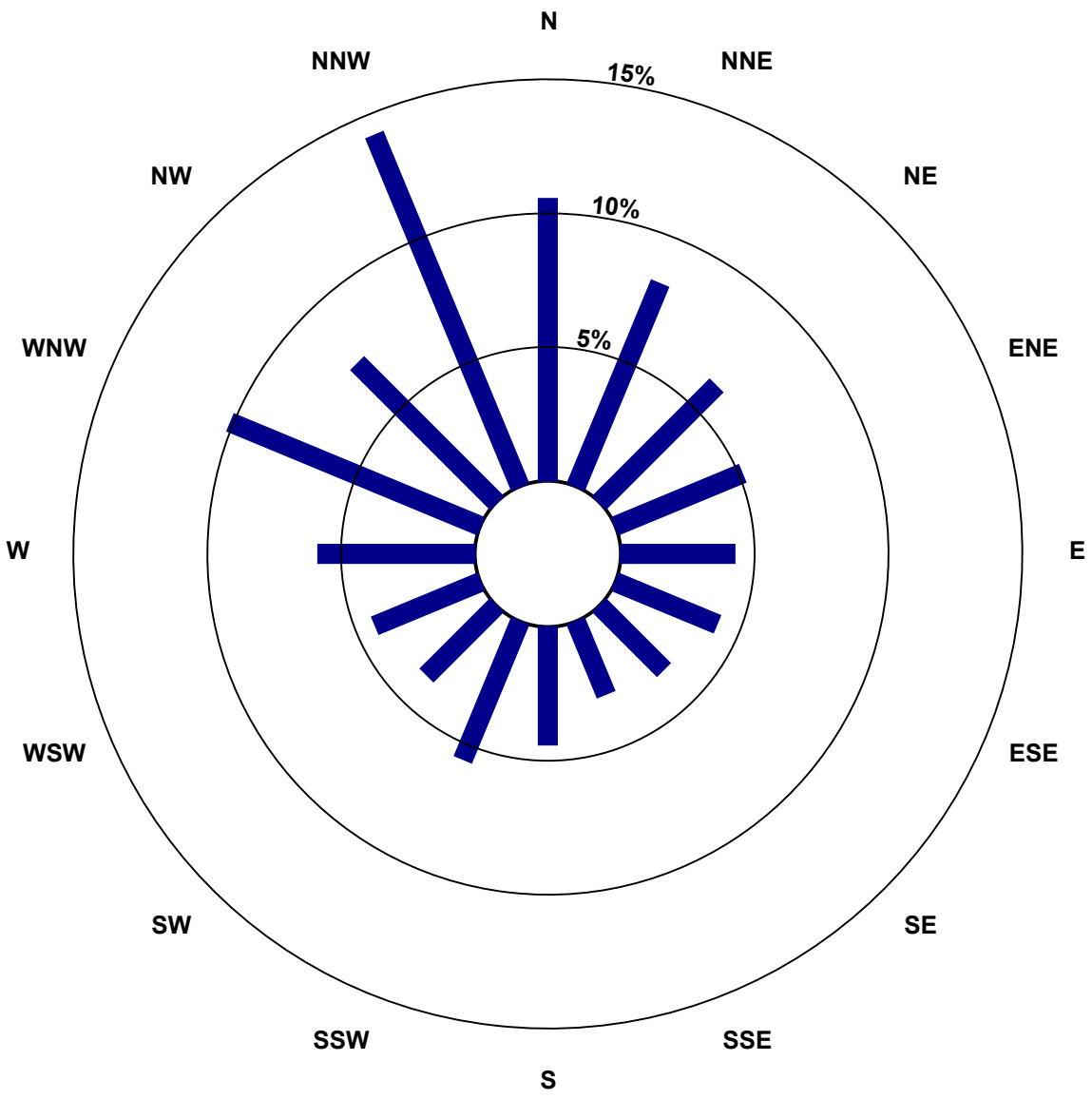
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Reduced Sulphur (TRS) - ppb

Stony Mountain



Classes (ppb)

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

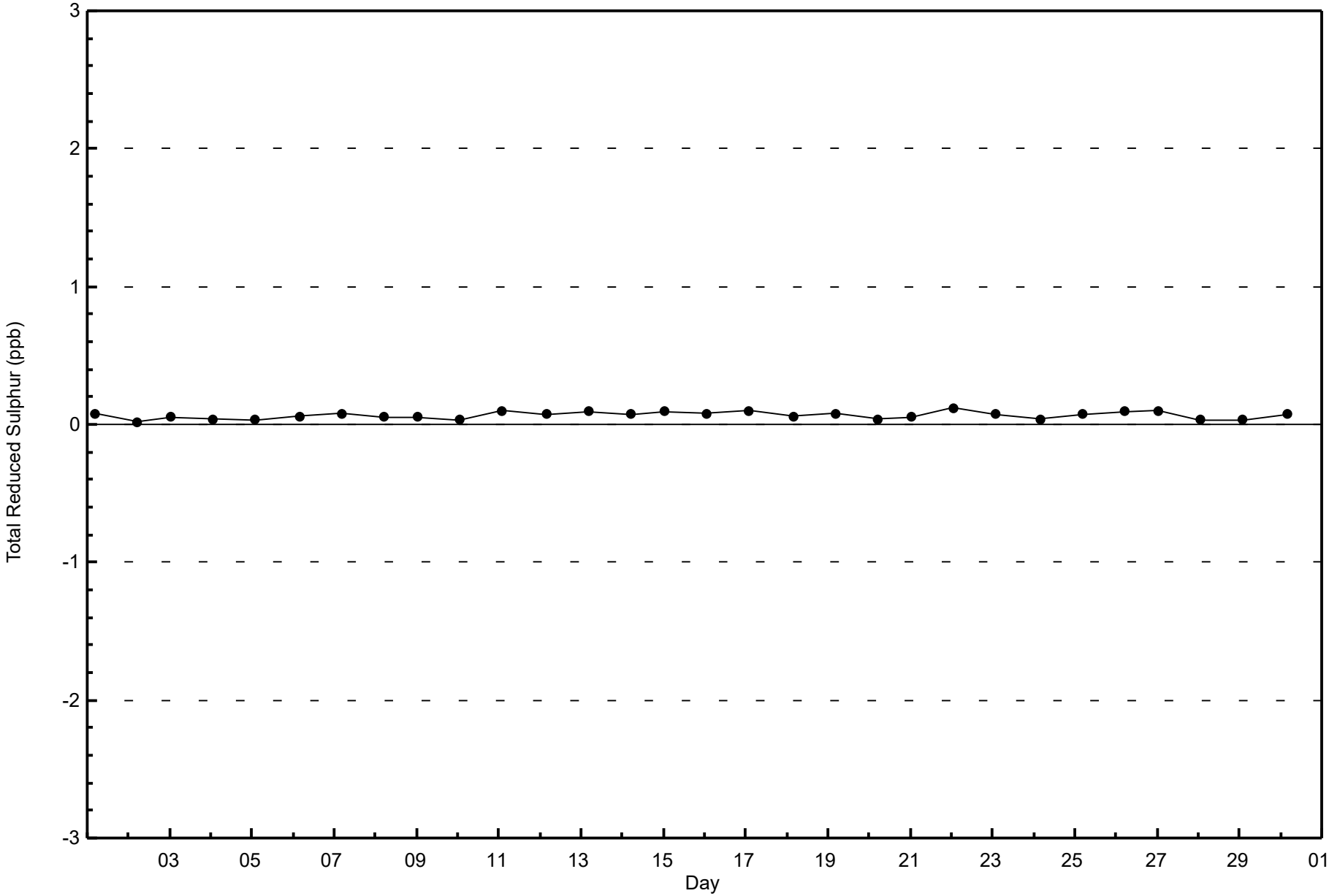
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Stony Mountain - June 2026

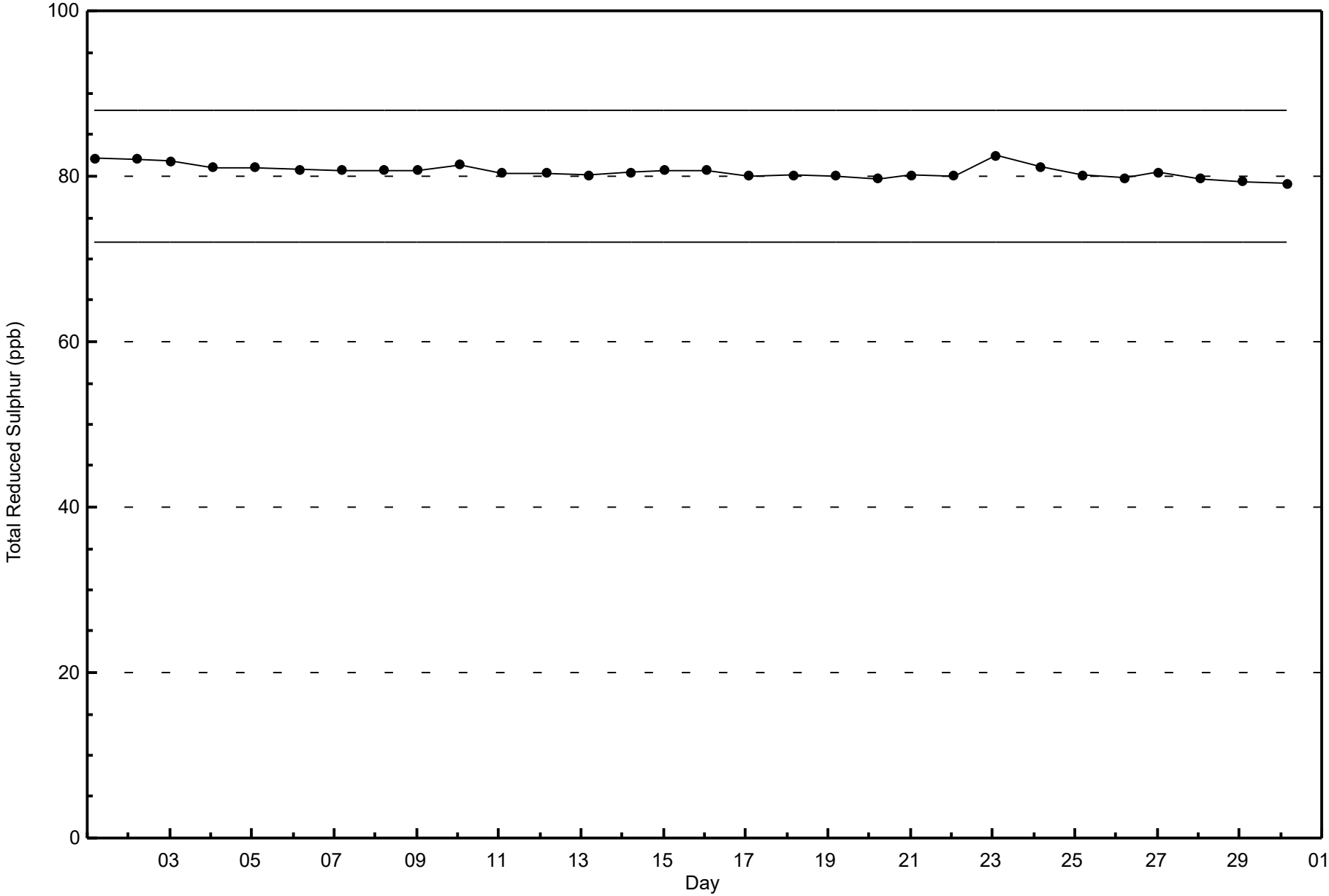


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Stony Mountain - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Stony Mountain - June 2026

Maximum Value: 2.2 ppm on Jun 28 07:00

Maximum Daily Average: 2.1 ppm on Jun 30

Minimum Value: 2.0 ppm on Jun 15 17:00

Minimum Daily Average: 2.0 ppm on Jun 16

Maximum Diurnal Average: 2.1 ppm at hour 5

Minimum Diurnal Average: 2.0 ppm at hour 15

Monthly Average: 2.05 ppm

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

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	35
Percent Operational Time:	99.7

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

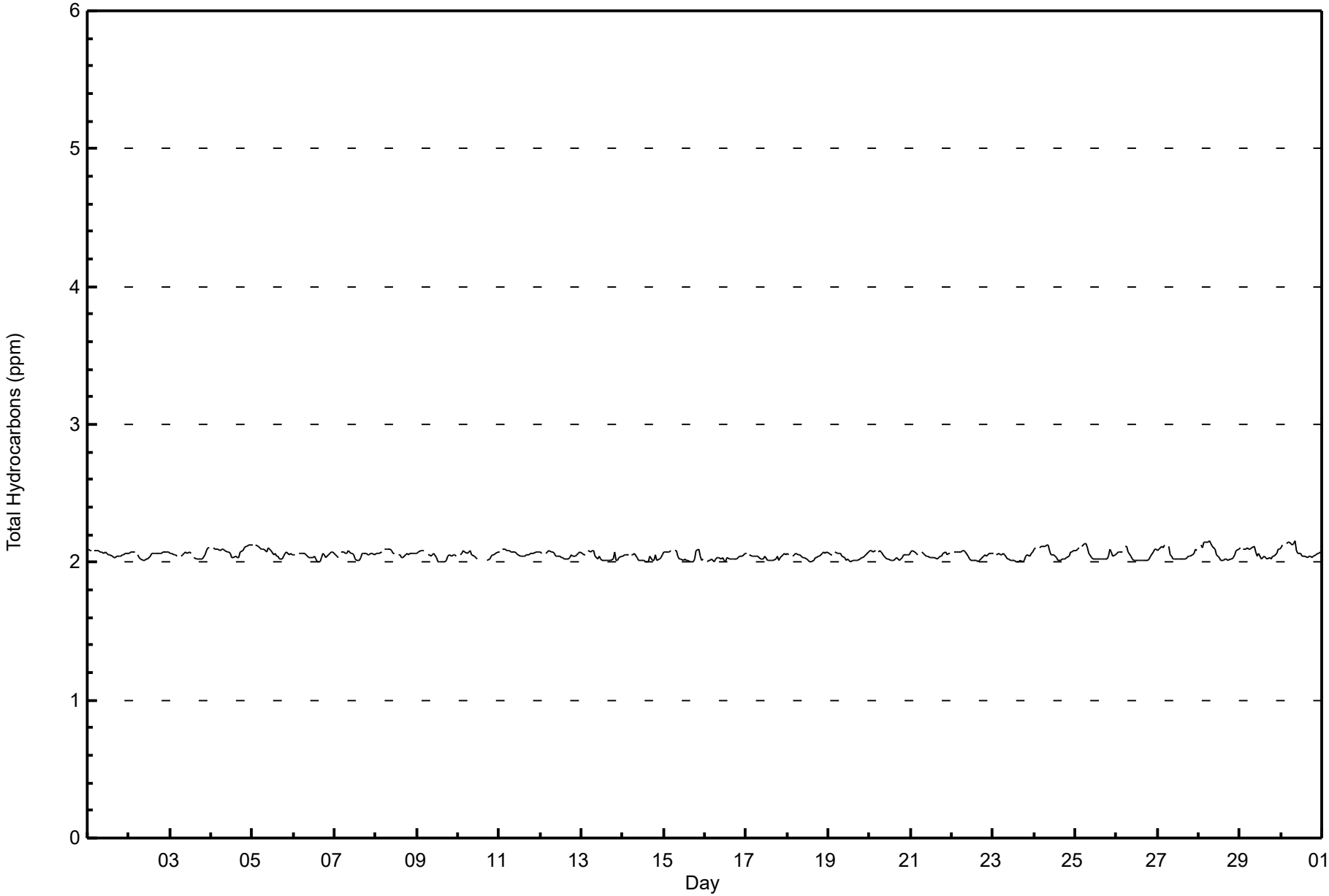
Z - zerospan C - Calibration PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Stony Mountain - June 2026



Total Hydrocarbons (THC) - ppm
Stony Mountain - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	316	46.27	46.27
2.1 - 3.0	367	53.73	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Stony Mountain - June 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	35	21	20	23	22	19	11	10	12	15	13	11	17	25	20	42	316
2.1 - 3.0	38	36	23	9	11	9	13	9	18	21	15	20	22	42	30	51	367
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	73	57	43	32	33	28	24	19	30	36	28	31	39	67	50	93	683

Total Number of Valid Hours: 683

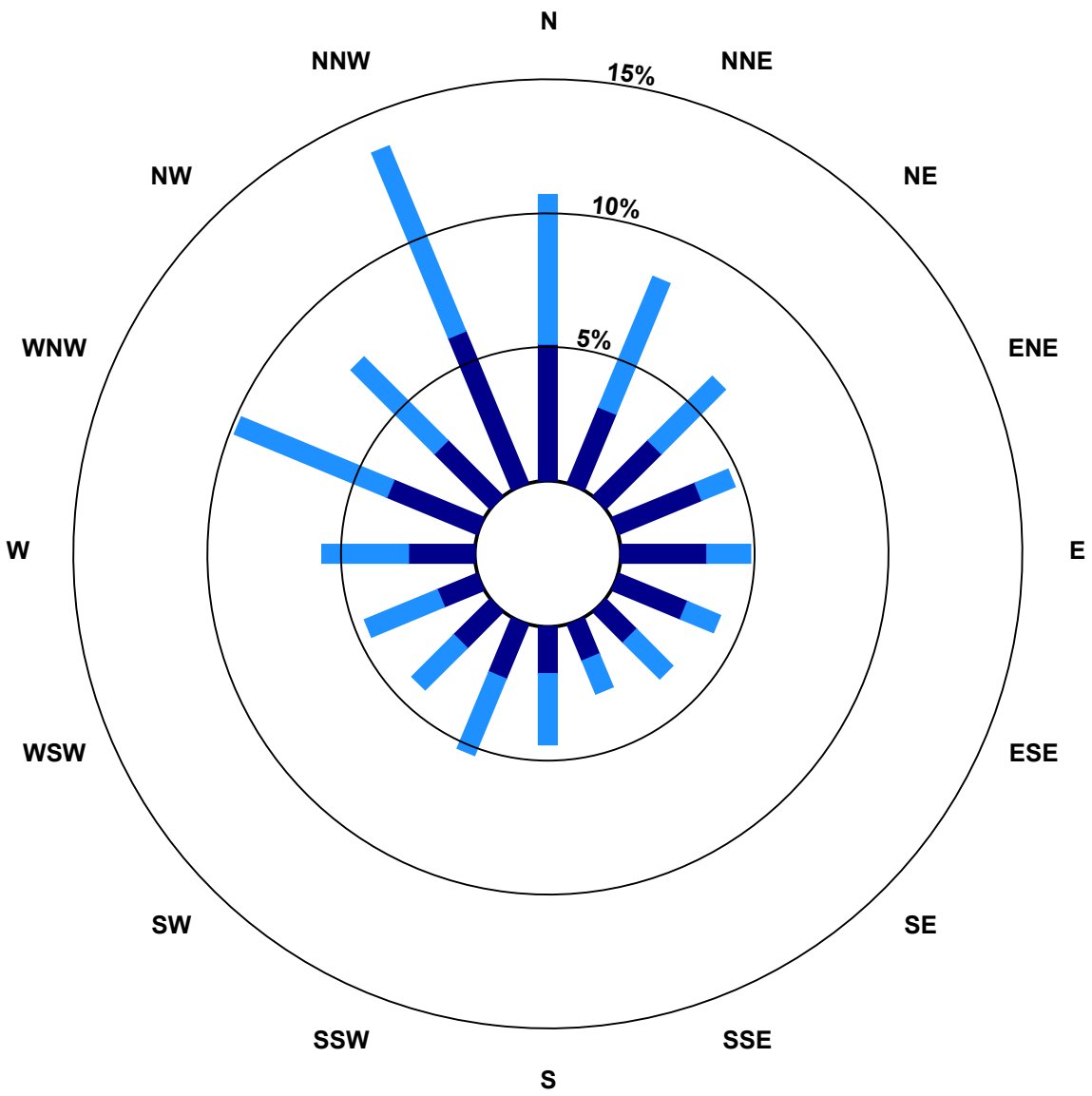
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Stony Mountain



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

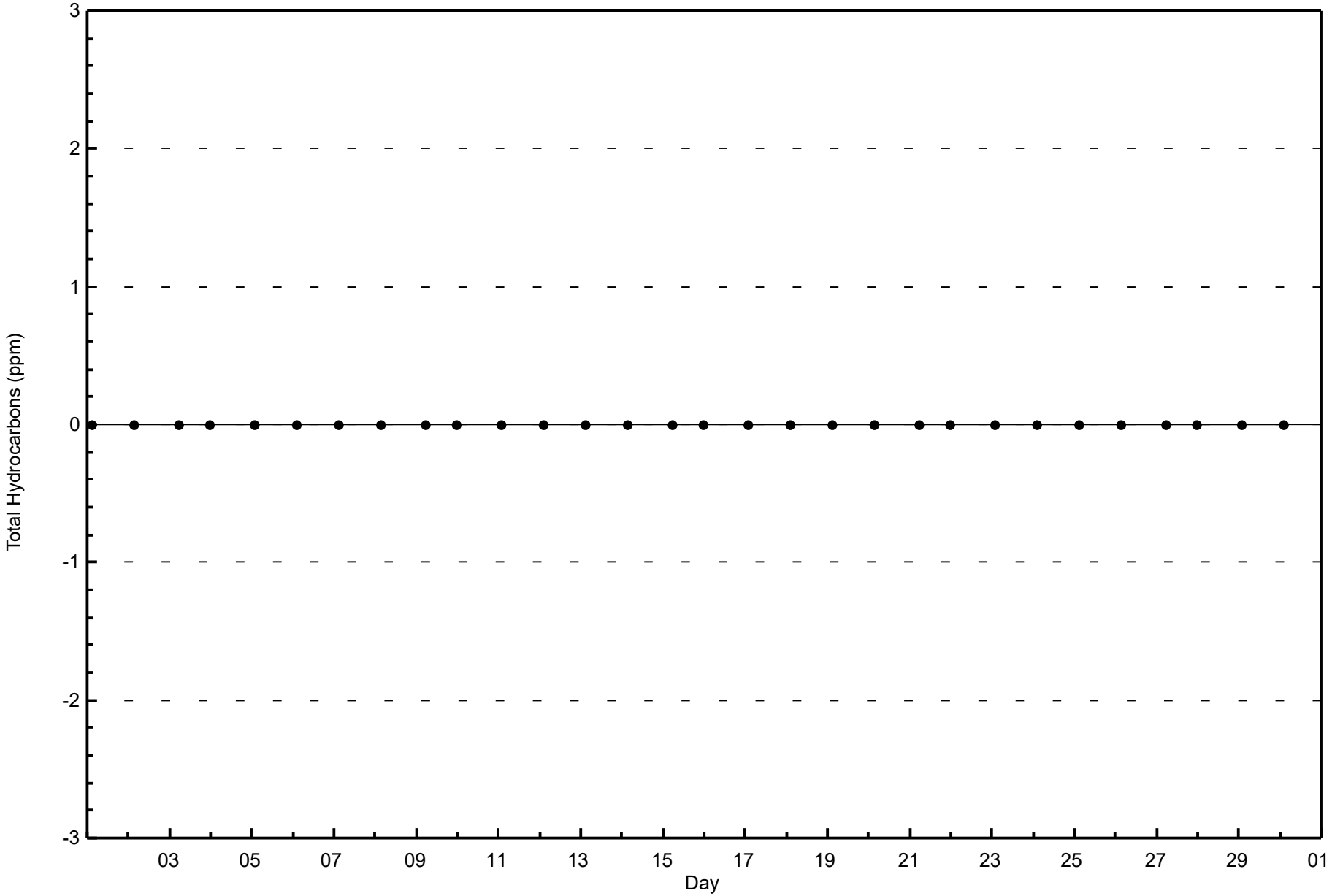
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Stony Mountain - June 2026

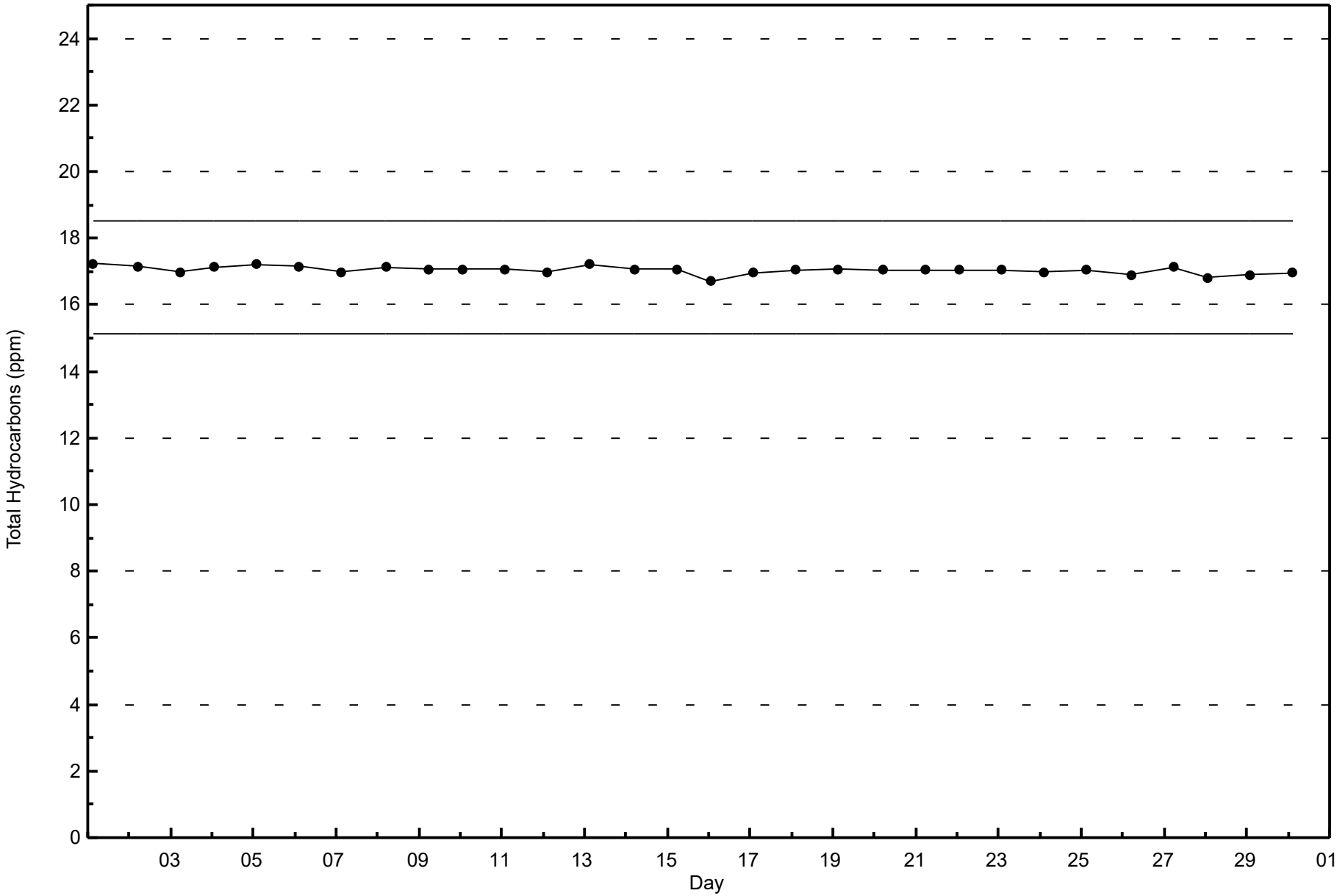


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Stony Mountain - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Stony Mountain - June 2026

Maximum Value: 0.024 ppm on Jun 20 01:00

Maximum Daily Average: 0.002 ppm on Jun 20

Minimum Value: 0.000 ppm on Jun 1 01:00

Minimum Daily Average: 0.000 ppm on Jun 1

Maximum Diurnal Average: 0.001 ppm at hour 1

Minimum Diurnal Average: 0.000 ppm at hour 6

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:	683
Hours of Missing Data:	37
Hours of Calibration:	35
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	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
2-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3-Jun	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	PF	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-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	PF	0.000	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-Jun	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	0.014	0.000	0.000	0.001	0.014
10-Jun	Z	0.000	0.000	0.009	0.007	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	0.001	0.009
11-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15-Jun	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-Jun	Z	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.001	0.008
17-Jun	0.003	Z	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
18-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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	0.012	0.001	0.012
20-Jun	0.024	0.022	0.003	0.006	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.024
21-Jun	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	0.014	0.016	0.000	0.000	0.000	0.001	0.016
22-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.001	0.001	0.000	0.001	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	0.000	0.000	0.001	Diurnal Average	
	0.024	0.022	0.004	0.009	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.016	0.014	0.000	0.012	Diurnal Maximum	

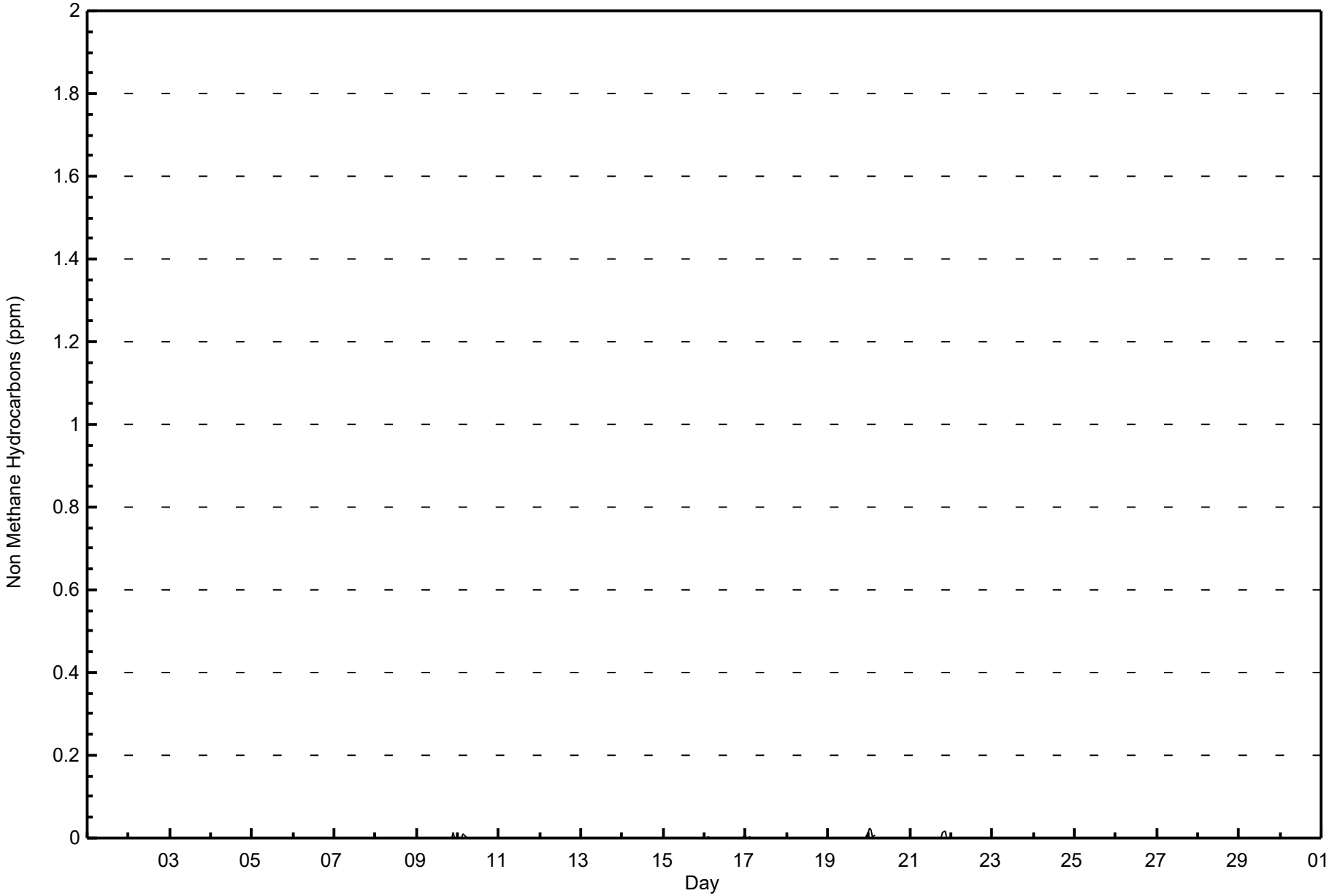
Z - zerospan C - Calibration PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Stony Mountain - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Stony Mountain - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	673	98.54	98.54
0.006 - 0.05	10	1.46	100.00
0.06 - 0.1	0	0.00	100.00
> 0.1	0	0.00	100.00

Total Number of Valid Hours: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Stony Mountain - June 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	72	54	41	31	33	28	24	19	30	36	28	31	39	67	50	90	673
0.006 - 0.05	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	3	10
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	73	57	43	32	33	28	24	19	30	36	28	31	39	67	50	93	683

Total Number of Valid Hours: 683

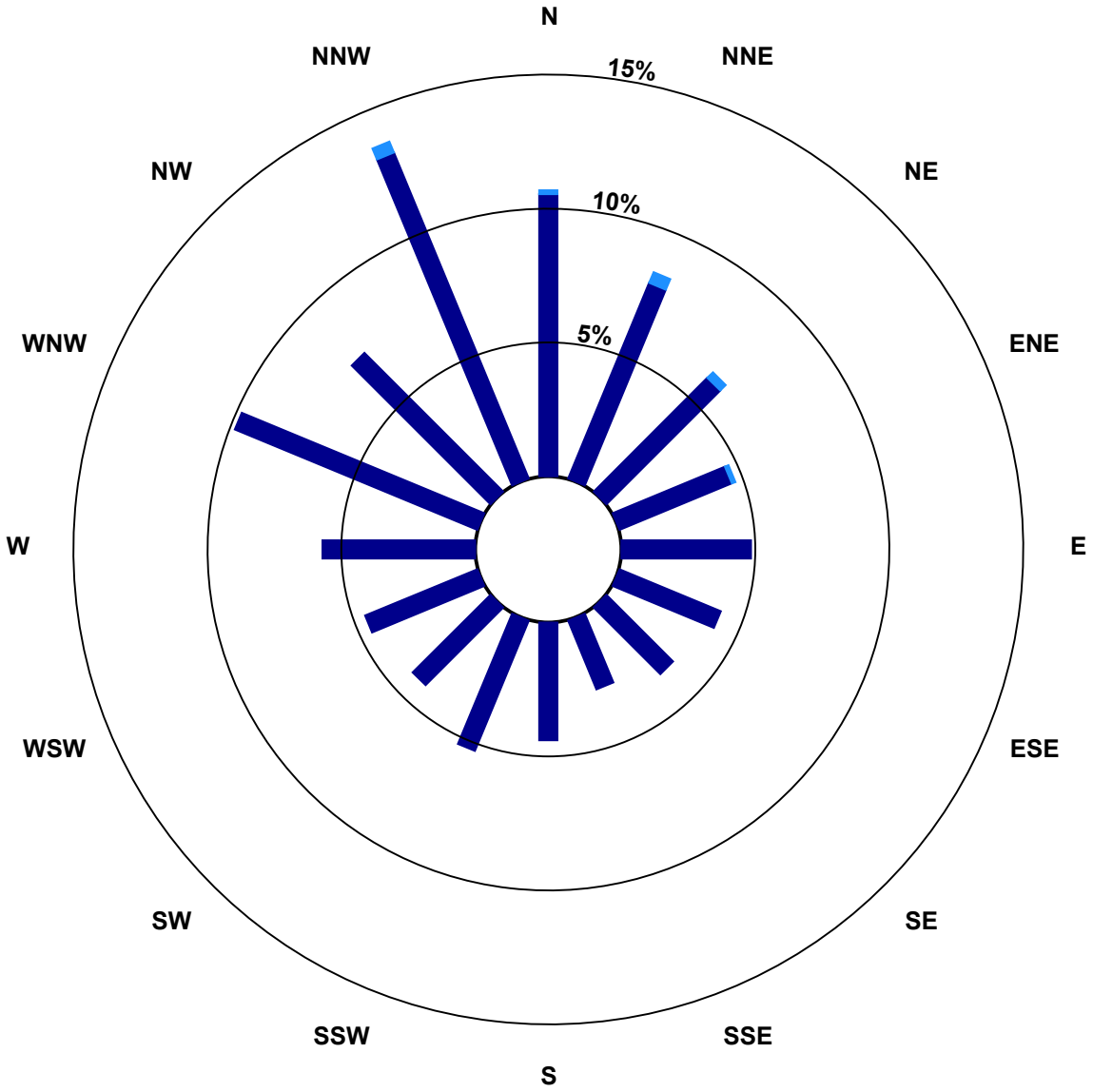
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Non Methane Hydrocarbons (NMHC) - ppm

Stony Mountain



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

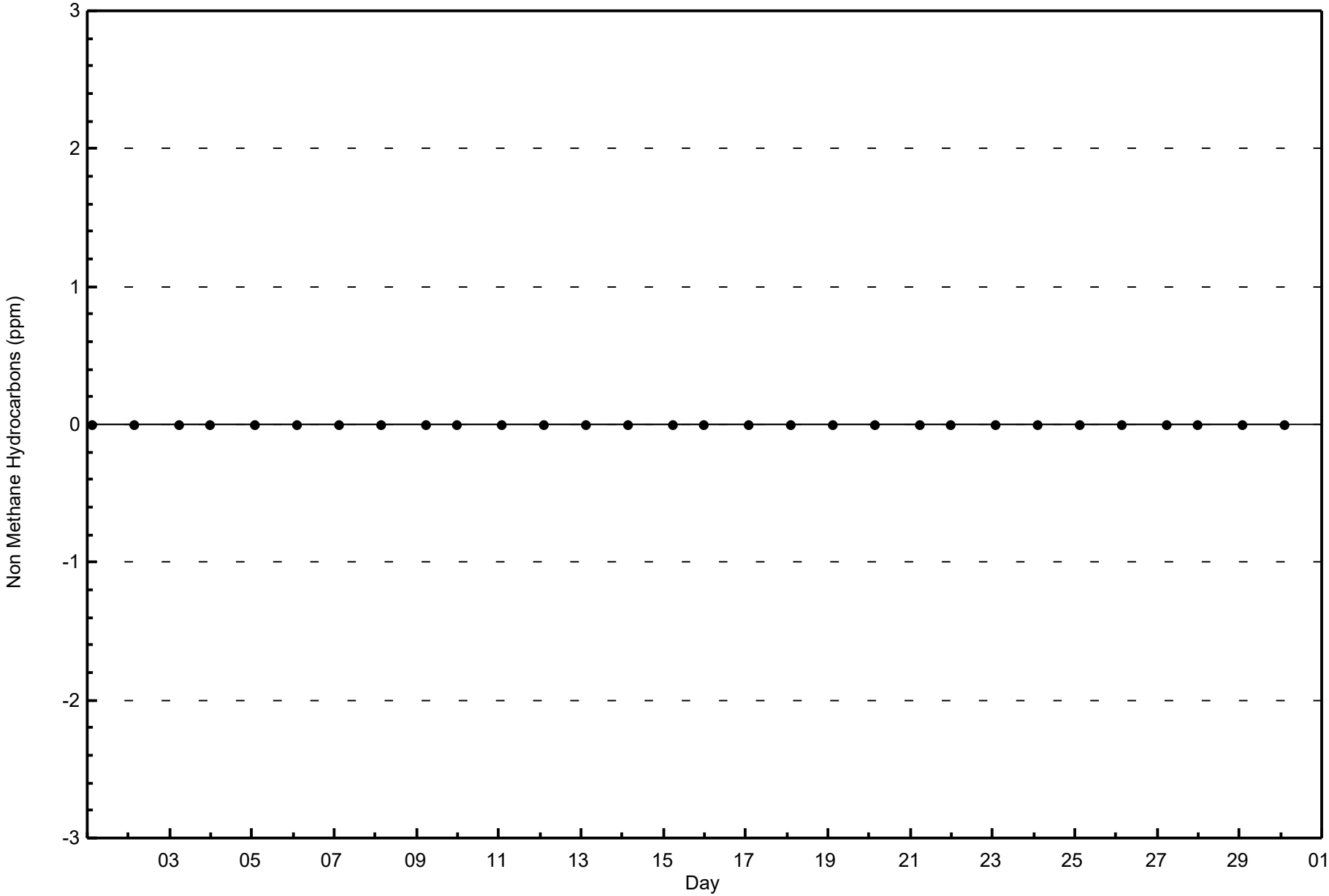
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Stony Mountain - June 2026

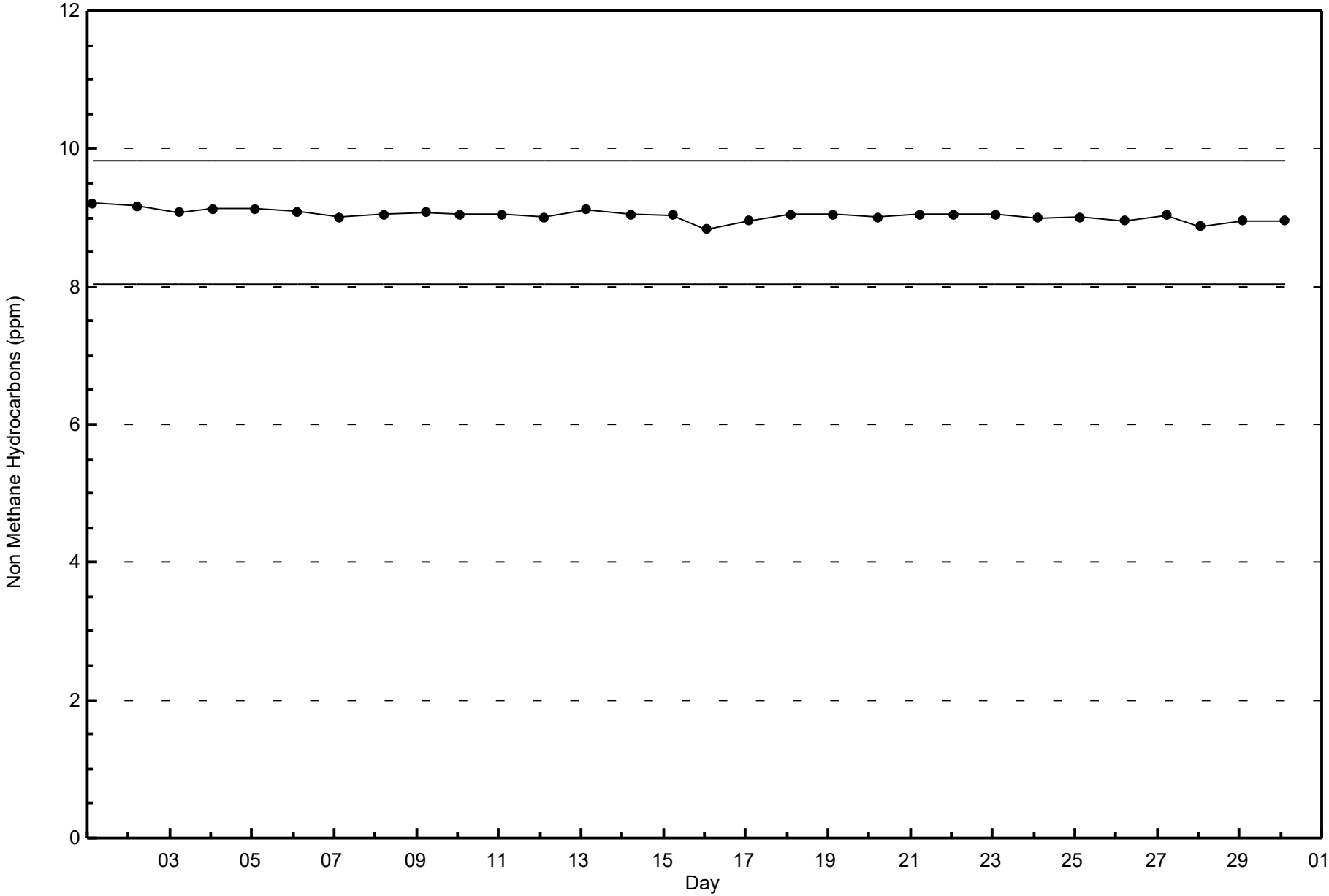


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Stony Mountain - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Stony Mountain - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.2 ppm on Jun 28 07:00 Maximum Daily Average: 2.1 ppm on Jun 30

Minimum Value: 2.0 ppm on Jun 15 17:00 Minimum Daily Average: 2.0 ppm on Jun 16
Maximum Diurnal Average: 2.1 ppm at hour 5 Minimum Diurnal Average: 2.0 ppm at hour 15
Monthly Average: 2.05 ppm Percentiles: P_1 = 2.0 P_{10} = 2.0 Q_1 = 2.0 Median = 2.1 Q_3 = 2.1 P_{90} = 2.1 P_{99} = 2.1

Hours in Service:	720
Hours of Data:	683
Hours of Missing Data:	37
Hours of Calibration:	35
Percent Operational Time:	99.7

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

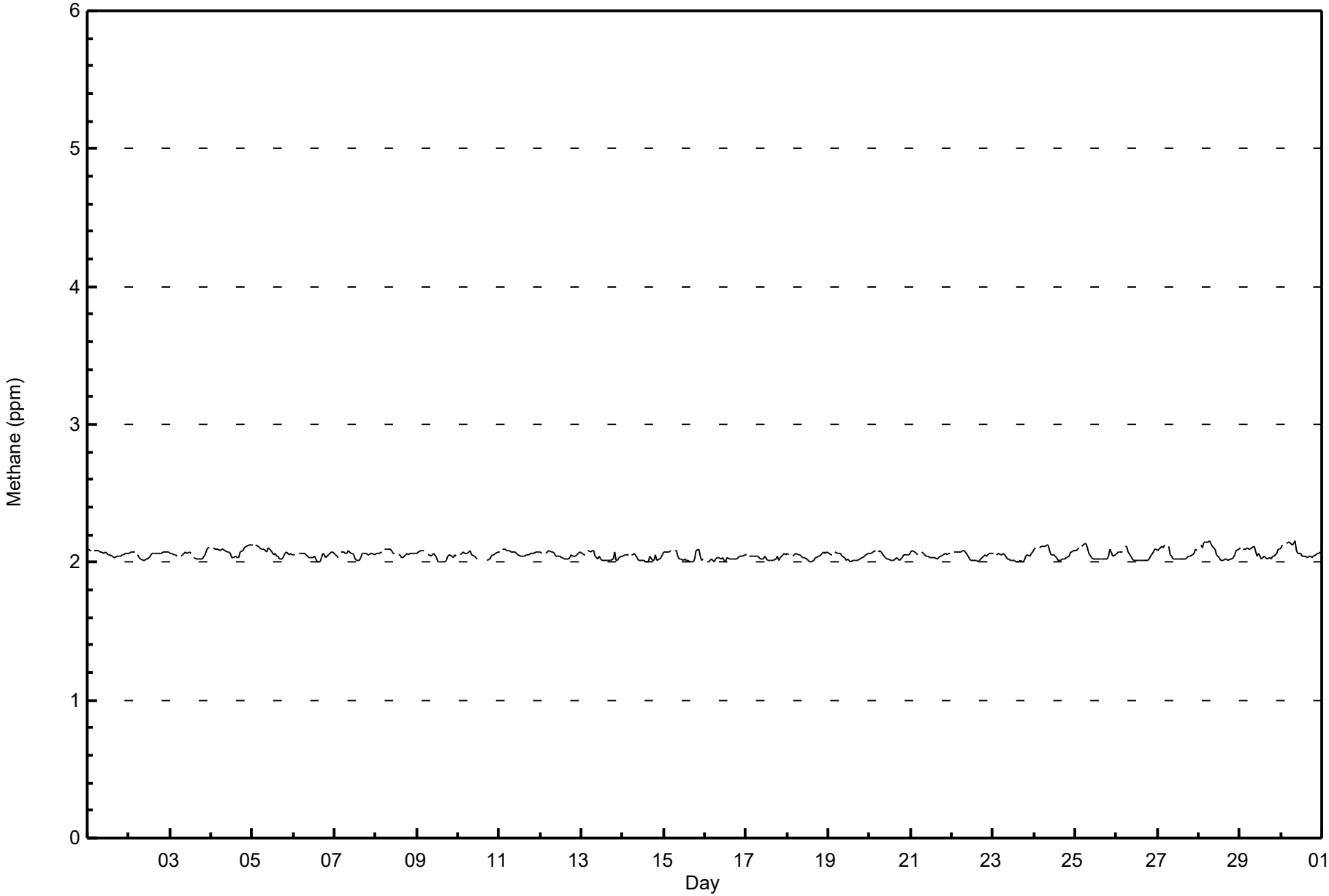
Z - zerospan C - Calibration PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Stony Mountain - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	319	46.71	46.71
2.1 - 3.0	364	53.29	100.00
3.1 - 10.0	0	0.00	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Stony Mountain - June 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	37	21	21	23	22	19	11	10	12	15	13	11	17	25	20	42	319
2.1 - 3.0	36	36	22	9	11	9	13	9	18	21	15	20	22	42	30	51	364
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	73	57	43	32	33	28	24	19	30	36	28	31	39	67	50	93	683

Total Number of Valid Hours: 683

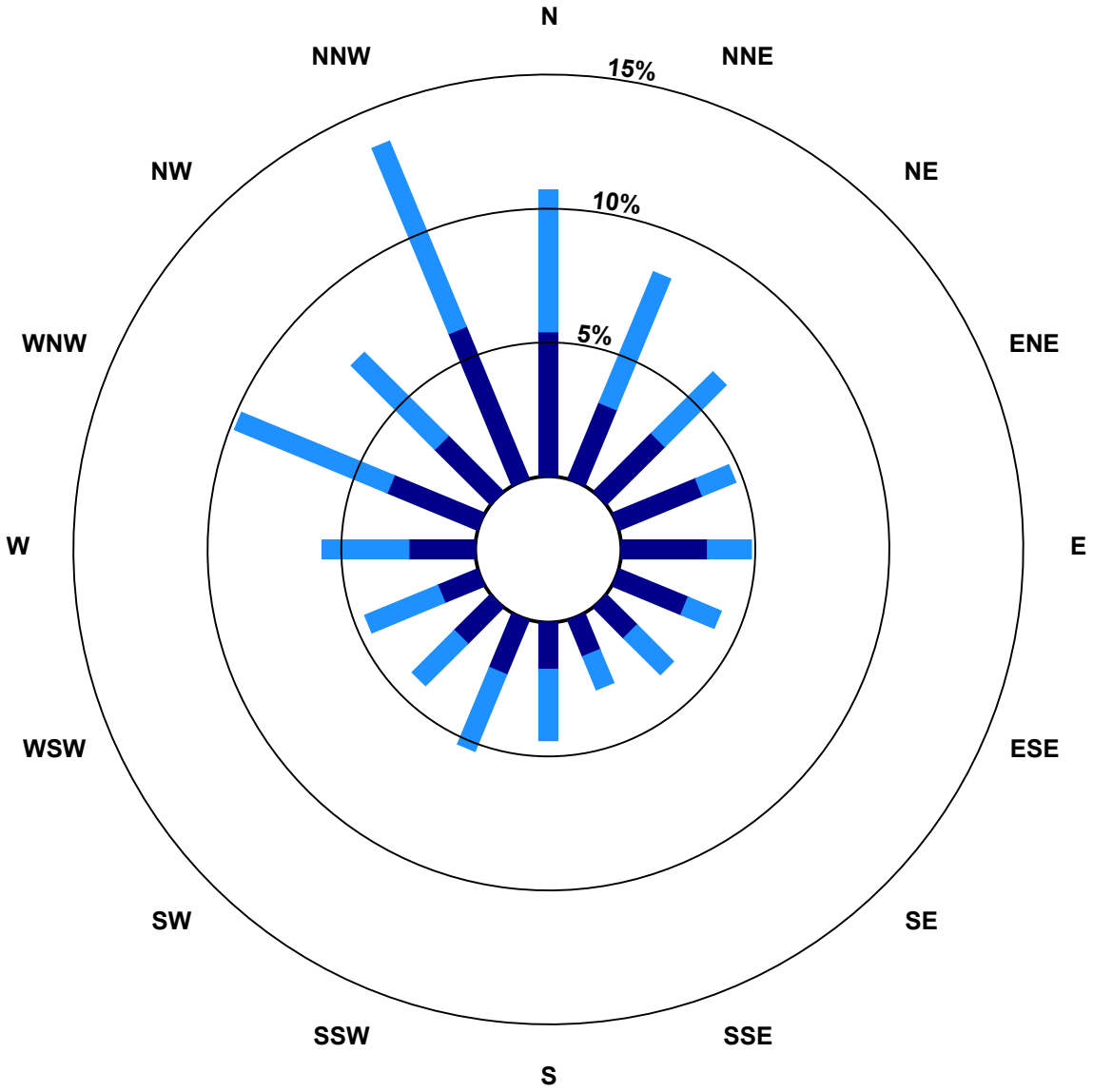
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Methane (CH_4) - ppm

Stony Mountain



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

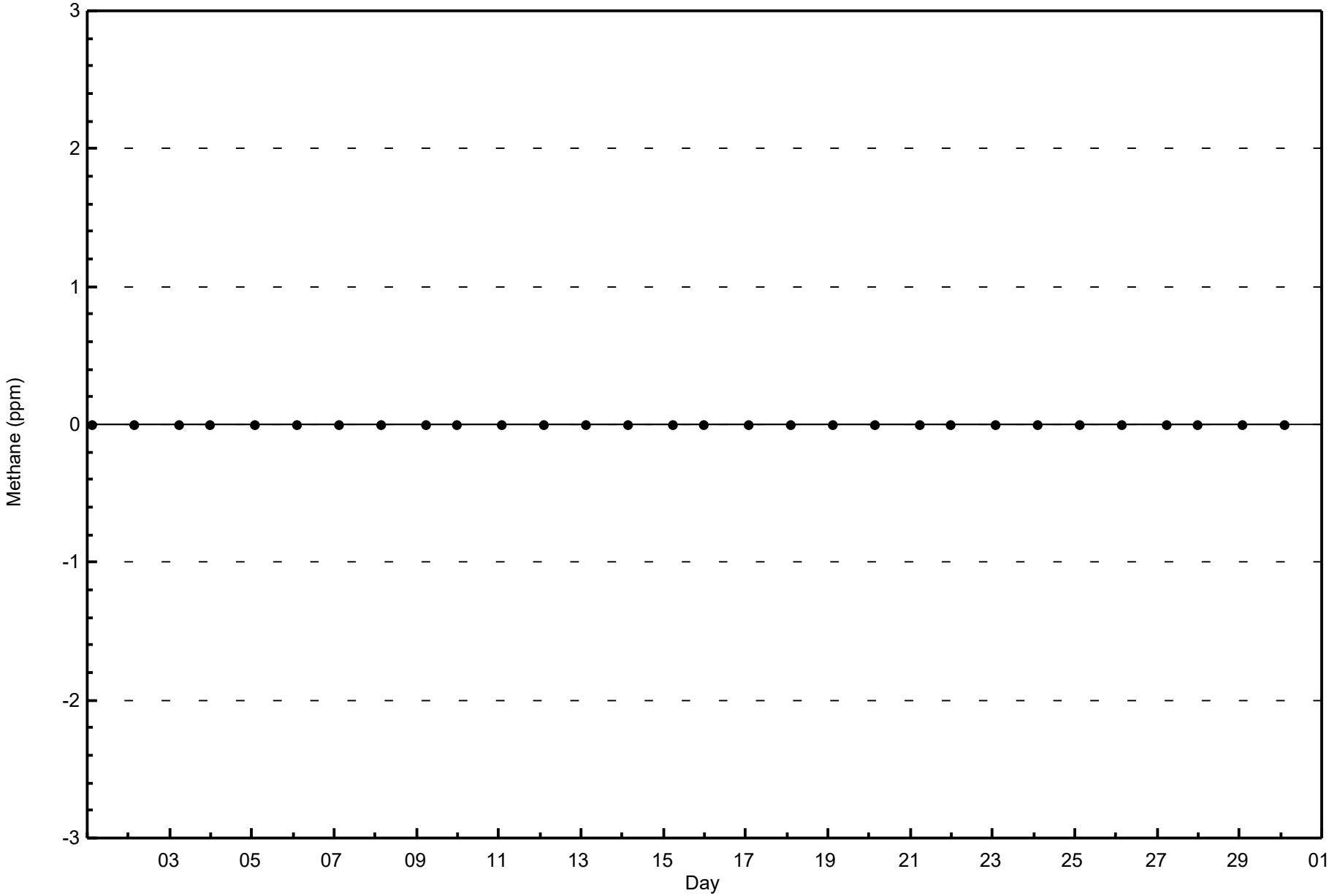
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Stony Mountain - June 2026

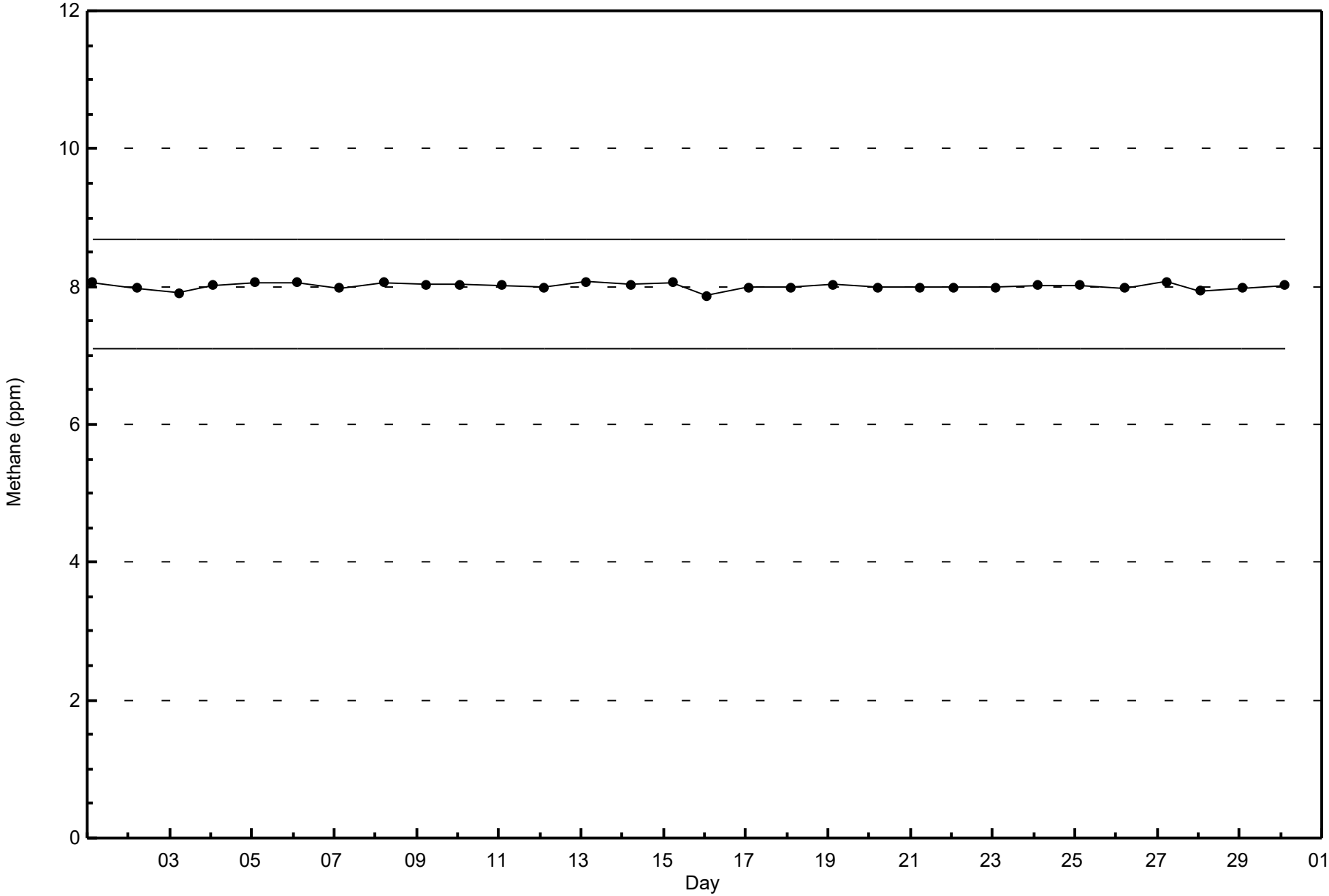


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Stony Mountain - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Stony Mountain - June 2026

Maximum Value: 0.8 ppb on Jun 13 08:00

Maximum Daily Average: 0.2 ppb on Jun 11

Minimum Value: 0.0 ppb on Jun 1 02:00

Minimum Daily Average: 0.0 ppb on Jun 1

Maximum Diurnal Average: 0.1 ppb at hour 8

Minimum Diurnal Average: 0.0 ppb at hour 23

Monthly Average: 0.04 ppb

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} = 0.4

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	37
Percent Operational Time:	99.7

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

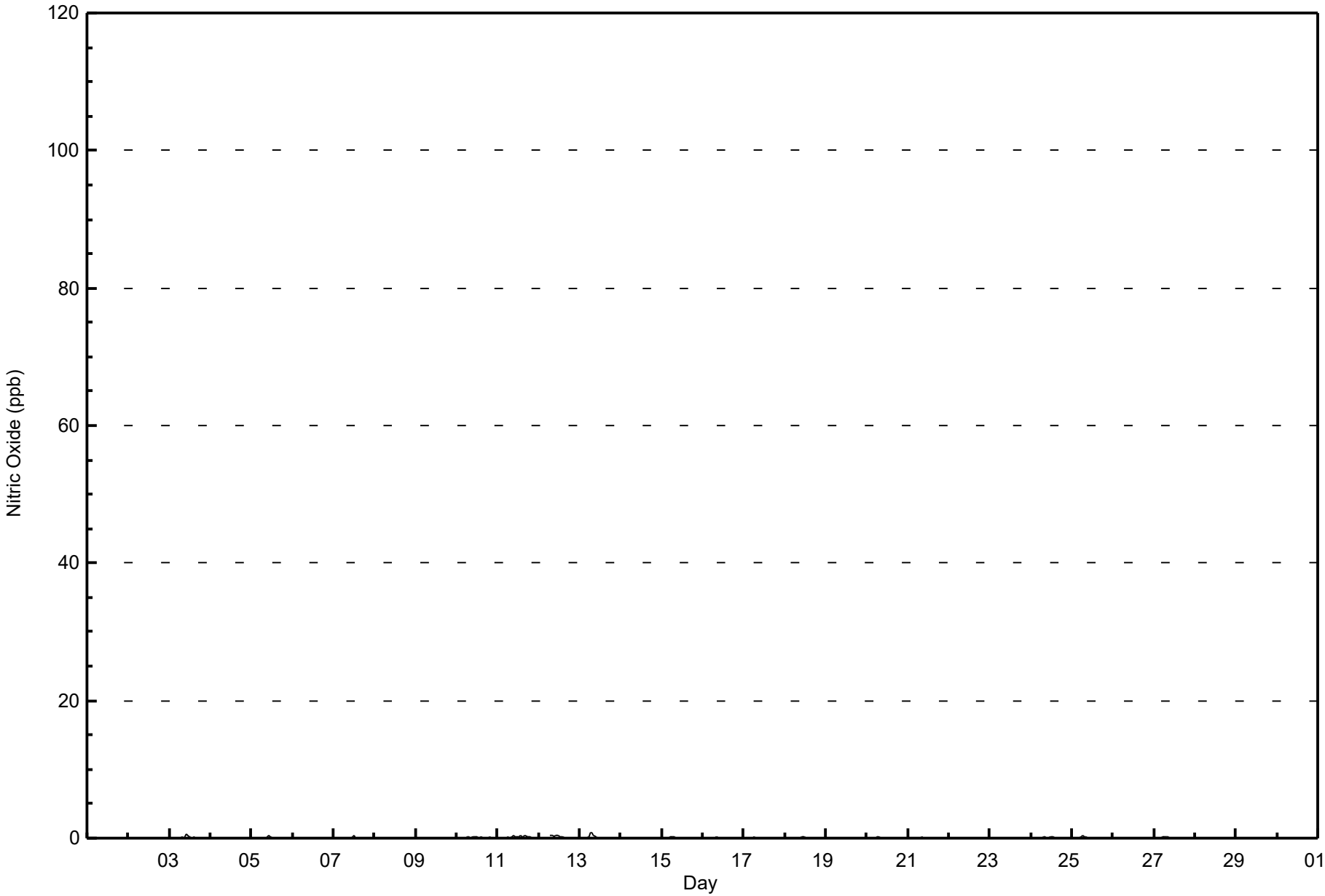
Z - zerospan C - Calibration PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Stony Mountain - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	681	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: 681

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

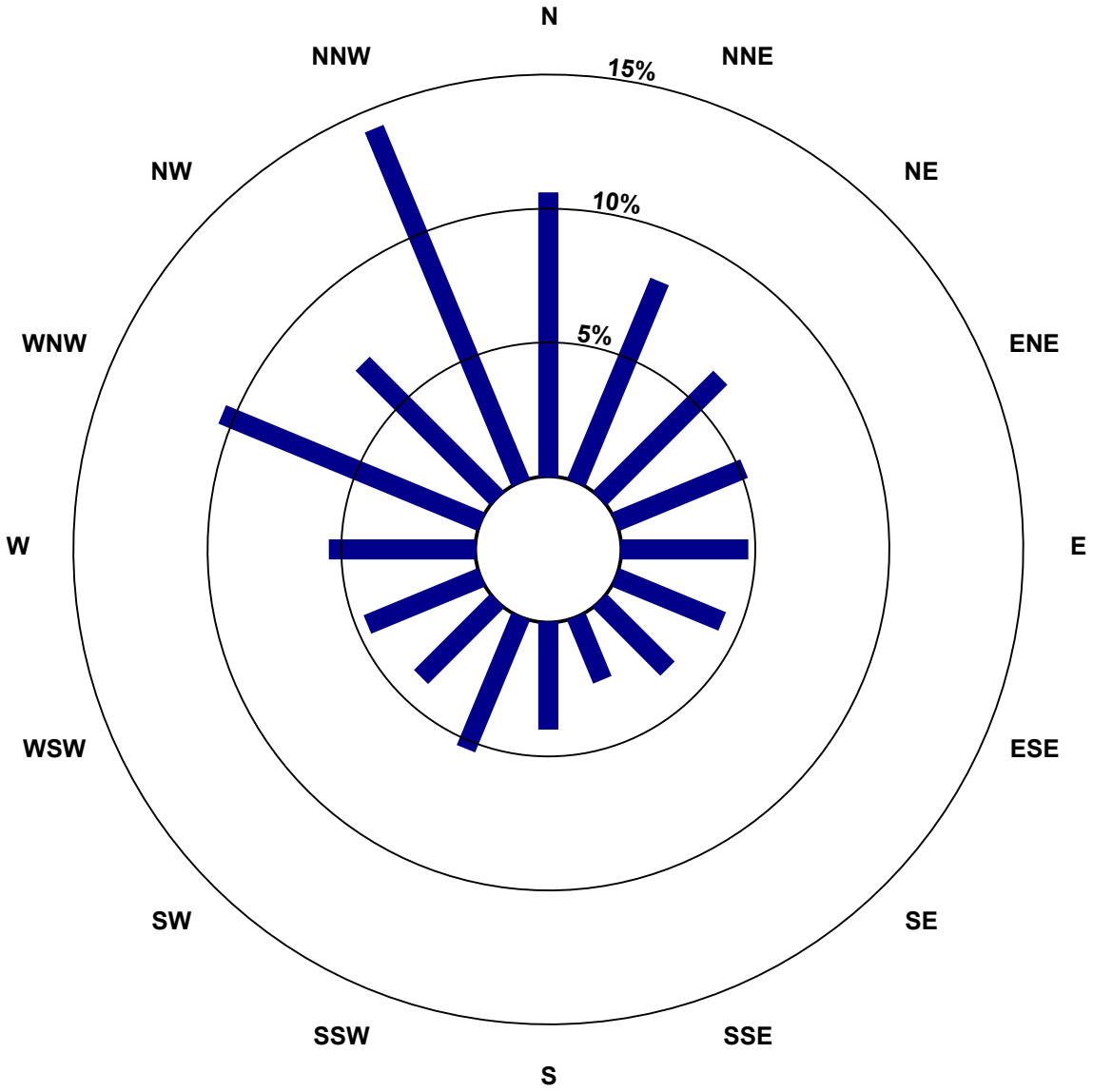
Nitric Oxide (NO) - ppb

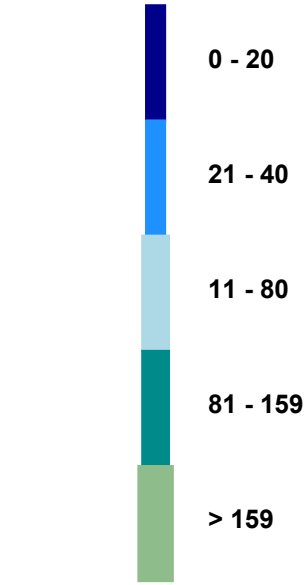
Stony Mountain - June 2026

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	55	43	35	32	29	24	17	27	36	27	31	37	71	48	97	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	72	55	43	35	32	29	24	17	27	36	27	31	37	71	48	97	681

Total Number of Valid Hours: 681

Total Number of Hours: 720





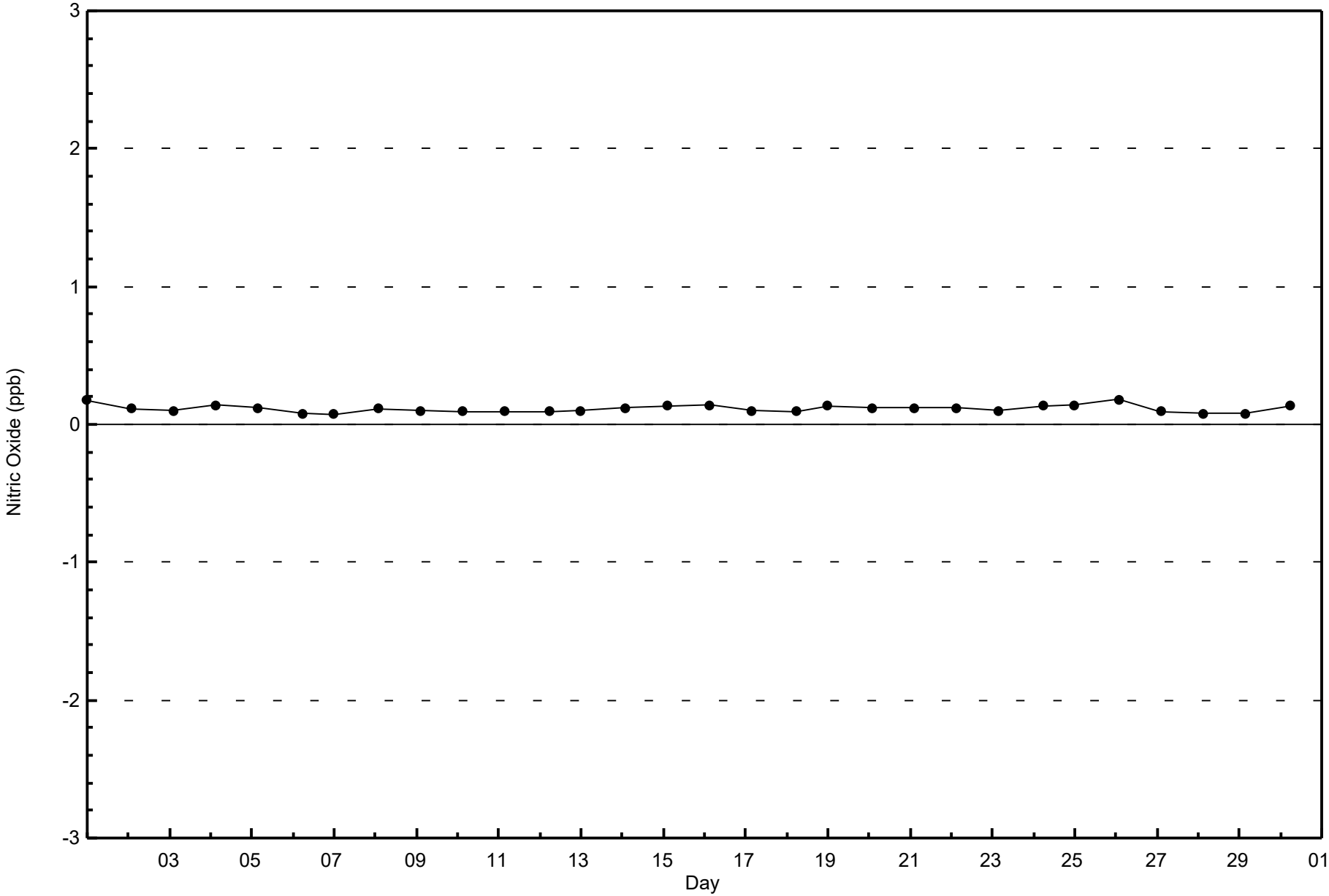
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Stony Mountain - June 2026

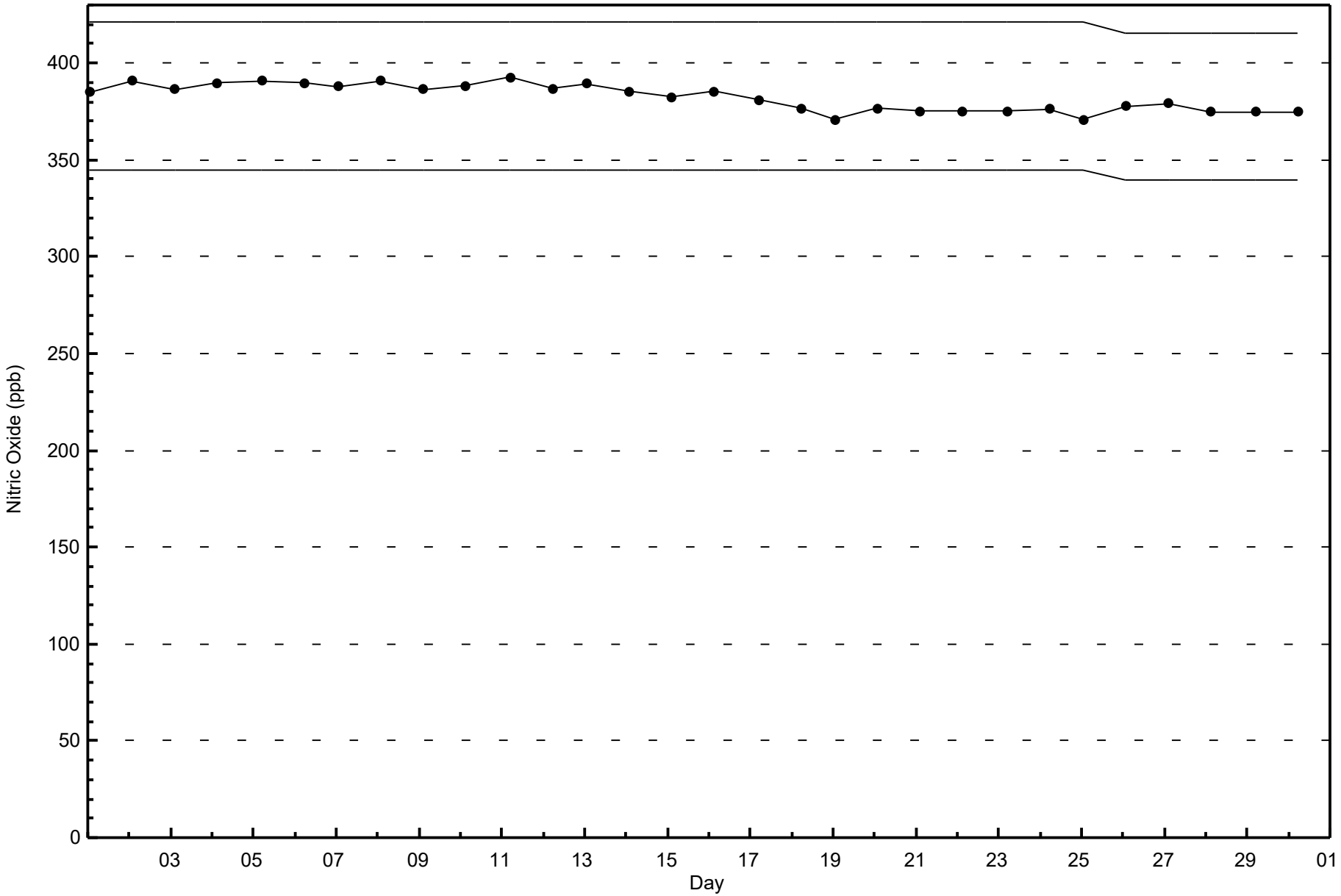


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Stony Mountain - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Stony Mountain - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.9 ppb on Jun 13 07:00 Maximum Daily Average: 1.4 ppb on Jun 11

Minimum Value: 0.1 ppb on Jun 2 00:00 Minimum Daily Average: 0.2 ppb on Jun 2
Maximum Diurnal Average: 0.8 ppb at hour 7 Minimum Diurnal Average: 0.4 ppb at hour 17
Monthly Average: 0.64 ppb Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.3 Median = 0.5 Q_3 = 0.8 P_{90} = 1.2 P_{99} = 2.0

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	37
Percent Operational Time:	99.7

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

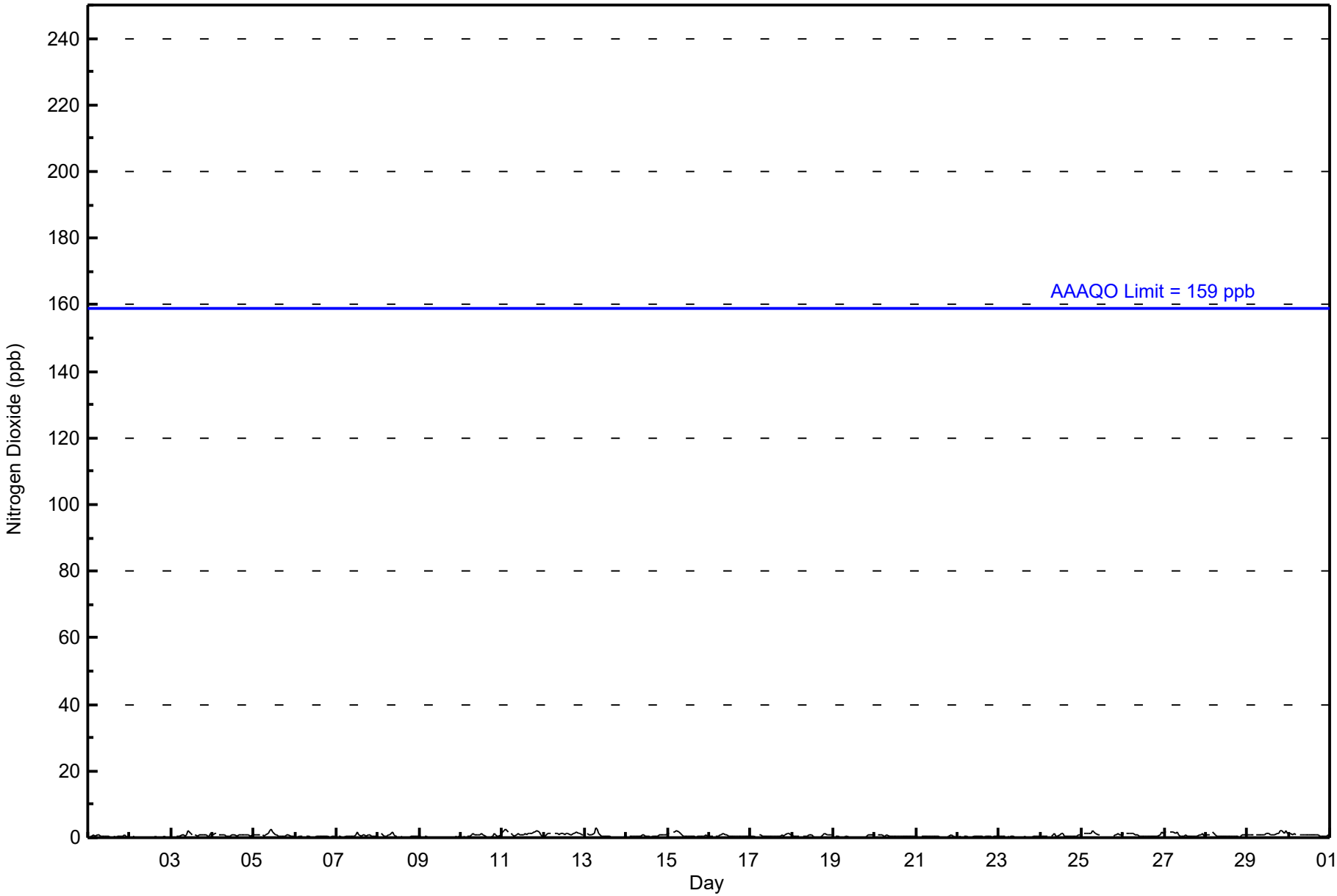
Z - zerospan C - Calibration PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Stony Mountain - June 2026



Nitrogen Dioxide (NO_2) - ppb
Stony Mountain - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	681	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: 681

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Stony Mountain - June 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	55	43	35	32	29	24	17	27	36	27	31	37	71	48	97	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	72	55	43	35	32	29	24	17	27	36	27	31	37	71	48	97	681

Total Number of Valid Hours: 681

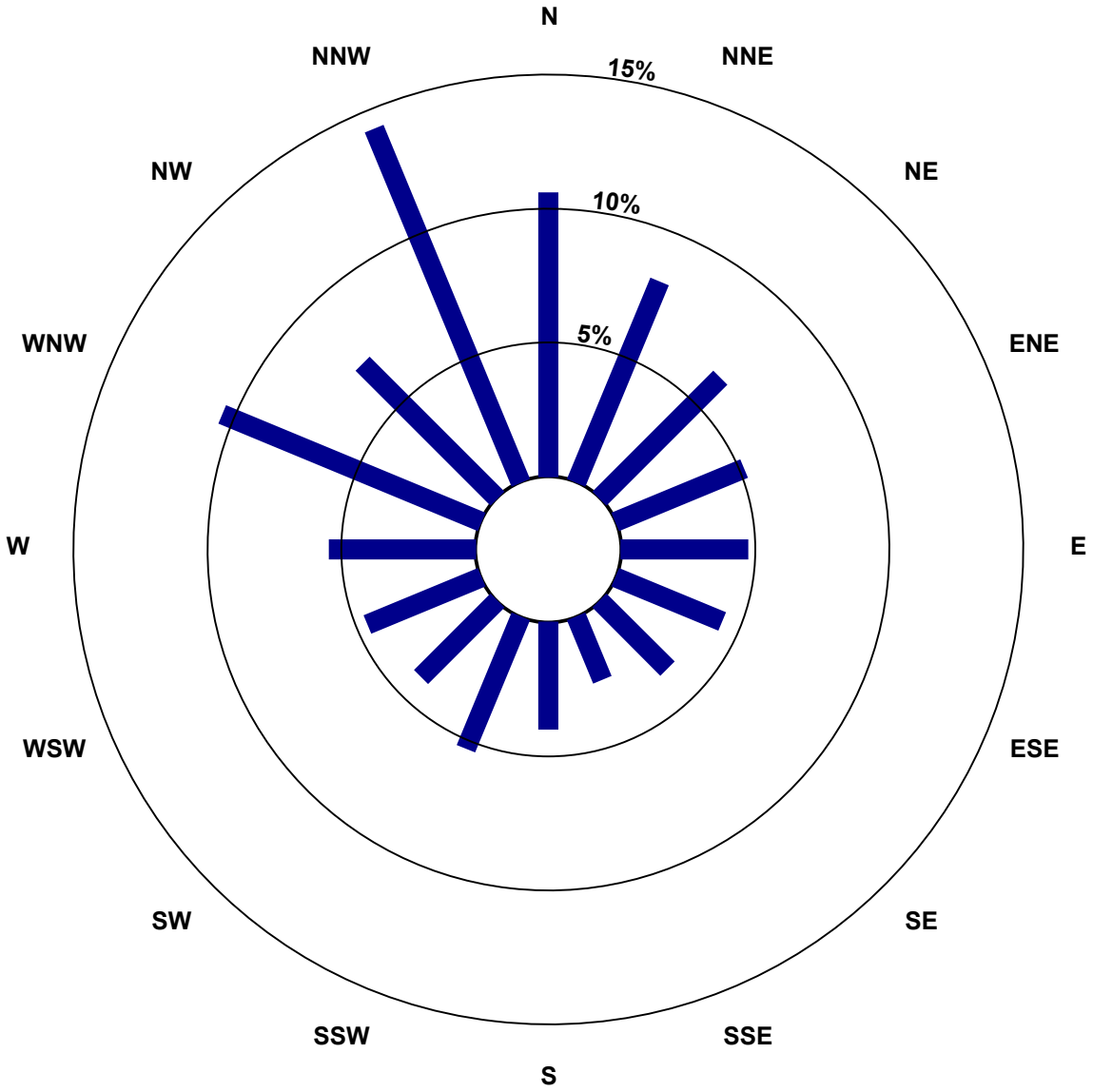
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Stony Mountain



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

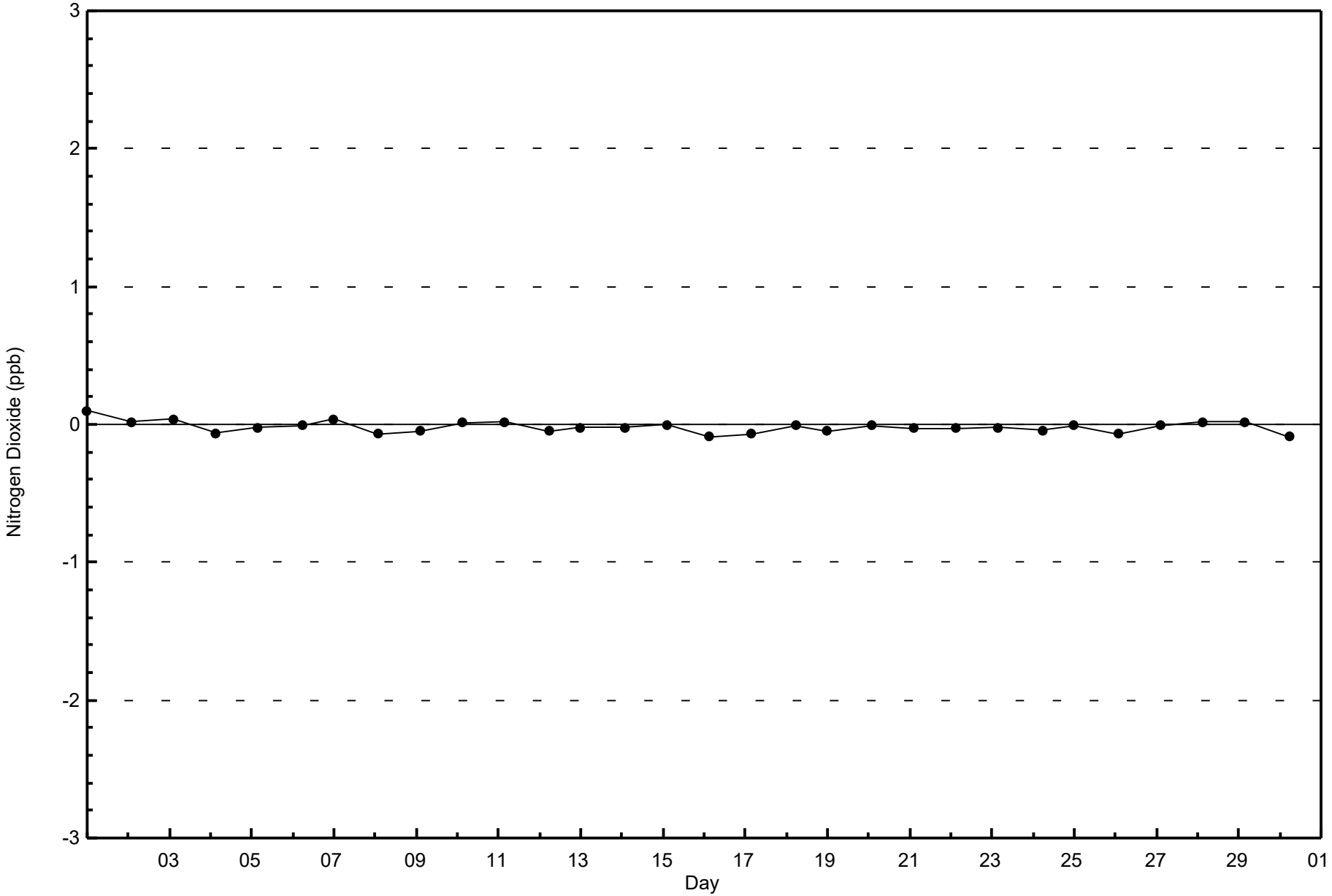
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Stony Mountain - June 2026

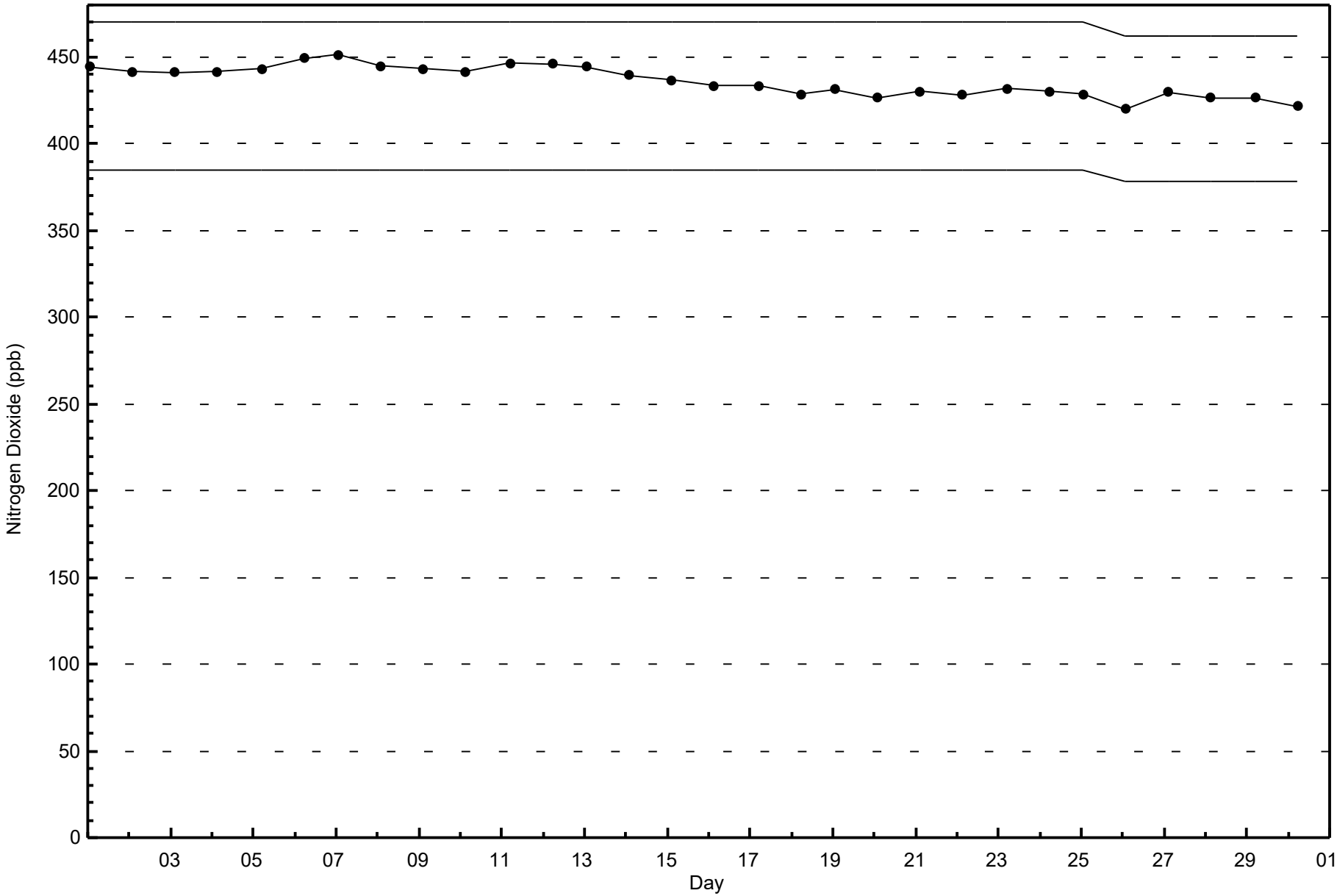


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Stony Mountain - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Stony Mountain - June 2026

Maximum Value: 3.6 ppb on Jun 13 07:00

Maximum Daily Average: 1.5 ppb on Jun 11

Minimum Value: 0.1 ppb on Jun 2 00:00

Minimum Daily Average: 0.2 ppb on Jun 2

Maximum Diurnal Average: 0.9 ppb at hour 7

Minimum Diurnal Average: 0.5 ppb at hour 17

Monthly Average: 0.67 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.3 Median = 0.6 Q_3 = 0.9 P_{90} = 1.4 P_{99} = 2.2

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	37
Percent Operational Time:	99.7

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

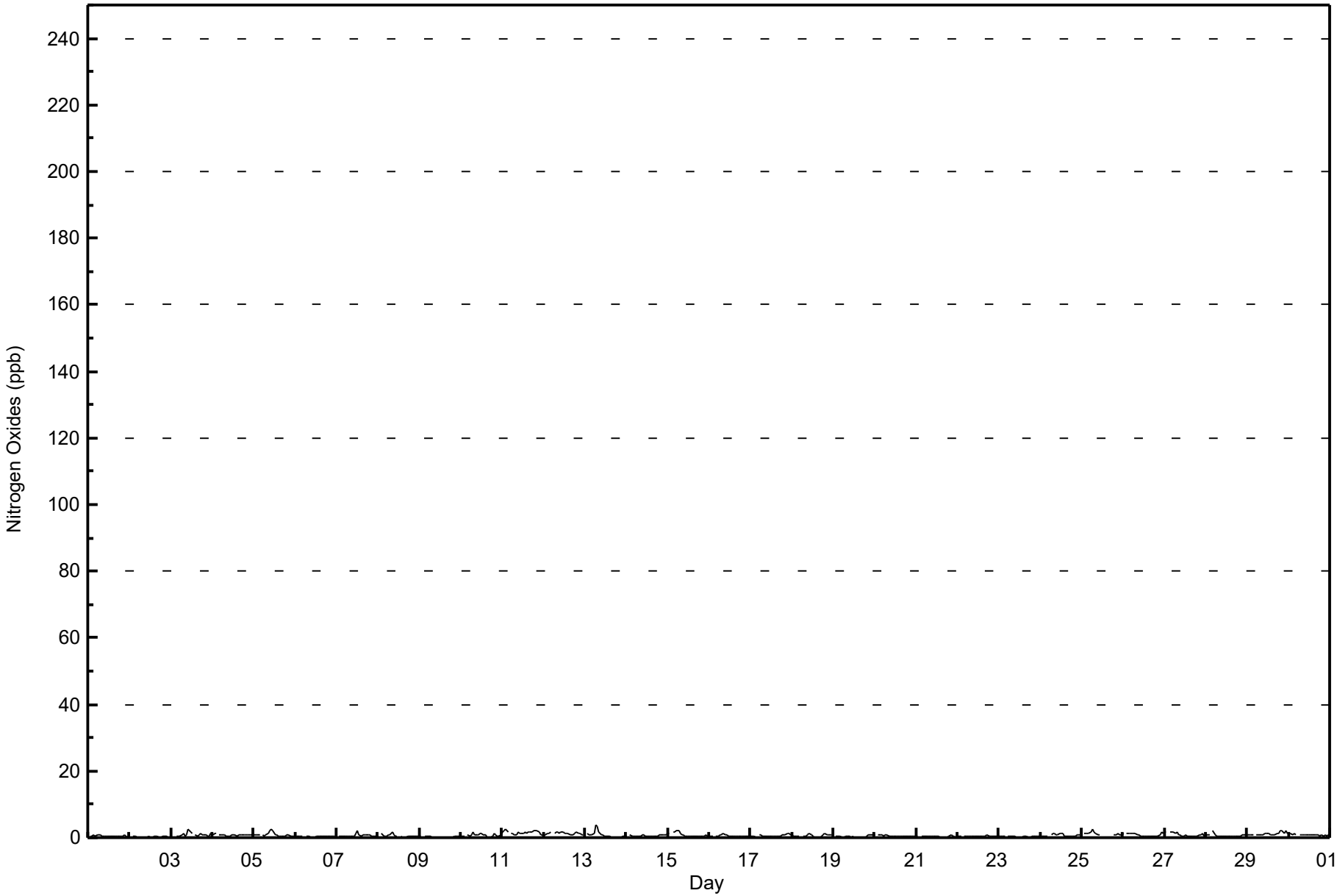
Z - zerospan C - Calibration PF - Power Failure

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Stony Mountain - June 2026



Nitrogen Oxides (NO_X) - ppb
Stony Mountain - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	681	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: 681

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Stony Mountain - June 2026

Concentration	Wind Direction																
Ranges (ppb)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	72	55	43	35	32	29	24	17	27	36	27	31	37	71	48	97	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	72	55	43	35	32	29	24	17	27	36	27	31	37	71	48	97	681

Total Number of Valid Hours: 681

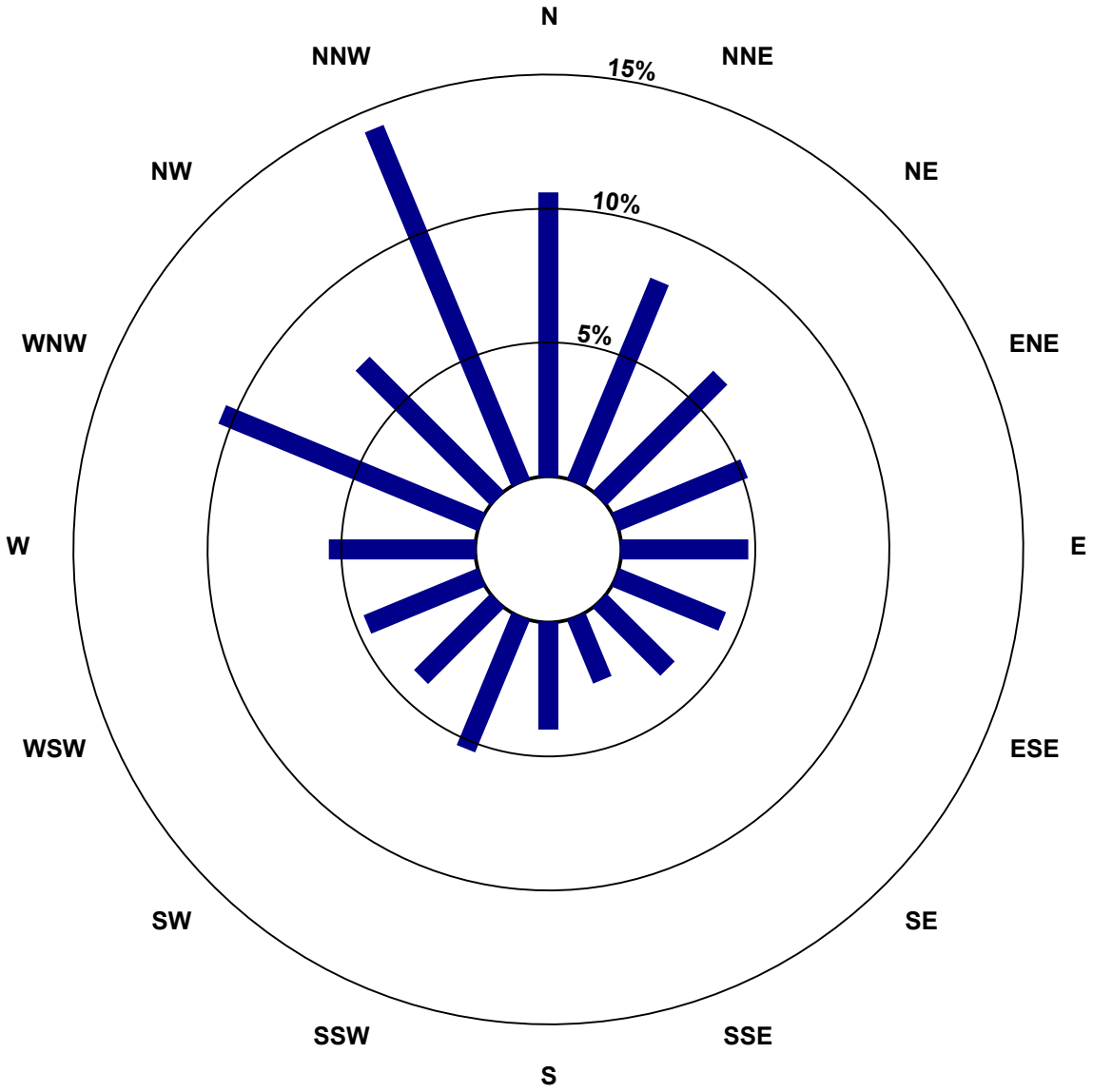
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Stony Mountain



Classes (ppb)

- 0 - 20
- 21 - 40
- 11 - 80
- 81 - 159
- > 159

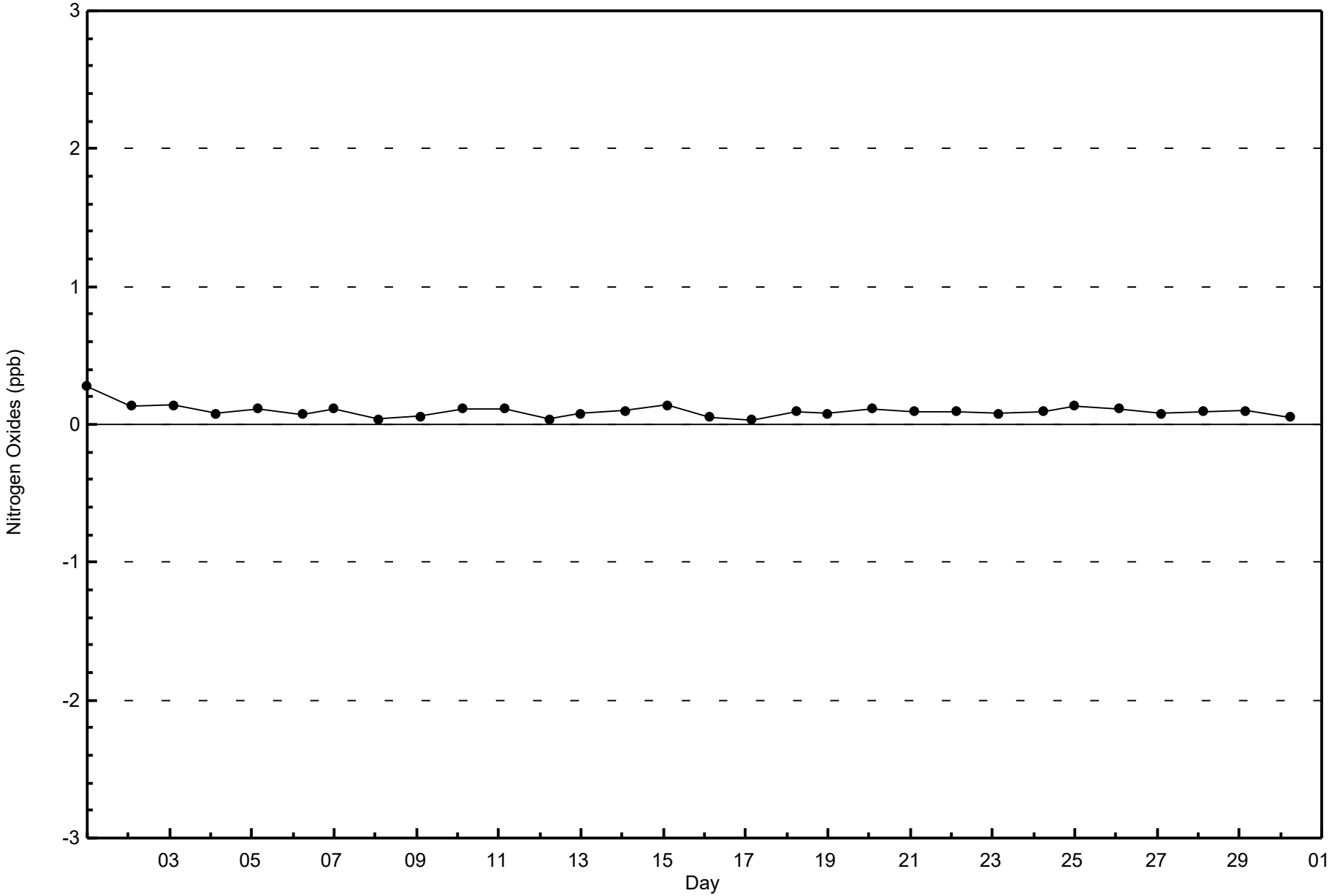
Total Number of Valid Hours: 681

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Stony Mountain - June 2026

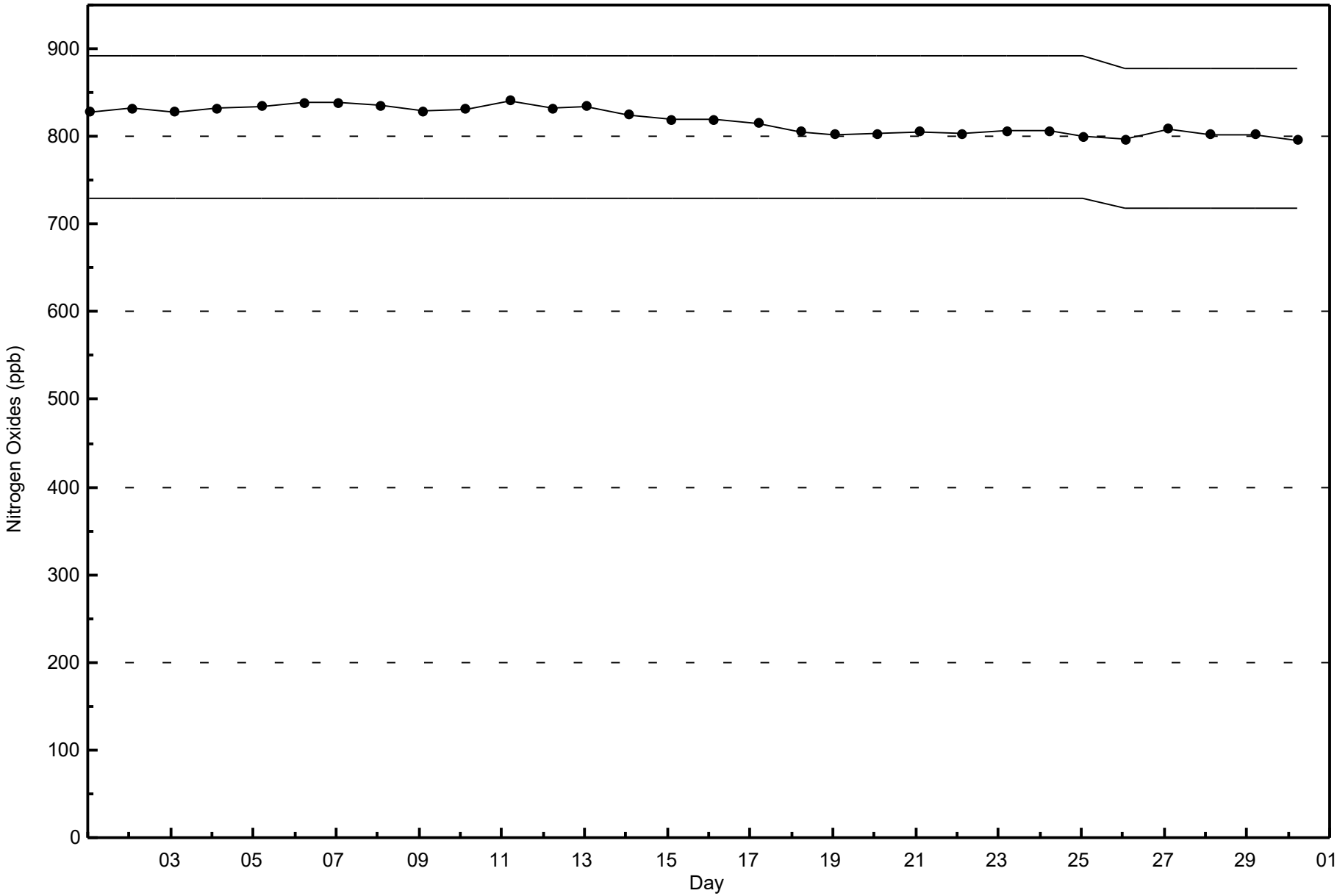


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Stony Mountain - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Stony Mountain - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 55.3 ppb on Jun 14 11:00 Maximum Daily Average: 46.2 ppb on Jun 29

Minimum Value: 11.0 ppb on Jun 11 03:00 Minimum Daily Average: 15.5 ppb on Jun 11
Maximum Diurnal Average: 36.1 ppb at hour 15 Minimum Diurnal Average: 24.6 ppb at hour 7
Monthly Average: 30.86 ppb Percentiles: P_1 = 12.3 P_{10} = 19.0 Q_1 = 24.2 Median = 30.5 Q_3 = 37.1 P_{90} = 41.9 P_{99} = 52.9

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-Jun	19.4	23.5	23.5	21.7	23.3	Z	23.8	26.3	28.1	29.2	28.4	26.0	25.1	25.0	30.5	31.3	29.4	28.2	27.6	27.6	27.7	27.6	30.0	29.4	26.6	31.3
2-Jun	Z	23.4	20.6	20.2	20.9	21.7	21.7	22.6	22.4	22.6	23.1	22.3	21.1	C	C	C	C	19.6	20.1	20.0	19.4	19.4	19.7	20.0	21.1	23.4
3-Jun	21.3	Z	17.4	15.3	15.2	16.7	19.1	20.2	21.5	20.7	20.4	21.3	21.5	PF	24.7	27.2	28.5	28.3	27.0	24.9	19.9	14.9	13.9	12.2	20.5	28.5
4-Jun	12.1	14.0	Z	13.6	15.8	21.8	24.6	27.0	28.4	30.5	34.7	34.3	34.9	37.3	39.9	41.2	41.1	39.9	37.6	36.7	32.3	29.7	28.0	27.8	29.7	41.2
5-Jun	27.7	25.3	26.0	Z	24.7	19.5	17.2	21.7	25.1	23.8	24.8	28.7	33.3	31.0	35.6	38.6	34.5	27.6	32.6	31.5	26.9	32.6	27.3	32.5	28.2	38.6
6-Jun	33.6	33.5	33.7	32.8	Z	29.6	29.9	31.7	33.5	33.7	34.0	35.3	34.4	34.7	36.0	36.4	35.9	34.6	35.8	35.1	31.6	29.9	28.3	34.5	33.4	36.4
7-Jun	35.3	30.5	20.1	20.5	24.9	Z	23.5	22.6	22.6	25.4	31.5	34.2	39.3	41.5	40.4	41.5	40.1	38.0	41.8	36.3	33.2	29.0	38.3	48.9	33.0	48.9
8-Jun	Z	38.2	35.4	29.6	27.8	24.7	23.0	22.8	25.6	23.6	26.7	26.8	PF	22.7	21.4	25.5	29.0	28.8	26.8	32.4	32.1	31.9	31.5	30.0	28.0	38.2
9-Jun	31.8	Z	30.0	32.8	32.7	33.1	34.4	37.1	39.1	40.8	41.9	42.8	41.3	40.3	40.8	40.4	39.7	37.8	35.2	34.8	36.0	34.4	38.4	34.0	36.9	42.8
10-Jun	34.1	32.0	Z	26.4	22.5	23.5	24.0	23.7	28.7	28.7	27.5	28.8	33.4	36.4	36.4	34.4	35.0	32.7	29.8	24.0	21.1	17.5	16.6	14.1	27.4	36.4
11-Jun	12.9	12.3	11.0	Z	12.3	12.2	11.9	12.3	12.3	13.9	17.0	16.8	17.0	17.5	17.8	18.9	18.7	17.6	16.4	18.3	17.8	17.5	18.0	17.1	15.5	18.9
12-Jun	17.2	18.0	17.0	17.8	Z	18.8	22.3	24.0	25.3	31.0	32.0	33.9	36.1	38.8	41.8	41.8	41.5	40.7	39.0	36.0	34.7	33.6	32.6	30.3	30.6	41.8
13-Jun	28.7	28.5	28.0	28.4	27.6	Z	25.3	27.2	32.1	36.4	37.2	38.0	39.8	39.3	37.6	36.9	36.8	36.9	36.9	35.3	33.2	36.6	38.0	37.0	34.0	39.8
14-Jun	Z	36.7	37.0	38.4	38.6	40.6	41.2	39.8	44.8	53.8	55.3	52.0	47.8	44.7	42.5	41.5	40.6	38.4	40.3	40.5	35.6	34.4	34.0	35.7	41.5	55.3
15-Jun	34.9	Z	33.2	33.0	32.7	30.7	30.1	31.6	35.6	38.9	39.2	39.6	41.2	42.2	41.6	39.4	37.1	36.9	37.1	36.2	36.1	40.6	39.6	34.8	36.6	42.2
16-Jun	31.9	28.2	Z	21.3	25.4	19.0	15.8	23.9	26.4	24.9	25.4	27.8	26.4	26.9	25.3	27.2	26.7	21.7	20.9	25.2	23.3	26.7	26.2	22.8	24.7	31.9
17-Jun	25.6	24.7	27.2	Z	24.5	23.9	21.5	21.8	25.4	28.8	34.4	36.3	37.1	41.0	41.7	40.5	39.2	39.3	37.3	31.7	30.9	31.1	29.1	27.5	31.3	41.7
18-Jun	28.0	30.0	29.7	28.7	Z	28.9	26.5	24.8	24.5	27.3	31.6	32.1	33.7	34.7	35.3	31.3	32.0	30.5	26.7	23.9	20.5	17.8	14.7	15.5	27.3	35.3
19-Jun	17.4	21.5	20.8	21.3	22.9	Z	22.9	22.3	24.6	28.0	29.8	31.1	30.1	27.4	28.6	28.9	31.0	30.5	29.3	32.8	38.5	35.3	32.7	24.6	27.5	38.5
20-Jun	Z	24.5	21.4	18.1	17.7	17.3	16.3	15.7	19.8	23.2	26.5	28.0	27.6	28.3	32.5	29.6	26.6	26.5	24.3	25.0	24.8	23.8	23.7	20.8	23.6	32.5
21-Jun	18.1	Z	21.1	21.7	21.9	19.6	16.9	15.1	13.3	14.1	17.4	20.2	22.4	21.9	22.6	23.8	22.7	23.0	21.7	19.5	19.0	18.2	17.4	18.6	19.6	23.8
22-Jun	17.2	18.5	Z	22.1	21.8	20.9	16.6	14.9	16.0	20.1	20.5	25.4	26.9	27.3	28.5	29.3	28.8	28.9	28.1	27.6	28.0	25.4	26.2	26.4	23.7	29.3
23-Jun	27.2	29.3	30.4	Z	32.1	31.0	27.2	29.0	31.1	32.1	32.7	33.8	34.9	35.9	30.8	24.0	30.1	34.0	35.1	33.7	31.7	30.3	30.8	28.7	31.1	35.9
24-Jun	27.0	25.8	27.0	31.0	Z	27.6	20.7	20.6	20.7	23.9	27.6	31.5	36.0	34.9	36.3	38.0	38.4	38.2	37.5	38.2	36.4	34.4	33.2	31.3	31.1	38.4
25-Jun	29.1	28.0	28.3	29.5	29.0	Z	28.2	31.4	37.2	42.1	43.7	44.6	44.9	45.9	46.2	47.3	47.4	49.2	49.1	48.8	46.5	45.5	43.0	39.8	40.2	49.2
26-Jun	Z	36.0	35.8	32.6	29.9	30.8	33.1	37.3	41.0	45.0	45.9	47.2	47.3	47.0	47.9	48.3	47.5	46.6	47.6	46.1	45.0	43.5	41.0	39.1	41.8	48.3
27-Jun	36.3	Z	35.0	34.5	32.0	28.3	27.1	32.3	36.0	40.3	44.0	43.6	40.7	40.9	42.0	42.1	41.2	42.7	40.0	38.3	34.9	37.8	37.2	36.4	37.6	44.0
28-Jun	34.8	33.8	Z	31.2	30.6	30.8	28.9	30.5	32.2	33.8	36.7	38.4	41.5	44.8	47.3	45.4	44.7	44.1	42.4	41.7	40.4	45.4	49.1	49.1	39.0	49.1
29-Jun	46.2	43.3	40.9	Z	42.7	40.1	38.5	37.3	35.2	38.2	41.7	49.8	54.8	54.0	53.6	53.9	53.1	52.8	51.0	48.7	47.1	48.1	46.0	44.3	46.2	54.8
30-Jun	40.0	36.9	35.0	32.8	Z	30.4	26.4	26.0	28.1	32.9	36.2	41.7	44.0	45.1	41.5	39.7	37.3	35.8	25.0	30.3	33.7	38.6	38.2	41.4	35.5	45.1
	27.5	27.9	27.4	26.2	26.0	25.7	24.6	25.8	27.9	30.3	32.3	33.7	35.0	36.0	36.1	36.0	35.7	34.3	33.3	32.7	31.3	31.0	30.8	30.1	Diurnal Average	
	46.2	43.3	40.9	38.4	42.7	40.6	41.2	39.8	44.8	53.8	55.3	52.0	54.8	54.0	53.6	53.9	53.1	52.8	51.0	48.8	47.1	48.1	49.1	49.1	Diurnal Maximum	

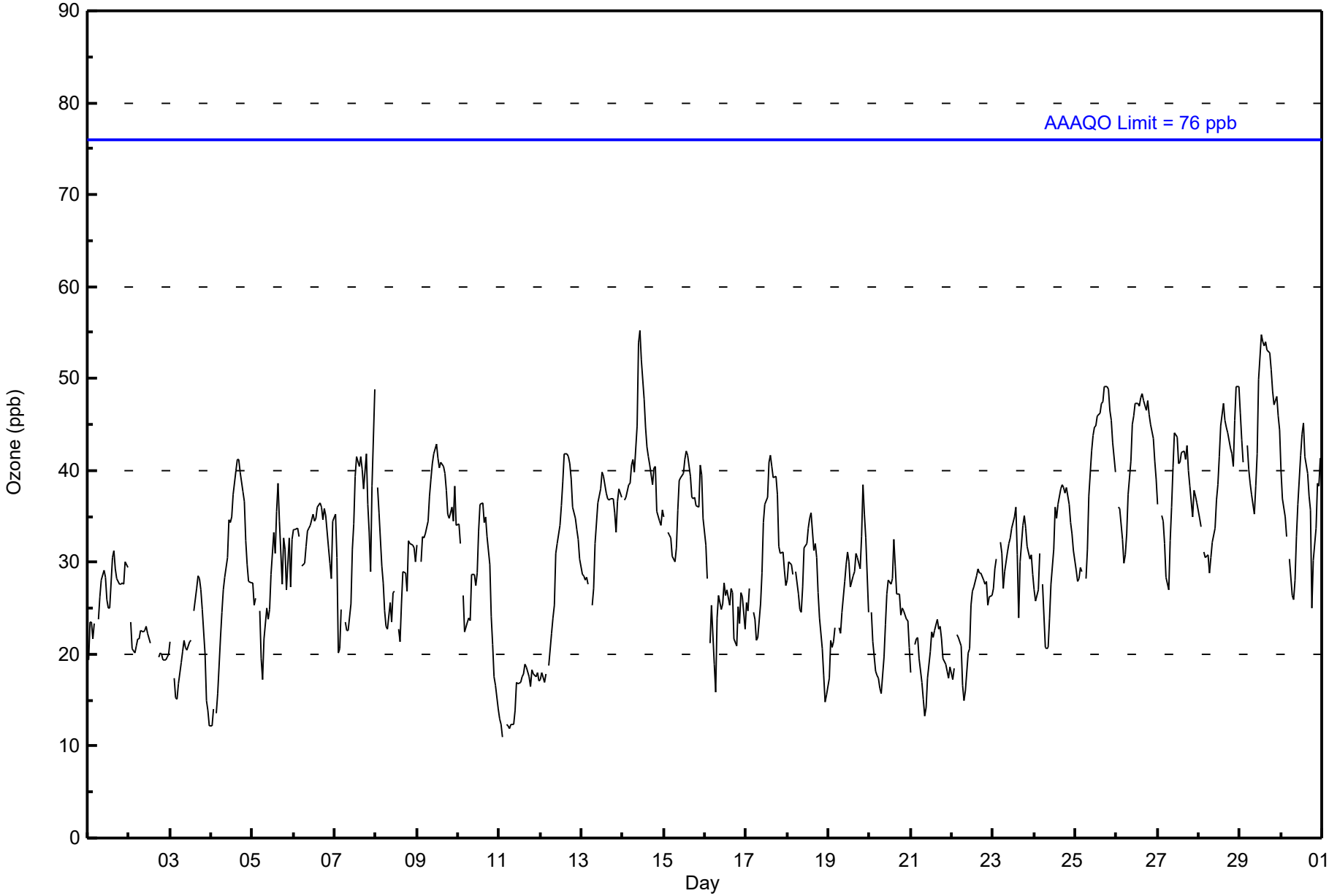
Z - zerospan C - Calibration PF - Power Failure
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Stony Mountain - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	89	13.01	13.01
21 - 50	585	85.53	98.54
51 - 82	10	1.46	100.00
> 83	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Ozone (O_3) - ppb

Stony Mountain - June 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	5	12	13	4	2	4	2	1	5	1	2	0	0	0	9	29	89
21 - 50	66	37	27	31	30	24	21	18	24	38	23	31	40	68	37	70	585
51 - 82	0	3	2	0	1	0	1	0	0	0	0	0	0	1	1	1	10
> 83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	71	52	42	35	33	28	24	19	29	39	25	31	40	69	47	100	684

Total Number of Valid Hours: 684

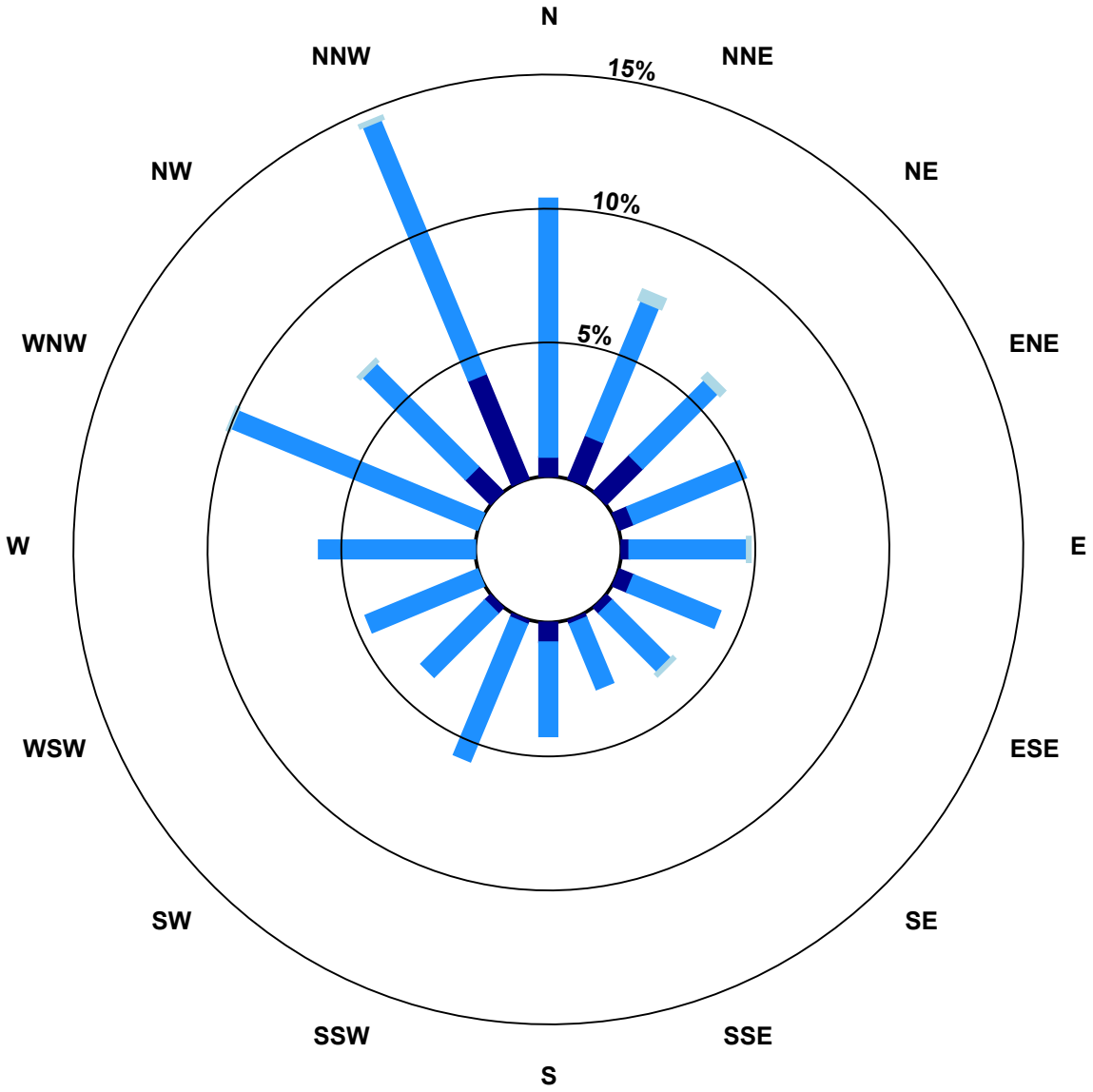
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Ozone (O_3) - ppb

Stony Mountain



Classes (ppb)

0 - 20

21 - 50

51 - 82

> 83

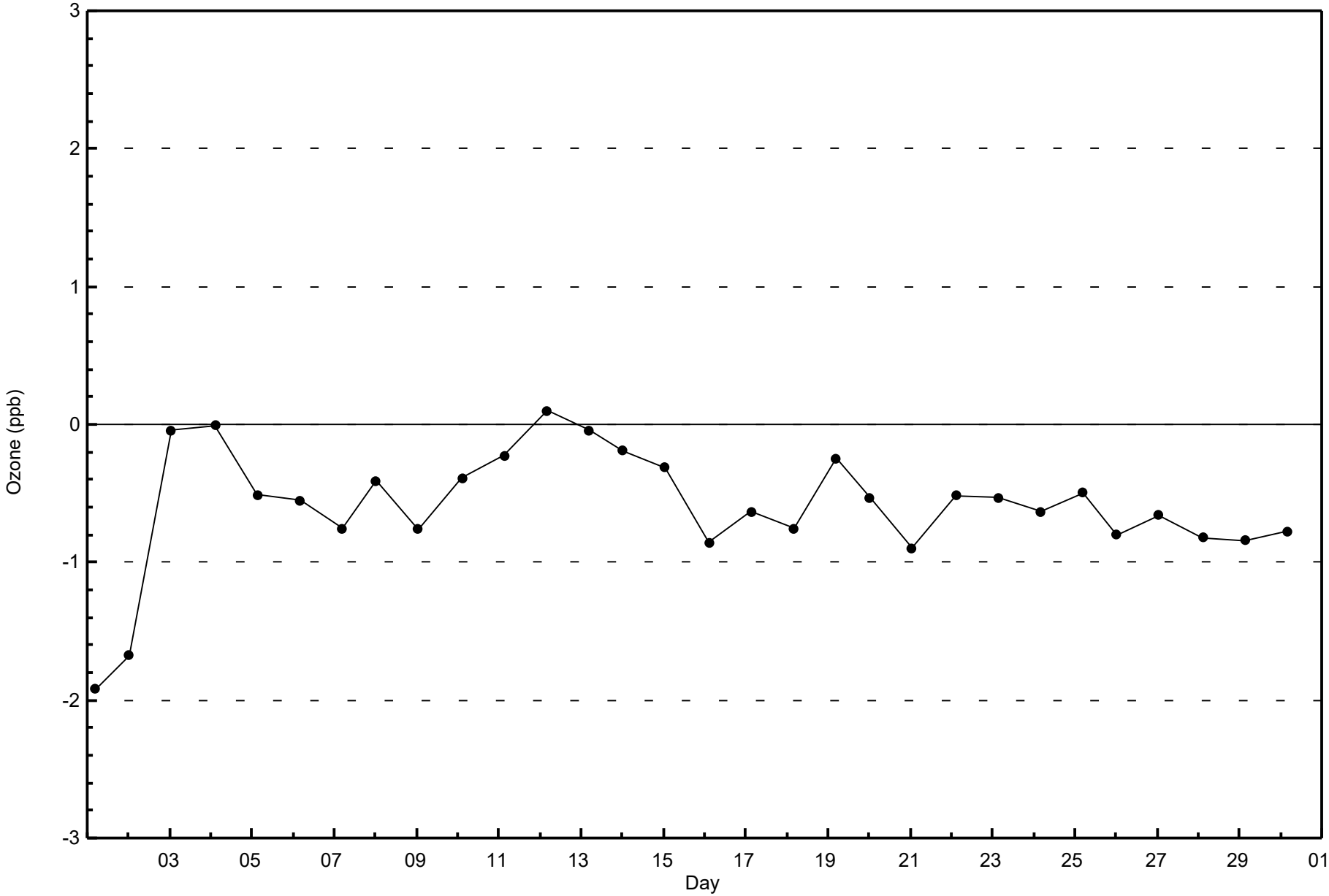
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Stony Mountain - June 2026

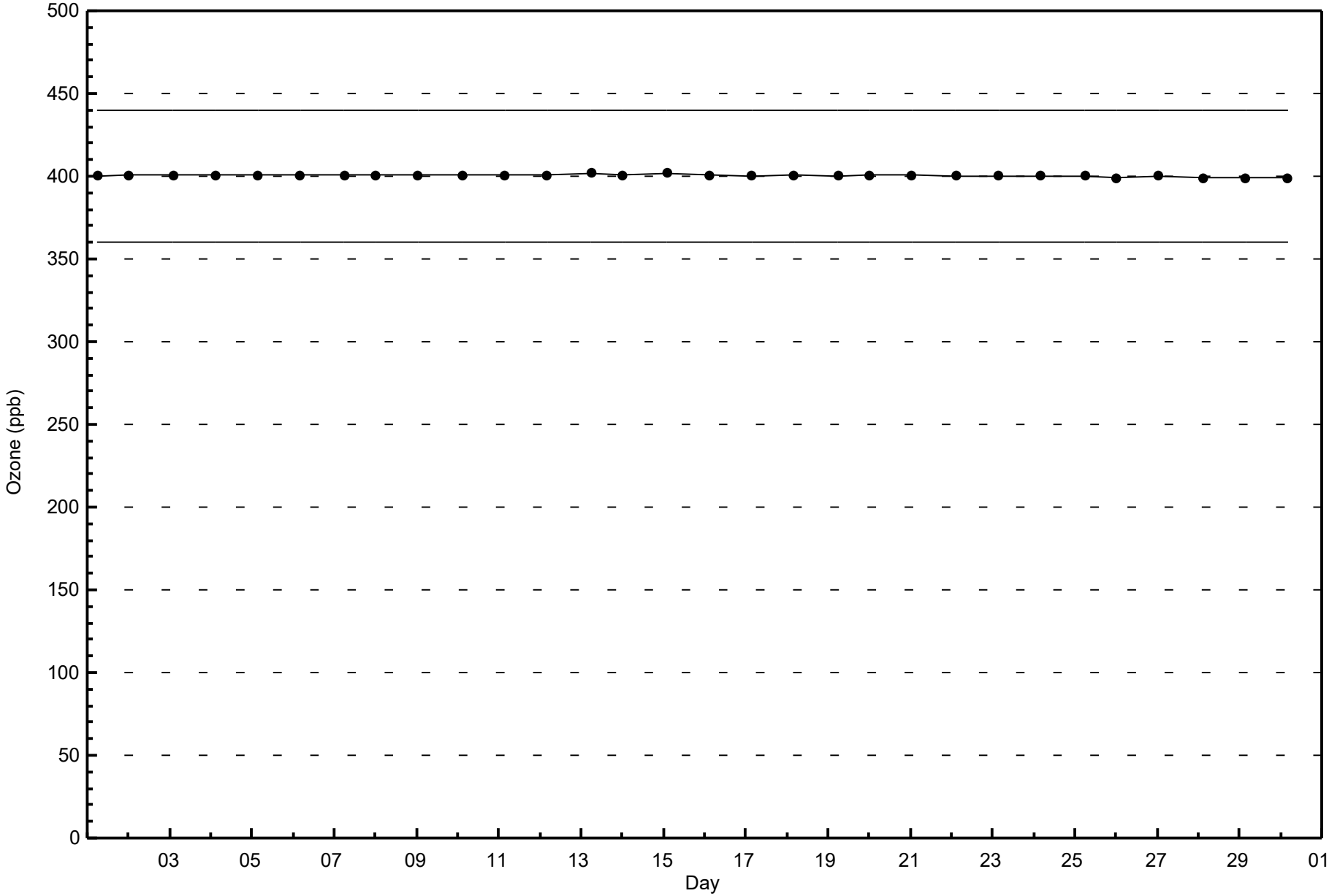


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Stony Mountain - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Stony Mountain - June 2026

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

Maximum Value: 94.1 $\mu g/m^3$ on Jun 29 12:00

Maximum Daily Average: 6.3 $\mu g/m^3$ on Jun 15

Minimum Value: 0.1 $\mu g/m^3$ on Jun 3 04:00

Minimum Daily Average: 1.1 $\mu g/m^3$ on Jun 2

Maximum Diurnal Average: 10.3 $\mu g/m^3$ at hour 12

Minimum Diurnal Average: 4.0 $\mu g/m^3$ at hour 14

Monthly Average: 7.10 $\mu g/m^3$

Percentiles: $P_1 = 0.2$ $P_{10} = 1.9$ $Q_1 = 3.1$ Median = 3.9 $Q_3 = 5.6$ $P_{90} = 8.7$ $P_{99} = 58.3$

Hours in Service:	720
Hours of Data:	407
Hours of Missing Data:	313
Hours of Calibration:	4
Percent Operational Time:	57.1

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-Jun	0.8	0.6	0.5	0.7	0.5	0.5	0.9	1.1	1.5	2.5	2.7	3.8	4.2	3.2	3.1	3.2	3.5	3.0	2.5	1.9	1.5	1.0	1.0	1.0	1.9	4.2
2-Jun	1.0	1.0	1.2	1.5	1.4	1.1	1.4	UO	UO	UO	UO	UO	UO	1.5	1.4	1.0	1.2	1.1	2.0	1.5	0.9	0.2	0.2	0.2	1.1	2.0
3-Jun	0.3	0.1	0.1	0.1	0.1	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	0.3
4-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	C	C	C	C	6.9	7.9	8.7	8.8	8.2	8.5	8.7	8.8	--	8.8
5-Jun	9.2	9.5	8.8	9.1	9.1	8.9	8.9	9.2	8.7	8.5	9.1	7.4	3.1	4.1	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	9.5
6-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	4.0	3.6	3.6	3.3	3.4	3.5	4.0	4.2	4.0	4.2	4.5	--	4.5
9-Jun	4.3	4.4	4.2	3.6	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	4.4
10-Jun	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-Jun	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-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	3.6	3.2	3.6	3.2	4.0	6.2	7.7	5.6	5.6	6.1	--	7.7
15-Jun	6.2	6.3	6.4	6.4	7.0	6.9	6.7	6.8	6.3	6.0	5.5	5.9	8.3	8.6	8.0	5.2	4.6	5.0	5.3	5.5	5.8	6.6	6.3	5.9	6.3	8.6
16-Jun	5.7	5.7	5.8	6.0	5.7	4.9	5.3	4.2	4.9	4.9	5.1	5.1	5.0	5.2	5.5	5.4	5.8	5.8	5.3	5.7	6.0	6.4	6.4	6.3	5.5	6.4
17-Jun	4.0	3.3	2.5	2.1	2.3	2.3	2.5	2.1	1.8	1.4	2.1	2.4	2.2	2.7	3.4	3.9	4.0	4.2	5.1	6.4	6.7	6.4	6.0	4.1	3.5	6.7
18-Jun	3.9	3.4	3.5	3.3	3.4	3.3	3.4	3.2	3.2	3.2	3.7	3.8	3.5	2.6	2.1	2.3	2.8	3.3	4.1	4.8	4.3	3.4	3.2	3.0	3.4	4.8
19-Jun	2.7	1.8	1.8	2.1	2.1	2.2	2.2	2.2	2.0	2.0	2.0	1.8	2.1	2.4	2.4	2.4	2.2	1.9	2.3	3.8	5.3	4.8	5.3	5.8	2.7	5.8
20-Jun	5.5	5.1	5.6	4.5	3.4	2.9	2.9	3.0	2.7	2.7	3.0	3.3	3.4	3.4	3.1	3.2	3.4	3.2	3.3	3.4	3.4	3.5	3.5	4.0	3.6	5.6
21-Jun	4.3	4.0	4.1	4.3	4.1	4.1	4.3	4.1	4.3	4.1	3.6	3.1	2.8	3.0	3.0	3.0	3.0	3.2	3.3	3.3	3.4	3.7	3.9	3.7	3.7	4.3
22-Jun	3.9	3.8	3.6	3.6	3.6	3.7	4.0	4.2	4.1	3.9	3.5	3.1	3.0	3.0	3.1	3.2	3.1	3.1	2.9	2.9	3.1	3.3	3.4	3.3	3.4	4.2
23-Jun	3.7	3.5	3.5	3.3	2.8	3.0	3.6	3.7	3.5	3.5	3.6	3.5	3.3	3.3	3.7	3.3	3.1	3.4	3.5	3.4	3.3	3.5	3.8	4.1	3.5	4.1
24-Jun	4.3	4.5	4.8	6.0	5.6	5.1	5.2	5.8	5.9	5.3	4.5	4.5	4.7	4.3	3.8	3.8	3.7	3.5	3.6	4.2	4.0	4.3	4.8	5.0	4.6	6.0
25-Jun	5.0	4.9	4.9	5.1	5.1	5.2	5.2	4.7	4.4	3.6	3.4	3.4	3.5	3.6	3.6	3.9	3.8	4.3	4.4	4.6	4.7	5.0	5.0	5.3	4.4	5.3
26-Jun	5.5	5.6	5.3	5.3	5.5	5.6	5.6	5.8	6.0	4.5	3.8	3.7	3.8	4.2	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	6.0
27-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	15.6	15.0	9.4	6.1	6.0	5.9	6.3	7.6	8.1	8.5	24.9	49.8	57.1	--	57.1
29-Jun	58.3	52.8	50.7	57.6	58.5	58.4	57.3	54.3	52.8	57.8	79.5	94.1	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	94.1
30-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	46.4	46.0	44.2	45.0	42.6	42.6	43.5	44.3	43.3	46.4	--	46.4
	7.1	6.7	6.5	6.9	7.1	7.4	7.5	7.6	7.5	7.6	9.0	10.3	4.5	4.0	6.2	6.0	6.0	6.2	6.3	6.7	6.9	7.7	9.1	9.7	Diurnal Average	
	58.3	52.8	50.7	57.6	58.5	58.4	57.3	54.3	52.8	57.8	79.5	94.1	15.0	9.4	46.4	46.0	44.2	45.0	42.6	42.6	43.5	44.3	49.8	57.1	Diurnal Maximum	

C - Calibration M - Maintenance UO - Unstable Operation

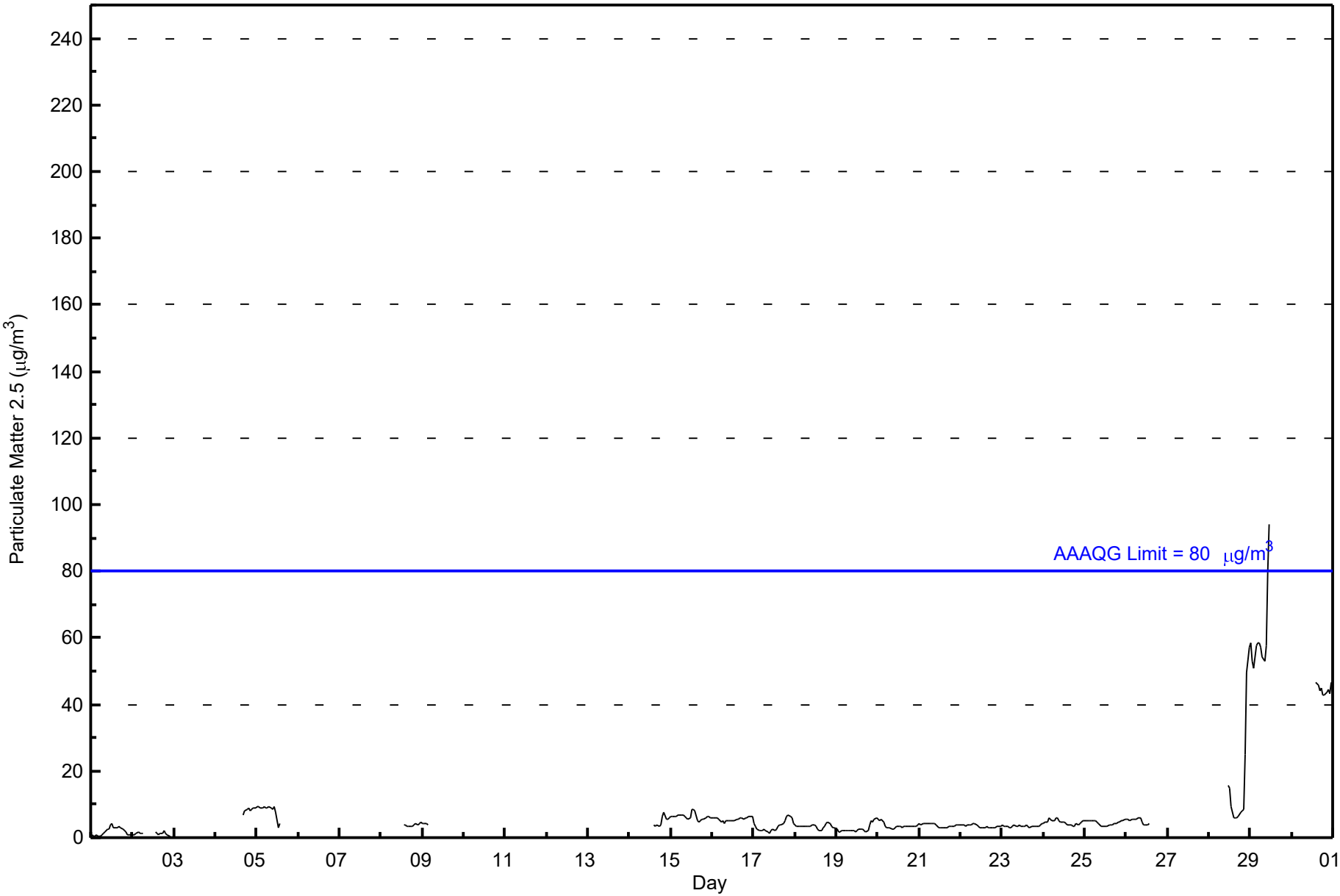
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Stony Mountain - June 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Stony Mountain - June 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	299	73.46	73.46
6 - 15	82	20.15	93.61
16 - 25	2	0.49	94.10
26 - 80	23	5.65	99.75
> 81.0	1	0.25	100.00

Total Number of Valid Hours: 407

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Stony Mountain - June 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	41	36	21	16	13	4	4	17	13	22	16	10	14	29	17	26	299
6 - 15	4	4	5	8	2	2	6	1	2	11	4	4	2	8	12	7	82
16 - 25	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
26 - 80	7	1	1	1	0	0	1	0	1	2	0	1	2	1	0	5	23
> 81.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Totals	52	42	29	25	15	6	11	18	16	35	20	15	18	38	29	38	407

Total Number of Valid Hours: 407

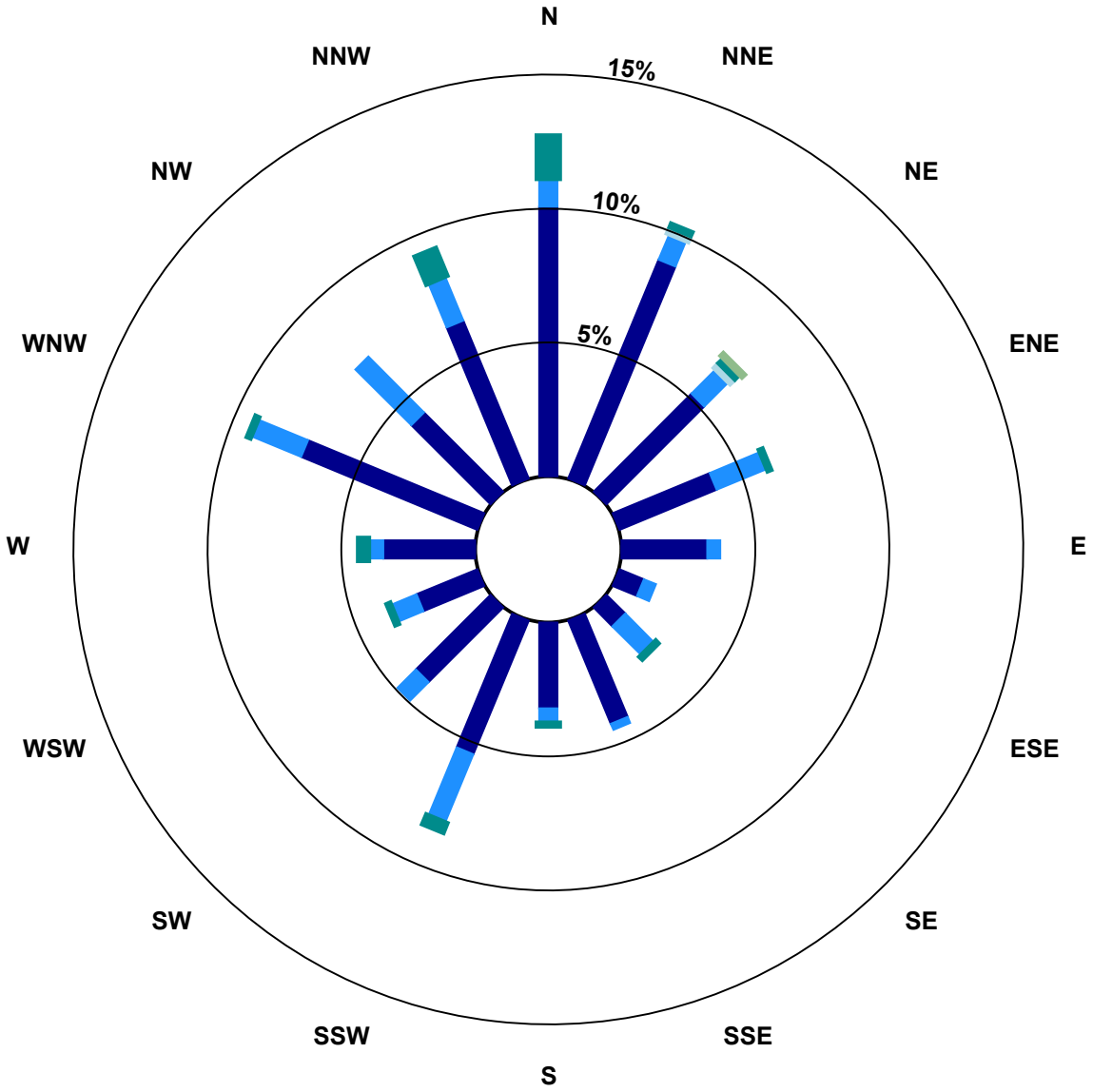
Total Number of Hours: 720

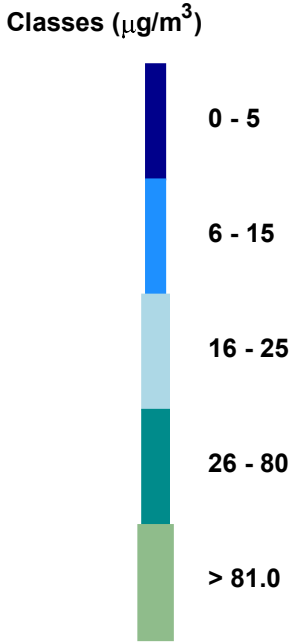
Wood Buffalo Environmental Association

Wind Rose Jun 2026

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

Stony Mountain





Total Number of Valid Hours: 407

Maximum Value: 26.9 C on Jun 28 16:00

Maximum Daily Average: 20.8 C on Jun 28

Minimum Value: 5.0 C on Jun 7 04:00

Minimum Daily Average: 7.0 C on Jun 2

Maximum Diurnal Average: 18.0 C at hour 16

Minimum Diurnal Average: 10.0 C at hour 5

Monthly Average: 14.18 C

Percentiles: P_1 = 6.2 P_{10} = 7.9 Q_1 = 10.1 Median = 13.7 Q_3 = 17.4 P_{90} = 21.7 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

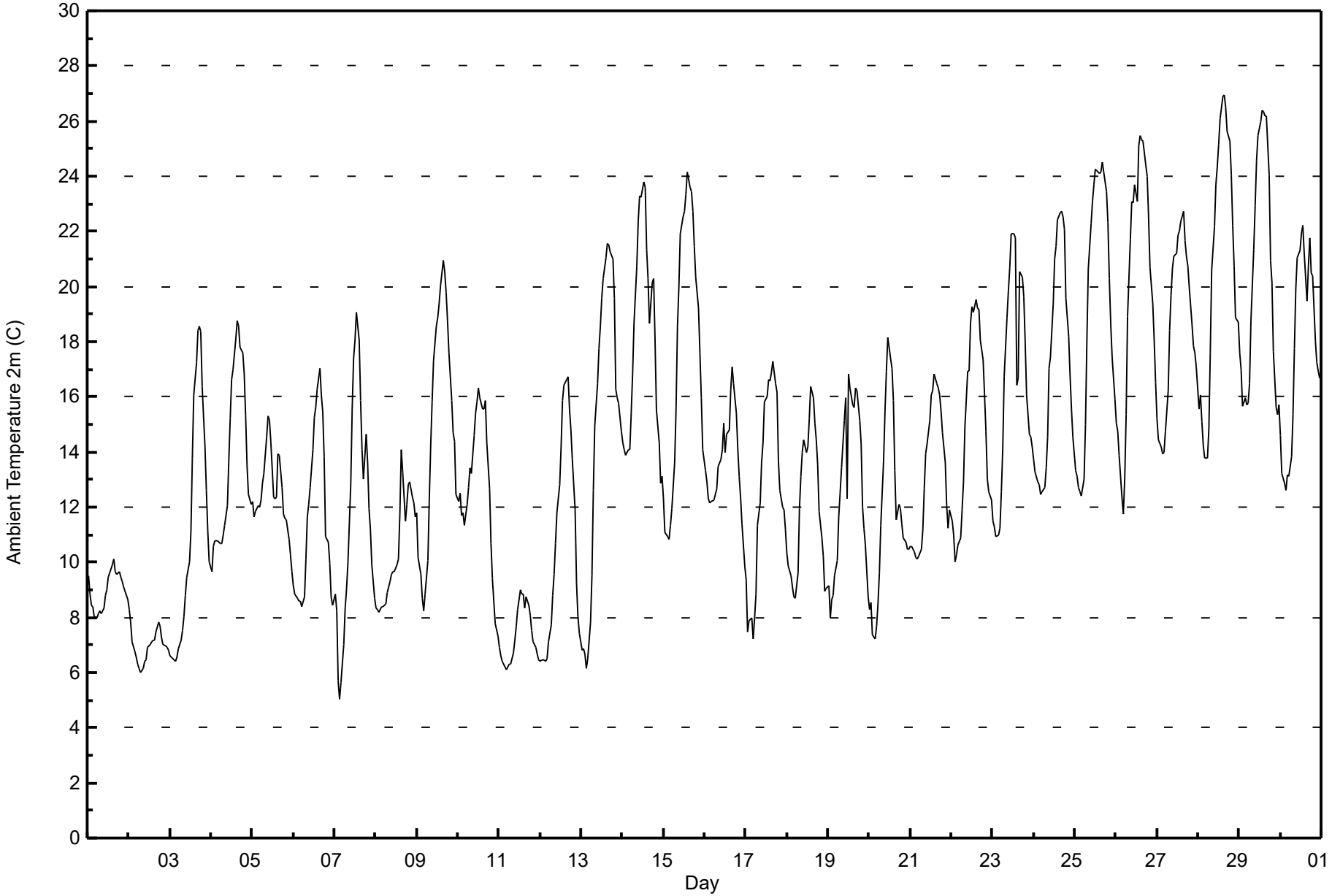
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	9.5	8.8	8.4	8.4	8.0	8.0	8.1	8.2	8.1	8.4	8.8	9.0	9.4	9.6	9.9	10.1	9.7	9.6	9.7	9.4	9.3	9.1	8.9	8.6	9.0	10.1
2-Jun	8.3	7.8	7.1	6.8	6.5	6.3	6.1	6.0	6.1	6.4	6.5	6.9	7.0	7.1	7.2	7.2	7.5	7.8	7.7	7.3	7.0	7.0	6.9	6.8	7.0	8.3
3-Jun	6.6	6.5	6.4	6.4	6.5	6.9	7.2	7.5	8.0	8.8	9.5	10.0	11.2	13.8	16.1	17.2	18.4	18.5	18.4	16.4	14.2	12.6	11.1	10.0	11.2	18.5
4-Jun	9.7	10.6	10.8	10.8	10.8	10.7	10.7	11.0	11.3	12.1	13.7	15.2	16.6	17.0	18.1	18.8	18.5	17.8	17.6	16.8	15.3	13.5	12.4	12.1	13.8	18.8
5-Jun	12.2	11.6	11.9	12.0	12.0	12.2	12.9	13.2	14.5	15.3	15.2	14.3	12.3	12.3	12.3	13.9	13.9	12.7	11.8	11.6	11.6	10.8	10.3	9.6	12.5	15.3
6-Jun	9.2	8.8	8.7	8.6	8.6	8.4	8.7	10.1	11.7	12.1	12.7	14.1	15.3	15.6	16.3	17.1	16.1	15.5	13.8	10.9	10.7	10.0	8.8	8.4	11.7	17.1
7-Jun	8.8	8.2	5.7	5.0	5.6	7.0	8.4	9.1	10.0	12.9	15.5	17.4	18.1	19.1	18.1	15.9	14.1	13.0	14.6	13.6	11.9	11.2	9.9	8.7	11.7	19.1
8-Jun	8.4	8.3	8.2	8.4	8.4	8.4	8.5	8.9	9.3	9.5	9.6	9.6	9.9	10.1	11.8	14.1	13.3	11.5	12.1	12.8	12.9	12.4	12.1	11.6	10.4	14.1
9-Jun	11.8	10.2	9.6	8.7	8.2	8.8	10.1	12.3	14.2	15.8	17.3	18.5	18.9	19.4	20.0	20.9	20.6	19.8	18.8	17.6	15.9	14.7	14.4	12.5	15.0	20.9
10-Jun	12.2	12.5	11.7	11.8	11.3	12.1	12.7	13.4	13.2	14.6	15.4	15.8	16.3	16.0	15.6	15.6	15.8	14.3	12.7	10.7	9.4	8.6	7.8	7.3	12.8	16.3
11-Jun	6.9	6.6	6.4	6.2	6.1	6.2	6.3	6.3	6.7	7.1	7.7	8.3	9.0	8.9	8.9	8.3	8.8	8.4	8.1	7.5	7.1	6.9	6.6	6.5	7.3	9.0
12-Jun	6.4	6.5	6.4	6.4	6.5	7.1	7.7	8.8	9.5	10.7	11.8	12.8	14.2	15.8	16.4	16.6	16.7	15.6	14.8	13.7	11.9	9.3	8.0	7.4	10.9	16.7
13-Jun	6.8	6.9	6.6	6.2	6.5	7.8	9.5	12.6	14.9	16.5	17.7	18.6	19.6	20.3	21.0	21.6	21.5	21.3	21.0	19.6	16.3	16.0	15.8	14.8	15.0	21.6
14-Jun	14.3	14.1	13.9	14.1	14.1	15.4	16.9	18.7	20.8	22.4	23.3	23.3	23.8	23.6	21.3	20.3	18.7	20.2	20.3	18.0	15.5	14.4	12.8	13.1	18.0	23.8
15-Jun	12.3	11.1	10.9	10.8	11.3	11.9	13.6	15.6	18.5	20.0	21.9	22.5	22.7	23.4	24.2	23.6	23.5	22.7	21.4	20.3	19.2	17.6	15.9	14.1	17.9	24.2
16-Jun	13.3	12.9	12.3	12.1	12.2	12.3	12.4	12.6	13.5	13.7	14.1	15.0	14.0	14.7	14.8	16.3	17.1	16.5	15.4	14.1	13.1	12.3	11.4	9.9	13.6	17.1
17-Jun	9.4	7.5	7.9	8.0	7.2	8.0	8.9	11.3	12.1	13.6	14.4	15.8	16.0	16.6	16.6	16.9	17.3	16.5	16.1	13.7	12.6	12.0	11.9	11.2	12.6	17.3
18-Jun	10.3	9.9	9.5	9.1	8.7	8.7	9.6	12.0	13.1	14.0	14.4	14.0	14.2	15.2	16.4	16.0	15.0	14.4	13.5	11.8	10.9	10.2	9.0	9.0	12.0	16.4
19-Jun	9.1	8.0	8.7	8.8	9.5	10.1	11.7	12.5	13.4	15.1	16.0	12.3	16.8	16.3	15.7	15.6	16.3	16.2	15.1	14.3	12.0	11.2	10.6	8.7	12.7	16.8
20-Jun	8.3	8.5	7.4	7.2	7.7	8.5	9.6	11.4	13.7	15.4	16.9	18.1	17.4	17.0	15.9	13.3	11.5	12.1	12.0	11.4	10.9	10.8	10.5	10.5	11.9	18.1
21-Jun	10.6	10.6	10.3	10.2	10.1	10.2	10.5	11.2	12.6	13.9	14.3	15.2	16.1	16.2	16.8	16.5	16.3	16.1	15.5	14.7	13.7	12.1	11.3	11.9	13.2	16.8
22-Jun	11.5	11.0	10.0	10.2	10.6	10.9	11.9	12.9	14.9	16.9	16.9	18.7	19.3	19.1	19.5	19.2	19.2	18.1	17.4	16.1	14.7	13.0	12.5	12.2	14.9	19.5
23-Jun	11.5	11.3	11.0	11.0	11.2	12.5	14.1	16.7	18.9	19.8	20.7	21.9	21.9	21.8	16.4	16.7	20.5	20.3	19.6	17.9	16.1	14.6	14.5	14.2	16.5	21.9
24-Jun	13.7	13.3	12.9	12.8	12.5	12.5	12.7	13.4	14.5	17.0	17.4	19.4	21.0	21.5	22.4	22.7	22.7	22.5	22.1	19.6	18.2	16.8	15.6	14.5	17.2	22.7
25-Jun	13.3	13.1	12.7	12.6	12.4	13.0	15.0	18.0	20.7	22.3	23.1	23.7	24.2	24.2	24.1	24.2	24.5	24.1	23.4	22.3	20.3	18.6	17.5	15.9	19.3	24.5
26-Jun	15.1	14.8	13.9	12.4	11.8	13.1	15.3	18.9	21.7	23.1	23.0	23.7	23.1	25.1	25.5	25.3	25.3	24.4	24.0	22.5	20.7	19.4	18.1	16.5	19.9	25.5
27-Jun	15.2	14.5	14.2	14.0	14.0	14.8	16.2	18.4	19.7	20.7	21.1	21.2	21.9	22.0	22.4	22.7	21.6	21.1	20.7	20.0	18.6	17.8	17.6	17.1	18.6	22.7
28-Jun	15.5	16.0	15.1	14.3	13.8	13.8	14.8	17.6	20.6	22.2	23.7	24.3	25.2	26.1	26.9	26.9	26.5	25.6	25.2	24.0	22.2	20.8	18.8	18.7	20.8	26.9
29-Jun	17.6	17.0	15.7	15.9	15.7	15.8	16.5	18.8	21.4	22.9	24.5	25.5	26.0	26.4	26.4	26.2	26.2	24.0	20.9	20.1	17.6	15.6	15.4	15.7	20.3	26.4
30-Jun	14.6	13.2	12.9	12.6	13.2	13.1	13.8	15.4	17.8	19.9	21.0	21.3	21.9	22.2	21.2	19.5	20.8	21.8	20.5	20.4	18.0	17.2	16.9	16.7	17.7	22.2
	11.1	10.7	10.2	10.1	10.0	10.5	11.3	12.8	14.2	15.4	16.3	16.9	17.4	17.9	17.9	18.0	17.9	17.4	16.8	15.6	14.3	13.2	12.4	11.8	Diurnal Average	
	17.6	17.0	15.7	15.9	15.7	15.8	16.9	18.9	21.7	23.1	24.5	25.5	26.0	26.4	26.9	26.9	26.5	25.6	25.2	24.0	22.2	20.8	18.8	18.7	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Stony Mountain - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	173	24.03	24.03
10 - 20	434	60.28	84.31
> 20	113	15.69	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 99.9 % on Jun 3 06:00

Maximum Daily Average: 97.2 % on Jun 2

Minimum Value: 27.0 % on Jun 14 11:00

Minimum Daily Average: 45.0 % on Jun 14

Maximum Diurnal Average: 86.1 % at hour 5

Minimum Diurnal Average: 55.3 % at hour 15

Monthly Average: 70.46 %

Percentiles: P_1 = 31.1 P_{10} = 39.9 Q_1 = 54.5 Median = 72.7 Q_3 = 88.0 P_{90} = 97.2 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

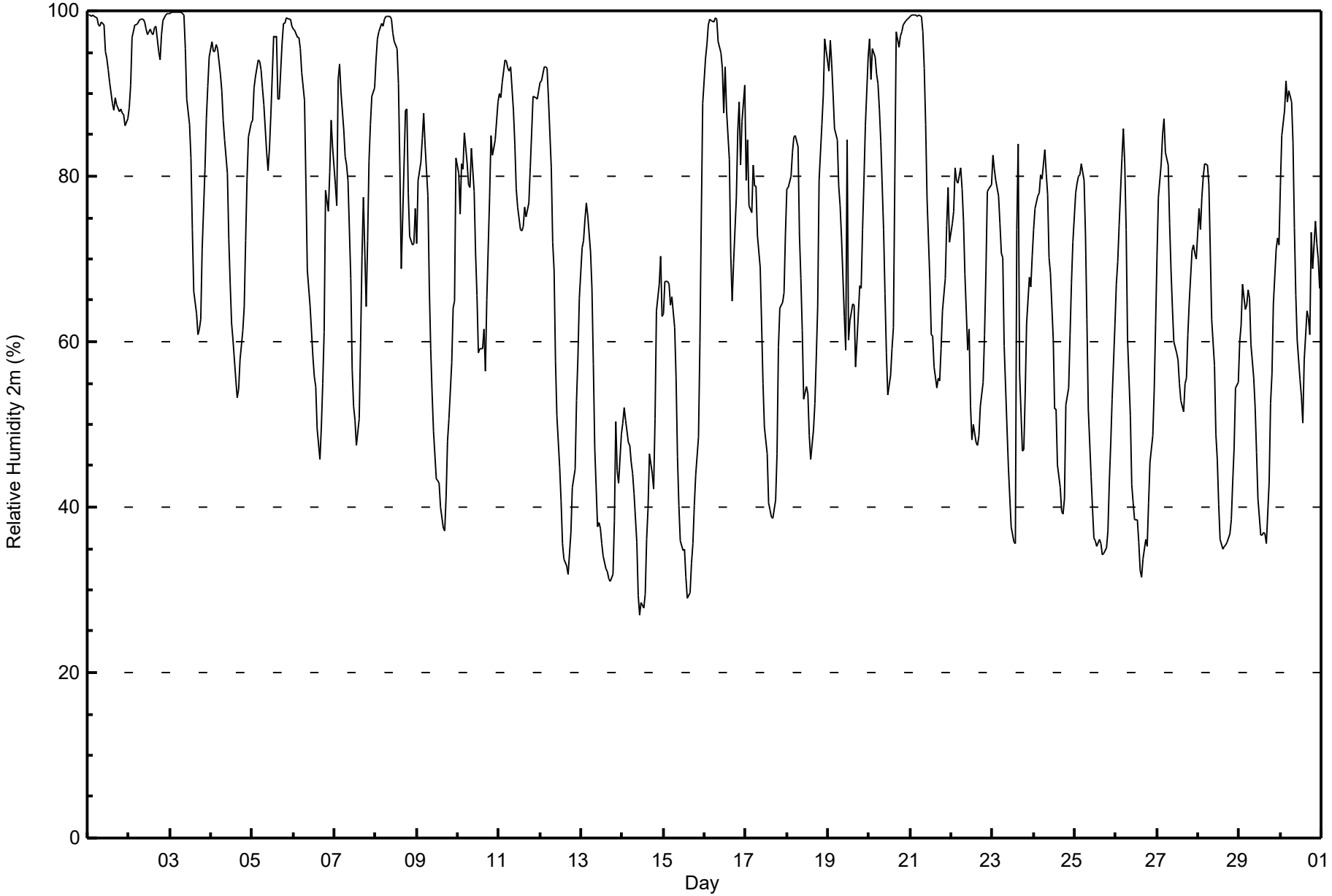
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	99.6	99.4	99.3	99.5	99.4	99.2	98.3	98.1	98.6	98.4	95.1	94.2	92.9	91.4	88.8	88.0	89.5	88.7	87.8	88.1	87.6	87.5	86.1	86.9	93.4	99.6
2-Jun	88.3	90.9	96.8	98.3	98.3	98.4	98.8	98.9	98.9	98.7	97.8	97.1	97.9	97.3	97.2	98.0	98.1	95.1	94.0	97.1	98.8	99.4	99.6	99.7	97.2	99.7
3-Jun	99.7	99.8	99.8	99.8	99.9	99.9	99.8	99.7	99.4	95.4	89.4	86.2	82.3	73.5	66.0	63.4	60.9	61.5	62.7	71.2	80.8	87.0	90.8	94.4	86.0	99.9
4-Jun	96.3	95.1	95.2	95.9	95.4	92.4	90.4	86.8	84.5	80.4	72.3	67.0	62.2	60.1	55.4	53.2	54.3	57.9	61.3	64.2	72.1	79.7	84.8	86.4	76.8	96.3
5-Jun	86.7	90.8	92.1	94.1	94.0	92.9	90.7	88.7	82.9	80.7	83.3	87.4	96.9	96.8	97.0	89.3	89.3	96.1	98.5	98.6	99.1	99.0	99.0	98.1	92.6	99.1
6-Jun	97.8	97.6	96.7	96.7	95.5	92.6	89.1	79.1	68.6	66.5	64.2	58.1	55.7	54.5	49.5	45.7	49.7	55.0	61.1	78.4	75.8	80.5	86.7	83.5	74.1	97.8
7-Jun	79.0	76.4	91.7	93.6	90.2	85.5	82.3	81.4	79.5	67.6	56.6	52.2	50.5	47.5	50.7	59.9	70.4	77.5	64.3	72.1	81.8	86.3	89.7	90.7	74.1	93.6
8-Jun	94.1	96.6	97.5	98.4	98.2	99.0	99.3	99.3	99.3	99.0	97.4	96.3	95.4	91.2	81.2	68.9	74.9	88.0	88.2	78.0	72.6	71.7	71.8	76.1	88.8	99.3
9-Jun	71.8	79.5	81.7	84.6	87.7	83.8	77.6	66.5	59.2	53.7	49.2	43.4	43.2	42.8	39.9	37.5	37.1	41.4	47.9	50.7	57.5	64.1	64.9	82.1	60.3	87.7
10-Jun	80.3	75.4	81.5	80.8	85.2	81.5	79.0	78.6	83.5	78.2	70.6	65.6	58.7	59.2	59.2	61.5	56.4	65.1	77.4	85.0	82.5	83.3	84.3	89.0	75.1	89.0
11-Jun	90.0	89.6	91.4	94.0	93.8	93.0	92.7	93.3	87.9	84.0	78.4	76.3	73.5	73.3	73.8	76.3	75.1	76.8	81.0	85.3	89.6	89.5	89.4	90.4	84.9	94.0
12-Jun	91.4	91.5	93.2	93.2	93.0	89.3	81.0	72.1	68.6	57.6	51.0	44.8	40.6	35.6	33.8	32.8	31.9	34.4	36.9	42.3	44.5	52.9	58.2	65.3	59.8	93.2
13-Jun	71.3	72.2	74.7	76.7	75.2	70.9	66.4	57.2	47.2	37.5	38.1	37.5	35.7	34.1	32.5	32.2	31.4	31.0	31.9	38.4	50.3	44.4	42.9	48.8	49.1	76.7
14-Jun	50.1	52.0	50.5	47.9	47.5	45.5	44.0	41.6	35.7	29.3	27.0	28.4	27.9	29.4	36.2	39.9	46.4	44.1	42.2	50.8	63.7	66.9	70.4	63.1	45.0	70.4
15-Jun	63.3	67.3	67.2	66.9	64.4	65.4	61.7	55.5	46.1	40.1	35.9	34.8	34.9	31.6	29.0	29.7	33.2	35.7	40.2	43.8	48.4	59.9	75.0	88.8	50.8	88.8
16-Jun	94.3	96.0	98.3	98.9	98.8	98.6	99.1	99.0	96.2	94.9	93.1	87.6	93.3	87.9	82.0	70.6	64.9	69.5	77.4	85.4	89.0	81.4	86.6	91.0	88.9	99.1
17-Jun	79.5	84.4	76.5	75.6	81.4	78.8	78.8	72.9	69.0	62.2	55.0	49.7	46.4	40.6	39.7	38.9	38.7	40.9	46.4	59.3	64.1	64.7	65.9	73.1	61.8	84.4
18-Jun	78.5	78.6	80.0	82.9	84.8	84.9	83.6	72.8	67.7	61.4	53.0	54.5	53.7	48.7	45.7	49.2	52.5	58.1	64.2	79.4	86.3	89.9	96.6	95.2	70.9	96.6
19-Jun	92.8	96.5	93.5	89.8	85.8	84.4	78.8	76.4	72.5	63.0	58.9	84.4	60.2	62.5	64.7	64.4	57.0	60.1	66.8	66.5	73.5	79.6	86.2	94.4	75.5	96.5
20-Jun	96.7	91.6	95.5	94.4	92.3	91.3	88.1	84.3	73.6	65.8	58.6	53.5	55.9	59.1	61.8	79.5	97.5	95.6	96.9	97.5	98.3	98.9	99.0	99.2	84.4	99.2
21-Jun	99.4	99.5	99.5	99.5	99.4	99.4	99.3	97.4	93.1	86.3	77.4	67.5	60.9	60.7	56.9	54.4	55.6	55.3	59.1	63.7	67.7	74.1	78.6	72.0	78.2	99.5
22-Jun	74.3	75.8	81.0	79.5	79.2	81.0	78.4	74.6	68.2	59.0	61.5	52.2	48.2	49.9	47.8	47.5	48.7	52.2	55.0	60.9	68.5	78.1	78.4	79.0	65.8	81.0
23-Jun	82.5	80.8	79.4	77.7	74.2	70.7	70.1	59.5	49.7	44.9	41.1	37.7	35.8	35.7	73.5	83.8	56.2	46.7	46.9	53.7	62.2	67.8	66.6	70.4	61.1	83.8
24-Jun	73.5	76.2	77.6	78.0	80.2	79.6	83.1	80.3	77.9	70.3	68.4	60.3	51.9	51.9	45.1	42.4	39.5	39.1	41.0	52.3	54.5	60.8	67.1	72.1	63.5	83.1
25-Jun	77.9	79.1	79.9	80.3	81.6	79.5	72.9	62.7	51.8	43.7	39.9	36.3	35.9	35.2	36.1	35.6	34.2	34.4	35.1	37.0	43.0	47.6	53.1	62.1	53.1	81.6
26-Jun	66.9	69.6	74.1	82.1	85.7	81.5	73.5	60.3	51.0	42.7	40.6	38.4	38.4	35.8	32.4	31.6	33.8	36.2	35.3	40.5	45.5	48.6	54.1	62.0	52.5	85.7
27-Jun	70.4	77.4	81.5	85.1	87.0	82.9	81.3	74.2	68.6	64.1	59.9	58.7	57.8	54.9	52.9	51.5	54.9	55.6	60.8	64.8	71.1	71.6	70.6	70.0	67.8	87.0
28-Jun	76.0	73.6	77.5	80.0	81.5	81.4	79.1	71.0	62.7	57.1	48.9	45.8	40.3	36.2	35.0	35.3	35.4	35.7	36.8	38.4	43.0	47.2	54.4	55.0	55.3	81.5
29-Jun	59.9	62.0	67.0	63.8	64.4	66.2	65.3	59.7	55.6	52.1	46.6	41.1	36.6	36.6	37.0	36.8	35.6	43.0	52.5	56.1	64.5	71.3	72.6	71.7	54.9	72.6
30-Jun	78.8	84.9	88.0	91.6	89.0	90.3	89.0	84.1	73.7	65.7	60.2	55.4	53.3	50.2	57.9	63.8	62.8	60.9	73.2	68.8	74.6	71.9	70.0	66.4	71.9	91.6
	82.0	83.3	85.3	86.0	86.1	84.7	82.4	77.5	72.4	66.7	62.3	59.7	57.2	55.5	55.3	55.4	55.5	57.7	60.8	65.6	70.4	73.5	76.4	79.2	Diurnal Average	
	99.7	99.8	99.8	99.8	99.9	99.9	99.8	99.7	99.4	99.0	97.8	97.1	97.9	97.3	97.2	98.0	98.1	96.1	98.5	98.6	99.1	99.4	99.6	99.7	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Stony Mountain - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Precipitation (PC) - mm

Stony Mountain - June 2026

Maximum Value: 7.3 mm on Jun 8 07:00

Maximum Daily Total: 27.3 mm on Jun 5

Minimum Value: 0.0 mm on Jun 1 06:00

Minimum Daily Total: 0.0 mm on Jun 4

Maximum Diurnal Total: 9.0 mm at hour 12

Minimum Diurnal Total: 0.9 mm at hour 20

Monthly Total: 92.55 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} = 3.9

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

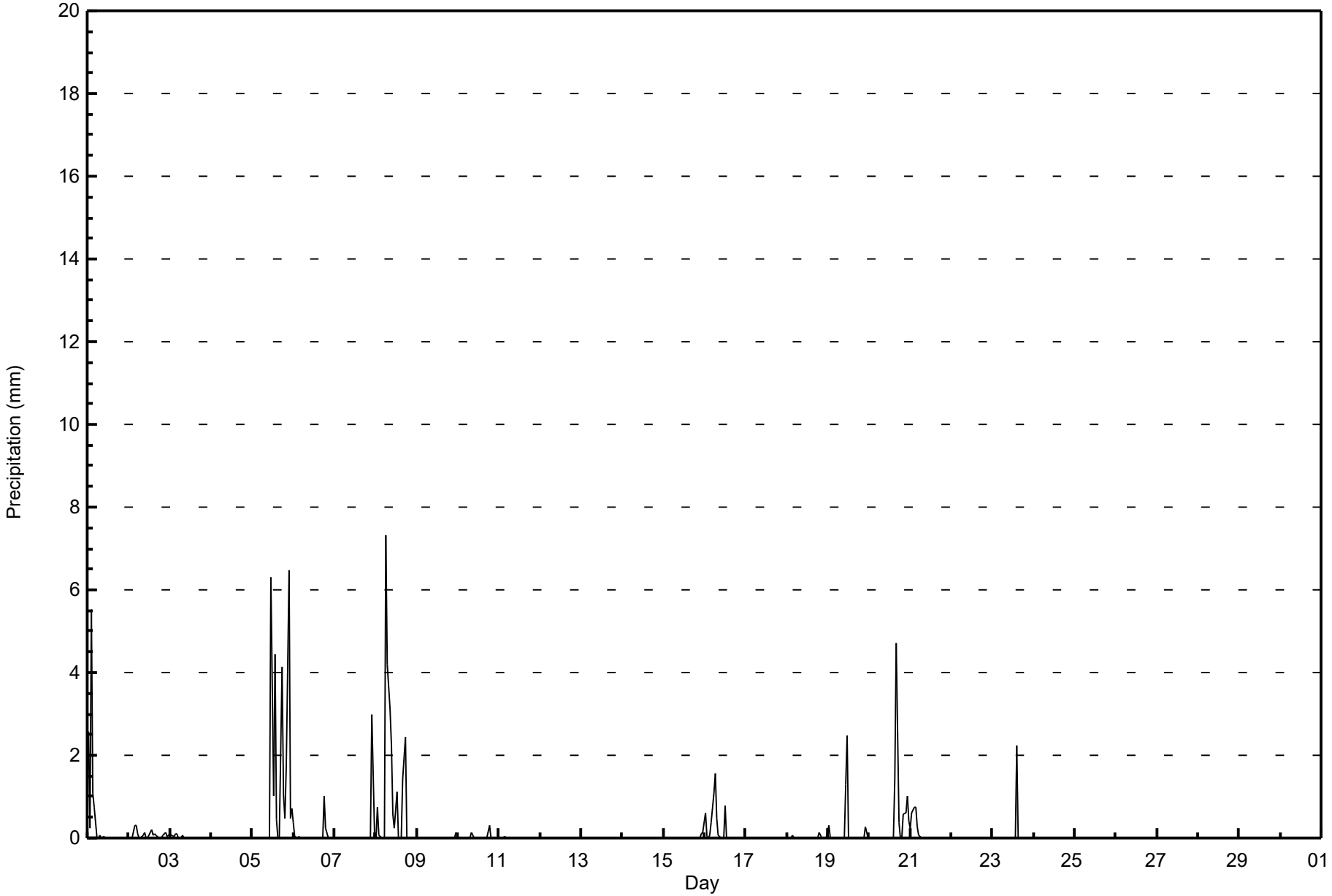
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	2.6	0.2	5.5	1.1	0.7	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.2	5.5
2-Jun	0.0	0.0	0.0	0.3	0.3	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	1.8	0.3
3-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1
4-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	1.0	4.4	0.4	0.0	0.0	4.1	1.1	0.5	1.8	6.5	0.5	0.7	27.3	6.5
6-Jun	0.4	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	1.0	0.3	0.0	0.0	0.0	0.0	1.7	1.0
7-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	3.0	3.0
8-Jun	0.0	0.8	0.1	0.0	0.0	0.0	7.3	4.2	3.1	2.2	0.6	0.2	1.1	0.0	0.0	0.0	1.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	23.5	7.3
9-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
10-Jun	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	0.3	0.0	0.0	0.0	0.0	0.0	0.5	0.3
11-Jun	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
12-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1
16-Jun	0.6	0.0	0.0	0.1	0.4	1.1	1.6	0.5	0.1	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	1.6
17-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	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	0.0	0.0	0.0	0.0	0.2	0.1
19-Jun	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	4.4	2.5
20-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	4.7	0.4	0.0	0.0	0.6	0.6	1.0	0.4	9.1	4.7
21-Jun	0.2	0.6	0.7	0.8	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.8
22-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2
24-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	1.8	6.4	2.5	1.8	1.3	8.9	4.8	3.4	2.4	1.9	9.0	3.1	4.7	2.7	1.5	6.2	6.9	2.4	0.9	2.4	7.2	4.9	1.5	Diurnal Average	
	2.6	0.8	5.5	1.1	0.7	1.1	7.3	4.2	3.1	2.2	1.3	6.3	1.1	4.4	2.2	1.4	4.7	4.1	1.1	0.5	1.8	6.5	3.0	0.7	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Precipitation (PC) - mm

Stony Mountain - June 2026



Concentration Ranges (mm)	Number of Hours	%	Cumulative %
0 - 0.3	674	93.61	93.61
0.4 - 0.5	8	1.11	94.72
0.6 - 0.7	8	1.11	95.83
0.8 - 1.4	13	1.81	97.64
1.5 - 10	17	2.36	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) - %

Stony Mountain - June 2026

Maximum Value: 37.5 % on Jun 5 22:00

Maximum Daily Average: 16.7 % on Jun 8

Minimum Value: 0.0 % on Jun 13 15:00

Minimum Daily Average: 0.4 % on Jun 14

Maximum Diurnal Average: 7.9 % at hour 4

Minimum Diurnal Average: 1.4 % at hour 16

Monthly Average: 4.17 %

Percentiles: P_1 = 0.0 P_{10} = 0.2 Q_1 = 0.6 Median = 1.1 Q_3 = 1.7 P_{90} = 16.8 P_{99} = 30.6

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

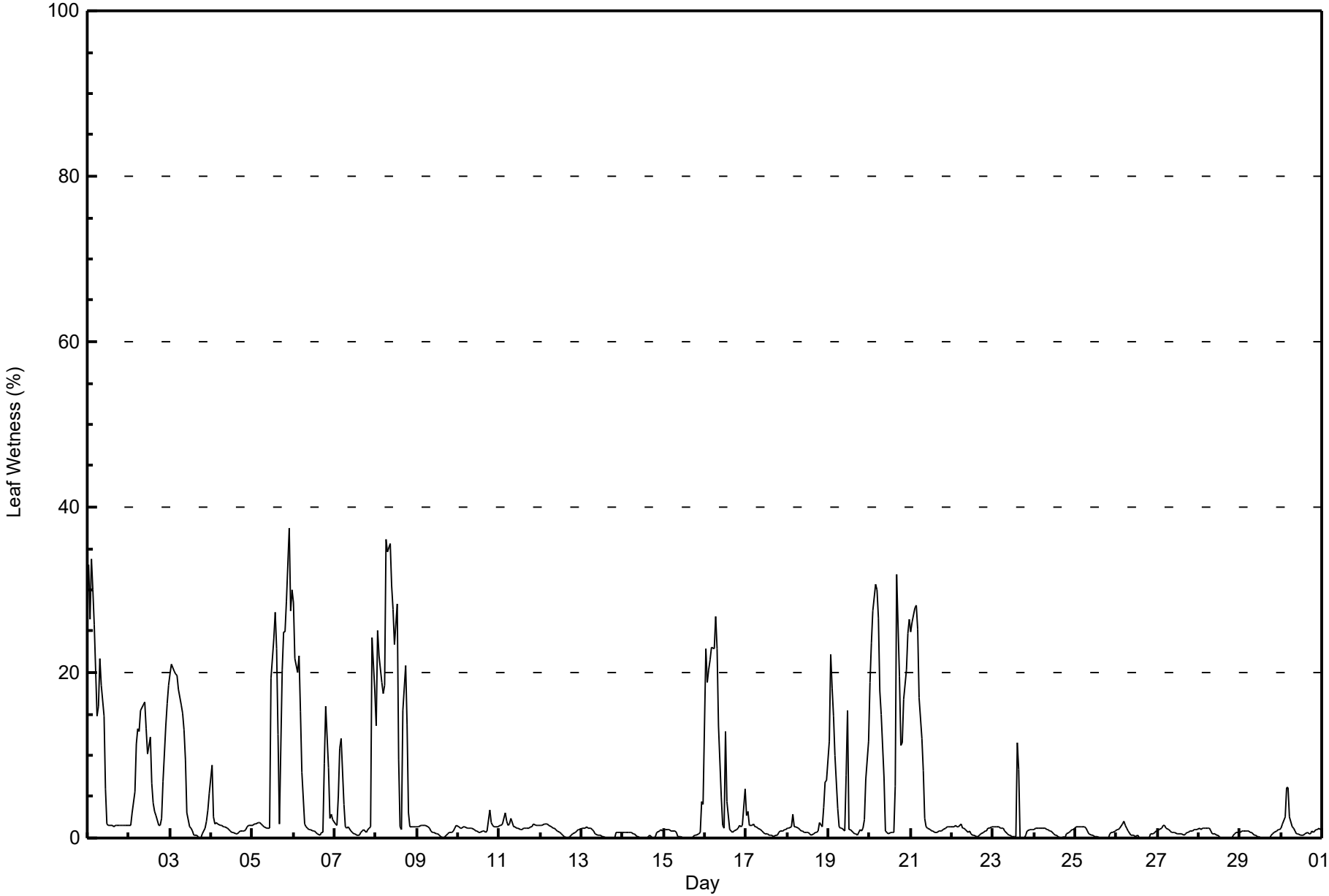
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	33.1	26.4	33.7	30.0	25.7	14.8	15.9	21.6	18.5	14.7	6.0	1.8	1.5	1.5	1.5	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	10.8	33.7
2-Jun	1.5	1.6	3.1	5.7	11.3	13.2	12.9	15.3	16.1	16.5	13.2	10.2	12.3	6.7	4.3	3.2	2.8	1.6	1.6	2.3	6.7	13.5	16.2	18.5	8.8	18.5
3-Jun	19.8	21.0	20.2	19.9	19.6	18.0	16.1	15.1	13.1	9.4	3.1	1.3	1.2	0.8	0.4	0.4	0.2	0.1	0.1	0.5	1.2	2.0	3.3	5.4	8.0	21.0
4-Jun	8.8	2.6	1.8	1.8	1.8	1.6	1.5	1.4	1.3	1.2	1.0	0.9	0.8	0.7	0.6	0.5	0.6	0.8	0.8	0.9	1.1	1.3	1.6	1.5	1.5	8.8
5-Jun	1.4	1.7	1.6	1.8	1.8	1.7	1.5	1.4	1.2	1.1	1.2	19.3	24.1	27.3	22.9	12.6	1.6	20.3	24.9	24.8	28.6	37.5	27.4	30.0	13.2	37.5
6-Jun	28.5	21.7	20.0	22.1	15.3	7.9	1.7	1.4	1.1	1.1	1.0	0.9	0.8	0.8	0.6	0.4	0.7	0.7	8.9	15.9	8.4	2.4	2.9	2.2	7.0	28.5
7-Jun	1.6	1.5	5.0	10.8	12.1	4.1	1.4	1.2	1.3	0.9	0.7	0.6	0.5	0.4	0.4	0.6	0.9	0.9	0.7	1.0	1.2	1.3	24.2	17.8	3.8	24.2
8-Jun	13.6	25.1	22.0	18.9	17.5	18.4	36.1	34.6	35.6	30.5	27.6	23.4	28.2	9.5	1.4	1.0	15.5	20.8	13.7	3.0	1.3	1.3	1.3	1.3	16.7	36.1
9-Jun	1.3	1.4	1.4	1.5	1.6	1.5	1.4	1.1	0.8	0.8	0.6	0.5	0.5	0.4	0.2	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.6	0.9	1.6
10-Jun	1.3	1.2	1.3	1.3	1.3	1.3	1.1	1.3	1.2	1.0	0.9	0.8	0.7	0.7	0.8	0.8	0.7	0.9	3.3	1.9	1.6	1.4	1.4	1.4	1.2	3.3
11-Jun	1.5	1.5	1.7	3.1	2.0	1.6	1.6	2.3	1.4	1.3	1.2	1.2	1.1	1.1	1.1	1.2	1.1	1.2	1.4	1.4	1.7	1.5	1.5	1.5	1.5	3.1
12-Jun	1.6	1.6	1.6	1.7	1.7	1.5	1.4	1.2	1.1	1.0	0.8	0.7	0.5	0.3	0.2	0.1	0.0	0.2	0.3	0.5	0.7	0.8	1.0	1.1	0.9	1.7
13-Jun	1.2	1.2	1.2	1.3	1.3	1.1	1.0	0.8	0.5	0.3	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.7	0.6	0.7	0.6	1.3
14-Jun	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.4	0.2	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.3	0.1	0.0	0.2	0.7	0.8	1.0	0.9	0.4	1.0
15-Jun	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.6	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.5	0.6	4.4	4.1	0.8	4.4
16-Jun	22.8	18.9	20.4	21.5	23.0	23.0	26.8	22.8	13.6	4.9	1.5	1.2	12.9	4.4	1.1	0.8	0.7	0.8	1.0	1.2	1.4	1.3	1.5	5.9	9.7	26.8
17-Jun	2.7	3.2	1.6	1.5	1.7	1.4	1.3	1.1	1.0	0.8	0.7	0.5	0.5	0.4	0.4	0.3	0.2	0.4	0.4	0.8	0.9	0.9	0.9	1.0	1.0	3.2
18-Jun	1.1	1.2	1.3	2.9	1.3	1.3	1.2	1.0	0.9	0.8	0.7	0.7	0.7	0.5	0.4	0.5	0.7	0.7	0.9	1.9	1.3	3.7	6.8	6.9	1.6	6.9
19-Jun	11.7	22.2	18.2	14.7	10.0	3.5	1.3	1.2	1.2	0.8	7.6	15.4	1.0	1.0	0.7	0.6	0.5	0.4	1.0	0.9	1.2	2.2	7.0	11.7	5.7	22.2
20-Jun	18.9	23.6	27.5	30.6	30.0	26.6	17.8	15.0	7.4	0.8	0.7	0.5	0.6	0.6	0.6	6.3	31.9	19.5	11.2	11.5	16.7	20.3	24.7	26.4	15.4	31.9
21-Jun	25.0	26.0	27.7	28.1	25.2	16.9	12.0	8.1	2.4	1.4	1.2	1.0	0.8	0.8	0.7	0.7	0.8	0.8	0.9	1.0	1.1	1.3	1.4	1.3	7.8	28.1
22-Jun	1.3	1.3	1.5	1.4	1.3	1.8	1.2	1.1	1.0	0.7	0.8	0.5	0.4	0.3	0.2	0.2	0.3	0.5	0.6	0.8	0.9	1.2	1.2	1.3	0.9	1.8
23-Jun	1.4	1.3	1.3	1.3	1.2	1.2	1.1	0.9	0.5	0.4	0.3	0.2	0.2	0.1	11.6	8.2	0.1	0.0	0.1	0.4	0.9	1.0	1.0	1.0	1.5	11.6
24-Jun	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.1	1.0	0.8	0.8	0.5	0.3	0.3	0.2	0.0	0.0	0.1	0.0	0.5	0.7	0.9	1.0	1.1	0.7	1.2
25-Jun	1.3	1.3	1.3	1.4	1.4	1.4	1.2	0.9	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.5	0.6	0.7	0.9	0.6	1.4
26-Jun	1.0	1.0	1.1	1.6	2.0	1.5	1.2	0.8	0.4	0.3	0.3	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.7	0.8	0.6	2.0
27-Jun	0.9	1.0	1.2	1.5	1.5	1.2	1.1	0.9	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.6	0.6	0.7	0.8	0.9	1.0	1.0	1.0	0.8	1.5
28-Jun	1.2	1.1	1.2	1.3	1.2	1.2	1.1	0.9	0.5	0.5	0.4	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.6	0.6	0.6	1.3
29-Jun	0.7	0.8	0.9	0.9	0.8	0.8	0.8	0.6	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.7	0.9	1.0	1.0	0.5	1.0
30-Jun	1.2	1.6	2.6	6.1	6.1	2.6	1.4	1.1	0.8	0.6	0.5	0.4	0.4	0.3	0.5	0.7	0.6	0.5	0.8	0.8	1.0	1.1	1.1	1.1	1.4	6.1
	7.0	7.2	7.5	7.9	7.4	5.8	5.5	5.2	4.2	3.1	2.5	2.8	3.1	2.0	1.7	1.4	2.1	2.5	2.5	2.5	2.9	3.5	4.7	5.1	Diurnal Average	
	33.1	26.4	33.7	30.6	30.0	26.6	36.1	34.6	35.6	30.5	27.6	23.4	28.2	27.3	22.9	12.6	31.9	20.8	24.9	24.8	28.6	37.5	27.4	30.0	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Leaf Wetness (LW) - %

Stony Mountain - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 0.3	108	15.00	15.00
0.4 - 0.5	59	8.19	23.19
0.6 - 0.7	68	9.44	32.64
0.8 - 1.4	253	35.14	67.78
1.5 - 10	103	14.31	82.08
> 10	110	15.28	97.36

Total Number of Valid Hours: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Global Radiation (GR) - W/m2

Stony Mountain - June 2026

Maximum Value: 1027.4 W/m2 on Jun 23 12:00

Maximum Daily Average: 321.8 W/m2 on Jun 13

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

Minimum Daily Average: 50.7 W/m2 on Jun 1

Maximum Diurnal Average: 567.3 W/m2 at hour 12

Minimum Diurnal Average: 0.0 W/m2 at hour 3

Monthly Average: 210.91 W/m2

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 1.3 Median = 90.0 Q_3 = 399.7 P_{90} = 640.3 P_{99} = 842.4

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

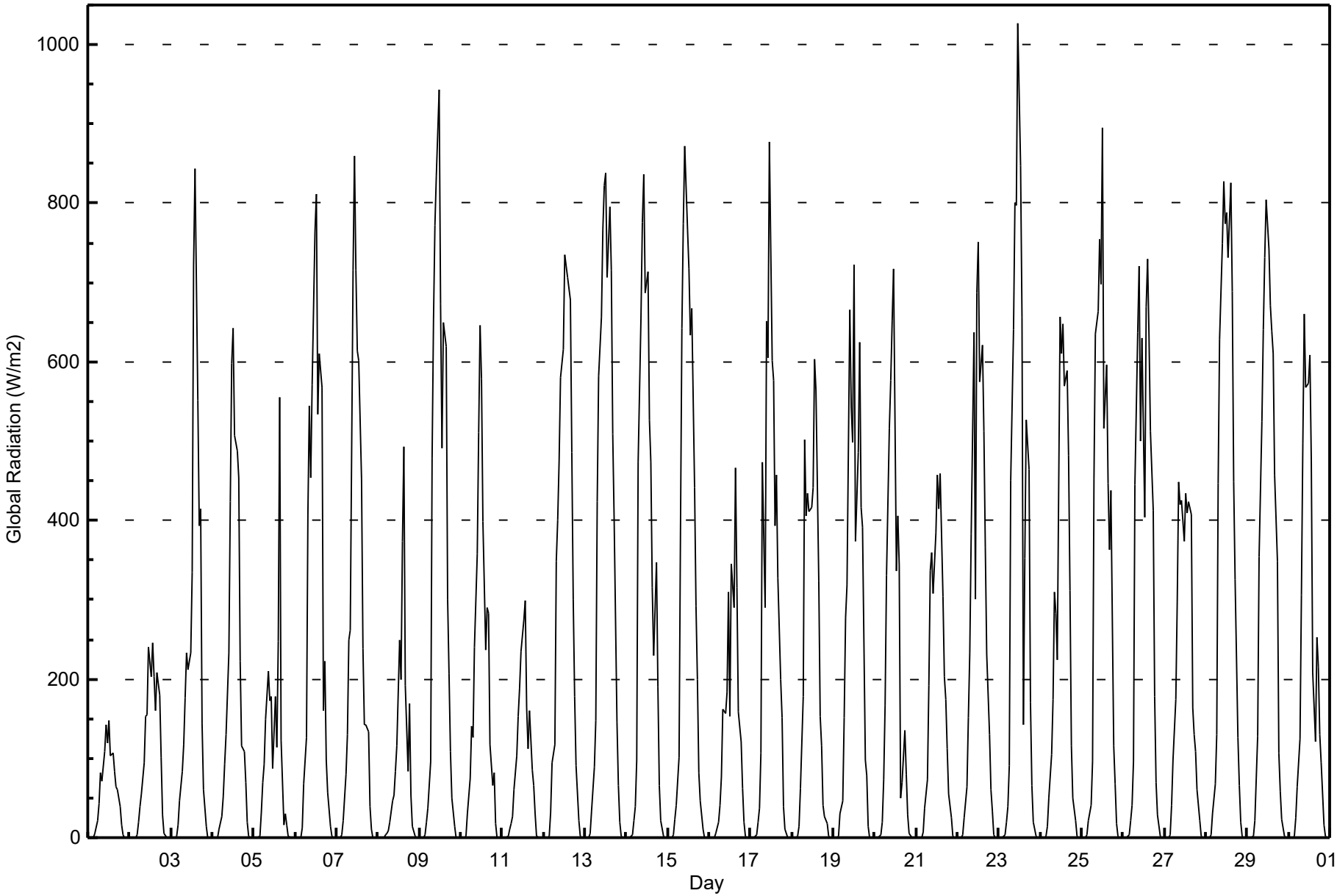
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0.0	0.0	0.0	0.2	5.7	21.7	42.1	82.0	71.8	108.6	141.5	119.6	148.0	102.5	106.9	82.9	63.8	60.2	38.7	16.9	3.3	0.1	0.0	0.0	50.7	148.0
2-Jun	0.0	0.0	0.0	0.2	4.1	19.4	38.9	54.3	94.5	153.9	154.1	240.2	203.6	246.1	203.1	160.8	208.0	180.3	100.7	28.2	5.4	0.2	0.0	0.0	87.3	246.1
3-Jun	0.0	0.0	0.0	1.8	15.3	45.8	83.4	117.9	176.0	232.3	212.7	233.5	334.6	721.4	843.4	551.0	394.1	413.9	144.9	59.6	14.1	0.7	0.0	0.0	191.5	843.4
4-Jun	0.0	0.0	0.0	0.6	10.8	25.9	52.2	93.3	129.7	232.9	423.8	598.8	642.7	507.7	487.0	453.4	222.9	115.4	109.1	69.3	20.3	1.1	0.0	0.0	174.9	642.7
5-Jun	0.0	0.0	0.0	2.5	31.5	69.8	92.7	148.9	210.6	173.0	178.2	86.9	178.2	113.3	247.4	554.9	123.1	16.6	30.3	16.6	1.3	0.0	0.0	0.0	94.8	554.9
6-Jun	0.0	0.0	0.0	0.7	11.8	67.6	126.4	408.9	545.3	454.3	571.8	764.4	812.1	533.5	610.8	567.6	160.0	222.1	98.3	57.8	14.9	1.1	0.0	0.0	251.2	812.1
7-Jun	0.0	0.1	0.1	2.8	22.1	80.6	130.6	248.4	261.2	715.6	859.5	715.6	614.5	601.5	451.9	238.1	142.7	143.2	132.9	39.7	10.5	0.4	0.0	0.0	225.5	859.5
8-Jun	0.0	0.0	0.0	0.4	3.9	5.0	9.5	19.0	45.6	53.0	84.2	115.1	248.8	199.0	374.6	493.5	191.4	83.5	168.3	53.0	13.9	1.2	0.0	0.1	90.1	493.5
9-Jun	0.1	0.0	0.1	2.7	20.1	36.8	95.9	479.5	653.9	772.0	834.4	943.7	673.6	491.0	650.4	620.1	300.0	207.0	108.5	49.9	14.3	0.5	0.0	0.0	289.8	943.7
10-Jun	0.1	0.2	0.1	1.3	29.5	75.3	140.2	126.7	239.4	358.5	510.6	646.3	577.7	399.5	237.5	289.9	282.2	117.8	65.4	82.6	17.1	0.7	0.0	0.0	174.9	646.3
11-Jun	0.0	0.0	0.0	0.9	10.1	18.6	26.9	60.9	102.4	153.4	189.1	235.5	273.5	298.3	163.1	112.1	161.0	84.8	66.1	30.3	2.5	0.2	0.0	0.0	82.9	298.3
12-Jun	0.0	0.0	0.0	1.2	32.1	93.5	116.6	348.1	400.8	475.1	579.5	615.9	734.5	721.0	705.9	677.6	486.6	300.6	177.8	90.0	21.2	1.1	0.0	0.0	274.1	734.5
13-Jun	0.1	0.0	0.0	4.5	33.7	88.9	148.5	424.0	582.3	656.1	766.7	822.7	838.4	706.3	795.8	714.7	508.5	400.2	145.2	66.1	19.1	2.0	0.1	0.1	321.8	838.4
14-Jun	0.1	0.1	0.0	3.5	21.0	39.2	97.1	472.8	654.3	776.2	837.3	686.6	713.9	526.9	474.0	315.1	229.1	347.5	189.6	66.2	20.6	2.5	0.1	0.1	269.7	837.3
15-Jun	0.1	0.0	0.0	3.3	22.8	40.4	100.8	386.3	642.2	774.1	871.3	766.5	716.9	633.6	666.7	441.4	291.6	199.5	82.2	45.6	11.4	0.5	0.0	0.0	279.1	871.3
16-Jun	0.0	0.0	0.0	0.8	5.9	20.4	40.1	77.1	162.8	156.8	183.6	309.3	153.6	345.0	290.2	467.2	315.2	159.0	121.4	61.7	19.5	2.5	0.1	0.0	120.5	467.2
17-Jun	0.0	0.1	0.0	3.0	20.2	36.8	106.9	473.0	290.1	650.5	605.4	877.8	602.4	576.9	393.1	458.2	328.1	199.6	151.2	38.3	11.0	0.4	0.0	0.0	242.6	877.8
18-Jun	0.0	0.0	0.0	1.3	15.1	62.8	178.8	501.9	405.7	433.7	411.3	417.3	441.9	603.9	564.7	323.4	152.4	115.2	41.4	26.3	17.3	1.0	0.0	0.0	196.5	603.9
19-Jun	0.0	0.0	0.0	2.5	31.1	46.9	152.1	277.4	318.9	665.1	543.1	498.7	722.3	373.8	485.8	624.5	415.7	391.1	97.4	78.9	14.4	0.5	0.1	0.0	239.2	722.3
20-Jun	0.0	0.0	0.0	2.8	19.6	72.5	167.2	330.1	516.0	576.6	651.9	718.0	335.7	405.0	344.1	49.0	68.6	134.6	80.3	27.7	6.2	0.4	0.0	0.0	187.8	718.0
21-Jun	0.0	0.0	0.0	0.7	6.6	37.5	73.2	192.3	336.9	359.1	308.7	383.7	457.0	414.5	459.3	303.4	203.7	174.4	112.8	54.6	25.3	1.3	0.0	0.0	162.7	459.3
22-Jun	0.0	0.0	0.1	3.7	24.8	63.7	151.0	233.0	383.2	636.6	301.0	687.3	751.1	574.2	621.9	513.3	365.8	230.7	130.0	60.2	34.6	3.0	0.0	0.0	240.4	751.1
23-Jun	0.0	0.0	0.0	3.4	20.4	38.8	90.0	451.0	640.3	800.9	796.8	1027.4	847.6	656.9	143.0	352.3	526.2	465.4	171.3	65.8	19.2	2.0	0.0	0.0	296.6	1027.4
24-Jun	0.0	0.0	0.0	2.1	14.5	50.0	104.8	174.7	310.4	283.7	225.1	657.0	610.9	647.4	569.5	589.6	481.9	312.0	115.3	49.7	21.2	2.0	0.0	0.0	217.6	657.0
25-Jun	0.0	0.0	0.0	3.4	21.1	40.8	96.3	451.5	635.0	663.4	754.3	698.4	895.7	516.1	596.1	446.2	363.5	437.0	115.2	67.8	18.3	1.8	0.0	0.0	284.2	895.7
26-Jun	0.0	0.0	0.0	3.0	20.9	41.2	95.6	444.7	636.4	721.2	499.7	630.0	404.8	670.0	730.1	632.0	511.7	413.0	178.8	70.1	27.7	2.5	0.0	0.0	280.6	730.1
27-Jun	0.0	0.0	0.0	3.9	40.7	98.0	174.7	297.5	449.0	420.8	424.5	373.2	434.2	409.9	424.3	406.9	163.2	130.5	109.1	59.9	22.2	1.2	0.0	0.0	185.1	449.0
28-Jun	0.0	0.0	0.0	4.1	30.0	68.0	130.0	445.8	628.4	750.1	827.2	773.5	788.6	731.8	826.3	689.0	448.6	325.1	127.2	66.7	19.6	1.6	0.0	0.0	320.1	827.2
29-Jun	0.0	0.0	0.0	2.0	21.7	75.0	128.9	353.8	524.4	640.4	731.4	804.7	741.9	671.6	639.8	610.2	456.5	349.2	105.9	59.5	22.3	1.6	0.0	0.0	289.2	804.7
30-Jun	0.0	0.0	0.0	2.4	24.3	63.4	124.9	306.0	497.4	660.3	567.1	572.3	609.0	474.4	208.0	120.2	252.8	216.0	129.8	94.7	16.8	0.9	0.0	0.0	205.9	660.3
	0.0	0.0	0.0	2.2	19.7	51.5	103.9	282.7	384.8	483.6	501.5	567.3	550.3	495.8	477.2	428.6	294.0	231.5	114.8	55.1	16.2	1.2	0.0	0.0	Diurnal Average	
	0.1	0.2	0.1	4.5	40.7	98.0	178.8	501.9	654.3	800.9	871.3	1027.4	895.7	731.8	843.4	714.7	526.2	465.4	189.6	94.7	34.6	3.0	0.1	0.1	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Global Radiation (GR) - W/m2

Stony Mountain - June 2026



Concentration Ranges (W/m2)	Number of Hours	%	Cumulative %
0 - 20	256	35.56	35.56
21 - 100	117	16.25	51.81
101 - 300	128	17.78	69.58
301 - 600	125	17.36	86.94
601 - 900	92	12.78	99.72
> 900	2	0.28	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

Stony Mountain - June 2026

Maximum Speed: 23 km/h on Jun 6 09:00

Maximum Daily Speed Average: 16.2 km/h on Jun 1

Minimum Speed Value: 1 km/h on Jun 7 08:00

Minimum Daily Speed Average: 1.2 km/h on Jun 22

Maximum Diurnal Speed Average: 4.6 km/h at hour 5

Minimum Diurnal Speed Average: 1.0 km/h at hour 19

Monthly Average Velocity: 2.7 km/h 338.9 deg

Percentiles: P_1 = 2 P_{10} = 5 Q_1 = 7 Median = 9 Q_3 = 12 P_{90} = 16 P_{99} = 20

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-Jun	NNW13	NNW17	NNW13	NNW11	NNW13	NNW13	NNW14	N16	N17	N16	N18	N17	N17	N18	N19	N19	N20	N19	N19	N17	N16	N16	N19	N19	N16.2	N20
2-Jun	NNE19	NNE16	NNE14	N17	NNE16	NNE17	NNE17	NNE17	NNE16	NNE17	NNE17	NNE17	NNE14	NNE14	NNE13	NNE13	NNE12	NNE13	NNE12	NE11	NE9	NE10	NE8	NE8	NNE13.8	NNE19
3-Jun	NNE8	NNE6	NNE5	NNE4	ENE4	ENE4	E5	ESE5	E6	ESE6	ESE4	SE4	SSE2	NE1	NW2	NE2	ESE7	E7	E7	E8	SE9	SE10	SSE11	S12	ESE4.1	S12
4-Jun	S13	S9	S6	S7	S7	S7	S8	S10	SSW11	S9	SSW12	S11	S11	SSW11	S10	S11	S9	SSW9	SSW9	SSW10	SSW9	SSW9	SSW10	SSW11	SSW9.3	S13
5-Jun	SSW11	SSW10	SW9	SW8	W5	SSW1	SE3	SE3	E4	E5	ENE4	NNW2	NW9	NW9	NNW6	N6	N6	NNW4	ENE7	NNE5	N3	WNW11	NW16	WNW13	WNW2.5	NW16
6-Jun	WNW14	W13	W13	WSW13	WSW15	WSW17	WSW15	W17	W23	W22	W22	W20	WSW17	W14	W15	W13	W9	WNW10	W10	WSW10	WSW9	W8	WNW8	W8	W13.8	W23
7-Jun	W9	W8	SW7	SSW8	SW8	SW7	WSW4	E1	SE3	WNW2	SE5	E7	E10	ESE10	ESE16	ESE10	W11	NW4	S4	NW3	N7	NNW6	WSW10	W12	SW1.6	ESE16
8-Jun	NW8	W7	WNW10	WNW9	WNW8	WSW5	SW6	NW9	NW12	WNW14	WNW16	WNW18	WNW20	W19	W19	W18	W13	WNW12	WSW11	WSW16	WSW16	WSW15	WSW15	WSW15	W12.0	WNW20
9-Jun	W16	W11	W13	W13	W11	WNW11	WNW9	WNW7	WNW7	WNW7	WNW6	W6	WSW4	WNW5	NW3	NNW8	WNW6	SW4	SW5	WSW8	N4	N7	NE4	SW1	WNW6.2	W16
10-Jun	WNW5	WNW9	NW7	NNW7	NNW4	NNW6	N7	NNW6	NNW5	NNW9	NNW13	NNW15	NNW13	NNW12	NNW12	NNW10	NNW15	NNW12	N12	N12	N12	NNW10	NNW11	NNW9	NNW9.4	NNW15
11-Jun	NNW10	NW9	NW9	NW8	NW10	NNW8	NNW8	NW9	NNW10	NNW9	NNW11	NNW11	NNW11	N12	NNW10	NNW11	NNW11	NNW13	NNW13	NNW11	NNW10	NNW11	NNW10	NNW9	NNW10.0	NNW13
12-Jun	NNW10	NNW9	NNW10	NNW9	NW11	NNW12	NNW14	NNW14	NNW13	NNW17	NNW18	NNW16	N17	N17	N17	NNW17	N15	NNW15	NNW13	N10	NNW10	NNW8	NNW8	NNW9	NNW12.7	NNW18
13-Jun	NW8	NNW8	NW8	NW8	NW9	WNW8	WNW9	WNW8	NW6	NNW6	NNW7	N6	NW5	NW7	WNW6	NNW6	WNW8	WNW8	WNW6	WNW5	WNW5	WSW9	WSW11	SW12	WNW6.4	SW12
14-Jun	WSW13	SW13	WSW13	W13	WSW12	WSW11	W10	WNW9	WNW10	WNW10	NW11	NNW13	NW14	NNW11	N12	N12	NNW6	NW6	N8	NNW5	N4	SSW4	WNW7	NW9	WNW7.4	NW14
15-Jun	NNW8	NW7	NW8	WNW9	WNW10	NW8	NW6	N3	NE3	NNE5	N2	NNE3	NNW2	W5	NW5	WNW6	NW3	WSW5	SW8	SSW8	WSW10	WNW13	WNW11	NW8	WNW4.9	WNW13
16-Jun	WSW8	SW4	NNE3	NNE2	WSW6	NNW1	ENE4	NE4	ENE5	ENE6	E8	E10	ENE7	NE9	NE10	NNE7	NNW5	NW5	WNW9	WNW10	WNW10	NW11	NW10	NNW8	N2.8	NW11
17-Jun	N9	NNW8	N8	N8	N8	NNW8	N8	N8	N10	NNE13	NNE12	NE12	NNE12	N11	N11	N11	N8	NNW8	NNW7	NNW6	NW7	NW7	NW9	WNW13	N8.3	NNE13
18-Jun	WNW12	W10	WNW8	WNW8	WNW11	WNW12	WNW11	WNW10	WNW8	NNW10	NNW14	N16	NNW14	NNW15	NNW14	NNW12	NNW11	N9	NNW8	NNW8	NW7	NW5	NW5	NW6	NW9.3	N16
19-Jun	NW7	WNW6	WNW8	W9	WNW10	WNW9	WNW8	NW7	NW6	NW6	NW9	NNW4	NW7	WNW8	SSW12	SSW12	SW10	SW8	SW7	NNW5	ENE9	NNE7	NE9	ENE6	WNW4.2	SSW12
20-Jun	NE7	NNE8	N7	NNE9	NNE9	NNE8	NNE8	NE8	NE11	ENE11	ENE11	ENE13	ENE10	E12	NE11	S8	SW4	NW6	N6	NNE6	NNE6	N8	N6	N7	NE6.3	ENE13
21-Jun	N8	NNE10	NNE10	NNE11	NNE11	NNE11	NNE10	NE9	NE9	NE10	ENE11	E13	E15	E14	E13	E10	E8	ENE10	ENE8	NE6	NNE7	N7	N6	N7	NE8.3	E15
22-Jun	ESE3	SW8	SW10	SW11	WSW10	WNW10	NW6	NNW6	NE4	NE8	ENE6	E10	E10	E11	E10	NE6	E8	SSE7	SW5	WSW8	W9	SSW8	SW10	W9	SSW1.2	E11
23-Jun	WNW10	WNW10	WNW10	WNW11	WNW11	WNW10	WNW8	NW6	WNW5	WNW6	SSW3	SW6	W6	W5	N6	WNW3	SSW2	SW8	SSW10	SSW9	SSW11	SSW11	SW13	SW13	WSW6.0	SW13
24-Jun	SW13	SW13	SW13	SW13	SW11	WSW9	SSE1	ESE3	SE5	ESE5	NE6	ENE5	ESE5	ESE9	SSE7	S6	SSW10	S8	SSE8	SSE8	S10	S11	SSW10	SSW12	S5.9	SW13
25-Jun	SSW11	SSW12	SSW12	SSW11	SSW10	S10	S9	SSE9	S8	S10	SSW11	S12	SSW13	SSW11	SSE10	SSE10	SSE10	S12	S12	SSE12	SSE10	SSE11	SSE11	SSE10	S10.3	SSW13
26-Jun	SSE10	S11	S10	SSE10	SSE10	SE10	SE9	SE10	ESE13	SE14	SE15	SSE15	SE14	SE13	SE13	SE14	SE16	SE16	SE14	SE12	ESE11	SE12	SE11	ESE10	SE11.8	SE16
27-Jun	ESE10	E10	E10	E10	E9	ENE8	E8	E12	E17	ESE16	ESE20	ESE19	E17	ESE20	ESE20	ESE16	ESE15	ESE15	ESE10	ESE7	E6	ENE7	ENE8	ENE7	E11.9	ESE20
28-Jun	ENE7	NNE7	NNE9	NNE9	NNE10	NNE9	NNE9	NE10	NE13	NE17	NE20	NE21	NE22	ENE23	ENE23	ENE19	ENE17	ENE16	ENE14	NE12	NE9	NNE10	N9	NNE9	NE12.6	ENE23
29-Jun	N9	N8	NNW8	N9	N7	NNW9	NNW7	N6	NNW7	N9	NE11	NE13	NNE12	NNE13	NE14	NE15	NNE12	E12	SE11	E7	ESE5	ENE6	ENE7	ENE8	NNE7.2	NE15
30-Jun	NE8	NE7	NNE8	NNE8	N8	N6	N5	N5	N7	NNE8	NE11	NE12	NE11	NE11	ENE6	SSW6	WSW5	W4	WNW4	NNW4	W4	SE4	S8	SSW7	NNE3.6	NE12
	WNW3.4	WNW3.8	WNW4.0	NW4.0	WNW4.6	NW4.4	NNW3.7	NNW3.6	N3.5	N4.1	NNE4.2	NNE4.3	NNE3.9	NNE4.1	NNE3.8	NNE2.7	N2.5	N1.8	N1.0	NNW1.6	NNW1.8	NW2.2	WNW2.8	WNW3.0	Diurnal Average	
	NNE19	NNW17	NNE14	NNE17	NNE16	WSW17	NNE17	NNE17	W23	W22	W22	NE21	NE22	ENE23	ENE23	N19	N20	N19	N19	N17	N16	N16	N19	N19	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 Jun 6 09:00

Minimum Value: 1 km/h on Jun 30 17:00

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

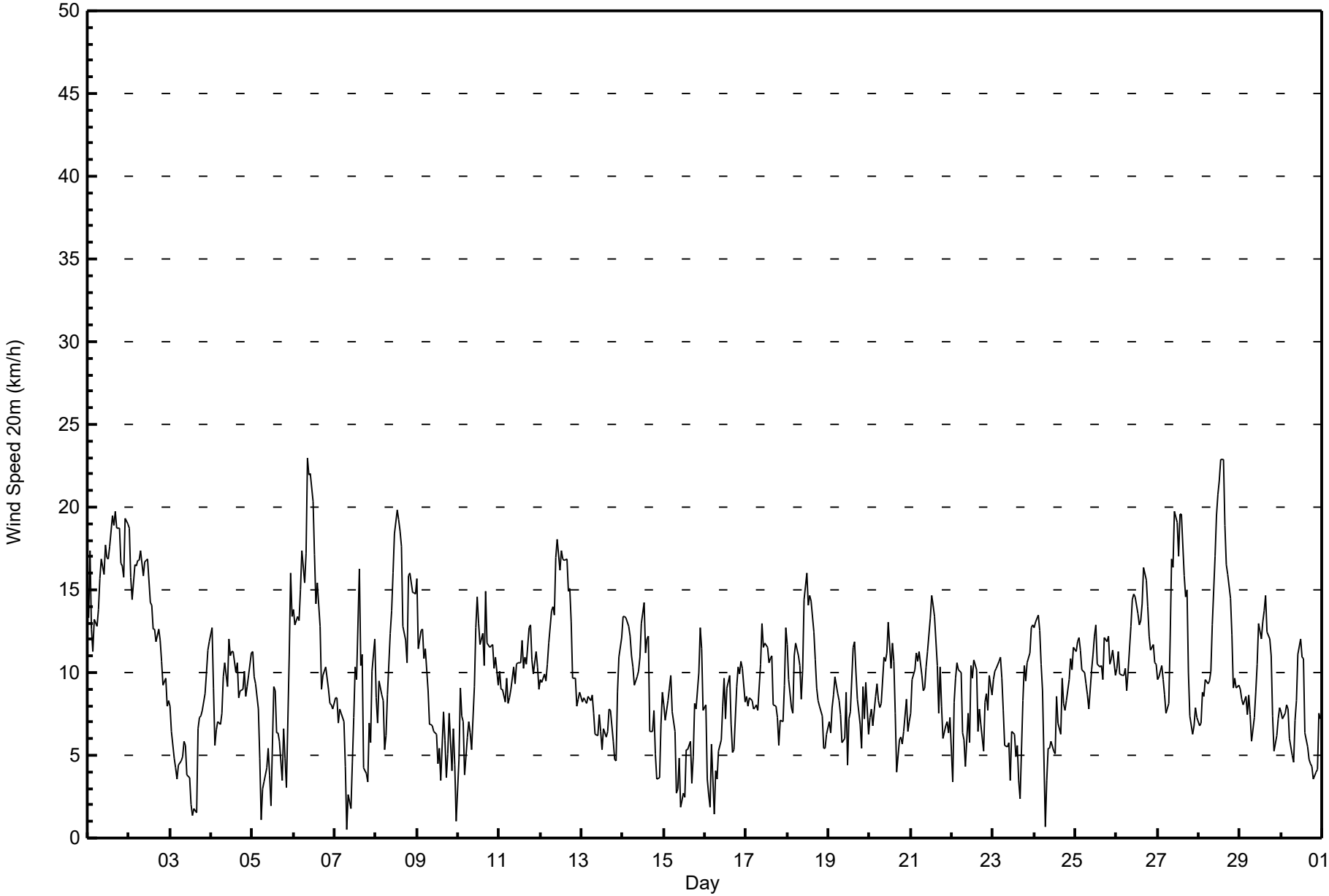
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	5	6	5	4	5	4	5	6	6	6	6	6	6	7	7	7	7	6	6	6	6	5	6	6	7
2-Jun	6	5	5	5	6	5	6	5	5	5	6	5	5	4	4	4	4	4	4	4	3	3	2	3	6
3-Jun	3	2	2	1	1	2	1	2	2	2	2	2	2	2	2	3	3	2	2	2	2	3	3	3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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 20m (WS20) - km/h

Stony Mountain - June 2026



Wind Speed 20m (WS20) - km/h
Stony Mountain - June 2026

Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	96	13.33	13.33
6 - 11	424	58.89	72.22
12 - 19	186	25.83	98.06
20 - 28	14	1.94	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 20m (WS20) - km/h

Stony Mountain - June 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	7	6	6	4	7	7	2	1	4	5	6	5	9	9	11	96
6 - 11	39	29	27	22	20	12	6	16	25	27	17	14	17	54	40	59	424
12 - 19	27	25	8	5	9	7	11	2	5	8	7	13	15	10	3	31	186
20 - 28	1	0	3	2	0	3	0	0	0	0	0	0	4	1	0	0	14
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	74	61	44	35	33	29	24	20	31	39	29	33	41	74	52	101	720

Total Number of Valid Hours: 720

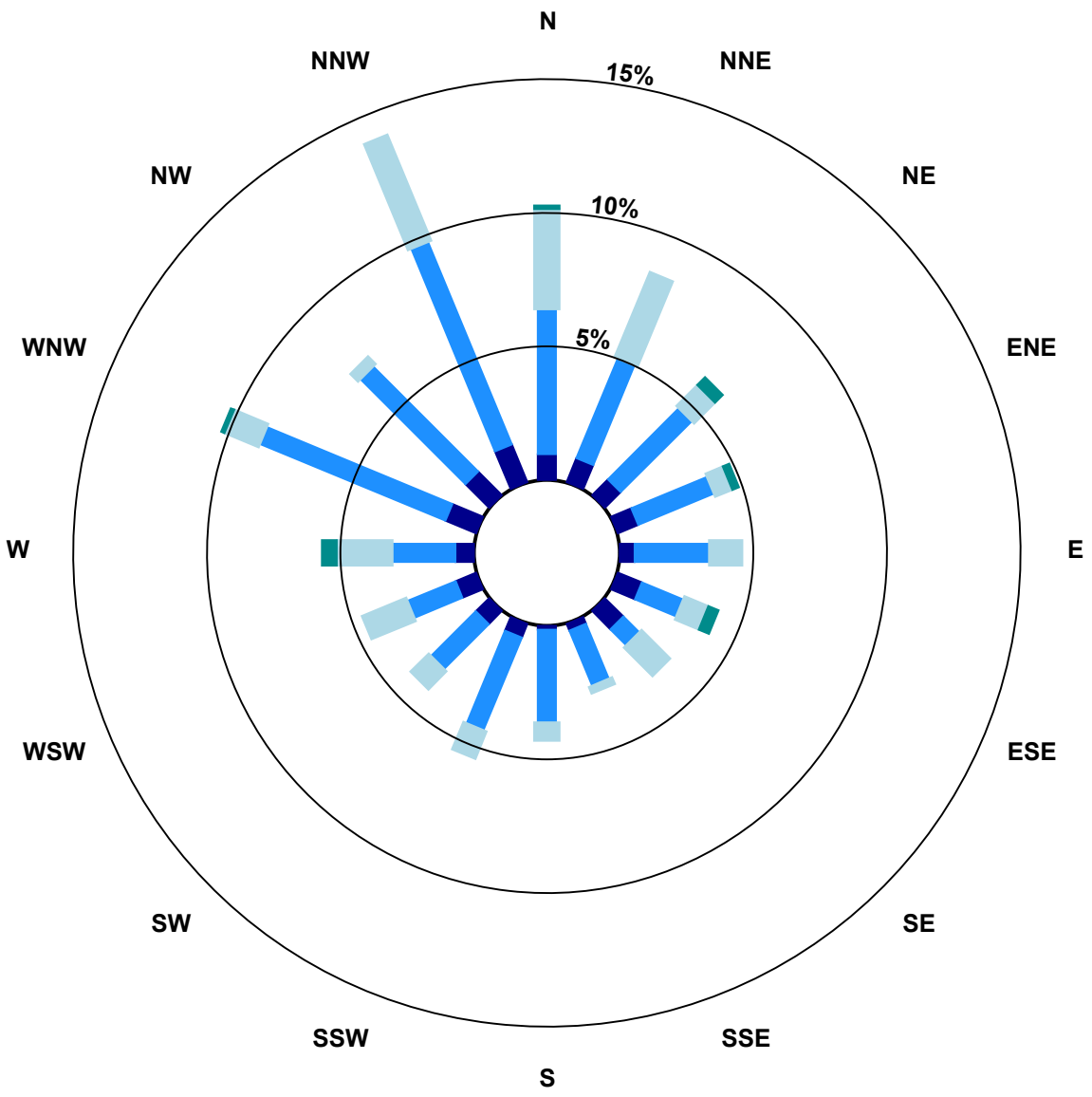
Total Number of Hours: 720

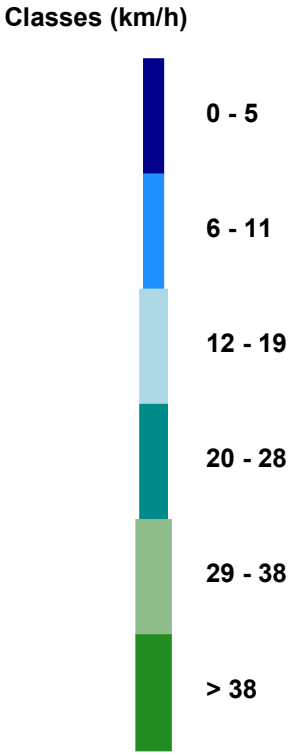
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 20m (WS20) - km/h

Stony Mountain





Total Number of Valid Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 20m (WD20) - deg

Stony Mountain - June 2026

Direction of Maximum Speed: 263 deg on Jun 6 09:00
Direction of Maximum Daily Speed Average: 357.4 deg on Jun 1

Direction of Minimum Speed: 94 deg on Jun 7 08:00

Direction of Minimum Daily Speed Average: 1.2 deg on Jun 22

Monthly Average Direction: 338.9 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-Jun	340	347	347	335	341	343	347	351	357	357	358	358	357	0	7	2	0	5	4	1	3	6	10	11	357.4
2-Jun	19	27	15	11	15	13	15	18	26	26	29	33	28	30	29	26	29	27	27	35	39	37	35	46	25.0
3-Jun	32	23	28	31	57	68	81	104	93	105	111	131	163	54	310	51	104	99	96	98	124	137	153	177	101.7
4-Jun	177	177	173	190	188	188	189	186	201	189	208	187	190	195	187	178	186	199	194	197	200	202	205	207	191.9
5-Jun	210	204	219	236	264	212	146	126	94	90	74	327	320	320	342	4	1	345	60	30	2	293	312	288	301.3
6-Jun	285	276	259	252	245	249	248	264	263	268	268	268	257	260	268	267	277	292	278	257	252	270	287	279	264.9
7-Jun	259	266	214	209	226	232	257	94	125	301	140	101	80	103	113	107	269	306	186	324	358	333	246	277	219.6
8-Jun	309	278	301	290	291	255	222	312	305	297	290	288	283	272	271	275	275	282	242	246	248	248	254	245	273.8
9-Jun	260	268	274	280	272	284	285	297	299	284	296	266	258	291	304	340	298	226	223	253	353	349	50	233	282.7
10-Jun	289	301	319	348	341	341	349	346	347	337	336	335	338	328	336	336	330	347	1	350	350	347	347	335	338.3
11-Jun	330	321	311	322	326	332	329	323	327	334	333	331	344	353	343	338	330	341	332	330	341	348	345	337	334.0
12-Jun	334	335	332	330	320	329	335	339	338	343	340	348	349	351	350	347	354	346	345	350	345	335	332	328	341.4
13-Jun	321	330	319	322	314	299	297	301	308	336	330	354	312	321	302	327	285	282	295	288	282	253	240	235	300.2
14-Jun	239	236	251	260	258	256	265	287	291	292	309	329	319	340	358	5	330	322	357	347	349	204	287	318	296.2
15-Jun	327	313	307	297	292	304	326	6	55	23	1	25	329	280	324	296	305	247	214	207	241	287	284	307	295.2
16-Jun	246	236	23	18	244	341	72	56	61	76	95	86	77	49	37	26	337	305	297	296	287	309	304	347	352.4
17-Jun	7	345	360	2	349	341	350	357	11	21	14	40	24	4	354	353	349	345	334	335	325	325	305	296	353.5
18-Jun	285	277	288	294	292	291	297	292	290	329	342	351	339	345	328	329	347	358	341	343	315	311	307	307	319.3
19-Jun	306	294	282	278	284	291	296	318	319	313	325	343	310	291	212	196	223	219	231	333	67	22	36	59	292.6
20-Jun	49	15	352	26	24	29	25	40	42	62	64	68	73	82	51	188	221	310	354	31	20	7	352	353	36.8
21-Jun	360	20	32	32	19	25	32	34	39	53	67	85	93	93	89	94	79	68	66	52	26	8	352	1	50.8
22-Jun	118	232	221	234	256	285	308	331	47	44	70	95	97	97	97	56	86	150	216	256	279	204	228	259	206.2
23-Jun	287	287	287	284	291	294	299	313	292	282	202	223	273	265	356	292	196	233	196	206	205	208	214	217	254.9
24-Jun	220	220	223	229	232	247	159	121	143	102	54	69	119	110	147	174	196	178	165	155	181	187	192	196	186.9
25-Jun	194	202	201	205	199	185	184	165	175	183	193	176	195	193	163	156	159	171	171	165	164	161	154	155	178.4
26-Jun	166	171	173	155	154	146	135	125	123	128	136	147	145	127	137	138	130	133	139	135	120	131	132	115	138.3
27-Jun	107	101	98	92	80	65	81	91	97	102	105	111	100	106	105	116	110	109	107	111	91	70	59	58	98.8
28-Jun	68	26	23	17	13	22	13	37	43	50	56	54	50	65	76	78	63	64	59	49	34	17	8	25	48.4
29-Jun	11	359	338	354	353	327	339	4	346	3	35	39	30	33	47	35	27	100	131	88	113	61	60	64	31.6
30-Jun	53	34	20	20	9	7	2	356	357	33	47	50	50	43	70	192	245	275	294	330	272	134	183	203	28.1
	301.2	298.7	299.0	304.0	302.7	310.4	326.4	347.5	358.1	8.9	13.4	29.0	14.0	21.5	30.1	16.4	350.7	356.1	351.4	332.1	329.4	315.7	299.2	295.5	
	Diurnal Average																								

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

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 20m (WD20) - deg

Stony Mountain - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 101 deg on Jun 3 16:00

Minimum Value: 9 deg on Jun 15 04:00

Percentiles: P_1 = 13 P_{10} = 16 Q_1 = 20 Median = 25 Q_3 = 31 P_{90} = 44 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

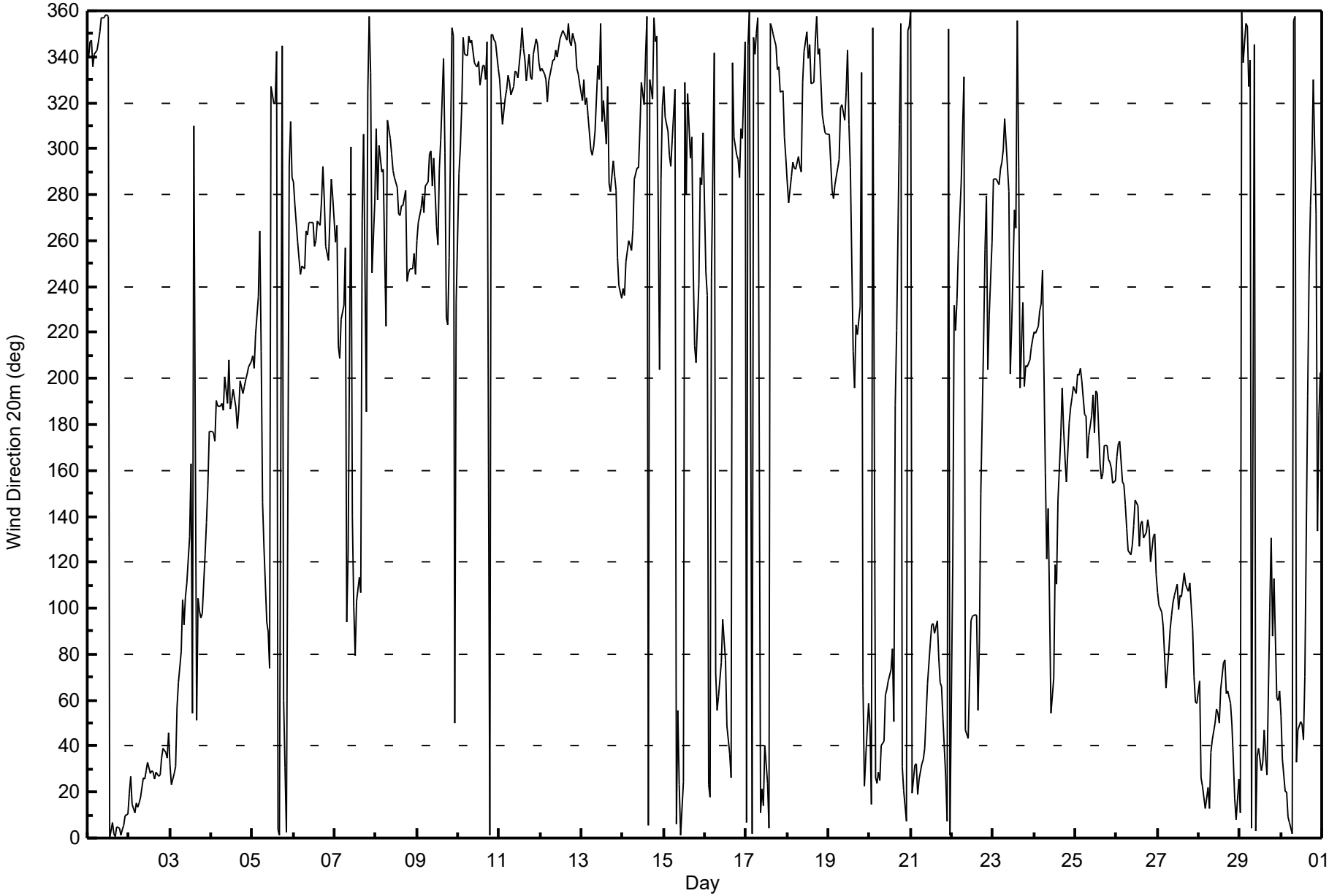
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	23	23	23	22	25	23	25	25	25	25	24	25	24	24	23	24	24	23	22	23	24	24	23	23	25
2-Jun	23	22	24	21	22	23	24	23	23	22	23	23	24	24	23	21	24	25	22	24	21	22	20	19	25
3-Jun	26	22	23	21	27	20	27	34	22	33	44	53	89	95	90	101	37	29	24	15	18	19	21	19	101
4-Jun	21	24	26	22	23	26	31	29	27	35	29	37	37	32	37	36	35	28	27	24	17	16	16	19	37
5-Jun	21	19	19	20	25	101	37	47	35	23	44	91	21	25	26	30	31	77	40	33	59	26	23	27	101
6-Jun	26	28	26	30	27	28	28	31	28	28	30	30	33	35	31	35	36	31	29	25	21	19	15	15	36
7-Jun	22	22	23	18	13	18	33	97	61	96	68	49	25	42	27	29	30	41	55	44	26	22	47	25	97
8-Jun	23	42	19	23	26	44	34	31	23	26	26	24	28	30	28	28	29	29	26	26	25	25	27	27	44
9-Jun	27	26	25	23	26	25	31	41	41	51	76	59	79	67	76	44	39	43	46	22	65	36	60	81	81
10-Jun	27	19	17	20	42	29	26	26	29	29	30	30	31	31	30	34	27	29	30	28	28	27	28	26	42
11-Jun	25	23	20	22	23	25	23	23	24	31	31	31	33	30	33	28	29	25	25	24	28	26	27	25	33
12-Jun	23	23	21	22	23	25	27	28	27	29	27	28	31	30	31	30	30	30	27	28	24	17	16	16	31
13-Jun	15	18	18	16	15	18	18	26	45	53	61	66	75	60	64	53	37	39	43	27	11	21	22	17	75
14-Jun	20	19	22	26	25	25	26	26	31	36	40	31	31	39	50	32	44	31	42	31	47	53	21	20	53
15-Jun	18	13	11	9	12	14	19	52	59	70	95	88	84	73	58	40	42	42	21	19	30	26	22	20	95
16-Jun	38	65	23	89	37	80	36	32	31	23	23	22	22	24	23	35	34	26	21	19	17	19	15	30	89
17-Jun	20	16	18	19	18	22	26	33	27	30	37	33	36	35	30	33	37	31	27	21	17	17	18	21	37
18-Jun	22	23	22	24	21	22	26	30	29	37	31	31	32	32	31	27	32	34	29	28	19	16	17	15	37
19-Jun	19	17	13	15	22	21	25	29	51	49	45	41	38	30	25	35	32	30	21	57	21	35	20	21	57
20-Jun	13	16	21	17	15	20	20	26	23	26	32	29	27	26	21	61	53	20	22	22	18	19	19	20	61
21-Jun	22	20	21	20	22	20	20	21	23	20	20	21	25	24	24	21	23	21	18	15	15	22	18	18	25
22-Jun	65	24	18	19	24	21	23	16	42	38	39	25	29	28	28	41	36	36	19	31	18	42	15	19	65
23-Jun	13	13	13	14	14	16	19	31	41	47	90	55	58	68	63	80	87	31	24	18	16	16	17	17	90
24-Jun	17	17	17	16	18	34	83	43	21	27	17	39	54	36	47	60	39	37	31	23	20	18	16	16	83
25-Jun	13	15	15	14	14	17	22	28	34	36	36	35	35	44	38	37	37	32	28	28	23	20	22	18	44
26-Jun	23	23	19	15	16	17	25	22	25	28	30	31	27	37	31	29	27	27	28	28	19	17	19	15	37
27-Jun	14	15	14	14	15	16	18	20	20	24	22	23	24	23	21	25	22	22	20	15	13	14	16	16	25
28-Jun	17	27	17	19	15	19	21	25	23	21	23	23	23	26	24	25	25	24	22	18	18	18	18	16	27
29-Jun	15	18	14	19	21	13	21	28	23	28	29	26	32	30	23	26	29	54	23	28	30	13	14	16	54
30-Jun	19	15	19	12	20	20	23	30	26	35	24	28	28	24	39	34	13	20	14	35	31	47	20	13	47
	65	65	26	89	42	101	83	97	61	96	95	91	89	95	90	101	87	77	55	57	65	53	60	81	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 20m (WD20) - deg

Stony Mountain - June 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS19
FIREBAG
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FIREBAG (AMS19)
JUNE 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	661	33	59	96.39	10.8	0	1.2	0
H2S (ppb) Average	685	35	35	100	6	0	0.7	0
THC (ppm) Average	682	34	38	99.44	2.8	-	2.3	-
NO2 (ppb) Average	685	35	35	100	15.3	0	3.7	-
NO (ppb) Average	685	35	35	100	8.8	-	0.7	-
NOX (ppb) Average	685	35	35	100	17.9	-	4.2	-
Temperature 2 m (C) Average	720	0	0	100	28.4	-	23.3	-
Relative Humidity (%) Average	720	0	0	100	98.4	-	97.5	-
Wind Speed 10 m (km/h) Average	720	0	0	100	32	-	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)
JUNE 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	661	0.24	0.8	-	0	0	0	0	0.1	0.5	10.8
H2S (ppb) Average	685	0.19	0.5	-	0	0	0	0.1	0.1	0.3	6
THC (ppm) Average	682	2.2	0.1	-	2	2.1	2.1	2.2	2.2	2.3	2.8
NO2 (ppb) Average	685	1.32	1.8	-	0	0.1	0.2	0.8	1.6	2.9	15.3
NO (ppb) Average	685	0.22	0.5	-	0	0	0	0.1	0.2	0.5	8.8
NOX (ppb) Average	685	1.54	2.1	-	0.1	0.1	0.3	0.9	1.9	3.5	17.9
Temperature 2 m (C) Average	720	14.52	5.7	-	5	7.6	9.7	14	18.8	23	28.4
Relative Humidity (%) Average	720	66.04	23.2	-	21.6	33.7	43.8	67.6	88.5	96.5	98.4
Wind Speed 10 m (km/h) Average	720	13	6	-	1	6	9	12	17	20	32
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FIREBAG (AMS19)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
SO2	04 Jun 2026 09:00	05 Jun 2026 10:00	26	Station power failure
THC	15 Jun 2026 11:00	15 Jun 2026 14:00	4	Maintenance - replaced support gas cylinder

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Firebag - June 2026

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

Maximum Value: 10.8 ppb on Jun 29 07:00

Maximum Daily Average: 1.2 ppb on Jun 23

Minimum Value: 0.0 ppb on Jun 1 01:00

Minimum Daily Average: 0.0 ppb on Jun 11

Maximum Diurnal Average: 0.8 ppb at hour 7

Minimum Diurnal Average: 0.1 ppb at hour 21

Monthly Average: 0.24 ppb

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} = 3.1

Hours in Service:	720
Hours of Data:	661
Hours of Missing Data:	59
Hours of Calibration:	33
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-Jun	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
2-Jun	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
3-Jun	0.2	2.0	0.7	Z	0.9	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.0
4-Jun	0.0	0.0	0.1	0.1	Z	0.5	0.7	0.4	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	--	0.7
5-Jun	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	C	C	C	C	0.2	0.1	0.0	0.0	0.4	0.1	0.2	0.1	0.0	0.1	--	0.4
6-Jun	Z	0.2	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	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.4
7-Jun	1.0	Z	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.2	0.2	0.0	0.0	0.0	0.1	1.0
8-Jun	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	0.1	0.0	0.0	0.0	0.1
9-Jun	0.0	0.1	0.1	Z	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.3
10-Jun	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-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-Jun	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
13-Jun	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	1.2	0.3	0.1	0.1	1.7	1.7	0.4	0.1	0.1	0.0	0.0	0.3	1.7
14-Jun	0.0	0.5	Z	1.8	1.1	1.0	0.6	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.8
15-Jun	0.0	0.0	0.1	0.1	Z	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	1.3	2.3	2.9	0.3	2.9
16-Jun	2.0	0.0	4.6	6.2	Z	1.9	3.0	1.1	1.6	0.6	0.6	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	6.2
17-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
18-Jun	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
19-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1
20-Jun	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	0.4	0.0	0.0	0.0	0.0	0.0	0.4
21-Jun	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
22-Jun	0.0	0.3	0.0	0.0	Z	0.1	0.0	0.1	0.7	0.4	0.1	0.1	0.3	0.0	0.0	0.7	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7
23-Jun	0.0	0.1	0.5	0.8	0.8	Z	3.1	2.9	1.7	0.7	1.0	3.1	5.7	2.1	1.7	1.2	0.9	0.3	0.2	0.1	0.1	0.1	0.1	0.1	1.2	5.7
24-Jun	Z	0.1	0.1	0.1	0.3	0.3	0.2	1.2	2.1	0.4	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	0.3	2.1
25-Jun	0.0	Z	0.1	0.1	0.1	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.3
26-Jun	0.1	0.0	Z	0.1	0.0	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.3
27-Jun	0.0	0.0	0.0	Z	0.1	0.1	0.1	1.9	0.4	0.5	0.3	0.4	0.4	0.1	0.1	0.3	0.8	0.9	0.3	0.1	0.0	1.9	1.5	1.3	0.5	1.9
28-Jun	0.4	0.2	1.3	1.9	Z	3.1	4.5	0.5	0.2	0.5	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.0	0.0	0.1	0.1	0.6	4.5
29-Jun	0.2	0.2	0.5	2.7	1.0	Z	10.8	5.7	0.7	0.9	0.6	0.5	0.1	0.1	0.1	0.1	0.1	0.2	0.8	0.2	0.2	0.2	0.2	0.1	1.2	10.8
30-Jun	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.1	1.6	0.7	0.1	0.1	0.1	0.1	0.1	0.3	1.1	0.8	1.2	0.1	0.1	0.1	0.1	0.4	2.1
	0.2	0.2	0.4	0.6	0.2	0.3	0.8	0.5	0.4	0.2	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	Diurnal Average	
	2.0	2.0	4.6	6.2	1.1	3.1	10.8	5.7	2.1	1.6	1.0	3.1	5.7	2.1	1.7	1.2	0.9	1.7	1.7	1.2	0.4	1.9	2.3	2.9	Diurnal Maximum	

Z - zerospan C - Calibration PF - Power Failure

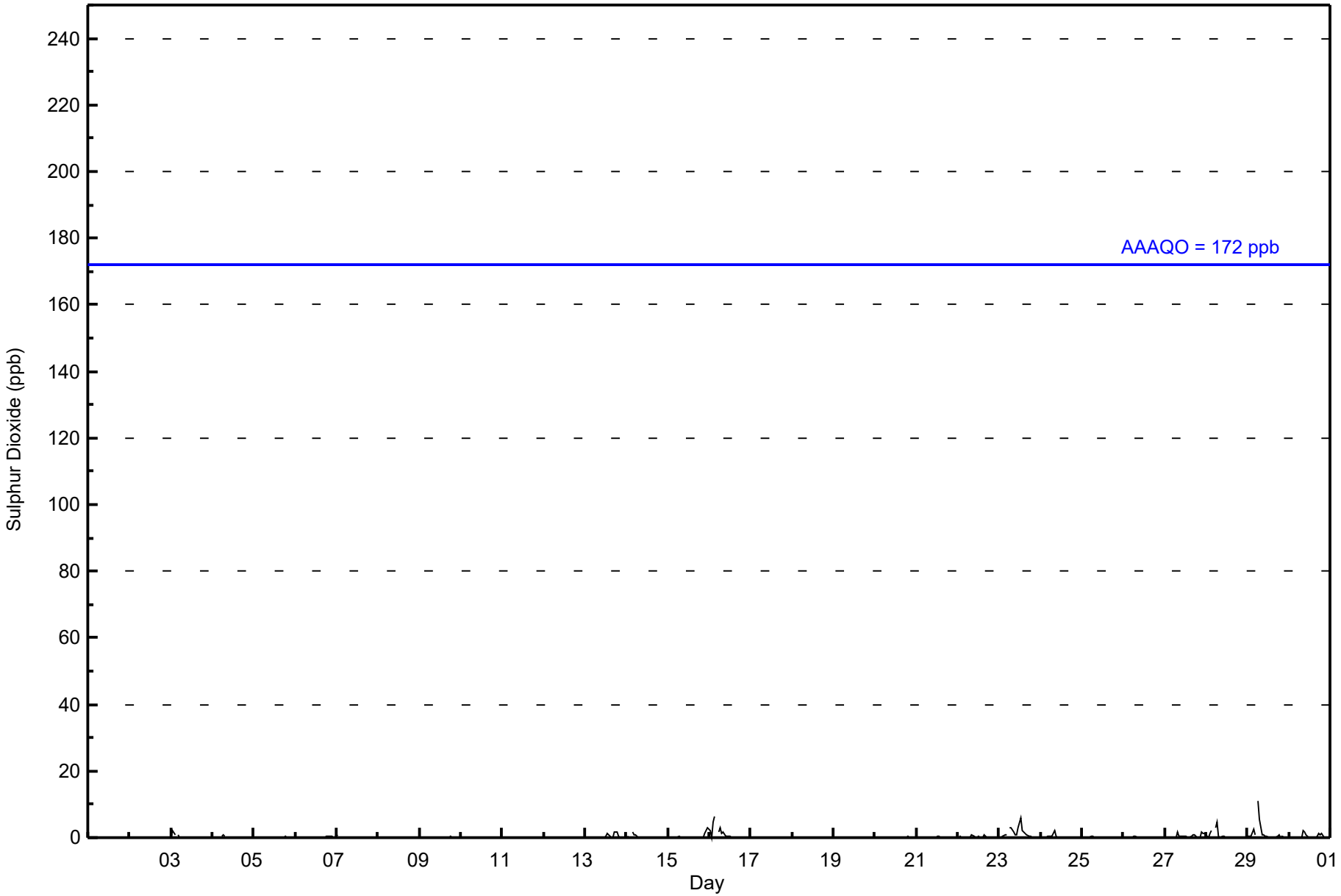
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Firebag - June 2026



Sulphur Dioxide (SO_2) - ppb

Firebag - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	660	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: 661

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Firebag - June 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	127	63	44	35	31	53	42	40	44	26	28	20	16	37	20	34	660
11 - 20	0	0	0	0	0	1	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	127	63	44	35	31	54	42	40	44	26	28	20	16	37	20	34	661

Total Number of Valid Hours: 661

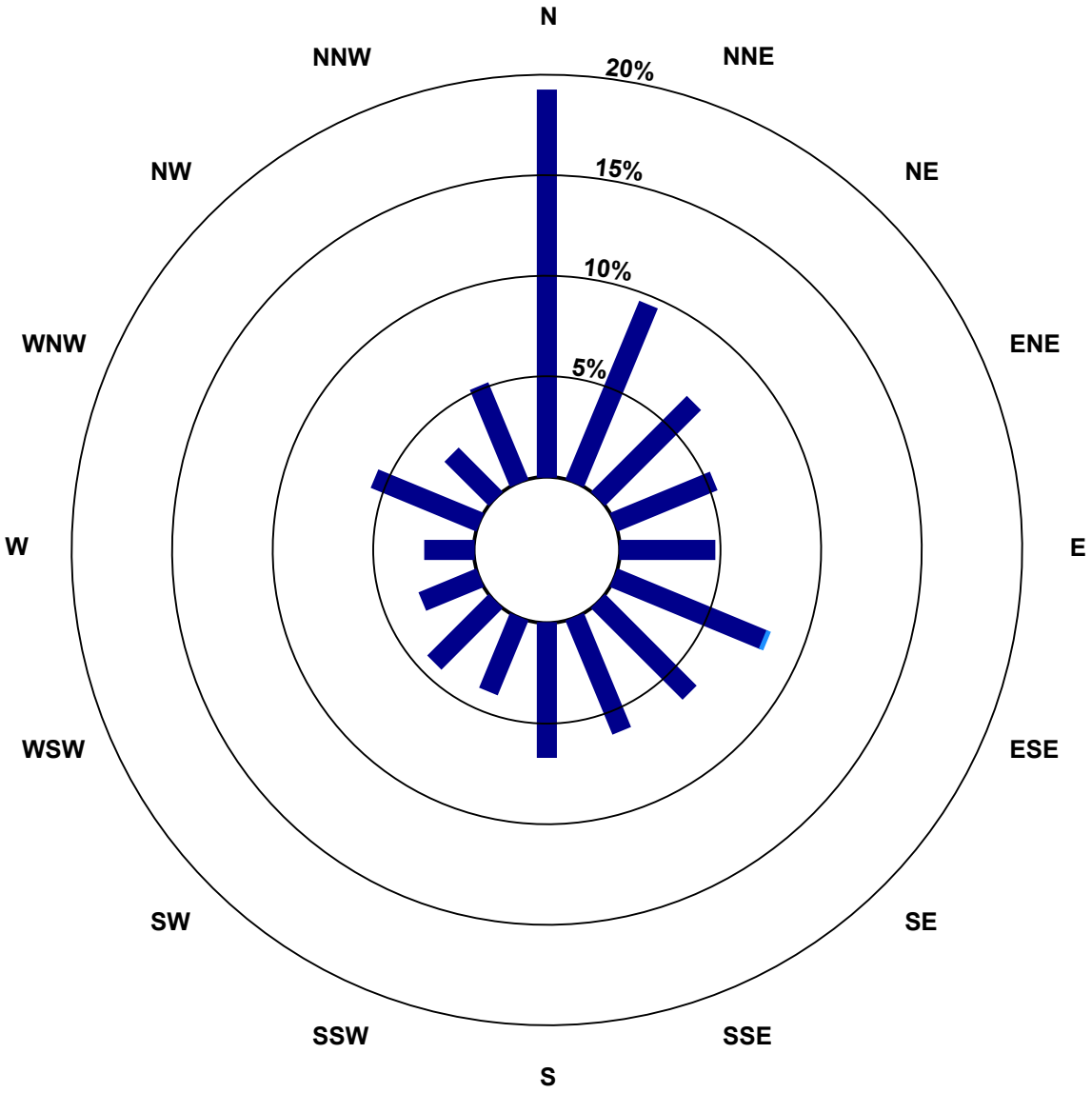
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Firebag



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

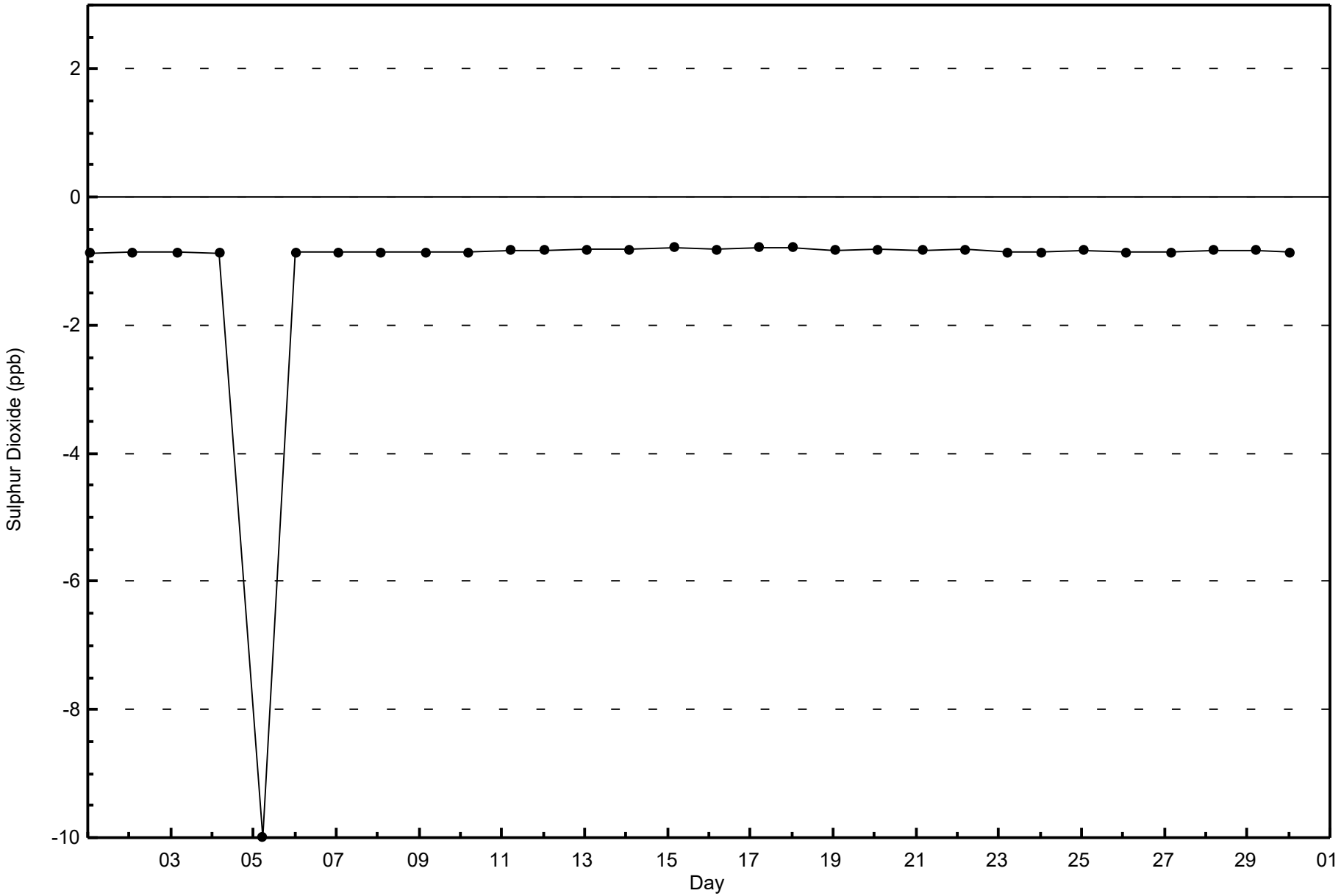
Total Number of Valid Hours: 661

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Firebag - June 2026

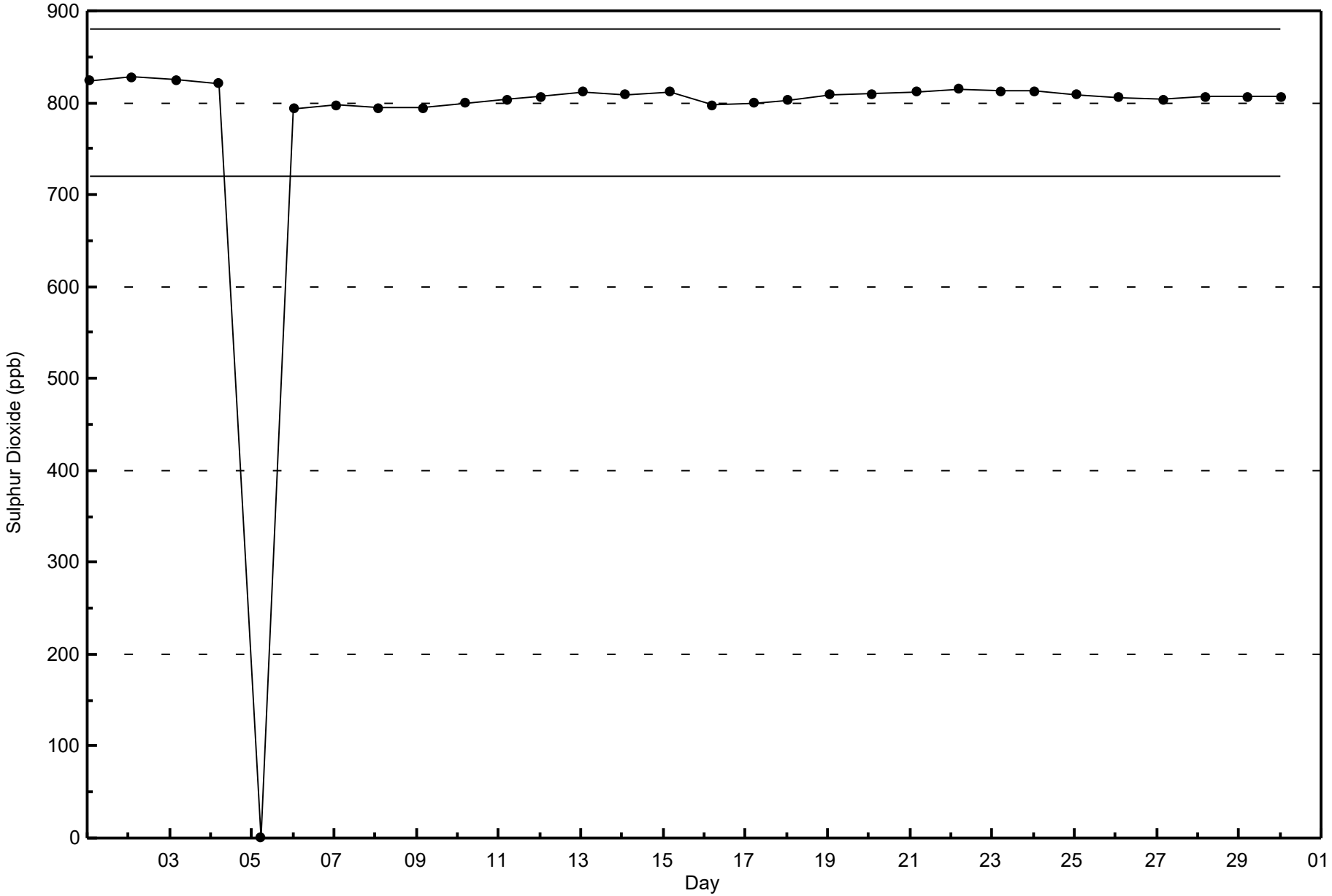


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Firebag - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Firebag - June 2026

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

Maximum Value: 6.0 ppb on Jun 28 00:00

Maximum Daily Average: 0.7 ppb on Jun 28

Minimum Value: 0.0 ppb on Jun 11 16:00

Minimum Daily Average: 0.0 ppb on Jun 1

Maximum Diurnal Average: 0.7 ppb at hour 2

Minimum Diurnal Average: 0.0 ppb at hour 15

Monthly Average: 0.19 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} = 3.1

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-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2-Jun	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	0.1	0.2	0.6	0.8	0.5	1.6	0.5	0.2	1.6
3-Jun	0.3	0.2	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.3
4-Jun	0.0	0.0	0.1	0.1	0.1	Z	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	0.1	0.1	0.1	0.1	0.1	0.1
5-Jun	Z	0.1	0.1	0.1	0.1	0.3	0.3	0.3	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	0.2	0.2	0.7	0.2	0.7
6-Jun	0.7	Z	0.6	0.4	0.4	0.2	0.2	0.1	0.1	0.2	0.2	0.4	0.4	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.3	0.7
7-Jun	0.2	0.2	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	1.4	1.1	0.1	0.1	0.2	1.4
8-Jun	0.1	0.1	0.1	Z	0.3	0.2	0.1	0.3	0.3	0.3	C	C	C	C	C	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
9-Jun	0.1	0.1	0.2	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	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
10-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
11-Jun	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	0.1	0.1	0.0	0.0	0.1	0.1
12-Jun	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	0.1	0.3	0.5	0.1	0.5
13-Jun	0.5	0.5	Z	0.5	0.7	0.4	0.2	0.1	0.1	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	0.1	0.2	0.2	0.7
14-Jun	0.2	0.2	0.3	Z	0.3	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.3
15-Jun	0.0	1.2	4.1	2.5	2.5	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	0.6	0.6	1.3	0.1	0.0	0.6	4.1
16-Jun	0.1	0.0	0.2	0.1	0.0	Z	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2
17-Jun	Z	0.3	0.1	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	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.3
18-Jun	0.2	Z	0.3	0.2	0.4	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.4
19-Jun	0.3	0.3	Z	0.5	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.2	0.5
20-Jun	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	0.1	0.0	0.0	0.1	1.0	0.1	0.0	0.0	0.0	0.0	0.1	1.0
21-Jun	0.5	4.6	0.5	1.0	Z	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.3	4.6
22-Jun	0.2	2.1	0.1	0.1	0.1	Z	0.1	0.1	0.7	0.2	0.1	0.2	0.3	0.1	0.0	0.1	0.8	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	2.1
23-Jun	Z	0.2	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.1	0.1	0.1	0.2	0.1	0.1	0.3	0.5	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.5
24-Jun	0.2	Z	0.2	0.3	0.4	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.4
25-Jun	0.3	0.4	Z	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	0.1	0.0	0.1	0.1	0.4
26-Jun	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1
27-Jun	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	4.2	6.0	0.6	6.0
28-Jun	2.0	3.3	3.1	0.8	2.0	Z	2.1	1.1	0.4	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.6	0.6	0.0	0.0	0.0	0.4	0.7	3.3
29-Jun	Z	2.1	1.3	3.3	1.3	0.5	0.2	1.1	0.8	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.8	0.8	0.7	0.2	0.1	0.1	0.1	0.6	3.3
30-Jun	0.1	Z	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	0.0	0.3	0.3	0.4	0.0	0.0	0.0	0.1	0.1	0.1	0.4
	0.3	0.7	0.5	0.4	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	Diurnal Average	
	2.0	4.6	4.1	3.3	2.5	0.5	2.1	1.1	0.8	0.3	0.2	0.4	0.4	0.2	0.3	0.3	0.8	0.8	1.0	0.7	1.4	3.4	4.2	6.0	Diurnal Maximum	

Z - zerospan C - Calibration

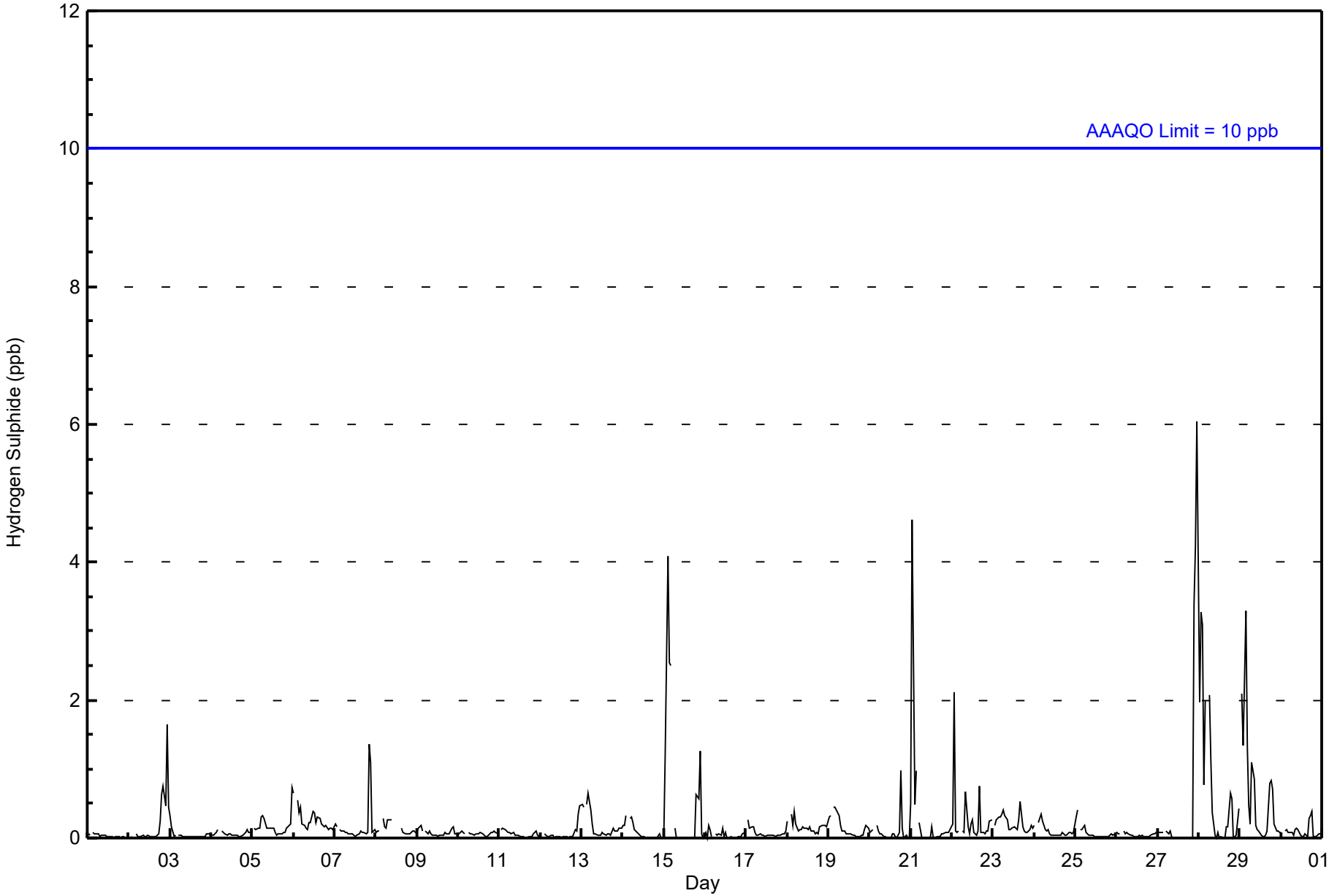
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Firebag - June 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Firebag - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	676	98.69	98.69
3 - 4	7	1.02	99.71
5 - 7	2	0.29	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 - June 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	125	63	46	36	27	48	43	39	43	36	41	27	16	36	19	31	676
3 - 4	0	0	0	0	3	4	0	0	0	0	0	0	0	0	0	0	7
5 - 7	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
8 - 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	125	63	46	36	30	54	43	39	43	36	41	27	16	36	19	31	685

Total Number of Valid Hours: 685

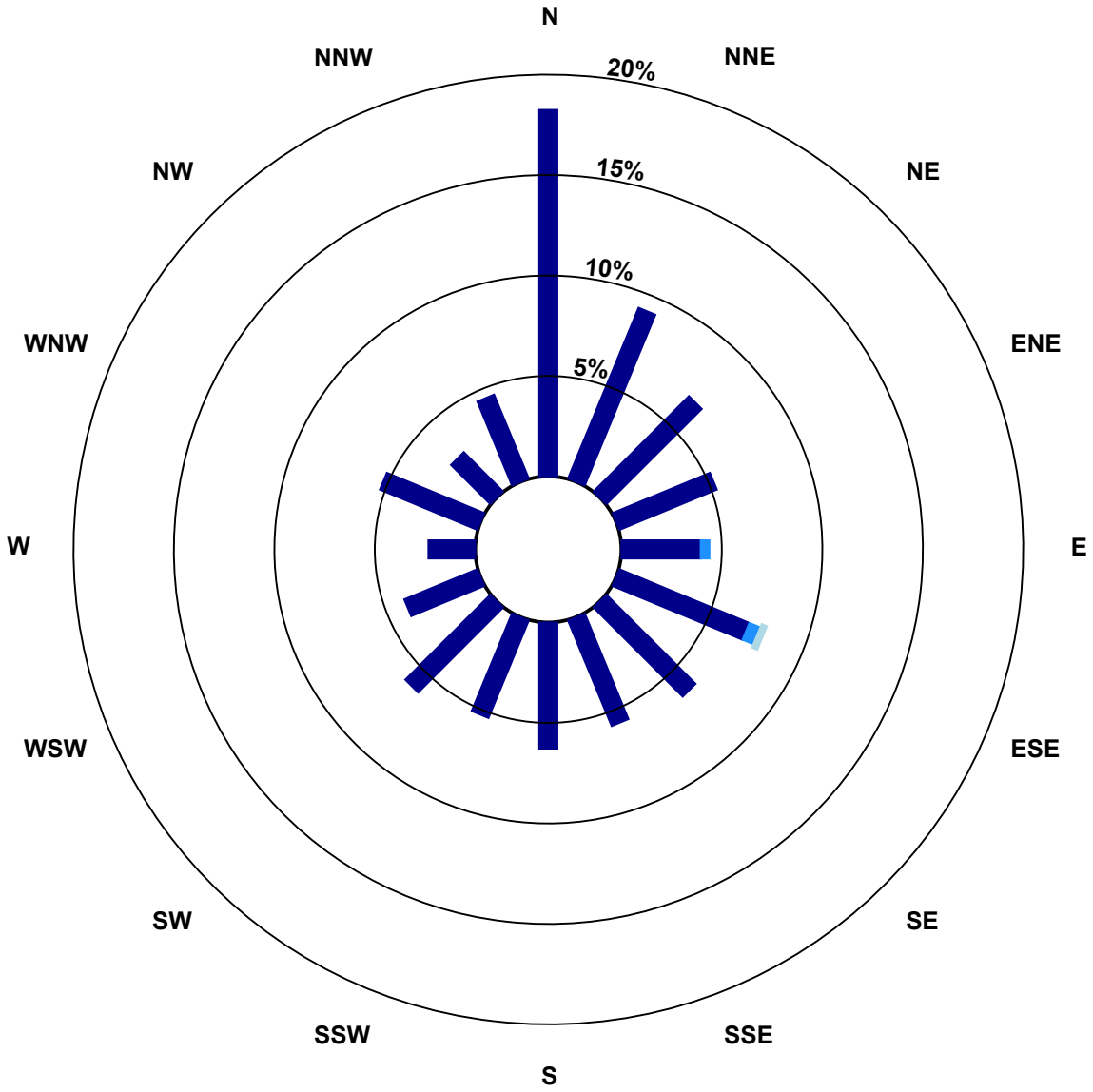
Total Number of Hours: 720

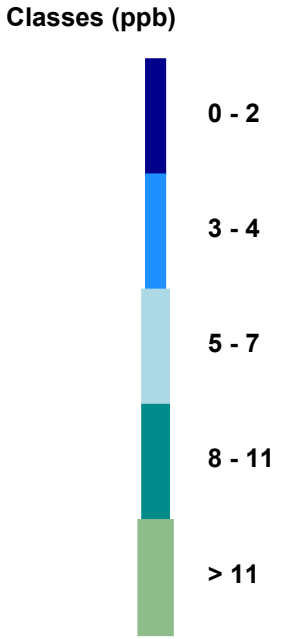
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H_2S) - ppb

Firebag





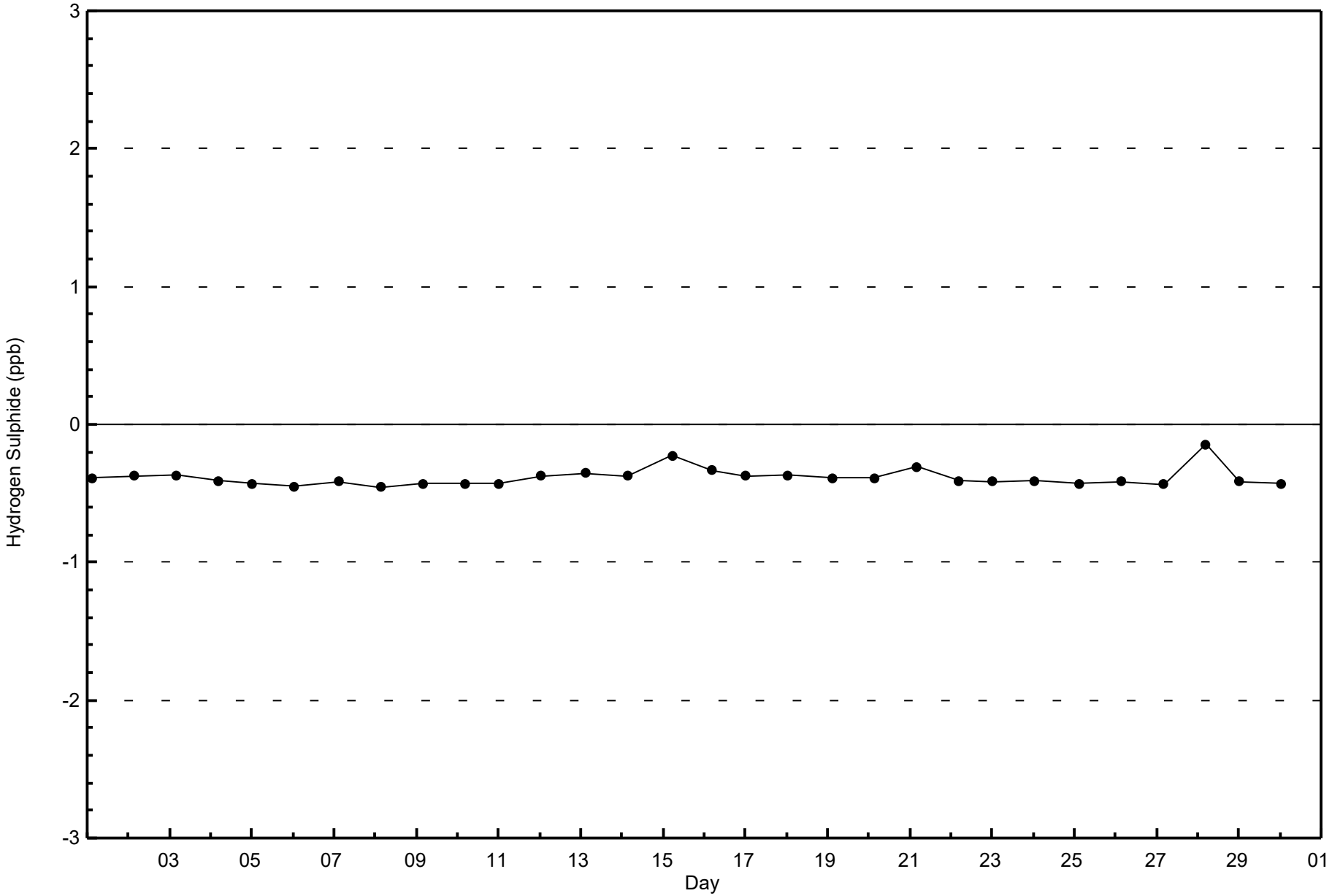
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Firebag - June 2026

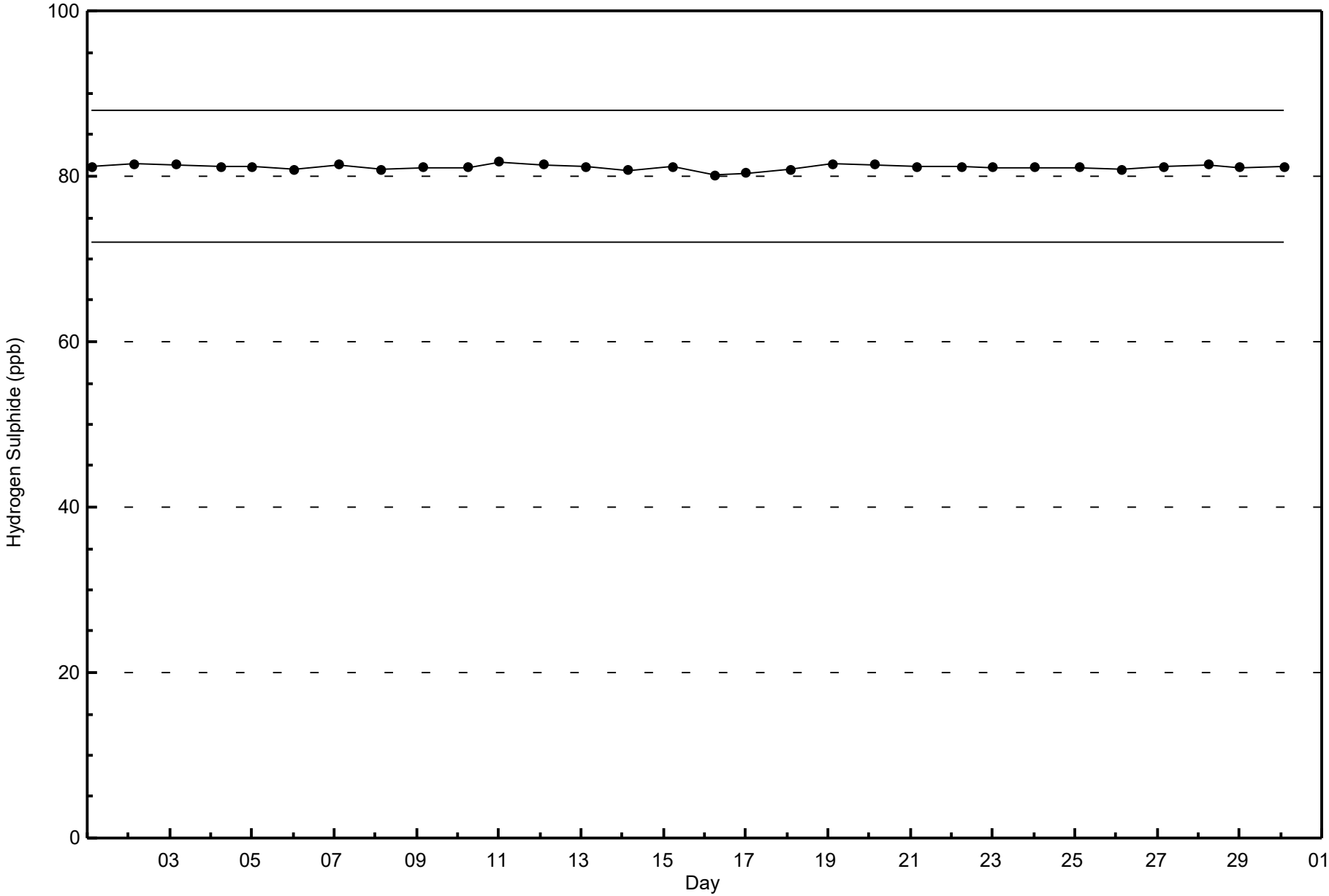


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Firebag - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Firebag - June 2026

Maximum Value: 2.8 ppm on Jun 13 05:00

Maximum Daily Average: 2.3 ppm on Jun 19

Minimum Value: 2.0 ppm on Jun 5 15:00

Minimum Daily Average: 2.1 ppm on Jun 1

Maximum Diurnal Average: 2.3 ppm at hour 5

Minimum Diurnal Average: 2.1 ppm at hour 9

Monthly Average: 2.20 ppm

Percentiles: P_1 = 2.1 P_{10} = 2.1 Q_1 = 2.1 Median = 2.2 Q_3 = 2.2 P_{90} = 2.3 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-Jun	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	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2
2-Jun	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	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.1	2.2
3-Jun	2.1	2.2	2.1	Z	2.1	2.1	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	2.2	2.3	2.3	2.2	2.2	2.3
4-Jun	2.2	2.1	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	2.2
5-Jun	2.2	2.2	2.2	2.2	2.2	Z	2.2	2.2	2.1	2.1	C	C	C	C	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.1	2.3
6-Jun	Z	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	2.1	2.1	2.1	2.1	2.1	2.3
7-Jun	2.1	Z	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	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.2
8-Jun	2.1	2.2	Z	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.2
9-Jun	2.2	2.2	2.2	Z	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	2.3	2.3	2.2	2.3	2.3	2.2	2.2	2.2	2.3
10-Jun	2.2	2.1	2.1	2.2	Z	2.1	2.1	2.1	2.2	2.2	2.2	2.2	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
11-Jun	2.1	2.1	2.1	2.2	2.2	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
12-Jun	Z	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.2	2.3
13-Jun	2.4	Z	2.7	2.7	2.8	2.4	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	2.3	2.8
14-Jun	2.2	2.2	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	2.2	2.2	2.2	2.3	2.2	2.3	2.2	2.3
15-Jun	2.3	2.3	2.6	2.5	Z	2.4	2.3	2.2	2.1	2.2	M	M	M	M	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.6
16-Jun	2.2	2.1	2.2	2.2	Z	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	2.2	2.3	2.2	2.3
17-Jun	2.3	2.3	2.2	2.2	2.3	Z	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3
18-Jun	Z	2.4	2.3	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	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.2	2.4
19-Jun	2.3	Z	2.5	2.6	2.6	2.4	2.4	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.4	2.3	2.6
20-Jun	2.3	2.2	Z	2.4	2.3	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.4
21-Jun	2.2	2.3	2.3	Z	2.4	2.3	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.2	2.4
22-Jun	2.2	2.3	2.3	2.3	Z	2.4	2.4	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.5	2.3	2.5
23-Jun	2.3	2.3	2.4	2.4	2.3	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	2.1	2.2	2.2	2.3	2.2	2.4
24-Jun	Z	2.3	2.3	2.3	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	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.4
25-Jun	2.3	Z	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.1	2.2	2.1	2.1	2.2	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3
26-Jun	2.2	2.3	Z	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.2	2.3
27-Jun	2.4	2.4	2.3	Z	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.5	2.5	2.6	2.2	2.6
28-Jun	2.4	2.3	2.4	2.4	Z	2.3	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	2.2	2.2	2.2	2.2	2.2	2.2	2.5
29-Jun	2.4	2.3	2.2	2.4	2.5	Z	2.3	2.4	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	2.4	2.4	2.4	2.3	2.5
30-Jun	Z	2.4	2.3	2.3	2.3	2.2	2.3	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	2.3	2.3	2.3	2.2	2.4
	2.2	2.2	2.3	2.3	2.3	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	2.3	Diurnal Average	
	2.4	2.4	2.7	2.7	2.8	2.4	2.5	2.4	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	2.5	2.5	2.6	Diurnal Maximum	

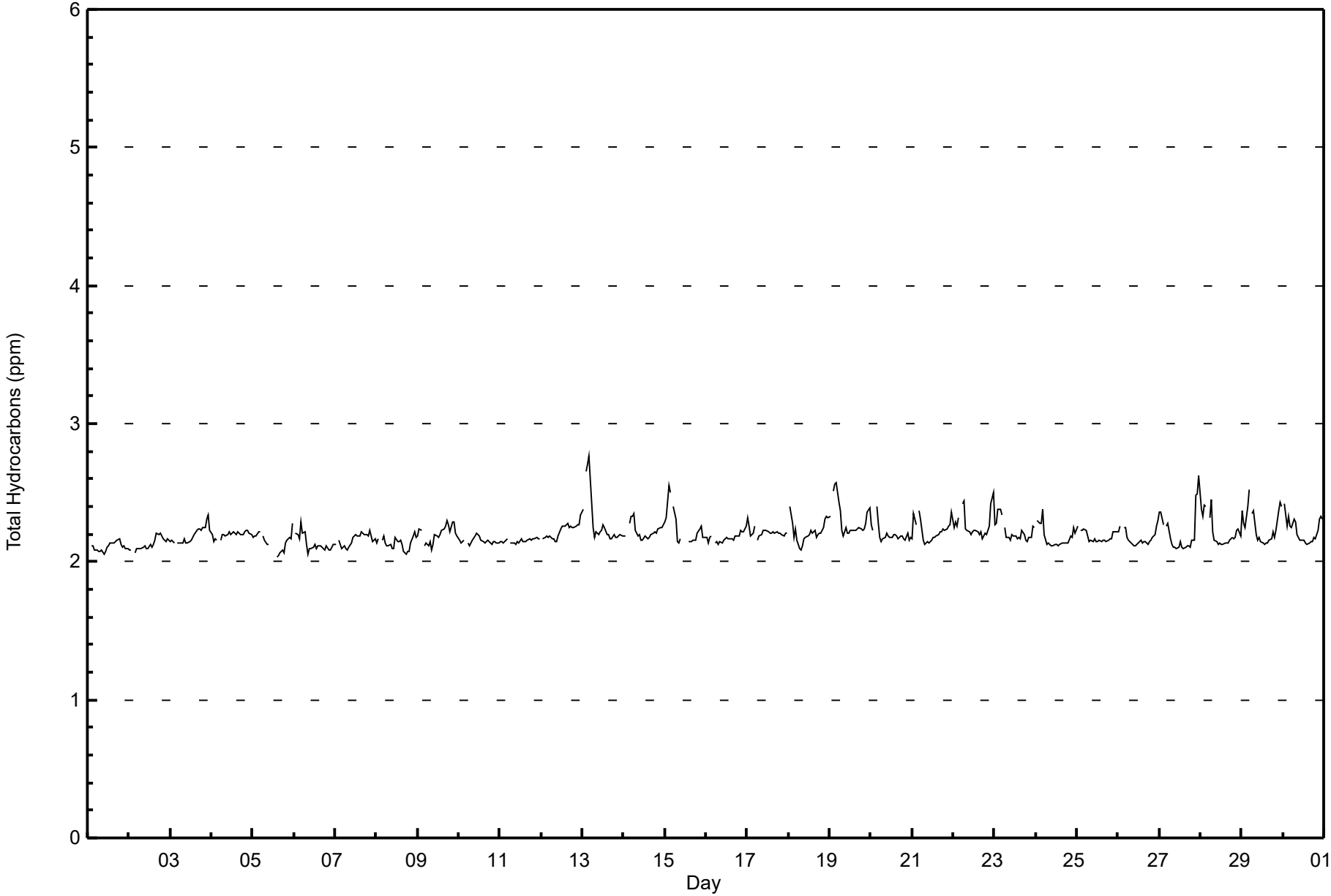
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Firebag - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	2	0.29	0.29
2.1 - 3.0	680	99.71	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 - June 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	1	0	1	0	0	0	0	2
2.1 - 3.0	126	62	44	35	31	54	42	40	44	35	38	24	16	37	18	34	680
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	126	62	44	35	31	54	42	40	44	36	38	25	16	37	18	34	682

Total Number of Valid Hours: 682

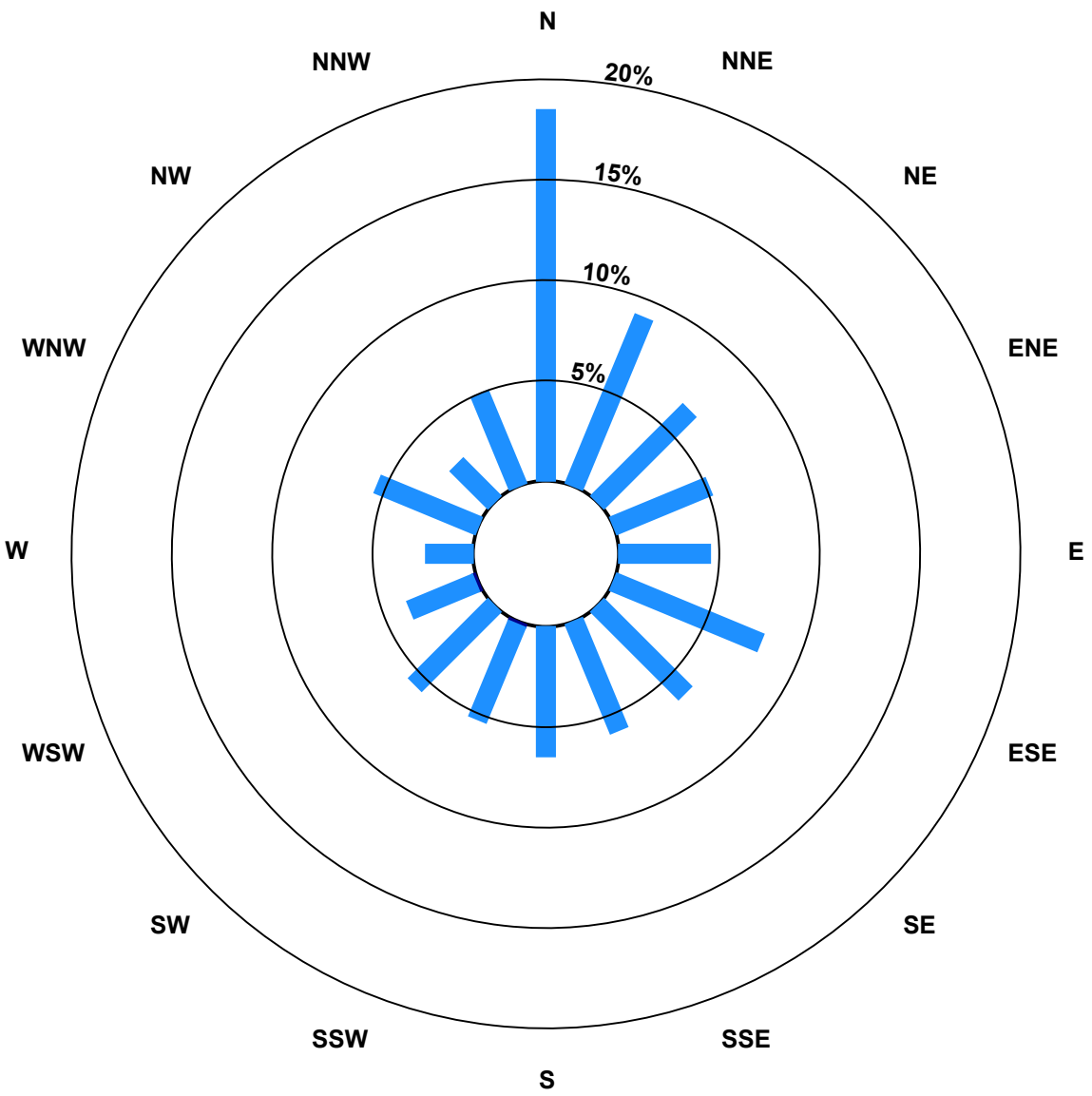
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Firebag



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

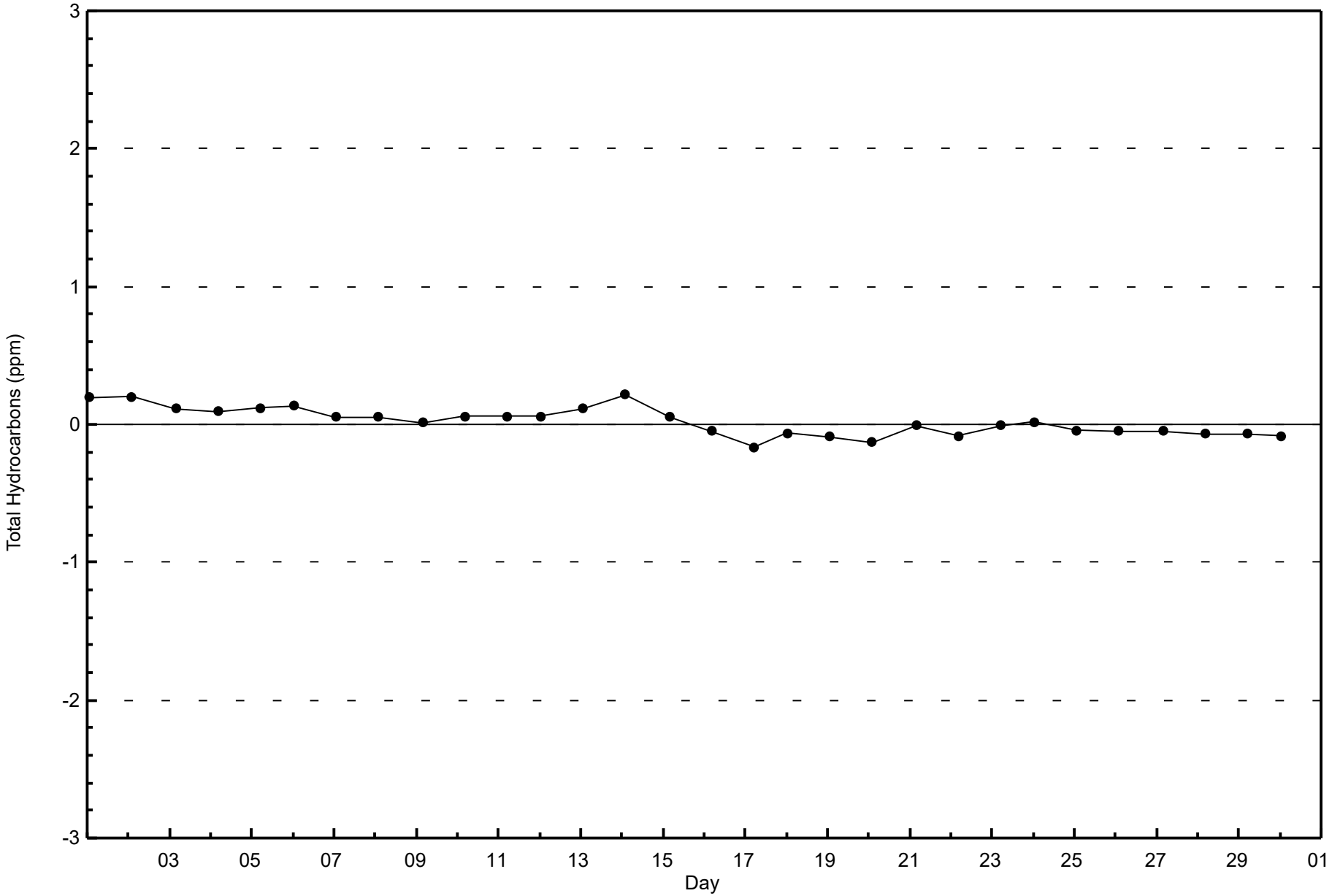
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Firebag - June 2026

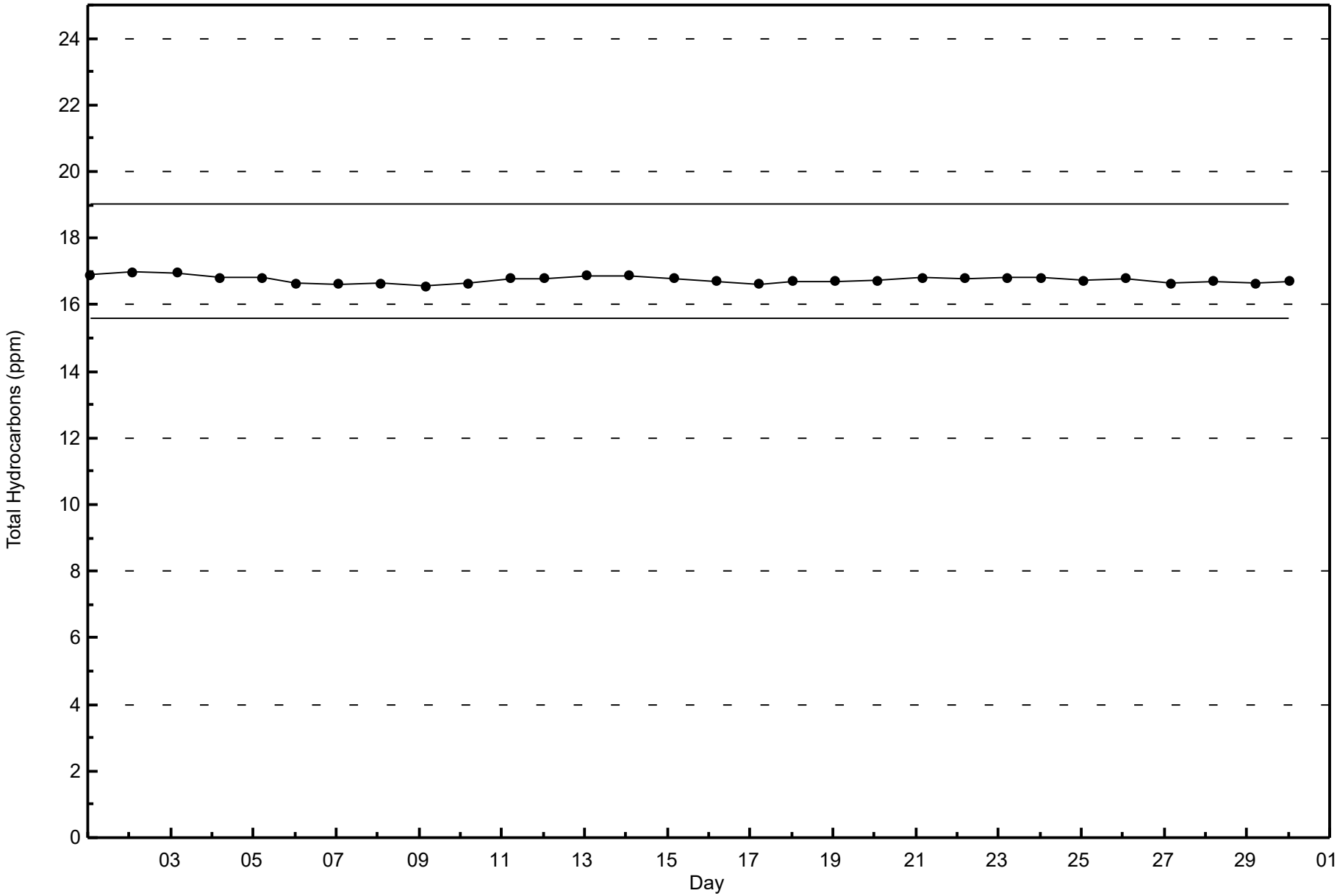


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Firebag - June 2026



Maximum Value: 8.8 ppb on Jun 24 06:00 — Maximum Daily Average: 0.7 ppb on Jun 19

Minimum Value: 0.0 ppb on Jun 28 21:00 — Minimum Daily Average: 0.0 ppb on Jun 17

Maximum Diurnal Average: 0.7 ppb at hour 6 — Minimum Diurnal Average: 0.1 ppb at hour 2

Monthly Average: 0.22 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} = 1.7

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-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1
2-Jun	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	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.4
3-Jun	0.2	Z	0.2	0.3	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.5	0.4	0.1	0.1	0.2	0.1	0.1	0.2	0.5
4-Jun	0.1	0.1	Z	0.1	0.1	0.3	0.4	0.3	0.2	0.2	0.5	0.3	0.3	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5
5-Jun	0.1	0.1	0.1	Z	0.3	1.2	1.7	1.5	0.6	0.5	0.6	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	0.4	1.7
6-Jun	0.1	0.1	0.1	0.1	Z	0.1	0.2	0.2	0.1	0.3	0.3	0.6	0.6	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.6
7-Jun	0.1	0.1	0.1	0.1	1.1	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	0.1	0.1	0.1	0.1	0.1	0.2	1.1
8-Jun	Z	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.4	0.3	0.4	0.1	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.4
9-Jun	0.0	Z	0.0	0.0	0.0	0.2	0.2	0.3	0.2	0.2	0.5	0.2	0.1	0.1	0.3	0.2	0.3	0.6	0.6	0.1	0.1	0.0	0.0	0.0	0.2	0.6
10-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.3	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	0.1	0.3
11-Jun	0.0	0.1	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
12-Jun	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1
13-Jun	0.1	0.0	0.0	0.3	2.4	Z	0.9	0.2	0.6	0.2	0.3	0.2	0.8	0.8	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.3	2.4
14-Jun	Z	0.0	0.0	0.1	0.3	0.6	1.9	1.1	0.6	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.9
15-Jun	0.0	Z	0.1	0.1	0.6	1.3	0.5	0.1	0.1	0.2	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.2	1.3
16-Jun	0.1	0.1	Z	0.2	0.2	0.2	0.2	0.2	0.5	0.4	0.7	0.4	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.7
17-Jun	0.0	0.1	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	0.0	0.0	0.0	0.0	0.0	0.1
18-Jun	0.0	0.1	0.0	0.0	Z	0.1	0.1	0.4	1.7	1.5	1.0	0.4	0.7	1.2	0.8	0.7	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.4	1.7
19-Jun	0.1	0.1	0.9	1.7	0.9	Z	5.4	3.2	1.1	0.9	0.1	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	0.7	5.4
20-Jun	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	0.1	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.0	0.0	0.1	0.3
21-Jun	0.0	Z	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.5	0.3	0.1	0.2	0.6	0.5	0.7	0.1	0.1	0.0	0.0	0.0	0.2	0.7
22-Jun	0.0	0.1	Z	1.0	1.1	0.6	0.5	0.4	1.6	0.2	C	C	C	C	C	0.6	0.1	0.2	0.1	0.2	0.4	0.2	0.0	0.0	0.4	1.6
23-Jun	0.0	0.0	0.1	Z	0.7	1.2	1.7	1.1	0.8	0.5	0.2	0.2	0.4	0.2	0.1	0.2	0.6	0.5	1.5	0.4	0.6	0.5	0.3	0.2	0.5	1.7
24-Jun	0.1	0.3	0.9	0.8	Z	8.8	0.5	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.0	0.1	0.6	8.8
25-Jun	0.0	0.0	0.0	0.1	2.1	Z	0.7	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.4	0.2	0.3	0.4	0.1	0.1	0.1	0.0	0.1	0.0	0.2	2.1
26-Jun	Z	0.0	0.1	0.1	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4
27-Jun	0.2	Z	0.1	0.2	0.3	0.3	0.1	1.0	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	0.0	0.1	0.1	0.2	1.0
28-Jun	0.0	0.0	Z	0.2	0.2	0.4	0.6	0.2	1.0	0.7	0.9	1.0	0.1	0.4	0.2	0.1	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.3	1.0
29-Jun	0.0	0.0	0.0	Z	0.1	0.2	0.4	1.0	0.5	0.5	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	1.0
30-Jun	0.1	0.1	0.1	0.1	Z	0.2	0.2	0.3	0.2	0.5	0.4	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.5
	0.1	0.1	0.1	0.2	0.5	0.7	0.6	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.2	0.3	0.9	1.7	2.4	8.8	5.4	3.2	1.7	1.5	1.0	1.0	0.8	1.2	0.8	0.7	0.6	0.6	1.5	0.4	0.6	0.5	0.4	0.2	Diurnal Maximum	

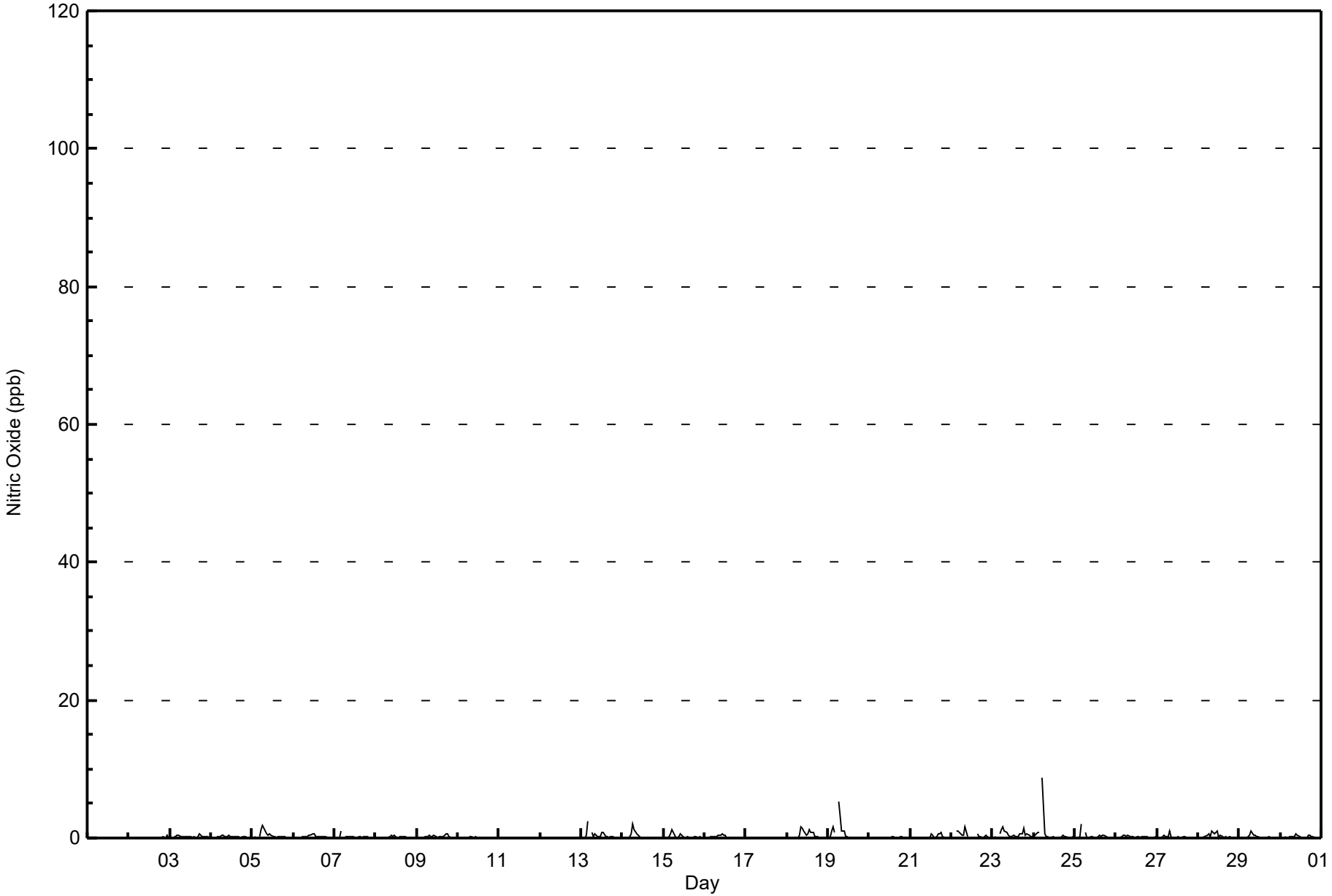
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Firebag - June 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

Firebag - June 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	128	64	43	34	29	52	43	42	42	34	42	27	18	34	20	33	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	128	64	43	34	29	52	43	42	42	34	42	27	18	34	20	33	685

Total Number of Valid Hours: 685

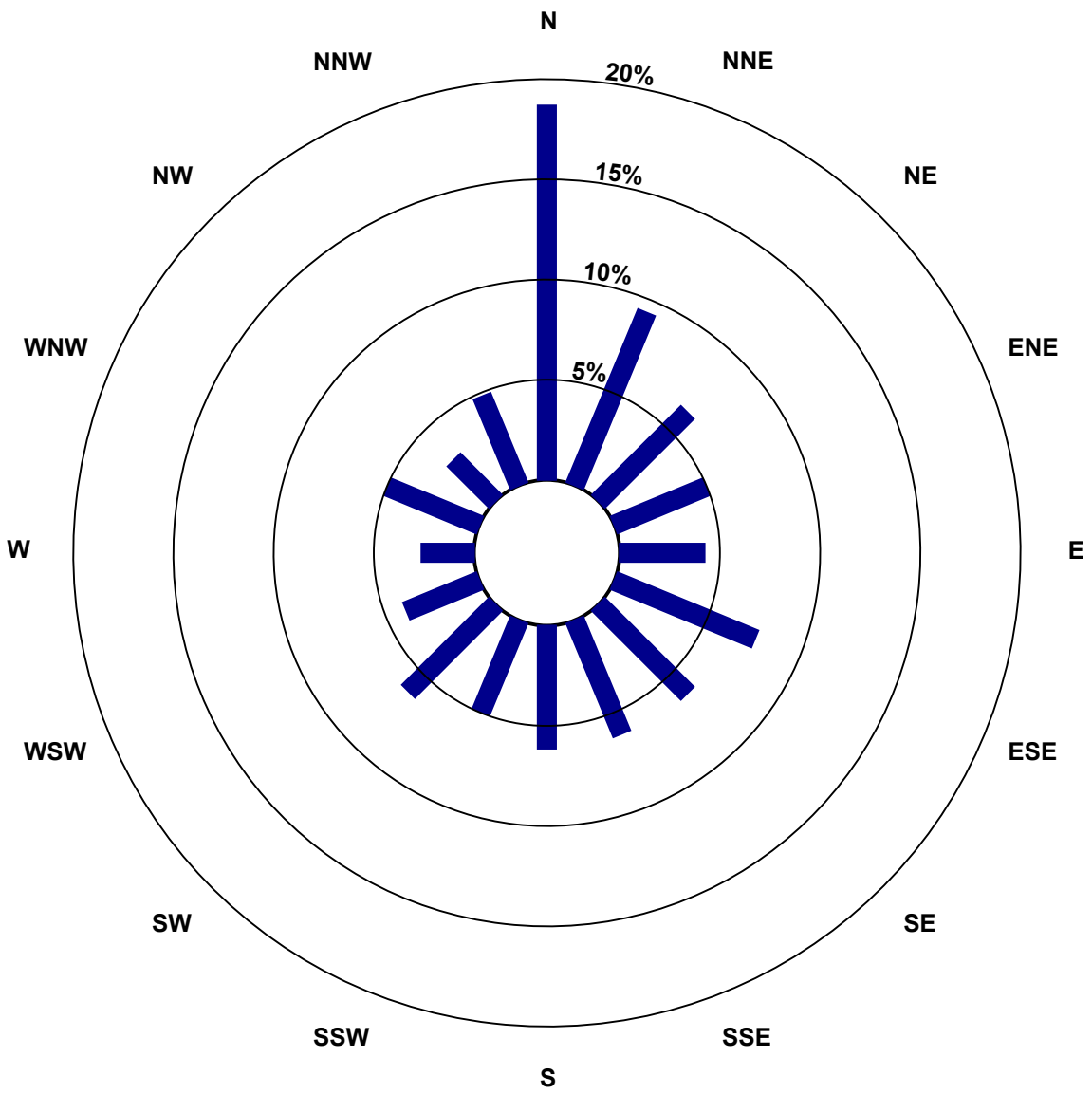
Total Number of Hours: 720

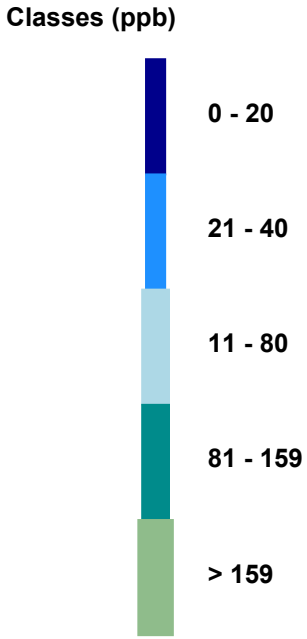
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Firebag





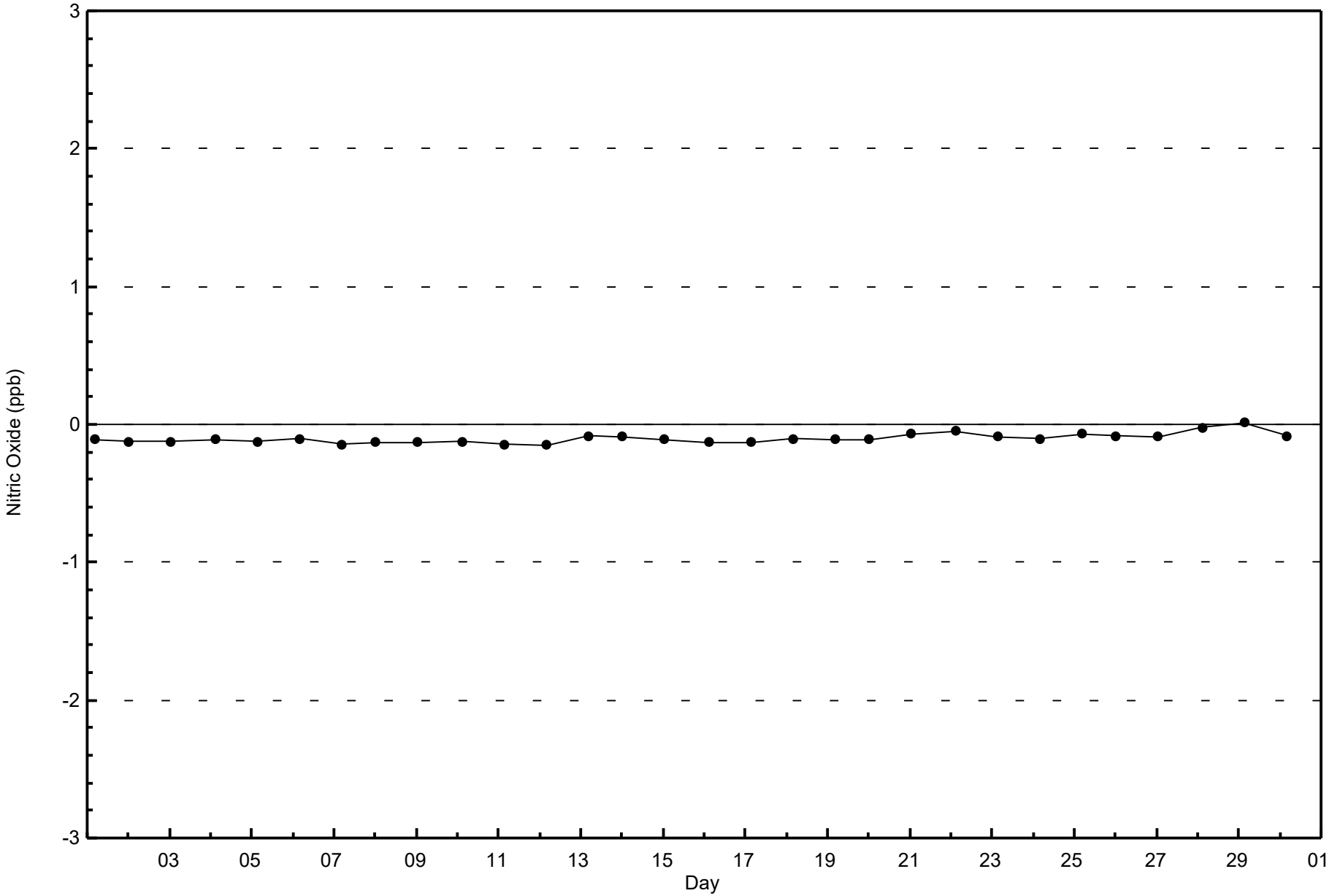
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Firebag - June 2026

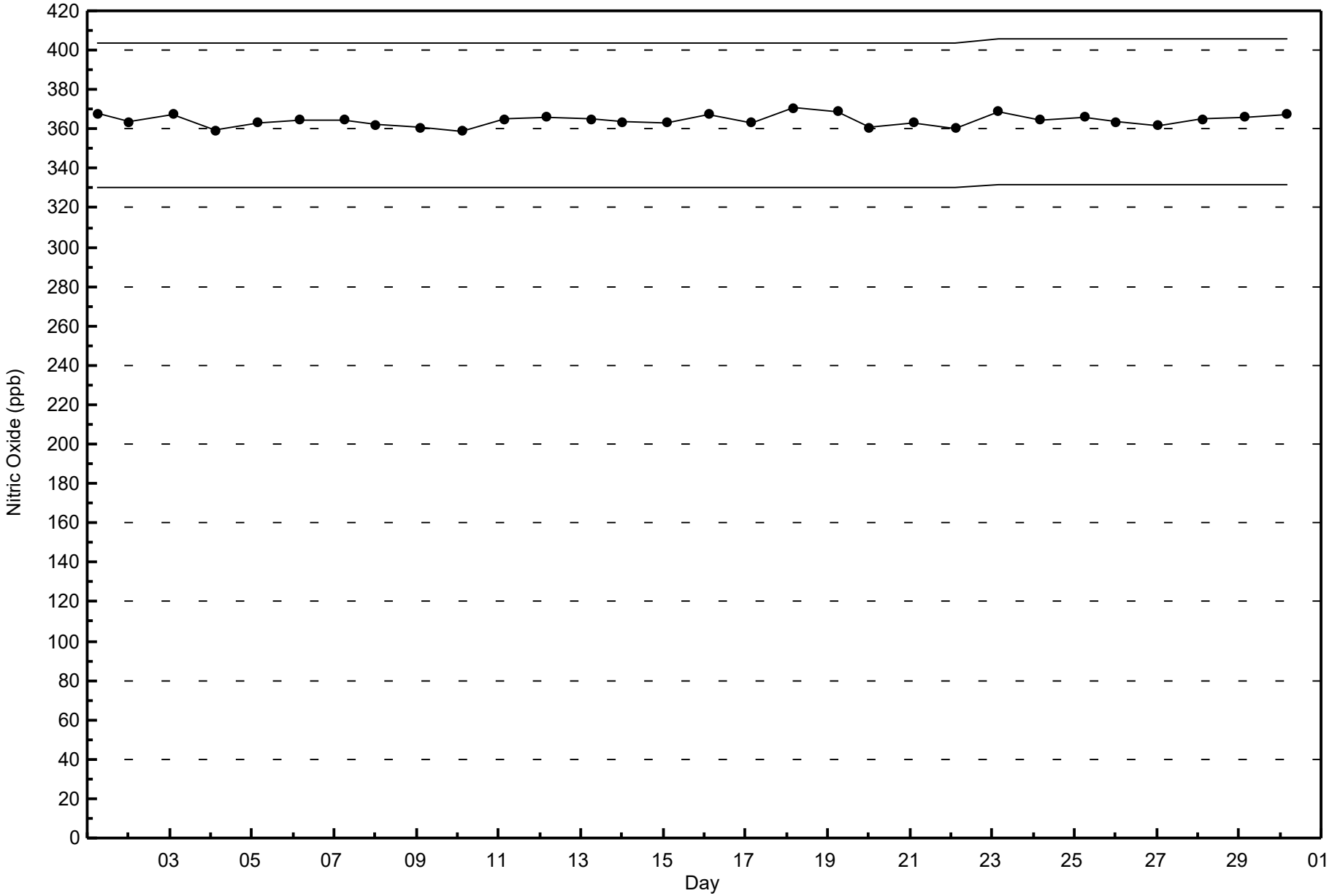


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Firebag - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Firebag - June 2026

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

Maximum Value: 15.3 ppb on Jun 19 03:00

Maximum Daily Average: 3.7 ppb on Jun 23

Minimum Value: 0.0 ppb on Jun 1 21:00

Minimum Daily Average: 0.1 ppb on Jun 17

Maximum Diurnal Average: 2.8 ppb at hour 4

Minimum Diurnal Average: 0.6 ppb at hour 15

Monthly Average: 1.32 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.2 Median = 0.8 Q_3 = 1.6 P_{90} = 2.9 P_{99} = 9.7

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-Jun	0.2	0.2	0.2	0.2	0.2	Z	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.2	0.1	0.1	0.2	0.3
2-Jun	Z	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.3	0.8	1.2	0.6	5.4	1.9	0.6	5.4
3-Jun	2.3	Z	1.0	1.7	2.2	1.4	1.0	0.7	0.5	0.4	0.4	0.4	0.3	0.2	0.4	0.3	0.4	0.8	0.6	0.4	0.5	0.9	0.7	0.3	0.8	2.3
4-Jun	0.2	0.2	Z	1.0	0.8	0.8	1.1	1.3	0.7	0.7	1.1	0.9	0.9	0.8	0.9	0.7	0.6	0.4	0.7	0.7	0.9	1.4	1.6	1.0	0.8	1.6
5-Jun	0.9	0.8	1.3	Z	3.1	4.2	4.2	3.3	1.8	1.7	2.1	1.6	1.5	1.2	0.9	0.9	1.2	1.1	1.1	1.1	0.8	1.7	1.3	0.8	1.7	4.2
6-Jun	0.7	0.6	1.4	2.6	Z	2.8	3.4	2.0	0.9	2.1	1.9	2.1	2.2	1.3	1.2	0.9	1.1	1.0	2.4	2.4	2.1	2.3	2.0	1.7	1.8	3.4
7-Jun	3.5	2.4	2.2	1.6	1.4	Z	0.6	0.5	0.6	0.4	0.4	0.4	0.4	0.4	0.7	1.0	0.4	0.8	1.0	1.1	1.1	0.8	0.3	0.3	1.0	3.5
8-Jun	Z	0.3	0.2	0.3	0.2	0.2	0.2	0.3	1.0	1.8	1.3	1.4	0.2	0.3	0.8	1.1	0.9	0.9	1.2	1.3	2.4	4.7	4.9	3.8	1.3	4.9
9-Jun	4.5	Z	5.4	3.4	1.2	3.7	1.8	2.3	0.8	0.7	1.3	0.6	0.3	0.5	1.2	1.3	1.7	2.2	2.3	1.3	1.7	0.9	0.3	0.2	1.7	5.4
10-Jun	0.2	0.2	Z	0.3	0.2	0.2	0.2	0.4	0.7	0.3	1.0	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.4	0.3	0.3	1.0
11-Jun	0.3	0.2	0.6	Z	0.3	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	0.0	0.1	0.5	0.2	0.1	0.2	0.6
12-Jun	0.3	0.5	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	0.5	1.1	1.4	0.7	0.3	1.4
13-Jun	0.4	0.8	1.5	5.2	5.8	Z	2.4	0.8	1.7	0.9	0.9	1.0	2.6	2.7	1.2	0.9	0.6	1.1	1.4	1.2	1.6	1.5	2.9	1.6	1.8	5.8
14-Jun	Z	2.4	3.9	4.9	4.8	5.1	6.3	3.9	2.5	1.5	0.7	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.7	6.3
15-Jun	0.2	Z	3.3	2.2	2.8	2.9	1.2	0.1	0.1	0.5	1.6	0.9	0.2	0.3	0.5	0.5	0.5	0.4	0.8	1.7	1.1	3.8	0.7	0.7	1.2	3.8
16-Jun	0.9	0.3	Z	1.4	1.3	0.9	0.7	0.8	1.2	1.0	1.4	1.0	1.1	0.2	0.2	0.2	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.0	0.6	1.4
17-Jun	0.2	0.1	0.0	Z	0.2	0.1	0.1	0.2	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	0.2
18-Jun	0.1	0.1	0.7	0.6	Z	0.3	0.3	1.6	3.7	2.7	2.1	1.1	1.6	2.2	1.1	1.7	0.4	0.9	0.3	0.1	0.3	4.9	2.5	1.3	1.3	4.9
19-Jun	2.8	9.6	15.3	13.3	5.5	Z	8.5	4.8	2.0	1.5	0.4	0.4	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.8	15.3
20-Jun	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	0.8	0.5	0.1	0.1	0.1	0.9	0.6	0.5	0.3	0.1	0.1	0.2	0.9
21-Jun	0.2	Z	0.6	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.1	1.2	0.8	0.3	0.6	2.3	1.8	3.1	0.8	0.5	0.6	2.8	1.6	0.8	3.1
22-Jun	0.7	1.4	Z	2.7	2.7	1.5	0.9	0.8	2.7	0.9	C	C	C	C	C	1.6	1.0	0.6	0.3	2.0	3.6	3.3	6.6	1.5	1.9	6.6
23-Jun	1.2	1.2	6.8	Z	6.0	4.6	3.9	2.5	1.8	1.4	1.5	2.1	2.8	1.6	1.3	2.3	3.7	2.4	2.7	1.4	4.3	8.0	10.6	10.3	3.7	10.6
24-Jun	11.3	11.8	9.6	13.0	Z	9.1	1.6	0.9	1.1	0.5	0.6	0.8	0.7	0.6	0.7	1.1	2.8	1.6	1.0	1.5	1.4	0.8	0.6	1.1	3.2	13.0
25-Jun	0.7	0.8	1.0	3.0	3.9	Z	2.7	0.8	0.6	0.7	0.8	0.6	0.6	0.7	1.5	0.8	1.6	1.9	0.9	0.7	0.7	0.9	0.7	0.6	1.2	3.9
26-Jun	Z	0.9	0.8	1.4	2.1	2.0	1.5	1.6	1.1	1.0	0.8	0.7	0.7	0.6	0.6	0.9	1.0	0.9	0.8	0.6	0.9	1.2	1.0	1.8	1.1	2.1
27-Jun	1.9	Z	0.8	1.1	1.9	1.2	0.7	1.6	0.8	0.6	0.6	0.5	0.7	0.6	0.6	0.7	1.1	0.9	0.9	1.1	1.1	3.6	3.4	4.2	1.3	4.2
28-Jun	1.8	1.8	Z	4.7	4.8	5.5	5.9	1.8	3.9	2.6	3.1	3.2	0.7	2.2	1.3	1.1	1.9	1.1	2.3	1.7	0.9	0.7	0.7	1.3	2.4	5.9
29-Jun	1.9	2.1	2.8	Z	3.6	2.6	2.4	4.5	2.6	2.9	2.4	1.6	0.8	0.6	0.5	0.8	1.3	2.9	2.1	1.4	1.6	1.8	1.9	1.9	2.0	4.5
30-Jun	1.3	1.1	1.3	3.8	Z	3.2	2.3	2.2	2.0	3.4	2.7	1.1	0.9	0.8	0.8	0.9	2.4	2.6	1.3	1.6	1.3	1.3	2.7	1.4	1.8	3.8
	1.5	1.6	2.4	2.8	2.2	2.1	1.8	1.3	1.2	1.0	1.0	0.8	0.7	0.7	0.6	0.7	0.9	0.9	1.0	0.9	1.1	1.6	1.9	1.4	Diurnal Average	
	11.3	11.8	15.3	13.3	6.0	9.1	8.5	4.8	3.9	3.4	3.1	3.2	2.8	2.7	1.5	2.3	3.7	2.9	3.1	2.4	4.3	8.0	10.6	10.3	Diurnal Maximum	

Z - zerospan C - Calibration

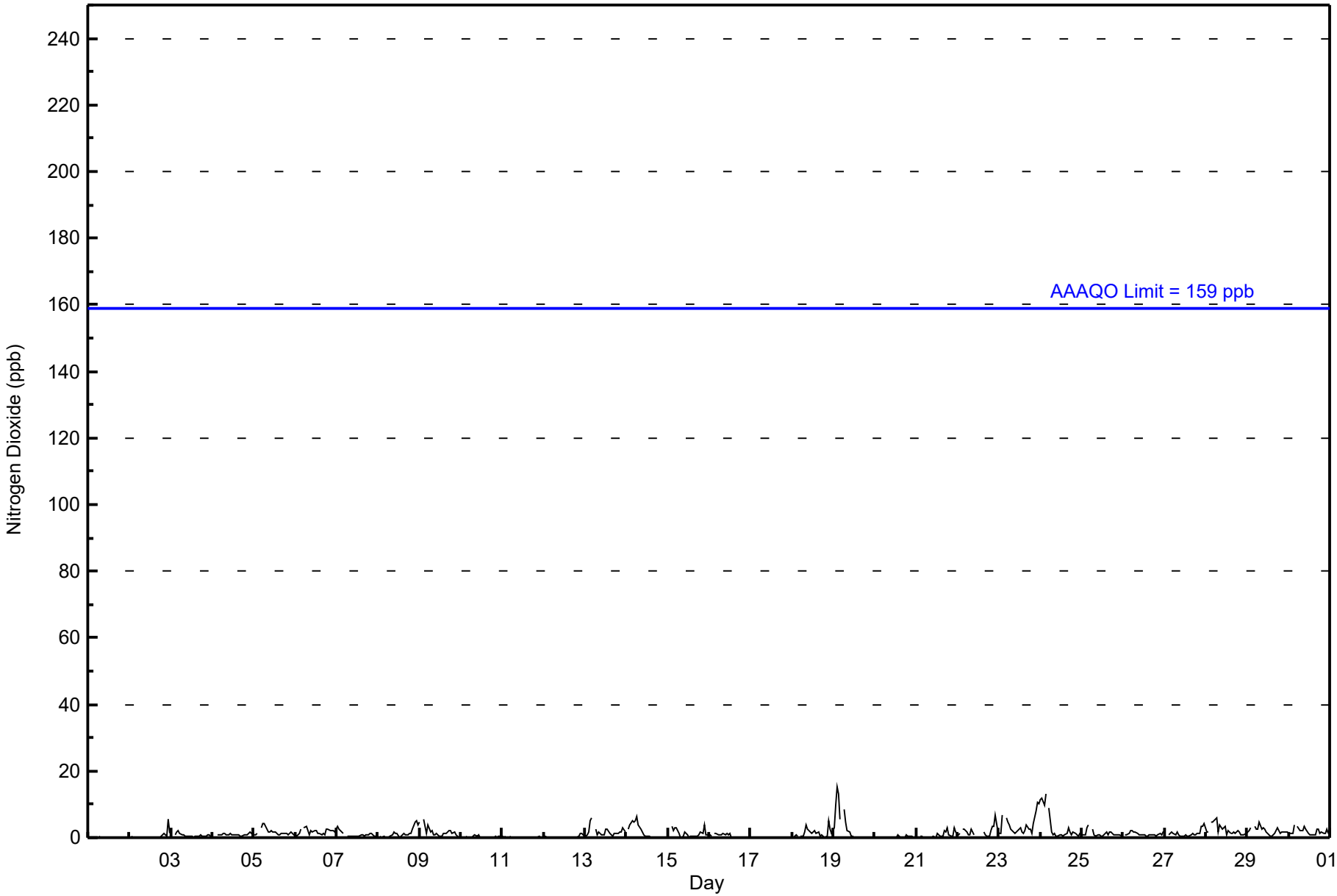
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Firebag - June 2026



Nitrogen Dioxide (NO_2) - ppb

Firebag - June 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 - June 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	128	64	43	34	29	52	43	42	42	34	42	27	18	34	20	33	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	128	64	43	34	29	52	43	42	42	34	42	27	18	34	20	33	685

Total Number of Valid Hours: 685

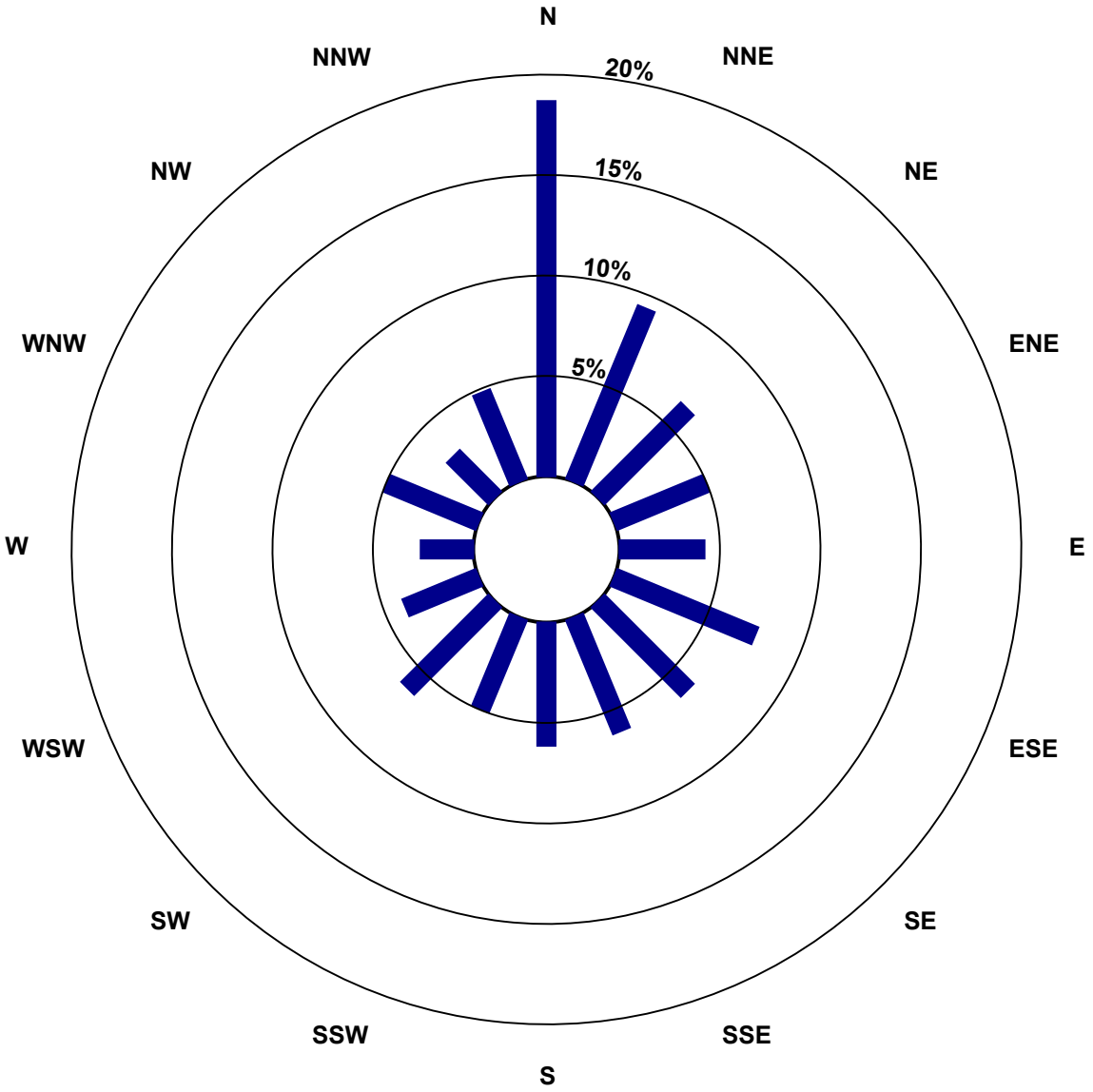
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Firebag



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

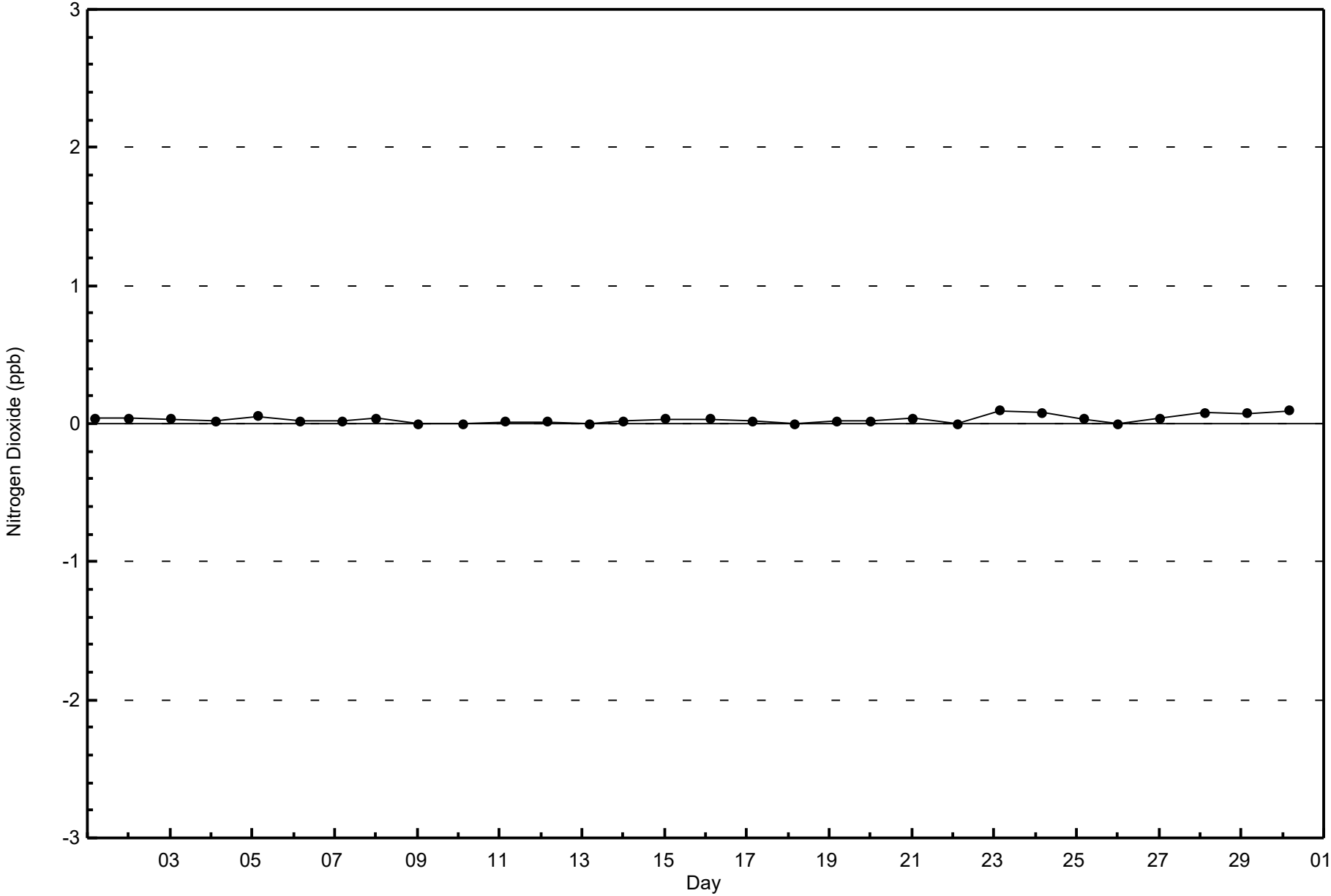
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Firebag - June 2026

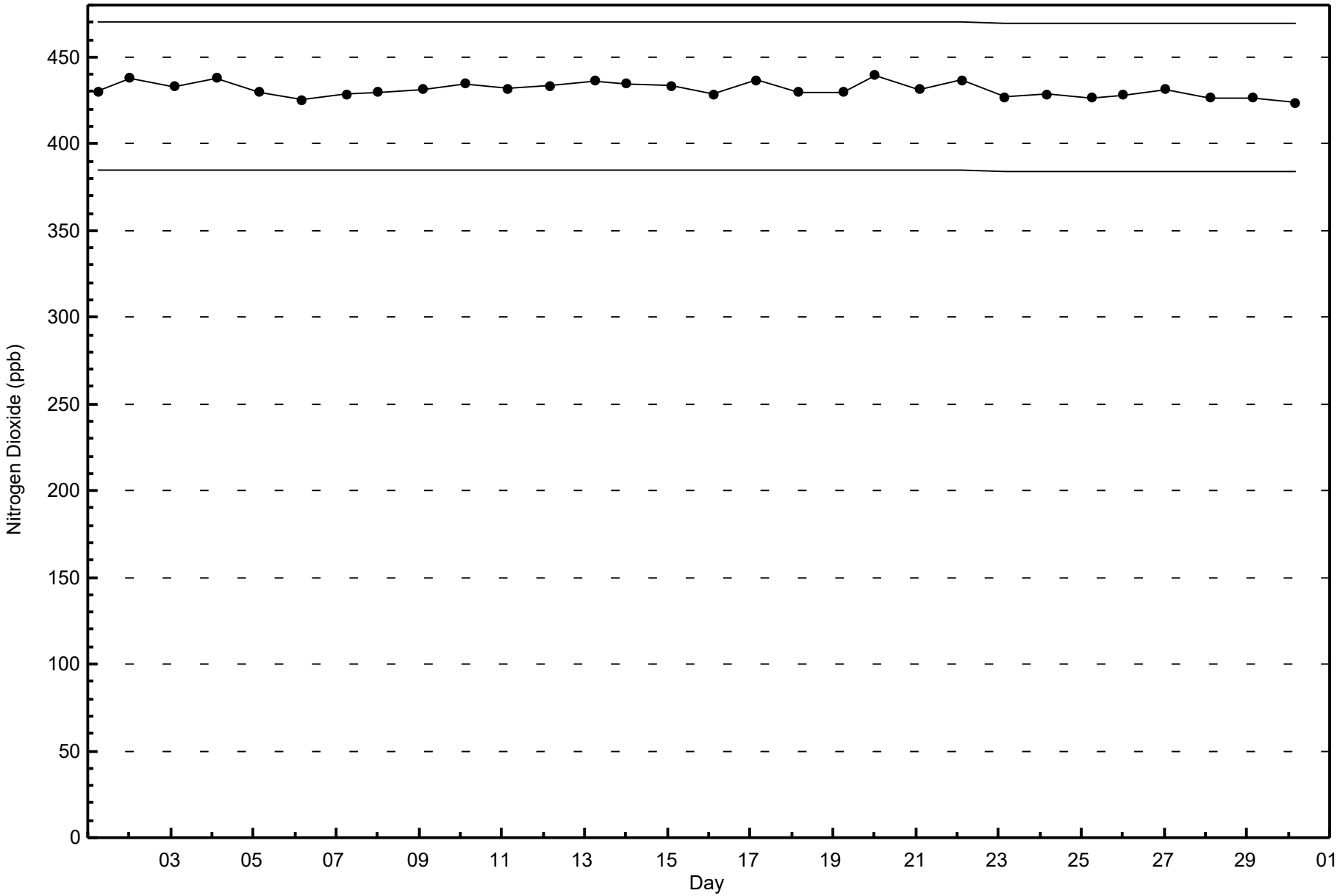


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Firebag - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Firebag - June 2026

Maximum Value: 17.9 ppb on Jun 24 06:00

Maximum Daily Average: 4.2 ppb on Jun 23

Minimum Value: 0.1 ppb on Jun 20 12:00

Minimum Daily Average: 0.1 ppb on Jun 17

Maximum Diurnal Average: 3.0 ppb at hour 4

Minimum Diurnal Average: 0.7 ppb at hour 15

Monthly Average: 1.54 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.3 Median = 0.9 Q_3 = 1.9 P_{90} = 3.5 P_{99} = 11.0

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-Jun	0.2	0.2	0.2	0.2	0.2	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.3
2-Jun	Z	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.4	0.9	1.3	0.7	5.8	2.0	0.6	5.8
3-Jun	2.5	Z	1.2	2.0	2.7	1.8	1.3	0.9	0.7	0.6	0.6	0.5	0.4	0.3	0.6	0.4	0.6	1.3	1.0	0.5	0.6	1.1	0.8	0.4	1.0	2.7
4-Jun	0.3	0.3	Z	1.1	0.9	1.1	1.5	1.6	0.9	0.9	1.6	1.2	1.2	0.9	1.0	0.8	0.8	0.5	0.8	0.8	1.0	1.5	1.7	1.1	1.0	1.7
5-Jun	1.0	0.9	1.4	Z	3.4	5.4	5.9	4.8	2.4	2.2	2.7	1.9	1.7	1.4	1.0	1.0	1.3	1.2	1.2	1.2	0.9	1.8	1.4	0.9	2.0	5.9
6-Jun	0.8	0.7	1.5	2.7	Z	2.9	3.6	2.2	1.0	2.4	2.2	2.7	2.8	1.5	1.4	1.0	1.3	1.1	2.6	2.5	2.2	2.4	2.1	1.8	2.0	3.6
7-Jun	3.6	2.5	2.3	1.7	2.5	Z	0.8	0.7	0.8	0.5	0.5	0.5	0.5	0.5	0.8	1.2	0.5	0.9	1.2	1.2	1.2	0.9	0.4	0.4	1.1	3.6
8-Jun	Z	0.4	0.3	0.3	0.3	0.3	0.3	0.4	1.2	2.2	1.6	1.8	0.3	0.3	0.9	1.3	1.1	1.0	1.3	1.4	2.5	4.7	4.9	3.8	1.4	4.9
9-Jun	4.5	Z	5.4	3.4	1.2	3.9	2.0	2.6	1.0	0.9	1.8	0.8	0.4	0.6	1.5	1.5	2.0	2.8	2.9	1.4	1.8	0.9	0.3	0.2	1.9	5.4
10-Jun	0.2	0.2	Z	0.3	0.2	0.2	0.2	0.5	0.9	0.3	1.3	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.4	0.3	0.3	1.3
11-Jun	0.3	0.3	0.6	Z	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.6	0.3	0.2	0.2	0.6
12-Jun	0.4	0.6	0.2	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	0.5	1.2	1.4	0.8	0.3	1.4
13-Jun	0.5	0.8	1.5	5.5	8.2	Z	3.3	1.0	2.3	1.1	1.2	1.2	3.4	3.5	1.4	1.0	0.7	1.2	1.5	1.3	1.7	1.6	3.0	1.6	2.1	8.2
14-Jun	Z	2.4	3.9	5.0	5.1	5.7	8.2	5.0	3.1	1.8	0.8	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	1.9	8.2
15-Jun	0.2	Z	3.4	2.3	3.4	4.2	1.7	0.2	0.2	0.7	2.1	1.1	0.3	0.4	0.6	0.6	0.6	0.5	1.0	1.9	1.2	4.0	0.8	0.8	1.4	4.2
16-Jun	1.0	0.4	Z	1.6	1.5	1.1	0.9	1.0	1.7	1.4	2.1	1.4	1.4	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.7	2.1
17-Jun	0.2	0.2	0.1	Z	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
18-Jun	0.1	0.2	0.7	0.6	Z	0.4	0.4	2.0	5.4	4.2	3.1	1.5	2.3	3.4	1.9	2.4	0.6	1.1	0.4	0.2	0.4	5.0	2.6	1.4	1.8	5.4
19-Jun	2.9	9.7	16.2	15.0	6.4	Z	13.9	8.0	3.1	2.4	0.5	0.7	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3.5	16.2
20-Jun	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	1.0	0.6	0.1	0.1	0.1	1.2	0.8	0.5	0.3	0.1	0.1	0.3	1.2
21-Jun	0.2	Z	0.7	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.4	0.2	1.7	1.1	0.4	0.8	2.9	2.3	3.8	0.9	0.6	0.6	2.8	1.6	1.0	3.8
22-Jun	0.7	1.5	Z	3.7	3.8	2.1	1.4	1.2	4.3	1.1	C	C	C	C	C	2.2	1.1	0.8	0.4	2.2	4.0	3.5	6.6	1.5	2.3	6.6
23-Jun	1.2	1.2	6.9	Z	6.7	5.8	5.6	3.6	2.6	1.9	1.7	2.3	3.2	1.8	1.4	2.5	4.3	2.9	4.2	1.8	4.9	8.5	10.9	10.5	4.2	10.9
24-Jun	11.4	12.1	10.5	13.8	Z	17.9	2.1	1.1	1.3	0.6	0.7	0.9	0.8	0.7	0.8	1.2	3.0	1.9	1.2	1.6	1.5	0.9	0.6	1.2	3.8	17.9
25-Jun	0.7	0.8	1.0	3.1	6.0	Z	3.4	0.9	0.7	0.8	0.9	0.7	0.6	0.8	1.9	1.0	1.9	2.3	1.0	0.8	0.8	0.9	0.8	0.6	1.4	6.0
26-Jun	Z	0.9	0.9	1.5	2.5	2.4	1.8	1.9	1.3	1.2	0.9	0.8	0.8	0.7	0.7	1.1	1.2	1.1	0.9	0.7	1.0	1.3	1.1	1.9	1.2	2.5
27-Jun	2.1	Z	0.9	1.3	2.2	1.5	0.8	2.6	1.0	0.7	0.7	0.6	0.8	0.7	0.7	0.8	1.3	1.0	1.0	1.2	1.2	3.6	3.5	4.3	1.5	4.3
28-Jun	1.8	1.8	Z	4.9	5.0	5.9	6.5	2.0	4.9	3.3	4.0	4.2	0.8	2.6	1.5	1.2	2.2	1.2	2.4	1.7	0.9	0.7	0.7	1.3	2.7	6.5
29-Jun	1.9	2.1	2.8	Z	3.7	2.8	2.8	5.5	3.1	3.4	2.6	1.7	0.8	0.6	0.5	0.8	1.4	3.1	2.2	1.5	1.7	1.9	2.0	2.0	2.2	5.5
30-Jun	1.4	1.2	1.4	3.9	Z	3.4	2.5	2.5	2.2	3.9	3.1	1.2	1.0	0.9	0.9	1.0	2.7	2.9	1.4	1.7	1.4	1.3	2.8	1.5	2.0	3.9
	1.6	1.7	2.6	3.0	2.7	2.8	2.4	1.8	1.6	1.3	1.3	1.0	0.9	0.9	0.7	0.8	1.1	1.1	1.2	1.0	1.2	1.7	1.9	1.4	Diurnal Average	
	11.4	12.1	16.2	15.0	8.2	17.9	13.9	8.0	5.4	4.2	4.0	4.2	3.4	3.5	1.9	2.5	4.3	3.1	4.2	2.5	4.9	8.5	10.9	10.5	Diurnal Maximum	

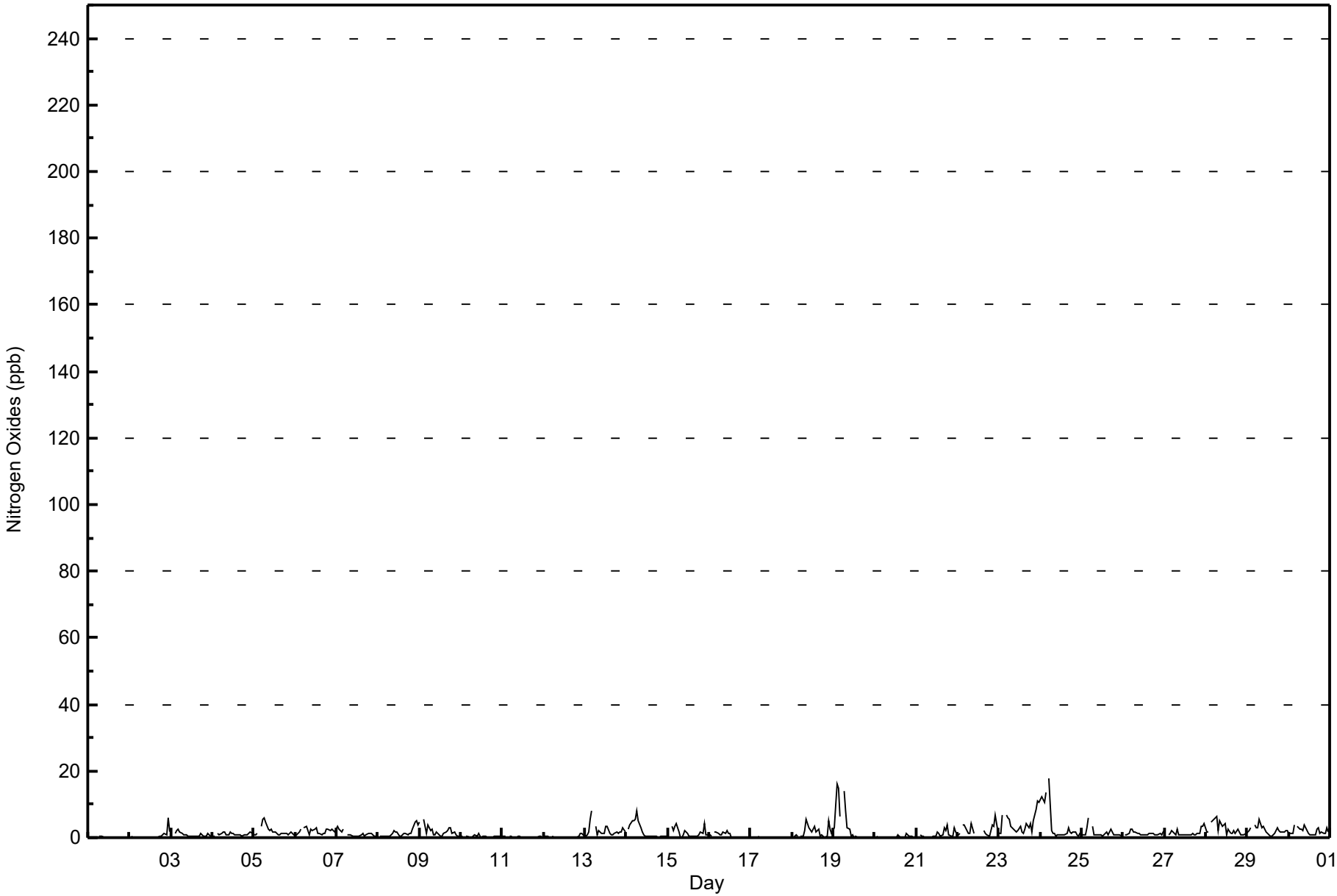
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Firebag - June 2026



Nitrogen Oxides (NO_X) - ppb

Firebag - June 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

Firebag - June 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	128	64	43	34	29	52	43	42	42	34	42	27	18	34	20	33	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	128	64	43	34	29	52	43	42	42	34	42	27	18	34	20	33	685

Total Number of Valid Hours: 685

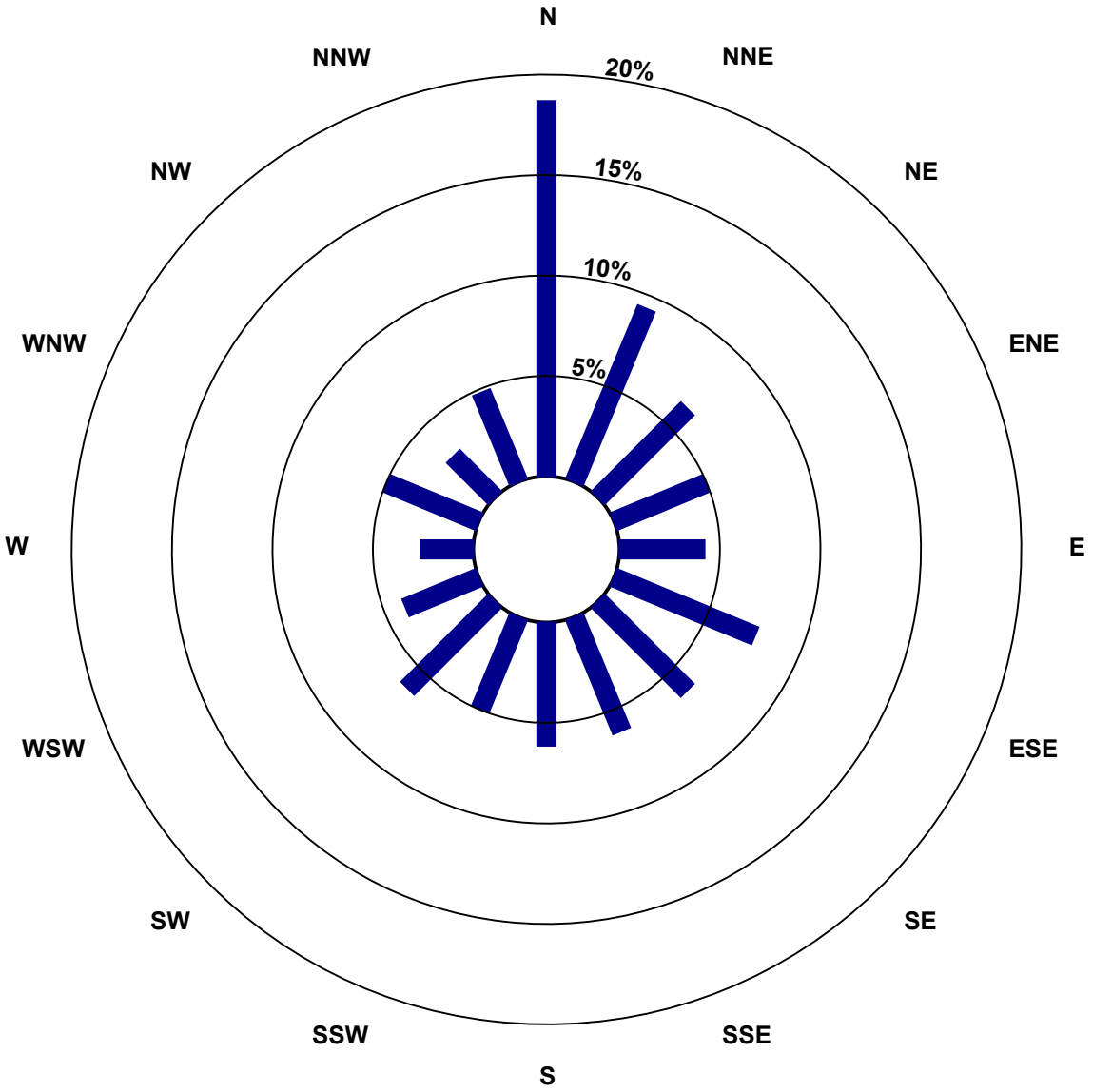
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Firebag



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

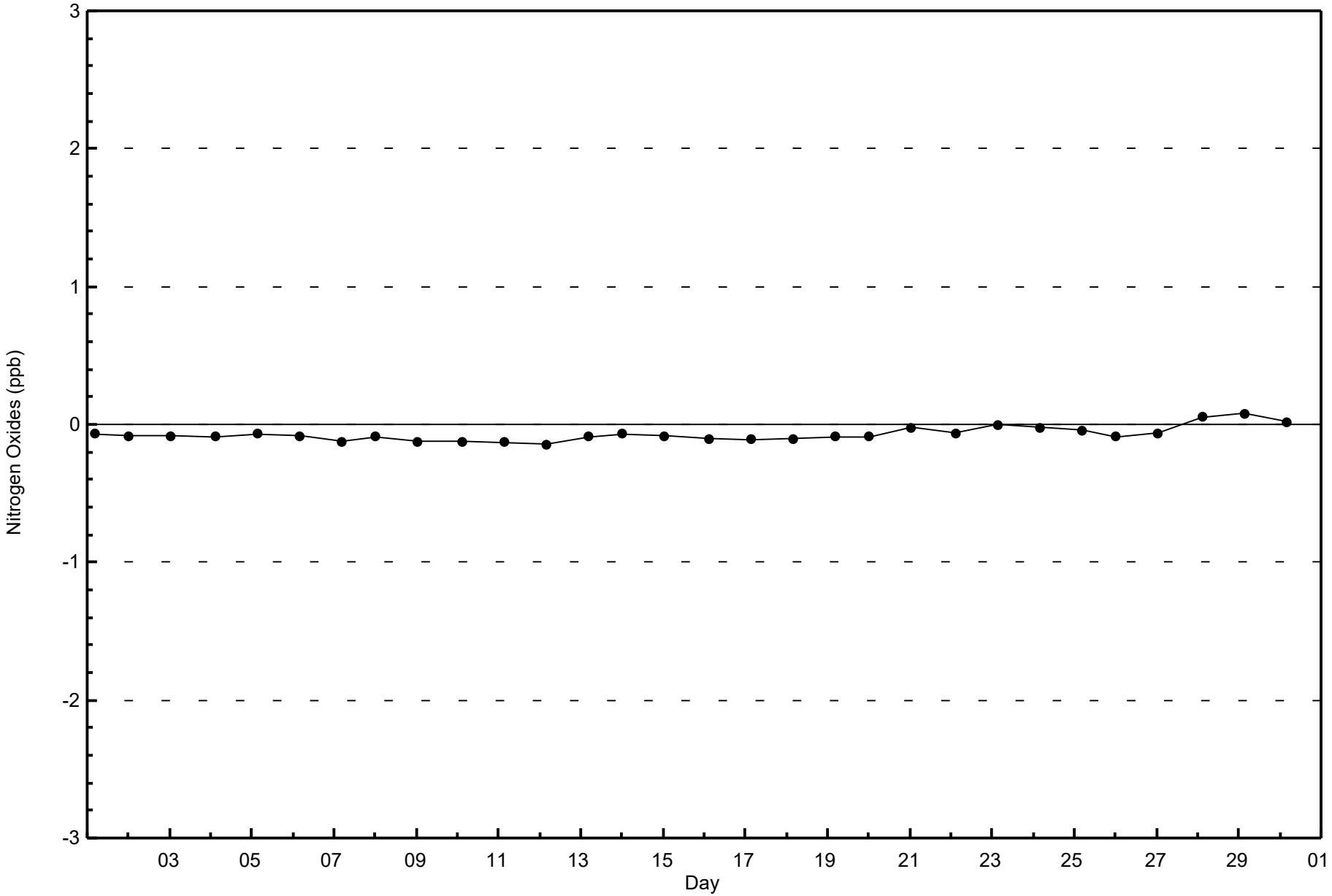
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Firebag - June 2026

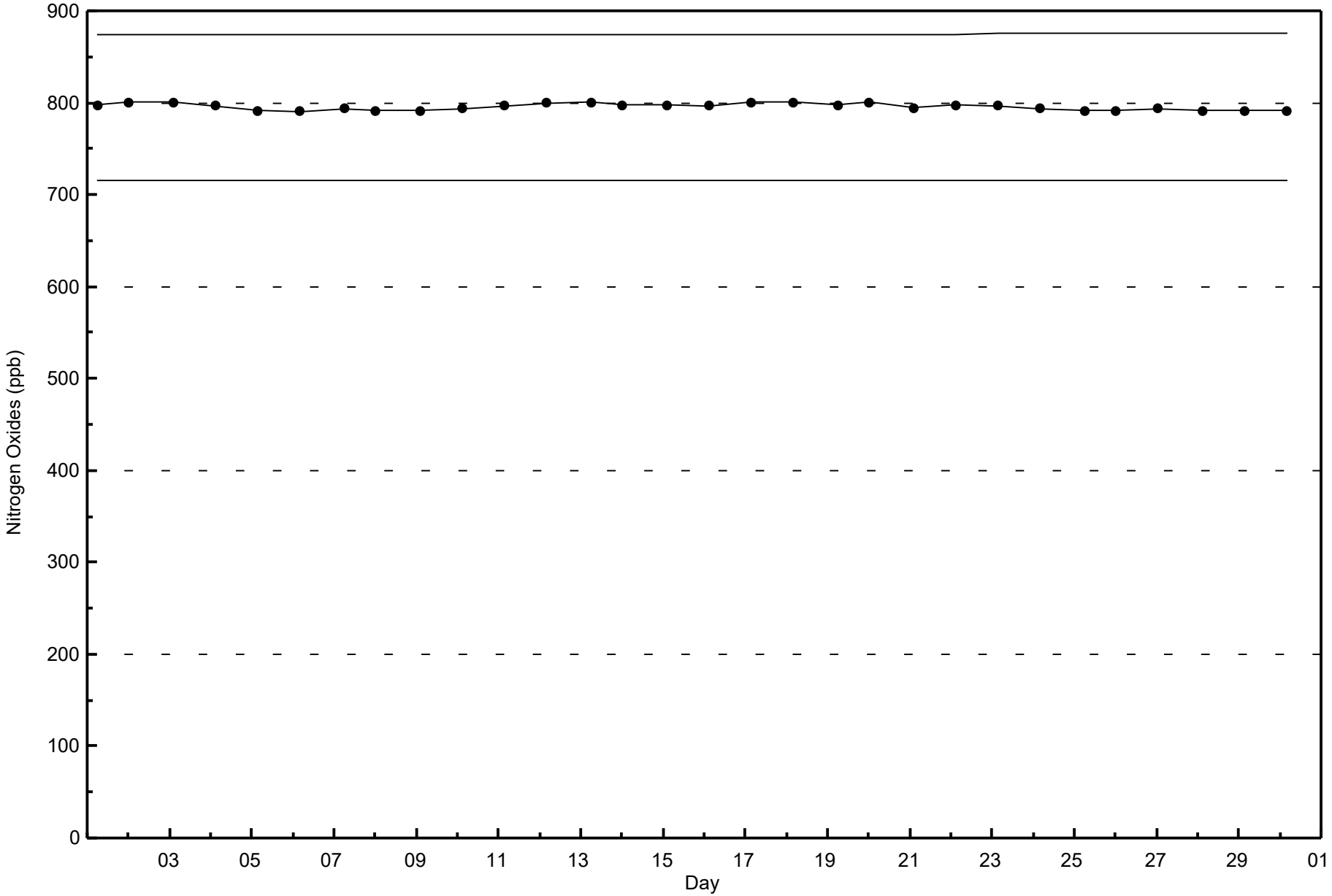


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Firebag - June 2026



Maximum Value: 28.4 C on Jun 28 17:00

Maximum Daily Average: 23.3 C on Jun 28

Minimum Value: 5.0 C on Jun 11 05:00

Minimum Daily Average: 6.5 C on Jun 11

Maximum Diurnal Average: 17.9 C at hour 16

Minimum Diurnal Average: 10.2 C at hour 4

Monthly Average: 14.52 C

Percentiles: P_1 = 5.4 P_{10} = 7.6 Q_1 = 9.7 Median = 14.0 Q_3 = 18.8 P_{90} = 23.0 P_{99} = 27.4

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

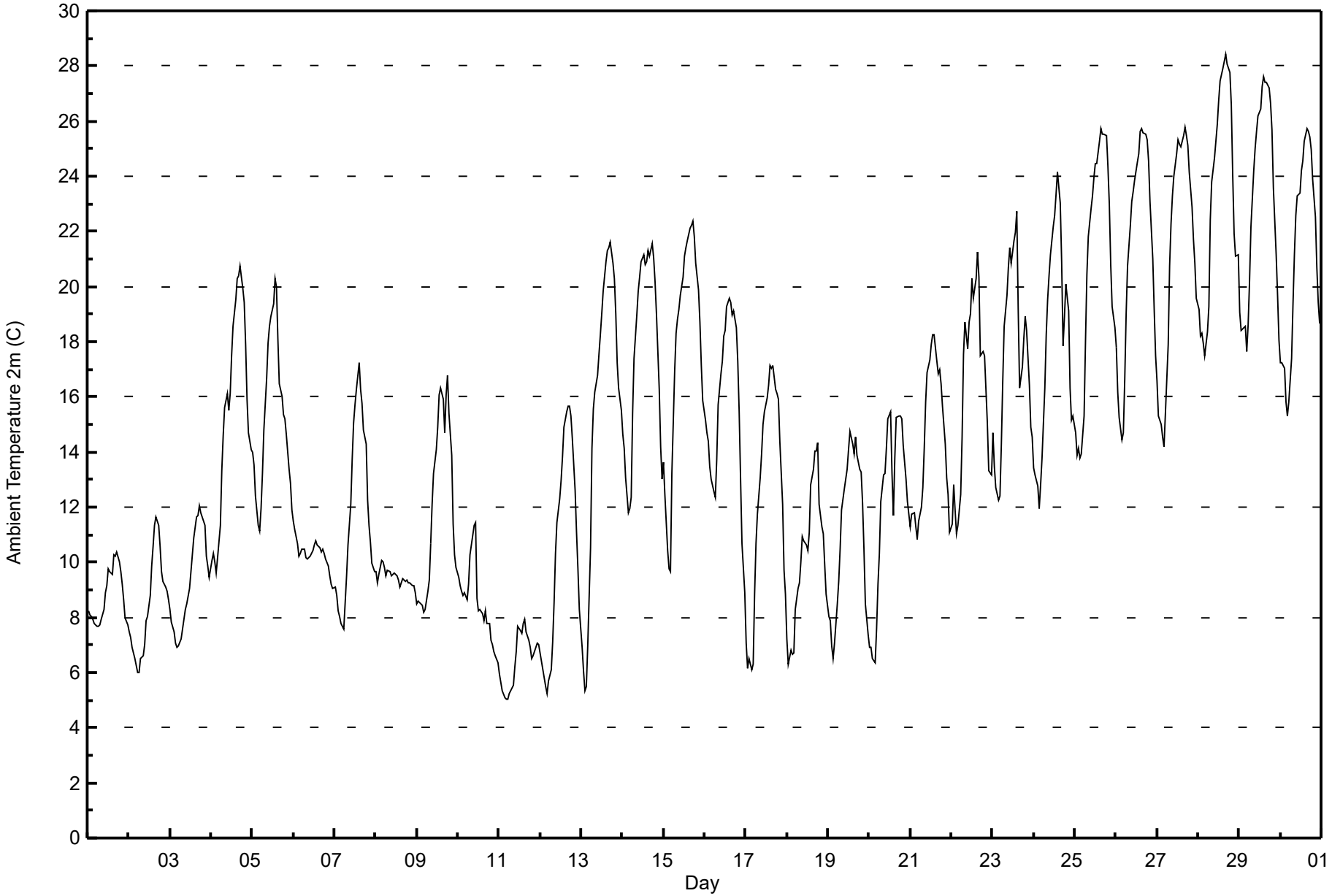
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	8.2	8.1	8.1	7.9	7.8	7.7	7.7	7.7	7.9	8.3	8.9	9.1	9.8	9.7	9.6	10.3	10.2	10.4	10.0	9.7	9.2	8.6	8.0	7.7	8.8	10.4
2-Jun	7.5	7.3	6.9	6.5	6.3	6.0	6.0	6.5	6.6	7.0	7.9	8.0	8.8	9.8	10.6	11.4	11.7	11.3	10.6	9.7	9.3	9.1	8.9	8.7	8.4	11.7
3-Jun	8.3	7.8	7.5	7.1	6.9	7.0	7.2	7.6	7.9	8.3	8.5	9.0	9.7	10.3	10.9	11.6	11.7	12.1	11.8	11.6	11.3	10.2	9.8	9.5	9.3	12.1
4-Jun	10.1	10.3	10.0	9.6	10.2	11.3	13.3	14.6	15.6	16.1	15.5	16.1	17.5	18.6	19.5	20.3	20.4	20.7	19.9	19.4	17.9	15.9	14.7	14.1	15.5	20.7
5-Jun	14.0	13.5	12.4	11.4	11.1	12.0	13.2	14.8	16.7	17.9	18.5	18.9	19.4	20.3	20.0	18.1	16.5	16.0	15.4	15.2	14.6	13.4	12.9	11.9	15.3	20.3
6-Jun	11.5	11.2	10.7	10.2	10.3	10.5	10.5	10.2	10.1	10.2	10.2	10.4	10.6	10.8	10.6	10.5	10.4	10.5	10.3	10.1	9.8	9.5	9.2	9.1	10.3	11.5
7-Jun	9.1	8.8	8.2	8.0	7.8	7.6	8.6	9.5	10.6	12.1	13.7	15.0	15.7	16.3	17.2	16.3	15.8	14.8	14.3	12.2	11.3	10.7	10.0	9.7	11.8	17.2
8-Jun	9.6	9.3	9.6	10.1	10.0	9.8	9.5	9.7	9.6	9.5	9.5	9.6	9.5	9.4	9.1	9.3	9.4	9.3	9.4	9.3	9.2	9.2	9.1	8.9	9.5	10.1
9-Jun	8.5	8.6	8.5	8.5	8.2	8.3	8.9	9.4	10.7	12.1	13.2	14.1	14.9	16.1	16.3	15.9	14.7	16.1	16.8	15.4	13.9	11.4	10.3	9.8	12.1	16.8
10-Jun	9.5	9.2	8.9	8.8	8.9	8.7	9.2	10.3	10.6	11.3	11.4	8.7	8.2	8.3	8.2	7.9	8.2	7.8	7.8	7.2	7.0	6.8	6.6	6.4	8.6	11.4
11-Jun	6.0	5.6	5.4	5.1	5.0	5.1	5.2	5.3	5.6	6.2	6.8	7.7	7.5	7.4	7.8	7.9	7.5	7.2	6.9	6.5	6.6	6.9	7.1	7.0	6.5	7.9
12-Jun	6.7	6.4	5.8	5.5	5.2	5.7	6.1	7.1	8.6	10.3	11.4	12.3	13.0	13.9	14.9	15.5	15.7	15.7	15.3	14.5	12.6	11.1	9.8	8.3	10.5	15.7
13-Jun	6.9	6.1	5.4	5.5	6.9	10.5	14.1	15.5	16.2	16.8	17.5	18.3	19.0	19.8	20.9	21.3	21.4	21.6	20.8	20.3	19.0	17.2	16.3	15.5	15.5	21.6
14-Jun	14.6	14.1	13.1	11.8	11.9	12.4	15.4	17.4	19.0	19.8	20.3	20.9	21.1	20.8	20.9	21.3	21.1	21.6	21.0	20.2	19.0	16.3	14.2	13.0	17.6	21.6
15-Jun	13.6	12.5	10.4	9.8	9.6	13.2	17.0	18.3	18.8	19.1	19.7	20.4	21.1	21.4	21.7	22.1	22.2	22.4	21.8	20.8	19.9	18.7	17.1	15.8	17.8	22.4
16-Jun	15.2	14.7	14.4	13.5	13.0	12.6	12.3	13.7	15.7	16.9	17.3	18.2	18.4	19.3	19.6	19.4	19.0	19.1	18.5	17.3	15.5	13.0	10.7	8.9	15.7	19.6
17-Jun	7.0	6.1	6.5	6.1	6.3	8.9	10.7	11.8	13.1	14.0	15.0	15.5	16.0	16.4	17.1	17.0	17.1	16.3	16.1	15.9	14.4	12.1	9.7	8.8	12.4	17.1
18-Jun	7.2	6.3	6.8	6.6	6.7	8.3	9.0	9.2	10.0	10.9	10.8	10.6	10.4	11.1	12.8	13.4	14.0	14.0	14.3	12.1	11.3	11.0	9.9	8.8	10.2	14.3
19-Jun	8.0	7.9	7.0	6.5	7.1	8.5	9.3	10.5	11.9	12.7	13.0	13.4	14.1	14.7	14.3	13.9	14.6	13.9	13.4	13.3	12.2	10.5	8.5	7.4	11.1	14.7
20-Jun	6.9	6.9	6.5	6.4	7.6	9.2	10.3	12.2	13.2	13.2	14.2	15.2	15.5	13.2	11.7	13.8	15.3	15.3	15.3	15.2	14.3	13.0	12.2	11.8	12.0	15.5
21-Jun	11.3	11.8	11.8	11.3	10.8	11.5	12.0	12.7	14.1	15.8	16.9	17.3	17.9	18.3	18.3	17.3	16.8	17.0	16.5	15.6	14.3	13.1	12.4	11.1	14.4	18.3
22-Jun	11.4	12.8	11.9	11.0	11.3	12.4	14.6	17.5	18.7	17.8	18.7	19.0	20.3	19.6	20.3	21.3	20.3	17.5	17.6	17.5	16.3	15.0	13.3	13.2	16.2	21.3
23-Jun	14.7	13.5	12.7	12.2	12.4	14.3	16.6	18.6	19.7	20.7	21.4	20.8	21.7	22.0	22.7	19.2	16.3	17.1	18.1	18.9	18.4	16.4	14.9	14.6	17.4	22.7
24-Jun	13.4	13.2	12.8	12.0	12.8	13.8	16.3	18.3	19.5	20.4	21.2	22.1	22.6	23.4	24.1	23.0	20.9	17.9	18.9	20.1	19.1	16.3	15.1	15.3	18.0	24.1
25-Jun	14.7	13.9	14.1	13.8	13.9	15.3	18.0	20.4	21.8	22.8	23.3	24.0	24.5	24.5	25.3	25.7	25.5	25.6	25.5	24.4	23.0	20.8	19.3	18.5	20.8	25.7
26-Jun	17.8	16.2	15.2	14.4	14.7	16.6	19.0	20.7	22.2	23.1	23.4	23.8	24.5	24.8	25.6	25.7	25.6	25.5	25.3	24.5	23.1	21.0	19.2	17.5	21.2	25.7
27-Jun	16.6	15.3	15.0	14.5	14.2	15.4	17.9	20.7	22.3	23.3	24.0	24.8	25.3	25.2	25.1	25.5	25.8	25.5	25.1	24.2	22.9	21.7	20.9	19.6	21.3	25.8
28-Jun	19.2	18.2	18.3	17.9	17.5	18.3	19.3	22.4	23.8	24.7	25.3	25.9	26.8	27.5	27.9	28.2	28.4	28.0	27.7	26.6	24.1	21.9	21.1	21.1	23.3	28.4
29-Jun	19.1	18.4	18.5	18.6	17.6	18.6	20.2	22.2	24.2	25.0	25.6	26.2	26.4	27.3	27.6	27.4	27.4	27.2	26.6	25.7	23.6	21.1	19.7	18.1	23.0	27.6
30-Jun	17.3	17.3	17.0	15.8	15.3	15.8	17.4	19.4	21.2	22.6	23.3	23.4	24.2	24.5	25.3	25.7	25.6	25.4	24.9	23.9	22.5	20.7	19.4	18.7	21.1	25.7
	11.5	11.0	10.6	10.2	10.2	11.2	12.5	13.8	14.9	15.6	16.2	16.6	17.1	17.5	17.9	17.9	17.6	17.4	17.2	16.6	15.5	14.1	13.0	12.3	Diurnal Average	
	19.2	18.4	18.5	18.6	17.6	18.6	20.2	22.4	24.2	25.0	25.6	26.2	26.8	27.5	27.9	28.2	28.4	28.0	27.7	26.6	24.1	21.9	21.1	21.1	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Firebag - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	198	27.50	27.50
10 - 20	381	52.92	80.42
> 20	141	19.58	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 - June 2026

Maximum Value: 98.4 % on Jun 8 13:00

Maximum Daily Average: 97.5 % on Jun 8

Minimum Value: 21.6 % on Jun 30 19:00

Minimum Daily Average: 39.3 % on Jun 28

Maximum Diurnal Average: 83.8 % at hour 5

Minimum Diurnal Average: 52.6 % at hour 15

Monthly Average: 66.04 %

Percentiles: P_1 = 25.6 P_{10} = 33.7 Q_1 = 43.8 Median = 67.6 Q_3 = 88.5 P_{90} = 96.5 P_{99} = 98.2

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

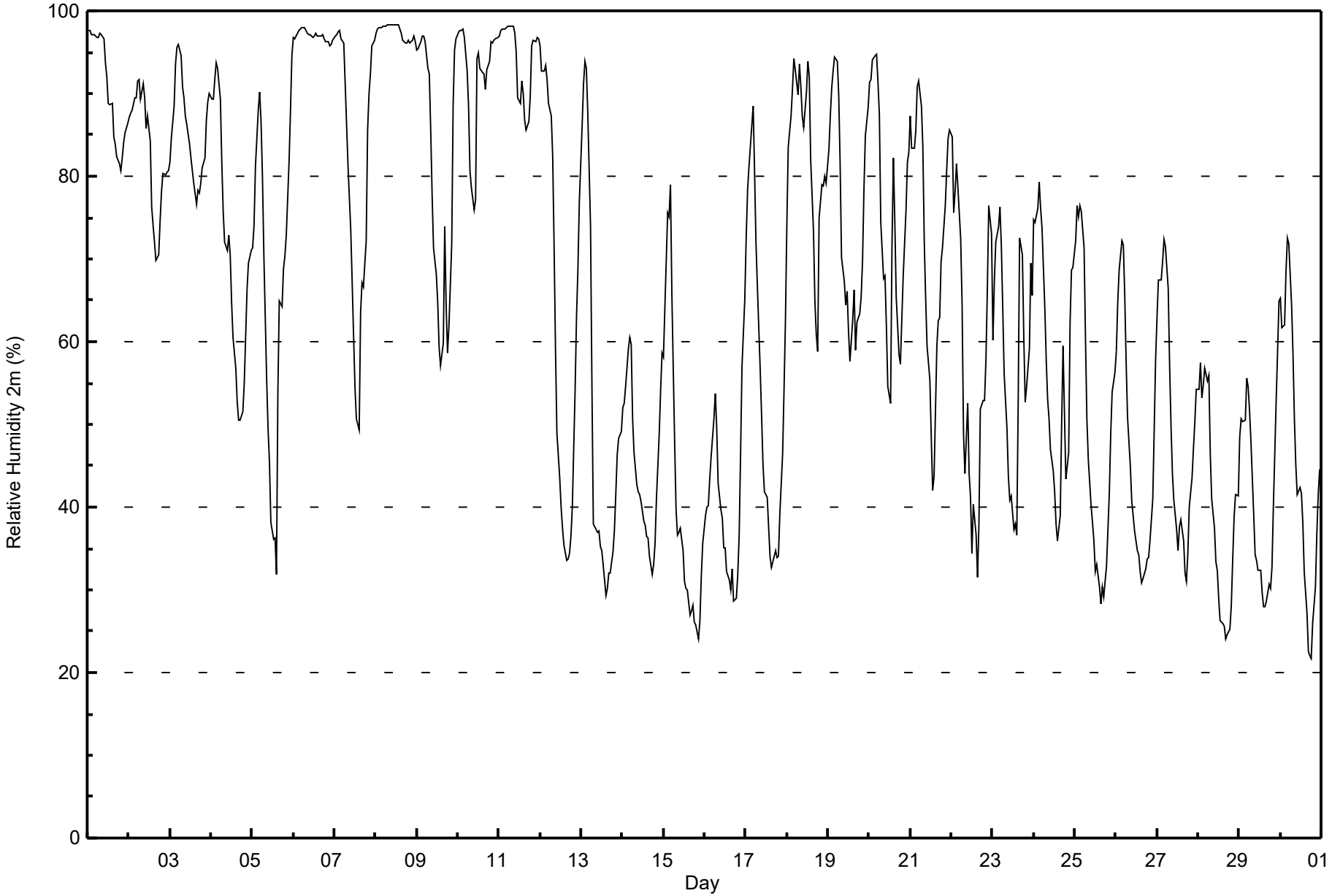
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	97.6	97.6	97.2	97.1	97.2	96.8	96.8	97.2	97.1	96.6	93.7	92.0	88.8	88.6	88.8	84.7	83.8	82.4	81.5	80.6	82.1	84.1	85.3	86.5	90.6	97.6
2-Jun	87.2	87.7	87.9	89.6	89.5	91.6	91.8	89.3	91.2	89.4	85.7	87.2	84.3	76.3	74.0	72.1	69.8	70.4	74.5	78.2	80.3	80.2	80.6	80.7	82.9	91.8
3-Jun	81.7	84.6	88.5	93.5	95.5	96.0	94.7	90.8	89.5	87.3	86.2	84.0	82.2	80.7	79.2	76.6	78.2	77.9	79.2	81.0	82.1	86.8	89.0	90.0	85.6	96.0
4-Jun	89.4	89.4	91.7	93.7	93.0	89.3	81.8	75.8	72.0	71.0	73.0	70.6	64.7	60.6	56.8	52.7	50.6	50.6	51.5	55.0	60.5	66.3	69.6	71.0	70.8	93.7
5-Jun	71.3	74.0	81.2	88.0	90.2	86.6	79.9	70.4	55.4	49.6	45.4	38.1	36.2	36.2	31.9	53.9	64.9	64.2	68.9	70.3	72.9	81.8	88.0	94.6	66.4	94.6
6-Jun	96.7	96.6	97.2	97.6	97.8	97.9	98.0	97.7	97.3	97.1	97.2	96.8	97.0	97.3	97.0	97.0	96.9	97.1	96.5	96.3	96.3	95.7	96.0	96.5	97.0	98.0
7-Jun	97.0	97.2	97.5	97.6	96.6	96.1	91.2	86.3	81.3	73.4	67.1	60.7	54.3	50.6	49.2	63.5	67.1	66.6	72.3	85.7	90.0	92.3	95.7	96.4	80.2	97.6
8-Jun	97.4	97.8	97.9	98.0	98.1	98.2	98.2	98.3	98.3	98.3	98.3	98.4	98.4	98.2	97.8	97.2	96.4	96.1	96.1	96.4	96.1	96.4	96.9	96.2	97.5	98.4
9-Jun	95.2	95.5	96.3	97.0	97.0	96.3	93.0	92.4	85.6	77.8	71.4	68.2	64.8	59.4	57.1	59.9	73.9	64.5	58.7	61.9	71.9	88.6	95.3	96.7	79.9	97.0
10-Jun	97.5	97.7	97.6	97.7	96.7	92.7	88.5	80.7	78.7	75.9	77.1	94.3	95.0	93.1	92.6	92.4	90.5	93.0	93.9	96.3	96.2	96.4	96.5	96.8	92.0	97.7
11-Jun	96.9	97.6	97.8	97.9	98.0	98.1	98.1	98.2	98.1	97.3	94.9	89.6	88.9	91.6	90.0	86.8	85.6	86.7	89.7	95.8	96.4	96.3	96.8	96.6	94.3	98.2
12-Jun	95.7	92.8	92.7	93.4	91.7	88.9	87.3	82.4	71.6	59.2	49.0	43.5	40.0	37.5	35.4	33.5	33.7	34.4	36.5	40.0	54.2	63.0	68.8	77.0	62.6	95.7
13-Jun	86.0	91.1	93.9	93.0	87.8	73.8	54.3	38.0	37.7	37.0	37.1	35.2	34.8	33.0	29.3	30.1	32.1	32.0	34.6	37.1	41.5	46.2	48.4	49.1	50.5	93.9
14-Jun	52.1	52.6	54.6	59.2	60.4	59.6	50.7	46.6	42.8	41.8	41.5	40.7	38.3	37.9	36.4	36.2	34.2	31.8	33.1	35.6	41.1	49.0	54.3	58.7	45.4	60.4
15-Jun	58.1	64.1	75.6	75.0	79.0	65.8	47.6	39.6	36.7	37.0	37.5	34.8	31.1	30.2	30.0	26.9	27.5	28.1	26.0	25.7	24.1	26.2	31.7	35.5	41.4	79.0
16-Jun	39.0	40.0	40.2	43.3	46.1	50.7	53.8	49.5	42.9	39.7	38.6	35.1	35.0	32.2	31.2	30.0	32.5	28.6	29.1	31.9	36.5	46.5	57.0	65.0	40.6	65.0
17-Jun	72.5	78.4	81.1	86.1	88.5	80.3	71.9	66.6	56.6	51.0	45.2	41.9	41.2	37.7	34.0	32.8	33.4	34.8	33.9	34.1	39.2	46.4	54.2	62.5	54.3	88.5
18-Jun	74.0	83.6	87.2	90.6	94.2	92.9	89.9	93.6	90.9	87.3	85.9	90.2	93.9	92.0	82.0	73.4	64.9	60.8	58.8	75.0	78.9	78.8	79.9	79.2	82.4	94.2
19-Jun	83.2	87.2	90.6	92.7	94.3	93.9	89.8	81.6	70.1	67.3	64.4	66.1	61.2	57.7	62.7	66.3	58.9	62.5	63.4	65.4	69.9	78.4	84.9	88.3	75.0	94.3
20-Jun	91.3	91.7	94.1	94.6	94.8	91.4	87.4	74.4	67.7	67.9	61.9	54.5	52.5	71.6	82.3	74.6	65.5	58.6	57.3	62.7	67.9	75.9	81.7	82.9	75.2	94.8
21-Jun	87.3	83.5	83.4	85.5	90.9	91.5	88.4	83.6	72.2	65.2	59.5	55.5	48.4	42.1	43.8	59.4	62.6	62.9	69.7	71.4	76.4	80.6	84.5	85.6	72.3	91.5
22-Jun	84.7	75.6	78.2	81.5	78.6	72.4	64.4	49.0	44.1	52.6	44.1	41.2	34.4	40.3	36.6	31.6	38.0	51.9	52.8	52.9	57.8	66.2	76.4	73.0	57.4	84.7
23-Jun	60.2	67.3	72.0	73.8	76.3	71.6	63.9	56.1	49.6	43.7	40.9	41.4	37.2	38.0	36.6	52.5	72.5	70.5	60.5	52.8	54.5	59.2	69.5	65.7	57.8	76.3
24-Jun	74.7	74.4	76.1	79.3	76.0	73.7	64.0	57.8	53.0	50.8	46.9	44.5	41.9	38.0	35.9	39.1	50.2	59.4	51.3	43.4	46.6	62.2	68.7	69.0	57.4	79.3
25-Jun	72.2	76.4	75.1	76.4	75.8	71.4	60.4	50.6	45.8	40.1	38.2	36.0	32.3	33.0	30.4	28.4	30.3	29.2	32.8	37.3	41.8	48.8	54.0	56.2	48.9	76.4
26-Jun	58.8	64.8	68.6	72.3	71.7	65.6	57.4	50.9	44.9	40.7	39.1	37.2	34.8	34.3	32.3	30.8	31.4	32.5	33.7	34.0	35.9	41.0	49.4	57.9	46.7	72.3
27-Jun	62.9	67.4	67.5	69.7	72.5	71.5	66.4	57.1	49.9	44.0	40.9	37.2	34.7	37.6	38.5	35.9	32.1	31.0	34.4	40.0	43.6	47.1	50.3	54.3	49.4	72.5
28-Jun	54.3	57.5	53.3	54.8	56.8	55.2	55.9	46.5	40.9	37.4	33.5	32.4	29.0	26.2	26.0	25.5	24.0	24.6	25.3	28.1	33.7	38.8	41.5	41.4	39.3	57.5
29-Jun	48.4	50.7	50.3	50.5	55.6	54.5	51.8	47.9	39.0	34.3	33.6	32.4	32.4	29.6	27.9	27.9	28.6	30.8	30.1	32.8	39.9	52.8	58.9	64.9	41.9	64.9
30-Jun	65.3	61.7	62.0	68.5	72.6	71.8	64.3	58.4	50.7	45.1	41.6	42.5	41.7	38.1	32.2	27.0	22.5	22.0	21.6	25.9	30.4	36.8	41.5	44.6	45.4	72.6
	77.6	79.2	80.9	82.9	83.8	81.2	76.0	70.2	65.0	61.9	59.0	57.4	55.0	54.0	52.6	53.3	54.4	54.5	54.9	57.4	61.3	67.0	71.5	73.7	Diurnal Average	
	97.6	97.8	97.9	98.0	98.1	98.2	98.2	98.3	98.3	98.3	98.3	98.4	98.4	98.2	97.8	97.2	96.9	97.1	96.5	96.4	96.4	96.4	96.9	96.8	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Firebag - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	145	20.14	20.14
40 - 60	156	21.67	41.81
60 - 80	162	22.50	64.31
80 - 100	257	35.69	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 - June 2026

Maximum Speed: 32 km/h on Jun 8 12:00

Maximum Daily Speed Average: 24.5 km/h on Jun 1

Minimum Speed Value: 1 km/h on Jun 15 07:00

Minimum Daily Speed Average: 3.3 km/h on Jun 22

Maximum Diurnal Speed Average: 6.5 km/h at hour 17

Minimum Diurnal Speed Average: 0.7 km/h at hour 5

Monthly Average Velocity: 2.5 km/h 31.6 deg

Percentiles: P_1 = 2 P_{10} = 6 Q_1 = 9 Median = 12 Q_3 = 17 P_{90} = 20 P_{99} = 27

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-Jun	N25	N28	N29	N22	N24	N26	N25	N26	N27	N26	N27	N28	N26	N25	N25	N24	N23	NNE21	NNE22	NNE23	NNE24	NNE21	NNE23	NNE23	N24.5	N29
2-Jun	NNE22	NE20	NE20	NNE18	NNE18	NNE18	NE17	NE17	NNE17	NE17	NE19	NE21	NE21	NE25	ENE21	ENE23	ENE23	ENE21	ENE21	ENE20	ENE19	ENE21	E18	E15	NE18.5	NE25
3-Jun	E16	ESE10	ESE12	SE10	SE10	ESE10	SE10	SSE10	SE10	SE10	SE10	ESE10	SSE11	S11	SSE11	S11	S11	S12	S14	S15	S12	SSE8	SSE11	SSE12	SSE10.1	E16
4-Jun	S15	S16	SSW13	SSW13	SW13	SW15	WSW16	WSW17	WSW16	SW16	SSW21	SSW19	SSW19	SSW18	SSW18	SW19	SW18	SW16	SW15	SW12	WSW12	SSW9	SSW10	SSW11	SSW14.7	SSW21
5-Jun	SSW14	SSW15	SW14	SW14	SW14	SW15	WSW15	SW14	WSW13	WSW12	WSW13	SW10	SW9	WSW7	WSW11	SSW18	SSE14	SSE12	SE11	SSE9	S1	SW5	SSE3	ESE3	SW9.2	SSW18
6-Jun	N1	N3	WNW4	WNW4	WNW6	NW10	NW13	W13	WSW16	WSW15	WSW17	WSW18	WSW20	W18	W16	W19	WNW14	W14	WSW18	WSW18	WSW18	WSW16	WSW14	WSW11	W12.4	WSW20
7-Jun	SW11	SW9	SW8	SSW11	S11	SSW12	SSW14	SSW14	SW12	SSW13	SSW9	S6	SSE9	SE3	WNW1	N14	NNE16	SE14	SE16	ESE11	E11	ENE13	ENE12	NE7	SSE4.5	SE16
8-Jun	NE9	NE6	NNE8	N11	NNW9	N13	N15	NNW17	NNW20	NNW23	NNW29	NNW32	NW31	NW28	WNW27	WNW26	WNW26	WNW24	WNW22	WNW19	WNW21	WNW19	WNW18	WNW17	NW17.4	NNW32
9-Jun	WNW16	WNW16	WNW13	W14	W15	WNW14	WNW14	WNW11	WNW15	WNW16	WNW17	W19	W19	WNW15	WNW14	NW12	NW6	WNW9	NW9	NW8	WNW4	NNE8	NE8	NNE11	WNW11.0	W19
10-Jun	NNE8	NNE7	NNE9	N13	N11	N12	N13	N16	N16	N16	NNW15	N16	N15	N16	N17	N18	N16	N18	N17	N16	N15	N15	N17	N17	N14.3	N18
11-Jun	N18	N16	NNW15	N14	N13	N14	N14	N16	N15	N15	N18	N19	N18	N18	N17	N20	N21	N19	N16	N15	N12	N14	N13	N12	N15.9	N21
12-Jun	N12	N14	N13	N13	N13	N12	N12	N16	N19	N21	N24	N26	N26	N26	N25	N26	N25	N23	N22	N16	N11	N9	N7	NNW6	N17.4	N26
13-Jun	NNW5	NW4	NNW2	NW4	W4	WNW3	NNW3	NW6	NW8	NW9	NW8	WNW4	WNW4	NW8	WNW6	WNW8	W6	WSW10	WSW12	SW11	SSW10	SSW11	SW11	SW11	W5.1	WSW12
14-Jun	SSW9	SW11	SW11	SW11	WSW9	W7	NNW9	N14	N13	N15	NNW16	N16	N18	N17	N17	N19	N16	N19	N18	N12	NNE10	NNE8	NNE7	NE9	N8.7	N19
15-Jun	ENE8	ENE6	E3	ESE5	ENE2	ESE4	SE1	N7	N10	NNE8	NNE9	N8	NW6	NW9	NNE7	N7	ENE6	NNE7	ENE11	E11	E15	ESE20	ESE16	ESE13	ENE5.6	ESE20
16-Jun	ESE16	ESE17	ESE18	ESE21	ESE15	ESE16	ESE17	ESE18	ESE18	ESE15	ESE12	ESE9	ENE8	NE13	NE15	NE16	NE18	NNE21	NNE19	NNE19	NNE17	NNE13	NNE10	NNE8	ENE11.5	NNE21
17-Jun	NNE8	NE8	NE8	NE9	NNE8	NNE9	NNE11	N14	N16	N18	N19	NNE20	N19	N19	N18	N18	NNE15	NNE16	NNE15	NNE15	NNE10	NNE7	NE7	NE8	NNE12.7	NNE20
18-Jun	NNE5	N8	N9	NNE7	N7	N8	N9	NNW9	NNW11	NW11	NNW14	N14	NNW14	NNW14	NNW17	NNW17	NNW16	N16	N16	NNW9	NNW6	NW7	WNW6	WNW6	NNW10.2	NNW17
19-Jun	NW2	W4	W5	WNW4	WNW5	NW6	NNW7	N7	NNW9	NNW9	NNW10	N15	N14	N17	NNE17	NNE15	N14	NNE12	NNE12	NE11	NNE9	NNE6	NNE7	NNE8	N8.2	NNE17
20-Jun	NE7	NE7	NE7	NNE6	NE5	NNE7	NE9	NE9	NE11	NNE12	NE16	NE13	NE10	S5	N12	NNE14	NNE15	ENE16	E13	SE7	SSW8	NNE6	NNE9	NNE5	NE7.9	ENE16
21-Jun	ENE6	ESE5	E4	NE4	NE5	NNE6	NE8	NE11	NE14	NE15	NE12	ENE12	E11	ESE11	S6	NNW8	N11	N9	N11	N8	N8	N8	N7	NE8	NE6.7	NE15
22-Jun	ENE8	ESE9	ESE12	SE10	SE9	SSE7	SSE6	SSW2	SSW1	NNW7	NE8	E6	ENE4	NNW8	SW2	SW5	E11	SSW14	SSW13	S10	SW9	SSW6	SSW5	WSW2	SSE3.3	SSW14
23-Jun	SW8	SSW6	SSW7	SW9	SW9	SW8	SW9	WSW9	W11	W11	W11	W11	SSW12	SW10	SW11	SE5	ESE11	SSE17	S19	S14	S8	SSW8	SSW6	S7	SSW7.6	S19
24-Jun	SSW6	S7	S7	S5	S6	S13	SSW13	SW11	SW13	SW14	SW12	SW12	SW14	SW14	SW10	WSW7	ESE10	SE23	SSE25	S17	SSE11	SE12	SSE13	S13	S10.1	SSE25
25-Jun	S12	S10	S13	S12	S13	S12	S10	SW10	SW11	S14	S19	SSE18	S19	S15	SSE15	SSE15	SSE15	S16	SSE20	SSE20	SSE16	SSE15	SSE15	SSE16	S14.2	SSE20
26-Jun	S15	SSE12	SSE13	SSE13	SSE12	SSE14	SSE14	S15	S17	S19	S21	S20	SSE18	S20	SSE19	SE18	SE17	SSE18	SE19	SSE17	SE11	SE12	SE11	SE10	SSE15.3	S21
27-Jun	SE11	SE10	ESE12	ESE13	SE11	ESE12	ESE13	ESE17	SE20	SE21	SE20	SE20	ESE18	SE19	SE17	SE16	ESE16	ESE13	SE12	SE9	ESE8	ESE8	ESE8	ESE8	SE13.7	SE21
28-Jun	ESE8	E7	E8	ESE9	ESE9	ESE8	E6	ENE12	ENE18	E20	E22	E18	ENE19	E22	ENE20	ENE19	E20	ENE17	E16	ENE14	ENE11	ENE9	ENE9	ENE9	E13.4	E22
29-Jun	E7	ENE8	E11	ESE9	ESE8	ESE7	ESE9	ESE8	E11	E16	ESE14	E12	NE10	NNE12	NE13	NE13	ENE14	E15	E17	E13	E7	SSE10	SSE10	SSE10	E9.4	E17
30-Jun	SSE10	SSE11	SE10	ESE7	ESE7	SE8	SE9	SE10	SE7	ESE9	E10	NE12	N12	NNE15	NE18	ENE18	E18	E16	ESE15	SE11	SE9	SE10	SE9	SE9	ESE8.6	ENE18
	ENE2.3	E1.6	E1.8	E1.4	ENE0.7	NE0.9	N1.7	N2.7	N3.5	N3.2	N3.8	NNE4.5	N3.7	N4.4	N4.9	NNE5.5	NE6.5	NE4.1	ENE3.6	ENE2.5	NE1.8	ENE2.6	ENE2.6	E2.3	Diurnal Average	
	N25	N28	N29	N22	N24	N26	N25	N26	N27	N26	NNW29	NNW32	NW31	NW28	WNW27	N26	WNW26	WNW24	SSE25	NNE23	NNE24	ENE21	NNE23	NNE23	Diurnal Maximum	

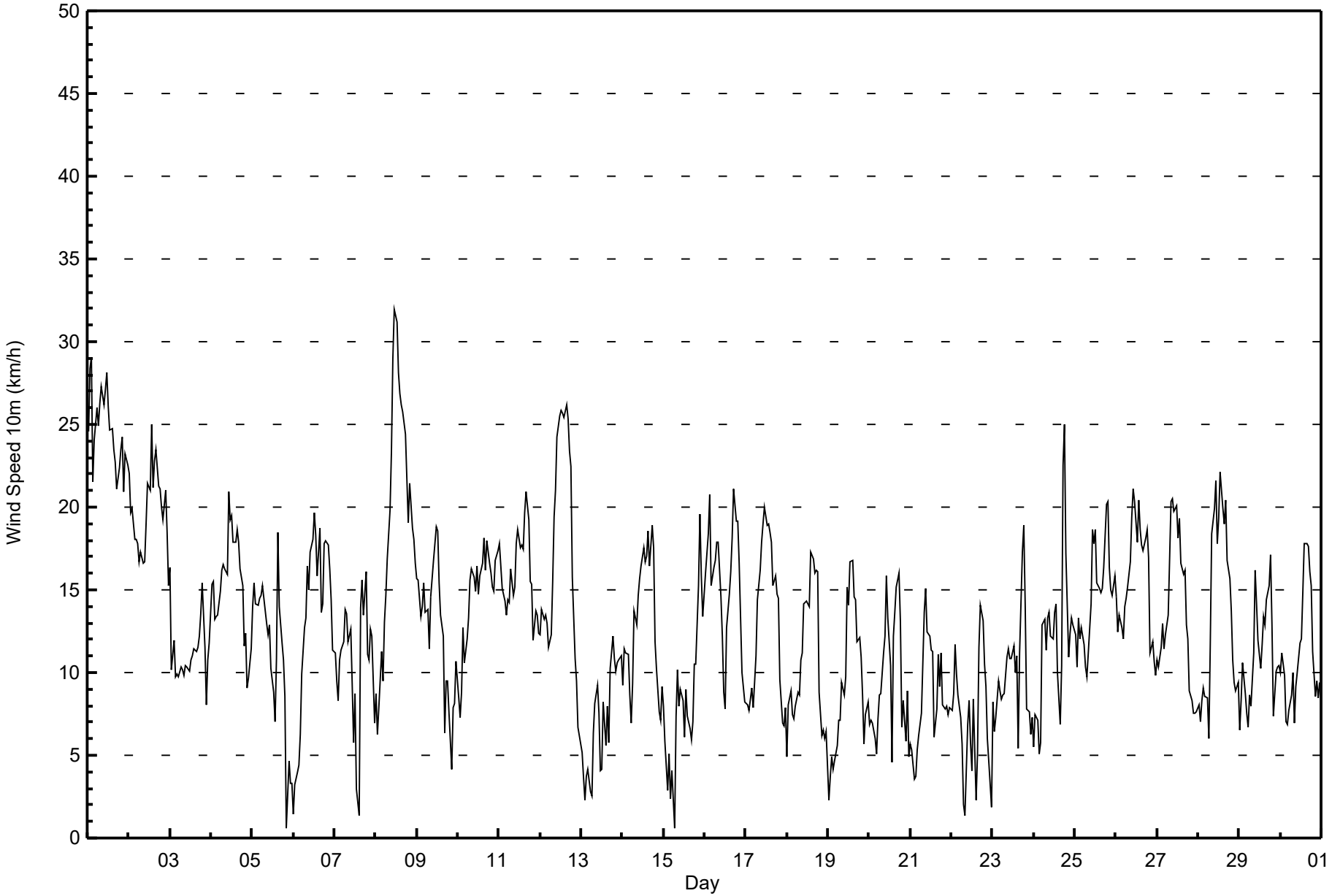
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Firebag - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	47	6.53	6.53
6 - 11	268	37.22	43.75
12 - 19	322	44.72	88.47
20 - 28	79	10.97	99.44
29 - 38	4	0.56	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 - June 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	2	3	2	2	4	3	1	3	3	3	1	3	9	3	3	47
6 - 11	22	32	22	12	13	26	26	15	14	16	22	7	6	7	14	14	268
12 - 19	79	22	17	14	12	25	11	23	25	17	20	18	9	15	2	13	322
20 - 28	28	10	5	8	4	3	4	3	3	1	0	1	0	6	1	2	79
29 - 38	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	132	66	47	36	31	58	44	42	45	37	45	27	18	37	21	34	720

Total Number of Valid Hours: 720

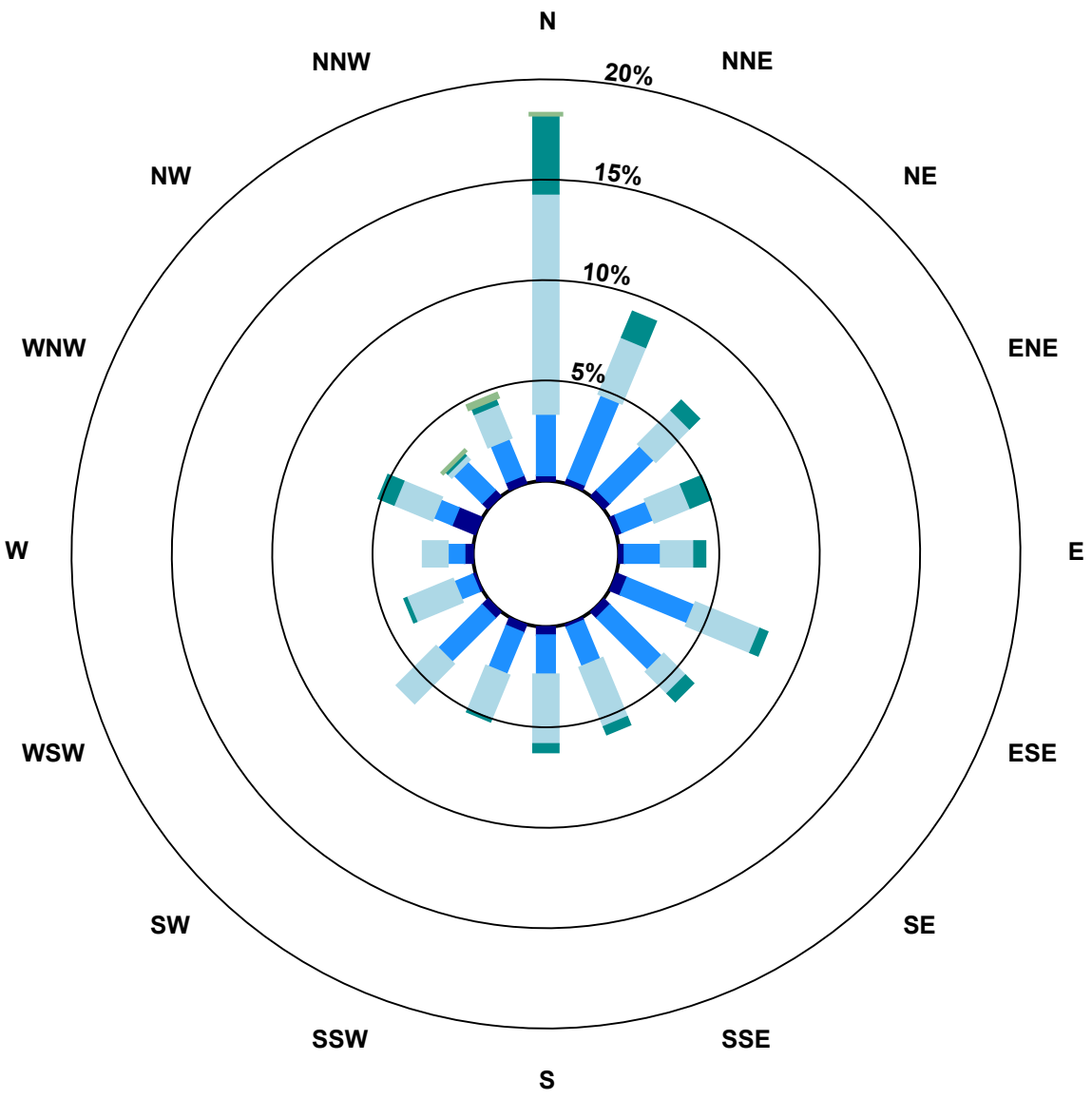
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Firebag



Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 10m (WS10) - km/h

Firebag - June 2026

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

Minimum Value: 0 km/h on Jun 13 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-Jun	6	7	7	8	6	6	6	7	6	6	6	7	6	6	6	5	6	5	5	5	6	5	6	5	8
2-Jun	5	4	5	4	4	4	4	4	4	4	5	5	5	6	5	5	5	5	4	4	4	4	4	4	6
3-Jun	4	3	3	2	2	2	2	2	2	2	2	2	2	3	3	3	3	2	2	2	4	1	2	2	4
4-Jun	2	2	2	2	2	2	3	4	4	3	4	4	4	5	4	4	5	3	4	3	3	1	1	1	5
5-Jun	2	2	2	2	2	2	3	3	3	4	4	4	3	4	3	5	3	2	3	2	2	1	1	3	5
6-Jun	1	1	1	1	1	4	4	4	4	3	3	4	4	5	5	4	4	5	4	4	4	4	3	2	5
7-Jun	2	2	1	2	2	2	2	3	2	3	3	4	3	4	2	3	4	5	4	3	2	2	2	1	5
8-Jun	2	1	2	3	2	3	3	5	5	6	7	7	8	8	8	8	8	7	7	5	6	6	6	5	8
9-Jun	4	4	4	4	4	4	4	3	4	5	4	5	5	4	4	4	3	3	3	4	1	5	1	2	5
10-Jun	3	2	2	3	3	3	4	3	4	4	3	4	4	4	4	5	4	5	4	4	4	3	4	4	5
11-Jun	4	4	4	4	3	4	4	4	4	4	4	5	5	4	4	5	5	5	4	3	3	4	3	3	5
12-Jun	2	3	3	3	3	2	3	4	5	5	5	6	6	6	6	7	6	6	5	5	3	1	1	1	7
13-Jun	1	0	1	1	0	1	1	3	2	3	3	3	3	3	3	3	4	3	3	2	2	1	1	2	4
14-Jun	1	1	1	1	2	2	4	4	3	4	5	5	5	5	6	5	5	5	5	3	2	1	0	1	6
15-Jun	1	2	2	1	1	1	2	3	4	4	4	5	4	4	4	4	3	3	3	2	3	3	3	3	5
16-Jun	3	3	3	4	3	3	4	3	4	3	4	4	5	5	6	6	4	5	5	4	4	3	1	1	6
17-Jun	1	1	1	1	1	2	3	4	4	5	5	5	6	6	5	5	5	4	4	3	2	1	1	1	6
18-Jun	1	1	1	1	1	2	2	2	3	3	4	4	4	4	4	4	4	4	4	2	1	1	1	1	4
19-Jun	3	1	1	1	1	1	2	2	2	3	4	4	4	4	5	5	4	3	3	3	2	1	1	1	5
20-Jun	1	1	1	1	1	1	2	3	2	5	4	4	4	6	6	3	3	3	3	3	2	3	2	2	6
21-Jun	2	1	1	2	1	1	1	2	3	3	3	3	3	4	4	4	4	3	3	2	1	1	1	1	4
22-Jun	1	2	2	2	2	1	1	1	2	3	3	3	4	4	2	3	4	4	4	2	2	1	1	2	4
23-Jun	1	2	1	1	1	1	1	2	2	3	3	3	4	4	4	7	3	3	3	4	1	1	1	1	7
24-Jun	1	1	1	1	3	2	2	2	3	3	4	5	4	4	4	3	5	5	4	4	2	2	2	2	5
25-Jun	2	2	2	1	2	2	2	2	2	4	4	5	5	4	4	4	4	4	4	4	3	3	2	2	5
26-Jun	2	2	2	2	2	3	2	2	3	4	5	4	5	5	4	4	4	4	4	4	3	4	2	2	5
27-Jun	2	1	2	2	2	2	3	3	4	4	4	5	4	4	4	4	4	3	2	2	2	1	1	1	5
28-Jun	2	2	1	2	2	2	1	5	4	4	5	5	5	5	5	5	5	4	4	3	1	1	2	2	5
29-Jun	1	2	2	2	1	2	2	2	4	3	4	4	4	4	5	5	4	3	3	3	2	1	2	2	5
30-Jun	1	2	3	1	1	2	2	2	2	4	4	5	5	6	5	5	4	4	4	3	1	2	1	1	6
	6	7	7	8	6	6	6	7	6	6	7	7	8	8	8	8	8	7	7	5	6	6	6	5	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Firebag - June 2026

Direction of Maximum Speed: 328 deg on Jun 8 12:00
Direction of Maximum Daily Speed Average: 7.8 deg on Jun 1

Direction of Minimum Speed: 129 deg on Jun 15 07:00

Direction of Minimum Daily Speed Average: 3.3 deg on Jun 22

Monthly Average Direction: 31.6 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-Jun	3	2	3	2	2	2	358	0	3	1	6	9	11	8	4	5	6	12	13	16	21	22	21	27	7.8
2-Jun	27	36	35	31	31	22	34	37	28	34	42	51	50	52	62	67	57	70	75	78	75	77	88	96	52.6
3-Jun	95	120	123	128	124	123	133	149	135	130	132	118	152	172	168	182	175	183	177	175	181	152	153	167	148.6
4-Jun	179	188	196	201	214	221	240	247	241	221	213	201	197	208	204	217	214	229	216	222	237	209	203	197	213.4
5-Jun	205	213	214	218	224	225	241	230	251	246	255	221	221	243	254	200	168	153	127	151	186	229	153	122	214.5
6-Jun	8	353	300	282	285	310	307	268	257	251	247	242	250	271	270	264	285	265	244	249	252	253	251	243	262.0
7-Jun	234	235	232	205	191	196	201	203	219	209	200	173	167	140	297	1	26	129	129	119	94	78	72	52	167.6
8-Jun	51	43	21	0	347	352	352	345	337	332	335	328	320	312	303	299	298	296	297	291	287	288	289	287	317.2
9-Jun	284	285	286	281	275	282	303	284	298	300	283	275	270	284	300	304	312	302	304	308	300	27	48	24	294.5
10-Jun	31	29	19	8	5	2	353	350	352	355	343	10	355	352	357	9	2	4	350	349	352	350	351	353	358.1
11-Jun	349	349	345	351	351	351	352	357	351	352	353	358	5	2	1	3	3	1	5	1	352	353	2	1	356.4
12-Jun	353	350	358	7	11	7	354	353	356	355	358	356	358	1	1	358	359	359	4	4	350	358	351	345	358.4
13-Jun	345	321	330	304	268	283	340	307	304	311	311	294	301	306	296	301	276	252	238	223	213	207	214	218	268.5
14-Jun	213	220	222	232	240	265	336	3	2	2	345	350	357	8	1	7	1	359	10	4	23	29	30	54	352.7
15-Jun	61	76	84	104	70	108	129	10	6	20	24	2	322	324	12	7	73	33	68	88	97	103	117	121	62.4
16-Jun	118	120	116	116	122	120	117	117	115	120	104	111	59	39	41	43	44	32	27	32	28	23	23	22	77.8
17-Jun	29	39	51	48	21	30	16	6	358	357	10	14	8	1	0	10	13	18	13	16	17	21	36	47	14.7
18-Jun	20	352	3	21	359	351	351	341	338	315	327	356	331	337	341	335	347	349	354	346	327	315	301	284	341.4
19-Jun	304	274	267	287	302	320	340	350	347	340	330	7	350	355	12	26	5	16	21	34	16	32	20	25	359.7
20-Jun	39	37	39	25	43	30	34	44	48	17	37	35	36	185	6	24	31	59	82	130	203	26	24	31	39.7
21-Jun	63	105	85	39	39	18	37	49	52	51	47	57	92	109	173	331	355	358	4	349	2	1	7	34	38.1
22-Jun	65	109	121	126	129	148	152	202	192	347	43	80	66	343	230	214	94	199	212	187	219	200	199	240	149.5
23-Jun	215	208	211	225	224	230	234	257	263	262	278	262	196	218	225	132	121	152	169	178	182	203	193	190	208.8
24-Jun	193	190	189	190	187	186	205	222	223	228	224	216	222	227	234	241	109	146	166	182	153	140	159	175	189.9
25-Jun	170	171	177	181	180	177	187	218	214	191	185	167	178	177	168	162	157	176	158	155	154	154	161	167	172.3
26-Jun	171	167	164	158	156	159	165	170	176	169	174	170	159	174	160	142	143	150	146	152	145	144	138	133	159.0
27-Jun	130	125	122	120	124	122	119	117	124	127	125	126	123	139	144	133	118	122	126	129	122	111	109	105	124.6
28-Jun	105	90	98	119	106	110	96	71	77	99	90	84	74	91	71	77	84	77	85	74	60	61	75	78	83.9
29-Jun	79	71	87	110	108	109	112	110	91	101	102	79	46	31	42	49	57	83	97	79	99	153	147	154	88.9
30-Jun	152	147	141	123	123	126	137	133	139	116	89	48	8	32	55	65	84	89	109	127	136	137	138	144	103.1
	74.2	80.5	85.8	88.5	70.7	34.3	358.7	356.3	353.7	357.8	3.9	17.8	4.6	356.0	1.7	12.2	36.0	49.2	73.1	77.4	55.9	67.7	76.4	84.5	
	Diurnal Average																								

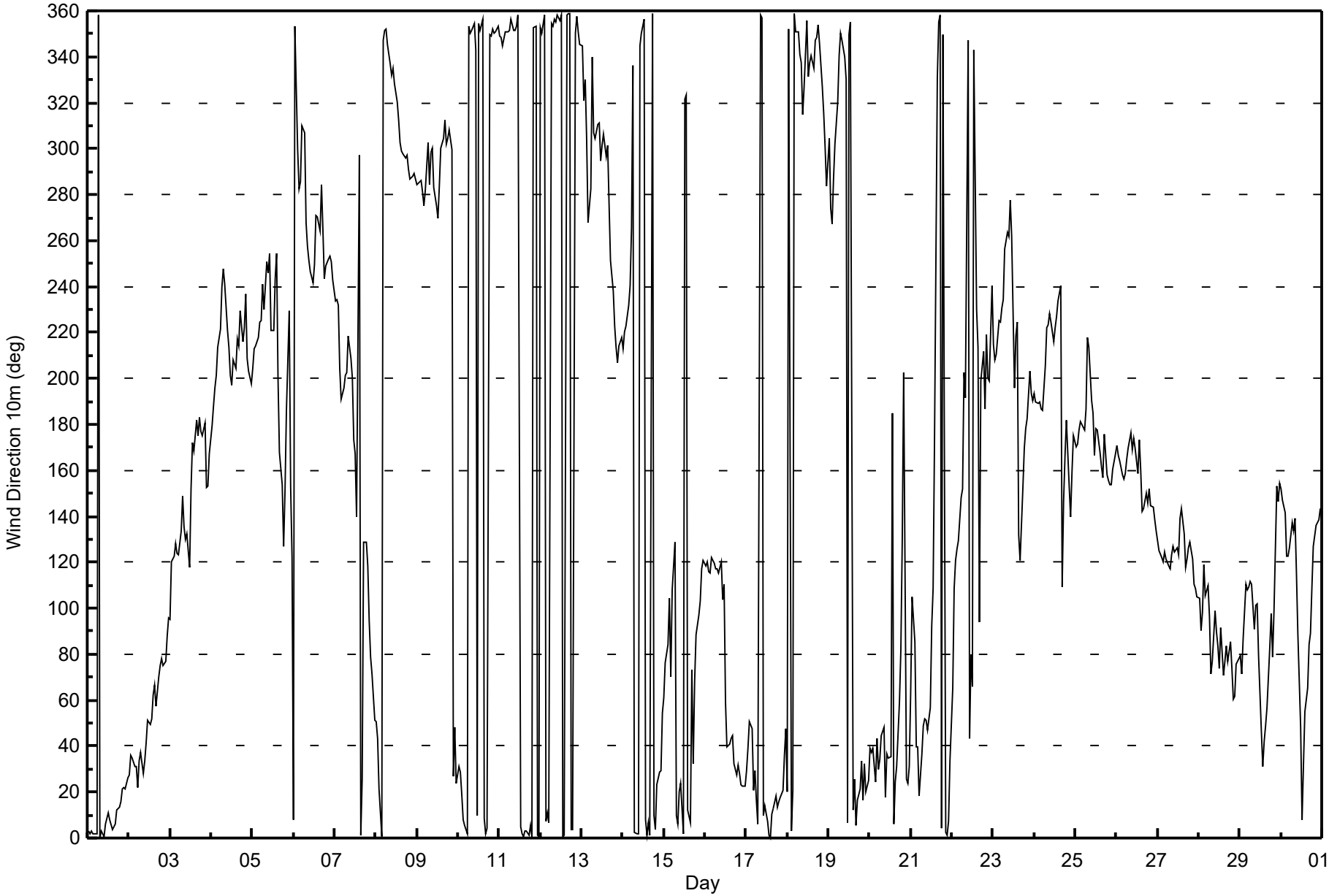
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Firebag - June 2026



Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 96 deg on Jun 5 21:00

Minimum Value: 4 deg on Jun 13 00:00

Percentiles: P_1 = 5 P_{10} = 10 Q_1 = 12 Median = 16 Q_3 = 21 P_{90} = 30 P_{99} = 83

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-Jun	17	18	18	18	17	17	15	17	17	17	17	17	16	16	17	17	16	15	16	15	15	13	13	13	18
2-Jun	13	13	13	14	13	13	14	14	14	13	13	11	12	13	14	14	12	12	13	11	11	10	13	12	14
3-Jun	12	15	15	13	13	13	19	21	20	19	21	19	23	22	19	20	20	19	12	11	16	11	12	10	23
4-Jun	9	8	7	9	9	11	13	16	20	21	15	18	16	16	22	19	17	14	12	14	12	8	6	6	22
5-Jun	9	9	9	9	10	11	14	16	21	26	28	31	34	61	19	26	10	20	18	20	96	23	52	87	96
6-Jun	53	33	34	19	19	20	19	19	13	12	12	13	13	17	19	15	22	25	13	14	14	13	12	12	53
7-Jun	12	12	16	9	10	12	9	15	21	21	32	62	44	84	85	18	18	42	14	13	15	10	12	10	85
8-Jun	12	15	13	17	14	13	14	15	15	14	14	14	16	17	21	21	21	21	21	21	20	21	20	20	21
9-Jun	19	19	20	20	17	19	21	20	20	23	22	20	19	24	24	23	19	23	27	15	19	21	12	13	27
10-Jun	26	15	15	15	16	15	15	16	16	18	18	16	17	17	17	17	17	16	16	15	15	14	15	15	26
11-Jun	13	15	14	14	14	15	14	15	15	15	17	15	19	18	17	16	16	18	16	14	14	16	14	14	19
12-Jun	13	14	13	14	13	15	15	16	16	17	19	19	19	19	19	19	19	18	18	16	12	12	8	4	19
13-Jun	5	11	18	17	8	24	20	27	30	34	46	75	82	44	59	41	56	26	21	11	9	6	8	8	82
14-Jun	7	11	7	9	11	18	27	18	19	24	20	22	22	21	23	20	21	24	16	15	14	8	6	4	27
15-Jun	8	21	37	16	26	50	91	31	28	54	43	61	62	46	66	60	55	42	20	11	10	10	12	13	91
16-Jun	11	12	13	11	13	12	11	13	14	21	27	46	59	34	26	25	17	17	17	13	13	11	10	8	59
17-Jun	7	8	5	8	12	14	20	19	20	21	23	19	22	20	21	23	22	18	18	16	10	5	5	6	23
18-Jun	26	14	11	9	13	14	14	15	15	19	15	23	17	17	17	16	16	15	15	12	10	10	16	12	26
19-Jun	61	24	16	16	13	13	19	17	24	28	32	29	26	21	20	20	21	18	17	17	10	7	10	4	61
20-Jun	8	7	11	9	18	12	11	27	23	20	17	21	26	95	26	15	18	23	17	50	23	40	11	17	95
21-Jun	17	20	26	12	15	15	16	11	15	16	23	16	19	24	77	31	16	19	15	15	9	11	9	8	77
22-Jun	18	14	10	11	15	13	21	81	94	28	31	54	81	28	82	69	34	44	12	15	18	14	12	83	94
23-Jun	12	16	15	8	9	12	11	19	20	26	31	24	24	43	30	83	39	11	12	9	8	9	6	9	83
24-Jun	8	10	10	11	19	9	12	15	17	18	27	28	24	28	38	40	44	18	11	9	22	14	10	10	44
25-Jun	9	9	8	9	9	10	14	16	17	24	18	26	20	21	25	32	22	20	13	11	10	11	10	10	32
26-Jun	8	10	9	10	11	11	10	12	15	20	18	18	22	19	22	29	20	19	15	13	14	16	16	15	29
27-Jun	12	12	10	11	13	12	12	13	15	18	20	17	23	18	22	23	19	16	17	13	13	10	9	12	23
28-Jun	21	13	13	11	17	14	12	15	13	18	18	21	22	18	17	20	16	22	17	15	6	5	9	8	22
29-Jun	9	19	14	12	9	14	13	23	19	14	20	28	31	36	25	27	25	15	11	16	44	12	10	10	44
30-Jun	9	10	14	13	13	15	13	18	28	43	33	31	30	23	19	19	20	19	16	14	12	13	12	11	43
	61	33	37	20	26	50	91	81	94	54	46	75	82	95	85	83	56	44	27	50	96	40	52	87	
	Diurnal Maximum																								

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS20
MACKAY RIVER
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MACKAY RIVER (AMS20)
JUNE 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	1146.1	4	140.1	1
H2S (ppb) Average	685	35	35	100	3.1	0	0.6	0
THC (ppm) Average	686	34	34	100	3.3	-	2.5	-
NO2 (ppb) Average	686	34	34	100	21.8	0	5.4	-
NO (ppb) Average	686	34	34	100	17.2	-	3.5	-
NOX (ppb) Average	686	34	34	100	33	-	8.2	-
Temperature 2 m (C) Average	720	0	0	100	29.4	-	22.2	-
Relative Humidity (%) Average	720	0	0	100	99.5	-	96.6	-
Wind Speed 10 m (km/h) Average	719	0	1	99.86	18	-	13	-
Wind Direction 10 m (deg) Average	719	0	1	99.86	-	-	-	-
Precipitation (mm) Total	720	0	0	100	12.5	-	25.9	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MACKAY RIVER (AMS20)
JUNE 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	5.13	63.3	-	0	0	0	0.1	0.3	1.1	1146.1
H2S (ppb) Average	685	0.14	0.2	-	0	0.1	0.1	0.1	0.1	0.2	3.1
THC (ppm) Average	686	2.26	0.1	-	2.1	2.2	2.2	2.2	2.3	2.4	3.3
NO2 (ppb) Average	686	1.38	2.4	-	0.1	0.2	0.3	0.6	1.4	3	21.8
NO (ppb) Average	686	0.37	1.6	-	0	0	0	0	0.1	0.5	17.2
NOX (ppb) Average	686	1.75	3.8	-	0.1	0.2	0.3	0.6	1.4	3.3	33
Temperature 2 m (C) Average	720	14.75	6	-	3	7.9	10.1	13.7	19.1	23.9	29.4
Relative Humidity (%) Average	720	67.81	22.3	-	24.3	34.7	47.7	71.4	87.9	95.7	99.5
Wind Speed 10 m (km/h) Average	719	6.9	4	-	0	2	4	7	10	12	18
Wind Direction 10 m (deg) Average	719	-	-	-	-	-	-	-	-	-	-
Precipitation (mm) Total	720	-	-	79.38	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION -MACKAY RIVER (AMS20)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
Wind Speed, Wind Direction	28 Jun 2026 21:00	28 Jun 2026 21:00	1	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Mackay River - June 2026

Number of Exceedances (AAAQO): 1-hr: 4 24-hr: 1

Maximum Value: 1146.1 ppb on Jun 29 08:00

Maximum Daily Average: 140.1 ppb on Jun 29

Minimum Value: 0.0 ppb on Jun 1 01:00

Minimum Daily Average: 0.0 ppb on Jun 3

Maximum Diurnal Average: 40.6 ppb at hour 8

Minimum Diurnal Average: 0.2 ppb at hour 22

Monthly Average: 5.13 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} = 10.8

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-Jun	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	0.2	0.3	0.4	0.3	0.1	0.2	0.1	0.1	0.4
2-Jun	0.2	0.1	Z	0.2	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	1.5	4.3	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	4.3
3-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4-Jun	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
5-Jun	0.0	0.0	0.0	0.0	0.1	Z	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2
6-Jun	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	0.0	0.0	0.0	0.0	0.0	0.1
7-Jun	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	0.8	5.8	2.4	0.1	0.0	0.2	0.3	0.3	0.2	0.4	5.8
8-Jun	0.2	0.7	Z	1.0	0.3	0.0	0.5	1.5	3.2	3.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	3.9
9-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.7	1.2	0.7	0.0	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.2	1.2
10-Jun	0.0	0.0	4.7	4.5	Z	0.2	0.8	0.1	0.0	0.4	1.0	0.3	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	4.7
11-Jun	3.3	3.7	0.1	0.0	0.4	Z	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	0.0	0.0	0.0	0.8	0.4	3.7
12-Jun	Z	1.5	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.5	0.3	0.2	0.1	0.1	0.2	1.5
13-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.1	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	0.1	1.0
14-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.5	3.5	0.3	1.0	0.0	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.4	0.4	0.2	0.0	0.0	0.4	3.5
15-Jun	0.0	0.0	0.0	Z	0.0	0.1	0.4	C	C	C	C	0.8	0.7	0.6	0.8	0.5	0.3	0.3	0.3	0.5	0.9	0.2	0.1	0.0	0.3	0.9
16-Jun	0.0	0.1	0.0	0.1	Z	0.0	0.0	0.6	0.0	0.0	0.1	0.1	0.1	2.1	4.6	0.9	0.0	0.0	0.0	0.2	0.3	0.1	0.2	0.1	0.4	4.6
17-Jun	0.0	0.1	0.0	0.0	0.1	Z	0.4	0.1	0.1	0.3	0.1	0.0	0.1	0.2	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
18-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.4	0.2	0.2	0.6	2.9	2.9	1.1	0.0	0.1	0.1	0.8	0.8	1.6	0.0	0.1	0.1	0.1	0.0	0.5	2.9
19-Jun	0.0	Z	0.0	0.0	0.1	1.0	0.0	1.9	0.5	0.4	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.9
20-Jun	0.0	0.0	Z	0.0	0.0	0.2	5.0	18.5	24.8	9.6	4.8	3.4	4.6	2.9	2.2	1.0	0.6	0.2	0.5	7.6	2.5	0.3	0.5	0.4	3.9	24.8
21-Jun	0.3	0.2	0.2	Z	0.3	0.2	0.7	0.8	0.3	0.4	0.4	0.7	1.1	1.3	0.9	0.3	0.9	1.8	0.8	0.4	0.4	0.3	0.2	0.1	0.6	1.8
22-Jun	0.0	0.1	0.0	0.0	Z	0.4	0.8	1.8	2.3	3.6	3.7	2.0	2.2	5.6	3.3	0.5	1.0	0.9	1.2	1.3	1.4	0.9	0.6	0.4	1.5	5.6
23-Jun	0.3	0.2	0.1	0.2	0.1	Z	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.3	1.4	0.5	1.2	0.9	0.7	0.3	0.3	1.4
24-Jun	Z	0.6	0.2	0.4	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
25-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.1	0.0	0.1	0.3
26-Jun	0.2	0.5	Z	0.4	0.3	0.7	0.7	0.7	0.8	0.7	0.3	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	0.3	0.8
27-Jun	0.0	0.0	0.0	Z	0.1	0.2	0.2	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
28-Jun	0.1	0.1	0.1	0.1	Z	0.7	1.3	3.2	2.9	0.7	0.2	0.4	0.2	0.0	0.2	0.2	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.5	3.2
29-Jun	0.3	0.4	0.3	0.3	1.7	Z	705.0	1146.1	851.5	475.0	17.6	0.8	0.6	3.8	3.2	2.6	2.8	2.2	0.6	0.2	0.3	0.9	2.6	3.2	140.1	1146.1
30-Jun	Z	2.5	2.2	1.7	1.3	0.9	0.4	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.1	4.9	0.6	0.7	0.6	0.7	0.8	0.7	0.5	0.6	0.9	4.9
	0.2	0.4	0.3	0.4	0.2	0.2	23.9	40.6	30.7	17.1	1.2	0.5	0.4	0.6	0.6	0.6	0.5	0.4	0.3	0.4	0.3	0.2	0.2	0.2	Diurnal Average	
	3.3	3.7	4.7	4.5	1.7	1.0	705.0	1146.1	851.5	475.0	17.6	3.4	4.6	5.6	4.6	4.9	5.8	2.4	1.6	7.6	2.5	0.9	2.6	3.2	Diurnal Maximum	

Z - zerospan C - Calibration

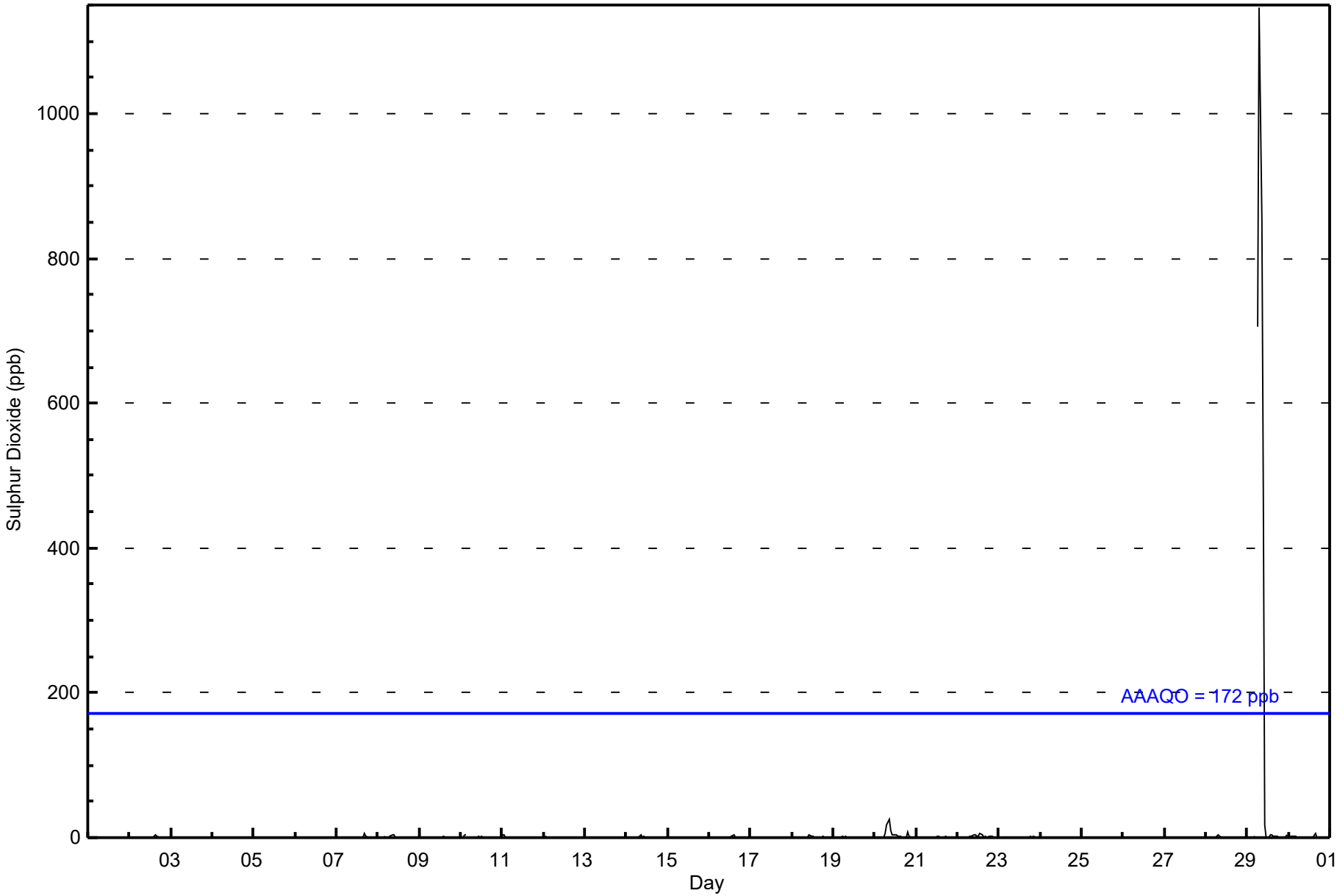
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Mackay River - June 2026



Sulphur Dioxide (SO_2) - ppb
Mackay River - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	679	98.98	98.98
11 - 20	2	0.29	99.27
21 - 60	1	0.15	99.42
61 - 110	0	0.00	99.42
111 - 172	0	0.00	99.42
> 172	4	0.58	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 - June 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	53	91	34	26	20	57	45	32	50	36	24	35	47	26	46	56	678
11 - 20	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
21 - 60	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
61 - 110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111 - 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 172	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Totals	53	98	34	26	20	57	45	32	50	36	24	35	47	26	46	56	685

Total Number of Valid Hours: 685

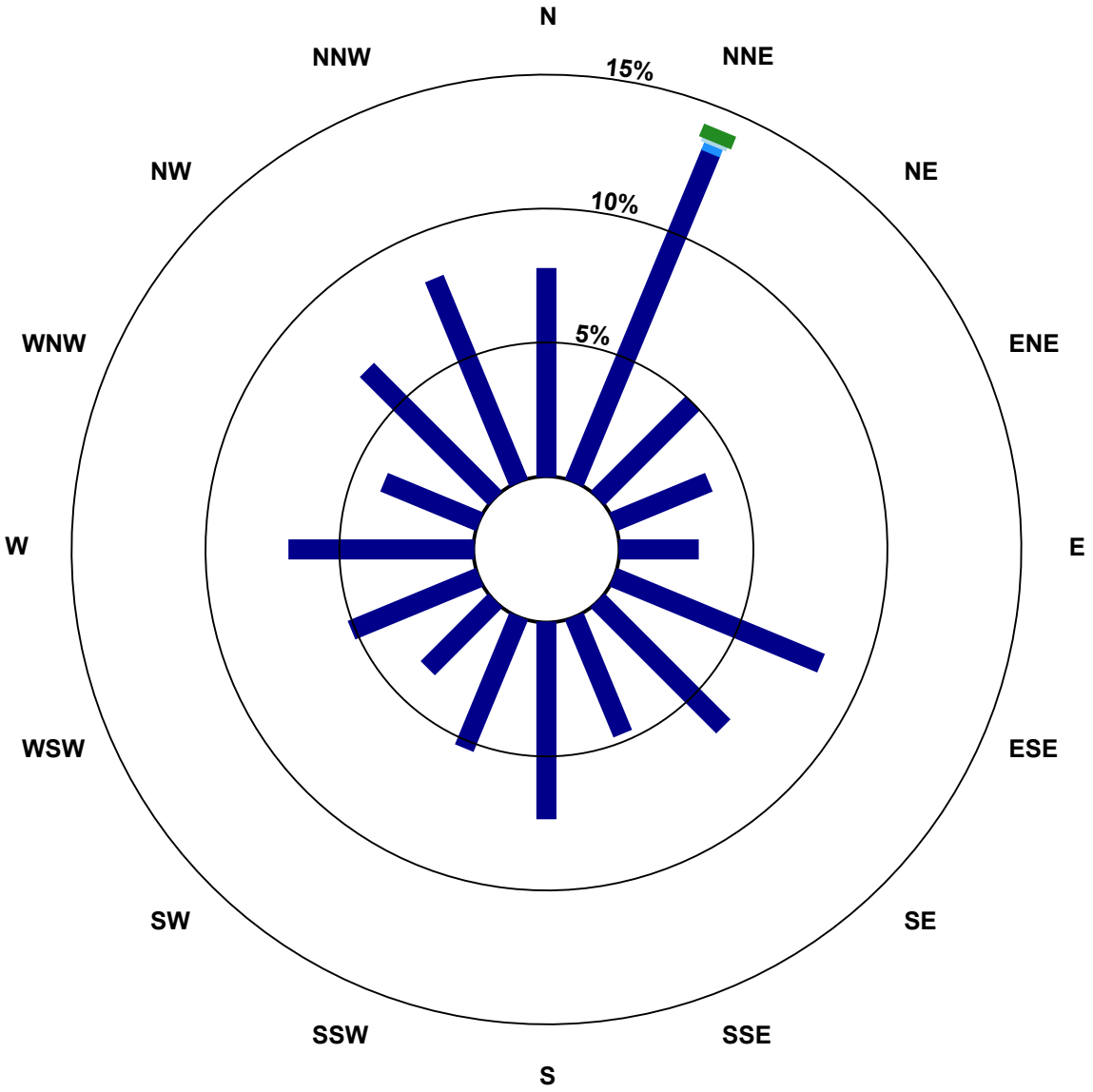
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Mackay River



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

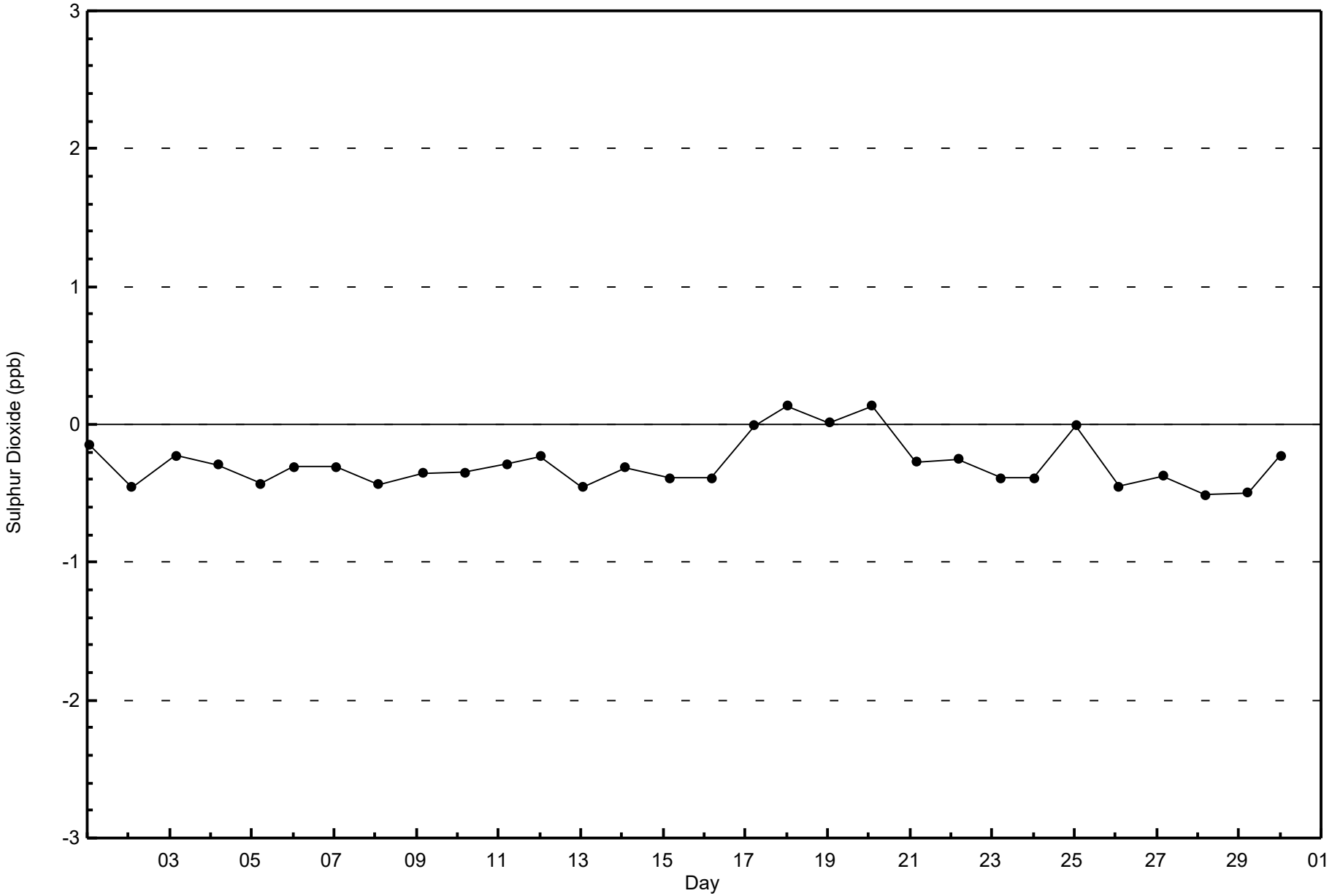
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Mackay River - June 2026

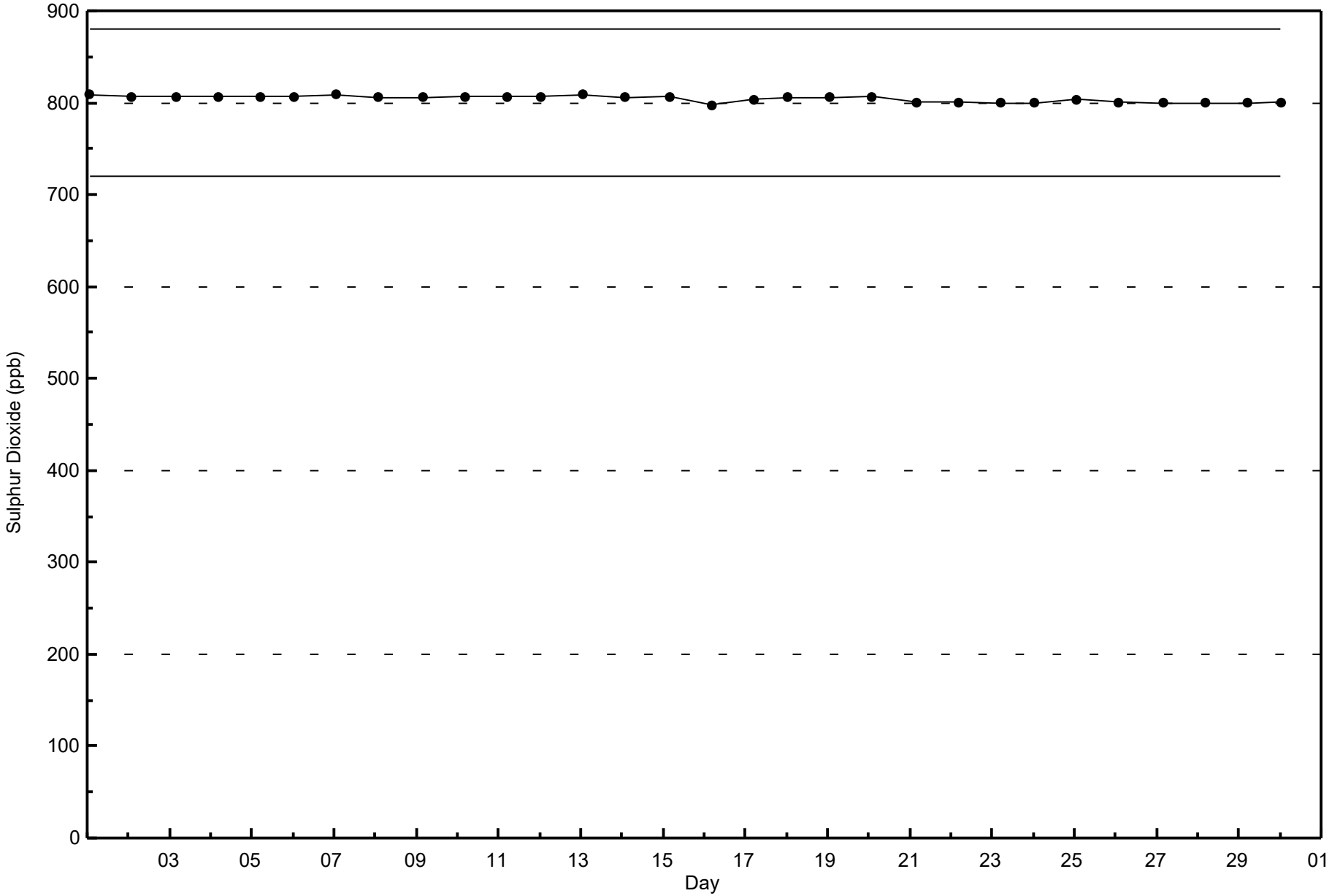


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Mackay River - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Mackay River - June 2026

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

Maximum Value: 3.1 ppb on Jun 29 08:00

Maximum Daily Average: 0.6 ppb on Jun 29

Minimum Value: 0.0 ppb on Jun 17 13:00

Minimum Daily Average: 0.1 ppb on Jun 2

Maximum Diurnal Average: 0.2 ppb at hour 4

Minimum Diurnal Average: 0.1 ppb at hour 19

Monthly Average: 0.14 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.1$ Median = 0.1 $Q_3 = 0.1$ $P_{90} = 0.2$ $P_{99} = 0.8$

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-Jun	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	0.0	0.1	0.2
2-Jun	0.1	0.0	0.1	Z	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	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1
3-Jun	0.1	0.0	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2
4-Jun	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
5-Jun	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	0.1	0.1	0.1	0.1	0.1	0.2
6-Jun	0.1	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
7-Jun	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	0.1	0.1	0.3	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.3
8-Jun	0.2	0.2	0.2	Z	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
9-Jun	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.3
10-Jun	0.2	0.2	0.3	0.6	0.4	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	0.6
11-Jun	Z	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	0.1	0.1	0.1	0.1	0.1	0.2
12-Jun	0.1	Z	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	0.1	0.0	0.0	0.1	0.1	0.2	0.5	0.5	0.5	0.1	0.5
13-Jun	0.2	0.5	Z	0.7	0.4	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5	0.4	0.1	0.2	0.7
14-Jun	0.1	0.1	0.2	Z	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2
15-Jun	0.8	0.3	0.7	0.3	Z	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.8
16-Jun	0.1	0.1	0.1	0.2	0.3	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.2	0.3
17-Jun	Z	0.3	0.7	0.8	0.8	0.5	C	C	C	C	C	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.2	0.8
18-Jun	0.2	Z	0.3	0.4	0.3	0.3	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	0.2	0.1	0.4
19-Jun	0.2	0.1	Z	0.3	0.2	0.2	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
20-Jun	0.2	0.2	0.3	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	0.2	0.1	0.1	0.1	0.1	0.1	0.3
21-Jun	0.1	0.1	0.2	0.2	Z	0.4	0.4	0.3	0.2	0.8	0.1	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	0.8
22-Jun	0.2	0.2	0.6	0.1	0.3	Z	0.4	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	0.2	0.6
23-Jun	Z	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	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
24-Jun	0.1	Z	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	0.2	0.2	0.1	0.2	0.1	0.3
25-Jun	0.2	0.1	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
26-Jun	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
27-Jun	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	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
28-Jun	0.1	0.2	0.2	0.2	0.3	Z	0.6	0.4	0.4	0.2	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	0.2	0.6
29-Jun	Z	0.2	0.2	0.2	0.3	0.4	1.3	3.1	2.7	2.4	0.7	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.6	3.1
30-Jun	0.2	Z	0.3	0.3	0.4	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.4
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	Diurnal Average	
	0.8	0.5	0.7	0.8	0.8	0.5	1.3	3.1	2.7	2.4	0.7	0.2	0.3	0.3	0.2	0.1	0.3	0.2	0.1	0.2	0.2	0.5	0.5	0.5	Diurnal Maximum	

Z - zerospan C - Calibration

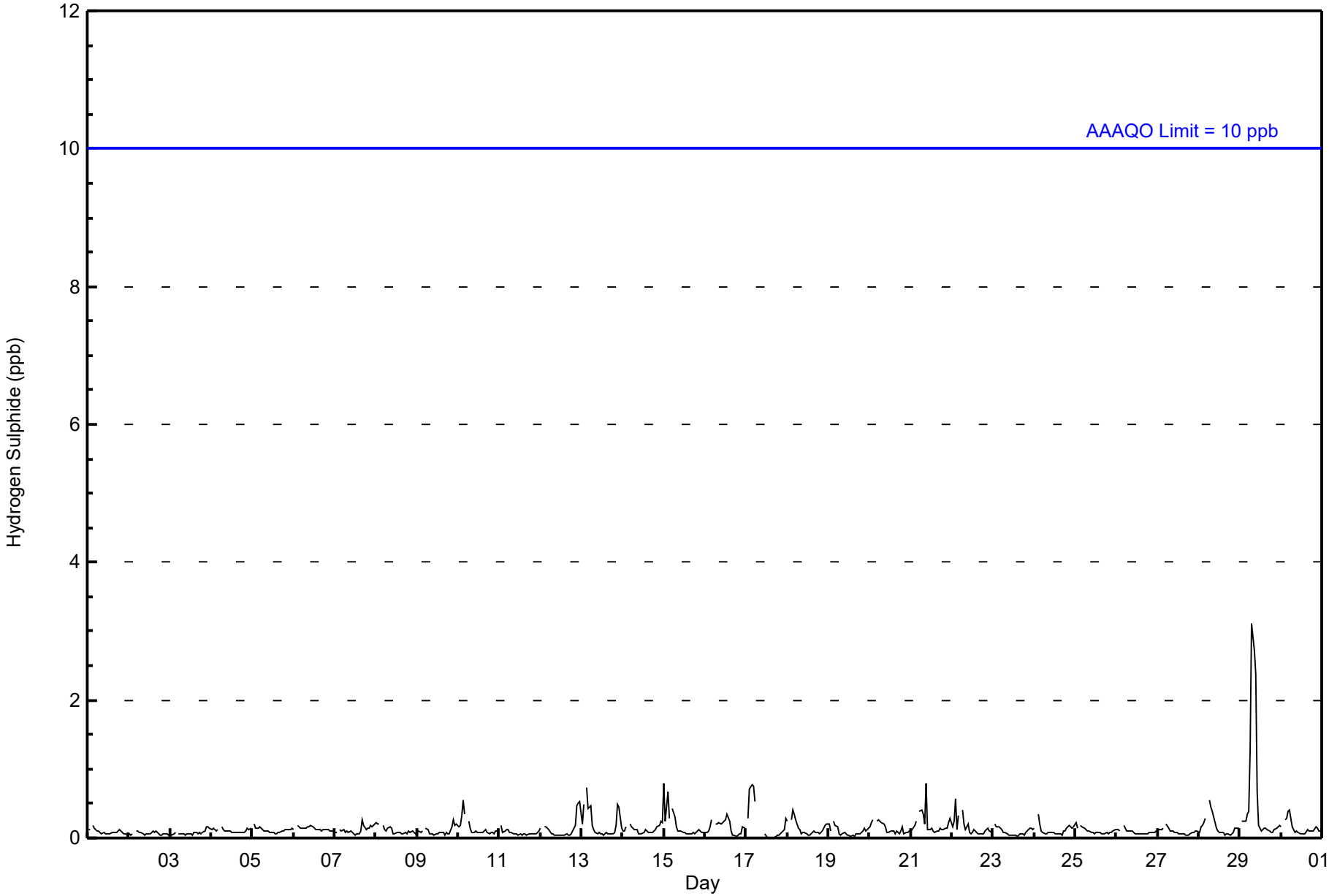
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Mackay River - June 2026



Hydrogen Sulphide (H_2S) - ppb
Mackay River - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	683	99.71	99.71
3 - 4	2	0.29	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

Mackay River - June 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 2	49	94	35	25	21	59	49	31	50	37	23	33	49	25	47	55	682
3 - 4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5 - 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 - 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	49	96	35	25	21	59	49	31	50	37	23	33	49	25	47	55	684

Total Number of Valid Hours: 684

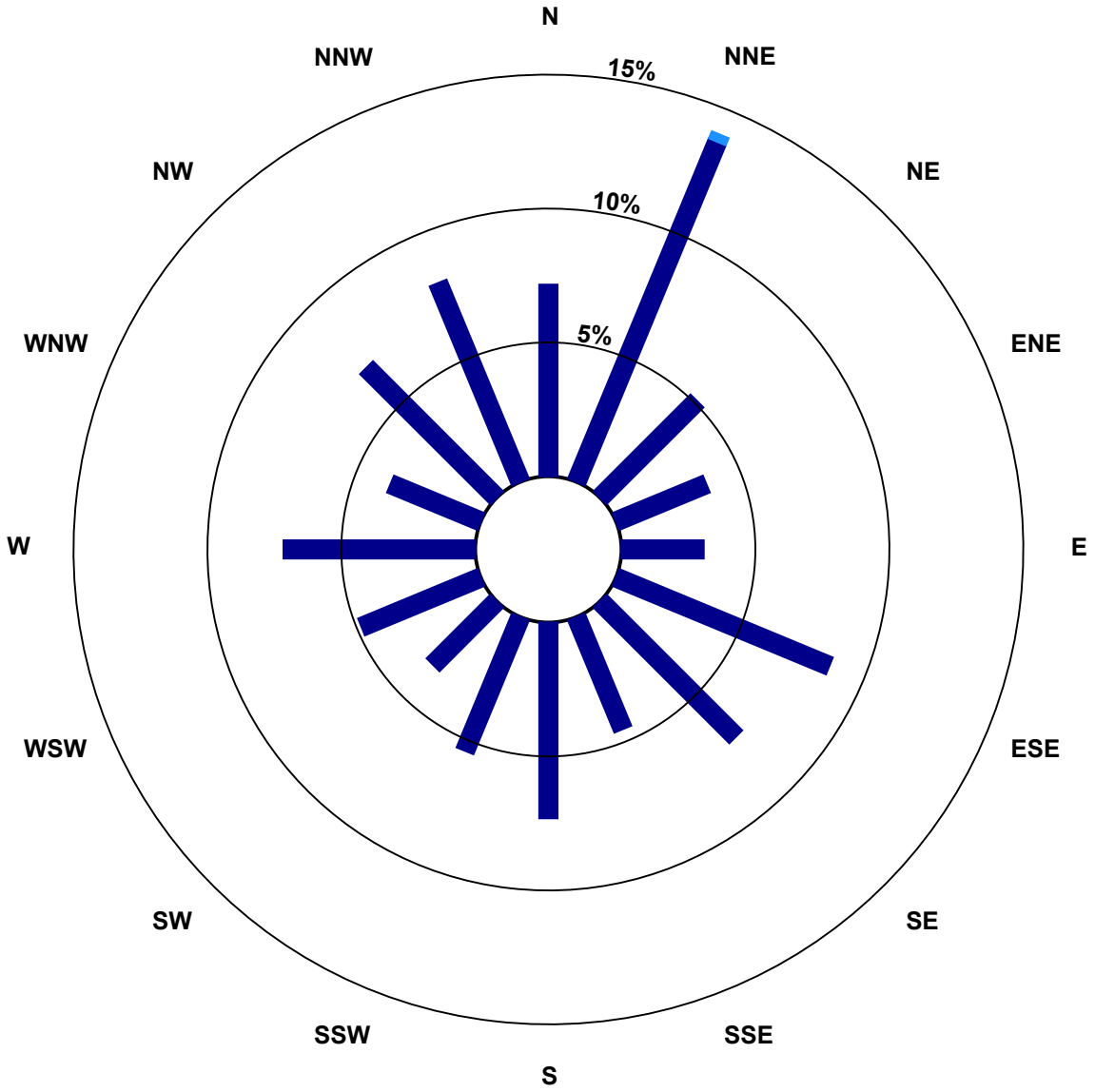
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H_2S) - ppb

Mackay River



Classes (ppb)

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

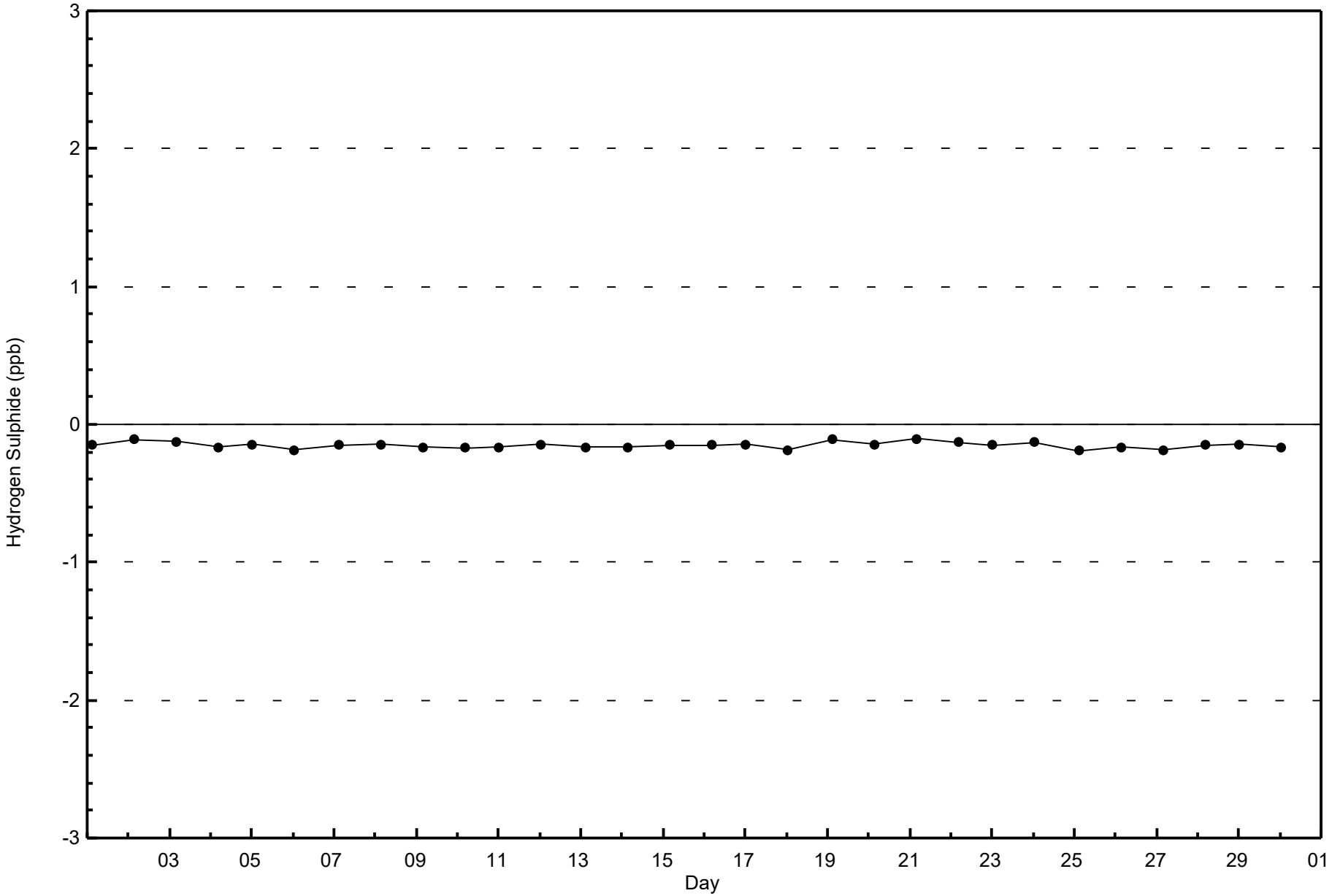
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Mackay River - June 2026

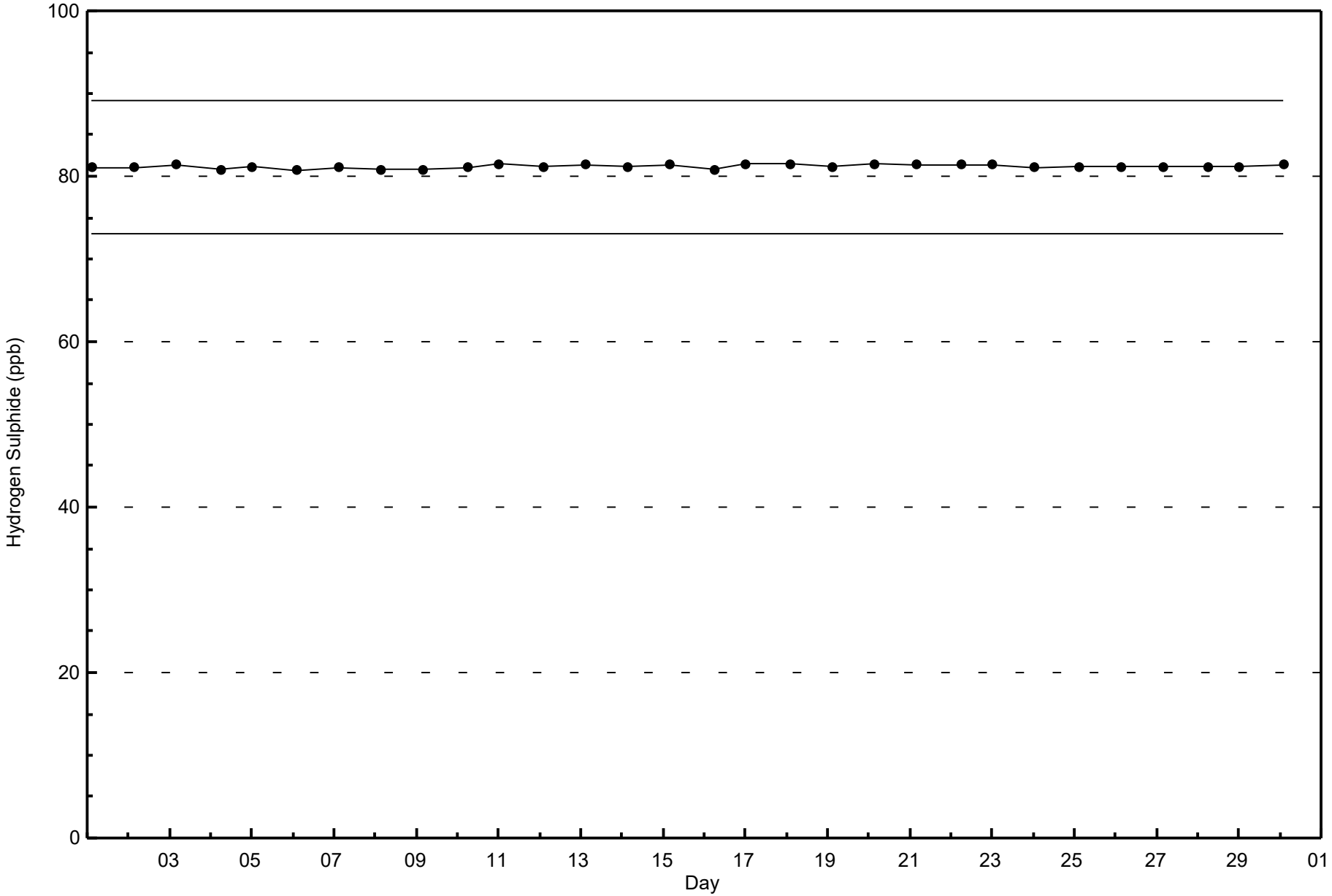


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Mackay River - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Mackay River - June 2026

Maximum Value: 3.3 ppm on Jun 28 06:00

Maximum Daily Average: 2.5 ppm on Jun 28

Minimum Value: 2.1 ppm on Jun 5 13:00

Minimum Daily Average: 2.1 ppm on Jun 5

Maximum Diurnal Average: 2.4 ppm at hour 6

Minimum Diurnal Average: 2.2 ppm at hour 17

Monthly Average: 2.26 ppm

Percentiles: P_1 = 2.1 P_{10} = 2.2 Q_1 = 2.2 Median = 2.2 Q_3 = 2.3 P_{90} = 2.4 P_{99} = 2.9

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-Jun	2.2	Z	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
2-Jun	2.2	2.2	Z	2.2	2.2	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3
3-Jun	2.2	2.2	2.2	Z	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2
4-Jun	2.2	2.2	2.2	2.2	Z	2.1	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	2.2
5-Jun	2.1	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
6-Jun	Z	2.1	2.1	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
7-Jun	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	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.3
8-Jun	2.4	2.4	Z	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	2.2	2.2	2.4
9-Jun	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	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.3
10-Jun	2.4	2.3	2.3	2.4	Z	2.4	2.4	2.2	2.2	2.2	2.2	2.1	2.2	2.1	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.4
11-Jun	2.2	2.3	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	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.3
12-Jun	Z	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	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.2	2.3
13-Jun	2.3	Z	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	2.2	2.1	2.2	2.2	2.3	2.3	2.2	2.2	2.4
14-Jun	2.3	2.3	Z	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.3
15-Jun	2.4	2.4	2.4	Z	2.5	2.6	2.6	C	C	C	C	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.6
16-Jun	2.2	2.2	2.2	2.2	Z	2.2	2.3	2.3	2.4	2.3	2.4	2.5	2.6	2.5	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.6
17-Jun	2.4	2.4	2.5	2.5	2.5	Z	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.3	2.5
18-Jun	Z	2.4	2.5	2.5	2.5	2.5	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.5
19-Jun	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	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.4
20-Jun	2.4	2.5	Z	2.7	2.7	2.7	2.5	2.5	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.3	2.2	2.3	2.2	2.2	2.3	2.3	2.4	2.7
21-Jun	2.3	2.5	2.6	Z	2.9	2.9	3.0	2.8	2.5	2.3	2.3	2.2	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	3.0
22-Jun	2.4	2.4	2.5	2.4	Z	2.6	2.5	2.4	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.6
23-Jun	2.3	2.3	2.3	2.3	2.3	Z	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.3	2.4
24-Jun	Z	2.6	2.6	2.5	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.6
25-Jun	2.3	Z	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.3
26-Jun	2.3	2.3	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	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4
27-Jun	2.3	2.3	2.3	Z	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.2	2.4
28-Jun	2.3	2.5	2.7	2.8	Z	3.3	3.2	3.1	2.8	2.5	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.4	2.4	2.4	2.5	2.5	3.3
29-Jun	2.6	2.6	2.7	2.6	2.8	Z	3.1	2.9	2.6	2.5	2.5	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.5	2.5	3.1
30-Jun	Z	2.5	2.6	2.6	2.6	2.5	2.5	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.4	2.6
	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	Diurnal Average	
	2.6	2.6	2.7	2.8	2.9	3.3	3.2	3.1	2.8	2.5	2.5	2.5	2.6	2.5	2.4	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.5	Diurnal Maximum	

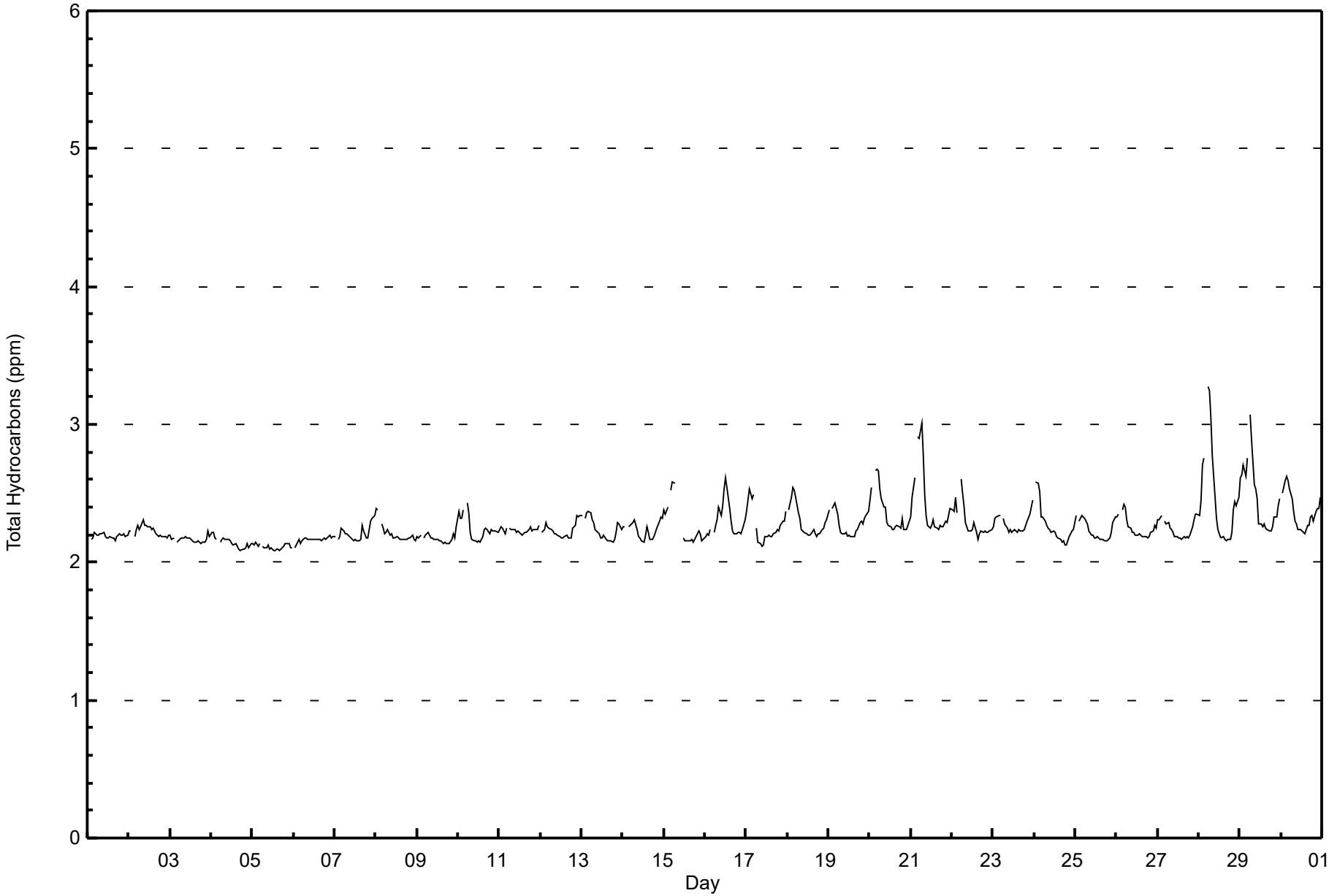
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Mackay River - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Total Hydrocarbons (THC) - ppm

Mackay River - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	0	0.00	0.00
2.1 - 3.0	682	99.42	99.42
3.1 - 10.0	4	0.58	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

Mackay River - June 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	53	94	34	26	20	57	45	32	50	36	24	35	47	26	46	56	681
3.1 - 10.0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	53	98	34	26	20	57	45	32	50	36	24	35	47	26	46	56	685

Total Number of Valid Hours: 685

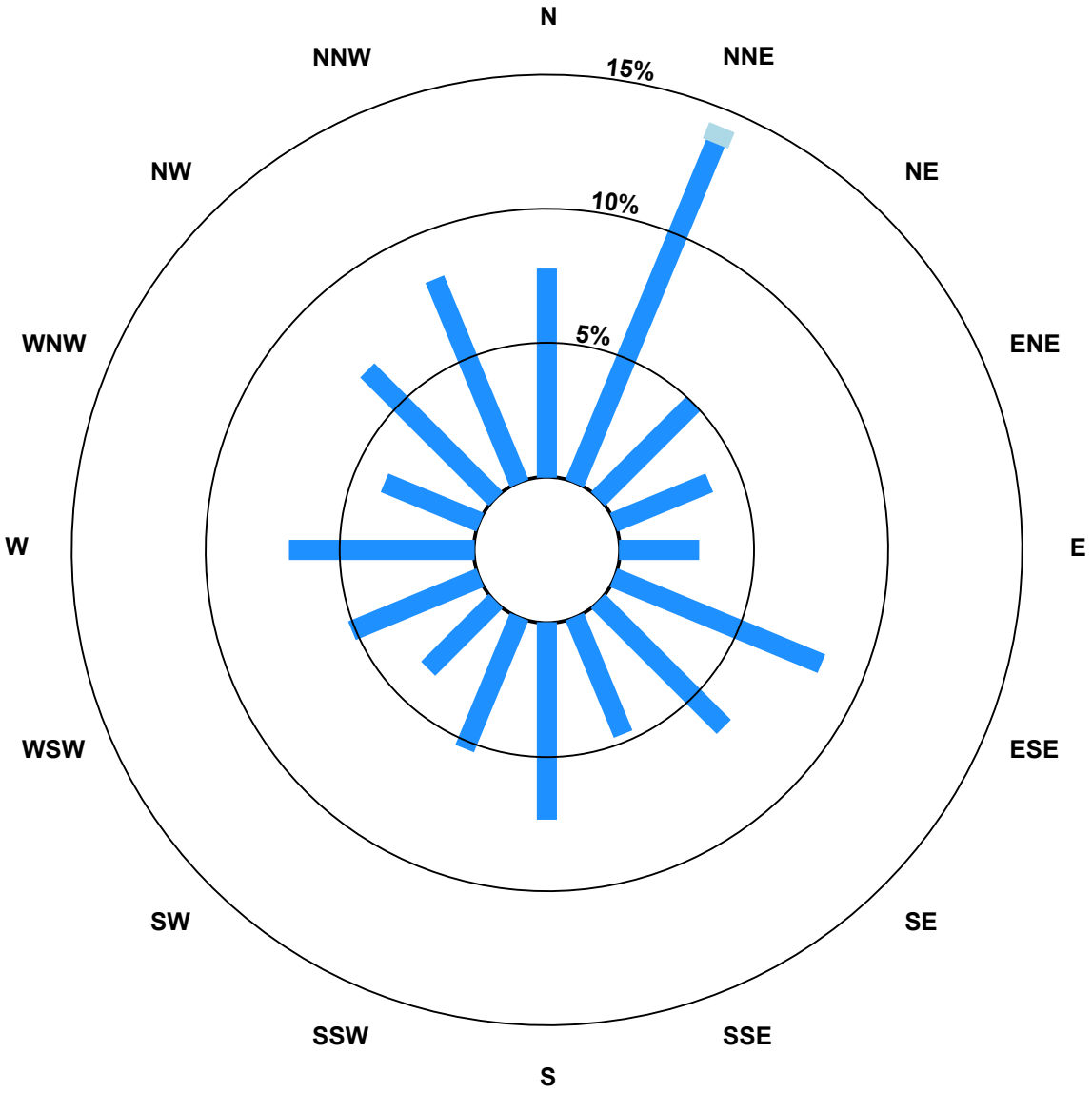
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Mackay River



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

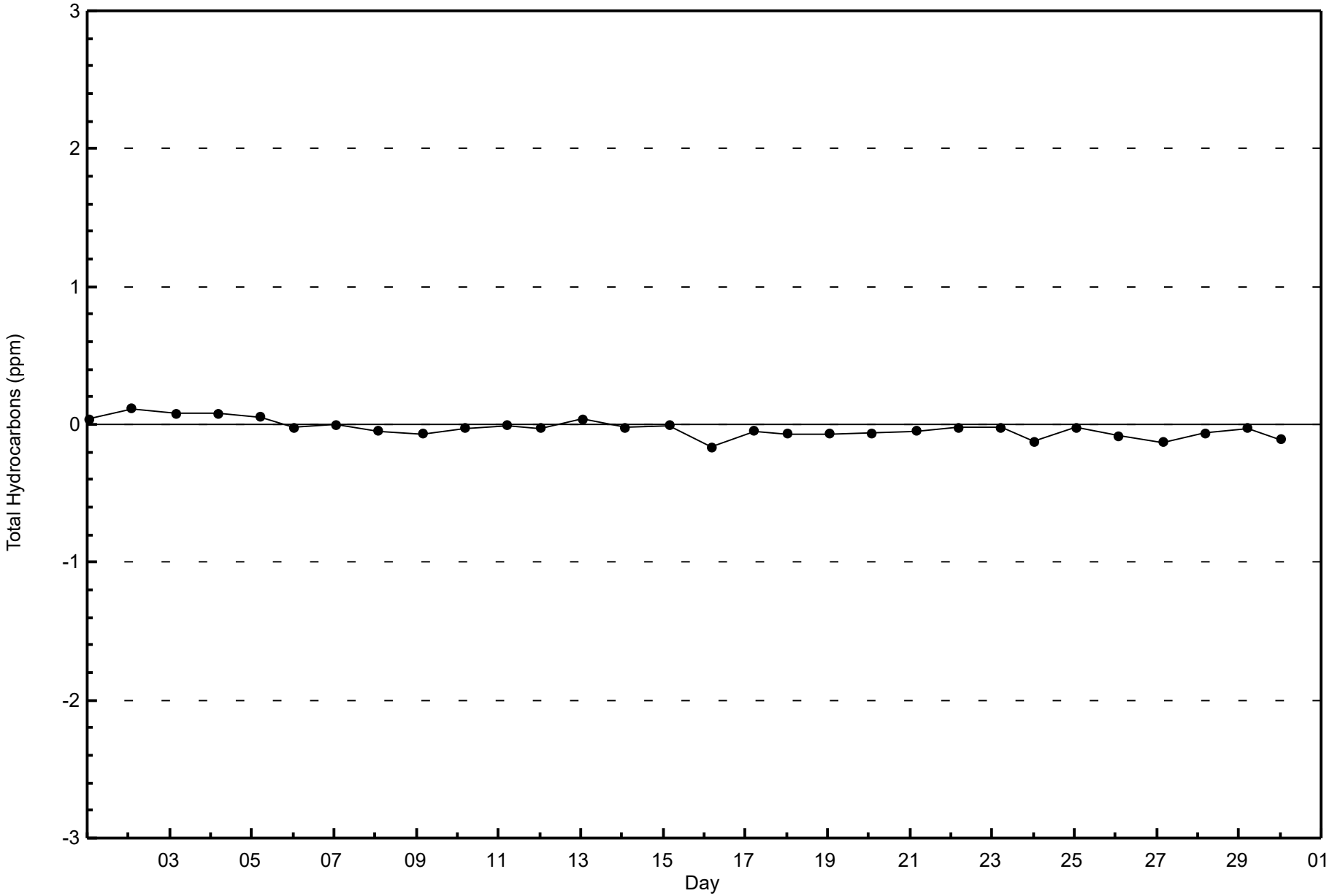
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Mackay River - June 2026

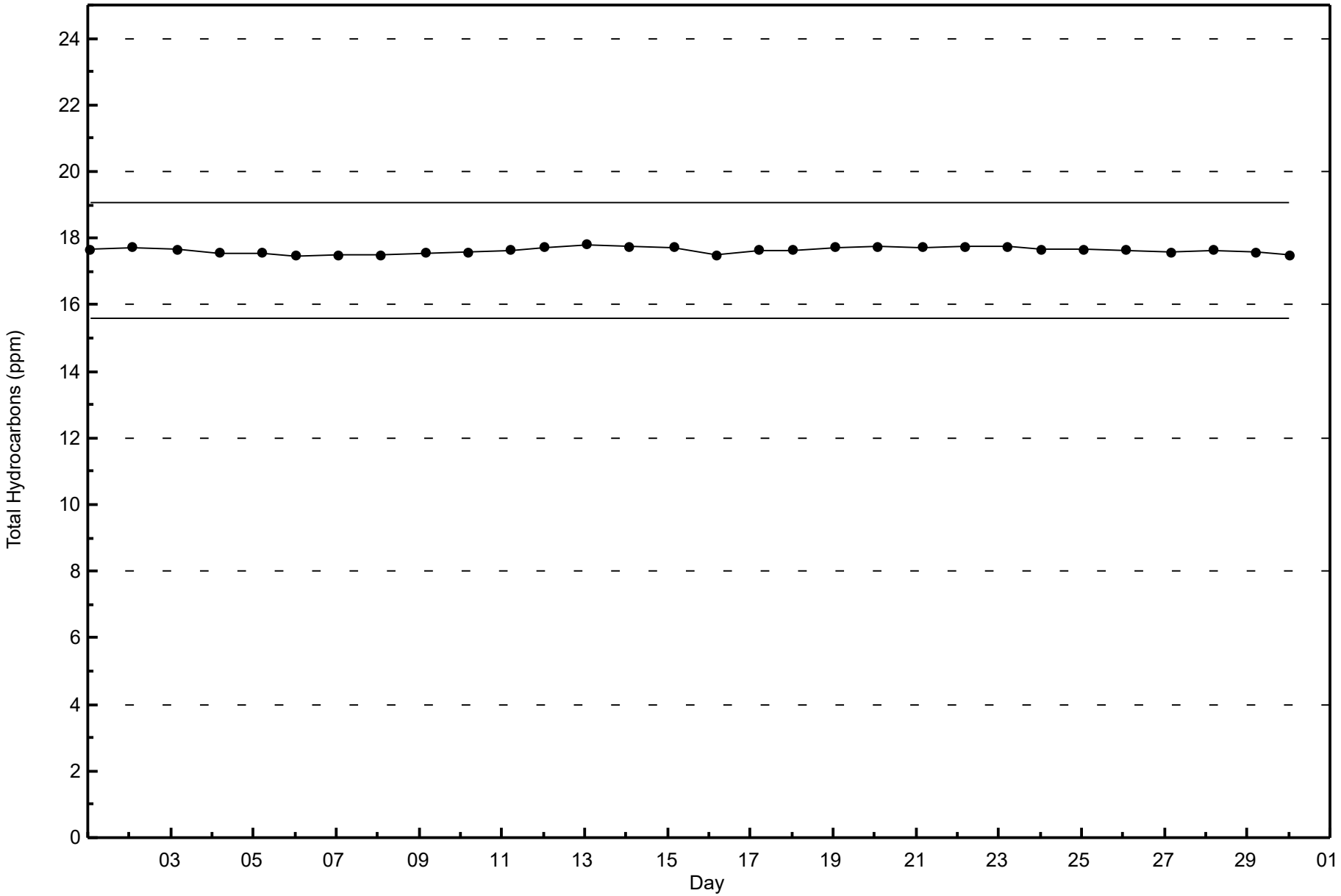


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Mackay River - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Mackay River - June 2026

Maximum Value: 17.2 ppb on Jun 21 07:00

Maximum Daily Average: 3.5 ppb on Jun 21

Minimum Value: 0.0 ppb on Jun 1 01:00

Minimum Daily Average: 0.0 ppb on Jun 25

Maximum Diurnal Average: 1.7 ppb at hour 7

Minimum Diurnal Average: 0.0 ppb at hour 22

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} = 0.5 P_{99} = 10.8

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-Jun	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	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.4	0.3	0.2	0.1	0.2	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
3-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
4-Jun	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
5-Jun	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
6-Jun	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
7-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
8-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.7	1.1	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	1.1
9-Jun	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	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
10-Jun	0.0	0.0	Z	0.2	1.2	2.7	2.0	0.2	0.0	0.1	0.1	0.1	0.3	0.1	0.1	0.4	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.4	2.7
11-Jun	0.5	0.5	0.0	Z	0.1	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.5
12-Jun	0.2	0.1	0.0	0.1	Z	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.2
13-Jun	0.1	0.0	0.0	0.0	0.1	Z	0.1	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
14-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.6
15-Jun	0.0	Z	0.1	0.1	0.1	0.7	2.4	0.6	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.4
16-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	C	C	C	C	1.8	3.1	2.5	0.9	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.5	3.1
17-Jun	0.0	0.0	0.0	Z	0.1	0.2	0.7	0.4	0.5	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	0.0	0.0	0.1	0.7
18-Jun	0.0	0.0	0.0	0.0	Z	0.2	0.1	0.3	0.0	0.1	0.5	0.4	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.5
19-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.4	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.4	0.5	0.8	0.5	0.1	0.1	0.1	0.1	0.2	0.8
20-Jun	Z	0.2	0.8	2.0	3.8	7.3	8.7	11.5	10.7	5.5	2.4	1.1	1.1	0.5	0.3	0.3	0.4	0.4	0.2	0.3	0.0	0.0	0.0	0.0	2.5	11.5
21-Jun	0.0	Z	1.5	13.5	14.7	12.8	17.2	12.6	3.6	1.5	0.7	0.4	0.6	1.0	0.2	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.1	0.1	3.5	17.2
22-Jun	0.1	0.1	Z	0.1	0.2	1.3	2.8	3.7	2.7	1.2	0.7	0.8	0.5	0.7	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.7	3.7
23-Jun	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	0.0	0.0	0.0	0.0	0.0	0.1
24-Jun	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
25-Jun	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
26-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
27-Jun	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
28-Jun	0.0	0.0	Z	0.0	1.3	9.8	11.2	8.8	4.3	1.5	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	1.6	11.2
29-Jun	0.0	0.0	0.0	Z	0.6	2.8	4.7	3.3	2.5	2.2	2.0	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	0.8	4.7
30-Jun	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	0.1	0.6	0.9	1.5	1.7	1.5	0.9	0.5	0.3	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	Diurnal Average	
	0.5	0.5	1.5	13.5	14.7	12.8	17.2	12.6	10.7	5.5	2.4	1.8	3.1	2.5	0.9	0.5	0.6	0.5	0.8	0.5	0.1	0.1	0.1	0.1	Diurnal Maximum	

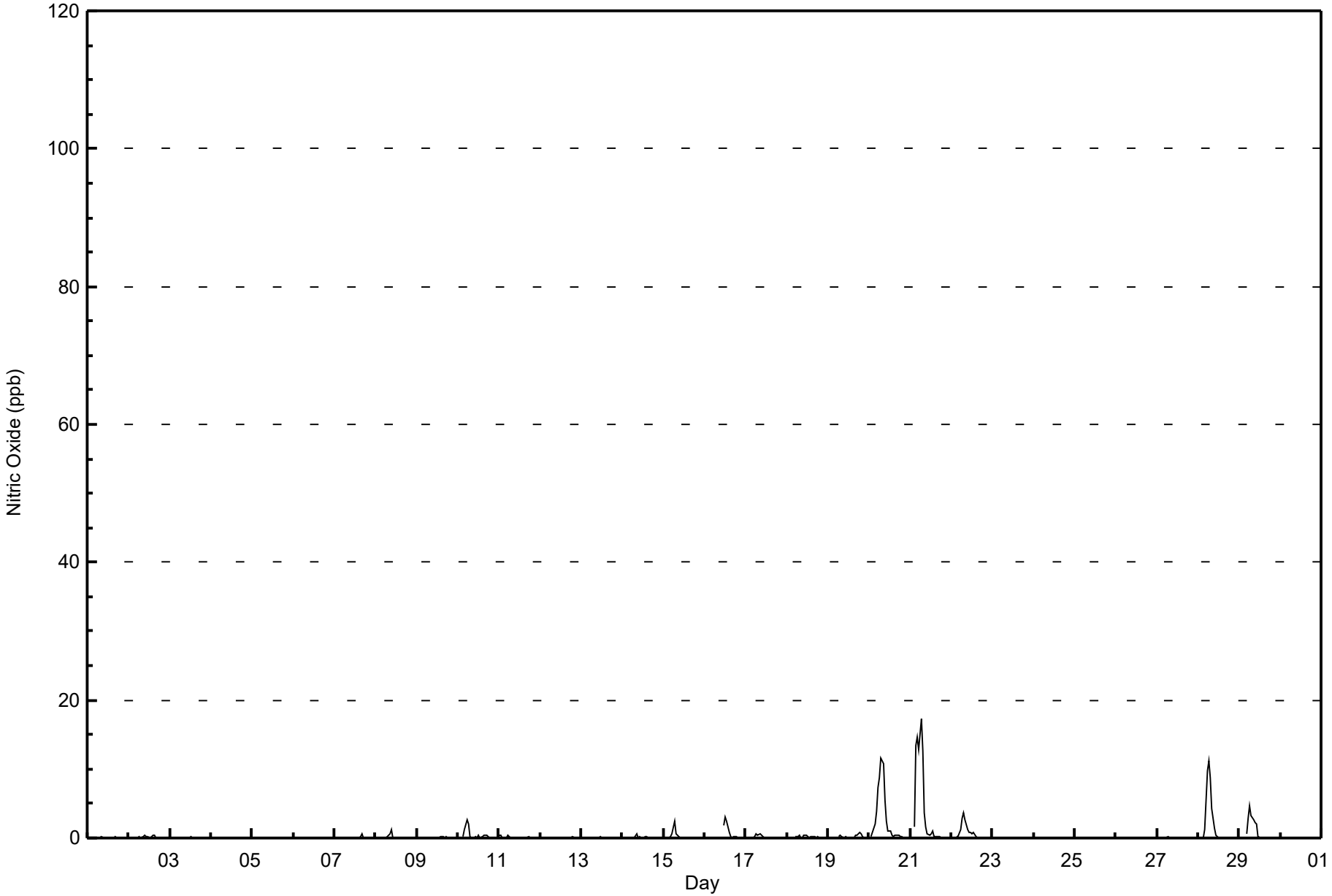
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Mackay River - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	686	100.00	100.00
21 - 40	0	0.00	100.00
11 - 80	0	0.00	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Mackay River - June 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	55	95	34	24	21	59	47	32	49	37	24	36	46	26	44	56	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	55	95	34	24	21	59	47	32	49	37	24	36	46	26	44	56	685

Total Number of Valid Hours: 685

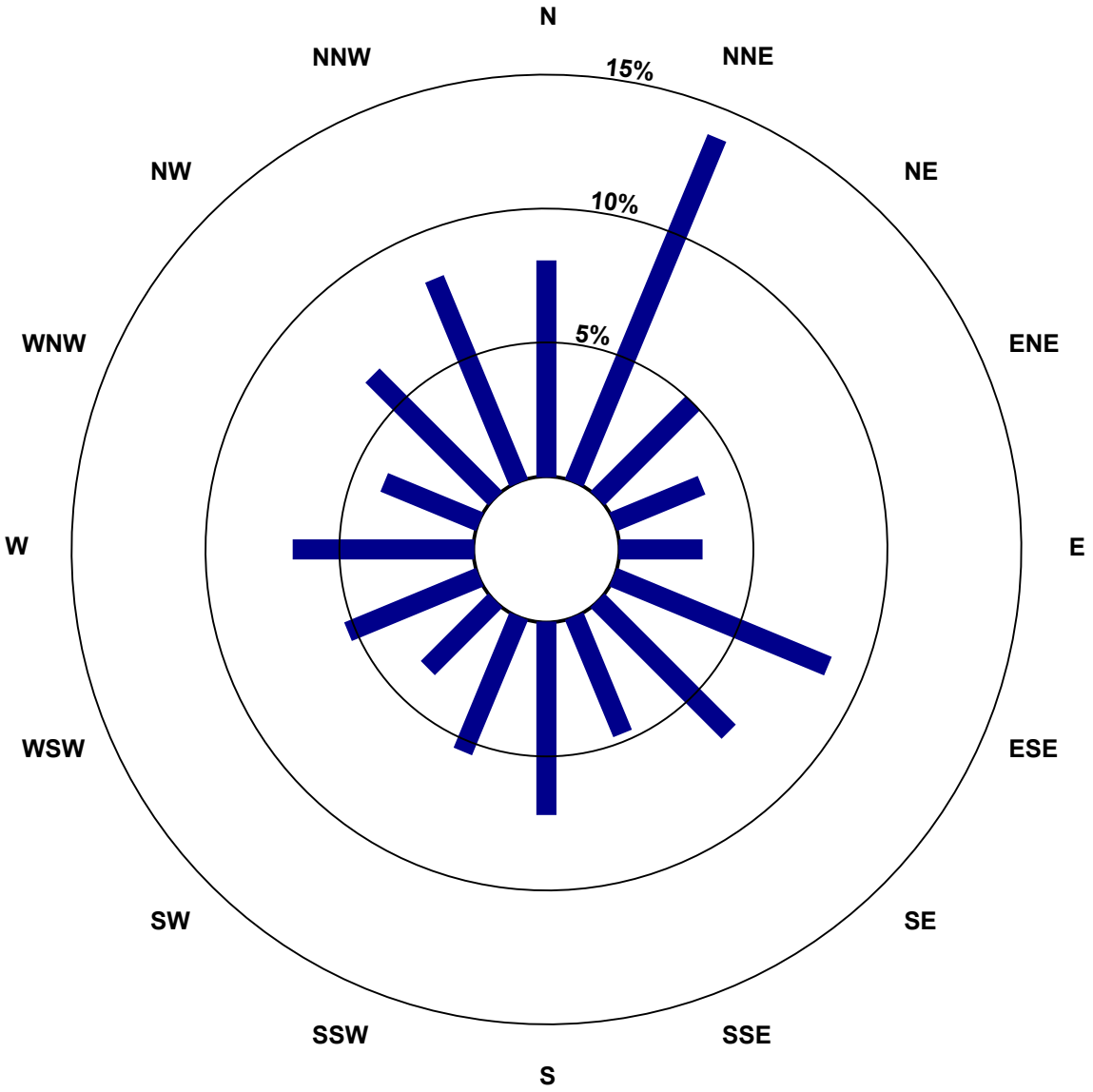
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Mackay River



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

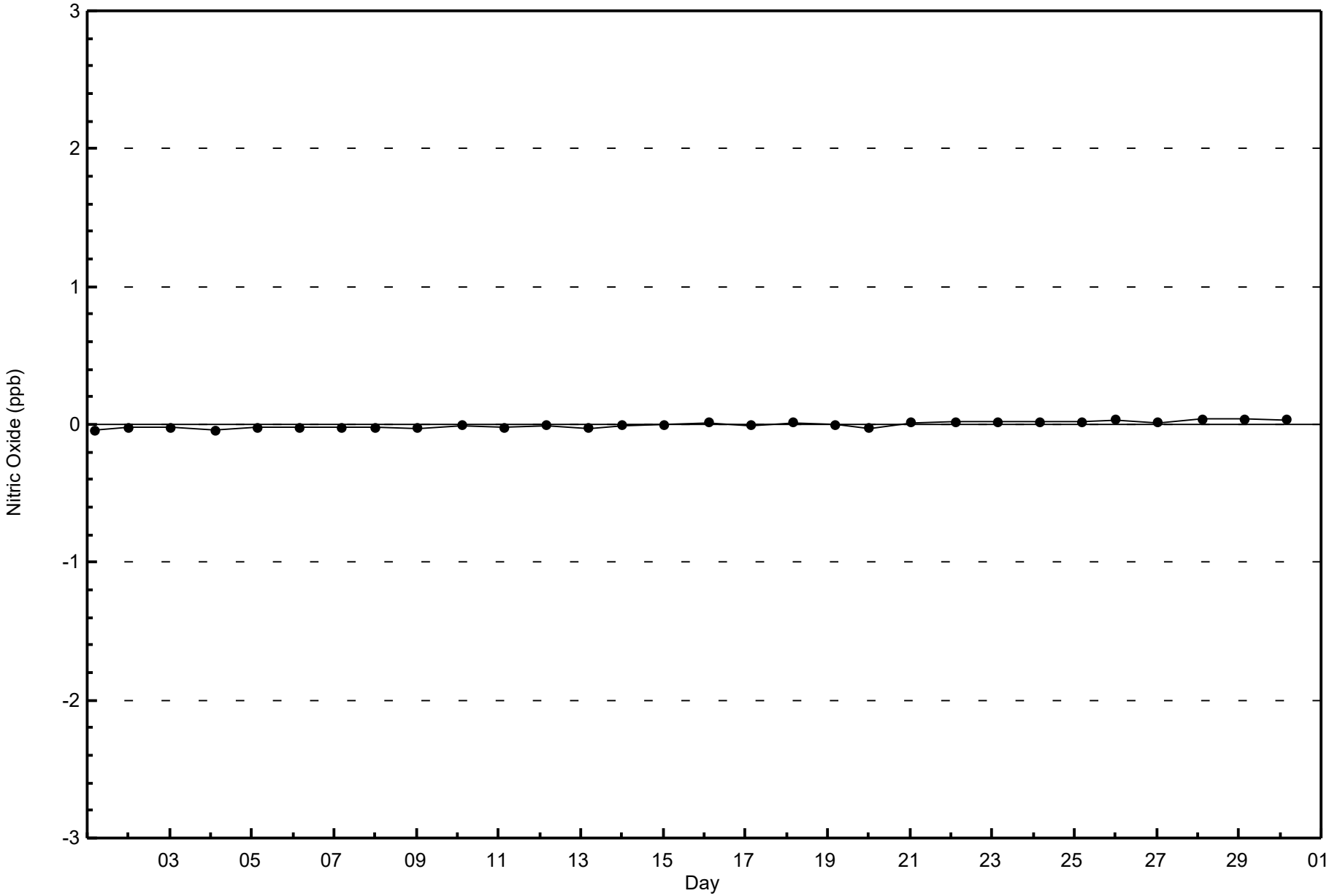
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Mackay River - June 2026

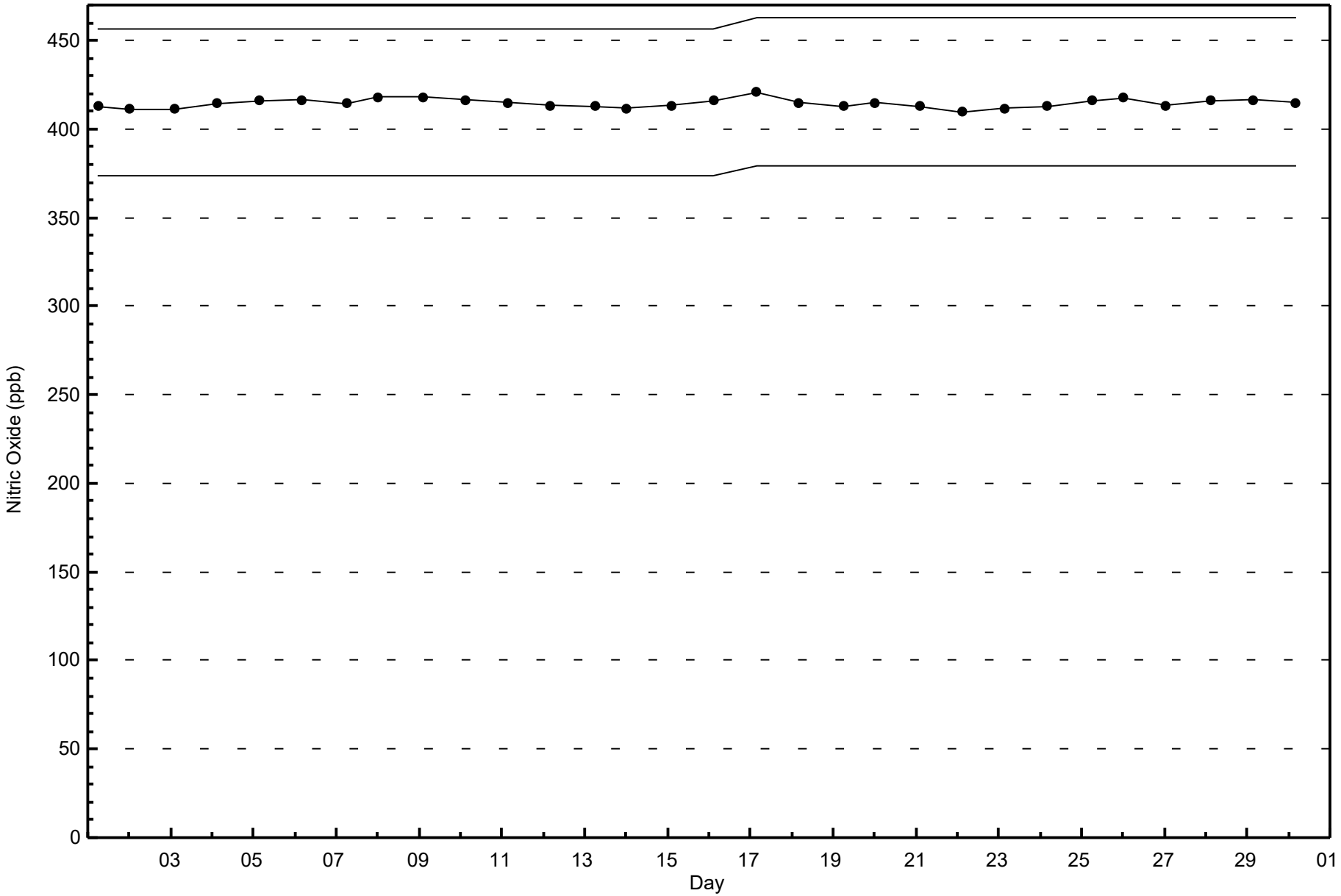


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Mackay River - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Mackay River - June 2026

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

Maximum Value: 21.8 ppb on Jun 28 07:00

Maximum Daily Average: 5.4 ppb on Jun 29

Minimum Value: 0.1 ppb on Jun 1 02:00

Minimum Daily Average: 0.2 ppb on Jun 13

Maximum Diurnal Average: 3.0 ppb at hour 6

Minimum Diurnal Average: 0.8 ppb at hour 23

Monthly Average: 1.38 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.3 Median = 0.6 Q_3 = 1.4 P_{90} = 3.0 P_{99} = 12.6

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-Jun	0.4	0.1	0.3	0.2	0.2	Z	1.2	1.3	1.1	0.6	0.2	0.2	0.2	0.2	0.6	0.6	0.6	0.8	1.2	1.5	1.4	1.4	1.2	1.7	0.7	1.7
2-Jun	Z	2.8	3.4	2.1	3.5	2.8	2.5	2.1	3.0	2.3	1.6	1.2	0.7	1.2	1.9	3.1	1.1	0.5	0.3	0.2	0.2	0.2	0.4	0.7	1.6	3.5
3-Jun	0.6	Z	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.6	1.0	0.6	0.5	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4	1.0
4-Jun	0.3	0.3	Z	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.5
5-Jun	0.6	0.6	0.5	Z	0.6	0.6	0.5	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.4	0.6
6-Jun	0.2	0.2	0.3	0.3	Z	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.5	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.6
7-Jun	0.3	0.3	0.3	0.2	0.2	Z	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.7	3.8	3.0	1.5	1.1	1.7	2.7	3.7	4.5	1.2	4.5
8-Jun	Z	5.0	5.4	4.4	3.0	1.1	0.7	1.5	2.3	2.3	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	1.2	5.4
9-Jun	0.2	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.6	0.9	0.5	0.2	0.7	0.5	0.2	0.2	0.1	0.2	2.3	0.4	2.3
10-Jun	5.4	3.4	Z	8.3	6.1	7.0	4.3	1.0	0.2	0.4	0.7	0.7	1.8	0.5	0.7	1.6	2.1	1.9	0.7	0.3	0.1	0.1	0.1	0.2	2.1	8.3
11-Jun	1.8	2.0	0.3	Z	1.0	1.3	0.7	0.5	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.7	1.4	1.5	0.4	0.2	0.2	0.2	1.4	0.7	2.0
12-Jun	2.5	0.9	0.1	0.8	Z	0.4	0.4	0.3	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.1	0.2	0.5	2.4	1.8	1.5	1.1	0.9	0.7	2.5
13-Jun	0.5	0.5	0.4	0.3	0.1	Z	0.2	0.2	0.1	0.3	0.2	0.5	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	0.5
14-Jun	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.7	1.9	0.4	0.9	0.2	0.4	1.4	2.1	1.6	0.8	0.7	1.0	1.6	1.4	1.0	0.9	0.6	0.9	2.1
15-Jun	0.6	Z	0.5	0.5	0.6	1.7	6.0	2.4	1.4	1.2	0.8	0.7	0.6	0.6	0.7	0.6	0.4	0.5	0.7	1.0	1.3	0.7	0.7	0.5	1.1	6.0
16-Jun	0.4	0.4	Z	0.5	0.4	0.4	0.6	C	C	C	C	6.9	6.7	5.8	4.4	3.2	1.5	1.5	1.5	1.7	1.8	0.9	2.9	4.8	2.4	6.9
17-Jun	5.2	4.7	4.0	Z	1.0	1.0	1.8	1.0	1.4	1.1	0.7	0.5	0.6	0.7	0.7	0.5	0.4	1.2	1.3	0.3	0.2	0.3	0.2	0.3	1.3	5.2
18-Jun	0.2	0.5	1.2	1.3	Z	0.9	0.8	1.3	0.3	0.4	1.3	1.5	0.6	0.1	0.8	0.9	0.5	0.5	0.9	0.2	0.4	0.4	0.4	0.3	0.7	1.5
19-Jun	0.2	0.2	0.2	0.1	0.1	Z	0.6	1.0	0.5	0.4	0.6	0.3	0.1	0.2	0.5	0.4	1.3	1.3	2.4	2.8	1.6	1.2	1.2	1.8	0.8	2.8
20-Jun	Z	4.0	3.2	5.7	8.0	7.4	6.5	7.0	7.2	5.9	2.9	2.1	2.1	1.4	1.4	1.7	1.7	1.8	1.6	3.6	1.5	0.5	0.4	0.4	3.4	8.0
21-Jun	1.2	Z	12.1	13.9	12.8	11.8	12.6	12.1	7.9	2.9	1.4	1.4	1.6	3.0	2.0	1.3	1.4	2.0	1.1	0.9	1.2	1.0	0.6	0.4	4.6	13.9
22-Jun	0.3	0.2	Z	0.3	0.2	1.9	3.5	3.8	3.3	2.3	2.2	2.1	2.4	3.6	2.2	0.4	1.0	1.3	1.4	1.3	1.5	1.2	0.8	0.5	1.6	3.8
23-Jun	0.4	0.3	0.3	Z	0.3	0.3	0.4	0.4	0.3	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.9	0.6	1.2	1.1	0.9	0.5	0.5	1.2
24-Jun	0.7	1.0	0.6	0.4	Z	0.4	0.3	0.4	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.5	1.0
25-Jun	0.3	0.3	0.3	0.3	0.3	Z	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.6
26-Jun	Z	0.6	0.7	0.6	0.6	1.0	1.1	0.9	0.9	0.8	0.8	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.5	0.6	0.6	1.1
27-Jun	0.6	Z	0.7	0.6	0.8	1.3	1.4	0.6	0.6	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.5	0.5	0.5	0.6	1.4
28-Jun	0.3	0.5	Z	2.9	7.6	19.7	21.8	19.2	12.5	6.7	3.3	1.9	1.3	0.9	0.8	0.9	0.9	1.0	0.9	1.0	1.0	1.0	0.8	1.5	4.7	21.8
29-Jun	3.4	4.9	4.7	Z	8.8	10.2	16.3	15.2	11.2	10.5	9.7	2.8	2.7	2.8	3.0	2.8	2.4	2.1	1.8	1.9	2.8	2.0	1.5	1.4	5.4	16.3
30-Jun	1.3	1.4	1.4	1.1	Z	1.2	1.0	1.0	0.9	0.8	0.7	1.1	1.2	1.3	1.2	3.0	2.4	2.9	3.3	2.2	1.9	1.6	1.3	1.2	1.5	3.3
	1.1	1.4	1.7	1.8	2.3	3.0	2.9	2.6	2.1	1.5	1.1	1.0	0.9	1.0	0.9	0.9	0.9	1.0	1.0	1.0	0.9	0.8	0.8	1.0	Diurnal Average	
	5.4	5.0	12.1	13.9	12.8	19.7	21.8	19.2	12.5	10.5	9.7	6.9	6.7	5.8	4.4	3.2	3.8	3.0	3.3	3.6	2.8	2.7	3.7	4.8	Diurnal Maximum	

Z - zerospan C - Calibration

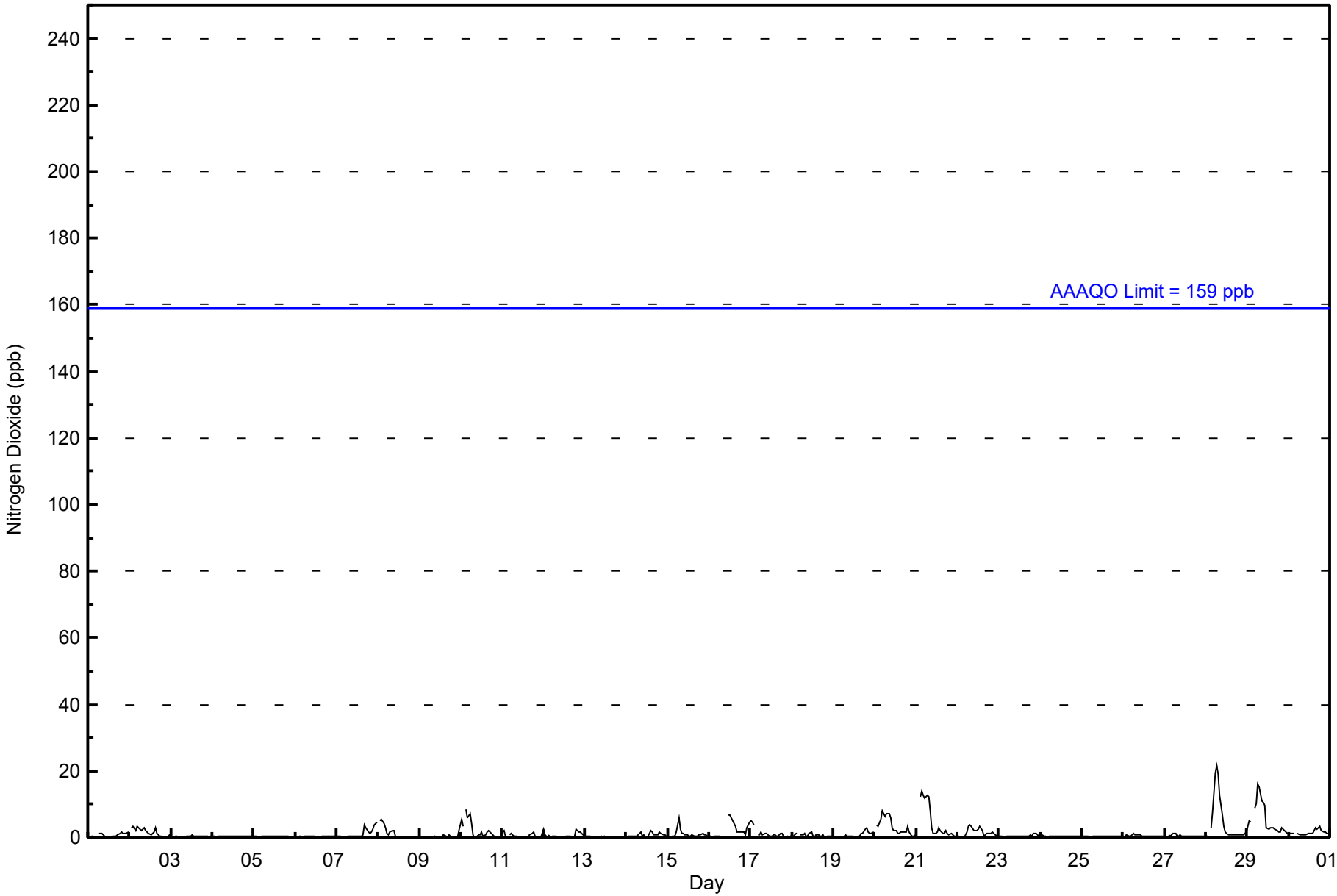
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Mackay River - June 2026



Nitrogen Dioxide (NO_2) - ppb
Mackay River - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	685	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: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Mackay River - June 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	55	94	34	24	21	59	47	32	49	37	24	36	46	26	44	56	684
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	55	95	34	24	21	59	47	32	49	37	24	36	46	26	44	56	685

Total Number of Valid Hours: 685

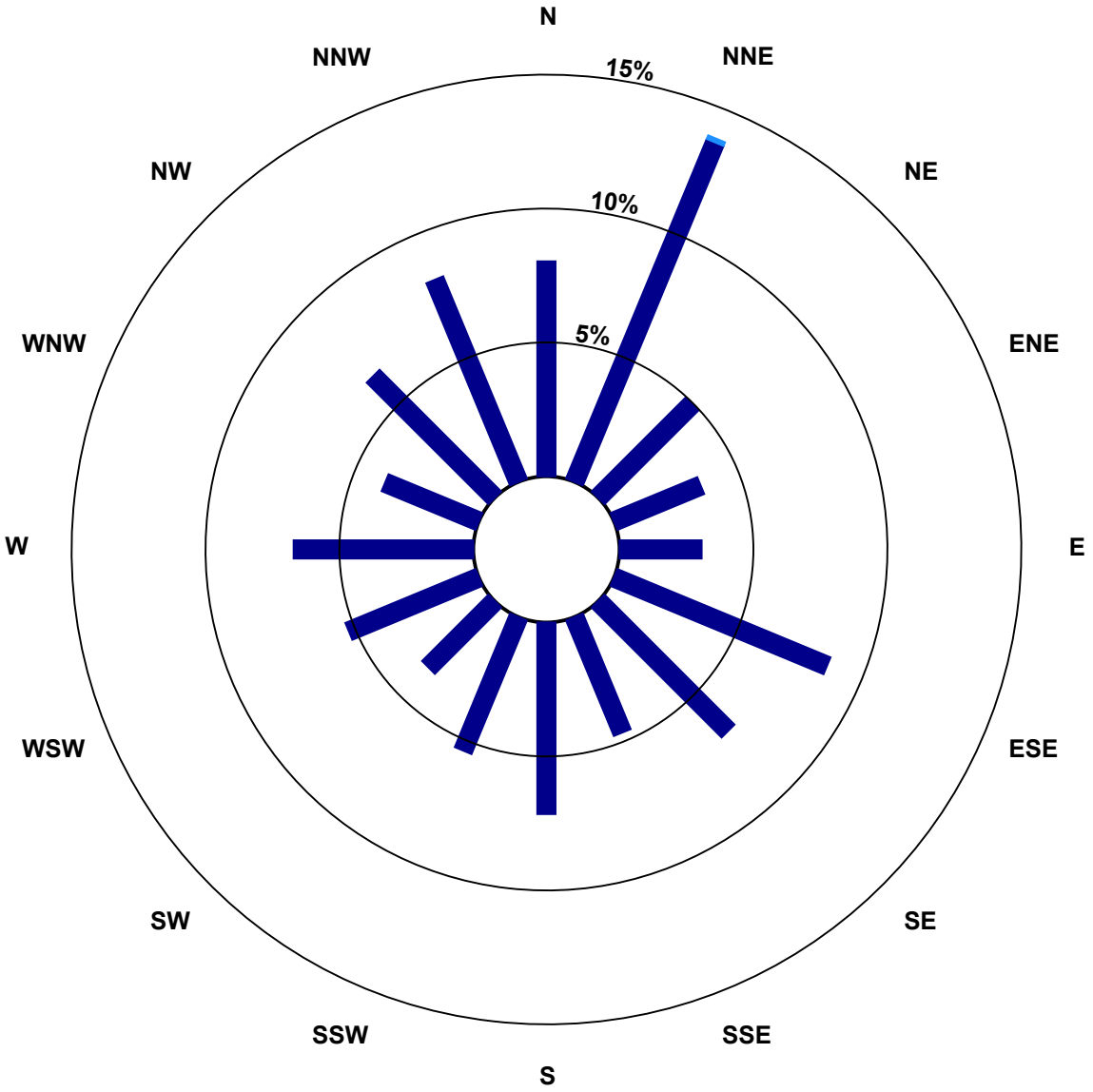
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Mackay River



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

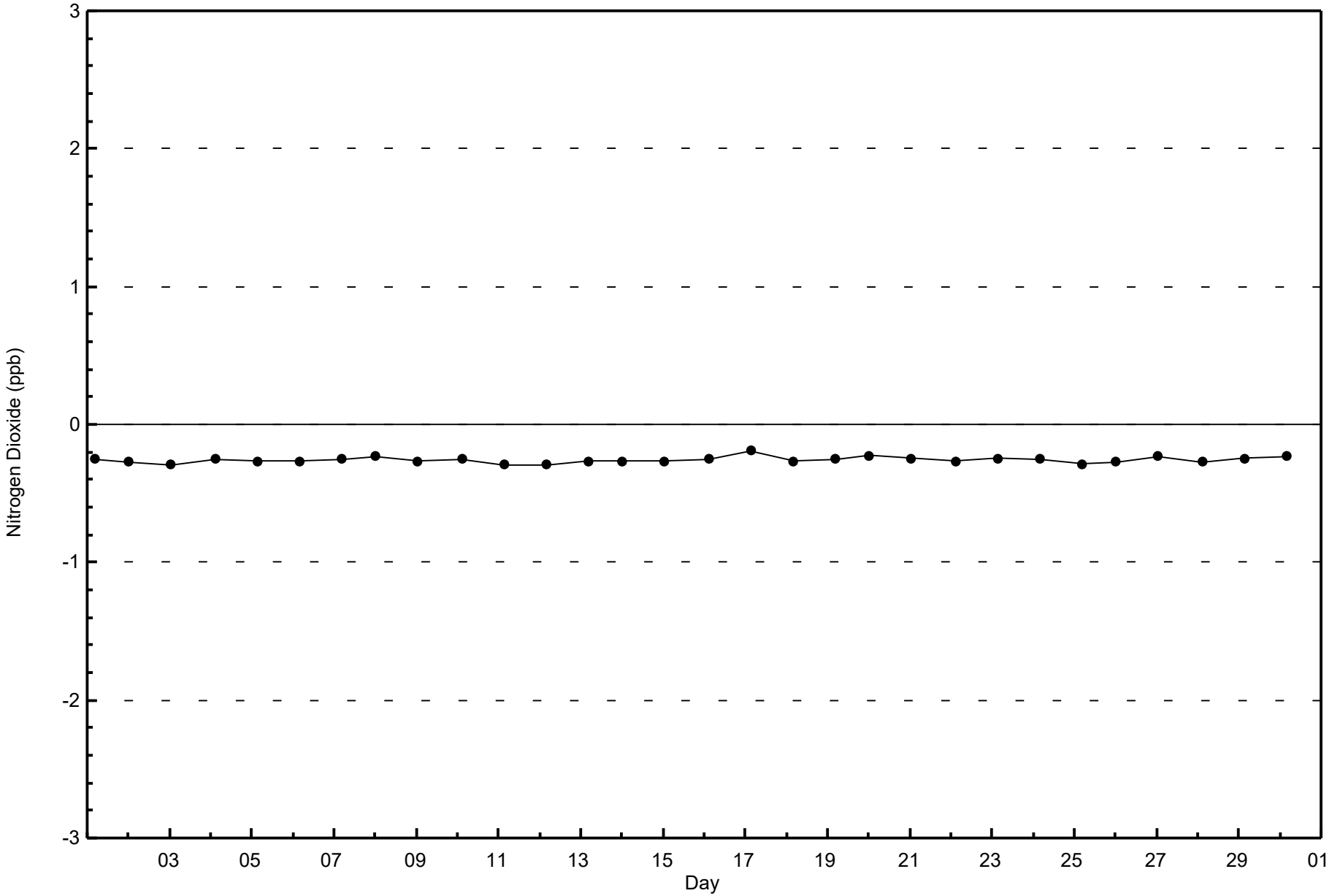
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Mackay River - June 2026

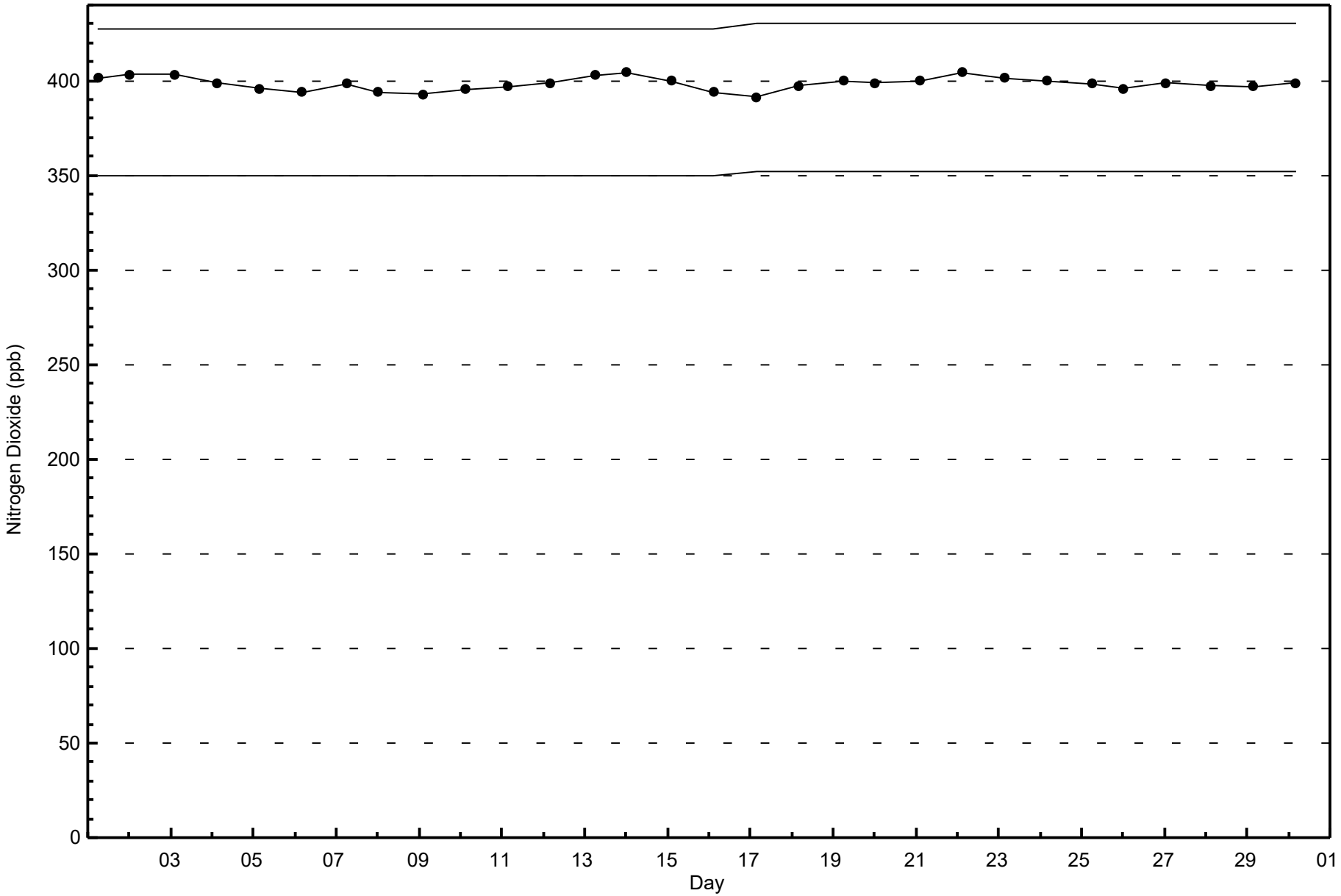


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Mackay River - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Mackay River - June 2026

Maximum Value: 33.0 ppb on Jun 28 07:00

Maximum Daily Average: 8.2 ppb on Jun 21

Minimum Value: 0.1 ppb on Jun 11 15:00

Minimum Daily Average: 0.2 ppb on Jun 13

Maximum Diurnal Average: 4.6 ppb at hour 7

Minimum Diurnal Average: 0.8 ppb at hour 22

Monthly Average: 1.75 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.3 Median = 0.6 Q_3 = 1.4 P_{90} = 3.3 P_{99} = 24.6

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-Jun	0.4	0.1	0.3	0.2	0.2	Z	1.3	1.4	1.2	0.7	0.2	0.2	0.2	0.2	0.7	0.7	0.7	0.9	1.3	1.5	1.4	1.4	1.2	1.7	0.8	1.7
2-Jun	Z	2.8	3.4	2.1	3.5	2.8	2.6	2.2	3.2	2.7	1.9	1.4	0.8	1.4	2.4	3.6	1.1	0.5	0.3	0.2	0.2	0.2	0.4	0.7	1.7	3.6
3-Jun	0.6	Z	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.6	1.1	0.7	0.5	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4	1.1
4-Jun	0.3	0.3	Z	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.5
5-Jun	0.6	0.6	0.5	Z	0.6	0.6	0.6	0.7	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.4	0.7
6-Jun	0.2	0.2	0.3	0.3	Z	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.5	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.6
7-Jun	0.3	0.3	0.3	0.2	0.2	Z	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.8	4.4	3.1	1.5	1.1	1.7	2.7	3.7	4.5	1.2	4.5
8-Jun	Z	5.0	5.4	4.4	3.0	1.1	0.8	1.8	3.0	3.4	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	1.3	5.4
9-Jun	0.2	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.7	1.1	0.6	0.2	0.8	0.5	0.2	0.2	0.1	0.2	2.3	0.4	2.3
10-Jun	5.4	3.4	Z	8.5	7.3	9.7	6.3	1.2	0.2	0.5	0.8	0.8	2.1	0.6	0.8	2.0	2.5	2.2	0.8	0.3	0.1	0.1	0.1	0.2	2.4	9.7
11-Jun	2.3	2.5	0.3	Z	1.1	1.7	0.8	0.5	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.7	1.5	1.6	0.4	0.2	0.2	0.2	1.4	0.7	2.5
12-Jun	2.7	1.0	0.1	0.9	Z	0.4	0.5	0.3	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.1	0.2	0.5	2.6	1.9	1.5	1.1	0.9	0.7	2.7
13-Jun	0.6	0.5	0.4	0.3	0.2	Z	0.3	0.2	0.1	0.4	0.2	0.6	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	0.6
14-Jun	Z	0.4	0.4	0.4	0.4	0.4	0.4	0.8	2.5	0.4	1.0	0.2	0.5	1.5	2.2	1.7	0.8	0.7	1.1	1.7	1.4	1.0	0.9	0.7	0.9	2.5
15-Jun	0.6	Z	0.6	0.6	0.7	2.4	8.4	3.0	1.7	1.4	0.9	0.7	0.6	0.6	0.7	0.6	0.4	0.5	0.7	1.0	1.3	0.7	0.7	0.5	1.3	8.4
16-Jun	0.4	0.4	Z	0.5	0.4	0.4	0.6	C	C	C	C	8.7	9.8	8.3	5.3	3.4	1.6	1.6	1.6	1.8	1.8	0.9	2.9	4.8	2.9	9.8
17-Jun	5.2	4.7	4.0	Z	1.1	1.2	2.5	1.4	1.9	1.4	0.8	0.6	0.7	0.7	0.7	0.5	0.4	1.2	1.3	0.3	0.2	0.3	0.2	0.3	1.4	5.2
18-Jun	0.2	0.5	1.2	1.3	Z	1.1	0.9	1.6	0.3	0.5	1.8	1.9	0.8	0.1	0.9	1.0	0.6	0.6	1.0	0.2	0.4	0.4	0.4	0.3	0.8	1.9
19-Jun	0.2	0.2	0.2	0.1	0.1	Z	0.7	1.4	0.6	0.5	0.7	0.3	0.1	0.2	0.6	0.5	1.7	1.8	3.2	3.3	1.7	1.3	1.3	1.9	1.0	3.3
20-Jun	Z	4.2	4.0	7.7	11.8	14.7	15.2	18.5	17.9	11.4	5.3	3.2	3.2	1.9	1.7	2.0	2.1	2.2	1.8	3.9	1.5	0.5	0.4	0.4	5.9	18.5
21-Jun	1.2	Z	13.6	27.4	27.5	24.6	29.8	24.7	11.5	4.4	2.1	1.8	2.2	4.0	2.2	1.6	1.7	2.2	1.2	0.9	1.2	1.0	0.7	0.5	8.2	29.8
22-Jun	0.4	0.3	Z	0.4	0.4	3.2	6.3	7.5	6.0	3.5	2.9	2.9	2.9	4.3	2.4	0.4	1.0	1.4	1.4	1.3	1.5	1.2	0.8	0.5	2.3	7.5
23-Jun	0.4	0.3	0.3	Z	0.3	0.3	0.4	0.4	0.3	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.4	1.0	0.6	1.2	1.1	0.9	0.5	0.5	1.2
24-Jun	0.7	1.0	0.6	0.4	Z	0.4	0.3	0.4	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.5	1.0
25-Jun	0.3	0.3	0.3	0.3	0.3	Z	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.6
26-Jun	Z	0.6	0.7	0.6	0.6	1.0	1.1	1.0	0.9	0.8	0.8	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.5	0.6	0.6	1.1
27-Jun	0.6	Z	0.7	0.6	0.8	1.4	1.5	0.6	0.6	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.5	0.5	0.5	0.6	1.5
28-Jun	0.3	0.5	Z	2.9	8.9	29.5	33.0	28.0	16.8	8.2	3.8	2.0	1.3	0.9	0.8	0.9	0.9	1.0	0.9	1.0	1.0	1.0	0.8	1.5	6.3	33.0
29-Jun	3.4	4.9	4.7	Z	9.4	13.0	21.0	18.5	13.7	12.7	11.7	3.1	2.8	2.9	3.0	2.8	2.4	2.1	1.8	1.9	2.8	2.0	1.5	1.4	6.2	21.0
30-Jun	1.3	1.4	1.4	1.1	Z	1.2	1.0	1.0	0.9	0.8	0.7	1.1	1.2	1.3	1.2	3.0	2.4	2.9	3.3	2.2	1.9	1.6	1.3	1.2	1.5	3.3
	1.2	1.5	1.8	2.5	3.2	4.5	4.6	4.1	3.0	2.0	1.4	1.2	1.2	1.2	1.0	1.0	1.0	1.1	1.0	1.0	0.9	0.8	0.8	1.0	Diurnal Average	
	5.4	5.0	13.6	27.4	27.5	29.5	33.0	28.0	17.9	12.7	11.7	8.7	9.8	8.3	5.3	3.6	4.4	3.1	3.3	3.9	2.8	2.7	3.7	4.8	Diurnal Maximum	

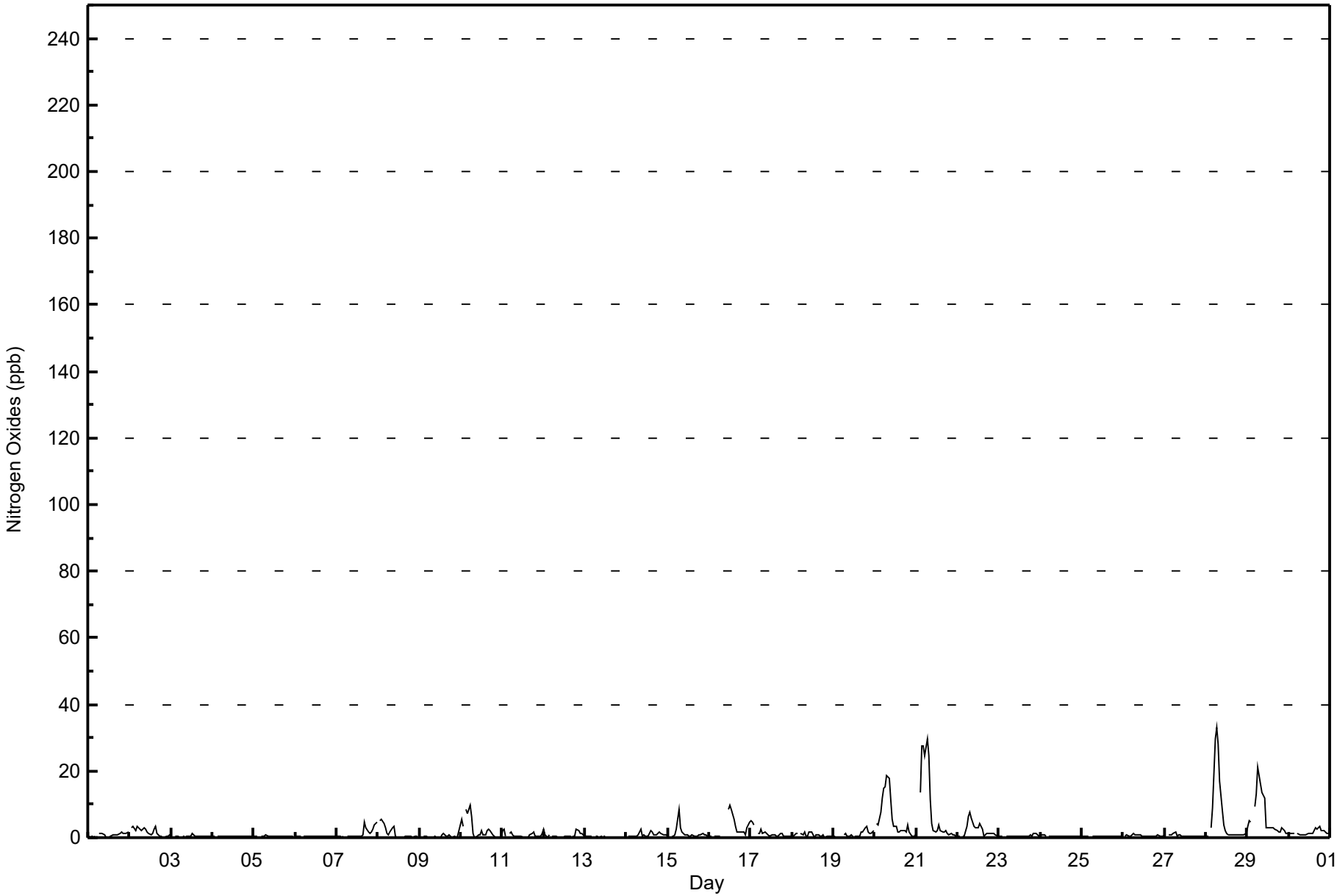
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Mackay River - June 2026



Nitrogen Oxides (NO_X) - ppb
Mackay River - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	677	98.69	98.69
21 - 40	9	1.31	100.00
11 - 80	0	0.00	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Mackay River - June 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	55	86	34	24	21	59	47	32	49	37	24	36	46	26	44	56	676
21 - 40	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
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	55	95	34	24	21	59	47	32	49	37	24	36	46	26	44	56	685

Total Number of Valid Hours: 685

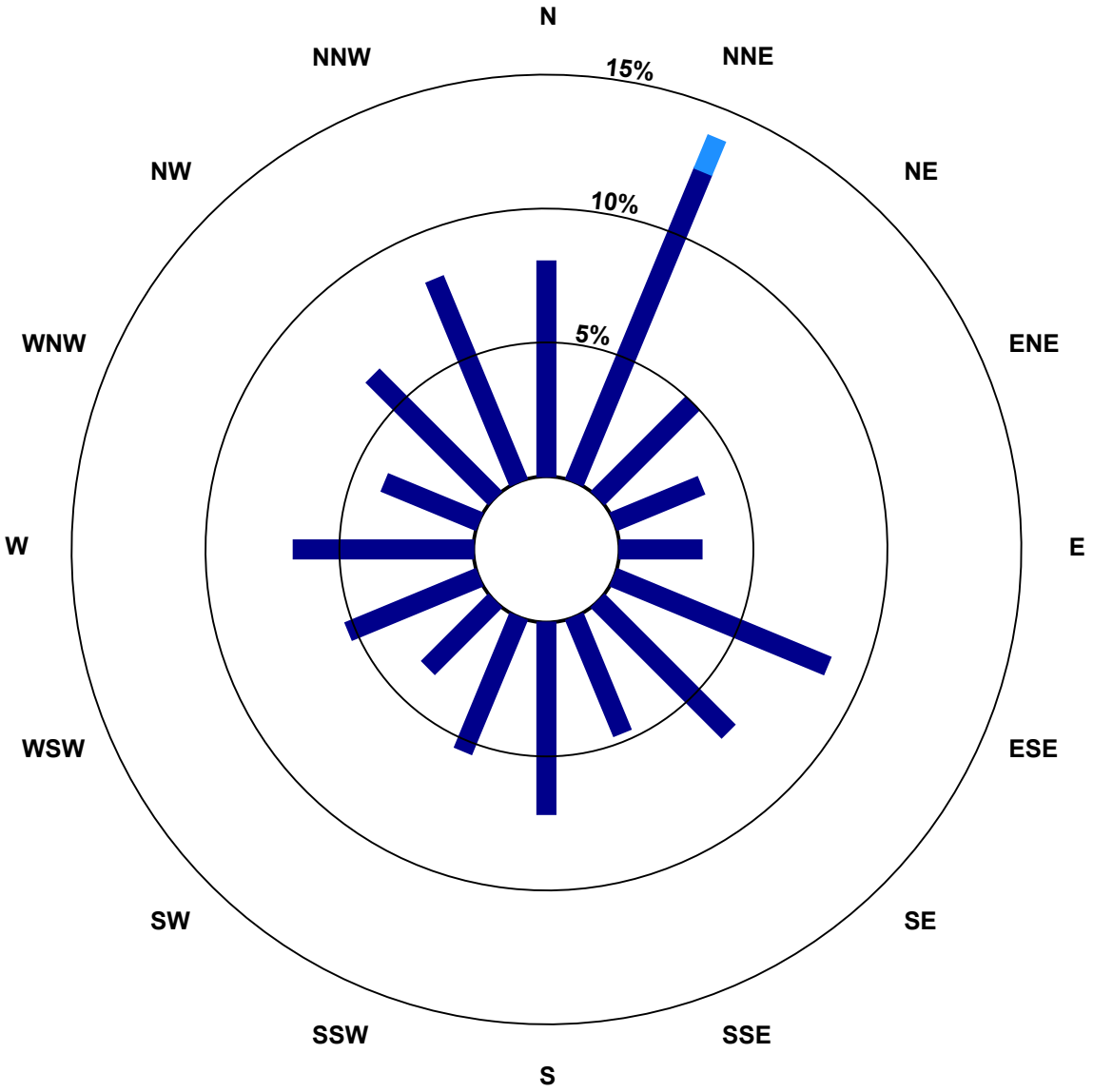
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Mackay River



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

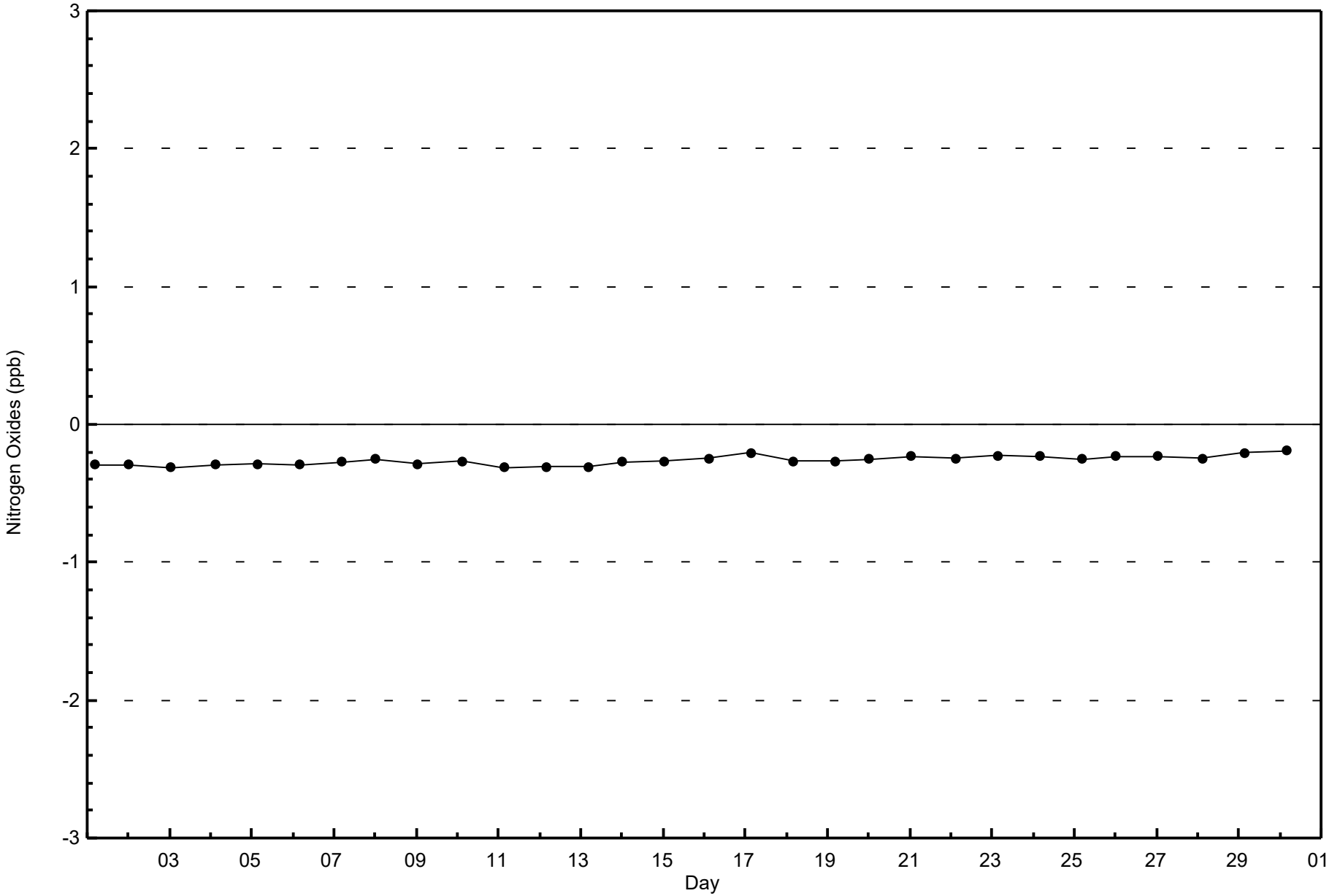
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Mackay River - June 2026

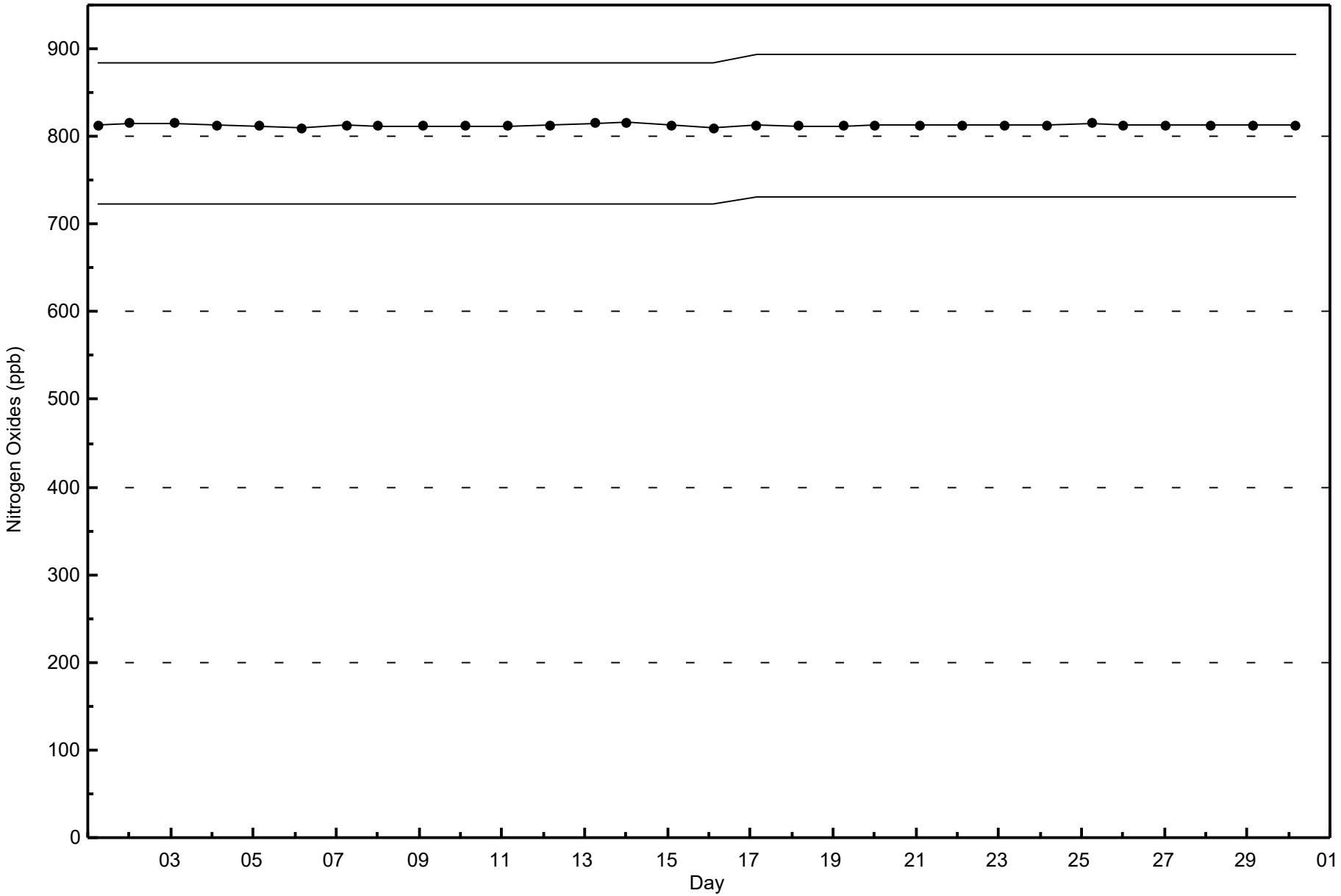


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Mackay River - June 2026



Maximum Value: 29.4 C on Jun 28 17:00

Maximum Daily Average: 22.2 C on Jun 29

Minimum Value: 3.0 C on Jun 17 04:00

Minimum Daily Average: 8.1 C on Jun 11

Maximum Diurnal Average: 19.2 C at hour 16

Minimum Diurnal Average: 8.8 C at hour 4

Monthly Average: 14.75 C

Percentiles: P_1 = 4.3 P_{10} = 7.9 Q_1 = 10.1 Median = 13.7 Q_3 = 19.1 P_{90} = 23.9 P_{99} = 28.6

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

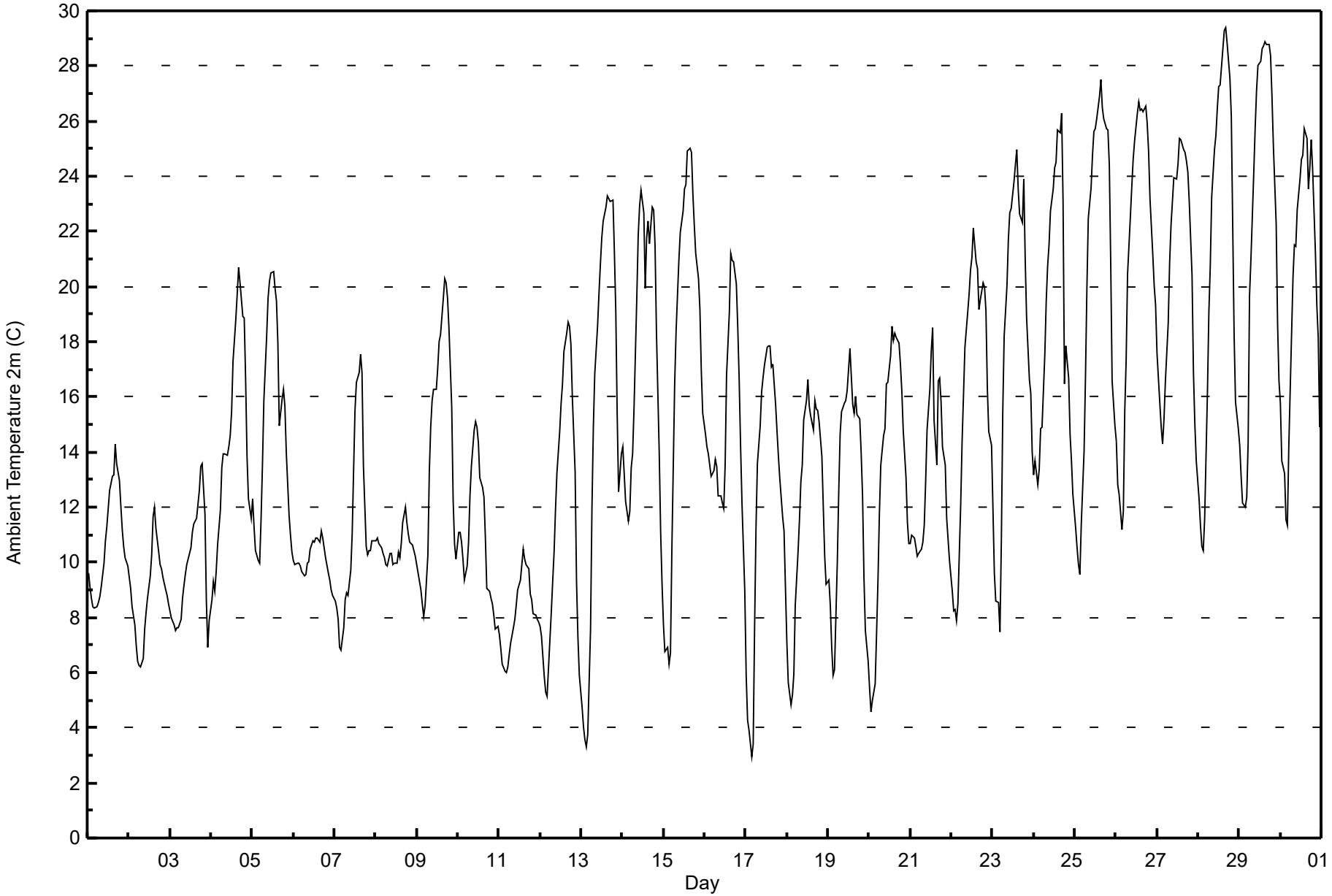
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	9.6	9.1	8.7	8.4	8.3	8.4	8.5	8.8	9.1	10.0	10.8	11.3	11.9	12.6	13.1	13.1	14.3	13.6	13.0	12.1	11.2	10.6	10.2	9.9	10.7	14.3
2-Jun	9.5	9.0	8.4	7.7	7.0	6.4	6.2	6.2	6.5	7.6	8.2	8.7	9.5	10.3	11.6	12.0	11.2	10.4	9.9	9.7	9.5	9.0	8.8	8.5	8.8	12.0
3-Jun	8.3	8.0	7.7	7.5	7.6	7.6	7.9	8.7	9.2	9.5	9.9	10.3	10.5	11.1	11.4	11.6	12.1	12.6	13.5	13.6	11.7	8.6	6.9	7.9	9.7	13.6
4-Jun	8.6	9.3	9.0	9.7	10.6	11.9	13.4	13.9	13.9	13.9	14.2	14.6	15.4	17.3	18.8	19.7	20.7	20.1	18.9	18.9	16.7	13.8	12.3	11.6	14.5	20.7
5-Jun	12.3	11.3	10.4	10.1	10.0	11.6	13.5	15.9	18.2	19.6	20.2	20.5	20.5	20.0	19.5	18.0	14.9	15.9	16.2	15.7	14.0	11.7	11.0	10.4	15.1	20.5
6-Jun	10.0	9.9	10.0	10.0	9.9	9.7	9.5	9.6	10.0	10.0	10.5	10.8	10.7	10.9	10.9	10.7	11.1	10.9	10.5	10.1	9.6	9.3	9.0	8.8	10.1	11.1
7-Jun	8.6	8.3	7.9	6.9	6.8	7.7	8.7	8.9	8.8	9.7	11.0	13.3	15.5	16.5	16.9	17.6	16.9	13.5	10.6	10.3	10.4	10.4	10.8	10.8	11.1	17.6
8-Jun	10.8	10.9	10.7	10.5	10.3	10.2	9.9	9.9	10.3	10.3	9.9	10.0	10.0	10.4	10.2	10.7	11.5	12.0	11.5	11.0	10.7	10.6	10.4	10.2	10.5	12.0
9-Jun	9.9	9.6	9.0	8.5	8.1	8.5	10.3	13.3	14.9	15.9	16.3	16.3	17.0	18.0	18.2	19.6	20.3	20.1	19.6	18.5	15.6	12.3	10.7	10.1	14.2	20.3
10-Jun	11.1	11.1	10.7	10.1	9.3	9.9	10.8	12.4	13.5	14.8	15.1	14.9	14.3	13.1	12.7	12.4	10.9	9.1	9.0	8.7	8.5	8.1	7.6	7.7	11.1	15.1
11-Jun	7.4	6.9	6.3	6.1	6.0	6.2	6.7	7.1	7.6	7.9	8.5	9.0	9.4	9.9	10.5	10.1	9.9	9.7	8.8	8.6	8.1	8.1	7.9	7.8	8.1	10.5
12-Jun	7.7	7.3	5.8	5.3	5.1	6.2	8.2	9.3	10.4	11.9	13.2	14.8	15.7	16.5	17.7	18.3	18.7	18.6	17.9	16.0	13.3	9.3	7.3	5.9	11.7	18.7
13-Jun	4.7	4.0	3.5	3.3	3.8	7.6	12.0	14.9	16.8	18.6	19.7	20.8	21.8	22.4	22.9	23.3	23.2	23.1	23.1	21.3	19.1	15.4	12.6	13.9	15.5	23.3
14-Jun	14.2	13.2	12.2	11.5	11.8	13.4	13.9	15.6	19.6	21.9	22.9	23.5	22.7	19.9	21.7	22.4	21.6	22.9	22.8	21.5	18.3	13.9	11.1	9.2	17.6	23.5
15-Jun	7.7	6.8	6.9	6.3	6.7	10.5	16.5	18.4	19.7	21.0	22.0	22.7	23.5	23.7	24.9	25.0	24.9	23.4	22.2	21.2	20.3	19.2	16.9	15.4	17.7	25.0
16-Jun	14.6	14.2	13.9	13.5	13.1	13.3	13.7	13.5	12.4	12.4	12.2	11.9	13.5	16.8	19.1	21.2	21.0	20.9	20.1	18.5	16.6	14.2	12.1	8.9	15.1	21.2
17-Jun	5.9	4.3	3.9	3.0	3.4	7.6	11.2	13.6	15.0	16.2	16.7	17.1	17.8	17.9	17.8	17.1	17.2	15.7	14.8	13.8	13.0	11.7	11.1	9.1	12.3	17.9
18-Jun	7.1	5.6	4.8	5.2	5.9	8.4	10.4	11.5	12.9	13.5	15.1	15.8	16.7	15.7	15.3	14.8	15.8	15.6	15.5	15.1	13.8	12.0	10.2	9.2	11.9	16.7
19-Jun	9.3	8.4	6.9	5.9	6.1	10.0	12.5	14.7	15.5	15.8	15.9	16.2	17.0	17.7	15.7	15.4	16.0	15.4	15.2	14.0	12.4	9.4	7.5	6.4	12.5	17.7
20-Jun	5.5	4.6	5.0	5.6	7.4	9.3	11.8	13.5	14.6	14.8	16.5	16.5	17.5	18.6	18.1	18.3	18.1	18.0	17.2	16.2	14.8	13.1	11.4	10.7	13.2	18.6
21-Jun	10.7	11.0	10.9	10.6	10.2	10.3	10.5	10.7	11.3	12.9	14.8	16.3	17.7	18.5	15.2	13.5	16.6	16.7	15.8	14.2	13.5	11.6	10.8	10.1	13.1	18.5
22-Jun	9.0	8.3	8.3	7.9	8.5	12.1	14.4	16.1	17.8	19.1	19.7	20.6	21.1	22.1	20.9	20.7	19.2	19.5	20.2	20.0	19.1	16.3	14.7	14.2	16.2	22.1
23-Jun	12.0	9.6	8.6	8.6	7.5	10.8	15.5	18.2	20.0	21.7	22.7	22.8	23.8	24.4	25.0	23.5	22.6	22.3	23.9	21.0	18.9	16.6	16.1	14.0	17.9	25.0
24-Jun	13.2	13.7	12.8	13.4	14.8	14.9	17.5	19.5	20.7	21.5	22.7	23.6	24.3	24.5	25.7	25.6	26.3	23.1	16.5	17.9	16.7	14.6	13.7	12.5	18.7	26.3
25-Jun	11.2	10.5	9.9	9.6	11.4	14.0	16.7	19.9	22.5	23.6	24.8	25.6	25.7	26.1	26.9	27.5	26.5	26.1	25.7	25.7	24.4	20.9	16.6	14.9	20.3	27.5
26-Jun	14.4	12.8	12.5	11.2	11.8	15.4	17.3	20.4	22.5	23.6	24.6	25.3	26.3	26.7	26.4	26.4	26.3	26.5	26.0	24.9	23.2	21.2	20.1	19.3	21.0	26.7
27-Jun	17.6	16.7	14.9	14.3	15.2	16.6	18.7	20.8	22.2	23.1	24.0	23.9	24.5	25.4	25.3	25.0	24.9	24.6	24.1	23.1	20.4	16.9	15.0	13.7	20.4	25.4
28-Jun	12.3	11.3	10.6	10.4	11.6	16.2	19.1	20.8	23.3	25.0	25.5	26.4	27.2	27.3	28.6	29.3	29.4	28.8	27.6	26.2	22.2	18.2	15.8	14.9	21.2	29.4
29-Jun	14.2	13.1	12.2	12.0	12.4	14.3	19.7	21.0	24.1	25.7	27.1	28.0	28.1	28.6	28.7	28.9	28.8	28.8	28.4	26.9	25.1	22.3	18.6	16.6	22.2	28.9
30-Jun	15.7	13.7	13.2	11.6	11.3	14.2	18.3	20.4	21.5	21.5	22.8	23.9	24.6	24.8	25.7	25.4	23.6	24.3	25.3	24.3	21.2	19.3	18.2	14.9	20.0	25.7
	10.4	9.7	9.2	8.8	9.1	10.8	12.8	14.2	15.5	16.4	17.2	17.8	18.5	18.9	19.2	19.2	19.1	18.7	18.1	17.3	15.7	13.6	12.2	11.2	Diurnal Average	
	17.6	16.7	14.9	14.3	15.2	16.6	19.7	21.0	24.1	25.7	27.1	28.0	28.1	28.6	28.7	29.3	29.4	28.8	28.4	26.9	25.1	22.3	20.1	19.3	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Mackay River - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	176	24.44	24.44
10 - 20	387	53.75	78.19
> 20	157	21.81	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) - %

Mackay River - June 2026

Maximum Value: 99.5 % on Jun 8 06:00

Maximum Daily Average: 96.6 % on Jun 6

Minimum Value: 24.3 % on Jun 28 17:00

Minimum Daily Average: 47.8 % on Jun 14

Maximum Diurnal Average: 89.8 % at hour 4

Minimum Diurnal Average: 50.6 % at hour 15

Monthly Average: 67.81 %

Percentiles: P_1 = 28.3 P_{10} = 34.7 Q_1 = 47.7 Median = 71.4 Q_3 = 87.9 P_{90} = 95.7 P_{99} = 98.8

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

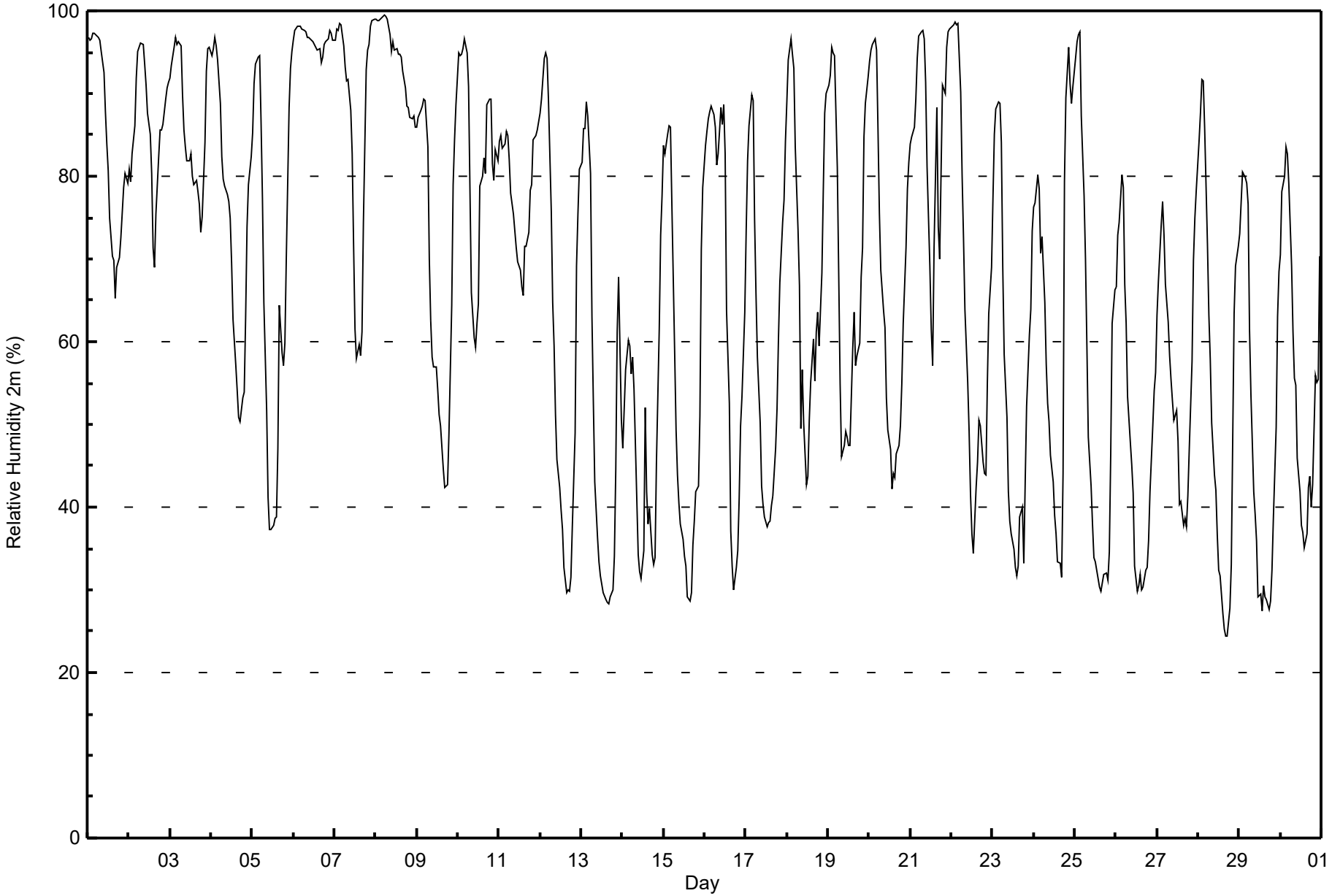
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	96.8	96.4	96.6	97.4	97.3	97.0	96.9	96.4	95.1	92.5	87.8	84.0	80.7	75.0	70.3	69.8	65.3	69.0	70.2	72.6	75.6	78.7	80.4	79.2	84.2	97.4
2-Jun	80.8	79.3	82.7	86.1	91.9	95.0	95.5	96.0	95.9	93.6	91.0	87.6	85.0	80.4	71.4	69.0	75.4	82.4	85.5	85.5	86.3	89.4	90.7	91.4	86.2	96.0
3-Jun	91.9	93.4	95.6	96.8	95.9	96.3	95.7	89.9	85.7	83.6	81.9	81.8	82.8	80.0	79.0	79.5	78.1	76.7	73.3	75.0	84.0	92.7	95.3	95.6	86.7	96.8
4-Jun	94.6	95.5	96.7	95.8	94.1	88.9	82.4	79.6	78.8	77.8	77.0	74.8	69.5	62.8	57.1	54.0	50.9	50.4	53.3	53.8	63.0	73.8	79.0	82.3	74.4	96.7
5-Jun	85.2	91.1	93.6	94.5	94.5	86.5	77.3	64.7	51.8	41.1	37.2	37.3	37.8	38.6	38.9	47.0	64.4	58.7	57.1	59.8	69.9	88.2	93.1	95.2	66.8	95.2
6-Jun	96.5	97.7	98.2	98.1	98.2	97.8	97.7	97.5	96.7	96.7	96.6	96.3	95.9	95.7	95.3	95.5	93.7	94.3	95.9	96.3	96.6	97.6	97.3	96.4	96.6	98.2
7-Jun	96.5	97.7	97.7	98.5	98.3	95.8	93.2	91.6	91.7	87.9	82.8	71.7	61.6	58.0	59.6	58.3	61.2	74.4	92.8	95.3	95.9	98.2	98.8	99.1	85.7	99.1
8-Jun	99.0	98.8	98.8	99.1	99.3	99.5	99.3	98.9	97.2	95.0	96.3	95.3	95.4	94.8	94.7	94.4	92.7	90.6	88.6	88.4	87.1	86.9	87.2	85.9	94.3	99.5
9-Jun	85.9	87.0	88.0	88.5	89.3	89.2	83.5	69.9	62.5	58.1	57.0	57.0	54.3	51.3	49.8	44.6	42.4	42.5	42.7	48.8	64.4	78.9	84.4	88.7	67.0	89.3
10-Jun	94.9	94.5	94.8	95.4	96.6	94.9	90.9	78.3	65.9	60.5	59.3	62.3	64.5	78.8	80.0	82.3	80.3	88.7	89.4	89.4	81.6	79.5	83.2	81.8	82.0	96.6
11-Jun	84.3	84.9	83.4	83.9	85.5	84.9	82.1	78.0	75.4	73.4	71.4	69.7	68.6	66.6	65.5	71.5	71.5	73.2	78.4	79.1	84.4	84.9	85.5	86.7	78.0	86.7
12-Jun	87.6	89.3	94.2	95.0	94.3	89.2	75.8	64.7	59.4	51.2	45.7	42.3	39.7	37.2	32.8	29.6	30.0	29.8	31.5	37.6	49.0	69.1	75.4	80.8	59.6	95.0
13-Jun	81.6	85.8	85.7	89.0	87.3	80.3	63.1	52.7	43.0	36.3	33.4	31.7	30.7	29.7	28.8	28.4	28.3	29.1	30.1	34.1	44.6	61.2	67.9	50.5	51.4	89.0
14-Jun	47.2	51.9	56.6	60.2	59.5	56.0	58.2	54.2	40.8	34.2	32.1	31.3	34.7	52.0	41.8	38.0	39.8	34.3	33.0	33.9	45.4	61.6	72.9	77.6	47.8	77.6
15-Jun	83.8	82.6	85.1	86.1	85.9	76.7	58.7	49.3	43.9	40.5	38.0	36.2	34.0	32.9	29.1	28.7	29.6	35.5	38.2	41.9	42.6	51.0	71.2	78.7	53.3	86.1
16-Jun	83.7	85.5	87.0	87.9	88.5	87.5	86.0	81.3	82.7	88.3	86.3	88.7	82.7	63.8	52.5	37.1	32.8	30.0	32.7	34.7	41.1	49.9	53.5	63.5	67.0	88.7
17-Jun	73.3	81.8	86.2	89.8	89.2	74.8	65.7	58.1	50.2	42.5	40.3	38.8	37.7	38.1	38.2	40.1	41.4	47.1	51.8	60.2	67.2	74.5	77.1	84.3	60.3	89.8
18-Jun	89.0	94.1	96.5	94.8	93.0	83.6	73.3	66.9	49.5	56.7	50.1	42.6	43.7	50.5	55.2	60.3	55.2	61.1	63.6	59.4	68.3	78.3	87.7	90.0	69.3	96.5
19-Jun	90.9	92.2	95.6	94.9	94.6	81.0	68.2	54.8	46.2	47.5	49.2	48.4	47.5	47.4	59.2	63.5	57.1	58.3	59.9	67.8	71.4	84.7	88.8	92.0	69.2	95.6
20-Jun	94.0	95.2	96.0	96.6	95.3	85.8	75.7	68.7	63.8	61.7	53.3	49.3	47.0	42.3	44.1	43.6	46.5	47.5	49.9	54.9	62.2	71.4	78.5	81.7	66.9	96.6
21-Jun	84.0	84.7	86.0	89.4	94.2	97.0	97.5	97.6	96.5	91.4	81.1	69.2	61.5	57.1	71.4	88.2	73.9	70.0	80.6	91.0	90.0	95.6	97.4	97.7	85.1	97.7
22-Jun	98.1	98.4	98.7	98.3	98.5	90.1	80.2	72.6	63.9	55.1	49.2	41.5	36.8	34.3	42.3	45.5	50.5	49.8	45.4	44.1	43.9	54.9	63.4	69.0	63.5	98.7
23-Jun	77.3	85.1	88.1	88.9	88.9	84.0	68.9	58.4	50.9	41.8	38.3	36.7	34.9	32.7	31.7	32.8	38.9	39.9	33.3	43.1	52.2	60.9	64.0	73.5	56.1	88.9
24-Jun	76.3	76.7	80.1	78.5	70.7	72.7	64.7	57.4	52.6	50.3	46.2	43.0	38.9	36.8	33.4	33.3	31.5	44.1	79.4	89.5	95.5	91.1	88.8	90.8	63.4	95.5
25-Jun	94.4	96.3	97.2	97.5	87.4	77.6	70.0	59.6	48.4	42.6	38.0	33.9	33.3	32.4	30.4	29.8	30.8	31.9	32.1	31.2	34.5	46.4	62.2	66.3	54.3	97.5
26-Jun	66.6	73.0	74.4	80.2	78.6	67.0	62.3	53.4	47.8	45.2	41.7	32.8	29.8	30.5	31.9	30.1	30.4	32.4	32.7	35.9	41.9	49.9	54.1	56.3	49.1	80.2
27-Jun	63.2	67.4	74.1	77.0	72.9	66.9	62.4	58.3	55.4	52.9	50.4	51.7	48.0	40.4	40.6	37.9	38.6	37.6	41.4	47.0	57.6	69.8	75.0	78.2	56.9	78.2
28-Jun	84.2	87.6	91.7	91.5	85.7	71.6	63.2	57.7	50.2	43.9	42.0	36.6	32.4	31.7	27.1	25.3	24.3	24.4	27.9	33.0	48.2	63.5	69.1	71.6	53.5	91.7
29-Jun	73.0	76.8	80.5	79.9	79.1	76.6	61.4	53.5	41.8	39.2	35.9	29.2	29.5	27.5	30.5	29.2	28.8	27.7	28.6	32.3	38.6	49.7	63.0	68.5	49.2	80.5
30-Jun	70.5	78.2	79.9	83.5	82.7	79.2	69.2	61.3	55.6	54.7	46.0	41.9	37.8	37.0	35.2	36.7	42.4	43.7	40.0	42.7	56.0	55.0	55.5	70.3	56.5	83.5
	84.2	86.6	88.7	89.8	88.9	84.1	77.3	70.7	64.6	61.2	57.8	54.8	52.5	51.2	50.6	50.8	50.9	52.5	55.3	58.6	64.6	72.9	78.0	80.8	Diurnal Average	
	99.0	98.8	98.8	99.1	99.3	99.5	99.3	98.9	97.2	96.7	96.6	96.3	95.9	95.7	95.3	95.5	93.7	94.3	95.9	96.3	96.6	98.2	98.8	99.1	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Mackay River - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	115	15.97	15.97
40 - 60	161	22.36	38.33
60 - 80	165	22.92	61.25
80 - 100	279	38.75	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 - June 2026

Maximum Value: 12.5 mm on Jun 24 19:00

Maximum Daily Total: 25.9 mm on Jun 6

Minimum Value: 0.0 mm on Jun 1 10:00

Minimum Daily Total: 0.0 mm on Jun 4

Maximum Diurnal Total: 13.7 mm at hour 19

Minimum Diurnal Total: 0.5 mm at hour 17

Monthly Total: 79.38 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} = 2.0

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

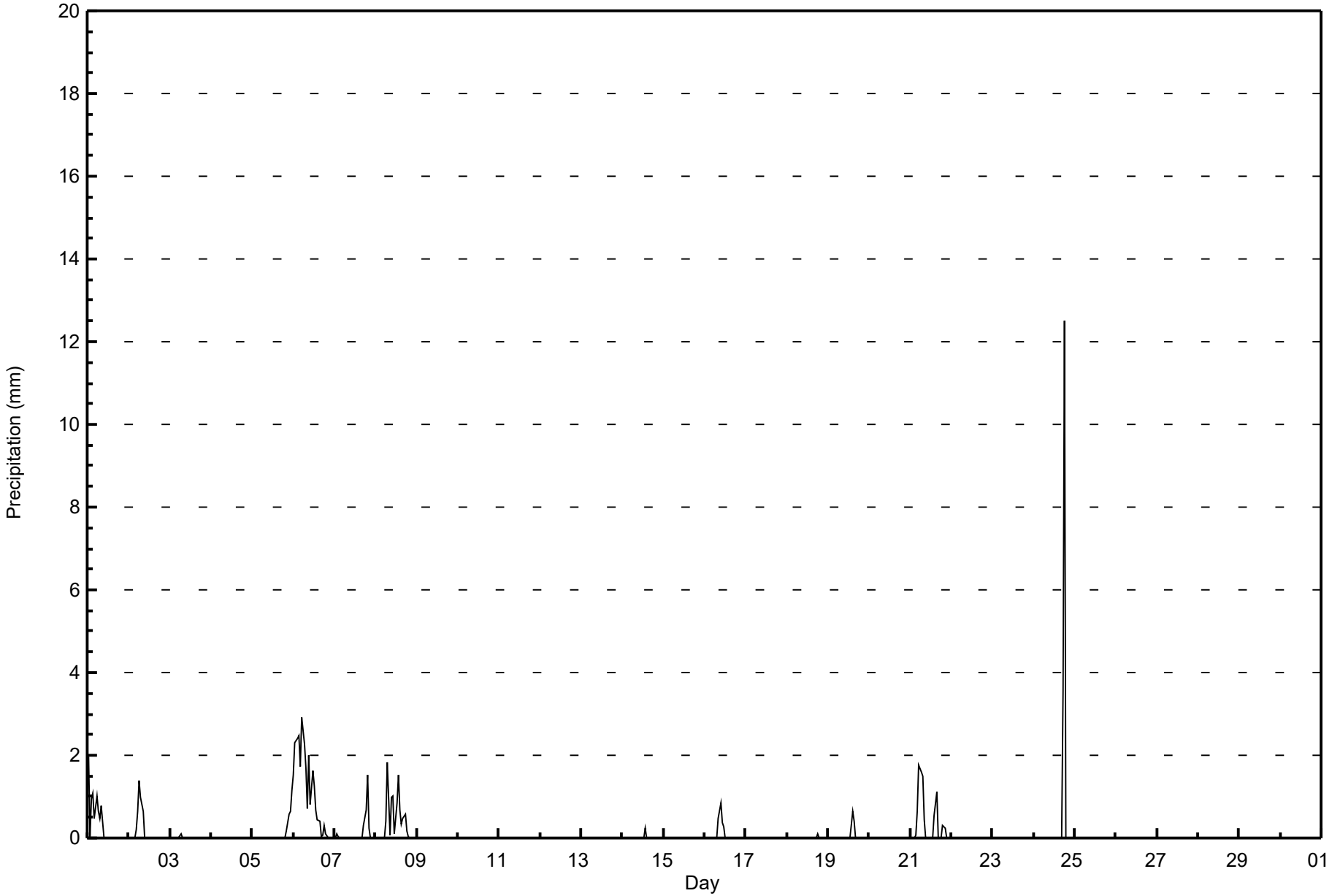
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	2.0	0.1	1.0	1.1	0.5	1.0	0.6	0.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	2.0
2-Jun	0.0	0.0	0.0	0.0	0.2	0.6	1.4	1.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	1.4
3-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
4-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.6	1.2	2.6	1.2
6-Jun	1.5	2.3	2.4	2.5	1.7	2.9	2.3	1.7	0.7	2.0	0.8	1.6	1.2	0.7	0.5	0.4	0.0	0.1	0.3	0.1	0.0	0.0	0.0	0.0	25.9	2.9
7-Jun	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	0.3	0.7	1.5	0.2	0.0	0.0	0.0	2.8	1.5
8-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.8	0.1	1.0	1.0	0.1	0.9	1.5	0.7	0.3	0.5	0.6	0.2	0.0	0.0	0.0	0.0	0.0	9.1	1.8
9-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
15-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.9	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	2.0	0.9
17-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
19-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.7
20-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.1	0.6	1.8	1.6	1.5	0.4	0.0	0.0	0.0	0.0	0.0	0.5	1.1	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	8.2	1.8
22-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	12.5	0.0	0.0	0.0	0.0	0.0	16.1	12.5
25-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	2.5	3.4	3.6	3.1	6.4	6.4	6.5	3.2	3.8	2.2	2.0	2.1	2.4	2.3	2.3	0.5	4.5	13.7	2.0	0.7	0.6	0.6	1.2	Diurnal Average	
	2.0	2.3	2.4	2.5	1.7	2.9	2.3	1.8	0.8	2.0	1.0	1.6	1.2	1.5	0.7	1.1	0.5	3.6	12.5	1.5	0.3	0.6	0.6	1.2	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Precipitation (PC) - mm

Mackay River - June 2026



Concentration Ranges (mm)	Number of Hours	%	Cumulative %
0 - 0.3	664	92.22	92.22
0.4 - 0.5	11	1.53	93.75
0.6 - 0.7	12	1.67	95.42
0.8 - 1.4	14	1.94	97.36
1.5 - 10	17	2.36	99.72
> 10	1	0.14	99.86

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 - June 2026

Maximum Speed: 18 km/h on Jun 27 14:00

Maximum Daily Speed Average: 12.2 km/h on Jun 1

Minimum Speed Value: 0 km/h on Jun 9 23:00

Minimum Daily Speed Average: 1.4 km/h on Jun 22

Maximum Diurnal Speed Average: 3.3 km/h at hour 17

Minimum Diurnal Speed Average: 0.1 km/h at hour 24

Monthly Average Velocity: 1.5 km/h 6.9 deg

Percentiles: P_1 = 1 P_{10} = 2 Q_1 = 4 Median = 7 Q_3 = 10 P_{90} = 12 P_{99} = 15

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-Jun	NW15	NW13	NW11	NW10	NW11	NW11	NW13	NNW11	NNW14	NNW14	NNW15	N14	N13	N15	N16	N14	N14	NNE14	N15	NNE14	NNE13	N11	NNE11	NNE12	N12.2	N16
2-Jun	NNE13	NNE14	NNE13	NNE12	NNE11	N13	NNE13	NNE11	NNE9	NNE11	NNE12	NNE13	NE12	NNE12	NE14	NE14	E8	ESE8	E8	E7	E7	E7	E5	ENE6	NE9.3	NNE14
3-Jun	ENE5	ENE5	ENE4	E4	ENE4	ESE4	ESE6	E5	ESE6	SE6	SE5	SE5	ESE6	SE7	SSE7	SE4	SE4	SSE5	SE6	ESE7	ESE4	E2	ENE1	ESE4	ESE4.2	SE7
4-Jun	SE3	S5	SSW6	SSW6	SSW6	SSW6	SSW8	SSW9	S10	S10	S9	S9	S10	SSW10	SSW10	S11	SSW10	SSW13	SSW10	SSW7	S4	S5	S4	S6	S7.7	SSW13
5-Jun	SW6	S6	S7	SSW6	SSW6	SW5	SW5	SW5	WSW5	WSW5	SSW5	S4	S5	SSW6	S7	SE9	SSE7	W4	WSW4	WSW3	WSW5	W7	W8	W9	SW4.4	SE9
6-Jun	W8	W8	W9	W12	W12	W12	WSW12	WSW11	WSW11	WSW11	WSW12	WSW10	WSW11	WSW10	SW10	SW9	WSW10	SW8	SW7	SW6	SW6	SSW4	SSW5	SSW5	WSW8.7	WSW12
7-Jun	SSW5	SSW6	SSW5	SSE4	SSE4	SSE5	S5	S6	SSE8	S6	S6	W3	NE1	NE5	NNE10	NE11	NE11	ENE10	NE4	ENE5	NNE6	N5	N5	N5	E1.9	NE11
8-Jun	NNE5	NNE6	NNE7	N7	NNW8	NW9	NW9	NW10	NW10	NW13	WNW14	WNW15	W13	W13	W12	W11	W10	WNW11	WNW12	WNW12	WNW11	W9	W9	WNW10	WNW9.1	WNW15
9-Jun	W9	W8	W7	W7	WSW6	W5	W7	W9	W9	WNW9	W7	W6	WNW8	WNW9	NW7	NW8	WNW7	NW9	NNW8	N6	NNE2	NE2	SE0	NNE4	WNW5.5	NW9
10-Jun	NE8	NE5	NNE3	NNE5	N5	NNW8	NW7	NNW8	NNW8	NNW7	NW10	NW10	NW11	N11	N9	NNE9	NE12	NNE9	N9	NNE8	N8	N6	NNW4	NNW7	N6.9	NE12
11-Jun	NW9	NW9	NNW8	NNW7	NW7	NW9	NW9	NNW10	NNW9	NNW9	NNW8	NNW8	N9	NNW9	N10	N9	N9	NNE10	NNE9	N9	NNW7	NNW8	NW7	NW7	NNW8.1	NNE10
12-Jun	NW8	WNW5	W5	WNW6	NW6	NW7	NNW10	NNW11	NNW11	NNW14	N15	NNW16	NNW14	N14	N13	N14	N12	N12	N10	NNE8	NE3	S2	S2	S2	NNW8.0	NNW16
13-Jun	SSE2	SSW2	WSW2	SSW2	SW2	WSW2	W3	W4	WNW5	WNW6	NW4	WNW5	W6	WSW6	W6	W6	W8	WNW7	W6	WSW3	S3	SSE3	SSW4	SW6	W3.4	W8
14-Jun	SW6	SW6	WSW5	SW5	WSW4	W5	W4	W4	NNW7	NNW7	NNW6	NNW10	NW8	ENE4	NNE7	NNE10	NNE10	N11	NNE8	NNE8	NE1	SSE2	SSE2	SSE2	NNW3.0	N11
15-Jun	S2	SE2	S1	SE1	S2	E1	SE5	SE7	SE8	ESE7	ESE6	SE4	NNE7	NNE5	N6	E5	SE5	ESE11	ESE10	ESE8	S4	W7	W8	WSW8	SE2.5	ESE11
16-Jun	W6	SW6	W4	SSW1	SSW4	SW3	NW5	NW3	ENE3	NNE3	NE4	NNE4	N5	NW2	SSW1	NNE10	NNE11	N13	NNE15	NNE13	NNE10	NNE8	NNE6	NNE4	N4.0	NNE15
17-Jun	NNW2	NNW3	NNW3	NW2	NW3	NW5	N8	NNE8	N8	N10	N10	NNW7	NE8	NNE8	NNE7	NNW4	NW6	NNW8	WNW3	SW4	WSW3	WSW2	W3	SW2	NNW4.1	N10
18-Jun	WNW1	NW2	NW3	NW3	NW2	WNW3	NW5	NNW8	NNW13	NNW10	NW11	NW14	NW14	NNW12	N11	NNW11	NNW11	WNW6	NNW7	NNW6	N4	N2	S2	SSW2	NNW6.2	NW14
19-Jun	WSW2	WSW2	WSW2	WSW2	W2	NW4	N5	NNE5	N6	N8	N6	NNW8	N7	NNE8	NNW9	NE6	NNE10	NE12	NNE8	NNE7	NNE3	ENE1	ENE1	NE1	N4.2	NE12
20-Jun	ESE0	WNW0	N1	NNE3	N5	NNE6	NNE7	NNE8	NNE9	NNE10	NE10	NE8	NE9	NE9	NNE9	NNE10	NNE12	NE11	NNE11	NNE9	E5	SE1	NE1	ENE2	NNE6.2	NNE12
21-Jun	NE3	NNE3	NNE4	NNE4	NNE3	NNE3	NNE5	NNE5	N6	N9	N10	NNE9	NNE11	NNE12	E8	NNW4	NNE5	NNW4	WSW4	WNW3	N3	NE1	NNW2	N2	NNE4.4	NNE12
22-Jun	ENE1	NE1	W1	SSE1	W2	WNW3	NW4	NNW7	NNW7	NNW6	SSE1	E6	NNE5	N6	NW7	SW7	W6	WSW5	SW5	SSW4	ESE6	SSW4	SSW6	SW5	W1.4	NNW7
23-Jun	SSW4	S4	S5	SSW4	SSE4	S3	SW4	WSW5	SW6	WSW6	W5	WSW4	WSW6	WSW6	SW7	SSW8	NE7	SE1	W1	SE6	SE5	SSE3	SW3	SSE2	SSW3.0	SSW8
24-Jun	ESE1	SSE2	SE3	SSW5	S5	SE4	S7	S9	SSW10	SSW9	SSW7	S7	S7	S7	S6	S7	SSW3	ENE3	SSE7	SE4	SE4	SE6	SE6	SE6	S4.9	SSW10
25-Jun	SE4	SSE6	SSE5	SSE5	S6	S6	S6	SSE6	SSE8	SSE11	SSE12	SSE11	SSE9	SSE11	SSE10	S11	S10	S9	S8	S7	SSE6	SE4	SE3	SE4	SSE7.1	SSE12
26-Jun	SE5	ESE5	ESE5	ESE5	ESE6	ESE7	SE8	SE9	SE11	ESE12	ESE14	SE12	SSE13	SE12	ESE11	ESE14	ESE13	ESE15	ESE14	ESE12	ESE9	ESE9	ESE10	ESE9	ESE9.8	ESE15
27-Jun	ESE7	ESE7	ESE5	ESE5	ESE7	ESE9	ESE11	E10	E13	E15	ESE16	ESE15	ESE16	ESE18	ESE13	ESE14	ESE13	ESE12	ESE8	E4	E2	SE2	SE3	ESE2	ESE9.3	ESE18
28-Jun	S1	S1	WNW1	NNE1	NE2	NNE5	NNE6	NNE7	NE7	ENE10	ENE12	ENE13	ENE11	ENE10	ENE12	ENE12	ENE12	ENE9	ESE8	ESE3	UO	SE1	S0	ENE1	ENE5.8	ENE13
29-Jun	N1	W2	WNW1	NNE1	NW0	NNW0	NNE4	NNE5	NNE7	NNE6	NNE10	NNE10	NE10	NNE10	NNE12	NNE12	NNE10	NNE11	NNE10	NNE8	NE8	ESE4	ESE3	SE5	NNE5.5	NNE12
30-Jun	SE4	ESE3	SE3	SE3	ESE4	SE4	SE5	ESE6	ESE5	ESE6	SE7	ESE8	E3	ENE2	NE4	NNE8	NE6	WSW3	N4	E3	SE3	ESE5	SSE4	ESE2	ESE3.3	NNE8
	NW0.8	WNW0.6	WNW1.0	WNW0.7	WNW0.9	NW1.5	NW1.6	NNW1.9	NNW2.0	N2.5	N2.2	N2.4	N2.6	NNE2.6	NNE2.9	NNE2.8	NNE3.3	NNE3.0	NNE2.4	NE2.3	NE1.5	E0.5	SSW0.3	SSW0.1	Diurnal Average	
	NW15	NNE14	NNE13	W12	W12	N13	NNE13	WSW11	NNW14	E15	ESE16	NNW16	ESE16	ESE18	N16	ESE14	N14	ESE15	NNE15	NNE14	NNE13	N11	NNE11	NNE12	Diurnal Maximum	

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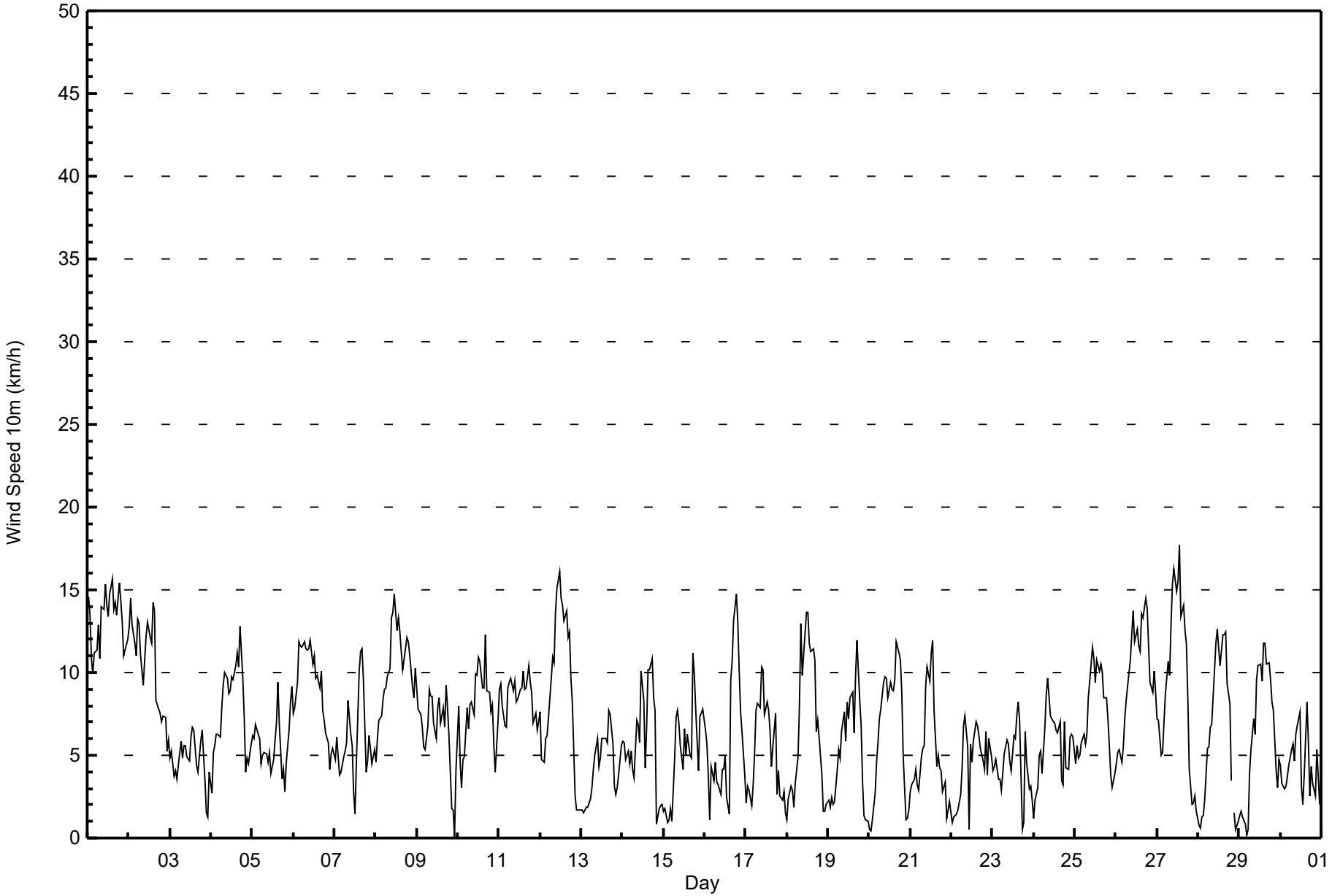
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Mackay River - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	278	38.66	38.66
6 - 11	350	48.68	87.34
12 - 19	91	12.66	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

Mackay River - June 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	26	15	15	11	19	33	18	23	19	11	22	17	11	15	9	278
6 - 11	27	56	15	6	8	28	14	13	28	20	14	13	28	11	29	40	350
12 - 19	14	19	5	5	2	15	2	2	0	1	0	2	5	5	6	8	91
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	55	101	35	26	21	62	49	33	51	40	25	37	50	27	50	57	719

Total Number of Valid Hours: 719

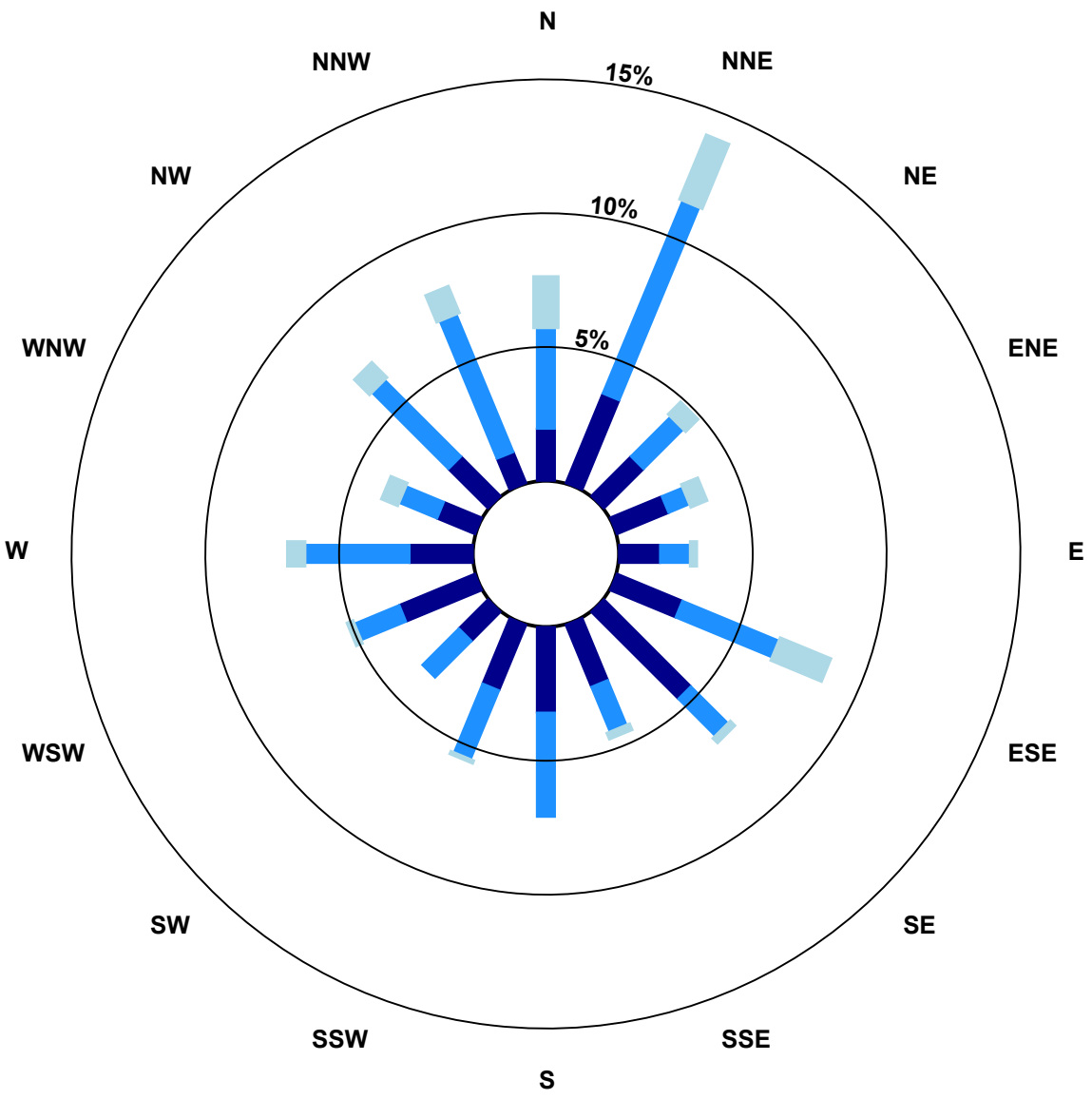
Total Number of Hours: 720

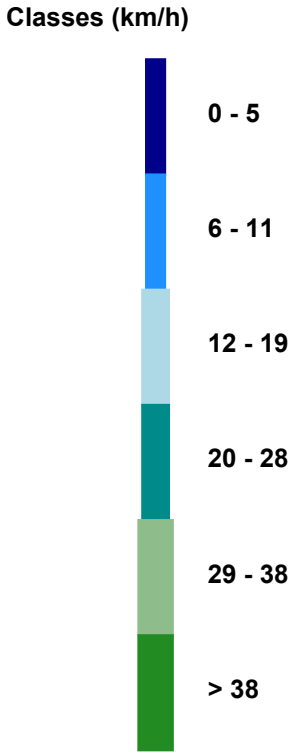
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Mackay River





Total Number of Valid Hours: 719

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

Maximum Value: 6 km/h on Jun 8 12:00

Minimum Value: 0 km/h on Jun 13 00:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 3 Q_3 = 3 P_{90} = 4 P_{99} = 5

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-Jun	4	4	3	3	3	3	4	3	4	4	5	5	4	5	5	5	5	5	5	5	5	4	4	4	5
2-Jun	4	5	4	4	4	5	4	4	3	4	4	4	4	4	5	6	3	3	3	2	3	3	2	2	6
3-Jun	2	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	2
4-Jun	1	1	2	2	2	2	3	3	3	3	3	3	3	4	4	4	4	4	4	3	1	1	1	2	4
5-Jun	2	1	1	1	1	2	2	2	2	2	3	4	3	2	2	5	3	2	2	1	2	3	3	4	5
6-Jun	3	3	4	5	5	5	5	4	5	5	5	4	4	4	4	4	4	3	3	2	2	1	1	2	5
7-Jun	2	2	2	1	1	1	2	2	3	2	2	2	2	2	4	4	4	3	3	3	2	2	2	2	4
8-Jun	1	2	2	2	3	3	3	3	4	4	5	6	5	5	5	4	4	4	5	4	4	4	3	4	6
9-Jun	4	3	3	3	2	2	3	4	3	4	3	2	3	3	3	3	3	3	3	3	1	1	1	3	4
10-Jun	3	2	1	2	2	2	2	3	3	3	3	3	4	3	3	3	4	3	3	2	3	2	1	2	4
11-Jun	3	3	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	3
12-Jun	2	2	1	2	2	2	3	3	3	4	5	5	5	5	4	4	4	4	3	3	2	1	1	0	5
13-Jun	0	1	1	1	1	1	1	2	2	2	3	3	3	3	3	3	3	3	3	2	1	1	1	2	3
14-Jun	2	2	2	2	2	2	2	2	2	3	3	3	4	5	4	4	4	3	3	3	2	1	0	0	5
15-Jun	1	1	1	1	2	1	2	2	3	3	3	3	3	2	3	2	4	3	3	2	2	5	3	3	5
16-Jun	3	2	2	1	2	1	1	1	1	1	2	1	3	2	2	4	4	5	5	4	3	3	2	1	5
17-Jun	1	1	1	1	1	2	2	2	3	3	4	4	3	3	3	2	3	3	2	2	1	1	1	1	4
18-Jun	1	1	1	1	1	1	2	4	5	3	4	5	4	4	4	4	4	3	4	2	2	1	1	1	5
19-Jun	1	1	1	1	1	2	2	2	3	3	3	3	4	4	4	2	5	4	3	2	1	1	1	2	5
20-Jun	1	2	1	2	2	2	2	3	3	4	4	3	4	3	4	4	4	4	4	4	2	1	1	1	4
21-Jun	1	1	1	1	1	1	1	2	2	3	3	3	4	4	4	1	2	1	2	2	2	1	1	1	4
22-Jun	1	2	1	1	1	1	1	2	2	2	2	3	3	3	3	3	4	2	2	1	2	1	2	1	4
23-Jun	1	1	1	1	1	1	1	2	2	3	2	3	3	3	3	4	3	3	2	2	2	1	2	1	4
24-Jun	2	1	1	2	2	1	2	3	4	3	3	3	3	3	3	3	3	5	3	1	1	1	1	1	5
25-Jun	1	1	1	1	1	2	2	2	3	3	4	4	3	4	4	4	4	4	3	2	2	1	1	1	4
26-Jun	1	1	1	1	1	1	2	3	3	3	4	4	4	4	4	5	5	4	4	4	2	3	2	2	5
27-Jun	2	2	1	1	2	3	3	3	4	5	5	5	5	6	4	5	4	4	3	2	1	1	1	1	6
28-Jun	2	1	1	1	1	2	2	2	2	4	4	5	4	4	5	5	4	4	3	2	UO	2	1	1	5
29-Jun	1	1	1	1	1	1	2	2	2	3	3	4	4	4	4	4	4	4	3	3	3	1	1	1	4
30-Jun	1	1	1	1	1	1	1	2	2	2	3	3	3	3	3	3	5	1	2	1	1	2	2	1	5
	4	5	4	5	5	5	5	4	5	5	5	6	5	6	5	6	5	5	5	5	5	5	4	4	
	Diurnal Maximum																								

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Mackay River - June 2026

Direction of Maximum Speed: 114 deg on Jun 27 14:00
Direction of Maximum Daily Speed Average: 350.7 deg on Jun 1

Direction of Minimum Speed: 127 deg on Jun 9 23:00
Direction of Minimum Daily Speed Average: 1.4 deg on Jun 22

Monthly Average Direction: 6.9 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-Jun	324	323	320	320	322	323	326	331	331	336	347	357	350	357	5	2	10	26	11	17	14	11	13	15	350.7
2-Jun	16	22	17	17	15	10	14	15	23	31	31	27	36	33	42	49	94	104	98	96	90	88	80	64	38.3
3-Jun	71	71	68	79	78	107	112	97	115	133	140	135	120	133	150	141	145	151	131	119	115	90	71	116	116.3
4-Jun	140	184	194	197	195	196	193	194	178	183	181	190	183	193	193	190	205	198	199	204	189	179	178	190	190.6
5-Jun	214	190	191	195	199	219	220	236	252	245	192	186	174	194	177	145	148	269	242	248	256	269	270	272	214.5
6-Jun	264	266	262	261	267	269	255	256	250	242	248	248	239	237	234	234	240	225	234	232	217	199	208	202	245.4
7-Jun	204	194	211	162	162	166	173	178	166	174	181	260	50	50	31	47	43	76	52	62	21	8	360	9	92.0
8-Jun	13	25	17	5	345	326	318	316	304	308	295	286	281	280	281	278	281	286	292	293	283	281	280	284	299.8
9-Jun	271	270	273	274	255	265	265	272	274	289	268	267	288	300	311	305	298	325	332	7	22	46	127	29	291.0
10-Jun	42	50	18	20	5	348	326	336	340	342	324	326	316	0	354	20	38	26	354	15	4	352	338	334	356.2
11-Jun	319	318	329	329	322	317	322	328	329	337	340	330	354	343	9	360	2	13	14	11	332	331	318	317	339.6
12-Jun	314	293	278	303	317	319	331	343	336	341	356	348	346	354	353	351	358	2	8	29	38	169	174	173	344.8
13-Jun	157	212	237	199	232	248	268	260	282	296	319	282	262	237	277	268	280	290	266	247	175	160	194	217	259.1
14-Jun	220	229	240	235	249	268	266	274	329	334	327	346	320	71	16	22	16	6	16	29	36	162	155	156	336.3
15-Jun	170	145	173	137	180	80	132	141	129	114	120	125	21	24	349	100	146	113	112	117	183	269	261	245	127.8
16-Jun	259	233	263	199	199	236	315	320	58	24	35	14	355	319	193	16	18	10	12	14	13	14	23	19	1.5
17-Jun	334	345	330	317	321	324	8	14	2	350	9	341	39	29	21	342	308	337	288	235	243	258	270	220	348.0
18-Jun	288	320	306	325	314	286	307	345	338	336	306	320	324	335	354	343	330	297	327	334	352	10	191	199	327.8
19-Jun	237	241	247	242	274	313	351	20	357	350	349	344	351	12	330	37	20	35	29	24	22	60	67	43	2.1
20-Jun	111	294	5	14	4	28	33	22	26	32	39	49	36	40	22	29	30	37	30	32	94	145	53	61	33.6
21-Jun	41	19	26	27	31	14	21	17	349	352	5	28	15	17	87	336	12	346	248	291	3	53	346	360	11.8
22-Jun	57	36	262	159	271	287	308	336	338	344	147	100	23	7	307	218	263	248	235	195	123	206	207	216	275.7
23-Jun	205	177	186	193	162	174	233	241	227	251	270	245	243	240	221	207	38	129	277	141	138	153	227	162	209.3
24-Jun	102	157	141	192	190	132	174	179	193	203	207	185	185	179	185	180	195	61	152	129	128	127	129	132	169.5
25-Jun	143	148	162	158	169	173	169	162	148	149	152	149	164	166	153	190	181	186	185	179	164	137	129	133	162.8
26-Jun	127	121	120	116	121	120	129	130	128	117	117	131	148	139	113	108	113	117	111	112	112	112	118	120	120.5
27-Jun	118	119	123	112	116	113	114	94	100	96	104	108	113	114	114	111	106	110	103	92	98	129	124	108	108.8
28-Jun	191	190	290	19	34	24	28	28	36	62	73	77	70	70	66	75	73	76	104	105	UO	140	181	57	66.8
29-Jun	353	271	295	23	321	347	32	27	28	31	15	26	36	18	12	27	24	15	26	23	36	112	114	126	27.6
30-Jun	127	120	130	133	118	127	127	117	103	113	125	109	95	77	39	32	41	237	5	83	129	115	160	122	103.9
	306.3	284.8	282.6	290.7	287.8	314.1	325.7	339.6	347.2	356.8	8.4	8.0	2.9	17.7	16.6	33.1	27.5	29.5	27.2	44.1	51.4	78.8	211.9	207.8	
	Diurnal Average																								

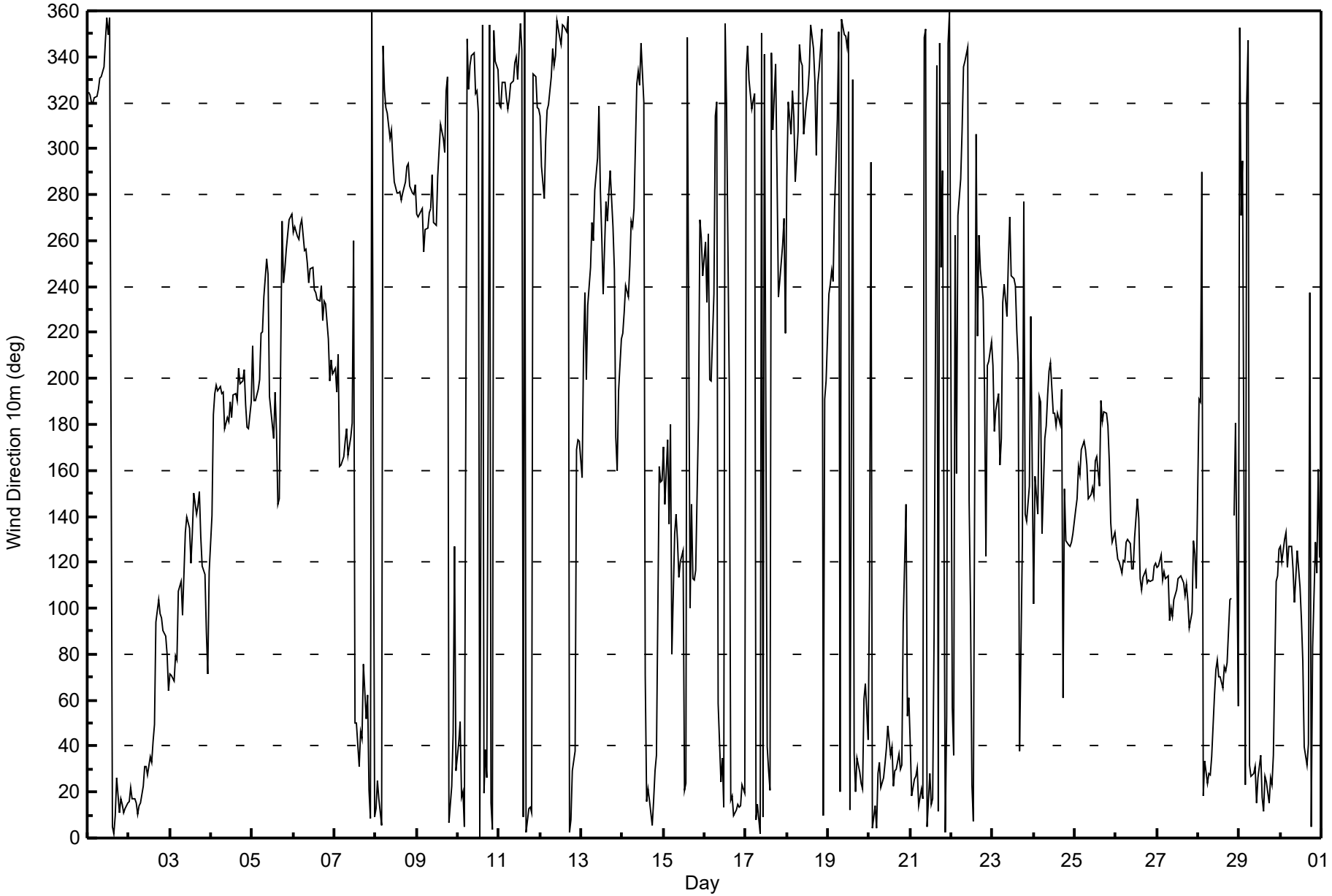
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Mackay River - June 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Mackay River - June 2026

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

Maximum Value: 104 deg on Jun 22 11:00

Minimum Value: 9 deg on Jun 14 23:00

Percentiles: P_1 = 12 P_{10} = 20 Q_1 = 25 Median = 31 Q_3 = 42 P_{90} = 57 P_{99} = 90

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-Jun	20	20	19	19	19	20	20	22	21	23	24	25	26	27	26	27	27	26	27	26	26	26	27	26	27
2-Jun	28	27	25	26	26	26	25	25	25	27	24	25	26	26	27	28	32	26	30	32	35	32	31	32	35
3-Jun	31	30	34	32	31	28	24	31	33	38	43	51	28	33	35	51	54	43	43	24	15	30	43	23	54
4-Jun	50	17	17	18	21	24	26	26	26	25	25	32	32	42	42	32	38	30	29	29	25	14	13	19	50
5-Jun	25	18	15	17	19	38	42	44	53	58	67	85	72	34	28	25	36	74	45	52	45	41	40	44	85
6-Jun	45	43	46	43	47	40	49	45	43	46	43	45	34	39	36	41	42	32	37	38	26	21	24	23	49
7-Jun	23	19	29	22	27	22	32	32	29	33	37	85	99	70	33	31	28	31	62	58	27	28	30	24	99
8-Jun	26	24	24	25	24	22	21	21	24	25	29	35	34	35	35	37	33	32	30	27	32	36	41	34	41
9-Jun	40	41	37	35	43	44	46	42	45	45	49	48	38	41	42	43	48	34	30	30	39	55	90	59	90
10-Jun	27	34	46	31	27	23	26	29	35	40	27	28	27	30	30	29	31	29	30	26	26	23	21	22	46
11-Jun	20	21	20	22	22	21	24	22	25	26	28	28	33	32	32	34	28	31	26	26	22	20	20	22	34
12-Jun	23	27	27	24	19	22	22	23	26	25	28	28	30	30	31	31	29	32	30	27	51	15	24	22	51
13-Jun	14	38	40	33	36	41	48	47	48	52	79	73	60	63	62	61	43	44	46	44	34	16	27	22	79
14-Jun	21	31	35	33	41	47	45	53	35	45	62	33	45	62	47	30	30	34	34	27	87	23	9	13	87
15-Jun	24	15	58	28	62	56	24	28	28	46	72	77	47	56	59	69	65	20	19	19	58	41	47	42	77
16-Jun	51	37	72	79	23	41	26	52	45	45	36	30	29	74	101	36	35	30	27	27	26	24	21	16	101
17-Jun	24	14	21	20	14	22	27	34	41	36	35	44	42	47	60	64	42	33	62	36	49	44	37	34	64
18-Jun	71	16	21	12	19	27	32	35	26	28	33	30	27	26	30	26	28	38	32	22	37	74	33	31	74
19-Jun	33	27	40	29	51	30	33	53	44	50	50	40	51	48	31	31	31	27	29	25	28	29	42	68	68
20-Jun	75	73	82	46	22	27	28	31	35	34	40	44	36	38	36	33	29	29	27	26	37	80	56	51	82
21-Jun	27	24	23	23	39	36	25	26	29	28	30	33	34	30	47	32	28	36	46	57	55	59	22	21	59
22-Jun	61	61	53	46	19	27	33	35	33	52	104	57	74	68	46	47	40	49	39	26	28	22	20	22	104
23-Jun	20	16	19	29	18	21	45	41	44	53	74	79	69	61	52	46	34	102	92	24	20	31	42	40	102
24-Jun	75	57	19	27	45	26	26	28	31	38	45	47	55	58	62	42	72	61	49	15	19	14	13	12	75
25-Jun	17	10	11	14	17	20	23	24	27	32	33	32	34	34	40	37	26	27	25	26	27	22	24	19	40
26-Jun	17	13	14	15	12	15	22	23	27	24	28	31	34	38	29	25	23	23	23	20	17	18	17	18	38
27-Jun	18	16	15	18	18	20	21	32	31	31	29	26	26	26	27	23	27	22	27	31	34	27	24	38	38
28-Jun	64	89	45	74	23	22	27	27	29	38	37	36	36	37	38	37	34	37	25	33	UO	12	77	66	89
29-Jun	47	31	33	92	90	85	35	31	34	44	36	33	36	45	35	34	30	31	27	25	24	27	16	12	92
30-Jun	10	20	23	21	15	15	18	26	40	28	43	36	86	91	77	37	64	49	36	33	14	16	30	16	91
	75	89	82	92	90	85	49	53	53	58	104	85	99	91	101	69	72	102	92	58	87	80	90	68	
	Diurnal Maximum																								

UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS21
CONKLIN
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - CONKLIN (AMS21)
JUNE 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	35	36	99.86	-	-	3.3	0	0.7	0
TRS(ppb) Average	684	36	36	100	0.9	0	0.7	0	0.2	0
THC(ppm) Average	684	35	36	99.86	-	-	4.2	-	2.4	-
NMHC(ppm) Average	684	35	36	99.86	-	-	0.187	-	0.018	-
CH4(ppm) Average	684	35	36	99.86	-	-	4	-	2.4	-
O3 (ppb) Average	685	34	35	99.86	-	-	54.5	0	35.1	-
NO2 (ppb) Average	683	36	37	99.86	-	-	10.5	0	2.1	-
NO (ppb) Average	683	36	37	99.86	-	-	59.4	-	4.8	-
NOX (ppb) Average	683	36	37	99.86	-	-	64.4	-	6.8	-
PM2.5 (ug/m3) Average	719	1	1	100	-	-	84.6	1	51.8	2
Temperature 2 m (C) Average	720	0	0	100	-	-	28.1	-	20.3	-
Relative Humidity (%) Average	703	0	17	97.64	-	-	100	-	96.1	-
Wind Speed 10 m (km/h) Average	720	0	0	100	-	-	18	-	13	-
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 - CONKLIN (AMS21)
JUNE 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	0.25	0.4	-	0	0	0.1	0.1	0.3	0.5	3.3
TRS (ppb) Average	684	0.17	0.1	-	0.1	0.1	0.1	0.2	0.2	0.3	0.7
THC (ppm) Average	684	2.13	0.2	-	2	2	2.1	2.1	2.1	2.3	4.2
NMHC(ppm) Average	684	0.001	0.009	-	0	0	0	0	0	0	0.187
CH4(ppm) Average	684	2.13	0.2	-	2	2	2.1	2.1	2.1	2.3	4
O3 (ppb) Average	685	26.19	11.7	-	1.3	10.8	17.5	26.5	34.6	41.3	54.5
NO2 (ppb) Average	683	1.12	1.3	-	0	0.2	0.4	0.7	1.3	2.3	10.5
NO (ppb) Average	683	0.43	3	-	0	0	0	0	0	0.4	59.4
NOX (ppb) Average	683	1.55	3.7	-	0	0.2	0.4	0.8	1.4	2.8	64.4
PM2.5 (ug/m3) Average	719	7.04	11.5	-	0.4	1.8	2.8	3.8	5.5	9.5	84.6
Temperature 2 m (C) Average	720	14.05	5.8	-	1	7.4	9.6	13	17.9	22.5	28.1
Relative Humidity (%) Average	703	71.78	22.4	-	26.7	38.2	52.2	76.3	92.4	98.8	100
Wind Speed 10 m (km/h) Average	720	6.3	4	-	1	2	3	5	9	12	18
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - CONKLIN (AMS 21)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
O3, NMHC,NO2, SO2	25 Jun 2026 14:00	25 Jun 2026 14:00	1	Maintenance - sample manifold cleaned
Relative Humidity	01 Jun 2026 04:00	01 Jun 2026 05:00	2	Sensor operated out of range
Relative Humidity	03 Jun 2026 02:00	03 Jun 2026 06:00	5	Sensor operated out of range
Relative Humidity	15 Jun 2026 05:00	15 Jun 2026 05:00	1	Sensor operated out of range
Relative Humidity	17 Jun 2026 05:00	17 Jun 2026 06:00	2	Sensor operated out of range
Relative Humidity	20 Jun 2026 03:00	20 Jun 2026 06:00	4	Sensor operated out of range
Relative Humidity	21 Jun 2026 01:00	21 Jun 2026 01:00	1	Sensor operated out of range
Relative Humidity	23 Jun 2026 05:00	23 Jun 2026 05:00	1	Sensor operated out of range
Relative Humidity	30 Jun 2026 06:00	30 Jun 2026 06:00	1	Sensor operated out of range

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Conklin - June 2026

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

Maximum Value: 3.3 ppb on Jun 25 23:00 Maximum Daily Average: 0.7 ppb on Jun 24

Minimum Value: 0.0 ppb on Jun 2 05:00 Minimum Daily Average: 0.0 ppb on Jun 19

Maximum Diurnal Average: 0.4 ppb at hour 12 Minimum Diurnal Average: 0.1 ppb at hour 5

Monthly Average: 0.25 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.3 P_{90} = 0.5 P_{99} = 1.9

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-Jun	0.1	0.2	Z	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2
2-Jun	0.1	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	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
3-Jun	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.4	0.2	0.3	0.6	0.9	1.1	0.9	1.0	0.9	0.7	0.3	0.2	0.1	0.4	0.5	0.4	1.1
4-Jun	0.3	0.3	0.3	0.2	0.1	Z	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.3
5-Jun	Z	0.0	0.0	0.1	0.0	0.0	0.0	0.1	1.3	2.6	2.4	1.0	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	2.6
6-Jun	0.1	Z	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.4
7-Jun	0.4	0.3	Z	0.4	0.4	0.4	0.4	0.3	0.3	0.5	0.9	2.6	0.9	0.5	0.4	0.3	0.5	0.4	0.3	0.3	0.2	0.1	0.2	0.2	0.5	2.6
8-Jun	0.2	0.2	0.2	Z	0.1	0.2	0.1	0.2	0.3	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
9-Jun	0.1	0.1	0.1	0.2	Z	0.1	0.1	0.1	0.2	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	0.1	0.2
10-Jun	0.1	0.0	0.1	0.1	0.1	Z	0.4	0.8	0.3	0.2	0.1	0.4	0.5	0.2	0.1	0.1	0.2	0.2	0.2	0.7	0.3	0.2	0.2	0.2	0.3	0.8
11-Jun	Z	0.5	0.6	0.3	0.6	1.2	0.7	0.4	0.8	1.0	0.5	0.6	0.8	1.0	0.8	0.9	1.3	0.7	0.8	0.7	0.4	0.2	0.2	0.1	0.7	1.3
12-Jun	0.2	Z	0.1	0.2	0.2	1.1	0.8	0.6	0.4	0.3	0.5	1.9	1.5	1.3	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.1	0.5	1.9
13-Jun	0.1	0.2	Z	0.0	0.0	0.2	0.6	1.3	0.9	0.5	0.5	0.5	0.7	0.9	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	1.3
14-Jun	0.3	0.2	0.2	Z	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.4	0.2	0.1	0.0	0.1	0.2	0.4
15-Jun	0.0	0.1	0.0	0.1	Z	0.0	0.4	0.3	0.3	0.4	0.2	0.1	0.4	0.6	0.4	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.6
16-Jun	0.0	0.1	0.0	0.1	0.1	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	0.1
17-Jun	Z	0.0	0.0	0.0	0.0	0.1	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.3	0.5	0.1	0.5
18-Jun	0.5	Z	0.1	0.1	0.2	0.0	0.1	0.1	0.0	0.5	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.4	0.6	0.0	0.0	0.0	0.0	0.0	0.1	0.6
19-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.2
20-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.2
21-Jun	0.1	0.1	0.0	0.1	Z	0.0	0.0	0.0	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	0.1	0.2	0.1	0.2
22-Jun	0.2	0.1	0.1	0.2	0.2	Z	0.2	0.1	0.2	0.1	0.2	0.1	0.3	0.1	0.2	0.2	0.3	0.3	0.8	0.3	0.2	0.2	0.3	0.2	0.2	0.8
23-Jun	Z	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.4	0.1	0.1	0.0	0.1	0.4
24-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.7	0.7	1.3	2.6	1.6	1.2	0.4	0.1	0.2	1.1	1.9	2.3	0.4	0.3	0.5	0.7	2.6
25-Jun	0.6	0.3	Z	0.1	0.0	0.2	0.4	0.5	0.3	0.1	0.1	0.0	0.1	M	0.1	0.2	0.2	0.1	0.3	0.9	0.2	0.1	3.3	1.2	0.4	3.3
26-Jun	0.4	0.2	0.1	Z	0.2	0.4	1.1	1.3	0.9	0.5	0.3	0.4	0.5	0.3	0.4	0.2	0.8	0.5	0.3	1.1	0.7	0.5	1.8	0.5	0.6	1.8
27-Jun	0.5	0.5	0.3	0.3	Z	0.2	0.1	0.5	0.8	0.7	0.5	0.5	0.3	0.5	0.4	0.3	0.4	0.7	0.3	0.3	0.2	0.1	0.1	0.2	0.4	0.8
28-Jun	0.0	0.0	0.1	0.0	0.1	Z	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2
29-Jun	Z	0.0	0.1	0.1	0.2	0.1	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.4	0.1	0.1	0.1	0.1	0.2	0.4
30-Jun	0.1	Z	0.5	0.3	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.1	0.3	0.2	Diurnal Average	
	0.6	0.5	0.6	0.4	0.6	1.2	1.1	1.3	1.3	2.6	2.4	2.6	2.6	1.6	1.2	0.9	1.3	0.9	1.1	1.9	2.3	0.5	3.3	1.2	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

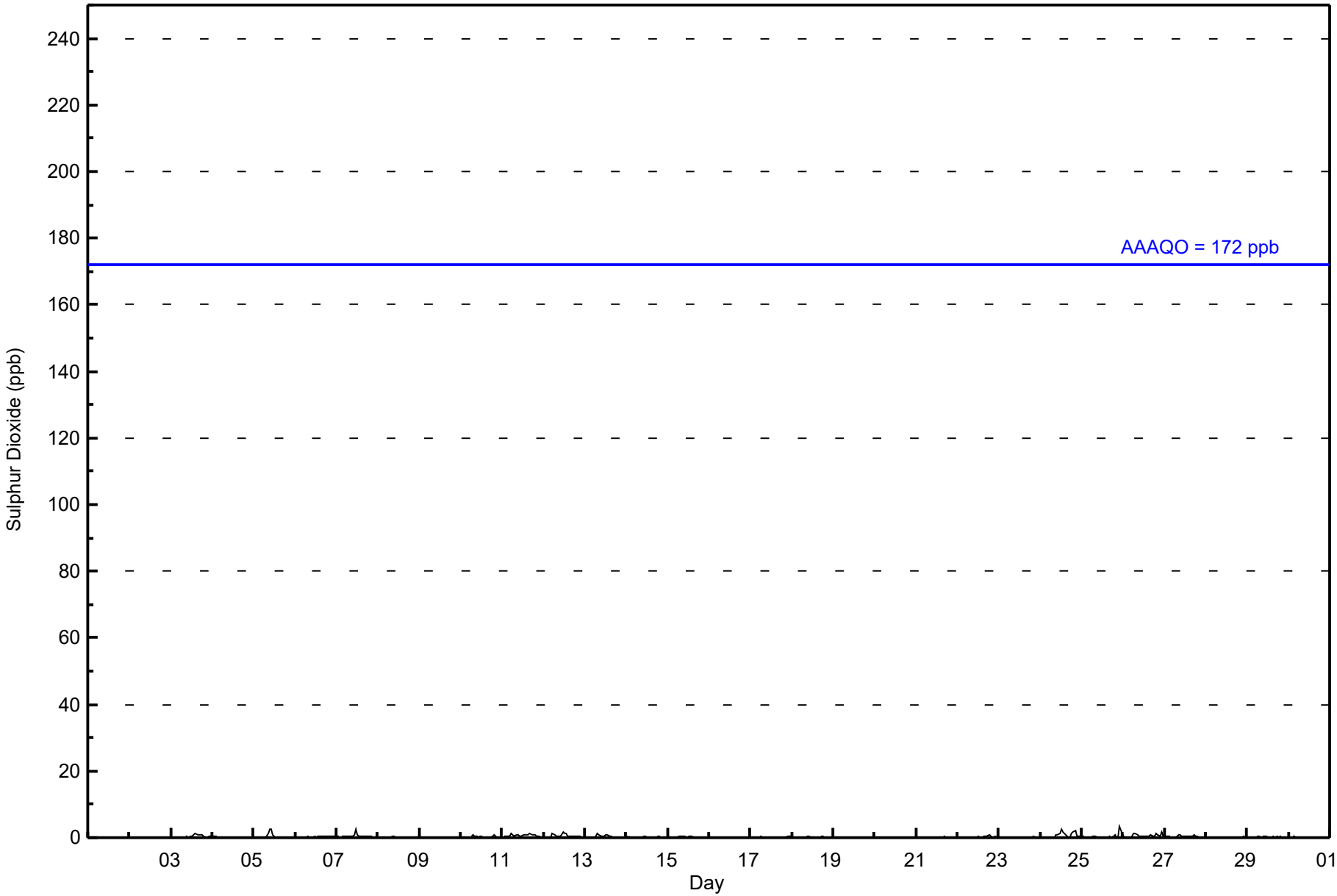
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Conklin - June 2026



Sulphur Dioxide (SO_2) - ppb

Conklin - June 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

Conklin - June 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	188	52	36	28	20	47	18	14	23	26	18	14	22	24	29	125	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	188	52	36	28	20	47	18	14	23	26	18	14	22	24	29	125	684

Total Number of Valid Hours: 684

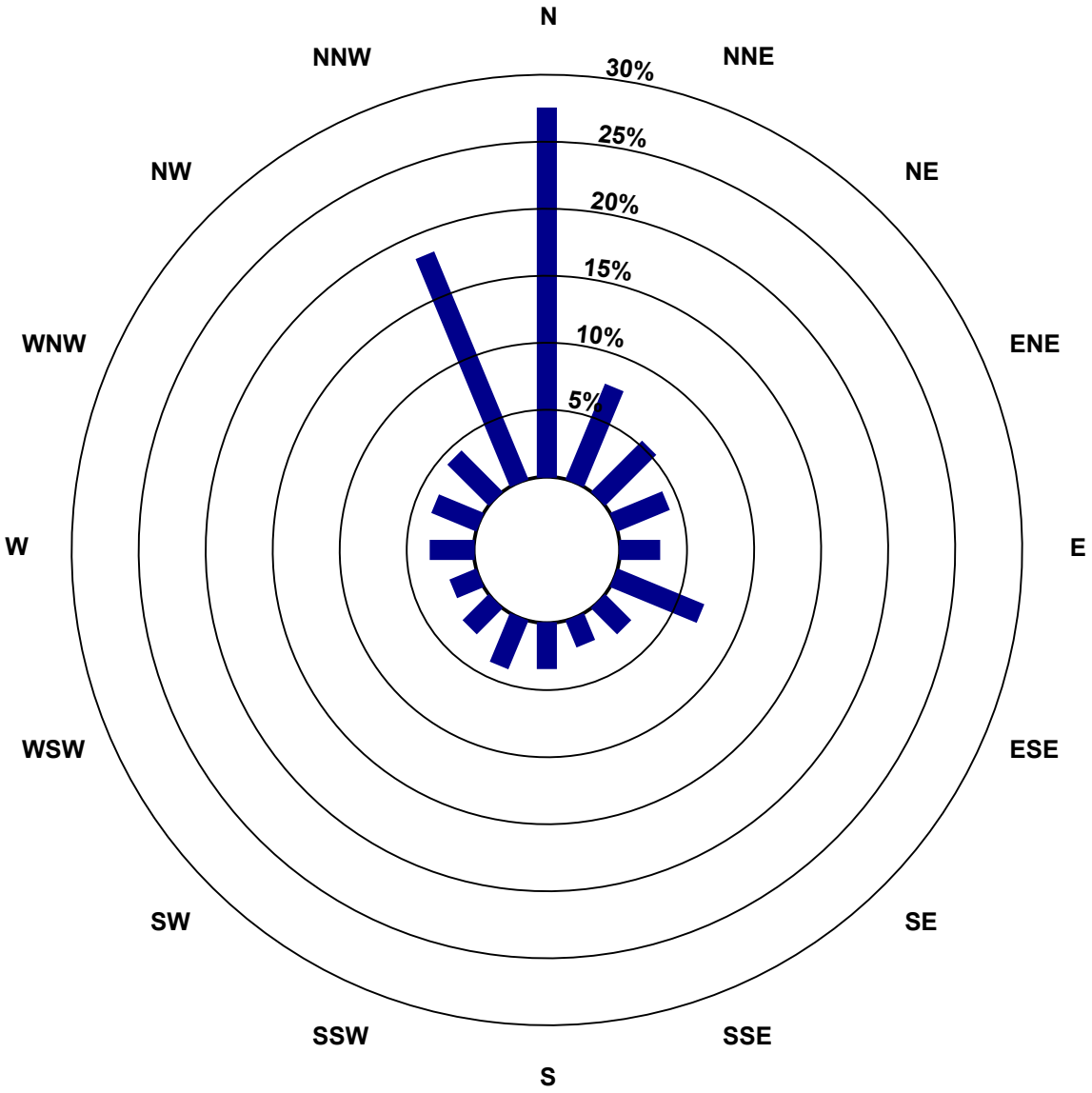
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Conklin



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

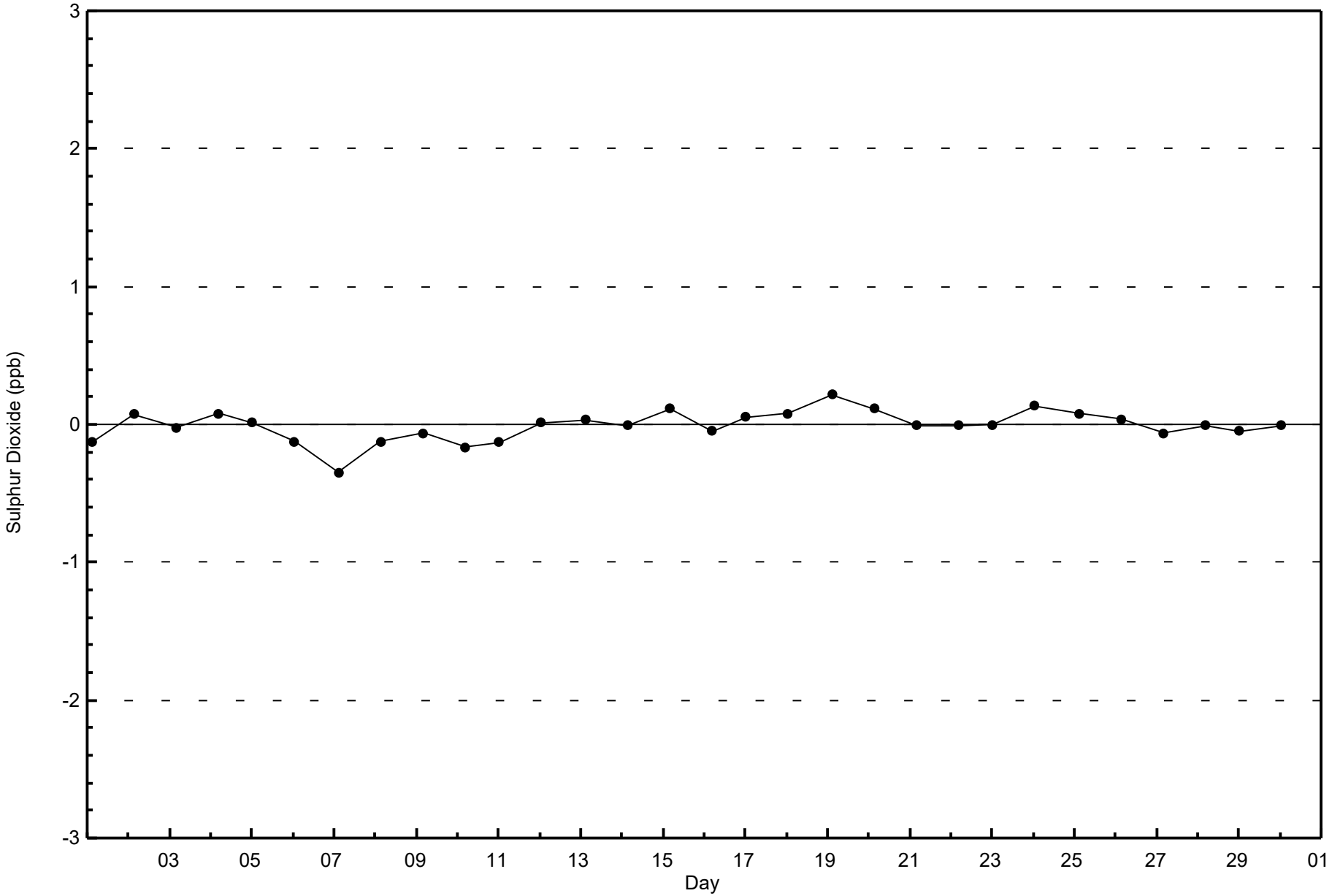
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Conklin - June 2026

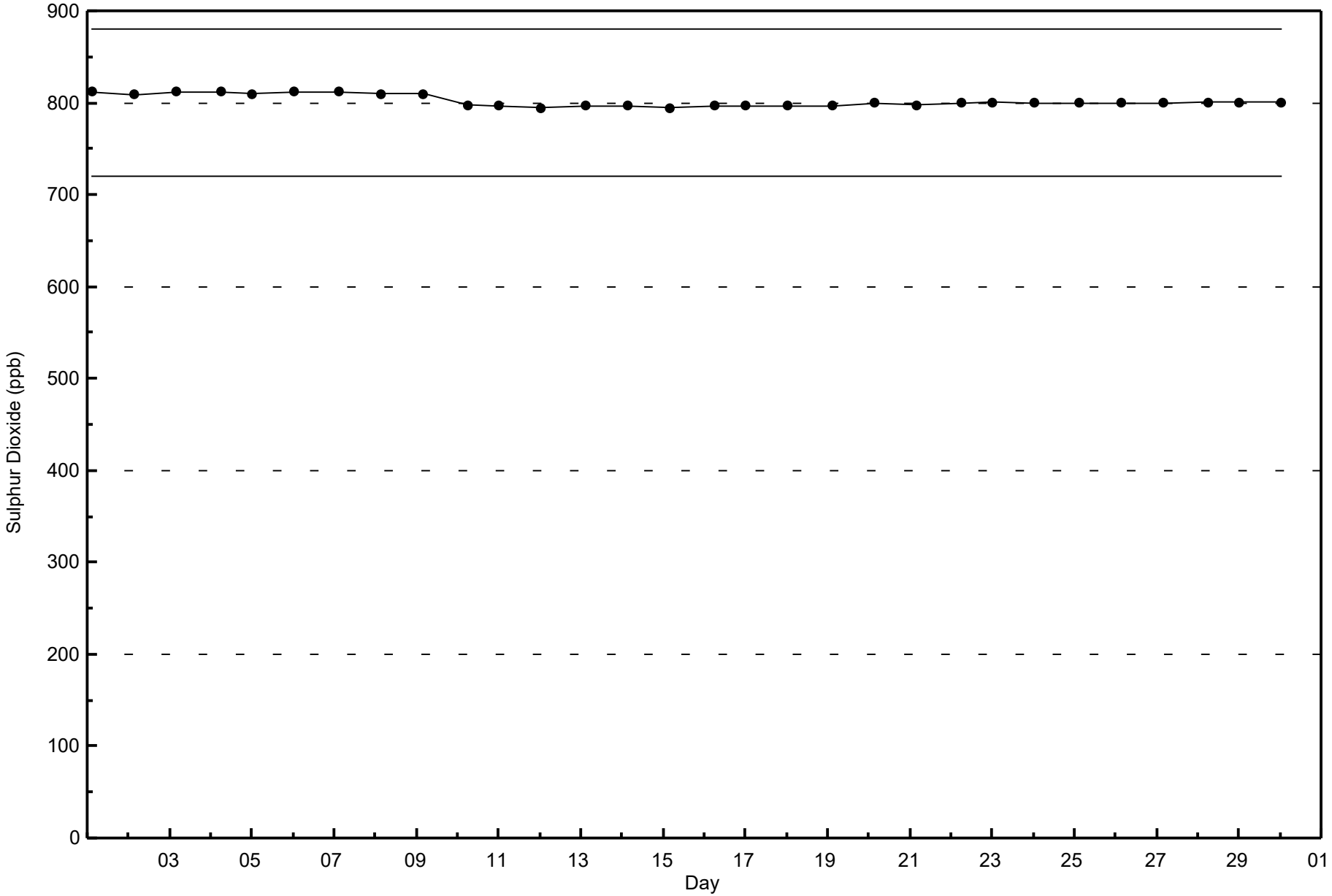


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Conklin - June 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Conklin - June 2026

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

Maximum Value: 0.9 ppb on Jun 28 03:30 Maximum Daily Average: 0.2 ppb on Jun 13

Minimum Value: 0.1 ppb on Jun 25 20:30 Minimum Daily Average: 0.1 ppb on Jun 3

Maximum Diurnal Average: 0.2 ppb at hour 4 Minimum Diurnal Average: 0.1 ppb at hour 15

Monthly Average: 0.17 ppb Percentiles: $P_1 = 0.1$ $P_{10} = 0.1$ $Q_1 = 0.1$ Median = 0.2 $Q_3 = 0.2$ $P_{90} = 0.2$ $P_{99} = 0.4$

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-Jun	0.2	0.2	0.2	Z	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.3
	0.2	0.2	0.2	SP	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	0.2	0.2	0.1	0.1	0.1		
2-Jun	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
	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1		
3-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
	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	0.2	0.1		
4-Jun	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
	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	0.2	0.2	0.2	0.2	0.2		
5-Jun	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	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.3
	0.2	SP	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	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.1		
6-Jun	0.1	0.2	Z	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2
	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	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2		
7-Jun	0.2	0.2	0.2	Z	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3
	0.2	0.2	0.2	SP	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	0.2	0.2	0.2	0.3	0.2	0.2	0.2		
8-Jun	0.2	0.2	0.2	0.2	Z	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.1	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	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1		
9-Jun	0.1	0.2	0.1	0.1	0.1	Z	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.1	0.3
	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	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2		
10-Jun	Z	0.2	0.2	0.2	0.2	0.3	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	0.1	0.1	0.2	0.3
	SP	0.2	0.2	0.2	0.3	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		
11-Jun	0.1	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2
	0.2	SP	0.2	0.2	0.2	0.2	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	0.2	0.2	0.2	0.2	0.1		
12-Jun	0.1	0.2	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
	0.1	0.1	SP	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	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2		
13-Jun	0.2	0.2	0.2	Z	0.2	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.7	0.4	0.2	0.7
	0.2	0.2	0.2	SP	0.3	0.5	0.3	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	0.2	0.3	0.5	0.3		
14-Jun	0.2	0.2	0.2	0.2	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	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	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3		
15-Jun	0.3	0.4	0.4	0.3	0.3	Z	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.4
	0.3	0.3	0.4	0.3	0.3	SP	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1		

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Conklin - June 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-Jun	Z	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	0.1	0.1	0.1	0.1	0.2	0.1	0.3
	SP	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	0.2		
17-Jun	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1		
18-Jun	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	0.2	0.2	0.3	0.2	0.1	0.3
	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	0.2	0.2	0.2	0.2	0.2	0.3		
19-Jun	0.3	0.2	0.2	Z	0.3	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.3
	0.2	0.3	0.2	SP	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1		
20-Jun	0.2	0.1	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2
	0.2	0.2	0.1	0.2	SP	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2		
21-Jun	0.2	0.1	0.1	0.2	0.2	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	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.4
	0.2	0.2	0.1	0.2	0.1	SP	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2		
22-Jun	Z	0.3	0.3	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.3
	SP	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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		
23-Jun	0.2	Z	0.3	0.3	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3
	0.2	SP	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2		
24-Jun	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.4	0.2	0.4
	0.2	0.1	SP	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.3		
25-Jun	0.3	0.2	0.2	Z	0.4	0.3	0.4	0.3	0.2	0.2	0.2	C	C	C	C	C	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.4
	0.3	0.2	0.2	SP	0.3	0.3	0.4	0.3	0.2	0.2	C	C	C	C	C	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2		
26-Jun	0.2	0.3	0.3	0.3	Z	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.4
	0.2	0.3	0.3	0.4	SP	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.3		
27-Jun	0.3	0.2	0.2	0.2	0.3	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3
	0.2	0.2	0.2	0.3	0.3	SP	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2		
28-Jun	Z	0.5	0.4	0.9	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.9
	SP	0.5	0.3	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	0.1	0.1	0.1	0.1	0.2	0.2		
29-Jun	0.3	Z	0.4	0.3	0.3	0.3	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	0.2	0.3	0.3	0.2	0.4
	0.3	SP	0.4	0.3	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	0.2	0.2	0.2	0.3	0.3		
30-Jun	0.3	0.3	Z	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.2	0.5
	0.3	0.3	SP	0.4	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	0.2	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	Diurnal Average	
	0.3	0.5	0.4	0.9	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.7	0.4	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

Conklin - June 2026

Maximum Value: 0.7 ppb on Jun 28 04:00

Maximum Daily Average: 0.2 ppb on Jun 13

Minimum Value: 0.1 ppb on Jun 25 19:00

Minimum Daily Average: 0.1 ppb on Jun 3

Maximum Diurnal Average: 0.2 ppb at hour 4

Minimum Diurnal Average: 0.1 ppb at hour 15

Monthly Average: 0.17 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} = 0.4

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-Jun	0.2	0.2	0.2	Z	0.3	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3
2-Jun	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-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
4-Jun	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
5-Jun	0.2	Z	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	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.3
6-Jun	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	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2
7-Jun	0.2	0.2	0.2	Z	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	0.3	0.2	0.2	0.2	0.2	0.3
8-Jun	0.2	0.2	0.2	0.2	Z	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.3
9-Jun	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	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
10-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.3
11-Jun	0.1	Z	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	0.2	0.2	0.2	0.2	0.1	0.2	0.2
12-Jun	0.1	0.2	Z	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
13-Jun	0.2	0.2	0.2	Z	0.3	0.4	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	0.2	0.4	0.6	0.3	0.2	0.6
14-Jun	0.2	0.2	0.2	0.2	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	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3
15-Jun	0.3	0.3	0.4	0.3	0.3	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	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.4
16-Jun	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
17-Jun	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2
18-Jun	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	0.3	0.1	0.3
19-Jun	0.2	0.2	0.2	Z	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	0.2	0.1	0.2	0.3
20-Jun	0.2	0.2	0.1	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2
21-Jun	0.2	0.2	0.1	0.2	0.2	Z	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3
22-Jun	Z	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3
23-Jun	0.2	Z	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3
24-Jun	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	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.3
25-Jun	0.3	0.2	0.2	Z	0.4	0.3	0.4	0.3	0.2	0.2	C	C	C	C	C	C	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	--	0.4
26-Jun	0.2	0.3	0.3	0.4	Z	0.3	0.2	0.2	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	0.3	0.3	0.3	0.2	0.4
27-Jun	0.3	0.2	0.2	0.3	0.3	Z	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3
28-Jun	Z	0.5	0.3	0.7	0.4	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	0.3	0.2	0.7
29-Jun	0.3	Z	0.4	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	0.2	0.2	0.3	0.3	0.2	0.4
30-Jun	0.3	0.3	Z	0.5	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	0.2	0.2	0.2	0.3	0.3	0.2	0.5
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	Diurnal Average	
	0.3	0.5	0.4	0.7	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.6	0.3	Diurnal Maximum	

Z - zerospan C - Calibration

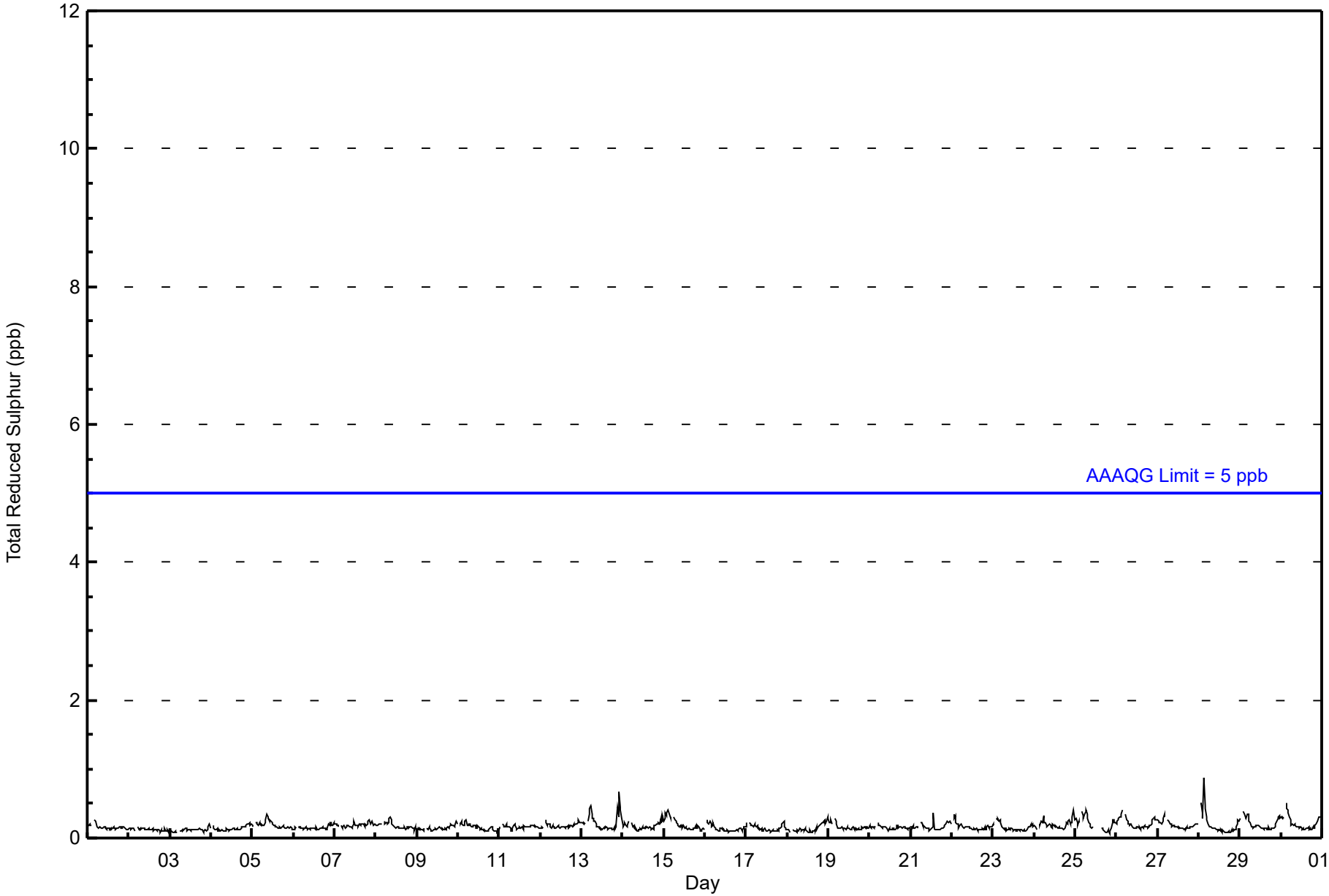
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Conklin - June 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 - June 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	190	51	36	28	21	47	16	11	24	24	18	14	22	27	29	126	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	190	51	36	28	21	47	16	11	24	24	18	14	22	27	29	126	684

Total Number of Valid Hours: 684

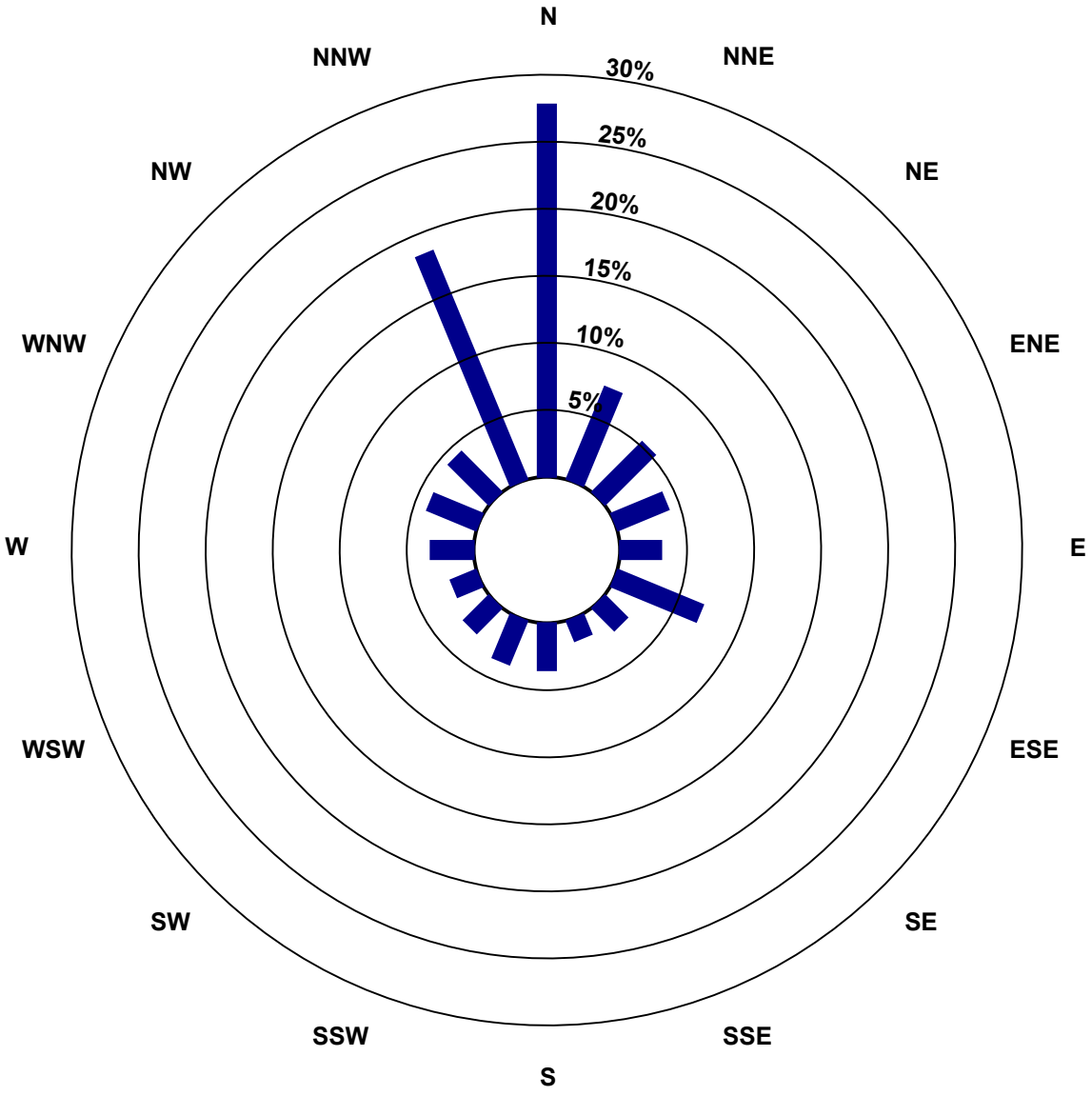
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Reduced Sulphur (TRS) - ppb

Conklin



Classes (ppb)

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

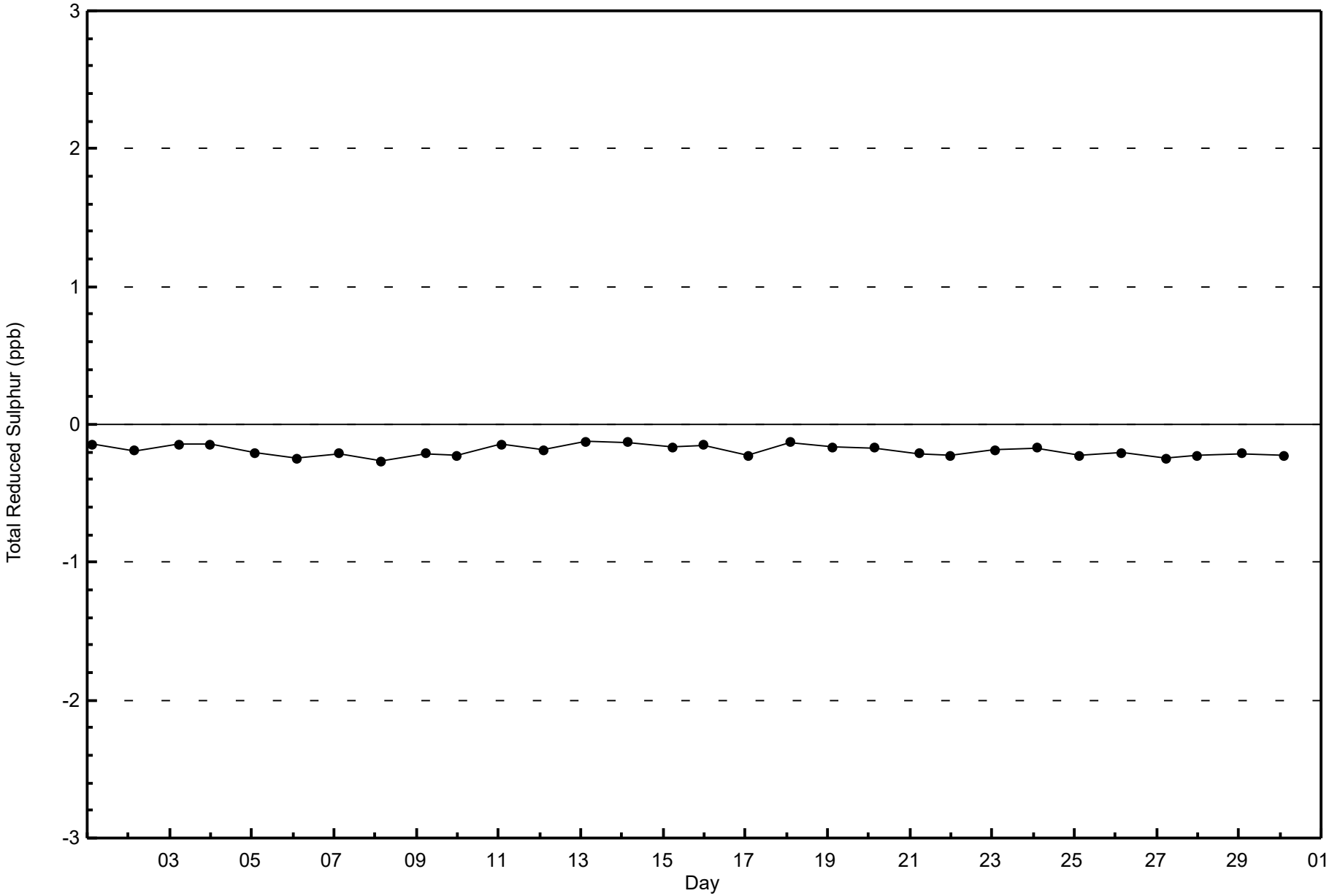
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Conklin - June 2026

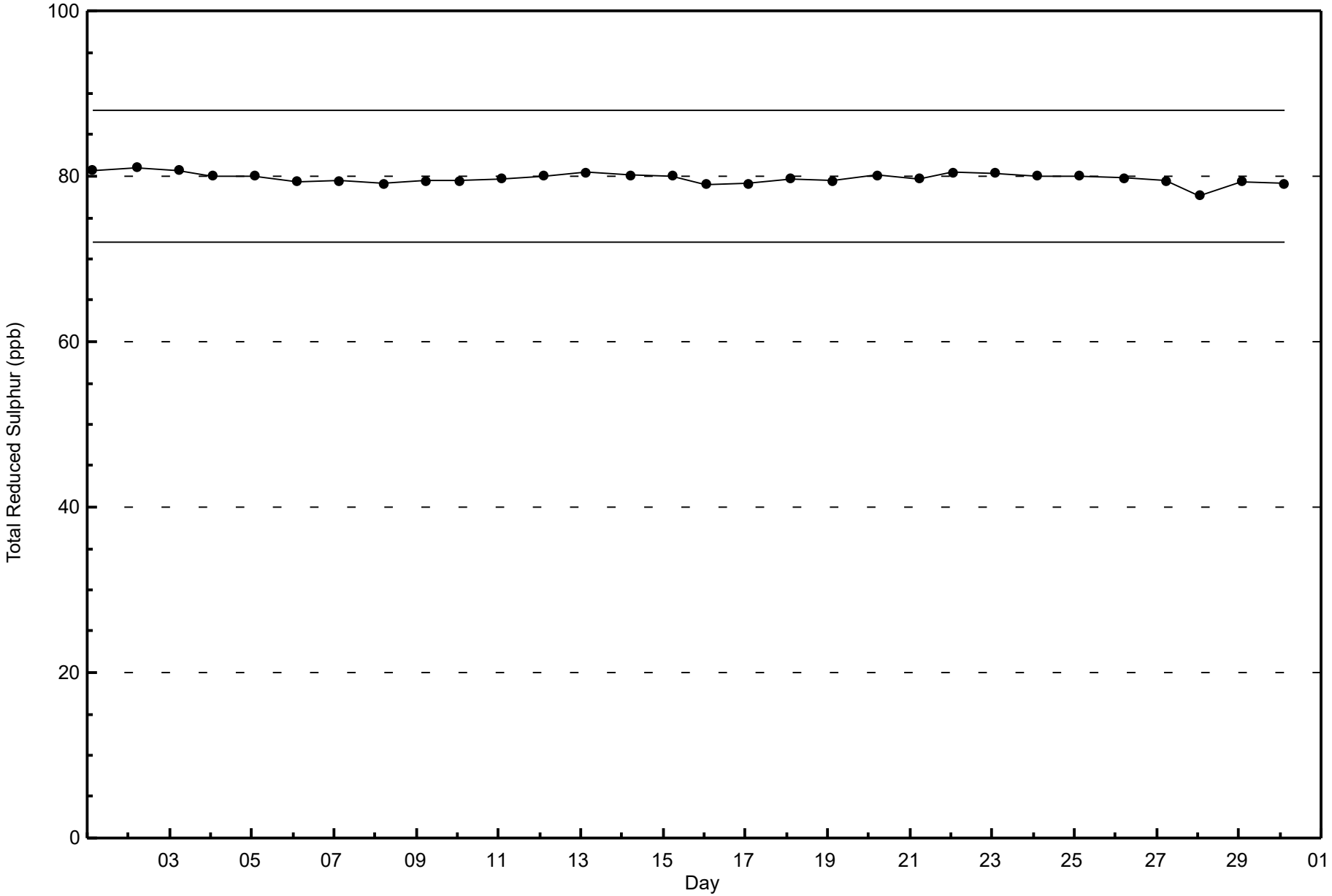


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Conklin - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Conklin - June 2026

Maximum Value: 4.2 ppm on Jul 1 00:00

Maximum Daily Average: 2.4 ppm on Jun 30

Minimum Value: 2.0 ppm on Jun 9 10:00

Minimum Daily Average: 2.0 ppm on Jun 6

Maximum Diurnal Average: 2.3 ppm at hour 5

Minimum Diurnal Average: 2.1 ppm at hour 17

Monthly Average: 2.13 ppm

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

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-Jun	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	2.0	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1
2-Jun	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
3-Jun	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	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1
4-Jun	2.1	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	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.2
5-Jun	Z	2.1	2.2	2.1	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2
6-Jun	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	2.1	2.0	2.1
7-Jun	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1
8-Jun	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
9-Jun	2.0	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	C	C	C	C	C	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.1
10-Jun	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
11-Jun	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	2.1	2.1	2.2
12-Jun	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	2.2	2.1	2.2
13-Jun	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.6	2.3	2.2	2.6
14-Jun	2.1	2.2	2.1	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	2.3	2.1	2.3
15-Jun	2.3	2.3	2.4	2.3	Z	2.4	2.2	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	2.4
16-Jun	2.1	2.1	2.2	2.2	2.1	Z	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	2.1	2.1	2.1	2.2
17-Jun	Z	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.2
18-Jun	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	2.2	2.4	2.1	2.4
19-Jun	2.3	2.3	Z	2.4	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.4
20-Jun	2.2	2.2	2.3	Z	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	2.1	2.1	2.1	2.1	2.1	2.4
21-Jun	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.1	2.3
22-Jun	2.5	2.4	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.5
23-Jun	Z	2.3	2.3	2.3	2.4	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.4	2.3	2.2	2.4
24-Jun	2.2	Z	2.2	2.2	2.3	2.4	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.2	2.2	2.4
25-Jun	2.3	2.4	Z	2.8	2.7	2.7	2.2	2.2	2.1	2.1	2.1	2.1	2.1	M	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.6	2.3	2.2	2.8
26-Jun	2.2	2.3	2.3	Z	3.5	3.3	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	2.3	2.3	2.4	2.3	3.5
27-Jun	2.6	2.4	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	2.2	2.2	2.3	2.4	2.2	2.6
28-Jun	2.4	2.4	2.3	2.4	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	2.2	2.3	2.2	2.4
29-Jun	Z	2.4	2.7	3.2	3.3	2.8	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	2.4	2.3	3.3
30-Jun	2.4	Z	2.5	2.6	2.6	2.6	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	3.0	3.3	4.2	2.4	4.2
	2.2	2.2	2.2	2.3	2.3	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	2.1	2.2	2.2	2.2	Diurnal Average	
	2.6	2.4	2.7	3.2	3.5	3.3	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	3.0	3.3	4.2	Diurnal Maximum	

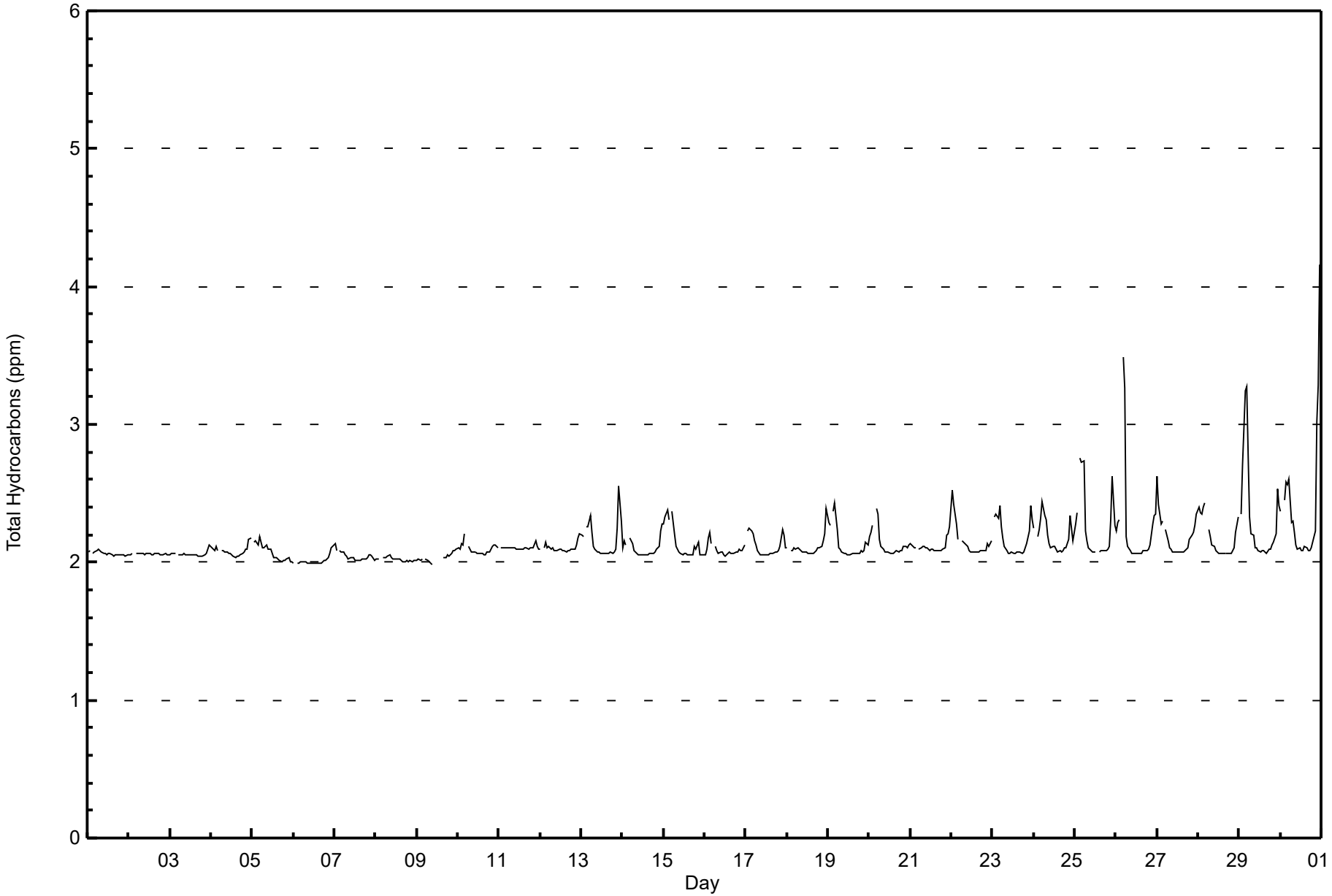
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Conklin - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Total Hydrocarbons (THC) - ppm

Conklin - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	101	14.77	14.77
2.1 - 3.0	577	84.36	99.12
3.1 - 10.0	6	0.88	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

Conklin - June 2026

Concentration Ranges (ppm)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 2.0	13	3	2	2	2	6	0	0	1	3	4	7	16	16	13	13	101
2.1 - 3.0	174	45	34	25	18	41	18	14	22	23	14	7	6	8	16	112	577
3.1 - 10.0	1	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	188	52	36	28	20	47	18	14	23	26	18	14	22	24	29	125	684

Total Number of Valid Hours: 684

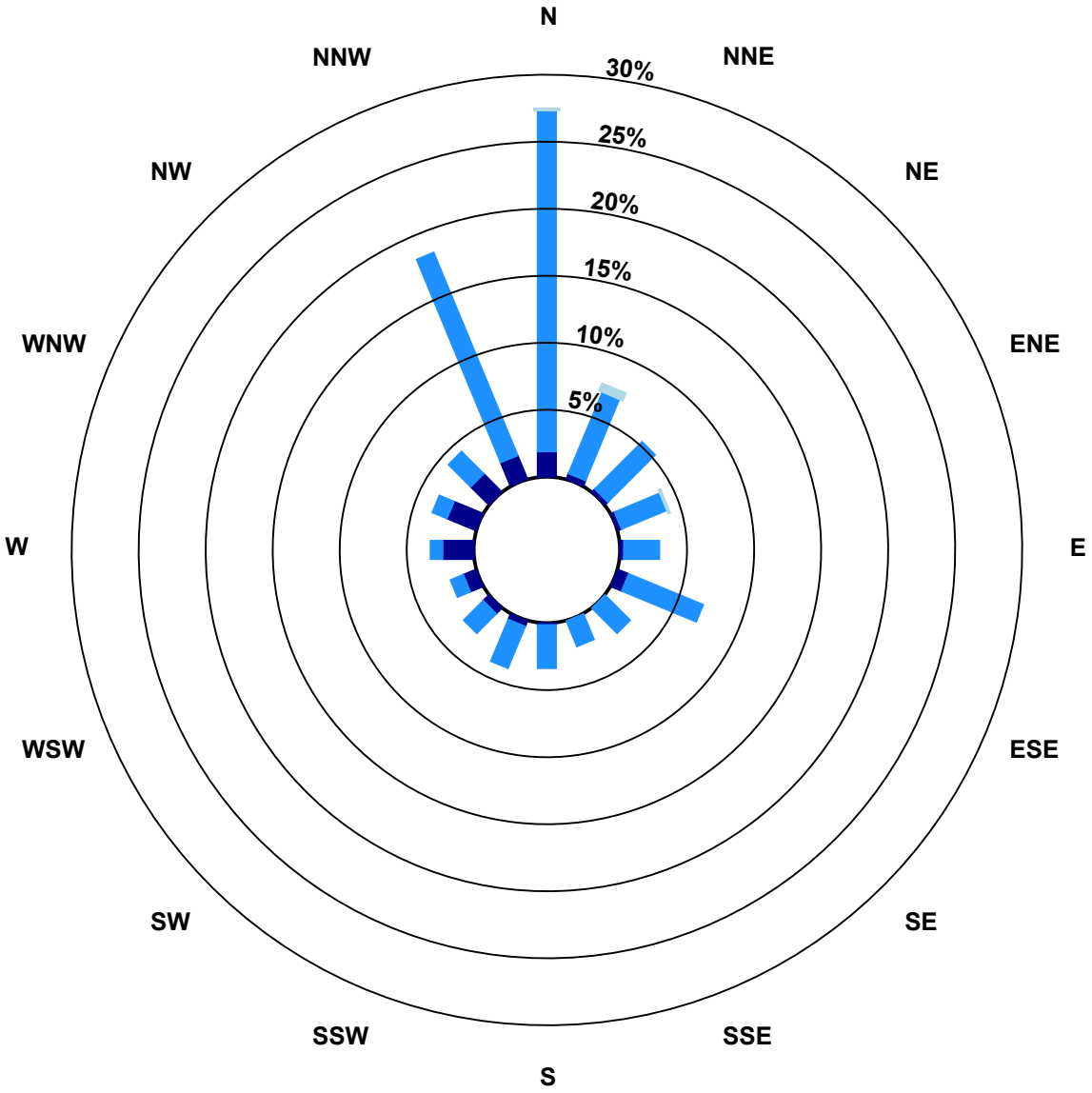
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Conklin



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

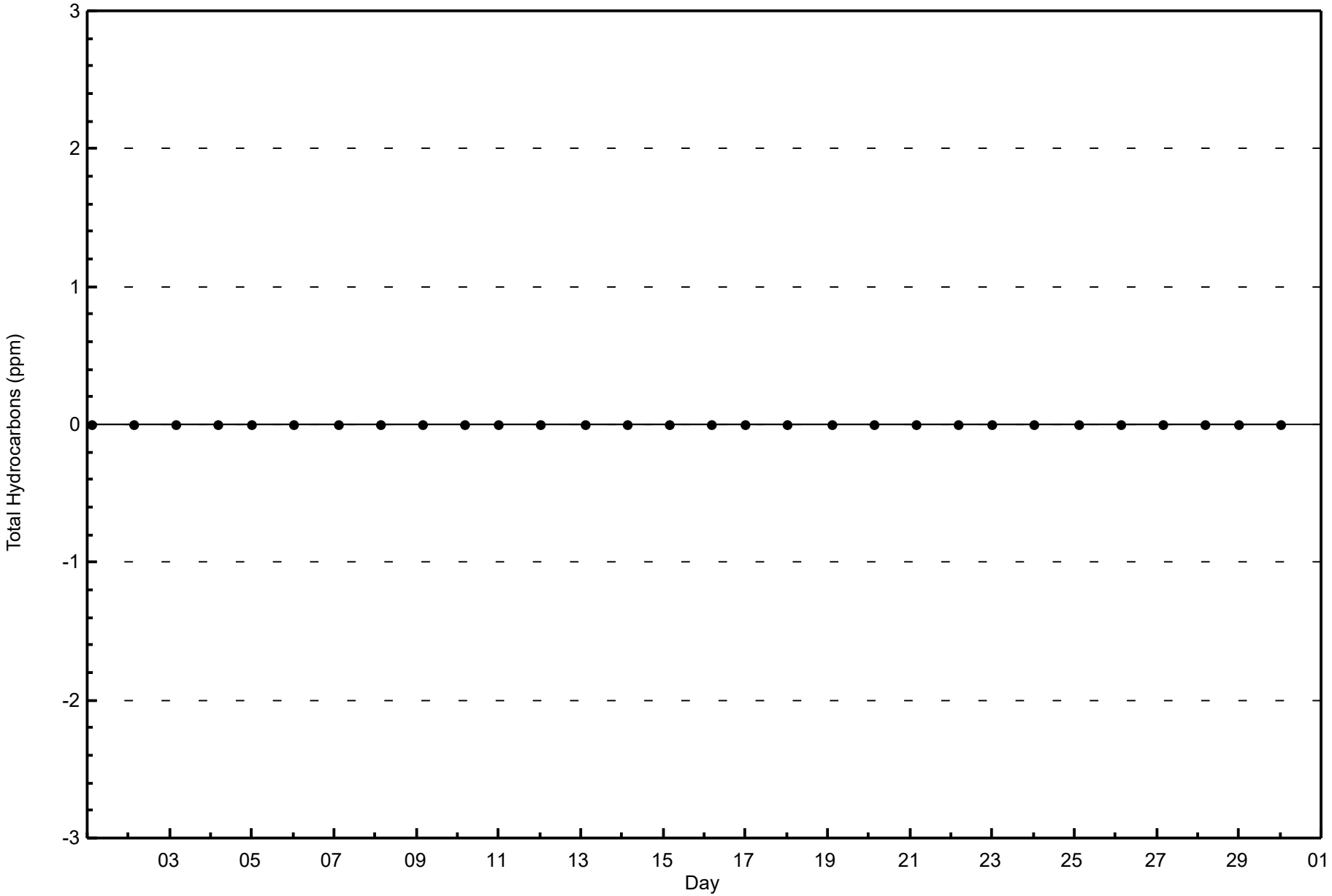
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Conklin - June 2026

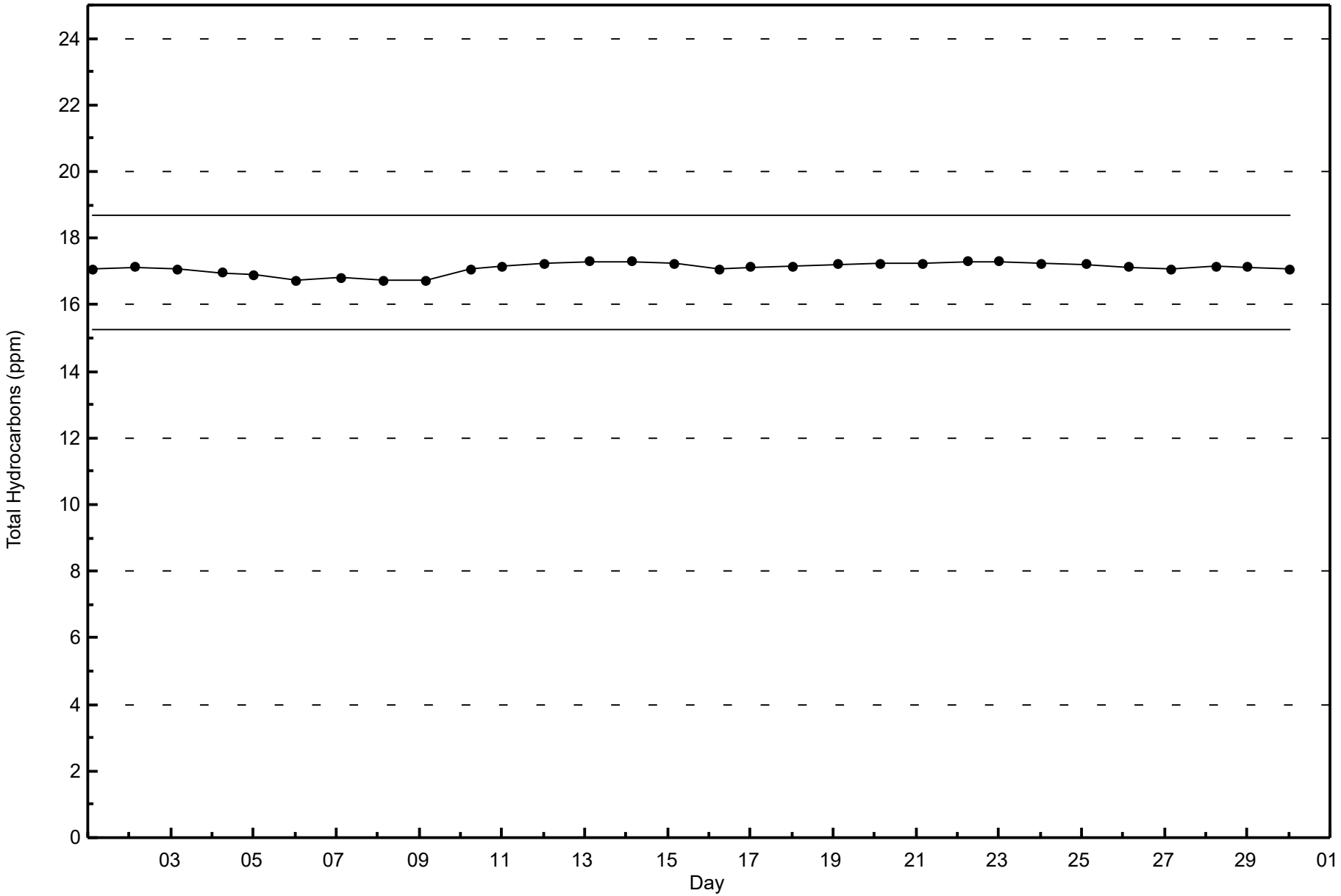


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Conklin - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Conklin - June 2026

Maximum Value: 0.187 ppm on Jul 1 00:00

Maximum Daily Average: 0.018 ppm on Jun 30

Minimum Value: 0.000 ppm on Jun 1 01:00

Minimum Daily Average: 0.000 ppm on Jun 1

Maximum Diurnal Average: 0.006 ppm at hour 24

Minimum Diurnal Average: 0.000 ppm at hour 2

Monthly Average: 0.001 ppm

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

Hours in Service:	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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-Jun	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-Jun	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-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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	0.004
8-Jun	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	0.000	0.002
9-Jun	0.000	0.000	0.000	0.000	Z	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
10-Jun	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-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.039	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.039
13-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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	0.005	0.000	0.000	0.000	0.005
15-Jun	0.000	0.000	0.000	0.000	Z	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	0.004
16-Jun	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-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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-Jun	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-Jun	0.003	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	0.003
23-Jun	Z	0.000	0.000	0.000	0.008	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	0.002	0.008	0.000	0.000	0.010	0.008	0.002	0.010
24-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	M	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26-Jun	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	0.008	0.001	0.000	0.000	0.000	0.000	0.008
27-Jun	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-Jun	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-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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	0.011
30-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.106	0.109	0.187	0.018	0.187
	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	0.001	0.000	0.004	0.004	0.006	Diurnal Average	
	0.003	0.000	0.000	0.039	0.008	0.004	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.008	0.013	0.106	0.109	0.187	Diurnal Maximum	

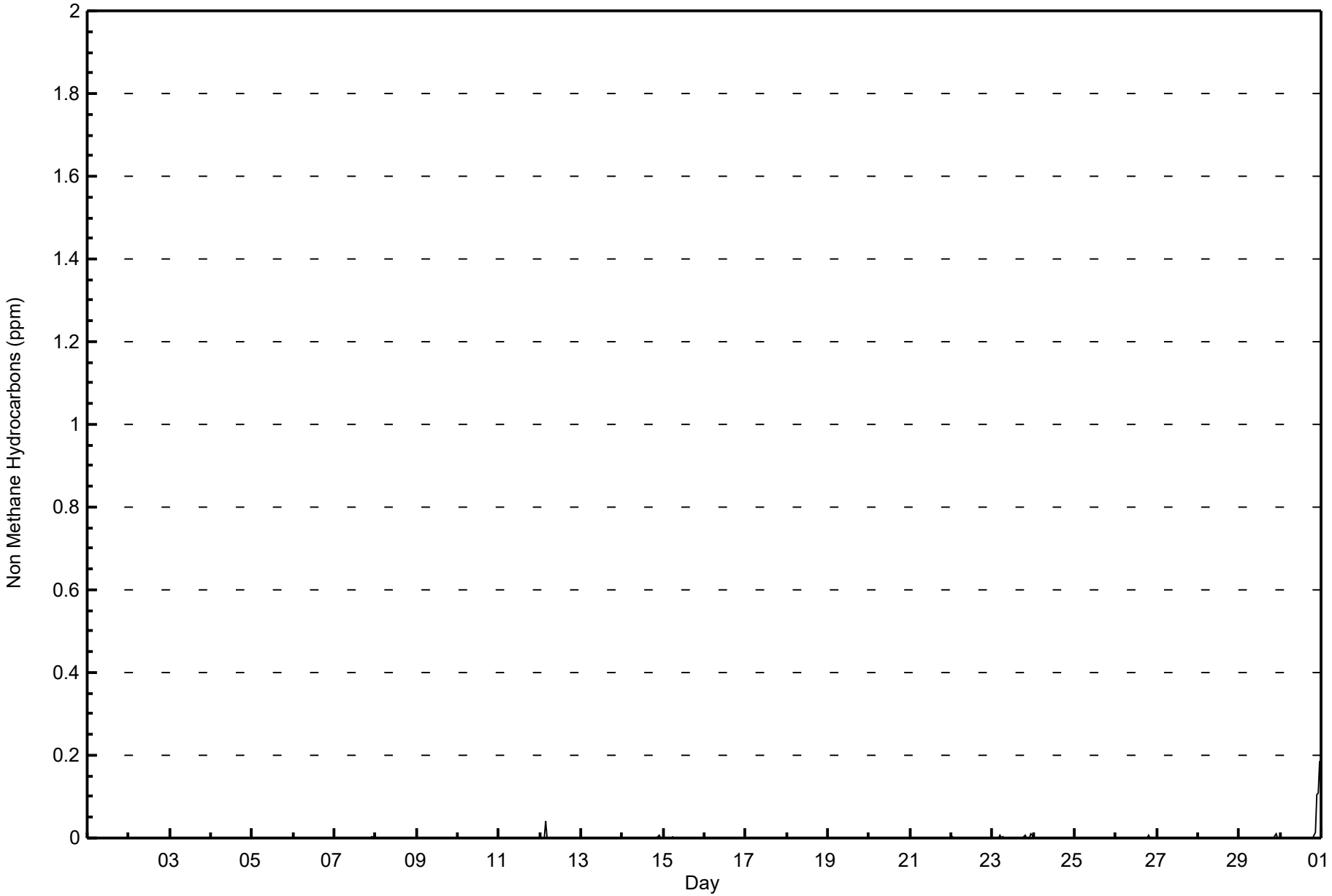
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Conklin - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Conklin - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	673	98.39	98.39
0.006 - 0.05	8	1.17	99.56
0.06 - 0.1	2	0.29	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

Conklin - June 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	185	50	35	28	20	46	18	14	22	24	18	14	22	24	29	124	673
0.006 - 0.05	2	0	1	0	0	1	0	0	1	2	0	0	0	0	0	1	8
0.06 - 0.1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
> 0.1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Totals	188	52	36	28	20	47	18	14	23	26	18	14	22	24	29	125	684

Total Number of Valid Hours: 684

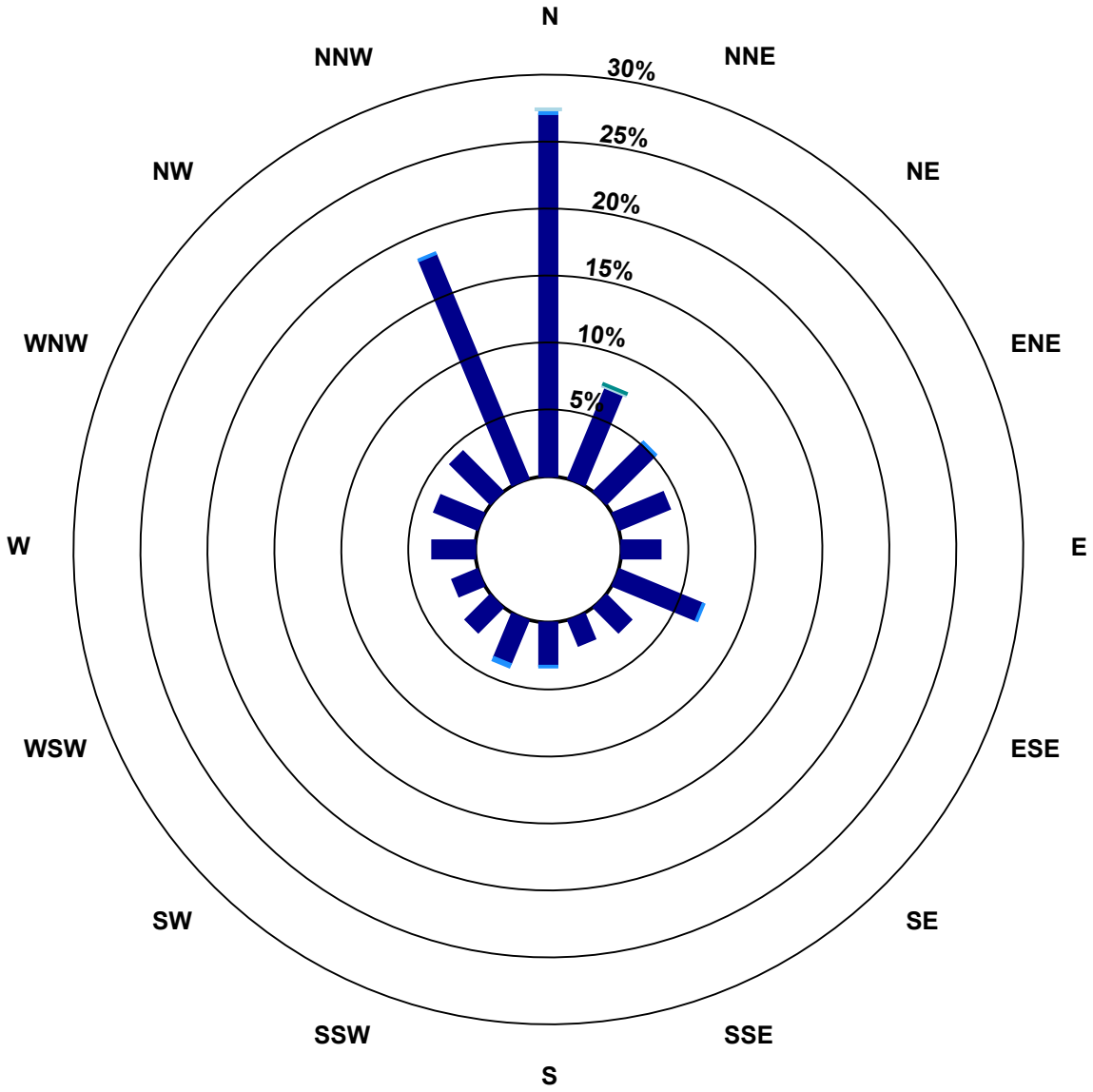
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Non Methane Hydrocarbons (NMHC) - ppm

Conklin



Classes (ppm)

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

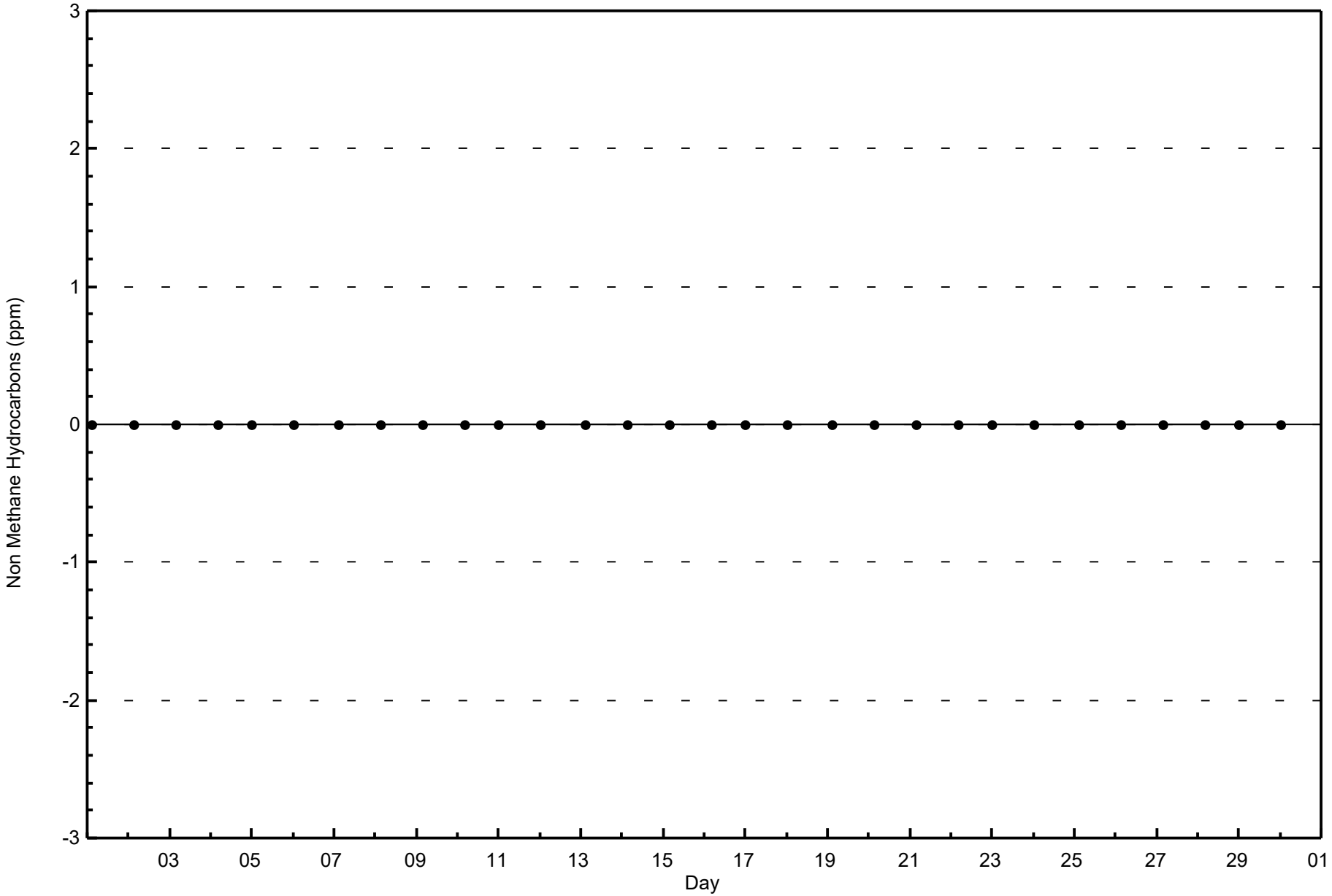
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Conklin - June 2026

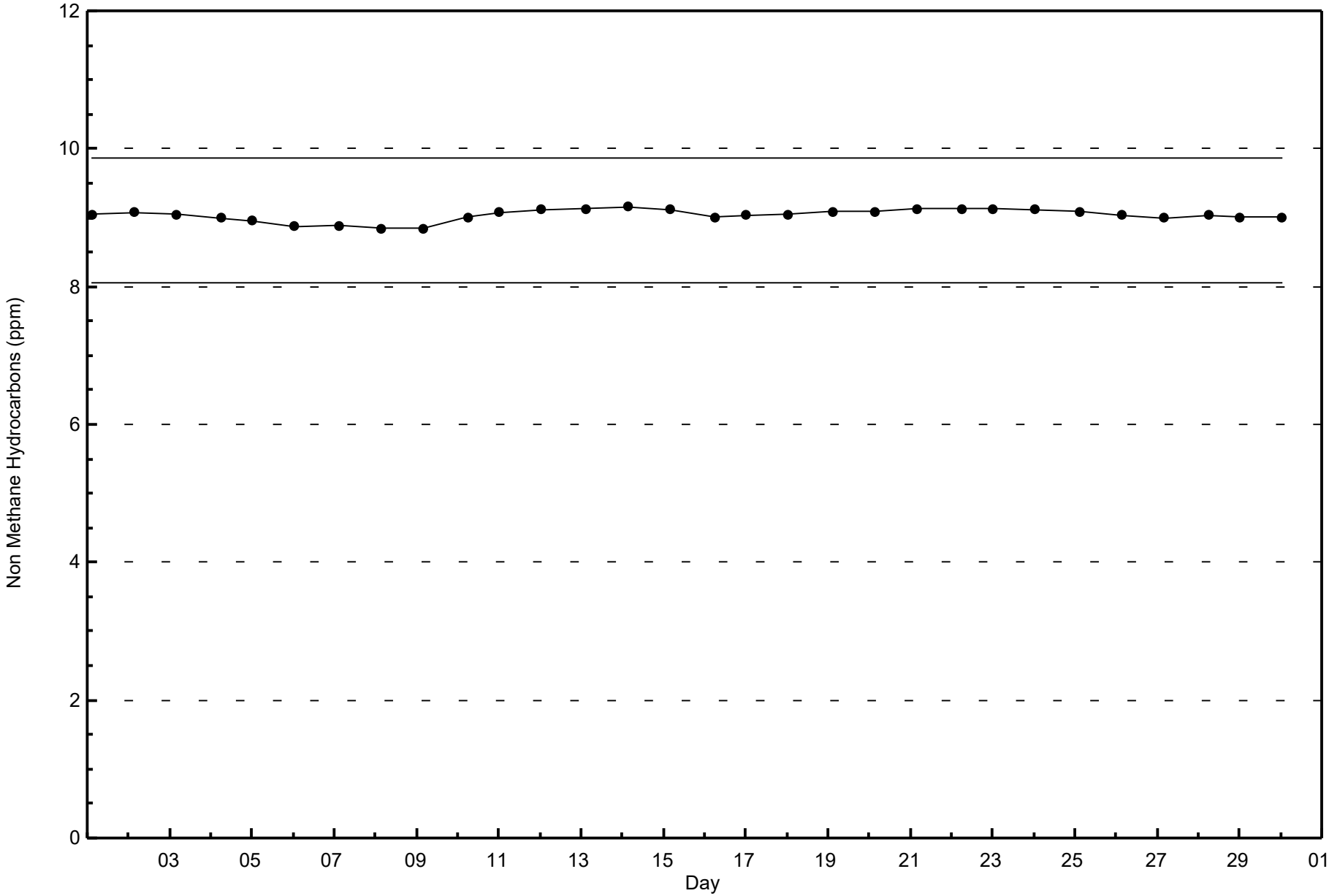


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Conklin - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Conklin - June 2026

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

Maximum Value: 4.0 ppm on Jul 1 00:00

Maximum Daily Average: 2.4 ppm on Jun 30

Minimum Value: 2.0 ppm on Jun 9 10:00

Minimum Daily Average: 2.0 ppm on Jun 6

Maximum Diurnal Average: 2.3 ppm at hour 5

Minimum Diurnal Average: 2.1 ppm at hour 17

Monthly Average: 2.13 ppm

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

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-Jun	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	2.0	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1
2-Jun	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
3-Jun	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	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1
4-Jun	2.1	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	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.2
5-Jun	Z	2.1	2.2	2.1	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2
6-Jun	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	2.1	2.0	2.1
7-Jun	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1
8-Jun	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
9-Jun	2.0	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	C	C	C	C	C	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.1
10-Jun	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
11-Jun	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	2.1	2.1	2.2
12-Jun	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	2.2	2.1	2.2
13-Jun	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.6	2.3	2.2	2.6
14-Jun	2.1	2.2	2.1	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	2.3	2.1	2.3
15-Jun	2.3	2.3	2.4	2.3	Z	2.4	2.2	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	2.4
16-Jun	2.1	2.1	2.2	2.2	2.1	Z	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	2.1	2.1	2.1	2.2
17-Jun	Z	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.2
18-Jun	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	2.2	2.4	2.1	2.4
19-Jun	2.3	2.3	Z	2.4	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.4
20-Jun	2.2	2.2	2.3	Z	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	2.1	2.1	2.1	2.1	2.1	2.4
21-Jun	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.1	2.3
22-Jun	2.5	2.4	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.5
23-Jun	Z	2.3	2.3	2.3	2.4	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.4	2.3	2.2	2.4
24-Jun	2.2	Z	2.2	2.2	2.3	2.4	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.2	2.2	2.4
25-Jun	2.3	2.4	Z	2.8	2.7	2.7	2.2	2.2	2.1	2.1	2.1	2.1	2.1	M	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.6	2.3	2.2	2.8
26-Jun	2.2	2.3	2.3	Z	3.5	3.3	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	2.3	2.3	2.4	2.3	3.5
27-Jun	2.6	2.4	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	2.2	2.2	2.3	2.4	2.2	2.6
28-Jun	2.4	2.4	2.3	2.4	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	2.2	2.3	2.2	2.4
29-Jun	Z	2.4	2.7	3.2	3.3	2.8	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	2.4	2.3	3.3
30-Jun	2.4	Z	2.5	2.6	2.6	2.6	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.9	3.2	4.0	2.4	4.0
	2.2	2.2	2.2	2.3	2.3	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	2.1	2.2	2.2	2.2	Diurnal Average	
	2.6	2.4	2.7	3.2	3.5	3.3	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	2.9	3.2	4.0	Diurnal Maximum	

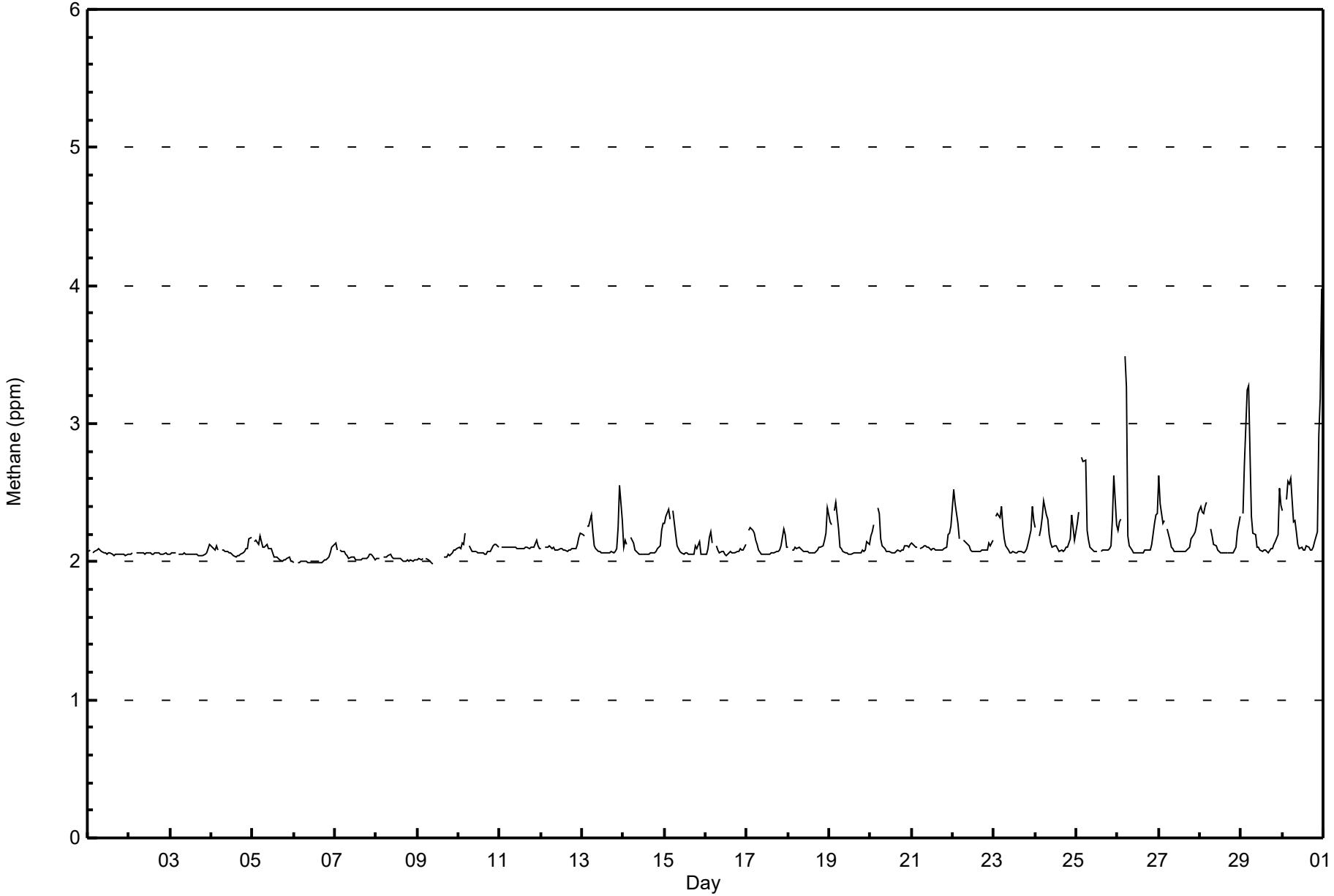
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Conklin - June 2026



Methane (CH_4) - ppm

Conklin - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	101	14.77	14.77
2.1 - 3.0	577	84.36	99.12
3.1 - 10.0	6	0.88	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

Conklin - June 2026

Concentration Ranges (ppm)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 2.0	13	3	2	2	2	6	0	0	1	3	4	7	16	16	13	13	101
2.1 - 3.0	174	45	34	25	18	41	18	14	22	23	14	7	6	8	16	112	577
3.1 - 10.0	1	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	188	52	36	28	20	47	18	14	23	26	18	14	22	24	29	125	684

Total Number of Valid Hours: 684

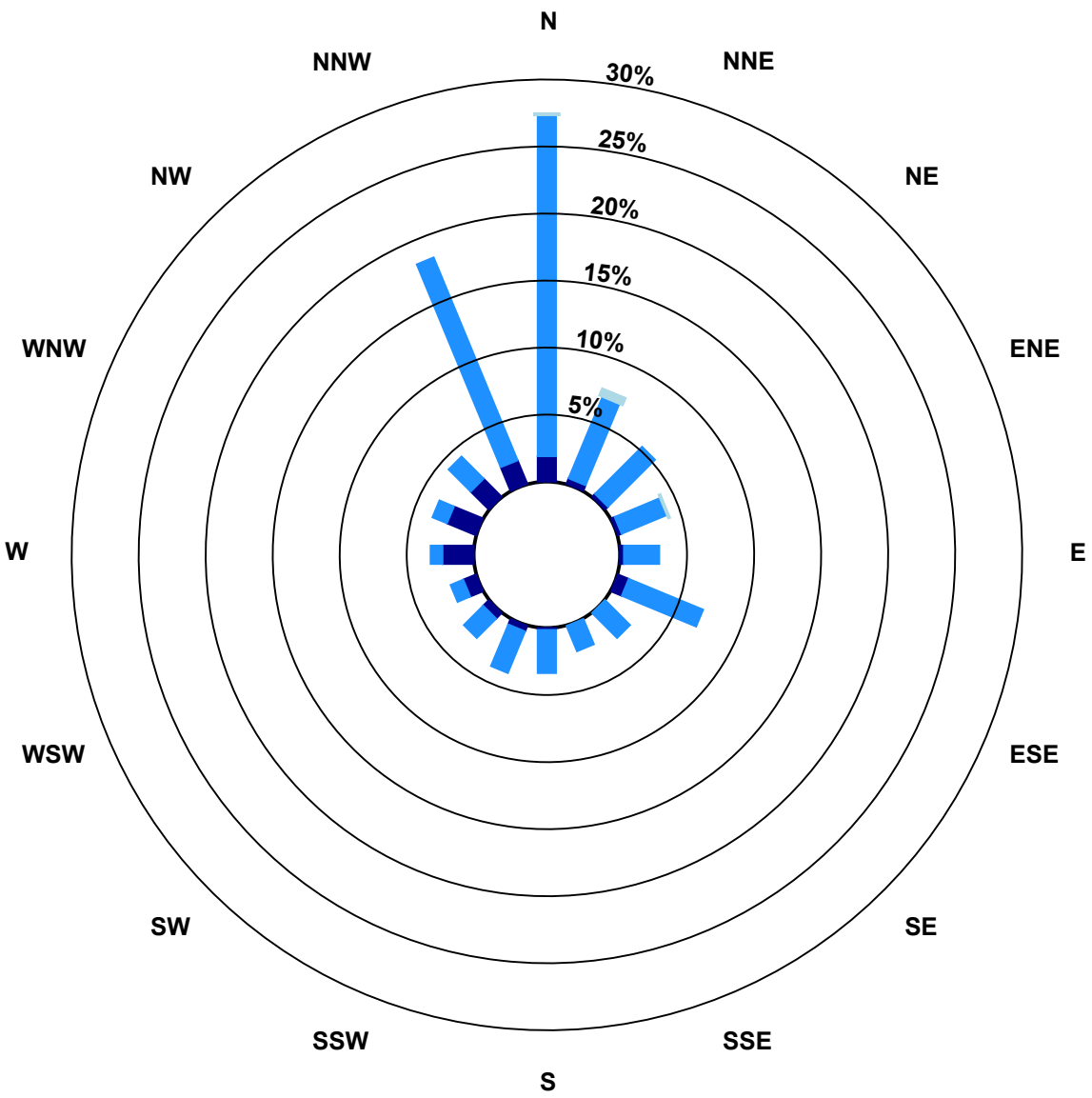
Total Number of Hours: 720

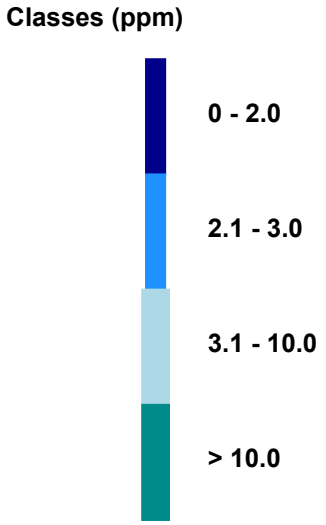
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Methane (CH_4) - ppm

Conklin





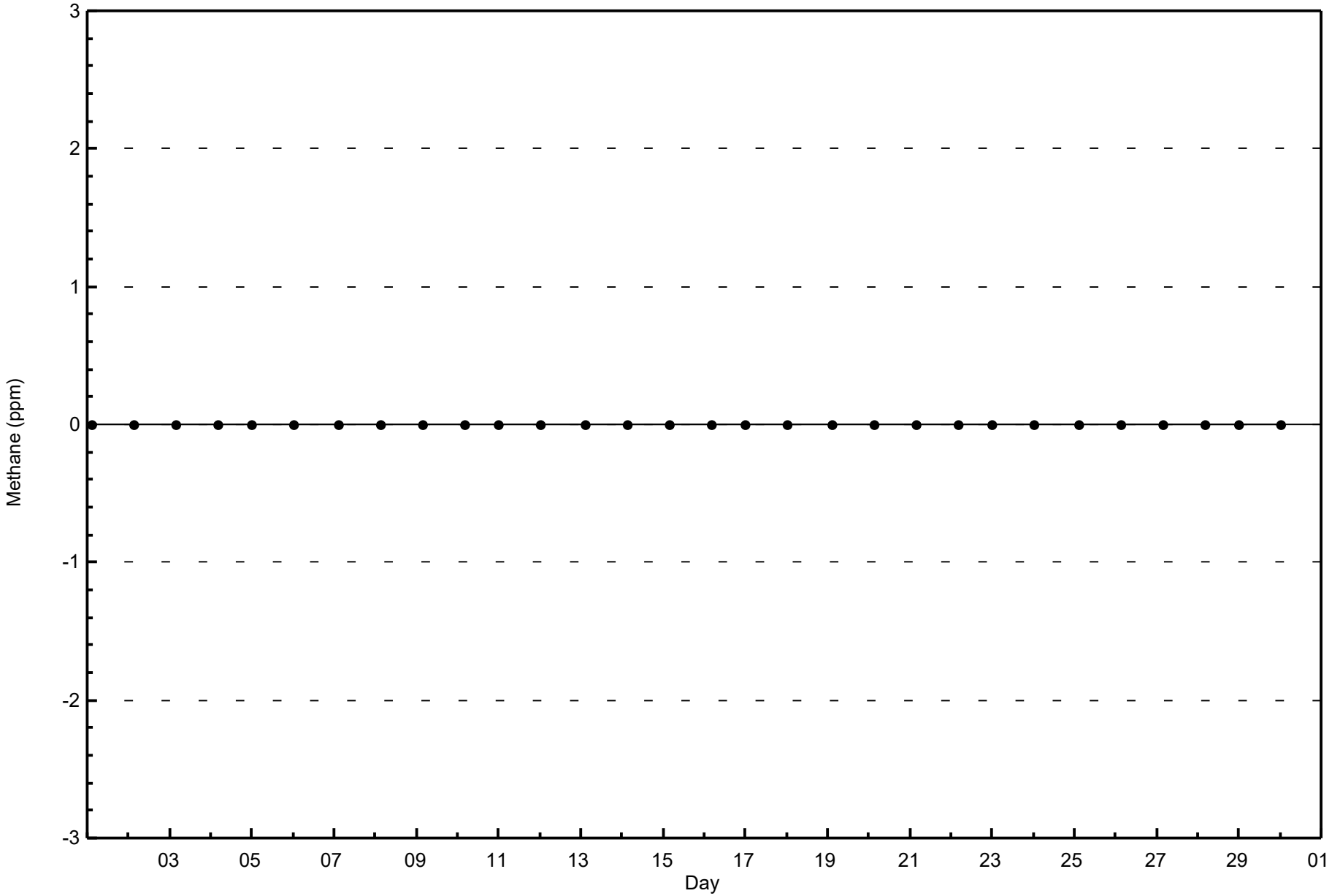
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Conklin - June 2026

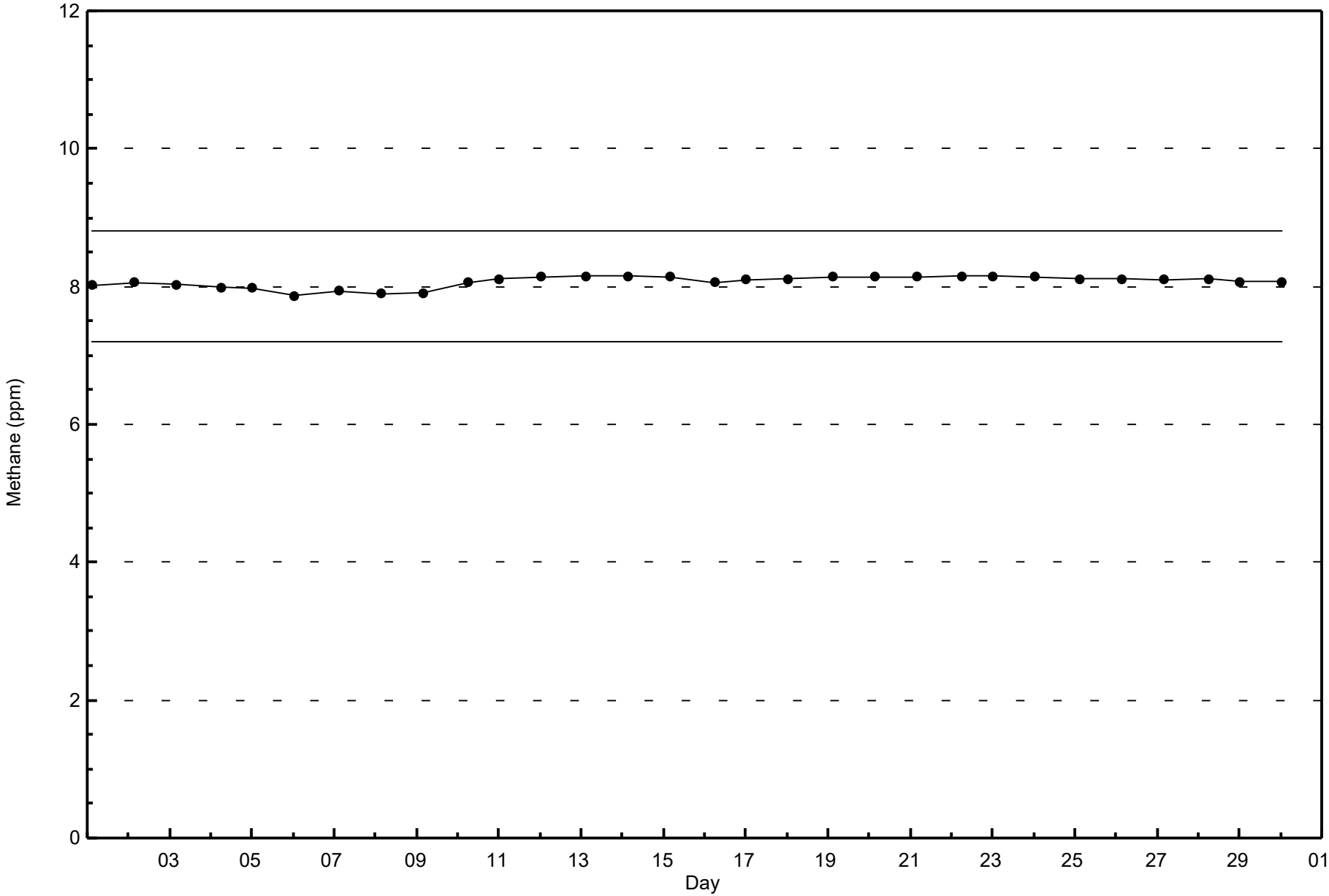


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Conklin - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Conklin - June 2026

Maximum Value: 59.4 ppb on Jun 30 03:00

Maximum Daily Average: 4.8 ppb on Jun 30

Minimum Value: 0.0 ppb on Jun 1 02:00

Minimum Daily Average: 0.0 ppb on Jun 2

Maximum Diurnal Average: 2.8 ppb at hour 3

Minimum Diurnal Average: 0.0 ppb at hour 20

Monthly Average: 0.43 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.0 P_{90} = 0.4 P_{99} = 6.7

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-Jun	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
2-Jun	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-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.3	0.4	0.4	0.3	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.4
4-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	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-Jun	0.0	0.9	0.0	0.0	Z	0.0	0.0	0.3	0.3	0.3	0.5	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	0.1	0.9
6-Jun	0.0	3.3	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	2.9	0.0	0.0	0.4	3.6
7-Jun	Z	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.2	0.6	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.2	4.1
8-Jun	0.0	Z	4.8	0.0	1.8	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	0.3	4.8
9-Jun	0.0	2.1	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	0.1	0.0	0.0	0.0	0.0	0.1	2.1
10-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.2
11-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.2	0.6	0.2	0.2	0.3	1.8	0.2	0.2	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	1.8
12-Jun	0.0	0.0	0.0	8.1	0.0	Z	0.2	0.4	0.2	1.7	0.3	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	0.5	8.1
13-Jun	Z	0.0	0.0	0.0	0.3	5.1	1.6	0.8	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	1.9	3.3	0.3	0.6	5.1
14-Jun	0.4	Z	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
15-Jun	0.0	16.6	Z	4.9	2.7	4.2	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	1.4	16.6
16-Jun	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
17-Jun	0.0	2.3	0.5	0.0	Z	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.3
18-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	2.0	0.0	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.1	2.0
19-Jun	Z	0.0	0.5	0.6	0.4	0.1	0.2	0.1	0.0	0.2	C	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.6
20-Jun	0.1	Z	0.0	0.0	0.3	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
21-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.2	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.7
22-Jun	0.6	0.6	0.9	Z	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9
23-Jun	0.0	0.1	0.7	0.1	Z	0.9	0.5	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.2	1.6
24-Jun	0.3	6.3	2.3	0.0	0.0	Z	0.7	0.5	0.2	0.2	0.0	0.4	0.7	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	6.3
25-Jun	Z	0.6	0.1	1.6	1.5	5.8	0.8	0.2	0.1	0.0	0.0	0.1	0.2	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	5.8
26-Jun	0.0	Z	0.0	6.5	17.7	7.7	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	0.0	0.0	0.0	0.0	1.4	17.7
27-Jun	0.1	0.0	Z	0.0	3.8	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	0.0	0.2	3.8
28-Jun	0.0	1.1	0.2	Z	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.1
29-Jun	0.0	0.0	1.2	5.9	Z	0.8	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	1.6	0.0	0.4	5.9
30-Jun	0.0	0.0	59.4	37.1	11.5	Z	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	3.0	4.8	59.4
	0.1	1.4	2.8	2.6	1.6	1.0	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	0.3	0.2	0.2	0.3	Diurnal Average	
	0.6	16.6	59.4	37.1	17.7	7.7	1.6	2.0	0.4	1.7	0.5	0.6	0.7	1.8	0.2	0.2	0.3	0.1	0.1	0.1	4.1	2.9	3.3	3.0	Diurnal Maximum	

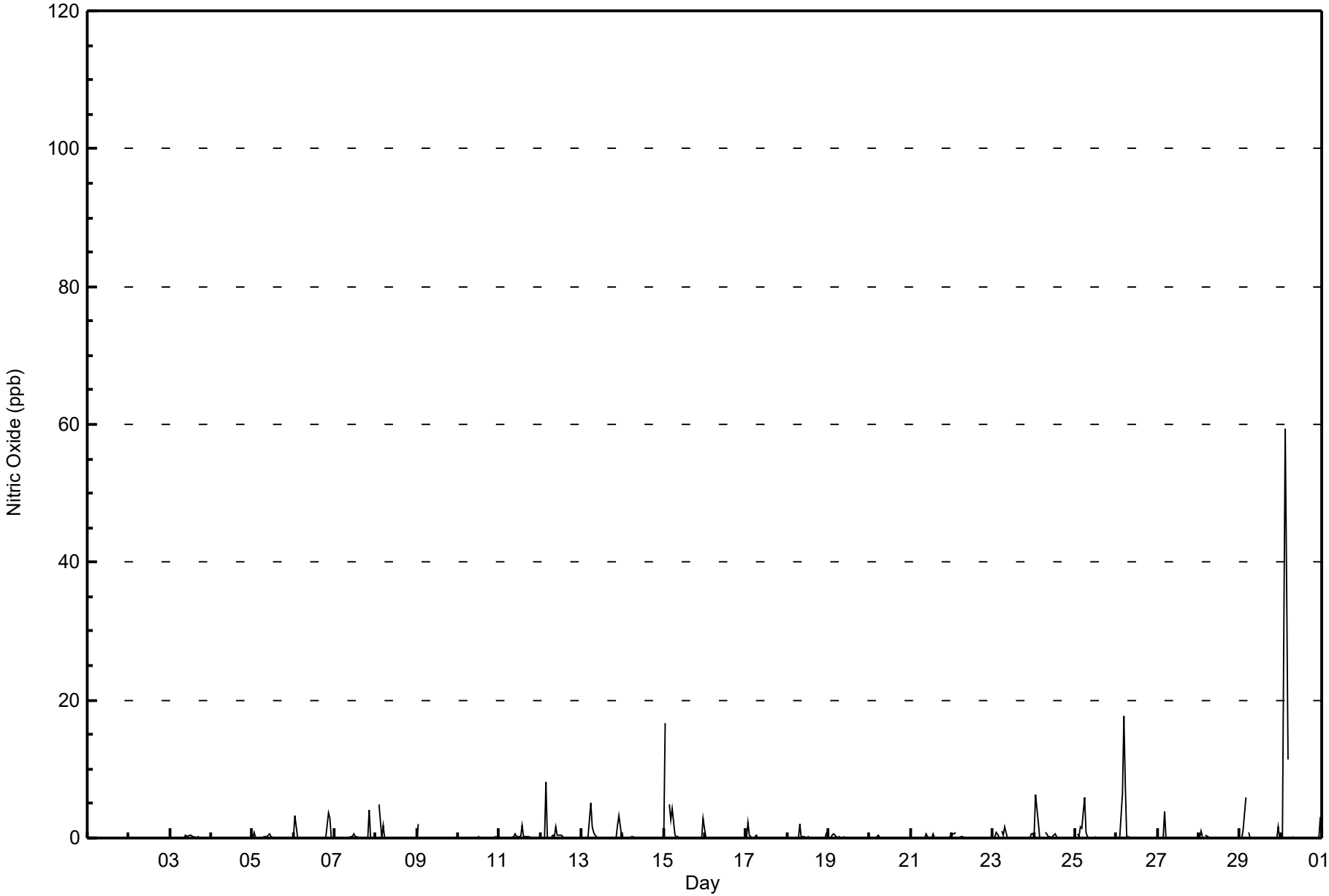
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Conklin - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	681	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: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Conklin - June 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	188	52	33	27	21	46	18	15	26	25	16	13	22	25	31	123	681
21 - 40	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11 - 80	1	0	0	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	190	52	33	27	21	46	18	15	26	25	16	13	22	25	31	123	683

Total Number of Valid Hours: 683

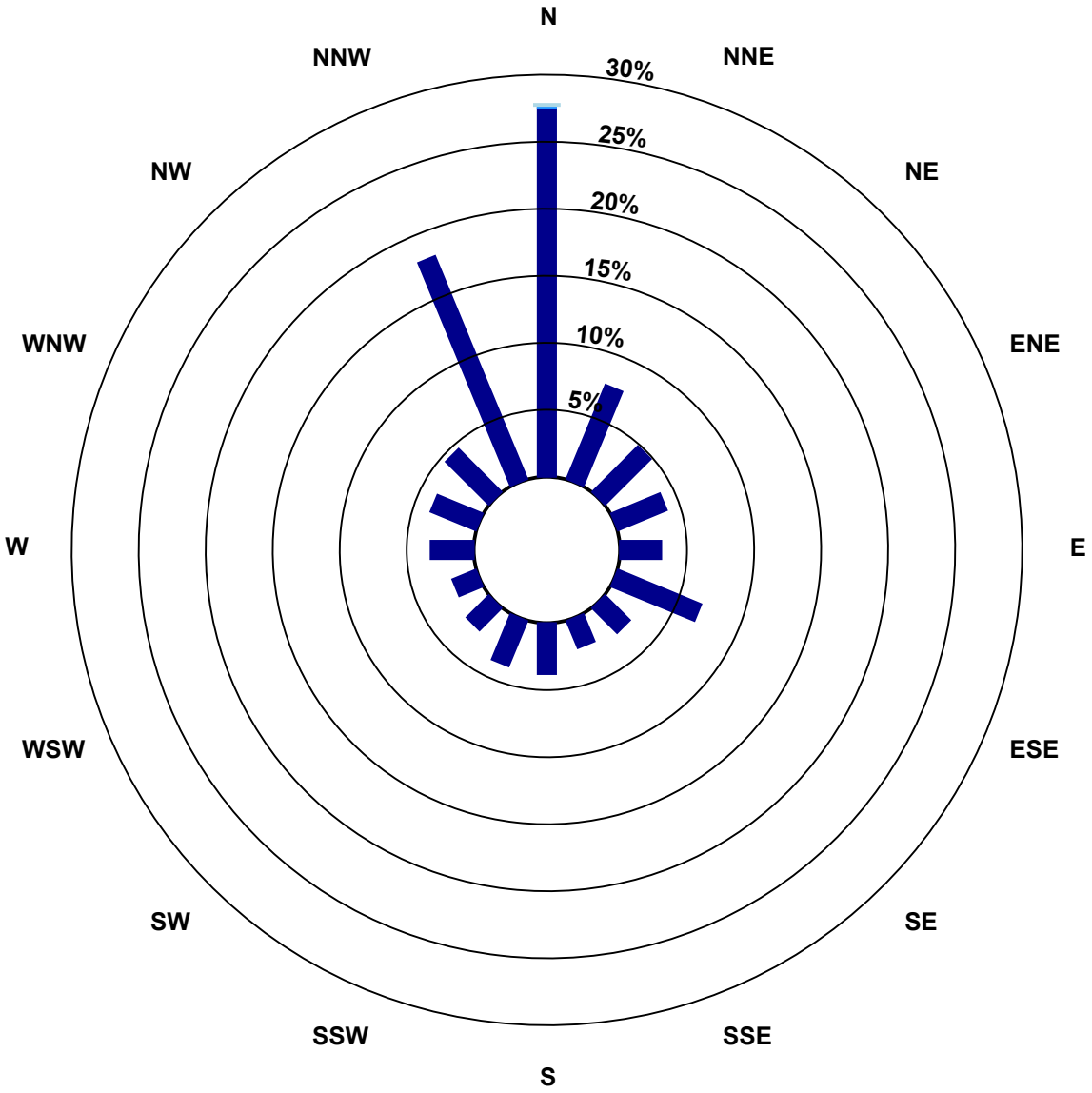
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Conklin



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

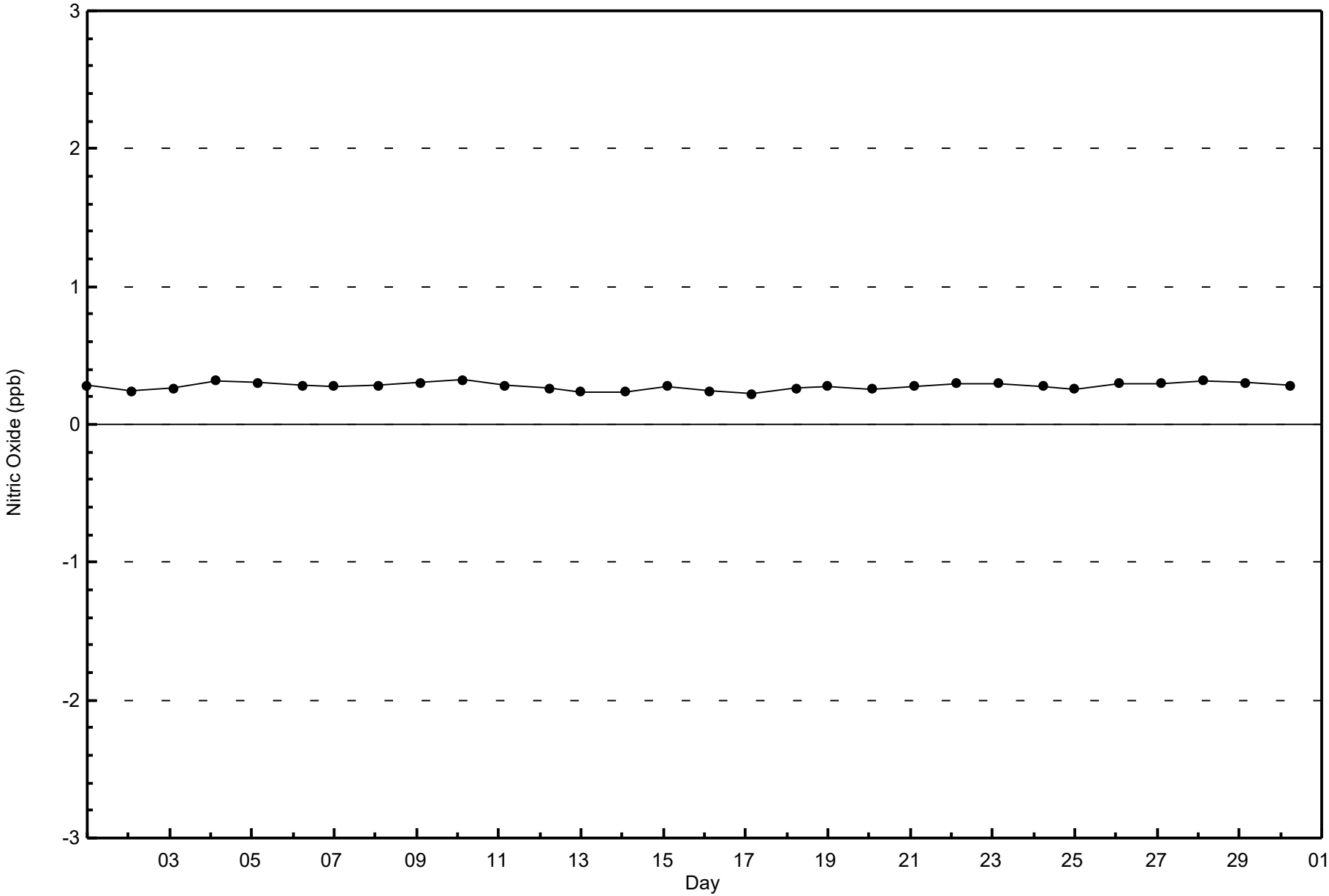
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Conklin - June 2026

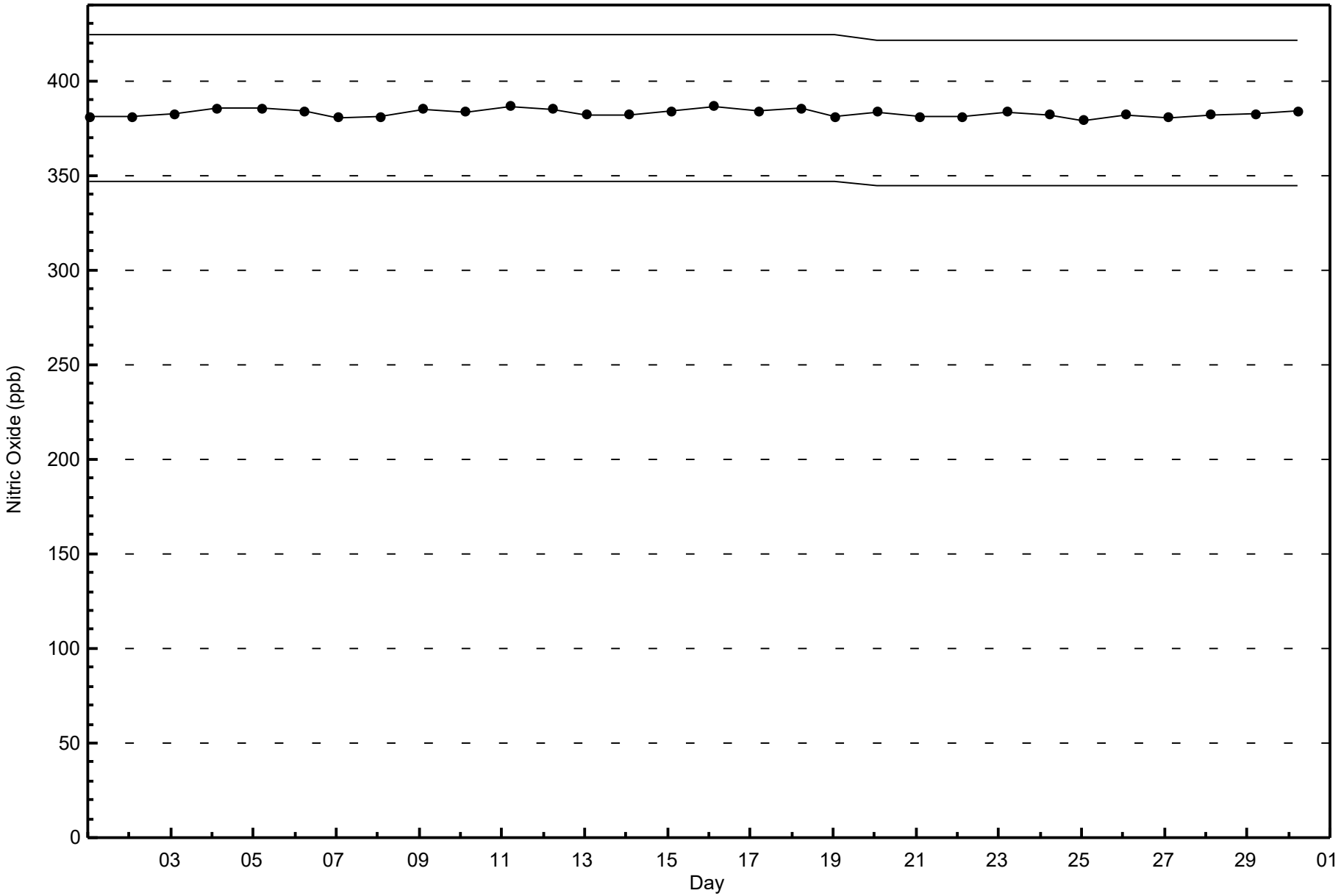


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Conklin - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Conklin - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10.5 ppb on Jun 13 23:00
Maximum Daily Average: 2.1 ppb on Jun 13

Minimum Value: 0.0 ppb on Jun 1 23:00
Minimum Daily Average: 0.1 ppb on Jun 2
Maximum Diurnal Average: 2.1 ppb at hour 3
Minimum Diurnal Average: 0.5 ppb at hour 16
Monthly Average: 1.12 ppb
Percentiles: P_1 = 0.0 P_{10} = 0.2 Q_1 = 0.4 Median = 0.7 Q_3 = 1.3 P_{90} = 2.3 P_{99} = 7.1

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-Jun	Z	1.1	0.6	0.6	0.6	1.0	1.6	1.4	0.9	0.6	0.6	0.4	0.4	0.5	0.4	0.6	0.5	0.4	0.6	0.5	0.5	0.2	0.0	0.0	0.6	1.6
2-Jun	0.0	Z	0.2	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	0.0	0.1	0.1	0.0	0.0	0.1	0.2
3-Jun	0.0	0.1	Z	0.2	0.1	0.1	0.1	0.3	0.4	1.4	0.9	1.1	1.0	0.9	0.9	0.8	1.0	1.0	1.0	1.2	0.5	0.5	1.0	0.8	0.7	1.4
4-Jun	1.3	1.8	1.5	Z	1.1	1.2	0.9	0.7	0.6	0.8	0.7	0.6	0.6	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	1.1	1.0	0.9	1.8
5-Jun	0.9	4.3	1.8	0.8	Z	1.0	0.7	1.1	1.7	2.8	3.1	3.0	1.4	0.9	1.4	1.1	0.6	0.7	0.9	0.4	0.4	0.7	0.5	0.3	1.3	4.3
6-Jun	0.3	2.0	0.2	0.2	0.4	Z	0.6	0.4	0.3	0.2	0.3	0.3	0.3	0.5	0.4	0.4	0.5	0.6	0.5	0.3	0.6	4.8	2.4	1.3	0.8	4.8
7-Jun	Z	0.4	0.4	0.6	0.4	0.5	0.4	0.3	0.4	0.7	1.0	2.4	1.3	1.0	0.7	0.7	0.7	0.8	0.7	0.6	7.3	1.7	0.7	0.6	1.1	7.3
8-Jun	0.4	Z	5.2	1.3	1.7	1.6	0.9	1.1	1.9	1.5	0.6	0.6	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.4	0.3	0.2	0.3	0.9	5.2
9-Jun	0.3	2.3	Z	0.5	0.3	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.1	0.2	0.4	0.2	0.2	0.4	0.9	1.6	0.7	1.0	0.4	0.5	0.5	2.3
10-Jun	0.7	0.6	0.3	Z	0.8	0.9	1.2	1.7	0.8	1.0	0.7	0.9	1.1	0.8	0.7	0.1	0.2	0.6	0.6	1.9	2.2	2.4	2.5	1.4	1.0	2.5
11-Jun	1.5	1.8	1.9	1.5	Z	1.9	1.2	0.9	1.3	1.7	1.1	1.0	1.0	1.8	1.4	1.8	1.7	1.7	2.1	2.0	2.1	3.8	1.9	0.5	1.6	3.8
12-Jun	0.5	0.6	0.9	5.9	1.3	Z	1.2	1.4	1.2	2.1	1.4	1.7	1.5	1.4	1.2	1.0	1.0	1.2	1.7	1.5	1.3	1.1	0.9	0.9	1.4	5.9
13-Jun	Z	0.8	0.7	0.9	1.3	5.2	3.5	2.6	1.7	0.8	0.7	0.4	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.6	2.4	9.0	10.5	5.5	2.1	10.5
14-Jun	1.5	Z	1.2	0.7	1.2	1.4	1.5	1.0	0.9	1.1	1.0	0.8	0.6	0.5	0.5	0.4	0.9	0.7	0.6	1.0	1.0	1.9	2.8	2.1	1.1	2.8
15-Jun	1.0	4.4	Z	5.7	3.0	3.5	1.7	1.6	1.2	0.7	0.5	0.4	0.5	0.7	0.8	0.3	0.3	0.9	1.4	1.8	0.6	0.6	0.7	2.5	1.5	5.7
16-Jun	0.5	0.5	0.6	Z	1.7	0.8	0.6	0.4	0.3	0.8	0.7	0.5	0.3	0.4	0.3	0.3	0.4	0.3	0.4	0.5	0.7	0.5	0.3	0.5	0.5	1.7
17-Jun	1.0	2.1	2.3	0.5	Z	0.8	1.1	0.4	0.4	0.5	0.4	0.3	0.2	0.4	0.4	0.6	0.5	0.7	0.6	0.6	0.9	0.7	1.0	1.2	0.8	2.3
18-Jun	1.2	0.8	0.6	0.8	0.8	Z	1.0	0.9	0.5	0.9	1.2	0.9	0.7	0.4	0.2	0.1	0.6	1.3	1.9	1.6	1.2	0.8	0.6	2.1	0.9	2.1
19-Jun	Z	1.0	3.0	3.6	1.9	0.6	0.7	0.6	0.3	1.1	C	C	C	C	C	C	0.2	0.1	0.3	1.3	0.8	0.5	1.0	0.6	--	3.6
20-Jun	1.2	Z	0.4	0.3	0.2	0.6	0.4	0.3	0.3	0.3	0.4	0.3	0.5	0.6	0.1	0.4	0.7	0.5	0.4	0.2	0.3	0.3	0.5	0.3	0.4	1.2
21-Jun	0.7	0.1	Z	0.2	0.2	0.1	0.2	0.2	0.3	0.9	0.7	0.4	0.4	0.4	0.1	0.1	0.2	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.3	0.9
22-Jun	2.0	2.9	3.4	Z	0.8	1.4	1.0	0.4	0.7	0.4	0.5	0.2	0.3	0.2	0.3	0.1	0.4	0.5	0.8	0.4	0.4	0.7	1.3	0.8	0.9	3.4
23-Jun	0.4	0.8	1.6	0.6	Z	1.8	1.3	2.3	0.6	0.3	0.5	0.2	0.3	0.3	0.5	0.7	0.2	0.3	0.4	0.7	1.1	2.6	7.8	6.6	1.4	7.8
24-Jun	4.4	2.6	5.6	3.3	1.4	Z	2.1	2.0	1.3	1.0	1.0	2.4	2.5	1.2	0.8	0.5	0.5	0.9	1.0	1.5	2.3	2.5	1.0	1.6	1.9	5.6
25-Jun	Z	7.8	4.4	5.6	1.2	5.8	2.8	1.5	1.1	0.7	0.6	0.8	0.7	M	0.6	0.6	0.7	0.6	0.7	0.9	0.7	0.7	2.8	1.5	1.9	7.8
26-Jun	1.1	Z	0.8	5.6	9.8	4.8	1.9	1.8	1.2	0.6	0.4	0.6	0.6	0.7	0.6	0.5	0.9	0.7	0.6	1.2	1.2	1.0	2.6	2.4	1.8	9.8
27-Jun	5.3	2.5	Z	1.3	5.1	1.2	0.8	1.3	1.2	1.0	1.0	1.0	0.5	0.9	0.7	0.7	0.9	1.4	1.0	1.6	1.0	1.0	1.0	0.6	1.4	5.3
28-Jun	0.5	1.5	2.9	Z	1.9	1.4	0.4	0.3	0.3	0.2	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	1.3	1.6	0.6	2.9
29-Jun	0.6	1.8	6.9	8.5	Z	2.8	1.5	0.8	1.6	0.8	1.1	1.3	1.1	0.9	0.9	0.8	0.8	1.5	1.4	1.8	1.3	1.4	3.8	2.3	2.0	8.5
30-Jun	0.6	1.5	5.0	2.7	1.5	Z	2.0	1.2	1.4	0.5	0.8	0.9	1.0	0.8	0.9	1.6	1.3	1.2	1.8	1.1	3.4	2.9	3.1	7.0	1.9	7.0
	1.1	1.8	2.1	2.1	1.6	1.6	1.1	1.0	0.8	0.9	0.8	0.8	0.7	0.7	0.6	0.5	0.6	0.7	0.8	0.9	1.2	1.5	1.8	1.6	Diurnal Average	
	5.3	7.8	6.9	8.5	9.8	5.8	3.5	2.6	1.9	2.8	3.1	3.0	2.5	1.8	1.4	1.8	1.7	1.7	2.1	2.0	7.3	9.0	10.5	7.0	Diurnal Maximum	

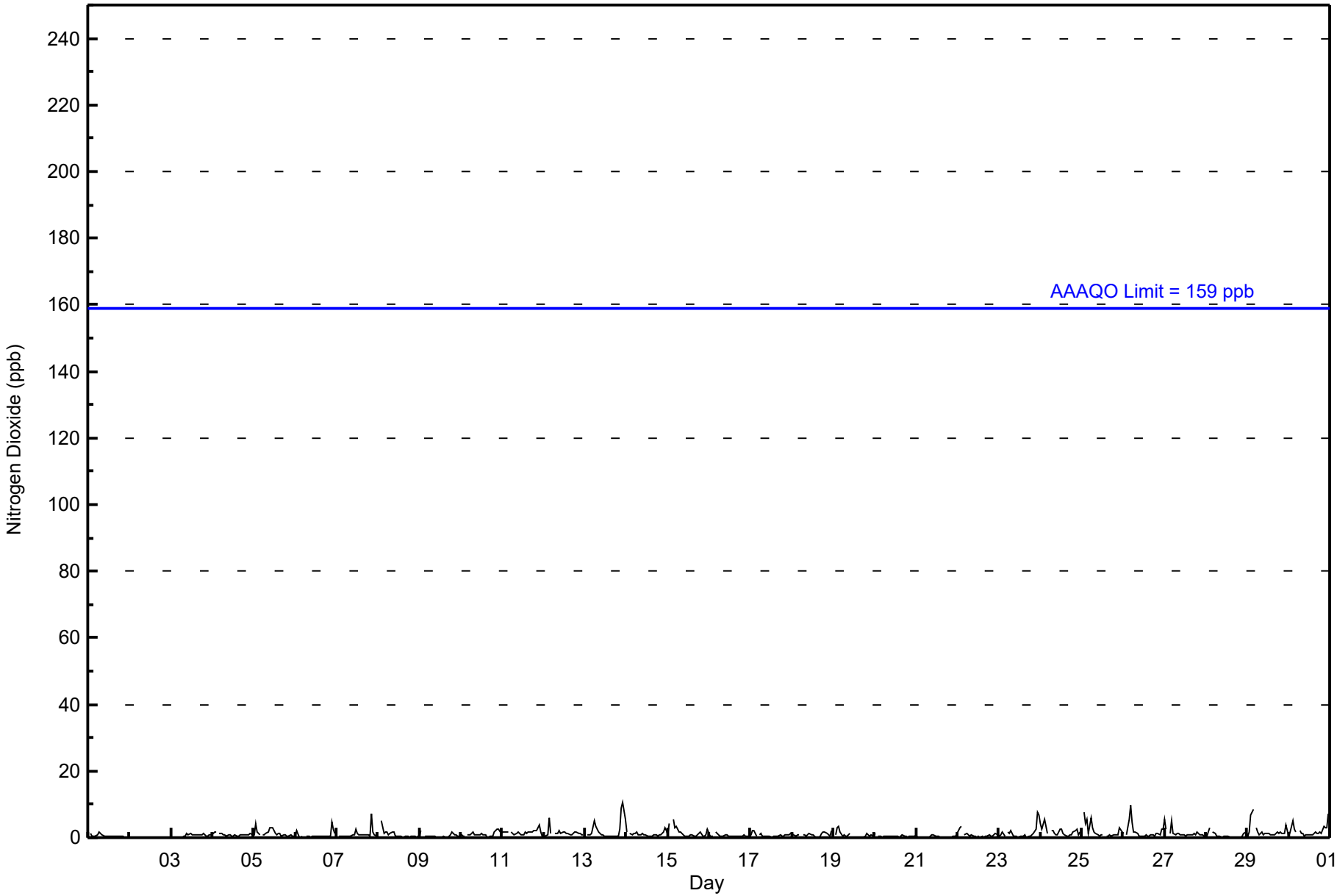
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Conklin - June 2026



Nitrogen Dioxide (NO_2) - ppb

Conklin - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	683	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: 683

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Conklin - June 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	190	52	33	27	21	46	18	15	26	25	16	13	22	25	31	123	683
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	190	52	33	27	21	46	18	15	26	25	16	13	22	25	31	123	683

Total Number of Valid Hours: 683

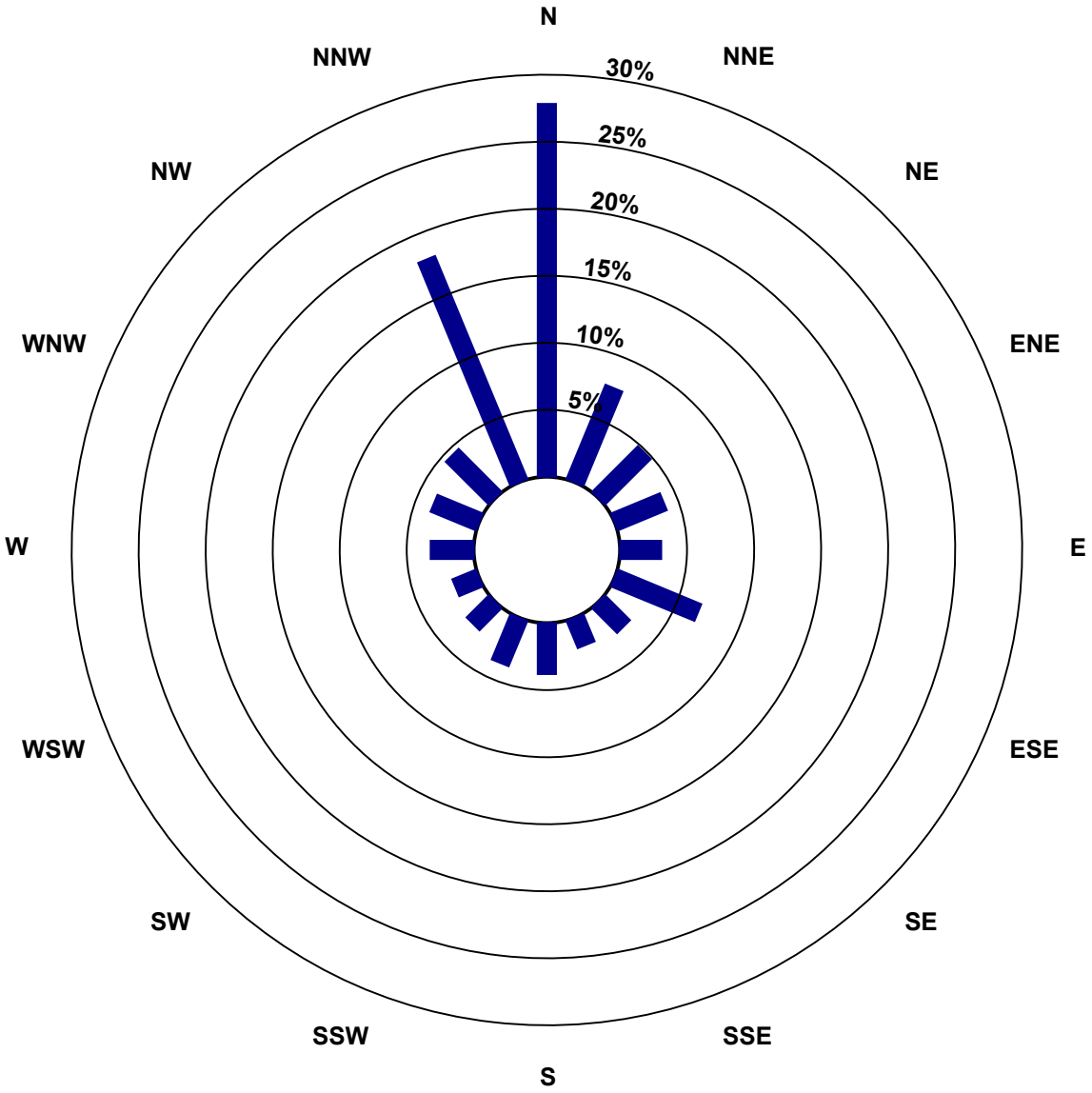
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Conklin



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

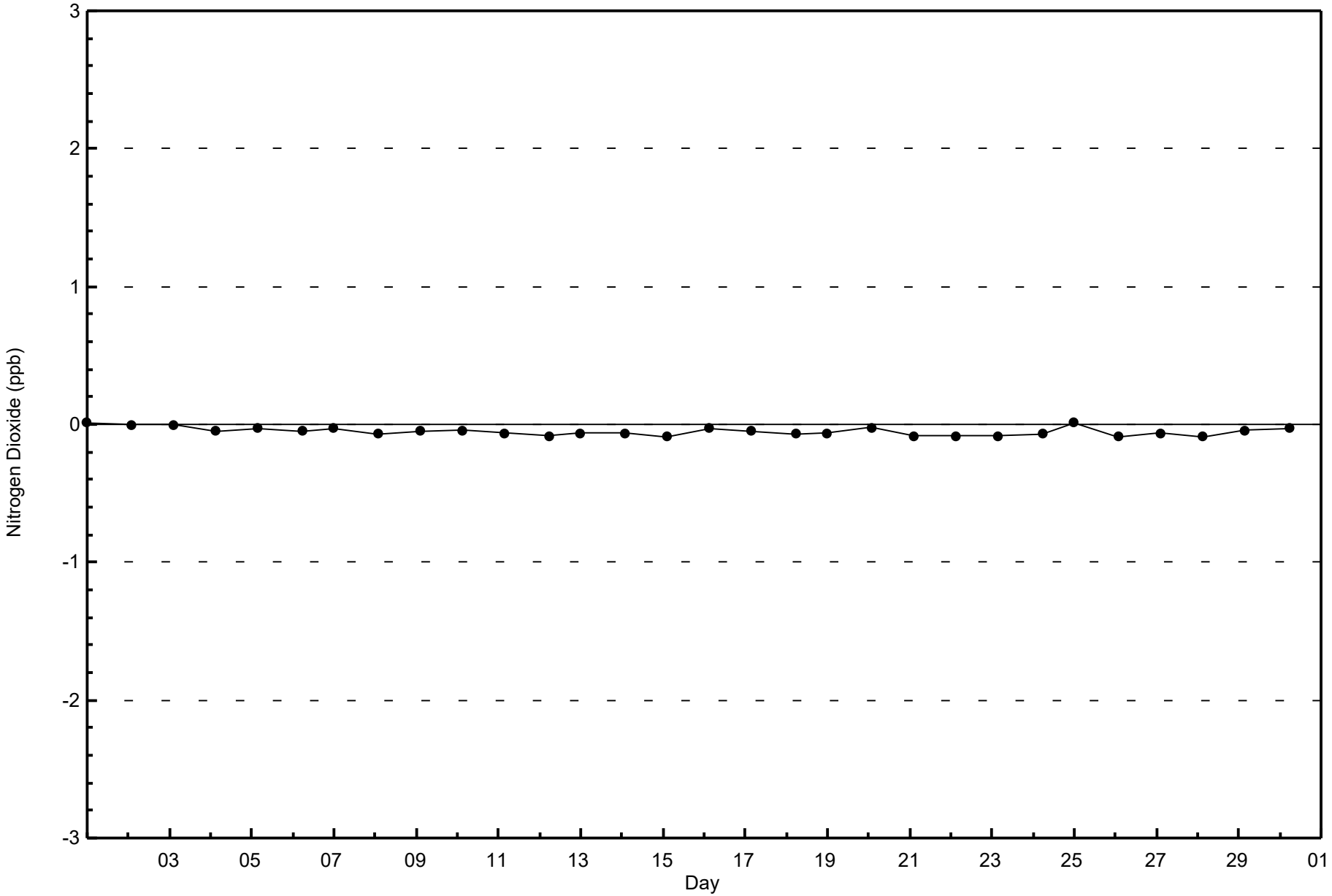
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Conklin - June 2026

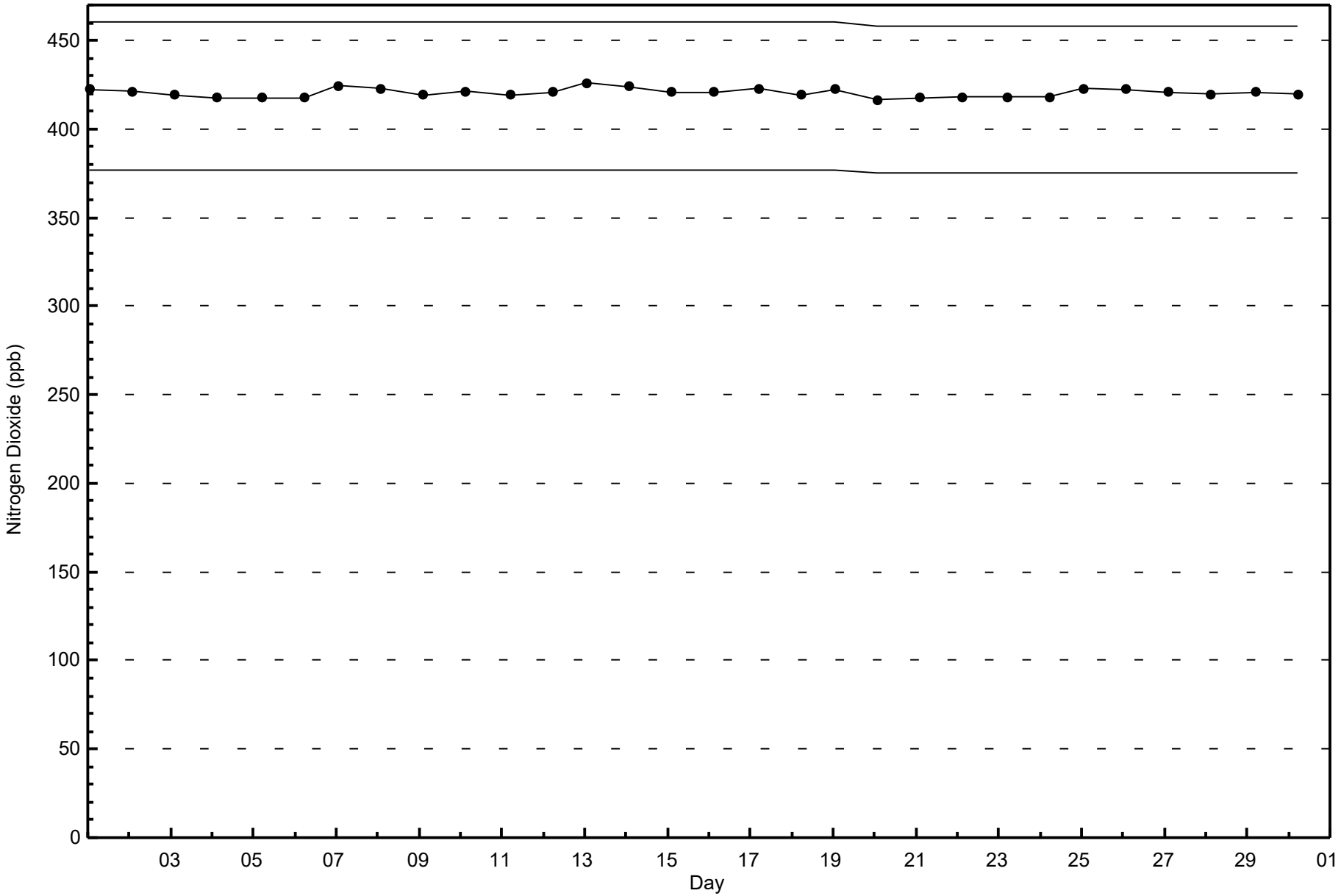


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Conklin - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Conklin - June 2026

Maximum Value: 64.4 ppb on Jun 30 03:00

Maximum Daily Average: 6.8 ppb on Jun 30

Minimum Value: 0.0 ppb on Jun 21 19:00

Minimum Daily Average: 0.1 ppb on Jun 2

Maximum Diurnal Average: 4.9 ppb at hour 3

Minimum Diurnal Average: 0.6 ppb at hour 16

Monthly Average: 1.55 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.2 Q_1 = 0.4 Median = 0.8 Q_3 = 1.4 P_{90} = 2.8 P_{99} = 13.1

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-Jun	Z	1.1	0.6	0.6	0.6	1.0	1.6	1.4	0.9	0.6	0.6	0.4	0.4	0.5	0.4	0.6	0.5	0.4	0.6	0.5	0.5	0.2	0.0	0.0	0.6	1.6
2-Jun	0.0	Z	0.2	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	0.0	0.1	0.1	0.0	0.0	0.1	0.2
3-Jun	0.0	0.1	Z	0.2	0.1	0.1	0.1	0.3	0.4	1.8	1.2	1.5	1.4	1.2	1.0	0.8	1.1	1.1	1.0	1.3	0.5	0.5	1.0	0.8	0.8	1.8
4-Jun	1.3	1.8	1.5	Z	1.1	1.2	0.9	0.7	0.6	0.9	0.7	0.6	0.6	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	1.1	1.0	0.9	1.8
5-Jun	0.9	5.2	1.8	0.8	Z	1.0	0.7	1.4	2.0	3.1	3.6	3.2	1.4	0.9	1.5	1.1	0.6	0.7	0.9	0.4	0.4	0.7	0.5	0.3	1.4	5.2
6-Jun	0.3	5.3	0.2	0.2	0.4	Z	0.6	0.4	0.3	0.2	0.3	0.3	0.3	0.5	0.4	0.4	0.5	0.6	0.5	0.3	4.2	7.7	2.4	1.3	1.2	7.7
7-Jun	Z	0.4	0.4	0.6	0.4	0.6	0.4	0.3	0.4	0.9	1.2	3.0	1.4	1.1	0.7	0.7	0.7	0.8	0.7	0.6	11.4	1.7	0.7	0.6	1.3	11.4
8-Jun	0.4	Z	10.0	1.3	3.5	1.6	0.9	1.1	2.0	1.5	0.6	0.6	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.4	0.3	0.2	0.3	1.2	10.0
9-Jun	0.3	4.4	Z	0.5	0.3	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.1	0.2	0.4	0.2	0.2	0.4	0.9	1.7	0.7	1.0	0.4	0.5	0.6	4.4
10-Jun	0.7	0.6	0.3	Z	0.8	0.9	1.2	1.8	0.8	1.1	0.7	1.0	1.3	0.8	0.7	0.1	0.2	0.6	0.6	2.0	2.2	2.4	2.6	1.4	1.1	2.6
11-Jun	1.5	1.8	1.9	1.5	Z	2.0	1.3	1.0	1.5	2.3	1.3	1.2	1.3	3.6	1.6	2.0	2.0	1.8	2.2	2.0	2.1	3.8	1.9	0.5	1.8	3.8
12-Jun	0.5	0.6	0.9	14.0	1.3	Z	1.4	1.8	1.4	3.8	1.7	2.2	1.8	1.6	1.3	1.0	1.0	1.2	1.7	1.5	1.3	1.1	0.9	0.9	1.9	14.0
13-Jun	Z	0.8	0.7	0.9	1.6	10.3	5.1	3.4	2.1	0.9	0.7	0.4	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.6	2.4	10.9	13.8	5.8	2.7	13.8
14-Jun	1.9	Z	1.2	0.7	1.2	1.6	1.7	1.0	0.9	1.1	1.0	0.8	0.6	0.5	0.5	0.4	0.9	0.7	0.6	1.0	1.0	1.9	2.8	2.1	1.1	2.8
15-Jun	1.0	21.0	Z	10.6	5.7	7.7	2.0	1.8	1.3	0.7	0.5	0.4	0.5	0.7	0.8	0.3	0.3	0.9	1.4	1.8	0.6	0.6	0.7	5.3	2.9	21.0
16-Jun	0.5	0.5	0.6	Z	1.7	0.8	0.6	0.4	0.3	0.8	0.7	0.5	0.3	0.4	0.3	0.3	0.4	0.3	0.4	0.5	0.7	0.5	0.3	0.5	0.5	1.7
17-Jun	1.0	4.4	2.8	0.5	Z	1.0	1.5	0.4	0.4	0.5	0.4	0.3	0.2	0.4	0.4	0.6	0.5	0.7	0.6	0.6	0.9	0.7	1.0	1.2	0.9	4.4
18-Jun	1.2	0.8	0.6	0.8	0.8	Z	1.0	2.9	0.5	1.1	1.4	1.0	0.8	0.4	0.2	0.1	0.6	1.3	1.9	1.6	1.2	0.8	0.6	2.9	1.1	2.9
19-Jun	Z	1.0	3.5	4.2	2.3	0.7	0.9	0.7	0.3	1.3	C	C	C	C	C	C	0.2	0.1	0.3	1.3	0.8	0.5	1.0	0.6	--	4.2
20-Jun	1.3	Z	0.4	0.3	0.5	1.0	0.5	0.3	0.3	0.3	0.4	0.3	0.5	0.6	0.1	0.4	0.7	0.5	0.4	0.2	0.3	0.3	0.5	0.3	0.4	1.3
21-Jun	0.7	0.1	Z	0.2	0.2	0.1	0.2	0.2	0.3	1.6	0.9	0.4	0.4	0.9	0.1	0.1	0.2	0.0	0.0	0.1	0.2	0.3	0.4	0.7	0.4	1.6
22-Jun	2.6	3.5	4.3	Z	0.8	1.5	1.1	0.4	0.8	0.4	0.6	0.2	0.3	0.2	0.3	0.1	0.4	0.5	0.8	0.4	0.4	0.7	1.3	0.8	1.0	4.3
23-Jun	0.4	0.9	2.3	0.7	Z	2.7	1.8	3.9	0.6	0.3	0.5	0.2	0.3	0.3	0.5	0.7	0.2	0.3	0.4	0.7	1.1	2.6	8.4	7.2	1.6	8.4
24-Jun	4.7	8.9	7.9	3.3	1.4	Z	2.8	2.5	1.5	1.2	1.0	2.8	3.2	1.3	0.9	0.6	0.5	0.9	1.0	1.5	2.3	2.5	1.0	1.6	2.4	8.9
25-Jun	Z	8.4	4.5	7.2	2.7	11.6	3.6	1.7	1.2	0.7	0.6	0.9	0.9	M	0.6	0.6	0.7	0.6	0.7	0.9	0.7	0.7	2.8	1.5	2.4	11.6
26-Jun	1.1	Z	0.8	12.1	27.5	12.5	2.1	2.0	1.2	0.6	0.4	0.6	0.6	0.7	0.6	0.5	0.9	0.7	0.6	1.2	1.2	1.0	2.6	2.4	3.2	27.5
27-Jun	5.4	2.5	Z	1.3	8.9	1.2	0.8	1.3	1.2	1.0	1.0	1.0	0.5	0.9	0.7	0.7	0.9	1.4	1.0	1.6	1.0	1.0	1.0	0.6	1.6	8.9
28-Jun	0.5	2.6	3.1	Z	2.3	1.5	0.4	0.3	0.3	0.2	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	1.3	1.6	0.7	3.1
29-Jun	0.6	1.8	8.1	14.4	Z	3.6	1.5	0.8	1.7	0.8	1.1	1.3	1.1	0.9	0.9	0.8	0.8	1.5	1.4	1.8	1.3	1.4	5.4	2.3	2.4	14.4
30-Jun	0.6	1.5	64.4	39.8	13.0	Z	2.3	1.2	1.5	0.5	0.8	0.9	1.0	0.8	0.9	1.6	1.3	1.2	1.8	1.1	3.4	2.9	3.1	10.0	6.8	64.4
	1.2	3.2	4.9	4.7	3.2	2.7	1.3	1.2	0.9	1.0	0.9	0.9	0.8	0.7	0.6	0.6	0.6	0.7	0.8	0.9	1.5	1.7	2.0	1.8	Diurnal Average	
	5.4	21.0	64.4	39.8	27.5	12.5	5.1	3.9	2.1	3.8	3.6	3.2	3.2	3.6	1.6	2.0	2.0	1.8	2.2	2.0	11.4	10.9	13.8	10.0	Diurnal Maximum	

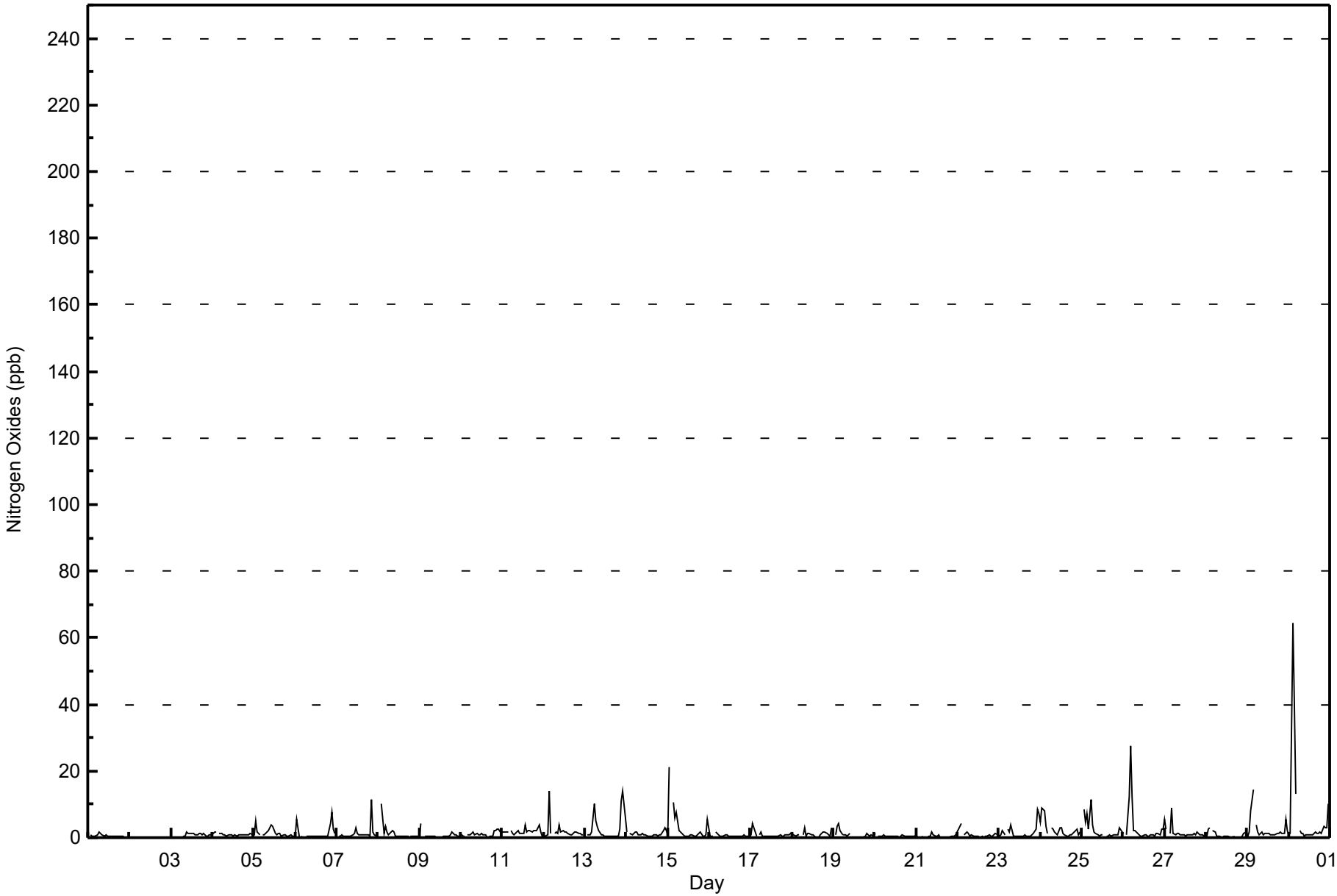
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Conklin - June 2026



Nitrogen Oxides (NO_X) - ppb
Conklin - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	679	99.41	99.41
21 - 40	3	0.44	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: 683

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Conklin - June 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	187	51	33	27	21	46	18	15	26	25	16	13	22	25	31	123	679
21 - 40	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11 - 80	1	0	0	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	190	52	33	27	21	46	18	15	26	25	16	13	22	25	31	123	683

Total Number of Valid Hours: 683

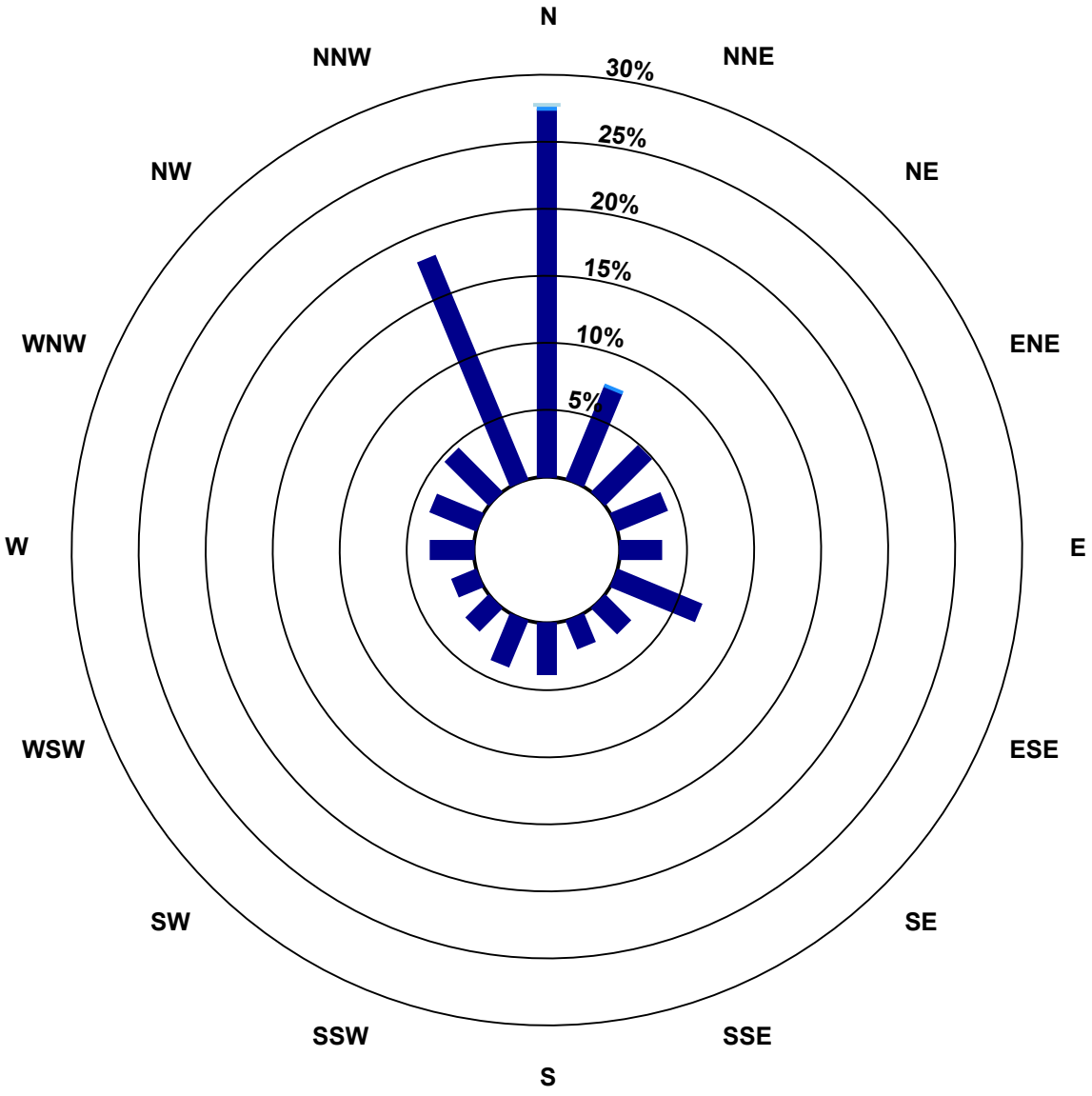
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Conklin



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

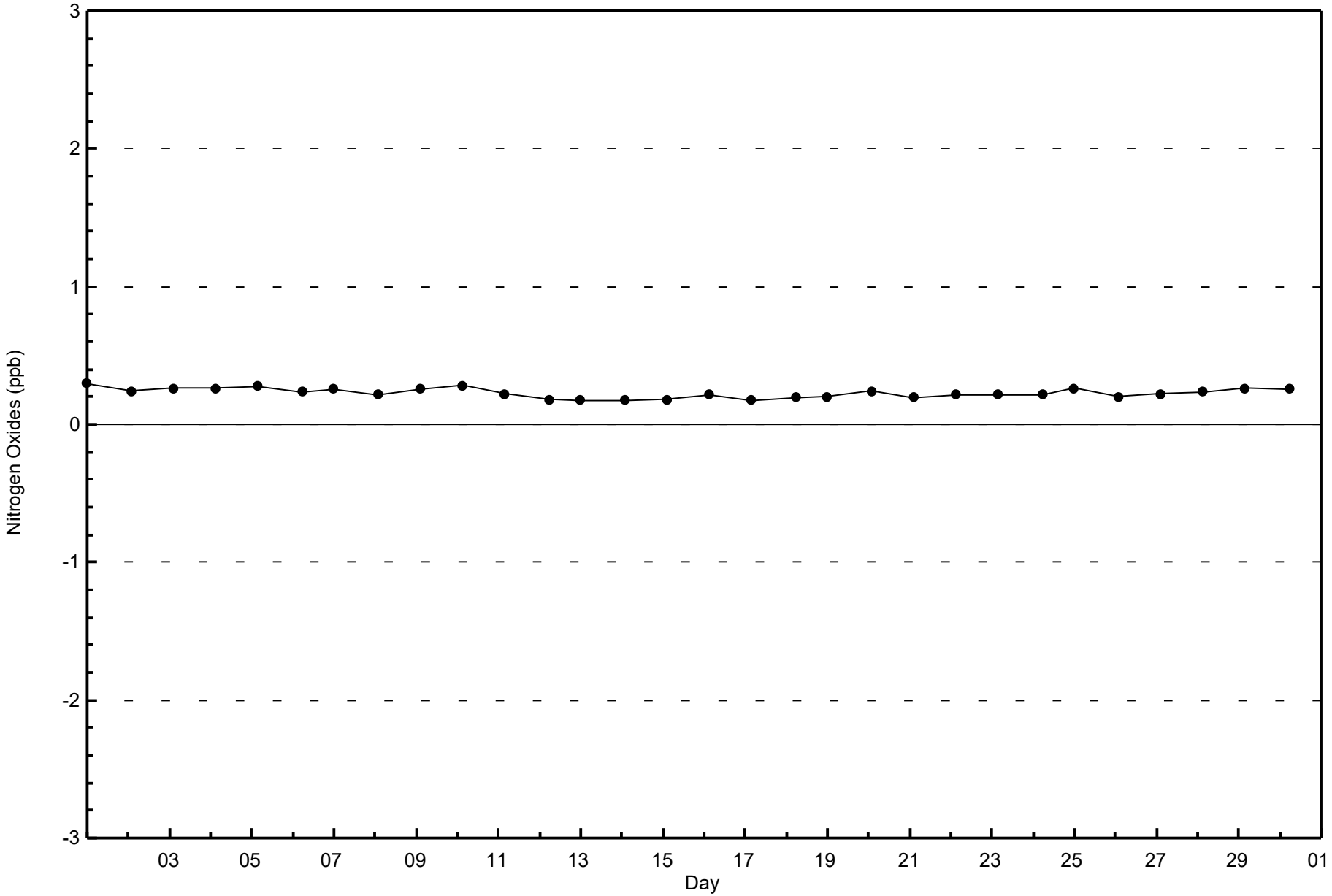
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Conklin - June 2026

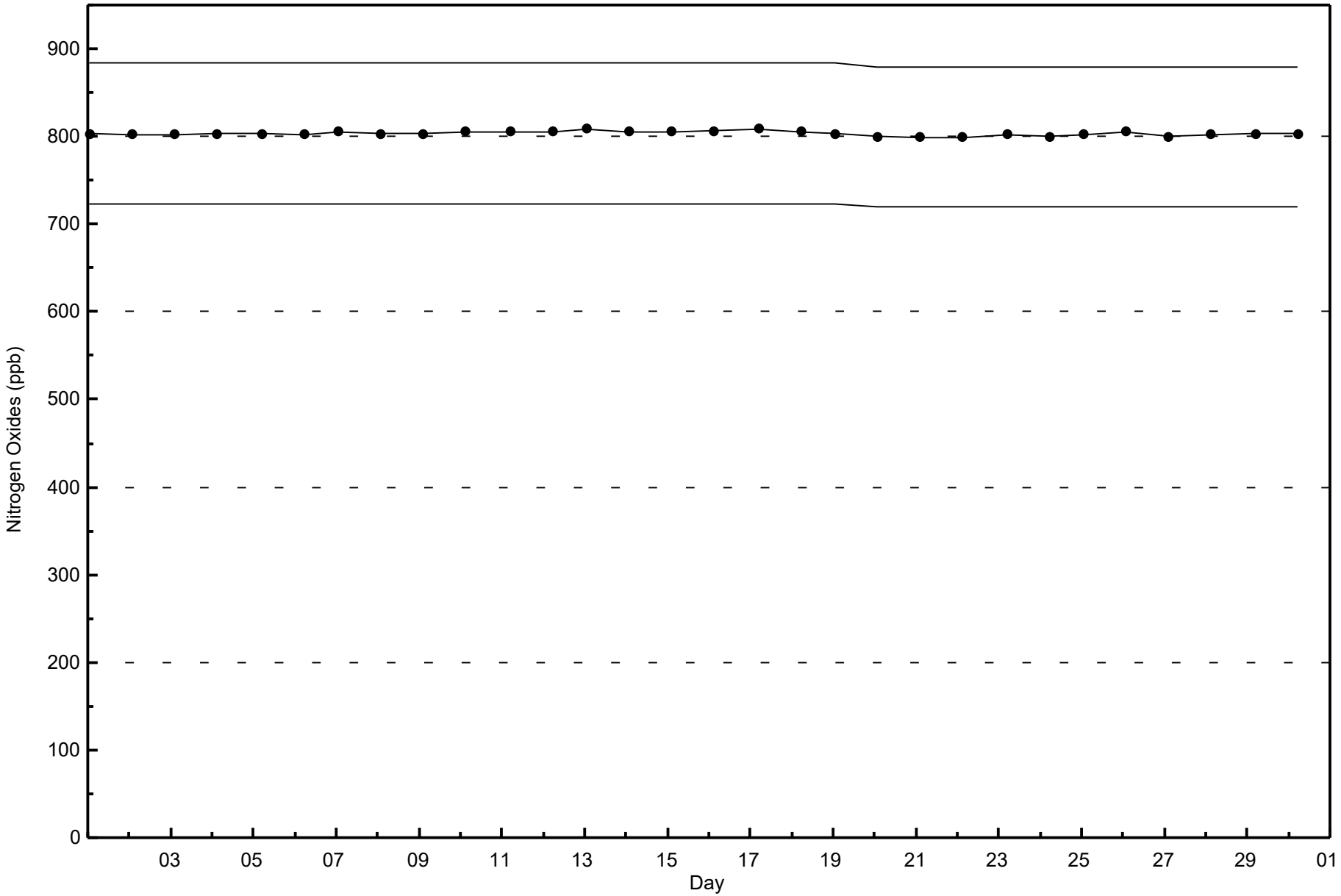


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Conklin - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Conklin - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 54.5 ppb on Jun 14 11:00 Maximum Daily Average: 35.1 ppb on Jun 25

Minimum Value: 1.3 ppb on Jun 20 05:00 Minimum Daily Average: 15.3 ppb on Jun 11
Maximum Diurnal Average: 35.6 ppb at hour 16 Minimum Diurnal Average: 12.3 ppb at hour 4
Monthly Average: 26.19 ppb Percentiles: P_1 = 2.5 P_{10} = 10.8 Q_1 = 17.5 Median = 26.5 Q_3 = 34.6 P_{90} = 41.3 P_{99} = 52.9

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-Jun	20.8	23.8	25.0	23.3	Z	24.3	24.5	25.2	27.3	29.1	27.6	26.1	25.2	24.5	30.1	30.9	29.8	28.6	28.9	28.9	28.8	29.0	30.0	29.6	27.0	30.9
2-Jun	26.5	22.5	20.8	20.6	20.6	Z	22.5	23.0	22.3	22.5	22.6	22.1	21.8	20.7	19.8	19.5	19.7	20.2	20.3	20.2	18.4	19.3	18.9	18.9	21.0	26.5
3-Jun	Z	16.3	14.0	12.2	13.2	13.4	15.6	20.7	22.3	20.0	21.1	20.6	22.3	25.0	27.9	30.4	30.2	29.5	29.0	26.4	18.6	15.1	13.1	11.9	20.4	30.4
4-Jun	12.9	Z	13.9	12.4	18.1	22.7	25.1	27.7	28.8	29.5	33.8	C	C	C	C	41.1	41.0	38.7	36.6	36.0	31.9	22.2	17.9	21.0	26.9	41.1
5-Jun	20.4	16.5	Z	21.3	15.9	14.5	15.1	18.7	23.7	24.6	24.1	24.4	31.0	29.6	33.0	36.8	35.3	30.2	28.5	28.2	24.1	25.7	26.0	28.8	25.1	36.8
6-Jun	32.1	30.8	32.1	Z	29.8	28.6	28.6	30.4	32.1	32.2	32.4	34.4	33.6	34.2	35.4	36.0	34.9	31.8	33.6	32.4	25.3	8.1	4.6	4.0	28.6	36.0
7-Jun	4.6	7.4	9.1	10.1	Z	11.6	15.8	17.9	22.9	24.4	28.1	34.5	43.4	39.4	39.7	38.8	39.5	39.7	42.2	32.1	20.3	20.3	29.2	39.6	26.5	43.4
8-Jun	30.9	31.7	24.9	20.5	22.0	Z	25.9	20.9	21.8	22.6	24.4	25.4	22.6	21.7	20.0	24.0	28.0	27.6	24.9	28.7	25.5	29.1	28.7	26.6	25.1	31.7
9-Jun	Z	26.2	29.9	32.9	32.0	32.5	33.3	35.5	37.7	40.0	40.2	41.8	41.3	39.6	39.1	40.2	39.9	37.9	34.7	30.5	30.9	27.3	30.0	30.4	35.0	41.8
10-Jun	23.2	Z	17.1	16.7	11.2	11.0	20.0	22.3	27.8	27.8	26.5	28.0	33.9	36.4	36.8	33.5	33.0	31.4	29.0	23.8	20.0	16.1	14.8	13.7	24.1	36.8
11-Jun	12.7	12.9	Z	12.9	11.6	11.8	11.7	11.7	11.9	14.2	16.8	17.0	17.1	16.8	17.1	18.7	18.1	17.1	16.4	17.0	17.9	16.4	17.5	17.1	15.3	18.7
12-Jun	16.5	17.0	16.4	Z	17.7	18.5	22.3	23.9	26.1	30.6	32.2	33.9	36.0	39.1	41.2	40.5	40.1	39.6	38.3	36.1	32.9	27.3	17.4	14.7	28.6	41.2
13-Jun	16.6	18.7	16.4	10.6	Z	5.9	18.4	26.9	31.2	36.0	37.6	38.1	39.8	39.7	38.6	37.6	36.9	36.8	37.6	36.3	27.0	13.1	8.1	18.8	27.2	39.8
14-Jun	31.5	26.5	28.4	21.6	25.1	Z	28.7	38.3	44.0	54.5	54.5	51.2	48.2	44.3	37.2	40.2	38.5	37.9	40.4	39.7	30.6	22.5	13.0	9.2	35.0	54.5
15-Jun	Z	3.8	1.9	2.5	3.1	6.8	19.2	30.7	33.6	35.3	37.7	38.4	40.9	42.5	42.1	40.7	38.7	37.6	34.5	35.0	31.5	39.9	39.3	35.5	29.2	42.5
16-Jun	31.9	Z	15.2	10.5	14.9	13.1	14.6	19.2	22.0	23.0	26.6	29.8	31.6	28.0	24.4	25.7	26.9	24.2	20.0	22.2	22.1	22.6	22.8	17.1	22.1	31.9
17-Jun	11.4	3.6	Z	6.0	4.7	11.9	19.6	21.6	24.5	27.1	33.2	34.5	36.4	37.9	41.1	40.9	39.6	38.1	35.2	29.8	25.8	18.9	19.9	26.1	25.6	41.1
18-Jun	26.2	27.4	26.4	Z	26.1	26.0	25.2	24.1	26.5	28.6	31.1	30.4	33.8	34.1	34.8	31.3	30.7	30.0	26.2	22.0	16.9	11.4	5.3	2.6	25.1	34.8
19-Jun	6.9	6.3	4.2	4.1	Z	13.0	20.3	20.9	26.3	28.9	29.4	29.3	30.8	29.9	28.1	28.7	31.1	31.2	29.7	30.6	34.4	15.7	14.3	15.5	22.2	34.4
20-Jun	5.6	2.5	1.7	1.4	1.3	Z	12.0	13.5	16.6	24.0	26.8	27.6	28.0	28.7	28.1	28.2	25.0	22.1	20.7	22.0	13.2	14.7	15.5	12.6	17.0	28.7
21-Jun	Z	16.0	17.5	18.4	18.6	16.7	14.2	12.7	12.7	15.3	17.8	22.4	23.2	22.9	24.0	25.4	24.0	23.5	22.5	18.7	11.4	4.6	3.3	3.2	16.9	25.4
22-Jun	3.0	Z	8.3	8.5	14.6	9.3	12.0	12.9	15.4	18.6	23.5	27.3	29.1	27.8	29.8	30.1	30.4	29.9	29.1	26.9	26.9	23.9	23.4	17.0	20.8	30.4
23-Jun	9.0	4.0	Z	2.3	3.8	8.5	15.5	21.4	29.9	31.2	31.2	32.9	32.6	33.5	33.1	31.7	36.3	36.3	35.9	34.8	31.9	27.2	17.6	17.0	24.3	36.3
24-Jun	17.5	18.5	16.1	Z	13.6	9.9	11.3	16.1	21.1	29.7	31.4	31.6	35.4	37.0	38.4	38.2	39.6	39.1	39.7	39.3	32.6	26.0	20.0	28.9	27.4	39.7
25-Jun	20.8	19.1	18.8	10.5	Z	9.2	26.2	33.4	39.2	43.1	44.4	44.9	44.5	M	47.0	48.4	48.2	49.3	49.3	47.8	45.3	38.4	27.4	16.3	35.1	49.3
26-Jun	15.0	10.6	8.8	6.8	2.8	Z	32.2	37.5	42.0	45.4	46.8	46.1	47.2	47.4	47.7	47.4	46.2	46.2	46.9	45.1	43.1	36.2	29.8	27.7	35.0	47.7
27-Jun	Z	28.7	22.6	12.1	7.3	25.7	29.8	34.7	38.1	43.4	44.6	43.8	42.3	42.1	43.4	43.6	42.7	42.6	40.2	35.6	26.4	17.0	12.5	7.0	31.6	44.6
28-Jun	3.7	Z	5.7	4.8	3.5	9.6	24.9	29.0	34.6	34.6	37.8	38.9	42.5	45.7	47.3	45.8	45.4	44.1	42.6	41.3	38.0	32.2	25.1	15.8	30.1	47.3
29-Jun	14.1	13.6	Z	4.2	3.5	6.6	22.1	33.8	33.6	38.1	41.2	49.4	54.2	53.6	54.3	53.1	52.9	53.3	50.3	50.0	42.8	22.3	10.6	6.2	33.2	54.3
30-Jun	4.3	5.0	2.8	Z	2.0	3.5	18.3	20.5	26.5	32.4	41.3	42.5	45.4	45.9	43.5	41.8	42.0	40.8	35.0	32.9	22.8	12.9	5.9	2.7	24.8	45.9
	16.7	16.4	15.9	12.3	13.5	14.6	20.8	24.2	27.4	30.2	32.2	33.4	35.0	34.6	35.3	35.6	35.5	34.5	33.3	31.7	27.2	21.8	18.7	17.8	Diurnal Average	
	32.1	31.7	32.1	32.9	32.0	32.5	33.3	38.3	44.0	54.5	54.5	51.2	54.2	53.6	54.3	53.1	52.9	53.3	50.3	50.0	45.3	39.9	39.3	39.6	Diurnal Maximum	

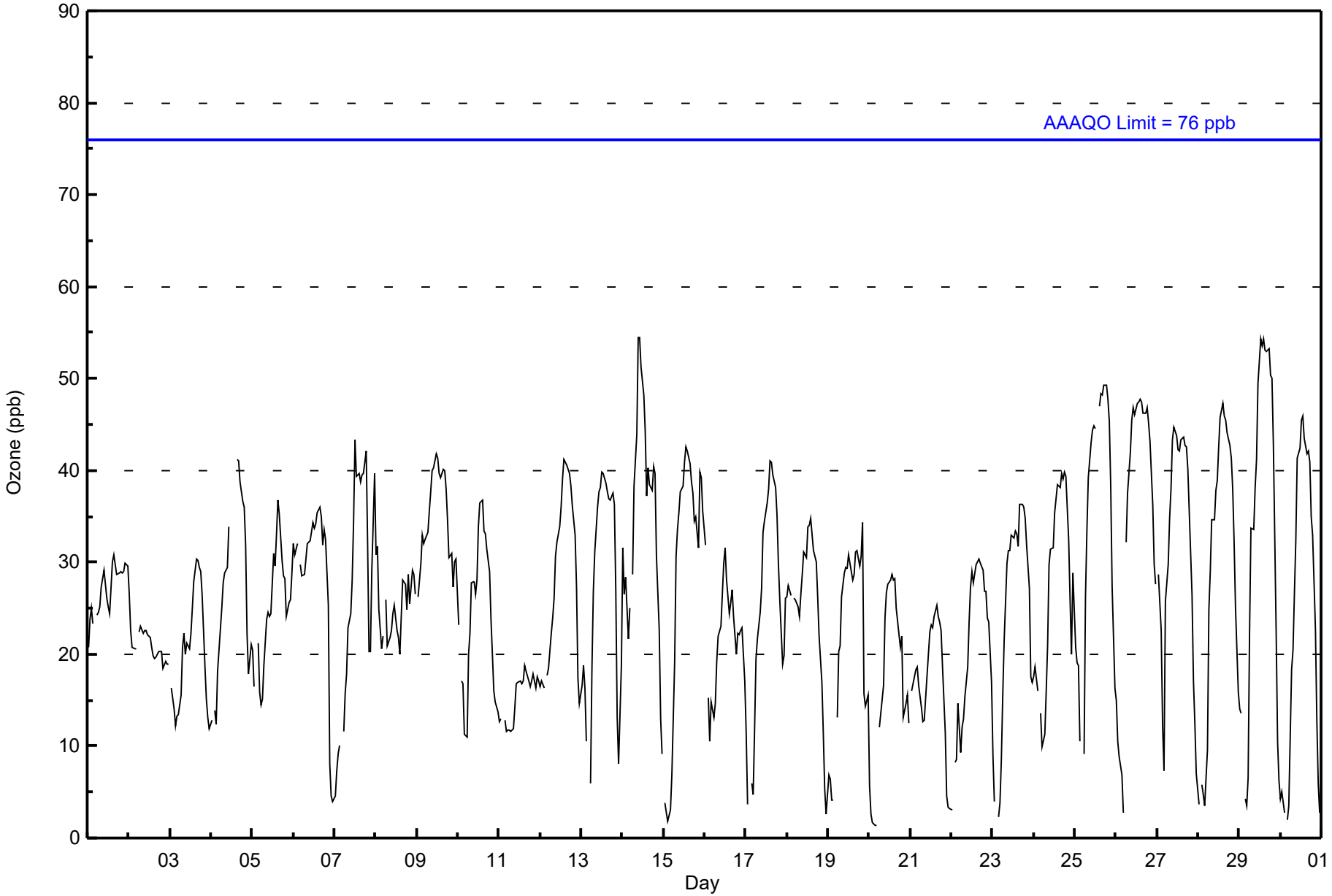
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Conklin - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	221	32.26	32.26
21 - 50	455	66.42	98.69
51 - 82	9	1.31	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

Conklin - June 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	96	32	17	3	1	5	3	3	7	9	2	0	1	1	2	39	221
21 - 50	89	21	17	23	20	39	15	11	17	15	15	13	20	26	27	87	455
51 - 82	3	2	0	0	0	1	0	0	0	0	0	0	0	0	2	1	9
> 83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	188	55	34	26	21	45	18	14	24	24	17	13	21	27	31	127	685

Total Number of Valid Hours: 685

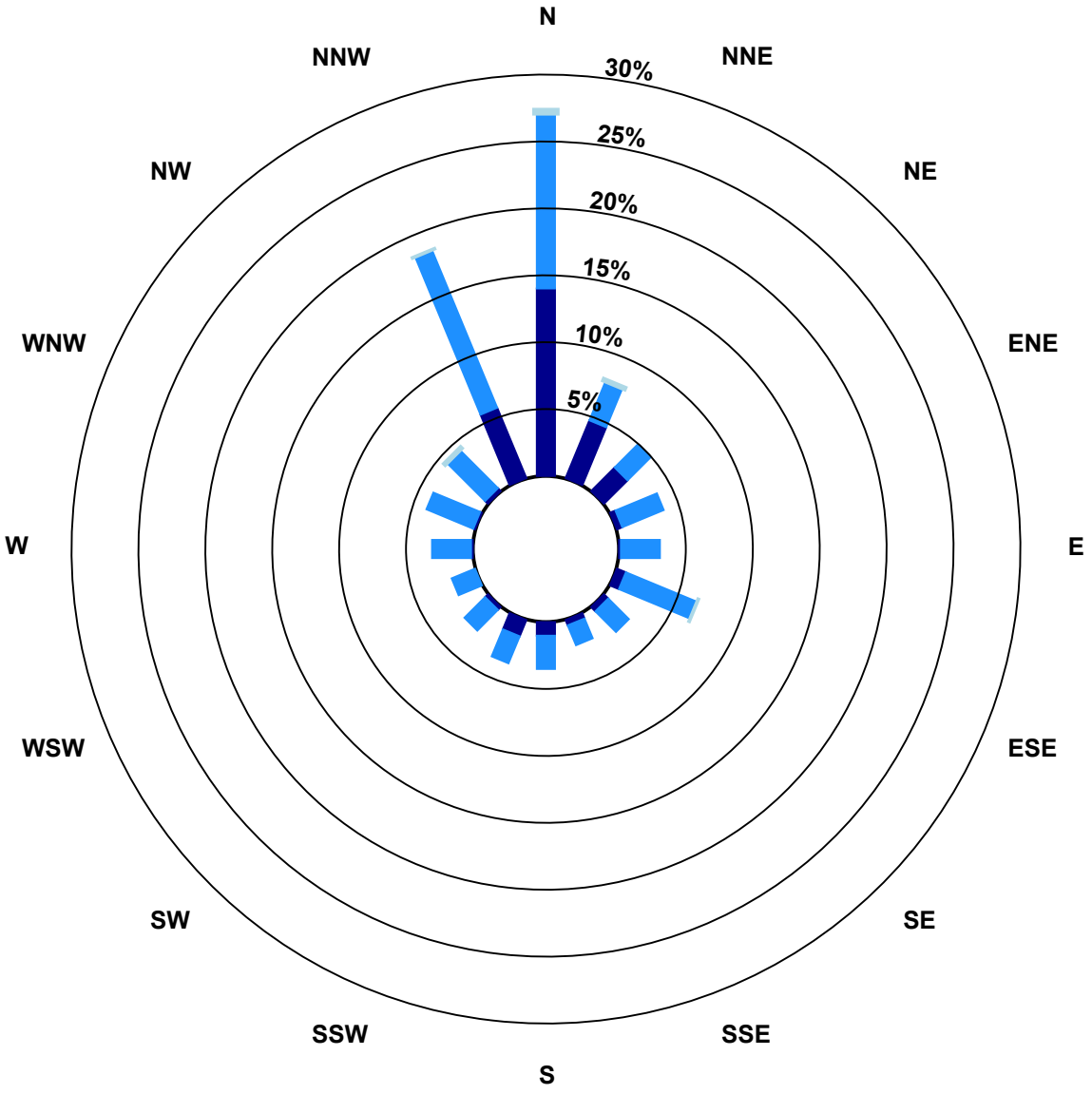
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Ozone (O_3) - ppb

Conklin



Classes (ppb)

- 0 - 20
- 21 - 50
- 51 - 82
- > 83

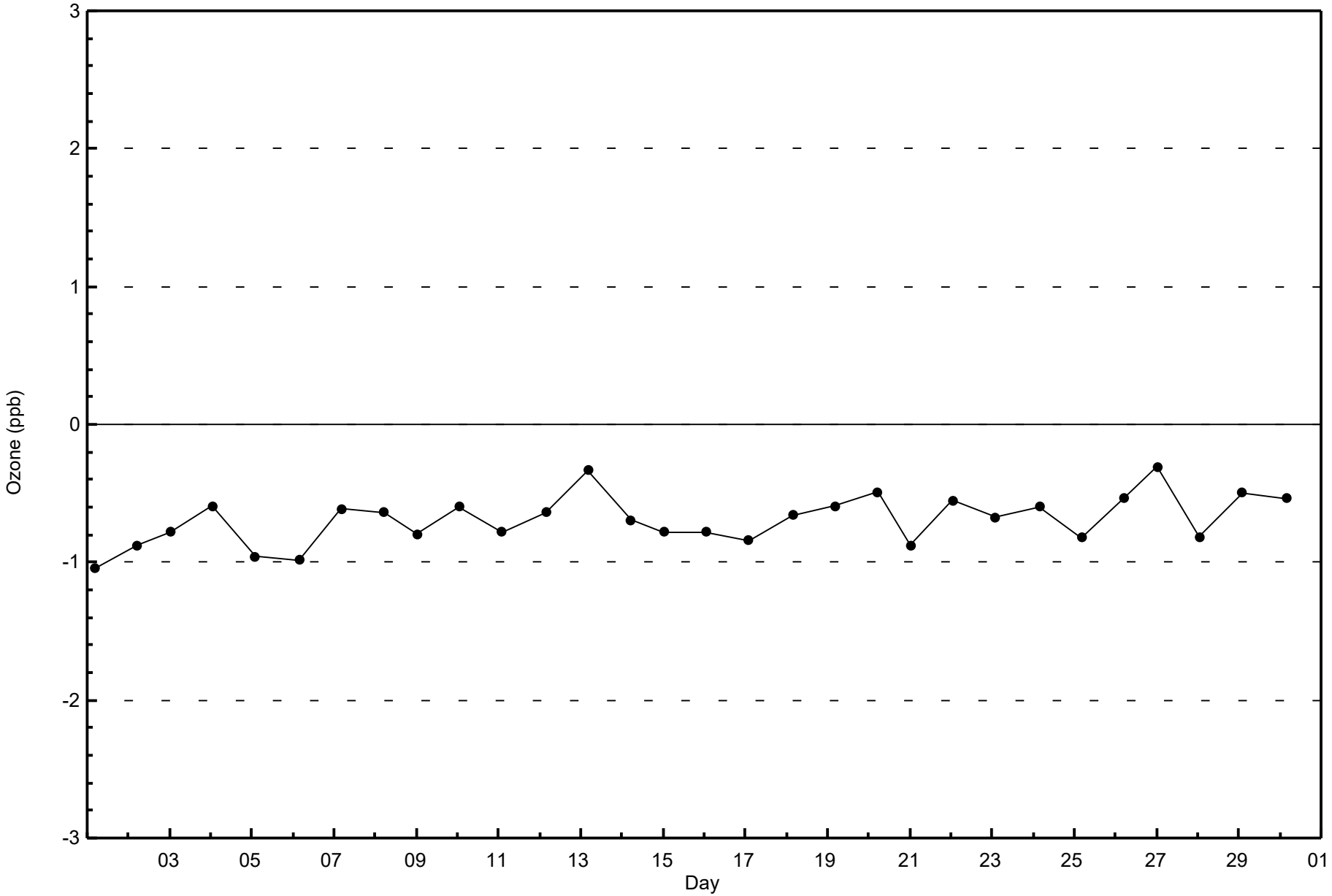
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Conklin - June 2026

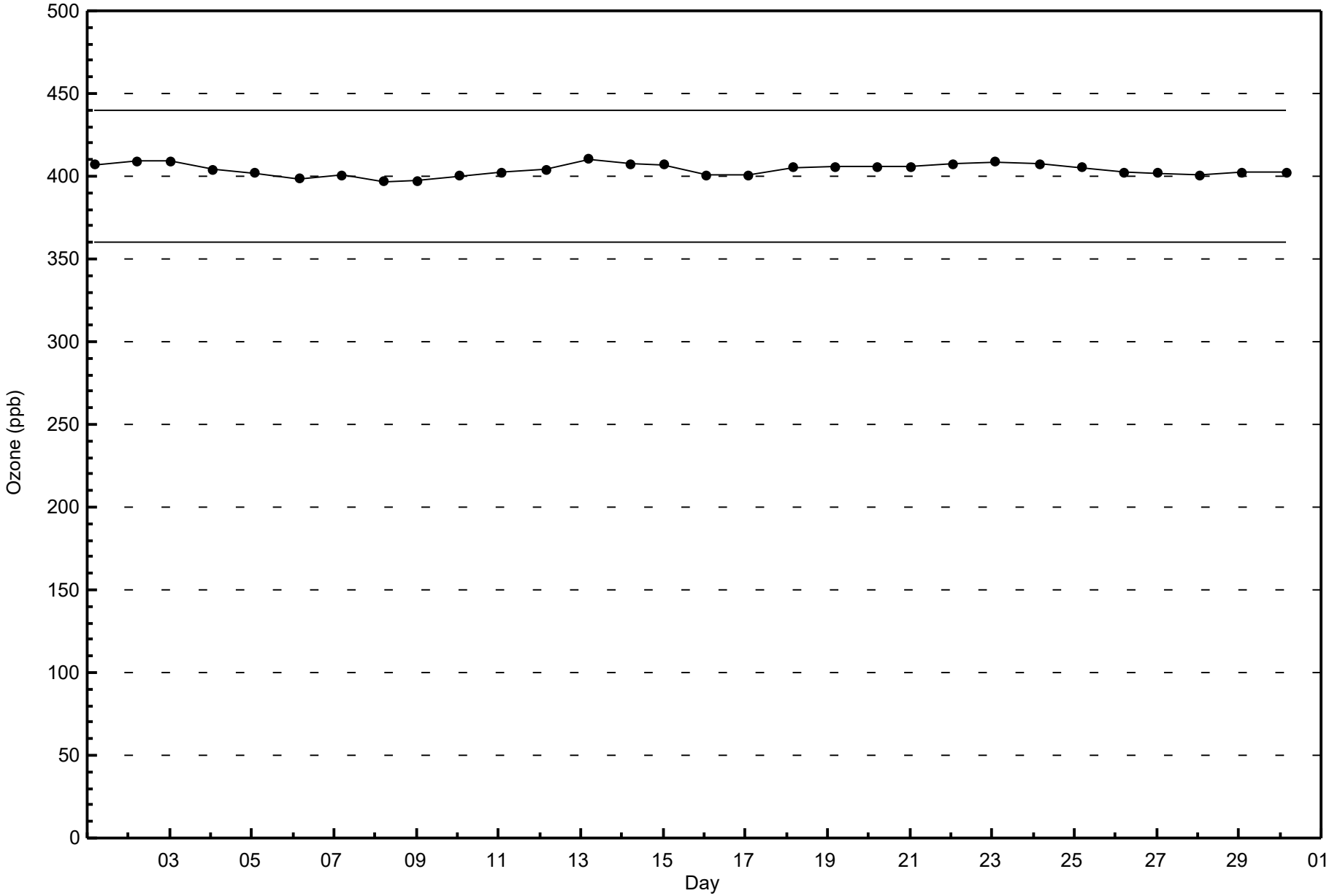


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Conklin - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Conklin - June 2026

Number of Exceedances (AAAQO): 1-hr: 1 24-hr: 2

Maximum Value: 84.6 $\mu g/m^3$ on Jun 29 12:00

Maximum Daily Average: 51.8 $\mu g/m^3$ on Jun 29

Minimum Value: 0.4 $\mu g/m^3$ on Jun 1 07:00

Minimum Daily Average: 1.3 $\mu g/m^3$ on Jun 2

Maximum Diurnal Average: 8.2 $\mu g/m^3$ at hour 12

Minimum Diurnal Average: 6.0 $\mu g/m^3$ at hour 10

Monthly Average: 7.04 $\mu g/m^3$

Percentiles: P_1 = 0.8 P_{10} = 1.8 Q_1 = 2.8 Median = 3.8 Q_3 = 5.5 P_{90} = 9.5 P_{99} = 53.5

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-Jun	0.7	0.6	0.6	0.6	0.7	0.4	0.4	1.0	1.8	2.0	2.6	3.2	4.0	3.6	4.0	4.2	3.7	3.7	2.7	1.6	1.1	1.0	1.0	1.0	1.9	4.2
2-Jun	1.0	1.1	1.4	1.6	1.4	1.2	1.8	1.5	1.2	0.9	1.0	1.1	1.7	1.5	1.6	1.2	1.1	1.5	2.2	1.4	1.3	1.0	1.2	1.1	1.3	2.2
3-Jun	1.1	1.2	1.4	1.0	2.0	0.7	0.9	1.6	1.8	2.7	3.1	3.8	4.6	4.5	4.3	4.2	3.9	3.9	4.0	3.9	4.5	7.0	8.4	9.3	3.5	9.3
4-Jun	10.9	12.1	12.1	13.1	11.6	13.1	12.4	10.4	9.2	8.5	8.2	7.3	6.6	6.2	6.2	6.7	7.2	7.7	8.4	8.8	8.3	8.5	9.5	9.6	9.3	13.1
5-Jun	9.8	10.9	13.2	9.8	9.5	9.7	9.5	9.6	9.0	8.8	9.5	9.3	4.0	3.7	2.9	2.5	2.4	2.6	3.1	2.9	3.4	3.9	2.8	2.3	6.5	13.2
6-Jun	1.8	1.6	1.6	2.2	2.7	2.6	2.5	2.0	1.4	1.5	1.4	1.7	2.2	2.7	2.7	2.4	2.4	2.6	1.9	1.8	2.1	3.4	3.3	3.5	2.3	3.5
7-Jun	3.3	3.7	3.6	3.7	3.5	3.2	2.8	2.5	1.6	1.6	1.7	2.0	2.3	2.5	2.7	2.1	2.5	2.6	2.4	2.5	2.9	2.8	3.0	1.7	2.6	3.7
8-Jun	1.9	3.6	4.7	2.6	2.9	4.2	2.8	1.7	2.6	2.6	2.1	2.5	1.8	3.6	3.5	3.4	3.2	3.0	3.4	3.8	4.1	3.7	3.8	4.2	3.2	4.7
9-Jun	4.1	4.4	3.7	3.3	3.0	2.7	2.5	2.2	2.1	1.8	1.8	1.7	2.1	2.6	2.8	3.0	3.2	3.3	3.7	4.0	3.9	3.4	3.2	3.1	3.0	4.4
10-Jun	3.1	3.5	3.6	3.9	3.9	4.0	4.0	4.2	3.1	3.5	5.0	6.1	8.0	5.8	2.3	1.1	1.1	1.3	2.8	3.6	2.3	1.1	1.0	1.1	3.3	8.0
11-Jun	2.4	3.1	3.4	3.3	3.7	4.2	3.2	2.5	1.5	3.3	3.6	3.6	3.8	4.5	4.5	5.5	6.5	5.4	5.9	5.6	4.1	3.5	4.1	2.5	3.9	6.5
12-Jun	1.8	2.1	5.0	4.2	4.3	4.2	3.1	2.6	2.2	2.0	2.0	2.6	2.6	2.9	3.3	3.3	3.4	3.7	4.3	4.4	4.2	4.0	4.2	4.0	3.4	5.0
13-Jun	4.0	3.6	3.5	3.3	2.9	2.9	3.1	3.9	4.2	3.1	3.1	2.8	2.9	3.3	3.2	3.1	2.6	2.2	2.2	3.0	4.6	5.5	5.6	3.2	3.4	5.6
14-Jun	3.4	4.0	3.5	3.6	3.6	4.7	4.2	3.3	3.4	3.8	3.6	3.8	3.6	3.5	3.0	2.8	2.5	3.8	3.9	5.1	5.4	5.2	5.4	5.2	3.9	5.4
15-Jun	5.5	6.0	5.9	5.6	5.5	6.1	6.6	5.6	5.2	4.7	4.1	4.2	6.5	8.3	8.0	5.8	4.4	4.6	5.0	5.5	5.4	6.0	6.3	5.5	5.7	8.3
16-Jun	5.1	5.3	5.5	6.0	6.8	7.0	6.3	5.1	4.8	4.8	4.8	4.8	4.5	5.3	4.7	5.0	5.5	5.3	5.2	5.7	5.7	6.1	6.0	6.1	5.5	7.0
17-Jun	5.5	5.6	4.8	3.8	3.2	2.5	2.3	2.0	1.5	1.5	1.9	1.8	1.9	2.2	2.6	3.1	3.3	3.4	3.4	3.2	3.9	4.4	5.4	4.8	3.3	5.6
18-Jun	3.8	3.3	3.2	3.1	3.3	3.3	3.6	3.3	3.2	3.2	2.9	2.5	1.9	1.5	1.3	1.3	1.7	2.9	3.6	4.6	4.5	4.4	4.3	4.0	3.1	4.6
19-Jun	3.4	3.0	2.9	2.8	2.5	2.1	2.2	2.3	1.7	1.7	1.8	1.7	2.0	2.4	2.4	2.2	2.2	1.8	2.1	4.0	4.5	4.1	4.8	5.0	2.7	5.0
20-Jun	5.1	5.2	4.8	4.9	4.5	4.4	3.2	2.5	2.5	2.6	2.8	3.0	3.1	3.2	3.1	3.3	3.3	3.2	3.3	3.0	3.3	7.2	3.4	3.6	3.7	7.2
21-Jun	4.0	4.1	4.0	3.9	3.7	3.7	3.7	3.8	3.8	3.6	3.3	2.6	2.5	2.6	2.7	2.8	2.9	2.9	3.6	4.1	6.5	3.9	4.1	4.1	3.6	6.5
22-Jun	4.4	4.5	4.4	4.0	3.6	3.9	3.7	4.0	4.1	3.9	3.4	2.8	2.8	2.9	3.0	2.8	3.0	2.8	3.1	3.0	2.9	3.0	3.4	3.3	3.4	4.5
23-Jun	4.2	4.9	4.6	4.1	4.5	4.1	4.1	3.9	3.6	3.5	3.5	3.5	3.2	3.2	3.3	3.7	3.2	3.2	3.7	3.4	3.2	3.2	3.7	4.0	3.7	4.9
24-Jun	4.3	4.4	4.7	4.7	4.8	4.9	5.2	6.1	5.9	5.1	4.2	4.6	4.1	4.0	4.1	4.0	3.7	3.6	4.5	5.3	6.1	5.5	5.1	4.9	4.8	6.1
25-Jun	5.0	4.8	4.9	5.1	5.3	5.3	4.9	4.7	3.8	3.2	3.1	3.1	3.4	3.5	C	3.8	4.2	4.6	5.0	5.2	5.3	5.8	5.9	5.5	4.6	5.9
26-Jun	5.5	5.6	5.6	5.7	7.1	5.8	5.7	5.9	5.0	4.1	3.6	3.9	4.0	4.4	4.3	4.2	5.1	4.9	4.3	4.2	4.6	5.4	6.0	8.8	5.2	8.8
27-Jun	7.0	6.3	6.2	5.7	6.1	5.8	6.1	5.7	4.5	3.9	3.8	4.2	4.5	4.6	4.4	4.5	4.7	5.0	5.0	5.6	5.7	6.1	8.3	6.1	5.4	8.3
28-Jun	6.1	6.1	6.6	7.0	6.3	6.1	6.2	6.1	5.7	6.4	12.2	16.6	11.9	7.4	5.6	5.7	5.6	6.2	7.3	7.9	8.1	13.8	24.7	28.1	9.3	28.1
29-Jun	32.3	38.3	38.7	40.5	39.7	40.6	47.9	51.3	48.5	53.8	75.9	84.6	71.5	59.8	64.4	57.3	55.1	51.5	43.9	52.3	49.9	49.3	48.1	47.7	51.8	84.6
30-Jun	46.6	47.1	47.0	45.1	40.7	39.8	45.9	43.7	38.2	29.2	46.5	50.7	49.6	44.5	44.7	46.8	45.0	44.8	43.6	42.9	43.2	43.5	43.0	44.0	44.0	50.7
	6.6	7.0	7.2	6.9	6.8	6.8	7.0	6.8	6.2	6.0	7.5	8.2	7.6	7.0	7.1	6.7	6.6	6.6	6.6	7.1	7.2	7.5	8.0	7.9	Diurnal Average	
	46.6	47.1	47.0	45.1	40.7	40.6	47.9	51.3	48.5	53.8	75.9	84.6	71.5	59.8	64.4	57.3	55.1	51.5	43.9	52.3	49.9	49.3	48.1	47.7	Diurnal Maximum	

C - Calibration

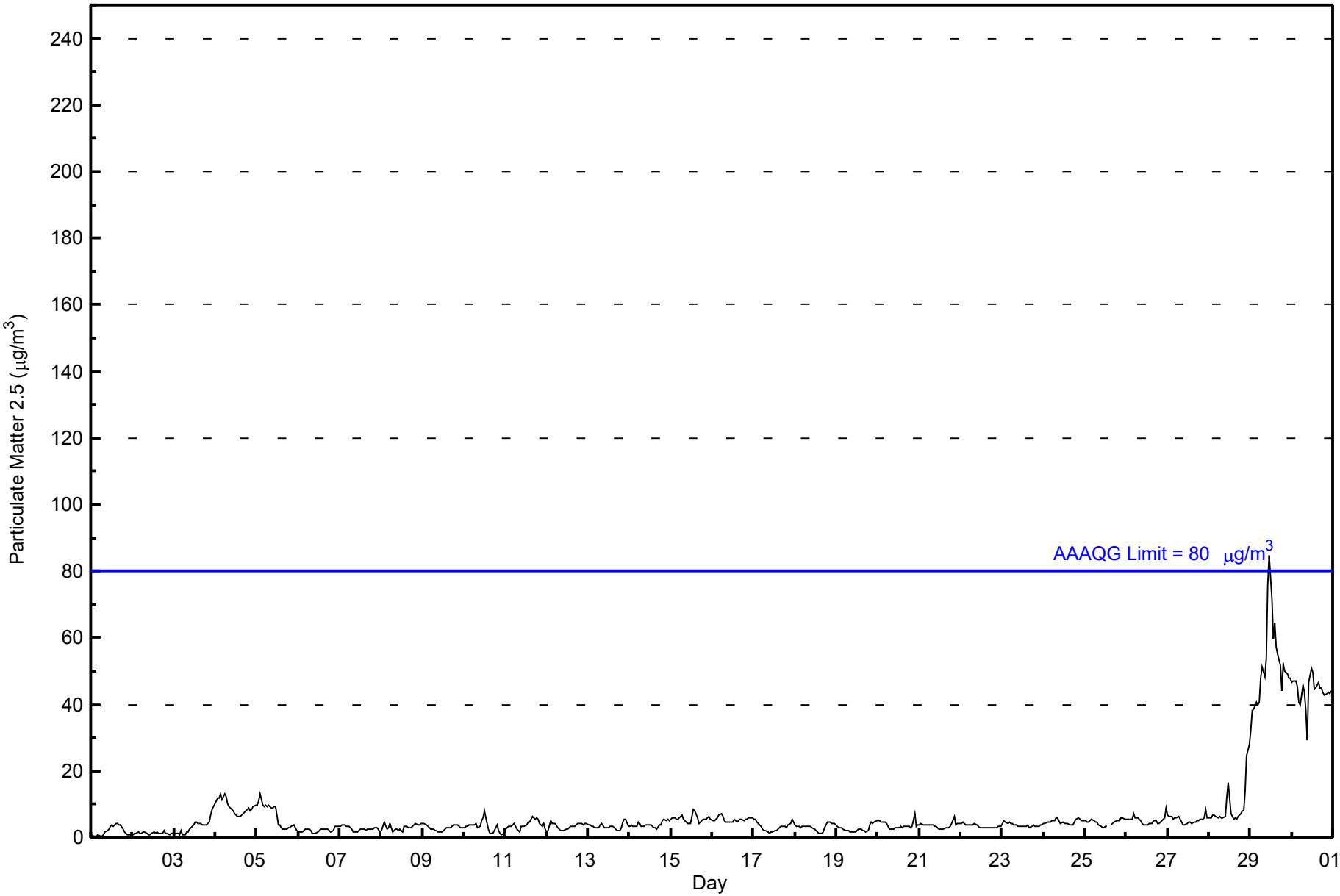
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Conklin - June 2026



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

Conklin - June 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	544	75.66	75.66
6 - 15	124	17.25	92.91
16 - 25	2	0.28	93.19
26 - 80	48	6.68	99.86
> 81.0	1	0.14	100.00

Total Number of Valid Hours: 719

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

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

Conklin - June 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	144	34	21	17	13	41	14	11	12	20	15	12	19	25	28	118	544
6 - 15	26	11	14	11	6	4	4	3	15	7	2	0	4	1	4	12	124
16 - 25	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
26 - 80	29	9	2	0	2	2	0	0	0	0	1	2	0	1	0	0	48
> 81.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Totals	201	55	37	28	21	47	18	14	27	27	18	14	23	27	32	130	719

Total Number of Valid Hours: 719

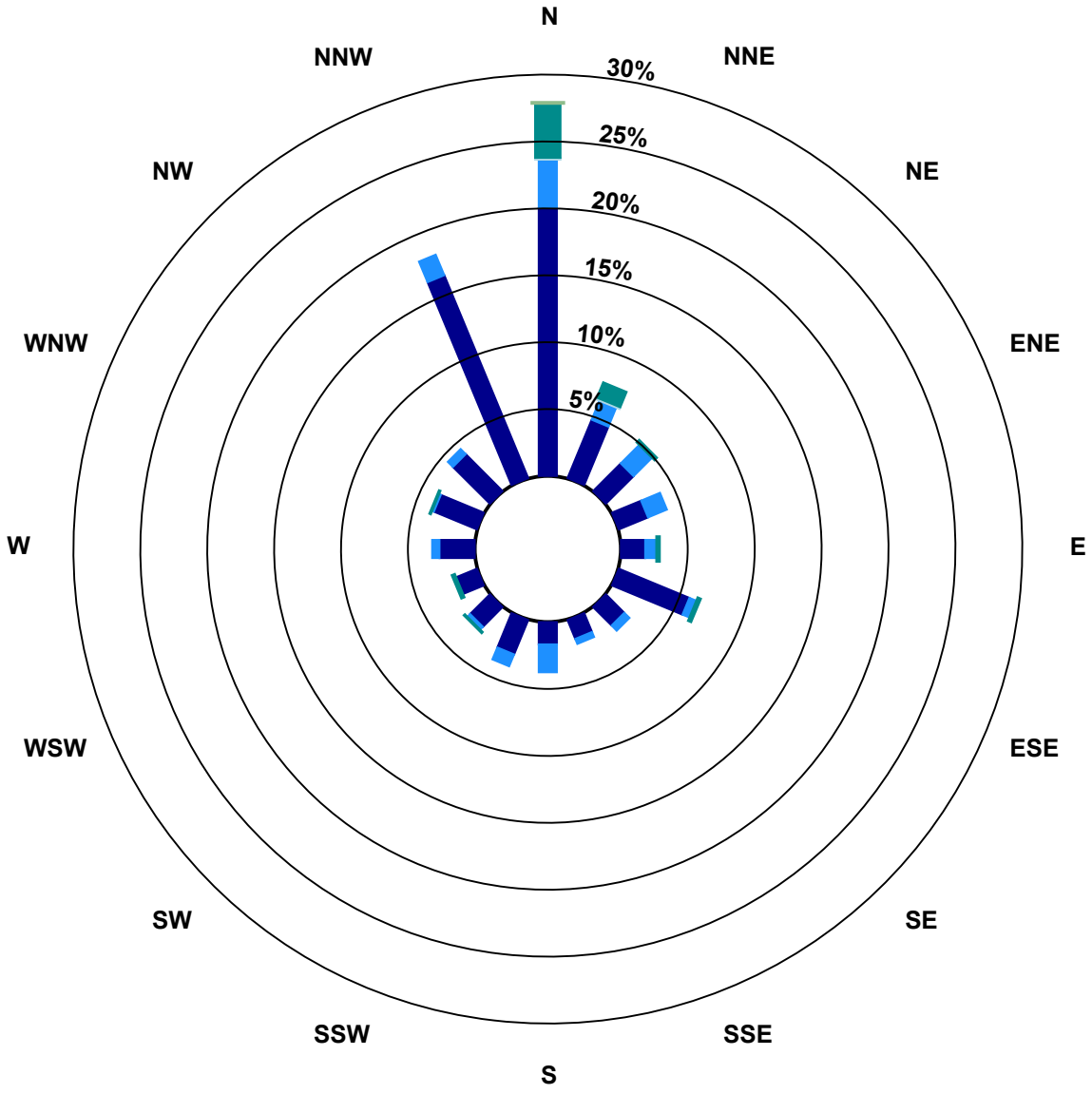
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 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: 719

Maximum Value: 28.1 C on Jun 28 16:00

Maximum Daily Average: 20.3 C on Jun 28

Minimum Value: 1.0 C on Jun 13 04:00

Minimum Daily Average: 7.4 C on Jun 2

Maximum Diurnal Average: 19.0 C at hour 17

Minimum Diurnal Average: 7.8 C at hour 4

Monthly Average: 14.05 C

Percentiles: P_1 = 2.9 P_{10} = 7.4 Q_1 = 9.6 Median = 13.0 Q_3 = 17.9 P_{90} = 22.5 P_{99} = 27.4

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

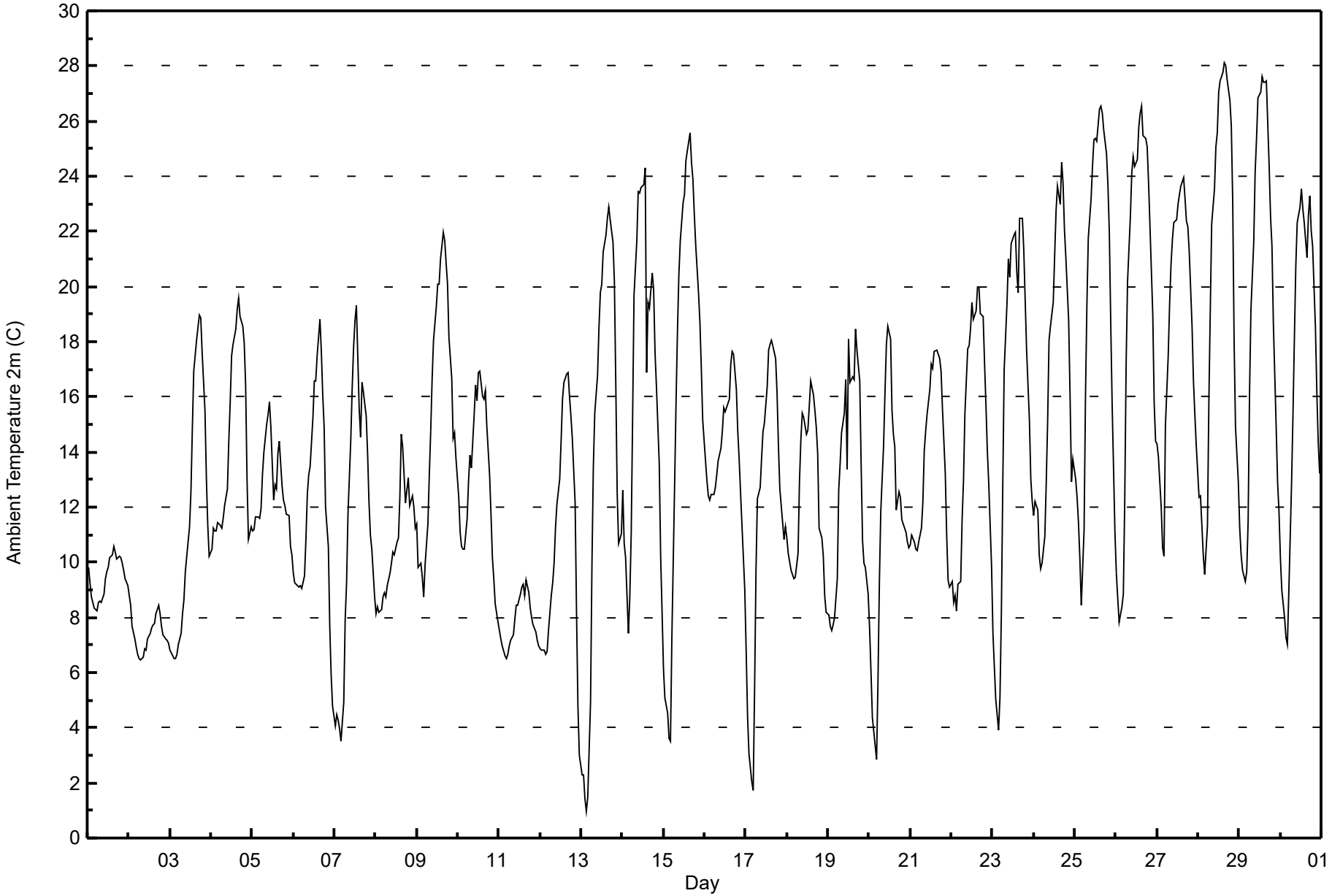
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	9.8	9.2	8.7	8.5	8.3	8.3	8.5	8.6	8.5	8.8	9.4	9.7	9.8	10.2	10.3	10.6	10.4	10.1	10.2	10.1	10.0	9.7	9.4	9.2	9.4	10.6
2-Jun	8.8	8.4	7.7	7.2	6.9	6.7	6.5	6.5	6.6	6.8	6.8	7.2	7.4	7.6	7.7	7.8	8.1	8.4	8.1	7.7	7.4	7.2	7.2	7.1	7.4	8.8
3-Jun	6.8	6.7	6.5	6.5	6.7	7.0	7.4	8.1	8.6	9.7	10.2	11.3	12.6	14.8	16.9	18.0	18.5	19.0	18.9	17.6	15.5	13.1	11.3	10.2	11.8	19.0
4-Jun	10.5	11.3	11.1	11.1	11.4	11.3	11.3	11.6	12.1	12.6	14.4	15.8	17.5	17.9	18.5	19.2	19.6	18.9	18.5	17.9	16.4	13.0	10.9	11.3	14.3	19.6
5-Jun	11.1	11.2	11.6	11.6	11.6	12.0	13.1	14.0	15.0	15.3	15.8	14.9	12.2	12.8	12.7	13.9	14.4	12.8	12.2	12.0	11.7	11.7	10.6	10.3	12.7	15.8
6-Jun	9.6	9.3	9.1	9.1	9.2	9.0	9.5	10.8	12.5	13.2	13.5	15.3	16.6	16.6	17.5	18.8	17.7	16.0	14.9	12.0	10.6	7.7	5.9	4.8	12.0	18.8
7-Jun	4.1	4.5	4.3	4.0	3.5	4.9	7.9	9.3	11.7	14.4	16.3	17.8	18.8	19.3	15.5	14.5	16.5	16.2	15.3	13.9	12.1	11.0	10.5	8.7	11.5	19.3
8-Jun	8.1	8.4	8.2	8.3	8.8	8.9	8.8	9.1	9.6	10.0	10.4	10.3	10.7	10.9	12.3	14.6	14.2	12.2	12.6	13.1	12.1	12.4	12.0	11.2	10.7	14.6
9-Jun	11.4	9.8	10.0	9.5	8.8	9.9	11.4	13.1	14.8	16.6	18.0	19.3	20.1	20.1	21.0	22.0	21.6	20.8	20.1	18.2	16.7	14.5	14.7	13.8	15.7	22.0
10-Jun	12.3	11.1	10.6	10.5	10.5	11.6	13.0	13.9	13.4	15.4	16.4	15.9	16.9	16.9	16.0	15.9	16.2	15.0	13.2	11.7	10.2	9.4	8.5	7.8	13.0	16.9
11-Jun	7.5	7.2	7.0	6.6	6.5	6.7	7.0	7.2	7.4	7.9	8.4	8.4	8.8	9.1	9.2	8.8	9.3	8.9	8.3	8.0	7.7	7.5	7.2	7.0	7.8	9.3
12-Jun	6.9	6.8	6.8	6.6	6.7	7.5	8.8	9.2	10.0	11.2	12.1	13.0	14.4	15.9	16.5	16.8	16.9	16.0	15.3	14.5	12.1	8.2	4.8	3.0	10.8	16.9
13-Jun	2.3	2.3	1.4	1.0	1.5	5.0	9.9	13.5	15.4	16.8	18.5	19.8	20.1	21.2	21.8	22.5	22.9	22.4	21.6	20.2	16.5	12.5	10.7	11.0	13.8	22.9
14-Jun	12.6	10.7	10.1	7.4	8.7	11.1	15.2	19.7	21.7	23.4	23.4	23.6	23.7	24.3	16.9	19.4	19.2	20.5	19.9	17.6	16.4	13.6	10.2	8.3	16.6	24.3
15-Jun	6.1	5.1	4.5	3.6	3.5	7.3	12.9	15.9	18.4	20.5	21.7	23.0	23.3	24.6	24.9	25.6	24.5	23.9	22.6	21.5	19.8	18.7	17.0	15.2	16.8	25.6
16-Jun	13.7	13.0	12.4	12.3	12.5	12.5	12.7	13.2	13.7	14.2	14.7	15.6	15.5	15.6	15.9	17.2	17.7	17.5	16.2	14.8	13.7	12.5	11.4	9.0	14.1	17.7
17-Jun	6.8	4.4	3.0	2.0	1.7	5.4	9.7	12.3	12.7	13.8	14.8	15.0	16.4	17.7	17.9	18.1	17.8	17.4	16.2	14.3	12.7	11.5	10.8	11.3	11.8	18.1
18-Jun	10.9	10.3	9.7	9.6	9.4	9.4	10.3	12.9	14.5	15.4	15.2	14.7	14.8	15.7	16.6	16.1	15.5	14.9	13.9	11.2	10.9	10.2	8.8	8.2	12.5	16.6
19-Jun	8.1	7.7	7.5	7.7	8.0	9.4	12.6	13.6	14.7	15.4	16.6	13.4	18.1	16.5	16.7	16.6	18.5	17.7	16.6	13.5	10.8	10.0	9.8	8.9	12.8	18.5
20-Jun	7.6	6.1	4.4	3.3	2.8	5.7	9.3	11.8	14.2	16.2	17.9	18.6	18.1	15.5	14.7	14.2	11.9	12.5	12.4	11.5	11.4	11.1	10.7	10.5	11.3	18.6
21-Jun	10.6	11.0	10.7	10.5	10.4	10.7	11.2	12.1	14.0	14.7	15.3	16.3	17.2	17.0	17.6	17.7	17.5	17.4	17.0	15.5	13.2	11.0	9.4	9.1	13.6	17.7
22-Jun	9.3	8.6	8.8	8.2	9.2	9.3	11.5	13.0	15.4	17.8	17.9	18.4	19.4	18.8	19.1	20.0	20.0	19.0	18.9	17.2	15.7	14.0	12.9	9.9	14.7	20.0
23-Jun	7.4	6.2	5.1	3.9	5.1	8.1	12.8	17.0	19.4	21.0	20.4	21.6	21.9	22.0	20.6	19.8	22.5	22.5	21.3	19.5	17.7	15.1	13.0	12.2	15.7	22.5
24-Jun	11.7	12.2	11.9	10.2	9.8	10.0	10.9	12.9	15.1	18.1	18.6	19.4	21.1	22.7	23.6	23.0	24.5	23.8	22.1	21.1	18.8	16.0	12.9	13.7	16.8	24.5
25-Jun	13.0	12.4	11.4	10.1	8.5	11.2	16.0	19.3	21.8	23.2	24.3	25.3	25.4	25.3	26.4	26.6	26.3	25.7	24.8	23.7	22.0	18.7	15.7	11.1	19.5	26.6
26-Jun	9.6	8.7	7.8	8.4	8.9	12.3	17.3	20.2	22.5	24.1	24.7	24.4	24.6	25.8	26.3	26.6	25.5	25.4	25.1	23.8	22.2	19.0	15.8	14.4	19.3	26.6
27-Jun	14.3	13.8	12.0	10.5	10.2	14.9	17.5	19.4	20.8	21.7	22.3	22.4	23.0	23.3	23.6	24.0	23.2	22.4	22.2	21.3	18.5	16.6	15.4	14.3	18.6	24.0
28-Jun	12.3	12.4	11.4	10.3	9.5	11.4	15.9	19.1	22.3	23.5	25.1	25.6	27.1	27.5	27.7	28.1	28.0	27.5	26.8	25.8	23.1	18.0	14.9	12.9	20.3	28.1
29-Jun	11.2	10.3	9.7	9.3	9.7	11.5	16.1	19.2	21.6	24.1	25.3	26.8	27.1	27.6	27.4	27.4	27.4	24.4	22.5	21.4	18.7	14.9	12.9	11.8	19.1	27.6
30-Jun	10.2	9.0	8.0	7.3	7.0	8.9	12.9	15.4	18.2	20.8	22.3	22.9	23.6	22.8	22.3	21.1	22.6	23.3	22.0	21.5	18.5	16.2	14.3	13.2	16.8	23.6
	9.5	8.9	8.4	7.8	7.8	9.3	11.6	13.4	14.9	16.2	17.0	17.5	18.2	18.5	18.5	18.8	19.0	18.4	17.7	16.4	14.8	12.8	11.3	10.3	Diurnal Average	
	14.3	13.8	12.4	12.3	12.5	14.9	17.5	20.2	22.5	24.1	25.3	26.8	27.1	27.6	27.7	28.1	28.0	27.5	26.8	25.8	23.1	19.0	17.0	15.2	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Conklin - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	202	28.06	28.06
10 - 20	392	54.44	82.50
> 20	126	17.50	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 - June 2026

Maximum Value: 100.0 % on Jun 1 01:00

Maximum Daily Average: 96.1 % on Jun 2

Minimum Value: 26.7 % on Jun 15 16:00

Minimum Daily Average: 53.6 % on Jun 25

Maximum Diurnal Average: 94.6 % at hour 4

Minimum Diurnal Average: 51.7 % at hour 17

Monthly Average: 71.78 %

Percentiles: P_1 = 29.8 P_{10} = 38.2 Q_1 = 52.2 Median = 76.3 Q_3 = 92.4 P_{90} = 98.8 P_{99} = 100.0

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-Jun	100.0	100.0	100.0	OR	OR	99.9	97.4	98.5	98.3	96.8	93.8	92.3	91.5	89.8	88.4	86.9	87.1	87.0	85.4	84.6	84.5	84.9	84.6	84.6	91.7	100.0
2-Jun	86.0	87.3	93.7	96.3	97.9	98.1	98.5	98.3	99.0	98.5	98.2	98.1	96.2	96.4	96.3	95.3	95.1	91.5	92.2	96.1	99.3	99.8	99.8	99.6	96.1	99.8
3-Jun	100.0	OR	OR	OR	OR	OR	99.8	94.9	92.1	83.6	81.0	77.0	73.4	66.6	60.7	58.1	57.8	57.4	58.4	63.9	74.7	83.9	89.4	92.5	77.1	100.0
4-Jun	93.0	91.8	92.5	93.8	90.9	88.2	86.5	83.2	80.3	77.7	69.9	64.6	59.2	57.3	55.3	52.3	51.1	55.2	58.9	60.3	66.9	83.9	93.4	90.2	74.9	93.8
5-Jun	90.5	91.4	91.5	93.7	94.5	93.5	90.1	86.5	80.5	79.7	82.4	91.2	98.9	99.4	98.3	91.9	88.0	95.8	99.2	99.2	100.0	100.0	99.6	98.1	93.1	100.0
6-Jun	97.3	96.8	95.5	95.0	93.2	90.3	86.5	77.8	67.7	64.2	63.2	55.5	53.1	52.2	47.3	42.1	46.2	58.9	58.6	74.9	82.8	95.4	98.8	100.0	74.7	100.0
7-Jun	100.0	99.9	98.6	97.9	98.3	95.6	87.5	81.7	69.7	62.4	55.9	48.7	44.1	46.1	65.2	72.9	60.8	62.8	60.9	73.8	84.1	90.1	91.9	95.1	76.8	100.0
8-Jun	99.0	98.4	99.0	99.3	98.8	98.8	99.7	99.9	100.0	99.9	96.9	95.0	93.9	89.8	81.0	69.1	69.2	85.8	87.8	80.3	83.4	73.7	74.3	78.6	89.6	100.0
9-Jun	75.6	82.1	79.9	80.8	84.6	78.9	72.9	65.4	59.4	52.0	48.4	42.7	40.2	41.6	39.5	35.3	34.8	38.2	44.6	52.3	57.7	72.0	67.7	73.0	59.2	84.6
10-Jun	80.3	85.3	89.0	89.4	92.4	88.3	79.6	75.8	84.1	75.5	67.5	65.8	56.3	56.3	56.4	64.6	59.3	63.6	73.1	75.8	77.7	77.5	79.5	83.2	74.8	92.4
11-Jun	85.6	84.6	86.9	91.2	91.0	90.6	87.9	87.4	84.3	79.7	75.3	74.7	73.1	72.2	72.2	73.7	72.6	74.8	80.5	84.1	85.7	86.2	86.6	87.6	82.0	91.2
12-Jun	89.1	89.8	91.0	92.0	91.7	86.7	75.7	69.9	66.2	55.5	48.9	43.8	40.5	35.3	33.0	33.0	32.4	33.4	35.8	39.3	46.9	63.8	79.1	86.2	60.8	92.0
13-Jun	90.0	92.2	94.5	98.7	99.7	96.1	72.2	55.3	46.5	37.8	36.5	35.5	34.3	33.3	31.7	30.7	30.1	30.3	30.7	35.0	53.4	73.8	80.0	70.8	57.9	99.7
14-Jun	60.3	68.7	70.1	84.8	78.1	68.4	56.1	42.3	36.4	28.7	28.0	29.4	30.4	29.8	70.5	47.5	50.4	46.0	46.5	55.5	66.1	79.7	91.4	95.6	56.7	95.6
15-Jun	97.6	99.5	100.0	100.0	OR	94.7	73.5	55.8	48.7	43.6	38.8	35.3	33.6	30.4	28.7	26.7	30.1	32.4	39.6	40.7	49.1	55.9	69.9	83.2	56.9	100.0
16-Jun	93.5	98.4	99.8	100.0	99.7	100.0	100.0	99.6	98.0	94.5	90.4	82.3	80.0	77.4	74.6	64.3	60.7	63.3	72.3	83.8	86.9	85.1	86.9	95.3	87.0	100.0
17-Jun	98.3	99.5	100.0	100.0	OR	OR	77.8	70.2	67.4	62.4	54.3	51.8	45.8	40.4	37.2	36.8	36.7	38.9	44.8	56.1	66.6	77.9	77.5	71.2	64.2	100.0
18-Jun	76.2	77.2	80.8	79.9	81.2	82.3	80.1	70.0	60.7	54.6	50.4	54.9	49.9	46.9	45.3	48.6	52.2	58.8	64.1	90.0	94.5	95.8	98.7	99.9	70.5	99.9
19-Jun	99.9	99.9	100.0	99.9	99.6	95.5	79.4	74.7	66.1	62.9	55.7	75.8	50.8	57.1	64.4	61.8	49.3	52.8	58.1	78.2	88.6	99.4	99.7	98.4	77.8	100.0
20-Jun	100.0	100.0	OR	OR	OR	OR	96.3	89.4	77.8	61.7	53.4	50.4	50.6	69.9	76.3	79.2	97.3	97.7	97.8	97.8	99.7	100.0	100.0	100.0	84.8	100.0
21-Jun	OR	100.0	100.0	100.0	100.0	99.9	98.8	96.5	88.9	78.7	69.9	56.3	53.0	53.7	48.5	45.1	46.8	47.5	49.6	61.2	78.8	91.2	96.0	97.0	76.4	100.0
22-Jun	96.2	96.8	90.8	93.0	87.4	91.8	85.5	78.0	67.1	58.6	52.6	46.7	43.6	48.4	46.4	42.8	43.4	46.7	48.7	57.1	64.6	72.6	77.5	90.1	67.8	96.8
23-Jun	97.9	99.4	99.9	100.0	OR	96.2	77.0	63.9	51.4	44.9	44.4	39.5	40.5	39.4	45.5	52.4	38.4	38.9	41.1	46.9	54.4	64.1	74.2	78.0	62.1	100.0
24-Jun	81.6	80.5	82.1	90.5	93.4	93.2	91.9	84.4	76.5	61.3	60.3	57.4	50.3	45.6	40.2	41.6	34.6	35.2	44.2	46.4	54.5	68.5	83.8	76.0	65.6	93.4
25-Jun	78.6	81.3	84.8	89.3	96.1	87.7	69.3	56.9	46.6	40.0	36.4	32.9	32.0	32.8	29.8	29.7	30.1	30.5	32.1	34.2	38.3	49.9	63.6	84.1	53.6	96.1
26-Jun	87.5	95.3	98.2	98.4	96.1	88.6	69.1	56.7	48.3	39.5	35.3	37.1	34.5	33.0	30.7	31.1	34.2	33.9	33.2	37.8	42.2	54.0	67.0	75.5	56.5	98.4
27-Jun	79.5	83.8	91.3	93.9	96.6	82.7	75.9	68.8	63.5	57.7	55.2	54.5	51.5	49.4	47.2	46.0	48.3	51.7	56.1	62.5	77.4	86.2	90.8	94.6	69.4	96.6
28-Jun	98.4	97.7	97.8	99.1	99.7	98.6	78.8	68.0	55.3	51.5	42.8	40.9	33.5	31.8	32.1	31.0	29.8	30.5	31.9	33.9	42.2	60.0	76.2	86.4	60.3	99.7
29-Jun	90.9	94.3	96.8	97.2	97.9	94.1	76.5	61.0	56.9	49.5	44.2	38.4	34.9	33.8	34.4	33.9	33.1	42.7	48.4	49.3	63.8	83.8	94.0	95.9	64.4	97.9
30-Jun	98.6	99.8	100.0	100.0	100.0	OR	93.7	84.9	73.9	63.1	51.4	49.5	46.5	46.9	51.1	56.5	52.4	52.0	60.0	63.3	78.0	90.0	96.2	98.0	74.2	100.0
	90.4	92.1	93.0	94.6	94.1	91.5	83.8	76.5	70.4	63.9	59.4	57.3	53.9	53.4	54.3	52.7	51.7	54.5	57.8	63.8	71.4	80.0	85.6	88.6	Diurnal Average	
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	99.9	98.2	98.1	98.9	99.4	98.3	95.3	97.3	97.7	99.2	99.2	100.0	100.0	100.0	100.0	Diurnal Maximum	

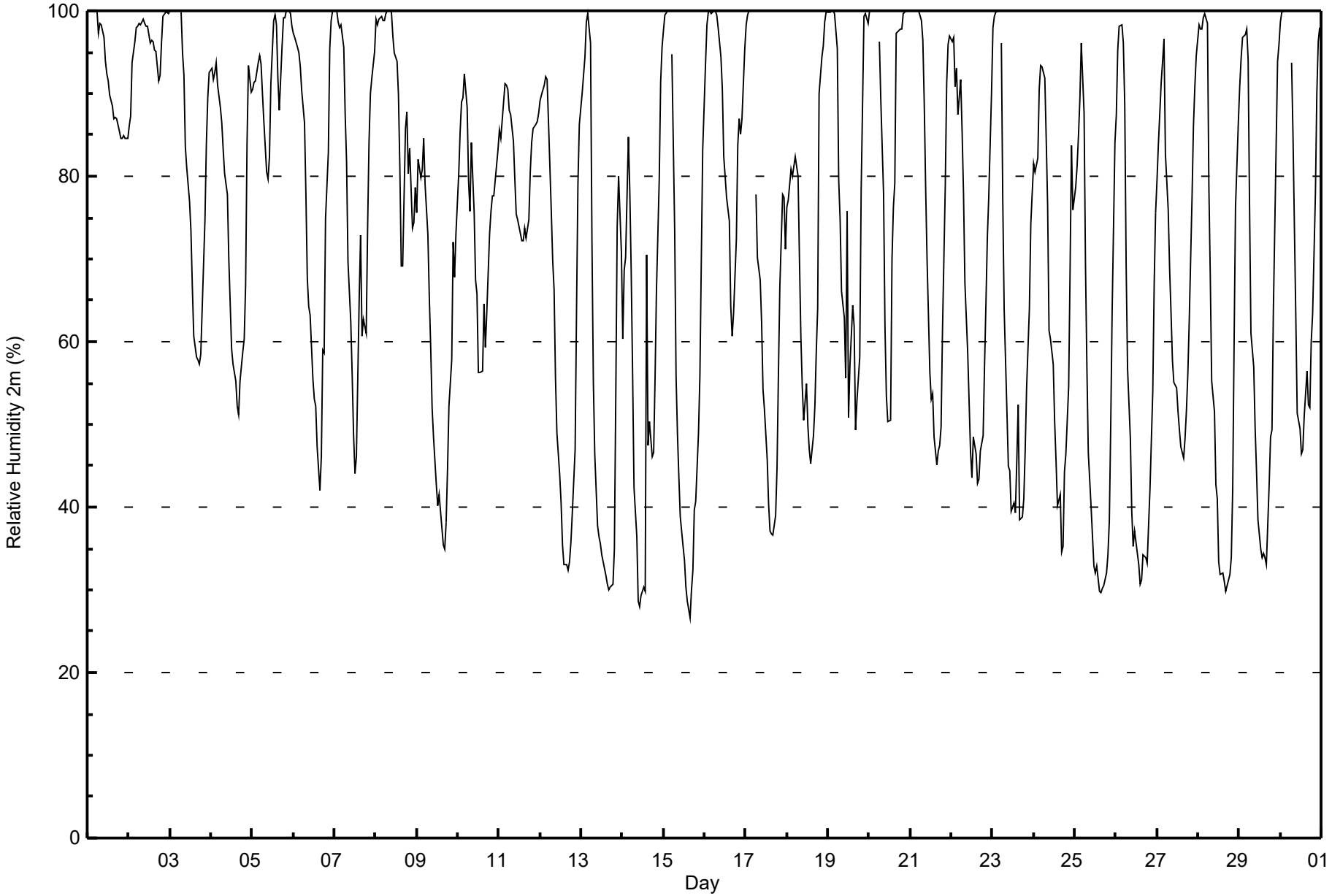
OR - Out of Range

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Conklin - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Conklin - June 2026

Maximum Speed: 18 km/h on Jun 12 15:00

Maximum Daily Speed Average: 12.6 km/h on Jun 1

Minimum Speed Value: 1 km/h on Jun 7 07:00

Minimum Daily Speed Average: 1.2 km/h on Jun 7

Maximum Diurnal Speed Average: 4.3 km/h at hour 11

Minimum Diurnal Speed Average: 1.7 km/h at hour 24

Monthly Average Velocity: 2.6 km/h 1.7 deg

Percentiles: $P_1 = 1$ $P_{10} = 2$ $Q_1 = 3$ Median = 5 $Q_3 = 9$ $P_{90} = 12$ $P_{99} = 16$

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-Jun	NNW10	NNW12	NNW9	NNW6	NNW7	NNW10	NNW11	NNW13	N14	N14	N13	N15	N14	N13	N15	N14	N14	N16	N15	N15	N14	N13	N13	N14	N12.6	N16
2-Jun	N12	NNE12	N10	N11	N10	N11	N12	N13	N12	N11	NNE12	NNE12	N12	N10	N9	N10	NNE11	N11	N9	NNE8	NNE6	N7	N6	N5	N10.0	N13
3-Jun	N5	N4	N2	N3	N2	N3	NNE3	E3	ESE5	ESE5	ESE4	ESE2	WNW4	SSW3	ESE5	SE5	ESE7	ESE6	E6	ESE6	ESE8	E6	ESE6	SE7	E2.9	ESE8
4-Jun	SSE7	SSE7	NE2	NE1	SSW4	S6	S6	S9	S10	S8	SSW8	S10	S9	SSW9	SSW9	SSW7	S6	S7	SSW6	S7	ESE2	N2	SW1	S5	S5.6	S10
5-Jun	S5	SSW3	SW1	NW1	E2	ENE2	NE2	NE3	E3	ENE4	NNE3	NNW4	NNW6	NNW5	N6	N5	N6	NNW3	NE4	NNE3	NNE3	W1	NNW7	NW7	N2.2	NNW7
6-Jun	NW7	WNW7	W8	WSW10	WSW11	WSW13	WSW13	W13	W15	W14	WNW13	W16	W13	W11	W12	WNW10	WNW6	NW5	NW5	W4	NNW2	NE2	N2	NNE2	W8.1	W16
7-Jun	NE2	SE4	SSE3	SSW4	SSW4	SSE3	SW1	NE2	NNE3	NNW4	N4	E6	ESE9	ESE10	ESE12	ENE5	WSW6	NNW5	NW2	N3	NNW3	N2	WSW4	NNW4	E1.2	ESE12
8-Jun	NNW4	N2	NNW3	NNW2	NW4	W4	SW7	NW3	NNW4	NW6	NW8	WNW10	WNW11	W13	W11	WNW10	WNW9	WNW7	SW7	W8	W6	WSW11	SW10	SW9	W5.9	W13
9-Jun	W6	WNW4	WNW6	WNW7	W6	NW5	WNW6	NW5	NNW5	NNW6	NW4	WNW5	WNW5	NW3	NW3	WNW4	NW4	W5	NW3	WNW3	N4	NNW3	SW4	NE1	WNW3.9	WNW7
10-Jun	N3	N3	N3	N2	N2	N3	N4	N5	N4	NNW7	NNW11	NNW14	NNW13	NNW10	NNW13	NNW8	NNW11	N11	N12	N11	NNW10	NNW10	N11	NNW7	NNW7.8	NNW14
11-Jun	NNW6	NNW6	NNW6	NNW6	NNW7	NNW7	NNW7	NNW7	NNW8	NNW10	NNW9	NNW11	NNW12	NNW10	NNW9	NNW10	NNW9	NNW10	NNW9	NNW7	NNW9	N11	NNW10	NNW6	NNW8.4	NNW12
12-Jun	NNW6	NNW5	NNW6	NNW5	NNW5	NNW9	NNW12	NNW12	NNW13	NNW16	NNW17	NNW17	NNW17	NNW18	NNW18	NNW17	N15	NNW15	NNW15	N12	NNW6	N2	N4	N4	NNW11.1	NNW18
13-Jun	N4	N3	N3	N1	N1	NNE2	N3	NNW5	NNW4	N5	NW5	NNW6	WNW3	NNW5	WNW4	N7	NNW4	W6	WNW4	N3	N1	NE1	S4	SSW6	NNW2.6	N7
14-Jun	SW7	SSW5	SSW4	E3	SE4	ESE3	SE2	NNW5	NW6	NW7	NW7	NNW9	NNW10	NNW10	N8	N13	NNW4	NNW4	N6	N3	ENE3	NW2	NNE2	NNE2	NNW3.1	N13
15-Jun	N1	N1	NNE1	NNE2	NNE1	NE2	NNE2	N3	NNE2	E4	ESE5	ENE5	S1	NW5	W6	W6	W4	W4	SW2	SSW4	N1	NW7	NW5	WNW6	NW1.4	NW7
16-Jun	NW2	N3	N2	W2	S2	NNE3	NE2	NNE2	NNE3	ENE4	NE5	ENE7	ENE6	NE6	NNE6	N7	N5	NNW3	NNW4	NNW4	W1	NNW4	NNW5	N3	NNE3.0	N7
17-Jun	N2	N2	N3	N3	N2	NNW4	N7	N8	N11	N12	N12	N9	NNE8	NNE8	NNW11	N10	N7	NNW6	N5	N2	N2	N2	N3	NNW5	N5.9	N12
18-Jun	NNW5	NNW4	N3	NW3	NNW4	NNW5	NNW4	NW6	NW7	NNW10	NNW17	N17	NNW16	NNW16	NNW12	NNW10	N9	N8	NNW6	N4	NW2	N1	N1	NNE1	NNW7.0	NNW17
19-Jun	N1	N1	N1	NNW1	NE2	N2	NNW4	NNW4	NNW5	NNW5	NNW6	NW3	NNW5	WNW2	SSW7	SW12	SW6	WSW7	WSW4	NNW5	ENE5	N3	NNE3	N3	NW2.0	SW12
20-Jun	N1	N2	N3	N1	N2	N3	N5	N6	N8	ENE7	ENE8	ENE7	ENE7	E7	N7	SSW4	WSW2	N4	N5	N2	N3	N4	N3	N3	NNE3.1	ENE8
21-Jun	N4	N6	N5	N5	N7	N7	N6	NNE5	NNE6	NE7	NE6	E10	E11	ESE12	E10	E9	ENE6	NE6	NE5	NNE3	N3	N2	N2	N2	NE4.6	ESE12
22-Jun	NNE2	NE1	S4	ESE2	NW3	NNE2	N2	N4	NNE3	N5	ENE5	E7	ESE10	ESE9	E7	NE5	E8	ESE5	WSW5	WNW5	NNW2	SSW6	SW5	N2	E1.7	ESE10
23-Jun	N1	NNE2	N2	NNE1	NE2	NE1	NE3	N3	NNW3	NNW4	SW4	SSW5	NNW4	ENE3	NNW7	NNW1	SW6	SW8	SW9	SSW8	S6	S5	S6	S6	SW1.4	SW9
24-Jun	S6	SSW6	SSW1	NE2	ENE2	NE2	NNE1	ESE3	SSE3	ESE4	NE3	ENE4	ESE8	ESE11	SE10	SSE8	SSW8	SSW5	SE9	SE9	SE4	ESE1	NW2	WSW5	SE3.1	ESE11
25-Jun	SW4	SSW5	S5	SE4	ESE4	SSW2	S7	S8	SSE8	S10	SSE11	S11	S10	S9	SSE11	SSE10	SSE12	SSE12	SSE12	SSE11	SSE8	SE6	SE5	NE1	SSE7.2	SSE12
26-Jun	N2	NNW4	N3	NE2	NNE2	ENE2	E5	E7	ESE11	ESE14	SE14	SE12	SE13	ESE11	SE13	ESE12	SE16	SE16	SE14	SE12	ESE8	ESE4	ENE2	ENE3	ESE7.3	SE16
27-Jun	ENE3	NE3	NNE2	N3	N4	NNE4	ENE5	E10	ESE12	ESE15	ESE15	ESE15	ESE14	ESE16	ESE15	ESE14	ESE13	ESE11	E6	NE3	N3	N2	N1	N2	E6.7	ESE16
28-Jun	N2	N4	N3	N3	N3	N3	N7	N8	NE11	NNE14	NE14	NNE16	NE16	ENE15	E15	ENE13	ENE12	NE11	NE9	NNE9	N5	NNW4	N2	N3	NE7.4	NNE16
29-Jun	N3	N2	N2	NNE2	N1	N2	N3	N5	N6	N9	N11	N10	NNE11	NNE12	N11	N11	N11	ESE14	ESE7	E5	NNE3	N2	N2	N2	NNE4.9	ESE14
30-Jun	N3	N2	N1	N1	N1	N2	N5	N4	N6	N7	NE10	NE8	NNE9	NNE8	E4	SW5	WSW4	WSW3	WNW2	NNE2	N1	N1	NNE1	NNE2	N2.6	NE10
	NNW2.0	NNW2.0	NNW2.1	NNW1.9	NNW1.9	NNW2.4	NNW2.8	N3.5	N3.5	N4.3	NNE4.3	NNE3.9	NNE3.9	NNE3.7	NNE3.1	N2.8	N2.1	N1.9	N2.0	N1.8	NNE2.1	N2.0	NNW1.8	NNW1.7	Diurnal Average	
	N12	NNW12	N10	N11	WSW11	WSW13	WSW13	NNW13	W15	NNW16	NNW17	NNW17	NNW17	NNW18	NNW18	NNW17	SE16	N16	N15	N15	N14	N13	N13	N14	Diurnal Maximum	

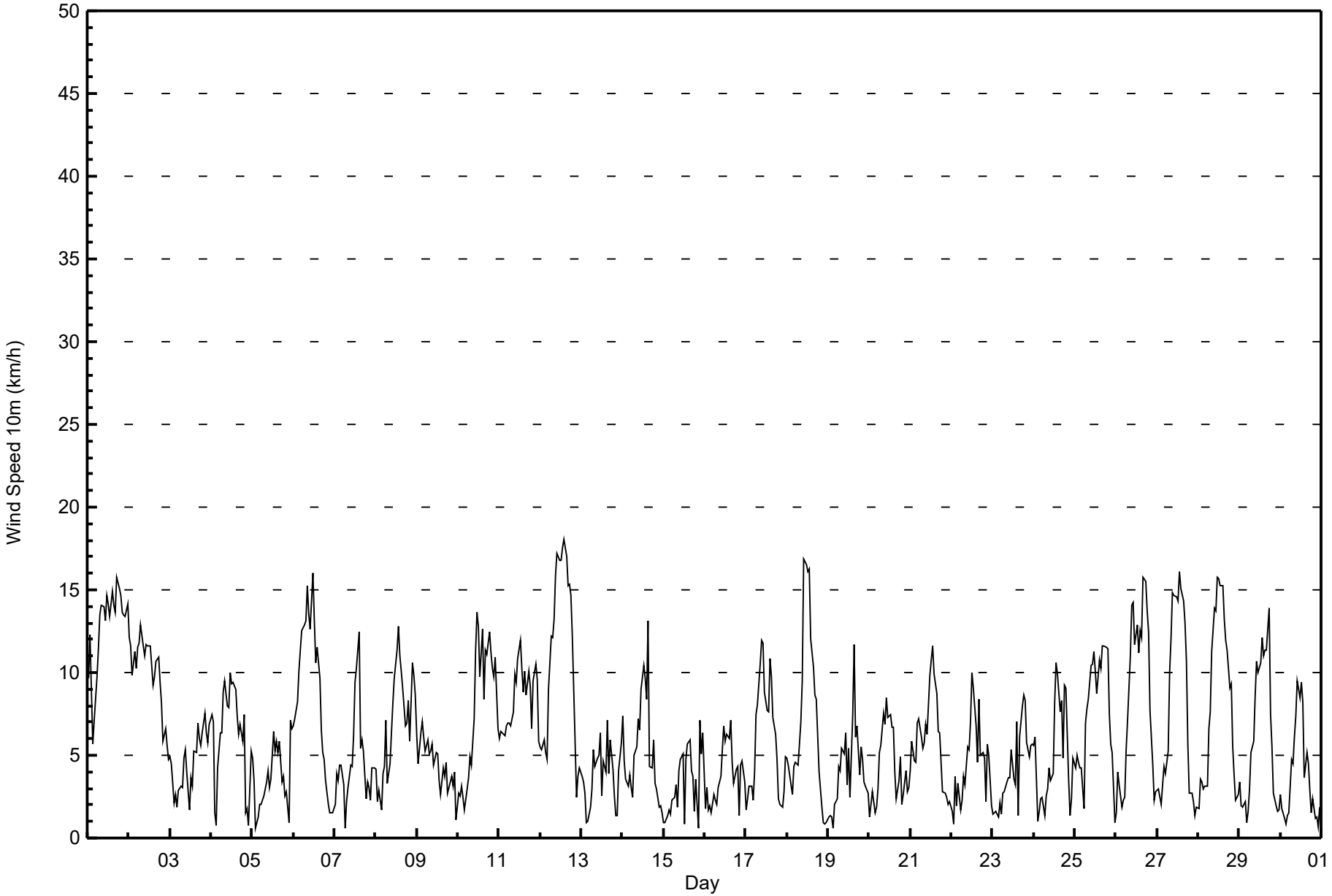
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Conklin - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	372	51.67	51.67
6 - 11	250	34.72	86.39
12 - 19	98	13.61	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: 720

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Conklin - June 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	130	36	26	18	6	15	7	3	8	15	8	7	8	12	22	51	372
6 - 11	44	13	9	7	14	16	5	9	19	12	9	5	9	13	10	56	250
12 - 19	27	6	2	3	1	16	6	3	0	0	1	2	6	2	0	23	98
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	201	55	37	28	21	47	18	15	27	27	18	14	23	27	32	130	720

Total Number of Valid Hours: 720

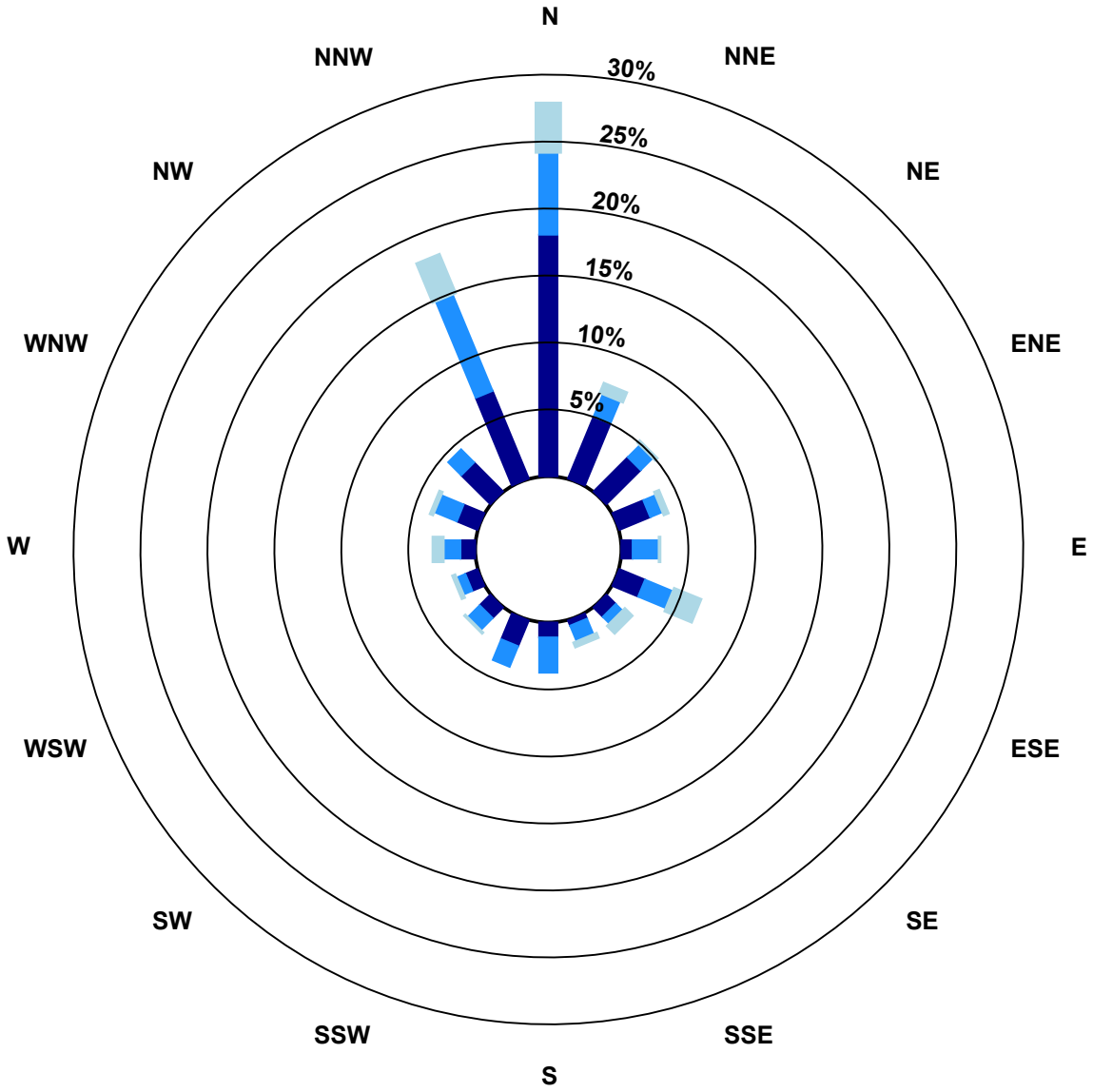
Total Number of Hours: 720

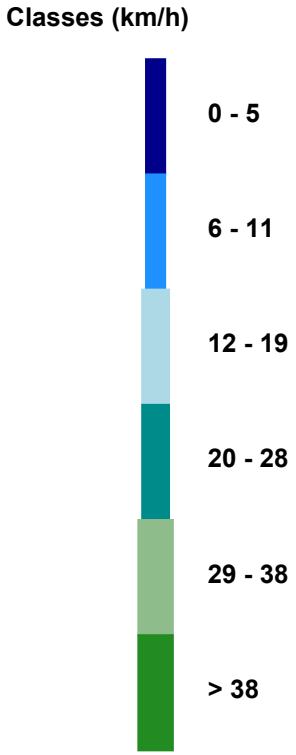
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Conklin





Total Number of Valid Hours: 720

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

Maximum Value: 8 km/h on Jun 6 09:00

Minimum Value: 0 km/h on Jun 26 05:00

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:	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-Jun	3	5	4	3	3	3	3	4	5	4	5	5	5	5	5	5	5	5	5	5	4	4	4	5	5
2-Jun	5	4	3	4	4	4	4	4	4	4	4	4	4	3	3	3	3	4	3	3	2	2	2	1	5
3-Jun	1	1	1	1	1	1	1	1	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	1	2
4-Jun	2	3	1	1	2	2	2	3	3	3	3	3	3	3	3	3	2	2	2	2	1	1	1	1	3
5-Jun	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	1	1	2	3	3	3
6-Jun	3	3	4	4	4	5	5	6	8	6	7	7	6	6	5	4	5	3	3	2	1	1	1	1	8
7-Jun	1	1	1	1	1	1	1	1	1	2	3	3	3	3	6	3	5	2	1	1	1	1	4	2	6
8-Jun	2	2	2	1	2	2	2	2	2	3	4	4	5	6	5	5	4	3	2	4	5	3	3	3	6
9-Jun	3	3	3	3	3	3	3	2	2	2	3	3	3	2	2	3	2	2	1	2	2	1	1	2	3
10-Jun	1	1	1	1	1	1	1	2	2	3	5	6	5	5	5	4	5	4	4	3	3	3	4	3	6
11-Jun	3	3	3	2	3	2	3	3	3	4	4	4	4	4	3	4	3	4	4	2	4	4	4	2	4
12-Jun	2	2	2	2	2	4	4	4	5	6	6	6	6	6	6	6	5	5	5	4	3	1	1	1	6
13-Jun	1	1	1	1	1	1	1	2	2	3	2	3	3	3	3	3	2	3	2	1	1	1	1	1	3
14-Jun	2	2	2	1	1	1	1	2	2	4	3	4	4	6	5	6	2	2	5	2	3	1	1	1	6
15-Jun	1	1	1	1	1	1	1	1	1	2	3	4	2	3	3	4	3	1	2	2	4	4	2	3	4
16-Jun	3	1	1	2	2	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3
17-Jun	1	1	1	1	1	1	3	2	4	4	4	4	3	4	5	4	3	2	2	1	1	1	1	3	5
18-Jun	2	2	2	1	2	2	2	2	4	6	6	5	5	6	5	4	3	3	4	4	1	1	1	1	6
19-Jun	1	1	1	1	1	1	2	2	3	2	3	3	3	3	4	5	2	2	2	3	2	1	2	1	5
20-Jun	1	1	1	1	1	2	1	2	2	3	3	3	3	4	2	5	2	1	2	1	1	1	1	1	5
21-Jun	2	2	1	1	2	2	2	2	2	3	3	4	4	4	4	4	2	2	2	1	1	1	1	1	4
22-Jun	1	1	1	1	2	2	1	1	1	2	3	3	4	3	3	2	3	3	2	3	1	2	2	1	4
23-Jun	1	1	1	1	1	1	0	1	1	2	2	2	2	2	3	2	3	3	3	2	1	1	1	1	3
24-Jun	1	2	2	1	1	1	1	1	2	2	1	2	3	3	3	3	3	2	3	3	1	2	1	1	3
25-Jun	1	1	1	1	1	2	2	2	3	4	4	4	5	4	4	4	4	4	4	3	2	1	1	1	5
26-Jun	1	1	1	1	0	1	2	3	4	4	4	4	4	4	4	4	5	4	4	3	3	1	1	2	5
27-Jun	1	2	1	1	1	1	2	3	4	5	5	4	5	5	5	5	4	4	2	1	1	2	2	1	5
28-Jun	1	2	1	1	1	1	2	2	5	6	5	6	6	6	6	5	5	5	4	3	2	1	1	1	6
29-Jun	1	2	1	1	1	1	2	2	2	2	3	4	4	4	4	4	4	7	3	2	1	1	1	1	7
30-Jun	1	1	1	1	1	1	1	1	2	3	4	3	4	4	2	1	1	2	1	2	1	1	1	1	4
	5	5	4	4	4	5	5	6	8	6	7	7	6	6	6	6	5	7	5	5	5	4	4	5	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Conklin - June 2026

Direction of Maximum Speed: 347 deg on Jun 12 15:00
Direction of Maximum Daily Speed Average: 353.7 deg on Jun 1

Direction of Minimum Speed: 218 deg on Jun 7 07:00

Direction of Minimum Daily Speed Average: 1.2 deg on Jun 7

Monthly Average Direction: 1.7 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-Jun	342	343	344	339	338	347	348	347	351	352	355	354	354	357	359	357	354	359	1	358	358	360	359	1	353.7
2-Jun	8	16	0	1	3	2	5	9	9	10	12	14	11	10	11	11	13	5	7	13	13	9	8	10	8.6
3-Jun	1	359	360	359	356	7	19	94	107	113	105	104	288	201	120	133	111	107	97	106	115	87	120	145	97.6
4-Jun	158	147	34	43	205	180	181	184	185	177	199	171	183	195	211	198	178	180	192	188	123	6	233	183	183.3
5-Jun	186	212	229	315	79	70	46	34	94	68	17	333	336	339	353	1	6	336	55	15	19	263	333	305	358.8
6-Jun	316	298	268	254	247	252	253	270	275	281	284	268	260	269	281	286	291	324	319	262	339	34	355	22	275.3
7-Jun	48	137	166	206	201	167	218	37	32	335	10	85	104	108	113	71	247	330	316	351	347	360	241	340	85.0
8-Jun	342	3	334	336	325	263	232	324	340	323	308	300	296	280	281	289	289	287	236	266	265	237	235	230	280.5
9-Jun	259	282	290	299	281	307	289	313	337	329	322	294	290	321	312	298	315	270	307	301	6	344	214	37	300.9
10-Jun	3	0	358	360	6	357	355	353	351	348	341	342	336	344	348	338	335	349	357	352	348	348	349	344	346.9
11-Jun	338	336	338	339	341	340	343	338	338	341	339	347	345	340	340	342	337	341	339	341	348	349	346	341	341.6
12-Jun	341	341	338	340	341	337	343	346	343	346	344	347	346	348	347	343	349	347	348	351	345	360	360	357	345.8
13-Jun	356	357	359	3	2	12	351	340	327	351	322	334	292	330	288	350	343	268	295	350	5	54	181	193	328.7
14-Jun	218	195	213	86	143	112	141	338	313	310	318	337	340	341	353	357	348	334	3	351	78	304	26	16	339.5
15-Jun	3	4	19	13	22	36	14	6	25	79	115	64	170	319	273	272	278	267	229	210	7	307	312	283	317.4
16-Jun	313	2	5	268	186	27	36	16	19	65	50	78	65	39	17	9	360	342	342	344	274	348	347	354	16.4
17-Jun	355	360	358	358	360	348	349	354	354	359	6	6	17	21	348	359	2	347	350	359	357	1	356	340	358.3
18-Jun	341	345	349	317	341	337	327	324	318	331	348	352	348	347	342	340	358	358	345	352	320	1	5	13	343.7
19-Jun	5	352	350	330	37	358	336	342	335	343	347	305	342	286	197	216	232	249	252	331	60	352	25	5	311.9
20-Jun	2	1	354	4	356	352	353	1	4	64	73	64	60	82	360	199	238	353	360	8	1	352	353	352	22.5
21-Jun	352	3	3	2	4	7	5	13	28	41	50	91	98	105	88	100	67	52	39	14	354	0	5	4	46.9
22-Jun	27	47	174	111	311	14	7	352	19	358	63	95	103	111	91	42	100	123	256	289	341	192	221	7	80.7
23-Jun	11	13	357	25	44	41	45	353	347	346	229	203	332	58	340	328	226	234	217	204	184	189	191	184	232.1
24-Jun	182	196	213	55	73	36	21	107	155	110	53	62	106	112	126	156	207	197	138	144	128	113	326	248	138.1
25-Jun	215	194	175	143	117	207	181	172	166	172	165	190	182	180	166	156	151	149	152	148	153	139	140	38	164.0
26-Jun	356	348	354	38	24	65	93	97	107	115	125	144	138	118	124	105	127	134	128	124	117	107	57	58	116.0
27-Jun	60	52	18	1	350	23	62	98	106	104	110	108	103	109	107	113	115	111	93	54	5	353	356	358	96.2
28-Jun	0	349	352	355	351	350	350	356	50	17	51	30	53	61	80	75	63	50	37	17	0	346	352	351	37.3
29-Jun	351	0	2	20	357	5	353	350	350	4	3	9	13	13	10	9	8	109	105	95	20	358	0	357	18.7
30-Jun	354	358	356	0	2	358	351	351	353	6	48	38	26	14	96	222	241	242	295	20	7	11	24	30	10.5
	338.0	346.6	338.1	342.7	340.7	346.7	345.9	354.5	2.8	9.4	14.2	14.1	17.2	23.8	20.0	6.3	5.1	6.2	8.5	5.5	14.0	352.1	337.6	335.1	
	Diurnal Average																								

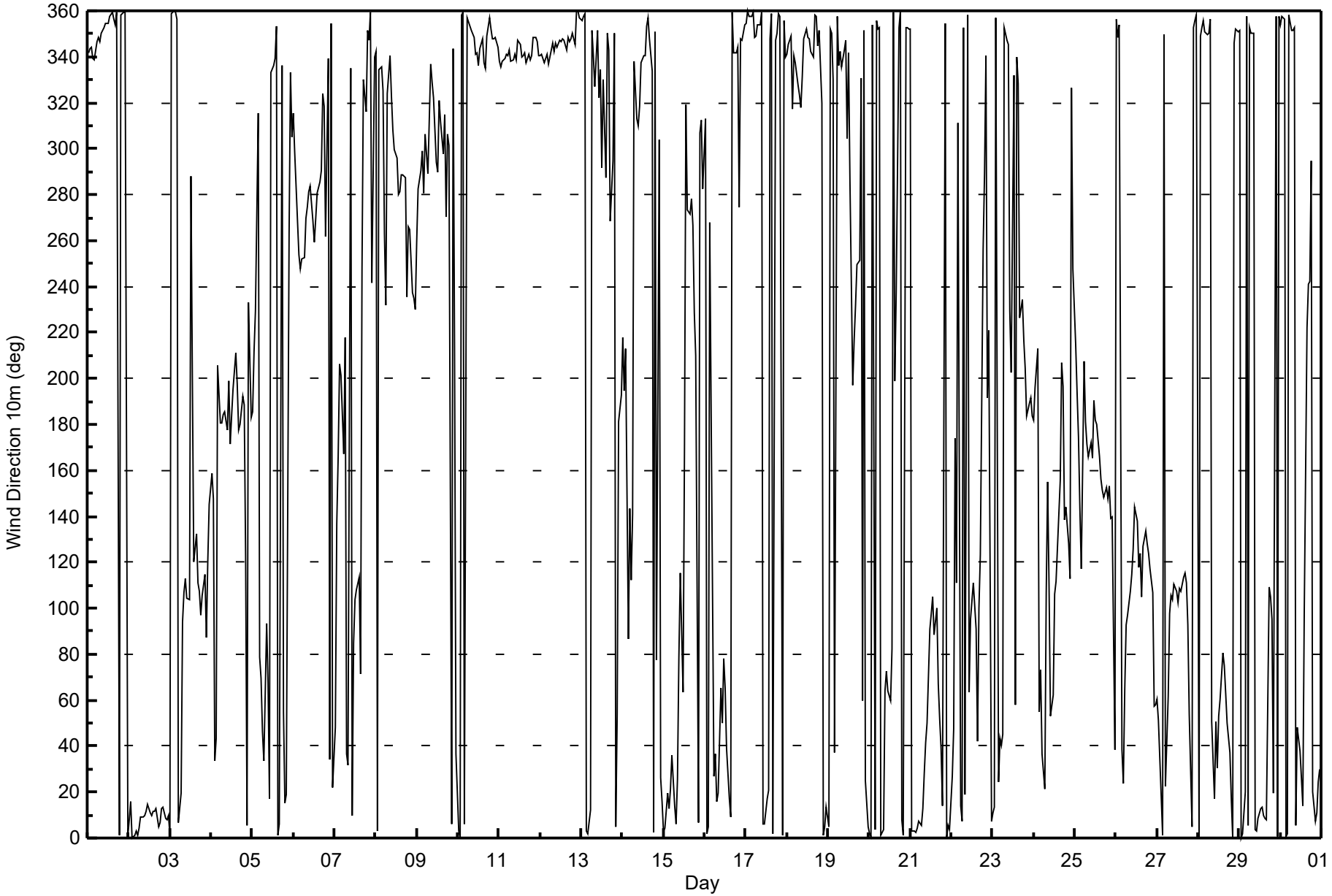
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Conklin - June 2026



Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 119 deg on Jun 5 03:00

Minimum Value: 2 deg on Jun 18 23:00

Percentiles: P_1 = 6 P_{10} = 13 Q_1 = 20 Median = 30 Q_3 = 45 P_{90} = 64 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-Jun	18	19	17	19	19	18	17	17	18	18	19	18	18	18	19	20	20	19	19	18	18	18	19	20	20
2-Jun	21	22	18	19	20	18	18	20	20	21	19	21	22	21	21	20	21	21	20	19	18	17	18	17	22
3-Jun	14	11	8	11	8	13	25	55	44	42	71	88	52	80	56	57	36	43	36	25	23	27	27	13	88
4-Jun	21	40	39	93	69	38	38	33	28	37	46	39	42	40	40	44	57	41	44	28	102	34	96	43	102
5-Jun	33	62	119	90	70	73	33	38	47	33	26	47	31	35	16	23	22	40	42	34	28	93	33	51	119
6-Jun	52	47	45	32	31	33	36	44	46	47	49	42	49	55	49	51	53	39	45	63	66	46	43	30	66
7-Jun	41	48	49	45	45	66	96	58	58	64	64	45	30	30	39	49	72	37	59	12	25	10	74	30	96
8-Jun	34	71	44	43	45	55	30	44	29	45	51	51	48	44	46	51	45	50	30	45	51	22	24	25	71
9-Jun	49	54	51	48	45	58	55	53	38	50	69	66	67	67	85	62	67	52	53	54	29	51	57	83	85
10-Jun	25	10	10	9	32	13	15	16	19	24	24	23	26	26	21	27	24	21	18	20	18	19	17	19	32
11-Jun	22	23	22	21	19	21	20	24	22	23	23	21	21	24	24	22	25	21	21	19	21	18	19	21	25
12-Jun	20	19	20	19	23	23	22	22	23	21	23	20	21	22	22	23	21	21	20	18	16	10	8	9	23
13-Jun	10	8	8	4	20	33	27	32	52	69	56	53	89	68	80	43	76	54	54	23	9	72	59	27	89
14-Jun	26	60	95	49	62	70	68	43	49	54	54	30	27	35	23	21	21	39	27	15	53	71	33	26	95
15-Jun	7	7	16	28	10	32	27	19	80	65	68	76	107	71	63	64	63	62	97	84	80	56	48	41	107
16-Jun	79	21	8	72	96	36	40	21	21	30	31	36	40	32	28	26	29	29	30	30	93	31	20	16	96
17-Jun	9	13	9	10	7	16	17	21	22	22	26	26	33	49	27	29	25	21	18	7	11	8	14	31	49
18-Jun	41	30	21	47	31	36	50	46	49	45	22	20	22	22	28	23	25	21	18	28	42	9	2	7	50
19-Jun	13	22	58	66	22	21	33	35	37	34	40	67	72	85	57	37	55	43	62	49	45	9	39	16	85
20-Jun	10	10	10	5	14	11	16	20	22	45	41	47	38	47	20	88	75	17	15	13	9	12	11	11	88
21-Jun	13	15	16	15	19	17	16	19	27	30	31	30	32	25	35	28	33	36	27	19	9	7	5	11	36
22-Jun	57	83	66	79	61	58	16	16	38	29	58	39	34	30	35	49	35	62	47	45	59	36	47	17	83
23-Jun	14	12	34	14	63	64	24	41	40	58	69	64	51	51	27	74	48	37	29	21	34	35	18	21	74
24-Jun	31	36	94	77	43	40	18	73	77	53	27	35	36	30	36	48	45	70	20	21	61	76	49	34	94
25-Jun	43	32	31	35	23	101	28	31	37	37	41	35	44	49	45	46	34	29	25	22	18	13	24	78	101
26-Jun	57	8	15	51	26	53	28	31	29	26	27	28	31	31	32	25	21	22	21	22	23	33	42	36	57
27-Jun	40	35	19	21	12	30	34	27	25	24	24	25	26	24	23	24	23	24	34	35	13	7	5	4	40
28-Jun	8	13	10	10	11	11	16	20	41	28	41	34	39	38	37	40	42	40	35	22	19	11	10	13	42
29-Jun	15	10	31	41	54	12	16	18	18	24	23	31	27	30	28	24	26	48	34	44	33	9	7	10	54
30-Jun	8	8	6	4	8	10	12	16	22	32	40	37	34	33	66	34	44	72	61	32	12	20	15	26	72
	79	83	119	93	96	101	96	73	80	69	71	88	107	85	85	88	76	72	97	84	102	93	96	83	
	Diurnal Maximum																								

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS22
JANVIER
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JANVIER (AMS22)
JUNE 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	35	36	99.86	-	-	1.2	0	0.5	0
TRS(ppb) Average	676	34	44	98.61	0.7	0	0.9	-	0.3	-
THC(ppm) Average	684	35	36	99.86	-	-	2.5	-	2.1	-
NMHC(ppm) Average	684	35	36	99.86	-	-	0.048	-	0.003	-
CH4(ppm) Average	684	35	36	99.86	-	-	2.5	-	2.1	-
O3 (ppb) Average	685	33	35	99.72	-	-	60.1	0	36.6	-
NO2 (ppb) Average	682	35	38	99.58	-	-	7.1	0	1.4	-
NO (ppb) Average	682	35	38	99.58	-	-	3.3	-	0.4	-
NOX (ppb) Average	682	35	38	99.58	-	-	7.5	-	1.7	-
PM2.5 (ug/m3) Average	700	0	20	97.22	-	-	74.1	0	18.8	0
Temperature 2 m (C) Average	720	0	0	100	-	-	28.2	-	21.1	-
Relative Humidity (%) Average	720	0	0	100	-	-	99.4	-	93.4	-
Wind Speed 20 m (km/h) Average	720	0	0	100	-	-	23	-	15	-
Wind Direction 20 m (deg) Average	720	0	0	100	-	-	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JANVIER (AMS22)
JUNE 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	0.12	0.2	-	0	0	0	0.1	0.2	0.3	1.2
TRS (ppb) Average	676	0.17	0.1	-	0.1	0.1	0.1	0.2	0.2	0.3	0.9
THC (ppm) Average	684	2.04	0.1	-	2	2	2	2	2.1	2.1	2.5
NMHC(ppm) Average	684	0	0.002	-	0	0	0	0	0	0	0.048
CH4(ppm) Average	684	2.04	0.1	-	2	2	2	2	2.1	2.1	2.5
O3 (ppb) Average	685	27.3	10.1	-	4.8	14.5	19.8	26.7	35.1	41.7	60.1
NO2 (ppb) Average	682	0.82	0.6	-	0.1	0.3	0.4	0.6	1.1	1.5	7.1
NO (ppb) Average	682	0.2	0.3	-	0	0	0.1	0.1	0.2	0.4	3.3
NOX (ppb) Average	682	1.02	0.8	-	0.1	0.3	0.5	0.8	1.3	1.9	7.5
PM2.5 (ug/m3) Average	700	5.92	10	-	0.4	1.5	2.4	3.5	4.9	7.9	74.1
Temperature 2 m (C) Average	720	15.07	5.3	-	4.4	8.5	10.9	14.3	18.8	23.3	28.2
Relative Humidity (%) Average	720	69.29	21.3	-	28.2	37.5	50.2	72.6	88.9	95.6	99.4
Wind Speed 20 m (km/h) Average	720	7.8	4	-	1	3	5	7	10	14	23
Wind Direction 20 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JANVIER (AMS22)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
NO2	02 Jun 2026 12:00	02 Jun 2026 14:00	3	Maintenance - WBEA internal audit
SO2	02 Jun 2026 14:00	02 Jun 2026 14:00	1	Maintenance - WBEA internal audit
TRS	02 Jun 2026 12:00	02 Jun 2026 15:00	4	Maintenance - WBEA internal audit
TRS	03 Jun 2026 11:00	03 Jun 2026 16:00	6	Maintenance - WBEA internal audit
THC/NMHC/CH4	03 Jun 2026 15:00	03 Jun 2026 15:00	1	Maintenance - WBEA internal audit
O3	03 Jun 2026 13:00	03 Jun 2026 14:00	2	Maintenance - WBEA internal audit
PM2.5	03 Jun 2026 12:00	03 Jun 2026 12:00	1	Maintenance - WBEA internal audit
PM2.5	29 Jun 2026 16:00	30 Jun 2026 10:00	19	DAS Failure - data not recorded

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Janvier - June 2026

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

Maximum Value: 1.2 ppb on Jun 18 14:00

Maximum Daily Average: 0.5 ppb on Jun 18

Minimum Value: 0.0 ppb on Jun 1 02:00

Minimum Daily Average: 0.0 ppb on Jun 20

Maximum Diurnal Average: 0.2 ppb at hour 14

Minimum Diurnal Average: 0.1 ppb at hour 2

Monthly Average: 0.12 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} = 0.8

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

Z - zerospan C - Calibration M - Maintenance

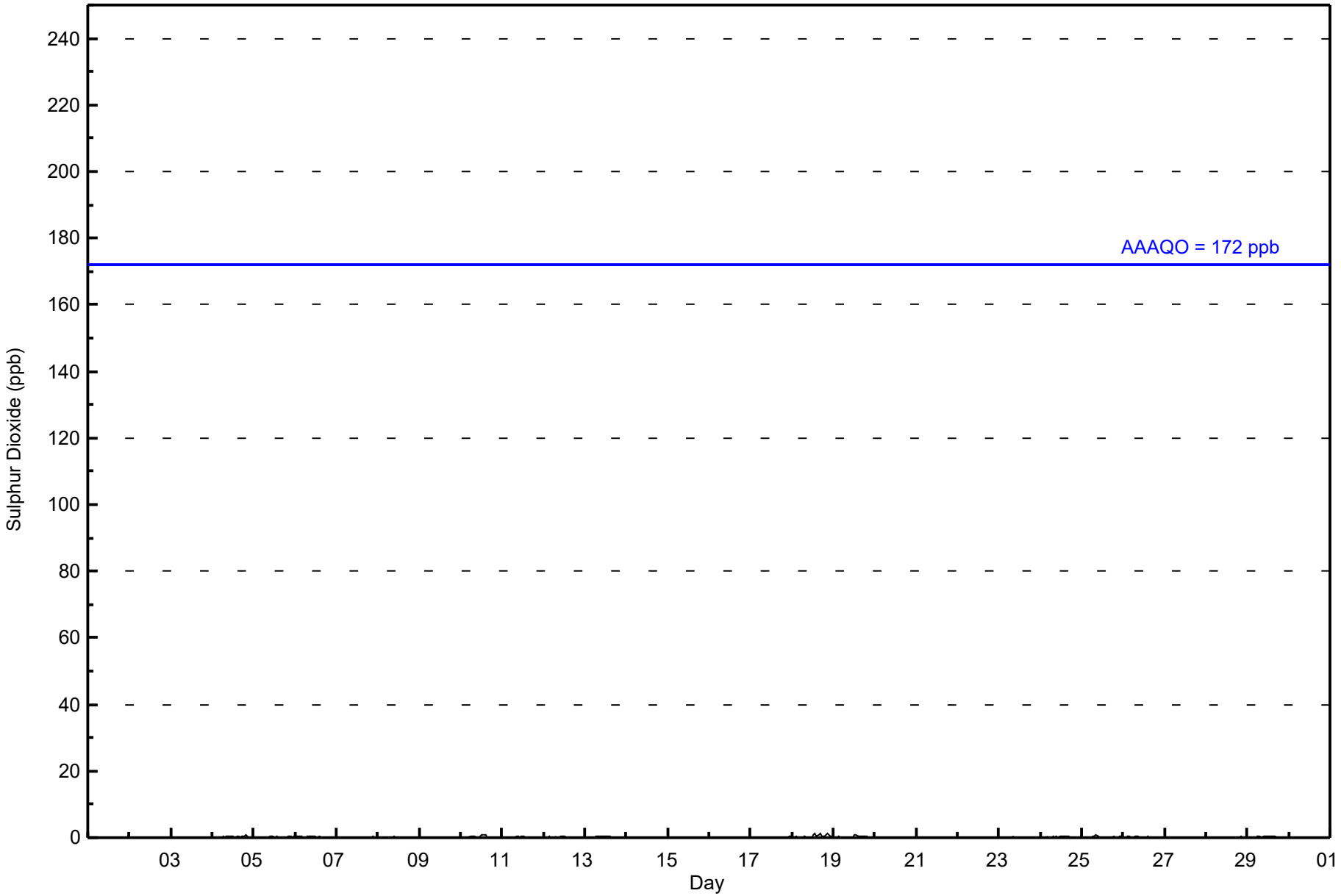
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Janvier - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Janvier - June 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

Janvier - June 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	111	119	59	36	25	28	30	24	21	52	46	34	34	20	13	32	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	111	119	59	36	25	28	30	24	21	52	46	34	34	20	13	32	684

Total Number of Valid Hours: 684

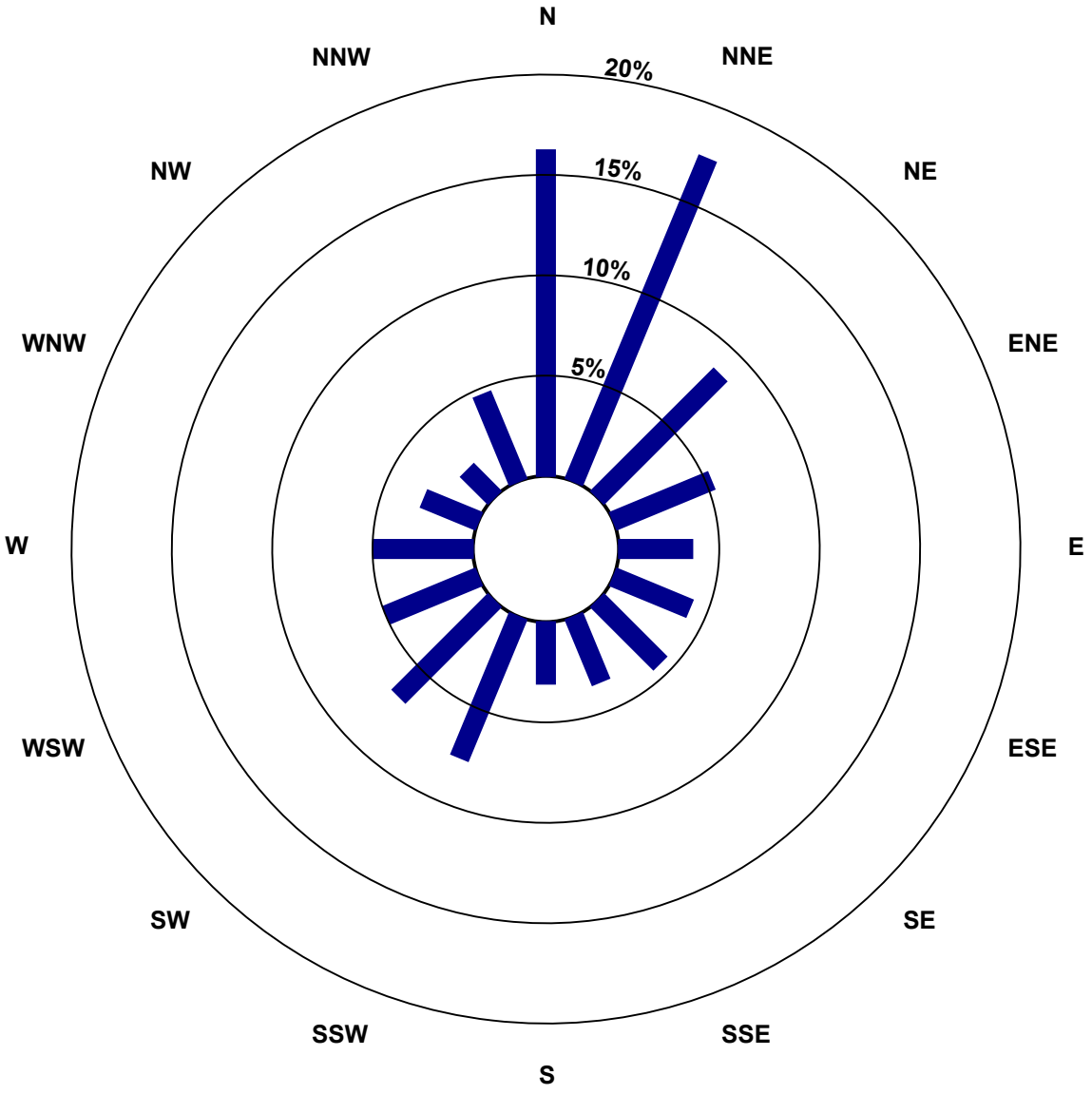
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Janvier



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

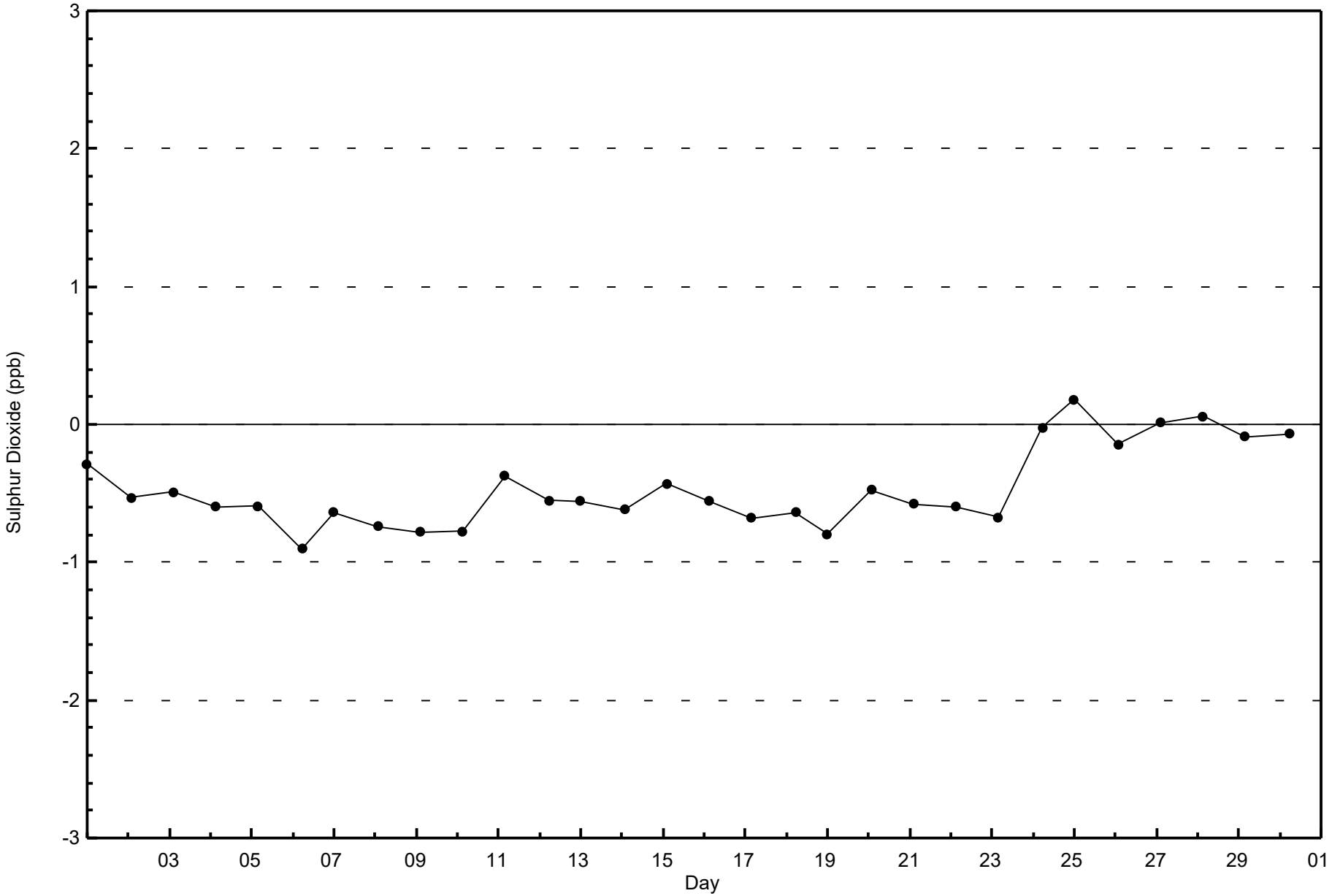
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Janvier - June 2026

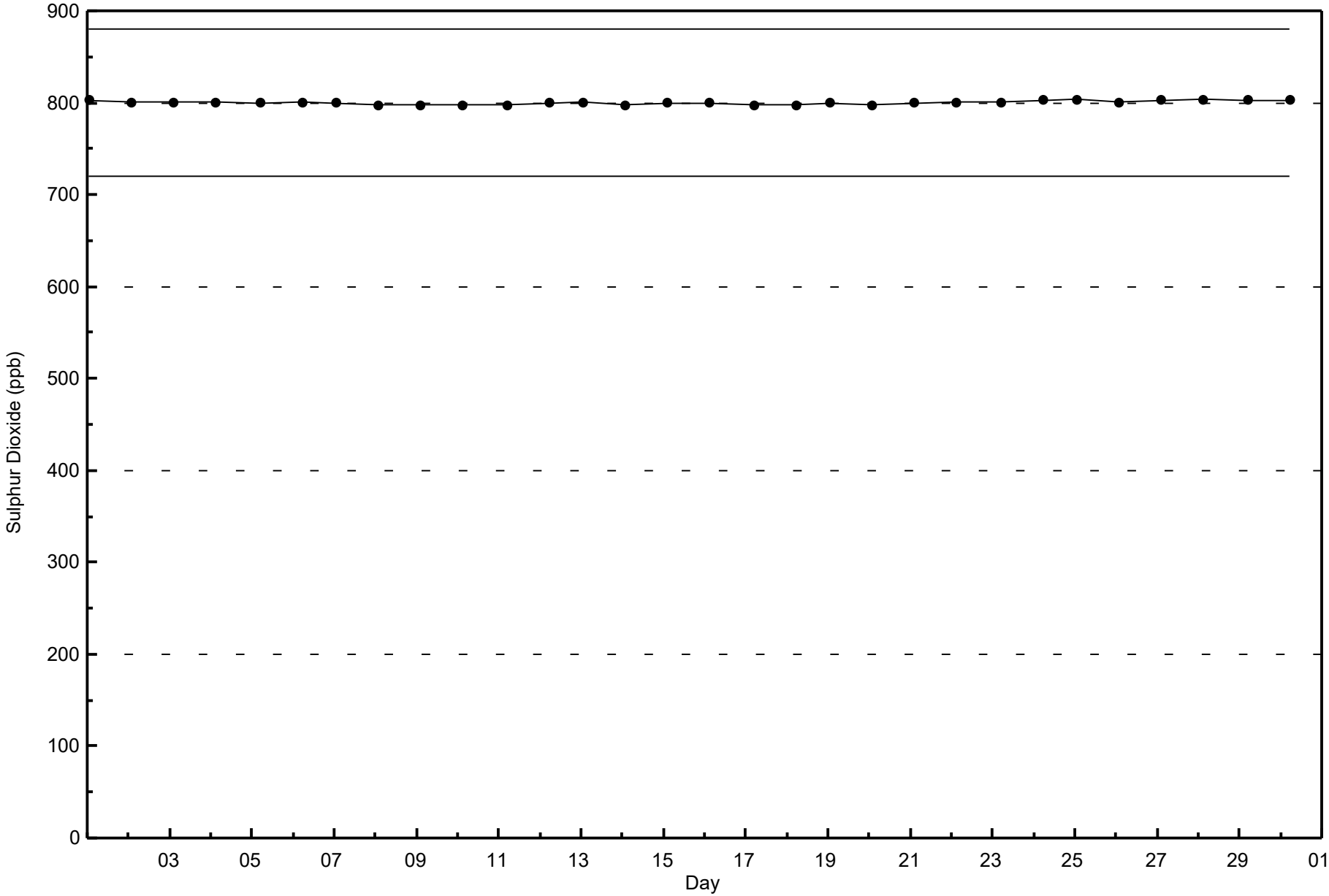


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Janvier - June 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Janvier - June 2026

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

Maximum Value: 0.7 ppb on Jun 25 14:00

Maximum Daily Average: 0.3 ppb on Jun 25

Minimum Value: 0.1 ppb on Jun 12 17:00

Minimum Daily Average: 0.1 ppb on Jun 12

Maximum Diurnal Average: 0.2 ppb at hour 7

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 = 0.3 P_{90} = 0.3 P_{99} = 0.4

Periods in Service:	1440
Periods of Valid Data:	1353
Periods of Invalid Data:	87
Periods of Calibration:	69
Percent Operational Time:	98.8

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-Jun	0.1 0.1	Z SP	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	0.2 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 0.1	0.1	0.2
2-Jun	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	M M	M M	M M	M 0.1	0.2 0.2	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1	0.2
3-Jun	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 M	M M	M M	M M	M M	M 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	0.1	0.3
4-Jun	0.2 0.2	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 0.2	0.1 0.1	PF 0.1	0.1 0.1	0.1 0.1	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	0.2
5-Jun	0.2 0.1	0.1 0.2	0.1 0.1	0.1 0.2	0.1 0.1	Z SP	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	0.2 0.1	0.1 0.2	0.2 0.2	0.2 0.1	0.2 0.2	0.1 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.1 0.2	0.2	0.2
6-Jun	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 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	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-Jun	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 0.2	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	0.1	0.2
8-Jun	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	0.3 0.3	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	0.1 0.1	0.1 0.1	0.1 0.1	0.2 0.1	0.2 0.1	0.1 0.1	0.2	0.3
9-Jun	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 0.2	0.1	0.2
10-Jun	0.2 0.1	0.1 0.1	0.1 0.1	0.1 0.2	Z SP	0.2 0.2	0.2 0.3	0.3 0.3	0.2 0.1	0.1 0.1	0.1 0.1	0.2 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 0.1	0.1 0.1	0.1	0.3
11-Jun	0.1 0.1	0.1 0.1	0.1 0.2	0.1 0.2	0.2 0.1	Z SP	0.1 0.1	0.1 0.2	0.1 0.2	0.2 0.2	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 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	0.2
12-Jun	Z SP	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 0.2	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
13-Jun	0.1 0.2	Z SP	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 0.1	0.1 0.1	0.1 0.1	0.1 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	0.1 0.1	0.1	0.2
14-Jun	0.1 0.1	0.1 0.1	Z SP	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 0.1	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 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2	0.2
15-Jun	0.2 0.2	0.2 0.2	0.2 0.2	Z SP	0.2 0.2	0.2 0.2	0.2 0.3	0.3 0.3	0.3 0.2	0.2 0.2	0.2 0.2	0.1 0.2	0.2 0.2	0.2 0.2	0.2 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	0.3

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Janvier - June 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-Jun	0.2 0.2	0.2 0.2	0.2 0.2	0.3 0.3	Z SP	0.2 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.2 0.1	0.2 0.2	0.1 0.1	0.2	0.3
17-Jun	0.2 0.2	0.3 0.3	0.3 0.3	0.3 0.3	0.4 0.4	Z SP	0.3 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 0.1	0.1 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	0.4
18-Jun	Z SP	0.1 0.2	0.2 0.2	0.2 0.2	0.2 0.1	0.1 0.2	0.2 0.1	0.1 0.1	0.1 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 0.2	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 0.2	0.3 0.2	0.2	0.3
19-Jun	0.2 0.2	Z SP	0.2 0.3	0.3 0.3	0.3 0.3	0.3 0.2	0.3 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2	0.3
20-Jun	0.2 0.3	0.3 0.3	Z SP	0.3 0.3	0.3 0.3	0.3 0.4	0.4 0.3	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.1 0.1	0.1 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	0.2 0.2	0.2 0.2	0.2 0.2	0.2 0.2	0.2	0.4
21-Jun	0.2 0.2	0.2 0.2	0.2 0.2	Z SP	0.1 0.1	0.2 0.2	0.2 0.2	0.1 0.1	0.2 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 0.1	0.1 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-Jun	0.2 0.2	0.2 0.2	0.2 0.2	0.1 0.1	Z SP	0.1 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	0.2 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	0.2 0.2	0.2 0.2	0.2	0.3
23-Jun	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 0.3	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 0.4	0.3 0.3	0.3 0.3	0.4 0.3	0.4 0.4	0.3	0.4
24-Jun	Z SP	0.3 0.4	0.4 0.3	0.3 0.3	0.3 0.4	0.4 0.3	0.4 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3	0.4
25-Jun	0.3 0.3	Z SP	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 0.4	C C	C C	C C	C C	C 0.7	0.4 0.4	0.4 0.4	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.2	0.3 0.2	0.3	0.7
26-Jun	0.2 0.2	0.3 0.3	Z SP	0.3 0.2	0.3 0.4	0.4 0.5	0.5 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 0.3	0.3 0.3	0.3 0.3	0.3 0.2	0.3 0.3	0.3 0.2	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3	0.5
27-Jun	0.3 0.3	0.3 0.4	0.4 0.4	Z SP	0.4 0.4	0.4 0.4	0.4 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3	0.4
28-Jun	0.3 0.4	0.4 0.4	0.4 0.4	0.4 0.4	Z SP	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 0.3	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	0.3 0.2	0.3 0.3	0.3 0.3	0.3 0.3	0.3	0.4
29-Jun	0.3 0.3	0.3 0.3	0.3 0.3	0.4 0.3	0.3 0.3	Z SP	0.3 0.4	0.4 0.4	0.4 0.4	0.3 0.4	0.4 0.3	0.3 0.3	0.3 0.3	0.3 0.2	0.2 0.2	0.2 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	0.3 0.3	0.3 0.3	0.3	0.4
30-Jun	Z SP	0.3 0.4	0.4 0.4	0.4 0.4	0.5 0.4	0.4 0.4	0.4 0.4	0.4 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.2 0.2	0.3 0.3	0.3 0.3	0.3 0.2	0.2 0.3	0.3 0.3	0.3 0.3	0.3 0.3	0.2 0.3	0.3	0.5
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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
Diurnal Maximum	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.7	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4		

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

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

Wood Buffalo Environmental Association

Summary of Hour Averages

Total Reduced Sulphur (TRS) - ppb

Janvier - June 2026

Maximum Value: 0.9 ppb on Jun 25 14:00

Maximum Daily Average: 0.3 ppb on Jun 25

Minimum Value: 0.1 ppb on Jun 12 17:00

Minimum Daily Average: 0.1 ppb on Jun 12

Maximum Diurnal Average: 0.2 ppb at hour 7

Minimum Diurnal Average: 0.1 ppb at hour 18

Monthly Average: 0.17 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} = 0.4

Hours in Service:	720
Hours of Data:	676
Hours of Missing Data:	44
Hours of Calibration:	34
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-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
2-Jun	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	M	M	M	M	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
3-Jun	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	M	M	M	M	M	M	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	--	0.3
4-Jun	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	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
5-Jun	0.2	0.1	0.1	0.2	0.1	Z	0.1	0.1	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	0.2	0.2	0.2
6-Jun	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
7-Jun	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	0.2	0.2	0.2	0.2	0.1	0.2
8-Jun	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3
9-Jun	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	0.2	0.1	0.2
10-Jun	0.2	0.1	0.1	0.2	Z	0.2	0.2	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	0.1	0.3
11-Jun	0.1	0.1	0.2	0.1	0.2	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
12-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
13-Jun	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	0.2	0.2	0.1	0.1	0.1	0.2
14-Jun	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15-Jun	0.2	0.2	0.2	Z	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
16-Jun	0.2	0.2	0.2	0.3	Z	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.3
17-Jun	0.2	0.3	0.3	0.3	0.4	Z	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.4
18-Jun	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3
19-Jun	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
20-Jun	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	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3
21-Jun	0.2	0.2	0.2	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	0.1	0.2	0.2	0.2	0.1	0.2
22-Jun	0.2	0.2	0.2	0.1	Z	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	0.1	0.1	0.1	0.2
23-Jun	0.2	0.1	0.1	0.1	0.1	Z	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	0.3	0.3	0.3	0.3	0.3	0.2	0.3
24-Jun	Z	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
25-Jun	0.2	Z	0.2	0.3	0.3	0.3	0.3	0.3	0.3	C	C	C	C	0.9	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.9
26-Jun	0.2	0.2	Z	0.2	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4
27-Jun	0.2	0.3	0.3	Z	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
28-Jun	0.3	0.3	0.3	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	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3
29-Jun	0.2	0.2	0.3	0.3	0.3	Z	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
30-Jun	Z	0.3	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	0.2	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	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	0.2	0.2	0.2	0.2	0.2	0.2	Diurnal Average	
	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	0.9	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

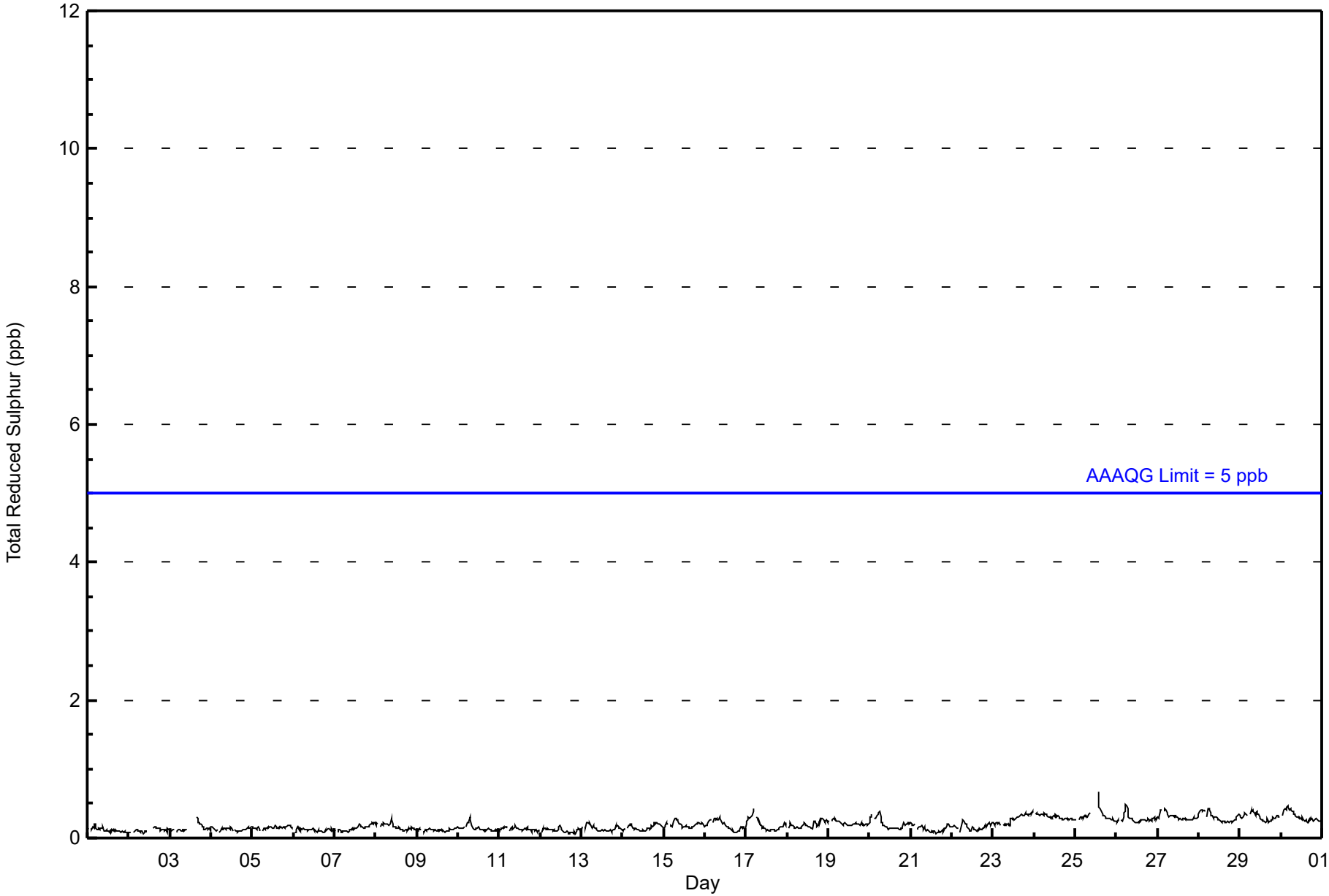
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Janvier - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	676	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: 676

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Reduced Sulphur (TRS) - ppb

Janvier - June 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	106	118	57	35	25	27	30	22	19	53	44	36	34	22	12	36	676
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	106	118	57	35	25	27	30	22	19	53	44	36	34	22	12	36	676

Total Number of Valid Hours: 676

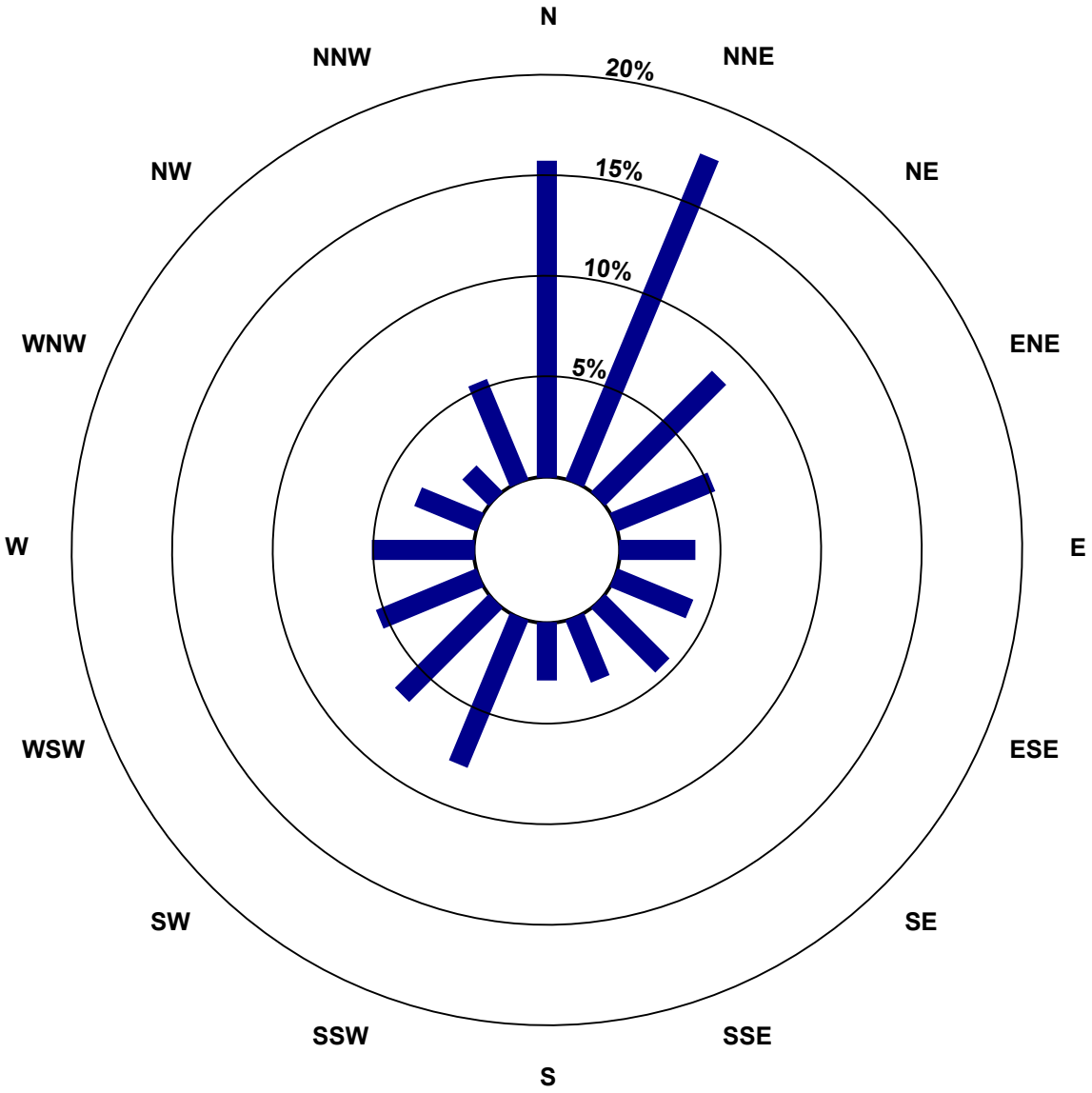
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Reduced Sulphur (TRS) - ppb

Janvier



Classes (ppb)

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

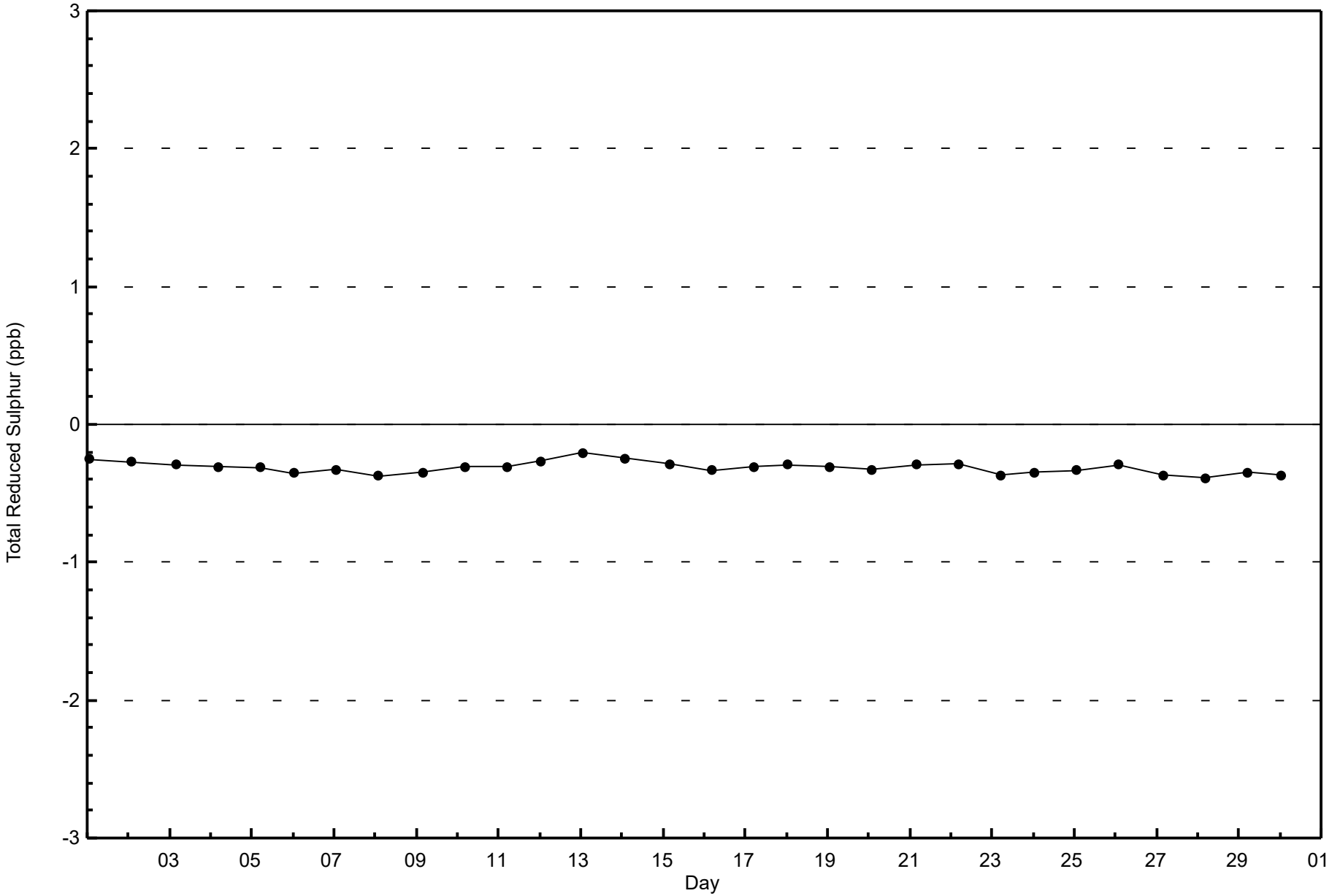
Total Number of Valid Hours: 676

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Janvier - June 2026

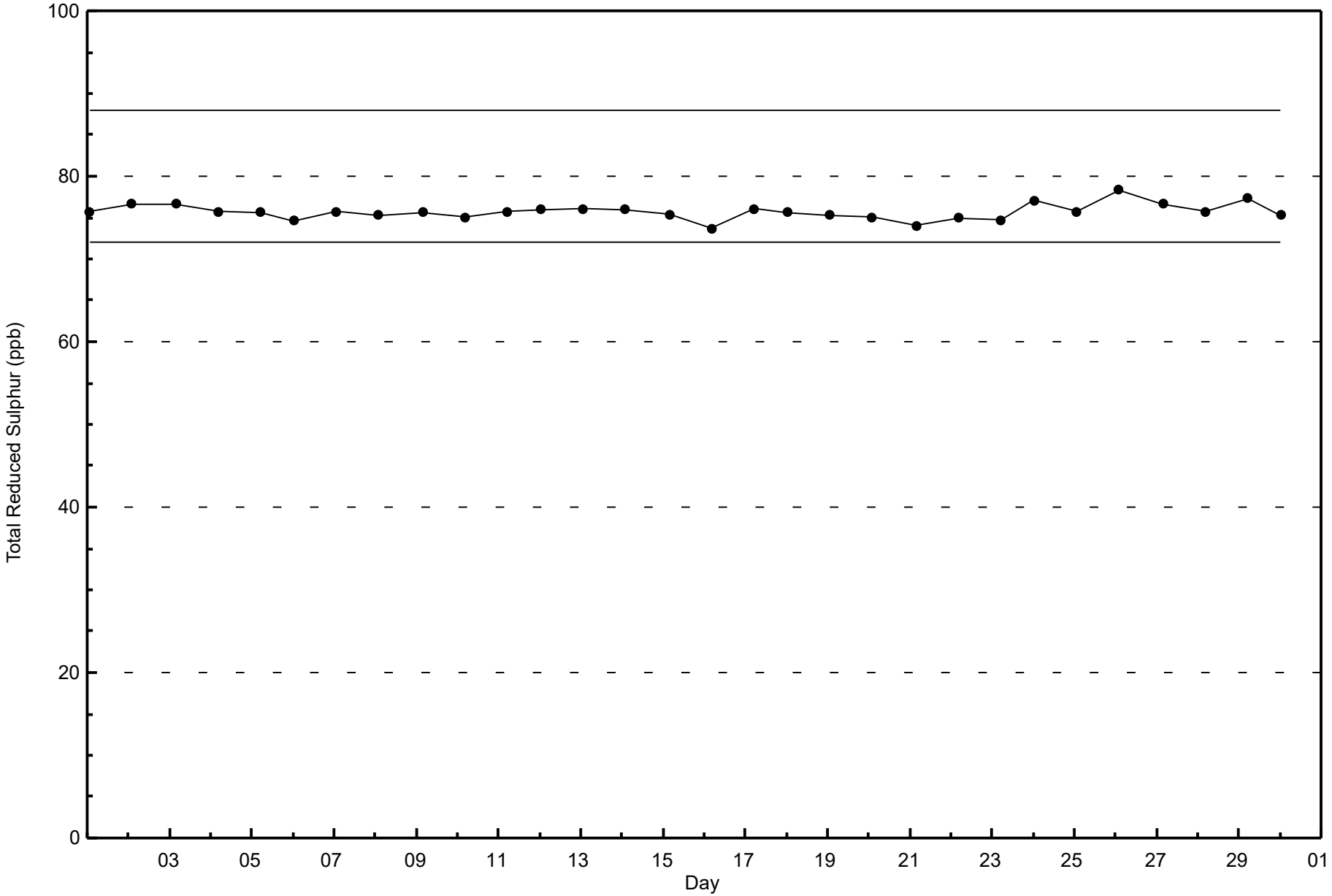


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Janvier - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Janvier - June 2026

Maximum Value: 2.5 ppm on Jun 28 03:00

Maximum Daily Average: 2.1 ppm on Jun 28

Minimum Value: 2.0 ppm on Jun 23 15:00

Minimum Daily Average: 2.0 ppm on Jun 23

Maximum Diurnal Average: 2.1 ppm at hour 6

Minimum Diurnal Average: 2.0 ppm at hour 16

Monthly Average: 2.04 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:	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-Jun	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
2-Jun	2.1	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
3-Jun	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	M	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1
4-Jun	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
5-Jun	2.1	2.1	2.2	2.2	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2
6-Jun	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
7-Jun	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	2.0	2.0	2.0	2.0	2.1
8-Jun	2.0	Z	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
9-Jun	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1
10-Jun	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1
11-Jun	2.1	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	2.0	2.0	2.0	2.0	2.0	2.1
12-Jun	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
13-Jun	Z	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	2.0	2.0	2.0	2.0	2.1
14-Jun	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
15-Jun	2.0	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
16-Jun	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
17-Jun	2.0	2.1	2.1	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	2.0	2.1
18-Jun	2.0	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	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1
19-Jun	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
20-Jun	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	2.0	2.0	2.1	2.1	2.1	2.1	2.1
21-Jun	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	2.0	2.1	2.1	2.1	2.1	2.1
22-Jun	2.1	2.1	2.1	Z	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	2.1	2.2
23-Jun	2.0	2.0	2.0	2.1	Z	2.1	2.1	2.1	2.0	C	C	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	2.1
24-Jun	2.0	2.0	2.0	2.0	2.0	Z	2.0	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
25-Jun	Z	2.0	2.0	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	2.0	2.0	2.1
26-Jun	2.0	Z	2.0	2.0	2.1	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	2.0	2.0	2.3
27-Jun	2.0	2.1	Z	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	2.0	2.0	2.0	2.0	2.1	2.1	2.4
28-Jun	2.3	2.4	2.5	Z	2.2	2.3	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.5
29-Jun	2.1	2.1	2.1	2.1	Z	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2
30-Jun	2.2	2.4	2.3	2.3	2.4	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	2.0	2.0	2.0	2.0	2.1	2.4
	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	2.0	Diurnal Average	
	2.3	2.4	2.5	2.3	2.4	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	Diurnal Maximum	

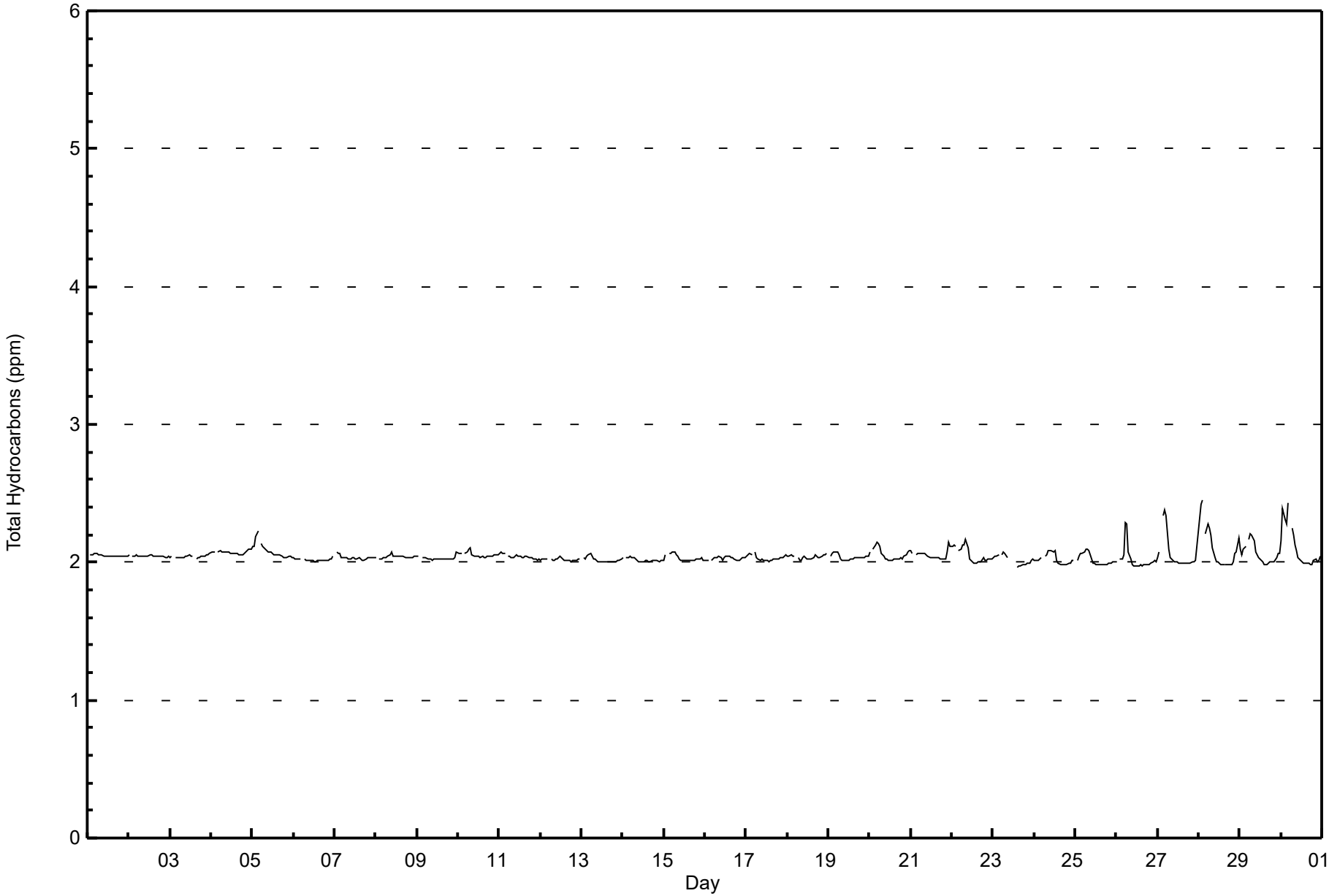
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Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Janvier - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Total Hydrocarbons (THC) - ppm

Janvier - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	501	73.25	73.25
2.1 - 3.0	183	26.75	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

Janvier - June 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	79	67	52	30	20	26	27	21	11	27	28	27	32	16	11	27	501
2.1 - 3.0	32	53	7	5	5	2	3	3	10	25	18	7	2	4	2	5	183
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	111	120	59	35	25	28	30	24	21	52	46	34	34	20	13	32	684

Total Number of Valid Hours: 684

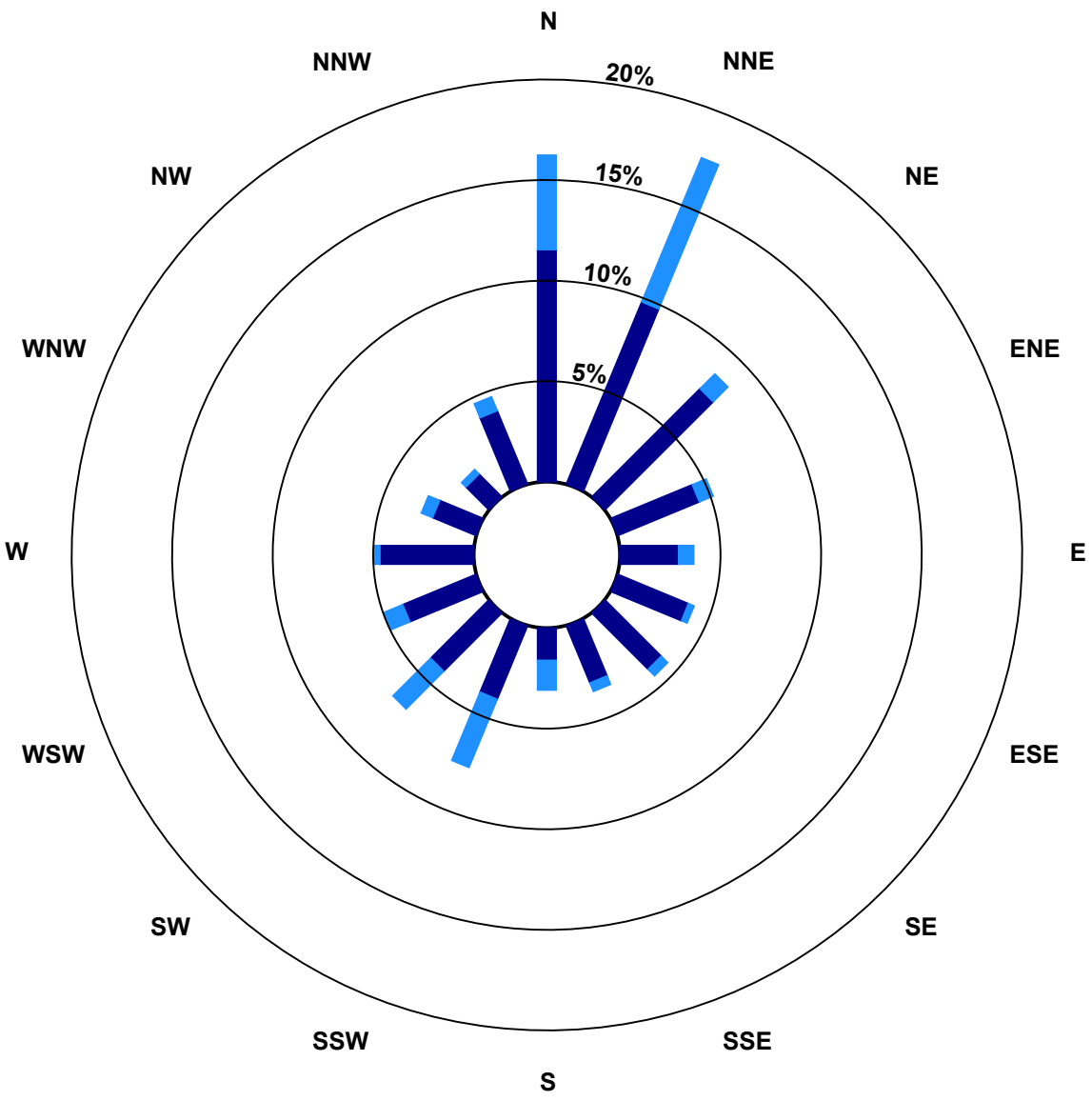
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Janvier



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

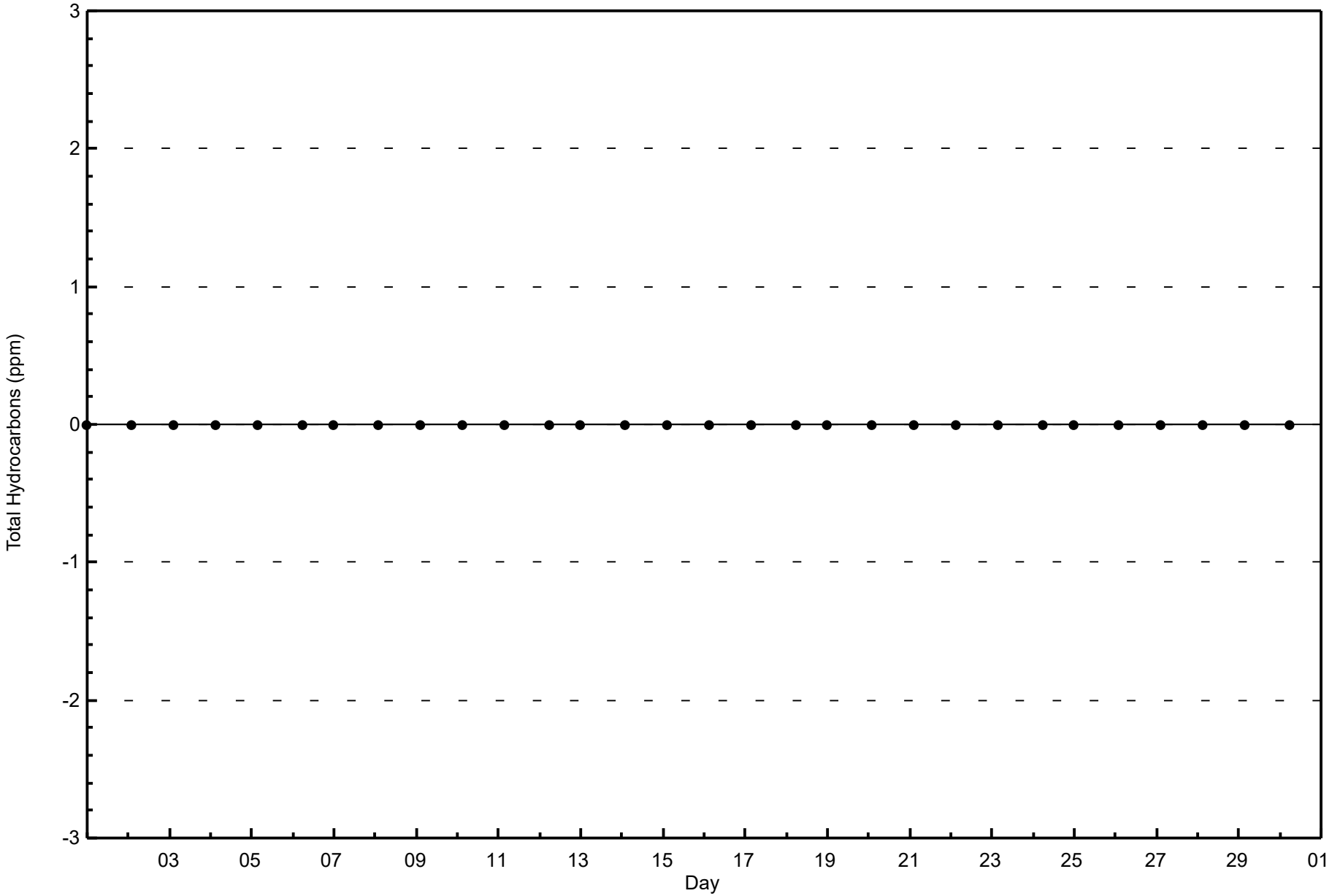
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Janvier - June 2026

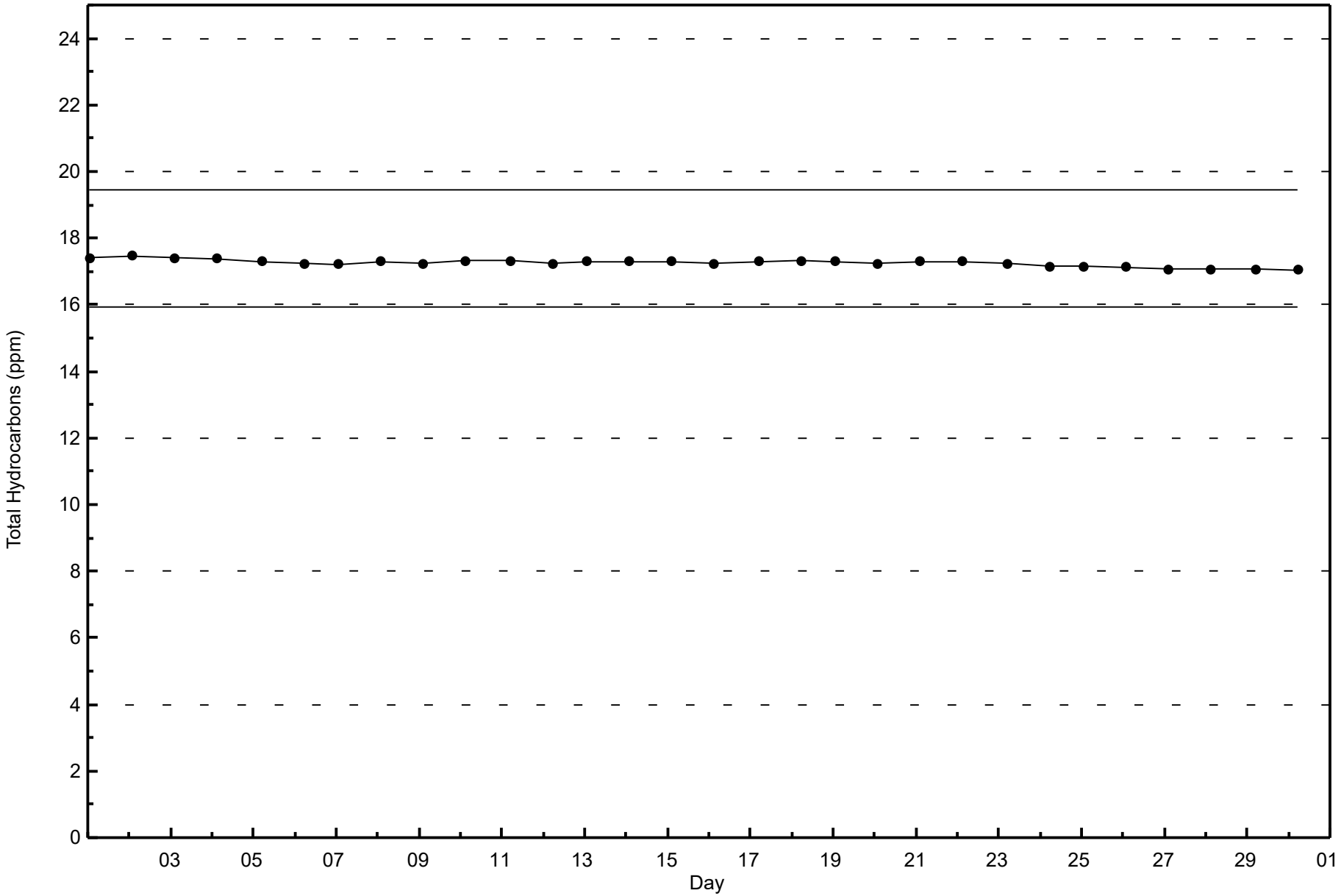


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Janvier - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Janvier - June 2026

Maximum Value: 0.048 ppm on Jun 28 22:00

Maximum Daily Average: 0.003 ppm on Jun 28

Minimum Value: 0.000 ppm on Jun 1 02:00

Minimum Daily Average: 0.000 ppm on Jun 1

Maximum Diurnal Average: 0.002 ppm at hour 22

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:	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-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	M	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4-Jun	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
5-Jun	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
6-Jun	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	0.002	0.000	0.000	0.000	0.002
7-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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
11-Jun	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
12-Jun	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
13-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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	0.000	0.000	0.000	0.002
14-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.003	0.000	0.000	0.003
15-Jun	0.000	0.000	Z	0.000	0.000	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	0.002	0.000	0.000	0.000	0.000	0.000	0.002
16-Jun	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
17-Jun	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
18-Jun	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
19-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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
22-Jun	0.000	0.000	0.000	Z	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	0.003	0.000	0.000	0.000	0.003
23-Jun	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	0.000
24-Jun	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
25-Jun	Z	0.000	0.000	0.000	0.000	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	0.000	0.000	0.000	0.000	0.001	0.018
26-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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	0.048	0.000	0.029	0.003	0.048
29-Jun	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
30-Jun	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	0.003	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
	0.000	0.000	0.000	0.000	0.000	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	0.002	0.000	0.001	Diurnal Average	
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.018	0.000	0.000	0.003	0.000	0.000	0.000	0.003	0.005	0.001	0.000	0.002	0.003	0.048	0.003	0.029	Diurnal Maximum	

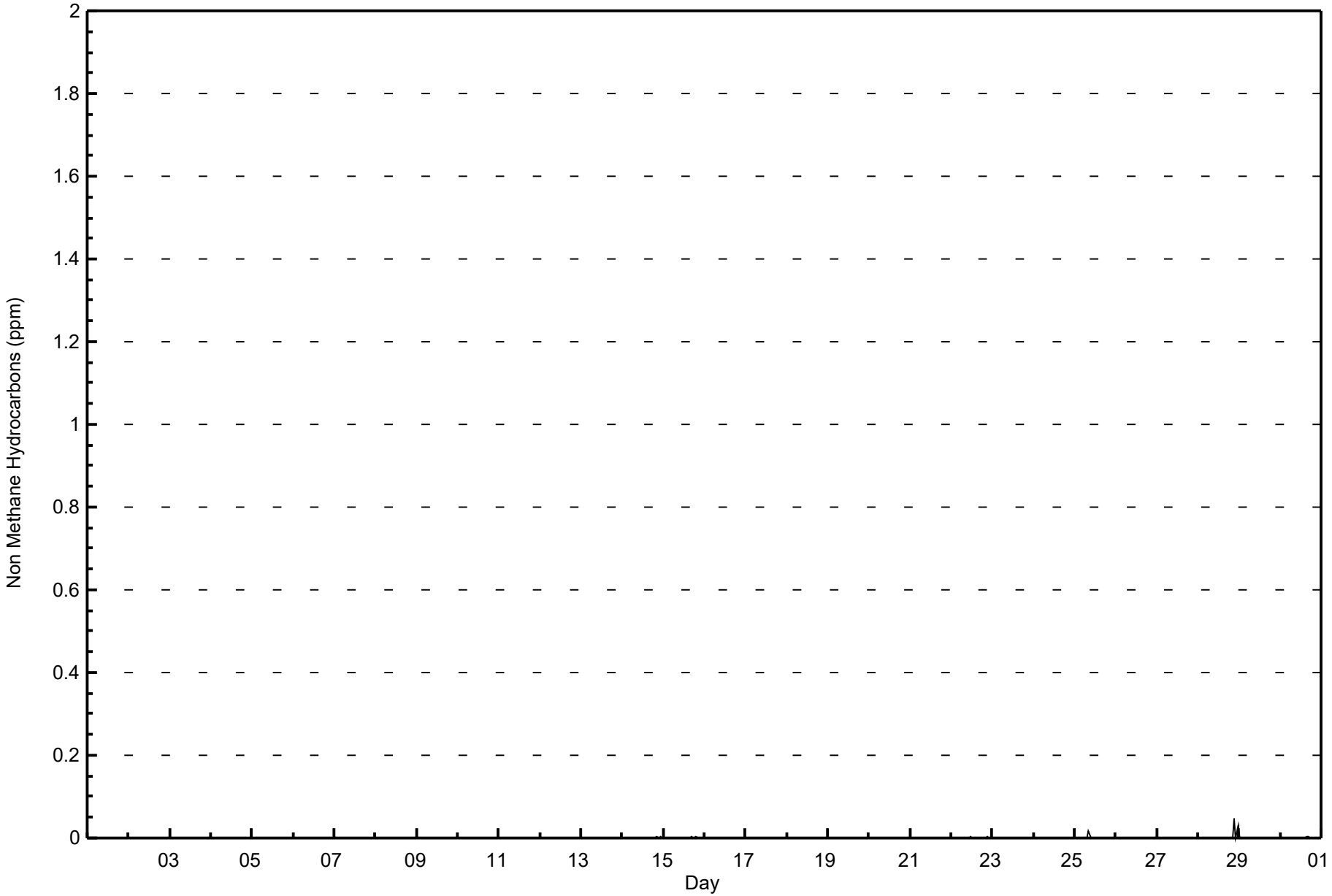
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Janvier - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Janvier - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	681	99.56	99.56
0.006 - 0.05	3	0.44	100.00
0.06 - 0.1	0	0.00	100.00
> 0.1	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Janvier - June 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	110	119	59	35	25	27	30	24	21	52	46	34	34	20	13	32	681
0.006 - 0.05	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
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	111	120	59	35	25	28	30	24	21	52	46	34	34	20	13	32	684

Total Number of Valid Hours: 684

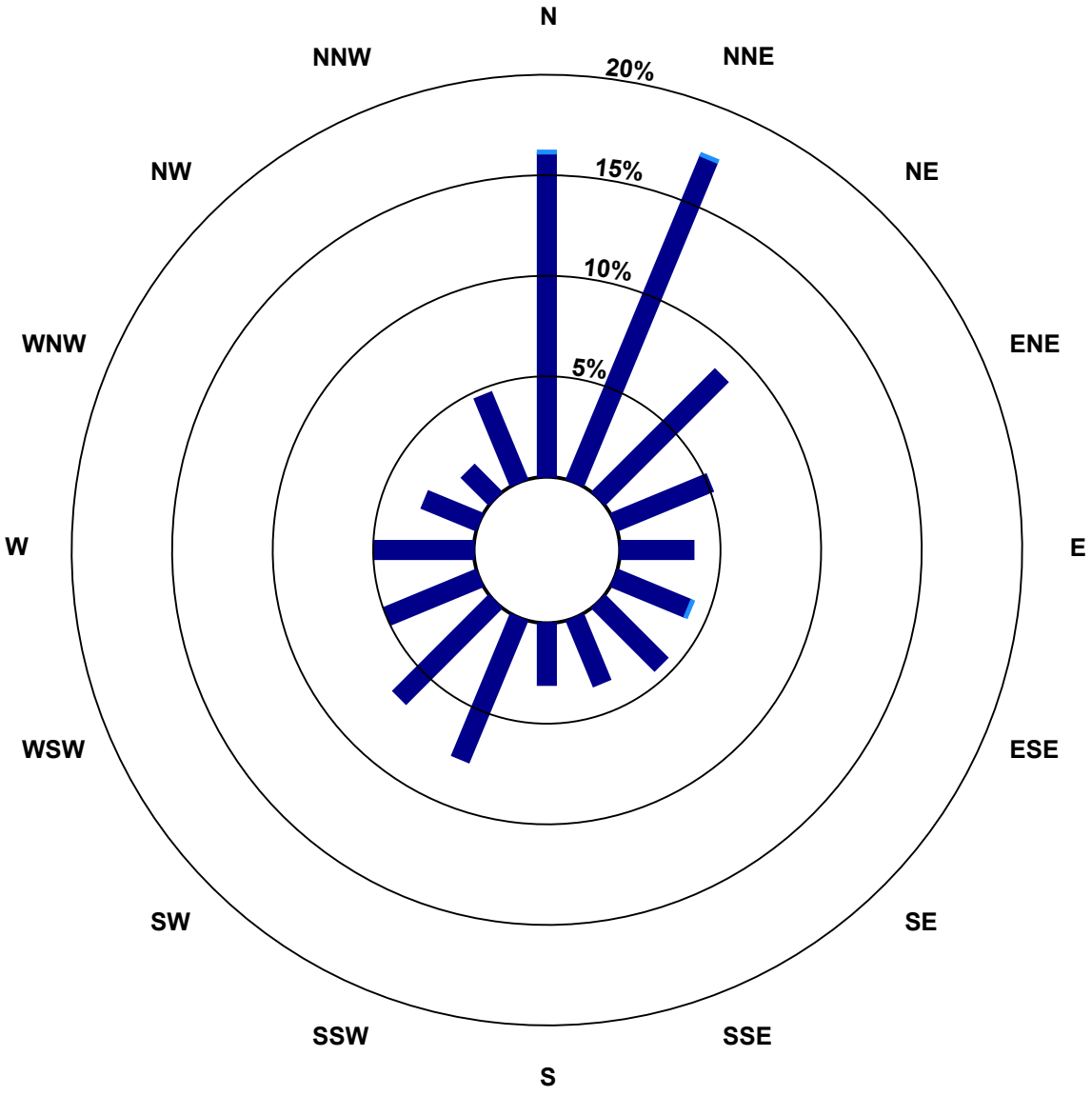
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Non Methane Hydrocarbons (NMHC) - ppm

Janvier



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

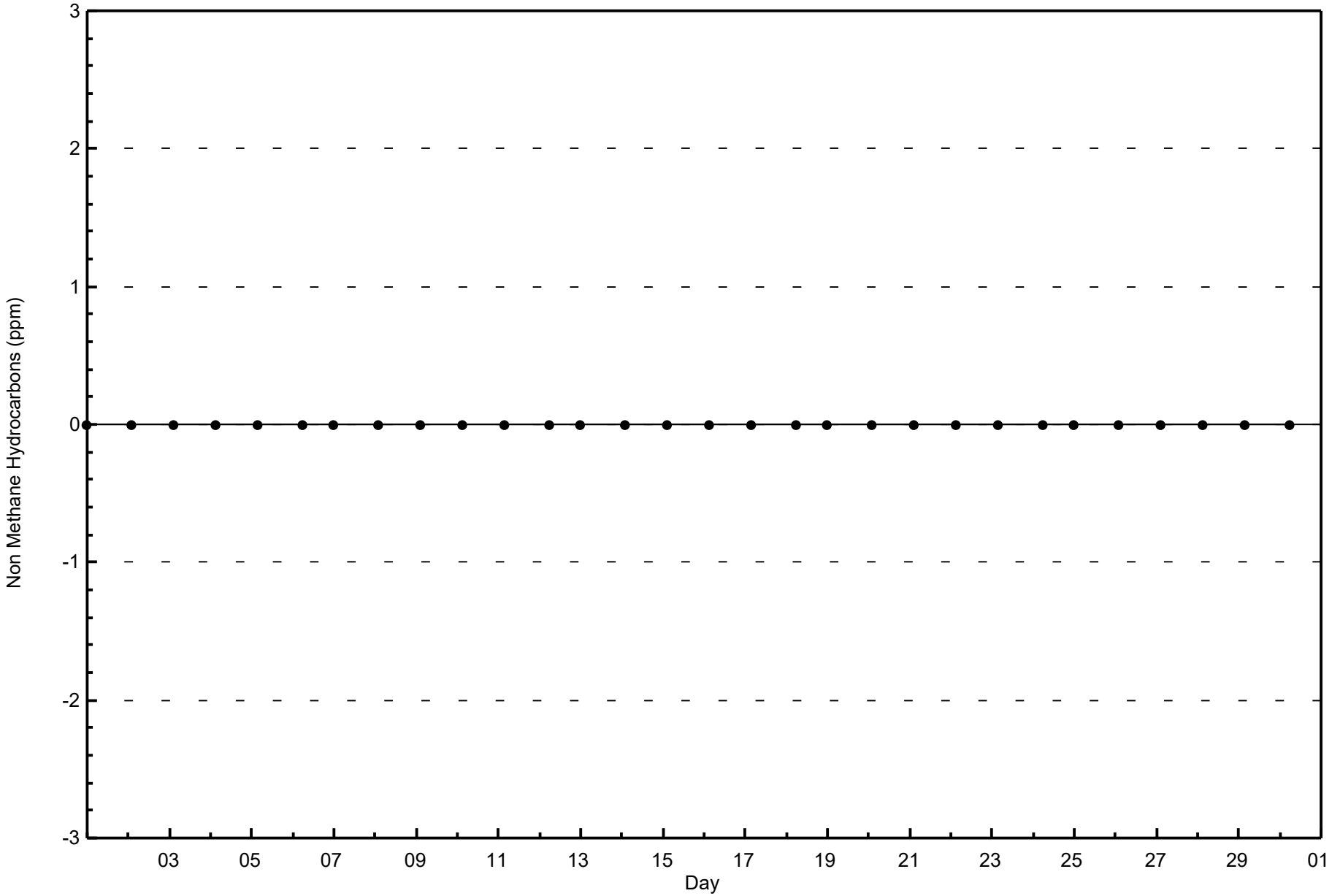
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Janvier - June 2026

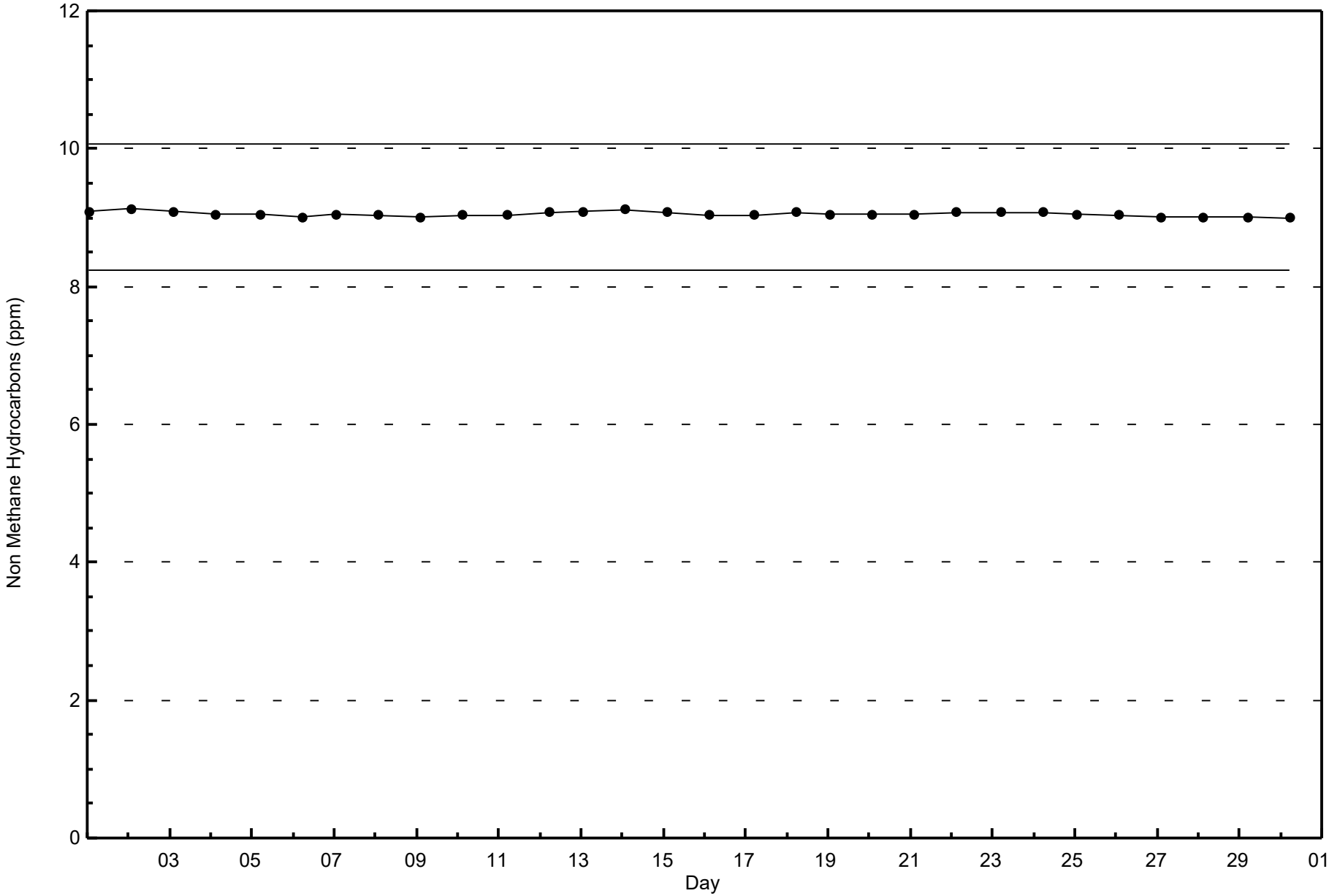


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Janvier - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Janvier - June 2026

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

Maximum Value: 2.5 ppm on Jun 28 03:00

Maximum Daily Average: 2.1 ppm on Jun 28

Minimum Value: 2.0 ppm on Jun 23 15:00

Minimum Daily Average: 2.0 ppm on Jun 25

Maximum Diurnal Average: 2.1 ppm at hour 6

Minimum Diurnal Average: 2.0 ppm at hour 16

Monthly Average: 2.04 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:	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-Jun	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
2-Jun	2.1	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
3-Jun	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	M	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1
4-Jun	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
5-Jun	2.1	2.1	2.2	2.2	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2
6-Jun	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
7-Jun	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	2.0	2.0	2.0	2.0	2.1
8-Jun	2.0	Z	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
9-Jun	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1
10-Jun	2.1	2.1	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1
11-Jun	2.1	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	2.0	2.0	2.0	2.0	2.0	2.1
12-Jun	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
13-Jun	Z	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	2.0	2.0	2.0	2.0	2.1
14-Jun	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
15-Jun	2.0	2.1	Z	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
16-Jun	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
17-Jun	2.0	2.1	2.1	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	2.0	2.1
18-Jun	2.0	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	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1
19-Jun	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
20-Jun	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	2.0	2.0	2.1	2.1	2.1	2.1	2.1
21-Jun	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	2.0	2.1	2.1	2.1	2.1	2.1
22-Jun	2.1	2.1	2.1	Z	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	2.1	2.2
23-Jun	2.0	2.0	2.0	2.1	Z	2.1	2.1	2.1	2.0	C	C	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	2.1
24-Jun	2.0	2.0	2.0	2.0	2.0	Z	2.0	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
25-Jun	Z	2.0	2.0	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	2.0	2.0	2.1
26-Jun	2.0	Z	2.0	2.0	2.1	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	2.0	2.0	2.3
27-Jun	2.0	2.1	Z	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	2.0	2.0	2.0	2.0	2.1	2.1	2.4
28-Jun	2.3	2.4	2.5	Z	2.2	2.3	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.5
29-Jun	2.1	2.1	2.1	2.1	Z	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2
30-Jun	2.2	2.4	2.3	2.3	2.4	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	2.0	2.0	2.0	2.0	2.1	2.4
	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	2.0	Diurnal Average	
	2.3	2.4	2.5	2.3	2.4	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	Diurnal Maximum	

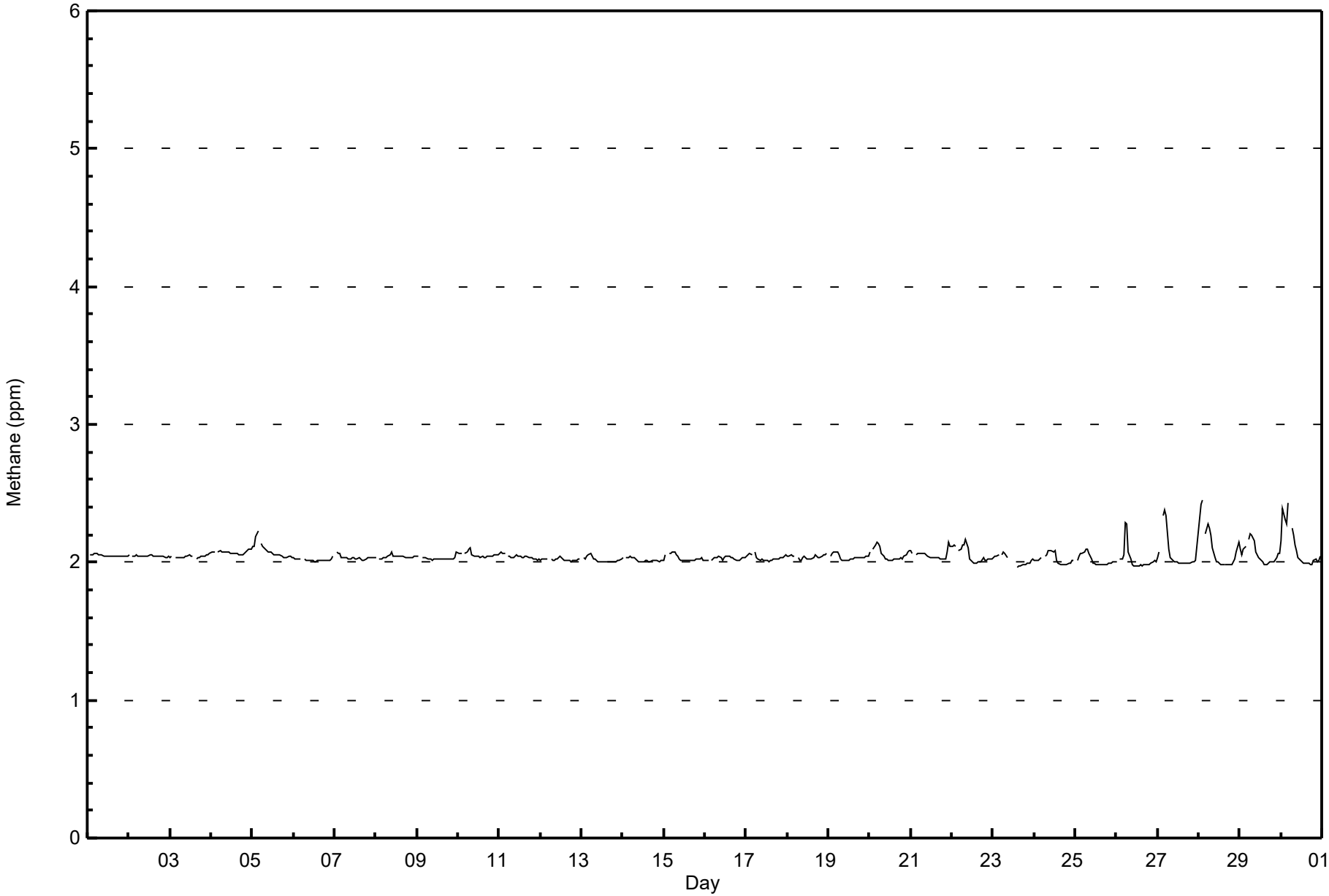
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Janvier - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	502	73.39	73.39
2.1 - 3.0	182	26.61	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

Methane (CH_4) - ppm

Janvier - June 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	79	68	52	30	20	26	27	21	11	27	28	27	32	16	11	27	502
2.1 - 3.0	32	52	7	5	5	2	3	3	10	25	18	7	2	4	2	5	182
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	111	120	59	35	25	28	30	24	21	52	46	34	34	20	13	32	684

Total Number of Valid Hours: 684

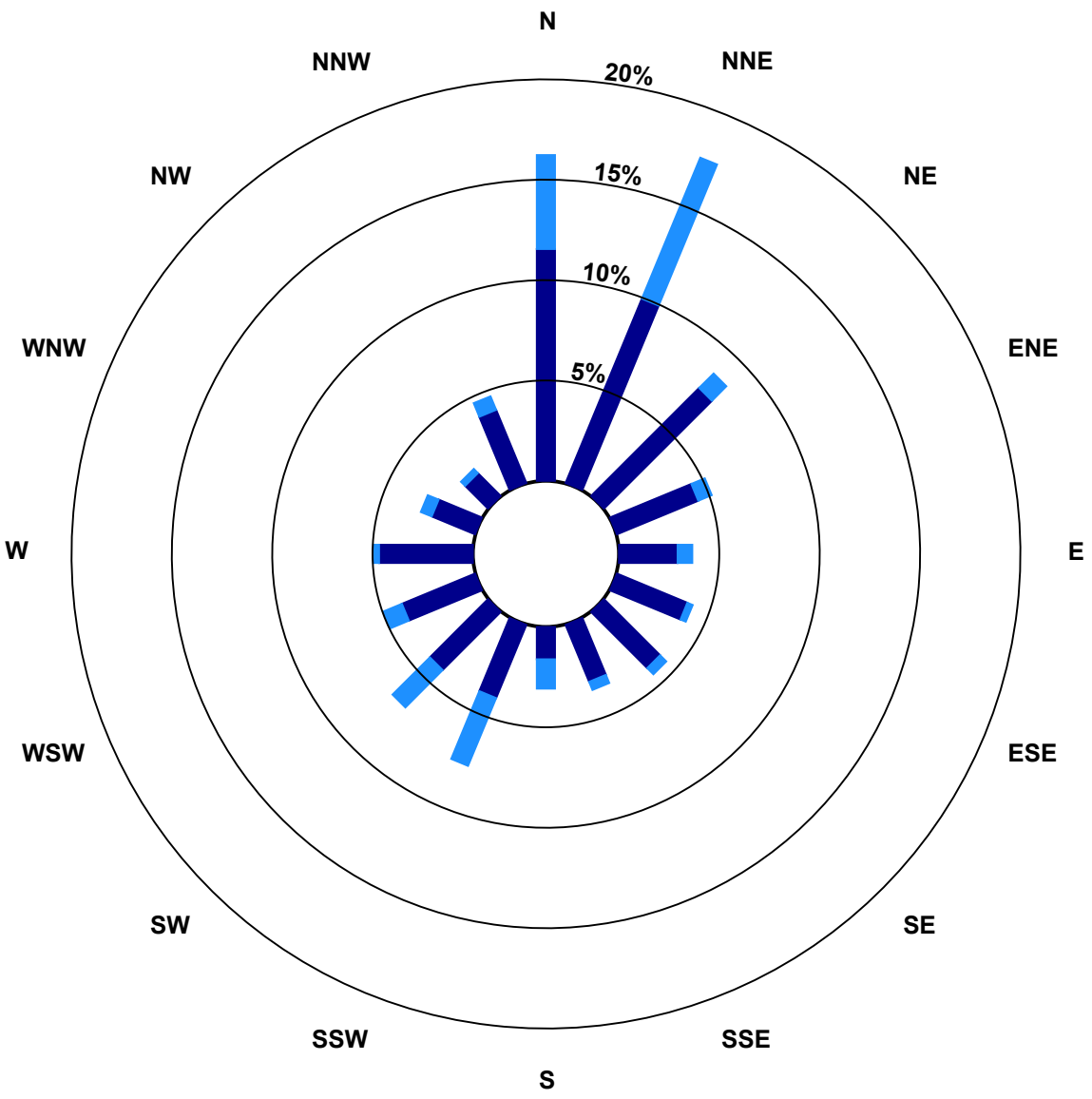
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Methane (CH_4) - ppm

Janvier



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

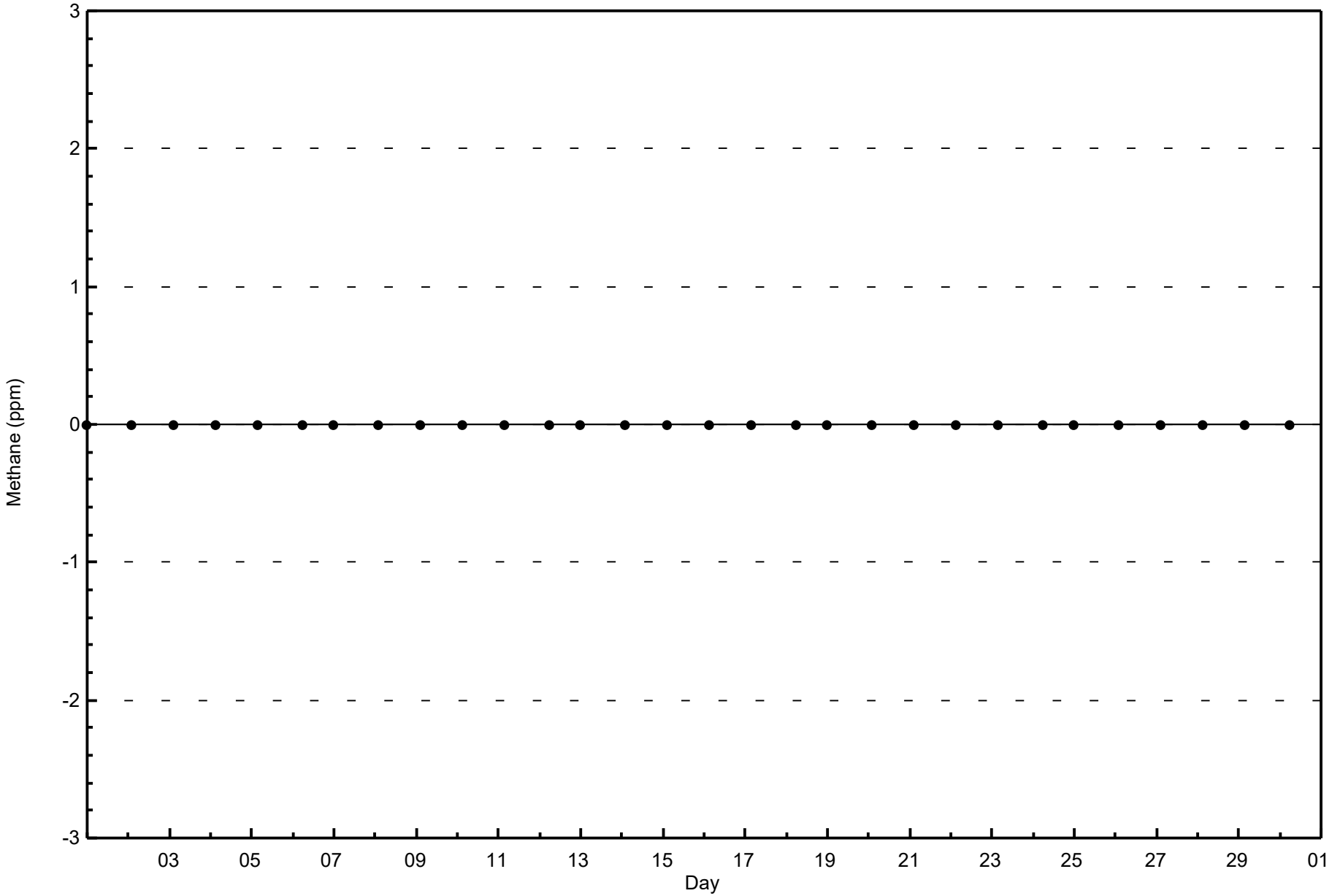
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Janvier - June 2026

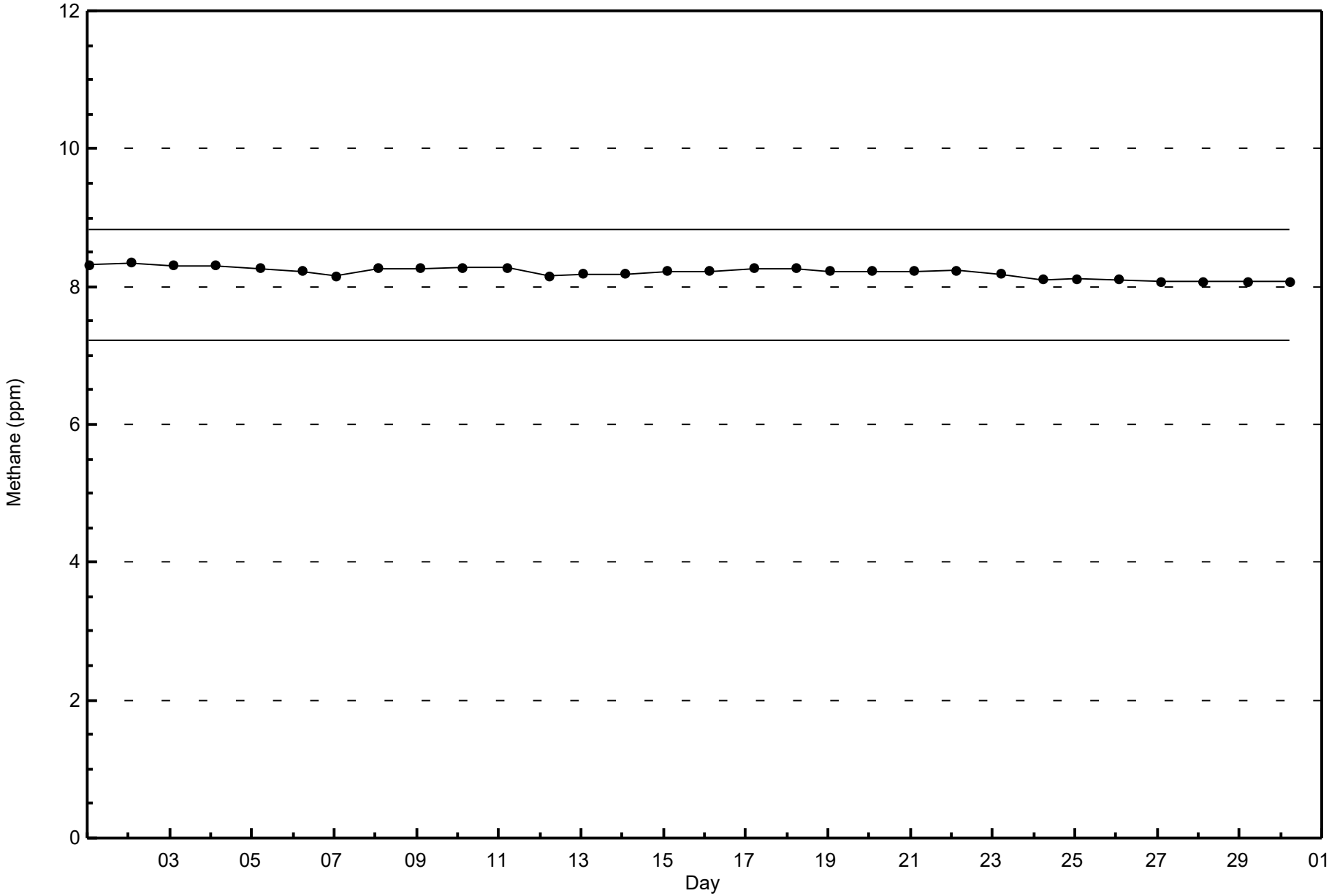


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Janvier - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Janvier - June 2026

Maximum Value: 3.3 ppb on Jun 21 21:00

Maximum Daily Average: 0.4 ppb on Jun 4

Minimum Value: 0.0 ppb on Jun 29 15:00

Minimum Daily Average: 0.0 ppb on Jun 1

Maximum Diurnal Average: 0.5 ppb at hour 6

Minimum Diurnal Average: 0.1 ppb at hour 4

Monthly Average: 0.20 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.4 P_{99} = 1.4

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-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.1	M	M	M	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3-Jun	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.4	0.1	0.1	0.1	0.4	0.1	0.1	0.6	0.2	0.1	0.6
4-Jun	0.1	Z	0.5	0.5	0.3	1.3	0.7	0.3	0.6	0.2	0.3	2.2	0.3	0.6	0.2	0.1	0.1	0.2	0.1	0.1	0.3	0.2	0.2	0.3	0.4	2.2
5-Jun	0.2	0.2	Z	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.3
6-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.4	0.3	0.1	0.4
7-Jun	0.6	0.2	0.1	0.1	Z	0.5	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.3	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.6
8-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.2	0.4	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.6	0.1	0.0	0.1	0.6
9-Jun	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.2	0.2	0.1	0.3
10-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.4	1.2	0.4	0.3	0.3	0.4	0.4	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.2	1.2
11-Jun	0.0	0.0	Z	0.0	0.1	0.2	0.3	0.4	0.4	0.5	0.7	0.8	0.7	0.4	0.4	0.4	0.5	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.3	0.8
12-Jun	0.0	0.0	0.0	Z	0.3	0.5	0.6	0.4	0.4	0.4	0.3	0.9	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	1.3	0.2	0.1	0.3	1.3
13-Jun	0.1	0.4	0.0	0.0	Z	0.5	0.4	0.5	0.4	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.3	0.2	1.6	0.9	0.2	0.1	0.3	1.6
14-Jun	0.0	0.0	0.0	0.0	0.1	Z	0.6	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.3	2.3	0.4	0.1	0.1	0.2	2.3
15-Jun	Z	0.2	0.2	0.1	0.5	2.4	0.3	0.5	0.3	0.6	0.1	0.3	0.1	0.2	0.2	0.1	0.4	0.3	0.3	0.6	0.9	0.3	0.1	0.1	0.4	2.4
16-Jun	0.0	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	0.0	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.2	0.1	0.3
17-Jun	0.1	0.2	Z	0.0	0.2	0.1	0.1	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.2
18-Jun	0.1	0.2	0.1	Z	0.1	0.1	0.2	0.1	0.2	0.4	0.6	0.2	0.2	0.2	0.1	0.2	0.5	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.6
19-Jun	0.3	0.2	0.0	0.0	Z	1.4	0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.2	0.7	0.5	0.2	1.4
20-Jun	0.1	0.1	0.2	0.1	0.1	Z	0.2	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	0.2	0.1	0.3	0.1	0.1	0.3
21-Jun	Z	0.0	0.0	0.0	0.0	0.1	0.4	0.1	0.1	0.3	0.2	0.2	0.1	0.0	0.3	0.3	0.4	0.1	0.1	0.3	3.3	1.1	0.7	0.4	0.4	3.3
22-Jun	0.1	Z	0.1	0.1	0.1	1.5	0.5	0.4	0.2	0.1	0.2	0.1	0.9	0.1	0.1	0.1	0.1	0.3	0.7	0.6	1.3	1.2	0.2	0.1	0.4	1.5
23-Jun	0.5	0.1	Z	0.1	0.0	0.4	0.3	0.3	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.5	0.4	0.2	0.2	0.2	0.5
24-Jun	0.5	0.1	0.0	Z	0.1	0.2	0.9	0.5	0.3	0.2	0.3	0.2	0.8	0.3	0.1	0.1	0.1	0.2	0.2	0.3	0.1	0.1	0.2	0.1	0.3	0.9
25-Jun	0.1	0.3	0.0	0.0	Z	1.5	0.4	0.5	0.5	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.4	0.1	0.1	0.2	0.2	0.1	0.1	0.3	1.5
26-Jun	0.3	0.4	0.1	0.0	0.7	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.2	0.1	0.1	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.7
27-Jun	Z	0.1	0.0	0.0	0.1	0.1	0.3	0.2	0.2	0.1	0.4	0.1	0.2	0.2	0.2	0.1	0.2	0.0	0.1	0.1	0.0	0.3	0.0	0.1	0.1	0.4
28-Jun	0.0	Z	0.0	0.1	0.1	0.1	0.3	0.0	0.1	0.1	0.3	0.1	0.1	0.1	0.4	0.2	0.1	0.1	0.1	0.0	0.1	0.4	0.5	0.3	0.1	0.5
29-Jun	0.1	0.0	Z	0.1	0.3	0.2	0.7	0.3	0.1	C	C	C	C	C	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.5	0.4	0.1	0.2	0.7
30-Jun	0.1	0.1	0.1	Z	0.6	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	0.2	0.4	0.1	0.1	0.1	0.2	0.6
	0.2	0.1	0.1	0.1	0.2	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.3	0.2	0.1	Diurnal Average	
	0.6	0.4	0.5	0.5	0.7	2.4	0.9	1.2	0.6	0.6	0.7	2.2	0.9	0.6	0.4	0.4	0.5	0.4	0.7	0.6	3.3	1.3	0.7	0.5	Diurnal Maximum	

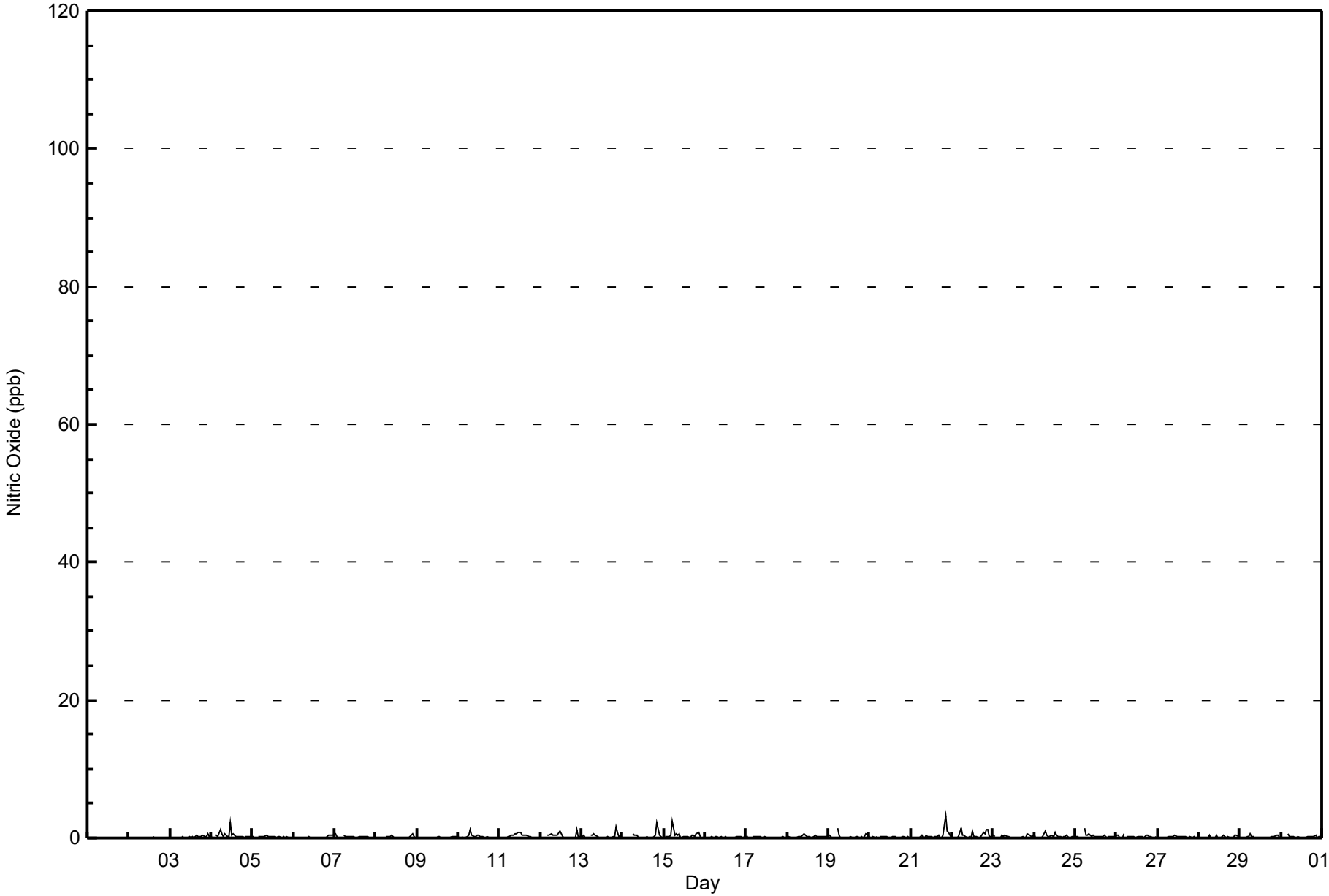
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Janvier - June 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

Janvier - June 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	111	111	59	35	25	27	31	24	23	51	46	35	35	22	13	34	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	111	111	59	35	25	27	31	24	23	51	46	35	35	22	13	34	682

Total Number of Valid Hours: 682

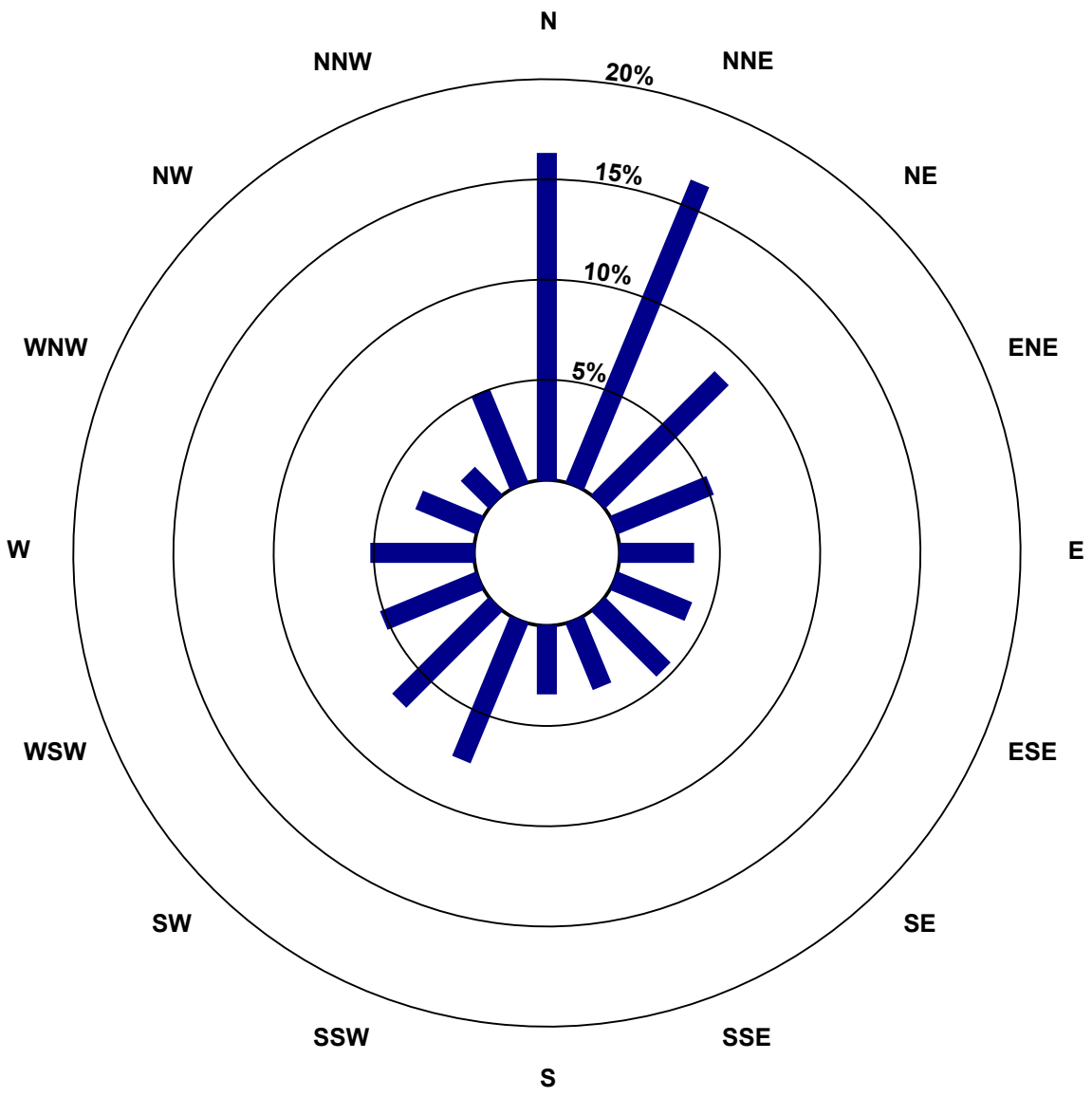
Total Number of Hours: 720

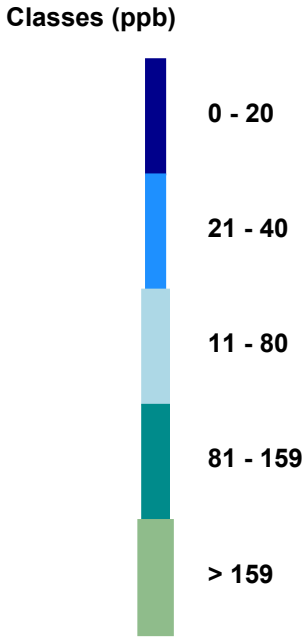
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Janvier





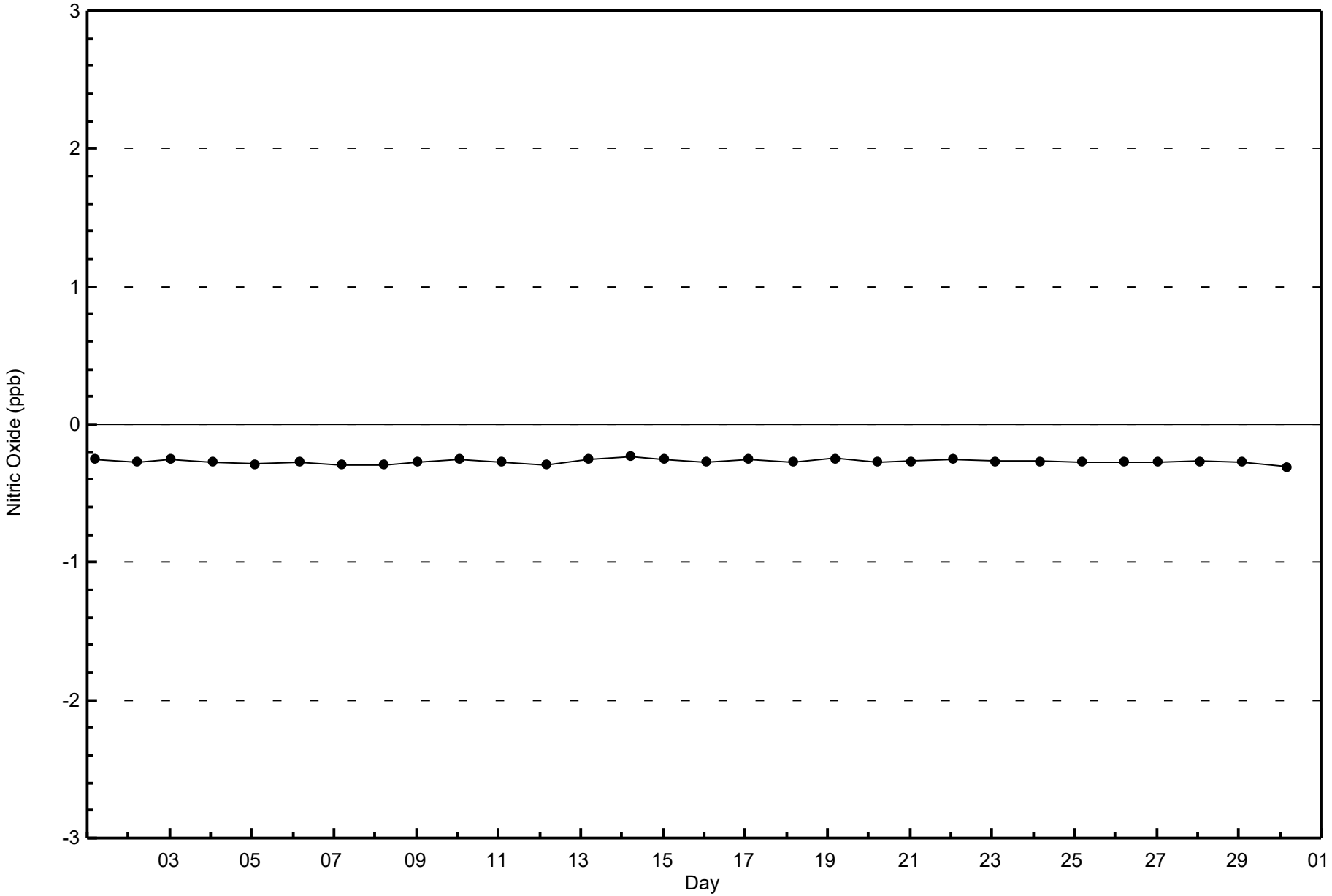
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Janvier - June 2026

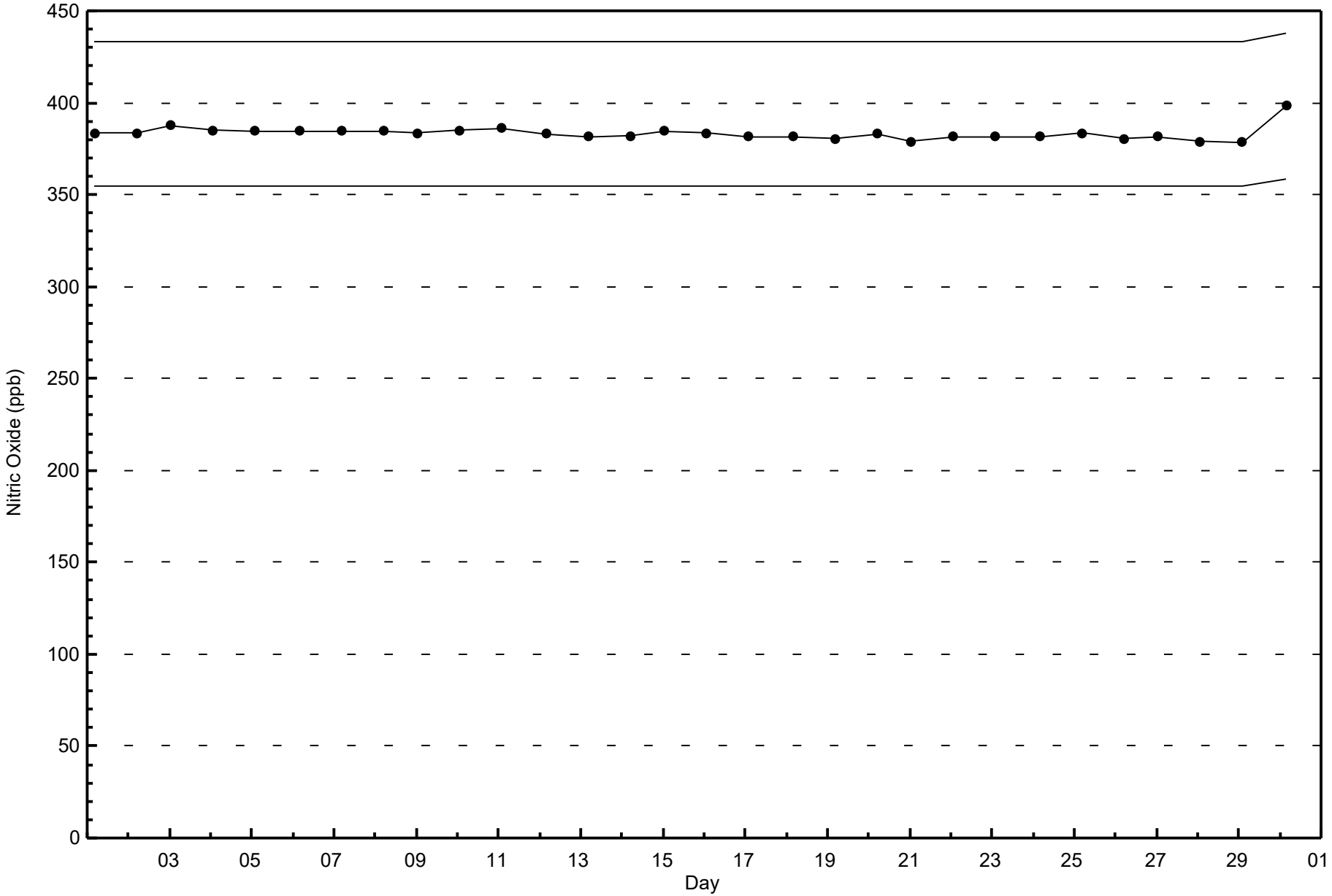


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Janvier - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Janvier - June 2026

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

Maximum Value: 7.1 ppb on Jun 28 22:00

Maximum Daily Average: 1.4 ppb on Jun 11

Minimum Value: 0.1 ppb on Jun 21 12:00

Minimum Daily Average: 0.2 ppb on Jun 2

Maximum Diurnal Average: 1.5 ppb at hour 22

Minimum Diurnal Average: 0.5 ppb at hour 16

Monthly Average: 0.82 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.3 Q_1 = 0.4 Median = 0.6 Q_3 = 1.1 P_{90} = 1.5 P_{99} = 2.9

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-Jun	0.7	0.6	0.4	0.4	Z	0.7	0.6	0.5	0.7	0.6	0.4	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.1	0.1	0.4	0.7
2-Jun	0.1	0.1	0.2	0.1	0.2	Z	0.4	0.3	0.2	0.2	0.2	M	M	M	0.3	0.2	0.3	0.2	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.4
3-Jun	Z	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.4	0.4	0.3	0.2	0.6	0.4	0.3	0.6
4-Jun	1.2	Z	1.0	1.3	1.2	1.5	1.2	1.0	2.1	1.2	1.1	1.4	1.1	1.2	0.9	0.9	0.8	1.0	1.1	1.2	1.2	1.8	1.7	1.6	1.2	2.1
5-Jun	1.6	0.9	Z	1.1	1.1	1.1	0.9	0.8	1.1	1.0	1.1	1.1	0.8	0.7	0.9	0.9	0.6	0.7	1.1	0.9	1.1	1.0	0.7	0.5	0.9	1.6
6-Jun	0.5	0.3	0.3	Z	0.6	0.6	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	1.2	1.7	1.0	1.0	0.5	1.7
7-Jun	1.2	0.6	0.3	0.3	Z	0.9	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.4	1.0	0.4	0.4	0.4	0.5	0.8	0.7	0.8	0.9	0.7	0.6	1.2
8-Jun	0.8	0.7	0.8	0.5	0.6	Z	1.6	1.2	1.3	2.2	0.7	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.4	0.5	0.6	0.3	0.6	2.2
9-Jun	Z	0.8	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.3	0.3	0.4	0.4	0.4	1.2	1.5	1.0	1.0	0.8	0.6	1.5
10-Jun	0.9	Z	0.9	0.6	0.8	1.3	3.5	3.6	1.0	1.1	0.8	1.3	1.3	1.1	1.3	0.7	0.7	0.8	0.7	0.7	0.7	0.8	0.8	1.1	1.2	3.6
11-Jun	1.7	1.9	Z	2.1	2.3	1.5	1.1	1.0	1.4	1.7	1.8	1.7	1.4	1.2	1.3	1.5	1.7	1.2	1.1	0.8	0.7	0.8	0.7	0.8	1.4	2.3
12-Jun	1.1	1.4	2.0	Z	2.1	1.9	1.9	1.4	1.1	1.1	1.1	2.4	1.7	0.6	0.4	0.4	0.5	0.4	0.5	0.5	0.6	1.6	1.3	1.2	1.2	2.4
13-Jun	0.9	2.1	1.3	1.1	Z	1.3	1.3	1.5	1.2	0.8	0.4	0.5	0.4	0.4	0.4	0.5	0.3	0.4	0.9	1.0	4.2	3.2	0.9	0.6	1.1	4.2
14-Jun	0.4	0.4	0.7	0.9	0.8	Z	1.2	1.0	1.5	0.8	0.7	0.5	0.4	0.4	0.7	0.5	0.6	0.7	1.2	1.2	3.0	1.1	0.7	0.8	0.9	3.0
15-Jun	Z	1.4	1.0	1.3	1.3	1.6	1.0	1.4	1.0	0.9	0.3	0.6	0.4	0.5	0.5	0.4	0.6	1.2	0.9	1.5	2.0	1.0	0.6	0.4	0.9	2.0
16-Jun	0.5	Z	0.8	0.6	0.8	0.6	0.8	0.6	0.6	0.6	0.5	0.3	0.4	0.5	0.2	0.3	0.3	0.4	0.8	0.9	1.1	1.4	0.4	1.1	0.6	1.4
17-Jun	0.8	0.7	Z	0.7	1.1	0.7	0.5	0.5	0.5	0.3	0.3	0.4	0.2	0.4	0.5	0.4	0.4	0.4	0.6	0.9	0.9	1.5	1.4	1.2	0.7	1.5
18-Jun	1.4	1.2	1.0	Z	0.6	0.5	0.6	0.5	0.7	1.4	1.5	0.7	0.9	0.8	0.4	1.1	1.8	0.9	0.9	1.7	2.9	2.8	2.0	1.6	1.2	2.9
19-Jun	1.2	1.0	0.8	0.7	Z	1.2	0.6	0.3	0.3	0.3	0.2	0.2	0.5	0.9	0.8	1.0	1.4	1.6	1.2	1.8	1.2	1.4	2.1	1.7	1.0	2.1
20-Jun	1.2	1.1	1.1	0.8	0.6	Z	0.6	0.4	0.3	0.3	0.4	0.2	0.3	0.4	0.4	0.4	0.3	0.2	0.4	0.6	0.7	0.5	0.6	0.5	0.5	1.2
21-Jun	Z	0.5	0.4	0.3	0.3	0.2	0.5	0.2	0.3	0.3	0.3	0.1	0.3	0.2	0.3	0.2	0.3	0.3	0.4	1.3	2.5	1.3	1.3	1.2	0.6	2.5
22-Jun	0.4	Z	0.5	0.4	0.8	0.8	1.0	0.7	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.4	1.7	2.1	1.6	2.6	0.6	0.9	0.7	2.6
23-Jun	0.8	0.8	Z	0.8	0.5	0.7	0.5	0.6	0.6	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.5	0.6	1.1	2.3	1.1	1.1	0.7	2.3
24-Jun	1.0	0.6	0.7	Z	0.9	1.1	2.5	1.6	1.2	0.9	1.2	1.1	1.8	1.2	0.8	0.9	0.5	0.8	0.7	0.8	0.8	0.8	1.4	1.0	1.1	2.5
25-Jun	0.7	1.7	0.9	1.0	Z	2.1	1.3	1.5	2.2	1.5	1.1	0.7	0.8	0.7	0.9	0.7	0.6	1.0	0.4	0.6	0.7	0.9	0.7	0.5	1.0	2.2
26-Jun	2.1	2.6	1.8	0.6	2.6	Z	0.5	0.6	0.6	0.5	0.5	0.3	0.6	0.5	0.6	0.4	0.4	0.3	0.7	0.7	1.0	0.4	0.3	0.9	0.8	2.6
27-Jun	Z	0.5	1.1	0.8	0.6	0.4	0.7	0.5	0.4	0.5	0.5	0.5	0.3	0.5	0.5	0.4	0.3	0.3	0.7	1.0	0.6	2.3	0.4	1.0	0.6	2.3
28-Jun	1.3	Z	0.6	0.6	0.5	0.4	1.0	0.3	0.2	0.2	0.3	0.4	0.4	0.2	0.8	0.5	0.3	0.6	0.3	0.9	2.4	7.1	4.9	2.5	1.2	7.1
29-Jun	0.9	0.8	Z	0.6	1.0	1.5	1.9	0.8	0.6	C	C	C	C	C	0.4	0.6	0.9	0.9	1.6	2.4	2.9	2.5	2.0	0.7	1.3	2.9
30-Jun	0.9	0.6	0.3	Z	0.6	0.7	0.4	0.2	0.1	0.1	0.5	0.4	0.5	0.5	0.4	0.9	1.0	0.6	0.5	1.1	1.4	0.4	0.3	0.3	0.6	1.4
	1.0	1.0	0.8	0.7	0.9	1.0	1.0	0.8	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.7	1.0	1.3	1.5	1.0	0.9	Diurnal Average	
	2.1	2.6	2.0	2.1	2.6	2.1	3.5	3.6	2.2	2.2	1.8	2.4	1.8	1.2	1.3	1.5	1.8	1.6	1.7	2.4	4.2	7.1	4.9	2.5	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

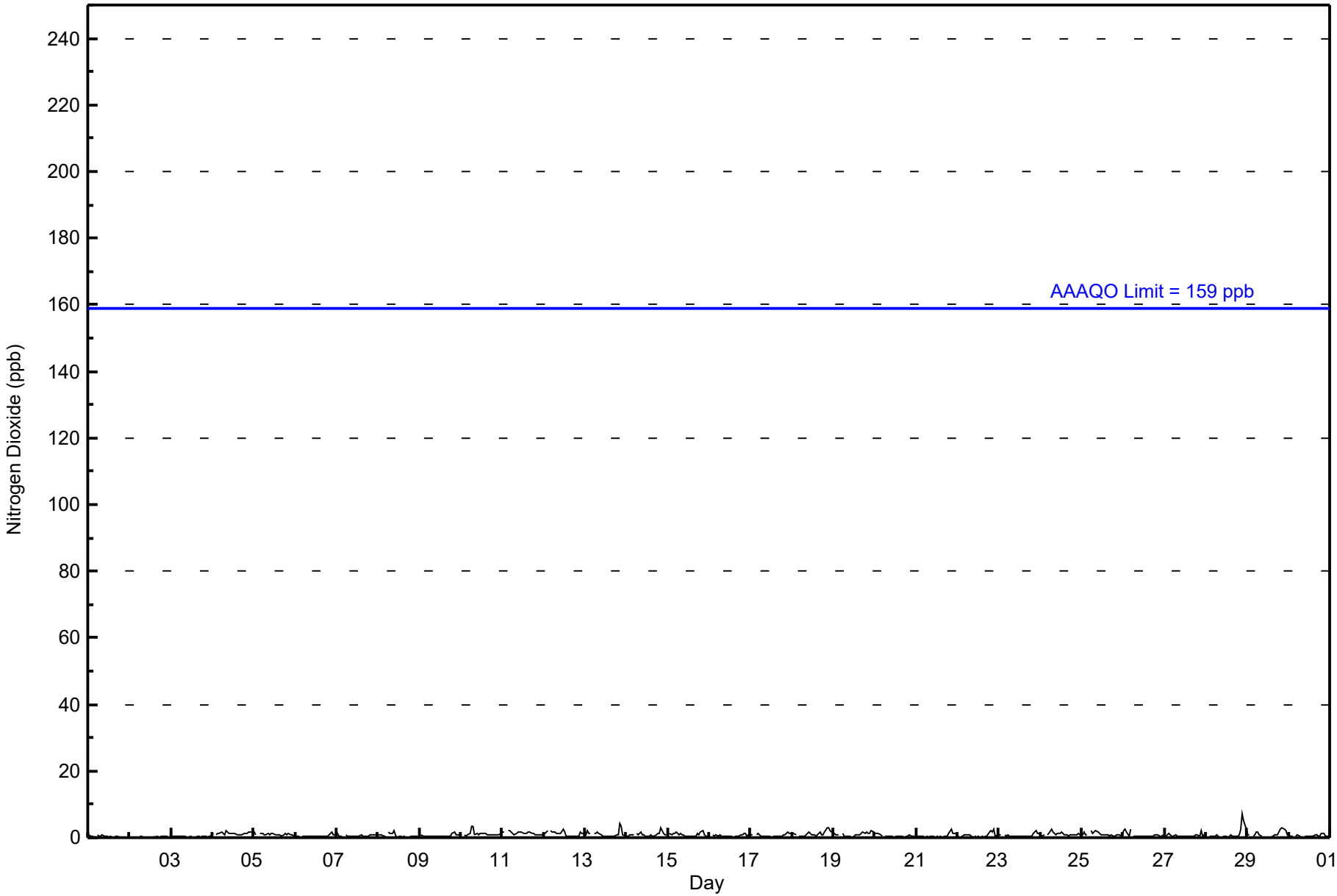
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Janvier - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Janvier - June 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

Janvier - June 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	111	111	59	35	25	27	31	24	23	51	46	35	35	22	13	34	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	111	111	59	35	25	27	31	24	23	51	46	35	35	22	13	34	682

Total Number of Valid Hours: 682

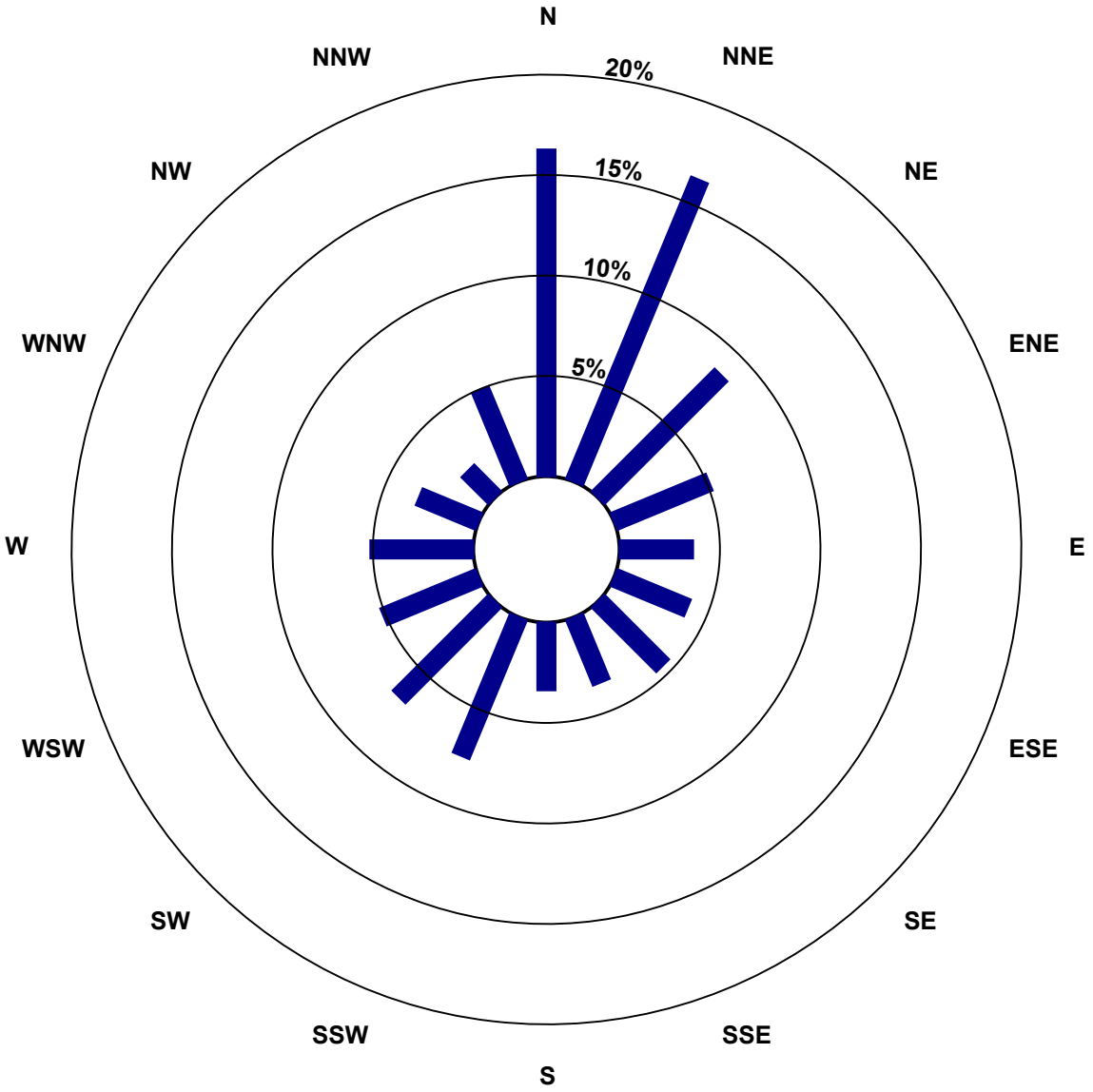
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Janvier



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

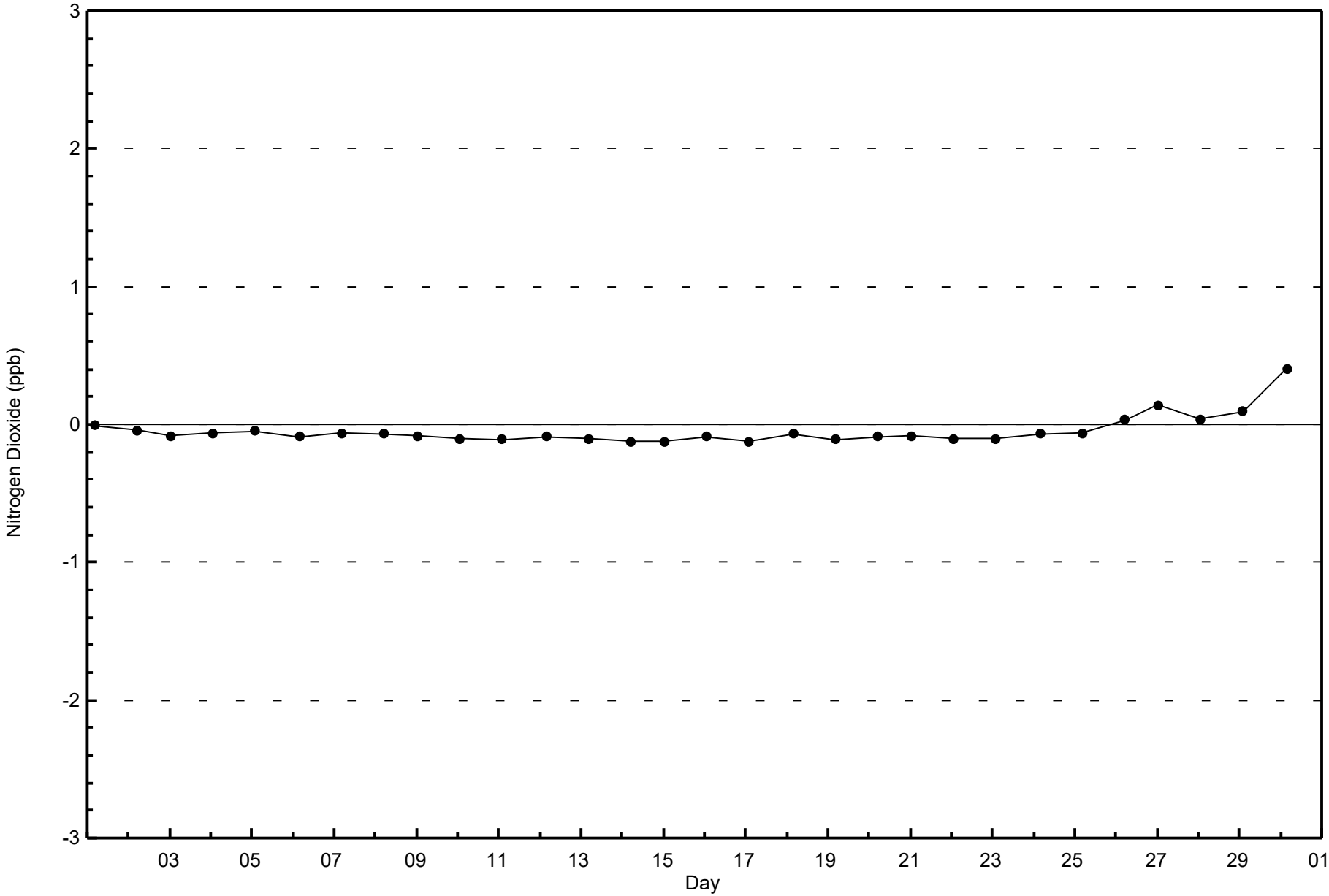
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Janvier - June 2026

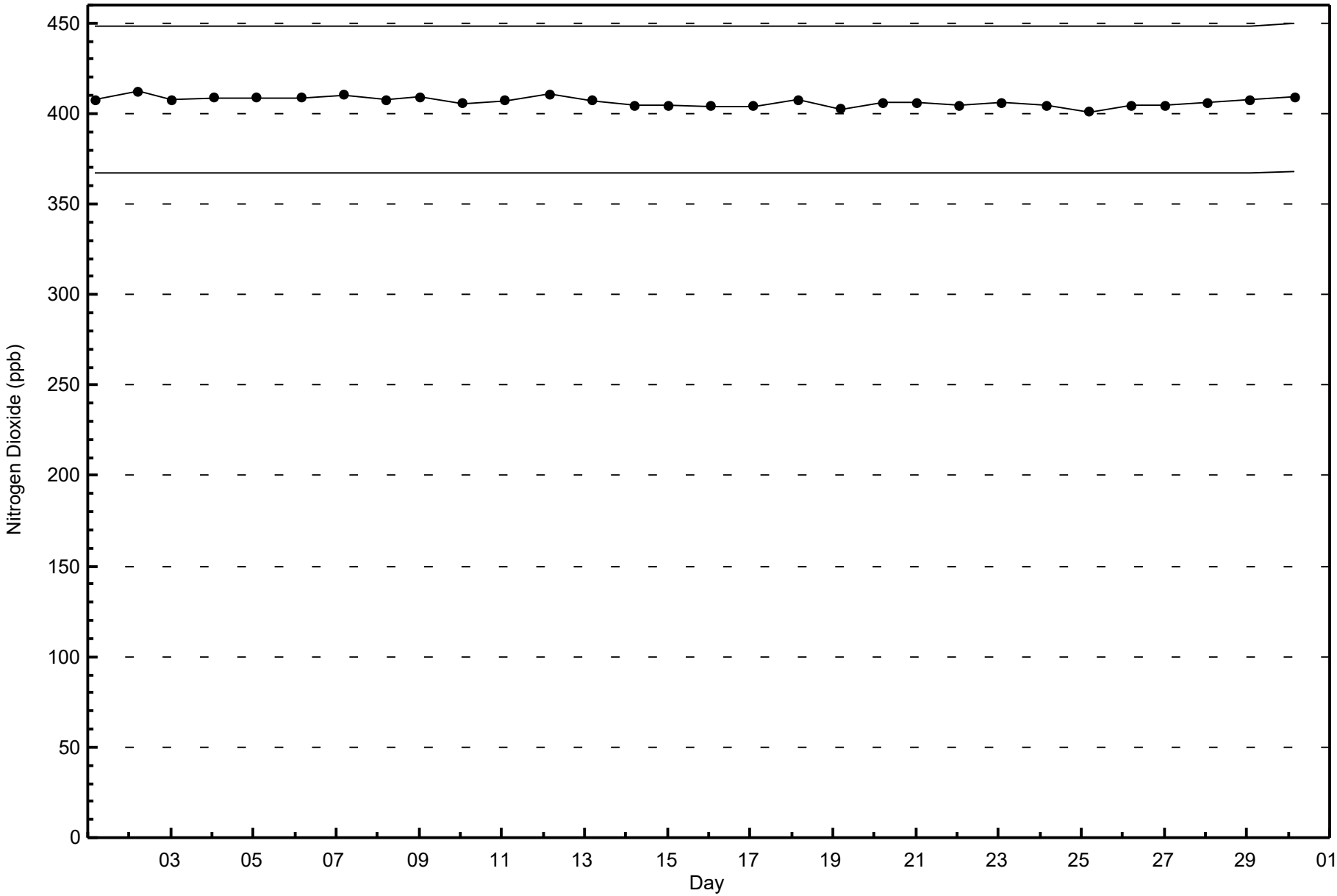


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Janvier - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Janvier - June 2026

Maximum Value: 7.5 ppb on Jun 28 22:00

Maximum Daily Average: 1.7 ppb on Jun 4

Minimum Value: 0.1 ppb on Jun 1 23:00

Minimum Daily Average: 0.3 ppb on Jun 2

Maximum Diurnal Average: 1.8 ppb at hour 22

Minimum Diurnal Average: 0.6 ppb at hour 16

Monthly Average: 1.02 ppb

Percentiles: P_1 = 0.2 P_{10} = 0.3 Q_1 = 0.5 Median = 0.8 Q_3 = 1.3 P_{90} = 1.9 P_{99} = 4.1

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-Jun	0.7	0.6	0.4	0.4	Z	0.7	0.6	0.6	0.8	0.7	0.5	0.4	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.1	0.1	0.4	0.8
2-Jun	0.1	0.1	0.2	0.1	0.2	Z	0.4	0.3	0.3	0.2	0.3	M	M	M	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.3	0.4
3-Jun	Z	0.6	0.4	0.3	0.3	0.3	0.3	0.5	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.7	0.4	0.3	0.5	0.8	0.4	0.3	1.2	0.6	0.4	1.2
4-Jun	1.3	Z	1.5	1.8	1.5	2.8	1.9	1.3	2.7	1.4	1.4	3.6	1.4	1.8	1.1	1.0	0.9	1.2	1.2	1.3	1.5	2.0	1.9	1.9	1.7	3.6
5-Jun	1.8	1.1	Z	1.2	1.3	1.3	1.1	1.0	1.4	1.2	1.2	1.2	0.9	0.8	1.0	1.0	0.7	0.8	1.2	1.0	1.2	1.1	0.8	0.5	1.1	1.8
6-Jun	0.5	0.3	0.3	Z	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	1.5	2.1	1.4	1.3	0.6	2.1
7-Jun	1.8	0.8	0.4	0.4	Z	1.4	0.7	0.7	0.8	0.6	0.6	0.6	0.6	0.5	1.3	0.5	0.6	0.6	0.6	0.9	0.8	0.9	1.0	0.8	0.8	1.8
8-Jun	0.9	0.8	0.9	0.6	0.7	Z	1.7	1.3	1.5	2.6	0.8	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	1.1	0.7	0.3	0.8	2.6
9-Jun	Z	0.8	0.6	0.5	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.6	0.8	0.4	0.4	0.4	0.4	0.4	1.3	1.7	1.1	1.2	1.0	0.6	1.7
10-Jun	1.0	Z	1.0	0.7	0.9	1.4	3.9	4.8	1.4	1.4	1.1	1.7	1.7	1.2	1.5	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.8	1.1	1.4	4.8
11-Jun	1.7	1.9	Z	2.1	2.4	1.7	1.4	1.4	1.8	2.2	2.5	2.5	2.1	1.6	1.7	1.9	2.2	1.4	1.2	0.9	0.8	0.8	0.7	0.8	1.6	2.5
12-Jun	1.1	1.4	2.0	Z	2.4	2.4	2.5	1.8	1.5	1.5	1.4	3.3	2.2	0.7	0.5	0.5	0.6	0.5	0.6	0.5	0.6	2.9	1.5	1.3	1.5	3.3
13-Jun	1.0	2.5	1.3	1.1	Z	1.8	1.7	2.0	1.6	0.9	0.5	0.5	0.5	0.5	0.5	0.6	0.3	0.5	1.2	1.2	5.8	4.1	1.1	0.7	1.4	5.8
14-Jun	0.4	0.4	0.7	0.9	0.9	Z	1.8	1.4	1.8	0.8	0.7	0.5	0.4	0.4	0.8	0.6	0.6	0.8	1.4	1.5	5.3	1.5	0.8	0.9	1.1	5.3
15-Jun	Z	1.6	1.2	1.4	1.8	4.0	1.3	1.9	1.3	1.5	0.4	0.9	0.5	0.7	0.7	0.5	1.0	1.5	1.2	2.1	2.9	1.3	0.7	0.5	1.3	4.0
16-Jun	0.5	Z	0.9	0.7	1.0	0.7	0.9	0.7	0.7	0.7	0.6	0.4	0.5	0.6	0.3	0.3	0.4	0.5	1.0	1.2	1.3	1.5	0.5	1.3	0.7	1.5
17-Jun	0.9	0.9	Z	0.7	1.3	0.8	0.6	0.7	0.6	0.3	0.3	0.5	0.2	0.4	0.6	0.4	0.5	0.4	0.7	1.0	1.0	1.7	1.5	1.2	0.8	1.7
18-Jun	1.5	1.4	1.1	Z	0.7	0.6	0.8	0.6	0.9	1.8	2.1	0.9	1.1	1.0	0.5	1.3	2.3	1.1	1.1	1.8	3.1	3.0	2.2	1.7	1.4	3.1
19-Jun	1.5	1.2	0.8	0.7	Z	2.6	0.9	0.3	0.3	0.3	0.2	0.3	0.5	1.0	0.9	1.1	1.5	1.7	1.3	2.0	1.2	1.6	2.8	2.2	1.2	2.8
20-Jun	1.3	1.2	1.3	0.9	0.7	Z	0.8	0.5	0.5	0.4	0.5	0.3	0.4	0.6	0.6	0.5	0.4	0.3	0.5	0.7	0.9	0.6	0.9	0.6	0.7	1.3
21-Jun	Z	0.5	0.4	0.3	0.3	0.3	0.9	0.3	0.4	0.6	0.5	0.3	0.4	0.2	0.6	0.5	0.7	0.4	0.5	1.6	5.8	2.4	2.0	1.6	0.9	5.8
22-Jun	0.5	Z	0.6	0.5	0.9	2.3	1.5	1.1	0.5	0.3	0.5	0.3	1.2	0.3	0.4	0.3	0.4	0.7	2.4	2.7	2.9	3.8	0.8	1.0	1.1	3.8
23-Jun	1.3	0.9	Z	0.9	0.5	1.1	0.8	0.9	0.7	0.7	0.5	0.3	0.3	0.4	0.3	0.4	0.4	0.7	0.6	0.7	1.6	2.7	1.3	1.3	0.8	2.7
24-Jun	1.5	0.7	0.7	Z	1.0	1.3	3.4	2.1	1.5	1.1	1.5	1.3	2.6	1.5	0.9	1.0	0.6	1.0	0.9	1.1	0.9	0.9	1.6	1.1	1.3	3.4
25-Jun	0.8	2.0	0.9	1.0	Z	3.6	1.7	2.0	2.7	1.7	1.4	0.8	1.0	0.9	1.1	0.9	0.8	1.4	0.5	0.7	0.9	1.1	0.8	0.6	1.3	3.6
26-Jun	2.4	3.0	1.9	0.6	3.3	Z	0.6	0.7	0.7	0.6	0.6	0.4	0.9	0.6	0.8	0.5	0.5	0.6	1.0	0.8	1.1	0.5	0.4	1.0	1.0	3.3
27-Jun	Z	0.6	1.1	0.8	0.7	0.5	1.0	0.7	0.6	0.6	0.9	0.6	0.5	0.7	0.7	0.5	0.5	0.3	0.8	1.1	0.6	2.6	0.4	1.1	0.8	2.6
28-Jun	1.3	Z	0.6	0.7	0.6	0.5	1.3	0.3	0.3	0.3	0.6	0.5	0.5	0.3	1.2	0.7	0.4	0.7	0.4	0.9	2.5	7.5	5.4	2.8	1.3	7.5
29-Jun	1.0	0.8	Z	0.7	1.3	1.7	2.6	1.1	0.7	C	C	C	C	C	0.4	0.6	0.9	0.9	1.7	2.6	3.2	3.0	2.4	0.8	1.5	3.2
30-Jun	1.0	0.7	0.4	Z	1.2	0.9	0.5	0.3	0.2	0.2	0.6	0.5	0.6	0.6	0.5	1.1	1.2	0.8	0.6	1.3	1.8	0.5	0.4	0.4	0.7	1.8
	1.1	1.1	0.9	0.8	1.1	1.4	1.3	1.1	1.0	0.9	0.8	0.9	0.8	0.7	0.7	0.6	0.7	0.7	0.9	1.1	1.8	1.8	1.2	1.0	Diurnal Average	
	2.4	3.0	2.0	2.1	3.3	4.0	3.9	4.8	2.7	2.6	2.5	3.6	2.6	1.8	1.7	1.9	2.3	1.7	2.4	2.7	5.8	7.5	5.4	2.8	Diurnal Maximum	

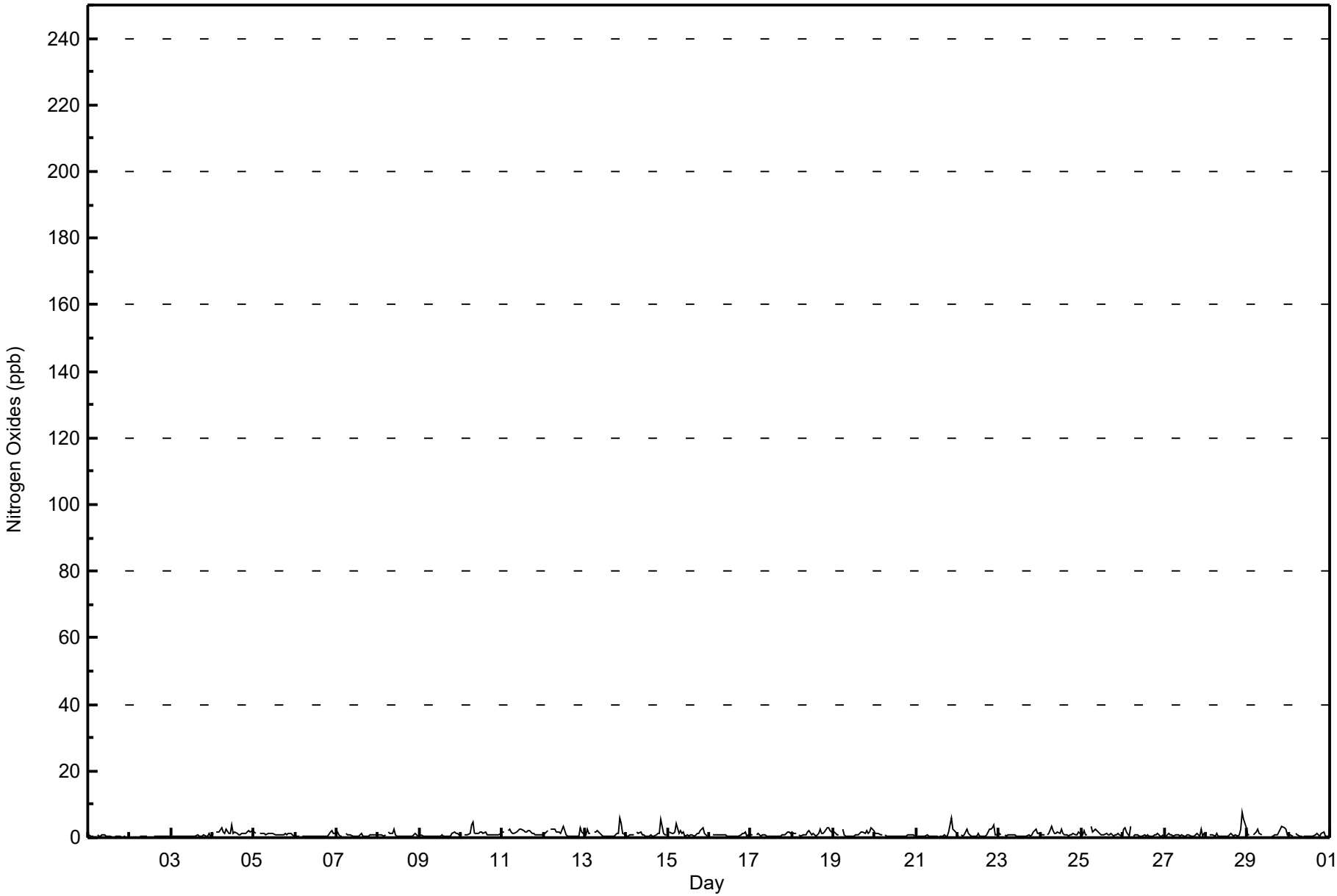
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Janvier - June 2026



Nitrogen Oxides (NO_X) - ppb

Janvier - June 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 Oxides (NO_X) - ppb

Janvier - June 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	111	111	59	35	25	27	31	24	23	51	46	35	35	22	13	34	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	111	111	59	35	25	27	31	24	23	51	46	35	35	22	13	34	682

Total Number of Valid Hours: 682

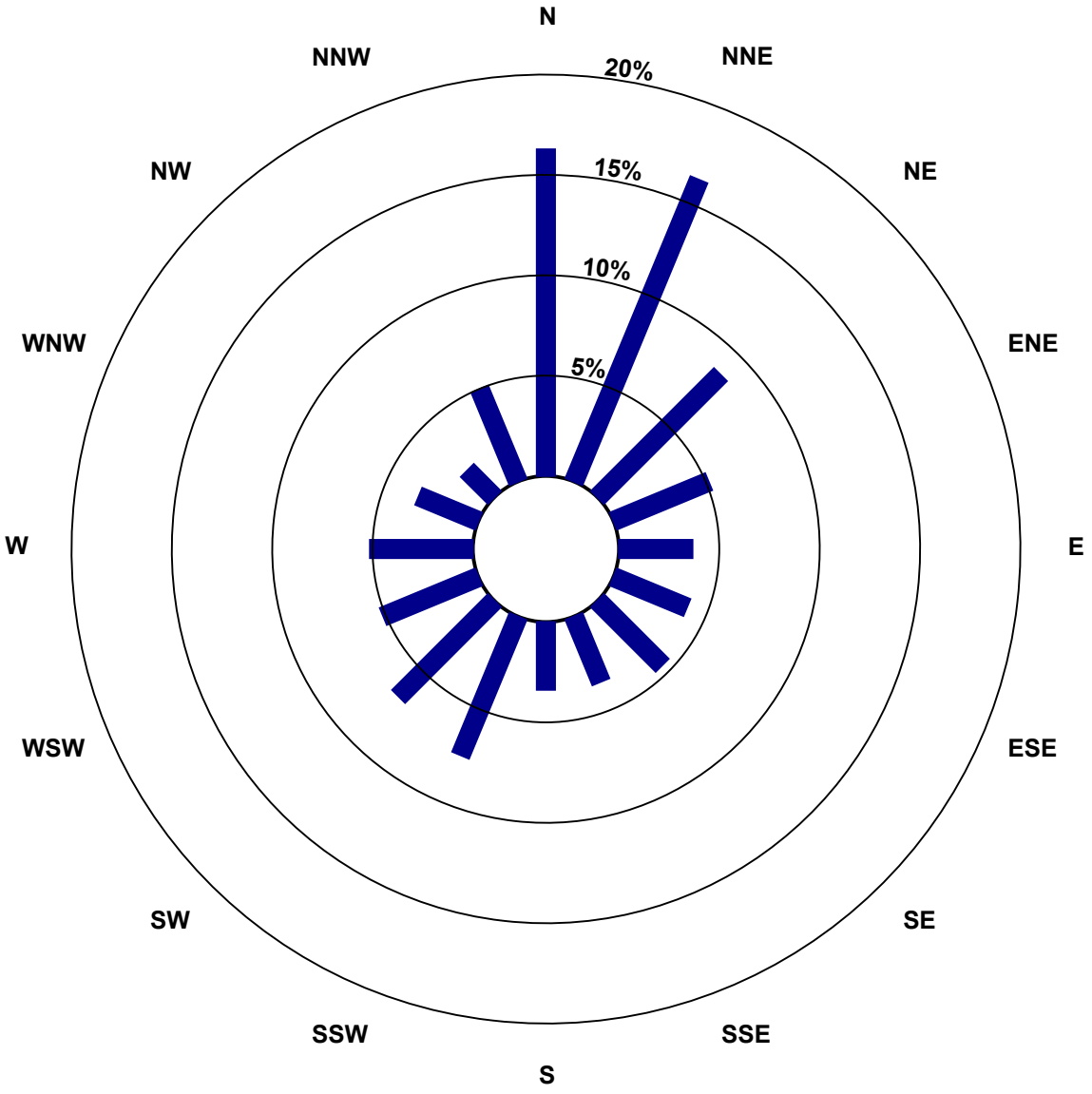
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Janvier



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

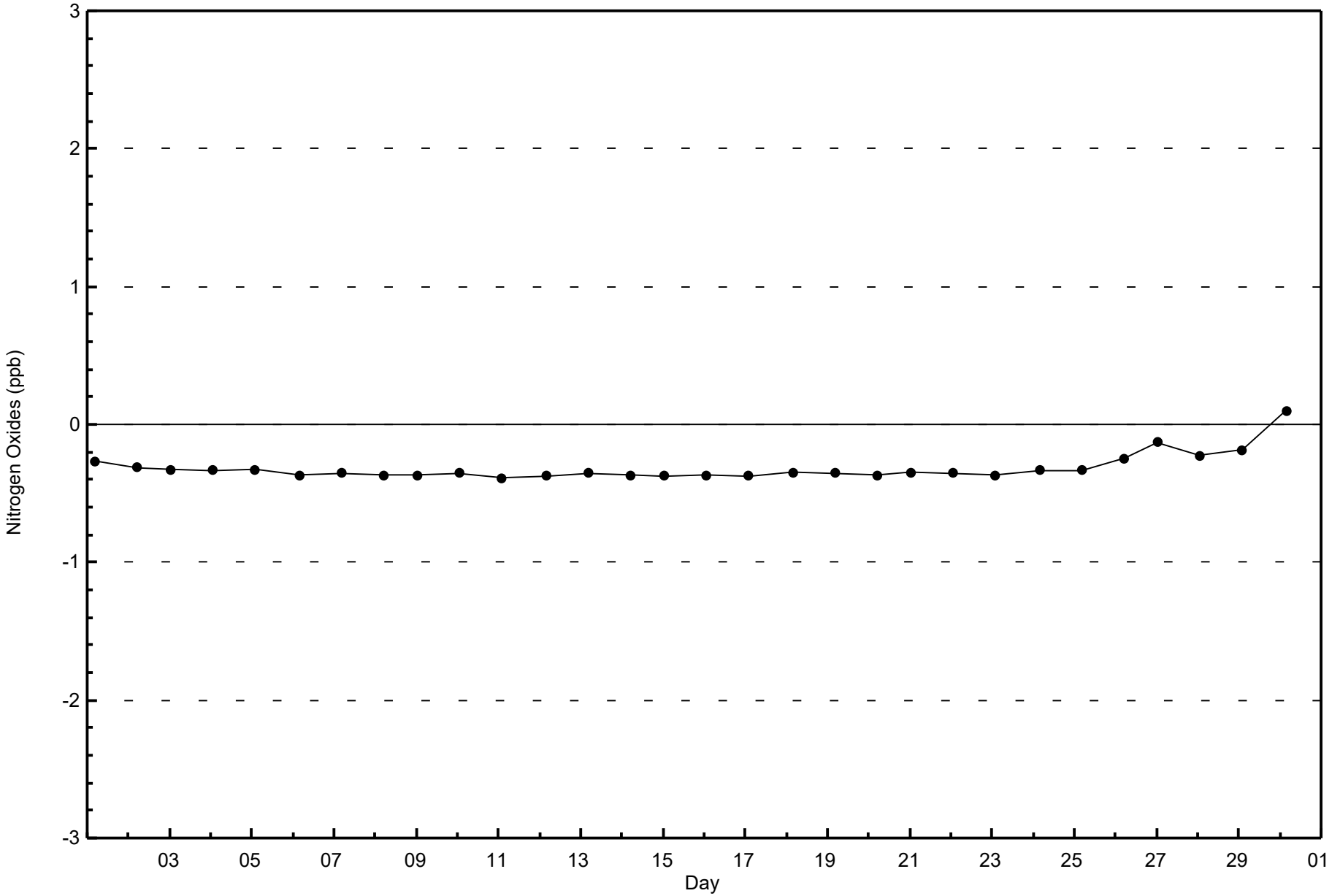
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Janvier - June 2026

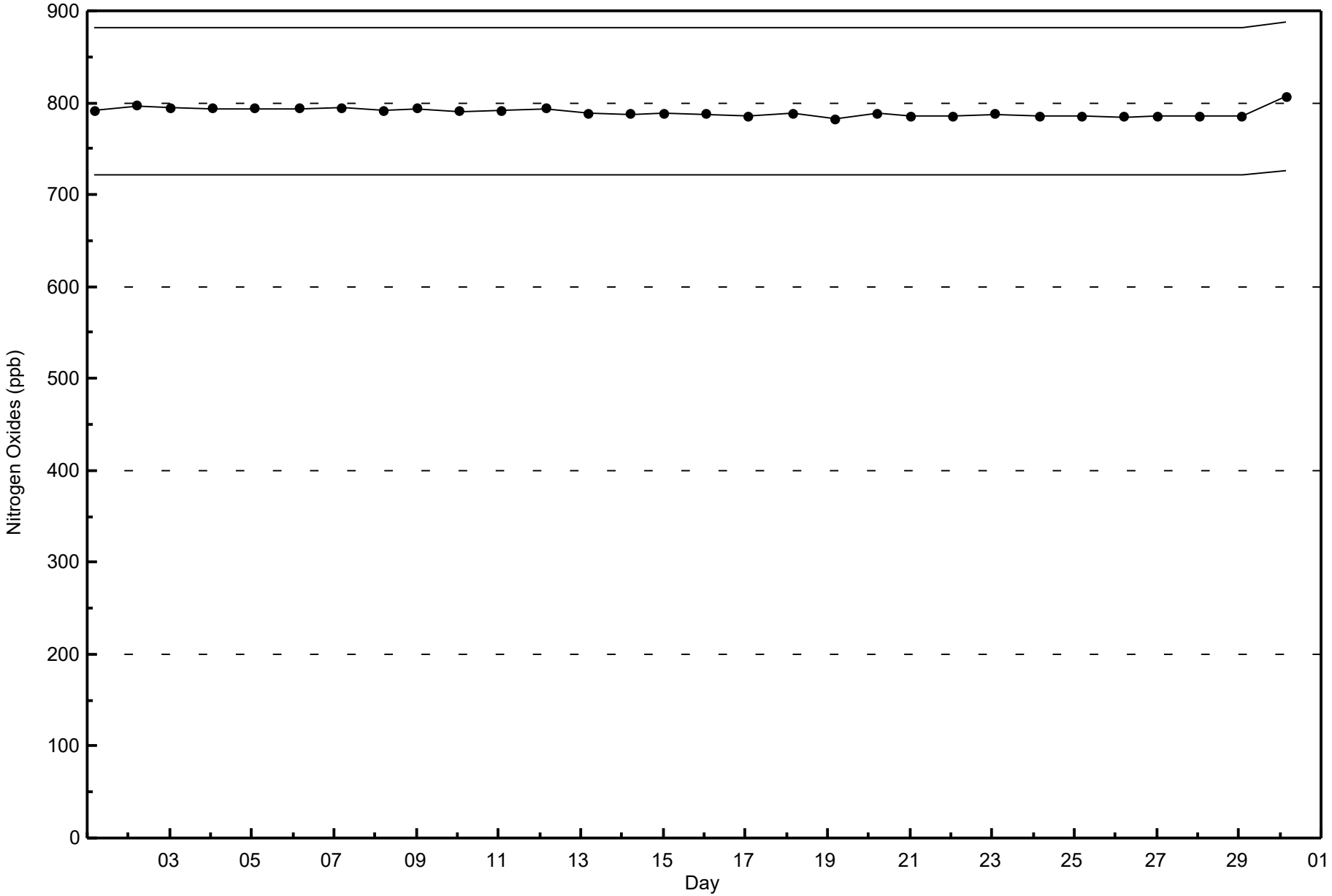


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Janvier - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Ozone (O_3) - ppb

Janvier - June 2026

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

Maximum Value: 60.1 ppb on Jun 29 17:00

Maximum Daily Average: 36.6 ppb on Jun 29

Minimum Value: 4.8 ppb on Jun 4 05:00

Minimum Daily Average: 17.0 ppb on Jun 11

Maximum Diurnal Average: 35.7 ppb at hour 17

Minimum Diurnal Average: 16.4 ppb at hour 5

Monthly Average: 27.30 ppb

Percentiles: P_1 = 7.1 P_{10} = 14.5 Q_1 = 19.8 Median = 26.7 Q_3 = 35.1 P_{90} = 41.7 P_{99} = 51.0

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-Jun	23.7	25.3	Z	27.5	24.9	24.5	25.8	25.9	26.6	28.6	27.5	25.6	24.1	25.3	29.8	31.7	31.3	28.0	28.3	29.7	29.8	29.8	29.6	27.2	27.4	31.7
2-Jun	23.5	22.3	21.4	Z	22.5	22.4	23.6	23.8	25.1	24.5	24.3	23.5	22.7	21.5	21.3	21.8	21.2	21.6	21.8	21.5	22.0	21.7	24.7	23.2	22.7	25.1
3-Jun	24.5	23.7	23.2	21.3	Z	18.5	18.2	18.0	18.8	22.0	21.8	21.6	M	M	20.0	22.2	23.7	24.6	23.3	20.2	18.1	16.8	13.3	11.0	20.2	24.6
4-Jun	12.5	14.4	12.9	6.5	4.8	Z	18.6	24.2	26.8	28.5	28.5	31.5	37.6	39.4	42.2	44.1	44.6	44.1	43.1	39.3	36.2	27.9	24.6	21.2	28.4	44.6
5-Jun	Z	16.8	11.6	11.1	8.2	14.3	16.7	18.9	23.8	29.4	29.6	27.0	30.5	30.5	28.0	29.8	33.6	32.0	27.7	27.1	27.5	23.1	21.9	29.2	23.8	33.6
6-Jun	29.2	Z	31.9	31.0	29.9	27.4	28.6	31.4	29.6	30.9	31.4	34.2	36.6	36.2	37.0	37.1	37.8	36.9	35.5	35.8	28.1	17.6	15.1	10.9	30.4	37.8
7-Jun	9.2	7.6	Z	6.6	9.9	14.3	16.0	16.9	20.7	24.6	29.4	33.1	35.7	39.6	34.5	46.8	47.7	47.0	42.1	40.7	36.8	32.5	28.9	24.2	28.0	47.7
8-Jun	23.5	24.3	26.9	Z	22.1	23.4	25.3	26.0	24.4	23.6	27.5	24.0	23.4	23.0	21.4	20.1	23.4	25.5	26.7	27.0	26.9	24.5	22.3	23.2	24.3	27.5
9-Jun	24.2	21.5	22.8	23.9	Z	25.8	28.4	36.1	37.9	40.0	41.0	41.5	41.7	42.7	43.3	43.3	42.5	41.7	40.1	36.5	27.8	24.4	22.5	20.1	33.5	43.3
10-Jun	17.2	21.9	17.1	15.8	18.3	Z	17.0	15.8	21.4	23.6	24.5	28.3	37.2	43.4	38.4	33.1	31.7	29.1	23.2	21.0	17.8	16.3	15.4	15.3	23.6	43.4
11-Jun	Z	13.1	12.4	12.6	12.1	15.4	16.4	16.6	16.9	17.9	16.4	16.5	17.1	18.7	19.8	18.6	17.4	18.7	19.9	19.8	19.4	19.0	18.4	17.7	17.0	19.9
12-Jun	17.6	Z	19.9	19.9	18.0	20.2	23.6	26.6	29.4	31.4	33.3	32.3	35.3	35.8	36.5	37.3	37.9	35.8	35.3	33.9	32.2	24.6	21.1	21.9	28.7	37.9
13-Jun	21.5	19.6	Z	15.4	15.1	15.1	18.8	22.8	29.2	36.4	38.3	38.1	37.6	37.9	37.8	37.1	36.7	36.6	34.1	32.5	20.7	20.1	23.0	25.5	28.3	38.3
14-Jun	27.7	29.3	29.4	Z	27.5	27.1	26.7	29.5	36.1	52.8	50.9	46.9	40.6	41.4	40.4	40.7	39.1	37.4	30.4	24.8	13.8	15.2	18.3	16.3	32.3	52.8
15-Jun	15.5	13.6	14.1	11.6	Z	10.4	15.2	21.3	23.5	28.6	31.8	34.2	35.5	35.5	34.7	35.7	35.1	33.9	31.1	26.2	23.1	26.0	30.1	34.5	26.1	35.7
16-Jun	35.0	35.5	28.7	21.3	15.2	Z	16.6	17.8	17.4	24.9	28.8	23.0	21.1	22.3	23.6	25.5	25.2	33.8	33.7	31.3	32.5	27.6	31.9	25.0	26.0	35.5
17-Jun	Z	18.8	15.3	19.1	17.7	19.1	21.5	22.1	24.0	24.9	27.5	32.1	33.5	37.1	38.9	37.4	38.3	37.4	36.9	34.4	30.3	27.7	26.4	24.8	28.1	38.9
18-Jun	23.5	Z	24.5	27.0	27.2	24.6	26.0	30.6	29.8	24.2	18.9	23.8	27.0	29.6	30.6	29.4	27.2	26.5	28.2	27.0	26.3	19.8	16.4	14.3	25.3	30.6
19-Jun	13.4	13.4	Z	12.4	11.4	13.2	18.8	25.0	26.7	28.7	30.7	33.7	37.7	41.6	42.1	42.2	41.9	38.7	35.7	31.5	28.4	22.9	17.4	16.0	27.1	42.2
20-Jun	14.7	11.3	10.3	Z	6.3	7.1	11.2	13.8	17.9	21.6	25.3	27.8	27.8	28.5	29.1	32.6	34.7	35.7	33.3	26.7	19.8	20.2	12.7	12.0	20.9	35.7
21-Jun	13.7	16.0	16.6	16.1	Z	14.1	13.0	12.4	12.3	15.1	19.4	23.1	25.3	25.5	24.9	23.9	23.7	24.4	22.7	19.7	12.5	10.8	10.3	9.9	17.6	25.5
22-Jun	8.7	7.9	7.3	5.5	6.8	Z	9.5	11.5	12.3	19.7	C	C	C	28.7	29.2	28.0	27.3	28.0	28.5	20.8	19.0	16.1	19.5	17.9	17.6	29.2
23-Jun	Z	17.5	15.0	10.5	11.3	11.7	12.0	14.8	25.3	31.5	33.0	34.6	33.7	37.1	37.1	38.2	36.5	33.8	33.0	34.6	27.1	20.3	19.5	19.1	25.5	38.2
24-Jun	19.4	Z	20.2	22.1	21.5	15.9	15.5	19.5	15.1	18.2	14.7	21.8	23.3	34.1	38.2	40.0	39.8	38.2	38.6	38.1	36.2	35.7	30.2	25.6	27.0	40.0
25-Jun	21.9	18.1	Z	14.6	11.6	12.7	17.1	24.8	33.4	39.2	42.6	43.8	44.7	44.7	42.9	44.6	47.5	45.6	45.7	42.5	41.2	38.6	34.7	32.0	34.1	47.5
26-Jun	27.0	21.1	22.6	Z	18.7	12.7	14.4	28.5	34.0	43.1	47.1	47.8	46.9	45.9	44.4	45.8	45.3	44.9	43.3	43.8	41.7	40.3	38.0	35.6	36.2	47.8
27-Jun	34.7	25.5	15.9	17.8	Z	22.2	28.4	31.1	33.0	35.8	39.9	41.4	42.1	41.8	40.8	41.4	41.1	41.7	32.5	28.2	36.7	36.0	36.4	29.4	33.6	42.1
28-Jun	28.9	26.9	25.0	25.1	22.8	Z	22.6	24.7	29.5	34.9	37.3	39.9	41.8	42.4	43.1	44.1	43.8	42.9	42.7	47.6	53.5	36.5	34.0	32.9	35.8	53.5
29-Jun	Z	27.7	27.8	24.0	20.3	18.2	25.2	28.7	32.6	35.4	38.4	46.3	51.4	53.1	51.3	53.4	60.1	48.8	44.5	36.4	35.1	29.1	27.0	26.7	36.6	60.1
30-Jun	19.0	Z	10.9	8.5	5.3	12.1	15.7	20.1	25.4	30.6	36.4	41.6	44.6	47.5	49.2	44.6	35.4	42.6	49.9	44.1	34.6	32.8	28.6	28.8	30.8	49.9
	21.2	19.7	19.3	17.1	16.4	17.7	19.6	22.6	25.3	29.0	30.9	32.4	34.2	35.5	35.0	35.7	35.7	35.2	33.7	31.4	28.5	25.1	23.7	22.4	Diurnal Average	
	35.0	35.5	31.9	31.0	29.9	27.4	28.6	36.1	37.9	52.8	50.9	47.8	51.4	53.1	51.3	53.4	60.1	48.8	49.9	47.6	53.5	40.3	38.0	35.6	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

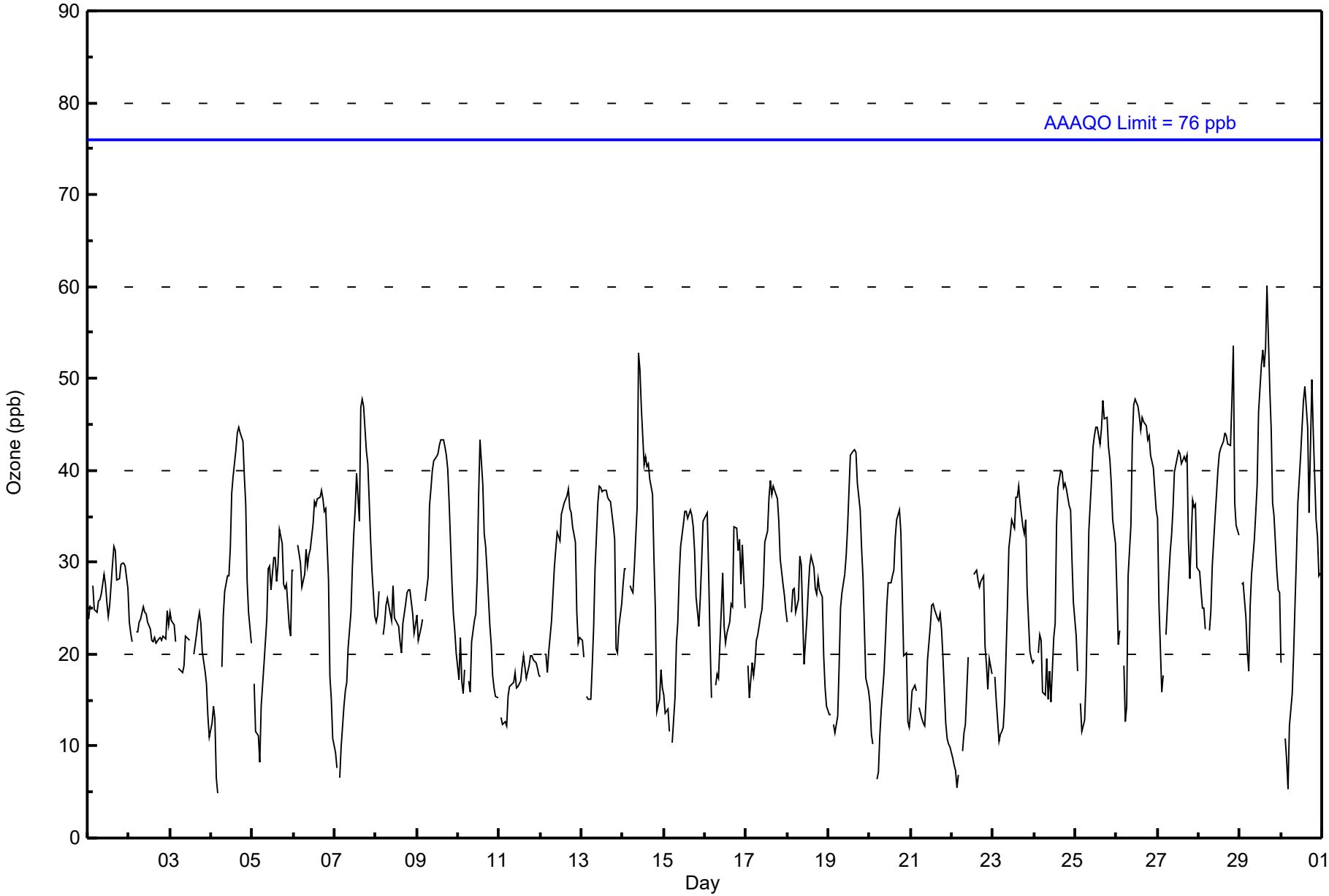
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 76 ppb

Wood Buffalo Environmental Association

Hourly Averages

Ozone (O_3) - ppb

Janvier - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Ozone (O_3) - ppb

Janvier - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	187	27.30	27.30
21 - 50	490	71.53	98.83
51 - 82	8	1.17	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

Janvier - June 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	33	5	6	3	1	3	4	11	26	23	10	5	2	4	14	187
21 - 50	73	82	52	28	23	26	27	20	10	25	24	26	27	19	7	21	490
51 - 82	0	3	3	0	0	0	0	0	0	0	0	0	0	0	2	0	8
> 83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	110	118	60	34	26	27	30	24	21	51	47	36	32	21	13	35	685

Total Number of Valid Hours: 685

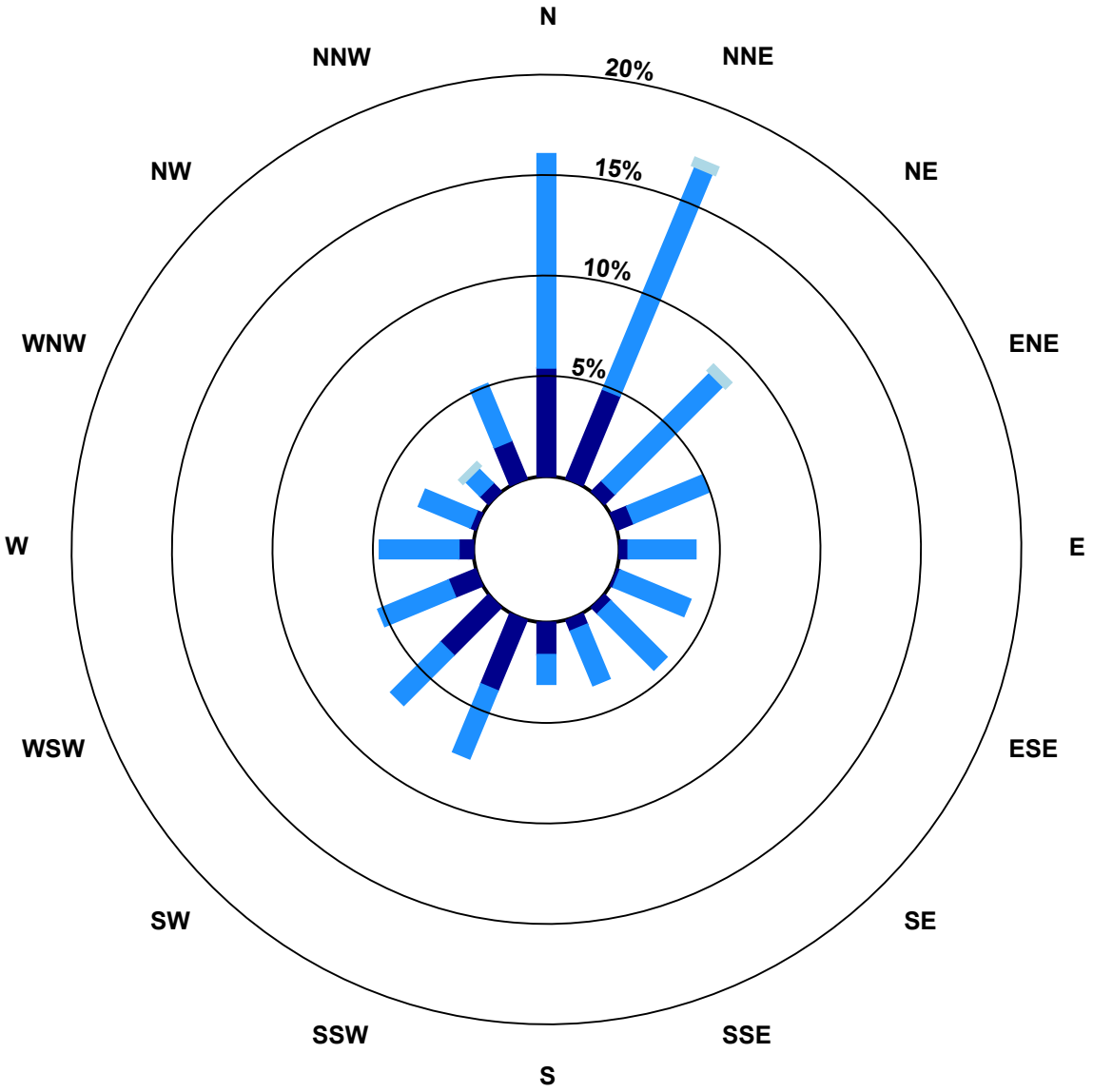
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Ozone (O_3) - ppb

Janvier



Classes (ppb)

- 0 - 20
- 21 - 50
- 51 - 82
- > 83

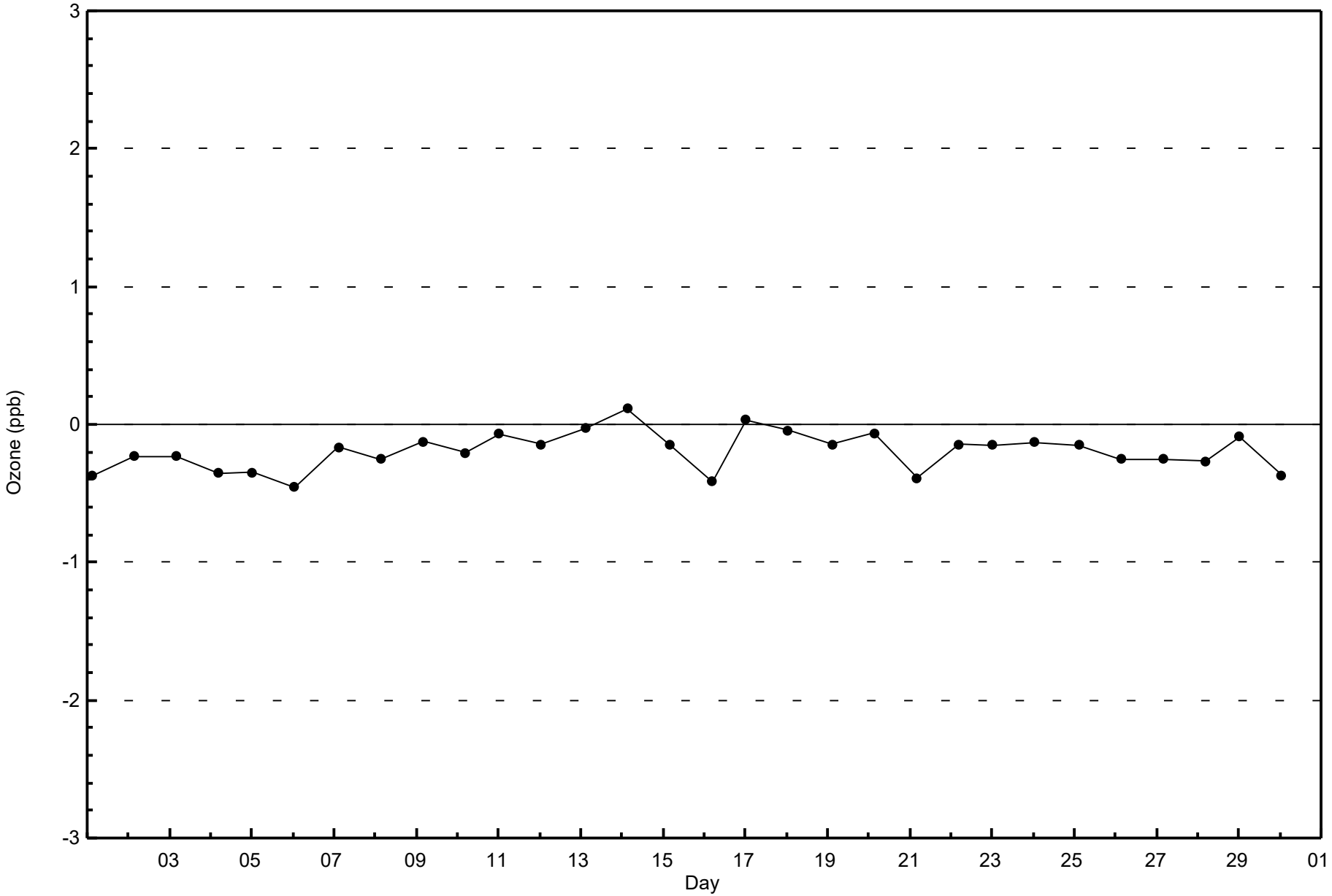
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Ozone (O_3) - ppb

Janvier - June 2026

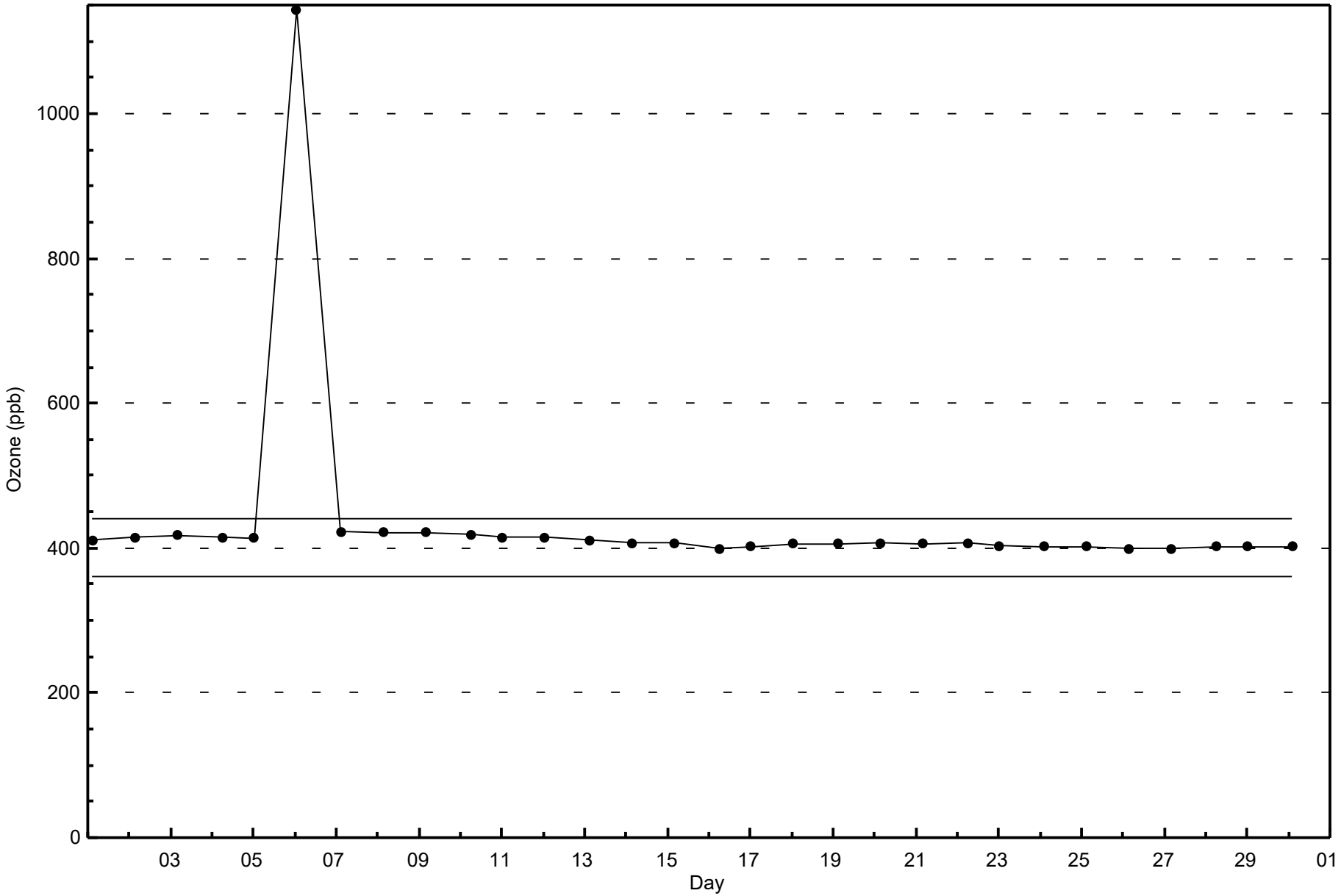


Wood Buffalo Environmental Association

Span Responses

Ozone (O_3) - ppb

Janvier - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Janvier - June 2026

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

Maximum Value: 74.1 $\mu g/m^3$ on Jun 28 23:00

Maximum Daily Average: 18.8 $\mu g/m^3$ on Jun 28

Minimum Value: 0.4 $\mu g/m^3$ on Jun 1 07:00

Minimum Daily Average: 1.0 $\mu g/m^3$ on Jun 2

Maximum Diurnal Average: 7.3 $\mu g/m^3$ at hour 13

Minimum Diurnal Average: 4.5 $\mu g/m^3$ at hour 16

Monthly Average: 5.92 $\mu g/m^3$

Percentiles: P_1 = 0.7 P_{10} = 1.5 Q_1 = 2.4 Median = 3.5 Q_3 = 4.9 P_{90} = 7.9 P_{99} = 58.6

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-Jun	1.0	0.9	0.7	0.6	0.4	0.4	0.4	0.5	0.7	1.1	1.8	2.6	2.8	2.7	2.3	2.0	1.9	2.1	1.3	0.7	0.8	0.7	0.8	0.8	1.3	2.8
2-Jun	0.9	1.0	1.1	1.0	1.0	1.1	1.0	1.0	0.7	0.7	0.9	1.1	1.1	1.0	1.1	1.2	1.4	1.1	1.0	1.1	1.4	0.8	1.1	1.1	1.0	1.4
3-Jun	1.2	2.0	2.3	1.9	2.1	2.3	1.7	1.6	1.8	1.7	1.7	M	2.9	2.4	3.1	3.2	3.4	3.4	3.7	4.4	5.1	6.0	7.3	8.4	3.2	8.4
4-Jun	10.0	10.5	11.4	11.9	12.2	12.6	12.2	11.6	12.8	12.0	11.5	9.1	8.5	7.5	6.9	6.5	6.6	6.6	7.0	7.7	8.6	9.9	10.6	11.1	9.8	12.8
5-Jun	12.7	9.8	10.9	10.8	11.3	10.3	10.7	10.0	9.2	8.1	9.4	9.5	5.1	5.2	4.1	3.5	4.2	3.9	3.9	4.0	4.2	4.7	4.6	3.1	7.2	12.7
6-Jun	2.4	1.6	1.5	1.5	2.1	2.6	2.2	1.4	1.6	1.2	1.3	1.7	2.1	2.4	2.3	2.1	2.1	2.4	2.1	2.2	2.0	2.7	3.2	3.5	2.1	3.5
7-Jun	3.6	3.6	3.6	3.5	3.3	2.9	2.8	2.6	2.3	2.0	2.1	1.8	2.0	2.0	3.3	2.5	1.9	2.0	2.5	3.3	2.6	2.6	2.9	3.0	2.7	3.6
8-Jun	3.2	3.4	3.1	3.0	3.6	5.4	5.1	4.1	4.1	4.0	1.6	0.9	0.9	1.7	3.9	3.9	3.9	3.5	3.2	3.1	3.7	3.6	3.8	3.7	3.4	5.4
9-Jun	3.7	3.7	3.6	3.5	3.2	2.9	2.6	1.8	1.7	1.6	1.3	1.4	1.3	1.2	1.4	1.5	1.8	2.0	2.0	2.4	2.8	3.1	3.4	3.2	2.4	3.7
10-Jun	3.5	3.1	3.5	3.7	3.8	3.8	5.2	5.6	4.1	4.2	5.2	7.3	7.3	3.8	3.7	2.4	2.6	2.3	2.1	1.2	1.0	0.9	0.9	1.4	3.4	7.3
11-Jun	2.1	2.0	2.2	2.6	2.5	1.6	1.2	1.2	1.5	3.0	3.5	3.2	3.6	3.2	2.9	3.1	3.2	2.4	1.4	1.3	2.2	2.4	2.2	2.3	2.4	3.6
12-Jun	2.5	2.8	2.7	2.6	2.6	3.1	2.2	1.7	1.3	1.6	1.9	2.8	3.2	2.7	2.3	2.4	2.3	2.3	2.2	2.1	2.0	2.3	2.8	2.9	2.4	3.2
13-Jun	2.8	2.8	3.0	2.8	2.8	2.7	2.7	2.7	2.7	2.0	2.2	2.3	2.5	2.3	2.3	2.2	2.1	1.7	2.2	3.1	4.0	4.0	3.6	3.1	2.7	4.0
14-Jun	3.5	3.2	3.3	3.1	3.2	3.2	3.6	3.4	3.0	3.1	3.1	3.1	3.0	3.2	3.6	2.9	2.8	4.2	4.9	4.7	4.1	4.4	4.5	5.2	3.6	5.2
15-Jun	5.3	5.2	5.3	5.3	5.1	5.8	5.9	5.8	5.7	4.2	3.7	3.4	3.4	3.8	3.7	4.6	4.3	3.6	4.5	4.5	4.7	5.2	5.3	5.4	4.7	5.9
16-Jun	5.5	4.4	4.9	5.6	5.9	6.0	6.5	6.1	6.7	4.8	4.9	4.5	3.9	4.2	3.8	3.8	3.8	5.5	4.5	3.6	2.8	2.9	2.1	2.3	4.5	6.7
17-Jun	2.6	2.6	2.6	2.2	2.1	2.1	1.7	1.7	1.4	1.2	1.3	1.8	1.3	1.6	2.7	2.7	2.9	3.0	3.1	3.1	3.7	4.5	4.4	4.1	2.5	4.5
18-Jun	3.7	3.9	3.7	3.0	3.0	2.9	2.4	2.2	2.0	2.3	2.2	2.3	2.6	3.0	2.5	2.7	3.7	3.4	3.1	3.8	4.6	4.7	4.7	4.3	3.2	4.7
19-Jun	4.1	3.3	3.1	3.0	3.0	2.5	2.2	1.5	1.5	1.5	1.5	1.9	2.8	3.5	4.1	6.1	7.9	7.9	6.1	8.7	7.6	4.4	4.5	3.1	4.0	8.7
20-Jun	4.4	6.4	3.4	3.4	3.1	2.7	2.1	1.6	1.8	1.7	2.1	2.8	3.0	3.4	3.5	3.1	2.4	2.9	3.0	3.5	3.5	3.9	3.8	3.9	3.1	6.4
21-Jun	3.7	3.7	3.5	3.3	3.4	3.3	3.2	3.3	3.7	3.6	3.1	2.7	2.7	2.6	2.6	2.8	2.8	2.9	2.9	3.3	3.8	6.9	7.1	4.9	3.6	7.1
22-Jun	5.1	4.9	4.2	4.5	4.4	4.1	4.7	4.8	4.4	3.3	2.6	2.9	2.8	2.5	2.7	2.8	2.9	2.9	2.8	3.2	3.2	4.8	3.8	3.8	3.7	5.1
23-Jun	4.1	4.0	4.2	4.5	4.2	4.2	4.1	4.1	4.1	4.7	3.6	3.0	3.2	2.9	3.3	3.1	3.4	3.4	4.6	3.9	4.3	4.5	4.7	4.4	3.9	4.7
24-Jun	5.5	4.3	4.4	4.2	4.8	5.1	5.4	6.0	6.2	6.4	6.6	6.5	7.4	5.0	4.0	3.8	3.9	4.2	4.2	4.3	4.0	4.3	4.6	4.7	5.0	7.4
25-Jun	4.8	4.9	5.0	5.1	5.3	5.1	4.9	5.5	4.8	3.8	3.1	3.3	3.5	3.4	3.5	3.9	6.1	4.5	5.0	4.2	4.7	5.4	5.0	5.0	4.6	6.1
26-Jun	5.4	5.9	5.9	5.7	6.3	7.8	6.4	5.1	4.3	3.3	2.9	3.0	3.1	3.3	3.5	3.8	3.7	3.8	4.0	4.2	4.3	4.6	4.7	4.9	4.6	7.8
27-Jun	5.1	5.4	7.0	7.5	6.3	5.9	5.3	5.4	5.0	4.7	4.2	4.3	4.0	4.4	4.2	4.0	4.3	4.3	4.3	4.4	4.7	4.8	4.5	6.0	5.0	7.5
28-Jun	7.0	6.3	6.1	6.3	6.4	6.4	5.9	6.3	6.4	5.9	13.2	16.8	21.4	9.6	6.8	5.9	6.1	6.6	7.9	20.8	68.9	68.3	74.1	61.3	18.8	74.1
29-Jun	51.5	46.0	46.0	46.8	48.4	48.1	54.5	54.7	53.6	53.9	58.6	60.4	66.9	63.3	48.1	DF	DF	DF	DF	DF	DF	DF	DF	DF	--	66.9
30-Jun	DF	DF	DF	DF	DF	DF	DF	DF	DF	DF	37.4	40.8	41.9	43.8	42.8	36.8	34.9	36.3	41.4	32.1	27.6	24.2	26.7	27.9	--	43.8
	5.9	5.6	5.6	5.6	5.7	5.8	5.8	5.6	5.5	5.2	6.6	7.1	7.3	6.7	6.2	4.5	4.6	4.7	4.9	5.1	6.8	7.0	7.3	6.9	Diurnal Average	
	51.5	46.0	46.0	46.8	48.4	48.1	54.5	54.7	53.6	53.9	58.6	60.4	66.9	63.3	48.1	36.8	34.9	36.3	41.4	32.1	68.9	68.3	74.1	61.3	Diurnal Maximum	

M - Maintenance DF - DAS Failure

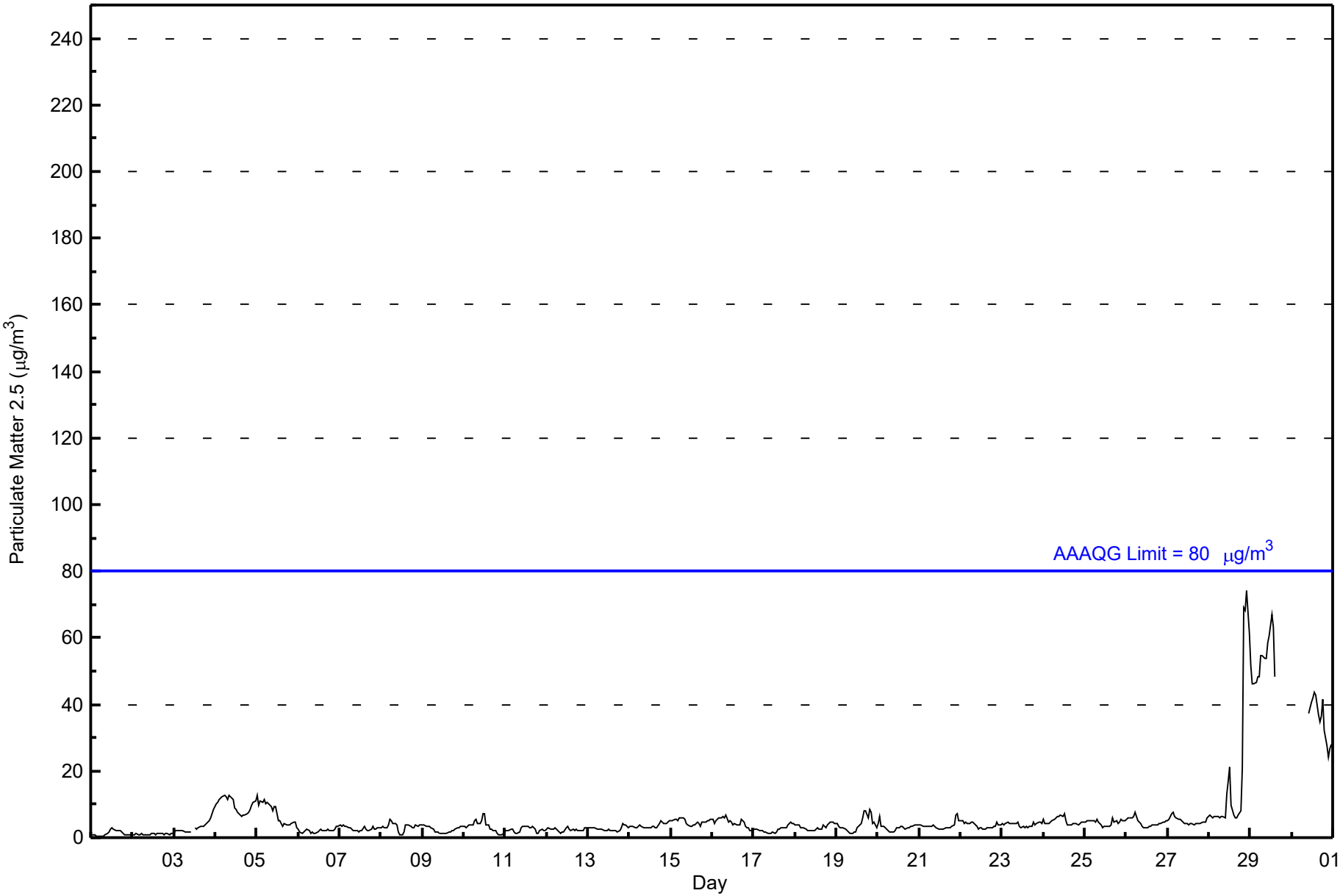
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Janvier - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Janvier - June 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	565	80.71	80.71
6 - 15	99	14.14	94.86
16 - 25	4	0.57	95.43
26 - 80	32	4.57	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 700

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Janvier - June 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	102	83	41	25	22	24	23	20	15	40	37	31	32	21	13	36	565
6 - 15	9	18	7	7	2	0	5	4	9	17	11	5	3	1	0	1	99
16 - 25	0	0	2	1	0	0	1	0	0	0	0	0	0	0	0	0	4
26 - 80	2	18	4	2	1	3	0	1	0	0	1	0	0	0	0	0	32
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	113	119	54	35	25	27	29	25	24	57	49	36	35	22	13	37	700

Total Number of Valid Hours: 700

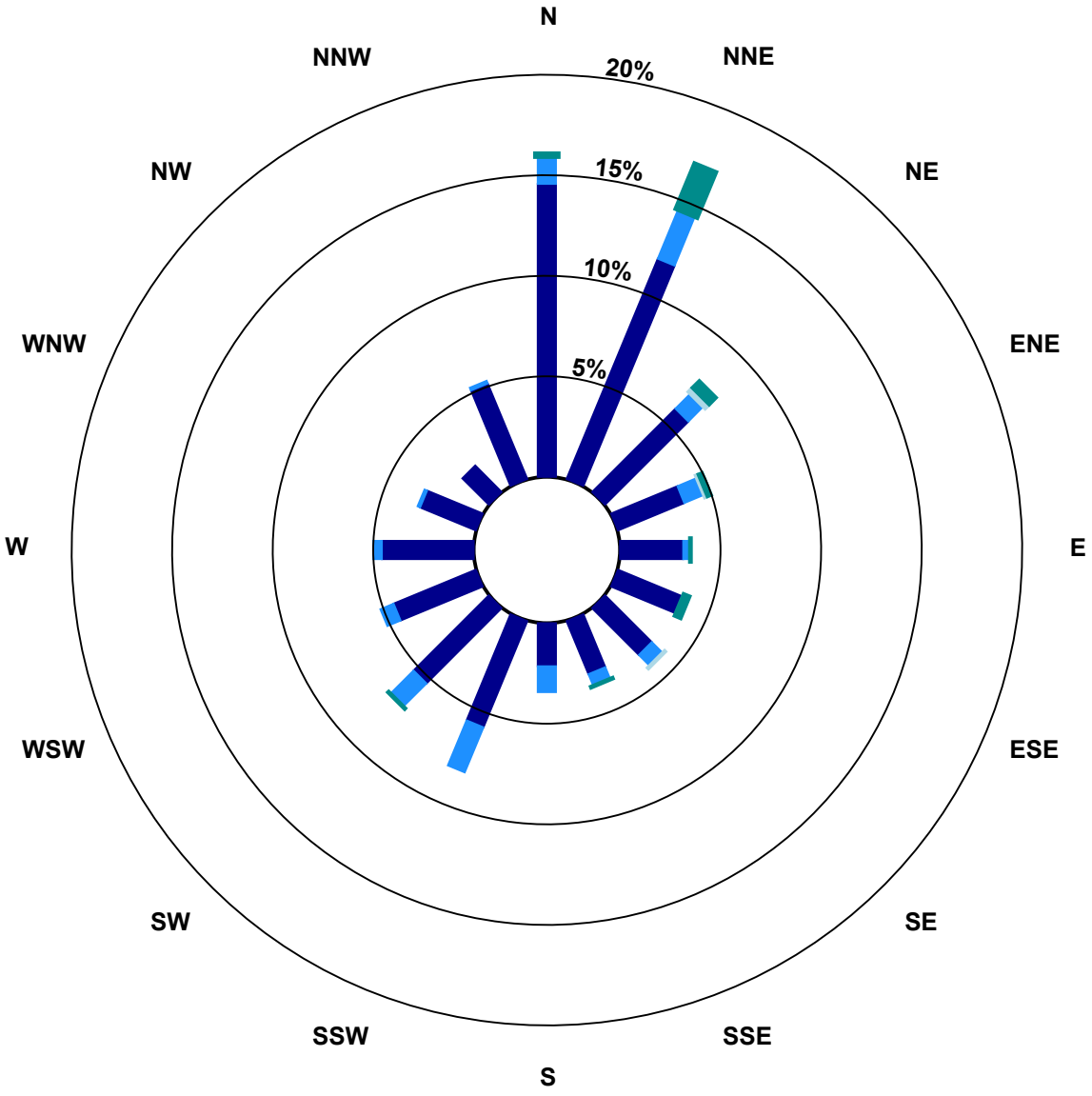
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

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

Janvier



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

0 - 5

6 - 15

16 - 25

26 - 80

> 81.0

Total Number of Valid Hours: 700

Maximum Value: 28.2 C on Jun 29 15:00

Maximum Daily Average: 21.1 C on Jun 28

Minimum Value: 4.4 C on Jun 13 04:00

Minimum Daily Average: 8.2 C on Jun 2

Maximum Diurnal Average: 19.8 C at hour 17

Minimum Diurnal Average: 9.5 C at hour 5

Monthly Average: 15.07 C

Percentiles: P_1 = 6.2 P_{10} = 8.5 Q_1 = 10.9 Median = 14.3 Q_3 = 18.8 P_{90} = 23.3 P_{99} = 27.4

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

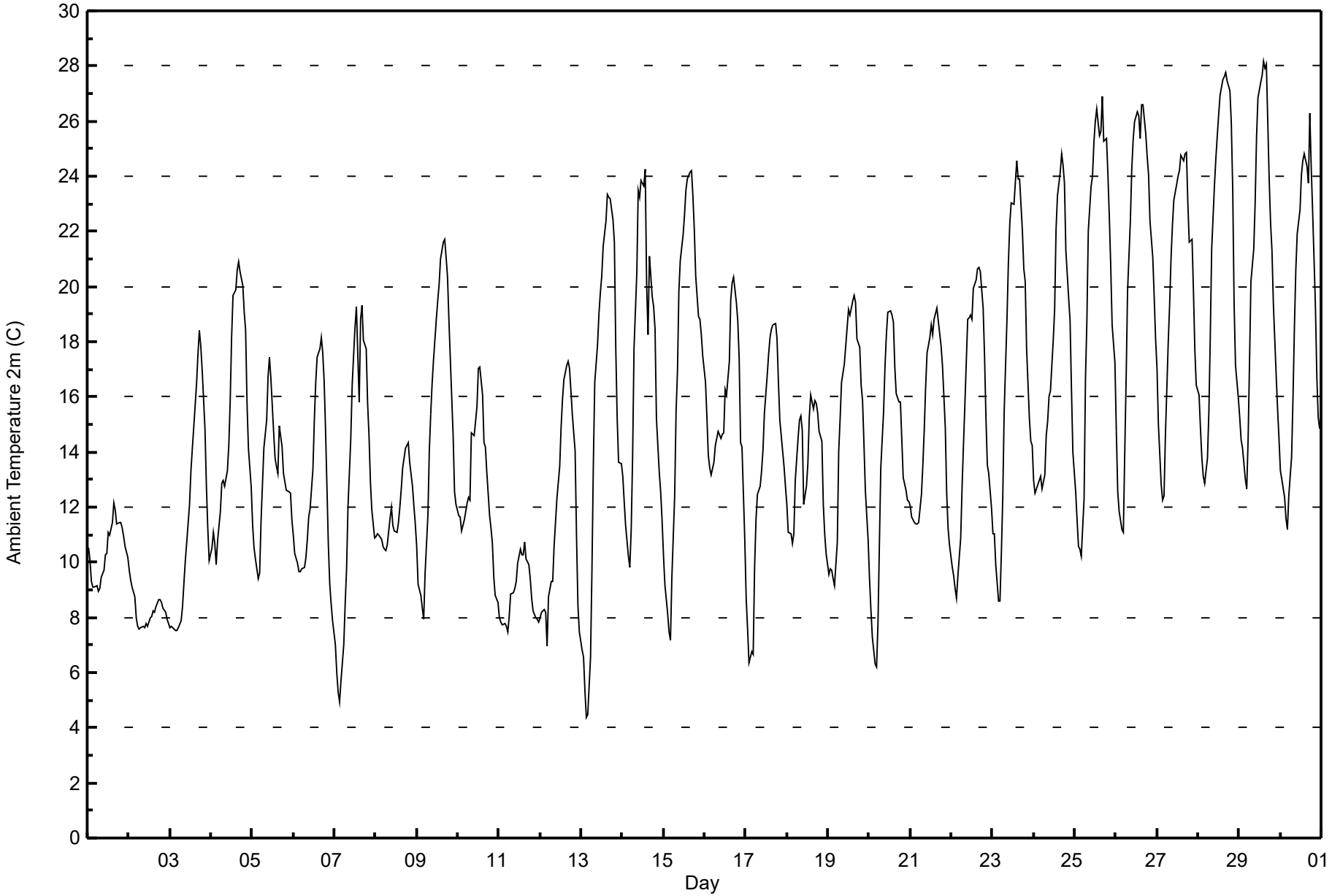
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	10.5	10.1	9.3	9.1	9.1	9.1	9.0	9.1	9.5	9.7	10.3	10.3	11.1	11.0	11.5	12.1	11.9	11.4	11.4	11.4	11.3	11.0	10.6	10.2	10.4	12.1
2-Jun	9.7	9.4	9.1	8.8	8.0	7.7	7.6	7.6	7.7	7.7	7.8	7.7	8.0	8.1	8.2	8.2	8.4	8.6	8.6	8.5	8.4	8.2	7.9	7.8	8.2	9.7
3-Jun	7.6	7.7	7.6	7.5	7.5	7.6	7.9	8.4	9.2	10.1	10.7	12.1	13.3	14.1	14.9	16.5	17.5	18.4	17.8	17.0	14.8	12.8	11.2	10.1	11.8	18.4
4-Jun	10.5	11.1	10.7	9.9	10.8	11.9	12.9	13.0	12.8	13.3	14.2	15.9	18.2	19.7	19.9	20.6	20.9	20.5	20.0	19.1	18.4	15.8	14.1	12.7	15.3	20.9
5-Jun	11.4	10.5	10.1	9.4	9.6	11.5	12.8	14.1	15.2	16.7	17.5	16.7	14.7	13.8	13.5	13.2	14.9	14.2	13.2	12.9	12.6	12.6	12.5	11.5	13.1	17.5
6-Jun	11.0	10.3	10.0	9.7	9.7	9.7	9.8	10.1	10.8	11.7	12.0	13.4	15.2	16.5	17.5	17.7	18.2	17.6	16.6	14.8	10.6	9.2	8.5	7.9	12.4	18.2
7-Jun	7.0	6.0	5.3	4.9	5.7	7.0	8.5	9.8	12.0	14.5	16.4	17.5	18.5	19.3	15.8	18.8	19.3	18.1	17.8	15.8	14.6	12.9	11.9	10.9	12.8	19.3
8-Jun	10.9	11.0	11.0	10.8	10.6	10.5	10.4	10.6	11.6	12.0	11.3	11.1	11.1	11.5	12.0	12.7	13.4	14.1	14.2	14.3	13.6	12.8	12.1	11.4	11.9	14.3
9-Jun	10.6	9.2	8.8	8.3	8.0	9.6	11.7	14.0	15.3	16.5	17.3	18.8	19.5	20.1	21.0	21.6	21.7	21.1	20.3	18.7	15.9	14.6	12.6	12.1	15.3	21.7
10-Jun	11.7	11.6	11.2	11.3	11.5	12.2	12.4	12.3	14.7	14.6	15.1	15.7	17.0	17.1	16.1	14.4	14.2	13.3	11.7	11.3	10.7	9.5	8.8	8.6	12.8	17.1
11-Jun	8.0	7.8	7.7	7.8	7.7	7.5	8.0	8.8	8.9	9.1	9.3	9.9	10.5	10.3	10.3	10.7	10.1	9.9	9.4	8.7	8.3	8.0	7.9	7.8	8.8	10.7
12-Jun	8.0	8.2	8.3	8.2	7.0	8.8	9.3	9.3	10.6	11.5	12.3	13.5	14.9	15.9	16.7	17.1	17.3	17.0	16.2	15.4	14.0	11.0	8.4	7.5	11.9	17.3
13-Jun	6.8	6.6	5.3	4.4	4.5	6.5	9.7	13.6	16.5	17.9	19.0	19.8	20.4	21.5	22.4	23.3	23.2	23.2	22.4	21.6	17.7	15.2	13.6	13.6	15.4	23.3
14-Jun	13.1	12.2	11.3	10.2	9.8	11.2	13.8	17.8	20.5	23.5	23.3	23.9	23.6	24.2	20.1	18.3	21.1	19.6	19.3	18.5	15.2	13.3	12.5	11.5	17.0	24.2
15-Jun	10.3	9.2	8.1	7.5	7.2	9.5	12.4	15.5	17.0	19.9	20.9	21.9	22.6	23.5	23.9	24.2	24.2	23.3	22.1	20.4	18.9	18.8	18.2	17.5	17.4	24.2
16-Jun	16.5	15.2	13.9	13.4	13.2	13.6	14.2	14.5	14.8	14.5	14.7	14.7	16.3	16.1	17.3	19.5	20.1	20.3	19.4	18.8	17.4	14.3	14.2	10.8	15.7	20.3
17-Jun	8.7	7.6	6.4	6.7	6.7	9.8	11.5	12.4	12.8	13.3	14.1	15.4	16.8	17.6	18.2	18.4	18.6	18.6	18.1	16.5	15.2	14.0	13.5	12.7	13.5	18.6
18-Jun	12.1	11.1	11.0	10.7	11.0	13.0	14.5	15.1	15.3	14.8	12.1	12.8	13.6	15.2	16.1	15.6	15.9	15.8	15.4	14.8	14.4	12.1	11.0	10.3	13.5	16.1
19-Jun	9.5	9.8	9.7	9.4	9.1	10.7	14.0	15.2	16.5	17.2	17.8	18.5	19.1	19.0	19.5	19.7	19.4	18.1	17.8	16.4	15.9	14.3	12.6	10.8	15.0	19.7
20-Jun	9.4	8.2	7.3	6.3	6.2	7.8	10.6	13.4	15.5	17.1	18.3	19.1	19.1	19.0	18.7	17.1	16.1	15.8	15.8	14.4	13.1	12.6	12.3	12.2	13.6	19.1
21-Jun	12.1	11.7	11.5	11.4	11.4	11.5	12.4	13.5	14.8	16.4	17.6	18.1	18.6	18.3	18.8	19.2	18.8	18.3	17.9	17.1	14.9	12.5	11.2	10.6	14.9	19.2
22-Jun	9.8	9.5	9.1	8.7	9.5	10.9	12.8	14.3	15.7	18.8	18.9	19.0	18.8	19.9	20.2	20.7	20.7	20.5	19.2	17.5	15.3	13.5	13.2	12.0	15.4	20.7
23-Jun	11.1	11.0	9.9	8.6	8.6	10.3	12.3	15.5	18.8	20.9	22.3	23.0	23.0	23.8	24.6	23.9	23.9	22.0	20.6	20.2	17.8	15.2	14.4	14.2	17.3	24.6
24-Jun	13.0	12.5	12.8	13.0	13.1	12.7	13.2	14.6	15.1	16.0	16.2	18.1	19.2	22.1	23.3	24.2	24.8	24.4	23.7	21.3	19.6	18.8	16.3	14.0	17.6	24.8
25-Jun	12.5	11.6	10.6	10.5	10.2	12.3	16.7	18.7	22.0	23.6	24.0	25.2	26.0	26.4	25.5	25.6	26.9	25.3	25.4	24.1	22.5	20.8	18.6	17.3	20.1	26.9
26-Jun	14.7	12.6	11.9	11.2	11.1	14.0	16.7	19.8	22.4	24.3	25.3	26.0	26.3	26.2	25.4	26.6	26.6	25.5	24.7	24.0	22.4	21.0	19.6	18.1	20.7	26.6
27-Jun	17.0	15.0	12.8	12.3	12.4	14.6	17.9	19.3	21.0	22.2	23.1	23.7	24.0	24.2	24.8	24.6	24.8	24.9	23.0	21.6	21.7	19.8	17.7	16.4	20.0	24.9
28-Jun	16.1	14.8	13.8	13.1	12.9	13.8	15.5	18.1	21.3	23.7	24.7	25.5	26.2	26.9	27.5	27.6	27.8	27.4	27.1	25.9	23.5	19.4	17.1	15.9	21.1	27.8
29-Jun	15.2	14.5	14.1	13.0	12.7	14.5	17.3	20.2	21.3	23.1	25.4	26.8	27.4	27.7	28.2	27.9	28.1	23.9	22.3	21.3	19.4	16.8	15.6	14.5	20.5	28.2
30-Jun	13.3	13.0	12.3	11.6	11.2	12.4	13.8	16.0	18.5	20.6	21.9	22.8	24.0	24.6	24.8	24.4	23.7	26.3	24.3	22.7	19.3	16.7	15.3	14.9	18.7	26.3
	11.3	10.6	10.0	9.6	9.5	10.7	12.3	13.8	15.3	16.5	17.1	17.9	18.6	19.1	19.2	19.5	19.8	19.2	18.5	17.5	15.9	14.2	13.1	12.2	Diurnal Average	
	17.0	15.2	14.1	13.4	13.2	14.6	17.9	20.2	22.4	24.3	25.4	26.8	27.4	27.7	28.2	27.9	28.1	27.4	27.1	25.9	23.5	21.0	19.6	18.1	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Janvier - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	135	18.75	18.75
10 - 20	447	62.08	80.83
> 20	138	19.17	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) - %

Janvier - June 2026

Maximum Value: 99.4 % on Jun 3 06:00

Maximum Daily Average: 93.4 % on Jun 2

Minimum Value: 28.2 % on Jun 13 18:00

Minimum Daily Average: 54.0 % on Jun 13

Maximum Diurnal Average: 92.1 % at hour 5

Minimum Diurnal Average: 49.6 % at hour 17

Monthly Average: 69.29 %

Percentiles: P_1 = 29.9 P_{10} = 37.5 Q_1 = 50.2 Median = 72.6 Q_3 = 88.9 P_{90} = 95.6 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

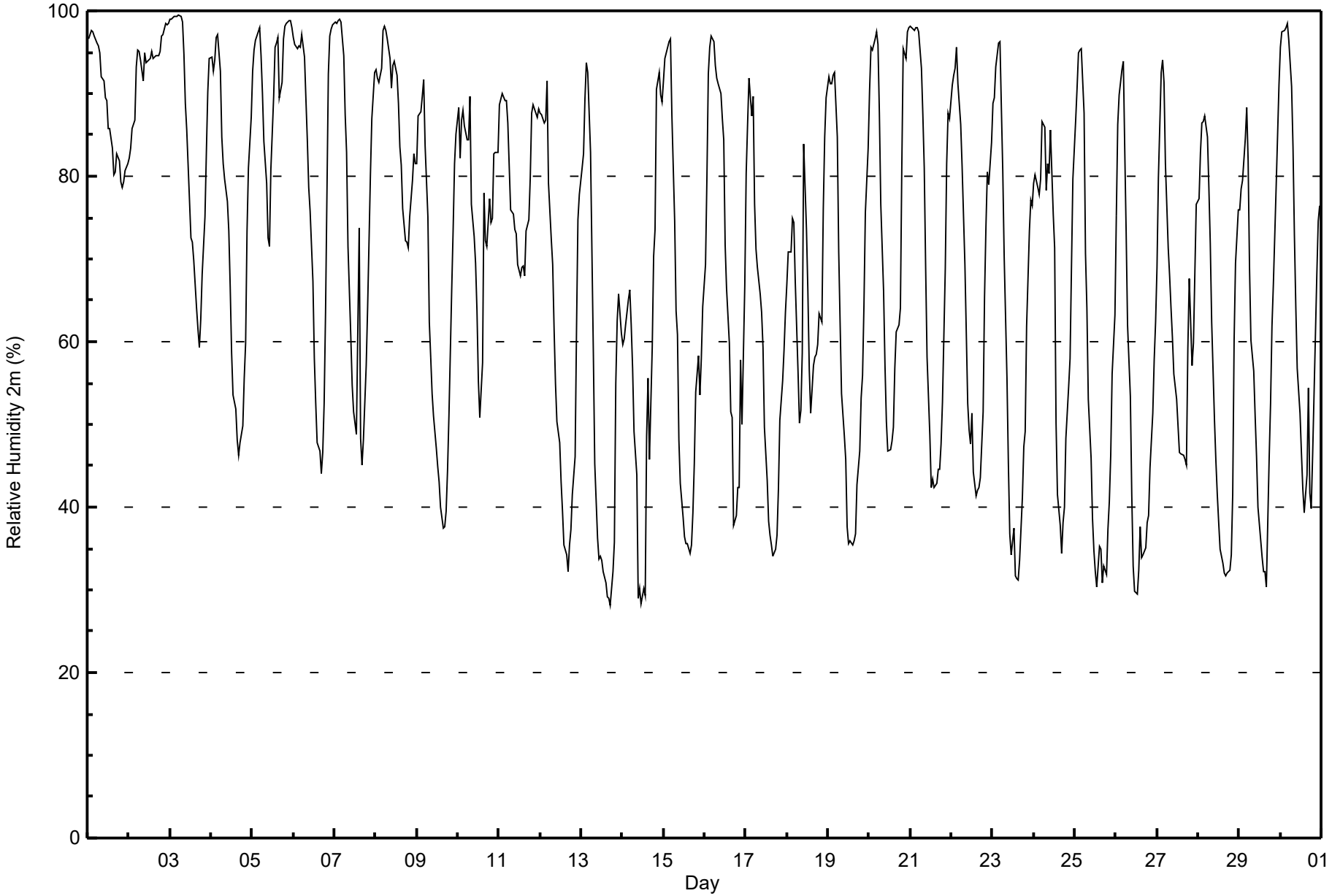
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	96.6	97.1	97.6	97.5	97.0	96.2	95.7	95.0	92.1	91.4	89.5	89.1	85.8	85.8	83.3	80.2	80.5	82.8	81.8	79.4	78.6	79.3	80.7	81.6	88.1	97.6
2-Jun	82.1	83.4	85.7	86.8	93.2	95.2	95.1	94.0	91.6	95.0	93.8	94.0	94.2	95.1	94.2	94.4	94.6	94.6	95.1	96.9	97.2	98.5	98.4	98.5	93.4	98.5
3-Jun	98.9	99.0	99.3	99.4	99.4	99.4	99.4	98.7	94.7	88.8	85.6	77.0	72.6	72.0	69.9	64.2	61.5	59.3	62.7	68.2	75.2	82.9	90.2	94.2	83.8	99.4
4-Jun	94.3	92.7	94.1	96.8	97.2	92.8	84.7	81.5	79.7	77.0	73.4	66.6	58.6	53.6	51.9	48.2	46.3	47.7	49.8	55.5	59.9	73.3	81.0	87.2	72.7	97.2
5-Jun	92.8	95.2	96.4	97.5	98.0	94.5	90.1	84.3	79.1	72.6	71.5	80.8	89.7	95.5	96.2	96.8	89.5	91.4	96.6	98.1	98.4	98.7	98.9	98.0	91.7	98.9
6-Jun	96.7	95.9	95.5	95.7	95.6	97.1	94.4	89.3	84.4	78.6	75.7	67.3	57.9	52.6	47.8	46.8	44.1	46.7	52.6	63.6	92.4	96.9	97.8	98.3	77.7	98.3
7-Jun	98.6	98.5	98.9	99.0	98.7	94.6	87.5	83.0	71.6	60.8	54.8	51.5	50.1	48.8	73.7	48.3	45.1	48.2	57.2	64.0	72.0	80.2	86.9	92.6	73.5	99.0
8-Jun	92.9	91.8	91.3	93.0	97.6	98.2	97.6	96.6	94.2	90.7	93.4	93.9	92.2	88.8	83.6	81.3	76.2	72.2	72.0	71.3	75.1	79.5	82.7	81.5	87.0	98.2
9-Jun	81.5	87.3	87.7	89.7	91.8	83.8	75.1	62.5	58.1	53.7	51.0	47.1	44.9	43.1	39.9	37.5	37.7	39.6	44.4	51.0	66.4	73.6	81.6	85.1	63.1	91.8
10-Jun	88.3	82.1	86.8	88.0	86.2	84.4	84.4	89.7	76.5	72.8	69.6	63.7	55.2	50.8	57.5	77.9	72.3	71.4	77.4	74.4	74.9	82.7	82.9	82.9	76.4	89.7
11-Jun	88.7	89.3	90.0	89.2	89.1	86.4	81.3	75.9	75.5	73.6	73.1	69.3	68.0	69.1	69.1	67.9	73.5	74.7	79.7	87.7	88.6	87.7	87.1	88.2	80.1	90.0
12-Jun	87.7	87.4	86.5	86.7	91.5	79.1	72.4	69.2	61.5	54.9	50.4	47.8	43.0	39.6	35.5	34.2	32.2	35.4	37.4	41.5	46.1	61.5	74.8	77.8	59.8	91.5
13-Jun	81.1	82.8	89.3	93.7	92.5	82.8	70.6	58.6	45.3	36.2	33.7	34.1	33.5	32.2	30.8	29.2	28.9	28.2	32.1	35.8	55.0	62.5	65.8	61.0	54.0	93.7
14-Jun	59.6	60.3	62.1	65.2	66.2	62.0	56.7	49.1	43.9	29.0	30.1	28.3	30.2	29.4	48.7	55.5	45.7	59.3	70.4	73.5	90.5	92.6	89.8	89.0	57.8	92.6
15-Jun	91.6	94.2	95.5	96.3	96.7	87.5	74.5	63.7	60.8	48.1	42.8	38.8	36.4	35.7	35.7	34.4	35.4	39.3	45.2	53.9	58.2	53.5	58.0	64.2	60.0	96.7
16-Jun	69.4	79.8	92.4	95.6	97.0	96.3	93.4	91.8	91.1	90.0	87.0	84.3	71.7	66.4	59.8	51.5	50.8	37.7	39.0	42.4	42.4	57.7	50.0	66.7	71.0	97.0
17-Jun	80.4	86.3	91.9	87.3	89.7	76.6	71.1	68.9	65.7	63.6	59.4	49.6	43.2	38.2	36.5	35.4	34.1	34.8	36.6	42.3	50.5	55.2	59.0	63.5	59.2	91.9
18-Jun	66.9	70.8	70.8	74.8	74.5	67.3	56.2	50.1	51.8	58.6	84.0	73.6	66.1	56.6	51.4	57.2	58.1	58.5	59.6	63.4	62.5	76.1	84.7	89.5	66.0	89.5
19-Jun	92.0	91.2	91.1	92.1	92.6	84.8	70.9	62.2	53.7	48.7	45.8	37.6	35.6	35.9	35.5	36.0	36.8	42.7	46.8	53.3	56.0	64.5	75.7	83.4	61.0	92.6
20-Jun	90.4	95.5	95.2	96.7	97.5	95.9	87.7	76.5	66.1	57.1	50.4	46.8	47.0	48.0	49.7	56.8	61.2	62.0	64.0	81.1	95.4	94.3	97.5	98.1	75.5	98.1
21-Jun	98.1	97.9	97.7	97.9	98.0	97.5	93.0	87.4	81.1	68.9	58.1	48.6	42.3	43.4	42.3	42.8	44.5	44.6	47.6	52.6	68.7	81.5	87.6	87.0	71.2	98.1
22-Jun	91.0	92.1	93.1	95.6	91.1	86.3	81.2	75.2	69.3	52.5	49.2	47.7	51.4	44.2	41.4	42.0	42.5	43.6	51.5	65.4	73.8	80.5	79.1	84.1	67.7	95.6
23-Jun	88.8	89.5	93.3	96.1	96.2	88.3	80.8	70.3	55.6	45.3	36.7	34.2	37.5	31.7	31.3	31.1	33.6	41.1	47.3	49.1	61.8	73.4	77.1	76.5	61.1	96.2
24-Jun	79.1	80.1	78.7	77.7	79.7	86.6	86.0	78.3	81.6	80.4	85.7	75.4	71.3	50.2	41.6	37.8	34.3	38.1	40.0	48.3	54.6	57.9	69.0	79.7	66.3	86.6
25-Jun	86.8	90.8	94.8	95.3	95.4	87.6	70.6	64.1	53.0	46.0	38.7	34.7	32.2	30.3	35.3	34.8	30.9	32.9	31.8	37.3	40.8	46.2	56.1	63.1	55.4	95.4
26-Jun	75.2	86.3	89.8	92.8	94.0	83.1	73.2	62.0	53.3	41.5	33.0	29.9	29.4	32.3	37.6	33.9	34.2	35.1	38.1	39.0	44.7	51.4	57.7	62.4	54.6	94.0
27-Jun	69.0	79.8	92.5	94.1	91.3	81.5	71.3	68.0	64.1	60.5	56.2	53.0	49.8	46.6	46.4	46.3	45.7	45.1	59.1	67.6	57.1	59.8	68.3	76.6	64.6	94.1
28-Jun	77.2	82.9	86.5	86.6	87.3	84.7	78.6	71.9	62.3	50.4	45.6	41.6	38.1	35.0	33.2	32.1	31.7	32.1	32.4	34.2	41.6	60.2	69.5	75.9	57.1	87.3
29-Jun	76.0	78.5	79.4	84.6	88.4	81.9	68.8	60.1	56.4	51.1	46.2	40.0	36.0	34.0	32.2	32.3	30.4	45.9	52.5	61.9	66.9	78.8	84.9	90.9	60.8	90.9
30-Jun	95.6	97.4	97.6	98.0	98.6	96.5	90.9	83.6	72.9	64.2	56.8	51.4	46.7	42.1	39.3	43.9	54.3	41.7	39.9	46.2	60.9	68.1	74.7	76.4	68.2	98.6
	85.6	87.9	90.0	91.3	92.1	87.6	81.1	75.4	69.6	63.4	60.7	56.6	53.7	50.9	51.0	50.4	49.6	50.9	54.7	60.0	66.9	73.6	78.2	81.8	Diurnal Average	
	98.9	99.0	99.3	99.4	99.4	99.4	99.4	98.7	94.7	95.0	93.8	94.0	94.2	95.5	96.2	96.8	94.6	94.6	96.6	98.1	98.4	98.7	98.9	98.5	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Janvier - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 20m (WS20) - km/h

Janvier - June 2026

Maximum Speed: 23 km/h on Jun 8 14:00

Maximum Daily Speed Average: 15.0 km/h on Jun 1

Minimum Speed Value: 1 km/h on Jun 30 22:00

Minimum Daily Speed Average: 0.7 km/h on Jun 5

Maximum Diurnal Speed Average: 4.8 km/h at hour 12

Minimum Diurnal Speed Average: 0.7 km/h at hour 22

Monthly Average Velocity: 2.3 km/h 9.8 deg

Percentiles: $P_1 = 1$ $P_{10} = 3$ $Q_1 = 5$ Median = 7 $Q_3 = 10$ $P_{90} = 14$ $P_{99} = 20$

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-Jun	N13	N11	N12	N11	N11	N11	N13	N15	N16	N16	N16	N17	NNE18	N18	NNE18	N17	N19	N15	NNE16	NNE19	NNE16	NNE15	NNE16	NNE15	N15.0	NNE19
2-Jun	NNE16	NNE15	NNE12	NNE13	NNE14	NNE13	NNE12	NNE15	NE16	NNE14	NE17	NNE14	NNE15	NNE14	NE14	NE13	NNE10	NNE11	NNE10	NE10	NE8	NE9	NE10	NE7	NNE12.5	NE17
3-Jun	NNE7	NNE7	NE7	NE5	NNE4	NNE5	NNE5	NNE4	N5	NNE6	N4	NE2	SSE4	ESE6	ENE3	E5	ENE4	NE6	NE7	E7	SE10	SE8	S5	SSE5	ENE3.4	SE10
4-Jun	S6	SSW7	S5	S4	SSW1	S4	SSW6	SSW11	SW10	SSW10	SW9	SW9	SW10	SSW12	S12	SW14	SW11	SW7	SW10	SSW7	SSW9	SSW8	SW7	SSW6	SSW8.0	SW14
5-Jun	SW6	S5	S4	SSW3	SSW5	S4	S4	WSW4	SSW3	SE3	E2	NNE6	NNE4	NW6	WNW5	NE5	NNE7	NNE7	NE2	NE4	NNE4	NE3	WNW4	NW10	NNW0.7	NW10
6-Jun	W8	W9	WSW11	SW12	WSW11	SW10	WSW13	WSW15	WSW16	WSW17	WSW18	W22	W23	W21	W21	WNW17	W16	W12	W10	SW10	SW5	SW6	SW6	SSW6	WSW12.4	W23
7-Jun	S5	SW5	SSW5	SW4	SSW6	SW5	SW3	S3	S3	N3	E9	ENE8	ENE7	ENE10	ESE7	S16	SSE15	SSE11	W9	NW6	N6	NNW6	N7	NNW3	SSE1.8	S16
8-Jun	WNW5	NNW6	N6	NNW4	NNW6	N8	N9	N6	WNW6	WNW12	WNW15	W15	W20	W23	W20	W16	W13	W12	WSW12	WSW12	W10	W8	WSW8	WSW9	WNW9.2	W23
9-Jun	SW9	SW8	SW10	SW9	SSW7	SW7	WSW8	WNW9	W7	WNW8	WNW7	WSW9	WSW8	WSW7	N5	NNE6	N8	NE8	NNE8	NE6	NE5	NE3	ENE1	WSW1	W3.0	SW10
10-Jun	NNE3	NNE4	NNE3	N2	N5	WNW1	NNE7	N8	N9	N10	NNE12	N11	N10	N11	N10	N11	N14	N14	N12	N11	N11	N10	N8	N11	N8.5	N14
11-Jun	NNW9	N9	NNW8	N8	NNW9	NNW9	NNW8	NNW9	N9	NNW10	NW9	NNW10	N11	N10	NNW10	N9	N11	NNW11	NNW9	N11	N10	N11	N10	N9	NNW9.5	N11
12-Jun	N8	N9	N8	NNW5	NW5	NNW9	N12	N12	N16	N17	N18	N17	N18	N16	N17	N17	N16	N16	N15	N11	NNW7	NNW3	NNE2	N3	N11.4	N18
13-Jun	NNW3	NW2	SW2	SSW6	SSW7	SSW6	SSW5	SSW3	NNW3	NNE1	NNE6	NNE7	ESE1	SSW1	N4	W3	W4	W6	WSW4	WSW5	SW6	SSW6	SSW8	SSW11	SW2.3	SSW11
14-Jun	SSW12	SSW11	SSW12	SSW12	SSW11	SSW9	SW8	SW9	WSW7	NW11	NW9	NNW12	N10	N12	WNW13	WNW11	NW10	NW8	NW4	ESE3	SW5	SW6	W1	NNE4	W4.9	WNW13
15-Jun	ENE3	SW2	SSW5	SSW5	S4	WSW2	WNW3	WSW1	W3	ENE5	E5	NE7	NE8	NE4	ESE9	NE7	E6	E6	E5	SE6	SE6	SSE7	SW9	W11	ESE1.6	W11
16-Jun	WSW9	WSW8	SW7	E2	SSE1	W2	SW1	W3	N4	NE7	NE7	NE10	NNE9	NNE9	N6	WNW4	WNW5	NE10	ENE8	ENE6	ENE8	NE5	NE11	NNE4	NNE3.0	NE11
17-Jun	N3	N3	N3	NNE6	N5	N6	NNE8	NNE10	N10	NNE10	NNE11	NNE10	NNE9	NNE10	N10	N8	NNE11	NNE10	N7	NNW6	NNW5	NNW5	N5	NNE5	N7.1	NNE11
18-Jun	N3	N4	NNW4	NNW4	NNW5	NNW5	NNW7	N11	N13	N14	NNW9	N12	N11	N11	N10	NNE14	N12	N11	N10	NNE7	NNW6	W4	WNW2	WSW1	N7.6	NNE14
19-Jun	WSW3	SW3	SSW3	SSW6	SSW6	SW5	W3	WNW8	WNW8	NW8	W9	NNW8	N8	N10	NE11	NNE12	NE13	NE11	NNE10	NNE7	NE6	NNE1	WSW1	NNE2	N3.3	NE13
20-Jun	NNE5	N4	NNE3	NNE3	N3	NNE3	NNE7	NNE8	NNE10	NE9	NE9	NE10	NE12	NE10	ENE9	SE11	SE8	SE5	WSW4	WSW5	ENE4	NE3	N3	NNE5	NE4.6	NE12
21-Jun	NNE7	N6	NNE5	N5	NNE5	NNE6	NNE8	NNE9	NE8	ENE7	E9	E11	ESE12	E11	ESE10	E9	E8	E9	ENE6	NE5	NE2	N2	NNE4	NNE4	ENE5.7	ESE12
22-Jun	E1	ESE3	WSW1	SSW3	SW5	W1	N4	NNE5	NE3	ENE4	ENE4	NNE6	SE7	SE9	SSE8	ESE6	ESE5	ESE7	SE4	SSW1	WSW3	WSW4	SW8	SW7	SE1.9	SE9
23-Jun	SSW7	SSW8	SW7	SSW5	SW8	SW7	SW6	SW5	SSW3	S1	W3	NW11	WNW10	WSW7	W12	WSW9	W7	NNE2	SSE8	SSE9	SSE7	SW3	SSW5	SW6	SW4.5	W12
24-Jun	SSW7	SSW7	SSW8	SW10	SW5	SSW5	SSW7	SSW6	WSW1	SE3	SW4	SSW4	SSW4	SSW7	SSW8	SW8	WNW2	E6	SE8	SSE8	SSE8	S9	SE4	SE3	SSW4.9	SSW10
25-Jun	SSE5	S2	S4	S4	SSE2	SSW1	NW2	NNW1	ESE4	SE6	S10	S11	S10	S11	SE8	SE10	SE10	SSE7	S10	SE12	SSE10	SSE9	SSE8	SSE8	SSE6.2	SE12
26-Jun	SE4	SE2	SSE2	ENE1	NNE3	N2	N2	E4	E7	SE11	SE13	SSE12	SE12	SE10	ESE9	ESE12	E9	SE10	SSE8	SSE7	ESE8	ESE9	ESE8	ESE7	ESE6.4	SE13
27-Jun	E7	E6	NNE4	NNE5	N4	NNE4	ENE8	ENE10	ENE9	ENE11	E12	E14	ESE14	ESE12	ESE10	ESE10	ESE10	ESE7	SE2	ENE2	ENE7	ENE6	NE5	NNE5	E6.5	E14
28-Jun	NNE5	NNE6	NNE5	NNE6	NNE5	NNE5	NNE7	NNE7	NE10	NE15	ENE18	ENE20	NE19	NE19	ENE15	ENE15	ENE14	ENE12	ENE11	NE12	NE9	NNE4	N3	N4	NE9.8	ENE20
29-Jun	NNE4	NNE4	NNE4	NNE3	NNE1	NNE4	NNE5	NNE5	NNE8	NNE8	NE8	NNE9	NNE10	NNE12	NNE12	NE13	NE14	SE14	ESE4	SE4	NE1	NE4	E4	ENE3	NE5.3	SE14
30-Jun	N2	NNE4	NE4	NNE3	NNE4	NNE5	NNE4	N5	NNE6	NNE7	NE10	NE9	NNE8	NNE11	NNE11	ENE7	SSE2	ESE1	E8	ESE6	ESE3	SE1	ENE2	SW3	NE4.1	NNE11
	NNW1.2	NNW1.1	WNW1.1	WNW0.8	WNW1.2	NW1.7	NNW2.6	NNW3.4	N3.9	N4.4	NNE3.8	NNE4.8	NNE4.1	NNE3.8	NNE3.5	NNE3.0	NNE3.7	NE3.4	NNE2.3	NE2.0	NE1.8	NE0.7	N0.7	NNW1.2	Diurnal Average	
	NNE16	NNE15	N12	NNE13	NNE14	NNE13	N13	WSW15	NE16	N17	ENE18	W22	W23	W23	W21	N17	N19	N16	NNE16	NNE19	NNE16	NNE15	NNE16	NNE15	Diurnal Maximum	

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

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 20m (WS20) - km/h

Janvier - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9 km/h on Jun 6 13:00

Minimum Value: 0 km/h on Jun 29 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:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

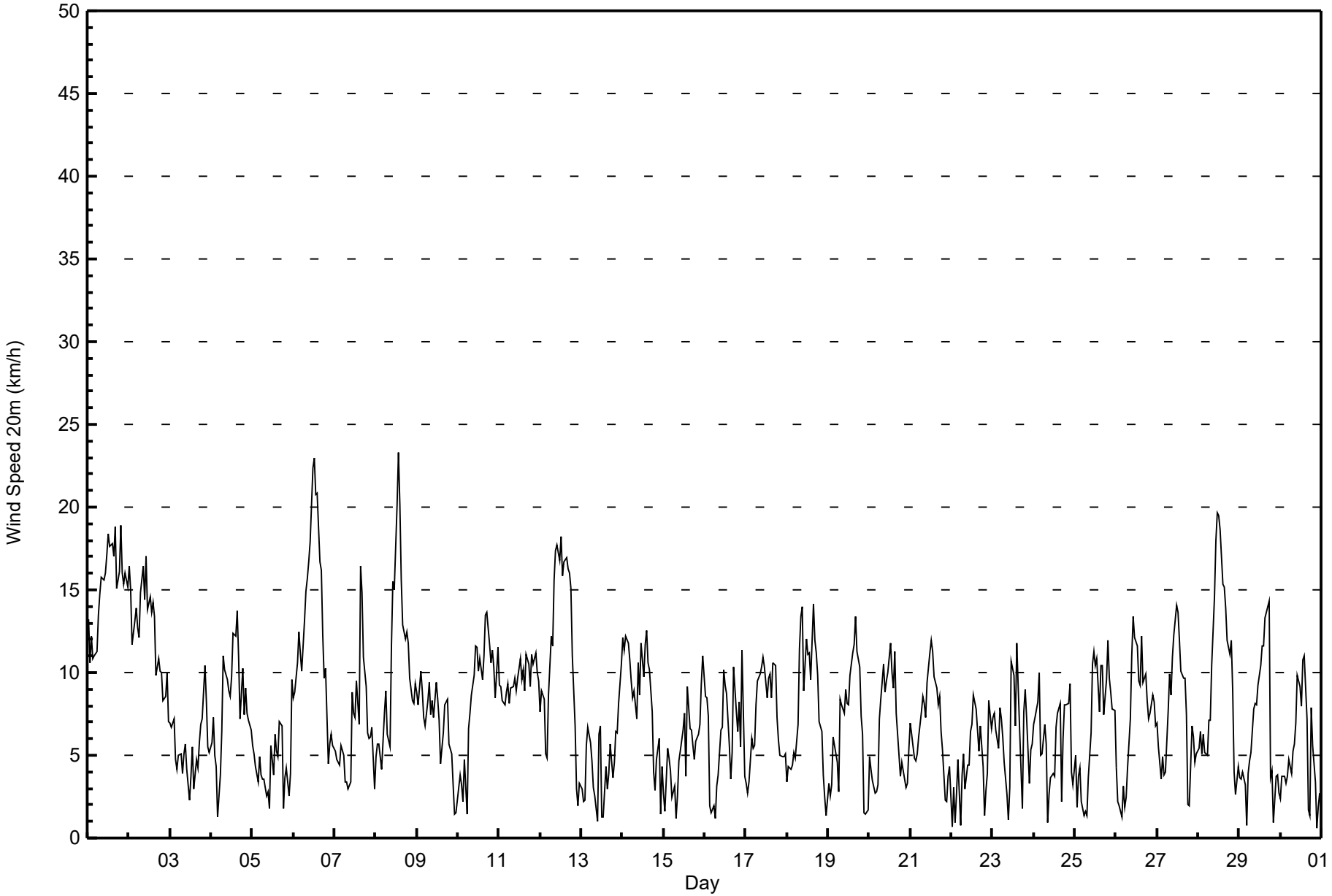
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	5	5	5	4	4	4	5	5	6	6	7	6	7	6	7	7	7	6	6	6	5	6	5	5	7
2-Jun	5	4	4	4	4	4	4	4	5	4	5	5	5	4	4	4	3	4	3	3	2	2	2	2	5
3-Jun	2	2	2	1	1	1	1	1	2	2	2	2	3	2	2	3	2	2	2	3	3	3	2	1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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 20m (WS20) - km/h

Janvier - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	247	34.31	34.31
6 - 11	351	48.75	83.06
12 - 19	114	15.83	98.89
20 - 28	8	1.11	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 20m (WS20) - km/h

Janvier - June 2026

Wind Speed Ranges (km/h)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 5	28	50	17	13	8	8	11	8	15	20	17	15	10	9	4	14	247
6 - 11	55	50	31	17	16	16	16	15	7	33	30	14	11	9	9	22	351
12 - 19	32	26	12	5	2	4	4	2	2	4	2	7	7	4	0	1	114
20 - 28	0	0	0	1	0	0	0	0	0	0	0	0	7	0	0	0	8
29 - 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	115	126	60	36	26	28	31	25	24	57	49	36	35	22	13	37	720

Total Number of Valid Hours: 720

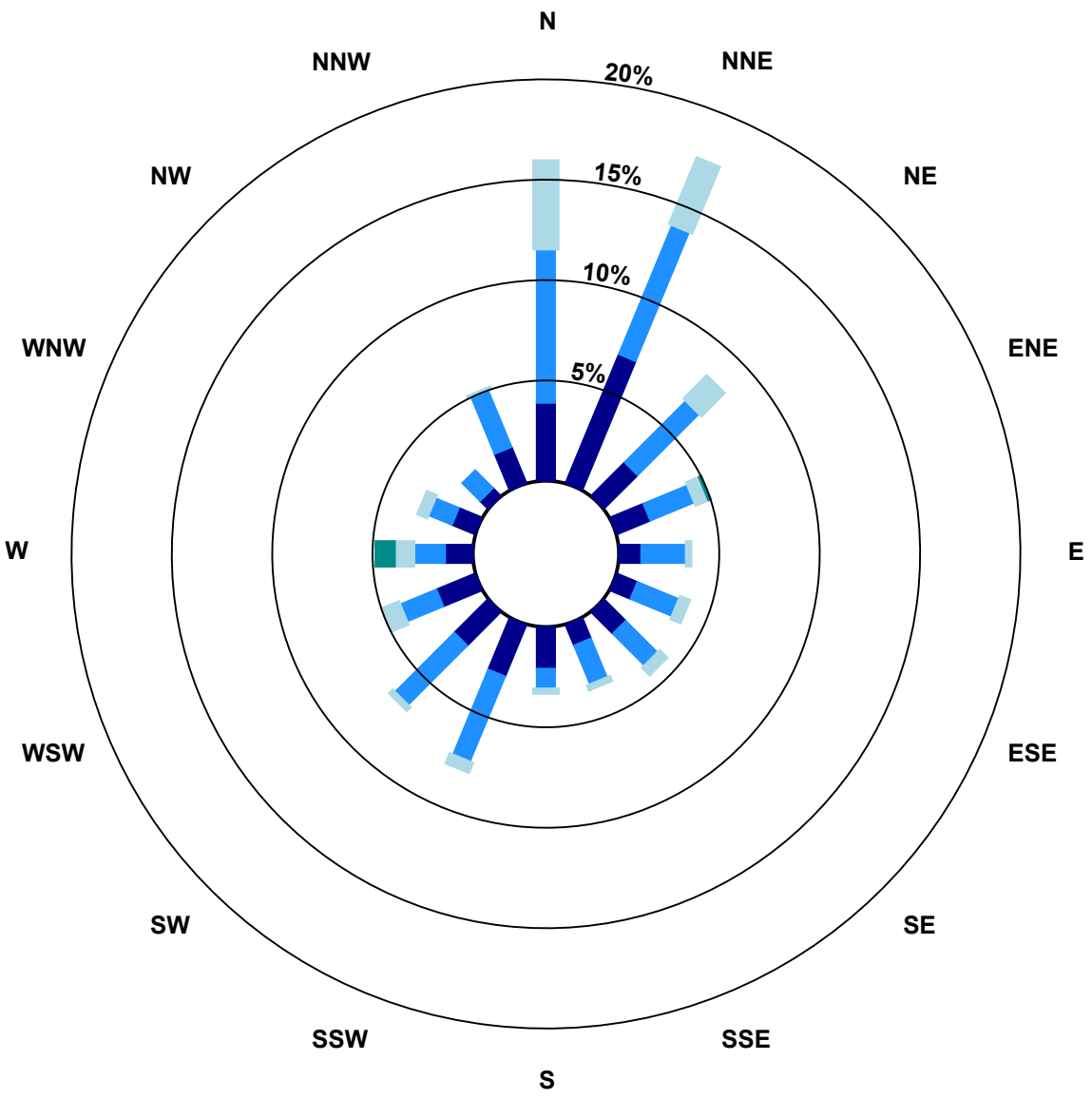
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 20m (WS20) - km/h

Janvier



Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 720

Direction of Maximum Speed: 278 deg on Jun 8 14:00
Direction of Maximum Daily Speed Average: 10.0 deg on Jun 1

Direction of Minimum Speed: 125 deg on Jun 30 22:00

Direction of Minimum Daily Speed Average: 0.7 deg on Jun 5

Monthly Average Direction: 9.8 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-Jun	8	351	357	5	2	357	1	3	6	8	10	11	12	11	14	10	8	6	12	18	20	21	21	27	10.0
2-Jun	26	32	20	22	24	22	23	30	35	31	37	31	26	28	40	40	30	28	29	36	41	42	42	40	31.2
3-Jun	31	30	38	40	31	31	18	23	9	15	355	38	155	104	71	87	66	51	45	101	134	144	169	167	65.2
4-Jun	188	195	177	181	194	180	193	203	215	213	215	227	218	199	186	217	223	218	217	213	208	206	214	204	207.0
5-Jun	214	172	190	195	210	179	188	253	196	133	93	14	12	314	282	46	18	18	43	41	28	45	302	312	326.4
6-Jun	279	259	244	233	237	233	240	250	247	256	256	267	267	265	266	282	277	278	263	231	231	217	216	204	255.6
7-Jun	171	218	202	223	203	220	234	183	179	358	92	77	72	70	118	171	167	166	276	309	358	334	359	341	162.4
8-Jun	301	334	0	347	347	357	6	358	298	299	288	278	279	278	272	275	270	263	254	248	265	262	253	250	283.7
9-Jun	236	224	222	224	210	236	247	302	274	291	292	256	238	241	349	32	10	46	30	48	42	44	71	250	273.0
10-Jun	16	33	22	8	8	296	12	7	356	5	16	2	355	349	359	9	7	7	359	359	357	357	349	350	1.8
11-Jun	346	349	346	350	343	347	339	339	353	332	325	337	0	360	344	349	351	342	331	356	357	353	354	355	346.9
12-Jun	355	359	356	344	326	341	357	357	358	354	3	357	4	357	2	3	5	0	1	359	346	338	23	359	357.7
13-Jun	338	316	224	195	199	205	198	198	330	32	19	21	106	212	8	271	269	268	249	247	220	212	207	209	233.0
14-Jun	209	212	212	213	211	213	222	232	238	308	306	338	352	350	300	291	311	316	305	102	220	218	277	15	265.3
15-Jun	69	227	201	203	191	239	283	249	260	76	84	34	49	48	107	55	81	87	92	124	129	147	235	271	114.6
16-Jun	256	240	227	92	150	274	228	259	353	34	43	36	21	28	5	294	283	37	59	60	61	38	53	15	22.8
17-Jun	359	359	6	13	10	357	20	14	3	14	25	31	24	18	9	359	14	19	355	337	330	327	352	12	8.9
18-Jun	10	4	341	341	336	331	347	358	10	3	344	4	355	3	360	21	8	356	4	16	343	272	299	240	357.4
19-Jun	256	214	208	201	205	215	267	292	299	310	278	329	353	11	34	27	41	38	33	29	41	31	239	28	354.1
20-Jun	23	5	18	16	7	33	26	21	30	50	55	56	37	47	70	126	129	132	254	244	69	56	357	21	48.4
21-Jun	13	8	23	7	12	16	28	29	37	60	91	99	103	97	105	94	93	85	59	55	35	7	18	26	60.9
22-Jun	83	109	242	196	217	281	2	28	39	76	64	32	136	130	150	102	108	123	128	213	244	238	221	216	132.2
23-Jun	208	213	214	192	214	222	230	216	209	177	272	304	300	251	276	254	270	28	150	161	167	221	194	216	228.6
24-Jun	207	206	210	214	226	194	209	209	243	142	216	202	210	203	209	230	283	97	137	166	160	176	139	140	192.2
25-Jun	164	173	190	187	162	205	309	332	111	136	182	174	185	184	124	143	138	157	176	137	154	160	149	153	159.8
26-Jun	144	145	147	68	30	1	6	87	81	133	137	148	138	128	116	119	98	135	164	151	116	107	120	110	123.7
27-Jun	100	87	19	15	3	16	69	59	72	74	101	101	108	112	107	115	105	113	145	66	66	64	49	19	84.6
28-Jun	28	27	23	29	19	17	23	14	34	54	60	57	53	54	63	65	65	66	58	49	37	20	10	351	47.7
29-Jun	12	28	14	32	25	28	22	16	26	30	35	18	29	28	31	38	43	142	112	136	45	54	81	77	41.8
30-Jun	5	32	36	27	18	17	17	1	22	14	40	35	33	29	29	64	166	116	99	107	118	125	76	218	40.5
	335.0	327.9	297.4	291.4	301.3	320.5	344.6	347.5	1.0	11.1	20.3	12.7	15.2	16.3	18.8	32.9	23.5	39.6	23.3	47.2	49.4	38.1	10.1	332.8	
	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

Janvier - June 2026

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

Maximum Value: 108 deg on Jun 13 10:00

Minimum Value: 8 deg on Jun 13 05:00

Percentiles: P_1 = 10 P_{10} = 17 Q_1 = 21 Median = 29 Q_3 = 37 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

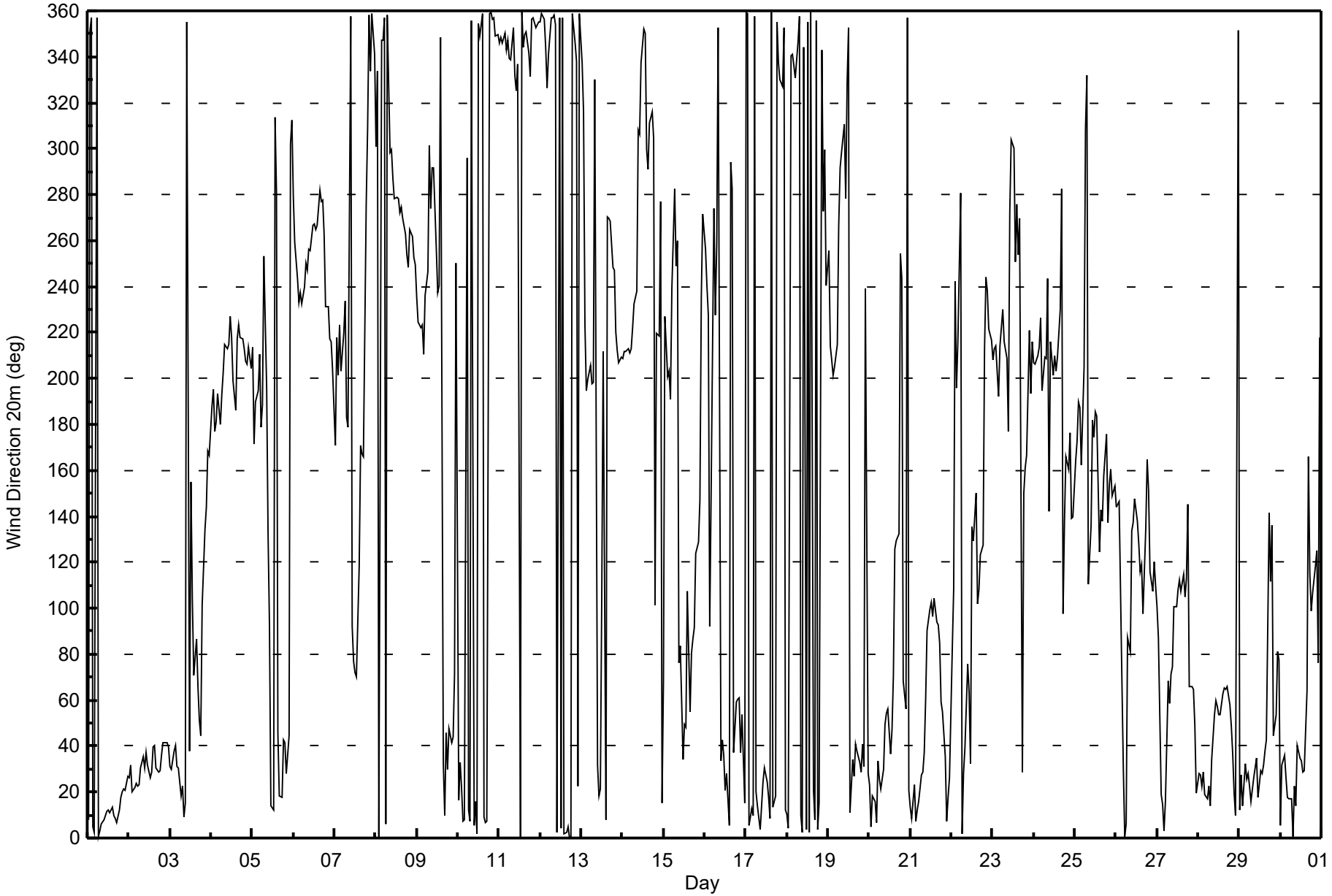
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	29	32	32	33	30	31	28	28	28	27	28	26	24	26	26	29	27	31	25	22	23	22	21	22	33
2-Jun	21	20	24	21	18	21	21	19	18	20	17	21	22	22	18	18	21	23	22	20	17	18	17	18	24
3-Jun	18	19	18	19	19	22	24	30	30	44	47	85	61	43	74	79	66	39	25	32	18	23	21	21	85
4-Jun	24	24	17	20	23	23	22	21	26	28	32	37	39	33	31	24	32	43	25	17	15	11	13	12	43
5-Jun	19	17	26	19	15	50	37	43	47	54	72	28	68	44	49	36	42	30	79	29	30	36	36	28	79
6-Jun	27	25	24	23	24	22	24	24	25	24	25	24	27	27	27	27	27	25	36	31	33	19	17	19	36
7-Jun	24	21	14	15	21	28	39	41	66	75	31	36	33	31	62	30	30	28	42	30	24	33	28	61	75
8-Jun	27	36	28	51	31	36	26	29	32	23	19	21	21	21	22	21	23	26	24	26	32	22	20	25	51
9-Jun	21	18	17	17	17	24	30	26	44	35	44	43	52	42	68	52	58	23	20	16	24	26	81	80	81
10-Jun	41	21	34	87	31	64	26	32	39	33	28	31	37	38	36	29	30	29	32	33	33	31	32	30	87
11-Jun	36	36	33	34	36	34	37	38	36	37	40	42	32	33	35	41	36	36	40	33	30	33	33	33	42
12-Jun	35	31	29	30	32	40	34	33	33	33	32	33	33	34	33	33	30	32	32	33	37	60	50	38	60
13-Jun	28	59	34	9	8	11	14	47	78	108	39	45	93	94	71	90	78	39	45	29	12	9	9	10	108
14-Jun	11	13	13	13	13	15	19	21	35	32	40	36	38	39	38	36	26	39	59	74	21	13	66	17	74
15-Jun	29	84	12	9	15	26	30	91	48	71	60	48	41	96	34	44	30	19	20	15	17	31	34	25	96
16-Jun	24	26	24	88	87	40	83	39	42	22	24	18	31	25	45	82	64	18	20	23	16	16	16	19	88
17-Jun	20	27	24	17	18	28	24	31	34	31	28	29	46	38	41	41	27	28	36	33	34	37	42	21	46
18-Jun	32	25	38	40	38	49	43	33	32	31	40	30	34	33	34	28	34	38	38	30	36	30	59	58	59
19-Jun	20	31	33	10	10	19	52	29	32	42	39	51	53	37	33	30	17	17	21	16	19	89	68	61	89
20-Jun	17	20	25	25	60	37	23	31	24	37	28	29	24	32	25	33	35	49	28	42	53	59	28	21	60
21-Jun	21	23	28	32	29	22	22	22	21	26	29	30	30	29	31	33	28	25	20	12	23	16	18	18	33
22-Jun	80	54	77	51	20	83	39	37	61	47	45	36	38	30	41	40	42	34	20	62	46	40	14	15	83
23-Jun	11	13	11	13	14	18	22	32	47	90	89	45	37	62	29	34	58	71	29	22	20	56	18	18	90
24-Jun	15	13	11	13	68	14	14	30	90	63	36	63	68	43	44	43	75	27	31	23	19	20	49	37	90
25-Jun	12	66	11	12	26	44	47	78	46	49	31	28	35	36	30	28	35	31	27	24	23	21	18	17	78
26-Jun	20	85	74	66	59	30	24	35	28	34	32	34	34	31	28	28	29	27	29	31	20	20	21	20	85
27-Jun	16	21	21	15	20	23	25	21	26	25	30	27	27	27	30	29	24	33	79	67	17	13	17	10	79
28-Jun	11	11	14	12	14	17	17	27	26	23	25	21	21	20	27	23	27	22	21	16	14	15	30	17	30
29-Jun	19	14	19	19	36	18	30	34	24	24	26	27	30	23	28	25	26	24	68	21	61	17	28	20	68
30-Jun	29	13	16	22	19	21	28	33	39	31	27	29	48	27	23	23	34	84	24	19	17	45	29	9	84
	80	85	77	88	87	83	83	91	90	108	89	85	93	96	74	90	78	84	79	74	61	89	81	80	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 20m (WD20) - deg

Janvier - June 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS23
FORT HILLS
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT HILLS (AMS23)
JUNE 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	685	34	35	99.86	-	-	9.7	0	1.9	0
TRS(ppb) Average	685	35	35	100	1.5	0	1.4	-	0.6	-
H2S(ppb) Average	685	35	35	100	-	-	1.7	0	0.5	0
THC(ppm) Average	538	36	182	79.72	-	-	8	-	2.8	-
NMHC(ppm) Average	538	36	182	79.72	-	-	5.727	-	0.556	-
CH4(ppm) Average	538	36	182	79.72	-	-	3.5	-	2.4	-
NO2 (ppb) Average	655	40	65	96.53	-	-	47.1	0	19.2	-
NO (ppb) Average	655	40	65	96.53	-	-	184.5	-	29.1	-
NOX (ppb) Average	655	40	65	96.53	-	-	221.1	-	45.4	-
PM2.5 (ug/m3) Average	616	1	104	85.69	-	-	280.1	27	81.4	6
Temperature 2 m (C) Average	720	0	0	100	-	-	31.4	-	25.1	-
Relative Humidity (%) Average	720	0	0	100	-	-	96.8	-	94.4	-
Wind Speed 10 m (km/h) Average	720	0	0	100	-	-	30	-	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 - FORT HILLS (AMS23)
JUNE 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	0.37	1	-	0	0	0	0.1	0.2	0.6	9.7
TRS(ppb) Average	685	0.39	0.2	-	0	0.2	0.2	0.3	0.5	0.7	1.4
H2S(ppb) Average	685	0.22	0.3	-	0	0	0.1	0.1	0.3	0.6	1.7
THC(ppm) Average	538	2.32	0.6	-	1.8	1.9	2	2	2.5	3.1	8
NMHC(ppm) Average	538	0.207	0.41	-	0	0	0	0	0.3	0.6	5.727
CH4(ppm) Average	538	2.11	0.2	-	1.8	1.9	2	2	2.2	2.5	3.5
NO2(ppb) Average	655	8.7	9.9	-	0	0.7	1.5	4.1	12.8	24.9	47.1
NO(ppb) Average	655	8.33	20.2	-	0	0	0.3	1	4.4	27	184.5
NOX(ppb) Average	655	17.04	27.7	-	0	0.9	2.1	5.6	18.7	51.3	221.1
PM2.5(ug/m3) Average	616	19.05	27.9	-	0.6	2.2	4.5	10.3	20.8	40.2	280.1
AT(C) Average	720	16.84	5.6	-	7.3	10.4	12.2	16	20.8	25	31.4
RH(%) Average	720	61.62	20.4	-	20.5	32.1	44.7	63.3	78.1	88.3	96.8
WS(km/h) Average	720	12.3	6	-	0	4	8	12	17	21	30
WD(deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - FORT HILLS (AMS23)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
NO2	10 Jun 2026 08:00	10 Jun 2026 09:00	2	Maintenance - reinitiated daily QA check
NO2	11 Jun 2026 13:00	12 Jun 2026 10:00	22	Maintenance - analyzer replaced
NO2, SO2, THC/NMHC/CH4	15 Jun 2026 12:00	15 Jun 2026 12:00	1	Maintenance - sample manifold cleaned
THC/NMHC/CH4	01 Jun 2026 02:00	23 Jun 2026 10:00	130	Unstable Operation - excessive baseline noise
THC/NMHC/CH4	08 Jun 2026 12:00	08 Jun 2026 16:00	5	Maintenance - replaced internal pump
THC/NMHC/CH4	17 Jun 2026 09:00	17 Jun 2026 16:00	8	Maintenance - adjusted carrier pressure
THC/NMHC/CH4	19 Jun 2026 11:00	19 Jun 2026 12:00	2	Maintenance - recalibration
PM2.5	16 Jun 2026 06:00	29 Jun 2026 12:00	99	Unstable Operation - flatline in analyzer output signal
PM2.5	19 Jun 2026 11:00	19 Jun 2026 12:00	2	Maintenance - analyzer rebooted
PM2.5	22 Jun 2026 11:00	22 Jun 2026 11:00	1	Maintenance - analyzer rebooted
PM2.5	29 Jun 2026 13:00	29 Jun 2026 13:00	1	Maintenance - analyzer rebooted

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Fort Hills - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9.7 ppb on Jun 13 11:00 Maximum Daily Average: 1.9 ppb on Jun 25

Minimum Value: 0.0 ppb on Jun 1 07:00 Minimum Daily Average: 0.0 ppb on Jun 19
Maximum Diurnal Average: 1.0 ppb at hour 11 Minimum Diurnal Average: 0.1 ppb at hour 5
Monthly Average: 0.37 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} = 5.6

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-Jun	0.1	0.2	Z	0.2	0.1	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	0.2
2-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
3-Jun	0.1	0.1	0.1	0.2	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.6	1.8	5.8	5.6	8.2	4.3	1.4	3.6	3.5	1.8	0.6	1.7	8.2
4-Jun	0.4	0.3	0.1	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.5	2.2	2.7	2.9	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	2.9
5-Jun	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	1.1	1.5	0.8	2.2	4.4	4.7	1.9	2.5	3.0	1.0	0.6	0.3	1.1	4.7
6-Jun	0.3	Z	0.2	0.1	0.0	0.1	0.1	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
7-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.2	0.6	1.6	3.5	6.6	2.9	2.0	1.4	1.3	0.7	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.9	6.6
8-Jun	0.1	0.1	0.0	Z	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	0.0	0.0	0.0	0.1
9-Jun	0.0	0.0	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	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2
10-Jun	0.1	0.0	0.0	0.1	0.1	Z	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1
11-Jun	Z	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	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1
12-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2
13-Jun	0.1	0.1	Z	0.1	0.1	0.2	0.2	0.3	0.3	3.4	9.7	2.3	0.7	0.3	0.2	0.2	0.4	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.8	9.7
14-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.2	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	0.2	0.1	0.3
15-Jun	0.3	0.6	0.4	0.3	Z	0.4	0.4	0.4	0.4	0.4	0.2	M	0.2	0.4	0.9	1.4	0.6	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.4	1.4
16-Jun	0.4	0.3	0.3	0.4	0.5	Z	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	0.1	0.2	0.1	0.2	0.5
17-Jun	Z	0.1	0.0	0.1	0.2	0.1	0.2	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	0.0	0.0	0.0	0.1	0.1	0.2
18-Jun	0.2	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2
19-Jun	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	0.0	0.0	0.0	0.0	0.0	0.1
20-Jun	0.1	0.0	0.1	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	0.1	0.1	0.1	0.2	0.0	0.2
21-Jun	0.2	0.2	0.3	0.3	Z	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.3	0.3	0.1	0.1	0.2	0.3
22-Jun	0.1	0.2	0.1	0.1	0.2	Z	0.8	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.2	0.1	0.1	0.3	0.2	0.8
23-Jun	Z	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.2	0.0	0.1	4.2	0.8	0.4	0.2	0.1	0.1	0.3	4.2
24-Jun	0.0	Z	0.2	0.0	0.1	0.1	0.1	0.1	0.2	0.7	0.6	0.3	0.2	0.5	0.4	0.5	0.4	0.3	0.2	0.3	0.1	0.2	0.1	0.1	0.2	0.7
25-Jun	0.1	0.1	Z	0.5	0.1	0.3	3.2	7.0	4.7	3.0	7.0	4.6	1.5	1.7	2.0	2.1	1.7	1.4	1.0	0.5	0.3	0.4	0.3	0.3	1.9	7.0
26-Jun	0.8	1.1	0.7	Z	0.4	0.3	0.3	0.6	3.5	2.1	0.9	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.5	3.5
27-Jun	0.2	0.2	0.1	0.2	Z	0.9	0.8	0.3	0.4	0.4	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	0.3	0.9
28-Jun	0.3	0.6	0.5	0.3	0.4	Z	0.3	0.3	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.2	0.6
29-Jun	Z	0.4	0.3	0.5	0.4	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.5	7.1	0.6	7.1
30-Jun	0.4	Z	0.1	0.0	0.1	0.1	0.2	0.4	0.4	0.5	0.5	0.6	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.2	0.6
	0.2	0.2	0.2	0.2	0.1	0.1	0.3	0.4	0.5	0.5	1.0	0.5	0.3	0.4	0.4	0.5	0.5	0.6	0.5	0.2	0.3	0.2	0.2	0.4	Diurnal Average	
	0.8	1.1	0.7	0.5	0.5	0.9	3.2	7.0	4.7	3.5	9.7	4.6	2.2	2.7	2.9	5.8	5.6	8.2	4.3	2.5	3.6	3.5	1.8	7.1	Diurnal Maximum	

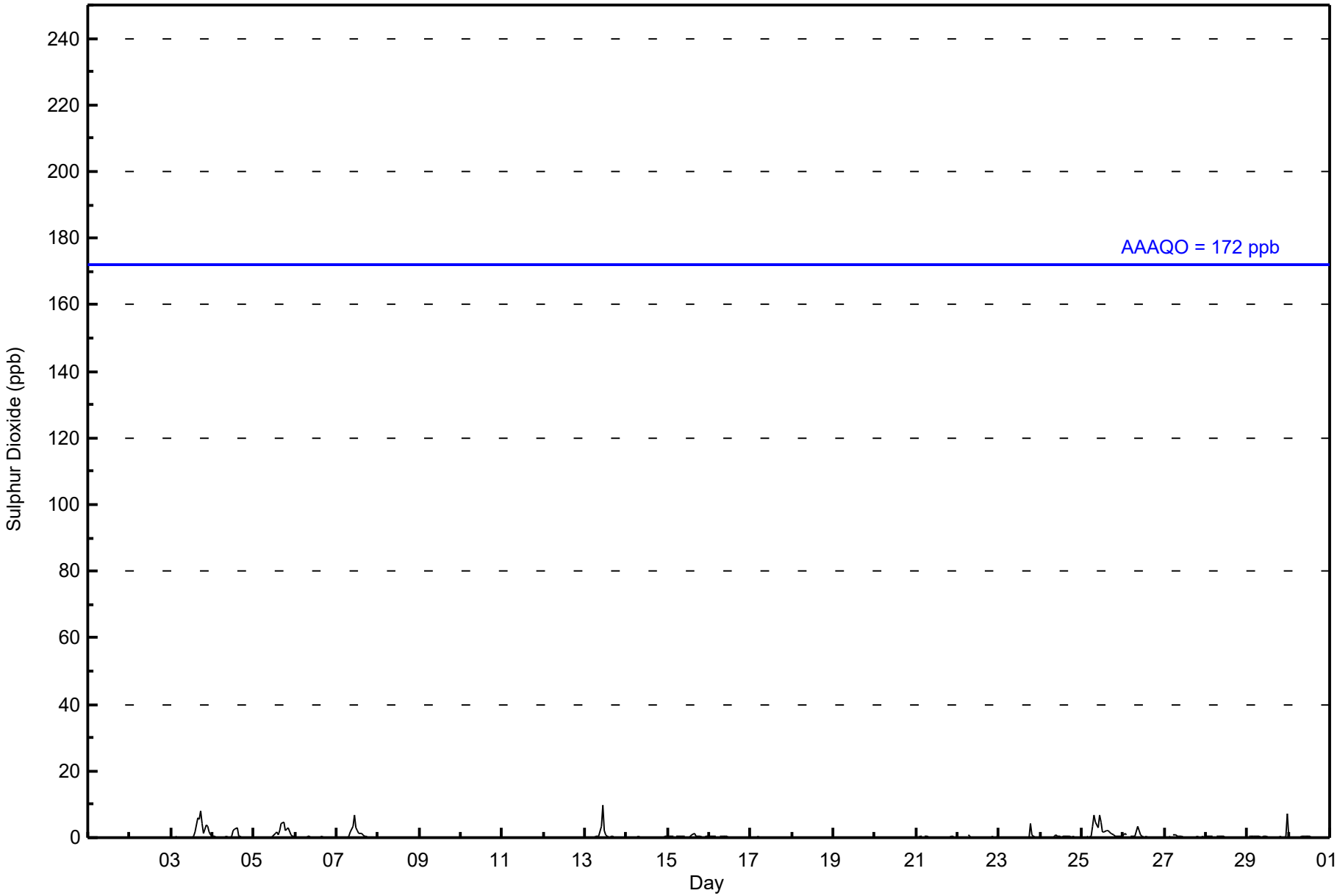
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Fort Hills - June 2026



Sulphur Dioxide (SO_2) - ppb
Fort Hills - June 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

Fort Hills - June 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	178	61	37	14	15	16	42	66	51	46	9	11	18	30	30	61	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	178	61	37	14	15	16	42	66	51	46	9	11	18	30	30	61	685

Total Number of Valid Hours: 685

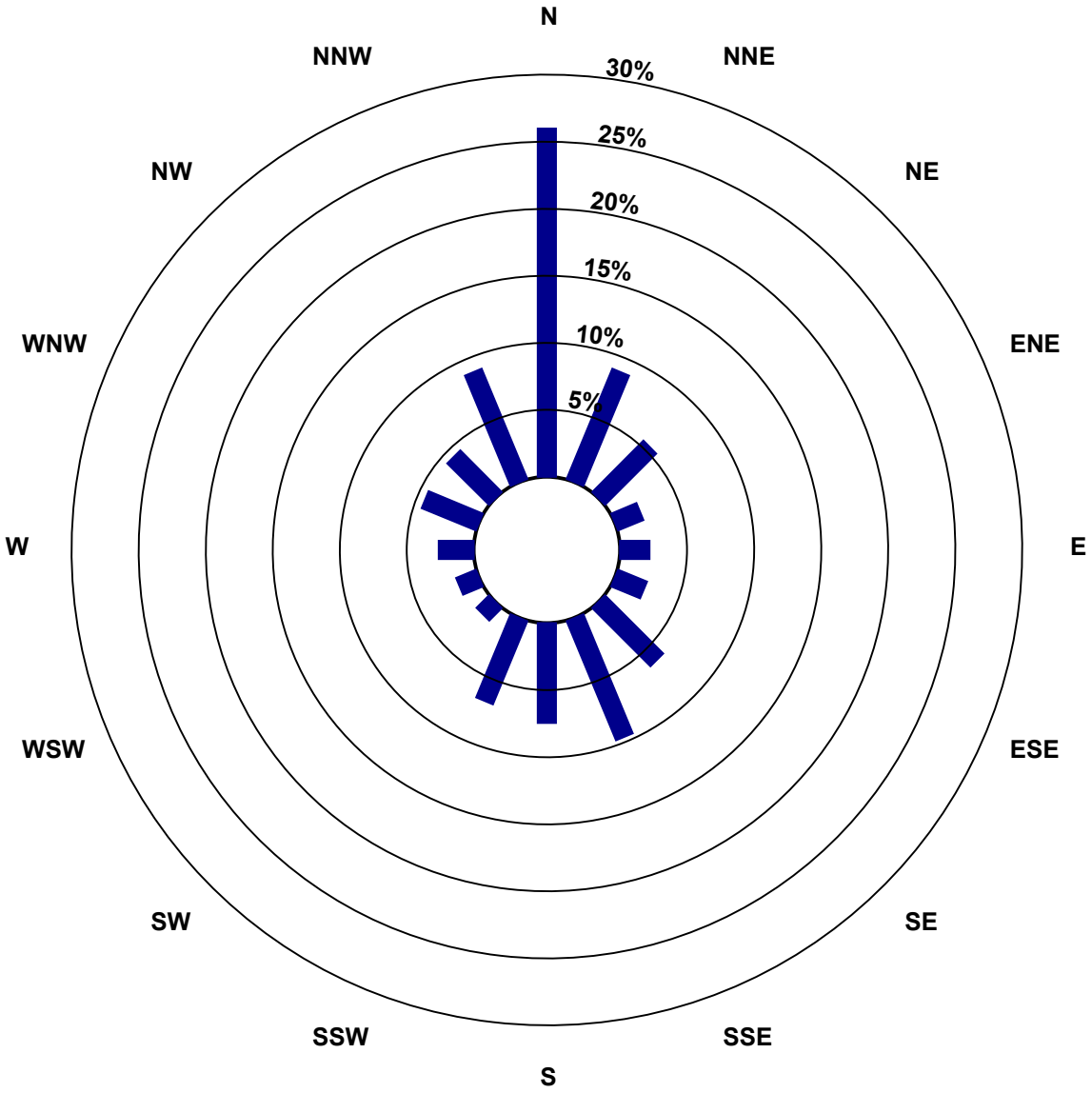
Total Number of Hours: 720

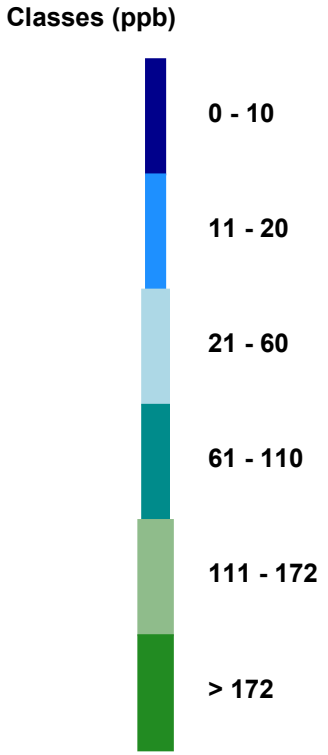
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Fort Hills





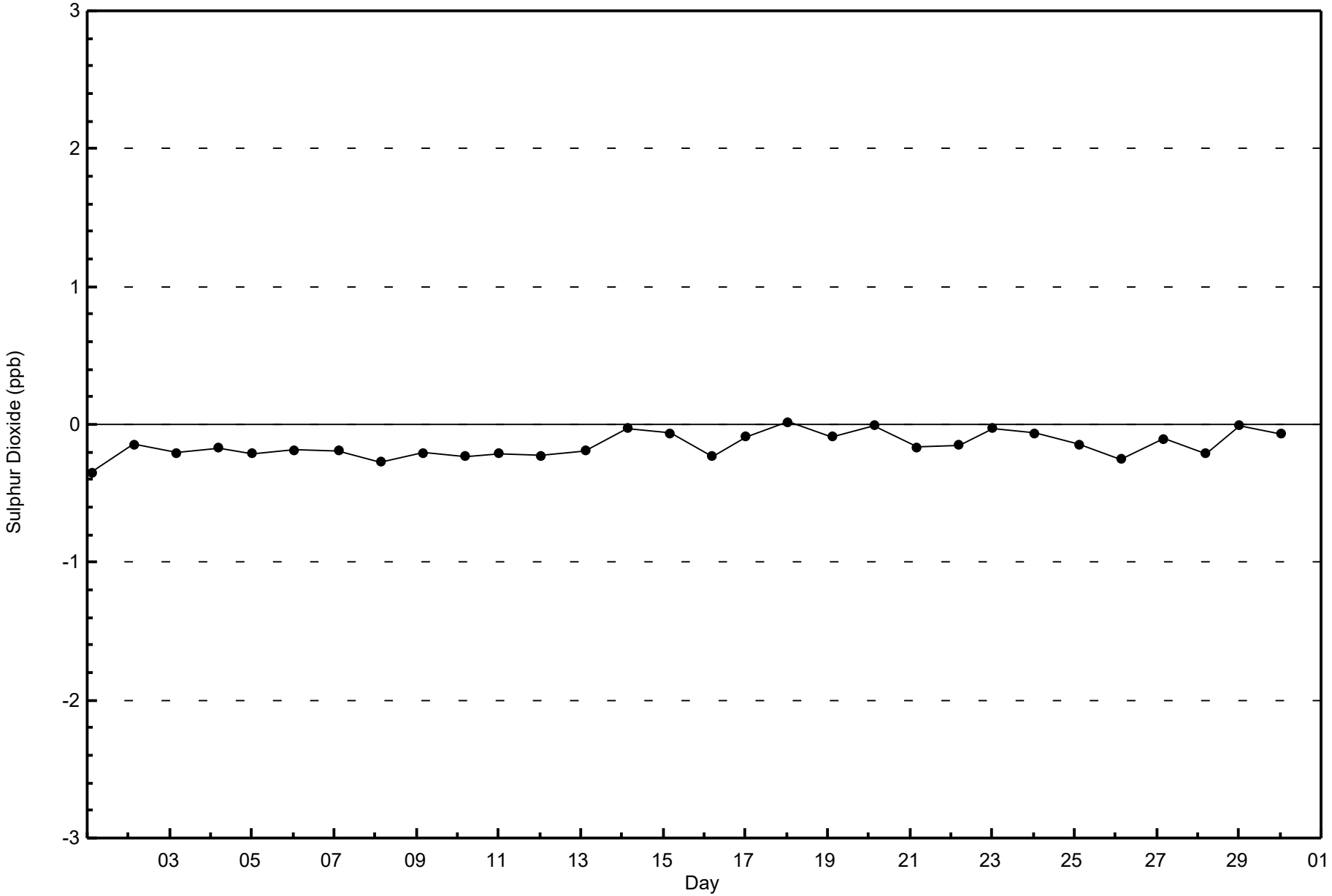
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Fort Hills - June 2026

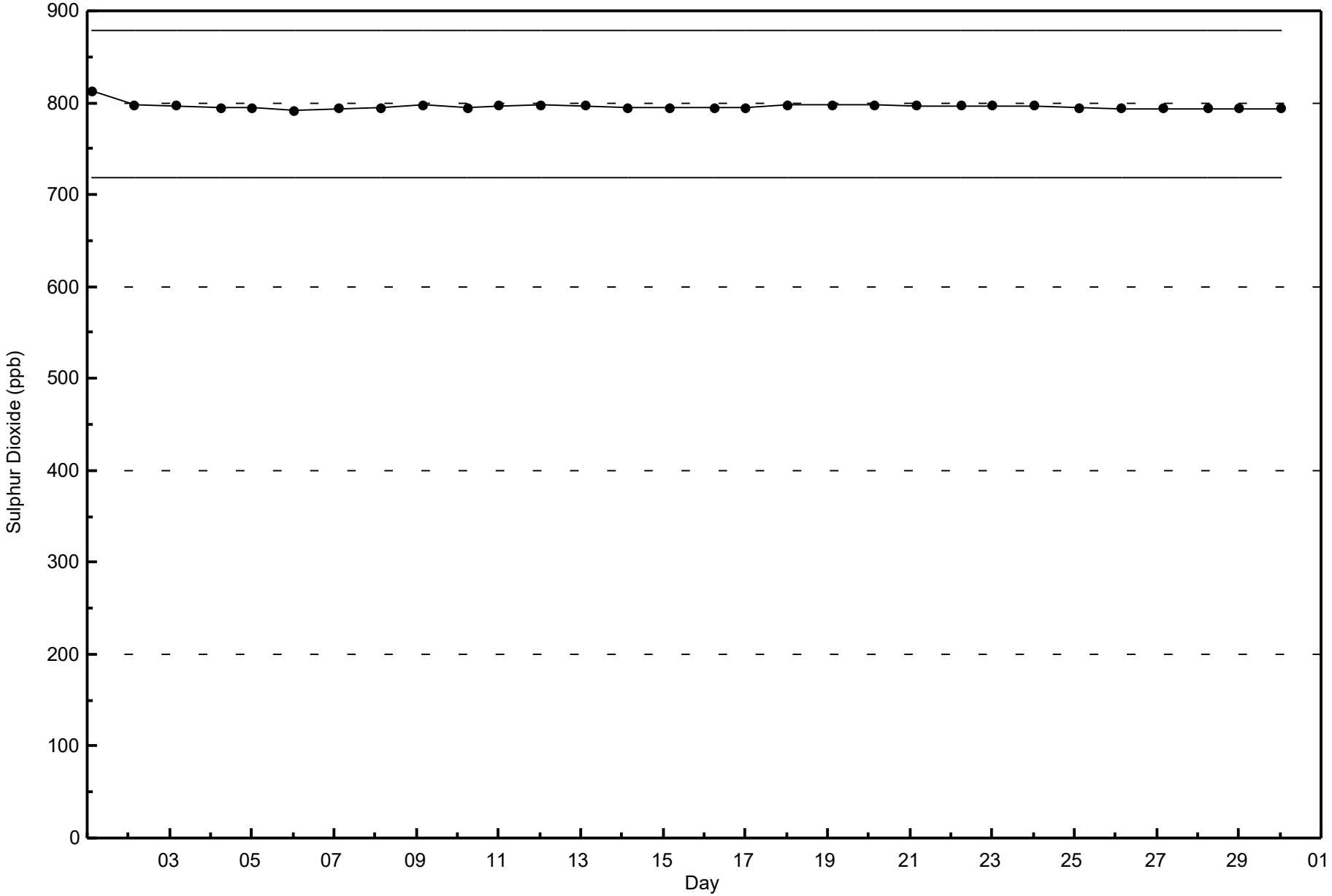


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Fort Hills - June 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Fort Hills - June 2026

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

Maximum Value: 1.5 ppb on Jun 25 06:30 Maximum Daily Average: 0.6 ppb on Jun 15

Minimum Value: 0.0 ppb on Jun 30 19:30 Minimum Daily Average: 0.2 ppb on Jun 11

Maximum Diurnal Average: 0.6 ppb at hour 7 Minimum Diurnal Average: 0.2 ppb at hour 19

Monthly Average: 0.39 ppb Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.2 Median = 0.3 Q_3 = 0.5 P_{90} = 0.7 P_{99} = 1.3

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

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Fort Hills - June 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-Jun	Z	0.4	0.4	0.5	0.6	0.6	0.6	0.5	0.4	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	0.5	0.4	0.4	0.7
	SP	0.4	0.5	0.6	0.7	0.7	0.6	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.5	0.4		
17-Jun	0.5	Z	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.6
	0.5	SP	0.5	0.5	0.6	0.6	0.6	0.4	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	0.2	0.5		
18-Jun	0.5	0.5	Z	0.6	0.6	0.6	0.5	0.4	0.5	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.4	0.6
	0.5	0.5	SP	0.5	0.6	0.6	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.4	0.5	0.5		
19-Jun	0.4	0.3	0.3	Z	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	0.2	0.2	0.2	0.3	0.5	0.4	0.3	0.6
	0.3	0.3	0.3	SP	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	0.2	0.2	0.3	0.4	0.6	0.3		
20-Jun	0.4	0.5	0.4	0.5	Z	0.6	0.7	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.7
	0.4	0.4	0.5	0.7	SP	0.7	0.5	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	0.2	0.2	0.3	0.4		
21-Jun	0.4	0.5	0.6	0.7	0.7	Z	0.5	0.8	0.8	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.6	0.6	0.6	0.5	0.8
	0.4	0.6	0.7	0.7	0.7	SP	0.6	0.7	0.7	0.4	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.4	0.6	0.6	0.6	0.5		
22-Jun	Z	0.5	0.6	0.7	0.8	0.8	1.1	1.3	0.8	0.5	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.5	1.3
	SP	0.6	0.5	0.7	0.8	0.9	1.3	1.1	0.5	0.4	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.5	0.7		
23-Jun	0.8	Z	0.4	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.4	0.3	0.3	0.3	0.6	0.4	0.8	0.6	0.5	0.4	0.8
	0.7	SP	0.5	0.5	0.6	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.4	0.4	0.7	0.4	0.6	0.5		
24-Jun	0.5	0.6	Z	0.7	1.0	1.4	1.1	0.5	0.4	0.7	0.7	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.4	0.3	0.5	1.4
	0.5	0.9	SP	0.8	1.2	1.3	0.7	0.5	0.6	0.8	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.2	0.3	0.4	0.3		
25-Jun	0.3	0.3	0.7	Z	0.4	0.5	1.5	0.8	0.6	0.5	0.7	0.7	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.6	0.6	0.4	0.5	1.5
	0.3	0.3	0.7	SP	0.5	0.9	1.2	0.7	0.5	0.5	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.6	0.4	0.5		
26-Jun	0.6	0.6	0.6	0.6	Z	0.5	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.6	0.3	0.3	1.3
	0.5	0.6	0.6	0.5	SP	0.5	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.3	1.3	0.6		
27-Jun	0.2	0.7	0.7	0.4	1.0	Z	1.2	1.1	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.4	1.5
	0.4	0.4	0.6	0.6	1.2	SP	1.5	0.6	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.6		
28-Jun	Z	0.8	1.1	1.1	1.0	1.4	1.2	1.0	0.7	0.5	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.3	0.4	0.5	1.5
	SP	1.0	1.1	1.0	1.3	1.5	1.0	0.9	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.3	0.4	0.5		
29-Jun	0.6	Z	0.6	1.1	1.2	1.3	1.3	1.5	1.0	0.5	0.4	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.4	0.7	0.6	1.5
	0.7	SP	0.9	1.2	1.3	1.4	1.3	1.4	0.5	0.6	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.8		
30-Jun	0.7	0.7	Z	0.5	0.7	0.7	0.8	0.7	0.7	0.8	0.5	0.7	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.9	0.6	0.4	0.9
	0.7	0.6	SP	0.7	0.8	0.8	0.6	0.7	0.8	0.8	0.7	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.7	0.5		
	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.4	0.4	0.4	Diurnal Average	
	1.0	1.0	1.1	1.2	1.3	1.5	1.5	1.5	1.1	1.3	0.7	0.7	0.6	0.5	0.5	0.6	0.6	0.6	0.4	0.6	1.3	1.0	1.3	0.8	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 Hills - June 2026

Maximum Value: 1.4 ppb on Jun 29 08:00

Maximum Daily Average: 0.6 ppb on Jun 15

Minimum Value: 0.0 ppb on Jun 30 20:00

Minimum Daily Average: 0.2 ppb on Jun 11

Maximum Diurnal Average: 0.6 ppb at hour 7

Minimum Diurnal Average: 0.2 ppb at hour 19

Monthly Average: 0.39 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.2 Median = 0.3 Q_3 = 0.5 P_{90} = 0.7 P_{99} = 1.3

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

Z - zerospan C - Calibration

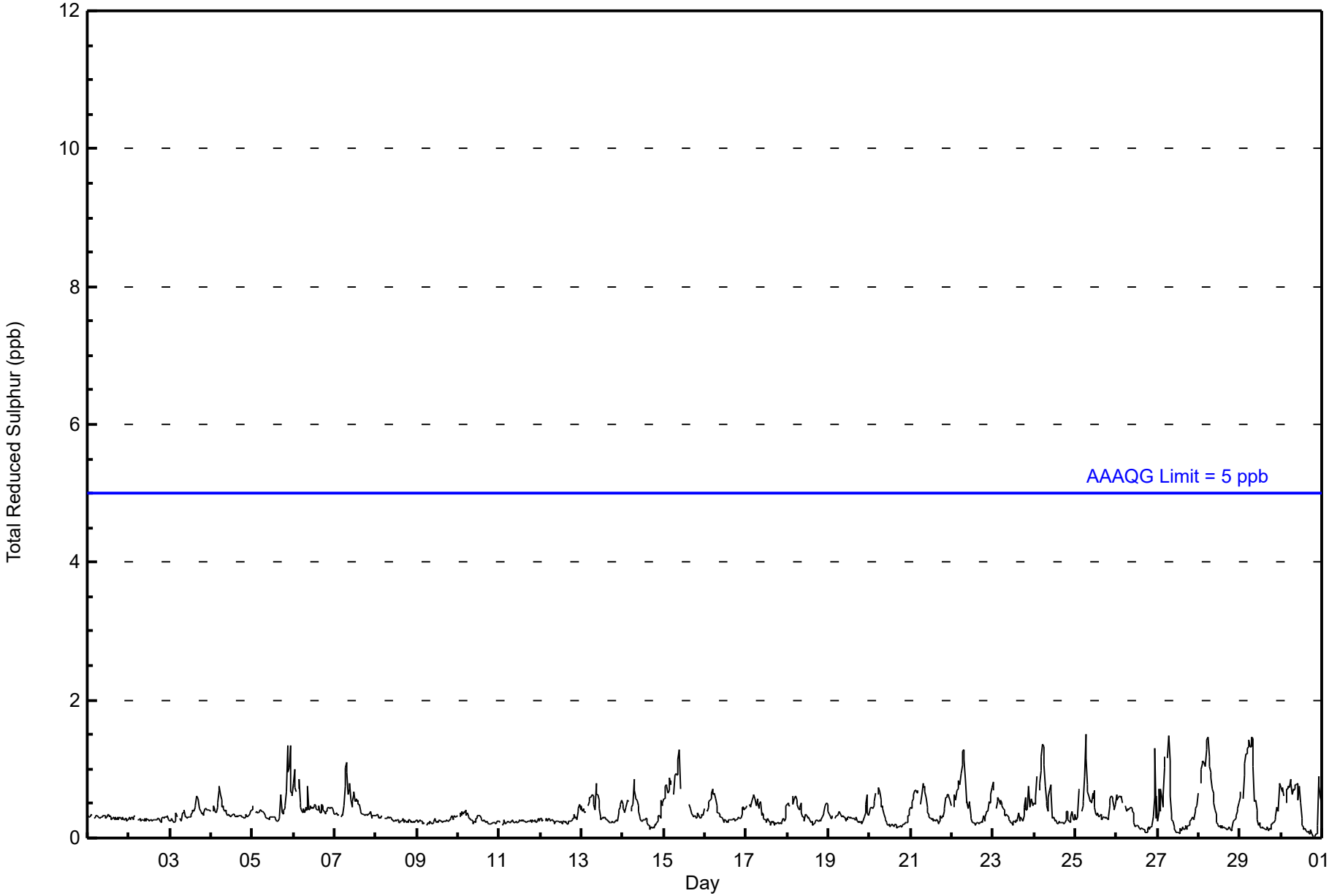
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Fort Hills - June 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

Fort Hills - June 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	186	61	36	14	15	14	44	61	53	45	10	11	19	30	29	57	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	186	61	36	14	15	14	44	61	53	45	10	11	19	30	29	57	685

Total Number of Valid Hours: 685

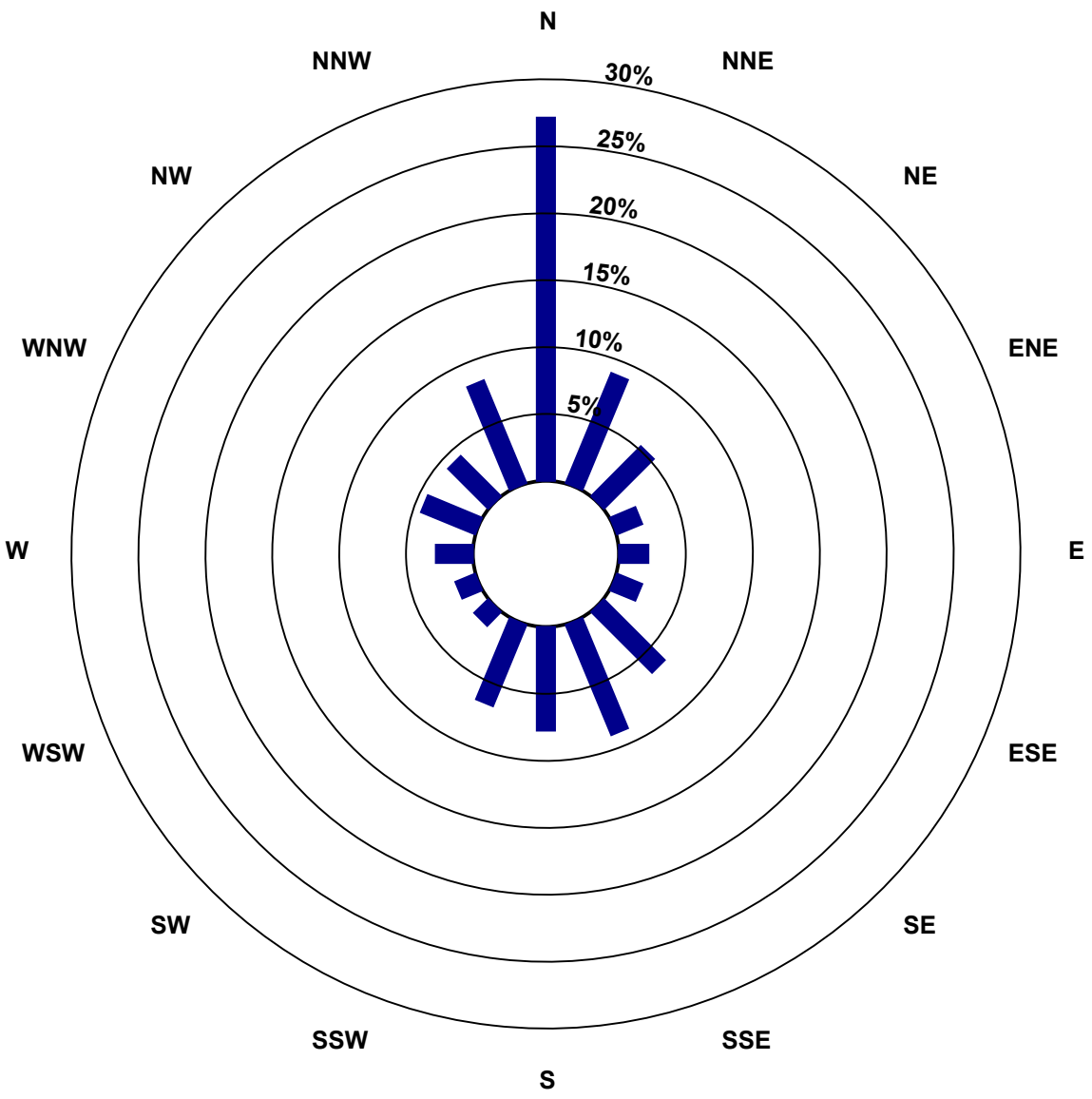
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Reduced Sulphur (TRS) - ppb

Fort Hills



Classes (ppb)

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

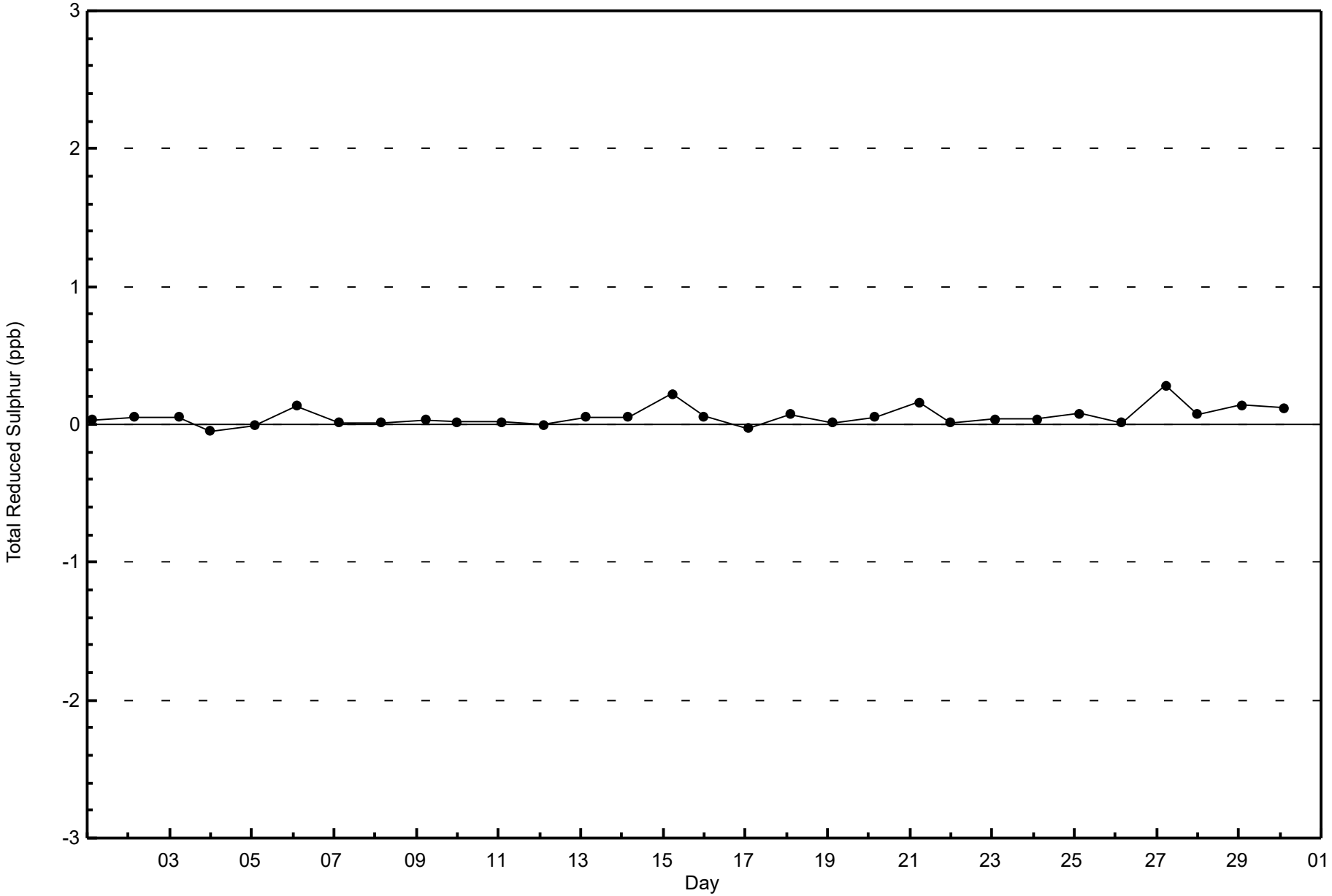
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Fort Hills - June 2026

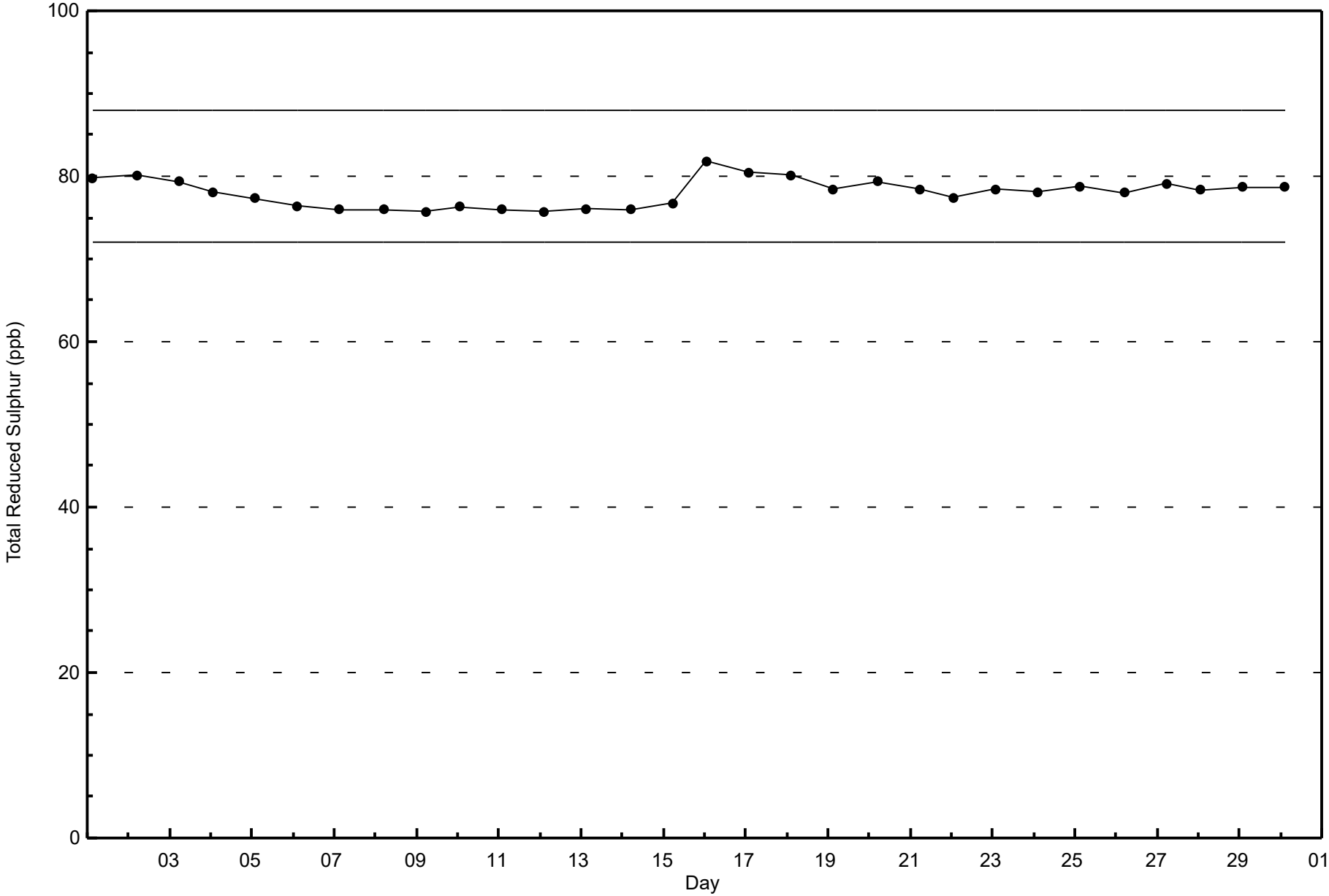


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Fort Hills - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Fort Hills - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.7 ppb on Jun 27 07:00 Maximum Daily Average: 0.5 ppb on Jun 29

Minimum Value: 0.0 ppb on Jun 5 14:00 Minimum Daily Average: 0.1 ppb on Jun 2
Maximum Diurnal Average: 0.5 ppb at hour 7 Minimum Diurnal Average: 0.0 ppb at hour 19
Monthly Average: 0.22 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.3 P_{90} = 0.6 P_{99} = 1.3

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

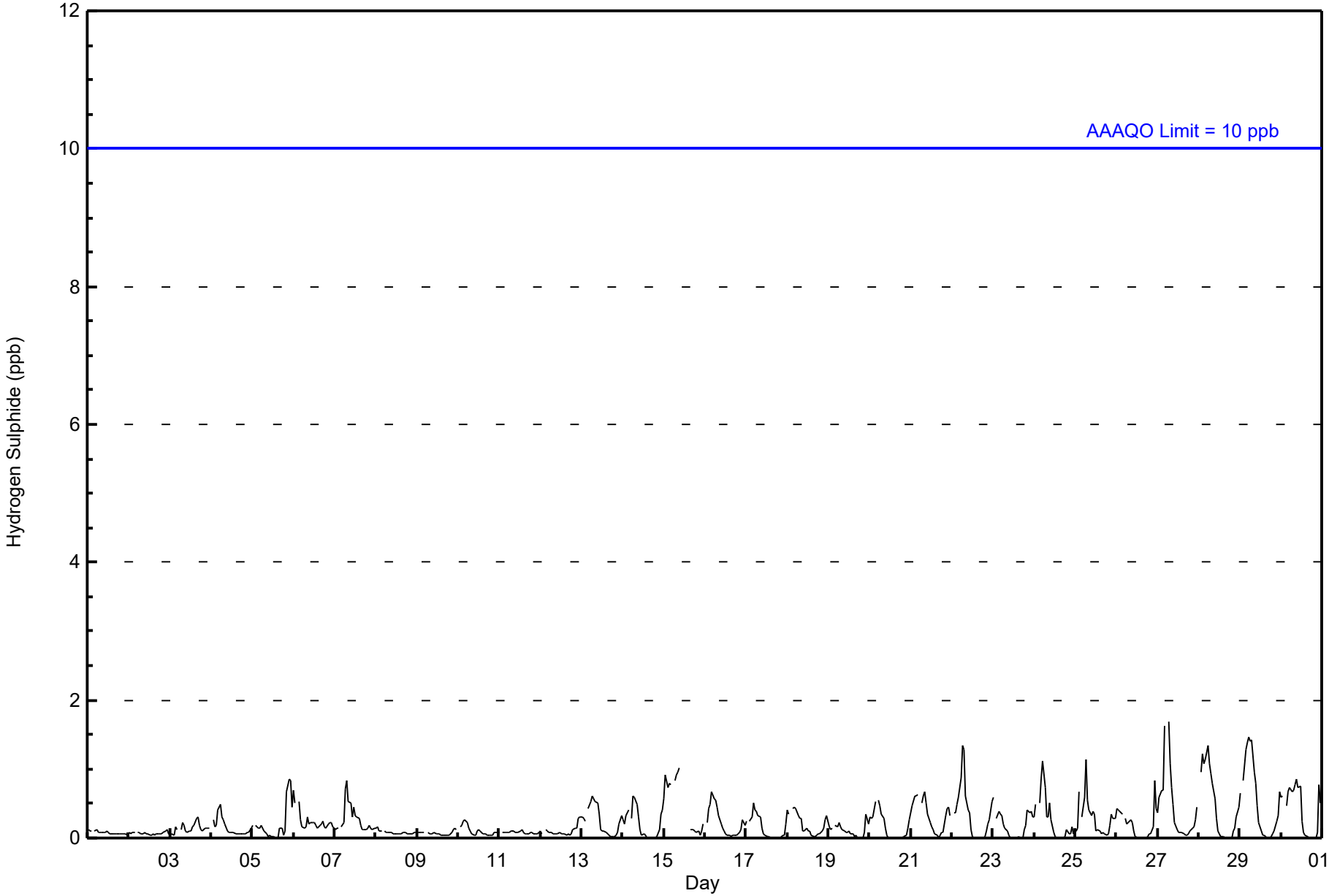
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Fort Hills - June 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

Fort Hills - June 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	186	61	36	14	15	14	44	61	53	45	10	11	19	30	29	57	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	186	61	36	14	15	14	44	61	53	45	10	11	19	30	29	57	685

Total Number of Valid Hours: 685

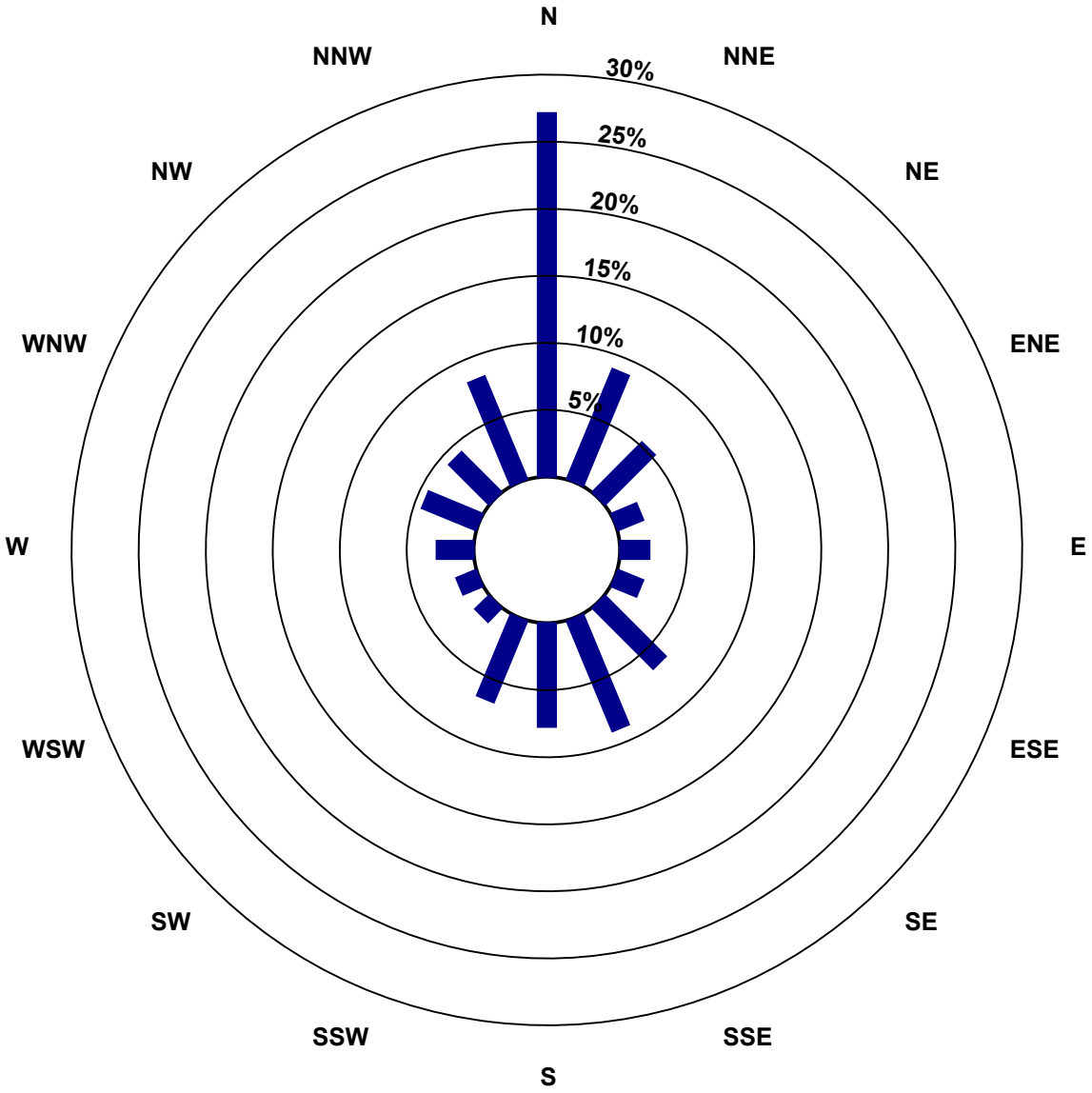
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H_2S) - ppb

Fort Hills



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

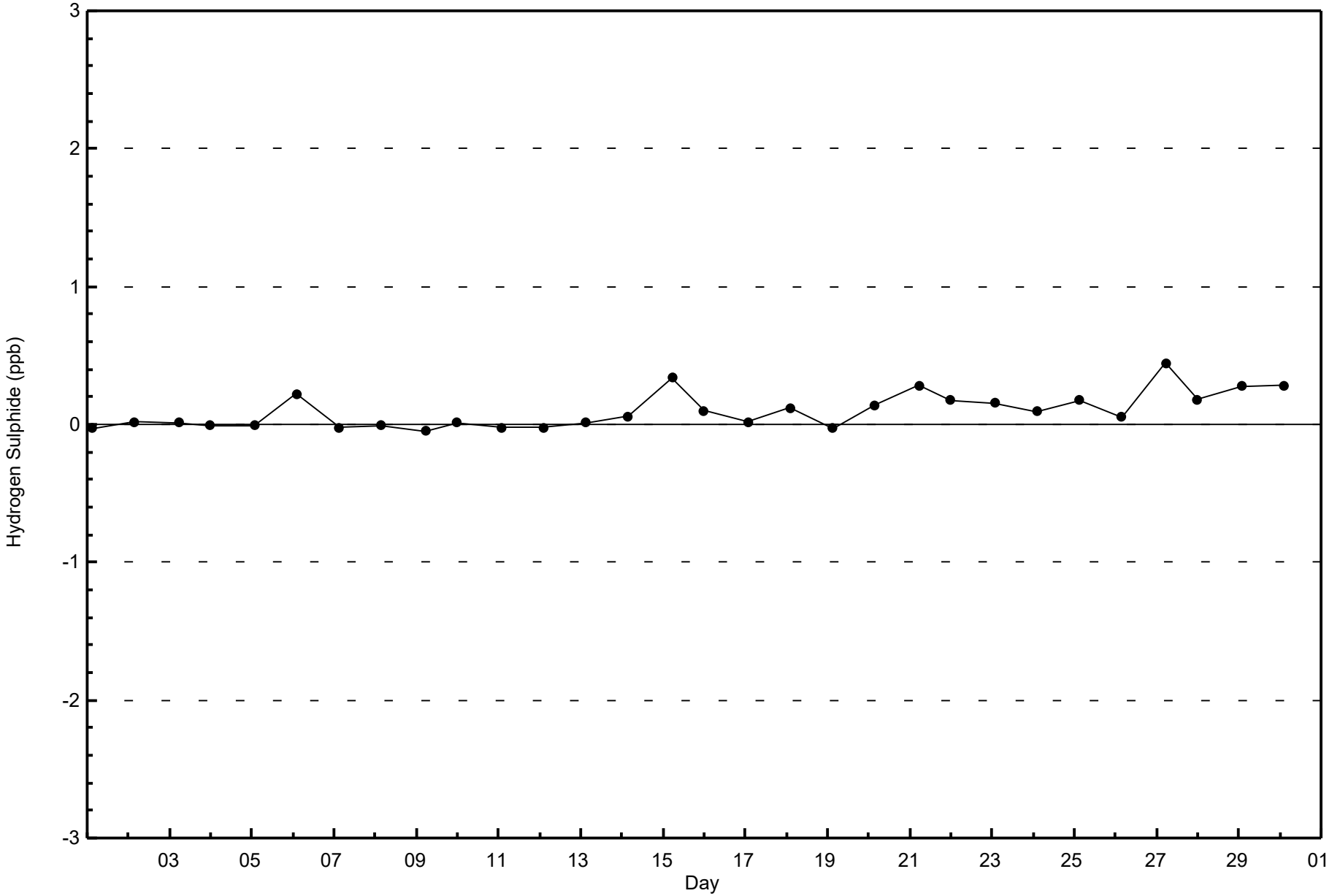
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Fort Hills - June 2026

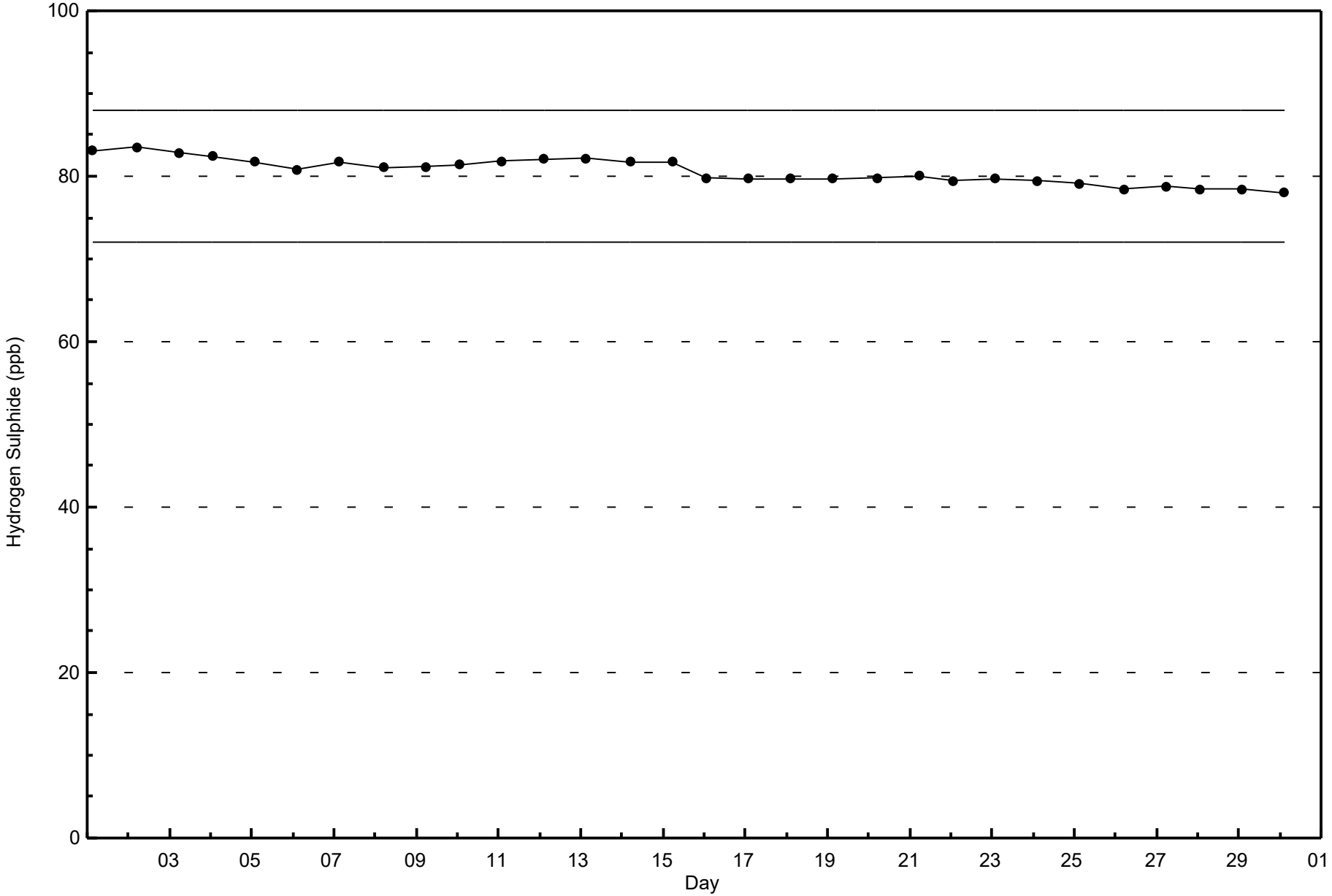


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Fort Hills - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Fort Hills - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8.0 ppm on Jun 25 22:00
Maximum Daily Average: 2.8 ppm on Jun 29

Minimum Value: 1.8 ppm on Jun 14 19:00
Maximum Diurnal Average: 2.6 ppm at hour 3
Monthly Average: 2.32 ppm
Minimum Daily Average: 1.9 ppm on Jun 11
Minimum Diurnal Average: 2.0 ppm at hour 15
Percentiles: P_1 = 1.9 P_{10} = 1.9 Q_1 = 2.0 Median = 2.0 Q_3 = 2.5 P_{90} = 3.1 P_{99} = 4.2

Hours in Service:	720
Hours of Data:	538
Hours of Missing Data:	182
Hours of Calibration:	36
Percent Operational Time:	79.7

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-Jun	1.9	UO	Z	UO	UO	1.9	1.9	UO	UO	1.9	UO	C	C	C	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	--	2.1
2-Jun	2.1	2.0	2.1	Z	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	2.2	2.1	2.0	1.9	2.0	2.2
3-Jun	2.0	2.0	1.9	2.2	Z	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.3
4-Jun	3.0	2.7	2.3	2.0	2.1	Z	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.1	2.1	3.0
5-Jun	Z	2.1	2.0	2.1	2.2	2.6	2.4	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.4	3.0	4.0	3.1	2.2	2.3	4.0
6-Jun	3.1	Z	2.8	2.7	2.0	UO	2.1	UO	2.3	2.3	2.2	1.9	1.9	1.9	1.9	2.2	2.5	2.2	1.9	UO	UO	UO	UO	2.0	--	3.1
7-Jun	2.0	2.1	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	2.1
8-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	M	M	M	M	UO	UO	UO	1.9	1.9	2.0	UO	UO	--	2.0
9-Jun	UO	1.9	1.9	UO	Z	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.1	2.0	2.3	2.0	2.3
10-Jun	2.5	2.3	2.2	2.3	2.1	Z	2.0	1.9	1.9	1.9	2.0	2.1	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.5
11-Jun	Z	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0
12-Jun	1.9	Z	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.0	1.9	2.1	UO	1.9	2.1
13-Jun	2.0	2.0	Z	2.1	2.7	3.3	3.8	3.3	2.8	2.3	2.0	1.9	2.1	2.3	2.0	2.0	1.9	1.9	2.0	1.9	UO	UO	2.4	2.7	2.3	3.8
14-Jun	2.4	2.0	2.9	Z	2.0	2.1	3.2	3.2	2.9	2.3	2.0	1.9	2.0	UO	1.9	UO	UO	UO	1.8	UO	2.1	2.0	3.2	2.7	2.4	3.2
15-Jun	2.5	3.2	3.1	3.0	Z	3.4	3.2	3.1	3.6	3.2	2.2	M	UO	2.0	2.0	2.0	UO	UO	UO	2.1	2.4	2.4	2.3	2.8	2.7	3.6
16-Jun	3.1	2.6	2.8	2.8	3.3	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	3.3
17-Jun	UO	UO	UO	UO	UO	UO	UO	UO	M	M	M	M	M	M	M	M	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.4	--	2.4
18-Jun	3.1	Z	3.0	2.7	2.2	2.1	2.0	2.0	2.0	2.0	2.2	UO	UO	UO	UO	UO	1.9	UO	2.0	1.9	1.9	UO	UO	UO	--	3.1
19-Jun	UO	UO	Z	2.0	UO	2.0	2.0	2.1	2.0	UO	M	M	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.2	2.7	2.6	2.1	--	2.7
20-Jun	2.6	2.5	2.5	Z	3.0	3.1	2.9	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.4	2.2	2.7	2.3	3.1
21-Jun	2.7	2.9	2.8	3.1	Z	2.4	2.5	2.4	2.5	2.3	2.3	2.2	2.1	2.2	2.0	2.0	2.1	2.3	2.4	2.0	2.8	2.9	2.6	2.0	2.4	3.1
22-Jun	2.0	2.7	2.4	2.3	2.7	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	2.7
23-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	C	C	C	C	C	C	2.1	2.0	2.0	2.2	3.2	3.0	2.8	2.4	--	3.2
24-Jun	2.2	Z	3.1	2.4	2.6	2.8	2.6	2.1	2.2	2.3	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.9	2.0	2.1	3.0	2.1	2.3	3.1
25-Jun	2.1	2.4	Z	4.4	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	5.7	8.0	3.7	3.0	2.8	8.0
26-Jun	3.0	2.4	2.2	Z	3.2	2.9	2.6	2.8	3.3	2.8	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.3	2.9	3.0	3.0	2.5	3.3
27-Jun	3.1	3.2	3.0	3.0	Z	4.1	4.9	3.2	2.6	2.3	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.6	2.8	2.4	2.5	3.6	3.3	2.7	4.9
28-Jun	3.1	4.0	3.9	2.9	3.1	Z	3.3	3.3	3.1	2.7	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.6	2.6	3.0	2.9	2.6	4.0
29-Jun	Z	4.1	4.0	4.2	3.6	4.3	4.0	3.7	2.8	2.9	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.4	3.1	2.7	3.6	2.8	4.3
30-Jun	3.6	Z	2.9	2.6	3.0	2.6	2.8	3.5	3.7	3.8	3.7	3.8	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.4	2.8	3.1	2.9	2.8	3.8
	2.5	2.6	2.6	2.6	2.5	2.6	2.6	2.5	2.4	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.4	2.6	2.6	2.5	Diurnal Average	
	3.6	4.1	4.0	4.4	3.6	4.3	4.9	3.7	3.7	3.8	3.7	3.8	2.3	2.3	2.1	2.2	2.5	2.3	2.6	2.9	5.7	8.0	3.7	3.6	Diurnal Maximum	

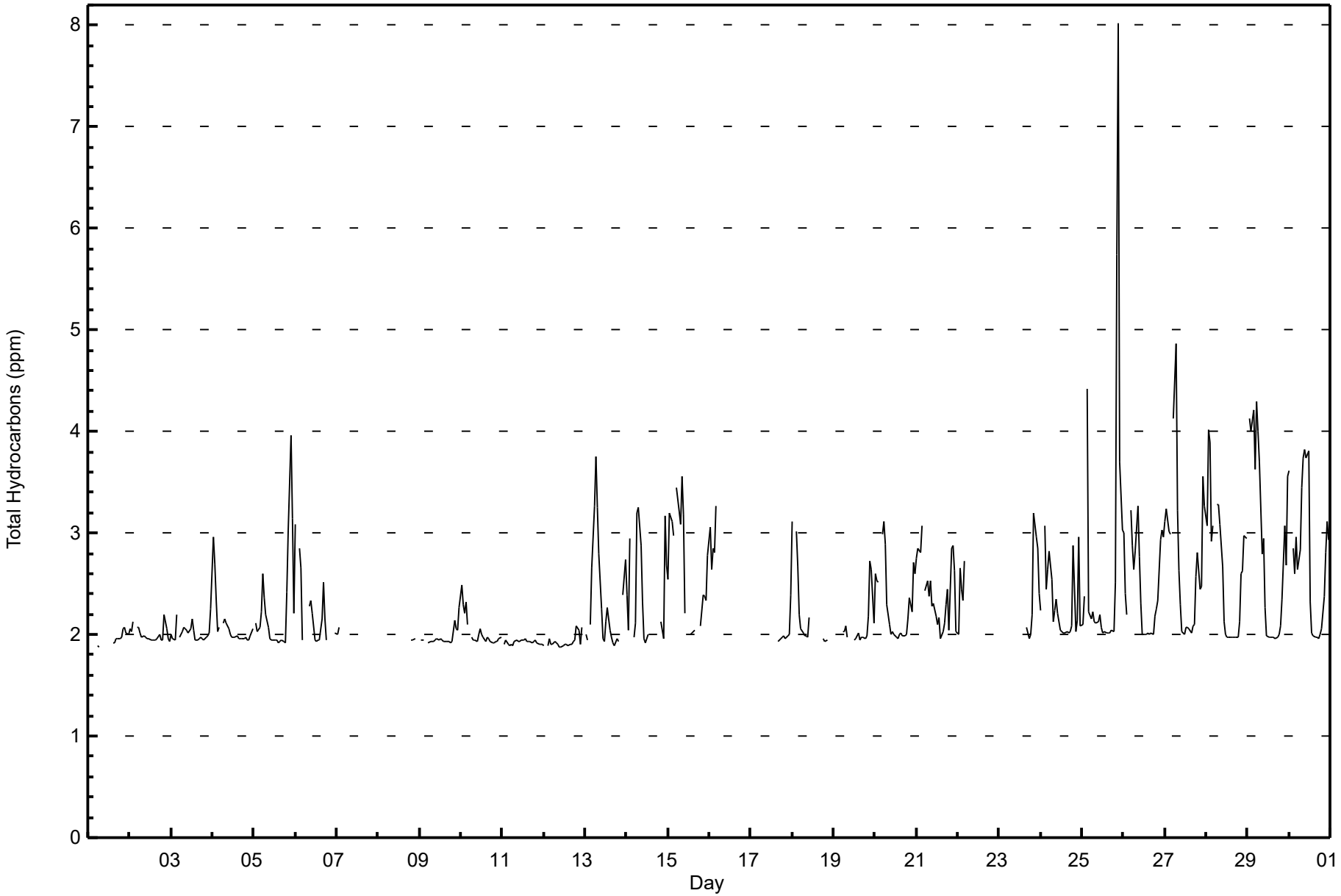
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Fort Hills - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	272	50.56	50.56
2.1 - 3.0	207	38.48	89.03
3.1 - 10.0	59	10.97	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 538

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Fort Hills - June 2026

Concentration Ranges (ppm)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 2.0	62	23	22	5	5	5	9	20	21	26	0	7	8	17	11	31	272
2.1 - 3.0	48	22	9	4	7	7	16	30	21	14	7	2	0	1	8	11	207
3.1 - 10.0	19	5	0	1	2	3	9	7	2	1	0	0	3	2	1	4	59
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	129	50	31	10	14	15	34	57	44	41	7	9	11	20	20	46	538

Total Number of Valid Hours: 538

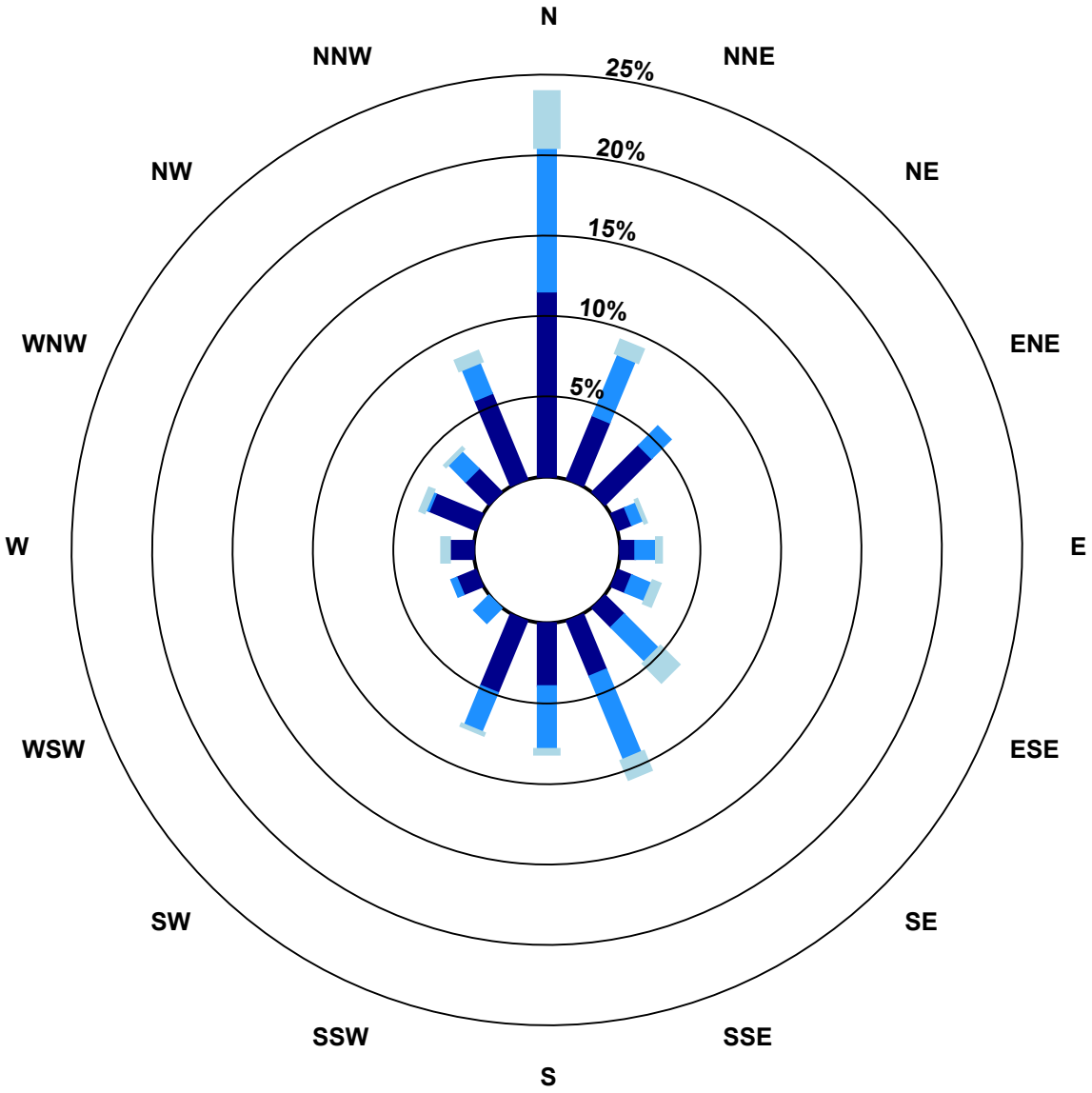
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Fort Hills



Classes (ppm)

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

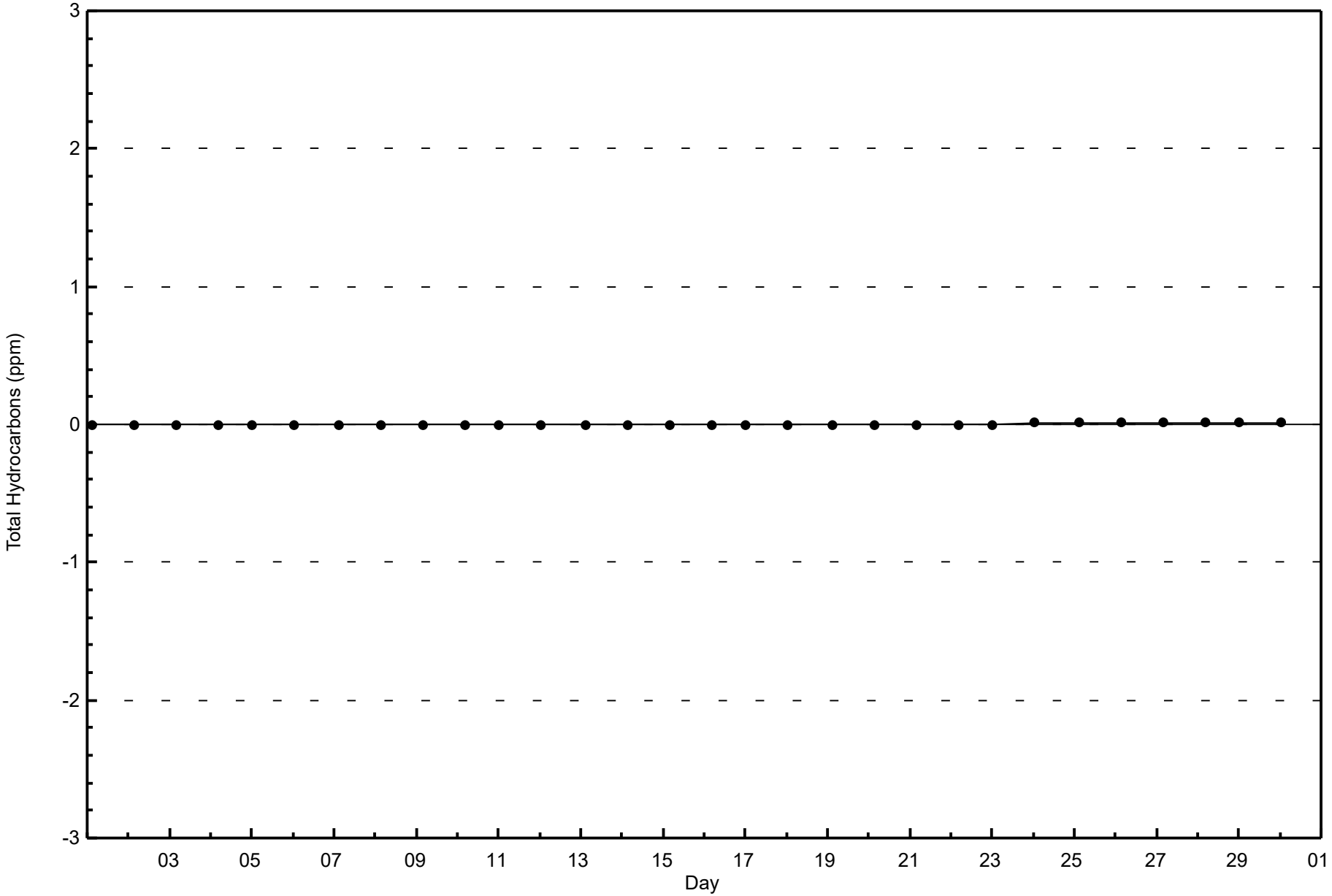
Total Number of Valid Hours: 538

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Fort Hills - June 2026

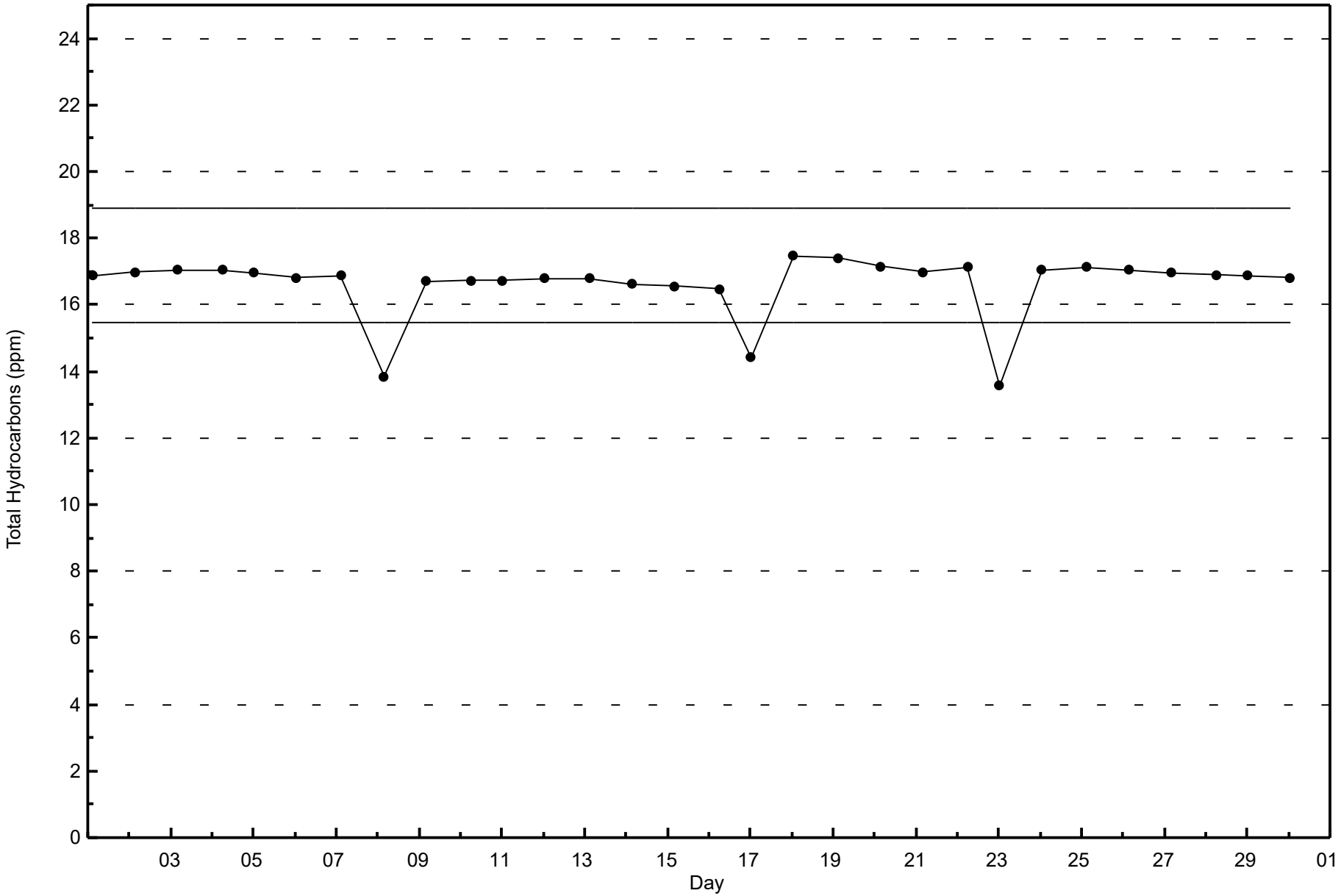


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Fort Hills - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Fort Hills - June 2026

Maximum Value: 5.727 ppm on Jun 25 22:00

Maximum Daily Average: 0.556 ppm on Jun 25

Minimum Value: 0.000 ppm on Jun 1 01:00

Minimum Daily Average: 0.000 ppm on Jun 11

Maximum Diurnal Average: 0.504 ppm at hour 22

Minimum Diurnal Average: 0.018 ppm at hour 17

Monthly Average: 0.207 ppm

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.3 P_{90} = 0.6 P_{99} = 1.3

Hours in Service:	720
Hours of Data:	538
Hours of Missing Data:	182
Hours of Calibration:	36
Percent Operational Time:	79.7

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-Jun	0.000	UO	Z	UO	UO	0.000	0.000	UO	UO	0.000	UO	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
2-Jun	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	0.027	0.000	0.000	0.254	0.103	0.000	0.000	0.017	0.254
3-Jun	0.069	0.000	0.000	0.126	Z	0.015	0.000	0.000	0.000	0.000	0.000	0.025	0.133	0.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.018	0.133
4-Jun	0.070	0.018	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	0.004	0.070
5-Jun	Z	0.000	0.000	0.000	0.000	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.151	0.460	1.167	0.611	0.038	0.107	1.167
6-Jun	0.541	Z	0.497	0.392	0.000	UO	0.052	UO	0.059	0.154	0.159	0.000	0.000	0.000	0.000	0.167	0.151	0.130	0.000	UO	UO	UO	UO	0.000	--	0.541
7-Jun	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
8-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	M	M	M	M	UO	UO	UO	0.000	0.000	0.000	UO	UO	--	0.000
9-Jun	UO	0.000	0.000	UO	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.144	0.056	0.046	0.139	0.018	0.144
10-Jun	0.284	0.305	0.185	0.212	0.020	Z	0.000	0.000	0.000	0.000	0.062	0.070	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.050	0.305
11-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009
12-Jun	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	0.000	0.000	0.012	0.118	0.093	0.000	0.020	UO	0.011	0.118
13-Jun	0.000	0.000	Z	0.011	0.167	0.270	0.394	0.408	0.463	0.208	0.000	0.000	0.225	0.372	0.148	0.059	0.005	0.000	0.000	0.000	UO	UO	0.301	0.467	0.167	0.467
14-Jun	0.188	0.019	0.258	Z	0.000	0.027	0.744	0.951	0.763	0.379	0.096	0.044	0.094	UO	0.000	UO	UO	UO	0.000	UO	0.206	0.014	0.689	0.461	0.274	0.951
15-Jun	0.407	0.673	0.588	0.585	Z	0.767	0.755	0.777	1.288	0.986	0.322	M	UO	0.176	0.177	0.191	UO	UO	UO	0.232	0.486	0.449	0.357	0.650	0.548	1.288
16-Jun	0.800	0.547	0.626	0.709	0.961	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	0.961
17-Jun	UO	UO	UO	UO	UO	UO	UO	UO	M	M	M	M	M	M	M	M	0.000	0.000	0.003	0.003	0.000	0.000	0.000	0.286	--	0.286
18-Jun	0.712	Z	0.638	0.338	0.084	0.006	0.000	0.000	0.000	0.000	0.156	UO	UO	UO	UO	UO	0.000	UO	0.000	0.000	0.000	UO	UO	UO	--	0.712
19-Jun	UO	UO	Z	0.000	UO	0.009	0.000	0.050	0.004	UO	M	M	0.000	0.007	0.043	0.000	0.003	0.005	0.014	0.003	0.144	0.532	0.331	0.016	--	0.532
20-Jun	0.385	0.231	0.262	Z	0.461	0.487	0.438	0.263	0.079	0.006	0.014	0.008	0.000	0.018	0.015	0.014	0.000	0.013	0.009	0.143	0.256	0.160	0.406	0.314	0.173	0.487
21-Jun	0.438	0.419	0.436	0.635	Z	0.332	0.318	0.238	0.258	0.196	0.244	0.135	0.089	0.150	0.000	0.059	0.112	0.268	0.346	0.056	0.590	0.551	0.351	0.000	0.270	0.635
22-Jun	0.000	0.326	0.262	0.110	0.316	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	0.326
23-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	C	C	C	C	C	C	0.051	0.000	0.016	0.105	0.614	0.549	0.447	0.180	--	0.614
24-Jun	0.083	Z	0.458	0.231	0.329	0.418	0.233	0.000	0.048	0.152	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.037	0.756	0.013	0.046	0.731	0.006	0.158	0.756
25-Jun	0.004	0.135	Z	0.917	0.044	0.010	0.040	0.000	0.000	0.000	0.067	0.000	0.000	0.000	0.000	0.003	0.003	0.007	0.000	0.428	3.561	5.727	1.360	0.494	0.556	5.727
26-Jun	0.494	0.121	0.045	Z	0.641	0.547	0.450	0.544	1.009	0.588	0.248	0.000	0.003	0.000	0.000	0.000	0.010	0.000	0.122	0.143	0.248	0.639	0.797	0.599	0.315	1.009
27-Jun	0.587	0.713	0.486	0.521	Z	1.198	1.602	0.762	0.435	0.210	0.031	0.018	0.071	0.081	0.025	0.007	0.087	0.108	0.574	0.731	0.335	0.328	1.325	0.957	0.487	1.602
28-Jun	0.605	1.048	0.909	0.423	0.550	Z	0.692	0.772	0.686	0.437	0.086	0.000	0.000	0.000	0.003	0.007	0.000	0.000	0.000	0.112	0.487	0.380	0.563	0.556	0.362	1.048
29-Jun	Z	1.110	1.029	1.167	0.755	1.054	0.975	1.000	0.577	0.672	0.192	0.000	0.000	0.000	0.000	0.012	0.000	0.010	0.007	0.066	0.236	0.630	0.490	0.991	0.477	1.167
30-Jun	1.098	Z	0.536	0.323	0.536	0.265	0.447	0.849	0.980	1.103	1.168	1.173	0.239	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.322	0.772	0.921	0.629	0.495	1.173
	0.308	0.283	0.328	0.335	0.256	0.272	0.298	0.301	0.289	0.221	0.134	0.074	0.041	0.041	0.018	0.024	0.018	0.025	0.046	0.122	0.338	0.504	0.406	0.283	Diurnal Average	
	1.098	1.110	1.029	1.167	0.961	1.198	1.602	1.000	1.288	1.103	1.168	1.173	0.239	0.372	0.177	0.191	0.151	0.268	0.574	0.756	3.561	5.727	1.360	0.991	Diurnal Maximum	

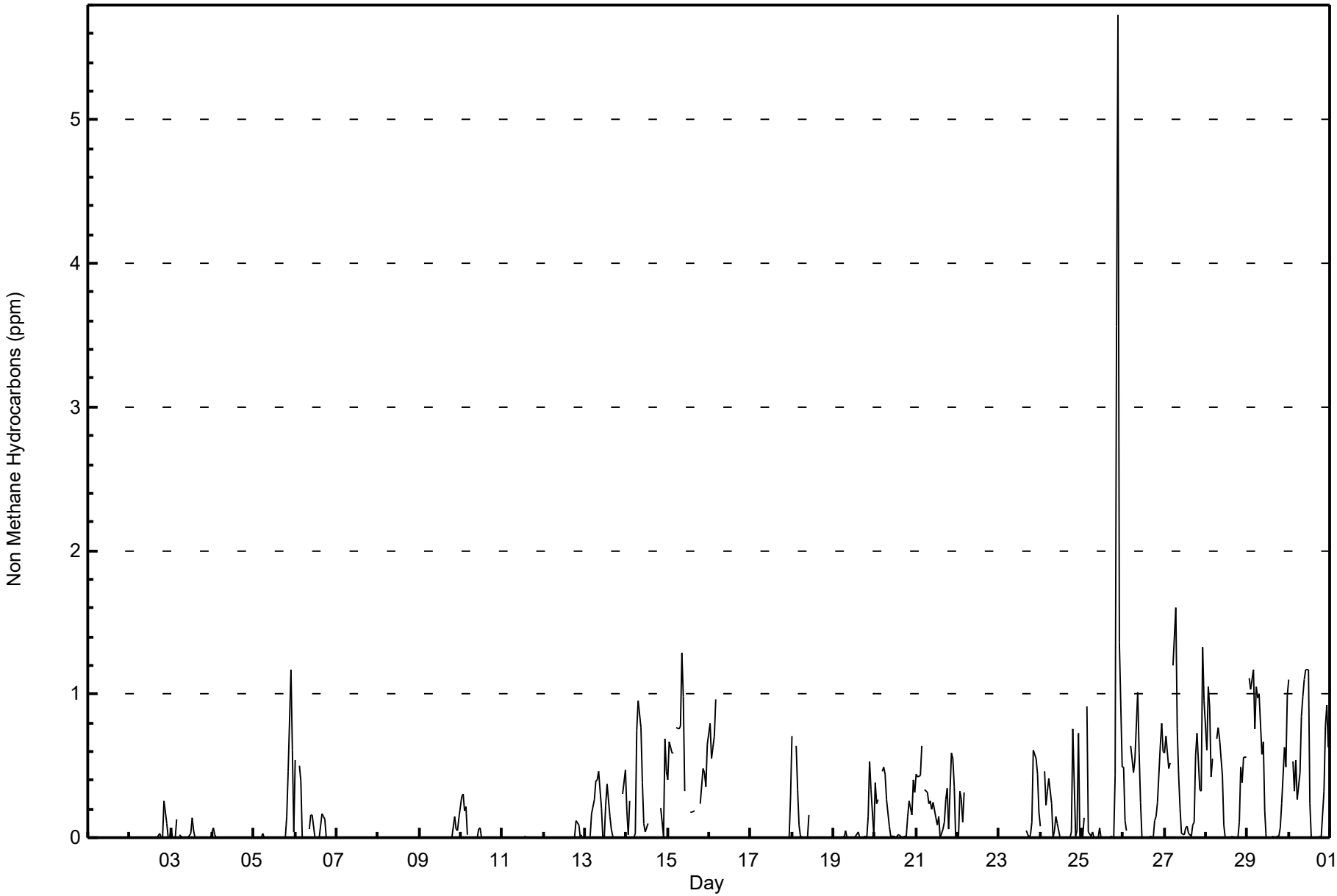
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Fort Hills - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Fort Hills - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	257	47.77	47.77
0.006 - 0.05	55	10.22	57.99
0.06 - 0.1	43	7.99	65.99
> 0.1	183	34.01	100.00

Total Number of Valid Hours: 538

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Fort Hills - June 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	56	13	19	5	1	3	6	23	26	33	0	7	8	16	12	29	257
0.006 - 0.05	8	10	2	2	1	2	4	8	8	3	1	0	0	1	2	3	55
0.06 - 0.1	11	8	3	0	3	3	5	5	2	0	1	0	0	0	1	1	43
> 0.1	54	19	7	3	9	7	19	21	8	5	5	2	3	3	5	13	183
Totals	129	50	31	10	14	15	34	57	44	41	7	9	11	20	20	46	538

Total Number of Valid Hours: 538

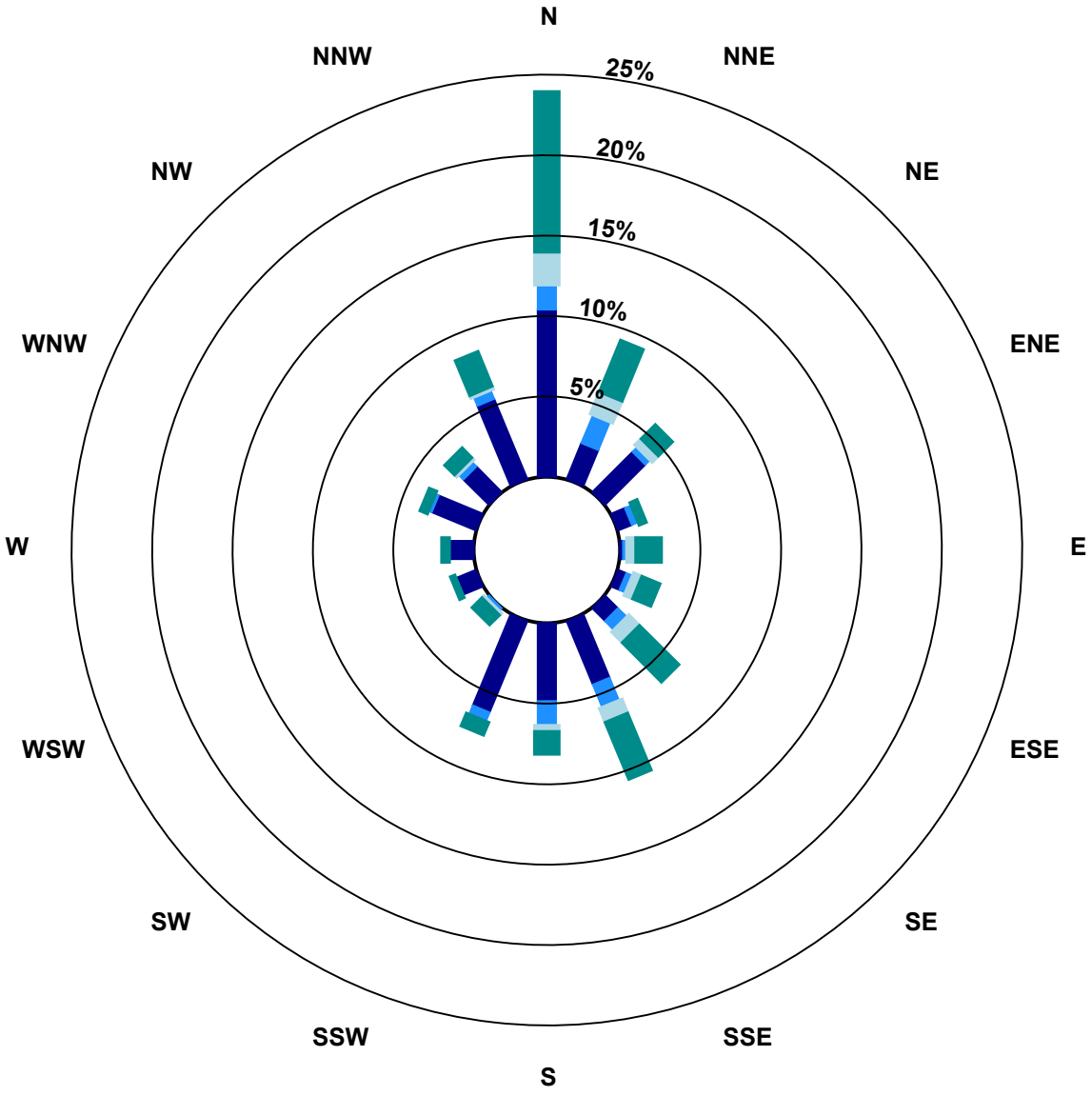
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Non Methane Hydrocarbons (NMHC) - ppm

Fort Hills



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

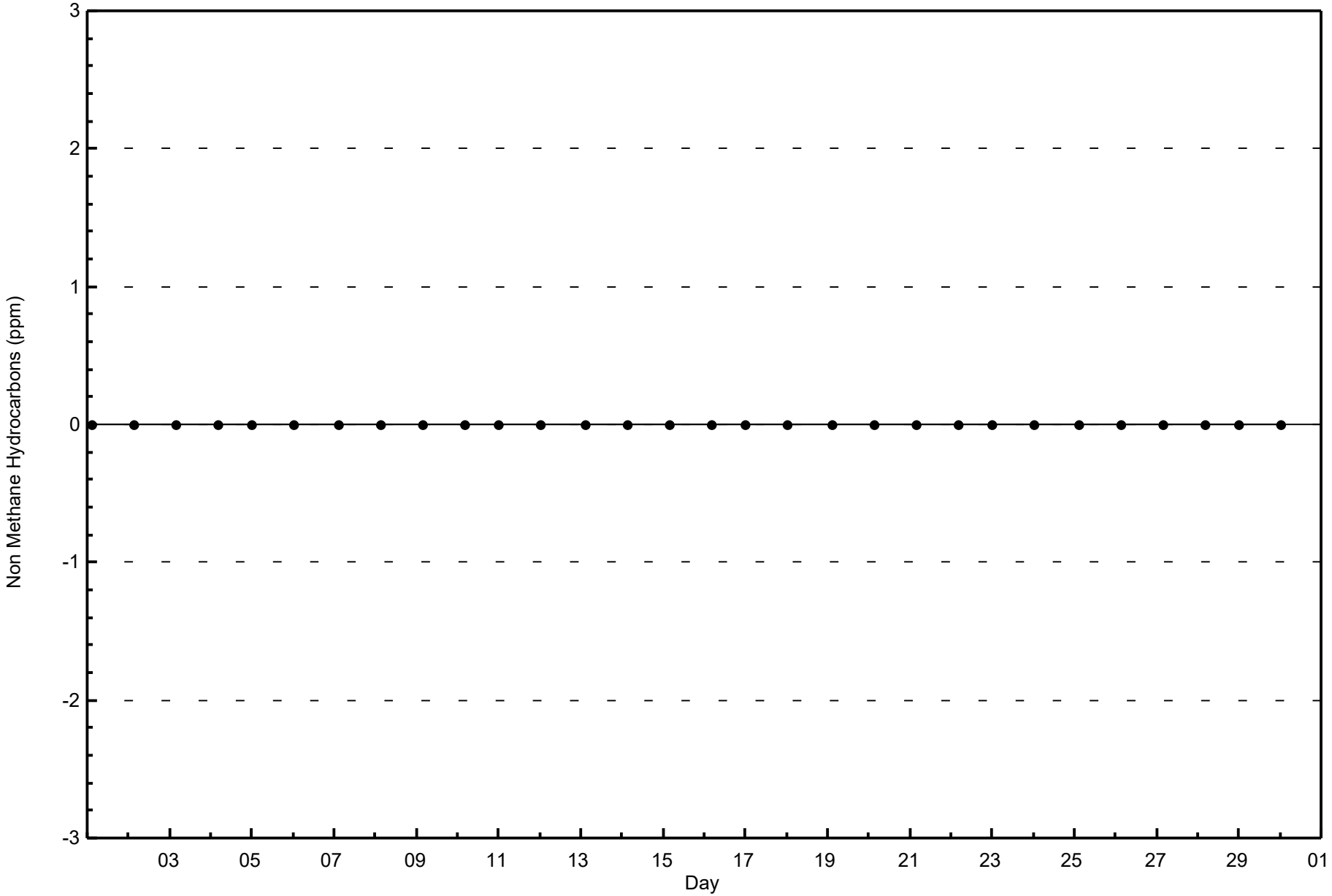
Total Number of Valid Hours: 538

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Fort Hills - June 2026

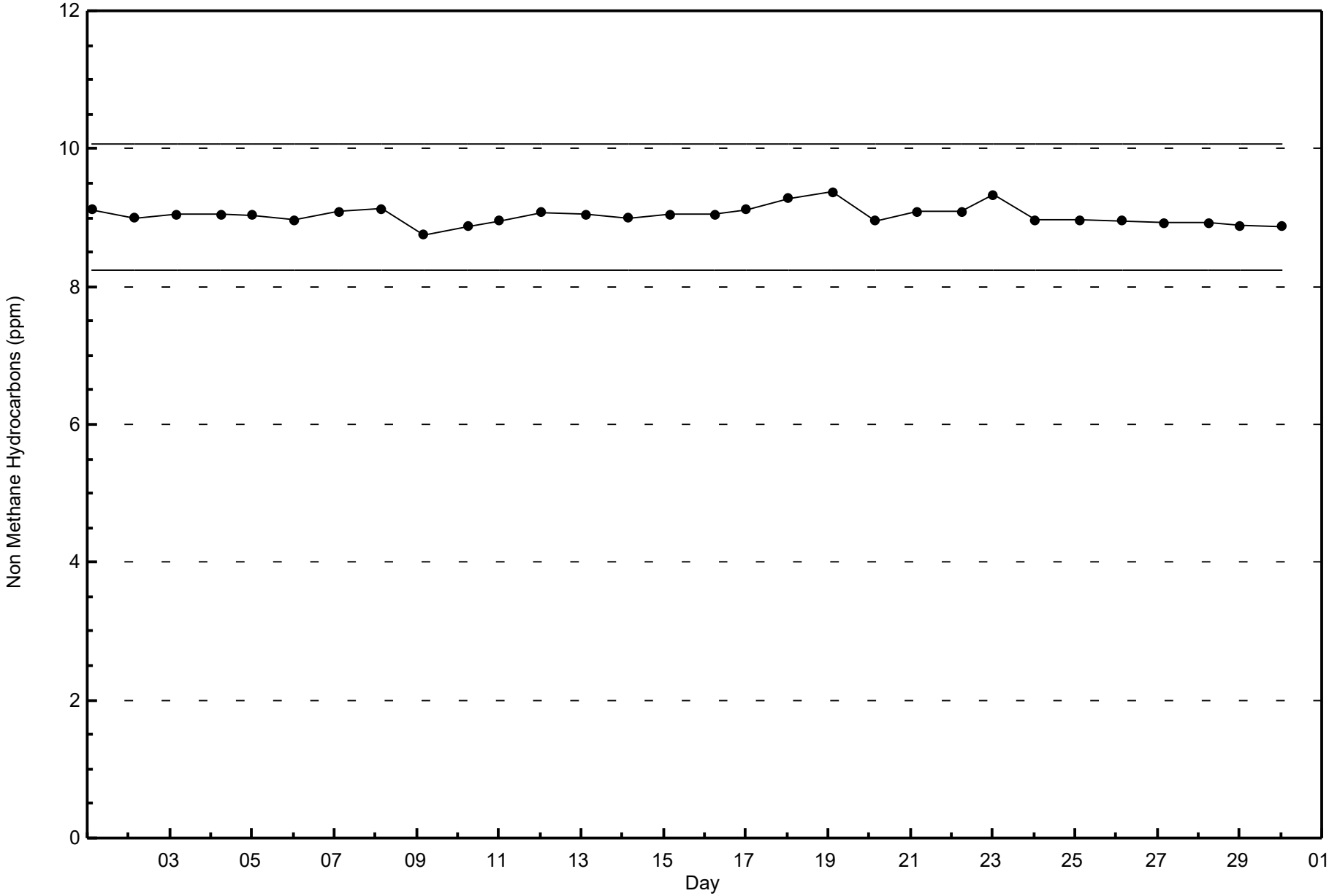


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Fort Hills - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Fort Hills - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.5 ppm on Jun 25 04:00
Maximum Daily Average: 2.4 ppm on Jun 29

Minimum Value: 1.8 ppm on Jun 14 19:00
Maximum Diurnal Average: 2.3 ppm at hour 6
Monthly Average: 2.11 ppm
Minimum Daily Average: 1.9 ppm on Jun 12
Minimum Diurnal Average: 2.0 ppm at hour 15
Percentiles: P_1 = 1.9 P_{10} = 1.9 Q_1 = 2.0 Median = 2.0 Q_3 = 2.2 P_{90} = 2.5 P_{99} = 3.0

Hours in Service:	720
Hours of Data:	538
Hours of Missing Data:	182
Hours of Calibration:	36
Percent Operational Time:	79.7

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-Jun	1.9	UO	Z	UO	UO	1.9	1.9	UO	UO	1.9	UO	C	C	C	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	--	2.1
2-Jun	2.1	2.0	2.1	Z	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	2.0	2.0	1.9	2.0	2.1
3-Jun	1.9	2.0	1.9	2.1	Z	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.3
4-Jun	2.9	2.7	2.3	2.0	2.1	Z	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.1	2.1	2.9
5-Jun	Z	2.1	2.0	2.1	2.2	2.6	2.4	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.3	2.6	2.8	2.5	2.2	2.1	2.8
6-Jun	2.5	Z	2.3	2.3	2.0	UO	2.0	UO	2.2	2.2	2.1	1.9	1.9	1.9	1.9	2.0	2.4	2.0	1.9	UO	UO	UO	UO	2.0	--	2.5
7-Jun	2.0	2.1	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	2.1
8-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	M	M	M	M	UO	UO	UO	1.9	1.9	2.0	UO	UO	--	2.0
9-Jun	UO	1.9	1.9	UO	Z	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.0	2.1
10-Jun	2.2	2.0	2.0	2.1	2.1	Z	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.2
11-Jun	Z	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
12-Jun	1.9	Z	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	UO	1.9	2.0
13-Jun	2.0	2.0	Z	2.1	2.5	3.0	3.4	2.9	2.3	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	UO	UO	2.1	2.3	2.2	3.4
14-Jun	2.2	2.0	2.7	Z	2.0	2.1	2.5	2.3	2.1	1.9	1.9	1.9	1.9	UO	1.9	UO	UO	UO	1.8	UO	1.9	2.0	2.5	2.2	2.1	2.7
15-Jun	2.1	2.5	2.5	2.4	Z	2.7	2.5	2.3	2.3	2.2	1.9	M	UO	1.8	1.8	1.9	UO	UO	UO	1.9	1.9	1.9	2.0	2.1	2.1	2.7
16-Jun	2.3	2.1	2.2	2.1	2.3	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	2.3
17-Jun	UO	UO	UO	UO	UO	UO	UO	UO	M	M	M	M	M	M	M	M	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.1	--	2.1
18-Jun	2.4	Z	2.4	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	UO	UO	UO	UO	UO	1.9	UO	2.0	1.9	1.9	UO	UO	UO	--	2.4
19-Jun	UO	UO	Z	2.0	UO	2.0	2.0	2.0	2.0	UO	M	M	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.2	2.3	2.1	--	2.3
20-Jun	2.2	2.3	2.2	Z	2.5	2.6	2.5	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.3	2.1	2.6
21-Jun	2.3	2.4	2.4	2.4	Z	2.1	2.2	2.1	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.3	2.3	2.3	2.0	2.1	2.4
22-Jun	2.0	2.3	2.2	2.2	2.4	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	2.4
23-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	C	C	C	C	C	C	2.0	2.0	2.0	2.1	2.6	2.4	2.4	2.2	--	2.6
24-Jun	2.2	Z	2.6	2.2	2.3	2.4	2.3	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	2.0	2.1	2.2	2.1	2.1	2.6
25-Jun	2.1	2.2	Z	3.5	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.3	2.3	2.5	2.2	3.5
26-Jun	2.5	2.3	2.2	Z	2.6	2.3	2.2	2.3	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.3	2.2	2.4	2.2	2.6
27-Jun	2.5	2.5	2.5	2.5	Z	2.9	3.3	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	2.1	2.1	2.2	2.3	2.3	3.3
28-Jun	2.5	3.0	3.0	2.5	2.5	Z	2.6	2.5	2.4	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.4	2.4	2.3	3.0
29-Jun	Z	3.0	3.0	3.0	2.9	3.2	3.0	2.7	2.2	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.4	2.2	2.6	2.4	3.2
30-Jun	2.5	Z	2.3	2.3	2.4	2.4	2.4	2.6	2.8	2.7	2.6	2.6	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.2	2.3	2.3	2.8
	2.2	2.3	2.3	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	2.1	2.1	2.2	2.2	Diurnal Average	
	2.9	3.0	3.0	3.5	2.9	3.2	3.4	2.9	2.8	2.7	2.6	2.6	2.1	2.0	2.0	2.0	2.4	2.0	2.1	2.3	2.6	2.8	2.5	2.6	Diurnal Maximum	

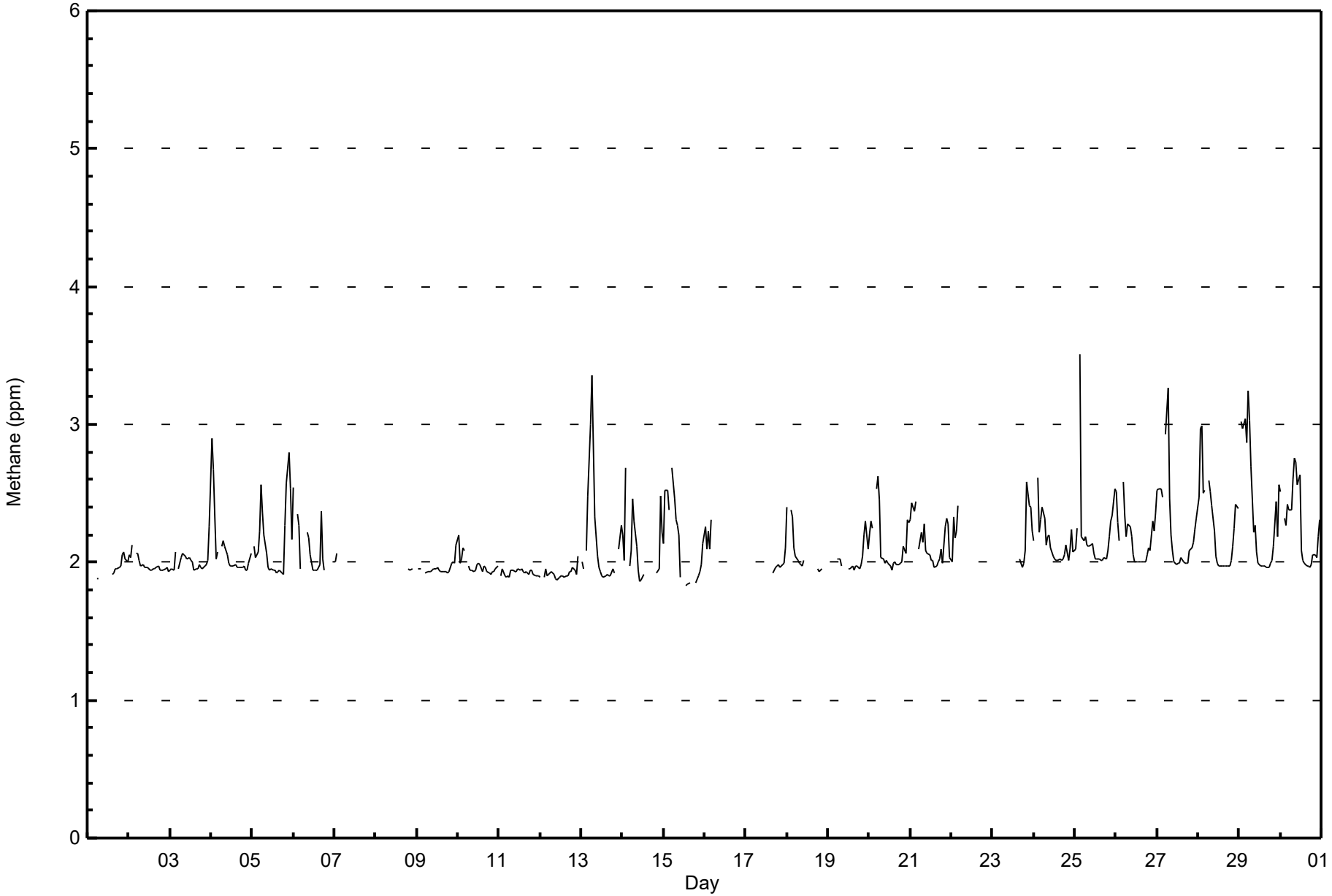
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Fort Hills - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	318	59.11	59.11
2.1 - 3.0	216	40.15	99.26
3.1 - 10.0	4	0.74	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 538

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Fort Hills - June 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	72	33	27	6	9	9	12	25	21	26	1	8	8	17	13	31	318
2.1 - 3.0	55	17	4	4	5	6	22	30	23	15	6	1	3	3	7	15	216
3.1 - 10.0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	4
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	129	50	31	10	14	15	34	57	44	41	7	9	11	20	20	46	538

Total Number of Valid Hours: 538

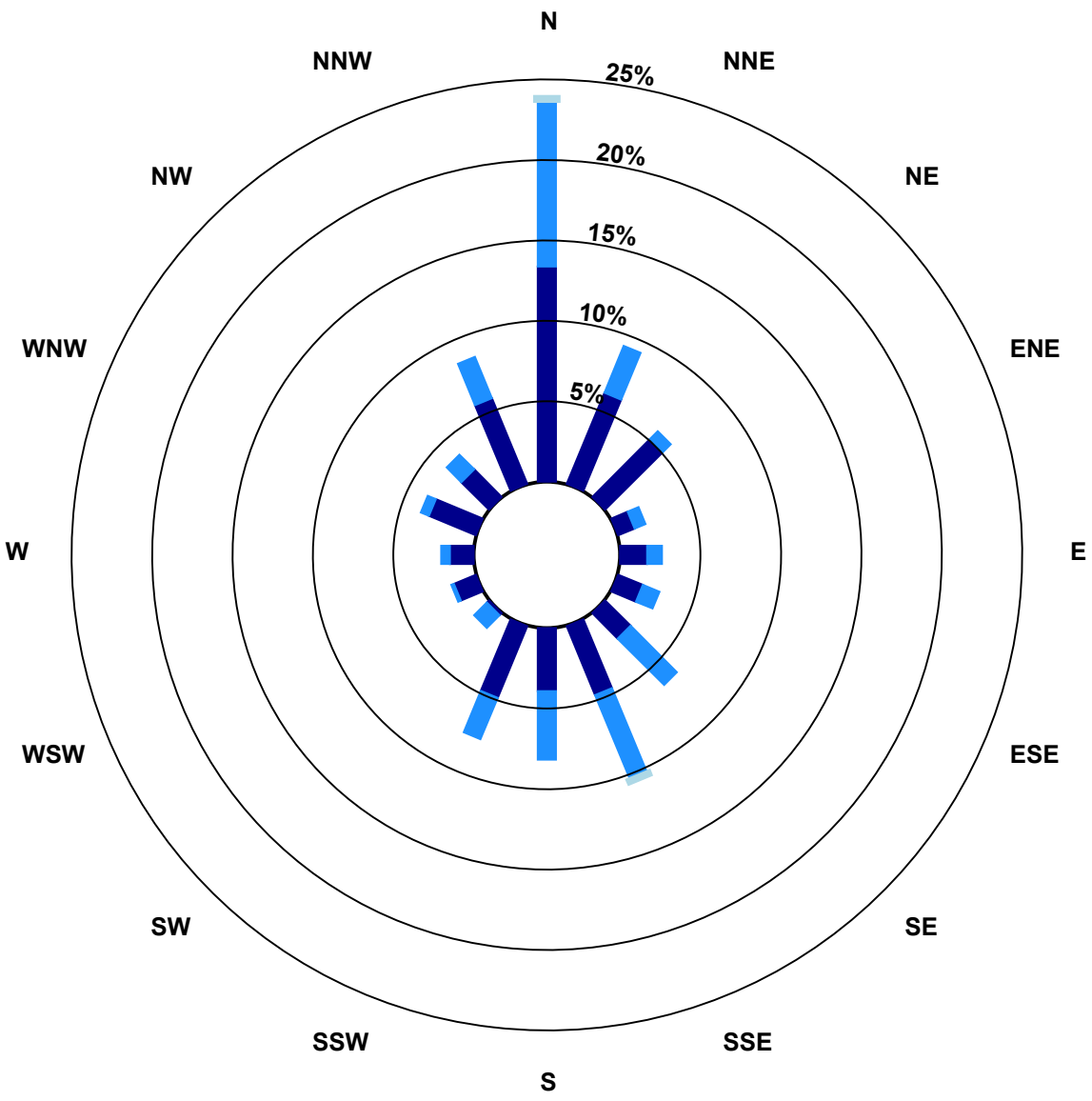
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Methane (CH_4) - ppm

Fort Hills



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

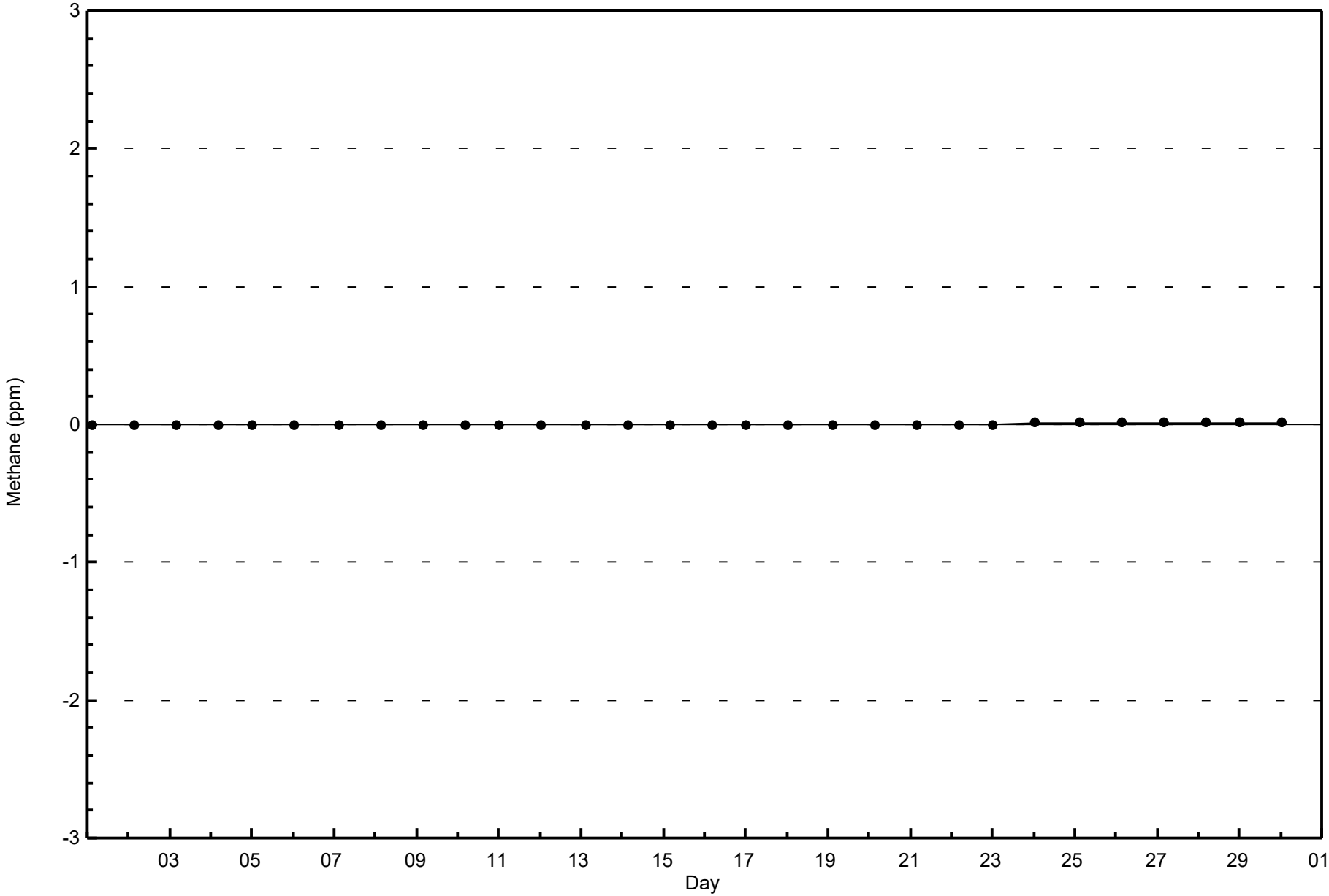
Total Number of Valid Hours: 538

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Fort Hills - June 2026

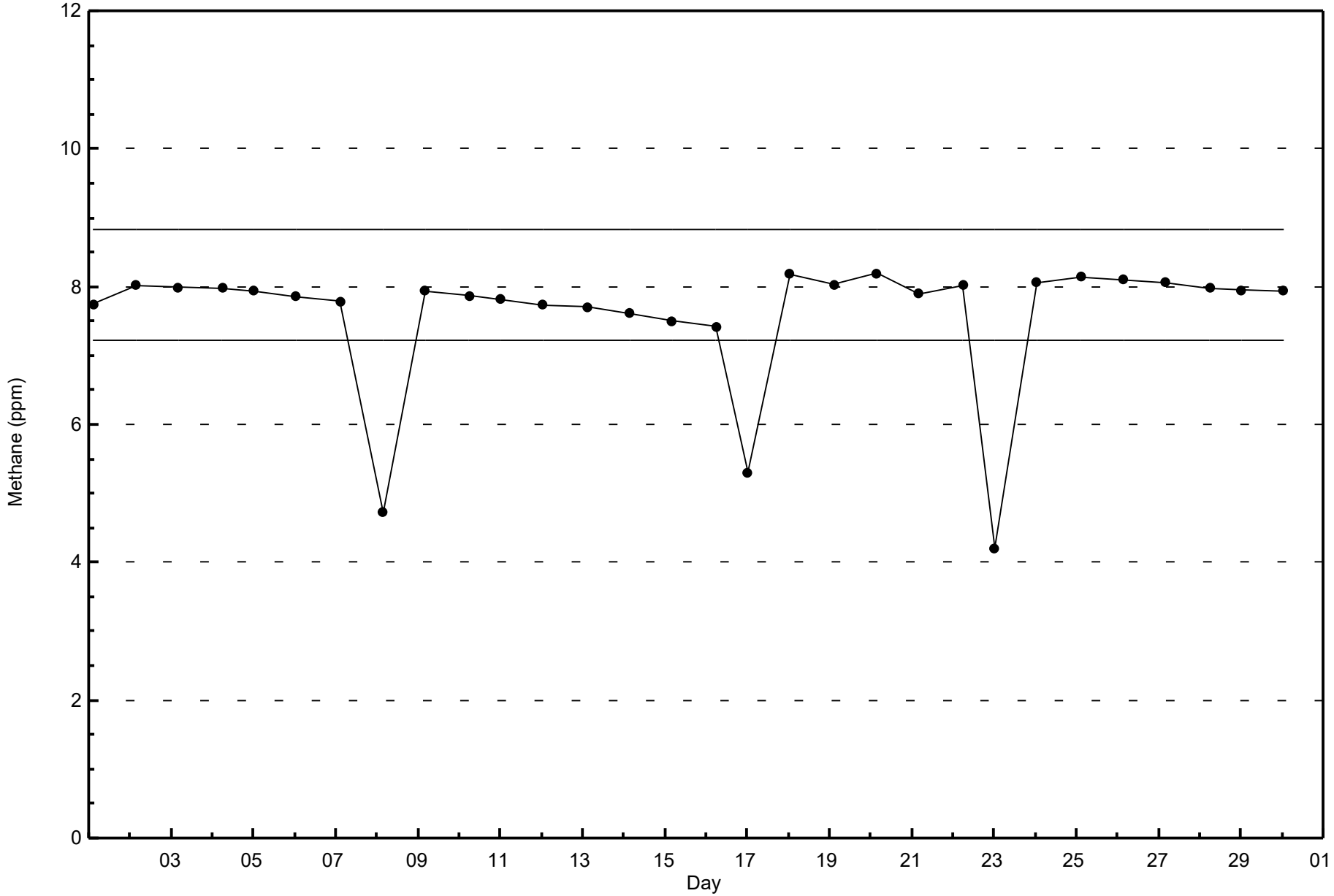


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Fort Hills - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Fort Hills - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 184.5 ppb on Jun 27 05:00 Maximum Daily Average: 29.1 ppb on Jun 15

Minimum Value: 0.0 ppb on Jun 1 03:00
Maximum Diurnal Average: 24.8 ppb at hour 6
Monthly Average: 8.33 ppb

Minimum Daily Average: 0.2 ppb on Jun 8
Minimum Diurnal Average: 0.6 ppb at hour 15
Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.3 Median = 1.0 Q_3 = 4.4 P_{90} = 27.0 P_{99} = 95.6

Hours in Service:	720
Hours of Data:	655
Hours of Missing Data:	65
Hours of Calibration:	40
Percent Operational Time:	96.5

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-Jun	Z	0.0	0.0	0.1	0.1	0.2	0.1	0.3	0.8	0.2	0.4	0.6	0.4	0.7	1.1	1.2	0.5	0.6	0.4	0.5	0.5	0.5	0.4	0.2	0.4	1.2
2-Jun	0.3	Z	0.5	0.7	0.6	1.4	1.5	0.9	1.8	5.3	0.6	1.0	0.2	0.3	0.2	0.3	0.3	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.7	5.3
3-Jun	0.0	0.0	Z	16.8	2.2	0.5	1.5	4.3	3.6	2.9	2.8	4.6	3.4	2.1	0.1	0.7	0.7	1.0	0.4	0.1	0.0	0.0	0.0	0.5	2.1	16.8
4-Jun	20.6	13.2	2.9	Z	1.8	3.5	3.0	5.8	3.3	1.1	0.3	0.3	0.6	0.6	0.5	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.5	20.6
5-Jun	0.0	0.0	0.0	0.0	Z	5.7	3.4	3.5	1.4	0.6	C	C	C	C	C	C	0.1	0.1	0.0	0.8	7.5	63.4	26.6	1.0	--	63.4
6-Jun	18.1	11.1	6.2	5.7	0.0	Z	0.5	1.1	2.5	3.6	2.0	0.0	0.0	0.0	0.0	1.2	2.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	2.4	18.1
7-Jun	Z	0.2	0.0	0.0	0.0	0.7	1.7	3.7	3.1	3.2	2.3	2.6	2.0	2.9	1.6	1.5	0.3	0.5	0.1	0.9	2.2	0.6	0.7	0.8	1.4	3.7
8-Jun	0.3	Z	0.0	1.9	1.3	0.8	0.0	0.0	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	0.0	0.0	0.2	1.9
9-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.6	2.1	3.0	0.5	3.0
10-Jun	5.4	1.2	0.5	Z	5.0	7.1	1.2	M	M	0.0	0.1	1.5	2.6	1.9	1.3	2.7	1.7	0.6	0.4	0.1	0.8	1.4	1.1	0.9	1.8	7.1
11-Jun	0.2	0.0	0.8	0.4	Z	0.0	0.3	2.0	1.7	0.7	0.4	1.2	M	M	M	M	M	M	M	M	M	M	M	M	--	2.0
12-Jun	M	M	M	M	M	M	M	M	M	M	C	C	C	C	C	0.6	0.2	0.5	0.8	2.2	3.0	0.1	0.0	0.0	--	3.0
13-Jun	Z	0.0	0.1	0.7	4.9	16.7	34.8	38.9	20.8	6.3	2.2	1.0	1.3	1.6	1.2	0.4	0.2	0.2	0.2	0.1	0.0	0.2	2.3	23.8	6.9	38.9
14-Jun	7.3	Z	10.8	11.4	0.5	2.8	30.3	34.9	24.5	10.4	1.3	0.9	3.5	1.2	0.7	0.7	0.8	0.3	0.5	0.8	2.1	0.6	49.5	46.9	10.6	49.5
15-Jun	66.1	114.5	Z	60.0	60.8	79.1	84.3	67.2	49.9	35.5	5.1	M	0.5	0.5	0.5	0.3	0.1	0.3	0.4	0.9	0.9	0.2	2.3	11.3	29.1	114.5
16-Jun	32.6	12.4	23.9	Z	52.3	19.6	15.8	7.4	5.2	3.6	1.0	0.8	0.4	0.4	0.8	0.7	0.8	1.0	1.2	0.9	1.4	2.2	11.0	1.2	8.5	52.3
17-Jun	0.2	0.4	0.5	9.1	Z	20.9	25.0	19.1	6.0	2.7	1.4	0.7	0.6	0.6	0.6	0.5	0.1	1.0	0.7	1.0	0.3	0.3	0.3	19.3	4.8	25.0
18-Jun	46.6	27.3	35.6	26.6	8.8	Z	0.3	0.4	0.3	0.3	3.9	2.6	2.7	1.4	0.2	0.3	0.3	0.5	0.1	0.1	0.3	0.0	0.1	0.2	6.9	46.6
19-Jun	Z	0.6	0.4	2.2	0.4	1.2	1.1	7.2	2.4	2.5	3.0	3.2	3.4	1.8	1.9	0.4	3.4	1.8	1.3	1.7	2.5	6.5	20.1	2.9	3.1	20.1
20-Jun	35.3	Z	29.6	61.8	47.8	36.3	28.4	11.5	4.4	3.0	2.9	1.5	1.3	1.6	1.2	1.0	0.7	1.3	1.5	2.5	6.4	5.6	16.5	19.5	14.0	61.8
21-Jun	27.8	34.4	Z	47.5	44.0	28.6	37.3	18.1	18.3	13.4	8.7	4.0	2.7	3.2	1.1	1.9	2.2	5.4	9.6	2.6	37.3	31.6	17.0	1.2	17.3	47.5
22-Jun	1.5	40.5	17.4	Z	21.2	97.4	150.6	99.0	9.6	15.0	10.0	0.9	0.5	0.5	0.3	0.5	0.2	1.4	0.7	0.8	1.6	7.1	7.8	22.7	22.1	150.6
23-Jun	24.9	0.2	1.7	2.2	Z	0.4	1.2	1.2	2.7	0.9	0.4	0.2	0.2	0.4	0.5	0.3	1.1	0.2	0.8	1.7	32.9	13.6	14.8	5.2	4.7	32.9
24-Jun	2.6	9.4	18.6	0.9	3.1	Z	8.9	2.6	3.1	1.7	0.6	0.2	0.1	0.2	0.0	0.0	0.1	0.1	0.3	2.7	0.2	0.1	1.3	0.1	2.5	18.6
25-Jun	Z	4.6	71.2	84.5	3.5	2.0	4.1	3.4	2.5	1.9	2.6	0.9	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.5	2.6	16.5	3.3	2.3	9.0	84.5
26-Jun	6.5	Z	0.3	1.9	19.0	7.1	1.5	5.3	8.2	5.3	1.5	0.2	0.2	0.2	0.5	0.5	0.5	0.5	0.6	1.0	0.9	3.3	0.5	4.6	3.0	19.0
27-Jun	14.6	8.9	Z	39.0	184.5	172.6	138.9	29.1	5.8	2.2	0.3	0.2	0.1	0.2	0.5	0.4	0.3	0.2	0.6	0.1	0.6	0.8	0.1	3.0	26.2	184.5
28-Jun	34.8	91.3	82.8	Z	55.3	41.0	34.4	26.2	15.1	7.0	1.5	0.3	0.2	0.4	0.5	0.4	0.3	0.3	0.3	0.6	4.1	2.0	15.4	26.3	19.2	91.3
29-Jun	43.3	79.0	59.7	94.0	Z	75.8	58.7	42.1	8.2	9.0	2.0	0.3	0.1	0.2	0.4	0.5	0.1	0.2	0.4	0.5	0.7	6.1	0.8	28.9	22.2	94.0
30-Jun	16.9	18.7	4.2	1.2	10.0	Z	8.0	35.2	40.0	45.3	32.0	33.0	2.7	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.3	3.6	11.0	45.3
	16.9	19.5	15.3	19.5	22.0	24.8	23.3	16.8	8.8	6.3	3.2	2.3	1.1	0.9	0.6	0.6	0.6	0.7	0.8	0.8	3.8	5.7	6.7	7.9	Diurnal Average	
	66.1	114.5	82.8	94.0	184.5	172.6	150.6	99.0	49.9	45.3	32.0	33.0	3.5	3.2	1.9	2.7	3.4	5.4	9.6	2.7	37.3	63.4	49.5	46.9	Diurnal Maximum	

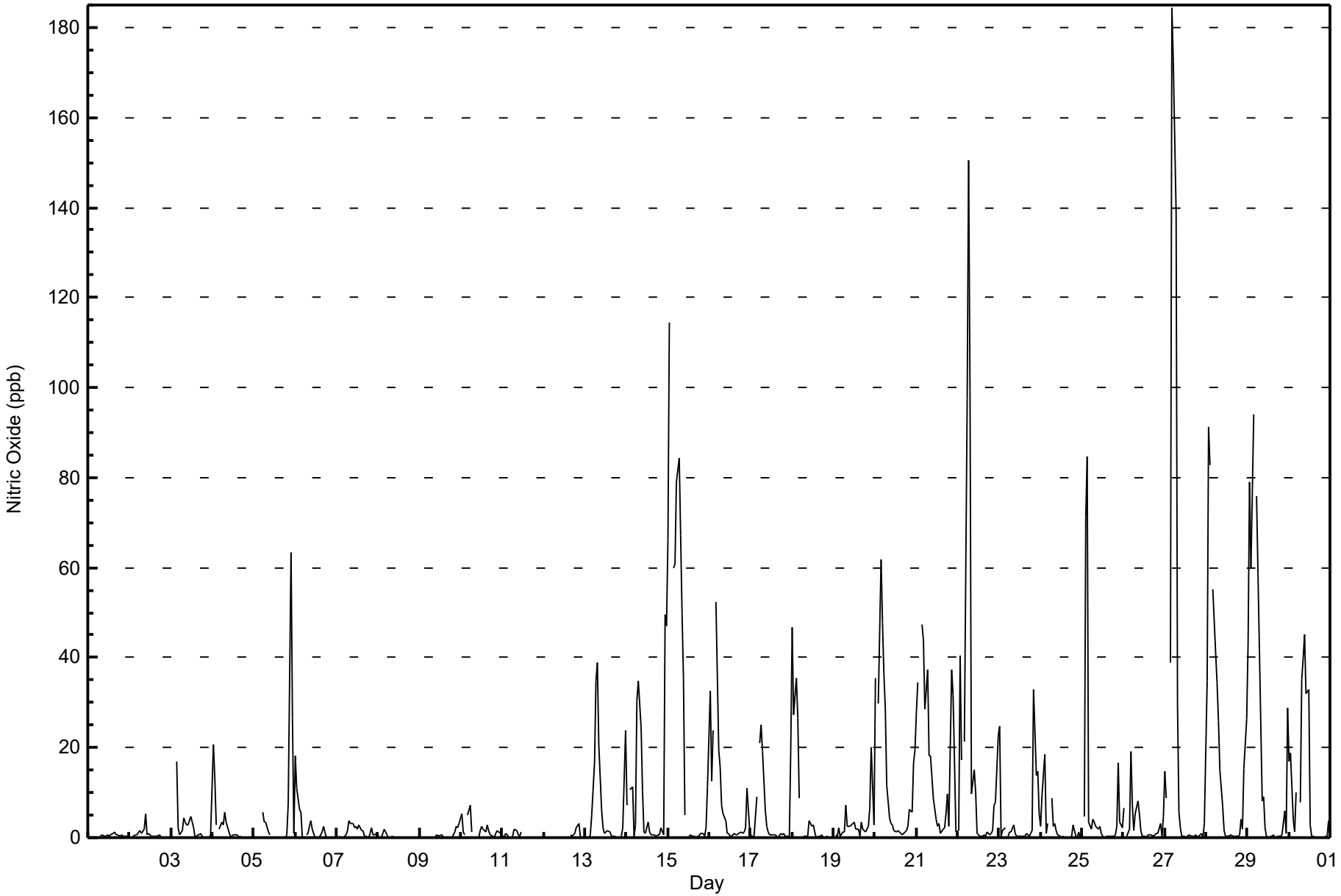
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Fort Hills - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	575	87.79	87.79
21 - 40	42	6.41	94.20
11 - 80	26	3.97	98.17
81 - 159	10	1.53	99.69
> 159	2	0.31	100.00

Total Number of Valid Hours: 655

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Fort Hills - June 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	133	56	36	12	15	16	39	53	49	43	9	10	15	27	20	42	575
21 - 40	16	4	0	1	1	0	5	6	0	0	1	0	2	2	1	3	42
11 - 80	14	1	1	0	0	0	2	1	0	1	0	0	1	0	0	5	26
81 - 159	7	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	10
> 159	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
Totals	171	61	37	13	16	16	46	61	49	44	10	10	18	29	23	51	655

Total Number of Valid Hours: 655

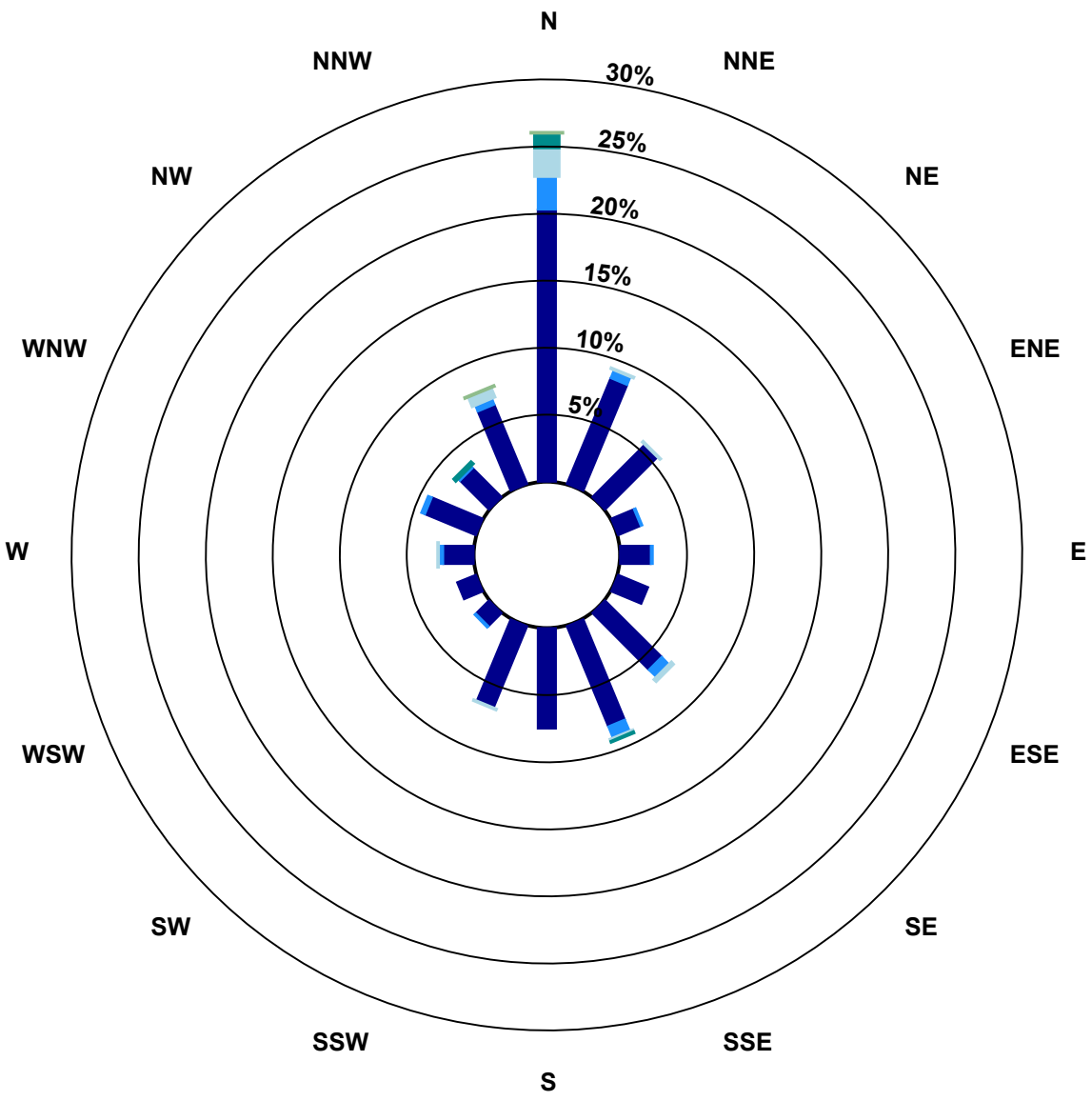
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Fort Hills



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

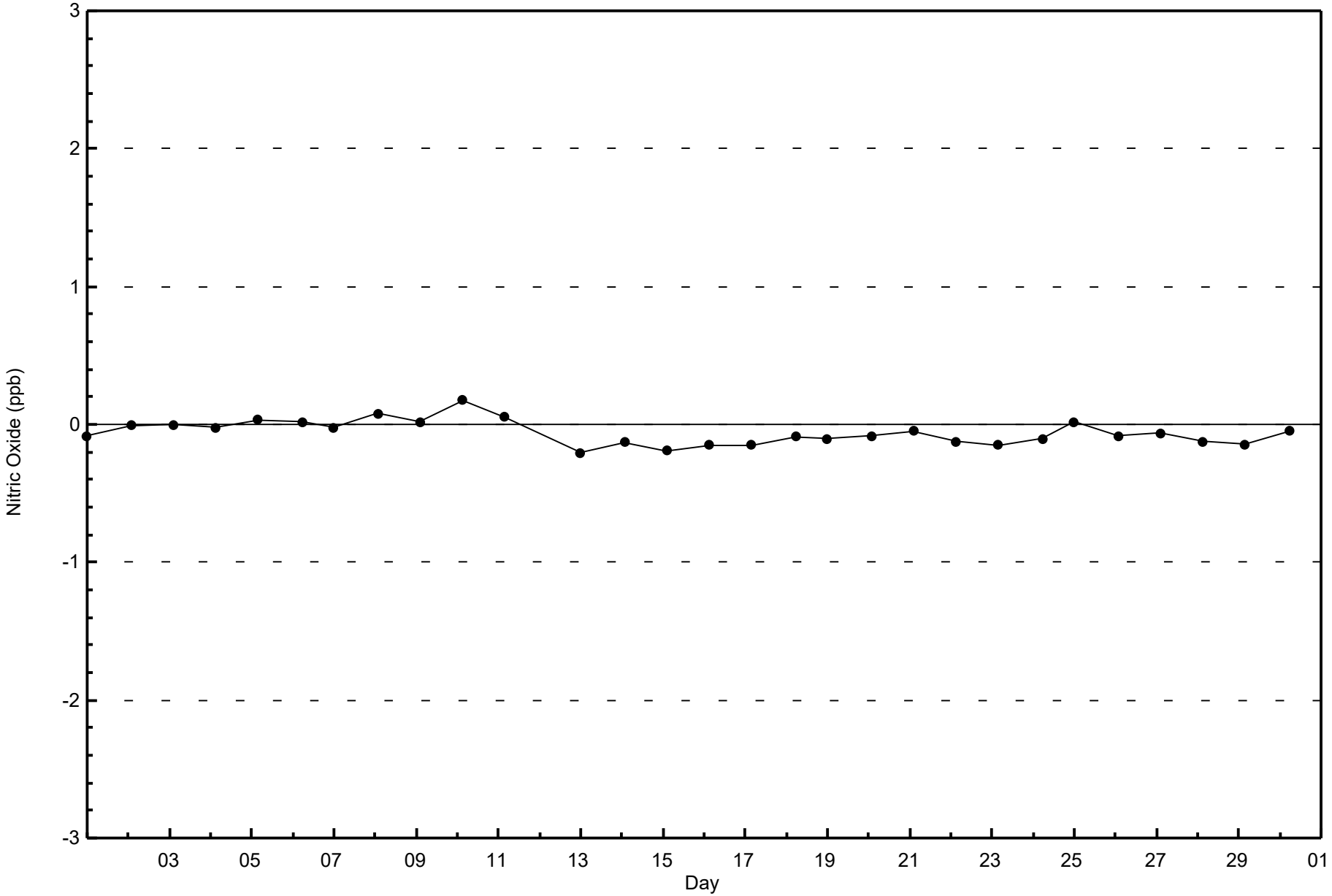
Total Number of Valid Hours: 655

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Fort Hills - June 2026

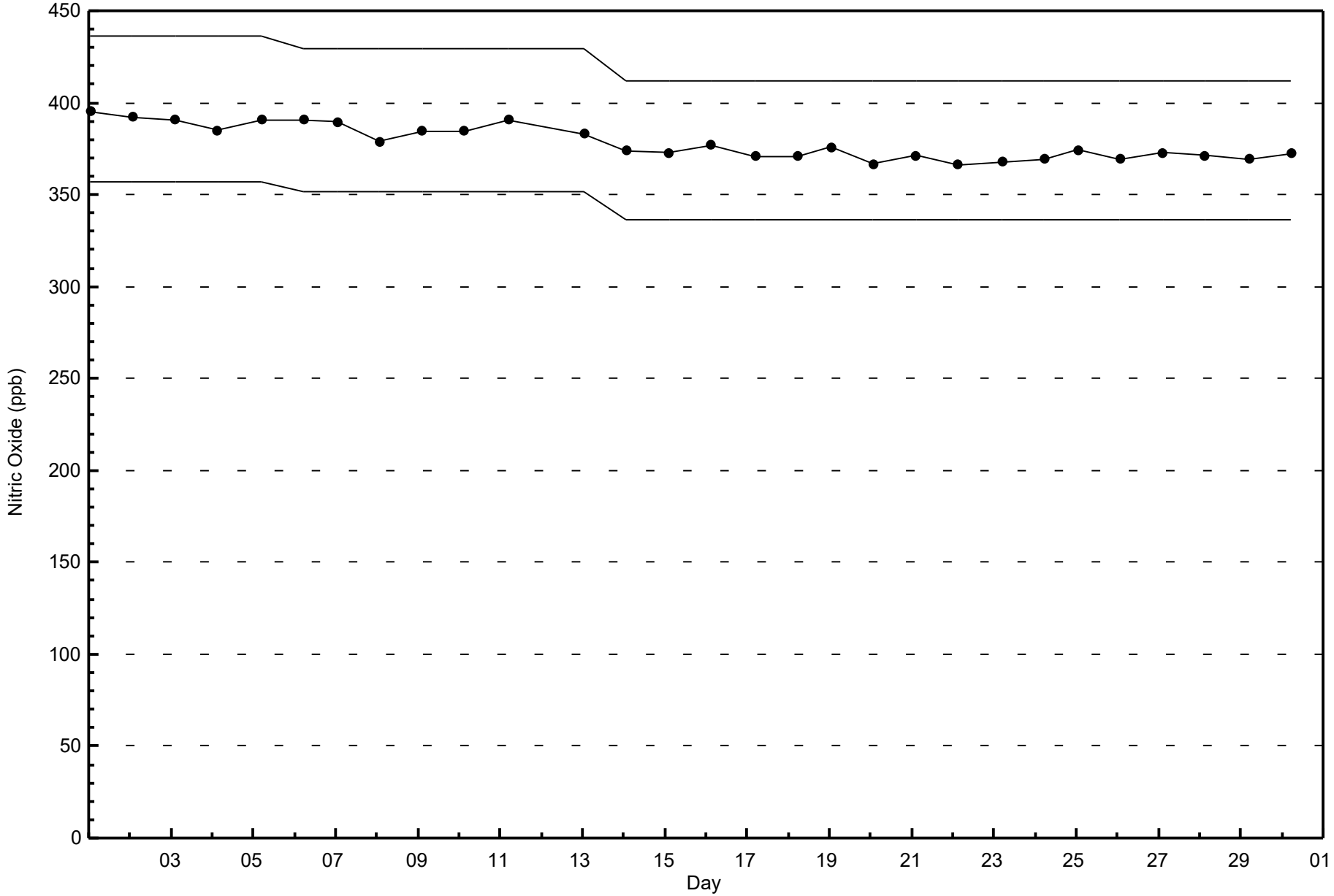


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Fort Hills - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Fort Hills - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 47.1 ppb on Jun 30 12:00
Maximum Daily Average: 19.2 ppb on Jun 30

Minimum Value: 0.0 ppb on Jun 8 15:00
Minimum Daily Average: 0.8 ppb on Jun 9
Maximum Diurnal Average: 18.2 ppb at hour 1
Minimum Diurnal Average: 1.9 ppb at hour 15
Monthly Average: 8.70 ppb
Percentiles: P_1 = 0.0 P_{10} = 0.7 Q_1 = 1.5 Median = 4.1 Q_3 = 12.8 P_{90} = 24.9 P_{99} = 38.1

Hours in Service:	720
Hours of Data:	655
Hours of Missing Data:	65
Hours of Calibration:	40
Percent Operational Time:	96.5

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-Jun	Z	2.0	2.6	2.5	3.6	3.1	0.9	1.9	3.1	1.1	1.4	1.5	1.4	2.8	3.7	3.4	2.5	3.0	3.2	3.9	8.5	12.7	12.2	8.7	3.9	12.7
2-Jun	12.2	Z	15.5	14.7	8.0	7.3	5.6	3.7	4.7	5.6	2.0	3.2	1.2	1.0	1.3	1.7	2.6	5.3	2.4	2.3	4.4	6.4	11.0	3.6	5.5	15.5
3-Jun	2.7	5.2	Z	16.7	6.9	6.2	10.4	11.5	11.3	9.4	8.1	10.0	8.6	6.3	1.6	3.3	3.4	5.5	3.9	2.3	4.1	4.3	4.4	8.4	6.7	16.7
4-Jun	17.5	12.7	7.7	Z	5.0	4.0	4.3	4.7	4.3	3.6	2.1	1.5	2.0	2.1	2.1	1.3	1.5	1.3	0.9	1.2	0.5	2.2	5.8	13.5	4.4	17.5
5-Jun	14.7	10.8	5.4	3.3	Z	9.6	5.5	5.2	3.0	1.5	C	C	C	C	C	C	4.0	4.3	2.2	12.2	27.3	29.4	20.6	11.6	--	29.4
6-Jun	23.9	20.1	26.3	20.2	1.6	Z	6.8	7.1	9.7	12.5	9.5	0.8	0.3	0.3	0.8	7.0	12.7	7.7	1.0	0.3	0.4	0.2	2.5	1.7	7.5	26.3
7-Jun	Z	4.0	1.8	4.0	4.0	3.6	4.2	5.2	3.9	4.1	3.7	4.7	4.4	5.7	4.4	4.2	1.8	4.0	5.2	9.9	10.4	7.6	10.3	12.9	5.4	12.9
8-Jun	11.3	Z	1.9	9.4	11.3	7.3	1.3	0.4	0.6	0.4	0.6	0.3	0.2	0.1	0.0	0.2	0.1	0.1	0.3	0.0	0.1	0.1	0.0	0.1	2.0	11.3
9-Jun	0.2	0.1	Z	0.1	0.1	0.1	0.3	0.2	0.1	0.2	2.3	1.4	0.5	0.4	0.1	0.0	0.0	0.1	0.0	0.0	2.2	3.0	3.4	3.4	0.8	3.4
10-Jun	4.2	3.1	2.5	Z	2.8	2.9	1.1	M	M	0.0	0.5	1.8	1.6	1.1	0.6	1.0	0.7	0.2	0.3	0.1	1.3	2.5	2.3	2.4	1.6	4.2
11-Jun	1.1	0.0	2.3	1.2	Z	0.0	0.1	0.9	0.7	0.2	0.2	0.4	M	M	M	M	M	M	M	M	M	M	M	M	--	2.3
12-Jun	M	M	M	M	M	M	M	M	M	M	C	C	C	C	C	1.7	1.1	2.2	4.0	12.0	15.9	3.7	1.1	1.5	--	15.9
13-Jun	Z	0.8	2.3	5.6	11.8	13.4	18.9	20.6	18.8	9.2	4.5	2.7	3.5	4.5	3.5	2.0	1.3	1.4	1.2	1.5	1.1	5.1	19.3	25.1	7.7	25.1
14-Jun	16.7	Z	17.7	19.9	5.9	6.3	23.8	31.2	28.8	16.9	3.8	3.8	10.0	4.6	2.9	2.2	2.3	1.4	1.9	5.5	18.0	6.4	26.3	30.6	12.5	31.2
15-Jun	31.7	33.6	Z	25.4	22.6	25.4	25.1	28.1	32.0	28.0	9.4	M	1.5	2.0	2.5	2.6	1.2	1.8	2.5	7.6	13.9	8.4	22.0	31.3	16.3	33.6
16-Jun	30.7	27.8	27.6	Z	30.0	24.2	19.9	13.6	8.1	5.3	2.5	2.0	0.8	0.7	2.1	1.6	1.8	2.9	3.4	3.8	11.9	23.3	30.1	11.0	12.4	30.7
17-Jun	4.7	12.4	6.7	12.1	Z	21.3	21.0	16.7	8.0	4.1	2.5	1.5	1.5	1.3	1.9	1.2	0.5	2.8	2.6	4.2	2.8	4.1	4.8	20.1	6.9	21.3
18-Jun	28.1	24.7	23.5	19.5	14.8	Z	1.5	1.5	0.7	0.6	7.4	6.0	5.8	3.0	0.2	0.6	0.6	1.2	0.2	1.1	1.4	0.4	0.1	0.5	6.2	28.1
19-Jun	Z	6.3	2.0	4.6	1.5	3.5	2.2	6.6	2.9	3.0	3.8	3.7	3.6	2.3	2.6	0.6	2.9	2.3	2.4	5.0	8.3	13.4	13.3	5.6	4.5	13.4
20-Jun	14.8	Z	14.0	15.7	14.5	13.1	11.7	8.5	3.9	2.6	2.5	1.4	1.3	1.7	1.8	2.4	1.6	2.6	3.5	5.7	13.2	13.8	17.4	16.9	8.0	17.4
21-Jun	16.9	17.2	Z	18.3	18.7	17.6	17.5	13.1	11.8	8.6	7.5	5.2	4.1	5.1	1.8	4.0	5.7	9.1	16.2	5.5	22.4	18.9	14.9	5.5	11.5	22.4
22-Jun	3.1	12.6	10.6	Z	7.7	17.9	22.9	21.4	7.2	11.0	8.7	1.5	0.7	1.0	0.9	1.7	0.4	3.5	3.1	6.5	16.4	23.8	25.5	24.7	10.1	25.5
23-Jun	20.2	4.3	9.8	12.2	Z	1.2	1.7	1.7	3.6	1.5	0.7	0.5	0.6	1.3	1.3	2.3	3.4	0.7	3.1	10.9	32.2	27.3	22.4	17.1	7.8	32.2
24-Jun	12.4	17.0	17.6	9.9	11.0	Z	9.8	4.4	5.2	4.0	2.6	1.4	1.1	1.2	0.7	0.9	0.7	0.7	3.9	16.8	3.1	7.0	22.4	3.0	6.8	22.4
25-Jun	Z	21.9	24.7	25.1	10.5	6.7	8.4	7.1	5.9	5.7	8.1	3.9	1.3	1.2	1.7	1.7	1.5	2.1	1.9	7.8	30.4	43.0	27.0	24.1	11.8	43.0
26-Jun	28.9	Z	8.7	13.2	22.6	14.6	4.9	12.0	18.9	14.4	5.4	0.8	1.0	0.8	2.1	2.3	2.2	2.2	5.6	9.2	16.1	30.1	19.5	30.3	11.6	30.3
27-Jun	34.6	33.0	Z	29.9	36.6	31.6	37.1	25.0	12.7	6.9	1.4	0.8	0.8	1.3	2.9	2.8	1.4	1.3	4.2	2.6	11.6	20.1	4.4	12.6	13.7	37.1
28-Jun	28.3	30.8	30.5	Z	24.4	25.1	25.8	24.7	18.4	13.1	4.1	1.3	0.8	1.4	1.7	1.5	1.3	1.3	2.1	5.4	26.6	30.6	37.6	37.8	16.3	37.8
29-Jun	38.5	36.6	34.1	35.9	Z	32.5	29.0	26.9	15.8	17.3	6.5	2.0	1.1	1.2	1.9	2.5	0.8	1.5	5.7	10.8	19.9	37.3	18.3	36.7	17.9	38.5
30-Jun	39.2	36.7	19.3	11.4	16.2	Z	17.0	32.6	38.8	44.2	44.3	47.1	13.1	4.0	2.9	1.5	1.3	1.3	1.4	1.1	2.4	15.3	22.9	26.7	19.2	47.1
	18.2	15.6	13.1	13.8	12.2	11.9	11.7	12.0	10.1	8.1	5.6	4.1	2.7	2.2	1.9	2.1	2.1	2.5	3.0	5.4	11.3	13.8	14.5	14.7	Diurnal Average	
	39.2	36.7	34.1	35.9	36.6	32.5	37.1	32.6	38.8	44.2	44.3	47.1	13.1	6.3	4.4	7.0	12.7	9.1	16.2	16.8	32.2	43.0	37.6	37.8	Diurnal Maximum	

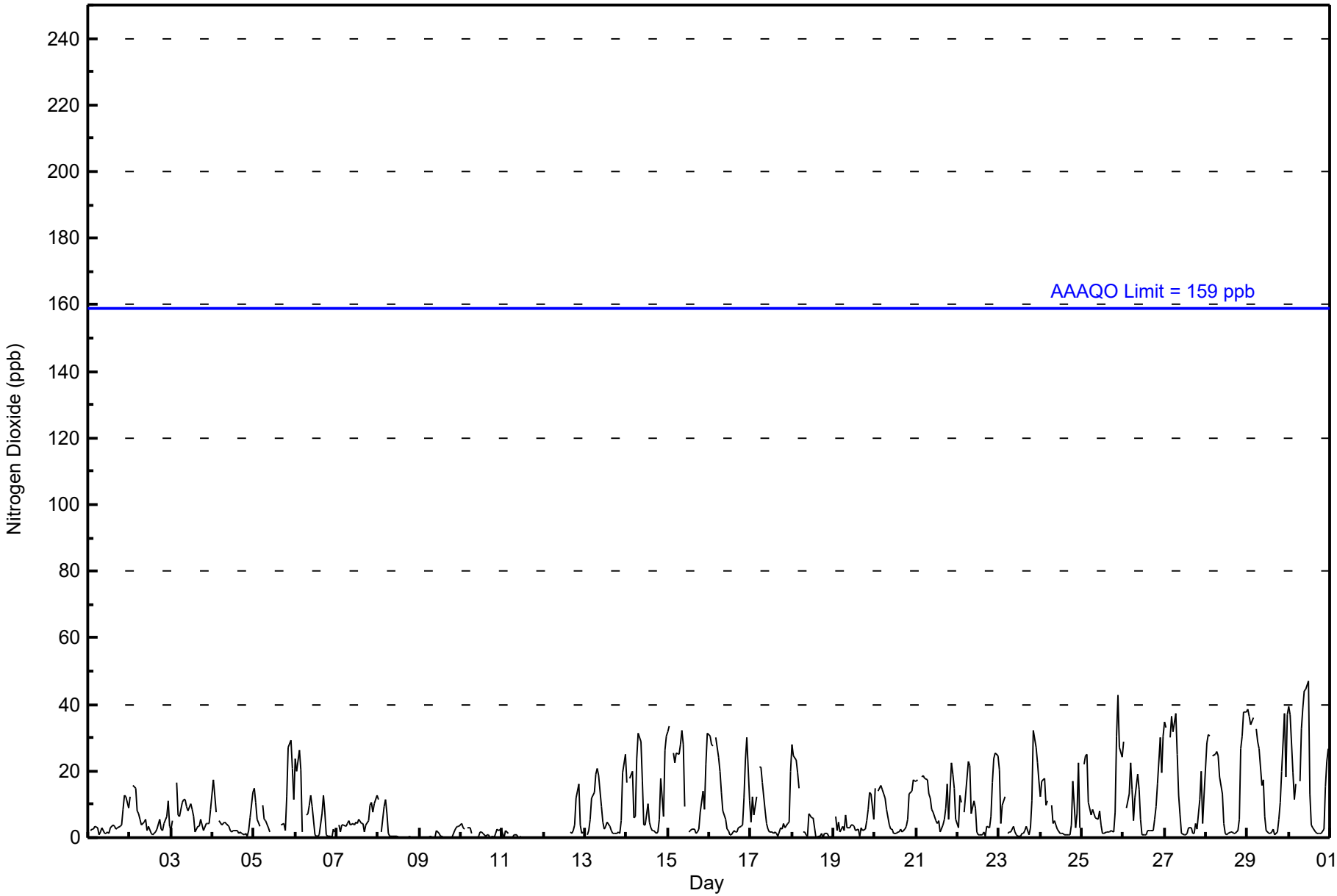
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Fort Hills - June 2026



Nitrogen Dioxide (NO_2) - ppb
Fort Hills - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	563	85.95	85.95
21 - 40	88	13.44	99.39
11 - 80	4	0.61	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 655

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Fort Hills - June 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	140	51	37	12	15	11	28	52	48	43	9	10	15	27	21	44	563
21 - 40	31	10	0	1	1	5	17	9	1	1	1	0	1	1	2	7	88
11 - 80	0	0	0	0	0	0	1	0	0	0	0	0	2	1	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	171	61	37	13	16	16	46	61	49	44	10	10	18	29	23	51	655

Total Number of Valid Hours: 655

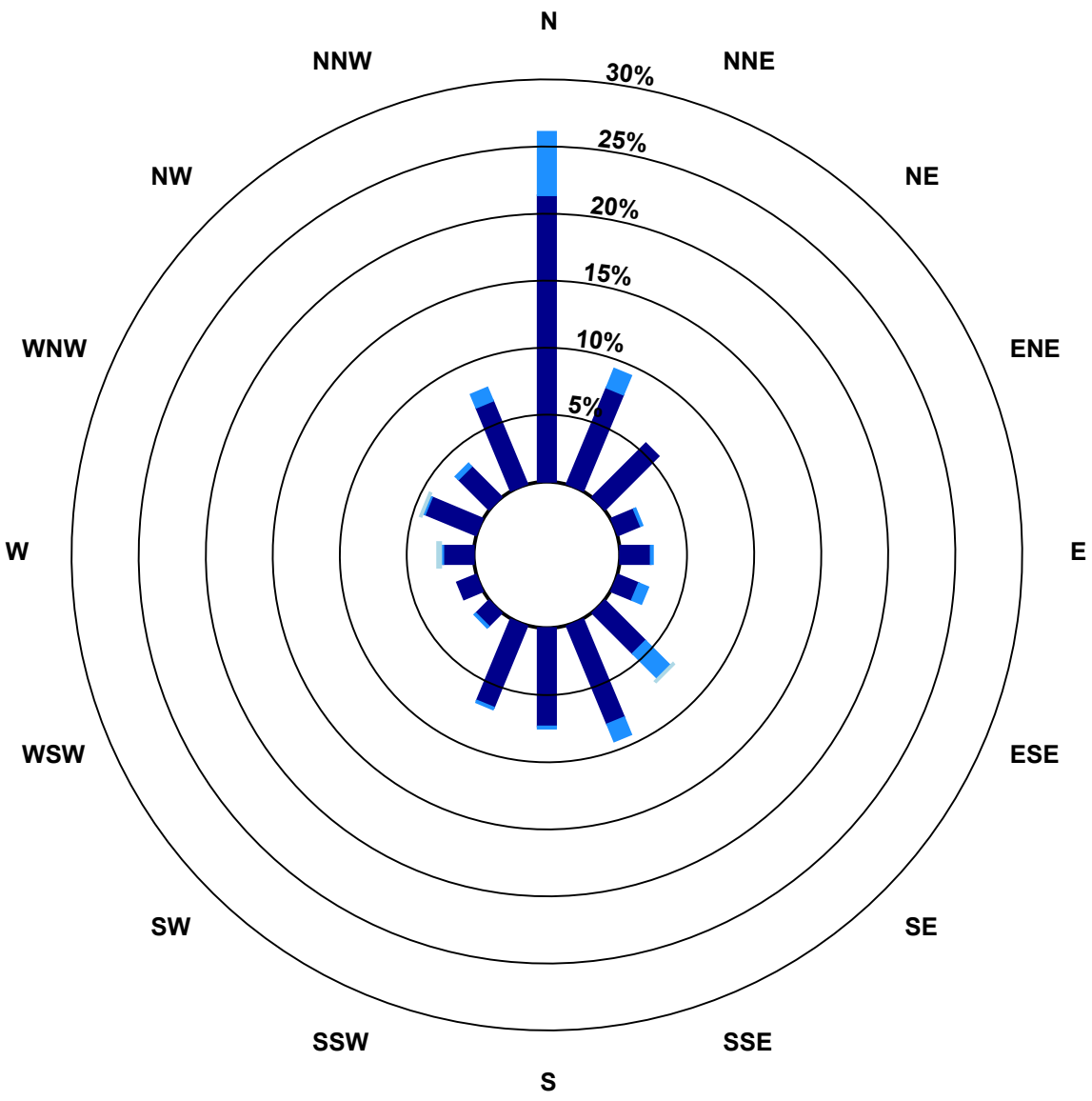
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Fort Hills



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

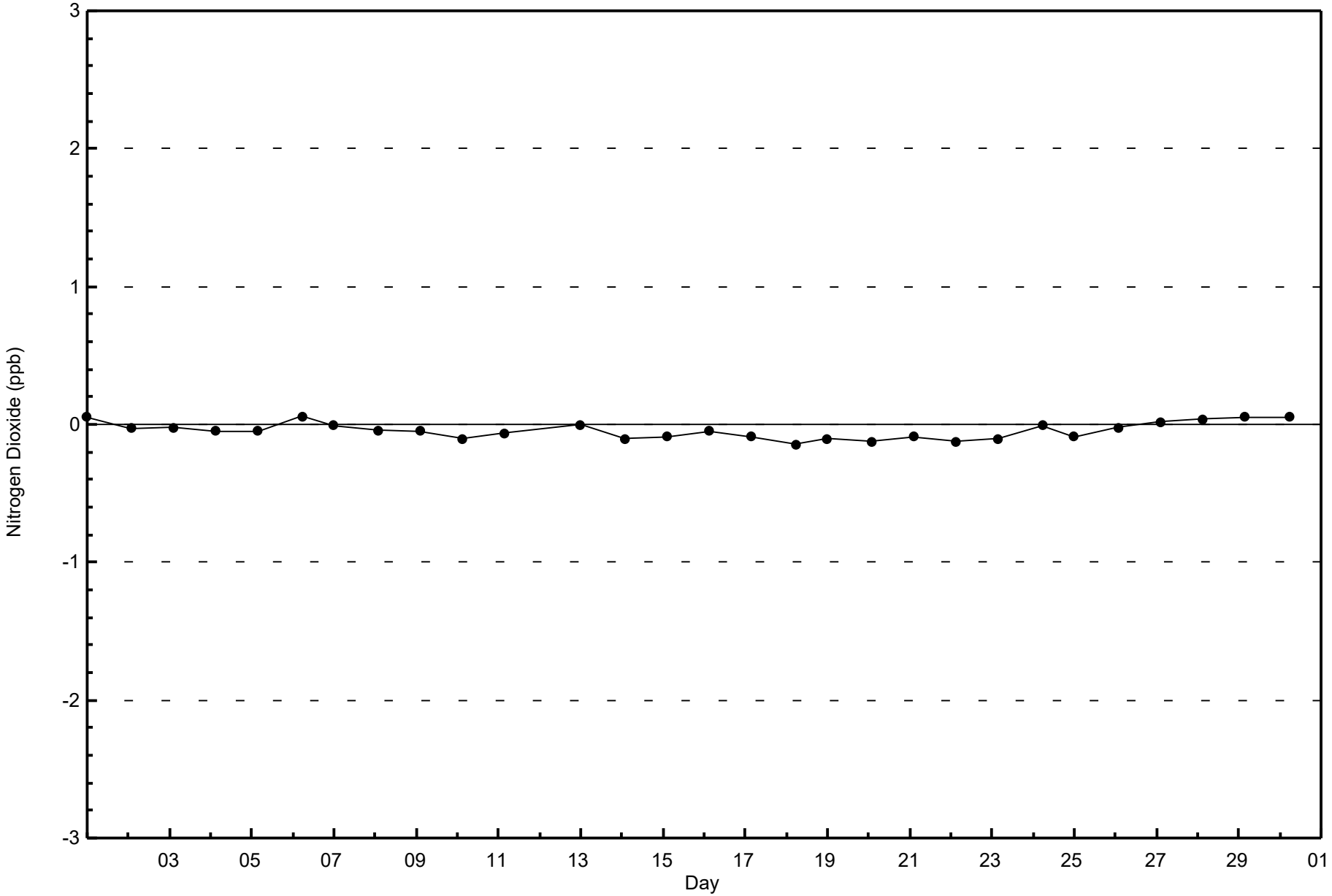
Total Number of Valid Hours: 655

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Fort Hills - June 2026

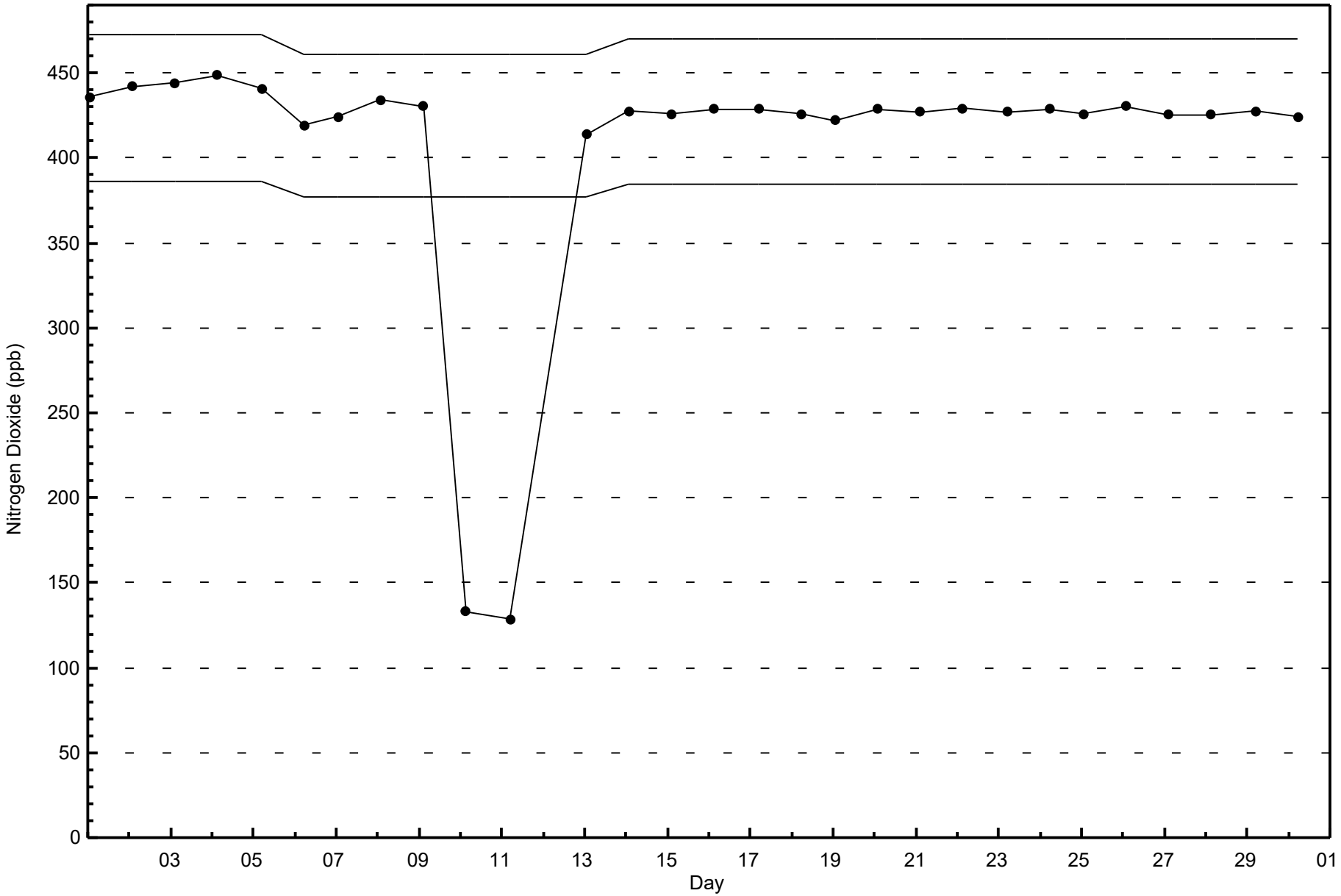


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Fort Hills - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Fort Hills - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 221.1 ppb on Jun 27 05:00 Maximum Daily Average: 45.4 ppb on Jun 15

Minimum Value: 0.0 ppb on Jun 9 16:00
Maximum Diurnal Average: 36.8 ppb at hour 6
Monthly Average: 17.04 ppb

Minimum Daily Average: 1.3 ppb on Jun 9
Minimum Diurnal Average: 2.5 ppb at hour 15
Percentiles: P_1 = 0.0 P_{10} = 0.9 Q_1 = 2.1 Median = 5.6 Q_3 = 18.7 P_{90} = 51.3 P_{99} = 121.2

Hours in Service:	720
Hours of Data:	655
Hours of Missing Data:	65
Hours of Calibration:	40
Percent Operational Time:	96.5

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-Jun	Z	2.0	2.6	2.6	3.7	3.3	1.0	2.2	3.9	1.3	1.8	2.1	1.8	3.5	4.8	4.6	3.0	3.6	3.6	4.4	9.0	13.2	12.6	8.9	4.3	13.2
2-Jun	12.5	Z	16.0	15.4	8.6	8.7	7.1	4.6	6.5	10.9	2.6	4.2	1.4	1.3	1.5	2.0	2.9	5.8	2.5	2.3	4.4	6.4	11.0	3.6	6.2	16.0
3-Jun	2.7	5.2	Z	33.5	9.1	6.7	11.9	15.8	14.9	12.3	10.9	14.6	12.0	8.4	1.7	4.0	4.1	6.5	4.3	2.4	4.1	4.3	4.4	8.9	8.8	33.5
4-Jun	38.1	25.9	10.6	Z	6.8	7.5	7.3	10.5	7.6	4.7	2.4	1.8	2.6	2.7	2.6	1.4	1.7	1.4	0.9	1.2	0.5	2.2	5.8	13.5	6.9	38.1
5-Jun	14.7	10.8	5.4	3.3	Z	15.3	8.9	8.7	4.4	2.1	C	C	C	C	C	C	4.1	4.4	2.2	13.0	34.8	92.8	47.2	12.6	--	92.8
6-Jun	42.0	31.2	32.5	25.9	1.6	Z	7.3	8.2	12.2	16.1	11.5	0.8	0.3	0.3	0.8	8.2	15.1	8.8	1.0	0.3	0.4	0.2	2.5	1.7	10.0	42.0
7-Jun	Z	4.2	1.8	4.0	4.0	4.3	5.9	8.9	7.0	7.3	6.0	7.3	6.4	8.6	6.0	5.7	2.1	4.5	5.3	10.8	12.6	8.2	11.0	13.7	6.8	13.7
8-Jun	11.6	Z	1.9	11.3	12.6	8.1	1.3	0.4	0.8	0.4	0.7	0.3	0.2	0.1	0.0	0.2	0.1	0.1	0.3	0.0	0.1	0.1	0.0	0.1	2.2	12.6
9-Jun	0.2	0.1	Z	0.1	0.1	0.1	0.3	0.2	0.1	0.2	2.9	1.6	1.2	1.1	0.1	0.0	0.0	0.1	0.0	0.0	3.4	5.6	5.5	6.4	1.3	6.4
10-Jun	9.6	4.3	3.0	Z	7.8	10.0	2.3	M	M	0.0	0.6	3.3	4.2	3.0	1.9	3.7	2.4	0.8	0.7	0.2	2.1	3.9	3.4	3.3	3.4	10.0
11-Jun	1.3	0.0	3.1	1.6	Z	0.0	0.4	2.9	2.4	0.9	0.6	1.6	M	M	M	M	M	M	M	M	M	M	M	M	--	3.1
12-Jun	M	M	M	M	M	M	M	M	M	M	C	C	C	C	C	2.3	1.3	2.7	4.8	14.2	18.9	3.8	1.1	1.5	--	18.9
13-Jun	Z	0.8	2.4	6.3	16.7	30.1	53.7	59.5	39.6	15.5	6.7	3.7	4.8	6.1	4.7	2.4	1.5	1.6	1.4	1.6	1.1	5.3	21.6	48.9	14.6	59.5
14-Jun	24.0	Z	28.5	31.3	6.4	9.1	54.1	66.1	53.3	27.3	5.1	4.7	13.5	5.8	3.6	2.9	3.1	1.7	2.4	6.3	20.1	7.0	75.8	77.5	23.0	77.5
15-Jun	97.8	148.1	Z	85.4	83.4	104.5	109.4	95.3	81.9	63.5	14.5	M	2.0	2.5	3.0	2.9	1.3	2.1	2.9	8.5	14.8	8.6	24.3	42.6	45.4	148.1
16-Jun	63.3	40.2	51.5	Z	82.3	43.8	35.7	21.0	13.3	8.9	3.5	2.8	1.2	1.1	2.9	2.3	2.6	3.9	4.6	4.7	13.3	25.5	41.1	12.2	20.9	82.3
17-Jun	4.9	12.8	7.2	21.2	Z	42.2	46.0	35.8	14.0	6.8	3.9	2.2	2.1	1.9	2.5	1.7	0.6	3.8	3.3	5.2	3.1	4.4	5.1	39.4	11.7	46.0
18-Jun	74.7	52.0	59.1	46.1	23.6	Z	1.8	1.9	1.0	0.9	11.3	8.6	8.5	4.4	0.4	0.9	0.9	1.7	0.3	1.2	1.7	0.4	0.2	0.7	13.1	74.7
19-Jun	Z	6.9	2.4	6.8	1.9	4.7	3.3	13.8	5.3	5.5	6.8	6.9	7.0	4.1	4.5	1.0	6.3	4.1	3.7	6.7	10.8	19.9	33.4	8.5	7.6	33.4
20-Jun	50.1	Z	43.6	77.5	62.3	49.4	40.1	20.0	8.3	5.6	5.4	2.9	2.6	3.3	3.0	3.4	2.3	3.9	5.0	8.2	19.6	19.4	33.9	36.4	22.0	77.5
21-Jun	44.7	51.6	Z	65.8	62.7	46.2	54.8	31.2	30.1	22.0	16.2	9.2	6.8	8.3	2.9	5.9	7.9	14.5	25.8	8.1	59.7	50.5	31.9	6.7	28.9	65.8
22-Jun	4.6	53.1	28.0	Z	28.9	115.3	173.5	120.4	16.8	26.0	18.7	2.4	1.2	1.5	1.2	2.2	0.6	4.9	3.8	7.3	18.0	30.9	33.3	47.4	32.2	173.5
23-Jun	45.1	4.5	11.6	14.4	Z	1.6	2.9	2.9	6.3	2.4	1.1	0.7	0.8	1.7	1.8	2.6	4.5	0.9	3.9	12.6	65.1	40.9	37.2	22.3	12.5	65.1
24-Jun	15.0	26.4	36.2	10.8	14.1	Z	18.7	7.0	8.3	5.7	3.2	1.6	1.2	1.4	0.7	0.9	0.8	0.8	4.2	19.5	3.3	7.1	23.7	3.1	9.3	36.2
25-Jun	Z	26.5	95.9	109.6	14.0	8.7	12.5	10.5	8.4	7.6	10.7	4.8	1.5	1.4	2.0	1.9	1.7	2.4	2.1	8.3	33.0	59.5	30.3	26.4	20.9	109.6
26-Jun	35.4	Z	9.0	15.1	41.6	21.7	6.4	17.3	27.1	19.7	6.9	1.0	1.2	1.0	2.6	2.8	2.7	2.7	6.2	10.2	17.0	33.4	20.0	34.9	14.6	41.6
27-Jun	49.2	41.9	Z	68.9	221.1	204.2	176.0	54.1	18.5	9.1	1.7	1.0	0.9	1.5	3.4	3.2	1.7	1.5	4.8	2.7	12.2	20.9	4.5	15.6	39.9	221.1
28-Jun	63.1	122.1	113.3	Z	79.7	66.1	60.2	50.9	33.5	20.1	5.6	1.6	1.0	1.8	2.2	1.9	1.6	1.6	2.4	6.0	30.7	32.6	53.0	64.1	35.4	122.1
29-Jun	81.8	115.6	93.8	130.0	Z	108.3	87.7	69.0	24.0	26.3	8.5	2.3	1.2	1.4	2.3	3.0	0.9	1.7	6.1	11.3	20.6	43.4	19.1	65.6	40.2	130.0
30-Jun	56.1	55.4	23.5	12.6	26.2	Z	25.0	67.8	78.8	89.5	76.3	80.1	15.8	4.4	3.2	1.6	1.4	1.4	1.5	1.2	2.4	15.5	23.2	30.3	30.1	89.5
	35.1	35.1	28.5	33.3	34.1	36.8	35.0	28.8	18.9	14.4	8.8	6.5	3.8	3.1	2.5	2.7	2.7	3.2	3.8	6.2	15.1	19.5	21.2	22.7	Diurnal Average	
	97.8	148.1	113.3	130.0	221.1	204.2	176.0	120.4	81.9	89.5	76.3	80.1	15.8	8.6	6.0	8.2	15.1	14.5	25.8	19.5	65.1	92.8	75.8	77.5	Diurnal Maximum	

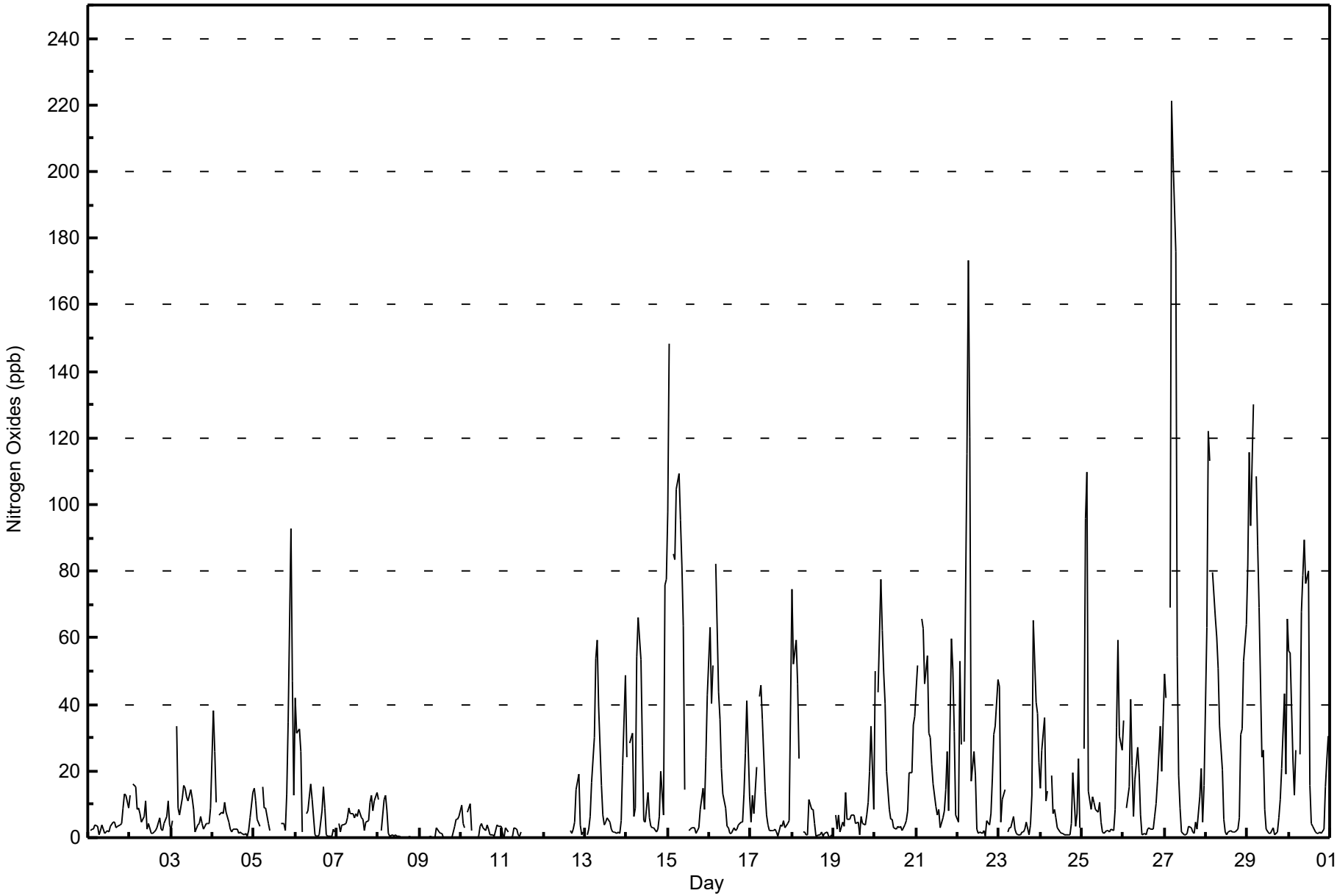
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Fort Hills - June 2026



Nitrogen Oxides (NO_X) - ppb
Fort Hills - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	503	76.79	76.79
21 - 40	63	9.62	86.41
11 - 80	62	9.47	95.88
81 - 159	23	3.51	99.39
> 159	4	0.61	100.00

Total Number of Valid Hours: 655

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Fort Hills - June 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	118	46	34	12	14	11	23	47	44	40	8	10	15	25	19	37	503
21 - 40	16	6	2	0	1	3	13	6	4	3	1	0	0	2	1	5	63
11 - 80	24	8	1	1	1	2	8	6	1	0	1	0	2	2	1	4	62
81 - 159	10	1	0	0	0	0	2	2	0	1	0	0	1	0	2	4	23
> 159	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
Totals	171	61	37	13	16	16	46	61	49	44	10	10	18	29	23	51	655

Total Number of Valid Hours: 655

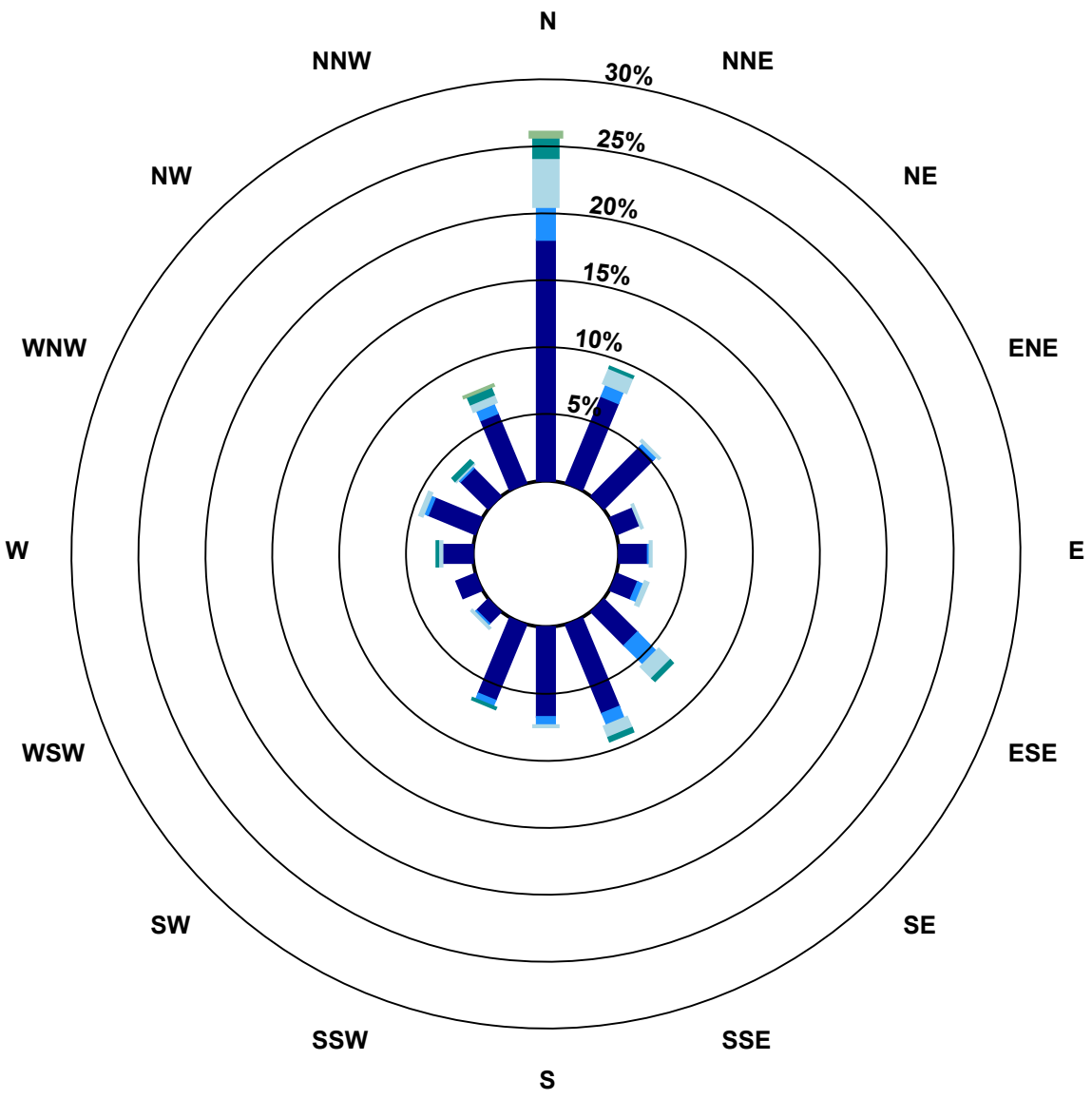
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Fort Hills



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

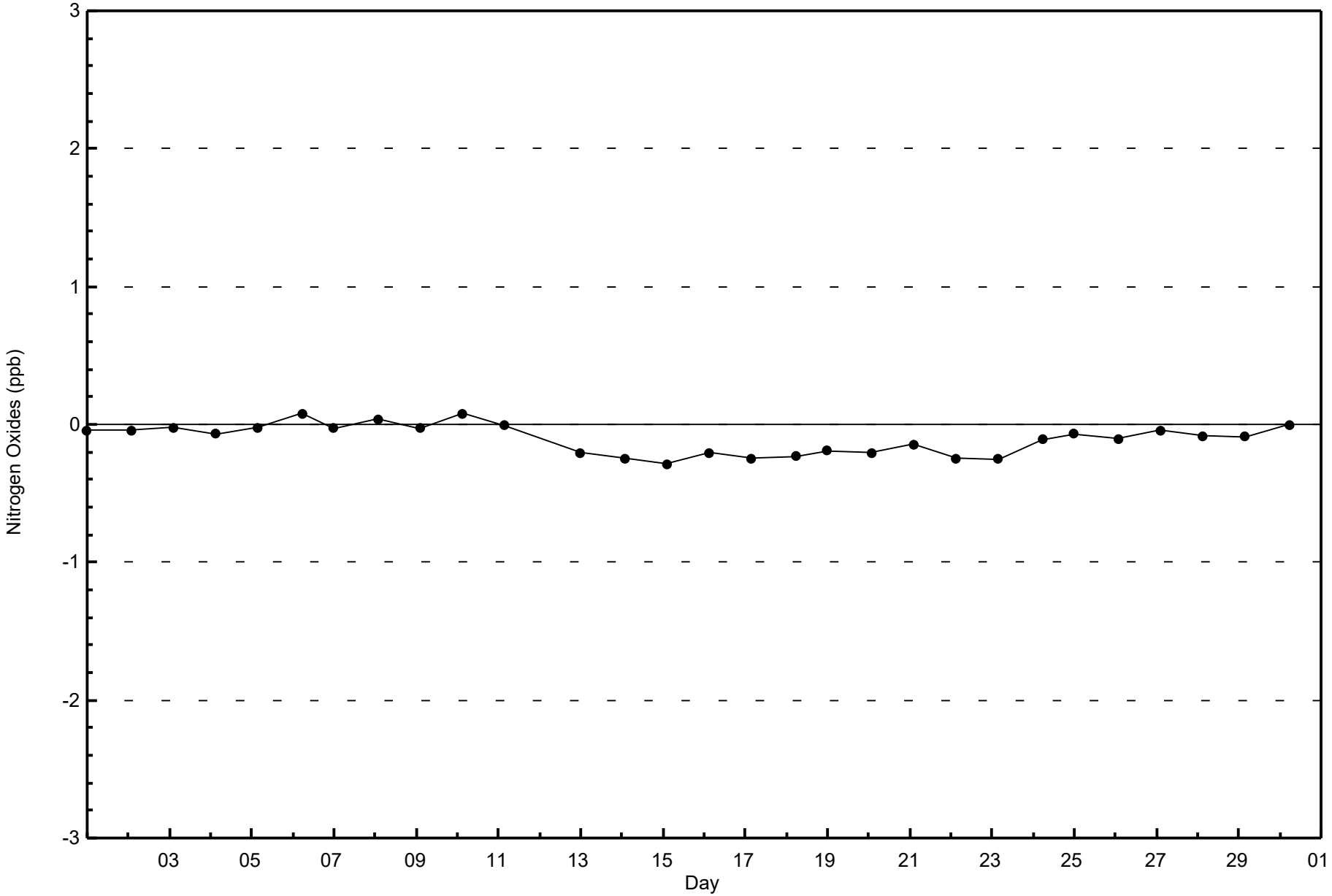
Total Number of Valid Hours: 655

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Fort Hills - June 2026

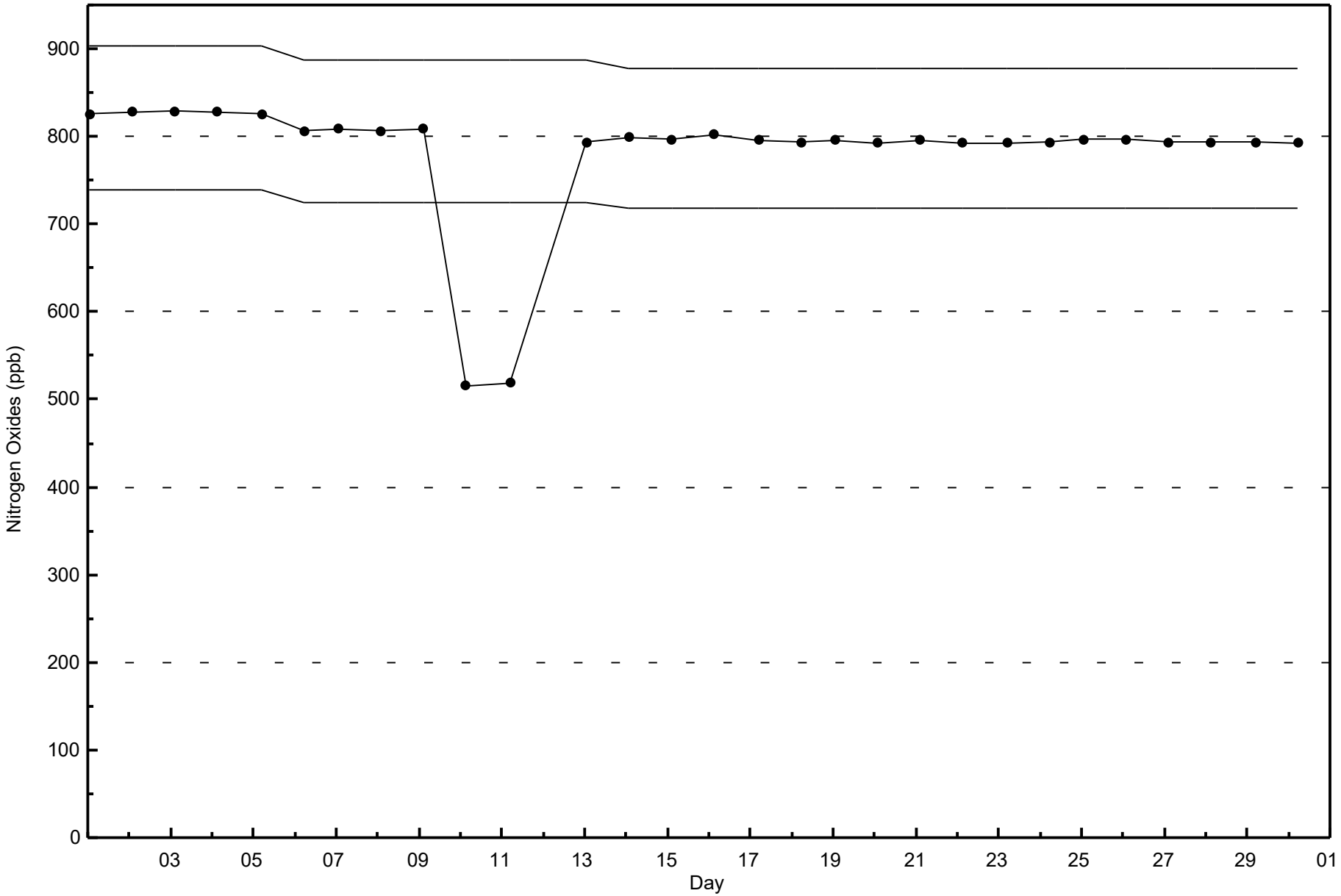


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Fort Hills - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Fort Hills - June 2026

Number of Exceedances (AAAQO): 1-hr: 27 24-hr: 6
Maximum Value: 280.1 $\mu g/m^3$ on Jun 30 05:00 Maximum Daily Average: 81.4 $\mu g/m^3$ on Jun 30

Minimum Value: 0.6 $\mu g/m^3$ on Jun 8 14:00 Minimum Daily Average: 2.1 $\mu g/m^3$ on Jun 8
Maximum Diurnal Average: 43.2 $\mu g/m^3$ at hour 5 Minimum Diurnal Average: 12.1 $\mu g/m^3$ at hour 12
Monthly Average: 19.05 $\mu g/m^3$ Percentiles: P_1 = 0.9 P_{10} = 2.2 Q_1 = 4.5 Median = 10.3 Q_3 = 20.8 P_{90} = 40.2 P_{99} = 148.8

Hours in Service:	720
Hours of Data:	616
Hours of Missing Data:	104
Hours of Calibration:	1
Percent Operational Time:	85.7

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-Jun	1.7	1.5	1.4	1.4	1.6	1.5	1.8	1.9	1.8	1.7	2.0	2.1	2.0	2.5	2.7	2.9	4.3	6.4	5.1	4.1	2.2	1.8	1.8	1.8	2.4	6.4
2-Jun	2.1	2.1	1.8	1.7	1.5	1.4	1.9	2.1	2.7	4.6	7.8	12.6	4.6	4.0	4.9	8.1	11.5	11.9	6.2	3.0	3.7	4.5	4.9	2.8	4.7	12.6
3-Jun	2.5	4.4	6.8	13.0	6.8	2.8	3.1	6.9	4.8	5.2	5.5	6.2	7.4	8.6	9.8	14.6	13.6	18.1	14.9	8.8	12.5	14.8	15.3	15.2	9.2	18.1
4-Jun	15.7	12.2	8.7	8.6	10.6	10.8	9.3	10.6	15.2	23.4	22.9	20.2	22.7	24.0	24.2	20.3	20.0	17.4	12.4	10.3	8.5	13.6	15.8	21.6	15.8	24.2
5-Jun	19.3	14.3	12.1	12.1	12.2	12.4	11.9	11.2	9.2	7.4	8.3	8.5	9.1	8.2	5.6	6.6	10.9	11.3	5.3	10.0	20.0	20.7	26.1	16.1	12.0	26.1
6-Jun	12.7	8.4	11.1	11.6	5.4	4.2	8.0	12.2	14.5	12.9	15.7	15.0	8.6	6.8	4.5	4.0	4.2	4.7	3.0	2.5	2.2	1.9	2.3	3.0	7.5	15.7
7-Jun	3.8	4.0	4.1	4.7	4.7	4.5	5.7	6.2	6.3	6.2	7.1	8.0	9.7	14.4	15.7	17.5	14.9	13.8	9.1	6.1	5.3	4.1	4.0	3.9	7.7	17.5
8-Jun	3.8	4.0	4.7	4.9	4.5	4.2	3.9	2.6	1.3	0.9	0.7	0.8	0.6	0.6	0.9	1.0	1.2	1.3	1.8	2.1	2.0	2.2	1.0	0.6	2.1	4.9
9-Jun	1.3	1.1	1.2	1.3	2.0	2.3	2.3	1.6	1.5	1.5	2.6	3.2	3.7	4.5	4.3	5.6	5.3	4.8	4.9	3.3	7.0	5.6	5.2	5.1	3.4	7.0
10-Jun	5.2	4.9	5.7	7.8	7.9	7.1	7.1	4.4	3.4	2.6	2.6	1.0	0.9	1.4	2.0	2.3	2.6	2.8	3.3	2.1	3.6	5.0	3.5	3.5	3.9	7.9
11-Jun	2.5	2.1	3.3	3.3	2.8	2.0	1.7	2.4	3.0	3.4	3.5	3.6	4.2	5.4	6.7	6.4	7.6	8.2	7.6	6.7	5.5	6.2	5.1	2.4	4.4	8.2
12-Jun	2.2	2.0	2.2	2.3	3.1	4.5	5.7	5.6	3.8	9.4	9.0	12.9	17.7	C	15.3	24.1	25.0	30.8	27.1	35.3	43.0	16.8	10.0	7.9	13.7	43.0
13-Jun	8.3	4.6	10.5	16.6	9.9	4.7	5.9	6.4	8.6	5.9	3.7	3.6	4.6	5.9	5.6	6.4	4.8	3.8	3.2	3.2	3.0	10.1	27.1	32.6	8.3	32.6
14-Jun	17.6	5.6	12.3	8.6	6.6	6.5	27.8	20.2	19.0	15.8	17.2	12.3	20.3	6.9	7.4	19.6	27.3	32.8	41.3	15.4	58.0	178.3	107.8	24.7	29.5	178.3
15-Jun	19.4	24.6	16.5	70.5	79.2	50.6	33.4	22.3	20.1	17.2	10.4	9.5	9.3	15.4	27.2	22.5	10.9	26.5	16.9	33.1	33.4	11.3	41.9	22.7	26.9	79.2
16-Jun	30.8	28.1	39.7	30.9	27.8	UO	UO	UO	UO	UO	UO	19.1	16.3	13.7	17.8	37.5	31.6	38.0	26.7	24.8	39.1	37.7	68.4	16.3	30.2	68.4
17-Jun	15.3	20.7	16.4	61.2	35.1	39.9	26.4	21.1	28.8	16.4	10.8	13.8	31.7	13.0	18.6	36.8	34.7	39.1	21.2	28.3	94.9	91.5	81.4	40.6	34.9	94.9
18-Jun	55.0	51.7	44.8	157.9	127.5	8.7	2.2	1.9	2.1	2.6	10.0	6.1	13.0	10.4	7.0	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	157.9
19-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	M	2.4	2.6	2.5	2.9	1.2	4.0	3.0	4.4	3.3	4.3	UO	UO	--	4.4
20-Jun	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-Jun	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-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	6.9	5.9	5.0	6.7	12.3	18.0	36.4	20.4	10.3	15.8	22.9	15.0	27.2	--	36.4
23-Jun	24.9	12.2	23.6	12.6	8.5	7.6	7.5	6.8	7.5	7.2	6.2	5.4	11.3	4.2	19.1	3.9	3.5	4.1	8.9	10.7	16.3	15.5	13.8	15.1	10.7	24.9
24-Jun	15.3	16.6	16.8	15.5	15.3	15.6	13.6	8.6	10.2	13.2	12.9	12.2	10.8	10.3	10.0	10.7	10.3	10.5	27.6	23.2	12.2	9.7	13.2	10.5	13.5	27.6
25-Jun	16.6	10.2	20.9	26.3	15.0	14.8	12.7	20.5	20.5	16.9	15.6	13.1	9.0	8.6	9.5	7.9	8.3	11.0	9.6	14.8	24.8	28.4	26.5	17.4	15.8	28.4
26-Jun	18.7	13.3	15.8	26.5	152.4	53.3	20.1	21.0	25.7	17.4	12.0	6.5	7.8	7.5	7.0	7.3	7.2	6.9	11.9	15.1	17.5	14.4	16.8	12.7	21.4	152.4
27-Jun	18.1	17.7	61.2	128.1	224.4	168.1	112.2	38.2	19.7	19.8	13.1	8.1	7.8	6.8	10.3	9.6	10.0	13.3	11.5	32.5	51.2	67.3	30.7	64.6	47.7	224.4
28-Jun	49.5	28.5	21.0	21.6	36.0	24.1	29.0	31.4	32.2	36.0	35.7	25.0	20.8	26.1	24.7	26.1	28.3	27.1	29.6	30.0	43.8	43.9	UO	UO	30.5	49.5
29-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	51.3	41.2	39.1	32.4	38.5	62.2	89.1	97.6	87.6	93.3	122.1	--	122.1
30-Jun	110.3	98.6	112.2	93.2	280.1	155.3	83.8	88.5	87.8	84.7	70.5	77.8	68.9	70.9	62.9	57.6	58.3	62.5	46.0	25.3	26.1	32.6	49.0	50.5	81.4	280.1
	18.9	15.7	19.0	29.7	43.2	25.3	18.2	14.8	14.6	13.8	12.7	12.1	12.3	12.6	13.4	15.3	15.1	18.0	16.3	16.8	24.2	27.9	27.2	21.6	Diurnal Average	
	110.3	98.6	112.2	157.9	280.1	168.1	112.2	88.5	87.8	84.7	70.5	77.8	68.9	70.9	62.9	57.6	58.3	62.5	62.2	89.1	97.6	178.3	107.8	122.1	Diurnal Maximum	

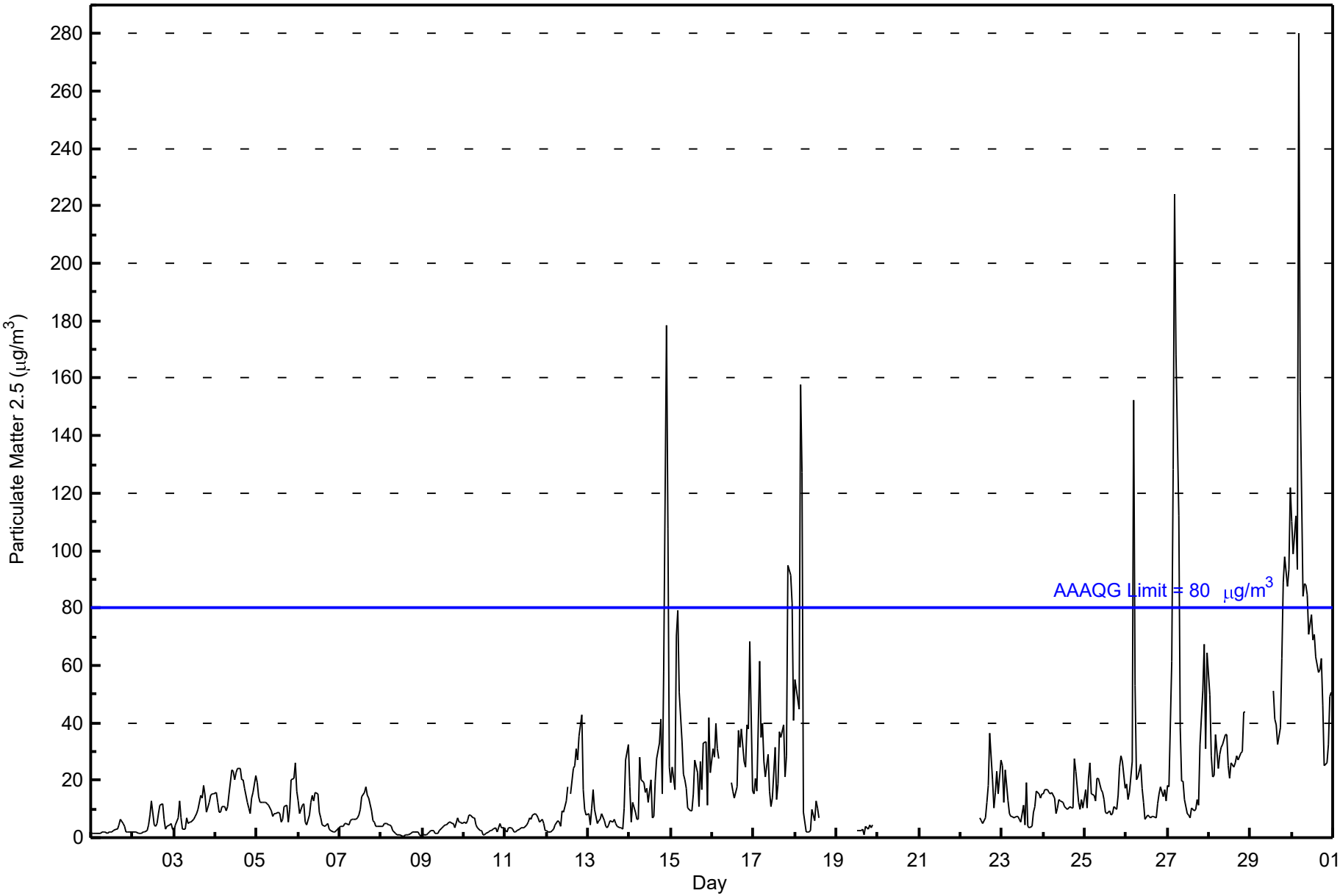
C - Calibration M - Maintenance UO - Unstable Operation
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Fort Hills - June 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Fort Hills - June 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	188	30.52	30.52
6 - 15	212	34.42	64.94
16 - 25	91	14.77	79.71
26 - 80	98	15.91	95.62
> 81.0	27	4.38	100.00

Total Number of Valid Hours: 616

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Fort Hills - June 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	59	15	3	3	3	5	1	8	10	8	1	9	12	22	9	20	188
6 - 15	26	10	8	2	7	7	22	43	32	27	6	1	2	4	7	8	212
16 - 25	17	6	6	4	1	2	15	12	9	9	2	1	0	1	2	4	91
26 - 80	38	9	14	3	5	2	5	4	1	1	1	0	1	1	2	11	98
> 81.0	6	1	0	1	0	0	3	1	2	1	0	0	2	1	3	6	27
Totals	146	41	31	13	16	16	46	68	54	46	10	11	17	29	23	49	616

Total Number of Valid Hours: 616

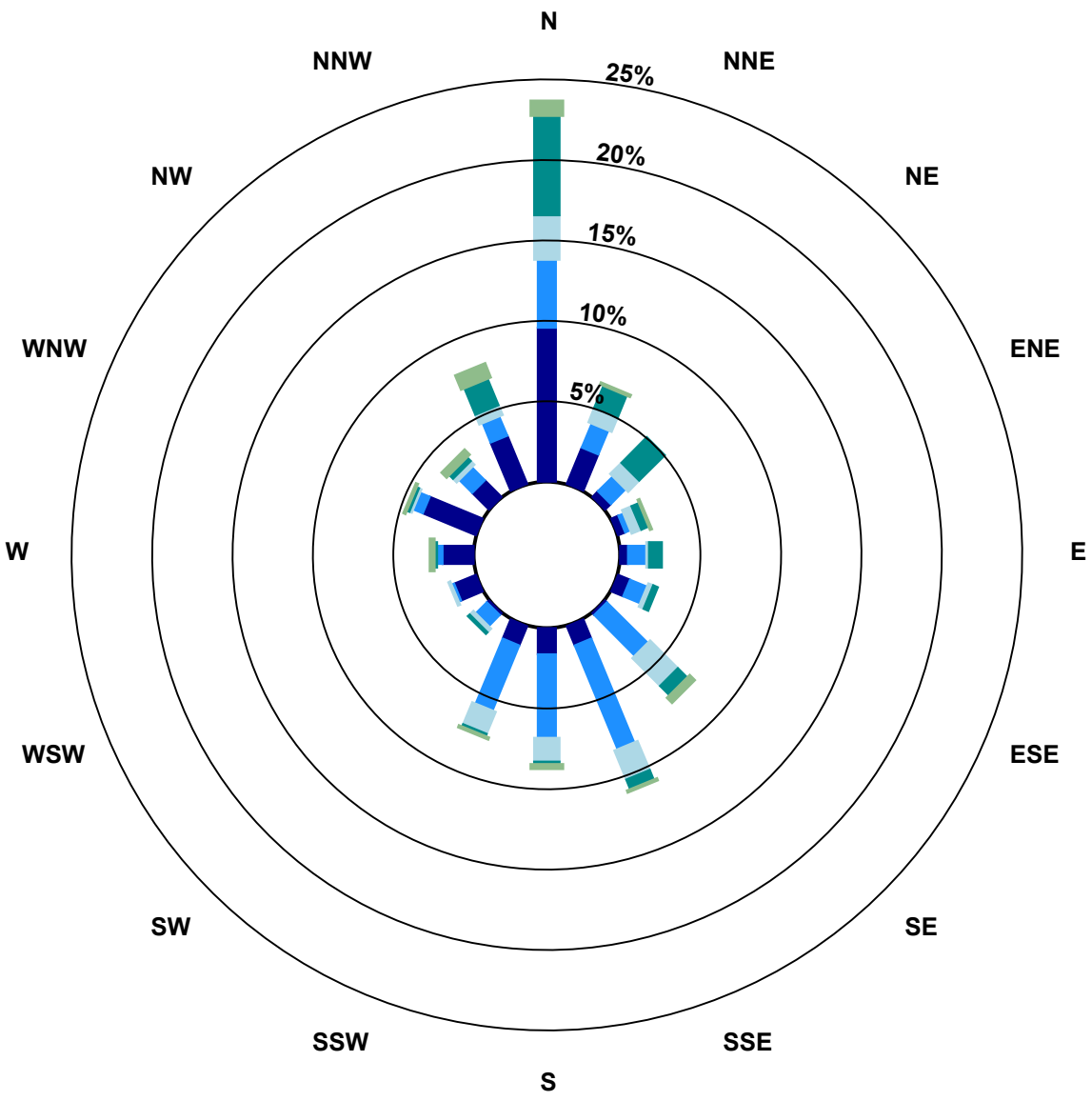
Total Number of Hours: 720

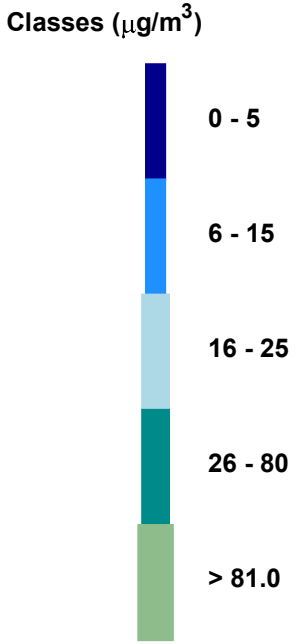
Wood Buffalo Environmental Association

Wind Rose Jun 2026

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

Fort Hills





Total Number of Valid Hours: 616

Summary of Hour Averages

Fort Hills - June 2026

Maximum Value: 31.4 C on Jun 28 16:00

Maximum Daily Average: 25.1 C on Jun 29

Minimum Value: 7.3 C on Jun 11 05:00

Minimum Daily Average: 9.4 C on Jun 11

Maximum Diurnal Average: 20.5 C at hour 17

Minimum Diurnal Average: 12.1 C at hour 5

Monthly Average: 16.84 C

Percentiles: P_1 = 8.1 P_{10} = 10.4 Q_1 = 12.2 Median = 16.0 Q_3 = 20.8 P_{90} = 25.0 P_{99} = 30.4

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

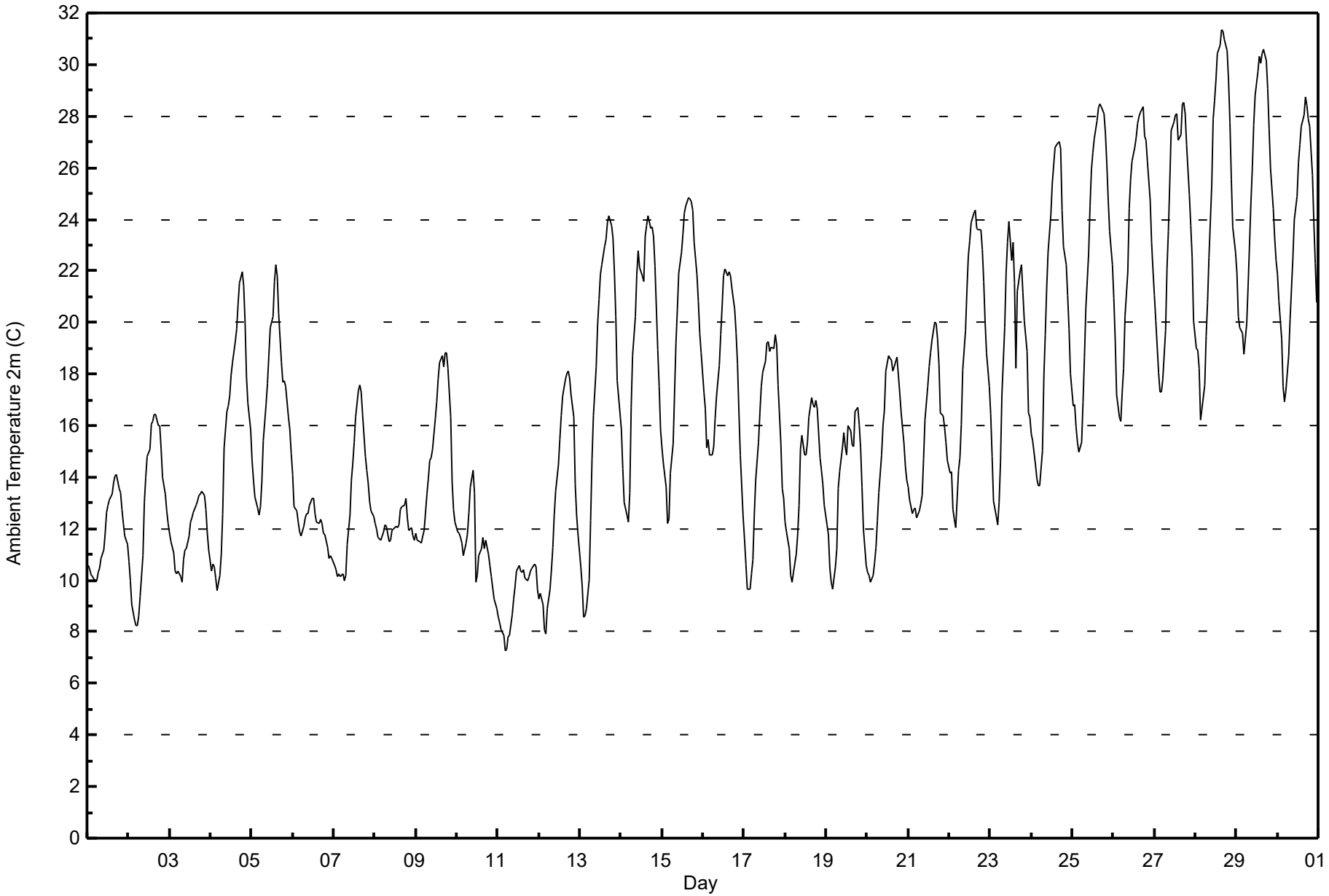
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	10.6	10.4	10.2	10.1	10.1	10.0	10.3	10.5	10.8	11.2	11.8	12.6	12.9	13.1	13.3	13.8	14.0	14.1	13.6	13.4	12.7	12.2	11.7	11.4	11.9	14.1
2-Jun	10.8	10.0	9.0	8.5	8.3	8.2	8.6	9.4	11.0	13.0	14.0	14.8	15.1	16.1	16.2	16.4	16.4	16.0	16.0	15.1	14.0	13.3	12.7	12.2	12.7	16.4
3-Jun	11.8	11.5	11.1	10.4	10.2	10.4	10.2	9.9	10.8	11.2	11.2	11.7	12.3	12.4	12.6	12.9	13.1	13.3	13.4	13.5	13.3	12.7	11.8	11.2	11.8	13.5
4-Jun	10.4	10.7	10.5	10.1	9.6	10.2	11.0	12.6	15.1	16.5	16.8	17.1	17.9	18.4	19.2	19.7	20.7	21.6	22.0	21.4	20.0	17.9	16.9	15.8	15.9	22.0
5-Jun	14.6	13.9	13.3	12.8	12.5	12.9	13.8	15.4	16.8	17.6	18.7	19.8	20.2	21.6	22.2	21.8	20.3	18.5	17.7	17.7	17.5	16.3	15.8	14.9	17.0	22.2
6-Jun	14.1	12.9	12.7	12.3	11.9	11.7	12.1	12.4	12.6	12.6	12.9	13.2	13.2	12.6	12.2	12.2	12.4	12.2	11.8	11.8	11.3	10.9	10.9	10.8	12.2	14.1
7-Jun	10.6	10.4	10.2	10.3	10.2	10.3	10.0	10.2	11.4	12.5	13.9	14.5	15.4	16.3	17.4	17.6	17.3	16.4	14.8	14.3	13.8	13.1	12.7	12.5	13.2	17.6
8-Jun	12.2	12.0	11.7	11.5	11.7	11.9	12.1	12.1	11.5	11.5	11.9	12.0	12.1	12.0	12.1	12.7	12.8	12.9	13.2	12.4	11.9	12.1	11.7	11.6	12.1	13.2
9-Jun	11.8	11.6	11.5	11.4	11.7	12.0	13.3	13.9	14.6	14.7	15.1	16.3	16.9	17.8	18.4	18.7	18.3	18.8	18.8	18.2	16.3	13.8	12.8	12.3	15.0	18.8
10-Jun	11.9	11.8	11.7	11.4	11.0	11.4	11.8	12.7	13.6	14.2	13.4	9.9	10.2	11.0	11.2	11.7	11.2	11.6	11.0	10.6	10.2	9.7	9.3	8.9	11.3	14.2
11-Jun	8.6	8.3	8.1	7.8	7.3	7.3	7.8	7.9	8.7	9.3	9.8	10.3	10.6	10.3	10.3	10.4	10.1	10.0	10.1	10.4	10.5	10.7	10.5	9.6	9.4	10.7
12-Jun	9.3	9.5	9.1	8.1	7.9	8.9	9.6	10.4	11.3	12.5	13.5	14.5	15.5	16.4	17.1	17.8	18.0	18.1	17.8	17.2	16.3	13.7	12.5	11.8	13.2	18.1
13-Jun	10.5	9.8	8.6	8.6	8.9	10.0	12.3	14.7	16.4	18.3	19.9	20.9	21.8	22.3	22.9	23.2	23.8	24.1	23.7	23.3	22.0	20.3	17.7	16.5	17.5	24.1
14-Jun	15.8	14.3	13.0	12.5	12.2	13.4	16.7	18.7	20.2	21.8	22.8	22.2	21.8	21.6	23.3	23.7	24.1	23.7	23.7	23.3	22.2	19.0	17.5	15.8	19.3	24.1
15-Jun	15.1	14.6	13.6	12.2	12.3	14.1	15.3	17.3	19.2	20.5	21.9	22.7	23.4	24.2	24.5	24.9	24.8	24.7	24.3	23.1	21.9	20.8	19.6	18.8	19.7	24.9
16-Jun	17.3	16.7	15.1	15.5	14.8	14.9	15.2	16.3	17.1	18.3	19.5	20.6	21.8	22.1	21.8	22.0	21.8	21.3	20.5	19.6	18.4	16.6	14.9	12.5	18.1	22.1
17-Jun	11.6	10.6	9.7	9.6	10.3	10.8	12.5	13.9	15.3	16.5	17.5	18.1	18.5	19.2	19.3	18.9	19.0	19.0	19.5	19.1	17.6	15.3	13.6	13.2	15.4	19.5
18-Jun	12.3	11.9	11.2	10.2	9.9	10.3	11.0	11.8	12.9	15.1	15.6	14.9	14.9	15.3	16.3	17.1	16.8	16.7	17.0	16.7	14.7	14.2	13.7	12.9	13.9	17.1
19-Jun	12.1	11.8	10.5	9.9	9.7	10.5	11.2	13.6	14.2	15.1	15.7	15.2	14.8	16.0	15.8	15.2	15.2	16.6	16.7	16.1	15.1	13.6	12.0	10.6	13.6	16.7
20-Jun	10.3	10.2	9.9	10.2	10.7	11.3	12.3	13.4	14.9	16.0	16.6	18.1	18.7	18.6	18.5	18.1	18.3	18.7	17.9	17.3	16.5	15.3	14.4	13.9	15.0	18.7
21-Jun	13.6	13.1	12.6	12.7	12.8	12.4	12.7	13.0	13.3	14.7	16.2	17.5	18.3	18.8	19.3	20.0	19.9	19.4	18.4	16.5	16.4	15.9	15.3	14.6	15.7	20.0
22-Jun	14.1	14.2	12.7	12.4	12.0	14.2	14.8	16.1	18.2	19.7	21.3	22.5	23.2	23.9	24.2	24.3	23.7	23.6	23.6	22.8	21.6	20.0	18.8	17.5	19.1	24.3
23-Jun	16.4	14.8	13.1	12.5	12.2	13.0	14.6	17.2	19.8	21.9	23.1	23.9	22.4	23.1	21.5	18.2	21.2	21.9	22.3	21.1	20.1	18.9	16.5	16.3	18.6	23.9
24-Jun	15.7	15.4	14.5	13.9	13.7	13.7	15.0	17.9	19.5	21.3	22.7	24.2	25.4	26.1	26.8	27.0	27.0	26.7	24.4	22.9	22.2	21.0	19.7	18.0	20.6	27.0
25-Jun	16.8	16.8	15.9	15.3	15.0	15.3	16.9	18.6	20.5	22.7	24.5	25.9	26.6	27.1	27.8	28.3	28.5	28.4	28.1	27.4	26.1	24.7	23.5	22.2	22.6	28.5
26-Jun	20.9	19.3	17.2	16.3	16.1	17.3	18.2	20.2	21.9	24.4	25.5	26.3	26.8	27.2	27.7	28.0	28.1	28.4	27.2	27.1	26.2	24.7	23.1	22.0	23.4	28.4
27-Jun	21.0	20.0	18.0	17.3	17.3	17.8	19.7	22.1	23.6	25.4	27.5	27.8	28.0	28.1	27.1	27.3	28.5	28.5	28.1	26.9	24.9	23.8	22.5	20.0	23.8	28.5
28-Jun	19.0	18.9	18.2	16.2	16.6	17.6	19.5	20.8	22.5	25.3	27.9	28.6	29.4	30.4	30.7	31.4	31.3	30.9	30.5	29.4	27.8	25.5	23.7	22.8	24.8	31.4
29-Jun	21.9	20.2	19.8	19.6	18.8	19.4	20.0	21.4	24.6	26.0	27.7	28.8	29.7	30.3	30.0	30.4	30.6	30.2	29.1	27.5	26.0	24.4	23.3	22.4	25.1	30.6
30-Jun	21.9	20.8	19.4	17.5	16.9	17.4	18.7	20.1	21.3	22.5	24.0	24.9	26.2	26.9	27.6	28.1	28.7	28.4	27.9	27.6	25.7	23.9	22.3	20.7	23.3	28.7
	14.1	13.5	12.7	12.2	12.1	12.6	13.6	14.8	16.1	17.4	18.4	19.0	19.5	20.0	20.3	20.4	20.5	20.5	20.1	19.5	18.4	17.1	16.0	15.1	Diurnal Average	
	21.9	20.8	19.8	19.6	18.8	19.4	20.0	22.1	24.6	26.0	27.9	28.8	29.7	30.4	30.7	31.4	31.3	30.9	30.5	29.4	27.8	25.5	23.7	22.8	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Fort Hills - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	45	6.25	6.25
10 - 20	475	65.97	72.22
> 20	200	27.78	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) - %

Fort Hills - June 2026

Maximum Value: 96.8 % on Jun 6 10:00

Maximum Daily Average: 94.4 % on Jun 6

Minimum Value: 20.5 % on Jun 30 19:00

Minimum Daily Average: 39.4 % on Jun 16

Maximum Diurnal Average: 81.0 % at hour 5

Minimum Diurnal Average: 46.3 % at hour 18

Monthly Average: 61.62 %

Percentiles: P_1 = 23.1 P_{10} = 32.1 Q_1 = 44.7 Median = 63.3 Q_3 = 78.1 P_{90} = 88.3 P_{99} = 96.2

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

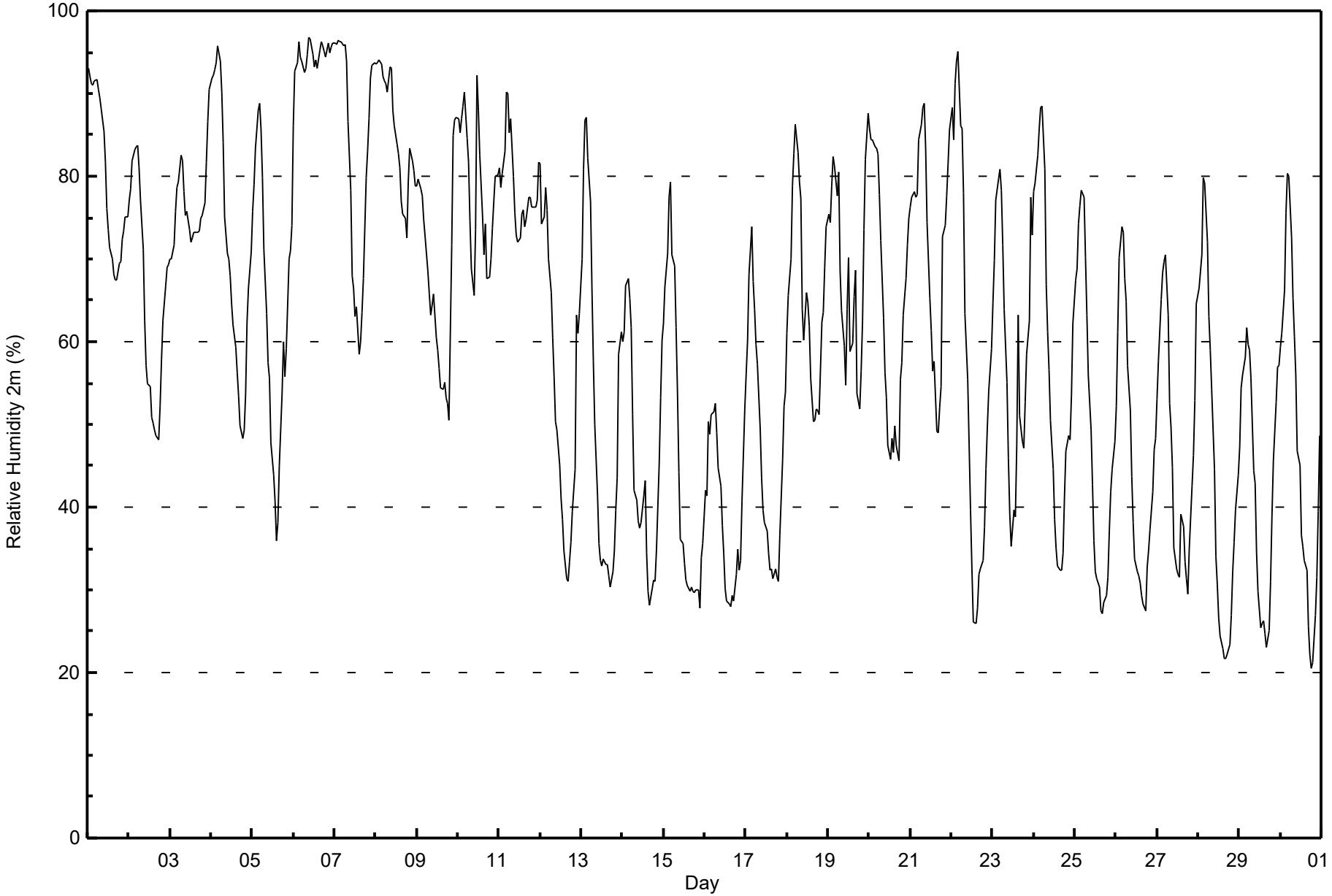
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	93.0	92.0	91.3	91.0	91.5	91.8	90.6	89.5	88.1	85.4	81.7	76.0	73.6	71.4	70.0	68.2	67.5	67.5	69.5	69.7	72.4	73.4	75.1	75.1	79.8	93.0
2-Jun	77.1	78.5	81.8	83.1	83.5	83.7	81.0	77.0	71.2	62.5	57.1	54.9	54.6	50.9	50.2	49.3	48.6	48.2	52.2	57.8	62.6	66.8	69.0	69.4	65.5	83.7
3-Jun	70.0	70.1	71.7	75.8	78.6	79.4	82.5	81.9	78.2	75.3	75.8	73.6	72.0	72.5	73.3	73.2	73.2	73.4	74.9	75.3	76.8	81.7	86.6	90.6	76.5	90.6
4-Jun	91.9	92.2	92.9	93.7	95.8	94.0	90.3	84.0	75.1	70.7	70.1	67.9	64.5	62.1	59.3	56.3	53.4	49.8	48.3	49.3	53.7	62.4	66.5	70.9	71.5	95.8
5-Jun	75.7	79.0	83.5	87.9	88.9	85.5	79.7	71.2	63.3	57.5	55.7	47.8	43.9	40.7	35.8	38.2	45.0	53.7	59.9	55.8	59.2	70.0	71.1	74.0	63.5	88.9
6-Jun	86.1	92.7	93.7	96.3	94.4	94.0	92.5	93.0	94.8	96.8	96.6	94.8	93.2	94.0	93.0	95.2	96.3	95.7	95.1	94.5	96.2	95.0	95.7	96.1	94.4	96.8
7-Jun	96.1	96.0	96.4	96.3	96.2	95.7	96.0	93.9	86.6	78.4	68.0	66.5	63.1	64.3	58.5	59.9	63.5	67.6	79.9	83.0	87.0	91.9	93.3	93.7	82.2	96.4
8-Jun	93.5	93.8	94.1	93.6	92.1	91.5	91.1	90.1	93.3	93.1	87.9	86.2	83.9	82.6	81.0	76.9	75.4	74.9	72.5	79.3	83.4	81.9	80.7	78.8	85.5	94.1
9-Jun	78.8	79.7	78.5	77.7	74.8	72.8	68.5	65.8	63.3	64.5	65.8	60.5	59.0	56.8	54.5	54.2	55.0	53.2	52.5	50.6	71.7	85.0	86.9	87.0	67.4	87.0
10-Jun	87.0	85.2	87.0	88.4	90.2	84.6	81.7	74.6	68.8	65.6	73.5	92.2	87.9	82.5	75.1	70.6	74.3	67.6	67.8	70.0	73.8	77.0	79.9	80.1	78.6	92.2
11-Jun	81.0	78.7	80.3	83.1	90.2	90.0	85.2	86.9	80.1	75.7	72.9	72.0	72.6	75.5	75.9	73.9	74.8	77.5	77.5	76.2	76.3	76.3	77.2	81.7	78.8	90.2
12-Jun	81.5	74.3	75.0	78.7	76.0	70.0	65.9	60.5	55.8	50.4	49.3	45.2	41.0	38.5	34.7	31.4	31.1	33.4	35.7	39.5	44.6	63.2	60.9	63.3	54.2	81.5
13-Jun	70.0	80.9	86.7	87.1	82.3	77.0	66.4	57.6	50.1	41.3	35.6	33.6	32.8	33.8	33.0	33.0	31.7	30.3	32.3	34.7	39.6	43.6	58.4	61.1	51.4	87.1
14-Jun	60.1	61.2	66.7	67.6	65.3	61.7	51.2	42.0	40.9	38.3	37.5	38.1	41.3	43.2	34.5	29.8	28.1	30.2	31.1	31.0	34.7	45.4	53.3	60.2	45.5	67.6
15-Jun	62.2	66.6	70.7	77.4	79.4	70.5	69.1	61.7	53.9	44.2	36.1	35.5	33.2	31.1	30.4	29.8	30.3	29.9	29.7	30.0	30.0	27.7	33.9	35.5	45.8	79.4
16-Jun	42.0	41.4	50.3	48.8	51.2	51.5	52.5	49.0	44.8	42.5	37.9	34.4	30.2	28.7	28.3	28.0	29.3	28.6	31.8	35.0	32.4	33.6	40.7	51.8	39.4	52.5
17-Jun	56.1	60.2	68.2	73.9	67.3	64.0	59.6	57.4	49.5	43.6	39.6	38.2	37.1	34.5	32.4	32.5	31.3	32.5	31.6	31.0	36.7	45.7	52.2	54.0	47.0	73.9
18-Jun	61.1	65.6	70.1	78.8	82.7	86.3	82.9	79.3	77.4	64.0	60.1	65.9	64.8	61.9	55.6	50.3	50.6	51.9	51.7	51.3	62.3	63.6	69.0	74.0	65.9	86.3
19-Jun	75.4	74.4	78.8	82.4	81.2	77.6	80.4	68.4	63.7	59.5	54.7	63.9	70.2	58.9	59.9	65.4	68.6	53.8	51.9	56.4	62.5	73.6	82.0	87.7	68.8	87.7
20-Jun	85.8	84.4	84.4	83.5	83.3	82.8	77.8	72.2	62.9	56.3	53.3	47.4	45.8	48.3	46.5	49.9	47.5	45.6	55.4	57.5	63.2	67.7	71.7	75.0	64.5	85.8
21-Jun	76.3	77.5	78.2	77.5	77.8	84.4	86.2	88.3	88.9	83.4	74.4	65.3	61.4	56.4	57.7	49.2	49.0	52.1	54.5	72.6	74.1	77.5	81.5	85.6	72.1	88.9
22-Jun	88.2	84.4	91.1	93.9	95.1	86.1	85.7	77.9	63.5	55.5	47.7	39.6	32.6	26.1	25.9	27.7	31.8	32.5	33.6	37.7	44.5	49.7	54.1	59.1	56.8	95.1
23-Jun	64.7	69.8	77.1	79.6	80.8	78.4	71.6	63.8	55.0	45.9	39.2	35.2	39.6	38.9	47.6	63.3	51.1	48.0	47.1	52.8	58.4	62.6	77.4	72.8	59.2	80.8
24-Jun	78.1	79.1	82.6	85.7	88.4	88.4	80.9	67.0	61.2	56.6	50.5	44.6	38.5	35.1	32.9	32.4	32.4	34.4	41.2	46.8	48.6	48.1	53.6	62.2	57.0	88.4
25-Jun	67.5	68.8	74.3	76.4	78.3	77.4	70.2	63.2	55.9	49.3	42.8	35.9	32.1	31.3	30.3	27.4	27.2	28.4	29.3	31.6	37.1	41.8	44.5	47.9	48.7	78.3
26-Jun	52.1	61.2	70.2	74.0	73.2	67.7	65.0	57.1	51.6	43.8	38.1	33.7	32.2	31.6	30.8	29.3	28.3	27.5	32.8	34.8	37.2	41.9	47.0	48.3	46.2	74.0
27-Jun	53.1	57.6	65.0	68.3	69.7	70.5	63.3	52.6	49.6	44.7	35.1	32.5	31.9	31.5	39.1	37.6	33.4	31.4	29.4	35.0	42.6	46.2	52.9	64.7	47.4	70.5
28-Jun	66.4	68.5	70.5	79.8	79.2	72.1	63.1	59.0	54.3	44.5	34.0	30.7	26.5	24.4	22.9	21.7	21.7	22.3	23.4	27.0	32.1	35.8	39.6	43.9	44.3	79.8
29-Jun	47.3	54.4	56.0	58.1	61.7	59.7	59.0	55.5	44.4	42.8	34.6	29.9	25.4	25.9	26.2	24.7	23.0	25.0	31.0	39.0	45.7	52.8	56.9	57.1	43.2	61.7
30-Jun	59.4	61.1	66.2	75.6	80.3	80.1	72.5	65.3	60.7	55.9	46.7	45.0	36.6	35.2	33.6	32.4	25.7	22.2	20.5	21.1	26.9	31.5	39.5	48.7	47.6	80.3
	72.6	74.3	77.8	80.5	81.0	79.0	75.4	70.2	64.9	59.6	55.1	52.9	50.7	49.0	47.6	47.1	46.6	46.3	48.1	50.9	55.5	60.4	65.0	68.3	Diurnal Average	
	96.1	96.0	96.4	96.3	96.2	95.7	96.0	93.9	94.8	96.8	96.6	94.8	93.2	94.0	93.0	95.2	96.3	95.7	95.1	94.5	96.2	95.0	95.7	96.1	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Fort Hills - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	151	20.97	20.97
40 - 60	172	23.89	44.86
60 - 80	244	33.89	78.75
80 - 100	153	21.25	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 - June 2026

Maximum Speed: 30 km/h on Jun 1 12:00

Maximum Daily Speed Average: 24.3 km/h on Jun 1

Minimum Speed Value: 0 km/h on Jun 30 04:00

Minimum Daily Speed Average: 2.5 km/h on Jun 22

Maximum Diurnal Speed Average: 7.7 km/h at hour 18

Minimum Diurnal Speed Average: 2.7 km/h at hour 24

Monthly Average Velocity: 4.7 km/h 6.3 deg

Percentiles: P_1 = 1 P_{10} = 4 Q_1 = 8 Median = 12 Q_3 = 17 P_{90} = 21 P_{99} = 28

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 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-Jun	N22	N26	N27	N24	N24	N22	NNW17	N18	N21	N26	N27	N30	N30	N29	N29	N30	N29	N28	NNE26	NNE24	NNE20	NNE21	NNE21	NNE23	N24.3	N30
2-Jun	N23	N21	N22	N25	N26	N26	N25	NNE27	NNE26	NNE27	NNE29	NNE24	NE23	NE24	NE24	NE20	NE20	NNE22	ENE13	E11	E8	ESE6	ESE7	ESE8	NNE18.1	NNE29
3-Jun	E6	ENE8	ENE7	NE6	E6	ESE8	S8	NW5	ENE2	SE10	SSE8	SSE8	SE8	S6	S9	SSW12	SSW12	SSW13	S11	SSW8	SSW6	SSW5	S2	S3	SSE4.7	SSW13
4-Jun	SSE2	S2	SSE5	SSE10	SSE11	S12	S12	S9	SSW13	SSW16	SSW17	SSW20	SSW19	SSW19	SSW18	S17	S17	S17	SSW18	SSW19	SSW14	S9	SSE11	S11	S12.6	SSW20
5-Jun	S10	S11	SSW12	SSW14	SSW16	SSW12	SSW15	SSW15	SSW15	SSW14	SSE15	S16	SSE19	S13	S13	SSE18	SSE21	SSE21	SSW8	SW15	SE5	SE7	SSE7	S4	S12.2	SSE21
6-Jun	ESE7	WNW6	NNW9	WNW9	WNW9	WSW8	SW9	SW11	SW13	SSW10	SW10	WNW9	W11	WSW12	WSW14	WSW10	SW2	N5	NW4	WSW3	WNW5	W5	S5	S6	WSW5.9	WSW14
7-Jun	SSW6	S5	S2	SE4	SSE7	SSE9	SSE9	SSE9	SE6	SSE7	W1	NE6	NNE2	N9	NNE8	N14	N21	N23	NNE17	N16	N16	N21	N18	N15	NNE5.5	N23
8-Jun	N16	N15	NNW15	N15	N14	N19	NNW14	NNW12	NW14	NW13	NW20	NW20	NW24	WNW27	WNW28	WNW26	WNW26	WNW26	WNW23	W21	W17	W15	WNW18	W13	NW16.4	WNW28
9-Jun	W12	W9	W10	W11	W14	WNW12	NW15	WNW16	WNW14	W12	WSW12	WSW15	WSW14	WSW13	WNW11	NW10	WNW9	WNW5	WNW6	WNW9	NNE14	NNE18	NNE14	N13	WNW9.1	NNE18
10-Jun	N12	NNE11	NNE10	N8	N6	N7	NW4	WNW5	NW4	WNW4	N7	NNE22	N18	N19	N25	N23	N24	NNW22	NNW22	NNW18	N18	N19	N21	N18	N13.9	N25
11-Jun	NNW11	NNW12	N12	N17	NNW14	NNW12	NNW17	N18	N18	N19	N19	N21	N20	N22	N21	N24	N25	N20	N18	N17	NNW14	NNW11	NNW10	WNW6	N16.2	N25
12-Jun	NW8	NNW11	NNW10	NW9	NNW12	NNW12	NNW13	NNW17	NW18	N22	N25	N25	N25	N24	N25	N26	N26	N24	N23	N18	N9	NW4	NW6	NW6	N16.0	N26
13-Jun	NW5	W2	SW2	SSW2	S3	SSE2	SSE3	SSE3	SE7	SSE6	S6	SSE7	SSE8	SE13	SE14	SSE15	S12	SSW12	SSW13	SSW11	SSW9	SW6	S4	SSE5	S5.9	SSE15
14-Jun	SSE5	SSE6	SSW3	S4	SSE4	SSE2	E4	ENE1	SW1	NE5	NNE12	NNE18	N14	NNW8	N15	N20	N23	N20	NNW15	N19	N11	NNW7	N7	N7	N7.2	N23
15-Jun	N8	N6	N8	NNW6	NNW3	NNW5	NW3	SSW2	SSE3	SSE4	SE5	SSE3	ESE3	E4	NE6	E7	E9	ENE11	ENE10	ENE12	NE11	NE13	N11	NNE11	NE4.5	NE13
16-Jun	NNE12	NNE11	N15	NNE11	NNE12	NNE11	NNE10	NNE12	NE15	NNE13	NNE12	NNE17	NE15	NE18	N24	N24	N27	N26	N28	N27	N24	N17	N11	NNW8	NNE16.1	N28
17-Jun	NNW8	NNW9	NNW10	NNW9	NNW10	N12	NNE9	N9	N11	N13	N14	N15	N16	N19	N18	NNW18	NNW16	N15	NNE12	N13	NNW9	NNW6	NNW9	N13	N11.9	N19
18-Jun	N10	N12	NNW9	NW6	NNW6	NW6	WNW3	WSW3	SSW3	ESE2	NNE9	N18	N20	N21	NNW16	NNW17	NNW19	NNW13	NNW13	NNW13	NW9	W5	W5	NW5	NNW8.9	N21
19-Jun	NNW8	NNW10	NNW6	NNW5	NW5	WNW3	WNW4	N15	N18	N13	N10	N10	N8	N16	N15	NNW16	N13	N17	NNE15	N15	NNE15	NNE8	NNW5	NNW6	N10.1	N18
20-Jun	N6	N9	NNW9	N11	NNW10	NNW12	N18	N16	N18	NNE18	N17	NNE14	NNE17	NNE19	N14	NNE13	NE17	NE16	ENE13	NNE13	N16	N13	N11	N10	NNE13.1	NNE19
21-Jun	N9	N12	N10	N10	N15	N13	N13	N15	N14	N14	N14	N15	N16	N15	NNW15	NNE13	NNE11	NNE18	NNE12	N6	N7	N8	NNW7	NW5	N11.7	NNE18
22-Jun	NW4	NE2	S0	NW2	N4	N3	N5	NW3	N7	NNE10	NNE6	SE5	NE8	ENE7	SE1	NE5	NW14	N14	ENE4	SE12	SE8	SE9	SE7	SE8	NE2.5	N14
23-Jun	SE8	SSE6	SSE3	SSE6	S10	S9	SSW9	S8	S9	SSW12	SSW15	S12	WNW12	S9	WNW13	SSW20	SSE17	S12	SSE17	SSE15	SE10	SSE8	SSE4	SE6	S8.4	SSW20
24-Jun	SSE5	SE8	SE7	SSE7	SSE9	S11	SSE8	S9	S10	S9	S12	S10	SSW9	S9	SSW8	S9	SSW10	SSW9	SE10	SSE12	S7	SE15	SSE13	SSW5	S8.6	SE15
25-Jun	SSE4	SE9	SE9	SE9	SSE8	S9	S14	SSE13	SSE10	SSE7	SSE10	SSE13	S15	SSE12	SE14	SE15	SSE14	SSE17	SSE17	SSE17	SE17	SE15	SE20	SE18	SSE12.6	SE20
26-Jun	SE15	S7	S5	SSE5	S3	SW3	WSW3	S2	S4	SE8	S14	SSE21	SSE19	SSE17	SE17	SE17	SE14	SE15	SE16	SE18	SE16	ESE11	ESE11	ESE12	SE10.7	SSE21
27-Jun	ESE11	SE6	NNW3	N5	N4	NNW5	N8	NNE10	NNE8	NE10	E11	ESE12	E11	ESE12	SSE18	SE13	E11	E10	E8	E6	NE8	E6	E6	NNE1	E5.9	SSE18
28-Jun	N8	N8	N9	NNW8	N11	N11	N12	N13	N13	N15	NE15	NE13	NE16	NE18	NE20	NE19	NE21	NE20	NE17	NE16	N15	N12	NNE13	NNE15	NNE13.2	NE21
29-Jun	N13	N8	NNW7	N11	N7	N13	N12	N12	NNE11	N12	NNE15	NE17	NE15	NE15	N18	NNE17	NE17	NNE18	N22	N21	N19	NNE14	ENE8	SE11	NNE12.4	N22
30-Jun	SE9	SE11	SSE4	S0	SSW1	NW3	NW3	W4	WNW4	W3	W1	WNW5	NW7	NNW8	N13	N13	NE18	NE17	ENE14	ENE9	E6	ESE6	ESE8	SE4	NE3.0	NE18
	N3.7	N3.9	N4.7	NNW4.2	NNW3.9	NNW3.9	NNW3.7	NNW4.5	N4.4	N4.2	N4.4	NNE5.2	NNE5.6	NNE5.9	N6.8	N6.1	NNE7.2	NNE7.7	NNE5.9	NNE4.6	NNE5.1	NNE4.4	NNE3.3	NNE2.7	Diurnal Average	
	N23	N26	N27	N25	N26	N26	N25	NNE27	NNE26	NNE27	NNE29	N30	N30	N29	N29	N30	N29	N28	N28	N27	N24	N21	N21	NNE23	Diurnal Maximum	

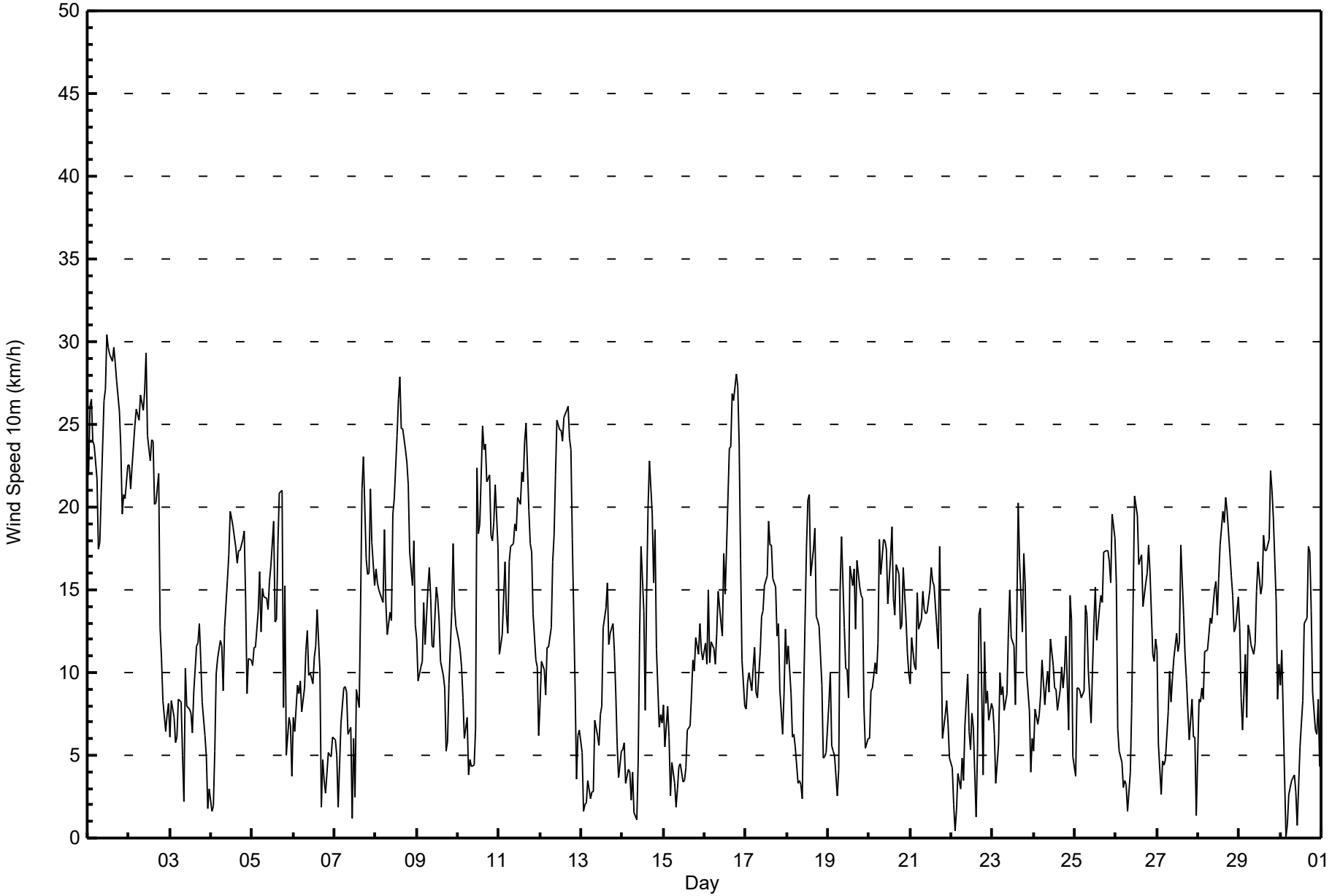
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Fort Hills - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	110	15.28	15.28
6 - 11	241	33.47	48.75
12 - 19	269	37.36	86.11
20 - 28	93	12.92	99.03
29 - 38	7	0.97	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 - June 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	2	3	3	2	2	5	19	15	8	4	3	8	9	15	6	110
6 - 11	41	17	7	7	14	11	22	26	26	12	4	2	4	9	9	30	241
12 - 19	85	30	19	4	0	3	18	20	14	24	2	6	6	7	3	28	269
20 - 28	55	12	8	0	0	0	1	3	0	2	0	0	1	6	3	2	93
29 - 38	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	193	62	37	14	16	16	46	68	55	46	10	11	19	31	30	66	720

Total Number of Valid Hours: 720

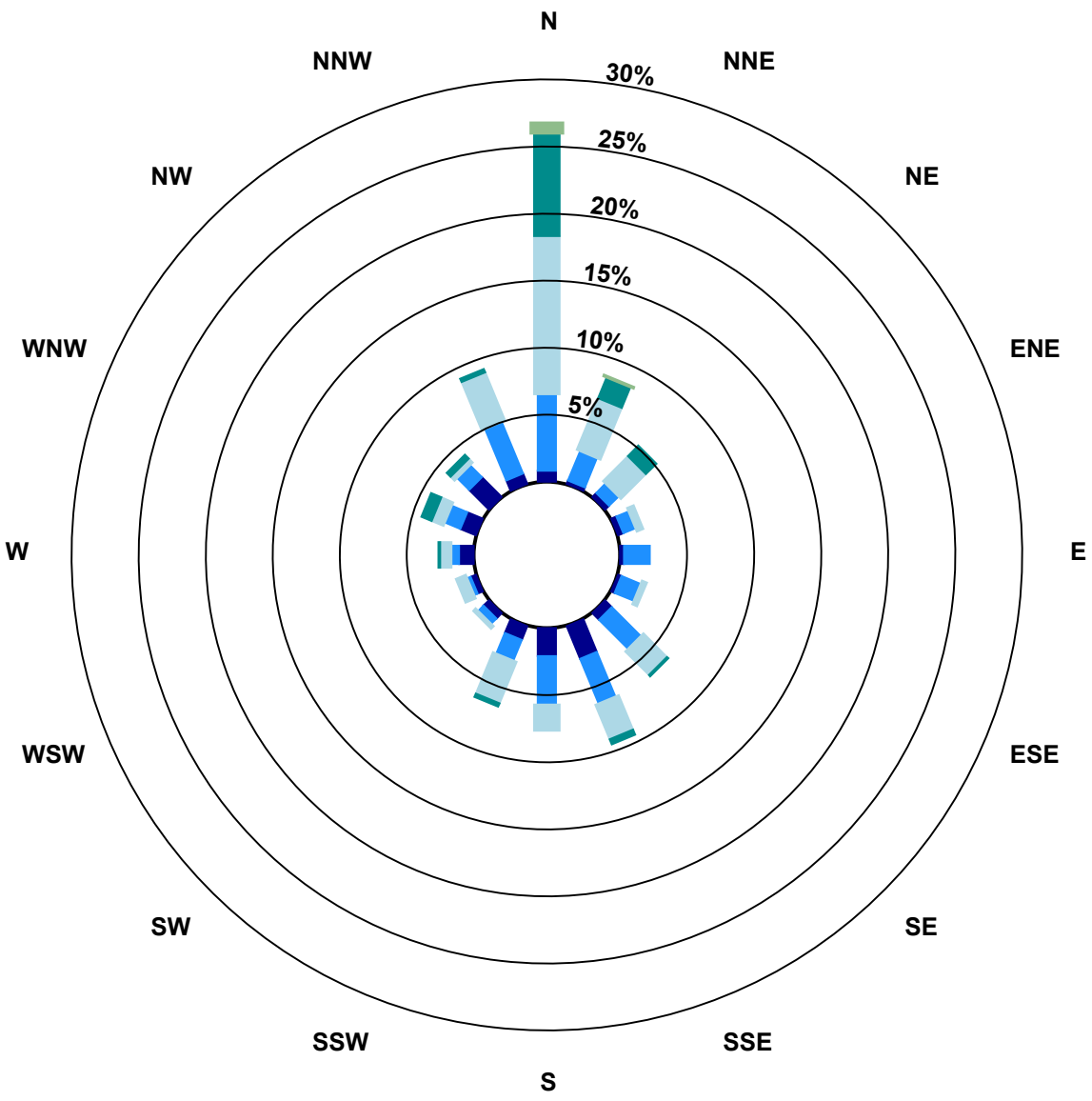
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 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

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 10m (WS10) - km/h

Fort Hills - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9 km/h on Jun 10 11:00

Minimum Value: 1 km/h on Jun 12 23:00

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

Direction of Maximum Speed: 356 deg on Jun 1 12:00
Direction of Maximum Daily Speed Average: 0.7 deg on Jun 1

Direction of Minimum Speed: 189 deg on Jun 30 04:00

Direction of Minimum Daily Speed Average: 2.5 deg on Jun 22

Monthly Average Direction: 6.3 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-Jun	358	354	356	354	357	350	343	350	353	355	353	356	358	356	359	360	3	11	12	13	21	20	16	14	0.7
2-Jun	8	11	2	1	3	4	9	12	16	24	25	32	44	48	46	50	37	31	64	90	101	102	114	108	28.2
3-Jun	84	71	74	47	87	110	169	321	76	132	154	158	135	170	189	200	205	200	191	202	198	197	187	178	160.7
4-Jun	165	170	162	153	149	170	177	187	208	209	198	201	196	196	193	191	181	188	207	205	194	172	163	180	189.0
5-Jun	186	179	192	207	207	210	209	203	201	195	163	172	160	181	190	164	165	159	196	220	132	127	158	176	183.0
6-Jun	115	293	329	282	285	248	234	221	216	209	236	285	259	254	249	239	226	357	315	237	286	281	190	188	250.9
7-Jun	209	183	169	146	160	165	154	153	135	151	272	39	29	350	16	11	5	7	22	359	354	1	9	10	18.5
8-Jun	4	353	345	350	2	357	345	330	321	319	319	312	304	294	289	288	288	289	293	281	269	280	285	276	308.5
9-Jun	268	270	274	266	278	284	292	300	291	274	247	258	237	242	292	312	295	297	295	284	13	18	13	6	291.9
10-Jun	10	32	27	351	1	354	323	295	326	285	359	16	9	7	357	5	5	344	348	346	354	357	360	353	358.6
11-Jun	341	337	352	353	342	328	339	0	356	351	351	3	6	8	359	352	352	350	355	354	348	343	330	303	351.3
12-Jun	321	329	327	315	330	336	340	343	348	350	353	355	360	358	359	1	2	5	2	1	353	313	308	316	350.4
13-Jun	320	278	227	211	176	151	159	153	131	155	182	162	165	146	145	155	185	211	208	198	193	221	191	150	176.3
14-Jun	163	161	196	178	166	147	81	66	228	38	19	13	3	347	354	3	10	353	348	5	356	329	1	351	4.5
15-Jun	350	354	0	329	342	348	313	196	164	154	131	155	118	90	39	82	95	69	72	59	43	36	3	30	44.4
16-Jun	24	25	5	23	15	27	27	27	34	26	30	26	35	39	9	5	4	6	358	357	6	11	352	341	13.5
17-Jun	340	336	334	341	348	354	12	353	8	0	1	11	1	8	9	345	345	4	18	3	345	339	340	352	356.3
18-Jun	352	356	344	315	328	322	296	254	198	122	12	360	11	357	327	340	343	345	327	338	324	276	267	309	340.5
19-Jun	328	339	329	334	317	295	285	359	2	357	3	10	358	5	349	327	358	9	18	9	17	17	344	344	355.6
20-Jun	6	355	346	349	347	347	5	9	9	17	8	30	23	14	8	21	39	34	67	32	3	357	359	0	12.6
21-Jun	1	355	9	6	6	7	7	2	359	358	9	4	10	11	339	27	18	19	25	357	355	350	330	305	4.2
22-Jun	309	55	186	321	350	2	351	322	0	16	31	131	51	76	131	52	318	355	65	138	146	134	138	130	48.5
23-Jun	146	168	166	155	176	183	192	189	174	194	195	191	294	175	288	205	168	187	168	149	144	151	162	133	181.3
24-Jun	162	140	141	152	166	169	157	176	191	181	190	185	198	179	194	182	212	200	136	153	173	145	152	192	171.4
25-Jun	162	142	131	146	155	172	169	162	162	161	154	164	170	162	146	141	150	152	156	152	138	136	144	144	152.2
26-Jun	144	180	177	162	173	228	245	174	176	137	169	158	148	151	139	138	140	131	141	139	130	120	113	121	144.8
27-Jun	122	143	338	10	358	338	351	18	21	46	88	102	81	106	150	131	101	98	95	80	55	80	95	12	84.9
28-Jun	350	355	351	337	352	355	6	1	350	8	34	50	44	38	39	44	39	41	42	37	2	6	17	15	21.3
29-Jun	358	349	337	360	354	5	359	357	26	352	31	42	50	41	8	26	43	17	1	356	1	12	75	136	16.2
30-Jun	144	146	160	189	192	314	316	280	294	280	273	300	306	335	351	349	47	50	57	78	89	103	111	128	43.9
	7.4	1.6	352.5	346.3	345.8	344.5	340.7	345.9	353.6	1.8	10.6	17.5	15.7	15.2	356.9	8.7	14.2	14.9	18.5	13.6	15.2	22.6	24.1	22.3	
	Diurnal Average																								

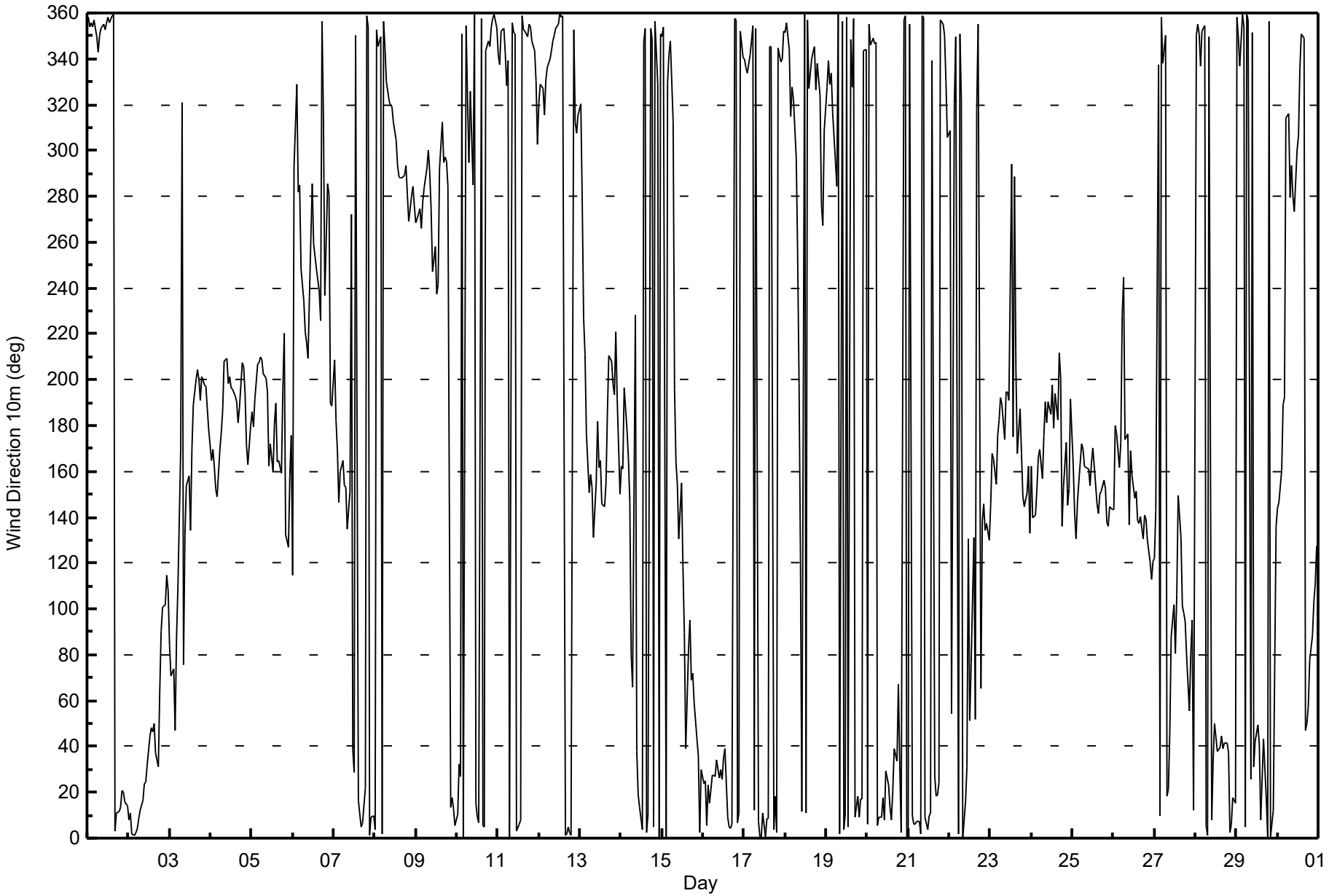
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Fort Hills - June 2026



Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 100 deg on Jun 14 09:00

Minimum Value: 6 deg on Jun 23 21:00

Percentiles: P_1 = 7 P_{10} = 11 Q_1 = 13 Median = 16 Q_3 = 23 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-Jun	15	16	16	16	16	15	15	16	17	17	15	17	17	16	17	15	15	13	12	13	10	10	11	11	17
2-Jun	13	12	13	15	14	14	13	12	11	14	12	15	13	12	14	11	12	11	23	23	22	20	15	20	23
3-Jun	20	16	19	31	27	22	31	24	70	14	28	26	23	34	18	16	15	11	12	17	14	19	42	24	70
4-Jun	57	76	19	9	7	8	9	21	15	16	17	14	16	17	17	22	18	17	13	10	9	12	7	14	76
5-Jun	9	10	7	7	7	10	10	10	11	12	19	15	14	25	23	10	10	10	27	16	58	16	40	56	58
6-Jun	19	37	22	12	16	28	14	8	7	8	24	16	13	12	10	14	89	29	21	36	18	16	28	14	89
7-Jun	32	24	74	35	11	11	13	12	31	54	96	39	87	34	34	19	15	13	24	15	14	13	12	13	96
8-Jun	15	16	13	15	13	16	13	12	13	13	13	15	16	14	13	14	14	13	14	15	13	14	14	22	22
9-Jun	13	15	14	15	14	16	18	17	19	22	19	15	21	20	36	23	19	33	23	13	32	10	11	13	36
10-Jun	15	13	12	15	25	18	38	34	44	49	52	12	12	14	17	17	16	17	18	15	16	14	15	16	52
11-Jun	15	16	19	15	17	21	15	14	16	16	16	16	15	15	16	16	16	16	14	14	14	14	19	12	21
12-Jun	18	12	10	10	12	12	13	14	15	16	17	17	18	18	16	17	17	15	16	13	13	30	7	12	30
13-Jun	16	53	22	50	18	33	34	22	18	28	44	30	28	27	22	13	27	26	13	8	7	49	29	17	53
14-Jun	17	17	61	29	34	65	35	83	100	87	22	15	18	30	30	18	15	16	19	13	14	14	11	11	100
15-Jun	13	20	11	21	48	20	31	64	66	61	60	78	77	77	52	35	27	22	20	12	11	10	15	15	78
16-Jun	12	17	13	15	11	15	12	13	11	17	19	16	18	18	21	19	18	16	17	17	15	12	14	12	21
17-Jun	12	14	8	8	11	16	17	18	18	19	23	21	20	20	19	16	17	19	18	20	14	14	15	13	23
18-Jun	13	13	14	15	12	14	23	24	43	72	41	17	14	18	18	17	15	16	14	15	14	22	20	14	72
19-Jun	13	13	13	19	21	35	34	16	14	22	28	27	32	17	18	15	21	15	15	12	10	8	28	16	35
20-Jun	10	12	11	12	18	14	14	13	16	16	17	25	17	18	26	20	17	15	14	16	14	15	15	15	26
21-Jun	13	13	14	17	13	11	13	14	14	15	13	15	18	16	16	22	16	14	24	29	20	16	12	24	29
22-Jun	35	80	88	49	11	46	24	54	25	20	47	56	46	54	98	56	34	22	70	12	10	12	15	11	98
23-Jun	21	23	51	17	16	14	12	18	17	16	23	34	40	23	45	36	14	14	15	7	6	10	19	15	51
24-Jun	40	13	11	12	13	9	15	18	17	24	19	25	40	33	47	35	25	18	74	18	55	10	27	69	74
25-Jun	66	11	8	11	8	12	9	12	24	35	28	27	26	25	25	20	21	13	12	10	8	9	7	7	66
26-Jun	7	18	15	17	53	40	35	71	38	37	30	16	22	25	20	21	15	14	11	12	8	18	15	12	71
27-Jun	12	44	62	21	24	17	14	18	25	27	34	27	24	24	18	17	28	26	23	22	8	20	14	83	83
28-Jun	14	11	28	13	14	14	15	15	19	20	16	21	17	17	18	19	14	12	10	9	17	14	8	8	28
29-Jun	15	15	26	10	14	11	14	14	23	20	18	14	20	24	24	26	14	27	18	17	14	19	33	11	33
30-Jun	15	13	51	95	89	18	19	22	37	58	96	39	49	46	25	31	19	13	23	21	23	21	11	42	96
	66	80	88	95	89	65	38	83	100	87	96	78	87	77	98	56	89	33	74	36	58	49	42	83	
	Diurnal Maximum																								

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS25
WASKŌW OHCI PIMÂTISIWIN
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WASKŌW OHCI PIMÂTISIWIN (AMS25)
JUNE 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	25.9	0	2.9	0
H2S(ppb) Average	626	38	94	92.22	1.9	0	0.4	0
Temperature 2 m (C) Average	720	0	0	100	31.4	0	23.7	0
Relative Humidity (%) Average	720	0	0	100	98.9	-	96.1	-
Wind Speed 10 m (km/h) Average	716	0	4	99.44	19	0	13	0
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 - WASKŌW OHCI PIMÂTISIWIN (AMS25)
JUNE 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	0.51	2	-	0	0	0	0	0.1	0.9	25.9
H2S (ppb) Average	626	0.2	0.2	-	0	0	0.1	0.1	0.2	0.4	1.9
Temperature 2 m (C) Average	720	16.23	5.9	-	5.7	9.7	11.6	15	19.9	25.1	31.4
Relative Humidity (%) Average	720	65.86	21.1	-	25.2	34.5	49.1	68.3	82.7	94.4	98.9
Wind Speed 10 m (km/h) Average	716	5.6	3	-	0	1	3	5	8	10	19
Wind Direction 10 m (deg) Average	716	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - WASKŌW OHCI PIMÂTISIWIN (AMS25)

JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
SO2	04 Jun 2026 15:00	04 Jun 2026 15:00	1	Maintenance - sample manifold cleaned
H2S	21 Jun 2026 05:00	23 Jun 2026 11:00	55	Analyzer Failure - UV Lamp Failure
H2S	23 Jun 2026 12:00	23 Jun 2026 12:00	1	Maintenance - analyzer replaced
Wind Speed, Wind Direction	04 Jun 2026 03:00	04 Jun 2026 04:00	2	Flat line in sensor output signal
Wind Speed, Wind Direction	15 Jun 2026 04:00	15 Jun 2026 05:00	2	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Waskow ohci Pimatisiwin - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 25.9 ppb on Jun 30 11:00 Maximum Daily Average: 2.9 ppb on Jun 30

Minimum Value: 0.0 ppb on Jun 1 03:00 Minimum Daily Average: 0.0 ppb on Jun 8
Maximum Diurnal Average: 2.2 ppb at hour 10 Minimum Diurnal Average: 0.0 ppb at hour 2
Monthly Average: 0.51 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} = 8.6

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-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	C	C	C	C	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1
2-Jun	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
3-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.4	1.0	6.8	6.1	3.9	2.6	0.7	0.2	2.2	1.7	0.2	0.0	0.0	1.2	6.8
4-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.1	1.3	1.4	0.1	0.0	0.1	0.2	1.1	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.4
5-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.7	3.0	3.2	3.6	6.4	3.1	4.5	3.2	8.5	7.2	2.1	1.3	0.7	0.4	0.1	2.1	8.5
6-Jun	0.0	0.0	0.0	0.2	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
7-Jun	Z	0.0	0.0	0.0	0.0	0.1	0.0	0.7	1.2	2.9	6.7	4.4	2.4	2.1	1.4	0.6	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.0	6.7
8-Jun	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
9-Jun	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
10-Jun	0.0	0.0	0.0	Z	0.0	0.0	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	0.0	0.2
11-Jun	0.0	0.0	0.0	0.0	Z	0.6	0.5	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	0.0	0.1	0.1	0.6
12-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
13-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.2	0.1	0.0	0.0	0.7	1.9	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	1.9
14-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.4	0.4	0.2	0.4	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.4
15-Jun	0.2	0.1	Z	0.1	0.2	0.2	0.2	0.3	4.8	5.8	2.8	0.7	0.4	0.4	0.6	0.6	0.6	0.6	0.3	0.2	0.1	0.0	0.0	0.0	0.8	5.8
16-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	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	0.0	0.3
17-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
18-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0	0.1	0.5
19-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.3
20-Jun	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
21-Jun	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
22-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.3	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.4	0.7	0.3	0.1	0.0	0.0	0.1	0.7
23-Jun	0.1	0.0	0.0	0.0	Z	0.0	0.0	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.1	0.2	0.9	0.5	0.1	0.1	0.0	0.0	0.1	0.9
24-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.1	1.9	3.5	2.4	0.9	1.0	1.9	2.8	1.9	2.3	0.6	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.9	3.5
25-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.3	1.0	6.3	11.9	9.7	0.4	0.6	0.7	1.4	1.1	1.3	0.9	1.2	0.3	0.1	0.1	0.1	0.7	1.6	11.9
26-Jun	1.8	Z	0.1	0.1	0.0	0.0	0.1	9.3	14.1	12.6	4.8	2.5	4.4	2.6	2.4	2.4	1.2	0.1	0.0	0.0	0.0	0.1	0.1	0.1	2.6	14.1
27-Jun	0.1	0.0	Z	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.1	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	0.1	0.4
28-Jun	0.0	0.0	0.0	Z	0.1	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	0.1	0.1	0.0	0.0	0.0	0.3
29-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	8.0	5.2	2.7	0.7	8.0
30-Jun	0.4	0.0	0.0	0.0	0.0	0.0	Z	0.4	6.4	25.4	25.9	5.8	0.7	0.2	0.2	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	2.9	25.9
	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.6	1.3	2.2	1.9	0.7	0.6	0.8	0.6	0.6	0.3	0.4	0.4	0.2	0.1	0.3	0.2	0.1	Diurnal Average	
	1.8	0.1	0.1	0.2	0.2	0.6	0.5	9.3	14.1	25.4	25.9	5.8	4.4	6.8	6.1	4.5	3.2	8.5	7.2	2.2	1.7	8.0	5.2	2.7	Diurnal Maximum	

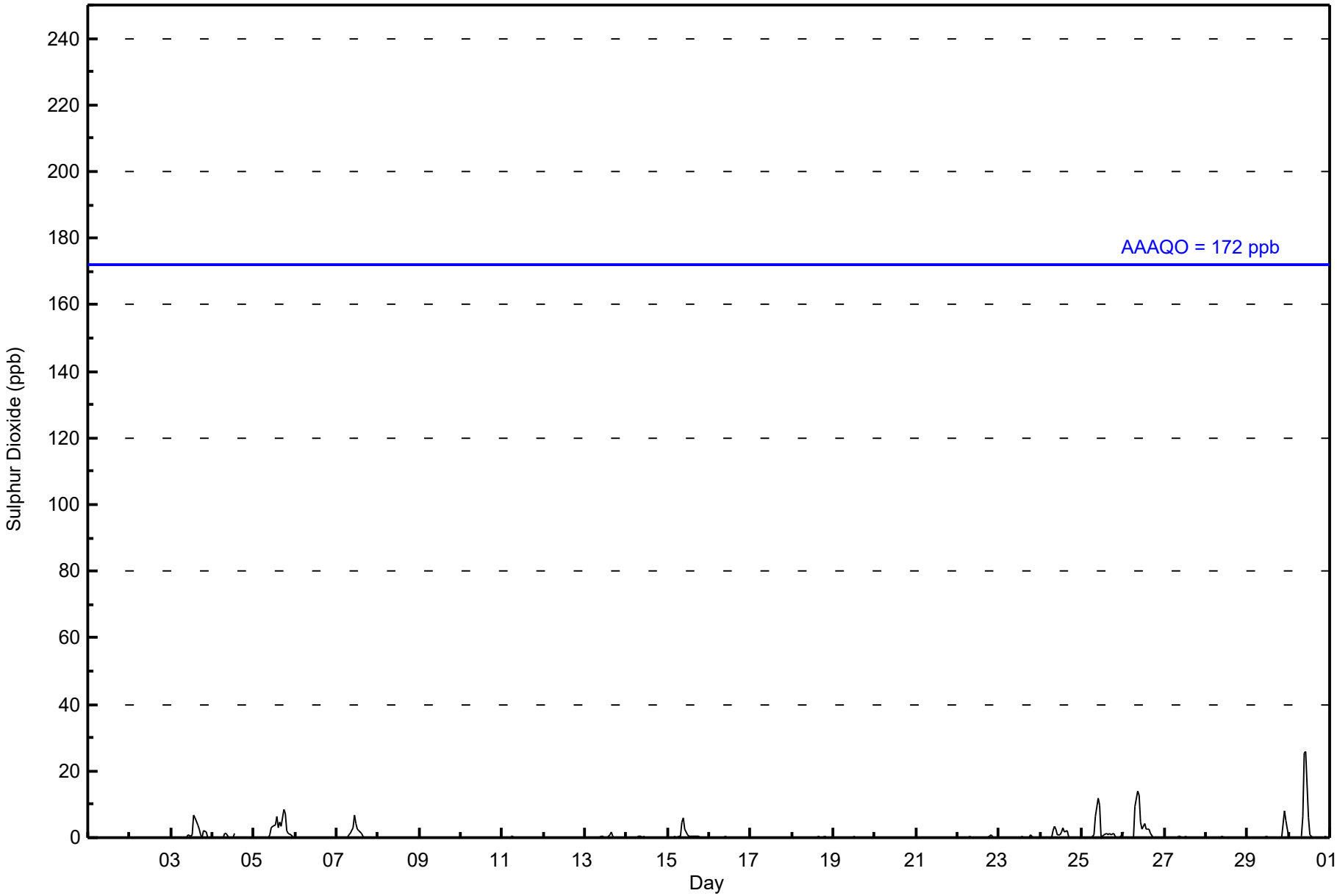
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Waskow ohci Pimatisiwin - June 2026



Sulphur Dioxide (SO_2) - ppb

Waskow ohci Pimatisiwin - June 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

Waskow ohci Pimatisiwin - June 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	120	58	34	12	17	23	51	82	29	21	7	12	25	50	53	83	677
11 - 20	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
21 - 60	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
61 - 110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111 - 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	120	58	34	12	18	24	51	85	29	21	7	12	25	50	53	83	682

Total Number of Valid Hours: 682

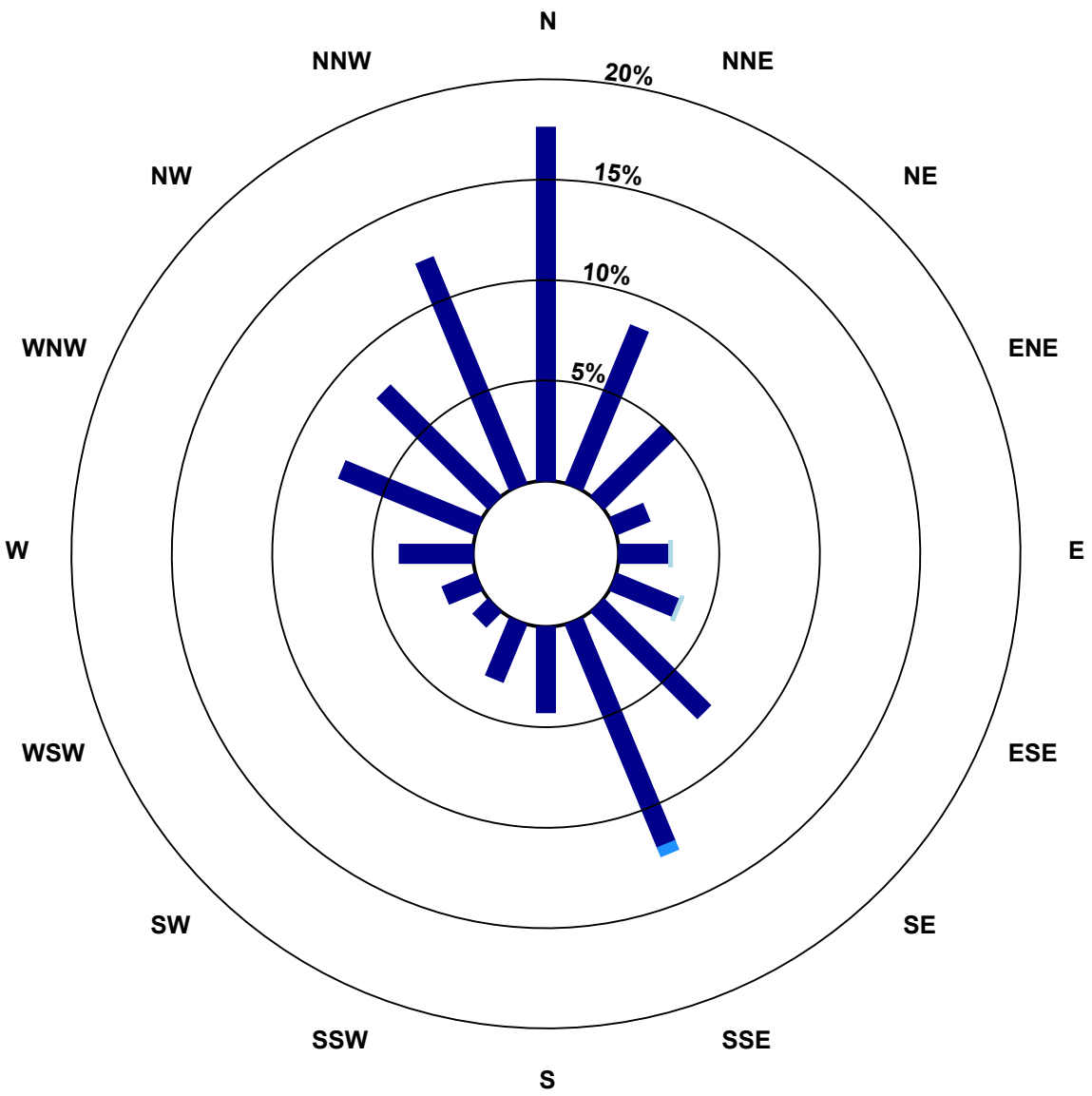
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Waskow ohci Pimatisiwin



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

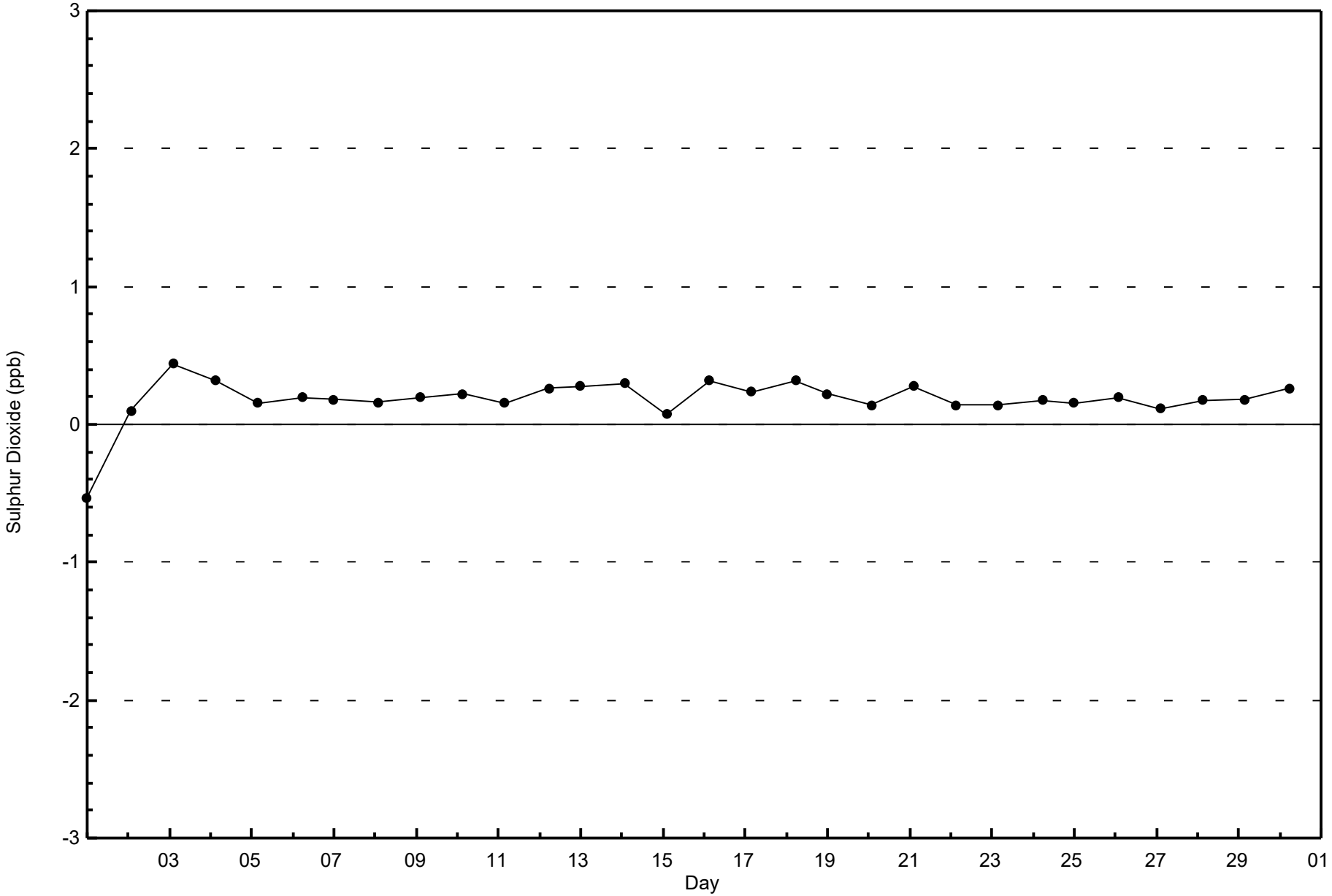
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Waskow ohci Pimatisiwin - June 2026

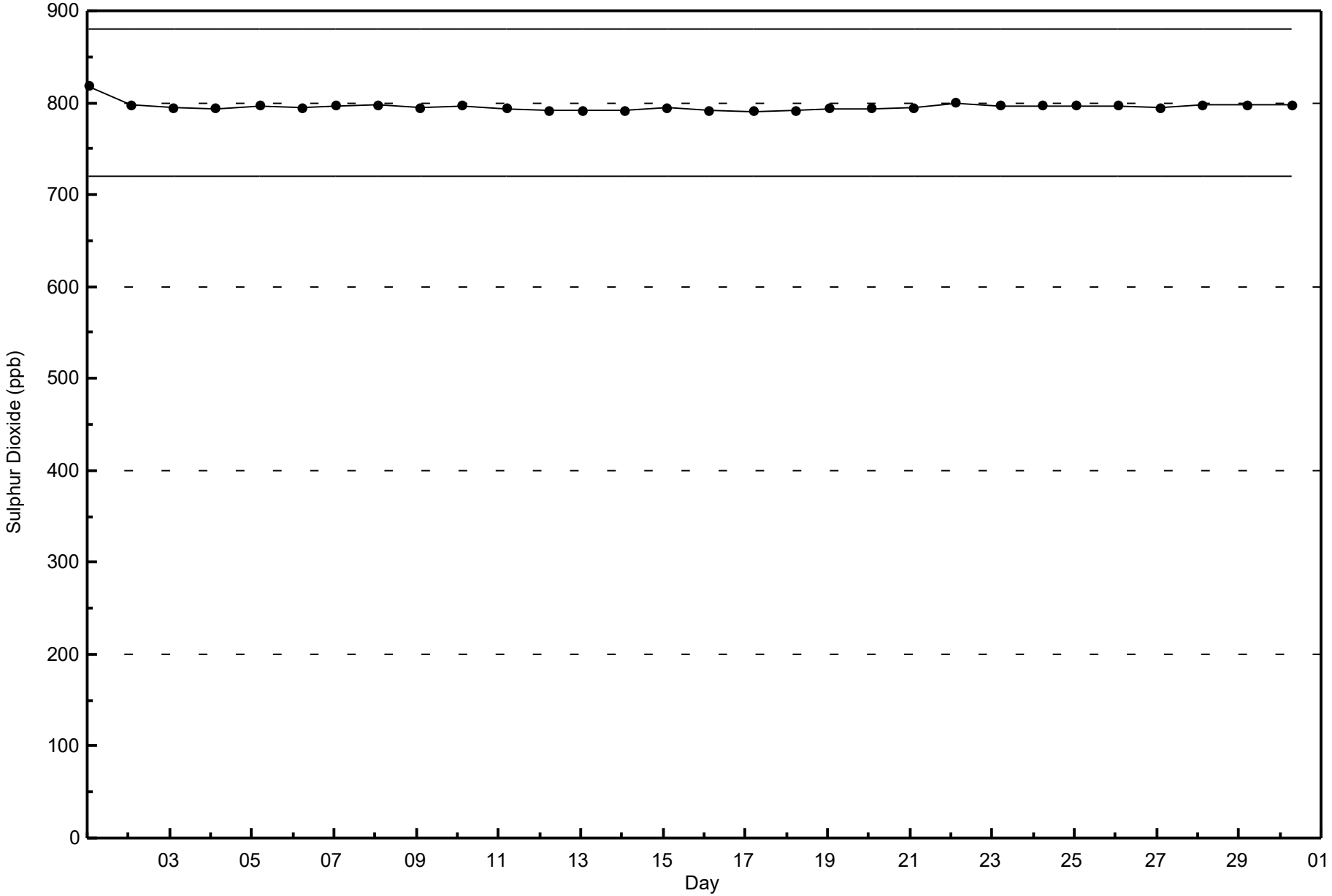


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Waskow ohci Pimatisiwin - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Waskow ohci Pimatisiwin - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.9 ppb on Jun 24 08:00 Maximum Daily Average: 0.4 ppb on Jun 24

Minimum Value: 0.0 ppb on Jun 16 15:00 Minimum Daily Average: 0.1 ppb on Jun 2
Maximum Diurnal Average: 0.4 ppb at hour 6 Minimum Diurnal Average: 0.1 ppb at hour 17
Monthly Average: 0.20 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.4 P_{99} = 1.4

Hours in Service:	720
Hours of Data:	626
Hours of Missing Data:	94
Hours of Calibration:	38
Percent Operational Time:	92.2

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-Jun	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	0.0	0.1	0.1
2-Jun	0.0	0.0	Z	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	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1
3-Jun	0.1	0.1	0.0	Z	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.3	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.3
4-Jun	0.2	0.2	0.2	0.2	Z	0.4	0.5	0.8	0.5	0.2	0.1	C	C	C	C	C	C	0.2	0.1	0.0	0.0	0.0	0.3	0.5	--	0.8
5-Jun	0.8	0.8	0.2	0.1	0.1	Z	0.1	0.1	0.0	0.3	0.4	0.2	0.1	0.1	0.1	0.1	0.2	0.6	0.6	0.4	0.5	0.5	0.4	0.3	0.3	0.8
6-Jun	Z	0.2	0.3	0.6	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.6
7-Jun	0.1	Z	0.2	0.2	0.4	1.0	0.6	0.8	0.5	0.3	0.3	0.2	0.3	0.3	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.3	1.0
8-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
9-Jun	0.1	0.1	0.1	Z	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
10-Jun	0.2	0.2	0.2	0.2	Z	0.2	0.2	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	0.0	0.1	0.2
11-Jun	0.1	0.1	0.0	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
12-Jun	Z	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2
13-Jun	0.3	Z	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.3
14-Jun	0.3	0.3	Z	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3
15-Jun	0.3	0.3	0.4	Z	0.5	0.5	0.4	0.4	1.4	0.8	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	1.4
16-Jun	0.2	0.2	0.1	0.1	Z	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	0.2
17-Jun	0.2	0.2	0.2	0.2	0.3	Z	0.4	0.3	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.4
18-Jun	Z	0.3	0.3	0.3	0.5	1.0	0.6	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	1.0
19-Jun	0.2	Z	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.4
20-Jun	0.3	0.2	Z	0.3	0.3	0.4	0.4	0.3	0.3	0.2	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	0.4
21-Jun	0.2	0.2	0.3	Z	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	--	0.3
22-Jun	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	--	--
23-Jun	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	M	C	C	C	C	0.3	0.2	0.4	0.2	0.1	0.1	0.2	0.5	--	0.5
24-Jun	Z	0.8	0.8	0.8	0.8	1.3	1.3	1.9	0.8	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.4	1.9
25-Jun	0.3	Z	0.8	0.7	0.8	0.8	0.7	0.7	0.8	1.5	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.7	0.4	1.5
26-Jun	1.0	0.6	Z	0.5	0.5	0.4	0.2	0.8	1.6	1.5	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.4	1.6
27-Jun	0.1	0.1	0.1	Z	0.5	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	0.3	0.2	0.2	0.2	0.2	0.5
28-Jun	0.2	0.3	0.4	0.5	Z	0.6	0.5	0.6	0.5	0.4	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	0.2	0.6
29-Jun	0.1	0.2	0.2	0.3	0.4	Z	0.5	0.5	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.2	0.5
30-Jun	0.2	Z	0.3	0.3	0.3	0.3	0.3	0.2	0.8	1.5	1.6	0.4	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.3	1.6
	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.4	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	0.1	0.2	Diurnal Average	
	1.0	0.8	0.8	0.8	0.8	1.3	1.3	1.9	1.6	1.5	1.6	0.4	0.3	0.3	0.4	0.2	0.3	0.6	0.6	0.4	0.5	0.5	0.4	0.7	Diurnal Maximum	

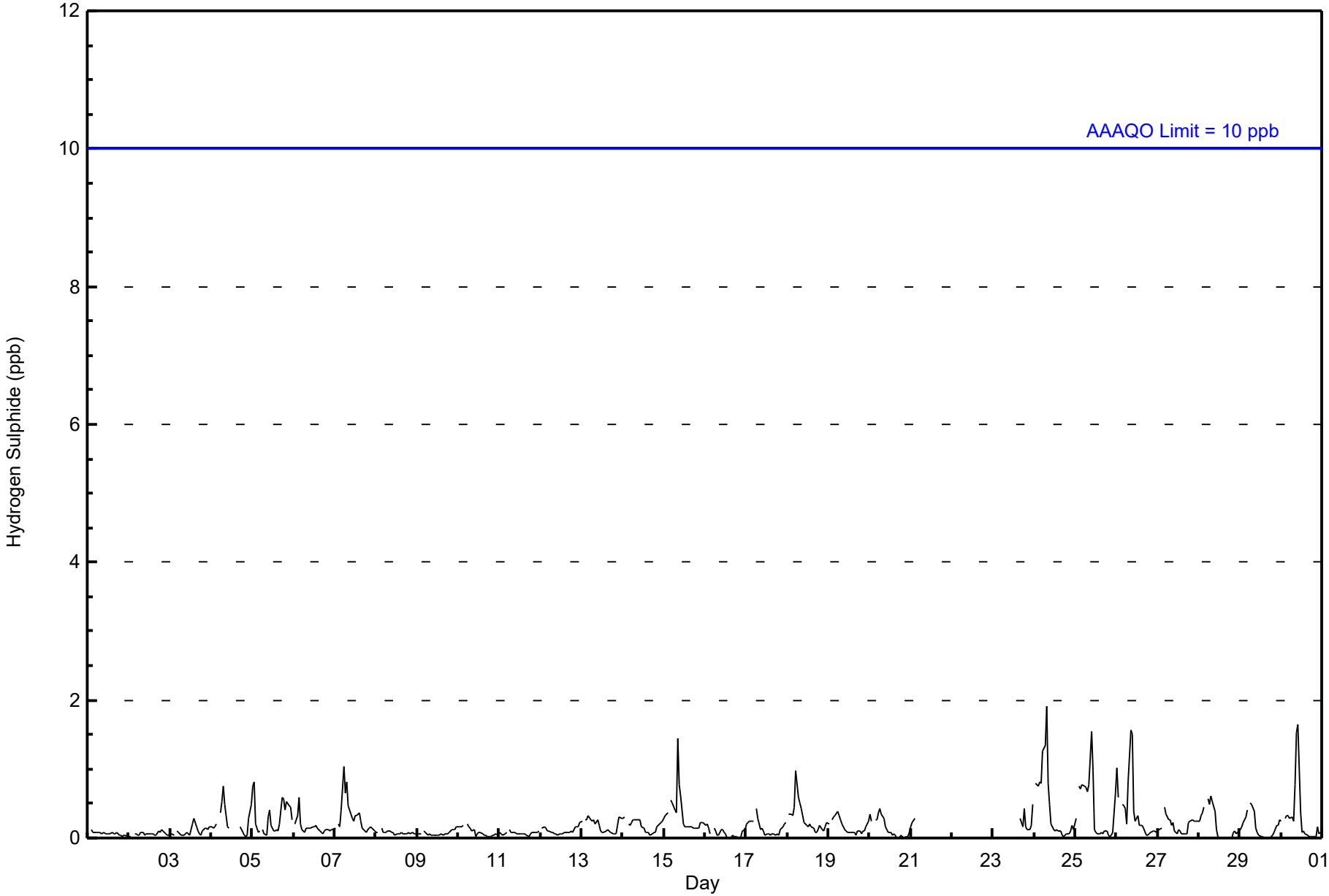
Z - zerospan C - Calibration M - Maintenance AF - Analyzer Failure
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Waskow ohci Pimatisiwin - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	626	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: 626

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Waskow ohci Pimatisiwin - June 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 2	117	51	29	12	18	23	49	76	22	15	5	10	22	48	49	77	623
3 - 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 - 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 - 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	117	51	29	12	18	23	49	76	22	15	5	10	22	48	49	77	623

Total Number of Valid Hours: 623

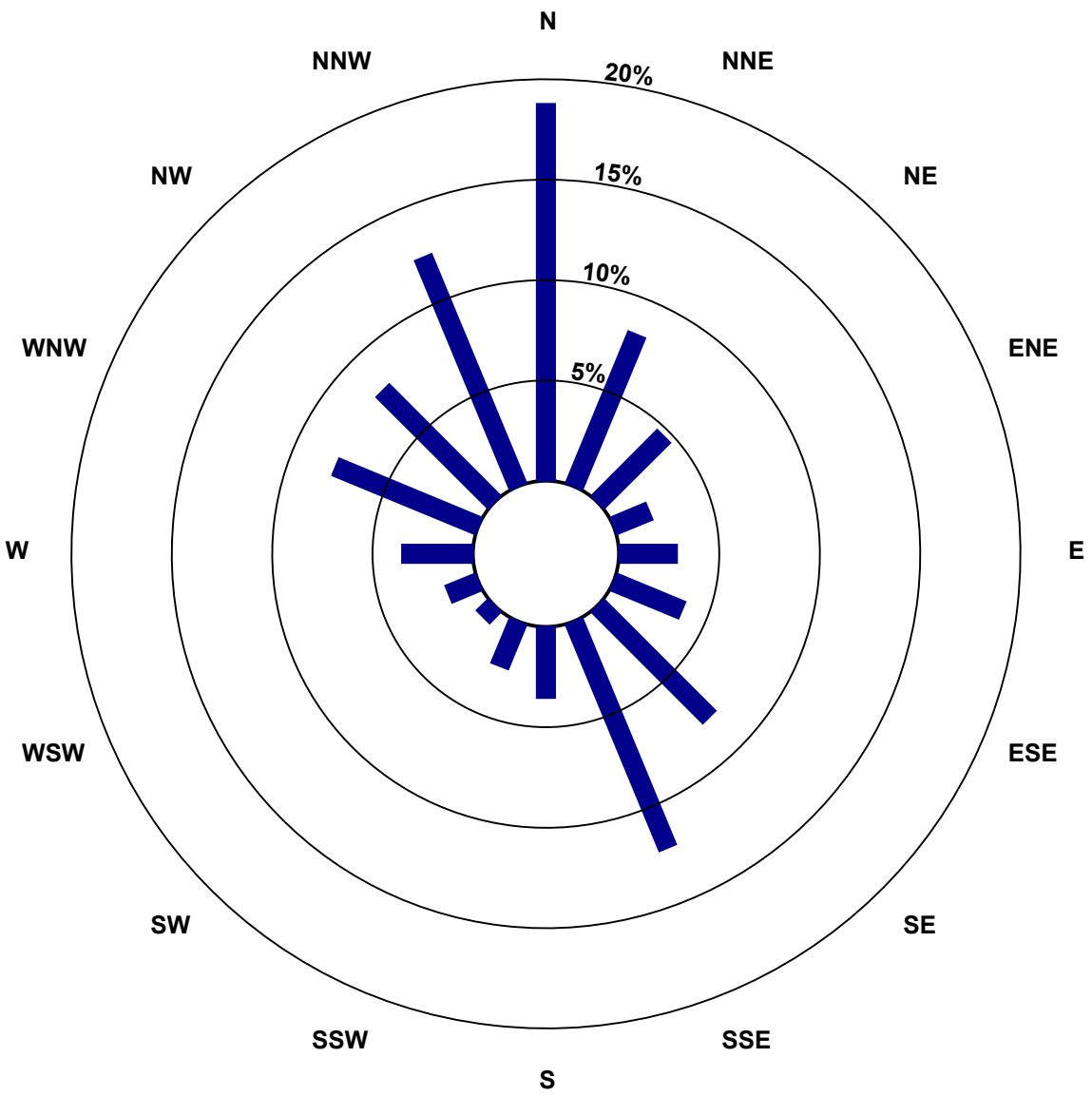
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H_2S) - ppb

Waskow ohci Pimatisiwin



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

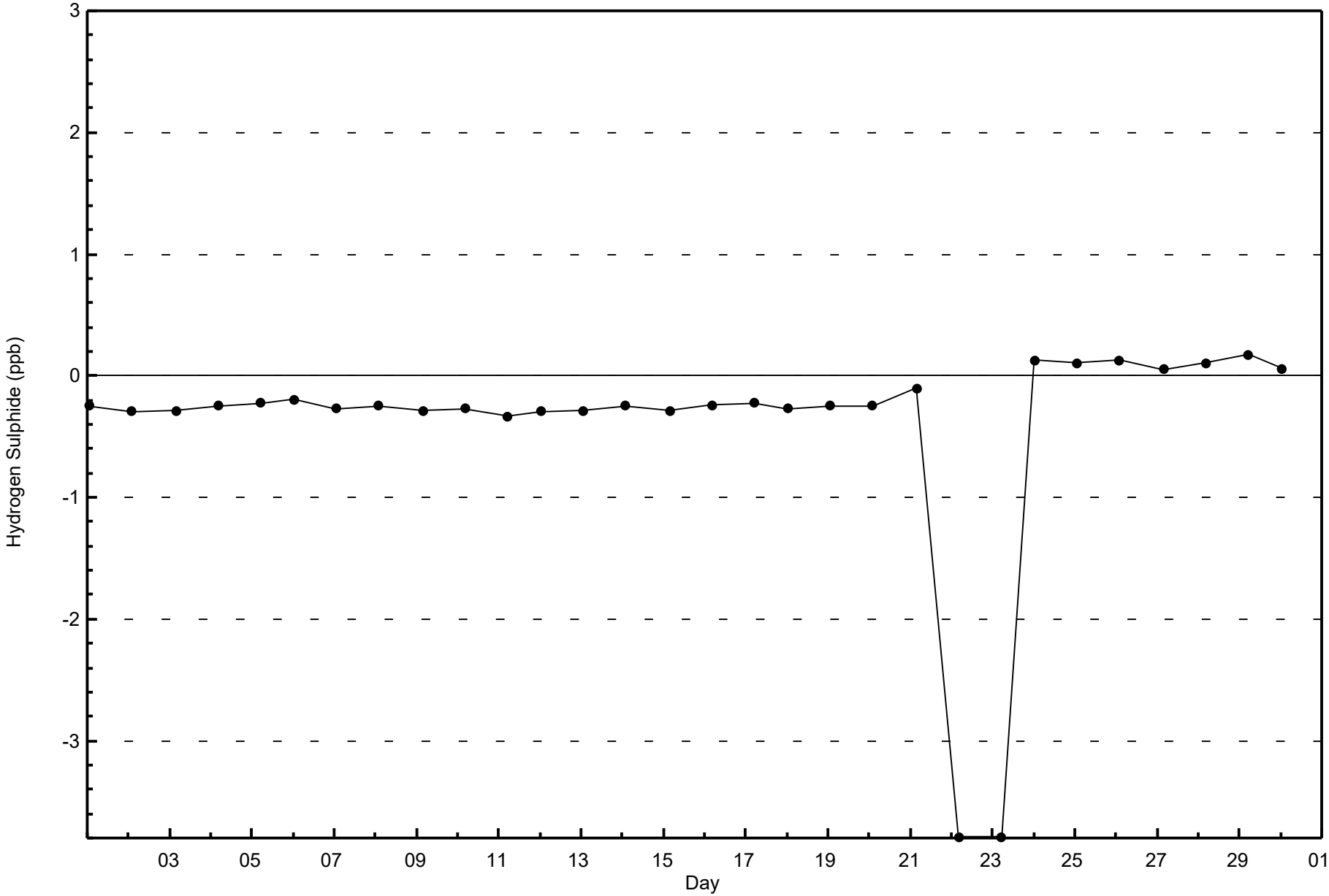
Total Number of Valid Hours: 623

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Waskow ohci Pimatisiwin - June 2026

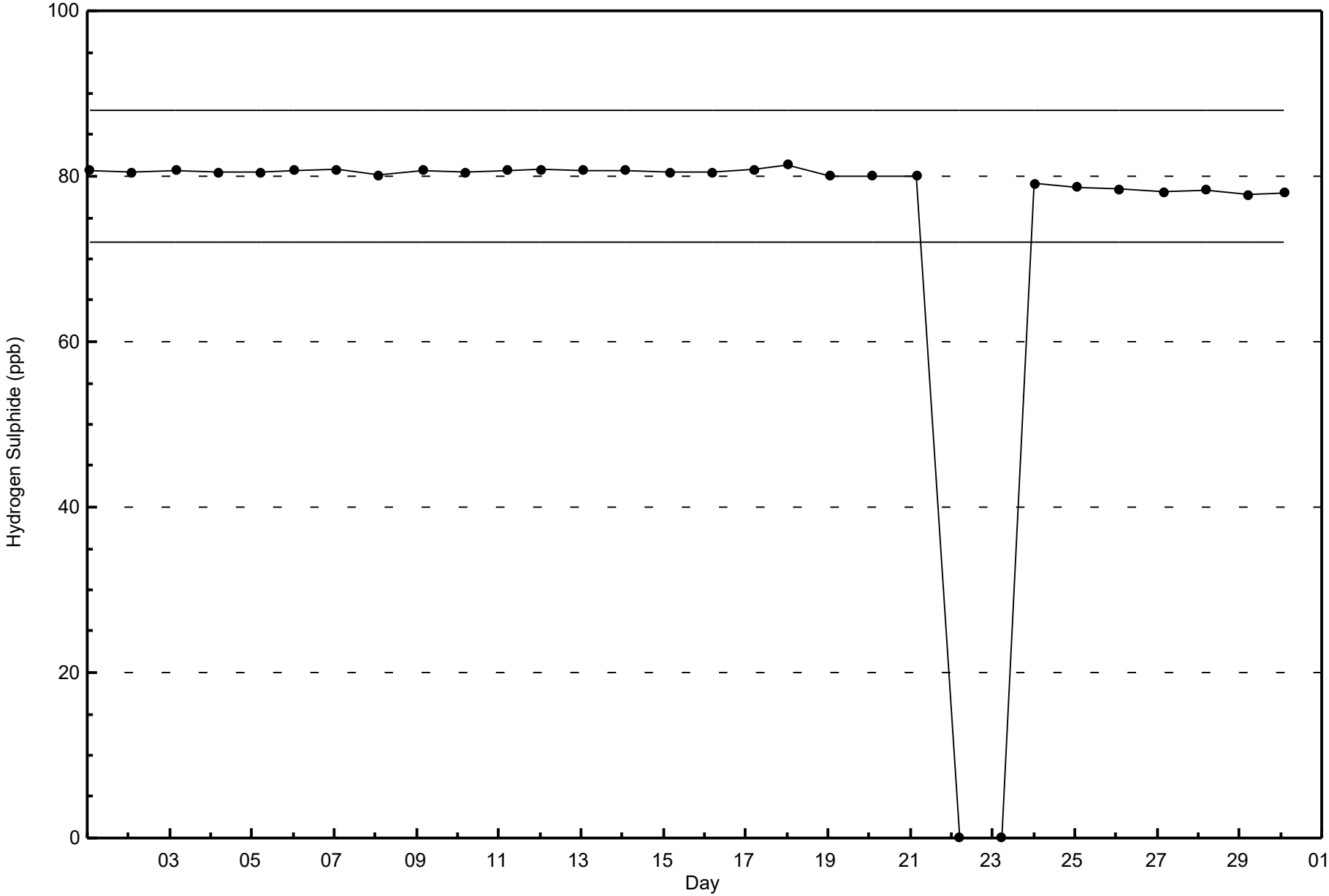


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Waskow ohci Pimatisiwin - June 2026



Maximum Value: 31.4 C on Jun 28 16:00

Maximum Daily Average: 23.7 C on Jun 29

Minimum Value: 5.7 C on Jun 13 04:00

Minimum Daily Average: 9.6 C on Jun 11

Maximum Diurnal Average: 20.8 C at hour 16

Minimum Diurnal Average: 10.3 C at hour 4

Monthly Average: 16.23 C

Percentiles: P_1 = 7.0 P_{10} = 9.7 Q_1 = 11.6 Median = 15.0 Q_3 = 19.9 P_{90} = 25.1 P_{99} = 30.6

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

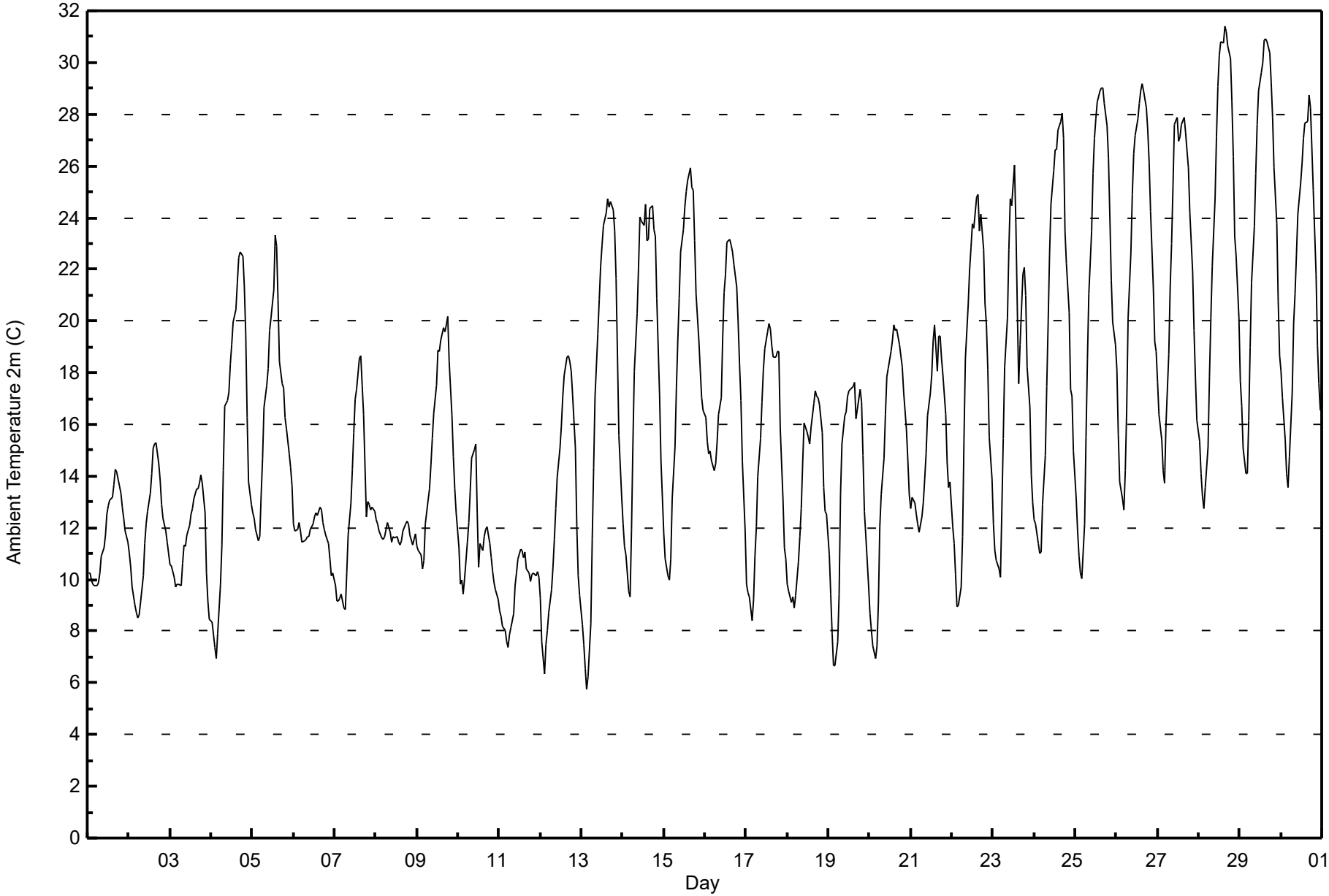
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	10.3	10.3	10.0	9.8	9.8	9.7	9.9	10.3	10.9	11.2	11.7	12.5	12.9	13.0	13.2	13.7	14.2	14.2	13.6	13.3	12.8	12.4	11.9	11.5	11.8	14.2
2-Jun	11.0	10.5	9.7	9.0	8.7	8.5	8.6	9.1	10.2	11.4	12.2	12.6	13.3	14.1	15.1	15.2	15.3	14.5	13.9	12.9	12.4	11.9	11.4	11.0	11.8	15.3
3-Jun	10.6	10.5	10.1	9.7	9.8	9.8	9.8	10.6	11.3	11.3	11.7	12.1	12.5	12.7	13.1	13.5	13.5	13.7	14.1	13.7	12.6	10.2	9.2	8.5	11.4	14.1
4-Jun	8.3	7.9	7.4	7.0	7.9	9.8	11.3	14.2	16.7	16.9	17.3	18.4	19.1	20.0	20.4	21.5	22.5	22.7	22.5	21.3	19.5	16.2	13.8	12.9	15.6	22.7
5-Jun	12.6	12.4	11.9	11.5	11.7	13.3	14.7	16.7	17.5	18.2	19.6	20.1	21.2	23.3	22.9	20.8	18.5	17.5	17.4	16.3	15.9	14.8	14.3	13.6	16.5	23.3
6-Jun	12.1	11.9	11.9	12.2	11.9	11.5	11.5	11.6	11.7	11.7	11.9	12.2	12.4	12.6	12.5	12.8	12.7	12.2	11.9	11.7	11.4	10.8	10.1	10.3	11.8	12.8
7-Jun	9.8	9.2	9.2	9.3	9.4	8.9	8.8	10.2	11.7	12.9	14.3	15.7	17.0	17.4	18.6	18.7	17.5	16.4	12.4	13.0	12.9	12.7	12.8	12.6	13.0	18.7
8-Jun	12.3	12.1	11.9	11.6	11.5	11.7	11.9	12.2	11.9	11.4	11.7	11.6	11.7	11.4	11.3	11.5	11.9	12.1	12.3	12.1	11.7	11.3	11.5	11.8	11.8	12.3
9-Jun	11.3	11.1	10.9	10.4	10.7	12.1	13.1	13.5	14.4	15.5	16.4	17.5	18.9	18.8	19.2	19.7	19.6	19.8	20.2	18.5	16.3	14.7	13.5	12.6	15.4	20.2
10-Jun	11.2	9.8	10.0	9.4	10.0	11.5	12.2	13.4	14.7	15.0	15.3	12.6	10.5	11.4	11.1	11.7	12.0	12.0	11.4	10.8	10.3	9.9	9.6	9.2	11.5	15.3
11-Jun	8.8	8.5	8.2	8.0	7.6	7.4	7.9	8.2	8.7	9.8	10.2	10.8	11.2	11.1	10.8	11.1	10.4	10.3	9.9	10.2	10.3	10.1	10.3	10.1	9.6	11.2
12-Jun	9.3	7.6	6.4	7.5	8.1	8.7	9.6	10.4	11.5	12.8	14.0	15.1	16.0	17.1	17.9	18.6	18.6	18.5	18.1	17.1	15.1	12.0	10.1	9.4	12.9	18.6
13-Jun	8.2	7.5	6.6	5.7	6.2	8.3	11.6	14.3	17.1	19.5	20.9	22.1	23.0	23.7	24.2	24.7	24.4	24.6	24.3	23.5	21.6	18.6	15.5	13.2	17.1	24.7
14-Jun	12.1	11.3	11.0	9.6	9.3	11.9	15.2	18.1	20.3	22.1	24.0	23.8	23.7	24.5	23.1	23.2	24.4	24.5	23.6	23.3	20.9	17.2	14.6	13.2	18.5	24.5
15-Jun	11.8	10.8	10.1	10.0	10.8	13.1	15.1	17.4	19.2	20.9	22.7	23.5	24.4	25.0	25.5	25.9	25.2	25.1	23.1	21.1	19.3	18.1	17.1	16.6	18.8	25.9
16-Jun	16.3	15.3	14.9	15.0	14.6	14.2	14.5	15.3	16.4	17.0	19.4	21.1	21.8	23.0	23.2	22.9	22.7	22.2	21.3	20.0	18.3	16.9	14.6	11.9	18.0	23.2
17-Jun	9.8	9.5	9.3	8.4	9.2	10.9	12.1	14.0	15.4	16.8	18.1	18.9	19.6	19.9	19.7	19.1	18.6	18.6	18.8	18.8	15.9	13.1	11.2	10.8	14.9	19.9
18-Jun	9.8	9.5	9.1	9.3	8.9	9.4	10.7	11.7	12.8	14.5	16.1	15.7	15.5	15.2	15.9	16.8	17.3	17.1	17.0	16.8	15.7	13.5	12.6	12.5	13.5	17.3
19-Jun	10.9	9.4	7.9	6.7	6.7	7.6	9.4	13.3	15.2	16.3	16.5	17.1	17.3	17.4	17.5	17.6	16.2	16.6	17.3	16.9	14.8	12.6	11.7	9.8	13.5	17.6
20-Jun	8.7	8.0	7.4	6.9	7.4	9.1	12.0	13.3	14.7	16.4	17.9	18.2	18.8	19.3	19.9	19.6	19.7	19.1	18.7	18.2	17.3	15.8	14.6	13.3	14.8	19.9
21-Jun	12.7	13.2	13.0	12.5	12.2	11.8	12.4	12.9	13.9	14.9	16.3	17.2	17.9	19.2	19.9	18.1	19.4	19.4	18.5	17.9	16.4	14.5	13.5	13.8	15.5	19.9
22-Jun	12.0	11.4	10.2	8.9	9.0	9.7	11.6	15.4	18.6	20.6	22.0	22.8	23.8	23.6	24.8	24.9	23.5	24.1	22.8	20.7	19.9	18.1	15.5	13.9	17.8	24.9
23-Jun	12.2	11.1	10.7	10.4	10.1	12.7	15.5	18.2	20.1	22.8	24.8	24.4	26.0	23.8	20.5	17.6	19.1	21.8	22.1	21.0	18.2	16.6	14.1	12.9	17.8	26.0
24-Jun	12.3	12.2	11.4	11.0	11.1	12.9	14.8	17.5	19.9	22.6	24.5	25.8	26.6	26.6	27.4	27.7	28.0	27.1	23.5	22.2	20.3	17.4	17.1	15.0	19.8	28.0
25-Jun	13.1	11.9	10.9	10.2	10.0	12.2	15.5	18.5	21.0	23.5	25.7	27.0	27.8	28.5	28.9	29.0	29.0	28.4	27.6	26.3	24.1	21.6	19.9	19.1	21.2	29.0
26-Jun	18.1	15.6	13.8	13.1	12.7	14.2	16.6	20.1	22.7	24.9	26.4	27.2	27.8	28.4	28.9	29.2	28.9	28.2	27.4	26.1	24.2	21.2	19.2	18.8	22.2	29.2
27-Jun	17.6	16.4	15.4	14.2	13.7	16.0	18.7	21.3	23.0	25.2	27.6	27.9	27.0	27.1	27.6	27.9	27.3	26.6	25.9	24.2	21.9	19.6	17.8	16.2	21.9	27.9
28-Jun	15.4	14.1	13.2	12.7	13.6	15.1	17.8	20.1	22.1	24.7	27.1	29.1	30.2	30.8	30.8	31.4	31.2	30.6	30.2	28.5	26.4	23.3	22.5	20.1	23.4	31.4
29-Jun	17.7	16.7	15.1	14.1	14.1	16.2	19.0	21.5	23.7	25.7	27.6	28.9	29.6	30.0	30.8	30.9	30.8	30.4	29.2	27.9	25.9	23.8	20.8	18.6	23.7	30.9
30-Jun	18.0	17.0	15.4	14.1	13.5	14.8	17.3	19.9	21.1	22.6	24.1	25.3	26.1	27.0	27.7	27.7	28.7	28.3	26.7	25.0	21.8	19.0	17.6	16.5	21.5	28.7
	12.1	11.4	10.8	10.3	10.3	11.4	13.0	14.8	16.3	17.6	18.9	19.6	20.1	20.5	20.7	20.8	20.7	20.6	19.9	19.0	17.5	15.6	14.3	13.3	Diurnal Average	
	18.1	17.0	15.4	15.0	14.6	16.2	19.0	21.5	23.7	25.7	27.6	29.1	30.2	30.8	30.8	31.4	31.2	30.6	30.2	28.5	26.4	23.8	22.5	20.1	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Waskow ohci Pimatisiwin - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	90	12.50	12.50
10 - 20	453	62.92	75.42
> 20	177	24.58	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 98.9 % on Jun 7 04:00

Maximum Daily Average: 96.1 % on Jun 6

Minimum Value: 25.2 % on Jun 28 16:00

Minimum Daily Average: 45.2 % on Jun 16

Maximum Diurnal Average: 88.3 % at hour 5

Minimum Diurnal Average: 49.0 % at hour 15

Monthly Average: 65.86 %

Percentiles: P_1 = 27.6 P_{10} = 34.5 Q_1 = 49.1 Median = 68.3 Q_3 = 82.7 P_{90} = 94.4 P_{99} = 98.1

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

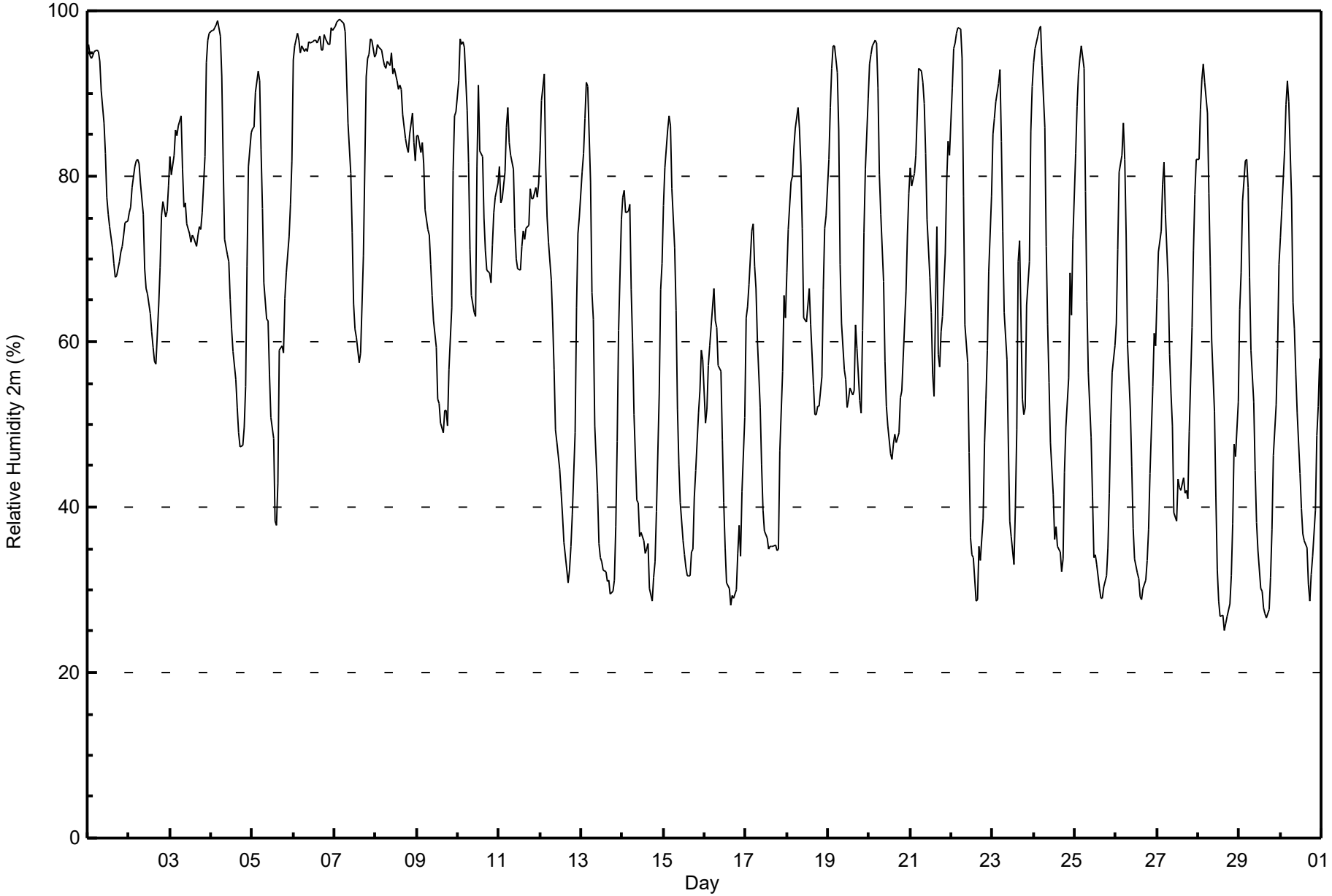
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	95.9	94.7	94.3	94.7	95.1	95.3	95.1	93.8	90.3	86.5	82.8	77.5	75.5	73.8	71.4	69.4	67.7	67.9	69.6	70.9	71.6	72.9	74.5	74.6	81.5	95.9
2-Jun	75.6	76.3	78.7	81.2	81.8	82.1	81.6	79.2	75.5	68.9	66.5	65.7	63.5	61.1	59.4	57.7	57.3	64.4	68.9	75.2	76.9	75.1	75.8	78.8	72.0	82.1
3-Jun	82.4	80.1	82.6	85.6	84.9	86.2	87.3	80.9	76.3	76.8	74.3	73.0	72.1	73.0	72.5	71.6	72.9	73.9	73.5	75.5	82.4	93.7	96.4	97.3	80.2	97.3
4-Jun	97.6	97.6	97.9	98.2	98.7	96.9	92.1	81.5	72.4	70.6	69.7	65.1	61.5	58.8	55.5	52.1	48.9	47.3	47.5	49.6	54.5	69.2	81.3	85.2	72.9	98.7
5-Jun	85.7	85.9	90.1	92.8	91.5	83.3	76.1	67.1	62.7	62.6	56.1	50.9	48.4	38.2	37.7	42.9	58.9	59.5	58.7	65.3	68.3	72.8	76.5	81.8	67.2	92.8
6-Jun	94.1	95.8	97.3	96.5	94.9	95.8	95.1	95.5	95.1	96.2	96.0	96.3	96.5	96.4	96.2	96.9	95.3	95.3	97.1	96.6	96.0	95.9	98.0	97.7	96.1	98.0
7-Jun	98.1	98.6	98.9	98.9	98.9	98.5	97.4	92.0	86.5	80.3	73.3	64.6	61.6	60.5	57.5	58.7	64.3	70.3	92.1	94.2	94.7	96.6	96.5	94.4	84.5	98.9
8-Jun	94.8	95.9	95.6	95.2	94.2	93.4	93.0	93.8	93.5	94.9	92.4	93.0	91.6	90.6	91.0	90.5	87.5	84.6	83.6	82.9	85.2	87.6	84.1	81.9	90.5	95.9
9-Jun	84.9	84.9	82.8	84.0	81.5	76.0	73.5	72.9	69.4	65.5	62.6	59.3	53.1	52.6	50.1	48.9	51.7	51.6	49.8	56.5	64.0	80.7	87.3	87.8	68.0	87.8
10-Jun	91.5	96.6	96.0	96.3	95.6	88.0	81.8	71.2	65.7	63.5	63.0	81.1	91.0	83.0	82.4	75.0	71.0	68.6	68.3	67.1	71.6	75.7	77.5	79.2	79.2	96.6
11-Jun	81.1	76.8	77.3	80.6	85.9	88.3	84.1	82.5	80.9	73.8	70.0	68.9	68.7	71.6	73.3	72.4	73.7	74.1	78.5	77.3	77.3	78.6	77.4	79.1	77.2	88.3
12-Jun	83.0	89.2	92.3	81.3	75.1	72.0	67.5	62.5	56.6	49.3	47.8	44.6	41.8	39.0	35.8	32.5	30.8	32.3	35.2	39.2	49.0	64.1	73.1	75.1	57.0	92.3
13-Jun	80.6	82.6	86.9	91.4	90.8	79.4	65.9	62.6	49.8	41.7	35.6	33.9	33.5	32.3	32.2	31.0	31.3	29.6	29.8	31.2	37.6	48.1	61.4	74.7	53.1	91.4
14-Jun	77.5	78.3	75.6	75.7	76.6	66.3	59.8	51.3	40.9	40.5	36.5	37.0	36.0	34.5	35.0	35.6	30.1	28.7	31.5	33.3	39.6	53.7	66.2	69.4	50.4	78.3
15-Jun	76.5	81.1	85.5	87.3	86.2	78.5	71.3	63.8	51.9	45.1	40.5	36.0	34.3	32.6	31.7	31.7	34.6	35.0	41.2	44.4	51.3	54.1	58.9	57.7	54.6	87.3
16-Jun	50.2	51.8	57.1	59.5	61.9	66.4	62.5	61.8	57.2	56.4	48.2	40.5	35.0	30.8	30.2	28.1	29.4	29.1	29.9	34.5	37.8	34.1	41.8	50.9	45.2	66.4
17-Jun	62.8	64.3	66.9	73.4	74.2	69.2	66.5	60.1	52.1	45.1	39.6	37.2	36.2	34.9	35.3	35.3	35.2	35.4	34.7	35.0	46.8	56.4	65.6	62.8	51.0	74.2
18-Jun	68.4	73.6	79.3	80.0	83.4	85.8	88.3	85.7	81.4	73.7	62.9	62.4	64.4	66.5	62.0	54.8	51.2	51.2	52.2	52.1	55.8	66.2	73.7	75.2	68.8	88.3
19-Jun	82.0	88.3	93.1	95.8	95.7	92.5	85.6	69.3	62.3	56.6	55.5	52.1	53.1	54.3	53.5	54.1	62.1	59.1	52.8	51.3	61.4	73.2	80.9	89.4	69.7	95.8
20-Jun	93.5	94.7	95.7	96.4	96.1	90.6	80.2	75.4	67.3	57.7	52.3	49.9	46.5	45.7	47.7	48.9	47.8	49.0	53.3	54.1	58.2	66.2	72.9	77.9	67.4	96.4
21-Jun	81.0	78.8	80.4	82.6	87.6	93.0	92.8	91.4	88.8	82.7	74.8	67.7	63.5	56.1	53.5	73.8	58.5	57.0	61.2	63.1	70.7	79.3	84.2	82.5	75.2	93.0
22-Jun	90.7	95.5	96.1	97.3	98.1	97.8	94.3	77.5	62.1	57.4	46.6	36.2	34.2	33.9	28.6	28.8	35.3	33.6	38.7	47.9	53.1	59.0	68.4	77.6	62.0	98.1
23-Jun	85.2	87.0	89.0	91.2	92.8	84.2	73.3	63.5	57.9	47.5	38.3	36.4	33.0	40.0	49.3	69.7	72.1	53.1	51.1	52.1	64.4	69.7	85.4	90.8	65.7	92.8
24-Jun	93.8	95.4	97.0	97.8	98.1	93.4	85.9	71.5	62.0	55.0	47.8	41.5	36.2	37.7	35.2	34.6	32.3	33.7	44.2	49.6	55.7	68.4	63.3	72.4	62.6	98.1
25-Jun	82.7	88.5	92.4	94.2	95.8	93.0	78.2	64.9	56.3	48.4	41.4	33.8	34.2	33.1	30.2	29.0	28.9	30.4	31.7	35.0	41.8	50.2	56.3	59.6	55.4	95.8
26-Jun	62.1	71.3	80.5	82.5	86.5	82.0	72.8	59.7	51.7	45.0	37.5	33.8	32.1	31.4	29.2	28.8	30.2	31.2	33.6	37.2	44.0	54.6	61.0	59.6	51.6	86.5
27-Jun	65.3	70.8	73.4	78.9	81.7	75.4	67.2	58.4	53.8	49.9	39.4	38.3	43.4	42.4	42.1	43.6	41.6	42.1	41.0	49.2	61.7	71.0	77.7	82.0	57.9	82.0
28-Jun	82.0	88.2	91.7	93.6	91.4	87.7	78.0	69.1	60.2	51.5	41.2	32.5	28.7	26.8	26.9	25.2	25.9	26.7	28.3	31.8	37.9	47.6	46.1	52.6	53.0	93.6
29-Jun	63.8	68.3	76.9	81.9	82.1	78.7	67.8	59.1	52.7	44.5	38.1	34.7	30.2	29.9	27.8	27.1	26.5	27.6	31.6	37.3	46.3	52.4	59.2	69.3	50.6	82.1
30-Jun	72.6	75.9	83.1	88.6	91.5	88.9	77.1	64.8	61.6	56.1	51.4	44.1	39.8	36.8	35.9	35.1	30.7	28.7	31.8	34.1	39.6	48.6	52.1	58.0	55.3	91.5
	81.2	83.6	86.1	87.8	88.3	85.3	79.7	72.8	66.5	61.5	56.1	52.9	51.3	49.9	49.0	49.5	49.5	49.0	51.4	54.1	59.8	67.2	72.5	75.8	Diurnal Average	
	98.1	98.6	98.9	98.9	98.9	98.5	97.4	95.5	95.1	96.2	96.0	96.3	96.5	96.4	96.2	96.9	95.3	95.3	97.1	96.6	96.0	96.6	98.0	97.7	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Waskow ohci Pimatisiwin - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	125	17.36	17.36
40 - 60	157	21.81	39.17
60 - 80	213	29.58	68.75
80 - 100	225	31.25	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

Waskow ohci Pimatisiwin - June 2026

Maximum Speed: 19 km/h on Jun 1 12:00

Maximum Daily Speed Average: 12.9 km/h on Jun 1

Minimum Speed Value: 0 km/h on Jun 13 05:00

Minimum Daily Speed Average: 0.3 km/h on Jun 22

Maximum Diurnal Speed Average: 3.6 km/h at hour 16

Minimum Diurnal Speed Average: 1.8 km/h at hour 8

Monthly Average Velocity: 2.3 km/h 355.7 deg

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 3 Median = 5 Q_3 = 8 P_{90} = 10 P_{99} = 15

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-Jun	N12	N16	NNW15	N13	NNW12	NNW12	NNW9	NNW10	NNW13	N16	N17	N19	N15	N15	N16	N15	N13	N13	N12	N12	N11	NNE10	N10	N12	N12.9	N19
2-Jun	N10	N10	N11	N11	N13	N14	N12	NNE12	NNE12	NNE12	NE8	ENE7	NE7	NE8	NE5	NE7	NE6	E4	E4	SE3	E3	E3	E1	E1	NNE6.6	N14
3-Jun	ENE1	E3	E1	ESE2	ESE2	ESE3	ENE1	SSE3	ESE4	SE4	SSE4	SSE3	SSE5	SSE5	SSE5	SSE4	SSE4	SE4	SE4	S3	NW1	W2	W1	W1	SE2.2	SSE5
4-Jun	W1	WSW1	UO	UO	SSE4	SSE4	SE4	SE5	SSE6	S7	S7	S8	SSW9	S7	S9	S8	SSE8	SSW7	SSW8	SSW8	S4	SE2	ENE1	SE2	S5.1	S9
5-Jun	SE3	SE3	SSE3	SSE4	SSE4	SSW5	S4	S5	SSW5	SSE6	SE7	SSE7	SE8	SE6	SSE6	SSE7	SSE10	SSE6	S3	WNW2	ESE2	SSE1	SSE2	SSE3	SSE4.1	SSE10
6-Jun	S1	WNW4	NW4	NW8	NW9	W6	W6	W8	W9	WSW9	WSW8	W8	WSW8	WSW8	WSW6	SSW4	SW6	SW5	SSW4	SSW5	SW5	SSW4	SSE3	S3	WSW4.6	NW9
7-Jun	SSE2	S1	S1	SE2	SE4	SSE6	SE5	SSE4	ESE1	NW2	SE3	ESE2	NE3	NNW5	NNE5	N8	N10	N9	N5	NNW5	NW5	NNW5	N7	N6	NNE2.1	N10
8-Jun	N5	N6	NNW8	NNW8	NNW8	NNW9	NNW10	NW5	NW7	NW9	NW12	NW10	WNW12	WNW12	WNW12	WNW10	WNW10	WNW10	W9	WNW9	WNW8	W8	WNW8	WNW8	NW8.1	WNW12
9-Jun	WNW5	W6	W6	W5	WNW7	WNW8	WNW6	WNW8	WNW7	W6	WSW6	WSW6	WNW8	WNW7	W7	W3	NNW5	N4	NNW5	NW5	NW5	N8	N6	N8	WNW5.2	WNW8
10-Jun	NNW4	NW2	NW4	NW3	NW4	NNW6	N5	N4	NNW4	NNW6	NNW7	N10	NNE7	N8	N10	N11	N12	N12	N13	NNW12	N8	N7	N10	N10	N7.2	N13
11-Jun	NNW6	NNW8	NNW8	NNW7	NNW8	NNW9	NNW9	NNW11	N10	N11	N13	N11	N11	NNE11	N11	N13	N15	N13	N11	NNW9	NNW8	NNW6	NW8	NW5	NNW9.5	N15
12-Jun	NW4	WNW4	WNW5	NW7	NW7	NNW6	NNW9	NNW11	NNW13	NNW16	N17	N15	N12	N12	N13	N12	N12	N12	N11	N9	NNW5	WNW3	WNW3	NNW3	N8.7	N17
13-Jun	NW2	NE1	SE1	S1	S0	SE1	NNE1	SSE3	ESE3	ESE3	ESE4	SE5	SE5	SE6	SSE7	SE6	S6	SSW6	SW6	S5	S3	SSW3	S1	W1	SSE2.5	SSE7
14-Jun	W1	S1	E1	SSW2	SSE2	ESE1	E2	ESE1	NE2	ENE2	ENE5	NE6	NNE10	N10	NNW9	N9	N10	N11	N9	N8	NNW5	NW4	NW3	NW2	N3.7	N11
15-Jun	NW3	W1	NW1	UO	UO	NNW2	NNE1	E2	SE4	SSE3	E2	NE3	NE5	NE4	NNE4	ENE4	NE4	NE4	NE3	N2	N2	NW2	NW3	N2	NE1.7	NE5
16-Jun	N3	NW4	NNE1	E1	NNE1	N2	NE2	E2	SSE2	S3	ESE3	NE3	N7	NNE9	NNE9	N11	NNE10	NNE10	NNE10	N12	N12	N10	NNW7	NW5	N4.7	N12
17-Jun	WNW4	NW5	NNW6	NW5	NNW4	NNW5	N5	N5	N7	NNE7	NNE8	N9	N10	N10	N9	N11	NNW10	NNW9	NNW9	N7	NNW4	NW4	WNW4	NW5	NNW6.3	NNW11
18-Jun	NW4	NNW4	NW3	WNW4	WNW4	WNW4	NW2	SSW2	S2	SE4	ESE3	N7	NNE8	N8	NNW9	NNW9	NNW13	N11	NNW8	NNW7	NNW7	NW2	WNW3	WNW3	NNW4.3	NNW13
19-Jun	NW2	NW2	WSW1	W3	W3	WNW3	WNW3	NNW7	NNE7	NNE8	N7	NNE5	NNE8	NNE8	N10	N12	N14	N7	N7	NNW9	N6	NNW4	NNW4	NW2	N5.3	N14
20-Jun	NW3	NW3	WNW4	WNW3	WNW2	WNW3	N6	N8	N8	N9	NNE8	NNE7	NNE6	NNE7	NE7	NNE8	NNE6	NNE8	NE5	NNE5	NNE5	NNW5	NNW5	NNW3	N4.8	NNE9
21-Jun	NW4	NNW5	NNW5	NNW4	NNW3	NW4	NW4	NNW5	NNW7	NNW9	N10	N11	N9	NNE6	NNE7	NE3	N7	N7	NNE4	N3	NW4	WNW3	WNW4	NW3	NNW5.0	N11
22-Jun	WNW1	SW2	WNW1	W2	W2	WSW1	W1	NW4	NE2	ENE3	NE4	NNE5	NE5	NNE5	NNE2	E3	S5	SSW4	SW4	SE3	SSE3	SSE4	SSE1	SSE2	E0.3	S5
23-Jun	WSW2	SSW2	SSE3	SSE2	S3	SSE3	S4	SSE5	SE6	SSE7	S6	SSW4	SSE6	N4	NW6	NW6	SSE5	SSE8	SE7	SSE3	SSE2	SE1	W1	S1	S2.5	SSE8
24-Jun	SSW1	S2	SSE1	S1	S1	SSE3	SE3	SSE6	SE7	SE7	SE7	SSE7	SSE7	SE7	SE7	SE6	SSW4	SSW5	ESE6	SSE7	SSE3	SE1	SE3	E0	SSE4.0	SE7
25-Jun	WNW2	W1	WNW2	SW1	W0	SSE3	SSE6	SSE7	SSE6	SSE6	SSE7	SSE10	SE9	SSE8	SE8	SSE8	SSE8	SSE8	SSE8	SE6	SE5	SE3	SSE5	SSE5	SSE5.0	SSE10
26-Jun	SSE4	SSE1	SSE1	E1	NNE1	NNE1	SE2	SSE5	SSE7	SSE8	SSE10	SSE11	SSE10	SSE10	SSE9	SE8	SE7	SSE8	SSE8	ESE6	ESE4	NE1	SSE1	SE2	SSE5.1	SSE11
27-Jun	ESE2	SE2	SE1	N1	NW3	NNW3	N5	N5	N7	N5	E5	SE6	SSE8	SSE9	ESE6	ESE4	ESE5	SE4	SSE4	N1	NW2	NW2	WNW3	W3	E1.2	SSE9
28-Jun	WNW2	WNW2	WNW1	NW2	NNW4	NNE1	NNW5	N6	N6	N8	NNE5	ENE6	ENE5	NE6	NE5	NE6	NE6	NE6	NNE5	NNE5	NNE4	NNW5	NNW5	NNW3	NNE3.8	N8
29-Jun	NW1	N1	WNW1	WNW1	NW3	NNW3	N4	N4	N6	N8	N7	NNE7	N8	N8	NNE6	NNE7	NNE7	NNE6	NNE6	NNW9	NNW10	SSE3	SE2	SE2	N4.3	NNW10
30-Jun	SSE1	SE1	WNW1	NW2	W1	S1	ENE1	ESE1	E1	ESE2	E1	ENE1	N5	NNW5	NNW9	NNW7	NE6	NE6	NE4	NE1	ESE0	WSW1	ENE0	NNW1	N1.6	NNW9
	NNW1.9	NNW2.0	NNW2.4	NW2.3	NW2.4	NNW2.1	NNW2.1	N1.8	N2.2	N2.3	NNE2.2	NNE2.5	NNE2.8	NNE3.4	NNE3.1	NNE3.6	NNE3.5	NNE2.9	N2.5	N2.7	NNW2.5	NNW1.9	NNW2.0	NNW1.9	Diurnal Average	
	N12	N16	NNW15	N13	N13	N14	N12	NNE12	NNW13	N16	N17	N19	N15	N15	N16	N15	N15	N13	N13	NNW12	N12	NNE10	N10	N12	Diurnal Maximum	

UO - Unstable Operation

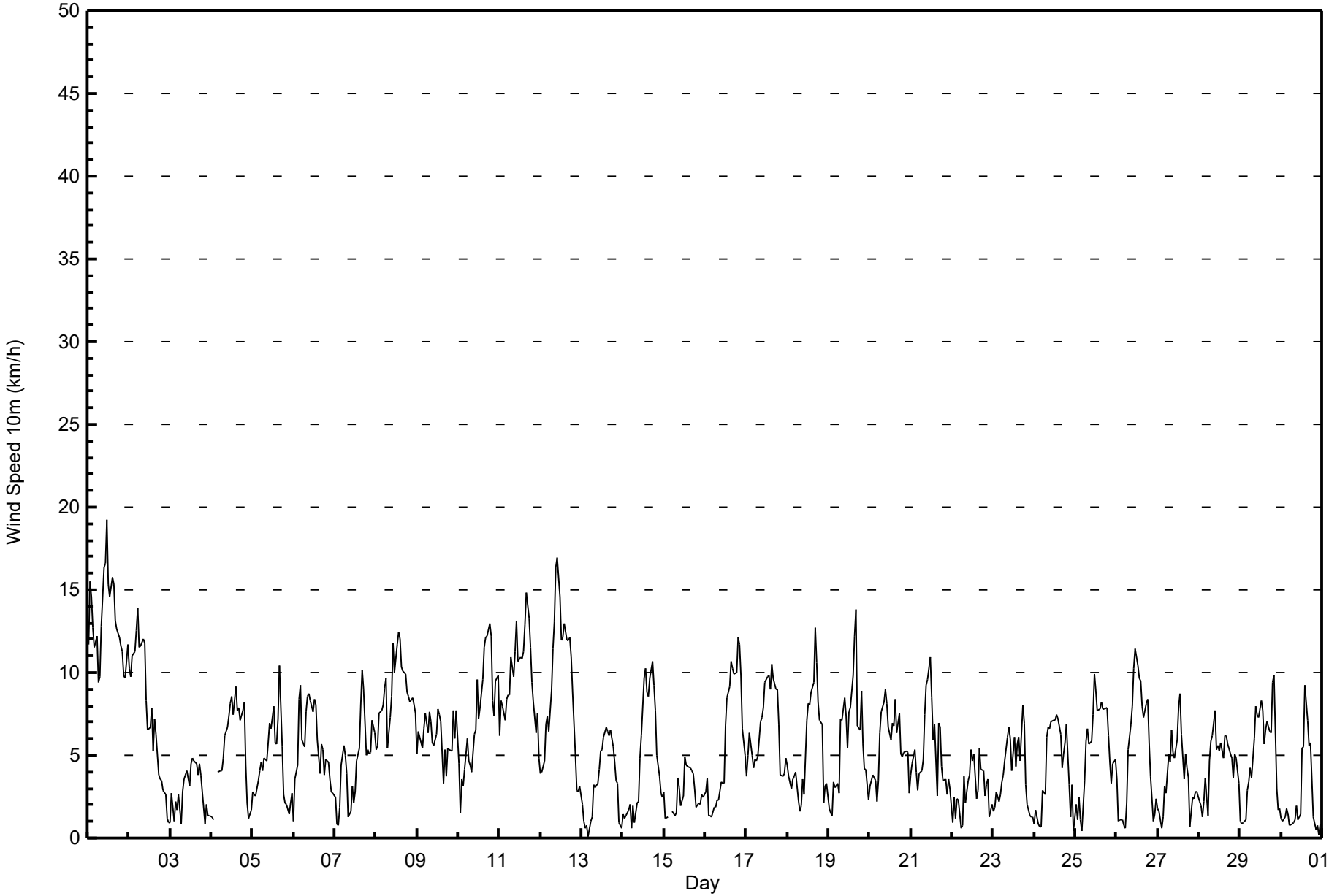
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Waskow ohci Pimatisiwin - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	384	53.63	53.63
6 - 11	280	39.11	92.74
12 - 19	52	7.26	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

Waskow ohci Pimatisiwin - June 2026

Wind Speed Ranges (km/h)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 5	23	20	21	11	20	21	34	49	25	15	5	5	18	34	49	34	384
6 - 11	67	35	13	2	0	3	18	40	7	6	2	7	9	16	10	45	280
12 - 19	37	3	0	0	0	0	0	0	0	0	0	0	0	3	1	8	52
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	127	58	34	13	20	24	52	89	32	21	7	12	27	53	60	87	716

Total Number of Valid Hours: 716

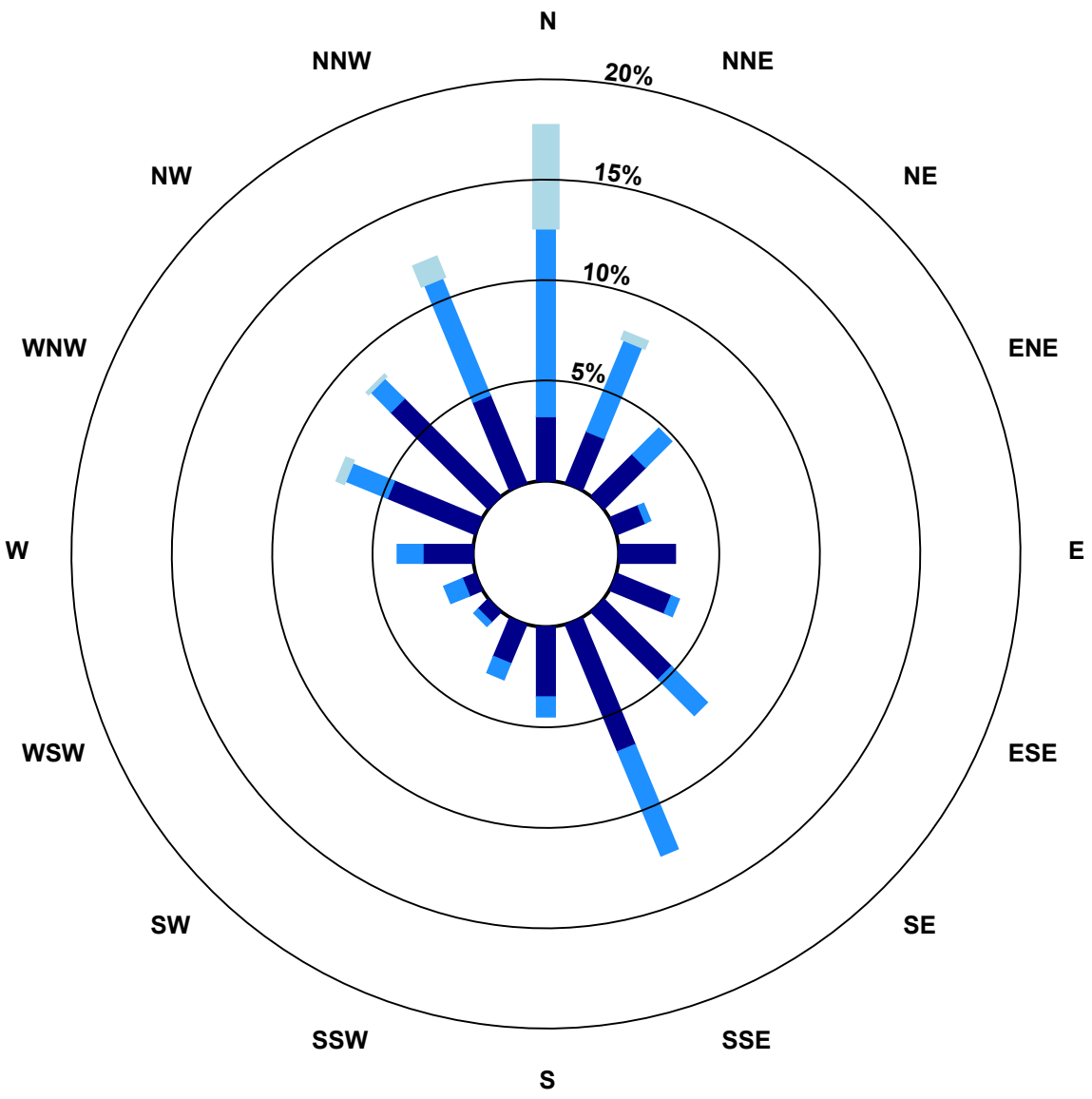
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Waskow ohci Pimatisiwin



Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 716

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6 km/h on Jun 1 12:00

Minimum Value: 0 km/h on Jun 27 23:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 1 Median = 2 Q_3 = 3 P_{90} = 4 P_{99} = 5

Hours in Service:	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-Jun	4	5	5	4	4	4	3	4	4	5	6	6	5	5	5	5	5	5	4	4	4	4	3	4	6
2-Jun	4	4	3	4	5	5	4	5	5	5	4	3	3	3	2	3	3	1	1	1	1	1	1	1	5
3-Jun	1	1	1	1	1	1	1	2	1	2	2	1	2	2	2	2	1	2	2	2	1	1	1	1	2
4-Jun	1	1	UO	UO	1	1	1	2	3	3	3	4	4	3	4	4	4	3	3	3	2	1	1	1	4
5-Jun	1	1	1	1	1	2	2	2	2	2	2	3	3	2	2	3	4	3	1	2	1	1	1	1	4
6-Jun	1	2	2	3	3	2	2	3	4	3	4	4	4	3	3	2	2	2	2	2	2	2	1	1	4
7-Jun	1	1	1	1	2	2	2	2	1	1	2	1	2	3	2	3	3	3	2	2	2	2	2	2	3
8-Jun	2	2	2	2	2	3	3	2	2	3	4	3	4	5	5	4	4	4	3	3	3	3	3	3	5
9-Jun	2	3	3	2	3	3	3	3	3	2	3	3	3	3	3	3	2	2	2	1	2	2	2	2	3
10-Jun	2	1	1	1	1	2	2	2	2	3	2	4	3	3	3	5	6	4	4	4	3	2	3	3	6
11-Jun	3	3	2	3	3	2	3	3	3	4	4	4	4	4	4	4	5	5	4	3	2	2	3	2	5
12-Jun	1	1	1	2	2	2	3	3	4	5	5	5	5	4	5	4	5	4	4	3	2	1	1	1	5
13-Jun	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	2	3	2	2	1	1	1	1	3
14-Jun	1	1	1	1	1	1	1	1	1	2	2	3	4	4	3	3	3	4	3	3	2	1	1	2	4
15-Jun	1	1	1	UO	UO	1	1	1	1	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	2
16-Jun	1	1	1	1	1	1	1	1	1	1	1	2	4	4	4	4	5	4	4	5	4	4	2	1	5
17-Jun	1	2	1	1	1	1	2	2	3	3	3	4	4	4	4	3	3	3	3	3	1	0	1	1	4
18-Jun	1	1	1	1	1	1	1	1	1	1	1	3	3	3	3	3	4	4	3	2	3	1	1	1	4
19-Jun	1	1	1	1	1	1	1	3	3	3	3	3	3	4	4	4	5	2	3	2	2	1	1	1	5
20-Jun	1	1	1	1	1	1	2	3	3	4	4	3	3	4	3	3	3	3	2	2	2	2	1	1	4
21-Jun	1	1	1	1	1	1	1	2	2	2	3	3	3	2	3	1	3	2	2	1	1	1	1	1	3
22-Jun	1	1	1	1	1	1	1	1	2	1	2	3	2	2	2	1	2	2	2	1	1	2	1	1	3
23-Jun	1	1	1	1	1	1	1	2	2	3	3	3	3	3	4	5	2	3	3	2	1	1	1	1	5
24-Jun	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3	2	3	2	4	3	2	2	2	1	4
25-Jun	1	1	1	1	1	1	2	2	2	2	3	4	3	3	3	4	4	3	3	2	2	1	2	2	4
26-Jun	2	1	1	1	1	1	1	2	2	3	4	5	4	4	4	4	4	4	3	3	2	1	1	1	5
27-Jun	1	1	1	1	1	1	2	2	2	2	2	3	4	4	3	2	2	2	2	1	1	1	0	1	4
28-Jun	1	1	1	1	1	1	2	2	2	3	3	3	2	3	2	3	3	3	2	2	2	1	1	1	3
29-Jun	1	1	1	1	1	1	2	1	2	2	3	3	3	4	2	3	3	2	2	4	3	2	1	1	4
30-Jun	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	3	2	2	2	1	1	1	1	1	4
	4	5	5	4	5	5	4	5	5	5	6	6	5	5	5	5	6	5	4	5	4	4	3	4	
	Diurnal Maximum																								

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Waskow ohci Pimatisiwin - June 2026

Direction of Maximum Speed: 354 deg on Jun 1 12:00
Direction of Maximum Daily Speed Average: 354.8 deg on Jun 1

Direction of Minimum Speed: 177 deg on Jun 13 05:00
Direction of Minimum Daily Speed Average: 0.3 deg on Jun 22

Monthly Average Direction: 355.7 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-Jun	349	349	346	349	342	346	333	337	345	349	355	354	356	354	356	356	1	8	8	6	11	14	10	7	354.8
2-Jun	11	8	360	1	3	4	8	22	17	22	43	58	50	45	56	37	44	89	97	144	101	96	90	86	26.6
3-Jun	77	97	87	107	112	118	74	148	102	145	156	147	149	161	153	151	158	146	139	177	323	277	261	267	144.0
4-Jun	262	252	UO	UO	161	160	142	144	164	181	191	189	195	190	178	171	167	197	206	197	187	140	72	133	180.3
5-Jun	139	130	149	158	166	196	188	183	195	152	143	147	144	132	155	156	155	165	180	288	118	156	165	164	158.6
6-Jun	170	303	320	322	305	281	265	259	263	244	252	267	239	239	239	212	219	224	199	209	224	213	167	190	251.7
7-Jun	159	183	184	136	143	149	146	151	119	323	134	108	49	347	30	11	8	9	358	333	322	340	0	360	20.7
8-Jun	353	351	344	343	340	348	345	322	311	311	312	306	301	298	284	286	291	288	281	288	285	277	284	296	307.1
9-Jun	286	277	273	261	290	298	284	294	296	273	255	250	285	301	267	269	343	10	336	325	314	355	358	349	299.0
10-Jun	346	305	315	312	323	347	1	356	338	330	329	357	12	3	6	359	5	359	349	345	349	350	350	352	350.9
11-Jun	346	338	334	345	335	330	336	344	350	353	349	355	2	12	6	354	353	354	353	347	345	330	323	315	347.6
12-Jun	309	301	302	319	320	335	346	347	348	348	352	356	5	8	3	10	6	7	10	5	342	294	289	330	350.6
13-Jun	318	56	137	174	177	130	32	150	116	112	118	131	126	133	149	146	175	204	214	186	189	210	169	281	156.8
14-Jun	270	185	85	192	167	102	86	116	43	62	68	37	18	11	346	349	356	2	354	350	332	309	304	324	2.9
15-Jun	317	264	308	UO	UO	343	14	82	146	148	86	41	40	46	30	58	54	56	50	3	2	313	306	357	35.2
16-Jun	1	318	26	99	22	356	48	95	148	191	112	51	11	24	30	10	14	12	13	354	353	11	347	316	11.2
17-Jun	301	316	330	320	340	337	9	5	353	17	16	1	3	360	1	349	339	340	345	351	329	316	300	310	346.7
18-Jun	315	330	312	287	292	296	310	198	170	133	106	358	13	4	345	338	347	349	346	333	335	308	284	296	337.9
19-Jun	323	309	252	263	276	289	303	348	16	17	8	15	16	20	5	357	353	4	9	346	349	344	344	321	354.4
20-Jun	304	305	288	290	283	303	359	354	9	11	23	29	31	26	44	26	31	29	41	28	18	348	332	335	7.5
21-Jun	322	329	341	340	332	313	324	337	344	343	352	351	352	21	12	47	352	3	16	352	322	300	289	322	345.9
22-Jun	299	219	282	278	261	253	280	305	35	73	37	16	45	23	21	84	184	205	220	135	151	149	165	154	96.4
23-Jun	256	211	168	152	190	165	182	155	138	149	184	199	165	352	307	317	156	155	146	160	154	142	268	174	170.2
24-Jun	203	169	151	169	191	164	146	148	142	140	144	155	150	138	142	140	205	210	121	154	154	125	129	93	150.2
25-Jun	301	270	282	217	267	154	155	149	166	162	152	149	144	148	146	149	154	153	156	131	128	138	154	147	152.1
26-Jun	147	166	147	93	28	22	136	152	163	161	150	151	149	150	153	144	144	150	149	119	112	47	163	135	146.6
27-Jun	112	137	130	351	318	344	2	8	358	4	101	135	150	147	121	108	107	128	158	4	316	309	285	263	93.0
28-Jun	286	302	295	317	334	15	348	356	358	359	15	57	59	47	50	37	36	46	24	28	25	333	336	328	13.1
29-Jun	305	3	297	290	322	345	359	353	0	5	10	21	11	9	28	26	15	18	21	346	346	159	146	142	6.5
30-Jun	168	134	288	322	268	178	74	123	88	117	87	75	1	331	340	348	39	35	49	40	112	244	60	336	10.7
	329.6	326.3	326.9	325.6	321.9	330.5	347.5	352.8	0.7	5.8	22.2	21.0	25.7	18.3	13.2	12.1	11.8	12.2	10.9	351.1	345.1	334.4	328.8	332.1	
	Diurnal Average																								

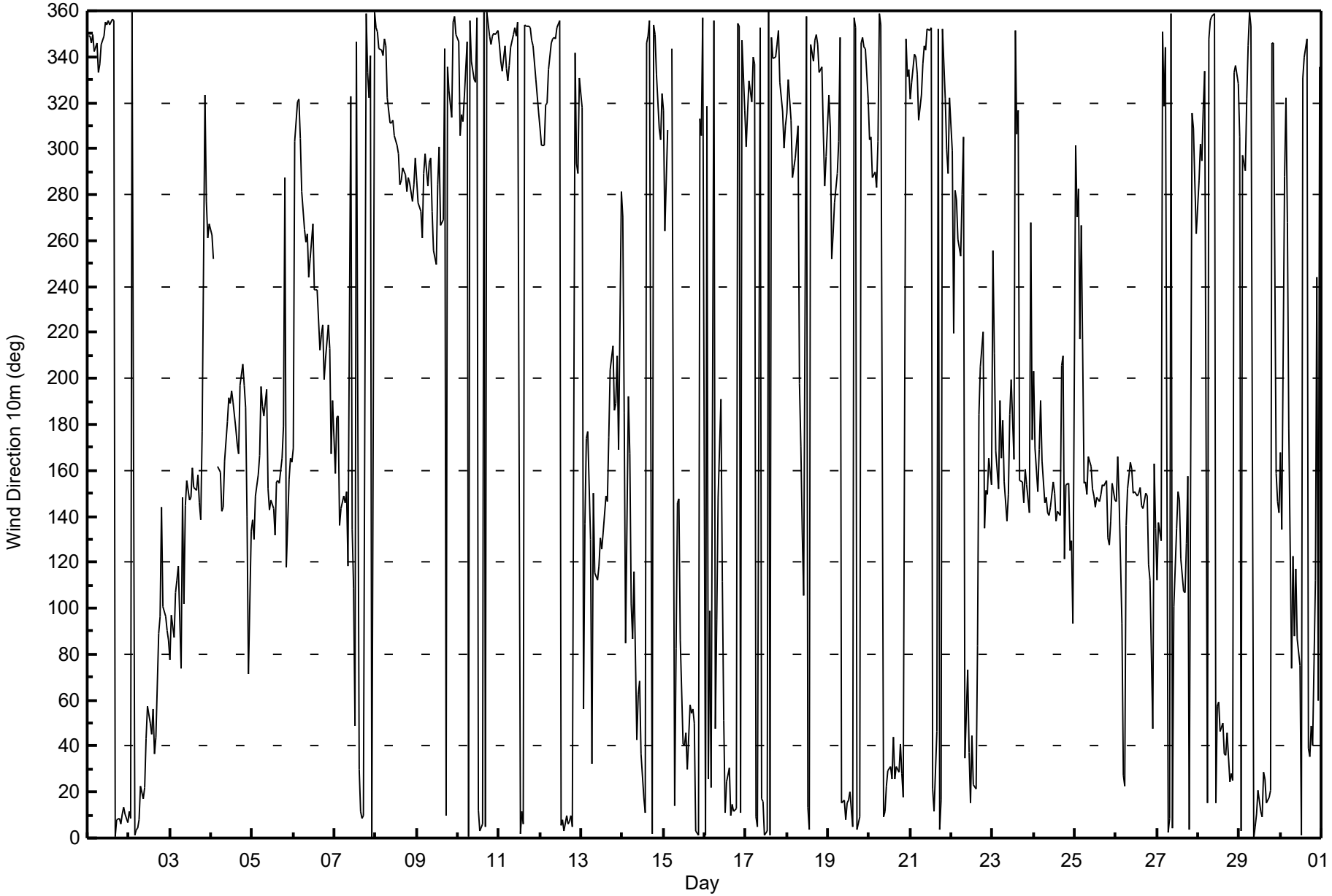
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Waskow ohci Pimatisiwin - June 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Waskow ohci Pimatisiwin - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 100 deg on Jun 7 10:00

Minimum Value: 12 deg on Jun 17 22:00

Percentiles: P_1 = 15 P_{10} = 21 Q_1 = 27 Median = 37 Q_3 = 50 P_{90} = 67 P_{99} = 92

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-Jun	22	23	23	24	21	22	21	28	23	23	24	25	25	27	25	25	27	29	29	28	30	31	29	28	31
2-Jun	30	27	26	27	26	26	30	32	32	34	42	40	40	38	42	37	40	31	26	54	53	45	56	25	56
3-Jun	32	28	69	34	38	37	91	58	42	51	39	48	47	35	40	41	44	34	36	37	64	23	46	46	91
4-Jun	29	59	UO	UO	23	27	32	35	45	42	48	50	47	54	42	50	43	43	41	39	36	30	54	27	59
5-Jun	28	32	42	25	20	53	59	58	57	37	32	32	32	39	44	29	28	43	50	90	47	30	42	45	90
6-Jun	75	61	71	23	29	50	57	53	60	48	52	56	56	45	49	49	44	49	56	46	49	54	28	41	75
7-Jun	31	95	86	35	28	29	32	46	90	100	59	78	73	65	45	34	30	33	48	21	29	17	24	24	100
8-Jun	27	25	21	21	21	22	21	27	27	28	28	34	36	38	45	46	44	47	46	49	47	48	46	44	49
9-Jun	51	49	54	56	48	43	49	42	50	53	63	68	56	54	54	94	48	64	36	16	21	20	24	19	94
10-Jun	20	74	24	19	23	22	32	49	64	43	34	31	35	31	29	30	33	28	22	22	23	21	22	21	74
11-Jun	20	21	22	24	21	21	23	21	24	25	26	27	31	33	30	25	25	25	23	21	22	19	21	23	33
12-Jun	27	29	17	17	17	20	21	22	24	23	24	30	33	33	30	33	32	29	32	27	19	26	16	15	33
13-Jun	52	38	75	66	90	54	69	31	51	53	54	40	46	36	38	48	37	53	47	33	25	22	79	91	91
14-Jun	73	76	56	62	45	93	39	78	69	67	40	47	37	38	33	25	33	32	26	22	18	17	57	14	93
15-Jun	18	70	62	UO	UO	32	59	69	45	69	88	85	55	56	63	55	45	40	43	26	28	47	36	53	88
16-Jun	39	38	72	70	72	31	67	57	61	53	61	64	44	43	42	35	41	34	36	25	28	29	24	17	72
17-Jun	23	18	19	20	22	21	28	43	37	44	48	40	37	36	38	27	24	22	23	22	14	12	17	15	48
18-Jun	16	20	19	25	20	23	52	58	44	37	60	27	35	33	26	28	23	25	24	23	23	41	40	49	60
19-Jun	67	68	87	15	37	39	43	28	38	41	38	51	41	43	32	31	26	40	40	27	20	18	14	39	87
20-Jun	17	17	15	14	36	31	26	26	32	37	44	43	47	49	47	42	44	41	45	39	33	20	19	15	49
21-Jun	22	20	20	18	32	19	23	58	23	22	26	24	30	36	33	57	27	30	28	30	14	54	17	21	58
22-Jun	67	53	83	28	55	85	81	46	74	50	62	50	62	50	85	68	39	66	69	27	28	35	47	30	85
23-Jun	46	54	33	29	30	26	38	35	31	37	62	71	54	90	67	94	40	28	35	35	37	66	77	47	94
24-Jun	87	54	79	91	78	33	41	30	31	38	39	40	46	39	36	40	71	46	58	36	44	52	42	87	91
25-Jun	42	68	17	46	96	22	24	28	37	40	32	34	36	41	36	37	38	34	28	39	37	26	26	32	96
26-Jun	60	71	47	33	52	76	66	34	31	32	34	34	36	33	37	42	40	37	37	38	40	52	75	35	76
27-Jun	30	46	66	71	17	45	23	36	27	51	48	44	39	38	44	51	38	45	38	83	17	23	17	20	83
28-Jun	36	56	66	34	27	54	24	22	26	29	59	49	53	55	52	45	46	45	39	33	54	19	16	50	66
29-Jun	56	20	61	61	16	24	24	36	30	33	33	41	36	39	45	47	39	36	34	22	20	68	53	40	68
30-Jun	56	71	74	58	67	79	64	85	57	57	87	92	37	52	61	39	45	42	43	64	70	60	99	65	99
	87	95	87	91	96	93	91	85	90	100	88	92	73	90	85	94	71	66	69	90	70	68	99	91	
	Diurnal Maximum																								

UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS27
JACKFISH 2/3
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JACKFISH 2/3 (AMS27)
JUNE 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	8.1	0	1.2	0
H2S (ppb) Average	685	35	35	100	1.3	0	0.4	0
NO2 (ppb) Average	604	41	116	89.58	11.8	0	1.8	-
NO (ppb) Average	604	41	116	89.58	22.8	-	1.4	-
NOX (ppb) Average	604	41	116	89.58	34.6	-	2.6	-
Temperature 2 m (C) Average	720	0	0	100	26.8	-	20.8	-
Relative Humidity (%) Average	720	0	0	100	99	-	97.1	-
Wind Speed 10 m (km/h) Average	720	0	0	100	20	-	12	-
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 - JACKFISH 2/3 (AMS27)
JUNE 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	0.48	0.9	-	0	0	0.1	0.2	0.5	1.4	8.1
H2S (ppb) Average	685	0.12	0.1	-	0	0	0.1	0.1	0.1	0.3	1.3
NO2 (ppb) Average	604	0.84	0.9	-	0	0.2	0.4	0.6	1.1	1.7	11.8
NO (ppb) Average	604	0.22	1	-	0	0	0	0	0.3	0.5	22.8
NOX (ppb) Average	604	1.06	1.7	-	0	0.3	0.5	0.7	1.3	1.9	34.6
Temperature 2 m (C) Average	720	13.96	5	-	4.6	7.8	10	13.3	17.1	21.3	26.8
Relative Humidity (%) Average	720	70.23	20.9	-	27	38.4	53.3	73.5	89.8	96.4	99
Wind Speed 10 m (km/h) Average	720	6.3	3	-	0	2	4	6	8	11	20
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - JACKFISH 2/3 (AMS27)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
NO2	17 Jun 2026 16:00	18 Jun 2026 03:00	12	Maintenance - stabilization post maintenance
NO2	18 Jun 2026 05:00	18 Jun 2026 08:00	4	Maintenance - stabilization post maintenance
NO2	21 Jun 2026 02:00	22 Jun 2026 01:00	24	Unstable Operation - span outside AMD criteria
NO2	22 Jun 2026 03:00	23 Jun 2026 02:00	24	Unstable Operation - span outside AMD criteria
NO2	23 Jun 2026 04:00	23 Jun 2026 10:00	7	Unstable Operation - span outside AMD criteria
NO2	23 Jun 2026 11:00	23 Jun 2026 14:00	4	Maintenance - to recalibrate the analyzer

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Jackfish 2/3 - June 2026

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

Maximum Value: 8.1 ppb on Jun 15 08:00

Maximum Daily Average: 1.2 ppb on Jun 15

Minimum Value: 0.0 ppb on Jun 1 02:00

Minimum Daily Average: 0.0 ppb on Jun 26

Maximum Diurnal Average: 1.2 ppb at hour 9

Minimum Diurnal Average: 0.1 ppb at hour 5

Monthly Average: 0.48 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.2 Q_3 = 0.5 P_{90} = 1.4 P_{99} = 4.7

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-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2
2-Jun	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	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.1	0.4
3-Jun	0.3	0.3	Z	0.1	0.1	0.1	0.1	0.3	0.4	0.5	0.8	1.1	0.8	0.8	0.6	1.0	1.1	0.6	0.3	0.2	0.1	0.1	0.1	0.1	0.4	1.1
4-Jun	0.1	0.1	0.1	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.4	0.4	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.4
5-Jun	0.2	0.2	0.2	0.2	Z	0.0	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	0.1	0.0	0.8	0.4	0.2	0.8
6-Jun	0.3	0.1	0.0	0.0	0.1	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	2.0	0.4	0.1	0.2	0.2	0.2	0.2	2.0
7-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.1	1.6	4.9	3.4	3.3	1.2	0.7	1.1	0.3	0.2	0.4	0.5	0.2	0.2	0.2	0.2	0.2	4.6	1.0	4.9
8-Jun	2.1	Z	2.7	1.5	0.2	1.5	0.1	0.0	1.1	2.6	0.3	0.1	0.0	0.0	0.0	0.0	2.9	0.5	1.2	0.1	0.2	0.2	0.2	0.2	0.8	2.9
9-Jun	0.3	0.3	Z	0.0	0.0	0.9	5.0	0.5	4.9	3.1	0.6	2.3	0.0	0.1	2.4	0.7	1.0	1.7	1.4	0.1	0.1	0.2	0.1	0.2	1.1	5.0
10-Jun	0.2	0.2	0.1	Z	0.0	0.0	0.3	0.6	1.3	0.4	0.7	0.2	0.3	0.1	0.1	0.4	0.1	0.2	0.2	0.4	0.4	0.1	0.3	0.5	0.3	1.3
11-Jun	0.2	0.3	0.4	0.3	Z	0.5	0.8	0.4	0.3	0.6	0.5	0.3	0.4	0.5	0.5	0.5	0.9	0.7	0.5	0.6	0.4	0.2	0.2	0.2	0.4	0.9
12-Jun	0.0	0.0	0.1	0.1	0.1	Z	0.8	0.2	0.1	0.0	0.1	0.7	1.7	1.7	0.3	0.2	0.2	0.3	0.2	0.5	0.4	0.5	0.2	0.2	0.4	1.7
13-Jun	Z	0.0	0.1	0.1	1.1	2.2	4.8	0.5	0.4	0.3	0.5	0.4	1.7	2.8	4.0	1.7	1.7	0.6	0.3	0.1	0.3	0.2	0.2	0.2	1.1	4.8
14-Jun	0.1	Z	0.1	0.2	0.3	0.3	0.1	0.1	1.4	0.6	1.2	2.0	0.6	0.9	0.9	0.1	0.2	2.7	0.3	0.1	0.1	0.2	0.3	0.4	0.6	2.7
15-Jun	0.3	0.3	Z	0.7	0.6	0.6	2.2	8.1	1.9	2.0	0.7	0.7	1.5	2.0	1.3	0.3	0.2	0.2	0.1	0.0	0.0	0.1	0.1	3.0	1.2	8.1
16-Jun	0.6	0.1	0.1	Z	0.0	0.0	0.0	0.1	0.1	0.4	C	C	C	0.0	0.1	0.3	0.4	0.2	0.0	0.0	0.0	0.2	2.2	0.8	0.3	2.2
17-Jun	0.3	0.1	0.1	0.1	Z	0.5	1.6	1.7	0.3	0.4	0.2	0.0	0.0	0.1	0.1	0.1	0.4	0.2	0.1	0.1	0.2	0.4	0.6	1.5	0.4	1.7
18-Jun	0.8	2.5	2.6	0.5	0.2	Z	0.3	0.5	0.4	2.2	0.6	0.3	0.3	0.3	0.1	0.1	0.2	0.4	0.8	0.4	0.1	0.1	0.3	0.1	0.6	2.6
19-Jun	Z	0.6	0.1	0.1	0.0	2.2	1.2	0.0	0.0	2.0	0.1	1.2	0.3	1.6	0.2	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.4	2.2
20-Jun	0.0	Z	0.0	0.0	0.0	0.1	0.0	0.9	1.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	1.0
21-Jun	0.2	0.2	Z	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.2	0.4	0.5	0.5	0.6	0.3	0.3	0.6	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.6
22-Jun	0.2	0.1	0.1	Z	0.0	0.0	0.5	0.9	2.3	2.4	0.3	0.4	0.3	0.9	0.1	0.4	0.4	0.7	0.3	0.5	0.0	0.2	0.2	0.0	0.5	2.4
23-Jun	0.1	0.2	0.2	0.2	Z	0.5	7.2	5.5	4.5	0.8	0.2	0.3	0.9	0.6	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	1.0	7.2
24-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.0	0.4	2.2	2.0	1.8	2.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	2.5
25-Jun	Z	0.1	0.2	0.0	0.2	0.5	0.5	0.6	0.9	0.4	0.1	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.9
26-Jun	0.0	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
27-Jun	0.1	0.0	Z	0.0	0.0	0.0	0.5	1.4	2.8	1.5	2.9	4.7	4.2	1.9	1.2	0.0	1.0	1.3	0.4	0.0	0.2	0.3	0.2	0.0	1.1	4.7
28-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.1	0.4	0.2	2.1
29-Jun	0.5	0.4	0.8	1.8	Z	0.9	1.7	2.0	2.9	0.4	1.3	1.0	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.6	2.9
30-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.5	2.5	1.2	0.2	0.4	0.8	0.5	0.5	1.1	0.5	0.6	0.7	0.7	0.2	0.2	0.1	0.1	0.5	2.5
	0.3	0.3	0.3	0.2	0.1	0.4	0.9	0.9	1.2	0.9	0.6	0.7	0.6	0.6	0.5	0.3	0.4	0.4	0.3	0.2	0.2	0.2	0.3	0.5	Diurnal Average	
	2.1	2.5	2.7	1.8	1.1	2.2	7.2	8.1	4.9	3.4	3.3	4.7	4.2	2.8	4.0	1.7	2.9	2.7	2.0	0.7	0.4	0.7	2.2	4.6	Diurnal Maximum	

Z - zerospan C - Calibration

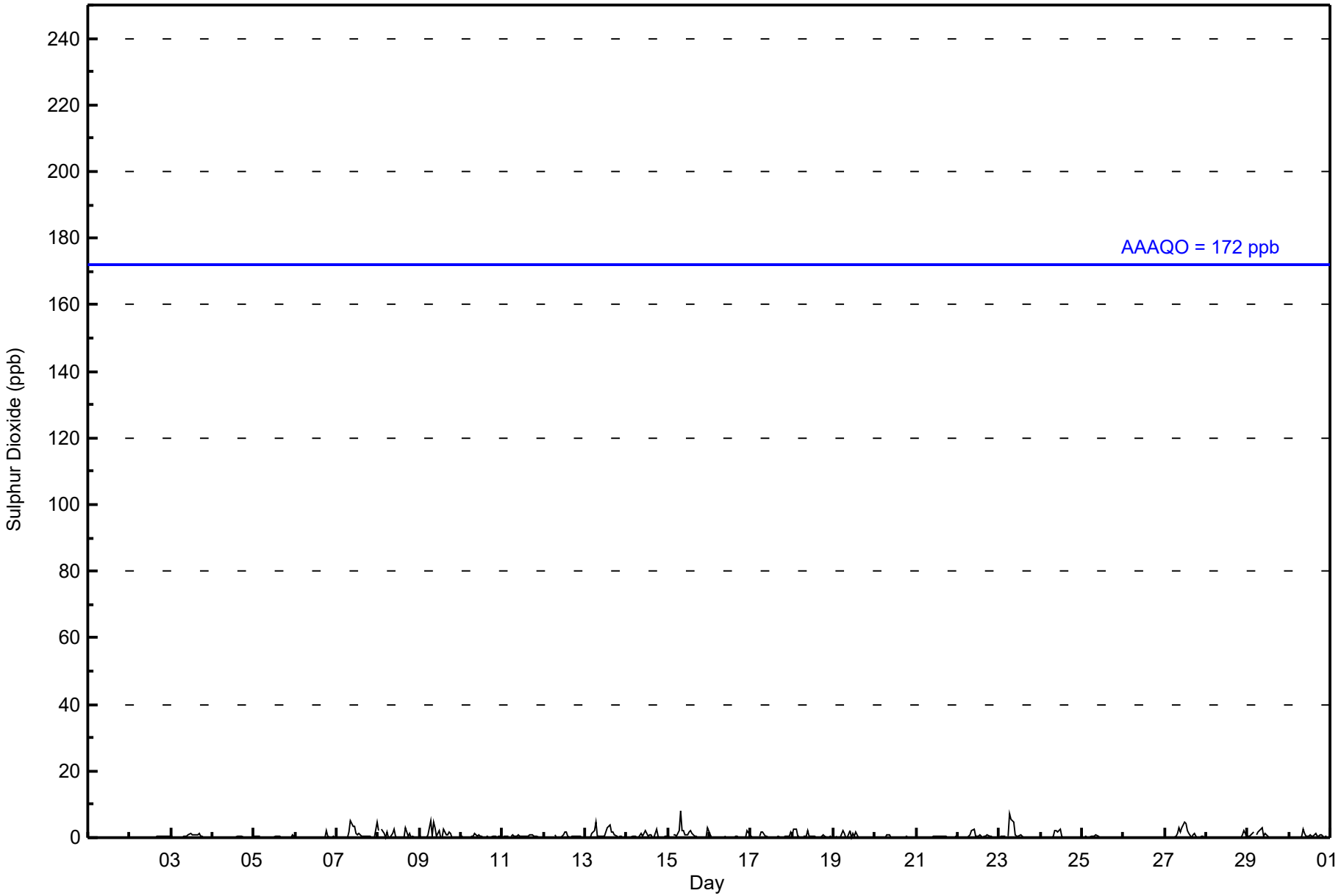
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Jackfish 2/3 - June 2026



Sulphur Dioxide (SO_2) - ppb
Jackfish 2/3 - June 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

Jackfish 2/3 - June 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	47	60	81	53	33	26	23	20	25	47	48	76	50	22	31	45	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	47	60	81	53	33	26	23	20	25	47	48	76	50	22	31	45	687

Total Number of Valid Hours: 687

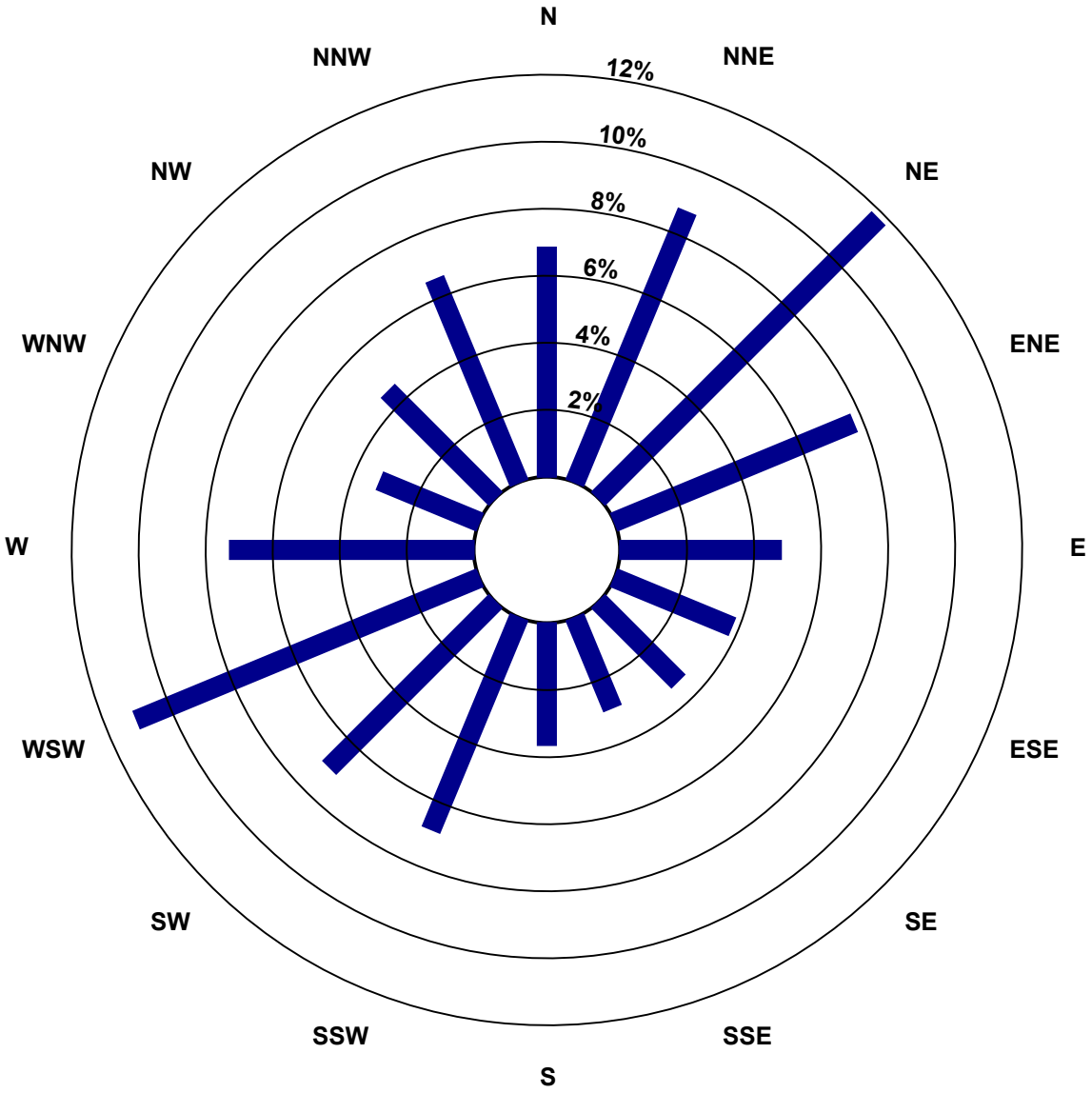
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Jackfish 2/3



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

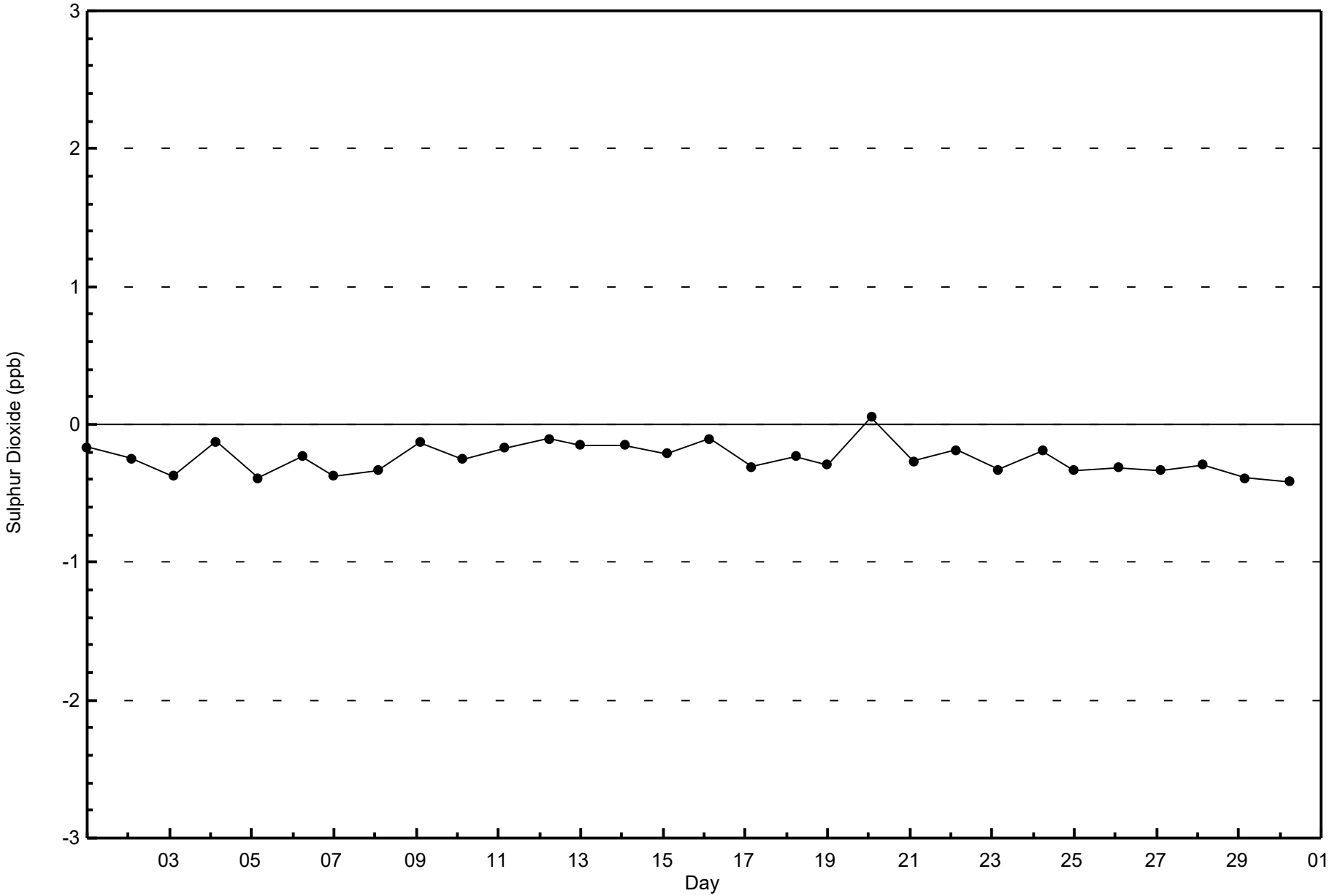
Total Number of Valid Hours: 687

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Jackfish 2/3 - June 2026

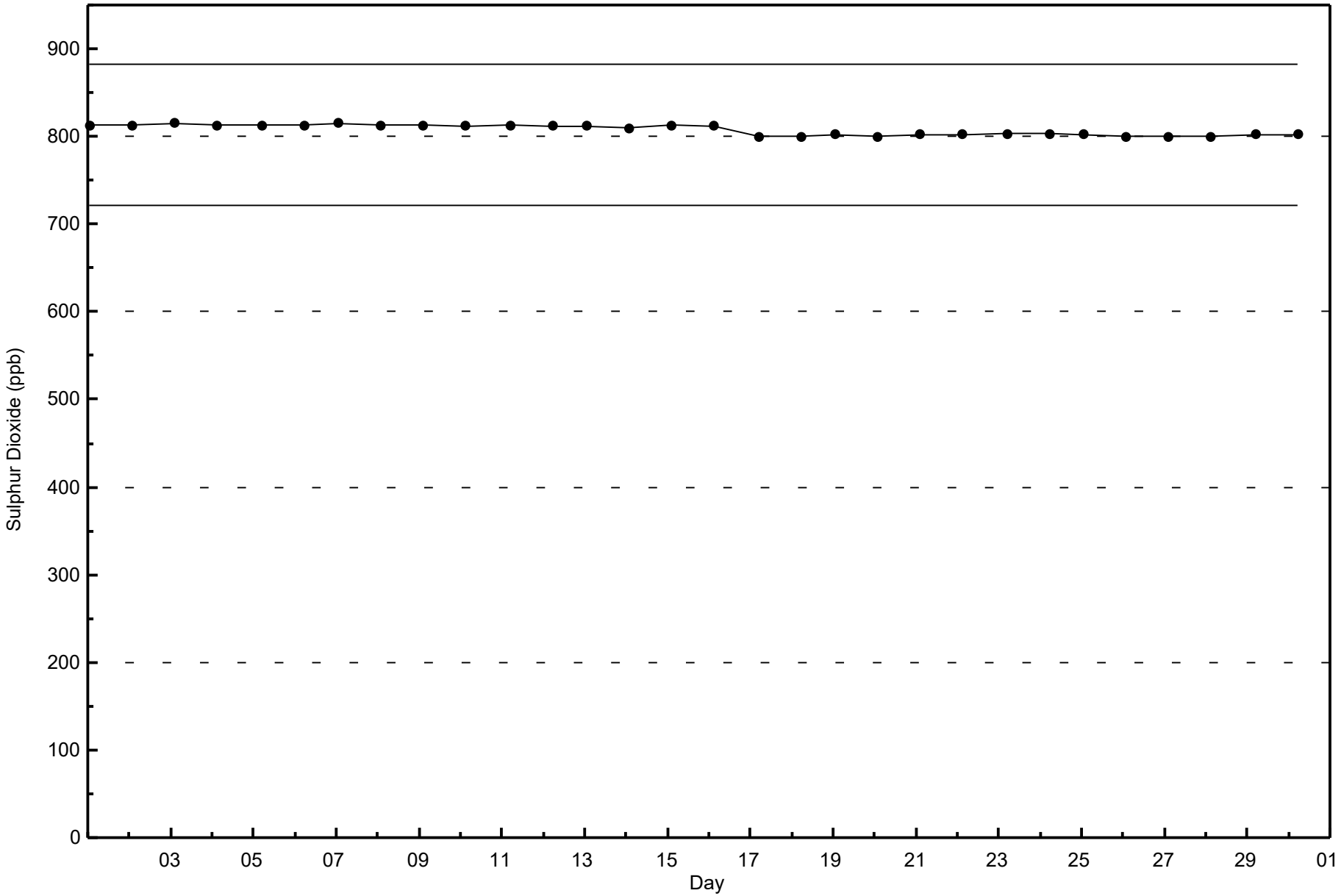


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Jackfish 2/3 - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H2S) - ppb

Jackfish 2/3 - June 2026

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

Maximum Value: 1.3 ppb on Jun 24 09:00 Maximum Daily Average: 0.4 ppb on Jun 27

Minimum Value: 0.0 ppb on Jun 23 12:00 Minimum Daily Average: 0.0 ppb on Jun 12

Maximum Diurnal Average: 0.2 ppb at hour 6 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 = 0.1 Median = 0.1 Q_3 = 0.1 P_{90} = 0.3 P_{99} = 0.7

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-Jun	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	0.0	0.0	0.0	0.1	0.2
2-Jun	0.0	0.1	Z	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	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
3-Jun	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	0.3	0.3	0.4	0.1	0.1	0.1	0.1	0.4
4-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5-Jun	0.1	0.1	0.1	0.2	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.2	0.1	0.1	0.4
6-Jun	Z	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.1	0.3
7-Jun	0.3	Z	0.1	0.1	0.2	0.3	0.2	0.3	0.7	0.3	0.1	0.1	0.1	0.3	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.7
8-Jun	0.2	0.2	Z	0.4	0.1	0.1	0.1	0.1	0.4	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.4
9-Jun	0.0	0.0	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.2	0.1	0.1	0.0	0.4	0.1	0.4
10-Jun	0.2	0.1	0.1	0.1	Z	0.4	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	0.1	0.0	0.0	0.0	0.1	0.4
11-Jun	0.0	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
12-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
13-Jun	0.1	Z	0.0	0.1	0.9	0.8	0.4	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	0.4	0.1	0.1	0.1	0.9
14-Jun	0.3	0.3	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.2	0.0	0.1	0.1	0.2	0.3	0.3	0.1	0.3
15-Jun	0.2	0.1	0.6	Z	0.8	0.9	0.4	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.9
16-Jun	0.1	0.3	0.3	0.2	Z	0.4	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.2	0.2	0.4
17-Jun	0.1	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	0.0	0.0	0.1	0.1	0.1	0.1	0.3	0.1	0.3
18-Jun	Z	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
19-Jun	0.6	Z	0.4	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.0	0.5	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.6
20-Jun	0.1	0.4	Z	0.1	0.1	0.2	0.2	0.2	0.2	0.1	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	0.1	0.4
21-Jun	0.1	0.1	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	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
22-Jun	0.1	0.4	0.5	0.1	Z	0.2	0.2	0.1	0.4	0.4	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.3	0.1	0.5
23-Jun	0.4	0.4	0.3	0.6	0.2	Z	0.3	0.3	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	0.6
24-Jun	Z	0.1	0.1	0.1	0.3	0.2	0.2	0.2	1.3	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	1.3
25-Jun	0.1	Z	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.2
26-Jun	0.1	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
27-Jun	0.1	0.1	0.2	Z	0.2	0.4	0.7	0.7	0.5	0.3	0.3	0.4	0.3	0.2	0.2	0.1	0.3	0.5	0.5	0.1	1.2	0.7	0.9	0.4	0.4	1.2
28-Jun	0.3	0.2	0.1	0.1	Z	0.2	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	0.3
29-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2
30-Jun	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	0.0	0.1	0.1	0.1	0.1	0.3	0.4	0.2	0.1	0.1	0.1	0.1	0.4
	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	Diurnal Average	
	0.6	0.4	0.6	0.6	0.9	0.9	0.7	0.7	1.3	0.4	0.3	0.5	0.4	0.3	0.2	0.1	0.4	0.5	0.5	0.4	1.2	0.7	0.9	0.4	Diurnal Maximum	

Z - zerospan C - Calibration

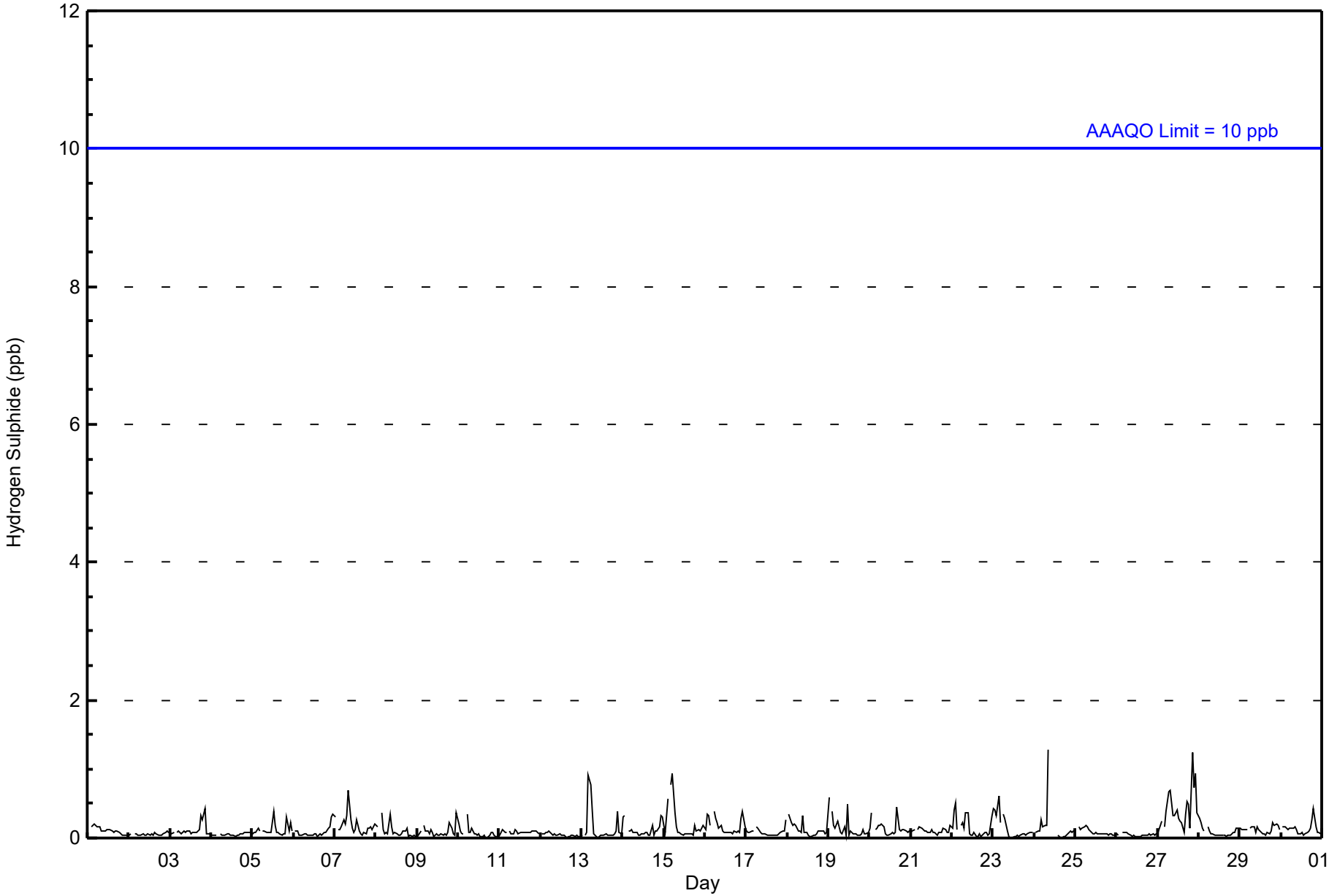
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H2S) - ppb

Jackfish 2/3 - June 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 (H2S) - ppb

Jackfish 2/3 - June 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	48	58	84	52	36	25	21	20	22	47	48	79	49	22	31	43	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	48	58	84	52	36	25	21	20	22	47	48	79	49	22	31	43	685

Total Number of Valid Hours: 685

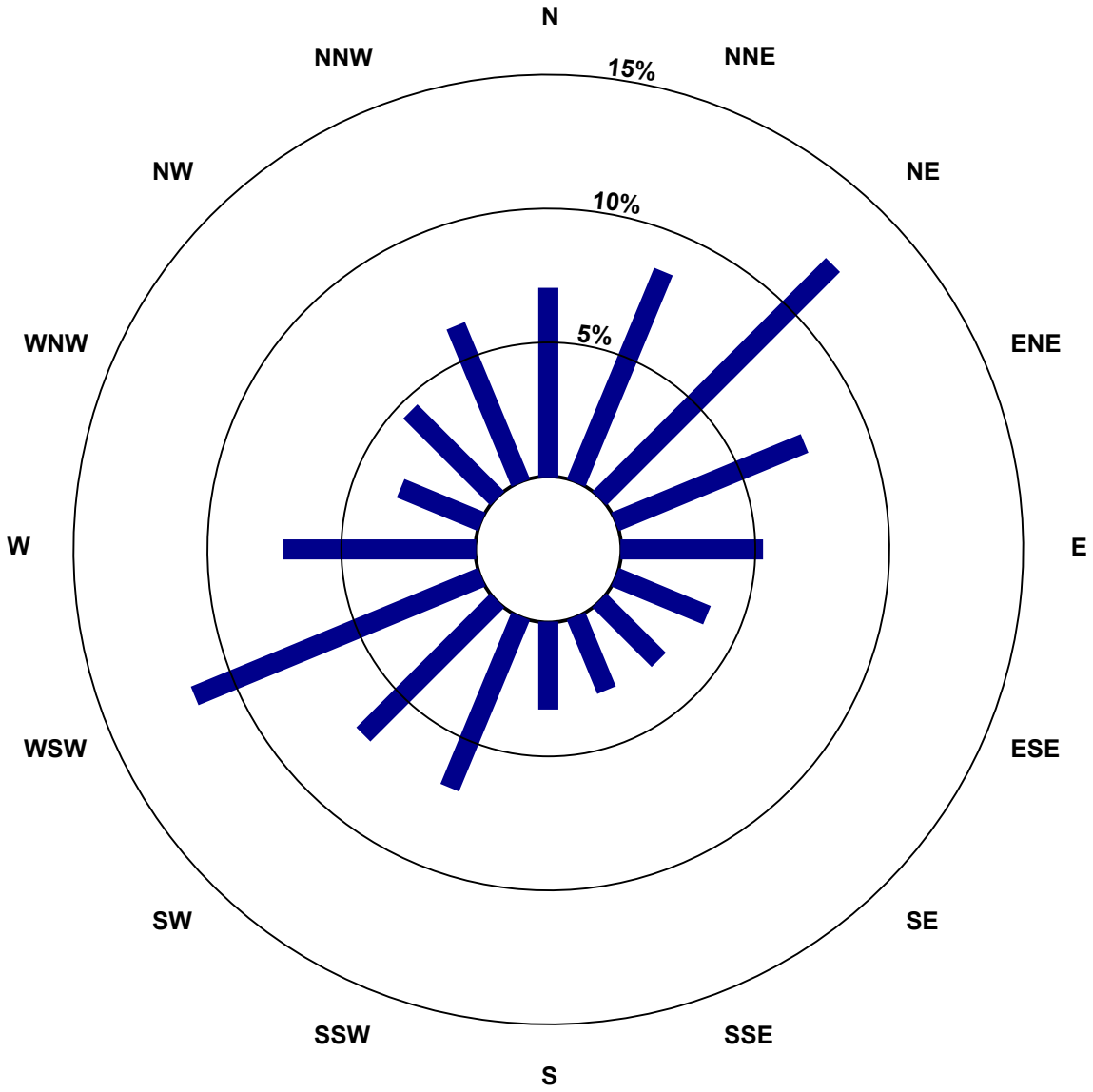
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H2S) - ppb

Jackfish 2/3



Classes (ppb)

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

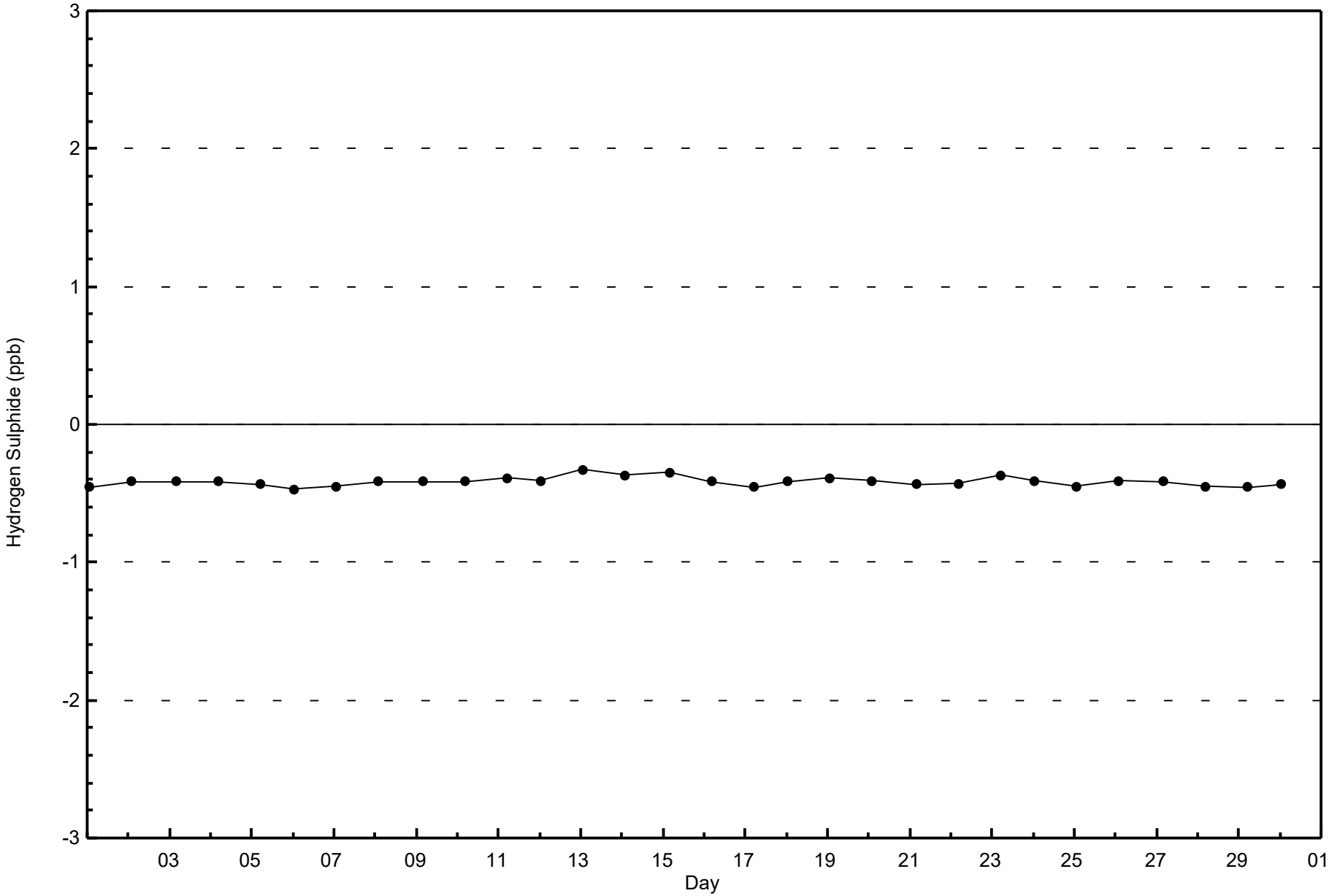
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H2S) - ppb

Jackfish 2/3 - June 2026

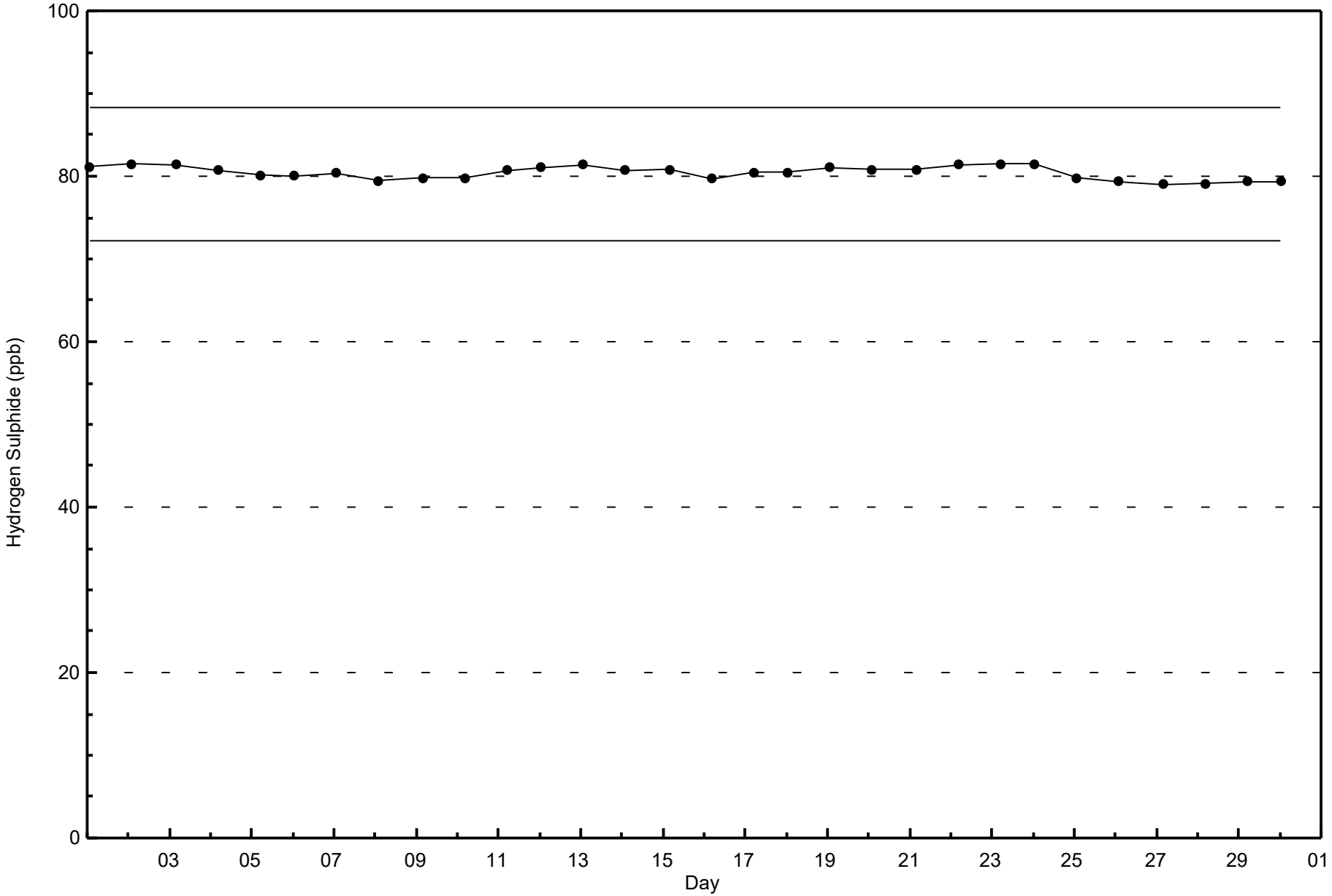


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H2S) - ppb

Jackfish 2/3 - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Jackfish 2/3 - June 2026

Maximum Value: 22.8 ppb on Jun 19 12:00

Maximum Daily Average: 1.4 ppb on Jun 19

Minimum Value: 0.0 ppb on Jun 1 01:00

Minimum Daily Average: 0.0 ppb on Jun 16

Maximum Diurnal Average: 1.1 ppb at hour 12

Minimum Diurnal Average: 0.0 ppb at hour 20

Monthly Average: 0.22 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.3 P_{90} = 0.5 P_{99} = 1.6

Hours in Service:	720
Hours of Data:	604
Hours of Missing Data:	116
Hours of Calibration:	41
Percent Operational Time:	89.6

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-Jun	0.0	0.0	0.0	0.0	Z	0.7	0.2	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.1	0.3	0.0	0.2	0.2	0.1	0.2	0.1	0.7
2-Jun	0.2	0.3	0.2	0.2	0.3	Z	0.7	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.4	0.3	0.4	0.3	0.5	0.6	0.6	0.5	0.4	0.4	0.7
3-Jun	Z	0.9	0.4	0.6	0.5	0.4	0.5	0.6	1.0	0.7	0.6	0.8	0.8	0.6	0.6	0.5	0.6	0.3	0.0	0.0	0.4	0.2	0.2	0.3	0.5	1.0
4-Jun	0.1	Z	0.6	0.2	0.3	0.3	0.1	0.3	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	0.6
5-Jun	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	0.2	0.0	0.2
6-Jun	0.0	0.0	0.0	Z	0.4	0.3	0.4	0.3	0.4	0.6	0.3	0.3	0.2	0.1	0.3	0.3	0.2	0.2	0.3	0.1	0.1	0.6	0.2	0.4	0.3	0.6
7-Jun	0.5	1.8	0.0	0.6	Z	1.2	0.7	0.5	2.1	1.0	1.1	0.6	0.5	0.3	0.2	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.2	0.0	0.5	2.1
8-Jun	0.2	0.0	0.0	0.0	0.0	Z	0.4	0.2	0.3	0.6	0.1	0.0	0.1	0.2	0.2	0.1	0.6	0.1	0.2	0.1	0.1	0.2	0.1	0.3	0.2	0.6
9-Jun	Z	0.5	0.4	0.3	0.3	0.6	0.9	0.2	0.8	0.8	0.2	0.3	0.2	0.3	0.3	0.1	0.0	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.9
10-Jun	0.1	Z	0.5	0.3	0.3	0.1	0.1	0.3	0.8	0.4	0.3	0.4	0.2	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8
11-Jun	0.0	0.0	Z	0.4	0.3	0.1	0.4	0.4	0.3	0.7	0.6	0.3	0.4	0.2	0.3	0.3	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.7
12-Jun	0.0	0.0	0.0	Z	0.0	0.1	0.2	0.0	0.0	0.2	0.0	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
13-Jun	0.0	0.0	0.0	0.0	Z	0.6	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
14-Jun	0.1	0.0	0.2	0.1	0.6	Z	0.7	0.3	0.4	0.2	0.2	0.3	0.3	0.2	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.2	0.7
15-Jun	Z	0.6	0.4	0.0	0.1	0.5	0.7	4.7	0.6	0.6	0.5	0.2	0.2	0.0	0.0	0.5	0.4	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.4	4.7
16-Jun	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
17-Jun	0.0	0.0	Z	0.4	0.3	0.1	0.2	0.8	0.1	C	C	C	C	C	C	M	M	M	M	M	M	M	M	M	--	0.8
18-Jun	M	M	M	Z	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	--	0.0
19-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.0	0.0	9.2	0.5	22.8	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	22.8
20-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.5	1.8	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	0.1	1.8
21-Jun	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
22-Jun	UO	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
23-Jun	UO	UO	Z	UO	UO	UO	UO	UO	UO	UO	M	M	M	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.0
24-Jun	0.0	0.0	0.0	Z	0.0	0.4	0.1	0.6	1.0	0.9	0.3	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	0.2	1.0
25-Jun	0.0	0.0	0.0	0.0	Z	0.3	0.5	0.3	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
26-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
27-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.1	0.3	0.5	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
28-Jun	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
29-Jun	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.4	0.8	0.1	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	0.8
30-Jun	0.0	0.0	0.0	Z	0.1	0.1	0.2	0.4	1.6	0.5	0.0	0.0	0.2	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.6
	0.1	0.2	0.1	0.1	0.2	0.3	0.3	0.5	0.5	0.7	0.2	1.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	Diurnal Average	
	0.5	1.8	0.6	0.6	0.6	1.2	0.9	4.7	2.1	9.2	1.1	22.8	0.8	0.6	0.6	0.5	0.6	0.4	0.3	0.5	0.6	0.6	0.5	0.4	Diurnal Maximum	

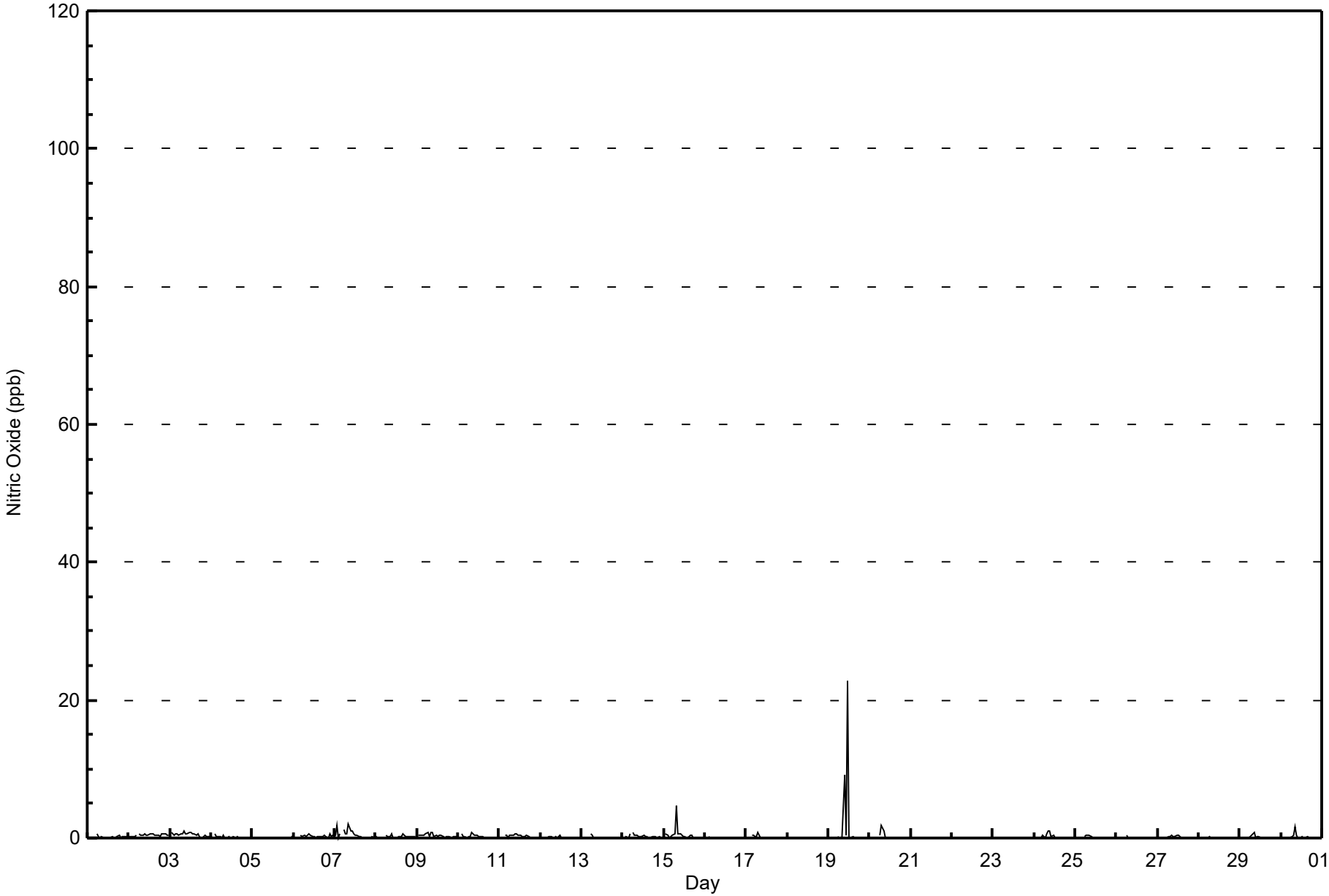
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Jackfish 2/3 - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	603	99.83	99.83
21 - 40	1	0.17	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: 604

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Jackfish 2/3 - June 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	50	71	46	27	23	23	20	24	47	39	63	42	17	28	41	603
21 - 40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
11 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81 - 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	42	50	71	46	27	23	23	20	24	47	39	63	42	17	29	41	604

Total Number of Valid Hours: 604

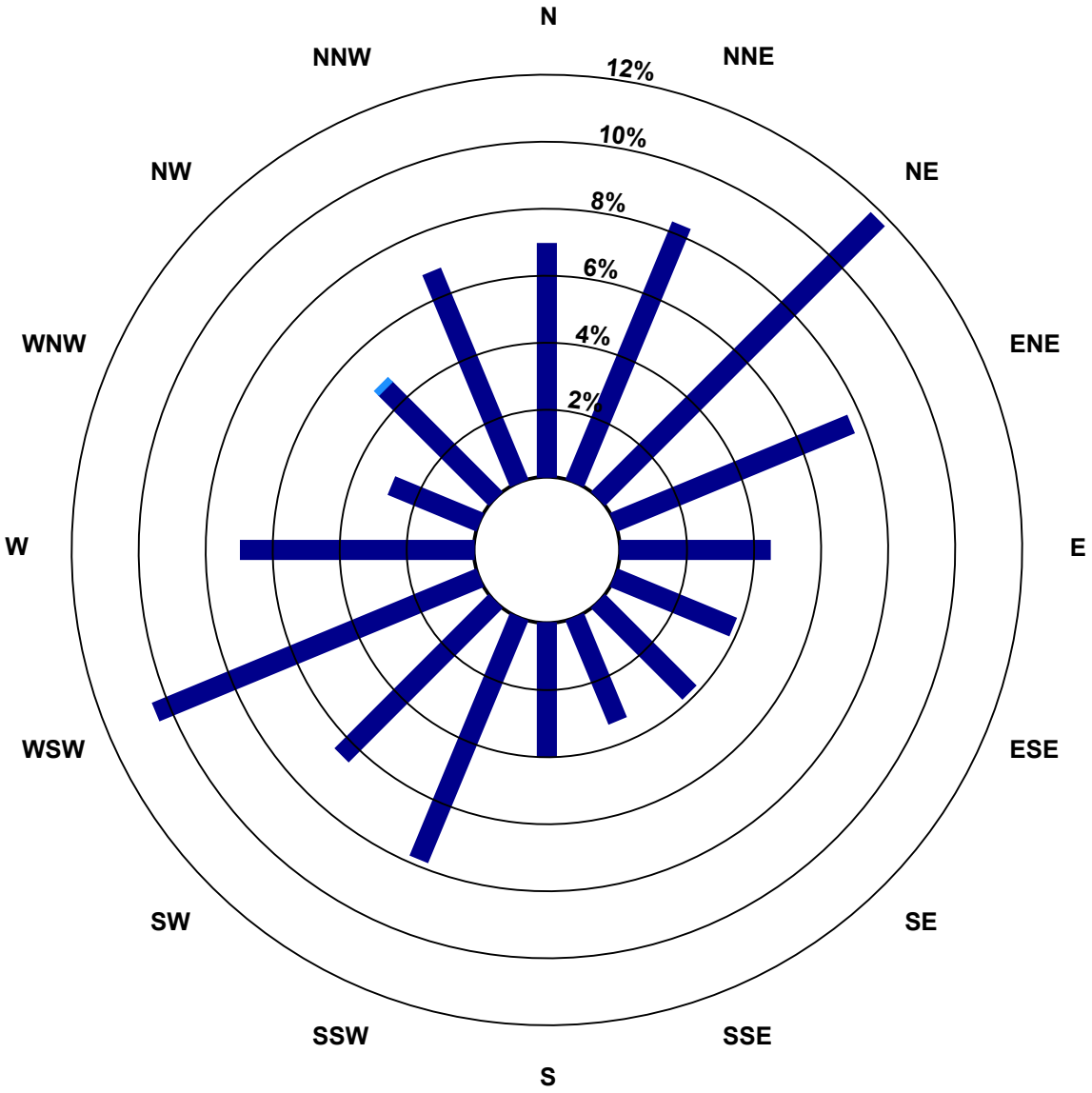
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Jackfish 2/3



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

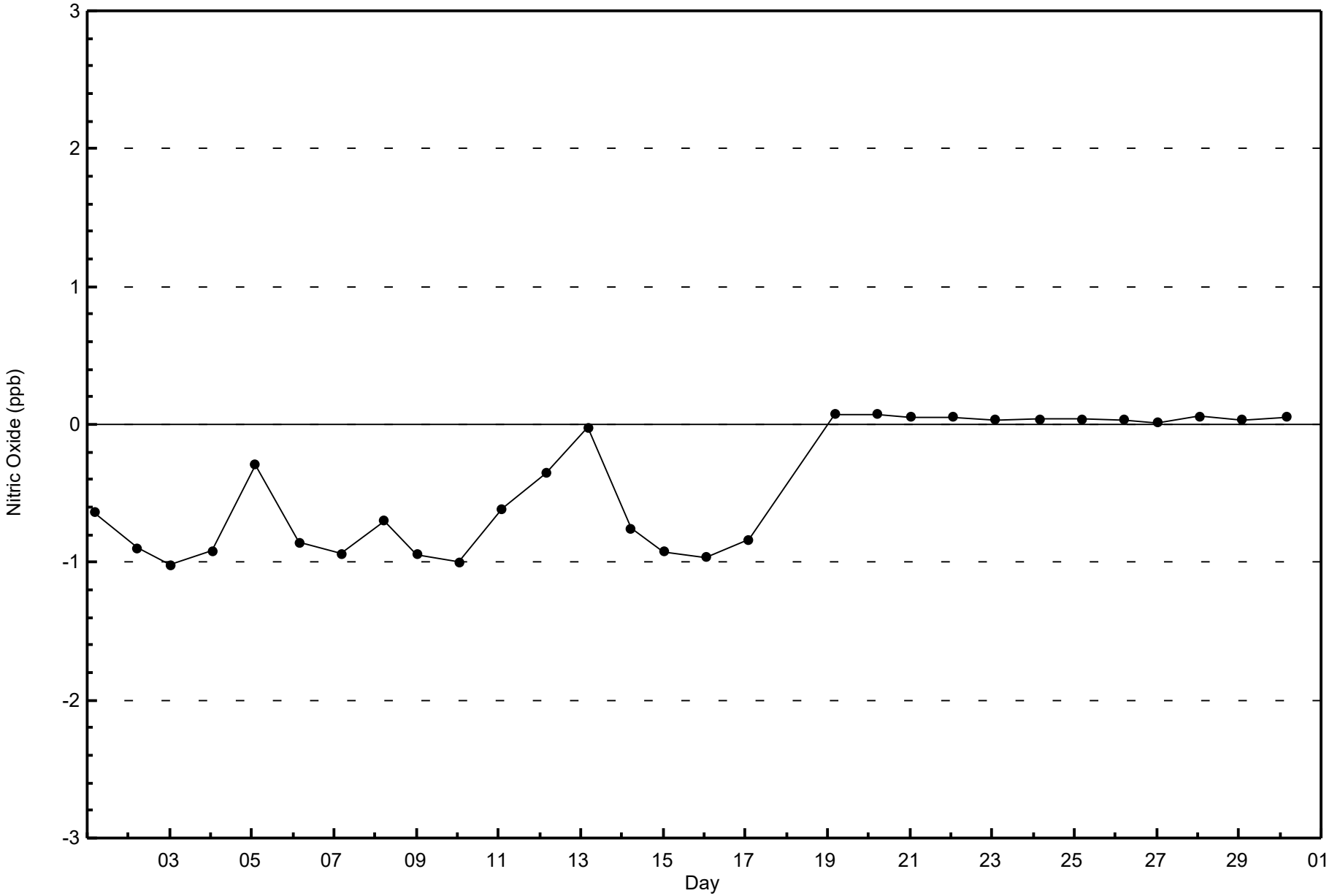
Total Number of Valid Hours: 604

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Jackfish 2/3 - June 2026

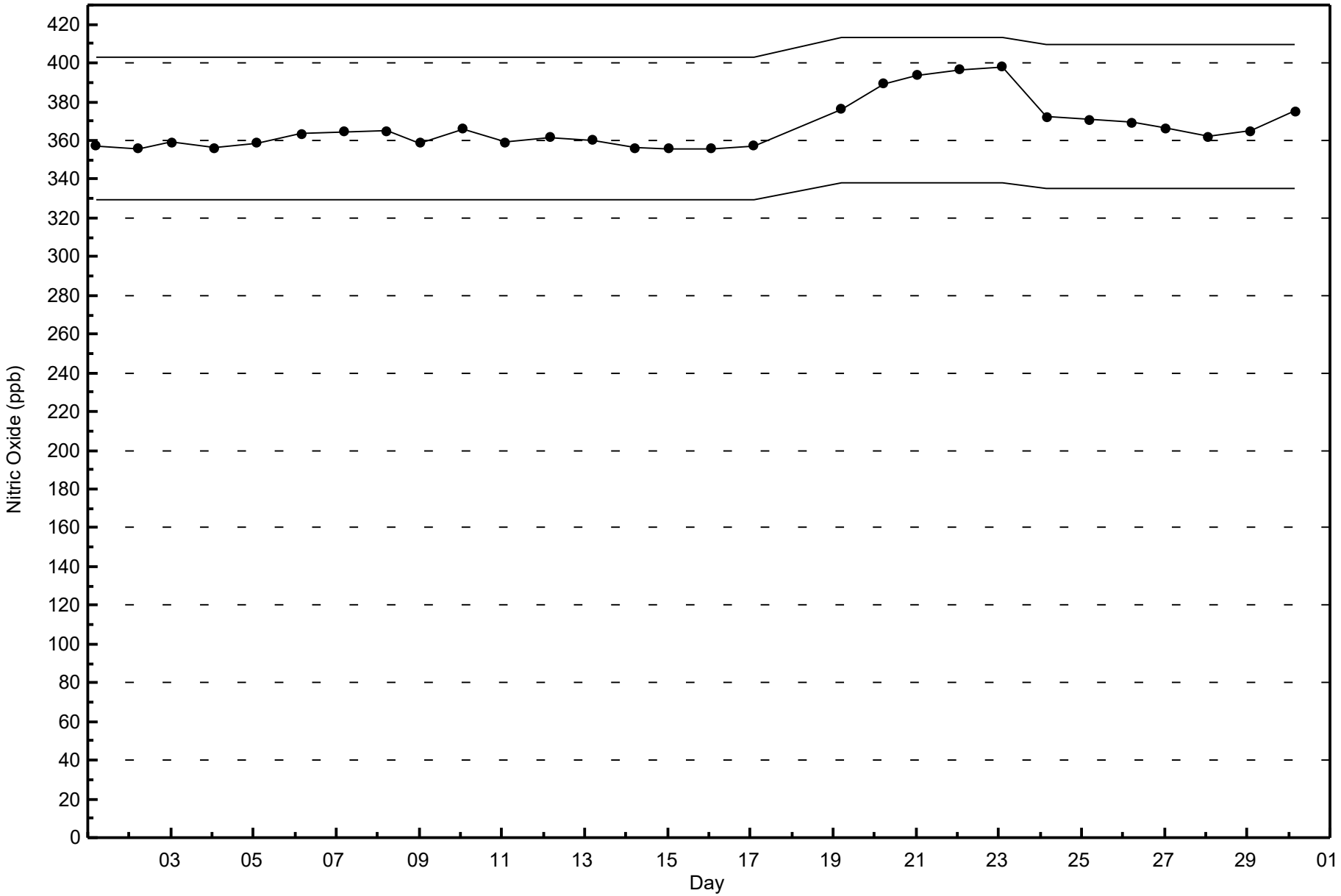


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Jackfish 2/3 - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Jackfish 2/3 - June 2026

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

Maximum Value: 11.8 ppb on Jun 19 12:00

Maximum Daily Average: 1.8 ppb on Jun 29

Minimum Value: 0.0 ppb on Jun 2 02:00

Minimum Daily Average: 0.2 ppb on Jun 2

Maximum Diurnal Average: 1.4 ppb at hour 8

Minimum Diurnal Average: 0.6 ppb at hour 16

Monthly Average: 0.84 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.2 Q_1 = 0.4 Median = 0.6 Q_3 = 1.1 P_{90} = 1.7 P_{99} = 3.2

Hours in Service:	720
Hours of Data:	604
Hours of Missing Data:	116
Hours of Calibration:	41
Percent Operational Time:	89.6

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-Jun	0.7	0.4	0.5	1.0	Z	0.8	1.0	0.9	0.4	0.4	0.7	0.6	0.7	0.8	0.5	0.5	0.6	0.7	0.4	0.3	0.2	0.1	0.2	0.1	0.5	1.0
2-Jun	0.1	0.0	0.1	0.2	0.1	Z	0.3	0.2	0.0	0.2	0.1	0.3	0.1	0.1	0.1	0.4	0.2	0.1	0.0	0.1	0.2	0.3	1.0	0.7	0.2	1.0
3-Jun	Z	0.6	0.6	0.3	0.2	0.4	0.2	0.9	1.1	0.8	1.2	0.7	0.8	0.9	0.7	0.9	0.9	0.4	0.2	0.1	0.2	0.1	0.1	0.5	0.6	1.2
4-Jun	0.8	Z	1.6	0.7	0.7	0.6	0.6	1.2	0.7	0.3	0.6	0.6	0.7	0.9	0.6	0.8	0.8	0.7	0.3	0.6	0.1	0.4	0.5	0.5	0.7	1.6
5-Jun	0.7	0.8	Z	0.5	1.1	0.3	0.5	0.4	0.2	0.9	0.4	0.4	0.7	1.2	0.8	0.8	0.1	0.0	0.1	0.5	0.9	0.6	0.9	0.3	0.6	1.2
6-Jun	0.2	0.1	0.2	Z	0.5	0.5	0.5	0.3	0.1	0.0	0.1	0.2	0.3	0.4	0.2	0.3	0.2	0.2	1.1	0.4	0.2	1.1	0.8	0.6	0.4	1.1
7-Jun	1.0	1.6	0.7	0.6	Z	1.3	0.6	1.0	3.0	1.6	1.7	1.2	0.7	1.2	0.7	0.5	0.5	0.9	0.8	0.6	0.6	1.0	0.7	3.2	1.1	3.2
8-Jun	1.5	1.6	1.9	1.2	0.4	Z	0.9	0.5	1.9	2.9	0.5	0.4	0.5	0.5	0.4	0.2	1.3	0.5	1.0	0.5	0.7	0.7	0.6	0.8	0.9	2.9
9-Jun	Z	1.1	0.6	0.5	0.5	0.7	1.8	0.5	1.6	1.3	0.6	0.9	0.4	0.3	1.0	0.4	0.6	0.7	0.7	0.3	0.3	0.5	0.5	0.7	0.7	1.8
10-Jun	0.4	Z	0.4	0.4	0.9	1.2	1.0	1.2	2.2	0.9	1.1	0.6	0.9	0.7	0.5	0.3	0.3	0.2	0.7	0.9	1.1	0.5	0.6	0.9	0.8	2.2
11-Jun	0.8	1.7	Z	2.0	1.7	1.9	1.7	1.2	0.9	1.5	1.4	0.9	0.8	0.8	1.2	1.3	1.8	1.7	1.6	1.9	1.7	1.1	0.9	0.5	1.3	2.0
12-Jun	0.5	0.5	0.5	Z	1.5	1.6	1.3	0.9	1.0	0.8	0.8	1.3	1.3	1.2	0.8	0.3	0.4	0.2	0.5	0.5	0.6	0.5	0.7	0.8	0.8	1.6
13-Jun	0.8	0.6	0.6	0.6	Z	2.3	2.3	1.1	0.7	0.2	0.5	0.3	0.5	0.5	0.8	0.2	0.4	0.2	0.1	0.0	0.1	0.0	0.6	0.5	0.6	2.3
14-Jun	0.4	0.4	0.8	1.1	2.0	Z	1.1	0.9	0.8	0.7	0.8	0.9	0.6	0.6	0.5	0.2	0.4	0.8	0.4	0.5	0.5	0.5	0.5	0.6	0.7	2.0
15-Jun	Z	1.2	1.4	1.6	1.1	0.8	2.2	9.0	1.0	0.7	0.2	0.2	0.3	0.4	0.3	0.1	0.0	0.0	0.1	0.1	0.1	0.4	0.1	1.3	1.0	9.0
16-Jun	0.4	Z	0.5	0.0	0.0	0.1	0.2	0.5	0.8	1.0	0.7	0.5	0.0	0.0	0.9	0.7	0.5	0.0	0.0	0.0	0.0	0.7	1.3	0.6	0.4	1.3
17-Jun	1.3	0.9	Z	1.1	1.0	1.0	1.3	1.3	0.3	C	C	C	C	C	C	M	M	M	M	M	M	M	M	M	--	1.3
18-Jun	M	M	M	Z	M	M	M	M	C	C	C	C	C	0.3	0.1	0.1	0.1	0.7	1.5	1.4	0.7	0.5	0.4	0.4	--	1.5
19-Jun	1.2	1.4	0.4	0.2	Z	1.1	0.7	0.4	0.2	2.9	0.3	11.8	0.4	0.9	0.6	0.1	0.0	0.2	0.5	0.9	0.9	0.5	0.6	0.5	1.2	11.8
20-Jun	0.5	0.9	0.6	0.4	0.6	Z	1.2	3.2	1.9	0.4	0.1	0.2	0.5	0.3	0.2	0.3	1.1	0.8	1.1	1.3	1.0	1.1	0.5	0.5	0.8	3.2
21-Jun	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
22-Jun	UO	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
23-Jun	UO	UO	Z	UO	UO	UO	UO	UO	UO	UO	M	M	M	M	0.5	0.2	0.3	0.0	0.2	0.1	0.1	0.1	0.2	0.2	--	0.5
24-Jun	0.2	0.1	0.2	Z	0.5	1.3	1.0	1.8	3.2	2.4	1.7	2.5	0.7	0.3	0.3	0.3	0.5	0.8	0.7	0.4	1.4	0.8	0.5	0.6	1.0	3.2
25-Jun	1.0	1.7	1.8	1.6	Z	2.1	2.0	1.7	1.7	1.2	0.6	0.6	0.5	0.6	0.7	0.6	0.7	0.6	0.7	0.7	0.7	0.6	0.8	0.7	1.0	2.1
26-Jun	0.6	0.7	1.1	1.3	1.2	Z	1.8	0.9	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.7	1.8
27-Jun	Z	0.8	0.7	0.7	0.7	0.8	1.4	1.5	1.9	1.3	1.8	2.7	2.3	1.4	1.0	0.4	1.0	1.2	0.7	0.4	0.6	0.9	0.8	0.5	1.1	2.7
28-Jun	0.6	Z	1.0	1.1	1.1	1.4	1.1	0.7	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	1.8	5.5	2.3	0.9	5.5
29-Jun	2.3	1.8	Z	2.2	1.3	1.3	2.1	3.1	4.5	1.3	2.8	2.3	1.5	1.2	1.3	1.1	1.2	1.5	1.3	1.4	1.0	1.1	1.2	1.8	1.8	4.5
30-Jun	1.1	1.4	1.6	Z	1.3	1.2	1.7	2.3	5.0	2.2	0.9	1.4	1.9	1.6	1.7	3.2	1.5	1.2	1.1	1.2	0.8	0.6	0.5	0.6	1.6	5.0
	0.8	0.9	0.8	0.9	0.9	1.1	1.2	1.4	1.4	1.1	0.8	1.3	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8	0.8	Diurnal Average	
	2.3	1.8	1.9	2.2	2.0	2.3	2.3	9.0	5.0	2.9	2.8	11.8	2.3	1.6	1.7	3.2	1.8	1.7	1.6	1.9	1.7	1.8	5.5	3.2	Diurnal Maximum	

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

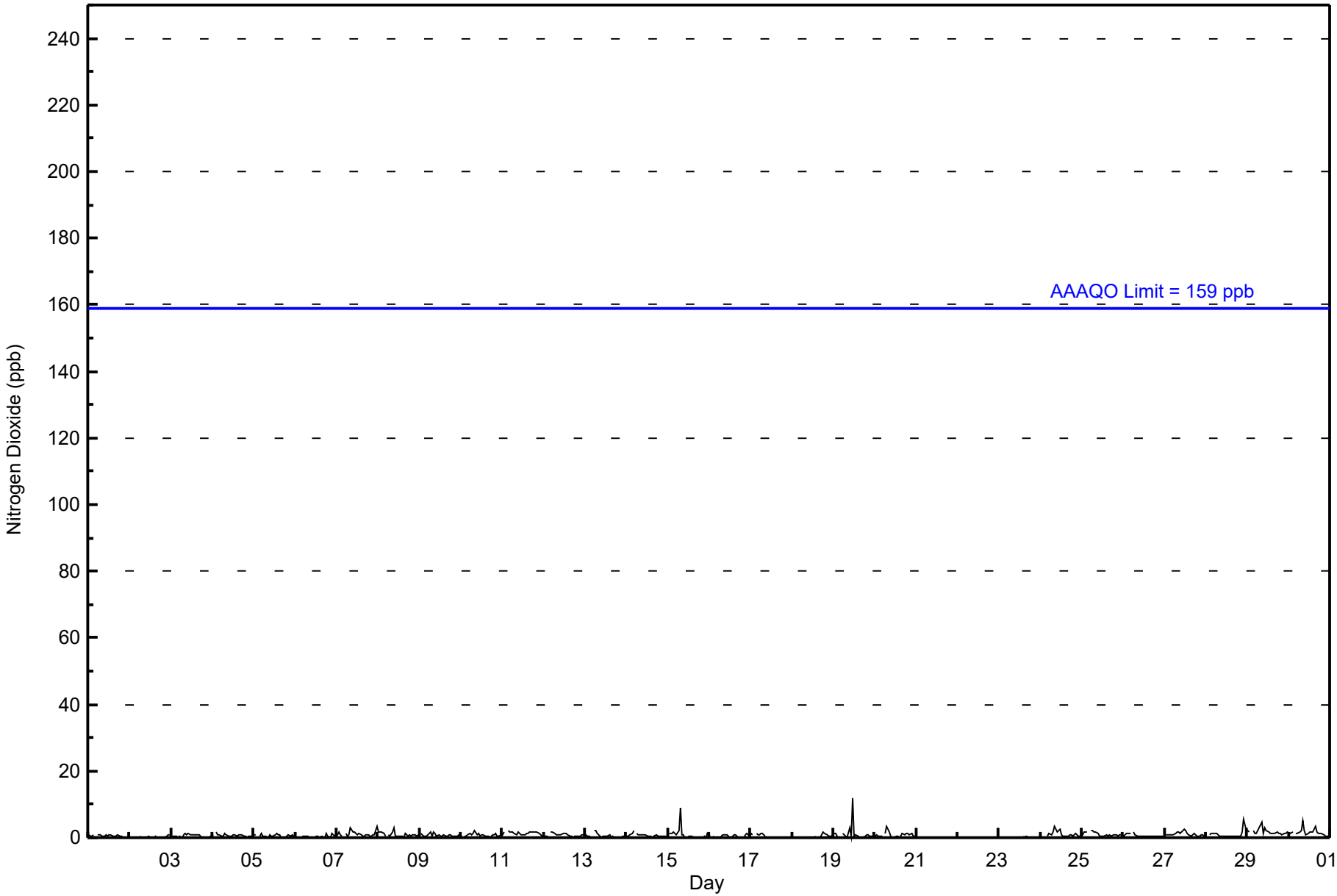
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Jackfish 2/3 - June 2026



Nitrogen Dioxide (NO_2) - ppb

Jackfish 2/3 - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	604	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: 604

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Jackfish 2/3 - June 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	50	71	46	27	23	23	20	24	47	39	63	42	17	29	41	604
21 - 40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81 - 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	42	50	71	46	27	23	23	20	24	47	39	63	42	17	29	41	604

Total Number of Valid Hours: 604

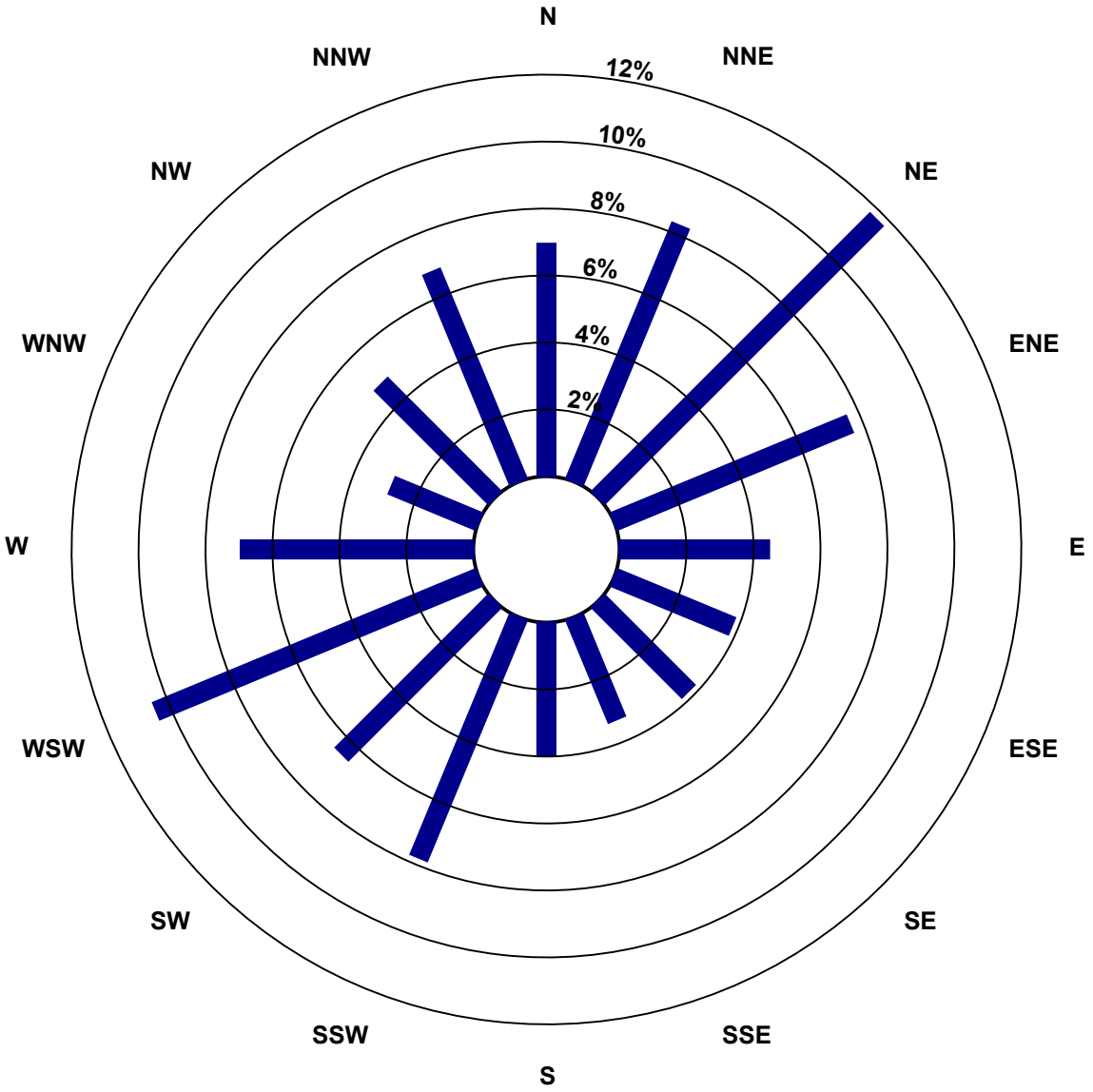
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Jackfish 2/3



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

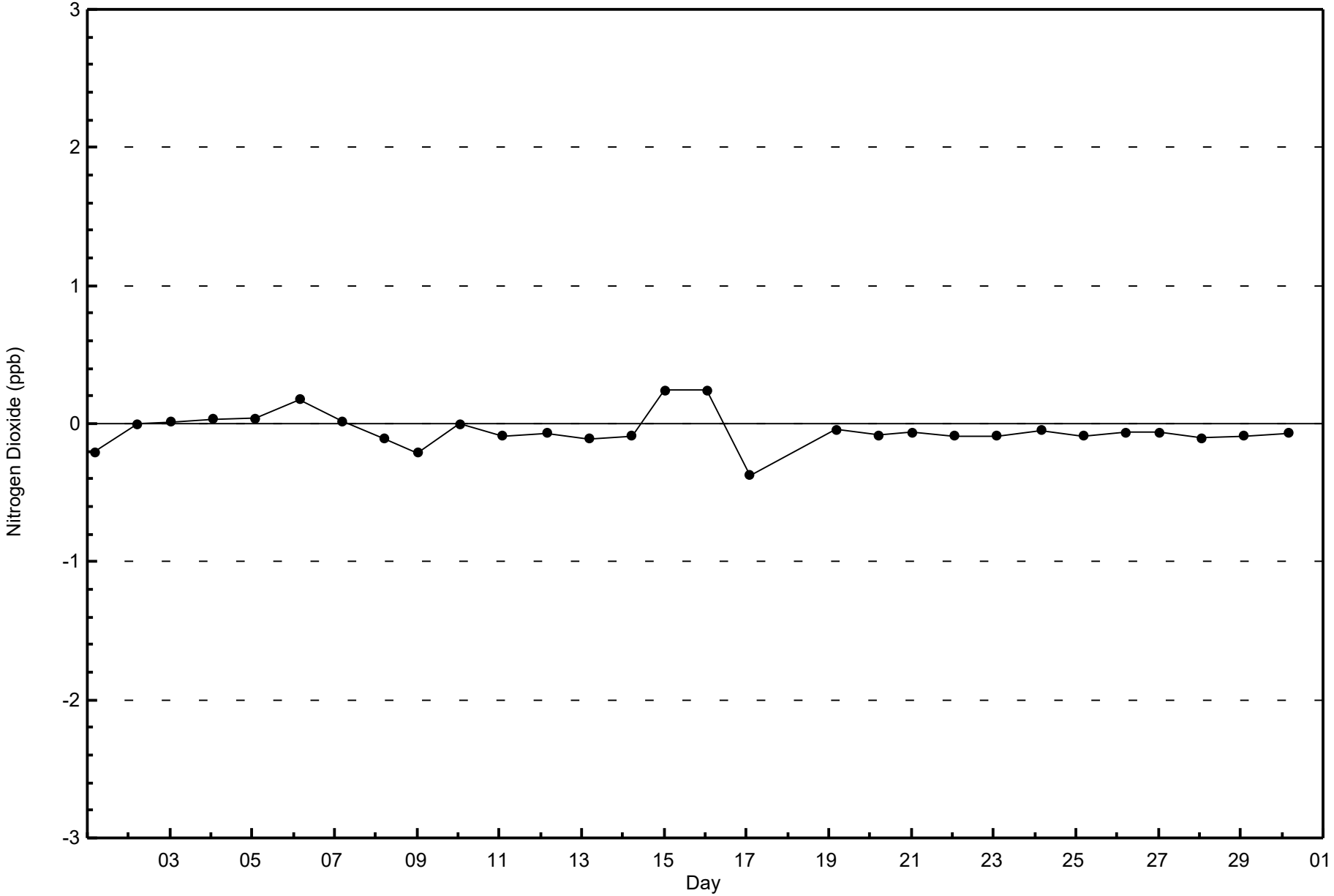
Total Number of Valid Hours: 604

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Jackfish 2/3 - June 2026

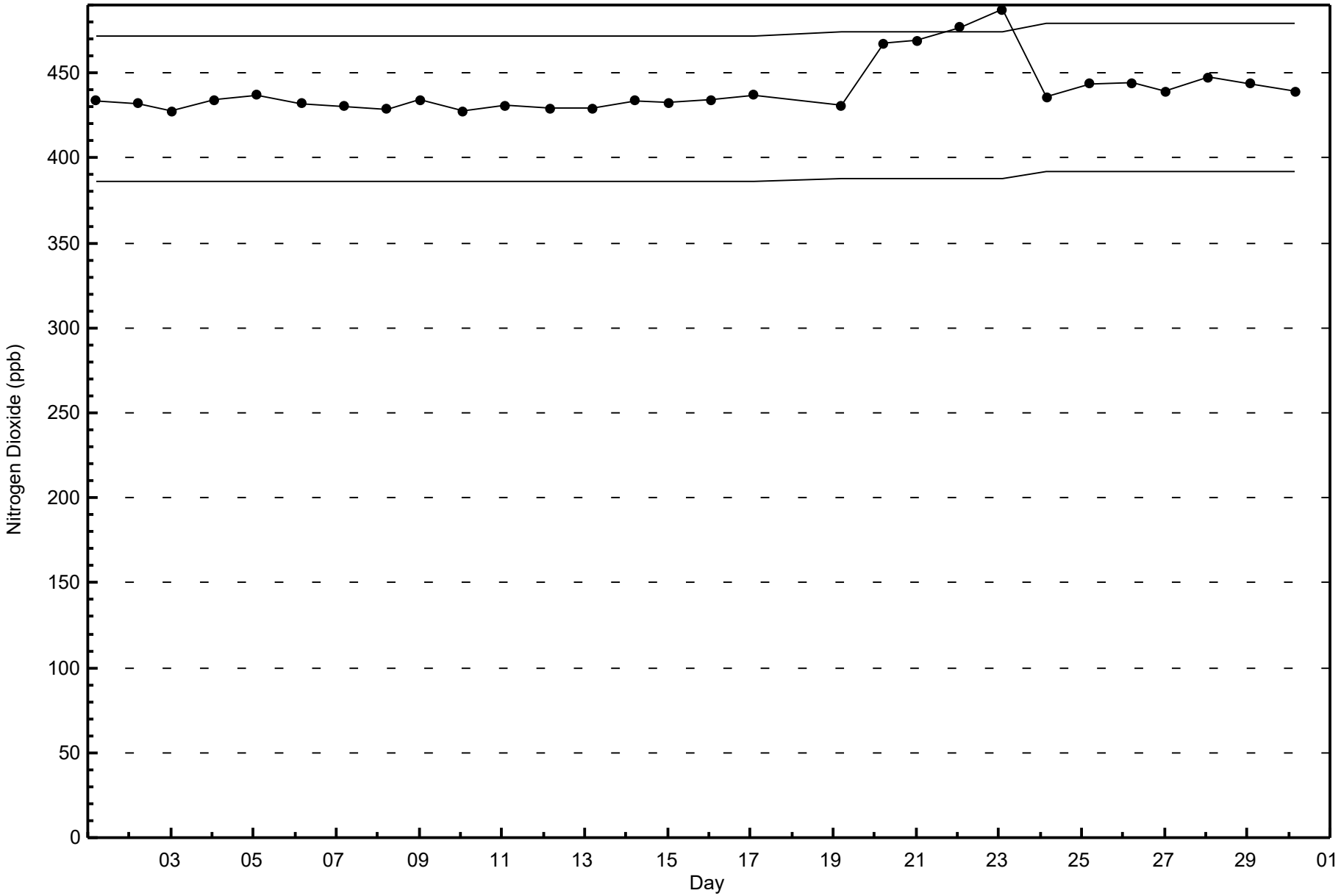


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Jackfish 2/3 - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Jackfish 2/3 - June 2026

Maximum Value: 34.6 ppb on Jun 19 12:00

Maximum Daily Average: 2.6 ppb on Jun 19

Minimum Value: 0.0 ppb on Jun 13 20:00

Minimum Daily Average: 0.4 ppb on Jun 16

Maximum Diurnal Average: 2.4 ppb at hour 12

Minimum Diurnal Average: 0.6 ppb at hour 20

Monthly Average: 1.06 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.3 Q_1 = 0.5 Median = 0.7 Q_3 = 1.3 P_{90} = 1.9 P_{99} = 5.1

Hours in Service:	720
Hours of Data:	604
Hours of Missing Data:	116
Hours of Calibration:	41
Percent Operational Time:	89.6

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-Jun	0.7	0.4	0.5	1.0	Z	1.5	1.2	0.9	0.5	0.5	0.7	0.7	0.7	0.9	0.7	0.5	0.6	0.8	0.7	0.3	0.4	0.3	0.3	0.3	0.6	1.5
2-Jun	0.3	0.3	0.3	0.4	0.4	Z	1.0	0.7	0.4	0.7	0.6	0.8	0.6	0.6	0.7	0.8	0.5	0.5	0.3	0.6	0.8	0.9	1.5	1.1	0.6	1.5
3-Jun	Z	1.5	1.0	0.9	0.7	0.8	0.7	1.5	2.1	1.5	1.8	1.5	1.6	1.5	1.3	1.4	1.5	0.7	0.2	0.1	0.6	0.3	0.3	0.8	1.1	2.1
4-Jun	0.9	Z	2.2	0.9	1.0	0.9	0.7	1.5	0.7	0.3	0.7	0.7	0.7	1.0	0.6	0.9	0.8	0.7	0.3	0.6	0.1	0.4	0.5	0.5	0.8	2.2
5-Jun	0.7	0.8	Z	0.5	1.1	0.3	0.5	0.4	0.2	0.9	0.4	0.4	0.7	1.2	0.8	0.8	0.1	0.0	0.1	0.5	0.9	0.6	0.9	0.5	0.6	1.2
6-Jun	0.2	0.1	0.2	Z	0.9	0.8	0.9	0.6	0.5	0.6	0.4	0.5	0.5	0.5	0.5	0.6	0.4	0.4	1.4	0.5	0.3	1.7	1.0	1.0	0.6	1.7
7-Jun	1.5	3.4	0.7	1.2	Z	2.5	1.3	1.5	5.1	2.6	2.8	1.8	1.2	1.5	0.9	0.6	0.5	1.0	0.9	0.6	0.6	1.0	0.9	3.2	1.6	5.1
8-Jun	1.7	1.6	1.9	1.2	0.4	Z	1.3	0.7	2.2	3.5	0.6	0.4	0.6	0.7	0.6	0.3	1.9	0.6	1.2	0.6	0.8	0.9	0.7	1.1	1.1	3.5
9-Jun	Z	1.6	1.0	0.8	0.8	1.3	2.7	0.7	2.4	2.1	0.8	1.2	0.6	0.6	1.3	0.5	0.6	0.9	0.9	0.4	0.4	0.7	0.7	0.9	1.0	2.7
10-Jun	0.5	Z	0.9	0.7	1.2	1.3	1.1	1.5	3.0	1.3	1.4	1.0	1.1	0.9	0.8	0.3	0.3	0.2	0.7	0.9	1.1	0.5	0.6	0.9	1.0	3.0
11-Jun	0.8	1.7	Z	2.4	2.0	2.0	2.1	1.6	1.2	2.2	2.0	1.2	1.2	1.0	1.5	1.6	2.1	1.8	1.7	1.9	1.7	1.1	0.9	0.5	1.6	2.4
12-Jun	0.5	0.5	0.5	Z	1.5	1.7	1.5	0.9	1.0	1.0	0.8	1.7	1.3	1.3	0.8	0.3	0.4	0.2	0.5	0.5	0.6	0.5	0.7	0.8	0.8	1.7
13-Jun	0.8	0.6	0.6	0.6	Z	2.9	2.8	1.1	0.8	0.2	0.5	0.3	0.5	0.5	0.8	0.2	0.4	0.2	0.1	0.0	0.1	0.0	0.6	0.5	0.7	2.9
14-Jun	0.5	0.4	1.0	1.2	2.6	Z	1.8	1.2	1.2	0.9	1.0	1.2	0.9	0.8	0.7	0.2	0.4	0.9	0.5	0.6	0.6	0.6	0.5	0.6	0.9	2.6
15-Jun	Z	1.8	1.8	1.6	1.2	1.3	2.9	13.7	1.6	1.3	0.7	0.4	0.5	0.4	0.3	0.6	0.4	0.0	0.2	0.2	0.1	0.4	0.1	1.3	1.4	13.7
16-Jun	0.4	Z	0.6	0.0	0.0	0.1	0.2	0.5	0.8	1.0	0.7	0.5	0.0	0.0	0.9	0.7	0.5	0.0	0.0	0.0	0.0	0.7	1.3	0.6	0.4	1.3
17-Jun	1.3	0.9	Z	1.5	1.3	1.1	1.5	2.1	0.4	C	C	C	C	C	C	M	M	M	M	M	M	M	M	M	--	2.1
18-Jun	M	M	M	Z	M	M	M	M	C	C	C	C	C	0.3	0.1	0.1	0.1	0.7	1.5	1.4	0.7	0.5	0.4	0.4	--	1.5
19-Jun	1.2	1.4	0.4	0.2	Z	1.2	0.8	0.4	0.2	12.1	0.8	34.6	0.4	1.0	0.9	0.1	0.0	0.2	0.5	0.9	0.9	0.5	0.6	0.5	2.6	34.6
20-Jun	0.5	0.9	0.6	0.4	0.6	Z	1.7	5.0	3.0	0.4	0.1	0.2	0.5	0.3	0.2	0.3	1.1	0.8	1.1	1.3	1.0	1.1	0.5	0.5	1.0	5.0
21-Jun	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
22-Jun	UO	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
23-Jun	UO	UO	Z	UO	UO	UO	UO	UO	UO	UO	M	M	M	M	0.5	0.2	0.3	0.0	0.2	0.1	0.1	0.1	0.2	0.2	--	0.5
24-Jun	0.2	0.1	0.2	Z	0.5	1.7	1.1	2.4	4.2	3.3	2.0	2.9	0.8	0.3	0.3	0.3	0.5	0.8	0.7	0.4	1.4	0.8	0.5	0.6	1.1	4.2
25-Jun	1.0	1.7	1.8	1.6	Z	2.4	2.5	2.0	2.0	1.4	0.6	0.6	0.5	0.6	0.7	0.6	0.7	0.6	0.7	0.7	0.7	0.6	0.8	0.7	1.1	2.5
26-Jun	0.6	0.7	1.1	1.3	1.2	Z	2.2	1.0	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.7	2.2
27-Jun	Z	0.8	0.7	0.7	0.7	0.8	1.6	1.7	2.2	1.4	2.1	3.2	2.8	1.6	1.1	0.4	1.0	1.2	0.7	0.4	0.6	0.9	0.8	0.5	1.2	3.2
28-Jun	0.6	Z	1.0	1.1	1.1	1.5	1.2	0.7	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	1.8	5.5	2.3	0.9	5.5
29-Jun	2.3	1.8	Z	2.2	1.3	1.4	2.2	3.5	5.3	1.4	3.1	2.5	1.6	1.2	1.3	1.1	1.2	1.5	1.3	1.4	1.0	1.1	1.2	1.8	1.9	5.3
30-Jun	1.1	1.4	1.6	Z	1.4	1.3	1.9	2.7	6.6	2.7	0.9	1.4	2.1	1.6	1.8	3.4	1.5	1.2	1.1	1.2	0.8	0.6	0.5	0.6	1.7	6.6
	0.8	1.1	0.9	1.0	1.0	1.4	1.5	1.9	1.9	1.8	1.1	2.4	0.9	0.8	0.8	0.7	0.7	0.6	0.7	0.6	0.6	0.7	0.8	0.9	Diurnal Average	
	2.3	3.4	2.2	2.4	2.6	2.9	2.9	13.7	6.6	12.1	3.1	34.6	2.8	1.6	1.8	3.4	2.1	1.8	1.7	1.9	1.7	1.8	5.5	3.2	Diurnal Maximum	

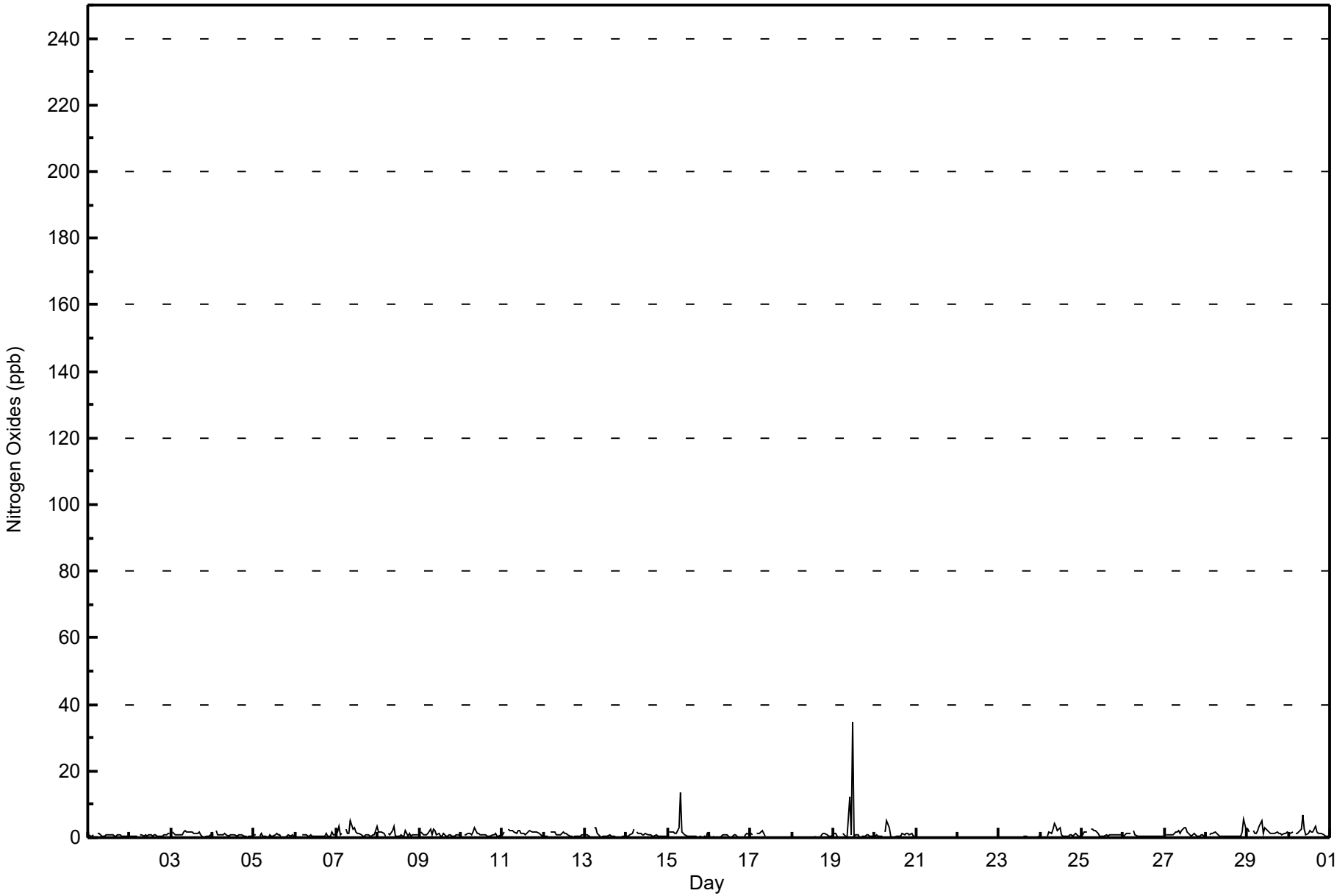
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Jackfish 2/3 - June 2026



Nitrogen Oxides (NO_X) - ppb

Jackfish 2/3 - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	603	99.83	99.83
21 - 40	1	0.17	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: 604

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Jackfish 2/3 - June 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	50	71	46	27	23	23	20	24	47	39	63	42	17	28	41	603
21 - 40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
11 - 80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81 - 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	42	50	71	46	27	23	23	20	24	47	39	63	42	17	29	41	604

Total Number of Valid Hours: 604

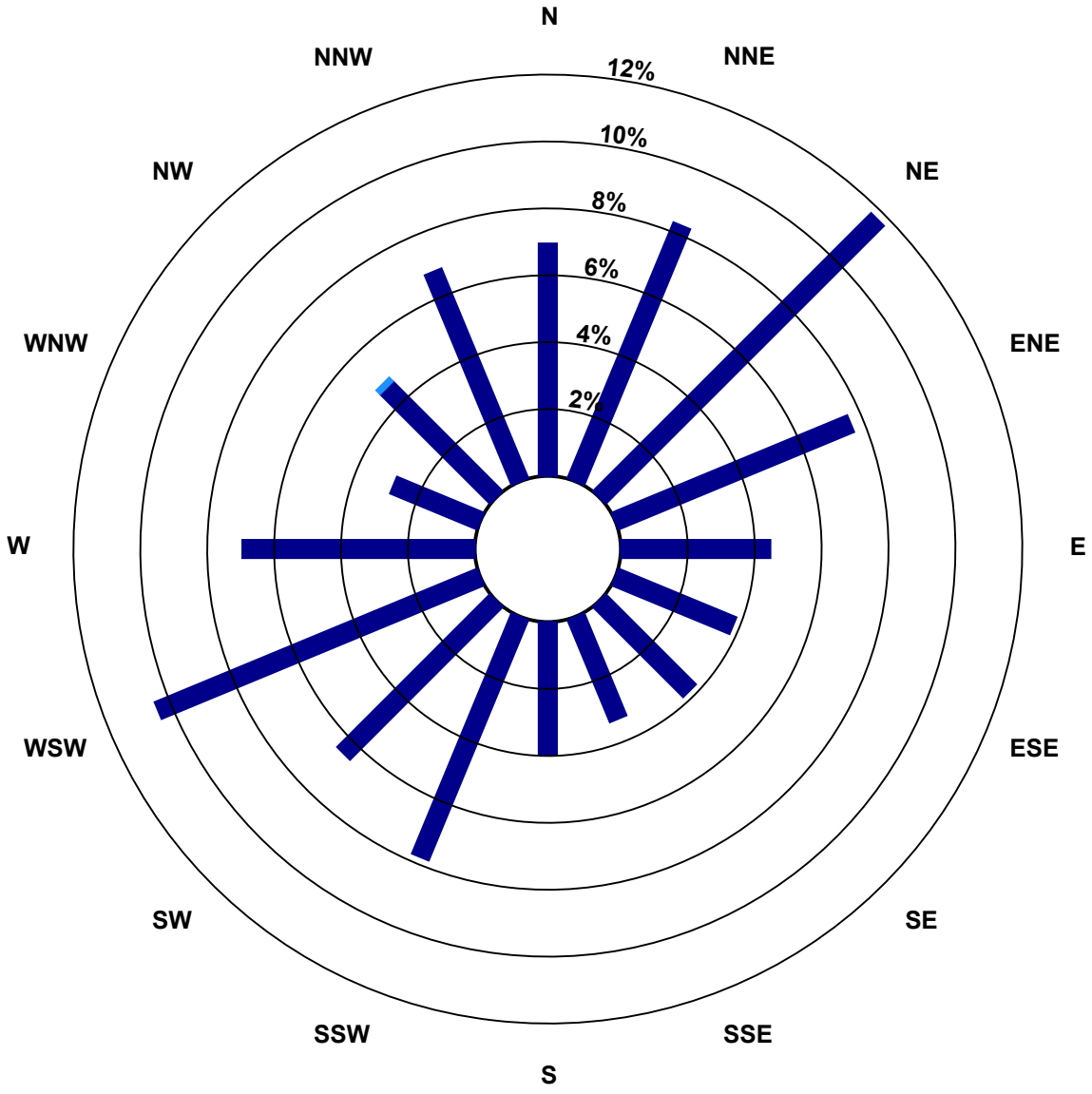
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Jackfish 2/3



Classes (ppb)

- 0 - 20
- 21 - 40
- 11 - 80
- 81 - 159
- > 159

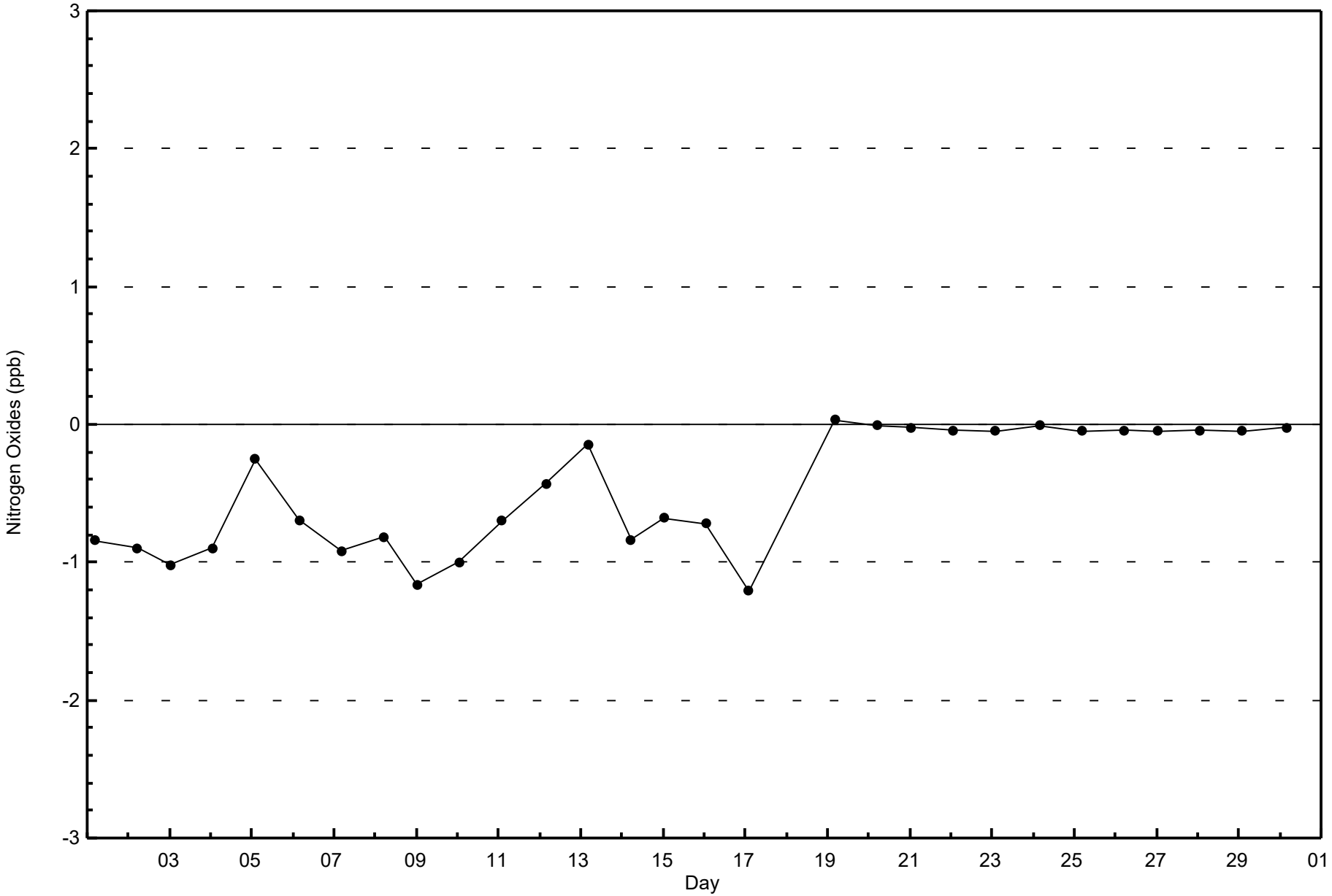
Total Number of Valid Hours: 604

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Jackfish 2/3 - June 2026

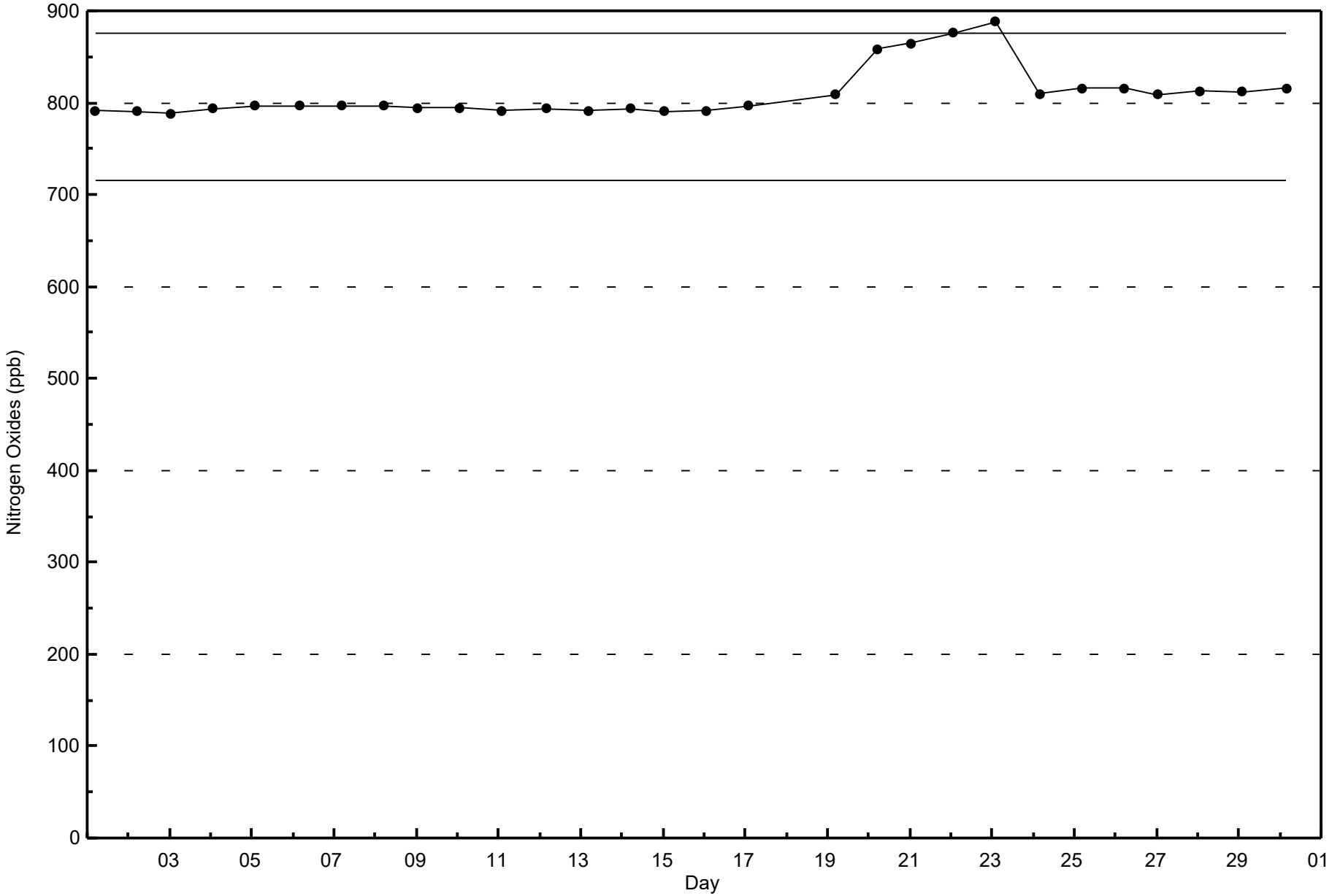


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Jackfish 2/3 - June 2026



Maximum Value: 26.8 C on Jun 28 17:00

Maximum Daily Average: 20.8 C on Jun 28

Minimum Value: 4.6 C on Jun 7 03:00

Minimum Daily Average: 7.1 C on Jun 2

Maximum Diurnal Average: 17.7 C at hour 16

Minimum Diurnal Average: 9.5 C at hour 4

Monthly Average: 13.96 C

Percentiles: P_1 = 6.1 P_{10} = 7.8 Q_1 = 10.0 Median = 13.3 Q_3 = 17.1 P_{90} = 21.3 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

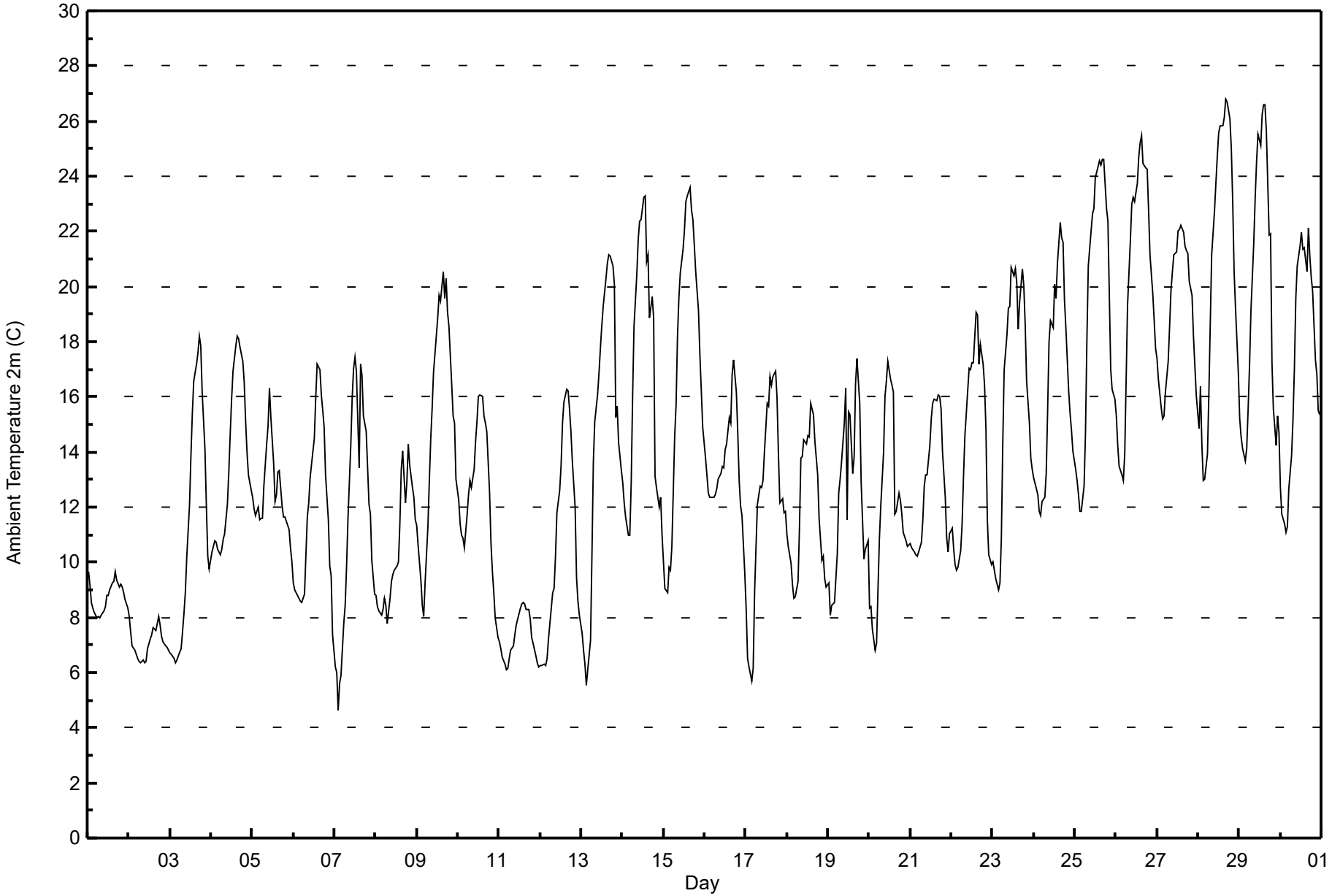
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	9.7	9.2	8.5	8.3	8.2	8.0	8.0	8.0	8.1	8.3	8.4	8.8	8.8	9.0	9.3	9.3	9.7	9.4	9.1	9.2	9.1	8.9	8.6	8.3	8.8	9.7
2-Jun	8.0	7.5	7.0	6.8	6.7	6.5	6.4	6.4	6.4	6.4	6.4	6.9	7.2	7.4	7.6	7.6	7.5	8.0	7.7	7.3	7.1	7.0	6.9	6.8	7.1	8.0
3-Jun	6.7	6.6	6.5	6.4	6.4	6.6	6.8	7.5	8.1	8.9	10.2	12.1	13.9	15.4	16.6	17.2	17.6	18.2	17.8	16.2	14.1	12.0	10.2	9.8	11.3	18.2
4-Jun	10.4	10.6	10.8	10.7	10.5	10.3	10.5	10.8	11.0	12.1	13.3	14.6	15.9	17.0	17.8	18.2	18.1	17.8	17.3	16.5	15.1	14.0	13.2	12.6	13.7	18.2
5-Jun	12.4	11.9	11.7	12.0	11.5	11.6	11.6	12.7	14.3	14.9	16.3	15.3	13.6	12.2	12.5	13.3	13.3	12.1	11.6	11.7	11.5	11.2	10.5	10.0	12.5	16.3
6-Jun	9.3	9.0	8.8	8.7	8.6	8.5	8.9	10.3	11.6	12.2	13.1	14.0	14.5	16.0	17.2	17.0	16.1	15.5	14.9	13.2	11.5	9.9	9.5	7.4	11.9	17.2
7-Jun	6.2	6.0	4.6	5.6	5.9	7.8	8.4	9.8	11.6	14.3	16.0	17.0	17.4	17.0	13.4	17.2	16.8	15.3	14.7	13.4	12.1	11.7	10.1	8.8	11.7	17.4
8-Jun	8.8	8.4	8.3	8.1	8.3	8.7	8.5	7.8	8.7	9.3	9.6	9.7	9.9	10.0	11.4	13.4	14.0	12.1	12.9	14.3	13.5	12.7	12.3	11.5	10.5	14.3
9-Jun	11.3	10.6	9.4	8.5	8.0	9.3	11.3	12.9	14.4	15.5	16.9	18.2	18.9	19.7	19.5	20.5	19.6	20.3	19.1	18.5	16.4	15.3	15.0	13.0	15.1	20.5
10-Jun	12.2	11.4	11.0	10.9	10.5	11.7	12.4	13.0	12.7	13.4	14.4	15.1	16.0	16.1	16.0	15.3	15.1	14.8	12.5	10.7	9.7	8.9	8.0	7.3	12.5	16.1
11-Jun	7.1	6.8	6.6	6.3	6.1	6.2	6.5	6.8	6.9	7.4	7.7	7.9	8.3	8.5	8.6	8.5	8.3	8.3	8.0	7.3	7.1	6.6	6.4	6.2	7.3	8.6
12-Jun	6.3	6.2	6.3	6.3	6.5	7.2	8.4	8.9	9.1	10.2	11.8	12.6	13.5	15.1	15.8	16.2	16.2	15.6	14.7	13.7	12.0	9.5	8.6	8.1	10.8	16.2
13-Jun	7.4	6.8	6.3	5.6	6.1	7.2	10.3	13.6	15.1	16.1	16.8	17.8	18.6	19.3	20.3	20.9	21.2	21.1	20.8	20.1	15.3	15.7	14.4	13.3	14.6	21.2
14-Jun	12.9	12.2	11.6	11.0	11.0	12.9	16.0	18.6	20.4	21.7	22.4	22.4	23.2	23.3	20.9	21.1	18.9	19.6	18.9	13.1	12.7	12.0	12.3	11.0	16.7	23.3
15-Jun	10.0	9.0	8.9	9.8	9.7	10.6	14.6	15.7	18.2	19.6	20.5	21.4	22.1	23.1	23.3	23.6	22.8	22.4	21.5	20.6	19.1	17.5	16.2	14.9	17.3	23.6
16-Jun	13.8	13.1	12.5	12.4	12.4	12.3	12.5	12.7	13.0	13.2	13.5	13.4	14.1	14.3	15.2	15.1	16.8	17.3	16.1	14.7	13.0	12.1	11.7	9.6	13.5	17.3
17-Jun	8.3	6.5	6.2	5.7	6.2	8.9	10.5	12.1	12.8	12.7	13.0	14.0	15.8	15.7	16.7	16.4	16.7	16.9	16.0	13.9	12.1	12.3	11.8	11.8	12.2	16.9
18-Jun	11.1	10.6	10.0	9.2	8.7	8.7	9.3	11.2	13.8	13.9	14.5	14.3	14.6	14.6	15.8	15.4	14.4	13.8	13.2	11.6	10.0	10.2	9.4	9.1	12.0	15.8
19-Jun	9.2	8.1	8.4	8.5	8.5	10.3	12.5	13.0	13.6	15.0	16.3	11.6	15.5	15.4	13.2	13.8	16.5	17.4	15.8	12.9	11.5	10.1	10.5	10.8	12.4	17.4
20-Jun	8.4	8.4	7.6	6.8	7.1	9.0	10.8	12.0	14.0	16.0	16.6	17.3	16.6	16.4	16.2	11.7	11.9	12.5	12.2	11.7	11.1	10.8	10.6	10.6	11.9	17.3
21-Jun	10.7	10.5	10.4	10.2	10.2	10.4	10.7	11.5	12.8	13.2	13.2	14.3	15.2	15.8	15.9	15.9	16.1	16.0	15.6	14.0	12.4	10.9	10.4	11.1	12.8	16.1
22-Jun	11.2	10.5	9.9	9.7	9.8	10.4	11.4	13.1	14.6	16.2	17.0	17.0	17.2	17.3	19.1	19.0	17.2	17.9	17.2	16.4	14.9	11.6	10.3	9.9	14.1	19.1
23-Jun	10.0	9.7	9.4	9.0	9.2	10.9	14.3	17.0	18.2	19.2	19.2	20.7	20.4	20.7	20.1	18.5	19.4	20.6	20.0	18.6	16.6	15.0	13.8	13.4	16.0	20.7
24-Jun	13.1	12.9	12.4	11.9	11.7	12.2	12.4	13.2	15.5	18.0	18.8	18.5	20.1	19.6	20.8	22.3	21.8	21.6	19.5	18.5	16.2	15.4	14.8	14.0	16.5	22.3
25-Jun	13.4	13.0	12.5	11.8	11.9	12.8	14.7	18.1	20.8	22.0	22.6	22.8	24.0	24.2	24.6	24.4	24.6	24.6	22.9	22.4	19.7	17.0	16.3	15.9	19.0	24.6
26-Jun	15.3	14.2	13.5	13.2	12.9	13.9	16.6	19.3	21.7	23.0	23.2	23.1	23.7	24.7	25.2	25.5	24.4	24.3	24.3	22.8	21.2	19.7	18.7	17.8	20.1	25.5
27-Jun	17.4	16.6	15.6	15.2	15.3	16.2	17.3	18.6	19.9	20.5	21.1	21.3	22.0	22.1	22.2	21.9	21.4	21.3	21.2	20.2	19.7	18.2	17.1	16.1	19.1	22.2
28-Jun	14.9	16.4	14.3	13.0	13.0	13.9	16.1	18.7	21.2	22.7	23.8	24.7	25.6	25.8	25.8	26.1	26.8	26.7	26.1	25.0	23.1	20.6	19.2	16.9	20.8	26.8
29-Jun	15.2	14.6	14.2	13.7	14.1	15.6	17.1	19.1	21.5	23.2	24.5	25.5	25.1	26.2	26.6	26.6	25.6	21.9	21.9	17.2	15.5	14.3	15.3	14.7	19.5	26.6
30-Jun	12.7	11.7	11.4	11.1	11.3	12.7	13.9	15.2	17.0	19.6	20.7	21.5	22.0	21.3	21.4	20.5	22.1	21.1	20.4	19.8	17.3	16.8	15.5	15.4	17.2	22.1
	10.8	10.3	9.8	9.5	9.5	10.4	11.6	12.9	14.2	15.3	16.1	16.5	17.1	17.4	17.6	17.7	17.7	17.5	16.8	15.5	14.0	12.9	12.3	11.5	Diurnal Average	
	17.4	16.6	15.6	15.2	15.3	16.2	17.3	19.3	21.7	23.2	24.5	25.5	25.6	26.2	26.6	26.6	26.8	26.7	26.1	25.0	23.1	20.6	19.2	17.8	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Jackfish 2/3 - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	178	24.72	24.72
10 - 20	435	60.42	85.14
> 20	107	14.86	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 99.0 % on Jun 3 04:00

Maximum Daily Average: 97.1 % on Jun 2

Minimum Value: 27.0 % on Jun 14 13:00

Minimum Daily Average: 48.9 % on Jun 13

Maximum Diurnal Average: 88.3 % at hour 4

Minimum Diurnal Average: 53.6 % at hour 16

Monthly Average: 70.23 %

Percentiles: P_1 = 29.5 P_{10} = 38.4 Q_1 = 53.3 Median = 73.5 Q_3 = 89.8 P_{90} = 96.4 P_{99} = 98.8

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

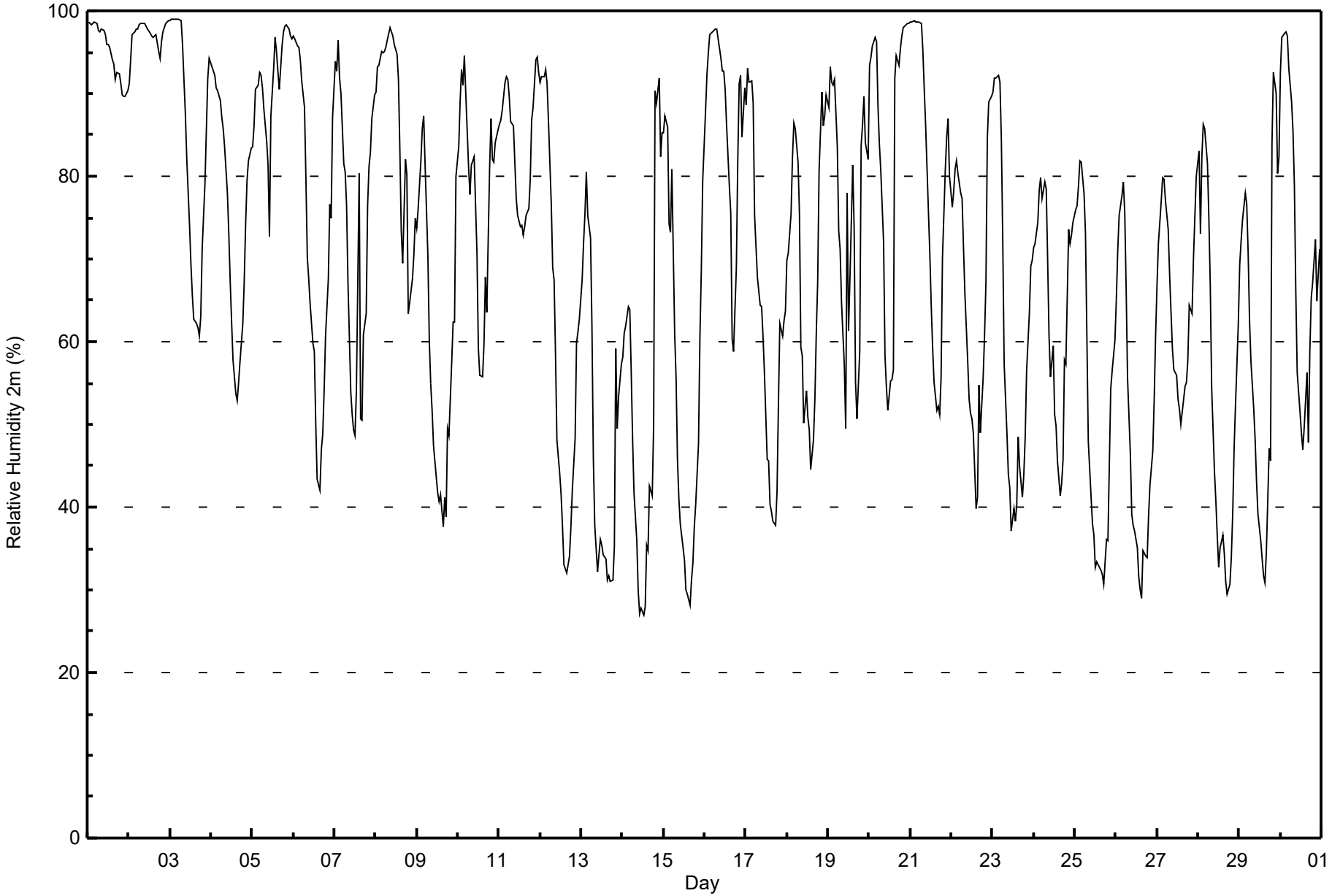
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	98.7	98.6	98.3	98.5	98.6	98.4	97.6	97.4	97.9	97.7	97.1	95.9	95.9	95.5	94.2	93.5	91.8	92.5	92.3	91.1	89.8	89.7	89.6	90.3	95.0	98.7
2-Jun	91.2	94.0	97.1	97.5	97.8	97.8	98.3	98.5	98.5	98.4	98.2	97.9	97.3	97.0	96.8	96.9	97.1	95.1	94.2	96.2	97.5	98.5	98.7	98.8	97.1	98.8
3-Jun	98.9	98.9	99.0	99.0	99.0	99.0	98.9	96.0	91.7	87.7	82.1	74.1	69.3	65.6	62.7	62.2	61.6	60.6	63.1	71.1	79.2	85.6	91.8	94.2	83.0	99.0
4-Jun	93.2	92.8	92.3	90.7	90.3	89.2	87.1	85.7	83.6	77.9	73.1	67.2	62.4	57.7	53.8	53.0	55.1	57.7	62.1	67.3	74.3	79.4	81.8	83.4	75.5	93.2
5-Jun	83.6	86.0	90.5	91.0	92.6	92.1	90.7	88.2	84.3	81.3	72.7	87.3	93.1	96.7	95.1	92.8	90.4	95.8	97.4	98.1	98.4	97.7	96.9	96.7	91.2	98.4
6-Jun	96.9	96.6	95.8	95.6	94.1	91.6	88.3	79.7	70.2	67.6	64.5	59.8	58.7	50.2	43.4	42.0	47.0	48.8	54.0	60.6	67.7	76.6	74.8	87.2	71.3	96.9
7-Jun	94.0	92.8	96.4	91.9	90.0	81.5	80.4	76.4	67.1	53.8	51.2	49.4	48.7	54.1	80.4	50.7	50.6	60.8	63.5	76.4	81.2	82.9	87.0	89.8	73.0	96.4
8-Jun	90.3	93.2	93.4	95.1	94.9	95.1	95.5	96.4	98.0	97.5	97.0	95.9	94.7	91.7	83.2	73.4	69.6	82.0	80.2	63.4	64.8	67.7	70.6	75.0	85.8	98.0
9-Jun	73.8	75.9	81.8	85.8	87.3	81.3	70.3	60.2	55.0	51.7	47.5	43.5	41.8	40.7	41.6	37.6	41.1	38.7	49.5	48.7	57.6	62.3	62.5	80.0	59.0	87.3
10-Jun	83.5	89.2	92.9	91.1	94.5	85.7	81.2	77.8	81.3	82.4	76.4	70.8	59.1	56.0	55.7	59.7	67.7	63.6	80.9	87.0	82.1	81.7	84.1	85.6	77.9	94.5
11-Jun	86.2	86.7	88.1	91.3	92.0	91.8	89.7	86.5	86.1	81.6	77.3	75.3	74.0	74.1	72.9	73.9	75.3	76.1	79.6	86.7	88.4	94.0	94.4	92.5	83.9	94.4
12-Jun	91.4	92.1	92.0	92.8	91.3	86.6	76.6	69.1	67.5	58.6	48.1	44.1	41.6	37.7	33.0	32.0	33.1	34.1	37.6	42.1	48.3	59.9	61.2	62.7	59.7	92.8
13-Jun	67.4	71.9	75.3	80.4	75.3	72.6	61.8	45.9	37.8	32.2	34.2	36.0	35.4	34.2	33.7	31.2	31.6	31.0	31.2	35.2	59.2	49.5	53.3	57.3	48.9	80.4
14-Jun	58.1	60.9	61.9	64.2	63.9	56.5	48.1	41.7	35.9	29.9	27.1	27.8	27.0	28.0	35.5	34.7	42.5	41.4	49.8	90.4	88.9	91.9	82.4	85.3	53.1	91.9
15-Jun	85.2	87.2	85.9	74.2	73.2	80.9	61.0	55.5	45.8	41.1	37.9	35.1	33.6	30.1	29.4	28.1	31.2	33.3	37.7	40.3	47.7	60.5	68.6	79.5	53.5	87.2
16-Jun	87.8	92.2	95.0	97.2	97.4	97.6	97.8	97.8	96.6	94.3	92.8	92.8	90.6	86.2	78.8	75.6	60.4	58.8	69.0	81.9	91.1	92.2	84.8	90.7	87.5	97.8
17-Jun	88.6	93.1	91.4	91.5	88.9	75.2	71.6	67.8	64.4	64.2	60.6	56.2	45.7	45.5	40.3	39.6	38.4	37.8	41.9	52.3	62.2	60.8	62.5	63.8	62.7	93.1
18-Jun	69.9	70.7	75.5	82.2	86.4	85.7	81.8	75.4	59.3	58.2	50.1	54.1	50.8	49.3	44.6	48.1	53.1	61.0	67.3	80.7	90.1	86.1	87.3	89.8	69.1	90.1
19-Jun	88.3	93.3	91.3	91.1	91.7	83.6	73.4	71.1	64.7	57.1	49.5	78.0	61.3	67.6	81.4	73.8	55.1	50.7	58.7	83.7	86.3	89.6	84.0	82.1	75.3	93.3
20-Jun	93.4	94.4	95.8	96.8	96.2	88.6	83.9	80.7	72.1	58.3	54.5	51.7	55.3	55.4	56.6	91.9	94.6	93.4	95.4	97.0	97.9	98.3	98.4	98.5	83.3	98.5
21-Jun	98.7	98.7	98.8	98.7	98.7	98.7	98.4	95.2	90.6	86.2	80.9	70.4	64.3	59.1	55.0	51.7	52.2	51.1	55.5	70.2	80.6	84.8	87.0	80.0	79.4	98.8
22-Jun	76.3	78.1	80.9	81.9	80.3	78.0	77.3	71.3	65.7	57.6	53.0	51.3	50.8	49.0	39.8	41.1	54.7	49.0	55.6	60.7	67.2	84.6	88.9	89.7	66.0	89.7
23-Jun	90.1	91.9	91.9	92.3	91.4	84.3	72.2	57.3	48.8	44.0	42.4	37.2	39.9	38.3	40.4	48.4	44.9	41.1	43.8	48.4	56.5	63.6	69.1	69.8	60.3	92.3
24-Jun	71.3	71.8	74.4	78.3	79.8	77.2	79.3	78.5	69.9	60.7	55.7	59.5	51.2	49.9	45.6	41.3	42.9	45.8	57.8	57.2	73.6	71.9	72.9	74.4	64.2	79.8
25-Jun	76.0	76.5	78.8	81.8	81.7	77.8	73.0	60.5	48.0	41.2	37.9	36.6	32.7	33.5	32.7	32.3	31.8	30.6	36.1	35.9	45.1	54.3	56.5	60.1	52.1	81.8
26-Jun	65.1	70.9	75.3	77.6	79.4	75.6	66.4	55.6	46.5	39.1	37.7	37.1	35.0	31.6	29.9	29.0	34.8	34.1	33.9	38.9	42.6	46.8	53.0	60.6	49.9	79.4
27-Jun	66.7	71.8	77.0	79.9	79.6	77.1	73.6	68.1	63.6	59.2	56.7	55.9	53.1	51.8	50.0	53.0	54.6	55.1	57.7	64.5	63.4	69.9	75.0	79.9	64.9	79.9
28-Jun	83.0	73.1	82.3	86.3	85.8	81.5	75.0	66.8	54.4	44.3	40.6	36.5	32.8	35.0	36.5	34.4	31.0	29.4	30.7	33.8	39.1	47.1	52.5	62.2	53.1	86.3
29-Jun	69.4	72.2	74.8	78.0	76.7	70.8	62.6	57.6	51.9	48.1	43.0	39.1	35.9	33.8	31.7	30.8	34.6	47.2	45.6	84.0	92.5	90.0	80.4	82.3	59.7	92.5
30-Jun	92.6	96.7	97.2	97.5	97.0	93.0	89.0	85.5	78.9	66.0	56.3	51.5	48.9	47.0	49.6	56.3	47.8	58.8	65.2	67.1	72.3	64.9	68.2	71.2	71.6	97.5
	83.6	85.4	87.4	88.3	88.2	84.8	80.0	74.8	69.2	63.9	59.9	58.9	56.0	54.8	54.1	53.6	53.9	55.2	59.6	67.0	72.8	76.1	77.3	80.4	Diurnal Average	
	98.9	98.9	99.0	99.0	99.0	99.0	98.9	98.5	98.5	98.4	98.2	97.9	97.3	97.0	96.8	96.9	97.1	95.8	97.4	98.1	98.4	98.5	98.7	98.8	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Jackfish 2/3 - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	81	11.25	11.25
40 - 60	161	22.36	33.61
60 - 80	186	25.83	59.44
80 - 100	292	40.56	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Speed: 20 km/h on Jun 6 10:00

Maximum Daily Speed Average: 12.0 km/h on Jun 6

Minimum Speed Value: 0 km/h on Jun 10 05:00

Minimum Daily Speed Average: 0.6 km/h on Jun 22

Maximum Diurnal Speed Average: 2.8 km/h at hour 12

Minimum Diurnal Speed Average: 0.4 km/h at hour 20

Monthly Average Velocity: 0.8 km/h 348.1 deg

Percentiles: $P_1 = 1$ $P_{10} = 2$ $Q_1 = 4$ Median = 6 $Q_3 = 8$ $P_{90} = 11$ $P_{99} = 17$

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-Jun	N8	NNW8	N8	N7	N7	N8	N9	N10	NNE10	NNE11	NNE12	N11	NNE12	NNE12	NNE12	NNE12	NNE11	NNE11	NNE12	NNE11	NNE12	NNE12	NNE13	NNE12	NNE10.3	NNE13
2-Jun	NE13	NE14	NNE12	NNE11	NE12	NNE11	NE12	NE12	NE12	NE11	NE12	NE12	NE10	NE10	NE10	NE9	NNE8	NE9	NE10	NE8	NE8	NE7	NE8	NE7	NE10.3	NE14
3-Jun	NE5	NE5	NE4	ENE5	ENE2	ENE3	ENE4	E4	ENE4	E2	NE3	NW3	N3	NNE4	NE4	NE6	ENE6	NE5	E7	ESE7	ESE7	SSE7	S7	S8	E3.1	S8
4-Jun	SSW8	SSW7	SSW5	SSW5	SSW5	SSW6	SSW6	SSW6	SSW7	SW8	SSW7	SSW8	SSW9	SSW9	SSW8	SSW7	SSW6	SSW5	SSW5	SSW4	SSW3	SSW4	SW5	SW6	SSW6.2	SSW9
5-Jun	SW6	SSW5	SW5	SSW5	SSW5	S4	S4	S3	SSE3	SSE3	SSE4	SW4	W5	N3	NNW4	NE6	NNE5	NNE1	NE4	NE5	E4	SW1	WNW6	W9	SW1.0	W9
6-Jun	W9	W9	WSW11	WSW11	WSW14	WSW15	WSW16	WSW16	W17	WSW20	WSW19	WSW18	WSW15	WSW18	WSW17	WSW13	WSW13	SW10	W5	W6	SW5	SW5	WSW5	WSW3	WSW12.0	WSW20
7-Jun	SSW4	SSW5	S3	SW5	SW4	SW4	SW4	S1	ESE2	W2	N2	E6	ESE7	ESE7	SE2	SE11	SSW6	W6	WSW4	ESE0	E2	WSW3	W8	W5	SSW1.9	SE11
8-Jun	WSW4	WSW4	W4	W4	W7	WNW8	W10	WSW9	WNW5	WNW7	W10	W11	W12	W15	W14	W11	W10	W8	WSW8	WSW19	WSW14	WSW14	WSW12	WSW11	W9.4	WSW19
9-Jun	WSW12	WSW10	WSW8	WSW8	WSW8	W6	WNW6	NW5	NW5	WSW4	WSW6	W7	WSW7	WSW8	W6	WSW6	NE2	NW3	W2	WSW4	W2	ENE4	NNW4	WSW4	W4.7	WSW12
10-Jun	W2	NNE2	SW2	E1	W0	NNW2	N4	NNE6	N3	N4	N5	NNW7	NNW9	NNW8	NNW8	NNW7	NNW6	N7	NNE8	NNE6	N7	N6	N6	N6	N4.5	NNW9
11-Jun	NW4	NW6	NW5	NW5	NW6	NW6	NW5	NNW5	NW5	NNW6	NNW6	NW7	NNW7	NNW6	NNW7	NNW7	NW7	NW6	NNW7	NNW6	NNW6	N6	N6	N6	NNW5.8	NNW7
12-Jun	NNW5	NNW4	NNW5	NNW5	NW6	NW7	NNW8	NNW8	NNW9	NNW9	NNW9	NNW11	NNW10	N10	N11	NNE12	N10	N9	NNW8	N7	NNE4	W1	NW1	N3	NNW6.8	NNE12
13-Jun	NE1	SE2	SW2	SW3	WSW4	WSW4	WNW3	NW3	NNW4	NNW4	N3	N5	WNW3	WNW4	WNW5	WNW4	WSW7	WSW7	WSW6	SW4	S3	SW6	WSW7	SW8	W3.0	SW8
14-Jun	SW8	SW8	SW9	WSW9	WSW9	WSW8	WSW8	W8	W6	W8	WNW7	NW7	NW8	NW7	NNW7	N8	NNW5	NW4	NNW5	SSW2	SE2	S3	SW6	WSW4	W4.6	WSW9
15-Jun	SW3	SW3	WSW4	WSW6	WSW6	WSW3	NNE4	NNE3	N3	N4	NNE3	NNE4	NNE2	W5	WNW4	W7	WSW6	SW5	SW5	SW5	WSW7	WSW8	W6	W3	W3.0	WSW8
16-Jun	SW5	SW5	NNE1	WSW1	SSW3	ENE2	ENE3	NE3	ENE4	ENE4	ENE5	ENE5	ENE7	ENE7	NE6	NNE5	NNE2	NW4	WSW3	WSW7	WSW6	W5	W4	WSW0	NNE0.8	ENE7
17-Jun	NE4	NE2	NE2	NE2	NE2	N3	N5	NNW6	NNE8	N7	NNE9	NE8	NE9	NNE6	NNE6	NNE7	N5	NNE5	N3	NNE2	WSW2	WNW2	WNW1	WNW6	NNE4.1	NNE9
18-Jun	NW7	WNW5	W5	W5	W4	W7	W7	W7	NNW5	NW7	NNW9	N9	N10	N10	NNW8	NNW7	N6	NNE6	N3	NW4	WNW3	WNW4	WSW2	WSW3	NW4.7	N10
19-Jun	W4	SW3	WSW4	WSW4	WSW5	W4	NW4	NNW3	NW4	NW5	NNW6	NW3	N2	WNW2	SSW7	SW10	SSW4	SSW4	WSW6	SSE1	NNE4	E1	ENE5	E5	W2.0	SW10
20-Jun	ENE2	E4	NE3	NE3	NE4	NE6	NE5	NE6	NE7	ENE9	ENE10	NE10	NE7	ENE10	ENE5	SW5	WNW2	NE3	NE5	NE5	NE5	NE5	NNE4	NNE3	NE4.7	ENE10
21-Jun	NNE5	NE6	NE6	NE6	NE6	NE7	NE6	NE7	NE7	ENE7	ENE7	E10	E10	E11	E11	E9	E7	E7	ENE5	ENE2	ENE2	NE1	ENE1	ESE2	ENE5.8	E11
22-Jun	SSW5	SW6	SW6	WSW6	WSW6	WSW6	W4	NNW3	NNE5	NE6	NE6	NE7	E8	E7	ENE8	ENE6	ESE7	SSW2	W3	WSW7	SW4	SW6	WSW5	WSW4	SW0.6	E8
23-Jun	WSW5	SW4	WSW5	SW5	WSW5	WSW3	W3	NW3	WSW3	SW5	WSW4	WSW4	W5	WSW5	SW6	SW10	SW9	SW9	SW8	SSW6	SW5	SSW5	SSW5	SSW6	SW4.9	SW10
24-Jun	SSW6	SW8	SSW7	SSW7	SW7	SW7	N1	ENE3	ESE3	ENE3	ENE5	ENE5	SE7	SSE6	SE6	SSE4	SSE4	SE6	SSE6	SE4	S2	S3	S4	S4	SSE3.4	SSW8
25-Jun	SSW5	S5	S5	S5	S5	S5	S6	S5	SSW6	SW8	S7	SSW9	SSW8	SSW8	SSW10	S7	S7	SSW7	SSE6	S5	SE3	ESE3	SSE3	SE5	S5.6	SSW10
26-Jun	SE5	SSE5	S4	SSE6	SSE5	SSE6	SSE5	SE7	SE8	SE9	SE9	SSE7	SSE8	SE8	SE9	SSE8	SE10	SE9	SE7	ESE7	ESE6	ESE6	ESE6	ESE6	SE6.5	SE10
27-Jun	ESE6	ESE6	E6	ESE6	ESE7	E8	E8	E10	E11	ESE13	E13	E13	E13	E12	ESE10	ESE8	E9	E9	ESE6	E3	E5	E4	E3	ENE2	E8.0	E13
28-Jun	ENE3	ENE5	NE3	NE4	NE4	NE5	NE7	ENE9	ENE14	ENE15	ENE17	ENE19	ENE19	ENE17	ENE16	ENE16	ENE15	ENE15	ENE14	ENE11	ENE6	NE5	ENE5	ENE3	ENE10.2	ENE19
29-Jun	NNE2	NNE2	NNE1	N1	NNE2	NNE2	NNE3	N4	NNE5	NNE7	NE8	NE8	NE10	NE10	NE11	NE11	ENE10	SE11	ESE6	E1	SE1	E4	E5	ENE4	NE4.5	NE11
30-Jun	NE3	NE2	NE3	ENE1	NE2	NE3	NNE4	N4	NNE5	NE8	ENE9	NE9	NNE8	NE9	NE6	W2	NW2	WNW2	SSE1	ESE0	SE2	SSE2	S3	SSW4	NE2.7	NE9
	WSW1.1	WSW1.0	WSW1.2	WSW1.5	W1.8	W1.5	NW1.6	N1.9	NNE2.3	N1.9	NNE2.7	NNE2.8	NNE2.5	NNE2.3	NNE1.8	NNE1.3	NNE1.0	NNE0.5	NNE0.6	NW0.4	E0.4	WSW0.5	W0.8	WSW0.9	Diurnal Average	
	NE13	NE14	NNE12	WSW11	WSW14	WSW15	WSW16	WSW16	W17	WSW20	WSW19	ENE19	ENE19	WSW18	WSW17	ENE16	ENE15	ENE15	ENE14	WSW19	WSW14	WSW14	NNE13	NNE12	Diurnal Maximum	

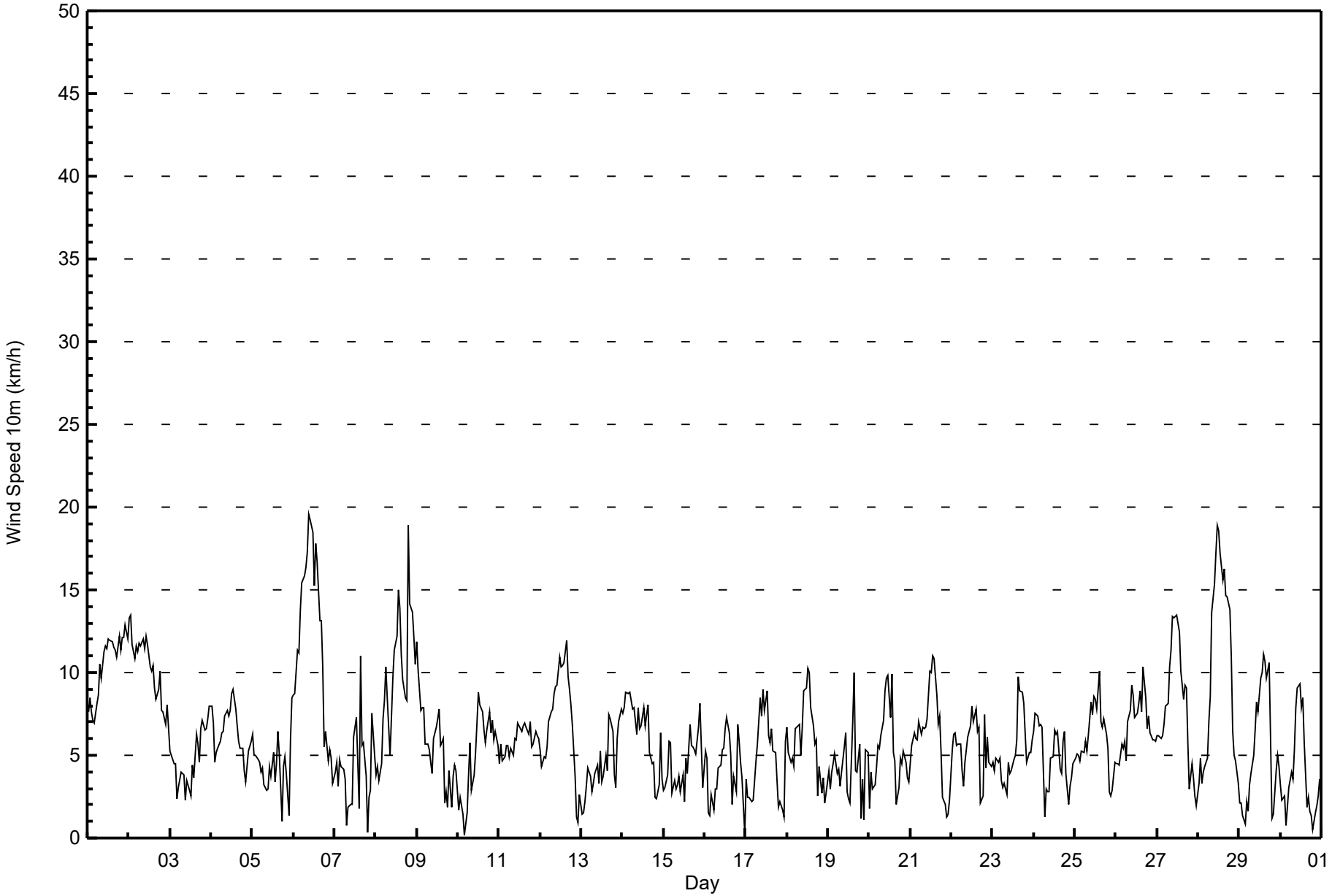
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Jackfish 2/3 - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	338	46.94	46.94
6 - 11	325	45.14	92.08
12 - 19	56	7.78	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

Jackfish 2/3 - June 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	21	30	36	30	15	6	9	12	19	24	28	33	24	16	20	15	338
6 - 11	27	19	44	15	17	19	14	9	6	27	22	33	24	6	13	30	325
12 - 19	0	12	8	11	4	1	0	0	0	0	0	16	4	0	0	0	56
20 - 28	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
29 - 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	48	61	88	56	36	26	23	21	25	51	50	83	52	22	33	45	720

Total Number of Valid Hours: 720

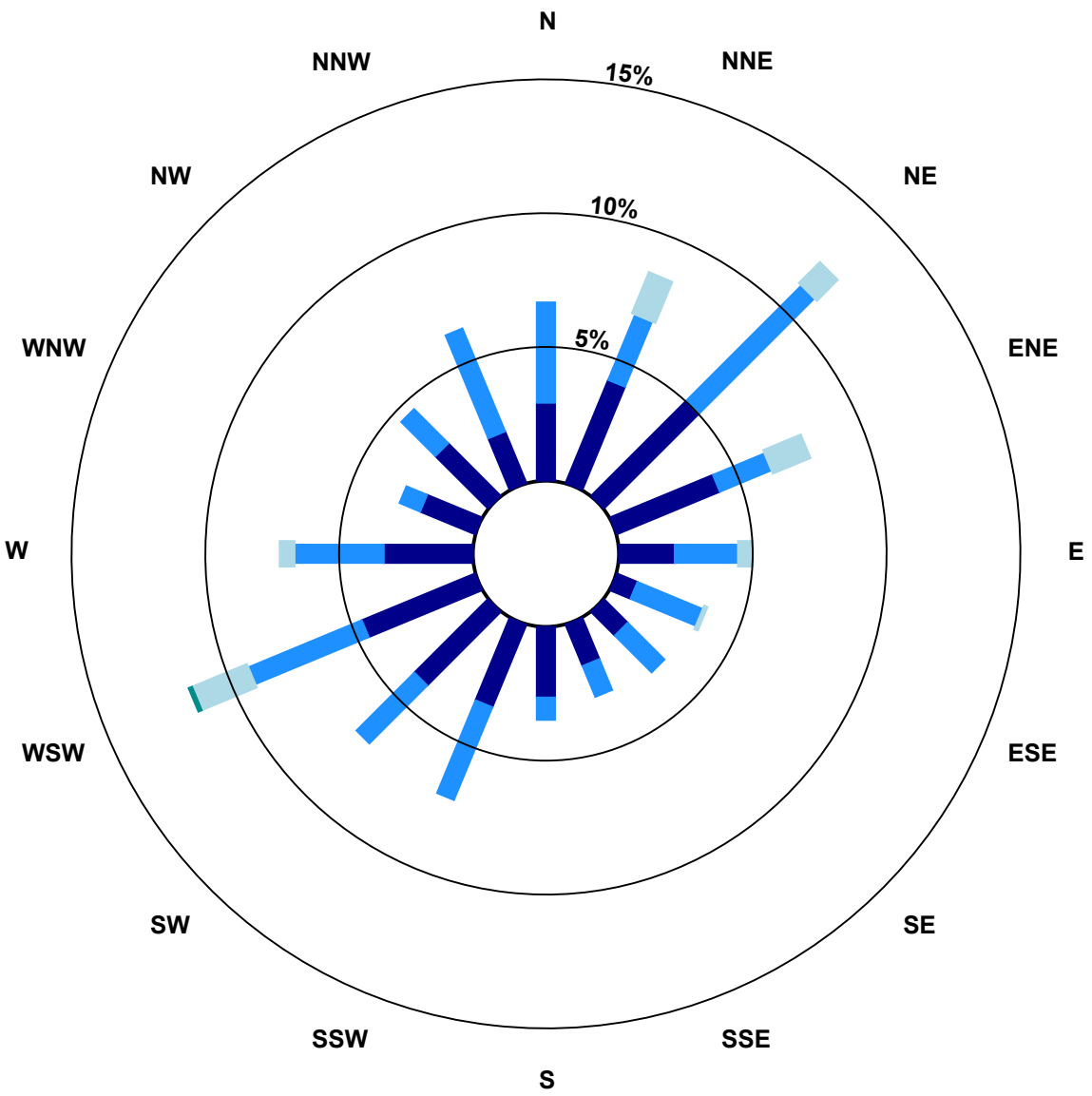
Total Number of Hours: 720

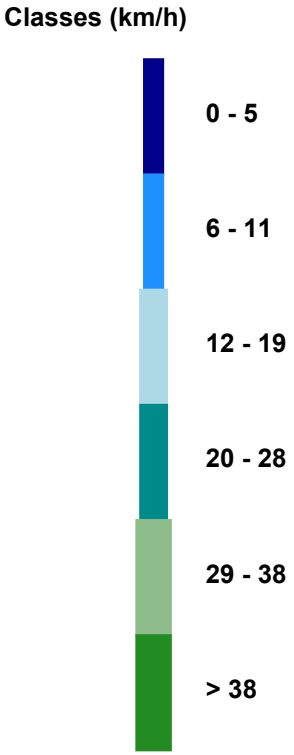
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Jackfish 2/3





Total Number of Valid Hours: 720

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 7 km/h on Jun 6 11:00

Minimum Value: 1 km/h on Jun 15 03:00

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

Direction of Maximum Speed: 250 deg on Jun 6 10:00

Direction of Maximum Daily Speed Average: 252.0 deg on Jun 6

Direction of Minimum Speed: 273 deg on Jun 10 05:00

Direction of Minimum Daily Speed Average: 0.6 deg on Jun 22

Monthly Average Direction: 348.1 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-Jun	349	347	354	358	350	354	1	10	14	15	20	11	15	21	20	17	17	18	18	18	26	26	25	26	13.4
2-Jun	41	42	32	33	35	32	34	38	36	36	40	37	39	41	40	38	33	35	34	37	44	45	53	54	38.2
3-Jun	46	47	53	61	57	62	63	89	66	90	34	312	4	27	49	55	66	56	99	103	114	156	176	182	79.4
4-Jun	195	197	199	213	208	206	206	211	204	229	211	211	200	207	202	194	198	203	212	208	201	202	220	218	206.3
5-Jun	218	204	216	213	204	186	180	176	152	163	164	220	279	4	344	39	26	30	47	55	81	216	298	277	220.8
6-Jun	276	264	255	252	249	247	249	258	262	250	250	255	252	251	250	249	253	228	269	272	220	225	246	242	252.0
7-Jun	195	210	170	230	220	230	226	171	115	260	356	84	121	108	140	137	210	265	257	114	83	258	269	275	196.4
8-Jun	247	255	268	261	275	284	262	251	285	283	280	276	278	267	267	274	278	280	257	252	245	247	252	244	264.2
9-Jun	253	253	252	251	247	273	296	322	311	254	247	270	255	248	278	257	42	304	272	256	268	57	338	254	266.9
10-Jun	259	33	230	82	273	334	3	23	4	351	10	348	327	343	331	329	332	359	33	13	10	351	0	356	354.0
11-Jun	323	316	316	323	324	321	316	335	320	331	332	326	348	340	341	331	323	323	336	332	331	352	355	352	331.8
12-Jun	343	343	337	335	319	323	333	333	340	333	345	340	341	354	354	21	355	349	333	359	16	267	308	351	344.5
13-Jun	54	139	225	233	252	253	284	322	333	328	359	350	299	288	287	300	250	245	241	231	177	227	237	236	264.2
14-Jun	231	231	232	239	240	245	250	264	268	268	298	308	314	324	329	8	344	308	335	198	125	191	235	255	270.7
15-Jun	226	231	244	246	244	241	24	12	354	353	15	32	22	262	285	260	247	235	225	222	237	256	266	281	262.0
16-Jun	215	234	24	248	213	66	63	48	57	75	67	74	57	59	47	30	23	306	245	242	237	281	263	246	33.4
17-Jun	52	54	47	38	36	11	1	346	24	358	30	34	35	16	26	21	5	20	6	15	246	289	299	303	15.3
18-Jun	305	291	277	268	269	268	279	276	329	310	332	351	353	356	342	336	355	32	353	317	286	286	244	243	317.6
19-Jun	262	227	253	255	254	266	305	329	319	311	329	324	4	303	212	228	205	199	239	161	14	80	75	89	266.8
20-Jun	69	83	46	35	41	53	42	40	50	66	65	52	56	59	72	215	298	36	45	40	40	40	32	27	51.1
21-Jun	30	45	54	47	39	47	44	50	51	58	72	83	90	87	86	85	88	85	77	76	75	50	62	103	68.5
22-Jun	207	226	235	243	253	252	271	348	14	50	40	41	81	90	71	72	109	207	260	254	222	229	240	239	223.7
23-Jun	239	235	239	234	243	255	272	307	255	235	248	258	275	253	228	225	225	225	236	205	214	208	195	201	233.2
24-Jun	207	214	209	209	220	216	3	78	102	75	74	74	140	151	136	161	153	141	147	143	178	188	182	185	166.5
25-Jun	192	189	187	184	176	176	182	182	203	215	187	207	194	203	210	180	171	197	163	183	146	112	153	132	186.5
26-Jun	144	155	170	160	165	157	161	142	136	128	130	168	150	144	143	152	134	133	137	118	107	116	113	108	139.2
27-Jun	112	112	100	107	104	97	98	99	99	104	100	97	98	101	109	118	101	100	104	99	96	84	93	57	101.3
28-Jun	68	63	41	48	46	44	49	60	66	72	61	63	62	63	65	60	67	62	64	63	65	42	62	58	61.5
29-Jun	27	26	20	358	21	28	14	2	22	14	53	43	52	37	42	46	62	126	122	93	130	84	80	73	53.4
30-Jun	56	53	47	63	54	37	28	6	25	51	66	48	30	52	50	275	309	296	168	119	144	156	182	200	47.5
	253.7	247.0	257.9	254.6	258.8	281.1	322.2	352.9	15.0	7.8	29.1	18.5	24.8	27.2	17.7	23.8	23.5	20.4	25.8	305.1	85.6	247.6	271.2	256.4	
	Diurnal Average																								

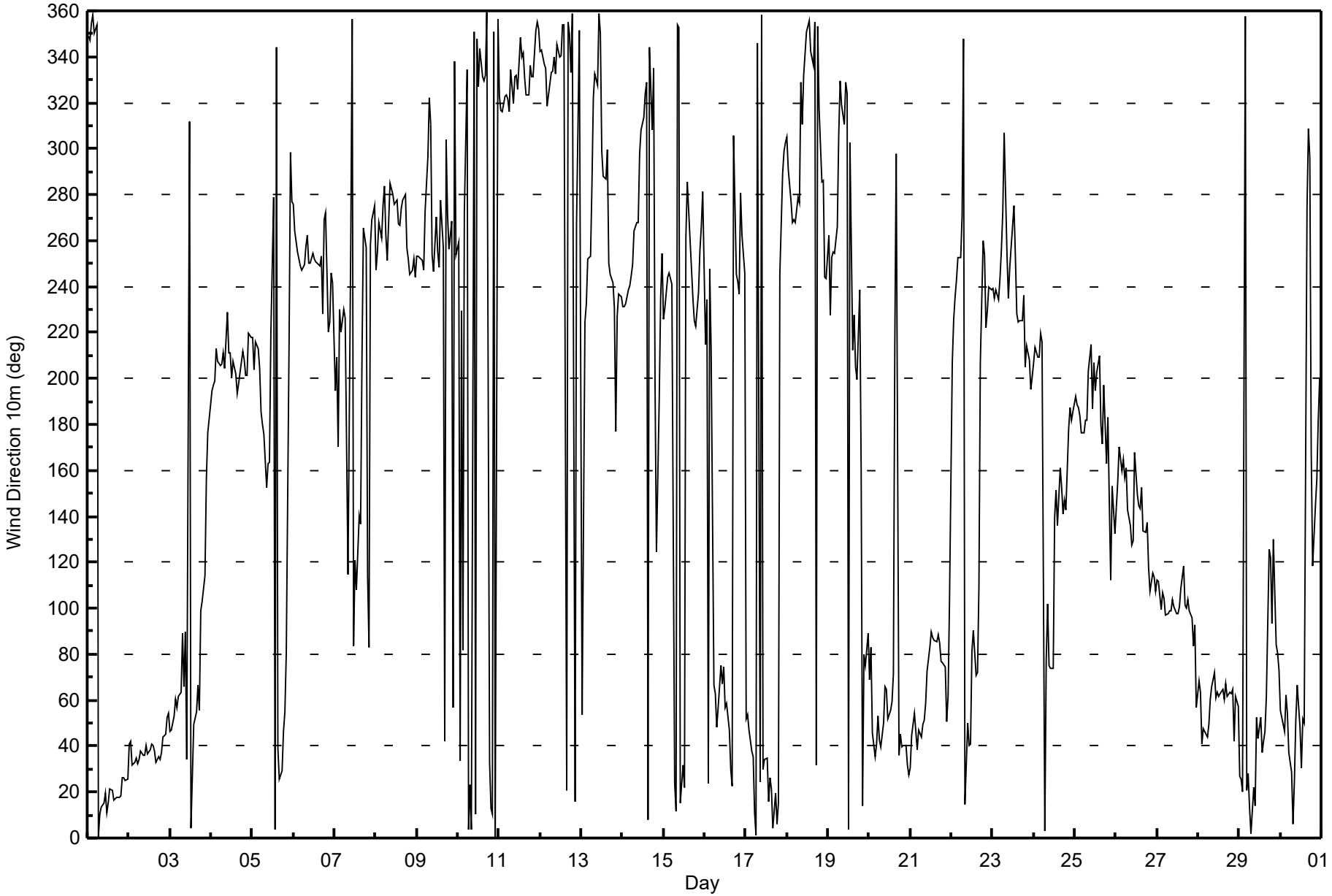
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Jackfish 2/3 - June 2026



Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 115 deg on Jun 12 23:00

Minimum Value: 8 deg on Jun 15 03:00

Percentiles: P_1 = 13 P_{10} = 23 Q_1 = 32 Median = 44 Q_3 = 57 P_{90} = 69 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
	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-Jun	54	57	55	51	56	57	54	48	49	48	47	52	47	46	49	51	53	50	48	48	45	44	42	44	57
2-Jun	36	37	37	40	39	39	40	40	40	42	37	37	40	39	37	35	37	40	41	41	32	35	33	27	42
3-Jun	35	32	30	28	36	32	32	35	39	70	51	86	81	74	85	49	47	45	32	32	39	50	41	32	86
4-Jun	32	35	36	36	34	39	36	44	36	36	39	45	45	41	44	42	40	36	39	35	27	22	27	27	45
5-Jun	29	26	26	30	22	29	31	52	52	52	57	62	51	75	60	39	41	94	33	30	45	72	57	42	94
6-Jun	40	36	28	29	26	24	27	30	35	27	29	30	33	29	33	31	33	34	40	46	24	21	22	30	46
7-Jun	24	24	16	19	20	22	40	100	80	93	99	55	55	38	105	52	69	50	33	91	41	58	39	39	105
8-Jun	34	46	35	37	38	44	34	27	45	44	43	41	44	38	40	42	47	43	48	23	25	24	25	24	48
9-Jun	23	25	24	22	22	46	58	52	64	86	59	58	52	49	52	53	69	83	59	39	78	56	65	45	86
10-Jun	96	62	41	83	99	62	49	44	54	56	61	67	59	57	61	55	59	65	42	56	55	59	63	54	99
11-Jun	53	49	57	55	57	63	66	59	60	56	59	50	60	64	61	67	55	64	61	60	57	53	63	55	67
12-Jun	60	57	57	65	54	55	62	62	62	60	68	55	59	58	59	48	61	62	65	59	85	105	115	98	115
13-Jun	106	91	77	40	12	17	50	74	69	65	91	75	85	84	75	74	50	46	38	31	11	23	18	19	106
14-Jun	19	19	22	18	18	20	31	40	51	47	75	57	61	60	60	61	62	62	72	22	64	42	17	16	75
15-Jun	56	22	8	9	13	25	64	57	64	76	95	84	95	73	76	41	30	32	27	26	28	35	34	57	95
16-Jun	27	41	70	78	57	60	52	38	36	28	30	31	31	33	43	38	98	56	65	29	22	41	39	108	108
17-Jun	24	37	45	50	54	43	58	51	55	65	48	51	49	63	57	57	66	52	65	84	53	98	103	50	103
18-Jun	52	44	30	29	35	44	45	49	68	52	60	61	58	56	66	64	64	50	75	61	69	54	68	55	75
19-Jun	34	19	18	19	27	41	56	68	75	58	61	89	86	82	31	32	58	66	36	79	49	88	25	27	89
20-Jun	42	26	25	18	20	21	30	35	39	37	35	37	35	33	71	51	58	55	30	29	29	30	34	50	71
21-Jun	48	28	26	29	35	27	31	27	31	30	31	33	36	31	32	31	30	30	29	25	30	52	47	62	62
22-Jun	34	17	18	22	22	33	40	65	50	49	52	43	49	54	47	44	55	75	54	25	63	21	17	16	75
23-Jun	15	16	12	13	12	28	40	47	72	66	62	69	72	39	41	29	28	29	36	30	22	20	18	18	72
24-Jun	20	21	19	20	19	20	75	51	47	70	41	48	57	51	50	68	58	43	49	61	64	53	61	44	75
25-Jun	36	34	34	41	38	37	33	43	48	43	53	44	50	50	43	53	58	56	60	57	71	70	88	61	88
26-Jun	69	65	64	52	57	56	57	45	50	51	54	59	53	59	51	59	53	47	57	45	32	43	39	38	69
27-Jun	41	35	29	36	34	32	33	33	36	35	35	32	38	36	41	43	35	34	38	33	23	29	24	52	52
28-Jun	21	23	19	14	16	19	28	36	33	35	33	34	36	35	36	36	36	37	35	30	30	32	25	19	37
29-Jun	34	33	75	93	39	83	56	50	49	55	44	50	38	46	43	43	42	44	50	79	56	29	20	18	93
30-Jun	20	12	16	38	51	24	37	45	50	41	38	39	49	39	40	48	33	52	57	93	51	63	19	15	93
	106	91	77	93	99	83	75	100	80	93	99	89	95	84	105	74	98	94	75	93	85	105	115	108	
	Diurnal Maximum																								

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS29
SURMONT 2
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SURMONT2 (AMS29)
JUNE 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	2.8	0	0.7	0
H2S (ppb) Average	686	34	34	100	0.3	0	0.1	0
THC(ppm) Average	682	35	38	99.58	2.4	-	2.3	-
NO2 (ppb) Average	685	35	35	100	4.9	0	1.8	-
NO (ppb) Average	685	35	35	100	1.6	-	0.4	-
NOX (ppb) Average	685	35	35	100	5	-	2	-
PM2.5 (ug/m3) Average	682	2	38	95	70.3	0	56.3	2
Temperature 2 m (C) Average	720	0	0	100	28.4	-	20.3	-
Relative Humidity (%) Average	716	0	4	99.44	100	-	94.8	-
Wind Speed 10 m (km/h) Average	687	0	33	95.42	17	-	11	-
Wind Direction 10 m (deg) Average	687	0	33	95.42	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SURMONT 2 (AMS29)
JUNE 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	0.21	0.3	-	0	0	0	0.1	0.3	0.5	2.8
H2S (ppb) Average	686	0.07	0.1	-	0	0	0	0.1	0.1	0.1	0.3
THC (ppm) Average	682	2.21	0.1	-	2	2.1	2.2	2.2	2.3	2.3	2.4
NO2 (ppb) Average	685	0.86	0.7	-	0	0.2	0.4	0.6	1.1	1.8	4.9
NO (ppb) Average	685	0.11	0.2	-	0	0	0	0	0.1	0.2	1.6
NOX (ppb) Average	685	0.97	0.8	-	0.1	0.2	0.4	0.7	1.2	2.1	5
PM2.5 (ug/m3) Average	682	8.29	12.6	-	0.3	1.5	2.7	4.2	6.5	16.4	70.3
Temperature 2 m (C) Average	720	14.36	5.7	-	3.1	7.6	10	13.4	18.4	22.7	28.4
Relative Humidity (%) Average	716	69.56	22.3	-	28.4	36.9	48.7	73.5	90.4	96.1	100
Wind Speed 10 m (km/h) Average	687	5.7	3	-	0	2	3	5	8	10	17
Wind Direction 10 m (deg) Average	687	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SURMONT 2 (AMS29)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
THC	03 Jun 2026 08:00	03 Jun 2026 10:00	3	Maintenance - replaced support gas cylinder
PM2.5	02 Jun 2026 09:00	02 Jun 2026 09:00	1	Station power failure
PM2.5	06 Jun 2026 01:00	06 Jun 2026 12:00	12	Unstable Operation - flatline in analyzer output signal
PM2.5	17 Jun 2026 09:00	18 Jun 2026 07:00	23	Unstable Operation - flatline in analyzer output signal
Relative Humidity	03 Jun 2026 04:00	03 Jun 2026 07:00	4	Sensor operated out of range
Wind Speed, Wind Direction	10 Jun 2026 01:00	01 Jul 2026 00:00	33	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Surmont 2 - June 2026

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

Maximum Value: 2.8 ppb on Jun 24 10:00 Maximum Daily Average: 0.7 ppb on Jun 18

Minimum Value: 0.0 ppb on Jun 1 02:00 Minimum Daily Average: 0.0 ppb on Jun 9

Maximum Diurnal Average: 0.4 ppb at hour 11 Minimum Diurnal Average: 0.1 ppb at hour 24

Monthly Average: 0.21 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.3 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-Jun	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	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.1	0.0	0.2
2-Jun	0.0	Z	0.0	0.0	0.2	0.0	0.0	C	C	C	C	C	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.2
3-Jun	0.1	0.1	Z	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.1	0.0	0.1	0.2	0.3	0.2	0.1	0.3	0.3	0.3	0.2	0.3
4-Jun	0.3	0.3	0.6	Z	0.1	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
5-Jun	0.8	0.6	0.1	0.1	Z	0.0	0.0	0.2	1.1	1.6	1.6	0.4	0.2	0.2	0.0	0.1	0.2	0.3	0.3	0.4	0.5	0.0	0.0	0.0	0.4	1.6
6-Jun	0.0	0.0	0.1	0.1	0.1	Z	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.5	0.6	0.5	0.4	0.4	0.2	0.2	0.3	0.2	0.1	0.2	0.6
7-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.8	1.7	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	1.7
8-Jun	0.0	Z	0.0	0.1	0.0	0.1	0.0	0.0	0.3	0.6	0.1	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	0.6
9-Jun	0.0	0.0	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1
10-Jun	0.1	0.1	0.1	Z	0.3	0.4	0.4	0.5	0.0	0.6	1.0	0.3	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.0
11-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.3	0.3	0.4	0.3	0.1	0.1	0.3	0.3	0.2	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.4
12-Jun	0.0	0.2	0.1	0.4	0.9	Z	0.5	0.5	0.2	0.3	0.9	0.6	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.9
13-Jun	Z	0.1	0.0	0.0	0.1	0.1	0.5	0.7	0.2	0.4	1.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.7
14-Jun	0.0	Z	0.2	0.4	0.6	0.3	0.2	0.2	0.3	0.4	0.6	0.5	0.6	1.3	0.8	0.9	0.9	0.6	0.6	0.4	0.5	0.6	0.5	0.3	0.5	1.3
15-Jun	0.2	0.1	Z	0.3	0.4	0.4	0.5	0.5	0.4	0.3	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.2	0.1	0.1	0.2	0.5	0.2	0.3	0.5
16-Jun	0.3	0.1	0.1	Z	0.1	0.1	0.1	0.0	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	0.0	0.1	0.3
17-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.3	0.1	0.1	0.2	0.0	0.1	0.2	0.2	0.4	0.5	0.4	0.2	0.3	0.3	0.2	0.1	0.0	0.2	0.5
18-Jun	0.0	0.2	0.1	0.2	0.2	Z	0.1	0.1	0.2	0.1	0.4	1.5	2.3	0.5	1.0	1.2	0.6	0.6	1.0	2.0	1.6	0.7	0.5	0.2	0.7	2.3
19-Jun	Z	0.1	0.1	0.1	0.1	0.3	0.2	1.0	1.2	1.8	1.3	0.2	0.3	0.6	0.8	0.9	1.2	0.9	0.5	0.0	0.0	0.0	0.0	0.0	0.5	1.8
20-Jun	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
21-Jun	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2
22-Jun	0.2	0.2	0.1	Z	0.1	0.2	0.4	0.4	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.4
23-Jun	0.1	0.1	0.1	0.1	Z	0.2	0.2	0.2	0.2	0.3	0.9	0.2	0.2	0.9	0.3	0.6	1.3	0.4	0.0	0.2	0.3	0.2	0.6	0.2	0.3	1.3
24-Jun	0.1	0.1	0.2	0.3	0.1	Z	0.1	0.1	0.1	2.8	0.8	0.6	0.6	1.0	0.8	0.6	0.3	0.5	0.5	0.4	0.2	0.1	0.2	0.3	0.5	2.8
25-Jun	Z	0.2	0.3	0.2	0.2	0.4	0.5	0.6	0.5	0.7	0.7	0.6	0.9	0.8	0.8	0.9	0.7	0.4	0.3	0.3	0.1	0.2	0.2	0.2	0.5	0.9
26-Jun	0.2	Z	0.2	0.1	0.1	0.0	0.1	0.4	0.3	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.3	0.2	0.2	0.0	0.2	0.2	0.4	0.2	0.4
27-Jun	0.5	0.5	Z	0.1	0.1	0.1	0.0	0.3	0.3	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.1	0.5
28-Jun	0.0	0.1	0.0	Z	0.2	0.0	0.3	0.3	0.2	0.2	0.3	0.4	0.5	0.3	0.3	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.0	0.0	0.2	0.5
29-Jun	0.2	0.1	0.1	0.0	Z	0.1	0.0	0.1	0.4	0.5	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.1	0.0	0.1	0.5
30-Jun	0.1	0.2	0.1	0.1	0.2	Z	0.1	0.1	0.2	0.0	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.1	0.2
	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.2	0.4	0.4	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	Diurnal Average	
	0.8	0.6	0.6	0.4	0.9	0.4	0.8	1.7	1.2	2.8	1.7	1.5	2.3	1.3	1.0	1.2	1.3	0.9	1.0	2.0	1.6	0.7	0.6	0.4	Diurnal Maximum	

Z - zerospan C - Calibration

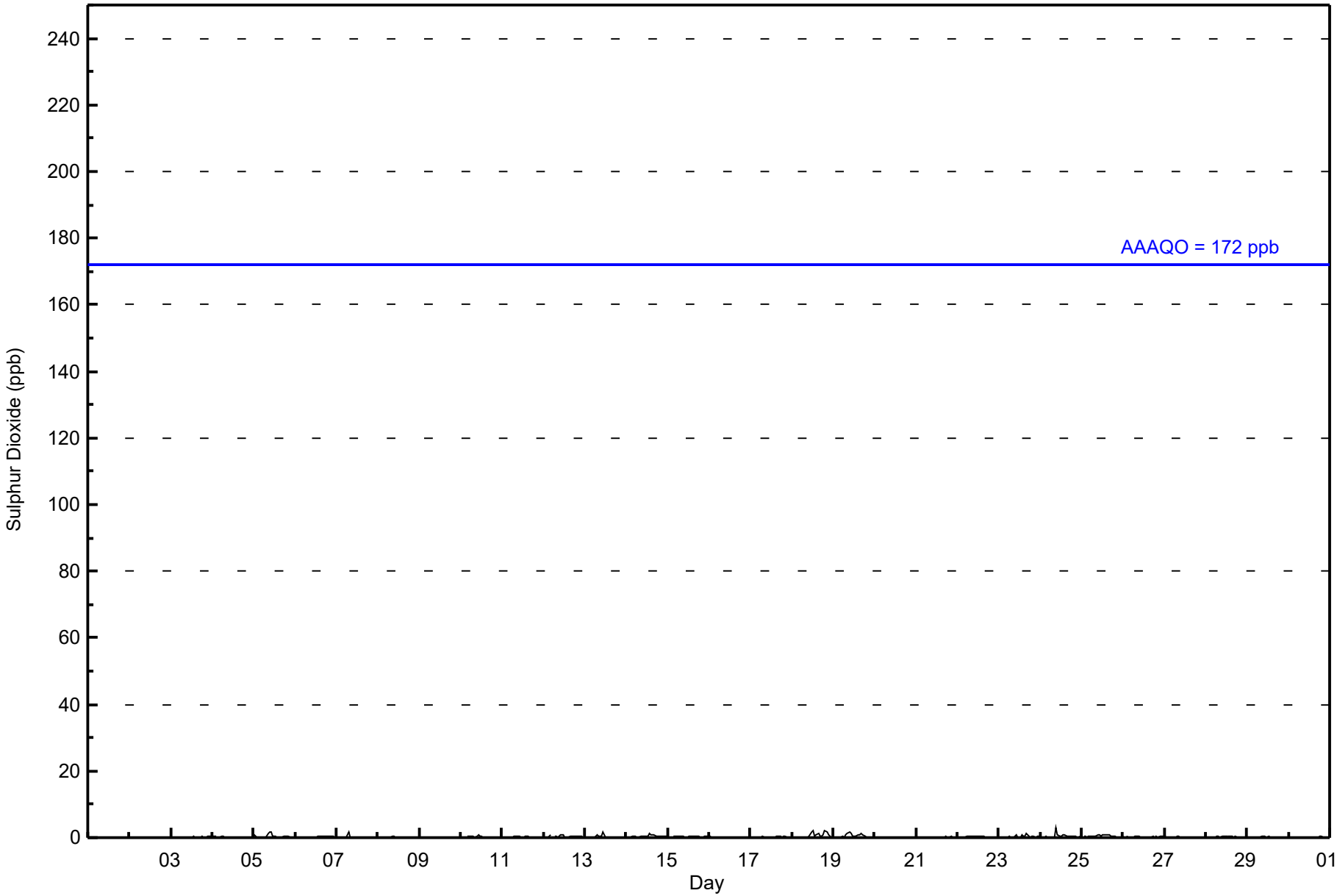
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Surmont 2 - June 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

Surmont 2 - June 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	24	37	34	41	39	38	27	19	10	12	57	105	58	30	85	655
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	24	37	34	41	39	38	27	19	10	12	57	105	58	30	85	655

Total Number of Valid Hours: 655

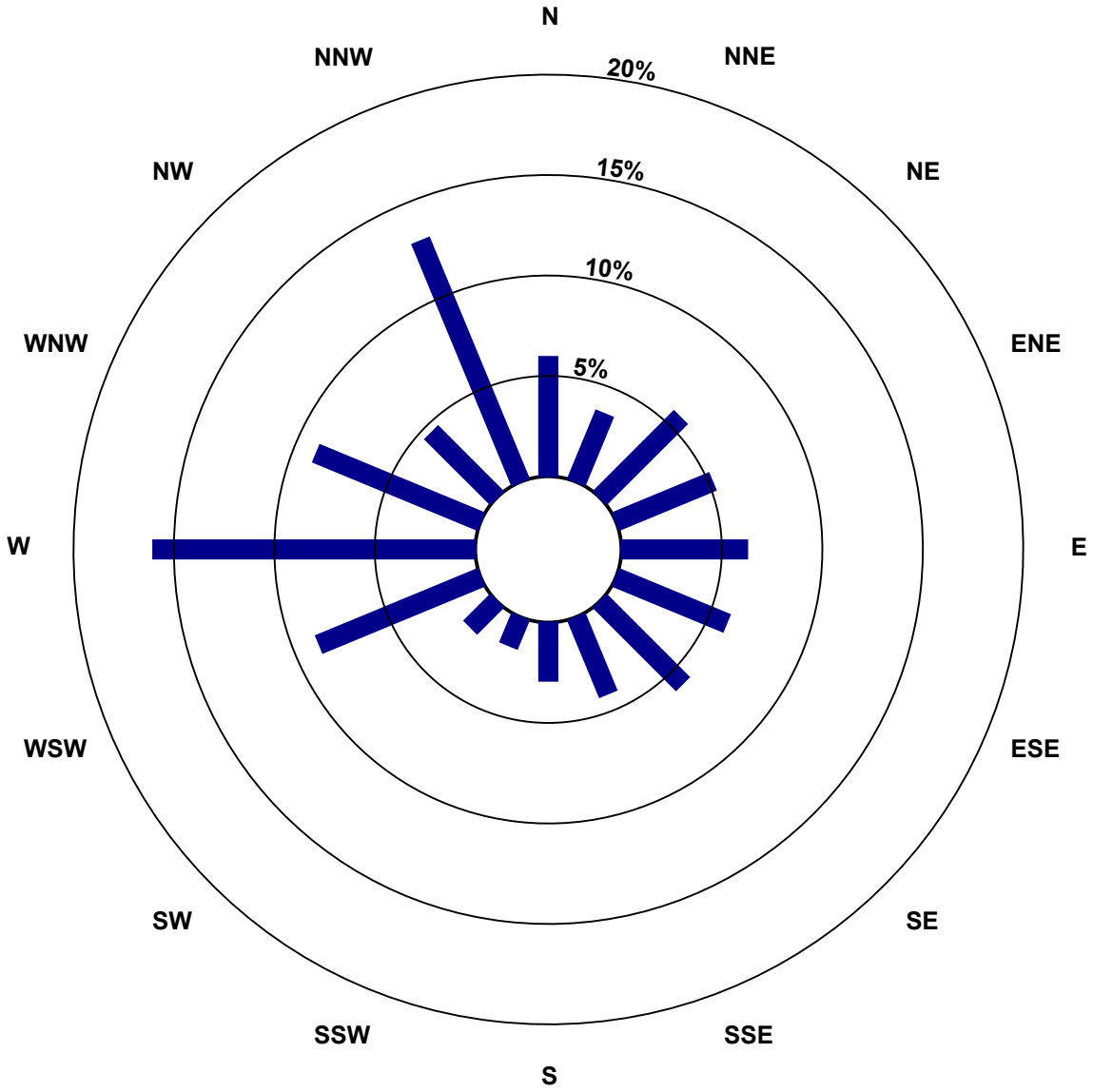
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Surmont 2



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

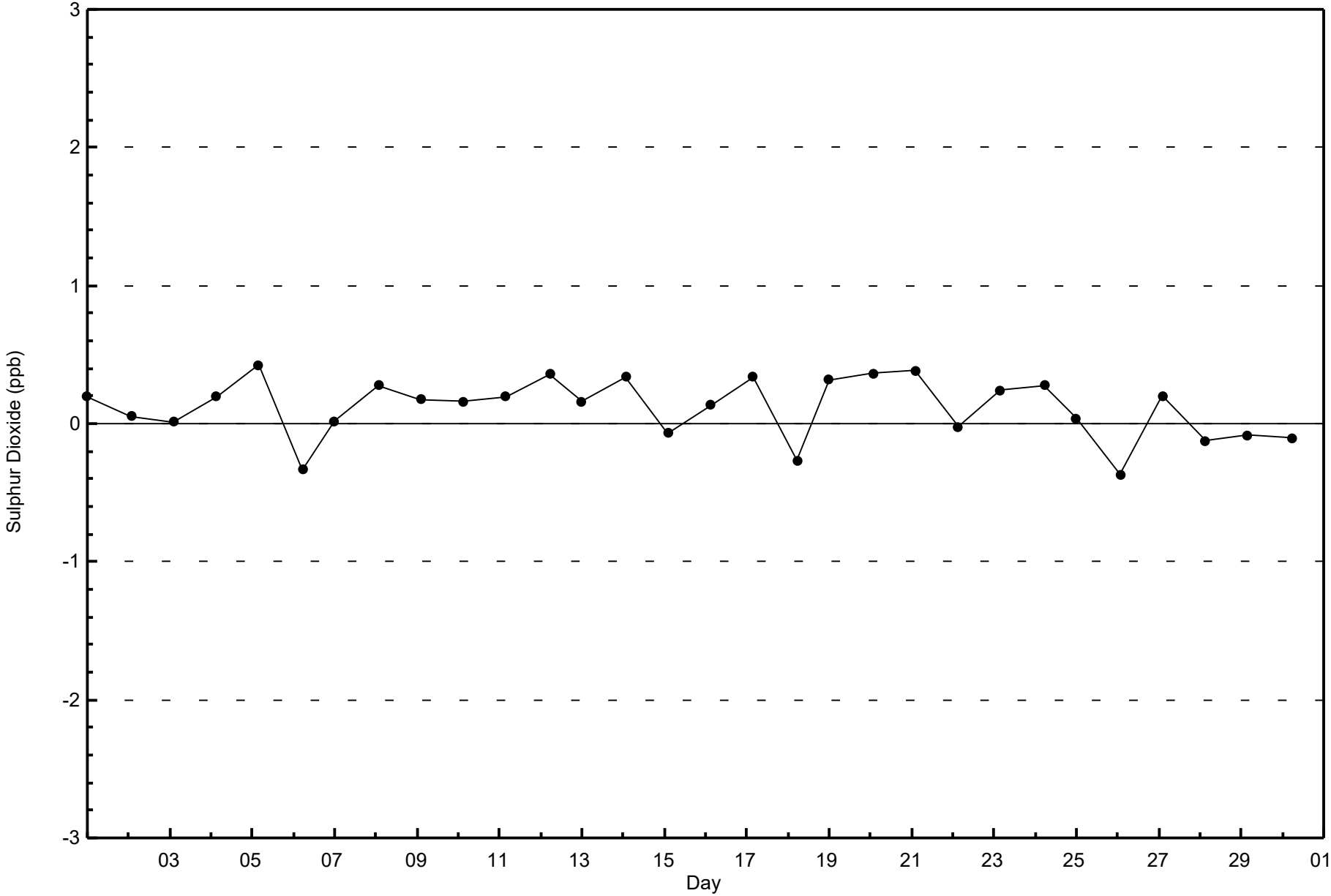
Total Number of Valid Hours: 655

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Surmont 2 - June 2026

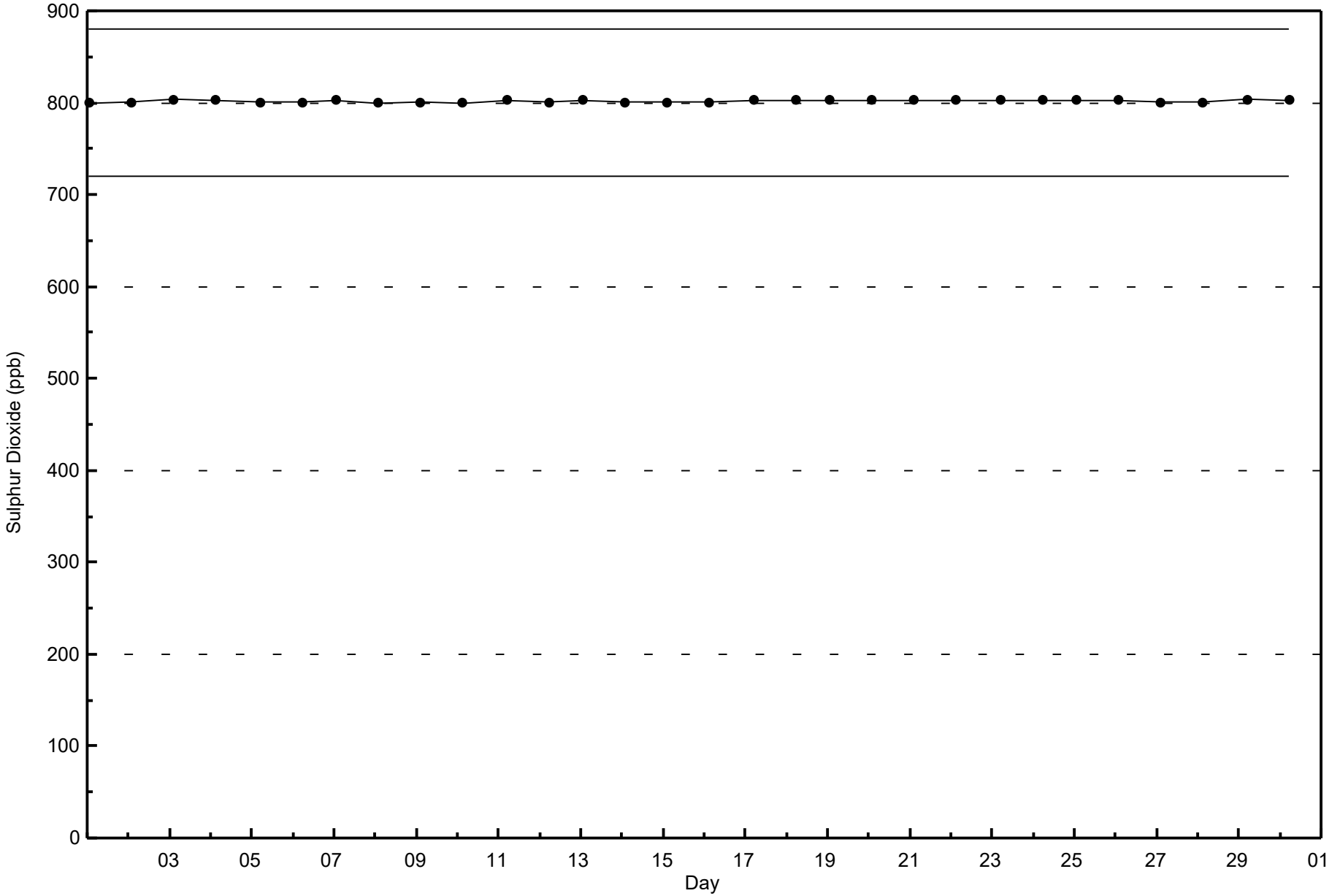


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Surmont 2 - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Surmont 2 - June 2026

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

Maximum Value: 0.3 ppb on Jun 28 06:00 Maximum Daily Average: 0.1 ppb on Jun 10

Minimum Value: 0.0 ppb on Jun 4 14:00 Minimum Daily Average: 0.0 ppb on Jun 2

Maximum Diurnal Average: 0.1 ppb at hour 4 Minimum Diurnal Average: 0.0 ppb at hour 15

Monthly Average: 0.07 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.1 P_{90} = 0.1 P_{99} = 0.3

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-Jun	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	0.0	0.0	0.0	0.1	0.2
2-Jun	0.0	0.0	Z	0.3	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
3-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1
4-Jun	0.1	0.1	0.1	0.1	Z	0.1	C	C	C	C	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1
5-Jun	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
6-Jun	Z	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
7-Jun	0.2	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.3
8-Jun	0.2	0.1	Z	0.1	0.1	0.0	0.1	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
9-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
10-Jun	0.2	0.2	0.2	0.2	Z	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	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3
11-Jun	0.1	0.1	0.1	0.1	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
12-Jun	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
13-Jun	0.1	Z	0.2	0.1	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.2
14-Jun	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	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
15-Jun	0.1	0.1	0.1	Z	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
16-Jun	0.1	0.1	0.1	0.1	Z	0.2	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	0.1	0.1	0.1	0.2
17-Jun	0.1	0.1	0.1	0.1	0.1	Z	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	0.0	0.1	0.1	0.1	0.1	0.1
18-Jun	Z	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2
19-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1
20-Jun	0.1	0.1	Z	0.2	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	0.1	0.0	0.1	0.1	0.1	0.1	0.2
21-Jun	0.1	0.1	0.2	Z	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2
22-Jun	0.1	0.1	0.1	0.1	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	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2
23-Jun	0.2	0.2	0.2	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	0.2	0.2	0.1	0.2
24-Jun	Z	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1
25-Jun	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	0.0	0.1	0.1	0.1	0.1	0.1
26-Jun	0.1	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
27-Jun	0.2	0.2	0.2	Z	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	0.0	0.0	0.1	0.1	0.1	0.2
28-Jun	0.1	0.1	0.2	0.3	Z	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.3
29-Jun	0.1	0.1	0.2	0.2	0.2	Z	0.3	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
30-Jun	Z	0.3	0.3	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.3
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	Diurnal Average	
	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	0.1	0.2	0.1	0.1	0.2	0.2	0.2	Diurnal Maximum	

Z - zerospan C - Calibration

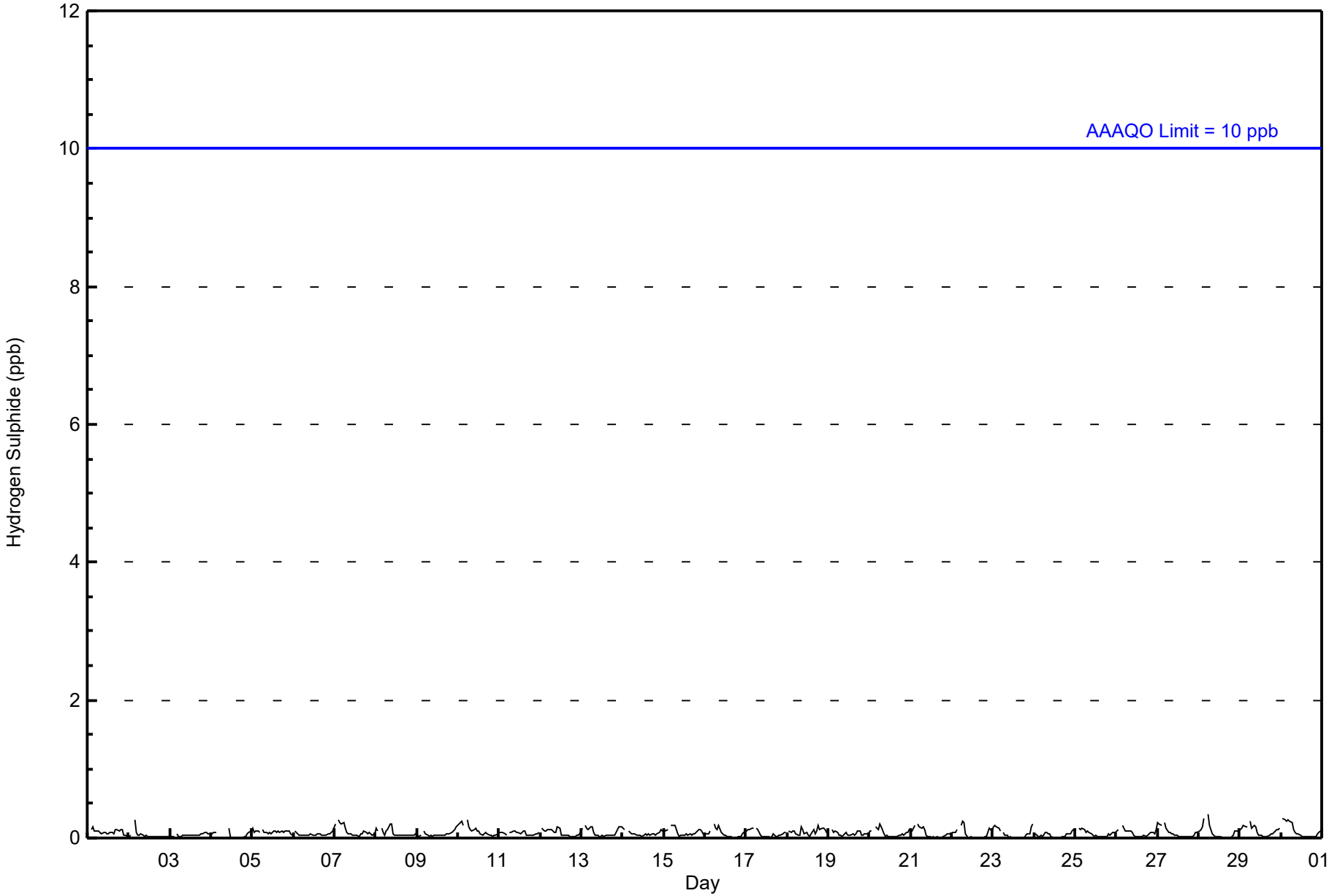
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Surmont 2 - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	686	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: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Surmont 2 - June 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	24	39	34	42	39	37	23	20	11	12	56	106	59	28	85	656
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	24	39	34	42	39	37	23	20	11	12	56	106	59	28	85	656

Total Number of Valid Hours: 656

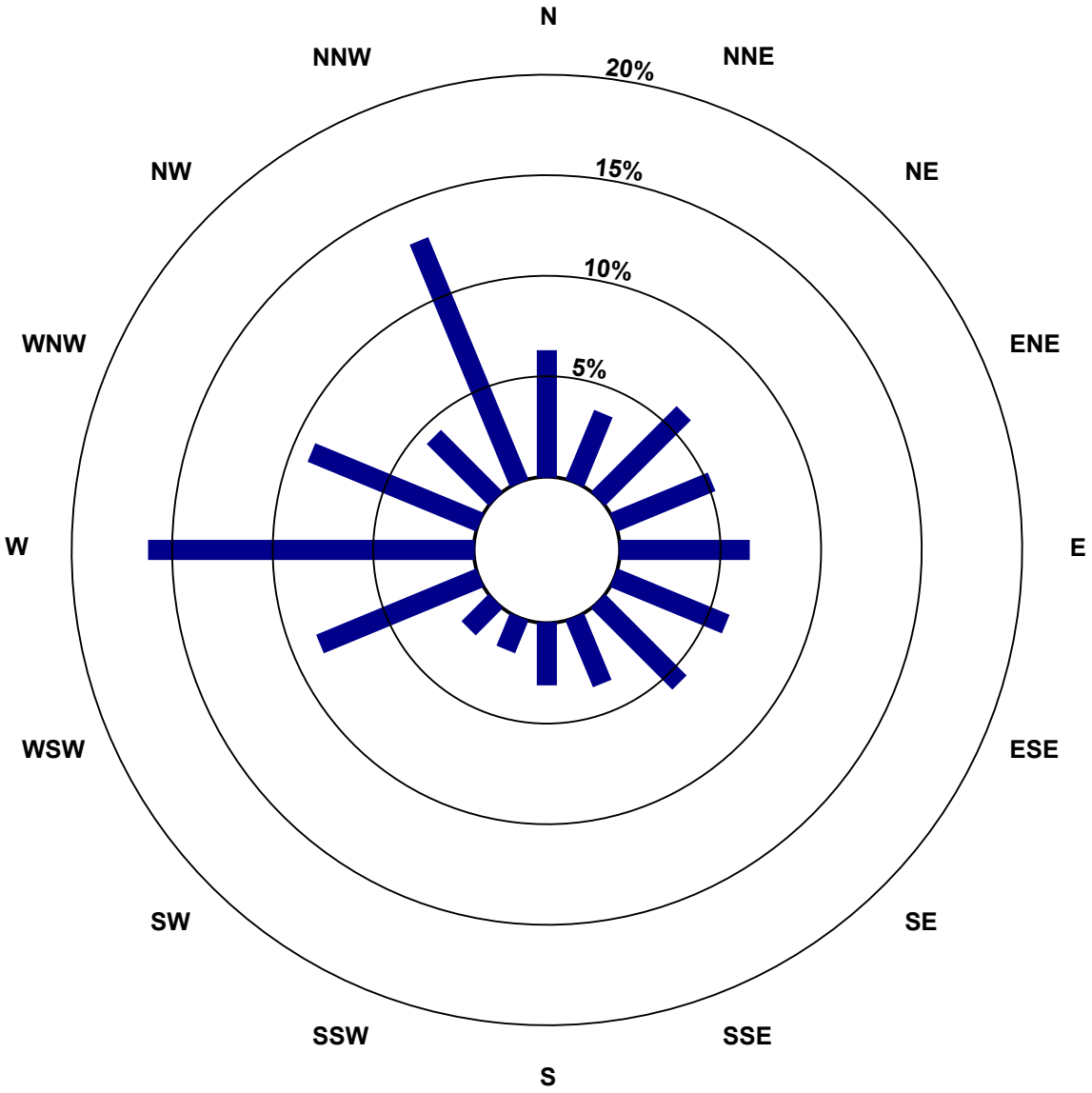
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H_2S) - ppb

Surmont 2



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

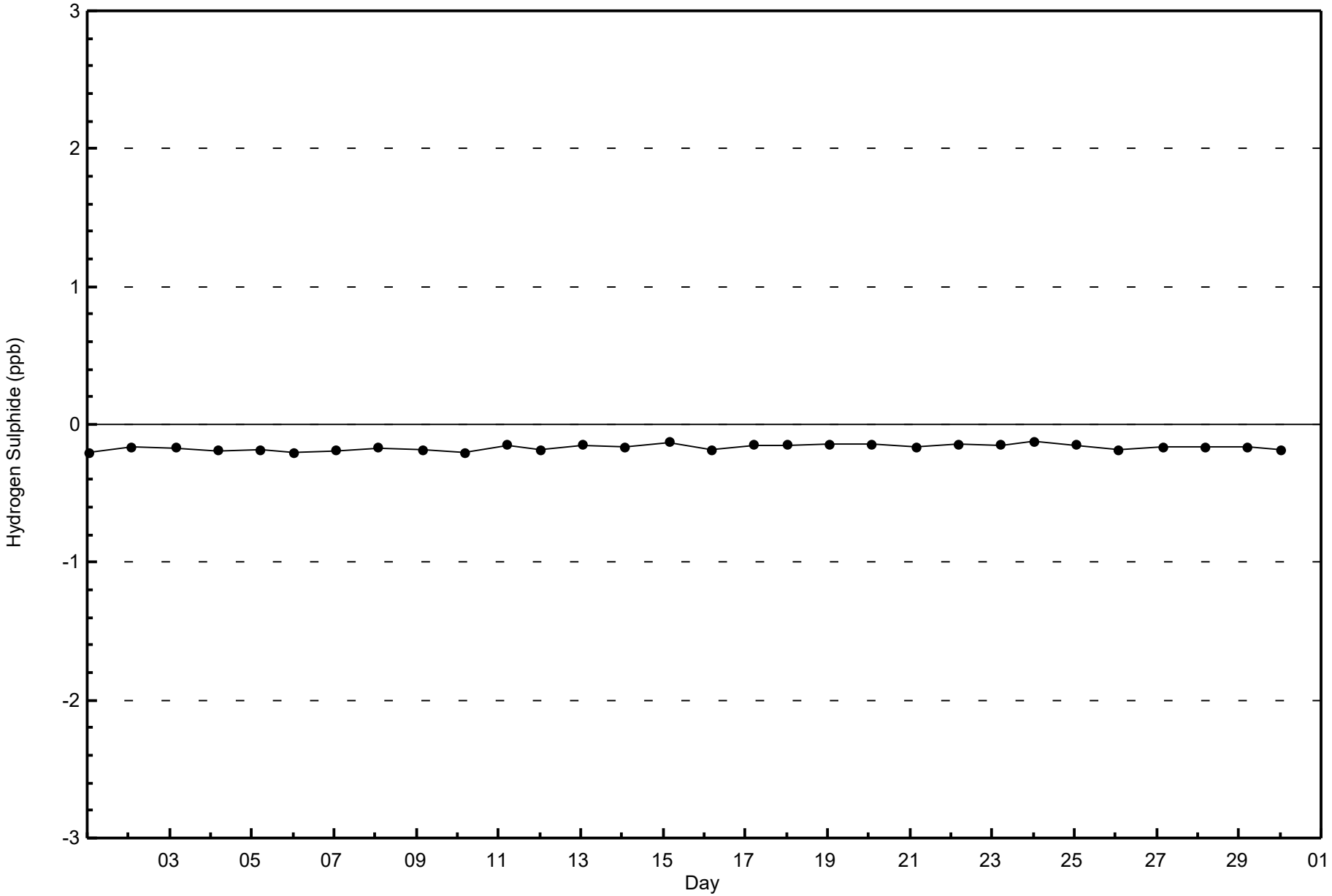
Total Number of Valid Hours: 656

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Surmont 2 - June 2026

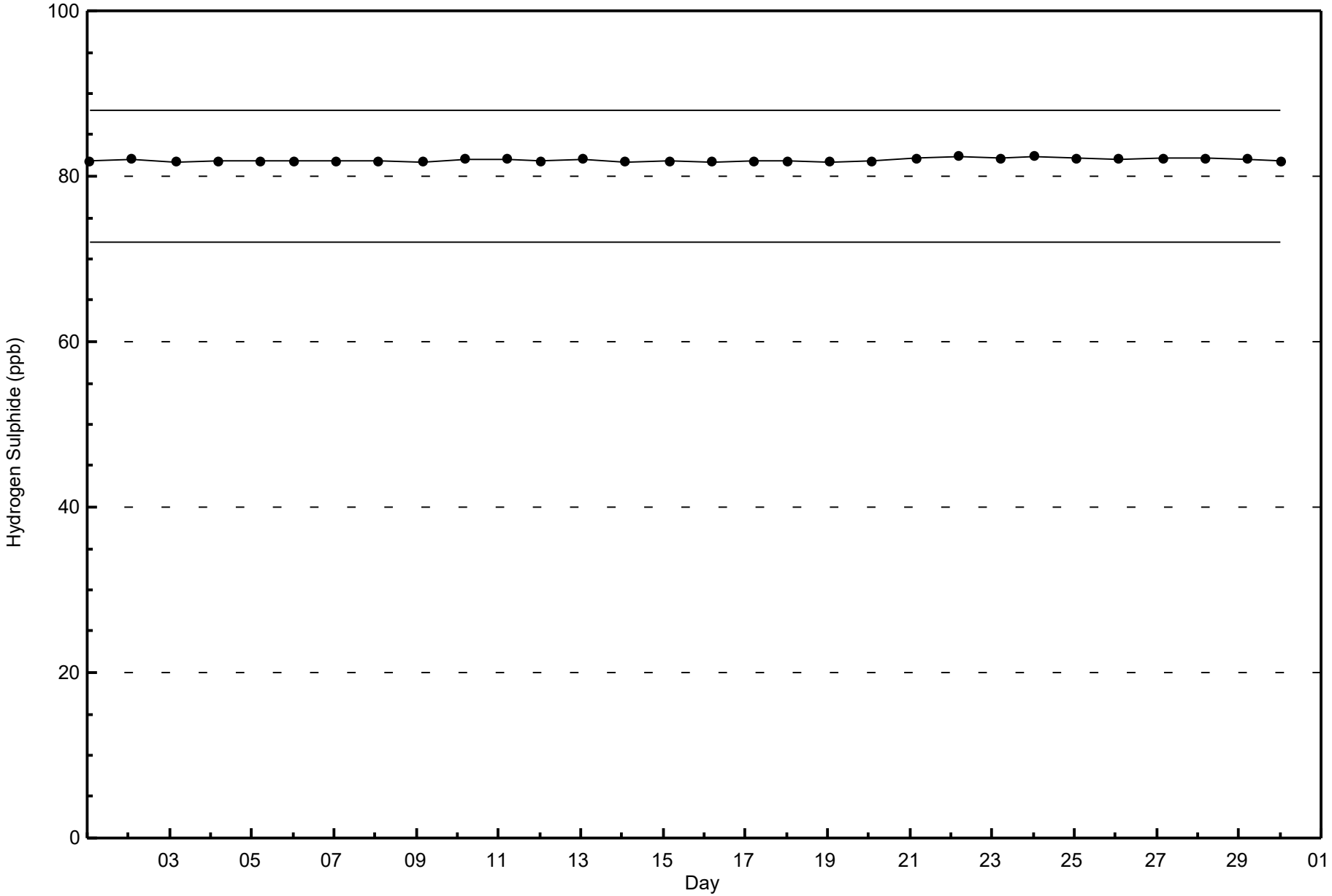


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Surmont 2 - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Surmont 2 - June 2026

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

Maximum Value: 2.4 ppm on Jun 29 08:00

Maximum Daily Average: 2.3 ppm on Jun 29

Minimum Value: 2.0 ppm on Jun 6 04:00

Minimum Daily Average: 2.1 ppm on Jun 2

Maximum Diurnal Average: 2.2 ppm at hour 9

Minimum Diurnal Average: 2.2 ppm at hour 23

Monthly Average: 2.21 ppm

Percentiles: P_1 = 2.0 P_{10} = 2.1 Q_1 = 2.2 Median = 2.2 Q_3 = 2.3 P_{90} = 2.3 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-Jun	Z	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	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.3
2-Jun	2.2	Z	2.2	2.2	2.2	2.2	2.2	C	C	C	C	C	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	2.2
3-Jun	2.1	2.1	Z	2.1	2.2	2.2	2.2	M	M	M	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.3
4-Jun	2.2	2.2	2.2	Z	2.2	2.2	2.1	2.1	2.2	2.1	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.3
5-Jun	2.2	2.2	2.2	2.2	Z	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	2.0	2.0	2.2	2.2
6-Jun	2.0	2.1	2.1	2.0	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	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2
7-Jun	Z	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.3
8-Jun	2.2	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	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2
9-Jun	2.1	2.1	Z	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.3
10-Jun	2.3	2.2	2.3	Z	2.2	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	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3
11-Jun	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	2.1	2.1	2.2	2.1	2.2	2.1	2.2	2.2	2.2
12-Jun	2.2	2.2	2.2	2.2	2.2	Z	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3
13-Jun	Z	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.3
14-Jun	2.2	Z	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.3
15-Jun	2.2	2.2	Z	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.3
16-Jun	2.2	2.1	2.1	Z	2.2	2.2	2.1	2.1	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	2.1	2.2	2.2	2.2
17-Jun	2.2	2.2	2.2	2.2	Z	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.3
18-Jun	2.2	2.2	2.2	2.2	2.2	Z	2.1	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	2.3	2.2	2.2	2.2	2.3
19-Jun	Z	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.3
20-Jun	2.2	Z	2.2	2.2	2.2	2.1	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	2.1	2.1	2.1	2.0	2.0	2.1	2.2
21-Jun	2.0	2.0	Z	2.1	2.1	2.1	2.1	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	2.2	2.2	2.2
22-Jun	2.2	2.2	2.2	Z	2.3	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	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.4
23-Jun	2.3	2.3	2.2	2.3	Z	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.4	2.3	2.4
24-Jun	2.2	2.2	2.2	2.2	2.2	Z	2.1	2.1	2.2	2.3	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	2.3	2.2	2.3
25-Jun	Z	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.3	2.4
26-Jun	2.2	Z	2.2	2.2	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
27-Jun	2.3	2.3	Z	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.2	2.3	2.3	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3
28-Jun	2.2	2.2	2.2	Z	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.3	2.4	2.3	2.3	2.3	2.4
29-Jun	2.3	2.4	2.3	2.3	Z	2.3	2.4	2.4	2.4	2.4	2.3	2.3	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	2.4
30-Jun	2.2	2.3	2.3	2.3	2.4	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	2.3	2.3	2.3	2.3	2.3	2.2	2.3	2.4
	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	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	
	2.3	2.4	2.3	2.3	2.4	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	2.4	2.3	2.4	Diurnal Maximum	

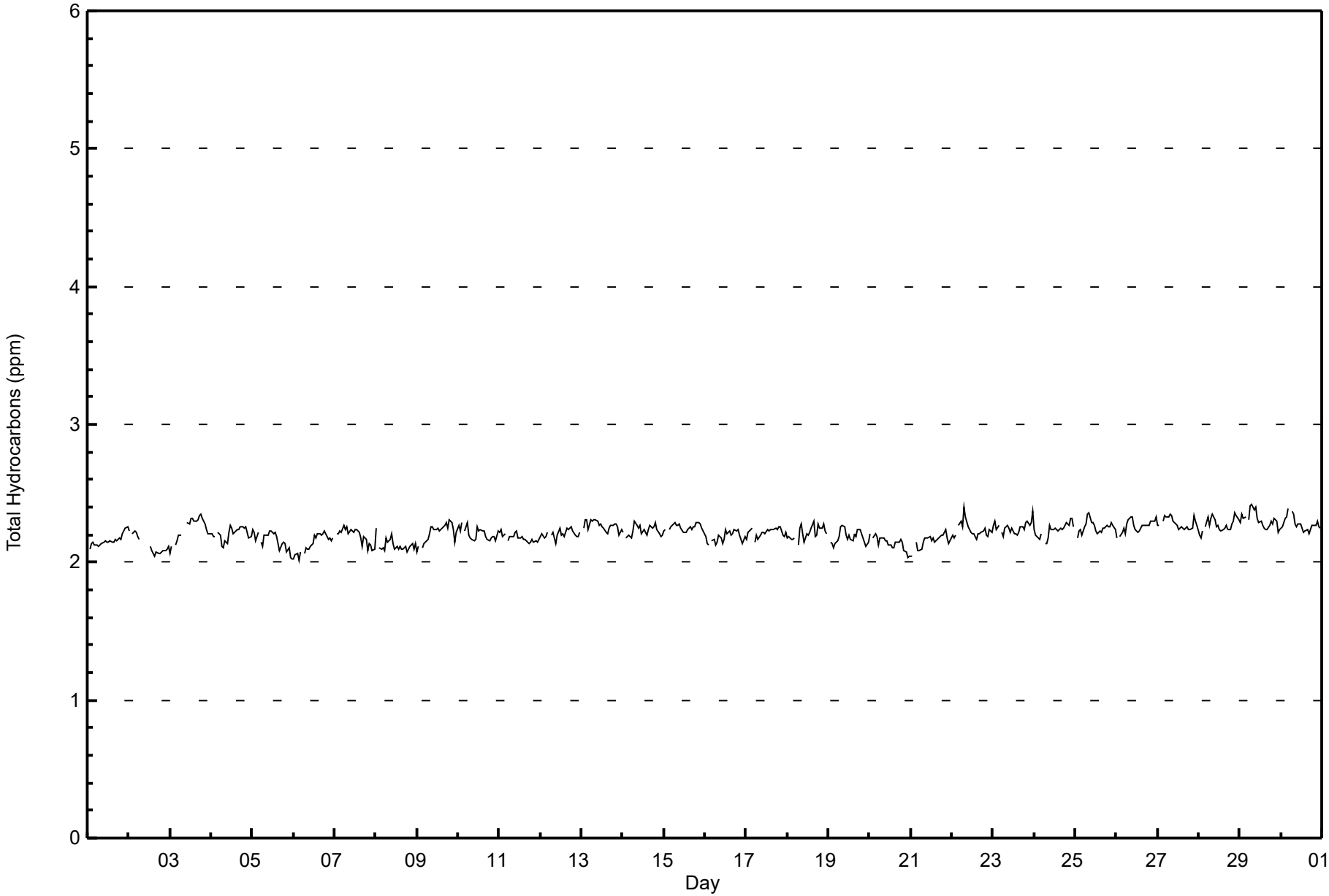
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Surmont 2 - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Total Hydrocarbons (THC) - ppm

Surmont 2 - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	9	1.32	1.32
2.1 - 3.0	673	98.68	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

Surmont 2 - June 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	1	0	0	0	0	0	0	0	0	5	3	0	0	9
2.1 - 3.0	39	24	37	32	39	39	38	27	19	10	12	57	100	55	30	85	643
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	24	37	33	39	39	38	27	19	10	12	57	105	58	30	85	652

Total Number of Valid Hours: 652

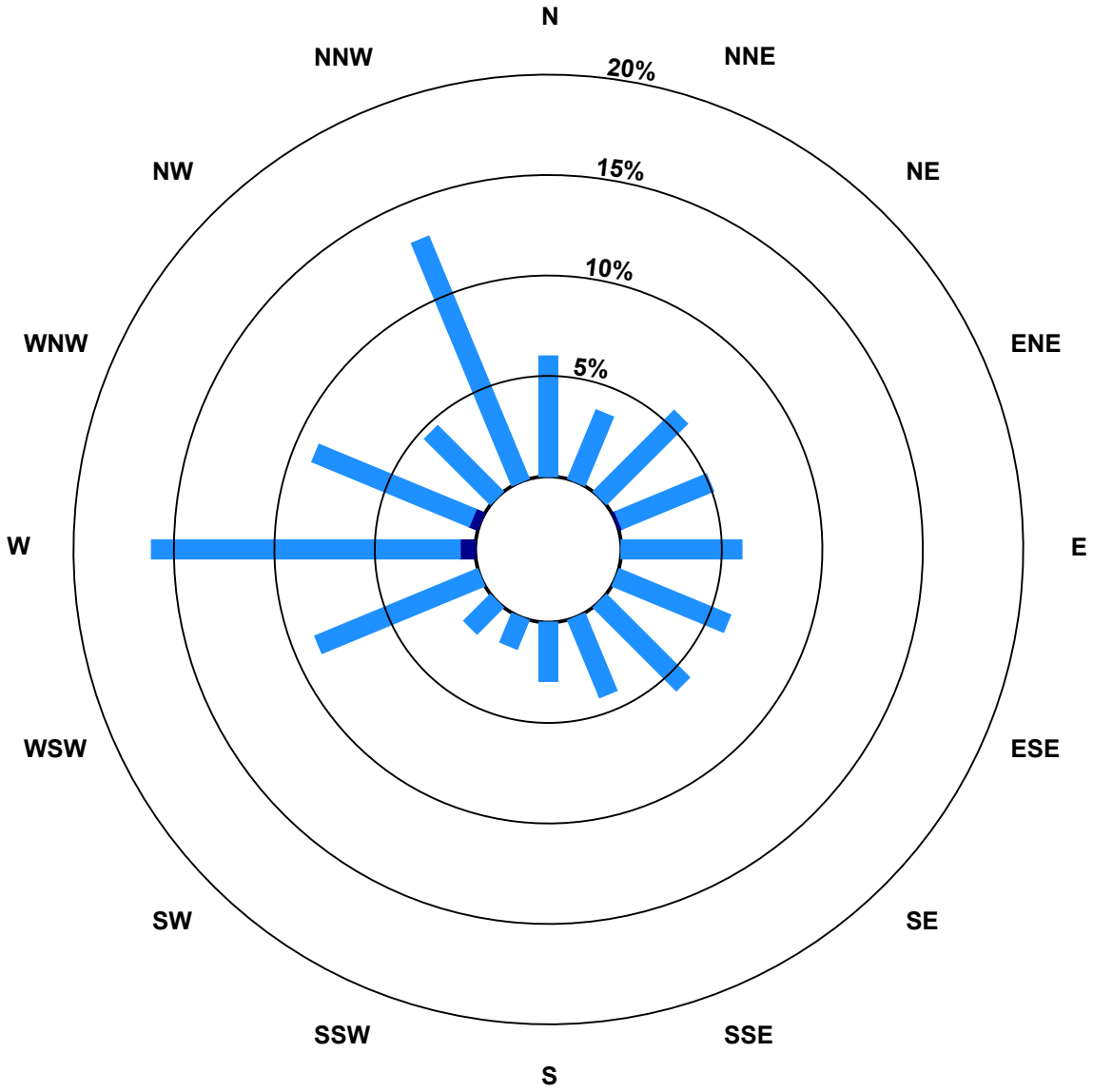
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Surmont 2



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

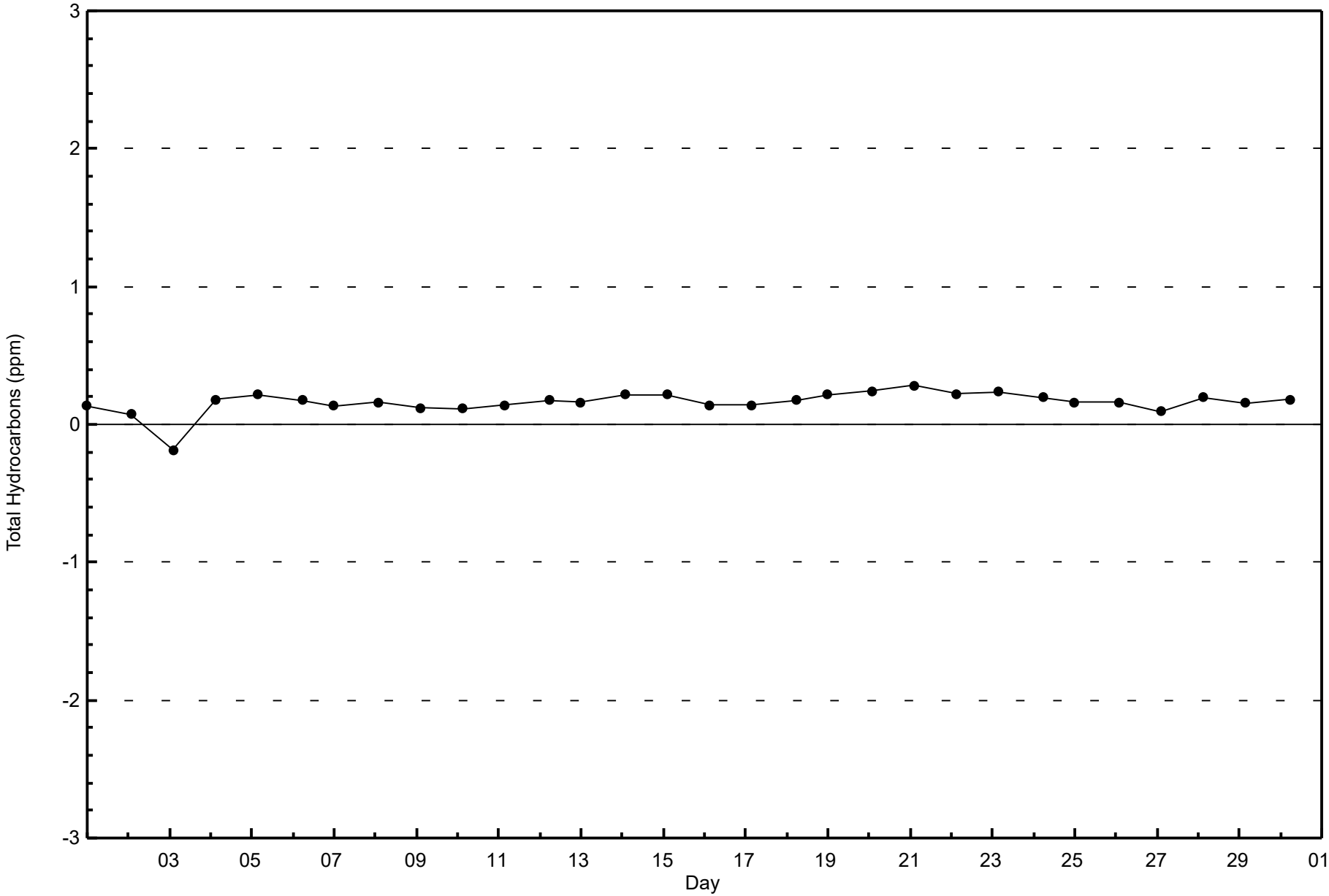
Total Number of Valid Hours: 652

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Surmont 2 - June 2026

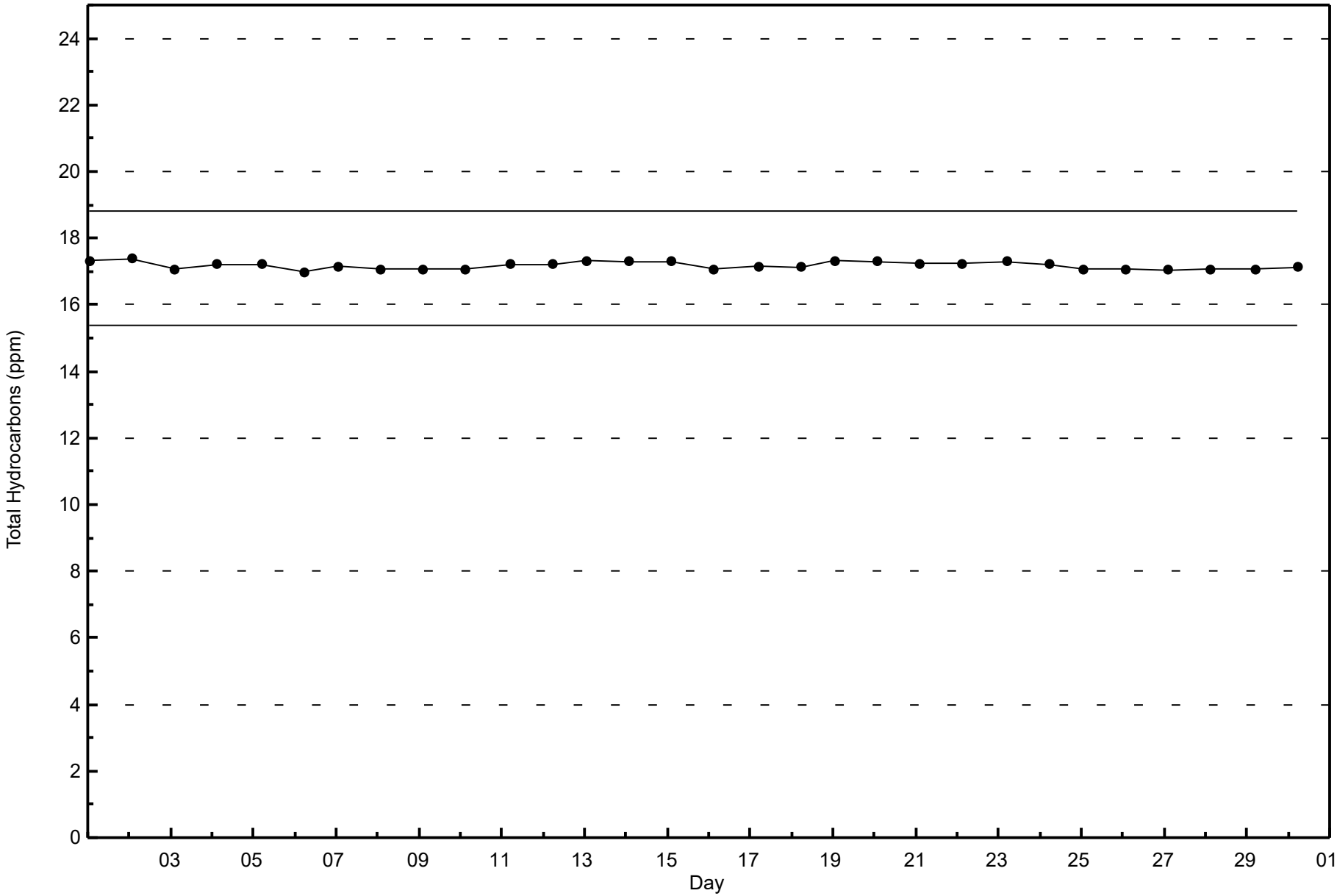


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Surmont 2 - June 2026



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

Maximum Value: 1.6 ppb on Jun 12 11:00 Maximum Daily Average: 0.4 ppb on Jun 11

Minimum Value: 0.0 ppb on Jun 1 01:00 Minimum Daily Average: 0.0 ppb on Jun 2

Maximum Diurnal Average: 0.3 ppb at hour 7 Minimum Diurnal Average: 0.0 ppb at hour 2

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} = 0.2 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-Jun	0.0	0.0	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	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2-Jun	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-Jun	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-Jun	0.0	Z	0.1	0.0	0.1	0.2	0.4	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.4
5-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
6-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
7-Jun	0.0	0.0	0.0	0.0	Z	0.3	0.6	0.6	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.6
8-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.3	0.3	0.5	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.5
9-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
10-Jun	0.0	Z	0.0	0.0	0.2	0.6	0.5	0.8	0.7	0.6	0.7	0.5	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.3	0.8
11-Jun	0.0	0.0	Z	0.0	0.1	0.3	0.6	0.5	0.9	1.1	1.2	1.0	0.7	0.7	0.8	0.5	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.2
12-Jun	0.1	0.0	0.0	Z	0.2	0.5	0.8	0.7	0.7	0.5	1.6	1.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.3	1.6
13-Jun	0.0	0.0	0.0	0.0	Z	0.3	0.9	0.6	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	0.0	0.0	0.1	0.1	0.9
14-Jun	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	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.2
15-Jun	Z	0.0	0.0	0.0	0.1	0.3	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
16-Jun	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	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1
17-Jun	0.0	0.0	Z	0.1	0.1	0.3	0.5	0.6	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.6
18-Jun	0.0	0.0	0.0	Z	0.0	0.1	C	C	C	C	C	0.4	0.4	0.0	0.3	1.1	0.2	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.2	1.1
19-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.2	0.2	0.5	0.4	0.2	0.2	0.3	0.3	0.4	0.3	0.5	0.4	0.1	0.0	0.0	0.0	0.0	0.2	0.5
20-Jun	0.0	0.0	0.1	0.1	0.5	Z	0.5	0.2	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.5
21-Jun	Z	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.3
22-Jun	0.0	Z	0.0	0.1	0.1	0.7	1.4	0.8	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.2	1.4
23-Jun	0.0	0.0	Z	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.3
24-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.8	0.6	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	0.0	0.1	0.8
25-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	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-Jun	0.0	0.0	0.0	0.0	0.0	Z	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	0.2
27-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
28-Jun	0.0	Z	0.0	0.0	0.0	0.2	0.2	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	0.1	0.1	0.0	0.0	0.1	0.2
29-Jun	0.0	0.0	Z	0.0	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	0.0	0.0	0.1	0.2
30-Jun	0.0	0.0	0.1	Z	0.2	0.5	0.6	0.1	0.1	0.1	0.1	0.1	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	0.6
	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	Diurnal Average	
	0.1	0.0	0.1	0.1	0.5	0.7	1.4	0.8	0.9	1.1	1.6	1.2	0.7	0.7	0.8	1.1	0.3	0.5	0.4	0.3	0.1	0.1	0.1	0.1	Diurnal Maximum	

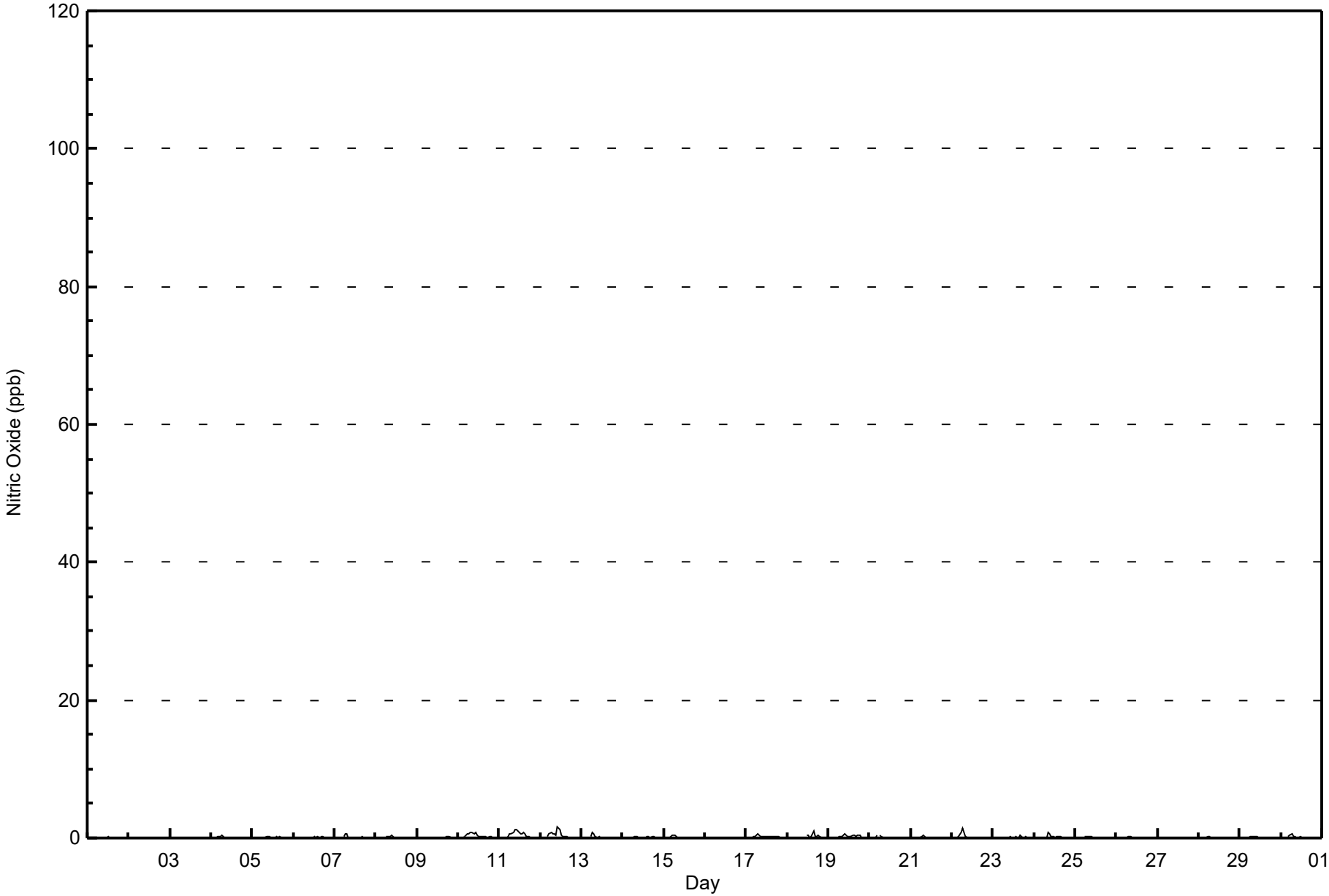
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Surmont 2 - June 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

Surmont 2 - June 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	38	25	39	33	42	39	36	26	21	11	12	60	104	55	29	83	653
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	38	25	39	33	42	39	36	26	21	11	12	60	104	55	29	83	653

Total Number of Valid Hours: 653

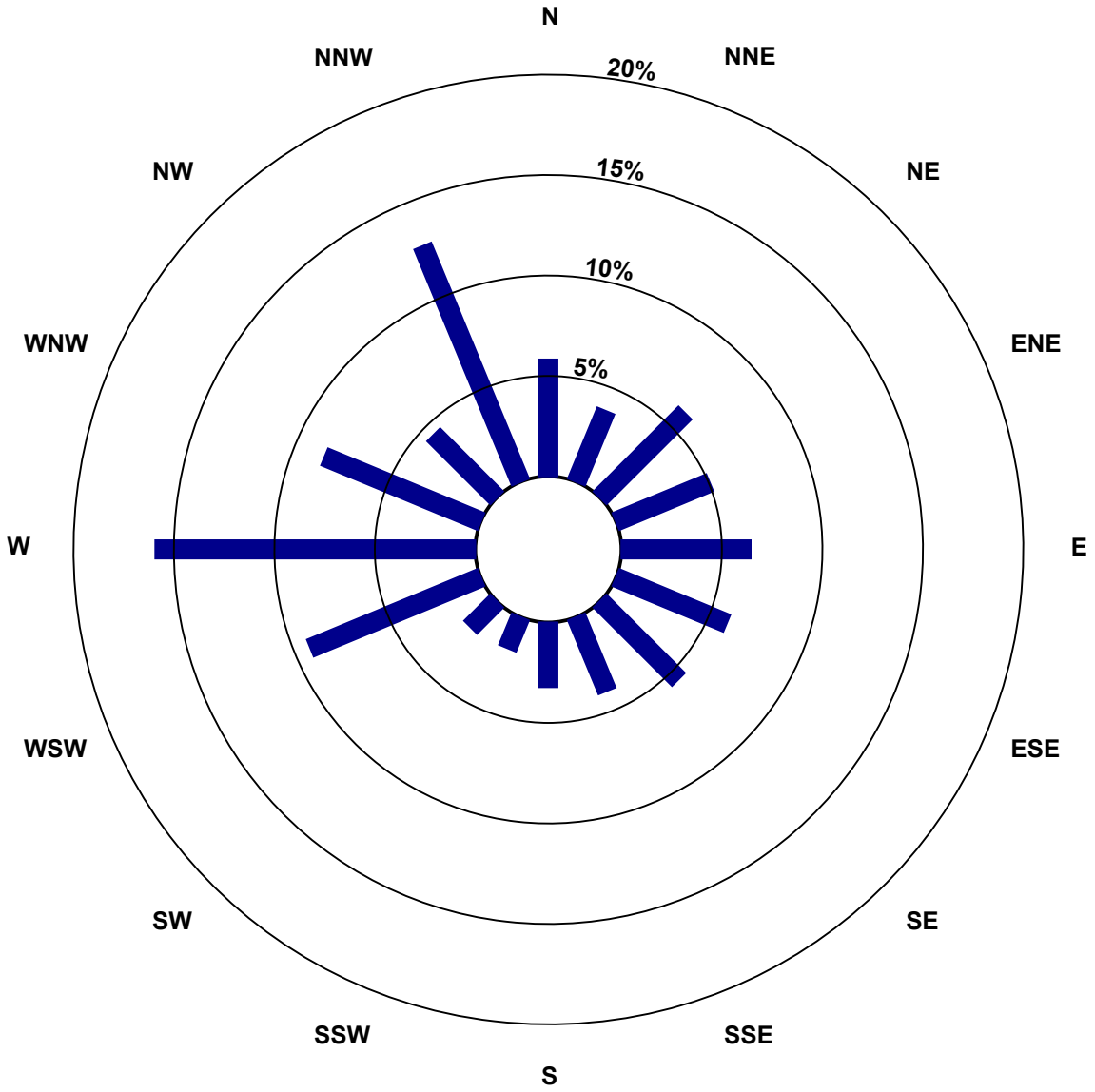
Total Number of Hours: 720

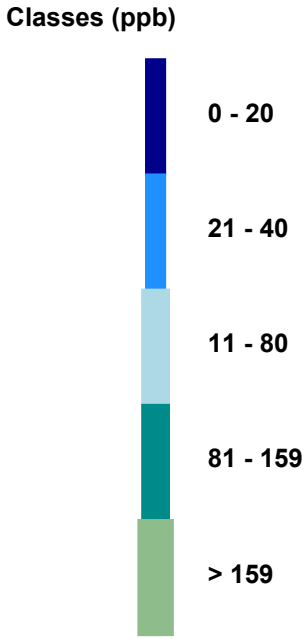
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Surmont 2





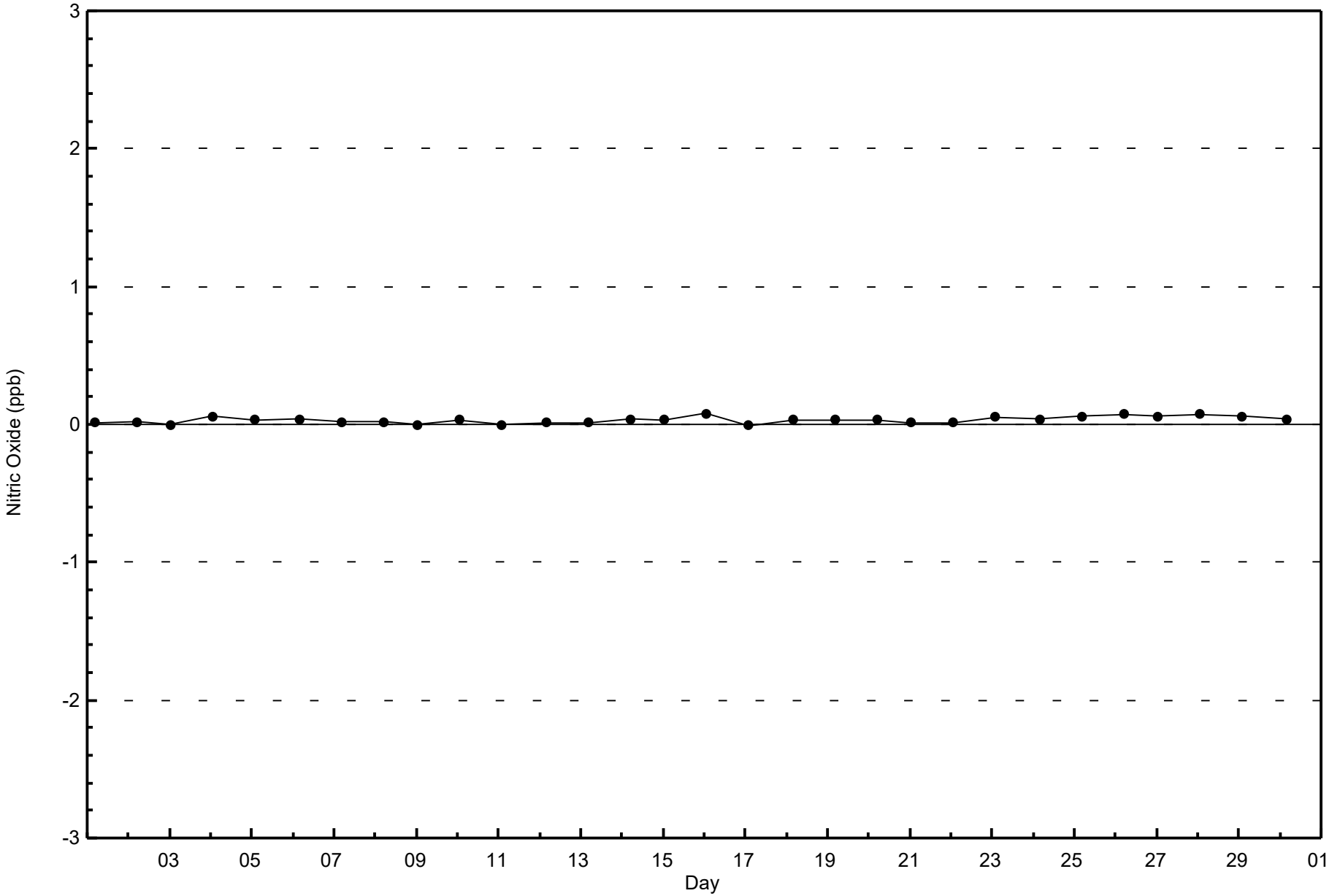
Total Number of Valid Hours: 653

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Surmont 2 - June 2026

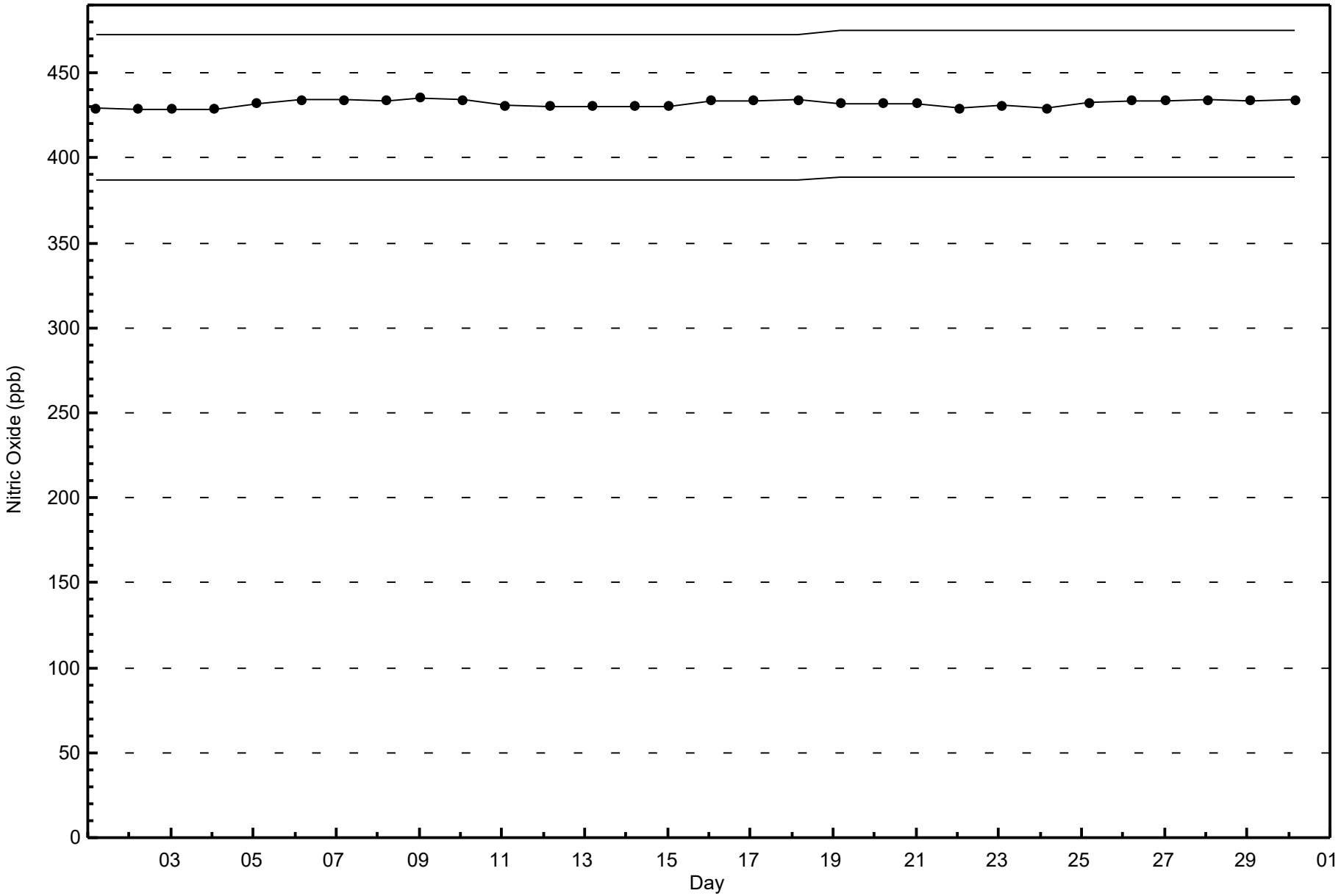


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Surmont 2 - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Surmont 2 - June 2026

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

Maximum Value: 4.9 ppb on Jun 30 23:00 Maximum Daily Average: 1.8 ppb on Jun 18

Minimum Value: 0.0 ppb on Jun 21 12:00 Minimum Daily Average: 0.2 ppb on Jun 3

Maximum Diurnal Average: 1.3 ppb at hour 23 Minimum Diurnal Average: 0.6 ppb at hour 13

Monthly Average: 0.86 ppb Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.4 Median = 0.6 Q_3 = 1.1 P_{90} = 1.8 P_{99} = 3.3

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-Jun	0.7	0.3	0.4	0.8	Z	1.2	0.9	0.5	0.4	0.5	0.4	0.5	0.6	0.7	0.7	0.6	1.0	1.2	1.1	1.3	0.4	0.2	0.3	0.2	0.6	1.3
2-Jun	0.2	0.2	0.1	0.2	0.2	Z	0.4	0.5	0.4	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.5
3-Jun	Z	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.3
4-Jun	0.4	Z	2.3	1.6	0.6	0.7	1.0	0.7	0.7	0.7	0.6	0.5	0.4	0.4	0.5	0.5	0.5	0.6	0.5	0.4	0.4	0.7	1.4	1.7	0.8	2.3
5-Jun	2.3	1.5	Z	1.0	0.8	0.6	0.5	0.6	1.0	1.2	1.2	0.6	0.6	0.8	1.3	0.7	1.1	1.0	1.2	1.2	1.6	1.2	0.6	0.3	1.0	2.3
6-Jun	0.3	0.3	0.3	Z	0.3	0.4	0.6	0.4	0.4	0.3	0.5	0.5	0.6	0.4	0.7	0.5	0.7	0.7	0.6	0.6	0.7	0.3	0.8	1.2	0.5	1.2
7-Jun	1.9	1.7	1.3	0.9	Z	0.4	1.1	1.7	0.3	0.4	0.3	0.3	0.3	0.4	0.5	0.7	1.1	0.6	1.0	0.4	1.1	1.1	0.7	1.2	0.8	1.9
8-Jun	0.7	0.8	0.9	1.8	0.7	Z	2.2	2.6	2.9	3.4	0.8	0.3	0.2	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.9	3.4
9-Jun	Z	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.2	0.3	0.6	0.9	0.9	0.7	0.7	0.8	0.7	0.4	0.9
10-Jun	0.5	Z	1.0	1.1	2.0	4.1	2.1	2.1	1.9	1.8	2.0	1.6	1.5	1.0	1.0	1.2	1.1	0.7	0.8	1.0	0.7	0.8	1.7	2.0	1.5	4.1
11-Jun	2.3	2.2	Z	2.1	1.1	1.6	1.7	2.0	2.4	2.0	2.1	2.0	1.4	2.0	1.9	2.1	0.8	1.0	0.6	0.4	0.5	1.4	1.3	2.1	1.6	2.4
12-Jun	2.0	3.0	2.7	Z	3.2	3.0	2.9	2.3	1.8	1.4	3.2	2.6	1.0	0.7	0.6	0.5	0.4	0.4	0.5	0.3	0.4	0.9	1.1	1.8	1.6	3.2
13-Jun	2.6	2.1	1.3	1.1	Z	0.7	2.4	1.7	0.5	0.3	0.5	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.4	0.2	0.6	1.7	1.6	2.0	0.9	2.6
14-Jun	0.7	1.1	0.7	0.7	0.9	Z	0.9	1.3	0.9	0.5	0.4	0.4	0.5	0.8	1.0	1.7	1.0	0.9	0.8	0.4	1.3	1.4	1.1	1.0	0.9	1.7
15-Jun	Z	1.6	1.6	1.6	1.4	0.9	1.0	0.9	0.4	0.2	0.2	0.2	0.3	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.1	0.6	0.4	0.7	1.6
16-Jun	0.5	Z	0.8	0.4	0.6	0.4	0.7	0.7	0.8	0.3	0.5	0.3	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.3	1.3	0.9	0.4	1.3
17-Jun	0.7	0.5	Z	0.6	0.5	1.2	1.8	1.5	0.4	0.3	0.6	0.8	0.8	1.0	0.6	0.6	1.0	1.2	0.9	1.5	1.4	1.8	1.9	1.4	1.0	1.9
18-Jun	1.2	1.3	0.6	Z	0.8	0.7	C	C	C	C	C	1.6	1.5	0.5	1.5	2.7	1.1	1.2	3.1	3.0	3.3	3.9	3.0	1.6	1.8	3.9
19-Jun	1.2	1.0	0.6	0.5	Z	0.4	0.4	0.4	0.8	1.3	1.3	1.0	1.1	1.3	1.8	2.1	1.7	2.1	2.2	0.8	0.9	0.9	0.8	1.1	1.1	2.2
20-Jun	0.8	1.0	1.4	1.1	0.9	Z	1.0	0.5	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.5	1.4
21-Jun	Z	0.4	0.9	1.6	0.9	1.1	1.1	0.8	0.4	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	1.3	1.1	1.6	0.8	0.6	1.6
22-Jun	0.6	Z	1.2	0.9	0.9	0.8	2.1	1.4	0.8	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.6	1.9	0.9	0.9	0.7	2.1
23-Jun	1.1	1.0	Z	1.0	0.8	0.6	0.5	0.4	0.4	0.5	1.1	0.5	0.5	0.6	0.4	0.6	1.4	0.5	0.4	1.2	1.6	1.3	3.6	3.4	1.0	3.6
24-Jun	1.1	0.5	0.7	Z	0.8	0.5	0.3	0.7	2.1	2.1	1.1	0.8	0.8	0.9	0.8	0.7	0.5	0.6	0.5	0.6	0.5	0.6	0.6	0.5	0.8	2.1
25-Jun	0.5	0.6	0.9	0.8	Z	1.1	1.0	1.1	1.0	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.5	0.5	0.5	0.5	0.4	0.7	1.1
26-Jun	0.4	0.4	0.4	0.4	0.4	Z	0.7	1.2	0.8	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5	1.2
27-Jun	Z	0.5	0.3	0.4	1.0	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.3	0.3	0.5	0.5	0.8	1.1	1.0	0.5	1.1
28-Jun	1.6	Z	2.0	0.9	0.8	0.5	0.7	0.5	0.5	0.3	0.5	0.6	0.5	0.5	0.5	0.4	0.4	0.5	0.7	1.0	1.5	3.2	1.4	1.2	0.9	3.2
29-Jun	1.1	1.2	Z	1.6	1.4	0.9	0.6	1.4	1.4	1.8	1.5	1.1	1.2	1.2	0.8	0.7	1.1	1.2	1.2	1.1	2.6	3.8	3.3	2.5	1.5	3.8
30-Jun	2.4	3.1	3.1	Z	1.3	0.8	0.7	0.9	0.9	1.0	0.9	1.0	0.8	0.8	0.7	0.7	0.6	0.7	0.8	0.6	0.5	3.1	4.9	3.1	1.5	4.9
	1.1	1.1	1.0	0.9	0.9	0.9	1.0	1.0	0.9	0.8	0.8	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.7	0.7	0.9	1.2	1.3	1.2	Diurnal Average	
	2.6	3.1	3.1	2.1	3.2	4.1	2.9	2.6	2.9	3.4	3.2	2.6	1.5	2.0	1.9	2.7	1.7	2.1	3.1	3.0	3.3	3.9	4.9	3.4	Diurnal Maximum	

Z - zerospan C - Calibration

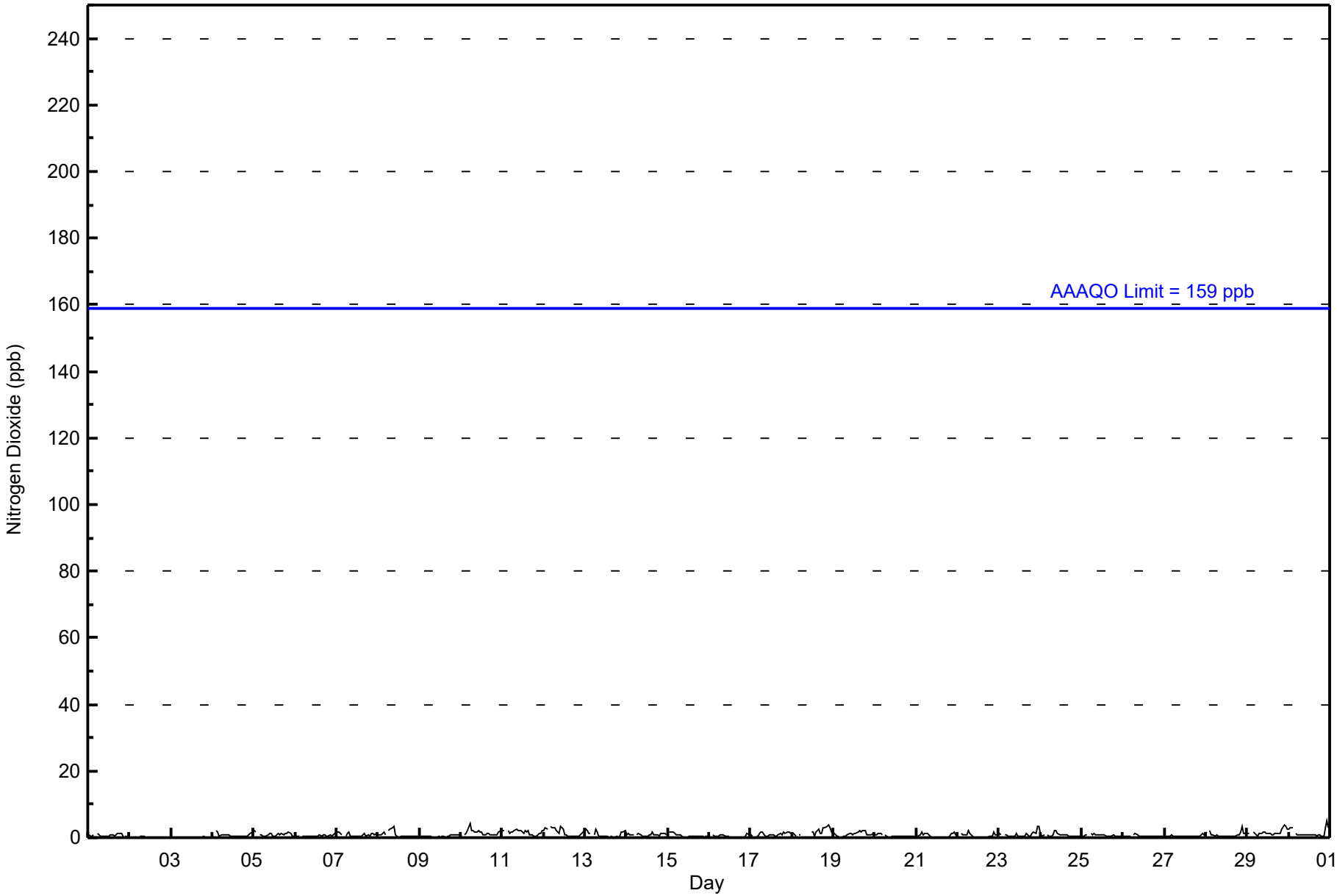
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Surmont 2 - June 2026



Nitrogen Dioxide (NO_2) - ppb

Surmont 2 - June 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

Surmont 2 - June 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	38	25	39	33	42	39	36	26	21	11	12	60	104	55	29	83	653
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	38	25	39	33	42	39	36	26	21	11	12	60	104	55	29	83	653

Total Number of Valid Hours: 653

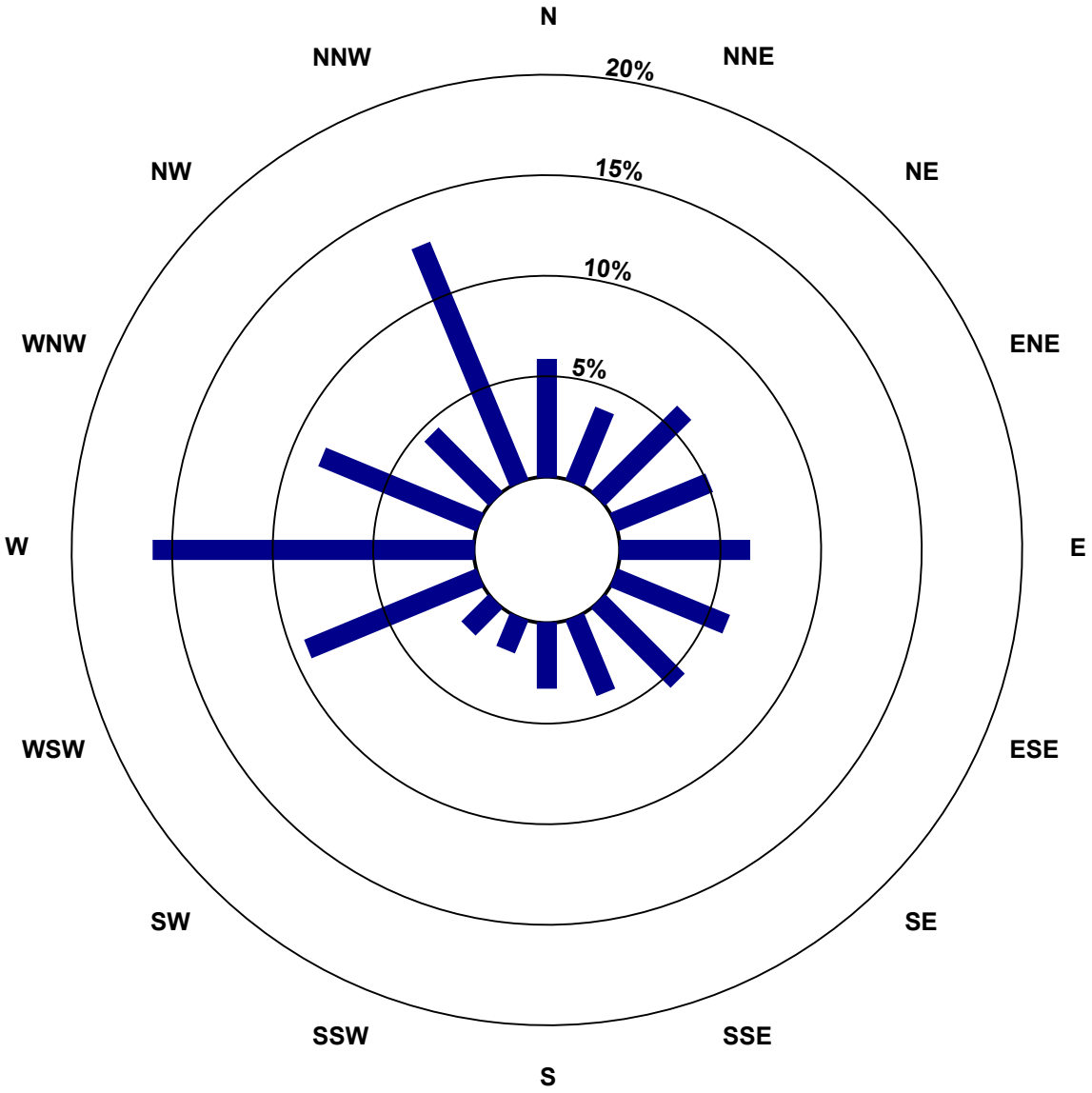
Total Number of Hours: 720

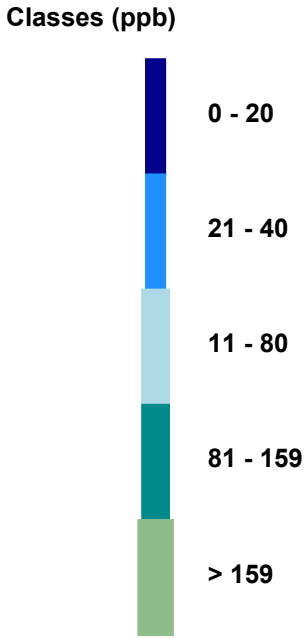
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Surmont 2





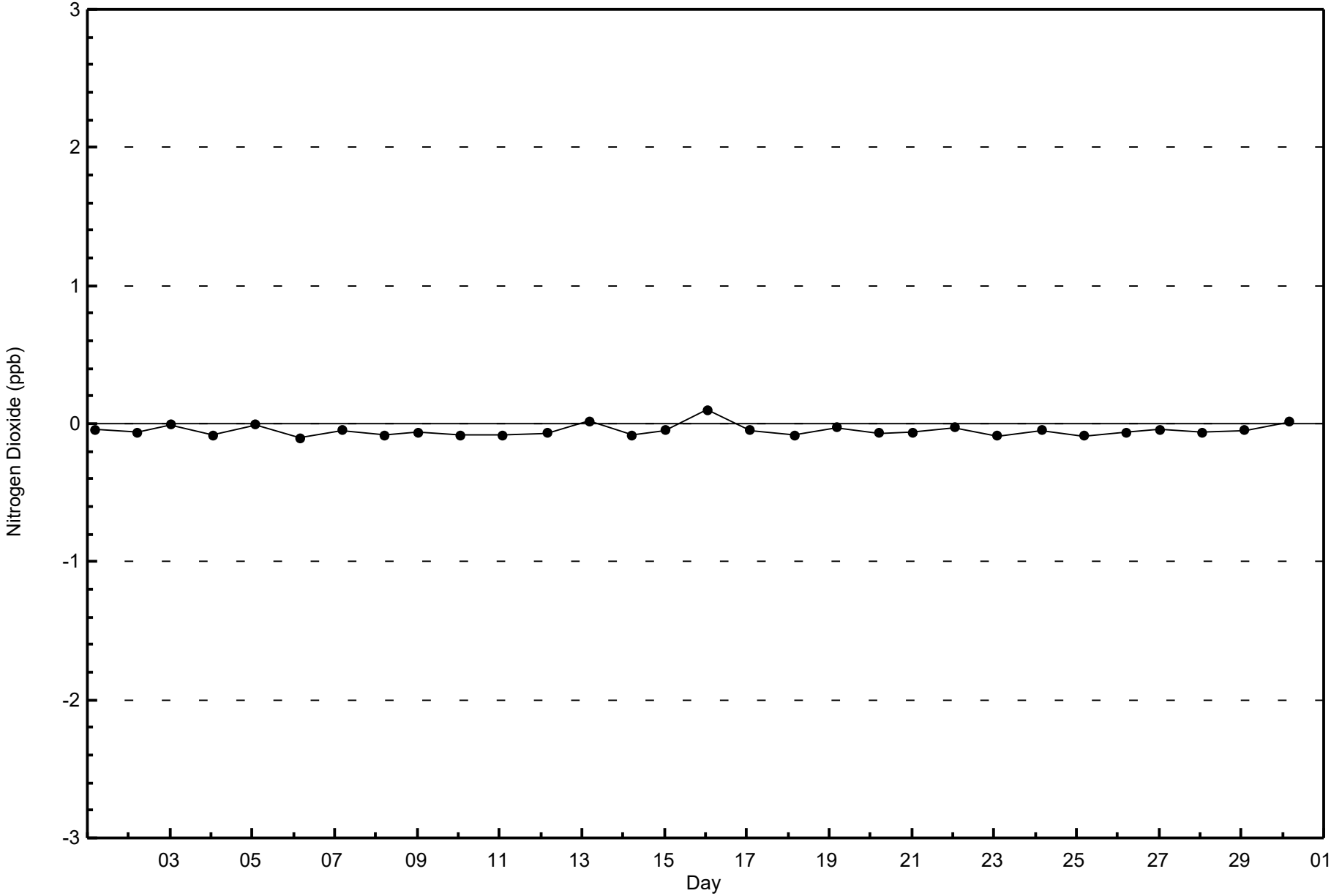
Total Number of Valid Hours: 653

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Surmont 2 - June 2026

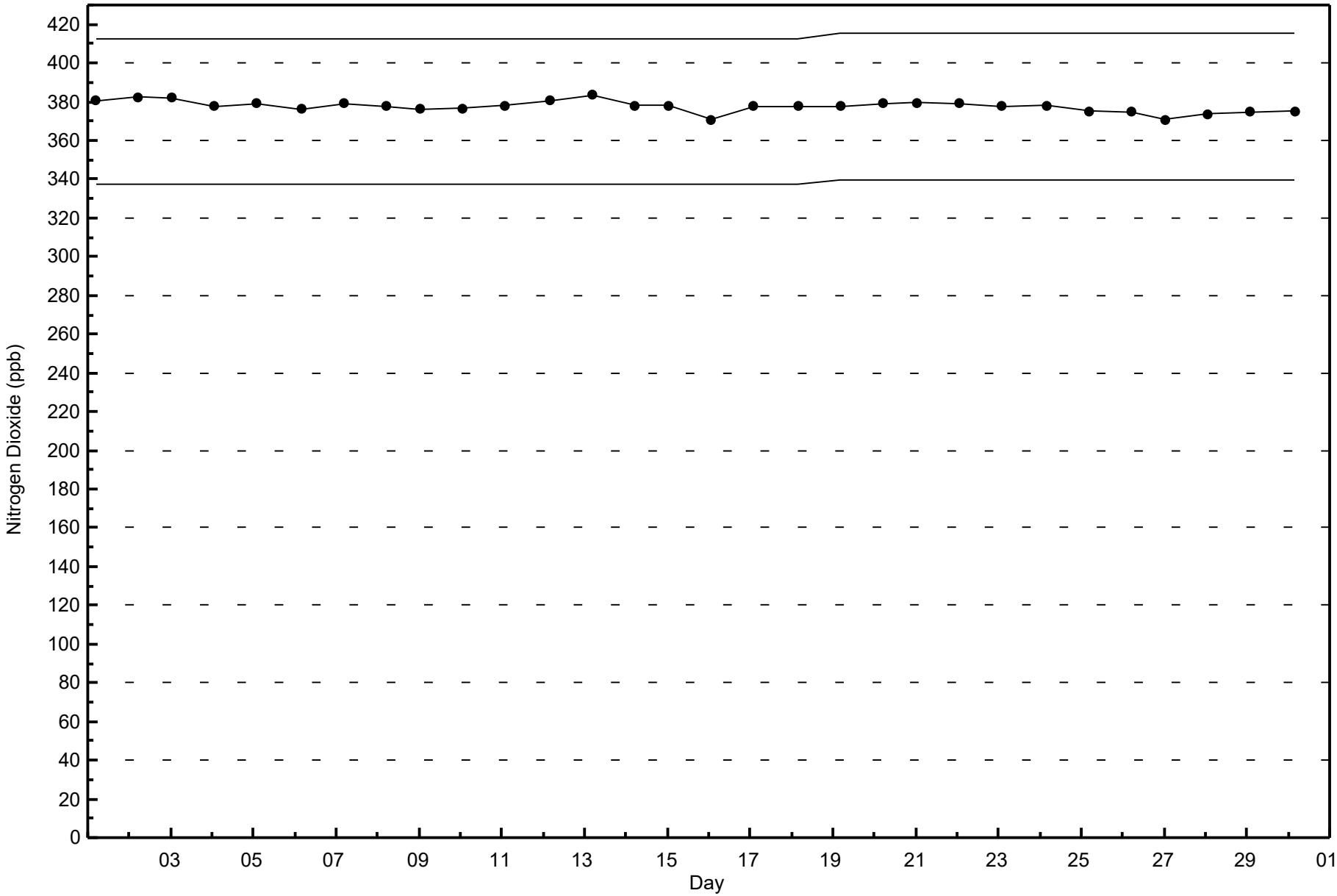


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Surmont 2 - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Surmont 2 - June 2026

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

Maximum Value: 5.0 ppb on Jun 30 23:00

Maximum Daily Average: 2.0 ppb on Jun 11

Minimum Value: 0.1 ppb on Jun 3 11:00

Minimum Daily Average: 0.2 ppb on Jun 3

Maximum Diurnal Average: 1.3 ppb at hour 7

Minimum Diurnal Average: 0.7 ppb at hour 14

Monthly Average: 0.97 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.4$ Median = 0.7 $Q_3 = 1.2$ $P_{90} = 2.1$ $P_{99} = 3.8$

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

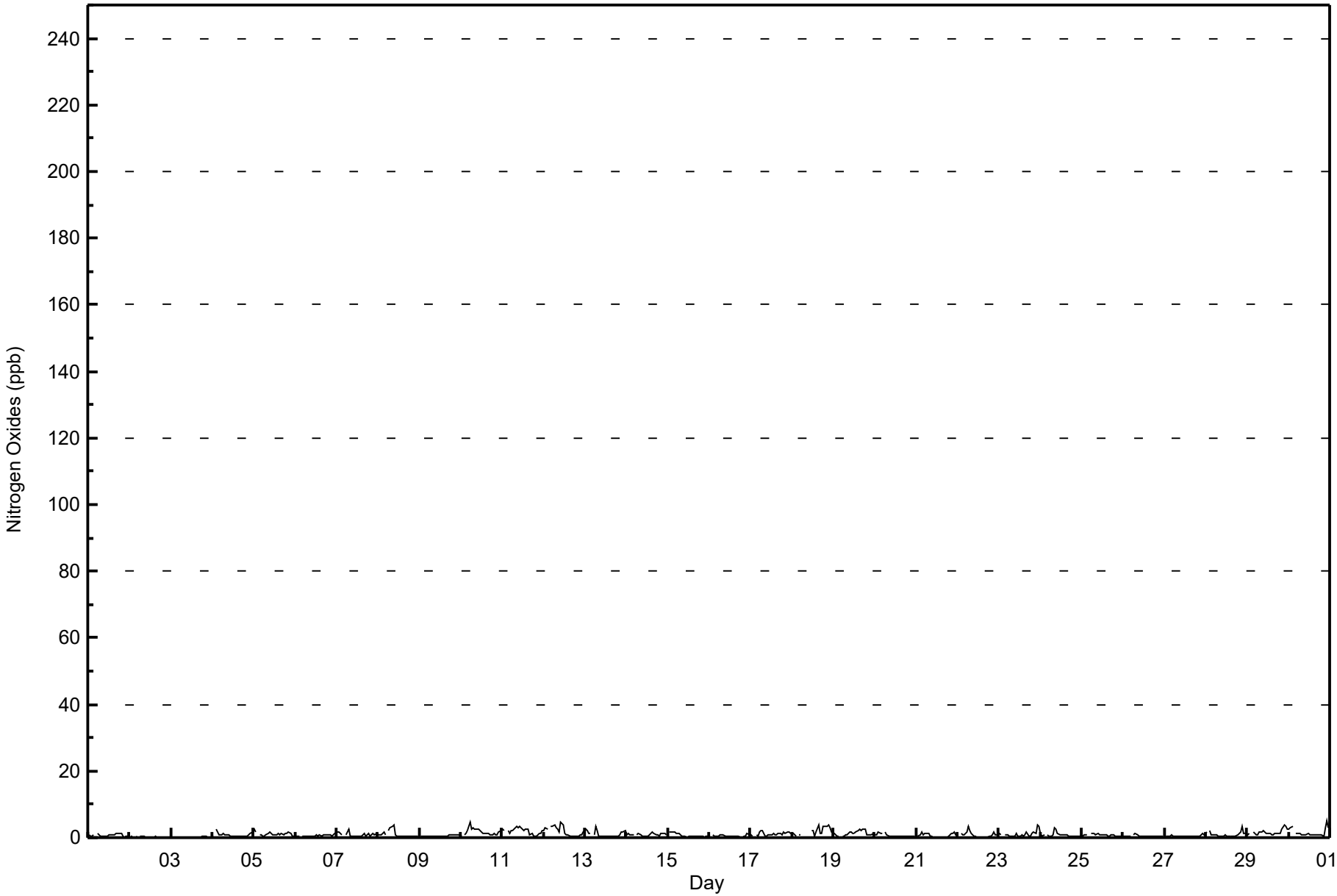
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Surmont 2 - June 2026



Nitrogen Oxides (NO_X) - ppb

Surmont 2 - June 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

Surmont 2 - June 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	38	25	39	33	42	39	36	26	21	11	12	60	104	55	29	83	653
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	38	25	39	33	42	39	36	26	21	11	12	60	104	55	29	83	653

Total Number of Valid Hours: 653

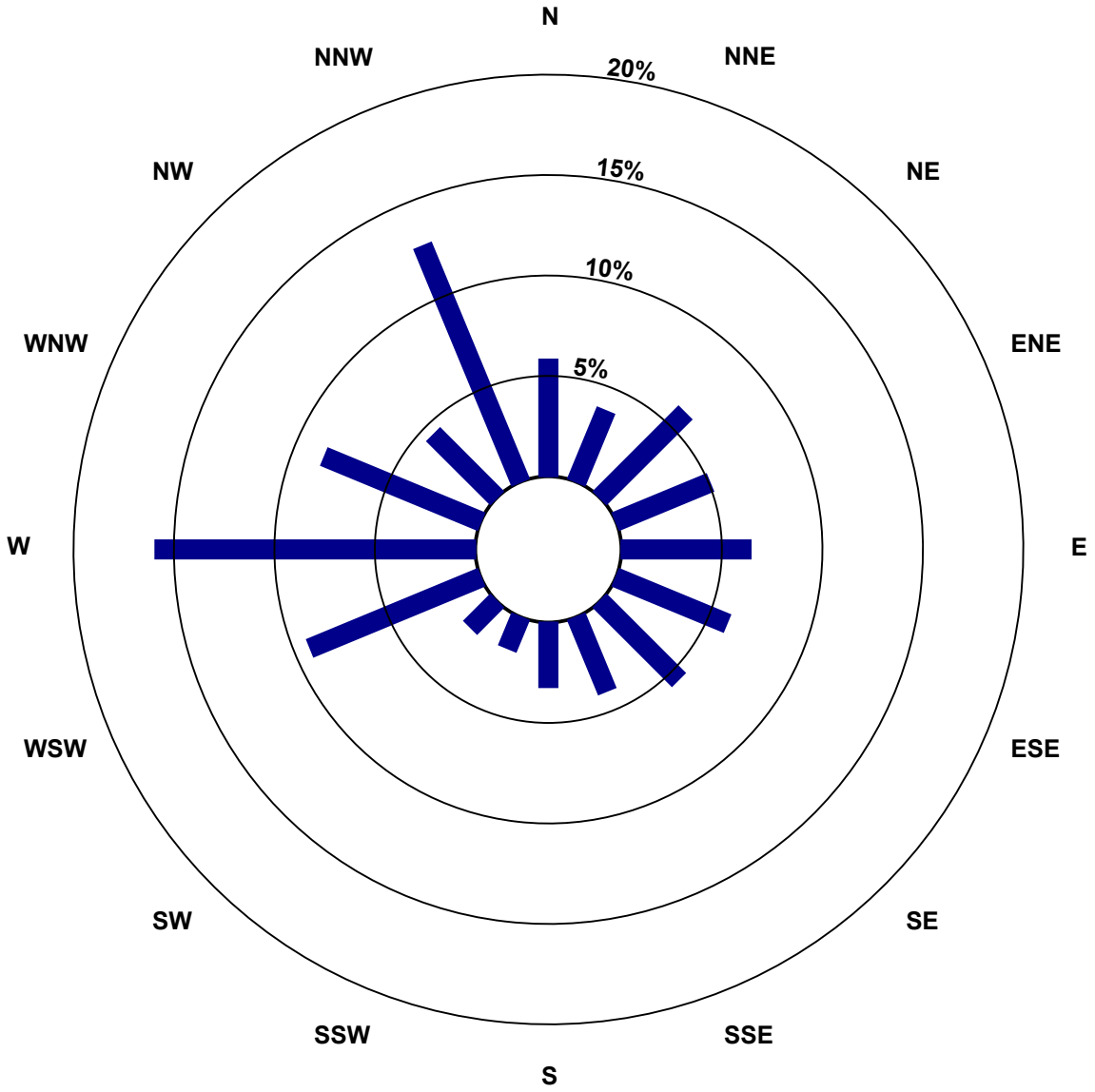
Total Number of Hours: 720

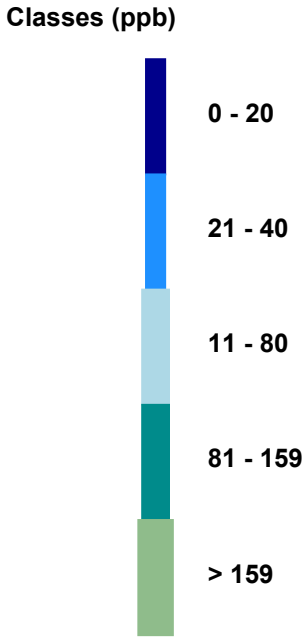
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Surmont 2





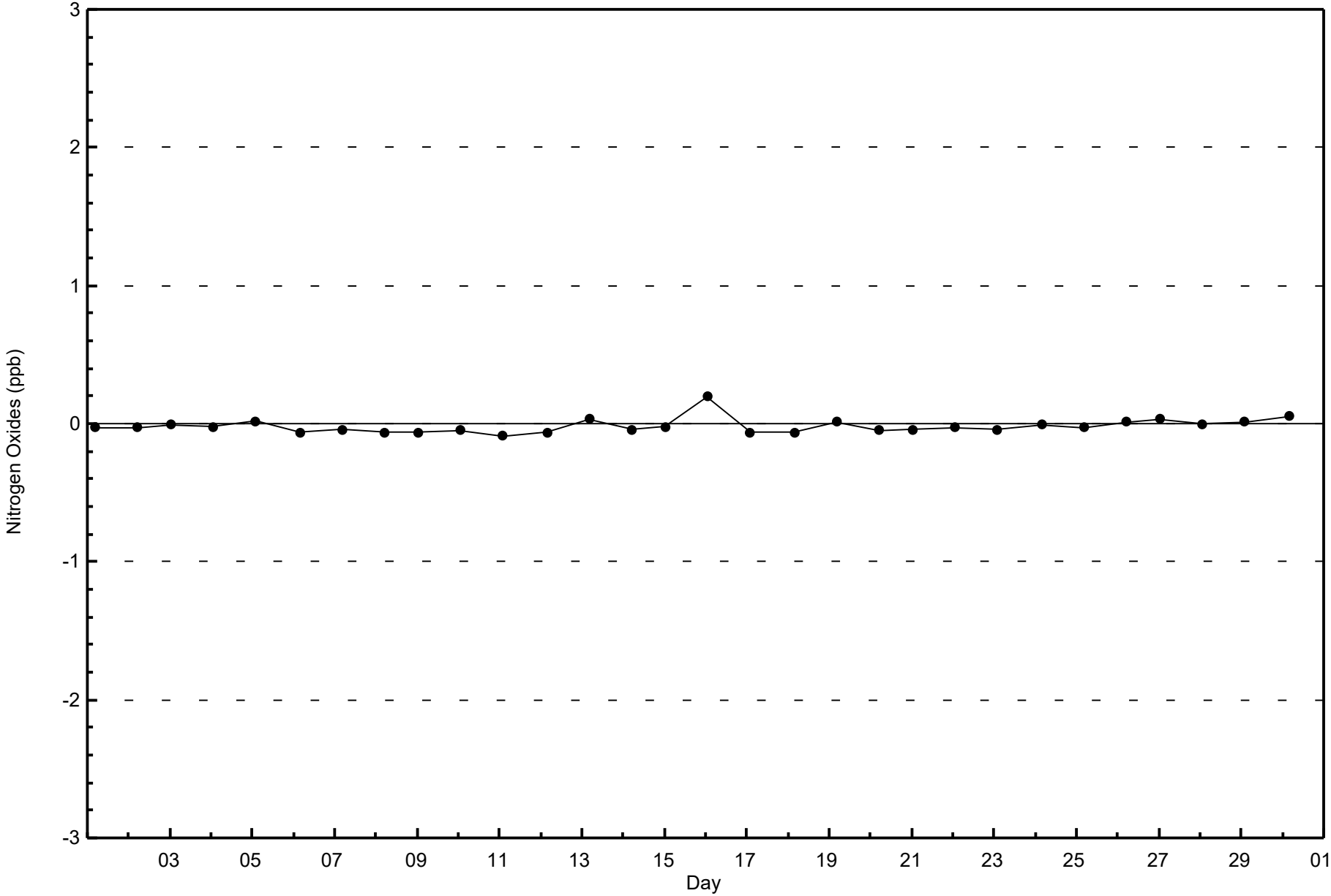
Total Number of Valid Hours: 653

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Surmont 2 - June 2026

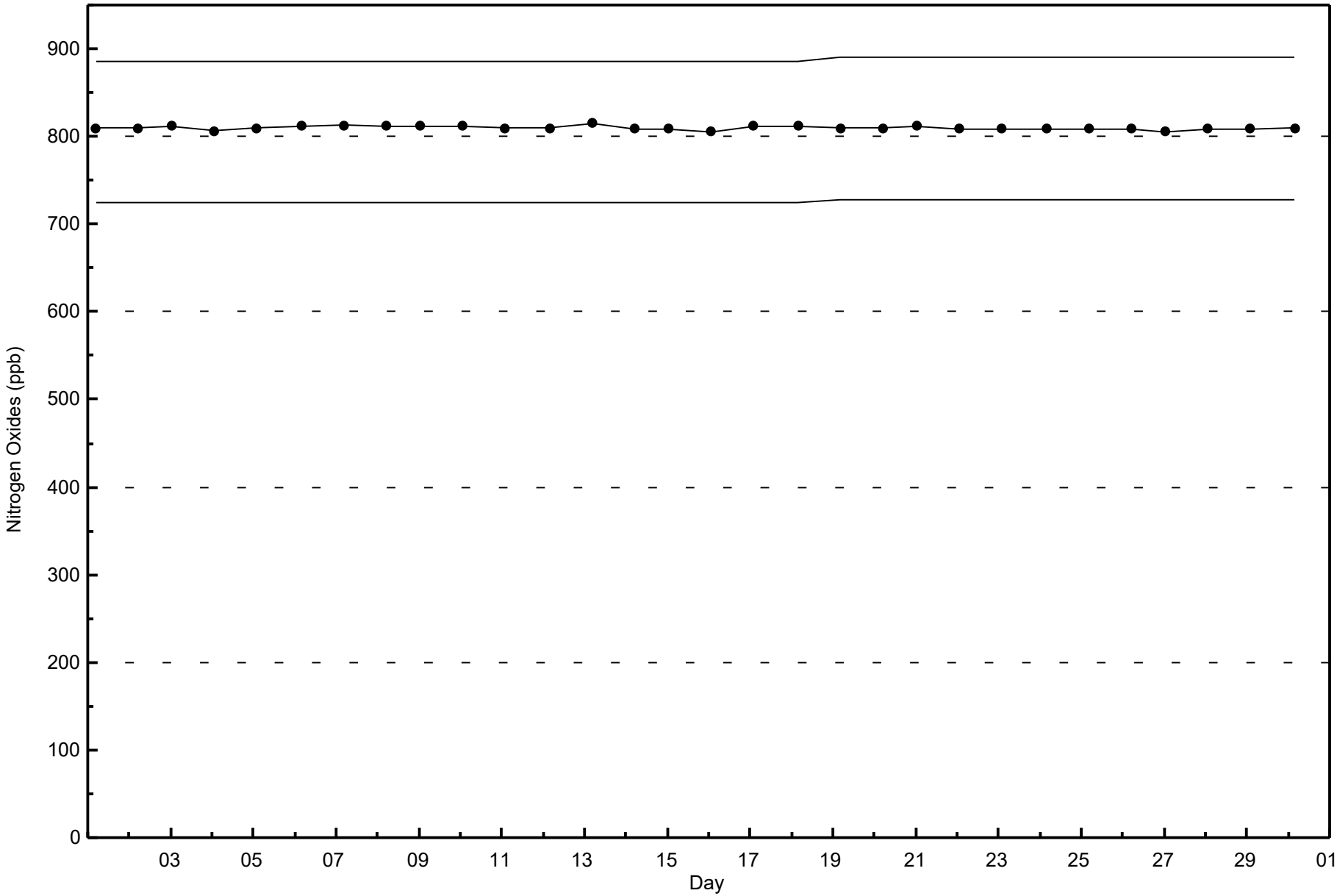


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Surmont 2 - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Surmont 2 - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 2

Maximum Value: 70.3 $\mu g/m^3$ on Jun 29 13:00

Maximum Daily Average: 56.3 $\mu g/m^3$ on Jun 29

Minimum Value: 0.3 $\mu g/m^3$ on Jun 1 02:00

Minimum Daily Average: 0.9 $\mu g/m^3$ on Jun 2

Maximum Diurnal Average: 10.3 $\mu g/m^3$ at hour 22

Minimum Diurnal Average: 6.8 $\mu g/m^3$ at hour 16

Monthly Average: 8.29 $\mu g/m^3$

Percentiles: $P_1 = 0.6$ $P_{10} = 1.5$ $Q_1 = 2.7$ Median = 4.2 $Q_3 = 6.5$ $P_{90} = 16.4$ $P_{99} = 61.1$

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	2
Percent Operational Time:	95.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0.9	0.3	0.4	0.5	0.4	0.3	0.3	0.4	0.7	1.2	2.2	2.6	2.2	2.6	2.6	2.9	2.4	1.4	1.0	0.8	0.7	0.8	0.9	0.9	1.2	2.9
2-Jun	0.9	0.9	0.9	0.8	0.8	0.7	C	C	PF	0.7	0.8	0.8	0.7	0.6	0.6	0.8	0.9	1.1	1.1	1.1	1.1	1.2	1.1	0.9	0.9	1.2
3-Jun	1.2	2.0	2.4	2.5	2.7	2.4	1.8	1.4	1.7	2.0	2.4	1.7	2.3	2.7	3.1	3.5	3.5	3.4	3.3	3.7	3.8	4.2	5.2	6.4	2.9	6.4
4-Jun	7.3	9.6	11.5	12.2	12.1	12.1	13.3	13.5	12.3	10.0	11.3	9.7	8.8	7.9	7.8	7.2	6.5	5.8	6.0	6.4	7.1	7.5	8.2	9.3	9.3	13.5
5-Jun	9.3	8.4	8.4	8.6	8.5	7.7	6.4	5.1	4.2	4.0	3.9	5.1	5.9	5.9	5.6	4.7	3.5	3.0	3.1	3.4	3.8	4.0	3.7	2.4	5.3	9.3
6-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	0.9	0.9	1.3	2.1	2.2	2.4	2.1	2.1	1.7	1.5	1.5	1.5	--	2.4
7-Jun	1.9	1.7	1.9	1.8	1.9	1.8	1.7	1.0	0.8	0.8	1.2	1.6	1.7	1.8	2.2	2.8	2.4	2.4	2.7	2.5	2.7	2.8	3.1	3.6	2.0	3.6
8-Jun	3.9	3.6	4.1	5.6	4.5	3.7	5.6	5.5	5.5	3.8	1.3	0.8	0.8	2.0	4.0	4.2	3.3	3.2	3.4	3.4	3.4	2.6	2.4	2.5	3.5	5.6
9-Jun	2.4	2.3	2.5	2.5	2.5	2.1	1.8	2.0	1.7	1.5	1.2	1.2	1.2	1.2	1.3	1.4	1.7	2.0	2.3	2.4	2.3	2.9	3.1	3.5	2.0	3.5
10-Jun	3.5	3.7	3.6	4.2	4.7	5.5	4.5	4.2	4.2	6.2	7.2	6.0	4.4	3.8	2.8	2.7	2.6	1.4	0.9	0.9	0.8	0.9	1.4	2.2	3.4	7.2
11-Jun	2.3	2.5	2.8	2.6	1.8	1.7	1.8	1.6	2.7	3.3	3.6	3.4	2.6	2.9	2.9	2.9	1.3	1.3	1.5	1.9	2.2	2.2	2.6	2.9	2.4	3.6
12-Jun	3.0	3.3	3.3	2.8	3.0	2.6	2.3	1.9	1.6	2.1	3.3	4.3	4.4	5.2	5.0	5.6	3.9	4.2	3.2	2.1	2.3	2.8	3.2	4.1	3.3	5.6
13-Jun	4.7	4.8	4.9	4.6	4.4	3.4	3.8	3.9	2.8	3.0	3.0	3.4	2.9	3.9	2.4	3.0	3.3	5.1	11.1	9.9	13.3	10.5	14.7	19.0	6.1	19.0
14-Jun	6.1	5.9	3.8	2.9	4.4	12.2	11.3	14.6	3.3	3.7	4.3	4.4	4.6	6.4	5.6	4.7	5.6	5.7	4.5	4.2	6.8	14.7	7.2	5.9	6.4	14.7
15-Jun	6.4	6.5	8.1	9.0	9.5	10.3	13.0	8.4	3.7	4.6	4.4	4.0	6.2	4.8	6.1	6.2	5.2	4.2	3.9	4.0	4.3	3.9	6.4	9.7	6.4	13.0
16-Jun	5.0	5.0	4.5	4.2	4.5	4.9	5.5	5.3	5.2	5.2	4.5	3.7	3.8	3.8	3.8	5.1	7.1	5.7	3.5	2.8	3.5	7.9	4.8	4.4	4.7	7.9
17-Jun	4.2	4.0	3.1	3.5	2.9	2.2	3.0	2.5	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	4.2
18-Jun	UO	UO	UO	UO	UO	UO	UO	2.8	3.1	2.4	2.1	2.9	4.0	5.4	6.9	6.6	7.8	7.4	6.5	11.4	13.2	18.5	16.4	15.4	--	18.5
19-Jun	15.1	9.2	5.7	5.1	3.1	2.2	3.0	3.9	7.0	6.1	5.0	4.2	6.9	11.7	10.4	11.0	7.1	8.9	9.6	4.0	17.9	14.1	9.4	11.0	8.0	17.9
20-Jun	10.1	11.4	23.7	19.8	17.3	24.8	12.6	5.9	4.1	3.2	6.5	2.8	2.8	3.3	3.1	2.8	2.9	3.1	3.8	3.1	3.2	2.0	2.0	2.3	7.4	24.8
21-Jun	2.6	2.8	3.1	3.1	2.9	2.8	2.7	2.9	3.3	3.4	3.2	2.7	2.5	2.6	2.6	2.7	2.8	2.8	2.8	2.9	5.4	4.6	3.9	4.2	3.1	5.4
22-Jun	4.5	4.9	4.8	4.5	4.5	4.2	4.8	4.9	4.1	2.7	2.9	2.7	2.5	2.6	2.9	2.7	3.0	2.8	4.5	5.6	14.5	27.3	12.7	7.7	5.8	27.3
23-Jun	6.8	6.2	5.7	5.6	5.3	4.5	4.3	5.3	4.7	8.6	6.3	4.7	4.8	4.5	4.7	6.3	5.2	4.7	5.0	9.5	6.9	10.2	7.2	7.4	6.0	10.2
24-Jun	6.1	8.7	10.1	6.6	4.8	4.3	4.3	4.0	3.9	4.1	4.4	5.1	5.1	4.5	4.1	3.9	3.9	4.4	4.4	4.7	4.9	4.6	4.9	4.7	5.0	10.1
25-Jun	4.3	4.5	5.0	5.2	5.2	5.0	5.3	5.6	5.1	4.1	3.5	3.7	3.7	3.7	3.7	3.7	3.8	3.9	4.0	3.8	4.5	4.3	4.8	4.9	4.4	5.6
26-Jun	4.9	5.0	5.2	5.4	5.6	5.7	5.7	6.0	5.3	4.2	3.6	3.4	3.1	3.3	3.4	3.4	3.6	3.8	3.8	4.1	4.1	4.5	4.7	4.6	4.4	6.0
27-Jun	5.0	5.0	5.1	5.4	16.2	10.1	5.2	4.9	5.2	5.0	5.0	4.4	4.3	4.0	4.2	4.1	4.3	4.1	3.8	4.0	4.4	6.9	15.7	14.3	6.3	16.2
28-Jun	12.3	12.5	12.6	10.6	9.6	8.0	7.9	6.1	5.9	6.8	17.3	27.9	22.4	24.6	16.8	14.2	15.2	17.2	25.7	38.4	43.4	53.4	50.5	49.2	21.2	53.4
29-Jun	50.5	51.6	58.6	60.9	57.6	54.7	50.0	55.4	55.2	55.1	62.8	62.3	70.3	67.8	45.1	42.2	63.3	67.9	50.4	49.5	48.9	52.9	63.7	55.5	56.3	70.3
30-Jun	53.8	55.6	56.6	54.3	49.4	46.0	44.9	36.9	34.1	43.8	42.0	43.4	41.6	36.5	35.3	34.3	30.7	39.3	44.7	35.6	26.8	26.2	30.9	28.4	40.5	56.6
	8.5	8.6	9.4	9.1	8.9	8.8	8.4	7.7	7.1	7.2	7.8	8.0	7.8	8.0	6.9	6.8	7.2	7.7	7.7	7.9	8.9	10.3	10.2	10.0	Diurnal Average	
	53.8	55.6	58.6	60.9	57.6	54.7	50.0	55.4	55.2	55.1	62.8	62.3	70.3	67.8	45.1	42.2	63.3	67.9	50.4	49.5	48.9	53.4	63.7	55.5	Diurnal Maximum	

C - Calibration UO - Unstable Operation PF - Power Failure

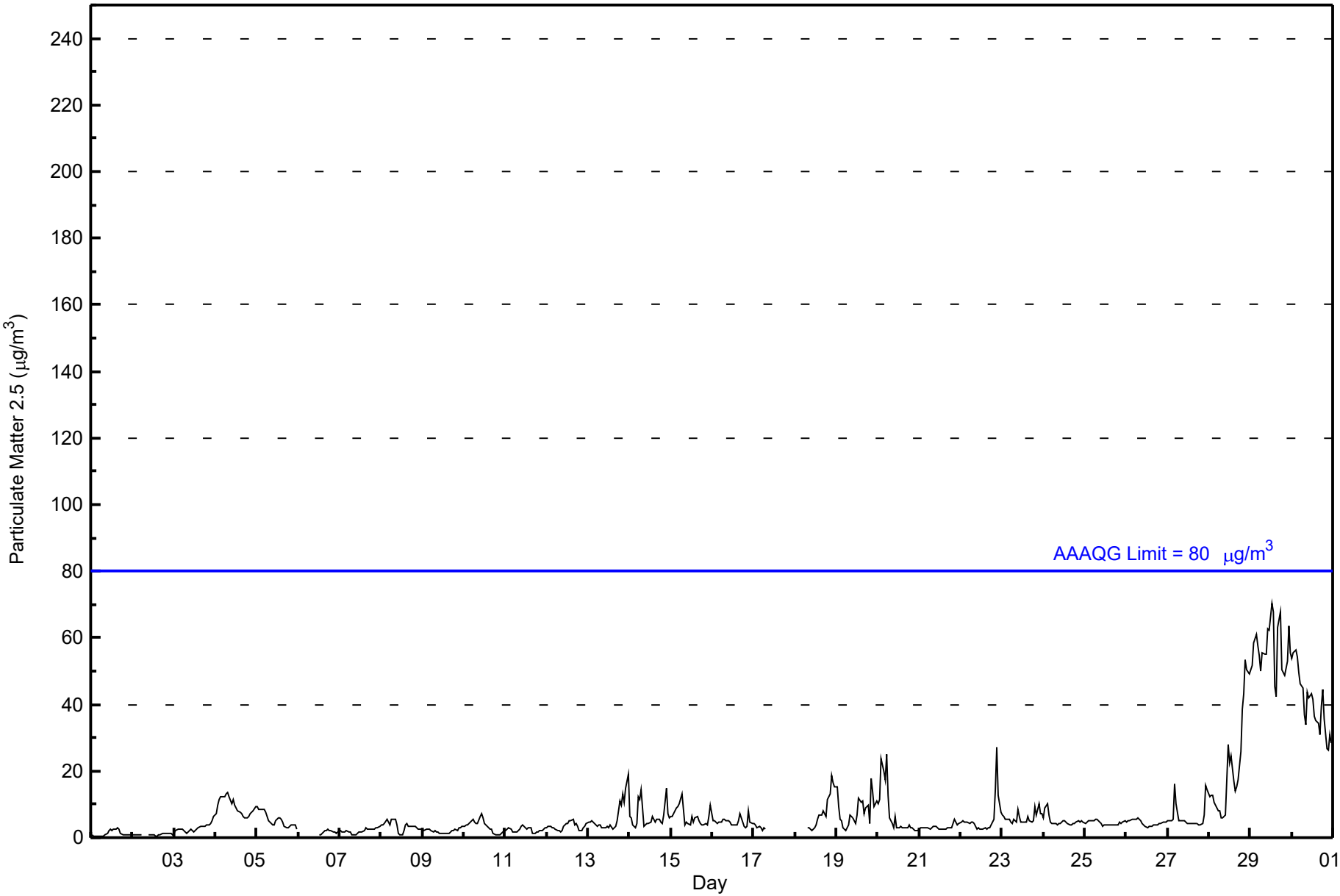
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Surmont 2 - June 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Surmont 2 - June 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	467	68.48	68.48
6 - 15	144	21.11	89.59
16 - 25	15	2.20	91.79
26 - 80	56	8.21	100.00
> 81.0	0	0.00	100.00

Total Number of Valid Hours: 682

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Surmont 2 - June 2026

Concentration Ranges ($\mu g/m^3$)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 5	29	15	25	20	32	33	26	18	16	8	7	27	66	45	26	65	458
6 - 15	3	7	7	4	2	3	12	9	6	1	6	20	23	9	3	16	131
16 - 25	0	0	0	3	2	0	0	0	0	0	0	3	2	3	1	1	15
26 - 80	3	0	7	7	6	3	0	0	0	2	0	7	5	3	0	2	45
> 81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	35	22	39	34	42	39	38	27	22	11	13	57	96	60	30	84	649

Total Number of Valid Hours: 649

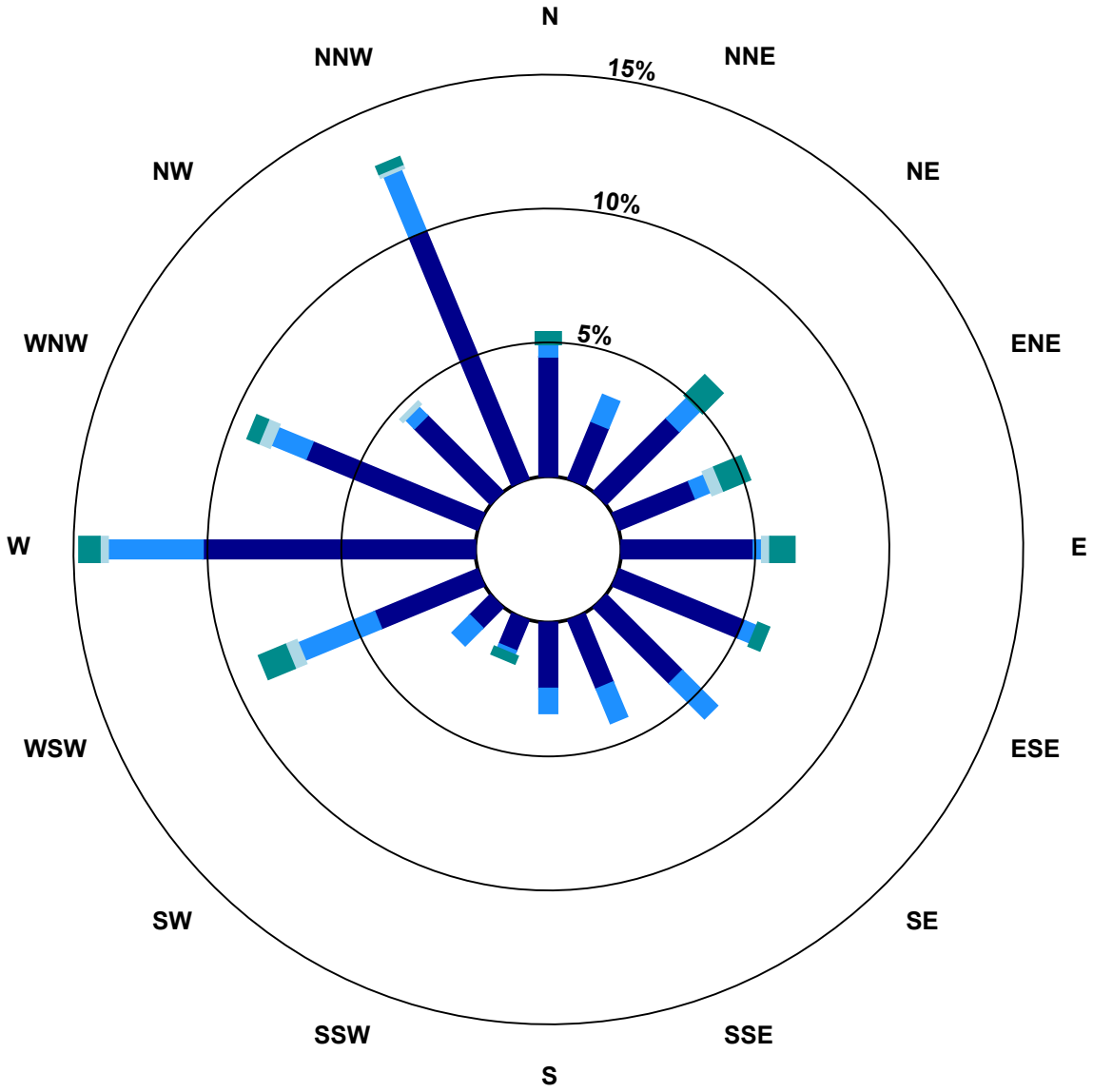
Total Number of Hours: 720

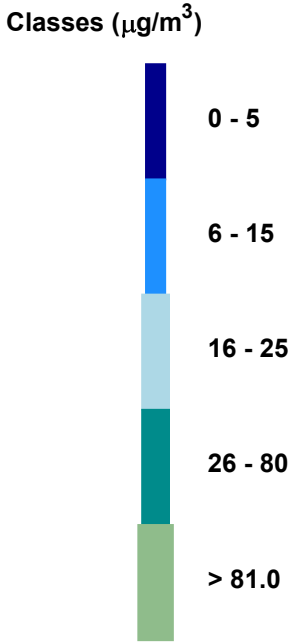
Wood Buffalo Environmental Association

Wind Rose Jun 2026

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

Surmont 2





Total Number of Valid Hours: 649

Maximum Value: 28.4 C on Jun 28 16:00
Maximum Daily Average: 20.3 C on Jun 26

Minimum Value: 3.1 C on Jun 13 05:00
Minimum Daily Average: 7.4 C on Jun 11
Maximum Diurnal Average: 18.9 C at hour 17
Minimum Diurnal Average: 8.7 C at hour 5
Monthly Average: 14.36 C
Percentiles: P_1 = 3.7 P_{10} = 7.6 Q_1 = 10.0 Median = 13.4 Q_3 = 18.4 P_{90} = 22.7 P_{99} = 27.8

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

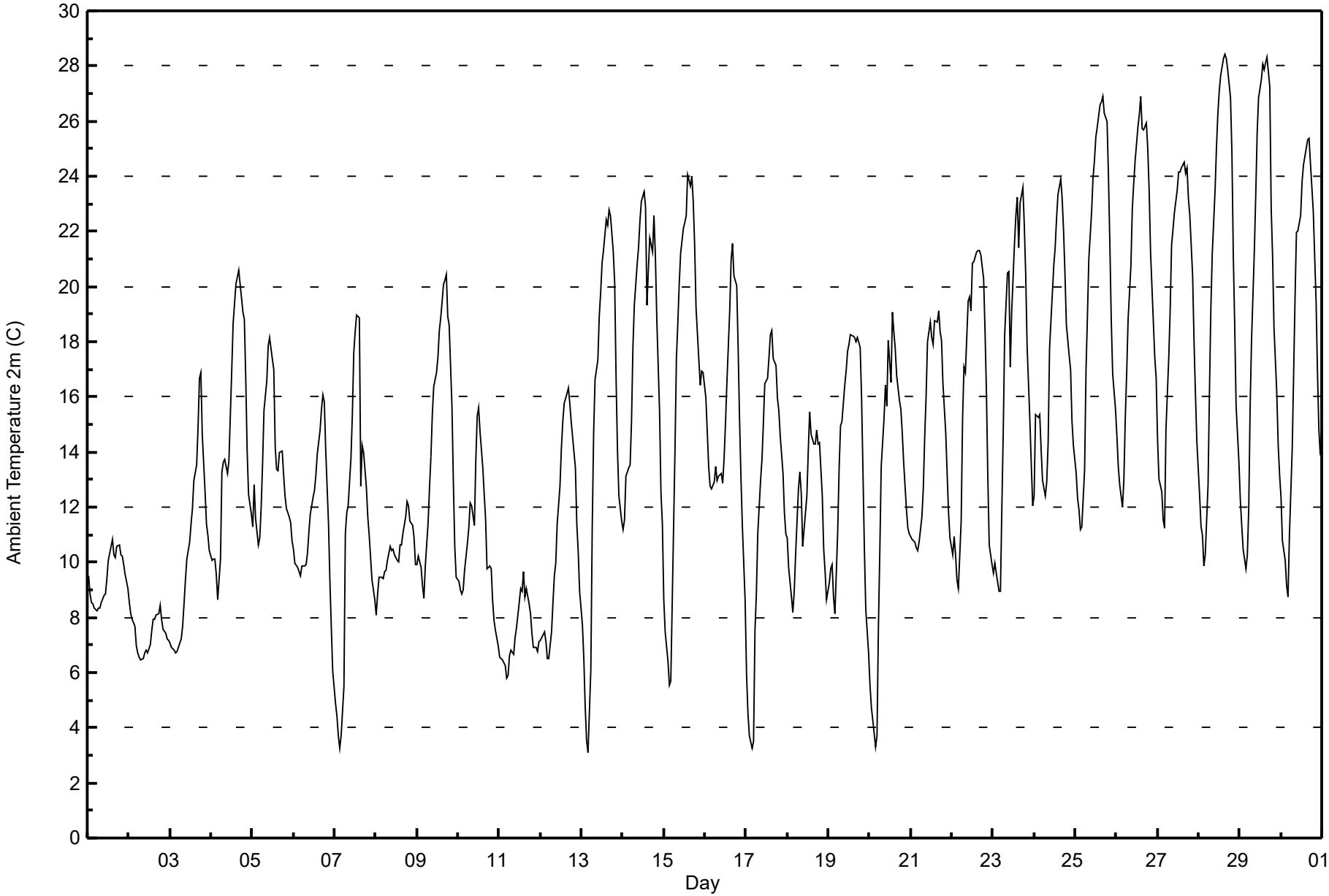
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	9.5	8.9	8.6	8.5	8.3	8.3	8.3	8.4	8.6	8.8	8.8	9.4	10.1	10.3	10.8	10.3	10.2	10.6	10.6	10.3	10.2	9.9	9.5	9.1	9.4	10.8
2-Jun	8.5	8.1	7.9	7.7	6.9	6.7	6.5	6.5	6.5	6.7	6.8	6.7	7.0	7.5	7.9	7.9	8.1	8.1	8.4	7.9	7.6	7.4	7.2	7.2	7.4	8.5
3-Jun	7.1	6.9	6.8	6.7	6.8	6.9	7.2	7.7	8.5	9.3	10.1	10.7	11.4	11.9	12.9	13.5	14.9	16.7	16.9	14.6	12.6	11.4	11.0	10.4	10.5	16.9
4-Jun	10.1	10.1	10.1	9.5	8.7	10.1	13.3	13.6	13.7	13.2	13.7	15.3	17.0	18.7	20.1	20.4	20.6	20.1	19.0	18.8	16.7	14.0	12.5	11.8	14.6	20.6
5-Jun	11.3	12.8	11.6	10.6	10.9	12.0	13.6	15.5	16.6	17.8	18.2	17.8	17.0	14.2	13.4	13.3	14.0	14.1	13.2	12.4	11.9	11.6	11.5	10.8	13.6	18.2
6-Jun	10.5	10.0	9.8	9.6	9.5	9.9	9.9	9.9	10.3	11.1	11.7	12.3	12.6	13.2	13.9	14.8	15.5	16.1	15.8	14.1	11.4	9.3	7.6	6.1	11.5	16.1
7-Jun	4.9	4.4	3.7	3.2	3.7	5.5	11.1	11.8	12.1	13.8	15.4	17.6	18.4	19.0	18.8	12.8	14.3	14.0	12.7	11.7	11.0	10.2	9.3	8.6	11.2	19.0
8-Jun	8.1	8.8	9.4	9.5	9.4	9.6	9.7	10.1	10.6	10.4	10.5	10.3	10.0	10.0	10.6	10.6	11.1	11.6	12.2	12.0	11.5	11.3	10.9	9.9	10.3	12.2
9-Jun	9.9	10.2	9.8	9.2	8.7	9.8	11.5	12.7	13.8	15.4	16.4	16.9	17.4	18.4	18.9	20.1	20.3	20.4	18.9	18.6	15.6	12.9	10.6	9.4	14.4	20.4
10-Jun	9.3	9.0	8.9	9.0	9.7	10.7	11.2	12.2	12.1	11.4	13.7	15.3	15.6	14.8	13.4	12.4	11.5	9.8	9.9	9.8	8.6	7.9	7.5	7.0	10.8	15.6
11-Jun	6.6	6.5	6.4	6.2	5.8	5.9	6.6	6.8	6.7	7.3	7.6	8.1	9.0	9.0	9.7	8.8	9.0	8.5	8.1	7.4	6.9	6.9	6.8	7.1	7.4	9.7
12-Jun	7.2	7.3	7.5	7.1	6.5	6.5	7.5	8.6	9.5	10.0	11.4	12.8	14.1	15.1	15.8	16.1	16.3	15.8	15.1	14.5	13.4	11.4	10.4	9.0	11.2	16.3
13-Jun	7.7	6.5	4.7	3.5	3.1	6.1	11.3	14.7	16.6	17.4	18.9	19.8	20.8	21.3	22.4	22.2	22.8	22.6	21.3	20.1	16.7	14.0	12.4	11.5	14.9	22.8
14-Jun	11.2	11.5	13.1	13.4	13.5	15.1	17.8	19.3	20.8	21.4	22.4	23.1	23.4	22.9	19.3	20.6	21.8	21.2	22.6	21.1	18.8	15.5	12.5	11.4	18.1	23.4
15-Jun	8.6	7.5	6.4	5.5	5.7	8.5	14.1	17.4	18.6	20.1	21.2	22.1	22.3	22.6	24.0	23.7	24.0	23.1	21.5	19.2	17.4	16.4	17.0	16.9	16.8	24.0
16-Jun	16.0	14.7	13.5	12.8	12.7	12.9	13.5	13.0	13.1	13.2	12.8	13.8	15.1	16.5	19.1	20.9	21.5	20.4	20.0	17.8	15.2	13.1	11.3	8.6	15.1	21.5
17-Jun	6.0	4.5	3.7	3.3	3.5	7.5	8.8	11.0	13.0	13.7	15.1	16.5	16.7	17.5	18.2	18.4	17.4	17.1	16.0	15.5	14.6	13.2	11.8	11.1	12.3	18.4
18-Jun	10.9	9.8	8.8	8.2	9.0	10.3	12.7	13.3	12.5	10.6	11.2	12.4	14.0	15.5	14.6	14.3	14.3	14.8	14.3	14.3	12.4	10.5	9.7	8.7	12.0	15.5
19-Jun	9.3	9.8	9.9	8.7	8.1	11.1	13.4	15.0	15.1	16.4	16.9	17.6	17.9	18.3	18.2	18.1	18.0	18.2	17.8	16.0	13.3	10.4	8.3	6.7	13.9	18.3
20-Jun	5.6	4.8	4.3	3.3	3.7	7.6	10.4	13.5	15.2	16.4	15.7	18.1	16.6	19.1	18.4	17.7	16.8	15.9	15.6	14.7	13.6	11.9	11.2	11.0	12.5	19.1
21-Jun	10.9	10.8	10.7	10.5	10.4	10.7	11.7	12.6	14.5	16.0	18.0	18.7	18.1	17.9	18.8	18.7	19.1	18.3	18.1	16.5	14.7	13.2	11.8	10.9	14.7	19.1
22-Jun	10.3	10.9	10.3	9.4	9.1	11.5	15.2	17.1	16.9	19.5	19.6	19.1	20.8	20.9	21.3	21.3	21.3	21.2	20.3	18.4	16.2	13.0	10.7	9.9	16.0	21.3
23-Jun	9.6	10.0	9.6	9.0	9.0	12.0	14.8	18.3	20.5	20.5	17.1	19.1	21.6	22.6	23.2	21.4	23.0	23.6	22.2	20.5	17.9	15.1	13.5	12.0	16.9	23.6
24-Jun	12.4	15.4	15.2	15.4	14.1	12.9	12.4	12.9	14.4	17.8	18.7	20.8	21.4	22.5	23.3	23.9	23.2	22.0	20.4	18.6	17.5	17.0	15.1	14.2	17.6	23.9
25-Jun	13.2	12.3	11.9	11.2	11.3	13.4	17.0	18.9	21.0	22.7	24.0	24.6	25.4	25.8	26.6	26.7	26.9	26.3	26.0	24.0	21.5	18.8	16.8	15.5	20.1	26.9
26-Jun	14.6	13.5	12.8	12.0	13.0	15.2	16.9	18.8	20.8	22.8	23.8	24.6	25.8	26.2	26.9	25.7	25.7	25.9	25.0	23.5	21.3	18.7	17.5	16.7	20.3	26.9
27-Jun	14.5	13.0	12.5	11.5	11.2	14.8	17.4	19.2	21.5	22.1	22.7	23.5	24.1	24.1	24.3	24.5	24.1	24.3	23.2	22.6	20.4	18.0	16.1	14.4	19.3	24.5
28-Jun	12.4	11.3	11.0	9.8	10.3	12.8	16.2	19.2	21.2	23.5	25.1	26.3	27.1	27.7	28.3	28.4	28.3	27.9	26.8	24.9	21.1	18.5	15.7	13.6	20.3	28.4
29-Jun	12.3	11.3	10.5	9.8	10.3	11.9	15.7	18.0	21.3	23.3	25.6	26.9	27.5	28.1	27.9	28.1	28.3	27.3	22.8	21.1	18.5	16.1	14.2	13.2	19.6	28.3
30-Jun	12.4	10.8	10.1	9.1	8.8	11.0	14.1	16.8	19.6	22.0	22.0	22.6	23.8	24.4	24.7	25.3	25.4	24.5	23.6	22.7	19.5	16.9	14.8	13.9	18.3	25.4
	10.0	9.7	9.3	8.8	8.7	10.3	12.3	13.7	14.9	15.8	16.5	17.4	18.1	18.5	18.9	18.7	18.9	18.7	17.9	16.8	14.9	13.2	11.8	10.9	Diurnal Average	
	16.0	15.4	15.2	15.4	14.1	15.2	17.8	19.3	21.5	23.5	25.6	26.9	27.5	28.1	28.3	28.4	28.3	27.9	26.8	24.9	21.5	18.8	17.5	16.9	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Surmont 2 - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	181	25.14	25.14
10 - 20	399	55.42	80.56
> 20	140	19.44	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 - June 2026

Maximum Value: 100.0 % on Jun 3 03:00

Maximum Daily Average: 94.8 % on Jun 2

Minimum Value: 28.4 % on Jun 25 17:00

Minimum Daily Average: 44.0 % on Jun 14

Maximum Diurnal Average: 91.8 % at hour 5

Minimum Diurnal Average: 51.0 % at hour 15

Monthly Average: 69.56 %

Percentiles: P_1 = 29.4 P_{10} = 36.9 Q_1 = 48.7 Median = 73.5 Q_3 = 90.4 P_{90} = 96.1 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-Jun	97.2	97.2	97.9	98.0	97.8	96.6	95.4	96.4	96.6	96.6	96.0	93.8	89.4	88.1	85.6	87.5	86.0	83.3	82.7	83.5	81.2	81.4	83.5	84.6	90.7	98.0
2-Jun	85.9	87.9	88.6	88.9	93.0	92.7	94.9	95.6	95.3	94.4	96.1	97.8	98.3	97.1	95.3	94.7	95.1	95.0	93.5	97.1	98.6	99.0	99.6	99.9	94.8	99.9
3-Jun	99.8	99.8	100.0	OR	OR	OR	OR	99.1	96.2	92.0	88.9	86.0	81.9	80.4	75.9	74.0	69.1	63.2	63.9	76.6	88.0	91.9	92.5	94.1	85.7	100.0
4-Jun	95.5	94.9	95.9	97.2	99.1	96.6	85.6	83.9	81.7	80.8	76.5	69.2	63.3	57.0	52.9	50.8	48.8	48.3	53.2	55.6	65.3	77.5	86.6	90.4	75.3	99.1
5-Jun	92.6	85.3	90.2	95.1	94.7	91.4	79.8	66.5	60.7	56.8	56.0	62.7	69.3	92.3	96.8	96.1	87.6	84.3	92.7	98.0	98.9	99.3	97.7	95.7	85.0	99.3
6-Jun	94.9	95.4	94.9	93.8	93.6	91.9	90.3	90.4	87.3	82.0	78.4	73.0	70.5	66.0	62.4	58.1	54.2	53.2	55.0	61.0	74.6	81.7	88.6	93.4	78.5	95.4
7-Jun	94.5	95.4	96.5	96.8	97.2	90.6	73.4	67.1	64.6	58.6	52.0	46.2	43.9	43.6	46.3	78.2	81.1	85.4	89.1	93.4	94.8	96.1	98.2	99.1	78.4	99.1
8-Jun	99.6	99.6	98.9	99.2	99.4	98.0	99.0	99.7	96.9	96.7	94.9	93.8	92.6	92.4	91.1	90.6	88.5	85.9	84.8	84.3	81.5	79.0	80.7	85.2	92.2	99.7
9-Jun	83.2	82.1	83.9	86.8	88.1	80.2	72.3	67.8	62.5	56.6	51.9	50.3	49.3	46.7	45.3	40.3	41.9	42.9	47.6	48.6	64.4	77.9	86.0	91.0	64.5	91.0
10-Jun	92.0	92.9	93.3	93.8	91.4	92.0	90.7	84.1	81.8	83.4	70.1	60.3	55.4	62.6	79.8	83.3	80.4	86.9	81.9	78.8	85.1	86.3	88.4	95.0	82.9	95.0
11-Jun	97.6	98.0	97.9	98.2	98.0	96.9	92.3	89.5	90.4	87.2	84.9	82.1	75.9	74.6	72.0	80.8	78.2	84.2	87.3	90.9	92.9	91.6	95.0	92.4	88.7	98.2
12-Jun	93.4	92.6	91.0	89.5	89.4	88.1	82.2	74.2	66.6	63.1	55.2	48.9	43.4	40.7	38.5	37.2	36.4	37.3	40.6	40.9	45.8	55.2	59.6	66.5	61.5	93.4
13-Jun	73.9	80.7	88.2	93.2	95.0	85.3	68.8	50.9	38.8	38.6	35.9	33.9	33.3	32.5	30.6	30.2	29.4	28.7	34.0	39.0	53.6	63.2	67.8	66.6	53.8	95.0
14-Jun	62.4	57.0	49.9	48.9	49.2	45.5	41.1	40.6	34.2	33.0	30.8	29.4	29.4	30.7	43.5	42.4	39.0	41.1	33.9	37.3	40.9	55.0	69.3	71.2	44.0	71.2
15-Jun	84.4	89.5	92.7	94.6	94.5	86.5	68.3	53.2	45.5	38.8	37.4	35.5	34.9	34.5	31.5	32.6	32.2	34.4	44.7	52.7	57.8	59.4	56.5	65.4	56.6	94.6
16-Jun	71.2	81.2	89.5	90.6	89.9	91.3	90.6	94.3	94.4	93.8	91.9	83.8	74.7	63.5	49.3	39.7	32.0	33.1	33.3	40.9	51.2	57.1	61.4	75.6	69.8	94.4
17-Jun	88.1	93.9	95.7	95.7	96.0	82.3	80.3	71.9	62.1	57.9	47.8	42.8	39.6	37.2	34.4	33.5	36.5	36.2	43.3	45.9	49.0	54.4	61.4	68.8	60.6	96.0
18-Jun	69.2	72.7	82.1	86.5	84.8	76.7	63.4	61.4	68.8	90.3	84.7	73.4	60.6	52.1	58.6	64.8	65.8	61.6	63.6	61.9	71.9	80.0	83.7	91.3	72.1	91.3
19-Jun	89.3	86.7	85.4	89.6	92.4	80.7	67.3	54.5	51.6	46.5	42.4	39.4	38.3	38.0	39.2	41.2	44.8	44.6	45.6	52.1	63.7	77.5	87.1	93.4	62.1	93.4
20-Jun	95.7	96.5	97.1	97.5	97.2	90.2	85.5	72.6	63.6	55.7	59.1	47.5	57.8	39.4	44.4	49.1	54.1	60.9	66.1	71.0	77.2	90.9	97.5	97.8	73.5	97.8
21-Jun	98.2	98.1	98.5	98.4	98.1	97.0	92.5	86.9	78.5	72.6	56.6	45.3	42.6	45.3	39.3	40.2	40.3	44.5	47.8	57.7	70.9	78.0	83.1	85.2	70.6	98.5
22-Jun	88.7	88.3	92.7	94.8	96.7	86.9	71.0	62.9	57.9	42.0	43.1	44.7	36.6	34.6	37.5	36.6	37.2	36.4	41.5	51.2	60.8	75.4	87.0	89.0	62.2	96.7
23-Jun	90.1	90.0	91.1	93.3	93.4	82.9	73.5	56.8	46.6	40.7	62.0	48.7	35.7	35.0	34.8	39.0	33.1	31.1	36.5	45.6	59.6	70.5	75.5	81.8	60.3	93.4
24-Jun	78.8	63.6	63.4	64.2	79.7	93.3	98.2	97.9	95.5	73.8	65.1	53.5	48.1	42.7	38.2	36.1	42.1	49.4	57.7	69.3	71.3	70.6	81.2	79.3	67.2	98.2
25-Jun	83.0	87.3	89.7	91.6	91.7	84.6	67.4	60.9	54.7	45.8	40.0	36.9	33.7	31.4	29.1	28.5	28.4	30.0	30.0	34.7	44.2	55.5	63.6	67.3	54.6	91.7
26-Jun	72.2	77.3	81.9	87.1	83.5	74.2	67.9	60.7	55.2	46.5	41.7	36.6	29.8	30.2	31.0	32.4	33.6	34.5	37.2	40.9	50.8	59.9	65.0	67.8	54.1	87.1
27-Jun	77.7	84.0	86.2	89.3	91.7	78.7	70.2	66.3	60.5	59.3	57.7	52.7	48.1	47.3	46.9	43.0	47.5	44.9	46.2	49.3	58.8	68.3	75.6	82.0	63.8	91.7
28-Jun	90.6	93.7	93.3	96.0	95.2	87.9	78.9	64.9	61.6	53.3	44.8	38.5	35.7	32.3	30.2	29.8	29.6	29.8	33.0	39.4	52.4	63.4	74.8	82.9	59.7	96.0
29-Jun	87.9	91.2	93.2	95.0	93.8	89.7	79.8	72.7	58.2	48.5	41.3	36.8	33.4	30.2	29.5	29.2	29.5	33.9	48.2	57.5	69.2	77.9	84.4	87.9	62.4	95.0
30-Jun	89.5	95.4	97.0	97.1	97.4	90.3	85.2	76.5	63.9	54.3	55.2	52.7	45.2	41.2	40.6	38.0	35.4	37.5	42.7	39.6	49.9	60.8	69.5	75.3	63.8	97.4
	87.2	88.3	89.9	91.1	91.8	86.9	79.5	74.0	69.1	64.7	61.3	56.5	53.0	51.3	51.0	51.9	51.3	52.1	55.3	59.8	67.5	74.5	80.0	83.9	Diurnal Average	
	99.8	99.8	100.0	99.2	99.4	98.0	99.0	99.7	96.9	96.7	96.1	97.8	98.3	97.1	96.8	96.1	95.1	95.0	93.5	98.0	98.9	99.3	99.6	99.9	Diurnal Maximum	

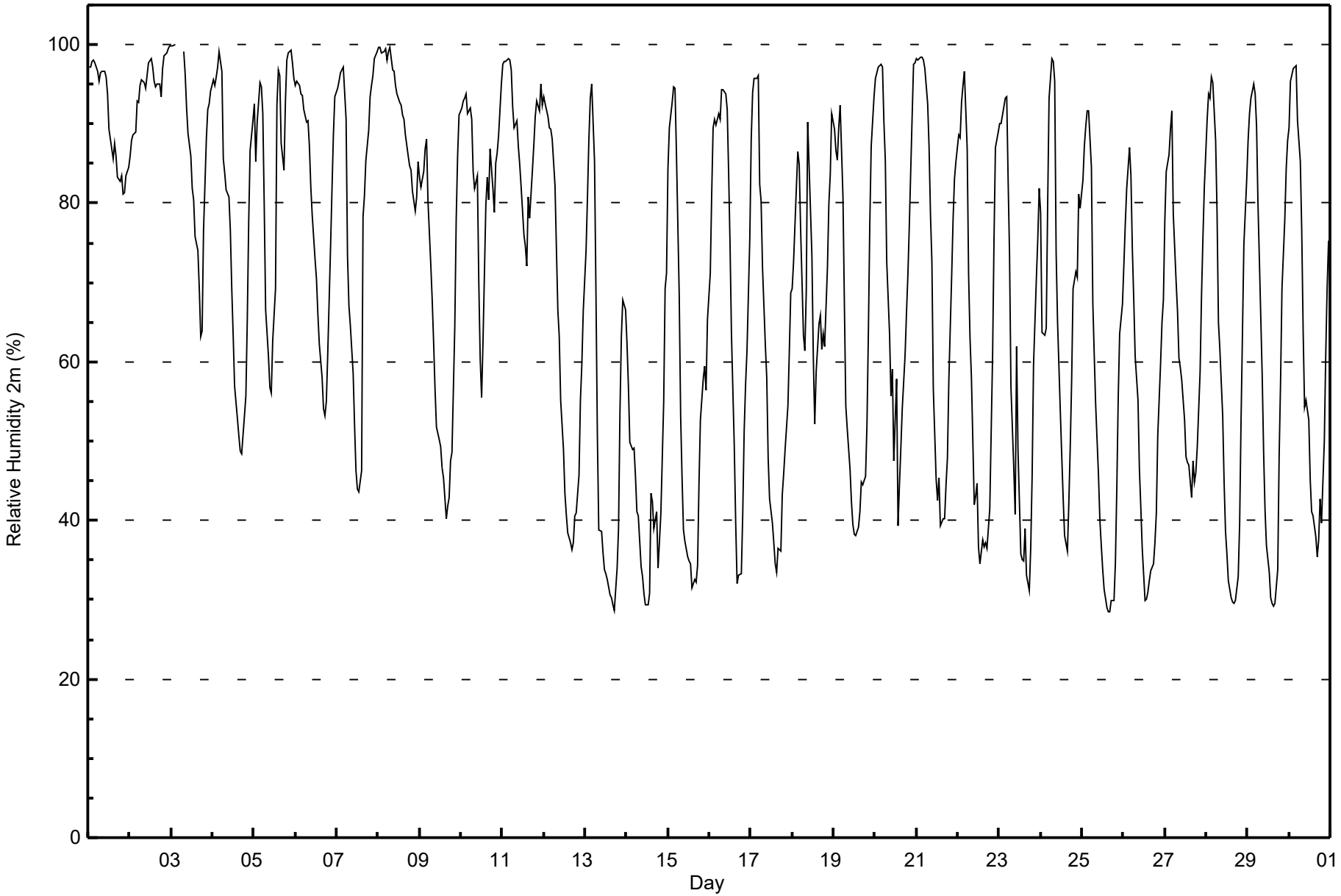
OR - Out of Range

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Surmont 2 - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	103	14.39	14.39
40 - 60	155	21.65	36.03
60 - 80	144	20.11	56.15
80 - 100	313	43.72	99.86

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

Surmont 2 - June 2026

Maximum Speed: 17 km/h on Jun 6 12:00

Maximum Daily Speed Average: 10.9 km/h on Jun 1

Minimum Speed Value: 0 km/h on Jun 29 03:00

Minimum Daily Speed Average: 0.7 km/h on Jun 5

Maximum Diurnal Speed Average: 2.8 km/h at hour 2

Minimum Diurnal Speed Average: 1.5 km/h at hour 20

Monthly Average Velocity: 1.3 km/h 342.0 deg

Percentiles: $P_1 = 0$ $P_{10} = 2$ $Q_1 = 3$ Median = 5 $Q_3 = 8$ $P_{90} = 10$ $P_{99} = 15$

Hours in Service:	720
Hours of Data:	687
Hours of Missing Data:	33
Percent Operational Time:	95.4

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-Jun	NNW11	NNW12	NW10	NNW10	NNW10	NNW11	NNW11	NNW13	NNW11	NNW12	N12	NNW13	N13	N12	N12	NNW12	N13	N12	N10	N9	N11	NNE10	NNE8	N9	N10.9	NNW13
2-Jun	N8	N9	NNE7	NNE8	N8	N8	N8	N8	NNE8	NE9	NE8	NE7	NE9	NE10	ENE9	ENE8	NE7	NE7	NE7	NE7	NE6	ENE6	ENE5	ENE3	NE6.9	ENE10
3-Jun	ENE4	ENE4	E4	NE3	ENE3	ENE3	E3	E4	ENE4	E4	ENE4	S2	ESE5	E2	SE4	S2	S2	SE2	ESE5	S1	WSW1	SSE3	SSE4	SE4	ESE2.4	ESE5
4-Jun	SE5	S7	S5	S2	SSE2	SE4	S5	SSE6	SE6	SSE6	SE7	SSE8	SE10	SE9	SSE8	SSE8	S7	SSE7	S4	SE3	SW2	WSW3	SW0	WSW2	SSE4.9	SE10
5-Jun	SSE2	WSW6	W1	ENE1	SSW0	SW1	WNW1	NW2	N2	NE3	ESE7	SSE6	SE6	SW2	W4	N2	N4	N3	WSW2	S2	W2	W3	W6	W7	W0.7	W7
6-Jun	W9	W9	W8	W11	W9	WSW8	WSW10	W11	W14	W13	WSW15	WSW17	WSW15	W14	W14	W15	W15	W11	W8	W7	W4	W3	WNW3	WSW2	W10.2	WSW17
7-Jun	SW2	WSW3	SSW2	WSW3	WSW1	ENE1	ENE2	S1	SE7	SSE4	SSE4	SE8	SE7	SE6	ESE9	SE5	NNW2	NNE2	WNW4	WNW2	WNW3	WNW4	W3	W3	SSE1.5	ESE9
8-Jun	WNW2	W3	NW2	WNW4	NW4	NNW5	NW5	NW6	WNW7	WNW8	W10	W13	W15	W15	W15	W15	W12	W10	W8	W8	W8	W10	W8	W6	W8.0	W15
9-Jun	W8	W9	W9	W8	W9	W10	WNW10	WNW8	WNW7	WNW7	WNW7	WSW7	W8	W6	NNW5	WNW6	NNE6	NE5	NNE4	NE4	W2	W3	WSW2	WSW1	WNW5.0	W10
10-Jun	UO	WNW1	SW1	W2	WNW3	NNW4	N6	N7	NNW8	NNW6	NNW7	NNW9	NW8	NW8	NNW9	NNW8	NNW8	NNW7	NNW8	NNW7	NNW8	NW6	NW7	WNW5	NNW6.0	NNW9
11-Jun	WNW5	WNW5	WNW5	NW6	WNW6	WNW6	WNW7	NNW6	NW6	NNW8	NNW7	NNW7	NW8	NNW9	NNW9	NW7	NNW9	NNW8	NNW9	NNW8	NNW8	NNW7	NW7	NW6	NW6.8	NNW9
12-Jun	NW6	NW6	WNW6	WNW6	WNW5	NW7	NNW7	NNW9	NNW11	NNW11	NW12	NNW13	NNW13	NNW13	NNW13	NNW13	NNW11	NNW11	NNW9	NNW8	NW6	W5	W5	W4	NNW8.2	NNW13
13-Jun	WSW3	WSW2	UO	WNW1	NE0	N0	W3	WNW5	NNW5	WNW5	NNW3	NE3	NE4	NNW3	NNE6	NNW4	NW2	WNW5	W4	W3	WSW4	WSW5	WSW4	WSW4	WNW2.1	NNE6
14-Jun	W3	WSW5	WSW7	WSW8	WSW7	W6	W5	W5	W8	NW7	NW8	NNW11	NNW10	NNW11	W10	W6	NW8	WNW7	N7	NNE5	WNW4	W4	WSW1	W3	WNW5.2	NNW11
15-Jun	UO	UO	UO	UO	UO	UO	NE1	ENE2	ESE3	NNE4	ENE4	E5	NNE6	S1	NNE2	ENE6	E6	ESE6	ESE3	SE1	WSW2	SW3	W5	W8	ENE1.4	W8
16-Jun	W7	WNW4	WNW2	WSW1	W3	UO	N0	NW3	NE3	ENE4	NE3	NNE3	NNE4	NNW3	NW2	NE6	NE8	ENE8	ENE7	NE3	N2	NNW2	W2	W2	NNE1.9	ENE8
17-Jun	UO	UO	W1	WNW2	WNW2	WNW3	WNW4	NNW6	NE8	NNE6	N7	N9	NNW7	N8	N7	N8	N6	NNW5	WNW5	WNW5	W4	W3	W3	WSW2	NNW4.0	N9
18-Jun	W2	WSW4	W3	W4	W4	W4	NW6	N9	N9	NNW7	NNW7	NNW7	NNW8	NW8	NNE8	N9	NNW7	NNW7	NNW6	NNW5	W3	WSW4	WSW4	WSW3	NW4.6	N9
19-Jun	W3	WSW4	WSW4	W3	WSW4	W4	WNW5	WNW7	NNW5	NNE7	N8	NNW7	NNW8	N7	N7	NNE7	NE7	NE8	NNE5	NE4	WNW2	W3	W1	WNW0	NNW3.3	NNW8
20-Jun	WNW1	WNW0	NNW1	WNW0	WNW0	NW3	NNW3	NE4	NNE7	ENE7	NNW5	E7	E9	NE5	NE5	ENE5	E6	ESE6	NNE2	NE5	N2	W1	W2	WNW3	NE2.3	E9
21-Jun	WNW3	WNW4	NNW2	NW3	WNW4	WNW4	NNW3	N5	NE5	NE4	E7	ESE10	ESE10	E9	ESE11	E10	E10	E7	E5	W1	W3	W3	UO	WNW2	E2.6	ESE11
22-Jun	WSW1	W2	WNW1	W1	UO	UO	NNW3	NNE2	SE5	ESE5	E8	E7	ESE8	E6	E8	ESE5	E5	E2	WSW4	W5	WSW3	SSW0	UO	UO	E2.1	E8
23-Jun	UO	UO	SE0	UO	UO	W0	W2	NNW3	E3	W4	W5	WSW5	N1	SW5	WSW3	WSW6	SW4	SE5	SE5	NNW1	SW2	SW2	WSW2	WSW0	WSW1.6	WSW6
24-Jun	WSW3	W5	W5	WNW5	WSW8	W2	SSW2	WSW3	SW2	SSE3	SSE5	S7	SSW7	SSW7	S6	SSE5	SE4	SE4	S2	WSW2	SSW2	W1	S2	S3	SSW2.7	WSW8
25-Jun	S2	S2	SSE3	SE3	SSE2	ESE2	SE5	ESE6	ESE7	SE9	SSE7	SSE6	SSE5	S5	SSE6	SE7	SE8	SE8	SE8	ESE10	SE6	SSE3	SSE3	SSW2	SE5.0	ESE10
26-Jun	S2	S2	S2	SSE2	SSE3	SE5	SE7	ESE8	SE8	SE10	SE9	SE10	ESE12	ESE12	ESE13	ESE13	ESE12	ESE12	ESE11	ESE9	ESE5	ESE5	SE4	S3	ESE7.3	ESE13
27-Jun	SW3	WSW2	WSW2	W2	W2	ESE4	ESE9	ESE9	E9	E10	E11	ESE14	ESE15	ESE12	E11	ESE13	E12	E12	E8	E5	E2	WSW2	W3	W2	ESE5.8	ESE15
28-Jun	WNW0	WSW1	W2	WSW0	UO	UO	NW2	NNE4	NE5	NE9	ENE10	E13	ENE13	ENE13	E13	E12	E12	E11	E8	ENE5	WNW1	W4	W1	UO	ENE5.4	ENE13
29-Jun	UO	UO	W0	UO	WNW0	WSW0	UO	N1	N3	NNW4	N5	NE7	NE6	NE8	NE7	ENE8	ENE7	E9	ESE10	SSW2	W2	WSW2	WSW2	WSW2	NE2.4	ESE10
30-Jun	W2	UO	UO	WNW0	UO	UO	UO	NNW2	E2	NE5	NE5	NE5	ENE6	ENE5	ENE4	ENE6	E8	E6	ESE6	ESE6	WSW2	W2	WSW2	UO	ENE2.8	E8
	W2.3	W2.8	W2.2	WNW2.3	WNW2.6	WNW2.2	NW2.1	NNW2.5	N2.3	N2.4	NNE2.1	NE1.6	NE2.3	NNE1.9	NE2.1	NE2.1	NE2.6	NE2.3	NE1.7	N1.5	WNW1.9	W2.0	W1.9	W2.1	Diurnal Average	
	NNW11	NNW12	NW10	W11	NNW10	NNW11	NNW11	NNW13	W14	W13	WSW15	WSW17	WSW15	W15	W15	W15	W15	ESE12	ESE11	ESE10	N11	W10	NNE8	N9	Diurnal Maximum	

UO - Unstable Operation

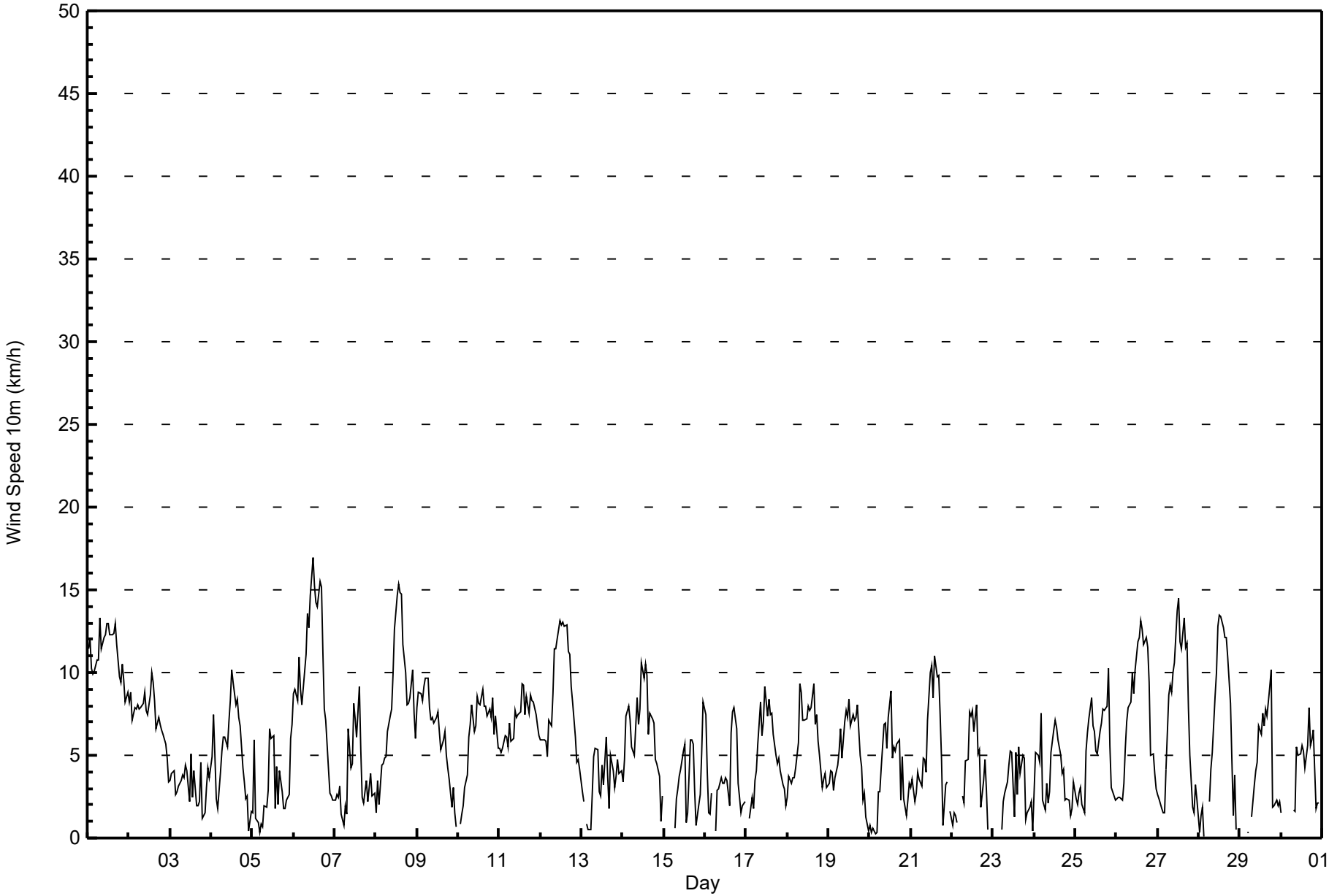
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Surmont 2 - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	360	52.40	52.40
6 - 11	277	40.32	92.72
12 - 19	50	7.28	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: 687

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Surmont 2 - June 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	11	22	18	13	10	18	17	18	9	13	51	67	47	9	25	360
6 - 11	23	14	18	14	23	19	20	10	4	2	0	9	33	15	21	52	277
12 - 19	6	0	0	2	6	10	0	0	0	0	0	3	12	0	1	10	50
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	41	25	40	34	42	39	38	27	22	11	13	63	112	62	31	87	687

Total Number of Valid Hours: 687

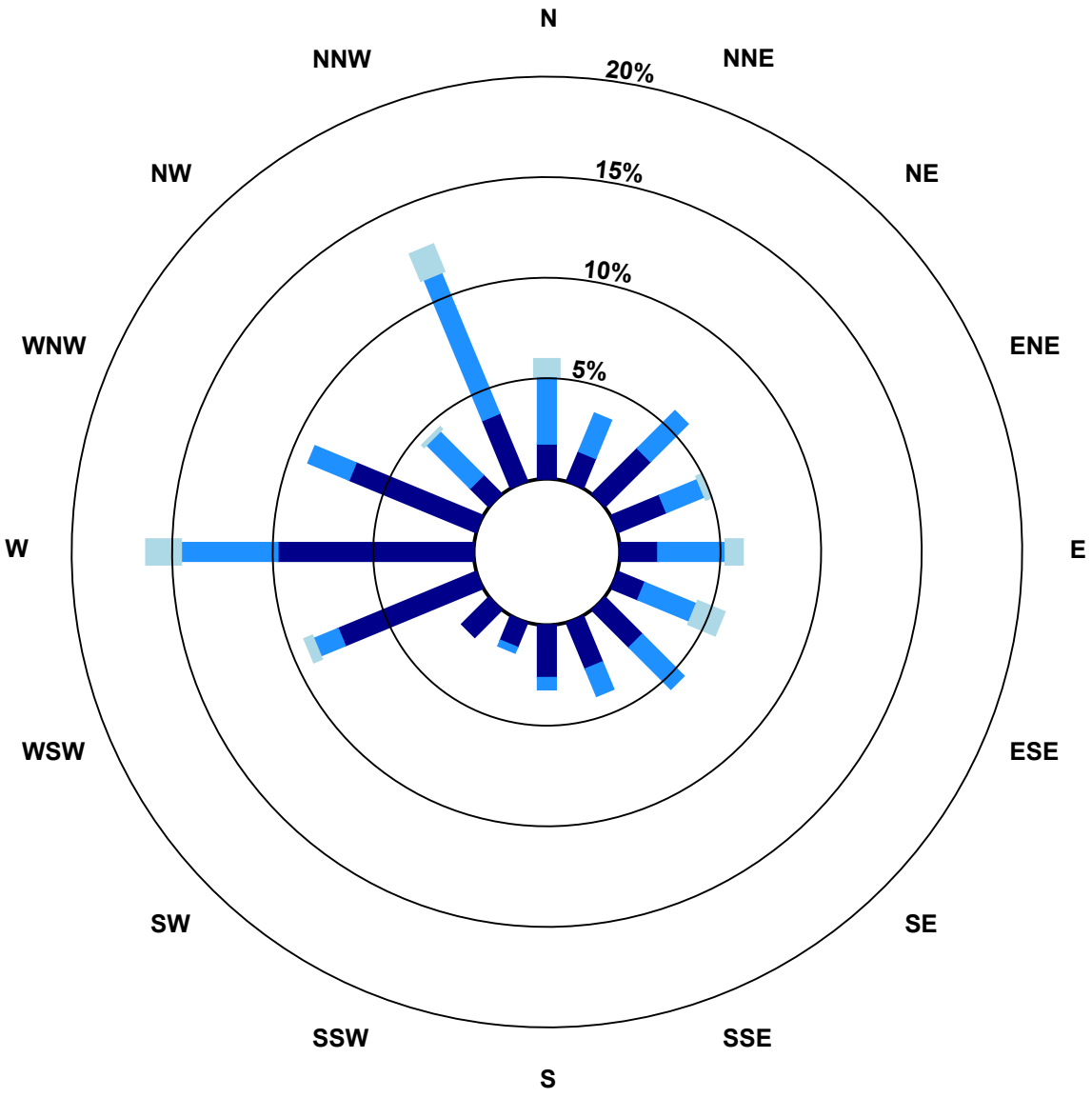
Total Number of Hours: 720

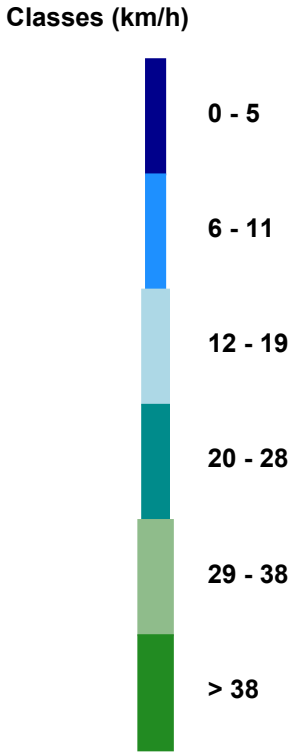
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Surmont 2





Total Number of Valid Hours: 687

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 10m (WS10) - km/h

Surmont 2 - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 7 km/h on Jun 6 12:00

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

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

Hours in Service:	720
Hours of Data:	687
Hours of Missing Data:	33
Hours of Calibration:	0
Percent Operational Time:	95.4

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-Jun	5	6	5	4	5	5	4	5	5	5	5	5	6	6	5	5	5	5	4	4	5	4	3	4	6
2-Jun	3	3	3	3	4	3	3	3	3	4	4	3	4	4	4	3	2	3	3	3	2	2	2	1	4
3-Jun	2	1	1	1	1	1	1	1	1	2	1	2	2	2	2	2	2	2	2	1	1	1	2	2	2
4-Jun	2	3	2	2	1	1	2	2	3	3	3	3	4	4	3	3	4	3	2	2	1	1	1	1	4
5-Jun	1	3	2	1	1	1	1	1	1	2	3	2	3	1	1	2	2	2	1	1	1	1	2	2	3
6-Jun	3	3	3	4	3	3	4	4	5	5	6	7	7	6	6	5	6	5	3	3	1	2	2	1	7
7-Jun	1	1	1	2	1	1	1	2	3	2	4	4	3	3	3	6	2	1	2	2	2	1	1	1	6
8-Jun	2	1	1	2	2	2	2	3	3	3	3	5	5	5	6	6	4	4	3	3	3	4	3	2	6
9-Jun	3	3	3	3	3	4	4	3	3	3	3	3	3	3	2	3	4	2	2	2	1	1	1	2	4
10-Jun	UO	1	1	1	1	2	2	3	3	3	3	4	4	4	4	4	4	3	3	3	4	3	3	2	4
11-Jun	2	2	2	3	2	2	3	3	3	4	3	3	3	4	4	3	4	3	4	4	3	4	3	3	4
12-Jun	3	3	2	2	2	3	3	4	5	5	6	5	6	6	5	5	5	5	4	3	2	1	1	2	6
13-Jun	1	1	UO	1	1	1	1	2	3	3	3	3	2	3	3	3	2	2	2	1	1	1	1	1	3
14-Jun	1	1	2	2	2	2	2	2	3	3	4	4	4	5	5	3	3	3	3	3	1	1	1	1	5
15-Jun	UO	UO	UO	UO	UO	UO	1	2	2	2	3	3	3	3	3	3	3	3	2	1	1	1	2	3	3
16-Jun	2	2	1	2	1	UO	1	1	1	1	1	1	2	2	2	3	3	3	3	2	1	2	1	2	3
17-Jun	UO	UO	1	1	1	1	2	3	4	3	3	4	3	3	4	4	3	2	2	2	1	1	1	1	4
18-Jun	1	1	1	1	1	2	3	4	4	3	3	3	3	4	4	4	4	4	3	2	1	1	1	1	4
19-Jun	1	1	2	1	1	1	2	3	2	3	4	4	4	4	4	3	3	3	3	3	1	1	1	1	4
20-Jun	1	1	1	1	1	2	1	2	3	3	2	3	5	3	2	3	3	2	2	2	1	1	1	1	5
21-Jun	1	1	1	1	2	2	2	2	2	2	3	4	4	4	4	4	4	3	2	1	0	1	UO	1	4
22-Jun	2	1	1	1	UO	UO	1	3	4	3	3	3	3	3	3	3	2	2	1	2	1	1	UO	UO	4
23-Jun	UO	UO	1	UO	UO	1	1	1	2	3	2	2	2	3	3	3	3	2	2	2	1	1	1	1	3
24-Jun	2	2	2	2	2	2	2	1	1	2	2	3	3	3	3	3	2	2	1	1	1	1	1	1	3
25-Jun	1	1	1	1	1	2	2	2	3	4	4	4	4	4	4	4	3	3	3	4	3	2	1	1	4
26-Jun	1	1	1	1	2	2	2	3	3	4	4	5	5	5	6	5	4	4	4	3	2	2	1	1	6
27-Jun	1	1	1	1	1	3	3	3	3	4	4	5	5	4	5	5	4	5	3	2	2	2	1	2	5
28-Jun	1	1	1	1	UO	UO	1	2	2	4	4	5	6	5	5	4	5	4	3	2	1	1	1	UO	6
29-Jun	UO	UO	0	UO	1	1	UO	1	1	2	2	3	3	3	3	3	3	5	5	2	2	1	1	1	5
30-Jun	1	UO	UO	1	UO	UO	UO	1	2	2	3	3	4	3	3	3	3	3	4	3	1	1	2	UO	4
	5	6	5	4	5	5	4	5	5	5	6	7	7	6	6	6	6	5	5	4	5	4	3	4	
	Diurnal Maximum																								

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Surmont 2 - June 2026

Direction of Maximum Speed: 258 deg on Jun 6 12:00
Direction of Maximum Daily Speed Average: 349.1 deg on Jun 1

Direction of Minimum Speed: 260 deg on Jun 29 03:00
Direction of Minimum Daily Speed Average: 0.7 deg on Jun 5

Monthly Average Direction: 342.0 deg

Hours in Service:	720
Hours of Data:	687
Hours of Missing Data:	33
Percent Operational Time:	95.4

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-Jun	328	330	324	336	340	335	340	338	345	346	355	344	357	360	352	348	359	356	2	2	3	13	12	9	349.1
2-Jun	6	11	19	16	7	5	0	3	21	37	35	37	49	56	68	74	56	45	48	54	52	57	60	77	35.6
3-Jun	70	77	80	52	57	60	86	89	59	83	57	184	116	99	133	189	174	126	112	191	239	153	157	144	103.6
4-Jun	133	173	189	171	152	139	187	158	144	156	140	158	129	145	149	156	176	154	176	143	217	252	226	244	158.1
5-Jun	152	257	277	77	192	219	286	311	353	53	113	148	136	223	281	9	4	358	256	191	278	267	274	279	262.0
6-Jun	270	268	269	259	262	256	257	261	266	264	256	258	258	260	259	266	263	266	272	274	272	266	284	257	262.8
7-Jun	225	241	211	239	249	72	62	176	134	164	166	139	138	144	111	134	332	17	289	286	302	286	277	279	165.2
8-Jun	288	266	317	302	311	334	324	306	296	291	275	276	275	273	269	272	274	271	274	270	266	272	267	259	278.8
9-Jun	259	268	270	269	267	275	284	294	284	290	287	254	275	270	328	284	23	40	27	34	261	267	257	249	284.7
10-Jun	UO	288	229	281	291	333	354	349	339	329	338	336	325	326	328	329	336	340	341	335	332	316	323	298	330.0
11-Jun	299	298	303	319	296	290	301	332	314	327	327	330	323	345	340	324	332	330	348	338	334	332	315	311	323.6
12-Jun	307	309	300	292	289	306	328	337	337	339	324	336	341	333	348	335	344	346	343	334	316	275	269	265	327.2
13-Jun	245	255	UO	284	51	359	269	293	332	297	334	51	50	328	29	348	318	283	264	280	252	242	254	246	298.4
14-Jun	274	252	252	251	258	281	279	274	280	309	315	342	343	343	270	276	311	294	2	23	292	259	253	260	296.5
15-Jun	UO	UO	UO	UO	UO	UO	54	78	107	26	66	84	33	171	29	76	96	107	111	142	237	218	264	281	76.2
16-Jun	276	289	295	251	260	UO	356	316	47	57	49	33	17	333	322	56	46	69	58	38	1	342	271	272	13.6
17-Jun	UO	UO	280	286	291	293	297	346	45	13	3	2	345	6	349	11	4	333	285	294	280	278	262	258	340.5
18-Jun	265	254	273	259	260	280	322	359	354	327	339	338	345	322	13	1	332	336	329	329	269	251	249	256	324.5
19-Jun	261	249	255	264	257	279	296	289	332	13	5	340	347	359	354	31	44	34	32	37	296	272	275	295	341.3
20-Jun	295	282	336	282	300	310	329	37	24	64	343	100	98	52	54	70	95	121	12	41	11	281	274	295	49.9
21-Jun	294	294	344	325	285	296	340	10	34	38	93	106	106	99	106	100	90	98	94	278	259	265	UO	289	79.6
22-Jun	258	270	283	273	UO	UO	337	30	129	102	92	99	106	91	92	109	89	88	254	260	257	201	UO	UO	101.0
23-Jun	UO	UO	126	UO	UO	278	268	338	90	279	267	254	349	236	250	254	220	146	132	348	236	227	246	258	241.8
24-Jun	251	276	278	283	252	270	192	249	227	160	153	176	199	209	174	166	139	130	182	242	194	267	181	173	206.8
25-Jun	189	176	150	141	164	113	124	121	122	131	150	150	167	174	156	137	137	138	138	118	130	150	155	199	141.5
26-Jun	174	172	169	147	150	133	127	117	126	128	129	128	120	115	111	114	115	114	108	114	113	112	129	172	122.2
27-Jun	231	240	244	265	266	109	112	102	96	101	99	104	103	108	100	103	93	101	92	88	85	255	273	271	103.7
28-Jun	287	258	265	242	UO	UO	326	25	34	48	69	85	77	76	89	81	89	90	79	61	293	268	262	UO	73.4
29-Jun	UO	UO	260	UO	289	254	UO	357	358	332	8	40	51	35	36	61	75	93	121	207	268	257	255	256	52.0
30-Jun	259	UO	UO	294	UO	UO	UO	342	101	55	50	40	75	66	72	62	84	97	109	105	252	266	254	UO	74.0
	281.0	276.8	280.3	286.3	282.7	303.3	315.4	340.7	4.9	8.6	15.5	36.4	44.2	15.7	35.0	40.4	42.1	55.2	43.3	8.6	300.2	279.2	275.7	273.2	
	Diurnal Average																								

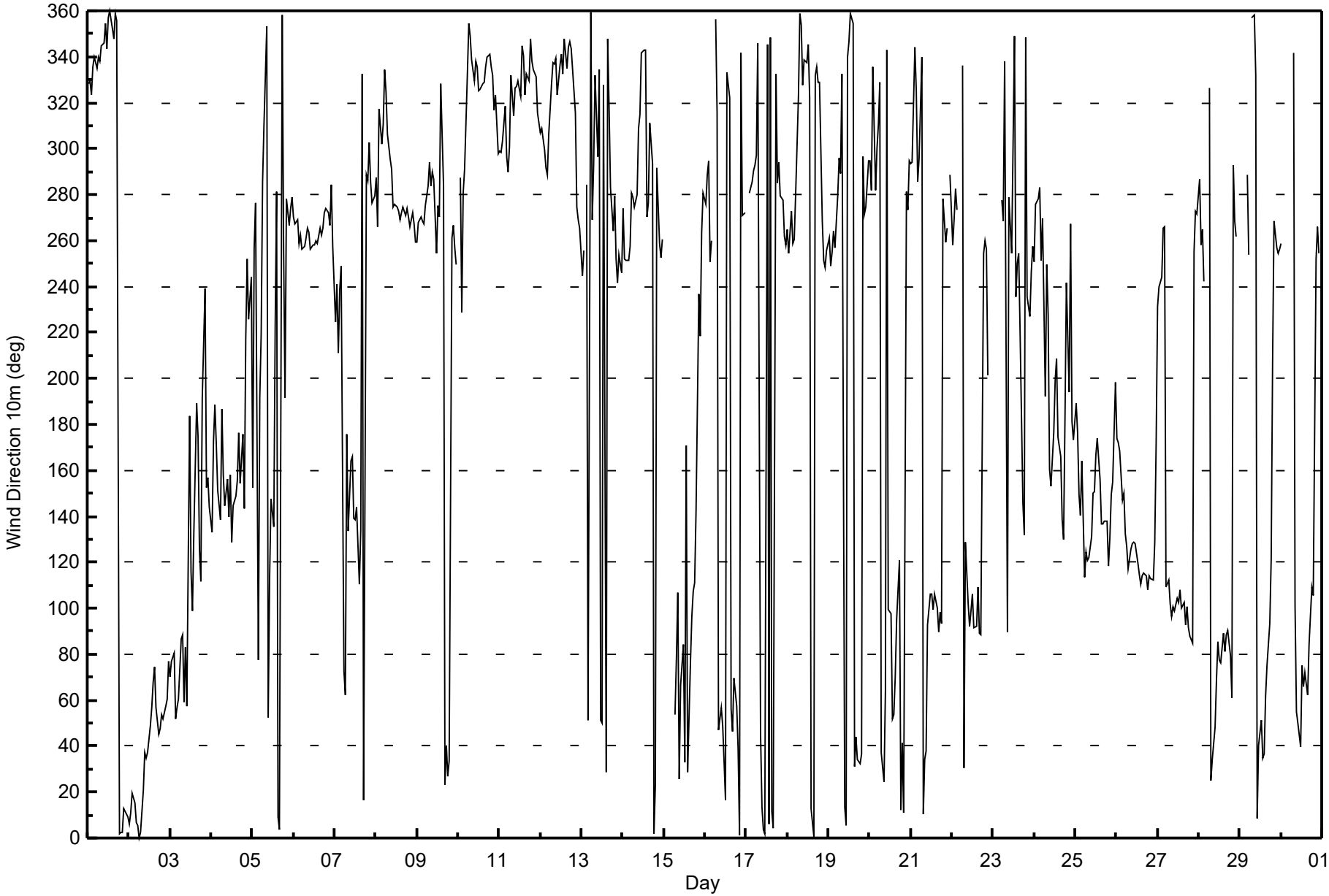
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Surmont 2 - June 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Surmont 2 - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 111 deg on Jun 15 14:00

Minimum Value: 9 deg on Jun 13 22:00

Percentiles: P_1 = 14 P_{10} = 29 Q_1 = 37 Median = 51 Q_3 = 60 P_{90} = 73 P_{99} = 100

Hours in Service:	720
Hours of Data:	687
Hours of Missing Data:	33
Hours of Calibration:	0
Percent Operational Time:	95.4

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-Jun	47	54	55	52	52	53	49	41	50	48	47	46	49	55	51	51	51	54	56	57	52	50	51	51	57
2-Jun	58	49	57	52	59	55	54	55	51	43	50	44	41	38	36	34	41	40	38	39	35	40	38	34	59
3-Jun	35	38	31	35	29	33	39	30	30	38	50	81	56	85	61	99	73	95	43	77	67	48	57	54	99
4-Jun	48	58	60	65	52	55	56	50	53	65	53	54	48	52	56	51	67	56	67	68	62	36	70	59	70
5-Jun	81	64	106	75	100	92	95	86	89	69	44	49	45	73	30	74	60	66	56	50	27	34	25	33	106
6-Jun	30	30	33	31	36	40	43	35	32	36	35	38	38	37	42	36	37	43	37	37	27	26	38	25	43
7-Jun	28	30	21	29	71	75	62	89	49	70	69	51	53	58	32	80	72	62	62	70	58	48	53	54	89
8-Jun	58	26	81	56	65	57	58	55	55	46	32	32	36	31	32	32	33	32	38	37	29	31	31	32	81
9-Jun	26	30	29	30	29	35	40	47	49	47	51	43	42	50	58	61	59	65	61	57	48	25	45	87	87
10-Jun	UO	82	58	32	28	59	51	56	55	61	64	59	60	64	59	60	57	61	55	61	54	65	60	51	82
11-Jun	53	55	61	59	46	48	53	55	64	58	64	63	60	57	55	55	57	54	57	57	51	58	53	61	64
12-Jun	59	59	53	50	57	56	60	55	55	59	61	55	57	57	56	54	55	54	59	54	57	35	35	29	61
13-Jun	20	34	UO	50	58	72	44	48	66	69	99	102	75	87	64	83	95	50	35	28	13	9	12	14	102
14-Jun	25	17	20	20	31	40	40	45	35	52	62	56	59	59	39	53	53	51	60	67	43	14	84	22	84
15-Jun	UO	UO	UO	UO	UO	UO	88	48	60	78	76	78	69	111	108	52	39	32	36	79	31	46	38	33	111
16-Jun	33	56	79	65	26	UO	73	54	58	42	45	51	73	64	97	57	46	41	47	48	56	70	79	29	97
17-Jun	UO	UO	30	18	28	35	58	67	51	66	64	59	57	53	69	63	55	60	38	45	38	42	20	23	69
18-Jun	56	23	38	25	27	29	58	53	57	60	58	58	59	64	57	61	63	59	59	51	29	13	15	20	64
19-Jun	21	15	28	39	26	31	41	50	65	53	61	68	67	68	60	54	56	51	84	64	63	45	37	43	84
20-Jun	69	88	73	90	92	46	49	57	51	51	53	45	34	71	49	48	39	39	55	47	78	71	34	20	92
21-Jun	40	33	85	69	44	56	57	59	51	57	49	35	29	31	28	27	33	27	37	77	10	13	UO	49	85
22-Jun	82	59	30	78	UO	UO	64	79	51	73	37	37	47	49	37	67	43	91	49	44	34	88	UO	UO	91
23-Jun	UO	UO	79	UO	UO	100	32	53	68	73	50	60	99	64	92	37	73	50	47	102	84	62	33	100	102
24-Jun	83	38	32	45	23	72	56	37	41	60	66	62	68	64	69	60	63	54	61	65	54	64	59	56	83
25-Jun	63	51	32	23	57	83	32	38	38	46	68	74	81	77	66	64	51	49	43	31	49	61	58	50	83
26-Jun	54	62	55	44	48	48	40	34	40	39	46	46	40	34	35	33	26	26	26	24	23	28	32	57	62
27-Jun	33	30	38	25	48	45	28	24	34	29	29	26	26	30	27	25	29	28	28	33	68	35	20	32	68
28-Jun	42	67	49	84	UO	UO	49	42	52	44	42	36	40	37	35	38	36	33	42	40	62	20	42	UO	84
29-Jun	UO	UO	87	UO	90	91	UO	52	49	55	64	54	65	50	60	48	45	41	39	74	38	24	18	38	91
30-Jun	55	UO	UO	80	UO	UO	UO	55	86	50	59	62	63	67	72	56	41	39	66	25	42	20	21	UO	86
	83	88	106	90	100	100	95	89	89	78	99	102	99	111	108	99	95	95	84	102	84	88	84	100	
	Diurnal Maximum																								

UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS30
ELLS RIVER
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ELLS RIVER (AMS30)
JUNE 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	-	-	44.3	0	3.7	0
TRS (ppb) Average	685	35	35	100	4.6	0	4.2	0	1	0
THC (ppm) Average	632	34	88	92.5	-	-	4.1	-	2.2	-
NMHC (ppm) Average	632	34	88	92.5	-	-	0.677	-	0.052	-
CH4 (ppm) Average	632	34	88	92.5	-	-	4.1	-	2.2	-
NO2 (ppb) Average	628	38	92	92.5	-	-	32.5	0	12.1	-
NO (ppb) Average	628	38	92	92.5	-	-	55	-	8.5	-
NOX (ppb) Average	628	38	92	92.5	-	-	77.1	-	20.6	-
PM2.5 (ug/m3) Average	689	0	31	95.69	-	-	105	3	43.6	1
Temperature 2 m (C) Average	720	0	0	100	-	-	30.9	-	24.3	-
Relative Humidity (%) Average	720	0	0	100	-	-	97.2	-	94.4	-
Wind Speed 10 m (km/h) Average	717	0	3	99.58	-	-	33	-	23	-
Wind Direction 10 m (deg) Average	717	0	3	99.58	-	-	-	-	-	-
Global Solar Radiation (W/m2) Average	720	0	0	100	-	-	998.9	-	381.6	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ELLS RIVER (AMS30)
JUNE 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	0.63	2.5	-	0	0	0	0.1	0.2	1	44.3
TRS (ppb) Average	685	0.26	0.3	-	0	0.1	0.1	0.2	0.3	0.6	4.2
THC (ppm) Average	632	2.05	0.2	-	1.9	1.9	1.9	2	2.1	2.2	4.1
NMHC(ppm) Average	632	0.004	0.031	-	0	0	0	0	0	0	0.677
CH4(ppm) Average	632	2.04	0.2	-	1.9	1.9	1.9	2	2.1	2.2	4.1
NO2 (ppb) Average	628	4.28	5.5	-	0.2	0.4	0.8	2.1	5.3	10.4	32.5
NO (ppb) Average	628	1.84	5.3	-	0	0	0.1	0.3	1	3.6	55
NOX (ppb) Average	628	6.13	9.8	-	0.2	0.4	1	2.6	6.4	16.1	77.1
PM2.5 (ug/m3) Average	689	7.58	11.3	-	0.4	1.5	2.5	4.2	8.1	13.7	105
Temperature 2 m (C) Average	720	16.52	5.7	-	6.6	10.2	11.9	15.4	20.3	25.1	30.9
Relative Humidity (%) Average	720	62.15	20.4	-	23	33.4	46.1	62.6	78.6	90.2	97.2
Wind Speed 10 m (km/h) Average	717	11.3	7	-	0	3	6	10	15	21	33
Wind Direction 10 m (deg) Average	717	28	-	-	-	-	-	-	-	-	-
Global Solar Radiation (W/m2) Average	720	249.8	283.1	-	0	0	3.8	129.8	457.8	716.9	998.9

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - ELLS RIVER (AMS30)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
NO2	23 Jun 2026 04:00	24 Jun 2026 03:00	24	Unstable Operation - AMD non-compliance
NO2	24 Jun 2026 05:00	24 Jun 2026 09:00	5	Unstable Operation - AMD non-compliance
NO2	24 Jun 2026 10:00	25 Jun 2026 10:00	25	Maintenance - replaced analyzer
THC/NMHC/CH4	01 Jun 2026 02:00	02 Jun 2026 09:00	32	Unstable Operation - AMD non-compliance
THC/NMHC/CH4	02 Jun 2026 10:00	02 Jun 2026 11:00	2	Maintenance - replaced analyzer
THC/NMHC/CH4	02 Jun 2026 15:00	03 Jun 2026 09:00	19	Maintenance - analyzer stabilization overnight
THC/NMHC/CH4	24 Jun 2026 12:00	24 Jun 2026 12:00	1	Unstable Operation - excessive baseline noise
PM2.5	10 Jun 2026 15:00	11 Jun 2026 11:00	21	Unstable Operation - flatline in analyzer output signal
PM2.5	30 Jun 2026 03:00	30 Jun 2026 11:00	9	Unstable Operation - flatline in analyzer output signal
PM2.5	30 Jun 2026 12:00	30 Jun 2026 12:00	1	Maintenance - analyzer rebooted
Wind Speed, Wind Direction	03 Jun 2026 23:00	03 Jun 2026 23:00	1	Flat line in sensor output signal
Wind Speed, Wind Direction	25 Jun 2026 03:00	25 Jun 2026 03:00	1	Flat line in sensor output signal
Wind Speed, Wind Direction	30 Jun 2026 06:00	30 Jun 2026 06:00	1	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Ells River - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 44.3 ppb on Jun 30 09:00 Maximum Daily Average: 3.7 ppb on Jun 30

Minimum Value: 0.0 ppb on Jun 1 02:00 Minimum Daily Average: 0.0 ppb on Jun 28
Maximum Diurnal Average: 2.6 ppb at hour 9 Minimum Diurnal Average: 0.1 ppb at hour 2
Monthly Average: 0.63 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.2 P_{90} = 1.0 P_{99} = 9.4

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 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-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.6	0.1	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	0.1	0.8
2-Jun	0.0	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
3-Jun	0.1	0.1	Z	0.1	0.2	0.1	0.1	0.1	0.1	C	C	C	C	2.9	7.0	6.9	2.4	1.5	4.7	3.5	0.4	0.2	0.0	0.0	1.6	7.0
4-Jun	0.0	0.0	0.0	Z	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.2	0.1	0.1	0.1	0.1	0.2
5-Jun	0.1	0.1	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.1	0.1	0.1	1.6	1.8	0.3	2.4	4.6	7.7	5.1	6.2	1.8	1.4	0.7	0.1	1.5	7.7
6-Jun	0.0	0.0	0.3	0.2	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	0.3
7-Jun	Z	0.0	0.0	0.0	0.0	0.1	0.3	0.9	0.6	5.1	5.3	9.0	9.3	5.5	4.0	1.4	0.4	0.2	0.1	0.1	0.1	0.0	0.0	0.0	1.8	9.3
8-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4
9-Jun	0.1	0.1	Z	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2
10-Jun	0.1	0.1	0.1	Z	0.2	0.1	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.4	0.5	0.5	0.1	0.1	0.1	0.2	0.5
11-Jun	0.3	0.8	1.0	0.2	Z	1.4	1.2	1.3	0.3	0.3	0.7	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.7	0.8	0.3	0.4	1.4
12-Jun	0.1	0.1	0.2	1.1	1.0	Z	0.2	0.2	2.0	0.7	0.5	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.0
13-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	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	0.5
14-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.4	0.6	8.6	2.0	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	0.5	8.6
15-Jun	0.1	0.1	Z	0.1	0.1	0.1	0.4	0.3	8.1	7.5	0.7	0.5	0.3	0.4	0.7	1.3	1.1	0.8	0.3	0.3	0.3	0.2	0.1	0.1	1.0	8.1
16-Jun	0.2	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.4
17-Jun	0.2	0.1	0.2	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
18-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.1	0.5	0.5	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.5
19-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.8	0.9	0.3	0.0	0.0	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9
20-Jun	0.0	Z	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
21-Jun	0.1	0.2	Z	0.1	0.1	0.2	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	0.0	0.0	0.0	0.0	0.2
22-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.2	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.1	0.3	1.4	0.0	0.3	0.8	0.3	0.4	0.3	0.2	1.4
23-Jun	0.3	0.1	0.0	0.1	Z	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.9	7.2	1.1	0.4	0.6	0.2	0.0	0.5	7.2
24-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.2	0.4	0.5	0.3	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.5
25-Jun	Z	0.2	0.2	0.3	0.5	4.8	3.7	5.4	4.0	4.4	9.8	11.1	6.3	5.0	5.9	3.6	5.3	1.3	1.2	0.5	0.1	0.1	0.4	1.1	3.3	11.1
26-Jun	0.5	Z	2.2	0.7	0.3	0.2	0.9	8.7	16.7	9.7	6.0	2.5	2.6	2.8	2.4	2.1	1.5	0.6	0.1	0.1	0.1	0.1	0.1	0.1	2.6	16.7
27-Jun	0.1	0.1	Z	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.2	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.3
28-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
29-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.2	0.1	0.2	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.3
30-Jun	0.3	0.0	0.0	0.0	0.0	Z	0.0	0.6	44.3	17.6	16.4	5.2	0.9	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	3.7	44.3
	0.1	0.1	0.2	0.1	0.1	0.3	0.3	0.7	2.6	1.9	1.5	1.1	0.8	0.7	0.7	0.6	0.6	0.6	0.7	0.4	0.2	0.2	0.1	0.1	Diurnal Average	
	0.5	0.8	2.2	1.1	1.0	4.8	3.7	8.7	44.3	17.6	16.4	11.1	9.3	5.5	7.0	6.9	5.3	7.7	7.2	6.2	1.8	1.4	0.8	1.1	Diurnal Maximum	

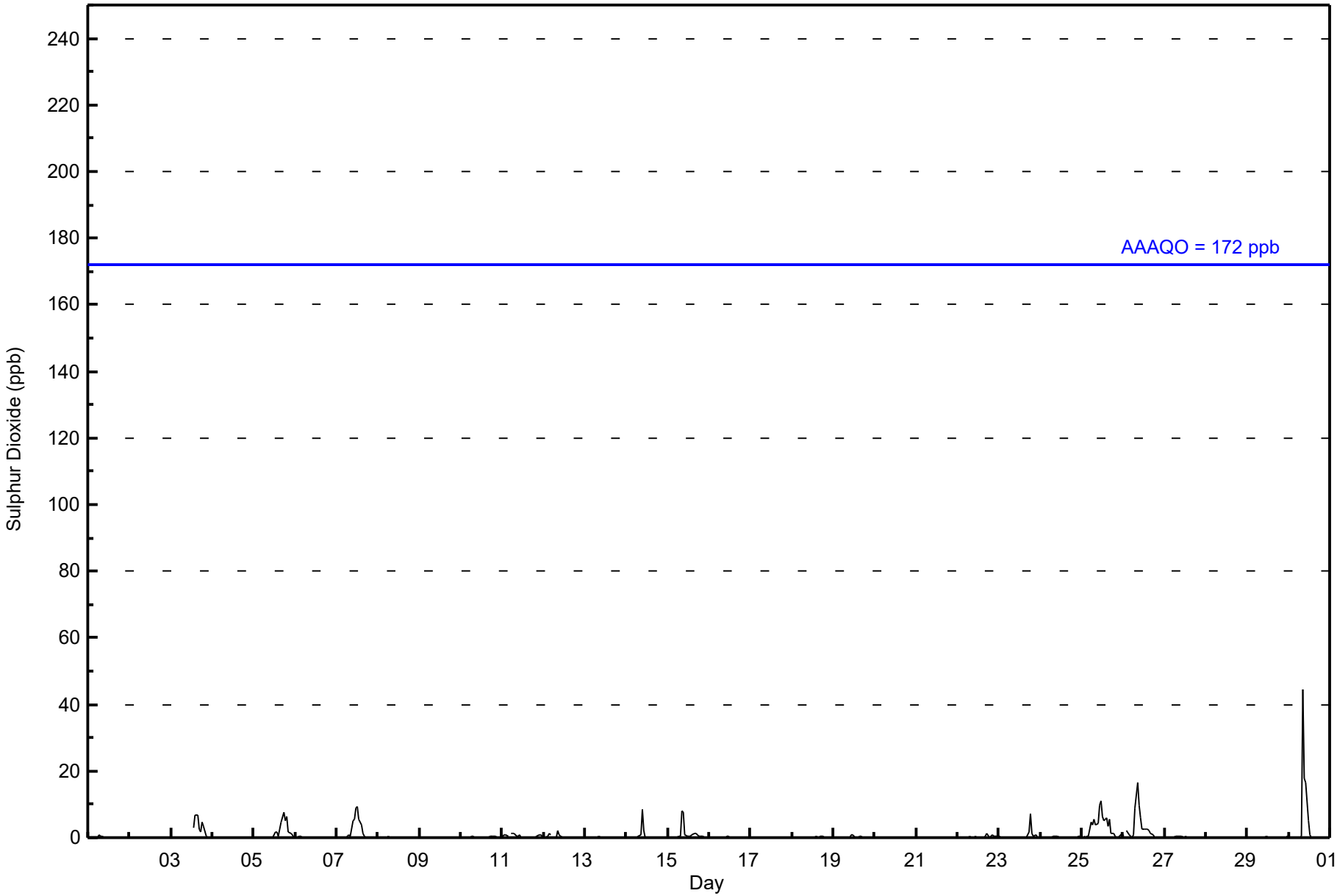
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Ells River - June 2026



Sulphur Dioxide (SO_2) - ppb

Ells River - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	681	99.27	99.27
11 - 20	4	0.58	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 - June 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	163	67	30	19	10	16	54	44	41	30	24	25	41	16	31	68	679
11 - 20	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	1	4
21 - 60	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
61 - 110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111 - 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	163	67	30	21	10	16	55	45	41	30	24	25	41	16	31	69	684

Total Number of Valid Hours: 684

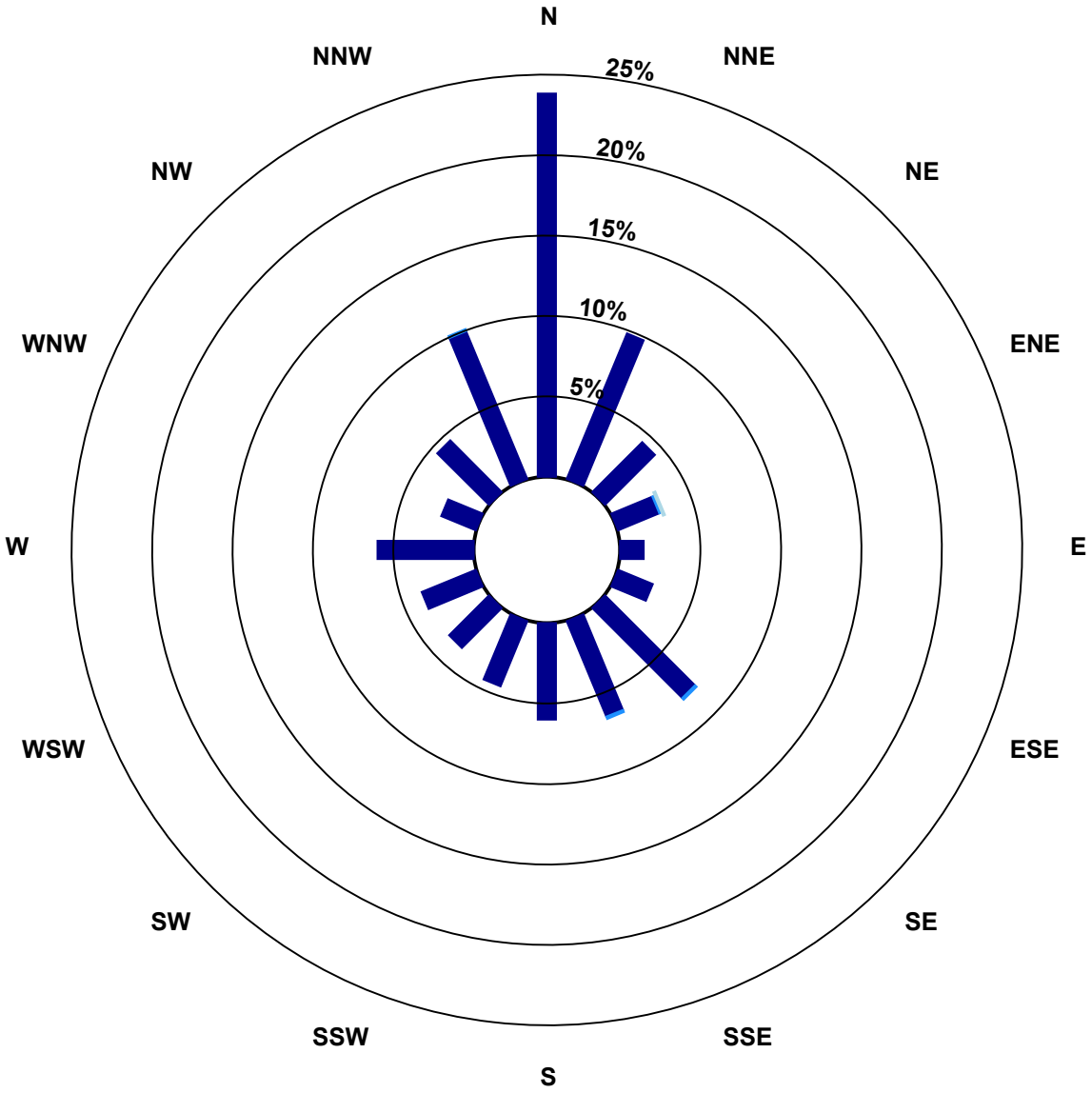
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Ells River



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

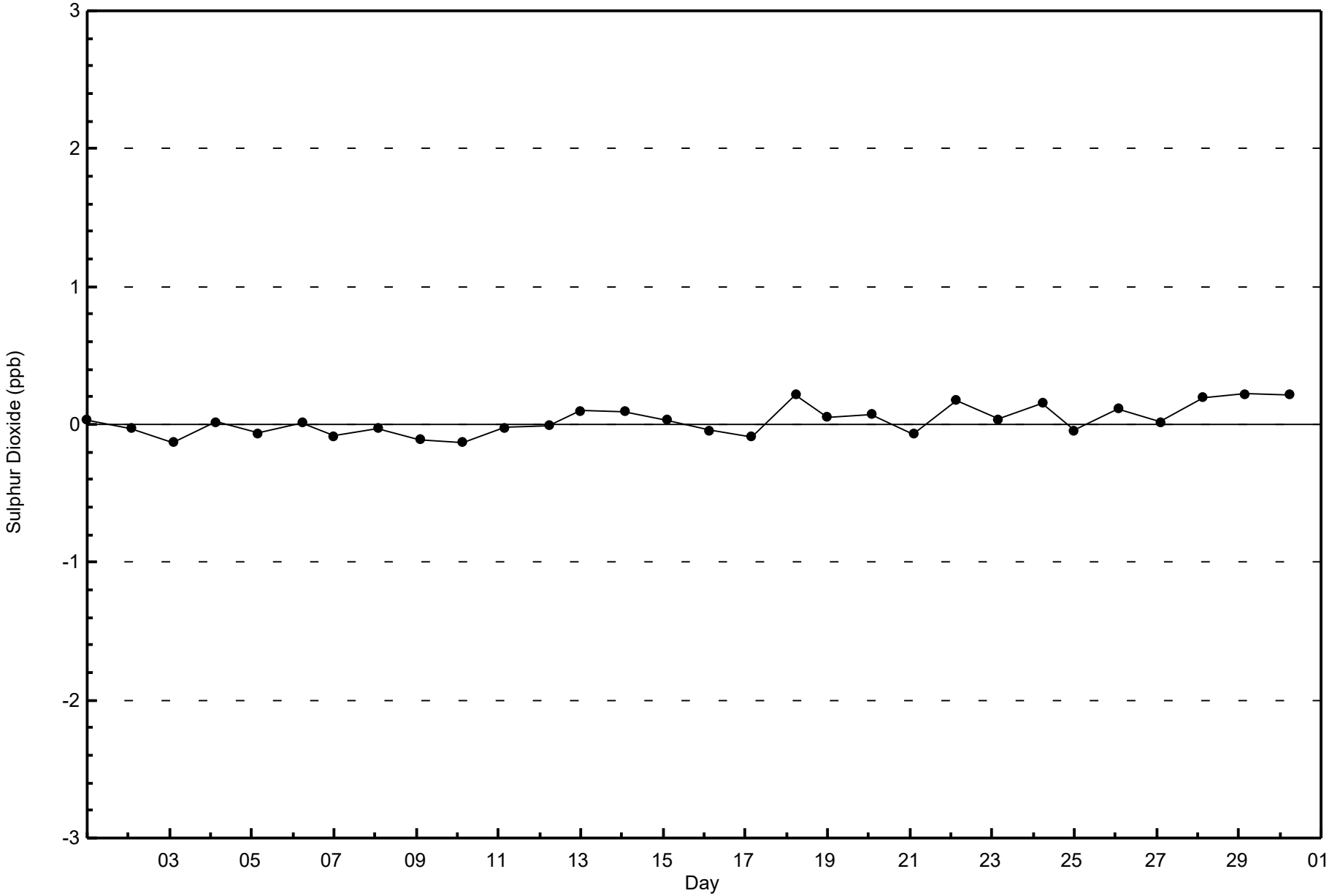
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Ells River - June 2026

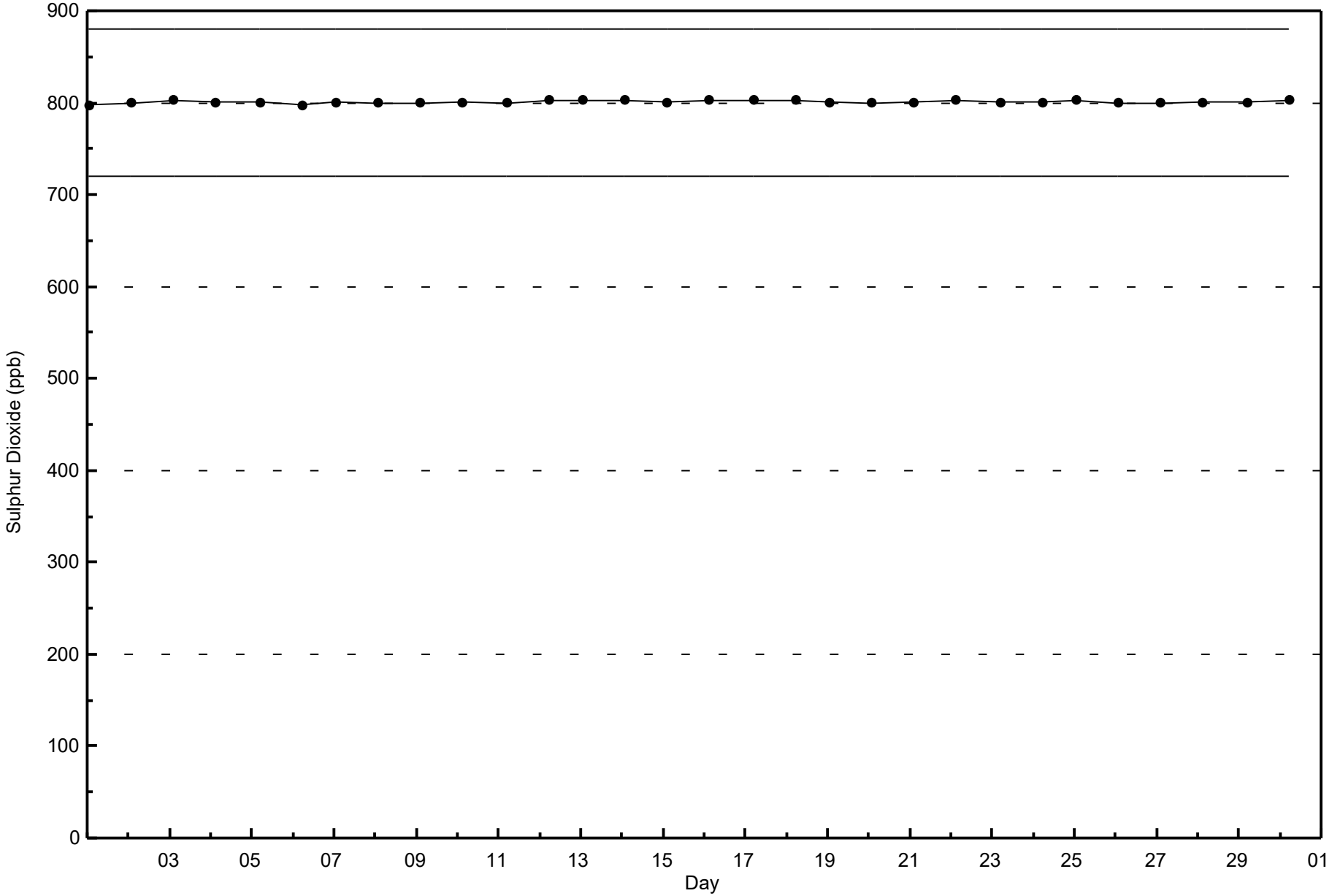


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Ells River - June 2026



Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Ells River - June 2026

Number of Exceedences (AAAQG): 30-Min: 0
Maximum Value: 4.6 ppb on Jun 25 05:30 Maximum Daily Average: 1.0 ppb on Jun 25

Minimum Value: 0.0 ppb on Jun 27 15:00 Minimum Daily Average: 0.1 ppb on Jun 2
Maximum Diurnal Average: 0.6 ppb at hour 5 Minimum Diurnal Average: 0.1 ppb at hour 16
Monthly Average: 0.26 ppb Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.3 P_{90} = 0.5 P_{99} = 1.5

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-Jun	0.1	Z	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
	0.2	SP	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
2-Jun	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	0.2
	0.1	0.1	SP	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1		
3-Jun	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	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.1	0.3
	0.1	0.1	0.2	SP	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.3	0.3	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2		
4-Jun	0.3	0.4	0.3	0.2	Z	0.4	0.3	0.3	C	C	C	C	C	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.4
	0.3	0.4	0.2	0.3	SP	0.3	0.3	0.2	C	C	C	C	0.3	0.2	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.2	0.2	0.2		
5-Jun	0.2	0.2	0.2	0.3	0.2	Z	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.5	0.4	0.4	0.5	0.4	0.5	0.5	0.2	0.3	0.7
	0.2	0.2	0.2	0.3	0.2	SP	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.4	0.6	0.4	0.7	0.4	0.5	0.4	0.2		
6-Jun	Z	0.3	0.7	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	0.2	0.1	0.2	0.3	0.8
	SP	0.5	0.8	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	0.2	0.1	0.2	0.2	0.2	0.2		
7-Jun	0.2	Z	0.3	0.4	0.2	0.3	0.6	0.6	0.4	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.3	0.7
	0.2	SP	0.3	0.3	0.2	0.5	0.7	0.6	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1		
8-Jun	0.1	0.1	Z	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	0.1	0.1	0.1	0.2
	0.1	0.1	SP	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	0.2		
9-Jun	0.1	0.2	0.1	Z	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2
	0.2	0.2	0.2	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	0.2	0.1	0.2	0.2		
10-Jun	0.2	0.2	0.2	0.2	Z	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.3
	0.2	0.2	0.2	0.2	SP	0.2	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	0.1	0.1	0.1		
11-Jun	0.2	0.8	0.3	0.1	0.2	Z	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.8
	0.3	0.2	0.2	0.2	0.1	SP	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1		
12-Jun	Z	0.3	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	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.5
	SP	0.2	0.1	0.1	0.5	0.1	0.1	0.1	0.5	0.1	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	0.3		
13-Jun	0.4	Z	0.3	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.2	0.5
	0.4	SP	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.4	0.5		
14-Jun	0.3	0.3	Z	0.3	0.3	0.5	0.3	0.4	0.2	0.5	0.4	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.2	0.8
	0.3	0.3	SP	0.3	0.5	0.3	0.3	0.3	0.2	0.8	0.3	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.5		
15-Jun	0.6	0.5	0.8	Z	0.9	0.9	0.6	0.7	0.4	0.6	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.5	0.2	0.1	0.3	1.0
	0.6	0.6	1.0	SP	0.9	0.6	0.7	0.5	1.0	0.3	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.4	0.2	0.2		

Wood Buffalo Environmental Association

Summary of 30-Minute Averages

Total Reduced Sulphur (TRS) - ppb

Ells River - June 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-Jun	0.3	0.1	0.1	0.2	Z	0.2	0.2	0.2	0.2	0.2	0.2	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	0.1	0.3
	0.1	0.2	0.2	0.3	SP	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2		
17-Jun	0.2	0.3	0.3	0.3	0.4	Z	0.3	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	0.4	0.3	0.2	0.5
	0.3	0.3	0.3	0.3	0.5	SP	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	0.3	0.4	0.2		
18-Jun	Z	0.2	0.4	0.7	0.8	0.9	0.7	0.7	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.9
	SP	0.2	0.4	0.6	0.7	0.8	0.7	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3		
19-Jun	0.3	Z	0.6	1.1	0.7	0.4	0.4	0.3	0.2	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	0.2	0.3	1.2
	0.3	SP	0.8	1.2	0.5	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2		
20-Jun	0.2	0.3	Z	0.4	0.8	0.5	0.4	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.8
	0.3	0.3	SP	0.5	0.5	0.4	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1		
21-Jun	0.1	0.2	0.3	Z	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.4	0.2	0.5
	0.2	0.2	0.3	SP	0.3	0.4	0.4	0.4	0.4	0.4	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.5		
22-Jun	0.6	0.6	0.5	0.5	Z	0.5	0.6	0.6	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.7
	0.5	0.5	0.5	0.5	SP	0.7	0.6	0.5	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.1	0.2	0.2	0.3	0.3		
23-Jun	0.3	0.4	0.5	0.5	0.9	Z	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.7	0.6	0.2	0.4	0.5	0.8	0.3	0.9
	0.2	0.4	0.5	0.7	0.6	SP	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.8	0.2	0.2	0.5	0.6	0.8		
24-Jun	Z	0.8	0.9	1.0	1.1	1.0	0.9	0.5	0.9	0.9	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.4	0.6	0.4	1.1
	SP	1.0	0.8	0.9	0.9	0.9	0.6	0.7	0.9	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.4	0.9		
25-Jun	1.0	Z	1.4	2.7	2.6	4.6	3.5	1.9	0.9	0.6	0.8	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.7	1.0	4.6
	1.2	SP	1.4	2.9	4.4	3.8	2.7	1.5	0.6	0.5	0.5	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.3	0.7		
26-Jun	0.4	0.4	Z	1.2	1.6	1.5	0.3	0.9	1.1	1.0	0.8	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.5	1.6
	0.3	0.7	SP	1.3	1.5	1.0	0.5	1.3	0.9	1.3	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2		
27-Jun	0.2	0.3	0.3	Z	0.8	0.5	0.3	0.3	0.3	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.4	0.2	0.9
	0.2	0.3	0.2	SP	0.9	0.3	0.4	0.3	0.2	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4		
28-Jun	0.6	0.7	0.5	0.6	Z	0.4	0.4	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.2	0.7
	0.5	0.7	0.6	0.7	SP	0.4	0.4	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1		
29-Jun	0.2	0.3	0.3	0.4	0.5	Z	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.2	0.7
	0.3	0.3	0.3	0.5	0.7	SP	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	0.1	0.1	0.2	0.3	0.4		
30-Jun	Z	0.4	0.6	0.9	0.8	1.1	0.8	0.3	1.6	0.7	0.6	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	0.4	1.8
	SP	0.4	0.7	0.7	0.8	0.9	0.5	0.3	1.8	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	0.6		
	0.3	0.3	0.4	0.6	0.6	0.6	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	Diurnal Average	
	1.2	1.0	1.4	2.9	4.4	4.6	3.5	1.9	1.8	1.3	0.8	0.4	0.3	0.3	0.3	0.3	0.5	0.6	0.8	0.7	0.4	0.5	0.6	0.9	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 - June 2026

Maximum Value: 4.2 ppb on Jun 25 06:00

Maximum Daily Average: 1.0 ppb on Jun 25

Minimum Value: 0.0 ppb on Jun 27 16:00

Minimum Daily Average: 0.1 ppb on Jun 2

Maximum Diurnal Average: 0.6 ppb at hour 5

Minimum Diurnal Average: 0.1 ppb at hour 16

Monthly Average: 0.26 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.3 P_{90} = 0.6 P_{99} = 1.4

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 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-Jun	0.1	Z	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
2-Jun	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
3-Jun	0.1	0.1	0.2	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.1	0.3
4-Jun	0.3	0.4	0.3	0.3	Z	0.3	0.3	0.3	C	C	C	C	C	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.4
5-Jun	0.2	0.2	0.2	0.3	0.2	Z	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.5	0.5	0.4	0.6	0.4	0.5	0.5	0.2	0.3	0.6
6-Jun	Z	0.4	0.8	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.8
7-Jun	0.2	Z	0.3	0.3	0.2	0.4	0.6	0.6	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.3	0.6
8-Jun	0.1	0.1	Z	0.2	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	0.1	0.1	0.2
9-Jun	0.1	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	0.2	0.1	0.2	0.2	0.1	0.2
10-Jun	0.2	0.2	0.2	0.2	Z	0.2	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	0.1	0.1	0.1	0.2	0.3
11-Jun	0.2	0.5	0.2	0.2	0.1	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	0.2	0.2	0.1	0.2	0.5
12-Jun	Z	0.2	0.1	0.2	0.3	0.2	0.1	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.3
13-Jun	0.4	Z	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.2	0.4
14-Jun	0.3	0.3	Z	0.3	0.4	0.4	0.3	0.3	0.2	0.6	0.3	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.4	0.2	0.6
15-Jun	0.6	0.6	0.9	Z	0.9	0.7	0.6	0.6	0.7	0.5	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.5	0.2	0.1	0.3	0.9
16-Jun	0.2	0.1	0.2	0.2	Z	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
17-Jun	0.3	0.3	0.3	0.3	0.5	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	0.4	0.3	0.2	0.5
18-Jun	Z	0.2	0.4	0.6	0.8	0.8	0.7	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	0.3	0.3	0.3	0.8
19-Jun	0.3	Z	0.7	1.2	0.6	0.4	0.4	0.3	0.2	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	0.2	0.2	0.3	1.2
20-Jun	0.3	0.3	Z	0.5	0.7	0.5	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.7
21-Jun	0.2	0.2	0.3	Z	0.3	0.4	0.4	0.4	0.4	0.4	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.5	0.2	0.5
22-Jun	0.6	0.5	0.5	0.5	Z	0.6	0.6	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.6
23-Jun	0.2	0.4	0.5	0.6	0.8	Z	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.7	0.4	0.2	0.5	0.6	0.8	0.3	0.8
24-Jun	Z	0.9	0.8	1.0	1.0	0.9	0.8	0.6	0.9	0.6	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.7	0.4	1.0
25-Jun	1.1	Z	1.4	2.8	3.5	4.2	3.1	1.7	0.8	0.6	0.7	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.7	1.0	4.2
26-Jun	0.4	0.5	Z	1.3	1.5	1.2	0.4	1.1	1.0	1.1	0.6	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5	1.5
27-Jun	0.2	0.3	0.3	Z	0.8	0.4	0.4	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.4	0.2	0.8
28-Jun	0.6	0.7	0.5	0.7	Z	0.4	0.4	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.7
29-Jun	0.2	0.3	0.3	0.4	0.6	Z	0.4	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.2	0.6
30-Jun	Z	0.4	0.7	0.8	0.8	1.0	0.7	0.3	1.7	0.7	0.5	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.4	0.4	1.7
	0.3	0.3	0.4	0.6	0.6	0.6	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	Diurnal Average	
	1.1	0.9	1.4	2.8	3.5	4.2	3.1	1.7	1.7	1.1	0.7	0.4	0.3	0.3	0.3	0.3	0.5	0.5	0.7	0.6	0.4	0.5	0.6	0.8	Diurnal Maximum	

Z - zerospan C - Calibration

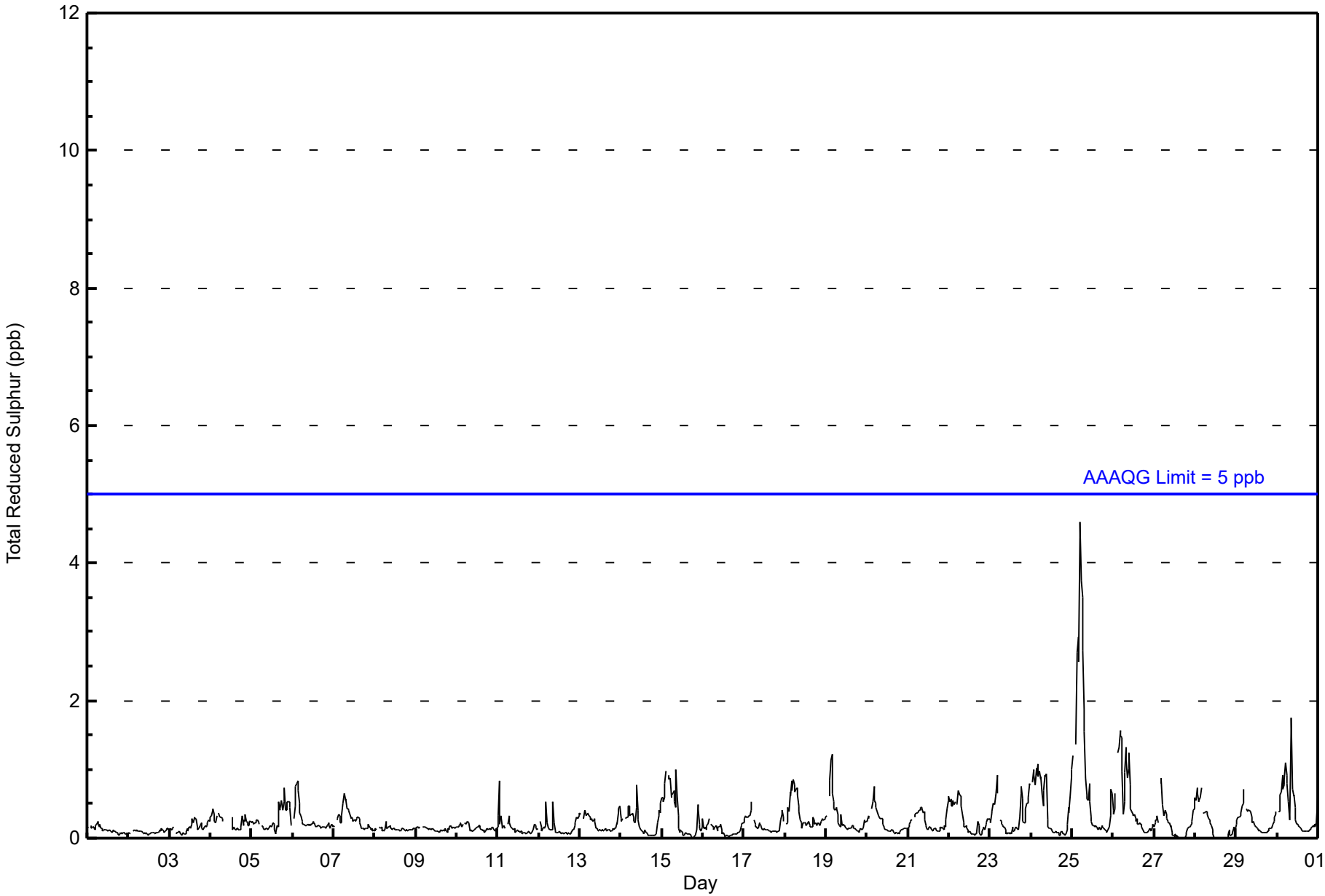
Alberta Ambient Air Quality Objective (AAAQO): 1-hour NA 24-hr NA

Wood Buffalo Environmental Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Ells River - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	681	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Reduced Sulphur (TRS) - ppb

Ells River - June 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	160	68	30	21	10	17	58	43	38	28	23	24	40	17	31	70	678
3 - 4	0	0	0	0	0	0	0	3	1	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	160	68	30	21	10	17	58	46	39	28	23	24	40	17	31	70	682

Total Number of Valid Hours: 682

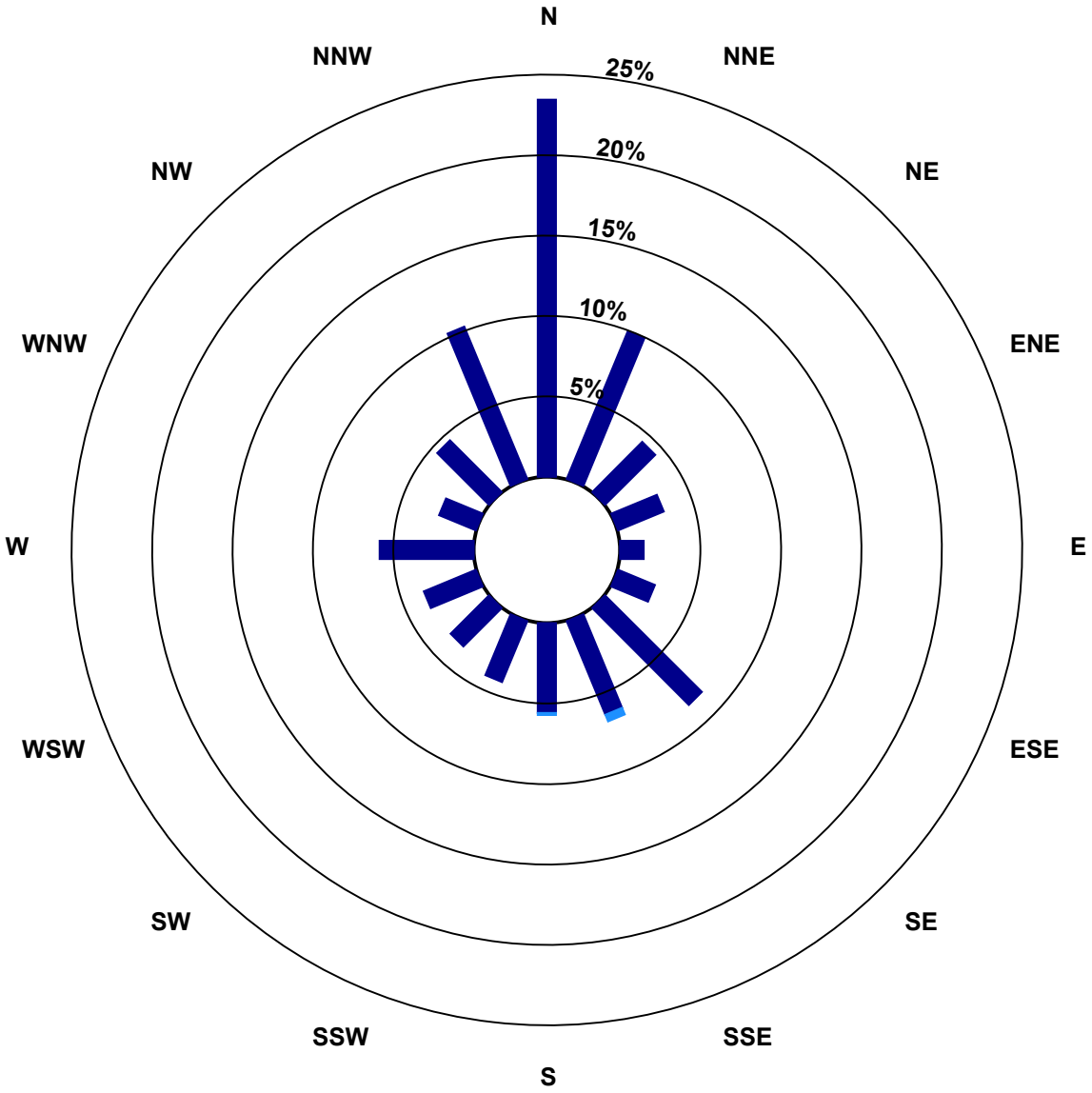
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Reduced Sulphur (TRS) - ppb

Ells River



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

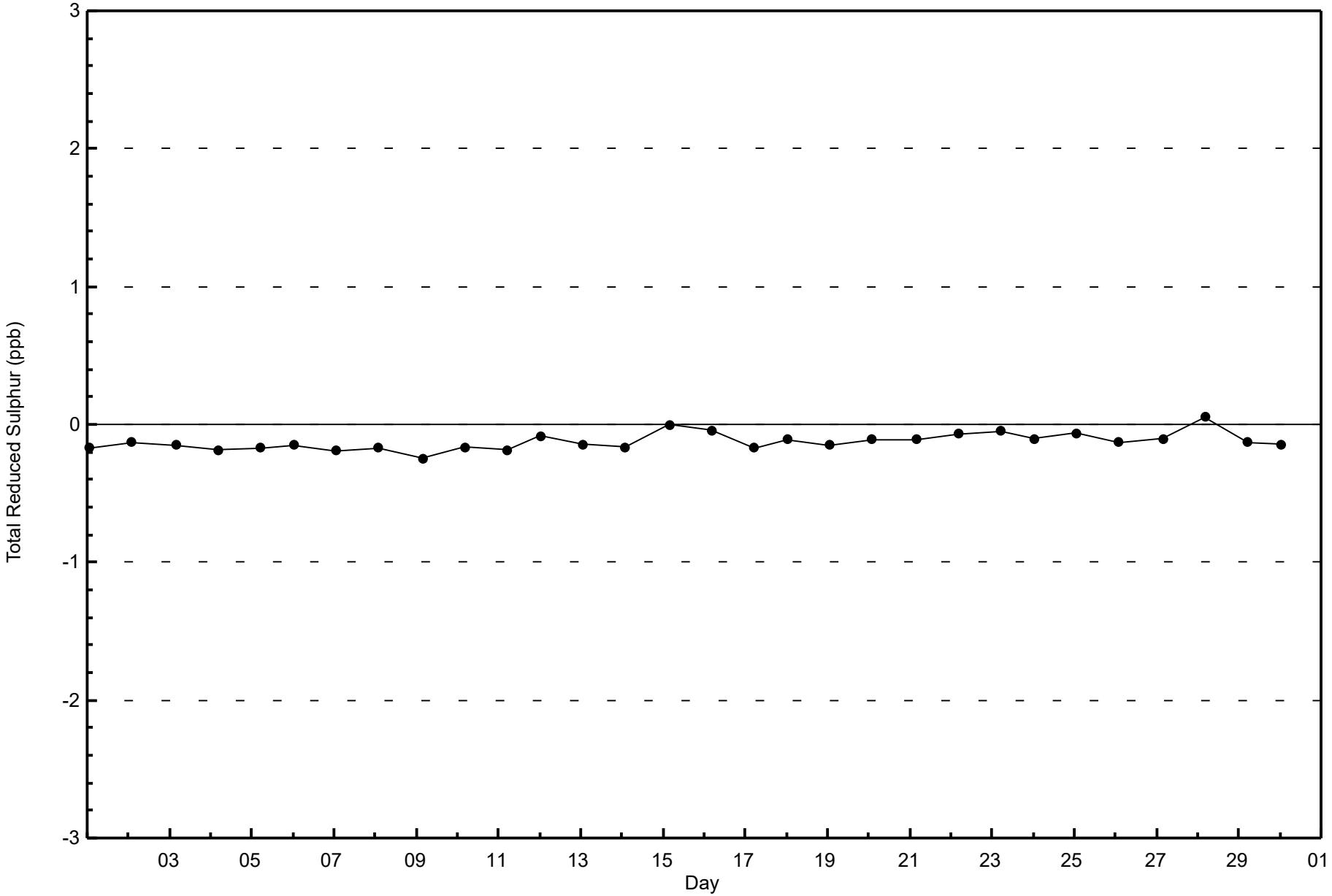
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Total Reduced Sulphur (TRS) - ppb

Ells River - June 2026

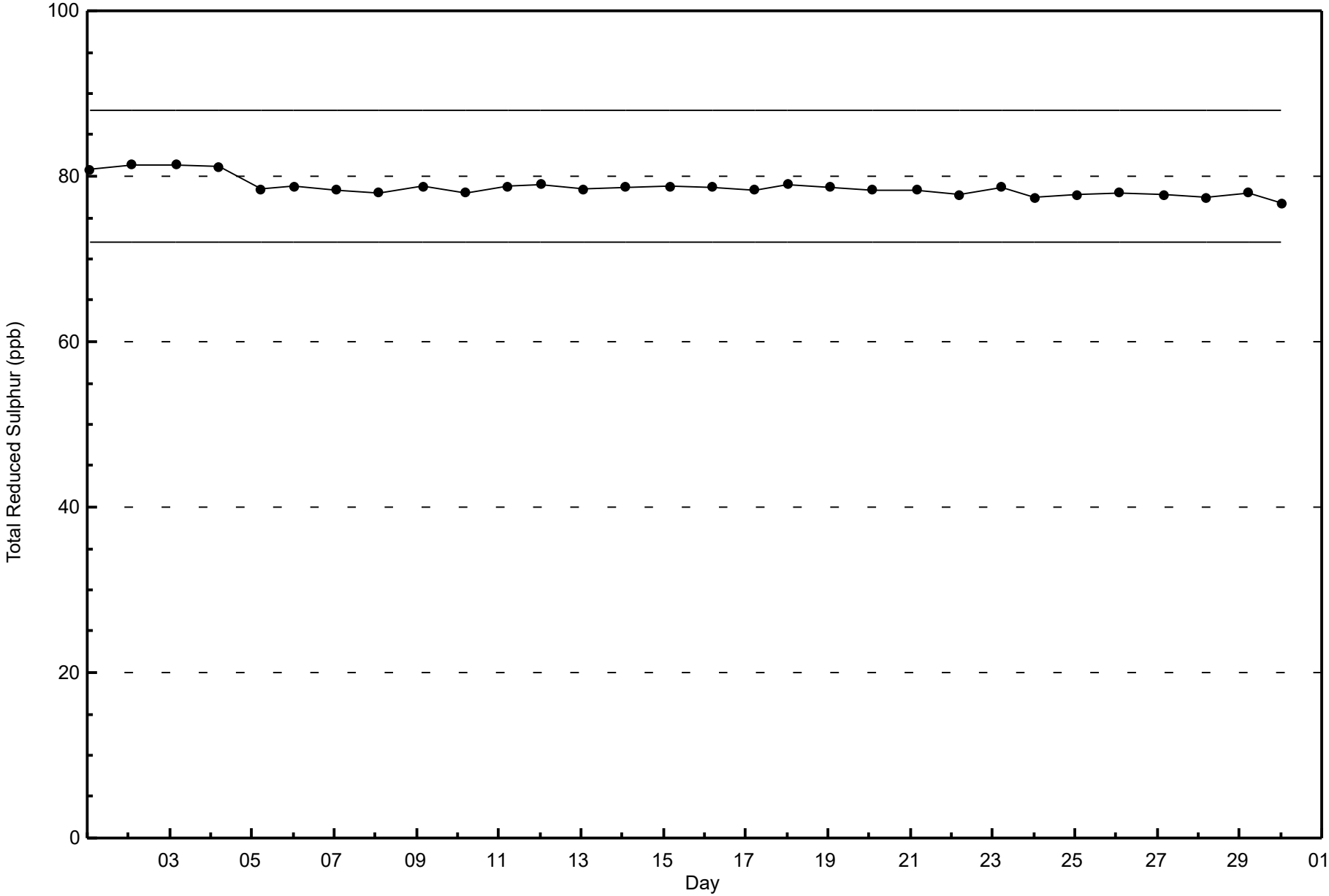


Wood Buffalo Environmental Association

Span Responses

Total Reduced Sulphur (TRS) - ppb

Ells River - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Ells River - June 2026

Maximum Value: 4.1 ppm on Jun 6 03:00

Maximum Daily Average: 2.2 ppm on Jun 15

Minimum Value: 1.9 ppm on Jun 23 15:00

Minimum Daily Average: 1.9 ppm on Jun 13

Maximum Diurnal Average: 2.3 ppm at hour 3

Minimum Diurnal Average: 1.9 ppm at hour 13

Monthly Average: 2.05 ppm

Percentiles: P_1 = 1.9 P_{10} = 1.9 Q_1 = 1.9 Median = 2.0 Q_3 = 2.1 P_{90} = 2.2 P_{99} = 3.0

Hours in Service:	720
Hours of Data:	632
Hours of Missing Data:	88
Hours of Calibration:	34
Percent Operational Time:	92.5

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-Jun	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	M	C	C	C	M	M	M	M	M	M	M	M	M	M	--	--
3-Jun	M	M	M	M	M	M	M	M	M	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	2.1	--	2.1
4-Jun	2.1	2.1	2.0	Z	2.1	2.4	2.3	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	2.1	2.3	2.1	2.4
5-Jun	2.2	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	2.0	2.0	2.2	2.2	2.0	2.0	2.2
6-Jun	2.0	2.1	4.1	2.9	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	4.1
7-Jun	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	2.1	2.0	2.0	2.0	2.0	2.0	2.2	2.0	2.0	2.1	2.0	2.2
8-Jun	2.0	Z	2.0	2.3	2.1	2.0	2.2	2.2	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.3
9-Jun	1.9	1.9	Z	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.2	2.3	2.4	2.8	2.1	2.0	2.0	2.0	2.0	2.8
10-Jun	2.0	2.1	2.1	Z	2.3	2.0	2.1	2.1	2.2	2.0	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.3
11-Jun	2.0	2.1	2.1	2.0	Z	2.1	2.1	2.1	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.3	2.3	2.3	2.0	2.3
12-Jun	2.0	2.1	2.2	2.4	2.4	Z	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.0	2.0	2.4
13-Jun	Z	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0
14-Jun	1.9	Z	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.3	2.4	2.0	2.4
15-Jun	2.8	3.0	Z	2.7	2.5	2.3	2.6	3.1	2.2	1.9	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.3	2.2	2.1	2.1	2.2	3.1
16-Jun	2.2	2.1	2.1	Z	2.3	2.2	2.0	2.0	2.1	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.0	2.3
17-Jun	2.1	2.3	2.2	2.1	Z	2.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.2	2.4	2.0	2.4
18-Jun	2.8	2.1	2.4	2.7	2.3	Z	2.3	2.1	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	1.9	1.9	2.0	2.0	2.2	2.3	1.9	1.9	2.1	2.8
19-Jun	Z	2.0	2.0	2.1	2.0	1.9	1.9	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.6	2.0	2.6
20-Jun	2.6	Z	3.3	2.6	2.6	2.7	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.2	2.3	1.9	2.1	3.3
21-Jun	2.0	2.2	Z	2.0	2.2	2.2	2.2	2.5	2.1	2.1	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.2	2.4	2.3	2.1	2.5
22-Jun	2.1	2.2	2.2	Z	2.1	2.2	2.9	3.2	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	3.2
23-Jun	1.9	1.9	2.0	1.9	Z	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	1.9	2.1
24-Jun	2.1	2.1	2.1	2.1	2.2	Z	2.2	2.2	2.2	2.0	2.0	UO	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.2
25-Jun	Z	2.1	2.1	2.1	2.2	2.2	2.4	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.4
26-Jun	2.0	Z	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.2
27-Jun	2.0	2.0	Z	2.0	2.0	2.2	2.4	2.2	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.2	2.0	2.4
28-Jun	2.2	2.8	2.4	Z	3.7	2.2	2.2	2.4	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.4	2.8	2.2	3.7
29-Jun	2.7	3.7	2.5	2.4	Z	2.7	2.4	2.3	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.2	3.7
30-Jun	2.2	2.1	2.2	2.2	2.2	Z	2.1	2.0	2.0	2.0	2.0	1.9	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	2.2
	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	Diurnal Average	
	2.8	3.7	4.1	2.9	3.7	2.7	2.9	3.2	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.2	2.3	2.4	2.8	2.3	2.3	2.4	2.8	Diurnal Maximum	

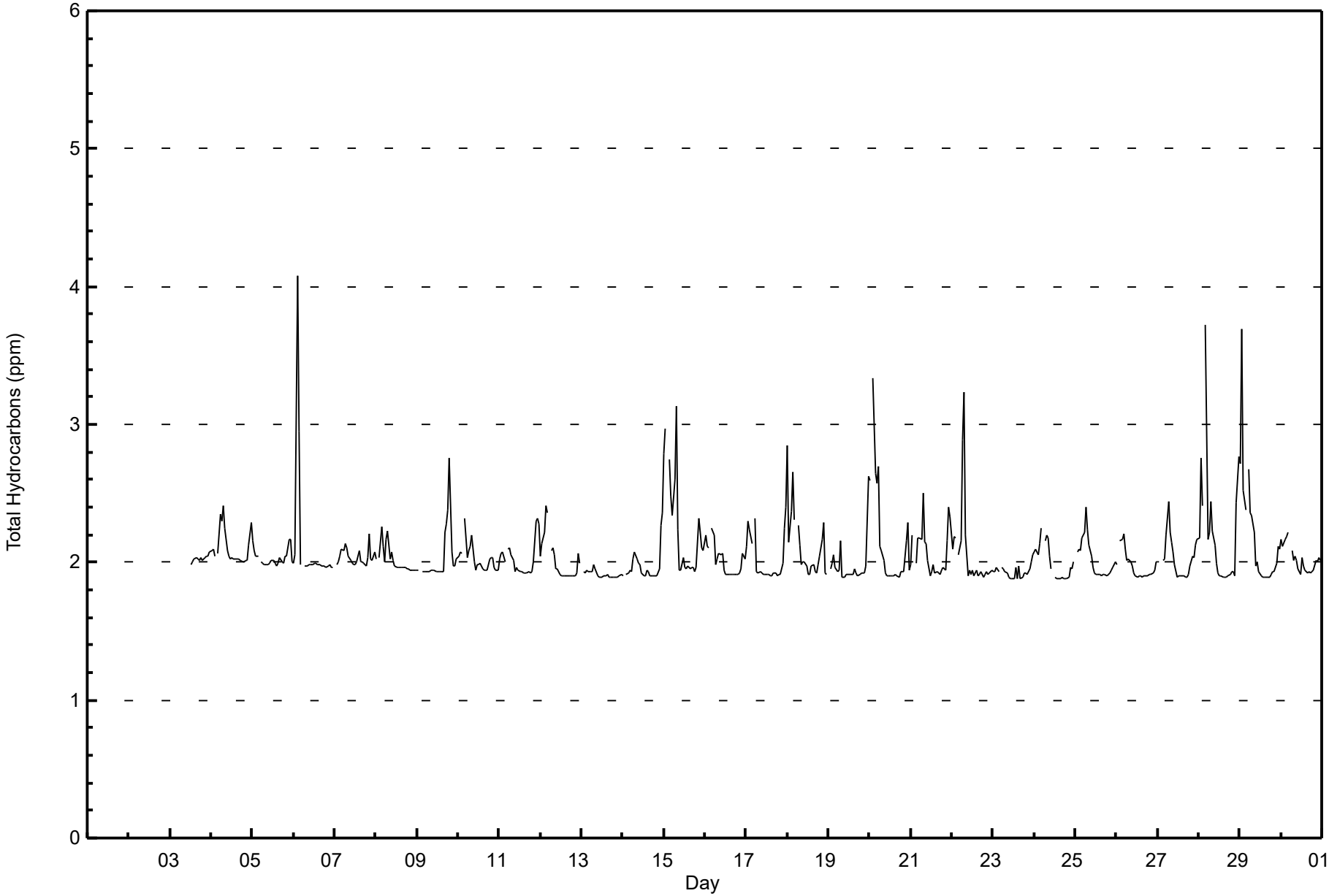
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Ells River - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Total Hydrocarbons (THC) - ppm

Ells River - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	450	71.20	71.20
2.1 - 3.0	176	27.85	99.05
3.1 - 10.0	6	0.95	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 632

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Ells River - June 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	105	52	21	19	2	11	43	33	26	28	20	22	27	12	6	22	449
2.1 - 3.0	35	7	4	0	1	1	10	11	15	2	4	3	14	4	22	42	175
3.1 - 10.0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	6
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	142	59	25	19	3	12	53	44	41	30	24	25	41	16	31	65	630

Total Number of Valid Hours: 630

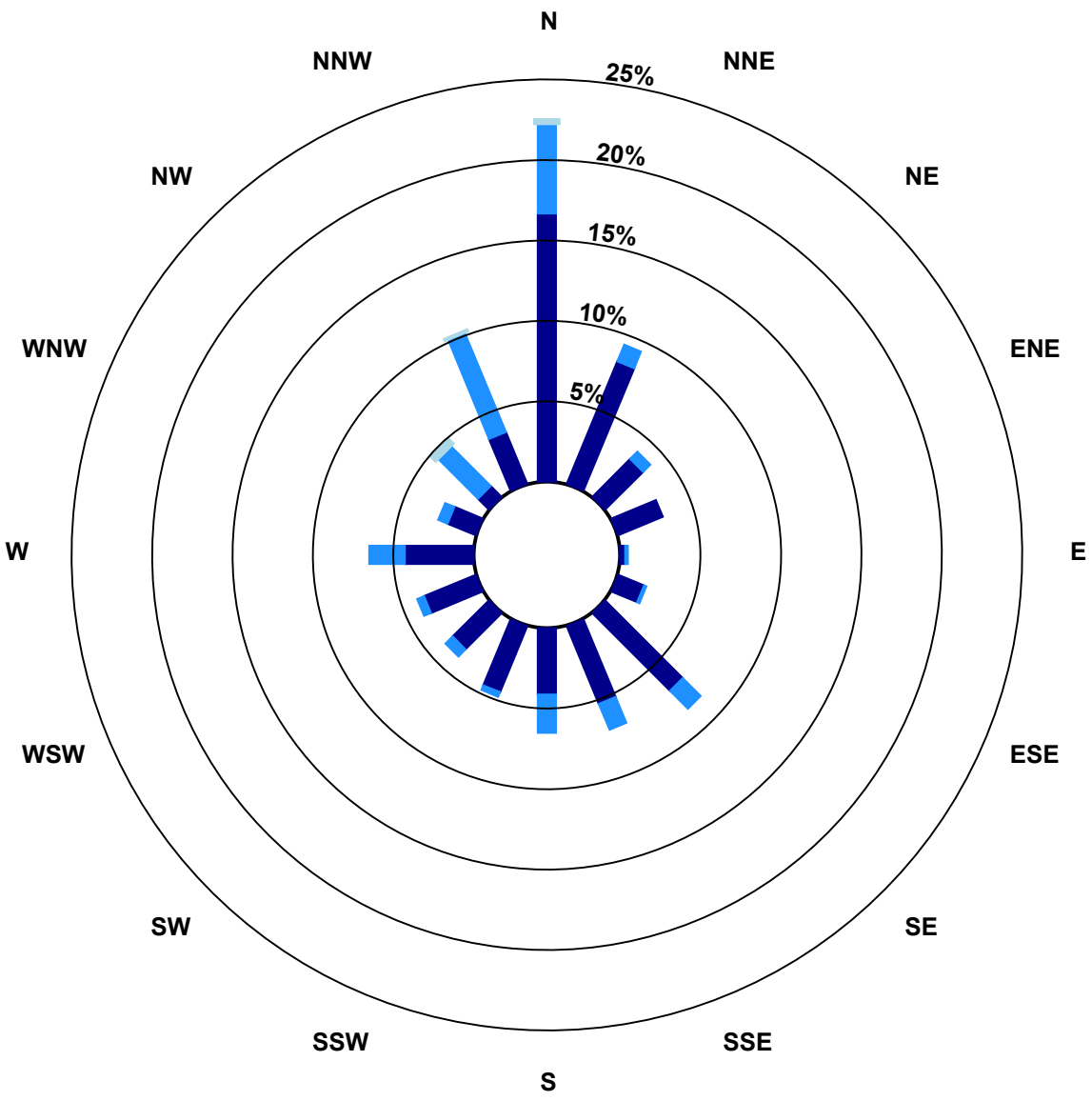
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Ells River



Classes (ppm)

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

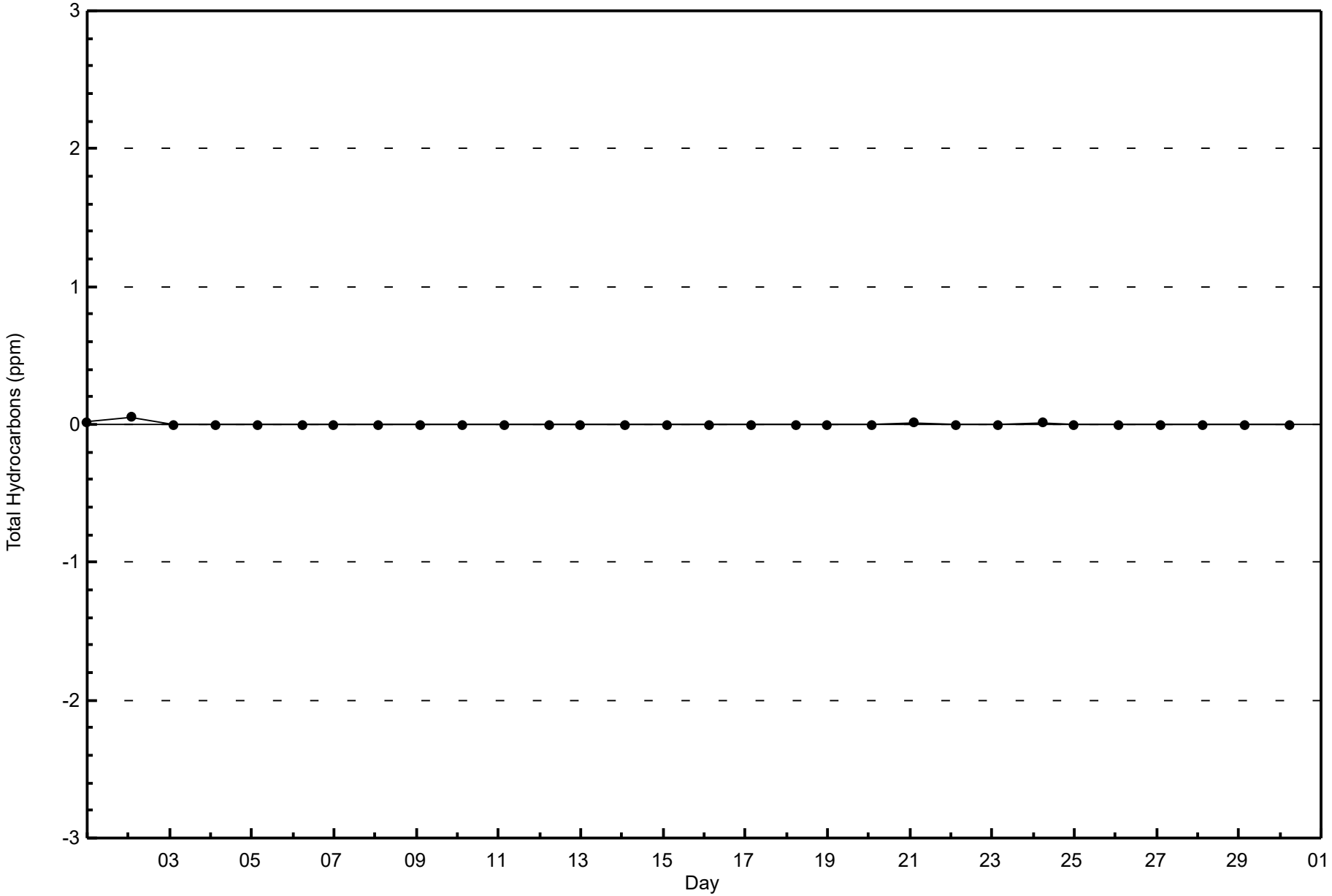
Total Number of Valid Hours: 630

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Ells River - June 2026

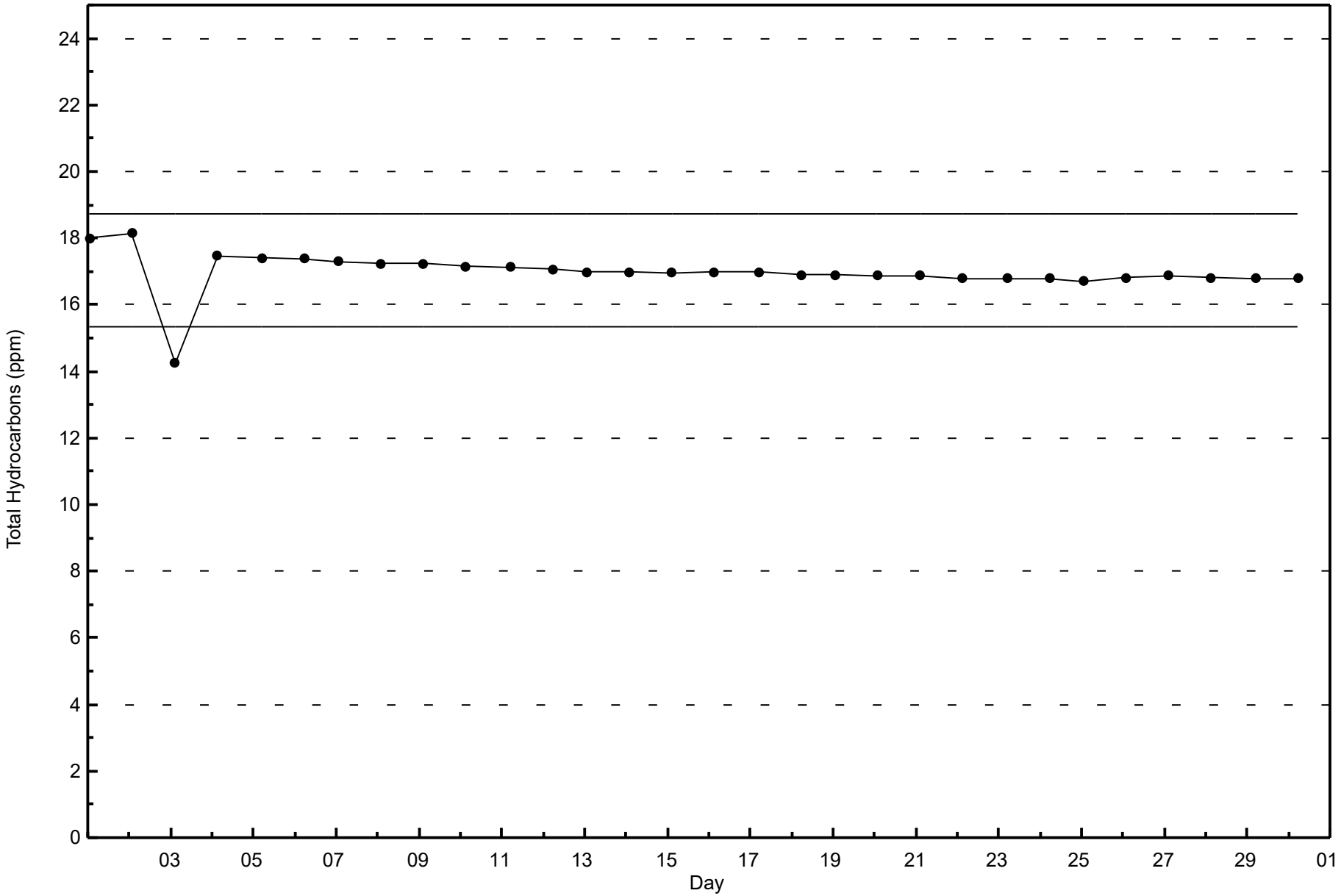


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Ells River - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Ells River - June 2026

Maximum Value: 0.677 ppm on Jun 15 08:00

Maximum Daily Average: 0.052 ppm on Jun 15

Minimum Value: 0.000 ppm on Jun 3 13:00

Minimum Daily Average: 0.000 ppm on Jun 4

Maximum Diurnal Average: 0.026 ppm at hour 8

Minimum Diurnal Average: 0.000 ppm at hour 12

Monthly Average: 0.004 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:	632
Hours of Missing Data:	88
Hours of Calibration:	34
Percent Operational Time:	92.5

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-Jun	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	M	C	C	C	M	M	M	M	M	M	M	M	M	M	--	--
3-Jun	M	M	M	M	M	M	M	M	M	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-Jun	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
5-Jun	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
6-Jun	0.000	0.000	0.000	0.050	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.050
7-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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
11-Jun	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
12-Jun	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
13-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.133	0.677	0.105	0.000	0.000	0.000	0.000	0.002	0.021	0.000	0.000	0.012	0.000	0.000	0.230	0.015	0.000	0.000	0.052	0.677
16-Jun	0.014	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.011	0.038	0.063	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.063
17-Jun	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
18-Jun	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
19-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.016	0.017	0.000	0.000	0.000	0.000	0.002	0.017
21-Jun	0.000	0.000	Z	0.000	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006
22-Jun	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.017	0.000	0.000	0.000	0.002	0.029	0.005	0.039	0.000	0.000	0.000	0.000	0.002	0.001	0.000	0.000	0.000	0.004	0.039
23-Jun	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
24-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	UO	0.000	0.000	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-Jun	Z	0.000	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	0.000	0.000	0.000	0.000	0.001
26-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.085	0.157	0.002	0.009	0.026	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.032	0.062	0.051	0.057	0.067	0.025	0.157
28-Jun	0.084	0.139	0.079	Z	0.003	0.000	0.000	0.000	0.000	0.000	0.006	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	0.014	0.139
29-Jun	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	0.001	0.000	0.000	0.001
30-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.042	0.001	0.000	0.000	0.023	0.021	0.016	0.000	0.007	0.001	0.000	0.000	0.005	0.042
	0.004	0.006	0.003	0.002	0.000	0.004	0.011	0.026	0.005	0.002	0.004	0.000	0.003	0.000	0.002	0.000	0.001	0.001	0.001	0.002	0.011	0.002	0.002	0.002	Diurnal Average	
	0.084	0.139	0.079	0.050	0.003	0.085	0.157	0.677	0.105	0.038	0.063	0.002	0.042	0.005	0.039	0.008	0.023	0.021	0.016	0.032	0.230	0.051	0.057	0.067	Diurnal Maximum	

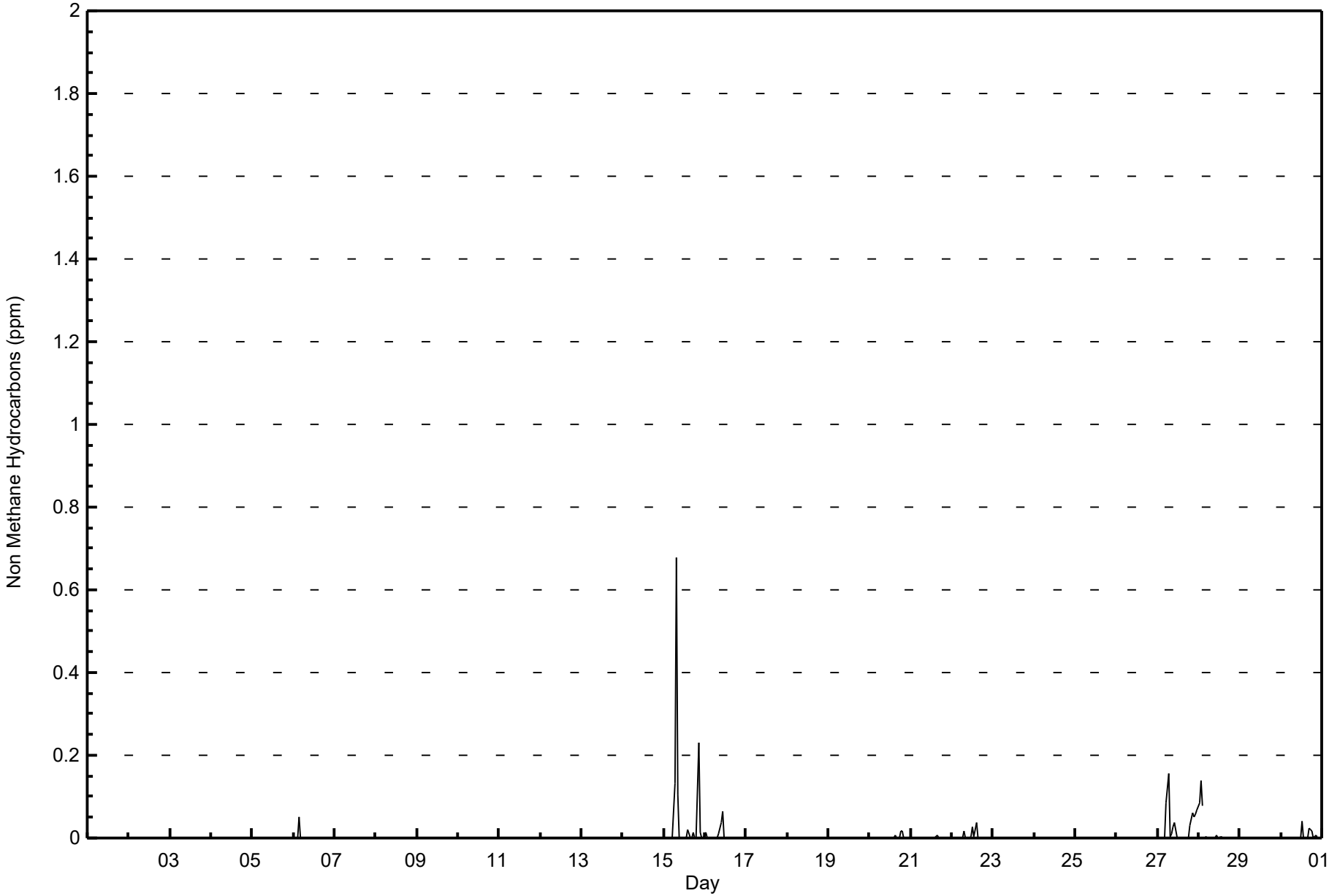
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Ells River - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Ells River - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	595	94.15	94.15
0.006 - 0.05	24	3.80	97.94
0.06 - 0.1	10	1.58	99.53
> 0.1	3	0.47	100.00

Total Number of Valid Hours: 632

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Ells River - June 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	135	55	18	12	2	11	52	44	40	30	24	25	40	15	27	63	593
0.006 - 0.05	4	2	6	7	1	0	1	0	1	0	0	0	0	0	2	0	24
0.06 - 0.1	2	1	0	0	0	1	0	0	0	0	0	0	1	1	2	2	10
> 0.1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Totals	142	59	25	19	3	12	53	44	41	30	24	25	41	16	31	65	630

Total Number of Valid Hours: 630

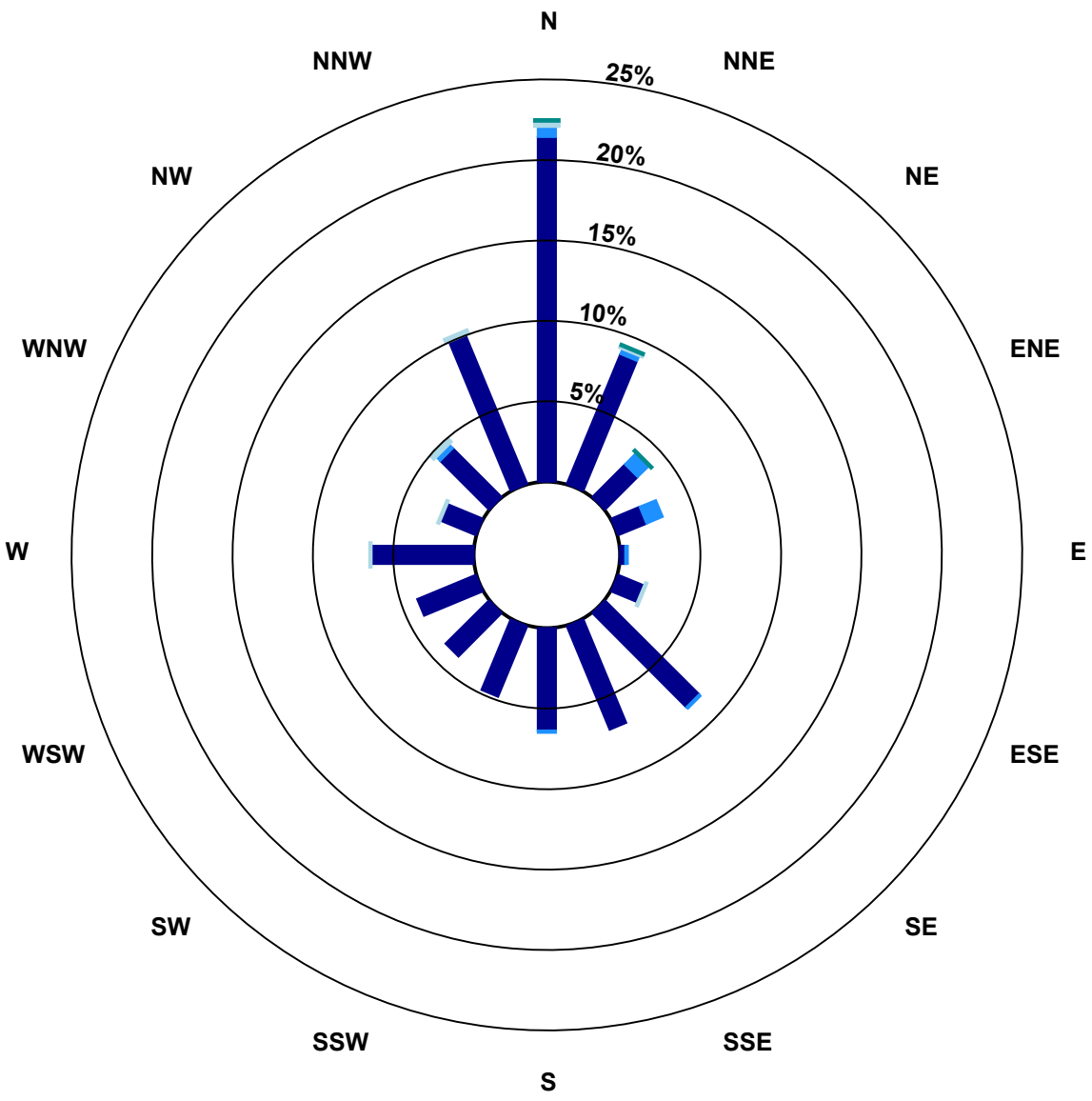
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Non Methane Hydrocarbons (NMHC) - ppm

Ells River



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

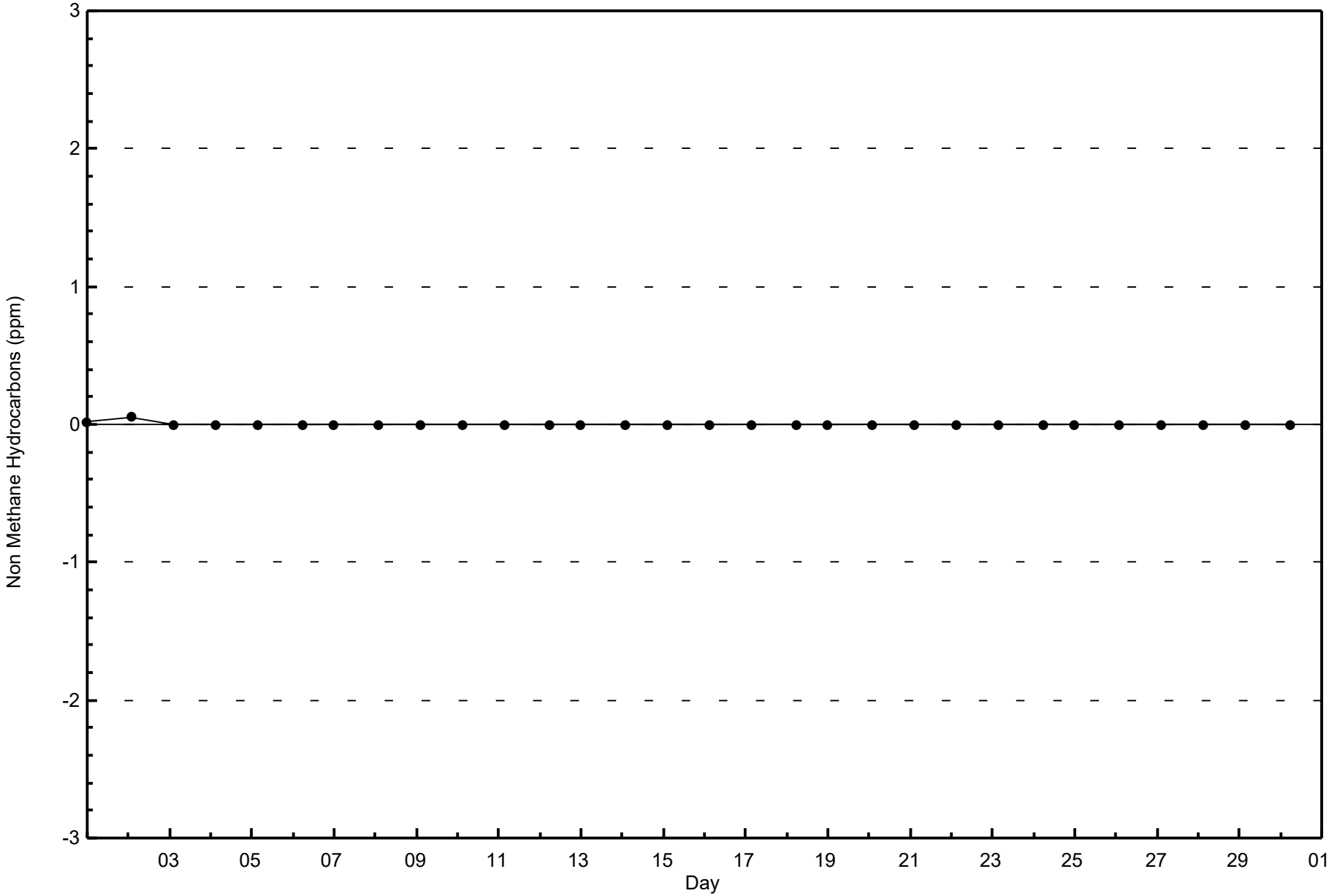
Total Number of Valid Hours: 630

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Ells River - June 2026

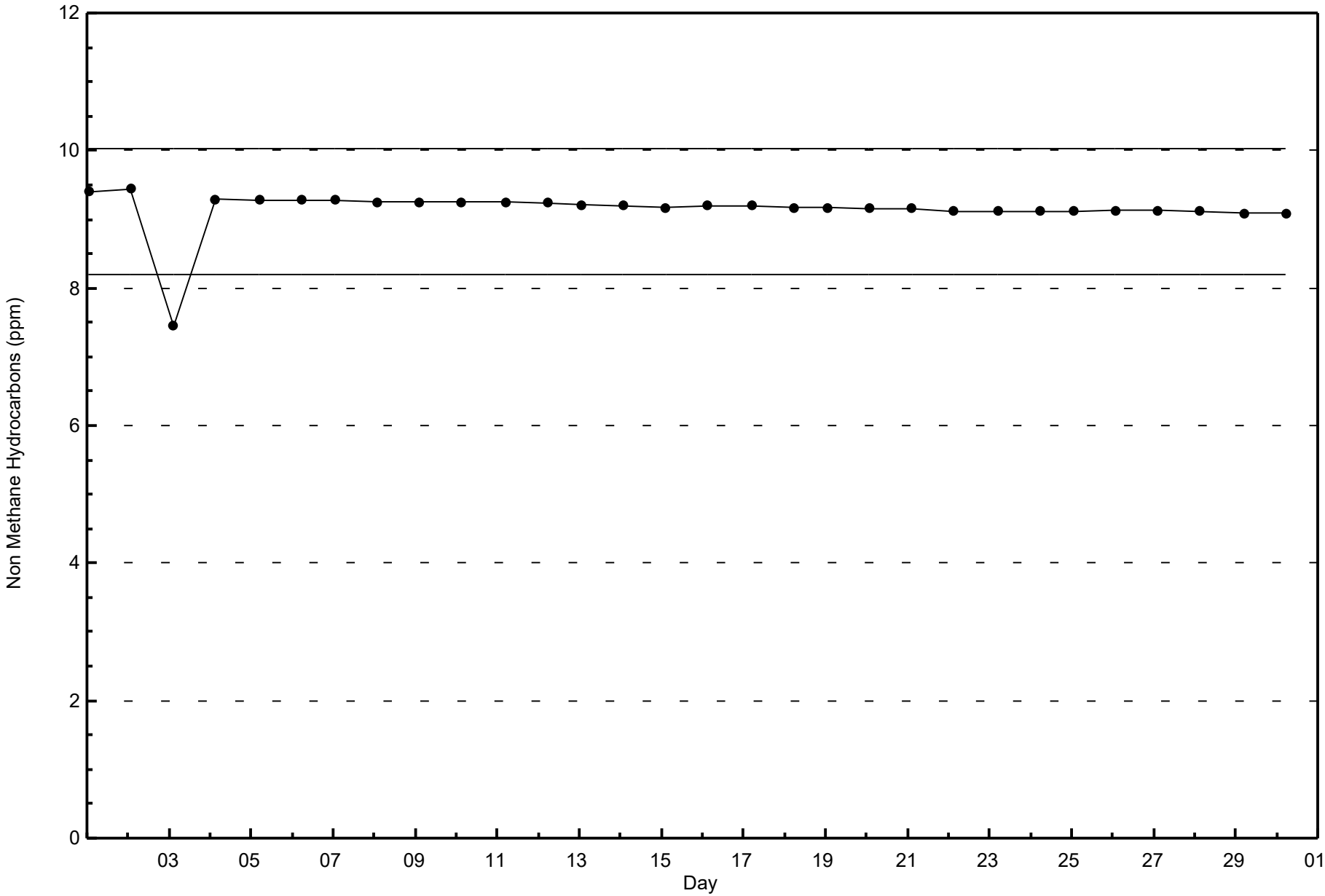


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Ells River - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Ells River - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.1 ppm on Jun 6 03:00 Maximum Daily Average: 2.2 ppm on Jun 15

Minimum Value: 1.9 ppm on Jun 23 15:00 Minimum Daily Average: 1.9 ppm on Jun 13
Maximum Diurnal Average: 2.3 ppm at hour 3 Minimum Diurnal Average: 1.9 ppm at hour 13
Monthly Average: 2.04 ppm Percentiles: P_1 = 1.9 P_{10} = 1.9 Q_1 = 1.9 Median = 2.0 Q_3 = 2.1 P_{90} = 2.2 P_{99} = 2.9

Hours in Service:	720
Hours of Data:	632
Hours of Missing Data:	88
Hours of Calibration:	34
Percent Operational Time:	92.5

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-Jun	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	--
2-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	M	C	C	C	M	M	M	M	M	M	M	M	M	M	--	--
3-Jun	M	M	M	M	M	M	M	M	M	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	2.1	--	2.1
4-Jun	2.1	2.1	2.0	Z	2.1	2.4	2.3	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	2.1	2.3	2.1	2.4
5-Jun	2.2	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	2.0	2.0	2.2	2.2	2.0	2.0	2.2
6-Jun	2.0	2.1	4.1	2.9	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	4.1
7-Jun	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	2.1	2.0	2.0	2.0	2.0	2.0	2.2	2.0	2.0	2.1	2.0	2.2
8-Jun	2.0	Z	2.0	2.3	2.1	2.0	2.2	2.2	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.3
9-Jun	1.9	1.9	Z	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.2	2.3	2.4	2.8	2.1	2.0	2.0	2.0	2.0	2.8
10-Jun	2.0	2.1	2.1	Z	2.3	2.0	2.1	2.1	2.2	2.0	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.3
11-Jun	2.0	2.1	2.1	2.0	Z	2.1	2.1	2.1	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.3	2.3	2.3	2.0	2.3
12-Jun	2.0	2.1	2.2	2.4	2.4	Z	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.0	2.0	2.4
13-Jun	Z	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0
14-Jun	1.9	Z	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.3	2.4	2.0	2.4
15-Jun	2.8	3.0	Z	2.7	2.5	2.3	2.5	2.5	2.1	1.9	1.9	2.0	2.0	1.9	1.9	2.0	2.0	1.9	1.9	2.0	2.1	2.2	2.1	2.1	2.2	3.0
16-Jun	2.2	2.1	2.1	Z	2.3	2.2	2.0	2.0	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.0	2.3
17-Jun	2.1	2.3	2.2	2.1	Z	2.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.2	2.4	2.0	2.4
18-Jun	2.8	2.1	2.4	2.7	2.3	Z	2.3	2.1	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	1.9	1.9	2.0	2.0	2.2	2.3	1.9	1.9	2.1	2.8
19-Jun	Z	2.0	2.0	2.1	2.0	1.9	1.9	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.6	2.0	2.6
20-Jun	2.6	Z	3.3	2.6	2.6	2.7	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.2	2.3	1.9	2.1	3.3
21-Jun	2.0	2.2	Z	2.0	2.2	2.2	2.2	2.5	2.1	2.1	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.2	2.4	2.3	2.1	2.5
22-Jun	2.1	2.2	2.2	Z	2.1	2.2	2.9	3.2	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	3.2
23-Jun	1.9	1.9	2.0	1.9	Z	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	1.9	2.1
24-Jun	2.1	2.1	2.1	2.1	2.2	Z	2.2	2.2	2.2	2.0	2.0	UO	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.2
25-Jun	Z	2.1	2.1	2.1	2.2	2.2	2.4	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.4
26-Jun	2.0	Z	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.2
27-Jun	2.0	2.0	Z	2.0	2.0	2.1	2.3	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.1	2.0	2.3
28-Jun	2.1	2.6	2.3	Z	3.7	2.2	2.2	2.4	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.4	2.8	2.2	3.7
29-Jun	2.7	3.7	2.5	2.4	Z	2.7	2.4	2.3	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.2	3.7
30-Jun	2.2	2.1	2.2	2.2	2.2	Z	2.1	2.0	2.0	2.0	2.0	1.9	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	2.2
	2.2	2.2	2.3	2.2	2.2	2.2	2.1	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	Diurnal Average	
	2.8	3.7	4.1	2.9	3.7	2.7	2.9	3.2	2.2	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.2	2.3	2.4	2.8	2.2	2.3	2.4	2.8	Diurnal Maximum	

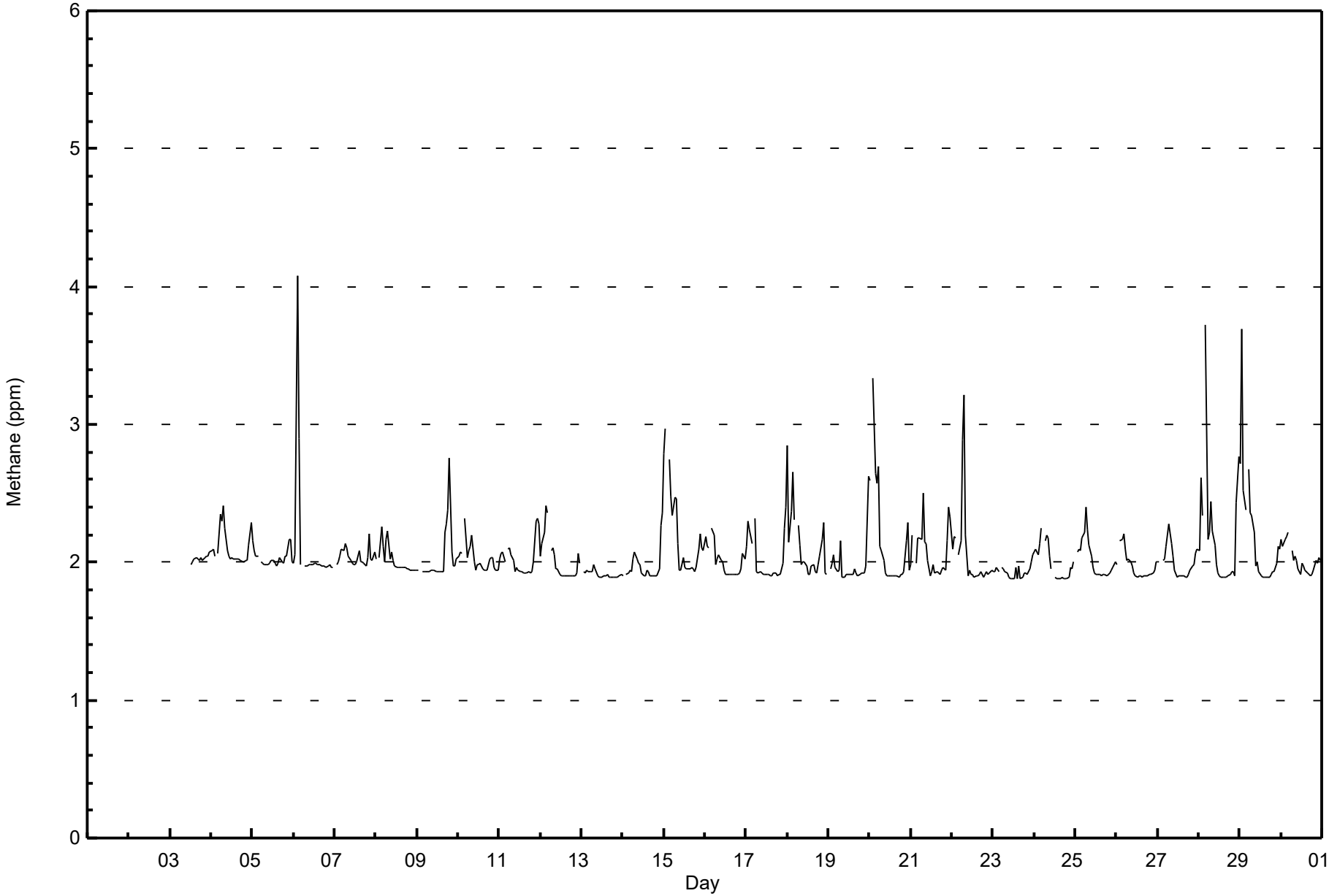
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Ells River - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	453	71.68	71.68
2.1 - 3.0	174	27.53	99.21
3.1 - 10.0	5	0.79	100.00
> 10.0	0	0.00	100.00

Total Number of Valid Hours: 632

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Methane (CH_4) - ppm

Ells River - June 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	105	53	22	19	2	11	44	33	26	28	20	22	27	12	6	22	452
2.1 - 3.0	36	6	3	0	1	1	9	11	15	2	4	3	14	4	22	42	173
3.1 - 10.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	5
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	142	59	25	19	3	12	53	44	41	30	24	25	41	16	31	65	630

Total Number of Valid Hours: 630

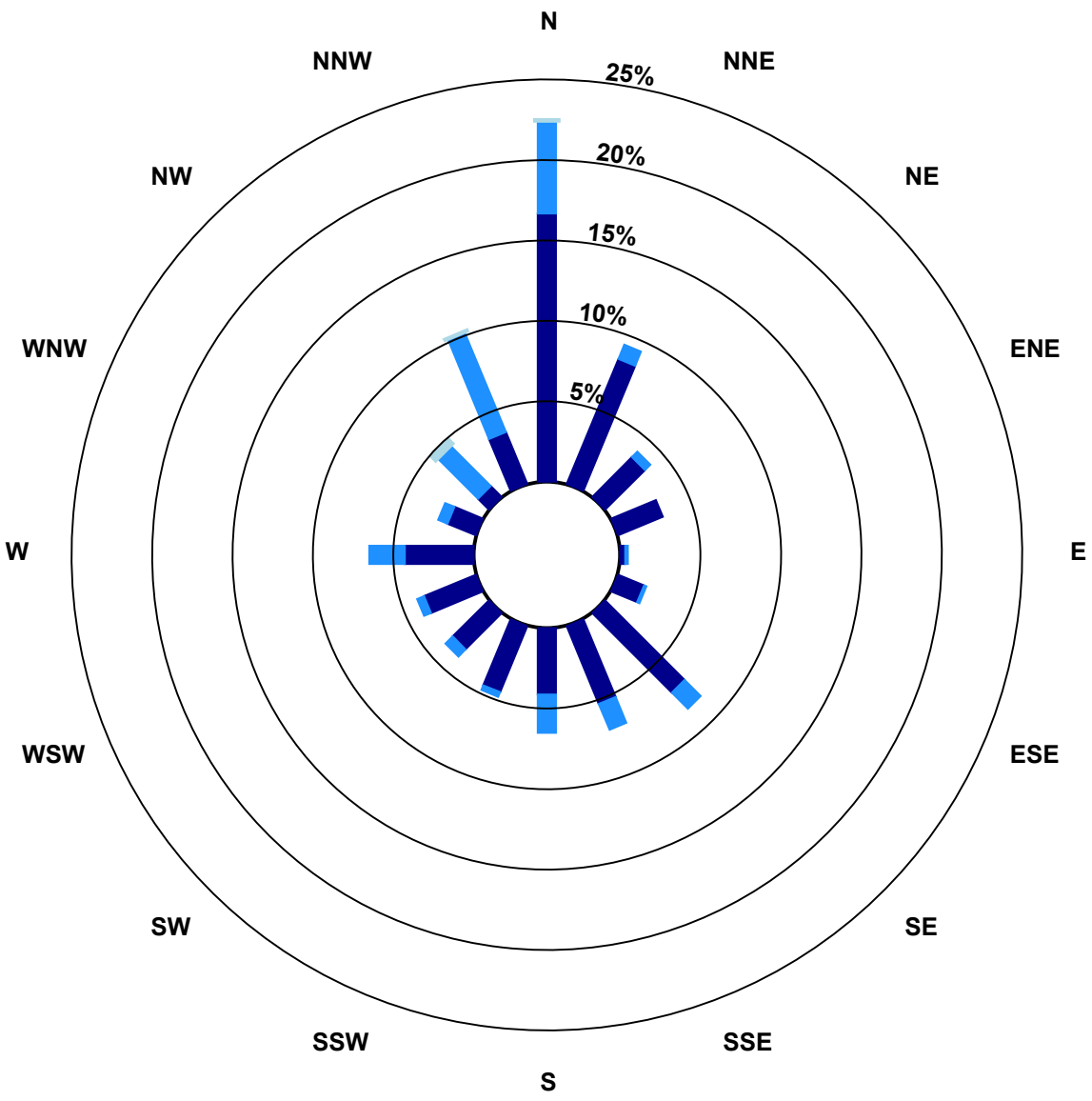
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Methane (CH_4) - ppm

Ells River



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

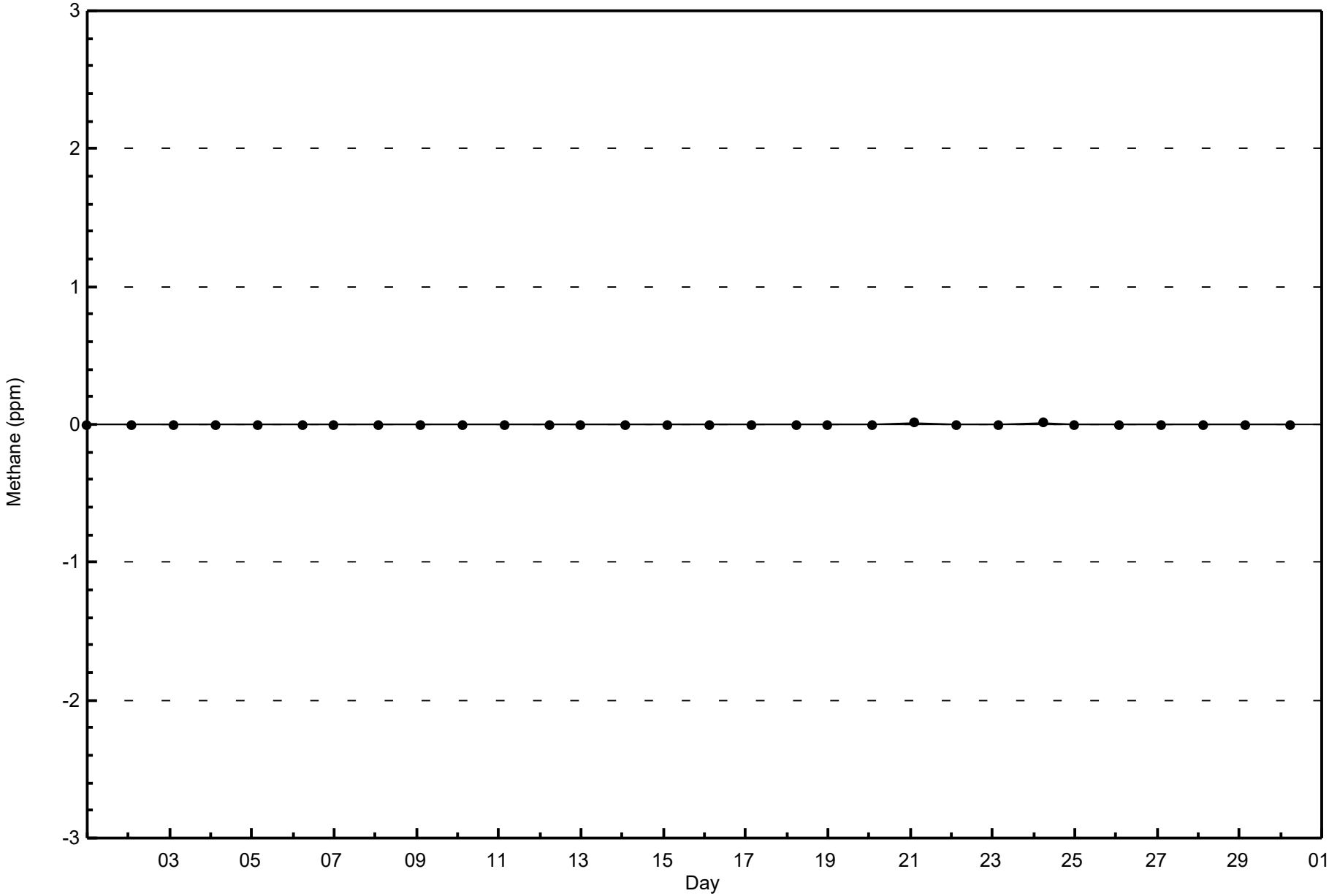
Total Number of Valid Hours: 630

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Ells River - June 2026

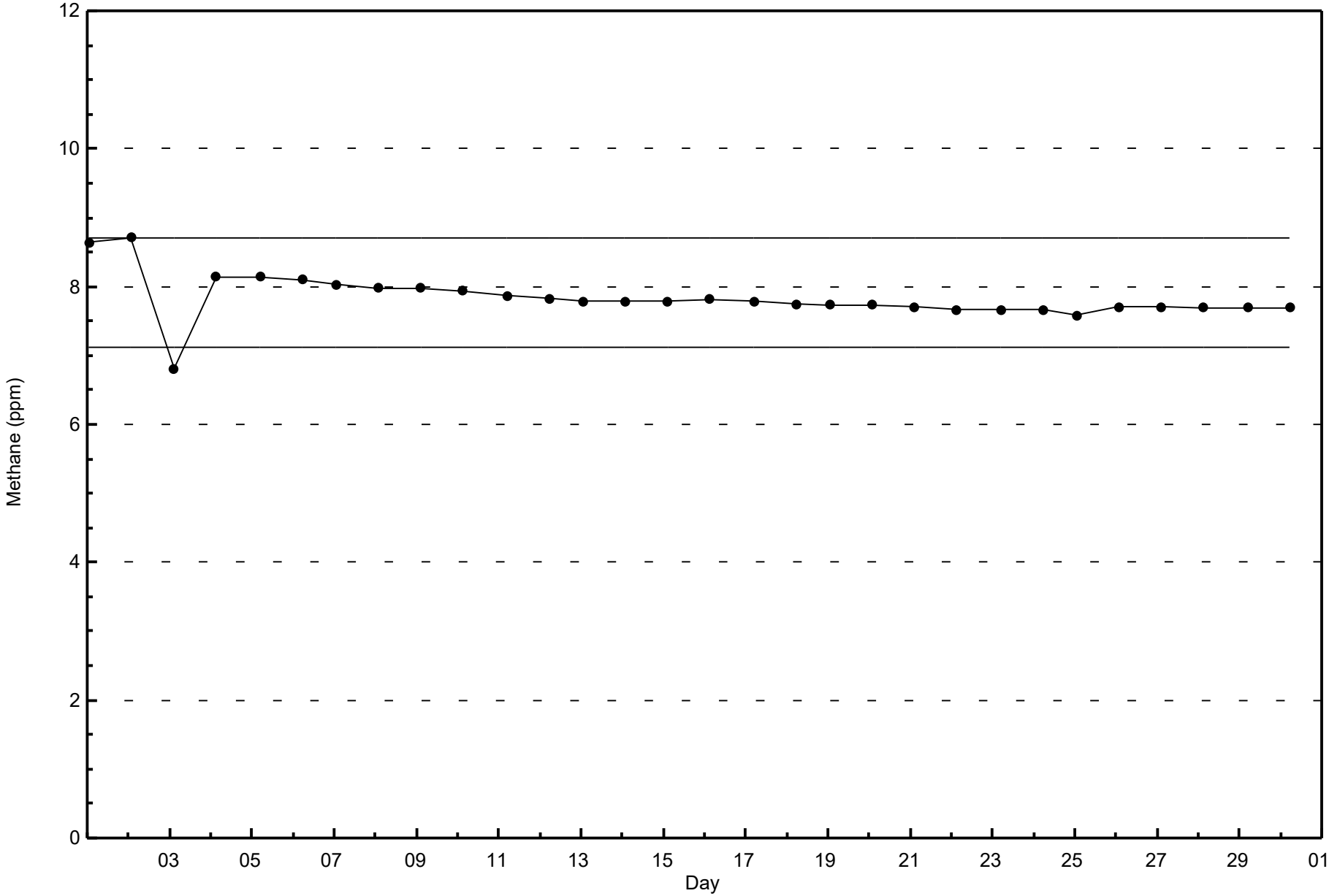


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Ells River - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Ells River - June 2026

Maximum Value: 55.0 ppb on Jun 6 03:00

Maximum Daily Average: 8.5 ppb on Jun 15

Minimum Value: 0.0 ppb on Jun 1 03:00

Minimum Daily Average: 0.1 ppb on Jun 8

Maximum Diurnal Average: 8.5 ppb at hour 8

Minimum Diurnal Average: 0.2 ppb at hour 21

Monthly Average: 1.84 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.3 Q_3 = 1.0 P_{90} = 3.6 P_{99} = 23.2

Hours in Service:	720
Hours of Data:	628
Hours of Missing Data:	92
Hours of Calibration:	38
Percent Operational Time:	92.5

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-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.9	4.2	1.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.3	4.2
2-Jun	0.0	0.0	0.0	0.0	0.1	Z	1.0	0.6	0.8	0.4	0.3	0.2	0.5	1.1	0.2	0.6	0.5	0.6	0.5	0.2	0.2	0.1	0.1	0.0	0.3	1.1
3-Jun	Z	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.7	0.8	0.3	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.2	0.8
4-Jun	0.0	Z	0.0	0.0	1.1	11.3	12.5	17.2	6.3	1.5	0.4	0.4	0.4	0.3	0.3	0.2	0.3	0.1	0.0	0.0	0.2	0.0	0.0	0.2	2.3	17.2
5-Jun	0.1	0.1	Z	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.3	0.3	0.3	0.1	0.0	0.0	0.2	0.3	0.1	0.3	0.0	0.0	0.0	0.0	0.1	0.3
6-Jun	0.0	0.7	55.0	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	2.4	55.0
7-Jun	0.0	0.0	0.0	0.0	Z	0.7	1.6	2.9	1.3	2.9	2.0	2.5	2.2	1.4	1.8	1.1	0.6	0.3	0.1	0.1	0.1	0.0	0.5	0.1	1.0	2.9
8-Jun	0.0	0.0	0.0	0.0	0.1	Z	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	0.0	0.0	0.0	0.1	1.0
9-Jun	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	0.6	0.3	0.2	0.1	0.1	1.0	0.5	0.2	0.1	1.0
10-Jun	0.3	Z	0.2	0.6	4.0	1.4	4.2	4.1	2.5	0.6	C	C	C	C	C	0.1	0.4	0.4	1.3	2.0	1.0	0.5	0.6	0.0	1.3	4.2
11-Jun	0.4	0.5	Z	0.0	0.0	0.8	2.4	2.3	0.6	0.1	0.5	0.5	0.1	0.9	0.6	0.2	0.1	0.1	0.0	0.0	0.1	7.2	11.4	10.2	1.7	11.4
12-Jun	0.5	1.7	3.1	Z	2.0	1.1	1.2	1.5	2.2	0.7	0.4	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.0	0.1	0.3	0.0	0.7	3.1
13-Jun	0.0	0.0	0.1	0.0	Z	0.1	0.1	1.2	0.9	0.1	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	1.2
14-Jun	0.0	0.0	0.0	0.0	0.0	Z	2.2	3.2	2.6	2.4	2.6	0.8	0.5	0.3	0.3	0.1	0.2	0.1	0.0	0.0	0.0	0.0	2.4	3.2	0.9	3.2
15-Jun	Z	9.4	20.0	17.5	10.1	13.7	50.2	41.5	11.0	3.1	1.0	2.8	1.5	0.5	0.3	0.3	0.4	0.3	0.2	0.3	0.2	8.8	1.0	1.9	8.5	50.2
16-Jun	7.4	Z	1.0	6.4	14.7	17.0	1.0	3.9	5.2	2.8	3.5	1.4	0.5	0.3	0.3	0.5	0.3	0.3	0.1	0.0	0.1	0.2	0.0	0.0	2.9	17.0
17-Jun	0.0	0.0	Z	0.1	1.2	1.7	0.7	1.2	1.4	1.2	0.9	0.6	0.4	0.4	0.4	0.2	0.1	0.2	0.2	0.3	0.1	0.2	2.3	0.3	0.6	2.3
18-Jun	0.1	0.5	0.1	Z	2.2	1.4	2.4	2.5	0.3	0.7	1.7	3.7	1.0	1.0	0.5	1.3	0.3	0.3	0.5	1.0	0.3	0.4	0.0	0.0	1.0	3.7
19-Jun	0.0	0.0	0.0	0.1	Z	0.0	0.4	4.6	0.3	0.4	0.4	1.1	1.9	1.5	1.4	1.2	0.4	0.5	1.0	0.6	0.2	0.2	0.6	0.0	0.7	4.6
20-Jun	0.0	1.8	11.2	12.5	9.6	Z	8.6	12.4	8.8	2.9	1.1	1.1	0.5	0.7	0.6	0.7	0.8	0.4	0.8	1.7	1.5	0.5	0.4	0.4	3.4	12.5
21-Jun	Z	5.5	0.2	2.8	19.2	18.0	12.7	17.2	13.1	1.3	0.5	0.5	1.7	2.2	2.0	1.7	1.4	1.7	2.1	2.5	0.3	0.3	1.0	6.7	5.0	19.2
22-Jun	0.4	Z	0.2	0.2	0.7	3.6	31.8	52.3	11.2	1.0	3.6	1.9	2.0	0.5	0.7	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.0	0.0	4.9	52.3
23-Jun	0.1	0.1	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	0.1
24-Jun	UO	UO	UO	Z	UO	UO	UO	UO	UO	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	--	--
25-Jun	M	M	M	M	M	M	M	M	M	M	C	C	C	C	2.3	1.4	1.2	0.9	1.0	0.6	0.6	0.6	0.7	0.4	--	2.3
26-Jun	0.3	0.4	0.4	0.3	0.7	Z	0.8	2.3	3.4	1.9	0.9	0.4	0.4	0.3	0.7	0.2	0.1	0.1	0.0	0.2	0.3	0.0	0.2	0.2	0.6	3.4
27-Jun	Z	0.4	0.4	0.0	0.2	4.7	18.5	20.5	9.0	4.6	1.2	0.2	0.3	0.3	0.2	0.4	0.2	0.2	0.3	0.1	0.0	0.2	0.4	0.3	2.7	20.5
28-Jun	0.6	Z	4.2	24.7	24.3	0.9	9.7	13.3	9.0	5.2	1.7	0.8	0.5	0.3	0.3	0.5	0.4	0.3	0.5	0.4	0.3	0.3	0.3	0.6	4.3	24.7
29-Jun	0.8	1.0	Z	6.4	5.2	5.5	18.1	19.4	10.8	1.8	1.5	0.5	0.5	0.3	0.4	0.3	0.5	0.1	0.1	0.4	0.2	0.2	0.5	0.7	3.3	19.4
30-Jun	0.1	0.3	0.1	Z	0.6	0.7	0.7	0.4	1.8	0.9	0.9	0.5	1.2	1.4	0.4	0.4	0.4	0.2	0.2	0.5	0.8	0.4	0.1	0.2	0.6	1.8
	0.5	1.0	4.2	3.1	4.2	3.8	6.8	8.5	3.8	1.4	1.0	0.8	0.6	0.5	0.6	0.5	0.4	0.3	0.4	0.4	0.2	0.8	0.8	0.9	Diurnal Average	
	7.4	9.4	55.0	24.7	24.3	18.0	50.2	52.3	13.1	5.2	3.6	3.7	2.2	2.2	2.3	1.7	1.4	1.7	2.1	2.5	1.5	8.8	11.4	10.2	Diurnal Maximum	

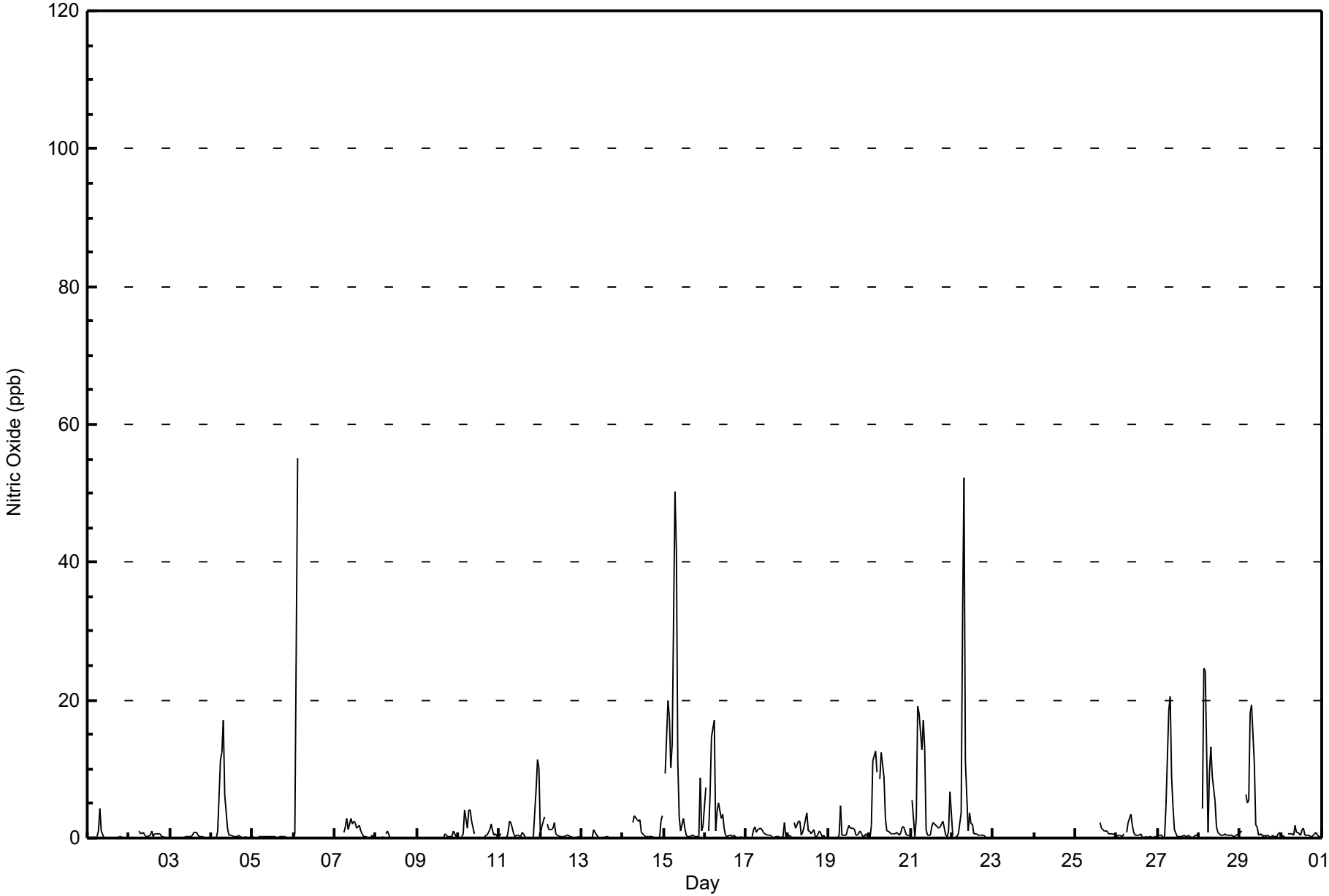
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Ells River - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	621	98.89	98.89
21 - 40	3	0.48	99.36
11 - 80	4	0.64	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 628

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Ells River - June 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	160	65	28	21	9	17	47	25	33	23	19	25	41	14	25	67	619
21 - 40	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3
11 - 80	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	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	161	65	28	21	9	17	47	25	33	23	19	25	41	15	28	69	626

Total Number of Valid Hours: 626

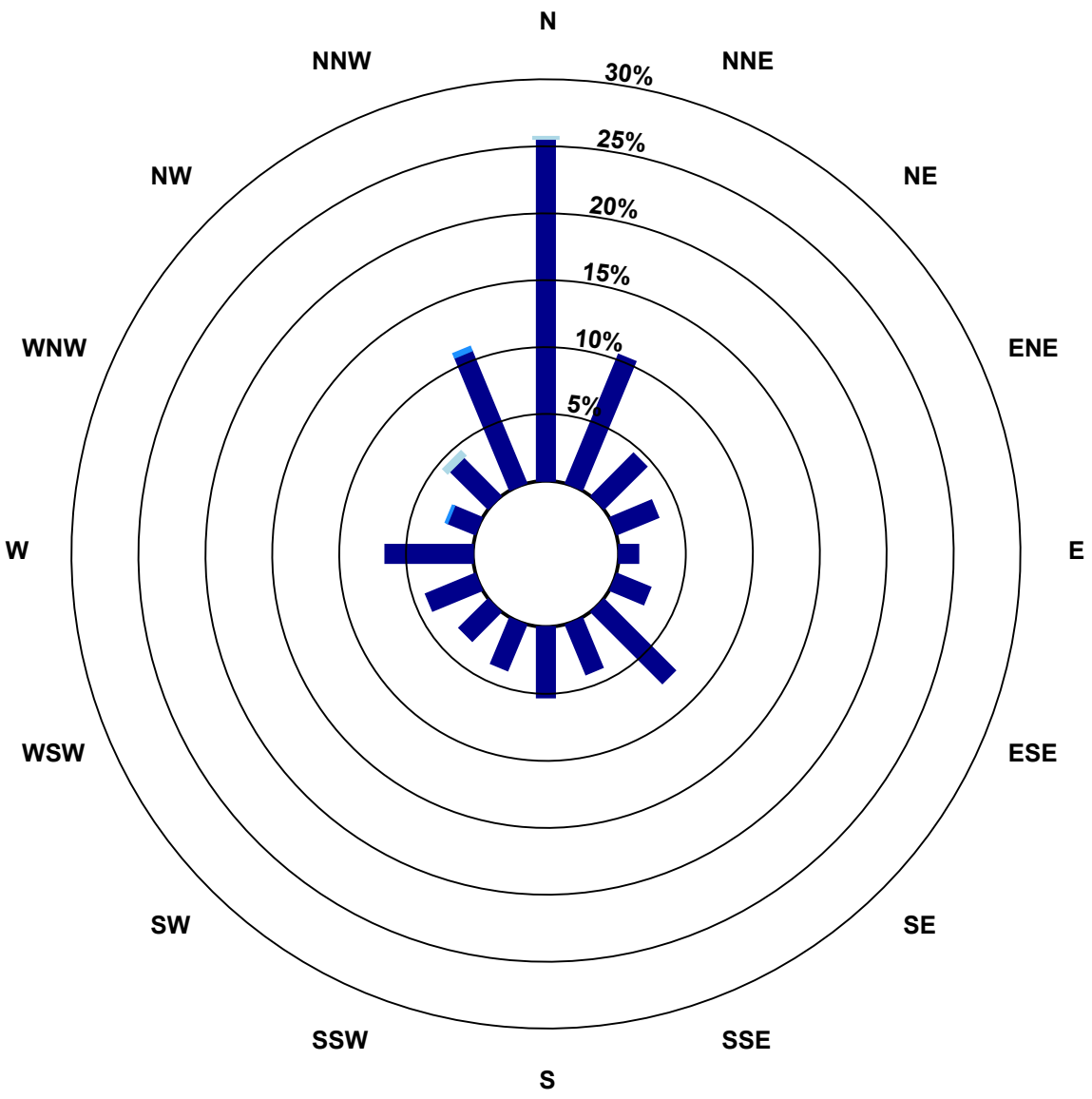
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Ells River



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

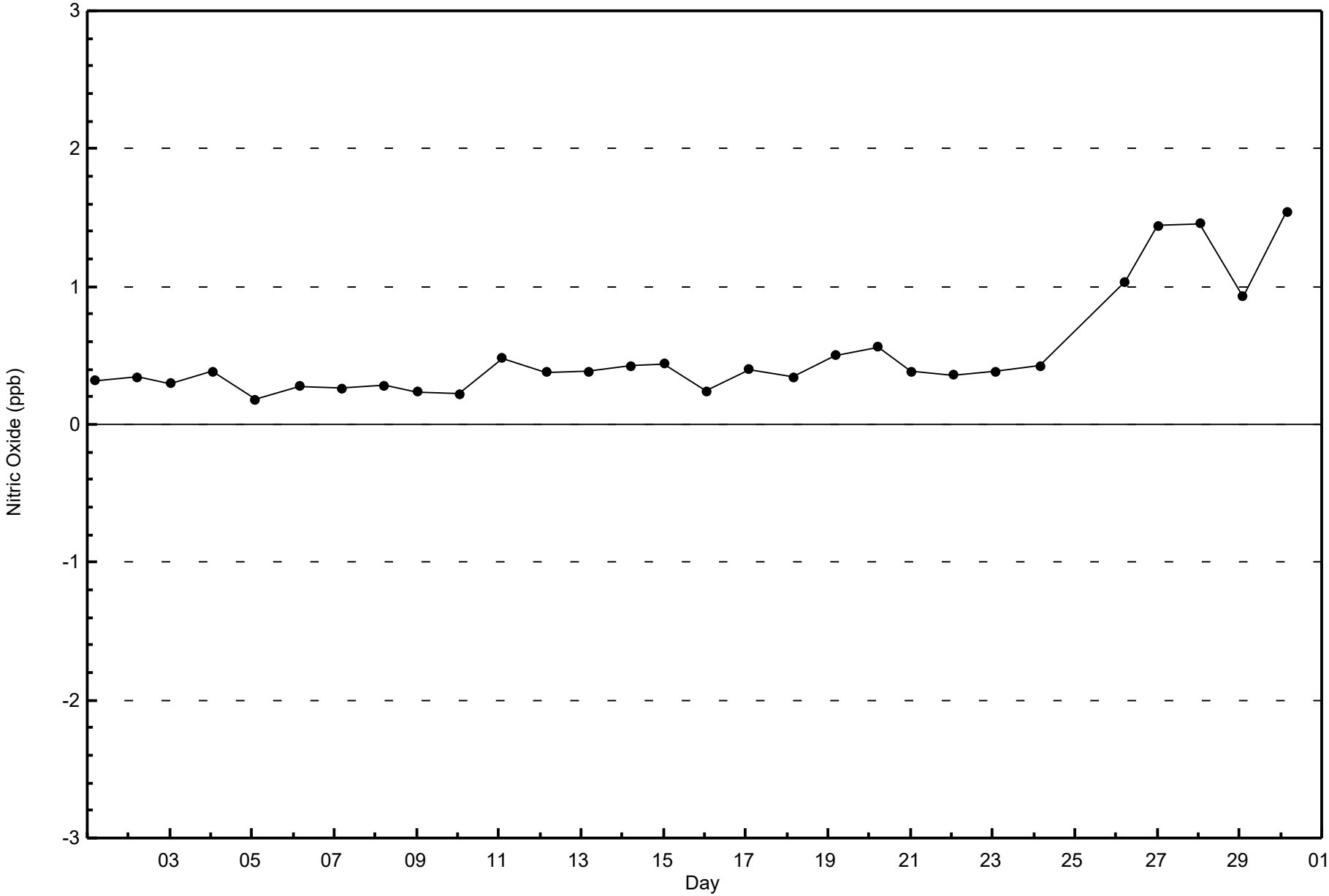
Total Number of Valid Hours: 626

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Ells River - June 2026

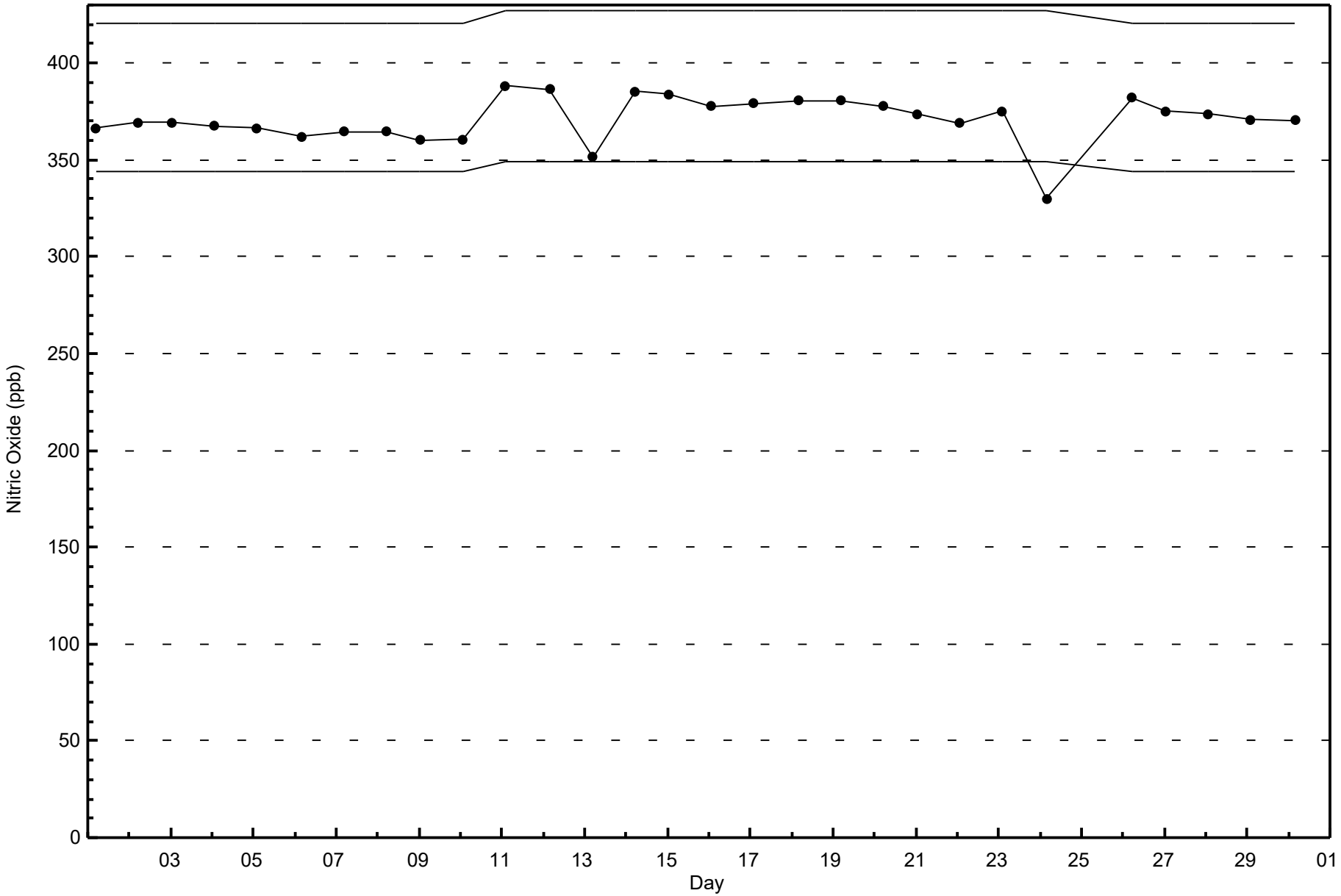


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Ells River - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Ells River - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 32.5 ppb on Jun 15 22:00
Maximum Daily Average: 12.1 ppb on Jun 15

Minimum Value: 0.2 ppb on Jun 13 03:00
Maximum Diurnal Average: 8.6 ppb at hour 8
Monthly Average: 4.28 ppb
Minimum Daily Average: 0.6 ppb on Jun 13
Minimum Diurnal Average: 1.6 ppb at hour 18
Percentiles: P_1 = 0.2 P_{10} = 0.4 Q_1 = 0.8 Median = 2.1 Q_3 = 5.3 P_{90} = 10.4 P_{99} = 25.9

Hours in Service:	720
Hours of Data:	628
Hours of Missing Data:	92
Hours of Calibration:	38
Percent Operational Time:	92.5

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-Jun	0.4	0.5	0.4	0.8	Z	3.6	12.2	18.0	4.6	0.5	0.5	0.4	0.5	0.4	0.4	0.5	0.4	0.6	1.8	2.3	2.3	1.9	2.3	4.8	2.6	18.0
2-Jun	7.0	5.8	7.2	1.2	1.7	Z	4.0	2.8	2.8	1.3	0.8	1.0	2.1	3.8	1.4	3.1	3.2	5.7	8.6	6.6	8.3	8.2	6.2	1.9	4.1	8.6
3-Jun	Z	3.1	1.8	0.9	1.1	0.7	0.9	0.5	0.9	0.9	1.0	1.1	1.4	2.3	4.0	4.0	2.6	1.9	3.4	3.1	2.6	2.1	1.5	1.2	1.9	4.0
4-Jun	0.8	Z	0.7	0.5	1.5	5.5	6.5	8.8	7.3	4.0	2.1	1.4	1.6	1.3	1.4	1.4	1.5	1.1	0.8	0.6	4.8	3.4	10.1	19.5	3.8	19.5
5-Jun	14.4	7.1	Z	5.9	1.8	0.7	0.6	0.8	0.8	0.9	1.8	1.8	1.7	1.1	0.8	1.4	4.1	5.1	4.3	7.5	4.6	6.2	5.3	1.1	3.5	14.4
6-Jun	0.5	2.4	22.1	Z	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	1.5	22.1
7-Jun	0.4	0.6	1.5	2.4	Z	3.3	2.8	3.1	2.4	3.5	3.7	4.0	3.9	3.3	4.4	3.9	3.3	2.2	2.2	3.2	2.9	3.1	5.2	8.3	3.2	8.3
8-Jun	3.8	1.3	0.8	4.8	3.4	Z	6.6	7.0	0.8	0.8	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	1.5	7.0
9-Jun	Z	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	0.2	2.3	1.4	1.6	1.8	2.0	5.0	5.9	8.6	1.4	8.6
10-Jun	7.3	Z	5.4	6.1	10.6	5.4	6.0	4.7	5.4	1.7	C	C	C	C	C	0.4	0.7	0.7	4.3	5.9	5.7	1.3	1.0	0.6	4.1	10.6
11-Jun	7.8	10.1	Z	2.0	1.1	5.2	5.9	4.1	1.5	0.4	1.1	0.7	0.5	1.5	0.9	0.4	0.3	0.4	0.3	0.7	3.1	15.0	22.0	23.3	4.7	23.3
12-Jun	6.0	14.2	25.6	Z	13.5	5.9	4.7	4.2	4.2	1.2	1.1	0.4	0.4	0.4	0.5	0.6	0.7	0.3	0.4	0.7	0.6	0.4	6.9	2.5	4.1	25.6
13-Jun	0.5	0.3	0.2	0.2	Z	0.3	0.3	2.5	2.4	0.5	0.3	0.3	0.4	0.8	1.2	1.4	0.4	0.2	0.2	0.3	0.3	0.3	0.7	0.5	0.6	2.5
14-Jun	0.3	0.3	0.3	0.3	0.6	Z	7.6	7.7	8.0	7.3	8.2	4.1	2.4	1.6	2.4	2.0	1.4	1.1	0.6	1.0	1.8	1.7	19.1	19.2	4.3	19.2
15-Jun	Z	20.1	14.4	9.4	8.2	14.7	25.8	30.0	15.9	7.2	3.1	7.5	5.2	3.2	3.0	3.3	4.7	3.3	2.8	5.1	8.5	32.5	28.6	22.3	12.1	32.5
16-Jun	29.2	Z	22.8	27.1	27.4	22.8	8.8	8.9	10.6	7.8	8.9	4.5	1.7	1.0	1.1	1.5	1.0	1.1	0.6	0.3	1.6	8.4	5.5	1.4	8.9	29.2
17-Jun	4.5	8.5	Z	7.6	6.3	5.1	1.9	2.5	2.9	2.7	2.2	1.5	1.2	1.2	1.5	0.9	0.8	1.2	1.1	2.0	1.2	2.0	15.8	11.5	3.7	15.8
18-Jun	8.8	2.9	5.0	Z	7.6	5.0	5.6	4.7	1.2	2.2	4.0	7.2	2.7	2.3	2.2	3.7	1.2	1.3	3.4	8.3	6.2	15.5	1.3	0.4	4.5	15.5
19-Jun	0.3	0.6	1.8	1.5	Z	0.4	0.7	3.9	0.7	1.0	1.1	2.1	2.4	2.5	2.1	1.7	0.9	1.3	2.6	2.8	2.4	5.6	8.1	5.0	2.2	8.1
20-Jun	3.0	9.5	10.3	7.5	5.3	Z	6.4	8.6	6.5	3.2	1.6	1.6	1.1	1.3	1.5	1.2	1.4	0.7	2.6	4.8	7.6	7.8	5.2	7.3	4.6	10.3
21-Jun	Z	14.9	4.3	11.9	16.7	15.5	13.3	13.1	10.0	1.8	0.9	0.7	3.9	3.6	3.4	5.3	3.8	4.9	10.2	9.9	4.2	7.4	8.2	13.3	7.9	16.7
22-Jun	5.0	Z	4.0	1.6	1.0	1.7	8.2	17.2	8.3	1.5	4.8	3.5	4.1	1.9	3.0	2.4	3.1	2.7	2.8	3.6	2.9	2.1	4.0	3.0	4.0	17.2
23-Jun	1.7	0.9	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	1.7
24-Jun	UO	UO	UO	Z	UO	UO	UO	UO	UO	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	--	--
25-Jun	M	M	M	M	M	M	M	M	M	M	C	C	C	C	1.9	1.6	2.2	1.3	1.1	1.0	1.0	1.6	2.2	5.2	--	5.2
26-Jun	2.8	6.4	5.9	4.1	3.0	Z	2.5	6.5	9.6	6.3	4.0	2.2	1.7	1.8	1.5	1.6	1.3	1.2	0.7	0.7	0.7	1.3	1.2	1.0	3.0	9.6
27-Jun	Z	0.5	0.7	0.8	1.2	12.3	23.1	24.7	18.8	12.3	3.8	0.6	0.8	0.5	0.5	0.5	0.4	0.3	0.7	0.7	0.5	0.9	4.7	3.5	4.9	24.7
28-Jun	3.6	Z	13.3	18.2	19.6	3.2	16.5	21.6	17.2	11.6	5.9	2.0	1.6	1.0	1.0	1.1	1.4	2.0	2.4	3.5	3.0	0.3	3.0	16.0	7.3	21.6
29-Jun	17.2	21.2	Z	25.9	15.7	11.9	22.6	23.4	18.5	5.1	6.0	3.1	2.2	1.1	0.8	0.6	0.3	0.5	0.6	1.1	0.6	5.9	14.5	9.4	9.1	25.9
30-Jun	3.3	1.8	2.0	Z	1.6	1.3	1.5	1.6	8.6	4.7	3.7	2.4	8.3	6.0	2.6	1.7	1.5	2.0	2.3	5.6	10.5	2.9	1.9	1.0	3.4	10.5
	5.6	5.8	6.6	6.1	6.5	5.7	7.3	8.6	6.3	3.4	2.8	2.1	2.0	1.7	1.6	1.7	1.6	1.6	2.3	3.0	3.2	5.1	6.8	6.9	Diurnal Average	
	29.2	21.2	25.6	27.1	27.4	22.8	25.8	30.0	18.8	12.3	8.9	7.5	8.3	6.0	4.4	5.3	4.7	5.7	10.2	9.9	10.5	32.5	28.6	23.3	Diurnal Maximum	

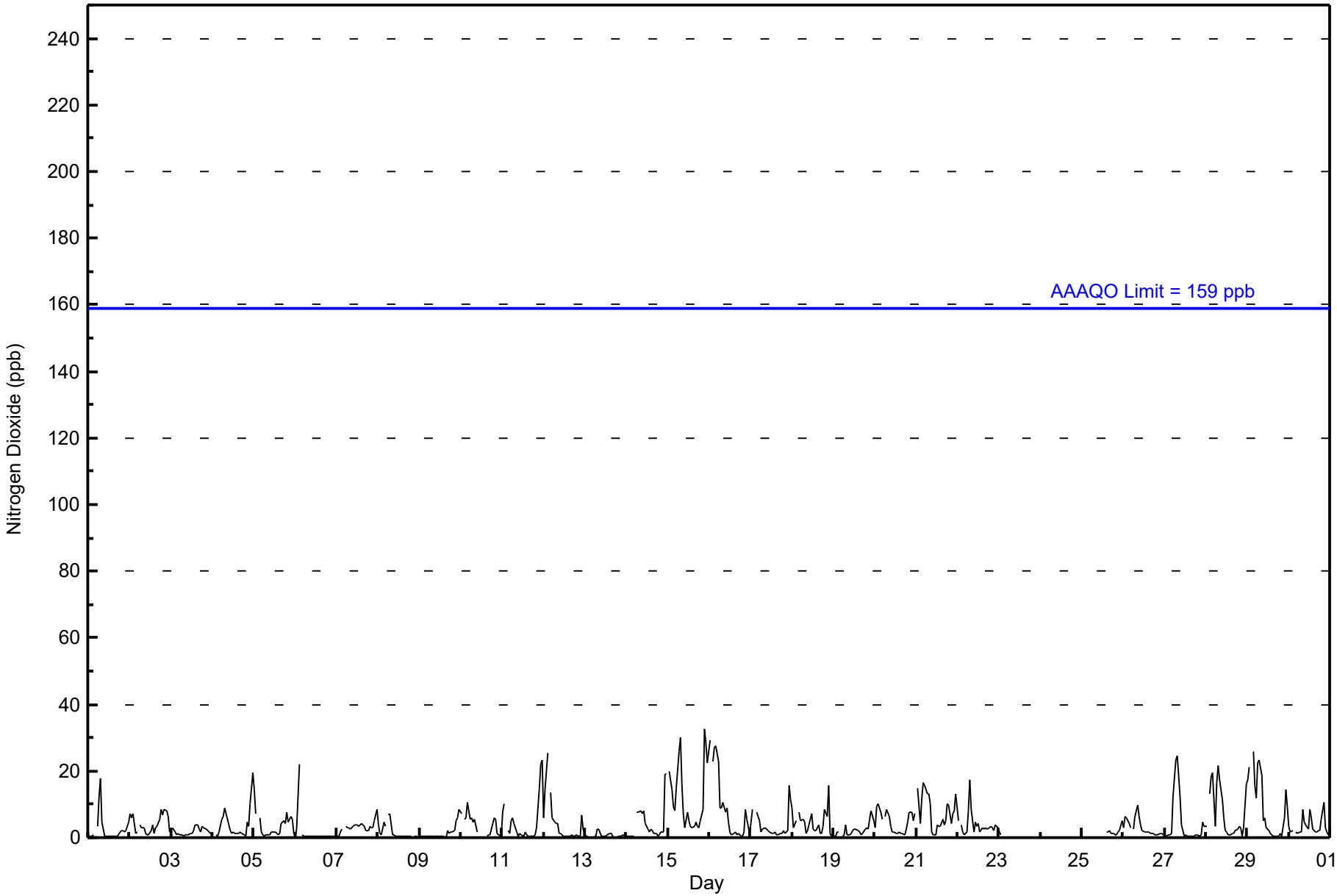
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Ells River - June 2026



Nitrogen Dioxide (NO_2) - ppb
Ells River - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	607	96.66	96.66
21 - 40	21	3.34	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: 628

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Ells River - June 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	152	60	28	21	9	17	47	25	33	23	19	25	41	15	23	67	605
21 - 40	9	5	0	0	0	0	0	0	0	0	0	0	0	0	5	2	21
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	161	65	28	21	9	17	47	25	33	23	19	25	41	15	28	69	626

Total Number of Valid Hours: 626

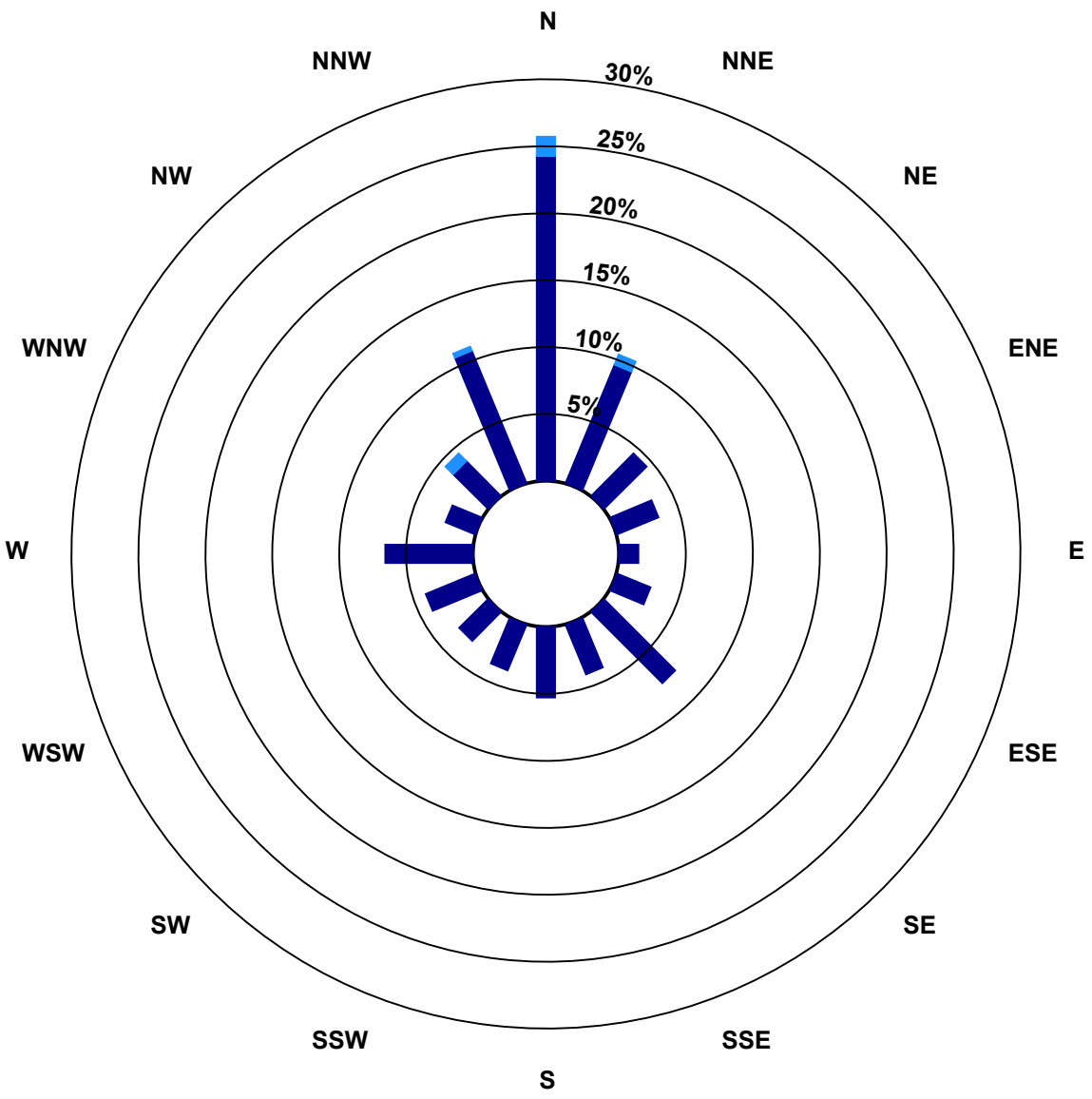
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Ells River



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

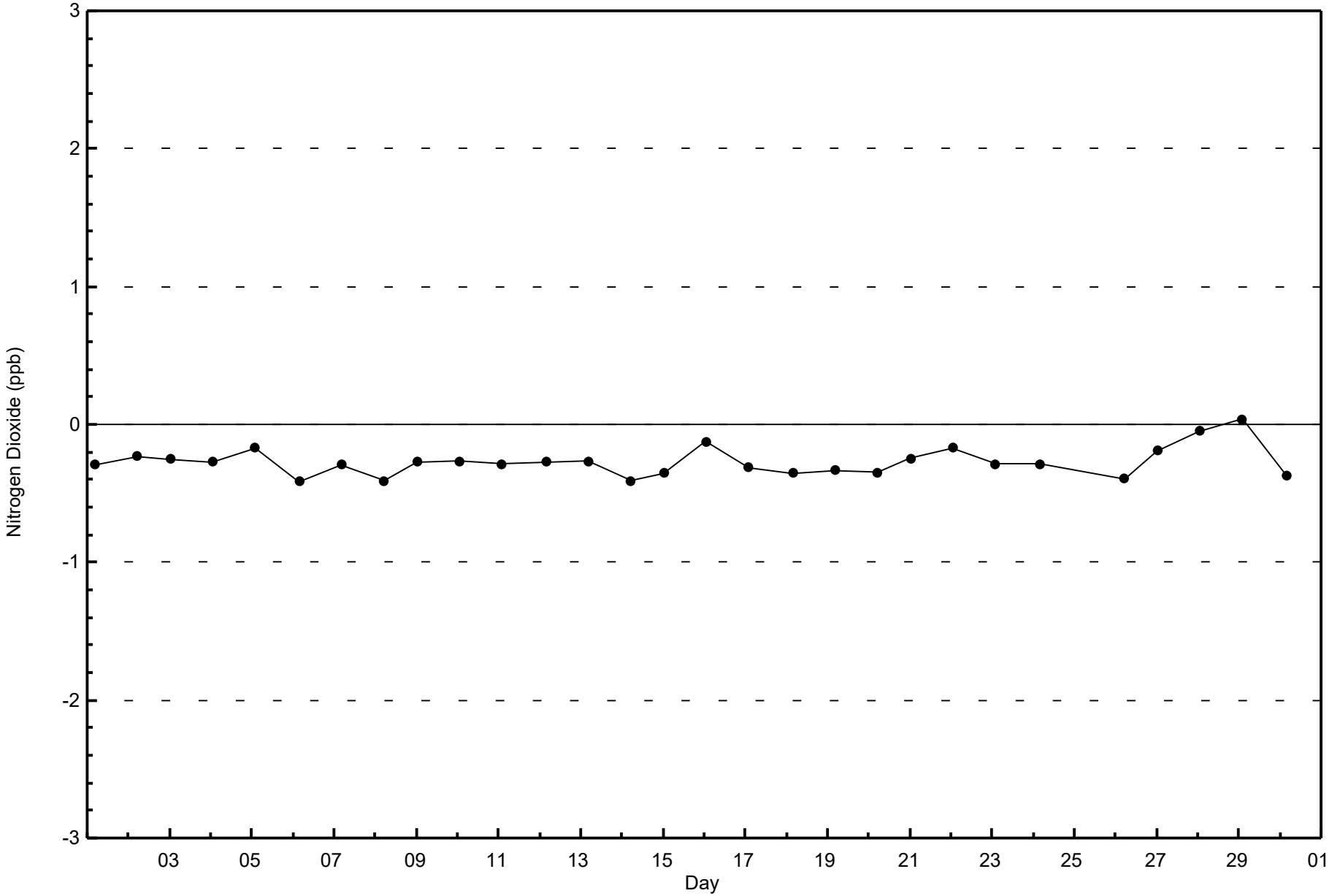
Total Number of Valid Hours: 626

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Ells River - June 2026

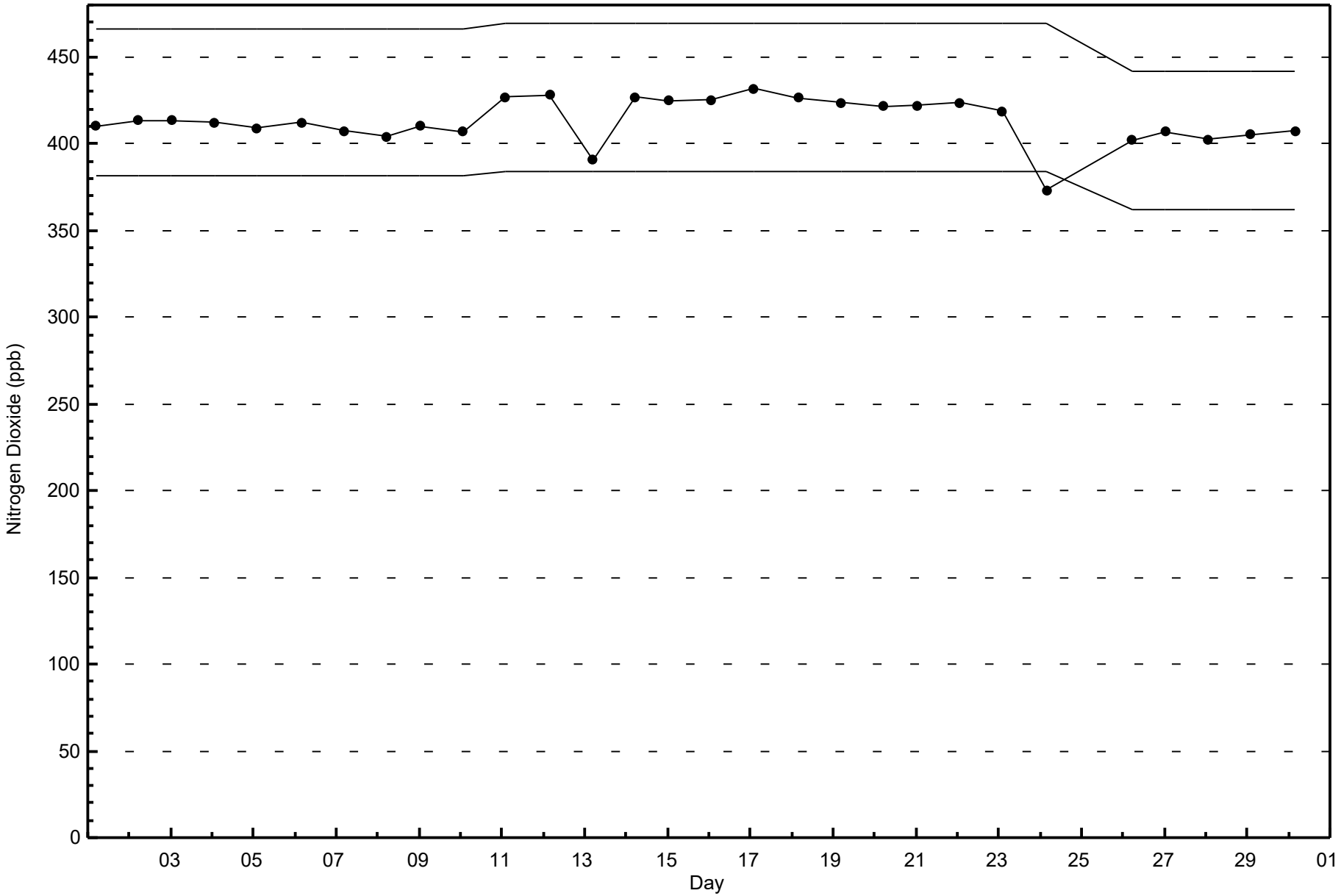


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Ells River - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Ells River - June 2026

Maximum Value: 77.1 ppb on Jun 6 03:00

Maximum Daily Average: 20.6 ppb on Jun 15

Minimum Value: 0.2 ppb on Jun 13 19:00

Minimum Daily Average: 0.8 ppb on Jun 13

Maximum Diurnal Average: 17.1 ppb at hour 8

Minimum Diurnal Average: 1.9 ppb at hour 18

Monthly Average: 6.13 ppb

Percentiles: P_1 = 0.3 P_{10} = 0.4 Q_1 = 1.0 Median = 2.6 Q_3 = 6.4 P_{90} = 16.1 P_{99} = 42.9

Hours in Service:	720
Hours of Data:	628
Hours of Missing Data:	92
Hours of Calibration:	38
Percent Operational Time:	92.5

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-Jun	0.4	0.5	0.4	0.8	Z	3.7	13.1	22.2	5.7	0.6	0.6	0.4	0.6	0.4	0.4	0.5	0.5	0.6	2.0	2.5	2.3	1.9	2.3	4.8	2.9	22.2
2-Jun	7.0	5.8	7.2	1.2	1.8	Z	5.0	3.4	3.6	1.7	1.1	1.2	2.6	4.9	1.6	3.7	3.7	6.3	9.1	6.8	8.5	8.3	6.3	1.9	4.5	9.1
3-Jun	Z	3.2	1.8	0.9	1.1	0.7	1.0	0.5	1.0	1.0	1.1	1.2	1.6	2.6	4.7	4.8	2.9	2.0	3.7	3.2	2.6	2.1	1.5	1.2	2.0	4.8
4-Jun	0.8	Z	0.7	0.5	2.6	16.8	19.0	26.0	13.6	5.5	2.5	1.8	2.0	1.6	1.7	1.6	1.8	1.2	0.8	0.6	5.0	3.4	10.1	19.7	6.0	26.0
5-Jun	14.5	7.2	Z	6.1	2.0	0.8	0.8	0.9	0.9	1.1	2.1	2.1	2.0	1.2	0.8	1.4	4.3	5.4	4.4	7.8	4.6	6.2	5.3	1.1	3.6	14.5
6-Jun	0.5	3.1	77.1	Z	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	3.9	77.1
7-Jun	0.4	0.6	1.5	2.4	Z	4.0	4.4	6.0	3.7	6.4	5.7	6.5	6.1	4.7	6.2	5.0	3.9	2.5	2.3	3.3	3.0	3.1	5.7	8.4	4.2	8.4
8-Jun	3.8	1.3	0.8	4.8	3.5	Z	7.2	8.0	0.8	0.8	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	1.5	8.0
9-Jun	Z	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	0.2	2.9	1.7	1.8	1.9	2.1	6.0	6.4	8.8	1.6	8.8
10-Jun	7.6	Z	5.6	6.7	14.6	6.8	10.2	8.8	7.9	2.3	C	C	C	C	C	0.5	1.1	1.1	5.6	7.9	6.7	1.8	1.6	0.6	5.4	14.6
11-Jun	8.2	10.6	Z	2.0	1.1	6.0	8.3	6.4	2.1	0.5	1.6	1.2	0.6	2.4	1.5	0.6	0.4	0.5	0.3	0.7	3.2	22.2	33.4	33.5	6.4	33.5
12-Jun	6.5	15.9	28.7	Z	15.5	7.0	5.9	5.7	6.4	1.9	1.5	0.6	0.7	0.6	0.7	0.9	1.0	0.5	0.5	0.8	0.6	0.5	7.2	2.5	4.9	28.7
13-Jun	0.5	0.3	0.3	0.2	Z	0.4	0.4	3.7	3.3	0.6	0.3	0.3	0.4	0.8	1.4	1.5	0.4	0.2	0.2	0.3	0.3	0.3	0.8	0.5	0.8	3.7
14-Jun	0.3	0.3	0.3	0.3	0.6	Z	9.8	10.9	10.6	9.7	10.8	4.9	2.9	1.9	2.7	2.1	1.6	1.2	0.6	1.0	1.8	1.7	21.5	22.4	5.2	22.4
15-Jun	Z	29.5	34.4	26.9	18.3	28.4	76.0	71.5	26.9	10.3	4.1	10.3	6.7	3.7	3.3	3.6	5.1	3.6	3.0	5.4	8.7	41.3	29.6	24.2	20.6	76.0
16-Jun	36.6	Z	23.8	33.5	42.1	39.8	9.8	12.8	15.8	10.6	12.4	5.9	2.2	1.3	1.4	2.0	1.3	1.4	0.7	0.3	1.7	8.6	5.5	1.4	11.8	42.1
17-Jun	4.5	8.5	Z	7.7	7.5	6.8	2.6	3.7	4.3	3.9	3.1	2.1	1.6	1.6	1.9	1.1	0.9	1.4	1.3	2.3	1.3	2.2	18.1	11.8	4.4	18.1
18-Jun	8.9	3.4	5.1	Z	9.8	6.4	8.0	7.2	1.5	2.9	5.7	10.9	3.7	3.3	2.7	5.0	1.5	1.6	3.9	9.3	6.5	15.9	1.3	0.4	5.4	15.9
19-Jun	0.3	0.6	1.8	1.6	Z	0.4	1.1	8.5	1.0	1.4	1.5	3.2	4.3	4.0	3.5	2.9	1.3	1.8	3.6	3.4	2.6	5.8	8.7	5.0	3.0	8.7
20-Jun	3.0	11.3	21.5	20.0	14.9	Z	15.0	21.0	15.3	6.1	2.7	2.7	1.6	2.0	2.1	1.9	2.2	1.1	3.4	6.5	9.1	8.3	5.6	7.7	8.0	21.5
21-Jun	Z	20.4	4.5	14.7	35.9	33.5	26.0	30.3	23.1	3.1	1.4	1.2	5.6	5.8	5.4	7.0	5.2	6.6	12.3	12.4	4.5	7.7	9.2	20.0	12.9	35.9
22-Jun	5.4	Z	4.2	1.8	1.7	5.3	40.0	69.5	19.5	2.5	8.4	5.4	6.1	2.4	3.7	2.8	3.5	3.1	3.1	3.8	3.0	2.2	4.0	3.0	8.9	69.5
23-Jun	1.8	1.0	Z	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	1.8
24-Jun	UO	UO	UO	Z	UO	UO	UO	UO	UO	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	--	--
25-Jun	M	M	M	M	M	M	M	M	M	M	C	C	C	C	4.2	3.0	3.4	2.2	2.1	1.6	1.6	2.2	2.9	5.6	--	5.6
26-Jun	3.1	6.8	6.3	4.4	3.7	Z	3.3	8.8	13.0	8.2	4.9	2.6	2.1	2.1	2.2	1.8	1.4	1.3	0.7	0.9	1.0	1.3	1.4	1.2	3.6	13.0
27-Jun	Z	0.9	1.1	0.8	1.4	17.0	41.6	45.2	27.8	16.9	5.0	0.8	1.1	0.8	0.7	0.9	0.6	0.5	1.0	0.8	0.5	1.1	5.1	3.8	7.6	45.2
28-Jun	4.2	Z	17.5	42.9	43.9	4.1	26.2	34.9	26.2	16.8	7.6	2.8	2.1	1.3	1.3	1.6	1.8	2.3	2.9	3.9	3.3	0.6	3.3	16.6	11.7	43.9
29-Jun	18.0	22.2	Z	32.3	20.9	17.4	40.7	42.8	29.3	6.9	7.5	3.6	2.7	1.4	1.2	0.9	0.8	0.6	0.7	1.5	0.8	6.1	15.0	10.1	12.3	42.8
30-Jun	3.4	2.1	2.1	Z	2.2	2.0	2.2	2.0	10.4	5.6	4.6	2.9	9.5	7.4	3.0	2.1	1.9	2.2	2.5	6.1	11.3	3.3	2.0	1.2	4.0	11.3
	6.1	6.8	10.7	9.3	10.7	9.5	14.0	17.1	10.2	4.7	3.7	2.9	2.7	2.3	2.2	2.2	2.0	1.9	2.6	3.4	3.5	5.9	7.6	7.8	Diurnal Average	
	36.6	29.5	77.1	42.9	43.9	39.8	76.0	71.5	29.3	16.9	12.4	10.9	9.5	7.4	6.2	7.0	5.2	6.6	12.3	12.4	11.3	41.3	33.4	33.5	Diurnal Maximum	

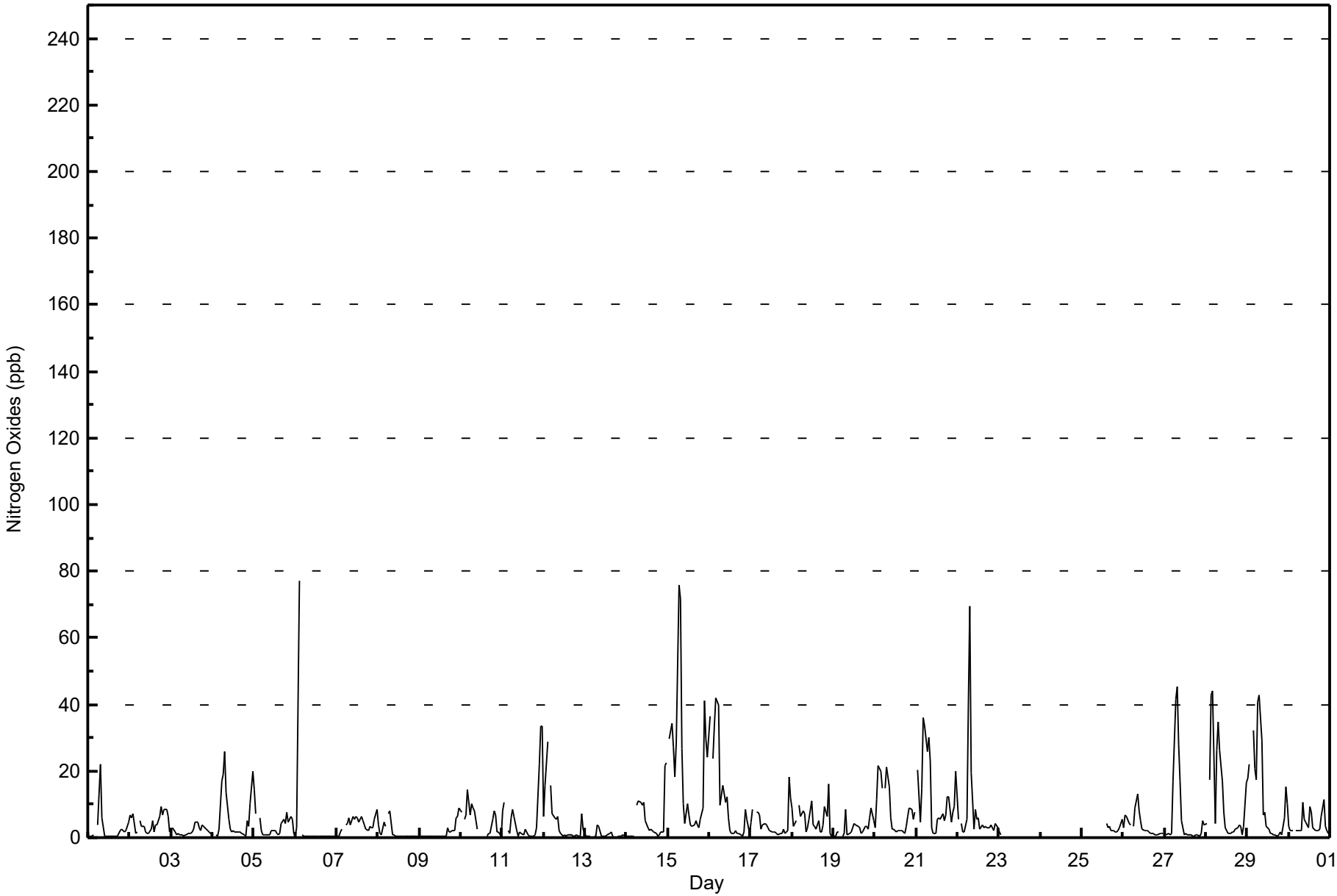
Z - zerospan C - Calibration M - Maintenance UO - Unstable Operation

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Ells River - June 2026



Nitrogen Oxides (NO_X) - ppb

Ells River - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	581	92.52	92.52
21 - 40	35	5.57	98.09
11 - 80	12	1.91	100.00
81 - 159	0	0.00	100.00
> 159	0	0.00	100.00

Total Number of Valid Hours: 628

Total Number of Hours: 720



Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Ells River - June 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	145	60	28	21	9	16	47	25	32	23	19	25	40	13	17	59	579
21 - 40	11	3	0	0	0	1	0	0	1	0	0	0	1	2	8	8	35
11 - 80	5	2	0	0	0	0	0	0	0	0	0	0	0	0	3	2	12
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	161	65	28	21	9	17	47	25	33	23	19	25	41	15	28	69	626

Total Number of Valid Hours: 626

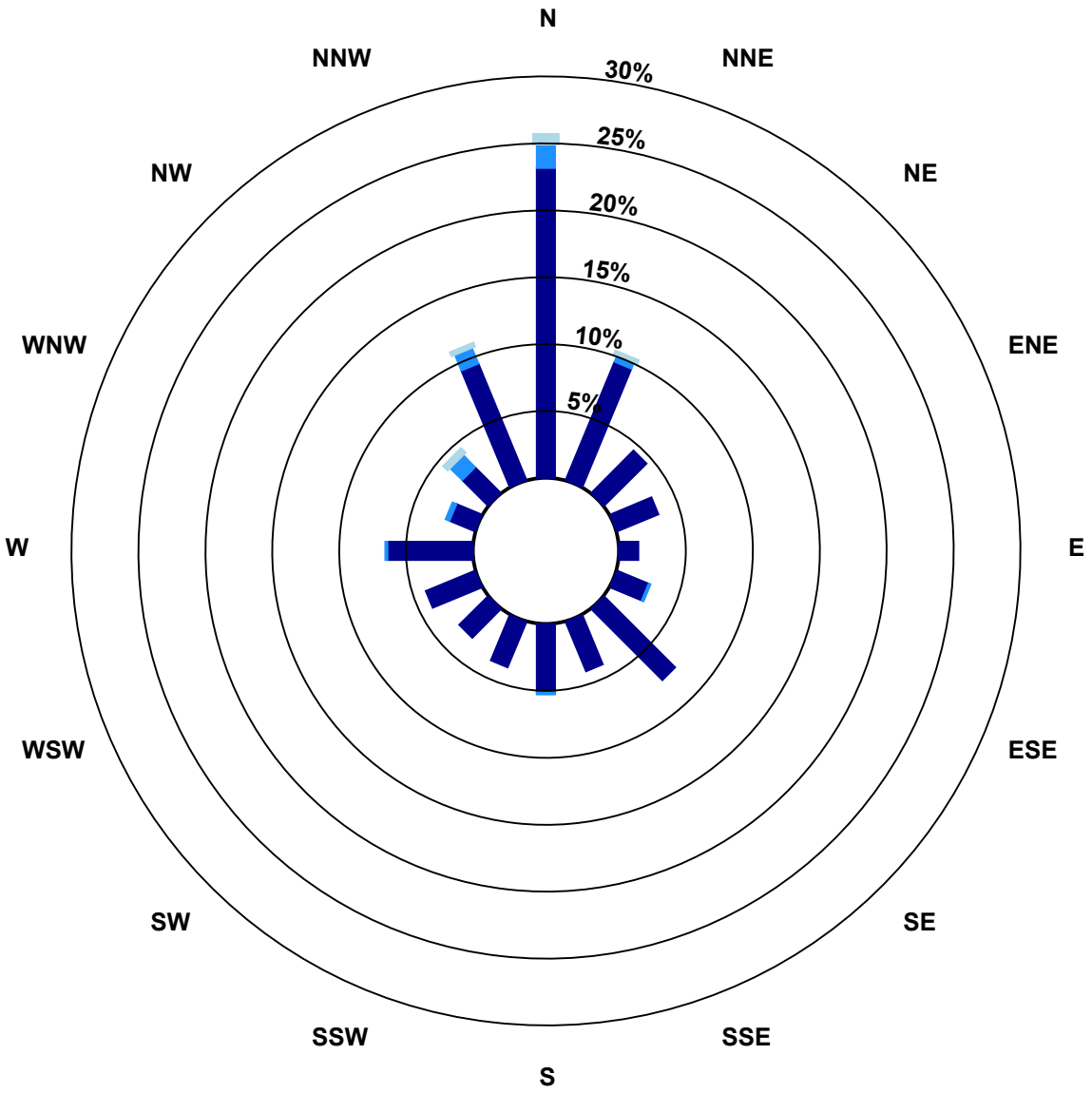
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Ells River



Classes (ppb)

- 0 - 20
- 21 - 40
- 11 - 80
- 81 - 159
- > 159

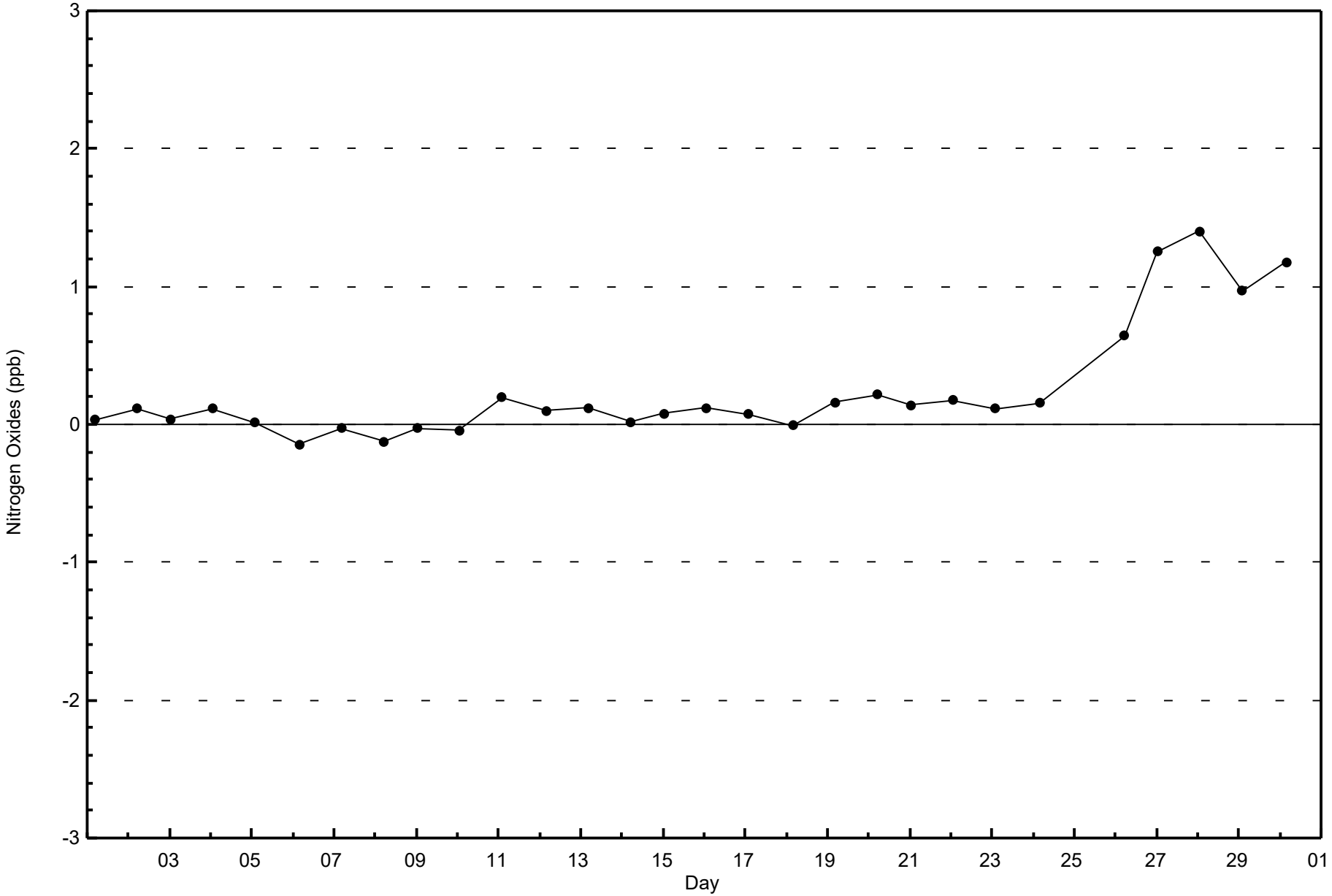
Total Number of Valid Hours: 626

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Ells River - June 2026

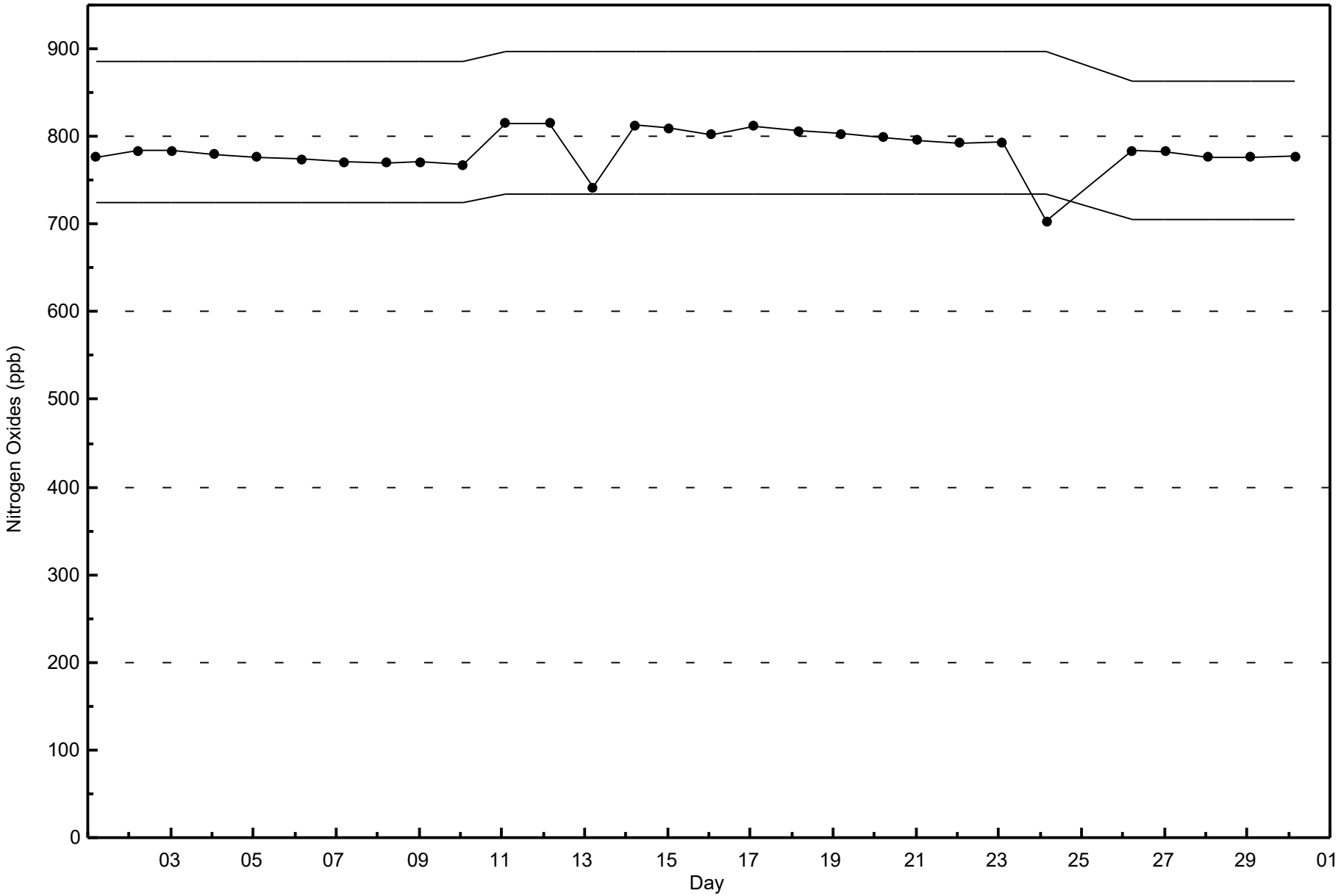


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Ells River - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

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

Ells River - June 2026

Number of Exceedances (AAAQO): 1-hr: 3 24-hr: 1
Maximum Value: 105.0 $\mu g/m^3$ on Jun 29 12:00 Maximum Daily Average: 43.6 $\mu g/m^3$ on Jun 29

Minimum Value: 0.4 $\mu g/m^3$ on Jun 8 13:00 Minimum Daily Average: 1.4 $\mu g/m^3$ on Jun 1
Maximum Diurnal Average: 9.9 $\mu g/m^3$ at hour 13 Minimum Diurnal Average: 5.3 $\mu g/m^3$ at hour 5
Monthly Average: 7.58 $\mu g/m^3$ Percentiles: P_1 = 0.8 P_{10} = 1.5 Q_1 = 2.5 Median = 4.2 Q_3 = 8.1 P_{90} = 13.7 P_{99} = 64.0

Hours in Service:	720
Hours of Data:	689
Hours of Missing Data:	31
Hours of Calibration:	0
Percent Operational Time:	95.7

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-Jun	1.3	1.2	1.2	1.1	1.2	1.4	2.0	2.3	1.7	1.1	1.1	1.3	1.5	1.5	1.5	1.4	1.3	1.3	1.6	1.6	1.1	0.9	0.9	1.2	1.4	2.3
2-Jun	1.3	1.1	1.1	0.9	0.8	0.9	0.9	0.9	1.2	2.3	1.1	1.0	1.0	1.6	1.5	2.0	2.4	2.3	3.6	2.4	2.0	2.0	1.9	1.3	1.6	3.6
3-Jun	1.2	1.8	1.6	1.4	1.6	2.1	2.7	1.5	2.1	2.8	4.0	4.5	5.5	7.1	10.4	10.4	7.4	5.5	7.4	7.2	6.7	6.6	6.8	6.9	4.8	10.4
4-Jun	6.6	6.0	6.1	6.0	6.0	6.3	6.3	8.0	11.5	15.5	13.5	12.2	12.9	13.0	13.7	12.5	11.9	10.0	7.8	6.5	8.2	8.0	9.8	12.8	9.6	15.5
5-Jun	8.2	7.2	7.2	7.9	7.8	7.7	7.3	5.8	5.0	5.4	5.1	6.3	6.4	4.5	3.4	4.5	8.8	5.6	3.7	7.4	7.0	7.1	7.4	3.3	6.2	8.8
6-Jun	2.7	3.0	6.2	8.9	3.1	2.8	3.3	3.5	3.7	4.1	3.3	3.1	5.9	2.7	2.2	2.4	2.3	2.5	2.5	2.6	2.7	1.8	2.6	2.6	3.4	8.9
7-Jun	2.7	3.0	2.9	2.9	3.1	3.8	5.2	6.6	5.0	5.9	5.4	5.5	5.9	6.2	8.7	9.5	8.5	6.4	4.2	4.9	4.5	3.7	3.1	3.3	5.0	9.5
8-Jun	3.1	2.8	3.2	3.5	3.1	2.8	3.2	2.1	1.0	1.0	0.6	0.5	0.4	0.6	0.6	0.8	0.8	0.8	1.0	1.5	1.7	1.8	1.5	1.3	1.7	3.5
9-Jun	1.0	1.2	1.2	1.4	1.5	1.5	1.7	1.5	1.4	1.4	1.9	1.8	1.7	1.7	1.9	2.1	3.2	3.1	3.1	2.9	2.8	3.9	3.6	3.7	2.1	3.9
10-Jun	3.7	3.8	4.0	4.2	4.3	4.0	4.2	4.0	3.0	2.2	1.3	1.2	0.8	1.1	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	4.3
11-Jun	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	0.7	0.9	1.8	1.5	1.5	1.4	1.3	1.6	1.7	2.0	4.2	6.7	6.4	--	6.7
12-Jun	2.6	2.8	3.1	3.5	2.6	1.9	2.0	3.0	2.9	2.0	2.2	1.7	1.5	1.9	1.5	1.4	2.2	1.6	2.0	2.3	2.6	2.5	5.0	3.8	2.4	5.0
13-Jun	2.8	2.6	2.6	2.4	2.3	2.3	2.3	2.9	2.5	1.8	1.7	1.8	2.1	2.7	3.8	4.4	2.5	2.1	2.1	2.3	2.3	2.5	2.8	3.2	2.5	4.4
14-Jun	3.0	3.3	3.3	3.2	3.3	3.5	4.6	5.1	5.7	5.8	7.3	7.8	4.9	3.7	3.9	3.7	3.7	3.7	3.2	3.2	3.7	3.8	8.2	7.2	4.5	8.2
15-Jun	8.1	6.8	7.7	6.8	5.9	5.8	8.6	10.2	9.7	8.6	5.3	9.5	9.8	11.4	14.2	17.0	18.7	13.8	10.6	12.6	13.5	9.2	11.3	10.7	10.2	18.7
16-Jun	12.1	10.4	8.5	10.3	12.6	13.7	4.1	6.5	9.3	6.7	10.8	17.3	11.5	6.8	4.2	4.6	3.8	3.8	2.8	2.3	2.9	6.0	4.2	2.6	7.4	17.3
17-Jun	2.8	3.5	3.7	4.0	3.3	3.1	3.3	3.6	3.3	3.3	3.6	3.2	2.9	3.4	3.3	2.6	2.4	2.5	2.5	3.5	2.8	2.7	8.6	5.3	3.5	8.6
18-Jun	3.1	2.2	2.7	3.3	3.2	3.2	3.0	3.3	2.5	2.5	2.6	4.9	4.0	4.3	2.3	3.2	2.0	1.9	2.7	4.0	4.1	5.2	2.4	2.1	3.1	5.2
19-Jun	2.2	2.2	2.6	2.7	2.5	2.4	2.5	2.7	1.6	1.8	1.6	2.3	2.9	2.1	2.6	1.8	1.0	1.0	1.9	2.6	1.9	2.1	2.6	2.0	2.2	2.9
20-Jun	1.3	1.6	2.4	2.4	2.1	2.9	3.1	5.4	3.2	3.0	2.6	3.0	2.6	3.1	3.2	2.7	2.9	2.4	2.3	2.9	3.7	3.8	2.0	3.1	2.8	5.4
21-Jun	3.5	4.2	2.3	3.2	4.9	5.7	4.4	3.3	2.0	1.6	1.7	2.1	3.6	4.1	4.8	5.2	4.9	6.4	7.1	5.9	4.4	3.9	3.6	4.9	4.1	7.1
22-Jun	4.0	3.8	4.2	4.4	4.4	4.5	5.4	5.6	4.2	3.6	4.6	4.4	6.4	5.2	7.5	6.6	8.1	6.5	6.3	8.9	9.0	6.0	10.1	10.3	6.0	10.3
23-Jun	8.7	7.1	6.0	5.7	6.4	6.0	5.7	5.2	5.4	4.6	3.8	3.7	4.0	5.9	3.6	3.9	3.0	3.9	6.9	9.9	8.9	11.0	10.6	10.6	6.3	11.0
24-Jun	10.4	10.6	9.5	8.2	8.2	8.4	7.5	8.1	11.1	10.5	10.4	10.8	8.8	8.1	8.5	8.2	8.1	6.7	6.3	5.6	5.5	5.3	9.1	10.2	8.5	11.1
25-Jun	11.0	12.0	11.5	11.2	10.8	9.7	11.9	13.1	18.3	21.4	13.4	9.0	7.8	8.1	7.6	6.7	7.1	6.3	5.7	5.5	4.2	4.7	6.8	10.7	9.8	21.4
26-Jun	9.9	12.5	12.5	10.4	9.9	9.3	7.7	10.9	15.3	10.7	8.6	7.2	6.6	6.3	6.2	6.5	6.7	6.0	5.4	4.4	4.3	5.0	4.8	5.1	8.0	15.3
27-Jun	5.4	4.8	5.0	5.7	6.0	11.6	16.5	19.8	17.6	15.8	11.9	4.2	5.1	4.9	4.9	4.7	4.3	4.3	5.2	6.4	7.1	7.2	10.4	9.8	8.3	19.8
28-Jun	9.2	18.2	11.1	12.5	12.3	10.4	17.8	22.6	23.2	30.0	35.8	23.6	22.0	20.8	23.4	19.6	17.5	19.5	19.3	19.0	22.5	14.0	13.3	17.2	18.9	35.8
29-Jun	17.1	16.4	15.7	15.4	14.4	15.0	19.3	24.2	37.2	57.7	58.4	105.0	89.7	58.0	37.0	31.6	27.7	28.9	34.5	50.1	63.4	72.0	78.2	79.4	43.6	105.0
30-Jun	81.0	67.7	UO	UO	UO	UO	UO	UO	UO	UO	UO	M	59.0	60.9	56.5	49.8	44.2	49.6	39.3	25.9	26.2	22.6	24.7	28.9	--	81.0
	7.9	7.7	5.3	5.5	5.3	5.5	5.9	6.9	7.5	8.3	8.0	8.9	9.9	8.8	8.4	8.0	7.5	7.2	7.0	7.4	8.0	7.9	9.1	9.3	Diurnal Average	
	81.0	67.7	15.7	15.4	14.4	15.0	19.3	24.2	37.2	57.7	58.4	105.0	89.7	60.9	56.5	49.8	44.2	49.6	39.3	50.1	63.4	72.0	78.2	79.4	Diurnal Maximum	

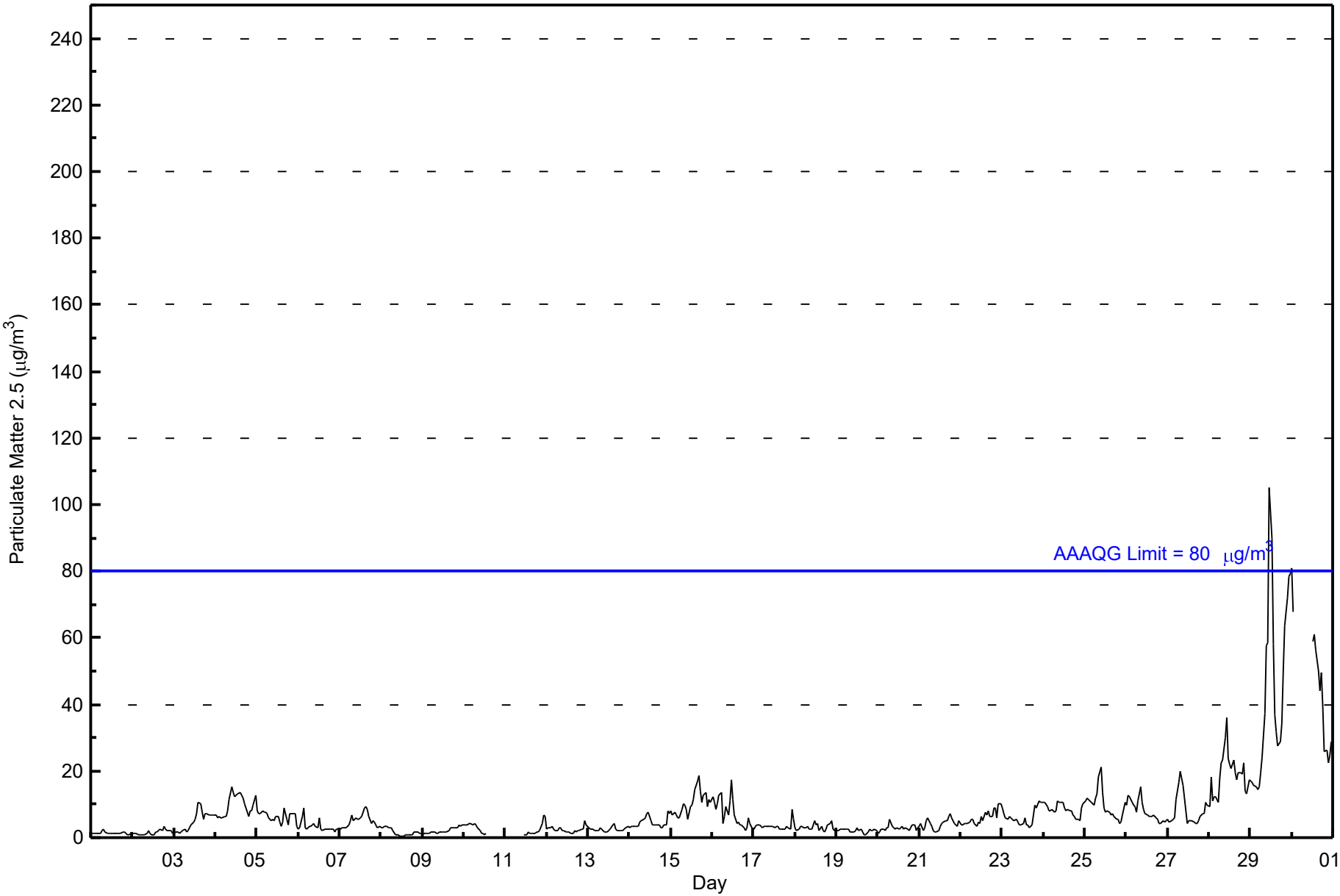
M - Maintenance UO - Unstable Operation
Alberta Ambient Air Quality Guideline/Objectives: 1-hr 80 $\mu g/m^3$ 24-hr 29 $\mu g/m^3$

Wood Buffalo Environmental Association

Hourly Averages

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

Ells River - June 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

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

Ells River - June 2026

Concentration Ranges ($\mu g/m^3$)	Number of Hours	%	Cumulative %
0 - 5	415	60.23	60.23
6 - 15	213	30.91	91.15
16 - 25	31	4.50	95.65
26 - 80	27	3.92	99.56
> 81.0	3	0.44	100.00

Total Number of Valid Hours: 689

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

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

Ells River - June 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	121	40	11	7	8	14	25	14	8	15	18	22	38	12	18	44	415
6 - 15	14	17	6	6	0	3	29	31	36	15	7	5	5	5	12	20	211
16 - 25	11	2	9	2	0	1	3	0	0	0	0	0	0	0	1	2	31
26 - 80	10	6	3	3	2	0	1	1	1	0	0	0	0	0	0	0	27
> 81.0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3
Totals	156	66	30	18	10	18	59	46	45	30	25	27	43	17	31	66	687

Total Number of Valid Hours: 687

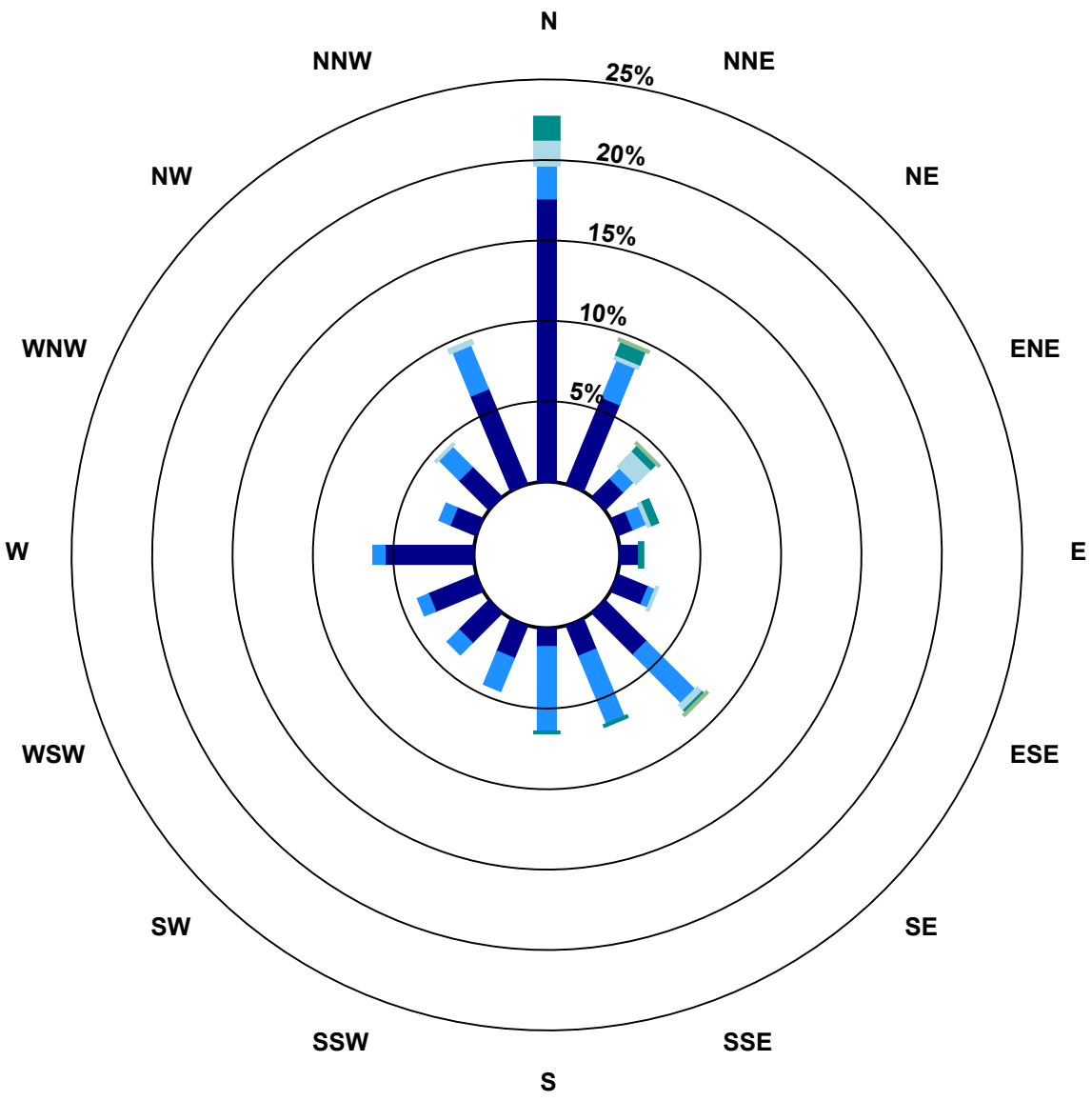
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

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

Ells River



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

0 - 5

6 - 15

16 - 25

26 - 80

> 81.0

Total Number of Valid Hours: 687

Maximum Value: 30.9 C on Jun 28 18:00

Maximum Daily Average: 24.3 C on Jun 29

Minimum Value: 6.6 C on Jun 19 04:00

Minimum Daily Average: 9.6 C on Jun 11

Maximum Diurnal Average: 20.5 C at hour 17

Minimum Diurnal Average: 11.1 C at hour 4

Monthly Average: 16.52 C

Percentiles: P_1 = 7.4 P_{10} = 10.2 Q_1 = 11.9 Median = 15.4 Q_3 = 20.3 P_{90} = 25.1 P_{99} = 29.9

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

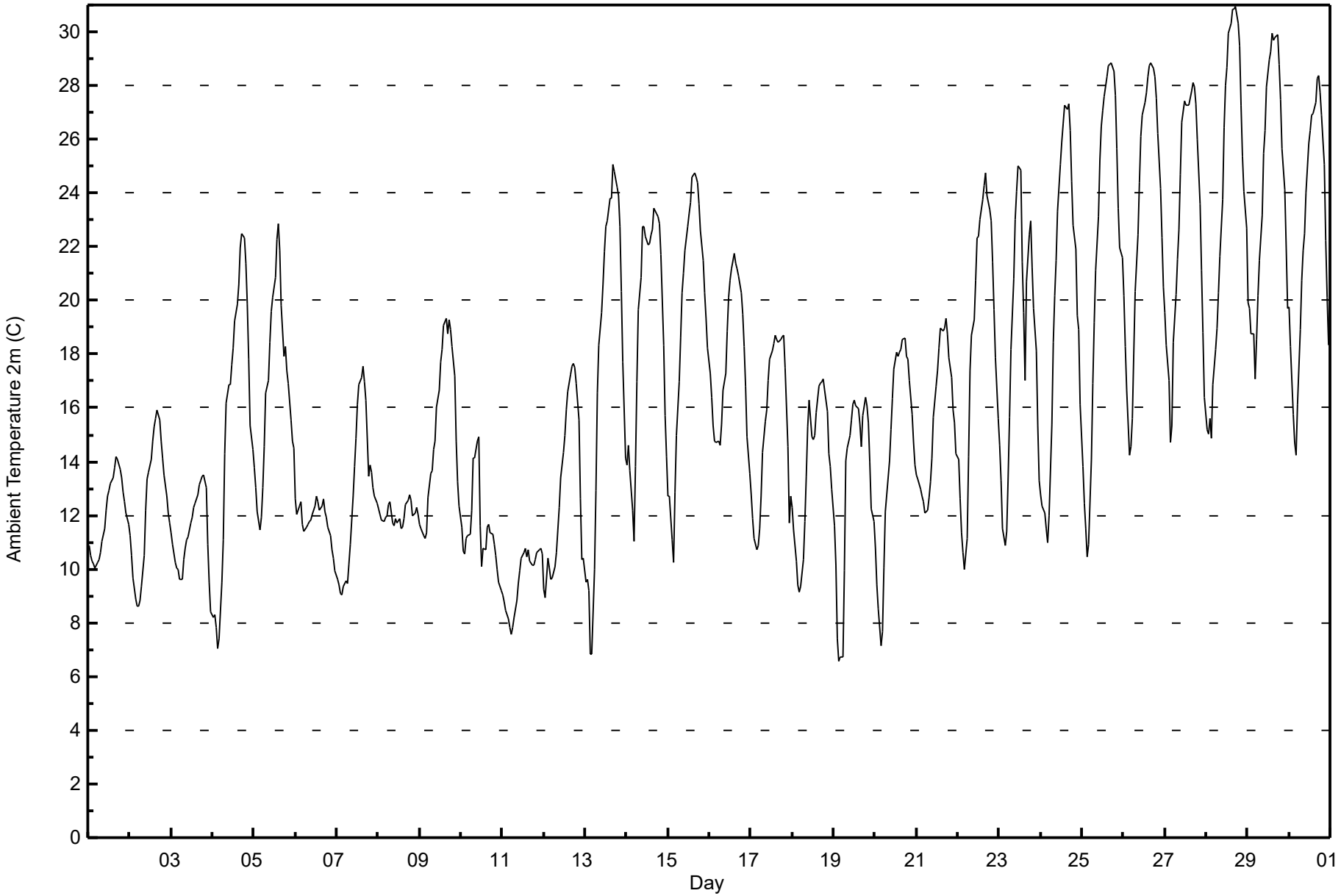
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	10.9	10.5	10.3	10.2	10.0	10.2	10.4	10.6	11.0	11.5	12.2	12.7	12.9	13.2	13.4	13.7	14.2	14.1	13.7	13.4	12.9	12.5	12.1	11.7	12.0	14.2
2-Jun	11.2	10.5	9.7	8.9	8.6	8.6	8.8	9.3	10.5	12.2	13.3	13.6	14.1	14.7	15.3	15.6	15.9	15.6	14.8	14.1	13.5	12.7	12.1	11.7	12.3	15.9
3-Jun	11.3	10.9	10.3	10.0	10.0	9.6	9.6	10.4	10.8	11.1	11.2	11.7	11.9	12.3	12.4	12.8	13.1	13.3	13.4	13.5	13.0	10.9	9.5	8.4	11.3	13.5
4-Jun	8.2	8.3	7.8	7.0	7.4	9.5	11.1	14.3	16.2	16.8	16.9	17.6	18.2	19.2	19.9	20.6	22.0	22.5	22.4	21.4	19.9	17.8	15.4	14.4	15.6	22.5
5-Jun	13.8	13.0	12.2	11.5	11.9	13.1	14.6	16.5	17.0	18.4	19.6	20.1	20.8	22.3	22.9	21.8	19.8	17.9	18.3	17.4	16.9	15.5	14.7	14.5	16.9	22.9
6-Jun	12.6	12.0	12.4	12.5	11.7	11.4	11.6	11.7	11.8	11.8	12.0	12.3	12.7	12.5	12.2	12.4	12.6	12.2	11.9	11.6	11.2	10.7	10.4	9.9	11.8	12.7
7-Jun	9.6	9.4	9.1	9.0	9.4	9.6	9.5	10.2	11.0	12.7	13.8	14.9	16.1	16.9	17.1	17.6	17.0	16.3	13.5	13.9	13.6	13.0	12.7	12.4	12.8	17.6
8-Jun	12.2	12.0	11.8	11.8	11.9	12.0	12.4	12.5	11.7	11.6	11.9	11.7	11.9	11.5	11.6	11.9	12.4	12.6	12.7	12.5	12.0	12.1	12.3	12.0	12.0	12.7
9-Jun	11.7	11.5	11.2	11.1	11.3	12.7	13.6	13.7	14.5	14.7	16.0	16.7	17.7	18.2	19.0	19.3	18.7	19.3	18.9	18.3	17.2	14.8	13.2	12.4	15.2	19.3
10-Jun	11.5	10.7	10.6	11.2	11.3	11.3	12.2	14.1	14.1	14.8	14.9	11.6	10.1	10.8	10.7	11.5	11.6	11.4	11.3	10.9	10.5	10.0	9.5	9.2	11.5	14.9
11-Jun	9.1	8.8	8.5	8.1	7.8	7.6	7.8	8.2	8.8	9.5	9.9	10.4	10.6	10.8	10.5	10.7	10.3	10.1	10.1	10.4	10.6	10.7	10.8	10.6	9.6	10.8
12-Jun	9.2	8.9	10.4	10.1	9.6	9.7	10.1	10.6	11.5	12.3	13.4	14.3	15.0	15.9	16.6	17.3	17.6	17.6	17.5	16.9	15.6	12.6	10.3	10.4	13.1	17.6
13-Jun	9.5	9.6	9.2	6.8	6.9	10.0	12.9	16.5	18.3	19.5	20.6	21.8	22.7	22.9	23.8	23.8	25.1	24.8	24.2	23.9	22.8	20.3	17.7	14.1	17.8	25.1
14-Jun	13.8	14.6	13.7	12.2	11.0	13.8	17.0	19.7	20.8	22.8	22.8	22.4	22.0	22.1	22.4	22.6	23.4	23.2	23.1	22.9	21.7	18.3	15.7	14.2	19.0	23.4
15-Jun	12.7	12.7	11.1	10.3	12.9	15.0	17.0	18.6	20.3	21.0	21.9	22.8	23.2	23.7	24.6	24.8	24.6	24.4	23.6	22.6	21.5	20.3	19.4	18.2	19.5	24.8
16-Jun	17.3	16.4	15.3	14.8	14.7	14.7	14.6	15.4	16.7	17.3	18.9	20.1	20.8	21.2	21.7	21.4	21.2	20.9	20.3	19.5	18.3	16.8	14.9	13.5	17.8	21.7
17-Jun	12.8	11.9	11.2	10.7	10.9	11.5	12.7	14.3	15.5	15.9	17.0	17.8	18.1	18.4	18.7	18.5	18.5	18.5	18.7	18.7	17.5	14.6	11.7	12.7	15.3	18.7
18-Jun	12.3	11.5	10.3	9.4	9.1	9.4	10.4	11.7	13.5	15.3	16.3	14.9	14.8	15.0	15.8	16.8	16.9	17.0	17.1	16.6	15.9	14.3	13.8	13.0	13.8	17.1
19-Jun	11.6	10.1	7.4	6.6	6.7	6.7	9.9	14.0	14.5	15.0	15.6	16.2	16.3	16.1	16.0	15.4	14.6	15.7	16.4	16.1	15.5	14.0	12.2	11.8	13.1	16.4
20-Jun	10.8	9.4	8.5	7.1	7.7	10.1	12.1	12.7	14.0	15.2	16.3	17.4	18.1	17.9	18.1	18.2	18.5	18.6	17.9	17.8	17.0	15.8	14.7	13.9	14.5	18.6
21-Jun	13.5	13.3	13.0	12.7	12.5	12.1	12.2	12.7	13.2	14.1	15.6	16.8	17.4	18.3	19.0	18.8	19.0	19.3	18.8	17.9	17.1	15.9	15.5	14.3	15.5	19.3
22-Jun	14.1	12.6	11.4	10.6	10.0	11.1	14.2	17.4	18.7	19.3	20.7	22.3	22.4	23.0	23.7	24.3	24.7	23.9	23.4	23.0	21.4	19.7	17.8	15.6	18.6	24.7
23-Jun	14.6	13.3	11.5	10.9	11.4	13.4	15.7	18.2	20.8	23.0	24.1	25.0	24.9	21.4	19.6	17.0	20.7	22.4	23.0	21.2	19.7	18.1	15.4	13.3	18.3	25.0
24-Jun	12.8	12.3	12.1	11.5	11.0	12.0	15.4	18.5	20.2	21.5	23.3	25.0	25.9	26.6	27.3	27.1	27.3	26.3	24.4	22.8	21.9	19.4	18.9	16.1	20.0	27.3
25-Jun	13.8	12.4	11.5	10.4	10.9	14.1	16.9	19.2	21.1	23.1	25.2	26.5	27.0	27.6	28.3	28.7	28.8	28.9	28.5	27.6	25.7	23.4	22.0	21.6	21.8	28.9
26-Jun	20.2	18.3	16.6	14.3	14.6	15.6	18.0	20.3	22.4	24.4	26.1	26.9	27.4	27.7	28.3	28.7	28.8	28.7	28.3	27.5	26.2	24.2	22.3	20.5	23.2	28.8
27-Jun	19.6	18.4	17.0	14.7	15.4	18.4	20.2	21.5	22.6	24.7	26.7	27.4	27.2	27.3	27.3	27.8	28.1	28.0	27.3	26.0	23.6	21.1	18.8	16.4	22.7	28.1
28-Jun	15.2	15.0	15.6	14.9	16.9	18.2	18.9	20.3	21.6	23.8	26.4	28.0	28.7	29.9	30.3	30.9	30.8	30.9	30.3	29.5	27.3	25.4	24.1	22.7	24.0	30.9
29-Jun	19.9	19.7	18.7	18.7	17.1	18.6	20.2	21.5	23.2	25.5	26.3	28.0	28.9	29.3	29.9	29.7	29.8	29.9	28.8	27.5	25.7	24.1	22.0	19.7	24.3	29.9
30-Jun	19.7	18.3	15.8	14.7	14.2	16.1	18.9	20.8	21.8	22.5	24.0	25.9	26.3	26.9	27.0	27.4	28.3	28.4	27.7	26.9	25.1	22.2	20.1	18.4	22.4	28.4
	13.2	12.6	11.8	11.1	11.2	12.2	13.6	15.2	16.3	17.4	18.4	19.1	19.5	19.8	20.1	20.2	20.5	20.4	20.0	19.4	18.4	16.7	15.3	14.3	Diurnal Average	
	20.2	19.7	18.7	18.7	17.1	18.6	20.2	21.5	23.2	25.5	26.7	28.0	28.9	29.9	30.3	30.9	30.8	30.9	30.3	29.5	27.3	25.4	24.1	22.7	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Ells River - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	62	8.61	8.61
10 - 20	467	64.86	73.47
> 20	191	26.53	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 - June 2026

Maximum Value: 97.2 % on Jun 7 05:00

Maximum Daily Average: 94.4 % on Jun 6

Minimum Value: 23.0 % on Jun 30 20:00

Minimum Daily Average: 43.8 % on Jun 16

Maximum Diurnal Average: 81.9 % at hour 5

Minimum Diurnal Average: 47.3 % at hour 18

Monthly Average: 62.15 %

Percentiles: P_1 = 25.3 P_{10} = 33.4 Q_1 = 46.1 Median = 62.6 Q_3 = 78.6 P_{90} = 90.2 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

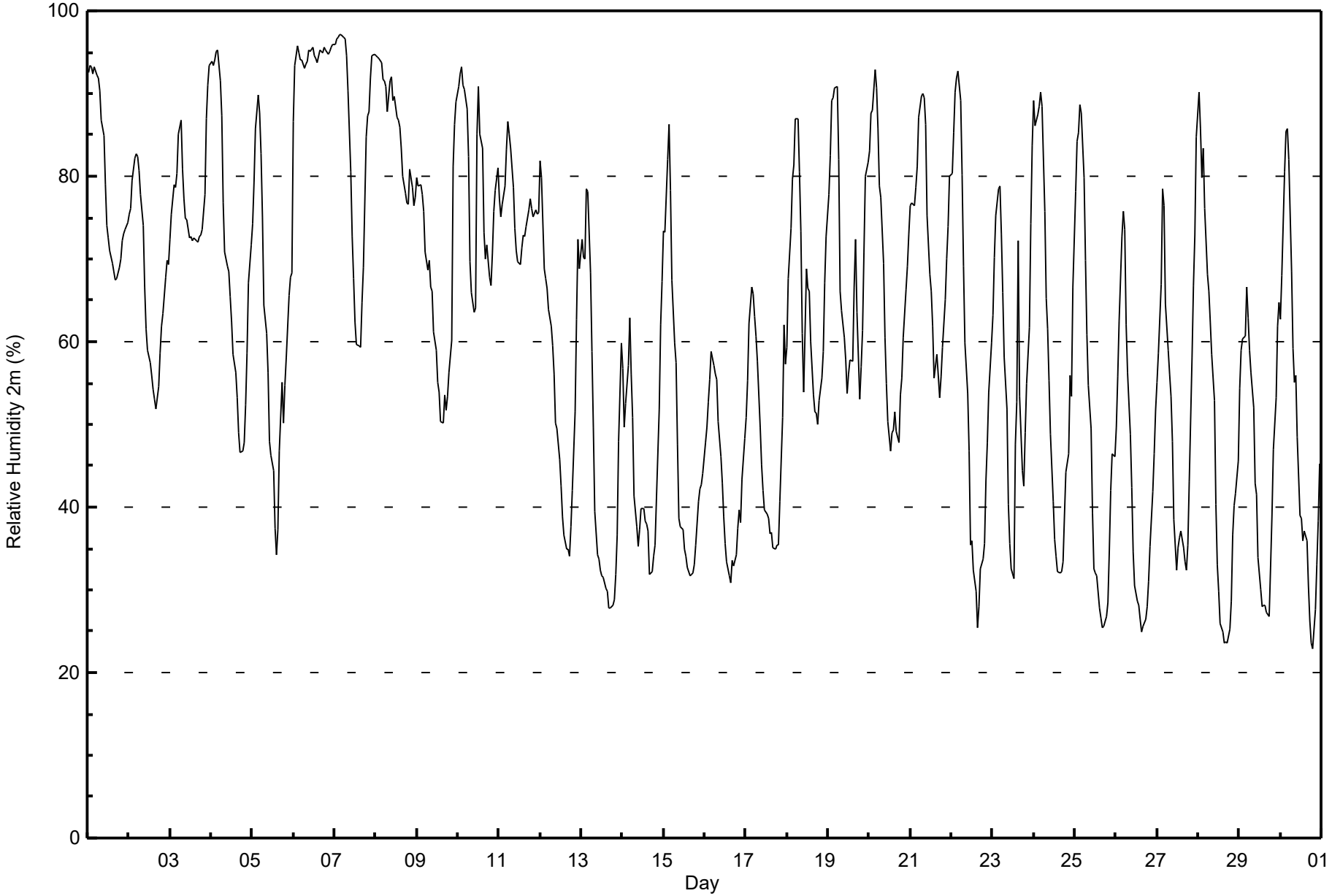
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	92.5	93.4	93.2	92.4	93.3	92.1	91.8	90.4	86.7	84.8	79.0	74.0	72.6	71.0	69.5	68.5	67.5	67.6	68.9	69.9	72.3	73.0	73.6	74.4	79.7	93.4
2-Jun	75.5	76.1	79.5	82.2	82.7	82.4	80.7	77.9	74.0	66.5	61.5	59.0	57.5	56.0	54.2	53.1	51.9	54.5	58.7	61.9	63.4	67.7	69.8	69.3	67.3	82.7
3-Jun	72.4	75.4	79.1	78.6	80.3	85.1	86.8	80.8	77.4	74.9	74.7	72.5	72.7	72.3	72.6	72.3	72.0	72.7	72.8	73.5	77.7	87.0	91.0	93.5	77.8	93.5
4-Jun	93.9	93.4	94.1	95.1	95.2	91.5	87.3	76.7	70.9	69.1	68.4	65.4	62.3	58.5	56.2	53.3	49.0	46.6	46.8	47.7	52.3	58.6	67.1	71.7	69.6	95.2
5-Jun	74.2	79.4	85.8	89.8	87.7	82.7	75.1	64.5	61.1	56.3	47.9	46.4	44.4	37.5	34.2	37.3	46.8	55.0	50.1	54.7	58.2	65.6	67.8	68.3	61.3	89.8
6-Jun	86.7	93.5	95.8	94.9	94.0	94.0	93.0	93.6	93.9	95.2	95.2	95.6	94.7	94.3	93.7	95.3	95.1	95.0	95.5	95.3	94.8	95.1	95.5	95.9	94.4	95.9
7-Jun	95.9	96.6	96.8	97.1	97.2	96.8	96.6	94.5	90.3	80.4	72.8	67.7	62.3	59.7	59.4	59.3	64.7	69.0	84.8	87.4	87.7	91.8	94.5	94.8	83.3	97.2
8-Jun	94.6	94.4	94.3	93.7	91.7	91.6	90.8	87.8	91.6	92.0	89.1	89.7	87.2	86.7	86.0	83.5	80.0	77.9	76.8	76.6	80.8	78.7	76.4	77.5	86.2	94.6
9-Jun	79.9	78.8	79.0	77.7	75.8	70.9	68.6	69.8	66.6	66.2	61.1	58.9	55.2	53.9	50.3	50.1	53.6	51.7	53.4	56.3	60.2	81.2	86.2	89.1	66.4	89.1
10-Jun	90.8	92.4	93.2	91.1	90.5	88.2	82.4	69.7	65.9	63.6	64.1	85.1	90.8	85.1	83.4	73.2	70.0	71.7	67.7	66.7	70.6	75.7	78.3	81.0	78.8	93.2
11-Jun	77.2	75.1	76.6	78.8	83.2	86.5	85.0	83.4	78.6	73.8	71.1	69.7	69.3	71.3	72.8	72.8	73.9	75.9	77.2	76.2	75.1	76.0	75.5	75.6	76.3	86.5
12-Jun	81.9	79.8	68.8	67.7	66.5	63.9	61.8	59.4	56.0	50.2	49.5	45.7	42.5	38.8	36.7	34.9	34.8	34.0	37.6	42.1	51.6	62.6	72.4	68.9	54.5	81.9
13-Jun	72.4	70.2	70.1	78.4	78.2	68.4	58.8	49.7	39.5	34.2	33.7	32.4	31.7	31.5	30.2	29.8	27.8	27.7	28.1	28.9	31.8	36.6	47.9	59.8	45.7	78.4
14-Jun	56.7	49.7	52.6	57.2	62.9	56.2	50.9	41.3	37.7	35.3	37.4	39.9	39.9	38.3	38.0	37.2	31.9	32.2	34.1	35.4	41.1	51.8	62.1	67.3	45.3	67.3
15-Jun	73.5	73.2	82.0	86.3	78.4	67.5	59.9	57.5	47.6	38.6	37.6	37.4	34.9	34.2	32.8	31.6	31.9	32.0	33.0	35.4	40.7	42.1	42.6	44.1	49.0	86.3
16-Jun	47.9	49.6	52.7	55.5	58.9	57.1	56.0	55.5	50.4	46.1	42.9	38.8	35.6	33.4	31.7	30.8	33.6	32.8	34.2	37.4	39.7	38.1	43.4	48.4	43.8	58.9
17-Jun	50.9	55.2	62.3	66.6	65.7	63.1	60.7	57.6	49.6	45.1	42.0	39.6	39.2	38.7	36.8	37.0	35.2	34.9	35.4	35.5	40.7	50.8	62.1	57.3	48.4	66.6
18-Jun	59.3	67.7	73.8	79.7	81.3	87.0	86.9	80.6	73.3	61.1	53.9	68.7	66.4	66.2	60.0	53.5	51.6	51.4	50.0	52.9	55.6	58.8	67.1	72.6	65.8	87.0
19-Jun	77.9	82.6	89.1	89.6	90.7	90.8	82.1	66.1	63.7	60.6	57.7	53.8	56.0	57.8	57.6	66.7	72.4	63.6	53.0	57.0	61.3	70.9	80.0	81.8	70.1	90.8
20-Jun	83.1	87.6	88.0	93.0	90.7	85.8	78.8	77.4	69.4	60.5	55.0	50.4	46.9	49.0	49.3	51.6	49.1	47.7	53.5	55.5	60.4	66.3	69.2	73.1	66.3	93.0
21-Jun	76.4	76.7	76.4	78.6	81.1	87.1	89.6	89.9	89.5	86.3	75.3	68.1	66.1	61.8	55.5	58.4	55.9	53.3	55.8	59.4	65.0	70.0	73.9	80.0	72.1	89.9
22-Jun	80.3	85.3	90.2	91.8	92.6	89.1	80.1	69.2	59.8	53.7	46.8	35.5	36.0	32.4	29.8	25.4	27.9	32.5	33.7	35.6	43.1	47.9	53.9	59.8	55.5	92.6
23-Jun	63.2	70.1	75.2	78.5	78.7	73.1	66.0	58.2	51.8	40.3	35.6	32.6	31.3	47.6	52.8	72.1	53.3	44.3	42.5	48.9	54.9	61.7	74.3	83.7	57.9	83.7
24-Jun	89.2	86.1	87.5	88.4	90.2	88.4	75.7	65.2	61.6	55.2	48.8	40.7	36.1	34.0	32.3	32.0	32.1	33.5	39.0	44.3	46.5	55.9	53.4	66.6	57.6	90.2
25-Jun	78.1	84.3	85.2	88.7	87.6	79.9	69.9	60.9	54.7	49.4	39.3	32.6	32.0	31.7	27.8	26.6	25.4	25.6	26.7	28.4	34.8	42.1	46.5	46.1	50.2	88.7
26-Jun	49.7	55.8	62.6	72.7	75.8	73.5	62.1	56.2	48.8	42.3	34.5	30.4	28.6	28.2	26.4	24.9	25.6	26.5	27.9	31.0	35.2	41.8	46.4	51.7	44.1	75.8
27-Jun	55.1	58.6	67.0	78.5	76.5	64.6	58.9	56.1	53.4	48.0	38.4	32.3	35.0	36.2	37.1	35.1	33.4	32.5	35.4	43.0	58.2	66.8	72.9	84.7	52.4	84.7
28-Jun	90.2	85.7	79.8	83.4	76.1	68.2	66.1	62.3	58.4	52.9	40.3	33.1	29.8	25.9	25.0	23.6	23.7	23.6	25.3	28.7	36.6	40.2	41.6	45.6	48.6	90.2
29-Jun	54.4	59.1	60.3	60.7	66.6	63.0	59.0	56.4	52.0	42.9	41.6	33.9	30.1	28.0	28.1	28.1	27.2	26.7	32.7	39.0	46.9	53.2	61.8	64.8	46.5	66.6
30-Jun	62.7	68.0	80.5	85.4	85.8	82.0	68.5	59.1	55.2	55.9	48.5	39.0	38.6	36.0	37.1	35.9	30.6	26.2	23.5	23.0	27.7	33.0	38.2	45.2	49.4	85.8
	74.6	76.5	79.0	81.7	81.9	79.0	74.3	68.9	64.3	59.4	54.8	52.3	50.8	49.9	48.6	48.5	47.6	47.3	48.5	50.9	55.5	61.4	66.2	69.8	Diurnal Average	
	95.9	96.6	96.8	97.1	97.2	96.8	96.6	94.5	93.9	95.2	95.2	95.6	94.7	94.3	93.7	95.3	95.1	95.0	95.5	95.3	94.8	95.1	95.5	95.9	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Ells River - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	147	20.42	20.42
40 - 60	185	25.69	46.11
60 - 80	226	31.39	77.50
80 - 100	162	22.50	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 - June 2026

Maximum Value: 998.9 W/m2 on Jun 20 12:00

Maximum Daily Average: 381.6 W/m2 on Jun 26

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

Minimum Daily Average: 30.3 W/m2 on Jun 6

Maximum Diurnal Average: 617.4 W/m2 at hour 12

Minimum Diurnal Average: 0.0 W/m2 at hour 2

Monthly Average: 249.80 W/m2

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 3.8 Median = 129.8 Q_3 = 457.8 P_{90} = 716.9 P_{99} = 938.4

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

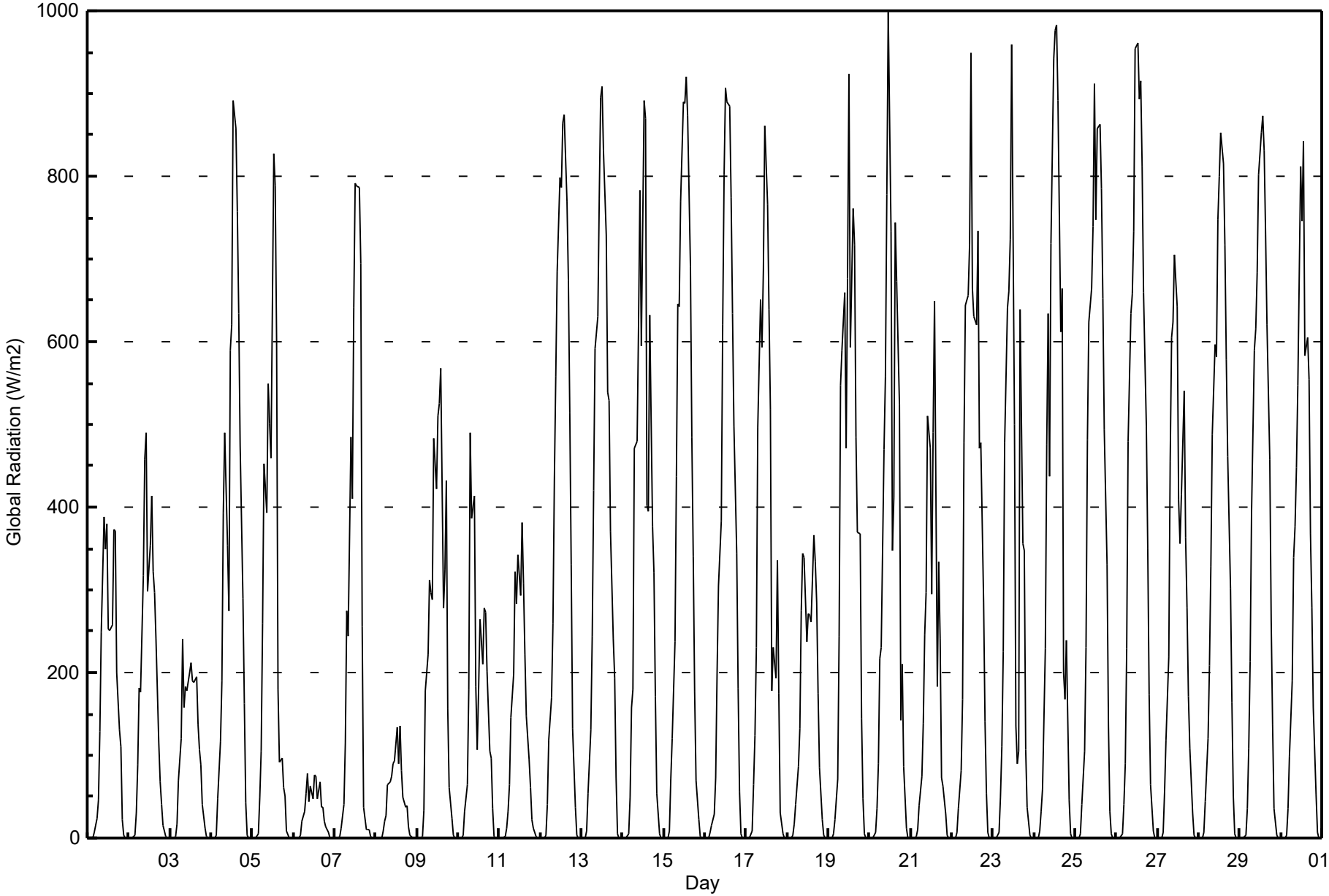
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0.0	0.0	0.0	0.4	7.0	23.5	45.5	129.2	248.8	387.7	349.5	380.3	253.3	250.5	257.9	373.3	372.0	200.0	130.5	110.6	22.0	3.0	0.0	0.0	147.7	387.7
2-Jun	0.0	0.0	0.0	3.4	30.0	87.5	180.8	175.8	317.3	457.7	489.4	298.1	354.8	414.1	322.1	296.9	241.4	114.8	67.4	40.5	15.6	1.5	0.0	0.0	162.9	489.4
3-Jun	0.0	0.0	0.0	2.4	17.8	70.1	120.3	241.3	157.3	183.4	178.4	199.5	212.2	189.1	187.6	195.2	136.9	106.5	88.9	40.9	11.2	1.8	0.0	0.0	97.5	241.3
4-Jun	0.0	0.0	0.0	3.7	48.3	116.4	190.5	393.5	490.7	354.6	275.4	589.1	620.6	891.0	856.9	758.0	633.5	474.2	289.4	162.5	41.6	2.6	0.0	0.0	299.7	891.0
5-Jun	0.0	0.0	0.0	5.0	49.2	105.3	258.8	452.1	393.9	549.8	500.9	459.7	827.8	787.6	599.9	179.3	92.2	96.3	60.7	50.5	8.6	0.3	0.0	0.0	228.2	827.8
6-Jun	0.0	0.0	0.0	0.1	2.9	20.2	32.4	53.6	77.9	44.5	62.7	47.4	76.6	75.1	47.9	68.5	37.3	37.6	21.0	14.1	7.0	0.5	0.0	0.0	30.3	77.9
7-Jun	0.0	0.0	0.0	1.2	11.7	41.1	115.7	274.2	243.2	485.4	410.0	640.5	791.5	788.1	785.9	694.3	256.6	36.9	10.0	10.5	9.7	1.2	0.0	0.0	233.6	791.5
8-Jun	0.0	0.0	0.0	0.8	8.1	21.0	27.8	64.5	67.8	75.1	89.5	93.5	134.6	90.0	135.6	81.9	49.2	38.1	38.2	13.2	3.8	0.1	0.0	0.0	43.0	135.6
9-Jun	0.0	0.0	0.0	2.5	33.1	178.6	222.6	311.4	297.3	288.0	483.6	422.1	511.0	524.7	567.7	277.3	324.2	432.8	156.0	61.6	24.4	2.7	0.0	0.0	213.4	567.7
10-Jun	0.0	0.0	0.0	3.8	31.4	64.3	180.5	489.1	386.5	412.9	183.5	106.6	178.9	263.9	209.9	277.6	272.1	202.3	105.5	96.9	35.3	1.4	0.0	0.0	145.9	489.1
11-Jun	0.0	0.0	0.0	1.0	11.8	31.5	63.9	146.0	198.5	321.8	283.2	342.5	293.3	381.6	308.3	221.2	146.7	95.2	61.9	22.8	12.2	2.1	0.0	0.0	122.7	381.6
12-Jun	0.0	0.0	0.0	4.0	40.2	118.5	169.5	258.8	431.7	558.3	684.3	798.6	785.7	864.8	875.4	769.5	674.7	513.7	331.2	132.7	37.3	3.7	0.0	0.0	335.5	875.4
13-Jun	0.0	0.0	0.1	8.9	54.3	131.2	243.4	420.1	590.9	630.8	772.7	895.0	909.3	830.6	728.7	538.6	528.4	372.0	240.2	192.8	73.0	5.6	0.0	0.0	340.3	909.3
14-Jun	0.0	0.0	0.0	4.7	49.3	156.9	179.8	471.5	480.4	618.3	782.2	595.5	891.7	869.2	401.9	395.0	632.9	376.3	320.2	171.2	54.5	4.9	0.0	0.0	310.7	891.7
15-Jun	0.0	0.0	0.0	9.3	70.9	120.7	237.1	436.5	645.8	642.8	768.8	890.4	888.1	921.2	872.7	692.0	484.3	340.0	176.2	70.1	21.4	1.9	0.0	0.0	345.4	921.2
16-Jun	0.0	0.0	0.0	6.0	15.2	28.9	73.6	199.8	305.7	382.5	620.2	800.9	907.4	889.5	885.1	774.4	633.6	498.4	344.3	182.0	56.0	5.0	0.0	0.0	317.0	907.4
17-Jun	0.0	0.0	0.1	7.7	63.7	124.2	231.0	496.2	651.7	592.7	685.9	860.9	766.2	639.0	517.9	177.7	231.0	192.9	334.8	175.1	31.2	5.4	0.0	0.0	282.7	860.9
18-Jun	0.0	0.0	0.0	3.0	17.5	40.1	86.8	132.5	274.5	343.8	339.8	236.5	270.8	270.0	261.4	366.1	334.2	284.2	175.3	85.4	22.1	2.9	0.0	0.0	147.8	366.1
19-Jun	0.0	0.0	0.0	4.2	22.3	71.9	244.1	547.5	590.0	659.2	471.8	676.2	923.5	592.7	760.8	716.3	485.2	369.8	367.1	143.2	47.0	5.7	0.0	0.0	320.8	923.5
20-Jun	0.0	0.0	0.0	6.0	35.3	90.2	216.9	231.0	469.9	558.4	777.8	998.9	733.2	346.6	412.4	743.6	673.6	523.2	141.9	210.3	86.4	12.0	0.0	0.0	302.8	998.9
21-Jun	0.0	0.0	0.0	1.5	10.7	38.5	75.4	138.6	245.2	296.0	509.5	471.1	294.5	490.1	649.2	183.1	333.3	240.3	73.4	62.6	29.5	3.4	0.0	0.0	172.7	649.2
22-Jun	0.0	0.0	0.0	6.0	36.1	80.8	167.5	478.3	643.4	655.2	716.7	949.8	664.6	630.1	620.5	733.9	470.4	477.5	284.4	140.5	54.3	6.9	0.0	0.0	325.7	949.8
23-Jun	0.0	0.0	0.1	6.3	49.4	111.0	224.9	478.2	640.2	661.8	723.0	959.0	499.9	135.3	90.2	105.2	638.6	356.4	348.1	106.9	36.7	3.9	0.0	0.0	257.3	959.0
24-Jun	0.0	0.0	0.0	8.5	32.7	58.8	228.8	476.2	633.9	437.8	718.4	941.9	976.6	982.9	890.8	612.1	664.5	199.9	167.0	238.2	45.7	5.4	0.1	0.0	346.7	982.9
25-Jun	0.0	0.0	0.1	4.4	39.9	105.0	230.9	480.8	623.7	664.6	739.4	911.5	746.7	857.5	862.1	785.5	651.9	493.6	330.3	135.7	33.0	4.3	0.2	0.1	362.5	911.5
26-Jun	0.0	0.0	0.0	5.2	41.3	90.4	228.6	479.0	633.7	657.3	734.5	954.4	960.6	892.7	915.1	812.7	659.2	497.5	350.2	173.7	64.0	7.7	0.1	0.1	381.6	960.6
27-Jun	0.1	0.1	0.1	6.3	56.7	119.0	218.5	455.6	605.6	624.0	705.0	641.7	407.9	355.1	414.4	540.7	362.9	278.3	170.4	109.1	31.3	3.8	0.0	0.0	254.4	705.0
28-Jun	0.0	0.0	0.0	7.2	44.5	120.3	208.6	328.1	488.4	597.0	580.7	748.2	799.4	852.7	816.0	716.3	577.2	460.9	301.9	164.0	51.2	5.9	0.0	0.0	327.9	852.7
29-Jun	0.0	0.0	0.0	3.8	36.4	108.1	212.8	393.5	590.6	615.6	682.2	801.7	852.4	872.8	830.6	730.9	621.1	457.9	263.5	137.5	35.7	3.9	0.0	0.0	343.8	872.8
30-Jun	0.0	0.0	0.0	3.9	35.4	98.4	189.5	338.2	376.9	447.8	546.8	811.6	745.5	843.1	583.5	604.8	553.4	367.0	278.8	158.0	52.0	6.1	0.1	0.0	293.4	843.1
	0.0	0.0	0.0	4.4	33.4	85.7	170.2	332.4	426.7	473.5	528.9	617.4	609.3	593.1	555.6	480.7	425.7	304.5	201.0	113.8	35.1	3.9	0.0	0.0	Diurnal Average	
	0.1	0.1	0.1	9.3	70.9	178.6	258.8	547.5	651.7	664.6	782.2	998.9	976.6	982.9	915.1	812.7	674.7	523.2	367.1	238.2	86.4	12.0	0.2	0.1	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Global Radiation (GR) - W/m2

Ells River - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Ells River - June 2026

Maximum Speed: 33 km/h on Jun 1 12:00

Maximum Daily Speed Average: 22.5 km/h on Jun 1

Minimum Speed Value: 0 km/h on Jun 13 10:00

Minimum Daily Speed Average: 1.8 km/h on Jun 22

Maximum Diurnal Speed Average: 8.7 km/h at hour 17

Minimum Diurnal Speed Average: 2.1 km/h at hour 24

Monthly Average Velocity: 4.5 km/h 6.2 deg

Percentiles: P_1 = 1 P_{10} = 3 Q_1 = 6 Median = 10 Q_3 = 15 P_{90} = 21 P_{99} = 29

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-Jun	N20	N19	N16	N13	N13	NNW16	NNW12	NNW14	NNW18	N24	N31	N33	N31	N29	N29	N32	N30	N29	N26	N27	NNE20	NNE22	NNE22	NNE24	N22.5	N33
2-Jun	N25	NNE24	N22	N24	N23	N27	N27	NNE26	NNE24	NNE29	NE27	NE24	NE21	ENE20	NE23	NE22	NE20	ENE14	E11	E10	E10	E7	E8	E9	NNE17.6	NNE29
3-Jun	E6	ESE3	SE2	ESE5	ESE7	ESE9	SE7	SE6	SE8	ESE9	SE8	SE5	SE6	SSE7	S9	SSE8	S7	SSE7	SSE8	S7	WSW2	S1	UO	SW1	SE5.4	ESE9
4-Jun	WSW2	W2	SSW4	S7	S7	S8	SSE3	S5	S14	S13	S15	SSW15	S15	SSW15	S14	S14	S12	SSW13	SSW12	SSW14	SSW10	S7	SSE9	S9	S9.7	S15
5-Jun	S9	S10	S9	S8	SSW9	SSW11	SW9	SW9	SW8	S10	SSE12	SSE15	SE15	SSE11	SSE9	SSE16	SSE18	SE17	SSE8	SW8	SSE4	SE4	S8	SSW6	S9.0	SSE18
6-Jun	SW6	W8	NW8	NW14	W9	W10	WSW8	W9	WSW10	SW11	WSW12	WSW8	WSW11	SW12	WSW10	SW7	SW7	SW7	SW6	SW8	WSW8	SSW4	SSW5	SSW6	WSW7.5	NW14
7-Jun	S3	WSW2	SSE4	S6	SE6	SSE8	SE9	SE8	ESE7	NNE1	ENE6	NE4	NNE3	NNW6	N10	NNE14	N20	N20	NE13	NNW12	N13	N17	N18	N14	NNE5.3	N20
8-Jun	N14	N14	N14	NNW12	N12	N17	NNW17	NW13	NW12	NW15	NW18	WNW17	WNW22	WNW21	W22	W20	WNW22	W20	W16	W17	W15	W15	W16	W12	WNW14.1	WNW22
9-Jun	W12	WSW10	W10	W10	W12	NW13	W11	W12	WNW13	WSW8	WSW11	WSW11	W11	WSW11	WSW11	W6	NNW11	NNW12	NW10	NW8	NNW7	NNE15	N13	N12	WNW8.3	NNE15
10-Jun	N7	NE2	NNW4	NNW8	N5	N8	N4	NNW5	NW9	NW7	WNW7	N19	NNE16	NNE13	NNE19	N23	N24	N21	NNW22	NNW20	NNW19	NNE12	N12	N11	N11.6	N24
11-Jun	NNW14	NNW15	NNW13	N9	N12	NNW11	NNW12	N14	N15	N19	N17	N19	N19	NNE21	N21	N23	N27	N24	N20	N15	N14	NNW10	NW11	NW10	N15.6	N27
12-Jun	WNW8	NW11	NW15	NNW14	NNW15	NNW17	NNW17	NNW18	NNW18	N26	NNW26	N26	N25	N25	NNE25	NNE25	NNE26	N27	N24	N17	NNW7	NW4	W7	W10	N16.4	N27
13-Jun	W9	W9	W8	SW2	SSW2	SW2	WSW4	NNE2	WNW1	ENE0	NNE4	NNE4	SE3	SE11	S11	SSE8	WSW7	SW9	SSW11	SSW9	SSW7	SSW7	SW5	SW5	SSW3.7	SSW11
14-Jun	SSW6	SW7	WSW6	SW5	SSW4	SW3	W2	NW1	NNW3	NNW3	NNE11	NNE17	N21	N20	NNW11	N12	N19	N22	N17	N14	N8	NW6	NW6	NW5	N6.7	N22
15-Jun	NW5	NW4	WNW5	W2	W1	NNW3	NW2	N3	ESE4	ESE7	E9	NE5	NNE8	NE8	ENE10	ENE13	ENE13	ENE16	ENE13	ENE8	NE7	NNE7	N6	NNE9	NE5.2	ENE16
16-Jun	N10	NNW9	NNE12	NNW7	N7	NNE9	ENE11	NE7	NE7	SE5	NNE4	N8	NNE19	NNE20	NNE24	N26	N28	N28	N30	N28	N23	N17	NNW11	NNW10	N14.1	N30
17-Jun	NNW14	NNW13	N11	N9	NNW5	NNW5	N9	N7	NNE12	N14	NNE16	NNE16	NNE17	N19	N18	N19	N16	N15	N15	N11	N8	NW6	WNW6	NNW8	N11.6	N19
18-Jun	NNW7	N6	NNW4	W4	W3	WSW2	SW4	SW4	S3	SE2	NNE4	NNE13	N18	N15	N15	NNW14	N21	N17	NNW17	NW12	NNW13	W6	W6	W4	NNW6.9	N21
19-Jun	WSW6	W3	W3	W2	SW3	S4	WSW2	N12	NNE15	NNE14	NNE8	N10	NNE19	N17	N22	N19	N20	N13	N15	N12	N9	N10	N4	NNW8	N8.9	N22
20-Jun	NNW7	NW6	NW4	NW5	NW2	NNW7	N13	N13	N15	N19	NNE18	NNE15	NNE16	NNE17	NNE16	NE21	NNE21	NNE21	ENE15	NE14	N15	N16	N8	NNE7	NNE12.0	NE21
21-Jun	N7	NNW11	N10	N8	N9	NW6	NNW7	NNW9	N11	N13	N15	N16	N15	N18	N18	NNE13	N10	NNE16	NNE11	N8	NNW5	NNW6	NW6	W7	N10.1	N18
22-Jun	W5	SSE5	WSW3	W3	W3	S1	WNW3	NW3	N9	N12	N8	ENE7	NE10	NNE6	ENE9	WNW3	NNW3	NNW10	NNE10	ESE6	SE6	SSE10	S7	S5	NNE1.8	N12
23-Jun	SSW8	WSW4	SW5	SSW8	S9	SSW9	SSW8	S8	SSE9	SSW10	SW10	SSW7	SSE8	NNW6	WSW7	NE3	SE13	SSE13	SSE16	SE12	SSE8	SSE7	S4	S5	S6.6	SSE16
24-Jun	SW4	S4	SSW9	S4	SSE5	S6	SE4	SE8	SSE9	SSE9	S8	SSE9	S10	SE12	SSE7	S8	SW11	SSW8	SE12	SE17	SSE11	SE8	SSE12	W1	SSE7.5	SE17
25-Jun	WNW3	WSW1	UO	S4	S3	SSE9	SSE12	SSE11	SE9	ESE6	SE13	SSE17	SSE16	SSE15	SSE13	SE18	SE17	SE18	SE19	SE16	SE13	SE10	SSE12	SSE14	SE11.2	SE19
26-Jun	SSE12	SSE11	S5	NNE1	NNW2	NW2	SE9	SE8	SE11	SE14	SE21	SE25	SE23	SE21	SE18	SE18	SE16	SSE18	SE18	SE16	ESE11	ESE9	ESE8	SE9	SE12.2	SE25
27-Jun	SE8	SE8	ESE2	NNW3	NNW3	N4	NNE8	N9	N11	NE11	ENE14	ESE14	SE14	SE16	SE15	ESE15	E12	ESE12	SE7	S2	NNW2	N2	N2	WNW3	E4.9	SE16
28-Jun	W4	NW4	NNW5	NNW5	NNW8	NW11	N9	N12	N13	N15	NNE13	NE17	NE19	NE17	NE19	NE21	NE20	NE19	NE16	NNE14	N12	N13	NW11	N9	NNE11.4	NE21
29-Jun	NW6	N5	NNW5	NNW6	NNW5	N8	N13	N8	N12	NNE15	N16	NNE17	NE16	NNE16	NE18	NNE19	NNE18	NNE19	N22	N21	N16	NE9	E2	SSE8	NNE11.2	N22
30-Jun	SE5	SE3	W3	WNW1	SSW1	UO	NW1	ENE2	ENE1	ENE4	NNW3	W2	N6	N9	N13	N14	NE13	ENE14	ENE14	ENE10	E5	SE7	SE6	S4	NE3.5	ENE14
	NW3.3	NW3.3	NW3.9	NW3.5	NNW2.7	NW3.4	N3.3	N3.8	N4.2	N4.9	NNE5.3	NNE5.9	NNE6.7	NNE6.7	NNE7.0	NNE7.7	NNE8.7	NNE8.1	NNE6.5	NNE4.7	N4.4	N3.4	NNW2.1	NNW2.1	Diurnal Average	
	N25	NNE24	N22	N24	N23	N27	N27	NNE26	NNE24	NNE29	N31	N33	N31	N29	N29	N32	N30	N29	N30	N28	N23	NNE22	NNE22	NNE24	Diurnal Maximum	

UO - Unstable Operation

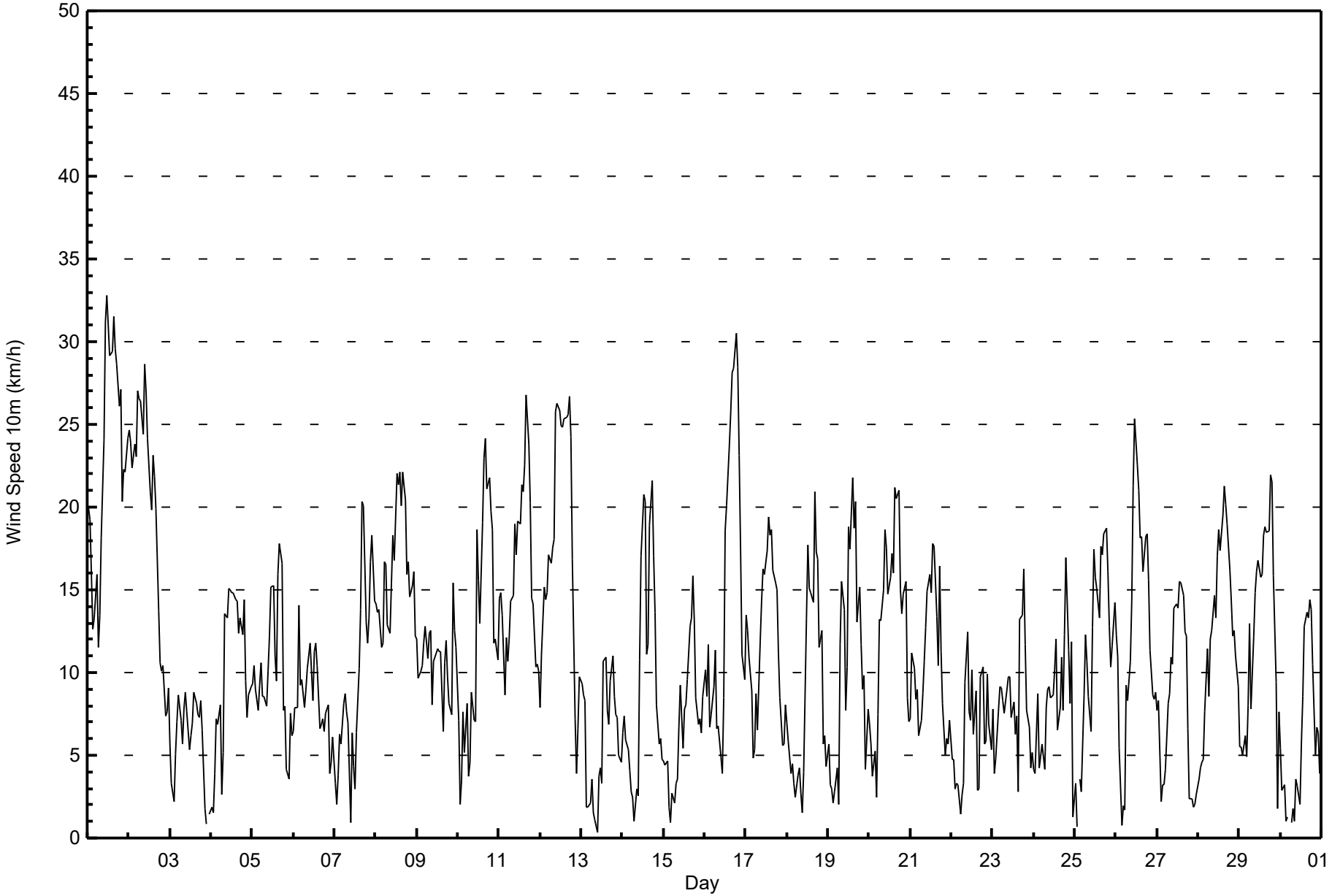
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Ells River - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	143	19.94	19.94
6 - 11	262	36.54	56.49
12 - 19	225	31.38	87.87
20 - 28	77	10.74	98.61
29 - 38	10	1.39	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

Ells River - June 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	4	4	2	4	9	6	15	6	12	9	17	7	13	19	143
6 - 11	38	11	7	7	8	10	23	24	23	20	13	16	16	4	13	29	262
12 - 19	73	32	11	9	0	4	23	16	7	5	0	2	9	4	6	24	225
20 - 28	39	16	8	1	0	0	4	0	0	0	0	0	3	3	0	3	77
29 - 38	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	167	68	30	21	10	18	59	46	45	31	25	27	45	18	32	75	717

Total Number of Valid Hours: 717

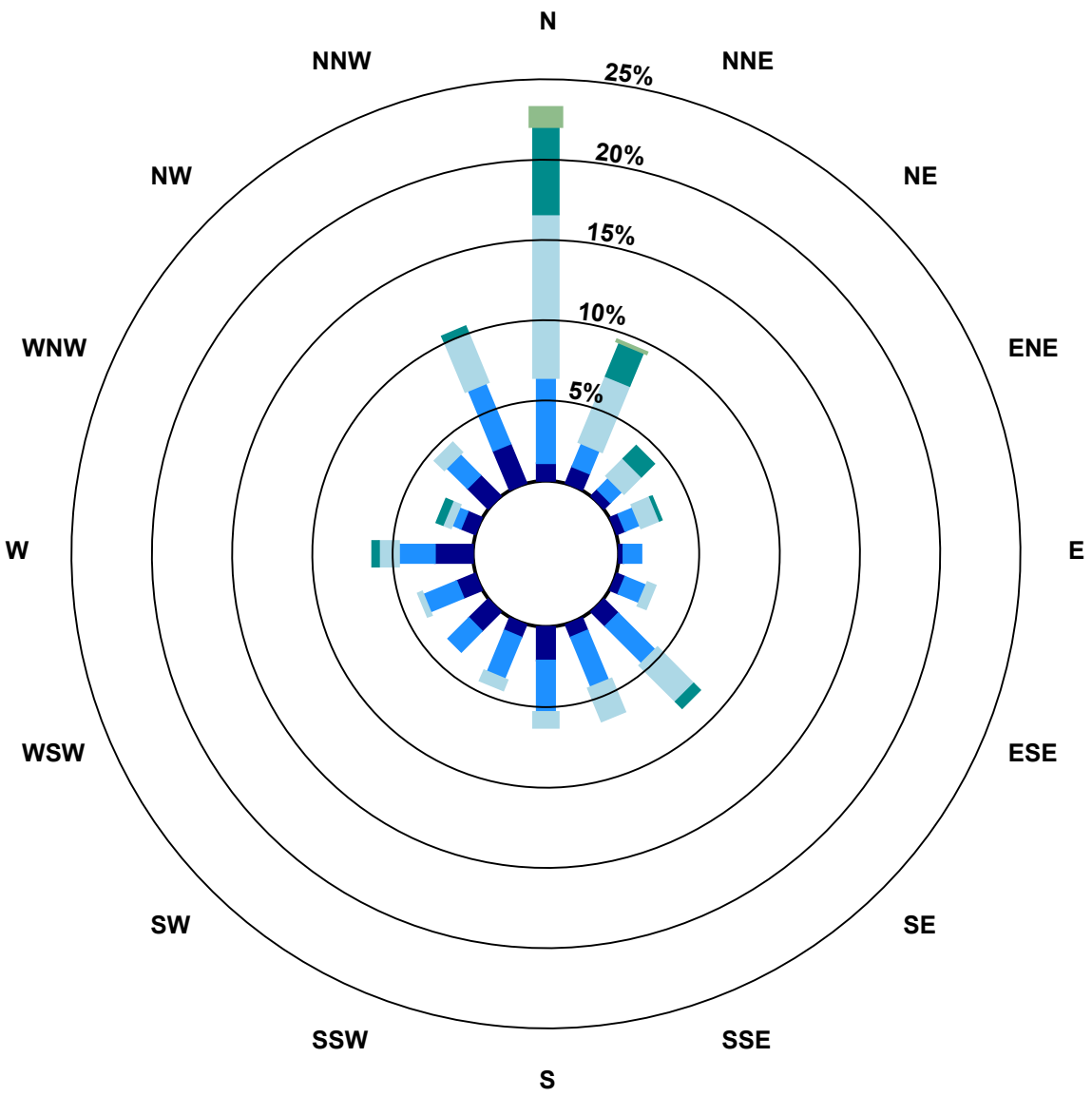
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Ells River



Classes (km/h)

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

Total Number of Valid Hours: 717

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

Minimum Value: 1 km/h on Jun 15 07:00

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

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Ells River - June 2026

Direction of Maximum Speed: 357 deg on Jun 1 12:00
Direction of Maximum Daily Speed Average: 359.4 deg on Jun 1

Direction of Minimum Speed: 59 deg on Jun 13 10:00
Direction of Minimum Daily Speed Average: 1.8 deg on Jun 22

Monthly Average Direction: 6.2 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-Jun	356	352	354	357	352	346	331	332	342	357	357	357	356	358	2	355	0	5	7	10	15	17	15	12	359.4
2-Jun	10	13	4	357	4	7	9	17	20	24	34	47	48	59	38	39	38	68	93	93	85	97	99	95	31.4
3-Jun	100	112	126	111	115	113	124	125	130	122	130	130	138	157	171	168	169	156	162	180	244	181	UO	220	140.9
4-Jun	256	278	192	188	183	181	166	186	169	188	182	196	184	196	185	184	188	203	204	204	194	191	163	176	188.6
5-Jun	178	179	173	181	203	209	215	224	216	172	158	147	140	167	167	157	150	140	162	233	165	139	187	212	172.9
6-Jun	232	280	306	307	269	263	258	261	239	234	244	251	244	236	241	214	214	217	216	225	246	206	200	198	245.7
7-Jun	184	249	166	170	146	150	142	135	118	27	63	53	19	331	352	20	5	8	47	346	349	1	10	0	21.4
8-Jun	353	357	354	342	357	352	344	312	300	308	309	294	288	282	278	279	284	279	272	276	272	271	275	276	300.3
9-Jun	280	255	259	267	271	287	281	281	292	253	252	242	262	248	252	264	334	330	329	313	328	20	7	357	290.0
10-Jun	358	49	341	343	353	354	356	328	308	311	299	5	15	15	16	2	9	8	340	340	344	13	8	358	356.2
11-Jun	342	339	348	349	359	341	348	349	350	353	352	358	356	12	10	6	359	1	1	357	350	335	320	311	353.4
12-Jun	288	307	326	329	344	343	345	346	346	353	347	358	9	5	13	16	13	9	9	7	347	307	265	268	352.6
13-Jun	267	260	261	225	202	234	245	14	291	59	19	27	130	132	177	156	245	220	200	202	196	203	221	216	211.0
14-Jun	205	216	249	216	196	221	268	310	345	342	24	21	7	2	342	353	6	7	7	5	352	317	312	321	353.4
15-Jun	319	313	284	266	277	338	324	4	122	115	80	54	33	34	64	70	68	70	64	59	43	17	354	19	47.5
16-Jun	3	343	12	343	1	25	61	35	44	140	16	352	12	12	27	7	2	4	357	358	355	4	339	346	6.5
17-Jun	342	340	350	350	332	331	8	357	19	9	16	12	13	4	2	7	353	2	5	4	356	323	293	335	359.1
18-Jun	346	354	338	271	264	256	234	228	171	124	27	19	7	5	350	333	356	0	332	313	334	275	276	260	339.8
19-Jun	253	267	259	269	222	175	252	8	16	12	16	5	17	7	3	351	359	3	2	355	360	4	349	344	359.3
20-Jun	334	326	320	316	315	329	360	1	1	8	24	23	28	23	23	37	16	24	57	36	11	349	356	16	13.5
21-Jun	356	346	354	359	355	325	336	347	350	351	352	360	350	360	1	25	1	12	26	5	348	328	311	278	354.5
22-Jun	280	163	239	281	262	190	303	326	1	356	1	74	39	32	60	290	327	347	27	116	141	158	186	186	22.3
23-Jun	192	248	225	200	191	195	204	179	154	205	226	197	156	336	243	51	142	163	155	145	159	167	177	181	180.5
24-Jun	218	185	196	187	161	178	146	145	160	162	169	167	176	140	165	179	215	206	138	145	153	140	152	271	165.2
25-Jun	283	243	UO	169	170	161	159	154	129	115	138	161	157	147	148	135	136	134	138	140	134	136	148	153	145.1
26-Jun	159	165	176	26	345	326	138	126	134	144	138	135	134	138	138	136	141	152	145	135	119	115	121	136	138.7
27-Jun	140	144	119	329	337	4	16	3	1	40	74	107	134	135	130	121	101	112	133	185	345	354	352	284	96.8
28-Jun	281	324	335	328	344	347	359	350	356	2	22	40	36	54	38	45	39	47	37	32	359	357	345	1	19.3
29-Jun	326	349	338	335	330	355	5	1	4	21	1	21	39	27	40	20	25	25	357	356	1	44	101	159	13.3
30-Jun	139	138	277	303	212	UO	324	62	70	68	346	264	357	4	3	355	43	57	61	69	98	138	135	171	48.2
	323.0	324.5	324.2	320.3	327.8	333.8	349.8	349.7	1.7	8.4	15.9	26.4	24.9	22.1	19.3	22.5	17.0	23.3	25.3	11.9	2.5	9.0	344.0	330.6	
	Diurnal Average																								

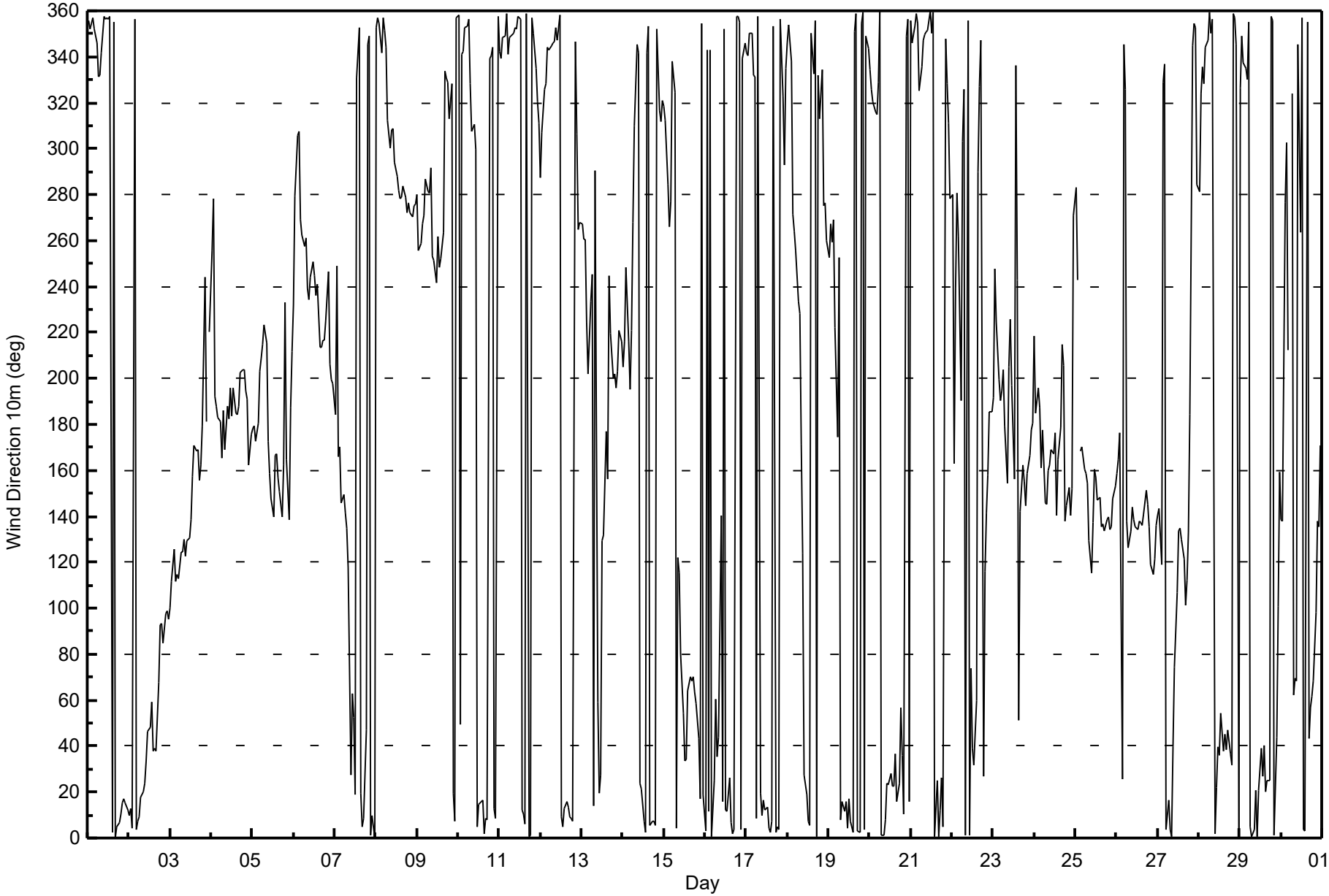
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Ells River - June 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Ells River - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 110 deg on Jun 13 10:00

Minimum Value: 6 deg on Jun 27 02:00

Percentiles: P_1 = 7 P_{10} = 11 Q_1 = 13 Median = 18 Q_3 = 27 P_{90} = 48 P_{99} = 83

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 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-Jun	13	11	13	13	13	11	11	14	12	13	15	14	15	15	13	15	15	12	13	12	8	9	9	10	15
2-Jun	12	9	12	12	12	13	11	9	11	15	12	13	12	14	13	13	12	16	15	15	15	15	12	13	16
3-Jun	11	22	21	12	12	15	14	29	21	20	15	44	24	27	25	24	19	23	20	23	38	85	UO	57	85
4-Jun	34	55	10	10	11	13	64	81	16	21	19	22	21	27	27	28	31	28	21	18	13	17	7	11	81
5-Jun	7	8	8	10	16	19	25	26	27	26	20	16	18	36	58	14	19	11	16	27	51	55	21	26	58
6-Jun	19	20	13	13	22	23	26	38	28	22	19	25	23	21	20	20	23	19	20	25	22	35	18	24	38
7-Jun	27	35	32	17	13	9	13	11	14	84	52	41	64	39	41	23	12	14	42	14	12	12	11	11	84
8-Jun	11	12	12	11	14	12	16	11	13	15	13	14	15	17	18	18	16	18	20	18	20	20	17	20	20
9-Jun	18	20	21	20	19	20	26	21	22	25	27	26	28	27	26	35	17	14	11	11	33	9	12	13	35
10-Jun	22	64	57	17	29	12	33	38	26	25	25	30	11	15	14	13	13	12	15	13	15	11	11	11	64
11-Jun	15	11	13	12	14	14	14	16	14	14	15	18	17	13	12	14	14	13	11	10	12	12	14	12	18
12-Jun	10	15	10	10	8	8	9	11	15	13	16	16	13	16	13	13	12	14	13	10	13	24	14	8	24
13-Jun	9	13	30	62	52	45	31	51	88	110	74	64	91	33	41	40	56	30	19	17	9	8	57	20	110
14-Jun	17	19	35	24	28	52	56	72	35	45	29	16	17	14	30	19	17	11	12	9	13	36	34	10	72
15-Jun	10	24	14	47	40	44	31	33	67	40	35	75	52	48	41	25	20	13	11	9	10	12	11	23	75
16-Jun	17	14	11	24	15	19	14	39	35	40	55	61	21	17	18	19	15	15	14	13	13	12	8	9	61
17-Jun	7	9	13	13	26	32	16	24	20	17	21	22	20	15	15	12	16	15	14	13	11	31	48	12	48
18-Jun	11	16	25	23	23	37	30	27	55	81	77	15	12	13	15	18	16	14	17	13	19	20	21	23	81
19-Jun	17	80	56	62	50	20	54	24	14	18	38	27	23	22	13	14	13	18	16	12	12	11	22	10	80
20-Jun	14	12	36	20	91	25	14	12	16	16	19	28	22	18	25	20	16	12	24	18	13	13	15	17	91
21-Jun	17	8	13	12	13	18	19	31	14	14	14	15	21	15	13	20	14	10	9	42	33	21	28	8	42
22-Jun	12	56	37	35	43	54	53	25	30	18	35	52	39	57	37	83	63	31	20	31	19	11	21	21	83
23-Jun	15	33	20	20	11	14	21	23	23	40	40	69	40	67	63	82	10	13	17	10	15	14	41	30	82
24-Jun	48	71	11	49	50	32	23	19	28	23	39	48	43	28	58	62	25	23	32	14	14	8	12	75	75
25-Jun	45	76	UO	34	65	11	13	18	21	40	21	19	24	27	32	23	16	13	11	9	7	8	8	9	76
26-Jun	10	8	50	42	36	63	15	23	14	19	13	11	14	16	18	18	19	16	13	9	9	7	9	7	63
27-Jun	7	6	68	24	28	20	14	21	20	28	30	20	23	20	22	20	17	14	28	56	18	16	13	27	68
28-Jun	19	16	15	14	12	9	18	9	13	12	29	26	15	26	20	15	15	13	13	12	15	11	8	10	29
29-Jun	22	15	21	10	9	14	10	14	14	16	15	30	26	23	19	21	15	10	14	13	12	43	83	17	83
30-Jun	44	31	55	70	49	UO	83	64	75	48	29	82	41	41	26	20	28	15	13	11	18	11	9	30	83
	48	80	68	70	91	63	83	81	88	110	77	82	91	67	63	83	63	31	42	56	51	85	83	75	
	Diurnal Maximum																								

UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS31
BLACKROD
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BLACKROD (AMS31)
JUNE 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	6.3	0	1	0
H2S (ppb) Average	680	35	40	99.31	0.7	0	0.4	0
THC(ppm) Average	686	34	34	100	12.6	-	3.7	-
NO2 (ppb) Average	685	35	35	100	20.6	0	9.7	-
NO (ppb) Average	685	35	35	100	55.8	-	22.3	-
NOX (ppb) Average	685	35	35	100	67.4	-	32	-
Temperature 2 m (C) Average	720	0	0	100	28.5	-	21.8	-
Relative Humidity (%) Average	720	0	0	100	98.3	-	93.3	-
Wind Speed 10 m (km/h) Average	720	0	0	100	27	-	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 - BLACKROD (AMS31)
JUNE 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	0.5	-	0	0	0	0	0.2	0.6	6.3
H2S (ppb) Average	680	0.16	0.1	-	0	0	0.1	0.1	0.2	0.3	0.7
THC (ppm) Average	686	2.64	1	-	2.1	2.2	2.2	2.3	2.6	3.4	12.6
NO2 (ppb) Average	685	2.68	3.2	-	0.1	0.4	0.6	1.3	3.6	7.1	20.6
NO (ppb) Average	685	4.83	9	-	0	0	0.1	0.6	4.6	17.3	55.8
NOX (ppb) Average	685	7.51	11.9	-	0.2	0.5	0.7	1.9	8.3	24	67.4
Temperature 2 m (C) Average	720	14.62	5.3	-	4.7	8.3	10.2	14.3	17.7	22.7	28.5
Relative Humidity (%) Average	720	69.37	21.6	-	22.9	37.3	52.2	71.3	90.2	95.4	98.3
Wind Speed 10 m (km/h) Average	720	10.4	5	-	1	3	7	10	14	18	27
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - BLACKROD (AMS31)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
H2S	26 Jun 2026 23:00	27 Jun 2026 01:00	3	Unstable Operation - flatline in analyzer output signal
H2S	27 Jun 2026 16:00	27 Jun 2026 17:00	2	Unstable Operation - flatline in analyzer output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Blackrod - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6.3 ppb on Jun 17 09:00 Maximum Daily Average: 1.0 ppb on Jun 17

Minimum Value: 0.0 ppb on Jun 1 20:00 Minimum Daily Average: 0.0 ppb on Jun 3
Maximum Diurnal Average: 0.5 ppb at hour 9 Minimum Diurnal Average: 0.1 ppb at hour 23
Monthly Average: 0.20 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.2 P_{90} = 0.6 P_{99} = 2.4

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-Jun	Z	0.0	0.2	0.5	0.4	0.2	0.8	0.6	0.8	0.7	0.8	0.6	0.6	0.7	0.6	0.6	0.6	0.5	0.2	0.0	0.0	0.1	0.3	0.4	0.4	0.8
2-Jun	0.9	Z	0.6	0.3	0.1	0.2	0.0	0.2	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	0.0	0.0	0.0	0.1	0.9
3-Jun	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-Jun	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	0.2	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.2
5-Jun	0.1	0.0	0.1	0.1	Z	0.2	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.6	0.6	0.2	0.1	0.1	0.0	0.1	0.3	0.1	0.1	0.6
6-Jun	0.2	0.1	0.3	0.1	0.0	Z	0.1	0.3	0.3	0.7	0.3	0.2	0.3	0.5	0.6	0.6	0.7	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.3	0.7
7-Jun	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	0.3	0.0	0.3
8-Jun	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	0.3	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.3
9-Jun	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	0.4	0.7	0.0	0.0	0.3	0.1	0.7
10-Jun	0.1	0.1	0.1	Z	0.2	1.0	0.6	0.7	1.1	0.8	0.5	0.4	0.3	0.1	0.0	0.1	0.0	0.2	0.7	0.9	0.2	0.4	0.4	0.8	0.4	1.1
11-Jun	0.2	0.2	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.4	0.5	0.5	0.3	0.6	1.4	2.1	0.5	0.2	0.3	2.1
12-Jun	0.7	0.7	0.3	0.0	0.0	Z	0.2	0.3	0.3	0.1	0.3	0.2	0.1	0.2	0.1	0.2	0.5	0.4	0.6	0.7	0.2	0.0	0.0	0.3	0.3	0.7
13-Jun	Z	0.2	0.2	0.1	0.1	0.2	0.4	1.4	3.2	0.9	0.2	0.3	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.0	0.0	0.1	0.0	0.1	0.4	3.2
14-Jun	0.1	Z	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.7	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.4	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.7
15-Jun	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	0.1	0.0	0.0	0.0	0.0	0.0	0.3
16-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
17-Jun	0.2	0.2	0.4	0.6	Z	0.4	0.6	3.4	6.3	4.8	2.1	1.1	0.0	0.5	0.3	0.0	0.0	0.1	0.1	0.1	0.8	0.3	0.0	0.0	1.0	6.3
18-Jun	0.1	0.0	0.1	0.0	0.0	Z	0.3	0.0	0.1	C	C	C	C	0.5	0.2	0.4	0.6	0.2	1.0	1.8	0.2	0.1	0.1	0.1	0.3	1.8
19-Jun	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.3	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.3
20-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.6	0.7	0.4	0.5	0.2	0.2	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7
21-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.4
22-Jun	0.2	0.1	0.6	Z	0.0	0.1	0.2	0.3	0.5	0.6	0.7	0.4	0.0	0.0	0.3	0.2	0.1	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.2	0.7
23-Jun	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	0.1	0.0	0.1
24-Jun	0.2	0.4	0.4	0.4	0.3	Z	0.6	1.0	0.8	1.3	1.2	1.8	2.4	1.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.4
25-Jun	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	0.1	0.0	0.1
26-Jun	0.1	Z	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.4
27-Jun	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	0.0	0.0	0.0	0.1
28-Jun	0.0	0.0	0.0	Z	0.2	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.6
29-Jun	0.2	0.2	0.1	0.1	Z	0.3	0.7	0.8	0.6	0.7	0.4	0.3	0.4	1.2	1.3	3.4	3.6	2.6	0.7	0.2	0.2	0.1	0.1	0.1	0.8	3.6
30-Jun	0.0	0.1	0.4	0.3	0.2	Z	0.1	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	0.1	0.1	0.1	0.1	0.7
	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.4	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	Diurnal Average	
	0.9	0.7	0.6	0.6	0.4	1.0	0.8	3.4	6.3	4.8	2.1	1.8	2.4	1.4	1.3	3.4	3.6	2.6	1.0	1.8	1.4	2.1	0.5	0.8	Diurnal Maximum	

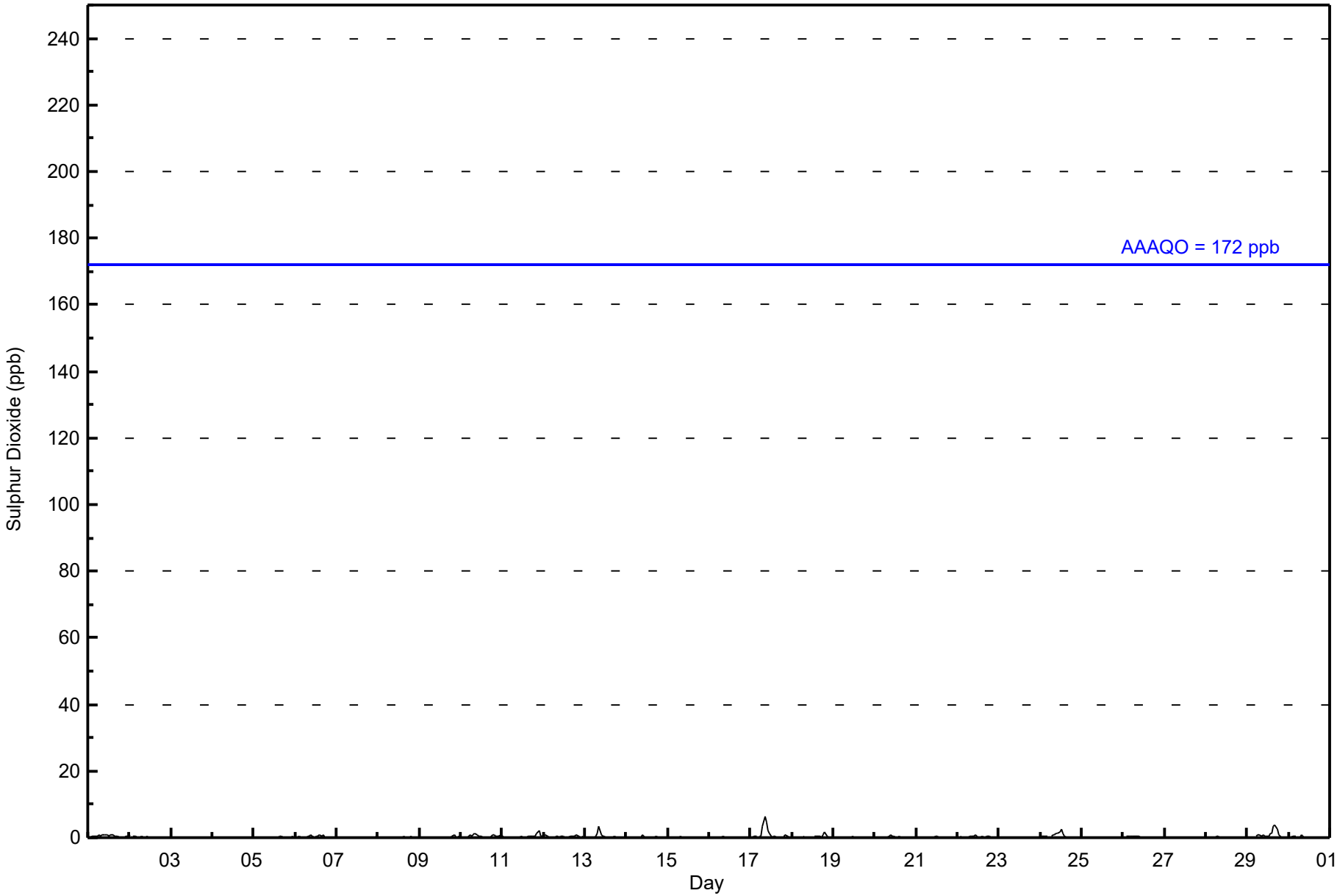
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Blackrod - June 2026



Sulphur Dioxide (SO_2) - ppb
Blackrod - June 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

Blackrod - June 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	97	84	41	34	17	19	35	78	78	35	16	11	22	32	25	62	686
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	97	84	41	34	17	19	35	78	78	35	16	11	22	32	25	62	686

Total Number of Valid Hours: 686

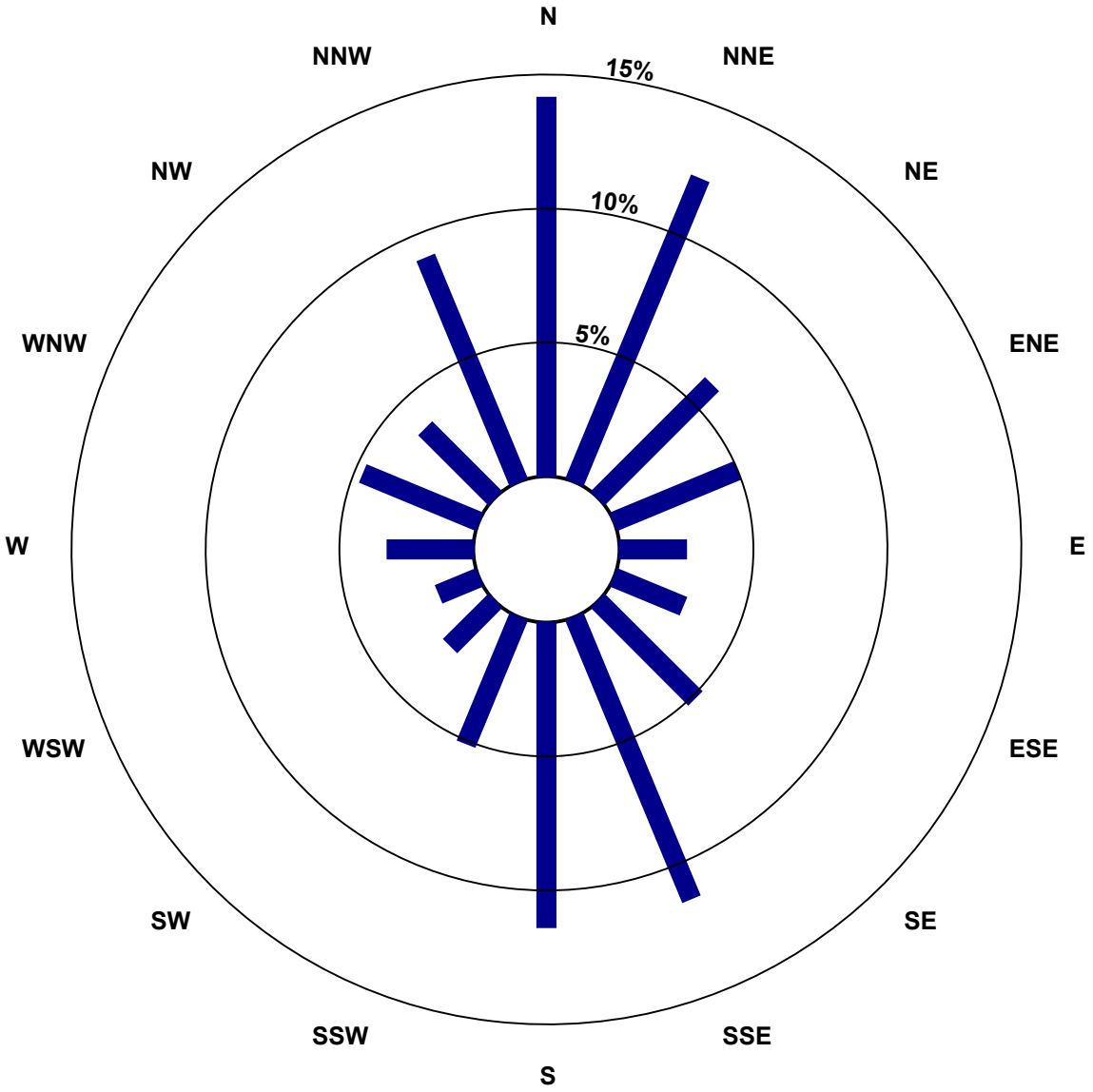
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Blackrod



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

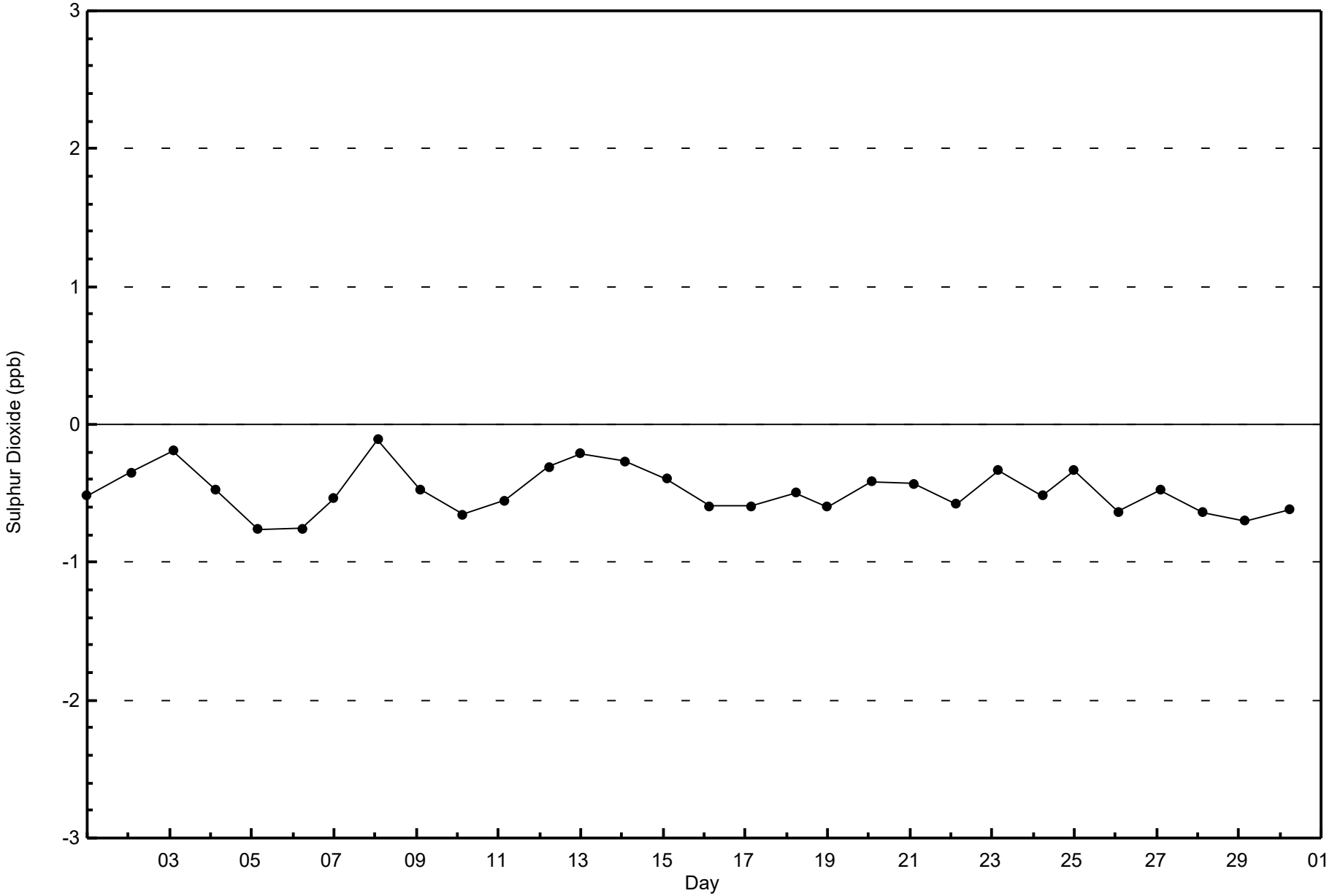
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Blackrod - June 2026

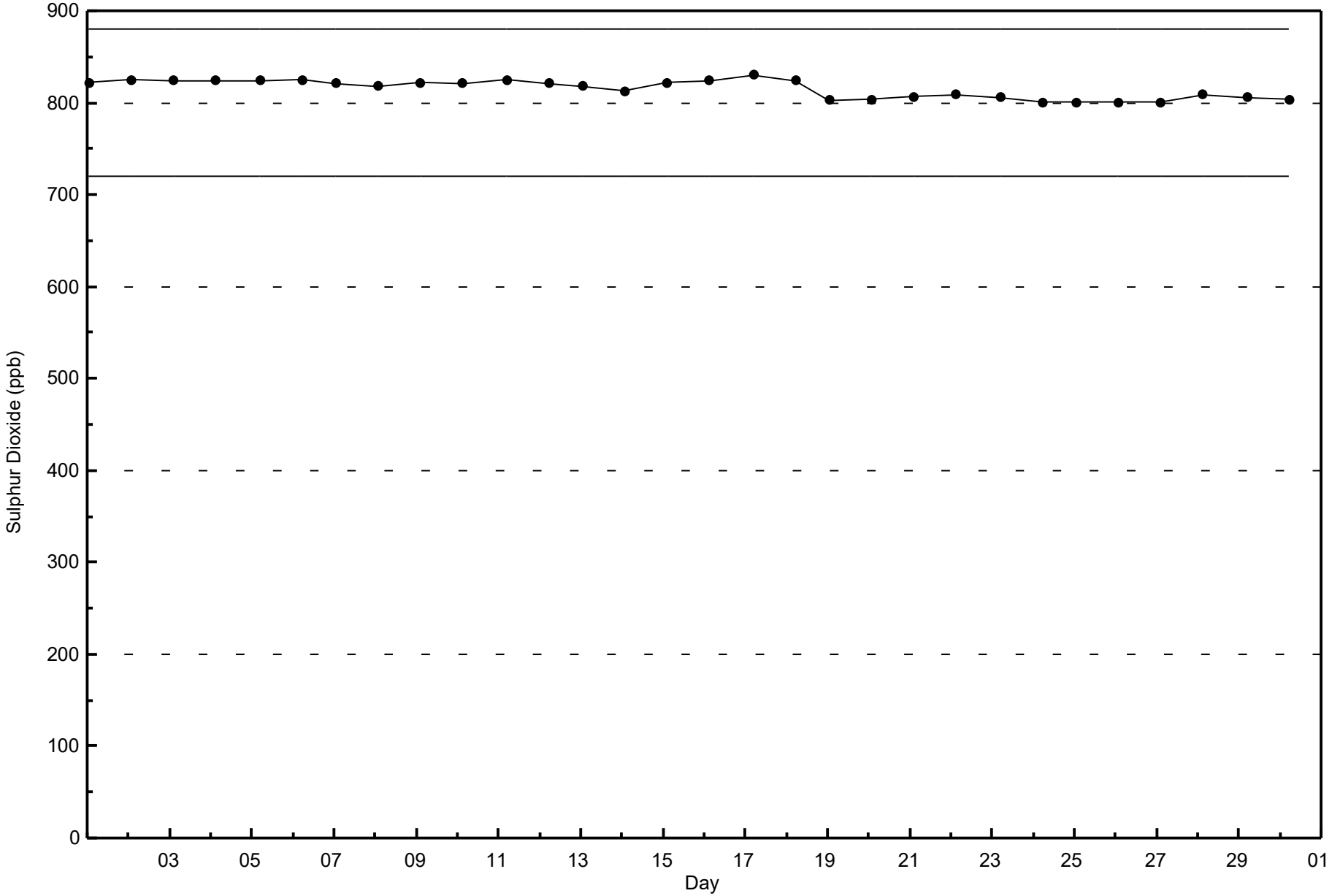


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Blackrod - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Blackrod - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.7 ppb on Jun 17 08:00 Maximum Daily Average: 0.4 ppb on Jun 17

Minimum Value: 0.0 ppb on Jun 16 04:00 Minimum Daily Average: 0.0 ppb on Jun 26
Maximum Diurnal Average: 0.2 ppb at hour 7 Minimum Diurnal Average: 0.1 ppb at hour 15
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} = 0.6

Hours in Service:	720
Hours of Data:	680
Hours of Missing Data:	40
Hours of Calibration:	35
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-Jun	0.1	Z	0.2	0.3	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.3	0.2	0.3	0.4	0.4	0.3	0.6
2-Jun	0.4	0.4	Z	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.5	0.3	0.2	0.1	0.2	0.1	0.0	0.1	0.1	0.2	0.0	0.1	0.0	0.0	0.2	0.5
3-Jun	0.0	0.0	0.0	Z	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	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2
4-Jun	0.0	0.1	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	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
5-Jun	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	0.3	0.3	0.1	0.2	0.1	0.1	0.1	0.3	0.2	0.1	0.3
6-Jun	Z	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.3
7-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.4	0.1	0.4
8-Jun	0.4	0.3	Z	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.3	0.4	0.1	0.2	0.4
9-Jun	0.1	0.2	0.3	Z	0.4	0.6	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.3	0.2	0.1	0.3	0.2	0.6
10-Jun	0.1	0.2	0.3	0.4	Z	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.4	0.2	0.4	0.4	0.4	0.3	0.5
11-Jun	0.2	0.2	0.2	0.2	0.1	Z	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.3	0.2	0.3	0.2	0.5	0.5	0.7	0.3	0.4	0.3	0.7
12-Jun	Z	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.5	0.7	0.6	0.4	0.2	0.2	0.3	0.7
13-Jun	0.1	Z	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.2
14-Jun	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	0.0	0.3	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.3
15-Jun	0.2	0.2	0.1	Z	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.2
16-Jun	0.0	0.0	0.0	0.0	Z	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2
17-Jun	0.3	0.5	0.5	0.6	0.6	Z	0.3	0.7	0.4	0.4	C	C	C	C	C	0.1	0.1	0.1	0.2	0.2	0.4	0.2	0.5	0.3	0.4	0.7
18-Jun	Z	0.4	0.3	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.5	0.4	0.3	0.2	0.3	0.3	0.2	0.5
19-Jun	0.3	Z	0.3	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.3	0.3	0.2	0.4
20-Jun	0.3	0.2	Z	0.2	0.1	0.2	0.5	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.2	0.3	0.1	0.1	0.3	0.3	0.1	0.1	0.2	0.5
21-Jun	0.1	0.1	0.1	Z	0.4	0.3	0.2	0.2	0.1	0.1	0.2	0.4	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.1	0.3	0.2	0.4
22-Jun	0.2	0.3	0.4	0.2	Z	0.4	0.4	0.4	0.3	0.2	0.1	0.2	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.4
23-Jun	0.1	0.1	0.2	0.2	0.2	Z	0.1	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	0.1	0.1	0.1	0.1	0.2
24-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2
25-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.2
26-Jun	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	UO	UO	0.0	0.1
27-Jun	UO	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	0.1	UO	UO	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
28-Jun	0.1	0.1	0.1	0.1	Z	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.3
29-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.5	0.5	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.5
30-Jun	Z	0.2	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.3
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	Diurnal Average	
	0.4	0.5	0.5	0.6	0.6	0.6	0.5	0.7	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.7	0.6	0.7	0.5	0.4	Diurnal Maximum	

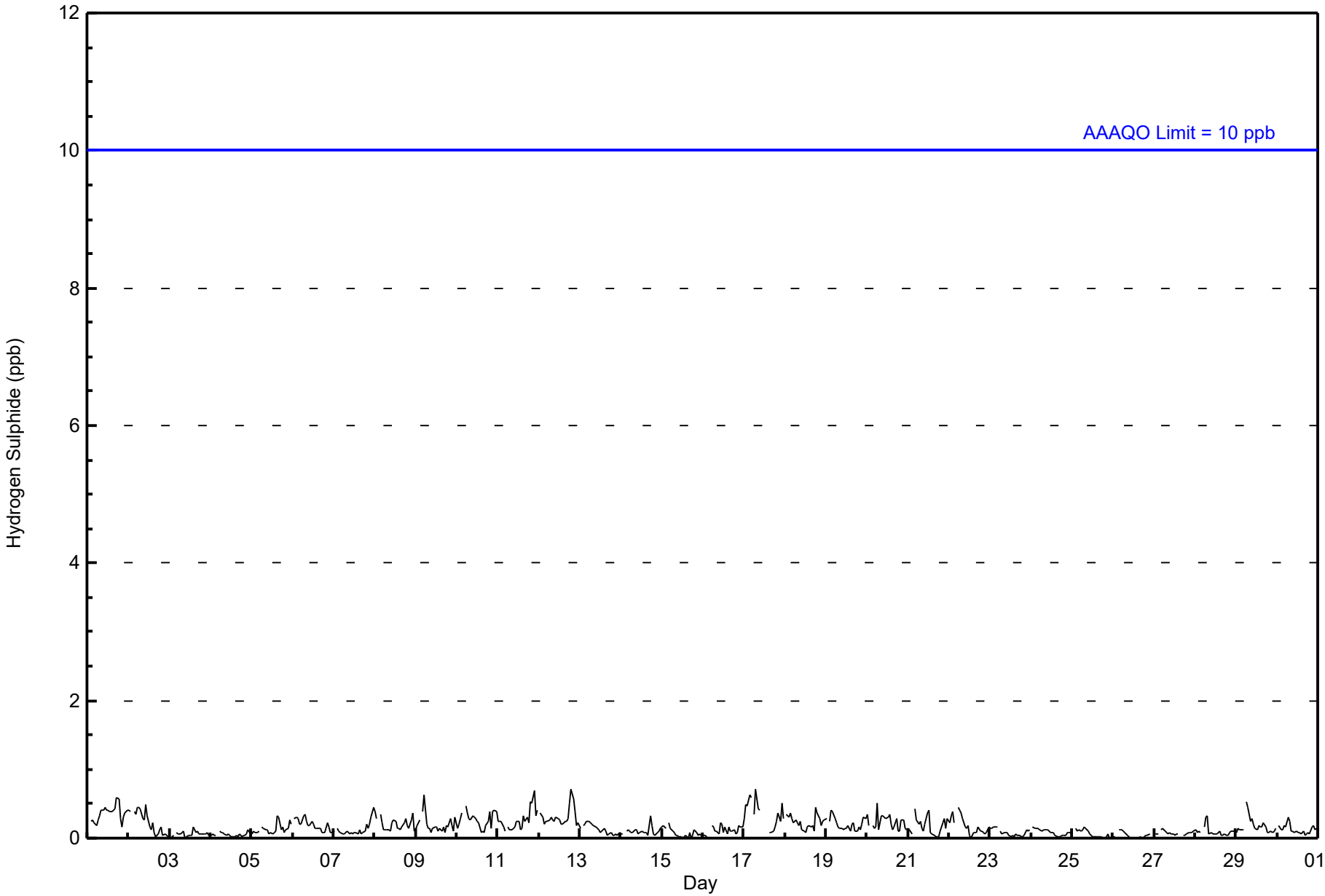
Z - zerospan C - Calibration UO - Unstable Operation
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Blackrod - June 2026



Hydrogen Sulphide (H_2S) - ppb

Blackrod - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	680	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: 680

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Blackrod - June 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 2	92	80	40	35	17	16	34	80	77	35	17	11	23	32	26	65	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	92	80	40	35	17	16	34	80	77	35	17	11	23	32	26	65	680

Total Number of Valid Hours: 680

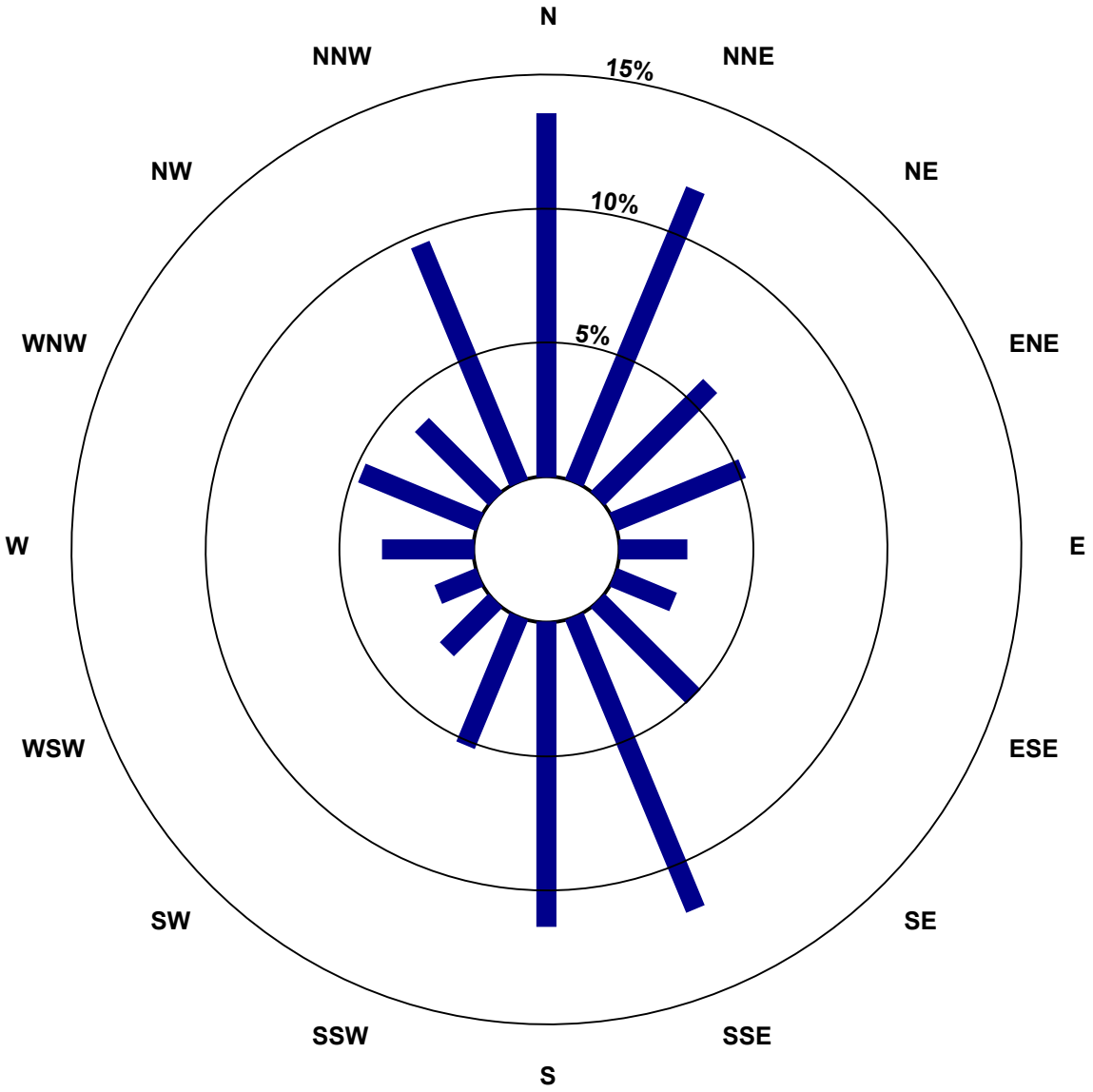
Total Number of Hours: 720

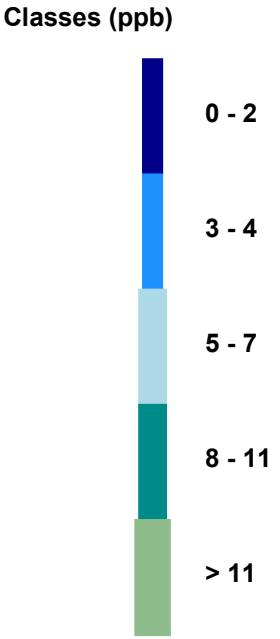
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H_2S) - ppb

Blackrod





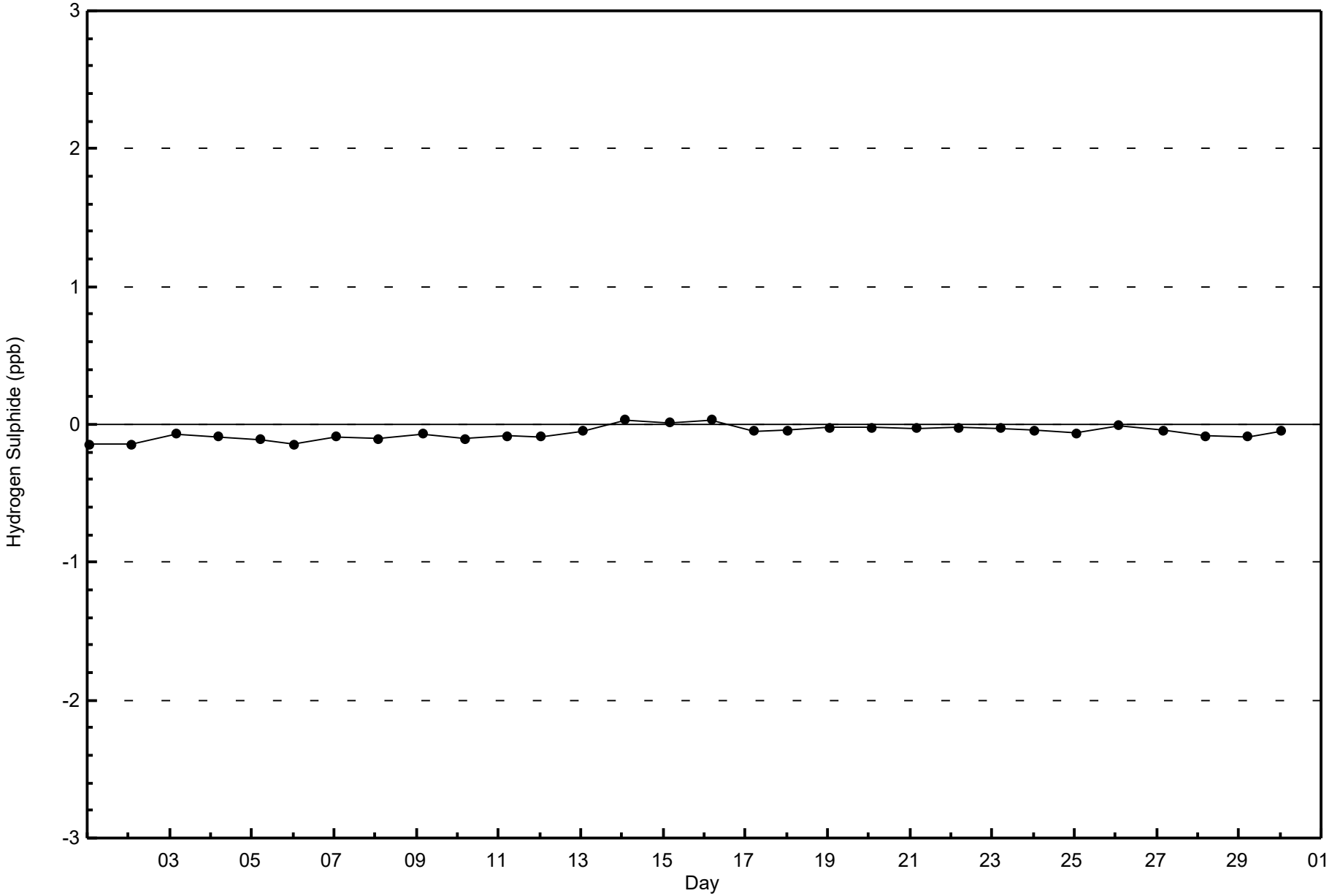
Total Number of Valid Hours: 680

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Blackrod - June 2026

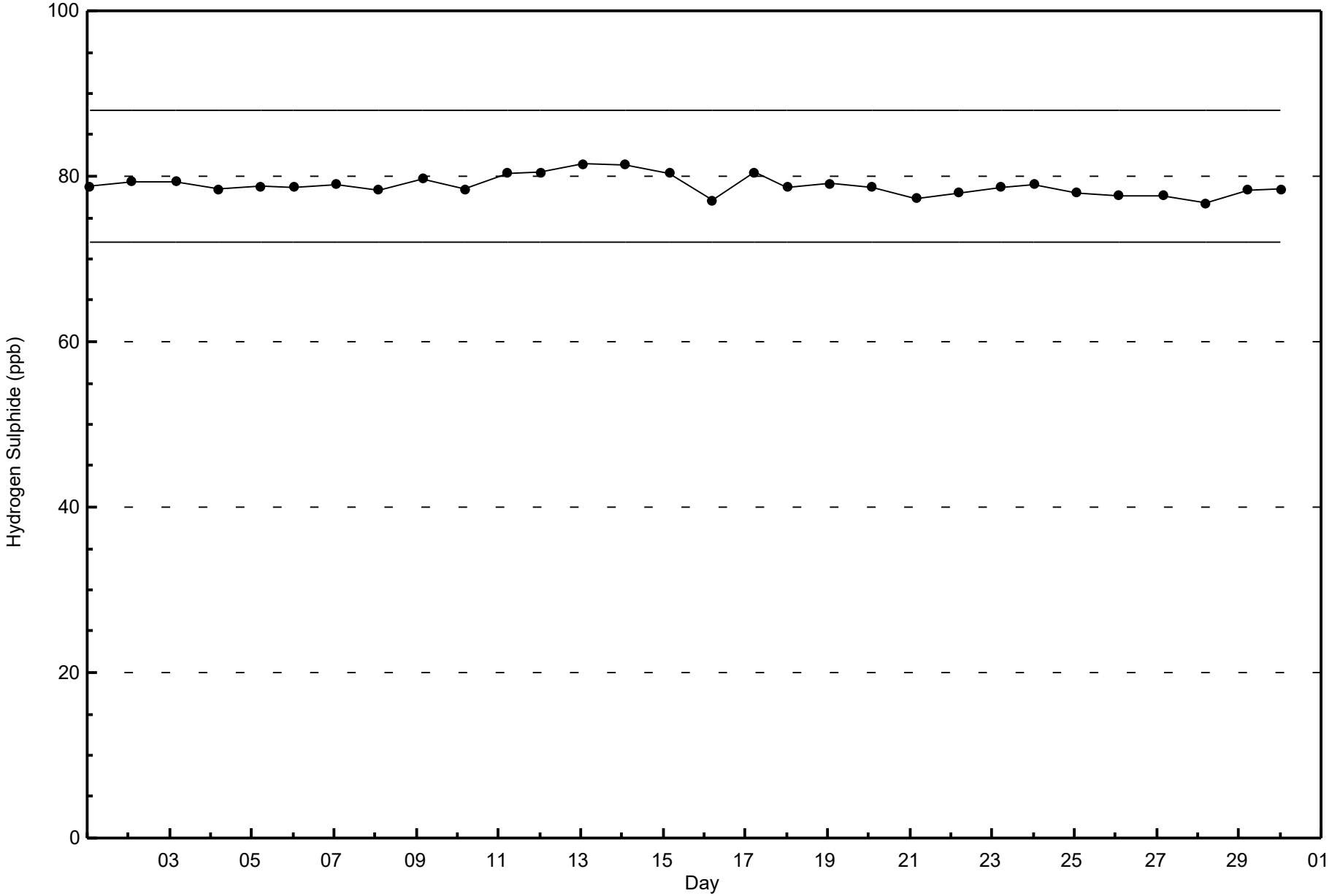


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Blackrod - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Blackrod - June 2026

Maximum Value: 12.6 ppm on Jun 17 23:00

Maximum Daily Average: 3.7 ppm on Jun 11

Minimum Value: 2.1 ppm on Jun 19 21:00

Minimum Daily Average: 2.2 ppm on Jun 27

Maximum Diurnal Average: 3.1 ppm at hour 6

Minimum Diurnal Average: 2.4 ppm at hour 13

Monthly Average: 2.64 ppm

Percentiles: P_1 = 2.1 P_{10} = 2.2 Q_1 = 2.2 Median = 2.3 Q_3 = 2.6 P_{90} = 3.4 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-Jun	Z	4.6	3.9	3.2	4.2	4.3	2.9	3.0	2.6	2.5	2.6	2.6	2.6	2.4	2.6	2.5	2.5	2.5	2.4	2.3	2.2	2.3	2.3	2.3	2.8	4.6
2-Jun	2.3	Z	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.3	2.2	2.3	2.3
3-Jun	2.2	2.2	Z	2.2	2.2	2.2	2.2	2.4	2.6	2.2	2.2	2.3	2.3	2.4	3.1	2.5	2.7	2.4	2.2	2.2	2.2	2.2	2.2	2.2	2.3	3.1
4-Jun	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	2.3	2.2	2.6	2.2	2.2	2.2	2.2	3.0	2.2	2.3	3.0
5-Jun	2.2	2.5	2.2	2.2	Z	2.2	2.2	2.2	2.2	2.4	2.1	2.1	2.1	2.2	2.4	3.2	4.1	3.2	2.1	2.6	4.0	2.1	2.2	2.1	2.5	4.1
6-Jun	3.5	3.5	3.8	4.2	3.0	Z	5.0	4.0	3.4	2.4	3.3	3.7	3.1	2.8	2.5	2.2	2.6	2.3	2.7	2.2	3.5	2.7	2.2	2.2	3.1	5.0
7-Jun	Z	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.9	2.5	2.5	2.5	2.5	2.3	2.2	2.9	2.5	2.6	2.6	3.7	3.0	2.6	3.8	6.4	2.7	6.4
8-Jun	5.5	Z	6.4	2.4	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.2	2.2	2.6	3.7	4.7	3.0	3.0	4.7	5.4	2.2	3.0	6.4
9-Jun	2.2	2.2	Z	2.5	2.7	5.5	2.3	2.3	3.2	2.4	3.0	2.6	3.2	2.6	2.9	2.3	3.0	2.2	3.6	3.2	2.6	2.5	2.2	3.0	2.8	5.5
10-Jun	2.2	2.2	3.2	Z	6.1	5.4	2.5	2.7	3.6	2.6	2.7	3.1	2.9	2.8	2.9	2.9	3.3	4.8	4.7	3.8	3.2	2.3	2.3	4.1	3.3	6.1
11-Jun	6.7	7.0	6.7	4.3	Z	4.8	4.3	3.6	3.4	2.9	3.1	3.7	2.8	3.0	2.8	2.6	3.4	3.0	3.5	3.3	2.8	3.0	2.5	2.3	3.7	7.0
12-Jun	2.6	5.7	6.3	5.4	6.1	Z	4.5	3.4	2.9	3.1	2.6	2.4	2.3	2.7	2.8	2.9	2.8	2.4	2.6	2.7	2.4	2.3	2.2	2.2	3.3	6.3
13-Jun	Z	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.7	2.3	2.3	2.3	2.4	2.3	2.7	2.4	2.2	2.4	2.5	2.3	2.2	2.2	2.2	2.2	2.3	2.7
14-Jun	2.2	Z	2.2	2.2	2.2	2.2	2.2	2.3	2.6	2.5	2.5	2.5	2.3	2.7	2.6	2.6	2.6	3.8	2.7	2.3	2.2	2.2	2.2	2.2	2.4	3.8
15-Jun	2.2	2.2	Z	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.5	2.3	2.4	2.6	2.5	2.7	2.2	2.5	2.8	2.2	2.2	2.1	2.2	2.3	2.8
16-Jun	2.1	2.1	2.2	Z	2.2	2.3	3.1	3.2	2.6	2.7	2.9	3.0	2.4	2.3	2.5	2.6	2.8	3.4	3.0	2.5	2.7	3.5	2.3	3.9	2.7	3.9
17-Jun	2.7	2.4	3.0	3.4	Z	2.3	2.3	2.5	2.3	3.1	2.5	2.8	2.4	3.6	2.8	2.2	2.3	2.9	4.8	7.2	2.7	3.4	12.6	4.3	3.5	12.6
18-Jun	6.7	2.2	2.2	2.7	2.3	Z	2.2	2.2	3.1	C	C	C	C	2.6	2.5	2.7	3.4	2.3	2.6	4.1	2.3	2.2	2.2	2.2	2.8	6.7
19-Jun	Z	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.2	2.8	2.3	2.3	2.5	2.6	2.6	2.5	3.1	2.1	2.1	2.2	2.1	2.1	2.1	2.3	2.3	3.1
20-Jun	2.2	Z	3.5	2.2	2.2	2.3	2.3	2.3	2.6	2.8	2.5	2.3	2.6	2.3	2.4	2.2	2.5	2.9	2.2	2.2	2.3	2.3	2.3	2.3	2.4	3.5
21-Jun	2.3	2.3	Z	2.3	2.4	2.3	2.3	2.3	2.2	2.2	4.3	2.4	2.4	2.2	2.2	2.2	2.2	2.2	2.2	2.5	2.4	2.3	3.1	7.3	2.6	7.3
22-Jun	3.9	5.7	2.4	Z	4.4	3.7	2.6	3.7	3.1	2.8	2.7	2.9	2.2	2.2	2.5	2.2	2.4	3.5	2.4	2.2	2.2	2.2	2.2	2.2	2.9	5.7
23-Jun	2.2	2.2	2.2	2.2	Z	2.2	2.2	2.2	2.4	2.4	2.4	2.3	2.2	2.2	2.2	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.4
24-Jun	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	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3
25-Jun	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	2.2	2.2	2.2
26-Jun	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	2.1	2.1	2.2	2.1	2.2	2.2	2.2	2.2	2.2
27-Jun	2.2	2.2	Z	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2
28-Jun	2.2	2.2	2.3	Z	2.4	2.4	2.5	3.9	2.2	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	2.3	2.3	3.9
29-Jun	2.2	2.4	2.4	2.4	Z	11.7	7.0	2.7	2.7	3.2	2.7	2.4	2.3	2.8	2.5	2.5	2.4	2.4	2.3	2.3	2.2	2.3	2.3	2.2	3.1	11.7
30-Jun	2.3	2.2	2.2	2.2	2.5	Z	2.7	2.9	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.1	2.2	2.2	2.2	4.2	2.9	2.2	2.2	2.4	4.2
	2.9	2.8	3.0	2.6	2.8	3.1	2.7	2.6	2.6	2.5	2.5	2.5	2.4	2.4	2.5	2.4	2.6	2.6	2.7	2.7	2.5	2.5	2.8	2.7	Diurnal Average	
	6.7	7.0	6.7	5.4	6.1	11.7	7.0	4.0	3.6	3.2	4.3	3.7	3.2	3.6	3.1	3.2	4.1	4.8	4.8	7.2	4.2	4.7	12.6	7.3	Diurnal Maximum	

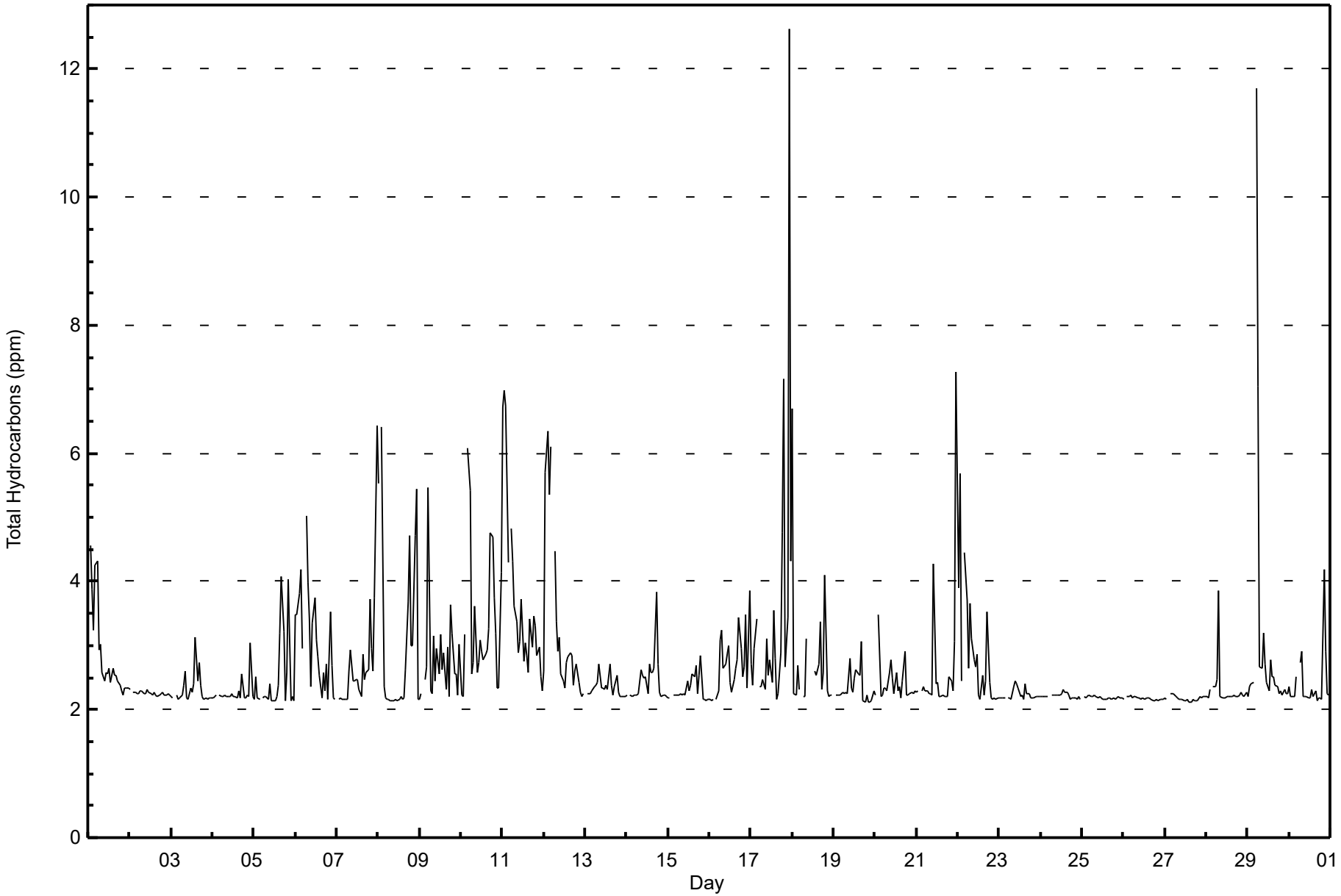
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Blackrod - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	0	0.00	0.00
2.1 - 3.0	585	85.28	85.28
3.1 - 10.0	99	14.43	99.71
> 10.0	2	0.29	100.00

Total Number of Valid Hours: 686

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Blackrod - June 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	67	80	40	34	16	19	35	78	78	34	10	4	15	31	23	21	585
3.1 - 10.0	30	3	1	0	1	0	0	0	0	1	6	7	7	1	2	40	99
> 10.0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
Totals	97	84	41	34	17	19	35	78	78	35	16	11	22	32	25	62	686

Total Number of Valid Hours: 686

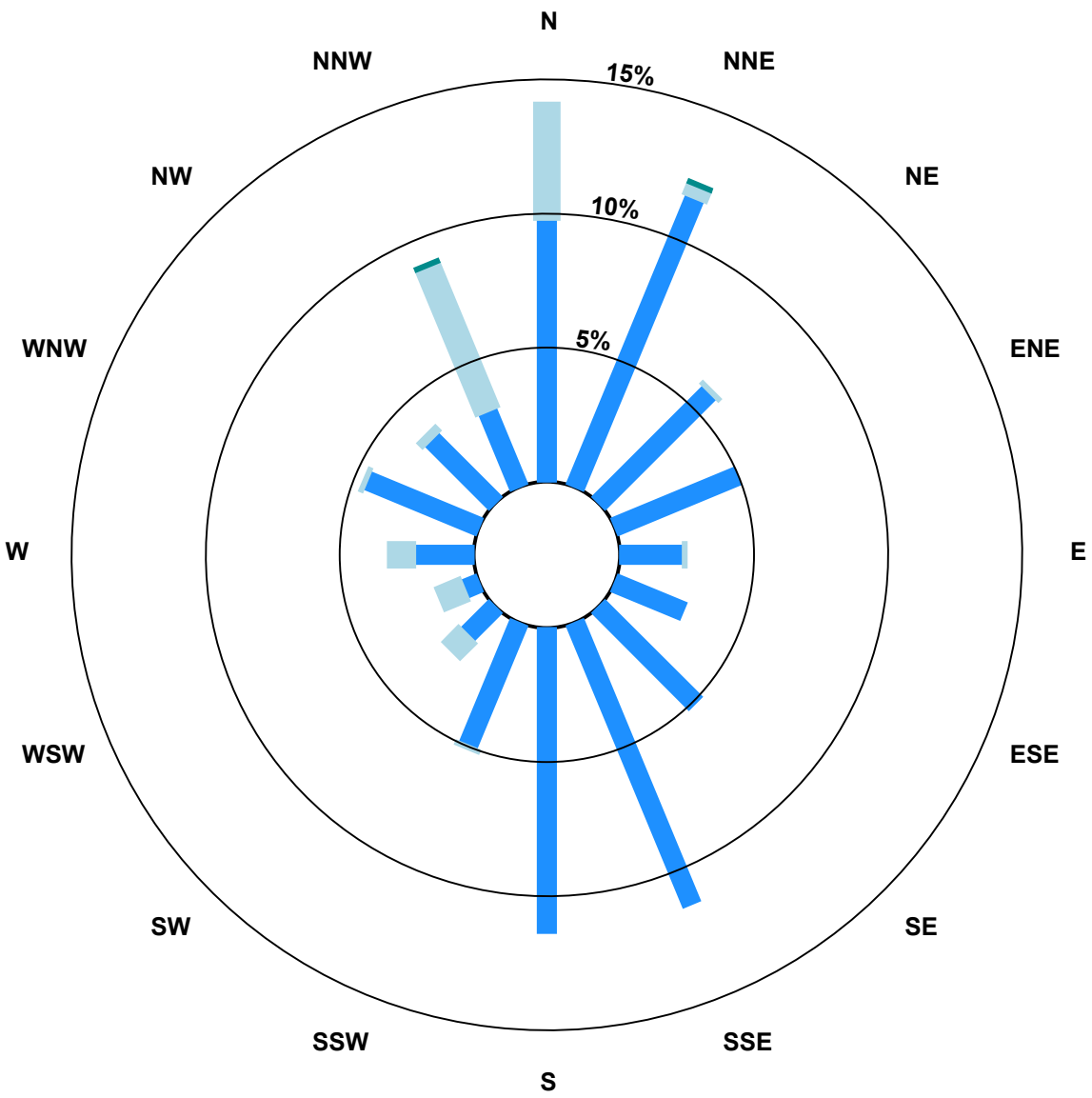
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Blackrod



Classes (ppm)

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

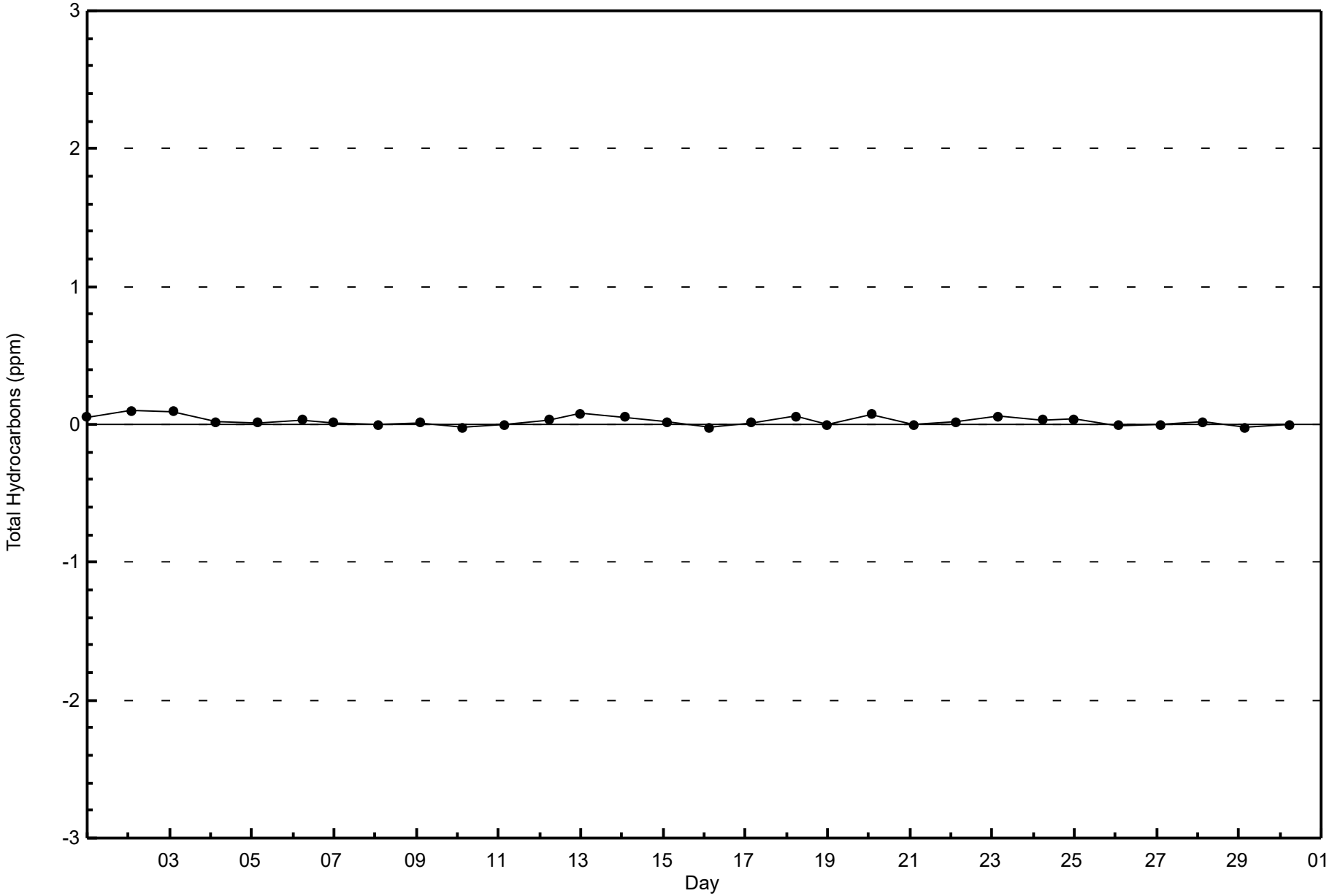
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Blackrod - June 2026

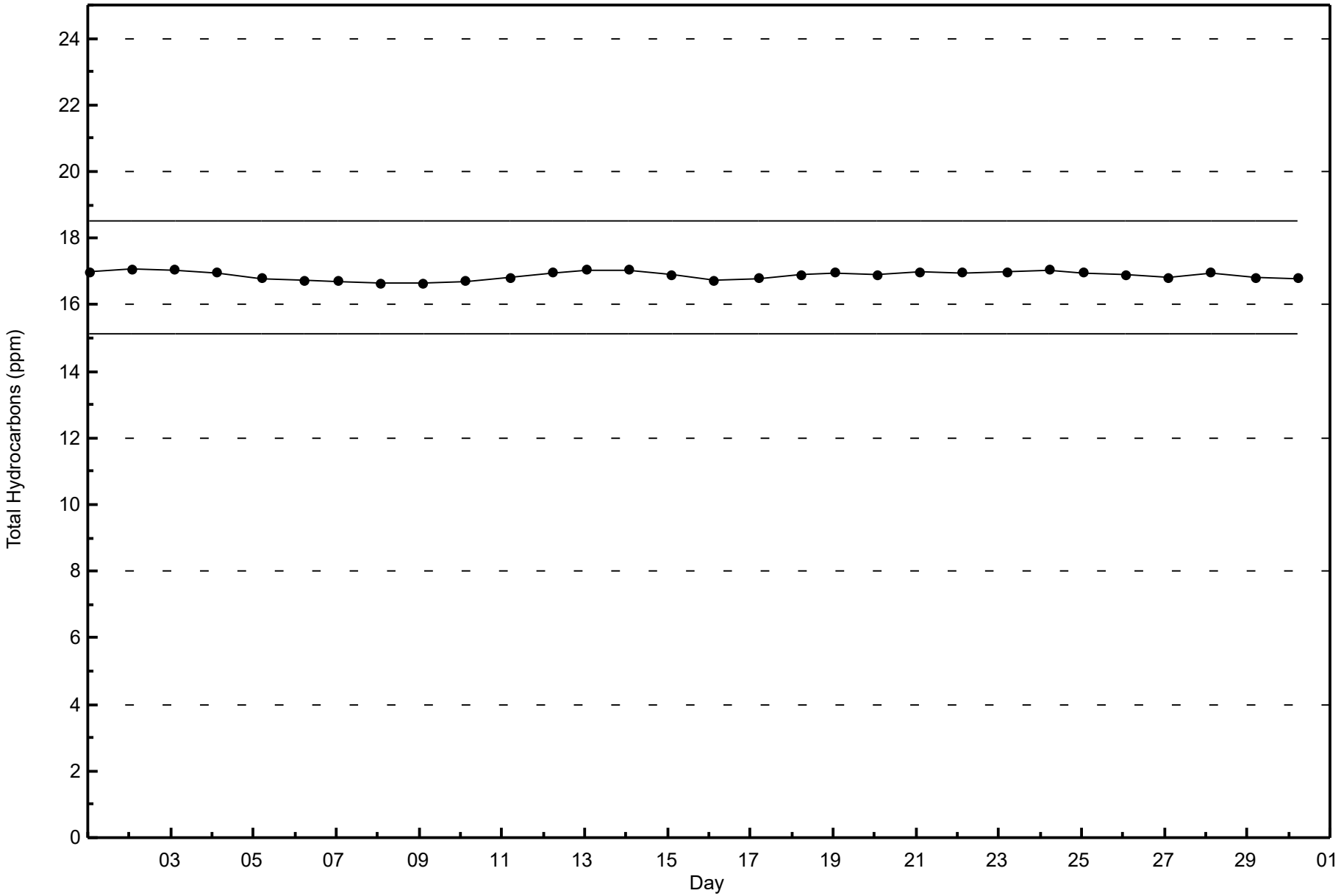


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Blackrod - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxide (NO) - ppb

Blackrod - June 2026

Maximum Value: 55.8 ppb on Jun 11 22:00

Maximum Daily Average: 22.3 ppb on Jun 1

Minimum Value: 0.0 ppb on Jun 3 03:00

Minimum Daily Average: 0.1 ppb on Jun 4

Maximum Diurnal Average: 7.6 ppb at hour 12

Minimum Diurnal Average: 1.9 ppb at hour 3

Monthly Average: 4.83 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.6 Q_3 = 4.6 P_{90} = 17.3 P_{99} = 42.7

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-Jun	0.4	0.1	3.2	8.5	Z	1.4	12.9	20.4	32.5	32.4	29.9	30.4	28.8	31.9	26.6	28.3	28.5	44.4	43.5	20.3	9.1	21.0	27.3	31.4	22.3	44.4
2-Jun	29.4	31.8	18.7	21.6	22.5	Z	24.7	32.8	19.8	17.3	33.5	22.2	8.0	8.2	14.0	4.4	1.3	1.8	6.8	15.2	3.2	0.5	0.5	0.3	14.7	33.5
3-Jun	Z	0.0	0.0	0.1	0.1	0.2	0.2	1.6	4.4	0.8	0.6	0.1	0.3	0.4	1.8	0.5	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.5	4.4
4-Jun	0.0	Z	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.2	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	0.1	0.2
5-Jun	0.0	0.1	Z	0.0	0.1	0.1	0.7	1.3	0.6	4.2	0.4	0.3	0.7	0.2	0.4	20.2	16.4	0.9	0.3	0.0	0.0	1.2	3.3	0.6	2.3	20.2
6-Jun	2.3	0.7	3.8	Z	0.0	0.3	4.1	7.1	6.7	6.9	6.2	5.9	8.7	7.4	8.3	6.4	8.1	0.8	1.1	2.2	4.2	0.0	0.0	0.0	4.0	8.7
7-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.0	0.7	0.1	0.1	0.4	0.1	0.4	0.6	0.0	0.0	1.9	0.9	0.3	14.4	12.5	1.4	14.4
8-Jun	9.0	0.2	0.0	0.1	0.7	Z	0.2	1.2	1.4	2.5	6.1	8.8	8.5	4.3	6.3	6.1	6.6	3.3	4.6	7.0	5.4	1.9	0.7	0.0	3.7	9.0
9-Jun	Z	0.2	0.5	3.4	4.8	2.2	0.8	0.6	1.1	1.1	1.9	12.3	3.8	1.2	0.0	0.0	0.0	0.0	0.4	4.1	16.7	0.3	0.0	2.4	2.5	16.7
10-Jun	1.1	Z	1.2	0.7	1.1	9.6	14.0	14.9	12.0	23.6	21.9	16.7	15.7	20.6	2.8	4.1	0.7	3.6	7.0	22.4	1.4	30.0	23.6	17.9	11.6	30.0
11-Jun	0.3	0.2	Z	0.0	0.1	0.8	1.4	0.6	0.8	4.3	9.2	12.0	16.4	4.6	5.1	20.5	12.4	19.2	9.7	42.7	37.9	55.8	24.9	32.3	13.5	55.8
12-Jun	49.9	4.4	1.4	Z	0.1	0.7	11.0	17.0	16.2	13.2	20.7	18.8	22.9	12.7	11.8	14.1	12.7	19.9	32.4	46.8	43.0	22.2	1.7	0.5	17.1	49.9
13-Jun	0.1	0.2	0.0	0.4	Z	6.1	2.9	2.8	1.8	3.6	3.8	2.4	1.2	1.5	5.0	5.1	1.6	0.7	0.2	0.1	0.1	0.1	0.0	0.1	1.7	6.1
14-Jun	0.1	0.0	0.0	0.1	0.5	Z	0.2	0.1	2.3	2.6	1.4	1.0	2.6	0.9	2.4	2.2	1.1	7.3	2.1	0.0	0.7	0.7	0.3	0.5	1.3	7.3
15-Jun	Z	0.6	0.2	0.3	0.1	1.2	1.0	0.3	0.2	0.3	0.2	0.1	0.4	1.3	0.6	0.2	0.4	0.0	0.1	0.5	0.0	0.0	0.2	0.0	0.4	1.3
16-Jun	0.0	Z	0.0	0.0	0.0	0.1	2.8	0.6	4.9	C	C	C	C	C	0.5	1.5	0.2	0.2	0.0	0.0	0.9	0.5	0.2	0.0	0.7	4.9
17-Jun	10.1	36.1	Z	47.6	41.6	15.3	5.7	35.5	20.0	20.4	18.1	11.7	1.6	6.7	3.8	1.8	2.8	5.8	2.8	0.0	18.6	4.2	0.0	0.4	13.5	47.6
18-Jun	0.3	0.4	0.1	Z	0.4	3.2	1.9	1.5	2.6	10.5	2.2	3.3	1.9	11.8	12.1	7.6	6.4	2.0	30.7	21.5	17.2	1.0	0.0	0.4	6.0	30.7
19-Jun	0.4	0.5	0.4	0.1	Z	3.0	2.8	1.7	3.7	0.5	1.9	4.6	4.5	6.1	1.5	6.3	0.7	0.0	0.1	3.7	1.2	0.7	1.8	0.3	2.0	6.3
20-Jun	0.8	1.1	0.8	0.1	0.3	Z	10.3	3.1	18.9	19.2	22.8	22.1	16.0	16.4	9.0	0.1	0.7	1.3	0.2	0.2	6.9	13.2	0.5	0.4	7.2	22.8
21-Jun	Z	0.2	0.2	0.6	11.5	3.2	4.8	6.5	5.5	3.8	13.2	30.3	29.1	2.0	0.9	0.8	0.6	0.6	0.4	0.4	12.0	22.6	2.7	10.1	7.0	30.3
22-Jun	2.2	Z	17.2	0.5	1.3	4.1	2.1	7.7	10.7	1.6	6.2	12.1	3.0	0.5	3.8	2.4	1.2	8.3	1.1	0.8	0.1	0.0	0.0	0.0	3.8	17.2
23-Jun	0.0	0.0	Z	0.1	0.0	0.3	0.1	0.1	0.3	0.8	0.8	0.3	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.8
24-Jun	0.0	0.0	0.0	Z	0.1	0.7	0.1	0.2	0.2	0.3	0.7	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	0.7
25-Jun	0.0	0.0	0.0	0.0	Z	0.1	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
26-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.4	0.4	0.2	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
27-Jun	Z	0.0	0.0	0.0	0.1	0.3	0.7	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7
28-Jun	0.0	Z	0.2	0.0	0.3	0.1	13.3	9.0	0.0	0.2	0.1	0.5	0.4	0.3	2.6	0.1	0.3	2.2	0.0	0.0	0.0	0.0	0.0	0.0	1.3	13.3
29-Jun	0.0	0.2	Z	0.0	0.1	0.9	10.4	23.1	5.6	7.2	3.2	4.0	3.2	7.7	7.6	8.6	9.1	4.6	0.3	0.3	0.0	0.0	0.1	0.0	4.2	23.1
30-Jun	0.0	0.0	0.0	Z	0.5	0.1	2.5	1.7	0.1	0.8	0.4	0.1	0.4	1.2	0.8	3.3	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.5	3.3
	4.3	3.1	1.9	3.4	3.5	2.2	4.4	6.4	5.8	6.2	7.1	7.6	6.2	5.1	4.3	4.9	3.8	4.3	4.8	6.3	6.0	5.9	3.4	3.7	Diurnal Average	
	49.9	36.1	18.7	47.6	41.6	15.3	24.7	35.5	32.5	32.4	33.5	30.4	29.1	31.9	26.6	28.3	28.5	44.4	43.5	46.8	43.0	55.8	27.3	32.3	Diurnal Maximum	

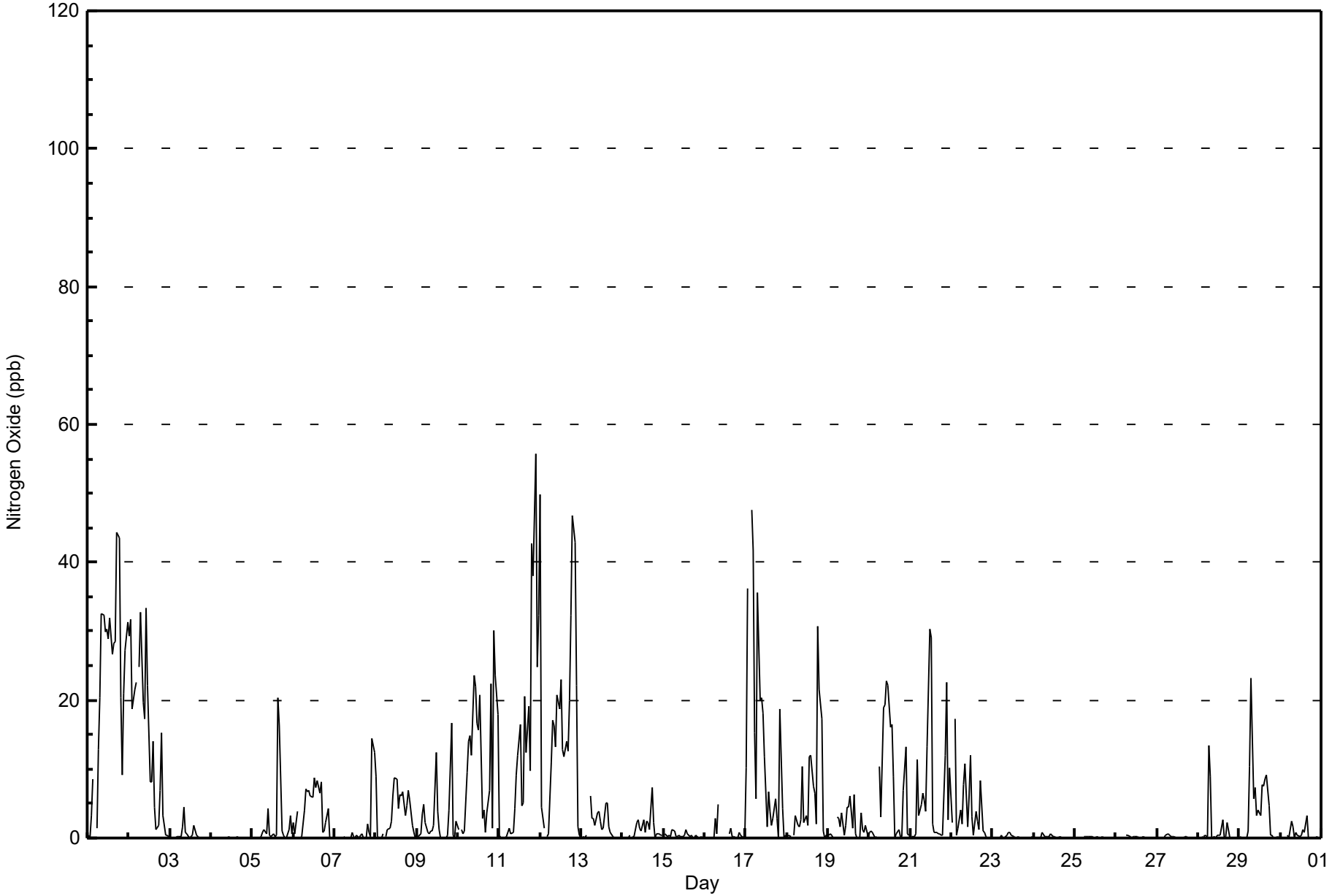
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Blackrod - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	633	92.41	92.41
21 - 40	43	6.28	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 - June 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	64	42	35	17	17	36	77	79	34	15	11	24	32	24	65	633
21 - 40	27	15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	43
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	96	80	42	35	17	17	36	77	79	34	15	11	24	32	24	66	685

Total Number of Valid Hours: 685

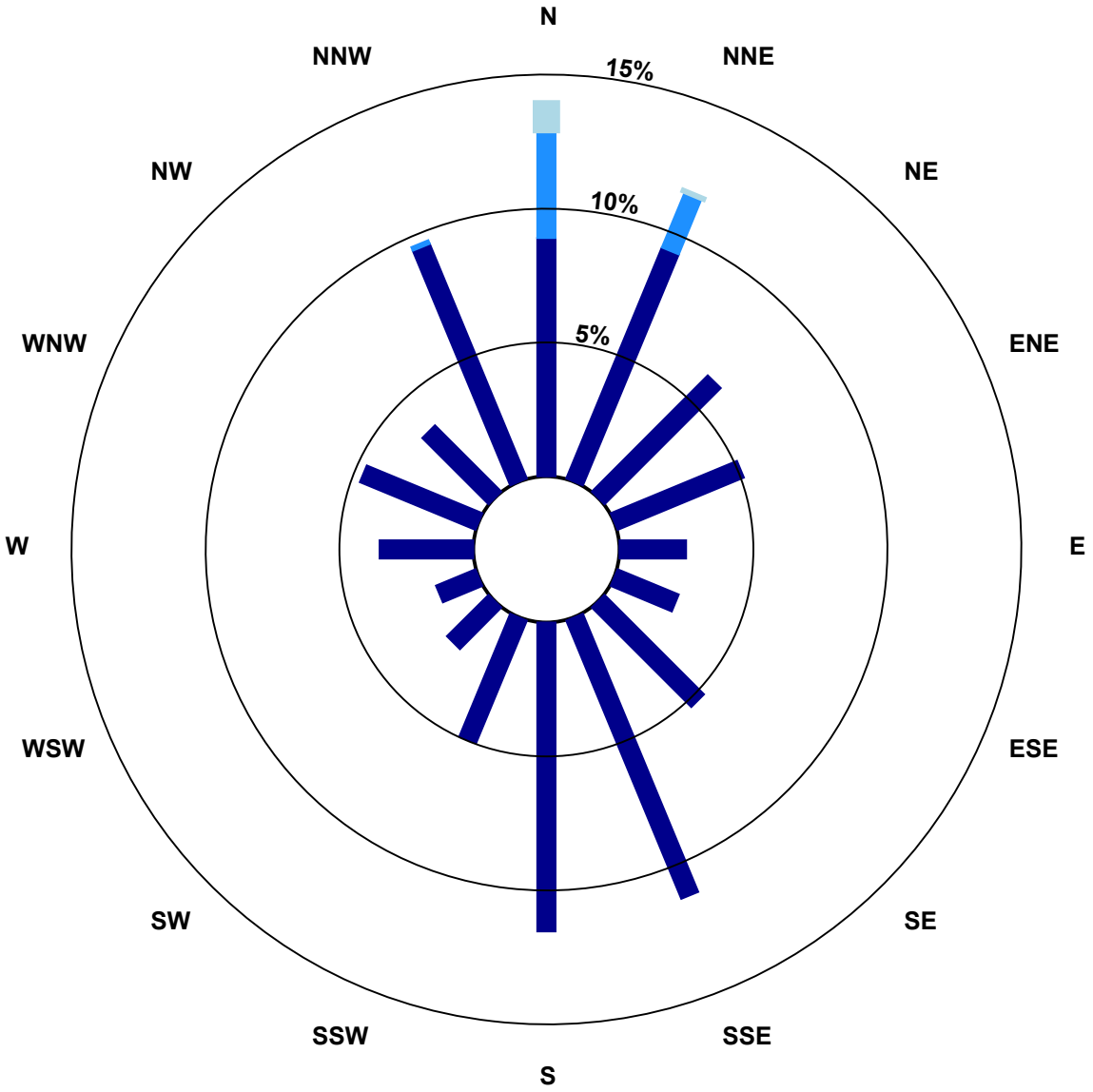
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxide (NO) - ppb

Blackrod



Classes (ppb)

- 0 - 20
- 21 - 40
- 11 - 80
- 81 - 159
- > 159

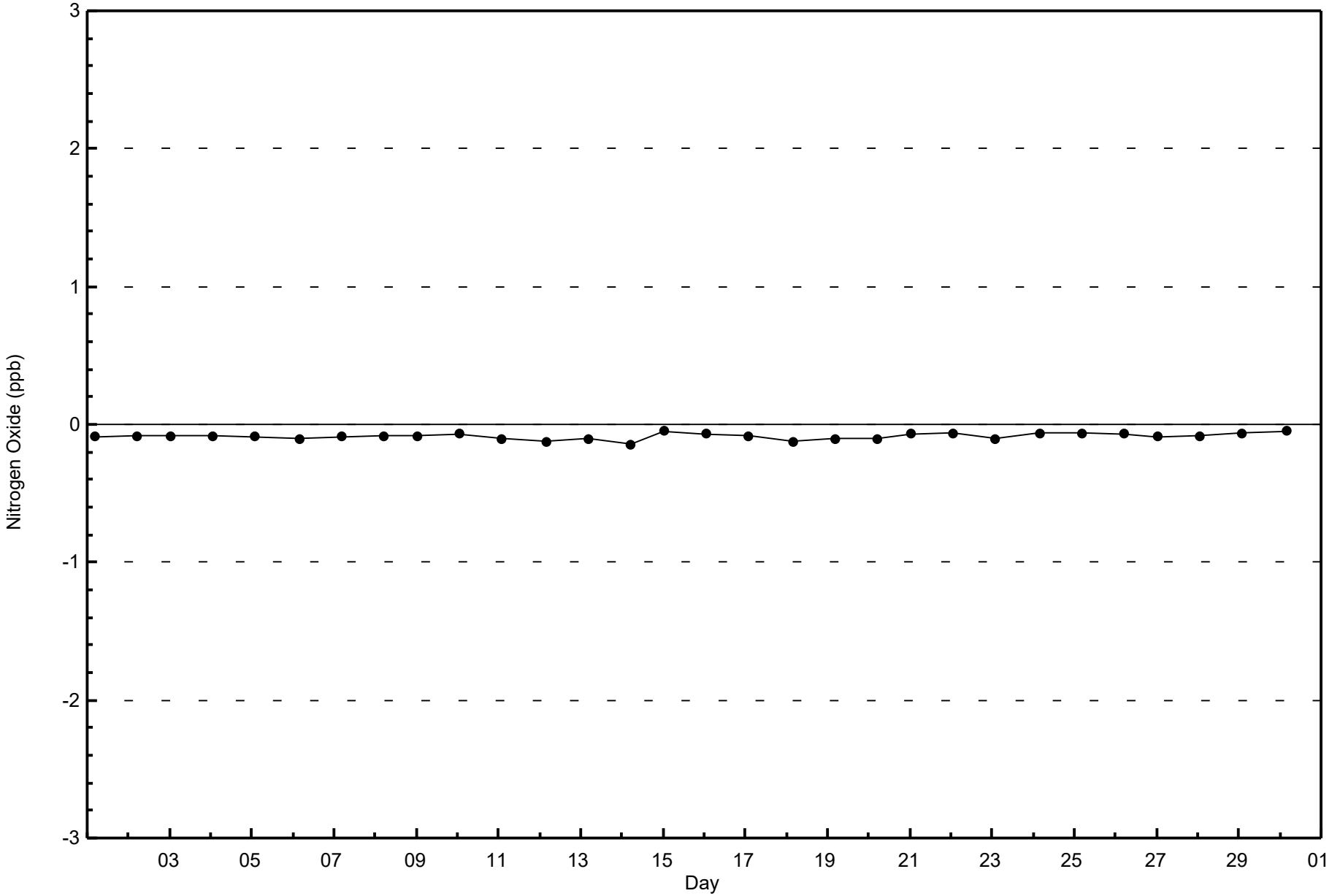
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxide (NO) - ppb

Blackrod - June 2026

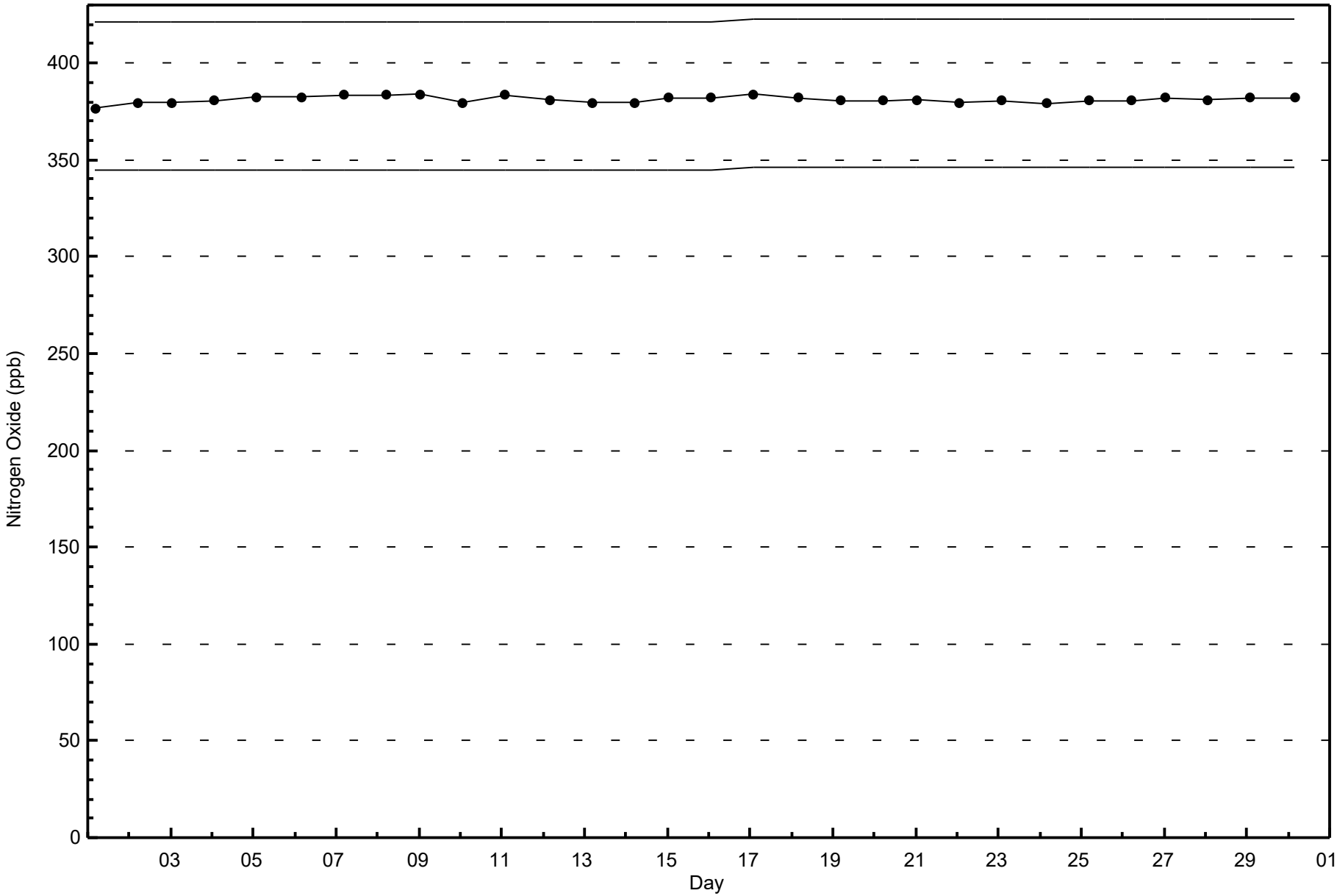


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxide (NO) - ppb

Blackrod - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Blackrod - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 20.6 ppb on Jun 12 20:00 Maximum Daily Average: 9.7 ppb on Jun 1

Minimum Value: 0.1 ppb on Jun 11 09:00 Minimum Daily Average: 0.4 ppb on Jun 23
Maximum Diurnal Average: 3.5 ppb at hour 12 Minimum Diurnal Average: 1.8 ppb at hour 2
Monthly Average: 2.68 ppb Percentiles: P_1 = 0.2 P_{10} = 0.4 Q_1 = 0.6 Median = 1.3 Q_3 = 3.6 P_{90} = 7.1 P_{99} = 14.3

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-Jun	0.4	0.2	1.9	3.7	Z	0.9	7.0	8.0	10.6	12.8	15.2	10.5	13.5	12.3	12.2	14.3	14.3	19.5	17.4	9.9	5.6	9.7	10.4	12.9	9.7	19.5
2-Jun	14.1	12.7	6.5	7.6	7.7	Z	7.3	9.5	7.8	6.7	10.8	8.1	4.5	4.5	5.4	3.0	2.2	1.4	2.8	5.3	2.6	1.5	1.4	0.9	5.8	14.1
3-Jun	Z	0.4	0.3	0.5	0.4	0.4	0.5	1.8	2.8	0.4	0.8	0.3	0.4	0.4	1.2	0.7	0.5	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.6	2.8
4-Jun	0.4	Z	0.9	0.8	0.6	0.6	0.5	0.6	0.5	0.6	0.6	0.4	0.4	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.7	0.8	0.7	0.7	0.6	0.9
5-Jun	0.7	0.8	Z	0.9	0.9	1.1	1.6	1.8	0.9	3.9	0.9	0.9	1.5	0.8	0.9	8.9	5.7	1.3	1.0	0.4	0.4	1.6	3.6	1.3	1.8	8.9
6-Jun	2.7	0.9	3.6	Z	0.8	1.0	3.3	5.7	5.6	5.7	4.9	5.0	5.8	6.2	5.5	4.7	5.7	1.2	1.2	2.7	4.5	0.5	0.6	0.6	3.4	6.2
7-Jun	0.6	0.6	0.6	0.5	Z	0.7	0.4	0.4	0.4	0.3	0.7	0.4	0.4	0.9	0.5	1.0	1.1	0.5	0.4	3.6	1.8	1.0	7.2	8.9	1.4	8.9
8-Jun	4.6	0.6	0.4	0.9	1.5	Z	0.7	1.6	1.3	2.1	3.3	3.9	5.0	1.8	4.1	4.4	5.6	3.7	5.5	6.4	5.6	2.1	1.4	0.6	2.9	6.4
9-Jun	Z	1.4	1.7	5.0	7.7	3.4	1.2	0.9	1.4	1.5	1.9	1.6	3.5	1.7	0.4	0.4	0.4	0.3	0.6	3.3	8.8	2.2	1.4	4.0	2.4	8.8
10-Jun	2.6	Z	4.0	3.2	1.8	3.8	5.0	4.6	5.2	7.9	3.5	6.9	7.1	6.5	0.9	2.0	0.6	1.3	3.5	6.1	2.0	7.8	7.9	6.4	4.4	7.9
11-Jun	0.3	0.2	Z	0.2	0.2	0.4	0.1	0.3	0.1	0.4	1.5	3.7	2.5	1.5	1.2	3.9	4.5	4.9	2.3	7.0	6.6	10.5	5.5	8.5	2.9	10.5
12-Jun	11.1	0.8	0.8	Z	0.3	0.6	1.9	4.0	4.1	5.4	8.7	8.4	8.2	6.9	7.1	8.0	7.7	10.9	18.0	20.6	18.0	10.8	3.3	2.2	7.3	20.6
13-Jun	1.7	1.8	1.9	3.5	Z	9.5	4.2	3.8	3.2	4.3	3.0	3.3	1.6	1.8	3.6	3.9	1.6	1.6	0.9	0.2	0.4	0.3	0.3	0.3	2.5	9.5
14-Jun	0.5	0.5	0.6	0.6	1.1	Z	0.9	0.7	3.7	5.2	3.3	1.7	3.7	1.9	1.4	2.8	0.9	7.6	2.3	0.5	1.7	2.3	1.0	1.8	2.0	7.6
15-Jun	Z	3.9	4.8	4.0	0.9	1.4	2.1	1.0	0.8	0.8	0.4	0.6	1.0	1.8	1.0	0.6	0.7	0.3	0.6	2.0	0.6	0.5	0.9	0.4	1.4	4.8
16-Jun	0.4	Z	0.5	0.4	0.4	0.5	1.4	0.7	1.9	C	C	C	C	C	1.8	3.2	1.1	1.5	0.7	0.7	1.6	4.5	1.3	1.0	1.3	4.5
17-Jun	7.1	8.1	Z	7.8	8.6	3.0	2.1	11.0	7.3	6.7	8.7	6.0	1.5	5.5	1.9	1.3	2.6	1.8	1.2	0.2	10.1	3.0	0.3	0.8	4.6	11.0
18-Jun	2.0	2.4	0.9	Z	0.8	3.3	1.7	1.6	1.4	3.7	1.9	2.2	1.3	6.2	5.6	3.8	3.0	1.9	13.6	8.7	5.9	2.2	0.4	1.5	3.3	13.6
19-Jun	1.1	0.9	0.7	0.3	Z	2.4	1.4	1.3	2.3	0.8	1.6	2.8	3.3	3.2	1.7	3.3	1.1	0.2	0.3	1.9	1.5	1.4	2.9	1.4	1.6	3.3
20-Jun	1.4	1.5	2.0	0.8	1.4	Z	4.9	2.3	4.3	5.8	6.9	8.7	6.6	8.7	4.3	0.5	3.0	3.4	1.2	1.2	3.1	3.7	1.4	1.4	3.4	8.7
21-Jun	Z	1.0	1.0	1.8	3.7	3.5	4.0	6.9	5.7	3.3	4.1	8.9	9.8	1.2	0.9	0.6	0.6	0.9	0.6	1.0	5.7	5.5	1.5	3.3	3.3	9.8
22-Jun	4.0	Z	5.8	3.6	2.8	2.9	1.8	2.6	3.4	1.6	3.2	3.7	1.5	0.9	4.5	2.4	1.2	3.2	1.6	3.1	0.7	0.4	0.4	0.4	2.4	5.8
23-Jun	0.4	0.4	Z	0.6	0.4	0.6	0.5	0.3	0.7	0.8	0.8	0.5	0.4	0.2	0.2	0.6	0.3	0.2	0.2	0.4	0.3	0.3	0.3	0.6	0.4	0.8
24-Jun	0.5	0.7	0.9	Z	0.9	2.3	1.1	1.2	1.3	1.6	1.7	1.2	0.9	0.6	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.5	0.9	2.3
25-Jun	0.6	0.6	0.6	1.0	Z	1.6	1.4	1.2	1.1	0.9	0.7	0.6	0.6	0.6	0.5	0.5	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.9	0.8	1.6
26-Jun	1.1	1.1	1.3	1.4	1.3	Z	1.6	1.5	0.9	0.6	0.7	0.9	0.7	0.5	0.5	0.6	0.9	0.6	0.6	0.7	0.6	0.6	0.6	0.7	0.9	1.6
27-Jun	Z	0.9	1.0	1.4	1.4	1.3	1.6	1.2	0.8	0.8	0.7	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.6	0.9	0.6	0.8	0.9	0.8	1.6
28-Jun	1.0	Z	1.2	0.6	1.2	0.6	3.5	3.5	0.4	0.5	0.5	1.1	0.8	0.7	1.9	0.4	0.7	2.0	0.4	0.4	0.4	0.5	0.5	0.6	1.0	3.5
29-Jun	0.7	1.4	Z	0.9	0.8	2.2	6.6	11.9	5.6	5.7	3.9	6.5	4.0	7.6	8.2	7.9	12.6	8.0	1.9	1.1	1.0	1.4	1.6	1.2	4.5	12.6
30-Jun	1.1	1.1	1.2	Z	3.0	1.0	4.0	3.9	0.7	1.4	0.7	1.0	1.0	2.3	2.2	3.3	1.0	1.0	1.1	0.9	1.3	5.6	1.4	1.1	1.8	5.6
	2.4	1.8	1.8	2.1	2.0	2.0	2.5	3.2	2.9	3.2	3.3	3.5	3.2	3.0	2.7	3.0	2.7	2.7	2.8	3.0	3.1	2.8	2.0	2.2	Diurnal Average	
	14.1	12.7	6.5	7.8	8.6	9.5	7.3	11.9	10.6	12.8	15.2	10.5	13.5	12.3	12.2	14.3	14.3	19.5	18.0	20.6	18.0	10.8	10.4	12.9	Diurnal Maximum	

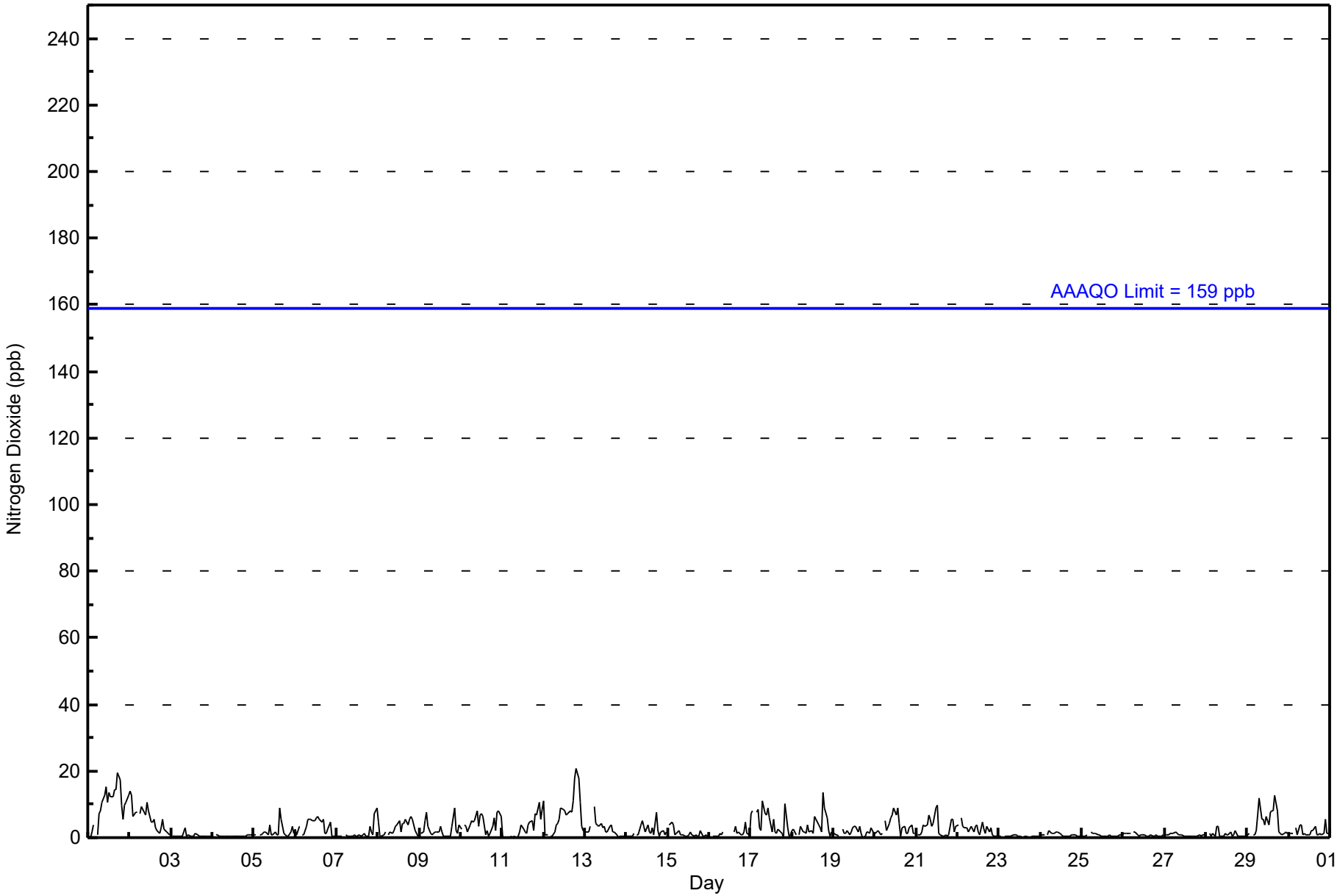
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Blackrod - June 2026



Nitrogen Dioxide (NO_2) - ppb
Blackrod - June 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

Nitrogen Dioxide (NO_2) - ppb

Blackrod - June 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	95	80	42	35	17	17	36	77	79	34	15	11	24	32	24	66	684
21 - 40	1	0	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	96	80	42	35	17	17	36	77	79	34	15	11	24	32	24	66	685

Total Number of Valid Hours: 685

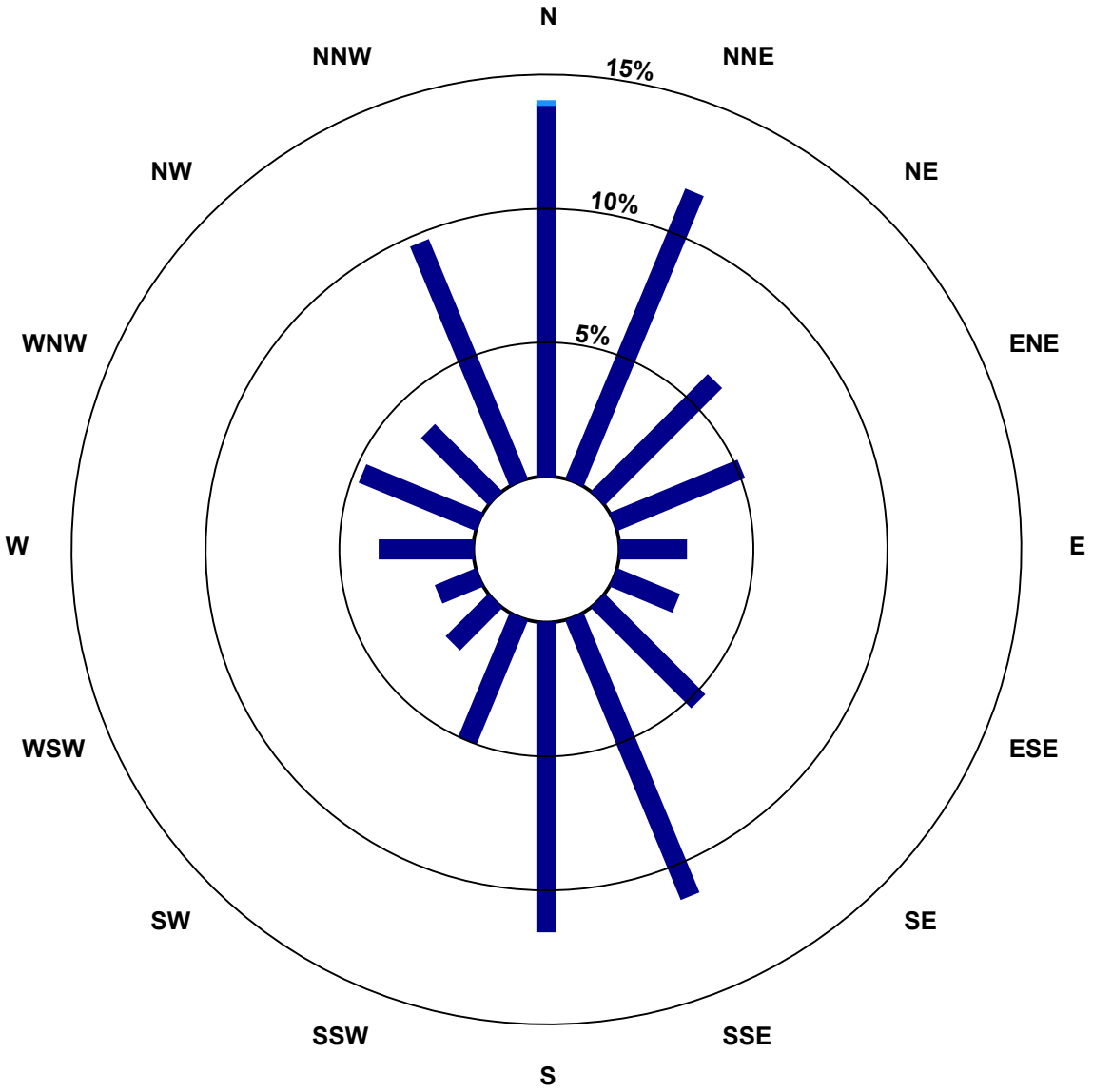
Total Number of Hours: 720

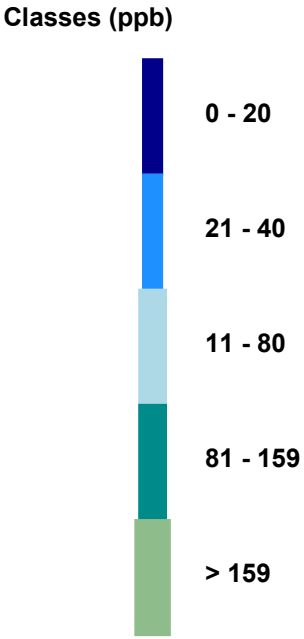
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Blackrod





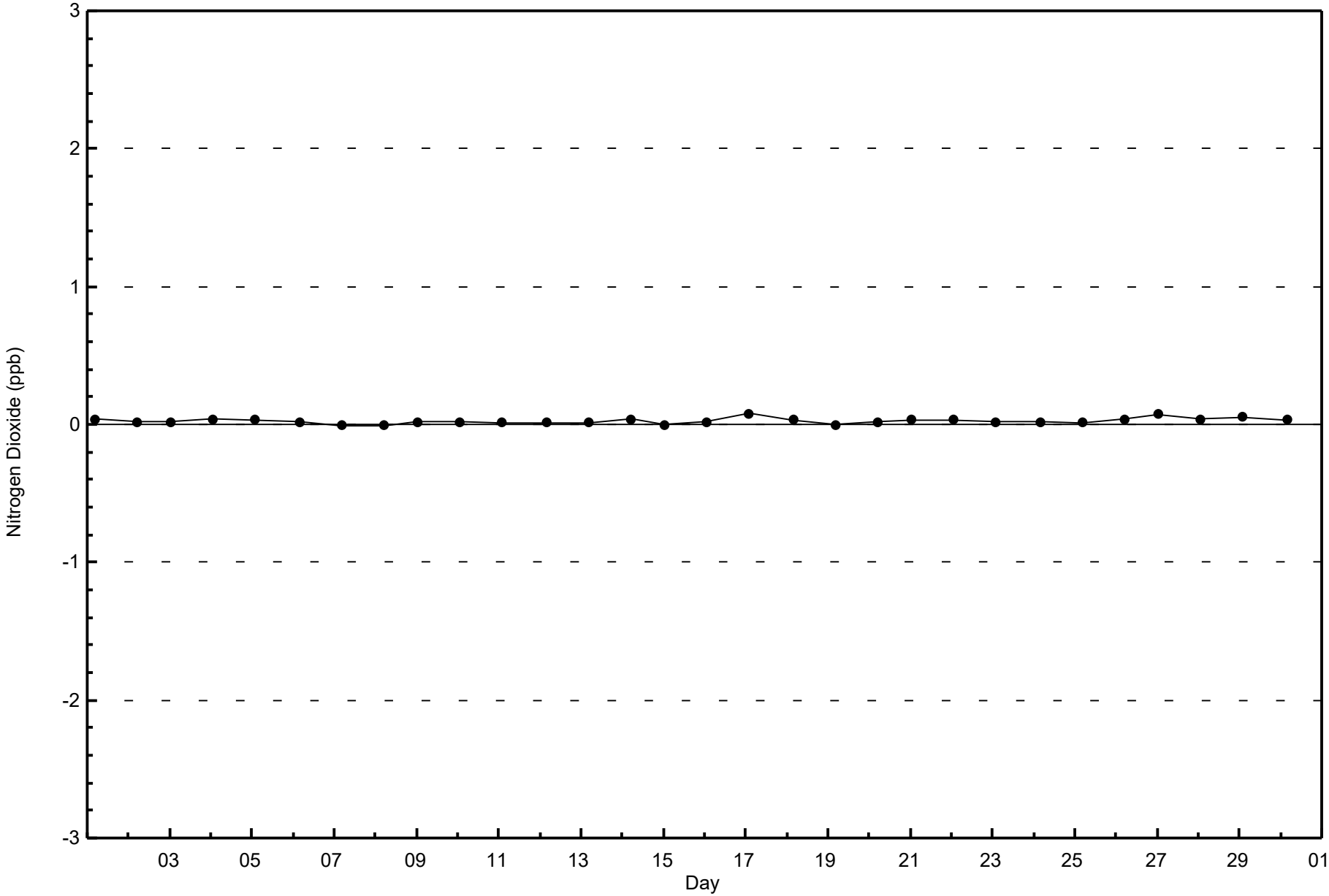
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Blackrod - June 2026

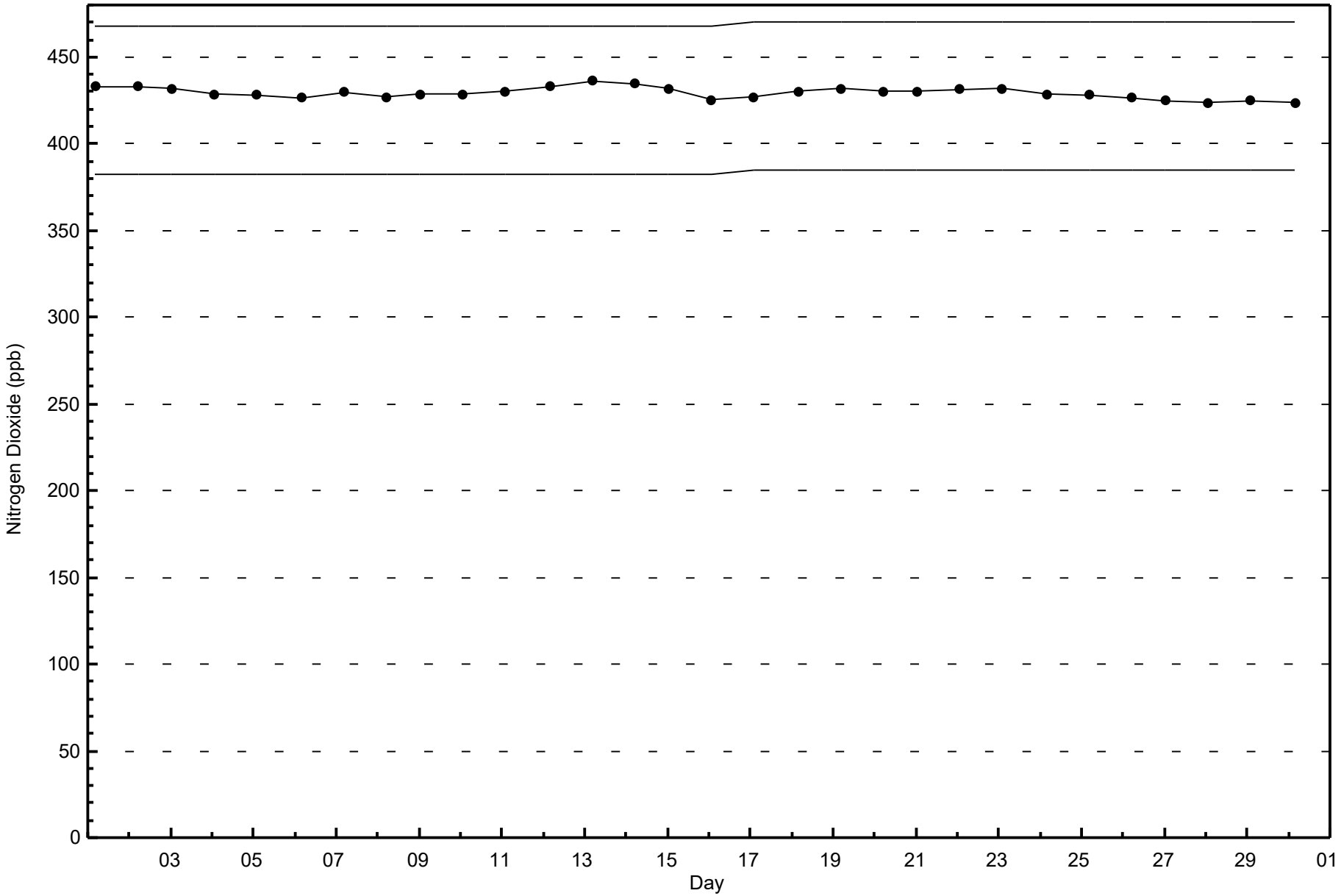


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Blackrod - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Blackrod - June 2026

Maximum Value: 67.4 ppb on Jun 12 20:00

Maximum Daily Average: 32.0 ppb on Jun 1

Minimum Value: 0.2 ppb on Jun 11 04:00

Minimum Daily Average: 0.6 ppb on Jun 23

Maximum Diurnal Average: 11.1 ppb at hour 12

Minimum Diurnal Average: 3.7 ppb at hour 3

Monthly Average: 7.51 ppb

Percentiles: P_1 = 0.3 P_{10} = 0.5 Q_1 = 0.7 Median = 1.9 Q_3 = 8.3 P_{90} = 24.0 P_{99} = 51.2

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-Jun	0.8	0.3	5.1	12.2	Z	2.3	19.9	28.4	43.1	45.2	45.1	40.9	42.3	44.2	38.8	42.6	42.8	63.9	60.9	30.2	14.7	30.7	37.7	44.3	32.0	63.9
2-Jun	43.5	44.5	25.2	29.2	30.2	Z	32.0	42.3	27.6	24.0	44.3	30.3	12.5	12.7	19.4	7.4	3.5	3.2	9.6	20.5	5.8	2.0	1.9	1.2	20.6	44.5
3-Jun	Z	0.4	0.3	0.6	0.5	0.6	0.7	3.4	7.2	1.2	1.4	0.4	0.7	0.8	3.0	1.2	0.7	0.4	0.3	0.3	0.3	0.4	0.5	0.4	1.1	7.2
4-Jun	0.4	Z	0.9	0.8	0.6	0.7	0.6	0.6	0.6	0.7	0.8	0.5	0.5	0.5	0.6	0.7	0.6	0.6	0.5	0.6	0.7	0.8	0.7	0.7	0.6	0.9
5-Jun	0.7	0.9	Z	0.9	1.0	1.2	2.3	3.1	1.5	8.1	1.3	1.2	2.2	1.0	1.3	29.1	22.1	2.2	1.3	0.4	0.4	2.8	6.9	1.9	4.1	29.1
6-Jun	5.0	1.6	7.4	Z	0.8	1.3	7.4	12.8	12.3	12.6	11.1	10.9	14.5	13.6	13.9	11.1	13.8	2.0	2.3	4.9	8.7	0.5	0.6	0.6	7.4	14.5
7-Jun	0.6	0.6	0.6	0.5	Z	0.8	0.5	0.5	0.5	0.3	1.4	0.5	0.5	1.3	0.6	1.4	1.7	0.5	0.4	5.5	2.7	1.3	21.6	21.4	2.9	21.6
8-Jun	13.6	0.8	0.4	1.0	2.2	Z	0.9	2.8	2.7	4.6	9.4	12.7	13.5	6.1	10.4	10.5	12.2	7.0	10.1	13.4	11.0	4.0	2.1	0.6	6.6	13.6
9-Jun	Z	1.6	2.2	8.4	12.5	5.6	2.0	1.5	2.5	2.6	3.8	13.9	7.3	2.9	0.4	0.4	0.4	0.3	1.0	7.4	25.5	2.5	1.4	6.4	4.9	25.5
10-Jun	3.7	Z	5.2	3.9	2.9	13.4	19.0	19.5	17.2	31.5	25.4	23.6	22.8	27.1	3.7	6.1	1.3	4.9	10.5	28.5	3.4	37.8	31.5	24.3	16.0	37.8
11-Jun	0.6	0.4	Z	0.2	0.3	1.2	1.5	0.9	0.9	4.7	10.7	15.7	18.9	6.1	6.3	24.4	16.9	24.1	12.0	49.7	44.5	66.3	30.4	40.8	16.4	66.3
12-Jun	61.0	5.2	2.2	Z	0.4	1.3	12.9	21.0	20.3	18.6	29.4	27.2	31.1	19.6	18.9	22.1	20.4	30.8	50.4	67.4	61.0	33.0	5.0	2.7	24.4	67.4
13-Jun	1.8	2.0	1.9	3.9	Z	15.6	7.1	6.6	5.0	7.9	6.8	5.7	2.8	3.3	8.6	9.0	3.2	2.3	1.1	0.3	0.5	0.4	0.3	0.4	4.2	15.6
14-Jun	0.6	0.5	0.6	0.7	1.6	Z	1.1	0.8	6.0	7.8	4.7	2.7	6.3	2.8	3.8	5.0	2.0	14.9	4.4	0.5	2.4	3.0	1.3	2.3	3.3	14.9
15-Jun	Z	4.5	5.0	4.3	1.0	2.6	3.1	1.3	1.0	1.1	0.6	0.7	1.4	3.1	1.6	0.8	1.1	0.3	0.7	2.5	0.6	0.5	1.1	0.4	1.7	5.0
16-Jun	0.4	Z	0.5	0.4	0.4	0.6	4.2	1.3	6.8	C	C	C	C	C	2.3	4.7	1.3	1.7	0.7	0.7	2.5	5.0	1.5	1.0	2.0	6.8
17-Jun	17.2	44.2	Z	55.4	50.2	18.3	7.8	46.5	27.3	27.1	26.8	17.7	3.1	12.2	5.7	3.1	5.4	7.6	4.0	0.2	28.7	7.2	0.3	1.2	18.1	55.4
18-Jun	2.3	2.8	1.0	Z	1.2	6.5	3.6	3.1	4.0	14.2	4.1	5.5	3.2	18.0	17.7	11.4	9.4	3.9	44.3	30.2	23.1	3.2	0.4	1.9	9.3	44.3
19-Jun	1.5	1.4	1.1	0.4	Z	5.4	4.2	3.0	6.0	1.3	3.5	7.4	7.8	9.3	3.2	9.6	1.8	0.2	0.4	5.6	2.7	2.1	4.7	1.7	3.7	9.6
20-Jun	2.2	2.6	2.8	0.9	1.7	Z	15.2	5.4	23.2	25.0	29.7	30.8	22.6	25.1	13.3	0.6	3.7	4.7	1.4	1.4	10.0	16.9	1.9	1.8	10.6	30.8
21-Jun	Z	1.2	1.2	2.4	15.2	6.7	8.8	13.4	11.2	7.1	17.3	39.2	38.9	3.2	1.8	1.4	1.2	1.5	1.0	1.4	17.7	28.1	4.2	13.4	10.3	39.2
22-Jun	6.2	Z	23.0	4.1	4.1	7.0	3.9	10.3	14.1	3.2	9.4	15.8	4.5	1.4	8.3	4.8	2.4	11.5	2.7	3.9	0.8	0.4	0.4	0.4	6.2	23.0
23-Jun	0.4	0.4	Z	0.7	0.4	0.9	0.6	0.4	1.0	1.6	1.6	0.8	0.5	0.3	0.3	0.8	0.3	0.2	0.2	0.5	0.3	0.3	0.3	0.7	0.6	1.6
24-Jun	0.5	0.7	0.9	Z	1.0	3.0	1.2	1.4	1.5	1.9	2.4	1.4	1.0	0.7	0.6	0.7	0.7	0.7	0.8	0.7	0.7	0.6	0.6	0.5	1.1	3.0
25-Jun	0.6	0.6	0.6	1.0	Z	1.7	1.6	1.5	1.4	1.1	0.8	0.7	0.7	0.8	0.6	0.6	0.8	0.6	0.6	0.6	0.6	0.6	0.7	0.9	0.9	1.7
26-Jun	1.1	1.1	1.3	1.4	1.3	Z	2.0	1.9	1.1	0.7	0.9	1.2	0.9	0.6	0.6	0.7	1.1	0.6	0.6	0.7	0.6	0.6	0.6	0.7	1.0	2.0
27-Jun	Z	0.9	1.0	1.4	1.5	1.6	2.3	1.5	0.9	0.9	0.9	0.6	0.6	0.6	0.6	0.7	0.8	0.8	0.5	0.6	0.9	0.6	0.8	0.9	1.0	2.3
28-Jun	1.0	Z	1.4	0.6	1.5	0.7	16.8	12.5	0.4	0.7	0.6	1.6	1.2	1.0	4.5	0.5	1.0	4.2	0.4	0.4	0.4	0.5	0.5	0.6	2.3	16.8
29-Jun	0.7	1.6	Z	0.9	0.9	3.1	17.0	35.0	11.2	12.9	7.1	10.5	7.2	15.3	15.8	16.5	21.7	12.6	2.2	1.4	1.0	1.4	1.7	1.2	8.6	35.0
30-Jun	1.1	1.1	1.2	Z	3.5	1.1	6.5	5.6	0.8	2.2	1.1	1.1	1.4	3.5	3.0	6.6	1.0	1.0	1.1	0.9	1.4	5.8	1.4	1.1	2.3	6.6
	6.7	4.9	3.7	5.5	5.5	4.1	6.9	9.6	8.6	9.3	10.4	11.1	9.3	8.2	7.0	7.8	6.5	7.0	7.5	9.4	9.1	8.6	5.4	5.9	Diurnal Average	
	61.0	44.5	25.2	55.4	50.2	18.3	32.0	46.5	43.1	45.2	45.1	40.9	42.3	44.2	38.8	42.6	42.8	63.9	60.9	67.4	61.0	66.3	37.7	44.3	Diurnal Maximum	

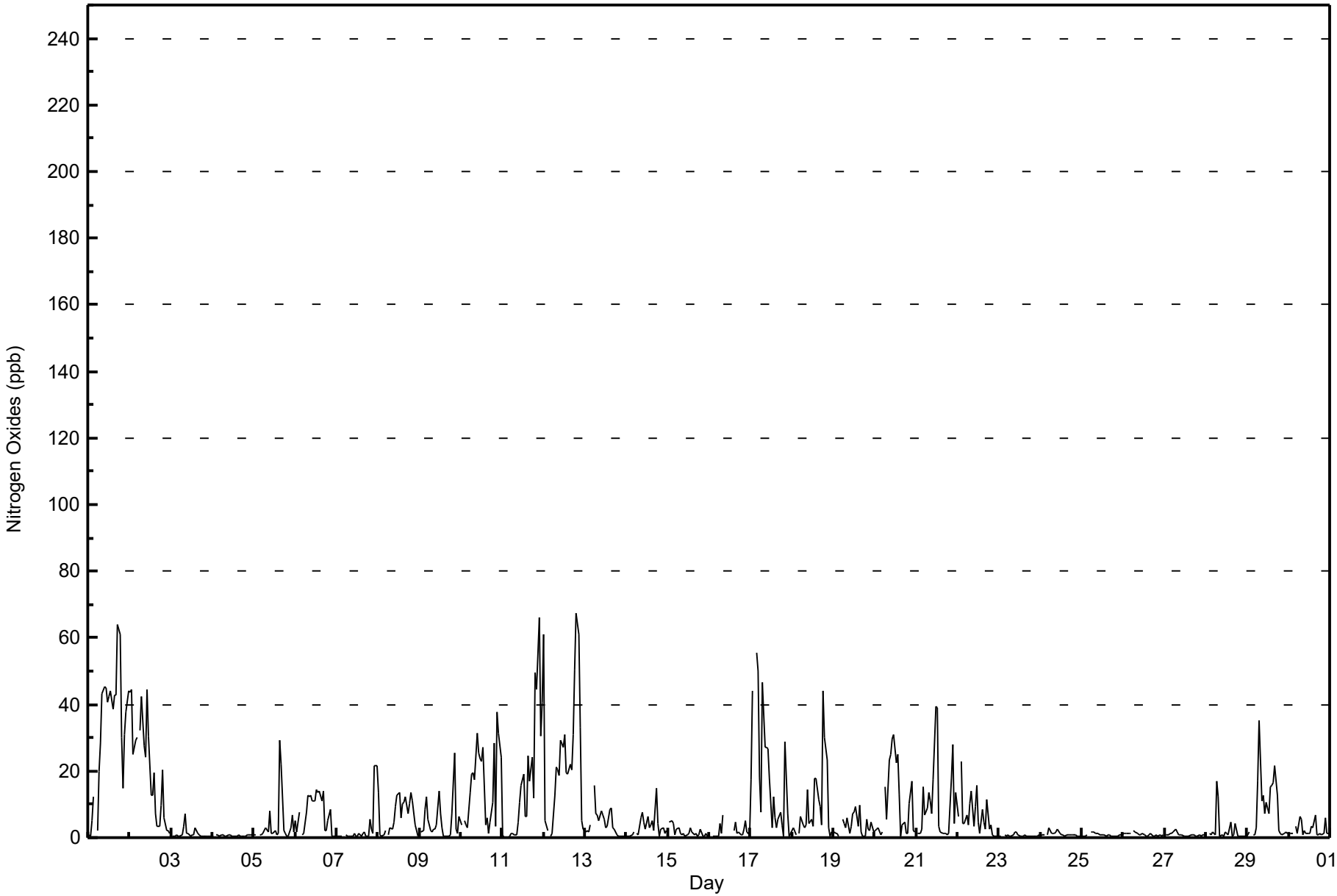
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Blackrod - June 2026



Nitrogen Oxides (NO_X) - ppb
Blackrod - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	602	87.88	87.88
21 - 40	55	8.03	95.91
11 - 80	28	4.09	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 - June 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	53	42	35	17	17	36	77	79	34	15	11	24	32	24	65	602
21 - 40	31	23	0	0	0	0	0	0	0	0	0	0	0	0	0	1	55
11 - 80	24	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
81 - 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	96	80	42	35	17	17	36	77	79	34	15	11	24	32	24	66	685

Total Number of Valid Hours: 685

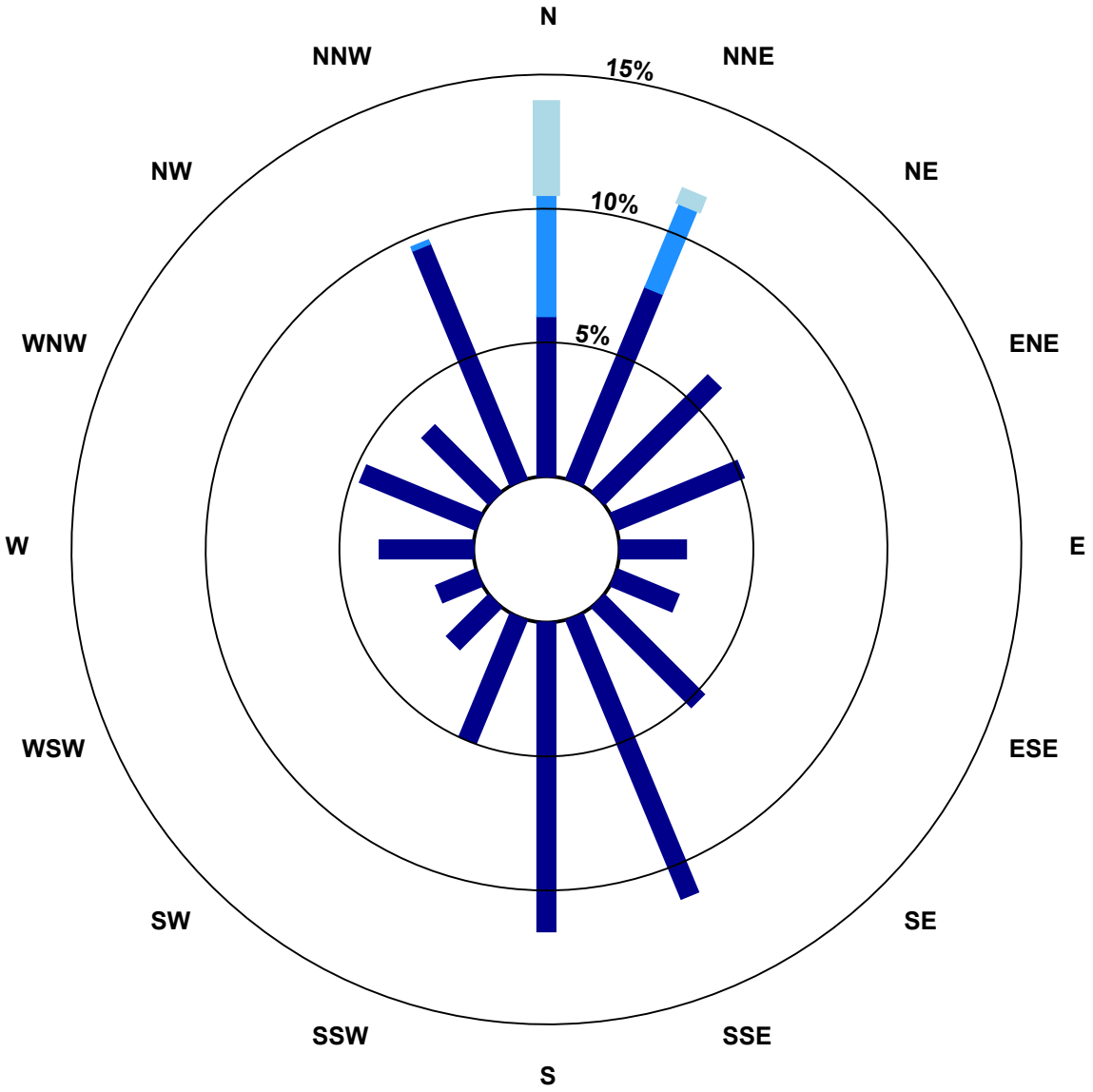
Total Number of Hours: 720

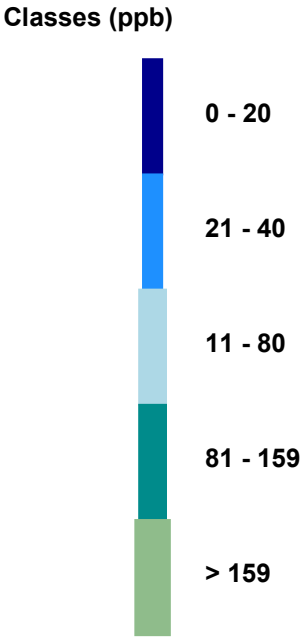
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Blackrod





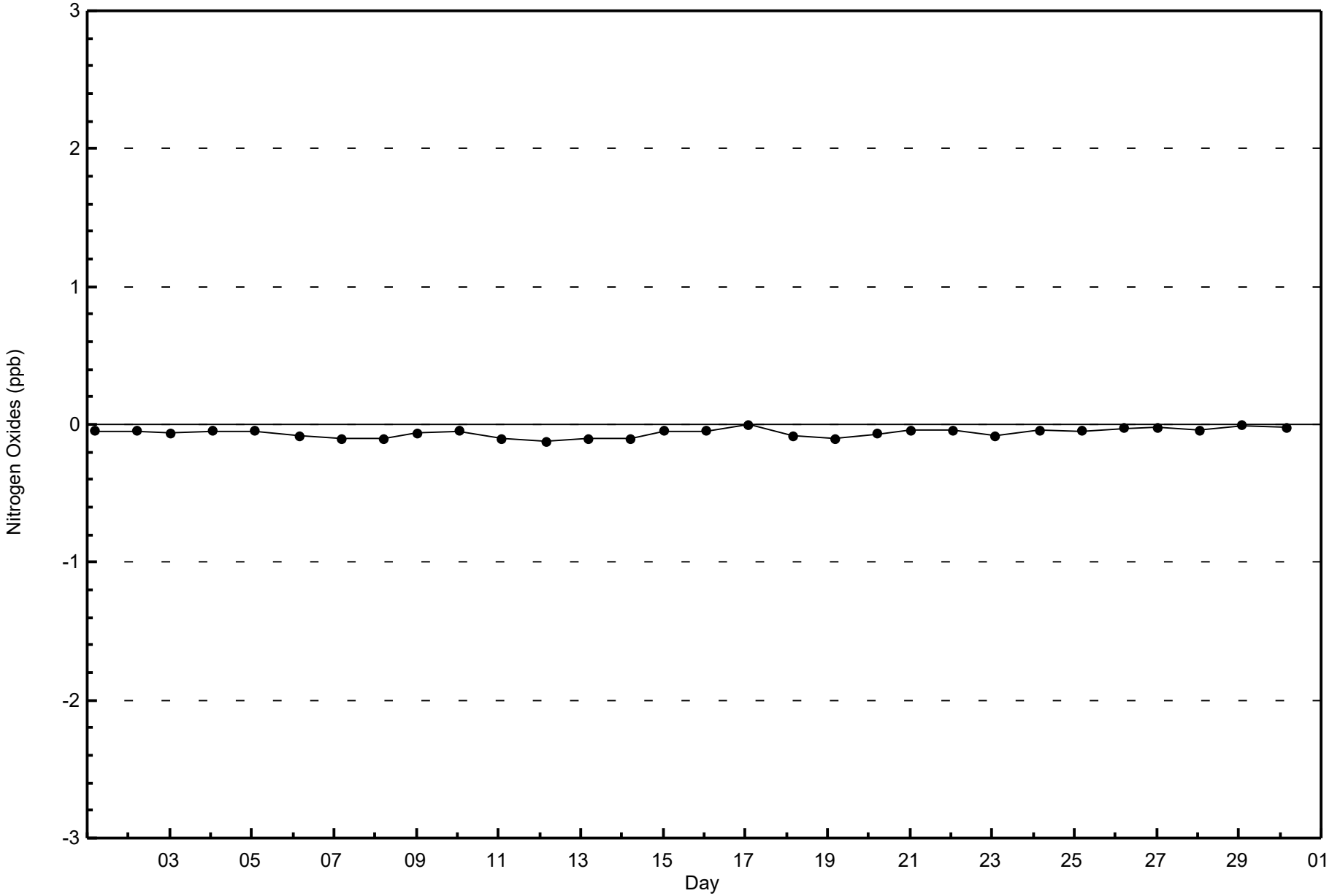
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Blackrod - June 2026

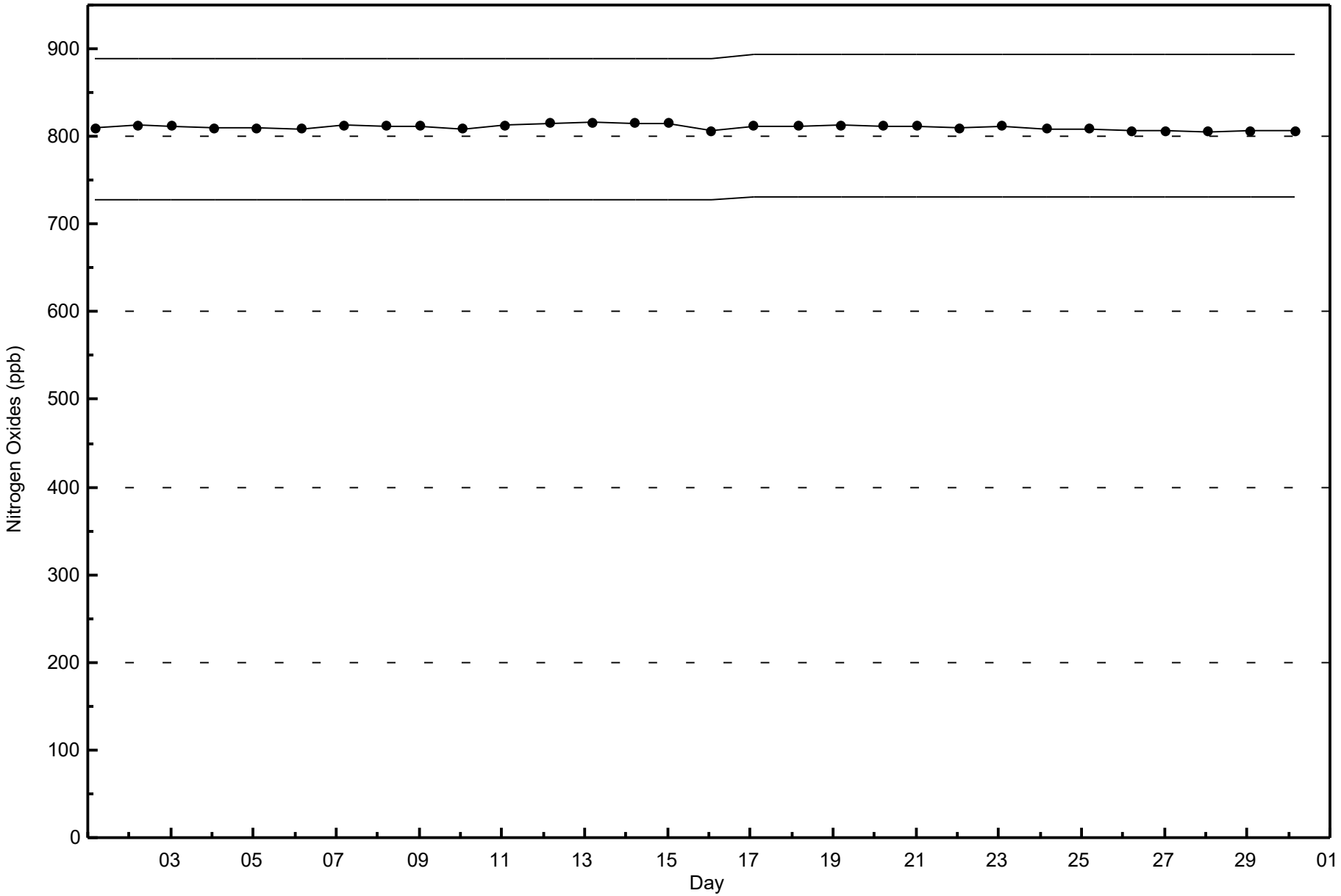


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Blackrod - June 2026



Maximum Value: 28.5 C on Jun 29 16:00

Maximum Daily Average: 21.8 C on Jun 28

Minimum Value: 4.7 C on Jun 13 04:00

Minimum Daily Average: 7.7 C on Jun 2

Maximum Diurnal Average: 18.4 C at hour 16

Minimum Diurnal Average: 10.2 C at hour 5

Monthly Average: 14.62 C

Percentiles: P_1 = 5.9 P_{10} = 8.3 Q_1 = 10.2 Median = 14.3 Q_3 = 17.7 P_{90} = 22.7 P_{99} = 27.3

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

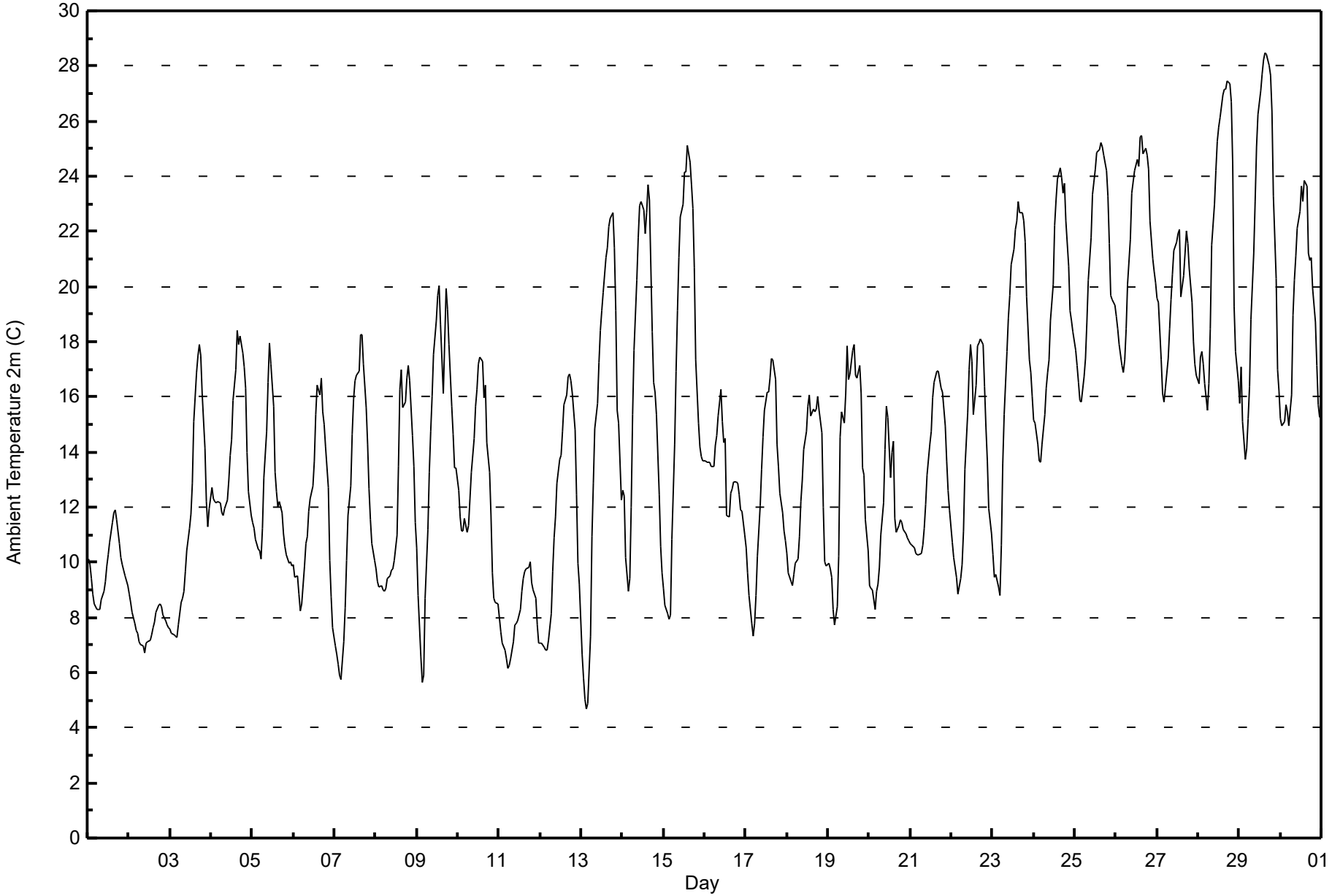
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	10.1	9.9	9.4	8.8	8.5	8.3	8.3	8.3	8.6	9.0	9.3	9.9	10.3	10.7	11.5	11.8	11.9	11.6	10.7	10.2	9.9	9.7	9.5	9.1	9.8	11.9
2-Jun	8.9	8.6	8.2	7.8	7.5	7.4	7.1	7.0	7.0	6.7	7.1	7.1	7.2	7.4	7.6	7.8	8.2	8.5	8.5	8.4	8.1	7.9	7.7	7.6	7.7	8.9
3-Jun	7.6	7.4	7.4	7.3	7.3	7.7	8.5	8.7	8.9	9.6	10.4	11.2	11.8	12.9	15.1	16.9	17.5	17.9	17.5	16.1	14.1	12.2	11.3	11.9	11.6	17.9
4-Jun	12.7	12.3	12.2	12.2	12.2	12.2	11.8	11.7	11.9	12.3	13.0	13.9	14.5	15.9	17.0	18.4	17.9	18.2	17.6	17.1	16.3	14.0	12.6	11.7	14.1	18.4
5-Jun	11.4	11.2	10.8	10.5	10.4	10.1	11.2	13.1	14.7	16.5	18.0	17.2	15.7	13.3	12.6	12.0	12.2	11.8	11.0	10.6	10.3	10.0	10.0	9.9	12.3	18.0
6-Jun	9.9	9.4	9.5	8.8	8.2	8.5	9.9	10.7	10.9	11.8	12.3	12.8	13.7	15.4	16.4	16.1	16.7	15.5	15.0	14.2	12.7	10.1	8.8	7.6	11.9	16.7
7-Jun	7.0	6.7	6.3	5.9	5.8	7.1	8.4	10.1	11.7	12.8	14.6	15.9	16.6	16.8	16.9	18.3	18.3	17.2	15.6	14.3	12.6	11.5	10.7	10.1	12.1	18.3
8-Jun	9.8	9.3	9.1	9.2	9.0	8.9	9.1	9.4	9.5	9.7	9.8	10.1	11.0	13.5	16.3	17.0	15.6	15.8	16.7	17.1	16.6	14.6	13.5	11.5	12.2	17.1
9-Jun	10.5	8.8	6.6	5.7	5.9	8.7	11.2	13.3	14.7	16.0	17.5	18.8	19.7	20.0	18.6	16.1	18.1	19.9	19.2	17.9	15.7	14.6	13.4	13.4	14.3	20.0
10-Jun	12.6	11.7	11.1	11.1	11.6	11.1	11.4	12.3	13.2	14.5	15.7	16.3	17.2	17.4	17.3	16.0	16.4	14.4	13.3	11.7	9.6	8.7	8.5	8.5	13.0	17.4
11-Jun	8.0	7.5	7.1	6.8	6.5	6.2	6.2	6.5	7.1	7.7	7.8	7.9	8.3	9.0	9.4	9.7	9.8	9.8	10.0	9.3	9.0	8.7	7.7	7.0	8.0	10.0
12-Jun	7.1	7.1	6.9	6.8	6.8	7.2	8.1	9.6	10.9	11.6	12.9	13.7	13.9	14.7	15.7	16.0	16.7	16.8	16.6	16.1	14.8	12.5	10.0	9.2	11.7	16.8
13-Jun	6.6	5.8	5.0	4.7	4.9	7.3	10.9	12.9	14.9	15.8	17.2	18.4	19.1	19.8	21.0	21.4	22.2	22.5	22.7	21.4	19.1	15.5	15.0	12.3	14.9	22.7
14-Jun	12.6	12.4	10.2	9.0	9.4	12.0	15.4	17.7	20.3	21.8	22.9	23.1	22.8	21.9	22.7	23.7	23.1	18.4	16.5	16.2	15.4	12.5	10.6	9.6	16.7	23.7
15-Jun	9.0	8.5	8.2	7.9	8.1	10.8	14.3	16.9	19.1	21.1	22.5	23.0	24.2	24.2	25.1	24.5	23.7	22.8	20.7	17.3	15.1	14.2	13.8	13.7	17.0	25.1
16-Jun	13.7	13.6	13.6	13.6	13.5	13.5	14.2	14.6	15.3	16.3	15.1	14.3	14.5	11.7	11.6	12.5	12.7	12.9	12.9	12.9	12.5	11.9	11.8	11.0	13.3	16.3
17-Jun	10.5	9.6	8.8	7.8	7.3	7.8	8.8	10.2	12.0	13.3	14.5	15.5	16.2	16.2	16.7	17.4	17.4	16.6	14.3	13.5	12.5	11.8	11.1	10.8	12.5	17.4
18-Jun	10.3	9.6	9.3	9.1	9.5	9.9	10.1	11.0	12.2	13.0	14.1	14.7	15.6	16.0	15.3	15.6	15.5	15.6	16.0	15.5	14.7	12.0	10.0	9.9	12.7	16.0
19-Jun	10.0	9.7	9.4	8.3	7.7	8.4	10.2	14.5	15.4	15.0	16.1	17.9	16.7	16.8	17.7	17.9	16.8	16.7	17.1	16.1	13.4	13.2	11.6	10.4	13.6	17.9
20-Jun	9.1	9.0	9.0	8.3	8.9	9.2	9.8	11.0	12.2	14.1	15.7	15.2	13.1	14.0	14.4	11.6	11.1	11.4	11.6	11.4	11.2	11.0	10.9	10.8	11.4	15.7
21-Jun	10.7	10.6	10.6	10.3	10.3	10.3	10.3	10.6	11.2	12.1	13.1	14.3	14.8	16.0	16.5	16.9	16.9	16.6	16.3	16.2	14.9	13.7	12.6	11.9	13.2	16.9
22-Jun	10.7	10.2	9.8	9.5	8.8	9.4	9.9	11.1	13.4	15.4	17.0	17.9	17.3	15.3	16.4	17.9	18.0	18.1	17.9	16.4	14.9	13.7	12.0	11.0	13.8	18.1
23-Jun	10.3	9.5	9.6	9.1	8.8	10.6	13.6	15.4	17.6	18.8	19.7	20.8	21.4	22.0	22.4	23.1	22.7	22.7	22.4	21.6	19.6	17.4	16.9	16.0	17.2	23.1
24-Jun	15.2	15.0	14.3	13.7	13.6	14.3	15.4	16.3	16.9	17.3	18.8	20.1	22.2	23.1	23.9	24.3	23.9	23.4	23.7	22.4	20.8	19.1	18.8	18.4	19.0	24.3
25-Jun	17.7	17.1	16.5	15.9	15.8	16.7	17.4	18.7	20.2	21.8	23.4	23.8	24.3	24.9	25.0	25.2	25.0	24.8	24.2	23.3	21.6	19.7	19.5	19.3	20.9	25.2
26-Jun	18.9	18.5	17.9	17.1	16.9	17.3	18.4	20.1	21.7	23.4	23.8	24.2	24.6	24.3	25.4	25.5	24.8	25.0	24.8	24.3	22.4	21.0	20.5	20.1	21.7	25.5
27-Jun	19.6	19.4	17.3	16.1	15.8	16.3	17.4	18.5	19.5	20.5	21.3	21.6	21.9	22.1	19.6	20.4	21.2	22.0	21.6	20.6	19.4	18.0	17.2	16.8	19.3	22.1
28-Jun	16.5	17.4	17.7	17.2	16.5	15.5	16.5	18.5	21.5	23.0	24.2	25.3	25.8	26.1	26.9	27.2	27.1	27.5	27.3	26.7	24.5	19.3	17.6	16.6	21.8	27.5
29-Jun	15.8	17.1	15.1	13.7	14.1	15.2	16.4	18.8	21.2	23.1	25.0	26.2	27.1	27.7	28.2	28.5	28.4	28.0	27.7	26.3	23.3	20.3	17.0	16.2	21.7	28.5
30-Jun	15.2	15.0	15.1	15.7	15.5	14.9	16.1	19.0	20.2	21.1	22.1	22.8	23.6	23.1	23.8	23.6	21.2	21.0	21.0	19.9	18.7	17.1	15.7	15.3	19.0	23.8
	11.6	11.3	10.7	10.3	10.2	10.8	11.9	13.2	14.5	15.5	16.5	17.1	17.5	17.7	18.2	18.4	18.4	18.1	17.7	16.8	15.5	13.9	12.9	12.3	Diurnal Average	
	19.6	19.4	17.9	17.2	16.9	17.3	18.4	20.1	21.7	23.4	25.0	26.2	27.1	27.7	28.2	28.5	28.4	28.0	27.7	26.7	24.5	21.0	20.5	20.1	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Blackrod - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	168	23.33	23.33
10 - 20	429	59.58	82.92
> 20	123	17.08	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 - June 2026

Maximum Value: 98.3 % on Jun 8 05:00

Maximum Daily Average: 93.3 % on Jun 2

Minimum Value: 22.9 % on Jun 13 16:00

Minimum Daily Average: 45.5 % on Jun 26

Maximum Diurnal Average: 87.5 % at hour 4

Minimum Diurnal Average: 52.3 % at hour 15

Monthly Average: 69.37 %

Percentiles: P_1 = 25.4 P_{10} = 37.3 Q_1 = 52.2 Median = 71.3 Q_3 = 90.2 P_{90} = 95.4 P_{99} = 98.0

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

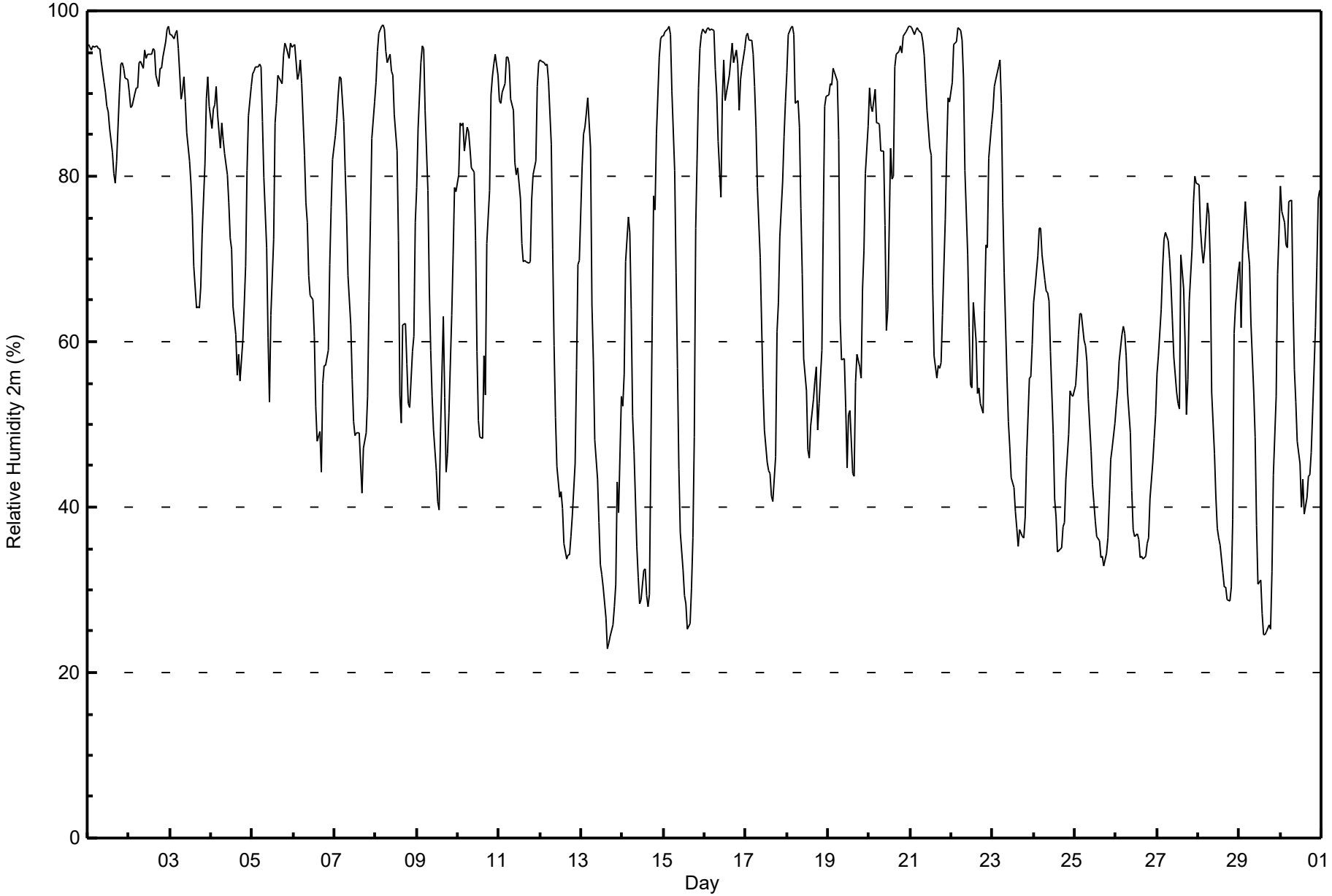
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	96.0	95.7	95.3	95.7	95.6	95.7	95.5	95.4	93.9	91.4	90.2	88.5	87.8	85.8	82.9	80.3	79.2	81.8	90.2	93.5	93.8	93.0	91.9	91.6	90.9	96.0
2-Jun	90.2	88.4	88.4	90.0	90.7	90.7	93.8	93.9	93.0	95.3	94.3	94.8	94.8	94.7	95.4	95.2	92.2	90.8	93.0	93.0	94.5	96.3	97.8	98.1	93.3	98.1
3-Jun	97.1	97.1	96.6	97.3	97.6	95.4	89.3	90.3	92.1	89.0	85.3	81.8	79.2	75.2	69.1	64.1	64.3	64.1	66.7	73.0	81.5	89.3	92.0	88.5	84.0	97.6
4-Jun	85.7	88.1	88.6	90.9	87.5	83.4	86.5	84.4	82.7	80.2	76.8	72.6	71.2	64.3	60.8	55.8	58.5	55.3	60.1	64.4	69.2	80.7	87.2	90.9	76.1	90.9
5-Jun	92.4	92.6	93.3	93.3	93.6	93.3	86.7	79.8	71.3	60.6	52.6	63.3	72.4	86.5	88.9	92.2	91.9	91.2	94.7	96.1	95.7	94.2	96.1	95.5	86.2	96.1
6-Jun	95.8	96.0	91.7	92.4	94.0	91.2	82.5	76.8	74.4	68.0	65.5	65.1	60.6	52.1	47.9	49.2	44.2	55.0	57.1	57.2	59.0	69.3	76.3	82.1	71.0	96.0
7-Jun	84.9	86.9	89.8	92.1	91.8	86.6	80.7	75.3	68.0	62.1	55.3	50.3	48.6	48.9	49.0	45.2	41.7	47.2	49.1	53.3	64.9	74.7	84.6	88.9	67.5	92.1
8-Jun	91.4	95.1	97.3	98.2	98.3	97.9	95.1	93.7	94.8	92.7	92.2	87.5	83.0	72.1	53.6	50.1	62.1	62.2	57.3	52.5	52.0	58.9	60.7	74.4	78.0	98.3
9-Jun	78.6	85.8	93.7	95.7	95.4	87.9	78.4	66.4	59.1	53.4	49.3	44.5	40.7	39.7	49.1	63.0	53.2	44.3	46.5	51.4	63.2	70.6	78.7	78.1	65.3	95.7
10-Jun	80.2	86.4	86.1	86.5	83.1	85.9	85.5	83.4	81.0	80.6	72.2	58.9	50.5	48.4	48.3	58.3	53.6	71.8	78.3	89.9	92.0	93.6	94.7	92.3	76.7	94.7
11-Jun	89.1	88.8	90.2	91.2	94.4	94.5	93.5	89.4	88.0	81.7	80.2	81.0	77.3	71.9	69.7	69.8	69.7	69.5	69.6	77.0	80.1	81.9	90.9	93.8	82.6	94.5
12-Jun	94.0	94.0	93.7	93.4	93.6	91.6	83.9	71.2	59.5	50.9	45.0	41.1	41.8	39.8	35.6	33.7	34.2	34.3	36.4	39.0	45.3	56.7	69.2	69.8	60.3	94.0
13-Jun	81.3	85.1	85.9	87.7	89.5	83.3	64.5	57.8	48.2	43.4	38.1	33.1	31.9	30.3	26.5	22.9	23.5	24.5	25.8	28.0	30.7	43.0	39.3	53.4	49.1	89.5
14-Jun	52.2	56.1	69.7	75.1	73.3	63.9	51.1	46.8	35.2	31.5	28.3	28.7	32.4	32.5	29.3	28.0	29.4	63.1	77.6	75.9	85.1	94.3	96.6	96.9	56.4	96.9
15-Jun	96.9	97.4	97.8	98.2	97.2	90.3	80.7	68.4	56.8	44.6	37.0	32.4	29.3	28.2	25.3	25.9	30.1	36.2	48.5	73.7	90.7	95.5	97.2	97.9	65.7	98.2
16-Jun	97.3	97.8	98.0	97.6	97.8	97.6	92.9	89.8	84.3	77.5	89.5	94.0	89.2	90.2	92.1	94.1	96.2	93.8	95.3	93.5	88.0	91.7	93.2	95.4	92.8	98.0
17-Jun	97.0	97.3	96.4	96.5	94.8	90.8	85.9	78.7	70.2	62.2	54.5	49.3	45.5	44.5	44.1	41.4	40.6	46.0	61.1	64.7	72.7	79.3	84.8	89.0	70.3	97.3
18-Jun	92.6	97.1	97.9	98.2	97.1	88.8	89.1	85.9	76.1	68.1	58.0	54.0	46.9	46.0	49.9	53.0	55.3	56.9	49.4	52.5	59.0	74.5	88.4	89.7	71.8	98.2
19-Jun	89.8	91.1	91.1	93.1	92.5	91.5	84.5	62.8	57.8	58.0	52.0	44.8	51.2	51.7	44.1	43.8	55.1	58.5	57.0	55.6	66.4	71.0	80.3	86.2	67.9	93.1
20-Jun	90.7	88.5	87.9	90.6	86.4	86.4	86.2	83.1	83.1	74.1	61.3	63.9	83.3	79.6	79.9	93.2	94.7	95.1	95.7	94.9	97.0	97.5	97.7	98.2	87.0	98.2
21-Jun	98.1	97.9	97.1	97.6	98.0	97.6	97.3	96.3	94.7	91.2	88.0	83.3	82.6	66.7	58.3	55.6	57.1	56.8	57.5	63.1	74.8	83.1	89.4	88.9	82.1	98.1
22-Jun	91.4	96.0	96.2	96.3	97.9	97.6	96.4	91.8	80.7	70.5	61.6	54.7	54.3	64.7	60.0	53.8	54.5	52.5	51.4	63.7	71.8	71.3	82.2	86.4	74.9	97.9
23-Jun	88.0	90.9	91.7	93.2	94.0	88.8	76.7	68.2	55.8	50.4	47.3	43.5	42.4	39.4	37.5	35.2	37.3	36.4	36.3	38.8	46.1	55.6	55.7	59.6	58.7	94.0
24-Jun	64.8	66.4	70.4	73.8	73.7	70.5	67.5	66.2	65.9	65.0	58.7	48.7	41.0	38.9	34.6	34.9	35.0	37.6	38.2	43.4	48.8	54.1	53.5	53.4	54.4	73.8
25-Jun	54.7	57.4	60.9	63.4	63.4	60.2	59.5	57.7	53.0	46.8	42.8	40.5	38.4	36.4	35.9	33.8	34.0	32.9	34.4	36.3	40.8	45.8	47.2	50.1	46.9	63.4
26-Jun	52.3	54.3	57.6	60.9	61.9	61.1	58.4	53.9	49.0	42.1	37.4	36.4	36.7	36.1	33.9	34.1	33.7	34.0	35.6	36.3	41.1	45.4	48.2	51.2	45.5	61.9
27-Jun	56.1	58.3	63.8	68.8	72.4	73.2	72.1	70.0	66.7	62.6	58.1	54.0	52.6	51.8	70.4	66.4	60.1	51.2	55.5	65.0	71.2	76.8	79.9	79.2	64.8	79.9
28-Jun	79.0	73.8	71.3	69.6	71.2	76.7	75.5	69.5	54.0	46.5	41.2	37.5	36.3	35.4	32.0	30.3	30.4	28.9	28.6	30.4	38.4	61.0	64.4	68.5	52.1	79.0
29-Jun	69.7	61.8	70.7	76.9	74.1	71.2	69.4	62.2	54.0	48.5	37.7	30.8	31.2	27.0	24.6	24.6	24.9	25.7	25.2	32.1	43.9	53.4	68.1	73.0	49.2	76.9
30-Jun	78.7	75.8	74.4	71.7	71.4	76.9	77.2	65.0	56.6	52.7	48.0	45.2	40.0	43.4	39.1	41.2	43.7	43.9	46.5	51.5	61.8	69.0	77.2	78.2	59.5	78.7
	83.5	84.6	86.1	87.5	87.4	85.3	81.2	75.8	70.0	64.7	59.9	56.8	55.8	54.1	52.3	52.3	52.7	54.7	57.3	61.3	67.3	74.0	78.8	81.3	Diurnal Average	
	98.1	97.9	98.0	98.2	98.3	97.9	97.3	96.3	94.8	95.3	94.3	94.8	94.8	94.7	95.4	95.2	96.2	95.1	95.7	96.1	97.0	97.5	97.8	98.2	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Blackrod - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	89	12.36	12.36
40 - 60	172	23.89	36.25
60 - 80	168	23.33	59.58
80 - 100	291	40.42	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

Blackrod - June 2026

Maximum Speed: 27 km/h on Jun 1 09:00

Maximum Daily Speed Average: 22.4 km/h on Jun 1

Minimum Speed Value: 1 km/h on Jun 19 08:00

Minimum Daily Speed Average: 1.3 km/h on Jun 5

Maximum Diurnal Speed Average: 4.6 km/h at hour 11

Minimum Diurnal Speed Average: 1.0 km/h at hour 7

Monthly Average Velocity: 1.9 km/h 8.9 deg

Percentiles: P_1 = 1 P_{10} = 3 Q_1 = 7 Median = 10 Q_3 = 14 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-Jun	NNW23	NNW24	N25	N25	N23	N24	N23	N26	N27	N27	N26	N27	N25	N25	N25	N25	N22	N18	N15	N16	NNE16	N18	N19	N20	N22.4	N27
2-Jun	NNE21	N20	NNE18	NNE17	NNE19	NNE19	NNE16	NNE17	NNE18	NNE15	N18	NNE17	NNE16	NNE14	NNE12	NNE13	NE13	NE12	NNE11	NNE11	NNE8	NE7	NE6	NE5	NNE14.1	NNE21
3-Jun	NE4	E3	E2	NE3	ENE4	ENE2	S4	NW4	NE7	ENE6	SSE6	S8	S10	SSW8	SW5	SSW7	SSW10	SSW11	SSW11	S10	S10	S7	SSE8	SSE10	S4.1	SSW11
4-Jun	S12	S14	S11	S13	S15	S14	S14	S16	S16	S15	S16	S16	S15	S18	S17	SSW17	S14	SSW11	S9	S7	SSW7	SSE8	SSW7	SSE9	S12.9	S18
5-Jun	SSE8	S7	SSE7	SSE7	S7	SSE6	ESE3	NE7	NE7	NNE5	ENE6	SE9	E6	SSE6	SW6	N11	N16	NW10	NW8	NNW10	NNW12	WNW9	WNW10	WNW12	NNW1.3	N16
6-Jun	W8	SW11	WSW10	SW11	SW13	SW15	WSW14	WSW16	W17	W19	W16	WSW14	W16	W20	W21	WNW18	W19	NW14	NW12	WNW12	W8	SSW8	SSW9	S9	WSW11.8	W21
7-Jun	SSE9	S9	S9	SSE9	SSE7	S9	S10	SSW11	SSW10	S11	S7	S11	SSW11	S10	S12	S9	SSW9	SSW10	SSW9	W11	WNW7	NW6	N9	N9	SSW6.6	S12
8-Jun	N7	NNW8	NNW8	NW10	NW13	NW15	NW14	NW15	NW18	WNW20	WNW20	WNW19	WNW15	WNW17	WNW25	WNW24	W15	WSW13	WSW15	W15	W14	WSW9	SW9	SSW10	WNW12.3	WNW25
9-Jun	SSW8	S3	ESE1	E1	ENE1	NW2	SSE4	ESE1	SW6	SW4	SW7	WSW5	W3	SSW6	SSW13	S10	SSW7	S8	SSW9	WNW10	NNE4	ENE1	SSE4	NE2	SSW3.2	SSW13
10-Jun	SE5	ESE1	NNW1	W2	NNW6	N9	NNE8	N7	N9	NNE8	N15	N19	N22	NNW23	NNW23	N21	NNW19	NNW14	N14	N14	NNE14	NNE10	NNE7	N11	N11.0	NNW23
11-Jun	NNW13	NNW13	NNW11	NNW10	NNW12	NNW14	NNW14	NNW16	NNW14	NNW15	NNW17	N12	N9	NNW13	NNW13	NNE11	N12	N13	NNW14	N11	N10	N10	NNE13	N12	N12.3	NNW17
12-Jun	N12	N14	NNW13	NNW13	NNW10	NNW11	N14	N17	N20	N19	N20	N23	NNE21	N20	N20	N21	N18	N17	N14	N11	NNE8	NNE5	ENE6	ENE4	N14.2	N23
13-Jun	SSE3	SE2	SE2	ESE2	ESE2	ESE2	NW2	W2	W6	WNW9	NW10	W9	W8	WNW5	W6	NW10	WNW5	NW5	SW7	SSW13	S8	SSE9	S9	SSE9	WSW2.8	SSW13
14-Jun	SSE9	SSE9	SSE8	SSE8	SSE8	SSE8	S9	S6	WNW7	W9	NW13	NW14	WNW13	NW16	NW13	WNW14	NNW15	N8	NNW1	SSW4	SE3	ESE2	ESE2	ESE2	W2.7	NW16
15-Jun	SE2	SE2	SE2	ESE2	SSE3	SE3	S4	SSW8	S9	S8	S8	S7	SSW8	WSW7	SW7	SSW11	SSW9	SSW7	SW12	W10	S6	S7	S6	SSE7	SSW5.6	SW12
16-Jun	S7	S7	SSE5	S7	S7	S4	NNW4	NNW6	NNW9	N7	NW7	NNW5	ENE3	NNE13	NE9	WNW4	WNW5	NNW5	WNW5	NW8	NE6	NNW4	WNW7	NW5	NNW2.3	NNE13
17-Jun	N6	NNE5	N6	N7	N5	NNE5	NNE8	N12	NNE13	N15	N15	N16	N12	N12	N8	NE10	NNE7	NNW11	NNW14	NNW11	N6	NNW5	NNW7	NNW5	N8.8	N16
18-Jun	NNW2	SE1	SSE2	SW2	WSW2	W8	WNW10	WNW12	NNW13	NNW12	NNW13	NNW15	NNW19	NNW19	N15	NNW14	NNW13	WNW6	N10	N10	NNE9	ENE3	SE2	SE2	NNW7.2	NNW19
19-Jun	SE3	SE2	SSE3	SE5	SSE6	ESE3	SSE3	WNW1	WNW10	NW10	NW9	WNW13	N14	NNW15	NNW8	WSW5	SW9	S8	SSE5	NNE8	ENE11	NE8	ENE7	SSE3	NNW1.6	NNW15
20-Jun	ENE2	NE9	NE6	NE9	NE10	NNE8	NNE8	NNE10	N10	N11	NNE12	N12	NNE9	NNE9	NE3	S10	ESE1	NNE4	NE7	NE8	NE6	NNE8	NE8	NE8	NNE6.8	N12
21-Jun	NE10	NE9	NE9	NNE9	NNE10	NNE12	NNE11	NNE11	NNE14	NNE14	NNE14	N16	N12	NE11	NE12	ENE11	ENE10	ENE9	NE6	NE4	NNE4	NNE6	NNE6	N6	NNE9.4	N16
22-Jun	NNW2	NNW5	NNE3	NW2	N2	NNW3	SW2	NNW6	N10	NNW12	N11	N13	NE16	E9	WNW5	WNW12	NW13	NNW12	NNE7	ESE3	SSE7	SSE8	SSE10	SSE8	N3.0	NE16
23-Jun	SSE7	SSE7	SSE7	SSE5	SSE5	S7	S10	S9	S8	SW7	SSW10	SSW9	S11	S11	S13	SSW12	SSW15	SSW13	S13	S10	SSE9	SSE11	SSE13	SSE12	S9.3	SSW15
24-Jun	SSE12	SSE13	SSE12	SSE12	SSE12	SSE11	SSE12	S8	S5	SSE8	SSE10	SSE11	SSE12	S13	S11	S9	S9	SSE8	SSE10	SSE12	SSE11	SSE11	SSE13	SE13	SSE10.5	SSE13
25-Jun	SE14	SE14	SE14	SE12	SE13	SE14	SSE16	SSE15	S19	S21	S17	S20	SSE19	SSE17	SSE17	SSE17	SSE17	SSE19	S18	S16	SSE10	SE8	SE11	SE14	SSE15.1	S21
26-Jun	SE17	SE18	SE19	SE18	SE18	SE19	SSE16	SSE15	SSE15	SE15	SSE20	SSE19	SSE21	SSE16	S20	SSE18	SE15	SE13	SE14	SSE9	SE6	SE8	SE10	ESE10	SSE14.9	SSE21
27-Jun	ESE9	E9	ENE11	ENE12	ENE11	ENE13	ENE12	ENE12	ENE13	ENE14	E14	E14	E15	E13	SSE12	ESE5	ENE7	E9	ESE5	E3	ENE5	ENE5	ENE5	ENE6	E9.2	E15
28-Jun	E6	E5	NE5	NE9	NNE8	NNE8	N8	N10	NE16	NNE18	NNE20	NNE20	NNE21	NNE20	NNE20	NNE19	NNE17	NNE18	NNE15	NNE13	NNE7	NE4	NE5	NNE6	NNE12.0	NNE21
29-Jun	NE7	NNE7	NNE9	NNE8	NNE9	NNE6	NNW6	N5	N6	NNW8	NNW9	NNW11	N12	NNW13	N15	N18	N16	N14	N11	NNE8	E5	SSE7	ESE3	ENE3	N7.6	N18
30-Jun	NE2	ENE4	ENE5	ENE5	ESE2	ENE2	W1	N4	NNE8	NNE11	NE11	NE10	NE8	NNE10	N5	NNE13	ENE9	NE5	NE8	E5	E1	ENE2	SE2	E2	NE4.8	NNE13
	E2.1	E1.9	ENE2.1	ENE2.0	ENE1.7	NE1.6	NNE1.0	N2.6	N4.0	NNW4.5	N4.6	N4.2	N3.6	N4.0	NW3.2	NW3.4	NNW3.0	N2.4	NNW1.4	NNW2.2	NE1.9	E1.7	ESE1.9	E2.1	Diurnal Average	
	NNW23	NNW24	N25	N25	N23	N24	N23	N26	N27	N27	N26	N27	N25	N25	WNW25	N25	N22	SSE19	S18	S16	NNE16	N18	N19	N20	Diurnal Maximum	

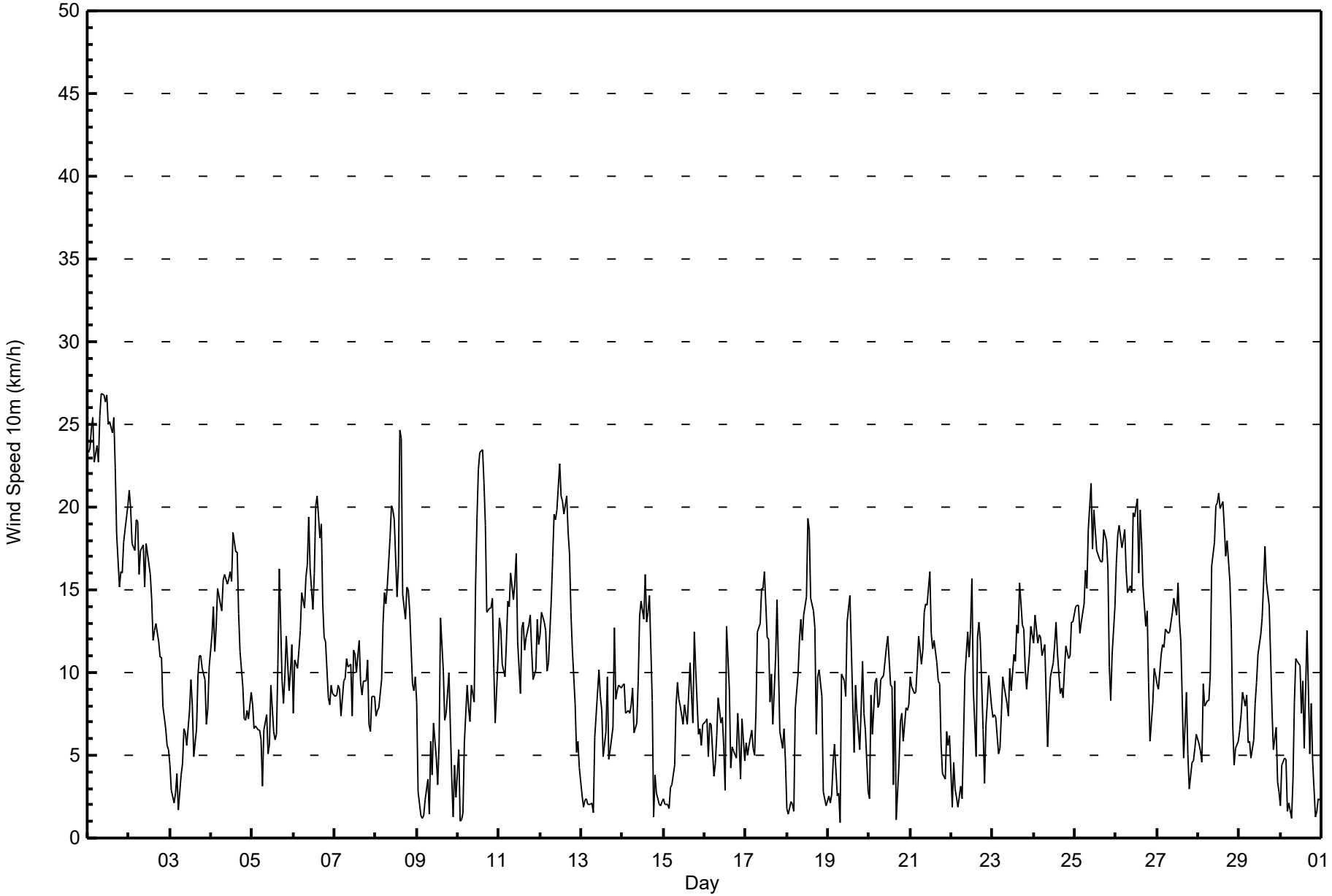
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Blackrod - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	137	19.03	19.03
6 - 11	308	42.78	61.81
12 - 19	228	31.67	93.47
20 - 28	47	6.53	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 - June 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	11	17	9	18	15	12	5	1	4	3	4	7	6	13	137
6 - 11	30	40	27	14	5	2	6	43	50	28	10	3	10	10	8	22	308
12 - 19	40	30	5	6	4	0	18	26	23	6	3	5	8	11	12	31	228
20 - 28	25	7	0	0	0	0	0	2	3	0	0	0	2	4	0	4	47
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	99	85	43	37	18	20	39	83	81	35	17	11	24	32	26	70	720

Total Number of Valid Hours: 720

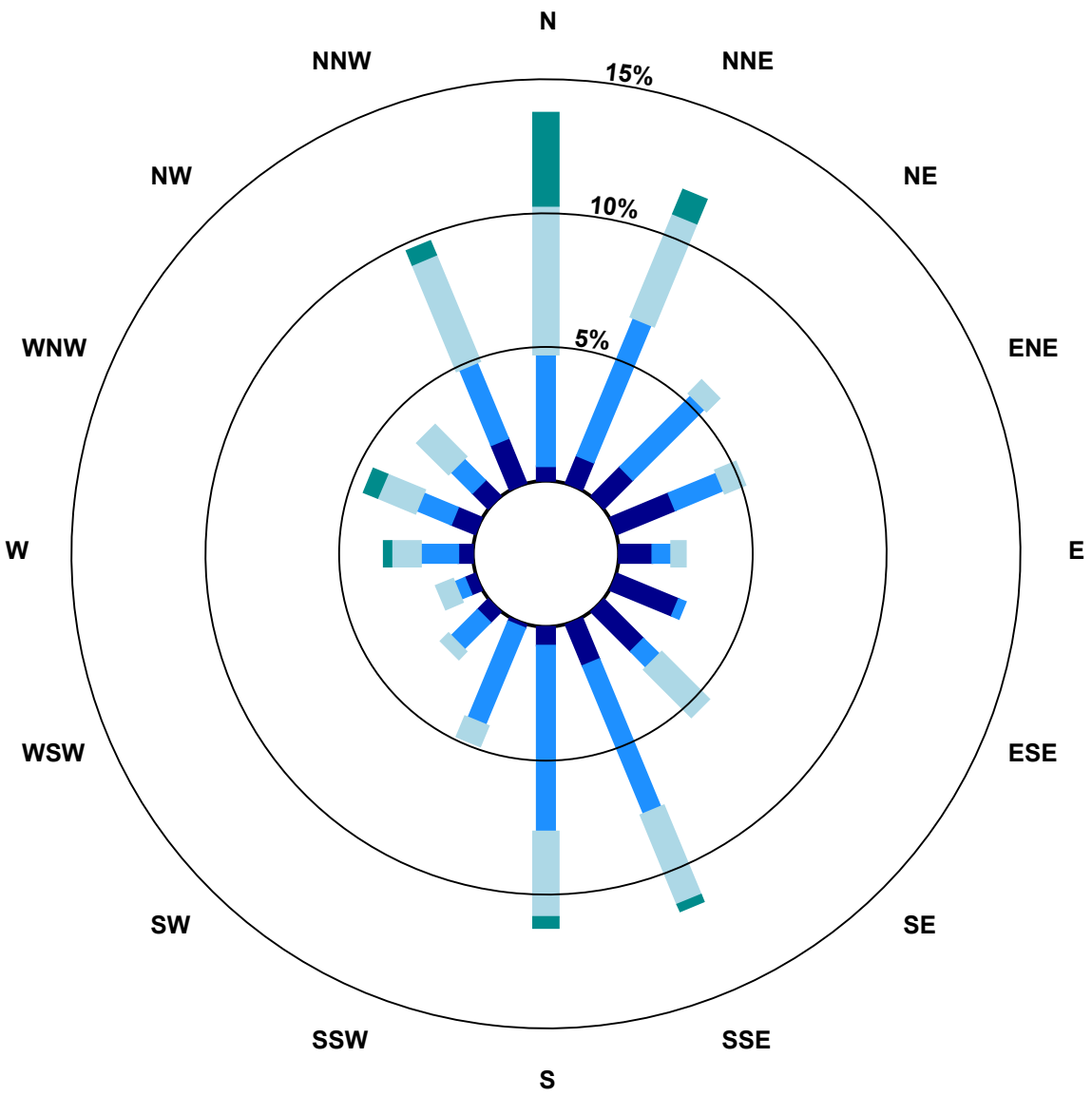
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 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

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10 km/h on Jun 8 16:00

Minimum Value: 1 km/h on Jun 3 22:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 3 Q_3 = 4 P_{90} = 5 P_{99} = 6

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

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Blackrod - June 2026

Direction of Maximum Speed: 2 deg on Jun 1 09:00
Direction of Maximum Daily Speed Average: 0.4 deg on Jun 1

Direction of Minimum Speed: 293 deg on Jun 19 08:00
Direction of Minimum Daily Speed Average: 1.3 deg on Jun 5

Monthly Average Direction: 8.9 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-Jun	345	345	351	356	352	350	357	358	2	3	2	3	2	3	2	3	4	6	6	11	15	11	9	8	0.4
2-Jun	12	10	15	16	14	15	17	14	20	21	11	17	25	28	23	28	37	36	26	20	31	42	44	48	20.5
3-Jun	50	82	87	54	67	73	187	313	34	63	147	187	190	194	232	206	202	205	197	191	182	177	167	163	177.4
4-Jun	175	188	176	176	171	175	180	177	181	178	183	191	189	187	180	197	176	206	185	182	196	162	193	166	182.3
5-Jun	164	170	165	155	184	166	118	52	50	30	73	136	98	151	215	360	353	326	309	332	337	303	289	299	345.4
6-Jun	263	226	246	223	219	220	245	251	259	277	260	258	262	268	271	289	272	306	317	303	270	201	195	173	258.4
7-Jun	164	186	180	164	159	170	179	196	202	189	190	187	192	174	180	188	197	196	205	270	303	310	350	357	194.1
8-Jun	352	343	342	316	307	325	326	317	314	303	291	290	287	292	289	288	277	250	246	264	263	237	223	196	290.1
9-Jun	192	170	108	94	70	314	160	123	220	225	235	249	264	204	207	184	197	182	210	303	21	77	162	36	207.2
10-Jun	142	116	346	274	347	357	29	354	354	15	1	357	349	338	340	350	341	347	352	357	24	15	15	356	355.1
11-Jun	348	347	344	336	333	343	341	342	337	332	341	353	356	344	348	12	355	6	347	359	5	358	16	10	349.7
12-Jun	3	350	346	344	344	341	352	354	357	358	7	9	12	360	2	356	359	8	4	5	13	24	57	60	1.0
13-Jun	164	134	136	119	116	122	311	275	262	290	305	280	277	299	274	314	293	323	220	200	178	162	170	163	241.4
14-Jun	165	162	158	159	161	166	179	186	285	274	312	315	299	313	324	293	339	3	337	197	140	116	123	118	276.0
15-Jun	142	127	128	113	154	146	189	194	183	187	174	185	195	245	230	202	212	200	218	259	176	184	169	165	194.7
16-Jun	170	178	166	184	180	187	347	346	346	355	322	329	58	23	44	291	300	330	282	315	42	327	283	325	330.8
17-Jun	356	17	9	8	0	28	26	4	14	351	1	358	1	353	6	38	13	333	339	341	360	340	340	340	359.4
18-Jun	339	129	151	234	254	280	290	298	332	342	330	333	330	347	1	346	336	299	360	350	24	76	141	138	335.2
19-Jun	130	132	151	145	148	106	159	293	301	326	314	298	355	337	340	248	219	171	147	32	62	55	61	165	347.5
20-Jun	65	56	45	49	49	33	30	31	10	1	14	10	16	13	36	170	108	14	35	40	35	32	37	37	31.3
21-Jun	34	40	40	31	25	33	33	33	33	32	19	6	9	46	46	58	59	63	56	39	18	31	23	349	32.9
22-Jun	348	346	27	323	1	338	225	345	352	330	349	359	46	90	282	288	305	343	24	123	149	153	165	157	353.6
23-Jun	156	159	158	154	153	172	174	179	189	214	212	200	171	182	186	203	197	194	190	182	156	150	155	157	178.6
24-Jun	152	147	148	155	161	157	168	177	173	160	154	149	165	184	191	175	172	161	166	155	150	147	147	145	159.9
25-Jun	140	146	144	142	135	140	151	161	170	174	175	171	168	163	166	161	157	166	170	171	155	133	129	131	157.4
26-Jun	136	141	143	144	143	141	151	152	152	144	150	156	166	158	173	167	133	133	142	148	126	125	126	116	147.0
27-Jun	109	96	73	74	76	75	76	73	73	75	80	89	89	92	155	118	75	80	103	93	65	65	70	72	84.5
28-Jun	90	99	40	38	15	16	358	353	37	31	32	30	14	19	17	23	23	19	20	21	26	45	44	30	25.2
29-Jun	47	32	21	22	26	28	344	1	359	336	343	345	5	347	357	350	354	4	10	22	97	150	114	67	7.4
30-Jun	52	62	71	70	121	67	267	2	19	22	40	47	48	20	349	22	78	55	34	91	91	61	135	97	43.3
	93.3	91.3	75.8	73.1	70.9	47.6	23.7	351.6	354.0	348.7	350.5	349.5	0.6	349.2	321.3	326.0	335.9	351.3	334.9	334.3	47.2	87.2	105.7	96.6	
	Diurnal Average																								

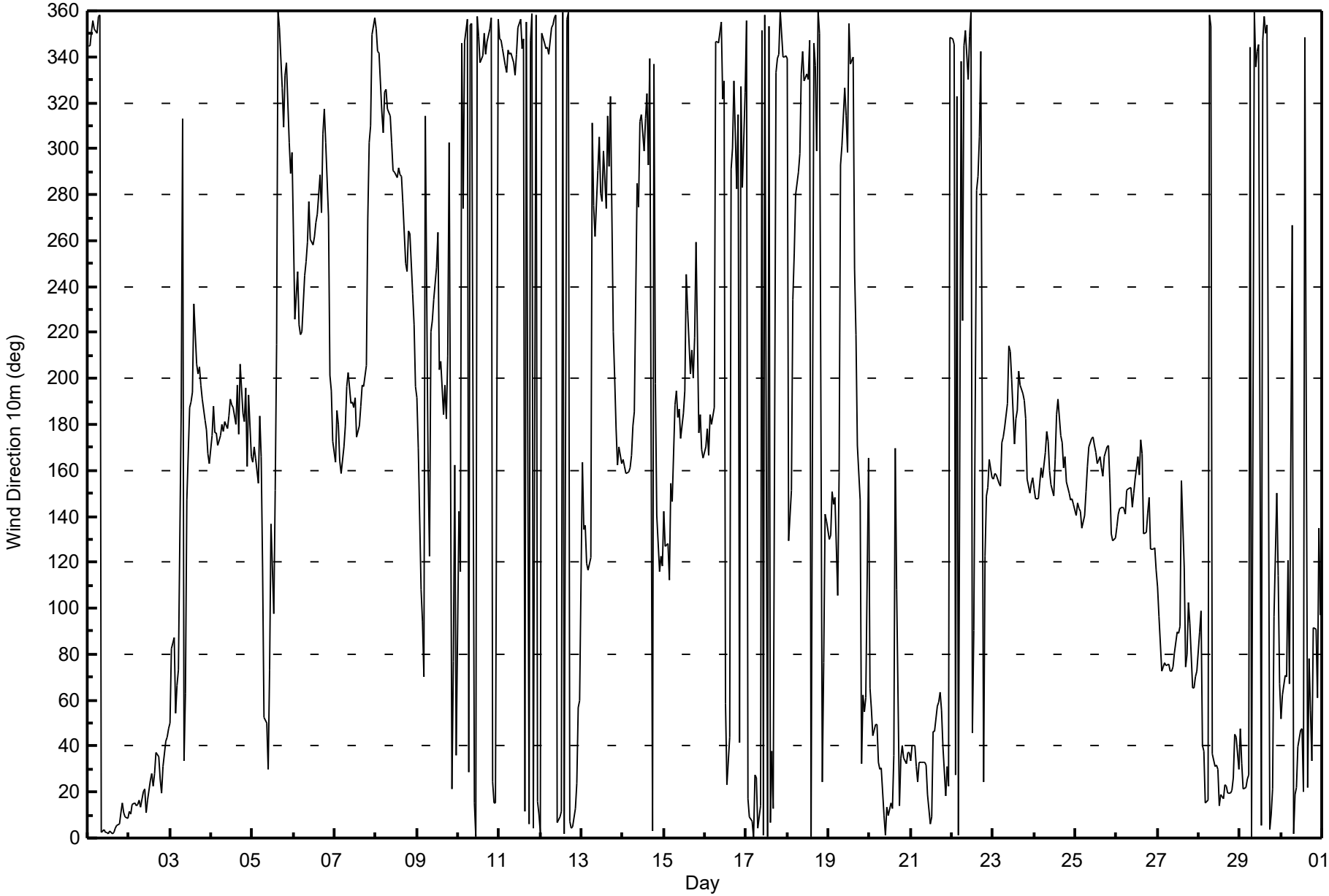
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Blackrod - June 2026



Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 97 deg on Jun 30 05:00

Minimum Value: 7 deg on Jun 14 02:00

Percentiles: P_1 = 8 P_{10} = 13 Q_1 = 15 Median = 20 Q_3 = 29 P_{90} = 49 P_{99} = 84

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-Jun	14	12	14	14	14	13	13	16	14	14	15	15	17	16	16	14	15	12	11	14	16	14	14	13	17
2-Jun	15	15	16	16	15	16	16	17	17	17	16	18	17	18	19	16	14	14	19	18	18	15	16	18	19
3-Jun	21	36	47	26	17	44	40	52	26	32	39	29	24	36	73	59	28	20	17	14	10	9	9	10	73
4-Jun	14	12	13	14	15	16	16	16	16	18	19	23	18	20	18	21	17	21	13	13	19	14	24	13	24
5-Jun	14	28	14	13	18	13	50	16	20	55	47	34	29	43	49	16	15	26	19	15	17	20	19	15	55
6-Jun	36	21	29	19	14	17	23	23	22	20	22	24	21	23	22	19	23	24	24	24	25	18	13	13	36
7-Jun	12	11	12	12	12	14	14	22	28	30	48	35	43	30	26	45	55	17	15	31	30	25	24	16	55
8-Jun	19	11	13	19	14	13	13	15	15	14	14	13	14	14	14	21	30	30	22	19	16	26	25	13	30
9-Jun	14	78	68	75	82	65	38	74	47	77	47	74	89	48	25	20	24	21	27	37	72	82	26	83	89
10-Jun	30	71	83	90	19	15	20	33	16	35	25	20	21	19	18	18	16	15	15	15	24	17	15	15	90
11-Jun	11	10	12	12	13	12	13	14	17	16	18	19	28	21	18	21	18	17	15	16	17	11	19	13	28
12-Jun	12	13	11	12	11	13	16	18	17	20	18	19	16	20	19	19	17	15	13	11	14	18	17	51	51
13-Jun	46	46	24	43	25	48	78	82	43	30	35	54	56	78	56	45	84	61	67	16	15	8	8	7	84
14-Jun	8	7	8	8	8	9	15	24	52	34	26	23	18	29	26	35	29	28	97	52	33	26	25	26	97
15-Jun	29	27	22	20	55	20	17	14	17	26	34	47	48	63	54	27	21	18	21	32	15	11	22	15	63
16-Jun	11	14	30	16	14	65	53	16	18	29	35	56	68	25	29	49	31	63	60	19	57	65	39	26	68
17-Jun	16	16	22	16	17	19	18	17	19	16	20	22	34	20	38	27	42	27	15	11	16	27	11	16	42
18-Jun	82	59	31	64	94	24	13	19	22	20	22	21	21	26	21	25	20	25	21	13	18	68	30	41	94
19-Jun	35	38	34	48	18	48	47	92	20	25	26	32	35	30	42	63	35	19	29	70	15	15	13	53	92
20-Jun	82	15	23	9	15	15	14	12	19	20	25	19	25	16	70	34	84	33	11	11	21	20	13	11	84
21-Jun	11	12	13	14	22	11	15	14	12	13	18	17	19	20	15	20	20	16	15	19	21	24	29	17	29
22-Jun	84	22	51	69	65	48	66	21	21	22	27	28	30	37	62	20	25	19	34	34	16	27	9	12	84
23-Jun	10	9	10	17	14	13	12	14	28	39	34	41	34	43	20	32	19	22	17	16	12	7	9	9	43
24-Jun	9	10	10	13	12	12	15	16	19	15	16	20	34	33	29	36	26	16	17	16	11	11	12	13	36
25-Jun	14	15	16	19	17	16	15	16	17	17	22	20	23	23	25	26	23	21	18	16	16	18	21	22	26
26-Jun	20	17	16	17	18	18	15	16	16	22	24	23	21	27	24	22	30	34	26	20	25	25	27	30	34
27-Jun	31	33	22	21	20	21	22	21	25	25	29	33	29	33	21	47	25	25	34	22	11	11	13	15	47
28-Jun	17	26	40	13	14	13	16	26	18	19	19	21	18	22	20	21	21	17	16	16	13	13	11	15	40
29-Jun	11	24	11	12	9	36	20	21	23	19	22	20	24	23	25	23	18	19	16	14	51	34	31	34	51
30-Jun	49	17	18	35	97	42	80	56	19	26	25	27	45	23	51	28	34	34	13	45	76	66	38	32	97
	84	78	83	90	97	65	80	92	52	77	48	74	89	78	73	63	84	63	97	70	76	82	39	83	
	Diurnal Maximum																								

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS02
PIHEW POINT
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - PIHEW POINT (AMS32)
JUNE 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	42.1	0	7.6	0
H2S (ppb) Average	685	35	35	100	5.2	0	1	0
THC (ppm) Average	685	34	35	99.86	5.2	-	2.3	-
NMHC(ppm) Average	685	34	35	99.86	2.733	-	0.216	-
CH4(ppm) Average	685	34	35	99.86	5.2	-	2.3	-
Temperature (C) Average	720	0	0	100	29.9	-	24.2	-
Relative Humidity (%) Average	720	0	0	100	97.5	-	92.6	-
Wind Speed 10 m (km/h) Average	720	0	0	100	28	-	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 - PIHEW POINT (AMS32)
JUNE 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	0.99	3.6	-	0	0	0	0.1	0.3	1.6	42.1
H2S (ppb) Average	685	0.36	0.6	-	0	0	0	0.1	0.4	1	5.2
THC (ppm) Average	685	2.12	0.3	-	2	2	2	2	2.1	2.3	5.2
NMHC(ppm) Average	685	0.011	0.127	-	0	0	0	0	0	0	2.733
CH4(ppm) Average	685	2.11	0.2	-	2	2	2	2	2.1	2.3	5.2
Temperature 2 m (C) Average	720	16.59	5.5	-	8	10.3	12.1	15.6	20.2	25.2	29.9
Relative Humidity (%) Average	720	64.51	19.4	-	28.3	36.7	48.8	66.4	80.2	90.7	97.5
Wind Speed 10 m (km/h) Average	720	10.7	6	-	0	4	6	9	15	20	28
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - PIHEW POINT (AMS32)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
SO2, THC/NMHC/CH4	10 Jun 2026 10:00	10 Jun 2026 10:00	1	Maintenance - sample manifold cleaned

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Pihew Point - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 42.1 ppb on Jun 16 14:00 Maximum Daily Average: 7.6 ppb on Jun 9

Minimum Value: 0.0 ppb on Jun 1 01:00 Minimum Daily Average: 0.0 ppb on Jun 1
Maximum Diurnal Average: 2.9 ppb at hour 14 Minimum Diurnal Average: 0.2 ppb at hour 22
Monthly Average: 0.99 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.3 P_{90} = 1.6 P_{99} = 16.5

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-Jun	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
2-Jun	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	1.3	0.4	0.6	0.1	0.0	0.0	0.0	0.1	1.3
3-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.2	0.3	0.4	1.3	1.1	2.6	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.3	2.6
4-Jun	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	0.0	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-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	5.4	3.0	0.5	0.3	0.2	0.3	2.9	0.6	5.4
6-Jun	4.5	1.0	Z	0.2	0.1	0.9	7.5	7.5	5.9	1.4	1.2	0.9	0.4	0.2	0.3	0.8	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	1.4	7.5
7-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.5	0.7	3.5	5.0	0.7	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.5	5.0
8-Jun	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	0.5	1.3	0.4	0.1	2.1	0.7	0.2	1.0	14.5	10.0	1.4	14.5
9-Jun	9.7	6.0	25.7	34.4	19.8	Z	13.3	5.9	2.4	1.7	8.7	24.9	1.1	6.2	13.3	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	7.6	34.4
10-Jun	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	M	0.1	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
11-Jun	0.0	Z	0.0	0.0	0.0	0.2	0.5	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	0.1	0.2	0.1	0.5
12-Jun	0.1	0.0	Z	0.3	0.3	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	0.1	0.2	0.1	0.3
13-Jun	0.2	0.1	0.2	Z	0.2	2.4	10.2	0.7	2.1	9.2	0.4	0.8	3.0	19.4	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	2.2	19.4
14-Jun	0.0	3.7	8.5	1.7	Z	6.8	1.1	0.6	0.5	0.4	0.9	0.7	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	1.1	8.5
15-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.2	1.6	0.3	0.8	1.2	0.7	2.3	12.4	12.4	15.9	6.8	4.2	0.7	0.5	0.5	0.5	1.6	0.3	2.8	15.9
16-Jun	Z	1.7	0.2	0.2	0.2	1.2	0.5	0.1	0.4	0.5	0.5	11.4	37.8	42.1	2.8	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	4.4	42.1
17-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.2
18-Jun	0.1	0.0	Z	0.1	0.1	0.1	0.1	0.2	0.4	C	C	C	C	0.1	0.0	0.2	0.1	0.0	0.0	0.4	0.0	0.0	0.2	0.1	0.1	0.4
19-Jun	0.0	0.0	0.0	Z	0.1	0.1	0.2	0.2	0.1	0.0	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
20-Jun	0.0	0.1	0.1	0.1	Z	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
21-Jun	0.0	0.1	0.0	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	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
22-Jun	Z	0.3	0.2	0.2	0.1	0.2	0.2	1.1	7.6	3.1	1.3	0.5	0.2	0.2	0.1	0.2	0.2	2.3	0.8	0.2	0.5	0.2	0.2	0.4	0.9	7.6
23-Jun	0.4	Z	0.3	0.1	0.1	0.1	0.1	0.2	0.5	0.2	0.3	0.4	0.3	0.3	0.3	0.1	0.1	0.5	3.0	0.5	0.2	0.1	0.1	0.1	0.4	3.0
24-Jun	0.1	0.1	Z	0.1	0.1	0.1	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.5	6.2	0.3	0.2	0.1	0.6	6.2
25-Jun	0.1	0.1	0.1	Z	0.2	0.2	0.5	0.5	0.5	1.1	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3	1.1
26-Jun	0.2	0.1	0.2	0.1	Z	0.6	0.5	0.5	0.4	0.6	0.2	0.1	0.1	0.1	0.1	0.3	0.8	0.4	0.1	0.1	0.5	3.0	4.8	13.4	1.2	13.4
27-Jun	15.1	4.7	1.6	0.3	0.2	Z	0.2	1.3	0.7	0.5	3.4	1.9	2.6	0.6	2.8	0.2	1.4	1.9	2.3	0.2	0.1	0.1	0.0	0.0	1.8	15.1
28-Jun	Z	0.1	0.0	0.1	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.3
29-Jun	0.2	Z	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.5	0.2	0.5
30-Jun	1.2	1.4	Z	0.1	0.1	0.1	0.2	0.5	0.3	0.5	8.0	6.1	4.1	0.9	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.4	1.3	0.3	1.2	8.0
	1.3	0.8	1.5	1.5	0.9	0.6	1.2	0.8	0.8	0.8	1.0	1.8	1.9	2.9	1.3	0.7	0.4	0.6	0.5	0.3	0.3	0.2	0.8	1.0	Diurnal Average	
	15.1	6.0	25.7	34.4	19.8	6.8	13.3	7.5	7.6	9.2	8.7	24.9	37.8	42.1	13.3	15.9	6.8	5.4	3.0	3.5	6.2	3.0	14.5	13.4	Diurnal Maximum	

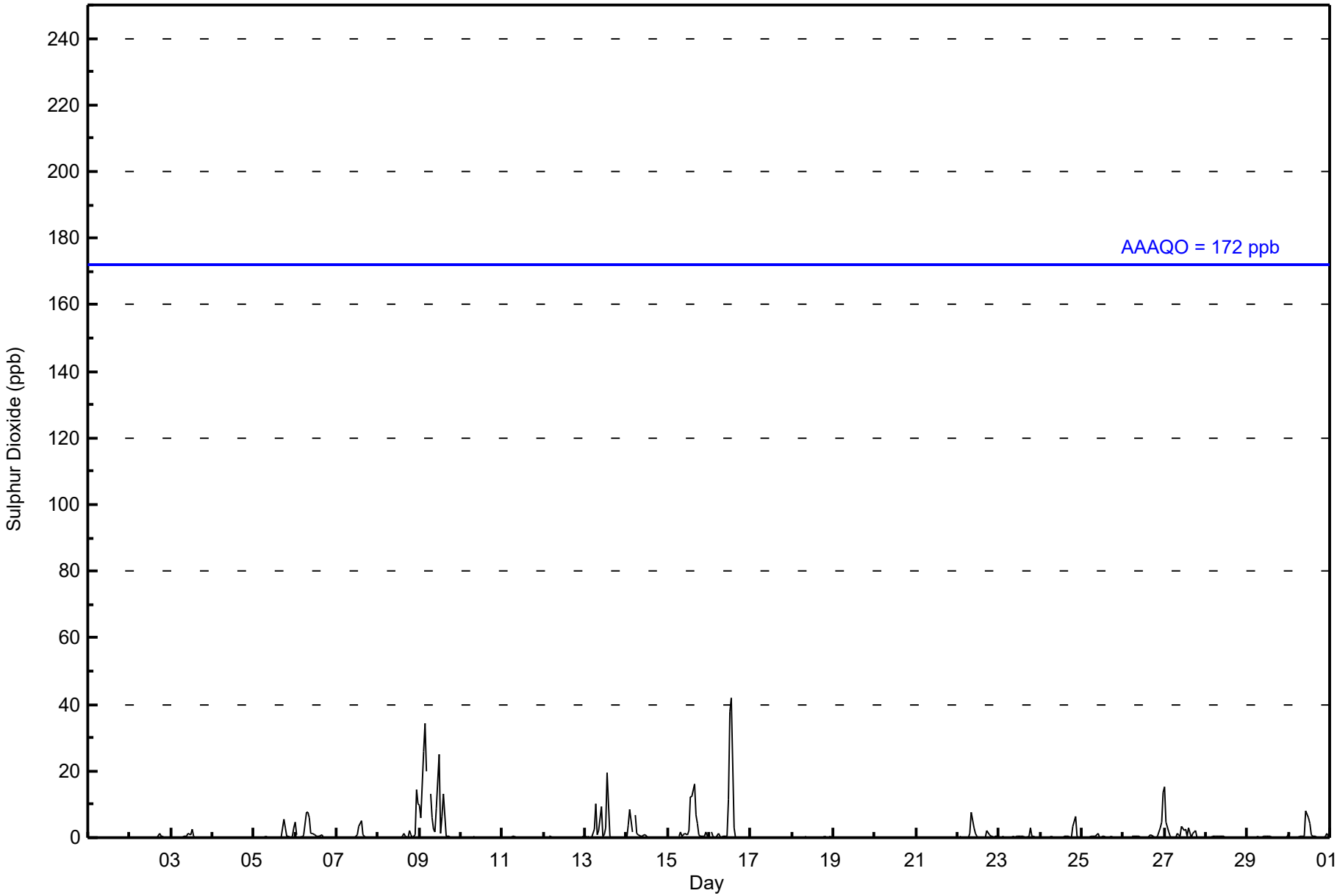
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Pihew Point - June 2026



Sulphur Dioxide (SO_2) - ppb
Pihew Point - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	669	97.66	97.66
11 - 20	11	1.61	99.27
21 - 60	5	0.73	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 - June 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	150	82	19	29	36	59	51	28	14	29	31	14	23	15	21	68	669
11 - 20	0	0	0	0	0	3	0	0	0	1	0	0	5	1	1	0	11
21 - 60	0	0	0	0	0	0	0	0	0	0	0	1	3	1	0	0	5
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	150	82	19	29	36	62	51	28	14	30	31	15	31	17	22	68	685

Total Number of Valid Hours: 685

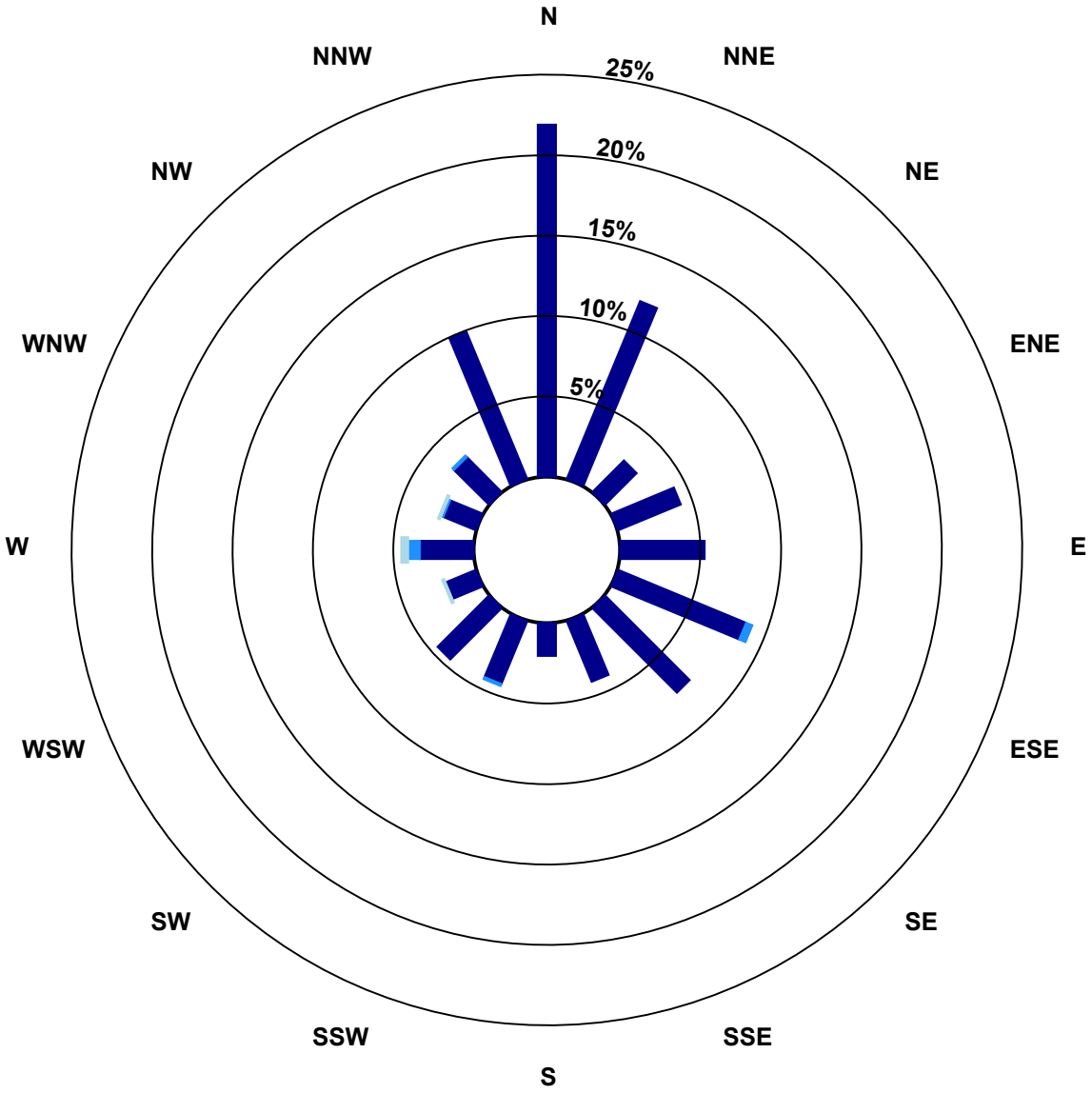
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Pihew Point



Classes (ppb)

- 0 - 10
- 11 - 20
- 21 - 60
- 61 - 110
- 111 - 172
- > 172

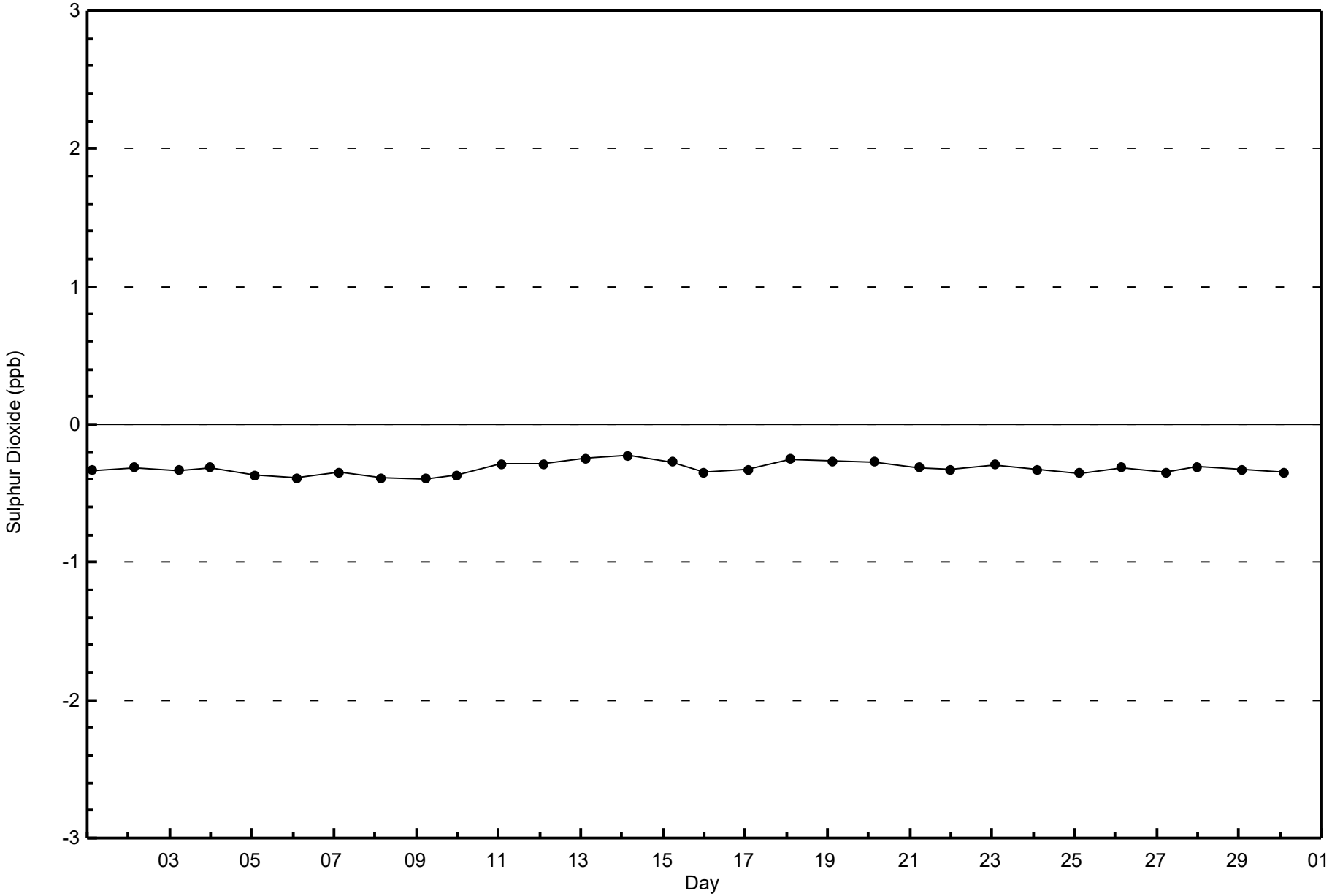
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Pihew Point - June 2026

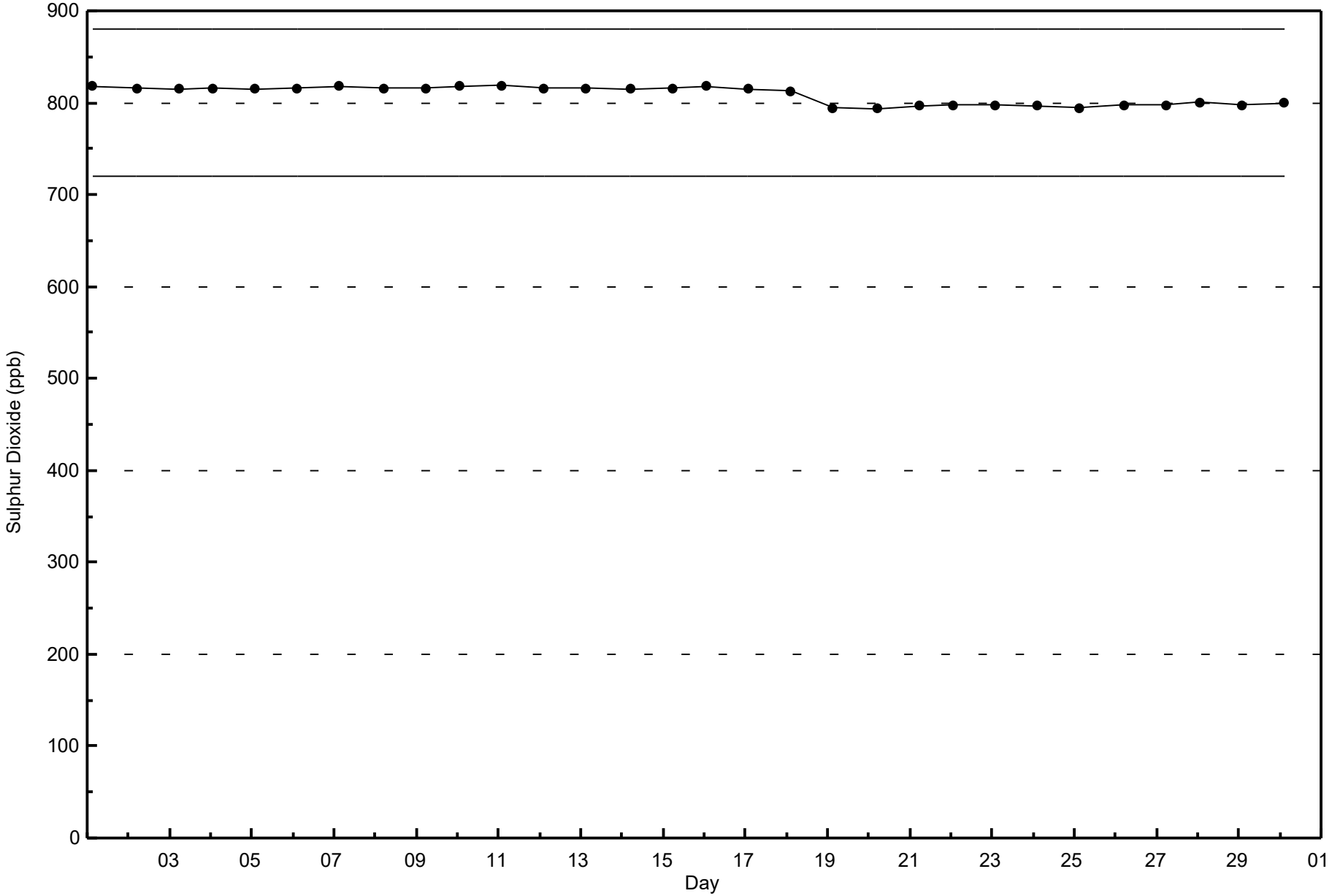


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Pihew Point - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Pihew Point - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 5.2 ppb on Jun 6 03:00 Maximum Daily Average: 1.0 ppb on Jun 8

Minimum Value: 0.0 ppb on Jun 12 10:00 Minimum Daily Average: 0.1 ppb on Jun 1
Maximum Diurnal Average: 0.9 ppb at hour 3 Minimum Diurnal Average: 0.1 ppb at hour 16
Monthly Average: 0.36 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.4 P_{90} = 1.0 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-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
2-Jun	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	1.0	0.5	0.6	0.4	0.1	0.4	0.3	0.2	1.0
3-Jun	Z	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.3	0.3	0.3	0.1	0.3
4-Jun	0.2	Z	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.3	0.2	0.3
5-Jun	0.2	0.2	Z	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.7	0.4	0.2	0.2	0.1	0.1	0.3	0.2	0.7
6-Jun	0.9	1.9	5.2	Z	0.9	3.6	0.4	0.6	0.6	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	0.7	5.2
7-Jun	0.1	0.1	0.2	0.2	Z	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.4	0.5	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.5
8-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.2	1.9	2.0	1.7	2.3	2.6	2.1	1.5	1.1	1.1	1.3	0.6	1.0	1.5	1.1	0.4	0.5	1.0	2.6
9-Jun	Z	0.5	0.4	0.5	0.4	0.9	0.5	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.3	0.9
10-Jun	0.1	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.2	C	C	C	C	C	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2
11-Jun	0.1	0.1	Z	0.0	0.0	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	0.0	0.0	0.1	0.1	0.1	0.2
12-Jun	1.0	2.3	0.9	Z	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.9	0.3	2.3
13-Jun	3.2	2.0	2.1	1.2	Z	0.7	1.1	1.8	0.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.3	0.3	0.6	3.2
14-Jun	0.1	0.4	1.2	0.7	0.5	Z	1.6	1.6	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.3	1.6
15-Jun	Z	0.2	0.4	0.4	1.1	1.4	1.0	1.8	0.9	0.4	0.3	0.2	0.3	0.4	0.2	0.2	0.1	0.1	0.2	0.3	0.5	0.5	0.7	0.5	0.5	1.8
16-Jun	0.1	Z	0.3	0.5	0.9	0.9	0.6	0.3	0.3	0.4	0.3	0.6	1.0	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	1.0
17-Jun	0.1	0.2	Z	0.3	0.3	0.4	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.4
18-Jun	0.2	0.2	0.3	Z	0.3	0.5	0.5	0.4	0.5	0.2	0.5	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	2.5	3.0	0.4	3.0
19-Jun	4.4	4.3	2.7	3.7	Z	2.2	0.6	0.5	0.2	0.1	0.0	0.0	0.0	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.9	4.4
20-Jun	0.2	0.2	0.3	0.4	0.3	Z	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.1	0.1	0.4
21-Jun	Z	0.2	0.3	0.5	0.6	0.6	0.6	0.6	0.5	0.4	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.6
22-Jun	0.5	Z	0.9	1.3	0.9	1.0	0.6	0.7	1.1	0.5	0.3	0.1	0.1	0.0	0.0	0.0	0.2	0.7	0.1	0.1	0.4	0.6	0.6	0.9	0.5	1.3
23-Jun	0.7	0.7	Z	0.9	1.1	0.6	0.5	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.4	0.2	0.9	0.3	0.4	0.5	0.6	0.9	0.4	1.1
24-Jun	1.0	1.1	1.2	Z	0.8	0.6	1.2	0.5	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.3	0.3	0.6	1.4	0.5	1.4
25-Jun	0.9	1.0	0.7	1.8	Z	1.3	0.5	0.2	0.3	0.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.3	0.2	0.4	1.8
26-Jun	0.2	0.3	1.8	2.7	2.0	Z	0.3	0.3	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9	1.2	2.5	0.5	2.7
27-Jun	Z	2.3	1.9	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.1	0.2	0.0	0.2	0.2	0.2	0.5	0.3	0.2	0.3	0.3	0.4	2.3
28-Jun	0.6	Z	0.7	0.6	0.9	0.9	0.9	0.8	0.7	0.5	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.9
29-Jun	0.2	0.2	Z	0.9	0.8	0.8	0.8	0.4	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.7	1.0	0.3	1.0
30-Jun	1.4	1.8	1.0	Z	1.3	1.4	1.5	1.0	0.5	0.2	1.0	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.5	0.6	1.8
	0.7	0.8	0.9	0.7	0.6	0.8	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.3	0.4	0.6	Diurnal Average	
	4.4	4.3	5.2	3.7	2.0	3.6	1.6	1.8	1.9	2.0	1.7	2.3	2.6	2.1	1.5	1.1	1.1	1.3	0.9	1.0	1.5	1.1	2.5	3.0	Diurnal Maximum	

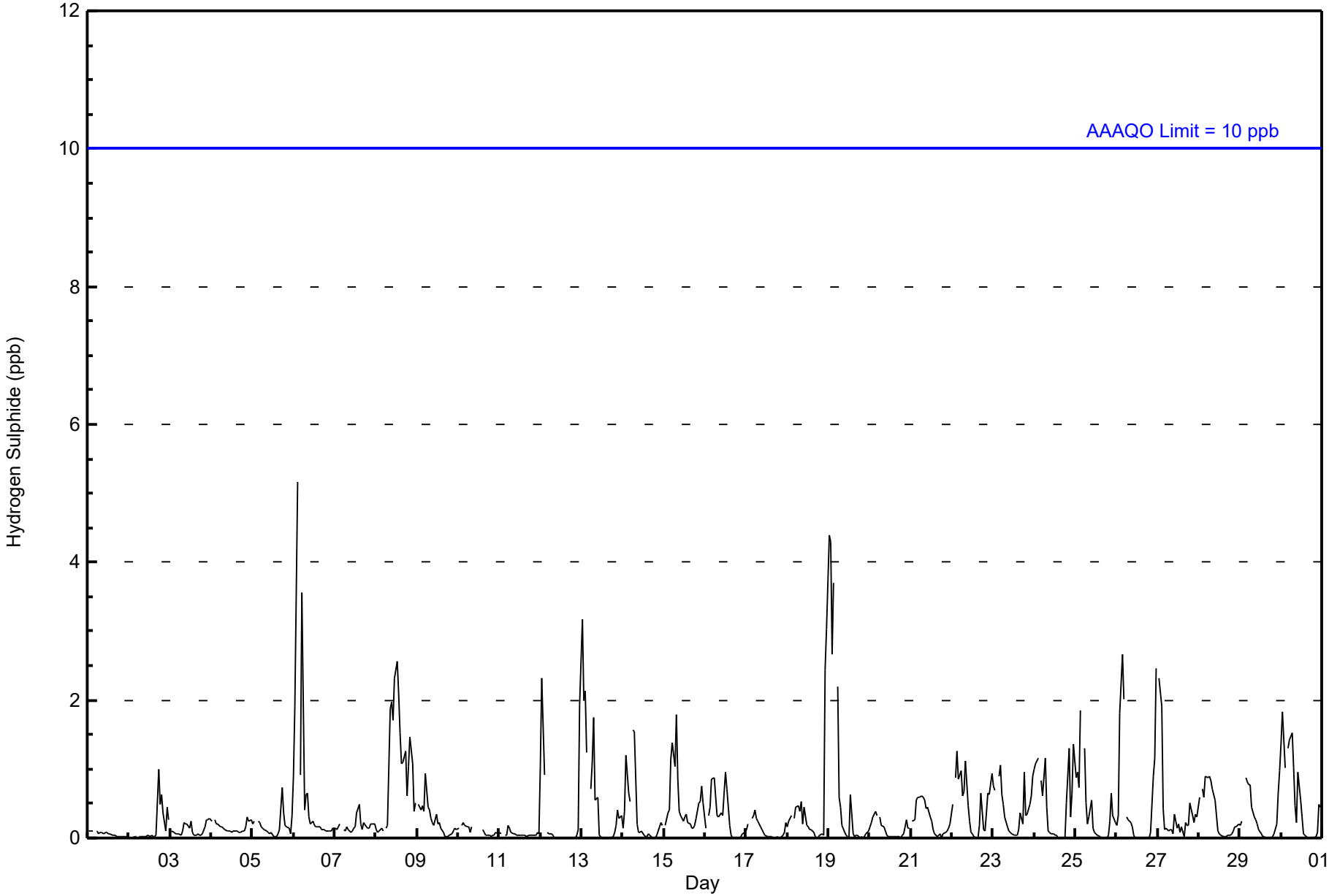
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Pihew Point - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Pihew Point - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	675	98.54	98.54
3 - 4	9	1.31	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Pihew Point - June 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	150	80	21	27	41	61	48	27	14	32	31	15	27	14	20	67	675
3 - 4	0	0	0	0	0	0	0	1	0	0	0	0	4	2	1	1	9
5 - 7	0	0	0	0	0	0	0	0	0	0	0	0	1	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	150	80	21	27	41	61	48	28	14	32	31	15	32	16	21	68	685

Total Number of Valid Hours: 685

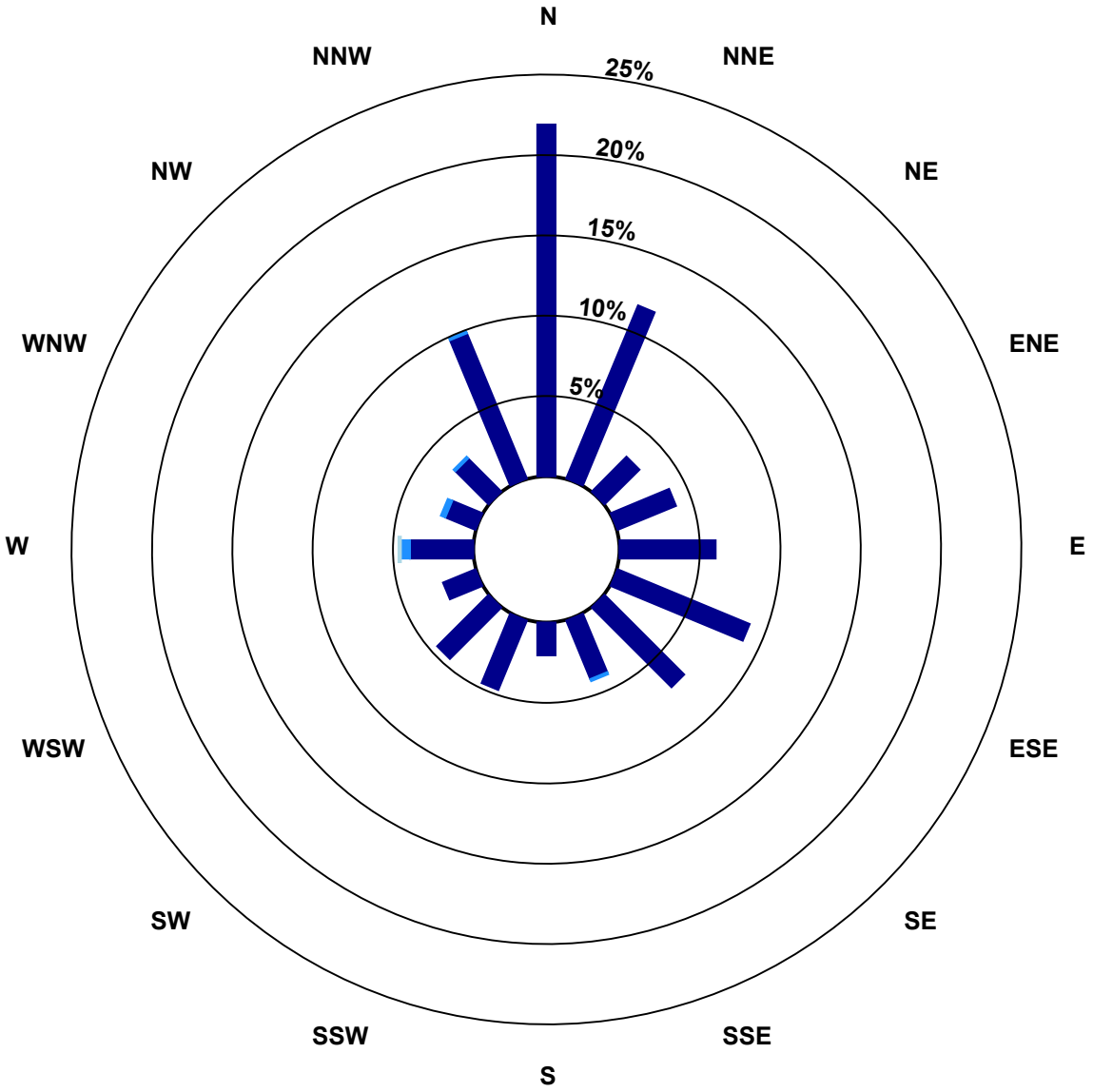
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H_2S) - ppb

Pihew Point



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

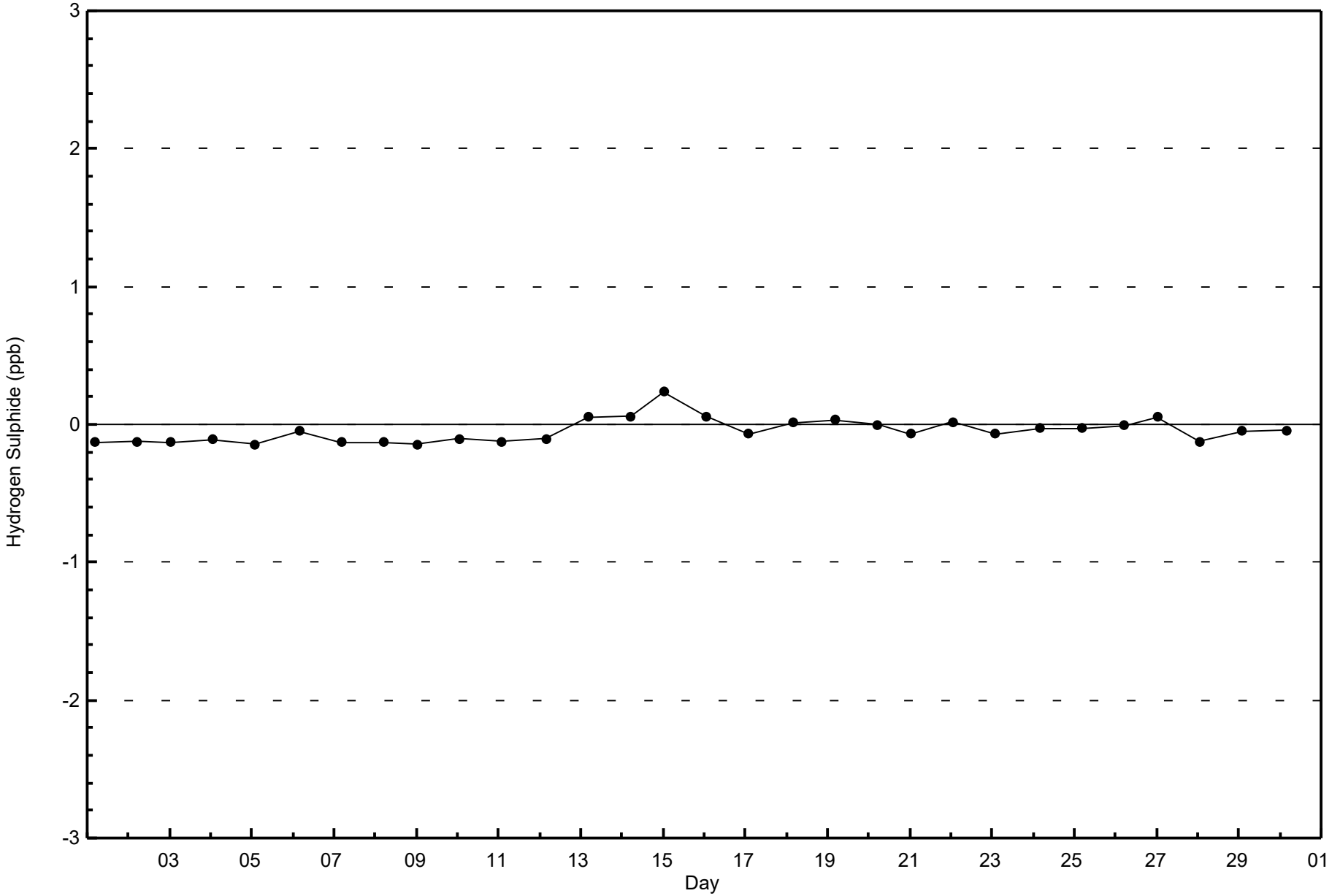
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Pihew Point - June 2026

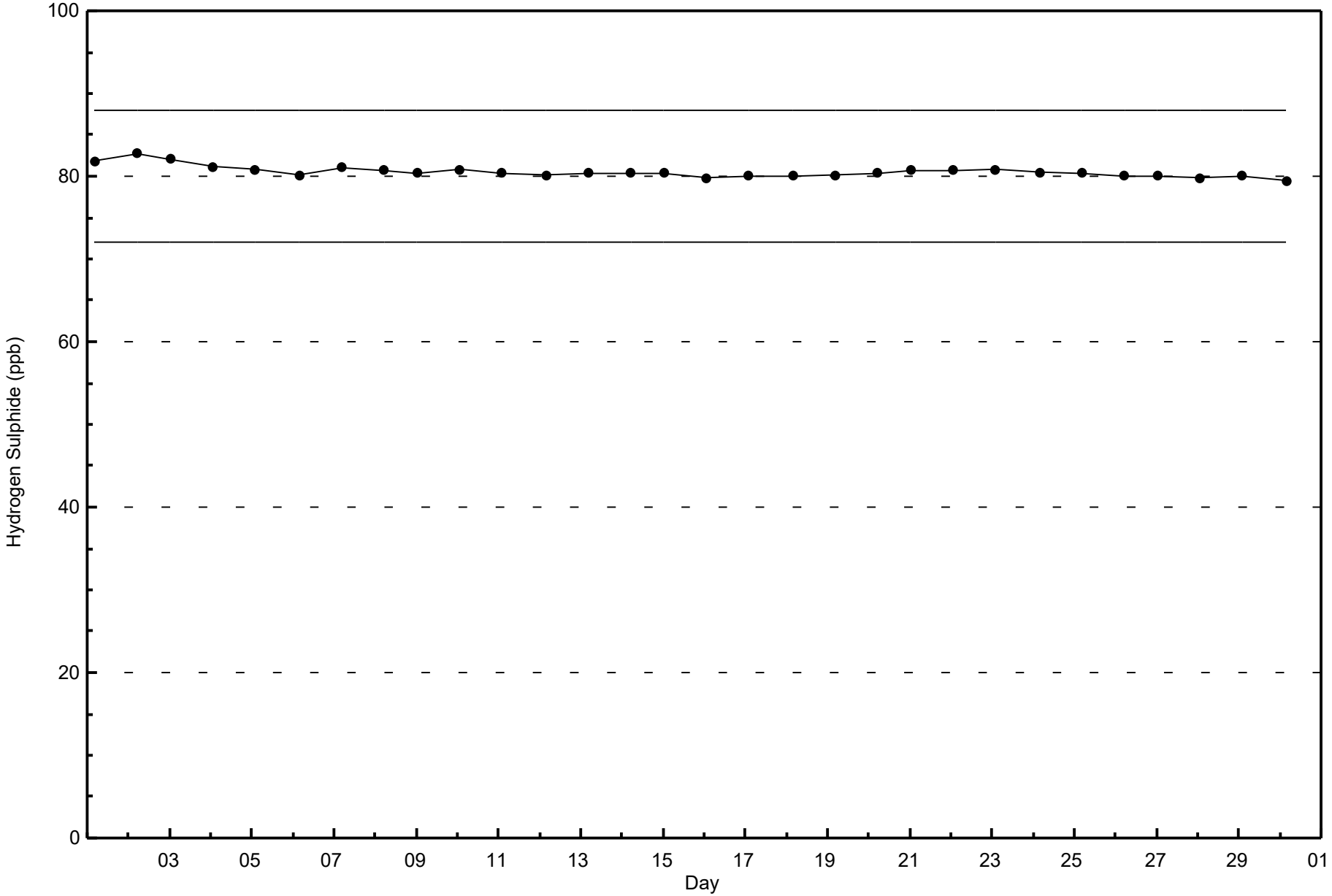


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Pihew Point - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Pihew Point - June 2026

Maximum Value: 5.2 ppm on Jun 13 00:00

Maximum Daily Average: 2.3 ppm on Jun 13

Minimum Value: 2.0 ppm on Jun 17 16:00

Minimum Daily Average: 2.0 ppm on Jun 1

Maximum Diurnal Average: 2.3 ppm at hour 3

Minimum Diurnal Average: 2.0 ppm at hour 17

Monthly Average: 2.12 ppm

Percentiles: P_1 = 2.0 P_{10} = 2.0 Q_1 = 2.0 Median = 2.0 Q_3 = 2.1 P_{90} = 2.3 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-Jun	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
2-Jun	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	2.0	2.0	2.0	2.0	2.0	2.1
3-Jun	2.0	2.0	2.0	2.0	2.0	Z	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	2.1	2.1	2.1	2.0	2.1
4-Jun	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
5-Jun	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	2.0	2.0	2.0	2.0	2.3	2.0	2.3
6-Jun	2.8	2.1	Z	2.4	2.4	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	2.0	2.1	2.8
7-Jun	2.0	2.0	2.0	Z	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.1
8-Jun	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	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	2.0	2.1	2.1	2.4
9-Jun	2.1	2.1	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.0	2.1	2.1
10-Jun	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	M	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
11-Jun	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.2	2.1	2.0	2.2
12-Jun	2.5	2.2	Z	2.4	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	2.9	5.2	2.2	5.2
13-Jun	4.9	3.1	2.6	Z	2.2	2.3	2.2	3.1	2.8	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	2.3	4.9
14-Jun	2.0	3.3	5.1	2.2	Z	3.0	2.4	2.5	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	2.1	2.1	2.3	5.1
15-Jun	2.2	2.2	2.4	2.3	2.3	Z	2.2	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.0	2.1	2.4
16-Jun	Z	2.1	2.2	2.1	2.1	2.2	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2
17-Jun	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	2.0	2.0	2.0	2.1	2.7	2.1	2.7
18-Jun	2.1	2.1	Z	2.5	2.4	2.1	2.2	2.1	2.2	C	C	C	C	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.4	2.2	2.5
19-Jun	2.5	2.4	2.7	Z	2.5	3.5	3.3	2.6	2.2	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.3	3.5
20-Jun	2.1	2.2	2.2	2.2	Z	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.3
21-Jun	2.1	2.2	2.2	2.2	2.2	Z	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.2	2.3	2.2	2.3
22-Jun	Z	2.3	2.5	2.3	2.3	2.4	2.2	2.7	3.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2	3.0
23-Jun	2.1	Z	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	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2
24-Jun	2.1	2.2	Z	2.1	2.1	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.1	2.3	2.1	2.3
25-Jun	2.2	2.1	2.1	Z	2.1	2.4	2.2	2.1	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	2.3	2.2	2.0	2.1	2.4
26-Jun	2.1	2.1	2.1	2.2	Z	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.2	2.1	2.3
27-Jun	2.3	2.2	2.2	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	2.1	2.1	2.3
28-Jun	Z	2.2	2.2	2.4	2.8	2.7	2.8	2.7	2.7	2.5	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.3	2.3	2.8
29-Jun	2.3	Z	2.4	2.5	2.6	2.6	2.8	2.5	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	2.4	2.2	2.8
30-Jun	2.4	2.3	Z	2.3	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.1	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.4
	2.3	2.2	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	Diurnal Average	
	4.9	3.3	5.1	2.5	2.8	3.5	3.3	3.1	3.0	2.5	2.3	2.2	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.9	5.2	Diurnal Maximum	

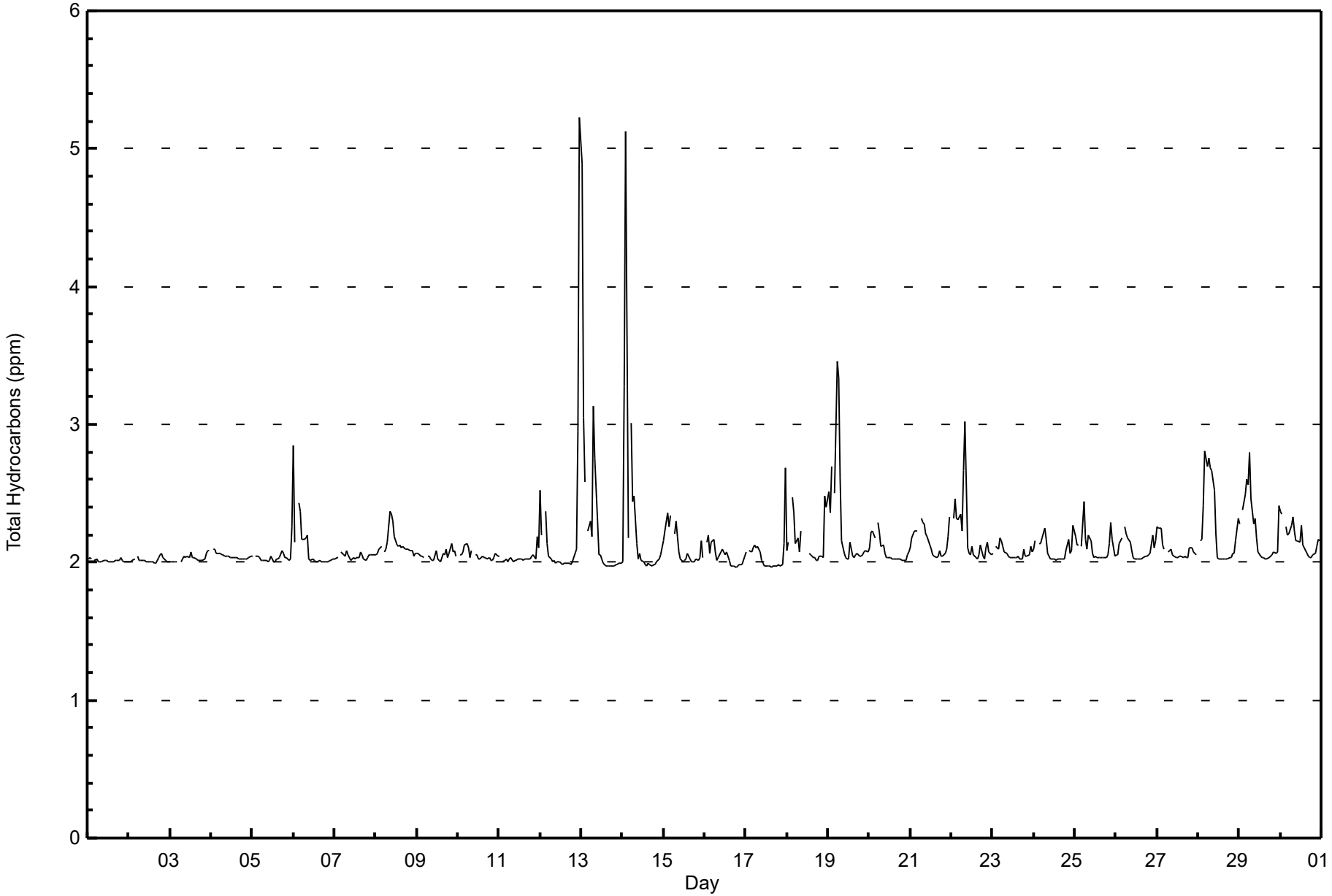
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Pihew Point - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	354	51.68	51.68
2.1 - 3.0	323	47.15	98.83
3.1 - 10.0	8	1.17	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

Pihew Point - June 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	70	52	12	21	22	30	19	13	7	24	25	6	9	5	4	35	354
2.1 - 3.0	80	30	7	8	14	32	32	15	7	6	6	7	22	11	15	31	323
3.1 - 10.0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3	2	8
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	150	82	19	29	36	62	51	28	14	30	31	15	31	17	22	68	685

Total Number of Valid Hours: 685

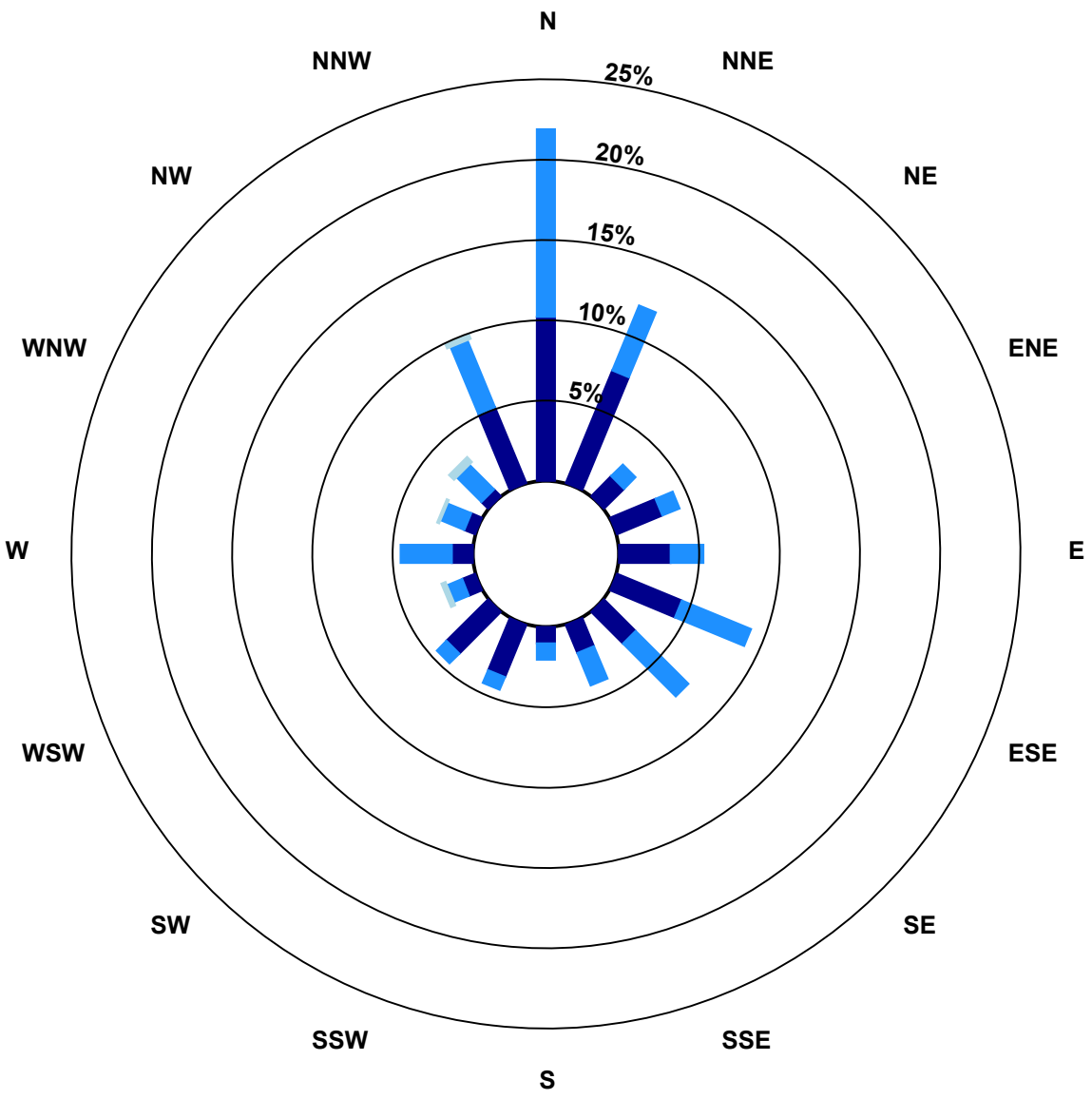
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Pihew Point



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

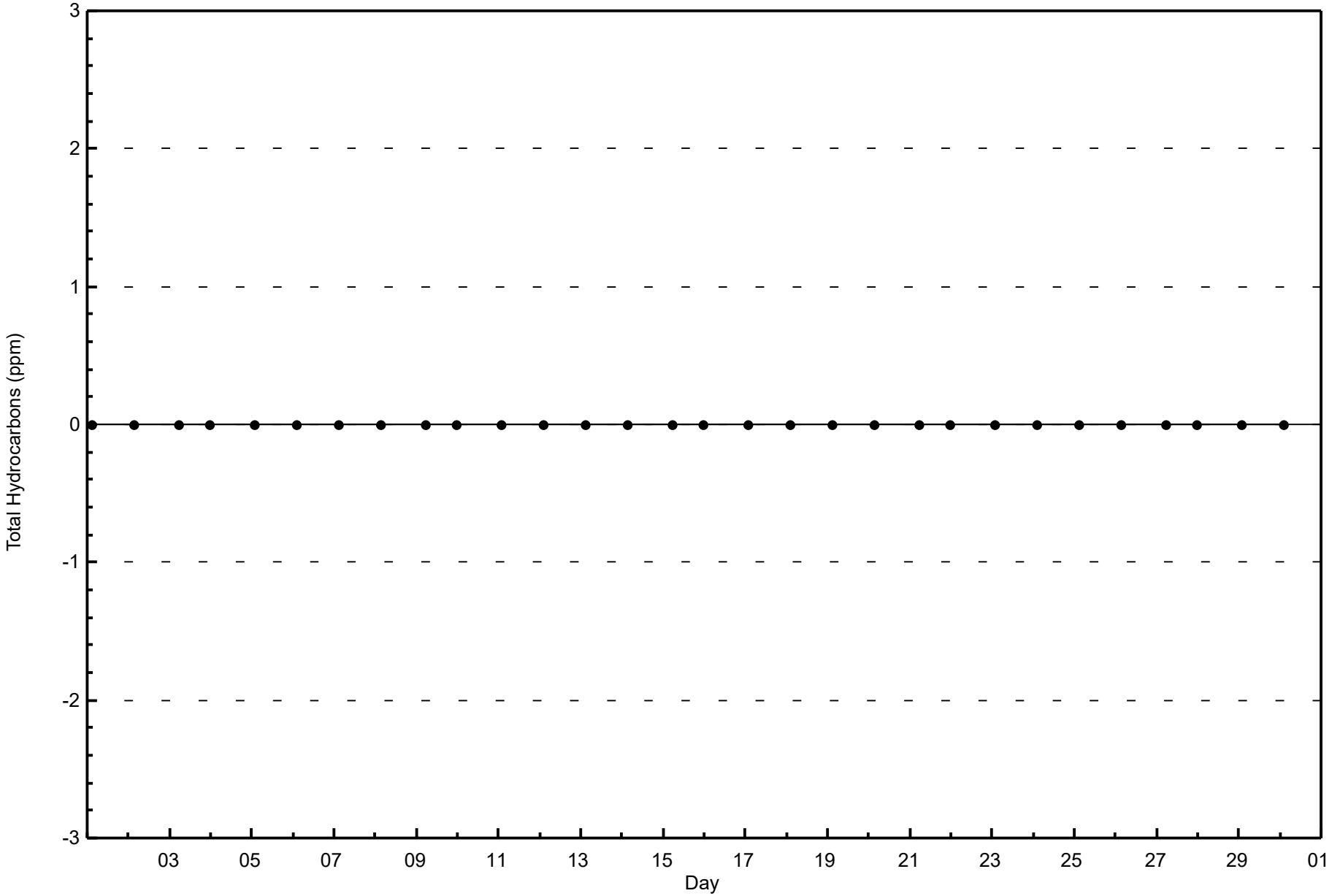
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Pihew Point - June 2026

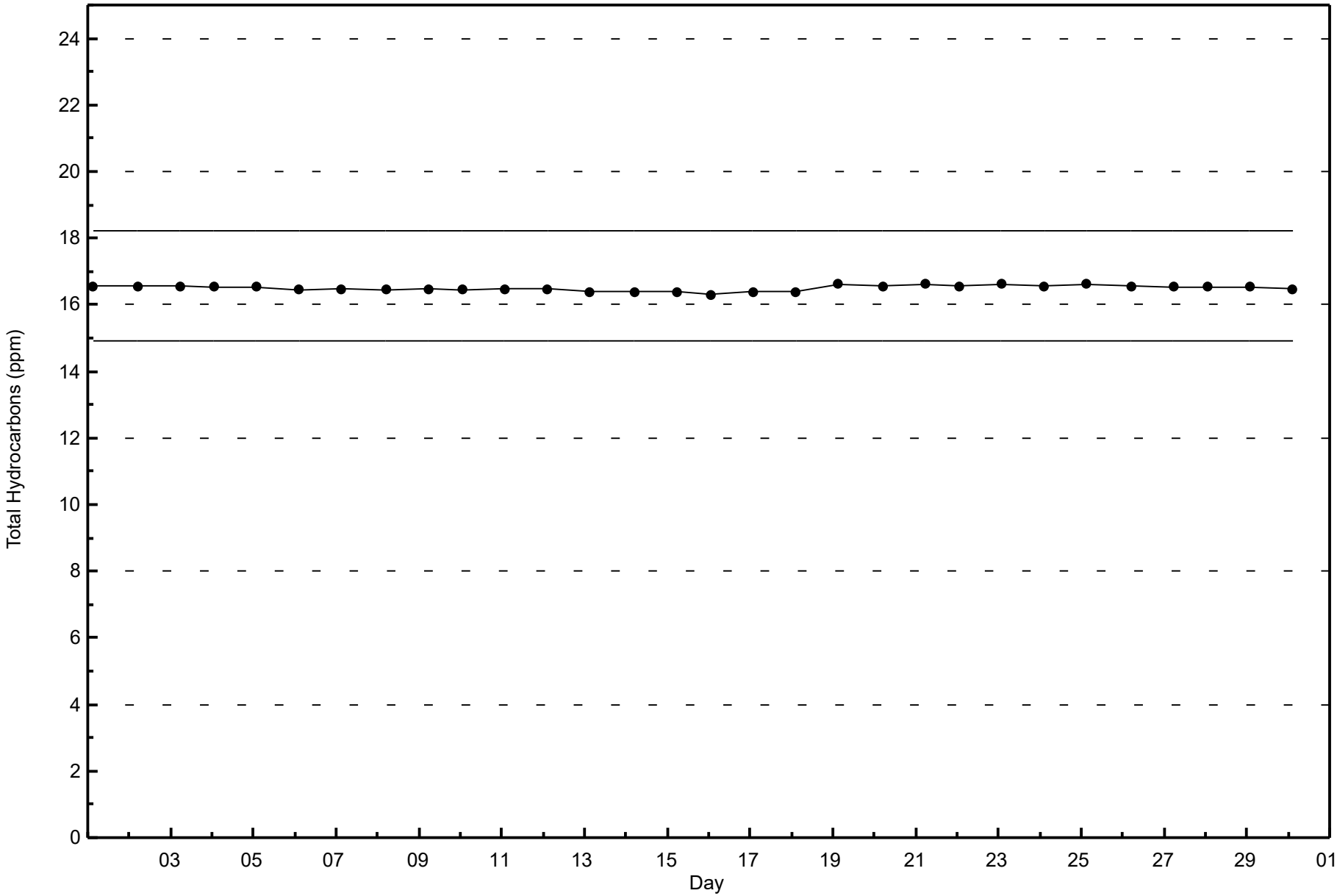


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Pihew Point - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Non Methane Hydrocarbons (NMHC) - ppm

Pihew Point - June 2026

Maximum Value: 2.733 ppm on Jun 14 03:00

Maximum Daily Average: 0.216 ppm on Jun 14

Minimum Value: 0.000 ppm on Jun 1 01:00

Minimum Daily Average: 0.000 ppm on Jun 1

Maximum Diurnal Average: 0.109 ppm at hour 3

Minimum Diurnal Average: 0.000 ppm at hour 13

Monthly Average: 0.011 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} = 0.2

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-Jun	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
2-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.017	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.192	0.009	0.192
6-Jun	0.642	0.000	Z	0.000	0.000	0.000	0.069	0.104	0.146	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.042	0.642
7-Jun	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-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.059	0.000	0.000	0.000	0.000	0.000	0.061	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.061
10-Jun	Z	0.000	0.000	0.000	0.003	0.000	0.003	0.000	0.000	M	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.001	0.007
11-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.003	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
12-Jun	0.000	0.000	Z	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.066	0.083	0.000	0.000	0.007	0.083
13-Jun	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14-Jun	0.000	1.244	2.733	0.053	Z	0.927	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.216	2.733
15-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.037
16-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.029
17-Jun	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	0.000	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-Jun	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
19-Jun	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20-Jun	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-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.022	0.000	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	0.002	0.028
22-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.412	0.720	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.049	0.720
23-Jun	0.000	Z	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	0.003
24-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	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-Jun	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
27-Jun	0.000	0.000	0.000	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28-Jun	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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-Jun	0.000	0.000	Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
	0.026	0.050	0.109	0.002	0.000	0.037	0.002	0.017	0.029	0.002	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.002	0.003	0.000	0.006	Diurnal Average	
	0.642	1.244	2.733	0.053	0.003	0.927	0.069	0.412	0.720	0.037	0.004	0.059	0.000	0.004	0.000	0.007	0.000	0.061	0.007	0.000	0.066	0.083	0.000	0.192	Diurnal Maximum	

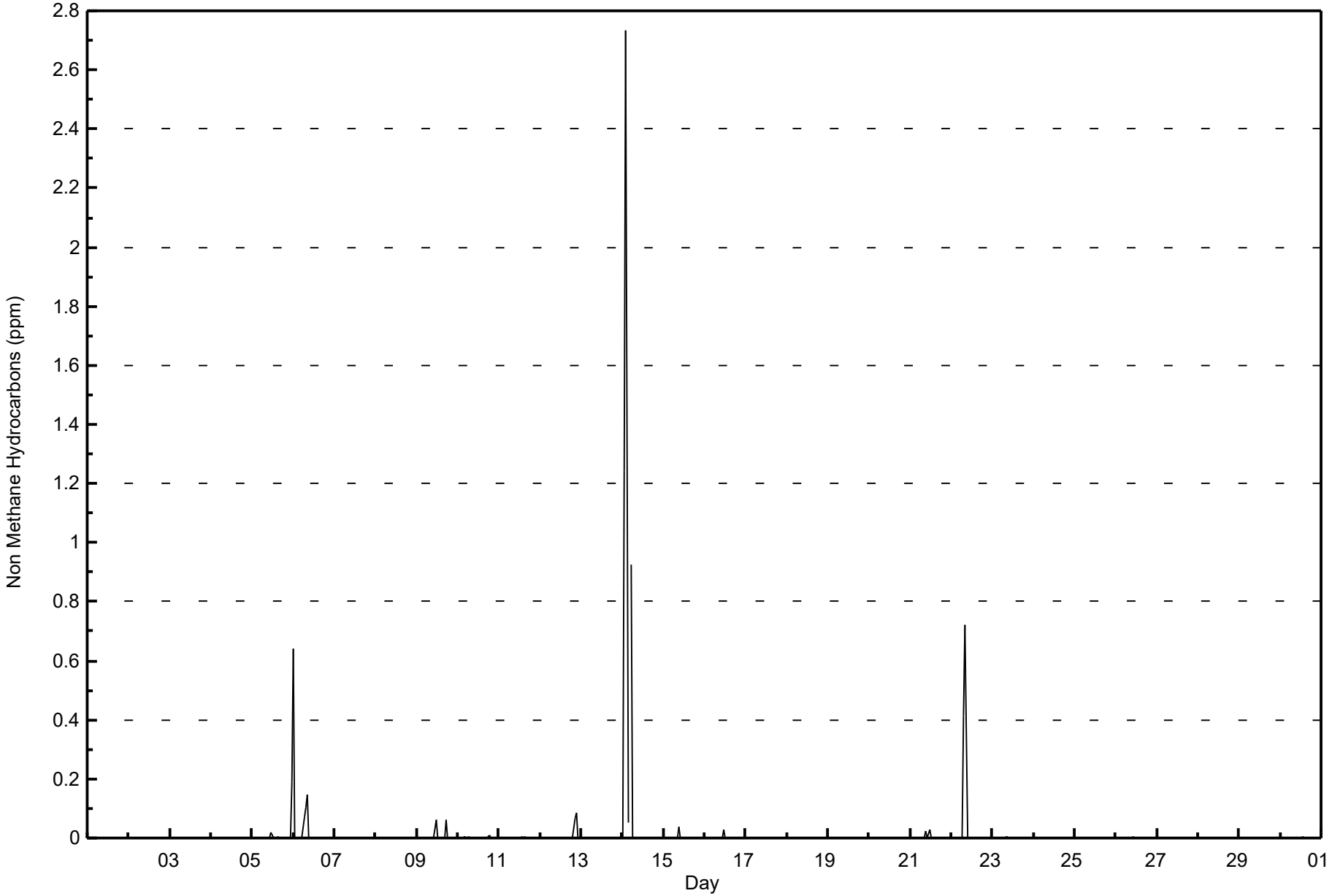
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Non Methane Hydrocarbons (NMHC) - ppm

Pihew Point - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Pihew Point - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 0.005	663	96.79	96.79
0.006 - 0.05	8	1.17	97.96
0.06 - 0.1	7	1.02	98.98
> 0.1	7	1.02	100.00

Total Number of Valid Hours: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Non Methane Hydrocarbons (NMHC) - ppm

Pihew Point - June 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	147	82	19	28	36	61	50	28	13	30	29	8	29	17	21	65	663
0.006 - 0.05	2	0	0	1	0	1	1	0	0	0	1	0	1	0	0	1	8
0.06 - 0.1	1	0	0	0	0	0	0	0	0	0	0	3	1	0	1	1	7
> 0.1	0	0	0	0	0	0	0	0	1	0	1	4	0	0	0	1	7
Totals	150	82	19	29	36	62	51	28	14	30	31	15	31	17	22	68	685

Total Number of Valid Hours: 685

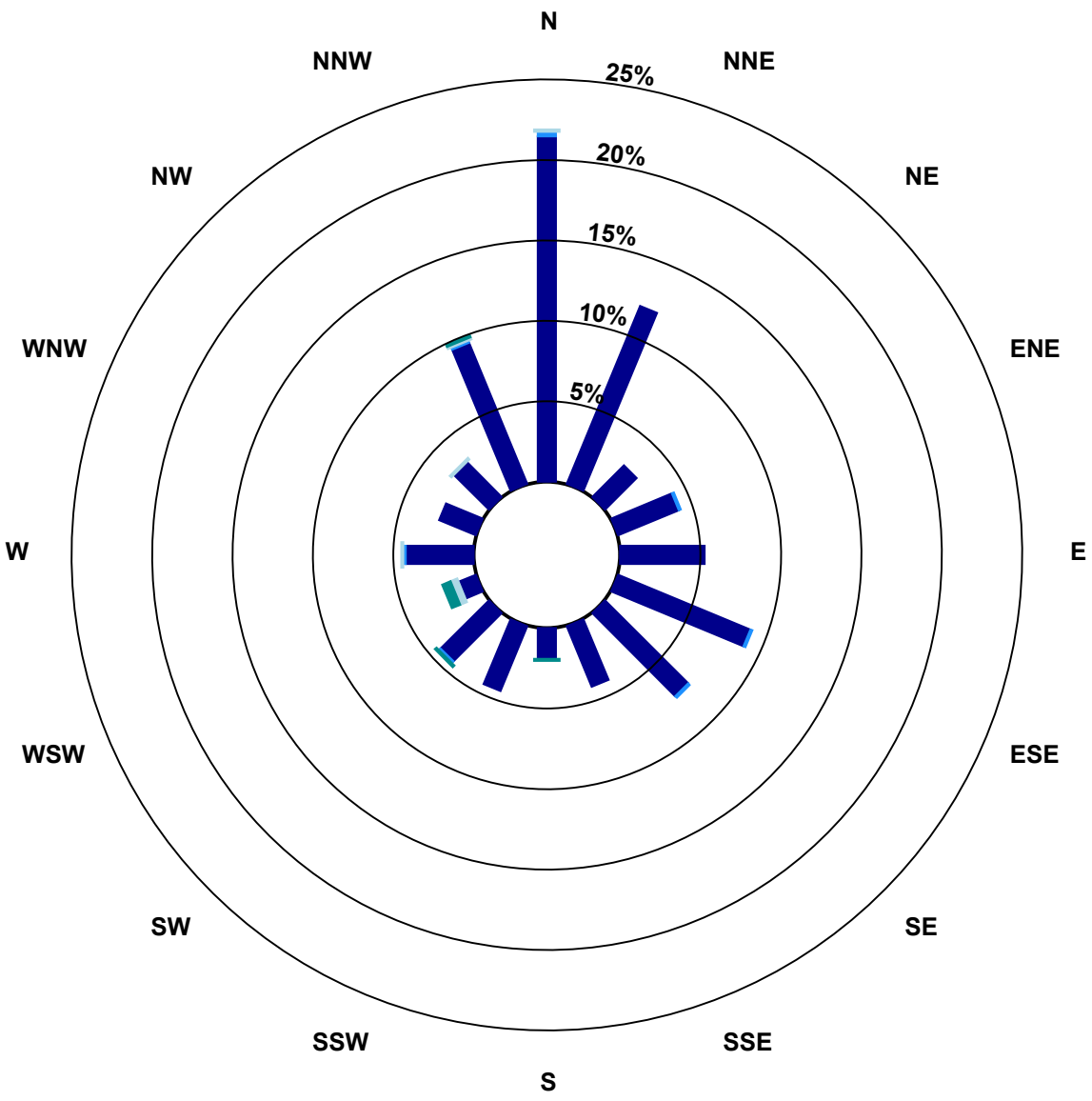
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Non Methane Hydrocarbons (NMHC) - ppm

Pihew Point



Classes (ppm)

0 - 0.005

0.006 - 0.05

0.06 - 0.1

> 0.1

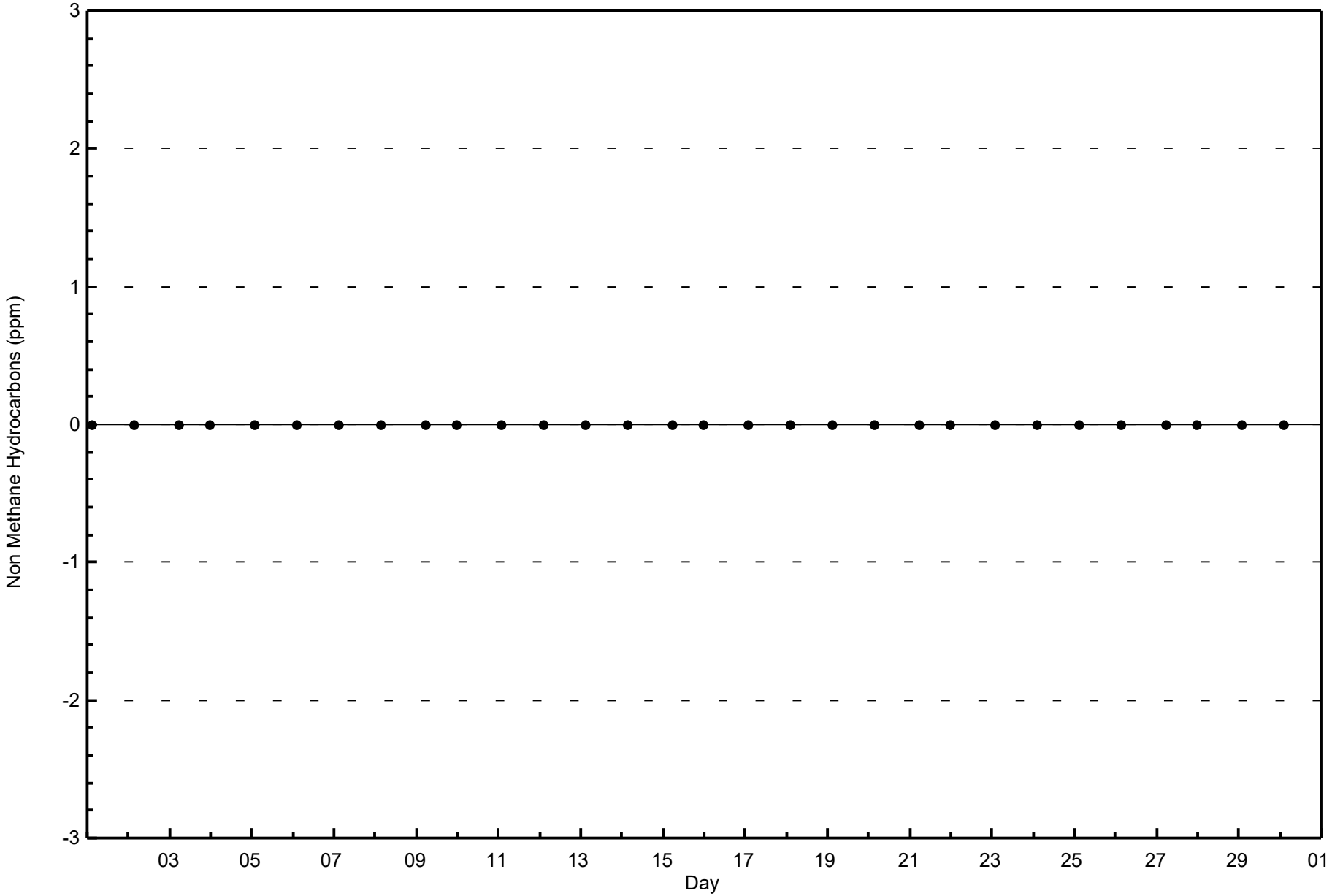
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Non Methane Hydrocarbons (NMHC) - ppm

Pihew Point - June 2026

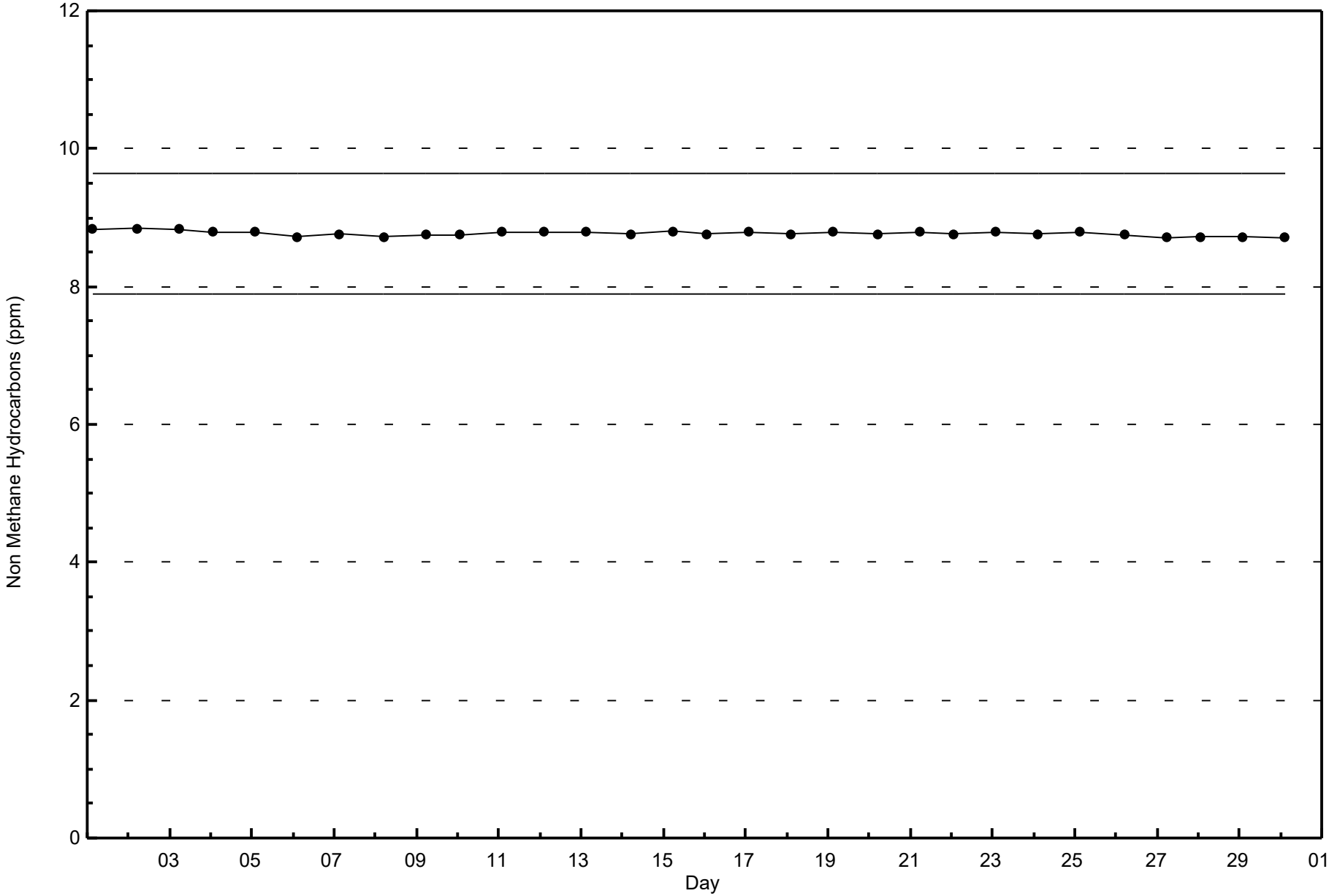


Wood Buffalo Environmental Association

Span Responses

Non Methane Hydrocarbons (NMHC) - ppm

Pihew Point - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Methane (CH_4) - ppm

Pihew Point - June 2026

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

Maximum Value: 5.2 ppm on Jun 13 00:00

Maximum Daily Average: 2.3 ppm on Jun 13

Minimum Value: 2.0 ppm on Jun 17 16:00

Minimum Daily Average: 2.0 ppm on Jun 1

Maximum Diurnal Average: 2.2 ppm at hour 1

Minimum Diurnal Average: 2.0 ppm at hour 17

Monthly Average: 2.11 ppm

Percentiles: P_1 = 2.0 P_{10} = 2.0 Q_1 = 2.0 Median = 2.0 Q_3 = 2.1 P_{90} = 2.3 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-Jun	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
2-Jun	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	2.0	2.0	2.0	2.0	2.0	2.1
3-Jun	2.0	2.0	2.0	2.0	2.0	Z	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	2.1	2.1	2.1	2.0	2.1
4-Jun	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
5-Jun	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	2.0	2.0	2.0	2.0	2.1	2.0	2.1
6-Jun	2.2	2.2	Z	2.4	2.4	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	2.0	2.0	2.0	2.1	2.4
7-Jun	2.0	2.0	2.0	Z	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.1
8-Jun	2.1	2.1	2.1	2.1	Z	2.1	2.1	2.1	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	2.0	2.1	2.1	2.4
9-Jun	2.1	2.1	2.0	2.0	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.1
10-Jun	Z	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	M	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
11-Jun	2.0	Z	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.2	2.1	2.0	2.2
12-Jun	2.5	2.2	Z	2.4	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	2.9	5.2	2.2	5.2
13-Jun	4.9	3.1	2.6	Z	2.2	2.3	2.2	3.1	2.8	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	2.3	4.9
14-Jun	2.0	2.0	2.4	2.1	Z	2.1	2.4	2.5	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	2.1	2.1	2.1	2.5
15-Jun	2.2	2.2	2.4	2.3	2.3	Z	2.2	2.3	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	2.0	2.2	2.0	2.1	2.4
16-Jun	Z	2.1	2.2	2.1	2.1	2.2	2.1	2.0	2.0	2.1	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	2.2
17-Jun	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	2.0	2.0	2.0	2.1	2.7	2.1	2.7
18-Jun	2.1	2.1	Z	2.5	2.4	2.1	2.2	2.1	2.2	C	C	C	C	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.4	2.2	2.5
19-Jun	2.5	2.4	2.7	Z	2.5	3.5	3.3	2.6	2.2	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.3	3.5
20-Jun	2.1	2.2	2.2	2.2	Z	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.3
21-Jun	2.1	2.2	2.2	2.2	2.2	Z	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.2	2.3	2.1	2.3
22-Jun	Z	2.3	2.5	2.3	2.3	2.4	2.2	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.5
23-Jun	2.1	Z	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	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.2
24-Jun	2.1	2.2	Z	2.1	2.1	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.1	2.3	2.1	2.3
25-Jun	2.2	2.1	2.1	Z	2.1	2.4	2.2	2.1	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	2.3	2.2	2.0	2.1	2.4
26-Jun	2.1	2.1	2.1	2.2	Z	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.2	2.1	2.3
27-Jun	2.3	2.2	2.2	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	2.1	2.1	2.3
28-Jun	Z	2.2	2.2	2.4	2.8	2.7	2.8	2.7	2.7	2.5	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.3	2.3	2.8
29-Jun	2.3	Z	2.4	2.5	2.6	2.6	2.8	2.5	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	2.4	2.2	2.8
30-Jun	2.4	2.4	Z	2.3	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.1	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.4
	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	2.0	2.0	2.1	2.1	2.2	Diurnal Average	
	4.9	3.1	2.7	2.5	2.8	3.5	3.3	3.1	2.8	2.5	2.3	2.2	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.9	5.2	Diurnal Maximum	

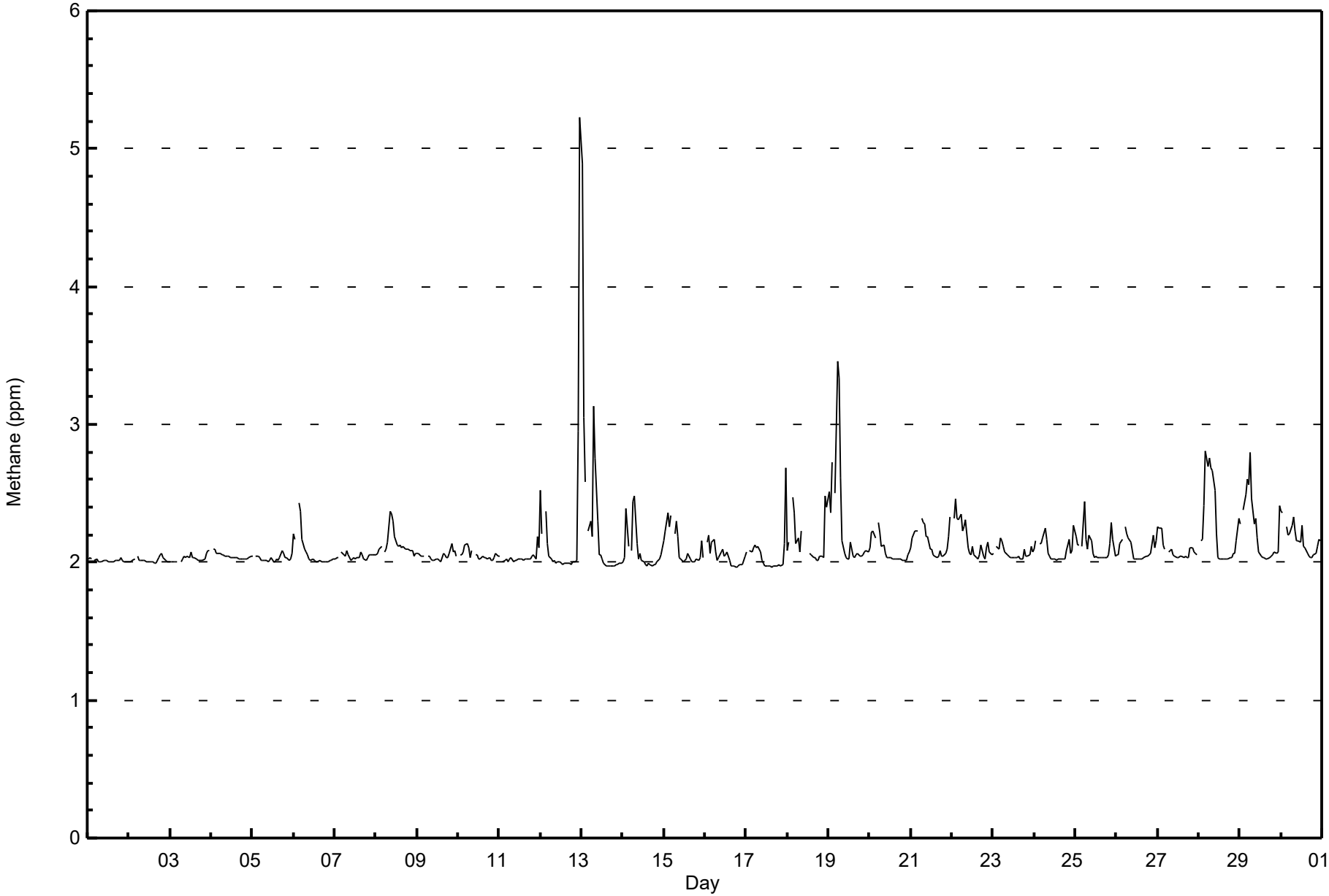
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Methane (CH_4) - ppm

Pihew Point - June 2026



Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	361	52.70	52.70
2.1 - 3.0	318	46.42	99.12
3.1 - 10.0	6	0.88	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

Pihew Point - June 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	71	52	12	22	22	30	19	13	7	24	25	7	11	5	5	36	361
2.1 - 3.0	79	30	7	7	14	32	32	15	7	6	6	8	20	11	14	30	318
3.1 - 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	2	6
> 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	150	82	19	29	36	62	51	28	14	30	31	15	31	17	22	68	685

Total Number of Valid Hours: 685

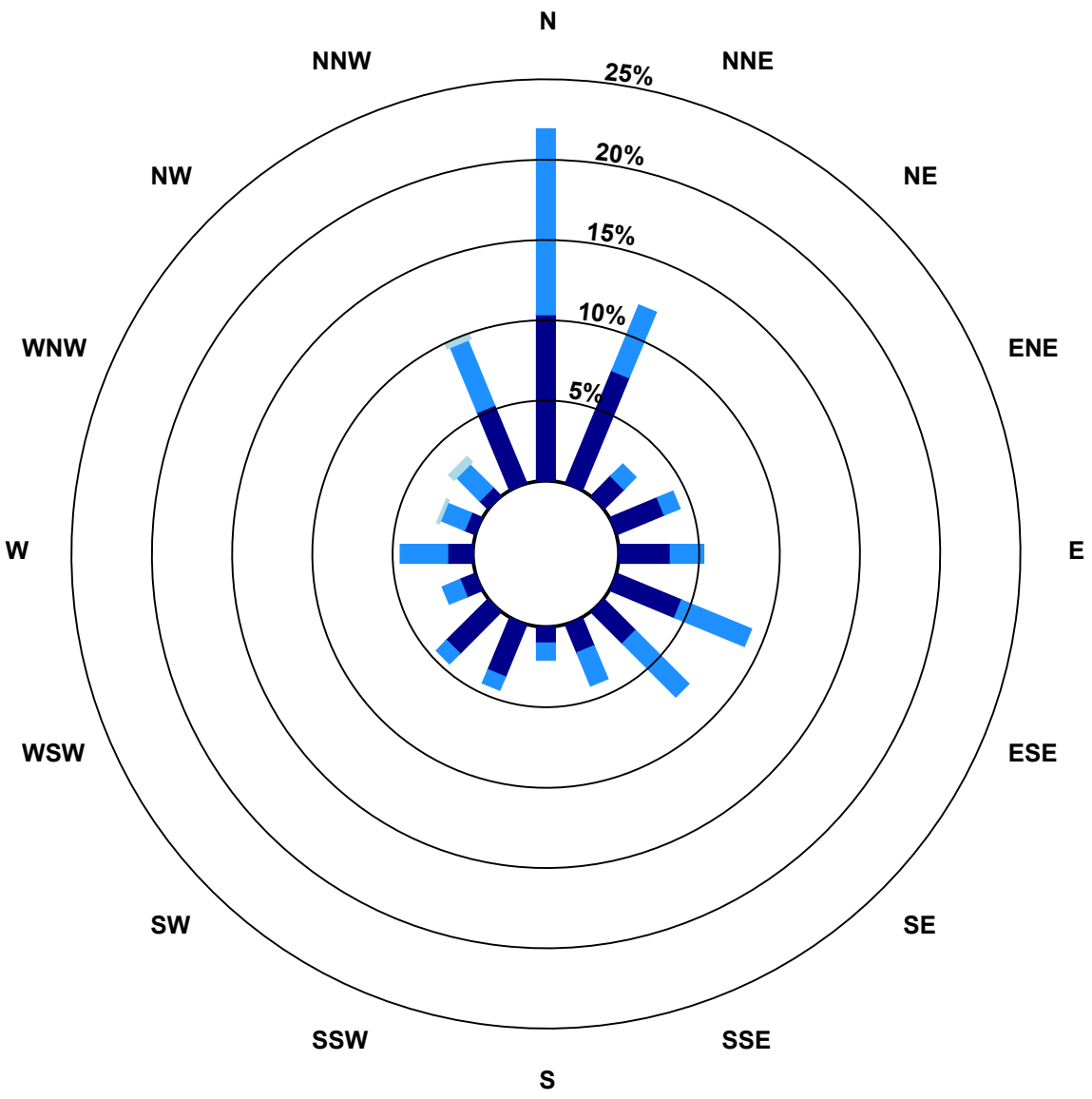
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Methane (CH_4) - ppm

Pihew Point



Classes (ppm)

0 - 2.0

2.1 - 3.0

3.1 - 10.0

> 10.0

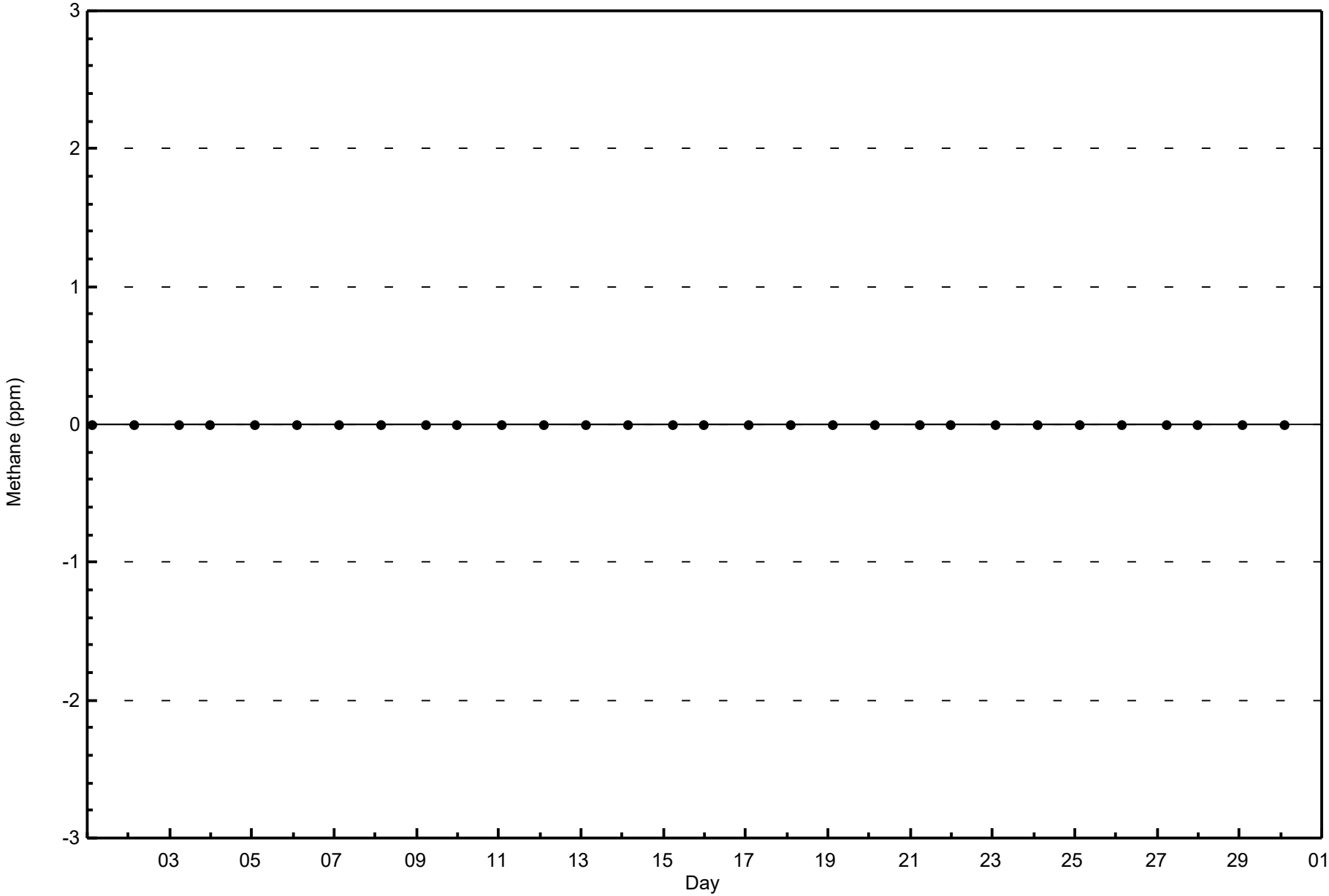
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Methane (CH_4) - ppm

Pihew Point - June 2026

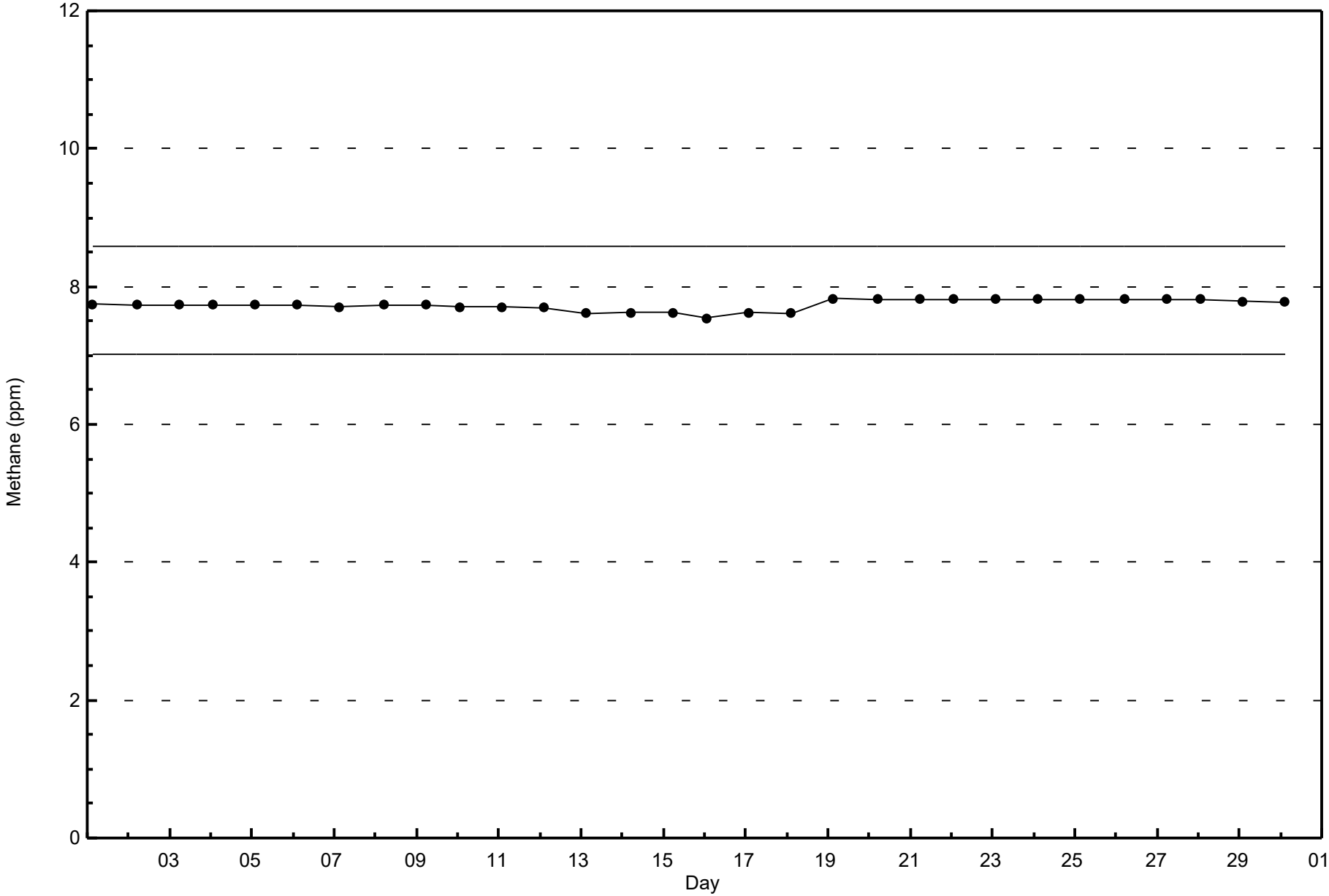


Wood Buffalo Environmental Association

Span Responses

Methane (CH_4) - ppm

Pihew Point - June 2026



Maximum Value: 29.9 C on Jun 28 16:00

Maximum Daily Average: 24.2 C on Jun 29

Minimum Value: 8.0 C on Jun 11 06:00

Minimum Daily Average: 9.6 C on Jun 11

Maximum Diurnal Average: 20.2 C at hour 15

Minimum Diurnal Average: 12.0 C at hour 5

Monthly Average: 16.59 C

Percentiles: P_1 = 8.4 P_{10} = 10.3 Q_1 = 12.1 Median = 15.6 Q_3 = 20.2 P_{90} = 25.2 P_{99} = 29.0

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

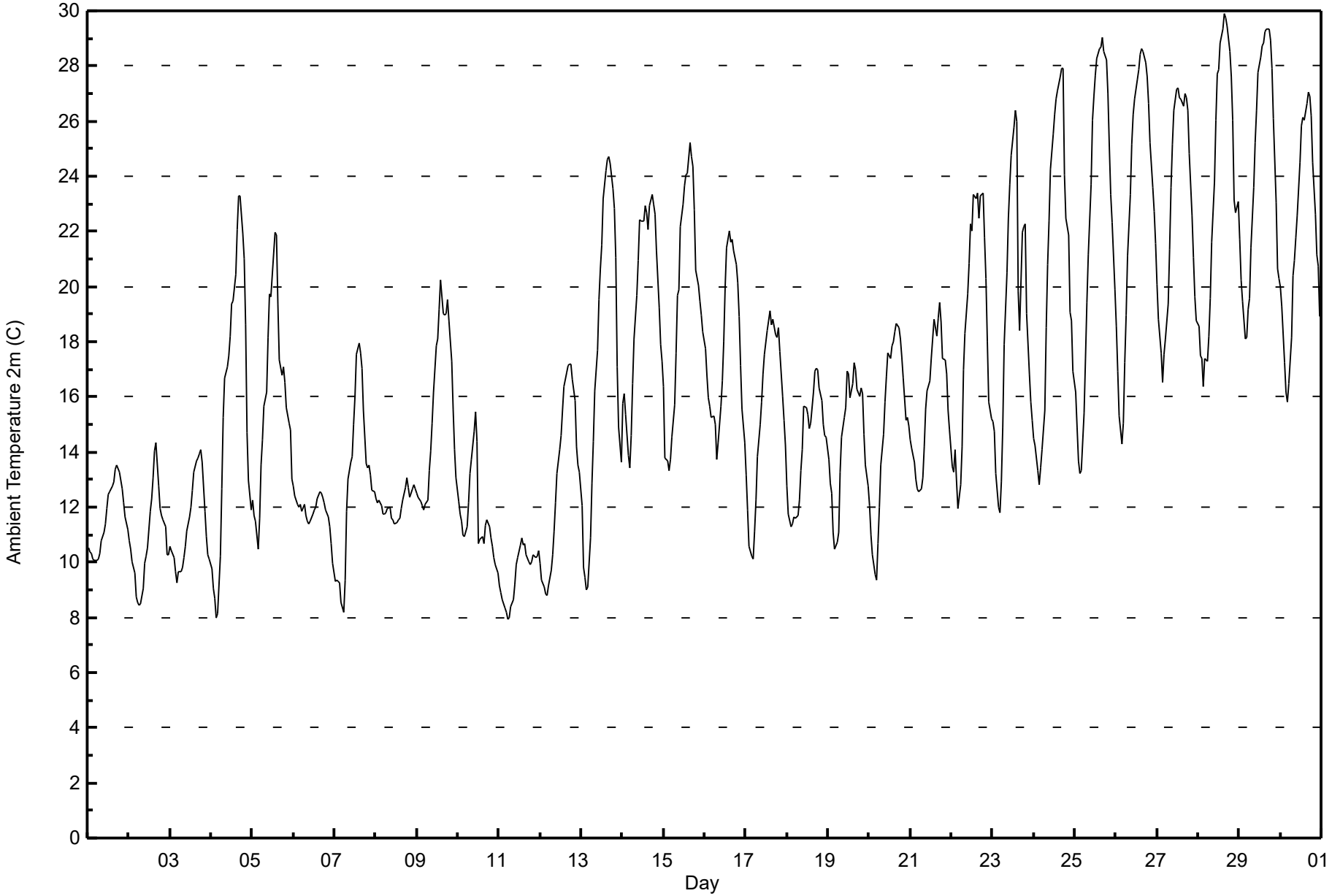
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	10.5	10.4	10.3	10.1	10.1	10.1	10.1	10.3	10.8	11.1	11.4	12.0	12.5	12.5	12.8	12.9	13.4	13.5	13.3	13.0	12.7	12.1	11.7	11.2	11.6	13.5
2-Jun	10.8	10.5	10.0	9.6	8.7	8.5	8.5	8.5	9.1	10.0	10.2	10.5	11.8	12.3	13.0	14.1	14.3	12.8	11.9	11.7	11.6	11.3	10.3	10.3	10.8	14.3
3-Jun	10.6	10.4	10.2	9.6	9.3	9.6	9.7	9.8	10.2	10.6	11.1	11.7	12.0	12.6	13.3	13.7	13.8	13.9	14.1	13.6	11.9	10.9	10.3	10.1	11.4	14.1
4-Jun	9.8	9.0	8.7	8.0	8.2	10.2	12.7	15.3	16.7	17.1	17.5	18.2	19.4	19.5	20.4	22.1	23.3	23.3	21.9	21.0	18.6	14.7	12.9	11.9	15.8	23.3
5-Jun	12.2	11.7	11.5	10.5	11.6	13.5	14.4	15.7	16.1	18.2	19.7	19.6	21.2	22.0	21.8	19.4	17.4	16.8	17.1	16.5	15.6	15.1	14.8	13.0	16.1	22.0
6-Jun	12.8	12.4	12.1	12.0	12.1	11.8	12.1	11.7	11.5	11.4	11.5	11.7	11.9	12.0	12.3	12.6	12.5	12.4	12.1	11.9	11.6	11.3	10.7	10.0	11.8	12.8
7-Jun	9.3	9.3	9.3	9.3	8.6	8.2	9.4	11.9	13.0	13.6	13.8	15.0	16.0	17.5	17.9	17.6	17.0	15.5	13.6	13.4	13.5	13.2	12.6	12.6	13.0	17.9
8-Jun	12.3	12.1	12.3	12.1	11.7	11.7	11.8	11.9	12.0	11.6	11.5	11.4	11.5	11.5	11.6	12.0	12.2	12.7	13.0	12.7	12.4	12.7	12.8	12.6	12.1	13.0
9-Jun	12.5	12.4	12.2	12.1	11.9	12.1	12.3	13.3	14.0	15.0	16.2	17.8	18.1	19.2	20.2	19.0	19.0	19.0	19.5	18.8	17.3	15.6	14.1	13.0	15.6	20.2
10-Jun	12.2	11.7	11.5	11.0	11.0	11.3	12.1	13.2	13.8	14.8	15.4	14.4	10.7	10.8	11.0	10.7	11.4	11.5	11.3	10.9	10.6	10.2	9.9	9.6	11.7	15.4
11-Jun	9.2	8.9	8.7	8.3	8.2	8.0	8.0	8.4	8.6	9.2	9.9	10.2	10.6	10.9	10.6	10.7	10.3	10.0	9.9	10.0	10.3	10.2	10.2	10.4	9.6	10.9
12-Jun	10.0	9.4	9.1	8.8	8.8	9.2	9.7	10.3	11.2	12.2	13.2	14.1	14.6	15.5	16.4	16.9	17.1	17.2	17.2	16.6	15.9	14.2	13.6	13.3	13.1	17.2
13-Jun	12.1	9.8	9.4	9.0	9.1	10.9	12.8	14.4	16.2	17.7	19.5	20.7	21.5	23.2	24.2	24.6	24.7	24.4	23.5	22.8	21.1	17.1	14.9	13.6	17.4	24.7
14-Jun	15.7	16.1	15.4	13.9	13.4	14.6	16.5	18.1	19.7	20.9	22.4	22.4	22.4	22.9	22.7	22.1	22.9	23.3	23.0	22.6	21.3	19.2	17.9	17.3	19.4	23.3
15-Jun	16.4	13.8	13.7	13.3	13.7	14.5	15.7	17.6	19.7	19.9	22.2	23.0	23.6	24.0	24.1	25.2	24.7	24.4	22.8	20.6	20.0	19.5	19.0	18.4	19.6	25.2
16-Jun	17.7	16.8	16.0	15.6	15.2	15.3	15.0	13.7	14.3	15.7	16.6	18.0	20.0	21.4	22.0	21.6	21.7	21.3	20.8	20.1	18.9	17.1	15.6	14.3	17.7	22.0
17-Jun	13.2	11.9	10.6	10.2	10.1	11.1	12.2	13.8	15.0	15.8	16.8	17.6	18.4	18.8	19.1	18.6	18.8	18.3	18.1	18.5	17.6	16.0	15.2	14.3	15.4	19.1
18-Jun	12.8	11.7	11.3	11.4	11.6	11.6	11.7	12.3	13.3	14.1	15.7	15.6	15.3	14.9	15.1	16.2	16.9	17.1	17.0	16.3	15.9	15.0	14.6	14.6	14.2	17.1
19-Jun	13.7	12.9	12.5	11.1	10.5	10.7	11.1	13.3	14.5	15.3	15.6	16.9	16.8	16.0	16.5	17.3	17.0	16.2	16.0	16.3	16.1	14.6	13.5	12.8	14.5	17.3
20-Jun	12.1	11.0	10.3	9.5	9.3	10.7	12.0	13.5	14.7	15.8	16.7	17.6	17.4	17.9	18.0	18.4	18.6	18.5	18.1	17.5	16.7	15.2	15.3	14.9	15.0	18.6
21-Jun	14.4	14.1	13.6	13.0	12.6	12.5	12.7	13.1	14.2	15.6	16.2	16.6	17.4	18.1	18.8	18.2	18.9	19.4	18.7	17.4	17.3	16.8	15.5	14.8	15.8	19.4
22-Jun	13.5	13.3	14.1	13.0	12.0	12.8	14.2	17.0	18.3	19.7	20.9	22.3	22.0	23.3	23.2	23.4	22.5	23.3	23.4	21.7	20.3	18.0	15.8	15.2	18.5	23.4
23-Jun	15.1	14.8	13.2	12.0	11.8	12.9	14.9	17.9	20.5	22.5	23.7	24.8	25.8	26.4	26.0	19.9	18.4	22.0	22.2	22.3	19.0	16.8	15.8	15.1	18.9	26.4
24-Jun	14.5	14.2	13.3	12.8	13.4	14.1	15.5	18.5	20.8	22.4	24.3	25.5	26.3	26.8	27.1	27.6	27.9	27.9	24.1	22.5	21.9	19.1	18.7	16.9	20.7	27.9
25-Jun	16.2	14.9	13.7	13.2	13.3	15.4	17.4	19.4	21.1	23.7	26.0	26.9	27.7	28.3	28.6	28.7	29.0	28.5	28.2	27.0	25.1	23.3	22.3	19.9	22.4	29.0
26-Jun	18.6	16.9	15.3	14.3	15.0	17.2	19.0	21.1	23.3	25.2	26.2	26.8	27.5	27.8	28.4	28.6	28.5	28.1	27.6	26.6	25.2	23.6	22.7	21.5	23.1	28.6
27-Jun	20.1	18.8	17.6	16.5	17.5	18.1	19.4	21.3	23.6	25.1	26.4	27.2	27.2	26.9	26.8	26.6	27.0	26.8	26.4	24.8	22.6	21.0	19.6	18.8	22.8	27.2
28-Jun	18.5	17.5	17.4	16.4	17.4	17.3	18.2	19.6	21.6	23.8	26.0	27.7	27.9	28.8	29.4	29.9	29.8	29.4	28.5	27.6	26.1	23.1	22.7	23.1	23.7	29.9
29-Jun	21.7	20.2	19.5	18.1	18.1	19.2	19.6	21.4	23.6	25.2	26.4	27.8	28.3	28.7	28.8	29.2	29.4	29.3	28.9	27.9	26.1	23.0	20.7	20.3	24.2	29.4
30-Jun	20.0	19.3	17.2	16.2	15.8	16.5	18.2	20.4	20.9	21.7	22.6	24.5	25.8	26.1	26.0	26.7	27.1	26.9	26.2	24.5	22.6	21.2	20.7	18.9	21.9	27.1
	13.9	13.2	12.7	12.0	12.0	12.7	13.6	14.9	16.1	17.2	18.2	18.9	19.4	19.9	20.2	20.1	20.2	20.1	19.6	18.9	17.9	16.4	15.5	14.8	Diurnal Average	
	21.7	20.2	19.5	18.1	18.1	19.2	19.6	21.4	23.6	25.2	26.4	27.8	28.3	28.8	29.4	29.9	29.8	29.4	28.9	27.9	26.1	23.6	22.7	23.1	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Pihew Point - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	52	7.22	7.22
10 - 20	485	67.36	74.58
> 20	183	25.42	100.00

Total Number of Valid Hours: 720

Total Number of Hours: 720

Maximum Value: 97.5 % on Jun 4 05:00

Maximum Daily Average: 92.6 % on Jun 6

Minimum Value: 28.3 % on Jun 25 17:00

Minimum Daily Average: 45.1 % on Jun 14

Maximum Diurnal Average: 83.0 % at hour 5

Minimum Diurnal Average: 50.5 % at hour 15

Monthly Average: 64.51 %

Percentiles: P_1 = 29.1 P_{10} = 36.7 Q_1 = 48.8 Median = 66.4 Q_3 = 80.2 P_{90} = 90.7 P_{99} = 96.3

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

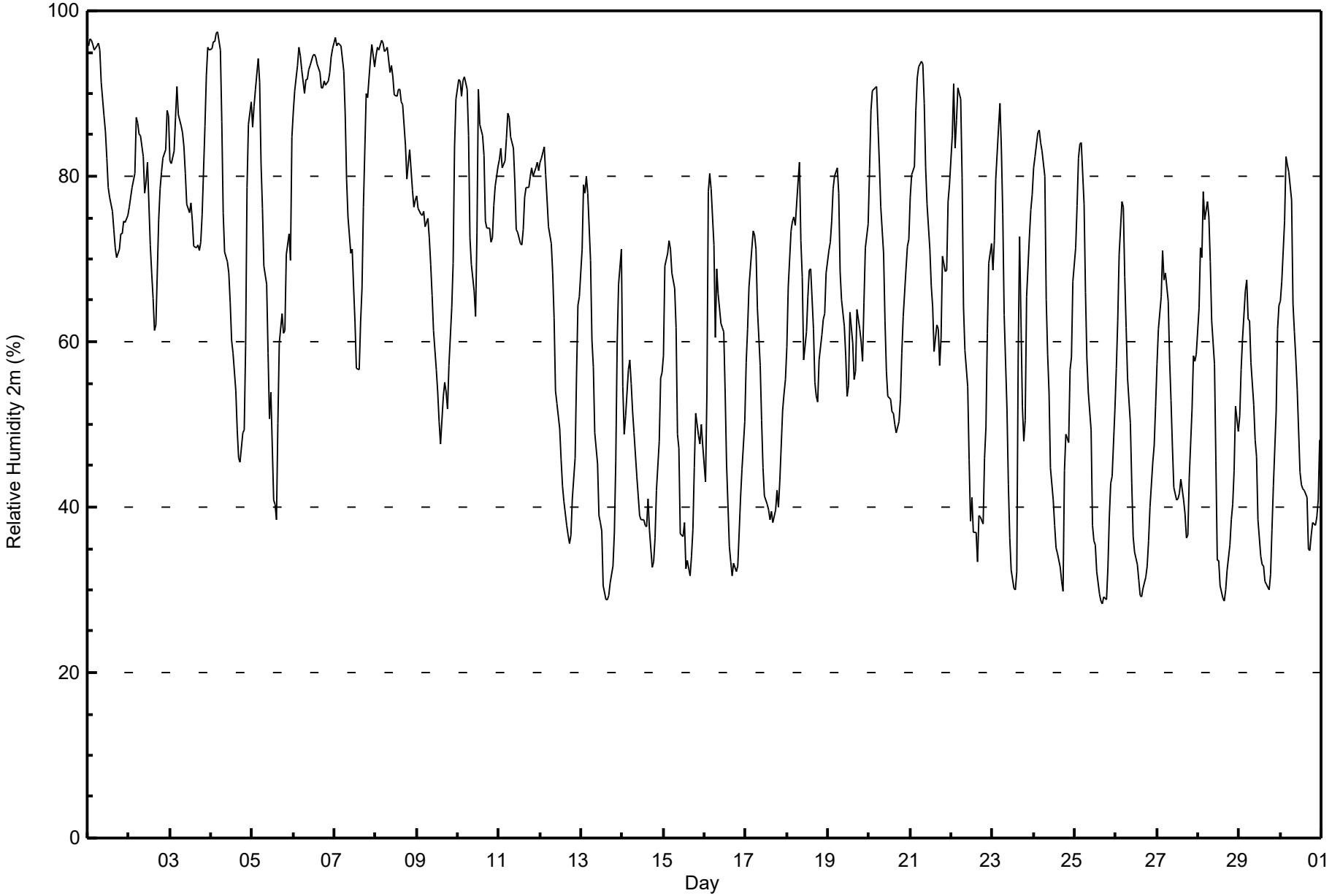
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	95.7	96.6	96.5	95.9	95.2	95.8	96.1	95.3	91.4	87.3	85.4	82.3	78.7	77.4	75.7	73.5	71.4	70.1	71.3	73.1	73.1	74.6	74.4	75.2	83.4	96.6
2-Jun	76.3	77.5	78.6	80.4	87.1	86.4	85.1	85.0	82.4	78.0	79.2	81.7	71.8	68.2	65.3	61.3	62.0	74.7	78.4	80.5	82.2	83.3	88.0	87.2	78.4	88.0
3-Jun	81.8	81.5	83.0	87.1	90.8	87.4	86.2	85.3	83.5	80.4	76.5	75.6	76.8	74.6	71.6	71.3	71.6	71.1	72.0	75.5	86.1	92.3	95.6	95.2	81.4	95.6
4-Jun	95.5	96.4	96.3	97.2	97.5	95.2	86.7	75.5	70.8	69.6	68.3	64.8	60.2	58.6	54.0	49.3	46.0	45.4	49.0	49.4	59.5	78.6	86.2	89.0	72.5	97.5
5-Jun	86.0	88.6	90.4	94.3	91.4	81.5	76.1	69.1	66.9	58.7	50.6	53.8	40.9	40.3	38.5	50.1	59.7	63.4	61.0	61.4	70.6	73.1	69.8	84.8	67.5	94.3
6-Jun	87.8	90.3	93.3	95.6	94.6	92.9	90.0	91.7	91.8	92.9	93.4	94.6	94.7	94.4	93.5	92.5	90.7	90.6	91.6	91.0	91.6	92.5	94.4	95.4	92.6	95.6
7-Jun	96.8	95.7	96.0	95.9	95.7	92.7	87.6	79.6	75.1	70.7	71.3	66.7	62.3	56.8	56.7	62.3	66.4	76.3	90.0	89.5	91.9	94.0	96.0	93.2	81.6	96.8
8-Jun	94.6	95.6	95.3	96.4	96.2	95.1	95.3	95.7	92.6	93.3	92.0	89.8	89.7	90.6	90.5	89.0	88.6	83.8	79.7	81.6	83.3	78.3	76.3	77.1	89.2	96.4
9-Jun	77.7	76.1	75.5	75.2	75.8	73.9	75.0	72.6	69.4	65.6	61.4	56.6	54.0	50.3	47.7	53.4	55.1	54.0	51.8	57.1	64.1	69.4	83.5	89.4	66.0	89.4
10-Jun	91.7	91.5	89.7	91.5	92.0	90.5	84.9	72.5	69.3	66.0	63.0	73.2	90.5	86.2	84.8	82.6	74.5	73.7	73.8	72.0	72.5	76.5	78.9	81.1	80.1	92.0
11-Jun	82.0	83.3	81.1	81.9	84.6	87.7	87.1	84.7	83.4	79.2	73.6	73.2	71.8	71.6	73.6	77.5	78.6	78.7	80.1	81.0	80.1	81.0	81.7	80.7	79.9	87.7
12-Jun	81.8	82.3	83.5	80.2	77.1	73.9	71.9	68.3	62.9	54.0	52.5	49.5	45.7	42.6	40.6	37.9	36.7	35.7	36.6	41.0	45.9	55.9	64.3	65.3	57.8	83.5
13-Jun	71.3	79.0	77.9	80.0	78.0	69.8	60.1	56.9	49.0	45.2	38.9	38.1	37.1	30.6	28.8	28.9	29.4	30.8	32.9	36.9	45.6	60.0	67.0	71.1	51.8	80.0
14-Jun	54.5	48.8	50.9	56.5	57.8	55.0	51.5	48.9	43.7	41.4	39.0	38.6	38.5	37.8	37.6	41.1	37.2	32.6	33.4	36.2	42.0	48.0	55.6	56.2	45.1	57.8
15-Jun	58.3	69.2	70.7	72.2	71.3	68.4	66.5	61.7	48.8	47.0	36.9	36.5	38.1	32.6	33.6	31.7	34.1	37.2	44.8	51.3	48.7	47.7	50.1	47.5	50.2	72.2
16-Jun	43.1	53.7	78.1	80.3	78.5	71.7	60.5	68.8	65.7	62.2	61.7	61.2	53.9	45.2	35.2	33.3	31.7	33.3	32.2	33.0	36.9	41.2	44.6	50.3	52.3	80.3
17-Jun	57.5	61.5	66.7	71.3	73.4	72.9	71.3	64.0	57.1	50.6	44.7	41.3	40.3	39.6	38.4	39.5	38.1	39.6	42.0	40.1	43.3	51.7	53.8	55.3	52.2	73.4
18-Jun	59.3	66.7	73.4	74.6	75.1	74.1	79.3	81.7	72.2	67.7	57.9	61.2	65.4	68.6	68.8	61.6	55.1	53.4	52.6	57.7	60.8	62.8	63.4	68.3	65.9	81.7
19-Jun	71.0	72.0	74.6	78.5	80.0	81.1	78.0	68.5	65.1	61.9	58.4	53.4	54.7	63.6	59.9	55.5	56.4	63.9	61.5	60.1	57.6	64.8	71.4	74.3	66.1	81.1
20-Jun	80.8	88.0	90.4	90.6	90.9	86.1	81.5	76.3	70.6	62.6	56.4	53.3	53.0	51.5	51.4	49.9	49.0	50.3	53.1	58.7	63.1	68.9	71.5	72.4	67.5	90.9
21-Jun	77.4	80.2	81.3	88.0	91.8	93.2	94.0	93.6	88.7	81.0	76.6	71.1	66.8	64.3	58.8	62.0	61.5	57.1	60.5	70.4	68.5	68.7	76.9	79.0	75.5	94.0
22-Jun	84.9	91.2	83.4	86.9	90.7	89.4	79.8	64.2	59.1	54.5	45.7	38.4	41.2	37.0	37.0	33.4	39.0	38.9	37.9	45.9	49.7	61.1	69.5	71.8	59.6	91.2
23-Jun	68.7	72.2	79.7	86.0	88.8	83.3	75.4	63.2	51.8	42.7	36.3	32.4	30.1	30.0	32.1	58.2	72.8	52.1	48.0	50.5	65.5	72.7	76.0	77.8	60.3	88.8
24-Jun	81.0	82.3	85.3	85.6	84.1	83.1	80.0	65.1	58.5	53.8	44.7	40.8	37.8	35.1	34.4	32.8	31.0	29.9	44.4	48.8	47.8	56.7	58.2	67.3	57.0	85.6
25-Jun	71.3	76.5	82.1	83.8	84.1	76.6	65.9	58.0	53.9	49.3	37.8	35.9	35.4	32.2	29.5	28.7	28.3	29.1	28.9	32.8	38.8	42.9	43.7	51.9	49.9	84.1
26-Jun	56.7	62.5	70.6	77.0	76.3	67.9	61.6	55.6	50.2	42.8	36.4	34.6	33.1	31.2	29.3	29.2	30.2	31.6	32.8	35.9	40.0	45.4	47.4	52.2	47.1	77.0
27-Jun	57.2	61.5	65.4	71.1	67.5	68.3	64.9	57.8	52.9	47.3	42.4	40.8	40.9	41.6	43.4	40.9	39.1	36.3	36.6	43.6	51.9	58.2	57.7	58.5	51.9	71.1
28-Jun	64.1	71.4	70.2	78.1	74.7	76.9	75.1	69.6	62.5	57.3	45.5	33.6	33.6	30.5	29.1	28.6	30.0	32.3	35.5	38.4	40.4	44.4	52.2	49.1	51.0	78.1
29-Jun	51.0	56.6	60.4	66.2	67.4	62.7	62.6	57.5	52.3	48.1	46.0	38.4	34.1	33.1	32.9	31.0	30.7	30.0	31.9	37.3	42.6	51.5	61.5	64.5	47.9	67.4
30-Jun	64.9	67.3	74.6	82.4	81.4	80.5	77.2	64.5	61.1	58.0	54.2	44.2	42.7	42.2	42.1	41.2	34.9	34.8	36.7	38.2	37.8	38.8	40.8	48.1	53.7	82.4
	74.0	77.2	79.8	82.7	83.0	80.5	76.9	71.7	66.8	62.3	57.6	55.2	53.8	52.0	50.5	50.9	51.0	51.0	52.7	55.6	59.4	64.5	68.3	71.0	Diurnal Average	
	96.8	96.6	96.5	97.2	97.5	95.8	96.1	95.7	92.6	93.3	93.4	94.6	94.7	94.4	93.5	92.5	90.7	90.6	91.6	91.0	91.9	94.0	96.0	95.4	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Pihew Point - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Pihew Point - June 2026

Maximum Speed: 28 km/h on Jun 1 10:00

Maximum Daily Speed Average: 24.3 km/h on Jun 1

Minimum Speed Value: 0 km/h on Jun 13 02:00

Minimum Daily Speed Average: 1.7 km/h on Jun 22

Maximum Diurnal Speed Average: 8.5 km/h at hour 17

Minimum Diurnal Speed Average: 3.2 km/h at hour 23

Monthly Average Velocity: 5.0 km/h 1.9 deg

Percentiles: P_1 = 1 P_{10} = 4 Q_1 = 6 Median = 9 Q_3 = 15 P_{90} = 20 P_{99} = 27

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-Jun	N27	N25	NNW26	N28	N28	NNW26	NNW24	NNW20	NNW24	N28	N27	N27	N25	N24	N25	N27	N26	NNE24	NNE24	N23	NNE20	NNE20	NNE23	NNE20	N24.3	N28
2-Jun	NNE19	NNE21	NNE20	NNE18	N17	N21	NNE24	NNE21	NNE21	NNE19	NE15	NNE13	NE17	NE19	NE18	NE20	ENE15	ESE9	ESE7	ESE5	ENE4	E6	SE4	ENE6	NNE13.3	NNE24
3-Jun	ENE6	ENE7	E8	E8	ENE6	E8	E7	E6	E6	E6	E5	E6	E9	ESE7	SE5	SE4	SE5	SSW5	SSE4	SSE3	SSE1	ENE1	N1	N2	E4.4	E9
4-Jun	E1	SSE3	SSE3	SSE2	SE1	SE4	SSE5	SE6	SSE5	SW9	SW12	SW12	SSW9	SW13	SW11	SW10	SSW8	SW11	SW16	SW15	SSW5	ESE1	E1	NE1	SSW5.9	SW16
5-Jun	SE1	SSW4	SSW4	SSW3	SSW5	SW12	SSW8	SSW8	SSW7	SSE5	SE6	ESE8	E4	E5	ESE7	SE7	ESE8	ESE5	SSW6	SW5	E5	SSW3	SW10	SW9	S4.1	SW12
6-Jun	WSW12	W14	W12	WNW11	NW17	W21	WSW19	WSW18	WSW21	WSW21	WSW19	WSW21	WSW21	SW18	SW16	SW15	SW15	SW15	SW14	SW13	SW12	SW9	SSW6	S4	WSW13.7	WSW21
7-Jun	SE1	S5	ESE4	ESE5	SE6	SE6	SE5	ESE6	SE5	SSW6	ENE3	NE5	NNE5	NW4	NNE10	N17	N21	NNE15	N14	N12	NNE9	NNE10	NNE8	NNE11	NNE5.0	N21
8-Jun	N13	N13	N14	N16	NNW17	N17	NNW16	NNW13	WNW15	WNW18	WNW23	WNW23	W27	W27	W26	W23	W21	W22	W21	W21	W21	W20	W23	W21	WNW16.3	W27
9-Jun	W17	W18	W18	W18	W18	W16	W14	W15	WNW12	WNW10	W9	W11	WNW14	W12	W10	NW9	NNW10	NNW9	N6	N8	N8	N9	N13	N18	WNW9.9	W18
10-Jun	NNE11	NNE7	NNE9	N10	N6	N9	N10	NNW12	NNW6	NNW4	NW9	NNW18	NNE19	NNE14	NNE14	N18	NNE22	N21	N21	N23	N18	N17	N19	N20	N13.6	N23
11-Jun	N17	N15	NNW14	NNW15	NNW14	NNW18	NNW18	NNW18	NNW19	NNW18	N19	N20	N19	N21	N23	N20	N24	N23	N21	N18	N16	NNW13	NW15	NNW14	N17.6	N24
12-Jun	WNW9	WNW9	NW14	NNW14	NNW15	NNW15	NNW16	NNW18	NNW21	NNW26	NNW27	N25	N25	N26	N24	N23	NNE24	NNE24	N23	N16	N11	NW6	NW8	NW8	N16.7	NNW27
13-Jun	NNW3	WNW0	W4	WSW4	SW3	SW5	WSW4	NNW3	NNE3	NNE4	NNW9	NNW6	NNW7	SSW5	SSW7	S6	SSW7	SSW8	SSW10	SSW7	S4	SSW3	WSW1	WSW2	WSW2.4	SSW10
14-Jun	SW11	WSW9	WSW11	SW4	SW5	WSW6	W5	WNW6	NW7	NNW11	NW8	NNE12	NNE16	N17	N18	NNW16	NNW18	N19	N18	N14	N8	NW8	N7	N8	NNW7.6	N19
15-Jun	N8	N4	N4	NNW3	NE4	NE3	ENE2	ESE3	SE4	ENE6	SE4	N3	NNW7	WNW4	NW3	ESE4	E5	E7	E7	ENE5	E1	E5	E2	NE8	NE2.8	N8
16-Jun	E12	ESE6	ESE7	ESE5	ESE5	ESE6	E7	ENE9	E7	ESE7	S4	W2	WSW6	WNW3	NNE13	NNE20	N20	NNE23	N23	NNE20	N17	NNE16	N14	N12	NNE7.5	NNE23
17-Jun	N10	NNW13	N15	N15	N13	N9	N12	NNW8	NNW11	N13	N16	N19	N15	N18	N17	N16	N20	NNW17	NNW15	NNW11	N10	N7	NNW7	NNW11	N13.2	N20
18-Jun	N14	N12	N10	NW9	NNW9	NNW11	NNW10	NNW8	NNW7	N3	NNW4	NNE8	N17	NNE19	N15	NNW17	NNW19	N21	N16	NNW15	NW17	NNW12	W8	WNW8	NNW11.2	N21
19-Jun	WNW9	W8	NW10	W6	W7	NW7	NW5	N7	N10	N12	N12	NNW10	NW12	NW8	N11	N17	NNE20	NNE15	NNE13	NNE9	N14	NNE11	NNE9	NNE9	NNW8.8	NNE20
20-Jun	N9	N11	N9	N7	N6	N9	NNE11	N10	N14	N17	NNE16	N16	NNE13	NE15	NE18	NNE18	NNE16	NNE17	NE17	ENE10	E7	ESE2	N7	NNE9	NNE11.2	NNE18
21-Jun	NNE8	NNE10	NNE8	N7	N9	N9	N11	N11	N15	NNW16	N19	N20	NNE20	N18	NNE16	NNE16	NNE16	N16	NNE13	NNE8	NNE8	NNE8	NNW5	N6	N12.0	NNE20
22-Jun	E2	N2	NNE9	N6	NNE3	N5	NE4	S2	NNW3	NNW5	N3	NW3	ENE5	E8	NE5	SSE2	NW5	NW6	SE4	SE3	ESE7	SE3	SW2	SSW3	NE1.7	NNE9
23-Jun	SW4	SSW6	SSE4	SE4	SSE4	SE3	SSW6	SSW5	SSW7	SW10	SW10	SSW9	SSW8	S6	S1	NNW22	ENE8	SE7	ESE10	SSE4	SSE3	ESE4	SE4	S5	S3.1	NNW22
24-Jun	SE4	SSE6	SSE4	SE5	SSE3	SE4	ESE6	SE6	SE7	SSE5	SSW6	S5	SSE6	SSE6	SSE5	SSE7	SSW8	SW8	E12	E11	SE5	SE5	ESE8	SSE4	SSE4.9	E12
25-Jun	SE5	S3	SSW3	SSE4	SSE5	SSE4	SE7	SE7	SE9	ESE9	SE8	SE9	ESE9	SE7	SE10	ESE10	ESE9	SE10	SE9	ESE12	SE11	SE8	SE7	SE6	SE7.3	ESE12
26-Jun	SE6	SE4	SE4	SSE4	SSE5	SE8	ESE11	ESE9	ESE9	ESE10	ESE14	ESE14	ESE12	ESE12	ESE11	ESE12	ESE11	ESE12	ESE12	ESE11	ESE10	ESE11	ESE12	ESE11	ESE9.6	ESE14
27-Jun	ESE9	ESE8	ESE7	E8	E10	E8	NE5	N2	E6	E10	ESE13	ESE14	ESE14	ESE12	ESE11	E14	ESE11	ESE10	ESE10	E6	E4	NE4	E4	E6	E8.2	ESE14
28-Jun	NE3	N6	N6	N5	N9	N8	N10	N9	N7	NNW10	NNE7	ENE15	NE15	ENE16	ENE17	ENE16	ENE15	ENE12	ENE11	ENE8	NNE7	NNE1	N8	N13	NE8.3	ENE17
29-Jun	N11	N7	N9	NNE4	N8	N10	NNE6	NNE10	N8	N7	N11	N9	NNE16	NNE15	NNE15	N15	NNE17	NNE17	NNE15	NE10	NE1	S4	SE4	ESE6	NNE8.7	NNE17
30-Jun	ESE7	SE5	SSW3	ENE2	ENE1	SSE1	SSE2	E3	S3	NE2	NNW3	NW4	NW7	NNW10	N13	N15	NNE14	NE12	ENE10	ENE8	E6	ESE6	SSE5	S4	NE2.9	N15
	N4.2	NNW3.7	NNW4.5	N4.3	N4.5	NNW4.6	N4.3	N4.2	NNW4.5	N5.1	NNW4.9	N5.4	N6.6	N5.7	NNE6.9	N8.3	NNE8.5	NNE7.2	NNE6.3	NNE4.8	NNE4.2	NNE3.3	N3.2	N4.2	Diurnal Average	
	N27	N25	NNW26	N28	N28	NNW26	NNW24	NNE21	NNW24	N28	N27	N27	W27	W27	W26	N27	N26	NNE24	NNE24	N23	W21	W20	NNE23	W21	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 Jun 24 19:00

Minimum Value: 1 km/h on Jun 15 07:00

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

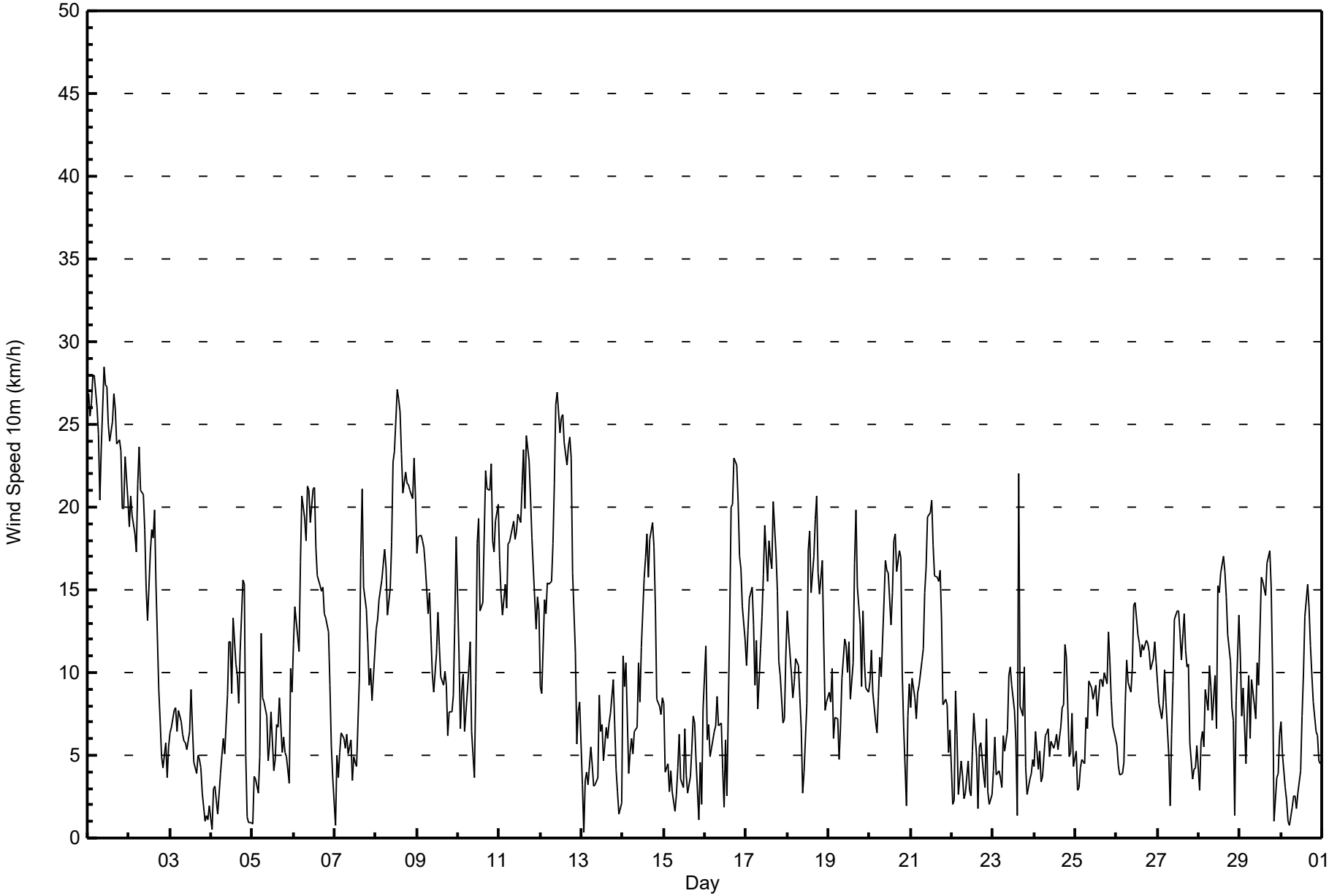
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	5	5	5	5	5	5	5	4	5	5	5	6	5	5	5	5	5	5	5	5	4	4	5	5	6
2-Jun	4	5	4	4	3	5	5	4	4	4	4	3	4	4	4	4	5	3	2	2	3	2	1	2	5
3-Jun	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1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

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Pihew Point - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	173	24.03	24.03
6 - 11	270	37.50	61.53
12 - 19	192	26.67	88.19
20 - 28	85	11.81	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

Pihew Point - June 2026

Wind Speed Ranges (km/h)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 5	11	6	11	9	13	11	28	27	12	13	7	4	3	4	5	9	173
6 - 11	51	26	1	13	25	39	23	4	2	20	11	4	7	7	13	24	270
12 - 19	61	32	8	7	3	13	0	0	0	0	14	4	11	4	5	30	192
20 - 28	36	20	1	0	0	0	0	0	0	0	0	4	13	2	0	9	85
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	159	84	21	29	41	63	51	31	14	33	32	16	34	17	23	72	720

Total Number of Valid Hours: 720

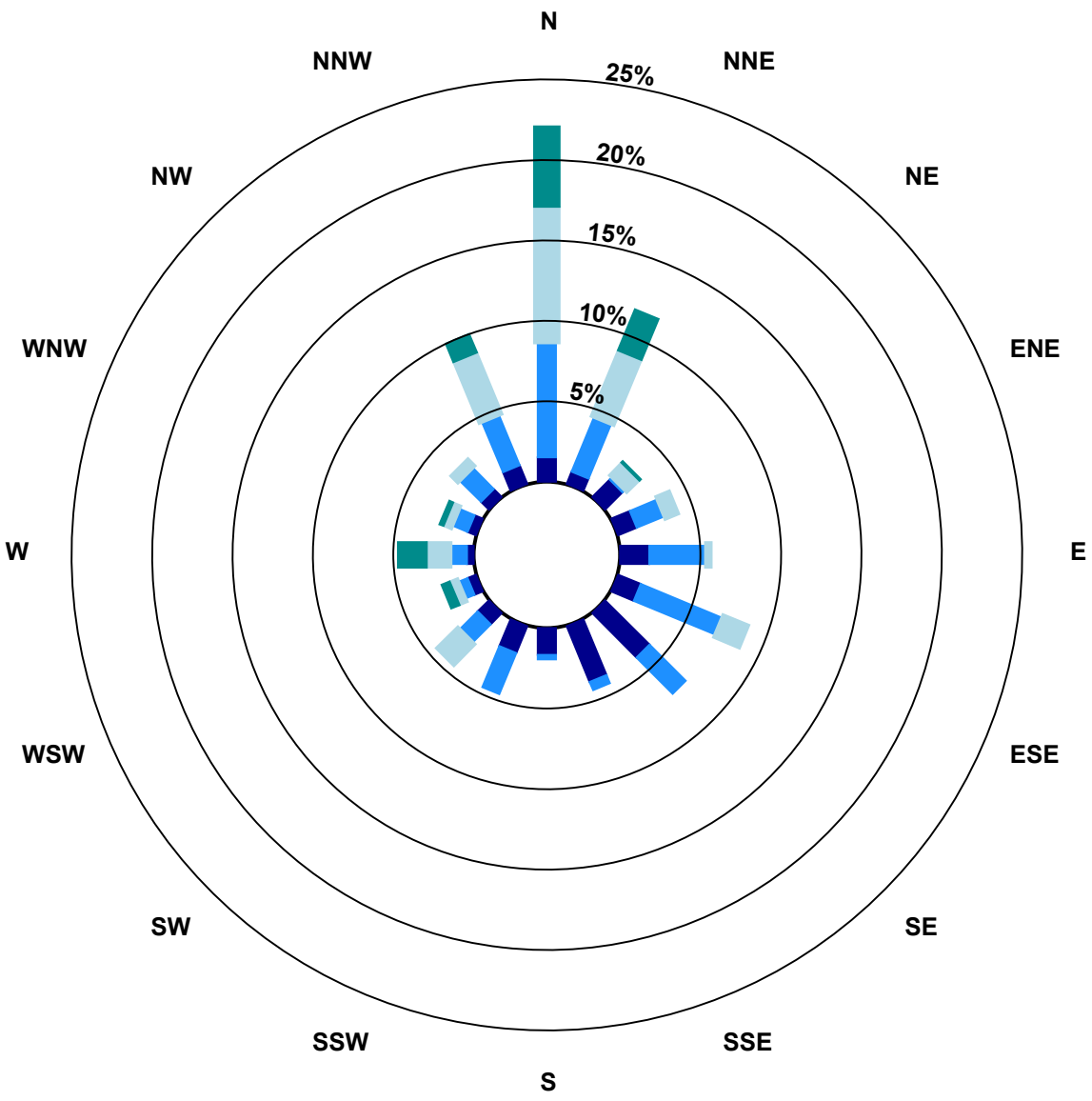
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Pihew Point



Classes (km/h)

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

Total Number of Valid Hours: 720

Direction of Maximum Speed: 353 deg on Jun 1 10:00
Direction of Maximum Daily Speed Average: 358.9 deg on Jun 1

Direction of Minimum Speed: 282 deg on Jun 13 02:00

Direction of Minimum Daily Speed Average: 1.7 deg on Jun 22

Monthly Average Direction: 1.9 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-Jun	356	352	348	352	351	348	341	337	346	353	355	359	2	3	359	2	4	12	12	9	15	12	15	20	358.9
2-Jun	19	18	14	13	7	11	19	15	15	27	34	30	36	37	43	37	57	112	115	116	78	86	131	76	31.1
3-Jun	69	65	79	88	77	85	82	88	84	89	90	84	90	111	142	130	139	202	153	158	148	66	1	3	94.6
4-Jun	89	150	153	166	131	139	159	135	162	214	218	217	201	221	225	218	207	216	218	218	208	108	85	39	204.2
5-Jun	144	213	200	192	207	225	211	213	212	151	133	121	97	91	115	146	123	109	207	215	95	198	219	226	178.8
6-Jun	254	271	279	299	314	278	256	249	243	241	237	241	240	234	231	231	232	222	220	229	222	215	199	171	245.1
7-Jun	137	185	122	112	128	127	144	112	128	206	75	44	31	311	15	5	5	32	11	2	13	19	19	13	31.1
8-Jun	8	2	0	357	343	350	347	331	291	298	297	285	277	275	270	267	270	275	264	271	275	269	267	266	292.4
9-Jun	274	266	265	266	268	274	261	266	283	289	262	266	297	270	272	321	338	346	0	355	349	354	10	6	292.5
10-Jun	24	17	12	8	354	350	350	339	334	338	322	334	19	23	16	8	13	4	4	355	360	0	356	354	0.9
11-Jun	355	354	343	346	346	338	335	338	344	348	356	354	356	1	3	355	4	2	1	355	352	338	321	332	350.5
12-Jun	298	285	313	337	343	346	344	343	344	346	346	357	358	358	356	8	13	16	11	10	6	323	315	316	350.7
13-Jun	344	282	264	239	222	227	247	334	31	27	327	341	343	211	205	180	202	205	212	204	191	196	242	255	238.4
14-Jun	216	237	238	214	214	241	277	296	321	335	312	17	14	3	356	338	343	5	2	360	349	324	356	0	338.0
15-Jun	4	7	353	335	34	52	75	105	134	76	124	359	337	296	315	104	87	87	79	68	94	96	79	56	53.3
16-Jun	95	116	116	119	118	116	90	73	86	103	187	268	238	286	15	14	10	12	11	13	11	14	11	5	31.2
17-Jun	356	348	350	349	355	10	6	346	342	353	1	2	360	355	3	4	353	341	341	346	360	352	346	345	353.9
18-Jun	356	4	0	326	341	347	342	338	328	350	331	23	9	19	1	336	344	352	1	334	325	337	279	284	346.7
19-Jun	288	277	308	271	272	310	323	351	0	357	352	335	320	326	3	3	12	16	13	21	358	12	16	20	348.3
20-Jun	6	357	7	8	0	3	21	7	1	9	13	7	22	37	42	30	20	31	34	67	92	103	5	28	21.4
21-Jun	14	14	31	9	7	1	358	1	350	344	351	2	12	9	17	20	20	7	23	16	13	17	343	349	7.0
22-Jun	83	5	12	11	29	8	41	175	339	332	357	324	66	92	45	149	304	318	135	132	117	125	218	207	35.6
23-Jun	222	212	164	134	155	144	198	202	211	214	216	206	205	169	170	344	58	136	113	147	150	119	143	181	179.2
24-Jun	142	166	164	141	159	141	115	134	134	158	212	191	160	168	151	164	210	222	86	98	126	133	122	150	148.3
25-Jun	140	186	201	166	154	152	145	142	127	111	139	144	122	132	124	117	122	126	129	115	126	129	135	135	132.1
26-Jun	133	134	125	161	159	129	123	119	111	120	123	122	120	118	115	119	115	119	119	120	107	109	110	110	119.7
27-Jun	110	111	109	94	97	82	40	10	83	90	105	116	115	117	107	82	106	108	112	100	84	55	100	92	100.1
28-Jun	42	6	3	354	354	359	7	0	351	332	16	71	52	62	59	69	67	66	63	59	33	29	359	357	34.8
29-Jun	3	360	7	12	10	11	29	22	360	351	4	1	16	27	23	10	16	20	29	39	54	172	140	121	18.0
30-Jun	119	129	195	59	61	162	155	100	182	52	342	322	320	341	354	351	32	51	67	76	95	105	163	178	44.0
	1.8	345.1	346.7	352.6	349.9	347.3	352.2	348.9	346.0	349.6	345.9	355.9	4.0	7.6	11.4	8.1	13.8	16.1	24.0	15.9	12.6	11.7	356.2	1.5	
	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: 108 deg on Jun 5 01:00

Minimum Value: 8 deg on Jun 18 21:00

Percentiles: P_1 = 11 P_{10} = 14 Q_1 = 16 Median = 22 Q_3 = 35 P_{90} = 57 P_{99} = 86

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

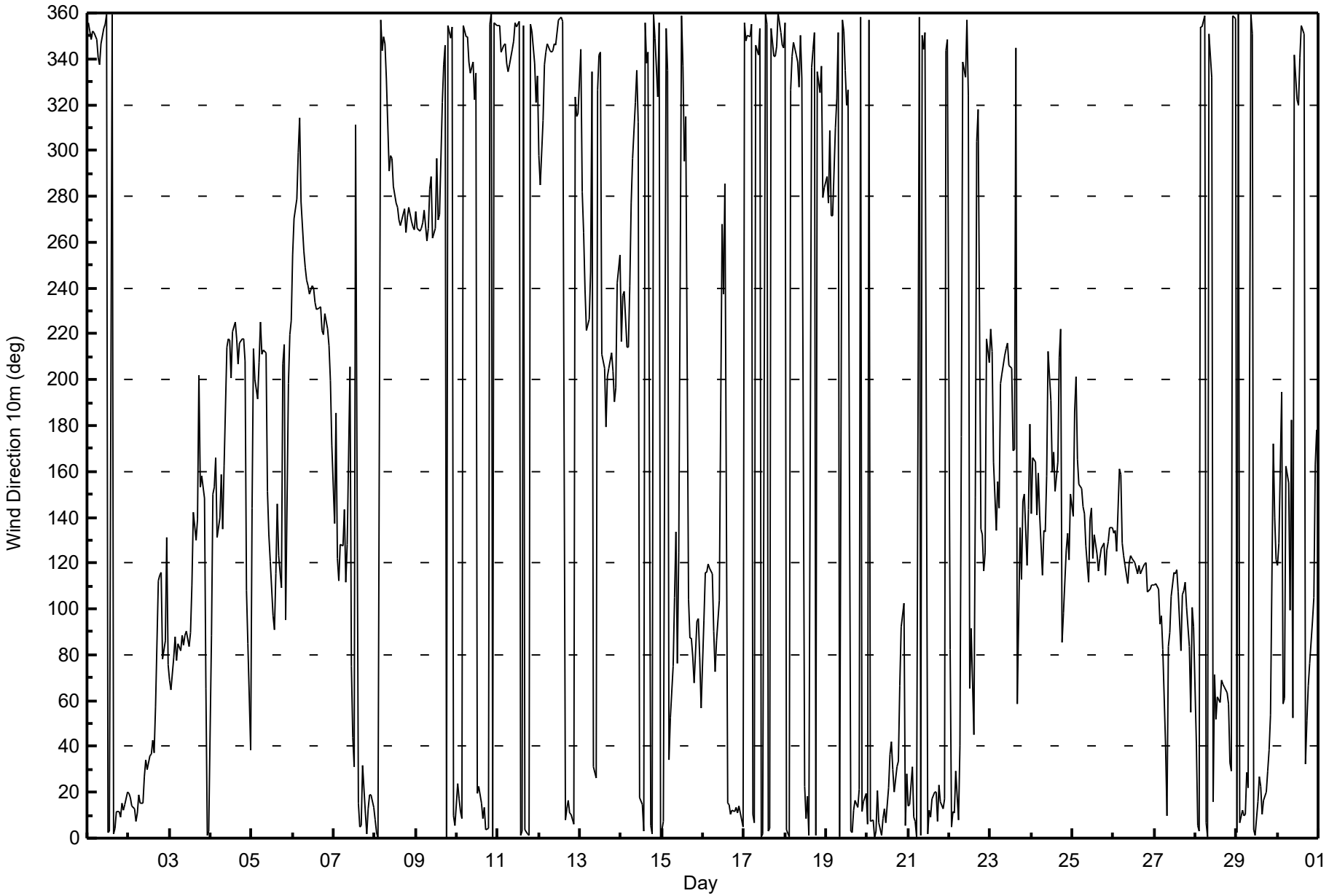
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	16	15	16	16	16	14	14	13	15	16	16	18	16	17	16	15	15	15	15	13	15	14	13	14	18
2-Jun	14	14	14	15	14	14	14	14	15	15	13	15	15	15	15	14	23	24	22	21	48	22	30	21	48
3-Jun	19	16	19	22	21	22	22	23	25	27	33	21	21	35	58	76	53	52	55	55	74	14	16	18	76
4-Jun	79	53	45	30	71	53	51	54	59	41	21	25	57	21	28	31	52	27	16	16	47	40	68	62	79
5-Jun	108	59	52	61	39	16	27	23	29	62	52	37	72	84	36	53	46	34	29	43	18	72	16	20	108
6-Jun	22	21	23	27	18	22	18	20	16	16	16	15	15	16	17	17	17	15	15	17	17	19	38	58	58
7-Jun	96	29	36	24	28	38	48	42	64	59	54	41	42	62	54	18	14	32	17	14	17	13	15	15	96
8-Jun	15	14	13	14	12	14	14	21	23	21	21	22	20	21	20	20	21	20	20	21	21	21	19	21	23
9-Jun	21	21	19	20	20	22	23	22	24	31	34	28	22	31	34	21	13	24	25	15	11	16	12	14	34
10-Jun	13	23	17	12	22	16	16	15	34	49	28	24	14	17	19	16	14	16	16	17	15	15	14	14	49
11-Jun	15	14	13	16	16	13	13	11	14	16	17	16	16	17	19	18	16	16	17	16	15	12	12	11	19
12-Jun	21	22	13	15	12	13	12	13	15	15	15	17	21	19	19	19	15	15	14	15	13	20	11	13	22
13-Jun	73	90	34	30	40	17	32	30	24	37	24	18	29	80	49	57	43	41	21	25	33	46	86	63	90
14-Jun	15	17	17	68	28	18	32	20	26	22	23	24	17	20	21	18	16	19	15	16	17	11	14	13	68
15-Jun	16	19	34	37	22	45	77	74	65	41	72	81	21	56	87	64	36	25	21	21	67	41	76	41	87
16-Jun	23	31	24	59	28	31	25	20	25	30	61	80	63	83	44	19	20	17	16	16	13	13	12	12	83
17-Jun	15	13	13	14	15	15	14	27	21	23	20	20	22	22	22	20	17	13	13	17	16	13	20	15	27
18-Jun	13	11	13	17	14	13	12	16	37	55	60	32	17	17	21	19	17	18	17	13	8	14	22	23	60
19-Jun	25	22	19	20	19	30	28	24	27	23	22	22	31	38	30	23	18	17	16	22	16	12	13	12	38
20-Jun	13	13	13	15	16	19	15	18	17	19	22	21	24	24	20	19	21	18	15	35	23	58	49	15	58
21-Jun	14	15	10	15	13	15	15	20	18	15	16	18	14	15	24	14	16	14	13	14	14	15	24	18	24
22-Jun	67	50	10	18	34	18	24	78	47	32	52	83	60	40	55	95	27	63	62	29	26	45	73	66	95
23-Jun	59	20	39	37	50	80	28	37	39	31	31	37	49	69	91	26	49	52	27	51	75	21	29	36	91
24-Jun	43	20	32	24	52	44	29	61	48	58	51	67	71	60	71	56	42	26	53	26	35	30	28	35	71
25-Jun	33	59	48	33	37	42	41	50	33	33	54	58	50	59	45	35	44	41	35	28	32	35	40	39	59
26-Jun	35	34	48	25	36	33	29	32	32	36	34	35	37	42	40	37	38	34	31	31	24	22	24	23	48
27-Jun	18	18	16	18	21	25	31	74	33	28	30	35	32	34	33	23	27	27	24	19	34	15	31	16	74
28-Jun	45	13	14	45	16	19	11	18	19	14	57	25	18	20	23	21	22	20	18	15	10	84	16	16	84
29-Jun	12	15	10	47	13	12	17	14	19	25	22	31	24	22	18	23	22	18	13	12	96	34	29	22	96
30-Jun	19	32	31	43	65	71	49	56	51	51	28	31	30	35	22	19	22	21	18	20	35	16	42	26	71
	108	90	52	68	71	80	77	78	65	62	72	83	72	84	91	95	53	63	62	55	96	84	86	66	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Pihew Point - June 2026



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS33
MONDAY CREEK
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MONDAY CREEK (AMS33)
JUNE 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	4.5	0	0.6	0
H2S (ppb) Average	684	35	36	99.86	0.8	0	0.2	0
NO2 (ppb) Average	685	35	35	100	12.5	0	2.6	-
NO (ppb) Average	685	35	35	100	3.4	-	0.7	-
NOX (ppb) Average	685	35	35	100	14.1	-	2.9	-
Temperature 2 m (C) Average	720	0	0	100	27.7	-	21.9	-
Relative Humidity (%) Average	718	0	2	99.72	100	-	94	-
Wind Speed 10 m (km/h) Average	719	0	1	99.86	29	-	18	-
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 - MONDAY CREEK (AMS33)
JUNE 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	0.21	0.4	-	0	0	0	0.1	0.2	0.5	4.5
H2S (ppb) Average	684	0.09	0.1	-	0	0	0	0.1	0.1	0.2	0.8
NO2 (ppb) Average	685	1.19	1.2	-	0.1	0.3	0.5	0.9	1.4	2.2	12.5
NO (ppb) Average	685	0.16	0.4	-	0	0	0	0	0.1	0.4	3.4
NOX (ppb) Average	685	1.35	1.4	-	0.1	0.3	0.6	0.9	1.6	2.6	14.1
Temperature 2 m (C) Average	720	14.94	5.2	-	3.5	8.6	10.8	14.3	18.3	22.6	27.7
Relative Humidity (%) Average	718	67.36	21.2	-	25	36.2	49.9	69.4	86.4	95.6	100
Wind Speed 10 m (km/h) Average	719	10.1	6	-	0	3	5	9	14	19	29
Wind Direction 10 m (deg) Average	719	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - MONDAY CREEK (AMS33)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
H2S, SO2	25 Jun 2026 14:00	25 Jun 2026 14:00	1	Maintenance - sample manifold cleaned
Relative Humidity	05 Jun 2026 23:00	05 Jun 2026 23:00	1	Sensor operated out of range
Relative Humidity	20 Jun 2026 05:00	20 Jun 2026 05:00	1	Sensor operated out of range
Wind Speed, Wind Direction	28 Jun 2026 01:00	28 Jun 2026 01:00	1	Flat line in sensor output signal

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Monday Creek - June 2026

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

Maximum Value: 4.5 ppb on Jun 8 23:00

Maximum Daily Average: 0.6 ppb on Jun 8

Minimum Value: 0.0 ppb on Jun 1 02:00

Minimum Daily Average: 0.0 ppb on Jun 21

Maximum Diurnal Average: 0.3 ppb at hour 1

Minimum Diurnal Average: 0.1 ppb at hour 2

Monthly Average: 0.21 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} = 2.6

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-Jun	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
2-Jun	0.1	Z	0.2	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.3
3-Jun	0.0	0.1	Z	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2
4-Jun	0.0	0.0	0.0	Z	0.1	0.1	0.1	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.3	0.3	0.2	0.3	0.2	0.2	0.3
5-Jun	0.3	0.1	0.1	0.1	Z	0.1	0.1	0.2	0.5	0.3	0.3	0.1	0.3	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.2	0.0	0.1	0.1	0.2	0.5
6-Jun	0.1	0.0	0.4	0.8	0.5	Z	1.7	1.5	0.8	0.8	0.5	0.5	0.9	1.7	1.4	1.0	0.7	0.8	0.1	0.1	0.0	0.0	0.1	0.1	0.6	1.7
7-Jun	Z	0.0	0.0	0.1	0.0	0.1	0.1	0.3	1.7	1.1	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	1.7
8-Jun	0.0	Z	0.1	0.0	0.0	0.0	0.2	0.4	0.1	0.1	0.0	0.0	0.1	0.3	0.1	0.3	0.2	0.2	0.5	1.1	0.7	3.3	4.5	2.7	0.6	4.5
9-Jun	4.3	0.8	Z	3.2	1.5	0.7	0.4	0.3	0.3	0.4	0.3	0.6	C	C	C	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.6	4.3
10-Jun	0.0	0.1	0.0	Z	0.0	0.0	0.2	0.3	0.7	0.6	0.3	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.2	0.1	0.0	0.1	0.7
11-Jun	0.0	0.0	0.0	0.1	Z	0.3	0.5	1.2	1.1	0.6	0.4	0.4	0.3	0.3	0.3	0.2	0.9	0.5	0.2	0.1	0.2	0.1	0.2	0.2	0.3	1.2
12-Jun	0.2	0.1	0.1	0.0	0.1	Z	0.7	0.3	0.3	0.2	0.1	0.4	0.7	0.5	0.2	0.2	0.3	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.2	0.7
13-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.2	0.1	0.2	0.3	0.3	0.4	0.7	0.7	0.6	0.4	0.3	0.2	0.2	0.3	0.7	0.8	0.3	0.8
14-Jun	2.1	Z	2.7	0.7	0.6	1.6	1.4	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.3	0.1	0.1	0.1	0.3	0.3	0.5	2.7
15-Jun	0.1	0.0	Z	0.0	0.0	0.0	0.2	0.3	0.1	0.0	0.0	0.0	0.1	0.2	0.4	0.2	0.1	0.1	0.5	0.1	0.2	3.1	0.2	0.0	0.3	3.1
16-Jun	0.1	0.2	0.1	Z	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.2	0.3	0.1	0.2	0.2	0.1	0.3
17-Jun	0.0	0.0	0.0	0.1	Z	0.1	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.2	0.3	0.4	0.6	0.1	0.6
18-Jun	0.5	0.4	0.3	0.2	0.2	Z	0.1	0.1	0.0	0.1	0.2	0.0	0.0	0.2	0.0	0.0	0.1	0.9	0.5	0.3	0.0	0.0	0.0	0.0	0.2	0.9
19-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.0	0.3	0.6	0.1	0.3	0.9	0.1	0.2	0.6	0.7	0.0	0.0	0.0	0.0	0.2	0.9
20-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
21-Jun	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
22-Jun	0.0	0.0	0.0	Z	0.0	0.1	0.0	0.1	0.2	0.4	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.2	1.0	0.6	0.4	0.5	0.2	0.2	1.0
23-Jun	0.2	0.1	0.1	0.0	Z	0.1	0.0	0.0	1.0	0.7	0.8	0.5	0.5	0.0	0.0	0.0	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.0
24-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.1	1.8	2.6	0.8	0.5	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	2.6
25-Jun	Z	0.4	0.4	0.4	0.3	0.5	0.7	0.6	0.4	0.2	0.1	0.1	0.1	M	0.0	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.3	0.7
26-Jun	0.0	Z	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2
27-Jun	0.2	0.2	Z	0.2	0.1	0.1	0.2	0.3	0.3	0.2	0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.3
28-Jun	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	0.1	0.0	0.0	0.1
29-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.0	0.4	0.4	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.4
30-Jun	0.2	0.1	0.1	0.1	0.1	Z	0.1	0.4	0.8	0.4	0.3	0.4	0.2	0.3	0.2	0.3	0.3	0.9	0.6	0.2	0.3	0.2	0.3	0.3	0.3	0.9
	0.3	0.1	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	0.1	0.3	0.3	0.2	Diurnal Average	
	4.3	0.8	2.7	3.2	1.5	1.6	1.7	1.5	1.7	1.8	2.6	0.8	0.9	1.7	1.4	1.0	0.9	0.9	0.6	1.1	0.7	3.3	4.5	2.7	Diurnal Maximum	

Z - zerospan C - Calibration M - Maintenance

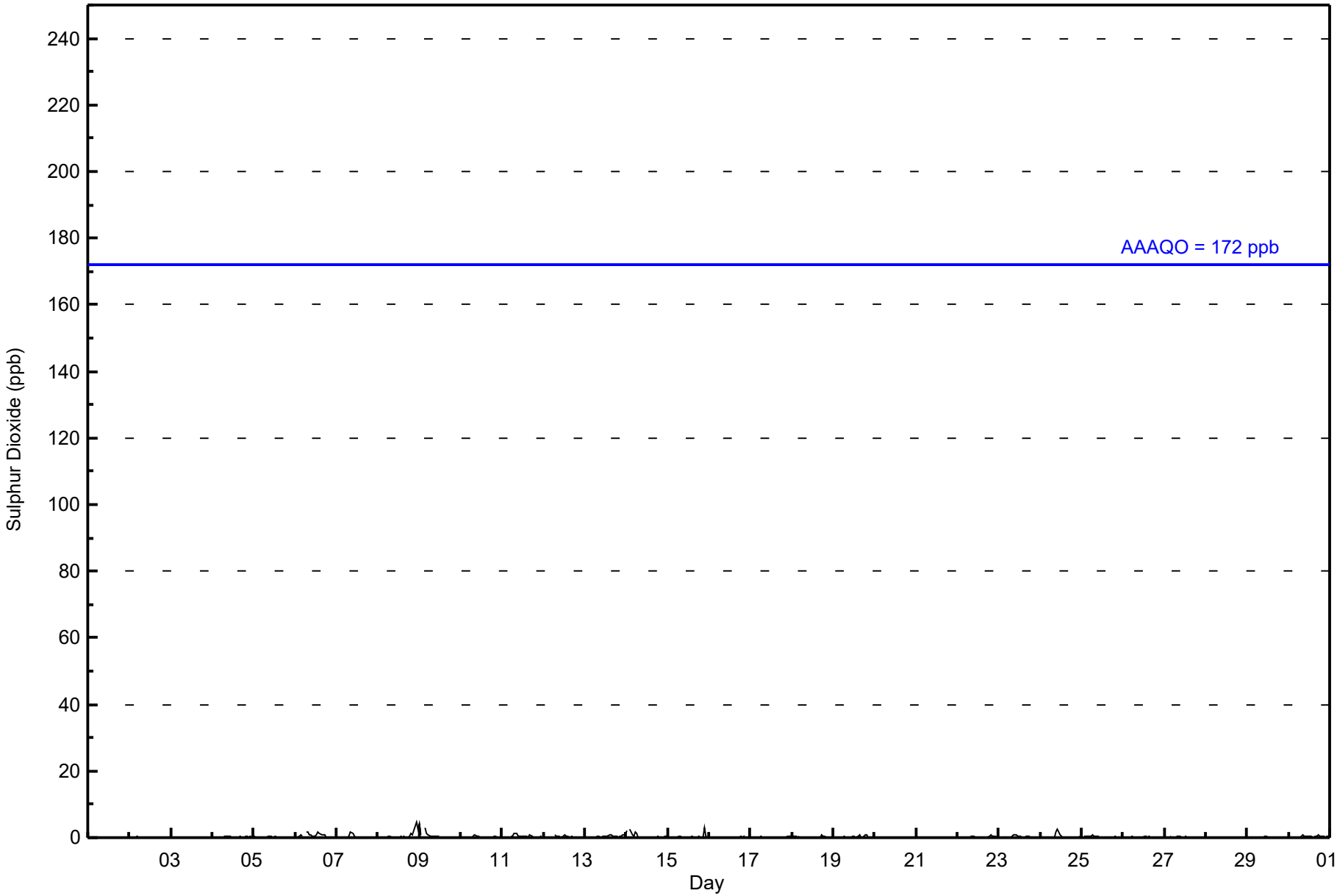
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Monday Creek - June 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

Monday Creek - June 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	50	65	62	42	30	36	43	23	24	45	17	25	59	68	44	52	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	50	65	62	42	30	36	43	23	24	45	17	25	59	68	44	52	685

Total Number of Valid Hours: 685

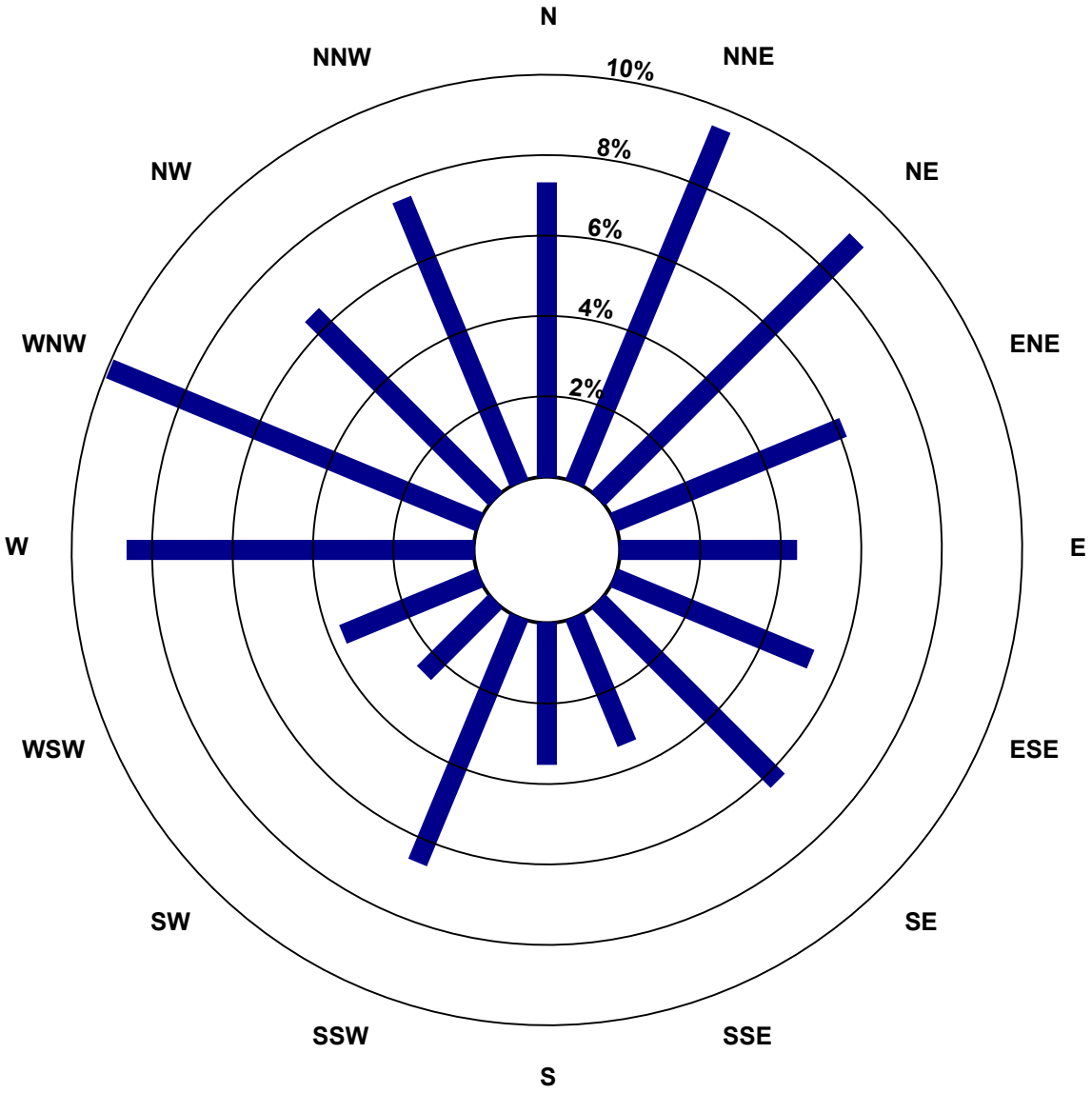
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Monday Creek



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

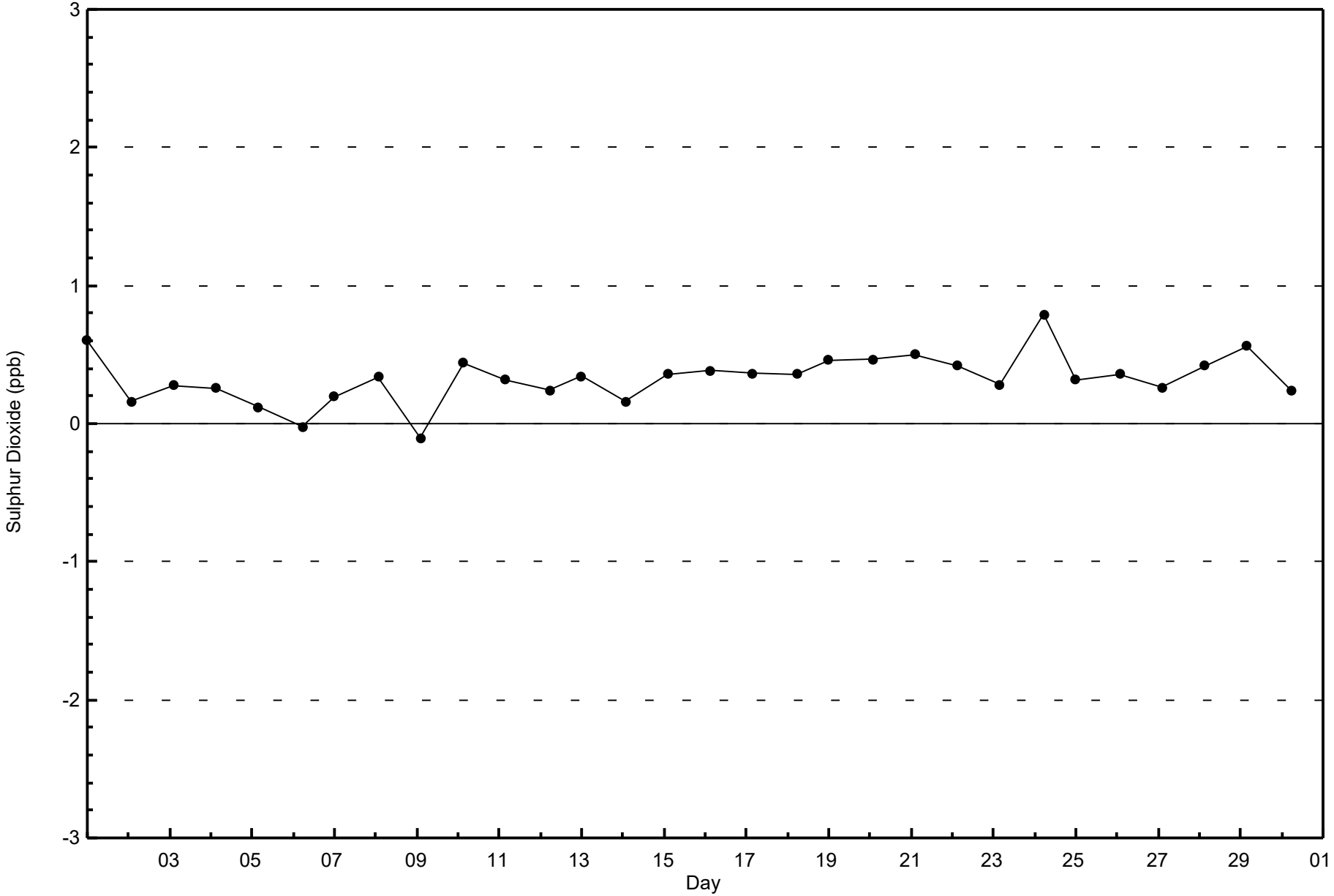
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Monday Creek - June 2026

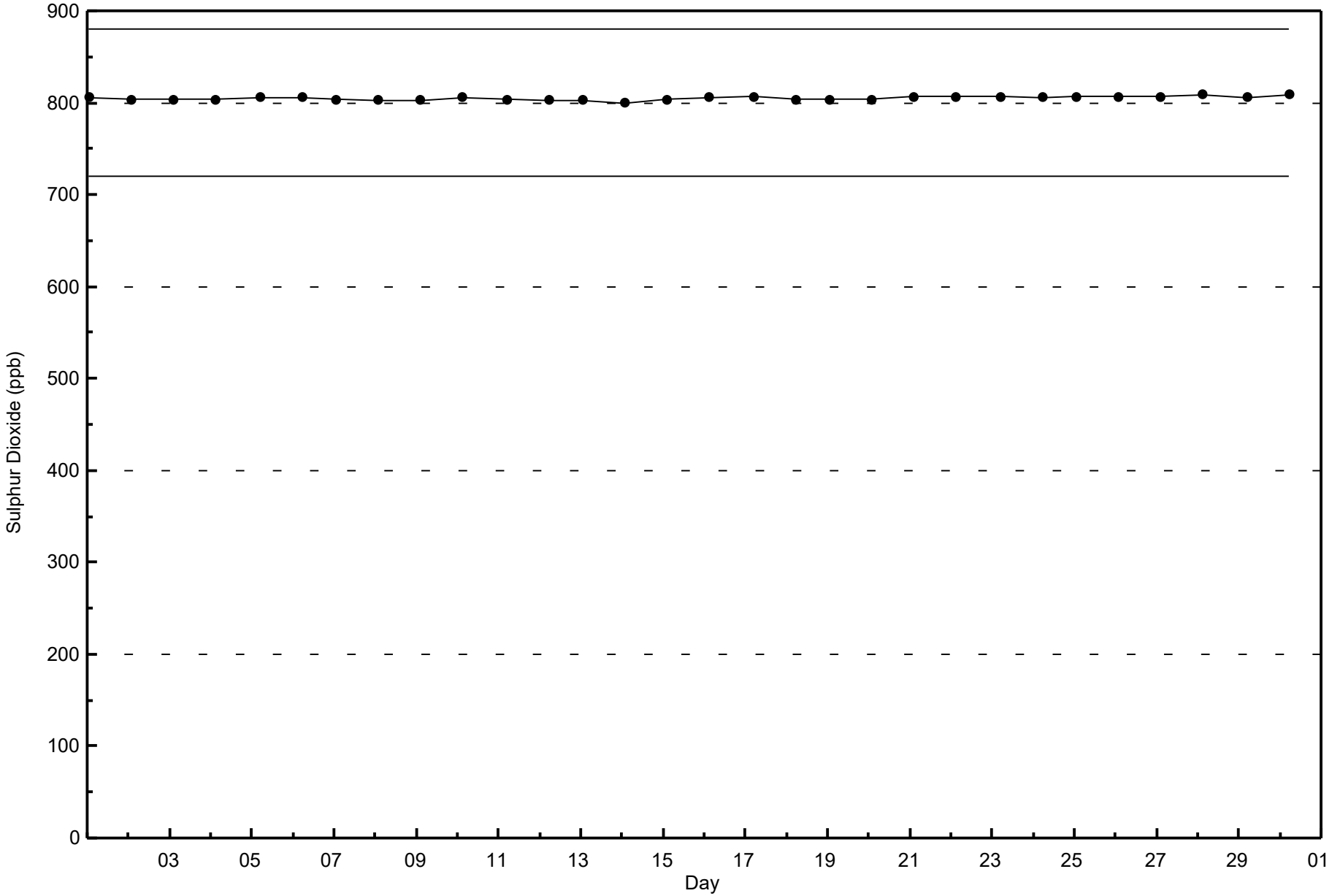


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Monday Creek - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Monday Creek - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.8 ppb on Jun 15 22:00 Maximum Daily Average: 0.2 ppb on Jun 15

Minimum Value: 0.0 ppb on Jun 28 18:00 Minimum Daily Average: 0.0 ppb on Jun 28
Maximum Diurnal Average: 0.2 ppb at hour 5 Minimum Diurnal Average: 0.0 ppb at hour 15
Monthly Average: 0.09 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.1 P_{90} = 0.2 P_{99} = 0.4

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-Jun	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	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
2-Jun	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	0.1	0.1	0.1	0.0	0.1
3-Jun	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
4-Jun	0.1	0.1	0.0	0.1	Z	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5-Jun	0.1	0.1	0.1	0.1	0.2	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2
6-Jun	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.3
7-Jun	0.3	Z	0.4	0.4	0.4	0.5	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.5
8-Jun	0.1	0.1	Z	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2
9-Jun	0.2	0.1	0.2	Z	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.3
10-Jun	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	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.2
11-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.3	0.2	0.2	0.2	C	C	C	C	C	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.3
12-Jun	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.2
13-Jun	0.2	Z	0.3	0.3	0.4	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.1	0.4
14-Jun	0.3	0.3	Z	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.5	0.4	0.1	0.5
15-Jun	0.3	0.4	0.5	Z	0.6	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.8	0.1	0.1	0.2	0.8
16-Jun	0.1	0.1	0.1	0.2	Z	0.4	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.4
17-Jun	0.1	0.1	0.1	0.2	0.3	Z	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.3
18-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
19-Jun	0.2	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
20-Jun	0.2	0.2	Z	0.3	0.5	0.2	0.2	0.2	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	0.1	0.1	0.1	0.1	0.5
21-Jun	0.1	0.1	0.1	Z	0.2	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2
22-Jun	0.1	0.1	0.3	0.3	Z	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	0.1	0.1	0.1	0.2	0.2	0.1	0.3
23-Jun	0.2	0.2	0.3	0.3	0.4	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	0.1	0.1	0.1	0.1	0.1	0.4
24-Jun	Z	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
25-Jun	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	M	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1
26-Jun	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
27-Jun	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	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
28-Jun	0.1	0.1	0.0	0.1	Z	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1
29-Jun	0.1	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	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
30-Jun	Z	0.2	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	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.3	0.4	0.5	0.4	0.6	0.5	0.4	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	0.2	0.8	0.5	0.4	Diurnal Maximum	

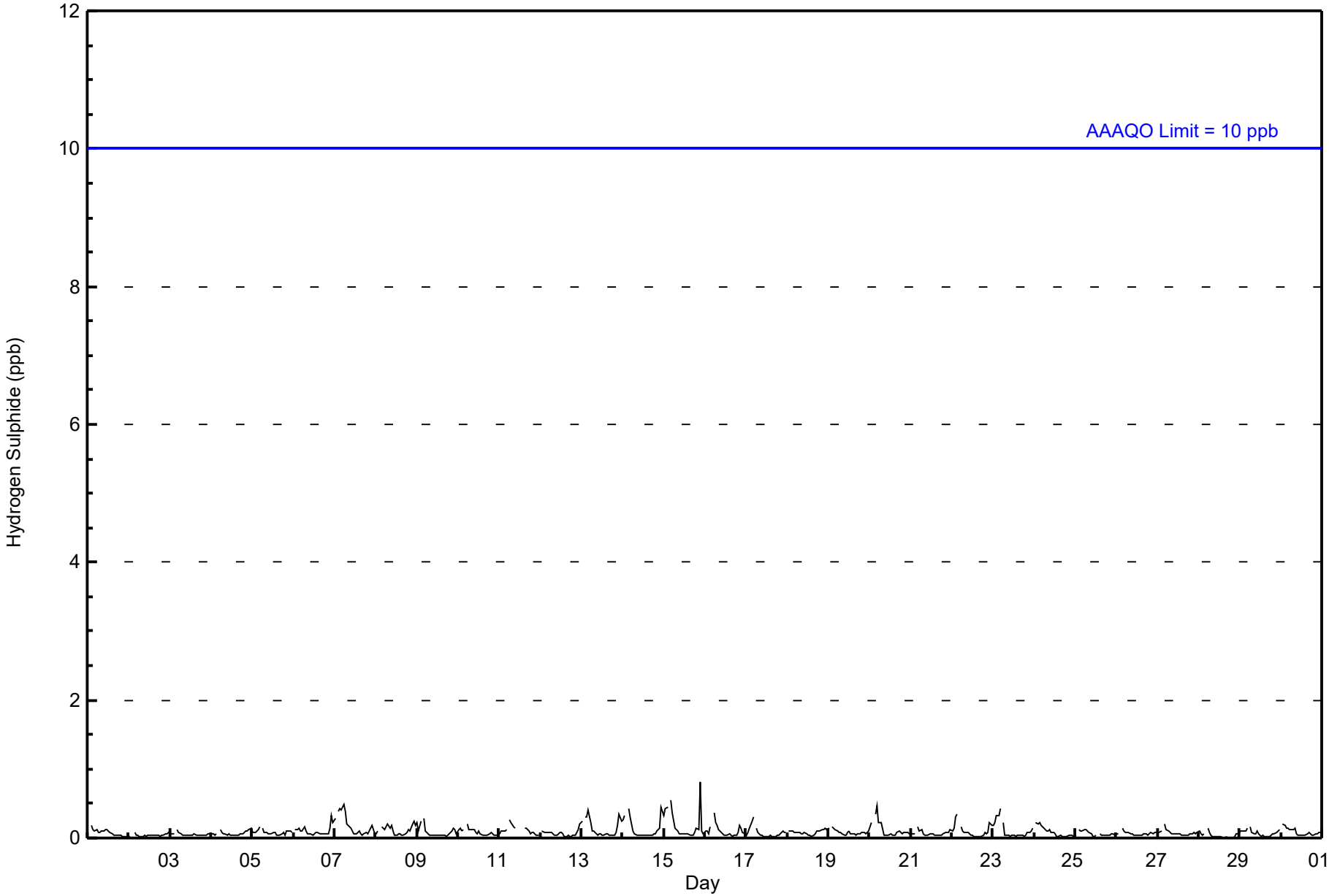
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Monday Creek - June 2026



Hydrogen Sulphide (H_2S) - ppb

Monday Creek - June 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

Monday Creek - June 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	47	64	62	42	31	36	43	25	24	43	17	26	60	69	46	48	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	47	64	62	42	31	36	43	25	24	43	17	26	60	69	46	48	683

Total Number of Valid Hours: 683

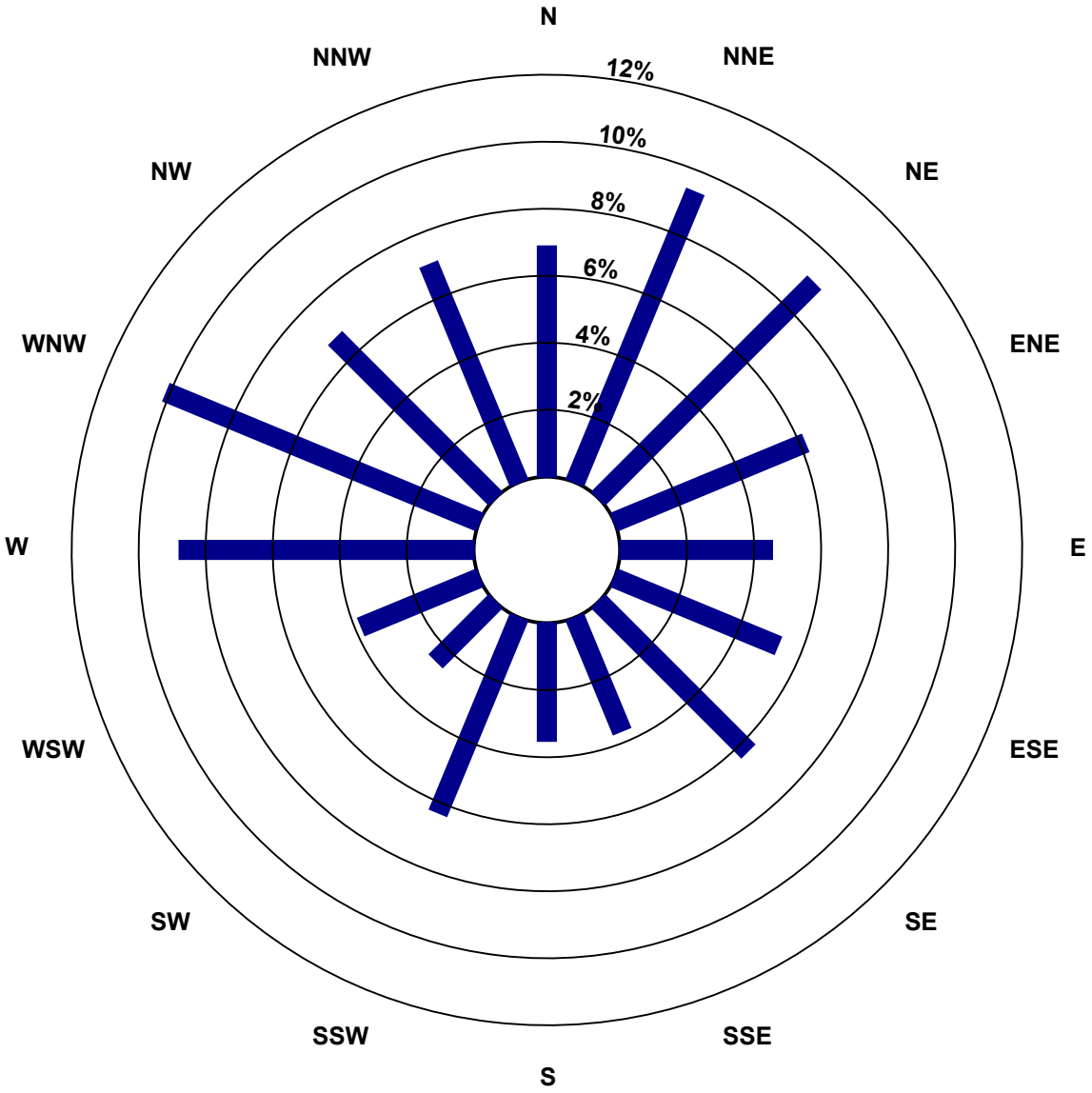
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H_2S) - ppb

Monday Creek



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

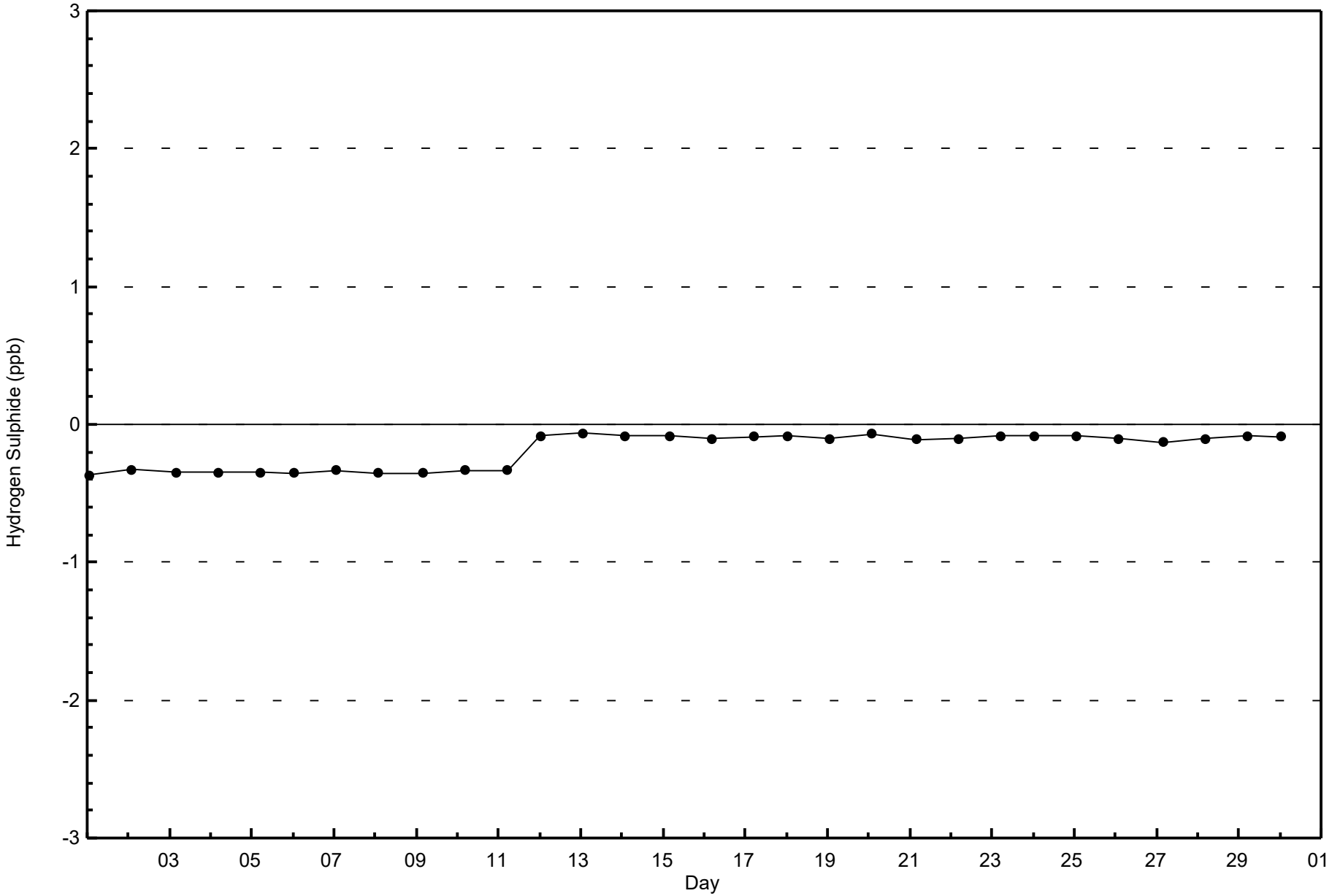
Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Monday Creek - June 2026

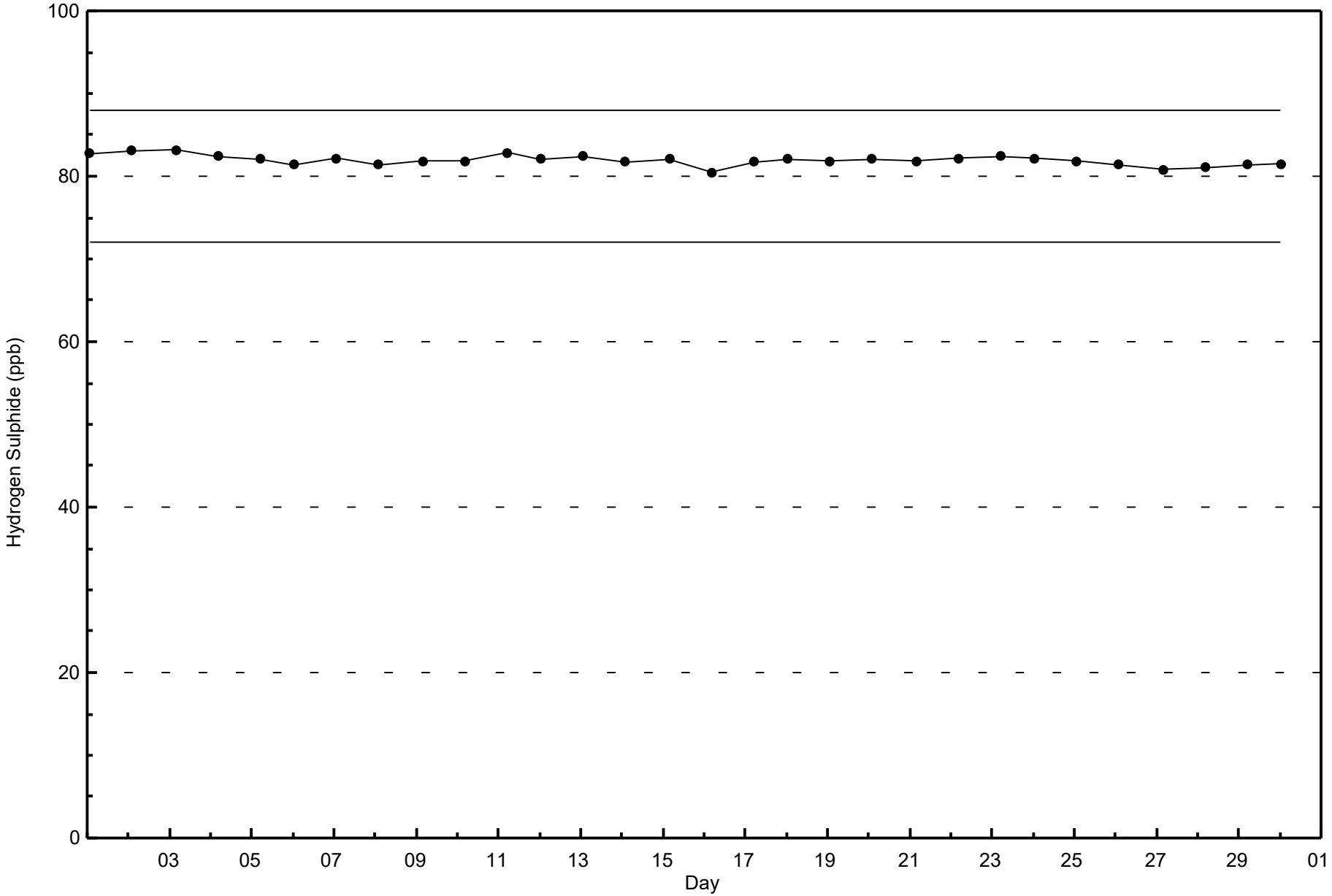


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Monday Creek - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Monday Creek - June 2026

Maximum Value: 3.4 ppb on Jun 20 05:00

Maximum Daily Average: 0.7 ppb on Jun 7

Minimum Value: 0.0 ppb on Jun 1 01:00

Minimum Daily Average: 0.0 ppb on Jun 2

Maximum Diurnal Average: 0.4 ppb at hour 5

Minimum Diurnal Average: 0.0 ppb at hour 18

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} = 0.4 P_{99} = 1.9

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-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	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-Jun	Z	0.0	0.0	0.0	0.0	0.1	0.2	0.0	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	0.0	0.0	0.0	0.0	0.2
4-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
5-Jun	0.0	0.0	Z	0.0	0.1	0.2	0.2	0.4	0.5	0.2	0.1	0.1	0.2	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.1	0.5
6-Jun	0.0	0.0	0.0	Z	0.2	0.9	1.9	1.3	0.3	0.4	0.2	0.2	0.7	1.5	1.0	0.7	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.9
7-Jun	0.8	2.4	0.1	0.1	Z	1.6	0.8	1.5	3.2	1.9	2.4	0.2	0.1	0.2	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	3.2
8-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.3	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.5	1.7	0.7	1.3	1.6	1.1	0.3	1.7
9-Jun	Z	0.0	0.1	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8
10-Jun	0.0	Z	0.0	0.0	0.0	0.2	0.1	0.2	0.6	1.0	0.5	0.2	0.2	0.1	0.0	0.0	0.2	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.2	1.0
11-Jun	0.0	0.0	Z	0.0	0.0	0.2	0.7	1.3	1.9	0.9	0.8	0.4	0.4	0.3	0.3	0.2	0.4	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.4	1.9
12-Jun	0.0	0.0	0.0	Z	0.1	0.4	0.6	0.4	0.2	0.1	0.2	0.4	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6
13-Jun	0.0	0.0	0.0	0.0	Z	0.2	0.3	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
14-Jun	0.0	0.0	0.0	0.0	0.1	Z	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
15-Jun	Z	0.1	0.0	0.1	0.3	0.8	0.4	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	0.0	0.0	0.1	0.8
16-Jun	0.2	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.3
17-Jun	0.1	0.1	Z	0.4	0.7	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	0.0	0.0	0.0	0.0	0.0	0.1	0.7
18-Jun	0.0	0.0	0.0	Z	0.0	0.0	1.3	0.4	0.0	0.0	0.1	0.3	0.1	0.0	0.0	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.1	1.3
19-Jun	0.1	0.1	0.0	0.0	Z	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5	0.1	0.5
20-Jun	1.4	1.6	2.2	0.4	3.4	Z	1.9	0.8	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.0	0.6	0.3	0.0	0.0	0.6	3.4
21-Jun	Z	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
22-Jun	0.0	Z	0.0	0.0	0.3	0.2	0.2	0.1	0.3	0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.3
23-Jun	0.0	0.5	Z	0.2	3.0	1.3	0.3	0.1	0.8	0.5	0.3	0.2	0.2	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.0
24-Jun	0.0	0.0	1.3	Z	0.0	0.4	0.2	0.4	0.3	1.3	1.0	0.3	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.3
25-Jun	0.0	0.0	0.0	0.0	Z	0.3	0.3	0.2	0.1	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.3
26-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.2	0.1	0.1	0.1	0.1	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	0.2
27-Jun	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1
28-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
29-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
30-Jun	0.0	0.3	0.1	Z	0.6	0.5	0.3	0.3	0.5	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.6
	0.1	0.2	0.2	0.1	0.4	0.3	0.4	0.3	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	1.4	2.4	2.2	0.8	3.4	1.6	1.9	1.5	3.2	1.9	2.4	0.4	0.7	1.5	1.0	0.7	0.4	0.3	0.5	1.7	0.7	1.3	1.6	1.1	Diurnal Maximum	

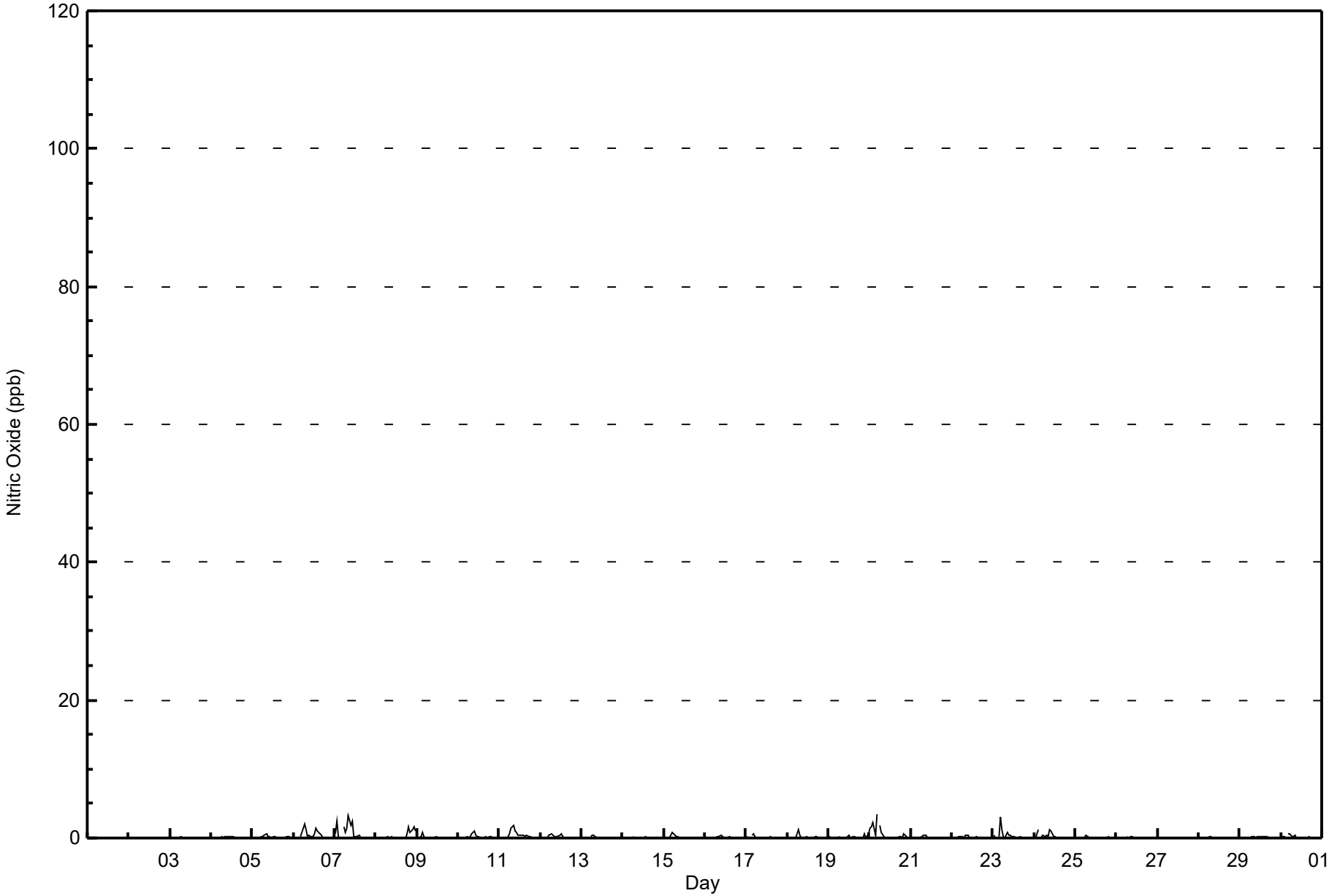
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Monday Creek - June 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

Monday Creek - June 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	64	63	41	31	35	43	24	23	40	17	28	56	69	48	52	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	50	64	63	41	31	35	43	24	23	40	17	28	56	69	48	52	684

Total Number of Valid Hours: 684

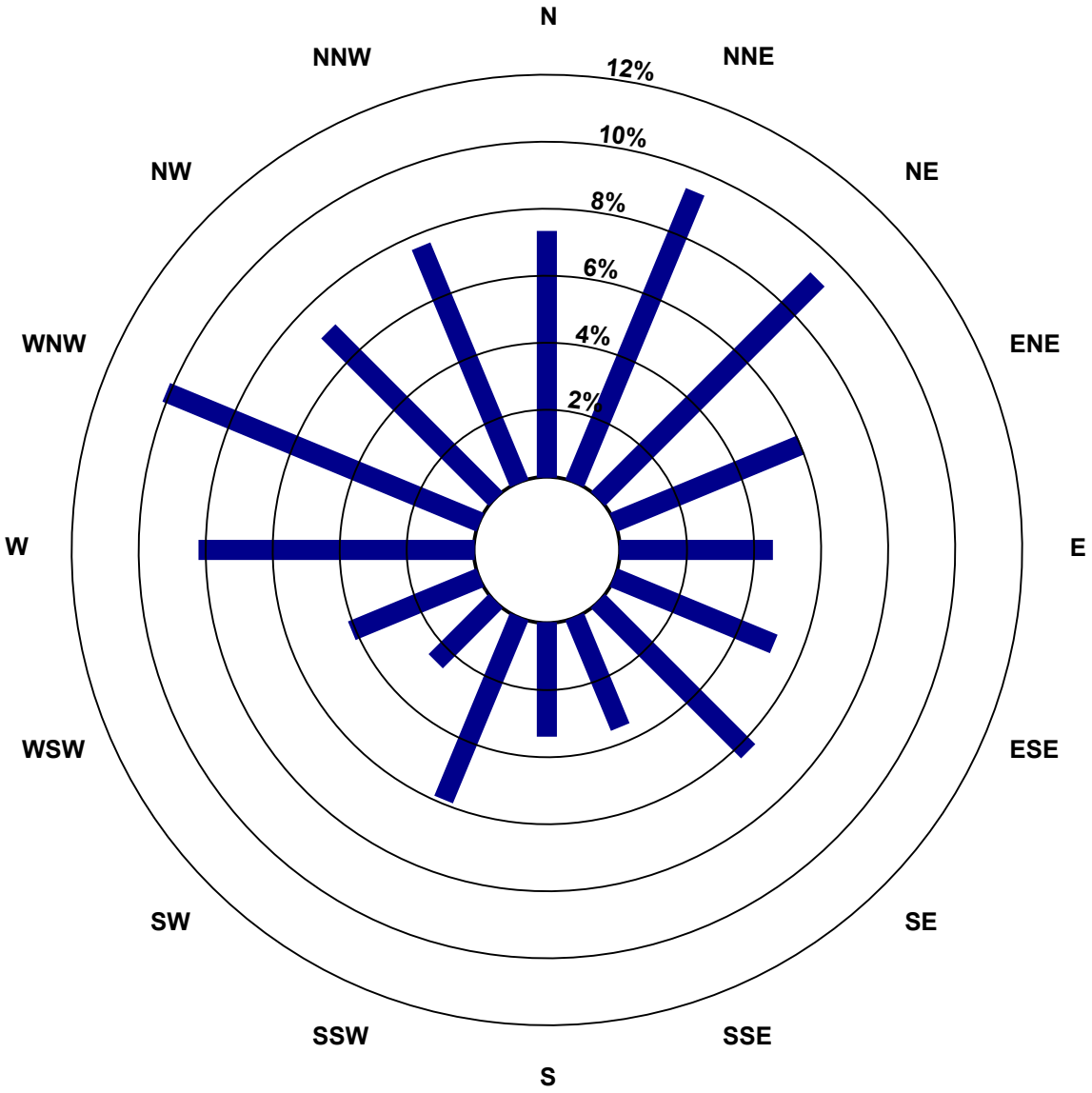
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Monday Creek



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

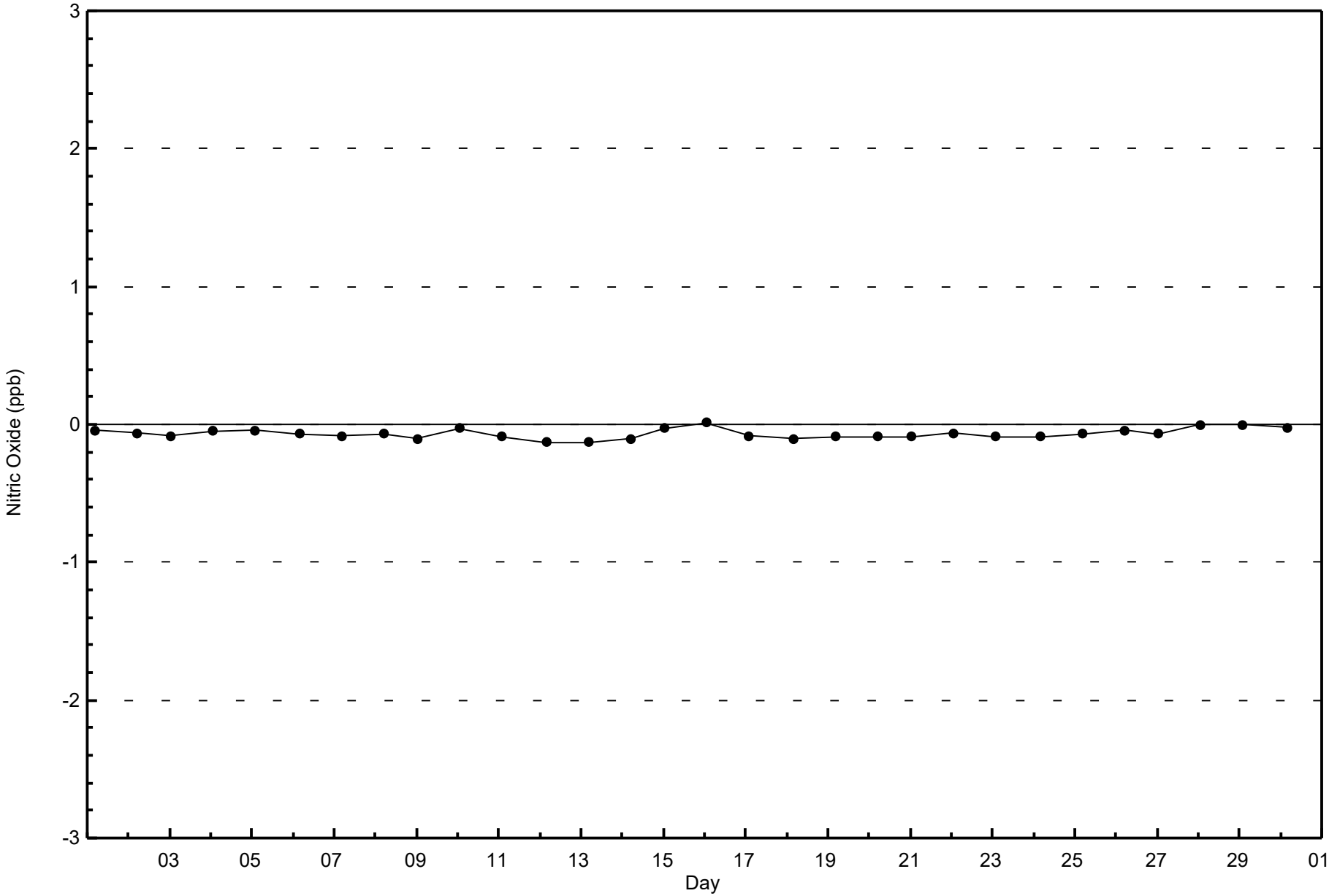
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Monday Creek - June 2026

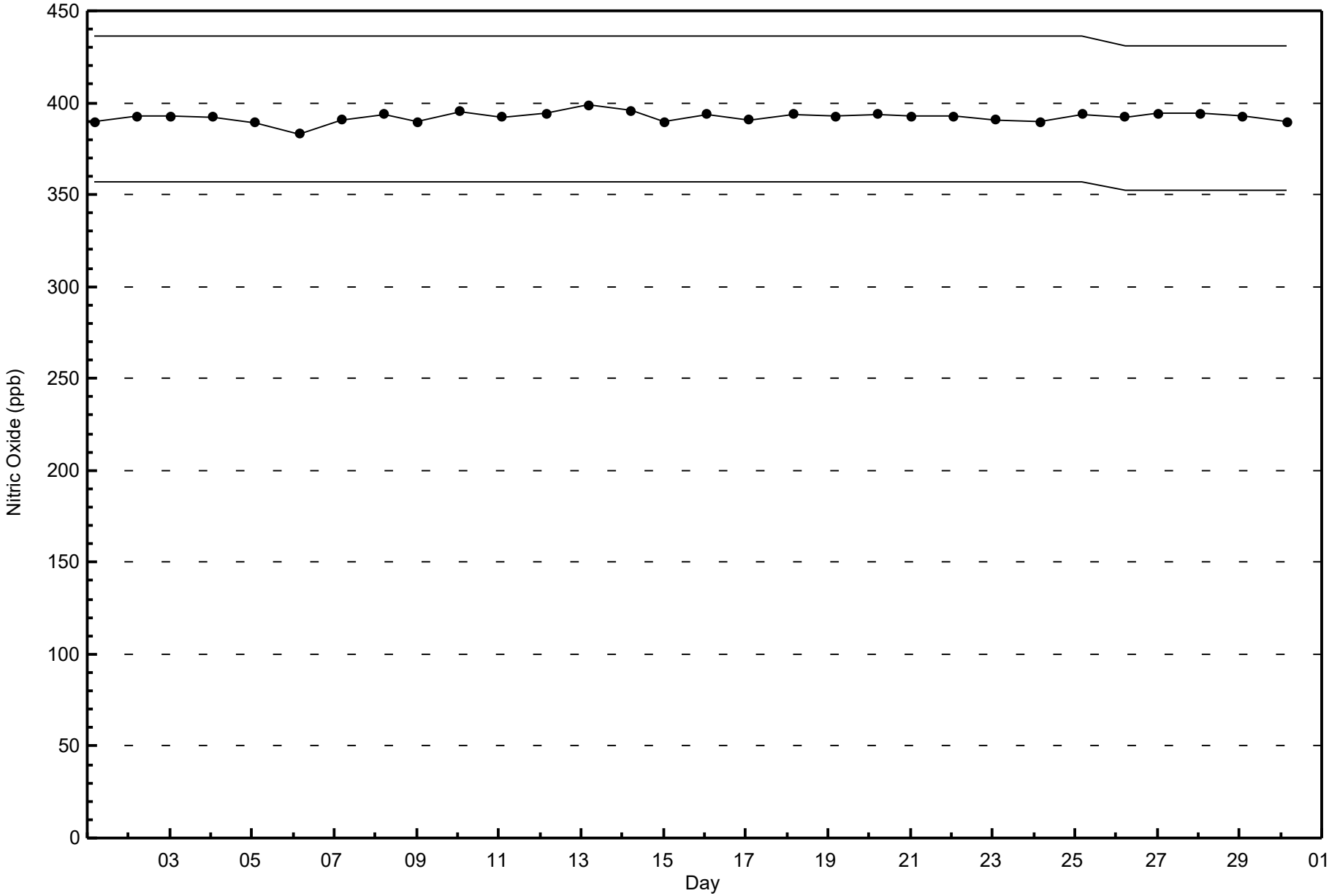


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Monday Creek - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Monday Creek - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 12.5 ppb on Jun 8 23:00 Maximum Daily Average: 2.6 ppb on Jun 8

Minimum Value: 0.1 ppb on Jun 1 22:00 Minimum Daily Average: 0.3 ppb on Jun 2
Maximum Diurnal Average: 1.9 ppb at hour 22 Minimum Diurnal Average: 0.6 ppb at hour 16
Monthly Average: 1.19 ppb Percentiles: P_1 = 0.2 P_{10} = 0.3 Q_1 = 0.5 Median = 0.9 Q_3 = 1.4 P_{90} = 2.2 P_{99} = 5.0

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-Jun	0.8	0.5	0.5	0.3	Z	0.7	0.6	0.8	0.7	0.6	0.7	0.7	0.6	0.5	0.3	0.2	0.3	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.4	0.8
2-Jun	0.1	0.2	0.1	0.1	0.2	Z	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.9	0.9	0.3	0.9
3-Jun	Z	0.8	0.7	0.5	0.6	0.8	0.9	0.5	0.4	0.2	0.2	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.7	0.7	0.8	1.0	0.5	1.0
4-Jun	1.5	Z	1.3	1.5	1.0	1.3	2.0	1.4	1.5	1.3	1.2	0.9	1.0	1.0	1.0	1.1	1.1	0.8	0.8	1.5	1.4	1.7	1.6	2.0	1.3	2.0
5-Jun	2.3	1.8	Z	2.4	2.2	2.3	2.0	1.8	2.5	1.5	1.2	1.0	1.8	1.2	0.8	0.8	0.7	0.8	1.1	0.7	2.9	4.8	1.1	0.6	1.7	4.8
6-Jun	0.4	0.2	1.7	Z	3.5	4.6	6.5	3.1	0.9	1.5	1.2	0.7	1.5	3.5	2.6	1.9	1.8	1.2	0.6	0.7	0.5	0.8	2.0	2.2	1.9	6.5
7-Jun	5.0	4.0	3.1	2.7	Z	3.0	2.4	3.6	4.7	3.0	2.0	1.0	0.9	0.9	2.2	0.5	0.5	0.7	0.8	0.8	1.2	1.4	1.2	0.7	2.0	5.0
8-Jun	0.9	2.2	0.6	0.5	1.3	Z	2.2	3.4	1.2	2.0	0.7	0.3	0.3	0.5	0.4	0.4	0.3	0.2	1.8	5.2	3.4	11.2	12.5	8.0	2.6	12.5
9-Jun	Z	1.0	4.5	10.4	3.3	0.6	0.4	0.3	0.3	0.3	0.5	1.1	0.6	0.3	0.5	0.3	0.3	0.3	0.4	0.7	1.8	1.2	1.2	0.7	1.3	10.4
10-Jun	2.5	Z	0.9	2.0	0.8	2.5	0.8	1.7	3.1	2.8	2.2	0.9	1.0	1.0	1.0	0.5	1.0	0.8	1.3	1.6	0.8	0.6	0.9	0.4	1.4	3.1
11-Jun	0.8	1.5	Z	1.6	1.6	1.9	1.9	2.7	2.0	2.1	1.6	1.4	1.1	1.3	1.3	1.3	1.9	1.9	1.7	1.6	1.4	1.1	0.9	0.6	1.5	2.7
12-Jun	0.6	0.7	0.6	Z	1.3	1.4	1.4	1.1	1.0	0.8	0.8	1.3	1.7	1.4	0.7	0.6	0.6	0.5	0.6	0.6	0.4	0.6	0.7	0.7	0.9	1.7
13-Jun	1.5	1.1	0.7	0.6	Z	1.5	1.3	1.3	0.9	0.5	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	1.4	1.3	1.3	1.9	0.9	1.9
14-Jun	1.9	1.6	2.0	1.9	1.9	Z	1.3	0.7	0.7	0.8	0.9	0.7	0.6	0.6	0.5	0.7	0.6	0.5	0.7	0.8	0.9	0.8	2.4	2.3	1.1	2.4
15-Jun	Z	1.0	0.8	0.9	1.8	1.8	1.7	1.3	1.3	0.8	0.5	0.5	0.5	0.6	0.6	0.5	0.4	0.5	0.8	0.6	0.6	4.7	0.9	0.7	1.0	4.7
16-Jun	1.8	Z	1.6	1.4	1.3	1.8	1.5	1.7	2.1	2.2	1.3	0.8	0.7	0.7	0.9	0.5	0.5	0.5	0.7	0.6	1.7	0.7	1.0	1.1	1.2	2.2
17-Jun	1.8	2.8	Z	2.1	1.5	0.9	0.6	0.4	0.4	0.5	0.5	0.3	0.3	0.4	0.8	0.9	1.0	0.7	0.8	0.9	0.7	0.7	1.5	1.5	1.0	2.8
18-Jun	1.3	1.4	1.2	Z	1.1	0.9	2.2	0.7	0.5	0.4	0.7	0.8	0.4	0.5	0.2	0.3	1.1	2.6	2.4	1.5	1.8	1.4	2.8	3.4	1.3	3.4
19-Jun	4.1	3.6	0.7	0.5	Z	0.6	0.6	0.5	0.3	0.2	0.2	1.3	1.1	0.5	0.8	1.0	0.4	0.5	1.0	1.4	1.0	6.8	1.0	3.4	1.4	6.8
20-Jun	3.3	4.8	3.0	1.0	3.9	Z	2.2	1.5	0.5	0.3	0.4	0.4	0.8	0.5	0.5	0.6	0.9	1.8	2.3	0.9	3.7	2.4	1.4	0.7	1.6	4.8
21-Jun	Z	0.3	0.3	0.4	0.4	0.7	1.0	0.8	0.8	0.5	0.3	0.2	0.3	0.2	0.2	0.3	0.4	0.3	0.4	0.6	0.6	0.9	1.1	0.9	0.5	1.1
22-Jun	0.6	Z	0.9	1.2	2.9	1.5	1.0	0.6	0.9	1.0	0.5	0.5	0.2	0.3	0.6	0.5	0.6	0.2	0.5	1.2	0.9	1.1	2.2	1.1	0.9	2.9
23-Jun	0.9	2.1	Z	1.2	1.6	1.4	0.8	0.5	1.9	1.2	1.3	0.9	0.9	0.3	0.3	0.2	0.7	0.5	0.4	0.4	0.7	0.7	1.4	1.4	0.9	2.1
24-Jun	1.2	0.6	2.2	Z	1.1	2.6	1.3	1.9	1.6	4.1	4.5	1.9	1.1	0.4	0.5	0.7	0.8	0.7	0.8	0.9	1.1	0.8	1.0	1.0	1.4	4.5
25-Jun	1.1	1.7	2.6	2.1	Z	2.2	2.0	1.5	1.1	C	C	C	C	C	0.6	0.7	0.7	0.7	0.8	1.0	0.7	0.4	0.5	0.6	1.2	2.6
26-Jun	0.7	0.8	1.4	1.1	1.2	Z	1.4	0.7	0.9	0.9	0.7	0.7	0.7	0.8	0.6	0.7	0.7	0.5	0.5	0.5	0.9	2.2	1.8	0.9	0.9	2.2
27-Jun	Z	0.8	0.7	0.8	1.4	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.7	0.5	0.5	0.5	0.9	0.4	0.4	0.4	1.1	0.6	0.7	0.9	0.7	1.4
28-Jun	2.6	Z	0.6	1.5	0.8	1.2	1.1	1.0	0.6	0.5	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.4	0.3	0.3	0.4	1.2	2.0	1.8	0.9	2.6
29-Jun	1.6	4.7	Z	1.3	1.1	0.9	1.0	1.5	1.3	1.0	1.7	1.7	1.2	1.1	1.1	0.9	1.4	1.4	1.4	1.4	1.5	3.7	3.4	2.9	1.7	4.7
30-Jun	1.8	1.7	2.2	Z	1.4	1.1	1.6	1.9	2.1	1.0	1.0	1.3	1.1	1.1	1.3	1.1	1.5	1.2	1.0	0.8	0.8	0.6	1.3	0.8	1.3	2.2
	1.6	1.7	1.4	1.6	1.6	1.6	1.5	1.3	1.2	1.1	1.0	0.8	0.8	0.8	0.8	0.6	0.8	0.7	0.9	1.0	1.2	1.9	1.7	1.5	Diurnal Average	
	5.0	4.8	4.5	10.4	3.9	4.6	6.5	3.6	4.7	4.1	4.5	1.9	1.8	3.5	2.6	1.9	1.9	2.6	2.4	5.2	3.7	11.2	12.5	8.0	Diurnal Maximum	

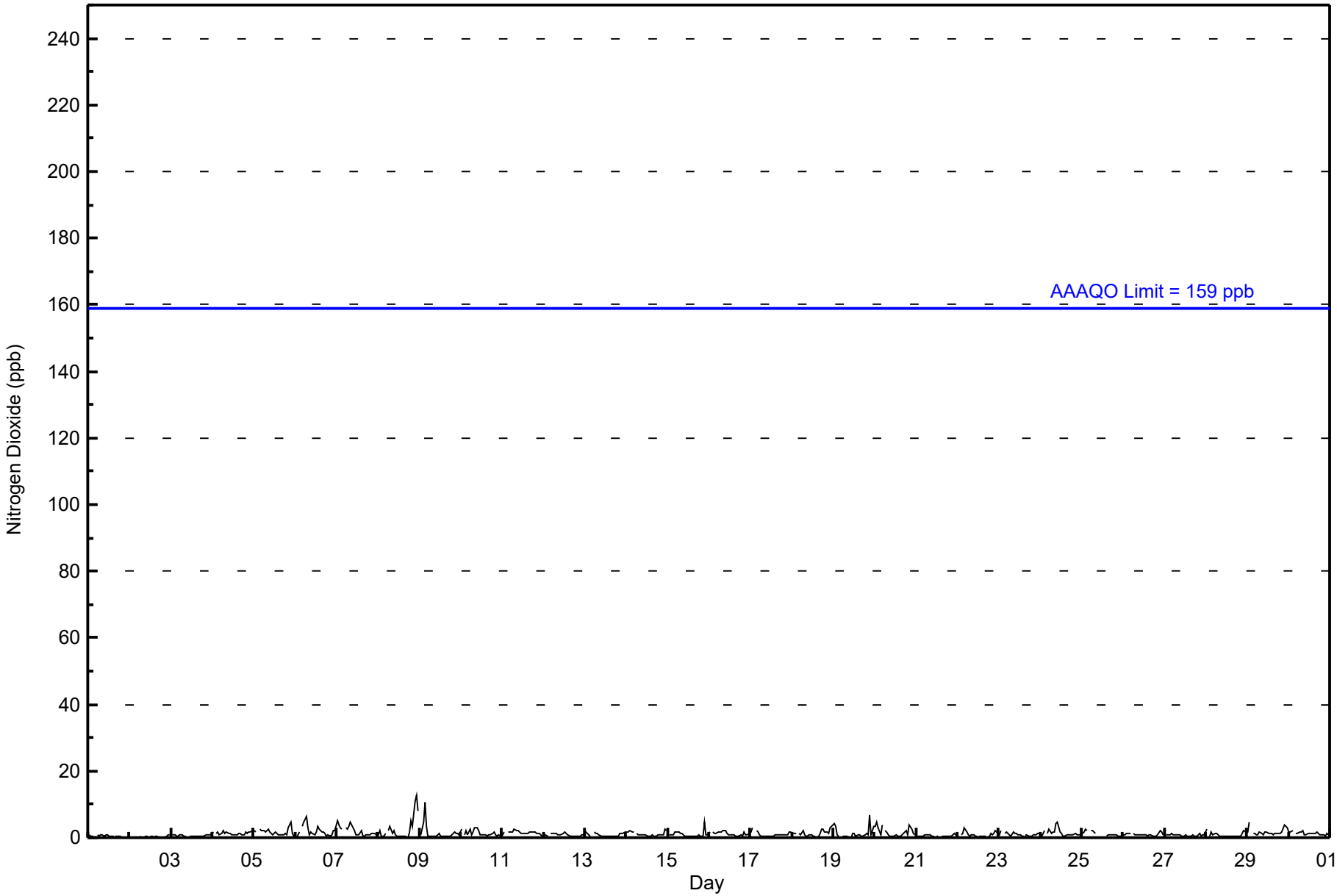
Z - zerospan C - Calibration
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Monday Creek - June 2026



Nitrogen Dioxide (NO_2) - ppb
Monday Creek - June 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

Monday Creek - June 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	64	63	41	31	35	43	24	23	40	17	28	56	69	48	52	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	50	64	63	41	31	35	43	24	23	40	17	28	56	69	48	52	684

Total Number of Valid Hours: 684

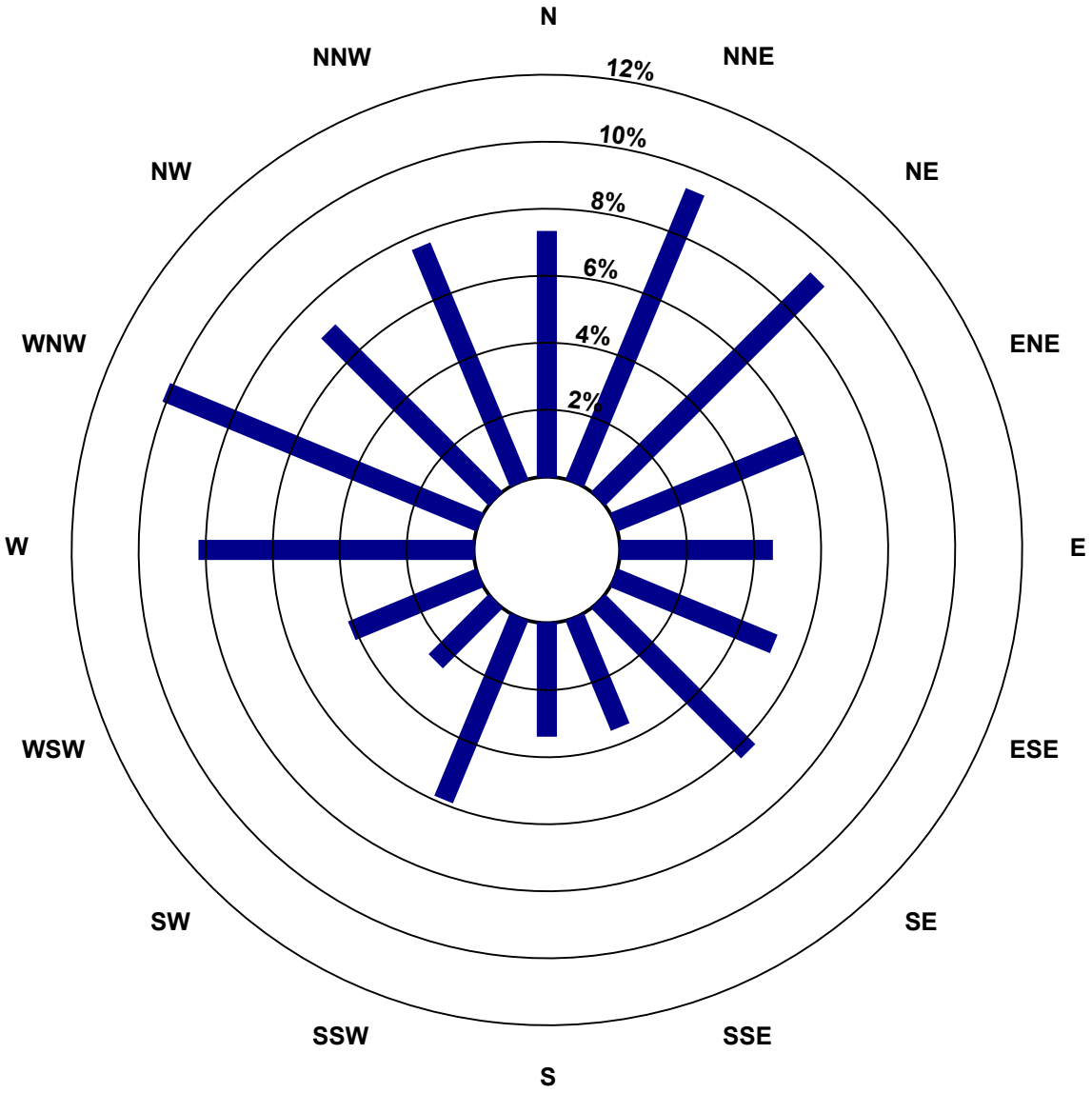
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Monday Creek



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

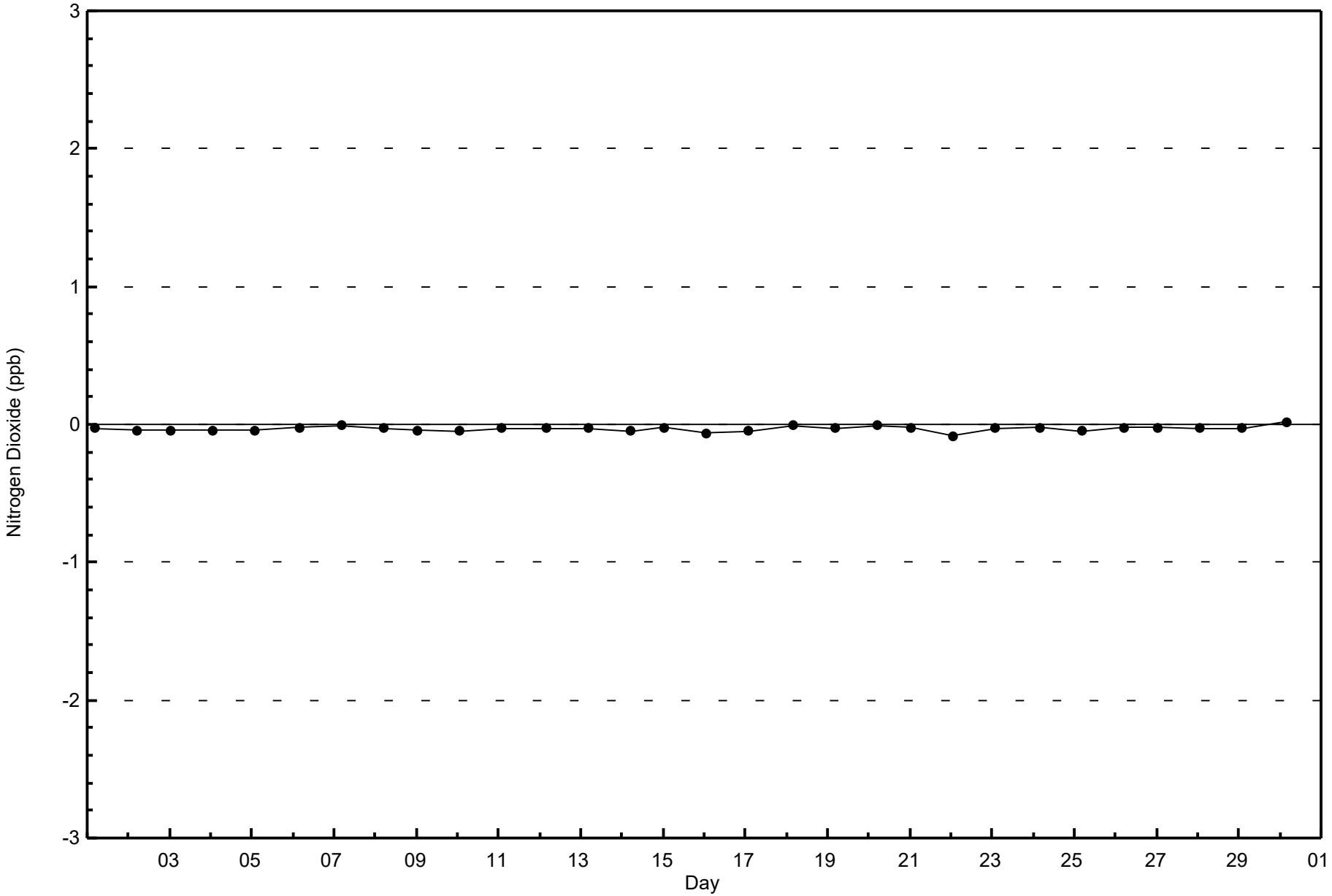
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Monday Creek - June 2026

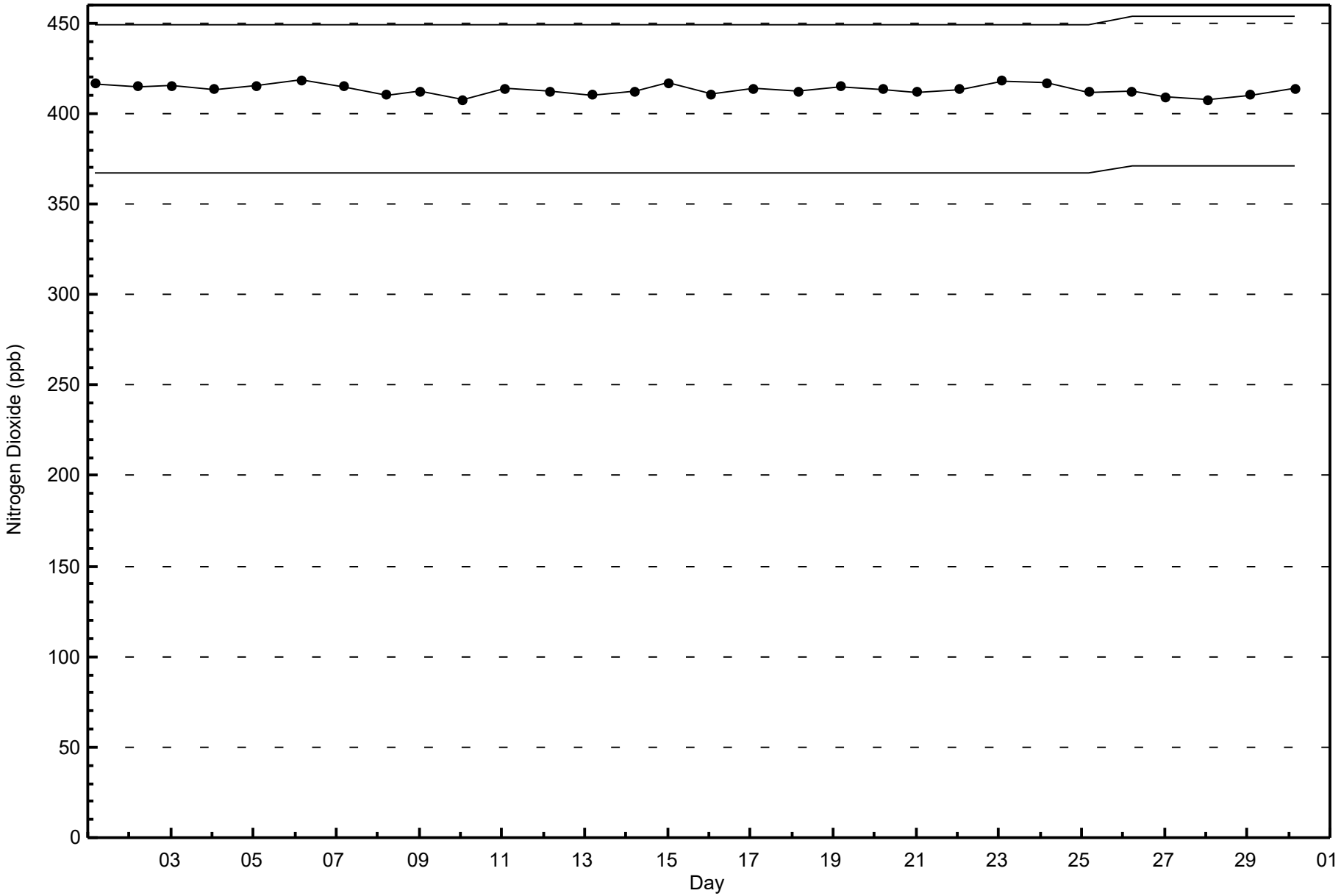


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Monday Creek - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Monday Creek - June 2026

Maximum Value: 14.1 ppb on Jun 8 23:00

Maximum Daily Average: 2.9 ppb on Jun 8

Minimum Value: 0.1 ppb on Jun 1 22:00

Minimum Daily Average: 0.3 ppb on Jun 2

Maximum Diurnal Average: 1.9 ppb at hour 5

Minimum Diurnal Average: 0.7 ppb at hour 16

Monthly Average: 1.35 ppb

Percentiles: P_1 = 0.2 P_{10} = 0.3 Q_1 = 0.6 Median = 0.9 Q_3 = 1.6 P_{90} = 2.6 P_{99} = 7.3

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-Jun	0.8	0.5	0.5	0.3	Z	0.7	0.6	0.8	0.7	0.6	0.7	0.8	0.6	0.5	0.3	0.2	0.3	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.4	0.8
2-Jun	0.1	0.2	0.1	0.1	0.2	Z	0.3	0.2	0.2	0.3	0.3	0.2	0.4	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.9	0.9	0.3	0.9
3-Jun	Z	0.8	0.7	0.5	0.6	0.9	1.1	0.5	0.5	0.2	0.2	0.5	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.6	0.8	0.7	0.8	1.0	0.6	1.1
4-Jun	1.5	Z	1.3	1.5	1.0	1.3	2.2	1.5	1.6	1.4	1.4	1.1	1.1	1.1	1.1	1.2	1.1	0.8	0.8	1.5	1.4	1.7	1.6	2.0	1.4	2.2
5-Jun	2.3	1.8	Z	2.4	2.3	2.5	2.2	2.2	3.0	1.7	1.3	1.1	2.0	1.4	0.8	0.9	0.8	0.8	1.1	0.7	3.1	5.1	1.1	0.6	1.8	5.1
6-Jun	0.4	0.2	1.7	Z	3.7	5.5	8.4	4.4	1.2	1.9	1.4	0.9	2.2	5.0	3.6	2.6	2.1	1.3	0.6	0.7	0.5	0.8	2.0	2.2	2.3	8.4
7-Jun	5.8	6.4	3.2	2.8	Z	4.6	3.2	5.1	7.9	4.9	4.4	1.2	1.0	1.1	2.6	0.6	0.5	0.7	0.8	0.8	1.2	1.4	1.2	0.7	2.7	7.9
8-Jun	0.9	2.2	0.6	0.5	1.3	Z	2.2	3.7	1.2	2.1	0.8	0.3	0.3	0.5	0.5	0.4	0.3	0.2	2.3	6.9	4.1	12.5	14.1	9.1	2.9	14.1
9-Jun	Z	1.0	4.6	11.2	3.4	0.6	0.4	0.3	0.3	0.3	0.5	1.3	0.6	0.3	0.5	0.3	0.3	0.3	0.4	0.7	1.8	1.2	1.2	0.7	1.4	11.2
10-Jun	2.5	Z	0.9	2.0	0.8	2.7	0.9	1.9	3.7	3.8	2.7	1.1	1.2	1.1	1.0	0.5	1.2	0.9	1.5	1.8	0.8	0.6	0.9	0.4	1.5	3.8
11-Jun	0.8	1.5	Z	1.6	1.6	2.1	2.6	4.0	3.9	3.0	2.4	1.8	1.5	1.6	1.6	1.5	2.3	2.2	1.8	1.7	1.4	1.1	0.9	0.6	1.9	4.0
12-Jun	0.6	0.7	0.6	Z	1.4	1.8	2.0	1.5	1.2	0.9	1.0	1.7	2.2	1.7	0.8	0.6	0.6	0.5	0.6	0.6	0.4	0.6	0.7	0.7	1.0	2.2
13-Jun	1.5	1.1	0.7	0.6	Z	1.7	1.6	1.7	1.2	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	1.4	1.3	1.3	1.9	0.9	1.9
14-Jun	1.9	1.6	2.0	1.9	2.0	Z	1.5	0.7	0.7	0.8	0.9	0.7	0.6	0.8	0.5	0.8	0.6	0.5	0.7	0.8	0.9	0.8	2.4	2.3	1.2	2.4
15-Jun	Z	1.1	0.8	1.0	2.1	2.6	2.1	1.5	1.6	0.9	0.5	0.5	0.5	0.6	0.6	0.5	0.4	0.5	0.8	0.6	0.6	4.7	0.9	0.7	1.1	4.7
16-Jun	2.0	Z	1.6	1.4	1.3	1.8	1.6	1.8	2.4	2.5	1.5	0.9	0.8	0.8	1.0	0.6	0.5	0.6	0.8	0.7	1.7	0.7	1.0	1.2	1.3	2.5
17-Jun	1.9	2.9	Z	2.5	2.2	1.1	0.7	0.5	0.4	0.6	0.5	0.3	0.3	0.4	0.9	0.9	1.0	0.7	0.8	0.9	0.7	0.7	1.5	1.5	1.0	2.9
18-Jun	1.3	1.4	1.2	Z	1.1	0.9	3.5	1.1	0.5	0.4	0.8	1.1	0.5	0.5	0.2	0.3	1.3	2.8	2.5	1.5	1.8	1.4	2.8	3.5	1.4	3.5
19-Jun	4.2	3.7	0.7	0.5	Z	0.7	0.7	0.5	0.3	0.2	0.2	1.5	1.4	0.5	1.1	1.2	0.4	0.5	1.0	1.4	1.0	7.3	1.0	3.9	1.5	7.3
20-Jun	4.7	6.4	5.2	1.4	7.3	Z	4.1	2.3	0.6	0.4	0.4	0.5	0.9	0.6	0.5	0.6	1.0	1.9	2.5	0.9	4.3	2.7	1.4	0.7	2.2	7.3
21-Jun	Z	0.3	0.3	0.4	0.4	0.8	1.3	1.1	1.1	0.8	0.3	0.2	0.3	0.2	0.2	0.3	0.4	0.3	0.4	0.6	0.6	0.9	1.1	0.9	0.6	1.3
22-Jun	0.6	Z	0.9	1.2	3.2	1.7	1.2	0.7	1.2	1.3	0.5	0.5	0.2	0.3	0.7	0.5	0.7	0.2	0.5	1.3	0.9	1.1	2.2	1.1	1.0	3.2
23-Jun	0.9	2.6	Z	1.4	4.6	2.7	1.1	0.6	2.7	1.7	1.6	1.1	1.1	0.3	0.3	0.2	0.9	0.6	0.4	0.4	0.7	0.7	1.4	1.4	1.3	4.6
24-Jun	1.2	0.6	3.5	Z	1.1	3.0	1.5	2.3	1.9	5.4	5.5	2.2	1.2	0.4	0.5	0.8	0.9	0.7	0.8	0.9	1.1	0.8	1.0	1.0	1.7	5.5
25-Jun	1.1	1.7	2.6	2.1	Z	2.5	2.3	1.7	1.2	C	C	C	C	C	0.6	0.7	0.7	0.7	0.8	1.1	0.7	0.4	0.5	0.6	1.2	2.6
26-Jun	0.7	0.8	1.4	1.1	1.2	Z	1.6	0.8	1.0	1.0	0.8	0.7	0.7	0.9	0.6	0.8	0.7	0.5	0.5	0.5	0.9	2.2	1.8	0.9	1.0	2.2
27-Jun	Z	0.8	0.7	0.8	1.4	1.1	0.9	0.8	0.8	0.7	0.6	0.6	0.7	0.5	0.5	0.5	0.9	0.4	0.4	0.4	1.1	0.6	0.7	0.9	0.7	1.4
28-Jun	2.6	Z	0.6	1.5	0.8	1.2	1.2	1.1	0.7	0.5	0.7	0.5	0.5	0.6	0.7	0.6	0.6	0.4	0.3	0.3	0.4	1.2	2.0	1.8	0.9	2.6
29-Jun	1.6	4.7	Z	1.3	1.1	0.9	1.0	1.6	1.4	1.1	1.9	1.9	1.3	1.2	1.2	1.0	1.5	1.5	1.4	1.4	1.5	3.7	3.4	2.9	1.8	4.7
30-Jun	1.8	2.0	2.3	Z	2.0	1.6	1.9	2.2	2.6	1.1	1.1	1.4	1.2	1.1	1.3	1.2	1.6	1.3	1.1	0.8	0.8	0.6	1.3	0.8	1.4	2.6
	1.7	1.9	1.6	1.7	1.9	1.9	1.9	1.6	1.6	1.4	1.2	0.9	0.9	0.9	0.8	0.7	0.8	0.8	0.9	1.0	1.2	1.9	1.8	1.6	Diurnal Average	
	5.8	6.4	5.2	11.2	7.3	5.5	8.4	5.1	7.9	5.4	5.5	2.2	2.2	5.0	3.6	2.6	2.3	2.8	2.5	6.9	4.3	12.5	14.1	9.1	Diurnal Maximum	

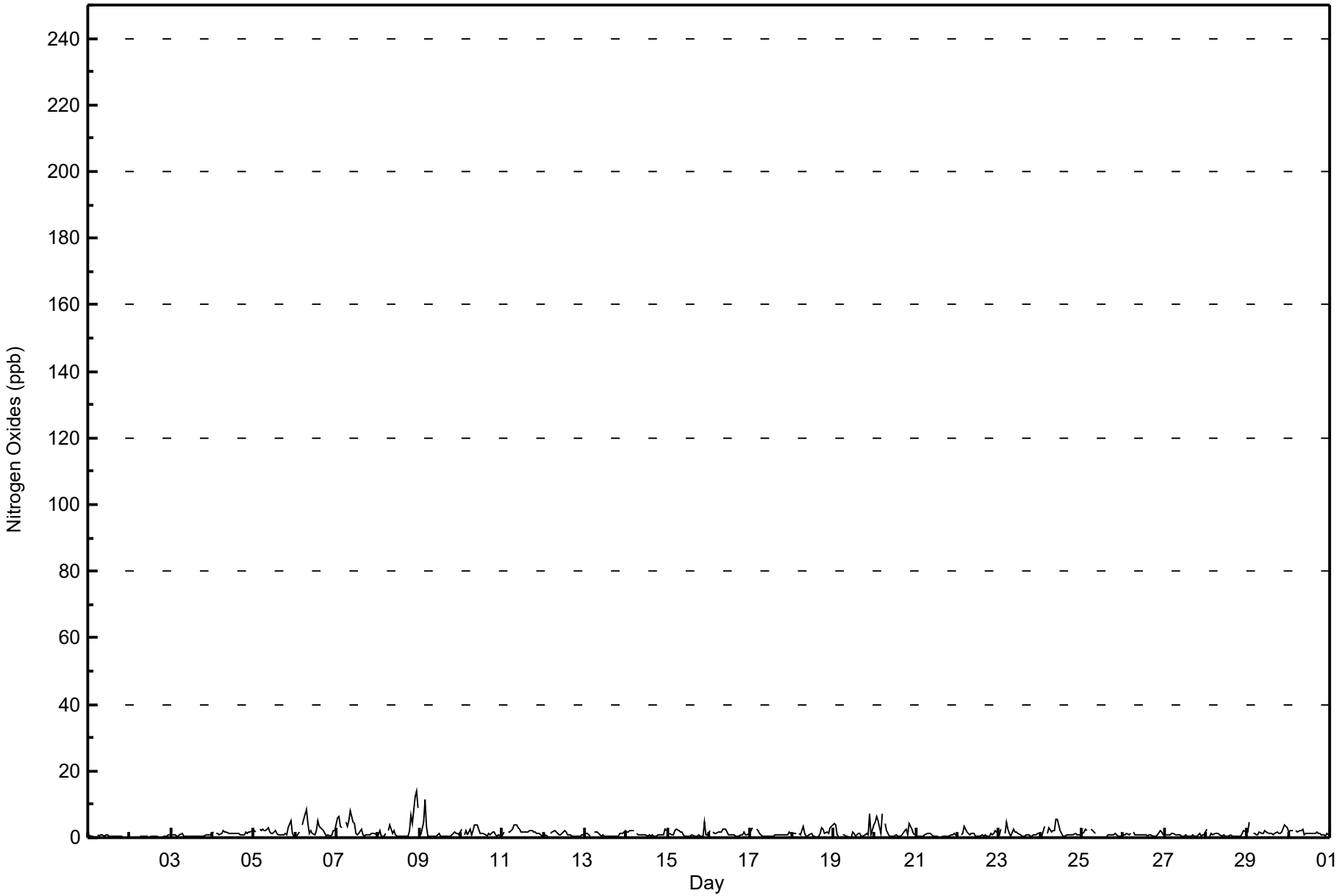
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Monday Creek - June 2026



Nitrogen Oxides (NO_X) - ppb
Monday Creek - June 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

Monday Creek - June 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	64	63	41	31	35	43	24	23	40	17	28	56	69	48	52	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	50	64	63	41	31	35	43	24	23	40	17	28	56	69	48	52	684

Total Number of Valid Hours: 684

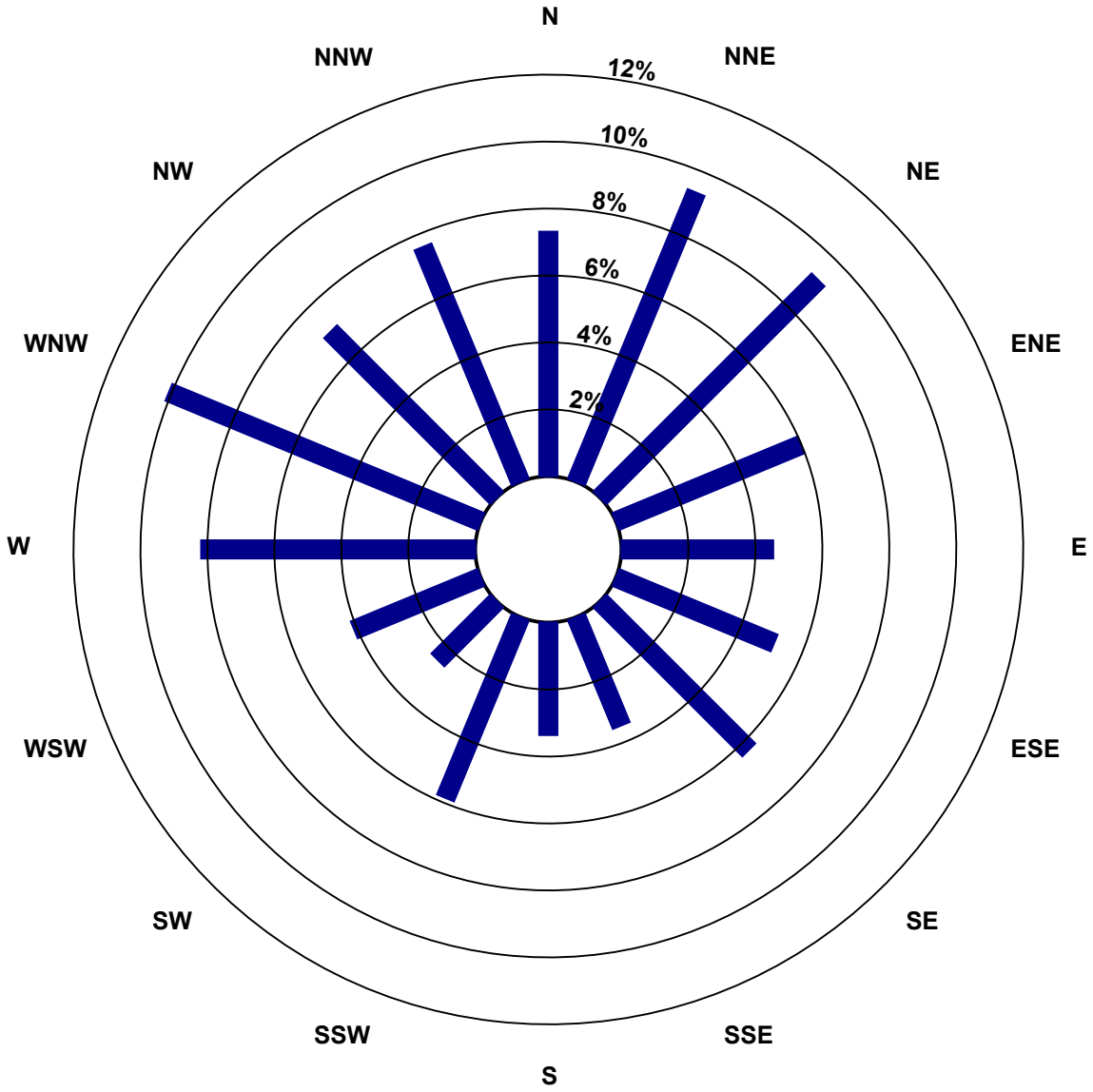
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Monday Creek



Classes (ppb)

- 0 - 20
- 21 - 40
- 11 - 80
- 81 - 159
- > 159

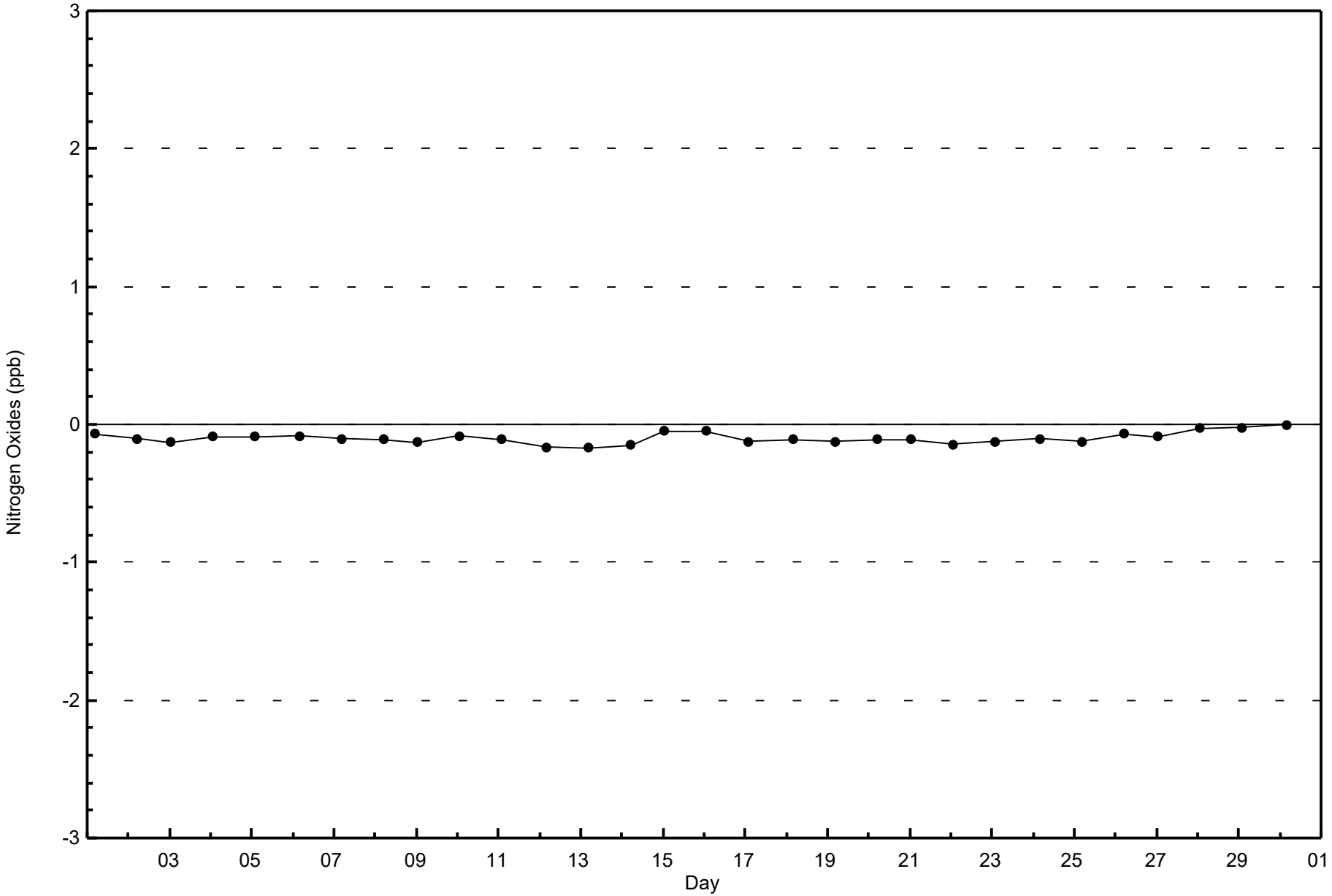
Total Number of Valid Hours: 684

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Monday Creek - June 2026

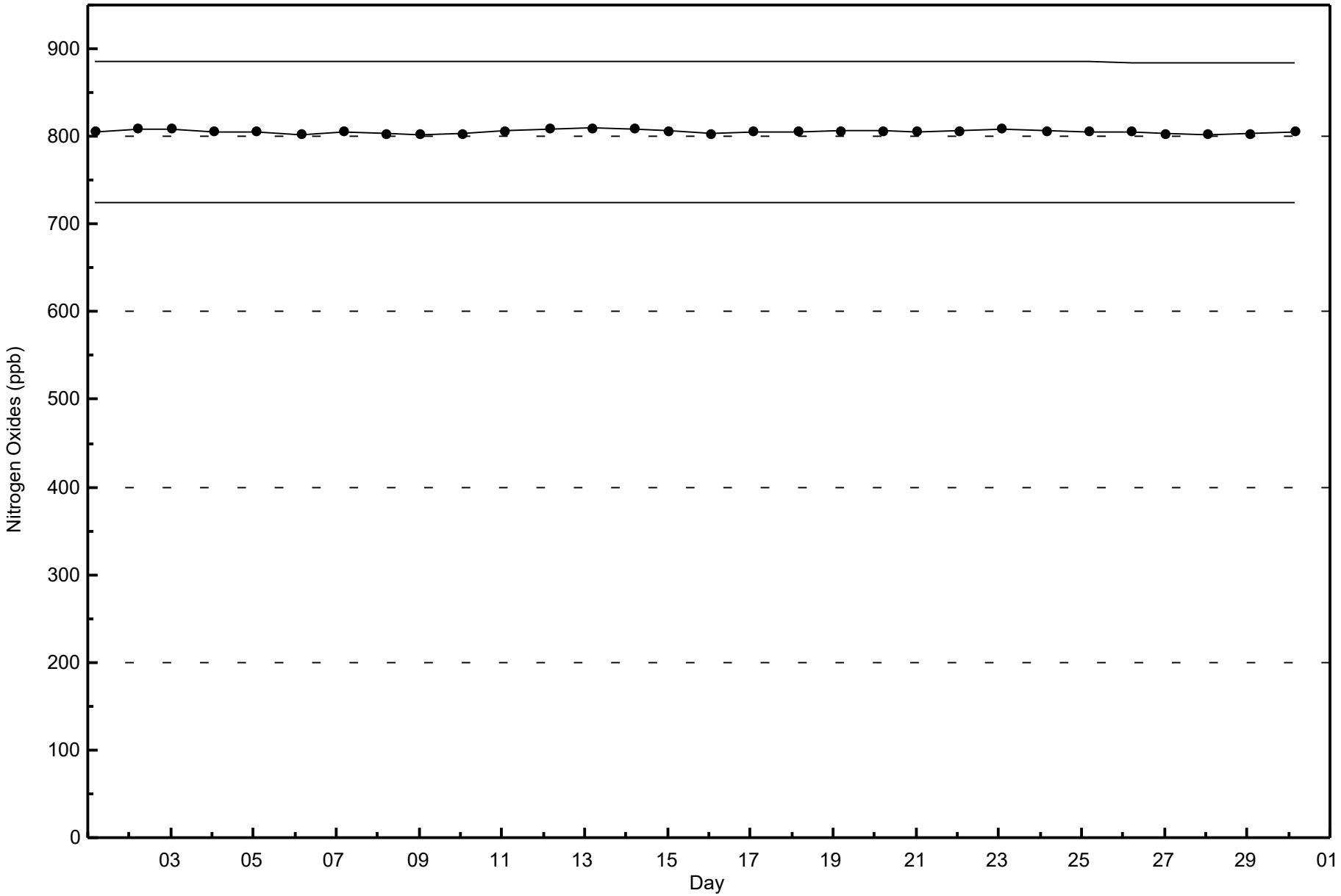


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Monday Creek - June 2026



Maximum Value: 27.7 C on Jun 28 17:00

Maximum Daily Average: 21.9 C on Jun 28

Minimum Value: 3.5 C on Jun 13 04:00

Minimum Daily Average: 8.2 C on Jun 2

Maximum Diurnal Average: 19.1 C at hour 16

Minimum Diurnal Average: 9.6 C at hour 4

Monthly Average: 14.94 C

Percentiles: P_1 = 5.5 P_{10} = 8.6 Q_1 = 10.8 Median = 14.3 Q_3 = 18.3 P_{90} = 22.6 P_{99} = 26.9

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

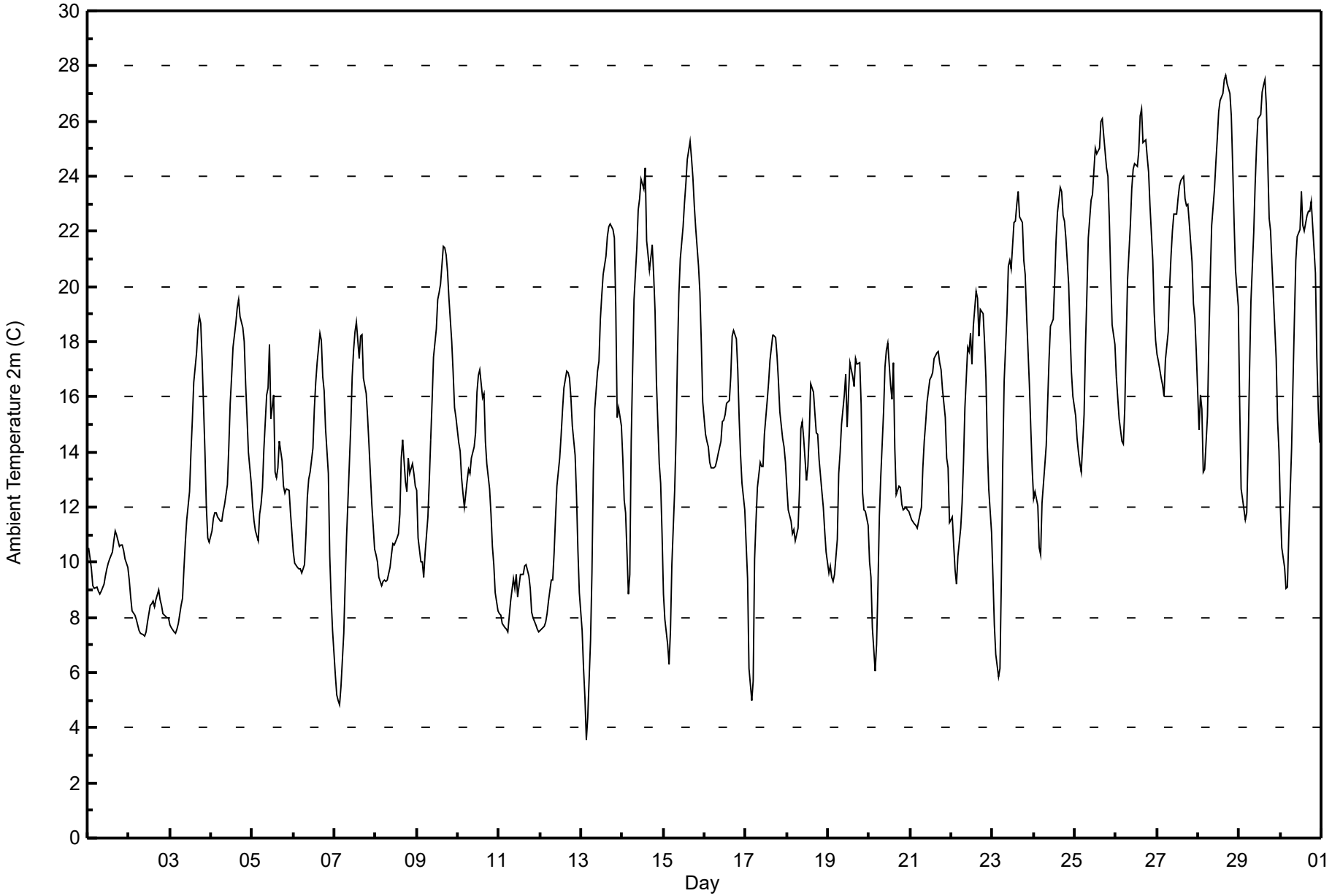
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	10.5	10.2	9.7	9.2	9.1	9.1	9.0	8.8	8.9	9.2	9.5	9.8	10.0	10.1	10.4	10.8	11.1	11.0	10.6	10.6	10.6	10.4	10.1	9.8	9.9	11.1
2-Jun	9.4	8.8	8.2	8.1	7.9	7.8	7.5	7.4	7.4	7.3	7.5	7.8	8.4	8.5	8.6	8.4	8.6	9.0	8.6	8.4	8.1	8.0	8.0	8.0	8.2	9.4
3-Jun	7.8	7.6	7.5	7.4	7.6	7.8	8.4	8.7	9.7	10.7	11.6	12.5	14.0	15.2	16.5	17.6	18.5	18.9	18.7	17.3	14.0	12.0	10.9	10.7	12.1	18.9
4-Jun	11.2	11.6	11.8	11.8	11.6	11.5	11.5	11.9	12.1	12.8	14.2	15.7	16.7	17.8	18.6	19.2	19.5	18.9	18.5	18.0	16.5	15.2	14.0	12.9	14.7	19.5
5-Jun	12.0	11.5	11.1	10.8	11.7	12.1	12.7	14.1	16.1	16.3	17.9	15.2	16.1	13.3	13.1	13.4	14.4	13.7	12.8	12.5	12.7	12.6	11.8	11.1	13.3	17.9
6-Jun	10.4	10.0	9.8	9.7	9.8	9.6	9.9	11.0	12.4	13.0	13.2	14.2	15.6	16.5	17.2	18.3	18.0	16.7	16.2	14.9	13.2	10.2	8.7	7.5	12.8	18.3
7-Jun	5.9	5.2	5.0	4.8	5.5	7.4	9.2	10.9	12.3	15.0	16.7	17.7	18.3	18.7	17.4	18.2	18.2	16.7	16.1	15.2	14.2	13.2	12.1	10.5	12.7	18.7
8-Jun	10.2	10.0	9.5	9.2	9.3	9.4	9.3	9.4	9.8	10.3	10.7	10.6	10.9	11.0	11.7	13.8	14.4	12.9	12.5	13.8	13.2	13.6	13.2	12.7	11.3	14.4
9-Jun	12.6	10.9	10.0	10.0	9.4	10.3	11.6	13.0	14.4	15.8	17.4	18.4	19.5	19.8	20.1	21.5	21.4	21.1	20.6	19.6	18.0	16.9	15.6	15.2	16.0	21.5
10-Jun	14.3	14.0	13.0	12.5	12.0	13.0	13.4	13.2	13.8	14.2	14.7	16.2	16.8	17.0	16.0	16.1	14.4	13.6	12.7	11.8	10.6	9.9	8.9	8.2	13.3	17.0
11-Jun	8.1	8.1	7.8	7.6	7.6	7.5	8.0	8.6	9.4	9.0	9.5	8.7	9.5	9.6	9.6	9.9	9.9	9.5	9.0	8.2	8.0	7.7	7.6	7.4	8.6	9.9
12-Jun	7.5	7.6	7.7	7.8	8.1	8.6	9.4	9.4	10.3	11.6	12.8	13.8	14.6	15.5	16.3	16.9	16.9	16.7	15.9	15.0	13.9	12.4	10.4	8.9	12.0	16.9
13-Jun	7.5	6.2	5.1	3.5	4.4	7.2	9.6	13.3	15.6	16.9	17.3	18.8	19.7	20.4	21.1	21.8	22.2	22.3	22.1	21.8	19.2	15.3	15.6	15.0	15.1	22.3
14-Jun	13.8	12.3	11.8	8.9	9.6	14.4	17.0	19.5	21.4	22.8	23.2	23.9	23.5	24.3	21.6	21.2	20.6	21.5	20.4	19.1	16.5	13.6	12.9	11.0	17.7	24.3
15-Jun	8.8	7.9	7.0	6.3	7.5	9.9	12.6	14.6	17.5	19.7	21.0	22.2	23.0	23.8	24.6	25.3	24.7	24.0	22.9	22.1	20.7	19.8	18.0	15.8	17.5	25.3
16-Jun	14.7	14.4	14.2	13.6	13.4	13.4	13.5	13.7	13.9	14.4	15.1	15.2	15.4	15.8	15.8	16.8	18.2	18.4	18.1	17.0	15.2	13.9	12.8	11.9	14.9	18.4
17-Jun	10.6	9.4	6.1	5.0	5.7	10.1	11.5	12.7	13.6	13.5	13.5	14.6	15.9	16.5	17.3	17.8	18.2	18.1	17.5	16.6	15.5	14.5	14.2	13.6	13.4	18.2
18-Jun	12.7	11.9	11.5	11.0	11.2	10.8	11.2	12.6	14.8	15.1	14.5	13.0	13.5	14.7	16.5	16.2	15.4	14.7	14.6	13.7	12.6	12.0	11.1	10.4	13.2	16.5
19-Jun	9.6	9.9	9.5	9.3	9.6	10.8	13.2	14.0	15.0	16.1	16.8	14.9	16.1	17.2	16.7	16.4	17.4	17.2	17.2	15.7	12.5	11.9	11.9	11.3	13.8	17.4
20-Jun	10.0	9.4	7.6	6.1	7.0	9.2	11.7	13.1	15.4	17.1	17.7	17.9	16.4	15.9	17.3	14.1	12.5	12.8	12.7	12.1	11.9	12.0	11.9	11.9	12.7	17.9
21-Jun	11.7	11.5	11.4	11.3	11.2	11.5	12.0	13.4	14.4	15.0	15.8	16.6	16.7	16.9	17.4	17.6	17.6	17.2	17.0	16.2	15.3	13.8	13.4	11.4	14.4	17.6
22-Jun	11.6	10.6	9.7	9.2	10.2	11.2	12.1	13.6	15.6	17.8	17.6	18.3	17.2	18.5	19.8	19.6	18.2	19.2	19.0	18.0	16.7	14.2	12.7	11.1	15.1	19.8
23-Jun	9.5	7.7	6.7	5.9	6.1	9.4	13.6	16.6	19.0	20.7	20.9	20.7	22.3	22.4	23.0	23.5	22.5	22.3	21.0	20.4	19.0	16.4	14.8	13.4	16.6	23.5
24-Jun	12.3	12.5	12.0	10.5	10.3	12.2	13.5	14.2	15.8	17.3	18.5	18.8	20.1	21.6	22.7	23.6	23.4	22.6	22.4	21.8	20.1	18.3	16.9	16.0	17.4	23.6
25-Jun	15.3	14.5	14.0	13.6	13.3	15.3	17.8	19.7	21.7	23.1	23.3	24.2	25.0	24.8	25.0	26.0	26.1	25.5	24.3	24.0	22.4	20.4	18.6	17.9	20.7	26.1
26-Jun	16.7	16.0	15.2	14.4	14.3	15.6	18.0	20.2	22.2	23.5	24.2	24.5	24.3	24.9	26.2	26.4	25.2	25.3	24.7	24.2	22.9	21.0	19.1	18.1	21.1	26.4
27-Jun	17.5	17.3	16.7	16.4	16.0	17.4	18.4	20.0	21.1	22.0	22.6	22.6	23.2	23.6	23.9	24.0	23.2	22.9	23.0	22.3	20.9	19.4	18.9	17.6	20.4	24.0
28-Jun	14.8	16.0	15.5	13.3	13.4	15.3	18.0	20.4	22.2	23.5	24.5	25.4	26.3	26.7	27.0	27.5	27.7	27.4	27.0	26.2	24.4	22.3	20.6	19.3	21.9	27.7
29-Jun	15.7	12.7	12.3	11.5	11.8	14.1	16.9	19.5	22.0	23.7	25.0	26.1	26.2	27.1	27.3	27.5	26.5	22.5	22.0	20.8	19.7	17.4	15.1	14.0	19.9	27.5
30-Jun	12.0	10.5	9.8	9.1	9.1	11.0	14.1	16.5	18.8	21.0	21.8	22.1	23.5	22.2	22.0	22.6	22.7	22.7	23.1	22.2	20.5	17.5	15.5	14.4	17.7	23.5
	11.5	10.9	10.2	9.6	9.8	11.1	12.5	13.8	15.2	16.3	17.0	17.3	18.0	18.3	18.7	19.1	18.9	18.5	18.0	17.3	16.0	14.5	13.5	12.6	Diurnal Average	
	17.5	17.3	16.7	16.4	16.0	17.4	18.4	20.4	22.2	23.7	25.0	26.1	26.3	27.1	27.3	27.5	27.7	27.4	27.0	26.2	24.4	22.3	20.6	19.3	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Monday Creek - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	145	20.14	20.14
10 - 20	439	60.97	81.11
> 20	136	18.89	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 - June 2026

Maximum Value: 100.0 % on Jun 5 22:00

Maximum Daily Average: 94.0 % on Jun 2

Minimum Value: 25.0 % on Jun 15 16:00

Minimum Daily Average: 47.2 % on Jun 25

Maximum Diurnal Average: 89.5 % at hour 4

Minimum Diurnal Average: 49.8 % at hour 16

Monthly Average: 67.36 %

Percentiles: P_1 = 28.8 P_{10} = 36.2 Q_1 = 49.9 Median = 69.4 Q_3 = 86.4 P_{90} = 95.6 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-Jun	98.6	99.3	98.4	98.5	97.2	96.2	95.9	96.4	94.9	95.6	92.8	92.7	92.6	92.7	89.9	87.3	85.3	85.0	86.3	85.0	83.0	82.8	83.5	83.9	91.4	99.3
2-Jun	85.2	89.2	94.3	94.6	94.0	94.3	95.9	97.6	97.5	97.5	95.7	94.2	90.5	90.1	89.5	93.8	93.3	89.9	92.5	95.6	98.2	98.5	97.9	97.2	94.0	98.5
3-Jun	98.2	98.8	98.3	99.2	98.5	97.4	91.7	89.9	83.0	77.3	75.7	73.9	70.4	67.7	64.4	61.1	58.9	57.4	59.5	67.0	78.4	86.8	91.9	94.3	80.8	99.2
4-Jun	92.6	90.1	88.5	86.7	86.8	86.9	85.0	83.2	81.7	76.9	70.5	65.1	61.6	57.1	53.5	49.9	50.3	54.3	57.4	60.7	67.2	73.3	79.4	83.6	72.6	92.6
5-Jun	86.7	89.3	91.5	94.3	93.4	93.4	90.2	85.0	76.3	74.9	67.8	87.7	84.3	94.8	95.4	91.5	86.5	93.3	99.0	97.9	99.2	100.0	OR	96.6	90.0	100.0
6-Jun	96.3	95.6	94.8	93.4	92.8	89.9	85.4	78.7	67.5	63.3	64.0	58.0	55.5	49.3	43.2	38.9	41.1	44.3	52.8	58.0	64.7	81.7	86.5	90.7	70.3	96.3
7-Jun	95.6	98.7	98.1	98.8	96.6	87.8	80.8	70.6	65.2	56.0	51.5	47.1	48.2	48.4	55.5	49.0	43.6	54.5	60.5	64.5	69.6	75.4	82.9	84.6	70.2	98.8
8-Jun	83.4	85.2	89.9	93.1	94.8	95.3	98.6	98.7	99.4	98.7	96.9	94.4	93.1	90.2	83.5	73.6	68.7	78.1	84.7	75.7	75.8	67.4	68.7	71.4	85.8	99.4
9-Jun	70.8	77.9	81.2	80.3	81.8	77.3	70.3	63.1	58.1	53.5	48.8	45.6	40.8	40.4	41.1	37.2	36.0	36.5	38.6	46.1	53.4	58.2	65.7	65.4	57.0	81.8
10-Jun	70.5	71.9	77.1	81.9	87.0	78.8	77.1	77.0	74.7	78.7	74.2	65.6	58.0	53.1	57.9	58.7	77.5	81.0	79.6	77.6	74.6	75.2	81.1	81.9	73.8	87.0
11-Jun	82.3	83.2	85.3	86.1	88.0	88.7	83.0	78.2	73.5	74.0	70.4	73.7	69.7	69.8	70.8	69.3	70.2	72.7	78.1	89.2	91.3	90.2	88.2	88.1	79.7	91.3
12-Jun	87.6	88.4	87.8	87.6	85.9	81.0	72.6	67.4	59.6	51.3	46.2	42.9	39.2	35.9	33.7	32.4	32.3	32.8	34.9	39.2	42.9	48.9	58.3	66.9	56.5	88.4
13-Jun	73.8	81.5	85.4	94.0	92.0	80.4	67.8	52.6	41.0	32.2	33.6	34.0	33.6	33.2	32.0	30.3	29.3	29.4	29.2	29.3	38.8	54.0	51.5	53.5	50.5	94.0
14-Jun	56.2	61.9	63.7	78.7	72.7	54.4	45.7	39.5	32.7	26.9	26.1	25.4	27.3	26.8	35.2	39.4	38.7	36.9	43.8	49.1	64.8	82.4	79.4	88.1	49.8	88.1
15-Jun	96.6	98.3	99.2	99.4	95.6	86.8	70.0	61.9	55.0	43.7	39.9	36.4	33.2	32.3	29.1	25.0	26.2	29.4	35.1	38.1	43.6	49.2	63.4	80.4	57.0	99.4
16-Jun	90.1	90.9	90.9	93.5	95.2	97.1	98.2	98.1	97.2	93.9	86.1	83.1	79.2	75.6	74.6	65.0	55.6	55.3	57.6	65.9	79.1	86.4	85.4	75.4	82.1	98.2
17-Jun	68.9	72.6	90.1	96.7	93.6	72.2	69.7	67.4	62.1	61.2	60.0	55.0	50.2	45.0	38.6	34.9	34.0	33.5	35.4	40.2	46.1	52.0	51.7	55.2	57.8	96.7
18-Jun	64.5	69.9	72.2	73.3	70.6	73.8	73.8	69.1	56.3	50.7	52.8	68.5	66.2	55.0	45.1	46.0	53.3	60.2	61.4	66.8	75.8	79.0	84.1	87.4	65.7	87.4
19-Jun	91.7	90.7	91.8	90.3	87.8	82.3	71.1	67.2	61.2	52.6	49.9	61.3	56.8	54.3	58.1	61.9	51.4	50.7	51.4	62.2	75.8	84.5	84.4	86.9	69.9	91.8
20-Jun	94.6	96.1	98.1	99.6	OR	92.6	81.2	78.1	65.4	54.0	49.9	50.6	60.4	62.2	54.6	77.4	94.7	95.6	95.4	97.0	98.5	97.3	97.6	98.0	82.1	99.6
21-Jun	97.7	98.0	97.6	97.7	98.2	97.4	94.5	87.4	80.0	70.7	60.5	53.5	54.2	52.6	47.6	46.5	45.7	48.1	50.3	54.7	59.5	67.7	68.2	80.2	71.2	98.2
22-Jun	75.6	78.0	83.8	89.8	82.5	78.7	77.4	71.1	64.3	52.8	52.3	47.4	52.0	45.9	41.0	44.0	51.0	43.0	44.7	52.7	57.0	66.3	72.8	80.3	62.7	89.8
23-Jun	88.3	95.3	98.1	98.9	98.8	90.3	71.5	59.8	48.6	40.2	39.4	39.4	34.7	34.4	33.0	32.4	35.8	36.7	43.1	45.2	49.0	60.4	66.0	73.0	58.9	98.9
24-Jun	77.2	75.3	77.2	86.4	87.9	82.2	79.0	79.5	71.2	63.4	57.3	59.7	51.5	42.0	38.9	36.0	37.4	41.9	43.3	44.1	50.6	58.1	63.2	66.0	61.2	87.9
25-Jun	68.3	70.0	73.0	75.5	76.4	68.5	59.2	51.7	45.6	39.6	36.4	34.5	32.0	32.4	32.7	30.4	28.8	29.0	31.9	31.9	36.9	44.5	49.9	54.3	47.2	76.4
26-Jun	61.2	65.4	69.4	73.6	75.3	70.4	61.9	54.8	47.9	41.4	36.7	35.2	35.2	33.4	29.9	29.1	33.9	31.7	32.6	36.3	39.5	44.5	52.5	58.6	47.9	75.3
27-Jun	63.8	68.1	73.0	75.3	77.9	73.7	70.5	64.0	59.1	54.8	52.3	51.4	48.9	46.4	44.2	44.3	46.8	49.3	50.9	54.2	61.5	69.2	66.8	69.8	59.8	77.9
28-Jun	82.8	77.0	75.2	84.4	84.5	78.1	69.4	61.6	52.5	44.8	41.3	37.5	32.9	35.0	34.4	32.0	30.5	29.9	31.1	33.0	37.6	43.2	49.4	54.7	51.4	84.5
29-Jun	69.9	78.9	84.1	86.5	88.8	80.9	69.4	58.6	51.4	46.2	44.2	38.1	34.5	32.3	30.3	31.1	34.0	48.8	48.2	55.3	62.0	72.0	79.7	84.6	58.7	88.8
30-Jun	92.9	95.4	97.4	97.8	97.7	96.9	90.4	79.4	70.1	58.7	53.0	51.0	44.0	46.8	47.6	46.5	45.7	49.3	48.1	42.4	46.6	58.6	66.7	72.3	66.5	97.8
	82.1	84.4	86.8	89.5	88.7	84.1	78.2	72.9	66.4	60.8	57.5	56.8	54.4	52.5	50.8	49.8	50.5	52.6	55.2	58.5	64.0	70.3	73.0	77.4	Diurnal Average	
	98.6	99.3	99.2	99.6	98.8	97.4	98.6	98.7	99.4	98.7	96.9	94.4	93.1	94.8	95.4	93.8	94.7	95.6	99.0	97.9	99.2	100.0	97.9	98.0	Diurnal Maximum	

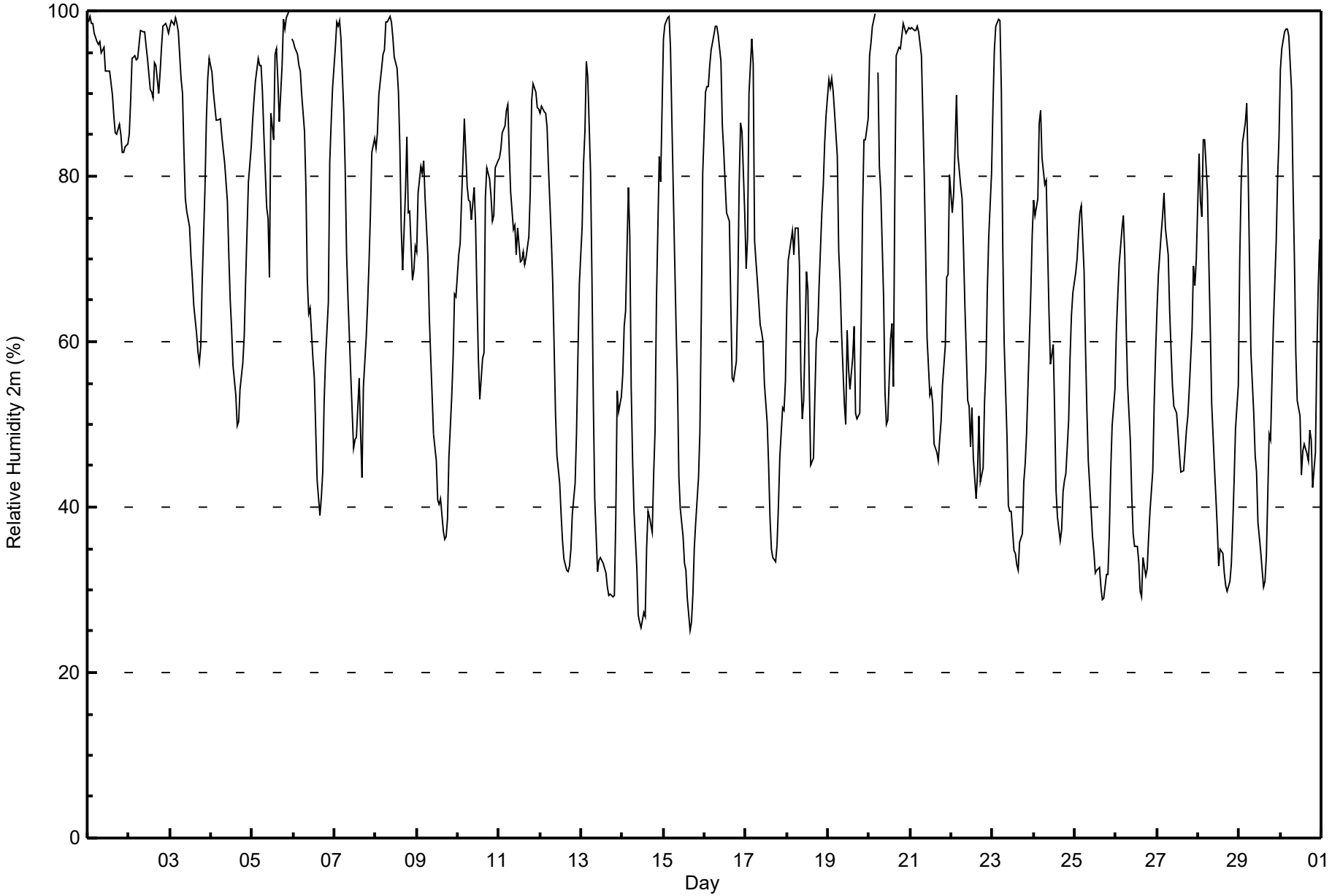
OR - Out of Range

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Monday Creek - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	101	14.07	14.07
40 - 60	179	24.93	39.00
60 - 80	193	26.88	65.88
80 - 100	244	33.98	99.86

Total Number of Valid Hours: 718

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Monday Creek - June 2026

Maximum Speed: 29 km/h on Jun 6 09:00

Maximum Daily Speed Average: 17.2 km/h on Jun 6

Minimum Speed Value: 0 km/h on Jun 22 18:00

Minimum Daily Speed Average: 0.6 km/h on Jun 22

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

Minimum Diurnal Speed Average: 1.7 km/h at hour 3

Monthly Average Velocity: 2.5 km/h 3.3 deg

Percentiles: P_1 = 1 P_{10} = 3 Q_1 = 5 Median = 9 Q_3 = 14 P_{90} = 19 P_{99} = 27

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-Jun	N13	NNW11	NNW10	N12	N12	N13	N15	N16	NNE18	N18	NNE19	NNE21	NNE19	N18	NNE21	NNE21	NNE18	NNE20	NNE18	NNE18	NNE20	NNE19	NNE18	NNE21	N16.9	NNE21
2-Jun	NE20	NE18	NNE17	NNE19	NNE18	NE18	NNE19	NE17	NE19	NE18	NE17	NE19	NE17	NE18	NE16	NE14	NE14	NNE15	NNE15	NNE11	NE11	NE10	NE9	NE8	NE15.7	NE20
3-Jun	NE8	NE8	NE7	NE5	NE5	ENE5	ENE4	E6	ESE6	E6	ESE6	E5	ENE6	E5	E7	E6	ENE7	ENE4	ESE7	SE13	SE15	SE12	SE9	SSE10	E5.7	SE15
4-Jun	S10	SSW9	SSW7	SSW8	SSW7	SSW9	SSW8	SSW9	SW10	SW11	SSW10	SSW10	SSW11	SSW12	SW12	SW12	SSW9	SSW9	SSW9	SW10	SSW7	SSW5	SSW4	S6	SSW8.9	SSW12
5-Jun	SSE5	S5	SSE4	S4	S3	SE5	SSE5	S3	ESE2	SE5	S3	NNW4	NNW12	NW7	NNW10	NNE7	NNE7	NNE3	NNE2	NE7	E9	E4	WNW12	WNW16	NNW0.9	WNW16
6-Jun	WNW20	W16	W17	W18	WSW18	WSW19	W20	W24	W29	W27	W24	W26	W24	W25	W26	W22	W20	WSW17	NW11	WNW10	WNW3	WNW2	WSW4	SSE2	W17.2	W29
7-Jun	SSE2	SSW2	SSE3	SW3	S3	S2	SSW1	ENE2	NW3	NW2	NNE2	ESE10	SE10	SE15	SE24	SE23	SSE16	WNW8	NW8	N5	NE6	NW2	W12	WNW10	SSE2.6	SE24
8-Jun	NW8	WNW8	W6	W6	W10	W13	W15	W15	WNW11	WNW13	WNW19	WNW23	WNW27	W26	W24	W22	W20	WNW17	WSW13	W14	W11	W17	W19	WSW15	W15.1	WNW27
9-Jun	W17	WNW11	W12	W13	W11	W12	WNW13	WNW10	WNW9	NW10	NW7	NW6	NW7	NW8	WNW8	NW7	WNW4	NE5	WNW2	ENE4	NE6	NNE5	NW4	NNW6	WNW6.7	W17
10-Jun	SW1	NNW5	WNW3	WNW4	WSW1	N3	NW5	N8	N6	NNE9	NNE10	N15	NNW18	NNW15	NNW13	N11	NNE10	NNE13	NNE14	NNE14	N13	N14	N13	N12	N8.9	NNW18
11-Jun	NNW12	NNW10	NNW12	NNW10	NW11	NNW12	NNW11	NNW12	NW15	NNW14	NNW14	N14	NNW12	NNW15	NNW13	NNW14	NNW14	NNW14	NNW15	NNW10	NNW10	N13	N12	N12	NNW12.4	NNW15
12-Jun	N11	NNW8	NNW8	NW8	NW9	NNW14	NNW16	N16	N19	NNW21	NNW21	N21	N22	N23	N22	N21	N21	N20	N19	N15	N12	NNW7	NW5	NNW5	N14.7	N23
13-Jun	NW4	WNW5	WNW4	W4	W4	W5	WNW7	NW6	NW7	NNW7	NW6	WNW6	WNW8	WNW7	WNW11	WNW6	W7	WNW10	WNW11	WNW9	W3	SSW5	WSW11	WSW9	WNW6.0	WSW11
14-Jun	WSW6	SW5	SW5	WSW2	WSW4	WNW4	WNW10	WNW11	WNW13	WNW13	NW14	NW13	NNW16	NNW14	N16	NNE20	N11	NW11	NNW10	W5	ENE6	SW5	W5	WNW4	NW6.8	NNE20
15-Jun	SSW2	SSW2	WSW3	WNW2	W2	WSW2	WNW5	WNW4	NE2	ENE4	E5	N7	NNW7	NNW10	NW9	NW8	WNW10	W8	SW6	SW4	ESE6	W14	WNW14	W10	WNW3.7	W14
16-Jun	WSW3	WNW5	NNE5	WSW6	S3	SSE2	SSW3	NE1	E3	E7	E12	ENE13	ENE10	NE9	NNE10	NNE8	NNW6	WNW10	WSW9	WNW10	WSW9	WNW5	WNW7	NE10	N2.1	ENE13
17-Jun	NE10	NNE6	W2	WSW3	NNW3	N10	N11	NNE11	N16	N16	NNE14	NNE13	NE12	NE12	NNE12	NNW10	NNE13	NNE11	NNE11	N6	NNW5	NNW6	NNW9	NW11	N8.6	N16
18-Jun	NW10	NW8	NW8	WNW8	WNW11	WNW14	WNW16	WNW14	NW11	NW14	N20	NNE19	N16	N16	NNW16	N14	NNE15	NNE12	NNW8	NW11	WNW6	W2	WNW4	WNW5	NNW9.8	N20
19-Jun	WNW5	WNW5	W4	W5	W5	W5	NW9	NW10	WNW10	WNW12	NW9	W10	SW6	E4	SW12	SW15	SSW11	SSW5	WNW3	WNW8	WSW3	NNE8	E8	NE4	W4.3	SW15
20-Jun	SSW2	NW2	NW2	WSW1	NNE1	SW1	NE5	NE8	ENE11	ENE13	ENE12	ENE13	E7	E14	E15	SE15	NW2	N1	NE6	ENE6	NNE5	NNE8	NNE5	NNE8	ENE5.4	SE15
21-Jun	NE9	NE9	NE9	NE10	NE11	NE10	NE8	ENE9	ENE10	E11	E16	ESE19	ESE18	E18	E17	ESE12	E15	ENE13	ENE9	NE7	NE7	NNE8	NE7	ESE4	ENE9.9	ESE19
22-Jun	SSW4	SSW4	WSW5	W2	NW4	W2	W3	NNW5	NNE6	NE8	NNE9	NNE6	ESE16	ESE13	NE10	E13	SE5	ESE0	WNW4	W8	SW10	WSW10	WSW5	WSW2	ENE0.6	ESE16
23-Jun	WNW1	SSW3	SSW3	S1	S2	WSW3	WNW4	NW6	NW4	NNW4	W5	SW4	NW8	NW9	WNW8	NW14	WSW13	SSW8	S13	SSW9	SSW5	S4	S5	SSW4	WSW3.3	NW14
24-Jun	SSW4	SSW4	SSW3	ESE3	SSE4	SE3	NNW4	SSE3	SSE5	SSE6	ESE4	E7	SE6	S12	SSW9	SSW7	SSW10	S11	S12	SSE10	SSE9	SE7	SSE6	SSE6	SSE5.5	S12
25-Jun	SSE4	S6	SSE5	SE4	SE4	SSE5	SSE6	S11	S11	SSW12	S13	S12	SSW14	S11	S11	S13	SSW12	SSE13	S12	S12	SSE11	SE10	SE9	SE9	S9.0	SSW14
26-Jun	SE10	SE10	SE9	SE9	SE8	SE9	SE11	SE12	SE15	SE19	SE20	SE17	SSE15	SE14	SE17	SE19	SE17	SE17	SE18	SE14	SE10	ESE9	ESE8	ESE9	SE13.0	SE20
27-Jun	ESE9	ESE9	E8	ESE9	E8	ESE11	ESE13	SE18	ESE20	ESE20	ESE22	ESE23	ESE21	ESE22	SE20	SE18	SE18	ESE14	ESE11	ESE6	E4	ENE5	ENE7	ENE6	ESE13.1	ESE23
28-Jun	UO	ENE6	NE7	E2	NE5	NE6	NE6	ENE15	ENE23	ENE26	ENE27	ENE28	ENE27	ENE27	E29	E26	ENE25	ENE24	ENE22	ENE17	NE11	NE12	NE10	ENE7	ENE16.5	E29
29-Jun	NNE3	NNW2	WNW4	W2	WNW4	WNW5	NW3	N6	NNE9	NNE13	NE12	NE11	NE15	NNE16	NE19	NNE17	ENE13	SE17	SE10	ENE5	ENE2	ENE3	E3	ENE3	NE5.8	NE19
30-Jun	N3	WSW1	SW1	WNW2	WNW2	W3	N4	NNE5	NE8	NE13	ENE15	NE14	NE15	NE10	NE4	W6	W7	W6	S1	ESE7	SE5	SSE2	E3	E2	NE3.2	ENE15
	NNW2.0	NW1.7	NW1.7	WNW1.8	NW2.0	NW2.3	NW3.6	NNW3.2	N3.9	NNE4.2	NNE4.7	NNE5.3	NNE4.5	NNE4.6	NNE3.8	NNE2.9	NNE2.0	NNE2.0	NNE2.0	N1.9	NE1.9	N1.8	NNW2.2	NNW1.8	Diurnal Average	
	NE20	NE18	W17	NNE19	NNE18	WSW19	W20	W24	W29	W27	ENE27	ENE28	ENE27	ENE27	E29	E26	ENE25	ENE24	ENE22	ENE18	NNE20	NNE19	W19	NNE21	Diurnal Maximum	

UO - Unstable Operation

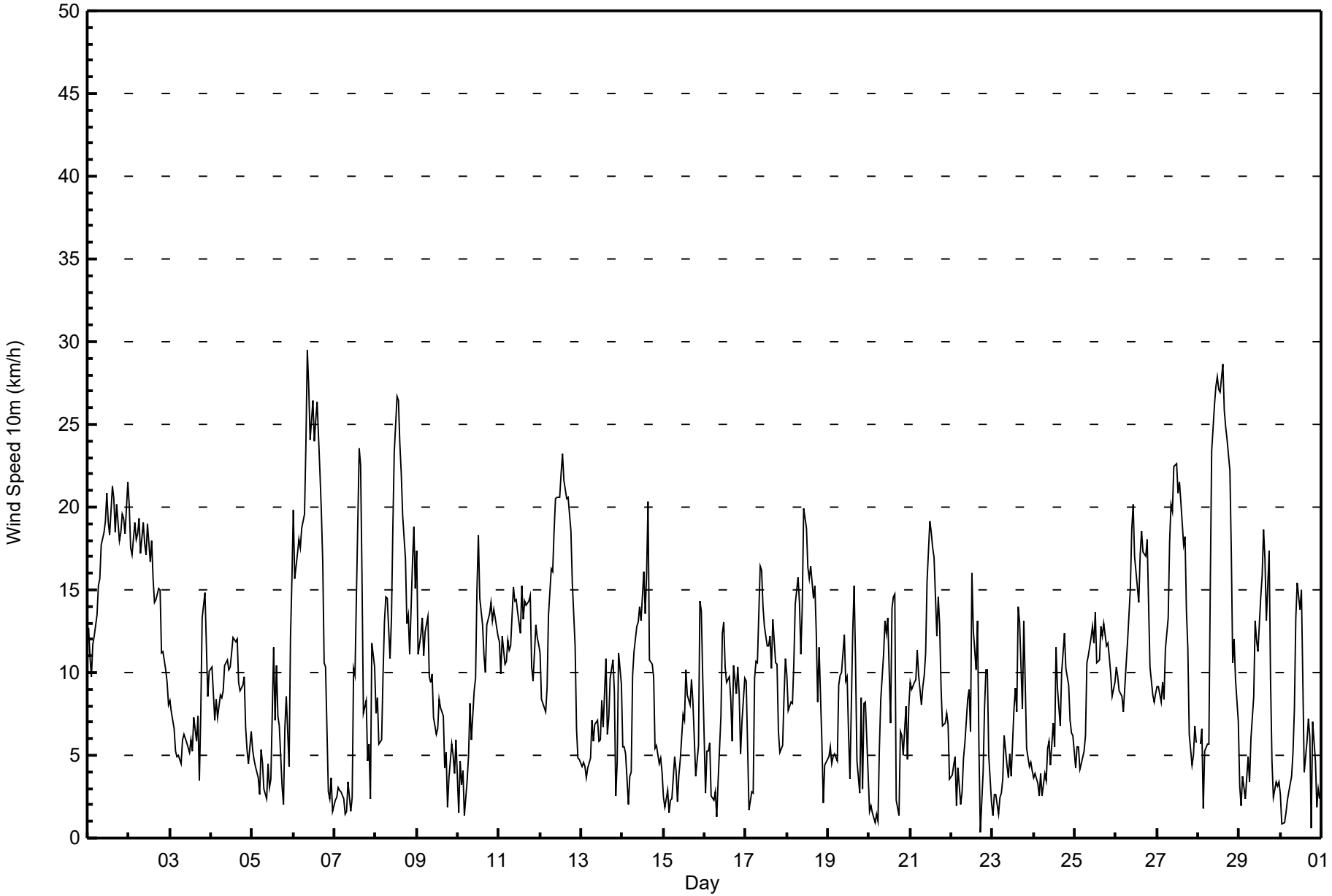
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Monday Creek - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	197	27.40	27.40
6 - 11	265	36.86	64.26
12 - 19	200	27.82	92.07
20 - 28	55	7.65	99.72
29 - 38	2	0.28	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

Monday Creek - June 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	10	9	11	11	5	7	14	12	20	9	15	19	28	13	9	197
6 - 11	10	20	35	13	11	16	16	8	8	20	6	7	13	30	31	21	265
12 - 19	28	28	20	9	7	10	18	3	7	6	3	6	15	13	5	22	200
20 - 28	8	7	1	9	1	6	4	0	0	0	0	0	14	3	0	2	55
29 - 38	0	0	0	0	1	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	51	65	65	42	31	37	45	25	27	46	18	28	62	74	49	54	719

Total Number of Valid Hours: 719

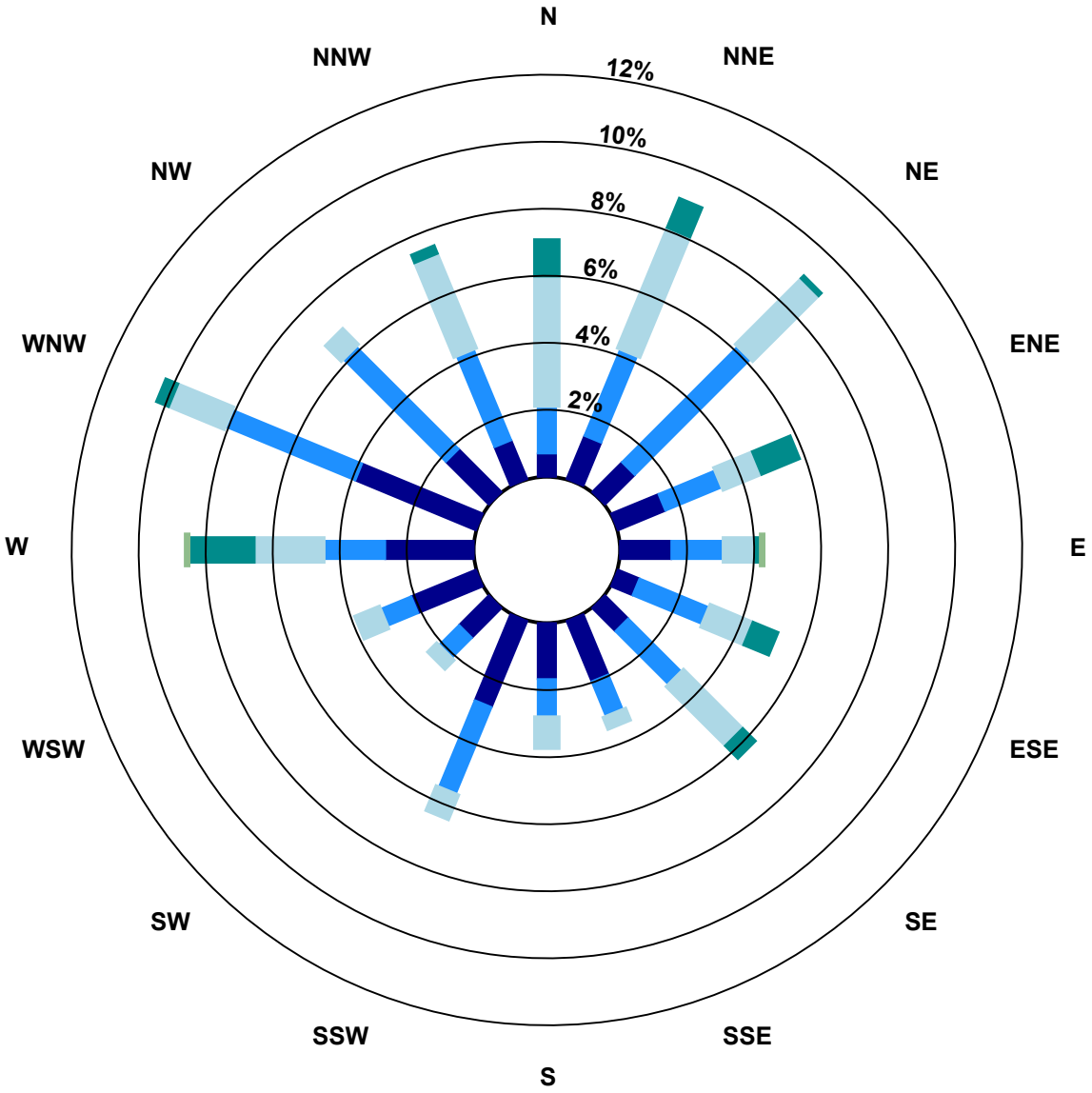
Total Number of Hours: 720

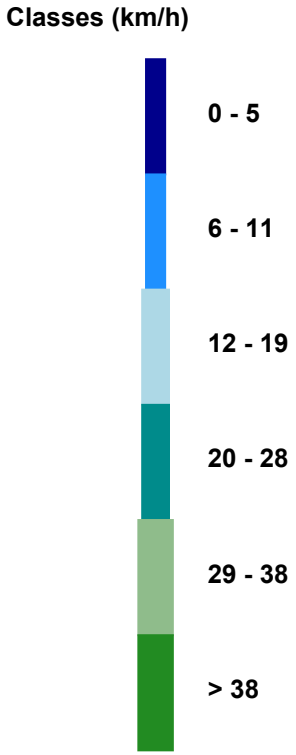
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Monday Creek





Total Number of Valid Hours: 719

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 10m (WS10) - km/h

Monday Creek - June 2026

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

Maximum Value: 9 km/h on Jun 14 16:00

Minimum Value: 0 km/h on Jun 13 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-Jun	4	3	2	3	3	3	5	4	5	5	6	5	5	5	6	6	5	5	4	4	5	5	5	5	6
2-Jun	5	4	4	4	4	4	5	4	4	5	4	4	4	4	4	3	3	4	3	3	2	2	2	2	5
3-Jun	2	2	1	1	1	1	1	2	2	3	3	2	2	3	3	3	2	2	3	3	3	2	2	3	3
4-Jun	3	3	3	3	2	2	3	3	2	3	3	3	4	4	3	3	3	2	2	3	1	1	1	1	4
5-Jun	1	1	1	1	2	2	1	1	2	2	3	2	5	3	3	3	2	2	1	1	2	2	5	5	5
6-Jun	4	4	4	5	4	5	5	5	7	7	6	6	5	7	6	6	5	5	4	4	1	1	1	1	7
7-Jun	1	2	1	1	1	1	1	2	1	2	3	3	3	5	8	6	4	3	2	1	1	3	6	5	8
8-Jun	2	3	1	2	2	2	3	4	2	3	4	5	6	6	5	5	4	5	4	4	5	4	4	4	6
9-Jun	4	3	3	3	2	3	2	3	3	3	3	4	3	3	3	4	3	2	1	2	2	1	3	1	4
10-Jun	1	1	1	1	1	2	2	2	2	2	4	4	5	4	4	3	4	4	4	4	4	4	3	3	5
11-Jun	3	2	3	3	2	3	3	3	4	4	4	4	3	4	4	4	3	4	4	3	3	4	3	3	4
12-Jun	3	2	2	2	2	4	4	4	5	5	5	6	6	6	5	5	5	5	5	4	3	2	1	1	6
13-Jun	1	1	1	1	0	1	1	2	2	3	4	4	4	4	5	5	4	3	3	2	2	3	2	2	5
14-Jun	2	1	3	1	1	1	3	2	3	4	4	4	5	5	7	9	3	3	5	2	7	2	1	1	9
15-Jun	2	1	1	1	1	1	1	1	1	2	3	3	4	3	4	4	3	2	1	2	1	5	4	4	5
16-Jun	3	2	1	2	2	2	1	1	2	2	3	3	3	2	2	2	2	3	3	2	2	1	1	2	3
17-Jun	1	4	1	1	2	2	2	3	5	4	4	4	4	4	4	4	4	3	4	2	2	1	2	3	5
18-Jun	2	2	2	2	3	3	3	3	4	5	5	5	4	4	4	4	4	3	2	4	3	1	1	1	5
19-Jun	1	1	1	1	1	3	2	2	3	3	3	5	3	3	4	5	4	2	1	4	4	3	3	2	5
20-Jun	2	2	1	1	1	1	1	2	3	4	3	3	4	4	4	6	1	1	2	2	1	2	1	3	6
21-Jun	2	2	2	2	2	3	2	2	2	3	4	4	5	4	4	3	4	4	2	1	1	1	3	2	5
22-Jun	1	1	1	2	2	1	1	2	2	2	3	2	6	4	4	5	3	1	2	1	4	2	1	1	6
23-Jun	1	3	1	1	2	2	1	1	2	2	3	2	3	3	5	4	5	4	4	3	2	1	1	1	5
24-Jun	2	2	2	1	1	1	2	2	1	1	1	1	4	4	3	4	3	3	3	3	2	1	2	1	4
25-Jun	1	2	1	1	1	1	2	3	3	4	5	4	5	4	4	4	3	4	4	3	2	2	1	2	5
26-Jun	2	2	1	2	2	2	2	3	3	4	5	5	4	4	5	4	4	5	4	3	3	1	1	1	5
27-Jun	2	2	1	2	1	3	3	4	5	5	5	6	5	5	5	5	5	3	3	2	1	1	1	1	6
28-Jun	UO	2	2	2	2	2	2	6	6	6	7	7	6	6	6	6	7	6	6	5	3	2	2	1	7
29-Jun	1	3	1	1	1	2	1	2	3	3	3	4	4	4	5	4	6	5	3	1	1	1	1	2	6
30-Jun	1	3	1	1	1	1	2	1	2	4	4	4	4	5	4	2	2	1	2	2	1	1	1	1	5
	5	4	4	5	4	5	5	6	7	7	7	7	6	7	8	9	7	6	6	5	7	5	6	5	
	Diurnal Maximum																								

UO - Unstable Operation

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Monday Creek - June 2026

Direction of Maximum Speed: 272 deg on Jun 6 09:00
Direction of Maximum Daily Speed Average: 268.7 deg on Jun 6

Direction of Minimum Speed: 120 deg on Jun 22 18:00
Direction of Minimum Daily Speed Average: 0.6 deg on Jun 22

Monthly Average Direction: 3.3 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-Jun	352	348	348	360	356	355	358	5	12	9	16	13	14	10	18	16	12	14	12	14	20	19	19	27	10.7
2-Jun	35	40	28	30	33	34	32	38	38	36	44	35	37	40	44	43	36	28	28	31	38	41	45	43	36.0
3-Jun	39	41	39	51	34	63	60	101	110	99	112	84	68	100	93	82	76	71	114	137	136	133	146	156	98.2
4-Jun	177	203	200	203	207	211	211	204	221	227	205	208	204	213	214	218	198	202	204	215	200	201	209	180	206.6
5-Jun	162	172	165	174	182	134	161	180	122	129	173	332	327	325	333	19	14	17	23	49	88	98	290	284	346.9
6-Jun	287	275	267	265	253	258	266	267	272	270	267	273	271	267	267	259	266	242	311	302	289	291	252	164	268.7
7-Jun	152	198	161	216	173	173	197	71	304	314	19	114	135	133	130	140	166	286	326	6	45	313	274	298	150.1
8-Jun	318	286	279	277	276	273	272	268	289	290	284	283	283	275	274	272	277	287	255	267	276	260	264	253	275.6
9-Jun	266	284	266	262	266	274	288	295	302	309	322	317	313	318	293	323	301	41	295	57	39	29	314	330	297.2
10-Jun	228	343	292	301	258	354	323	8	355	33	27	351	337	344	343	355	14	32	22	12	357	355	353	351	357.2
11-Jun	345	342	335	328	326	333	334	334	319	327	334	351	336	339	331	332	330	347	336	336	347	357	356	349	337.4
12-Jun	349	334	337	322	319	333	345	355	351	342	340	350	2	1	3	1	357	350	2	358	351	329	322	329	349.7
13-Jun	321	298	285	270	280	278	296	322	308	329	309	299	294	286	282	287	272	291	287	294	279	199	239	237	285.1
14-Jun	240	232	218	252	239	289	285	291	302	299	305	319	344	346	352	13	355	326	342	274	72	220	271	287	317.1
15-Jun	206	200	249	283	280	240	287	290	36	57	81	3	341	347	326	314	299	265	222	226	120	266	283	274	293.8
16-Jun	256	287	23	254	185	156	199	40	90	84	83	72	77	40	29	25	338	289	252	282	258	292	303	43	7.4
17-Jun	39	25	265	242	330	7	11	16	2	1	12	29	44	41	25	348	17	12	13	356	340	328	348	308	8.5
18-Jun	304	315	306	294	296	297	290	293	317	325	350	18	1	359	346	357	22	25	341	319	303	274	288	292	332.0
19-Jun	285	286	269	273	272	280	316	318	300	297	326	276	231	94	230	224	206	207	282	287	243	29	88	51	276.6
20-Jun	193	320	315	240	24	216	38	38	63	73	72	63	89	79	84	134	305	358	36	68	31	27	20	25	63.3
21-Jun	36	45	50	44	40	46	50	62	69	84	94	102	104	101	94	102	84	71	74	49	37	23	38	121	73.4
22-Jun	193	201	240	278	306	271	274	329	17	40	19	25	105	108	44	90	125	120	297	277	216	245	246	255	62.2
23-Jun	284	193	206	176	173	237	287	308	313	335	281	221	311	317	300	312	254	212	169	195	194	191	185	202	251.1
24-Jun	209	202	193	121	165	138	341	152	161	160	116	93	143	170	193	213	205	175	171	166	159	137	156	159	166.9
25-Jun	160	181	167	144	132	158	161	185	189	202	174	191	197	176	176	191	197	166	181	176	148	137	144	143	174.1
26-Jun	136	135	130	133	128	136	138	142	124	130	129	138	148	134	144	126	135	143	131	133	131	121	110	105	132.7
27-Jun	107	113	101	103	90	105	109	124	116	120	120	115	117	114	127	131	127	121	119	119	83	58	67	73	113.9
28-Jun	UO	64	53	82	38	50	45	69	72	76	71	66	72	78	80	79	76	75	75	68	53	35	41	64	69.5
29-Jun	25	338	292	260	298	301	313	6	23	27	36	49	39	29	42	30	68	136	126	61	65	74	79	61	43.3
30-Jun	10	249	232	288	292	281	4	12	37	55	60	47	48	35	55	260	265	276	191	103	125	152	91	79	41.7
	332.5	318.1	308.4	298.5	310.1	317.3	323.9	344.0	2.0	14.9	29.6	28.1	24.3	29.3	23.2	22.3	12.0	14.2	24.1	3.2	51.2	7.0	327.8	341.8	
	Diurnal Average																								

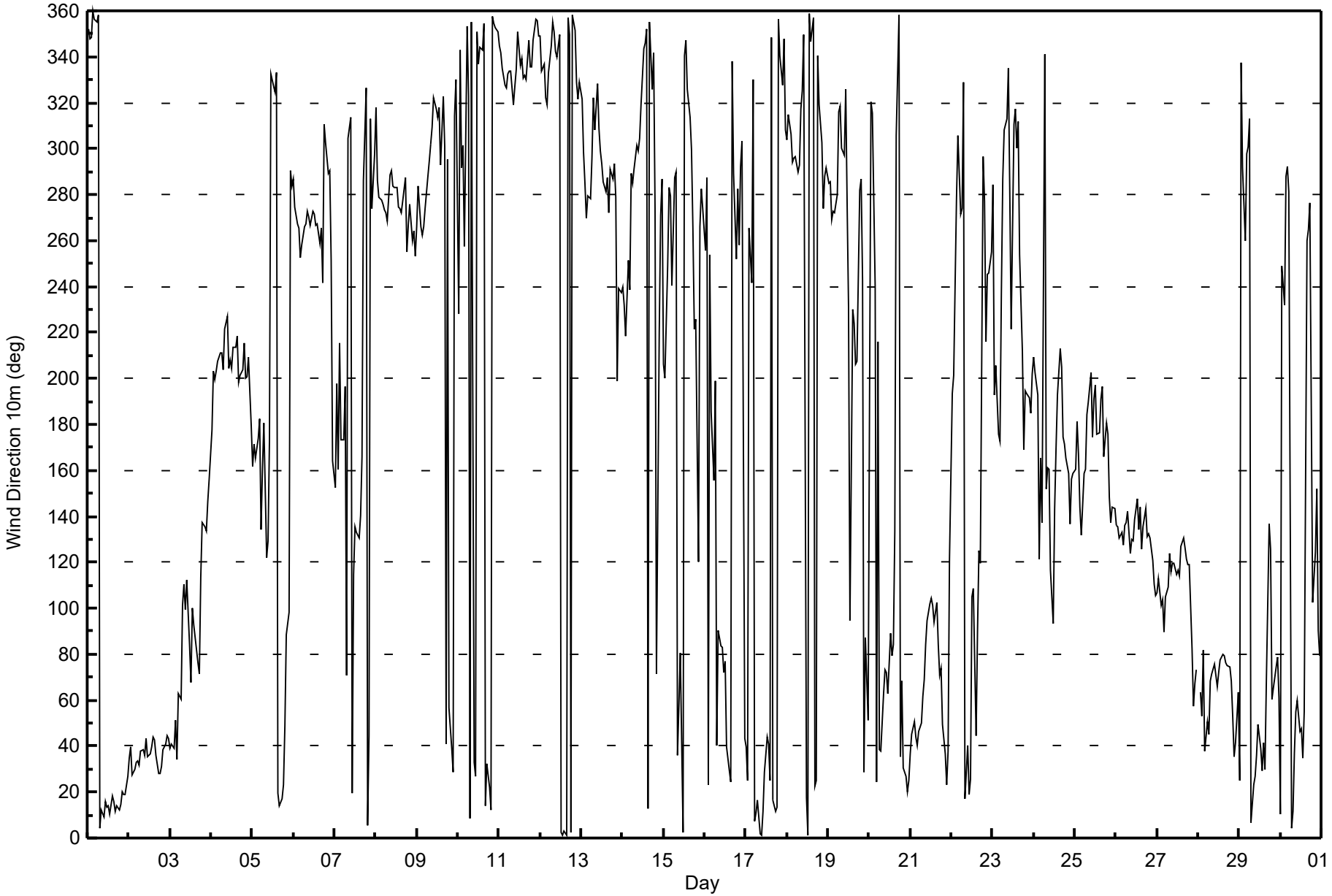
UO - Unstable Operation
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Monday Creek - June 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Monday Creek - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 102 deg on Jun 30 19:00

Minimum Value: 8 deg on Jun 13 05:00

Percentiles: P_1 = 9 P_{10} = 13 Q_1 = 16 Median = 21 Q_3 = 30 P_{90} = 56 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-Jun	18	20	20	19	19	19	19	18	16	18	15	15	16	17	14	16	17	17	16	15	13	13	14	13	20
2-Jun	13	13	12	12	13	13	13	15	13	15	15	15	16	14	16	13	15	16	14	14	13	13	13	13	16
3-Jun	12	13	14	16	14	21	26	29	30	48	46	45	51	60	41	53	35	64	30	12	12	12	14	18	64
4-Jun	21	19	17	19	18	20	23	21	20	17	26	25	28	27	23	21	28	17	17	15	16	15	23	15	28
5-Jun	17	18	21	41	46	31	22	70	83	49	87	55	19	49	25	26	22	71	82	20	16	46	20	19	87
6-Jun	10	12	12	14	13	15	13	13	13	13	20	14	16	15	13	17	19	22	19	19	54	55	48	68	68
7-Jun	50	40	32	38	26	33	66	79	51	97	95	26	22	22	20	21	23	56	24	19	21	87	20	27	97
8-Jun	25	35	27	34	10	12	12	11	13	11	10	11	11	12	12	12	13	13	15	21	32	12	12	14	35
9-Jun	15	14	10	11	11	12	15	26	27	30	64	70	71	39	36	50	72	34	70	70	25	32	74	21	74
10-Jun	94	25	50	33	92	45	32	21	22	21	25	25	20	26	23	29	24	16	15	16	19	19	18	18	94
11-Jun	16	17	16	16	14	16	20	20	18	20	23	20	20	19	19	19	18	18	17	16	21	21	18	17	23
12-Jun	16	19	16	17	18	15	19	20	20	19	19	22	22	21	22	23	23	21	20	20	18	19	19	17	23
13-Jun	17	17	14	10	8	9	18	30	28	45	69	69	52	67	35	77	70	31	17	19	61	26	12	12	77
14-Jun	23	14	56	49	25	28	16	22	17	23	22	25	29	37	22	22	26	21	28	16	81	35	19	32	81
15-Jun	30	65	20	28	65	45	12	28	79	62	62	56	58	40	47	51	38	24	19	56	36	15	11	51	79
16-Jun	71	34	23	39	54	57	33	81	55	16	15	15	17	23	14	22	49	20	27	20	19	33	19	28	81
17-Jun	13	63	51	24	57	15	19	23	22	21	20	29	26	36	28	25	24	25	21	21	22	22	16	24	63
18-Jun	16	18	17	11	17	14	13	15	27	21	21	16	23	22	21	22	21	17	19	28	26	58	16	15	58
19-Jun	13	11	9	29	24	28	21	21	23	23	40	50	50	82	30	20	28	27	56	31	81	31	17	56	82
20-Jun	91	62	47	76	82	89	27	15	18	25	19	21	61	17	22	23	73	80	13	26	28	13	16	12	91
21-Jun	11	14	14	15	11	14	14	15	16	18	16	15	14	16	14	16	15	13	14	10	9	8	18	47	47
22-Jun	60	21	13	50	63	67	37	39	29	32	25	43	18	21	37	28	48	94	57	10	37	13	25	63	94
23-Jun	78	65	17	54	31	34	31	28	46	71	74	69	46	28	54	23	30	50	21	24	22	18	14	24	78
24-Jun	21	43	51	46	28	28	64	44	23	27	39	18	45	33	41	56	30	20	19	19	17	19	20	18	64
25-Jun	21	22	22	20	12	19	26	21	25	28	26	31	31	27	35	27	27	23	24	23	16	9	12	14	35
26-Jun	11	11	12	12	14	14	15	18	14	17	16	19	25	22	25	16	19	19	14	14	12	10	14	10	25
27-Jun	11	12	15	12	12	16	14	14	15	16	15	16	16	15	14	15	15	14	14	15	23	10	9	9	23
28-Jun	UO	17	11	84	18	18	28	18	15	16	18	16	17	15	14	15	17	15	16	14	16	8	9	10	84
29-Jun	36	68	24	40	19	28	45	24	17	18	23	24	22	23	18	17	48	14	22	34	58	23	18	40	68
30-Jun	28	94	61	42	26	29	54	24	25	20	20	23	26	22	76	21	19	15	102	10	20	30	18	18	102
	94	94	61	84	92	89	66	81	83	97	95	70	71	82	76	77	73	94	102	70	81	87	74	68	
	Diurnal Maximum																								

UO - Unstable Operation

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS34
HANGINGSTONE EXPANSION
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - HANGINGSTONE EXPANSION (AMS34)
JUNE 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	8.3	0	1.2	0
H2S (ppb) Average	685	35	35	100	2.5	0	0.4	0
NO2 (ppb) Average	685	35	35	100	22.5	0	4.6	-
NO (ppb) Average	685	35	35	100	22.2	-	2.9	-
NOX (ppb) Average	685	35	35	100	33.2	-	7.5	-
Temperature 2 m (C) Average	720	0	0	100	27.9	-	21.2	-
Relative Humidity (%) Average	710	0	10	98.61	100	-	96.5	-
Wind Speed 10 m (km/h) Average	720	0	0	100	22	-	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)
JUNE 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	0.41	0.8	-	0	0	0	0.1	0.5	1	8.3
H2S (ppb) Average	685	0.18	0.3	-	0	0	0	0.1	0.2	0.4	2.5
NO2 (ppb) Average	685	2.13	2.1	-	0	0.3	0.7	1.4	3	4.8	22.5
NO (ppb) Average	685	0.84	1.6	-	0	0	0.1	0.3	0.9	2.2	22.2
NOX (ppb) Average	685	2.96	3.5	-	0	0.4	0.9	1.8	3.9	6.7	33.2
Temperature 2 m (C) Average	720	14.1	5.6	-	2.6	7.2	9.6	13.6	18	22.4	27.9
Relative Humidity (%) Average	710	69.54	22.3	-	25.7	37.9	49	71.6	90.9	97.7	100
Wind Speed 10 m (km/h) Average	720	9.3	5	-	0	4	6	8	12	16	22
Wind Direction 10 m (deg) Average	720	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - HANGINGSTONE EXPANSION (AMS34)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
Relative Humidity	08 Jun 2026 02:00	08 Jun 2026 10:00	9	Sensor operated out of range
Relative Humidity	10 Jun 2026 06:00	10 Jun 2026 06:00	1	Sensor operated out of range

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Hangingstone Expansion - June 2026

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

Maximum Value: 8.3 ppb on Jun 24 04:00

Maximum Daily Average: 1.2 ppb on Jun 24

Minimum Value: 0.0 ppb on Jun 2 11:00

Minimum Daily Average: 0.0 ppb on Jun 28

Maximum Diurnal Average: 0.7 ppb at hour 9

Minimum Diurnal Average: 0.2 ppb at hour 24

Monthly Average: 0.41 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.5 P_{90} = 1.0 P_{99} = 3.6

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-Jun	0.3	0.1	0.3	Z	0.0	0.1	0.2	0.1	0.1	0.1	0.4	0.6	0.4	0.9	1.2	0.9	0.9	0.7	0.5	0.2	0.2	0.1	0.1	0.1	0.4	1.2
2-Jun	0.2	0.1	0.1	0.1	Z	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.2
4-Jun	Z	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.2	0.2	0.4
5-Jun	0.7	Z	0.2	0.1	0.4	0.9	0.9	0.9	1.4	3.7	1.3	1.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	3.7
6-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.9	0.7	0.1	0.6	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.2	0.2	0.1	0.2	0.9
7-Jun	1.2	1.1	0.2	Z	0.3	0.3	0.2	0.1	0.7	2.0	0.1	0.2	0.0	0.2	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.0
8-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.7	0.4	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.7
9-Jun	0.2	0.2	0.2	0.2	0.5	Z	0.4	0.2	0.2	0.2	0.5	0.2	0.1	0.4	0.6	0.6	0.3	0.3	0.2	0.1	0.1	0.0	0.1	0.1	0.3	0.6
10-Jun	Z	0.2	0.8	1.0	0.6	0.3	0.3	0.8	3.5	1.6	0.6	0.5	0.5	0.7	0.4	0.4	0.5	0.4	0.2	0.4	1.9	1.5	0.5	0.5	0.8	3.5
11-Jun	0.3	Z	0.1	0.1	0.1	0.4	0.3	0.2	0.4	0.6	0.9	0.7	1.7	0.7	0.6	1.1	1.2	2.3	2.7	3.0	1.7	0.6	1.2	0.9	0.9	3.0
12-Jun	0.2	0.2	Z	0.1	0.0	0.1	0.9	2.2	3.0	1.8	1.0	0.5	0.4	0.7	1.1	0.6	1.1	2.7	2.0	1.3	1.0	0.6	0.5	0.4	1.0	3.0
13-Jun	0.2	0.2	0.6	Z	1.2	0.9	0.7	0.4	0.4	0.4	0.1	0.1	0.2	0.1	0.1	1.0	0.3	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.3	1.2
14-Jun	0.2	1.0	0.2	0.7	Z	0.2	0.7	0.2	0.1	0.8	0.4	0.3	0.2	0.3	0.7	1.3	1.3	2.2	1.7	2.3	2.8	2.6	0.8	0.6	0.9	2.8
15-Jun	0.8	0.7	0.9	1.0	0.8	Z	0.6	0.7	0.4	0.4	0.9	0.6	0.4	0.5	0.5	0.3	0.4	0.2	0.1	0.6	0.5	0.0	0.0	0.0	0.5	1.0
16-Jun	Z	0.1	0.1	0.0	0.1	0.1	0.1	0.3	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.6	0.2	0.1	0.2	0.2	0.2	0.2	0.6
17-Jun	0.3	Z	0.1	0.2	0.2	0.6	0.8	0.6	0.3	0.2	0.8	1.0	1.6	1.8	1.6	2.2	1.7	1.4	1.8	1.2	0.2	0.7	1.1	0.7	0.9	2.2
18-Jun	0.3	0.9	Z	0.7	0.3	0.2	0.2	3.3	5.8	4.1	0.3	0.5	0.3	0.1	0.2	0.9	1.7	0.5	1.4	0.5	0.1	0.1	0.1	0.1	1.0	5.8
19-Jun	0.0	0.0	0.1	Z	0.7	C	C	C	C	0.6	2.6	0.6	1.8	1.7	0.5	0.2	0.2	1.2	0.3	1.1	0.3	0.2	0.1	0.0	0.6	2.6
20-Jun	0.0	0.0	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2
21-Jun	0.0	0.1	0.0	0.0	0.0	Z	0.1	0.0	0.2	0.5	0.2	0.2	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.5
22-Jun	Z	0.0	0.0	0.1	0.0	0.3	0.5	0.6	0.7	0.1	0.0	0.1	0.1	0.0	0.2	0.0	0.0	0.7	0.5	0.2	0.2	0.1	0.0	0.0	0.2	0.7
23-Jun	0.1	Z	0.0	0.0	0.0	0.5	1.4	0.2	0.1	0.8	0.4	0.2	0.1	0.3	0.2	0.1	0.2	0.3	0.5	0.6	0.0	0.0	0.0	0.1	0.3	1.4
24-Jun	0.5	0.4	Z	8.3	4.9	1.9	0.3	0.1	0.1	0.2	0.1	0.4	2.3	2.1	2.5	1.4	1.2	0.3	0.3	0.1	0.0	0.3	0.3	0.2	1.2	8.3
25-Jun	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2
26-Jun	0.1	0.7	0.7	0.6	Z	1.0	0.8	0.4	0.3	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	0.0	0.2	1.0
27-Jun	0.0	0.0	0.0	0.0	0.0	Z	0.1	0.2	0.3	0.4	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	0.1	0.4
28-Jun	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	0.1	0.0	0.0	0.0	0.0	0.0	0.1
29-Jun	0.1	Z	0.0	0.0	0.0	0.1	0.3	0.3	0.4	1.0	7.5	5.9	0.7	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.8	7.5
30-Jun	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
	0.2	0.3	0.2	0.5	0.4	0.3	0.4	0.4	0.7	0.7	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.3	0.2	0.2	Diurnal Average	
	1.2	1.1	0.9	8.3	4.9	1.9	1.4	3.3	5.8	4.1	7.5	5.9	2.3	2.1	2.5	2.2	1.7	2.7	2.7	3.0	2.8	2.6	1.2	0.9	Diurnal Maximum	

Z - zerospan C - Calibration

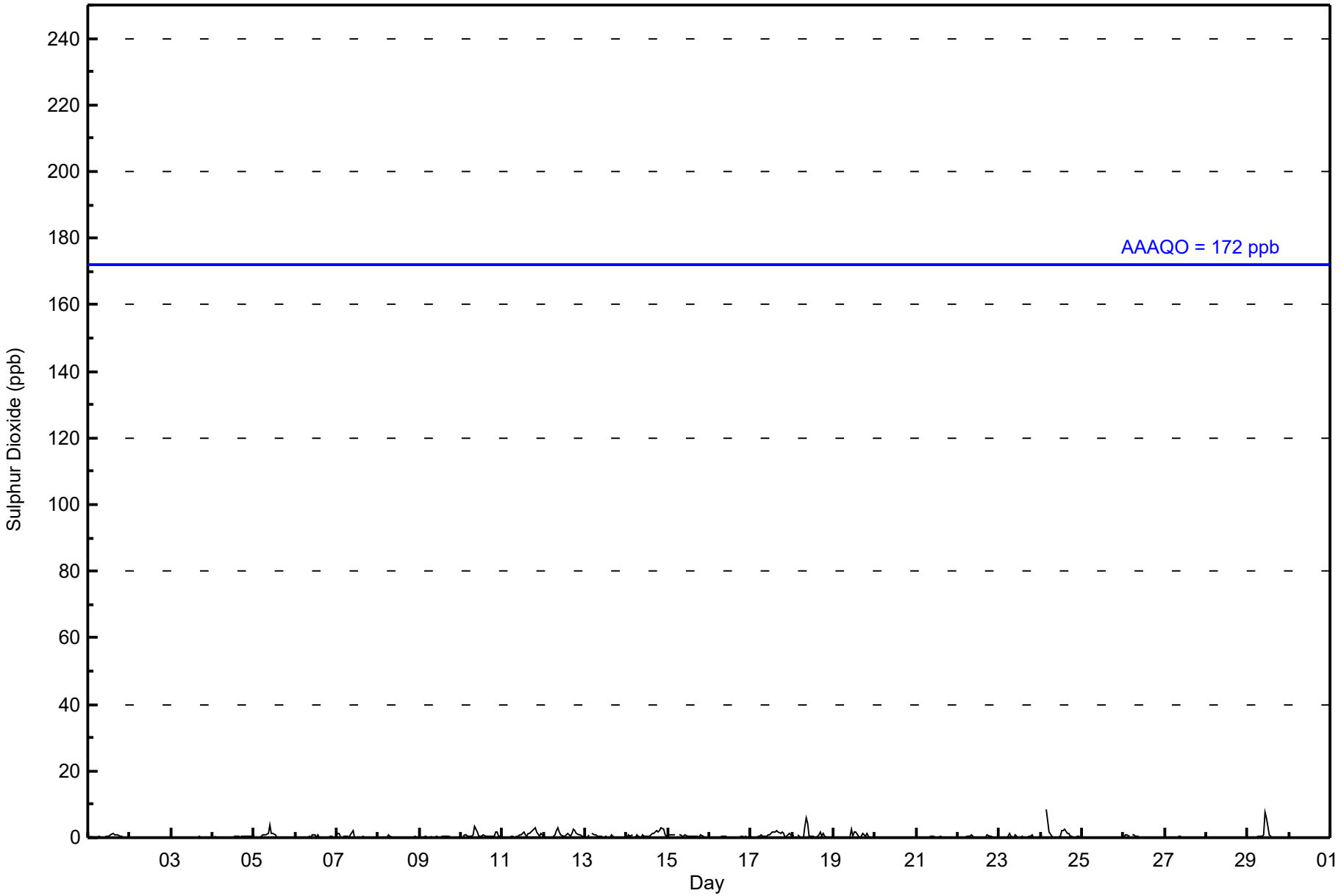
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Hangingstone Expansion - June 2026



Sulphur Dioxide (SO_2) - ppb

Hangingstone Expansion - June 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

Hangingstone Expansion - June 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	83	60	49	29	21	56	26	57	61	38	18	32	43	22	27	64	686
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	83	60	49	29	21	56	26	57	61	38	18	32	43	22	27	64	686

Total Number of Valid Hours: 686

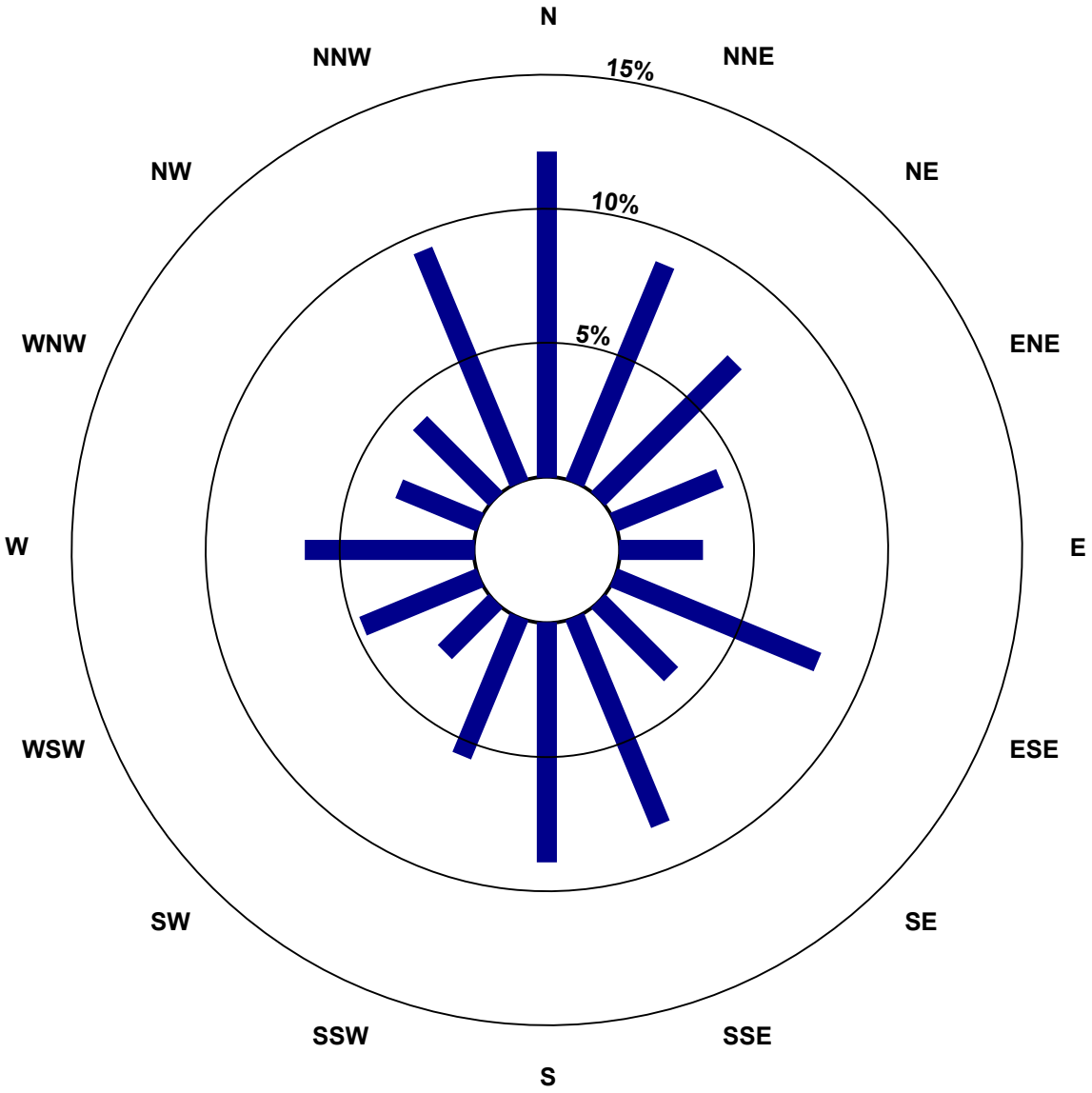
Total Number of Hours: 720

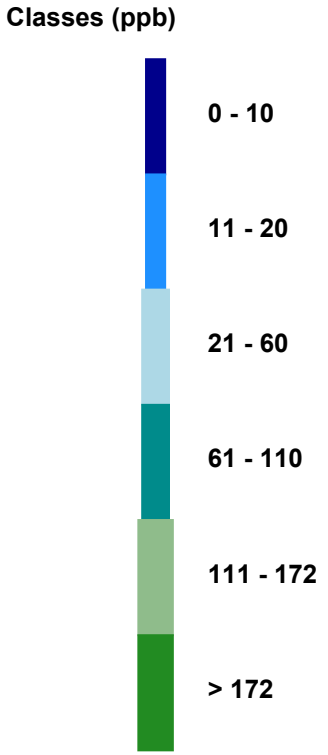
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Hangingstone Expansion





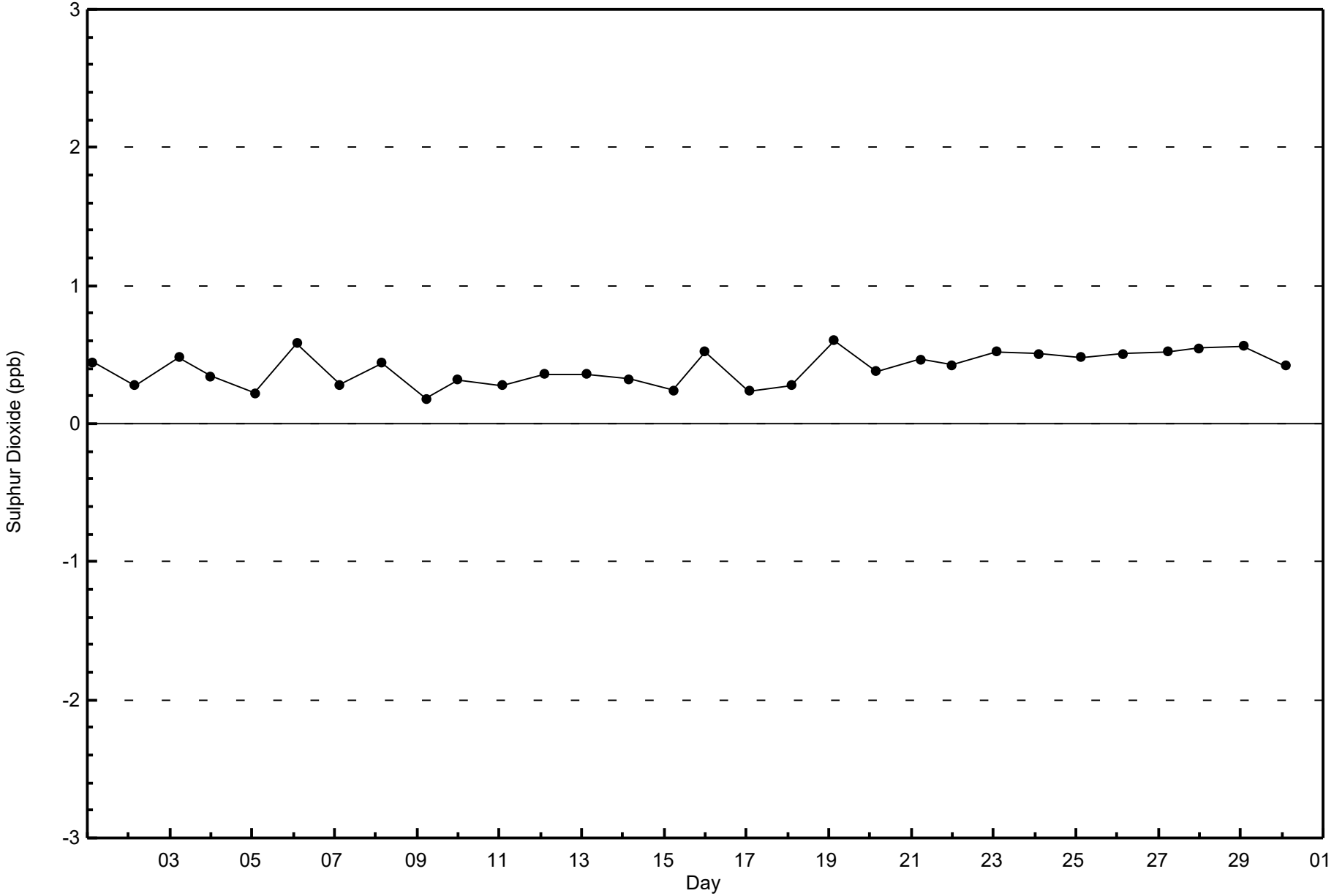
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Hangingstone Expansion - June 2026

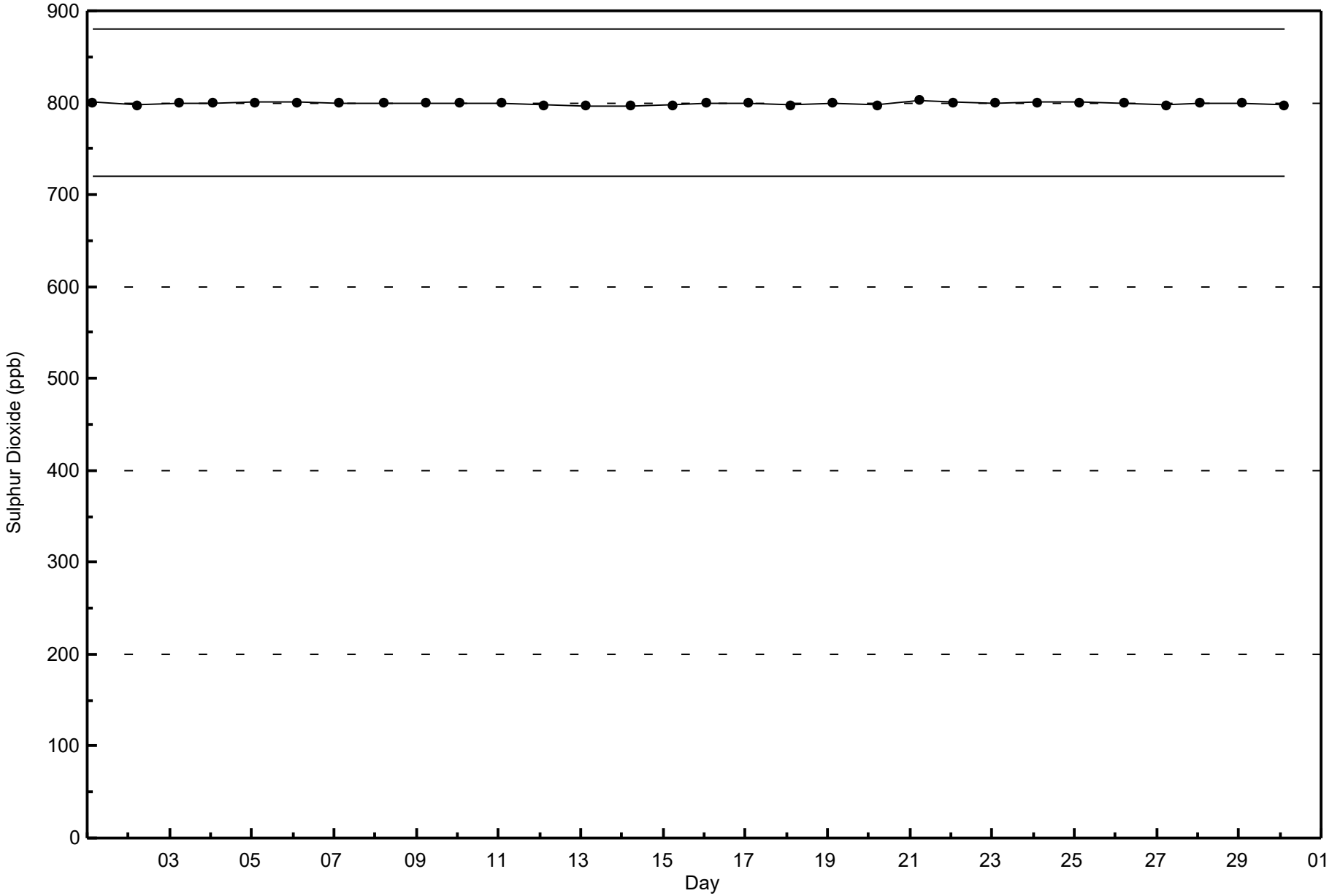


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Hangingstone Expansion - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Hangingstone Expansion - June 2026

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

Maximum Value: 2.5 ppb on Jun 17 05:00 Maximum Daily Average: 0.4 ppb on Jun 17

Minimum Value: 0.0 ppb on Jun 18 11:00 Minimum Daily Average: 0.0 ppb on Jun 26

Maximum Diurnal Average: 0.4 ppb at hour 5 Minimum Diurnal Average: 0.1 ppb at hour 15

Monthly Average: 0.18 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} = 1.3

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-Jun	0.1	0.1	0.2	0.1	Z	0.1	0.1	0.1	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	0.1	0.0	0.0	0.1	0.2
2-Jun	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	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
3-Jun	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	0.1	0.0	0.1	0.1	0.8	0.4	0.2	0.1	0.1	0.8
4-Jun	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	0.2	0.3	0.2	0.2	0.1	0.3
5-Jun	0.2	0.2	Z	0.2	0.4	0.4	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.3	0.1	0.1	0.1	0.0	0.4	0.6	0.7	0.3	0.1	0.1	0.2	0.7
6-Jun	0.1	0.1	0.0	Z	0.1	0.1	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	0.2	0.3	0.3	0.2	0.2	0.1	0.3
7-Jun	0.3	0.1	0.1	0.1	Z	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.3	0.3	0.1	0.3
8-Jun	0.2	0.3	0.2	0.2	0.2	Z	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.4
9-Jun	Z	0.1	0.1	0.1	0.5	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.7	1.0	0.4	1.4	0.3	1.4
10-Jun	0.9	Z	0.4	0.5	0.6	0.3	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.9
11-Jun	0.2	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	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2
12-Jun	0.0	0.1	0.2	Z	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.9	0.2	0.9
13-Jun	0.4	0.3	0.4	0.8	Z	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.4	0.3	0.2	0.3	0.2	0.8
14-Jun	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	0.3	0.1	0.0	0.1	0.1	0.2	0.3	0.7	0.6	0.2	0.7
15-Jun	Z	0.6	0.3	0.5	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.1	0.6
16-Jun	0.3	Z	0.2	0.2	0.4	0.4	0.5	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.5
17-Jun	0.5	1.8	Z	1.9	2.5	1.0	0.7	0.4	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.1	0.4	2.5
18-Jun	0.0	0.7	0.7	Z	0.2	0.1	0.3	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.1	0.2	0.3	0.2	0.7
19-Jun	0.2	0.9	0.9	1.0	Z	0.7	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.2	0.2	0.9	1.3	0.3	1.3
20-Jun	1.2	1.2	1.3	1.3	1.2	Z	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.2	0.3	1.3
21-Jun	Z	0.1	0.3	0.2	0.1	0.1	0.1	0.1	0.3	0.4	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.8	1.3	1.3	0.3	1.3
22-Jun	1.4	Z	1.0	0.7	1.0	0.5	0.4	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.2	0.4	0.2	0.2	0.6	0.3	1.4
23-Jun	0.2	0.1	Z	0.2	0.2	0.2	0.7	C	C	C	C	C	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.7
24-Jun	0.0	0.0	0.2	Z	0.7	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.7
25-Jun	0.1	0.1	0.1	0.1	Z	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	0.1	0.1	0.1	0.1	0.1	0.2
26-Jun	0.1	0.1	0.1	0.0	0.1	Z	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1
27-Jun	Z	0.1	0.0	0.1	0.0	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	0.1	0.1	0.0	0.1	0.0	0.1
28-Jun	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	0.0	0.1	0.1	0.1	0.3	0.5	0.5	0.8	0.2	0.8
29-Jun	0.6	0.7	Z	1.2	1.1	0.5	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	1.2
30-Jun	0.2	0.4	0.5	Z	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	0.3	0.6	0.6	0.4	0.3	0.2	0.6
	0.3	0.3	0.3	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	Diurnal Average	
	1.4	1.8	1.3	1.9	2.5	1.0	0.7	0.4	0.3	0.4	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.4	0.6	0.8	1.0	1.3	1.4	Diurnal Maximum	

Z - zerospan C - Calibration

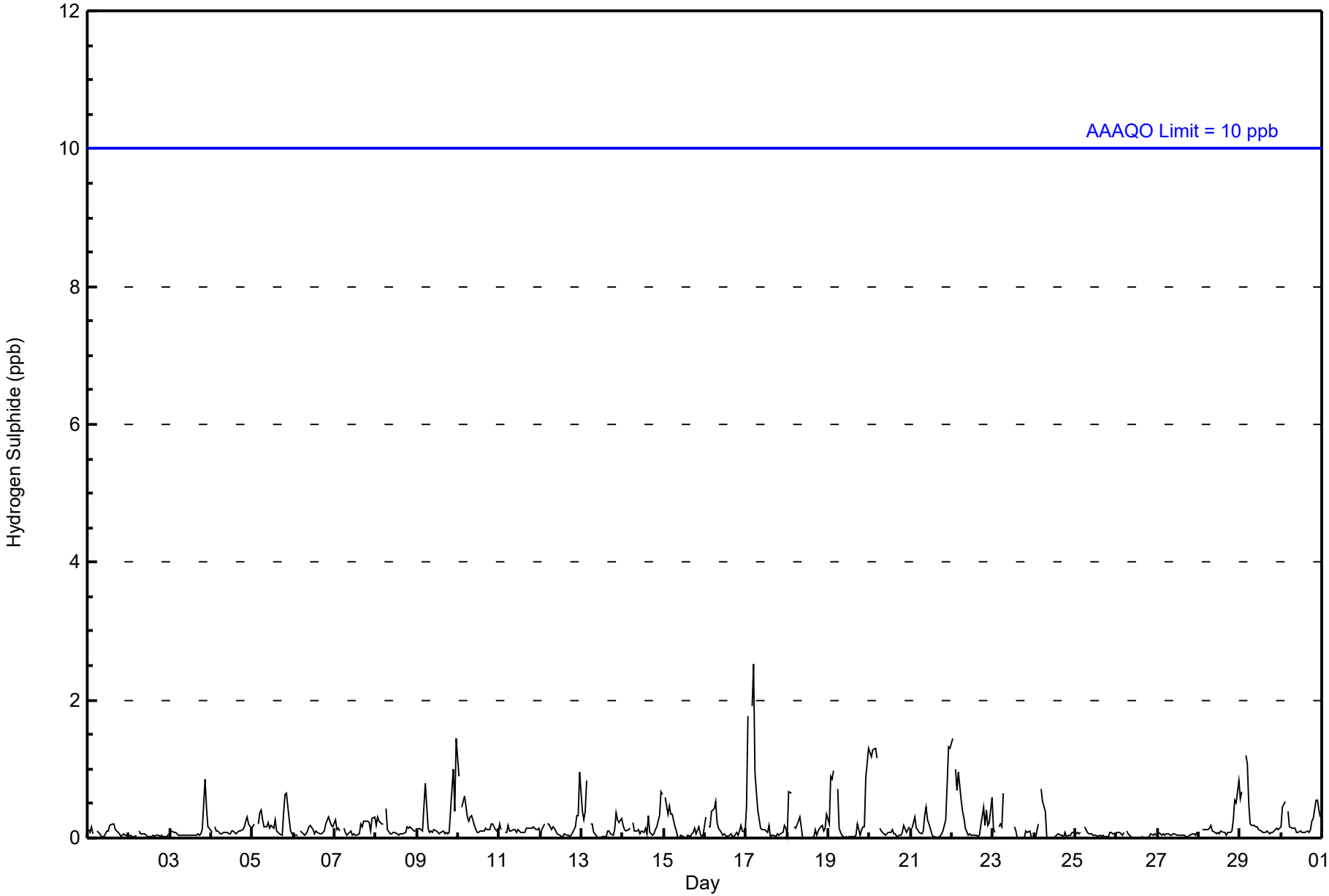
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Hangingstone Expansion - June 2026





Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Hangingstone Expansion - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	684	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Hangingstone Expansion - June 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	83	60	46	32	21	55	28	54	62	39	20	32	37	24	26	65	684
3 - 4	1	0	0	0	0	0	0	0	0	0	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	84	60	46	32	21	55	28	54	62	39	20	32	37	24	26	65	685

Total Number of Valid Hours: 685

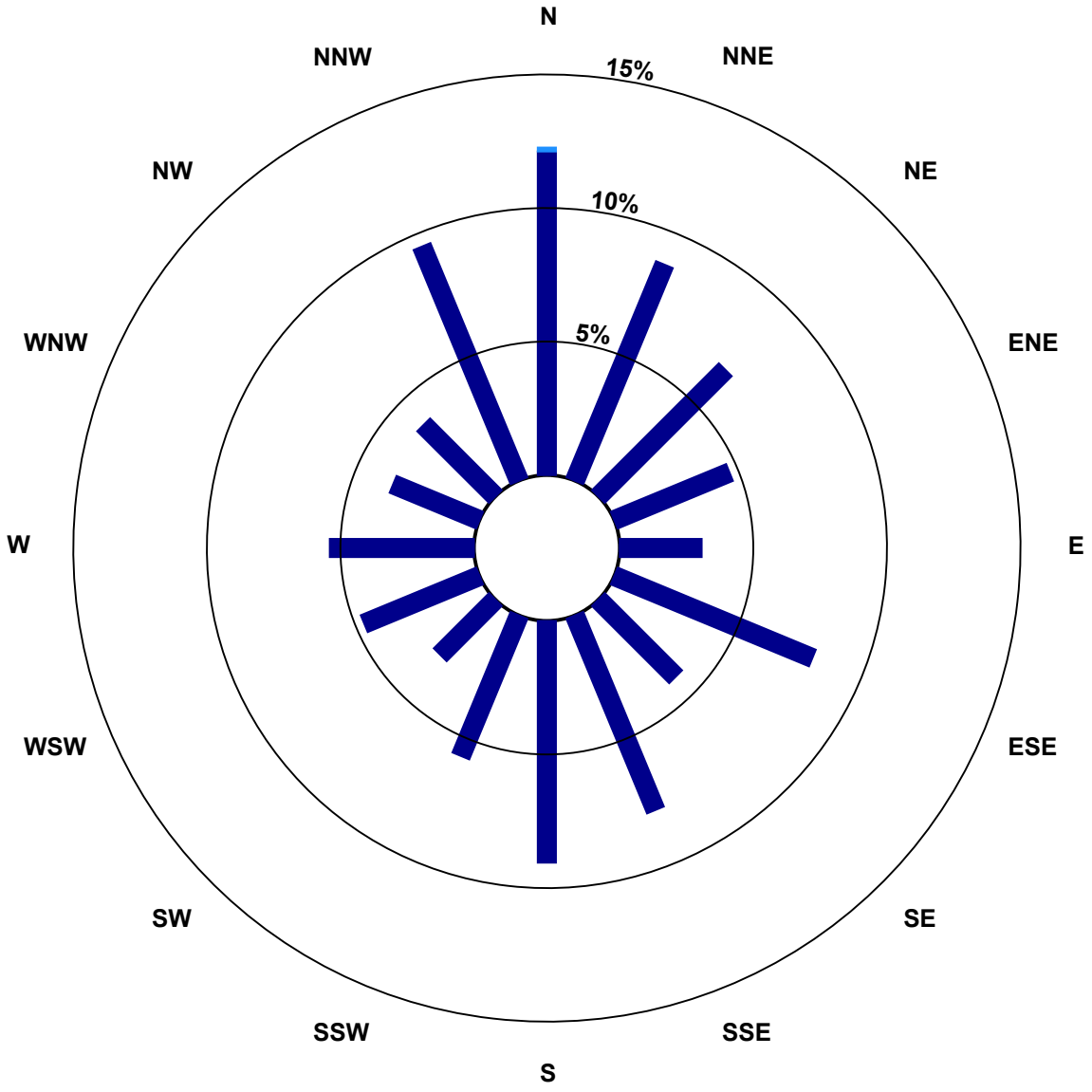
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H_2S) - ppb

Hangingstone Expansion



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

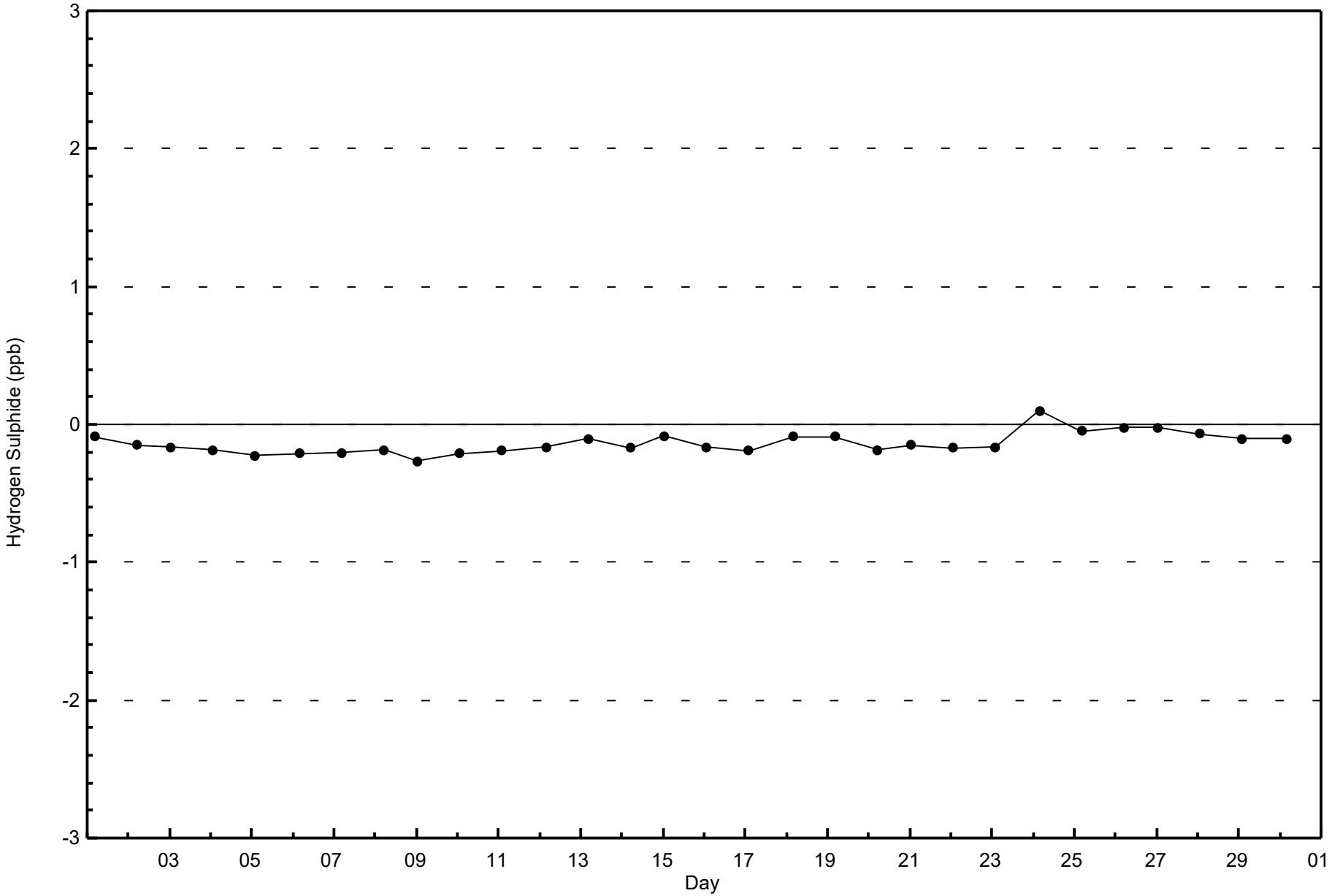
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Hangingstone Expansion - June 2026

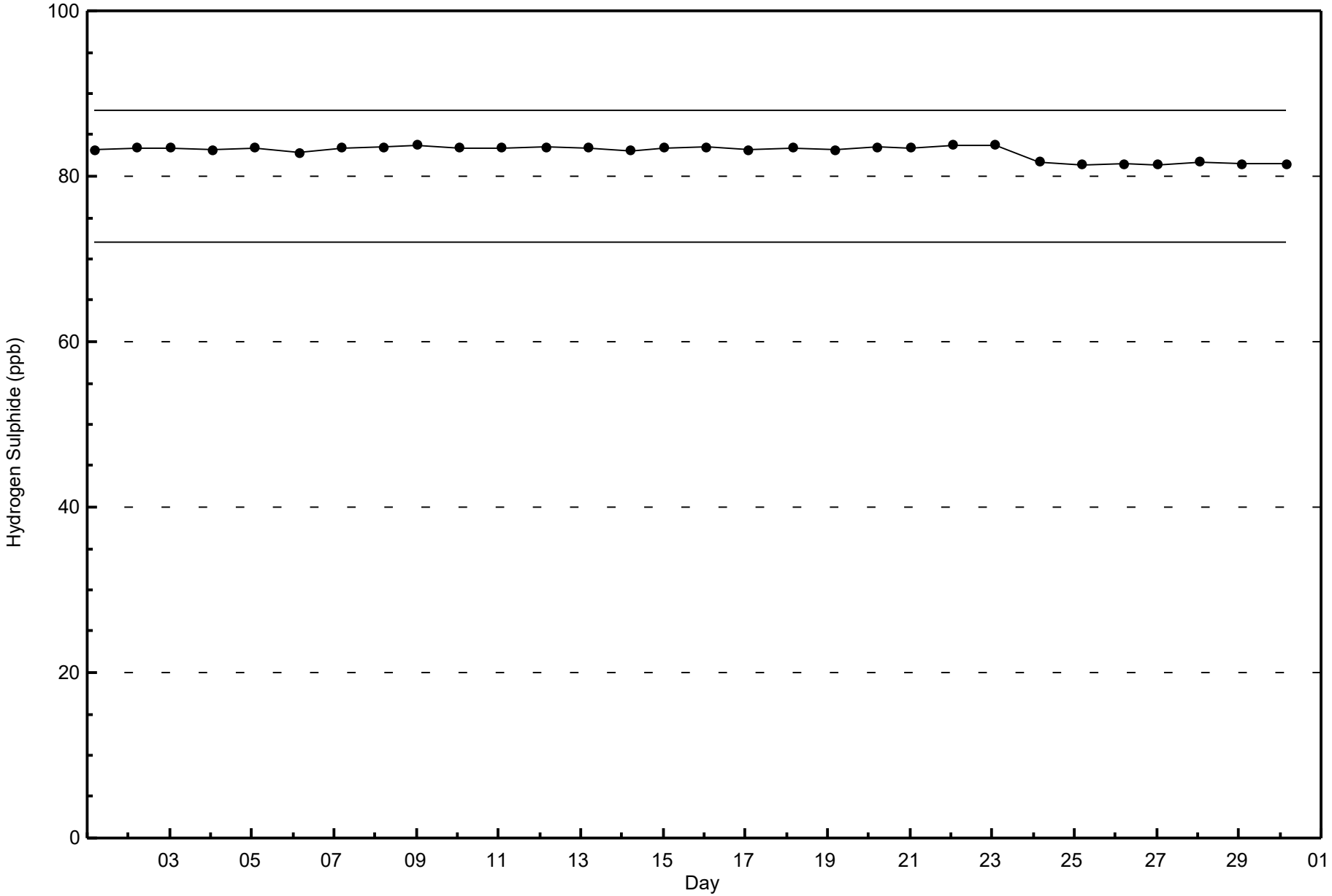


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Hangingstone Expansion - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Hangingstone Expansion - June 2026

Maximum Value: 22.2 ppb on Jun 14 16:00

Maximum Daily Average: 2.9 ppb on Jun 17

Minimum Value: 0.0 ppb on Jun 3 19:00

Minimum Daily Average: 0.0 ppb on Jun 4

Maximum Diurnal Average: 1.8 ppb at hour 16

Minimum Diurnal Average: 0.1 ppb at hour 23

Monthly Average: 0.84 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.3 Q_3 = 0.9 P_{90} = 2.2 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-Jun	0.0	Z	0.6	1.0	0.3	0.0	1.2	0.6	0.0	0.3	1.9	1.4	1.1	1.5	0.8	0.7	0.9	0.5	0.1	0.6	0.8	1.2	0.4	1.9	0.8	1.9
2-Jun	0.3	0.3	Z	0.3	0.6	1.0	1.1	0.6	0.5	1.2	0.9	0.8	0.8	1.8	1.4	0.4	0.4	0.6	0.7	0.6	0.4	0.4	0.3	0.4	0.7	1.8
3-Jun	0.3	0.2	0.3	Z	0.4	0.6	0.3	0.6	0.5	0.4	0.4	0.3	0.2	0.5	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.6
4-Jun	0.0	0.0	0.0	0.0	Z	0.0	0.1	0.0	0.1	0.0	0.1	0.1	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	0.2
5-Jun	0.0	0.0	0.0	0.0	0.1	Z	0.3	0.3	0.3	0.8	0.5	0.2	0.2	0.4	0.5	0.5	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.2	0.8
6-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.1	0.1	0.0	0.1	1.2	0.1	1.5	1.0	0.0	0.0	0.0	0.0	0.2	1.5
7-Jun	0.0	Z	0.1	0.0	0.2	0.2	0.3	0.2	0.6	0.5	0.4	0.6	0.0	0.2	0.7	0.0	0.0	0.2	0.4	0.4	1.2	0.1	0.1	0.0	0.3	1.2
8-Jun	0.0	0.5	Z	0.2	0.1	0.2	0.9	1.1	0.9	1.1	0.3	0.3	1.2	0.1	0.1	0.2	0.6	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.4	1.2
9-Jun	0.1	0.1	0.1	Z	0.2	0.6	0.1	1.3	1.4	0.4	0.5	0.5	0.5	0.3	0.7	0.6	0.8	0.9	0.5	0.7	0.6	0.2	0.2	0.1	0.5	1.4
10-Jun	0.2	5.6	0.3	0.5	Z	2.5	5.4	4.5	3.5	4.4	3.8	3.1	2.4	1.0	3.6	3.0	2.1	1.0	2.9	1.7	1.2	0.9	0.1	0.0	2.3	5.6
11-Jun	0.0	0.0	0.1	0.0	0.1	Z	0.3	5.3	2.1	2.1	3.2	3.6	3.1	3.0	1.4	1.2	4.6	1.3	2.8	4.0	1.5	0.2	0.1	1.9	1.8	5.3
12-Jun	Z	0.4	0.0	0.5	0.0	1.5	1.3	4.8	4.8	3.2	2.1	1.6	1.4	1.4	6.0	4.6	2.2	2.3	3.1	3.3	3.1	2.6	1.1	7.2	2.6	7.2
13-Jun	1.3	Z	0.4	0.1	0.1	0.7	0.4	0.2	0.2	0.1	0.3	0.2	0.9	1.5	2.9	4.1	2.0	0.1	0.1	0.1	0.5	0.1	0.1	0.1	0.7	4.1
14-Jun	0.1	0.2	Z	0.2	0.2	0.2	0.3	0.2	0.3	2.2	0.5	9.4	1.1	0.3	2.9	22.2	4.3	1.6	1.0	1.5	4.7	0.1	0.1	1.4	2.4	22.2
15-Jun	4.1	0.5	0.3	Z	0.3	1.1	1.6	1.4	0.4	0.3	0.5	0.7	0.4	0.5	0.7	0.1	0.2	0.1	0.4	0.2	0.1	0.0	0.0	0.0	0.6	4.1
16-Jun	0.1	0.1	0.0	0.1	Z	0.4	1.4	1.1	1.2	0.8	0.7	0.3	0.2	0.1	1.4	2.2	0.9	0.4	0.2	0.7	2.7	6.6	0.2	0.0	0.9	6.6
17-Jun	0.1	0.7	0.4	1.7	12.5	Z	9.1	6.1	3.8	6.0	1.9	2.4	2.7	13.2	1.9	1.8	1.8	0.3	0.1	0.4	0.0	0.0	0.0	0.0	2.9	13.2
18-Jun	Z	0.1	0.1	0.0	0.0	0.4	0.9	3.8	5.7	2.5	1.9	1.0	0.2	0.5	0.6	3.1	3.3	1.9	0.3	0.3	0.0	0.1	0.5	0.0	1.2	5.7
19-Jun	0.0	Z	0.0	0.0	0.1	0.6	0.4	0.0	1.0	1.9	1.1	0.6	1.7	1.1	1.3	2.5	2.1	1.6	1.9	1.7	0.9	0.3	0.1	1.3	1.0	2.5
20-Jun	1.9	0.7	Z	0.7	2.6	5.1	1.9	1.0	1.0	0.6	0.8	0.4	0.8	0.7	0.7	0.7	0.3	0.1	0.1	0.1	0.1	0.5	0.3	0.3	0.9	5.1
21-Jun	0.4	0.1	0.2	Z	0.0	4.0	0.7	2.1	1.8	2.2	2.7	2.6	0.6	0.5	0.8	0.5	0.5	0.4	0.3	0.1	0.2	0.5	0.4	1.1	1.0	4.0
22-Jun	0.2	0.2	0.3	0.2	Z	3.6	C	C	C	C	C	0.4	0.1	0.2	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.3	3.6
23-Jun	0.0	0.0	0.0	0.0	0.1	Z	1.0	0.1	0.0	0.0	0.1	0.1	0.0	0.6	0.4	0.3	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	1.0
24-Jun	Z	0.0	0.1	0.2	0.1	0.1	0.2	0.7	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.7
25-Jun	0.0	Z	0.0	0.0	0.0	0.1	0.2	0.1	0.3	0.2	0.3	0.1	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.3
26-Jun	0.0	0.0	Z	0.0	0.1	0.2	0.4	0.3	0.4	0.2	0.1	0.2	0.5	0.7	0.2	0.7	0.5	0.2	0.1	0.0	0.0	0.2	0.0	0.0	0.2	0.7
27-Jun	0.2	0.1	0.0	Z	0.1	0.3	0.6	0.6	0.4	0.4	1.3	0.8	0.4	0.4	0.6	0.8	0.5	0.5	0.4	0.4	0.4	0.7	0.0	0.0	0.4	1.3
28-Jun	0.1	0.0	0.2	0.4	Z	1.4	3.2	5.6	1.0	0.6	0.3	0.4	0.1	0.3	0.3	0.4	0.1	0.3	0.1	0.1	0.4	0.1	0.1	0.1	0.7	5.6
29-Jun	0.1	0.1	0.3	0.0	0.8	Z	3.7	2.8	1.3	1.9	1.4	0.7	1.3	0.9	1.9	1.3	0.4	0.2	0.0	0.1	0.0	0.0	0.0	0.2	0.8	3.7
30-Jun	Z	0.1	0.0	0.0	0.2	0.4	1.3	1.3	3.8	0.7	0.3	0.3	0.3	0.7	0.6	1.0	0.2	0.4	0.2	0.1	1.3	0.0	0.0	0.5	0.6	3.8
	0.4	0.4	0.1	0.2	0.8	1.0	1.3	1.6	1.3	1.2	1.0	1.1	0.7	1.1	1.1	1.8	1.0	0.5	0.6	0.6	0.7	0.5	0.1	0.6	Diurnal Average	
	4.1	5.6	0.6	1.7	12.5	5.1	9.1	6.1	5.7	6.0	3.8	9.4	3.1	13.2	6.0	22.2	4.6	2.3	3.1	4.0	4.7	6.6	1.1	7.2	Diurnal Maximum	

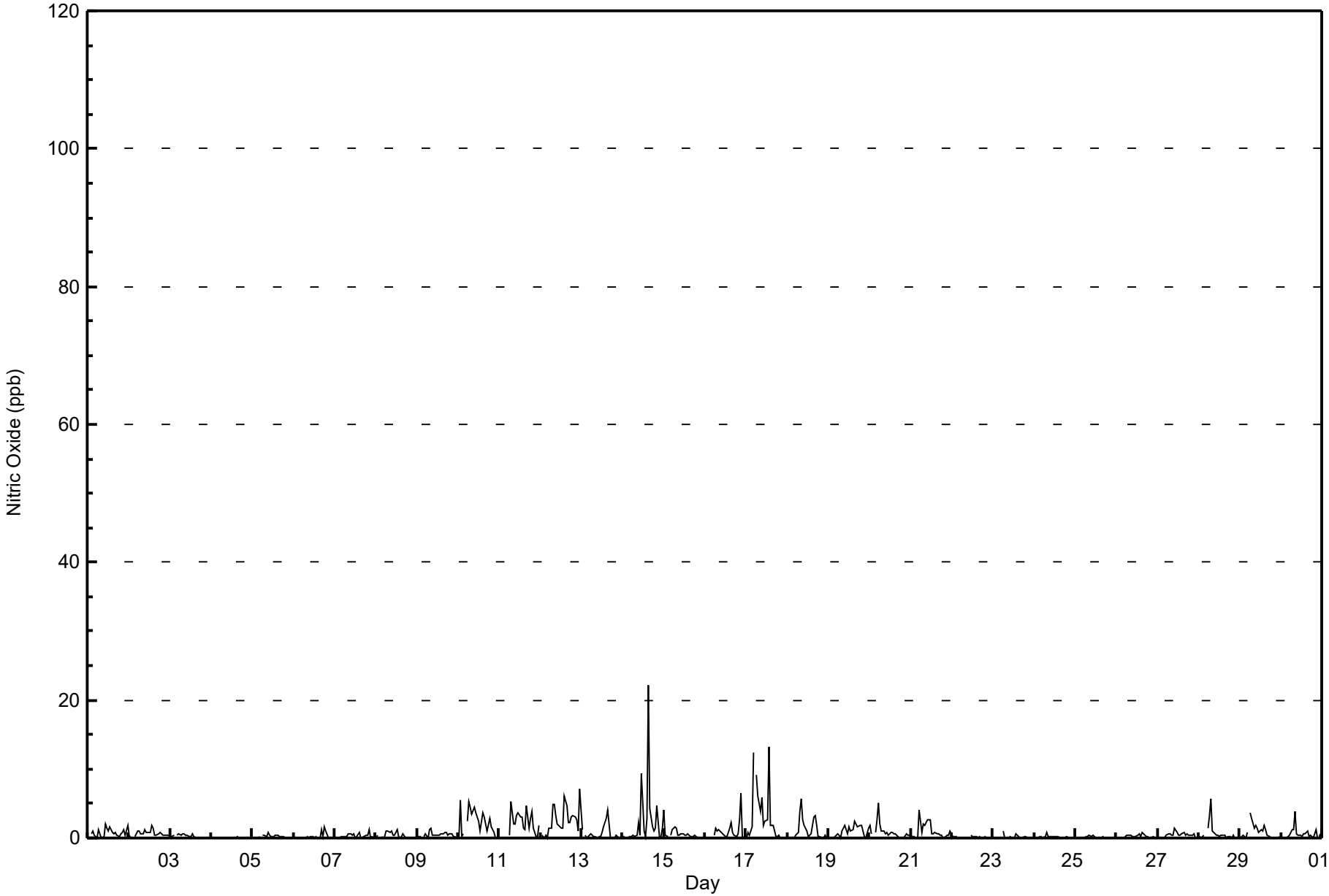
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Hangingstone Expansion - June 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

Hangingstone Expansion - June 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	81	58	47	32	20	56	29	55	61	40	20	32	42	23	25	63	684
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	81	58	47	32	20	56	29	55	61	40	20	32	42	24	25	63	685

Total Number of Valid Hours: 685

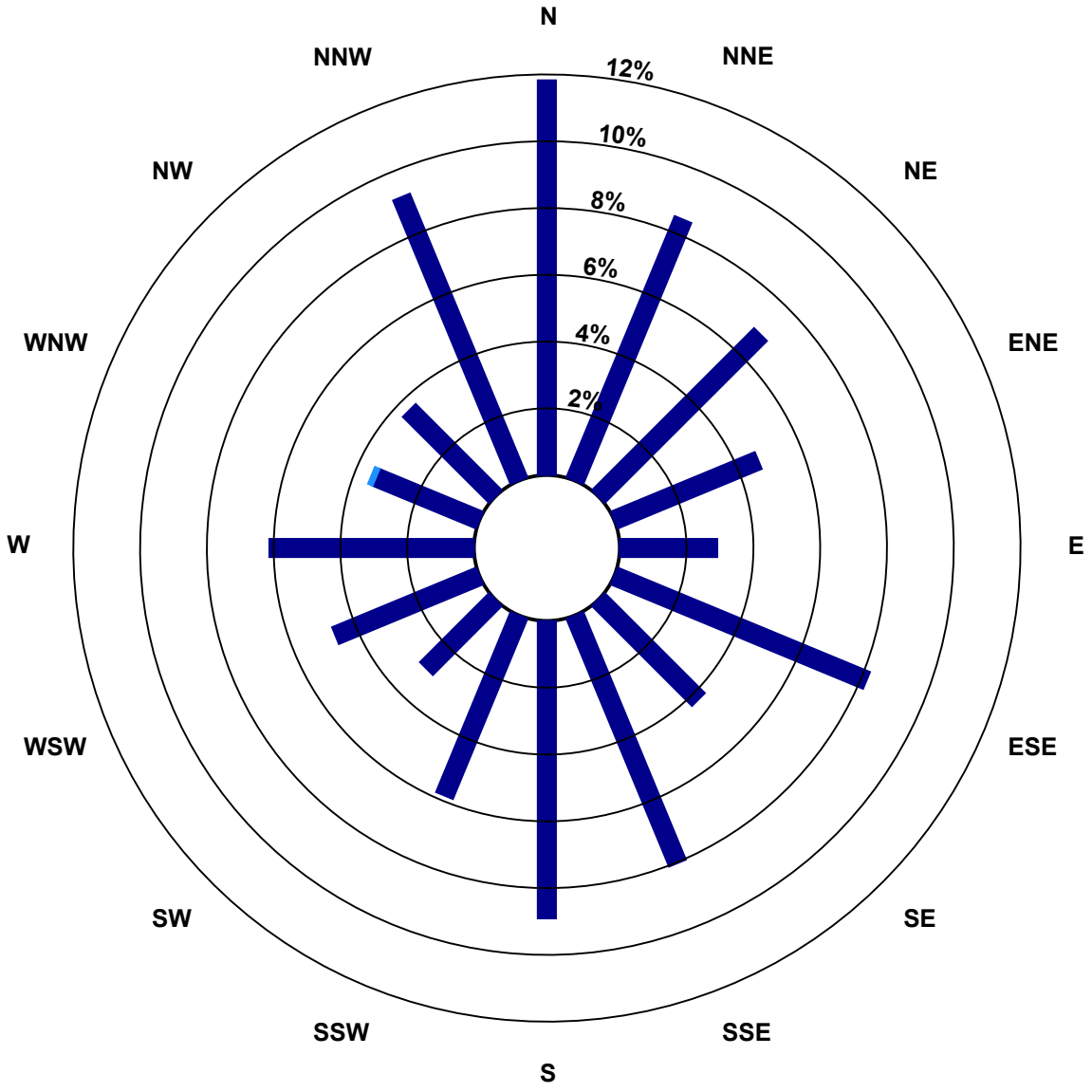
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Hangingstone Expansion



Classes (ppb)

- 0 - 20
- 21 - 40
- 11 - 80
- 81 - 159
- > 159

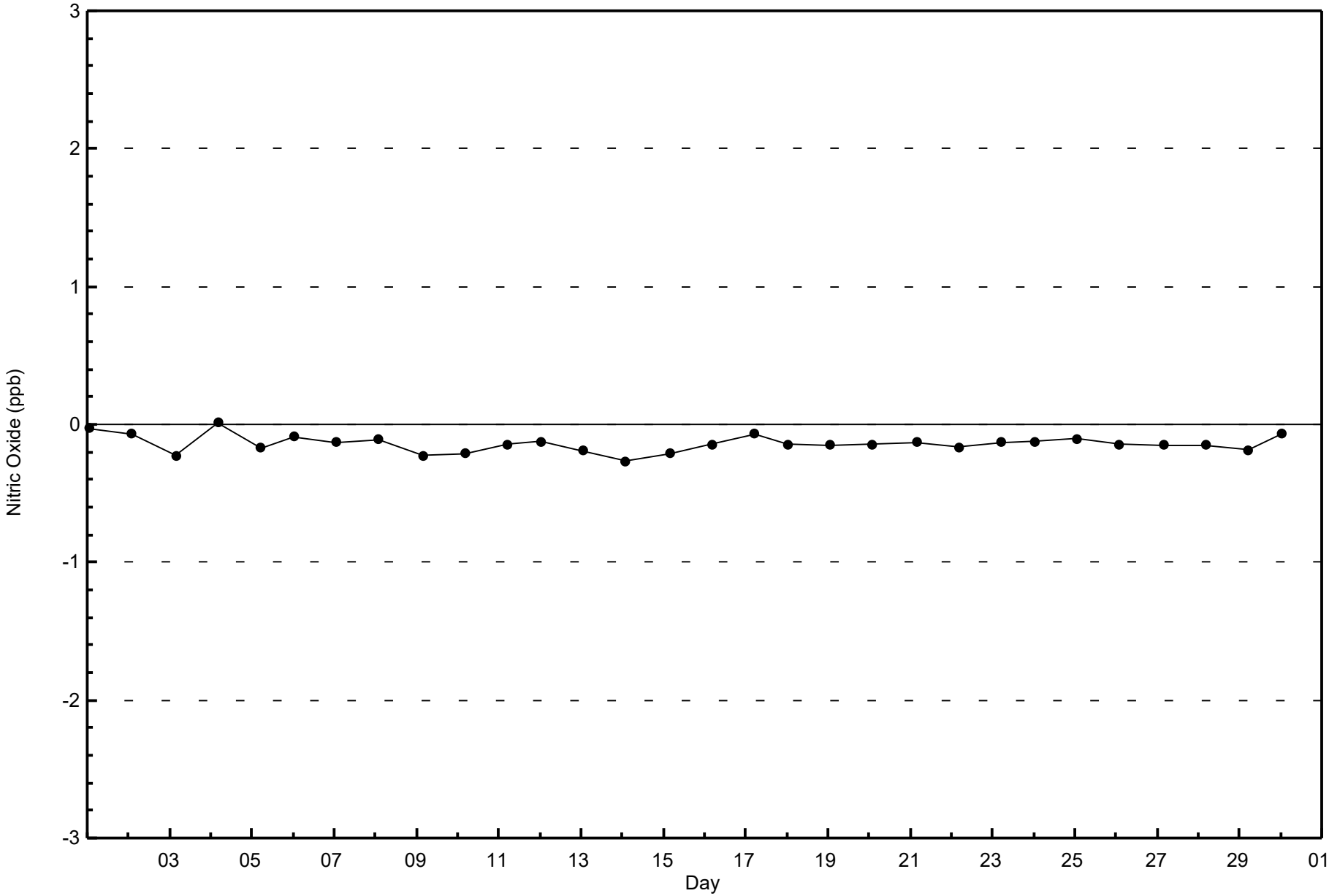
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Hangingstone Expansion - June 2026

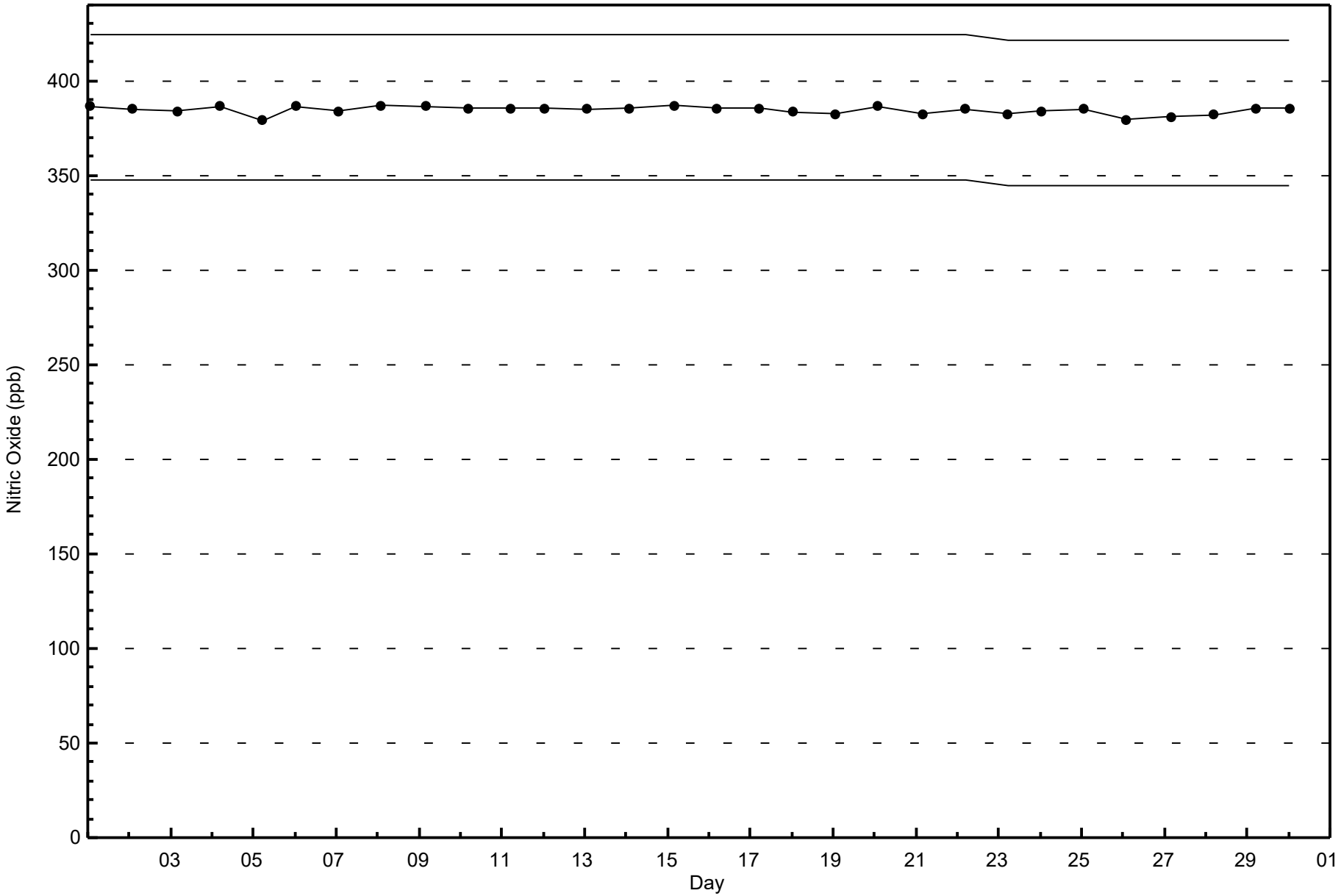


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Hangingstone Expansion - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Hangingstone Expansion - June 2026

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

Maximum Value: 22.5 ppb on Jun 16 22:00

Maximum Daily Average: 4.6 ppb on Jun 17

Minimum Value: 0.0 ppb on Jun 8 18:00

Minimum Daily Average: 0.5 ppb on Jun 6

Maximum Diurnal Average: 3.0 ppb at hour 21

Minimum Diurnal Average: 1.5 ppb at hour 13

Monthly Average: 2.13 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.3 Q_1 = 0.7 Median = 1.4 Q_3 = 3.0 P_{90} = 4.8 P_{99} = 10.4

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-Jun	1.6	Z	4.8	4.0	2.5	1.3	5.5	3.4	0.9	1.9	6.4	5.0	3.9	4.9	3.2	3.0	3.4	2.5	1.6	3.0	3.2	4.0	2.4	5.3	3.4	6.4
2-Jun	1.4	1.1	Z	1.6	1.6	2.2	2.6	2.5	2.1	2.1	1.8	1.3	1.3	2.1	1.6	0.7	0.8	1.3	1.4	1.4	1.2	1.1	0.9	1.6	1.6	2.6
3-Jun	3.0	1.5	2.3	Z	1.7	1.5	0.9	0.9	0.9	0.9	0.7	0.6	0.4	0.7	0.1	0.2	0.2	0.3	0.2	0.4	1.1	1.9	0.7	0.6	0.9	3.0
4-Jun	0.7	0.9	0.9	0.6	Z	1.2	0.9	0.7	0.8	0.6	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.6	1.2	2.7	1.0	0.6	0.8	2.7
5-Jun	1.0	1.2	1.6	1.4	1.0	Z	1.2	1.0	0.9	2.5	1.9	1.1	1.4	2.6	3.2	2.7	0.8	1.3	2.6	1.2	4.0	0.9	0.1	0.1	1.6	4.0
6-Jun	Z	0.4	0.2	0.1	0.1	0.2	0.2	0.1	0.7	0.5	0.8	0.6	0.1	0.6	0.2	0.4	1.3	0.6	1.3	1.0	0.4	1.1	0.8	0.9	0.5	1.3
7-Jun	1.1	Z	0.8	0.6	1.0	0.8	0.7	0.6	0.9	1.2	0.4	0.5	0.3	0.5	2.5	0.5	0.7	2.5	2.3	3.3	7.3	1.2	3.2	0.5	1.5	7.3
8-Jun	0.5	1.6	Z	2.0	1.6	1.8	5.1	3.4	1.0	0.6	0.3	0.2	0.4	0.2	0.2	0.2	0.3	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.9	5.1
9-Jun	0.1	0.1	0.1	Z	0.7	2.0	0.1	0.8	0.9	0.3	0.4	0.3	0.3	0.4	1.4	1.3	1.2	2.2	1.3	3.5	4.8	3.1	2.9	2.2	1.3	4.8
10-Jun	3.4	7.6	3.9	4.9	Z	5.0	7.1	7.1	7.8	5.6	3.4	3.1	3.1	1.6	4.7	5.5	5.0	3.5	5.0	3.4	3.8	2.7	1.1	0.9	4.3	7.8
11-Jun	0.3	0.2	0.1	0.1	0.2	Z	1.2	2.5	1.4	2.2	3.6	3.7	3.5	3.3	2.0	2.4	6.4	3.7	6.5	7.7	4.5	2.5	2.2	2.6	2.7	7.7
12-Jun	Z	0.7	0.2	0.4	0.2	0.8	1.6	4.4	4.5	3.7	2.5	2.3	2.6	3.1	6.4	4.4	4.4	5.8	8.3	10.4	12.5	10.6	2.8	6.9	4.3	12.5
13-Jun	7.7	Z	3.9	3.4	3.1	3.2	1.6	0.7	0.5	0.2	0.3	0.3	1.2	1.3	1.8	2.6	1.6	0.0	0.0	0.0	1.1	1.8	1.0	0.7	1.7	7.7
14-Jun	0.7	1.1	Z	1.0	0.8	0.9	1.3	0.5	1.0	2.6	1.1	5.3	1.6	0.9	4.7	11.0	4.1	5.1	4.1	5.7	6.1	1.8	5.7	4.4	3.1	11.0
15-Jun	4.6	5.1	2.6	Z	3.4	3.2	3.3	3.1	1.1	1.1	1.4	1.6	0.9	1.0	1.5	0.2	0.7	0.6	2.6	1.7	0.7	0.2	0.4	0.4	1.8	5.1
16-Jun	0.3	0.6	0.9	0.9	Z	2.0	6.0	4.0	3.6	2.4	2.0	1.4	0.8	0.7	3.0	2.9	1.7	1.7	2.5	5.1	11.0	22.5	5.1	2.6	3.6	22.5
17-Jun	3.3	6.5	3.4	3.7	9.2	Z	10.7	7.3	4.5	6.8	3.4	4.2	5.4	12.0	4.7	4.8	4.3	2.1	1.6	3.2	0.2	1.1	1.3	1.3	4.6	12.0
18-Jun	Z	0.9	0.8	0.2	0.0	0.4	1.4	3.3	7.7	5.1	3.0	2.9	0.1	0.3	0.9	5.7	6.5	4.5	1.4	2.1	0.3	0.4	3.0	1.1	2.3	7.7
19-Jun	1.8	Z	0.9	0.7	0.9	1.4	0.2	0.0	1.3	2.4	2.1	1.0	3.4	2.7	2.1	4.8	3.2	3.5	5.1	4.4	3.7	2.6	3.1	3.8	2.4	5.1
20-Jun	3.9	2.7	Z	1.8	2.8	3.3	2.0	0.8	1.0	0.6	1.2	0.9	1.3	1.4	1.3	1.7	0.8	0.8	0.5	0.4	0.5	1.5	2.5	3.2	1.6	3.9
21-Jun	1.9	0.5	1.1	Z	1.0	3.4	1.8	4.3	3.0	3.1	3.0	3.8	1.3	0.7	1.1	0.7	0.7	0.6	0.6	0.3	1.6	3.8	3.8	3.6	2.0	4.3
22-Jun	2.1	2.4	2.3	2.8	Z	4.4	C	C	C	C	C	1.2	0.8	0.9	0.8	0.6	0.9	0.5	0.9	1.4	1.6	2.4	1.6	2.1	1.7	4.4
23-Jun	1.8	0.8	0.6	1.2	1.4	Z	2.0	0.4	0.2	0.3	0.5	0.2	0.3	2.1	1.7	0.7	0.3	0.3	1.6	2.2	1.0	1.1	1.2	0.6	1.0	2.2
24-Jun	Z	1.1	1.3	2.9	2.0	1.5	3.0	3.1	1.1	0.6	0.8	0.6	0.9	0.9	0.7	0.6	0.5	0.4	0.4	1.2	0.5	0.5	0.8	0.4	1.1	3.1
25-Jun	0.4	Z	0.8	1.0	1.1	1.0	1.2	0.9	1.0	0.7	0.9	0.7	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.8	1.2	0.9	0.5	0.7	1.2
26-Jun	0.4	1.0	Z	1.6	1.4	1.5	1.5	1.5	1.3	0.8	0.6	0.9	1.1	1.2	0.9	1.9	1.7	0.7	0.8	0.7	1.4	1.7	1.1	0.5	1.1	1.9
27-Jun	0.9	0.5	0.3	Z	0.8	1.3	1.6	1.6	1.3	1.1	2.9	1.7	1.0	1.2	1.5	2.0	1.7	1.5	1.5	1.2	2.2	4.1	0.8	1.7	1.5	4.1
28-Jun	1.6	1.1	0.8	4.1	Z	5.2	6.6	8.8	2.6	1.9	1.2	1.3	0.9	1.3	1.4	1.2	0.7	1.4	1.4	1.7	6.2	5.9	6.4	4.5	3.0	8.8
29-Jun	3.1	2.8	5.4	2.4	4.2	Z	9.3	9.7	5.1	4.7	3.6	2.9	3.6	3.5	5.3	4.4	2.2	1.1	1.2	1.5	1.0	1.6	1.4	3.5	3.6	9.7
30-Jun	Z	3.7	1.8	1.7	3.0	2.3	3.9	4.5	5.8	1.9	1.2	1.5	1.8	3.2	2.4	3.6	1.8	3.6	3.2	2.9	7.2	2.2	5.0	6.4	3.2	7.2
	1.9	1.8	1.7	1.8	1.8	2.1	2.9	2.8	2.2	2.0	1.8	1.7	1.5	1.9	2.1	2.4	2.0	1.8	2.0	2.4	3.0	2.9	2.1	2.1	Diurnal Average	
	7.7	7.6	5.4	4.9	9.2	5.2	10.7	9.7	7.8	6.8	6.4	5.3	5.4	12.0	6.4	11.0	6.5	5.8	8.3	10.4	12.5	22.5	6.4	6.9	Diurnal Maximum	

Z - zerospan C - Calibration

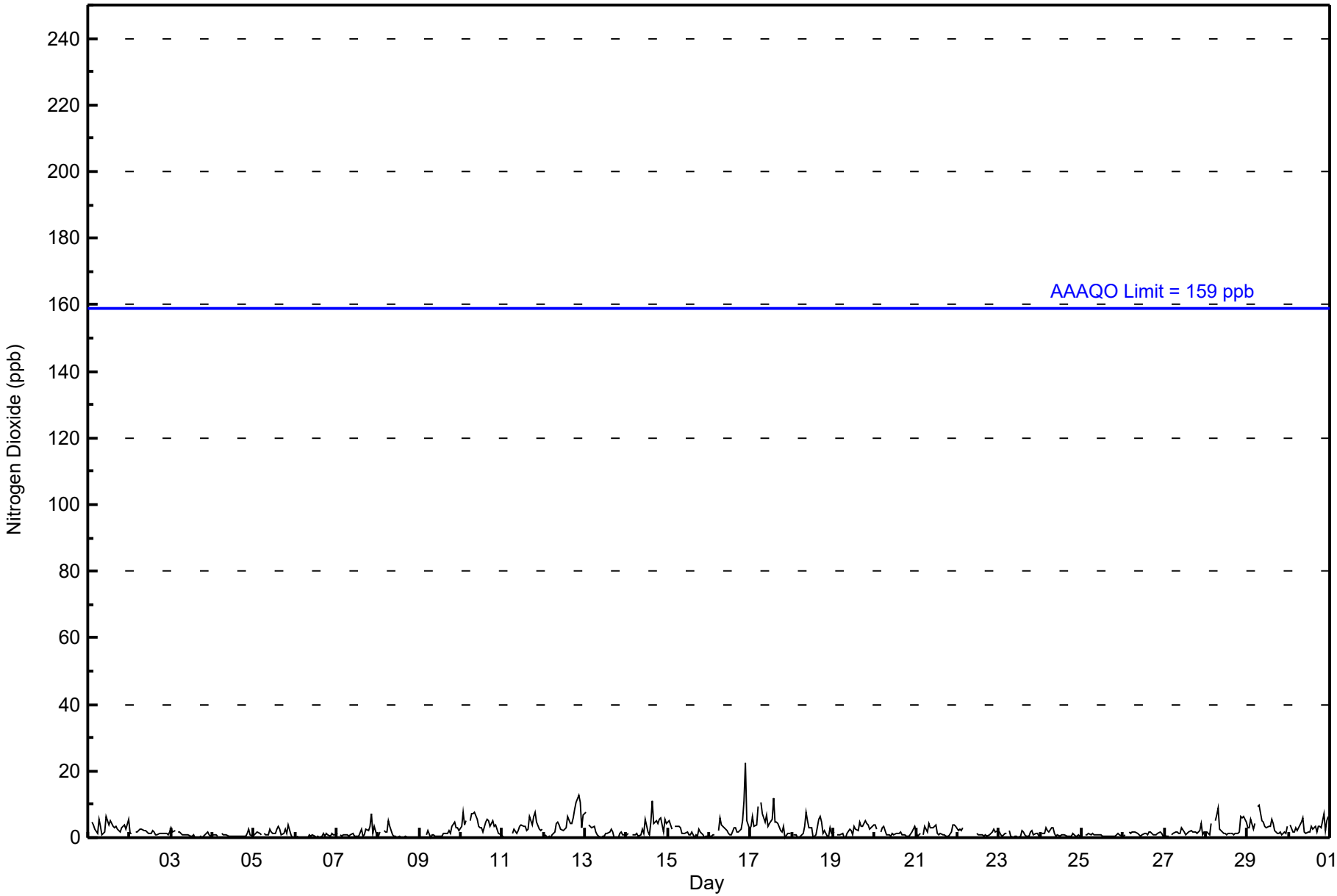
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Hangingstone Expansion - June 2026



Nitrogen Dioxide (NO_2) - ppb
Hangingstone Expansion - June 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

Nitrogen Dioxide (NO_2) - ppb

Hangingstone Expansion - June 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	80	58	47	32	20	56	29	55	61	40	20	32	42	24	25	63	684
21 - 40	1	0	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	81	58	47	32	20	56	29	55	61	40	20	32	42	24	25	63	685

Total Number of Valid Hours: 685

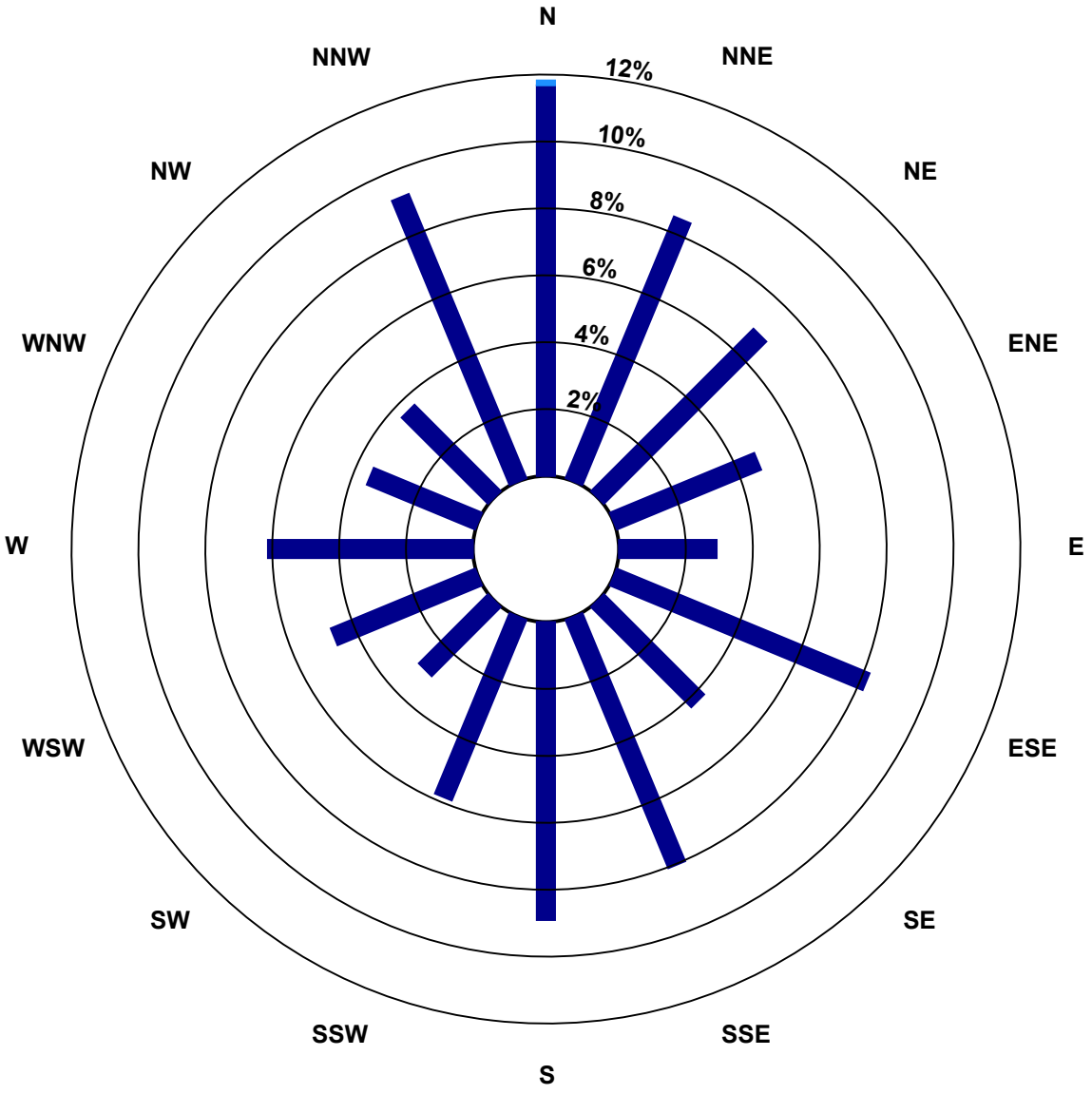
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Hangingstone Expansion



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

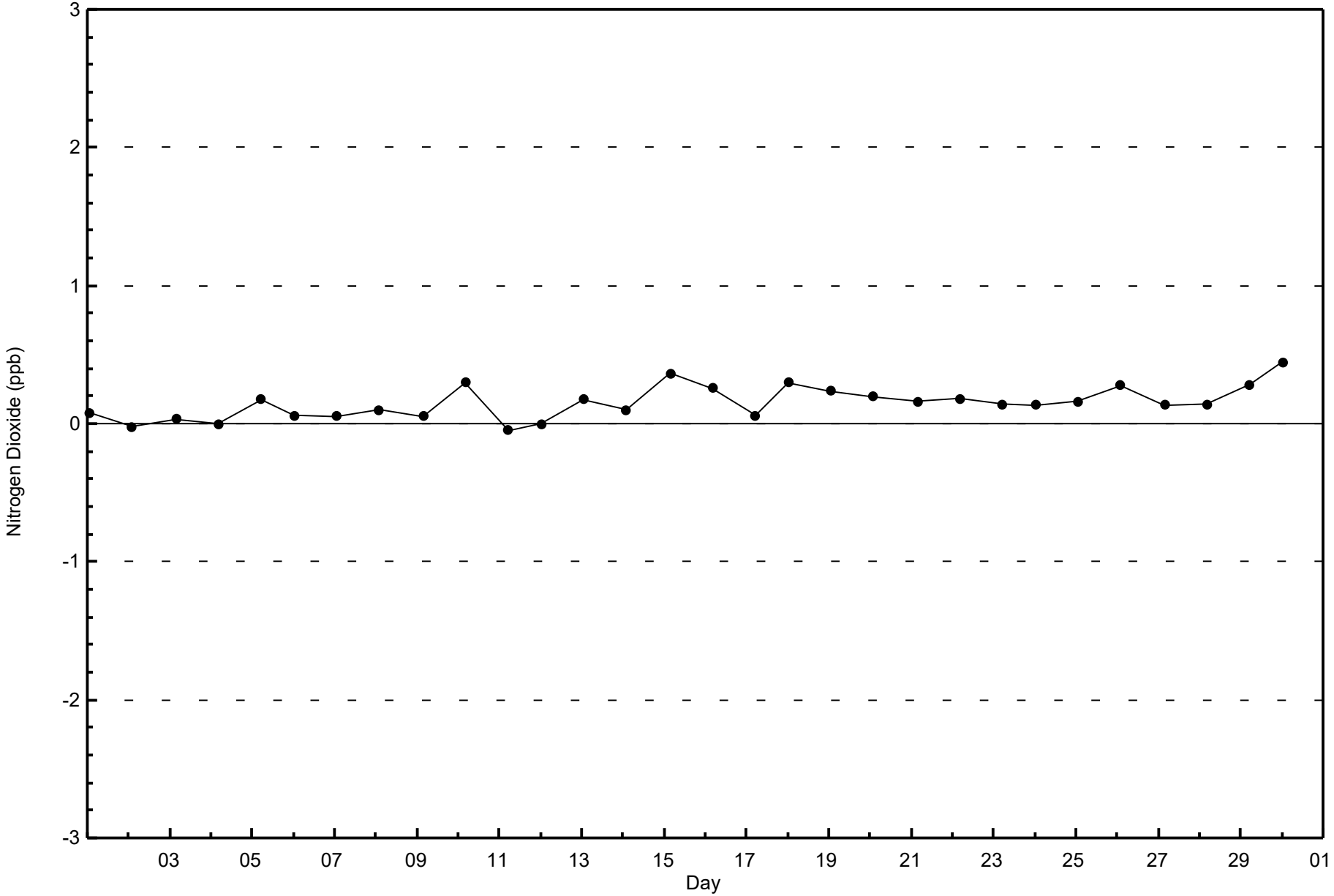
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Hangingstone Expansion - June 2026

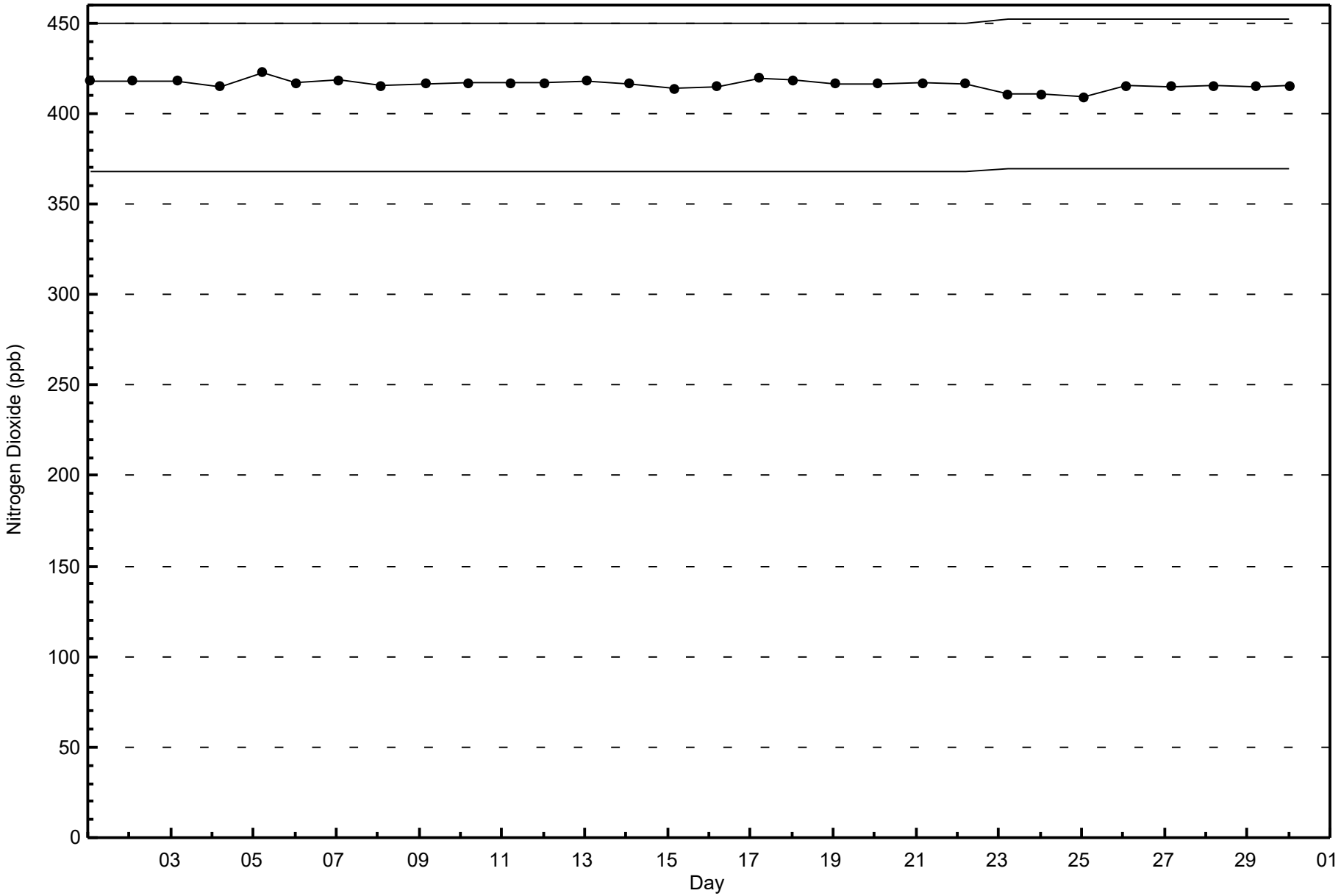


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Hangingstone Expansion - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Hangingstone Expansion - June 2026

Maximum Value: 33.2 ppb on Jun 14 16:00

Maximum Daily Average: 7.5 ppb on Jun 17

Minimum Value: 0.0 ppb on Jun 18 05:00

Minimum Daily Average: 0.8 ppb on Jun 6

Maximum Diurnal Average: 4.4 ppb at hour 8

Minimum Diurnal Average: 1.8 ppb at hour 3

Monthly Average: 2.96 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.4$ $Q_1 = 0.9$ Median = 1.8 $Q_3 = 3.9$ $P_{90} = 6.7$ $P_{99} = 14.5$

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-Jun	1.6	Z	5.4	5.0	2.8	1.3	6.7	4.0	0.9	2.2	8.3	6.4	5.0	6.4	4.0	3.7	4.3	3.0	1.7	3.6	4.0	5.2	2.8	7.2	4.1	8.3
2-Jun	1.7	1.4	Z	1.9	2.2	3.2	3.7	3.1	2.6	3.3	2.7	2.1	2.1	3.9	3.0	1.1	1.2	1.9	2.1	2.0	1.6	1.5	1.2	2.0	2.2	3.9
3-Jun	3.3	1.7	2.6	Z	2.1	2.1	1.2	1.5	1.4	1.3	1.1	0.9	0.6	1.2	0.2	0.3	0.3	0.4	0.2	0.4	1.1	2.0	0.7	0.6	1.2	3.3
4-Jun	0.7	0.9	0.9	0.6	Z	1.2	1.0	0.7	0.9	0.6	0.6	0.5	0.4	0.4	0.5	0.7	0.5	0.4	0.5	0.6	1.2	2.7	1.0	0.6	0.8	2.7
5-Jun	1.0	1.2	1.6	1.4	1.1	Z	1.5	1.3	1.2	3.3	2.4	1.3	1.6	3.0	3.7	3.2	0.9	1.5	2.8	1.3	4.1	0.9	0.1	0.1	1.8	4.1
6-Jun	Z	0.4	0.2	0.1	0.1	0.2	0.2	0.1	0.8	0.6	1.1	0.9	0.2	0.7	0.2	0.5	2.5	0.7	2.8	2.0	0.4	1.1	0.8	0.9	0.8	2.8
7-Jun	1.1	Z	0.9	0.6	1.2	1.0	1.0	0.8	1.5	1.7	0.8	1.1	0.3	0.7	3.2	0.5	0.7	2.7	2.7	3.7	8.5	1.3	3.3	0.5	1.7	8.5
8-Jun	0.5	2.1	Z	2.2	1.7	2.0	6.0	4.5	1.9	1.7	0.6	0.5	1.6	0.3	0.3	0.4	0.9	0.1	0.1	0.1	0.1	0.0	0.1	0.1	1.2	6.0
9-Jun	0.2	0.2	0.2	Z	0.9	2.6	0.2	2.1	2.3	0.7	0.9	0.8	0.8	0.7	2.1	1.9	2.0	3.1	1.8	4.2	5.4	3.3	3.1	2.3	1.8	5.4
10-Jun	3.6	13.2	4.2	5.4	Z	7.5	12.5	11.6	11.3	10.0	7.2	6.2	5.5	2.6	8.3	8.5	7.1	4.5	7.9	5.1	5.0	3.6	1.2	0.9	6.7	13.2
11-Jun	0.3	0.2	0.2	0.1	0.3	Z	1.5	7.8	3.5	4.3	6.8	7.3	6.6	6.3	3.4	3.6	11.0	5.0	9.3	11.7	6.0	2.7	2.3	4.5	4.5	11.7
12-Jun	Z	1.1	0.2	0.9	0.2	2.3	2.9	9.2	9.3	6.9	4.6	3.9	4.0	4.5	12.4	9.0	6.6	8.1	11.4	13.7	15.6	13.2	3.9	14.1	6.9	15.6
13-Jun	9.0	Z	4.3	3.5	3.2	3.9	2.0	0.9	0.7	0.3	0.6	0.5	2.1	2.8	4.7	6.7	3.6	0.1	0.1	0.1	1.6	1.9	1.1	0.8	2.4	9.0
14-Jun	0.8	1.3	Z	1.2	1.0	1.1	1.6	0.7	1.3	4.8	1.6	14.7	2.7	1.2	7.6	33.2	8.4	6.7	5.1	7.2	10.8	1.9	5.8	5.8	5.5	33.2
15-Jun	8.7	5.6	2.9	Z	3.7	4.3	4.9	4.5	1.5	1.4	1.9	2.3	1.3	1.5	2.2	0.3	0.9	0.7	3.0	1.9	0.8	0.2	0.4	0.4	2.4	8.7
16-Jun	0.4	0.7	0.9	1.0	Z	2.4	7.4	5.1	4.8	3.2	2.7	1.7	1.0	0.8	4.4	5.1	2.6	2.1	2.7	5.8	13.7	29.1	5.3	2.6	4.6	29.1
17-Jun	3.4	7.2	3.8	5.4	21.7	Z	19.8	13.4	8.3	12.8	5.3	6.6	8.1	25.2	6.6	6.6	6.1	2.4	1.7	3.6	0.2	1.1	1.3	1.3	7.5	25.2
18-Jun	Z	1.0	0.9	0.2	0.0	0.8	2.3	7.1	13.4	7.6	4.9	3.9	0.3	0.8	1.5	8.8	9.8	6.4	1.7	2.4	0.3	0.5	3.5	1.1	3.4	13.4
19-Jun	1.8	Z	0.9	0.7	1.0	2.0	0.6	0.0	2.3	4.3	3.2	1.6	5.1	3.8	3.4	7.3	5.3	5.1	7.0	6.1	4.6	2.9	3.2	5.1	3.4	7.3
20-Jun	5.8	3.4	Z	2.5	5.4	8.4	3.9	1.8	2.0	1.2	2.0	1.3	2.1	2.1	2.0	2.4	1.1	0.9	0.6	0.5	0.6	2.0	2.8	3.5	2.5	8.4
21-Jun	2.3	0.6	1.3	Z	1.0	7.4	2.5	6.4	4.8	5.3	5.7	6.4	1.9	1.2	1.9	1.2	1.2	1.0	0.9	0.4	1.8	4.3	4.2	4.7	3.0	7.4
22-Jun	2.3	2.6	2.6	3.0	Z	8.0	C	C	C	C	C	1.6	0.9	1.1	1.1	0.7	1.1	0.6	1.0	1.5	1.7	2.4	1.6	2.1	2.0	8.0
23-Jun	1.8	0.8	0.6	1.2	1.5	Z	3.0	0.5	0.2	0.3	0.6	0.3	0.3	2.7	2.1	1.0	0.3	0.3	1.7	2.3	1.0	1.1	1.2	0.6	1.1	3.0
24-Jun	Z	1.1	1.4	3.1	2.1	1.6	3.2	3.8	1.2	0.8	0.9	0.7	1.0	1.1	0.9	0.6	0.6	0.4	0.4	1.4	0.5	0.5	0.8	0.4	1.2	3.8
25-Jun	0.4	Z	0.8	1.0	1.1	1.1	1.4	1.0	1.3	0.9	1.2	0.8	0.5	0.4	0.4	0.3	0.5	0.4	0.4	0.4	0.8	1.3	0.9	0.5	0.8	1.4
26-Jun	0.4	1.0	Z	1.6	1.5	1.7	1.9	1.8	1.7	1.0	0.7	1.1	1.6	1.9	1.1	2.6	2.2	0.9	0.9	0.7	1.4	1.9	1.1	0.5	1.4	2.6
27-Jun	1.1	0.6	0.3	Z	0.9	1.6	2.2	2.2	1.7	1.5	4.2	2.5	1.4	1.6	2.1	2.8	2.2	2.0	1.9	1.6	2.6	4.8	0.8	1.7	1.9	4.8
28-Jun	1.7	1.1	1.0	4.5	Z	6.6	9.8	14.4	3.6	2.5	1.5	1.7	1.0	1.6	1.7	1.6	0.8	1.7	1.5	1.8	6.6	6.0	6.5	4.6	3.6	14.4
29-Jun	3.2	2.9	5.7	2.4	5.0	Z	13.0	12.5	6.4	6.6	5.0	3.6	4.9	4.4	7.2	5.7	2.6	1.3	1.2	1.6	1.0	1.6	1.4	3.7	4.5	13.0
30-Jun	Z	3.8	1.8	1.7	3.2	2.7	5.2	5.8	9.6	2.6	1.5	1.8	2.1	3.9	3.0	4.6	2.0	4.0	3.4	3.0	8.5	2.2	5.0	6.9	3.8	9.6
	2.3	2.2	1.8	2.0	2.6	3.1	4.2	4.4	3.5	3.2	2.8	2.8	2.2	3.0	3.2	4.2	3.0	2.3	2.6	3.0	3.7	3.4	2.2	2.7	Diurnal Average	
	9.0	13.2	5.7	5.4	21.7	8.4	19.8	14.4	13.4	12.8	8.3	14.7	8.1	25.2	12.4	33.2	11.0	8.1	11.4	13.7	15.6	29.1	6.5	14.1	Diurnal Maximum	

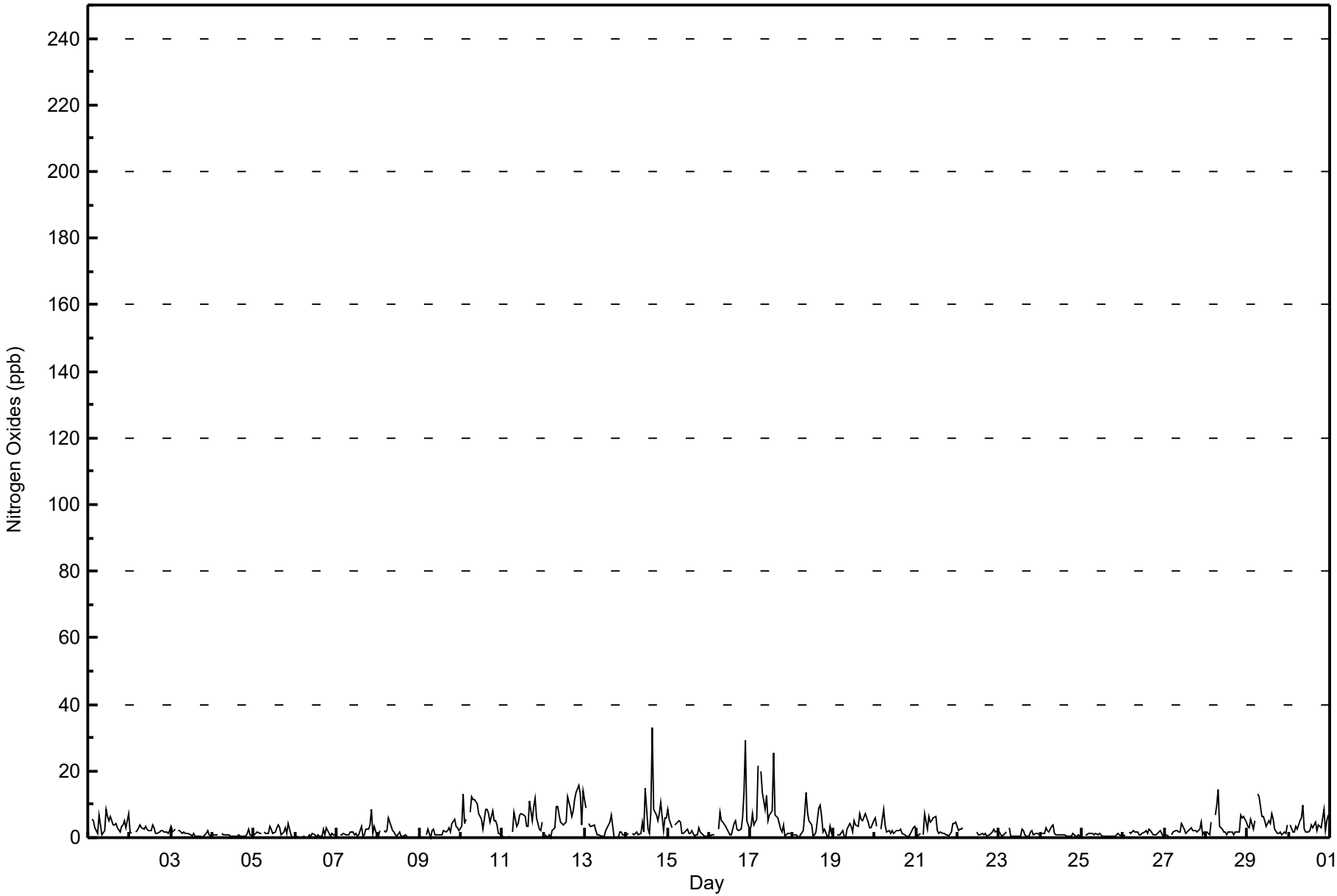
Z - zerospan C - Calibration

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Hangingstone Expansion - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	681	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: 685

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Hangingstone Expansion - June 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	78	58	47	32	20	56	29	55	61	40	20	32	42	23	25	63	681
21 - 40	3	0	0	0	0	0	0	0	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	81	58	47	32	20	56	29	55	61	40	20	32	42	24	25	63	685

Total Number of Valid Hours: 685

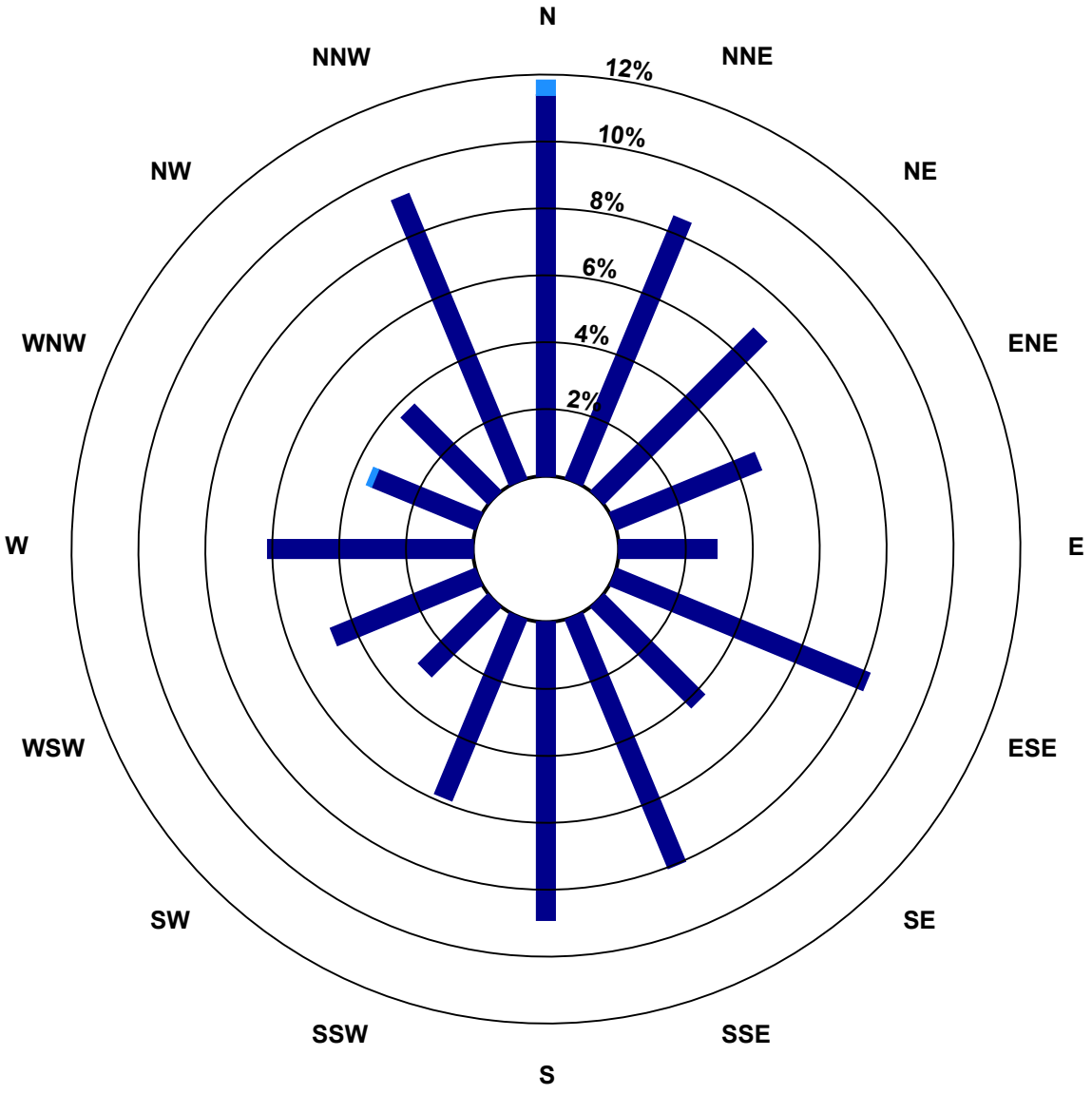
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Hangingstone Expansion



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

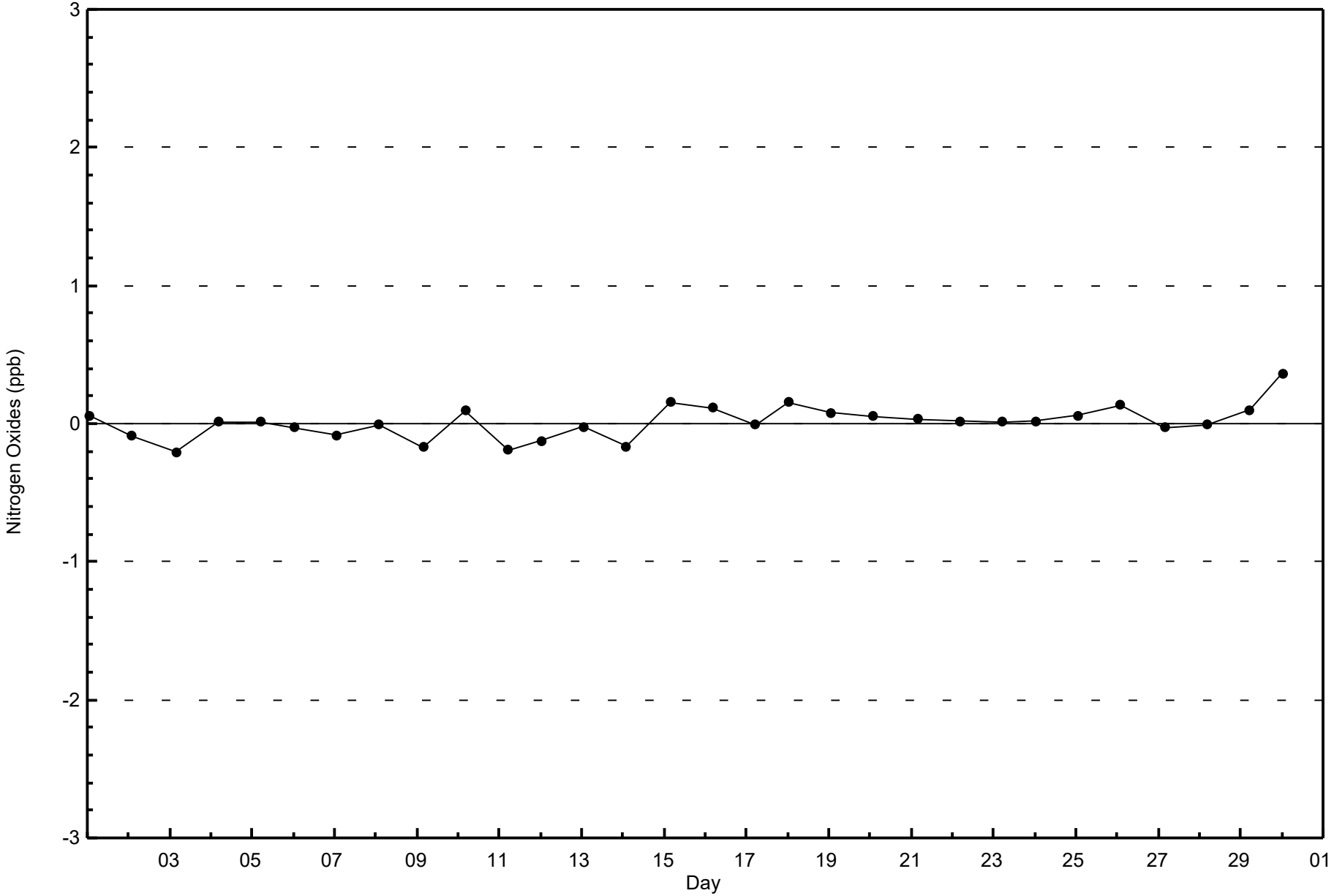
Total Number of Valid Hours: 685

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Hangingstone Expansion - June 2026

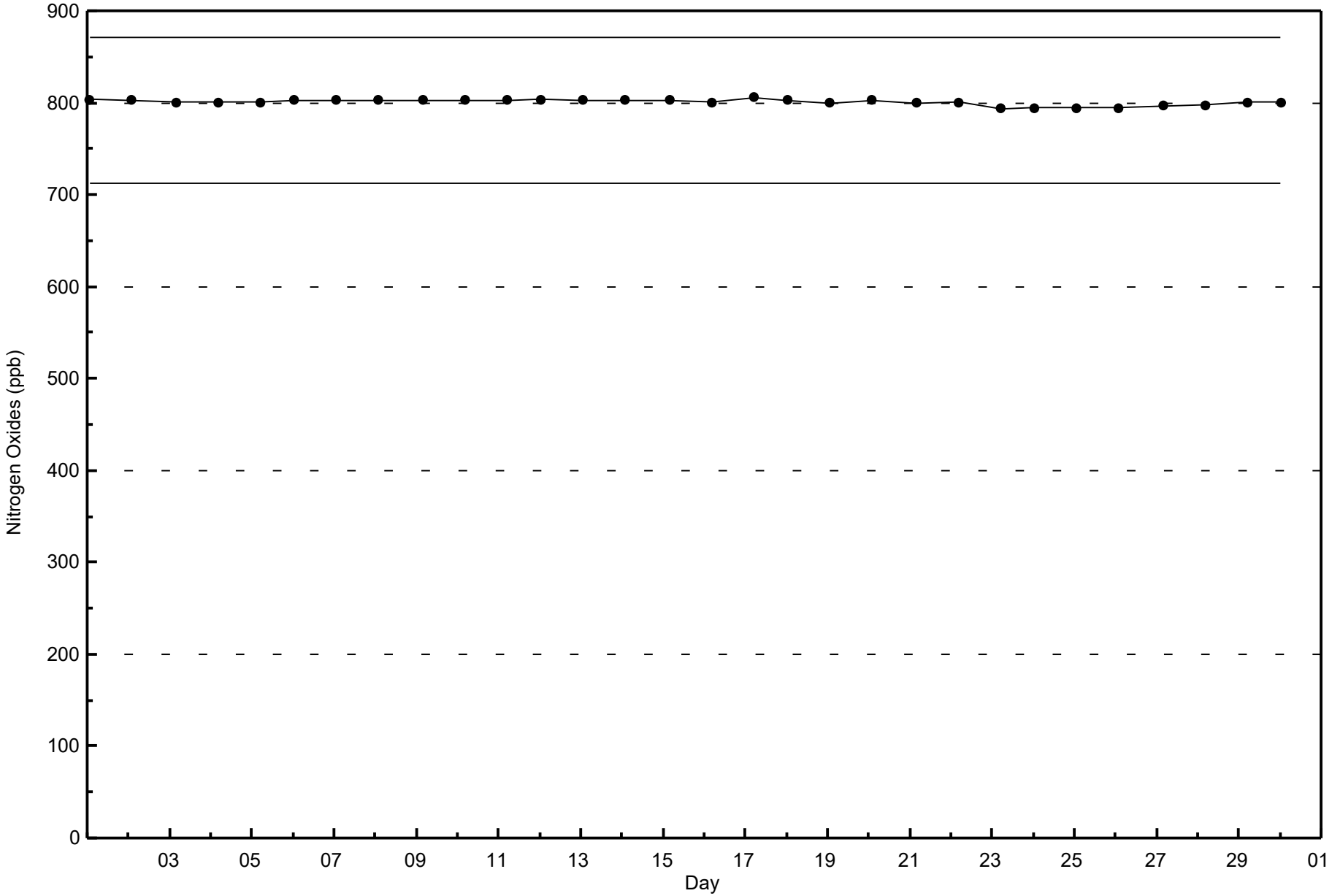


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Hangingstone Expansion - June 2026



Maximum Value: 27.9 C on Jun 29 16:00

Maximum Daily Average: 21.2 C on Jun 26

Minimum Value: 2.6 C on Jun 17 04:00

Minimum Daily Average: 6.7 C on Jun 11

Maximum Diurnal Average: 18.2 C at hour 17

Minimum Diurnal Average: 9.5 C at hour 4

Monthly Average: 14.10 C

Percentiles: P_1 = 4.5 P_{10} = 7.2 Q_1 = 9.6 Median = 13.6 Q_3 = 18.0 P_{90} = 22.4 P_{99} = 27.1

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

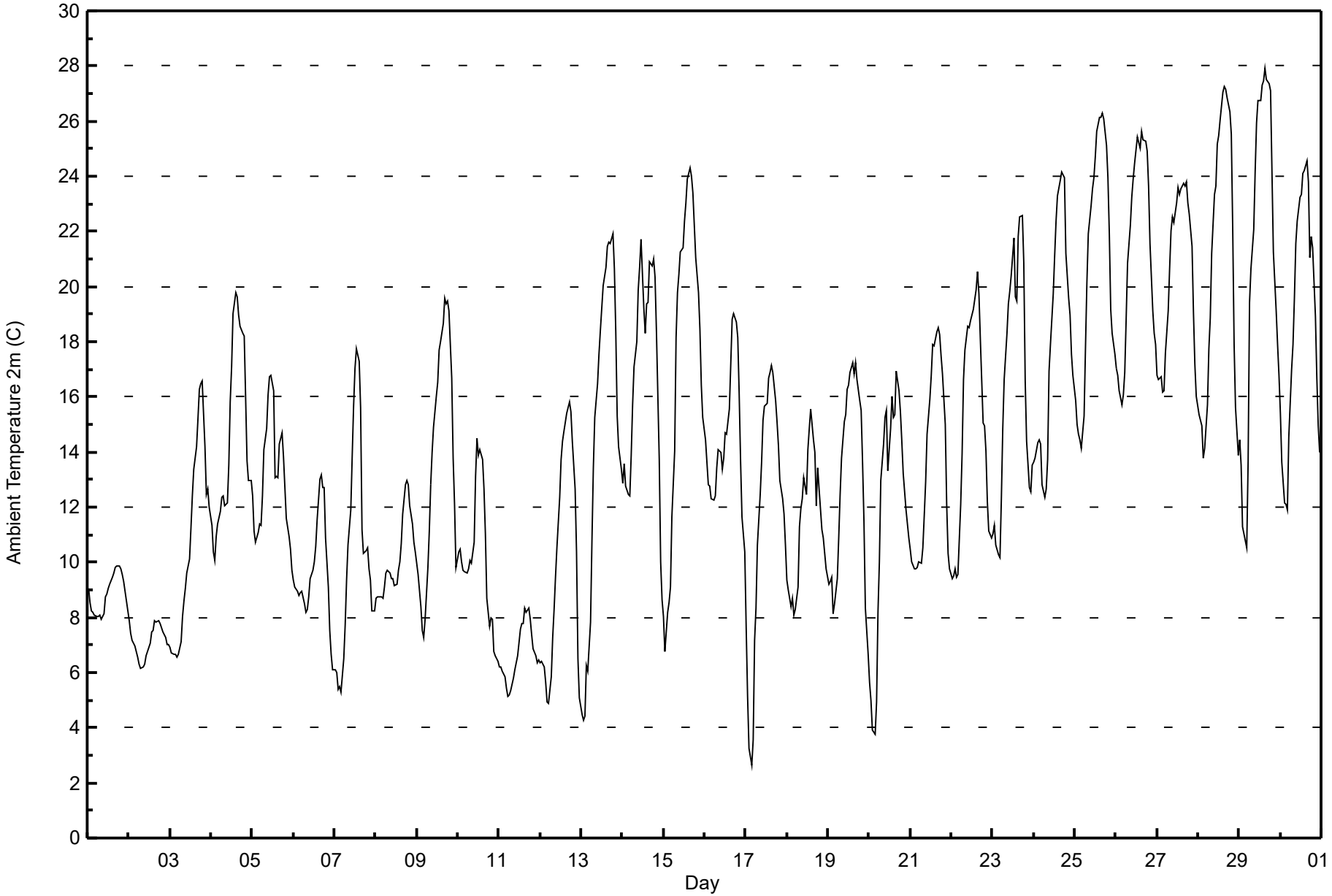
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	9.1	8.6	8.2	8.2	8.1	8.0	8.1	8.1	7.9	8.2	8.7	8.9	9.0	9.2	9.5	9.6	9.8	9.9	9.9	9.8	9.6	9.3	8.9	8.2	8.9	9.9
2-Jun	7.9	7.4	7.2	7.0	6.8	6.6	6.3	6.1	6.2	6.3	6.6	6.8	7.1	7.5	7.5	7.9	7.8	7.9	7.8	7.6	7.4	7.3	7.0	7.0	7.1	7.9
3-Jun	6.9	6.7	6.7	6.7	6.6	6.7	7.1	8.0	8.6	9.1	9.6	10.1	11.2	12.4	13.4	14.2	15.2	16.3	16.5	16.6	14.2	12.5	12.6	12.0	10.8	16.6
4-Jun	11.3	10.4	10.1	10.9	11.4	11.9	12.4	12.4	12.0	12.2	13.5	15.8	17.1	19.0	19.8	19.6	19.0	18.6	18.3	18.2	16.0	13.7	13.0	13.0	14.6	19.8
5-Jun	12.4	11.1	10.7	11.1	11.4	11.3	12.4	14.1	14.8	16.1	16.7	16.8	16.2	13.1	13.1	13.1	14.3	14.7	13.8	12.7	11.6	10.9	10.5	9.7	13.0	16.8
6-Jun	9.3	9.1	9.0	8.8	8.9	8.9	8.5	8.2	8.3	8.8	9.4	9.7	10.0	10.6	11.6	13.0	13.2	12.7	12.7	10.9	9.1	7.5	6.7	6.1	9.6	13.2
7-Jun	6.1	6.0	5.4	5.5	5.3	6.5	7.7	9.4	10.6	11.9	13.9	15.7	17.0	17.8	17.3	15.6	11.2	10.3	10.4	10.5	9.8	9.4	8.3	8.2	10.4	17.8
8-Jun	8.7	8.8	8.7	8.7	8.7	9.1	9.6	9.7	9.6	9.4	9.4	9.2	9.2	9.7	10.0	10.7	11.7	12.8	13.0	12.8	12.0	11.4	10.7	10.3	10.2	13.0
9-Jun	9.9	9.5	8.4	7.5	7.3	7.9	9.8	11.1	12.8	14.0	14.9	16.0	16.5	17.7	18.0	18.7	19.6	19.4	19.5	19.1	16.7	13.8	12.1	9.8	13.8	19.6
10-Jun	10.4	10.5	10.0	9.7	9.6	9.6	9.8	10.1	9.9	10.7	13.1	14.5	13.9	14.1	13.7	12.7	11.0	8.7	7.7	8.0	7.9	6.8	6.6	6.4	10.2	14.5
11-Jun	6.2	6.2	6.0	5.8	5.4	5.2	5.2	5.3	5.8	6.1	6.3	6.6	7.6	7.8	7.8	8.3	8.2	8.3	7.9	7.4	6.9	6.6	6.3	6.4	6.7	8.3
12-Jun	6.3	6.4	6.2	5.6	4.9	4.9	5.9	7.3	8.3	9.4	10.5	12.4	13.7	14.4	14.8	15.4	15.6	15.8	15.5	14.4	12.7	10.4	6.5	5.1	10.1	15.8
13-Jun	4.5	4.3	4.4	6.3	6.1	7.8	10.8	13.4	15.3	16.5	17.6	18.4	19.2	20.1	20.7	21.5	21.6	21.6	21.9	20.7	18.3	15.3	14.2	13.4	14.7	21.9
14-Jun	12.8	13.6	12.8	12.5	12.4	13.9	15.7	17.1	18.0	19.9	20.7	21.7	19.2	18.3	19.4	19.4	20.9	20.8	21.0	20.3	18.3	13.7	10.0	8.7	16.7	21.7
15-Jun	8.0	6.8	8.2	8.6	9.1	11.6	14.0	18.1	19.8	20.5	21.2	21.4	22.4	23.0	23.9	24.3	24.0	23.4	22.2	21.0	19.8	18.4	16.4	15.2	17.6	24.3
16-Jun	14.4	13.6	12.8	12.8	12.3	12.3	12.4	13.4	14.1	14.0	13.4	13.8	14.7	14.6	15.5	17.2	18.8	19.0	18.7	18.1	16.1	13.7	11.6	10.4	14.5	19.0
17-Jun	7.6	5.1	3.3	2.6	3.6	7.2	8.4	10.6	12.5	13.6	15.2	15.7	15.8	16.7	16.9	17.1	16.9	15.9	15.1	14.2	12.9	12.3	11.8	10.6	11.7	17.1
18-Jun	9.3	9.0	8.4	8.7	8.1	8.3	9.1	11.3	11.9	12.3	13.0	12.5	14.1	14.8	15.6	14.4	14.0	12.1	13.4	12.6	11.2	10.9	10.3	9.8	11.5	15.6
19-Jun	9.2	9.3	9.4	8.1	8.5	9.4	10.9	12.4	13.8	15.1	15.3	16.3	16.4	16.9	17.2	16.9	17.3	16.6	15.9	15.5	13.6	11.5	8.3	6.7	12.9	17.3
20-Jun	5.6	5.0	3.9	3.8	4.9	8.2	10.0	12.9	14.3	15.2	15.5	13.3	14.8	16.0	15.3	15.4	16.9	16.2	15.5	14.4	13.2	11.9	11.4	10.9	11.9	16.9
21-Jun	10.5	10.0	9.8	9.7	9.8	10.0	9.9	10.5	11.7	12.9	14.7	15.9	16.8	17.9	17.8	18.3	18.5	18.2	17.5	16.8	15.0	12.1	10.3	9.7	13.5	18.5
22-Jun	9.4	9.5	9.8	9.4	9.5	12.1	14.0	16.7	17.7	18.5	18.5	18.8	19.0	19.2	19.9	20.5	19.8	18.1	15.1	15.0	14.0	12.2	11.2	10.9	14.9	20.5
23-Jun	11.0	11.3	10.6	10.2	10.1	12.3	14.8	16.6	18.3	19.4	19.8	20.4	21.8	19.6	19.5	21.8	22.5	22.6	20.9	16.6	14.4	12.7	12.6	13.5	16.4	22.6
24-Jun	13.6	13.8	14.3	14.5	14.3	12.8	12.3	12.7	13.7	16.9	17.9	19.7	21.1	22.4	23.3	23.9	24.1	24.0	24.0	21.2	19.6	19.0	17.5	16.8	18.1	24.1
25-Jun	15.8	15.0	14.7	14.4	14.1	15.3	17.8	20.1	21.9	23.0	23.5	23.9	24.7	25.6	26.2	26.1	26.3	26.1	25.1	23.9	21.9	19.2	18.3	17.6	20.9	26.3
26-Jun	17.1	16.8	16.2	15.7	16.1	16.9	18.8	20.8	22.2	23.2	23.9	24.5	25.4	25.2	25.0	25.6	25.3	25.3	24.9	23.6	21.6	19.1	18.3	17.9	21.2	25.6
27-Jun	16.8	16.6	16.7	16.1	16.2	17.6	19.1	20.6	22.0	22.5	22.3	23.0	23.6	23.3	23.5	23.7	23.7	23.8	23.0	22.6	21.5	19.1	17.2	16.0	20.4	23.8
28-Jun	15.4	15.2	15.0	13.8	14.2	15.7	17.8	18.9	21.2	23.4	23.7	25.1	25.5	26.1	27.0	27.2	27.2	26.8	26.4	25.5	22.1	17.9	15.6	13.9	20.8	27.2
29-Jun	14.5	13.5	11.3	10.8	10.5	13.7	19.4	20.6	22.1	24.1	25.9	26.7	26.7	27.3	27.5	27.9	27.5	27.4	27.1	24.2	21.3	19.1	17.9	16.8	21.0	27.9
30-Jun	15.4	13.6	12.2	12.1	11.9	14.5	17.0	17.9	19.6	21.6	22.4	23.2	23.4	24.1	24.2	24.6	23.8	21.1	21.8	21.4	18.9	16.7	15.0	14.0	18.8	24.6
	10.5	10.1	9.7	9.5	9.5	10.5	11.8	13.2	14.2	15.2	15.9	16.6	17.1	17.5	17.8	18.2	18.2	17.8	17.4	16.5	14.9	13.1	11.9	11.2	Diurnal Average	
	17.1	16.8	16.7	16.1	16.2	17.6	19.4	20.8	22.2	24.1	25.9	26.7	26.7	27.3	27.5	27.9	27.5	27.4	27.1	25.5	22.1	19.2	18.3	17.9	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Hangingstone Expansion - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	210	29.17	29.17
10 - 20	391	54.31	83.47
> 20	119	16.53	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) - %

Hangingstone Expansion - June 2026

Maximum Value: 100.0 % on Jun 3 04:00

Maximum Daily Average: 96.5 % on Jun 2

Minimum Value: 25.7 % on Jun 15 16:00

Minimum Daily Average: 46.2 % on Jun 26

Maximum Diurnal Average: 88.6 % at hour 5

Minimum Diurnal Average: 52.7 % at hour 17

Monthly Average: 69.54 %

Percentiles: P_1 = 28.8 P_{10} = 37.9 Q_1 = 49.0 Median = 71.6 Q_3 = 90.9 P_{90} = 97.7 P_{99} = 99.8

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-Jun	98.8	98.8	98.8	97.7	98.0	98.5	98.0	98.5	98.2	97.5	94.7	94.0	93.4	92.3	90.9	89.2	87.3	85.6	85.3	86.0	87.0	88.5	86.5	89.5	93.0	98.8
2-Jun	89.5	90.7	91.7	92.9	93.7	94.9	96.4	97.4	97.6	97.5	97.3	97.5	97.2	97.5	97.1	97.3	97.4	98.0	98.5	99.0	99.2	99.1	99.2	98.4	96.5	99.2
3-Jun	98.6	99.5	99.9	100.0	100.0	100.0	99.9	96.0	88.2	87.9	86.9	85.0	80.6	76.6	73.3	71.3	68.6	65.5	64.7	65.4	81.5	86.3	84.6	88.2	85.3	100.0
4-Jun	90.6	94.1	96.0	94.0	94.0	92.7	89.4	85.8	86.4	83.9	76.2	66.3	61.8	55.6	53.5	53.1	54.0	54.4	55.5	56.5	68.5	78.7	80.9	83.6	75.2	96.0
5-Jun	86.0	92.1	95.0	93.8	91.7	91.2	83.2	70.3	63.8	56.4	53.9	55.7	63.7	94.4	90.0	84.8	74.8	66.8	73.9	85.7	94.5	96.1	97.8	98.1	81.4	98.1
6-Jun	97.9	98.6	99.1	99.1	99.4	98.8	98.4	97.9	96.8	96.1	93.9	94.4	92.3	86.7	80.0	68.8	67.4	70.3	66.5	75.2	81.6	87.5	90.6	90.9	88.7	99.4
7-Jun	90.6	90.5	92.7	93.2	92.6	91.1	90.8	82.9	77.5	72.2	62.2	54.1	49.0	46.0	50.8	62.8	85.1	96.7	96.9	97.6	98.1	98.4	98.8	99.5	82.1	99.5
8-Jun	99.9	OR	OR	OR	OR	OR	OR	OR	OR	OR	99.3	98.7	97.9	96.4	93.9	89.8	85.1	79.7	78.1	71.0	71.7	73.1	77.4	80.3	--	99.9
9-Jun	82.9	85.9	92.2	95.2	95.3	91.7	82.1	75.4	67.1	62.2	58.5	54.1	52.9	48.9	47.8	45.6	41.7	43.1	44.0	45.6	60.2	69.1	75.2	86.7	66.8	95.3
10-Jun	85.1	89.9	91.5	97.8	99.7	OR	97.0	93.5	94.4	90.4	73.7	63.5	70.1	70.7	73.5	81.0	86.1	94.3	96.7	95.5	92.5	98.6	96.9	96.0	88.2	99.7
11-Jun	96.1	94.6	96.6	98.2	99.6	99.7	98.7	95.5	92.3	89.5	87.2	86.2	79.1	78.7	79.8	78.1	80.2	79.0	83.9	86.9	90.1	93.2	97.5	97.7	89.9	99.7
12-Jun	99.6	99.8	99.5	99.2	99.4	98.6	94.6	82.9	74.7	63.2	55.4	45.7	40.6	38.7	35.6	33.5	33.1	30.4	35.0	39.0	46.2	58.4	76.6	90.9	65.4	99.8
13-Jun	92.1	89.7	88.4	75.5	77.0	71.9	61.0	52.3	45.8	39.8	37.1	36.0	34.3	32.3	30.9	30.3	29.7	31.0	30.5	34.9	42.8	51.9	47.2	46.9	50.4	92.1
14-Jun	47.7	44.9	49.2	51.7	54.0	51.9	49.0	45.3	43.9	37.9	35.0	33.2	48.2	51.8	49.8	51.0	42.6	39.6	36.8	36.9	44.2	59.5	83.6	91.0	49.1	91.0
15-Jun	87.5	91.9	83.7	78.1	79.0	74.5	67.5	49.0	39.7	37.4	36.3	36.2	32.6	30.8	29.3	25.7	27.8	30.7	40.0	41.5	45.3	54.4	69.0	76.9	52.7	91.9
16-Jun	82.0	89.3	93.9	90.9	95.4	97.9	97.9	92.4	88.5	87.8	93.5	91.0	83.5	78.0	70.1	57.3	49.5	47.1	44.9	40.0	42.9	48.9	56.9	61.2	74.2	97.9
17-Jun	75.7	88.9	96.2	97.8	98.0	81.1	76.3	70.0	60.5	52.4	42.8	42.1	41.8	38.0	37.1	37.9	39.5	45.1	49.4	53.0	61.0	61.0	63.1	71.5	61.7	98.0
18-Jun	81.1	83.9	88.1	88.9	91.2	90.1	85.0	73.3	69.1	61.2	51.3	57.0	51.7	49.9	45.7	58.3	65.8	82.0	71.1	80.3	92.0	92.3	95.8	97.4	75.1	97.4
19-Jun	96.9	93.8	91.6	94.9	95.3	93.0	86.4	76.5	65.1	46.8	47.4	42.6	45.1	43.4	41.9	46.4	46.7	50.8	48.9	54.2	64.5	74.5	88.8	94.7	67.9	96.9
20-Jun	96.1	97.1	97.7	98.3	98.5	89.6	83.1	71.0	62.5	55.4	53.5	68.6	68.1	62.8	62.7	64.4	52.8	57.7	60.5	68.3	77.4	86.1	89.0	93.0	75.6	98.5
21-Jun	95.9	97.9	99.2	99.6	99.9	99.8	99.1	98.0	92.9	86.8	79.1	71.2	57.6	45.0	44.5	41.0	41.2	42.1	46.7	52.6	65.9	81.0	92.7	95.2	76.0	99.9
22-Jun	97.9	97.9	96.8	97.0	98.3	88.3	77.6	61.7	51.2	43.4	42.9	43.1	43.0	42.6	40.9	38.2	41.1	55.0	75.8	78.6	80.5	86.9	84.5	80.3	68.5	98.3
23-Jun	80.2	81.9	83.3	83.9	87.9	80.7	71.9	62.8	55.0	47.5	44.0	41.4	36.1	51.7	57.3	41.7	37.3	36.5	44.5	68.3	81.0	84.1	83.2	77.8	63.3	87.9
24-Jun	76.2	74.1	72.2	70.1	71.8	88.7	95.1	92.9	83.4	71.6	66.3	58.4	50.6	41.1	37.5	35.4	35.4	34.7	38.9	42.8	44.6	52.3	59.7	61.4	60.6	95.1
25-Jun	64.2	67.1	68.5	70.0	72.4	69.2	60.3	53.1	46.0	40.0	38.2	38.0	35.8	32.1	30.3	29.1	28.2	28.8	31.7	34.9	41.1	49.0	49.9	52.3	47.1	72.4
26-Jun	55.3	58.0	61.4	64.6	64.0	62.0	56.2	51.3	45.9	38.7	34.9	34.8	30.2	33.6	33.4	30.7	32.2	32.8	35.4	38.7	44.1	52.8	56.8	59.8	46.2	64.6
27-Jun	63.9	64.9	66.4	69.1	71.2	67.6	64.0	60.0	55.1	53.4	55.0	52.2	46.8	47.9	46.6	48.3	48.0	46.4	47.9	47.1	49.7	57.1	63.8	67.9	56.7	71.2
28-Jun	69.6	69.3	69.3	76.0	74.3	71.4	67.3	67.3	58.8	45.9	45.8	40.4	37.7	34.5	31.0	30.2	30.6	31.2	33.0	35.9	48.1	65.5	74.1	79.6	53.6	79.6
29-Jun	71.4	75.7	87.5	86.2	88.1	77.0	58.0	56.1	52.0	44.4	35.6	31.6	29.5	27.5	28.0	27.4	28.9	28.3	29.6	42.0	50.0	56.7	60.5	65.4	51.6	88.1
30-Jun	72.3	81.6	87.4	87.8	89.3	82.2	73.7	71.3	63.5	50.6	46.2	42.2	42.1	38.6	37.8	39.5	42.3	51.7	59.2	63.6	75.5	80.7	85.5	79.4	64.3	89.3
	84.0	85.6	87.4	87.6	88.6	85.5	81.3	75.2	69.5	63.4	60.8	58.5	56.4	55.5	54.0	52.9	52.7	54.5	56.8	60.6	67.4	74.1	78.9	81.7	Diurnal Average	
	99.9	99.8	99.9	100.0	100.0	100.0	99.9	98.5	98.2	97.5	99.3	98.7	97.9	97.5	97.1	97.3	97.4	98.0	98.5	99.0	99.2	99.1	99.2	99.5	Diurnal Maximum	

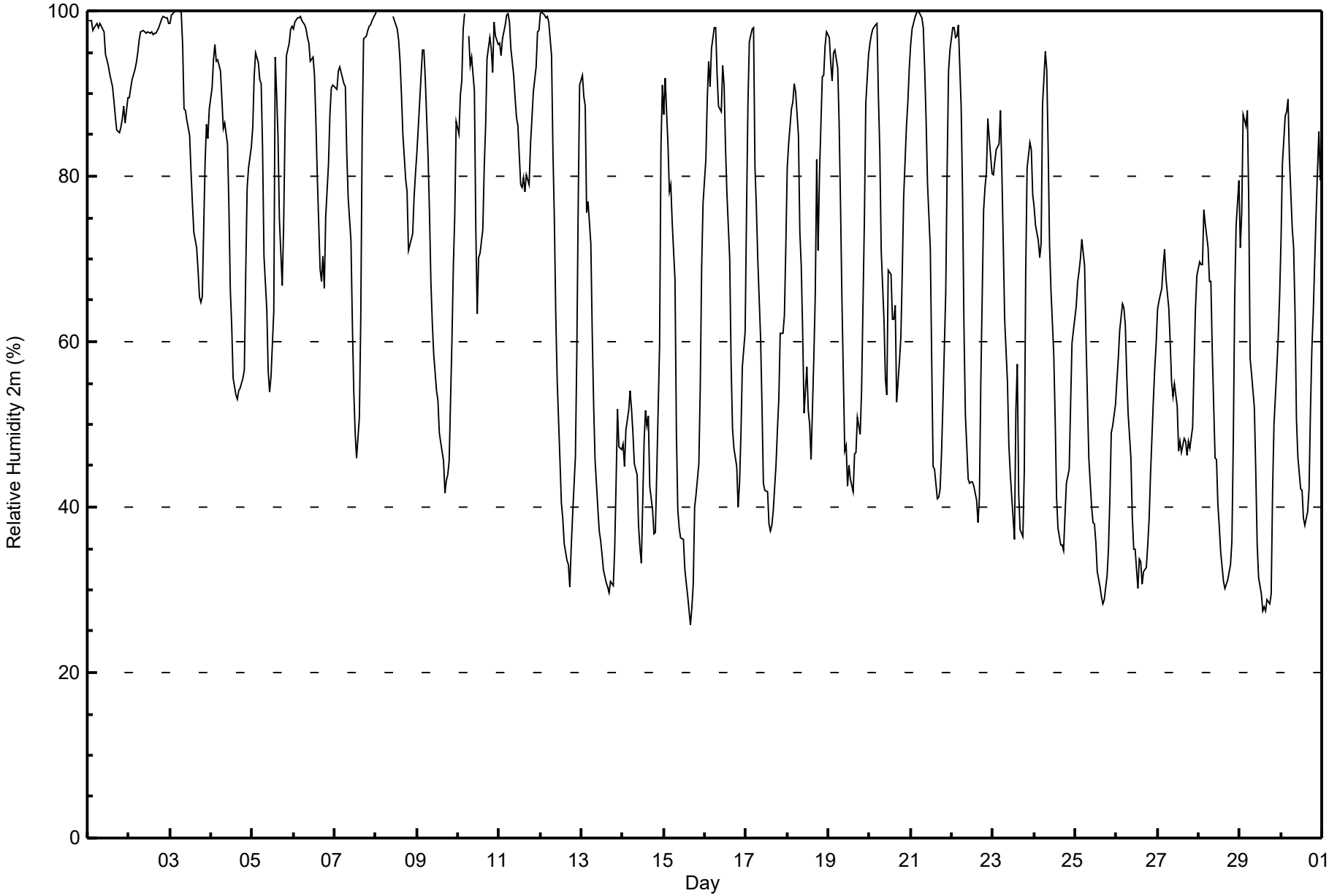
OR - Out of Range

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Hangingstone Expansion - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	89	12.54	12.54
40 - 60	173	24.37	36.90
60 - 80	154	21.69	58.59
80 - 100	291	40.99	99.58

Total Number of Valid Hours: 710

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Hangingstone Expansion - June 2026

Maximum Speed: 22 km/h on Jun 8 12:00

Maximum Daily Speed Average: 18.4 km/h on Jun 1

Minimum Speed Value: 0 km/h on Jun 15 17:00

Minimum Daily Speed Average: 1.6 km/h on Jun 22

Maximum Diurnal Speed Average: 4.6 km/h at hour 17

Minimum Diurnal Speed Average: 0.6 km/h at hour 22

Monthly Average Velocity: 1.5 km/h 14.7 deg

Percentiles: P_1 = 1 P_{10} = 4 Q_1 = 6 Median = 8 Q_3 = 12 P_{90} = 16 P_{99} = 20

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-Jun	N20	N20	N18	N20	N16	N18	N19	N19	NNW19	N19	N21	N21	N20	N20	N18	N20	N19	N19	N18	N18	N16	N14	N16	N15	N18.4	N21
2-Jun	NNE17	NNE16	NNE14	NNE14	NNE14	NNE15	NNE15	NNE14	NNE14	NNE16	NNE16	NNE17	NNE18	NE18	NE15	NE13	NE13	NNE11	NNE12	NNE12	NE11	NE8	ENE8	ENE6	NNE13.3	NNE18
3-Jun	NNE4	NNE5	NNE4	NNE4	ENE5	ENE5	ENE5	E4	SE4	ESE4	ESE5	ESE5	ESE5	ESE6	S5	SSE5	SSE3	SE8	SSE6	SSE5	ESE4	SE7	SE11	SSE12	ESE4.0	SSE12
4-Jun	SSE11	S9	SSE10	S9	S9	SSE9	S8	S11	SSE12	S10	S12	S11	SSW11	SSW10	S12	S13	S13	S12	SSW10	S8	S7	SSE7	SSE8	S10	S9.8	S13
5-Jun	S9	S7	S6	SSW5	SW7	SW6	SW6	WSW5	WSW2	N2	NW6	NW6	SSW5	SE5	ENE5	ENE6	NE8	NE7	NNW3	SW1	S2	W4	W10	W11	WSW2.0	W11
6-Jun	W12	WSW12	WSW14	WSW13	WSW13	W14	WSW15	WSW16	WSW17	WSW16	WSW17	WSW16	WSW18	WSW17	WSW18	W18	W17	W14	WSW14	WSW8	SSW6	SSW5	S6	SSW6	WSW12.9	W18
7-Jun	SSW7	SSW8	S7	S8	SSE9	S8	SSW8	S8	SSW6	S1	SSW4	S5	S7	SSE7	NW2	NW10	SSE8	S2	ESE2	SSE1	ENE6	NNE5	WNW3	WNW5	S3.5	WNW10
8-Jun	SW2	WNW3	NW5	NNW5	NNW6	NW8	NNW11	NW15	NW17	NW20	WNW19	WNW22	WNW22	W18	W16	W15	W12	W11	WNW11	WNW17	WNW13	WNW11	W8	W10	WNW11.7	WNW22
9-Jun	W11	W11	WSW9	WSW9	WSW9	SW9	W10	W8	W9	W8	W10	W11	W9	WNW8	NNW5	NNW7	NNW6	N9	NNE9	N6	NE4	NNE6	ESE4	SSE6	WNW5.1	W11
10-Jun	SE6	NE4	NE4	NNE4	N2	N7	N9	N10	N8	NNW8	NNW11	NNW13	NNW14	NNW14	N12	N15	N14	NNE15	N10	NNW8	NNW11	NNW11	NNW7	NW7	N8.5	NNE15
11-Jun	NW6	NW7	NW7	NW9	NNW10	NNW9	NW9	NW11	NW11	NNW11	NNW12	N12	NNW13	NNW13	NNW12	NNW11	N12	NNW14	N15	N14	NNW13	NNW9	NNW8	NNW9	NNW10.4	N15
12-Jun	NW10	NW7	WNW6	W5	WNW6	NW8	NW9	NNW13	NNW14	NNW16	NNW17	NNW19	NNW21	N21	N21	N19	N17	N17	N15	N13	N7	NNW5	W2	S3	NNW11.2	N21
13-Jun	SSE6	SSE6	SSW6	SSW7	SSW7	SSW6	SW6	W7	W9	WNW9	NW9	WNW7	NNW9	WNW8	WNW7	W7	W9	WSW7	WSW7	WSW6	SSW5	S7	S7	S7	WSW4.6	NNW9
14-Jun	SSW8	SSW9	SSW8	SSW9	SSW8	SSW9	SW8	WSW8	W7	NNW9	NNW10	NNW13	WNW12	NW9	NNE7	WNW6	NW8	N15	N14	N12	NNW5	NW4	WSW4	S5	WNW4.1	N15
15-Jun	SSE8	S6	SSW8	S6	S6	S5	S4	E4	NE3	N4	N6	NNW5	N8	NNW5	N6	SW5	W0	SW3	SE5	ESE9	S6	WSW11	W11	W7	SW1.7	W11
16-Jun	SW6	SSW6	S7	ENE1	NW3	S2	SE4	E1	NE7	NNE9	NE10	NE9	NNE11	NE12	N8	NNW6	N11	NNE8	N10	N14	N12	N7	NNE5	NNE6	NNE4.9	N14
17-Jun	NNE4	ENE3	ESE3	ESE1	N2	N4	N7	N8	N12	N13	NNE16	N17	N14	N14	N13	NNW12	NNW11	NNW7	NNW8	NNW9	NW7	WNW8	SSW4	W5	N7.2	N17
18-Jun	WSW5	SW7	SSW7	WSW8	WSW6	SW6	WSW6	NW8	N15	NNW16	NNW15	NNW9	NW16	NW14	NNW17	N14	N13	N8	NNW7	NW5	W4	W4	WNW3	S5	NW6.2	NNW17
19-Jun	SSW5	SSW5	SW6	SSW6	SSW5	SW4	WSW6	WNW6	N6	N8	NNW9	NNW10	N12	N10	NNW8	N14	N14	NNE13	N10	N12	NNE7	NE5	ESE5	ESE4	N4.3	N14
20-Jun	SE5	ESE6	ESE5	ESE5	ESE4	NE3	NNE6	NE9	NNE12	NNE11	NNE11	NNW6	NNW6	N7	ENE12	NE10	NE13	NE13	NE14	E5	E4	ESE6	E5	NE4	NE5.9	NE14
21-Jun	NE5	NE5	NNE6	NNE5	NE8	NNE8	NNE7	NNE10	NNE12	NNE12	NNE10	NNE9	E8	E11	E12	ENE12	ENE11	ENE11	ENE8	ENE5	NE4	NNE3	NNE3	ENE2	NE6.9	E12
22-Jun	ENE3	SE3	SE4	S4	S4	W1	NNW3	NNE2	N4	NE8	NE8	ENE5	NE4	NE7	E6	ESE3	ESE3	WSW10	SSW6	SSW6	SSW6	S6	S6	SSW6	SE1.6	WSW10
23-Jun	S7	SSW7	S7	S7	S6	SSW6	SW5	SW6	W7	W6	W7	W5	WSW3	NNE6	ESE9	SSE12	S10	S8	NE4	W8	SSE9	SSE8	SSE9	S9	S4.5	SSE12
24-Jun	S10	S9	SSW8	SSW8	SW8	SW6	SSE9	ESE9	SE12	SSE11	SSE11	S12	S11	SSW8	SSW8	SSW8	SW6	SSW3	WSW1	ESE12	SE12	SSE12	SSE10	SSE9	S7.5	SE12
25-Jun	S10	SSE10	S12	S11	SSE11	SSE10	SSE7	SSE8	SSE11	SSE13	SSE11	SSE12	SSE12	S13	SSE11	SSE12	SSE12	S12	S13	SSE13	SSE8	SSE9	SSE11	SSE12	SSE11.0	SSE13
26-Jun	SSE14	SSE14	SSE13	SE13	SE14	SE14	SSE13	SSE12	SE16	SE17	SSE17	SE16	SE15	SSE14	SE13	ESE13	ESE15	SE14	ESE15	ESE12	ESE8	ESE8	ESE10	ESE12	SE13.0	SE17
27-Jun	ESE11	ESE12	ESE13	ESE13	ESE14	ESE14	ESE13	ESE14	ESE17	ESE18	E18	E18	ESE19	ESE17	E16	E14	ENE14	E16	E12	ENE10	E8	E7	ESE7	ESE8	E13.0	ESE19
28-Jun	ESE8	ESE8	ESE7	E5	E6	ENE5	NNE4	N6	NE7	ENE15	ENE17	NE19	NE18	NE19	NE19	NE18	NE18	ENE14	NE11	ENE8	ENE4	ESE6	ESE6	E4	ENE9.6	NE19
29-Jun	SE8	SE4	SSE5	SSE7	SSE7	SE5	ENE3	N4	NNE4	NNW8	N9	NNE13	NNE12	NNE12	NNE12	NE13	NE12	NE12	NE10	ESE14	SE9	SE7	ESE7	ESE6	ENE4.8	ESE14
30-Jun	ESE4	E4	SE6	ESE7	ESE7	ESE5	NE6	NNE5	NNE4	E9	ENE10	ENE11	NNE10	NNE11	NE12	NE9	NE12	ESE5	SSE3	SE3	SW2	S4	SE4	ESE6	ENE4.9	NE12
	S2.0	S1.9	S2.4	S2.0	S1.8	S0.9	NW0.9	NNW2.5	N3.1	N3.9	N4.6	N4.5	N4.1	N4.2	NNE4.2	N4.0	NNE4.6	NNE4.0	NNE3.9	NNE2.8	NE1.5	E0.6	SSE1.9	SSE2.3	Diurnal Average	
	N20	N20	N18	N20	N16	NNW18	N19	N19	NNW19	NW20	N21	WNW22	WNW22	N21	N21	N20	N19	N19	N18	N18	N16	N14	N16	N15	Diurnal Maximum	

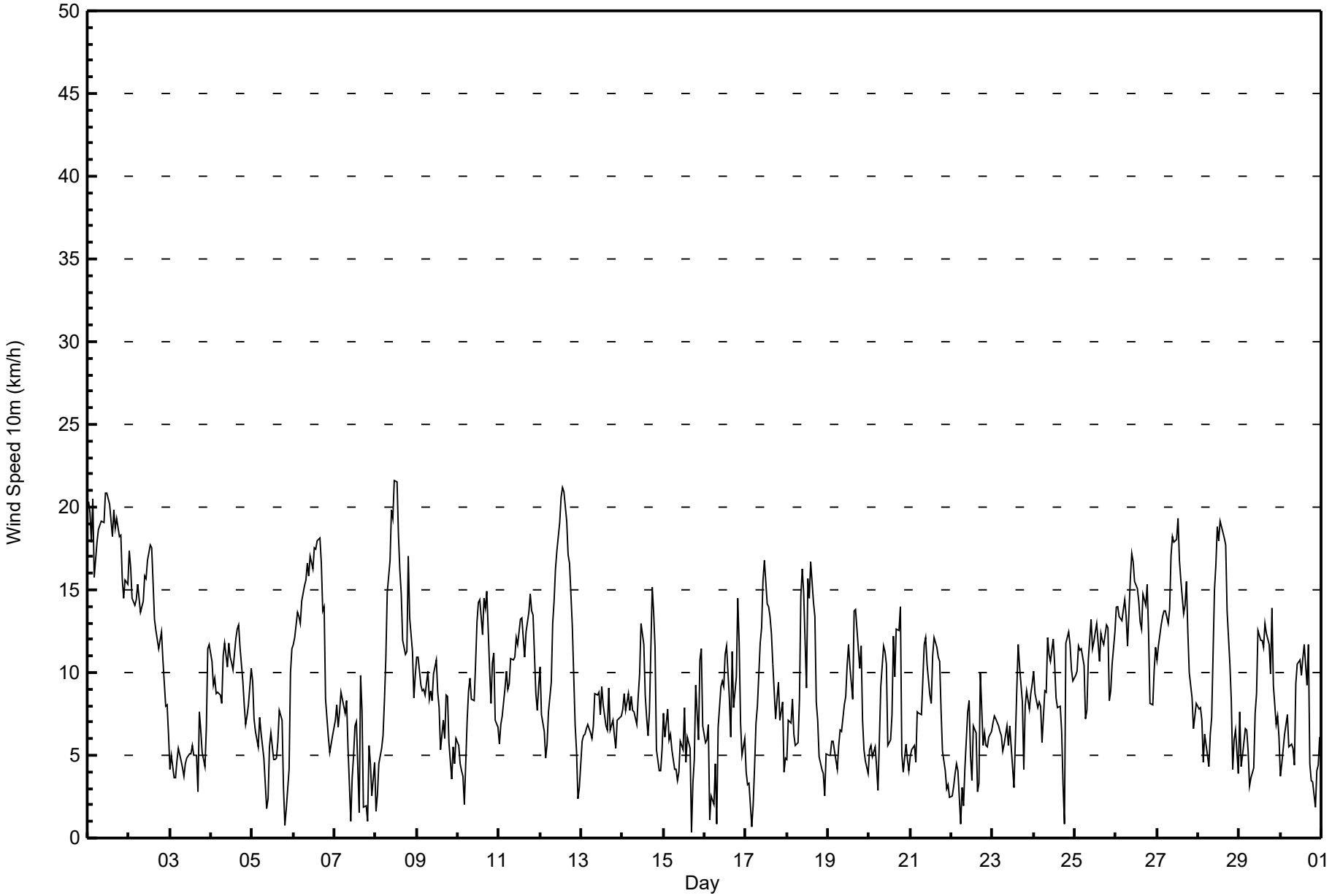
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Hangingstone Expansion - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	157	21.81	21.81
6 - 11	339	47.08	68.89
12 - 19	210	29.17	98.06
20 - 28	14	1.94	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

Hangingstone Expansion - June 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	17	12	15	7	19	11	6	14	10	7	6	9	4	5	8	157
6 - 11	25	20	18	11	7	22	8	34	41	34	14	14	25	13	19	34	339
12 - 19	43	25	19	6	7	18	11	18	10	0	0	14	9	5	3	22	210
20 - 28	10	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	14
29 - 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	85	62	49	32	21	59	30	58	65	44	21	34	43	24	28	65	720

Total Number of Valid Hours: 720

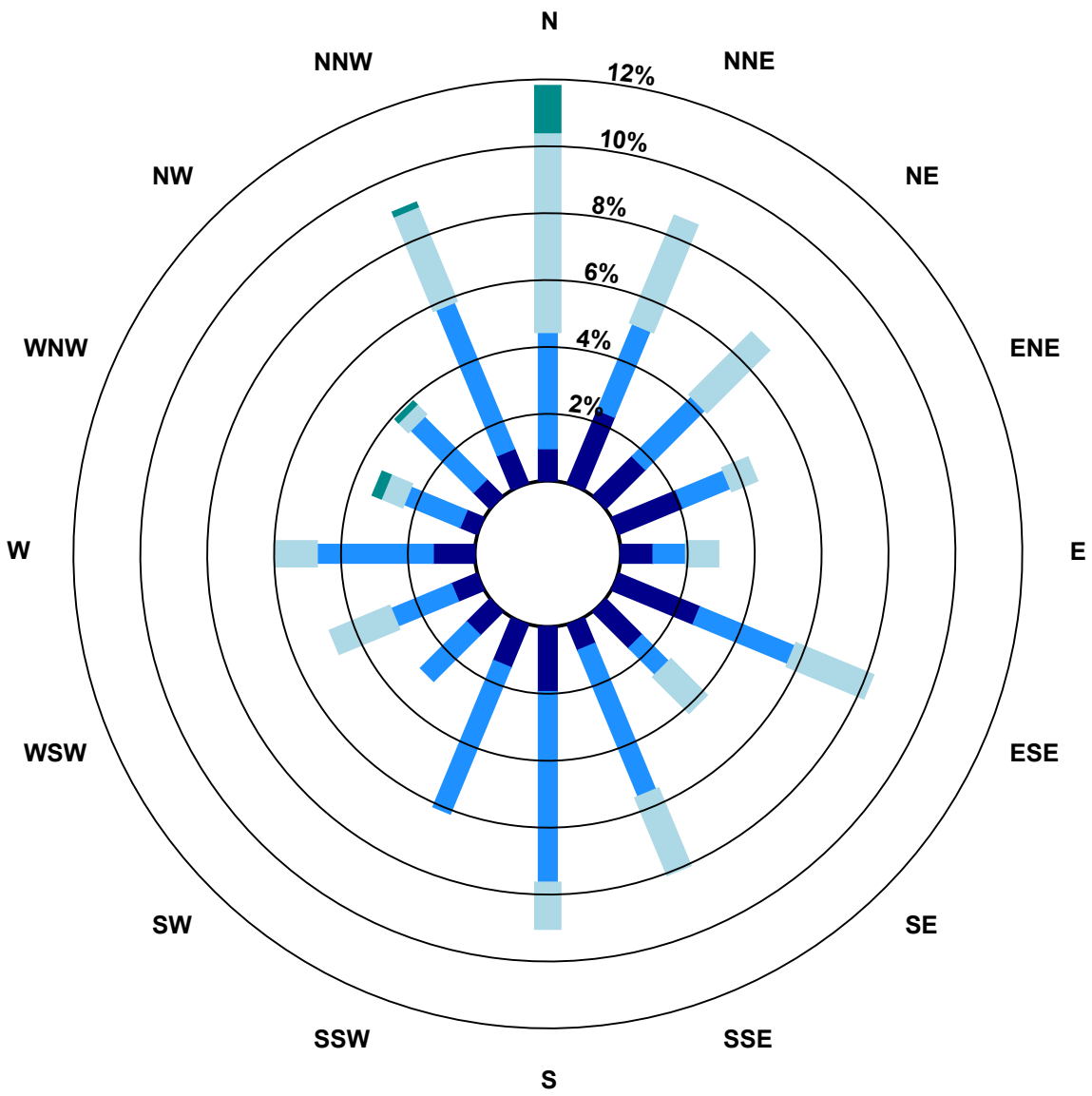
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Hangingstone Expansion



Classes (km/h)

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

Total Number of Valid Hours: 720

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8 km/h on Jun 7 17:00

Minimum Value: 0 km/h on Jun 22 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-Jun	5	5	5	6	4	4	5	5	5	5	6	5	6	5	5	5	5	5	5	5	5	4	4	4	6
2-Jun	4	4	4	3	4	4	4	4	4	4	4	4	4	5	4	3	3	3	3	3	3	2	2	2	5
3-Jun	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3	2	1	2	1	4	3	4
4-Jun	3	2	2	2	2	2	2	3	3	3	3	4	4	4	4	4	4	4	3	2	1	1	1	2	4
5-Jun	2	2	1	2	3	3	2	2	2	2	1	1	4	2	1	4	2	2	1	1	1	1	3	4	4
6-Jun	3	4	4	4	4	5	5	5	5	5	5	6	6	6	6	6	5	5	5	3	2	2	2	2	6
7-Jun	2	2	2	2	2	2	2	2	2	2	3	3	4	3	2	4	8	2	1	1	3	2	1	1	8
8-Jun	1	1	1	1	1	2	3	4	4	5	5	6	6	5	5	4	3	4	2	4	5	3	2	3	6
9-Jun	3	3	3	2	3	3	3	3	3	3	3	4	3	4	4	3	3	2	2	1	1	1	2	1	4
10-Jun	2	3	2	1	1	2	2	2	2	3	3	4	5	4	4	4	4	6	4	2	3	3	2	2	6
11-Jun	1	1	2	2	2	2	2	3	2	3	3	3	3	3	3	3	4	3	4	4	4	2	2	2	4
12-Jun	3	2	1	1	2	2	2	3	3	4	5	5	6	6	5	5	5	4	4	4	2	1	1	1	6
13-Jun	1	1	1	1	1	1	2	2	2	3	4	3	4	4	4	3	3	2	3	2	1	1	1	1	4
14-Jun	1	2	2	2	2	3	3	2	2	3	3	4	7	6	3	1	5	4	4	3	2	1	1	1	7
15-Jun	1	1	1	2	1	1	1	1	2	2	3	3	3	3	3	3	2	2	2	2	3	4	3	2	4
16-Jun	2	2	2	2	1	1	1	1	2	2	2	3	3	3	3	3	3	4	4	4	3	2	1	1	4
17-Jun	1	1	1	1	1	2	2	3	3	3	4	5	4	4	4	3	3	2	2	3	3	3	2	2	5
18-Jun	1	2	2	3	2	2	1	3	4	4	4	6	4	4	4	4	4	6	2	2	1	2	2	1	6
19-Jun	1	1	2	1	1	1	2	2	3	3	4	4	4	4	3	4	4	4	2	3	2	1	1	2	4
20-Jun	1	1	1	1	1	1	1	4	3	4	3	4	3	3	4	3	3	3	4	3	1	2	2	1	4
21-Jun	1	1	1	1	2	2	2	3	3	3	3	2	3	3	3	3	4	4	2	1	1	1	0	1	4
22-Jun	0	1	1	1	1	1	1	1	2	3	3	2	2	3	3	3	2	4	3	2	1	1	1	1	4
23-Jun	2	2	2	1	1	1	1	2	2	3	3	3	3	3	3	3	3	2	3	5	2	1	2	2	5
24-Jun	2	2	2	2	3	3	3	3	3	3	3	4	3	3	3	3	3	2	2	8	4	3	2	2	8
25-Jun	2	2	2	2	2	2	2	2	3	4	3	4	4	4	4	5	4	4	4	4	2	1	2	3	5
26-Jun	3	3	3	3	3	4	3	4	5	6	5	5	5	5	4	5	4	5	5	4	2	1	2	3	6
27-Jun	2	3	3	3	3	4	4	4	5	6	5	6	6	5	5	4	4	4	4	3	2	1	1	1	6
28-Jun	1	1	1	1	1	1	1	1	4	5	4	5	6	5	5	5	5	5	4	2	1	1	1	1	6
29-Jun	1	3	3	1	1	2	1	3	1	2	3	4	4	4	5	4	4	4	3	5	3	1	1	1	5
30-Jun	2	1	1	1	1	1	2	1	2	3	4	4	4	3	4	3	5	2	1	1	1	1	1	1	5
	5	5	5	6	4	5	5	5	5	6	6	6	7	6	6	6	8	6	5	8	5	4	4	4	
	Diurnal Maximum																								

Direction of Maximum Speed: 350 deg on Jun 1 00:00
Direction of Maximum Daily Speed Average: 0.0 deg on Jan 1

Direction of Minimum Speed: 350 deg on Jun 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-Jun	350	351	357	353	351	349	355	350	346	351	359	0	360	1	4	2	1	5	7	5	7	7	8	7	--
2-Jun	12	12	14	13	17	16	17	17	20	25	23	28	31	36	42	39	34	30	31	32	40	42	58	75	--
3-Jun	19	26	28	19	61	73	73	82	140	104	103	119	109	116	184	158	149	132	151	152	106	128	142	150	--
4-Jun	158	173	166	169	171	164	171	171	162	184	177	183	195	194	182	183	178	182	197	186	174	164	165	176	--
5-Jun	185	188	187	199	231	221	229	253	247	349	312	312	205	138	66	57	36	34	329	222	170	266	274	278	--
6-Jun	278	256	250	251	256	259	251	255	244	245	242	246	248	249	251	260	265	264	252	247	213	200	188	192	--
7-Jun	198	202	188	170	163	172	195	175	204	189	195	174	169	159	309	304	154	177	111	160	73	33	297	299	--
8-Jun	220	296	308	327	337	317	328	318	304	304	295	291	284	275	275	278	276	276	299	297	293	288	267	260	--
9-Jun	259	265	258	256	243	228	272	274	280	274	276	279	273	289	346	336	342	4	15	5	37	28	104	153	--
10-Jun	124	54	53	18	0	7	1	356	350	339	327	331	337	339	349	358	1	17	6	342	344	346	330	321	--
11-Jun	309	313	309	318	327	340	316	319	326	338	347	349	343	342	337	338	355	347	355	352	348	340	334	330	--
12-Jun	324	316	293	274	291	306	324	333	334	341	337	348	348	355	356	353	358	3	2	6	5	345	273	191	--
13-Jun	164	166	194	201	192	195	220	260	280	286	313	303	341	297	283	259	275	257	256	257	203	183	191	189	--
14-Jun	193	206	202	205	202	203	224	258	276	331	332	327	283	310	28	303	326	3	354	350	331	305	237	176	--
15-Jun	158	183	194	188	187	172	179	99	36	355	6	327	353	346	349	232	271	220	137	108	188	248	263	259	--
16-Jun	222	207	190	72	326	172	130	83	42	26	43	37	33	35	7	327	360	21	351	357	356	3	31	27	--
17-Jun	23	68	112	121	1	356	2	4	10	2	13	2	357	355	352	341	336	335	339	330	305	290	197	277	--
18-Jun	242	219	211	239	243	234	254	324	353	347	348	341	311	311	340	355	357	355	335	314	260	277	282	186	--
19-Jun	197	208	222	205	212	215	254	286	350	1	329	335	0	354	343	5	11	19	4	11	20	47	123	118	--
20-Jun	126	122	103	114	118	40	19	38	27	28	21	342	335	351	68	49	35	34	39	91	79	102	99	35	--
21-Jun	47	36	20	16	35	31	29	14	26	33	22	19	82	88	95	72	78	71	68	61	47	17	29	76	--
22-Jun	72	125	132	180	182	276	328	28	358	55	54	57	39	50	96	103	112	238	209	198	195	180	180	192	--
23-Jun	191	194	188	190	189	192	225	230	278	260	281	267	245	30	119	153	169	179	54	274	157	161	167	169	--
24-Jun	171	188	207	207	229	215	153	107	134	153	159	170	187	200	193	204	214	205	252	104	138	151	157	166	--
25-Jun	176	164	170	176	166	162	159	154	152	160	166	164	166	172	165	163	153	169	174	157	159	153	159	156	--
26-Jun	155	154	149	144	146	145	151	152	140	139	154	139	132	150	146	111	114	129	115	122	114	110	121	123	--
27-Jun	117	120	118	119	115	111	106	106	108	107	89	92	104	106	99	80	75	80	79	71	81	94	105	112	--
28-Jun	113	107	102	79	96	74	31	4	34	73	58	52	53	49	55	55	51	59	54	61	66	117	122	98	--
29-Jun	142	125	157	150	149	141	78	356	20	342	359	27	17	14	23	39	39	35	45	123	134	136	122	116	--
30-Jun	107	99	125	121	122	115	52	12	31	81	65	64	32	32	44	36	39	108	165	125	221	189	146	118	--
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	Diurnal Average																								

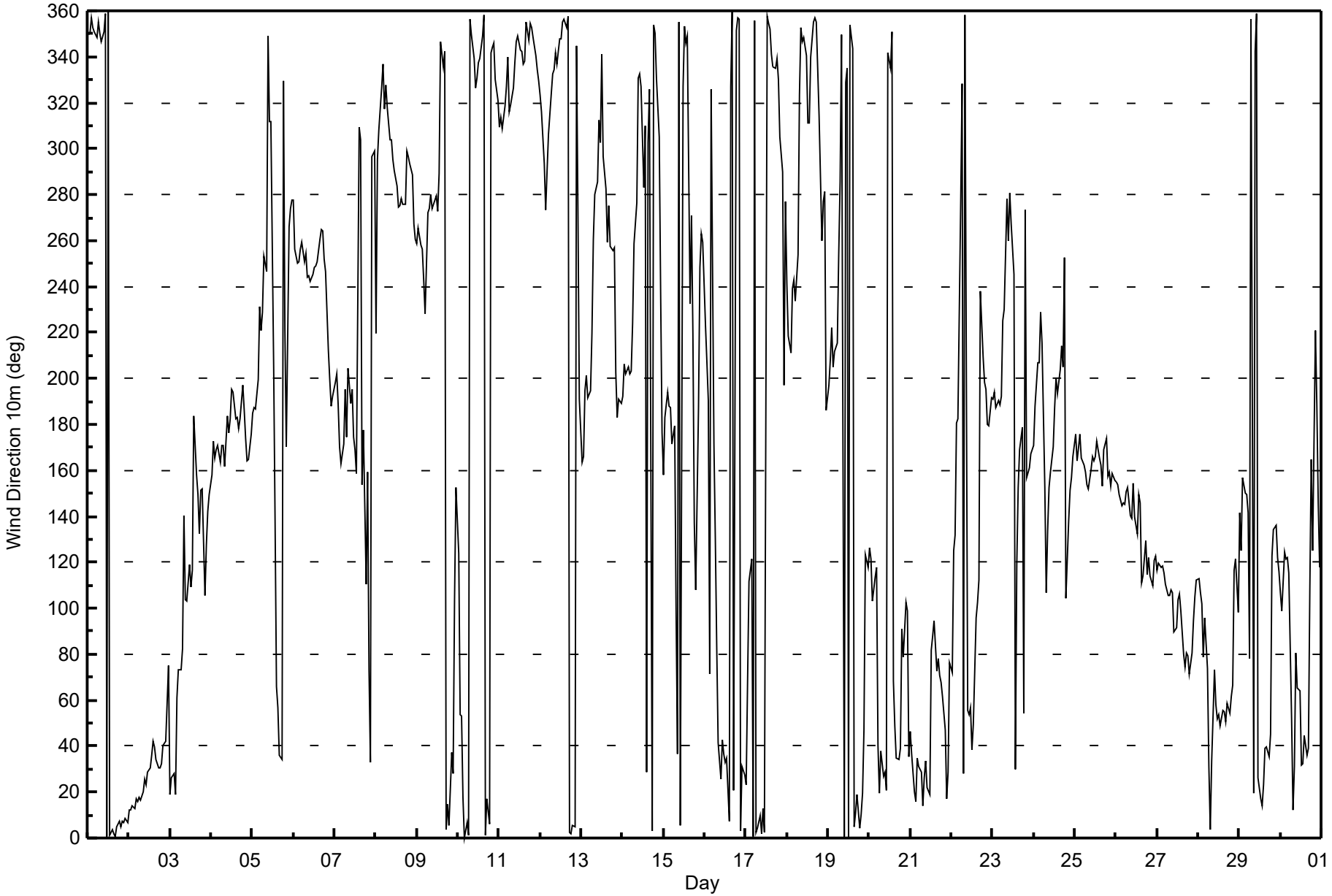
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Hangingstone Expansion - June 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Hangingstone Expansion - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 99 deg on Jun 16 08:00

Minimum Value: 5 deg on Jun 13 02:00

Percentiles: P_1 = 8 P_{10} = 14 Q_1 = 17 Median = 21 Q_3 = 30 P_{90} = 47 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-Jun	16	17	18	17	16	15	18	17	15	17	18	18	19	18	17	18	18	19	16	17	17	17	16	16	19
2-Jun	17	18	17	16	16	16	16	15	16	16	16	16	15	15	15	16	15	16	16	16	14	13	19	20	20
3-Jun	20	15	20	23	20	17	26	32	35	45	37	36	39	41	52	56	82	32	28	19	18	12	17	16	82
4-Jun	19	16	14	15	16	18	20	22	20	23	26	30	36	36	30	26	26	27	26	27	12	11	13	16	36
5-Jun	18	21	21	25	33	32	33	40	87	73	30	17	70	29	32	37	24	24	43	91	75	27	21	23	91
6-Jun	21	25	26	26	24	25	26	25	28	28	27	27	27	27	26	28	26	28	27	27	28	23	23	21	28
7-Jun	25	26	22	22	15	18	32	26	36	94	84	67	62	39	86	25	61	61	79	94	70	42	48	26	94
8-Jun	66	70	26	18	14	14	16	15	14	14	16	17	19	21	21	20	22	22	14	15	17	17	25	25	70
9-Jun	24	23	24	25	28	30	25	30	31	34	31	29	35	48	72	41	57	23	20	20	26	18	49	17	72
10-Jun	16	44	36	44	74	20	17	17	17	30	23	21	19	19	27	19	18	19	19	18	18	17	17	14	74
11-Jun	13	13	14	13	18	17	15	15	15	17	17	18	17	19	18	18	20	17	19	17	18	17	15	14	20
12-Jun	15	20	14	20	22	13	16	16	16	18	19	19	20	22	19	20	21	19	20	18	15	11	38	34	38
13-Jun	9	5	11	13	15	18	36	29	30	34	35	52	44	55	53	54	36	45	37	26	29	15	15	15	55
14-Jun	16	23	23	23	22	26	33	26	32	28	29	23	32	55	43	24	63	19	19	17	18	14	17	17	63
15-Jun	7	11	6	34	13	14	22	31	62	62	58	61	43	65	65	74	98	55	28	16	42	32	24	26	98
16-Jun	32	27	22	97	60	49	16	99	19	16	15	20	18	16	25	39	23	49	34	19	17	15	20	13	99
17-Jun	12	27	21	94	16	19	17	23	23	22	24	22	24	24	22	20	22	17	16	22	18	23	54	48	94
18-Jun	26	28	28	28	26	26	24	33	19	19	20	37	22	22	19	18	22	23	19	37	14	43	53	13	53
19-Jun	18	19	25	19	24	34	26	27	36	28	34	27	25	31	40	20	24	22	21	19	14	24	18	31	40
20-Jun	13	17	22	18	26	41	18	24	20	27	25	80	47	40	26	25	19	17	16	42	35	21	31	30	80
21-Jun	14	14	14	19	18	15	17	18	19	15	20	21	43	27	21	21	27	22	16	17	8	30	13	23	43
22-Jun	25	35	30	14	10	82	32	78	58	26	25	38	67	35	41	81	73	34	52	39	28	13	11	23	82
23-Jun	17	21	19	16	16	20	31	31	34	62	44	54	79	45	20	24	29	27	71	57	17	8	13	13	79
24-Jun	14	19	26	26	31	47	22	17	19	18	22	26	32	43	48	42	54	62	82	53	20	16	15	15	82
25-Jun	16	15	16	18	16	16	22	23	24	28	26	29	29	30	34	31	28	26	21	18	14	12	14	14	34
26-Jun	16	16	16	17	16	17	18	24	21	22	22	27	28	29	26	28	21	21	20	20	13	10	15	17	29
27-Jun	15	16	16	16	16	17	19	19	20	20	20	22	23	19	21	21	18	19	18	18	17	11	10	8	23
28-Jun	11	10	15	28	18	19	19	17	42	22	19	21	20	18	21	19	18	20	16	17	27	11	10	22	42
29-Jun	8	73	57	7	7	36	23	57	37	20	32	25	29	28	30	23	20	18	15	29	18	15	14	14	73
30-Jun	37	26	7	7	7	12	21	23	43	25	26	30	32	25	24	31	33	20	14	23	56	23	20	8	56
	66	73	57	97	74	82	36	99	87	94	84	80	79	65	86	81	98	62	82	94	75	43	54	48	
	Diurnal Maximum																								

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS505
SAWBONES BAY
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SAWBONES BAY (AMS505)
JUNE 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	27.9	0	6.7	0
H2S (ppb) Average	682	36	38	99.72	2.8	0	1.1	0
NO2 (ppb) Average	682	36	38	99.72	14	0	6.6	-
NO (ppb) Average	682	36	38	99.72	10.7	-	4.2	-
NOX (ppb) Average	682	36	38	99.72	22.5	-	10.7	-
Temperature 2 m (C) Average	720	0	0	100	28	-	22	-
Relative Humidity (%) Average	720	0	0	100	99.4	-	95.1	-
Wind Speed 10 m (km/h) Average	720	0	0	100	30	-	20	-
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 - SAWBONES BAY (AMS505)
JUNE 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	0.92	2.9	-	0	0	0	0.1	0.4	1.6	27.9
H2S (ppb) Average	682	0.18	0.3	-	0	0	0.1	0.1	0.1	0.4	2.8
NO2 (ppb) Average	682	1.61	2.3	-	0	0.1	0.3	0.8	1.8	4.1	14
NO (ppb) Average	682	0.61	1.5	-	0	0	0	0.1	0.4	1.4	10.7
NOX (ppb) Average	682	2.22	3.6	-	0	0.1	0.4	0.9	2.3	5.4	22.5
Temperature 2 m (C) Average	720	14.66	5.4	-	4.4	7.9	10.6	13.9	18.3	22.4	28
Relative Humidity (%) Average	720	67.33	20.7	-	28.6	36.6	49.8	69.1	85.8	94.7	99.4
Wind Speed 10 m (km/h) Average	720	10.6	6	-	0	4	6	9	14	19	30
Wind Direction 10 m (deg) Average	720	3.5	0	-	0	-	-	-	-	-	0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - SAWBONES BAY (AMS505)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
H2S, NO2	24 Jun 2026 12:00	24 Jun 2026 13:00	2	Maintenance - sample manifold cleaned

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Sawbones Bay - June 2026

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

Maximum Value: 27.9 ppb on Jun 9 06:00

Maximum Daily Average: 6.7 ppb on Jun 6

Minimum Value: 0.0 ppb on Jun 1 18:00

Minimum Daily Average: 0.0 ppb on Jun 30

Maximum Diurnal Average: 2.0 ppb at hour 6

Minimum Diurnal Average: 0.3 ppb at hour 22

Monthly Average: 0.92 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.4 P_{90} = 1.6 P_{99} = 17.7

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-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
2-Jun	0.0	0.0	Z	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2
3-Jun	0.1	0.2	0.1	Z	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	0.1	0.1	0.2	0.2	0.2
4-Jun	0.2	0.1	0.1	0.1	Z	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.0	0.1	0.2
5-Jun	0.1	0.1	0.0	0.1	0.1	Z	0.1	0.1	1.0	0.8	0.2	0.0	0.2	1.3	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.2	0.3	1.3
6-Jun	Z	7.3	17.7	3.2	0.9	1.3	2.2	12.1	18.4	18.5	10.4	12.3	8.2	4.1	6.9	9.6	10.9	4.8	0.2	1.4	1.0	1.2	1.2	0.4	6.7	18.5
7-Jun	0.2	Z	0.2	0.5	0.8	0.3	0.8	0.3	1.2	0.8	0.4	0.3	0.2	0.1	0.1	0.1	0.0	0.2	0.4	0.0	0.1	0.1	0.2	3.0	0.4	3.0
8-Jun	0.1	0.4	Z	0.2	6.5	2.3	2.9	5.5	0.2	0.4	1.3	1.9	3.0	7.7	23.3	12.0	6.1	8.8	9.9	13.9	12.2	2.9	9.7	3.2	5.8	23.3
9-Jun	13.7	23.6	17.7	Z	19.3	27.9	3.7	1.9	1.9	1.6	3.1	2.7	0.7	0.8	1.7	0.7	0.6	0.5	0.2	0.1	0.2	0.2	0.2	0.2	5.3	27.9
10-Jun	0.3	0.2	0.2	0.3	Z	0.5	0.6	0.6	0.6	0.4	0.2	0.2	0.3	0.2	0.6	0.6	0.2	0.3	0.4	0.3	0.1	0.1	0.1	0.4	0.3	0.6
11-Jun	0.3	0.0	0.0	0.1	0.0	Z	0.1	0.4	0.6	0.2	0.4	0.4	0.4	0.3	0.3	0.2	0.5	0.3	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.6
12-Jun	Z	0.2	0.4	0.4	0.3	0.6	0.7	0.4	0.4	0.5	0.5	0.6	0.6	0.4	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.3	0.7
13-Jun	0.1	Z	0.3	0.2	0.2	0.2	0.3	0.6	0.2	0.2	0.2	0.8	1.0	0.6	0.9	1.7	0.6	3.2	4.9	1.9	4.1	0.1	0.6	1.2	1.1	4.9
14-Jun	1.7	1.3	Z	2.1	1.1	13.8	16.3	4.1	2.5	4.6	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.2	0.5	0.4	0.3	0.0	0.8	0.4	2.2	16.3
15-Jun	0.2	0.1	0.3	Z	1.3	0.5	0.3	0.2	0.5	0.1	0.0	0.0	0.0	0.2	0.5	0.6	0.3	0.2	0.0	0.0	0.0	1.9	2.6	1.0	0.5	2.6
16-Jun	2.8	4.5	0.1	4.6	Z	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	0.4	0.0	0.0	0.6	4.6
17-Jun	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	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.5	0.6	0.1	0.6
18-Jun	Z	0.4	0.5	0.4	0.3	0.3	0.2	0.1	0.3	0.3	0.2	0.1	0.2	0.4	0.3	0.2	0.7	1.0	0.3	0.1	0.1	0.2	0.4	0.2	0.3	1.0
19-Jun	0.2	Z	0.0	0.1	0.4	1.1	0.4	0.2	0.1	0.0	0.0	0.0	0.7	0.2	0.5	0.8	0.4	0.4	1.0	0.7	3.9	0.2	0.1	0.1	0.5	3.9
20-Jun	0.2	0.1	Z	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.2
21-Jun	0.1	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	0.1
22-Jun	0.0	0.0	0.3	8.1	Z	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	0.0	0.2	0.7	4.5	1.4	0.7	8.1
23-Jun	0.4	0.5	1.8	2.6	1.2	Z	2.6	1.4	3.0	0.5	0.4	0.6	2.1	0.4	0.4	0.7	1.0	0.4	0.4	0.3	0.3	0.3	0.3	0.4	1.0	3.0
24-Jun	Z	0.4	0.4	0.5	0.7	0.6	0.6	0.6	0.5	0.4	C	C	C	C	0.0	0.0	0.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7
25-Jun	0.0	Z	0.1	0.1	0.1	0.3	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
26-Jun	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
27-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.2	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3
28-Jun	0.1	0.1	0.1	0.2	Z	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2
29-Jun	0.2	0.2	0.1	0.0	0.0	Z	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
30-Jun	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	0.0	0.0	0.1
	0.8	1.6	1.6	1.0	1.3	2.0	1.1	1.0	1.1	1.0	0.6	0.7	0.6	0.6	1.2	0.9	0.8	0.7	0.6	0.7	0.8	0.3	0.8	0.5	Diurnal Average	
	13.7	23.6	17.7	8.1	19.3	27.9	16.3	12.1	18.4	18.5	10.4	12.3	8.2	7.7	23.3	12.0	10.9	8.8	9.9	13.9	12.2	2.9	9.7	3.2	Diurnal Maximum	

Z - zerospan C - Calibration

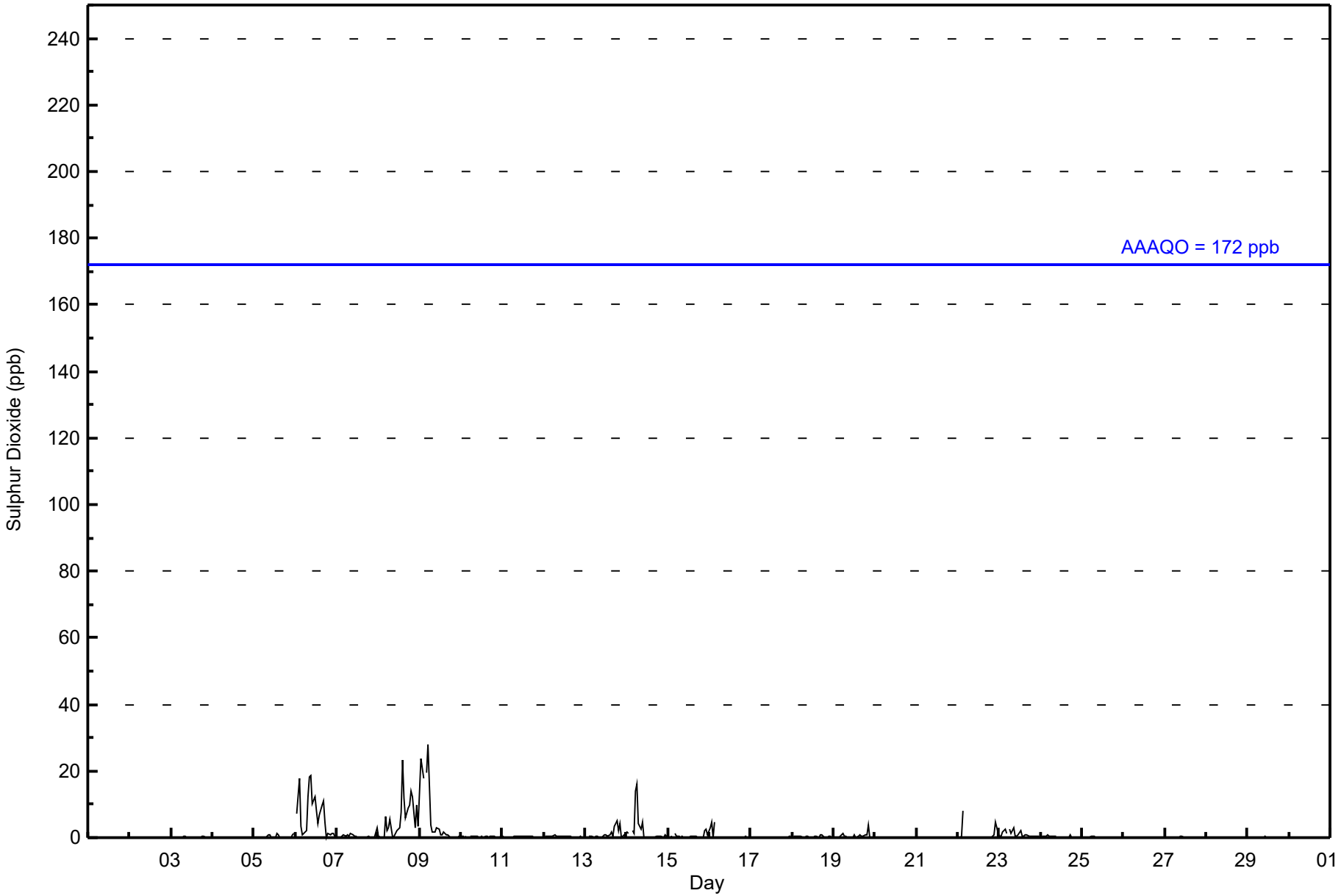
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Sawbones Bay - June 2026



Sulphur Dioxide (SO_2) - ppb
Sawbones Bay - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	669	97.52	97.52
11 - 20	14	2.04	99.56
21 - 60	3	0.44	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 - June 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	77	73	47	45	32	26	17	46	30	33	18	15	36	51	52	71	669
11 - 20	0	0	0	0	0	0	0	0	0	0	0	9	5	0	0	0	14
21 - 60	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3
61 - 110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111 - 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	77	73	47	45	32	26	17	46	30	33	18	24	44	51	52	71	686

Total Number of Valid Hours: 686

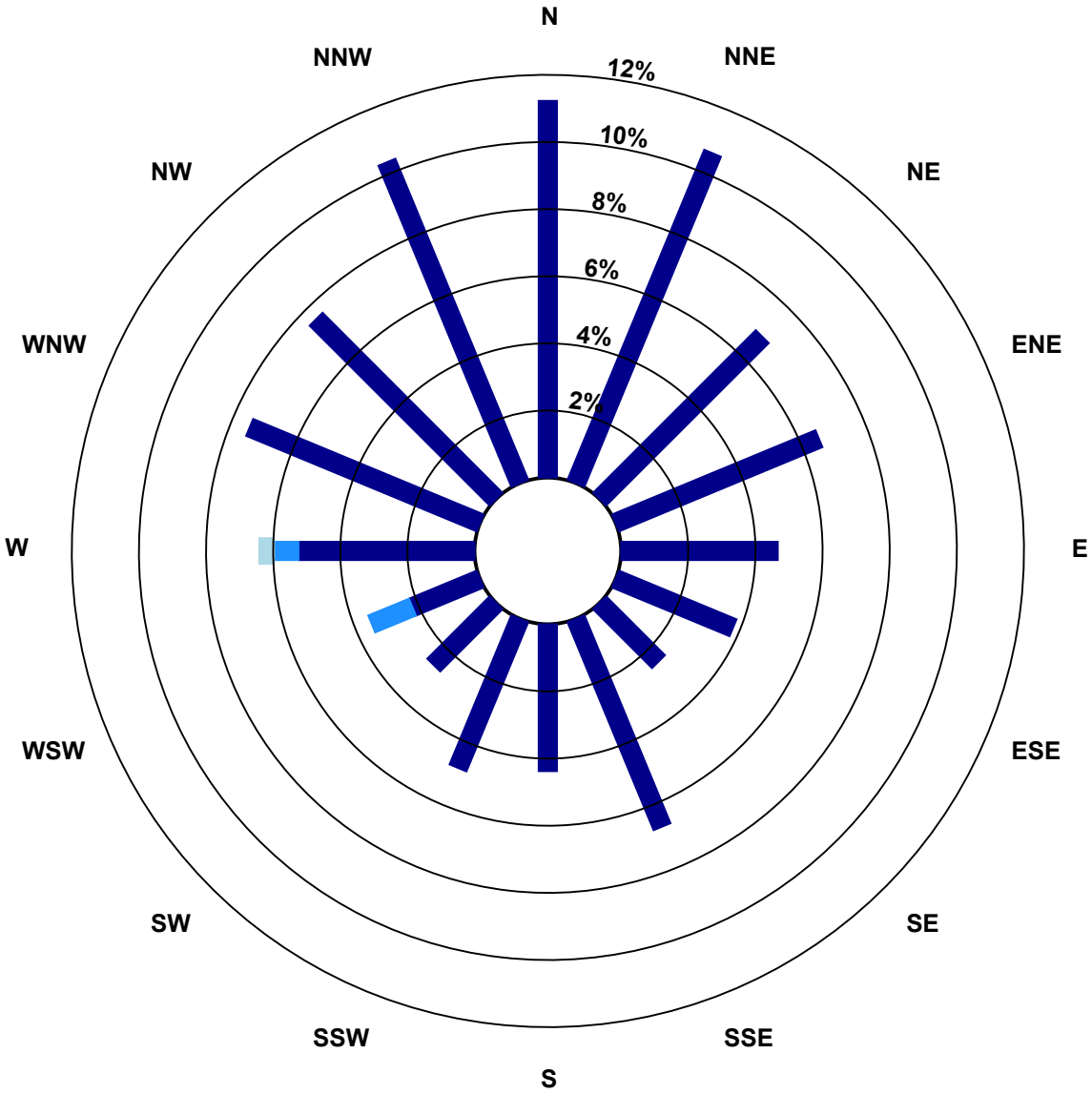
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Sawbones Bay



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

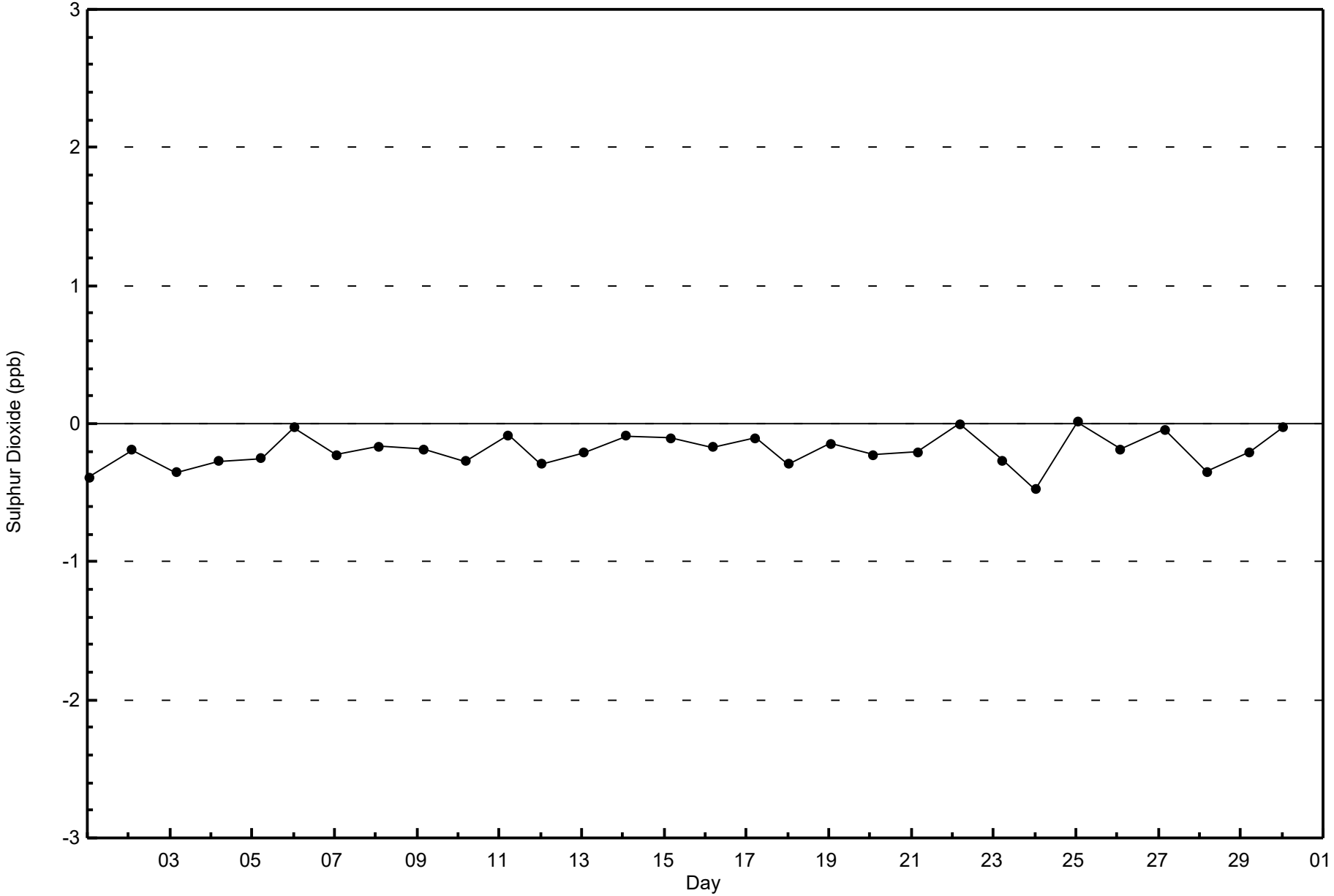
Total Number of Valid Hours: 686

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Sawbones Bay - June 2026

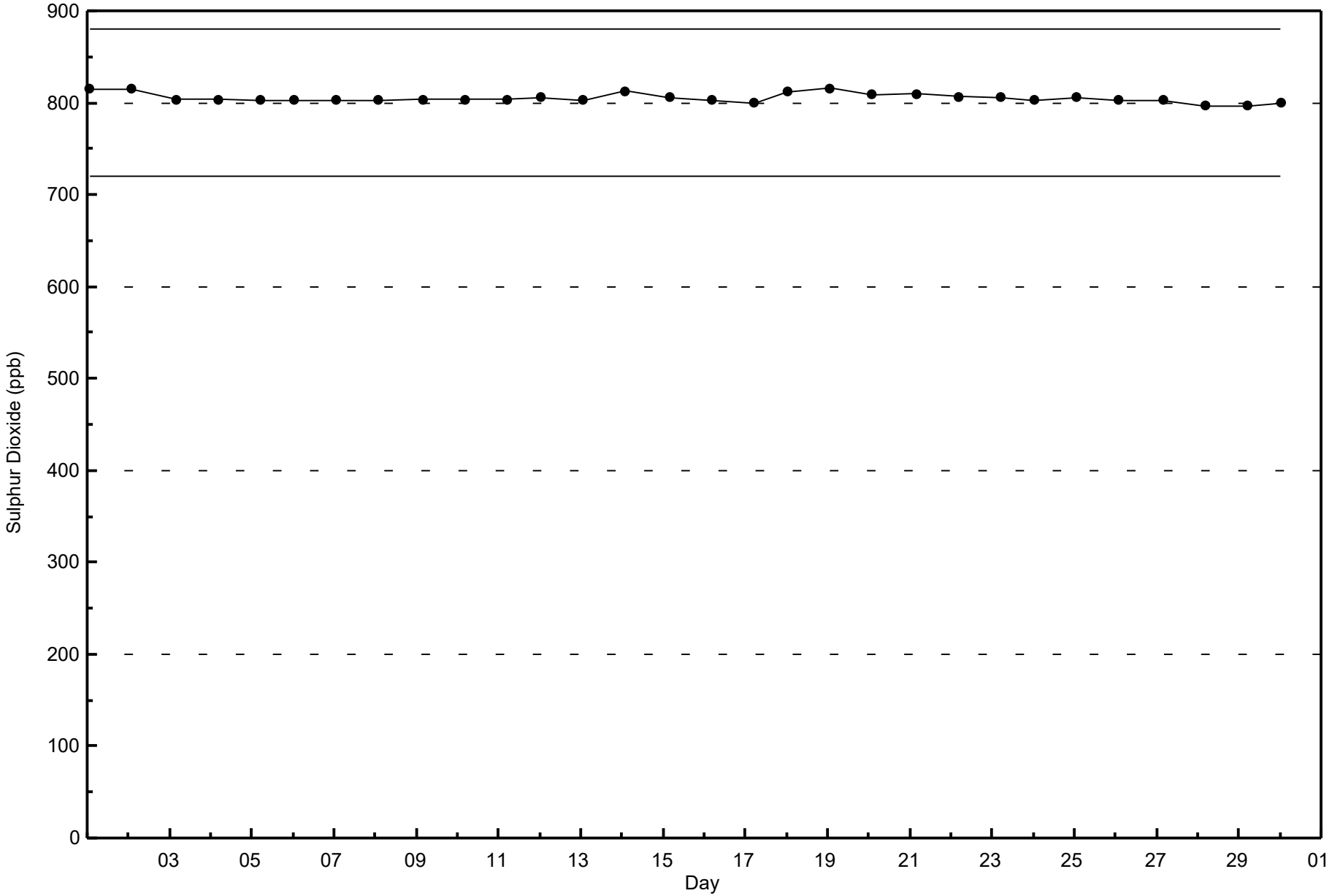


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Sawbones Bay - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H2S) - ppb

Sawbones Bay - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.8 ppb on Jun 22 04:00 Maximum Daily Average: 1.1 ppb on Jun 8

Minimum Value: 0.0 ppb on Jun 17 18:00 Minimum Daily Average: 0.1 ppb on Jun 21
Maximum Diurnal Average: 0.4 ppb at hour 4 Minimum Diurnal Average: 0.1 ppb at hour 19
Monthly Average: 0.18 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.1 P_{90} = 0.4 P_{99} = 1.8

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-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
2-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
3-Jun	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
4-Jun	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
5-Jun	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	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.2	0.7	0.1	0.7
6-Jun	0.6	Z	1.3	0.3	0.1	0.2	0.2	0.9	1.2	1.5	1.7	1.0	0.9	0.3	1.1	1.0	0.8	0.7	0.1	0.6	0.2	0.6	0.6	0.2	0.7	1.7
7-Jun	0.3	0.2	Z	0.5	0.7	0.3	0.5	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.3	0.1	0.1	0.1	0.1	0.7	0.2	0.7
8-Jun	0.1	0.3	0.4	Z	1.2	0.7	0.7	1.1	0.1	0.2	1.3	2.0	2.6	2.3	1.8	1.4	2.3	2.5	0.6	1.1	0.8	0.2	0.7	0.2	1.1	2.6
9-Jun	1.4	1.7	1.0	1.5	Z	1.3	0.9	0.4	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	0.1	0.1	0.4	1.7
10-Jun	0.1	0.2	0.2	0.2	0.1	Z	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
11-Jun	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
12-Jun	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	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1
13-Jun	0.1	0.0	Z	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	0.1	0.3	0.3	0.2	0.7	0.1	0.1	0.1	0.1	0.7
14-Jun	0.1	0.1	0.1	Z	0.2	1.2	1.2	0.6	0.4	0.3	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.4	0.2	0.9	0.2	0.3	1.2
15-Jun	0.2	0.3	0.4	0.4	Z	0.5	0.2	0.1	0.3	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.5	1.8	0.4	0.3	1.8
16-Jun	0.9	0.8	0.1	0.7	0.2	Z	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.3	0.2	0.0	0.2	0.9
17-Jun	Z	0.1	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	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
18-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
19-Jun	0.1	0.2	Z	0.2	0.4	0.5	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.5
20-Jun	0.1	0.1	0.1	Z	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
21-Jun	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1
22-Jun	0.1	0.1	0.1	2.8	0.3	Z	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.2	2.8
23-Jun	Z	0.7	0.9	0.6	0.3	0.5	0.4	0.0	0.1	0.0	C	C	C	C	C	C	0.2	0.1	0.0	0.0	0.1	0.1	0.1	0.1	--	0.9
24-Jun	0.1	Z	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.1	0.1	M	M	0.1	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-Jun	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
26-Jun	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
27-Jun	0.1	0.1	0.2	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
28-Jun	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	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
29-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
30-Jun	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	0.1	0.2
	0.2	0.2	0.3	0.4	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	Diurnal Average	
	1.4	1.7	1.3	2.8	1.2	1.3	1.2	1.1	1.2	1.5	1.7	2.0	2.6	2.3	1.8	1.4	2.3	2.5	0.6	1.1	0.8	0.6	1.8	0.7	Diurnal Maximum	

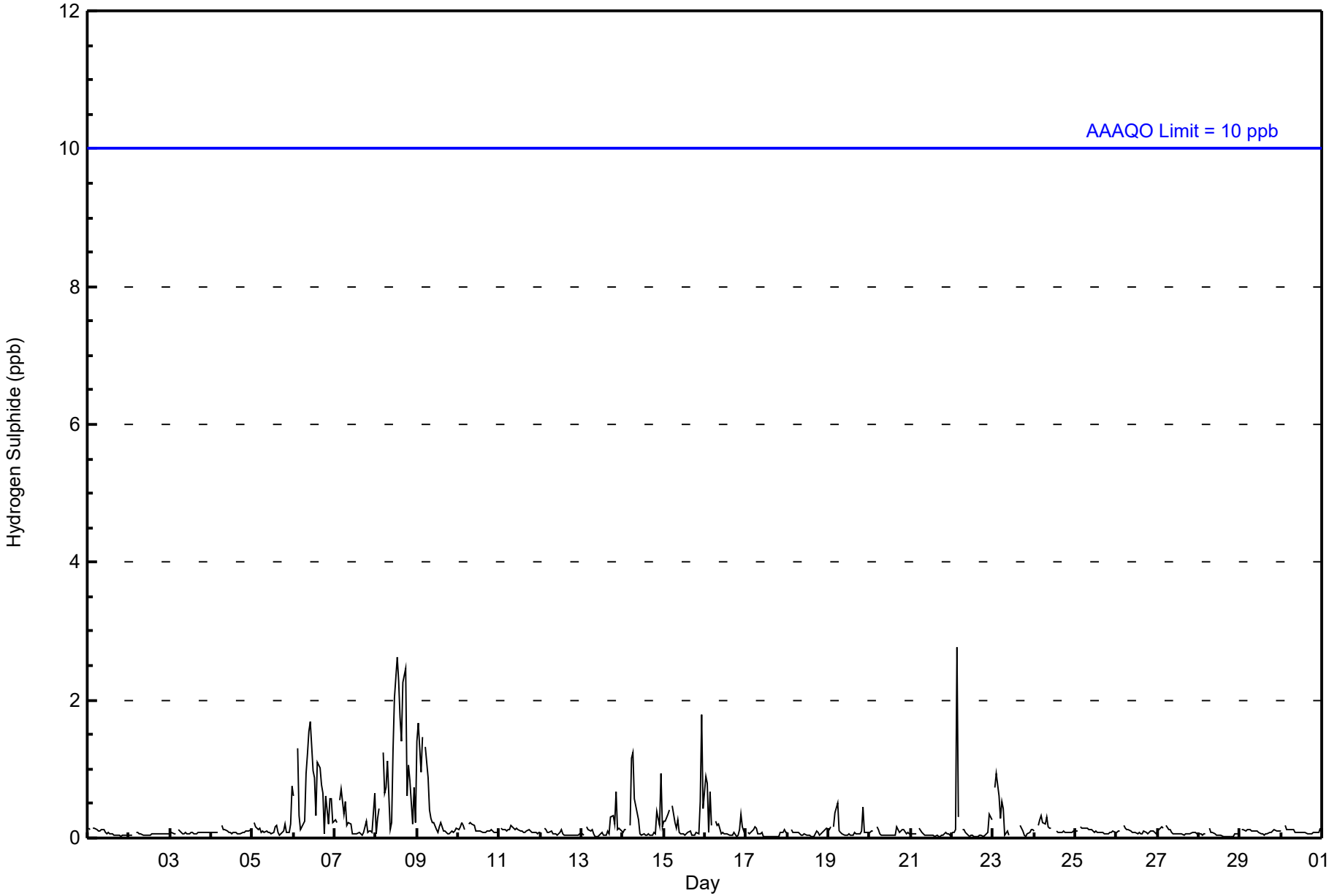
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H2S) - ppb

Sawbones Bay - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	680	99.71	99.71
3 - 4	2	0.29	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

Hydrogen Sulphide (H2S) - ppb

Sawbones Bay - June 2026

Concentration	Wind Direction																
Ranges (ppb)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 2	79	70	47	46	31	27	17	45	31	35	18	22	41	51	47	73	680
3 - 4	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
5 - 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 - 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	79	70	47	46	31	27	17	45	31	35	18	23	42	51	47	73	682

Total Number of Valid Hours: 682

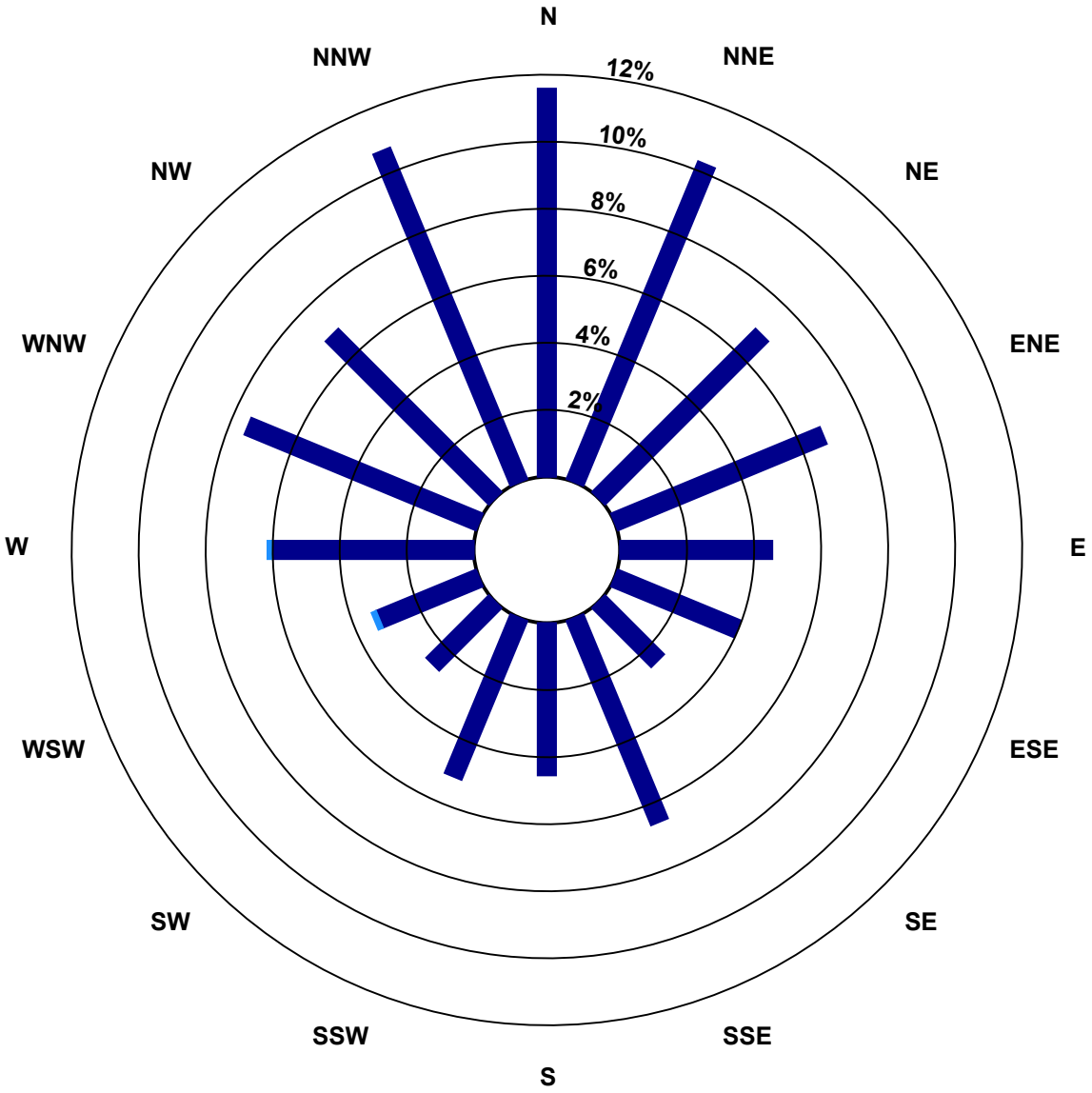
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H2S) - ppb

Sawbones Bay



Classes (ppb)

0 - 2

3 - 4

5 - 7

8 - 11

> 11

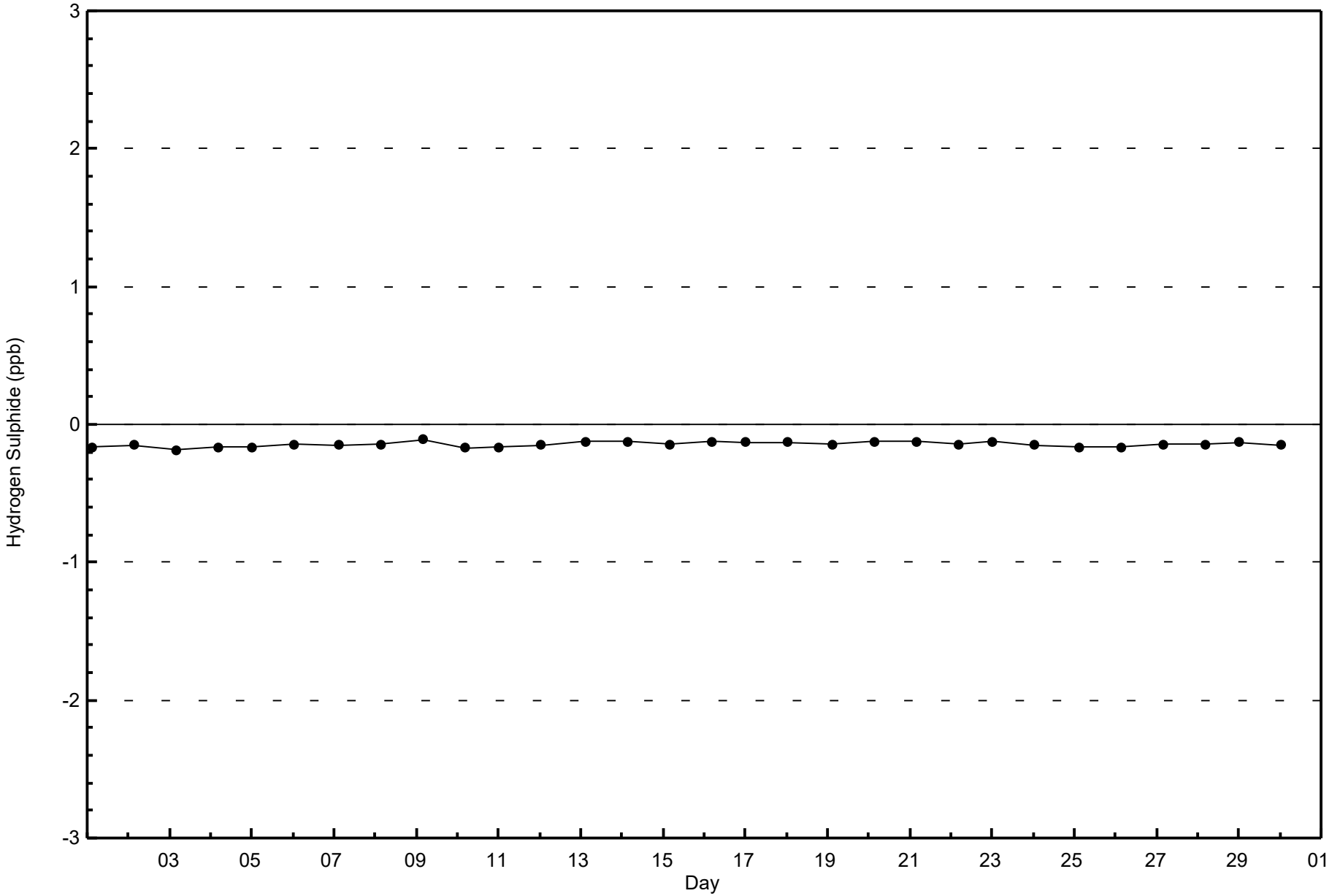
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H2S) - ppb

Sawbones Bay - June 2026

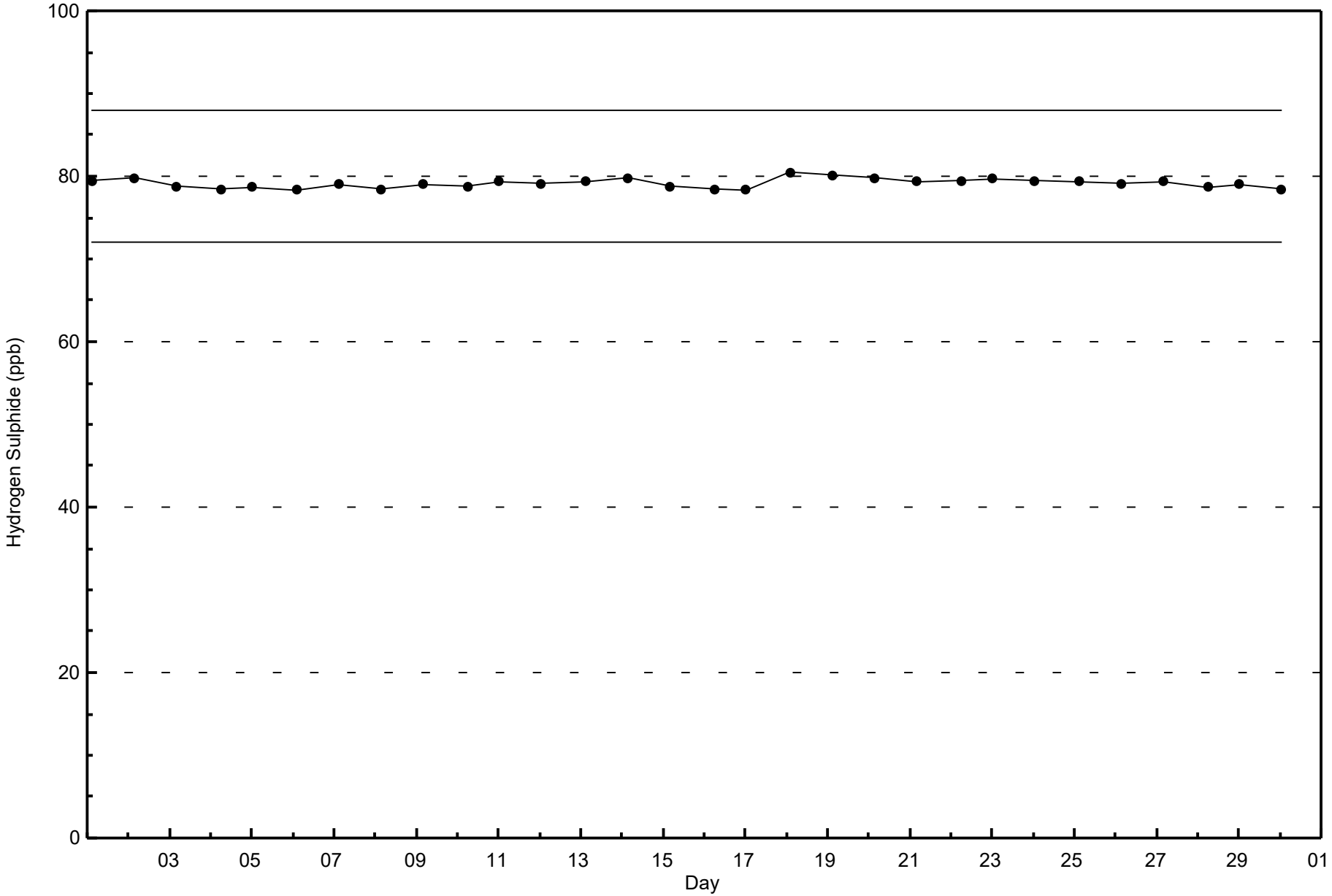


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H2S) - ppb

Sawbones Bay - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Sawbones Bay - June 2026

Maximum Value: 10.7 ppb on Jun 8 15:00

Maximum Daily Average: 4.2 ppb on Jun 6

Minimum Value: 0.0 ppb on Jun 1 11:00

Minimum Daily Average: 0.0 ppb on Jun 29

Maximum Diurnal Average: 1.3 ppb at hour 6

Minimum Diurnal Average: 0.2 ppb at hour 22

Monthly Average: 0.61 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.4 P_{90} = 1.4 P_{99} = 8.0

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-Jun	0.0	0.0	0.1	0.1	0.0	Z	1.0	0.2	0.1	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	0.1	1.0
2-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.2
3-Jun	0.1	Z	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	1.1	1.1	2.6	0.2	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.3	2.6
4-Jun	0.0	0.3	Z	0.6	1.1	0.7	2.3	1.3	1.3	1.6	1.5	0.5	0.7	0.8	1.0	0.7	0.4	0.2	0.3	0.3	0.5	0.5	0.1	0.0	0.7	2.3
5-Jun	0.0	0.0	0.0	Z	0.3	0.0	0.5	0.2	0.9	0.7	0.1	0.0	0.1	0.5	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.4	2.1	0.3	2.1
6-Jun	1.8	2.1	4.9	2.7	Z	1.9	5.4	9.1	10.0	8.2	6.4	9.8	7.9	7.0	4.6	4.6	4.1	2.3	0.4	1.3	0.2	0.3	0.4	0.2	4.2	10.0
7-Jun	1.5	0.5	0.4	0.3	0.5	Z	1.3	0.7	1.6	1.1	0.4	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.1	0.7	0.5	1.6
8-Jun	Z	0.1	0.3	0.1	5.6	1.7	2.2	3.0	1.0	0.8	1.6	2.7	2.7	4.3	10.7	7.4	2.3	3.3	5.5	4.2	4.3	2.5	7.0	2.7	3.3	10.7
9-Jun	3.9	Z	4.7	7.0	6.2	8.2	1.6	1.0	1.0	0.6	1.2	0.8	0.5	0.4	0.8	0.4	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.7	8.2
10-Jun	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.7	0.5	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.7
11-Jun	0.0	0.1	0.1	Z	0.1	0.2	0.2	0.4	0.7	0.4	0.5	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7
12-Jun	0.0	0.1	0.0	0.0	Z	0.4	0.4	0.2	0.3	0.3	0.3	0.4	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.7
13-Jun	0.0	0.0	0.0	2.0	0.2	Z	5.5	0.9	0.1	0.1	0.2	0.1	0.5	0.3	0.3	0.7	0.3	1.0	1.5	0.6	0.6	0.3	0.4	0.2	0.7	5.5
14-Jun	Z	0.6	0.4	0.8	0.9	8.5	6.1	1.6	1.1	1.3	0.2	0.1	0.3	0.2	0.1	0.4	0.1	0.1	0.1	0.1	0.3	0.2	0.3	1.0	1.1	8.5
15-Jun	0.3	Z	1.2	1.2	4.3	1.4	1.4	0.4	0.9	0.1	0.4	0.2	0.1	0.2	0.6	0.2	0.2	0.1	0.0	0.0	0.0	0.6	0.5	0.4	0.6	4.3
16-Jun	0.6	0.7	Z	1.0	0.1	0.0	0.1	0.3	0.2	0.0	C	C	C	C	C	C	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	--	1.0
17-Jun	0.0	0.0	0.0	Z	0.1	0.1	0.8	0.1	0.5	0.2	0.1	0.0	0.1	0.0	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.8
18-Jun	0.1	0.0	0.1	0.0	Z	0.3	1.3	0.9	0.1	0.1	0.4	0.3	0.1	0.1	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.0	0.1	0.1	0.2	1.3
19-Jun	0.1	0.6	0.1	0.2	0.4	Z	0.7	0.3	0.2	0.2	0.2	0.1	0.4	0.0	0.0	6.3	1.4	0.3	0.2	0.1	1.0	0.1	0.1	0.0	0.6	6.3
20-Jun	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.4
21-Jun	0.0	Z	0.1	0.0	0.0	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	0.0	0.0	0.0	0.1
22-Jun	0.0	0.2	Z	6.6	0.2	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.4	0.2	1.6	0.1	0.4	6.6
23-Jun	0.0	0.1	0.4	Z	2.7	5.3	3.1	0.7	2.3	0.5	0.3	0.4	0.6	0.2	0.7	2.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	5.3
24-Jun	0.0	0.0	0.0	0.1	Z	2.6	0.3	3.6	1.4	0.3	0.6	M	M	0.5	0.4	0.9	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.1	0.6	3.6
25-Jun	0.1	0.1	0.0	0.1	0.3	Z	0.5	1.3	2.0	0.3	0.3	0.6	0.7	0.5	0.5	0.8	0.4	0.7	0.1	0.1	0.0	0.0	0.1	0.0	0.4	2.0
26-Jun	Z	0.1	0.1	0.0	0.1	0.1	0.1	0.6	0.4	0.1	0.2	0.8	0.3	0.3	1.2	0.5	6.7	0.8	0.0	0.0	0.0	0.0	0.1	0.0	0.5	6.7
27-Jun	0.0	Z	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1
28-Jun	0.1	0.1	Z	0.1	0.1	0.0	0.1	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
29-Jun	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	0.0	0.0	0.1
30-Jun	0.0	0.0	0.1	0.2	Z	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.6	0.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9
	0.3	0.2	0.5	0.9	0.9	1.3	1.2	0.9	0.9	0.6	0.5	0.7	0.7	0.7	0.8	0.9	0.6	0.4	0.3	0.3	0.3	0.2	0.4	0.3	Diurnal Average	
	3.9	2.1	4.9	7.0	6.2	8.5	6.1	9.1	10.0	8.2	6.4	9.8	7.9	7.0	10.7	7.4	6.7	3.3	5.5	4.2	4.3	2.5	7.0	2.7	Diurnal Maximum	

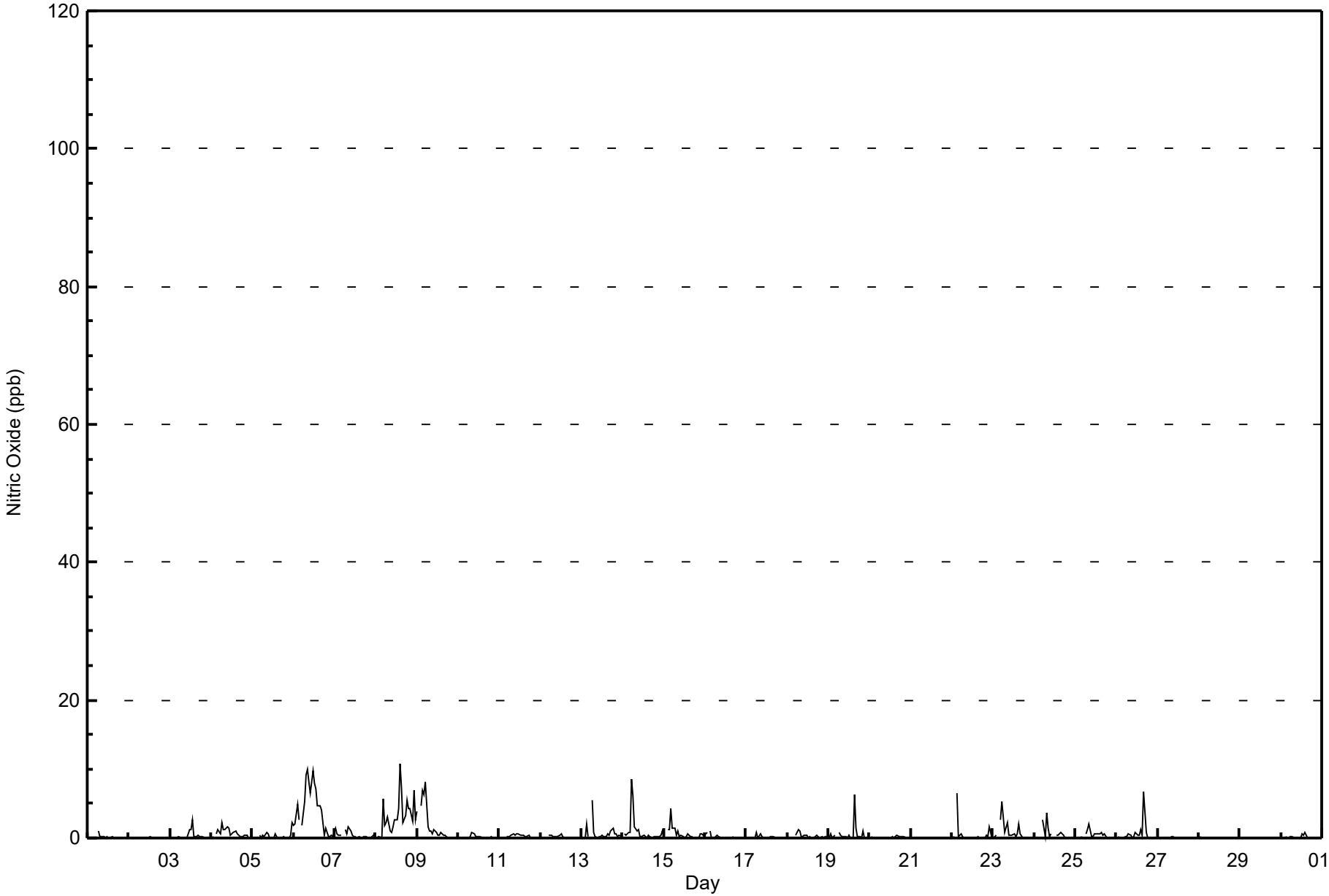
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Sawbones Bay - June 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

Sawbones Bay - June 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	75	70	44	45	32	26	17	45	32	33	18	23	45	53	49	75	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	75	70	44	45	32	26	17	45	32	33	18	23	45	53	49	75	682

Total Number of Valid Hours: 682

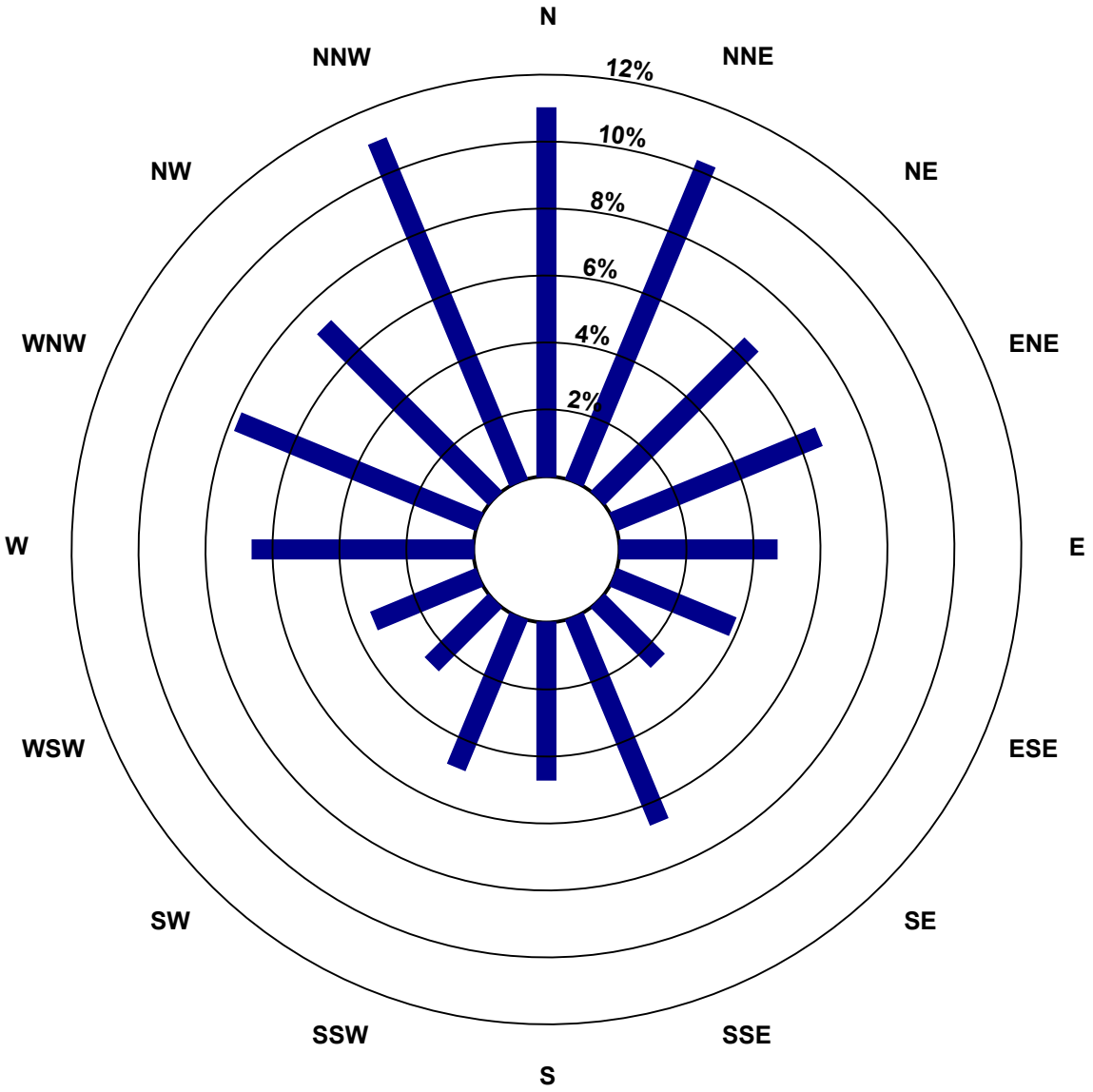
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Sawbones Bay



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

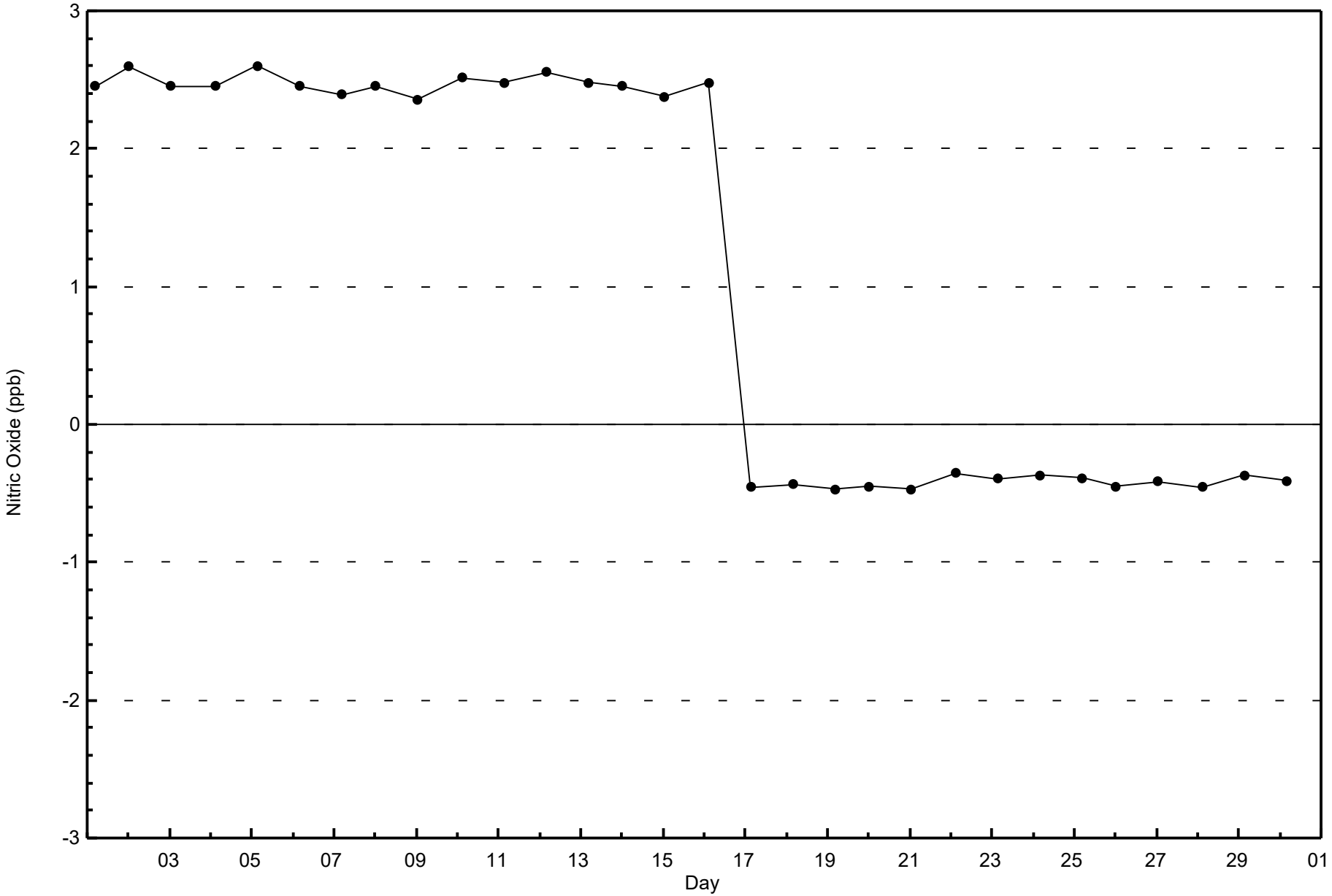
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Sawbones Bay - June 2026

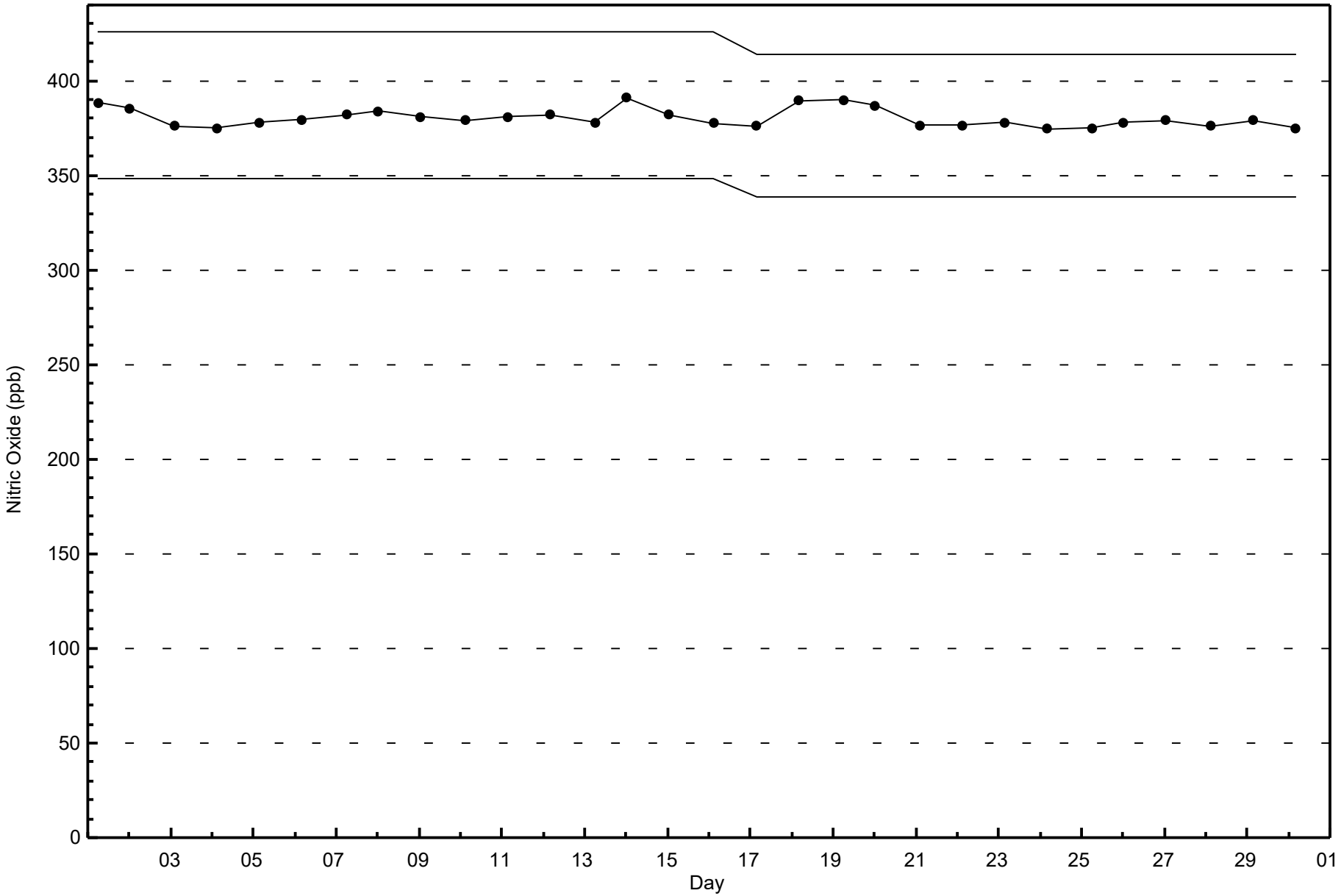


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Sawbones Bay - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Sawbones Bay - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 14.0 ppb on Jun 14 06:00 Maximum Daily Average: 6.6 ppb on Jun 6

Minimum Value: 0.0 ppb on Jun 1 22:00 Minimum Daily Average: 0.1 ppb on Jun 21
Maximum Diurnal Average: 3.1 ppb at hour 4 Minimum Diurnal Average: 1.0 ppb at hour 20
Monthly Average: 1.61 ppb Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.3 Median = 0.8 Q_3 = 1.8 P_{90} = 4.1 P_{99} = 11.1

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-Jun	0.8	0.6	0.6	0.5	0.5	Z	1.5	0.6	0.6	0.6	0.3	0.4	0.3	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.4	1.5
2-Jun	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.6
3-Jun	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.4	0.7	2.0	0.2	0.3	0.5	0.4	0.4	0.2	0.1	0.2	0.2	0.4	0.3	2.0
4-Jun	0.4	1.2	Z	3.0	3.9	2.4	5.0	3.4	2.7	2.3	2.4	1.3	1.5	1.7	2.2	2.0	2.0	1.8	2.1	2.6	4.4	5.4	2.6	2.5	2.6	5.4
5-Jun	1.7	3.8	2.5	Z	3.5	1.0	2.0	1.5	2.6	2.2	1.0	0.6	1.2	2.7	1.5	0.5	0.4	0.6	1.7	1.2	0.5	0.7	2.9	5.4	1.8	5.4
6-Jun	4.4	5.8	12.4	7.3	Z	3.3	6.8	11.1	11.3	9.8	8.2	10.2	8.5	8.1	6.3	6.9	8.0	5.7	1.0	4.1	1.9	4.0	3.6	3.0	6.6	12.4
7-Jun	5.3	3.5	4.1	3.7	3.2	Z	3.3	1.8	2.7	1.8	1.0	0.4	0.4	0.2	0.4	0.2	0.1	0.6	1.4	0.7	0.6	0.8	0.9	2.9	1.7	5.3
8-Jun	Z	1.3	2.5	1.2	8.6	4.0	4.6	6.0	3.2	2.6	3.7	4.3	3.8	5.0	9.3	6.6	4.0	5.8	8.6	8.2	8.2	5.4	13.6	7.1	5.5	13.6
9-Jun	8.5	Z	9.6	13.2	11.9	13.7	3.4	2.1	1.9	1.3	2.8	1.8	1.1	0.9	2.3	1.0	1.1	1.4	0.5	0.1	0.1	0.1	0.1	0.7	3.5	13.7
10-Jun	1.0	0.8	Z	1.5	0.4	0.4	0.8	1.1	2.2	1.6	0.7	0.6	0.8	0.9	0.9	0.7	0.4	0.6	0.7	0.7	0.6	0.6	0.6	0.8	0.8	2.2
11-Jun	1.2	1.3	1.5	Z	1.5	1.5	0.7	1.1	1.6	1.6	1.3	1.4	1.3	1.3	1.2	1.0	1.4	1.7	1.1	0.7	0.6	0.6	0.5	0.4	1.2	1.7
12-Jun	0.6	0.9	1.3	1.7	Z	1.5	1.6	1.0	0.9	1.0	0.8	0.9	1.8	0.9	0.3	0.3	0.2	0.2	0.3	0.3	0.4	1.0	1.3	0.7	0.9	1.8
13-Jun	0.5	1.0	1.3	7.3	2.3	Z	8.5	1.7	0.3	0.2	0.4	0.5	1.2	0.6	0.7	1.7	0.9	3.0	4.3	3.1	5.8	3.7	3.0	2.0	2.3	8.5
14-Jun	Z	5.6	3.9	5.3	4.5	14.0	10.7	3.8	3.0	3.8	0.9	0.5	1.1	0.4	0.1	0.7	0.2	0.3	0.5	0.5	2.7	1.2	3.7	5.9	3.2	14.0
15-Jun	1.9	Z	6.3	5.6	10.2	3.6	3.0	0.8	2.0	0.2	0.4	0.1	0.3	0.4	1.5	0.6	0.4	0.1	0.1	0.3	0.2	2.4	3.3	2.1	2.0	10.2
16-Jun	4.3	6.0	Z	5.0	1.2	0.5	1.4	2.3	1.3	0.5	C	C	C	C	C	C	0.6	0.2	0.1	0.0	1.3	1.8	0.7	0.2	--	6.0
17-Jun	0.2	0.2	0.2	Z	0.3	0.3	1.1	0.2	0.4	0.4	0.1	0.1	0.0	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.4	0.6	0.9	1.1	0.3	1.1
18-Jun	1.0	1.0	1.3	0.9	Z	1.2	1.8	1.1	0.2	0.4	0.7	0.6	0.3	0.4	0.1	0.0	0.7	1.5	0.7	0.2	0.7	1.1	1.2	1.4	0.8	1.8
19-Jun	0.8	2.1	0.4	0.8	0.9	Z	1.4	0.6	0.3	0.3	0.3	0.0	0.5	0.0	0.2	5.5	2.1	1.2	1.4	1.1	3.7	0.8	0.3	0.3	1.1	5.5
20-Jun	Z	1.1	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	2.3	1.1	1.6	1.4	1.4	0.3	0.3	0.1	0.5	2.3
21-Jun	0.1	Z	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
22-Jun	0.5	2.1	Z	10.5	2.2	1.7	0.4	0.3	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.6	0.1	0.1	0.1	0.3	2.1	2.4	8.4	2.9	1.5	10.5
23-Jun	1.2	1.4	3.3	Z	6.3	7.0	4.5	1.6	4.3	1.0	0.8	0.9	2.0	0.5	0.9	3.9	1.5	0.4	0.4	0.3	0.4	1.8	1.1	1.6	2.0	7.0
24-Jun	0.8	1.6	2.4	2.0	Z	7.7	1.8	5.1	3.9	2.0	1.8	M	M	1.3	1.0	1.7	1.7	2.0	0.5	0.6	0.7	0.5	1.3	1.6	2.0	7.7
25-Jun	2.0	1.9	3.0	4.1	4.5	Z	2.6	3.0	4.2	1.0	1.3	2.0	1.7	1.7	1.5	2.2	1.4	1.5	0.3	0.4	0.3	0.4	0.4	0.6	1.8	4.5
26-Jun	Z	0.8	0.6	0.8	0.8	0.9	0.8	1.4	1.0	0.4	0.7	1.8	0.8	0.8	2.7	1.4	8.5	2.1	0.3	0.3	0.4	0.4	0.4	0.5	1.2	8.5
27-Jun	0.5	Z	0.8	0.8	0.6	0.6	0.7	0.6	0.5	0.5	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.5	0.8
28-Jun	0.4	0.5	Z	0.6	0.4	0.4	0.3	0.3	0.2	0.1	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.7	0.9	0.8	0.3	0.9
29-Jun	0.8	0.9	0.9	Z	0.8	0.6	0.6	0.6	0.6	0.6	0.8	0.8	0.7	0.7	0.7	0.6	1.2	1.1	1.0	0.9	0.9	1.0	0.9	0.9	0.8	1.2
30-Jun	0.9	0.8	0.7	0.7	Z	0.9	0.6	0.6	0.5	0.5	0.7	0.8	1.3	1.4	1.3	0.9	0.6	0.6	0.5	0.4	0.6	1.1	0.6	0.8	0.8	1.4
	1.6	1.9	2.4	3.1	2.8	2.7	2.3	1.8	1.8	1.2	1.1	1.1	1.2	1.1	1.3	1.4	1.4	1.2	1.0	1.0	1.3	1.3	1.8	1.6	Diurnal Average	
	8.5	6.0	12.4	13.2	11.9	14.0	10.7	11.1	11.3	9.8	8.2	10.2	8.5	8.1	9.3	6.9	8.5	5.8	8.6	8.2	8.2	5.4	13.6	7.1	Diurnal Maximum	

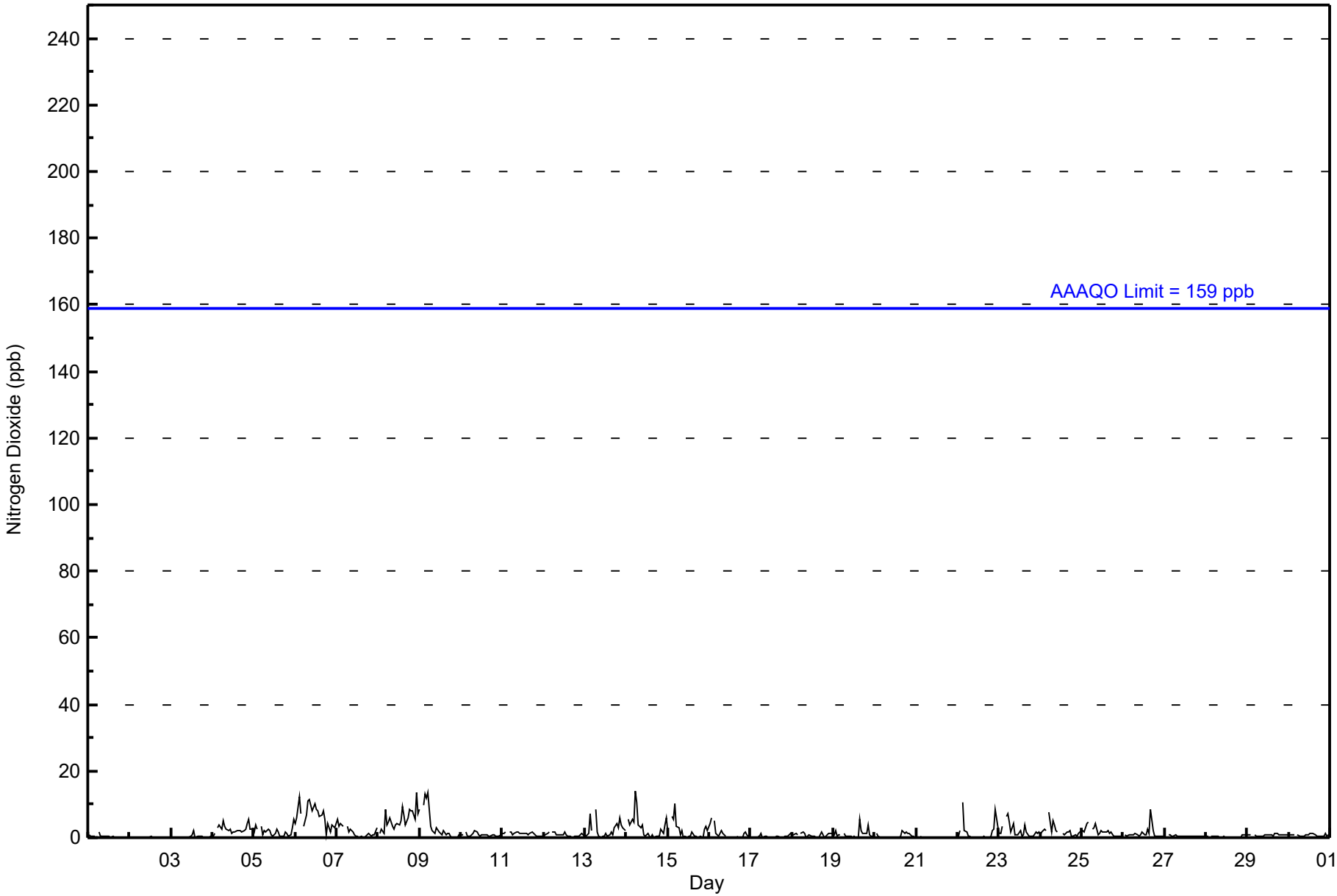
Z - zerospan C - Calibration M - Maintenance
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Sawbones Bay - June 2026



Nitrogen Dioxide (NO_2) - ppb
Sawbones Bay - June 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

Sawbones Bay - June 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	75	70	44	45	32	26	17	45	32	33	18	23	45	53	49	75	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	75	70	44	45	32	26	17	45	32	33	18	23	45	53	49	75	682

Total Number of Valid Hours: 682

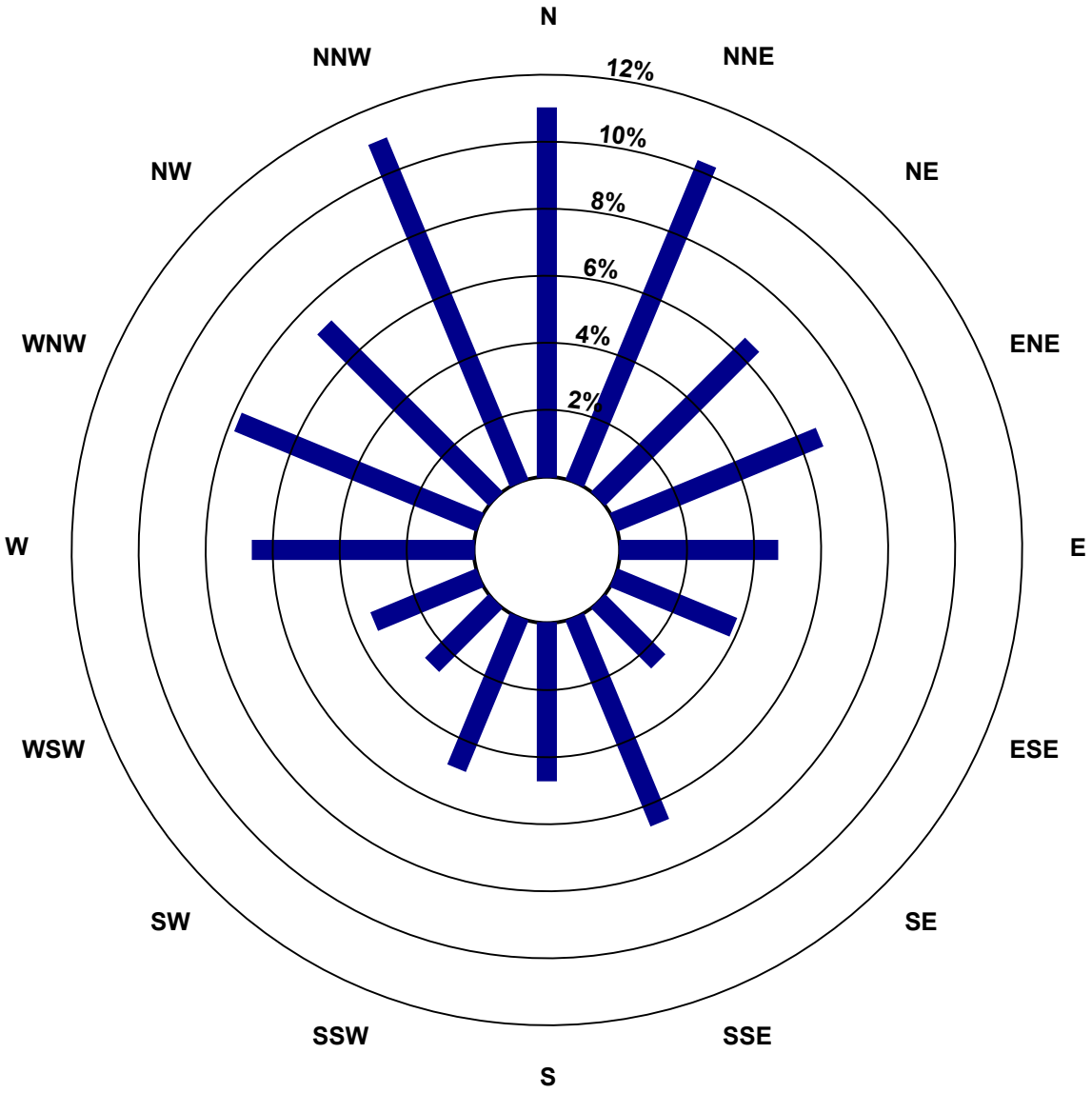
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Sawbones Bay



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

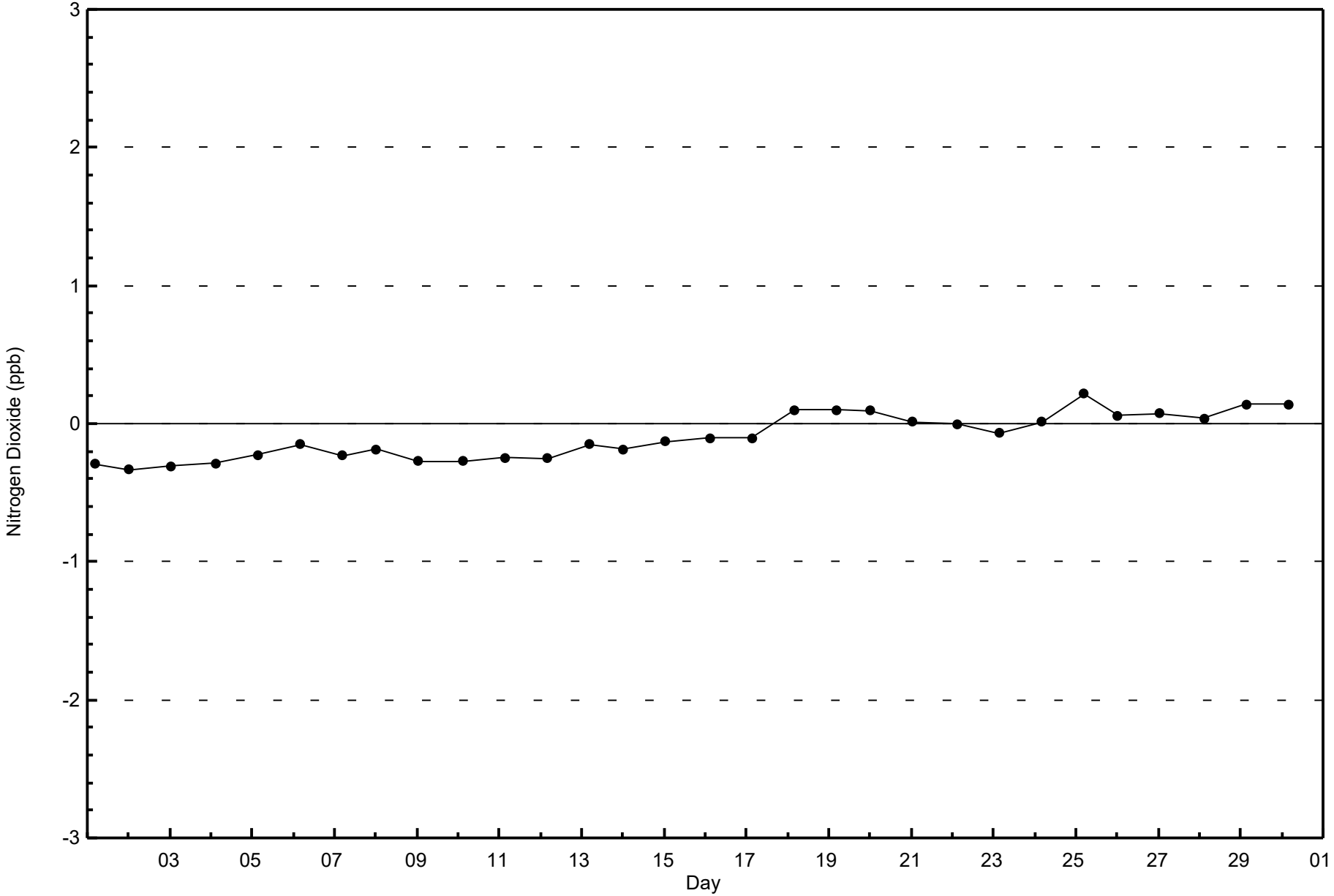
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Sawbones Bay - June 2026

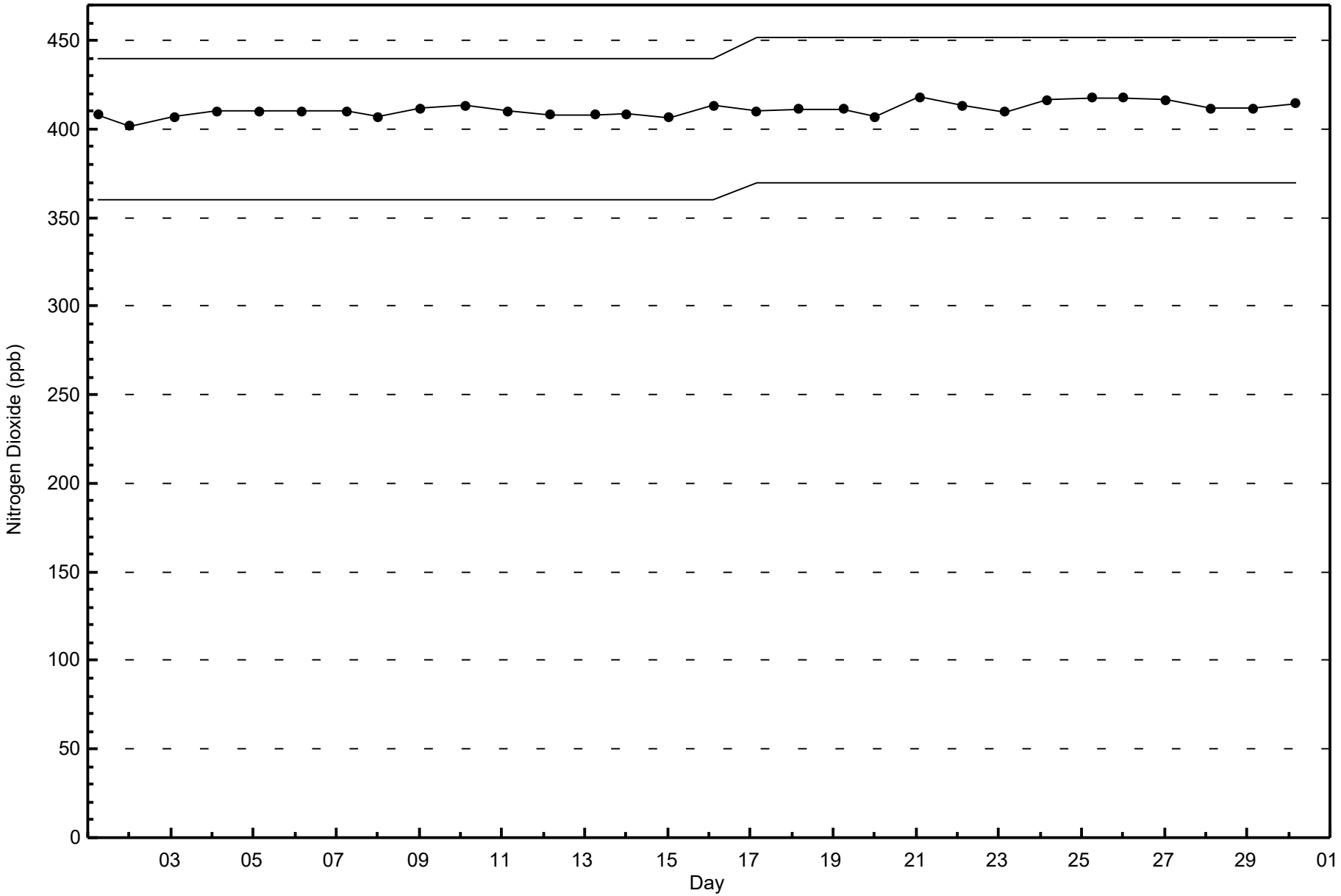


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Sawbones Bay - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Sawbones Bay - June 2026

Maximum Value: 22.5 ppb on Jun 14 06:00

Maximum Daily Average: 10.7 ppb on Jun 6

Minimum Value: 0.0 ppb on Jun 20 09:00

Minimum Daily Average: 0.1 ppb on Jun 21

Maximum Diurnal Average: 4.0 ppb at hour 4

Minimum Diurnal Average: 1.2 ppb at hour 20

Monthly Average: 2.22 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.4 Median = 0.9 Q_3 = 2.3 P_{90} = 5.4 P_{99} = 20.0

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-Jun	0.8	0.6	0.7	0.6	0.5	Z	2.5	0.8	0.7	0.7	0.3	0.5	0.3	0.3	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.5	2.5
2-Jun	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.8
3-Jun	0.2	Z	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	1.5	1.8	4.6	0.4	0.4	0.8	0.5	0.5	0.3	0.2	0.3	0.2	0.4	0.6	4.6
4-Jun	0.4	1.5	Z	3.6	5.0	3.1	7.3	4.7	4.0	3.9	3.9	1.8	2.2	2.5	3.2	2.7	2.4	2.0	2.4	2.9	4.9	5.9	2.7	2.5	3.3	7.3
5-Jun	1.7	3.8	2.5	Z	3.8	1.0	2.5	1.7	3.5	2.9	1.1	0.6	1.3	3.2	1.7	0.5	0.4	0.7	1.8	1.2	0.5	0.7	3.3	7.5	2.1	7.5
6-Jun	6.2	7.9	17.3	10.0	Z	5.2	12.2	20.2	21.3	18.0	14.6	20.0	16.4	15.1	10.9	11.5	12.1	8.0	1.4	5.4	2.1	4.3	4.0	3.2	10.7	21.3
7-Jun	6.8	4.0	4.5	4.0	3.7	Z	4.6	2.5	4.3	2.9	1.4	0.6	0.5	0.3	0.6	0.3	0.2	0.8	1.7	0.8	0.7	0.9	1.0	3.6	2.2	6.8
8-Jun	Z	1.4	2.8	1.3	14.2	5.7	6.8	9.0	4.2	3.4	5.3	7.0	6.5	9.3	20.0	14.0	6.3	9.1	14.1	12.4	12.5	7.9	20.6	9.8	8.9	20.6
9-Jun	12.4	Z	14.3	20.2	18.1	21.9	5.0	3.1	2.9	1.9	4.0	2.6	1.6	1.3	3.1	1.4	1.4	1.7	0.5	0.1	0.1	0.1	0.1	0.7	5.1	21.9
10-Jun	1.0	0.8	Z	1.5	0.4	0.4	0.8	1.2	2.9	2.1	0.9	0.8	0.9	1.0	1.0	0.8	0.4	0.7	0.8	0.8	0.6	0.6	0.6	0.8	0.9	2.9
11-Jun	1.2	1.4	1.6	Z	1.6	1.7	0.9	1.5	2.3	2.0	1.8	2.0	1.8	1.8	1.6	1.3	1.7	2.0	1.1	0.7	0.6	0.6	0.5	0.4	1.4	2.3
12-Jun	0.6	1.0	1.3	1.7	Z	1.9	2.0	1.2	1.2	1.3	1.1	1.3	2.5	1.1	0.3	0.3	0.2	0.2	0.3	0.3	0.4	1.0	1.3	0.8	1.0	2.5
13-Jun	0.5	1.0	1.3	9.3	2.5	Z	14.0	2.6	0.4	0.3	0.6	0.6	1.7	0.9	1.0	2.4	1.2	4.0	5.8	3.7	6.4	4.0	3.4	2.2	3.0	14.0
14-Jun	Z	6.2	4.3	6.1	5.4	22.5	16.8	5.4	4.1	5.1	1.1	0.6	1.4	0.6	0.2	1.1	0.3	0.4	0.6	0.6	3.0	1.4	4.0	6.9	4.3	22.5
15-Jun	2.2	Z	7.5	6.8	14.5	5.0	4.4	1.2	2.9	0.3	0.8	0.3	0.4	0.6	2.1	0.8	0.6	0.2	0.1	0.3	0.2	3.0	3.8	2.5	2.6	14.5
16-Jun	4.9	6.7	Z	6.0	1.3	0.5	1.5	2.6	1.5	0.5	C	C	C	C	C	C	0.8	0.2	0.1	0.0	1.3	1.9	0.7	0.2	--	6.7
17-Jun	0.2	0.2	0.2	Z	0.4	0.4	1.9	0.3	0.9	0.6	0.2	0.1	0.1	0.1	0.4	0.4	0.4	0.3	0.2	0.3	0.5	0.6	0.9	1.2	0.5	1.9
18-Jun	1.1	1.0	1.4	0.9	Z	1.5	3.1	2.0	0.3	0.5	1.1	0.9	0.4	0.5	0.2	0.1	0.9	1.8	0.8	0.3	0.8	1.1	1.3	1.5	1.0	3.1
19-Jun	0.9	2.7	0.5	1.0	1.3	Z	2.1	0.9	0.5	0.5	0.5	0.1	0.9	0.0	0.2	11.8	3.5	1.5	1.6	1.2	4.7	0.9	0.4	0.3	1.7	11.8
20-Jun	Z	1.3	0.4	0.3	0.2	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.7	2.7	1.2	1.8	1.5	1.5	0.4	0.3	0.2	0.6	2.7
21-Jun	0.1	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
22-Jun	0.5	2.3	Z	17.1	2.4	2.2	0.5	0.3	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.8	0.1	0.1	0.1	0.4	2.5	2.6	10.0	3.0	2.0	17.1
23-Jun	1.2	1.5	3.7	Z	9.0	12.3	7.6	2.3	6.6	1.5	1.1	1.3	2.6	0.7	1.6	5.9	2.0	0.4	0.4	0.3	0.4	1.8	1.1	1.6	2.9	12.3
24-Jun	0.8	1.6	2.4	2.1	Z	10.3	2.1	8.7	5.3	2.3	2.4	M	M	1.8	1.4	2.6	2.2	2.4	0.5	0.6	0.7	0.5	1.3	1.7	2.6	10.3
25-Jun	2.1	2.0	3.0	4.2	4.8	Z	3.1	4.3	6.2	1.3	1.6	2.6	2.4	2.2	2.0	3.0	1.8	2.2	0.4	0.5	0.3	0.4	0.5	0.6	2.2	6.2
26-Jun	Z	0.9	0.7	0.8	0.9	1.0	0.9	2.0	1.4	0.5	0.9	2.6	1.1	1.1	3.9	1.9	15.2	2.9	0.3	0.3	0.4	0.4	0.5	0.5	1.8	15.2
27-Jun	0.5	Z	0.9	0.8	0.6	0.7	0.7	0.7	0.6	0.6	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.5	0.4	0.4	0.4	0.5	0.9
28-Jun	0.5	0.6	Z	0.7	0.5	0.4	0.4	0.3	0.2	0.2	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.7	0.9	0.8	0.3	0.9
29-Jun	0.8	0.9	0.9	Z	0.8	0.6	0.6	0.6	0.6	0.6	0.8	0.8	0.7	0.7	0.8	0.6	1.2	1.1	1.0	0.9	0.9	1.0	0.9	0.9	0.8	1.2
30-Jun	0.9	0.8	0.8	0.9	Z	1.1	0.8	0.7	0.5	0.5	0.7	0.8	1.9	1.8	2.2	0.9	0.6	0.6	0.5	0.4	0.6	1.1	0.6	0.8	0.9	2.2
	1.9	2.1	2.9	4.0	3.7	4.0	3.5	2.7	2.7	1.8	1.6	1.8	1.8	1.8	2.1	2.3	2.0	1.5	1.3	1.2	1.6	1.5	2.2	1.8	Diurnal Average	
	12.4	7.9	17.3	20.2	18.1	22.5	16.8	20.2	21.3	18.0	14.6	20.0	16.4	15.1	20.0	14.0	15.2	9.1	14.1	12.4	12.5	7.9	20.6	9.8	Diurnal Maximum	

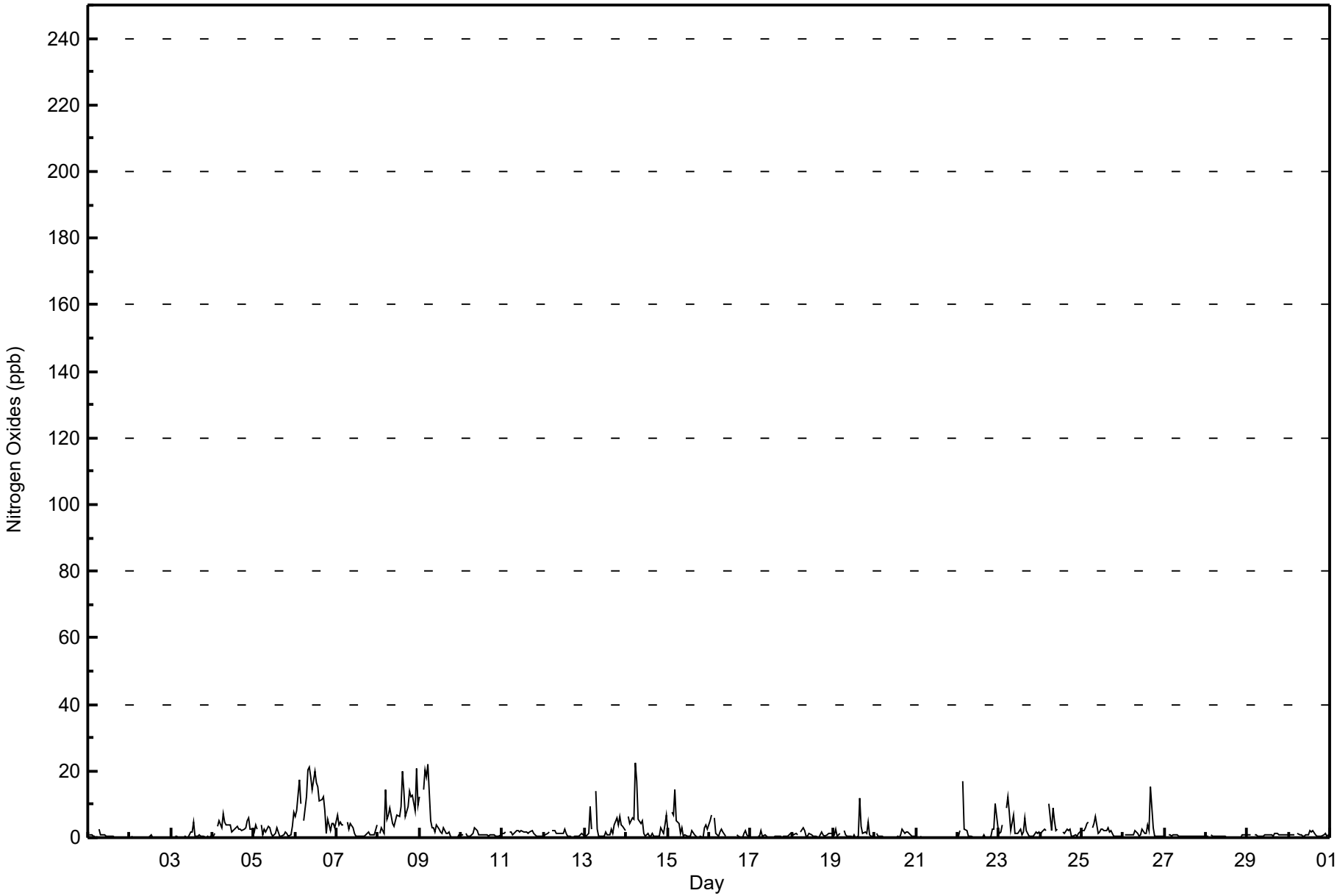
Z - zerospan C - Calibration M - Maintenance

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Sawbones Bay - June 2026



Nitrogen Oxides (NO_X) - ppb
Sawbones Bay - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	678	99.41	99.41
21 - 40	4	0.59	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 Oxides (NO_X) - ppb

Sawbones Bay - June 2026

Concentration Ranges (ppb)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 20	75	70	44	45	32	26	17	45	32	33	18	21	43	53	49	75	678
21 - 40	0	0	0	0	0	0	0	0	0	0	0	2	2	0	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	75	70	44	45	32	26	17	45	32	33	18	23	45	53	49	75	682

Total Number of Valid Hours: 682

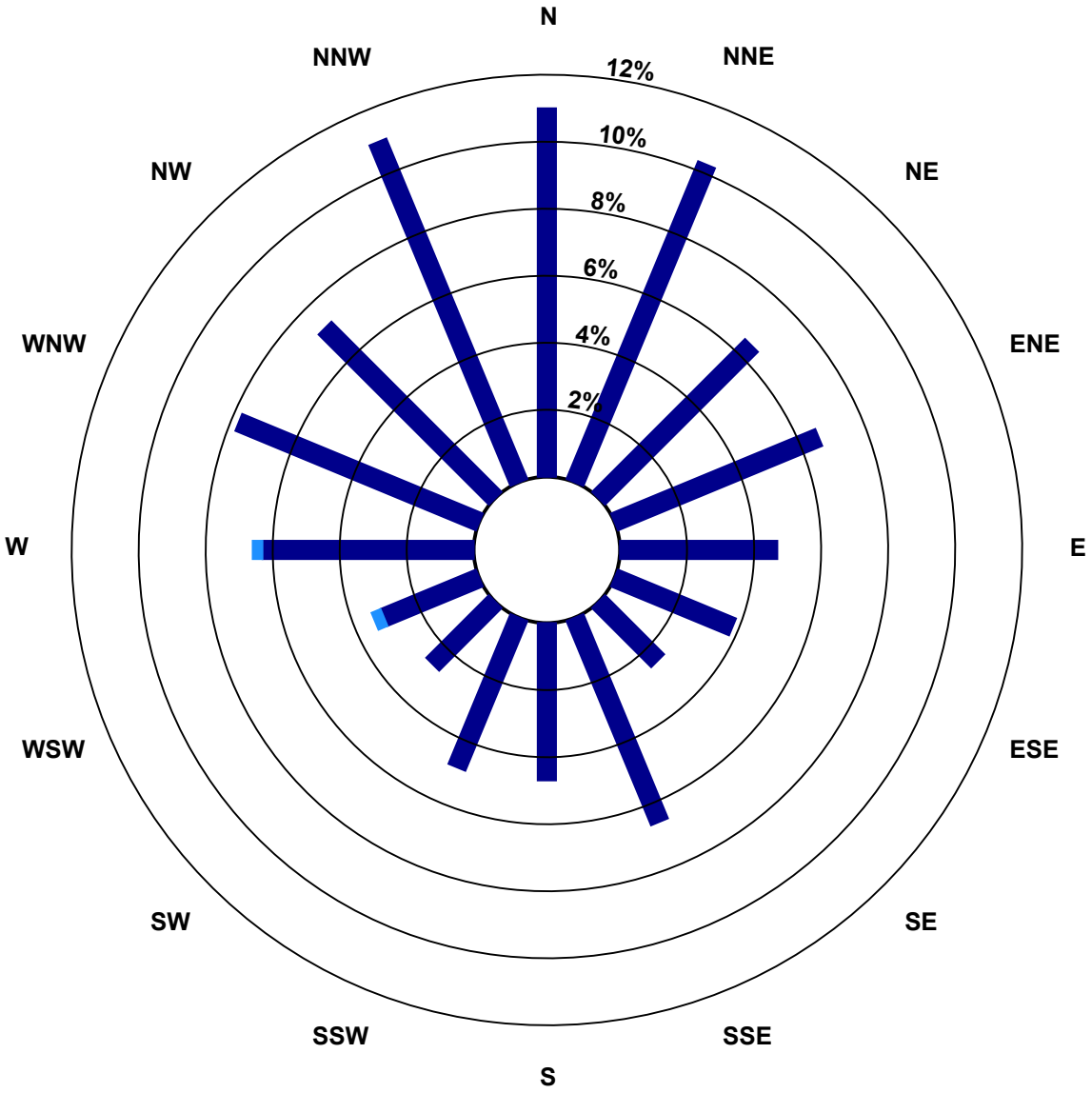
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Sawbones Bay



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

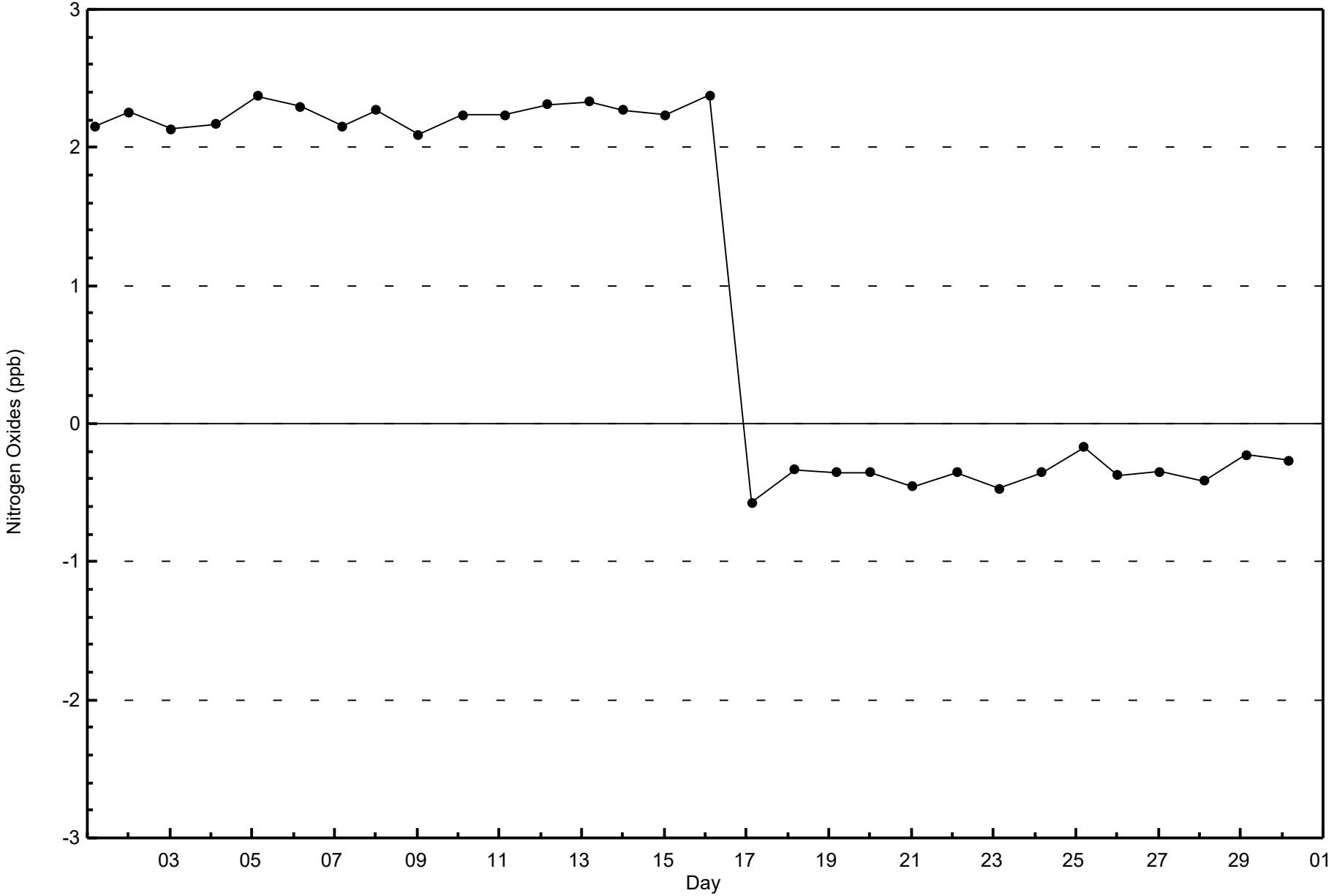
Total Number of Valid Hours: 682

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Sawbones Bay - June 2026

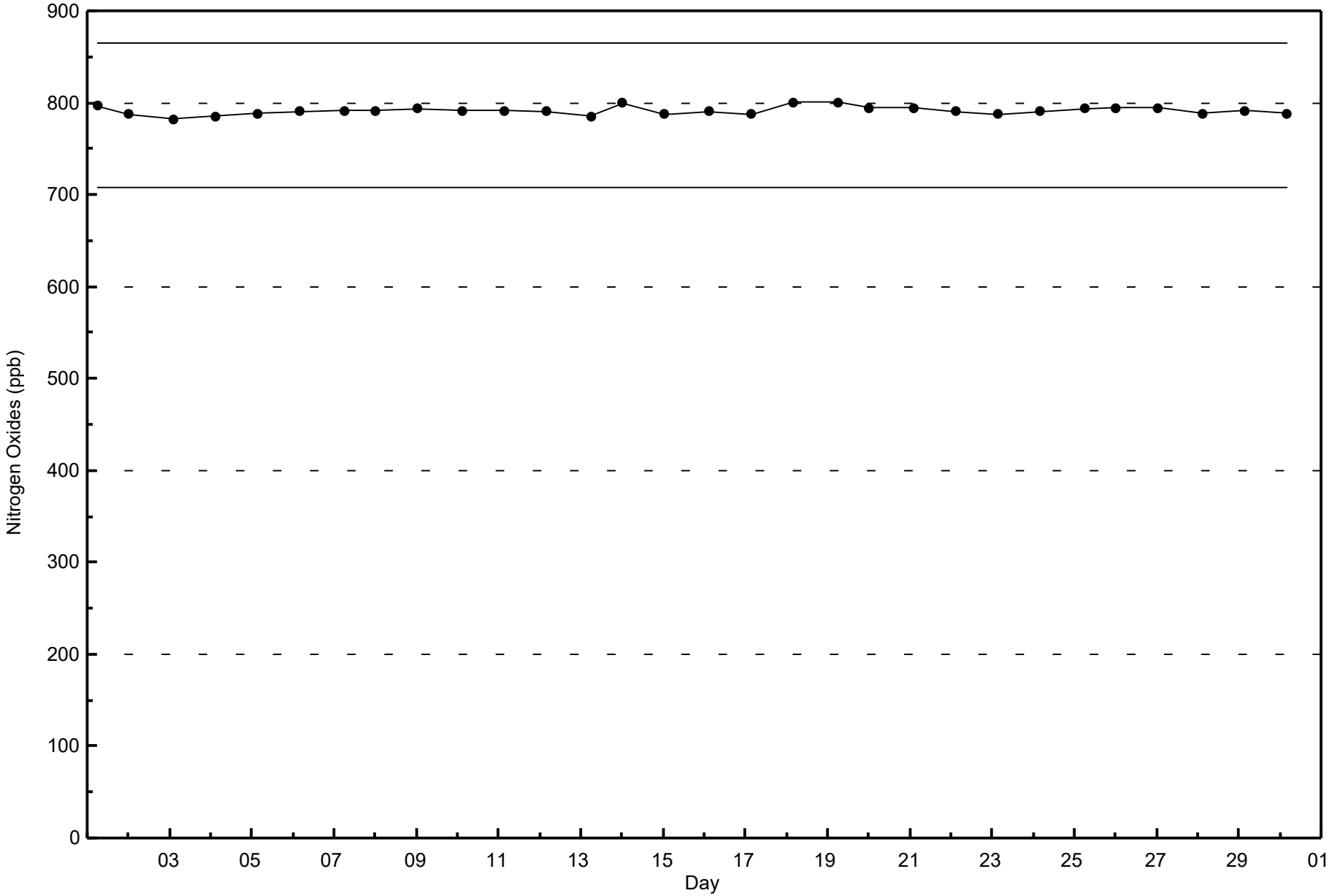


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Sawbones Bay - June 2026



Maximum Value: 28.0 C on Jun 28 18:00

Maximum Daily Average: 22.0 C on Jun 28

Minimum Value: 4.4 C on Jun 13 04:00

Minimum Daily Average: 7.3 C on Jun 2

Maximum Diurnal Average: 19.0 C at hour 17

Minimum Diurnal Average: 9.7 C at hour 4

Monthly Average: 14.66 C

Percentiles: P_1 = 6.2 P_{10} = 7.9 Q_1 = 10.6 Median = 13.9 Q_3 = 18.3 P_{90} = 22.4 P_{99} = 27.3

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

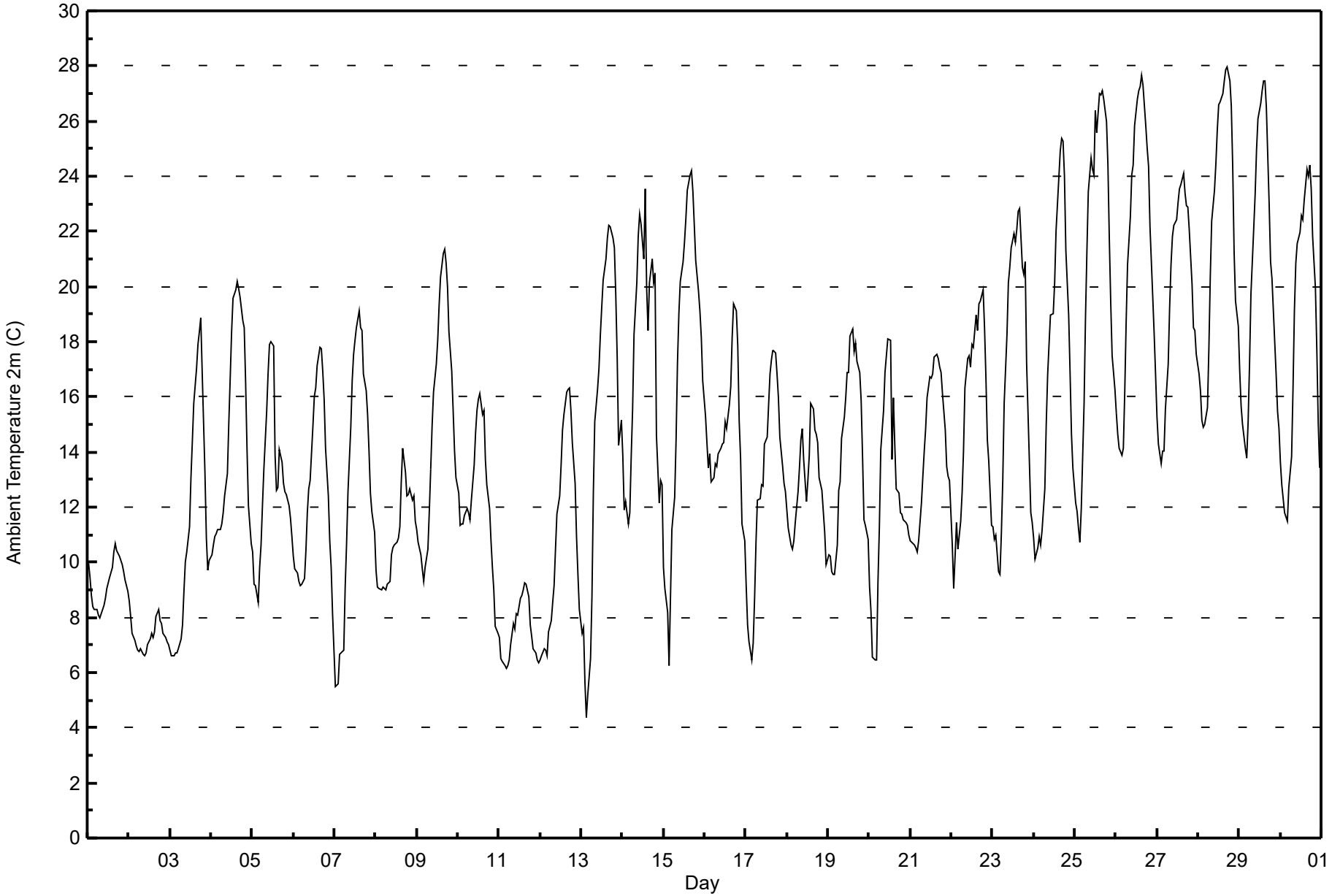
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	10.0	9.5	8.8	8.4	8.3	8.3	8.1	8.0	8.1	8.4	8.7	9.0	9.3	9.5	9.8	10.4	10.7	10.4	10.2	10.1	9.9	9.7	9.4	9.0	9.2	10.7
2-Jun	8.6	8.0	7.4	7.2	7.0	6.8	6.8	6.9	6.7	6.6	6.7	7.0	7.2	7.4	7.3	7.5	8.0	8.3	7.9	7.8	7.4	7.3	7.1	7.0	7.3	8.6
3-Jun	6.8	6.6	6.6	6.7	6.7	6.9	7.2	7.7	8.9	10.0	10.4	11.3	13.0	14.4	15.8	17.0	17.9	18.3	18.9	16.9	13.2	10.9	9.7	10.0	11.3	18.9
4-Jun	10.3	10.6	11.0	11.0	11.2	11.2	11.4	11.8	12.4	13.2	15.1	16.7	18.3	19.6	19.9	20.2	19.9	19.6	18.7	18.5	16.5	14.1	12.1	10.7	14.7	20.2
5-Jun	10.4	9.2	9.1	8.6	9.8	10.6	12.1	13.4	15.5	16.8	17.9	18.0	17.8	13.9	12.6	12.7	14.1	13.7	12.9	12.6	12.5	12.1	11.6	10.9	12.9	18.0
6-Jun	10.2	9.8	9.6	9.3	9.2	9.2	9.4	10.4	11.8	12.7	13.0	15.0	16.0	16.3	17.2	17.8	17.7	16.9	15.9	14.1	12.4	10.8	9.8	8.2	12.6	17.8
7-Jun	5.5	5.6	5.6	6.7	6.7	6.8	9.1	10.7	12.5	14.9	16.6	17.5	18.1	18.5	19.1	18.5	18.4	16.8	16.2	15.3	14.1	12.5	11.8	11.1	12.9	19.1
8-Jun	9.7	9.1	9.1	9.0	9.1	9.0	9.0	9.2	9.3	10.3	10.5	10.6	10.7	10.9	11.3	12.9	14.2	13.3	12.4	12.5	12.6	12.3	12.4	11.5	10.9	14.2
9-Jun	11.2	10.7	10.3	9.7	9.3	9.8	10.5	11.8	13.4	15.0	16.2	17.2	18.1	19.3	20.4	21.2	21.4	20.9	20.0	18.4	16.9	15.5	14.1	13.1	15.2	21.4
10-Jun	12.5	11.3	11.4	11.4	11.7	11.9	11.8	11.5	12.3	13.5	14.7	15.5	15.9	16.1	15.3	15.5	13.7	12.8	12.0	10.8	9.8	9.0	7.7	7.4	12.3	16.1
11-Jun	7.3	6.5	6.4	6.2	6.2	6.2	6.4	7.0	7.8	7.6	8.1	8.1	8.7	8.8	9.0	9.3	9.2	8.8	7.8	7.3	6.9	6.7	6.4	6.3	7.5	9.3
12-Jun	6.5	6.6	6.8	6.8	6.6	7.5	7.9	8.5	9.1	10.5	11.7	12.4	13.5	14.8	15.4	16.2	16.3	16.3	15.5	14.3	12.9	10.9	9.6	8.3	11.0	16.3
13-Jun	7.4	7.6	5.7	4.4	5.2	6.5	8.8	12.5	15.1	16.2	17.0	18.3	19.3	20.2	21.0	21.8	22.2	22.1	21.8	21.4	19.7	17.4	14.2	15.2	15.0	22.2
14-Jun	13.9	11.9	12.2	11.4	11.8	13.8	15.5	18.3	20.1	21.8	22.6	22.3	21.0	23.6	20.0	18.4	20.1	21.0	20.1	20.5	14.6	12.1	13.0	12.8	17.2	23.6
15-Jun	9.8	9.1	8.2	6.2	8.7	11.2	12.4	14.5	17.2	19.0	20.2	20.9	21.6	22.5	23.5	24.0	24.2	23.4	22.2	21.0	19.9	19.1	18.2	16.6	17.2	24.2
16-Jun	15.3	14.3	13.4	13.9	12.9	13.1	13.6	13.5	13.9	14.1	14.3	14.4	15.1	14.8	15.7	16.4	18.1	19.4	19.1	17.8	15.2	13.8	11.4	10.8	14.8	19.4
17-Jun	9.2	7.7	7.1	6.5	7.1	8.7	10.7	12.3	12.3	12.8	12.8	14.3	14.5	15.7	16.8	17.3	17.7	17.6	16.8	16.0	14.5	13.5	12.9	12.6	12.8	17.7
18-Jun	11.9	11.3	10.6	10.5	10.8	11.4	12.6	13.4	14.4	14.9	13.7	12.2	13.0	13.9	15.8	15.5	14.8	14.7	14.4	13.1	12.6	11.9	11.1	9.9	12.8	15.8
19-Jun	10.3	10.2	9.7	9.6	9.5	10.6	12.6	12.9	14.5	15.2	16.0	16.9	16.9	18.2	18.5	17.6	17.9	17.3	16.9	15.9	13.8	11.5	11.3	10.9	13.9	18.5
20-Jun	9.1	8.2	6.5	6.5	6.5	9.3	11.3	14.1	15.5	16.9	17.5	18.1	18.0	13.7	16.0	14.3	12.6	12.5	11.8	11.7	11.5	11.5	11.3	11.0	12.3	18.1
21-Jun	10.8	10.7	10.6	10.5	10.4	10.8	12.1	13.1	14.0	14.9	16.0	16.7	16.7	16.8	17.4	17.6	17.4	17.1	16.9	16.1	14.8	13.5	13.1	13.0	14.2	17.6
22-Jun	10.6	9.0	10.2	11.4	10.5	11.5	12.5	14.1	16.3	17.4	17.5	17.1	17.9	17.8	19.0	18.4	19.4	19.5	19.9	18.5	16.7	14.5	13.7	11.4	15.2	19.9
23-Jun	11.3	10.8	11.0	9.7	9.6	11.0	13.0	15.8	18.3	20.2	20.7	21.4	21.9	21.6	22.1	22.7	22.8	20.7	20.4	20.9	17.2	13.6	11.8	11.4	16.7	22.8
24-Jun	10.9	10.1	10.5	10.9	10.6	11.2	12.6	15.0	16.8	17.9	19.0	19.0	20.1	22.0	23.0	24.9	25.4	25.3	24.0	21.3	19.0	16.9	14.7	13.4	17.3	25.4
25-Jun	12.1	11.8	11.2	10.8	11.9	15.8	18.9	21.2	23.5	24.7	24.3	24.0	26.4	25.6	27.0	27.0	27.1	26.8	26.0	24.4	21.7	19.4	17.5	16.3	20.6	27.1
26-Jun	15.4	14.7	14.2	13.9	14.2	16.2	18.7	20.8	22.5	24.0	24.4	25.8	26.8	27.1	27.3	27.7	27.3	25.8	25.0	24.3	22.2	19.6	18.2	16.8	21.4	27.7
27-Jun	15.3	14.3	13.6	14.0	14.1	15.6	17.2	19.2	20.8	21.8	22.2	22.4	23.0	23.5	23.7	24.1	23.4	22.9	22.9	22.0	20.1	18.5	18.4	17.5	19.6	24.1
28-Jun	16.8	16.2	15.1	14.9	15.0	15.6	17.7	20.3	22.4	23.5	24.5	25.7	26.6	26.7	27.0	27.5	27.9	28.0	27.4	26.5	24.4	21.2	19.5	18.6	22.0	28.0
29-Jun	16.9	15.7	15.0	14.1	13.8	15.1	17.2	19.8	22.1	23.3	25.0	26.1	26.6	27.1	27.5	27.5	26.5	23.0	20.9	20.3	19.1	16.8	15.5	14.8	20.4	27.5
30-Jun	13.6	12.8	11.8	11.7	11.5	12.7	13.8	16.2	19.1	20.8	21.5	22.0	22.6	22.4	23.1	24.3	24.0	24.4	23.5	21.8	20.0	17.7	15.1	13.4	18.3	24.4
	11.0	10.3	10.0	9.7	9.9	10.8	12.0	13.5	14.9	16.0	16.6	17.2	17.8	18.1	18.6	18.9	19.0	18.6	17.9	17.1	15.4	13.8	12.7	12.0	Diurnal Average	
	16.9	16.2	15.1	14.9	15.0	16.2	18.9	21.2	23.5	24.7	25.0	26.1	26.8	27.1	27.5	27.7	27.9	28.0	27.4	26.5	24.4	21.2	19.5	18.6	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Sawbones Bay - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	155	21.53	21.53
10 - 20	435	60.42	81.94
> 20	130	18.06	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) - %

Sawbones Bay - June 2026

Maximum Value: 99.4 % on Jun 3 05:00

Maximum Daily Average: 95.1 % on Jun 2

Minimum Value: 28.6 % on Jun 28 18:00

Minimum Daily Average: 48.0 % on Jun 13

Maximum Diurnal Average: 86.4 % at hour 4

Minimum Diurnal Average: 50.5 % at hour 17

Monthly Average: 67.33 %

Percentiles: P_1 = 29.6 P_{10} = 36.6 Q_1 = 49.8 Median = 69.1 Q_3 = 85.8 P_{90} = 94.7 P_{99} = 98.6

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

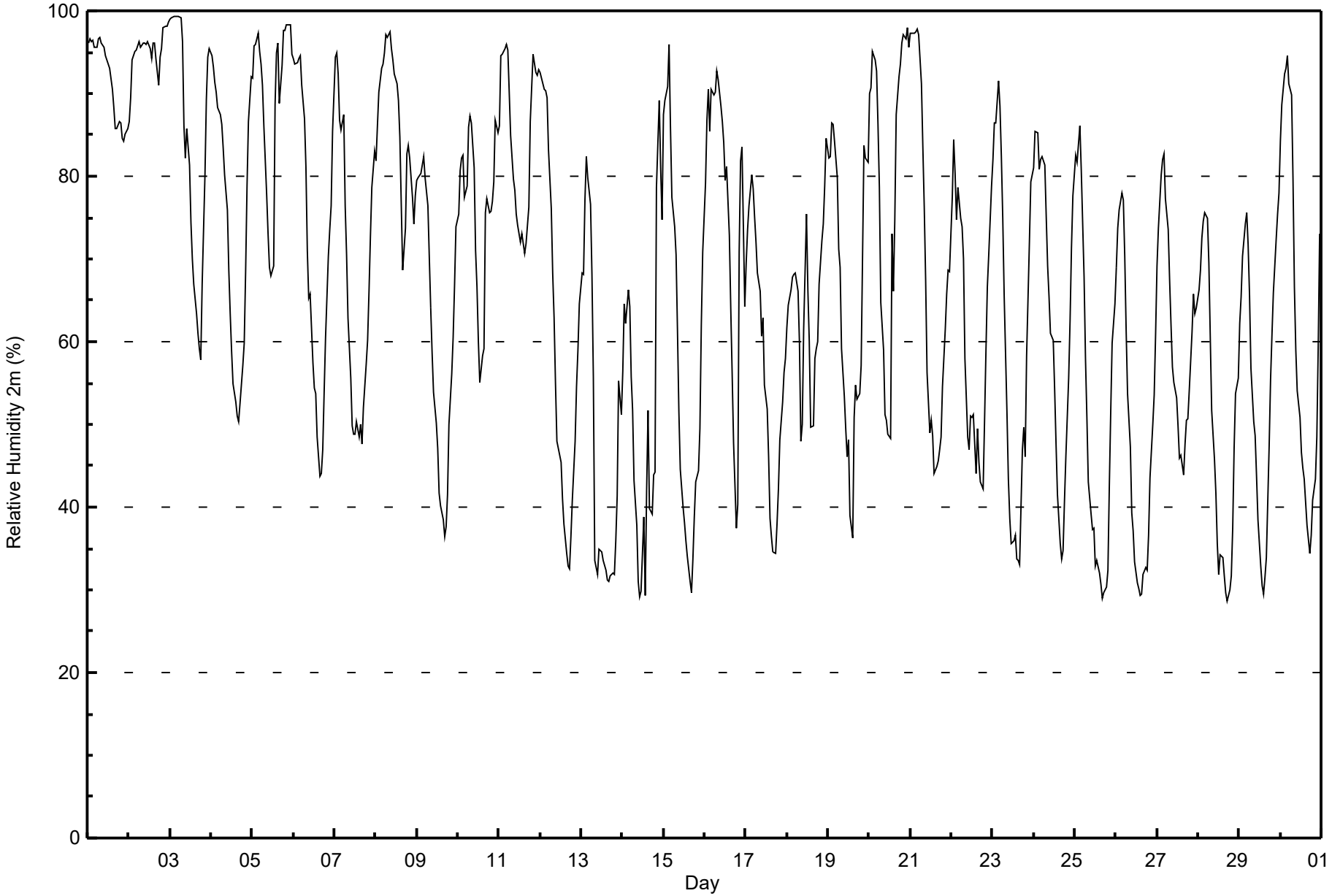
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	96.1	96.6	96.3	96.4	95.6	95.6	96.7	96.8	96.1	95.6	94.7	94.1	93.5	93.1	90.6	88.3	85.8	85.7	86.6	86.5	84.5	84.3	85.0	85.8	91.7	96.8
2-Jun	86.7	89.5	94.1	95.1	95.3	95.8	96.3	95.5	96.0	96.2	95.9	96.3	95.4	94.3	96.2	96.1	94.3	91.0	94.4	95.4	98.0	98.1	98.1	98.6	95.1	98.6
3-Jun	99.0	99.2	99.3	99.4	99.4	99.4	99.2	96.2	86.2	82.3	85.8	81.4	74.4	70.0	66.9	63.5	60.9	59.2	57.8	66.9	80.1	89.4	94.4	95.5	83.6	99.4
4-Jun	94.5	93.2	91.4	90.2	88.4	87.4	86.2	83.4	80.2	76.0	68.7	63.4	58.8	55.0	52.7	51.0	50.3	52.5	57.1	59.8	68.4	78.9	86.7	92.0	73.6	94.5
5-Jun	91.8	95.8	96.0	97.3	95.0	93.6	90.9	86.1	77.8	73.1	68.9	68.0	69.1	88.7	95.0	96.2	88.8	93.4	97.7	97.7	98.3	98.3	98.3	94.7	89.6	98.3
6-Jun	94.2	93.6	93.8	94.2	94.5	91.1	87.0	81.2	71.0	65.3	65.8	57.5	54.4	53.7	48.5	43.7	44.2	47.0	53.9	60.5	70.3	73.5	76.4	85.4	70.8	94.5
7-Jun	94.4	95.0	92.4	86.8	85.6	87.5	76.4	70.5	62.9	55.6	49.7	48.7	48.8	50.3	48.5	49.9	47.6	52.0	57.2	60.2	66.1	72.8	78.6	83.1	67.5	95.0
8-Jun	81.9	86.1	90.2	93.0	93.6	94.9	97.1	96.8	97.5	95.4	94.0	92.4	91.1	89.1	84.8	76.5	68.6	73.8	82.7	83.6	82.3	77.5	74.2	77.7	86.5	97.5
9-Jun	79.5	79.8	80.4	81.4	82.3	79.8	76.5	70.2	64.0	58.6	53.9	50.1	47.2	41.6	40.1	38.5	36.4	37.6	41.6	50.0	56.1	60.4	66.8	73.9	60.3	82.3
10-Jun	75.4	80.7	82.2	82.6	77.5	78.9	85.9	87.3	86.4	81.0	70.9	66.6	60.0	55.1	58.4	59.2	75.6	77.2	75.6	75.7	76.9	79.4	86.8	85.3	75.9	87.3
11-Jun	86.0	94.5	94.8	95.4	96.0	95.3	90.2	84.9	79.6	78.3	75.4	74.1	72.0	73.0	71.9	70.7	71.8	76.3	86.6	90.6	94.7	92.6	92.3	92.9	84.6	96.0
12-Jun	92.5	91.9	90.5	90.3	89.4	83.2	76.2	68.3	62.8	54.8	47.9	46.3	45.4	41.0	38.0	34.4	32.9	32.5	36.5	40.9	48.0	54.5	59.0	64.5	59.2	92.5
13-Jun	68.3	68.2	77.1	82.4	79.8	76.6	68.1	55.8	33.5	31.9	34.9	34.7	34.5	33.5	32.4	31.2	30.9	31.6	32.0	31.8	35.9	41.4	55.3	51.2	48.0	82.4
14-Jun	56.5	64.5	62.1	66.3	64.2	55.7	51.6	43.2	37.8	30.9	29.1	29.9	38.8	29.4	42.0	51.7	39.8	39.2	43.9	44.3	78.6	89.2	81.0	74.8	51.9	89.2
15-Jun	87.4	89.2	90.8	95.9	85.9	77.4	74.0	70.5	61.3	51.6	44.6	40.1	38.1	35.9	34.1	31.0	29.6	33.7	38.8	43.1	44.4	49.6	62.0	70.8	57.5	95.9
16-Jun	79.1	86.8	90.5	85.5	90.5	89.9	90.2	92.8	91.6	88.4	86.6	84.1	79.5	81.1	72.9	64.1	56.1	47.8	37.5	40.3	70.8	81.9	83.6	64.3	76.5	92.8
17-Jun	69.5	73.5	76.5	80.1	78.5	75.1	72.1	68.3	66.2	60.7	62.9	54.7	51.9	46.1	38.7	36.4	34.6	34.3	38.0	42.2	48.2	52.8	56.3	58.0	57.3	80.1
18-Jun	61.8	64.5	66.3	67.8	68.2	68.3	66.1	59.9	48.0	49.9	61.5	75.4	66.3	60.0	49.7	49.8	58.0	59.2	60.0	67.0	72.2	74.3	78.8	84.6	64.1	84.6
19-Jun	82.1	82.4	86.5	86.2	84.3	79.9	71.3	69.1	59.2	53.3	49.5	46.1	48.1	38.9	36.2	50.8	54.7	53.0	53.8	57.2	70.3	83.7	82.2	81.6	65.0	86.5
20-Jun	90.0	90.7	95.1	94.0	92.7	86.3	78.7	64.7	58.9	51.2	50.5	48.8	48.3	73.0	66.0	74.8	87.5	92.0	93.5	96.1	97.2	96.7	97.9	95.7	80.0	97.9
21-Jun	97.3	97.4	97.3	97.5	97.8	97.1	91.1	83.5	76.3	67.4	56.2	48.9	50.5	48.7	44.1	44.9	45.6	47.0	48.4	54.6	61.6	65.7	68.7	68.5	69.0	97.8
22-Jun	77.4	84.3	80.3	74.7	78.7	75.0	73.9	70.0	58.0	48.4	47.0	51.0	50.8	51.3	44.1	49.4	45.4	43.0	42.3	50.4	58.9	66.5	70.4	78.8	61.2	84.3
23-Jun	82.0	86.5	86.5	91.6	88.6	82.3	75.0	65.6	51.4	43.4	38.7	35.7	36.0	36.6	33.8	33.6	33.0	47.0	49.6	46.0	58.3	72.0	79.3	80.1	59.7	91.6
24-Jun	81.1	85.4	85.3	80.8	82.1	82.3	81.3	75.1	69.2	65.5	61.0	60.1	54.2	47.6	41.5	35.5	33.8	34.8	40.7	46.1	55.5	62.5	71.4	77.6	62.9	85.4
25-Jun	82.5	81.7	83.9	86.2	80.7	67.8	58.0	50.8	43.1	39.2	37.3	37.4	32.9	33.5	32.0	30.7	29.0	29.6	30.4	32.3	42.5	51.6	59.9	64.7	50.7	86.2
26-Jun	69.0	73.8	75.9	78.0	77.1	70.4	61.3	53.8	47.4	39.3	37.1	33.3	30.8	30.2	29.4	29.4	31.8	32.8	32.4	36.7	43.6	49.9	53.6	60.8	49.1	78.0
27-Jun	69.2	73.7	80.1	82.1	82.6	77.3	73.6	67.4	62.1	56.9	55.0	53.1	49.8	46.0	46.3	43.9	47.7	50.5	50.7	54.1	61.2	65.8	63.3	64.1	61.5	82.6
28-Jun	66.3	68.7	72.6	74.6	75.6	74.9	69.4	60.6	51.7	45.8	41.7	35.6	31.8	34.3	33.9	31.7	29.6	28.6	29.9	31.7	37.5	47.2	53.7	55.5	49.3	75.6
29-Jun	62.3	65.4	70.3	74.2	75.6	71.7	65.6	56.9	50.4	48.6	43.7	38.4	32.9	30.6	29.5	31.5	33.9	47.5	55.5	60.8	65.9	72.3	75.5	78.0	55.7	78.0
30-Jun	84.2	88.6	92.4	93.1	94.5	91.2	89.8	79.7	66.7	58.9	54.0	50.8	46.7	44.8	43.3	37.8	36.2	34.5	36.6	40.8	43.4	48.4	59.5	73.0	62.0	94.5
	81.3	84.0	85.7	86.4	85.7	82.7	79.0	73.5	66.4	61.4	58.8	56.6	54.4	53.5	51.4	50.9	50.5	52.1	54.7	58.1	65.7	71.0	75.0	77.0	Diurnal Average	
	99.0	99.2	99.3	99.4	99.4	99.4	99.2	96.8	97.5	96.2	95.9	96.3	95.4	94.3	96.2	96.2	94.3	93.4	97.7	97.7	98.3	98.3	98.3	98.6	Diurnal Maximum	

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Sawbones Bay - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	96	13.33	13.33
40 - 60	180	25.00	38.33
60 - 80	199	27.64	65.97
80 - 100	245	34.03	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 - June 2026

Maximum Speed: 30 km/h on Jun 6 10:00

Maximum Daily Speed Average: 19.5 km/h on Jun 1

Minimum Speed Value: 0 km/h on Jun 24 04:00

Minimum Daily Speed Average: 0.4 km/h on Jun 22

Maximum Diurnal Speed Average: 6.3 km/h at hour 11

Minimum Diurnal Speed Average: 1.4 km/h at hour 22

Monthly Average Velocity: 3.3 km/h 352.8 deg

Percentiles: $P_1 = 1$ $P_{10} = 4$ $Q_1 = 6$ Median = 9 $Q_3 = 14$ $P_{90} = 19$ $P_{99} = 27$

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-Jun	N16	NNW18	NNW17	N15	N18	N18	NNW19	N19	N20	N23	N22	N20	N22	N23	N22	N21	N22	N20	N20	N20	NNE20	N20	N20	NNE18	N19.5	N23
2-Jun	NNE21	NNE17	NNE16	NNE16	NNE16	NNE17	NNE17	NNE18	NNE19	NNE18	NNE18	NNE18	NNE18	NNE17	NNE13	NNE13	NNE14	NNE15	NNE14	NNE11	NNE10	NNE11	NNE9	NE8	NNE15.1	NNE21
3-Jun	NNE7	NNE6	NNE6	NNE5	NNE4	NE5	NE5	E7	ENE5	NE5	NNE8	ENE8	E4	ENE4	E2	ENE6	E5	E5	ESE4	ESE11	SE12	SSE10	SSE10	SSE10	E4.5	SE12
4-Jun	S10	S7	SSW5	S5	SSW7	S7	SSW7	SSW8	SSW9	SSW10	SSW9	SSW10	SSW12	SSW11	SSW11	SSW10	SSW8	SSW8	SSW9	SSW9	SSW7	SSW6	S4	S6	SSW8.0	SSW12
5-Jun	SSE7	S6	S6	SSE7	ESE2	ESE5	SSE4	SSE5	S3	SSW2	SSE2	SE10	SSW8	WNW15	NW9	N9	NNE9	NE3	S3	NE4	E6	ESE5	WSW3	WNW19	S0.8	WNW19
6-Jun	WNW26	W21	WSW16	SW15	SW16	SW20	SW21	WSW21	W27	W30	W25	WSW28	WSW25	WSW22	W25	W23	WSW16	W14	NW13	WNW13	WNW2	WSW4	SW3	WNW3	WSW16.9	W30
7-Jun	S4	SSW4	SW2	WSW2	SSE2	ESE2	N1	SSE1	W2	NW1	E5	ESE8	E9	ESE12	SSE24	SSE24	SSE19	SSE7	WNW8	NW7	N6	ENE3	NNW6	WNW14	SE3.0	SSE24
8-Jun	NW12	WNW5	WNW9	WNW9	W7	WNW14	W14	W15	WNW12	WNW18	W21	W25	W28	W30	W27	W23	W19	W21	WSW16	WSW12	WSW16	SW17	WSW16	SW13	W15.9	W30
9-Jun	W13	W15	WSW13	W16	WSW16	W15	W15	WNW12	WNW10	WNW9	WNW12	WNW10	WNW10	WNW9	W9	W7	WNW3	WNW3	NNE7	NE6	ENE6	NE5	NE5	NW4	W7.3	W16
10-Jun	ENE2	NNE5	NE3	NNW5	N5	NNE8	NNW7	N5	NNW9	N12	N16	NNW16	NNW18	NNW17	NNW16	N12	N15	N18	N18	N18	NNW15	N15	NNW13	NNW13	N11.2	N18
11-Jun	NNW13	NNW11	NW11	NW10	NW10	NW12	NNW12	NNW12	NNW13	NNW14	NNW14	NNW14	NNW12	NW13	NNW13	NNW13	NNW14	NNW15	NNW12	NW13	NNW15	NNW15	NNW14	NNW12	NNW12.8	NNW15
12-Jun	NNW11	NNW9	NNW12	NNW8	NW10	NW16	NNW18	NNW18	NNW22	NNW23	NNW24	N25	NNW24	N24	NNW25	N24	N23	N22	NNW22	N16	NNW9	NW8	NW8	NW9	NNW16.7	NNW25
13-Jun	NW8	NNW7	NW7	WNW8	WNW8	WNW6	WNW6	WNW5	NW9	NW8	NW8	NW8	NNW7	NW7	NW6	W7	WNW8	WSW10	W10	SW10	WSW6	WSW4	SSW8	SW13	WNW6.1	SW13
14-Jun	SW9	SW6	SW11	SW8	SW9	WSW11	W12	WNW13	W11	W15	NW14	NNW14	NW15	NNW14	NNW16	NNW15	NW15	NNW12	NNW10	N8	W4	SSW3	WNW7	WNW11	WNW8.2	NNW16
15-Jun	NW4	N4	W3	SW2	W3	W1	NW4	NW2	S2	N3	WNW4	NW7	NNW6	NW7	W7	NW5	NNW7	NNE6	ENE11	E7	ESE7	SW8	W19	WNW19	NW3.2	WNW19
16-Jun	W10	WNW6	NNW6	W8	ENE5	E3	SSE4	N1	NE5	ENE9	ENE12	NE11	NNE11	NNE6	NNE7	N7	WNW6	N8	ENE11	ENE5	S4	WNW2	N6	NE8	NNE3.6	ENE12
17-Jun	N6	N7	N6	N8	N7	N8	N10	N12	N17	N19	N15	N14	NNE10	NNE9	N12	N13	N12	N11	N10	NNW8	NNW7	NNW8	NNW9	NNW11	N10.1	N19
18-Jun	NNW9	WNW9	NW8	NW8	NW9	WNW15	WNW15	NW11	NNW14	N16	N23	NNW20	NNW19	NNW19	NNW16	N16	N16	N15	N14	NE9	NW1	WNW8	WNW8	NNW4	NNW11.4	N23
19-Jun	NW6	WNW8	WNW9	WNW9	WNW12	WNW12	NW10	NW9	NW11	NW16	NW14	NNW14	NNW9	NNW14	N11	SSW9	SSW10	SSW3	WNW3	NW3	W12	NE4	NE5	NE5	NW6.7	NW16
20-Jun	NE3	NE1	N5	NNE3	NNE4	NNE6	NNE8	NE10	NE12	ENE13	NE13	NE16	E14	E11	ENE13	ESE9	WSW2	S1	WNW2	NNE2	N4	N6	NNE5	N8	NE5.9	NE16
21-Jun	NNE9	NNE8	NNE8	NNE8	NNE9	NNE9	NE9	ENE10	ENE12	ENE14	E16	E19	E18	E15	E16	ENE13	ENE15	ENE13	ENE10	NE5	NNE6	NNE7	NNE6	NE7	ENE9.7	E19
22-Jun	SSE5	SSW5	SSW8	WSW9	WNW10	W6	NW6	N3	NNE7	NE10	NE11	NE6	ESE9	ENE11	NE8	ESE7	SE7	NE4	NW5	NNE2	SSW8	SW12	WSW9	SW1	ENE0.4	SW12
23-Jun	NW9	W7	W8	WSW3	SW3	W5	WNW6	WNW6	NW6	WNW5	NW6	NW8	W5	NW9	NW9	WNW15	WNW5	SE12	SSE12	S10	S5	S4	S5	SSW5	W3.7	WNW15
24-Jun	S4	SSE3	S5	WSW0	S2	W2	ENE2	SSE6	SSE4	S3	SSE4	SE4	S4	S7	SSE8	SSW8	SSW8	SSW9	S10	SSE11	SSE10	SSE8	SSE7	SSE7	S5.2	SSE11
25-Jun	S7	S8	S8	SSE7	SSE8	SSE9	S8	SSE8	S7	S9	SSW10	SSW9	S12	S10	SSE11	SSE10	SSE11	SSE13	SSE13	SSE12	SE11	SE8	ESE7	ESE8	SSE8.9	SSE13
26-Jun	SE8	SE8	SE8	SE9	SE8	SSE8	SSE9	SE10	SE12	SE15	SE14	SE15	SSE15	SSE16	SSE14	SSE14	SSE18	SSE16	SSE13	SE10	ESE9	ESE8	ESE8	E9	SE10.9	SSE18
27-Jun	E7	E7	E7	E10	E10	E11	E13	E16	E17	E19	E23	ESE20	ESE18	E20	ESE18	ESE16	ESE15	SE11	ESE10	ESE6	ENE5	NE6	ENE8	NE9	E12.0	E23
28-Jun	ENE9	ENE8	NE7	ENE9	NE8	NE7	NNE11	NE16	ENE20	ENE24	ENE27	ENE28	ENE27	ENE27	ENE26	ENE25	ENE25	ENE23	ENE21	ENE17	NE9	NNE9	NNE8	NE8	ENE16.2	ENE28
29-Jun	NNE6	N6	N8	NNE4	NNW5	NNW5	N7	N6	N10	NNE13	NE12	NNE14	NNE17	NNE17	NNE17	NNE18	ENE13	ESE14	E7	NNE4	NNE4	NE6	ENE6	NE6	NNE8.1	NNE18
30-Jun	NNE5	NNE4	N6	N5	N5	NNW2	N5	N6	NE10	NE12	NE13	NE13	NNE16	ENE12	NE9	ENE8	NE10	ENE10	E13	E7	ESE5	S3	SSE4	ESE4	NE6.5	NNE16
	NNW3.3	NW2.8	NW3.0	NW2.8	NW2.8	NW3.4	NNW4.2	NNW3.7	N5.0	N5.4	N6.3	N5.8	N4.5	N5.1	N4.4	N3.6	NNE3.1	NNE2.9	NNE3.3	NNE2.7	NNE1.5	N1.4	NNW2.1	NNW2.9	Diurnal Average	
	WNW26	W21	NNW17	W16	N18	SW20	SW21	WSW21	W27	W30	ENE27	WSW28	W28	W30	W27	ENE25	ENE25	ENE23	NNW22	N20	NNE20	N20	NNE20	WNW19	Diurnal Maximum	

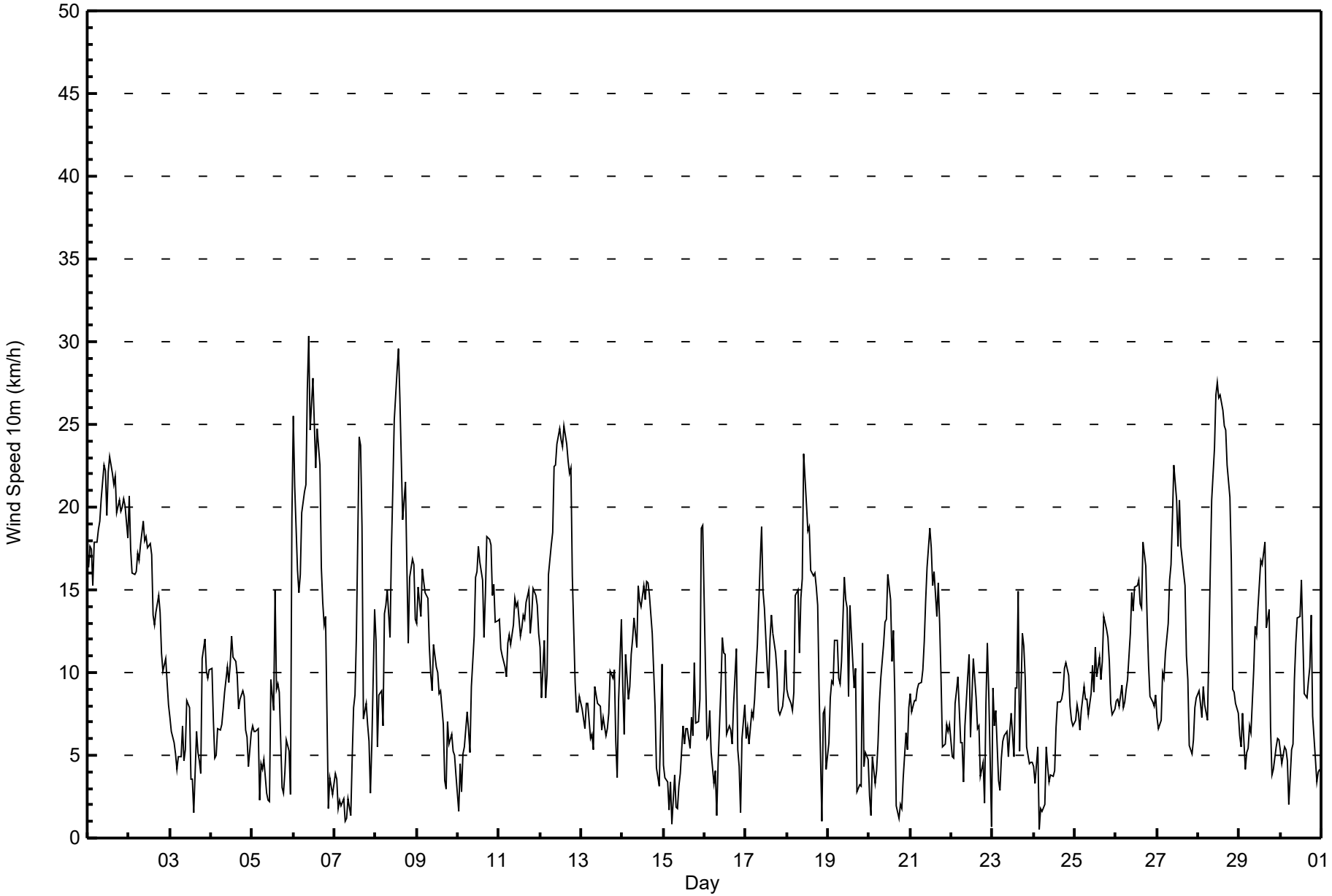
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Sawbones Bay - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	144	20.00	20.00
6 - 11	307	42.64	62.64
12 - 19	204	28.33	90.97
20 - 28	63	8.75	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 10m (WS10) - km/h

Sawbones Bay - June 2026

Wind Speed Ranges (km/h)	Wind Direction																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	**Totals**
0 - 5	11	14	16	8	6	7	1	11	17	7	5	7	8	12	8	6	144
6 - 11	25	33	24	16	14	13	12	22	16	27	7	5	12	26	34	21	307
12 - 19	25	27	8	11	11	6	6	12	1	1	6	8	13	16	11	42	204
20 - 28	19	3	0	11	2	1	0	2	0	0	2	4	11	1	0	7	63
29 - 38	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	80	77	48	46	33	27	19	47	34	35	20	24	46	55	53	76	720

Total Number of Valid Hours: 720

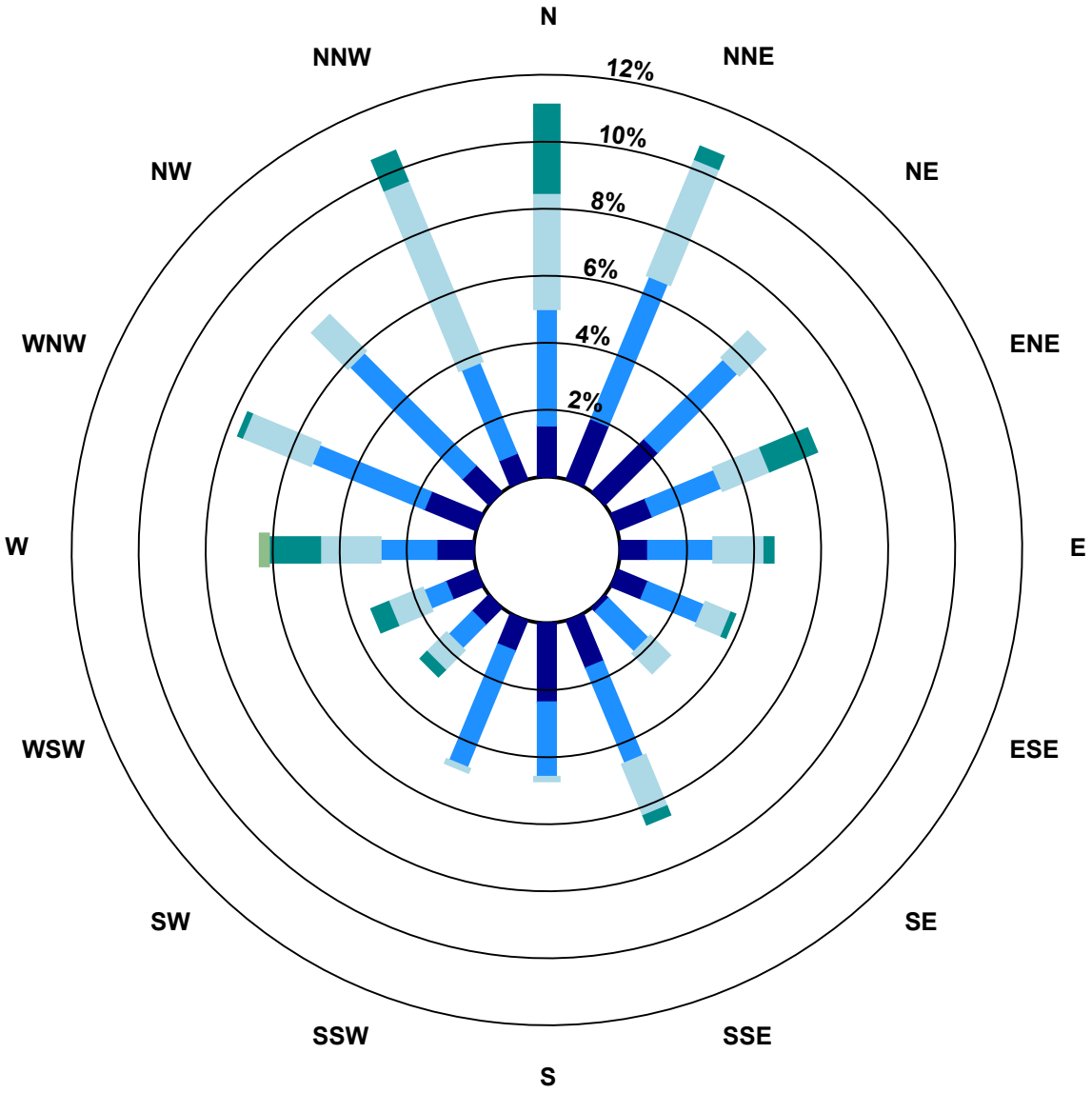
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Sawbones Bay



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

Sawbones Bay - June 2026

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

Maximum Value: 12 km/h on Jun 14 15:00

Minimum Value: 0 km/h on Jun 30 23:00

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-Jun	4	5	5	4	4	4	4	5	5	5	6	5	6	6	6	6	6	5	5	5	5	4	5	4	6
2-Jun	5	4	4	4	4	4	4	5	5	4	4	4	4	4	4	3	3	3	3	3	2	3	2	2	5
3-Jun	1	2	1	1	1	1	1	2	2	2	2	2	2	3	3	3	2	2	3	4	3	3	2	3	4
4-Jun	3	3	2	1	2	2	3	3	3	4	3	4	4	4	4	3	3	3	3	3	2	1	1	1	4
5-Jun	2	1	2	2	2	1	1	2	1	1	3	5	6	6	4	2	2	2	2	1	2	2	5	4	6
6-Jun	5	5	4	4	4	5	6	6	7	7	6	8	8	7	6	5	5	4	4	4	3	2	3	3	8
7-Jun	1	1	2	1	2	2	1	1	2	3	3	3	3	4	9	7	6	5	4	3	1	1	1	5	9
8-Jun	3	3	2	2	4	3	4	3	2	4	4	5	6	6	6	6	4	5	4	4	5	4	4	4	6
9-Jun	3	5	4	5	4	3	3	3	3	4	4	4	4	5	4	4	5	3	3	1	1	1	1	2	5
10-Jun	2	1	1	1	1	2	2	2	2	3	3	4	4	5	5	4	5	5	4	4	4	4	4	4	5
11-Jun	3	2	3	2	2	3	3	3	3	3	3	4	3	3	3	3	3	3	3	3	4	4	4	3	4
12-Jun	3	2	3	2	2	4	4	5	5	5	5	6	6	6	7	6	6	6	5	4	3	1	1	1	7
13-Jun	1	1	1	1	2	1	1	2	3	4	4	4	5	5	5	5	5	4	3	4	3	3	3	3	5
14-Jun	3	2	3	2	2	3	3	3	2	4	4	4	7	5	12	7	3	3	4	2	5	2	4	3	12
15-Jun	1	1	1	2	1	2	2	1	2	2	3	4	3	3	3	3	3	3	2	2	2	8	4	4	8
16-Jun	3	3	2	6	1	1	1	2	1	2	2	2	2	2	2	2	2	4	4	1	2	2	3	2	6
17-Jun	1	1	1	1	1	2	2	3	4	4	4	4	3	4	4	4	4	4	2	2	1	1	2	2	4
18-Jun	2	1	2	1	2	3	3	4	4	4	7	5	5	5	5	4	4	5	4	4	1	2	1	1	7
19-Jun	1	2	2	2	2	3	2	2	4	5	4	4	4	4	3	5	3	2	2	2	4	3	1	1	5
20-Jun	1	2	1	2	1	2	2	2	3	4	4	4	3	4	5	4	1	2	2	1	2	2	2	1	5
21-Jun	2	2	2	2	2	2	2	2	3	3	4	5	5	4	4	3	3	4	3	1	1	1	1	1	5
22-Jun	2	1	2	3	3	2	1	1	3	4	4	4	3	6	4	3	3	2	3	2	3	3	3	1	6
23-Jun	2	2	2	1	1	2	1	1	2	3	3	4	3	4	4	4	5	4	3	3	2	1	1	1	5
24-Jun	1	1	1	2	2	2	2	1	1	1	2	1	2	3	3	3	4	3	3	3	3	2	1	1	4
25-Jun	1	1	1	1	1	2	2	3	3	3	3	4	5	4	4	4	4	5	4	4	3	2	1	1	5
26-Jun	1	2	1	2	2	2	3	3	4	5	5	6	5	5	5	5	6	5	4	3	2	2	2	1	6
27-Jun	1	1	1	1	2	2	3	3	4	5	6	6	5	5	5	5	4	3	3	1	0	1	1	1	6
28-Jun	1	1	1	1	1	1	3	4	5	6	6	7	8	7	7	6	6	6	5	5	2	1	1	1	8
29-Jun	1	1	2	2	1	1	2	2	3	3	3	4	4	5	5	4	5	4	5	1	1	1	1	1	5
30-Jun	1	1	0	1	1	2	1	2	4	3	4	4	5	5	4	3	4	4	4	1	1	1	0	1	5
	5	5	5	6	4	5	6	6	7	7	7	8	8	7	12	7	6	6	5	5	5	8	5	5	
	Diurnal Maximum																								

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Sawbones Bay - June 2026

Direction of Maximum Speed: 263 deg on Jun 6 10:00
Direction of Maximum Daily Speed Average: 0.6 deg on Jun 1

Direction of Minimum Speed: 254 deg on Jun 24 04:00

Direction of Minimum Daily Speed Average: 0.4 deg on Jun 22

Monthly Average Direction: 352.8 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-Jun	349	346	345	353	353	350	348	354	357	355	1	1	2	10	9	5	4	3	1	5	12	11	11	16	0.6
2-Jun	25	26	14	14	17	16	19	32	30	27	29	19	21	24	22	29	22	15	18	25	27	33	33	35	23.4
3-Jun	26	29	28	33	33	43	54	79	73	53	30	69	93	75	87	61	90	94	102	110	127	147	157	162	83.6
4-Jun	171	189	194	191	197	188	200	195	195	195	200	211	197	201	205	200	194	194	201	202	199	199	185	176	195.7
5-Jun	166	176	170	165	111	119	156	164	188	194	158	139	193	301	323	2	31	40	173	37	85	105	240	289	179.1
6-Jun	286	272	255	235	225	230	232	251	261	263	267	255	248	240	267	267	249	263	308	289	294	252	236	287	257.9
7-Jun	172	199	222	239	152	108	352	153	271	316	89	112	96	115	148	149	148	160	303	316	8	61	338	282	144.9
8-Jun	304	296	289	287	261	286	281	280	288	287	279	276	271	268	263	274	273	267	239	253	249	231	248	232	268.8
9-Jun	264	260	249	259	254	259	280	288	282	283	282	293	302	301	260	270	289	297	29	41	60	37	38	321	280.9
10-Jun	75	12	42	333	359	18	335	350	340	2	6	343	330	337	344	354	8	8	2	350	346	353	348	341	352.2
11-Jun	339	328	323	322	320	325	328	330	330	329	330	327	332	323	327	338	329	342	333	322	345	348	346	342	332.0
12-Jun	345	336	343	334	315	325	341	348	342	341	340	349	344	351	347	356	354	3	345	353	335	320	315	306	343.4
13-Jun	320	347	310	299	291	296	290	302	319	316	306	310	328	311	315	264	291	257	260	227	244	246	208	219	285.3
14-Jun	221	217	221	223	219	248	276	285	278	279	310	331	305	338	333	342	325	327	347	352	269	202	282	294	295.9
15-Jun	326	351	277	230	279	281	306	305	181	350	294	322	328	321	271	315	347	22	74	98	120	233	272	288	306.3
16-Jun	276	283	341	273	69	94	167	350	39	72	66	54	29	27	27	351	284	351	60	62	184	291	7	46	25.5
17-Jun	11	353	352	355	2	358	3	1	358	353	6	11	15	22	1	360	352	354	353	339	327	327	328	347	356.3
18-Jun	333	298	317	313	305	300	298	320	335	352	349	346	339	346	348	355	11	357	353	40	320	297	296	345	337.4
19-Jun	310	293	294	294	293	293	312	308	315	306	320	331	340	346	3	208	202	202	296	321	278	45	45	47	310.0
20-Jun	38	54	4	21	15	22	32	55	50	73	47	34	82	86	69	108	241	186	289	18	11	5	12	9	48.2
21-Jun	18	15	20	14	14	23	44	58	68	71	83	94	90	90	83	70	67	74	68	35	19	21	30	36	59.7
22-Jun	156	199	213	251	301	281	320	349	24	46	54	47	102	70	42	114	138	40	310	22	207	218	237	220	57.0
23-Jun	306	276	266	246	217	263	288	289	305	288	319	311	278	321	313	294	298	142	167	177	182	182	182	193	265.4
24-Jun	185	163	178	254	187	273	60	167	165	172	164	139	173	176	164	193	210	211	172	157	167	159	166	168	174.1
25-Jun	175	174	170	167	168	167	169	164	177	174	196	193	189	178	167	168	157	161	168	162	146	139	123	123	166.4
26-Jun	129	128	131	136	139	147	148	141	140	136	136	144	158	155	148	152	168	151	154	143	102	105	110	90	141.0
27-Jun	88	91	86	87	86	91	89	88	83	93	95	108	103	101	105	114	120	129	118	102	67	51	59	55	95.9
28-Jun	71	62	54	65	53	43	28	50	59	60	61	58	65	64	68	69	69	60	59	57	35	21	33	40	58.3
29-Jun	16	3	357	16	342	347	7	0	1	24	34	26	25	22	26	28	59	122	94	16	29	41	61	44	28.8
30-Jun	29	33	10	8	11	348	349	4	45	51	40	45	31	58	55	60	41	77	87	89	104	172	161	120	50.5
	332.0	321.1	314.8	310.9	318.1	318.0	327.8	345.6	353.2	0.2	6.9	6.5	3.5	6.2	5.6	7.7	14.7	23.0	18.7	21.4	16.0	0.5	337.5	332.6	
	Diurnal Average																								

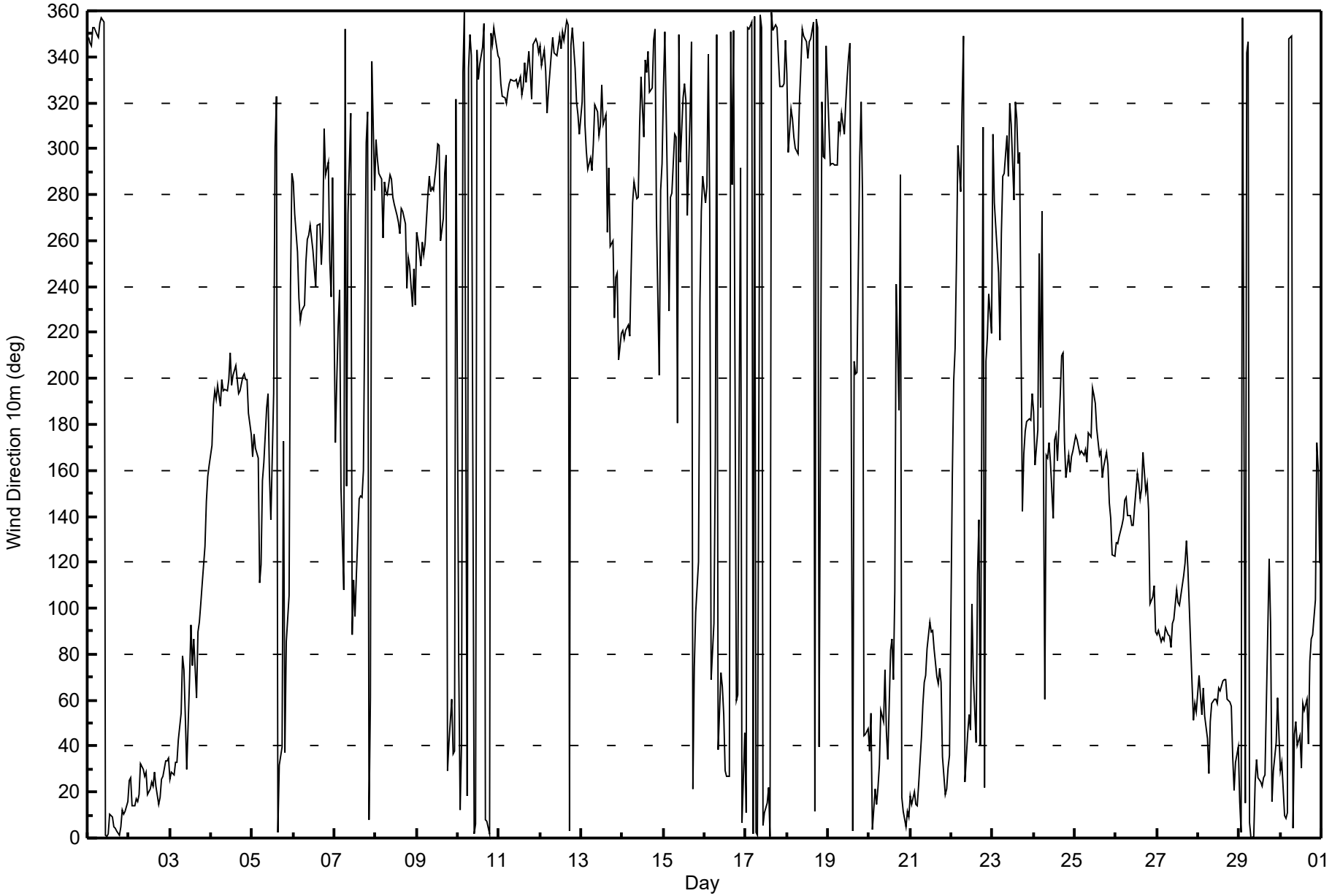
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Sawbones Bay - June 2026



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

Maximum Value: 101 deg on Jun 3 15:00

Minimum Value: 6 deg on Jun 13 04:00

Percentiles: P_1 = 8 P_{10} = 12 Q_1 = 16 Median = 20 Q_3 = 30 P_{90} = 54 P_{99} = 91

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-Jun	19	17	18	19	19	19	18	21	19	20	20	20	20	19	19	21	20	20	20	20	18	19	16	17	21
2-Jun	15	15	17	18	15	18	16	16	15	16	14	16	17	16	17	16	18	20	18	15	15	14	14	15	20
3-Jun	15	14	16	13	15	16	20	18	31	39	26	30	70	84	101	51	47	41	66	22	20	18	16	18	101
4-Jun	21	25	21	21	22	22	24	24	23	23	28	28	26	30	28	29	23	23	20	20	17	16	10	9	30
5-Jun	13	10	15	18	67	39	21	20	48	71	93	32	66	26	31	17	15	69	69	38	26	39	83	11	93
6-Jun	11	16	17	20	18	19	18	21	18	16	18	20	22	21	21	18	25	31	15	20	96	35	66	66	96
7-Jun	28	33	76	68	85	61	88	89	84	87	73	35	32	34	23	22	23	68	59	22	20	76	18	23	89
8-Jun	13	77	14	19	31	14	18	15	8	9	15	15	14	13	14	18	16	16	22	31	28	19	18	19	77
9-Jun	21	18	18	15	16	15	17	23	26	37	30	38	33	52	41	51	86	55	16	14	13	17	27	39	86
10-Jun	65	32	37	11	14	24	20	26	19	23	20	21	21	20	19	24	20	22	23	22	18	22	18	18	65
11-Jun	18	13	13	13	13	14	15	16	17	18	18	17	18	20	21	19	17	21	20	14	19	19	19	19	21
12-Jun	18	19	17	17	11	14	19	21	21	20	19	22	23	22	23	24	23	23	21	21	18	9	8	8	24
13-Jun	19	22	8	6	7	7	10	36	30	47	38	39	53	52	60	67	56	32	37	23	22	47	19	16	67
14-Jun	17	19	17	19	18	19	16	17	20	22	21	27	23	30	32	24	15	21	25	34	60	42	24	11	60
15-Jun	23	35	36	58	22	90	28	58	75	69	80	64	60	52	53	56	32	38	10	20	16	55	15	13	90
16-Jun	29	43	29	89	18	53	21	94	24	13	14	17	20	28	33	36	48	54	19	28	56	71	31	9	94
17-Jun	11	14	12	15	18	19	21	24	23	22	24	30	35	51	29	26	27	29	23	18	10	10	12	19	51
18-Jun	15	8	13	14	13	12	14	35	23	23	22	22	25	24	27	25	21	23	23	16	76	12	11	37	76
19-Jun	9	9	9	9	11	12	19	17	28	23	25	29	61	28	34	68	26	71	45	50	30	46	19	21	71
20-Jun	43	91	17	21	16	19	18	23	24	26	31	20	27	45	24	48	75	91	73	57	64	13	16	14	91
21-Jun	14	17	18	14	14	14	15	16	16	15	15	17	17	18	17	20	13	13	13	10	7	7	7	9	20
22-Jun	41	21	22	17	24	34	19	53	32	34	24	62	43	39	36	54	37	67	54	78	25	16	24	97	97
23-Jun	12	22	28	32	36	31	19	18	22	65	60	52	78	36	35	21	83	30	22	24	17	11	7	14	83
24-Jun	13	34	14	100	71	75	62	20	29	30	31	33	40	32	29	36	41	32	25	18	18	17	14	13	100
25-Jun	12	14	12	10	10	15	22	24	35	42	29	28	36	29	28	32	30	26	23	22	19	17	16	15	42
26-Jun	15	15	16	15	15	18	21	26	27	28	28	28	31	28	31	31	22	24	22	21	13	11	17	11	31
27-Jun	9	10	8	9	10	13	13	13	16	17	16	19	19	17	18	20	23	21	19	13	8	9	13	9	23
28-Jun	9	12	9	11	11	13	13	14	17	19	17	17	18	18	17	18	16	17	15	13	18	10	10	9	19
29-Jun	12	14	16	23	10	18	18	23	22	19	22	24	21	24	22	21	48	21	44	21	28	12	12	9	48
30-Jun	15	21	12	14	12	42	17	26	28	24	21	27	20	17	28	41	21	26	13	8	22	14	11	12	42
	65	91	76	100	85	90	88	94	84	87	93	64	78	84	101	68	86	91	73	78	96	76	83	97	
	Diurnal Maximum																								

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS507
KIRBY SOUTH
JUNE 2026

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

July 30, 2026

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - KIRBY SOUTH (AMS 507)
JUNE 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	581	31	31	100	12.5	0	4.3	0
H2S (ppb) Average	585	29	29	100	0.4	0	0.1	0
THC (ppm) Average	576	31	36	99.18	2.8	-	2.5	-
NO2 (ppb) Average	654	34	34	100	8.8	0	3.5	-
NO (ppb) Average	654	34	34	100	10.1	-	3.2	-
NOX (ppb) Average	654	34	34	100	18.9	-	6.7	-
Temperature 2 m (C) Average	703	0	0	100	26.8	-	21.5	-
Relative Humidity (%) Average	703	0	0	100	97.7	-	94.2	-
Wind Speed 10 m (km/h) Average	684	1	1	100	29	-	23	-
Wind Direction 10 m (deg) Average	683	0	0	100	-	-	-	-

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

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - KIRBY SOUTH(AMS507)
JUNE 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	581	0.51	1.3	-	0	0	0	0.1	0.4	0.9	12.5
H2S (ppb) Average	585	0.08	0.1	-	0	0	0	0.1	0.1	0.1	0.4
THC (ppm) Average	576	2.34	0.1	-	2.2	2.2	2.3	2.3	2.4	2.5	2.8
NO2 (ppb) Average	654	1.03	1	-	0.2	0.4	0.6	0.8	1.1	1.7	8.8
NO (ppb) Average	654	0.25	0.9	-	0	0	0	0.1	0.1	0.3	10.1
NOX (ppb) Average	654	1.27	1.8	-	0.3	0.4	0.6	0.8	1.2	2	18.9
Temperature 2 m (C) Average	703	14.1	4.8	-	5.3	8.2	10.2	13.7	17	21.2	26.8
Relative Humidity (%) Average	703	68.26	20.3	-	26	37.7	51.6	70.3	88.2	94	97.7
Wind Speed 10 m (km/h) Average	684	12	6	-	1	6	8	11	15	21	29
Wind Direction 10 m (deg) Average	683	-	-	-	-	-	-	-	-	-	-

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION - KIRBY SOUTH (AMS507)
JUNE 2026

OPERATIONAL NOTES

Parameter	Period Start	Period End	Duration (Hours)	Notes
THC	11 Jun 2026 12:00	11 Jun 2026 16:00	5	Maintenance - replaced support gas cylinder

Wood Buffalo Environmental Association

Summary of Hour Averages

Sulphur Dioxide (SO_2) - ppb

Kirby South - June 2026

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

Maximum Value: 12.5 ppb on Jun 6 08:00

Maximum Daily Average: 4.3 ppb on Jun 6

Minimum Value: 0.0 ppb on Jun 3 09:00

Minimum Daily Average: 0.0 ppb on Jun 4

Maximum Diurnal Average: 0.8 ppb at hour 8

Minimum Diurnal Average: 0.1 ppb at hour 24

Monthly Average: 0.51 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.4 P_{90} = 0.9 P_{99} = 7.9

Hours in Service:	612
Hours of Data:	581
Hours of Missing Data:	31
Hours of Calibration:	31
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0.2	0.2	Z	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.4
2-Jun	0.3	0.3	0.2	Z	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.0	0.1	0.1	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.2	0.3
3-Jun	0.1	0.1	0.2	0.1	Z	0.1	0.2	0.0	0.0	0.0	0.1	0.4	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
4-Jun	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-Jun	Z	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	0.3	0.7	0.4	0.7	0.3	0.1	0.2	0.1	0.0	0.2	0.7
6-Jun	0.0	Z	1.5	4.4	5.1	0.6	8.6	12.5	8.8	8.7	6.6	8.1	6.5	5.7	5.4	6.1	2.9	4.6	1.5	0.1	0.1	0.0	0.0	0.2	4.3	12.5
7-Jun	0.1	0.1	Z	0.1	0.1	0.1	0.0	0.3	1.1	0.3	1.1	0.2	0.1	0.1	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.2	1.1
8-Jun	0.0	0.1	0.1	Z	0.9	1.2	0.2	0.2	1.3	0.3	0.2	0.1	0.0	1.3	4.3	0.8	0.2	2.3	9.5	5.0	0.4	1.6	0.0	0.0	1.3	9.5
9-Jun	7.1	5.3	2.1	0.2	Z	0.1	0.2	0.1	0.1	1.4	0.5	1.1	0.7	0.7	0.6	0.4	0.3	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.9	7.1
10-Jun	0.1	0.1	0.3	0.0	0.7	Z	0.8	1.5	2.0	1.4	C	C	C	0.2	0.1	0.1	0.0	0.0	0.0	0.4	0.3	0.1	0.0	0.0	0.4	2.0
11-Jun	Z	0.1	0.7	0.8	0.5	0.6	0.9	0.7	0.5	0.4	0.5	0.7	0.7	0.6	0.6	0.5	0.6	0.9	0.5	0.7	0.6	0.4	0.2	0.1	0.6	0.9
12-Jun	0.0	Z	0.1	0.1	0.1	0.4	1.3	0.4	0.2	0.2	0.1	0.4	1.3	1.2	0.8	0.2	0.1	0.0	0.1	0.1	0.0	0.4	0.0	0.0	0.3	1.3
13-Jun	0.9	1.7	Z	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.0	0.1	0.9	1.2	1.3	0.6	0.5	0.3	0.3	0.3	0.2	0.1	0.0	0.4	1.7
14-Jun	0.0	0.0	0.1	Z	0.1	0.2	0.1	0.3	0.0	0.8	0.9	0.1	0.1	0.0	0.1	0.1	0.6	0.1	0.1	0.3	0.3	0.3	0.2	0.5	0.2	0.9
15-Jun	0.1	0.1	0.2	0.3	Z	0.4	0.2	1.0	2.3	1.1	0.3	0.3	0.9	0.8	1.6	1.0	0.6	1.5	0.1	0.0	2.3	7.9	0.1	0.0	1.0	7.9
16-Jun	0.0	0.0	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	0.1	0.2	0.5	0.3	0.2	0.1	0.1	0.1	0.2	0.1	0.5
17-Jun	Z	0.3	0.4	0.9	1.6	2.2	2.6	1.9	1.2	0.8	1.0	0.8	0.5	0.4	0.5	0.4	0.4	0.4	0.2	0.3	0.4	0.5	0.9	0.6	0.8	2.6
18-Jun	0.5	Z	0.5	0.1	0.4	0.4	0.2	0.2	0.1	0.5	0.5	0.9	0.3	0.1	0.0	0.0	0.0	0.2	0.8	0.7	0.1	0.1	0.3	0.4	0.3	0.9
19-Jun	0.3	0.1	Z	0.3	0.1	0.1	0.4	0.4	0.2	0.2	0.2	0.2	0.1	0.2	0.1	1.1	0.0	0.0	0.0	0.0	0.0	0.9	0.5	0.0	0.2	1.1
20-Jun	0.1	0.0	0.0	Z	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	0.1	0.0	0.2
21-Jun	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	0.0	0.1
22-Jun	0.0	0.0	0.1	0.1	0.0	Z	0.1	0.1	0.8	0.5	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.5	0.2	0.1	0.1	0.1	0.0	0.1	0.8
23-Jun	Z	0.0	0.2	0.1	0.1	0.0	0.0	0.6	0.2	1.7	0.4	0.1	1.7	0.7	0.1	0.0	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.3	1.7
24-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.1	0.6
25-Jun	0.7	0.7	Z	0.5	0.7	0.8	1.0	0.6	0.3	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.3	1.0
26-Jun	0.2	0.3	0.4	Z	0.6	0.4	0.3	0.2	0.2	0.2	C	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	0.6
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	0.5	0.4	0.3	0.4	0.5	0.4	0.7	0.8	0.8	0.7	0.6	0.6	0.6	0.6	0.7	0.5	0.3	0.5	0.6	0.4	0.2	0.6	0.1	0.1	Diurnal Average	
	7.1	5.3	2.1	4.4	5.1	2.2	8.6	12.5	8.8	8.7	6.6	8.1	6.5	5.7	5.4	6.1	2.9	4.6	9.5	5.0	2.3	7.9	0.9	0.6	Diurnal Maximum	

Z - zerospan C - Calibration NS - Not in Service

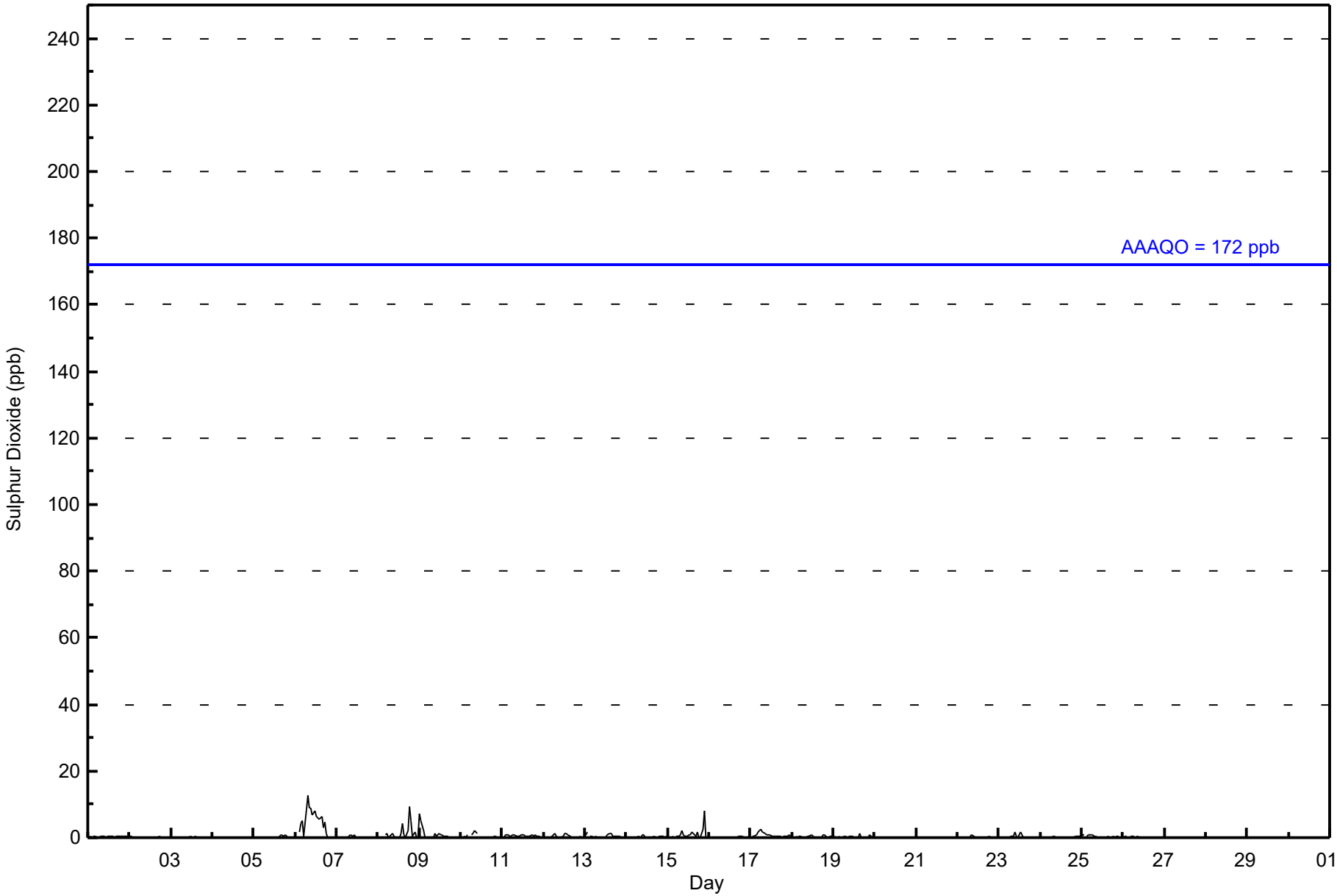
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb

Wood Buffalo Environmental Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Kirby South - June 2026



Sulphur Dioxide (SO_2) - ppb
Kirby South - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 10	580	99.83	99.83
11 - 20	1	0.17	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: 581

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Sulphur Dioxide (SO_2) - ppb

Kirby South - June 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	67	51	39	31	14	11	21	22	29	42	27	31	53	59	35	48	580
11 - 20	0	0	0	0	0	0	0	0	0	0	0	0	1	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	67	51	39	31	14	11	21	22	29	42	27	31	54	59	35	48	581

Total Number of Valid Hours: 581

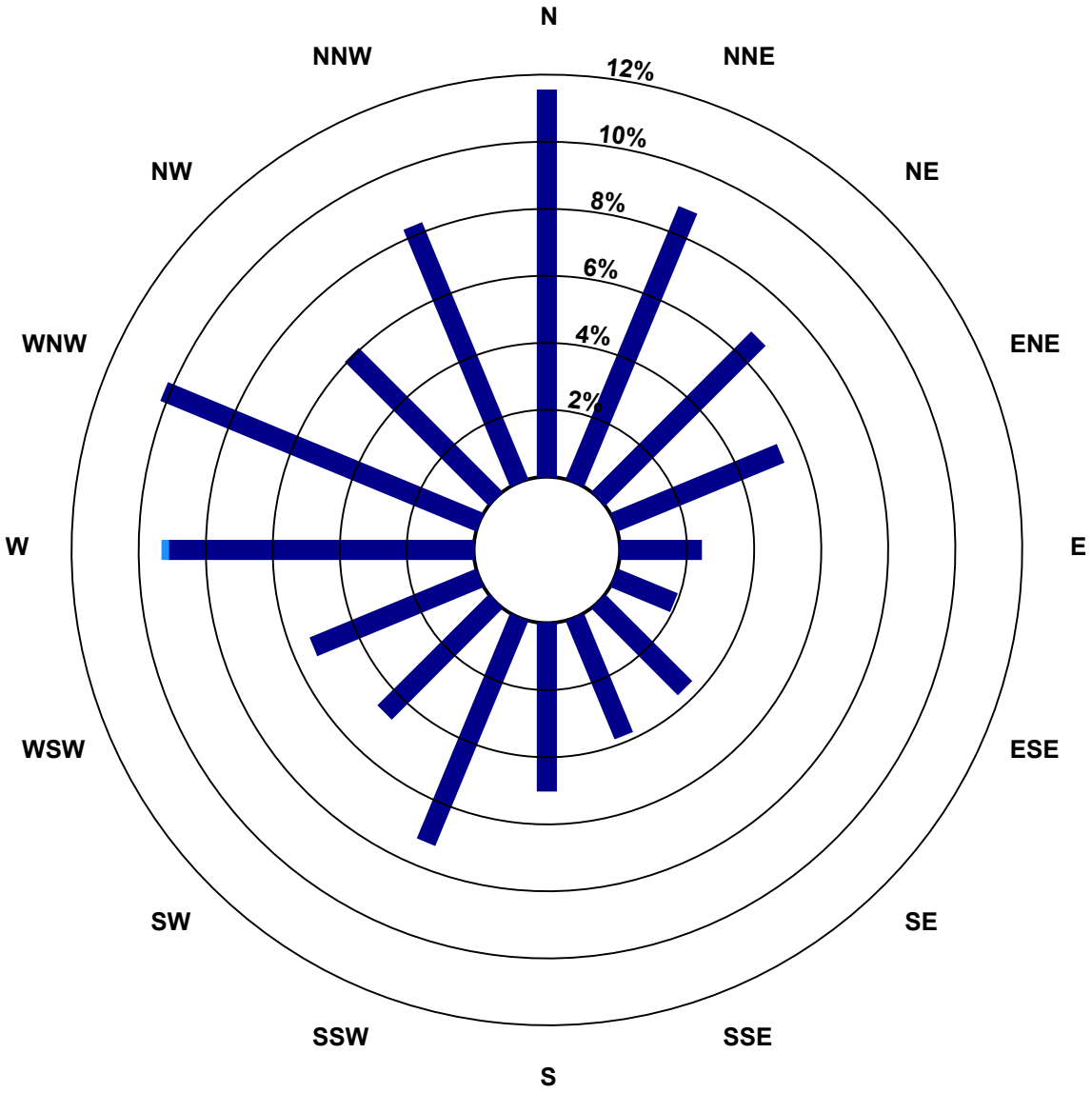
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Sulphur Dioxide (SO_2) - ppb

Kirby South



Classes (ppb)

0 - 10

11 - 20

21 - 60

61 - 110

111 - 172

> 172

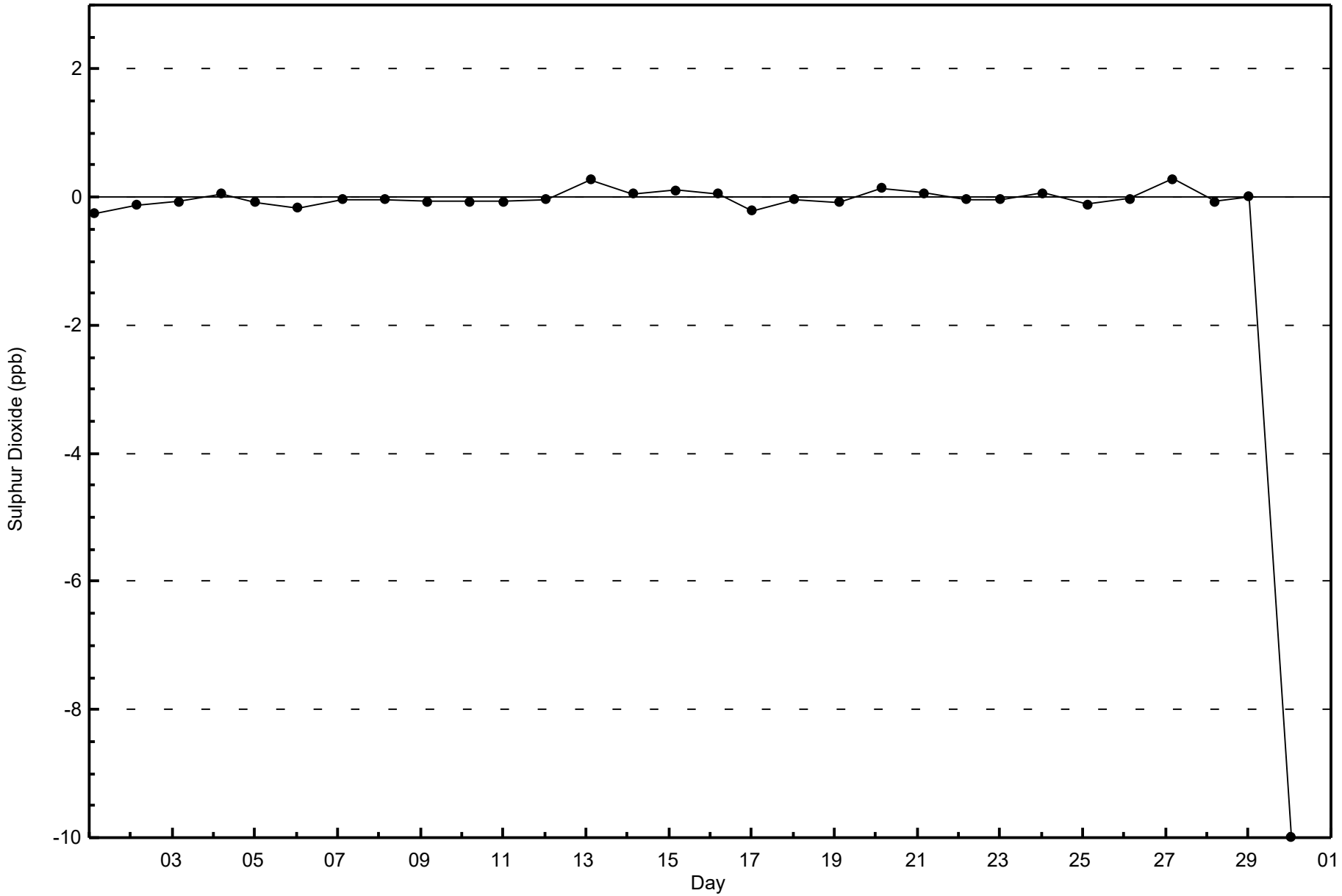
Total Number of Valid Hours: 581

Wood Buffalo Environmental Association

Zero Responses

Sulphur Dioxide (SO_2) - ppb

Kirby South - June 2026

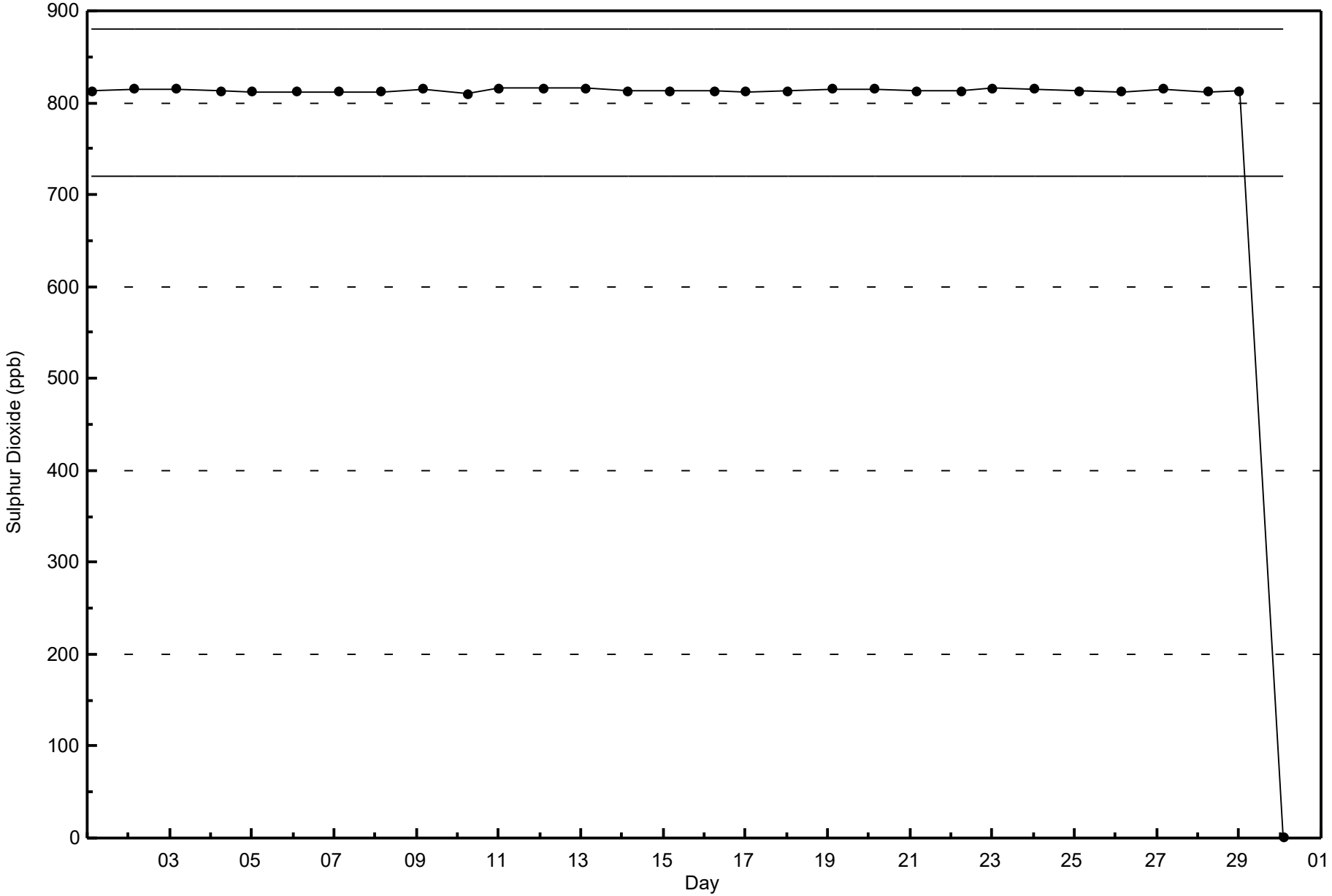


Wood Buffalo Environmental Association

Span Responses

Sulphur Dioxide (SO_2) - ppb

Kirby South - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Hydrogen Sulphide (H_2S) - ppb

Kirby South - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.4 ppb on Jun 15 22:00 Maximum Daily Average: 0.1 ppb on Jun 15

Minimum Value: 0.0 ppb on Jun 18 16:00 Minimum Daily Average: 0.0 ppb on Jun 2
Maximum Diurnal Average: 0.1 ppb at hour 5 Minimum Diurnal Average: 0.0 ppb at hour 16
Monthly Average: 0.08 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.1 P_{90} = 0.1 P_{99} = 0.3

Hours in Service:	614
Hours of Data:	585
Hours of Missing Data:	29
Hours of Calibration:	29
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0.2	0.1	0.1	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2
2-Jun	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	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
3-Jun	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	0.1	0.1	0.1	0.1	0.0	0.1
4-Jun	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	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2
5-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2
6-Jun	0.1	0.1	Z	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
7-Jun	0.2	0.3	0.3	Z	0.2	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
8-Jun	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	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2
9-Jun	0.1	0.1	0.1	0.2	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	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.3
10-Jun	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.2
11-Jun	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	0.1	0.2
12-Jun	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
13-Jun	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.1	0.3
14-Jun	0.3	0.3	0.2	0.1	Z	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.2	0.2	0.1	0.3
15-Jun	0.1	0.3	0.3	0.2	0.2	Z	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	0.3	0.4	0.1	0.0	0.1	0.4
16-Jun	Z	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2
17-Jun	0.1	Z	0.2	0.4	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.4
18-Jun	0.0	0.0	Z	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	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
19-Jun	0.1	0.1	0.1	Z	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	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20-Jun	0.1	0.1	0.1	0.1	Z	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	0.2	0.1	0.3
21-Jun	0.1	0.1	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
22-Jun	Z	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	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
23-Jun	0.2	Z	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.3
24-Jun	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25-Jun	0.1	0.1	0.1	Z	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
26-Jun	0.1	0.1	0.1	0.1	Z	0.2	0.1	0.1	0.1	0.0	0.0	C	C	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	0.2
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	0.1	0.1	0.1	0.1	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	Diurnal Average	
	0.3	0.3	0.3	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.4	0.3	0.2	Diurnal Maximum	

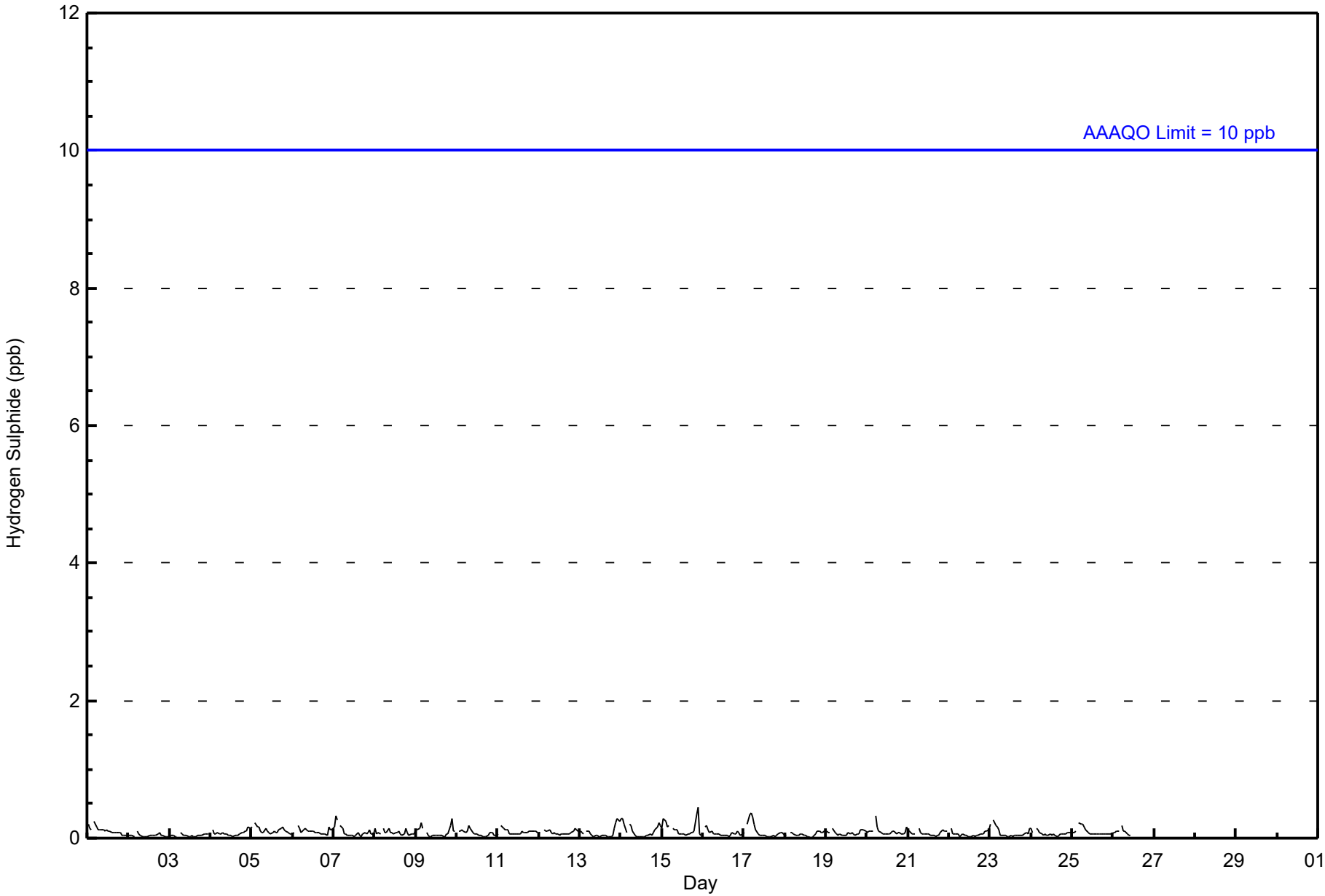
Z - zerospan C - Calibration NS - Not in Service
Alberta Ambient Air Quality Objective (AAAQO): 1-hour 10 ppb 24-hr 3 ppb

Wood Buffalo Environmental Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Kirby South - June 2026



Hydrogen Sulphide (H_2S) - ppb

Kirby South - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 2	585	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: 585

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Hydrogen Sulphide (H_2S) - ppb

Kirby South - June 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	69	51	39	30	14	11	21	23	28	44	25	32	54	59	37	48	585
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	69	51	39	30	14	11	21	23	28	44	25	32	54	59	37	48	585

Total Number of Valid Hours: 585

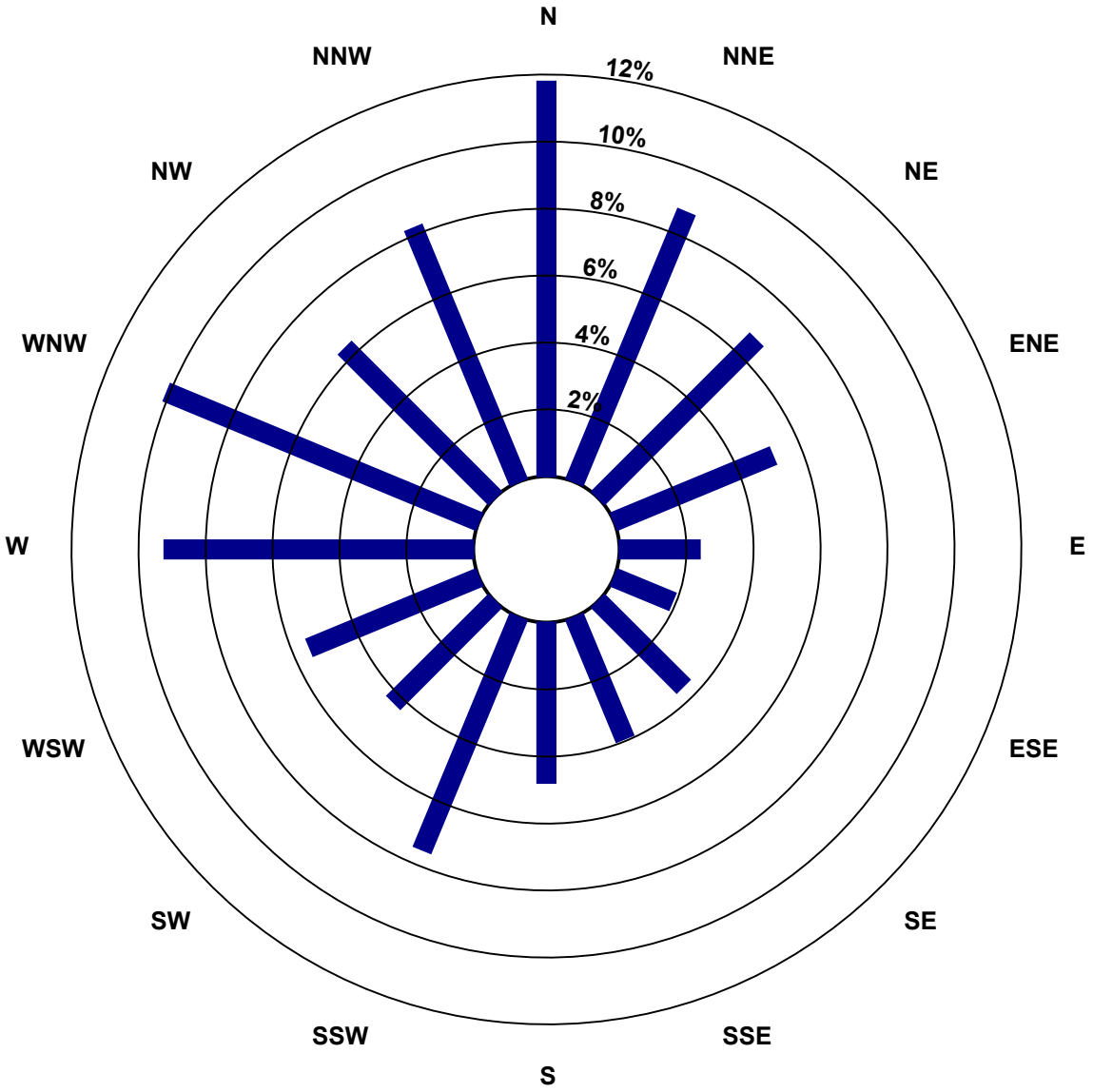
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Hydrogen Sulphide (H_2S) - ppb

Kirby South



Classes (ppb)

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

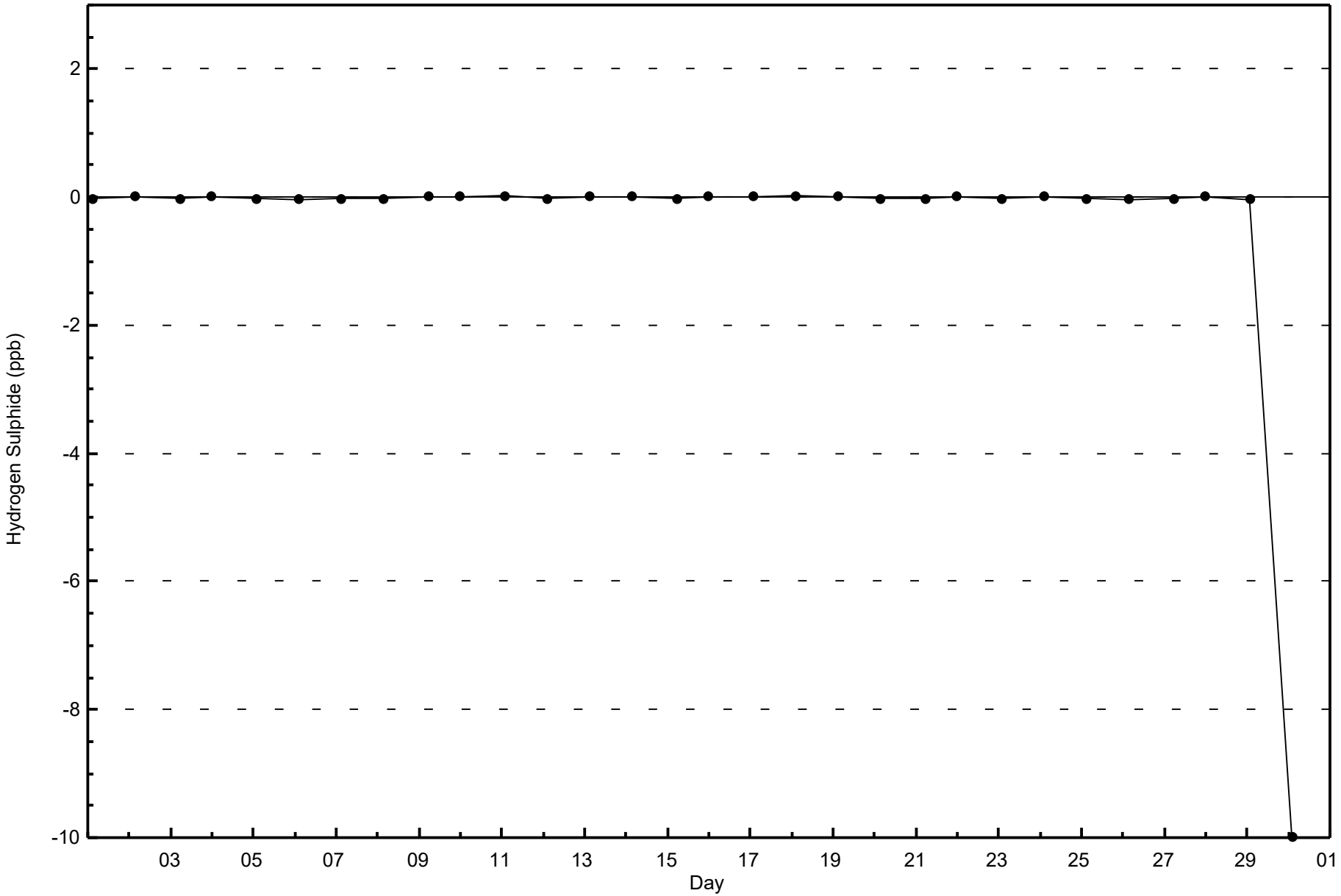
Total Number of Valid Hours: 585

Wood Buffalo Environmental Association

Zero Responses

Hydrogen Sulphide (H_2S) - ppb

Kirby South - June 2026

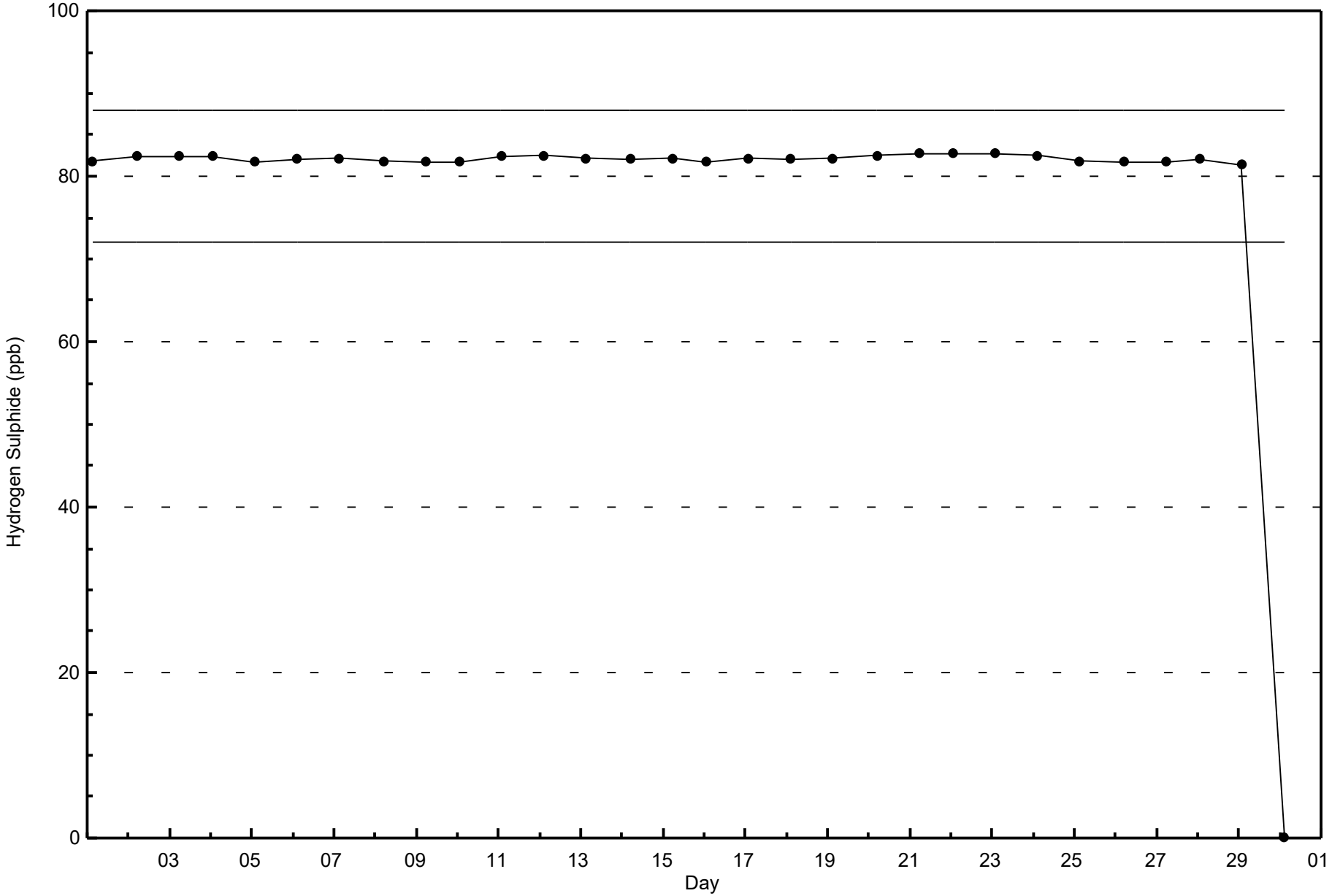


Wood Buffalo Environmental Association

Span Responses

Hydrogen Sulphide (H_2S) - ppb

Kirby South - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Total Hydrocarbons (THC) - ppm

Kirby South - June 2026

Maximum Value: 2.8 ppm on Jun 10 04:00

Maximum Daily Average: 2.5 ppm on Jun 10

Minimum Value: 2.2 ppm on Jun 16 14:00

Minimum Daily Average: 2.2 ppm on Jun 25

Maximum Diurnal Average: 2.4 ppm at hour 4

Minimum Diurnal Average: 2.3 ppm at hour 13

Monthly Average: 2.34 ppm

Percentiles: P_1 = 2.2 P_{10} = 2.2 Q_1 = 2.3 Median = 2.3 Q_3 = 2.4 P_{90} = 2.5 P_{99} = 2.7

Hours in Service:	612
Hours of Data:	576
Hours of Missing Data:	36
Hours of Calibration:	31
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-Jun	2.5	2.5	Z	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5
2-Jun	2.4	2.3	2.4	Z	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	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.5
3-Jun	2.4	2.4	2.4	2.4	Z	2.4	2.4	2.3	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4
4-Jun	2.3	2.3	2.3	2.3	2.3	Z	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.3	2.4
5-Jun	Z	2.3	2.3	2.4	2.4	2.4	2.3	2.3	2.4	2.3	2.3	2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.4
6-Jun	2.3	Z	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	2.5	2.5	2.7	2.3	2.7
7-Jun	2.7	2.8	Z	2.7	2.6	2.6	2.4	2.4	2.4	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.4	2.3	2.3	2.4	2.4	2.8
8-Jun	2.4	2.4	2.4	Z	2.4	2.3	2.3	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	2.3	2.3	2.4	2.3	2.3	2.4
9-Jun	2.3	2.3	2.4	2.5	Z	2.3	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.7	2.6	2.7	2.4	2.7
10-Jun	2.7	2.5	2.7	2.8	2.7	Z	2.6	2.5	2.5	2.5	C	C	C	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.6	2.5	2.8
11-Jun	Z	2.5	2.5	2.4	2.5	2.5	2.5	2.4	2.4	2.4	2.4	M	M	M	M	M	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5
12-Jun	2.4	Z	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.6	2.7	2.7	2.6	2.5	2.7
13-Jun	2.6	2.6	Z	2.8	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.4	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.8
14-Jun	2.4	2.3	2.3	Z	2.6	2.5	2.4	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.6	2.3	2.4	2.5	2.4	2.6
15-Jun	2.5	2.7	2.6	2.5	Z	2.6	2.5	2.5	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.5	2.6	2.2	2.2	2.4	2.7
16-Jun	2.5	2.3	2.3	2.3	2.2	Z	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	2.2	2.3	2.3	2.3	2.4	2.3	2.5
17-Jun	Z	2.5	2.6	2.6	2.6	2.5	2.4	2.4	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.6	2.6	2.3	2.4	2.6
18-Jun	2.4	Z	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	2.3	2.3	2.4	2.5	2.5	2.4	2.3	2.4	2.3	2.5
19-Jun	2.4	2.4	Z	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.7	2.4	2.5	2.5	2.3	2.7
20-Jun	2.5	2.6	2.4	Z	2.5	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.2	2.3	2.5	2.5	2.3	2.3	2.2	2.3	2.3	2.3	2.4	2.4	2.6
21-Jun	2.4	2.3	2.3	2.3	Z	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.4	2.7	2.5	2.4	2.3	2.3	2.7
22-Jun	2.3	2.4	2.3	2.3	2.4	Z	2.3	2.3	2.4	2.3	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.3	2.5	2.3	2.5
23-Jun	Z	2.6	2.7	2.6	2.5	2.5	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	2.3	2.3	2.3	2.7
24-Jun	2.4	Z	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.4
25-Jun	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	2.3	2.2	2.3
26-Jun	2.3	2.3	2.3	Z	2.3	2.3	2.3	2.2	2.2	2.2	C	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	2.3
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	2.4	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	2.4	2.4	2.4	2.4	Diurnal Average	
	2.7	2.8	2.7	2.8	2.7	2.6	2.6	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.7	2.7	2.7	2.7	Diurnal Maximum	

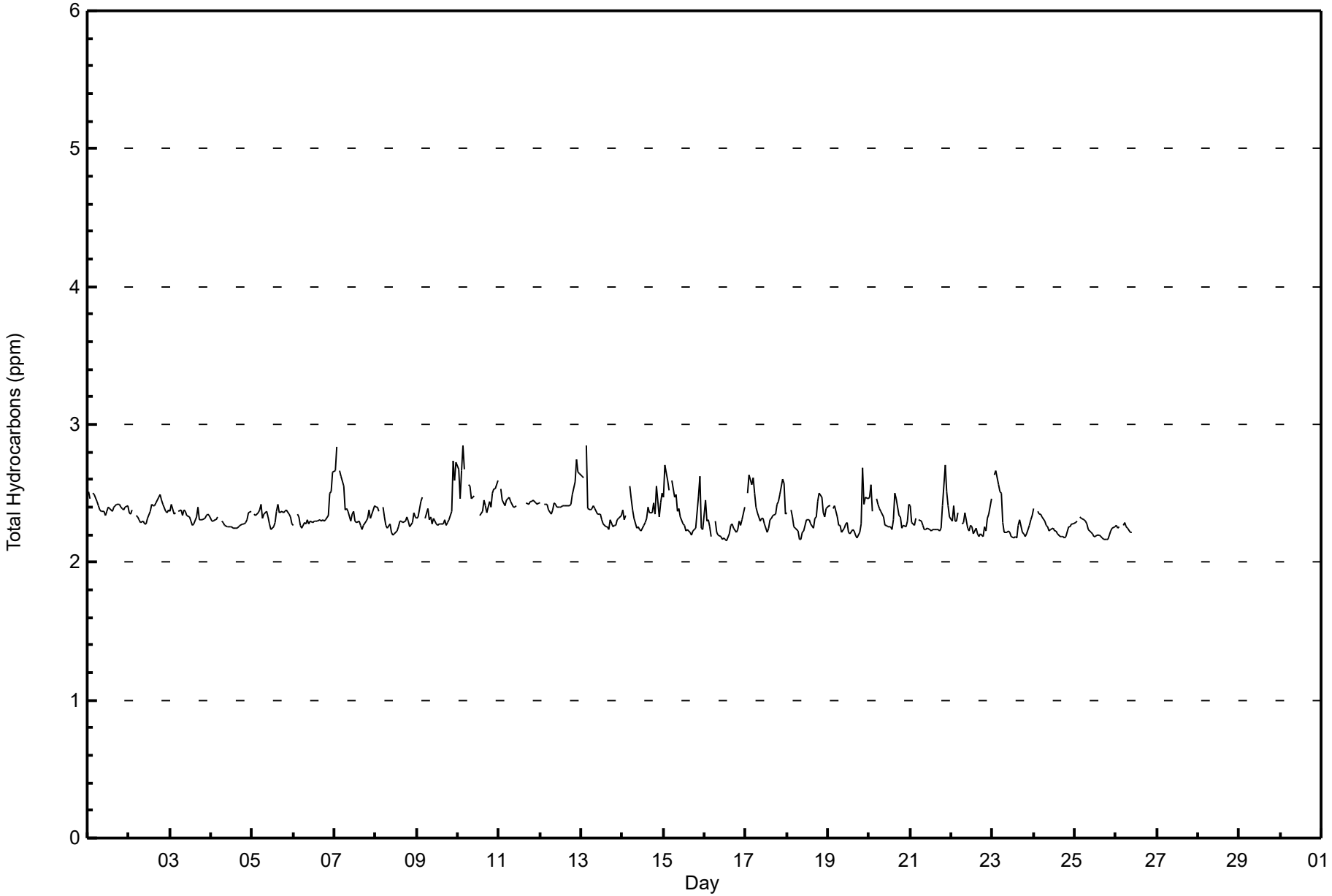
Z - zerospan C - Calibration M - Maintenance NS - Not in Service

Wood Buffalo Environmental Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Kirby South - June 2026



Wood Buffalo Environmental Association

Cumulative Frequency Distribution

Total Hydrocarbons (THC) - ppm

Kirby South - June 2026

Concentration Ranges (ppm)	Number of Hours	%	Cumulative %
0 - 2.0	0	0.00	0.00
2.1 - 3.0	576	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: 576

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Total Hydrocarbons (THC) - ppm

Kirby South - June 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	65	51	39	31	14	11	21	22	29	42	27	31	54	59	35	45	576
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	65	51	39	31	14	11	21	22	29	42	27	31	54	59	35	45	576

Total Number of Valid Hours: 576

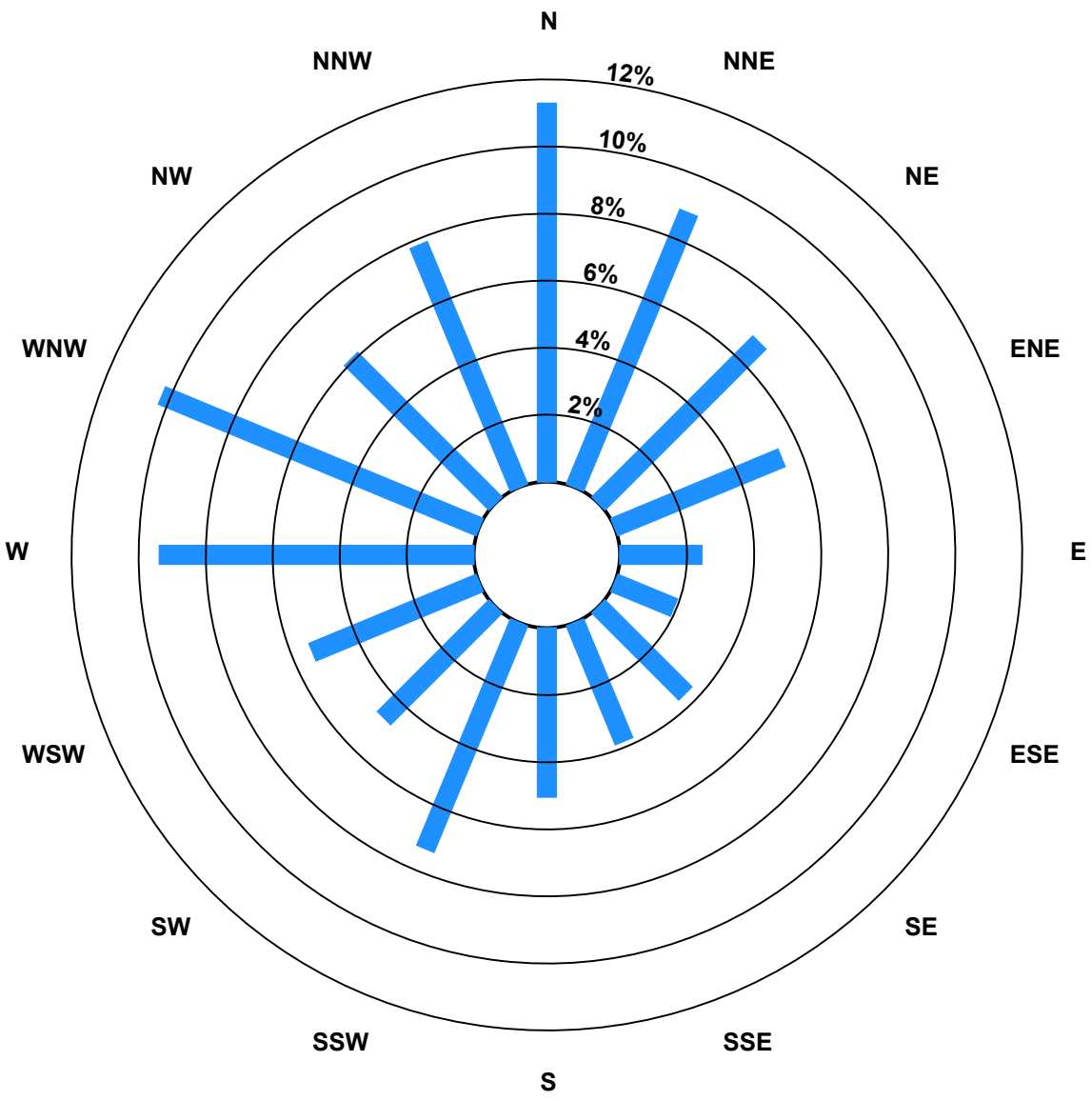
Total Number of Hours: 720

Wood Buffalo Environmental Association

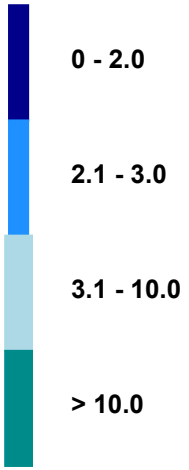
Wind Rose Jun 2026

Total Hydrocarbons (THC) - ppm

Kirby South



Classes (ppm)



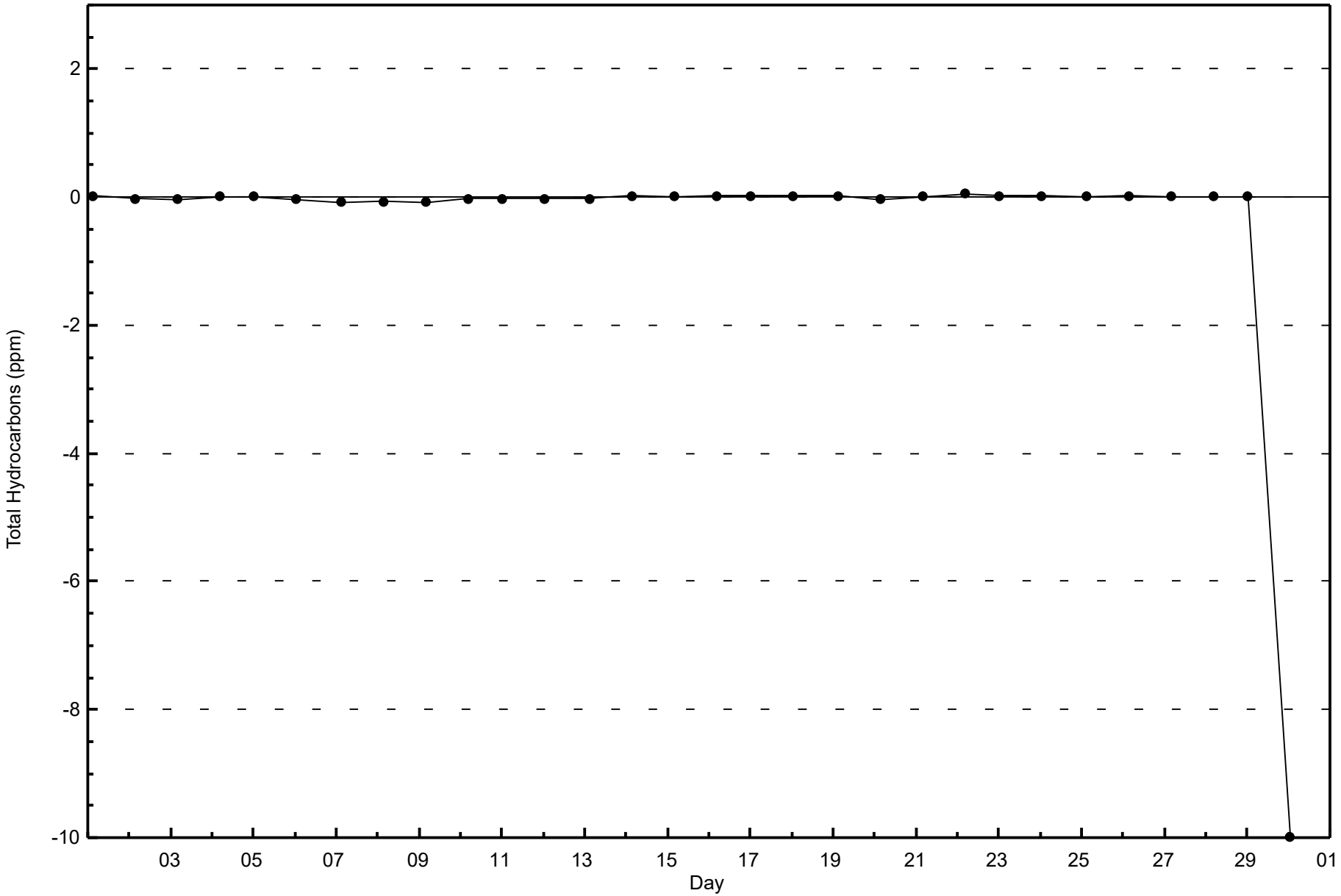
Total Number of Valid Hours: 576

Wood Buffalo Environmental Association

Zero Responses

Total Hydrocarbons (THC) - ppm

Kirby South - June 2026

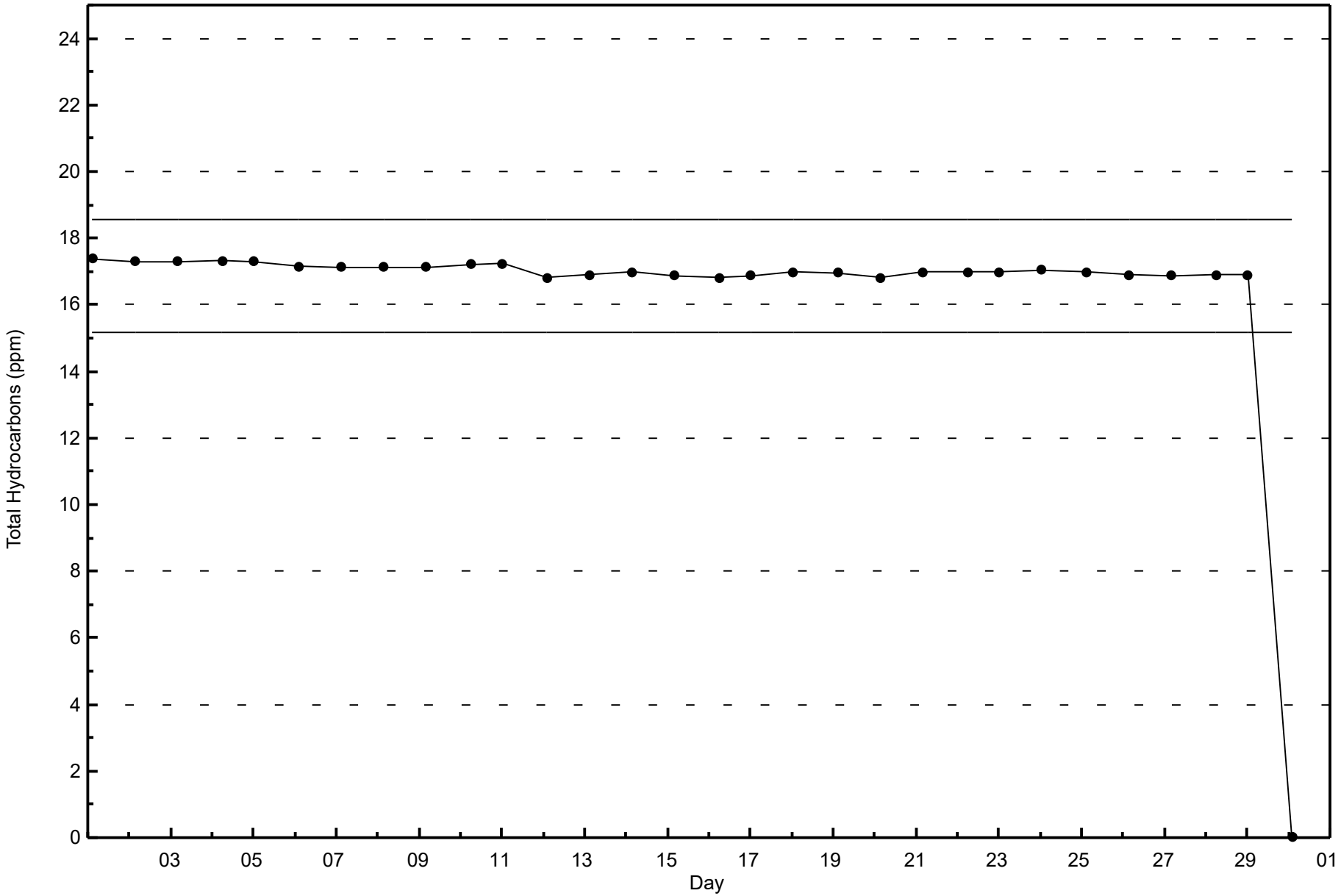


Wood Buffalo Environmental Association

Span Responses

Total Hydrocarbons (THC) - ppm

Kirby South - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitric Oxide (NO) - ppb

Kirby South - June 2026

Maximum Value: 10.1 ppb on Jun 6 08:00

Maximum Daily Average: 3.2 ppb on Jun 6

Minimum Value: 0.0 ppb on Jun 1 22:00

Minimum Daily Average: 0.0 ppb on Jun 28

Maximum Diurnal Average: 0.5 ppb at hour 8

Minimum Diurnal Average: 0.0 ppb at hour 23

Monthly Average: 0.25 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} = 4.7

Hours in Service:	688
Hours of Data:	654
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-Jun	Z	0.0	0.0	0.0	0.1	0.0	0.0	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
2-Jun	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.3
3-Jun	0.1	0.1	Z	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.4	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4
4-Jun	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
5-Jun	0.1	0.0	0.0	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	0.3	0.1	0.1	0.1	0.0	0.0	0.1	0.3
6-Jun	0.0	0.9	1.2	3.5	3.3	Z	7.2	10.1	6.5	7.2	4.6	6.2	4.9	3.8	3.9	4.3	1.7	2.9	0.7	0.0	0.0	0.0	0.0	0.0	3.2	10.1
7-Jun	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.1	0.4	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	0.1	0.5
8-Jun	0.0	Z	0.0	0.0	0.5	0.6	0.0	0.2	1.1	0.0	0.0	0.0	0.0	1.4	3.8	0.6	0.1	1.6	5.8	3.1	0.4	0.8	0.2	0.1	0.9	5.8
9-Jun	4.5	2.5	Z	0.0	0.0	0.0	0.1	0.1	0.1	0.6	0.2	0.6	0.3	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	4.5
10-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.2	0.5	0.4	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	0.5
11-Jun	0.1	0.1	0.1	0.1	Z	0.2	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.2	0.4
12-Jun	0.0	0.0	0.0	0.0	0.1	Z	0.6	0.3	0.2	0.3	0.3	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.6
13-Jun	Z	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.1	0.1	0.0	0.0	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
14-Jun	0.0	Z	0.0	0.0	0.0	0.1	0.2	0.2	0.0	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	0.0	0.1	0.4
15-Jun	0.0	0.1	Z	0.1	0.2	0.4	0.3	0.2	0.5	0.1	0.0	0.0	0.2	0.2	0.8	0.5	0.2	0.5	0.0	0.0	1.3	3.5	0.0	0.0	0.4	3.5
16-Jun	0.1	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.2
17-Jun	0.1	0.1	0.1	0.0	Z	0.9	1.5	0.9	0.4	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	0.0	0.2	1.5
18-Jun	0.2	0.1	0.1	0.1	0.3	Z	0.0	0.1	0.1	0.4	0.1	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.4
19-Jun	Z	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7
20-Jun	0.1	Z	0.0	0.0	0.0	0.2	0.1	0.0	2.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.5
21-Jun	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	0.1	0.1	0.1	0.0	0.1
22-Jun	0.1	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.2	0.3	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.3
23-Jun	0.1	0.1	0.1	0.1	Z	0.2	0.1	0.3	0.1	1.0	0.1	0.0	0.9	0.3	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.0
24-Jun	0.0	0.1	0.0	0.0	0.0	Z	0.0	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	0.1
25-Jun	Z	0.0	0.0	0.0	0.1	0.3	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
26-Jun	0.0	Z	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
27-Jun	0.1	0.1	Z	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
28-Jun	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
29-Jun	0.1	0.1	0.1	0.1	Z	0.2	0.3	0.3	0.2	0.1	0.1	C	C	C	C	C	NS	NS	NS	NS	NS	NS	NS	NS	--	0.3
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	0.2	0.2	0.1	0.2	0.2	0.2	0.4	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.1	0.2	0.3	0.1	0.1	0.2	0.0	0.0	Diurnal Average	
	4.5	2.5	1.2	3.5	3.3	0.9	7.2	10.1	6.5	7.2	4.6	6.2	4.9	3.8	3.9	4.3	1.7	2.9	5.8	3.1	1.3	3.5	0.2	0.1	Diurnal Maximum	

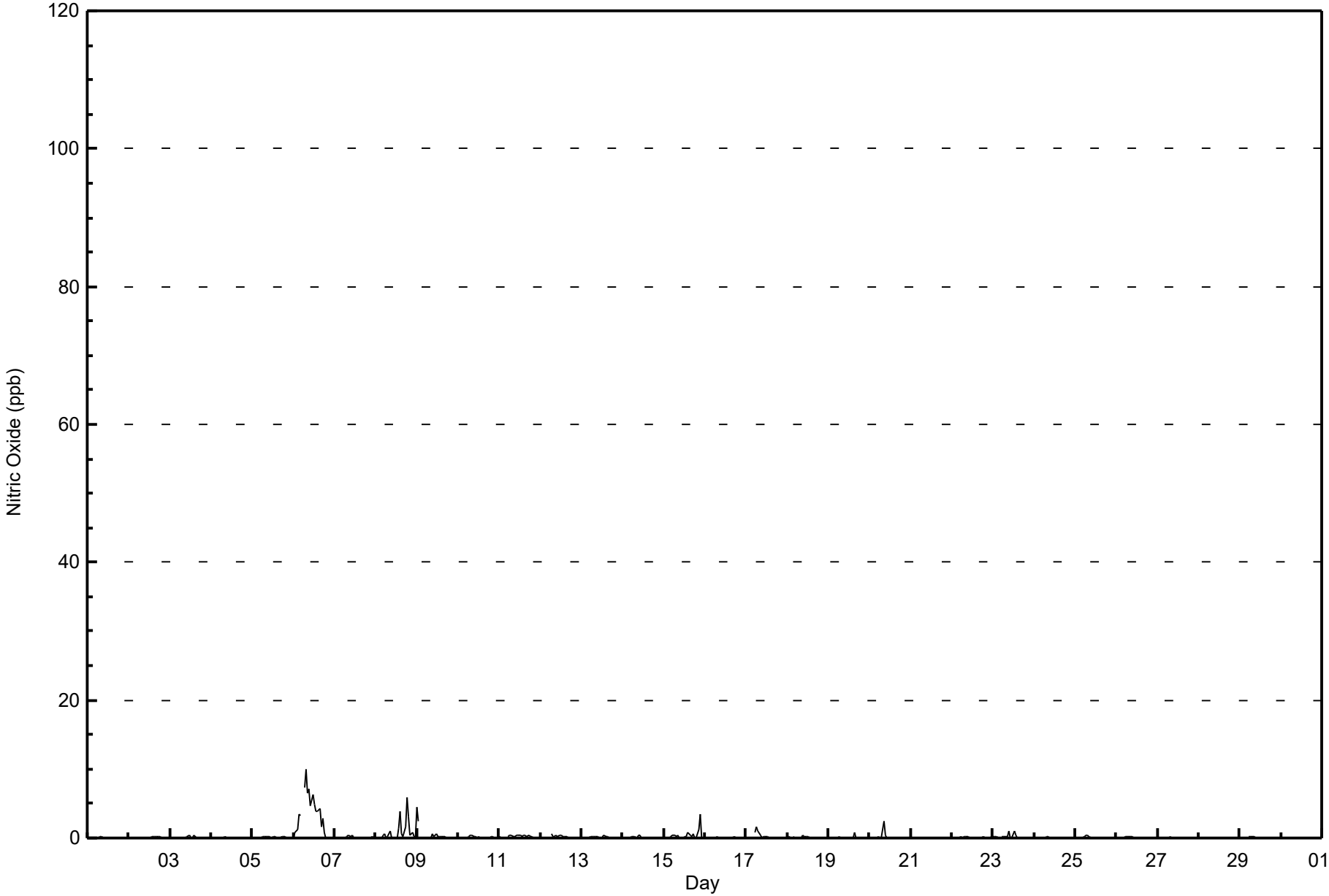
Z - zerospan C - Calibration NS - Not in Service

Wood Buffalo Environmental Association

Hourly Averages

Nitric Oxide (NO) - ppb

Kirby South - June 2026



Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	654	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: 654

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitric Oxide (NO) - ppb

Kirby South - June 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	74	61	45	45	19	29	30	25	29	42	26	29	56	60	36	48	654
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	74	61	45	45	19	29	30	25	29	42	26	29	56	60	36	48	654

Total Number of Valid Hours: 654

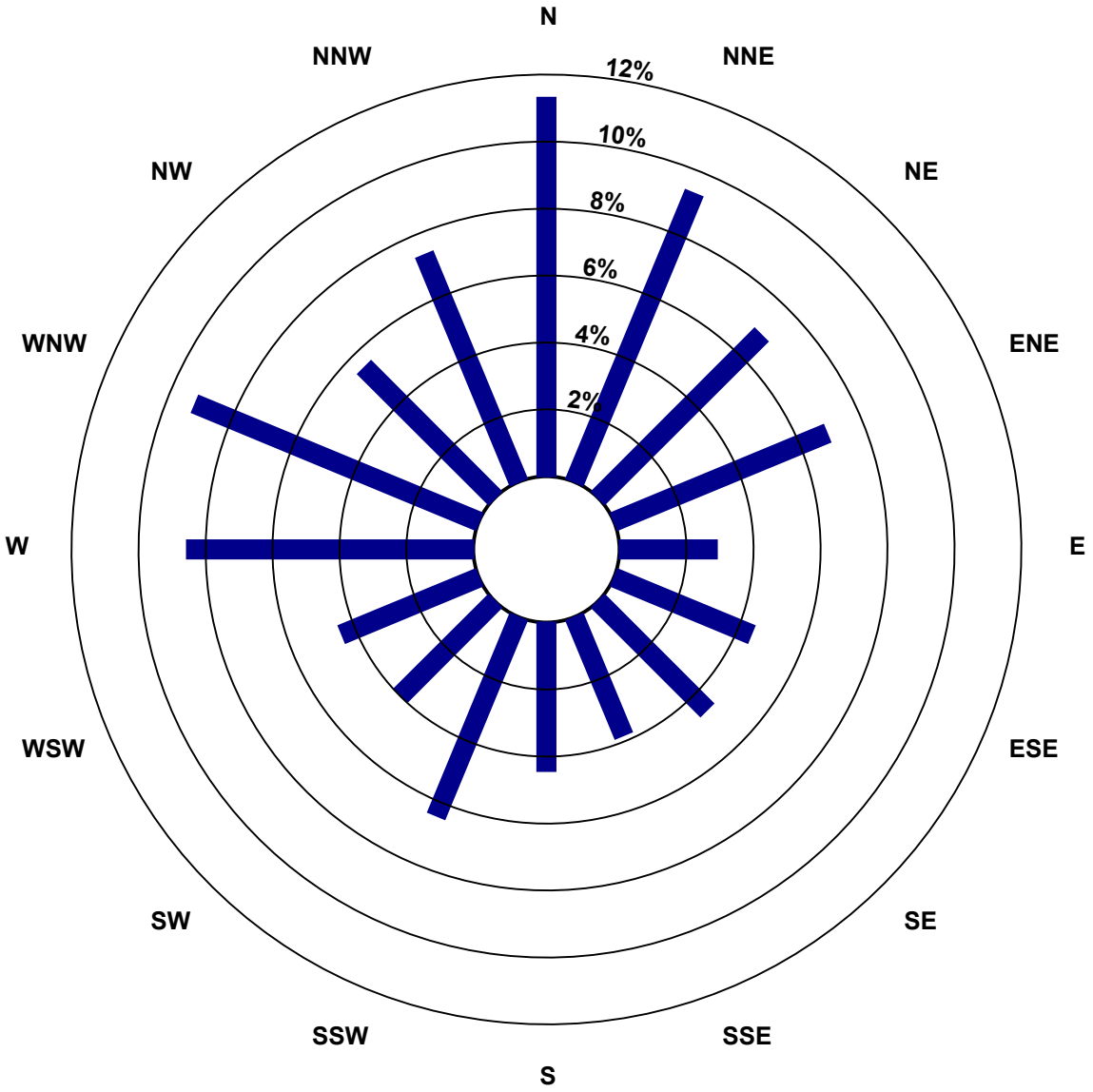
Total Number of Hours: 720

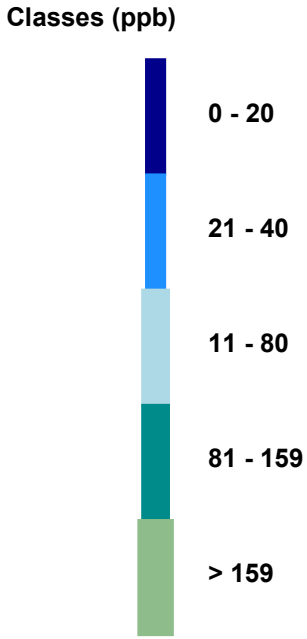
Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitric Oxide (NO) - ppb

Kirby South





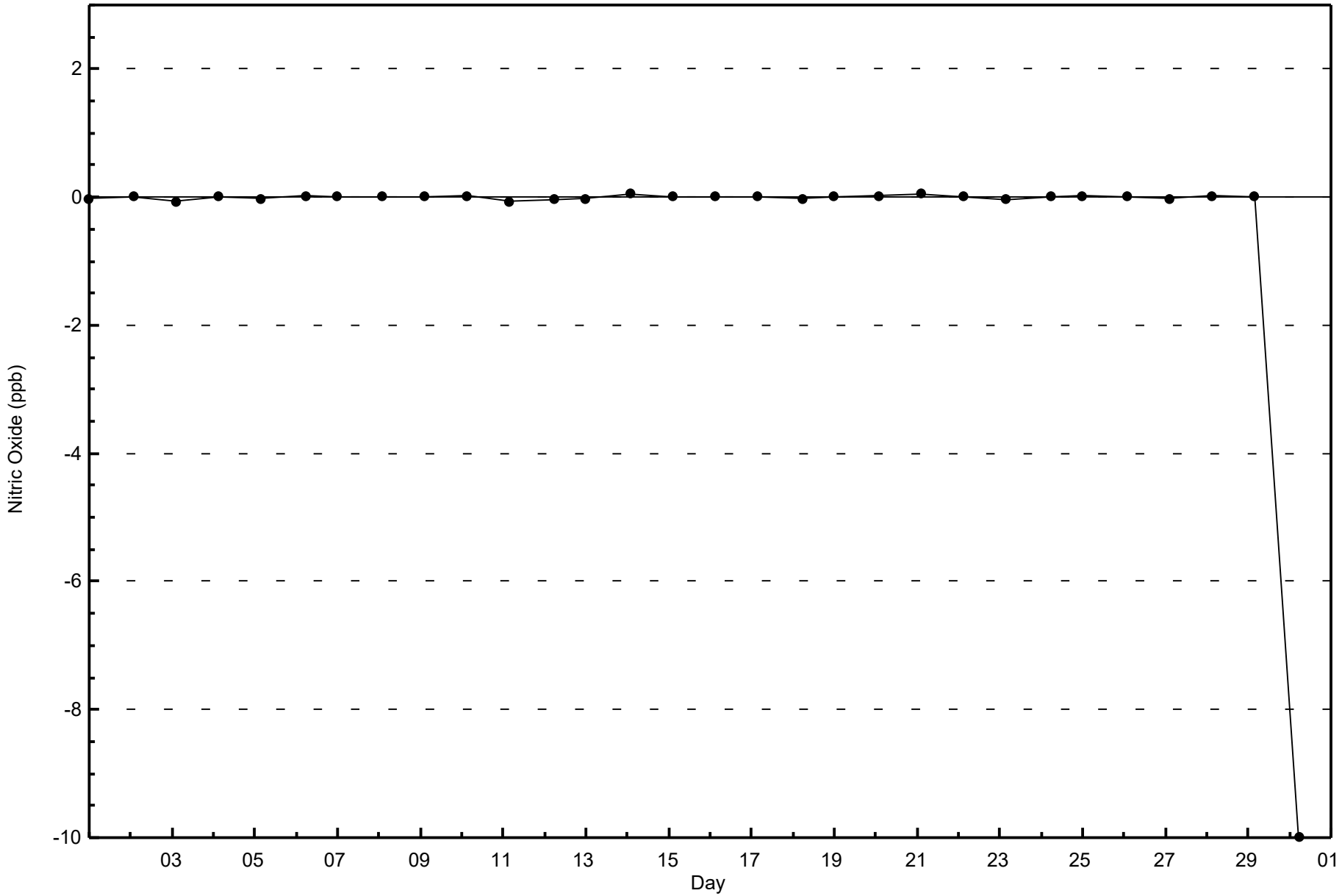
Total Number of Valid Hours: 654

Wood Buffalo Environmental Association

Zero Responses

Nitric Oxide (NO) - ppb

Kirby South - June 2026

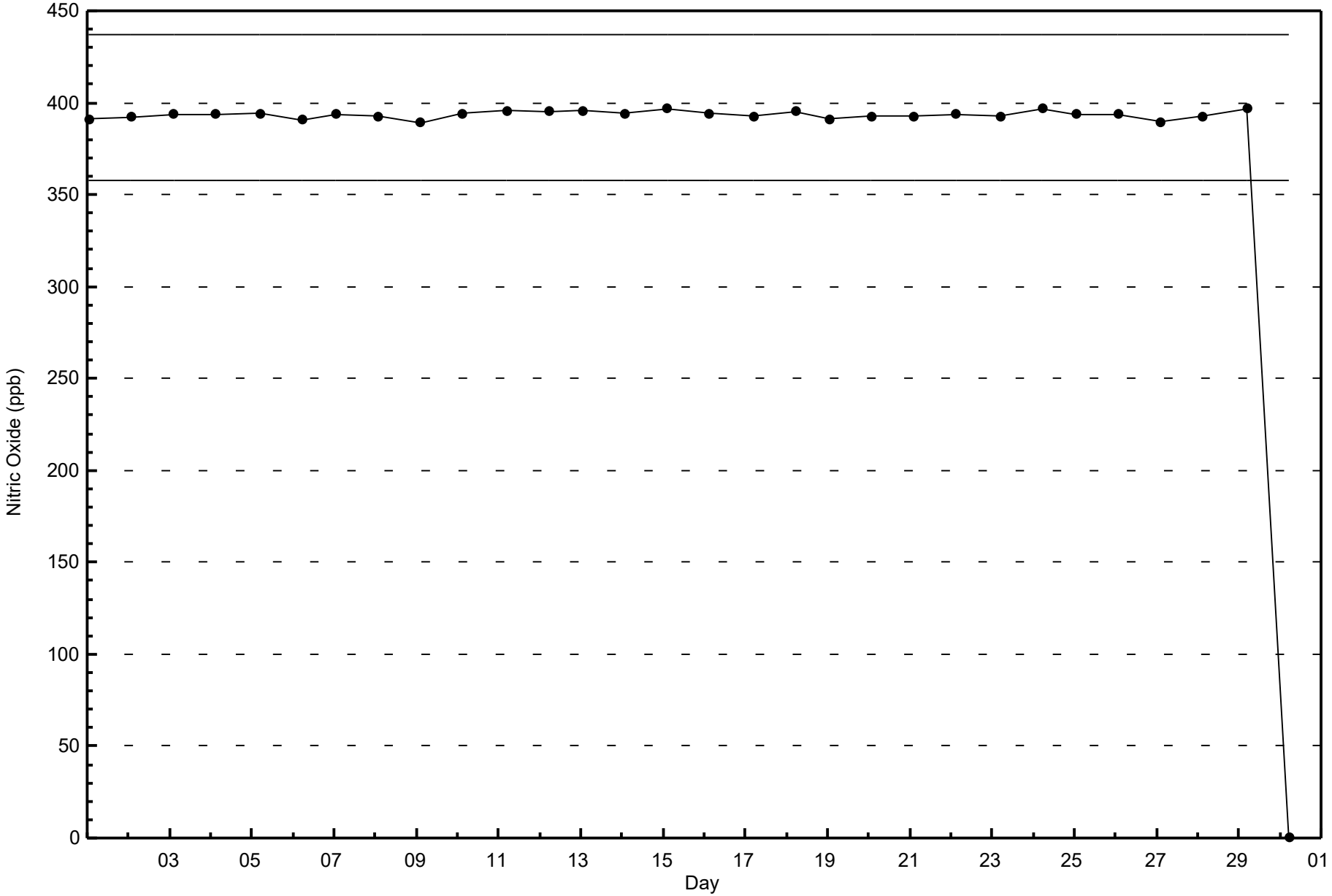


Wood Buffalo Environmental Association

Span Responses

Nitric Oxide (NO) - ppb

Kirby South - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Dioxide (NO_2) - ppb

Kirby South - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8.8 ppb on Jun 6 08:00 Maximum Daily Average: 3.5 ppb on Jun 6

Minimum Value: 0.2 ppb on Jun 3 01:00 Minimum Daily Average: 0.4 ppb on Jun 21
Maximum Diurnal Average: 1.3 ppb at hour 4 Minimum Diurnal Average: 0.8 ppb at hour 17
Monthly Average: 1.03 ppb Percentiles: P_1 = 0.3 P_{10} = 0.4 Q_1 = 0.6 Median = 0.8 Q_3 = 1.1 P_{90} = 1.7 P_{99} = 5.7

Hours in Service:	688
Hours of Data:	654
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-Jun	Z	0.7	0.5	0.6	0.6	0.6	0.5	0.7	0.6	0.6	0.6	0.8	0.8	0.9	0.6	0.7	0.8	0.8	0.8	0.8	0.6	0.9	1.0	1.1	0.7	1.1
2-Jun	0.7	Z	0.7	0.7	0.7	1.1	0.9	0.6	0.4	0.4	0.3	0.5	0.6	0.7	0.6	0.5	0.6	1.2	1.0	0.7	0.6	0.5	0.4	0.3	0.6	1.2
3-Jun	0.2	0.3	Z	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.8	0.3	0.3	0.7	0.5	0.5	0.5	0.4	0.4	0.4	0.7	0.9	1.0	0.5	1.0
4-Jun	1.3	1.3	0.7	Z	1.0	0.9	0.9	0.8	1.0	0.7	0.8	0.9	0.9	0.7	0.8	0.9	0.9	1.0	1.1	1.1	1.1	1.1	1.2	1.3	1.0	1.3
5-Jun	1.3	1.2	1.0	1.1	Z	1.2	1.3	1.2	1.2	1.3	1.6	1.0	1.3	1.4	1.1	0.8	1.5	3.5	4.8	2.4	1.4	1.0	0.8	0.5	1.5	4.8
6-Jun	0.4	1.5	2.2	4.3	4.8	Z	7.0	8.8	6.0	5.6	5.0	5.6	4.1	4.5	3.9	4.0	2.7	3.8	1.9	0.6	0.8	0.6	1.0	1.3	3.5	8.8
7-Jun	Z	0.5	0.8	0.7	1.0	0.6	0.7	0.7	1.2	0.6	1.4	0.7	0.7	0.8	0.9	0.8	0.7	1.0	1.1	0.9	0.7	1.0	1.1	0.6	0.8	1.4
8-Jun	0.8	Z	0.8	0.8	2.0	2.4	0.5	1.0	2.4	1.0	0.5	0.4	0.5	1.2	2.5	0.9	0.5	1.9	7.1	3.9	1.8	2.8	1.4	1.1	1.7	7.1
9-Jun	7.2	5.8	Z	0.7	0.7	0.7	0.6	0.4	0.5	1.4	0.7	0.9	0.8	1.0	0.9	0.7	0.6	0.5	0.5	0.5	0.5	0.6	0.7	1.0	1.2	7.2
10-Jun	0.8	0.6	0.6	Z	0.8	0.9	1.3	2.4	1.7	1.4	1.0	0.9	0.7	0.8	0.7	0.5	0.4	0.5	0.4	1.7	1.3	1.2	0.7	0.6	1.0	2.4
11-Jun	0.7	1.3	2.0	2.3	Z	1.4	1.2	1.2	0.9	0.7	0.9	1.0	1.0	0.8	1.0	1.1	1.4	1.6	1.6	1.9	1.9	1.8	1.5	1.0	1.3	2.3
12-Jun	0.7	0.8	0.7	1.0	1.4	Z	1.6	0.9	0.9	1.1	1.0	1.2	1.3	1.2	1.2	1.1	0.9	0.8	0.8	1.1	1.0	1.1	1.1	0.9	1.0	1.6
13-Jun	Z	1.3	0.9	1.0	1.3	1.6	1.0	0.9	0.6	0.7	0.5	0.4	0.5	1.0	1.0	1.1	0.6	0.5	0.5	0.7	0.6	2.2	0.7	0.9	0.9	2.2
14-Jun	0.7	Z	0.6	0.6	0.7	1.3	1.6	1.5	0.9	1.3	1.7	0.9	1.0	0.7	0.8	0.7	0.9	0.7	0.7	1.4	1.8	1.5	1.1	1.5	1.1	1.8
15-Jun	1.1	1.8	Z	4.7	3.2	2.1	1.5	1.3	1.8	0.8	0.6	0.7	0.9	1.0	1.7	1.4	1.0	1.9	0.7	0.7	2.9	8.5	1.0	0.8	1.8	8.5
16-Jun	0.7	0.8	0.6	Z	0.5	0.5	0.6	0.6	0.6	0.8	0.9	0.8	0.7	0.7	0.6	0.6	0.8	1.2	0.8	0.7	0.6	0.5	0.7	0.6	0.7	1.2
17-Jun	0.8	0.9	1.1	1.5	Z	2.7	2.8	1.7	0.8	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.8	0.9	0.7	0.8	1.0	1.1	1.1	1.1	1.1	2.8
18-Jun	1.3	1.3	1.1	0.7	1.1	Z	0.7	0.5	0.5	1.0	0.8	1.1	1.0	0.6	0.3	0.4	0.4	0.6	1.2	1.2	1.2	1.1	1.2	1.1	0.9	1.3
19-Jun	Z	1.0	0.8	0.6	0.7	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.6	0.6	1.4	0.4	0.4	0.4	0.3	0.4	1.7	1.4	0.9	0.7	1.7
20-Jun	0.7	Z	0.7	0.5	0.6	1.0	0.6	0.6	1.7	1.1	0.3	0.3	0.4	0.4	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.4	0.6	1.9	0.7	1.9
21-Jun	1.4	0.9	Z	0.5	0.4	0.5	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	1.4
22-Jun	0.5	0.5	0.6	Z	0.6	0.9	0.3	0.5	0.7	0.7	0.4	0.4	0.4	0.4	0.2	0.3	0.3	0.4	0.5	0.5	0.3	0.5	0.3	0.4	0.5	0.9
23-Jun	0.3	0.4	0.7	0.9	Z	0.9	0.6	0.8	0.5	1.4	0.6	0.4	1.3	0.9	0.4	0.4	0.5	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.6	1.4
24-Jun	0.4	0.4	0.4	0.5	0.5	Z	0.5	0.7	0.7	0.5	0.4	0.8	0.6	0.5	0.5	0.6	0.6	1.0	0.7	0.8	0.9	1.3	1.4	1.7	0.7	1.7
25-Jun	Z	2.3	2.0	1.9	1.9	2.2	2.2	1.6	1.1	0.7	0.6	0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.9	1.0	1.0	0.9	0.8	0.8	1.2	2.3
26-Jun	1.0	Z	1.5	1.5	1.7	1.5	1.3	1.3	1.3	1.0	0.7	0.7	0.7	0.6	0.6	0.7	0.9	0.9	0.9	1.0	1.0	0.8	0.8	0.7	1.0	1.7
27-Jun	0.8	0.8	Z	0.9	0.8	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.6	0.7	0.6	0.5	0.7	0.9
28-Jun	0.5	0.6	0.6	Z	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.9	1.1	0.6	1.1
29-Jun	1.1	1.2	2.1	2.6	Z	3.5	3.3	2.8	1.9	1.6	1.5	C	C	C	C	C	NS	NS	NS	NS	NS	NS	NS	NS	--	3.5
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	1.1	1.2	1.0	1.3	1.2	1.2	1.2	1.3	1.1	1.0	0.9	0.9	0.8	0.9	0.9	0.8	0.8	1.0	1.1	1.0	0.9	1.3	0.9	0.9	Diurnal Average	
	7.2	5.8	2.2	4.7	4.8	3.5	7.0	8.8	6.0	5.6	5.0	5.6	4.1	4.5	3.9	4.0	2.7	3.8	7.1	3.9	2.9	8.5	1.5	1.9	Diurnal Maximum	

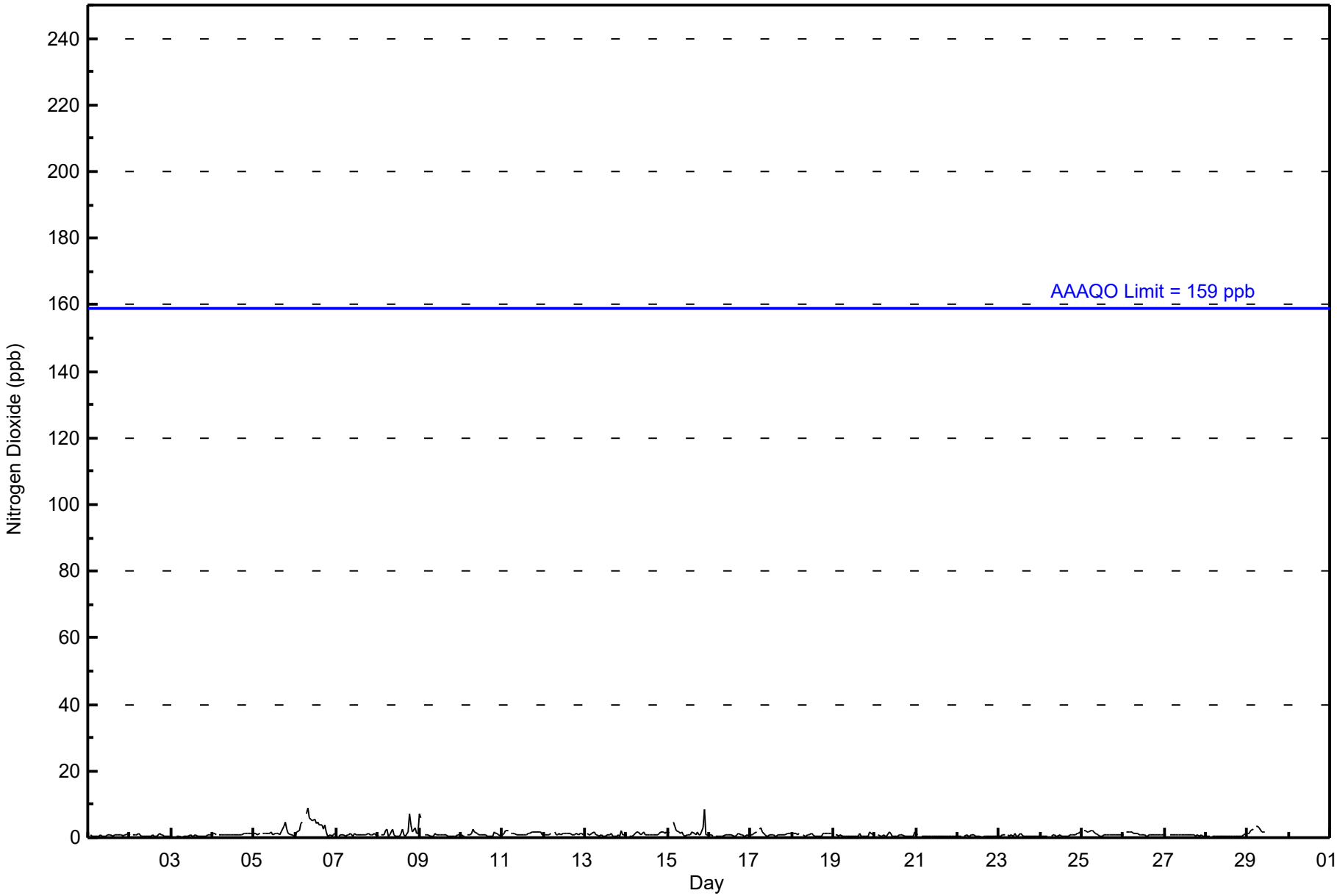
Z - zerospan C - Calibration NS - Not in Service
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Kirby South - June 2026



Nitrogen Dioxide (NO_2) - ppb
Kirby South - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	654	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: 654

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Dioxide (NO_2) - ppb

Kirby South - June 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	74	61	45	45	19	29	30	25	29	42	26	29	56	60	36	48	654
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	74	61	45	45	19	29	30	25	29	42	26	29	56	60	36	48	654

Total Number of Valid Hours: 654

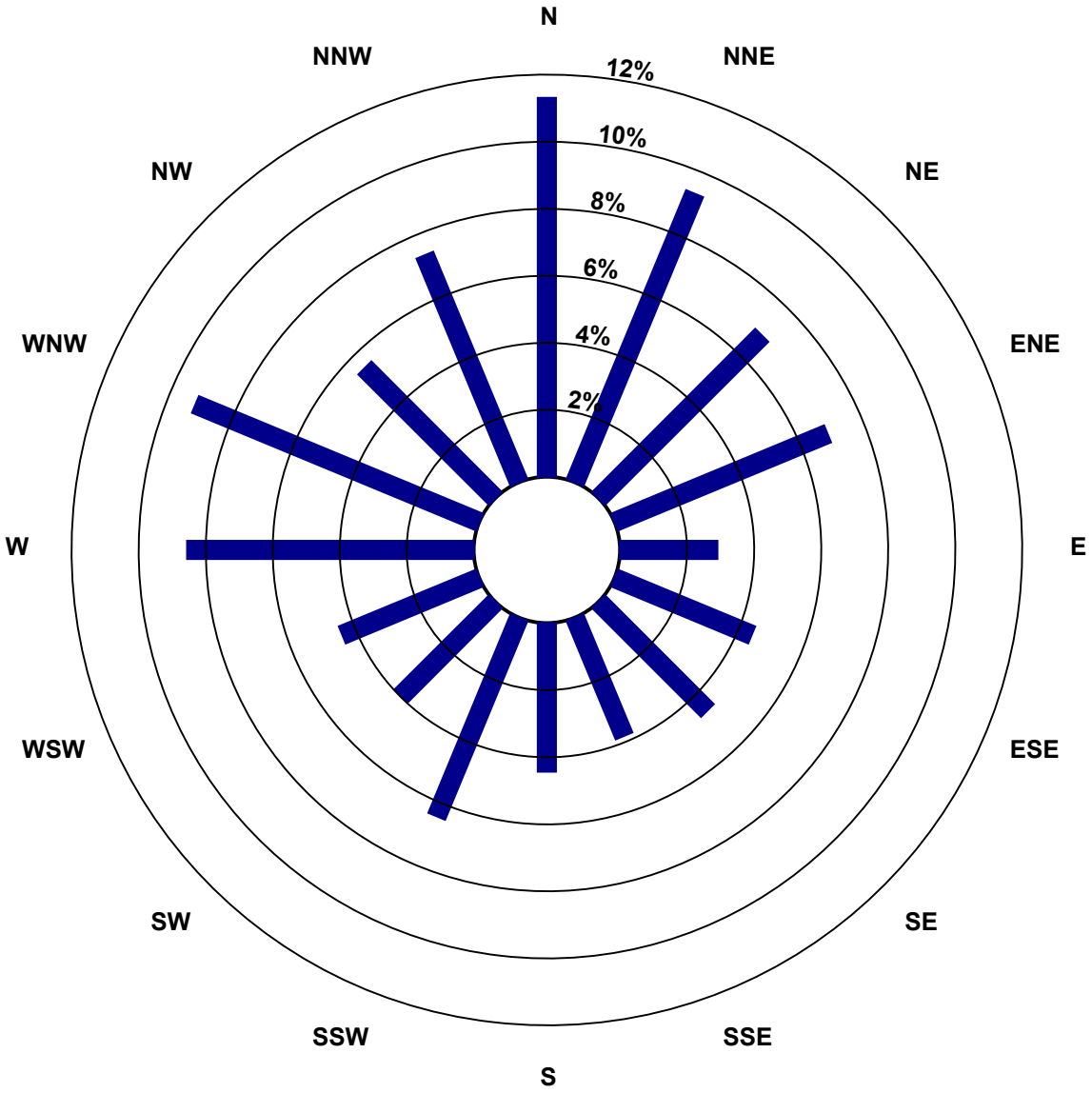
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Dioxide (NO_2) - ppb

Kirby South



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

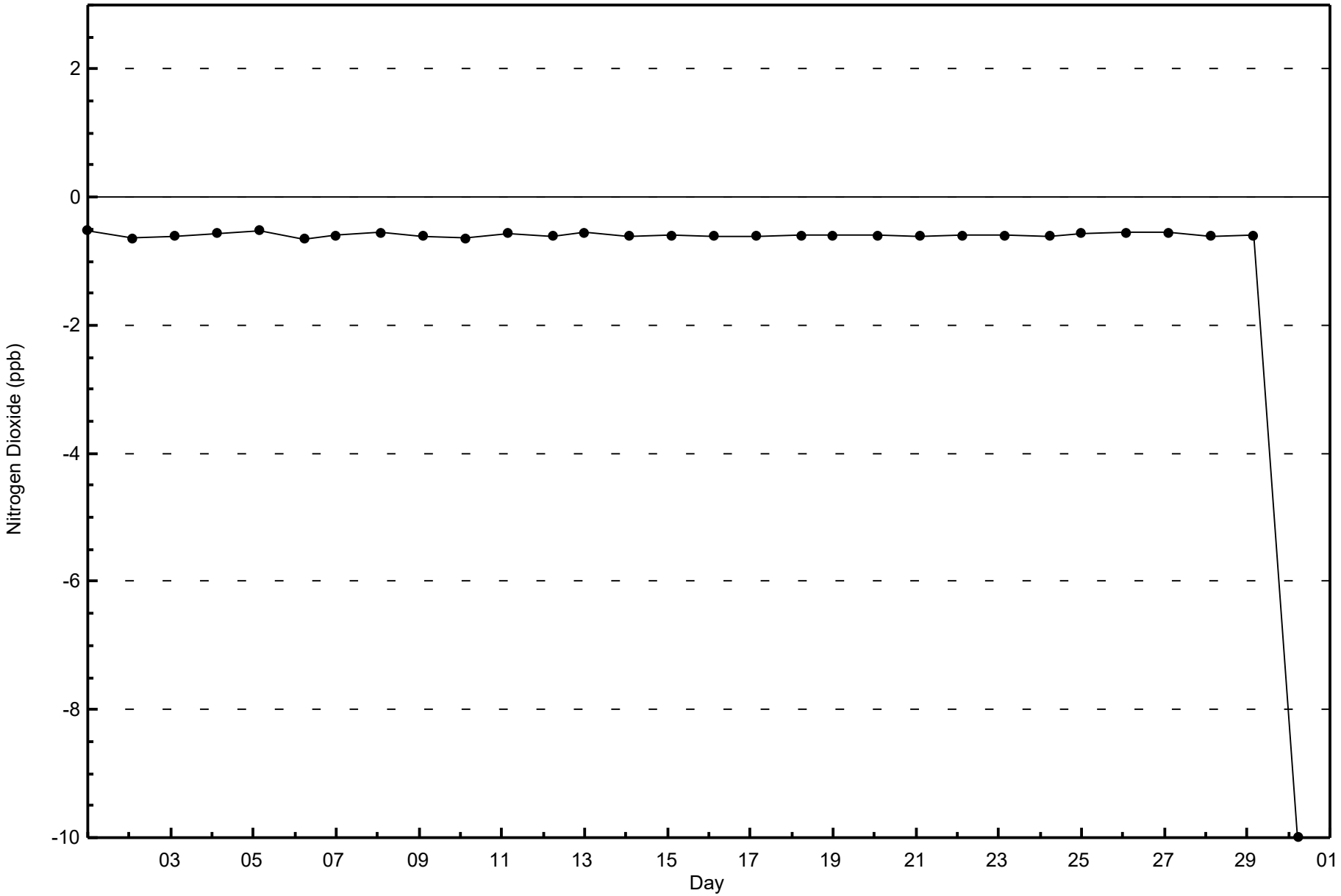
Total Number of Valid Hours: 654

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Dioxide (NO_2) - ppb

Kirby South - June 2026

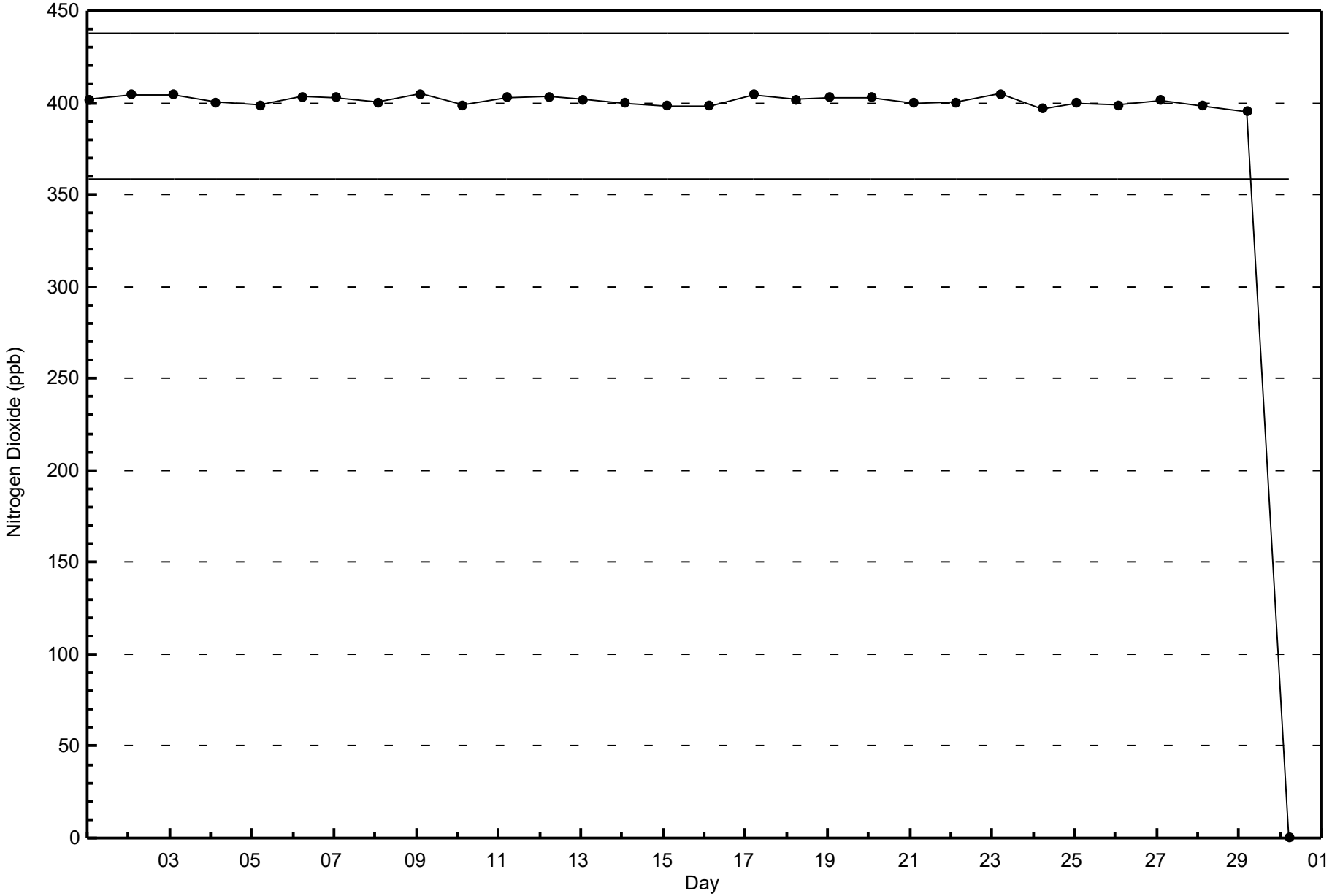


Wood Buffalo Environmental Association

Span Responses

Nitrogen Dioxide (NO_2) - ppb

Kirby South - June 2026



Wood Buffalo Environmental Association

Summary of Hour Averages

Nitrogen Oxides (NO_X) - ppb

Kirby South - June 2026

Maximum Value: 18.9 ppb on Jun 6 08:00

Maximum Daily Average: 6.7 ppb on Jun 6

Minimum Value: 0.3 ppb on Jun 21 18:00

Minimum Daily Average: 0.4 ppb on Jun 21

Maximum Diurnal Average: 1.8 ppb at hour 8

Minimum Diurnal Average: 0.9 ppb at hour 17

Monthly Average: 1.27 ppb

Percentiles: P_1 = 0.3 P_{10} = 0.4 Q_1 = 0.6 Median = 0.8 Q_3 = 1.2 P_{90} = 2.0 P_{99} = 11.7

Hours in Service:	688
Hours of Data:	654
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-Jun	Z	0.7	0.5	0.6	0.7	0.6	0.5	0.8	0.7	0.6	0.7	0.9	0.9	1.0	0.7	0.7	0.8	0.8	0.8	0.8	0.6	0.9	1.0	1.1	0.8	1.1
2-Jun	0.7	Z	0.7	0.7	0.7	1.1	0.9	0.6	0.4	0.4	0.3	0.5	0.7	0.9	0.8	0.6	0.7	1.5	1.2	0.8	0.7	0.5	0.4	0.3	0.7	1.5
3-Jun	0.3	0.4	Z	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.5	1.1	0.4	0.4	1.1	0.5	0.5	0.5	0.5	0.5	0.5	0.8	1.0	1.1	0.5	1.1
4-Jun	1.4	1.4	0.8	Z	1.0	0.9	1.0	0.9	1.2	0.8	0.9	1.0	1.0	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.1	1.1	1.2	1.3	1.0	1.4
5-Jun	1.4	1.2	1.0	1.2	Z	1.3	1.4	1.3	1.3	1.5	1.7	1.1	1.4	1.5	1.2	0.9	1.6	3.6	5.1	2.5	1.5	1.1	0.8	0.5	1.6	5.1
6-Jun	0.4	2.4	3.4	7.8	8.1	Z	14.2	18.9	12.5	12.8	9.6	11.8	9.0	8.3	7.8	8.3	4.4	6.7	2.6	0.6	0.8	0.6	1.0	1.3	6.7	18.9
7-Jun	Z	0.5	0.8	0.7	1.0	0.6	0.7	0.8	1.7	0.7	1.8	0.7	0.7	0.8	1.0	0.8	0.7	1.0	1.1	0.9	0.7	1.0	1.2	0.6	0.9	1.8
8-Jun	0.8	Z	0.8	0.8	2.5	3.0	0.5	1.2	3.5	1.0	0.5	0.4	0.5	2.6	6.3	1.5	0.6	3.5	12.9	7.0	2.2	3.6	1.6	1.2	2.5	12.9
9-Jun	11.7	8.3	Z	0.7	0.7	0.7	0.7	0.5	0.6	2.0	0.9	1.5	1.1	1.3	1.1	0.9	0.7	0.5	0.5	0.5	0.5	0.6	0.7	1.0	1.6	11.7
10-Jun	0.8	0.6	0.6	Z	0.8	0.9	1.5	2.9	2.1	1.6	1.1	1.0	0.8	0.9	0.8	0.6	0.5	0.5	0.5	1.8	1.4	1.3	0.8	0.7	1.1	2.9
11-Jun	0.8	1.4	2.1	2.4	Z	1.6	1.6	1.5	1.2	1.0	1.2	1.4	1.4	1.1	1.4	1.4	1.7	1.9	1.8	2.1	2.0	1.9	1.5	1.0	1.5	2.4
12-Jun	0.7	0.8	0.7	1.0	1.5	Z	2.2	1.2	1.1	1.4	1.3	1.6	1.7	1.5	1.4	1.3	1.0	0.9	0.9	1.2	1.1	1.2	1.1	1.0	1.2	2.2
13-Jun	Z	1.3	0.9	1.0	1.4	1.8	1.2	1.2	0.7	0.8	0.5	0.4	0.5	1.3	1.3	1.4	0.6	0.5	0.5	0.7	0.6	2.2	0.7	0.9	1.0	2.2
14-Jun	0.7	Z	0.6	0.6	0.7	1.4	1.8	1.7	0.9	1.7	2.0	0.9	1.0	0.7	0.8	0.7	0.9	0.7	0.7	1.4	1.8	1.5	1.1	1.5	1.1	2.0
15-Jun	1.1	1.9	Z	4.8	3.4	2.5	1.8	1.5	2.3	0.9	0.6	0.7	1.1	1.2	2.5	1.9	1.2	2.4	0.7	0.7	4.2	12.0	1.0	0.8	2.2	12.0
16-Jun	0.8	0.9	0.7	Z	0.6	0.6	0.7	0.7	0.7	0.9	1.0	0.9	0.7	0.7	0.7	0.6	0.9	1.4	0.9	0.8	0.6	0.6	0.7	0.6	0.8	1.4
17-Jun	0.9	1.0	1.2	1.5	Z	3.6	4.3	2.6	1.2	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.9	0.9	0.7	0.8	1.0	1.1	1.2	1.1	1.3	4.3
18-Jun	1.5	1.4	1.2	0.8	1.4	Z	0.7	0.6	0.6	1.4	0.9	1.4	1.2	0.7	0.3	0.4	0.4	0.6	1.3	1.3	1.2	1.1	1.2	1.1	1.0	1.5
19-Jun	Z	1.0	0.8	0.6	0.8	0.7	0.7	0.7	0.5	0.4	0.4	0.5	0.4	0.6	0.6	2.1	0.4	0.4	0.4	0.3	0.4	1.7	1.4	0.9	0.7	2.1
20-Jun	0.8	Z	0.7	0.5	0.6	1.2	0.7	0.6	4.2	1.5	0.3	0.3	0.4	0.4	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.4	0.6	1.9	0.8	4.2
21-Jun	1.4	0.9	Z	0.5	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.4	0.4	1.4
22-Jun	0.6	0.5	0.6	Z	0.7	1.0	0.4	0.6	0.9	1.0	0.5	0.4	0.4	0.4	0.3	0.3	0.4	0.5	0.6	0.5	0.4	0.6	0.4	0.5	0.5	1.0
23-Jun	0.4	0.5	0.8	1.0	Z	1.1	0.7	1.1	0.6	2.4	0.7	0.4	2.2	1.2	0.5	0.4	0.5	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.8	2.4
24-Jun	0.4	0.5	0.4	0.5	0.5	Z	0.5	0.8	0.8	0.5	0.4	0.9	0.6	0.5	0.5	0.6	0.6	1.0	0.7	0.8	0.9	1.3	1.4	1.7	0.7	1.7
25-Jun	Z	2.3	2.0	1.9	2.0	2.5	2.7	1.9	1.2	0.7	0.6	0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.9	1.0	1.0	0.9	0.8	0.8	1.2	2.7
26-Jun	1.0	Z	1.5	1.5	1.8	1.6	1.5	1.5	1.5	1.1	0.7	0.7	0.7	0.6	0.6	0.7	0.9	0.9	0.9	1.0	1.0	0.8	0.8	0.8	1.1	1.8
27-Jun	0.9	0.9	Z	1.0	0.9	1.0	1.0	1.0	1.0	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.6	0.7	0.7	0.6	0.8	1.0
28-Jun	0.6	0.6	0.6	Z	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.9	1.1	0.6	1.1
29-Jun	1.2	1.3	2.2	2.7	Z	3.7	3.6	3.1	2.1	1.7	1.6	C	C	C	C	C	NS	NS	NS	NS	NS	NS	NS	NS	--	3.7
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	1.3	1.4	1.1	1.5	1.4	1.4	1.7	1.8	1.6	1.4	1.1	1.2	1.1	1.2	1.3	1.1	0.9	1.3	1.4	1.1	1.0	1.5	0.9	0.9	Diurnal Average	
	11.7	8.3	3.4	7.8	8.1	3.7	14.2	18.9	12.5	12.8	9.6	11.8	9.0	8.3	7.8	8.3	4.4	6.7	12.9	7.0	4.2	12.0	1.6	1.9	Diurnal Maximum	

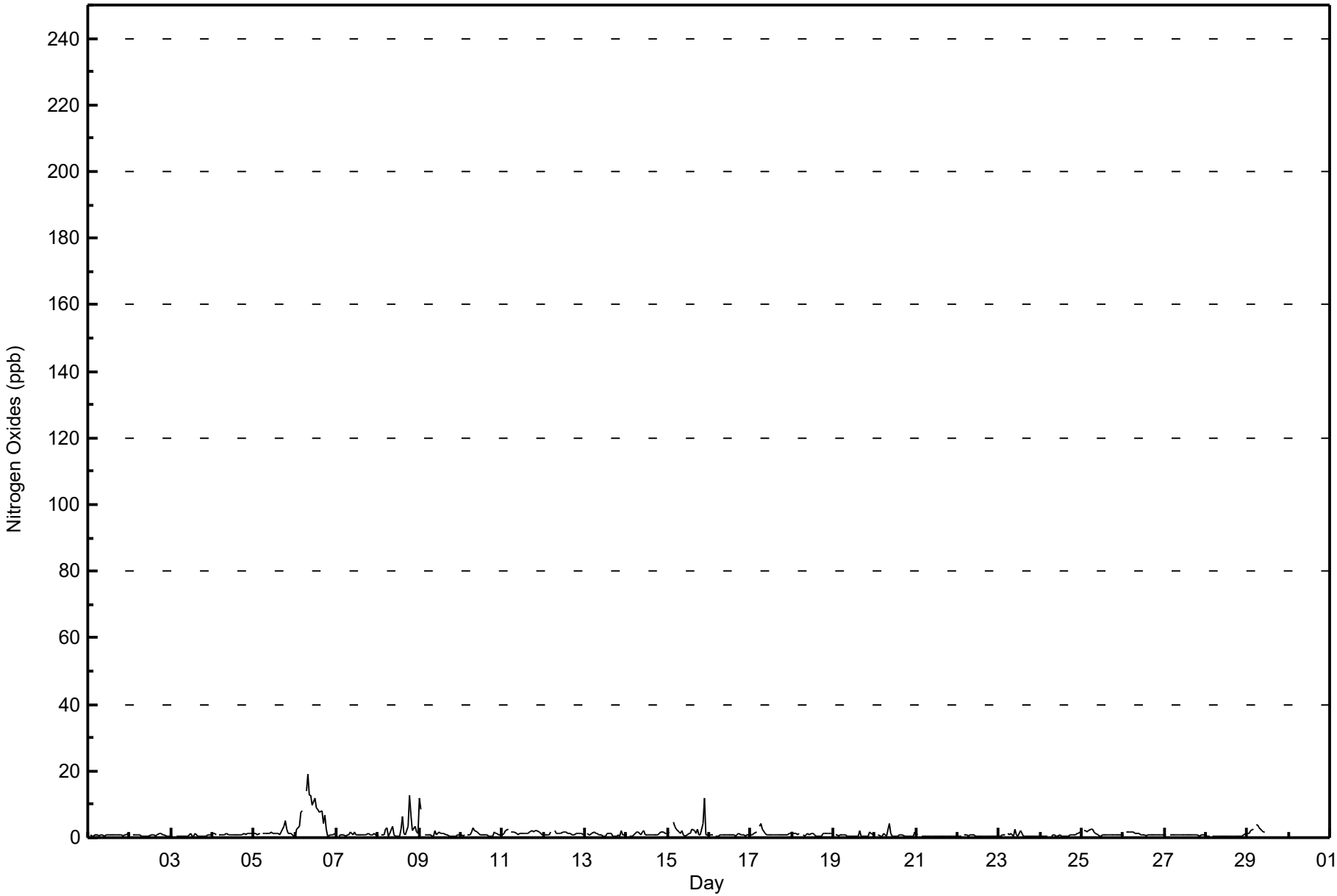
Z - zerospan C - Calibration NS - Not in Service

Wood Buffalo Environmental Association

Hourly Averages

Nitrogen Oxides (NO_X) - ppb

Kirby South - June 2026



Nitrogen Oxides (NO_X) - ppb
Kirby South - June 2026

Concentration Ranges (ppb)	Number of Hours	%	Cumulative %
0 - 20	654	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: 654

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Nitrogen Oxides (NO_X) - ppb

Kirby South - June 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	74	61	45	45	19	29	30	25	29	42	26	29	56	60	36	48	654
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	74	61	45	45	19	29	30	25	29	42	26	29	56	60	36	48	654

Total Number of Valid Hours: 654

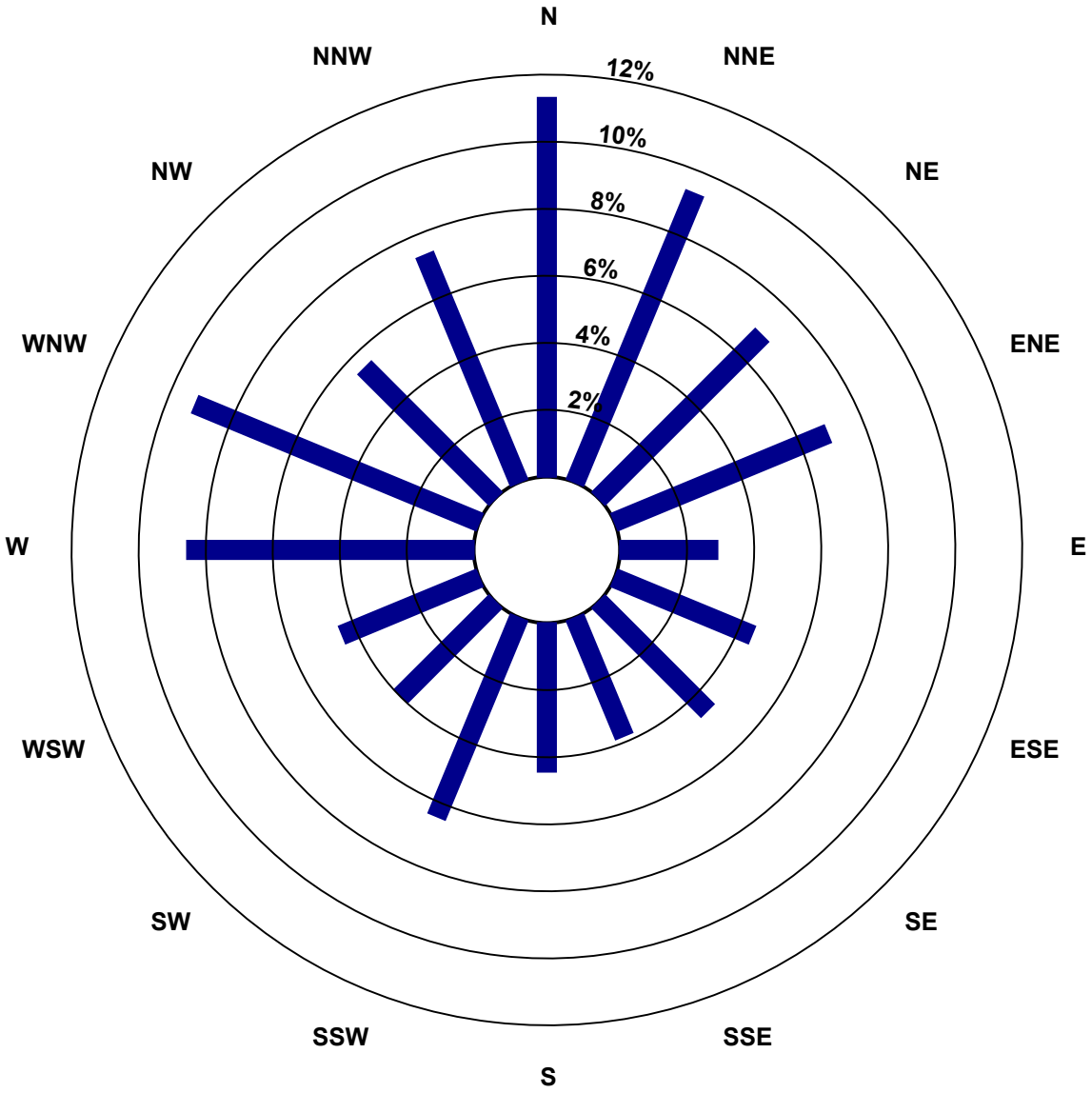
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Nitrogen Oxides (NO_X) - ppb

Kirby South



Classes (ppb)

0 - 20

21 - 40

11 - 80

81 - 159

> 159

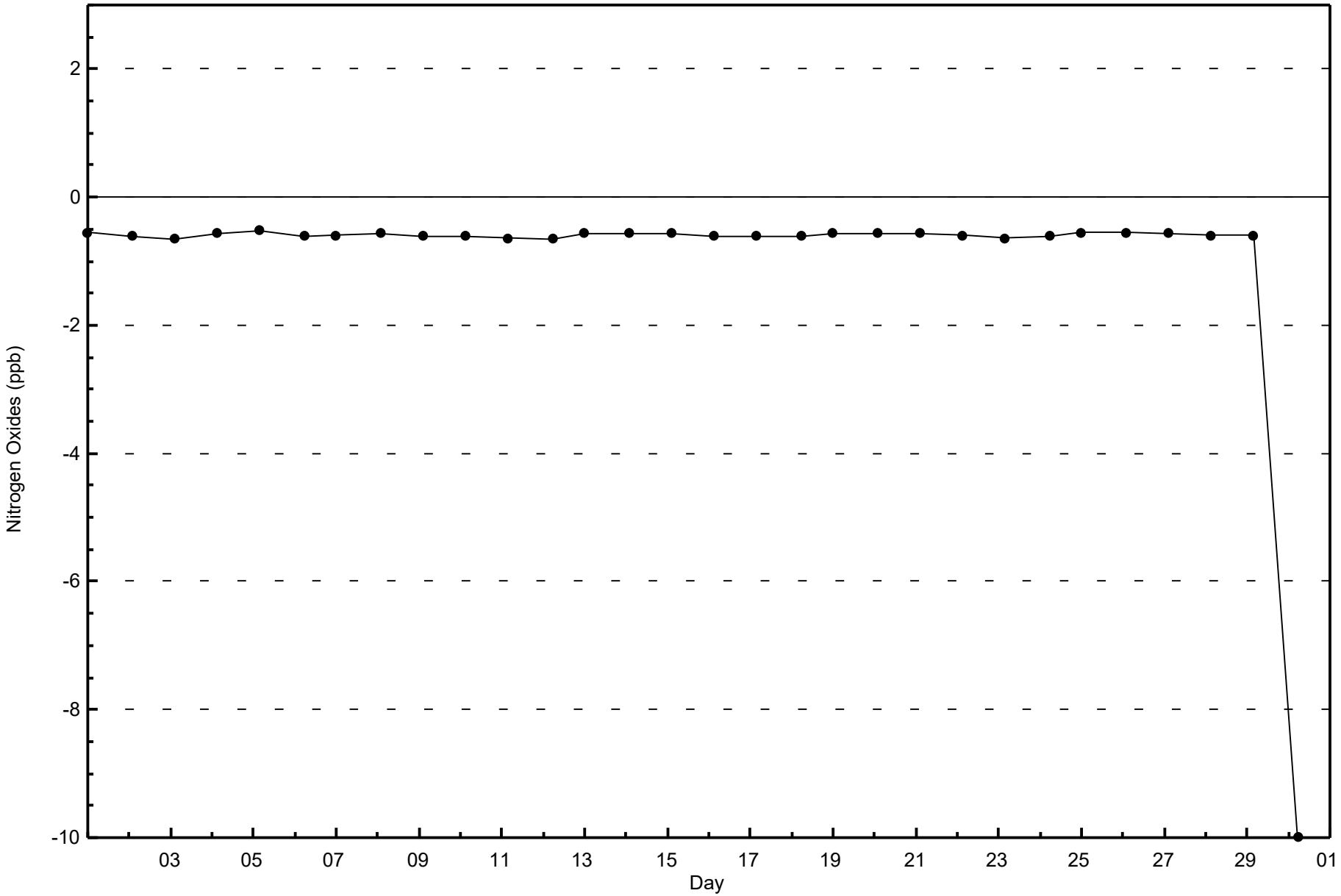
Total Number of Valid Hours: 654

Wood Buffalo Environmental Association

Zero Responses

Nitrogen Oxides (NO_X) - ppb

Kirby South - June 2026

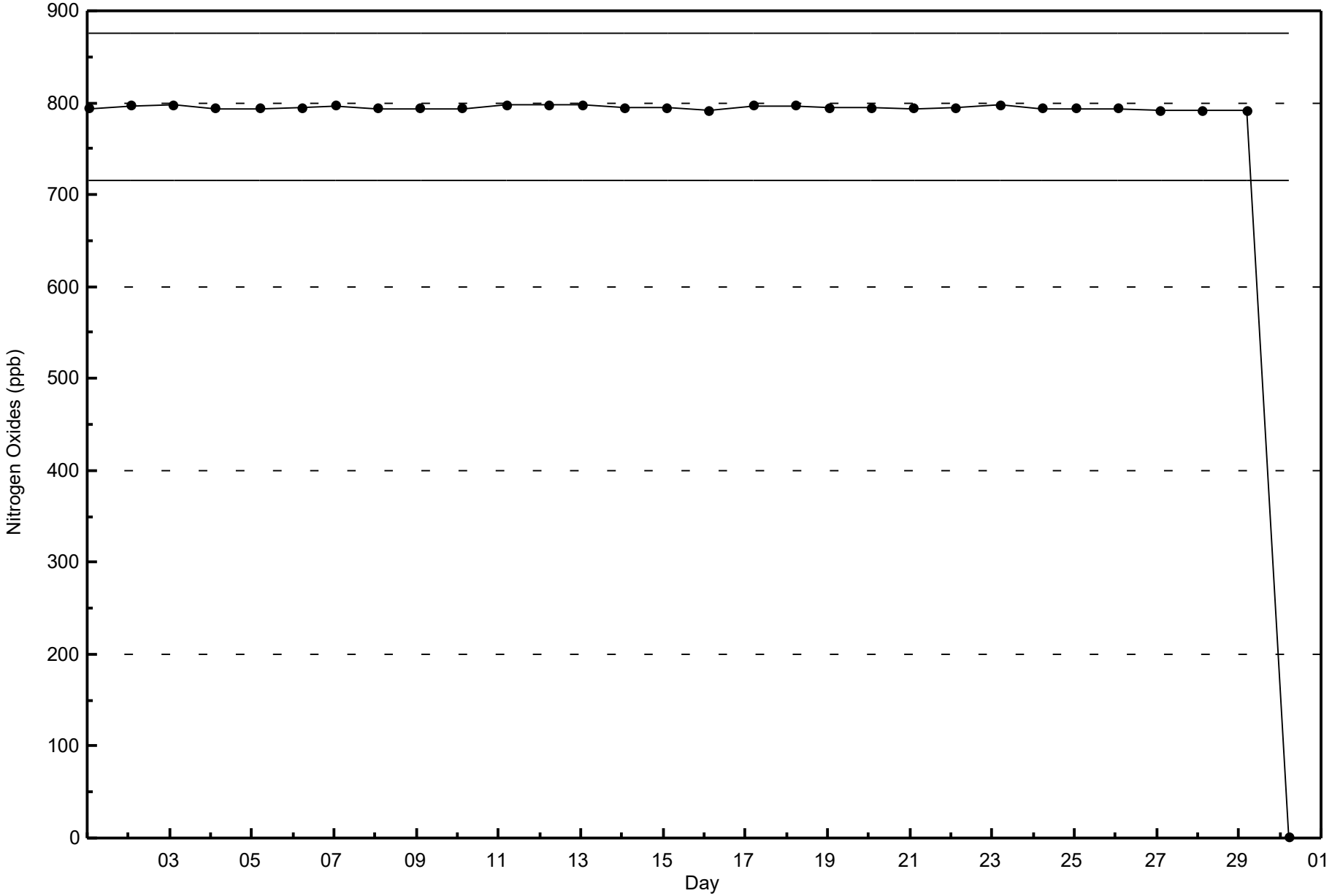


Wood Buffalo Environmental Association

Span Responses

Nitrogen Oxides (NO_X) - ppb

Kirby South - June 2026



Maximum Value: 26.8 C on Jun 29 16:00

Maximum Daily Average: 21.5 C on Jun 28

Minimum Value: 5.3 C on Jun 7 05:00

Minimum Daily Average: 7.5 C on Jun 11

Maximum Diurnal Average: 17.5 C at hour 16

Minimum Diurnal Average: 10.1 C at hour 5

Monthly Average: 14.10 C

Percentiles: P_1 = 6.6 P_{10} = 8.2 Q_1 = 10.2 Median = 13.7 Q_3 = 17.0 P_{90} = 21.2 P_{99} = 25.7

Hours in Service:	703
Hours of Data:	703
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-Jun	10.1	9.7	9.0	8.8	8.7	8.5	8.4	8.3	8.3	8.5	8.6	8.8	9.0	9.0	9.3	9.4	9.9	9.7	9.4	9.5	9.4	9.2	9.0	8.7	9.1	10.1
2-Jun	8.2	7.8	7.4	7.1	7.0	6.8	6.7	6.6	6.7	6.7	6.9	7.5	7.7	7.9	8.4	8.8	8.7	8.7	8.1	8.0	7.6	7.4	7.3	7.2	7.5	8.8
3-Jun	7.1	7.0	6.9	6.9	7.0	7.1	7.2	7.5	8.2	9.1	10.0	11.2	13.0	15.0	16.4	17.5	18.0	18.5	18.2	17.3	14.7	11.6	10.2	10.4	11.5	18.5
4-Jun	10.6	10.9	10.8	10.3	10.1	10.2	10.4	10.5	11.3	12.3	13.4	14.3	15.7	16.9	17.4	17.8	17.7	17.2	16.9	16.3	15.3	13.4	12.5	12.0	13.5	17.8
5-Jun	11.7	11.5	11.5	11.4	11.3	11.7	12.7	13.3	13.6	15.3	16.0	16.0	15.3	16.3	14.4	13.9	13.4	12.2	12.0	11.9	11.6	11.0	10.7	9.9	12.9	16.3
6-Jun	9.4	9.2	9.1	9.1	8.8	8.4	9.1	10.2	11.1	11.9	12.6	13.7	14.8	15.8	16.4	17.0	16.0	16.3	16.5	14.6	13.3	11.1	9.3	10.1	12.2	17.0
7-Jun	8.3	6.8	5.7	7.0	5.3	7.0	8.5	10.6	12.6	14.7	15.7	16.6	17.7	17.9	18.3	17.9	17.0	15.9	15.3	13.8	12.7	12.0	9.8	9.0	12.3	18.3
8-Jun	8.7	8.9	9.0	8.9	8.5	8.1	8.1	8.3	8.6	9.2	9.3	9.4	9.3	10.2	11.8	13.5	15.2	13.6	15.0	15.3	13.8	12.9	11.9	11.4	10.8	15.3
9-Jun	11.4	10.9	9.8	9.3	8.6	9.6	11.2	12.4	14.0	15.2	16.7	17.6	18.4	18.5	19.2	19.7	20.1	19.4	18.5	18.4	16.5	15.6	15.1	14.3	15.0	20.1
10-Jun	14.1	14.1	13.7	13.3	12.9	12.8	13.5	13.1	14.3	14.4	14.8	15.2	15.9	16.6	16.0	15.3	15.3	15.8	13.5	11.5	10.6	9.3	8.5	7.6	13.4	16.6
11-Jun	7.1	7.0	6.6	6.3	6.4	6.5	6.9	7.0	6.8	7.1	7.3	7.9	8.4	8.7	9.1	9.1	8.5	8.5	8.4	8.0	7.5	7.0	6.9	6.6	7.5	9.1
12-Jun	6.5	6.6	6.7	6.8	6.8	7.4	8.2	9.1	9.4	10.1	11.5	12.5	13.0	14.2	15.4	16.1	16.1	15.5	14.9	14.2	12.9	11.2	10.2	9.5	11.0	16.1
13-Jun	8.9	8.6	8.0	7.7	7.7	8.1	11.1	13.2	14.4	15.2	16.3	17.4	18.2	18.6	19.3	19.8	20.3	20.7	20.3	20.3	18.6	15.8	14.3	13.1	14.8	20.7
14-Jun	12.3	11.8	10.7	9.9	10.6	12.4	14.8	17.8	19.6	20.7	21.7	22.2	21.9	22.9	22.5	20.0	19.9	19.3	19.9	17.7	16.5	15.3	13.9	13.9	17.0	22.9
15-Jun	12.5	10.9	10.0	9.5	9.9	12.5	15.8	17.0	18.4	19.9	20.8	20.9	22.2	22.8	23.4	23.3	22.7	22.2	21.6	20.7	19.2	17.1	16.0	14.5	17.7	23.4
16-Jun	13.9	13.1	12.6	12.6	12.4	12.7	13.1	12.8	13.3	13.5	13.4	13.7	13.9	13.0	14.2	14.6	15.0	15.2	14.6	13.0	12.7	12.1	12.2	11.2	13.3	15.2
17-Jun	10.3	9.4	8.8	7.7	7.8	9.2	10.6	11.9	13.0	13.0	13.1	13.9	14.7	15.0	15.7	16.5	17.0	16.8	16.3	16.2	14.8	13.8	13.1	12.2	12.9	17.0
18-Jun	11.2	10.6	10.0	9.3	8.2	8.0	8.3	8.6	9.5	11.2	12.2	14.1	13.9	14.0	15.1	15.5	15.2	14.5	14.1	13.5	11.7	11.4	11.3	10.7	11.7	15.5
19-Jun	10.4	9.8	9.4	9.3	9.2	10.2	12.5	13.4	13.6	14.5	15.9	11.7	14.1	13.0	12.9	11.7	14.5	15.6	15.1	14.1	13.8	12.1	10.9	9.9	12.4	15.9
20-Jun	9.7	8.1	8.7	7.8	7.8	9.6	11.0	12.4	14.4	15.9	16.7	16.9	17.2	15.3	12.5	12.6	13.0	12.8	12.7	12.0	11.5	11.1	10.9	10.9	12.1	17.2
21-Jun	10.9	10.8	10.7	10.5	10.4	10.6	10.9	11.7	12.4	13.2	13.8	14.5	15.0	15.4	15.7	15.9	16.3	16.3	15.9	15.3	14.5	13.5	12.2	11.5	13.2	16.3
22-Jun	11.0	10.5	10.7	10.4	10.5	11.3	12.0	13.1	15.5	16.8	16.7	17.1	16.8	16.1	17.7	17.3	14.6	16.7	15.7	14.9	13.1	11.9	11.9	9.3	13.8	17.7
23-Jun	9.4	9.1	8.9	9.2	9.0	11.1	13.4	15.4	16.7	18.1	18.3	18.9	19.9	20.5	17.9	20.3	17.7	19.6	19.0	18.4	17.4	14.8	13.8	13.6	15.4	20.5
24-Jun	12.7	12.8	11.9	11.8	11.7	12.2	13.6	16.7	17.5	19.0	20.1	18.2	16.3	19.3	21.8	21.8	21.8	21.9	21.3	20.2	18.2	16.7	15.8	15.1	17.0	21.9
25-Jun	14.5	13.8	13.5	13.2	13.4	14.6	15.7	17.9	19.9	21.4	22.3	23.2	22.8	23.1	23.8	23.9	23.9	24.0	23.2	22.2	20.5	18.5	17.7	16.7	19.3	24.0
26-Jun	15.8	15.4	14.6	14.0	14.2	15.7	17.8	20.0	21.7	22.4	23.0	23.4	24.0	24.7	25.0	24.1	24.3	24.1	23.7	22.8	21.3	19.4	18.4	18.0	20.3	25.0
27-Jun	17.6	17.0	16.4	15.6	15.6	16.2	17.3	18.4	19.6	19.9	20.4	20.7	21.8	21.8	21.9	21.9	21.6	21.3	21.2	20.8	20.2	19.0	16.9	16.5	19.2	21.9
28-Jun	16.7	16.8	15.8	14.9	14.4	15.6	17.5	19.5	21.0	22.2	23.6	24.5	25.3	25.7	26.1	26.4	26.3	26.4	26.1	25.4	24.1	22.0	20.4	18.9	21.5	26.4
29-Jun	17.4	16.6	16.2	14.2	15.7	16.4	17.6	19.1	21.2	23.3	24.2	25.4	25.3	25.6	26.3	26.8	24.9	21.6	21.4	20.8	19.5	17.2	16.4	16.0	20.4	26.8
30-Jun	15.1	13.8	12.5	11.3	13.1	13.8	15.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	15.1
	11.4	11.0	10.5	10.1	10.1	10.8	12.0	13.0	14.0	15.0	15.7	16.1	16.6	17.0	17.4	17.5	17.4	17.3	16.9	16.1	15.0	13.6	12.7	12.0	Diurnal Average	
	17.6	17.0	16.4	15.6	15.7	16.4	17.8	20.0	21.7	23.3	24.2	25.4	25.3	25.7	26.3	26.8	26.3	26.4	26.1	25.4	24.1	22.0	20.4	18.9	Diurnal Maximum	

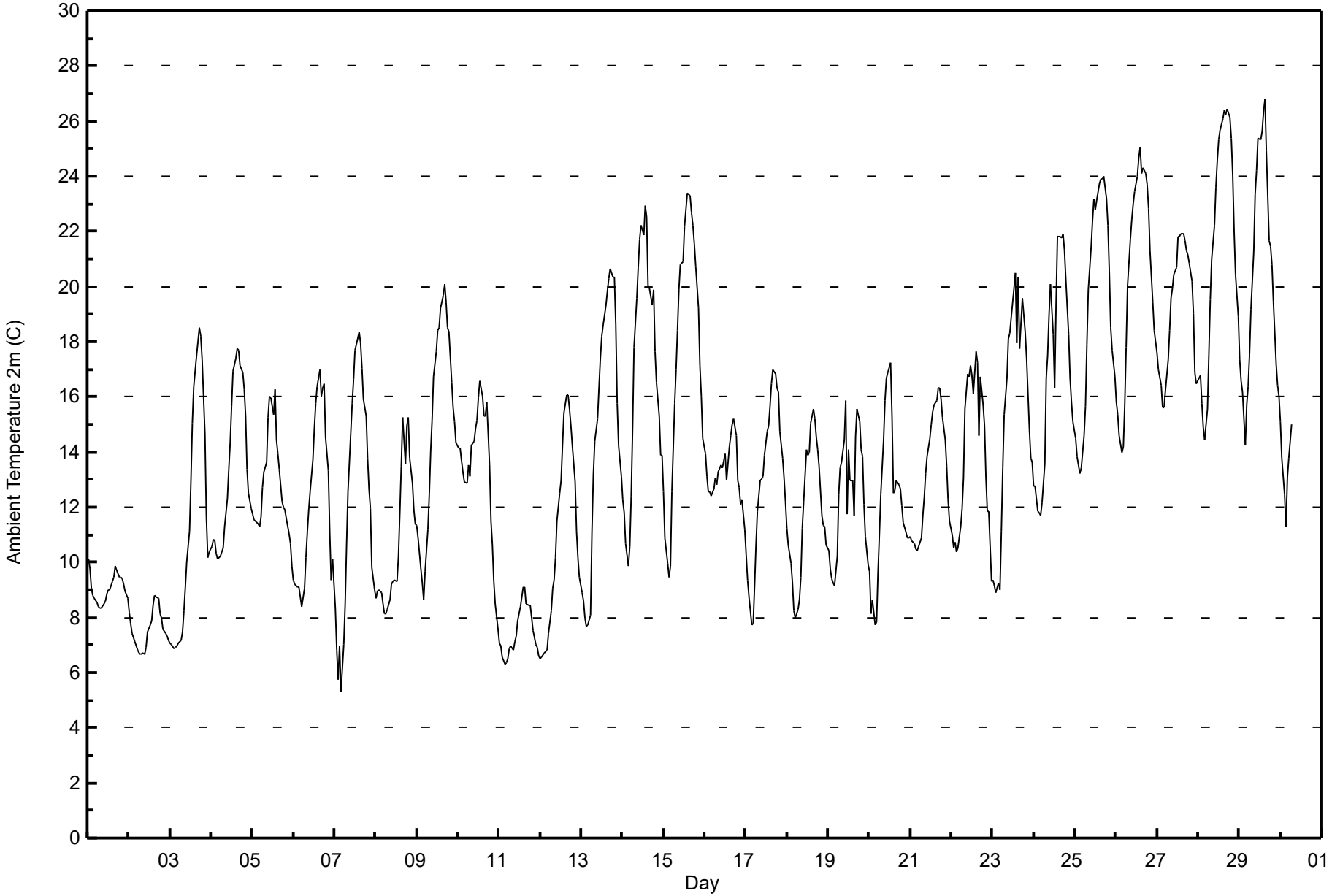
NS - Not in Service

Wood Buffalo Environmental Association

Hourly Averages

Ambient Temperature 2m (AT2) - C

Kirby South - June 2026



Concentration Ranges (C)	Number of Hours	%	Cumulative %
-50 - -20	0	0.00	0.00
-20 - 0	0	0.00	0.00
0 - 10	169	24.04	24.04
10 - 20	439	62.45	86.49
> 20	95	13.51	100.00

Total Number of Valid Hours: 703

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Relative Humidity 2m (RH2) - %

Kirby South - June 2026

Maximum Value: 97.7 % on Jun 3 03:00

Maximum Daily Average: 94.2 % on Jun 2

Minimum Value: 26.0 % on Jun 14 14:00

Minimum Daily Average: 45.0 % on Jun 13

Maximum Diurnal Average: 85.0 % at hour 5

Minimum Diurnal Average: 53.9 % at hour 16

Monthly Average: 68.26 %

Percentiles: P_1 = 28.8 P_{10} = 37.7 Q_1 = 51.6 Median = 70.3 Q_3 = 88.2 P_{90} = 94.0 P_{99} = 97.1

Hours in Service:	703
Hours of Data:	703
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-Jun	96.1	95.6	94.9	96.1	95.3	94.1	93.5	94.0	94.9	94.7	94.6	94.8	94.4	94.9	92.9	92.8	90.5	90.7	90.9	89.4	88.6	87.9	88.4	89.3	92.9	96.1
2-Jun	92.0	93.8	94.4	95.8	96.3	96.7	97.2	97.6	97.2	96.7	95.1	94.3	93.8	93.9	91.2	88.4	89.4	88.4	92.0	92.5	95.7	96.0	96.3	97.1	94.2	97.6
3-Jun	97.1	97.4	97.7	97.4	96.5	94.7	94.0	94.3	90.5	86.9	83.3	79.9	74.4	68.1	64.3	61.3	60.1	58.5	63.5	68.5	77.2	86.6	92.4	93.1	82.4	97.7
4-Jun	92.9	92.1	90.7	91.7	90.8	89.4	88.6	86.8	82.2	77.6	73.0	69.4	64.2	59.4	57.4	56.7	58.4	61.7	64.2	67.9	73.3	81.3	84.1	85.9	76.7	92.9
5-Jun	87.3	89.5	91.8	91.0	92.1	92.2	90.7	89.0	88.2	80.8	76.9	75.1	84.6	77.4	85.6	87.1	91.7	95.1	94.2	95.9	96.7	95.7	94.8	95.7	89.1	96.7
6-Jun	95.7	95.6	94.2	93.0	92.6	92.6	88.1	82.4	76.7	72.8	68.6	62.1	58.3	50.5	47.7	42.6	47.3	47.0	46.0	56.6	60.0	68.8	73.8	70.9	70.2	95.7
7-Jun	80.5	87.8	88.8	83.3	90.1	85.1	80.1	70.6	61.7	54.3	52.0	48.9	45.7	45.2	42.8	42.6	46.3	52.8	54.6	61.5	65.1	75.6	89.3	89.1	66.4	90.1
8-Jun	91.9	90.5	88.2	89.7	92.8	95.3	96.7	94.8	96.0	96.0	95.8	94.7	94.2	89.7	82.0	72.1	59.5	66.3	60.9	57.9	59.8	65.4	70.8	75.2	82.3	96.7
9-Jun	74.7	75.3	80.9	82.6	85.3	81.0	70.3	61.9	55.3	51.3	48.0	45.5	45.3	44.0	41.7	39.5	37.5	40.1	47.4	47.0	54.0	60.8	61.4	64.4	58.1	85.3
10-Jun	63.0	60.1	63.3	68.5	71.6	74.0	72.1	79.7	72.0	71.6	71.9	70.1	61.6	52.7	55.4	63.1	65.3	57.4	74.4	89.9	89.8	88.9	88.2	89.9	71.4	89.9
11-Jun	90.1	90.8	90.6	91.8	91.7	91.0	89.1	87.5	87.8	84.5	81.8	76.9	74.1	73.0	71.8	71.3	74.3	75.2	76.1	80.2	84.9	91.4	90.7	91.3	83.7	91.8
12-Jun	90.7	90.2	90.0	89.7	89.4	86.4	78.2	66.6	61.9	59.5	48.8	43.7	41.2	38.4	34.6	32.9	33.6	33.6	34.7	38.6	45.4	51.6	52.7	55.2	57.8	90.7
13-Jun	59.4	62.7	66.0	67.8	68.4	68.7	53.7	42.3	35.0	34.6	32.2	31.2	33.8	36.5	35.7	33.5	31.2	30.6	31.2	32.0	38.7	47.6	52.0	55.2	45.0	68.7
14-Jun	56.5	57.8	63.6	67.2	65.7	59.5	51.0	42.5	35.3	29.9	27.8	26.0	29.1	26.0	29.0	39.7	37.8	40.3	39.7	48.6	54.4	60.6	63.2	61.1	46.4	67.2
15-Jun	66.3	77.0	77.5	79.9	76.3	68.6	54.8	48.4	44.0	37.7	33.9	32.9	30.0	27.2	27.3	28.5	32.1	33.7	35.7	38.5	47.9	65.1	72.2	81.8	50.7	81.8
16-Jun	87.1	91.0	94.6	96.1	97.2	97.4	96.5	96.4	93.6	91.3	91.0	88.7	86.1	92.7	83.7	78.5	81.4	83.0	86.9	87.3	94.0	96.4	88.8	88.6	90.3	97.4
17-Jun	87.9	86.4	78.8	80.9	80.1	77.7	76.3	71.5	63.5	62.3	60.5	57.4	52.4	50.7	45.2	40.3	37.4	37.4	39.9	41.0	49.1	53.6	56.2	64.1	60.4	87.9
18-Jun	70.8	74.5	78.6	80.6	92.0	93.8	94.0	90.5	88.5	81.8	74.5	55.4	54.6	53.5	49.3	46.9	50.6	55.8	60.8	66.0	77.5	77.8	77.9	80.8	71.9	94.0
19-Jun	82.7	85.2	86.1	89.0	91.3	84.6	71.0	65.7	64.2	59.1	51.2	77.4	69.1	78.8	80.2	84.7	71.8	55.9	58.2	65.1	72.7	78.4	78.4	82.5	74.3	91.3
20-Jun	85.3	89.3	90.2	90.6	90.1	86.7	82.0	76.0	67.5	56.3	53.8	54.2	51.1	62.7	88.6	89.0	90.0	89.6	91.2	92.7	94.3	95.4	96.0	96.2	81.6	96.2
21-Jun	95.9	96.5	96.3	95.9	96.1	95.4	94.5	90.5	86.7	81.4	73.3	70.0	64.9	60.1	57.0	49.9	48.7	49.7	52.0	58.0	63.7	66.0	72.5	75.8	74.6	96.5
22-Jun	75.9	79.6	76.8	80.4	78.9	76.9	74.1	70.8	59.7	50.6	50.0	47.1	49.4	53.2	45.9	54.9	75.9	61.2	65.5	70.7	81.8	84.6	79.5	91.1	68.1	91.1
23-Jun	91.1	93.5	93.8	92.3	92.5	85.2	73.2	64.9	57.1	48.7	47.8	44.7	41.6	39.8	58.0	42.9	50.6	44.1	46.6	48.3	52.7	63.5	68.0	69.0	62.9	93.8
24-Jun	72.7	72.6	76.5	77.7	78.6	76.5	70.3	59.2	58.6	50.4	45.1	58.1	66.9	55.2	42.7	42.4	43.9	43.6	42.7	47.0	55.7	62.2	66.1	68.6	59.7	78.6
25-Jun	70.2	73.4	74.8	76.1	74.6	69.3	65.6	58.1	49.6	42.6	39.5	36.2	36.7	36.9	34.8	34.2	32.7	32.7	33.9	36.4	41.2	48.3	56.7	61.3	50.7	76.1
26-Jun	65.3	67.3	71.3	74.6	73.7	67.4	59.1	51.5	45.5	41.7	38.8	36.7	32.9	30.9	28.7	33.0	33.7	35.3	37.0	38.8	42.0	47.7	53.5	61.7	48.7	74.6
27-Jun	67.0	71.1	74.6	78.8	79.0	77.2	73.3	68.8	63.5	61.8	59.1	58.1	48.3	49.3	50.5	51.4	50.5	52.5	55.1	56.4	60.3	65.5	74.0	75.7	63.4	79.0
28-Jun	76.0	74.1	76.2	79.1	80.8	77.3	69.8	62.2	52.8	42.9	37.2	33.6	33.2	34.8	35.0	33.8	33.7	32.1	31.6	33.3	36.9	42.2	46.5	51.9	50.3	80.8
29-Jun	57.0	60.0	61.5	69.0	65.2	64.3	61.9	57.1	50.9	45.3	43.3	36.3	35.0	34.8	31.2	28.8	34.6	46.2	44.3	46.4	52.3	61.4	65.4	70.2	50.9	70.2
30-Jun	75.6	79.9	82.7	89.7	85.0	84.3	81.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	89.7
	79.8	81.7	82.8	84.5	85.0	82.8	78.0	73.2	68.3	63.6	60.3	58.6	56.8	55.5	54.8	53.9	54.9	54.8	56.9	60.4	65.7	71.2	74.1	77.0	Diurnal Average	
	97.1	97.4	97.7	97.4	97.2	97.4	97.2	97.6	97.2	96.7	95.8	94.8	94.4	94.9	92.9	92.8	91.7	95.1	94.2	95.9	96.7	96.4	96.3	97.1	Diurnal Maximum	

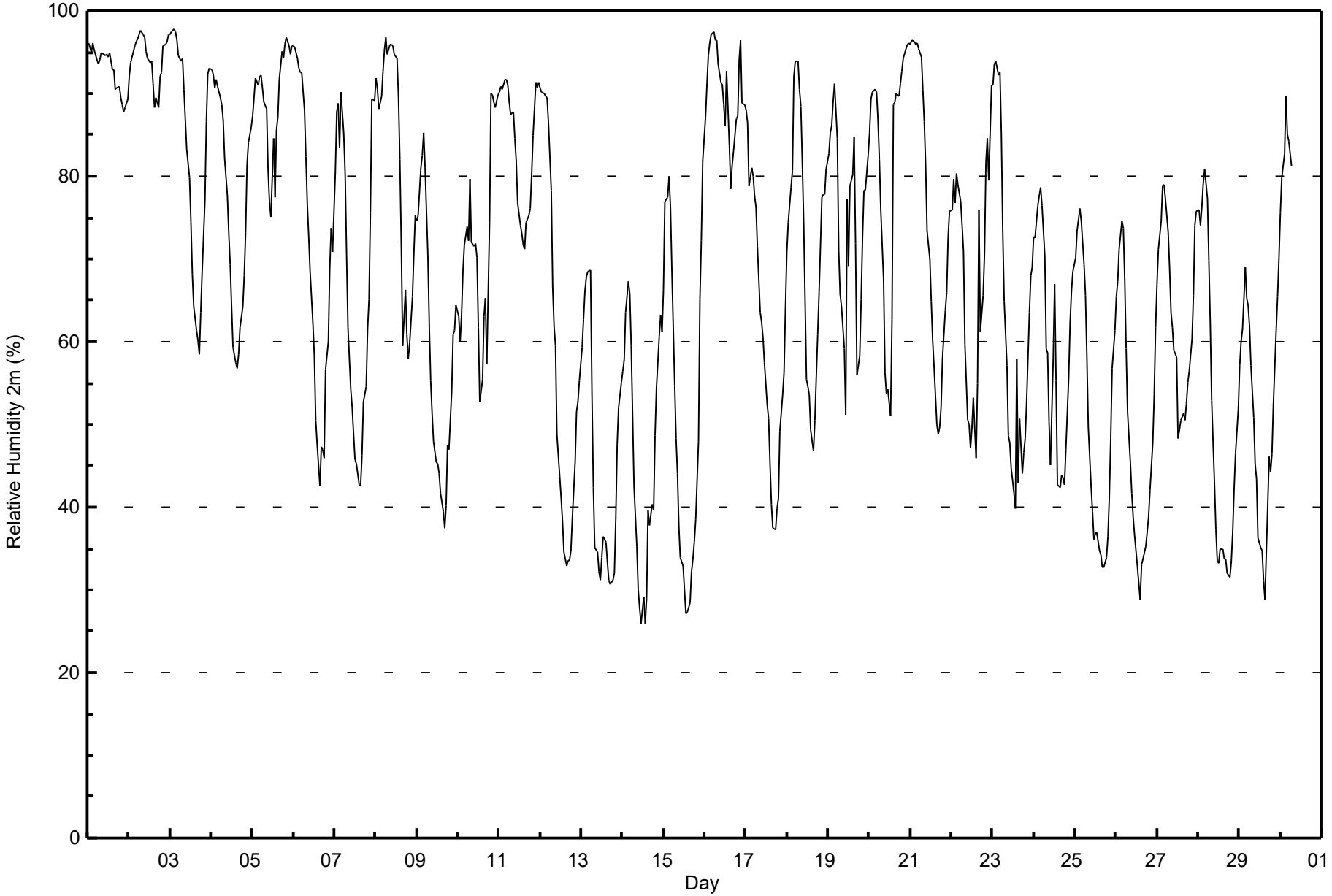
NS - Not in Service

Wood Buffalo Environmental Association

Hourly Averages

Relative Humidity 2m (RH2) - %

Kirby South - June 2026



Concentration Ranges (%)	Number of Hours	%	Cumulative %
0 - 20	0	0.00	0.00
20 - 40	84	11.95	11.95
40 - 60	167	23.76	35.70
60 - 80	206	29.30	65.01
80 - 100	246	34.99	100.00

Total Number of Valid Hours: 703

Total Number of Hours: 720

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Speed 10m (WS10) - km/h

Kirby South - June 2026

Maximum Speed: 29 km/h on Jun 8 18:00

Maximum Daily Speed Average: 22.3 km/h on Jun 1

Minimum Speed Value: 1 km/h on Jun 14 22:00

Minimum Daily Speed Average: 1.3 km/h on Jun 22

Maximum Diurnal Speed Average: 4.3 km/h at hour 11

Minimum Diurnal Speed Average: 0.9 km/h at hour 21

Monthly Average Velocity: 2.6 km/h 349.6 deg

Percentiles: P_1 = 2 P_{10} = 6 Q_1 = 8 Median = 11 Q_3 = 15 P_{90} = 21 P_{99} = 27

Hours in Service:	685
Hours of Data:	684
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-Jun	N17	N17	N19	N15	N17	N20	N22	NNE23	NNE22	NNE23	NNE25	NNE26	NNE23	NNE25	NNE26	NNE24	NNE22	NNE24	NNE25	NNE26	NNE26	NNE26	NNE24	NNE25	NNE22.3	NNE26
2-Jun	NNE22	NE21	NNE25	NNE24	NNE23	NNE23	NNE23	NE22	NE21	NE21	NE22	NE19	NNE17	NNE19	NNE18	NE17	NNE18	NNE17	NNE16	NE13	NNE13	NE14	NE11	NE11	NNE18.6	NNE25
3-Jun	NE10	NNE9	NE7	NE6	NE6	ENE7	ENE6	E7	ENE5	E5	ESE5	ESE2	SE5	SSW5	WSW5	NE1	ENE3	SE5	E10	E10	ESE11	SE11	SSE11	S11	E4.6	SE11
4-Jun	S12	S10	S10	SSW9	SSW11	SSW10	SSW12	SSW13	SSW14	SSW13	SSW11	S12	SSW12	S12	S10	S11	SSW10	SSW11	SSW11	SSW10	SSW9	S8	SSW8	SSW7	SSW10.6	SSW14
5-Jun	SSW9	SSW7	SSW8	SSW5	SSW6	SSE3	SSE5	SE6	ESE6	SE7	S11	S12	S11	SSW13	NW9	NNE12	NE9	ENE6	ENE6	ENE6	ESE6	W4	WNW14	WNW19	SSW2.3	WNW19
6-Jun	W19	W19	W20	W22	WSW20	WSW21	WSW22	W24	W26	WSW27	W27	WSW26	WSW23	WSW24	W22	W20	W20	W16	W14	WNW13	WNW8	W6	WSW5	WSW9	W18.6	WSW27
7-Jun	W6	W6	WNW4	WNW6	WSW1	WNW3	WNW4	NE3	NE4	W3	N2	NE6	ESE10	SE14	SE23	SE25	SSE18	S12	SW9	SSW7	SE7	SSW9	WNW13	NW7	S3.4	SE25
8-Jun	WSW5	NW7	WNW6	WNW9	W12	WSW12	W16	W14	W13	W16	WNW22	W26	W28	W27	W29	W25	W22	W29	W27	WSW25	WSW22	WSW19	WSW16	WSW17	W18.0	W29
9-Jun	WSW17	WSW14	WSW13	W14	W11	WNW10	NW9	WNW8	NW5	WNW8	WNW8	W11	W11	WNW10	WNW12	WNW10	WNW9	WNW12	W9	WNW7	W4	NNW4	NW7	NNW8	WNW8.8	WSW17
10-Jun	N9	NE6	N6	NNW5	N5	NW7	N8	NNE7	N9	N9	N9	NNW15	NNW19	NNW20	NNW18	N15	N13	NNW16	N10	NNE12	N11	N11	N11	N9	N10.6	NNW20
11-Jun	N9	NNW10	NNW12	NNW12	NNW11	NNW11	NNW11	NNW11	NNW13	NNW12	NNW12	NNW13	NNW13	NNW12	N14	N16	N15	NNW14	NNW14	NNW14	NNW12	NNW11	N13	N14	NNW12.5	N16
12-Jun	N14	N12	N12	N13	NNW11	NNW13	NNW18	N19	N20	N21	N21	N22	N23	N24	N22	N21	N20	N21	N20	N17	N11	N8	N11	N11	N16.7	N24
13-Jun	N10	NNW7	NNW7	NNW8	NW8	NW7	NNW8	NW8	NNW10	NW10	NW10	NNW10	NNW8	WNW10	W11	WNW11	WNW11	NW9	WNW8	WNW6	SW10	SW9	SW11	SW11	NW6.7	W11
14-Jun	SW11	SW10	SW9	SW10	SW12	WSW10	W12	W13	WNW12	WNW12	WNW13	WNW17	NW14	NW15	NNW19	N13	N16	NW9	NNW10	NNE7	WNW5	E1	SW7	WSW8	WNW7.5	NNW19
15-Jun	W8	NW7	NW5	WNW5	WNW4	W5	NW6	N6	N6	NNW10	NNW10	NW6	NW8	WNW11	WNW13	W12	WSW13	WSW11	SW11	SW9	WSW16	W18	WNW14	WNW11	WNW7.5	W18
16-Jun	NNW1	SSW4	SSW6	SSW4	SSW7	WSW6	NE2	ENE7	ENE8	ENE11	ENE12	ENE11	ENE11	ESE8	E5	NNE6	NW6	NW8	WNW7	W3	W9	WNW9	NW11	NW9	NNE1.4	ENE12
17-Jun	N8	NNE9	NNE9	N6	N9	NNE10	N9	N11	N14	N15	NNE17	NNE16	NE16	NNE11	N10	N10	N13	N10	NNW7	NNW8	NW6	NNW7	NNW8	NW13	N9.9	NNE17
18-Jun	NW13	NW12	NW11	WNW9	W14	WSW9	WNW10	W15	W16	W17	WNW15	NNW18	N21	N19	NNW18	NNW17	NNW14	NNE11	NNE8	N9	N7	NW7	NW7	WNW6	NW10.4	N21
19-Jun	WNW7	WNW7	WNW8	WNW7	WNW7	WNW7	NW11	NW11	WNW12	NW10	NW7	N11	ESE6	SSW9	SW8	SW15	SW10	SSW11	SW8	W6	N5	NE6	NE7	E6	W4.4	SW15
20-Jun	ENE5	ENE4	E6	NNE4	NE5	NE8	ENE9	NE9	ENE10	ENE13	ENE13	ENE13	ENE14	S7	SW4	N6	N7	NNE7	NNE9	NE9	ENE7	NE7	NE9	NNE12	NE7.1	ENE14
21-Jun	NNE13	NE12	NE11	NNE12	NE10	NE11	NE9	NE10	NE11	NE12	ENE14	ENE14	E18	E16	E16	E15	ENE15	ENE15	E11	NE5	NNE5	ENE2	SSW5	SW7	ENE9.5	E18
22-Jun	SW5	WSW6	W9	WNW9	WNW6	NW7	NW7	NW8	NNE10	NE12	ENE12	ENE9	ENE10	E13	ENE9	ESE9	SE8	WSW9	WSW11	W8	SSE5	W10	W5	W4	NW1.3	E13
23-Jun	W7	WNW6	WNW7	WNW8	WNW5	WNW6	WNW6	WNW5	WNW6	W4	WNW4	SSW6	SW10	SW6	SSE6	WSW4	N10	W11	SSW4	S8	SSW9	SSW8	SSW9	SSW9	WSW4.6	W11
24-Jun	SSW10	SSW11	SW10	SW11	SW10	SW10	SW11	SW9	SW6	SSW4	SE8	SSW4	ESE11	ESE16	SE12	SSE9	SSE13	SSE13	SSE13	SSE11	S8	S10	SSE12	SSE14	S8.2	ESE16
25-Jun	S13	S12	S12	S12	S12	S12	S13	S13	SSW14	S14	S16	S16	S14	S14	SSE13	SSE16	S14	SSE18	SSE16	SSE15	SSE10	SE11	SE13	SE13	S13.2	SSE18
26-Jun	SE13	SSE13	SSE13	SSE14	SSE13	SE13	SE14	SE15	SE17	SE18	SSE17	SSE18	SE20	SE19	SSE18	SE17	SE20	SE17	SE18	SE15	SE11	SE10	ESE10	ESE12	SE15.0	SE20
27-Jun	ESE13	ESE13	E12	ESE13	E13	ESE14	E14	ESE18	ESE21	ESE21	ESE24	E23	ESE29	ESE24	ESE22	E21	ESE20	ESE16	ESE12	ESE10	E6	ESE6	ENE4	NNE5	ESE15.2	ESE29
28-Jun	NE5	NNE6	NE6	NE8	NE8	NE11	ENE14	ENE19	ENE25	ENE26	ENE27	ENE28	ENE27	ENE27	ENE27	ENE25	ENE20	ENE22	ENE22	ENE17	NE11	NNE9	NNE9	NNE6	ENE16.6	ENE28
29-Jun	N6	N6	N6	N6	N8	N9	NNE6	NNE9	NNE10	NE11	NE13	NS16	NSC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	----	--16
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	----	----
	NW2.4	NW2.5	NW2.8	NW3.1	WNW2.7	NW2.9	NNW3.7	N3.6	N4.0	N3.7	NNE4.3	N4.2	NE3.6	NNE1.8	N3.0	NNE3.3	N3.2	NNW2.6	NNW2.0	N1.9	NNW0.9	NW1.3	NW2.3	NW2.3	Diurnal Average	
	NNE22	NE21	NNE25	NNE24	NNE23	NNE23	NNE23	W24	W26	WSW27	W27	ENE28	ESE29	W27	W29	ENE25	NNE22	W29	W27	NNE26	NNE26	NNE26	NNE24	NNE25	Diurnal Maximum	

C - Calibration NS - Not in Service

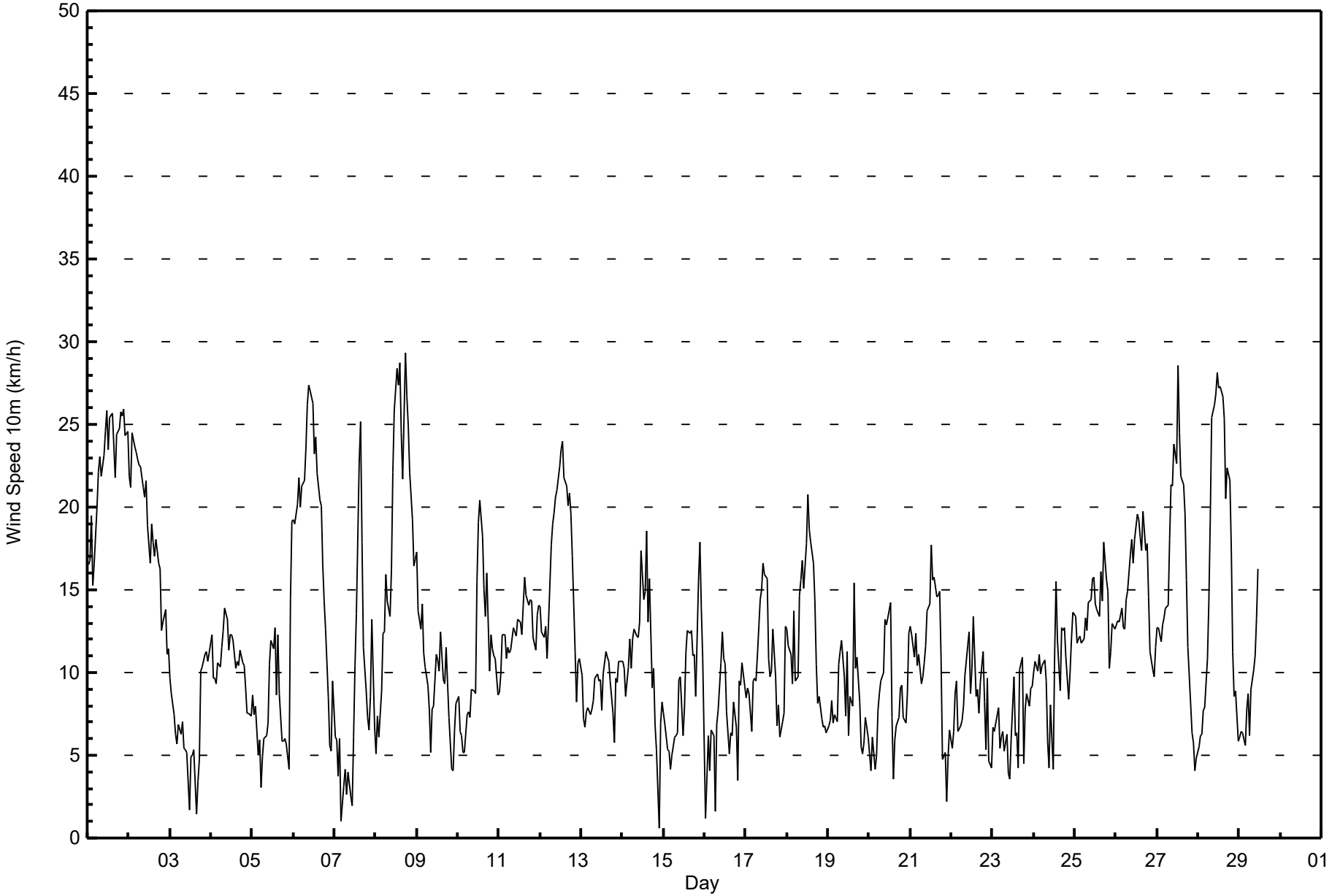
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Speed 10m (WS10) - km/h

Kirby South - June 2026



Wind Speed Ranges (km/h)	Number of Hours	%	Cumulative %
0 - 5	66	9.65	9.65
6 - 11	317	46.35	55.99
12 - 19	208	30.41	86.40
20 - 28	90	13.16	99.56
29 - 38	3	0.44	100.00
> 38	0	0.00	100.00

Total Number of Valid Hours: 684

Total Number of Hours: 720

Wood Buffalo Environmental Association

Frequency Distribution

Wind Speed 10m (WS10) - km/h

Kirby South - June 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	7	6	3	2	2	3	0	8	2	5	8	9	2	3	66
6 - 11	37	21	28	16	7	11	9	5	12	29	24	9	16	38	31	24	317
12 - 19	24	14	9	13	8	9	15	18	18	8	2	9	17	15	5	23	207
20 - 28	14	23	5	11	2	6	4	0	0	0	0	9	14	1	0	1	90
29 - 38	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	3
> 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	78	61	49	46	20	29	30	26	30	45	28	32	57	63	38	51	683

Total Number of Valid Hours: 683

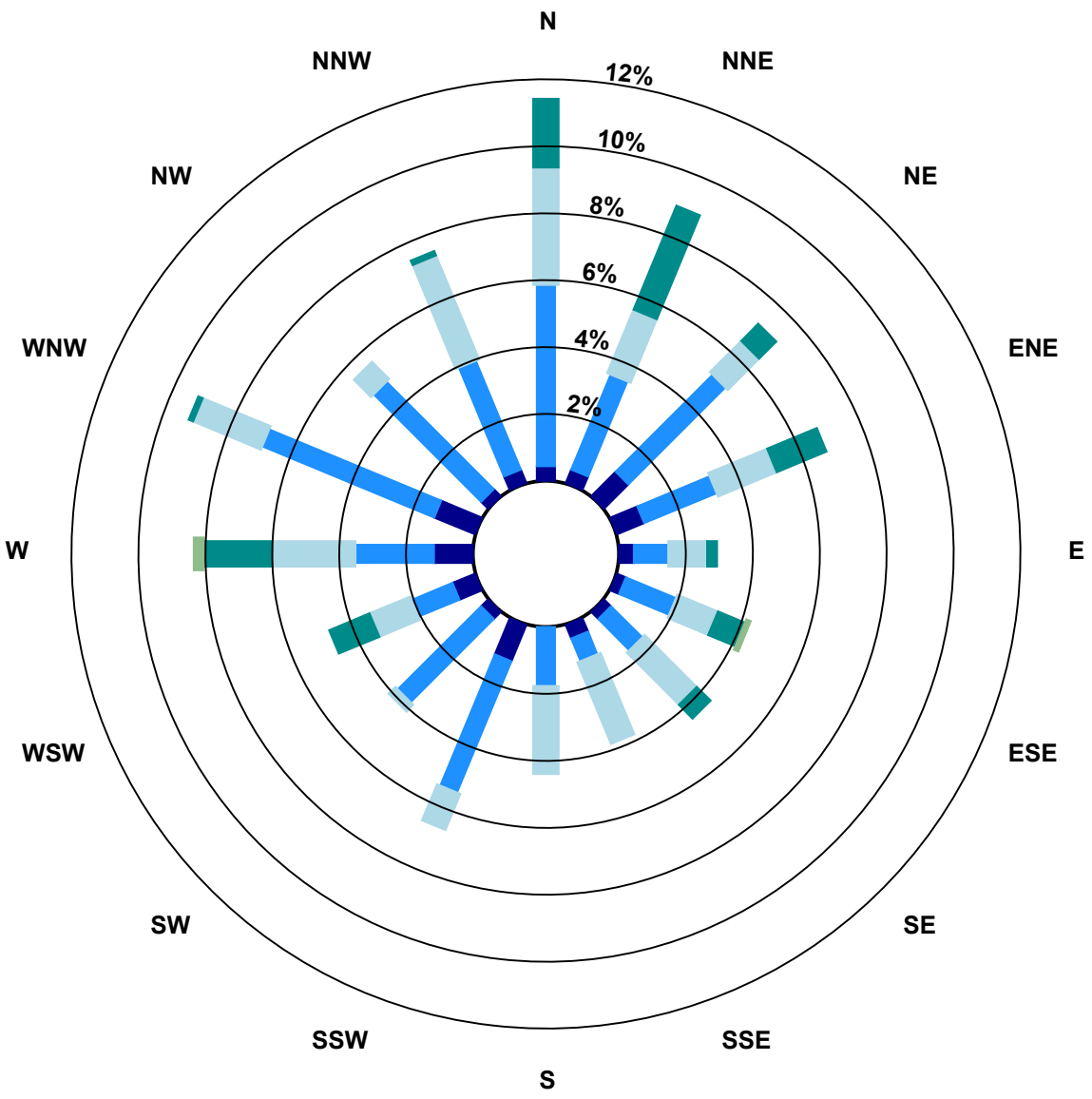
Total Number of Hours: 720

Wood Buffalo Environmental Association

Wind Rose Jun 2026

Wind Speed 10m (WS10) - km/h

Kirby South



Classes (km/h)

0 - 5

6 - 11

12 - 19

20 - 28

29 - 38

> 38

Total Number of Valid Hours: 683

Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Speed 10m (WS10) - km/h

Kirby South - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10 km/h on Jun 8 18:00

Minimum Value: 1 km/h on Jun 27 23:00

Percentiles: P_1 = 1 P_{10} = 1 Q_1 = 2 Median = 3 Q_3 = 4 P_{90} = 6 P_{99} = 7

Hours in Service:	685
Hours of Data:	684
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-Jun	4	5	5	4	5	5	6	5	6	6	6	6	6	6	6	6	6	6	6	7	6	6	6	6	7
2-Jun	6	6	5	5	6	5	5	5	5	5	5	5	4	4	4	4	4	4	3	3	3	3	3	2	6
3-Jun	3	2	2	1	1	2	2	2	2	2	2	2	3	2	2	2	2	3	3	3	3	3	3	3	3
4-Jun	3	2	3	2	3	3	3	4	3	3	3	3	3	4	3	3	3	3	3	2	1	1	1	1	4
5-Jun	1	1	1	2	1	2	1	1	1	2	3	5	4	4	4	3	2	3	1	2	2	3	4	4	5
6-Jun	4	4	4	5	4	5	5	6	6	7	6	6	6	6	5	5	7	4	4	4	2	2	2	2	7
7-Jun	2	1	1	1	2	2	1	1	2	2	2	3	4	4	7	6	5	3	2	3	2	2	3	2	7
8-Jun	2	2	1	2	3	3	4	3	4	3	5	5	6	6	6	5	5	10	5	6	5	4	3	3	10
9-Jun	3	4	3	2	2	2	2	2	2	2	4	4	4	3	4	4	3	3	2	1	2	2	1	2	4
10-Jun	2	2	3	2	2	2	2	3	3	2	5	5	6	5	5	4	4	5	4	4	4	3	3	2	6
11-Jun	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	5	4	4	4	4	4	3	4	3	5
12-Jun	4	3	3	3	3	4	4	5	5	5	6	7	6	6	6	6	5	6	6	5	3	2	2	2	7
13-Jun	2	2	1	1	1	1	2	2	3	4	4	4	4	5	4	4	3	3	2	2	3	1	1	1	5
14-Jun	1	1	2	2	2	2	2	2	3	3	5	5	4	5	7	8	6	3	3	6	2	3	1	2	8
15-Jun	1	1	1	1	1	1	2	2	2	4	6	3	5	5	5	4	3	4	2	2	8	4	3	4	8
16-Jun	1	1	1	2	2	2	2	2	2	3	4	3	3	3	2	4	2	2	3	3	2	2	2	2	4
17-Jun	2	2	2	1	2	2	2	3	4	5	5	4	5	4	4	4	3	3	2	3	1	1	2	4	5
18-Jun	3	3	3	3	2	2	3	4	3	3	3	7	5	5	6	5	4	3	3	5	3	1	1	1	7
19-Jun	1	1	1	1	1	1	2	3	3	3	4	7	2	3	3	4	2	2	2	2	1	3	2	1	7
20-Jun	1	1	1	1	2	1	2	2	3	4	4	3	4	3	4	2	2	2	2	2	1	1	2	3	4
21-Jun	2	3	2	3	2	2	2	2	2	3	3	5	4	4	4	4	4	4	3	1	1	3	3	1	5
22-Jun	1	1	2	2	2	2	2	2	2	4	3	3	6	4	4	5	3	3	2	2	3	4	2	2	6
23-Jun	1	2	2	1	2	2	2	1	2	3	2	2	3	4	3	4	7	5	2	2	2	1	1	1	7
24-Jun	1	2	1	1	2	2	2	2	2	2	4	5	3	3	3	3	3	3	4	4	1	2	2	3	5
25-Jun	3	2	2	2	2	3	3	3	4	4	4	4	5	4	5	4	5	5	4	4	2	2	3	2	5
26-Jun	2	3	3	3	2	3	3	4	4	5	5	5	5	6	5	5	5	5	5	5	3	2	2	3	6
27-Jun	3	3	2	3	3	3	3	5	6	6	6	6	7	6	6	6	5	5	3	3	2	2	1	1	7
28-Jun	2	2	1	1	2	2	4	5	6	7	8	7	7	7	7	7	6	6	6	5	3	1	2	1	8
29-Jun	1	1	1	2	2	2	2	2	2	3	4	4	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
	6	6	5	5	6	5	6	6	6	7	8	7	7	7	7	8	7	10	6	7	8	6	6	6	
	Diurnal Maximum																								

C - Calibration NS - Not in Service

Wood Buffalo Environmental Association

Summary of Hour Averages

Wind Direction 10m (WD10) - deg

Kirby South - June 2026

Direction of Maximum Speed: 272 deg on Jun 8 18:00
Direction of Maximum Daily Speed Average: 14.9 deg on Jun 1

Direction of Minimum Speed: 80 deg on Jun 14 22:00
Direction of Minimum Daily Speed Average: 1.3 deg on Jun 22

Monthly Average Direction: 349.6 deg

Hours in Service:	683
Hours of Data:	683
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-Jun	359	355	5	1	360	2	5	13	16	15	20	14	15	17	22	18	18	18	17	22	22	24	24	26	14.9
2-Jun	33	34	29	29	33	33	32	37	37	40	38	34	31	23	31	35	27	25	27	35	32	35	38	36	32.7
3-Jun	37	29	42	53	55	60	64	95	75	88	108	103	132	200	243	52	65	144	94	92	123	132	152	170	97.3
4-Jun	184	188	184	199	208	197	193	207	212	197	198	188	198	186	184	188	203	200	196	198	201	177	199	192	195.3
5-Jun	204	204	208	196	207	167	159	130	112	129	174	178	183	212	323	12	42	62	63	57	111	274	289	283	195.6
6-Jun	280	273	271	268	250	242	257	260	262	253	264	257	255	254	266	265	274	266	270	294	298	269	241	255	263.0
7-Jun	277	281	287	294	253	297	287	34	49	268	359	54	119	146	140	138	160	175	218	195	131	193	290	312	171.8
8-Jun	252	306	287	284	263	255	279	277	262	281	285	279	278	272	270	276	280	272	268	257	243	245	239	238	268.3
9-Jun	254	252	255	263	271	301	319	299	322	303	290	273	259	287	285	301	300	286	280	285	276	331	325	348	284.2
10-Jun	360	40	351	347	349	320	349	13	1	5	2	342	341	340	341	3	353	335	349	22	359	0	350	351	352.1
11-Jun	354	342	331	327	335	338	345	340	334	327	330	341	344	346	354	350	351	341	345	347	348	346	356	1	343.4
12-Jun	1	5	355	357	340	339	336	352	352	351	352	349	357	357	351	358	353	358	355	358	6	358	1	2	353.9
13-Jun	5	346	337	335	317	310	328	325	345	326	326	334	346	287	280	290	288	319	301	286	229	222	221	221	304.3
14-Jun	224	220	224	227	234	248	268	270	293	298	294	300	314	323	342	6	356	325	346	25	283	80	231	243	292.5
15-Jun	280	308	308	302	285	279	322	7	1	344	342	310	305	291	295	277	237	249	231	219	238	266	283	282	282.9
16-Jun	335	192	209	199	194	239	51	76	75	66	70	74	74	117	83	31	321	311	300	271	270	285	315	325	16.8
17-Jun	1	20	14	8	6	12	11	11	10	358	13	19	36	29	8	355	8	359	338	345	326	340	339	316	4.5
18-Jun	324	323	321	302	270	253	290	278	280	272	288	337	350	354	341	334	346	15	14	358	352	320	310	295	319.5
19-Jun	286	286	282	285	285	293	313	312	294	307	318	3	106	209	221	230	218	210	235	264	0	43	53	86	281.1
20-Jun	78	58	89	29	38	42	63	50	71	77	63	65	63	169	214	9	8	31	31	42	59	54	36	27	53.9
21-Jun	25	43	47	31	38	34	38	52	51	55	73	72	91	91	79	84	71	67	81	54	19	63	210	214	62.2
22-Jun	221	242	279	289	291	306	308	322	12	51	63	64	76	85	64	102	146	237	250	270	157	269	274	263	325.0
23-Jun	267	294	288	294	288	288	300	288	301	279	294	195	225	227	150	253	349	267	210	188	200	205	198	206	250.4
24-Jun	210	213	216	217	219	221	223	234	214	197	126	208	108	110	140	165	161	164	158	165	186	170	160	168	178.0
25-Jun	174	179	179	174	171	173	181	182	195	191	182	170	182	184	167	164	169	168	165	164	154	145	143	142	171.2
26-Jun	142	149	151	154	149	137	139	135	129	140	147	150	141	139	147	141	127	129	136	134	133	125	115	120	138.4
27-Jun	121	115	100	110	101	102	98	108	114	109	104	101	112	119	107	99	110	104	104	107	91	107	59	27	106.0
28-Jun	38	25	37	37	44	47	57	61	63	65	62	63	62	58	59	64	65	57	62	61	52	19	23	22	56.8
29-Jun	8	0	1	2	350	356	22	22	16	49	45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
	322.7	325.7	322.2	313.2	303.2	320.2	337.3	355.0	5.2	10.2	18.6	10.4	36.2	17.4	3.4	15.0	8.3	338.5	347.0	9.0	347.4	319.8	315.6	307.6	
	Diurnal Average																								

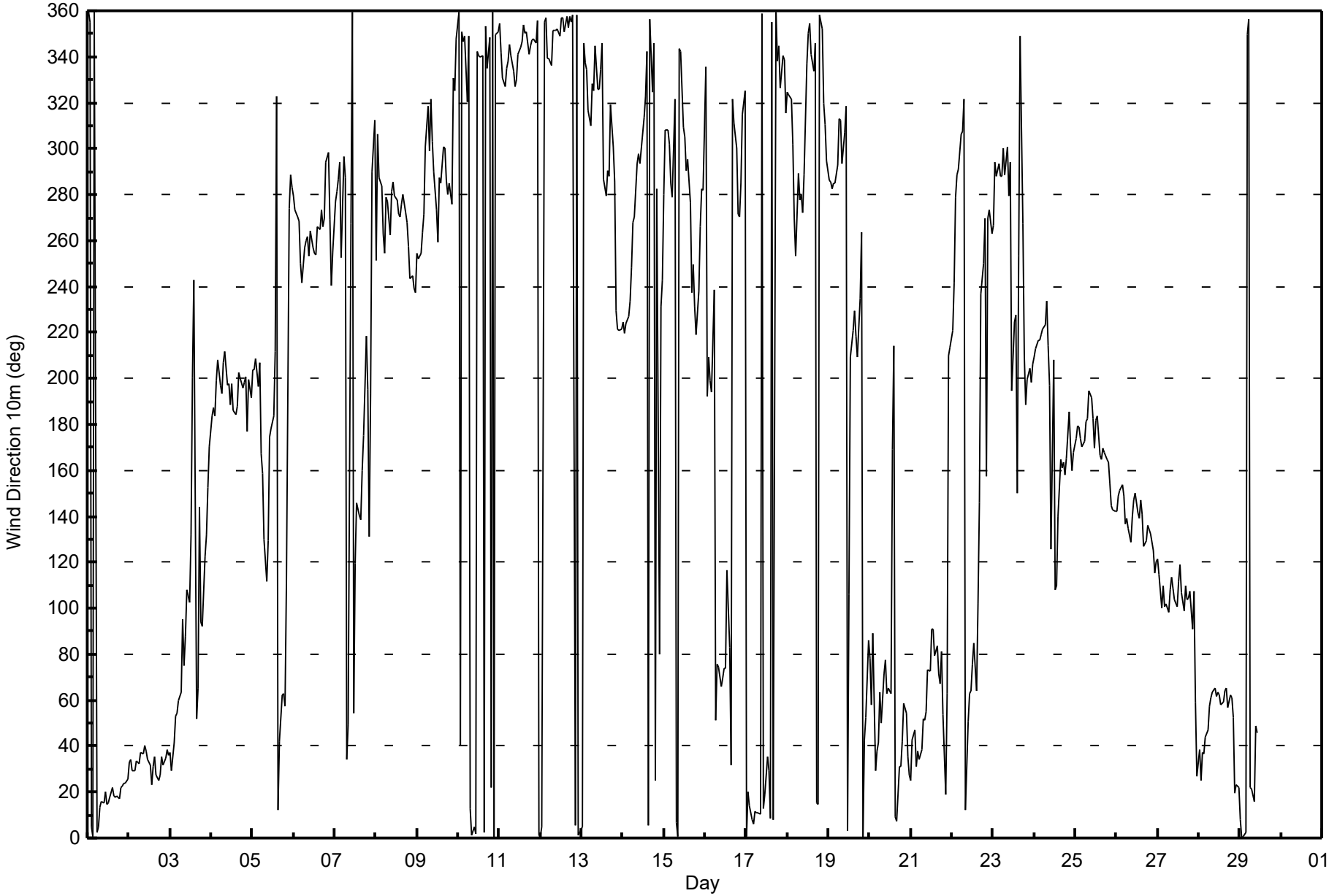
NS - Not in Service
All monthly, daily, and diurnal averages have been calculated using vector methods

Wood Buffalo Environmental Association

Hourly Averages

Wind Direction 10m (WD10) - deg

Kirby South - June 2026



Wood Buffalo Environmental Association

Summary of Hour Standard Deviations

Wind Direction 10m (WD10) - deg

Kirby South - June 2026

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 95 deg on Jun 3 16:00

Minimum Value: 6 deg on Jun 24 01:00

Percentiles: P_1 = 8 P_{10} = 12 Q_1 = 14 Median = 18 Q_3 = 23 P_{90} = 36 P_{99} = 79

Hours in Service:	683
Hours of Data:	683
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-Jun	17	21	17	17	18	18	17	16	15	16	15	16	16	14	15	15	15	14	14	13	13	13	13	14	21
2-Jun	14	14	13	12	13	13	13	14	14	14	14	15	16	13	16	16	13	15	14	16	13	13	13	13	16
3-Jun	13	15	15	16	18	20	23	25	41	34	45	94	65	59	60	95	69	46	17	23	13	16	14	17	95
4-Jun	18	18	17	17	17	17	20	17	19	21	23	23	26	28	29	28	25	18	16	14	12	16	10	10	29
5-Jun	11	12	9	13	19	70	16	21	17	26	19	19	19	30	51	17	21	63	20	25	42	77	23	12	77
6-Jun	11	12	11	11	17	12	15	15	15	15	16	18	17	19	18	19	24	17	24	27	14	28	22	21	28
7-Jun	26	17	15	18	75	47	26	63	66	90	84	51	34	26	21	16	25	27	32	42	19	27	24	23	90
8-Jun	32	20	18	30	11	20	12	16	21	12	13	11	11	11	11	12	13	12	12	17	12	13	11	12	32
9-Jun	15	14	16	9	11	15	21	28	62	34	43	31	35	25	23	56	33	19	12	11	34	43	22	19	62
10-Jun	16	22	24	16	20	19	18	23	27	18	36	20	21	23	19	19	21	20	22	16	18	18	18	18	36
11-Jun	17	17	16	14	17	16	17	17	17	20	21	19	19	22	20	19	18	18	18	17	17	19	18	17	22
12-Jun	16	17	16	17	17	19	18	18	19	20	20	22	21	21	20	22	21	20	18	17	14	15	14	15	22
13-Jun	15	18	14	11	18	16	17	23	28	34	36	38	60	50	28	34	27	25	22	26	15	10	8	8	60
14-Jun	8	8	9	7	8	16	10	9	21	27	28	26	20	25	30	24	29	23	18	38	20	92	19	20	92
15-Jun	14	14	17	13	16	20	35	31	40	30	53	66	72	31	33	27	23	23	15	11	22	12	13	14	72
16-Jun	84	40	17	59	15	25	73	17	16	15	16	17	20	16	23	26	36	26	46	87	13	13	13	15	87
17-Jun	17	9	11	13	12	12	18	22	23	21	20	23	19	24	38	34	22	24	22	25	17	18	23	14	38
18-Jun	13	15	18	30	13	20	23	11	13	13	19	24	21	20	21	21	21	24	16	18	21	15	14	14	30
19-Jun	9	12	8	10	10	15	17	22	22	28	58	40	51	37	34	24	20	17	20	30	17	20	17	22	58
20-Jun	28	22	13	24	11	16	13	15	21	20	20	20	19	55	76	20	20	33	24	14	19	15	13	11	76
21-Jun	12	14	15	12	14	12	15	16	14	15	15	18	17	17	16	18	17	15	16	22	13	72	43	21	72
22-Jun	19	22	13	19	14	19	16	27	22	27	22	35	44	22	44	50	27	31	12	19	67	13	36	31	67
23-Jun	22	8	7	10	16	12	18	24	32	71	62	33	39	79	53	76	53	28	58	27	13	8	7	7	79
24-Jun	6	9	9	8	9	9	11	19	28	56	43	68	14	19	27	33	20	22	16	14	11	12	12	13	68
25-Jun	13	13	12	12	13	15	16	18	19	24	25	23	27	32	30	17	24	20	19	15	14	11	12	12	32
26-Jun	12	12	12	13	12	13	13	15	19	20	19	25	18	19	19	20	20	18	17	15	13	11	12	13	25
27-Jun	14	14	13	13	14	14	15	14	15	16	15	16	16	15	19	19	16	15	16	15	17	23	12	13	23
28-Jun	18	14	17	11	13	14	15	15	16	17	17	16	18	18	18	17	21	17	16	15	13	11	14	16	21
29-Jun	12	14	14	15	15	18	30	17	18	25	24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	30
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
	84	40	24	59	75	70	73	63	66	90	84	94	72	79	76	95	69	63	58	87	67	92	43	31	
	Diurnal Maximum																								

NS - Not in Service

Appendix 1 - Summary of Ambient Air Quality Objectives (AAAQOs) and Ambient Air Quality Guidelines (AAAQGs) in June 2026

Site	Paramter	Date/Time	Reference	Period	Reported	Final	Status
Fort Hills	$PM_{2.5}$	14Jun26, 22:00		1-hr	178	178.3	exc
Fort Hills	$PM_{2.5}$	14Jun26, 23:00		1-hr	108	107.8	exc
Fort Hills	$PM_{2.5}$	14Jun26, 24:00	455640	24-hr	30	29.5	exc
Fort Hills	$PM_{2.5}$	17Jun26, 21:00		1-hr	95	94.9	exc
Fort Hills	$PM_{2.5}$	17Jun26, 22:00		1-hr	92	91.5	exc
Fort Hills	$PM_{2.5}$	17Jun26, 23:00		1-hr	81	81.4	exc
Fort Hills	$PM_{2.5}$	17Jun26, 24:00	455640	24-hr	35	34.9	exc
Fort Hills	$PM_{2.5}$	18Jun26, 04:00		1-hr	158	157.9	exc
Fort Hills	$PM_{2.5}$	18Jun26, 05:00		1-hr	127	127.5	exc
Fort Hills	$PM_{2.5}$	26Jun26, 05:00		1-hr	152	152.4	exc
Fort Hills	$PM_{2.5}$	27Jun26, 04:00		1-hr	128	128.1	exc
Fort Hills	$PM_{2.5}$	27Jun26, 05:00		1-hr	224	224.4	exc
Fort Hills	$PM_{2.5}$	27Jun26, 06:00		1-hr	168	168.1	exc
Fort Hills	$PM_{2.5}$	27Jun26, 07:00		1-hr	112	112.2	exc
Fort Hills	$PM_{2.5}$	27Jun26, 24:00	455640	24-hr	48	47.7	exc
Anzac	$PM_{2.5}$	28Jun26, 21:00		1-hr	83	82.9	exc
Anzac	$PM_{2.5}$	28Jun26, 22:00		1-hr	84	84.1	exc
Anzac	$PM_{2.5}$	28Jun26, 23:00		1-hr	96	96.2	exc
Anzac	$PM_{2.5}$	28Jun26, 24:00		1-hr	91	90.8	exc
Anzac	$PM_{2.5}$	28Jun26, 24:00	455641	24-hr	33	33.2	exc
Buffalo Viewpoint	$PM_{2.5}$	28Jun26, 24:00	455642	24-hr	35	34.8	exc
Patricia McInnes	SO_2	29Jun26, 03:00	455303	1-hr	358	358.9	exc
Patricia McInnes	SO_2	29Jun26, 04:00	455303	1-hr	340	340.4	exc
Patricia McInnes	SO_2	29Jun26, 05:00	455303	1-hr	189	189.7	exc
Patricia McInnes	SO_2	29Jun26, 06:00	455306	1-hr	189	189.6	exc
Patricia McInnes	SO_2	29Jun26, 07:00	455310	1-hr	178	178.0	exc
Mackay River	SO_2	29Jun26, 07:00	455311	1-hr	704	705.0	exc
Mackay River	SO_2	29Jun26, 08:00	455315	1-hr	1146	1146.1	exc
Mackay River	SO_2	29Jun26, 09:00	455992	1-hr	851	851.5	exc
Mackay River	SO_2	29Jun26, 10:00	455334	1-hr	475	475.0	exc
Wapasu	$PM_{2.5}$	29Jun26, 11:00		1-hr	81	81.2	exc
Bertha Ganter	$PM_{2.5}$	29Jun26, 12:00		1-hr	80	80.2	exc
Buffalo Viewpoint	$PM_{2.5}$	29Jun26, 12:00		1-hr	83	82.7	exc
Barge Landing	$PM_{2.5}$	29Jun26, 12:00		1-hr	98	97.9	exc
Stony Mtn.	$PM_{2.5}$	29Jun26, 12:00		1-hr	94	94.1	exc
Conklin	$PM_{2.5}$	29Jun26, 12:00		1-hr	85	84.6	exc
Ells River	$PM_{2.5}$	29Jun26, 12:00		1-hr	105	105.0	exc
Bertha Ganter	$PM_{2.5}$	29Jun26, 13:00		1-hr	90	90.1	exc
Buffalo Viewpoint	$PM_{2.5}$	29Jun26, 13:00		1-hr	85	85.0	exc
Barge Landing	$PM_{2.5}$	29Jun26, 13:00		1-hr	106	105.7	exc
Ft. McKay S	$PM_{2.5}$	29Jun26, 13:00		1-hr	89	89.3	exc
Ells River	$PM_{2.5}$	29Jun26, 13:00		1-hr	90	89.7	exc
Bertha Ganter	$PM_{2.5}$	29Jun26, 14:00		1-hr	82	82.3	exc
Buffalo Viewpoint	$PM_{2.5}$	29Jun26, 14:00		1-hr	90	89.9	exc
Barge Landing	$PM_{2.5}$	29Jun26, 14:00		1-hr	91	90.7	exc

Site	Paramter	Date/Time	Reference	Period	Reported	Final	Status
Buffalo Viewpoint	$PM_{2.5}$	29Jun26, 15:00		1-hr	94	94.4	exc
Buffalo Viewpoint	$PM_{2.5}$	29Jun26, 19:00		1-hr	91	90.8	exc
Barge Landing	$PM_{2.5}$	29Jun26, 19:00		1-hr	94	94.1	exc
Buffalo Viewpoint	$PM_{2.5}$	29Jun26, 20:00		1-hr	91	91.2	exc
Barge Landing	$PM_{2.5}$	29Jun26, 20:00		1-hr	100	100.4	exc
Ft. McKay S	$PM_{2.5}$	29Jun26, 20:00		1-hr	83	82.7	exc
Fort Hills	$PM_{2.5}$	29Jun26, 20:00		1-hr	89	89.1	exc
Buffalo Viewpoint	$PM_{2.5}$	29Jun26, 21:00		1-hr	90	89.9	exc
Barge Landing	$PM_{2.5}$	29Jun26, 21:00		1-hr	110	109.6	exc
Ft. McKay S	$PM_{2.5}$	29Jun26, 21:00		1-hr	82	81.6	exc
Fort Hills	$PM_{2.5}$	29Jun26, 21:00		1-hr	98	97.6	exc
Bertha Ganter	$PM_{2.5}$	29Jun26, 22:00		1-hr	82	82.0	exc
Buffalo Viewpoint	$PM_{2.5}$	29Jun26, 22:00		1-hr	84	84.4	exc
Barge Landing	$PM_{2.5}$	29Jun26, 22:00		1-hr	104	104.0	exc
Ft. McKay S	$PM_{2.5}$	29Jun26, 22:00		1-hr	82	82.1	exc
Fort Hills	$PM_{2.5}$	29Jun26, 22:00		1-hr	88	87.6	exc
Buffalo Viewpoint	$PM_{2.5}$	29Jun26, 23:00		1-hr	82	81.7	exc
Barge Landing	$PM_{2.5}$	29Jun26, 23:00		1-hr	95	94.9	exc
Fort Hills	$PM_{2.5}$	29Jun26, 23:00		1-hr	93	93.3	exc
Bertha Ganter	$PM_{2.5}$	29Jun26, 24:00	455643	24-hr	51	50.9	exc
Buffalo Viewpoint	$PM_{2.5}$	29Jun26, 24:00	455642	24-hr	65	65.0	exc
Patricia McInnes	$PM_{2.5}$	29Jun26, 24:00	455644	24-hr	53	53.1	exc
Patricia McInnes	SO_2	29Jun26, 24:00	455372	24-hr	61	61.9	exc
Athabasca Valley	$PM_{2.5}$	29Jun26, 24:00	455645	24-hr	58	58.1	exc
Fort Chip	$PM_{2.5}$	29Jun26, 24:00	455646	24-hr	43	42.8	exc
Barge Landing	$PM_{2.5}$	29Jun26, 24:00		1-hr	81	80.9	exc
Barge Landing	$PM_{2.5}$	29Jun26, 24:00	455647	24-hr	62	61.9	exc
Ft. McKay S	$PM_{2.5}$	29Jun26, 24:00		1-hr	84	83.8	exc
Ft. McKay S	$PM_{2.5}$	29Jun26, 24:00	455648	24-hr	50	50.0	exc
Anzac	$PM_{2.5}$	29Jun26, 24:00	455641	24-hr	56	55.7	exc
Wapasu	$PM_{2.5}$	29Jun26, 24:00	455649	24-hr	52	51.6	exc
Stony Mtn.	$PM_{2.5}$	29Jun26, 24:00	455650	24-hr	29	-	ret
Mackay River	SO_2	29Jun26, 24:00	455373	24-hr	139	140.1	exc
Conklin	$PM_{2.5}$	29Jun26, 24:00	455651	24-hr	52	51.8	exc
Janvier	$PM_{2.5}$	29Jun26, 24:00	455652	24-hr	30	-	ret
Fort Hills	$PM_{2.5}$	29Jun26, 24:00		1-hr	122	122.1	exc
Surmont 2	$PM_{2.5}$	29Jun26, 24:00	455653	24-hr	56	56.3	exc
Ells River	$PM_{2.5}$	29Jun26, 24:00	455654	24-hr	44	43.6	exc

Site	Paramter	Date/Time	Reference	Period	Reported	Final	Status
Buffalo Viewpoint	$PM_{2.5}$	30Jun26, 01:00		1-hr	85	85.4	exc
Barge Landing	$PM_{2.5}$	30Jun26, 01:00		1-hr	83	82.7	exc
Ft. McKay S	$PM_{2.5}$	30Jun26, 01:00		1-hr	100	100.4	exc
Fort Hills	$PM_{2.5}$	30Jun26, 01:00		1-hr	110	110.3	exc
Ells River	$PM_{2.5}$	30Jun26, 01:00		1-hr	81	81.0	exc
Buffalo Viewpoint	$PM_{2.5}$	30Jun26, 02:00		1-hr	81	81.0	exc
Ft. McKay S	$PM_{2.5}$	30Jun26, 02:00		1-hr	84	83.9	exc
Fort Hills	$PM_{2.5}$	30Jun26, 02:00		1-hr	99	98.6	exc
Buffalo Viewpoint	$PM_{2.5}$	30Jun26, 03:00		1-hr	81	80.9	exc
Fort Hills	$PM_{2.5}$	30Jun26, 03:00		1-hr	112	112.2	exc
Fort Hills	$PM_{2.5}$	30Jun26, 04:00		1-hr	93	93.2	exc
Fort Hills	$PM_{2.5}$	30Jun26, 05:00		1-hr	280	280.1	exc
Fort Hills	$PM_{2.5}$	30Jun26, 06:00		1-hr	155	155.3	exc
Fort Hills	$PM_{2.5}$	30Jun26, 07:00		1-hr	84	83.8	exc
Fort Hills	$PM_{2.5}$	30Jun26, 08:00		1-hr	88	88.5	exc
Fort Hills	$PM_{2.5}$	30Jun26, 09:00		1-hr	88	87.8	exc
Fort Hills	$PM_{2.5}$	30Jun26, 10:00		1-hr	85	84.7	exc
Buffalo Viewpoint	$PM_{2.5}$	30Jun26, 13:00		1-hr	81	80.7	exc
Buffalo Viewpoint	$PM_{2.5}$	30Jun26, 14:00		1-hr	85	84.6	exc
Buffalo Viewpoint	$PM_{2.5}$	30Jun26, 15:00		1-hr	89	89.4	exc
Buffalo Viewpoint	$PM_{2.5}$	30Jun26, 22:00		1-hr	91	91.3	exc
Patricia McInnes	$PM_{2.5}$	30Jun26, 22:00		1-hr	82	81.7	exc
Buffalo Viewpoint	$PM_{2.5}$	30Jun26, 23:00		1-hr	91	90.7	exc
Athabasca Valley	$PM_{2.5}$	30Jun26, 23:00		1-hr	96	96.2	exc
Bertha Ganter	$PM_{2.5}$	30Jun26, 24:00	455643	24-hr	48	48.0	exc
Buffalo Viewpoint	$PM_{2.5}$	30Jun26, 24:00		1-hr	94	93.6	exc
Buffalo Viewpoint	$PM_{2.5}$	30Jun26, 24:00	455642	24-hr	70	70.1	exc
Patricia McInnes	$PM_{2.5}$	30Jun26, 24:00	455644	24-hr	54	54.0	exc
Athabasca Valley	$PM_{2.5}$	30Jun26, 24:00	455645	24-hr	55	55.5	exc
Fort Chip	$PM_{2.5}$	30Jun26, 24:00	455646	24-hr	52	52.4	exc
Barge Landing	$PM_{2.5}$	30Jun26, 24:00	455647	24-hr	58	57.6	exc
Ft. McKay S	$PM_{2.5}$	30Jun26, 24:00	455648	24-hr	57	57.2	exc
Anzac	$PM_{2.5}$	30Jun26, 24:00	455641	24-hr	40	39.8	exc
Wapasu	$PM_{2.5}$	30Jun26, 24:00	455649	24-hr	37	37.5	exc
Conklin	$PM_{2.5}$	30Jun26, 24:00	455651	24-hr	44	44.0	exc
Fort Hills	$PM_{2.5}$	30Jun26, 24:00	455640	24-hr	81	81.4	exc
Surmont 2	$PM_{2.5}$	30Jun26, 24:00	455653	24-hr	40	40.5	exc
Ft. McKay S	$PM_{2.5}$	29Jun26, 14:00		1-hr	80.4	80.4	late

Site	Paramter	Date/Time	Reference	Period	Reported	Final	Status

*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

July 30, 2026
9:19:43 AM
Request # 4956850

Submitted by: EN6138_PARAM_KAUR
Submission Date: Jul 30, 2026 9:19:17 AM

File Type	File Name
Ambient Data	AMB-WBEA-202606-V00.xml

Total Number of Files: 1

*** End of Report ***

ELECTRONIC TRANSFER SYSTEM
AIRDATA
SUBMISSION REPORT

July 30, 2026
9:24:23 AM
Request # 4956856

Submitted by: EN6138_PARAM_KAUR
Submission Date: Jul 30, 2026 9:24:15 AM

File Type	File Name
Airshed Monitoring Report	WBEA-202606.pdf

Total Number of Files: 1

*** End of Report ***

ELECTRONIC TRANSFER SYSTEM
AIRDATA
SUBMISSION REPORT

July 30, 2026
9:25:16 AM
Request # 4956858

Submitted by: EN6138_PARAM_KAUR
Submission Date: Jul 30, 2026 9:25:08 AM

File Type	File Name
Calibration Report	CAL-WBEA-202606.pdf

Total Number of Files: 1

*** End of Report ***



End of Report