Peace River Area Monitoring Program

AUGUST 2023

Monthly Ambient Air Quality Monitoring Report

PRAMP-202308

Operation and Maintenance:
Bureau Veritas Canada

Data Validation and Report:
Peace River Area Monitoring Program

September 20, 2023

Pages may be left blank for double-sided printing

Table of Contents

LIST OF ACRONYMS 4

COVER LETTER 5

NETWORK STATION SUMMARY 6

Listing of Continuous Monitoring Stations 6

Listing of Intermittent Monitoring Stations 6

Listing of PRAMP member with EPEA Facility Operating Approval 6

Calibration and Data Submission 6

Monitoring Notes during the Month of August 2023 7

986-C Station 7

842-B Station 7

Reno-B Station 7

PRC Station 7

AQHI – Grimshaw Station 7

VOCs Canister Sampling Program 10

Revisions to Alberta's Ambient Air Quality Data Warehouse 11

Deviations from Authorized Monitoring Methods 11

Disclaimer 11

Certification 12

Map of PRAMP Continuous Monitoring Network 13

CONTINUOUS NETWORK EQUIPMENT AND MONITORING RESULTS SUMMARY 14

986 -C Station 15

842-B Station 19

Reno-B Station 24

PRC Station 28

AQHI – Grimshaw Station 32

TABLES, CHARTS AND WIND ROSES 40

986-C STATION 41

842-B STATION 61

RENO -B STATION 81

PRC STATION 101

AQHI GRIMSHAW STATION 122

END OF REPORT 152

LIST OF ACRONYMS

AAAQOs	Alberta Ambient Air Quality Objectives
AEP	Alberta Environment and Parks
AMD	Air Monitoring Directive
AT	Ambient Temperature
BP	Barometric Pressure
CH4	Methane
EPEA	Environmental Protection and Enhancement Act
H2S	Hydrogen Sulphide
kph	kilometers per hour
mb	millibar
mm	millimeter
NMHC	Non-Methane Hydrocarbons
ppb	parts per billion
ppm	parts per million
PRAMP	Peace River Area Monitoring Program
RH	Relative Humidity
SO2	Sulphur Dioxide
ST	Station Temperature
THC	Total Hydrocarbons
TRS	Total Reduced Sulphur
VWD	Vector Wind Direction
VWS	Vector Wind Speed
WD	Wind Direction
WS	Wind Speed
°C	Degrees Celsius

Peace River Area Monitoring Program
Suite 91, 305 – 4625 Varity Drive NW
Calgary, AB, T3A 0Z9
Phone #: 780-226-7068 / 587-225-2248
E-mail: pramptech@prampairshed.ca
www.prampairshed.ca

Alberta Environment and Protected Areas (EPA)
11th Floor, Oxbridge Place
9820 106 Street
Edmonton, AB, T5K 2J6

September 20, 2023

RE: PRAMP – August 2023 Monthly Ambient Air Quality Monitoring Report

Enclosed is the August 2023 Monthly Ambient Air Quality Monitoring Report for the continuous ambient air quality monitoring stations of the Peace River Area Monitoring Program (PRAMP) regional air quality monitoring network.

The representative of the Person Responsible for this monitoring program is

PRAMP Airshed
Michael Bisaga / Lily Lin, Technical Program Managers
Suite 91, 305 – 4625 Varity Drive NW
Calgary, AB, T3A 0Z9
Phone #: 780-226-7068 / 587-225-2248
E-mail: pramptech@prampairshed.ca

This report has been prepared, review and submitted by Michael Bisaga & Lily Lin of the PRAMP Airshed. This report is also submitted on behalf of the industrial member companies to satisfy the requirements of the facility operating approvals.

PRAMP Airshed has retained the services of Bureau Veritas Canada to conduct continuous ambient monitoring on its behalf.

NETWORK STATION SUMMARY

Listing of Continuous Monitoring Stations

The PRAMP continuous ambient air quality monitoring network stations are:

- 986-C Station
- 842-B Station
- Reno-B Station
- AQHI Grimshaw
- Peace River Complex (PRC) Station

Station ID	Station Name	Latitude	Longitude
1562	986-C	56.36980	-116.92500
1561	842-B	56.27406	-116.98129
1563	Reno-B	55.890868	-117.137080
1689	AQHI-Grimshaw	56.18657	-117.604994
1698	PRC	56.38257	-116.769283

Listing of Intermittent Monitoring Stations

- VOC Canister Sampling Station
    - 986-C Station
    - 842-B Station
    - Reno-B Station

Listing of PRAMP member with EPEA Facility Operating Approval

Company	Facility	Approval No.
Canadian Natural Upgrading Limited	Peace River Complex	1642-03-00

Calibration and Data Submission

Hourly data and calibration reports for August 2023 were submitted to Alberta's Ambient Air Data Warehouse through ETS for the 986-C station, 842-B station, Reno-B station, PRC station and AQHI-Grimshaw station.

Monitoring Notes during the Month of August 2023

986-C Station

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.
- All data collected this month were compliant with the requirements outlined in the AMD 2016.
- All parameters met the 90% operational uptime requirement.
- No major operational issues were recorded this month.

842-B Station

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.
- All data collected this month were compliant with the requirements outlined in the AMD 2016.
- All parameters met the 90% operational uptime requirement, except BP (61.7%).
- **All parameters:** The PRAMP's Envista Ultimate datalogger, s/n: 510, failed on August 9 due to a major hardware failure. The logger was replaced with the BV's Envista Ultimate datalogger, s/n: AC1400000208, on August 10. The system was back online on August 11. Forty-one hours of downtime were recorded.
- **BP:** Due to a configuration error dating back to the urgent logger swap on August 10, data collected between August 11 hour 12 and August 21 hour 6 were invalid and were discarded. Two hundred thirty-five hours of downtime were recorded.

Reno-B Station

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.
- All data collected this month were compliant with the requirements outlined in the AMD 2016.
- All parameters met the 90% operational uptime requirement.
- No major operational issues were recorded this month.

PRC Station

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.
- All data collected this month were compliant with the requirements outlined in the AMD 2016.
- All parameters met the 90% operational uptime requirement.
- No major operational issues were recorded this month.

AQHI – Grimshaw Station

- All data collected this month were compliant with the requirements outlined in the AMD 2016.
- All parameters met the 90% operational uptime requirement.
- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) and /or Alberta Ambient Air Quality Guidelines (AAAQGs) where applicable, except PM2.5. ninety-two 1-hour PM2.5 exceedances and ten 24-hour PM2.5 exceedances were recorded this month. Both nearby and distant wildfires contributed to intense local wildfire smoke conditions and numerous PM2.5 exceedances measured by PRAMP.

Date	Time (MST)	Parameter	Average Period	Concentration (µg/m3)	Wind speed (km/hr)	Wind Direction	Reference #
7-Aug	-	PM2.5	24-Hour	31	5.9	72°(ENE)	419456
8-Aug	-	PM2.5	24-Hour	30	5.8	69°(ENE)	419456
24-Aug	1	PM2.5	1-Hour	225	6.8	351°(N)	418443
24-Aug	2	PM2.5	1-Hour	337	7.6	353°(N)	418443
24-Aug	3	PM2.5	1-Hour	309	9.1	354°(N)	418443
24-Aug	4	PM2.5	1-Hour	347	9.7	347°(NNW)	418443
24-Aug	5	PM2.5	1-Hour	339	9.6	353°(N)	418443
24-Aug	6	PM2.5	1-Hour	332	10.9	355°(N)	418443
24-Aug	7	PM2.5	1-Hour	331	10.5	356°(N)	418443
24-Aug	8	PM2.5	1-Hour	339	10.0	358°(N)	418443
24-Aug	9	PM2.5	1-Hour	338	8.3	357°(N)	418443
24-Aug	10	PM2.5	1-Hour	266	6.1	16°(NNE)	418443
24-Aug	11	PM2.5	1-Hour	182	5.8	44°(NE)	418443
24-Aug	12	PM2.5	1-Hour	146	6.5	60°(ENE)	418443
24-Aug	13	PM2.5	1-Hour	106	5.4	98°(E)	418443
24-Aug	14	PM2.5	1-Hour	104	2.6	126°(SE)	418443
24-Aug	15	PM2.5	1-Hour	147	5.0	163°(SSE)	418443
24-Aug	16	PM2.5	1-Hour	134	6.2	188°(S)	418443
24-Aug	17	PM2.5	1-Hour	126	8.1	170°(SSE)	418443
24-Aug	18	PM2.5	1-Hour	131	7.2	186°(S)	418443
24-Aug	19	PM2.5	1-Hour	137	5.2	170°(SSE)	418443
24-Aug	20	PM2.5	1-Hour	172	7.4	196°(SSW)	418443
24-Aug	21	PM2.5	1-Hour	175	6.8	203°(SSW)	418443
24-Aug	22	PM2.5	1-Hour	151	6.3	209°(SSW)	418443
24-Aug	23	PM2.5	1-Hour	124	5.8	216°(SW)	418443
24-Aug	-	PM2.5	24-Hour	210	7.1	26°(NNE)	418443
25-Aug	0	PM2.5	1-Hour	100	4.8	224°(SW)	418443
25-Aug	1	PM2.5	1-Hour	90	3.2	227°(SW)	418443
25-Aug	2	PM2.5	1-Hour	81	2.9	210°(SSW)	418443
25-Aug	-	PM2.5	24-Hour	52	6.8	195°(SSW)	418443
26-Aug	12	PM2.5	1-Hour	81	9.6	241°(WSW)	418443
26-Aug	13	PM2.5	1-Hour	84	9.0	256°(WSW)	418443
26-Aug	23	PM2.5	1-Hour	112	5.0	336°(NNW)	418443
26-Aug	-	PM2.5	24-Hour	57	6.8	260°(WSW)	418443
27-Aug	0	PM2.5	1-Hour	181	5.1	340°(NNW)	418443
27-Aug	1	PM2.5	1-Hour	217	2.5	5°(N)	418443
27-Aug	2	PM2.5	1-Hour	217	4.4	346°(NNW)	418443
27-Aug	3	PM2.5	1-Hour	220	4.5	347°(NNW)	418443
27-Aug	4	PM2.5	1-Hour	234	4.4	358°(N)	418443

Date	Time (MST)	Parameter	Average Period	Concentration (µg/m3)	Wind speed (km/hr)	Wind Direction	Reference #
27-Aug	5	PM2.5	1-Hour	249	1.3	274°(W)	418443
27-Aug	6	PM2.5	1-Hour	249	3.2	344°(NNW)	418443
27-Aug	7	PM2.5	1-Hour	204	0.7	342°(NNW)	418443
27-Aug	8	PM2.5	1-Hour	219	4.5	195°(SSW)	418443
27-Aug	9	PM2.5	1-Hour	163	4.8	195°(SSW)	418443
27-Aug	10	PM2.5	1-Hour	126	8.1	193°(S)	418443
27-Aug	11	PM2.5	1-Hour	98	11.7	193°(S)	418443
27-Aug	16	PM2.5	1-Hour	85	13.5	246°(WSW)	418443
27-Aug	-	PM2.5	24-Hour	134	7.0	254°(WSW)	418443
28-Aug	9	PM2.5	1-Hour	82	8.3	195°(SSW)	418931
28-Aug	10	PM2.5	1-Hour	87	8.6	208°(SSW)	418931
28-Aug	11	PM2.5	1-Hour	94	9.8	218°(SW)	418931
28-Aug	12	PM2.5	1-Hour	88	12.2	194°(SSW)	418931
28-Aug	13	PM2.5	1-Hour	83	13.0	192°(S)	418931
28-Aug	14	PM2.5	1-Hour	84	14.3	188°(S)	418931
28-Aug	15	PM2.5	1-Hour	98	15.0	188°(S)	418931
28-Aug	16	PM2.5	1-Hour	110	16.0	194°(SSW)	418931
28-Aug	17	PM2.5	1-Hour	85	12.3	186°(S)	418931
28-Aug	-	PM2.5	24-Hour	80	7.8	213°(SSW)	418931
29-Aug	4	PM2.5	1-Hour	86	2.6	301°(WNW)	418931
29-Aug	5	PM2.5	1-Hour	87	1.1	187°(S)	418931
29-Aug	6	PM2.5	1-Hour	93	0.6	188°(S)	418931
29-Aug	7	PM2.5	1-Hour	92	1.0	236°(SW)	418931
29-Aug	8	PM2.5	1-Hour	96	4.8	178°(S)	418931
29-Aug	9	PM2.5	1-Hour	97	6.4	191°(S)	418931
29-Aug	10	PM2.5	1-Hour	89	5.4	184°(S)	418931
29-Aug	11	PM2.5	1-Hour	81	7.4	188°(S)	418931
29-Aug	13	PM2.5	1-Hour	88	6.3	191°(S)	418931
29-Aug	14	PM2.5	1-Hour	94	6.6	199°(SSW)	418931
29-Aug	15	PM2.5	1-Hour	99	9.4	194°(SSW)	418931
29-Aug	16	PM2.5	1-Hour	101	6.5	196°(SSW)	418931
29-Aug	17	PM2.5	1-Hour	96	6.0	180°(S)	418931
29-Aug	18	PM2.5	1-Hour	87	2.1	199°(SSW)	418931
29-Aug	19	PM2.5	1-Hour	153	5.0	315°(NW)	418931
29-Aug	20	PM2.5	1-Hour	177	6.0	323°(NW)	418931
29-Aug	21	PM2.5	1-Hour	167	5.9	337°(NNW)	418931
29-Aug	22	PM2.5	1-Hour	162	7.5	335°(NNW)	418931
29-Aug	23	PM2.5	1-Hour	159	8.3	333°(NNW)	418931
29-Aug	-	PM2.5	24-Hour	103	4.8	232°(SW)	418931

Date	Time (MST)	Parameter	Average Period	Concentration (µg/m3)	Wind speed (km/hr)	Wind Direction	Reference #
30-Aug	0	PM2.5	1-Hour	151	6.4	333°(NNW)	418931
30-Aug	1	PM2.5	1-Hour	150	2.8	4°(N)	418931
30-Aug	2	PM2.5	1-Hour	146	2.4	351°(N)	418931
30-Aug	3	PM2.5	1-Hour	146	2.1	349°(NNW)	418931
30-Aug	4	PM2.5	1-Hour	145	0.5	59°(ENE)	418931
30-Aug	5	PM2.5	1-Hour	144	0.5	276°(W)	418931
30-Aug	6	PM2.5	1-Hour	147	4.3	327°(NW)	418931
30-Aug	7	PM2.5	1-Hour	139	3.9	322°(NW)	418931
30-Aug	8	PM2.5	1-Hour	159	0.8	181°(S)	418931
30-Aug	9	PM2.5	1-Hour	230	1.4	228°(SW)	418931
30-Aug	10	PM2.5	1-Hour	393	2.0	260°(WSW)	418931
30-Aug	11	PM2.5	1-Hour	547	1.9	300°(WNW)	418931
30-Aug	12	PM2.5	1-Hour	611	4.8	325°(NW)	418931
30-Aug	13	PM2.5	1-Hour	552	1.9	308°(NW)	418931
30-Aug	14	PM2.5	1-Hour	329	4.7	176°(S)	418931
30-Aug	15	PM2.5	1-Hour	291	6.0	214°(SSW)	418931
30-Aug	16	PM2.5	1-Hour	276	5.7	228°(SW)	418931
30-Aug	17	PM2.5	1-Hour	280	7.3	270°(W)	418931
30-Aug	18	PM2.5	1-Hour	240	4.8	280°(W)	418931
30-Aug	19	PM2.5	1-Hour	218	4.6	275°(W)	418931
30-Aug	20	PM2.5	1-Hour	207	5.2	269°(W)	418931
30-Aug	21	PM2.5	1-Hour	153	11.7	288°(WNW)	418931
30-Aug	-	PM2.5	24-Hour	239	4.8	289°(WNW)	418931
31-Aug	-	PM2.5	24-Hour	43	8.5	309°(NW)	418931

- **NOx/NO/NO2:** A successful shut-down calibration was completed on PRAMP's Teledyne T200 analyzer, s/n: 837, on August 1. The analyzer was removed for maintenance. The BV's API 200E analyzer, s/n: 594, was installed afterwards. The analyzer was allowed time to stabilize overnight. A successful installation calibration was completed on August 2.

VOCs Canister Sampling Program

- The canister sampling program collects a 1-hour sample of air when the continuously measured non-methane hydrocarbon (NMHC) concentration reaches a specified trigger point. The current trigger point is 0.3 ppm for non-methane hydrocarbons. The trigger point is based on real-time monitoring data that are averaged over a 5-minute period.
- The canister sample collection systems are in place at Station 986-C, 842-B, and the Reno-B Station; a canister sample collection system is not part of the suite of instruments currently deployed at both the PRC station and the AQHI-Grimshaw station.

- Sample analysis and analytical results were prepared and provided by InnoTech Alberta.
- The canister system at the 842-B station was triggered on August 29 29 at 18:05, at concentration of 1.1 ppm, by widespread forest fire smoke. However, the sample was not collected due to a configuration error dating back to the urgent datalogger swap on August 10. The error was corrected, and the system was re-armed on August 31. No canister samples were sent to the laboratory for analysis this month.

Revisions to Alberta's Ambient Air Quality Data Warehouse

No revisions to historical data previously submitted to the Alberta's Ambient Air Quality Data Warehouse were made this month.

Deviations from Authorized Monitoring Methods

No deviations from authorized monitoring methods were recorded this month.

Disclaimer

Baseline corrections were performed on the 1-minute data. 5-minute and hourly data were calculated based on the post-baseline correction 1-minute data set. Data verification/validation were then performed on the 5-minute and hourly data. Hourly data that are included in this report are the post-validation hourly data set.

Equipment calibration / maintenance records were provided by Bureau Veritas.

Certification

This report was prepared and submitted by Lily Lin in accordance with Chapter 9 of the Air Monitoring Directive (AMD 2016).

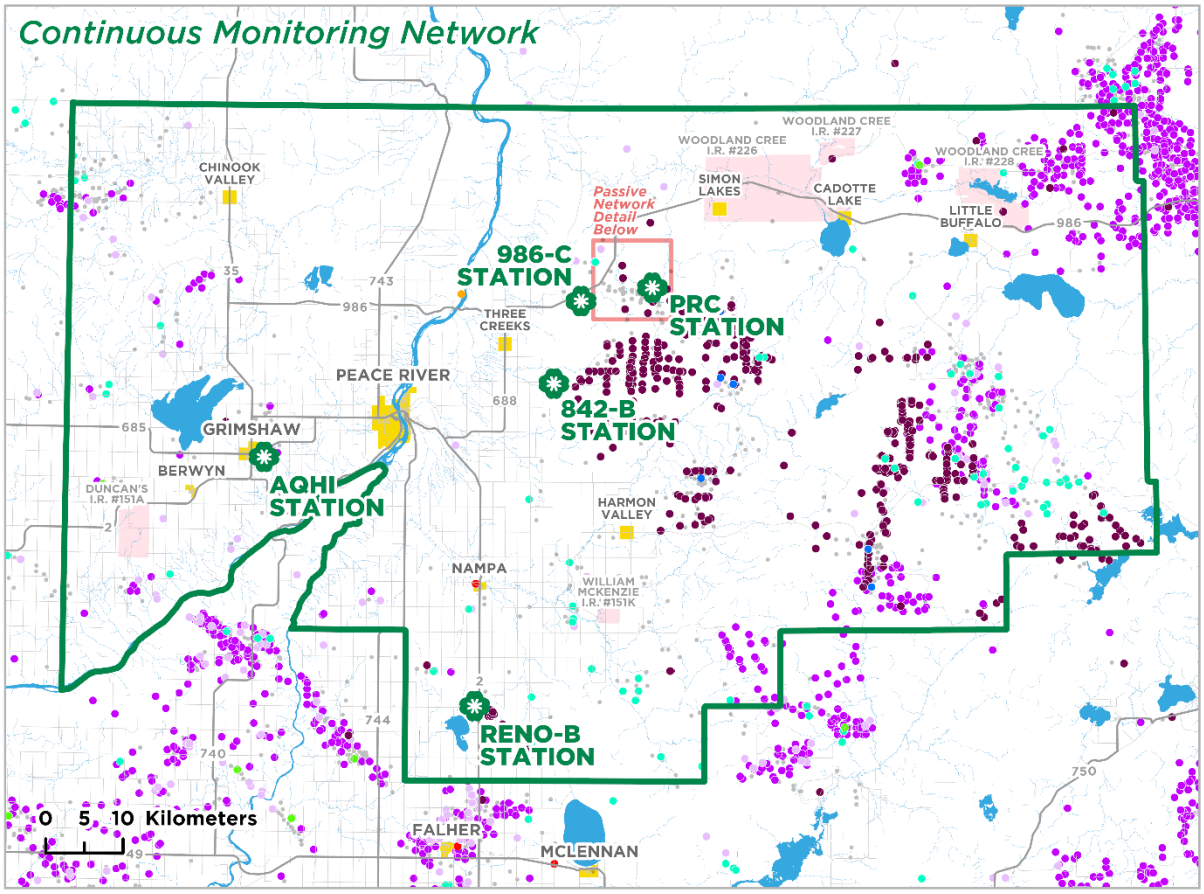
Lily Lin, Technical Program Manager, PRAMP Airshed

This report was reviewed by Michael Bisaga in accordance with Chapter 9 of the Air Monitoring Directive (AMD 2016).

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. I also certify that at the time of this report's submission, all air data have been electronically uploaded to Alberta's Ambient Air Quality Data Warehouse as required by the AMD. Uploading of VOC data from the canister sampling program was not required at the time of completing this report.

Michael Bisaga, Technical Program Manager, PRAMP Airshed

Map of PRAMP Continuous Monitoring Network

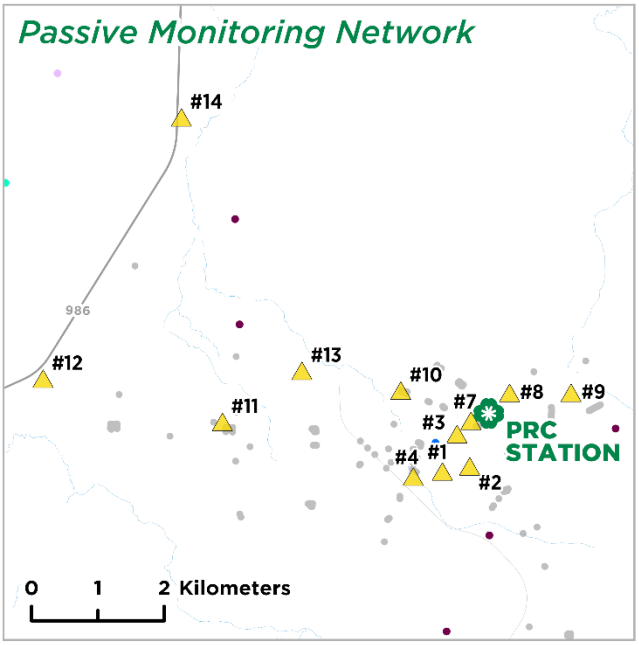


Legend

- PRAMP Boundary
- Populated Place
- First Nation
- Continuous Monitoring Station
- Passive Monitoring Station

Industrial Facilities

- In-Situ Oil Sands
- Heavy Oil/Bitumen Well or Battery
- Conventional Oil Well or Battery
- Natural Gas Well or Battery
- Gas Plant or Gas Processing
- Compressor Station or Pipeline
- Agricultural Storage and Transfer
- Pulp and Paper
- Well (Not Associated with Batteries)



Service Layer Credits: Esri, CGIAR, USGS, Esri, USGS

CONTINUOUS NETWORK EQUIPMENT AND MONITORING RESULTS SUMMARY

986 -C Station

Equipment Operation Summary

Parameter	Equipment Operational Summary
SO2 Thermo 43iQTL #1193585646	• A successful monthly calibration was performed on August 9. The expected span value was updated on August 11.
TRS Thermo 43iQTL #1191833341 TRS convertor CD Nova CDN-101 #552 (BV-supplied)	• A successful monthly calibration was performed on August 9. The expected span value was updated on August 11.
THC/CH4/NMHC Thermo 55i #1022143392	• A successful monthly calibration was performed on August 9. The expected span value was updated on August 11. • It was noticed that the CH4 baseline went up after July's analyzer swap. The baseline shift was likely related to the newly installed analyzer stabilizing during/after the calibration. The shift was corrected during the August's calibration. The analyzer's response went back in line with the other PRAMP stations.
RH Rotronic HC2-S3 #20626912	• The RH probe was checked on August 9. The probe passed the check requirements. • Due to datalogger polling issues, three hours of downtime were recorded as the hourly data completeness requirement did not meet.
BP MetOne 092 #Y23358	• The BP sensor was checked on August 9. The sensor passed the check requirements. • Due to datalogger polling issues, three hours of downtime were recorded as the hourly data completeness requirement did not meet.
AT Rotronic HC2-S3 #20626912	• The AT probe was checked on August 9. The probe passed the check requirements. • Due to datalogger polling issues, three hours of downtime were recorded as the hourly data completeness requirement did not meet.
ST COMET #18961918	• No operational issues were identified this month. • Due to datalogger polling issues, one hour of downtime was recorded as the hourly data completeness requirement did not meet.

Parameter	Equipment Operational Summary
Precipitation RM Young 52202 #TB 16325	• The precipitation gauge was checked on August 9. The unit passed the check requirements. • Due to datalogger polling issues, one hour of downtime was recorded as the hourly data completeness requirement did not meet.
WS/ WD RM Young 05305AQ #180340	• Wind direction data contained in this report represents where the wind is coming from. • The annual wind system calibration was completed on August 3, 2023. • The anemometer sensors were check on August 9. The wind system passed the check requirements. • Due to datalogger polling issues, three hours of downtime were recorded as the hourly data completeness requirement did not meet.

Monitored Data Summary for 986-C Station

Parameter	Objectives/Guidelines			Exceedances			Monthly Avg.	Min. 1-hr	Max. 1-hr	Date/Time	VWS (km/hr)	VWD (sector)	Max. 24-hr	Date	Operational Uptime (%)	Valid Data (%)
	1-hr	24-hr	30-day	1-hr	24-hr	30-day										
SO2 (ppb)	172	48	11	0	0	0	0.0	0	1	Aug 4 at hr 13	6.6	WSW	0.4	Aug 28	100.0	94.7
TRS (ppb)	-	-	-	-	-	-	0.70	0.07	3.89	Aug 30 at hr 19	3.8	SSE	2.32	Aug 30	100.0	94.7
THC (ppm)	-	-	-	-	-	-	2.03	1.87	2.39	Aug 30 at hr 4	4	SSE	2.28	Aug 30	100.0	94.7
CH4 (ppm)	-	-	-	-	-	-	2.03	1.87	2.39	Aug 30 at hr 4	4	SSE	2.28	Aug 30	100.0	94.7
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.02	Aug 30 at hr 15	4.1	WNW	0.00	Aug 30	100.0	94.7
RH (%)	-	-	-	-	-	-	78.9	29	100	Aug 1 at hr 0	4.3	SW	99.8	Aug 23	99.6	99.6
BP (millibar)	-	-	-	-	-	-	942	929	953	Aug 5 at hr 7	5	SSW	952	Aug 5	99.6	99.6
Ext. Temp. (°C)	-	-	-	-	-	-	16.1	5.9	28.3	Aug 29 at hr 15	5.1	WNW	21.1	Aug 13	99.6	99.6
Stn. Temp. (°C)	-	-	-	-	-	-	23.1	22.3	24.2	Aug 9 at hr 11	6.8	SSE	23.3	Aug 17	99.9	99.9
Precipitation (mm)*	-	-	-	-	-	-	47.8	0.0	4.5	Aug 10 at hr 13	10.4	WNW	13.3	Aug 10	99.9	99.9
WSV (km/hr)	-	-	-	-	-	-	2.9	0.2	21.0	Aug 27 at hr 14	21	SW	14.3	Aug 13	99.6	99.5
WDV (sector)	-	-	-	-	-	-	193 (S)	-	-	-	-	-	-	-	99.6	99.5

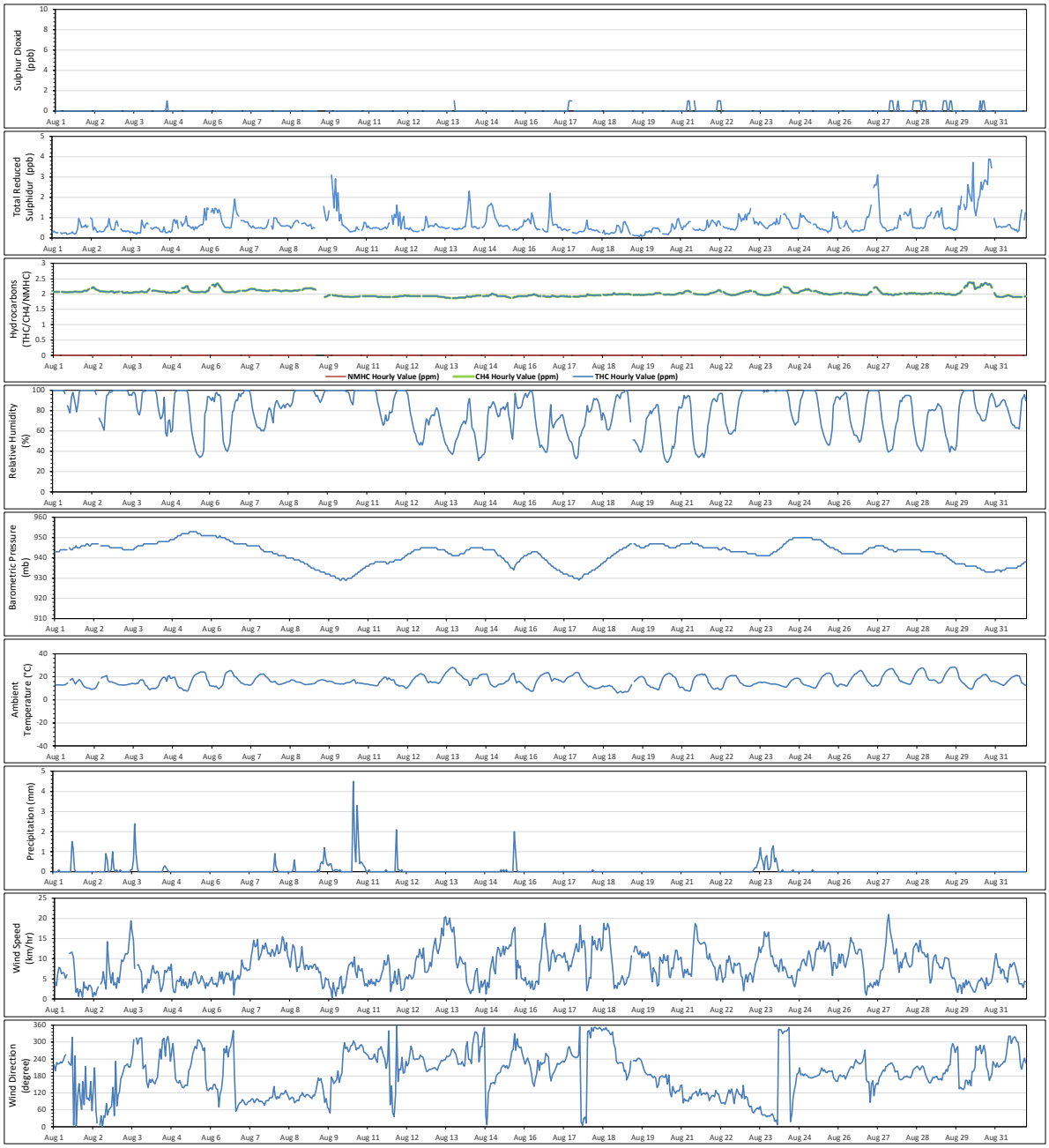
1- Date/ Time given is the first minimum and maximum value that was recorded

* Data represents the total (sum) for the indicated time frame

Alberta Ambient Air Quality Objectives (AAAQOs) Exceedances

The measured ambient air quality was within the AAAQOs for all monitored parameters.

Timeseries Chart of Hourly Average for the month of Aug 2023 - 986-C Station



842-B Station

Equipment Operation Summary

Parameter	Equipment Operational Summary
SO2 Thermo 43iQTL #1200736629	• A successful monthly calibration was performed on August 16. • Due to datalogger polling errors, data collected on August 8 between hour 11 and hour 19 were lost. Nine hours of downtime were recorded due to this event. • Due to a datalogger failure, no data were collected between August 9 hour 19 and August 11 hour 11. Forty-one hours of downtime were recorded.
TRS Thermo 43iQTL #1200736630 TRS Convertor CD Nova CDN-101 #583	• A successful monthly calibration was performed on August 16. • Due to datalogger polling errors, data collected on August 8 between hour 11 and hour 19 were lost. Nine hours of downtime were recorded due to this event. • Due to a datalogger failure, no data were collected between August 9 hour 19 and August 11 hour 11. Forty-one hours of downtime were recorded.
THC/CH4/NMHC Thermo 55i #1314057759 H2 Generator HG300 #190567058	• A successful monthly calibration was performed on August 16. • Due to datalogger polling errors, data collected on August 8 between hour 11 and hour 19 were lost. Nine hours of downtime were recorded due to this event. • Due to a datalogger failure, no data were collected between August 9 hour 19 and August 11 hour 11. Forty-one hours of downtime were recorded.
RH Rotronic HC2-S3 #20370767	• The RH probe was checked on August 16. The probe passed the check requirements. • Due to datalogger polling errors, data collected on August 8 between hour 11 and hour 19 were lost. Nine hours of downtime were recorded due to this event. • Due to a datalogger failure, no data were collected between August 9 hour 19 and August 11 hour 11. Forty-one hours of downtime were recorded.
AT Rotronic HC2-S3 #20370767	• The AT probe was checked on August 16. The probe passed the check requirements. • Due to datalogger polling errors, data collected on August 8 between hour 11 and hour 19 were lost. Nine hours of downtime were recorded due to this event. • Due to a datalogger failure, no data were collected between August 9 hour 19 and August 11 hour 11. Forty-one hours of downtime were recorded.

Parameter	Equipment Operational Summary
BP MetOne 092 #Y23362	• The BP sensor was checked on August 16. The sensor passed the check requirements. • Due to datalogger polling errors, data collected on August 8 between hour 11 and hour 19 were lost. Nine hours of downtime were recorded due to this event. • Due to a datalogger failure, no data were collected between August 9 hour 19 and August 11 hour 11. Forty-one hours of downtime were recorded. • Due to a configuration error which was programed on August 11, data collected between August 11 hour 12 and August 21 hour 6 were invalid and were discarded. Two hundred thirty-five hours of downtime were recorded.
ST COMET #20790297	• Due to datalogger polling errors, data collected on August 8 between hour 11 and hour 19 were lost. Nine hours of downtime were recorded due to this event. • Due to a datalogger failure, no data were collected between August 9 hour 19 and August 11 hour 11. Forty-one hours of downtime were recorded.
Precipitation RM Young 52202 #TB 15878	• Upon arrival the station on August 3, it was found that the precipitation gauge was blocked by debris. The drain holes were cleared on the same day. One hour of downtime was recorded due to this maintenance. After reviewing the data which was collected between the last system check on July 13 and August 3 and comparing data with precipitation data that were collected at other PRAMP stations, it was concluded that the issue had minimum to none affect to data quality. As a result, all data were kept for reference uses. • The precipitation gauge was checked on August 16. The sensor passed the check requirements. • Due to datalogger polling errors, data collected on August 8 between hour 11 and hour 19 were lost. Nine hours of downtime were recorded due to this event. • Due to a datalogger failure, no data were collected between August 9 hour 19 and August 11 hour 11. Forty-one hours of downtime were recorded.

Parameter	Equipment Operational Summary
WS/ WD RM Young 05305AQ #174802	• Wind direction data contained in this report represents where the wind is coming from. • The annual wind system calibration was completed on August 3, 2023. • The anemometer sensors were check on August 16. Both the wind speed sensor and wind direction sensor passed the check requirements. • Due to datalogger polling errors, data collected on August 8 between hour 11 and hour 19 were lost. Nine hours of downtime were recorded due to this event. • Due to a datalogger failure, no data were collected between August 9 hour 19 and August 11 hour 11. Forty-one hours of downtime were recorded.
DATALOGGER Envista Ultimate #530 #ACI40000208	• The PRAMP's Envista Ultimate datalogger, s/n: 510, failed on August 9 due to catastrophic hardware failure. The logger was replaced with the BV's Envista Ultimate datalogger, s/n: ACI400000208, on August 10. The system was back online on August 11.

Monitored Data Summary for 842-B Station

Parameter	Objectives/Guidelines			Exceedances			Monthly Avg.	Min. 1-hr	Max. 1-hr	Date/Time	VWS (km/hr)	VWD (sector)	Max. 24-hr	Date	Operational Uptime (%)	Valid Data (%)
	1-hr	24-hr	30-day	1-hr	24-hr	30-day										
SO2 (ppb)	172	48	11	0	0	0	0.0	0	0	Aug 1 at hr 0	4.5	SW	0.0	Aug 1	93.3	88.4
TRS (ppb)	-	-	-	-	-	-	0.53	0.10	2.95	Aug 30 at hr 13	6.7	WSW	1.31	Aug 30	93.3	88.1
THC (ppm)	-	-	-	-	-	-	2.03	1.90	2.78	Aug 30 at hr 13	6.7	WSW	2.43	Aug 30	93.3	88.6
CH4 (ppm)	-	-	-	-	-	-	2.02	1.90	2.58	Aug 30 at hr 6	0.3	SE	2.27	Aug 30	93.3	88.6
NMHC (ppm)	-	-	-	-	-	-	0.01	0.00	0.42	Aug 30 at hr 13	6.7	WSW	0.16	Aug 30	93.3	88.6
RH (%)	-	-	-	-	-	-	77.9	28	100	Aug 1 at hr 0	4.5	SW	99.5	Aug 23	93.3	93.3
BP (millibar)	-	-	-	-	-	-	NA	931	952	Aug 5 at hr 7	3.8	SSE	951	Aug 5	61.7	61.7
Ext. Temp. (°C)	-	-	-	-	-	-	17.3	5.2	29.6	Aug 29 at hr 15	5.6	WSW	22.4	Aug 13	93.3	93.3
Stn. Temp. (°C)	-	-	-	-	-	-	22.6	21.4	23.9	Aug 16 at hr 8	2.2	SE	23.4	Aug 9	93.3	93.3
Precipitation (mm)*	-	-	-	-	-	-	35.7	0.0	4.5	Aug 4 at hr 16	3.5	NW	18.8	Aug 23	93.1	93.0
WSV (km/hr)	-	-	-	-	-	-	2.3	0.0	22.8	Aug 13 at hr 13	22.8	W	14.5	Aug 13	93.3	93.1
WDV (sector)	-	-	-	-	-	-	215 (SSW)	-	-	-	-	-	-	-	93.3	93.1

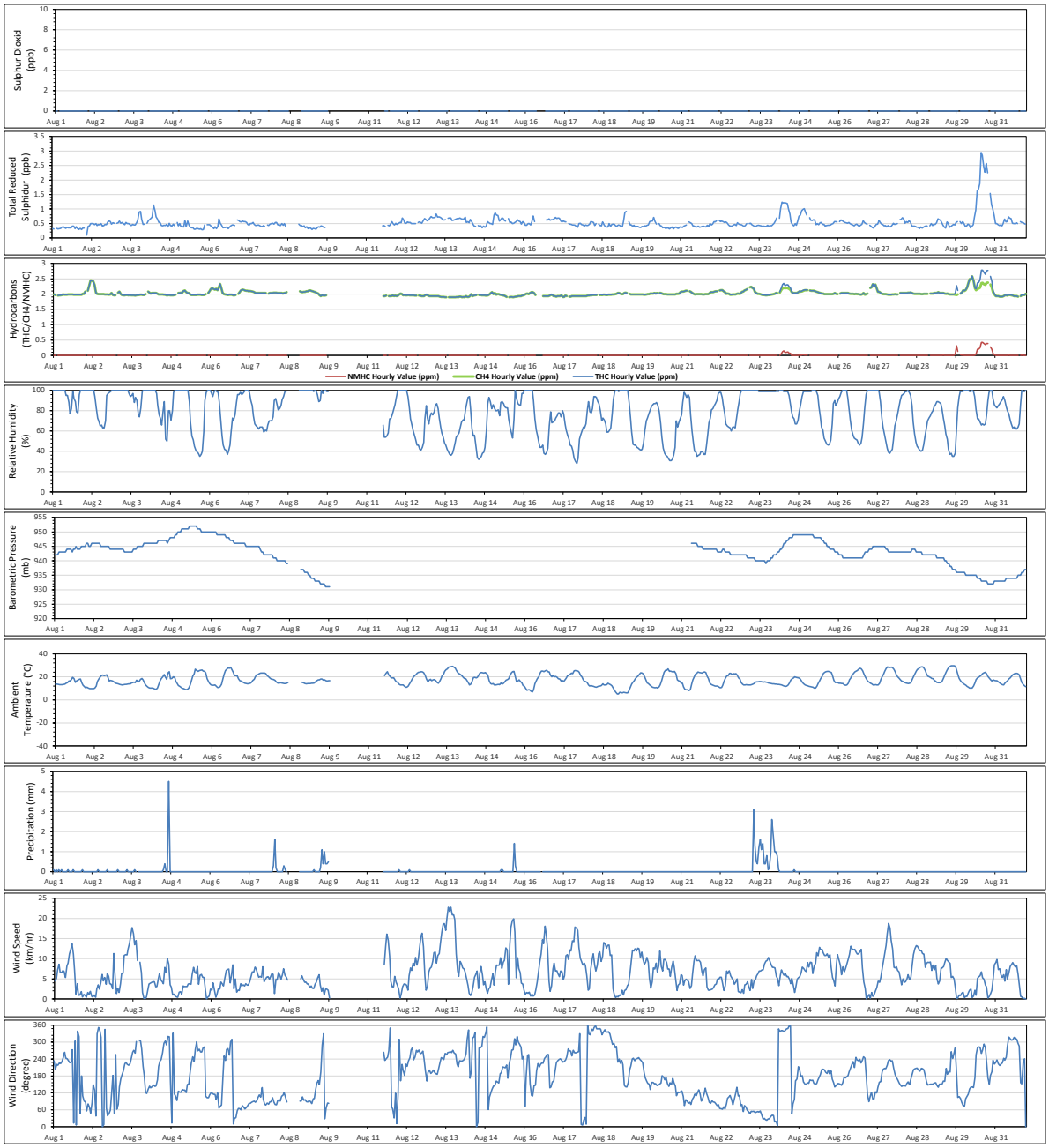
1- Date/ Time given is the first minimum and maximum value that was recorded

* Data represents the total (sum) for the indicated time frame

Alberta Ambient Air Quality Objectives (AAAQOs) Exceedances

The measured ambient air quality was within the AAAQOs for all monitored parameters.

Timeseries Chart of Hourly Average for the month of Aug 2023 - 842-B Station



Reno-B Station

Equipment Operation Summary

Parameter	Equipment Operational Summary
SO2 Thermo 43iQTL #12101910505	• A successful monthly calibration was performed on August 1.
TRS Thermo 43iQTL #12101910504 **TRS Convertor** CD Nova CDN-101 #590	• The TRS convertor failed after the power was restored on July 31. The convertor was repair following by a successful post-repair calibration on August 1. Nine hours of downtime were recorded this month due to this event.
THC/CH4/NMHC Thermo 55i #12101910497 H2 Generator HG300 #210467069	• A successful monthly calibration was performed on August 1. • Isolated and sporadic bad injections were noticed, starting August 17. One-minute data were reviewed and discarded if data quality was affected by the injection issues. Hourly data were re-calculated and validated using the post-validation 1-minute data results. Hourly data would be discarded if less than 75% of valid data in an hour was collected. No hourly data were discarded as a result.
RH Rotronic HC2-S3 #20467597	• The RH probe was checked on August 1. The probe passed the check requirements. • Due to datalogger polling errors, two hours of downtime were recorded as the hourly data completeness requirement did not meet.
BP MetOne 092 #A17940	• The BP sensor was checked on August 1. The sensor passed the check requirements. • Due to datalogger polling errors, two hours of downtime were recorded as the hourly data completeness requirement did not meet.
AT Rotronic HC2-S3 #20467597	• The AT probe was checked on August 1. The probe passed the check requirements. • Due to datalogger polling errors, two hours of downtime were recorded as the hourly data completeness requirement did not meet.
ST COMET #NA	• No operational issues were identified this month.

Parameter	Equipment Operational Summary
Precipitation RM Young 52202 #TB 15877	• The precipitation gauge was checked and tested on August 1. The unit passed the check requirements. • No operational issues were identified this month.
WS/ WD RM Young 05305AQ #174795	• Wind direction data contained in this report represents where the wind is coming from. • The annual wind system calibration was completed on August 1, 2023. • The anemometer sensors were check on August 1. The wind sensors passed the check requirements. • Due to datalogger polling errors, three hours of downtime were recorded as the hourly data completeness requirement did not meet.

Monitored Data Summary for Reno-B Station

Parameter	Objectives/Guidelines			Exceedances			Monthly Avg.	Min. 1-hr	Max. 1-hr	Date/Time	VWS (km/hr)	VWD (sector)	Max. 24-hr	Date	Operational Uptime (%)	Valid Data (%)
	1-hr	24-hr	30-day	1-hr	24-hr	30-day										
SO2 (ppb)	172	48	11	0	0	0	0.0	0	2	Aug 28 at hr 8	11.5	SSW	0.7	Aug 28	100.0	94.9
TRS (ppb)	-	-	-	-	-	-	0.57	0.25	1.56	Aug 24 at hr 7	10	N	1.12	Aug 24	98.8	93.9
THC (ppm)	-	-	-	-	-	-	2.00	1.84	3.04	Aug 30 at hr 0	1.6	ENE	2.13	Aug 30	100.0	95.0
CH4 (ppm)	-	-	-	-	-	-	2.00	1.84	3.04	Aug 30 at hr 0	1.6	ENE	2.13	Aug 30	100.0	95.0
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.08	Aug 14 at hr 21	5	SSE	0.00	Aug 14	100.0	95.0
RH (%)	-	-	-	-	-	-	75.4	26	100	Aug 1 at hr 2	6.1	SSW	99.8	Aug 23	99.7	99.7
BP (millibar)	-	-	-	-	-	-	941	928	951	Aug 5 at hr 3	4.2	S	950	Aug 5	99.7	99.7
Ext. Temp. (°C)	-	-	-	-	-	-	16.5	5.3	29.5	Aug 29 at hr 15	7	WSW	21.2	Aug 29	99.7	99.7
Stn. Temp. (°C)	-	-	-	-	-	-	23.2	22.2	24.1	Aug 12 at hr 8	16.7	W	23.8	Aug 23	100.0	100.0
Precipitation (mm)*	-	-	-	-	-	-	53.6	0.0	4.0	Aug 23 at hr 17	11	NNE	27.5	Aug 23	100.0	100.0
WSV (km/hr)	-	-	-	-	-	-	3.7	0.3	32.6	Aug 15 at hr 16	32.6	WNW	18.2	Aug 13	99.6	99.3
WDV (sector)	-	-	-	-	-	-	220 (SW)	-	-	-	-	-	-	-	99.6	99.3

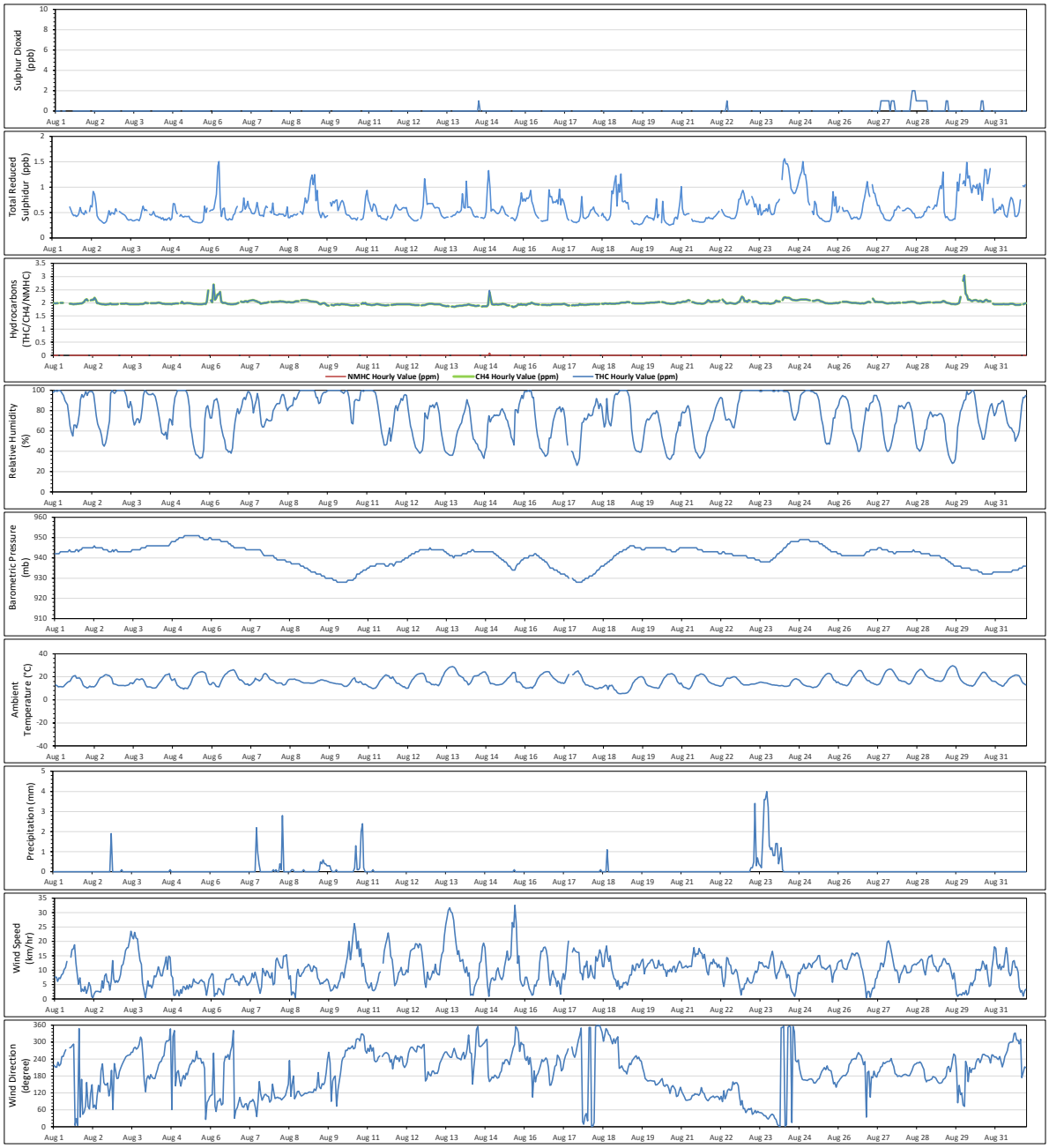
1- Date/ Time given is the first minimum and maximum value that was recorded

* Data represents the total (sum) for the indicated time frame

Alberta Ambient Air Quality Objectives (AAAQOs) Exceedances

The measured ambient air quality was within the AAAQOs for all monitored parameters.

Timeseries Chart of Hourly Average for the month of Aug 2023 - Reno-B Station



PRC Station

Equipment Operation Summary

Parameter	Equipment Operational Summary
SO2 Thermo 43i #1034746225	• A successful monthly calibration was performed on August 3. • No operational issues were identified.
H2S Thermo 450i #1308857354	• A successful monthly calibration was performed on August 3. • The analyzer failed due to a power supply failure on August 30. The power supply was replaced following by a successful post-repair calibration on August 31. Forty-one hours of downtime were recorded due to this event.
TRS Thermo 450i #1034746224 TRS Convertor CD Nova CDN-101 #506	• A successful monthly calibration was performed on August 3. • No operational issues were identified.
THC/CH4/NMHC Thermo 55i #1034745845 H2 Generator HG300 #211067076	• A successful monthly calibration was performed on August 3. • No operational issues were identified.
RH Rotronic HC2-S3 #20558318	• The RH sensor was checked on August 3. The sensor passed the check requirements. • No operational issues were identified.
BP MetOne 092 #B19577	• The BP sensor was checked on August 3. The sensor passed the check requirements. • No operational issues were identified.
AT Rotronic HC2-S3 #20558318	• The AT sensor was checked on August 3. The sensor passed the check requirements. • No operational issues were identified.

Parameter	Equipment Operational Summary
ST Canadian Natural #NA	• No operational issues were identified.
WS/ WD RM Young 05305VK #129612	• Wind direction data contained in this report represents where the wind is coming from. • The annual wind system calibration was completed on August 3, 2023. • The anemometer sensors were checked on August 3. The sensors passed the check requirements. • No operational issues were identified.

Monitored Data Summary for Peace River Complex (PRC) Station

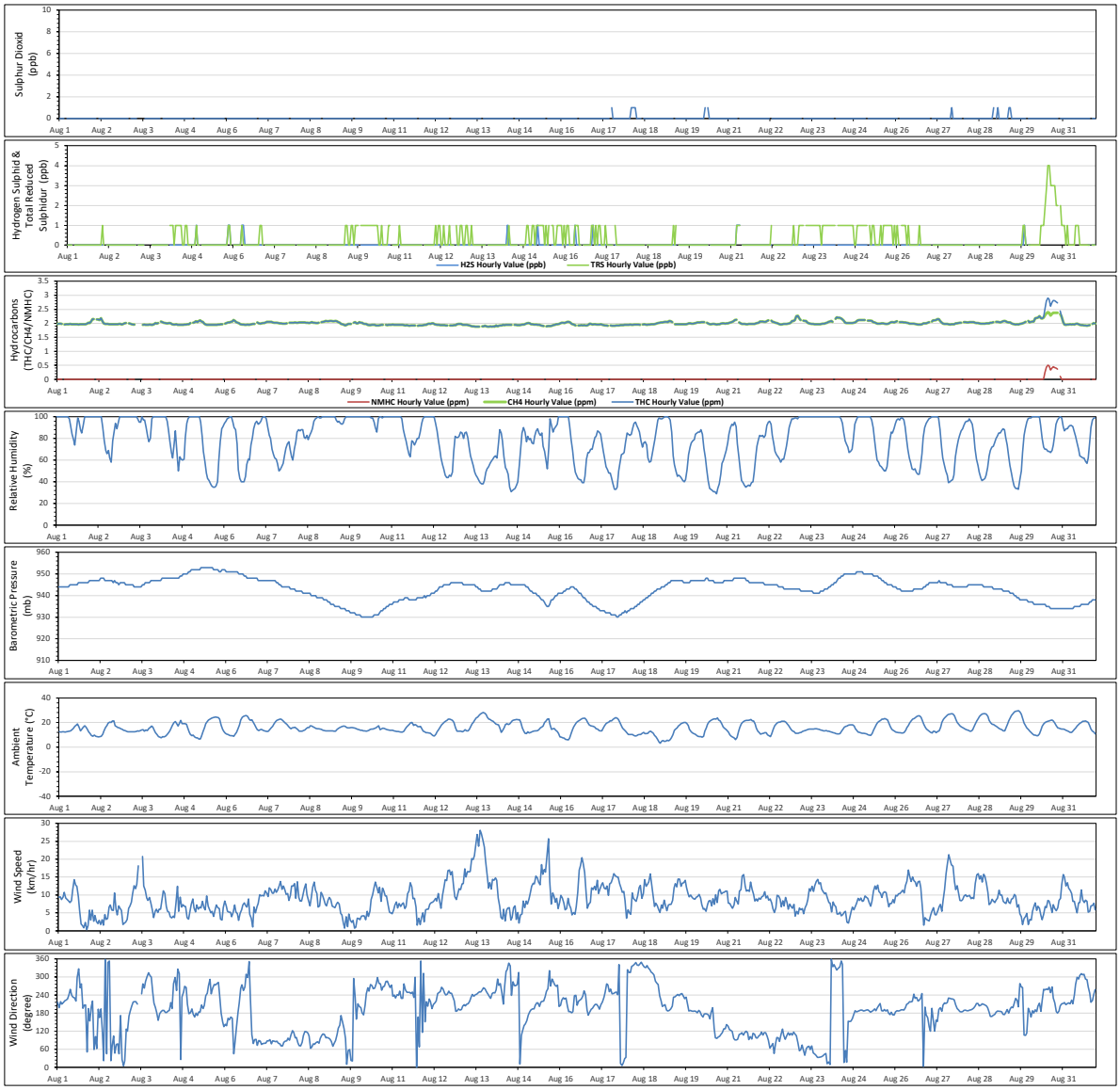
Parameter	Objectives/Guidelines			Exceedances			Monthly Avg.	Min. 1-hr	Max. 1-hr	Date/Time	VWS (km/hr)	VWD (sector)	Max. 24-hr	Date	Operational Uptime (%)	Valid Data (%)
	1-hr	24-hr	30-day	1-hr	24-hr	30-day										
SO2 (ppb)	172	48	11	0	0	0	0.0	0	1	Aug 17 at hr 12	13.4	WSW	0.2	Aug 18	100.0	94.9
H2S (ppb)	10	3	-	0	0	-	0.0	0	1	Aug 4 at hr 21	3.3	SSW	0.0	Aug 1	94.5	89.5
TRS (ppb)	-	-	-	-	-	-	0.3	0	4	Aug 30 at hr 13	8.5	WSW	1.5	Aug 30	100.0	94.9
THC (ppm)	-	-	-	-	-	-	2.01	1.88	2.90	Aug 30 at hr 13	8.5	WSW	2.43	Aug 30	100.0	94.9
CH4 (ppm)	-	-	-	-	-	-	2.00	1.88	2.40	Aug 30 at hr 13	8.5	WSW	2.25	Aug 30	100.0	94.9
NMHC (ppm)	-	-	-	-	-	-	0.01	0.00	0.50	Aug 30 at hr 13	8.5	WSW	0.18	Aug 30	100.0	94.9
RH (%)	-	-	-	-	-	-	78.5	29	100	Aug 1 at hr 0	9.4	SW	99.8	Aug 23	100.0	100.0
BP (millibar)	-	-	-	-	-	-	943	930	953	Aug 5 at hr 6	6.4	S	952	Aug 5	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	15.8	3.2	29.6	Aug 29 at hr 16	7.3	SSW	20.7	Aug 29	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	23.0	21.8	24.7	Aug 19 at hr 11	12.3	SW	23.3	Aug 10	100.0	100.0
WSV (km/hr)	-	-	-	-	-	-	3.8	0.3	28.1	Aug 13 at hr 14	28.1	WSW	18.6	Aug 13	100.0	99.7
WDV (sector)	-	-	-	-	-	-	207 (SSW)	-	-	-	-	-	-	-	100.0	99.7

1- Date/ Time given is the first minimum and maximum value that was recorded

Alberta Ambient Air Quality Objectives (AAAQOs) Exceedances

The measured ambient air quality was within the AAAQOs for all monitored parameters.

Timeseries Chart of Hourly Average for the month of Aug 2023 - Peace River Complex (PRC) Station



AQHI – Grimshaw Station

Equipment Operation Summary

Parameter	Equipment Operational Summary
SO2 Teledyne T100 #722	• The analyzer spanned low on August 26 due to depleted permeation tube. The permeation tube was replaced on August 1. Two hours of downtime were recorded due to this maintenance activity. • A successful monthly calibration was performed on August 2. Due to a change in the SO2 permeation oven temperature, time was allowed for the system to stabilize. The expected span value was updated on August 6. • Due to datalogger polling errors, which was likely caused by Windows updates, hourly data collected on August 19 hour 10 was discarded as the hourly data completeness requirement did not meet.
TRS Teledyne T100U #132 TRS Convertor CD Nova CDN-101 #576	• Due to COMMS issue with analyzer, data collected from July 31 hour 14 to August 1 hour 5 and from August 17 hour 0 to hour 4 were lost. The analyzer was reset following by a zero-span check to confirm its functionality on August 1. Eleven hours of downtime were recorded this month. • A successful monthly calibration was performed on August 2. • Due to datalogger polling errors, which was likely caused by Windows updates, hourly data collected on August 19 hour 10 was discarded as the hourly data completeness requirement did not meet.
NOx/NO/NO2 Teledyne T200 #837 API 200E #594	• Following a successful shut-down calibration on August 1, the PRAMP's Teledyne T200 analyzer, s/n: 837, was removed for maintenance. The BV's API 200E analyzer, s/n: 594, was installed afterwards. The analyzer was allowed time to stabilize overnight. A successful installation calibration was completed on August 2. Fourteen hours of downtime were recorded due to this event. • The analyzer spanned upward close to the acceptable limit, starting on August 9. A repeat calibration was completed on August 15 to correct the drift. Seven hours of downtime were recorded due to this additional quality check. • Due to datalogger polling errors, which was likely caused by Windows updates, hourly data collected on August 19 hour 10 was discarded as the hourly data completeness requirement did not meet. • The analyzer failed both August 30 scheduled zero-span check and August 31's repeat zero-span check. The analyzer passed the August 31's scheduled zero-span check and onwards. As the issue corrected itself, no further troubleshooting was needed. Two hours of downtime were recorded due to the additional quality check.

Parameter	Equipment Operational Summary
O3 API 400A #445	• A successful monthly calibration was completed on August 2. • Due to datalogger polling errors, which was likely caused by Windows updates, hourly data collected on August 19 hour 10 was discarded as the hourly data completeness requirement did not meet.
THC/CH4/NMHC Thermo 55i #1191032505 H2 Generator AMA HG300 #190567059	• Following a successful shut-down calibration on August 1, the sample pump was serviced. The analyzer was left offline overnight to stabilize. A successful post-repair calibration was completed on August 2. Fifteen hours of downtime were recorded due to this event. • Due to datalogger polling errors, which was likely caused by Windows updates, hourly data collected on August 19 hour 10 was discarded as the hourly data completeness requirement did not meet.
PM2.5 Teledyne T640 #3189	• A successful annual audit/maintenance was completed on August 2. • Due to datalogger polling errors, which was likely caused by Windows updates, hourly data collected on August 19 hour 10 was discarded as the hourly data completeness requirement did not meet.
RH Vaisala HMP155 #N2910506	• The RH probe was checked on August 2. The Probe passed the check requirements. • Due to datalogger polling errors, which was likely caused by Windows updates, hourly data collected on August 19 hour 10 was discarded as the hourly data completeness requirement did not meet.
BP MetOne 092 #A2397	• The BP sensor was checked on August 2. The sensor passed the check requirements. • Due to datalogger polling errors, which was likely caused by Windows updates, hourly data collected on August 19 hour 10 was discarded as the hourly data completeness requirement did not meet.
AT Vaisala HMP155 #N2910506	• The AT prober was checked on August 2. The probe passed the check requirements. • Due to datalogger polling errors, which was likely caused by Windows updates, hourly data collected on August 19 hour 10 was discarded as the hourly data completeness requirement did not meet.
ST COMET #NA	• Due to datalogger polling errors, which was likely caused by Windows updates, hourly data collected on August 19 hour 10 was discarded as the hourly data completeness requirement did not meet.

Parameter	Equipment Operational Summary
WS/ WD RM Young 05305AQ #174801	• Wind direction data contained in this report represents where the wind is coming from. • The last annual wind system calibration was completed on August 2, 2023. • The anemometer sensors were check on August 2. Both the wind speed sensor and wind direction sensor passed the check requirements. • Due to datalogger polling errors, which was likely caused by Windows updates, hourly data collected on August 19 hour 10 was discarded as the hourly data completeness requirement did not meet.

Monitored Data Summary for AQHI - Grimshaw Station

Parameter	Objectives/Guidelines			Exceedances			Monthly Avg.	Min. 1-hr	Max. 1-hr	Date/Time	VWS (km/hr)	VWD (sector)	Max. 24-hr	Date	Operational Uptime (%)	Valid Data (%)
	1-hr	24-hr	30-day	1-hr	24-hr	30-day										
SO2 (ppb)	172	48	11	0	0	0	0.0	0	2	Aug 16 at hr 20	4.8	SSW	0.2	Aug 16	99.6	94.5
TRS (ppb)	-	-	-	-	-	-	0.20	0.00	3.51	Aug 10 at hr 1	2.3	NE	1.02	Aug 30	98.4	93.3
NOx (ppb)	-	-	-	-	-	-	2.7	0	39	Aug 29 at hr 7	1	SW	6.9	Aug 29	96.8	91.1
NO (ppb)	-	-	-	-	-	-	0.3	0	26	Aug 29 at hr 7	1	SW	1.6	Aug 29	96.8	91.1
NO2 (ppb)	159	-	-	0	-	-	2.4	0	15	Aug 22 at hr 6	5.5	N	5.3	Aug 29	96.8	91.1
O3 (ppb)	76	-	-	0	-	-	24.1	2.3	51.9	Aug 29 at hr 16	6.5	SSW	31.9	Aug 21	99.9	94.6
THC (ppm)	-	-	-	-	-	-	2.05	1.88	3.43	Aug 6 at hr 5	3.2	NNW	2.47	Aug 30	97.8	93.0
CH4 (ppm)	-	-	-	-	-	-	2.03	1.88	3.39	Aug 6 at hr 5	3.2	NNW	2.33	Aug 30	97.8	93.0
NMHC (ppm)	-	-	-	-	-	-	0.02	0.00	0.46	Aug 30 at hr 12	4.8	NW	0.14	Aug 30	97.8	93.0
PM2.5 (µg/m3)	80	29	-	92	10	-	40.2	2	611	Aug 30 at hr 12	4.8	NW	239.2	Aug 30	99.9	99.7
RH (%)	-	-	-	-	-	-	71.1	28	100	Aug 2 at hr 21	1.1	WNW	97.4	Aug 9	99.9	99.9
BP (millibar)	-	-	-	-	-	-	943	930	953	Aug 5 at hr 4	3.1	NNE	952	Aug 5	99.9	99.9
Ext. Temp. (°C)	-	-	-	-	-	-	17.1	7.5	28.5	Aug 13 at hr 15	25.7	WSW	21.4	Aug 13	99.9	99.9
Stn. Temp. (°C)	-	-	-	-	-	-	21.8	21.0	24.2	Aug 29 at hr 17	6	S	22.1	Aug 2	99.9	99.9
WSV (km/hr)	-	-	-	-	-	-	7.3	0.3	29.6	Aug 13 at hr 16	29.6	W	16.5	Aug 13	99.9	99.6
WDV (sector)	-	-	-	-	-	-	285 (WNW)	-	-	-	-	-	-	-	99.9	99.6

1- Date/ Time given is the first minimum and maximum value that was recorded

Alberta Ambient Air Quality Objectives (AAAQOs) and/or Alberta Ambient Air Quality Guidelines (AAAQGs) Exceedances

The following exceedances of AAAQO and AAAQG were observed at the AQHI - Grimshaw Station.

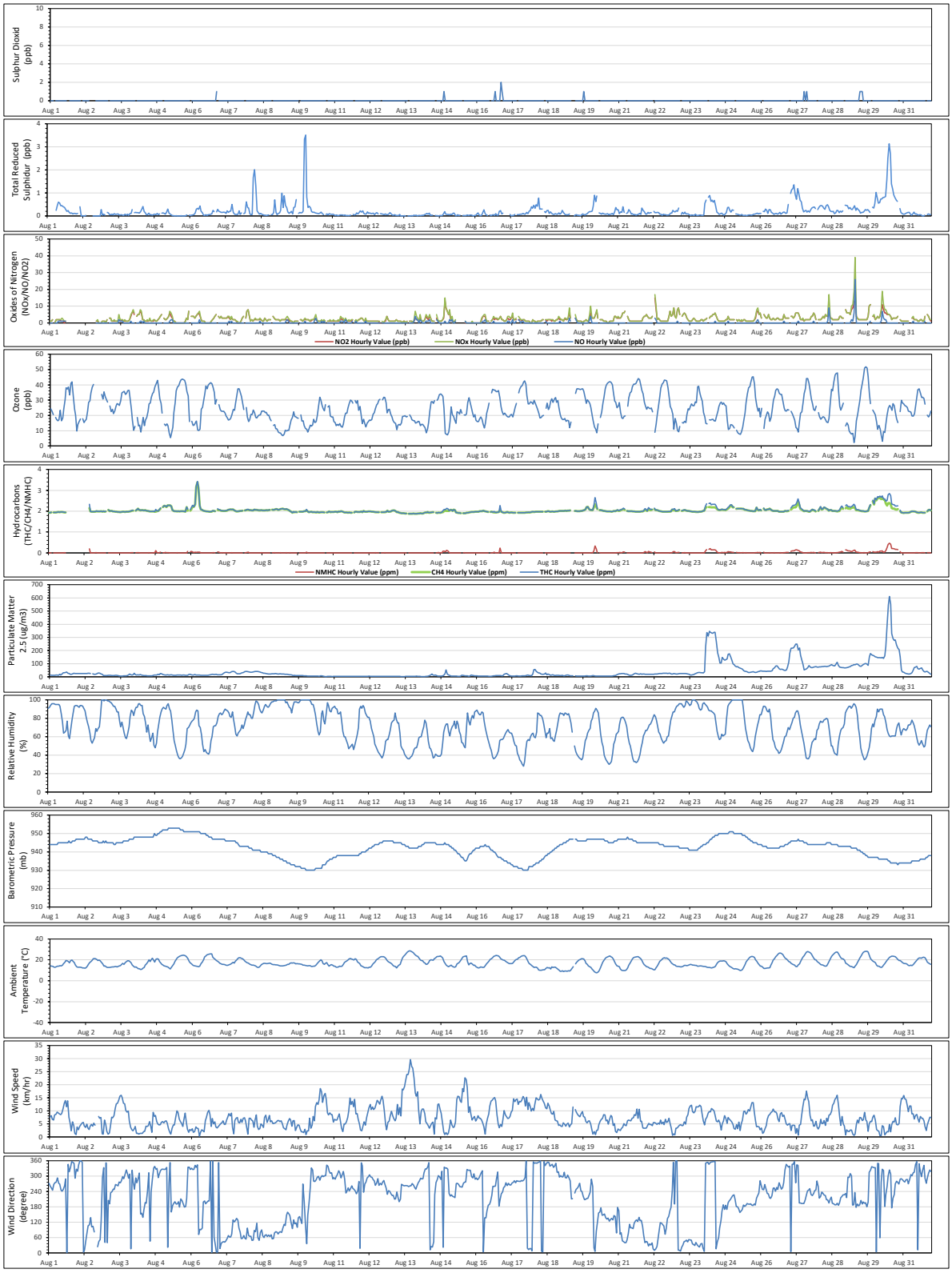
Date	Time (MST)	Parameter	Average Period	AAAQOs / AAAQGs	Concentration	Wind speed	Wind Direction	Reference #
Aug 7	-	PM2.5	24-Hour	29 µg/m3	31 µg/m3	5.9 km/hr	72° (ENE)	419456
Aug 8	-	PM2.5	24-Hour	29 µg/m3	30 µg/m3	5.8 km/hr	69° (ENE)	419456
Aug 24	1	PM2.5	1-Hour	80 µg/m3	225 µg/m3	6.8 km/hr	351° (N)	418443
Aug 24	2	PM2.5	1-Hour	80 µg/m3	337 µg/m3	7.6 km/hr	353° (N)	418443
Aug 24	3	PM2.5	1-Hour	80 µg/m3	309 µg/m3	9.1 km/hr	354° (N)	418443
Aug 24	4	PM2.5	1-Hour	80 µg/m3	347 µg/m3	9.7 km/hr	347° (NNW)	418443
Aug 24	5	PM2.5	1-Hour	80 µg/m3	339 µg/m3	9.6 km/hr	353° (N)	418443
Aug 24	6	PM2.5	1-Hour	80 µg/m3	332 µg/m3	10.9 km/hr	355° (N)	418443
Aug 24	7	PM2.5	1-Hour	80 µg/m3	331 µg/m3	10.5 km/hr	356° (N)	418443
Aug 24	8	PM2.5	1-Hour	80 µg/m3	339 µg/m3	10.0 km/hr	358° (N)	418443
Aug 24	9	PM2.5	1-Hour	80 µg/m3	338 µg/m3	8.3 km/hr	357° (N)	418443
Aug 24	10	PM2.5	1-Hour	80 µg/m3	266 µg/m3	6.1 km/hr	16° (NNE)	418443
Aug 24	11	PM2.5	1-Hour	80 µg/m3	182 µg/m3	5.8 km/hr	44° (NE)	418443
Aug 24	12	PM2.5	1-Hour	80 µg/m3	146 µg/m3	6.5 km/hr	60° (ENE)	418443
Aug 24	13	PM2.5	1-Hour	80 µg/m3	106 µg/m3	5.4 km/hr	98° (E)	418443
Aug 24	14	PM2.5	1-Hour	80 µg/m3	104 µg/m3	2.6 km/hr	126° (SE)	418443
Aug 24	15	PM2.5	1-Hour	80 µg/m3	147 µg/m3	5.0 km/hr	163° (SSE)	418443
Aug 24	16	PM2.5	1-Hour	80 µg/m3	134 µg/m3	6.2 km/hr	188° (S)	418443
Aug 24	17	PM2.5	1-Hour	80 µg/m3	126 µg/m3	8.1 km/hr	170° (SSE)	418443
Aug 24	18	PM2.5	1-Hour	80 µg/m3	131 µg/m3	7.2 km/hr	186° (S)	418443
Aug 24	19	PM2.5	1-Hour	80 µg/m3	137 µg/m3	5.2 km/hr	170° (SSE)	418443
Aug 24	20	PM2.5	1-Hour	80 µg/m3	172 µg/m3	7.4 km/hr	196° (SSW)	418443
Aug 24	21	PM2.5	1-Hour	80 µg/m3	175 µg/m3	6.8 km/hr	203° (SSW)	418443
Aug 24	22	PM2.5	1-Hour	80 µg/m3	151 µg/m3	6.3 km/hr	209° (SSW)	418443
Aug 24	23	PM2.5	1-Hour	80 µg/m3	124 µg/m3	5.8 km/hr	216° (SW)	418443
Aug 24	-	PM2.5	24-Hour	29 µg/m3	210 µg/m3	7.1 km/hr	26° (NNE)	418443
Aug 25	0	PM2.5	1-Hour	80 µg/m3	100 µg/m3	4.8 km/hr	224° (SW)	418443
Aug 25	1	PM2.5	1-Hour	80 µg/m3	90 µg/m3	3.2 km/hr	227° (SW)	418443
Aug 25	2	PM2.5	1-Hour	80 µg/m3	81 µg/m3	2.9 km/hr	210° (SSW)	418443
Aug 25	-	PM2.5	24-Hour	29 µg/m3	52 µg/m3	6.8 km/hr	195° (SSW)	418443
Aug 26	12	PM2.5	1-Hour	80 µg/m3	81 µg/m3	9.6 km/hr	241° (WSW)	418443
Aug 26	13	PM2.5	1-Hour	80 µg/m3	84 µg/m3	9.0 km/hr	256° (WSW)	418443
Aug 26	23	PM2.5	1-Hour	80 µg/m3	112 µg/m3	5.0 km/hr	336° (NNW)	418443
Aug 26	-	PM2.5	24-Hour	29 µg/m3	57 µg/m3	6.8 km/hr	260° (WSW)	418443
Aug 27	0	PM2.5	1-Hour	80 µg/m3	181 µg/m3	5.1 km/hr	340° (NNW)	418443
Aug 27	1	PM2.5	1-Hour	80 µg/m3	217 µg/m3	2.5 km/hr	5° (N)	418443

Date	Time (MST)	Parameter	Average Period	AAAQOs / AAAQGs	Concentration	Wind speed	Wind Direction	Reference #
Aug 27	2	PM2.5	1-Hour	80 µg/m3	217 µg/m3	4.4 km/hr	346° (NNW)	418443
Aug 27	3	PM2.5	1-Hour	80 µg/m3	220 µg/m3	4.5 km/hr	347° (NNW)	418443
Aug 27	4	PM2.5	1-Hour	80 µg/m3	234 µg/m3	4.4 km/hr	358° (N)	418443
Aug 27	5	PM2.5	1-Hour	80 µg/m3	249 µg/m3	1.3 km/hr	274° (W)	418443
Aug 27	6	PM2.5	1-Hour	80 µg/m3	249 µg/m3	3.2 km/hr	344° (NNW)	418443
Aug 27	7	PM2.5	1-Hour	80 µg/m3	204 µg/m3	0.7 km/hr	342° (NNW)	418443
Aug 27	8	PM2.5	1-Hour	80 µg/m3	219 µg/m3	4.5 km/hr	195° (SSW)	418443
Aug 27	9	PM2.5	1-Hour	80 µg/m3	163 µg/m3	4.8 km/hr	195° (SSW)	418443
Aug 27	10	PM2.5	1-Hour	80 µg/m3	126 µg/m3	8.1 km/hr	193° (S)	418443
Aug 27	11	PM2.5	1-Hour	80 µg/m3	98 µg/m3	11.7 km/hr	193° (S)	418443
Aug 27	16	PM2.5	1-Hour	80 µg/m3	85 µg/m3	13.5 km/hr	246° (WSW)	418443
Aug 27	-	PM2.5	24-Hour	29 µg/m3	134 µg/m3	7.0 km/hr	254° (WSW)	418443
Aug 28	9	PM2.5	1-Hour	80 µg/m3	82 µg/m3	8.3 km/hr	195° (SSW)	418931
Aug 28	10	PM2.5	1-Hour	80 µg/m3	87 µg/m3	8.6 km/hr	208° (SSW)	418931
Aug 28	11	PM2.5	1-Hour	80 µg/m3	94 µg/m3	9.8 km/hr	218° (SW)	418931
Aug 28	12	PM2.5	1-Hour	80 µg/m3	88 µg/m3	12.2 km/hr	194° (SSW)	418931
Aug 28	13	PM2.5	1-Hour	80 µg/m3	83 µg/m3	13.0 km/hr	192° (S)	418931
Aug 28	14	PM2.5	1-Hour	80 µg/m3	84 µg/m3	14.3 km/hr	188° (S)	418931
Aug 28	15	PM2.5	1-Hour	80 µg/m3	98 µg/m3	15.0 km/hr	188° (S)	418931
Aug 28	16	PM2.5	1-Hour	80 µg/m3	110 µg/m3	16.0 km/hr	194° (SSW)	418931
Aug 28	17	PM2.5	1-Hour	80 µg/m3	85 µg/m3	12.3 km/hr	186° (S)	418931
Aug 28	-	PM2.5	24-Hour	29 µg/m3	80 µg/m3	7.8 km/hr	213° (SSW)	418931
Aug 29	4	PM2.5	1-Hour	80 µg/m3	86 µg/m3	2.6 km/hr	301° (WNW)	418931
Aug 29	5	PM2.5	1-Hour	80 µg/m3	87 µg/m3	1.1 km/hr	187° (S)	418931
Aug 29	6	PM2.5	1-Hour	80 µg/m3	93 µg/m3	0.6 km/hr	188° (S)	418931
Aug 29	7	PM2.5	1-Hour	80 µg/m3	92 µg/m3	1.0 km/hr	236° (SW)	418931
Aug 29	8	PM2.5	1-Hour	80 µg/m3	96 µg/m3	4.8 km/hr	178° (S)	418931
Aug 29	9	PM2.5	1-Hour	80 µg/m3	97 µg/m3	6.4 km/hr	191° (S)	418931
Aug 29	10	PM2.5	1-Hour	80 µg/m3	89 µg/m3	5.4 km/hr	184° (S)	418931
Aug 29	11	PM2.5	1-Hour	80 µg/m3	81 µg/m3	7.4 km/hr	188° (S)	418931
Aug 29	13	PM2.5	1-Hour	80 µg/m3	88 µg/m3	6.3 km/hr	191° (S)	418931
Aug 29	14	PM2.5	1-Hour	80 µg/m3	94 µg/m3	6.6 km/hr	199° (SSW)	418931
Aug 29	15	PM2.5	1-Hour	80 µg/m3	99 µg/m3	9.4 km/hr	194° (SSW)	418931
Aug 29	16	PM2.5	1-Hour	80 µg/m3	101 µg/m3	6.5 km/hr	196° (SSW)	418931
Aug 29	17	PM2.5	1-Hour	80 µg/m3	96 µg/m3	6.0 km/hr	180° (S)	418931
Aug 29	18	PM2.5	1-Hour	80 µg/m3	87 µg/m3	2.1 km/hr	199° (SSW)	418931
Aug 29	19	PM2.5	1-Hour	80 µg/m3	153 µg/m3	5.0 km/hr	315° (NW)	418931
Aug 29	20	PM2.5	1-Hour	80 µg/m3	177 µg/m3	6.0 km/hr	323° (NW)	418931
Aug 29	21	PM2.5	1-Hour	80 µg/m3	167 µg/m3	5.9 km/hr	337° (NNW)	418931

Date	Time (MST)	Parameter	Average Period	AAAQOs / AAAQGs	Concentration	Wind speed	Wind Direction	Reference #
Aug 29	22	PM2.5	1-Hour	80 µg/m3	162 µg/m3	7.5 km/hr	335° (NNW)	418931
Aug 29	23	PM2.5	1-Hour	80 µg/m3	159 µg/m3	8.3 km/hr	333° (NNW)	418931
Aug 29	-	PM2.5	24-Hour	29 µg/m3	103 µg/m3	4.8 km/hr	232° (SW)	418931
Aug 30	0	PM2.5	1-Hour	80 µg/m3	151 µg/m3	6.4 km/hr	333° (NNW)	418931
Aug 30	1	PM2.5	1-Hour	80 µg/m3	150 µg/m3	2.8 km/hr	4° (N)	418931
Aug 30	2	PM2.5	1-Hour	80 µg/m3	146 µg/m3	2.4 km/hr	351° (N)	418931
Aug 30	3	PM2.5	1-Hour	80 µg/m3	146 µg/m3	2.1 km/hr	349° (NNW)	418931
Aug 30	4	PM2.5	1-Hour	80 µg/m3	145 µg/m3	0.5 km/hr	59° (ENE)	418931
Aug 30	5	PM2.5	1-Hour	80 µg/m3	144 µg/m3	0.5 km/hr	276° (W)	418931
Aug 30	6	PM2.5	1-Hour	80 µg/m3	147 µg/m3	4.3 km/hr	327° (NW)	418931
Aug 30	7	PM2.5	1-Hour	80 µg/m3	139 µg/m3	3.9 km/hr	322° (NW)	418931
Aug 30	8	PM2.5	1-Hour	80 µg/m3	159 µg/m3	0.8 km/hr	181° (S)	418931
Aug 30	9	PM2.5	1-Hour	80 µg/m3	230 µg/m3	1.4 km/hr	228° (SW)	418931
Aug 30	10	PM2.5	1-Hour	80 µg/m3	393 µg/m3	2.0 km/hr	260° (WSW)	418931
Aug 30	11	PM2.5	1-Hour	80 µg/m3	547 µg/m3	1.9 km/hr	300° (WNW)	418931
Aug 30	12	PM2.5	1-Hour	80 µg/m3	611 µg/m3	4.8 km/hr	325° (NW)	418931
Aug 30	13	PM2.5	1-Hour	80 µg/m3	552 µg/m3	1.9 km/hr	308° (NW)	418931
Aug 30	14	PM2.5	1-Hour	80 µg/m3	329 µg/m3	4.7 km/hr	176° (S)	418931
Aug 30	15	PM2.5	1-Hour	80 µg/m3	291 µg/m3	6.0 km/hr	214° (SSW)	418931
Aug 30	16	PM2.5	1-Hour	80 µg/m3	276 µg/m3	5.7 km/hr	228° (SW)	418931
Aug 30	17	PM2.5	1-Hour	80 µg/m3	280 µg/m3	7.3 km/hr	270° (W)	418931
Aug 30	18	PM2.5	1-Hour	80 µg/m3	240 µg/m3	4.8 km/hr	280° (W)	418931
Aug 30	19	PM2.5	1-Hour	80 µg/m3	218 µg/m3	4.6 km/hr	275° (W)	418931
Aug 30	20	PM2.5	1-Hour	80 µg/m3	207 µg/m3	5.2 km/hr	269° (W)	418931
Aug 30	21	PM2.5	1-Hour	80 µg/m3	153 µg/m3	11.7 km/hr	288° (WNW)	418931
Aug 30	-	PM2.5	24-Hour	29 µg/m3	239 µg/m3	4.8 km/hr	289° (WNW)	418931
Aug 31	-	PM2.5	24-Hour	29 µg/m3	43 µg/m3	8.5 km/hr	309° (NW)	418931

The cause for the exceedance of the PM2.5 objective and guideline was due to wildfire smoke.

Timeseries Chart of Hourly Average for the month of Aug 2023 - AQHI - Grimshaw Station



TABLES, CHARTS AND WIND ROSES

986-C STATION

Peace River Area Monitoring Program

986-C Station - August 2023

Summary of Hourly Averages

SULPHUR DIOXIDE (SO_2) in ppb

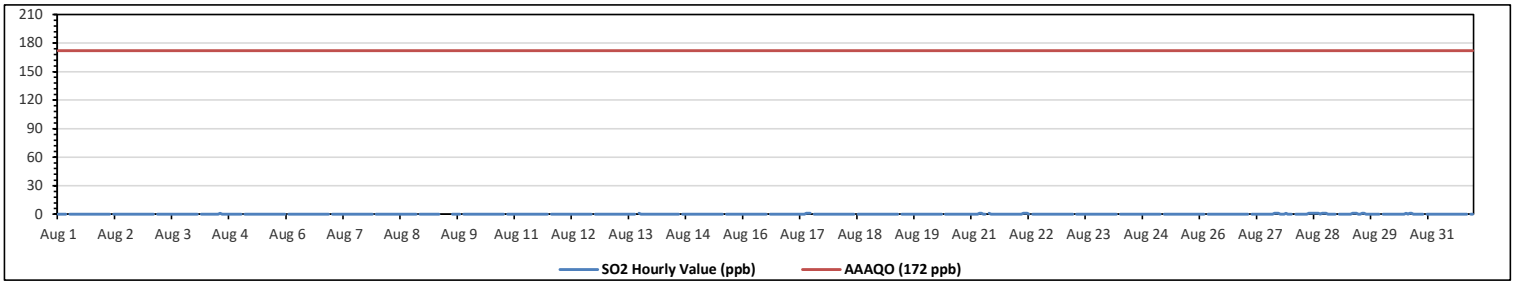
Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb

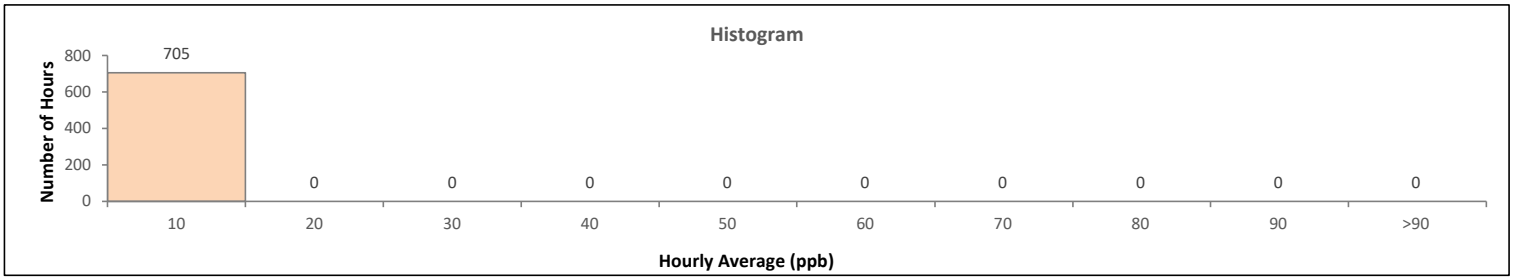
Number of 1-Hour Exceedances:	0	Number of 24-Hour Exceedances:	0	30-Day Exceedence:	0	
Maximum Hourly Value:	1	ppb	on Aug 4 at hr 13	Hours in Service:	744	
Maximum Daily Value:	0.4	ppb	on Aug 28	Hours of Data:	705	
Minimum Hourly Value:	0	ppb	on Aug 1 at hr 0	Hours of Missing Data:	0	
Minimum Daily Value:	0.0	ppb	on Aug 1	Hours of Calibration:	39	
Monthly Average:	0.0	ppb		Operational Uptime:	100.0	

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 2	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 3	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 4	0	0	S	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
Aug 5	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 6	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0.0
Aug 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0.0
Aug 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0.0
Aug 9	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	0	0	0	0	0	S	0	0	0	0	0	NA
Aug 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0.0
Aug 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0.0
Aug 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0.0
Aug 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	1	0	0	0	0	0	0	0	1	0.0
Aug 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0.0
Aug 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 16	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 17	0	0	0	0	0	0	0	0	0	1	1	1	S	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1
Aug 18	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 19	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 20	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 21	0	0	0	0	1	1	0	0	S	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1
Aug 22	0	0	0	1	1	1	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1
Aug 23	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 24	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 25	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 26	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 27	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	0	0	0	1	0.2
Aug 28	0	S	0	0	0	0	0	0	0	1	1	1	1	1	1	0	1	1	1	0	0	0	0	0	0	1	0.4
Aug 29	S	0	0	0	0	0	0	0	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0	S	0	1	0.2
Aug 30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	S	0	0	1	0.1
Aug 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0.0
Diurnal Maximum	0	0	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0			
Diurnal Average	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



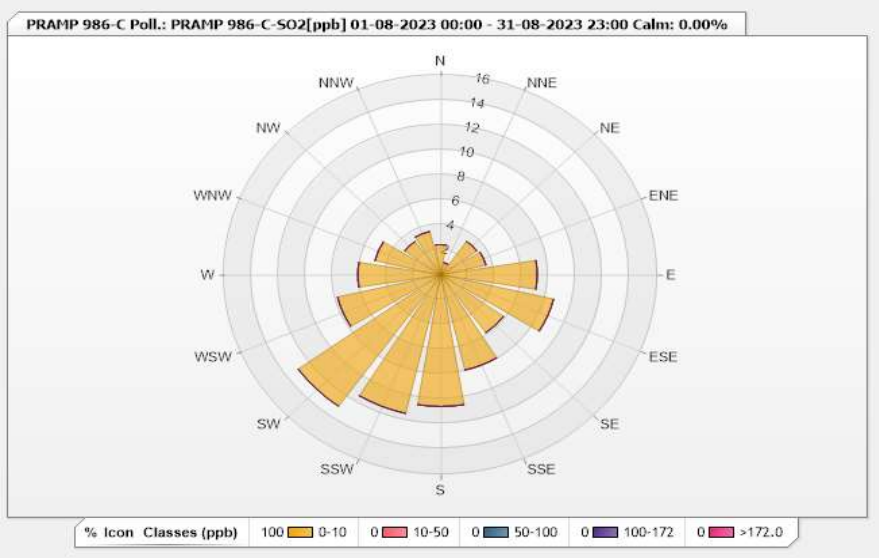


Station: PRAMP 986-C Poll.: PRAMP 986-C-SO2[ppb] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.35% Calm Avg: 0.00 [ppm]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	2.42	0	0	0	0	2.42
NNE	1	0	0	0	0	1
NE	3.28	0	0	0	0	3.28
ENE	3.42	0	0	0	0	3.42
E	7.12	0	0	0	0	7.12
ESE	8.55	0	0	0	0	8.55
SE	5.7	0	0	0	0	5.7
SSE	7.83	0	0	0	0	7.83
S	10.54	0	0	0	0	10.54
SSW	11.4	0	0	0	0	11.4
SW	12.96	0	0	0	0	12.96
WSW	7.83	0	0	0	0	7.83
W	6.13	0	0	0	0	6.13
WNW	4.99	0	0	0	0	4.99
NW	3.28	0	0	0	0	3.28
NNW	3.56	0	0	0	0	3.56
Summary	100	0	0	0	0	100



Peace River Area Monitoring Program

986-C Station - August 2023

Summary of Hourly Averages

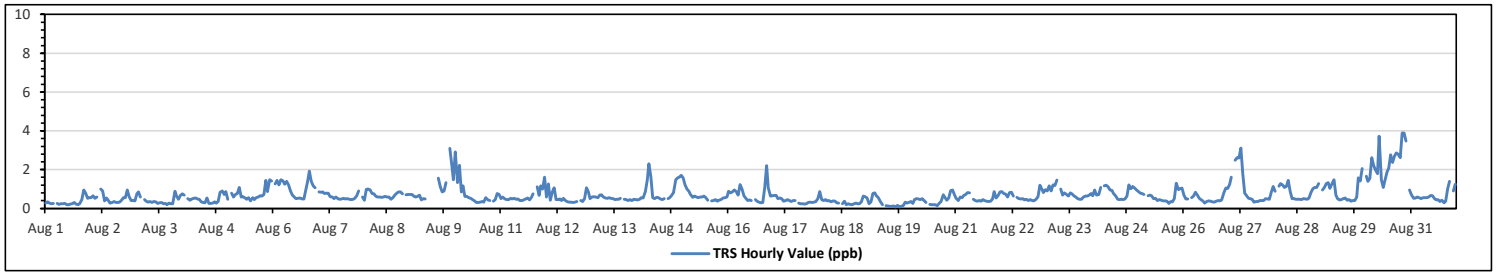
TOTAL REDUCED SULPHUR (TRS) in ppb

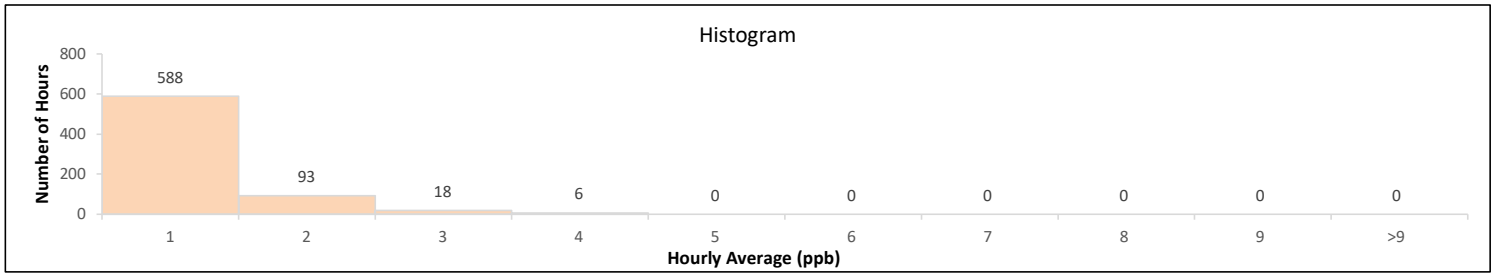
Maximum Hourly Value:	3.89	ppb	on Aug 30 at hr 19	Hours in Service:	744
Maximum Daily Value:	2.32	ppb	on Aug 30	Hours of Data:	705
Minimum Hourly Value:	0.07	ppb	on Aug 19 at hr 16	Hours of Missing Data:	0
Minimum Daily Value:	0.31	ppb	on Aug 19	Hours of Calibration:	39
Monthly Average:	0.70	ppb		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0.27	0.34	0.27	0.25	0.26	S	0.26	0.21	0.25	0.23	0.26	0.18	0.2	0.22	0.23	0.31	0.22	0.2	0.25	0.46	0.96	0.79	0.52	0.55	0.18	0.96	0.33
Aug 2	0.55	0.65	0.52	0.59	S	0.99	0.91	0.39	0.53	0.4	0.27	0.3	0.35	0.31	0.31	0.33	0.43	0.56	0.56	0.96	0.61	0.42	0.41	0.39	0.27	0.99	0.51
Aug 3	0.75	0.85	0.58	S	0.46	0.38	0.32	0.36	0.31	0.35	0.34	0.26	0.29	0.3	0.23	0.26	0.18	0.27	0.25	0.24	0.88	0.63	0.48	0.67	0.18	0.88	0.42
Aug 4	0.75	0.68	S	0.5	0.43	0.49	0.52	0.54	0.49	0.47	0.34	0.3	0.29	0.54	0.26	0.26	0.27	0.34	0.28	0.35	0.84	0.91	0.72	0.87	0.26	0.91	0.50
Aug 5	0.47	S	0.79	0.58	0.71	0.76	1.08	0.6	0.61	0.54	0.47	0.55	0.39	0.56	0.45	0.55	0.59	0.65	0.64	0.71	1.44	0.87	1.49	1.41	0.39	1.49	0.74
Aug 6	S	1.27	1.44	1.21	1.48	1.43	1.24	1.4	1.21	0.9	0.69	0.58	0.51	0.52	0.53	0.49	0.49	0.88	1.35	1.92	1.39	1.17	1.07	S	0.49	1.92	1.05
Aug 7	0.86	0.84	0.85	0.78	0.79	0.79	0.61	0.58	0.5	0.59	0.51	0.47	0.49	0.52	0.49	0.51	0.47	0.46	0.47	0.52	0.65	0.9	S	0.59	0.46	0.90	0.62
Aug 8	0.43	0.98	1	0.95	0.77	0.75	0.63	0.58	0.6	0.57	0.59	0.62	0.58	0.58	0.47	0.55	0.69	0.79	0.86	0.86	0.75	S	0.7	0.71	0.43	1.00	0.70
Aug 9	0.73	0.72	0.63	0.58	0.62	0.68	0.44	0.51	0.49	C	C	C	C	C	C	1.56	1.14	0.85	0.9	1.33	S	3.1	2.26	1.47	0.44	3.10	NA
Aug 10	2.92	1.33	2.22	0.85	1.16	0.62	0.62	0.55	0.52	0.46	0.39	0.3	0.3	0.32	0.35	0.33	0.56	0.44	0.41	S	0.38	0.46	0.78	0.73	0.30	2.92	0.74
Aug 11	0.5	0.59	0.49	0.46	0.46	0.52	0.49	0.52	0.48	0.49	0.41	0.42	0.44	0.49	0.54	0.44	0.57	0.75	S	1.11	0.67	1.16	1.01	1.62	0.41	1.62	0.64
Aug 12	0.59	1.27	0.43	0.84	1.06	0.45	0.46	0.49	0.4	0.52	0.4	0.34	0.32	0.33	0.31	0.32	0.35	S	0.4	0.36	0.5	1.07	0.85	0.51	0.31	1.27	0.55
Aug 13	0.6	0.61	0.59	0.56	0.68	0.7	0.59	0.54	0.52	0.55	0.52	0.51	0.45	0.47	0.48	0.52	S	0.48	0.46	0.41	0.45	0.4	0.48	0.45	0.40	0.70	0.52
Aug 14	0.44	0.47	0.56	0.54	0.87	1.46	2.31	1.67	0.55	0.51	0.57	0.55	0.49	0.45	0.51	S	0.51	0.56	0.67	0.82	1.49	1.58	1.62	1.71	0.44	2.31	0.91
Aug 15	1.57	1.22	0.99	0.88	0.72	0.57	0.64	0.6	0.55	0.59	0.6	0.63	0.55	0.43	S	0.39	0.41	0.45	0.37	0.43	0.45	0.53	0.55	0.6	0.37	1.57	0.64
Aug 16	0.88	0.8	0.86	0.95	0.87	0.69	1.23	0.99	0.65	0.52	0.4	0.44	0.41	S	0.46	0.38	0.32	0.29	0.31	1.07	2.21	1.07	0.63	0.66	0.29	2.21	0.74
Aug 17	0.67	0.67	0.5	0.53	0.51	0.37	0.42	0.46	0.41	0.35	0.41	0.42	S	0.27	0.25	0.25	0.22	0.24	0.31	0.33	0.3	0.32	0.36	0.51	0.22	0.67	0.39
Aug 18	0.87	0.46	0.42	0.45	0.39	0.41	0.34	0.39	0.38	0.29	0.27	S	0.25	0.38	0.18	0.23	0.21	0.18	0.23	0.27	0.23	0.25	0.34	0.63	0.18	0.87	0.35
Aug 19	0.61	0.53	0.24	0.34	0.78	0.8	0.66	0.55	0.34	0.2	S	0.15	0.12	0.11	0.11	0.12	0.07	0.16	0.08	0.11	0.14	0.32	0.27	0.3	0.07	0.80	0.31
Aug 20	0.36	0.26	0.46	0.5	0.49	0.45	0.5	0.42	0.31	S	0.21	0.2	0.2	0.19	0.15	0.26	0.35	0.7	0.57	0.43	0.54	0.92	0.95	0.7	0.15	0.95	0.44
Aug 21	0.52	0.4	0.59	0.55	0.67	0.71	0.81	0.8	S	0.47	0.42	0.38	0.4	0.37	0.45	0.41	0.38	0.36	0.38	0.49	0.87	0.53	0.66	0.85	0.36	0.87	0.54
Aug 22	0.87	0.77	0.74	0.58	0.82	0.83	0.64	S	0.57	0.51	0.49	0.5	0.44	0.47	0.41	0.46	0.4	0.39	0.48	0.61	1.2	1.01	0.82	0.97	0.39	1.20	0.65
Aug 23	0.89	1.16	0.89	1.21	1.18	1.46	S	0.99	0.69	0.8	0.74	0.64	0.8	0.75	0.66	0.6	0.51	0.47	0.47	0.59	0.63	0.64	0.69	0.78	0.47	1.46	0.79
Aug 24	0.66	0.96	0.69	0.71	1.09	S	1.17	1.2	1.11	0.95	0.93	0.78	0.64	0.48	0.46	0.47	0.45	0.49	0.63	1.21	1.02	1.12	1.05	0.94	0.45	1.21	0.84
Aug 25	0.87	0.79	0.78	0.73	S	0.66	0.69	0.65	0.5	0.52	0.42	0.46	0.43	0.39	0.39	0.38	0.26	0.35	0.34	0.5	1.29	0.97	1.02	1.05	0.26	1.29	0.63
Aug 26	0.69	0.49	0.49	S	0.55	0.63	0.84	0.68	0.52	0.46	0.39	0.27	0.36	0.39	0.38	0.34	0.33	0.37	0.41	0.39	0.44	0.82	1.05	1.03	0.27	1.05	0.54
Aug 27	1.25	1.62	S	2.48	2.62	2.59	3.11	1.77	0.79	0.65	0.52	0.51	0.47	0.33	0.35	0.36	0.4	0.41	0.4	0.51	0.49	0.48	0.84	1.13	0.33	3.11	1.05
Aug 28	0.88	S	1.15	1.28	1.21	1.08	1.13	1.44	0.88	0.51	0.51	0.48	0.47	0.48	0.46	0.51	0.49	0.47	0.54	0.82	1.02	1.09	1.09	1.28	0.46	1.44	0.84
Aug 29	S	0.95	1.08	1.28	1.33	1.03	1.25	1.49	0.69	0.5	0.44	0.46	0.5	0.53	0.43	0.46	0.37	0.4	0.42	0.59	1.58	1.41	2.06	S	0.37	2.06	0.88
Aug 30	1.66	1.39	1.55	2.62	2.21	1.98	1.8	3.73	1.47	1.09	1.5	1.9	2.07	2.76	2.37	2.7	2.86	2.79	2.62	**3.89**	3.88	3.47	S	0.96	0.96	**3.89**	**2.32**
Aug 31	0.7	0.52	0.54	0.58	0.56	0.51	0.56	0.56	0.56	0.6	0.67	0.66	0.51	0.44	0.45	0.36	0.43	0.29	0.37	1	1.39	S	0.89	1.25	0.29	1.39	0.63
Diurnal Maximum	2.92	1.62	2.22	2.62	2.62	2.59	3.11	3.73	1.47	1.09	1.50	1.90	2.07	2.76	2.37	2.70	2.86	2.79	2.62	3.89	3.88	3.47	2.26	1.71			
Diurnal Average	0.82	0.81	0.77	0.84	0.89	0.85	0.88	0.86	0.60	0.54	0.51	0.49	0.47	0.50	0.45	0.50	0.50	0.53	0.55	0.78	0.96	0.98	0.88	0.87			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



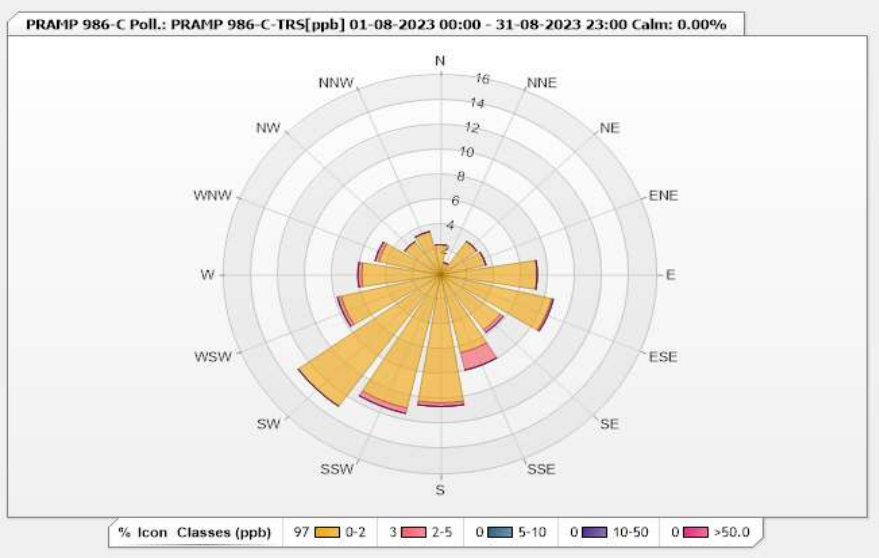


Station: PRAMP 986-C Poll.: PRAMP 986-C-TRS[ppb] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.35% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	2.42	0	0	0	0	2.42
NNE	1	0	0	0	0	1
NE	3.28	0	0	0	0	3.28
ENE	3.42	0	0	0	0	3.42
E	7.12	0	0	0	0	7.12
ESE	8.4	0.14	0	0	0	8.54
SE	5.41	0.28	0	0	0	5.69
SSE	6.41	1.42	0	0	0	7.83
S	10.26	0.28	0	0	0	10.54
SSW	10.97	0.43	0	0	0	11.4
SW	12.96	0	0	0	0	12.96
WSW	7.55	0.28	0	0	0	7.83
W	5.84	0.28	0	0	0	6.12
WNW	4.7	0.28	0	0	0	4.98
NW	3.28	0	0	0	0	3.28
NNW	3.56	0	0	0	0	3.56
Summary	96.58	3.39	0	0	0	100



Peace River Area Monitoring Program

986-C Station - August 2023

Summary of Hourly Averages

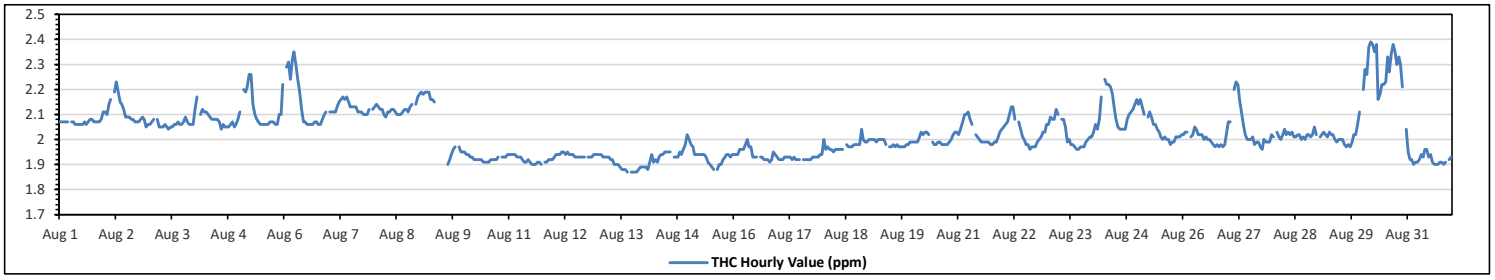
TOTAL HYDROCARBONS (THC) in ppm

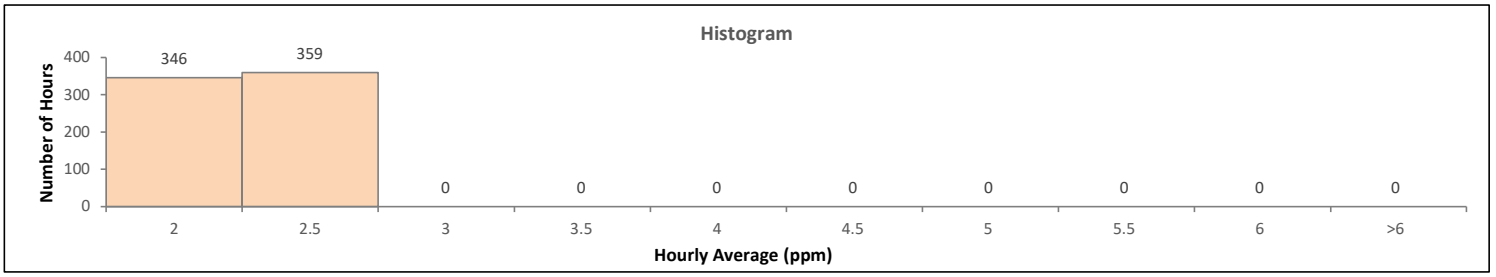
Maximum Hourly Value:	2.39	ppm	on Aug 30 at hr 4	Hours in Service:	744
Maximum Daily Value:	2.28	ppm	on Aug 30	Hours of Data:	705
Minimum Hourly Value:	1.87	ppm	on Aug 13 at hr 15	Hours of Missing Data:	0
Minimum Daily Value:	1.90	ppm	on Aug 13	Hours of Calibration:	39
Monthly Average:	2.03	ppm		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	2.07	2.07	2.07	2.07	2.07	S	2.07	2.07	2.06	2.06	2.06	2.06	2.06	2.07	2.06	2.07	2.08	2.08	2.07	2.07	2.07	2.07	2.08	2.11	2.06	2.11	2.07
Aug 2	2.11	2.10	2.14	2.16	S	2.19	2.23	2.19	2.15	2.14	2.12	2.09	2.09	2.09	2.08	2.08	2.07	2.07	2.07	2.08	2.09	2.08	2.05	2.06	2.05	2.23	2.11
Aug 3	2.06	2.07	2.08	S	2.08	2.05	2.05	2.05	2.06	2.05	2.04	2.05	2.05	2.06	2.06	2.07	2.06	2.06	2.07	2.09	2.07	2.06	2.06	2.06	2.04	2.09	2.06
Aug 4	2.12	2.17	S	2.10	2.12	2.11	2.11	2.10	2.09	2.08	2.08	2.08	2.08	2.07	2.04	2.06	2.05	2.05	2.05	2.06	2.07	2.05	2.06	2.08	2.04	2.17	2.08
Aug 5	2.11	S	2.20	2.19	2.21	2.26	2.26	2.14	2.10	2.08	2.07	2.06	2.06	2.06	2.06	2.06	2.07	2.07	2.07	2.06	2.06	2.10	2.10	2.22	2.06	2.26	2.12
Aug 6	S	2.29	2.31	2.24	2.32	2.35	2.30	2.24	2.19	2.12	2.07	2.07	2.06	2.06	2.06	2.06	2.07	2.07	2.06	2.06	2.08	2.10	2.11	S	2.06	2.35	2.15
Aug 7	2.11	2.11	2.11	2.11	2.13	2.15	2.16	2.17	2.16	2.17	2.15	2.13	2.13	2.13	2.13	2.11	2.11	2.11	2.10	2.10	2.10	2.12	S	2.12	2.10	2.17	2.13
Aug 8	2.13	2.14	2.13	2.12	2.12	2.10	2.09	2.11	2.11	2.12	2.12	2.11	2.10	2.10	2.10	2.11	2.12	2.12	2.11	2.13	2.14	S	2.14	2.17	2.09	2.17	2.12
Aug 9	2.18	2.19	2.18	2.19	2.19	2.19	2.16	2.16	2.15	C	C	C	C	C	C	1.90	1.92	1.94	1.96	1.97	S	1.97	1.95	1.95	1.90	2.19	NA
Aug 10	1.95	1.94	1.94	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.91	1.91	1.91	1.91	1.92	1.92	1.92	1.92	1.93	S	1.93	1.93	1.94	1.91	1.95	1.92
Aug 11	1.94	1.94	1.94	1.94	1.93	1.93	1.93	1.92	1.91	1.91	1.92	1.91	1.90	1.90	1.90	1.91	1.91	1.90	S	1.91	1.91	1.92	1.92	1.92	1.90	1.94	1.92
Aug 12	1.93	1.94	1.94	1.94	1.95	1.95	1.94	1.95	1.94	1.94	1.94	1.93	1.93	1.93	1.93	1.93	1.93	S	1.93	1.93	1.93	1.94	1.94	1.94	1.93	1.95	1.94
Aug 13	1.94	1.94	1.93	1.93	1.93	1.93	1.92	1.92	1.90	1.90	1.90	1.89	1.88	1.88	1.88	1.87	S	1.87	1.87	1.87	1.87	1.88	1.89	1.89	1.87	1.94	1.90
Aug 14	1.89	1.89	1.88	1.91	1.94	1.91	1.92	1.91	1.93	1.94	1.94	1.95	1.95	1.95	1.95	S	1.93	1.93	1.93	1.95	1.94	1.96	1.98	2.02	1.88	2.02	1.93
Aug 15	2.00	1.98	1.97	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.91	1.90	1.89	1.88	S	1.88	1.90	1.90	1.92	1.93	1.94	1.94	1.93	1.94	1.88	2.00	1.93
Aug 16	1.94	1.94	1.94	1.96	1.96	1.96	1.98	2.00	1.97	1.97	1.93	1.93	1.93	S	1.93	1.93	1.92	1.92	1.92	1.91	1.92	1.95	1.94	1.93	1.91	2.00	1.94
Aug 17	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.92	1.93	1.92	1.92	1.92	S	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.94	1.94	1.92	1.94	1.93
Aug 18	2.00	1.96	1.97	1.96	1.96	1.95	1.96	1.96	1.96	1.96	1.96	S	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.98	2.04	2.00	1.99	1.99	1.95	2.04	1.98
Aug 19	2.00	2.00	2.00	2.00	1.99	2.00	2.00	2.00	2.00	1.98	S	1.97	1.97	1.98	1.97	1.98	1.97	1.97	1.97	1.97	1.98	1.98	1.99	1.99	1.97	2.00	1.99
Aug 20	1.99	1.99	1.99	2.01	2.03	2.02	2.03	2.03	2.02	S	1.99	1.98	1.98	1.99	1.99	1.98	1.98	1.98	1.98	1.99	2.00	2.02	2.03	2.03	1.98	2.03	2.00
Aug 21	2.02	2.04	2.07	2.10	2.10	2.11	2.08	2.06	S	2.02	2.01	2.00	1.99	1.99	1.99	1.99	1.99	1.98	1.98	1.99	1.99	2.01	2.03	2.04	1.98	2.11	2.03
Aug 22	2.05	2.06	2.07	2.10	2.13	2.13	2.08	S	2.07	2.04	2.01	2.00	1.98	1.98	1.96	1.97	1.97	1.97	1.99	2.00	2.01	2.03	2.03	2.06	1.96	2.13	2.03
Aug 23	2.06	2.09	2.08	2.08	2.12	2.10	S	2.08	2.08	2.05	1.99	2.00	1.98	1.98	1.97	1.96	1.96	1.97	1.97	1.97	1.99	2.00	2.01	2.01	1.96	2.12	2.02
Aug 24	2.03	2.06	2.04	2.08	2.17	S	2.24	2.22	2.22	2.21	2.18	2.13	2.08	2.05	2.04	2.04	2.04	2.04	2.08	2.10	2.11	2.12	2.14	2.16	2.03	2.24	2.11
Aug 25	2.14	2.16	2.13	2.10	S	2.09	2.11	2.09	2.06	2.06	2.04	2.03	2.01	2.00	2.01	2.00	2.00	1.98	1.99	1.99	2.01	2.01	2.01	2.02	1.98	2.16	2.05
Aug 26	2.02	2.03	2.03	S	2.01	2.02	2.05	2.04	2.02	2.02	2.02	2.00	2.01	2.00	2.00	1.99	1.98	1.97	1.98	1.97	1.98	1.97	1.98	2.03	1.97	2.05	2.01
Aug 27	2.07	2.07	S	2.20	2.23	2.22	2.16	2.11	2.06	2.02	2.00	2.00	2.00	2.01	1.98	1.99	1.99	1.97	1.96	2.00	1.99	1.99	1.99	2.02	1.96	2.23	2.04
Aug 28	2.01	S	2.03	2.01	2.00	2.02	2.04	2.02	2.03	2.02	2.03	2.01	2.01	2.02	2.02	2.00	2.01	2.00	2.02	2.02	2.01	2.02	2.05	2.02	2.00	2.05	2.02
Aug 29	S	2.01	2.02	2.03	2.02	2.01	2.03	2.02	2.02	2.00	1.99	2.00	2.00	2.00	1.98	1.97	1.98	1.97	1.99	2.02	2.02	2.06	2.11	S	1.97	2.11	2.01
Aug 30	2.20	2.28	2.26	2.37	**2.39**	2.38	2.35	2.38	2.16	2.18	2.22	2.22	2.23	2.33	2.27	2.34	2.38	2.35	2.30	2.33	2.30	2.21	S	2.04	2.04	**2.39**	**2.28**
Aug 31	1.95	1.92	1.92	1.90	1.91	1.91	1.92	1.94	1.93	1.96	1.96	1.93	1.94	1.91	1.90	1.90	1.90	1.91	1.91	1.90	1.91	S	1.92	1.93	1.90	1.96	1.92
Diurnal Maximum	2.20	2.29	2.31	2.37	2.39	2.38	2.35	2.38	2.22	2.21	2.22	2.22	2.23	2.33	2.27	2.34	2.38	2.35	2.30	2.33	2.30	2.21	2.14	2.22			
Diurnal Average	2.03	2.04	2.04	2.06	2.06	2.06	2.07	2.06	2.04	2.03	2.02	2.01	2.01	2.01	2.00	2.00	2.00	2.00	2.00	2.01	2.01	2.01	2.01	2.02			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



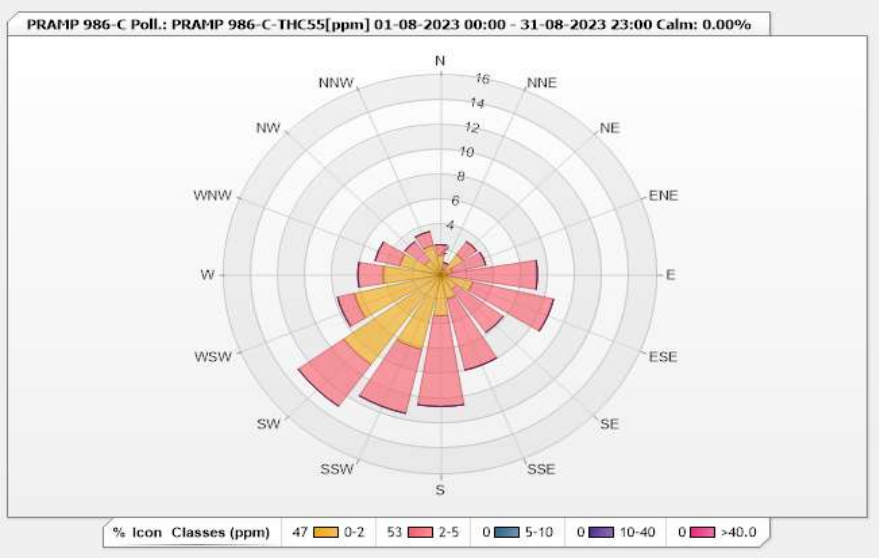


Station: PRAMP 986-C Poll.: PRAMP 986-C-THC55[ppm] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.35% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	1.57	0.85	0	0	0	2.42
NNE	0.43	0.57	0	0	0	1
NE	1.99	1.28	0	0	0	3.27
ENE	0.85	2.56	0	0	0	3.41
E	0.43	6.7	0	0	0	7.13
ESE	2.42	6.13	0	0	0	8.55
SE	1.42	4.27	0	0	0	5.69
SSE	1.99	5.84	0	0	0	7.83
S	3.28	7.26	0	0	0	10.54
SSW	6.13	5.27	0	0	0	11.4
SW	8.83	4.13	0	0	0	12.96
WSW	6.55	1.28	0	0	0	7.83
W	4.27	1.85	0	0	0	6.12
WNW	3.13	1.85	0	0	0	4.98
NW	1.42	1.85	0	0	0	3.27
NNW	2.42	1.14	0	0	0	3.56
Summary	47.13	52.83	0	0	0	100



Peace River Area Monitoring Program

986-C Station - August 2023

Summary of Hourly Averages

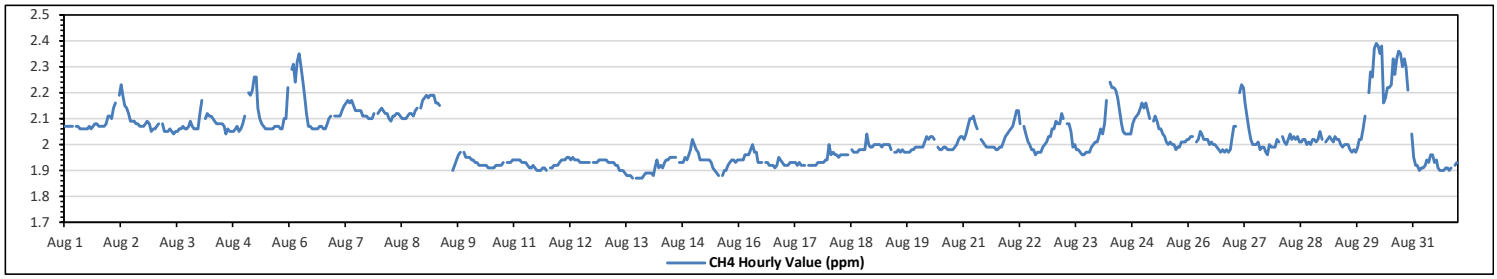
METHANE (CH4) in ppm

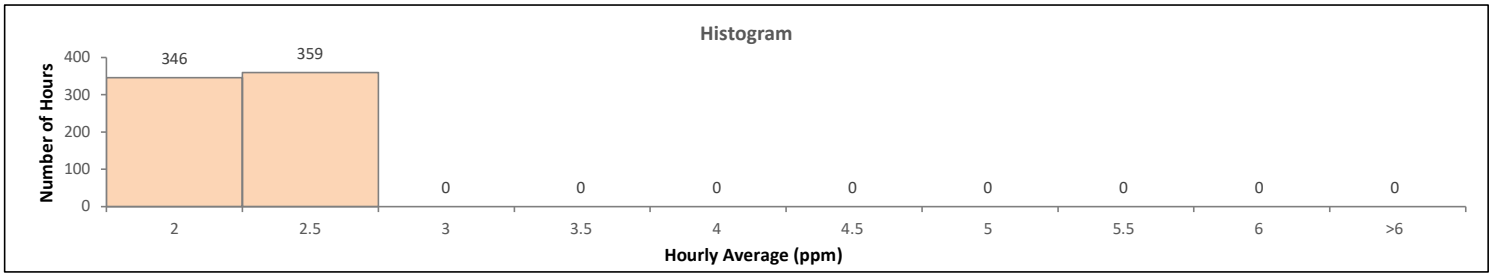
Maximum Hourly Value:	2.39	ppm	on Aug 30 at hr 4	Hours in Service:	744
Maximum Daily Value:	2.28	ppm	on Aug 30	Hours of Data:	705
Minimum Hourly Value:	1.87	ppm	on Aug 13 at hr 15	Hours of Missing Data:	0
Minimum Daily Value:	1.90	ppm	on Aug 13	Hours of Calibration:	39
Monthly Average:	2.03	ppm		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Aug 1	2.07	2.07	2.07	2.07	2.07	S	2.07	2.07	2.06	2.06	2.06	2.06	2.06	2.07	2.06	2.07	2.08	2.08	2.07	2.07	2.07	2.07	2.08	2.11	2.06	2.11	2.07
Aug 2	2.11	2.10	2.14	2.16	S	2.19	2.23	2.19	2.15	2.14	2.12	2.09	2.09	2.09	2.08	2.08	2.07	2.07	2.07	2.08	2.09	2.08	2.05	2.06	2.05	2.23	2.11
Aug 3	2.06	2.07	2.08	S	2.08	2.05	2.05	2.05	2.06	2.05	2.04	2.05	2.05	2.06	2.06	2.07	2.06	2.06	2.07	2.09	2.07	2.06	2.06	2.06	2.04	2.09	2.06
Aug 4	2.12	2.17	S	2.10	2.12	2.11	2.11	2.10	2.09	2.08	2.08	2.08	2.08	2.07	2.04	2.06	2.05	2.05	2.05	2.06	2.07	2.05	2.06	2.08	2.04	2.17	2.08
Aug 5	2.11	S	2.20	2.19	2.21	2.26	2.26	2.14	2.10	2.08	2.07	2.06	2.06	2.06	2.06	2.06	2.07	2.07	2.07	2.06	2.06	2.10	2.10	2.22	2.06	2.26	2.12
Aug 6	S	2.29	2.31	2.24	2.32	2.35	2.30	2.24	2.19	2.12	2.07	2.07	2.06	2.06	2.06	2.06	2.07	2.07	2.06	2.06	2.08	2.10	2.11	S	2.06	2.35	2.15
Aug 7	2.11	2.11	2.11	2.11	2.13	2.15	2.16	2.17	2.16	2.17	2.15	2.13	2.13	2.13	2.13	2.11	2.11	2.11	2.10	2.10	2.10	2.12	S	2.12	2.10	2.17	2.13
Aug 8	2.13	2.14	2.13	2.12	2.12	2.10	2.09	2.11	2.11	2.12	2.12	2.11	2.10	2.10	2.10	2.11	2.12	2.12	2.11	2.13	2.14	S	2.14	2.17	2.09	2.17	2.12
Aug 9	2.18	2.19	2.18	2.19	2.19	2.19	2.16	2.16	2.15	C	C	C	C	C	C	1.90	1.92	1.94	1.96	1.97	S	1.97	1.95	1.95	1.90	2.19	NA
Aug 10	1.95	1.94	1.94	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.91	1.91	1.91	1.91	1.92	1.92	1.92	1.92	1.93	S	1.93	1.93	1.94	1.91	1.95	1.92
Aug 11	1.94	1.94	1.94	1.94	1.93	1.93	1.93	1.92	1.91	1.91	1.92	1.91	1.90	1.90	1.90	1.91	1.91	1.90	S	1.91	1.91	1.92	1.92	1.92	1.90	1.94	1.92
Aug 12	1.93	1.94	1.94	1.94	1.95	1.95	1.94	1.95	1.94	1.94	1.94	1.93	1.93	1.93	1.93	1.93	1.93	S	1.93	1.93	1.93	1.94	1.94	1.94	1.93	1.95	1.94
Aug 13	1.94	1.94	1.93	1.93	1.93	1.93	1.92	1.92	1.90	1.90	1.90	1.89	1.88	1.88	1.88	1.87	S	1.87	1.87	1.87	1.87	1.88	1.89	1.89	1.87	1.94	1.90
Aug 14	1.89	1.89	1.88	1.91	1.94	1.91	1.92	1.91	1.93	1.94	1.94	1.95	1.95	1.95	1.95	S	1.93	1.93	1.93	1.95	1.94	1.96	1.98	2.02	1.88	2.02	1.93
Aug 15	2.00	1.98	1.97	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.91	1.90	1.89	1.88	S	1.88	1.90	1.90	1.92	1.93	1.94	1.94	1.93	1.94	1.88	2.00	1.93
Aug 16	1.94	1.94	1.94	1.96	1.96	1.96	1.98	2.00	1.97	1.97	1.93	1.93	1.93	S	1.93	1.93	1.92	1.92	1.92	1.91	1.92	1.95	1.94	1.93	1.91	2.00	1.94
Aug 17	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.92	1.93	1.92	1.92	1.92	S	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.94	1.94	1.92	1.94	1.93
Aug 18	2.00	1.96	1.97	1.96	1.96	1.95	1.96	1.96	1.96	1.96	1.96	S	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.98	2.04	2.00	1.99	1.99	1.95	2.04	1.98
Aug 19	2.00	2.00	2.00	2.00	1.99	2.00	2.00	2.00	2.00	1.98	S	1.97	1.97	1.98	1.97	1.98	1.97	1.97	1.97	1.97	1.98	1.98	1.99	1.99	1.97	2.00	1.99
Aug 20	1.99	1.99	1.99	2.01	2.03	2.02	2.03	2.03	2.02	S	1.99	1.98	1.98	1.99	1.99	1.98	1.98	1.98	1.98	1.99	2.00	2.02	2.03	2.03	1.98	2.03	2.00
Aug 21	2.02	2.04	2.07	2.10	2.10	2.11	2.08	2.06	S	2.02	2.01	2.00	1.99	1.99	1.99	1.99	1.99	1.98	1.98	1.99	1.99	2.01	2.03	2.04	1.98	2.11	2.03
Aug 22	2.05	2.06	2.07	2.10	2.13	2.13	2.08	S	2.07	2.04	2.01	2.00	1.98	1.98	1.96	1.97	1.97	1.97	1.99	2.00	2.01	2.03	2.03	2.06	1.96	2.13	2.03
Aug 23	2.06	2.09	2.08	2.08	2.12	2.10	S	2.08	2.08	2.05	1.99	2.00	1.98	1.98	1.97	1.96	1.96	1.97	1.97	1.97	1.99	2.00	2.01	2.01	1.96	2.12	2.02
Aug 24	2.03	2.06	2.04	2.08	2.17	S	2.24	2.22	2.22	2.21	2.18	2.13	2.08	2.05	2.04	2.04	2.04	2.04	2.08	2.10	2.11	2.12	2.14	2.16	2.03	2.24	2.11
Aug 25	2.14	2.16	2.13	2.10	S	2.09	2.11	2.09	2.06	2.06	2.04	2.03	2.01	2.00	2.01	2.00	2.00	1.98	1.99	1.99	2.01	2.01	2.01	2.02	1.98	2.16	2.05
Aug 26	2.02	2.03	2.03	S	2.01	2.02	2.05	2.04	2.02	2.02	2.02	2.00	2.01	2.00	2.00	1.99	1.98	1.97	1.98	1.97	1.98	1.97	1.98	2.03	1.97	2.05	2.01
Aug 27	2.07	2.07	S	2.20	2.23	2.22	2.16	2.11	2.06	2.02	2.00	2.00	2.00	2.01	1.98	1.99	1.99	1.97	1.96	2.00	1.99	1.99	1.99	2.02	1.96	2.23	2.04
Aug 28	2.01	S	2.03	2.01	2.00	2.02	2.04	2.02	2.03	2.02	2.03	2.01	2.01	2.02	2.02	2.00	2.01	2.00	2.02	2.02	2.01	2.02	2.05	2.02	2.00	2.05	2.02
Aug 29	S	2.01	2.02	2.03	2.02	2.01	2.03	2.02	2.02	2.00	1.99	2.00	2.00	2.00	1.98	1.97	1.98	1.97	1.99	2.02	2.02	2.06	2.11	S	1.97	2.11	2.01
Aug 30	2.20	2.28	2.26	2.37	**2.39**	2.38	2.35	2.38	2.16	2.18	2.22	2.22	2.23	2.33	2.27	2.33	2.36	2.35	2.30	2.33	2.30	2.21	S	2.04	2.04	**2.39**	**2.28**
Aug 31	1.95	1.92	1.92	1.90	1.91	1.91	1.92	1.94	1.93	1.96	1.96	1.93	1.94	1.91	1.90	1.90	1.90	1.91	1.91	1.90	1.91	S	1.92	1.93	1.90	1.96	1.92
Diurnal Maximum	2.20	2.29	2.31	2.37	2.39	2.38	2.35	2.38	2.22	2.21	2.22	2.22	2.23	2.33	2.27	2.33	2.36	2.35	2.30	2.33	2.30	2.21	2.14	2.22			
Diurnal Average	2.03	2.04	2.04	2.06	2.06	2.06	2.07	2.06	2.04	2.03	2.02	2.01	2.01	2.01	2.00	2.00	2.00	2.00	2.00	2.01	2.01	2.01	2.01	2.02			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



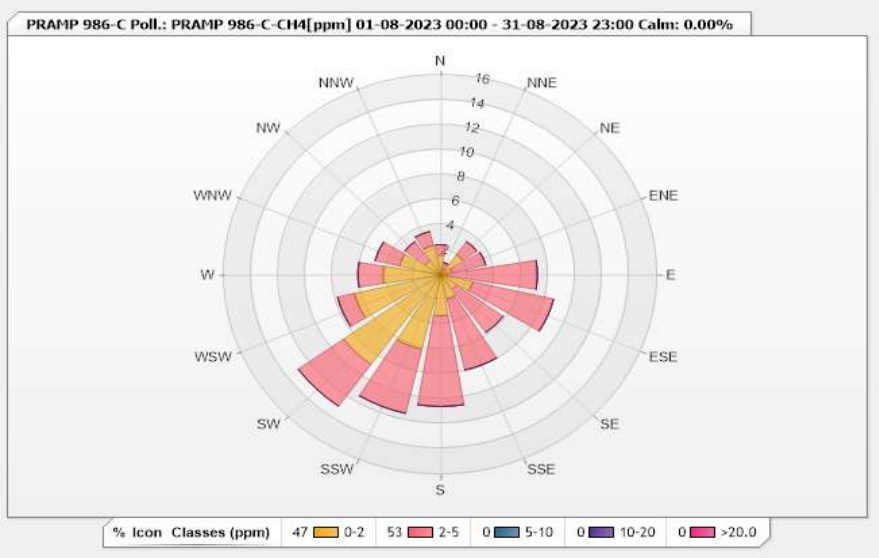


Station: PRAMP 986-C Poll.: PRAMP 986-C-CH4[ppm] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.35% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	1.57	0.85	0	0	0	2.42
NNE	0.43	0.57	0	0	0	1
NE	1.99	1.28	0	0	0	3.27
ENE	0.85	2.56	0	0	0	3.41
E	0.43	6.7	0	0	0	7.13
ESE	2.42	6.13	0	0	0	8.55
SE	1.42	4.27	0	0	0	5.69
SSE	1.99	5.84	0	0	0	7.83
S	3.28	7.26	0	0	0	10.54
SSW	6.13	5.27	0	0	0	11.4
SW	8.83	4.13	0	0	0	12.96
WSW	6.55	1.28	0	0	0	7.83
W	4.27	1.85	0	0	0	6.12
WNW	3.13	1.85	0	0	0	4.98
NW	1.42	1.85	0	0	0	3.27
NNW	2.42	1.14	0	0	0	3.56
Summary	47.13	52.83	0	0	0	100



Peace River Area Monitoring Program

986-C Station - August 2023

Summary of Hourly Averages

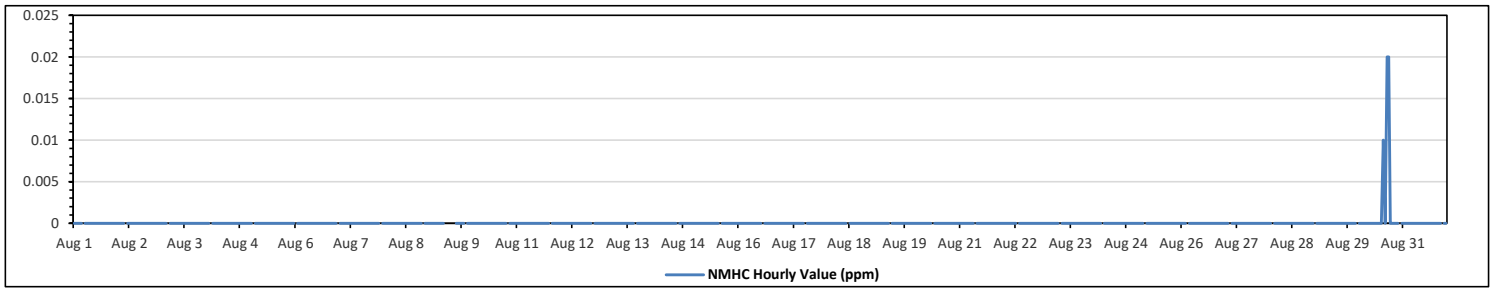
NON-METHANE HYDROCARBONS (NMHC) in ppm

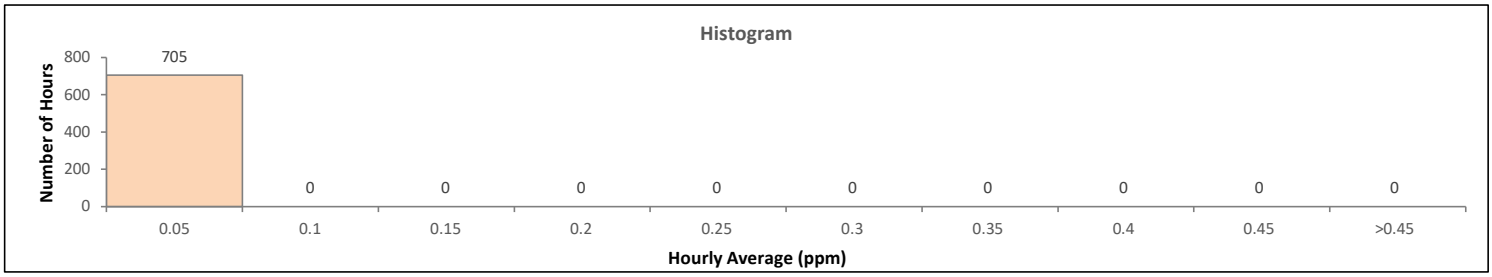
Maximum Hourly Value:	0.02	ppm	on Aug 30 at hr 15	Hours in Service:	744
Maximum Daily Value:	0.00	ppm	on Aug 30	Hours of Data:	705
Minimum Hourly Value:	0.00	ppm	on Aug 1 at hr 0	Hours of Missing Data:	0
Minimum Daily Value:	0.00	ppm	on Aug 1	Hours of Calibration:	39
Monthly Average:	0.00	ppm		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 2	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 3	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 4	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 5	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 6	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00
Aug 7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00
Aug 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00
Aug 9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	C	C	C	C	C	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	NA
Aug 10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 23	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 24	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 25	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 26	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 27	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 28	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 29	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00
Aug 30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	**0.02**	**0.02**	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	**0.02**	**0.00**
Aug 31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00
Diurnal Maximum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Diurnal Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



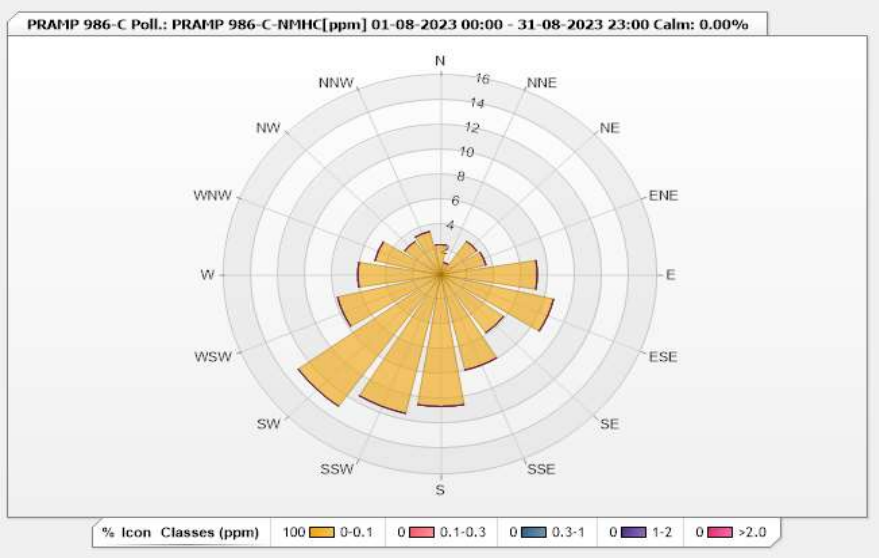


Station: PRAMP 986-C Poll.: PRAMP 986-C-NMHC[ppm] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.35% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	2.42	0	0	0	0	2.42
NNE	1	0	0	0	0	1
NE	3.28	0	0	0	0	3.28
ENE	3.42	0	0	0	0	3.42
E	7.12	0	0	0	0	7.12
ESE	8.55	0	0	0	0	8.55
SE	5.7	0	0	0	0	5.7
SSE	7.83	0	0	0	0	7.83
S	10.54	0	0	0	0	10.54
SSW	11.4	0	0	0	0	11.4
SW	12.96	0	0	0	0	12.96
WSW	7.83	0	0	0	0	7.83
W	6.13	0	0	0	0	6.13
WNW	4.99	0	0	0	0	4.99
NW	3.28	0	0	0	0	3.28
NNW	3.56	0	0	0	0	3.56
Summary	100	0	0	0	0	100



Peace River Area Monitoring Program

986-C Station - August 2023

Summary of Hourly Averages

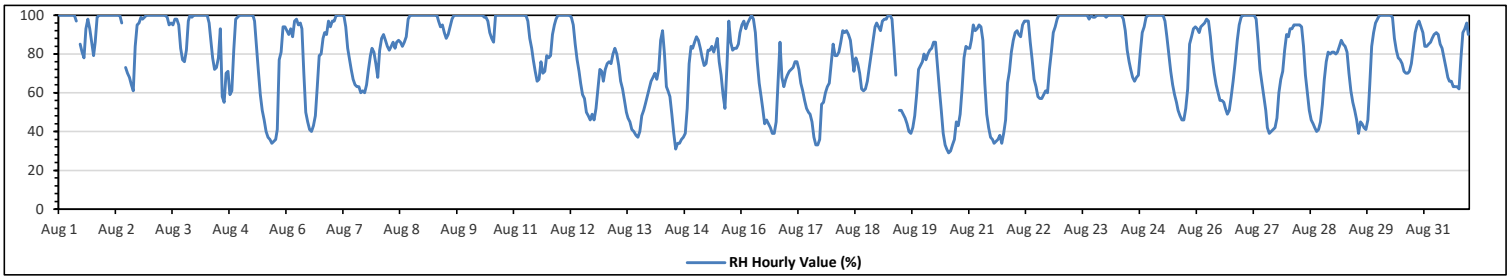
RELATIVE HUMIDITY (RH) in %

Maximum Hourly Value:	100	%	on Aug 1 at hr 0	Hours in Service:	744
Maximum Daily Value:	99.8	%	on Aug 23	Hours of Data:	741
Minimum Hourly Value:	29	%	on Aug 20 at hr 13	Hours of Missing Data:	3
Minimum Daily Value:	58.3	%	on Aug 17	Hours of Calibration:	0
Monthly Average:	78.9	%		Operational Uptime:	99.6

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	100	100	100	100	100	100	100	100	100	97	K	85	81	78	93	98	93	86	79	86	99	100	100	100	78	100	94.6
Aug 2	100	100	100	100	100	100	100	100	100	96	K	73	70	68	64	61	84	95	96	99	98	99	100	100	61	100	91.4
Aug 3	100	100	100	100	100	100	100	100	100	99	95	96	95	98	98	95	83	77	76	82	97	100	99	100	76	100	95.4
Aug 4	100	100	100	100	100	100	100	96	86	78	72	73	78	93	58	55	70	71	59	61	82	98	99	100	55	100	84.5
Aug 5	100	100	100	100	100	100	100	97	84	71	59	51	46	40	37	36	34	35	36	41	77	81	94	94	34	100	71.4
Aug 6	92	90	93	89	97	98	95	96	93	70	50	45	41	40	43	48	63	79	80	88	91	90	97	94	40	98	77.6
Aug 7	97	97	100	100	100	100	100	94	83	78	72	67	64	63	63	60	61	60	64	72	79	83	81	75	60	100	79.7
Aug 8	68	82	88	90	87	84	82	84	86	83	86	87	86	84	86	89	98	100	100	100	100	100	100	100	68	100	89.6
Aug 9	100	100	100	100	100	100	100	100	97	94	95	91	88	90	94	98	100	100	100	100	100	100	100	100	88	100	97.8
Aug 10	100	100	100	100	100	100	100	100	99	99	97	91	88	86	100	100	100	100	100	100	100	100	100	100	86	100	98.3
Aug 11	100	100	100	100	100	100	100	97	88	83	77	71	66	67	76	70	71	79	78	79	90	95	98	100	66	100	86.9
Aug 12	100	100	100	100	100	100	99	95	85	77	71	65	59	57	50	48	46	49	46	52	62	72	71	66	46	100	73.8
Aug 13	72	75	76	75	80	83	80	74	66	62	56	50	47	45	41	40	38	37	40	48	51	54	58	62	37	83	58.8
Aug 14	66	68	70	67	72	87	92	80	63	61	58	49	39	31	34	34	36	37	39	52	75	84	83	86	31	92	61.0
Aug 15	89	87	83	78	74	75	82	82	84	81	84	88	76	69	59	52	73	97	86	82	83	83	85	91	52	97	80.1
Aug 16	95	97	93	96	98	100	98	91	76	65	58	52	44	46	44	42	39	39	45	66	86	68	63	67	39	100	69.5
Aug 17	69	71	72	73	76	76	72	65	61	56	52	50	49	45	37	33	33	36	54	55	60	63	65	75	33	76	58.3
Aug 18	85	79	79	81	86	92	91	92	90	87	80	71	78	75	70	62	61	62	66	73	80	87	94	96	61	96	79.9
Aug 19	94	92	97	98	98	100	100	98	84	69	K	51	51	49	47	44	40	39	42	48	59	72	74	76	39	100	70.5
Aug 20	80	77	80	82	83	86	86	74	62	51	39	33	31	29	30	33	36	45	43	49	62	78	84	83	29	86	59.8
Aug 21	83	87	95	92	93	95	94	87	65	49	42	37	36	34	35	36	38	34	39	46	65	71	81	87	34	95	63.4
Aug 22	91	92	90	89	95	97	97	97	86	77	67	63	58	57	57	59	61	60	72	81	91	94	98	100	57	100	80.4
Aug 23	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	98	100	99	99	100	100	100	100	100	98	100	99.8
Aug 24	99	100	100	100	100	100	100	100	100	98	92	82	76	72	68	66	68	69	81	91	94	99	100	100	66	100	89.8
Aug 25	100	100	100	100	100	100	100	97	89	80	71	64	59	55	51	48	46	46	52	62	85	89	93	94	46	100	78.4
Aug 26	93	91	94	95	96	98	97	89	78	70	64	60	56	56	55	52	49	51	58	66	75	87	95	99	49	99	76.0
Aug 27	100	100	100	100	100	100	100	98	86	72	65	58	51	42	39	40	41	42	47	60	67	71	82	90	39	100	73.0
Aug 28	89	93	93	95	95	95	95	94	84	69	60	51	46	44	42	40	41	45	54	67	76	81	80	81	40	95	71.3
Aug 29	81	80	81	84	87	85	84	81	70	61	55	51	46	39	45	44	42	41	46	64	84	91	96	98	39	98	68.2
Aug 30	100	100	100	100	100	100	100	99	88	82	78	77	75	71	70	70	71	75	83	91	95	97	94	91	70	100	87.8
Aug 31	84	84	85	86	88	90	91	90	85	83	78	73	68	66	66	63	63	63	62	78	91	93	96	90	62	96	79.8
Diurnal Maximum	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100			
Diurnal Average	91.2	91.7	92.5	92.6	93.7	94.9	94.7	91.8	84.5	77.4	70.5	66.3	62.8	60.9	59.7	58.5	60.6	62.8	65.2	72.2	82.4	86.5	89.0	90.2			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

986-C Station - August 2023

Summary of Hourly Averages

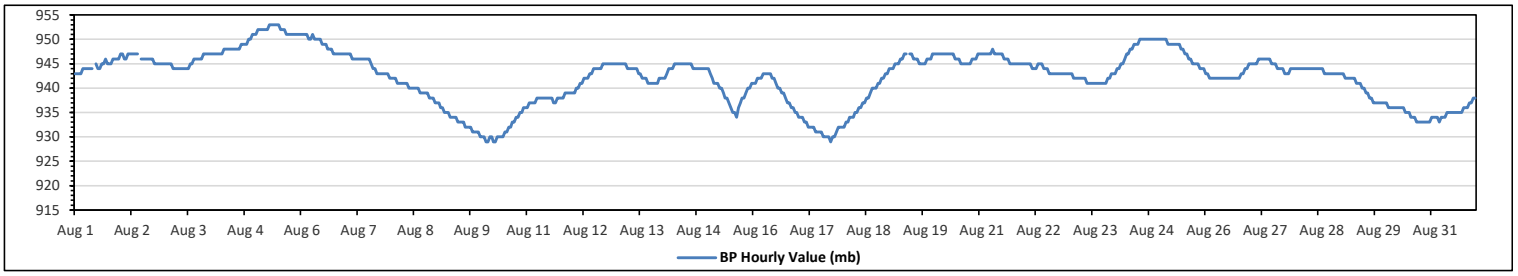
BAROMETRIC PRESSURE (BP) in millibar

Maximum Hourly Value:	953	mb	on Aug 5 at hr 7	Hours in Service:	744	
Maximum Daily Value:	952	mb	on Aug 5	Hours of Data:	741	
Minimum Hourly Value:	929	mb	on Aug 10 at hr 2	Hours of Missing Data:	3	
Minimum Daily Value:	932	mb	on Aug 17	Hours of Calibration:	0	
Monthly Average:	942	mb		Operational Uptime:	99.6	

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Aug 1	943	943	943	943	944	944	944	944	944	944	K	945	944	944	945	945	946	945	945	945	946	946	946	946	943	946	945
Aug 2	947	947	946	946	947	947	947	947	947	947	K	946	946	946	946	946	946	946	945	945	945	945	945	945	945	947	946
Aug 3	945	945	945	945	944	944	944	944	944	944	944	944	944	945	945	946	946	946	946	946	947	947	947	947	944	947	945
Aug 4	947	947	947	947	947	947	947	948	948	948	948	948	948	948	948	948	949	949	949	949	950	950	951	951	947	951	948
Aug 5	951	952	952	952	952	952	952	**953**	**953**	**953**	**953**	**953**	**953**	952	952	952	951	951	951	951	951	951	951	951	951	**953**	**952**
Aug 6	951	951	951	951	950	950	951	950	950	950	950	949	949	949	948	948	948	947	947	947	947	947	947	947	947	951	949
Aug 7	947	947	947	946	946	946	946	946	946	946	946	946	946	945	944	944	943	943	943	943	943	943	943	942	942	947	945
Aug 8	942	942	942	941	941	941	941	941	941	940	940	940	940	940	940	939	939	939	939	939	938	938	938	937	937	942	940
Aug 9	937	937	936	936	935	935	935	934	934	934	934	933	933	933	933	932	932	932	932	931	931	931	931	930	930	937	933
Aug 10	930	930	**929**	**929**	930	930	**929**	**929**	930	930	930	930	931	931	932	932	933	933	934	934	935	935	936	936	**929**	936	932
Aug 11	936	937	937	937	937	938	938	938	938	938	938	938	938	938	937	937	938	938	938	938	939	939	939	939	936	939	938
Aug 12	939	939	940	940	941	941	942	942	942	943	943	944	944	944	944	944	945	945	945	945	945	945	945	945	939	945	943
Aug 13	945	945	945	945	945	944	944	944	944	944	944	943	943	942	942	942	941	941	941	941	941	941	942	942	941	945	943
Aug 14	942	942	943	944	944	944	945	945	945	945	945	945	945	945	945	945	944	944	944	944	944	944	944	944	942	945	944
Aug 15	944	943	942	941	941	941	940	940	939	938	938	937	936	935	935	934	936	937	938	938	939	940	940	941	934	944	939
Aug 16	941	941	942	942	942	943	943	943	943	943	942	942	941	940	940	939	939	938	937	937	936	936	935	935	935	943	940
Aug 17	934	934	934	933	933	932	932	932	932	931	931	931	931	930	930	930	930	**929**	930	930	931	932	932	932	**929**	934	**932**
Aug 18	932	933	933	934	934	934	935	935	936	936	937	937	938	938	939	940	940	940	941	941	942	942	943	943	932	943	938
Aug 19	944	944	944	945	945	945	946	946	947	947	K	947	947	946	946	946	945	945	945	945	946	946	946	947	944	947	946
Aug 20	947	947	947	947	947	947	947	947	947	947	947	946	946	946	945	945	945	945	945	945	946	946	946	947	945	947	946
Aug 21	947	947	947	947	947	947	947	948	947	947	947	947	947	946	946	946	945	945	945	945	945	945	945	945	945	948	946
Aug 22	945	945	945	945	944	944	944	945	945	945	944	944	944	943	943	943	943	943	943	943	943	943	943	943	943	945	944
Aug 23	943	943	942	942	942	942	942	942	942	941	941	941	941	941	941	941	941	941	941	941	942	942	943	943	941	943	942
Aug 24	943	944	944	945	945	946	947	947	948	948	949	949	949	950	950	950	950	950	950	950	950	950	950	950	943	950	948
Aug 25	950	950	950	950	949	949	949	949	949	949	949	948	948	947	947	946	946	945	945	945	945	944	944	944	944	950	947
Aug 26	943	943	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	943	943	944	944	945	942	945	942
Aug 27	945	945	945	945	946	946	946	946	946	946	946	945	945	945	944	944	944	944	943	943	943	944	944	944	943	946	945
Aug 28	944	944	944	944	944	944	944	944	944	944	944	944	944	944	944	943	943	943	943	943	943	943	943	943	943	944	944
Aug 29	943	943	942	942	942	942	942	942	941	941	941	940	940	939	939	938	938	937	937	937	937	937	937	937	937	943	940
Aug 30	937	936	936	936	936	936	936	936	936	936	935	935	935	934	934	934	933	933	933	933	933	933	933	933	933	937	935
Aug 31	934	934	934	934	933	934	934	934	935	935	935	935	935	935	935	935	935	936	936	936	937	937	938	938	933	938	935
Diurnal Maximum	951	952	952	952	952	952	952	953	953	953	953	953	953	952	952	952	951	951	951	951	951	951	951	951			
Diurnal Average	943	943	942	942	942	942	943	943	943	943	942	942	942	942	942	942	942	942	942	942	942	942	942	942			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

986-C Station - August 2023

Summary of Hourly Averages

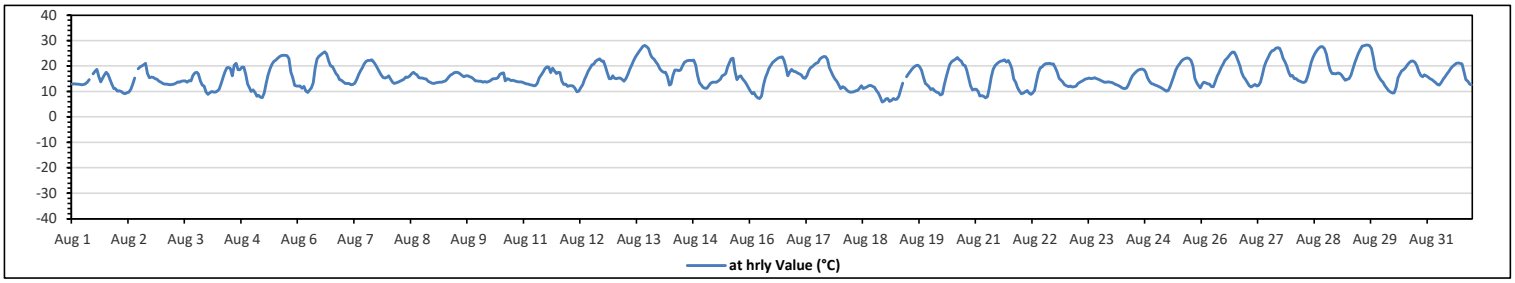
AMBIENT TEMPERATURE (AT) in Degree Celsius

Maximum Hourly Value:	28.3	°C	on Aug 29 at hr 15	Hours in Service:	744	
Maximum Daily Value:	21.1	°C	on Aug 13	Hours of Data:	741	
Minimum Hourly Value:	5.9	°C	on Aug 18 at hr 22	Hours of Missing Data:	3	
Minimum Daily Value:	10.5	°C	on Aug 18	Hours of Calibration:	0	
Monthly Average:	16.1	°C		Operational Uptime:	99.6	

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	13	13.1	13	12.9	12.8	12.7	12.8	13.1	13.7	14.6	K	17	17.9	18.7	15.8	13.8	15.1	16.4	17.6	16.7	14.6	12.8	11.2	11.1	11.1	18.7	14.4
Aug 2	10.2	10.3	10	9.4	9.2	9.5	9.8	10.9	12.9	15.3	K	18.9	19.7	20	20.6	21.1	17.1	15.5	15.7	15.6	15	14.7	14.1	13.7	9.2	21.1	14.3
Aug 3	13.2	12.9	12.9	12.8	12.7	12.8	12.9	13.3	13.8	13.7	14.1	14.2	14.2	13.7	14.3	14.2	16.3	17.3	17.5	17	14.3	12.5	12.1	9.7	9.7	17.5	13.9
Aug 4	8.9	9.5	10	9.7	9.8	10.3	10.9	13.1	15.5	17.7	19.3	19.5	19	16.1	20.3	21.1	18.6	18.6	19.6	19.6	16.8	12.9	11.4	10	8.9	21.1	14.9
Aug 5	10.6	9.6	8.1	8.5	7.8	7.6	9.5	13.3	16.5	18.9	20.7	21.8	22.4	23.1	23.7	24.1	24.2	24.2	24	22.9	17.7	15.5	12.4	12.1	7.6	24.2	16.6
Aug 6	12.1	12.1	11.3	12	10.2	9.6	10.6	11.4	13.4	19.2	22.8	23.9	24.5	25.2	25.6	24.8	22.1	20	19.9	18.6	17.1	16.2	14.6	14.5	9.6	25.6	17.2
Aug 7	13.8	13.2	13.2	13.2	12.7	12.8	13.3	14.7	16.7	18.2	19.5	20.8	21.8	22.2	22.3	22.5	21.5	20.4	19.3	18	16.6	15.6	15.3	15.6	12.7	22.5	17.2
Aug 8	16.2	14.7	13.7	13.2	13.4	13.6	14.1	14.5	14.8	15.7	15.6	16	16.9	17.5	17	16.6	15.5	15.3	15.3	15.1	14.9	14.1	13.6	13.3	13.2	17.5	15.0
Aug 9	13.2	13.4	13.5	13.7	13.7	13.9	14.2	14.8	15.8	16.6	16.9	17.4	17.5	17.4	17	16.3	15.9	16.1	16.1	15.9	15.6	14.9	14.2	14.2	13.2	17.5	15.3
Aug 10	14	14	13.6	13.9	13.6	13.9	14.3	14.9	15.1	15	15.5	16.7	17.2	17.3	14.2	15	14.7	14.3	14.4	14.2	13.9	13.8	13.8	13.7	13.6	17.3	14.6
Aug 11	13.3	13.1	13	12.6	12.5	12.3	12.2	13.2	15.3	16.4	17.6	18.9	19.8	19.6	17.4	19.2	18.1	17.1	17.5	17.4	14.1	12.8	12.9	12	12.0	19.8	15.3
Aug 12	12.3	12.2	12.1	11.3	9.9	10.2	11.5	12.6	14.7	16.4	18	19.2	20.5	20.8	21.9	22.5	22.8	21.9	21.9	19.9	17.3	15	15.1	16.2	9.9	22.8	16.5
Aug 13	15.2	15.1	15.3	15.3	14.7	14.1	15	16.7	18.7	20.3	22.1	23.6	24.7	25.9	26.9	27.8	28.1	27.6	26.9	24.5	23.3	22.7	21.6	20.6	14.1	28.1	**21.1**
Aug 14	18.9	18.1	17.6	17.5	15.9	12.5	13	16.3	18.5	18.5	18.2	18.5	20	21.4	21.9	22.2	22.3	22.2	22.4	20.5	16.3	13.4	12.7	11.7	11.7	22.4	17.9
Aug 15	11.3	11.3	12.3	13.3	13.7	13.6	13.6	14.2	14.8	16.1	16.5	17.1	19.7	21.4	22.8	23.1	18	14.6	15.8	16.1	14.9	14	13	11.5	11.3	23.1	15.5
Aug 16	10.1	9.2	9.6	8.3	7.5	7.3	8.2	12.5	15.5	17.3	19	20.3	21.4	22.1	22.7	23.2	23.5	23.6	22.4	19.6	16.1	17.7	18.7	18	7.3	23.6	16.4
Aug 17	17.8	17.3	16.9	16.5	15.5	15.2	16.3	18.1	19.3	19.9	20.4	21.1	21.3	22.7	23.4	23.8	23.7	22.6	19.3	17.7	16	14.7	14	12.6	12.6	23.8	18.6
Aug 18	11.2	11.9	11.5	10.8	10.2	9.7	9.8	9.9	10.3	10.5	11.3	12.2	11.2	11.6	11.8	12.3	12.4	12	11.7	10.4	9.3	7.8	**5.9**	6.3	**5.9**	12.4	**10.5**
Aug 19	7.1	7.2	6.1	6.5	7.2	6.8	7	8.1	10.8	13.3	K	15.8	16.9	18	18.9	19.7	20.2	20.3	19.7	18.3	15.6	13.2	12.7	11.9	6.1	20.3	13.1
Aug 20	10.8	11.1	10.3	9.7	9.5	8.7	9.1	12.7	15.7	18.5	20.6	21.7	22.2	22.7	23.3	22.5	21.9	20.4	20.2	18.5	15.4	12.3	10.6	10.9	8.7	23.3	15.8
Aug 21	10.9	10	8.3	8.4	8.1	7.5	7.9	11.5	15.9	18.8	20.2	21	21.6	21.9	22.1	22.5	21.6	22.3	21.1	19	14.9	13.6	11.5	10.1	7.5	22.5	15.4
Aug 22	9.2	9.4	9.9	10.4	9.4	8.9	9.4	10.5	14.1	17.4	19.3	19.8	20.5	21	21	21.1	20.9	20.9	19.3	17.6	15.2	14.4	13.8	12.7	8.9	21.1	15.3
Aug 23	12.3	11.9	12.1	11.8	11.9	12.1	13.2	13.6	14	14.5	14.9	15.1	15.3	15	15.2	15.4	15	14.8	14.4	14	13.7	13.7	13.8	13.6	11.8	15.4	13.8
Aug 24	13.5	13.2	12.8	12.5	12.1	11.7	11.3	11.1	11.4	12.8	14.6	16.2	17.1	17.8	18.5	18.7	18.8	18.6	17.7	15.4	14	13.2	12.9	12.5	11.1	18.8	14.5
Aug 25	12.3	11.9	11.5	11.1	10.6	10.1	10.4	12	14.2	16.3	18.3	19.9	20.9	21.9	22.6	23	23.2	23	22.2	20.1	15.2	13.4	12.4	11.4	10.1	23.2	16.2
Aug 26	13	13.7	13.4	13.1	12.9	11.9	11.9	13.9	16	17.6	19.3	20.7	22.2	22.9	23.7	24.8	25.5	25.4	24	22.1	20.1	17.6	15.8	14.7	11.9	25.5	18.2
Aug 27	13.5	12.3	11.8	12.3	12.8	12.1	12.4	13.7	16.5	19.9	21.8	23.4	25	26	26.3	27	27.3	27	25.5	23	21.5	20.1	17.7	16	11.8	27.3	19.4
Aug 28	16.3	15.1	15	14.3	14.1	13.7	13.5	14	16.2	19.1	21.6	23.6	25.1	26.3	27	27.6	27.6	26.9	24.7	21.1	18.5	17.1	17.1	16.9	13.5	27.6	19.7
Aug 29	17.3	17.1	16.5	15.5	14.4	14.7	15.1	16.4	18.9	21.3	23.4	25	26.5	27.9	28	**28.3**	**28.3**	28	26.8	23.2	18.8	17.1	15.6	14.4	14.4	**28.3**	20.8
Aug 30	13.6	12.3	11.3	10.3	9.7	9.4	9.5	11.7	15.4	16.7	18.1	18.6	19.3	20.4	21.3	21.9	22	21.4	20.1	17.8	16.3	15.9	16.5	16.2	9.4	22.0	16.1
Aug 31	15.7	15.1	14.6	14	13.4	12.8	12.5	13.5	14.8	15.8	16.9	18	19	19.9	20.4	21.1	21.2	21.1	20.8	17.8	14.6	14.1	13	12.6	12.5	21.2	16.4
Diurnal Maximum	18.9	18.1	17.6	17.5	15.9	15.2	16.3	18.1	19.3	21.3	23.4	25.0	26.5	27.9	28.0	28.3	28.3	28.0	26.9	24.5	23.3	22.7	21.6	20.6			
Diurnal Average	12.9	12.6	12.3	12.1	11.7	11.4	11.8	13.2	15.1	16.8	18.4	19.2	20.0	20.6	20.9	21.2	20.8	20.3	19.8	18.3	16.1	14.7	13.9	13.2			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

986-C Station - August 2023

Summary of Hourly Averages

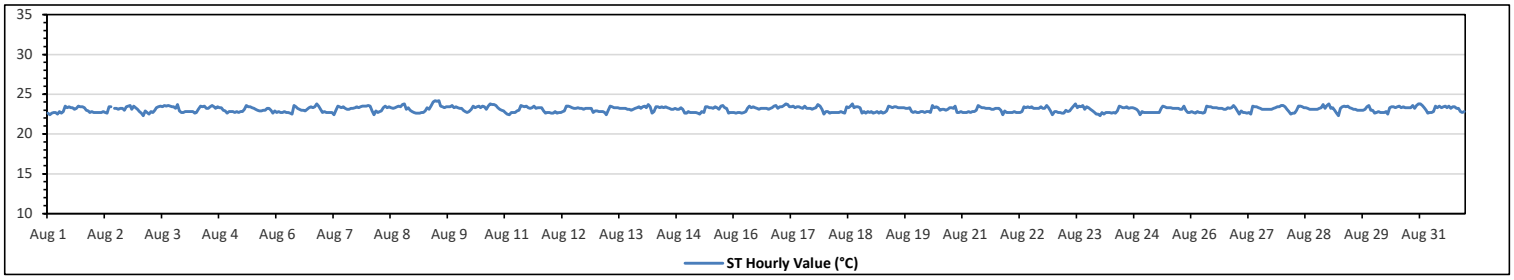
STATION TEMPERATURE (ST) in Degree Celsius

Maximum Hourly Value:	24.2	°C	on Aug 9 at hr 11	Hours in Service:	744
Maximum Daily Value:	23.3	°C	on Aug 17	Hours of Data:	743
Minimum Hourly Value:	22.3	°C	on Aug 3 at hr 2	Hours of Missing Data:	1
Minimum Daily Value:	22.9	°C	on Aug 24	Hours of Calibration:	0
Monthly Average:	23.1	°C		Operational Uptime:	99.9

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Aug 1	22.6	22.4	22.6	22.7	22.7	22.5	22.8	22.6	22.8	23.5	23.3	23.4	23.3	23.3	23.1	23.2	23.5	23.4	23.4	23.3	23.0	22.9	22.7	22.8	22.4	23.5	23.0
Aug 2	22.7	22.7	22.7	22.7	22.7	22.8	22.7	22.6	23.4	23.4	K	23.2	23.2	23.1	23.2	23.2	23.0	23.4	23.5	23.6	23.1	23.5	23.3	23.1	22.6	23.6	23.1
Aug 3	22.8	22.6	**22.3**	22.9	22.7	22.5	22.8	22.7	23.0	23.3	23.4	23.5	23.4	23.6	23.5	23.6	23.5	23.4	23.4	23.2	23.7	22.9	22.7	22.7	**22.3**	23.7	23.1
Aug 4	22.8	22.8	22.8	22.8	22.8	22.6	22.7	23.1	23.5	23.4	23.5	23.2	23.2	23.4	23.6	23.4	23.2	23.4	23.3	23.3	23.0	22.9	22.6	22.8	22.6	23.6	23.1
Aug 5	22.8	22.8	22.7	22.8	22.7	22.8	22.8	23.1	23.6	23.4	23.4	23.3	23.2	23.1	23.0	22.9	22.9	23.0	23.0	23.2	23.2	23.0	22.6	22.9	22.6	23.6	23.0
Aug 6	22.7	22.8	22.7	22.7	22.8	22.7	22.7	22.6	22.5	23.6	23.4	23.2	23.1	23.0	23.0	22.9	23.1	23.3	23.4	23.3	23.4	23.8	23.5	23.1	22.5	23.8	23.1
Aug 7	22.7	22.8	22.7	22.7	22.7	22.7	22.4	23.0	23.5	23.4	23.3	23.4	23.2	23.1	23.1	23.2	23.2	23.3	23.4	23.3	23.4	23.5	23.5	23.5	22.4	23.5	23.1
Aug 8	23.6	23.5	22.9	22.4	22.9	22.7	22.8	22.9	23.3	23.5	23.3	23.4	23.3	23.2	23.3	23.4	23.5	23.4	23.7	23.8	23.1	23.3	23.0	22.8	22.4	23.8	23.2
Aug 9	22.7	22.6	22.6	22.6	22.7	22.7	22.9	23.3	23.1	23.5	24.0	**24.2**	24.1	**24.2**	23.5	23.4	23.3	23.4	23.4	23.4	23.6	23.3	23.4	23.3	22.6	**24.2**	23.3
Aug 10	23.2	23.2	23.0	22.8	22.7	22.8	23.1	23.5	23.3	23.4	23.5	23.3	23.5	23.4	23.1	23.5	23.8	23.7	23.7	23.6	23.3	23.1	23.0	22.9	22.7	23.8	23.3
Aug 11	22.7	22.5	22.4	22.7	22.7	22.7	22.9	23.0	23.6	23.5	23.4	23.5	23.3	23.2	23.3	23.5	23.2	23.3	23.3	23.3	22.9	22.6	22.7	22.7	22.4	23.6	23.0
Aug 12	22.6	22.6	22.8	22.6	22.7	22.7	22.8	22.9	23.5	23.5	23.4	23.3	23.2	23.2	23.3	23.2	23.2	23.1	23.2	23.2	23.2	23.2	22.7	22.9	22.6	23.5	23.0
Aug 13	22.9	22.8	22.8	22.8	22.7	22.4	23.0	23.5	23.4	23.3	23.3	23.3	23.2	23.2	23.2	23.2	23.1	23.1	23.0	23.1	23.2	23.3	23.4	23.2	22.4	23.5	23.1
Aug 14	23.4	23.5	23.3	23.7	23.4	22.6	22.8	23.4	23.4	23.3	23.4	23.3	23.4	23.3	23.2	23.1	23.1	23.2	23.1	23.1	23.3	23.1	22.6	22.6	22.6	23.7	23.2
Aug 15	22.8	22.7	22.7	22.7	22.7	22.6	22.5	22.8	22.7	23.4	23.4	23.3	23.3	23.2	23.4	23.3	23.1	23.5	23.6	23.3	23.2	22.6	22.7	22.7	22.5	23.6	23.0
Aug 16	22.7	22.6	22.7	22.7	22.6	22.7	22.8	23.2	23.5	23.3	23.4	23.3	23.2	23.1	23.2	23.2	23.2	23.2	23.1	23.2	23.3	23.5	23.6	23.2	22.6	23.6	23.1
Aug 17	23.4	23.4	23.6	23.8	23.7	23.4	23.4	23.5	23.3	23.4	23.4	23.3	23.2	23.5	23.2	23.2	23.2	23.1	23.2	23.3	23.7	23.5	23.1	22.5	22.5	23.8	**23.3**
Aug 18	22.8	22.8	22.6	22.7	22.7	22.7	22.7	22.7	22.8	22.7	22.6	23.4	23.3	23.5	23.8	23.3	23.4	23.4	23.3	22.6	22.8	22.6	22.8	22.7	22.6	23.8	22.9
Aug 19	22.8	22.6	22.7	22.8	22.6	22.8	22.6	22.7	22.9	23.5	23.4	23.3	23.4	23.4	23.3	23.3	23.3	23.3	23.2	23.2	23.3	22.8	22.7	22.8	22.6	23.5	23.0
Aug 20	22.7	22.7	22.8	22.8	22.7	22.8	22.8	22.7	23.6	23.3	23.4	23.3	23.0	23.1	23.1	23.0	23.1	23.3	23.3	23.2	23.5	22.7	22.7	22.8	22.7	23.6	23.0
Aug 21	22.7	22.7	22.7	22.8	22.7	22.8	22.8	23.0	23.6	23.4	23.3	23.3	23.2	23.2	23.2	23.1	23.1	23.2	23.2	23.2	23.0	22.4	22.9	22.7	22.4	23.6	23.0
Aug 22	22.7	22.7	22.7	22.8	22.7	22.7	22.7	22.8	23.4	23.3	23.4	23.3	23.4	23.2	23.2	23.2	23.2	23.4	23.2	23.2	23.6	23.3	22.9	22.4	22.4	23.6	23.1
Aug 23	22.8	22.8	22.7	22.7	22.6	22.6	23.0	22.8	22.9	23.2	23.5	23.8	23.3	23.5	23.4	23.6	23.1	23.4	23.3	23.1	22.9	22.7	22.5	22.5	22.5	23.8	23.0
Aug 24	**22.3**	22.7	22.5	22.7	22.7	22.7	22.6	22.7	22.6	22.9	23.5	23.4	23.3	23.3	23.4	23.2	23.3	23.3	23.2	23.1	22.9	22.4	22.8	22.7	**22.3**	23.5	**22.9**
Aug 25	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	23.2	23.5	23.4	23.3	23.3	23.3	23.2	23.2	23.2	23.2	23.1	23.1	23.5	23.0	22.7	22.7	22.7	23.5	23.0
Aug 26	22.8	22.7	22.6	22.8	22.7	22.7	22.6	22.7	23.5	23.4	23.4	23.3	23.3	23.3	23.2	23.2	23.2	23.1	23.1	23.3	23.2	23.3	23.6	23.3	22.6	23.6	23.1
Aug 27	22.9	22.5	22.9	22.7	22.7	22.6	22.7	22.5	23.5	23.4	23.4	23.3	23.2	23.1	23.1	23.1	23.1	23.1	23.1	23.2	23.3	23.4	23.4	23.6	22.5	23.6	23.1
Aug 28	23.6	23.4	23.1	22.8	22.5	22.6	22.6	23.0	23.5	23.5	23.4	23.3	23.3	23.2	23.1	23.1	23.1	23.1	23.1	23.2	23.3	23.7	23.2	23.6	22.5	23.7	23.2
Aug 29	23.8	23.2	23.3	23.0	22.6	**22.3**	23.2	23.4	23.5	23.4	23.5	23.3	23.2	23.1	23.1	23.0	23.0	23.0	23.0	23.1	23.4	23.6	23.0	23.0	**22.3**	23.8	23.2
Aug 30	22.6	22.7	22.8	22.7	22.7	22.7	22.8	22.5	23.3	23.4	23.4	23.3	23.4	23.5	23.3	23.4	23.3	23.3	23.3	23.3	23.6	23.2	23.6	23.8	22.5	23.8	23.2
Aug 31	23.8	23.6	23.3	23.0	22.6	22.7	22.7	22.8	23.5	23.3	23.5	23.3	23.4	23.5	23.3	23.5	23.2	23.4	23.4	23.2	23.2	22.8	22.7	22.8	22.6	23.8	23.2
Diurnal Maximum	23.8	23.6	23.6	23.8	23.7	23.4	23.4	23.5	23.6	23.6	24.0	24.2	24.1	24.2	23.8	23.6	23.8	23.7	23.7	23.8	23.7	23.8	23.6	23.8			
Diurnal Average	22.9	22.8	22.8	22.8	22.7	22.7	22.8	22.9	23.3	23.4	23.4	23.4	23.3	23.3	23.3	23.2	23.2	23.3	23.3	23.2	23.3	23.1	23.0	22.9			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

986-C Station - August 2023

Summary of Hourly Averages

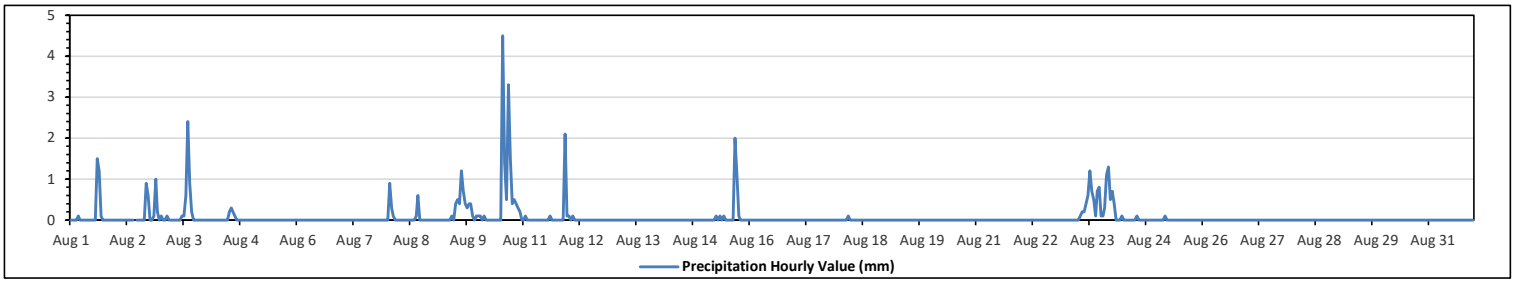
PRECIPITATION in mm

Maximum Hourly Value:	4.5	mm	on Aug 10 at hr 13	Hours in Service:	744	
Maximum Daily Value:	13.3	mm	on Aug 10	Hours of Data:	743	
Minimum Hourly Value:	0.0	mm	on Aug 1 at hr 0	Hours of Missing Data:	1	
Minimum Daily Value:	0.0	mm	on Aug 5	Hours of Calibration:	0	
Monthly Total:	47.8	mm		Operational Uptime:	99.9	

Day	Hourly Period Starting at (MST)																						Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Total
Aug 1	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	1.5	1.2	0.1	0	0	0	0	0	0	0	0	1.5	2.9
Aug 2	0	0	0	0	0	0	0	0	0	0	K	0	0	0	0	0	0.9	0.6	0	0	0.1	1	0.2	0	0	1	2.8
Aug 3	0.1	0	0	0.1	0	0	0	0	0	0	0	0.1	0.1	0.6	2.4	0.9	0.2	0	0	0	0	0	0	0	0	2.4	4.5
Aug 4	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	0.2	0.1	0	0	0	0	0	0	0	0	0	0.3	0.8
Aug 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
Aug 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
Aug 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 8	0	0.9	0.3	0.1	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6	0	0	0	0	0	0	0	0	0.9	2
Aug 9	0	0	0	0	0	0	0	0	0	0	0.1	0	0.4	0.5	0.4	1.2	0.7	0.4	0.3	0.4	0.4	0.1	0	0.1	0	1.2	5
Aug 10	0.1	0.1	0	0.1	0	0	0	0	0	0	0	0	0	**4.5**	1.4	0.5	3.3	1.5	0.4	0.5	0.4	0.3	0.2	0	0	**4.5**	**13.3**
Aug 11	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	2.1	0.1	0	2.1	2.4
Aug 12	0.1	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
Aug 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
Aug 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 15	0	0	0	0	0	0	0.1	0	0.1	0	0.1	0	0	0	0	0	2	1.1	0.1	0	0	0	0	0	0	2	3.5
Aug 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 18	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
Aug 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 23	0	0	0	0	0	0	0	0.1	0.2	0.2	0.4	0.6	1.2	0.7	0.5	0.1	0.7	0.8	0.1	0.1	0.3	1.1	1.3	0.5	0	1.3	8.9
Aug 24	0.7	0.4	0	0	0	0.1	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0.7	1.3
Aug 25	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
Aug 26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 31	0	0	0	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	0.7	0.9	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.6	1.2	4.5	2.4	1.2	3.3	1.5	0.4	0.5	0.4	1.1	2.1	0.5			
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	0.1	0.2	0.2	0.1	0.3	0.1	0.0	0.0	0.0	0.1	0.1	0.0			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

986-C Station - August 2023

Summary of Hourly Averages

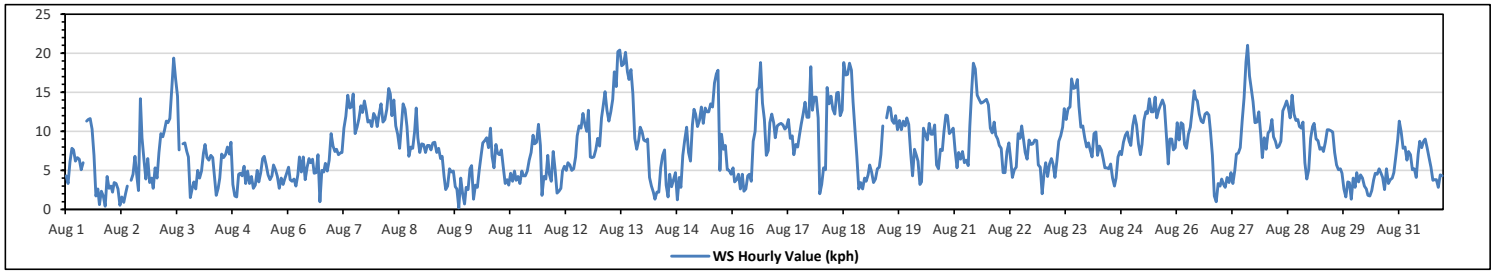
VECTOR WIND SPEED (VWS) in km/hr

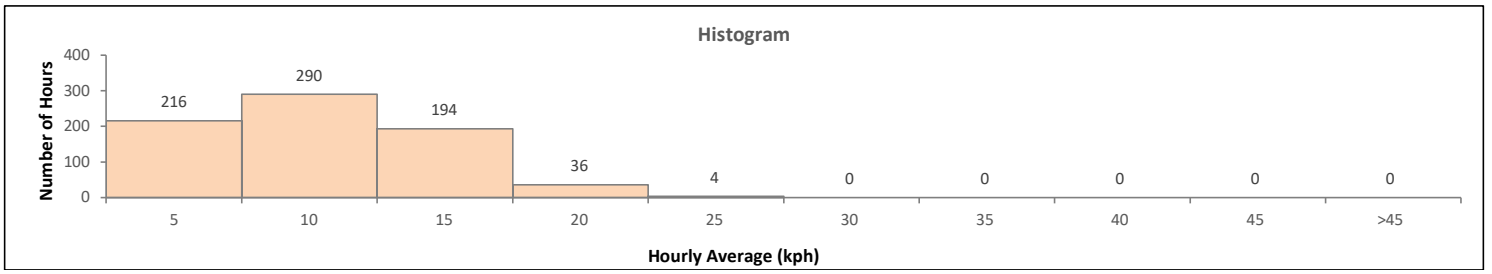
Maximum Hourly Value:	21.0	kph	on Aug 27 at hr 14	Hours in Service:	744	
Maximum Daily Value:	14.3	kph	on Aug 13	Hours of Data:	740	
Minimum Hourly Value:	0.2	kph	on Aug 9 at hr 20	Hours of Missing Data:	3	
Minimum Daily Value:	4.0	kph	on Aug 30	Hours of Calibration:	1	
Monthly Average:	2.9	kph		Operational Uptime:	99.6	

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	4.3	3.3	6.1	7.8	7.6	6.2	6.6	6.4	5.1	6.0	K	11.3	11.5	11.6	10.3	6.9	1.7	2.6	0.6	2.3	1.7	0.4	4.2	2.7	0.4	11.6	5.5
Aug 2	3.0	2.2	3.4	3.3	2.6	0.5	1.6	0.9	2.1	3.0	K	3.7	4.5	6.8	4.2	2.4	14.2	9.2	6.4	3.9	6.5	3.4	4.0	2.7	0.5	14.2	4.1
Aug 3	5.3	4.0	7.3	9.7	9.3	10.1	11.3	11.1	11.6	15.4	19.4	16.7	14.5	7.6	C	8.4	8.5	7.4	6.7	1.5	2.7	3.5	2.6	5.0	1.5	19.4	8.7
Aug 4	4.0	4.9	7.2	8.3	6.6	6.3	6.9	6.6	4.4	1.8	2.7	4.0	7.1	6.6	7.0	8.0	7.1	8.6	3.2	1.7	1.6	4.5	4.6	4.3	1.6	8.6	5.3
Aug 5	5.5	3.3	4.9	3.3	4.2	2.7	3.1	5.0	3.5	4.7	6.5	6.8	5.7	4.4	3.8	4.3	5.7	5.1	4.2	2.7	4.0	3.2	3.9	4.6	2.7	6.8	4.4
Aug 6	5.4	3.8	3.6	3.9	3.0	4.4	6.7	4.8	6.7	3.8	5.4	6.5	6.0	6.4	4.6	4.7	7.0	1.0	5.0	4.8	5.9	4.9	6.3	9.7	1.0	9.7	5.2
Aug 7	8.1	7.4	7.7	7.0	7.2	7.3	10.4	11.9	14.6	13.0	13.1	14.8	9.7	10.5	11.6	13.3	12.4	13.9	12.8	11.2	11.4	10.6	12.3	11.8	7.0	14.8	11.0
Aug 8	10.6	12.2	13.5	11.2	11.5	12.8	15.5	14.8	12.0	14.0	10.7	9.6	7.8	10.9	13.5	12.8	10.6	6.8	8.0	7.8	10.0	13.0	9.2	7.3	6.8	15.5	11.1
Aug 9	8.4	8.3	7.3	8.2	8.2	7.6	8.5	8.6	7.3	7.8	6.5	6.8	4.2	2.5	3.0	5.2	4.8	4.9	2.9	2.6	0.2	4.0	2.0	0.7	0.2	8.6	5.4
Aug 10	2.8	2.5	5.2	5.6	1.3	3.1	2.8	5.1	7.0	8.5	8.8	9.2	7.9	10.4	6.8	5.3	8.3	7.2	7.0	7.6	5.4	3.3	3.8	3.1	1.3	10.4	5.8
Aug 11	4.6	3.6	4.9	3.7	4.2	3.3	4.9	4.3	4.3	4.9	6.3	7.3	9.5	8.4	8.6	10.9	8.2	1.8	4.2	3.9	6.9	4.5	3.6	7.4	1.8	10.9	5.6
Aug 12	5.1	2.1	2.3	2.7	4.9	5.5	5.0	6.0	5.7	5.0	5.2	6.7	9.4	10.7	10.4	12.3	10.9	10.0	12.7	6.7	6.6	6.7	7.6	9.1	2.1	12.7	7.1
Aug 13	8.1	11.7	13.2	15.1	12.7	11.3	12.5	14.1	17.6	15.7	20.2	20.4	18.4	18.6	20.1	17.6	16.6	17.9	14.8	9.1	7.7	8.8	10.5	9.9	7.7	20.4	14.3
Aug 14	8.9	8.7	9.0	4.1	3.0	2.2	1.3	2.2	2.2	5.3	6.9	7.6	3.1	1.6	4.5	2.9	3.8	4.7	1.2	4.1	2.8	6.9	8.9	10.5	1.2	10.5	4.9
Aug 15	7.3	6.2	10.8	12.8	12.2	10.6	11.4	13.1	11.0	13.0	12.5	12.5	13.5	13.1	16.2	17.4	17.8	5.0	9.6	7.7	8.2	5.1	5.0	4.5	4.5	17.8	10.7
Aug 16	5.3	3.5	3.8	4.5	2.6	4.5	2.3	2.6	4.3	4.5	3.6	8.7	10.0	15.3	15.6	18.8	13.6	11.5	6.9	7.5	11.1	12.2	11.1	9.2	2.3	18.8	8.0
Aug 17	10.7	10.9	11.0	10.8	10.3	10.5	11.5	9.1	9.4	7.0	8.3	8.0	9.6	10.9	12.2	13.7	11.8	11.8	18.3	12.7	14.4	14.4	11.7	2.0	2.0	18.3	10.9
Aug 18	3.2	5.3	5.1	15.6	13.5	14.5	12.8	12.2	14.9	15.0	12.0	12.7	18.8	17.2	17.3	18.7	17.8	13.8	10.2	6.7	2.6	3.4	2.6	4.0	2.6	18.8	11.2
Aug 19	3.6	4.4	5.7	4.8	3.4	3.9	5.2	5.4	7.0	10.7	K	11.7	13.1	13.0	11.4	11.0	12.0	10.2	11.4	10.2	11.3	10.7	11.7	10.9	3.4	13.1	8.8
Aug 20	7.3	4.3	7.7	6.9	6.2	3.2	3.5	10.4	9.6	8.9	11.0	9.6	9.6	10.8	5.7	5.2	7.7	7.5	9.9	12.1	12.0	9.7	10.0	10.4	3.2	12.1	8.3
Aug 21	7.5	5.3	7.3	6.4	7.4	6.0	6.3	5.6	10.7	15.4	18.7	18.0	14.6	14.1	13.6	13.7	13.9	14.1	13.4	10.4	9.8	11.2	9.5	9.0	5.3	18.7	10.9
Aug 22	8.2	7.8	4.7	4.7	7.4	8.5	6.6	4.1	5.1	5.4	9.7	9.1	10.7	8.9	7.3	6.4	8.9	8.3	8.4	8.9	8.8	5.7	5.4	2.0	2.0	10.7	7.1
Aug 23	4.6	6.0	4.2	5.8	6.5	5.8	4.1	6.2	8.7	9.4	10.5	12.9	11.5	12.9	13.1	16.7	15.5	15.6	16.6	13.2	10.5	10.7	9.2	8.0	4.1	16.7	9.9
Aug 24	8.5	7.6	6.7	9.7	9.9	6.9	8.1	7.6	6.4	5.3	5.3	5.2	5.8	4.0	3.0	4.0	6.7	7.4	7.0	8.6	9.5	9.9	8.7	8.2	3.0	9.9	7.1
Aug 25	10.7	12.0	10.8	8.4	7.0	8.3	11.4	12.5	12.3	14.2	12.5	12.5	14.4	11.7	12.7	13.4	14.0	13.3	9.6	5.8	9.0	9.0	7.6	7.9	5.8	14.4	10.9
Aug 26	11.1	8.9	11.1	10.9	8.3	7.8	9.6	10.5	12.7	15.2	14.2	13.9	12.2	11.3	11.1	12.2	12.4	12.1	10.0	6.9	1.7	1.0	3.3	3.0	1.0	15.2	9.6
Aug 27	3.9	3.2	2.8	4.1	3.4	4.7	3.3	5.0	7.1	7.2	7.9	11.3	14.3	18.9	21.0	17.1	15.6	13.8	11.1	11.2	12.5	9.6	6.6	9.2	2.8	21.0	9.4
Aug 28	7.7	9.8	10.1	11.5	9.3	8.7	7.9	8.1	8.7	12.6	13.2	13.9	13.1	11.7	14.6	12.2	11.4	11.5	10.6	10.4	11.2	6.0	3.9	5.1	3.9	14.6	10.1
Aug 29	9.1	10.6	11.0	9.0	8.8	7.7	7.9	7.4	8.6	10.2	10.2	10.1	9.9	7.3	5.7	5.1	5.2	4.6	2.6	1.6	3.5	3.4	1.3	4.0	1.3	11.0	6.9
Aug 30	2.8	4.7	3.5	4.4	4.0	3.0	2.6	1.8	1.7	2.4	3.8	4.6	4.5	5.2	4.6	4.1	2.5	5.2	3.3	3.8	4.0	4.7	6.7	8.9	1.7	8.9	4.0
Aug 31	11.3	9.9	7.8	8.0	6.3	7.4	7.0	5.1	5.2	4.1	7.1	8.7	7.9	8.7	9.0	7.9	6.6	5.4	3.7	3.8	3.8	2.8	4.4	4.3	2.8	11.3	6.5
Diurnal Maximum	11.3	12.2	13.5	15.6	13.5	14.5	15.5	14.8	17.6	15.7	20.2	20.4	18.8	18.9	21.0	18.8	17.8	17.9	18.3	13.2	14.4	14.4	12.3	11.8			
Diurnal Average	6.7	6.4	7.1	7.5	6.9	6.6	7.1	7.4	8.0	8.7	9.7	10.2	10.1	10.1	10.1	10.1	10.1	8.8	8.1	6.8	7.0	6.7	6.5	6.4			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



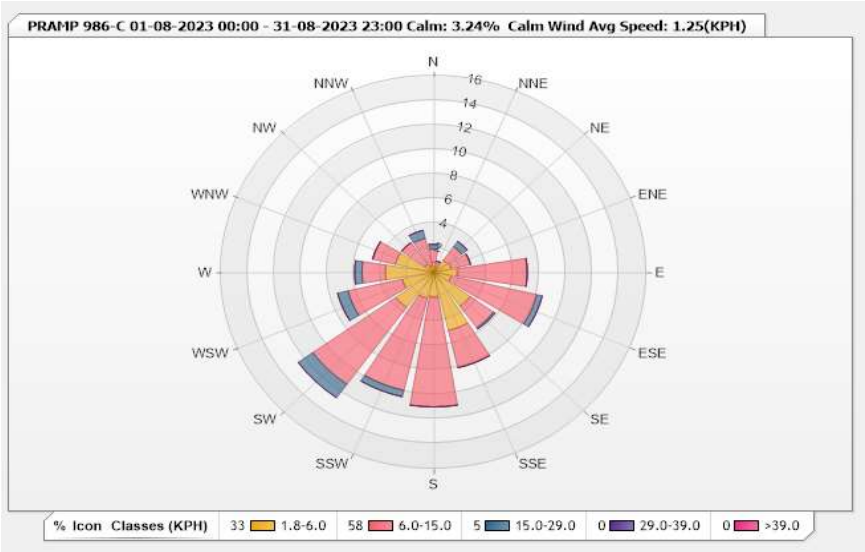


Station: PRAMP 986-C Monitor: WDS [KPH] Monthly: 08-2023

Type: Wind Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm (WS<1.8kph): 3.24% Valid Data: 99.46%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	0.81	1.08	0.41	0	0	2.3
NNE	0.41	0.54	0	0	0	0.95
NE	1.22	1.35	0.54	0	0	3.11
ENE	1.35	1.49	0	0	0	2.84
E	1.76	5.27	0	0	0	7.03
ESE	1.35	6.62	0.41	0	0	8.38
SE	3.38	2.16	0.14	0	0	5.68
SSE	4.86	3.11	0	0	0	7.97
S	2.03	8.92	0	0	0	10.95
SSW	2.16	7.7	0.54	0	0	10.4
SW	3.51	7.7	1.35	0	0	12.56
WSW	2.43	4.19	0.81	0	0	7.43
W	3.65	1.76	0.54	0	0	5.95
WNW	2.97	1.76	0	0	0	4.73
NW	0.81	2.16	0	0	0	2.97
NNW	0.54	2.3	0.68	0	0	3.52
Summary	33.24	58.11	5.42	0	0	96.77



Peace River Area Monitoring Program

986-C Station - August 2023

Summary of Hourly Averages

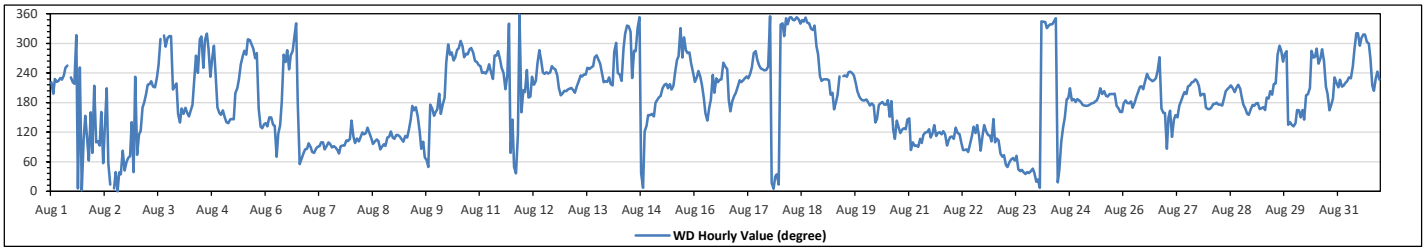
WIND DIRECTION (VWD) in sector

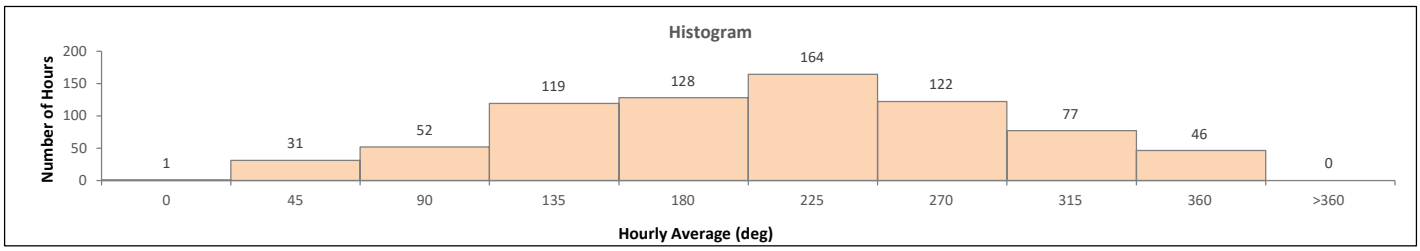
Monthly Average:	193 (S)	degree	
Hours in Service:	744		
Hours of Data:	740		
Hours of Missing Data:	3		
Hours of Calibration:	1		
Operational Uptime:	99.6		

Day	Hourly Period Starting at (MST)																							Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant
Aug 1	SW	SSW	SW	SW	SW	SW	SW	SW	WSW	WSW	K	SW	SW	SW	NW	N	WSW	N	ESE	SSE	ESE	ENE	SSE	ENE	233	SW
Aug 2	SSW	E	E	E	SSE	ENE	SE	SSW	ENE	NNE	K	N	NE	N	NE	NE	E	NE	ENE	ENE	ENE	SE	NE	SW	62	ENE
Aug 3	ENE	ESE	ESE	SSE	S	SSW	SW	SW	SW	SSW	SSW	SW	WSW	NW	C	NW	WNW	NW	NW	NW	SSW	SSW	SW	SSE	224	SW
Aug 4	SE	SSE	SSE	SSE	SSE	SSE	SSE	S	SW	W	WSW	NW	NW	WSW	NW	NW	WNW	SW	W	WNW	SW	SSE	SSE	SSE	211	SSW
Aug 5	SSE	SSE	SE	SE	SE	SE	SE	SSW	SSW	SW	WSW	W	WNW	W	NW	NW	WNW	WNW	W	W	SSE	SE	SE	SE	220	SW
Aug 6	SE	SE	SSE	SSE	SE	SE	ENE	ESE	SE	S	W	W	WNW	WSW	W	WNW	NW	NNW	S	NE	ENE	ENE	E	E	129	SE
Aug 7	E	E	E	ENE	E	E	E	E	E	E	E	E	E	E	E	E	E	ENE	E	E	E	ESE	E	ESE	92	E
Aug 8	SE	ESE	E	ESE	E	ESE	ESE	ESE	ESE	SE	ESE	ESE	E	E	ESE	E	E	E	E	E	ESE	ESE	ESE	ESE	109	ESE
Aug 9	ESE	ESE	ESE	ESE	ESE	E	ESE	ESE	ESE	SE	S	SSE	S	SSE	ESE	E	E	ENE	ENE	NE	S	SSE	SSE	SSE	119	ESE
Aug 10	SSE	SSW	SSE	S	S	W	WNW	W	W	W	W	WNW	WNW	WNW	WNW	W	W	W	WNW	WNW	W	W	W	WSW	273	W
Aug 11	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	W	W	WNW	W	WSW	WSW	SSW	SW	NNW	ENE	SE	NE	NE	ESE	N	SSE	248	WSW
Aug 12	SSW	SSW	WSW	S	S	SW	SW	SW	WSW	WNW	W	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SSW	SSW	SSW	SSW	233	SW
Aug 13	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	W	W	W	WSW	WSW	SW	SW	SW	236	SW
Aug 14	SW	SW	SSW	W	WNW	WSW	SW	SW	WNW	NW	NNW	NNW	NW	SW	WNW	WNW	NNW	N	NE	N	ESE	SE	SSE	SSE	254	WSW
Aug 15	SSE	SSE	S	S	S	S	SSW	SW	SW	SSW	SW	SSW	SSW	WSW	W	W	NNW	W	NW	WNW	W	W	WSW	WSW	231	SW
Aug 16	SW	SW	WSW	SW	SW	S	SSE	SE	SSE	S	SW	SSW	SW	SW	SW	SW	W	WSW	WSW	S	SSE	S	S	SSW	214	SSW
Aug 17	SSW	SW	SW	SW	SW	SW	SW	WSW	WSW	W	WNW	W	WSW	WSW	WSW	WSW	WSW	WSW	N	NNE	N	NNE	NE	NNE	264	W
Aug 18	NNW	NNW	NW	N	NNW	N	N	NNW	NNW	N	NNW	NNW	NNW	NNW	N	NNW	NNW	NNW	NW	NNW	WNW	W	SW	SW	342	NNW
Aug 19	SW	SW	SW	SW	SSW	SSW	SSE	S	SSW	SW	K	SW	SW	SW	WSW	WSW	WSW	SW	SW	SSW	S	S	S	S	216	SW
Aug 20	S	S	S	S	S	SE	SE	S	S	S	S	S	S	SSE	S	ESE	ESE	SE	SE	ESE	SE	SE	SE	SE	154	SSE
Aug 21	SE	E	E	E	E	E	ESE	E	ESE	ESE	ESE	SE	ESE	ESE	SE	ESE	ESE	ESE	ESE	ESE	ESE	E	ESE	ESE	114	ESE
Aug 22	ESE	ESE	SE	ESE	ESE	E	E	E	E	E	E	ESE	SE	ESE	SE	ESE	E	ESE	SE	ESE	ESE	ESE	E	SE	110	ESE
Aug 23	E	ESE	ESE	ENE	ENE	ENE	NE	NE	ENE	ENE	ENE	ENE	ENE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NNE	51	NE
Aug 24	NNE	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNE	NE	E	SE	SSE	S	S	SSW	S	S	S	S	S	323	NW
Aug 25	S	S	S	S	S	S	S	S	S	S	SSW	SSW	SSW	SSW	S	S	SSW	SSW	SSW	SSW	S	SSE	SSE	SSE	186	S
Aug 26	S	S	S	S	S	SSE	S	S	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	WSW	W	SSE	SSE	SSE	206	SSW
Aug 27	E	SSE	SSE	ESE	SE	SSE	SSE	S	S	S	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	SSE	SSE	200	SSW
Aug 28	SSE	SSE	S	S	S	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SSW	S	S	SSE	SSE	SSE	SSE	191	S
Aug 29	S	S	S	S	SSE	SSE	S	SSE	S	S	SSW	SSW	SW	SW	W	WNW	WNW	W	W	WNW	SE	SE	SE	SE	192	S
Aug 30	SE	SSE	SSE	SSE	SSE	SE	SSW	SSW	SSW	WNW	W	W	WNW	WSW	W	WNW	W	SSW	SSW	SSE	S	S	SW	SW	215	SSW
Aug 31	SSW	SW	SSW	SSW	SW	SW	SW	SW	WSW	WNW	NW	NW	WNW	NW	NW	NW	WNW	WNW	W	SSW	SSW	SW	WSW	SW	259	WSW

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Machine Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.





Peace River Area Monitoring Program

986-C Station - August 2023

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr & WIND DIRECTION (VWD) in sector

WIND SPEED

Maximum Hourly Value:	21.0	kph	on Aug 27 at hr 14	Hours in Service:	744
Maximum Daily Value:	14.3	kph	on Aug 13	Hours of Data:	740
Minimum Hourly Value:	0.2	kph	on Aug 9 at hr 20	Hours of Missing Data:	3
Minimum Daily Value:	4.0	kph	on Aug 30	Hours of Calibration:	1
Monthly Average:	2.9	kph		Operational Uptime:	99.6

WIND DIRECTION

Monthly Average: 193 degree (S)

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	4.3	3.3	6.1	7.8	7.6	6.2	6.6	6.4	5.1	6.0	K	11.3	11.5	11.6	10.3	6.9	1.7	2.6	0.6	2.3	1.7	0.4	4.2	2.7	0.4	11.6	5.5
	SW	SSW	SW	SW	SW	SW	SW	SW	WSW	WSW	K	SW	SW	SW	NW	N	WSW	N	ESE	SSE	ESE	ENE	SSE	ENE			
Aug 2	3.0	2.2	3.4	3.3	2.6	0.5	1.6	0.9	2.1	3.0	K	3.7	4.5	6.8	4.2	2.4	14.2	9.2	6.4	3.9	6.5	3.4	4.0	2.7	0.5	14.2	4.1
	SSW	E	E	E	SSE	ENE	SE	SSW	ENE	NNE	K	N	NE	N	NE	NE	E	NE	ENE	ENE	ENE	SE	NE	SW			
Aug 3	5.3	4.0	7.3	9.7	9.3	10.1	11.3	11.1	11.6	15.4	19.4	16.7	14.5	7.6	C	8.4	8.5	7.4	6.7	1.5	2.7	3.5	2.6	5.0	1.5	19.4	8.7
	ENE	ESE	ESE	SSE	S	SSW	SW	SW	SW	SSW	SSW	SW	WSW	NW	C	NW	WNW	NW	NW	NW	SSW	SSW	SW	SSE			
Aug 4	4.0	4.9	7.2	8.3	6.6	6.3	6.9	6.6	4.4	1.8	2.7	4.0	7.1	6.6	7.0	8.0	7.1	8.6	3.2	1.7	1.6	4.5	4.6	4.3	1.6	8.6	5.3
	SE	SSE	SSE	SSE	SSE	SSE	SSE	S	SW	W	WSW	NW	NW	WSW	NW	NW	WNW	SW	W	WNW	SW	SSE	SSE	SSE			
Aug 5	5.5	3.3	4.9	3.3	4.2	2.7	3.1	5.0	3.5	4.7	6.5	6.8	5.7	4.4	3.8	4.3	5.7	5.1	4.2	2.7	4.0	3.2	3.9	4.6	2.7	6.8	4.4
	SSE	SSE	SE	SE	SE	SE	SE	SSW	SSW	SW	WSW	W	WNW	W	NW	NW	WNW	WNW	W	W	SSE	SE	SE	SE			
Aug 6	5.4	3.8	3.6	3.9	3.0	4.4	6.7	4.8	6.7	3.8	5.4	6.5	6.0	6.4	4.6	4.7	7.0	1.0	5.0	4.8	5.9	4.9	6.3	9.7	1.0	9.7	5.2
	SE	SE	SSE	SSE	SE	SE	ENE	ESE	SE	S	W	W	WNW	WSW	W	WNW	NW	NNW	S	NE	ENE	ENE	E	E			
Aug 7	8.1	7.4	7.7	7.0	7.2	7.3	10.4	11.9	14.6	13.0	13.1	14.8	9.7	10.5	11.6	13.3	12.4	13.9	12.8	11.2	11.4	10.6	12.3	11.8	7.0	14.8	11.0
	E	E	E	ENE	E	E	E	E	E	E	E	E	E	E	E	E	E	ENE	E	E	E	ESE	E	ESE			
Aug 8	10.6	12.2	13.5	11.2	11.5	12.8	15.5	14.8	12.0	14.0	10.7	9.6	7.8	10.9	13.5	12.8	10.6	6.8	8.0	7.8	10.0	13.0	9.2	7.3	6.8	15.5	11.1
	SE	ESE	E	ESE	E	ESE	ESE	ESE	ESE	SE	ESE	ESE	E	E	ESE	E	E	E	E	E	ESE	ESE	ESE	ESE			
Aug 9	8.4	8.3	7.3	8.2	8.2	7.6	8.5	8.6	7.3	7.8	6.5	6.8	4.2	2.5	3.0	5.2	4.8	4.9	2.9	2.6	**0.2**	4.0	2.0	0.7	**0.2**	8.6	5.4
	ESE	ESE	ESE	ESE	ESE	E	ESE	ESE	ESE	SE	S	SSE	S	SSE	ESE	E	E	ENE	ENE	NE	S	SSE	SSE	SSE			
Aug 10	2.8	2.5	5.2	5.6	1.3	3.1	2.8	5.1	7.0	8.5	8.8	9.2	7.9	10.4	6.8	5.3	8.3	7.2	7.0	7.6	5.4	3.3	3.8	3.1	1.3	10.4	5.8
	SSE	SSW	SSE	S	S	W	WNW	W	W	W	W	WNW	WNW	WNW	WNW	W	W	W	WNW	WNW	W	W	W	WSW			
Aug 11	4.6	3.6	4.9	3.7	4.2	3.3	4.9	4.3	4.3	4.9	6.3	7.3	9.5	8.4	8.6	10.9	8.2	1.8	4.2	3.9	6.9	4.5	3.6	7.4	1.8	10.9	5.6
	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	W	W	WNW	W	WSW	WSW	SSW	SW	NNW	ENE	SE	NE	NE	ESE	N	SSE			
Aug 12	5.1	2.1	2.3	2.7	4.9	5.5	5.0	6.0	5.7	5.0	5.2	6.7	9.4	10.7	10.4	12.3	10.9	10.0	12.7	6.7	6.6	6.7	7.6	9.1	2.1	12.7	7.1
	SSW	SSW	WSW	S	S	SW	SW	SW	WSW	WNW	W	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SSW	SSW	SSW	SSW			
Aug 13	8.1	11.7	13.2	15.1	12.7	11.3	12.5	14.1	17.6	15.7	20.2	20.4	18.4	18.6	20.1	17.6	16.6	17.9	14.8	9.1	7.7	8.8	10.5	9.9	7.7	20.4	**14.3**
	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	W	W	W	WSW	WSW	SW	SW	SW			
Aug 14	8.9	8.7	9.0	4.1	3.0	2.2	1.3	2.2	2.2	5.3	6.9	7.6	3.1	1.6	4.5	2.9	3.8	4.7	1.2	4.1	2.8	6.9	8.9	10.5	1.2	10.5	4.9
	SW	SW	SSW	W	WNW	WSW	SW	SW	WNW	NW	NNW	NNW	NW	SW	WNW	WNW	NNW	N	NE	N	ESE	SE	SSE	SSE			
Aug 15	7.3	6.2	10.8	12.8	12.2	10.6	11.4	13.1	11.0	13.0	12.5	12.5	13.5	13.1	16.2	17.4	17.8	5.0	9.6	7.7	8.2	5.1	5.0	4.5	4.5	17.8	10.7
	SSE	SSE	S	S	S	S	SSW	SW	SW	SSW	SW	SSW	SSW	WSW	W	W	NNW	W	NW	WNW	W	W	WSW	WSW			
Aug 16	5.3	3.5	3.8	4.5	2.6	4.5	2.3	2.6	4.3	4.5	3.6	8.7	10.0	15.3	15.6	18.8	13.6	11.5	6.9	7.5	11.1	12.2	11.1	9.2	2.3	18.8	8.0
	SW	SW	WSW	SW	SW	S	SSE	SE	SSE	S	SW	SSW	SW	SW	SW	SW	W	WSW	WSW	S	SSE	S	S	SSW			
Aug 17	10.7	10.9	11.0	10.8	10.3	10.5	11.5	9.1	9.4	7.0	8.3	8.0	9.6	10.9	12.2	13.7	11.8	11.8	18.3	12.7	14.4	14.4	11.7	2.0	2.0	18.3	10.9
	SSW	SW	SW	SW	SW	SW	SW	WSW	WSW	W	WNW	W	WSW	WSW	WSW	WSW	WSW	WSW	N	NNE	N	NNE	NE	NNE			
Aug 18	3.2	5.3	5.1	15.6	13.5	14.5	12.8	12.2	14.9	15.0	12.0	12.7	18.8	17.2	17.3	18.7	17.8	13.8	10.2	6.7	2.6	3.4	2.6	4.0	2.6	18.8	11.2
	NNW	NNW	NW	N	NNW	N	N	NNW	NNW	N	NNW	NNW	NNW	NNW	N	NNW	NNW	NNW	NW	NNW	WNW	W	SW	SW			
Aug 19	3.6	4.4	5.7	4.8	3.4	3.9	5.2	5.4	7.0	10.7	K	11.7	13.1	13.0	11.4	11.0	12.0	10.2	11.4	10.2	11.3	10.7	11.7	10.9	3.4	13.1	8.8
	SW	SW	SW	SW	SSW	SSW	SSE	S	SSW	SW	K	SW	SW	SW	WSW	WSW	WSW	SW	SW	SSW	S	S	S	S			
Aug 20	7.3	4.3	7.7	6.9	6.2	3.2	3.5	10.4	9.6	8.9	11.0	9.6	9.6	10.8	5.7	5.2	7.7	7.5	9.9	12.1	12.0	9.7	10.0	10.4	3.2	12.1	8.3
	S	S	S	S	S	SE	SE	S	S	S	S	S	S	SSE	S	ESE	ESE	SE	SE	ESE	SE	SE	SE	SE			
Aug 21	7.5	5.3	7.3	6.4	7.4	6.0	6.3	5.6	10.7	15.4	18.7	18.0	14.6	14.1	13.6	13.7	13.9	14.1	13.4	10.4	9.8	11.2	9.5	9.0	5.3	18.7	10.9
	SE	E	E	E	E	E	ESE	E	ESE	ESE	ESE	SE	ESE	ESE	SE	ESE	ESE	ESE	ESE	ESE	ESE	E	ESE	ESE			
Aug 22	8.2	7.8	4.7	4.7	7.4	8.5	6.6	4.1	5.1	5.4	9.7	9.1	10.7	8.9	7.3	6.4	8.9	8.3	8.4	8.9	8.8	5.7	5.4	2.0	2.0	10.7	7.1
	ESE	ESE	SE	ESE	ESE	E	E	E	E	E	E	ESE	SE	ESE	SE	ESE	E	ESE	SE	ESE	ESE	ESE	E	SE			
Aug 23	4.6	6.0	4.2	5.8	6.5	5.8	4.1	6.2	8.7	9.4	10.5	12.9	11.5	12.9	13.1	16.7	15.5	15.6	16.6	13.2	10.5	10.7	9.2	8.0	4.1	16.7	9.9
	E	ESE	ESE	ENE	ENE	ENE	NE	NE	ENE	ENE	ENE	ENE	ENE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NNE			
Aug 24	8.5	7.6	6.7	9.7	9.9	6.9	8.1	7.6	6.4	5.3	5.3	5.2	5.8	4.0	3.0	4.0	6.7	7.4	7.0	8.6	9.5	9.9	8.7	8.2	3.0	9.9	7.1
	NNE	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNE	NE	E	SE	SSE	S	S	SSW	S	S	S	S	S			
Aug 25	10.7	12.0	10.8	8.4	7.0	8.3	11.4	12.5	12.3	14.2	12.5	12.5	14.4	11.7	12.7	13.4	14.0	13.3	9.6	5.8	9.0	9.0	7.6	7.9	5.8	14.4	10.9
	S	S	S	S	S	S	S	S	S	S	SSW	SSW	SSW	SSW	S	S	SSW	SSW	SSW	SSW	S	SSE	SSE	SSE			
Aug 26	11.1	8.9	11.1	10.9	8.3	7.8	9.6	10.5	12.7	15.2	14.2	13.9	12.2	11.3	11.1	12.2	12.4	12.1	10.0	6.9	1.7	1.0	3.3	3.0	1.0	15.2	9.6
	S	S	S	S	S	SSE	S	S	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	WSW	W	SSE	SSE	SSE			
Aug 27	3.9	3.2	2.8	4.1	3.4	4.7	3.3	5.0	7.1	7.2	7.9	11.3	14.3	18.9	**21.0**	17.1	15.6	13.8	11.1	11.2	12.5	9.6	6.6	9.2	2.8	**21.0**	9.4
	E	SSE	SSE	ESE	SE	SSE	SSE	S	S	S	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	SSE	SSE			
Aug 28	7.7	9.8	10.1	11.5	9.3	8.7	7.9	8.1	8.7	12.6	13.2	13.9	13.1	11.7	14.6	12.2	11.4	11.5	10.6	10.4	11.2	6.0	3.9	5.1	3.9	14.6	10.1
	SSE	SSE	S	S	S	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SSW	S	S	SSE	SSE	SSE	SSE			
Aug 29	9.1	10.6	11.0	9.0	8.8	7.7	7.9	7.4	8.6	10.2	10.2	10.1	9.9	7.3	5.7	5.1	5.2	4.6	2.6	1.6	3.5	3.4	1.3	4.0	1.3	11.0	6.9
	S	S	S	S	SSE	SSE	S	SSE	S	S	SSW	SSW	SW	SW	W	WNW	WNW	W	W	WNW	SE	SE	SE	SE			
Aug 30	2.8	4.7	3.5	4.4	4.0	3.0	2.6	1.8	1.7	2.4	3.8	4.6	4.5	5.2	4.6	4.1	2.5	5.2	3.3	3.8	4.0	4.7	6.7	8.9	1.7	8.9	**4.0**
	SE	SSE	SSE	SSE	SSE	SE	SSW	SSW	SSW	WNW	W	W	WNW	WSW	W	WNW	W	SSW	SSW	SSE	S	S	SW	SW			
Aug 31	11.3	9.9	7.8	8.0	6.3	7.4	7.0	5.1	5.2	4.1	7.1	8.7	7.9	8.7	9.0	7.9	6.6	5.4	3.7	3.8	3.8	2.8	4.4	4.3	2.8	11.3	6.5
	SSW	SW	SSW	SSW	SW	SW	SW	SW	WSW	WNW	NW	NW	WNW	NW	NW	NW	WNW	WNW	W	SSW	SSW	SW	WSW	SW			

C	Monthly Calibration	**S**	Daily Zero-Span Check	**Q**	Quality Assurance		
K	Collection Error	**ND**	No Data (Machine Not in Service)	**Y**	Routine Maintenance	**P**	Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	**NRM**	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)				

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

842-B STATION

Peace River Area Monitoring Program

842-B Station - August 2023

Summary of Hourly Averages

SULPHUR DIOXIDE (SO_2) in ppb

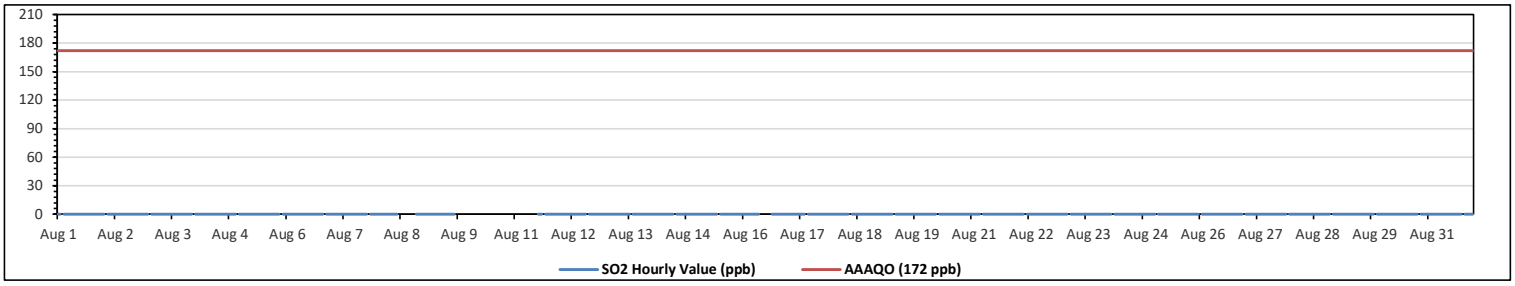
Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb

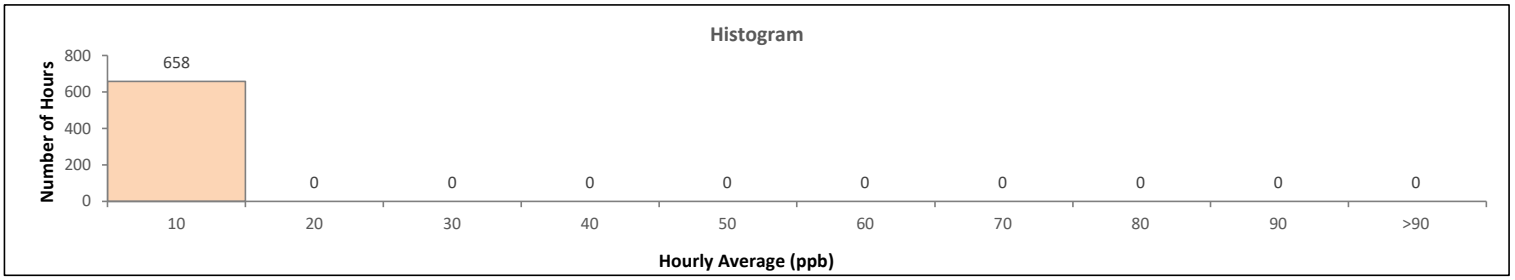
Number of 1-Hour Exceedances:	0	Number of 24-Hour Exceedances:	0	30-Day Exceedence:	0	
Maximum Hourly Value:	0	ppb	on Aug 1 at hr 0	Hours in Service:	744	
Maximum Daily Value:	0.0	ppb	on Aug 1	Hours of Data:	658	
Minimum Hourly Value:	0	ppb	on Aug 1 at hr 0	Hours of Missing Data:	50	
Minimum Daily Value:	0.0	ppb	on Aug 1	Hours of Calibration:	36	
Monthly Average:	0.0	ppb		Operational Uptime:	93.3	

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 2	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 3	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0.0
Aug 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0.0
Aug 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0.0
Aug 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0.0
Aug 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0.0
Aug 8	0	0	0	0	0	0	0	0	0	0	0	K	K	K	K	K	K	K	K	K	0	0	0	0	0	0	NA
Aug 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	K	ND	ND	ND	ND	0	0	0.0
Aug 10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-
Aug 11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NRM	0	0	0	S	0	0	0	0	0	0	0	0	0	0	NA
Aug 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 13	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 14	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 15	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 16	0	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
Aug 17	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 18	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 19	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 20	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 21	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 22	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 23	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 24	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 25	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 26	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0.0
Aug 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0.0
Aug 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0.0
Aug 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0.0
Aug 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0.0
Aug 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0.0
Diurnal Maximum	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			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



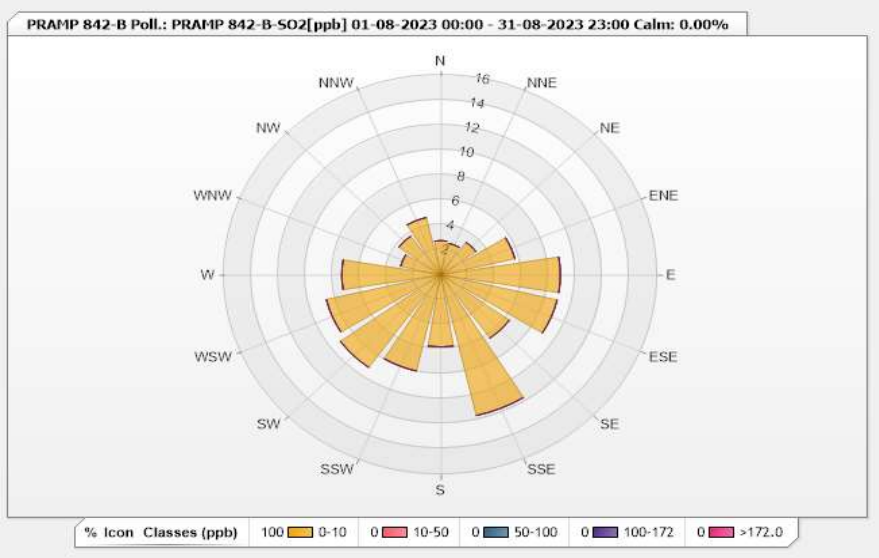


Station: PRAMP 842-B Poll.: PRAMP 842-B-SO2[ppb] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 88.31% Calm Avg: 0.00 [ppm]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	2.74	0	0	0	0	2.74
NNE	2.59	0	0	0	0	2.59
NE	3.2	0	0	0	0	3.2
ENE	5.63	0	0	0	0	5.63
E	8.83	0	0	0	0	8.83
ESE	8.83	0	0	0	0	8.83
SE	6.24	0	0	0	0	6.24
SSE	11.57	0	0	0	0	11.57
S	5.78	0	0	0	0	5.78
SSW	7.91	0	0	0	0	7.91
SW	9.13	0	0	0	0	9.13
WSW	8.68	0	0	0	0	8.68
W	7.31	0	0	0	0	7.31
WNW	3.04	0	0	0	0	3.04
NW	3.81	0	0	0	0	3.81
NNW	4.72	0	0	0	0	4.72
Summary	100	0	0	0	0	100



Peace River Area Monitoring Program

842-B Station - August 2023

Summary of Hourly Averages

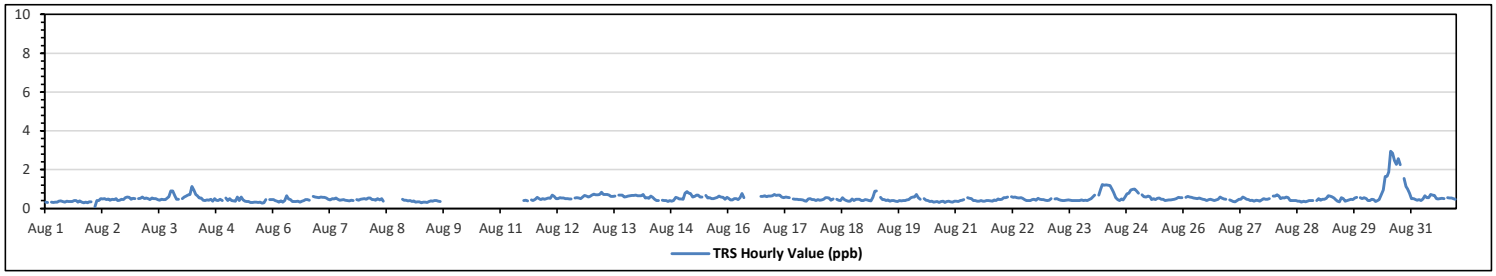
TOTAL REDUCED SULPHUR (TRS) in ppb

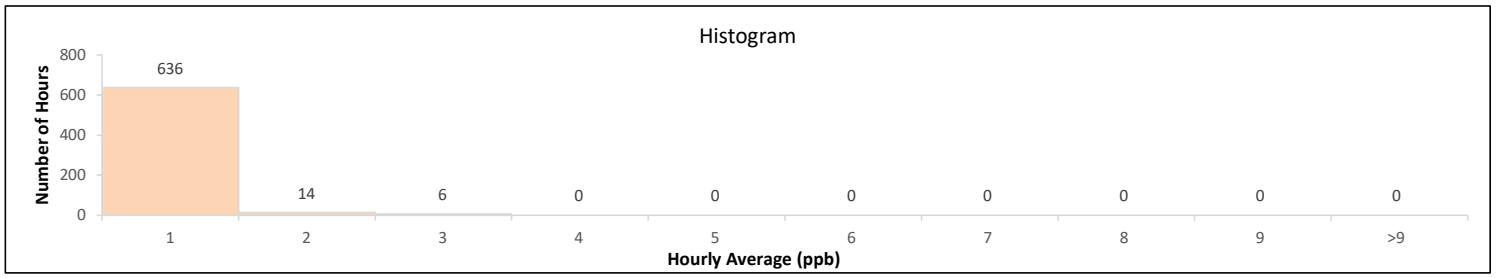
Maximum Hourly Value:	2.95	ppb	on Aug 30 at hr 13	Hours in Service:	744	
Maximum Daily Value:	1.31	ppb	on Aug 30	Hours of Data:	656	
Minimum Hourly Value:	0.10	ppb	on Aug 2 at hr 2	Hours of Missing Data:	50	
Minimum Daily Value:	0.34	ppb	on Aug 1	Hours of Calibration:	38	
Monthly Average:	0.53	ppb		Operational Uptime:	93.3	

Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0.32	0.31	S	0.33	0.31	0.32	0.33	0.37	0.39	0.36	0.33	0.37	0.35	0.35	0.35	0.41	0.41	0.32	0.39	0.32	0.29	0.33	0.29	0.34	0.29	0.41	0.34
Aug 2	0.34	S	0.1	0.4	0.42	0.5	0.49	0.5	0.46	0.49	0.43	0.47	0.45	0.5	0.41	0.43	0.47	0.46	0.55	0.59	0.57	0.48	0.52	0.51	0.10	0.59	0.46
Aug 3	S	0.51	0.52	0.58	0.51	0.54	0.5	0.46	0.54	0.5	0.5	0.46	0.43	0.47	0.45	0.45	0.52	0.61	0.9	0.91	0.64	0.47	0.48	S	0.43	0.91	0.54
Aug 4	0.51	0.6	0.63	0.68	0.72	1.14	0.95	0.73	0.65	0.54	0.53	0.43	0.42	0.44	0.43	0.47	0.38	0.51	0.43	0.41	0.48	0.42	S	0.53	0.38	1.14	0.57
Aug 5	0.42	0.5	0.4	0.39	0.38	0.59	0.4	0.58	0.44	0.37	0.35	0.36	0.3	0.3	0.33	0.32	0.3	0.32	0.28	0.29	0.45	S	0.46	0.46	0.28	0.59	0.39
Aug 6	0.46	0.41	0.37	0.32	0.39	0.32	0.4	0.66	0.49	0.45	0.35	0.36	0.36	0.38	0.32	0.37	0.42	0.45	0.45	0.43	S	0.62	0.6	0.57	0.32	0.66	0.43
Aug 7	0.55	0.58	0.57	0.57	0.53	0.47	0.44	0.5	0.49	0.53	0.47	0.43	0.44	0.45	0.43	0.4	0.39	0.43	0.4	S	0.45	0.43	0.48	0.49	0.39	0.58	0.47
Aug 8	0.51	0.48	0.53	0.54	0.45	0.46	0.43	0.5	0.44	0.5	0.38	K	K	K	K	K	K	K	K	K	0.48	0.43	0.43	0.39	0.38	0.54	NA
Aug 9	0.42	0.35	0.39	0.32	0.34	0.34	0.29	0.33	0.32	0.3	0.35	0.39	0.37	0.42	0.4	0.37	0.36	S	0.35	K	ND	ND	ND	ND	0.29	0.42	0.36
Aug 10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-
Aug 11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NRM	0.42	0.43	0.39	S	0.44	0.42	0.48	0.57	0.5	0.45	0.51	0.47	0.39	0.57	NA
Aug 12	0.5	0.53	0.52	0.69	0.62	0.51	0.51	0.55	0.54	0.53	0.5	0.5	0.49	0.49	S	0.54	0.55	0.53	0.51	0.59	0.67	0.63	0.59	0.62	0.49	0.69	0.55
Aug 13	0.69	0.74	0.7	0.7	0.71	0.83	0.72	0.73	0.71	0.68	0.62	0.62	0.63	S	0.68	0.69	0.69	0.6	0.61	0.63	0.65	0.67	0.67	0.69	0.60	0.83	0.68
Aug 14	0.66	0.65	0.65	0.72	0.54	0.56	0.52	0.64	0.57	0.47	0.41	0.4	S	0.43	0.4	0.42	0.35	0.41	0.37	0.4	0.57	0.54	0.49	0.49	0.35	0.72	0.51
Aug 15	0.47	0.79	0.87	0.79	0.78	0.58	0.62	0.69	0.68	0.6	0.58	S	0.67	0.53	0.55	0.5	0.51	0.53	0.57	0.63	0.58	0.57	0.48	0.57	0.47	0.87	0.61
Aug 16	0.52	0.44	0.44	0.5	0.5	0.45	0.55	0.76	0.56	C	C	C	C	C	C	C	C	0.62	0.62	0.66	0.61	0.63	0.63	0.66	0.44	0.76	NA
Aug 17	0.71	0.67	0.69	0.68	0.58	0.55	0.59	0.57	0.55	S	0.49	0.48	0.47	0.45	0.45	0.44	0.39	0.37	0.49	0.51	0.46	0.45	0.41	0.45	0.37	0.71	0.52
Aug 18	0.43	0.44	0.48	0.56	0.55	0.54	0.43	0.49	S	0.48	0.43	0.42	0.55	0.46	0.4	0.38	0.38	0.49	0.4	0.47	0.48	0.47	0.41	0.41	0.38	0.56	0.46
Aug 19	0.45	0.44	0.4	0.39	0.57	0.88	0.91	S	0.57	0.45	0.45	0.4	0.44	0.38	0.4	0.4	0.37	0.36	0.4	0.39	0.42	0.41	0.44	0.45	0.36	0.91	0.47
Aug 20	0.56	0.58	0.58	0.71	0.56	0.48	S	0.5	0.43	0.41	0.35	0.37	0.33	0.34	0.35	0.31	0.35	0.38	0.31	0.35	0.38	0.34	0.33	0.38	0.31	0.71	0.42
Aug 21	0.38	0.36	0.41	0.43	0.45	S	0.55	0.52	0.5	0.42	0.41	0.38	0.38	0.41	0.37	0.38	0.4	0.41	0.39	0.38	0.44	0.4	0.49	0.45	0.36	0.55	0.42
Aug 22	0.48	0.56	0.55	0.59	S	0.61	0.57	0.58	0.56	0.54	0.55	0.52	0.46	0.42	0.41	0.41	0.45	0.47	0.43	0.52	0.48	0.46	0.46	0.43	0.41	0.61	0.50
Aug 23	0.4	0.43	0.5	S	0.49	0.51	0.46	0.43	0.4	0.4	0.43	0.44	0.43	0.42	0.4	0.41	0.4	0.4	0.44	0.4	0.43	0.42	0.46	0.51	0.40	0.51	0.44
Aug 24	0.59	0.69	S	0.68	1.01	1.23	1.2	1.22	1.2	1.19	1	0.83	0.55	0.46	0.42	0.49	0.44	0.59	0.75	0.79	0.94	0.98	1.01	0.9	0.42	1.23	0.83
Aug 25	0.79	S	0.7	0.61	0.6	0.63	0.61	0.46	0.5	0.46	0.52	0.53	0.47	0.47	0.41	0.43	0.44	0.44	0.45	0.48	0.5	0.57	0.56	0.55	0.41	0.79	0.53
Aug 26	S	0.57	0.62	0.59	0.57	0.54	0.52	0.51	0.54	0.5	0.47	0.45	0.42	0.46	0.48	0.44	0.4	0.44	0.47	0.59	0.54	0.49	0.48	S	0.40	0.62	0.50
Aug 27	0.44	0.4	0.36	0.34	0.4	0.47	0.48	0.6	0.54	0.48	0.46	0.42	0.43	0.38	0.43	0.4	0.38	0.44	0.51	0.47	0.48	0.5	S	0.63	0.34	0.63	0.45
Aug 28	0.64	0.7	0.64	0.51	0.56	0.54	0.59	0.55	0.42	0.41	0.41	0.4	0.37	0.37	0.32	0.38	0.34	0.37	0.4	0.42	0.41	S	0.42	0.5	0.32	0.70	0.46
Aug 29	0.43	0.47	0.47	0.52	0.66	0.63	0.61	0.54	0.44	0.38	0.34	0.55	0.51	0.37	0.4	0.44	0.47	0.45	0.54	0.57	S	0.56	0.5	0.56	0.34	0.66	0.50
Aug 30	0.5	0.4	0.42	0.48	0.45	0.35	0.4	0.46	0.71	0.96	1.64	1.66	1.87	2.95	2.85	2.47	2.27	2.57	2.25	S	1.54	1.14	1.01	0.79	0.35	2.95	1.31
Aug 31	0.5	0.5	0.46	0.43	0.45	0.42	0.49	0.65	0.55	0.56	0.73	0.68	0.67	0.51	0.49	0.5	0.52	0.5	S	0.56	0.54	0.53	0.5	0.48	0.42	0.73	0.53
Diurnal Maximum	0.79	0.79	0.87	0.79	1.01	1.23	1.20	1.22	1.20	1.19	1.64	1.66	1.87	2.95	2.85	2.47	2.27	2.57	2.25	0.91	1.54	1.14	1.01	0.90			
Diurnal Average	0.51	0.52	0.52	0.54	0.54	0.57	0.56	0.57	0.54	0.52	0.52	0.51	0.51	0.52	0.51	0.51	0.49	0.53	0.54	0.51	0.55	0.53	0.52	0.53			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance			
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P	Power Failure	
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)					

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



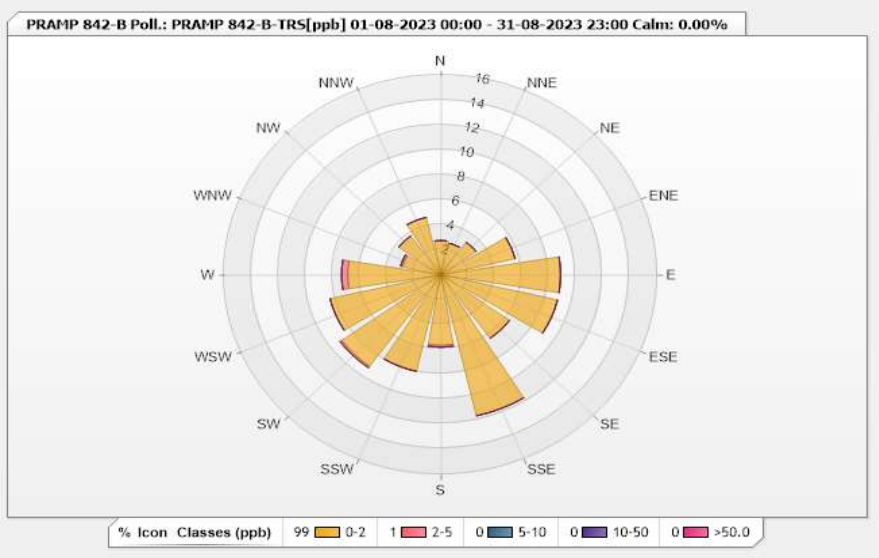


Station: PRAMP 842-B Poll.: PRAMP 842-B-TRS[ppb] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 88.04% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	2.75	0	0	0	0	2.75
NNE	2.6	0	0	0	0	2.6
NE	3.21	0	0	0	0	3.21
ENE	5.65	0	0	0	0	5.65
E	8.85	0	0	0	0	8.85
ESE	8.85	0	0	0	0	8.85
SE	6.26	0	0	0	0	6.26
SSE	11.6	0	0	0	0	11.6
S	5.65	0.15	0	0	0	5.8
SSW	7.94	0	0	0	0	7.94
SW	9.01	0.15	0	0	0	9.16
WSW	8.4	0	0	0	0	8.4
W	6.87	0.46	0	0	0	7.33
WNW	2.9	0.15	0	0	0	3.05
NW	3.82	0	0	0	0	3.82
NNW	4.73	0	0	0	0	4.73
Summary	99.09	0.91	0	0	0	100



Peace River Area Monitoring Program

842-B Station - August 2023

Summary of Hourly Averages

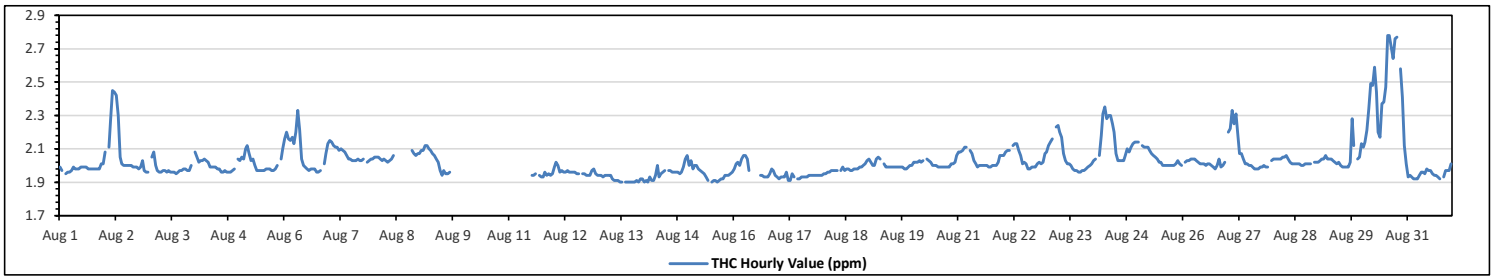
TOTAL HYDROCARBONS (THC) in ppm

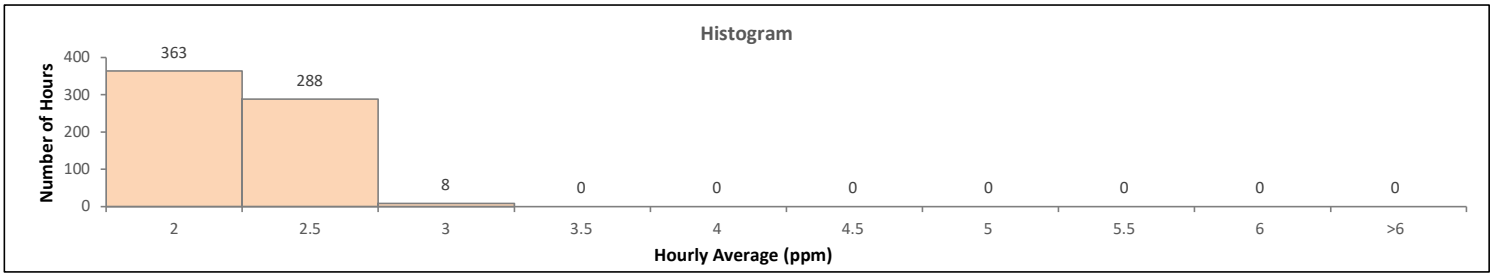
Maximum Hourly Value:	2.78	ppm	on Aug 30 at hr 13	Hours in Service:	744
Maximum Daily Value:	2.43	ppm	on Aug 30	Hours of Data:	659
Minimum Hourly Value:	1.90	ppm	on Aug 13 at hr 11	Hours of Missing Data:	50
Minimum Daily Value:	1.92	ppm	on Aug 13	Hours of Calibration:	35
Monthly Average:	2.03	ppm		Operational Uptime:	93.3

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	1.99	1.97	S	1.95	1.96	1.96	1.97	1.99	1.98	1.98	1.98	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.98	1.98	2.01	2.01	1.95	2.01	1.98
Aug 2	2.08	S	2.11	2.27	2.45	2.44	2.42	2.30	2.05	2.01	2.00	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.98	1.99	2.03	1.97	1.96	1.96	1.96	2.45	2.09
Aug 3	S	2.05	2.08	2.00	1.97	1.96	1.96	1.97	1.97	1.96	1.97	1.96	1.96	1.96	1.95	1.96	1.97	1.97	1.98	1.98	1.97	1.97	2.00	S	1.95	2.08	1.98
Aug 4	2.08	2.05	2.02	2.03	2.03	2.04	2.03	2.02	1.99	1.99	1.99	1.99	1.98	1.98	1.96	1.96	1.97	1.96	1.96	1.96	1.97	1.98	S	2.04	1.96	2.08	2.00
Aug 5	2.03	2.05	2.04	2.10	2.12	2.07	2.03	2.04	2.00	1.97	1.97	1.97	1.97	1.97	1.98	1.98	1.98	1.97	1.97	1.98	2.00	S	2.04	2.10	1.97	2.12	2.01
Aug 6	2.16	2.20	2.16	2.15	2.17	2.13	2.20	2.33	2.21	2.04	2.00	1.99	1.98	1.97	1.98	1.98	1.98	1.96	1.96	1.97	S	2.01	2.07	2.13	1.96	2.33	2.08
Aug 7	2.15	2.14	2.12	2.11	2.11	2.09	2.10	2.09	2.08	2.06	2.04	2.04	2.03	2.03	2.03	2.04	2.03	2.03	2.04	S	2.02	2.03	2.04	2.04	2.02	2.15	2.06
Aug 8	2.05	2.05	2.05	2.04	2.03	2.04	2.03	2.02	2.03	2.04	2.06	K	K	K	K	K	K	K	K	K	2.09	2.07	2.06	2.07	2.02	2.09	NA
Aug 9	2.07	2.09	2.09	2.12	2.12	2.10	2.09	2.07	2.06	2.04	2.02	1.97	1.94	1.97	1.95	1.95	1.96	S	2.00	K	ND	ND	ND	ND	1.94	2.12	2.03
Aug 10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-
Aug 11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NRM	1.94	1.94	1.95	S	1.94	1.93	1.93	1.96	1.94	1.95	1.94	1.95	1.93	1.96	NA
Aug 12	1.99	2.02	2.00	1.96	1.97	1.96	1.96	1.97	1.96	1.96	1.96	1.96	1.95	1.95	S	1.95	1.95	1.94	1.94	1.94	1.97	1.98	1.95	1.94	1.94	2.02	1.96
Aug 13	1.94	1.94	1.93	1.94	1.94	1.94	1.94	1.92	1.91	1.91	1.91	1.90	1.90	S	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.90	1.92	1.92	1.90	1.94	1.92
Aug 14	1.90	1.91	1.90	1.93	1.91	1.91	1.94	2.00	1.93	1.95	1.96	1.97	S	1.97	1.97	1.96	1.96	1.96	1.96	1.95	1.96	1.99	2.04	2.06	1.90	2.06	1.96
Aug 15	2.00	2.03	1.98	2.00	2.00	1.98	1.97	1.96	1.95	1.93	1.91	S	1.90	1.91	1.91	1.90	1.91	1.92	1.92	1.94	1.94	1.94	1.95	1.96	1.90	2.03	1.95
Aug 16	1.98	2.01	2.02	2.00	2.04	2.06	2.06	2.04	1.97	C	C	C	C	C	1.94	1.94	1.93	1.93	1.93	1.95	1.98	1.97	1.94	1.93	1.93	2.06	1.98
Aug 17	1.92	1.93	1.93	1.93	1.96	1.91	1.91	1.95	1.93	S	1.92	1.92	1.93	1.93	1.93	1.93	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.91	1.96	1.93
Aug 18	1.95	1.95	1.96	1.96	1.97	1.97	1.97	1.97	S	1.97	1.99	1.97	1.98	1.98	1.97	1.97	1.98	1.98	1.98	1.99	1.99	2.00	2.01	2.03	1.95	2.03	1.98
Aug 19	2.04	2.02	2.00	2.00	2.04	2.05	2.04	S	2.01	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.98	1.98	1.99	2.00	2.00	1.98	2.05	2.00
Aug 20	2.02	2.02	2.02	2.03	2.02	2.03	S	2.04	2.03	2.02	2.00	2.00	2.00	1.99	1.99	1.99	1.99	1.99	1.99	1.99	2.01	2.01	2.02	2.06	1.99	2.06	2.01
Aug 21	2.08	2.08	2.09	2.11	2.11	S	2.09	2.07	2.03	2.01	1.99	2.00	2.00	2.00	2.00	2.00	1.99	1.99	2.00	2.00	2.00	2.02	2.06	2.06	1.99	2.11	2.03
Aug 22	2.06	2.08	2.09	2.09	S	2.12	2.13	2.13	2.09	2.06	2.01	2.02	2.01	1.98	1.98	1.99	1.99	1.99	2.01	2.02	2.01	2.02	2.07	2.08	1.98	2.13	2.04
Aug 23	2.12	2.14	2.16	S	2.23	2.24	2.20	2.17	2.07	2.03	2.01	2.01	2.00	1.98	1.97	1.97	1.96	1.96	1.97	1.97	1.98	1.99	2.00	2.01	1.96	2.24	2.05
Aug 24	2.03	2.04	S	2.06	2.18	2.31	2.35	2.28	2.30	2.30	2.25	2.20	2.07	2.03	2.03	2.03	2.03	2.06	2.10	2.08	2.11	2.13	2.14	2.14	2.03	2.35	2.14
Aug 25	2.14	S	2.12	2.11	2.11	2.11	2.09	2.07	2.06	2.05	2.04	2.02	2.02	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.01	2.03	2.01	2.00	2.00	2.14	2.04
Aug 26	S	2.02	2.03	2.03	2.04	2.04	2.04	2.03	2.02	2.01	2.01	2.01	2.00	2.01	2.01	2.00	1.99	1.98	2.00	2.04	1.99	2.00	2.02	S	1.98	2.04	2.01
Aug 27	2.20	2.22	2.33	2.25	2.31	2.18	2.07	2.07	2.04	2.01	2.01	2.00	2.00	1.99	1.98	1.98	1.98	1.99	1.99	2.00	1.99	1.99	S	2.03	1.98	2.33	2.07
Aug 28	2.04	2.04	2.04	2.04	2.04	2.05	2.05	2.06	2.04	2.02	2.01	2.01	2.01	2.01	2.01	2.00	2.00	2.01	2.01	2.01	2.01	S	2.02	2.02	2.00	2.06	2.02
Aug 29	2.02	2.03	2.04	2.04	2.06	2.04	2.04	2.04	2.03	2.02	2.01	2.02	2.00	1.99	1.99	1.99	1.99	2.02	2.28	2.12	S	2.04	2.05	2.13	1.99	2.28	2.04
Aug 30	2.11	2.14	2.21	2.34	2.49	2.48	2.59	2.44	2.20	2.17	2.37	2.38	2.47	**2.78**	**2.78**	2.71	2.64	2.76	2.77	S	2.58	2.41	2.12	2.01	2.01	**2.78**	**2.43**
Aug 31	1.93	1.94	1.93	1.92	1.92	1.92	1.94	1.96	1.96	1.95	1.98	1.97	1.97	1.95	1.94	1.94	1.93	1.92	S	1.93	1.97	1.97	1.97	2.01	1.92	2.01	1.95
Diurnal Maximum	2.20	2.22	2.33	2.34	2.49	2.48	2.59	2.44	2.30	2.30	2.37	2.38	2.47	2.78	2.78	2.71	2.64	2.76	2.77	2.12	2.58	2.41	2.14	2.14			
Diurnal Average	2.04	2.04	2.05	2.05	2.08	2.08	2.08	2.07	2.03	2.02	2.01	2.01	2.00	2.01	2.00	2.00	1.99	2.00	2.02	1.98	2.01	2.01	2.01	2.02			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance			
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P	Power Failure	
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)					

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



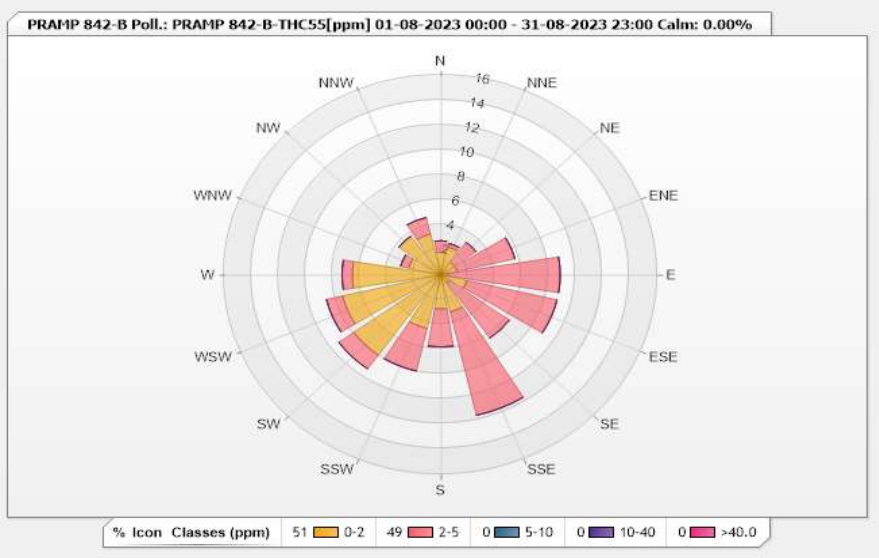


Station: PRAMP 842-B Poll.: PRAMP 842-B-THC55[ppm] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 88.44% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	1.82	0.91	0	0	0	2.73
NNE	2.28	0.3	0	0	0	2.58
NE	1.22	1.98	0	0	0	3.2
ENE	1.22	4.41	0	0	0	5.63
E	0.46	8.36	0	0	0	8.82
ESE	1.98	6.84	0	0	0	8.82
SE	0.76	5.47	0	0	0	6.23
SSE	3.04	8.51	0	0	0	11.55
S	2.74	3.04	0	0	0	5.78
SSW	4.41	3.5	0	0	0	7.91
SW	7.9	1.37	0	0	0	9.27
WSW	7.45	1.22	0	0	0	8.67
W	6.53	0.76	0	0	0	7.29
WNW	2.43	0.61	0	0	0	3.04
NW	3.8	0	0	0	0	3.8
NNW	3.34	1.37	0	0	0	4.71
Summary	51.38	48.65	0	0	0	100



Peace River Area Monitoring Program

842-B Station - August 2023

Summary of Hourly Averages

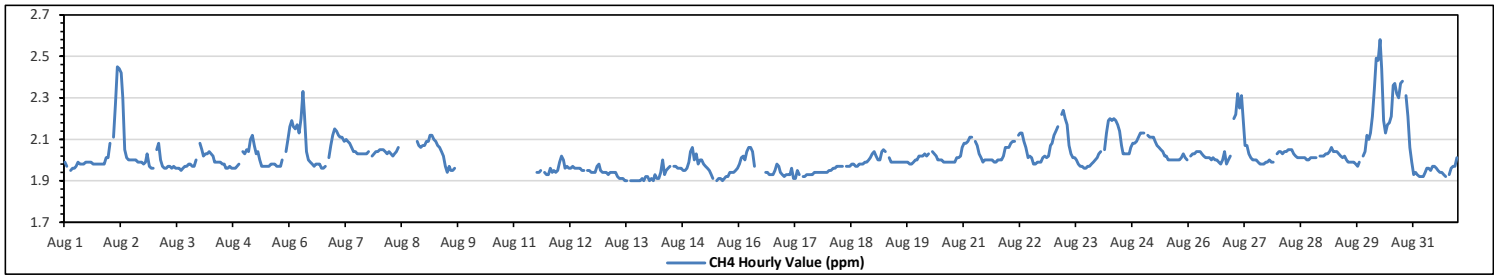
METHANE (CH4) in ppm

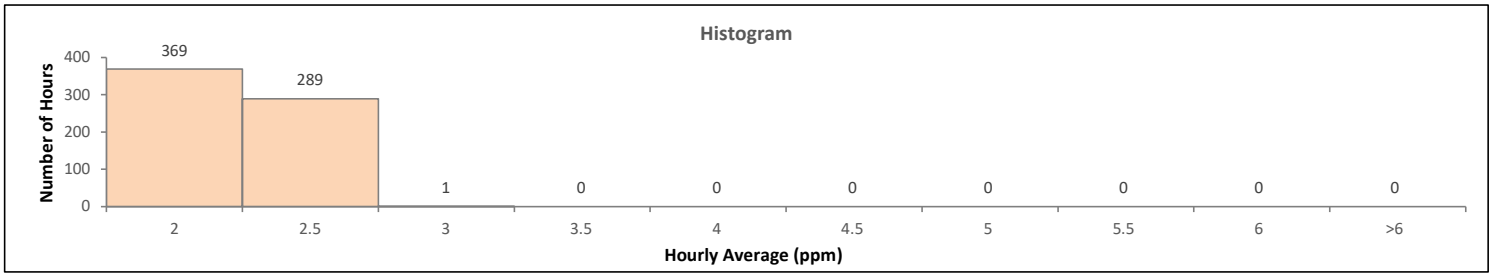
Maximum Hourly Value:	2.58	ppm	on Aug 30 at hr 6	Hours in Service:	744	
Maximum Daily Value:	2.27	ppm	on Aug 30	Hours of Data:	659	
Minimum Hourly Value:	1.90	ppm	on Aug 13 at hr 11	Hours of Missing Data:	50	
Minimum Daily Value:	1.92	ppm	on Aug 13	Hours of Calibration:	35	
Monthly Average:	2.02	ppm		Operational Uptime:	93.3	

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	1.99	1.97	S	1.95	1.96	1.96	1.97	1.99	1.98	1.98	1.98	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.98	1.98	2.01	2.01	1.95	2.01	1.98
Aug 2	2.08	S	2.11	2.27	2.45	2.44	2.42	2.30	2.05	2.01	2.00	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.98	1.99	2.03	1.97	1.96	1.96	1.96	2.45	2.09
Aug 3	S	2.05	2.08	2.00	1.97	1.96	1.96	1.97	1.97	1.96	1.97	1.96	1.96	1.96	1.95	1.96	1.97	1.97	1.98	1.98	1.97	1.97	2.00	S	1.95	2.08	1.98
Aug 4	2.08	2.05	2.02	2.03	2.03	2.04	2.03	2.02	1.99	1.99	1.99	1.99	1.98	1.98	1.96	1.96	1.97	1.96	1.96	1.96	1.97	1.98	S	2.04	1.96	2.08	2.00
Aug 5	2.03	2.05	2.04	2.10	2.12	2.07	2.03	2.04	2.00	1.97	1.97	1.97	1.97	1.97	1.98	1.98	1.98	1.97	1.97	1.97	2.00	S	2.04	2.10	1.97	2.12	2.01
Aug 6	2.16	2.19	2.16	2.15	2.17	2.13	2.20	2.33	2.21	2.04	2.00	1.99	1.98	1.97	1.98	1.98	1.98	1.96	1.96	1.97	S	2.01	2.07	2.12	1.96	2.33	2.07
Aug 7	2.15	2.14	2.12	2.11	2.11	2.09	2.10	2.09	2.08	2.06	2.04	2.04	2.03	2.03	2.03	2.03	2.03	2.03	2.04	S	2.02	2.03	2.04	2.04	2.02	2.15	2.06
Aug 8	2.05	2.05	2.05	2.04	2.03	2.04	2.03	2.02	2.03	2.04	2.06	K	K	K	K	K	K	K	K	K	2.09	2.07	2.06	2.07	2.02	2.09	NA
Aug 9	2.07	2.09	2.09	2.12	2.12	2.10	2.09	2.07	2.06	2.04	2.02	1.97	1.94	1.97	1.95	1.95	1.96	S	2.00	K	ND	ND	ND	ND	1.94	2.12	2.03
Aug 10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-
Aug 11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NRM	1.94	1.94	1.95	S	1.94	1.93	1.93	1.96	1.94	1.95	1.94	1.95	1.93	1.96	NA
Aug 12	1.99	2.02	2.00	1.96	1.97	1.96	1.96	1.97	1.96	1.96	1.96	1.96	1.95	1.95	S	1.95	1.95	1.94	1.94	1.94	1.97	1.98	1.95	1.94	1.94	2.02	1.96
Aug 13	1.94	1.94	1.93	1.94	1.94	1.94	1.94	1.92	1.91	1.91	1.91	1.90	1.90	S	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.90	1.92	1.92	1.90	1.94	1.92
Aug 14	1.90	1.91	1.90	1.93	1.91	1.91	1.94	2.00	1.93	1.95	1.96	1.97	S	1.97	1.97	1.96	1.96	1.96	1.95	1.95	1.96	1.99	2.04	2.06	1.90	2.06	1.96
Aug 15	2.00	2.03	1.98	2.00	2.00	1.98	1.97	1.96	1.95	1.93	1.91	S	1.90	1.91	1.91	1.90	1.91	1.92	1.92	1.94	1.94	1.94	1.95	1.96	1.90	2.03	1.95
Aug 16	1.98	2.01	2.02	2.00	2.04	2.06	2.06	2.04	1.97	C	C	C	C	C	1.94	1.94	1.93	1.93	1.93	1.95	1.98	1.97	1.94	1.93	1.93	2.06	1.98
Aug 17	1.92	1.93	1.93	1.93	1.96	1.91	1.91	1.95	1.93	S	1.92	1.92	1.93	1.93	1.93	1.93	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.91	1.96	1.93
Aug 18	1.95	1.95	1.96	1.96	1.97	1.97	1.97	1.97	S	1.97	1.97	1.97	1.98	1.98	1.97	1.97	1.98	1.98	1.98	1.99	1.99	2.00	2.01	2.03	1.95	2.03	1.98
Aug 19	2.04	2.02	2.00	2.00	2.04	2.05	2.04	S	2.01	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.98	1.98	1.99	2.00	2.00	1.98	2.05	2.00
Aug 20	2.02	2.02	2.02	2.03	2.02	2.03	S	2.04	2.03	2.02	2.00	2.00	2.00	1.99	1.99	1.99	1.99	1.99	1.99	1.99	2.01	2.01	2.02	2.06	1.99	2.06	2.01
Aug 21	2.08	2.08	2.09	2.11	2.11	S	2.09	2.07	2.03	2.01	1.99	2.00	2.00	2.00	2.00	2.00	1.99	1.99	2.00	2.00	2.00	2.02	2.06	2.06	1.99	2.11	2.03
Aug 22	2.06	2.08	2.09	2.09	S	2.12	2.13	2.13	2.09	2.06	2.01	2.02	2.01	1.98	1.98	1.99	1.99	1.99	2.01	2.02	2.01	2.02	2.07	2.08	1.98	2.13	2.04
Aug 23	2.12	2.14	2.16	S	2.22	2.24	2.20	2.17	2.07	2.03	2.01	2.01	2.00	1.98	1.97	1.97	1.96	1.96	1.97	1.97	1.98	1.99	2.00	2.01	1.96	2.24	2.05
Aug 24	2.03	2.04	S	2.05	2.13	2.19	2.20	2.19	2.20	2.19	2.17	2.14	2.07	2.03	2.03	2.03	2.03	2.06	2.08	2.08	2.09	2.11	2.13	2.13	2.03	2.20	2.10
Aug 25	2.13	S	2.12	2.11	2.11	2.11	2.09	2.07	2.06	2.05	2.04	2.02	2.02	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.01	2.03	2.01	2.00	2.00	2.13	2.04
Aug 26	S	2.02	2.03	2.03	2.04	2.04	2.04	2.03	2.02	2.01	2.01	2.01	2.00	2.01	2.00	2.00	1.99	1.98	2.00	2.04	1.98	2.00	2.02	S	1.98	2.04	2.01
Aug 27	2.20	2.22	2.32	2.25	2.31	2.18	2.07	2.07	2.03	2.01	2.00	2.00	2.00	1.99	1.98	1.98	1.98	1.99	1.99	2.00	1.99	1.99	S	2.03	1.98	2.32	2.07
Aug 28	2.04	2.04	2.03	2.04	2.04	2.05	2.05	2.05	2.03	2.02	2.01	2.01	2.01	2.01	2.01	2.00	2.00	2.01	2.01	2.01	2.01	S	2.02	2.02	2.00	2.05	2.02
Aug 29	2.02	2.03	2.03	2.04	2.06	2.04	2.04	2.04	2.03	2.02	2.01	2.02	2.00	1.99	1.99	1.99	1.99	1.98	1.97	1.99	S	2.02	2.04	2.12	1.97	2.12	2.02
Aug 30	2.10	2.13	2.21	2.34	2.49	2.48	**2.58**	2.44	2.19	2.13	2.17	2.18	2.21	2.36	2.37	2.32	2.30	2.37	2.38	S	2.31	2.21	2.06	1.99	1.99	**2.58**	**2.27**
Aug 31	1.93	1.94	1.93	1.92	1.92	1.92	1.94	1.96	1.96	1.95	1.97	1.97	1.96	1.95	1.94	1.94	1.93	1.92	S	1.93	1.96	1.97	1.97	2.01	1.92	2.01	1.95
Diurnal Maximum	2.20	2.22	2.32	2.34	2.49	2.48	2.58	2.44	2.21	2.19	2.17	2.18	2.21	2.36	2.37	2.32	2.30	2.37	2.38	2.08	2.31	2.21	2.13	2.13			
Diurnal Average	2.04	2.04	2.05	2.05	2.08	2.07	2.07	2.07	2.03	2.01	2.00	2.00	1.99	1.99	1.99	1.99	1.98	1.99	1.99	1.98	2.00	2.00	2.01	2.02			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance			
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P	Power Failure	
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)					

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



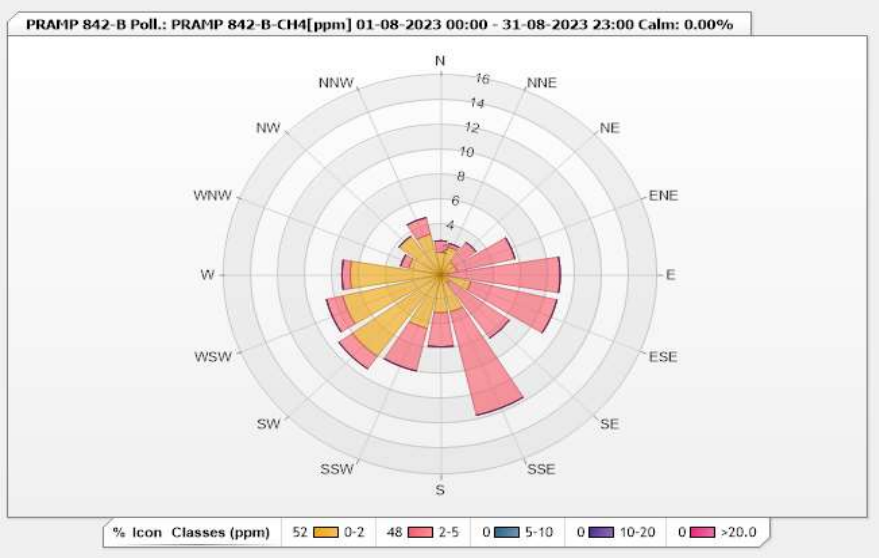


Station: PRAMP 842-B Poll.: PRAMP 842-B-CH4[ppm] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 88.44% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	1.82	0.91	0	0	0	2.73
NNE	2.28	0.3	0	0	0	2.58
NE	1.22	1.98	0	0	0	3.2
ENE	1.22	4.41	0	0	0	5.63
E	0.46	8.36	0	0	0	8.82
ESE	2.28	6.53	0	0	0	8.81
SE	0.76	5.47	0	0	0	6.23
SSE	3.04	8.51	0	0	0	11.55
S	3.04	2.74	0	0	0	5.78
SSW	4.41	3.5	0	0	0	7.91
SW	8.05	1.22	0	0	0	9.27
WSW	7.45	1.22	0	0	0	8.67
W	6.69	0.61	0	0	0	7.3
WNW	2.43	0.61	0	0	0	3.04
NW	3.8	0	0	0	0	3.8
NNW	3.34	1.37	0	0	0	4.71
Summary	52.29	47.74	0	0	0	100



Peace River Area Monitoring Program

842-B Station - August 2023

Summary of Hourly Averages

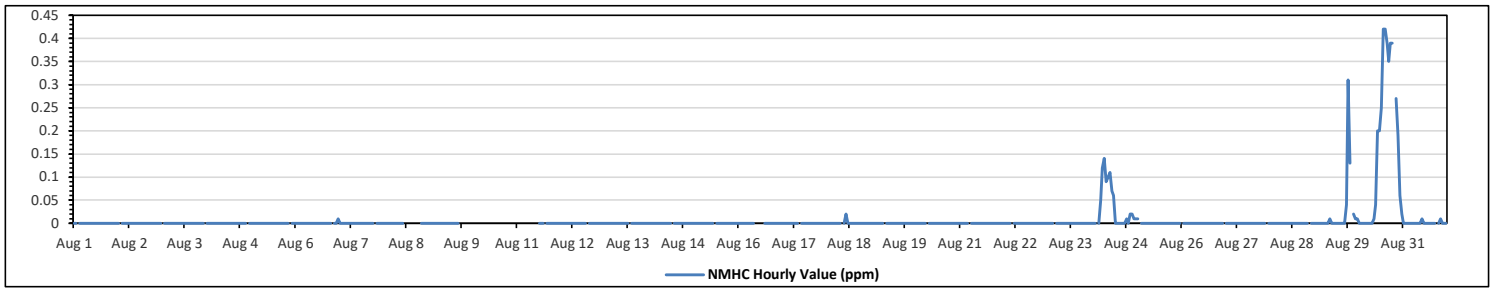
NON-METHANE HYDROCARBONS (NMHC) in ppm

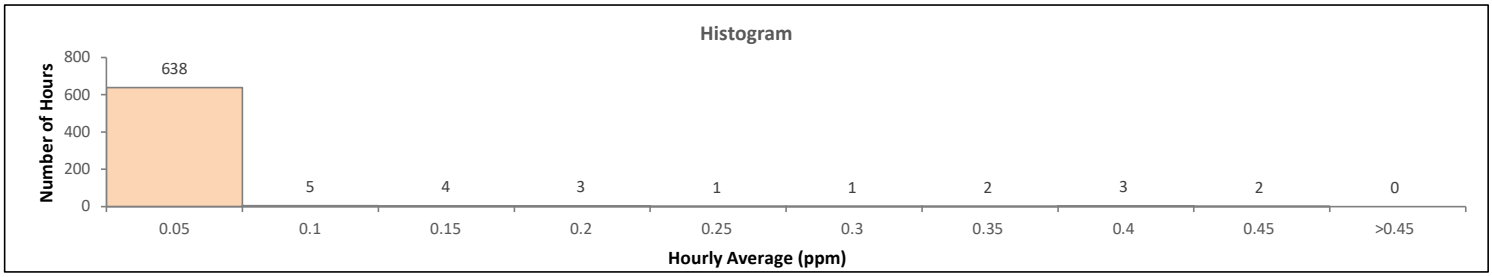
Maximum Hourly Value:	0.42	ppm	on Aug 30 at hr 13	Hours in Service:	744	
Maximum Daily Value:	0.16	ppm	on Aug 30	Hours of Data:	659	
Minimum Hourly Value:	0.00	ppm	on Aug 1 at hr 0	Hours of Missing Data:	50	
Minimum Daily Value:	0.00	ppm	on Aug 1	Hours of Calibration:	35	
Monthly Average:	0.01	ppm		Operational Uptime:	93.3	

Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 2	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 3	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00
Aug 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00
Aug 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00
Aug 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.01	0.00	0.01	0.00
Aug 7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	K	K	K	K	K	K	K	K	K	0.00	0.00	0.00	0.00	0.00	0.00	NA
Aug 9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	K	ND	ND	ND	ND	0.00	0.00	0.00
Aug 10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-
Aug 11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NRM	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA
Aug 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	C	C	C	C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
Aug 19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 20	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 21	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 22	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 23	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 24	0.00	0.00	S	0.00	0.05	0.12	0.14	0.09	0.10	0.11	0.07	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.02	0.01	0.01	0.00	0.14	0.04
Aug 25	0.01	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Aug 26	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00
Aug 27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00
Aug 28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00
Aug 29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.31	0.13	S	0.02	0.01	0.01	0.00	0.31	0.02
Aug 30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.20	0.20	0.25	**0.42**	**0.42**	0.39	0.35	0.39	0.39	S	0.27	0.19	0.06	0.02	0.00	**0.42**	**0.16**
Aug 31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00
Diurnal Maximum	0.01	0.00	0.00	0.00	0.05	0.12	0.14	0.09	0.10	0.11	0.20	0.20	0.25	0.42	0.42	0.39	0.35	0.39	0.39	0.13	0.27	0.19	0.06	0.02			
Diurnal Average	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.03	0.01	0.01	0.01	0.00	0.00			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



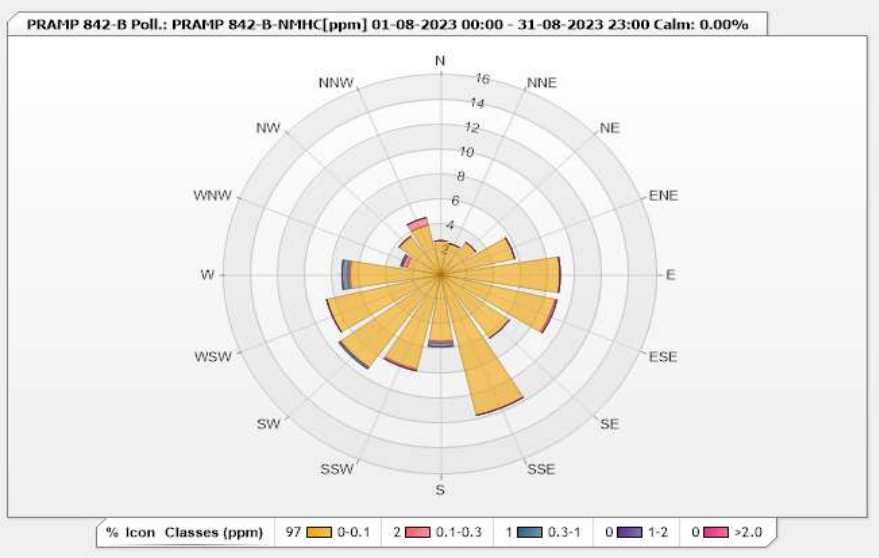


Station: PRAMP 842-B Poll.: PRAMP 842-B-NMHC[ppm] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 88.44% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	2.74	0	0	0	0	2.74
NNE	2.58	0	0	0	0	2.58
NE	3.19	0	0	0	0	3.19
ENE	5.62	0	0	0	0	5.62
E	8.81	0	0	0	0	8.81
ESE	8.66	0.15	0	0	0	8.81
SE	6.23	0	0	0	0	6.23
SSE	11.55	0	0	0	0	11.55
S	5.32	0.15	0.3	0	0	5.77
SSW	7.75	0.15	0	0	0	7.9
SW	9.12	0	0.15	0	0	9.27
WSW	8.66	0	0	0	0	8.66
W	6.69	0.15	0.46	0	0	7.3
WNW	2.58	0.3	0.15	0	0	3.03
NW	3.8	0	0	0	0	3.8
NNW	4.1	0.61	0	0	0	4.71
Summary	97.4	1.51	1.06	0	0	100



Peace River Area Monitoring Program

842-B Station - August 2023

Summary of Hourly Averages

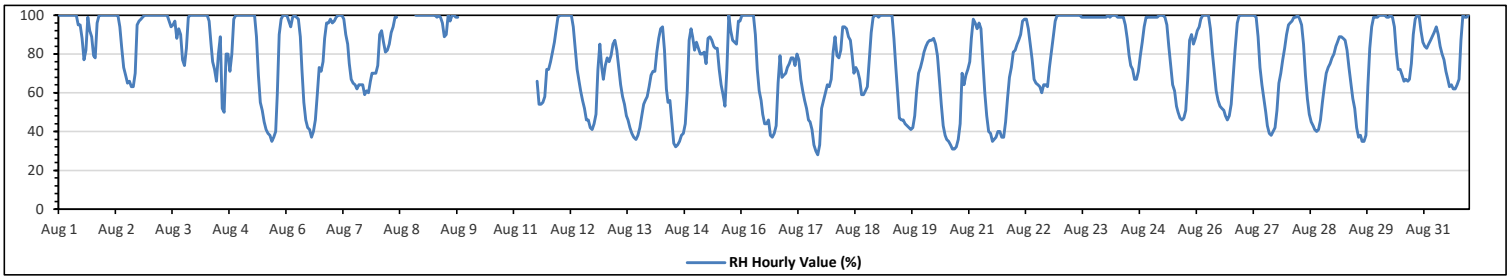
RELATIVE HUMIDITY (RH) in %

Maximum Hourly Value:	100	%	on Aug 1 at hr 0	Hours in Service:	744
Maximum Daily Value:	99.5	%	on Aug 23	Hours of Data:	694
Minimum Hourly Value:	28	%	on Aug 17 at hr 16	Hours of Missing Data:	50
Minimum Daily Value:	57.9	%	on Aug 17	Hours of Calibration:	0
Monthly Average:	77.9	%		Operational Uptime:	93.3

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Aug 1	100	100	100	100	100	100	100	100	100	100	95	95	88	77	82	99	92	89	79	78	96	100	100	100	77	100	94.6
Aug 2	100	100	100	100	100	100	100	100	94	83	73	69	65	66	63	63	70	95	97	98	99	100	100	100	63	100	89.0
Aug 3	100	100	100	100	100	100	100	100	100	100	97	94	95	97	88	93	90	77	74	83	99	100	100	100	74	100	95.3
Aug 4	100	100	100	100	100	100	100	97	85	76	72	66	80	89	52	50	80	80	71	80	98	100	100	100	50	100	86.5
Aug 5	100	100	100	100	100	100	100	100	89	69	55	51	45	41	39	38	35	37	40	59	90	98	100	100	35	100	74.4
Aug 6	100	97	94	99	100	99	98	89	72	55	46	42	41	37	40	46	59	73	71	76	88	96	96	98	37	100	75.5
Aug 7	96	97	99	100	100	100	98	90	85	75	67	65	64	62	64	64	64	59	61	60	66	70	70	70	59	100	76.9
Aug 8	74	90	92	86	81	82	85	91	94	99	99	K	K	K	K	K	K	K	K	K	100	100	100	100	74	100	NA
Aug 9	100	100	100	100	100	100	100	99	100	99	96	89	90	100	97	100	100	99	99	K	ND	ND	ND	ND	89	100	98.3
Aug 10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	
Aug 11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NRM	66	54	54	55	58	72	72	76	81	86	92	99	54	99	NA
Aug 12	100	100	100	100	100	100	100	94	83	72	66	61	56	52	46	46	42	41	44	49	72	85	73	67	41	100	72.9
Aug 13	74	78	76	79	85	87	82	73	64	58	54	48	46	42	39	37	36	38	42	48	54	56	58	63	36	87	59.0
Aug 14	69	71	71	81	88	93	94	82	62	55	56	45	34	32	33	35	38	39	44	60	87	93	89	82	32	94	63.9
Aug 15	86	83	80	80	81	75	88	89	87	84	83	83	72	64	59	53	72	100	92	87	86	85	97	97	53	100	81.8
Aug 16	100	100	100	100	100	100	100	90	72	61	56	49	44	44	46	38	37	39	43	65	79	68	69	70	37	100	69.6
Aug 17	73	75	78	78	74	80	77	67	61	56	52	46	45	41	33	30	28	33	52	56	60	64	63	67	28	80	57.9
Aug 18	81	89	79	78	82	94	94	93	89	87	80	70	73	71	67	59	59	61	63	77	91	99	100	100	59	100	80.7
Aug 19	99	100	100	100	100	100	100	100	88	73	59	47	46	46	44	43	42	41	42	48	61	70	73	77	41	100	70.8
Aug 20	81	84	86	87	87	88	85	79	67	54	43	38	36	35	33	31	31	32	36	44	70	64	69	72	31	88	59.7
Aug 21	76	88	98	96	93	96	93	76	60	48	40	39	35	36	37	40	40	37	37	45	57	68	73	81	35	98	62.0
Aug 22	82	85	87	90	97	98	98	93	85	77	67	65	64	63	60	64	64	63	73	81	89	97	100	100	60	100	80.9
Aug 23	100	100	100	100	100	100	100	100	100	100	100	99	99	99	99	99	99	99	99	99	99	99	99	99	99	100	99.5
Aug 24	99	100	99	100	100	100	99	99	99	99	95	88	79	74	72	67	67	71	79	86	94	99	99	99	67	100	90.1
Aug 25	99	99	99	99	100	100	100	99	95	84	74	64	61	53	50	47	46	47	51	67	87	90	85	88	46	100	78.5
Aug 26	92	94	98	100	100	100	100	93	81	71	61	56	53	52	51	48	46	48	54	68	82	96	100	100	46	100	76.8
Aug 27	100	100	100	100	100	100	100	99	89	73	64	57	50	43	39	38	40	42	51	65	70	77	83	90	38	100	73.8
Aug 28	95	96	97	99	99	100	98	95	85	69	57	49	45	43	41	40	41	46	55	63	70	73	75	78	40	100	71.2
Aug 29	80	84	86	89	89	88	87	82	73	65	57	52	42	37	38	35	35	38	63	83	94	99	99	99	35	99	70.6
Aug 30	100	100	100	100	99	99	100	99	94	81	72	72	69	66	67	66	67	75	90	98	100	100	92	86	66	100	87.2
Aug 31	84	83	85	87	89	91	94	90	84	80	77	71	67	63	64	62	62	64	67	87	100	99	99	100	62	100	81.2
Diurnal Maximum	100	100	100	100	100	100	100	100	100	100	100	99	99	100	99	100	100	100	99	99	100	100	100	100			
Diurnal Average	91.0	92.9	93.2	94.1	94.6	95.5	95.5	91.7	84.0	76.0	69.4	63.2	60.3	57.9	55.1	54.7	56.6	59.8	63.5	70.9	83.4	87.3	88.0	89.0			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

842-B Station - August 2023

Summary of Hourly Averages

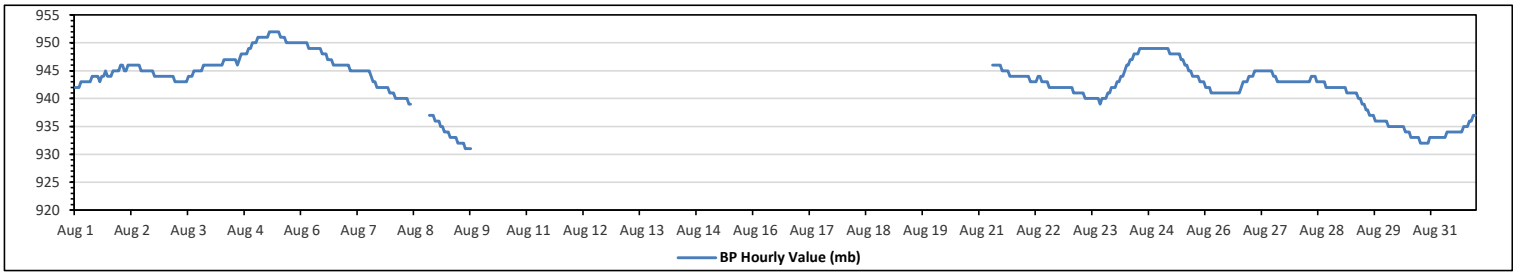
BAROMETRIC PRESSURE (BP) in millibar

Maximum Hourly Value:	952	mb	on Aug 5 at hr 7	Hours in Service:	744	
Maximum Daily Value:	951	mb	on Aug 5	Hours of Data:	459	
Minimum Hourly Value:	931	mb	on Aug 9 at hr 15	Hours of Missing Data:	285	
Minimum Daily Value:	933	mb	on Aug 9	Hours of Calibration:	0	
Monthly Average:	NA	mb		Operational Uptime:	61.7	

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Aug 1	942	942	942	943	943	943	943	943	943	944	944	944	944	943	944	944	945	944	944	944	945	945	945	945	942	945	944
Aug 2	946	946	945	945	946	946	946	946	946	946	946	945	945	945	945	945	945	945	944	944	944	944	944	944	944	946	945
Aug 3	944	944	944	944	944	943	943	943	943	943	943	943	944	944	944	945	945	945	945	945	946	946	946	946	943	946	944
Aug 4	946	946	946	946	946	946	946	947	947	947	947	947	947	947	946	947	948	948	948	948	949	949	950	950	946	950	947
Aug 5	950	951	951	951	951	951	951	**952**	**952**	**952**	**952**	**952**	**952**	951	951	951	950	950	950	950	950	950	950	950	950	**952**	**951**
Aug 6	950	950	950	950	949	949	949	949	949	949	949	948	948	948	947	947	947	946	946	946	946	946	946	946	946	950	948
Aug 7	946	946	945	945	945	945	945	945	945	945	945	945	945	944	943	943	942	942	942	942	942	942	942	941	941	946	944
Aug 8	941	941	940	940	940	940	940	940	940	939	939	**K**	**K**	**K**	**K**	**K**	**K**	**K**	**K**	**K**	937	937	937	936	936	941	NA
Aug 9	936	936	935	935	934	934	934	933	933	933	933	932	932	932	932	**931**	**931**	**931**	**931**	**K**	**ND**	**ND**	**ND**	**ND**	**931**	936	**933**
Aug 10	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	-	-	-
Aug 11	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**NRM**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	-	-	-
Aug 12	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	-	-	-
Aug 13	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	-	-	-
Aug 14	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	-	-	-
Aug 15	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	-	-	-
Aug 16	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	-	-	-
Aug 17	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	-	-	-
Aug 18	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	-	-	-
Aug 19	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	-	-	-
Aug 20	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	-	-	-
Aug 21	**X**	**X**	**X**	**X**	**X**	**X**	**X**	946	946	946	946	946	945	945	945	945	944	944	944	944	944	944	944	944	944	946	NA
Aug 22	944	944	944	943	943	943	943	944	944	943	943	943	943	942	942	942	942	942	942	942	942	942	942	942	942	944	943
Aug 23	942	942	941	941	941	941	941	941	940	940	940	940	940	940	940	940	939	940	940	940	941	941	942	942	939	942	941
Aug 24	942	943	943	944	944	945	946	946	947	947	948	948	948	949	949	949	949	949	949	949	949	949	949	949	942	949	947
Aug 25	949	949	949	949	949	948	948	948	948	948	948	947	947	946	946	945	945	944	944	944	944	943	943	943	943	949	946
Aug 26	942	942	942	941	941	941	941	941	941	941	941	941	941	941	941	941	941	941	941	942	943	943	943	944	941	944	942
Aug 27	944	944	945	945	945	945	945	945	945	945	945	945	944	944	943	943	943	943	943	943	943	943	943	943	943	945	944
Aug 28	943	943	943	943	943	943	943	943	944	944	944	943	943	943	943	943	942	942	942	942	942	942	942	942	942	944	943
Aug 29	942	942	942	941	941	941	941	941	941	940	940	939	939	938	938	937	937	937	936	936	936	936	936	936	936	942	939
Aug 30	936	935	935	935	935	935	935	935	935	935	934	934	934	933	933	933	933	933	932	932	932	932	932	933	932	936	934
Aug 31	933	933	933	933	933	933	933	933	934	934	934	934	934	934	934	934	934	935	935	935	936	936	937	937	933	937	934
Diurnal Maximum	950	951	951	951	951	951	951	952	952	952	952	952	952	951	951	951	950	950	950	950	950	950	950	950			
Diurnal Average	943	943	943	943	943	943	943	943	943	943	943	943	943	943	942	942	942	942	942	943	943	943	943	943			

C	Monthly Calibration	**S**	Daily Zero-Span Check	**Q**	Quality Assurance	
K	Collection Error	**ND**	No Data (Machine Not in Service)	**Y**	Routine Maintenance	**P** Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	**NRM**	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

842-B Station - August 2023

Summary of Hourly Averages

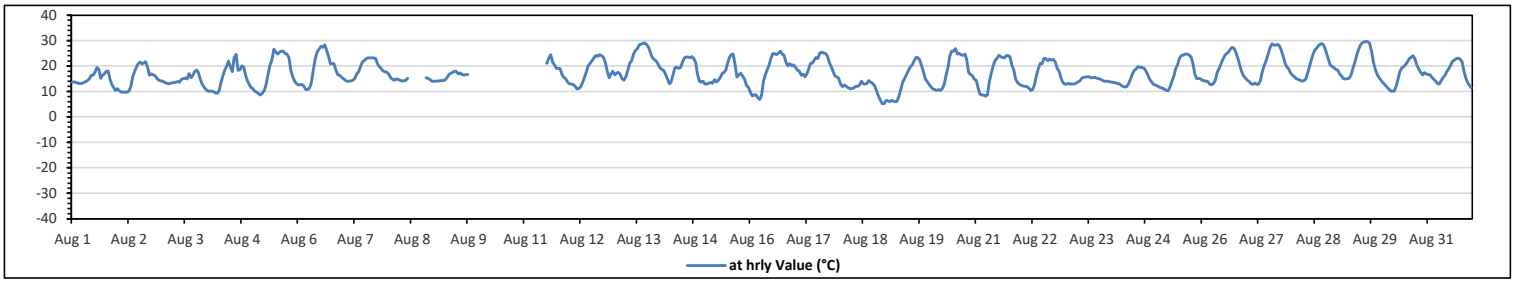
AMBIENT TEMPERATURE (AT) in Degree Celsius

Maximum Hourly Value:	29.6	°C	on Aug 29 at hr 15	Hours in Service:	744
Maximum Daily Value:	22.4	°C	on Aug 13	Hours of Data:	694
Minimum Hourly Value:	5.2	°C	on Aug 18 at hr 22	Hours of Missing Data:	50
Minimum Daily Value:	11.4	°C	on Aug 18	Hours of Calibration:	0
Monthly Average:	17.3	°C		Operational Uptime:	93.3

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Aug 1	13.6	13.8	13.5	13.3	13.2	13.2	13.5	13.8	14.3	14.9	16.3	16.4	17.6	19.5	18.7	15.2	16.3	17	17.9	18.1	14.8	12.6	11.4	10.5	10.5	19.5	15.0
Aug 2	11.1	10.3	9.8	9.7	9.7	9.7	10.1	11.9	15.9	18	19.8	21	21.5	20.9	21.3	21.7	19.8	16.4	16.9	16.6	16.1	15.1	14.5	14.2	9.7	21.7	15.5
Aug 3	14	13.5	13.3	13.1	13.2	13.4	13.5	13.7	13.9	13.6	14.7	15	15.3	14.9	17.1	15.4	16.4	17.9	18.5	17.4	14.7	13	11.7	10.8	10.8	18.5	14.5
Aug 4	10.2	10.2	10.1	9.9	9.3	9.3	10.4	13.6	16.3	18.6	20	22	19.8	17.8	23.3	24.6	18.3	18.6	20	19.6	16.1	14.1	12.5	11.6	9.3	24.6	15.7
Aug 5	11	10	9.7	9.2	8.7	9.4	10.4	13	17	20.5	22.5	26.6	25.4	24.8	25.4	25.8	25.9	25	24.8	23.4	18.3	15.8	14.1	13.1	8.7	26.6	17.9
Aug 6	12.7	12.6	12.8	12	10.7	10.8	11.5	13.4	18.3	22.7	25.4	26.6	27.8	27.4	28.3	26.1	23.8	20.9	21.1	20.8	18.3	16.6	16.4	15.7	10.7	28.3	18.9
Aug 7	15	14.4	14.1	14	14.2	14.4	15.2	16.9	17.8	19.9	21.7	22.1	22.8	23.2	23.2	23.2	23.2	22.9	21.1	19.9	19.1	18.1	17.8	17.6	14.0	23.2	18.8
Aug 8	16.8	15.5	14.7	14.5	14.9	14.7	14.5	14.2	14.2	14.5	15.2	K	K	K	K	K	K	K	K	K	15.4	15.2	14.6	14.1	14.1	16.8	NA
Aug 9	14	14.1	14.2	14.2	14.3	14.3	14.6	15.5	16.7	17.2	17.5	18	18	17	17.3	16.7	16.4	16.7	16.7	K	ND	ND	ND	ND	14.0	18.0	16.0
Aug 10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-
Aug 11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NRM	21.1	23.1	24.5	21.6	20.5	19.1	19.1	19	16.8	15.6	15.1	13.6	13.6	24.5	NA
Aug 12	13.1	12.9	12.8	12.1	11	11.1	11.9	13.7	15.7	18	20.1	21	22.1	23.2	24	23.9	24.5	24.1	23.4	21.3	17.8	15.5	17.1	17.9	11.0	24.5	17.8
Aug 13	16.6	17.2	17.6	16.8	15.1	14.5	15.8	18.4	21.1	22.1	24.8	26.1	26.8	28.3	28.6	28.9	29.2	28.4	27.4	25.3	23.5	22.6	22.1	21	14.5	29.2	**22.4**
Aug 14	19.5	18.7	18.3	16.8	14.9	13.1	13.7	16.4	19.3	19.6	19.1	19.5	21.5	23.2	23.6	23.5	23.3	23.7	22.9	21.4	16.7	14.1	13.7	14.1	13.1	23.7	18.8
Aug 15	13	12.9	13.3	13.5	13.3	14.6	13.8	14.5	15.6	17.1	17.6	18.3	21.2	23.5	24.5	24.8	20.8	15.7	16.5	17.2	16	14.7	12.4	11.7	11.7	24.8	16.5
Aug 16	9.7	8.3	8.7	8.8	7.6	6.8	8.5	14	16.7	18.7	20.2	23	24.9	24.9	24.5	25.2	25.8	24.6	24.3	21.5	20	21	20.2	20.4	6.8	25.8	17.8
Aug 17	19.6	18.4	18.1	16.4	16.8	15.9	17.1	18.8	21.1	21.2	22.2	23.3	22.9	25.1	25.4	25.1	25	23.9	21.3	19.7	17.7	16	15.9	15.2	15.2	25.4	20.1
Aug 18	13	11.9	12.5	12	11.6	11.2	11.1	11.4	12	12	12.5	14	13.1	13	13.2	14.3	13.6	13.2	12.3	10.5	8.2	6.6	**5.2**	**5.2**	**5.2**	14.3	**11.4**
Aug 19	6.5	6.4	6	6.5	6.3	6	6.2	7.9	10.7	13.7	15.2	16.7	18.4	19.8	20.5	22.1	23.5	23.2	22.5	20.2	17.7	14.7	14.1	13	6.0	23.5	14.1
Aug 20	11.9	11	10.8	10.5	10.7	10.4	11.2	13.1	16.5	19.7	23.9	25.8	25.8	26.9	24.8	25	24.4	24.2	24.8	22.6	17.5	16.7	16.1	14.7	10.4	26.9	18.3
Aug 21	14.5	11.3	9.1	8.7	8.7	8.1	8.8	13.9	17.3	20.2	22.3	23.1	24.2	23.8	23.4	23.2	24	24.1	23.7	20.4	18.6	14.8	13.5	12.8	8.1	24.2	17.2
Aug 22	12.4	12.1	12	11.9	11.2	10.5	10.8	12.7	16.3	19.1	21.1	21	23	23	22.1	22.7	22.4	22.6	21.6	19.1	18	15.2	13.7	12.9	10.5	23.0	17.0
Aug 23	12.9	13.2	12.9	13.1	12.9	13.3	13.8	14.2	15.3	15.6	15.7	15.8	15.8	15.5	15.4	15.6	15.3	15.1	14.8	14.4	14.1	14	14	13.8	12.9	15.8	14.4
Aug 24	13.6	13.5	13.4	13.2	13.1	12.4	12	11.8	11.9	13.1	14.9	17	18.3	18.9	19.9	19.5	19.4	19.2	18.4	16.8	15	13.9	13	12.5	11.8	19.9	15.2
Aug 25	12.2	11.8	11.5	11.3	10.9	10.4	10.4	11.9	14.2	16.3	18.9	20.4	23.1	24	24.4	24.8	24.8	24.3	23.6	21.1	16.8	15	15.2	15	10.4	24.8	17.2
Aug 26	14.5	14.3	14.1	14.1	12.9	12.6	13.1	14.5	17.5	19.1	21	22.7	24.2	25	25.5	26.6	27.4	26.9	25.2	22.8	20.1	17.9	16.2	15.3	12.6	27.4	19.3
Aug 27	14.5	13.9	13.1	12.8	13.3	12.8	13	14.3	18	20.2	22.3	24.7	27.2	28.7	28.2	28.2	28.5	27.9	26.3	23.9	21.2	19.8	18.9	17.3	12.8	28.7	20.4
Aug 28	16.4	15.9	15.1	14.8	14.4	14.1	14.3	14.9	17.4	20	22.5	24.9	26.5	27.3	28.1	28.7	28.7	27.7	25.3	22.8	20.5	19.9	19.3	18.7	14.1	28.7	20.8
Aug 29	18.3	16.8	16.1	15.1	14.9	15	15.2	16.4	19	21.4	24.3	26.2	28.1	29.2	29.5	**29.6**	29.5	29	26	21.5	18.7	16.7	15.4	14.5	14.5	**29.6**	21.1
Aug 30	13.4	12.6	11.8	11	10.2	10.1	10.2	12	14.7	17.6	19.2	19.8	20.5	21.5	22.8	23.5	24	22.7	20.3	18.8	17.4	16.5	17.4	16.9	10.1	24.0	16.9
Aug 31	16.7	16.6	15.6	14.7	14	13.2	13	14.3	15.6	16.4	18	19.1	20.4	21.8	22.4	23	23.1	22.7	21.7	18.1	15.2	13.4	12.3	11.4	11.4	23.1	17.2
Diurnal Maximum	19.6	18.7	18.3	16.8	16.8	15.9	17.1	18.8	21.1	22.7	25.4	26.6	28.1	29.2	29.5	29.6	29.5	29.0	27.4	25.3	23.5	22.6	22.1	21.0			
Diurnal Average	13.8	13.2	12.9	12.6	12.1	11.9	12.3	14.0	16.2	18.0	19.6	21.1	22.0	22.6	23.1	23.1	22.7	22.0	21.3	19.8	17.3	15.7	15.0	14.3			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

842-B Station - August 2023

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

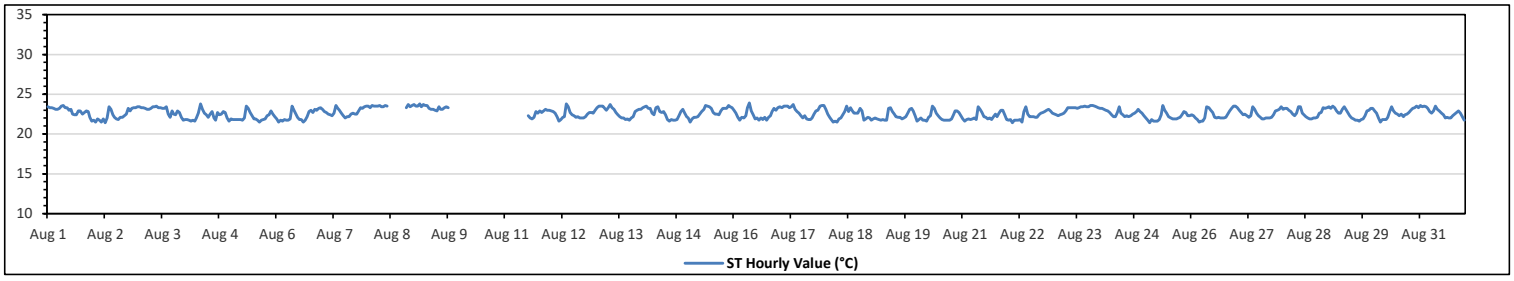
Maximum Hourly Value:	23.9	°C	on Aug 16 at hr 8	Hours in Service:	744	
Maximum Daily Value:	23.4	°C	on Aug 9	Hours of Data:	694	
Minimum Hourly Value:	21.4	°C	on Aug 2 at hr 6	Hours of Missing Data:	50	
Minimum Daily Value:	22.1	°C	on Aug 5	Hours of Calibration:	0	
Monthly Average:	22.6	°C		Operational Uptime:	93.3	

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	23.4	23.3	23.3	23.2	23.1	23.1	23.2	23.5	23.6	23.3	23.3	23.0	23.1	22.5	22.4	22.4	22.9	22.9	22.5	22.7	22.9	22.8	22.1	21.6	21.6	23.6	22.9
Aug 2	21.7	21.5	21.9	21.7	21.5	21.9	**21.4**	22.0	23.4	23.1	22.4	22.1	21.9	21.8	22.1	22.1	22.3	22.5	23.2	22.9	23.2	23.3	23.3	23.4	**21.4**	23.4	22.4
Aug 3	23.4	23.3	23.3	23.2	23.1	23.1	23.2	23.4	23.4	23.5	23.3	23.3	23.2	23.2	23.4	22.5	22.1	22.9	22.5	22.4	22.9	22.7	22.1	21.7	21.7	23.5	23.0
Aug 4	21.8	21.8	21.7	21.6	21.7	21.6	22.0	22.6	23.8	23.1	22.6	22.4	22.1	22.5	22.8	22.0	21.7	22.7	22.4	22.5	22.8	22.7	22.0	21.6	21.6	23.8	22.3
Aug 5	21.9	21.8	21.8	21.8	21.8	21.8	21.7	22.0	23.5	23.2	22.7	22.3	21.9	21.9	21.7	21.5	21.7	21.8	21.9	22.3	22.4	22.9	22.5	22.2	21.5	23.5	**22.1**
Aug 6	21.9	21.5	21.7	21.6	21.8	21.7	21.7	21.9	23.5	23.0	22.5	22.1	21.8	21.8	21.5	21.7	22.2	22.8	23.0	22.7	23.1	23.0	23.2	23.3	21.5	23.5	22.3
Aug 7	23.1	22.8	22.7	22.5	22.4	22.3	22.6	23.6	23.2	23.0	22.6	22.3	22.0	22.2	22.2	22.5	22.6	22.5	22.5	22.9	23.3	23.2	23.4	23.5	22.0	23.6	22.7
Aug 8	23.5	23.3	23.6	23.5	23.5	23.5	23.6	23.4	23.4	23.6	23.5	**K**	**K**	**K**	**K**	**K**	**K**	**K**	**K**	**K**	23.3	23.7	23.4	23.6	23.3	23.7	NA
Aug 9	23.7	23.5	23.5	23.8	23.4	23.7	23.6	23.6	23.2	23.1	23.1	23.0	22.9	23.4	23.1	23.1	23.3	23.4	23.3	**K**	**ND**	**ND**	**ND**	**ND**	22.9	23.8	**23.4**
Aug 10	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	-	-	-
Aug 11	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**NRM**	22.3	22.0	21.9	22.1	22.8	22.6	22.9	22.7	22.9	23.1	23.0	23.0	21.9	23.1	NA
Aug 12	22.9	22.8	22.6	22.2	21.6	21.8	22.1	22.2	23.8	23.4	22.7	22.4	22.3	22.1	22.2	22.0	22.0	22.0	22.2	22.5	22.7	22.7	22.6	23.0	21.6	23.8	22.5
Aug 13	23.3	23.5	23.5	23.5	23.2	23.0	23.3	23.7	23.3	23.1	22.7	22.4	22.2	22.0	22.0	21.8	21.9	21.7	22.0	22.2	22.8	23.0	23.1	23.1	21.7	23.7	22.8
Aug 14	23.3	23.4	23.5	23.2	23.2	22.6	22.4	23.3	23.4	22.8	22.7	22.8	22.4	21.8	21.6	21.8	21.7	21.7	21.8	22.3	22.8	23.1	22.6	22.2	21.6	23.5	22.6
Aug 15	22.0	21.5	21.9	22.1	22.1	22.2	22.5	22.8	23.1	23.6	23.5	23.4	23.2	22.7	22.5	22.5	22.4	22.9	23.2	23.2	23.2	23.6	23.4	23.3	21.5	23.6	22.8
Aug 16	23.0	22.6	22.1	21.7	22.1	22.0	22.3	23.3	**23.9**	22.9	22.4	21.9	22.0	21.7	22.0	21.8	22.1	21.7	22.1	22.3	22.8	23.2	23.0	23.3	21.7	**23.9**	22.4
Aug 17	23.4	23.3	23.5	23.5	23.5	23.3	23.4	23.7	23.1	22.8	22.6	22.3	22.0	22.3	21.9	21.8	21.8	22.0	22.5	22.9	23.0	23.5	23.6	23.6	21.8	23.7	22.9
Aug 18	23.1	22.5	22.1	21.8	21.5	21.6	21.5	21.9	22.0	22.4	22.8	23.5	22.8	23.3	22.9	22.6	22.6	22.6	23.2	22.9	21.7	21.9	22.1	22.0	21.5	23.5	22.4
Aug 19	21.7	21.9	22.0	21.9	21.8	21.7	21.8	21.7	21.7	23.2	23.3	22.8	22.5	22.2	22.1	22.1	21.9	22.0	22.2	22.6	23.1	23.2	22.9	22.3	21.7	23.3	22.3
Aug 20	21.6	21.8	22.0	21.7	21.7	21.6	22.1	22.3	23.5	23.2	22.6	22.3	22.0	21.8	21.7	21.7	21.7	21.7	21.9	22.4	22.9	22.9	22.7	22.3	21.6	23.5	22.2
Aug 21	21.9	21.6	21.8	21.9	21.8	21.9	22.0	21.8	23.4	23.1	22.7	22.2	22.1	21.9	22.0	21.8	22.2	22.5	22.2	22.6	23.0	23.0	22.4	21.8	21.6	23.4	22.2
Aug 22	21.7	21.8	**21.4**	21.7	21.7	21.7	21.8	21.5	22.8	23.4	22.5	22.2	22.2	22.2	22.1	22.1	22.4	22.6	22.7	22.8	23.0	23.1	22.9	22.6	**21.4**	23.4	22.3
Aug 23	22.5	22.4	22.3	22.4	22.5	22.6	22.9	23.3	23.3	23.3	23.3	23.3	23.2	23.3	23.4	23.4	23.5	23.4	23.4	23.6	23.6	23.5	23.4	23.3	22.3	23.6	23.1
Aug 24	23.2	23.2	23.1	23.0	22.9	22.7	22.4	22.2	22.2	22.7	23.4	22.6	22.4	22.2	22.3	22.2	22.3	22.5	22.6	22.8	23.1	22.8	22.6	22.3	22.2	23.4	22.7
Aug 25	22.0	21.7	**21.4**	21.8	21.6	21.6	21.6	21.8	22.4	23.6	23.0	22.6	22.2	22.0	21.9	21.9	21.9	22.0	22.1	22.4	22.8	22.7	22.3	22.3	**21.4**	23.6	22.2
Aug 26	22.4	22.3	22.0	21.8	21.5	21.6	21.6	22.0	23.4	23.3	23.0	22.7	22.1	22.0	22.1	22.0	22.0	22.0	22.1	22.5	22.9	23.2	23.5	23.5	21.5	23.5	22.4
Aug 27	23.3	23.0	22.7	22.4	22.5	22.3	22.1	22.3	23.4	23.1	22.6	22.3	22.1	21.9	21.9	22.0	22.0	22.0	22.1	22.4	22.9	23.0	23.1	23.4	21.9	23.4	22.5
Aug 28	23.1	23.2	23.2	23.0	22.8	22.5	22.3	22.6	23.4	23.4	22.6	22.4	22.2	22.0	21.9	21.9	22.0	22.0	22.1	22.6	22.7	23.3	23.2	23.3	21.9	23.4	22.7
Aug 29	23.4	23.2	23.5	23.3	22.9	22.6	22.6	23.1	23.4	23.1	22.7	22.3	22.0	21.9	21.7	21.7	21.6	21.8	21.9	22.3	22.9	23.0	23.2	23.2	21.6	23.5	22.6
Aug 30	22.9	22.6	22.0	21.5	21.8	21.8	21.8	22.1	22.8	23.4	22.9	22.6	22.5	22.3	22.5	22.2	22.4	22.5	22.7	23.0	23.2	23.3	23.5	23.3	21.5	23.5	22.6
Aug 31	23.6	23.4	23.5	23.4	23.2	22.8	22.6	22.9	23.5	23.1	22.9	22.6	22.4	22.0	22.1	22.0	22.0	22.3	22.5	22.7	22.9	22.6	22.2	21.7	21.7	23.6	22.7
Diurnal Maximum	23.7	23.5	23.6	23.8	23.5	23.7	23.6	23.7	23.9	23.6	23.5	23.5	23.2	23.4	23.4	23.4	23.5	23.4	23.4	23.6	23.6	23.7	23.6	23.6			
Diurnal Average	22.7	22.6	22.5	22.4	22.4	22.3	22.3	22.6	23.2	23.2	22.9	22.6	22.3	22.2	22.2	22.1	22.2	22.3	22.5	22.6	22.9	23.0	22.9	22.7			

C	Monthly Calibration	**S**	Daily Zero-Span Check	**Q**	Quality Assurance	
K	Collection Error	**ND**	No Data (Machine Not in Service)	**Y**	Routine Maintenance	**P** Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	**NRM**	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

842-B Station - August 2023

Summary of Hourly Averages

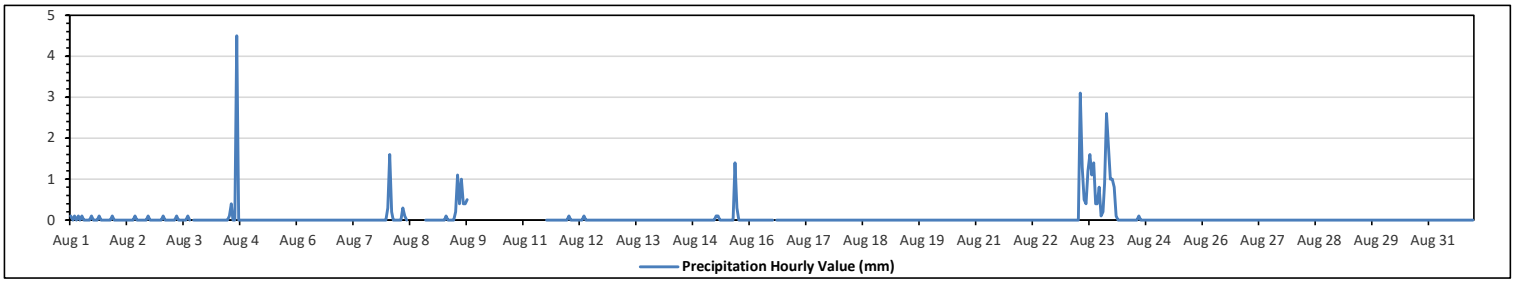
PRECIPITATION in mm

Maximum Hourly Value:	4.5	mm	on Aug 4 at hr 16	Hours in Service:	744	
Maximum Daily Value:	18.8	mm	on Aug 23	Hours of Data:	692	
Minimum Hourly Value:	0.0	mm	on Aug 1 at hr 1	Hours of Missing Data:	51	
Minimum Daily Value:	0.0	mm	on Aug 5	Hours of Calibration:	1	
Monthly Total:	35.7	mm		Operational Uptime:	93.1	

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Total
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0.1	0	0.1	0	0.1	0	0.1	0	0	0	0	0.1	0	0	0	0.1	0	0	0	0	0	0	0.1	0	0	0.1	0.7
Aug 2	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	0.1	0.2
Aug 3	0	0.1	0	0	0	0	0	0	0.1	0	0	0	0	0	0.1	0	NRM	0	0	0	0	0	0	0	0	0.1	0.3
Aug 4	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	0	0	4.5	0	0	0	0	0	0	0	0	4.5	5
Aug 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
Aug 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
Aug 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 8	0.3	1.6	0.2	0	0	0	0	0	0.3	0.1	0	K	K	K	K	K	K	K	K	K	0	0	0	0	0	1.6	NA
Aug 9	0	0	0	0	0	0	0	0.1	0	0	0	0	0.2	1.1	0.4	1	0.4	0.4	0.5	K	ND	ND	ND	ND	0	1.1	4.1
Aug 10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-
Aug 11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NRM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
Aug 12	0.1	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
Aug 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
Aug 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 15	0	0	0	0	0	0	0.1	0.1	0	0	0	0	0	0	0	0	1.4	0.3	0	0	0	0	0	0	0	1.4	1.9
Aug 16	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 23	0	0	0	0	0	0	0	3.1	1.3	0.5	0.4	1.2	1.6	1.1	1.4	0.4	0.4	0.8	0.1	0.2	0.9	2.6	1.8	1	0	3.1	18.8
Aug 24	1	0.8	0.1	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	1	2
Aug 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 31	0	0	0	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	1.0	1.6	0.2	0.0	0.1	0.0	0.1	3.1	1.3	0.5	0.4	1.2	1.6	1.1	1.4	1.0	4.5	0.8	0.5	0.2	0.9	2.6	1.8	1.0			
Diurnal Average	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.0			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

842-B Station - August 2023

Summary of Hourly Averages

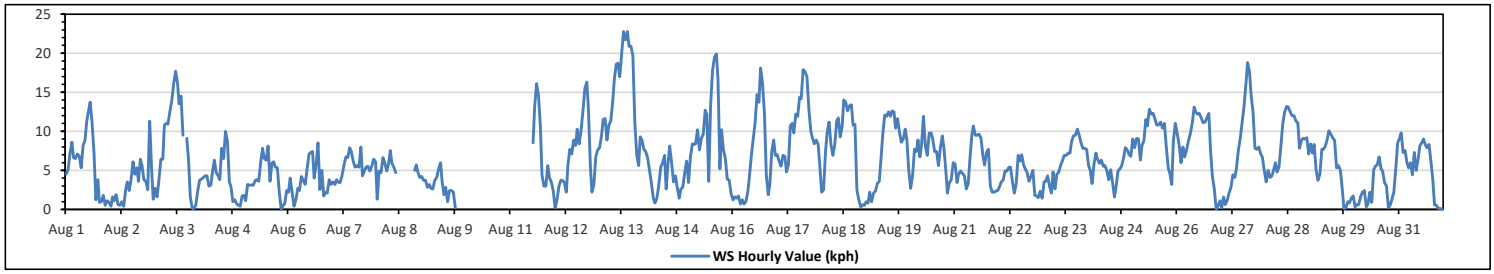
VECTOR WIND SPEED (VWS) in km/hr

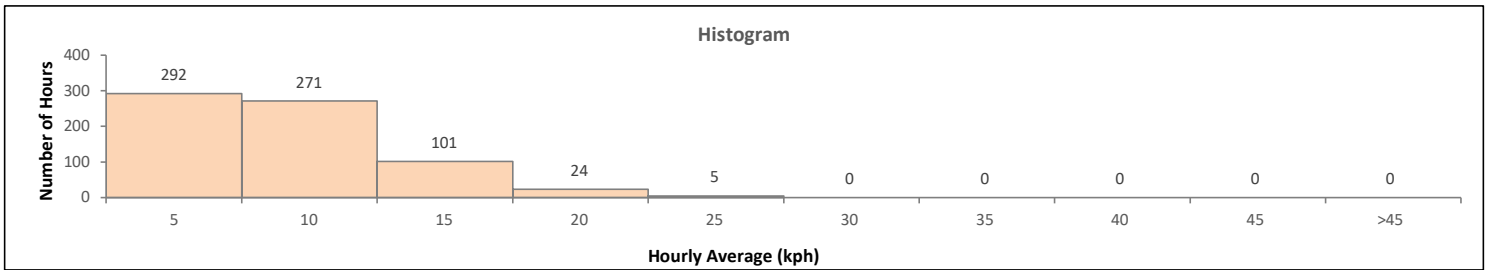
Maximum Hourly Value:	22.8	kph	on Aug 13 at hr 13	Hours in Service:	744
Maximum Daily Value:	14.5	kph	on Aug 13	Hours of Data:	693
Minimum Hourly Value:	0.0	kph	on Aug 5 at hr 20	Hours of Missing Data:	50
Minimum Daily Value:	2.9	kph	on Aug 30	Hours of Calibration:	1
Monthly Average:	2.3	kph		Operational Uptime:	93.3

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	4.5	5.1	7.2	8.6	6.6	6.5	7.1	6.8	5.3	8.2	8.9	11.2	12.4	13.7	11.1	7.2	1.2	3.8	0.9	1.0	1.8	0.5	1.1	0.9	0.5	13.7	5.9
Aug 2	0.4	1.6	1.1	1.9	0.6	0.5	1.0	0.4	2.5	3.5	2.4	3.9	6.1	4.5	5.3	3.6	6.4	5.6	3.8	3.6	2.5	11.3	5.2	1.3	0.4	11.3	3.3
Aug 3	2.7	1.6	3.8	6.4	6.4	10.8	11.0	10.9	12.5	13.9	16.1	17.7	16.2	13.5	14.5	9.5	C	9.1	6.6	1.6	0.1	0.1	0.5	2.3	0.1	17.7	8.2
Aug 4	3.7	3.9	4.1	4.3	4.3	3.0	3.1	5.0	6.3	4.7	4.3	3.8	7.8	6.5	10.0	8.7	3.5	2.9	1.0	1.2	0.7	0.5	0.4	1.7	0.4	10.0	4.0
Aug 5	1.8	1.1	3.2	3.1	3.1	3.1	3.7	3.8	3.6	6.1	7.8	6.5	6.3	8.1	3.6	5.9	6.1	5.4	5.3	2.2	0.0	0.5	0.7	2.4	0.0	8.1	3.9
Aug 6	2.2	4.0	2.2	0.4	1.2	2.7	2.4	4.2	3.7	3.2	5.2	7.1	7.3	7.4	4.0	5.7	8.5	2.5	5.0	1.7	2.2	2.1	3.8	3.2	0.4	8.5	3.8
Aug 7	3.5	3.2	3.8	3.4	3.4	4.3	5.6	6.7	6.6	7.9	7.4	6.2	5.4	5.6	5.4	8.0	4.3	4.9	5.4	5.5	4.9	5.5	6.4	6.1	3.2	8.0	5.4
Aug 8	1.3	4.9	4.7	6.6	5.9	4.9	6.0	7.5	5.9	5.4	4.7	K	K	K	K	K	K	K	K	K	5.0	5.7	4.8	4.1	1.3	7.5	NA
Aug 9	4.2	3.7	3.7	2.8	3.2	2.7	2.6	3.7	4.1	5.2	6.0	3.5	1.9	2.8	1.0	2.4	2.4	2.2	0.2	K	ND	ND	ND	ND	0.2	6.0	3.1
Aug 10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-
Aug 11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NRM	8.5	13.1	16.1	14.6	10.6	4.4	3.0	3.0	5.6	4.1	3.5	2.4	2.4	16.1	NA
Aug 12	0.2	1.2	3.0	3.7	3.7	3.4	2.2	5.7	7.7	7.1	8.9	8.2	10.3	8.4	10.1	12.6	15.5	16.3	13.0	5.7	2.2	3.1	6.7	7.6	0.2	16.3	6.9
Aug 13	7.9	9.4	11.5	11.6	8.9	10.8	11.3	13.8	16.6	18.6	18.7	17.0	20.0	**22.8**	21.7	**22.8**	20.9	20.9	19.7	11.2	7.0	5.6	9.3	8.8	5.6	**22.8**	**14.5**
Aug 14	7.7	7.4	6.6	5.0	3.3	1.4	0.8	1.4	3.1	5.4	6.0	6.9	2.6	6.0	8.1	6.0	3.5	4.3	2.7	1.4	2.6	2.8	4.7	6.2	0.8	8.1	4.4
Aug 15	3.4	6.8	8.4	8.3	8.4	10.2	7.6	9.1	9.6	12.7	12.2	3.6	13.4	17.8	19.5	19.9	16.6	5.2	10.2	7.6	6.5	3.9	3.7	2.0	2.0	19.9	9.4
Aug 16	1.2	1.6	1.4	1.7	0.7	1.2	0.7	1.0	2.2	4.1	6.8	9.0	11.1	14.7	13.7	18.1	16.2	12.4	4.4	1.9	3.2	7.4	8.9	6.9	0.7	18.1	6.3
Aug 17	7.0	6.2	5.5	6.9	6.8	4.8	5.7	10.7	11.0	9.8	12.2	11.9	14.4	14.2	17.9	17.6	17.0	12.8	10.1	9.2	8.4	8.9	8.3	5.7	4.8	17.9	10.1
Aug 18	2.2	2.5	7.4	9.8	11.2	8.3	6.9	8.3	11.3	11.7	9.3	10.6	14.0	13.7	12.6	13.3	13.4	10.8	10.9	2.5	1.2	0.3	0.6	0.5	0.3	14.0	8.1
Aug 19	1.0	0.8	2.2	1.0	2.1	2.3	3.3	3.6	6.3	9.6	12.1	11.9	12.5	11.9	12.6	12.5	10.4	11.6	9.9	8.6	9.0	10.3	9.0	5.1	0.8	12.6	7.5
Aug 20	2.7	4.3	7.7	7.4	8.9	6.7	8.2	11.9	8.1	6.9	9.8	9.8	9.0	7.4	7.4	5.6	7.9	9.4	7.9	4.9	2.1	3.4	3.8	6.0	2.1	11.9	7.0
Aug 21	5.8	3.4	4.5	4.9	4.6	4.3	2.6	3.3	6.3	9.4	10.7	9.5	9.5	9.6	9.1	6.8	5.7	7.3	7.7	3.0	2.2	2.2	2.3	2.4	2.2	10.7	5.7
Aug 22	2.8	3.5	3.7	4.9	4.9	5.4	5.4	3.6	2.1	3.3	6.9	6.2	7.0	5.7	5.2	4.7	3.6	4.2	5.0	1.8	1.7	1.5	2.3	1.4	1.4	7.0	4.0
Aug 23	3.5	3.6	4.3	3.0	2.1	4.8	2.6	4.5	4.8	5.7	6.3	6.9	6.9	7.2	7.2	8.7	9.4	9.5	10.3	9.6	8.6	7.8	7.8	7.7	2.1	10.3	6.4
Aug 24	5.6	5.1	3.3	5.8	7.2	6.4	5.9	6.3	5.5	5.6	5.0	3.8	5.1	3.4	1.6	2.9	4.9	5.2	5.5	6.5	7.9	7.6	7.0	6.8	1.6	7.9	5.4
Aug 25	9.0	7.9	9.1	9.0	6.3	8.2	8.8	11.5	10.7	12.8	12.2	12.3	11.5	10.8	10.8	11.2	10.4	11.0	8.0	5.3	4.6	3.2	8.7	11.0	3.2	12.8	9.3
Aug 26	9.7	8.3	6.0	8.0	6.7	7.5	8.7	9.7	11.0	13.1	12.5	12.2	12.3	11.7	11.1	11.2	11.7	12.3	7.7	4.2	2.6	0.0	0.5	1.1	0.0	13.1	8.3
Aug 27	0.2	1.6	0.6	1.1	2.1	2.8	4.4	4.1	5.2	7.5	9.1	11.2	13.3	16.2	18.8	17.6	14.6	12.5	7.8	7.7	8.0	7.1	6.7	5.0	0.2	18.8	7.7
Aug 28	3.5	5.0	4.1	4.3	5.0	6.0	4.8	5.4	8.1	11.0	12.5	13.2	13.1	12.5	12.0	12.0	11.3	11.1	7.8	8.8	9.1	9.0	9.2	7.1	3.5	13.2	8.6
Aug 29	8.4	7.2	8.3	5.1	3.7	4.5	7.7	7.7	8.1	9.0	10.1	9.6	9.2	8.8	5.3	5.6	5.0	3.0	0.1	0.2	1.0	0.8	1.4	1.7	0.1	10.1	5.5
Aug 30	0.3	0.6	0.6	1.6	2.2	2.4	0.3	0.7	2.2	0.9	5.1	5.5	5.7	6.7	5.2	4.9	3.4	3.0	0.2	0.6	1.4	2.2	5.2	8.5	0.2	8.5	**2.9**
Aug 31	9.0	9.8	7.3	7.5	6.0	5.3	6.0	4.4	7.3	5.0	6.4	8.1	8.5	9.0	8.3	7.9	8.3	6.1	3.7	0.6	0.5	0.1	0.1	**0.0**	**0.0**	9.8	5.6
Diurnal Maximum	9.7	9.8	11.5	11.6	11.2	10.8	11.3	13.8	16.6	18.6	18.7	17.7	20.0	22.8	21.7	22.8	20.9	20.9	19.7	11.2	9.1	11.3	9.3	11.0			
Diurnal Average	4.0	4.3	4.8	5.1	4.8	5.0	5.0	6.1	6.8	7.8	8.8	8.8	9.7	10.1	10.0	9.9	9.0	7.9	6.3	4.3	3.9	4.1	4.6	4.3			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



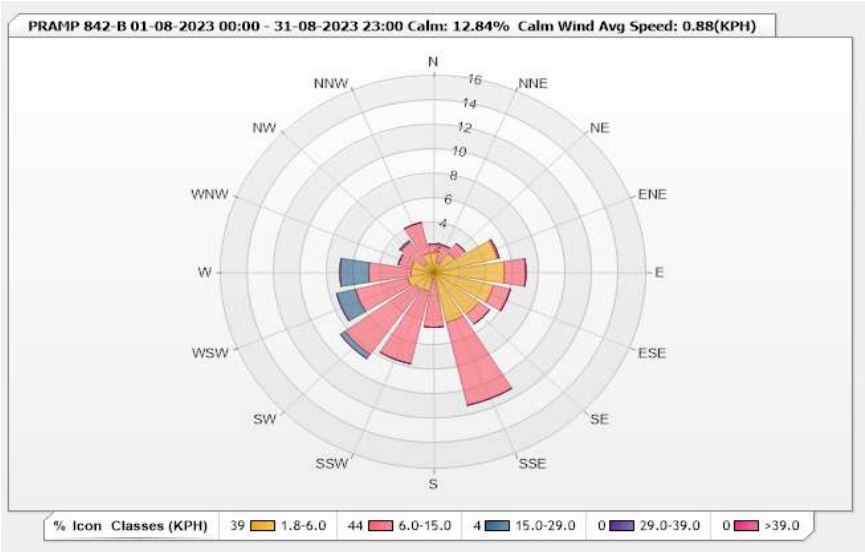


Station: PRAMP 842-B Monitor: WDS [KPH] Monthly: 08-2023

Type: Wind Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm (WS<1.8kph): 12.84% Valid Data: 93.15%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	1.59	0.72	0	0	0	2.31
NNE	0.87	1.44	0	0	0	2.31
NE	1.88	1.01	0	0	0	2.89
ENE	4.91	0.14	0	0	0	5.05
E	5.34	1.59	0	0	0	6.93
ESE	4.62	1.3	0	0	0	5.92
SE	4.18	1.01	0	0	0	5.19
SSE	4.18	6.93	0	0	0	11.11
S	0.58	3.9	0	0	0	4.48
SSW	1.59	6.06	0	0	0	7.65
SW	1.73	6.49	0.43	0	0	8.65
WSW	2.02	4.04	1.44	0	0	7.5
W	1.73	3.17	2.16	0	0	7.06
WNW	1.73	1.01	0	0	0	2.74
NW	0.87	2.16	0.14	0	0	3.17
NNW	1.59	2.6	0	0	0	4.19
Summary	39.41	43.57	4.17	0	0	87.15



Peace River Area Monitoring Program

842-B Station - August 2023

Summary of Hourly Averages

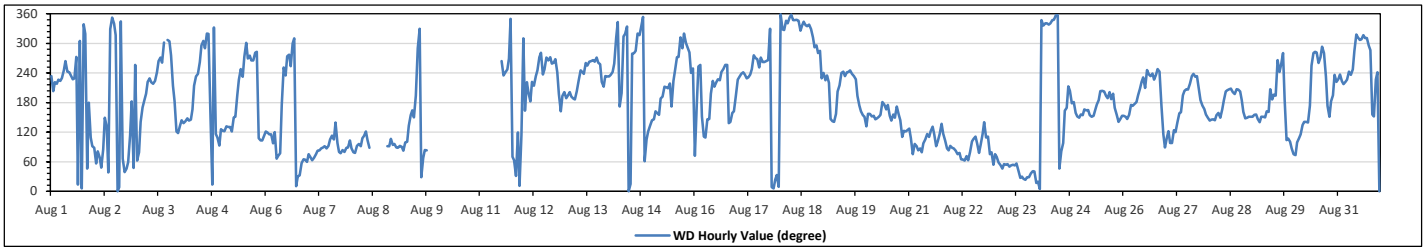
WIND DIRECTION (VWD) in sector

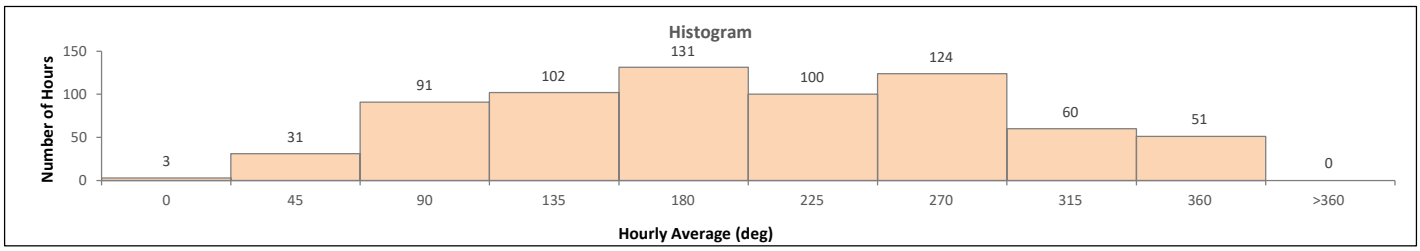
Monthly Average:	215 (SSW)	degree	
Hours in Service:	744		
Hours of Data:	693		
Hours of Missing Data:	50		
Hours of Calibration:	1		
Operational Uptime:	93.3		

Day	Hourly Period Starting at (MST)																							Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant
Aug 1	SW	SSW	SW	SW	SW	SW	SW	WSW	W	WSW	WSW	SW	SW	SW	W	NNE	WNW	N	NNW	NW	NE	S	ESE	E	240	WSW
Aug 2	E	NE	E	ENE	NE	E	SSE	SE	NE	NNW	N	NNW	NW	N	N	NNW	ENE	NE	NE	ENE	ESE	S	NE	WSW	32	NNE
Aug 3	ENE	ENE	SE	SSE	S	SSW	SW	SW	SW	SW	SW	WSW	W	W	W	WNW	C	NW	WNW	W	SSW	S	ESE	ESE	239	WSW
Aug 4	SE	SE	SE	SE	SE	SE	SE	SSE	SSW	SW	SW	W	WNW	WNW	WNW	NW	NW	SSE	NNE	NNW	ESE	ESE	E	SE	231	SW
Aug 5	ESE	ESE	SE	SE	SE	ESE	SSE	SSE	SSW	SW	WSW	SW	W	WNW	W	W	W	W	W	W	ESE	ESE	ESE	ESE	237	SW
Aug 6	ESE	ESE	ESE	ESE	E	ESE	ENE	ENE	ENE	S	WSW	SW	W	W	WSW	WNW	NW	N	NNE	NNE	ENE	ENE	ENE	ENE	332	NNW
Aug 7	ENE	ENE	ENE	ENE	ENE	E	E	E	E	E	E	E	ESE	ESE	ESE	SE	E	E	ENE	E	E	E	E	ESE	91	E
Aug 8	E	ENE	ENE	E	E	E	ESE	ESE	ESE	ESE	E	K	K	K	K	K	K	K	K	K	E	E	ESE	E	NA	NA
Aug 9	E	E	E	E	E	E	E	E	SE	SSE	SSE	SSE	SSW	WNW	NNW	NNE	ENE	E	E	K	ND	ND	ND	ND	111	ESE
Aug 10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-
Aug 11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NRM	W	SW	WSW	WSW	W	N	ENE	ENE	NNE	ESE	NNE	ESE	NA	NA
Aug 12	NW	SSE	SW	SSW	S	SW	SSW	SW	WSW	W	W	SW	WSW	W	W	W	WSW	W	W	WSW	SSW	SSE	S	SSW	248	WSW
Aug 13	S	SSW	SSW	S	S	S	SSW	SW	WSW	WSW	SW	WSW	WSW	W	W	W	W	W	W	WSW	SW	SSW	SW	SW	242	WSW
Aug 14	SW	SW	WSW	WSW	NW	NNW	S	SSW	NW	NW	NNW	N	NNE	W	W	WNW	NW	NW	NNW	N	ENE	ESE	ESE	SE	290	WNW
Aug 15	SE	SE	SSE	SSE	SSE	S	S	SSW	SSW	SSW	SW	S	SW	WSW	W	W	NW	WNW	NW	WNW	WNW	W	WSW	WSW	237	SW
Aug 16	ENE	S	WSW	WSW	SSE	ESE	ESE	SE	SE	SSW	SW	SSW	SW	SW	SW	WSW	WSW	WSW	WSW	SE	SE	SSE	SSE	S	219	SW
Aug 17	SW	SW	SW	WSW	SW	SW	SW	SW	WSW	W	W	W	WSW	W	W	W	W	W	NNW	N	N	NNE	NNE	N	270	W
Aug 18	N	NNW	NW	NNW	NNW	N	N	NNW	NNW	NNW	NNW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NW	WNW	WNW	W	WNW	SW	338	NNW
Aug 19	WSW	SW	SW	SW	SE	SE	SE	SSE	SSW	SSW	WSW	WSW	SW	WSW	WSW	WSW	SW	SW	SW	S	S	SSE	SSE	SSE	216	SW
Aug 20	SE	SSE	SSE	SSE	SSE	SE	SE	SSE	SSE	S	S	SSE	S	SSE	SE	SSE	SSE	S	SSE	SE	ESE	ESE	ESE	ESE	154	SSE
Aug 21	SE	ESE	ENE	E	E	E	E	ENE	E	ESE	ESE	ESE	ESE	SE	ESE	E	E	ESE	SE	ESE	ESE	E	E	E	108	ESE
Aug 22	E	E	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	ESE	ESE	E	ENE	E	ESE	SE	ESE	ESE	ENE	ENE	NE	88	E
Aug 23	ENE	ENE	ENE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NNE	NNE	NNE	NNE	NNE	NNE	NE	NE	NE	NNE	40	NE
Aug 24	NNE	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NE	E	E	SSE	SSE	SSW	SSW	S	S	SSE	SSE	SSE	8	N
Aug 25	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	SSW	SSW	SSW	S	S	SSW	S	SSW	SSE	SSE	SE	SE	SSE	175	S
Aug 26	SSE	SSE	SE	SSE	S	S	S	S	SSW	SSW	SW	SW	SSW	WSW	SW	SW	WSW	SW	SW	WSW	WSW	S	ESE	E	207	SSW
Aug 27	ESE	ESE	E	E	ESE	ESE	SE	SSE	SSE	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SSW	S	S	SSE	SSE	SSE	203	SSW
Aug 28	SE	SE	SE	SE	SSE	SSE	SSE	SSE	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSE	SE	SSE	SSE	SSE	182	S
Aug 29	SSE	SSE	SSE	SE	SE	SSE	SSE	SSE	SSE	SSE	SSW	S	SSW	SSW	W	WSW	WSW	W	S	ESE	ESE	E	E	ENE	176	S
Aug 30	ENE	E	ESE	ESE	SE	SE	SE	SE	S	WSW	W	W	W	WSW	W	WNW	W	SW	S	SSE	S	SSW	SW	SW	247	WSW
Aug 31	SW	SW	SW	SW	SW	SW	WSW	SW	WSW	WNW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	SSE	SSE	SW	WSW	N	271	W

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Machine Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.





Peace River Area Monitoring Program

842-B Station - August 2023

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr & WIND DIRECTION (VWD) in sector

WIND SPEED

Maximum Hourly Value:	22.8	kph	on Aug 13 at hr 13	Hours in Service:	744
Maximum Daily Value:	14.5	kph	on Aug 13	Hours of Data:	693
Minimum Hourly Value:	0.0	kph	on Aug 5 at hr 20	Hours of Missing Data:	50
Minimum Daily Value:	2.9	kph	on Aug 30	Hours of Calibration:	1
Monthly Average:	2.3	kph		Operational Uptime:	93.3

WIND DIRECTION

Monthly Average: 215 degree (SSW)

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	4.5	5.1	7.2	8.6	6.6	6.5	7.1	6.8	5.3	8.2	8.9	11.2	12.4	13.7	11.1	7.2	1.2	3.8	0.9	1.0	1.8	0.5	1.1	0.9	0.5	13.7	5.9
	SW	SSW	SW	SW	SW	SW	SW	WSW	W	WSW	WSW	SW	SW	SW	W	NNE	WNW	N	NNW	NW	NE	S	ESE	E			
Aug 2	0.4	1.6	1.1	1.9	0.6	0.5	1.0	0.4	2.5	3.5	2.4	3.9	6.1	4.5	5.3	3.6	6.4	5.6	3.8	3.6	2.5	11.3	5.2	1.3	0.4	11.3	3.3
	E	NE	E	ENE	NE	E	SSE	SE	NE	NNW	N	NNW	NW	N	N	NNW	ENE	NE	NE	ENE	ESE	S	NE	WSW			
Aug 3	2.7	1.6	3.8	6.4	6.4	10.8	11.0	10.9	12.5	13.9	16.1	17.7	16.2	13.5	14.5	9.5	C	9.1	6.6	1.6	0.1	0.1	0.5	2.3	0.1	17.7	8.2
	ENE	ENE	SE	SSE	S	SSW	SW	SW	SW	SW	SW	WSW	W	W	W	WNW	C	NW	WNW	W	SSW	S	ESE	ESE			
Aug 4	3.7	3.9	4.1	4.3	4.3	3.0	3.1	5.0	6.3	4.7	4.3	3.8	7.8	6.5	10.0	8.7	3.5	2.9	1.0	1.2	0.7	0.5	0.4	1.7	0.4	10.0	4.0
	SE	SE	SE	SE	SE	SE	SE	SSE	SSW	SW	SW	W	WNW	WNW	WNW	NW	NW	SSE	NNE	NNW	ESE	ESE	E	SE			
Aug 5	1.8	1.1	3.2	3.1	3.1	3.1	3.7	3.8	3.6	6.1	7.8	6.5	6.3	8.1	3.6	5.9	6.1	5.4	5.3	2.2	**0.0**	0.5	0.7	2.4	**0.0**	8.1	3.9
	ESE	ESE	SE	SE	SE	ESE	SSE	SSE	SSW	SW	WSW	SW	W	WNW	W	W	W	W	W	W	ESE	ESE	ESE	ESE			
Aug 6	2.2	4.0	2.2	0.4	1.2	2.7	2.4	4.2	3.7	3.2	5.2	7.1	7.3	7.4	4.0	5.7	8.5	2.5	5.0	1.7	2.2	2.1	3.8	3.2	0.4	8.5	3.8
	ESE	ESE	ESE	ESE	E	ESE	ENE	ENE	ENE	S	WSW	SW	W	W	WSW	WNW	NW	N	NNE	NNE	ENE	ENE	ENE	ENE			
Aug 7	3.5	3.2	3.8	3.4	3.4	4.3	5.6	6.7	6.6	7.9	7.4	6.2	5.4	5.6	5.4	8.0	4.3	4.9	5.4	5.5	4.9	5.5	6.4	6.1	3.2	8.0	5.4
	ENE	ENE	ENE	ENE	ENE	E	E	E	E	E	E	E	ESE	ESE	ESE	SE	E	E	ENE	E	E	E	E	ESE			
Aug 8	1.3	4.9	4.7	6.6	5.9	4.9	6.0	7.5	5.9	5.4	4.7	**K**	**K**	**K**	**K**	**K**	**K**	**K**	**K**	**K**	5.0	5.7	4.8	4.1	1.3	7.5	NA
	E	ENE	ENE	E	E	E	ESE	ESE	ESE	ESE	E	**K**	**K**	**K**	**K**	**K**	**K**	**K**	**K**	**K**	E	E	ESE	E			
Aug 9	4.2	3.7	3.7	2.8	3.2	2.7	2.6	3.7	4.1	5.2	6.0	3.5	1.9	2.8	1.0	2.4	2.4	2.2	0.2	**K**	ND	ND	ND	ND	0.2	6.0	3.1
	E	E	E	E	E	E	E	E	SE	SSE	SSE	SSE	SSW	WNW	NNW	NNE	ENE	E	E	**K**	ND	ND	ND	ND			
Aug 10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Aug 11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**NRM**	8.5	13.1	16.1	14.6	10.6	4.4	3.0	3.0	5.6	4.1	3.5	2.4	2.4	16.1	NA
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**NRM**	W	SW	WSW	WSW	W	N	ENE	ENE	NNE	ESE	NNE	ESE			
Aug 12	0.2	1.2	3.0	3.7	3.7	3.4	2.2	5.7	7.7	7.1	8.9	8.2	10.3	8.4	10.1	12.6	15.5	16.3	13.0	5.7	2.2	3.1	6.7	7.6	0.2	16.3	6.9
	NW	SSE	SW	SSW	S	SW	SSW	SW	WSW	W	W	SW	WSW	W	W	W	WSW	W	W	WSW	SSW	SSE	S	SSW			
Aug 13	7.9	9.4	11.5	11.6	8.9	10.8	11.3	13.8	16.6	18.6	18.7	17.0	20.0	**22.8**	21.7	**22.8**	20.9	20.9	19.7	11.2	7.0	5.6	9.3	8.8	5.6	**22.8**	**14.5**
	S	SSW	SSW	S	S	S	SSW	SW	WSW	WSW	SW	WSW	WSW	W	W	W	W	W	W	WSW	SW	SSW	SW	SW			
Aug 14	7.7	7.4	6.6	5.0	3.3	1.4	0.8	1.4	3.1	5.4	6.0	6.9	2.6	6.0	8.1	6.0	3.5	4.3	2.7	1.4	2.6	2.8	4.7	6.2	0.8	8.1	4.4
	SW	SW	WSW	WSW	NW	NNW	S	SSW	NW	NW	NNW	N	NNE	W	W	WNW	NW	NW	NNW	N	ENE	ESE	ESE	SE			
Aug 15	3.4	6.8	8.4	8.3	8.4	10.2	7.6	9.1	9.6	12.7	12.2	3.6	13.4	17.8	19.5	19.9	16.6	5.2	10.2	7.6	6.5	3.9	3.7	2.0	2.0	19.9	9.4
	SE	SE	SSE	SSE	SSE	S	S	SSW	SSW	SSW	SW	S	SW	WSW	W	W	NW	WNW	NW	WNW	WNW	W	WSW	WSW			
Aug 16	1.2	1.6	1.4	1.7	0.7	1.2	0.7	1.0	2.2	4.1	6.8	9.0	11.1	14.7	13.7	18.1	16.2	12.4	4.4	1.9	3.2	7.4	8.9	6.9	0.7	18.1	6.3
	ENE	S	WSW	WSW	SSE	ESE	ESE	SE	SE	SSW	SW	SSW	SW	SW	SW	WSW	WSW	WSW	WSW	SE	SE	SSE	SSE	S			
Aug 17	7.0	6.2	5.5	6.9	6.8	4.8	5.7	10.7	11.0	9.8	12.2	11.9	14.4	14.2	17.9	17.6	17.0	12.8	10.1	9.2	8.4	8.9	8.3	5.7	4.8	17.9	10.1
	SW	SW	SW	WSW	SW	SW	SW	SW	WSW	W	W	W	WSW	W	W	W	W	W	NNW	N	N	NNE	NNE	N			
Aug 18	2.2	2.5	7.4	9.8	11.2	8.3	6.9	8.3	11.3	11.7	9.3	10.6	14.0	13.7	12.6	13.3	13.4	10.8	10.9	2.5	1.2	0.3	0.6	0.5	0.3	14.0	8.1
	N	NNW	NW	NNW	NNW	N	N	NNW	NNW	NNW	NNW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NW	WNW	WNW	W	WNW	SW			
Aug 19	1.0	0.8	2.2	1.0	2.1	2.3	3.3	3.6	6.3	9.6	12.1	11.9	12.5	11.9	12.6	12.5	10.4	11.6	9.9	8.6	9.0	10.3	9.0	5.1	0.8	12.6	7.5
	WSW	SW	SW	SW	SE	SE	SE	SSE	SSW	SSW	WSW	WSW	SW	WSW	WSW	WSW	SW	SW	SW	S	S	SSE	SSE	SSE			
Aug 20	2.7	4.3	7.7	7.4	8.9	6.7	8.2	11.9	8.1	6.9	9.8	9.8	9.0	7.4	7.4	5.6	7.9	9.4	7.9	4.9	2.1	3.4	3.8	6.0	2.1	11.9	7.0
	SE	SSE	SSE	SSE	SSE	SE	SE	SSE	SSE	S	S	SSE	S	SSE	SE	SSE	SSE	S	SSE	SE	ESE	ESE	ESE	ESE			
Aug 21	5.8	3.4	4.5	4.9	4.6	4.3	2.6	3.3	6.3	9.4	10.7	9.5	9.5	9.6	9.1	6.8	5.7	7.3	7.7	3.0	2.2	2.2	2.3	2.4	2.2	10.7	5.7
	SE	ESE	ENE	E	E	E	E	ENE	E	ESE	ESE	ESE	ESE	SE	ESE	E	E	ESE	SE	ESE	ESE	E	E	E			
Aug 22	2.8	3.5	3.7	4.9	4.9	5.4	5.4	3.6	2.1	3.3	6.9	6.2	7.0	5.7	5.2	4.7	3.6	4.2	5.0	1.8	1.7	1.5	2.3	1.4	1.4	7.0	4.0
	E	E	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	ESE	ESE	E	ENE	E	ESE	SE	ESE	ESE	ENE	ENE	NE			
Aug 23	3.5	3.6	4.3	3.0	2.1	4.8	2.6	4.5	4.8	5.7	6.3	6.9	6.9	7.2	7.2	8.7	9.4	9.5	10.3	9.6	8.6	7.8	7.8	7.7	2.1	10.3	6.4
	ENE	ENE	ENE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NNE	NNE	NNE	NNE	NNE	NNE	NE	NE	NE	NNE			
Aug 24	5.6	5.1	3.3	5.8	7.2	6.4	5.9	6.3	5.5	5.6	5.0	3.8	5.1	3.4	1.6	2.9	4.9	5.2	5.5	6.5	7.9	7.6	7.0	6.8	1.6	7.9	5.4
	NNE	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NE	E	E	SSE	SSE	SSW	SSW	S	S	SSE	SSE	SSE			
Aug 25	9.0	7.9	9.1	9.0	6.3	8.2	8.8	11.5	10.7	12.8	12.2	12.3	11.5	10.8	10.8	11.2	10.4	11.0	8.0	5.3	4.6	3.2	8.7	11.0	3.2	12.8	9.3
	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	SSW	SSW	SSW	S	S	SSW	S	SSW	SSE	SSE	SE	SE	SSE			
Aug 26	9.7	8.3	6.0	8.0	6.7	7.5	8.7	9.7	11.0	13.1	12.5	12.2	12.3	11.7	11.1	11.2	11.7	12.3	7.7	4.2	2.6	**0.0**	0.5	1.1	**0.0**	13.1	8.3
	SSE	SSE	SE	SSE	S	S	S	S	SSW	SSW	SW	SW	SSW	WSW	SW	SW	WSW	SW	SW	WSW	WSW	S	ESE	E			
Aug 27	0.2	1.6	0.6	1.1	2.1	2.8	4.4	4.1	5.2	7.5	9.1	11.2	13.3	16.2	18.8	17.6	14.6	12.5	7.8	7.7	8.0	7.1	6.7	5.0	0.2	18.8	7.7
	ESE	ESE	E	E	ESE	ESE	SE	SSE	SSE	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SSW	S	S	SSE	SSE	SSE			
Aug 28	3.5	5.0	4.1	4.3	5.0	6.0	4.8	5.4	8.1	11.0	12.5	13.2	13.1	12.5	12.0	12.0	11.3	11.1	7.8	8.8	9.1	9.0	9.2	7.1	3.5	13.2	8.6
	SE	SE	SE	SE	SSE	SSE	SSE	SSE	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSE	SE	SSE	SSE	SSE			
Aug 29	8.4	7.2	8.3	5.1	3.7	4.5	7.7	7.7	8.1	9.0	10.1	9.6	9.2	8.8	5.3	5.6	5.0	3.0	0.1	0.2	1.0	0.8	1.4	1.7	0.1	10.1	5.5
	SSE	SSE	SSE	SE	SE	SSE	SSE	SSE	SSE	SSE	SSW	S	SSW	SSW	W	WSW	WSW	W	S	ESE	ESE	E	E	ENE			
Aug 30	0.3	0.6	0.6	1.6	2.2	2.4	0.3	0.7	2.2	0.9	5.1	5.5	5.7	6.7	5.2	4.9	3.4	3.0	0.2	0.6	1.4	2.2	5.2	8.5	0.2	8.5	**2.9**
	ENE	E	ESE	ESE	SE	SE	SE	SE	S	WSW	W	W	W	WSW	W	WNW	W	SW	S	SSE	S	SSW	SW	SW			
Aug 31	9.0	9.8	7.3	7.5	6.0	5.3	6.0	4.4	7.3	5.0	6.4	8.1	8.5	9.0	8.3	7.9	8.3	6.1	3.7	0.6	0.5	0.1	0.1	**0.0**	**0.0**	9.8	5.6
	SW	SW	SW	SW	SW	SW	WSW	SW	WSW	WNW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	SSE	SSE	SW	WSW	N			

C	Monthly Calibration	**S**	Daily Zero-Span Check	**Q**	Quality Assurance			
K	Collection Error	**ND**	No Data (Machine Not in Service)	**Y**	Routine Maintenance	**P**	Power Failure	
X	InValid Data (Equipment Malfunction /Recovery)	**NRM**	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)					

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

RENO -B STATION

Peace River Area Monitoring Program

Reno-B Station - August 2023

Summary of Hourly Averages

SULPHUR DIOXIDE (SO_2) in ppb

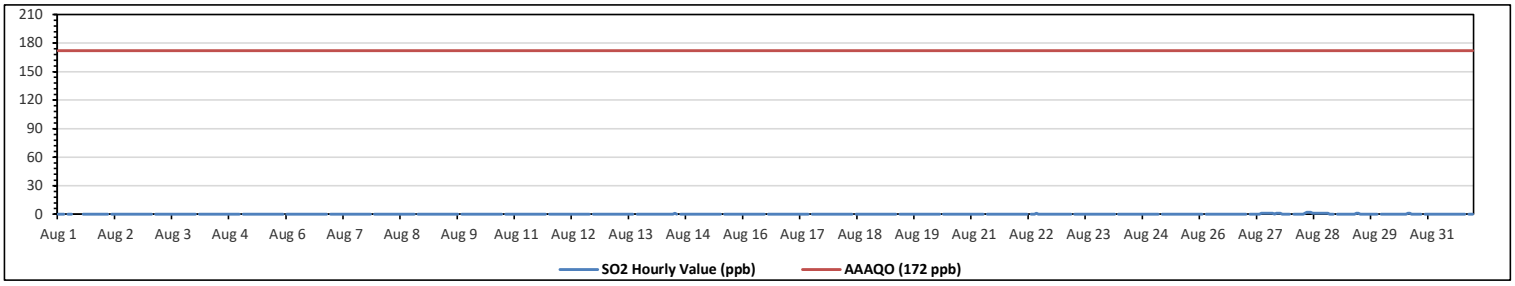
Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb

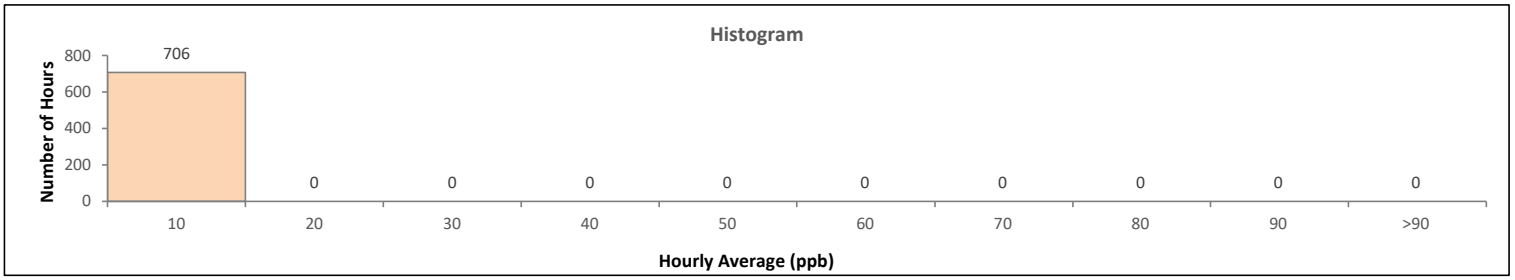
Number of 1-Hour Exceedances:	0	Number of 24-Hour Exceedances:	0	30-Day Exceedence:	0	
Maximum Hourly Value:	2	ppb	on Aug 28 at hr 8	Hours in Service:	744	
Maximum Daily Value:	0.7	ppb	on Aug 28	Hours of Data:	706	
Minimum Hourly Value:	0	ppb	on Aug 1 at hr 0	Hours of Missing Data:	0	
Minimum Daily Value:	0.0	ppb	on Aug 1	Hours of Calibration:	38	
Monthly Average:	0.0	ppb		Operational Uptime:	100.0	

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0	0	0	0	S	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 2	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 3	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 4	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 5	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0.0
Aug 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0.0
Aug 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0.0
Aug 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0.0
Aug 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0.0
Aug 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0.0
Aug 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0.0
Aug 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0.0
Aug 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0.0
Aug 14	0	0	0	0	0	0	0	0	0	0	0	0	1	0	S	0	0	0	0	0	0	0	0	0	0	1	0.0
Aug 15	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 16	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 17	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 18	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 19	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 20	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 21	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 22	0	0	0	0	0	0	S	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0
Aug 23	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 24	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 25	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 26	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 27	0	S	0	0	0	0	0	0	1	1	1	1	1	1	1	0	1	1	1	0	0	0	0	0	0	1	0.4
Aug 28	S	0	0	0	0	0	0	1	2	2	2	1	1	1	1	1	1	1	1	1	0	0	0	S	0	2	0.7
Aug 29	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	S	0	0	1	0.1
Aug 30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	S	0	0	0	1	0.1
Aug 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0.0
Diurnal Maximum	0	0	0	0	0	0	0	1	2	2	2	1	1	1	1	1	1	1	1	1	0	0	0	0			
Diurnal Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



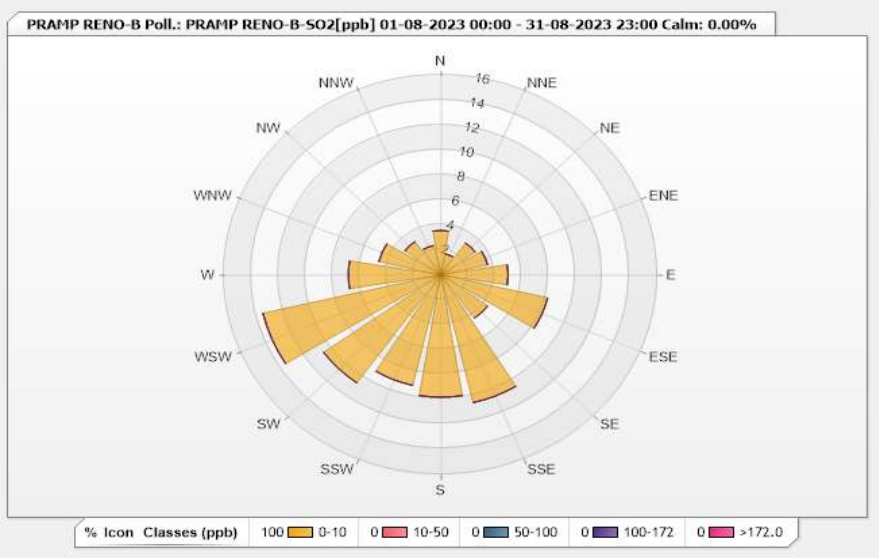


Station: PRAMP RENO-B Poll.: PRAMP RENO-B-SO2[ppb] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.62% Calm Avg: 0.00 [ppm]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	3.55	0	0	0	0	3.55
NNE	1.7	0	0	0	0	1.7
NE	3.13	0	0	0	0	3.13
ENE	3.55	0	0	0	0	3.55
E	4.97	0	0	0	0	4.97
ESE	8.1	0	0	0	0	8.1
SE	4.26	0	0	0	0	4.26
SSE	10.51	0	0	0	0	10.51
S	9.8	0	0	0	0	9.8
SSW	9.09	0	0	0	0	9.09
SW	10.65	0	0	0	0	10.65
WSW	13.49	0	0	0	0	13.49
W	6.82	0	0	0	0	6.82
WNW	4.69	0	0	0	0	4.69
NW	3.27	0	0	0	0	3.27
NNW	2.41	0	0	0	0	2.41
Summary	100	0	0	0	0	100



Peace River Area Monitoring Program

Reno-B Station - August 2023

Summary of Hourly Averages

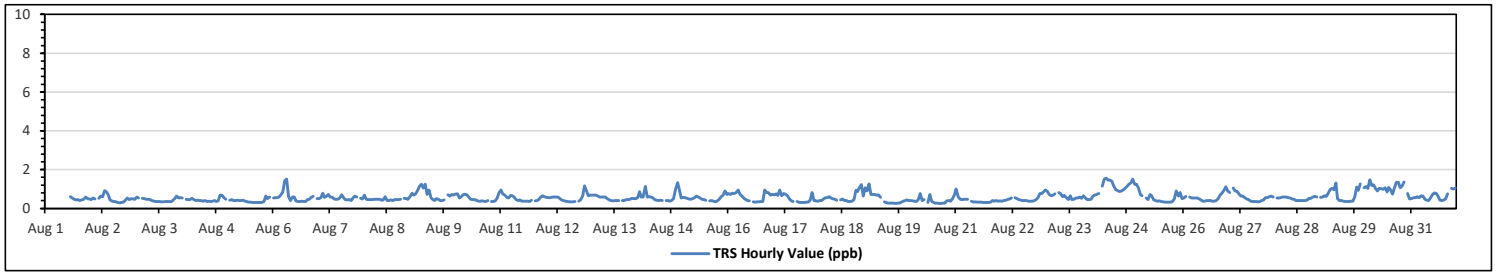
TOTAL REDUCED SULPHUR (TRS) in ppb

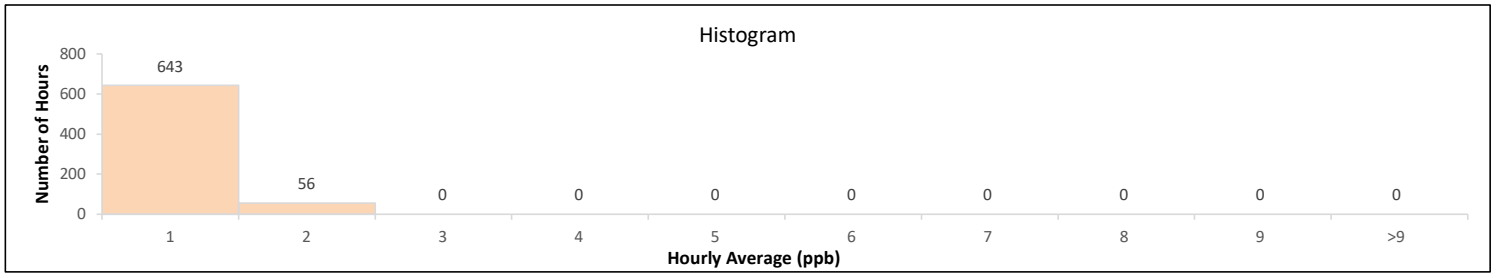
Maximum Hourly Value:	1.56	ppb	on Aug 24 at hr 7	Hours in Service:	744
Maximum Daily Value:	1.12	ppb	on Aug 24	Hours of Data:	699
Minimum Hourly Value:	0.25	ppb	on Aug 20 at hr 15	Hours of Missing Data:	9
Minimum Daily Value:	0.40	ppb	on Aug 5	Hours of Calibration:	36
Monthly Average:	0.57	ppb		Operational Uptime:	98.8

Day	Hourly Period Starting at (MST)																						Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	X	X	X	X	X	X	X	X	X	C	C	C	C	0.61	0.54	0.48	0.44	0.45	0.42	0.44	0.48	0.6	0.5	0.49	0.42	0.61	NA
Aug 2	0.46	0.54	0.49	S	0.52	0.64	0.61	0.92	0.86	0.68	0.44	0.38	0.35	0.34	0.31	0.29	0.3	0.33	0.43	0.54	0.45	0.5	0.49	0.47	0.29	0.92	0.49
Aug 3	0.58	0.53	S	0.52	0.5	0.48	0.47	0.45	0.42	0.37	0.35	0.36	0.36	0.34	0.34	0.35	0.36	0.36	0.34	0.41	0.52	0.63	0.54	0.56	0.34	0.63	0.44
Aug 4	0.54	S	0.47	0.45	0.46	0.52	0.45	0.42	0.43	0.4	0.41	0.37	0.4	0.35	0.37	0.35	0.38	0.4	0.35	0.39	0.68	0.67	0.54	0.48	0.35	0.68	0.45
Aug 5	S	0.43	0.46	0.42	0.41	0.43	0.42	0.42	0.43	0.37	0.36	0.33	0.32	0.31	0.31	0.3	0.3	0.3	0.31	0.36	0.63	0.5	0.59	S	0.30	0.63	0.40
Aug 6	0.53	0.55	0.55	0.58	0.7	0.86	1.42	1.51	0.61	0.42	0.58	0.59	0.39	0.36	0.35	0.38	0.36	0.36	0.45	0.48	0.57	0.62	S	0.51	0.35	1.51	0.60
Aug 7	0.51	0.55	0.79	0.57	0.62	0.72	0.59	0.57	0.49	0.48	0.48	0.54	0.7	0.55	0.45	0.44	0.45	0.42	0.55	0.63	0.6	S	0.52	0.49	0.42	0.79	0.55
Aug 8	0.69	0.47	0.46	0.45	0.45	0.48	0.47	0.47	0.47	0.43	0.44	0.61	0.4	0.4	0.44	0.42	0.46	0.46	0.45	0.48	S	0.52	0.5	0.47	0.40	0.69	0.47
Aug 9	0.62	0.79	0.69	0.75	0.92	1.14	1.24	1.05	1.25	0.73	0.94	0.55	0.47	0.4	0.5	0.47	0.4	0.42	0.44	S	0.7	0.63	0.72	0.69	0.40	1.25	0.72
Aug 10	0.74	0.75	0.54	0.61	0.7	0.74	0.7	0.59	0.48	0.45	0.45	0.43	0.38	0.37	0.39	0.38	0.35	0.4	S	0.36	0.36	0.39	0.53	0.82	0.35	0.82	0.52
Aug 11	0.94	0.75	0.68	0.57	0.53	0.67	0.65	0.59	0.46	0.42	0.44	0.38	0.38	0.37	0.37	0.35	0.43	S	0.39	0.42	0.48	0.6	0.66	0.61	0.35	0.94	0.53
Aug 12	0.57	0.55	0.56	0.59	0.6	0.59	0.6	0.51	0.44	0.41	0.38	0.36	0.34	0.34	0.34	0.36	S	0.38	0.45	0.63	1.17	0.9	0.66	0.68	0.34	1.17	0.54
Aug 13	0.68	0.68	0.68	0.63	0.59	0.6	0.6	0.59	0.5	0.44	0.41	0.39	0.4	0.41	0.41	S	0.42	0.42	0.45	0.45	0.48	0.52	0.5	0.51	0.39	0.68	0.51
Aug 14	0.55	0.87	0.6	0.59	1.12	0.6	0.61	0.6	0.55	0.46	0.43	0.41	0.43	0.41	S	0.4	0.4	0.38	0.41	0.51	1.03	1.33	0.98	0.53	0.38	1.33	0.62
Aug 15	0.57	0.55	0.52	0.49	0.48	0.5	0.55	0.63	0.6	0.53	0.47	0.45	0.43	S	0.39	0.4	0.37	0.34	0.39	0.45	0.6	0.68	0.89	0.72	0.34	0.89	0.52
Aug 16	0.77	0.72	0.79	0.78	0.81	0.94	0.72	0.64	0.52	0.46	0.42	0.39	S	0.34	0.33	0.34	0.34	0.35	0.35	0.95	0.81	0.82	0.69	0.71	0.33	0.95	0.61
Aug 17	0.7	0.75	0.67	0.96	0.65	0.77	0.73	0.65	0.51	0.39	0.35	S	0.35	0.33	0.31	0.31	0.3	0.32	0.33	0.43	0.82	0.41	0.39	0.38	0.30	0.96	0.51
Aug 18	0.41	0.42	0.49	0.55	0.56	0.61	0.53	0.49	0.47	0.43	S	0.44	0.49	0.41	0.41	0.35	0.35	0.37	0.45	0.93	0.87	1.09	1.23	0.63	0.35	1.23	0.56
Aug 19	1.06	0.9	1.26	0.72	0.71	0.73	0.69	0.7	0.57	S	0.34	0.31	0.27	0.28	0.28	0.27	0.26	0.27	0.28	0.32	0.38	0.41	0.44	0.4	0.26	1.26	0.52
Aug 20	0.4	0.39	0.38	0.35	0.45	0.77	0.4	0.46	S	0.3	0.72	0.36	0.31	0.28	0.27	0.25	0.26	0.27	0.27	0.39	0.41	0.37	0.5	0.7	0.25	0.77	0.40
Aug 21	1.01	0.58	0.47	0.45	0.47	0.48	0.48	S	0.37	0.33	0.34	0.33	0.32	0.32	0.31	0.31	0.31	0.31	0.33	0.4	0.38	0.41	0.38	0.39	0.31	1.01	0.41
Aug 22	0.37	0.41	0.43	0.46	0.49	0.53	S	0.56	0.5	0.45	0.43	0.42	0.41	0.41	0.38	0.38	0.38	0.39	0.45	0.55	0.76	0.77	0.86	0.94	0.37	0.94	0.51
Aug 23	0.88	0.73	0.65	0.68	0.75	S	0.82	0.75	0.61	0.67	0.57	0.46	0.66	0.45	0.48	0.54	0.53	0.58	0.52	0.66	0.53	0.46	0.46	0.48	0.45	0.88	0.61
Aug 24	0.62	0.69	0.71	0.76	S	1.15	1.51	**1.56**	1.46	1.46	1.39	1.18	0.97	0.92	0.87	0.89	0.95	1.04	1.14	1.24	1.31	1.51	1.25	1.25	0.62	**1.56**	**1.12**
Aug 25	1.05	0.72	0.65	S	0.53	0.46	0.72	0.66	0.46	0.42	0.38	0.39	0.35	0.34	0.32	0.32	0.33	0.32	0.36	0.49	0.91	0.63	0.81	0.5	0.32	1.05	0.53
Aug 26	0.53	0.62	S	0.6	0.53	0.53	0.54	0.54	0.49	0.44	0.37	0.38	0.41	0.4	0.41	0.37	0.37	0.4	0.5	0.69	0.78	0.93	1.11	0.9	0.37	1.11	0.56
Aug 27	0.82	S	1.05	0.89	0.88	0.75	0.64	0.64	0.55	0.49	0.46	0.39	0.36	0.35	0.35	0.34	0.35	0.4	0.44	0.55	0.55	0.61	0.63	0.59	0.34	1.05	0.57
Aug 28	S	0.54	0.54	0.55	0.58	0.59	0.58	0.56	0.53	0.49	0.48	0.4	0.4	0.4	0.41	0.4	0.42	0.44	0.52	0.52	0.6	0.62	0.6	S	0.40	0.62	0.51
Aug 29	0.57	0.59	0.65	0.62	0.79	0.94	1.03	0.97	1.3	0.51	0.4	0.42	0.38	0.35	0.35	0.35	0.37	0.37	0.61	1.1	0.93	1.26	S	1.07	0.35	1.30	0.69
Aug 30	1.13	1.03	1.49	1.18	1.22	1.02	0.89	1.04	1.02	0.98	1.06	0.86	1.08	0.95	0.74	1.06	1.35	1.34	1.07	1.17	1.37	S	0.78	0.49	0.49	1.49	1.06
Aug 31	0.5	0.56	0.55	0.61	0.56	0.66	0.63	0.47	0.43	0.41	0.56	0.72	0.8	0.76	0.64	0.43	0.42	0.44	0.51	0.75	S	1.03	1.01	1.05	0.41	1.05	0.63
Diurnal Maximum	1.13	1.03	1.49	1.18	1.22	1.15	1.51	1.56	1.46	1.46	1.39	1.18	1.08	0.95	0.87	1.06	1.35	1.34	1.14	1.24	1.37	1.51	1.25	1.25			
Diurnal Average	0.67	0.63	0.65	0.62	0.64	0.69	0.70	0.69	0.61	0.51	0.51	0.47	0.46	0.43	0.41	0.41	0.42	0.43	0.47	0.59	0.70	0.70	0.68	0.64			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



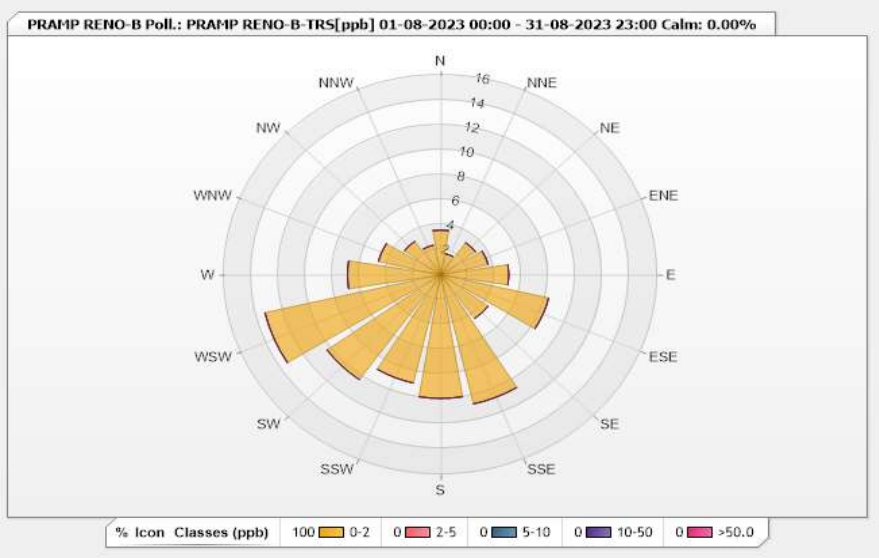


Station: PRAMP RENO-B Poll.: PRAMP RENO-B-TRS[ppb] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 93.68% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	3.59	0	0	0	0	3.59
NNE	1.72	0	0	0	0	1.72
NE	3.16	0	0	0	0	3.16
ENE	3.59	0	0	0	0	3.59
E	5.02	0	0	0	0	5.02
ESE	8.18	0	0	0	0	8.18
SE	4.3	0	0	0	0	4.3
SSE	10.62	0	0	0	0	10.62
S	9.9	0	0	0	0	9.9
SSW	8.9	0	0	0	0	8.9
SW	10.33	0	0	0	0	10.33
WSW	13.34	0	0	0	0	13.34
W	6.89	0	0	0	0	6.89
WNW	4.73	0	0	0	0	4.73
NW	3.3	0	0	0	0	3.3
NNW	2.44	0	0	0	0	2.44
Summary	100	0	0	0	0	100



Peace River Area Monitoring Program

Reno-B Station - August 2023

Summary of Hourly Averages

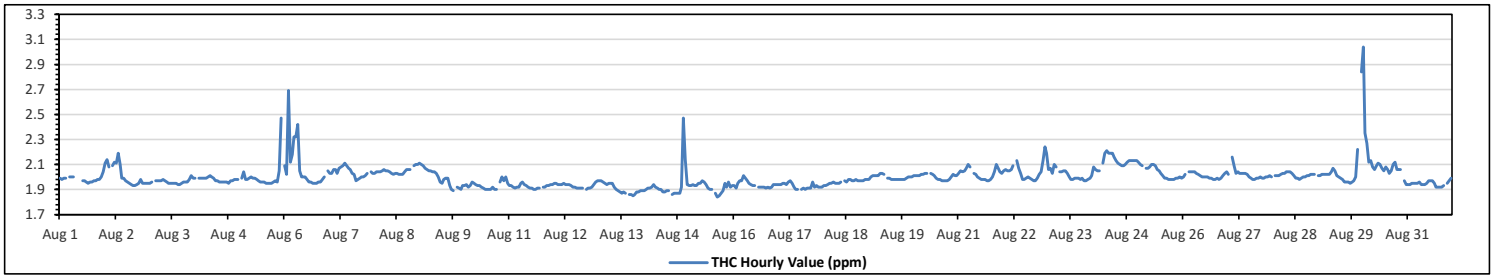
TOTAL HYDROCARBONS (THC) in ppm

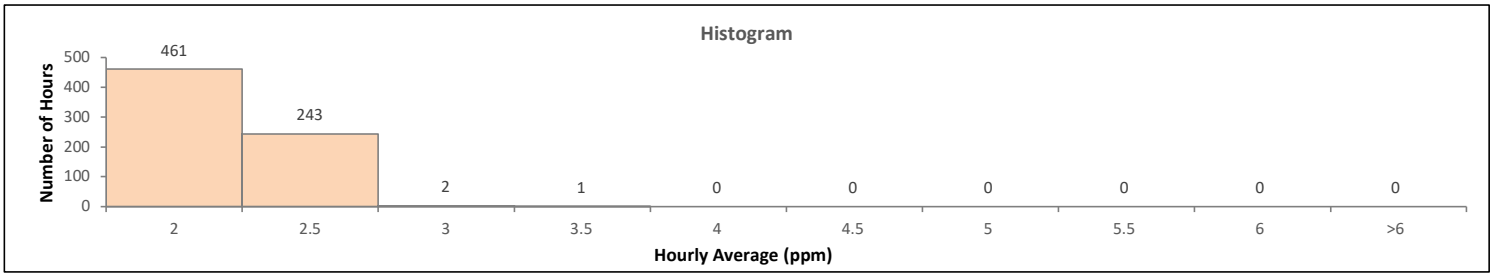
Maximum Hourly Value:	3.04	ppm	on Aug 30 at hr 0	Hours in Service:	744	
Maximum Daily Value:	2.13	ppm	on Aug 30	Hours of Data:	707	
Minimum Hourly Value:	1.84	ppm	on Aug 15 at hr 15	Hours of Missing Data:	0	
Minimum Daily Value:	1.91	ppm	on Aug 13	Hours of Calibration:	37	
Monthly Average:	2.00	ppm		Operational Uptime:	100.0	

Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	1.99	1.98	1.99	1.99	S	2.00	2.00	2.00	C	C	C	C	1.97	1.97	1.96	1.95	1.96	1.96	1.97	1.97	1.98	1.98	2.00	2.04	1.95	2.04	1.98
Aug 2	2.11	2.14	2.08	S	2.09	2.12	2.11	2.19	2.10	1.99	1.99	1.97	1.96	1.95	1.94	1.93	1.93	1.94	1.95	1.98	1.95	1.95	1.95	1.95	1.93	2.19	2.01
Aug 3	1.95	1.96	S	1.97	1.97	1.97	1.97	1.98	1.97	1.96	1.95	1.95	1.95	1.95	1.95	1.94	1.94	1.95	1.96	1.96	1.96	1.98	2.01	1.99	1.94	2.01	1.96
Aug 4	1.99	S	1.99	1.99	1.99	1.99	1.99	2.00	2.01	2.00	1.99	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.95	1.97	1.97	1.98	1.98	1.98	1.95	2.01	1.98
Aug 5	S	1.99	2.04	1.98	1.98	1.99	2.00	1.99	1.99	1.98	1.97	1.96	1.96	1.96	1.95	1.95	1.95	1.95	1.96	1.97	1.96	2.05	2.47	S	1.95	2.47	2.00
Aug 6	2.09	2.02	2.69	2.12	2.18	2.32	2.32	2.42	2.05	2.00	2.00	2.00	1.98	1.96	1.96	1.95	1.95	1.95	1.96	1.96	1.98	2.00	S	2.05	1.95	2.69	2.08
Aug 7	2.03	2.03	2.06	2.06	2.03	2.07	2.08	2.09	2.11	2.09	2.07	2.06	2.03	2.02	1.97	1.98	1.99	2.00	2.00	2.01	2.03	S	2.04	2.03	1.97	2.11	2.04
Aug 8	2.03	2.04	2.04	2.04	2.05	2.06	2.05	2.05	2.04	2.03	2.02	2.03	2.03	2.02	2.02	2.02	2.04	2.06	2.06	2.06	S	2.09	2.10	2.10	2.02	2.10	2.05
Aug 9	2.11	2.10	2.09	2.07	2.06	2.05	2.05	2.04	2.04	2.03	2.00	1.96	1.95	1.98	1.99	1.99	1.93	1.90	1.89	S	1.92	1.91	1.90	1.93	1.89	2.11	2.00
Aug 10	1.93	1.94	1.92	1.93	1.96	1.95	1.94	1.93	1.93	1.92	1.91	1.90	1.90	1.90	1.90	1.92	1.90	1.90	S	1.96	2.00	1.97	2.00	1.95	1.90	2.00	1.93
Aug 11	1.93	1.93	1.92	1.91	1.92	1.92	1.95	1.96	1.94	1.93	1.92	1.91	1.91	1.90	1.90	1.91	1.91	S	1.92	1.92	1.93	1.93	1.94	1.94	1.90	1.96	1.92
Aug 12	1.95	1.95	1.94	1.94	1.94	1.95	1.94	1.94	1.94	1.93	1.92	1.92	1.91	1.91	1.91	1.91	S	1.90	1.91	1.91	1.92	1.94	1.96	1.97	1.90	1.97	1.93
Aug 13	1.97	1.97	1.96	1.95	1.94	1.95	1.95	1.95	1.92	1.90	1.89	1.88	1.87	1.88	1.87	S	1.86	1.86	1.85	1.86	1.88	1.88	1.89	1.89	1.85	1.97	1.91
Aug 14	1.89	1.90	1.91	1.91	1.92	1.94	1.92	1.91	1.90	1.90	1.88	1.88	1.89	1.89	S	1.86	1.87	1.87	1.87	1.87	1.92	2.47	2.14	1.94	1.86	2.47	1.93
Aug 15	1.93	1.93	1.94	1.93	1.93	1.95	1.95	1.97	1.96	1.94	1.91	1.90	1.90	S	1.87	1.84	1.85	1.87	1.89	1.95	1.92	1.96	1.92	1.93	1.84	1.97	1.92
Aug 16	1.93	1.91	1.95	1.97	1.97	2.01	1.99	1.97	1.95	1.94	1.93	1.93	S	1.92	1.92	1.92	1.92	1.91	1.92	1.91	1.92	1.94	1.94	1.94	1.91	2.01	1.94
Aug 17	1.94	1.94	1.95	1.95	1.94	1.96	1.97	1.95	1.92	1.90	1.90	S	1.90	1.91	1.90	1.91	1.91	1.91	1.96	1.92	1.93	1.92	1.92	1.92	1.90	1.97	1.93
Aug 18	1.93	1.93	1.94	1.95	1.95	1.96	1.95	1.95	1.95	1.96	S	1.97	1.96	1.98	1.98	1.97	1.97	1.98	1.97	1.97	1.97	1.97	1.98	1.98	1.93	1.98	1.96
Aug 19	1.98	2.00	2.01	2.01	2.01	2.01	2.03	2.03	2.02	S	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.99	2.00	2.00	2.00	1.98	2.03	2.00
Aug 20	2.01	2.01	2.01	2.01	2.02	2.02	2.03	2.03	S	2.03	2.02	2.01	1.99	1.98	1.98	1.97	1.97	1.97	1.97	1.98	2.00	2.02	2.01	2.01	1.97	2.03	2.00
Aug 21	2.03	2.05	2.04	2.05	2.07	2.10	2.08	S	2.03	2.02	2.00	1.99	1.98	1.98	1.98	1.97	1.97	1.98	2.00	2.04	2.10	2.07	2.04	2.03	1.97	2.10	2.03
Aug 22	2.05	2.06	2.05	2.05	2.06	2.09	S	2.13	2.07	2.03	1.98	1.98	1.99	2.00	1.99	1.98	1.97	1.97	1.99	2.02	2.04	2.13	2.24	2.19	1.97	2.24	2.05
Aug 23	2.06	2.07	2.03	2.10	2.08	S	2.04	2.04	2.05	2.05	2.03	2.00	1.98	1.98	1.99	1.99	1.99	1.98	1.99	1.97	1.97	1.98	1.99	2.01	1.97	2.10	2.02
Aug 24	2.08	2.06	2.05	2.05	S	2.11	2.19	2.21	2.19	2.19	2.19	2.16	2.13	2.11	2.10	2.09	2.09	2.10	2.12	2.13	2.13	2.13	2.13	2.13	2.05	2.21	2.12
Aug 25	2.12	2.10	2.09	S	2.07	2.07	2.08	2.10	2.10	2.09	2.06	2.05	2.03	2.01	1.99	1.99	1.98	1.98	1.98	1.98	1.99	1.99	2.00	1.99	1.98	2.12	2.04
Aug 26	2.00	2.02	S	2.04	2.04	2.04	2.04	2.03	2.02	2.01	2.00	2.00	2.00	2.00	1.99	1.99	1.98	1.98	1.99	1.98	1.99	2.01	2.03	2.04	1.98	2.04	2.01
Aug 27	2.02	S	2.16	2.09	2.03	2.04	2.03	2.03	2.03	2.03	2.02	2.00	1.99	1.98	1.98	1.99	1.99	2.00	1.99	1.99	2.00	2.00	2.01	2.00	1.98	2.16	2.02
Aug 28	S	2.01	2.01	2.01	2.02	2.03	2.03	2.04	2.04	2.04	2.03	2.01	1.99	1.99	1.98	1.99	2.00	2.00	2.01	2.01	2.02	2.02	2.02	S	1.98	2.04	2.01
Aug 29	2.01	2.01	2.02	2.02	2.02	2.02	2.02	2.04	2.07	2.05	2.01	2.00	1.99	1.98	1.96	1.96	1.96	1.95	1.96	1.97	2.00	2.22	S	2.84	1.95	2.84	2.05
Aug 30	3.04	2.35	2.27	2.12	2.13	2.08	2.06	2.09	2.11	2.10	2.07	2.05	2.08	2.06	2.03	2.05	2.10	2.12	2.06	2.06	2.06	S	1.97	1.94	1.94	3.04	2.13
Aug 31	1.94	1.94	1.95	1.95	1.95	1.95	1.96	1.94	1.94	1.94	1.95	1.97	1.97	1.97	1.95	1.92	1.92	1.92	1.92	1.93	S	1.95	1.97	1.99	1.92	1.99	1.95
Diurnal Maximum	3.04	2.35	2.69	2.12	2.18	2.32	2.32	2.42	2.19	2.19	2.19	2.16	2.13	2.11	2.10	2.09	2.10	2.12	2.12	2.13	2.13	2.47	2.47	2.84			
Diurnal Average	2.04	2.01	2.04	2.01	2.01	2.02	2.02	2.03	2.01	2.00	1.99	1.98	1.97	1.97	1.96	1.96	1.96	1.96	1.97	1.97	1.98	2.02	2.02	2.02			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance			
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P	Power Failure	
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)					

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



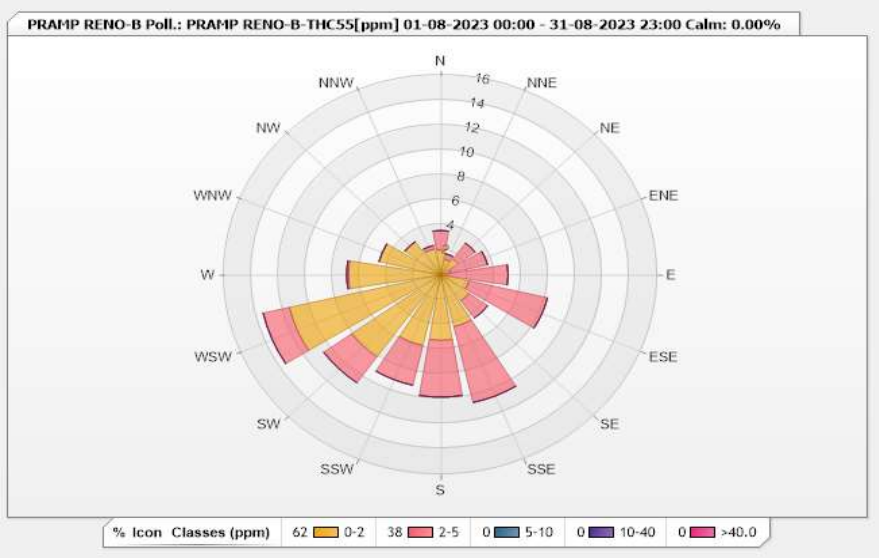


Station: PRAMP RENO-B Poll.: PRAMP RENO-B-THC55[ppm] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.76% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	1.99	1.56	0	0	0	3.55
NNE	1.28	0.43	0	0	0	1.71
NE	1.56	1.56	0	0	0	3.12
ENE	0.71	2.84	0	0	0	3.55
E	0.43	4.54	0	0	0	4.97
ESE	2.13	5.96	0	0	0	8.09
SE	2.55	1.7	0	0	0	4.25
SSE	4.26	6.24	0	0	0	10.5
S	5.25	4.54	0	0	0	9.79
SSW	5.82	3.26	0	0	0	9.08
SW	8.09	2.55	0	0	0	10.64
WSW	11.49	1.99	0	0	0	13.48
W	6.81	0.14	0	0	0	6.95
WNW	4.68	0	0	0	0	4.68
NW	3.26	0	0	0	0	3.26
NNW	2.13	0.28	0	0	0	2.41
Summary	62.44	37.59	0	0	0	100



Peace River Area Monitoring Program

Reno-B Station - August 2023

Summary of Hourly Averages

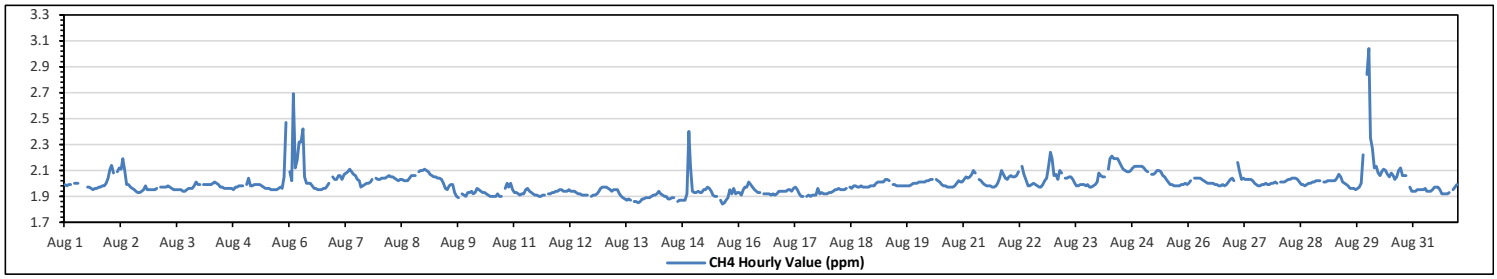
METHANE (CH4) in ppm

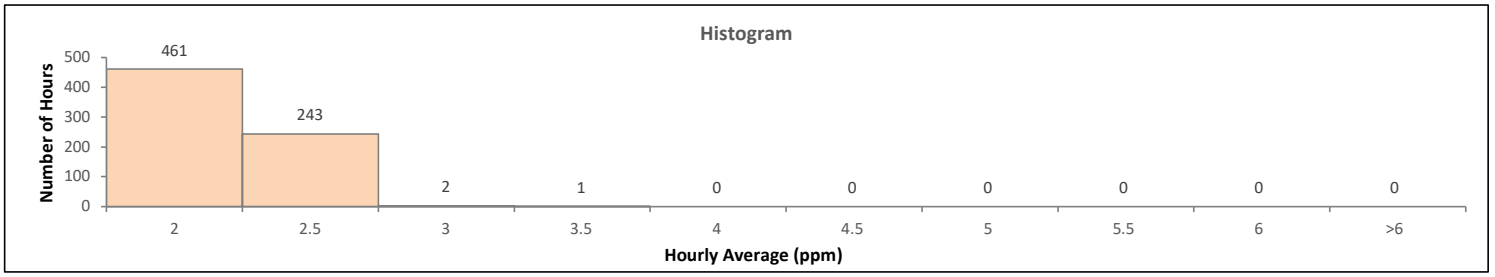
Maximum Hourly Value:	3.04	ppm	on Aug 30 at hr 0	Hours in Service:	744
Maximum Daily Value:	2.13	ppm	on Aug 30	Hours of Data:	707
Minimum Hourly Value:	1.84	ppm	on Aug 15 at hr 15	Hours of Missing Data:	0
Minimum Daily Value:	1.91	ppm	on Aug 13	Hours of Calibration:	37
Monthly Average:	2.00	ppm		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	1.99	1.98	1.99	1.99	S	2.00	2.00	2.00	C	C	C	C	1.97	1.97	1.96	1.95	1.96	1.96	1.97	1.97	1.98	1.98	2.00	2.04	1.95	2.04	1.98
Aug 2	2.11	2.14	2.08	S	2.09	2.12	2.11	2.19	2.10	1.99	1.99	1.97	1.96	1.95	1.94	1.93	1.93	1.94	1.95	1.98	1.95	1.95	1.95	1.95	1.93	2.19	2.01
Aug 3	1.95	1.96	S	1.97	1.97	1.97	1.97	1.98	1.97	1.96	1.95	1.95	1.95	1.95	1.95	1.94	1.94	1.95	1.96	1.96	1.96	1.98	2.01	1.99	1.94	2.01	1.96
Aug 4	1.99	S	1.99	1.99	1.99	1.99	1.99	2.00	2.01	2.00	1.99	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.95	1.97	1.97	1.98	1.98	1.98	1.95	2.01	1.98
Aug 5	S	1.99	2.04	1.98	1.98	1.99	1.99	1.99	1.99	1.98	1.97	1.96	1.96	1.96	1.95	1.95	1.95	1.95	1.96	1.97	1.96	2.05	2.47	S	1.95	2.47	2.00
Aug 6	2.09	2.02	2.69	2.12	2.18	2.32	2.32	2.42	2.05	2.00	2.00	2.00	1.98	1.96	1.96	1.95	1.95	1.95	1.96	1.96	1.98	2.00	S	2.05	1.95	2.69	2.08
Aug 7	2.03	2.03	2.06	2.06	2.03	2.07	2.08	2.09	2.11	2.09	2.07	2.06	2.03	2.02	1.97	1.98	1.99	2.00	2.00	2.01	2.03	S	2.04	2.03	1.97	2.11	2.04
Aug 8	2.03	2.04	2.04	2.04	2.05	2.06	2.05	2.05	2.04	2.03	2.02	2.03	2.03	2.02	2.02	2.02	2.04	2.06	2.06	2.06	S	2.09	2.10	2.10	2.02	2.10	2.05
Aug 9	2.11	2.10	2.09	2.07	2.06	2.05	2.05	2.04	2.04	2.03	2.00	1.96	1.95	1.98	1.99	1.99	1.93	1.90	1.89	S	1.92	1.91	1.90	1.93	1.89	2.11	2.00
Aug 10	1.93	1.94	1.92	1.93	1.96	1.95	1.94	1.93	1.93	1.92	1.91	1.90	1.90	1.90	1.90	1.92	1.90	1.90	S	1.96	2.00	1.97	2.00	1.95	1.90	2.00	1.93
Aug 11	1.93	1.93	1.92	1.91	1.92	1.92	1.95	1.96	1.94	1.93	1.92	1.91	1.91	1.90	1.90	1.91	1.91	S	1.92	1.92	1.93	1.93	1.94	1.94	1.90	1.96	1.92
Aug 12	1.95	1.95	1.94	1.94	1.94	1.95	1.94	1.94	1.94	1.93	1.92	1.92	1.91	1.91	1.91	1.91	S	1.90	1.91	1.91	1.92	1.94	1.96	1.97	1.90	1.97	1.93
Aug 13	1.97	1.97	1.96	1.95	1.94	1.95	1.95	1.95	1.92	1.90	1.89	1.88	1.87	1.88	1.87	S	1.86	1.86	1.85	1.86	1.88	1.88	1.89	1.89	1.85	1.97	1.91
Aug 14	1.89	1.90	1.91	1.91	1.92	1.94	1.92	1.91	1.90	1.90	1.88	1.88	1.89	1.89	S	1.86	1.87	1.87	1.87	1.87	1.92	2.40	2.13	1.94	1.86	2.40	1.93
Aug 15	1.93	1.93	1.94	1.93	1.93	1.95	1.95	1.97	1.96	1.94	1.91	1.90	1.90	S	1.87	1.84	1.85	1.87	1.89	1.95	1.92	1.96	1.92	1.93	1.84	1.97	1.92
Aug 16	1.93	1.91	1.95	1.97	1.97	2.01	1.99	1.97	1.95	1.94	1.93	1.93	S	1.92	1.92	1.92	1.92	1.91	1.92	1.91	1.92	1.94	1.94	1.94	1.91	2.01	1.94
Aug 17	1.94	1.94	1.95	1.95	1.94	1.96	1.97	1.95	1.92	1.90	1.90	S	1.90	1.91	1.90	1.91	1.91	1.91	1.96	1.92	1.93	1.92	1.92	1.92	1.90	1.97	1.93
Aug 18	1.93	1.93	1.94	1.95	1.95	1.96	1.95	1.95	1.95	1.96	S	1.97	1.96	1.98	1.98	1.97	1.97	1.98	1.97	1.97	1.97	1.97	1.98	1.98	1.93	1.98	1.96
Aug 19	1.98	2.00	2.01	2.01	2.01	2.01	2.03	2.03	2.02	S	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.99	2.00	2.00	2.00	1.98	2.03	2.00
Aug 20	2.01	2.01	2.01	2.01	2.02	2.02	2.03	2.03	S	2.03	2.02	2.01	1.99	1.98	1.98	1.97	1.97	1.97	1.97	1.98	2.00	2.02	2.01	2.01	1.97	2.03	2.00
Aug 21	2.03	2.05	2.04	2.05	2.07	2.10	2.08	S	2.03	2.02	2.00	1.99	1.98	1.98	1.98	1.97	1.97	1.98	2.00	2.04	2.10	2.07	2.04	2.03	1.97	2.10	2.03
Aug 22	2.05	2.06	2.05	2.05	2.06	2.09	S	2.13	2.07	2.03	1.98	1.98	1.99	2.00	1.99	1.98	1.97	1.97	1.99	2.02	2.04	2.13	2.24	2.19	1.97	2.24	2.05
Aug 23	2.06	2.07	2.03	2.10	2.08	S	2.04	2.04	2.05	2.05	2.03	2.00	1.98	1.98	1.99	1.99	1.99	1.98	1.99	1.97	1.97	1.98	1.99	2.01	1.97	2.10	2.02
Aug 24	2.08	2.06	2.05	2.05	S	2.11	2.19	2.21	2.19	2.19	2.19	2.16	2.13	2.11	2.10	2.09	2.09	2.10	2.12	2.13	2.13	2.13	2.13	2.13	2.05	2.21	2.12
Aug 25	2.12	2.10	2.09	S	2.07	2.07	2.08	2.10	2.10	2.09	2.06	2.05	2.03	2.01	1.99	1.99	1.98	1.98	1.98	1.98	1.99	1.99	2.00	1.99	1.98	2.12	2.04
Aug 26	2.00	2.02	S	2.04	2.04	2.04	2.04	2.03	2.02	2.01	2.00	2.00	2.00	2.00	1.99	1.99	1.98	1.98	1.99	1.98	1.99	2.01	2.03	2.04	1.98	2.04	2.01
Aug 27	2.02	S	2.16	2.09	2.03	2.04	2.03	2.03	2.03	2.03	2.02	2.00	1.99	1.98	1.98	1.99	1.99	2.00	1.99	1.99	2.00	2.00	2.01	2.00	1.98	2.16	2.02
Aug 28	S	2.01	2.01	2.01	2.02	2.03	2.03	2.04	2.04	2.04	2.03	2.01	1.99	1.99	1.98	1.99	2.00	2.00	2.01	2.01	2.02	2.02	2.02	S	1.98	2.04	2.01
Aug 29	2.01	2.01	2.02	2.02	2.02	2.02	2.02	2.04	2.07	2.05	2.01	2.00	1.99	1.98	1.96	1.96	1.96	1.95	1.96	1.97	2.00	2.22	S	2.84	1.95	2.84	2.05
Aug 30	3.04	2.35	2.27	2.12	2.13	2.08	2.06	2.09	2.11	2.10	2.07	2.05	2.08	2.06	2.03	2.05	2.10	2.12	2.06	2.06	2.06	S	1.97	1.94	1.94	3.04	2.13
Aug 31	1.94	1.94	1.95	1.95	1.95	1.95	1.96	1.94	1.94	1.94	1.95	1.97	1.97	1.97	1.95	1.92	1.92	1.92	1.92	1.93	S	1.95	1.97	1.99	1.92	1.99	1.95
Diurnal Maximum	3.04	2.35	2.69	2.12	2.18	2.32	2.32	2.42	2.19	2.19	2.19	2.16	2.13	2.11	2.10	2.09	2.10	2.12	2.12	2.13	2.13	2.40	2.47	2.84			
Diurnal Average	2.04	2.01	2.04	2.01	2.01	2.02	2.02	2.03	2.01	2.00	1.99	1.98	1.97	1.97	1.96	1.96	1.96	1.96	1.97	1.97	1.98	2.01	2.02	2.02			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



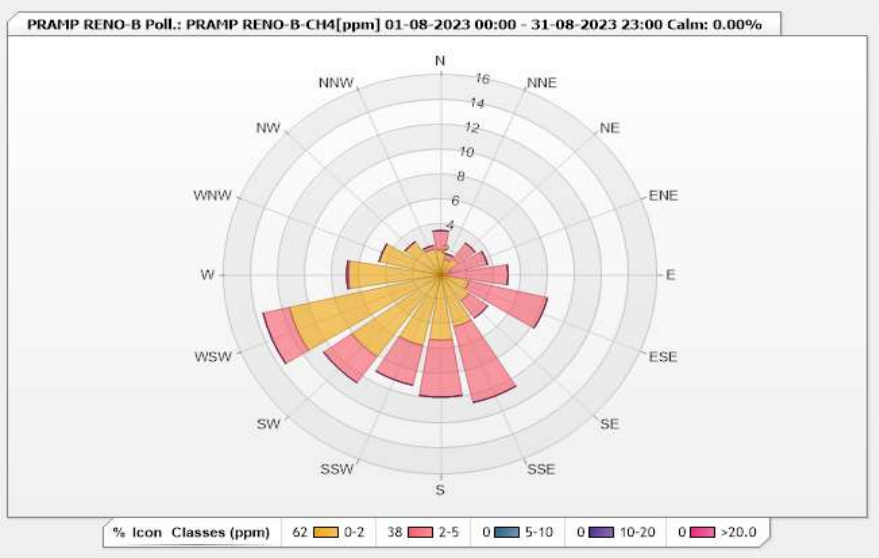


Station: PRAMP RENO-B Poll.: PRAMP RENO-B-CH4[ppm] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.76% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	1.99	1.56	0	0	0	3.55
NNE	1.28	0.43	0	0	0	1.71
NE	1.56	1.56	0	0	0	3.12
ENE	0.71	2.84	0	0	0	3.55
E	0.43	4.54	0	0	0	4.97
ESE	2.13	5.96	0	0	0	8.09
SE	2.55	1.7	0	0	0	4.25
SSE	4.26	6.24	0	0	0	10.5
S	5.25	4.54	0	0	0	9.79
SSW	5.82	3.26	0	0	0	9.08
SW	8.09	2.55	0	0	0	10.64
WSW	11.49	1.99	0	0	0	13.48
W	6.81	0.14	0	0	0	6.95
WNW	4.68	0	0	0	0	4.68
NW	3.26	0	0	0	0	3.26
NNW	2.13	0.28	0	0	0	2.41
Summary	62.44	37.59	0	0	0	100



Peace River Area Monitoring Program

Reno-B Station - August 2023

Summary of Hourly Averages

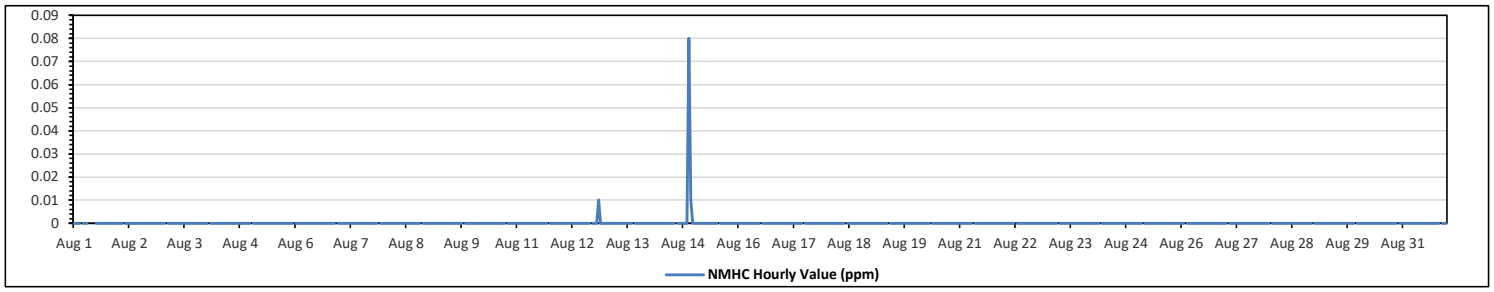
NON-METHANE HYDROCARBONS (NMHC) in ppm

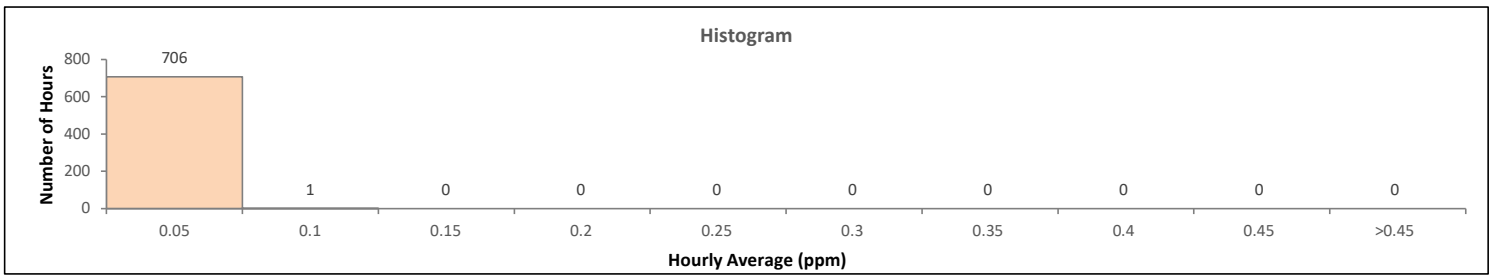
Maximum Hourly Value:	0.08	ppm	on Aug 14 at hr 21	Hours in Service:	744
Maximum Daily Value:	0.00	ppm	on Aug 14	Hours of Data:	707
Minimum Hourly Value:	0.00	ppm	on Aug 1 at hr 0	Hours of Missing Data:	0
Minimum Daily Value:	0.00	ppm	on Aug 1	Hours of Calibration:	37
Monthly Average:	0.00	ppm		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	C	C	C	C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 2	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 3	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 4	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 5	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00
Aug 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00
Aug 7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00
Aug 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00
Aug 9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00
Aug 13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	**0.08**	0.01	0.00	0.00	**0.08**	**0.00**
Aug 15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 22	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 23	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 24	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 25	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 26	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 27	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 28	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00
Aug 29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00
Aug 30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00
Aug 31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00
Diurnal Maximum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.01	0.00			
Diurnal Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



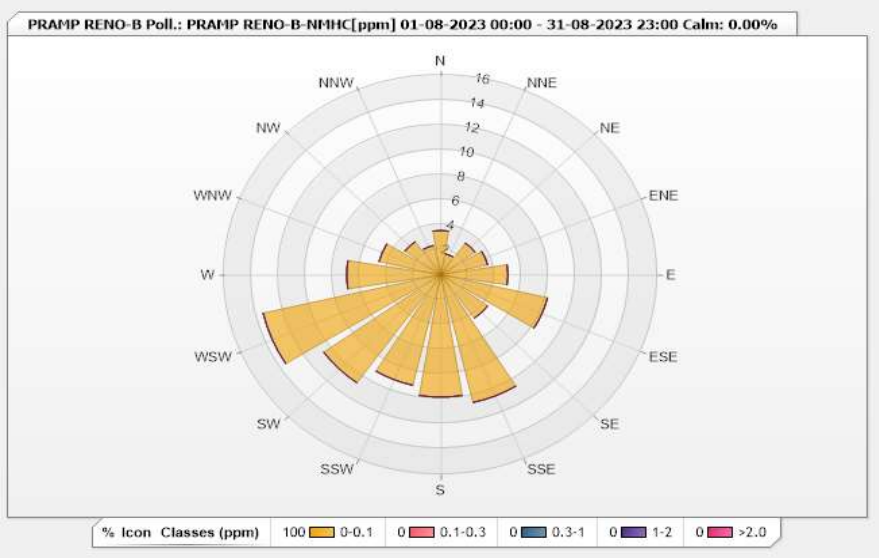


Station: PRAMP RENO-B Poll.: PRAMP RENO-B-NMHC[ppm] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.76% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	3.55	0	0	0	0	3.55
NNE	1.7	0	0	0	0	1.7
NE	3.12	0	0	0	0	3.12
ENE	3.55	0	0	0	0	3.55
E	4.96	0	0	0	0	4.96
ESE	8.09	0	0	0	0	8.09
SE	4.26	0	0	0	0	4.26
SSE	10.5	0	0	0	0	10.5
S	9.79	0	0	0	0	9.79
SSW	9.08	0	0	0	0	9.08
SW	10.64	0	0	0	0	10.64
WSW	13.48	0	0	0	0	13.48
W	6.95	0	0	0	0	6.95
WNW	4.68	0	0	0	0	4.68
NW	3.26	0	0	0	0	3.26
NNW	2.41	0	0	0	0	2.41
Summary	100	0	0	0	0	100



Peace River Area Monitoring Program

Reno-B Station - August 2023

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

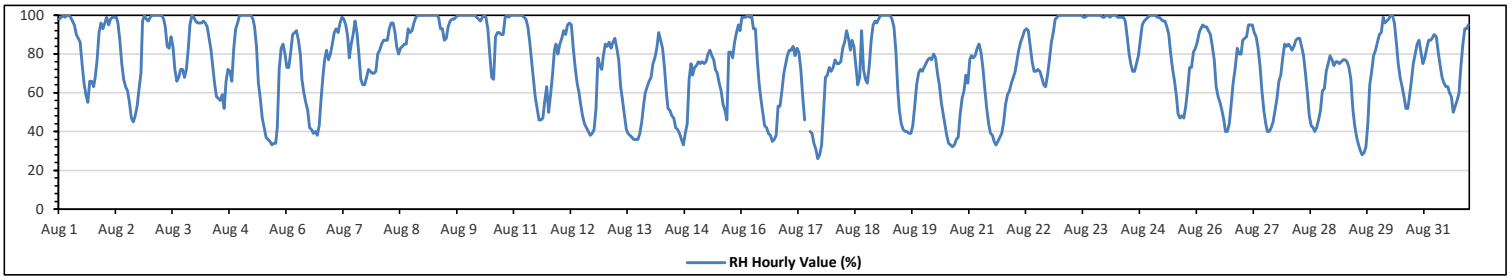
Maximum Hourly Value:	100	%	on Aug 1 at hr 2	Hours in Service:	744	
Maximum Daily Value:	99.8	%	on Aug 23	Hours of Data:	742	
Minimum Hourly Value:	26	%	on Aug 17 at hr 16	Hours of Missing Data:	2	
Minimum Daily Value:	56.8	%	on Aug 20	Hours of Calibration:	0	
Monthly Average:	75.4	%		Operational Uptime:	99.7	

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Aug 1	98	99	**100**	99	**100**	**100**	99	97	95	90	88	86	75	65	59	55	66	66	63	68	77	91	96	93	55	**100**	84.4
Aug 2	96	99	95	98	99	99	99	96	87	75	67	63	61	55	47	45	48	53	62	70	97	**100**	98	97	45	**100**	79.4
Aug 3	99	**100**	**100**	**100**	**100**	**100**	**100**	98	94	84	83	89	84	72	66	68	72	72	68	72	83	95	**100**	99	66	**100**	87.4
Aug 4	97	96	96	96	97	96	94	88	82	74	65	58	57	56	59	52	66	72	71	66	83	93	96	**100**	52	**100**	79.6
Aug 5	**100**	**100**	**100**	**100**	**100**	**100**	98	94	84	65	57	47	42	37	36	35	33	34	34	42	72	83	85	80	33	**100**	69.1
Aug 6	73	73	81	90	91	92	87	80	67	60	55	51	42	41	39	40	38	43	57	69	77	82	77	80	38	92	66.0
Aug 7	85	91	93	91	96	99	98	95	89	78	85	90	97	91	80	67	64	64	68	72	71	70	70	71	64	99	82.3
Aug 8	80	82	85	87	87	87	93	96	96	91	84	80	83	84	85	85	93	91	92	96	99	**100**	**100**	**100**	80	**100**	89.8
Aug 9	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	99	93	93	87	88	94	97	98	98	99	**100**	**100**	**100**	**100**	**100**	**100**	87	**100**	97.8
Aug 10	**100**	**100**	**100**	**100**	99	98	97	99	**100**	99	93	80	68	67	89	91	91	90	90	99	**100**	99	**100**	**100**	67	**100**	93.7
Aug 11	**100**	**100**	**100**	**100**	**100**	99	98	94	86	76	68	58	52	46	46	47	56	63	50	59	69	82	85	80	46	**100**	75.6
Aug 12	85	88	92	90	95	96	95	83	73	65	60	54	48	44	42	40	38	39	41	52	78	74	72	79	38	96	67.6
Aug 13	85	84	86	83	86	88	83	77	63	56	48	41	39	38	37	36	36	36	39	45	54	60	63	66	36	88	59.5
Aug 14	68	75	78	83	91	87	83	73	60	52	51	48	47	42	41	39	36	33	39	44	67	75	69	73	33	91	60.6
Aug 15	74	76	75	76	75	76	80	82	79	77	72	70	65	61	54	51	46	81	81	78	86	91	95	92	46	95	74.7
Aug 16	99	99	99	**100**	99	**100**	93	93	77	64	56	50	43	42	39	38	35	36	38	53	53	61	70	75	35	**100**	67.2
Aug 17	79	82	82	84	79	83	81	72	58	46	**K**	**K**	40	39	34	31	**26**	28	33	50	68	69	73	71	**26**	84	59.5
Aug 18	73	77	75	75	76	83	86	92	88	82	87	84	74	64	68	92	72	67	65	74	87	95	97	96	64	97	80.4
Aug 19	98	**100**	**100**	**100**	**100**	**100**	**100**	98	94	82	62	51	44	41	40	40	39	39	43	53	64	70	72	71	39	**100**	70.9
Aug 20	73	75	77	78	77	80	78	70	64	55	49	43	38	34	33	32	33	36	37	49	57	61	69	65	32	80	**56.8**
Aug 21	77	79	78	79	83	85	81	73	62	52	44	39	38	35	33	35	37	39	45	54	59	61	65	68	33	85	58.4
Aug 22	71	77	82	86	89	92	93	92	84	76	71	71	72	71	68	64	63	69	77	86	91	98	99	**100**	63	**100**	80.9
Aug 23	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	99	99	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	99	99	99	**100**	**99.8**
Aug 24	**100**	**100**	99	**100**	**100**	**100**	99	99	99	99	97	89	80	75	71	71	75	79	87	95	97	98	99	**100**	71	**100**	92.0
Aug 25	**100**	**100**	**100**	99	99	98	97	97	94	90	80	72	66	58	49	47	48	47	53	62	73	73	81	83	47	**100**	77.8
Aug 26	86	91	93	95	94	94	92	90	84	77	63	58	55	51	46	40	40	44	54	65	72	83	80	80	40	95	72.0
Aug 27	87	88	89	95	95	95	91	89	83	74	61	51	44	40	40	42	45	51	57	66	69	78	85	84	40	95	70.8
Aug 28	85	84	82	84	87	88	88	84	79	70	60	48	43	42	40	42	46	51	61	62	71	75	79	77	40	88	67.8
Aug 29	74	76	76	75	76	77	77	76	73	67	52	43	37	33	30	28	29	32	44	64	71	79	82	86	28	86	60.7
Aug 30	90	91	99	96	97	98	**100**	**100**	96	86	75	68	63	58	52	52	58	66	75	80	85	87	81	75	52	**100**	80.3
Aug 31	78	83	87	87	88	90	89	81	74	68	65	63	63	60	58	50	53	56	60	74	85	93	93	95	50	95	74.7
Diurnal Maximum	100	100	100	100	100	100	100	100	100	100	100	100	99	99	100	100	100	100	100	100	100	100	100	100			
Diurnal Average	87.4	89.2	90.3	91.2	92.1	92.9	91.9	89.0	82.7	74.9	69.7	64.4	59.6	56.0	54.1	53.3	54.2	57.3	60.8	68.4	77.9	83.1	84.8	85.0			

C	Monthly Calibration	**S**	Daily Zero-Span Check	**Q**	Quality Assurance	
K	Collection Error	**ND**	No Data (Machine Not in Service)	**Y**	Routine Maintenance	**P** Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	**NRM**	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

Reno-B Station - August 2023

Summary of Hourly Averages

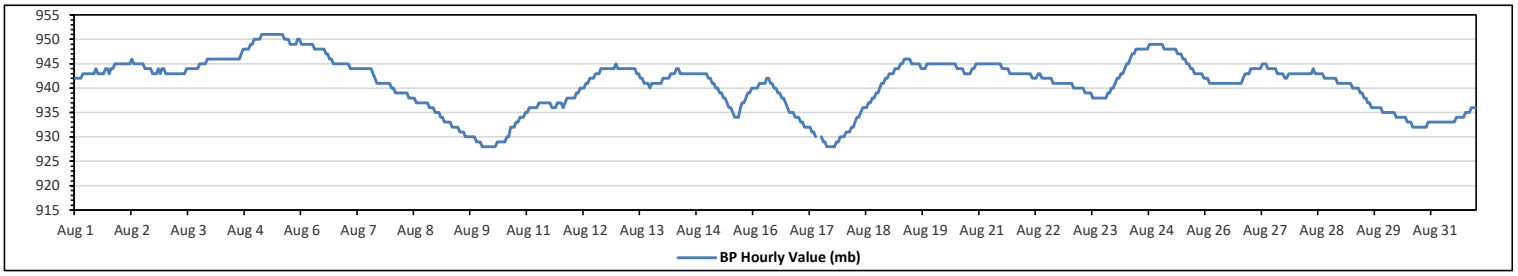
BAROMETRIC PRESSURE (BP) in millibar

Maximum Hourly Value:	951	mb	on Aug 5 at hr 3	Hours in Service:	744	
Maximum Daily Value:	950	mb	on Aug 5	Hours of Data:	742	
Minimum Hourly Value:	928	mb	on Aug 10 at hr 0	Hours of Missing Data:	2	
Minimum Daily Value:	930	mb	on Aug 17	Hours of Calibration:	0	
Monthly Average:	941	mb		Operational Uptime:	99.7	

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Aug 1	942	942	942	942	943	943	943	943	943	943	943	944	943	943	943	943	944	944	943	944	944	945	945	945	942	945	943
Aug 2	945	945	945	945	945	945	946	945	945	945	945	945	945	944	944	944	944	943	943	943	944	943	944	944	943	946	944
Aug 3	943	943	943	943	943	943	943	943	943	943	943	944	944	944	944	944	944	944	945	945	945	945	946	946	943	946	944
Aug 4	946	946	946	946	946	946	946	946	946	946	946	946	946	946	946	946	947	948	948	948	948	949	949	950	946	950	947
Aug 5	950	950	950	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	**951**	950	950	950	949	949	949	949	950	950	949	**951**	**950**
Aug 6	949	949	949	949	949	949	949	948	948	948	948	948	948	947	947	946	946	945	945	945	945	945	945	945	945	949	947
Aug 7	945	945	944	944	944	944	944	944	944	944	944	944	944	944	943	942	941	941	941	941	941	941	941	941	941	945	943
Aug 8	940	940	939	939	939	939	939	939	939	938	938	938	938	937	937	937	937	937	937	937	936	936	936	935	935	940	938
Aug 9	935	935	934	934	933	933	933	933	932	932	932	932	931	931	931	930	930	930	930	930	930	929	929	929	929	935	932
Aug 10	**928**	**928**	**928**	**928**	**928**	**928**	**928**	**928**	929	929	929	929	929	930	930	932	932	932	933	933	934	934	934	935	**928**	935	930
Aug 11	935	936	936	936	936	936	937	937	937	937	937	937	937	936	936	936	937	937	937	936	937	938	938	938	935	938	937
Aug 12	938	938	939	939	940	940	940	941	941	942	942	942	943	943	943	944	944	944	944	944	944	944	944	945	938	945	942
Aug 13	944	944	944	944	944	944	944	944	944	944	943	943	942	942	941	941	941	940	941	941	941	941	941	941	940	944	942
Aug 14	942	942	942	942	943	943	943	944	944	943	943	943	943	943	943	943	943	943	943	943	943	943	943	943	942	944	943
Aug 15	942	942	941	941	940	940	939	939	938	938	937	936	936	935	934	934	934	936	937	937	938	939	939	940	934	942	938
Aug 16	940	940	940	941	941	941	941	942	942	941	941	940	940	939	939	938	938	937	936	935	935	935	934	934	934	942	939
Aug 17	934	933	933	932	932	932	932	931	931	930	**K**	**K**	930	929	929	**928**	**928**	**928**	**928**	**928**	929	929	930	930	**928**	934	**930**
Aug 18	930	931	931	931	932	932	933	934	934	935	936	936	936	937	937	938	938	939	939	940	941	941	942	942	930	942	936
Aug 19	943	943	943	944	944	944	945	945	946	946	946	946	945	945	945	945	945	944	944	944	945	945	945	945	943	946	945
Aug 20	945	945	945	945	945	945	945	945	945	945	945	945	944	944	944	944	943	943	943	943	944	944	945	945	943	945	944
Aug 21	945	945	945	945	945	945	945	945	945	945	945	945	944	944	944	944	943	943	943	943	943	943	943	943	943	945	944
Aug 22	943	943	943	943	942	942	942	943	943	942	942	942	942	942	942	941	941	941	941	941	941	941	941	941	941	943	942
Aug 23	941	941	940	940	940	940	940	940	939	939	939	939	938	938	938	938	938	938	938	938	939	939	940	940	938	941	939
Aug 24	941	942	942	943	943	944	945	945	946	947	947	948	948	948	948	948	948	948	949	949	949	949	949	949	941	949	946
Aug 25	949	949	948	948	948	948	948	948	948	947	947	947	946	946	945	945	944	944	943	943	943	943	943	942	942	949	946
Aug 26	942	942	941	941	941	941	941	941	941	941	941	941	941	941	941	941	941	941	941	941	942	943	943	943	941	943	941
Aug 27	944	944	944	944	944	944	945	945	945	944	944	944	944	944	943	943	943	943	942	942	943	943	943	943	942	945	944
Aug 28	943	943	943	943	943	943	943	943	943	944	943	943	943	943	943	942	942	942	942	942	942	942	941	941	941	944	943
Aug 29	941	941	941	941	941	941	940	940	940	940	939	939	938	938	937	937	936	936	936	936	936	936	935	935	935	941	938
Aug 30	935	935	935	935	935	934	934	934	934	934	934	933	933	933	932	932	932	932	932	932	932	932	933	933	932	935	933
Aug 31	933	933	933	933	933	933	933	933	933	933	933	933	933	934	934	934	934	934	935	935	935	936	936	936	933	936	934
Diurnal Maximum	950	950	950	951	951	951	951	951	951	951	951	951	951	951	951	950	950	950	949	949	949	949	950	950			
Diurnal Average	941	941	941	941	941	941	941	941	941	941	941	941	941	941	940	940	940	940	940	940	941	941	941	941			

C	Monthly Calibration	**S**	Daily Zero-Span Check	**Q**	Quality Assurance	
K	Collection Error	**ND**	No Data (Machine Not in Service)	**Y**	Routine Maintenance	**P** Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	**NRM**	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

Reno-B Station - August 2023

Summary of Hourly Averages

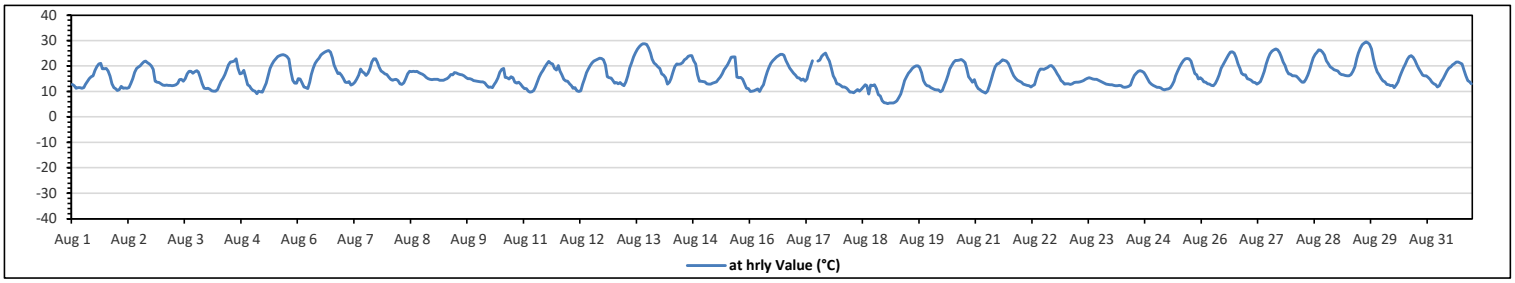
AMBIENT TEMPERATURE (AT) in Degree Celsius

Maximum Hourly Value:	29.5	°C	on Aug 29 at hr 15	Hours in Service:	744
Maximum Daily Value:	21.2	°C	on Aug 29	Hours of Data:	742
Minimum Hourly Value:	5.3	°C	on Aug 19 at hr 1	Hours of Missing Data:	2
Minimum Daily Value:	10.5	°C	on Aug 18	Hours of Calibration:	0
Monthly Average:	16.5	°C		Operational Uptime:	99.7

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	12.8	12.3	11.3	11.5	11.5	11.3	11.5	12.8	13.9	15.1	15.8	16.2	18.3	19.9	20.8	21.1	18.9	18.9	19.1	18.1	16	13.1	11.5	11.2	11.2	21.1	15.1
Aug 2	10.4	10.8	12	11.3	11.4	11.3	11.6	13.2	15	17.5	19.1	19.6	20	21	21.7	21.9	21.3	20.9	20.1	18.7	14	13.6	13.5	13.1	10.4	21.9	16.0
Aug 3	12.5	12.4	12.5	12.4	12.4	12.3	12.4	12.7	13.3	14.6	14.8	14	15.1	16.9	18	17.9	17.2	17.8	18.2	17.7	15.6	13.1	11.3	11.2	11.2	18.2	14.4
Aug 4	11.3	10.9	10.3	10.2	10.2	10.8	12.3	14	15.2	16.7	18.7	20.4	21.5	21.7	22	22.8	19.1	16.9	17.2	18.4	15.6	12.6	12.1	11.1	10.2	22.8	15.5
Aug 5	10.4	10.1	9.2	10.2	9.9	9.8	11.5	13.3	16.2	19.1	20.7	21.9	22.8	23.7	24	24.3	24.5	24.2	23.8	22.7	17.9	14.4	13.3	13.3	9.2	24.5	17.1
Aug 6	15	14.9	13.4	11.8	11.5	11.2	13.7	16.7	19.2	21.1	22.2	23.1	24.3	25	25.5	25.8	26.1	25.5	23.2	20.5	18.7	17.1	17.3	16.4	11.2	26.1	19.1
Aug 7	15.2	13.6	13.5	13.9	12.5	13	13.7	14.9	16.4	18.8	17.7	17.3	16.3	17.2	18.9	21.6	22.8	22.8	21.5	19.6	18.1	17.5	17	16.7	12.5	22.8	17.1
Aug 8	15.7	14.8	14.4	14.6	14.7	14.3	13.1	12.8	13.4	15.1	17	17.9	17.8	17.9	17.8	18	17.4	17.1	16.8	16.3	15.6	15.1	14.8	14.6	12.8	18.0	15.7
Aug 9	14.8	14.8	14.7	14.5	14.5	14.5	14.8	15.1	15.7	16.7	16.6	17.4	17.3	17	16.7	16.6	16.1	15.6	15.1	15	14.7	14.3	14.2	14	14.0	17.4	15.4
Aug 10	13.9	13.8	13.8	13.4	12.4	11.7	11.8	11.6	12.7	13.8	15.3	17.5	18.7	19	15.6	15.4	14.9	15.8	15.4	13.7	13.3	13.6	13	11.9	11.6	19.0	14.3
Aug 11	11.2	11.1	10.2	9.7	9.9	10.4	11.7	13.6	15.7	17.2	18.4	19.8	20.8	21.8	21.1	20.8	19	18.5	20.2	18.1	16.5	14.8	14.2	14.1	9.7	21.8	15.8
Aug 12	13.1	12.2	11.3	11.5	10.3	10	10.3	13	15.1	17.4	18.7	20.1	21.2	22	22.4	22.7	23.1	23	22.5	20.4	15.8	15.4	15.3	14.4	10.0	23.1	16.7
Aug 13	13.3	13.5	13.1	13.5	12.8	12.3	13.8	16.1	19.3	21.3	23.6	25.3	26.6	27.7	28.4	28.7	28.8	28.5	27.1	25.2	22.7	21.2	20.6	19.8	12.3	28.8	21.0
Aug 14	19	16.9	16.4	15.5	13	13.7	15.1	17.6	19.9	20.8	20.7	20.9	21.3	22.5	23	23.9	24.1	24.1	22.1	20.8	16.5	14	14.1	13.9	13.0	24.1	18.7
Aug 15	13.8	13.1	12.9	12.9	13.3	13.5	13.8	14.7	15.7	16.9	18.6	19.4	20.6	22.1	23.5	23.6	23.6	15.7	15.4	15.6	14.7	13.1	11.3	11.1	11.1	23.6	16.2
Aug 16	10	10.1	10.3	10.6	11	10	11.5	12.6	15.4	17.8	19.5	21.1	22.1	22.8	23.6	24.1	24.6	24.6	24.2	22.2	20.7	19.2	18.2	17.2	10.0	24.6	17.6
Aug 17	16.4	15.4	15.3	14.4	14.9	14.1	14.9	17.6	19.9	22.1	K	K	21.9	22.4	23.9	24.6	25.1	23.3	21.9	19.2	16.2	14.8	13.1	12.9	12.9	25.1	18.4
Aug 18	12.4	11.8	11.8	11.4	10.8	9.8	9.8	9.5	10.2	10.8	10.2	10.9	11.8	12.7	12.3	9	12.5	12.3	12.6	11.2	8.8	8.2	6.4	5.6	5.6	12.7	**10.5**
Aug 19	5.4	**5.3**	5.5	5.5	5.5	5.9	6.4	7.6	9	11.6	14.3	15.9	17.2	18.1	19.1	19.7	20	20	19.4	17.4	14.3	12.9	12.2	12.1	**5.3**	20.0	12.5
Aug 20	11.5	11.1	10.8	10.6	10.6	9.9	10.4	12.4	14.3	16.6	18.8	20.2	21.4	22.2	22.3	22.4	22.6	22.1	21.3	19	15.9	14.7	13.6	14.6	9.9	22.6	16.2
Aug 21	12.4	11.1	10.7	10.1	9.7	9.4	10.1	12.3	14.8	17.4	19.8	20.9	21.1	21.8	22.5	22.3	22	21.1	19.8	17.8	16.2	15.2	14.5	14	9.4	22.5	16.1
Aug 22	13.6	13	12.6	12.4	12.3	11.8	12.3	12.6	15.3	17.5	18.8	18.8	18.7	19.1	19.5	20.1	20.2	19.5	18.3	17	15.9	14.3	13.8	13	11.8	20.2	15.9
Aug 23	13.1	13.1	12.8	13.1	13.5	13.7	13.6	13.8	14	14.3	14.8	15.2	15.4	15.2	14.9	14.7	14.7	14.5	14	13.7	13.3	13	12.8	12.7	12.7	15.4	13.9
Aug 24	12.6	12.4	12.3	12.3	12.4	12.2	11.8	11.7	11.8	12	12.5	14.6	16.3	17.2	18	18.2	17.9	17.4	16.4	15	13.7	13	12.4	12	11.7	18.2	14.0
Aug 25	11.7	11.7	11.4	10.9	10.6	10.9	11	11.4	12.5	14	16.1	17.9	19.6	21	22.1	22.8	23	22.8	21.9	19.4	17.1	16.6	14.9	15.5	10.6	23.0	16.1
Aug 26	14.8	13.8	13.6	13.1	13	12.4	12.3	13.2	14.6	16.6	19	20.4	21.8	23.2	24.4	25.4	25.6	25.2	23.3	20.9	19.1	17.2	16.6	16.6	12.3	25.6	18.2
Aug 27	15.1	14.7	14.5	13.6	13.5	13	13.3	13.9	15.8	18	20.8	23.1	24.9	25.9	26.4	26.7	26.4	25.3	23.7	21.5	20.2	18.3	16.9	16.8	13.0	26.7	19.3
Aug 28	16.1	16.1	16	15.3	14.4	13.7	13.7	14.8	16.4	18.6	20.9	23.2	24.6	25.5	26.4	26.3	25.4	24.3	22.1	21	19.7	19.2	18.6	18.4	13.7	26.4	19.6
Aug 29	18.1	17.1	16.7	16.6	16.3	16.1	16.1	16.7	17.9	19.7	22.9	25.2	27	28.4	29.1	**29.5**	29.2	28.5	26.7	22.8	19.9	17.7	16.5	15.2	15.2	**29.5**	**21.2**
Aug 30	14.2	13.8	12.8	12.7	12.2	12.4	11.6	12.5	13.8	15.7	17.6	19.3	20.8	22.6	23.8	24	23.5	22.2	20.4	18.9	17.7	16.4	16.2	16.2	11.6	24.0	17.1
Aug 31	15.6	14.7	13.7	13.1	12.6	11.8	12.2	13.9	15	16.5	18.1	19.2	19.7	20.5	21	21.6	21.5	21.2	20.8	18.5	16.2	14.3	13.8	13.1	11.8	21.6	16.6
Diurnal Maximum	19.0	17.1	16.7	16.6	16.3	16.1	16.1	17.6	19.9	22.1	23.6	25.3	27.0	28.4	29.1	29.5	29.2	28.5	27.1	25.2	22.7	21.2	20.6	19.8			
Diurnal Average	13.4	12.9	12.6	12.3	12.1	11.8	12.3	13.5	15.1	16.8	18.1	19.2	20.2	21.1	21.6	21.8	21.6	21.0	20.1	18.6	16.5	15.1	14.3	14.0			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

Reno-B Station - August 2023

Summary of Hourly Averages

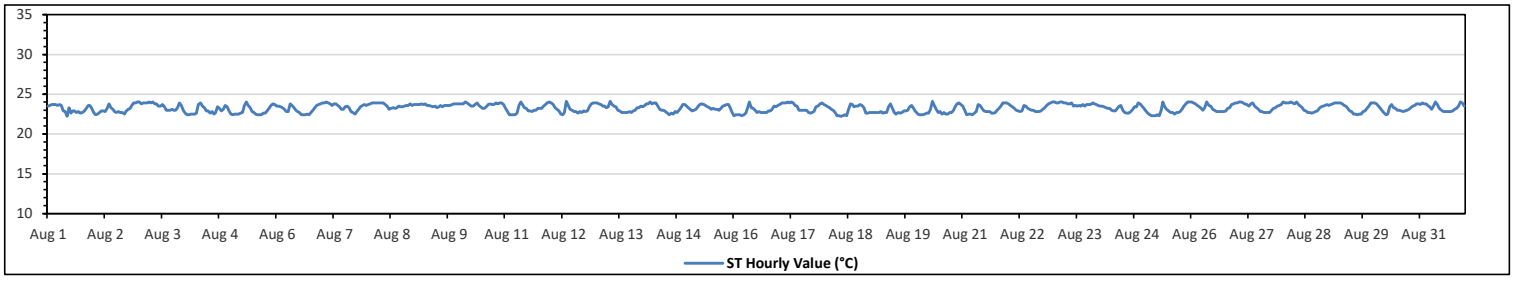
STATION TEMPERATURE (ST) in Degree Celsius

Maximum Hourly Value:	24.1	°C	on Aug 12 at hr 8	Hours in Service:	744	
Maximum Daily Value:	23.8	°C	on Aug 23	Hours of Data:	744	
Minimum Hourly Value:	22.2	°C	on Aug 1 at hr 10	Hours of Missing Data:	0	
Minimum Daily Value:	22.9	°C	on Aug 16	Hours of Calibration:	0	
Monthly Average:	23.2	°C		Operational Uptime:	100.0	

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Aug 1	23.5	23.6	23.7	23.7	23.7	23.6	23.7	23.6	22.9	22.8	**22.2**	23.3	22.6	22.9	22.9	22.7	22.8	22.6	22.7	22.9	23.2	23.6	23.6	23.2	**22.2**	23.7	23.2
Aug 2	22.7	22.4	22.5	22.7	22.9	22.9	22.8	23.2	23.8	23.3	23.1	22.8	22.7	22.8	22.7	22.7	22.5	22.9	23.1	23.2	23.6	23.9	23.9	24.0	22.4	24.0	23.0
Aug 3	24.0	23.8	23.9	23.9	23.9	24.0	23.9	24.0	23.8	23.8	23.5	23.5	23.7	23.4	23.0	23.0	23.0	23.1	23.0	23.0	23.3	23.9	23.6	23.0	23.0	24.0	23.5
Aug 4	22.6	22.4	22.4	22.5	22.5	22.5	22.6	23.7	23.9	23.5	23.3	22.9	22.9	22.6	22.8	22.5	22.7	23.4	23.2	22.9	23.1	23.6	23.4	22.9	22.4	23.9	23.0
Aug 5	22.5	22.4	22.5	22.5	22.5	22.6	22.7	23.6	24.0	23.6	23.3	22.8	22.7	22.5	22.4	22.4	22.4	22.6	22.6	22.9	23.2	23.6	23.8	23.7	22.4	24.0	22.9
Aug 6	23.5	23.5	23.4	23.3	23.1	22.8	22.8	23.8	23.6	23.3	23.0	22.8	22.7	22.4	22.4	22.4	22.5	22.4	22.7	23.0	23.3	23.6	23.7	23.8	22.4	23.8	23.1
Aug 7	23.9	23.9	24.0	23.9	23.8	23.6	23.8	23.8	23.6	23.4	23.1	23.1	23.4	23.5	23.3	22.8	22.7	22.5	22.8	23.1	23.4	23.6	23.7	23.6	22.5	24.0	23.4
Aug 8	23.7	23.8	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.7	23.5	23.1	23.2	23.3	23.2	23.3	23.5	23.4	23.4	23.5	23.6	23.6	23.8	23.6	23.1	23.9	23.6
Aug 9	23.7	23.7	23.7	23.7	23.8	23.7	23.8	23.6	23.6	23.5	23.4	23.5	23.3	23.4	23.6	23.4	23.6	23.6	23.6	23.6	23.7	23.8	23.8	23.8	23.3	23.8	23.6
Aug 10	23.8	23.8	23.8	24.0	23.9	23.7	23.5	23.5	23.7	23.9	23.6	23.4	23.2	23.2	23.4	23.7	23.8	23.7	23.7	23.9	23.8	23.9	23.9	23.7	23.2	24.0	23.7
Aug 11	23.3	22.9	22.4	22.4	22.4	22.4	22.6	23.6	24.0	23.7	23.3	23.2	22.9	22.9	22.8	23.0	23.0	23.2	23.2	23.2	23.5	23.7	23.9	24.0	22.4	24.0	23.1
Aug 12	23.9	23.7	23.3	23.1	22.9	22.5	22.4	22.7	**24.1**	23.6	23.1	23.0	22.8	22.8	22.6	22.8	22.7	22.9	22.8	22.9	23.4	23.8	23.9	23.9	22.4	**24.1**	23.2
Aug 13	23.9	23.8	23.7	23.5	23.5	23.3	23.4	**24.1**	23.7	23.5	23.4	23.0	22.9	22.7	22.7	22.7	22.7	22.8	22.7	22.9	23.0	23.3	23.3	23.5	22.7	**24.1**	23.3
Aug 14	23.4	23.6	23.8	23.8	24.0	23.8	23.9	23.9	23.5	23.1	23.0	23.0	22.8	22.6	22.4	22.6	22.5	22.8	22.7	23.0	23.3	23.7	23.7	23.5	22.4	24.0	23.3
Aug 15	23.3	23.1	22.9	23.0	23.1	23.4	23.7	23.8	23.7	23.6	23.4	23.3	23.1	23.2	23.1	23.1	23.0	23.2	23.5	23.6	23.7	23.7	23.3	22.7	22.7	23.8	23.3
Aug 16	22.3	22.4	22.4	22.4	22.3	22.4	22.6	23.2	24.0	23.3	23.2	23.0	22.7	22.8	22.7	22.7	22.7	22.7	22.9	22.9	23.1	23.5	23.4	23.6	22.3	24.0	**22.9**
Aug 17	23.7	23.9	23.9	23.9	24.0	23.9	24.0	23.9	23.6	23.5	23.0	23.0	23.0	23.0	23.0	22.7	22.6	22.7	22.8	23.4	23.5	23.8	23.9	23.7	22.6	24.0	23.4
Aug 18	23.6	23.4	23.3	23.1	23.0	22.7	22.3	22.3	**22.2**	22.3	22.4	22.3	23.1	23.8	23.7	23.4	23.5	23.5	23.7	23.6	23.3	22.6	22.6	22.7	**22.2**	23.8	23.0
Aug 19	22.7	22.7	22.7	22.7	22.7	22.8	22.6	22.7	22.7	23.4	23.8	23.2	22.7	22.5	22.7	22.6	22.7	22.9	22.9	23.0	23.4	23.6	23.3	22.9	22.5	23.8	22.9
Aug 20	22.6	22.4	22.4	22.4	22.5	22.6	22.6	23.1	**24.1**	23.6	23.1	22.7	22.8	22.5	22.7	22.5	22.5	22.7	22.7	23.0	23.4	23.8	23.9	23.7	22.4	**24.1**	22.9
Aug 21	23.5	23.0	22.4	22.5	22.5	22.4	22.6	22.8	23.7	23.6	23.2	22.9	22.8	22.8	22.8	22.6	22.6	22.7	23.0	23.2	23.5	23.9	23.9	23.9	22.4	23.9	23.0
Aug 22	23.8	23.6	23.4	23.2	23.0	22.9	22.8	22.9	23.6	23.5	23.2	23.1	23.0	23.0	22.8	22.8	22.8	22.9	23.1	23.3	23.6	23.8	23.9	24.0	22.8	24.0	23.3
Aug 23	24.0	23.9	23.9	24.0	24.0	23.9	23.9	23.8	23.8	23.9	23.5	23.6	23.5	23.6	23.5	23.7	23.5	23.7	23.7	23.7	23.9	23.8	23.7	23.6	23.5	24.0	**23.8**
Aug 24	23.5	23.5	23.4	23.3	23.2	23.2	23.0	22.9	22.9	23.2	23.5	23.6	23.0	22.7	22.6	22.6	22.8	23.1	23.4	23.4	23.9	23.8	23.5	23.2	22.6	23.9	23.2
Aug 25	22.9	22.6	22.4	22.3	22.3	22.3	22.4	22.3	23.0	24.0	23.4	23.1	22.9	22.7	22.7	22.5	22.7	22.7	22.8	23.1	23.5	23.8	24.0	24.0	22.3	24.0	22.9
Aug 26	24.0	23.9	23.8	23.6	23.4	23.2	23.0	23.3	24.0	23.6	23.5	23.1	23.0	22.8	22.8	22.8	22.8	22.8	22.9	23.2	23.3	23.7	23.8	23.9	22.8	24.0	23.3
Aug 27	23.9	24.0	24.0	23.9	23.8	23.7	23.5	23.8	23.9	23.5	23.3	23.1	22.8	22.8	22.7	22.7	22.7	22.7	23.0	23.2	23.3	23.5	23.6	23.7	22.7	24.0	23.4
Aug 28	24.0	23.9	23.9	23.9	24.0	23.9	23.8	24.0	23.7	23.5	23.3	23.0	22.9	22.7	22.7	22.6	22.7	22.8	22.9	23.2	23.4	23.5	23.6	23.7	22.6	24.0	23.4
Aug 29	23.6	23.7	23.8	23.9	23.9	23.9	23.9	23.8	23.6	23.5	23.2	22.9	22.8	22.5	22.5	22.4	22.5	22.5	22.8	22.9	23.2	23.5	23.9	23.9	22.4	23.9	23.3
Aug 30	23.9	23.8	23.5	23.2	22.9	22.6	22.4	22.5	23.4	23.7	23.3	23.2	23.0	23.0	22.9	22.8	22.9	23.0	23.1	23.3	23.5	23.6	23.8	23.8	22.4	23.9	23.2
Aug 31	23.7	23.9	23.8	23.8	23.6	23.4	23.1	23.5	24.0	23.7	23.2	23.0	22.8	22.8	22.8	22.8	22.8	22.9	23.1	23.2	23.5	24.0	23.9	23.5	22.8	24.0	23.4
Diurnal Maximum	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.1	24.1	24.0	23.8	23.6	23.7	23.8	23.7	23.7	23.8	23.7	23.7	23.9	23.9	24.0	24.0	24.0			
Diurnal Average	23.5	23.4	23.3	23.3	23.3	23.2	23.2	23.4	23.6	23.5	23.2	23.1	23.0	22.9	22.9	22.8	22.8	22.9	23.0	23.2	23.4	23.7	23.7	23.6			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance		
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P	Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)				

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

Reno-B Station - August 2023

Summary of Hourly Averages

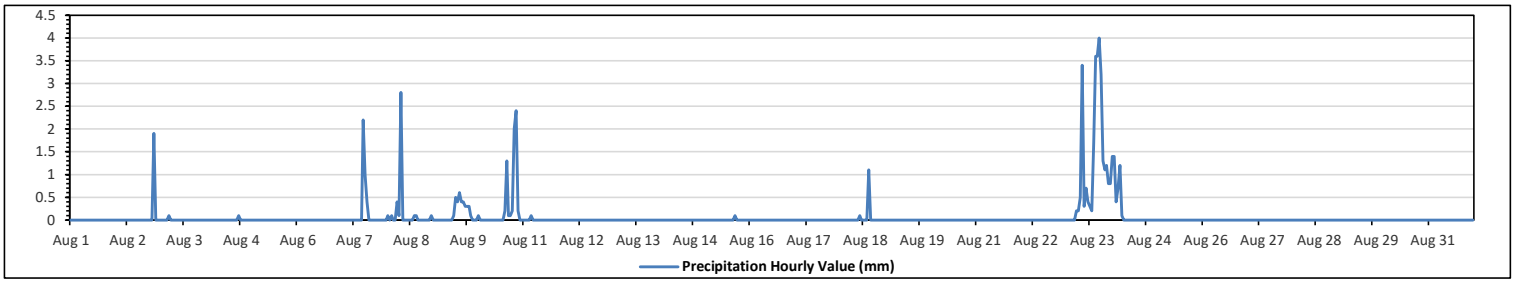
PRECIPITATION in mm

Maximum Hourly Value:	4.0	mm	on Aug 23 at hr 17	Hours in Service:	744		
Maximum Daily Value:	27.5	mm	on Aug 23	Hours of Data:	744		
Minimum Hourly Value:	0.0	mm	on Aug 1 at hr 0	Hours of Missing Data:	0		
Minimum Daily Value:	0.0	mm	on Aug 1	Hours of Calibration:	0		
Monthly Total:	53.6	mm		Operational Uptime:	100.0		

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Total
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9	0	0	0	0	1.9	1.9
Aug 3	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
Aug 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0.1	0.1
Aug 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
Aug 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
Aug 7	0	0	0	0	0	0	0	0	0	0	0	2.2	1	0.4	0	0	0	0	0	0	0	0	0	0	0	2.2	3.6
Aug 8	0.1	0	0.1	0	0	0.4	0.1	2.8	0	0	0	0	0	0	0.1	0.1	0	0	0	0	0	0	0	0.1	0	2.8	3.8
Aug 9	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5	0.4	0.6	0.4	0.4	0.3	0.3	0.3	0.1	0	0	0	0	0.6	3.4
Aug 10	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.3	0.1	0.1	0.2	2	2.4	0.2	0	0	0	2.4	6.6
Aug 11	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
Aug 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 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
Aug 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 15	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
Aug 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 18	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	1.1	0	0	0	0	0	0	0	0	0	1.1	1.2
Aug 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 23	0	0	0	0	0	0.2	0.2	0.5	3.4	0.3	0.7	0.4	0.3	0.2	1.7	3.6	3.6	4	3.2	1.3	1.1	1.2	0.8	0.8	0	4	27.5
Aug 24	1.4	1.4	0.4	0.7	1.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4	5.2
Aug 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug 31	0	0	0	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	1.4	1.4	0.4	0.7	1.2	0.4	0.2	2.8	3.4	0.3	0.7	2.2	1.0	0.4	1.7	3.6	3.6	4.0	3.2	2.0	2.4	1.2	0.8	0.8			
Diurnal Average	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	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.0			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

Reno-B Station - August 2023

Summary of Hourly Averages

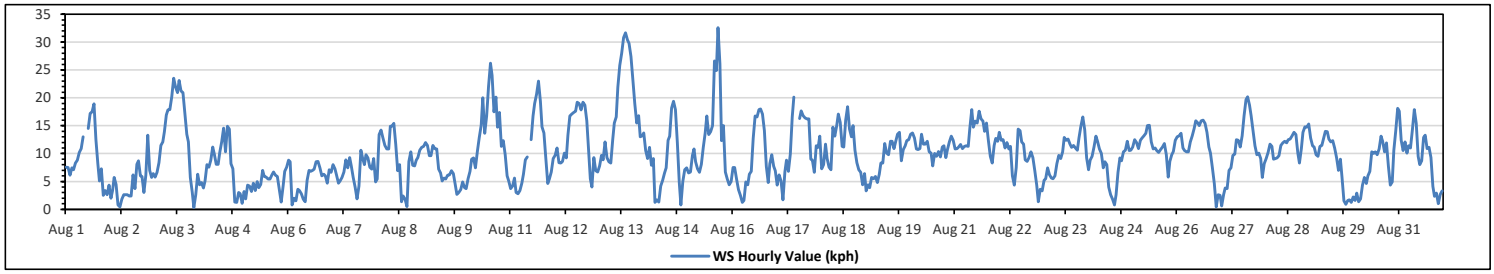
VECTOR WIND SPEED (VWS) in km/hr

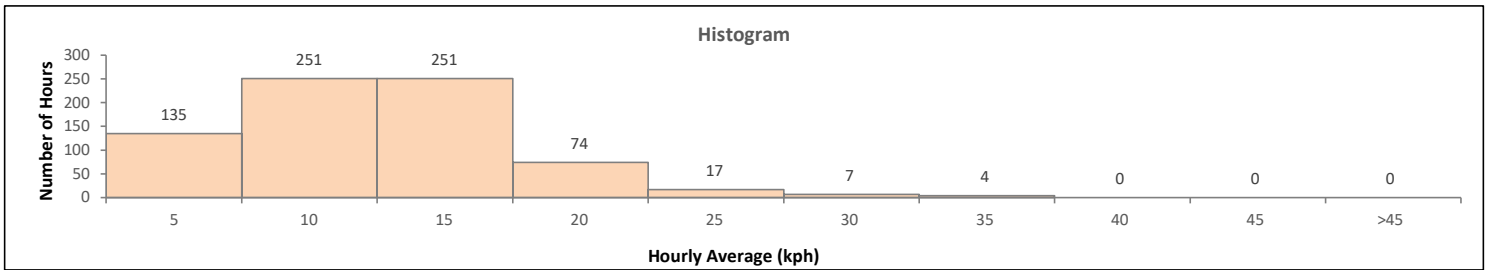
Maximum Hourly Value:	32.6	kph	on Aug 15 at hr 16	Hours in Service:	744
Maximum Daily Value:	18.2	kph	on Aug 13	Hours of Data:	739
Minimum Hourly Value:	0.3	kph	on Aug 3 at hr 21	Hours of Missing Data:	3
Minimum Daily Value:	4.6	kph	on Aug 2	Hours of Calibration:	2
Monthly Average:	3.7	kph		Operational Uptime:	99.6

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	7.6	7.5	6.1	7.4	7.1	8.3	8.8	10.2	10.9	13.0	C	C	14.5	17.2	17.5	18.9	12.5	8.2	5.1	7.3	2.5	3.4	2.6	4.3	2.5	18.9	9.1
Aug 2	2.0	3.4	5.7	4.5	0.8	0.4	1.8	2.6	2.6	2.6	2.4	2.4	6.2	3.7	8.1	8.7	6.0	5.9	3.0	6.1	13.3	7.0	5.7	6.4	0.4	13.3	**4.6**
Aug 3	5.8	6.6	8.4	11.5	12.1	13.9	16.9	17.8	17.9	20.2	23.5	21.9	20.9	23.1	21.2	20.9	17.2	13.5	12.1	5.7	3.1	**0.3**	2.6	6.3	**0.3**	23.5	13.5
Aug 4	4.4	4.8	3.8	5.1	8.0	7.6	8.8	11.2	9.9	8.1	8.1	10.2	12.1	14.6	10.3	14.9	14.4	8.2	7.3	1.3	1.2	3.0	2.8	1.1	1.1	14.9	7.6
Aug 5	3.2	1.9	4.3	4.2	3.2	4.7	3.4	5.0	3.9	4.5	7.0	5.9	5.8	5.4	5.4	6.2	6.7	6.1	5.9	3.6	1.3	4.2	6.8	7.6	1.3	7.6	4.8
Aug 6	8.8	8.5	0.8	2.0	1.5	3.6	3.4	2.8	1.8	1.4	5.2	7.0	6.8	7.0	7.2	8.5	8.6	7.4	6.0	6.3	6.0	4.7	7.1	6.6	0.8	8.8	5.4
Aug 7	8.0	7.3	6.1	4.7	5.1	5.7	6.7	8.9	7.4	9.3	7.8	5.7	4.0	1.9	4.2	10.6	9.3	8.0	9.8	9.2	7.6	7.2	9.1	4.9	1.9	10.6	7.0
Aug 8	5.4	13.4	14.2	12.8	11.5	10.8	10.8	14.9	14.9	15.4	11.6	6.9	8.0	1.4	2.4	1.8	0.5	8.6	10.3	7.9	7.8	8.8	9.3	10.6	0.5	15.4	9.2
Aug 9	11.1	11.3	12.0	11.5	9.6	9.6	11.5	10.9	10.8	7.2	6.5	5.1	5.6	5.4	6.1	6.2	6.9	6.4	4.4	2.7	3.0	3.5	4.9	3.9	2.7	12.0	7.3
Aug 10	3.7	5.5	6.8	9.0	9.2	7.4	10.4	12.9	15.1	20.0	13.6	16.7	22.1	26.2	24.0	17.5	20.1	14.7	17.4	11.3	12.3	9.8	6.0	5.1	3.7	26.2	13.2
Aug 11	3.7	4.2	5.6	3.0	2.8	3.4	4.7	6.3	8.9	9.4	K	12.5	16.7	19.0	20.6	23.0	19.4	14.8	13.7	9.1	4.6	5.4	6.7	9.1	2.8	23.0	9.9
Aug 12	9.7	11.0	8.4	8.3	8.6	10.1	9.2	13.3	16.7	17.1	17.4	17.6	19.2	19.0	17.8	19.2	18.7	15.9	11.2	5.5	4.0	9.3	6.9	6.7	4.0	19.2	12.5
Aug 13	7.8	9.7	8.9	12.1	9.3	8.5	8.3	12.5	15.5	16.6	21.9	25.8	28.0	30.8	31.7	30.4	29.8	27.4	23.2	18.9	15.5	16.8	13.0	13.2	7.8	31.7	**18.2**
Aug 14	13.7	10.5	9.1	11.1	7.9	9.1	1.2	1.7	1.3	4.2	5.2	6.5	7.4	12.4	13.1	18.2	19.4	17.9	11.9	4.8	0.8	5.0	7.1	7.4	0.8	19.4	8.6
Aug 15	6.5	6.7	9.6	10.8	8.5	7.3	6.6	8.1	11.1	13.7	16.7	13.4	13.9	15.0	26.6	24.9	**32.6**	26.1	12.3	15.0	6.7	5.4	4.4	5.0	4.4	**32.6**	12.8
Aug 16	7.5	7.5	5.4	3.5	2.5	1.2	1.6	4.9	4.4	6.3	6.8	12.7	16.7	16.6	17.9	18.0	17.1	14.1	7.7	4.8	8.2	9.8	7.7	6.9	1.2	18.0	8.7
Aug 17	4.3	6.2	5.1	1.7	6.7	8.8	6.8	9.9	16.6	20.1	K	K	16.3	17.7	16.8	16.4	16.2	16.2	9.0	8.8	6.6	11.4	11.1	13.1	1.7	20.1	11.2
Aug 18	7.3	8.0	11.7	9.1	7.6	7.1	14.7	13.1	15.0	17.1	15.6	11.3	11.2	16.0	18.4	14.4	13.0	15.0	10.6	8.4	7.1	6.6	4.4	6.4	4.4	18.4	11.2
Aug 19	3.3	4.4	3.9	5.7	5.5	5.9	4.8	6.3	8.3	8.3	11.8	10.1	9.8	12.2	12.2	10.9	12.1	13.5	13.8	8.7	10.7	11.4	12.3	12.5	3.3	13.8	9.1
Aug 20	13.5	13.7	12.8	10.8	10.7	10.9	13.5	11.7	11.7	12.2	10.3	10.1	7.8	10.0	9.5	10.4	9.4	11.2	11.4	9.3	10.7	12.1	13.1	12.4	7.8	13.7	11.2
Aug 21	10.8	10.9	11.2	11.6	10.9	11.3	11.4	11.3	14.6	17.9	14.7	15.8	15.5	17.6	16.2	15.8	14.0	15.5	12.3	9.5	8.3	11.5	12.7	12.2	8.3	17.9	13.1
Aug 22	13.8	12.4	12.5	11.0	12.0	10.8	11.3	6.0	4.3	7.5	14.4	14.1	12.1	11.7	8.9	8.6	9.3	10.3	9.3	6.9	4.3	1.4	3.6	3.3	1.4	14.4	9.2
Aug 23	5.2	5.5	7.4	6.2	5.6	5.5	6.0	8.2	9.7	9.1	10.3	12.9	12.4	12.6	11.7	11.1	11.5	11.0	10.6	12.8	14.9	16.6	14.3	9.2	5.2	16.6	10.0
Aug 24	7.1	8.8	9.5	11.2	13.1	12.2	10.8	10.0	7.4	8.5	8.0	4.0	2.6	1.8	0.8	2.6	6.6	9.2	8.7	10.3	10.6	12.2	10.5	10.6	0.8	13.1	8.2
Aug 25	11.2	12.5	12.0	10.9	12.4	12.8	13.2	13.6	15.0	15.1	12.1	10.8	11.0	10.5	10.2	10.7	11.2	11.8	9.8	5.8	8.6	9.8	10.4	12.4	5.8	15.1	11.4
Aug 26	13.0	13.2	13.6	11.0	10.5	10.3	10.3	12.1	13.2	14.5	15.9	15.6	15.0	15.9	16.0	15.4	13.8	11.2	10.1	7.4	4.6	0.4	2.6	2.5	0.4	16.0	11.2
Aug 27	0.6	2.6	3.8	3.7	7.0	7.4	9.7	9.9	12.5	12.4	11.2	13.2	16.8	19.7	20.2	18.7	16.8	14.1	11.4	9.8	10.1	9.1	5.7	8.2	0.6	20.2	10.6
Aug 28	9.1	10.2	11.7	11.3	9.0	9.1	9.2	9.6	11.5	11.9	12.2	11.9	12.5	12.6	13.2	13.8	13.4	10.1	8.3	10.9	13.8	14.8	14.7	15.3	8.3	15.3	11.7
Aug 29	12.8	11.4	11.2	9.8	9.5	11.3	11.5	12.6	14.0	13.9	12.6	12.1	12.3	11.0	9.3	7.0	9.0	5.8	1.5	0.9	1.6	1.7	1.2	2.2	0.9	14.0	8.6
Aug 30	1.6	2.9	1.4	1.9	4.3	5.7	4.6	6.0	6.8	10.3	10.0	10.3	9.8	10.8	13.1	12.2	10.3	11.9	7.7	4.3	4.9	10.6	14.1	18.1	1.4	18.1	8.1
Aug 31	17.6	12.4	10.5	12.1	10.1	11.4	11.0	14.3	17.9	15.4	9.5	8.0	8.7	12.9	13.3	10.9	11.1	9.3	4.1	2.3	2.9	1.0	2.7	3.3	1.0	17.9	9.7
Diurnal Maximum	17.6	13.7	14.2	12.8	13.1	13.9	16.9	17.8	17.9	20.2	23.5	25.8	28.0	30.8	31.7	30.4	32.6	27.4	23.2	18.9	15.5	16.8	14.7	18.1			
Diurnal Average	7.7	8.2	8.2	8.0	7.8	8.1	8.5	9.6	10.7	11.7	11.5	11.4	12.3	13.3	13.7	13.8	13.4	12.2	9.7	7.6	7.0	7.6	7.6	8.0			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



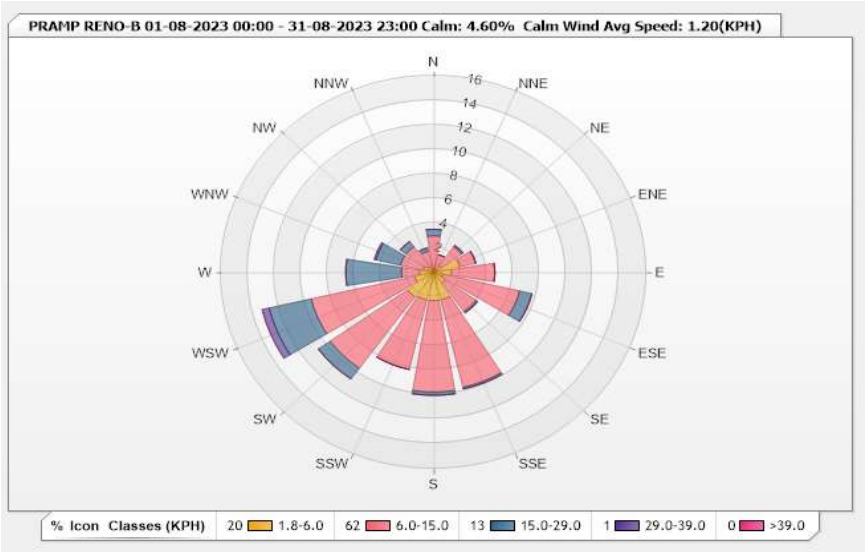


Station: PRAMP RENO-B Poll.: PRAMP RENO-B-WDS[KPH] Monthly: 08-2023

Type: Wind Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm (WS<1.8kph): 0.046 Valid Data: 0.9933

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	0.27	2.71	0.54	0	0	3.52
NNE	0.27	1.22	0	0	0	1.49
NE	0.68	1.89	0.14	0	0	2.71
ENE	2.03	1.22	0	0	0	3.25
E	1.35	3.25	0	0	0	4.6
ESE	0.68	5.96	0.95	0	0	7.58
SE	1.08	2.84	0.14	0	0	4.06
SSE	2.3	7.31	0.14	0	0	9.75
S	2.3	7.44	0.27	0	0	10.01
SSW	2.3	5.82	0	0	0	8.12
SW	2.44	7.17	1.08	0	0	10.69
WSW	1.49	7.98	3.25	0.54	0	13.26
W	1.08	1.35	4.19	0	0	6.62
WNW	0.81	1.76	1.89	0.14	0	4.6
NW	0.54	2.03	0.54	0	0	3.11
NNW	0	1.76	0.27	0	0	2.03
Summary	19.62	61.7	13.4	0.68	0	95.4



Peace River Area Monitoring Program

Reno-B Station - August 2023

Summary of Hourly Averages

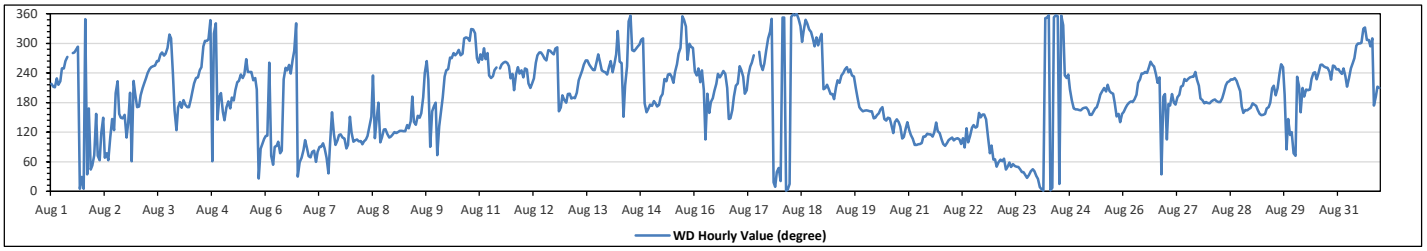
WIND DIRECTION (VWD) in sector

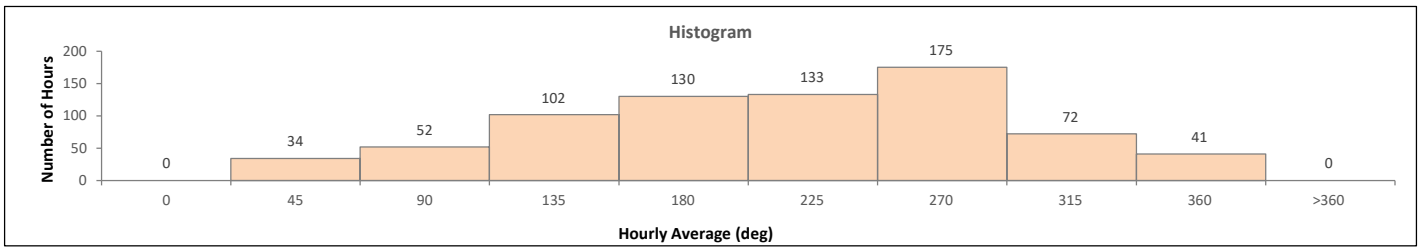
Monthly Average:	220 (SW)	degree	
Hours in Service:	744		
Hours of Data:	739		
Hours of Missing Data:	3		
Hours of Calibration:	2		
Operational Uptime:	99.6		

Day	Hourly Period Starting at (MST)																						Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant
Aug 1	SW	SSW	SSW	SW	SW	SW	WSW	WSW	W	W	C	C	W	W	WNW	WNW	N	NNE	N	NNW	NE	SSE	NE	NE	276	W
Aug 2	ENE	SSE	ENE	ENE	ESE	SSE	ENE	ENE	ENE	ESE	SE	ESE	SSW	SW	SSE	SSE	SE	SSE	ESE	SE	SSW	ENE	SW	SSW	148	SE
Aug 3	S	S	SSW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	W	WNW	NW	NW	SW	SSE	ESE	SSE	256	WSW
Aug 4	S	SSE	S	S	S	S	S	SSW	SW	SW	SW	WSW	WSW	WNW	WNW	WNW	NW	NNW	ENE	NW	NNW	SE	S	SSW	243	WSW
Aug 5	SSE	SE	SSE	S	SSE	S	S	SSW	SW	SW	SW	SW	SW	W	WSW	WSW	WSW	SW	SW	SSW	NNE	E	E	ESE	207	SSW
Aug 6	ESE	ESE	W	ENE	NE	E	E	E	ENE	E	SW	WSW	WSW	WSW	WSW	W	WNW	NNW	NNE	ENE	ENE	E	ESE	E	94	E
Aug 7	ENE	ENE	E	E	ENE	E	E	E	E	E	ENE	NE	E	SSE	ESE	E	ESE	ESE	ESE	ESE	ESE	E	E	SSE	92	E
Aug 8	ESE	E	ESE	ESE	E	E	E	E	ESE	ESE	SE	SSE	SW	ESE	SSE	S	E	ESE	SE	SE	ESE	ESE	ESE	ESE	113	ESE
Aug 9	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SE	SE	SE	S	SE	SE	SSE	SSE	SSE	S	WSW	W	SW	E	SSE	S	S	141	SE
Aug 10	ENE	SE	SSE	S	SW	WSW	WSW	W	W	W	W	W	WNW	W	W	NW	NW	NW	WNW	NNW	NNW	NW	W	W	284	WNW
Aug 11	W	W	WNW	W	W	SW	SW	SW	WSW	WSW	K	WSW	WSW	W	W	WSW	WSW	SW	SW	SSW	SW	WSW	WSW	WSW	251	WSW
Aug 12	SW	WSW	WSW	SW	SSW	SW	SW	W	W	W	W	W	W	W	WNW	WNW	W	W	WNW	WNW	SSE	SSE	SSW	S	261	W
Aug 13	S	SSW	SSW	S	S	S	SSW	SW	SW	WSW	WSW	W	W	WSW	WSW	WSW	WSW	W	W	W	WSW	WSW	WSW	SW	245	WSW
Aug 14	WSW	W	WSW	WSW	W	NW	W	WSW	SSE	SSW	WSW	NNW	N	WNW	WNW	WNW	WNW	WNW	NW	NW	S	SSE	SSE	S	278	W
Aug 15	S	S	S	S	S	S	SSW	SW	SW	SW	SW	SW	SW	WSW	WSW	W	WNW	N	NNW	NNW	W	WNW	WNW	WNW	257	WSW
Aug 16	WSW	SW	WSW	SW	WSW	SSW	ESE	SSW	SSE	S	S	SSW	SW	SW	SW	SW	WSW	SW	SSW	SE	SE	SSE	S	SSW	216	SW
Aug 17	SW	WSW	WSW	SW	SSW	SSW	SW	WSW	W	W	K	K	W	WSW	WSW	WSW	WNW	NW	NW	N	NNE	N	NE	NE	280	W
Aug 18	NNE	N	N	N	N	NNE	N	N	N	N	N	NNW	WNW	NW	NNW	NNW	NNW	NW	NW	WNW	NW	WNW	NW	NW	340	NNW
Aug 19	SSW	SSW	SW	SSW	SSW	SSW	S	SSW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	SW	SW	SSW	S	S	SSE	SSE	SSE	213	SSW
Aug 20	SSE	SSE	SSE	SSE	SE	SSE	SSE	SSE	SSE	S	SE	SE	SSE	SE	SE	ESE	SE	SE	SE	SE	ESE	ESE	SE	SE	146	SE
Aug 21	ESE	ESE	ESE	E	E	E	E	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SE	ESE	ESE	ESE	E	E	E	ESE	ESE	110	ESE
Aug 22	ESE	ESE	ESE	ESE	ESE	E	ESE	E	SE	E	ESE	SE	SE	SE	SE	SSE	SSE	SSE	SSE	SE	ESE	ENE	E	ENE	120	ESE
Aug 23	ENE	NE	ENE	ENE	ENE	ENE	NE	NE	ENE	NE	NE	NE	NE	NE	NE	NE	NE	NNE	NNE	NNE	NE	NE	NE	NNE	46	NE
Aug 24	NNE	N	N	N	N	N	N	N	N	N	N	N	NNE	N	NNW	SW	SW	SW	SSW	S	SSE	SSE	SSE	SSE	349	NNW
Aug 25	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	SSW	SSW	SSW	SSW	SW	SSW	SSW	SSW	S	SSE	SSE	SE	SSE	176	S
Aug 26	SSE	SSE	S	S	S	S	S	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	SW	SW	SW	NE	S	SSW	219	SW
Aug 27	ESE	S	S	SSW	S	S	S	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	WSW	SW	SSW	S	S	S	S	S	213	SSW
Aug 28	S	S	S	S	S	S	S	S	SSW	SSW	SW	SW	SW	SW	SW	SW	SSW	SSW	S	SSE	SSE	SSE	SSE	SSE	194	SSW
Aug 29	S	S	S	SSE	SSE	SSE	SSE	SSE	SSE	S	S	SSW	SSW	SSW	SSW	WSW	WSW	WSW	SSW	E	SE	ESE	ESE	ENE	182	S
Aug 30	ENE	SW	SSW	SSE	SSW	S	SSW	SSW	SSW	SW	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW	239	WSW
Aug 31	WSW	WSW	SW	WSW	SW	SSW	SW	WSW	WSW	W	WNW	WNW	WNW	WNW	NNW	NNW	NW	NW	WNW	NW	S	S	SSW	SSW	268	W

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Machine Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.





Peace River Area Monitoring Program

Reno-B Station - August 2023

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr & WIND DIRECTION (VWD) in sector

WIND SPEED

Maximum Hourly Value:	32.6	kph	on Aug 15 at hr 16	Hours in Service:	744
Maximum Daily Value:	18.2	kph	on Aug 13	Hours of Data:	739
Minimum Hourly Value:	0.3	kph	on Aug 3 at hr 21	Hours of Missing Data:	3
Minimum Daily Value:	4.6	kph	on Aug 2	Hours of Calibration:	2
Monthly Average:	3.7	kph		Operational Uptime:	99.6

WIND DIRECTION

Monthly Average: 220 degree (SW)

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	7.6	7.5	6.1	7.4	7.1	8.3	8.8	10.2	10.9	13.0	C	C	14.5	17.2	17.5	18.9	12.5	8.2	5.1	7.3	2.5	3.4	2.6	4.3	2.5	18.9	9.1
	SW	SSW	SSW	SW	SW	SW	WSW	WSW	W	W	C	C	W	W	WNW	WNW	N	NNE	N	NNW	NE	SSE	NE	NE			
Aug 2	2.0	3.4	5.7	4.5	0.8	0.4	1.8	2.6	2.6	2.6	2.4	2.4	6.2	3.7	8.1	8.7	6.0	5.9	3.0	6.1	13.3	7.0	5.7	6.4	0.4	13.3	**4.6**
	ENE	SSE	ENE	ENE	ESE	SSE	ENE	ENE	ENE	ESE	SE	ESE	SSW	SW	SSE	SSE	SE	SSE	ESE	SE	SSW	ENE	SW	SSW			
Aug 3	5.8	6.6	8.4	11.5	12.1	13.9	16.9	17.8	17.9	20.2	23.5	21.9	20.9	23.1	21.2	20.9	17.2	13.5	12.1	5.7	3.1	**0.3**	2.6	6.3	**0.3**	23.5	13.5
	S	S	SSW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	W	WNW	NW	NW	SW	SSE	ESE	SSE			
Aug 4	4.4	4.8	3.8	5.1	8.0	7.6	8.8	11.2	9.9	8.1	8.1	10.2	12.1	14.6	10.3	14.9	14.4	8.2	7.3	1.3	1.2	3.0	2.8	1.1	1.1	14.9	7.6
	S	SSE	S	S	S	S	S	SSW	SW	SW	SW	WSW	WSW	WNW	WNW	WNW	NW	NNW	ENE	NW	NNW	SE	S	SSW			
Aug 5	3.2	1.9	4.3	4.2	3.2	4.7	3.4	5.0	3.9	4.5	7.0	5.9	5.8	5.4	5.4	6.2	6.7	6.1	5.9	3.6	1.3	4.2	6.8	7.6	1.3	7.6	4.8
	SSE	SE	SSE	S	SSE	S	S	SSW	SW	SW	SW	SW	SW	W	WSW	WSW	WSW	SW	SW	SSW	NNE	E	E	ESE			
Aug 6	8.8	8.5	0.8	2.0	1.5	3.6	3.4	2.8	1.8	1.4	5.2	7.0	6.8	7.0	7.2	8.5	8.6	7.4	6.0	6.3	6.0	4.7	7.1	6.6	0.8	8.8	5.4
	ESE	ESE	W	ENE	NE	E	E	E	ENE	E	SW	WSW	WSW	WSW	WSW	W	WNW	NNW	NNE	ENE	ENE	E	ESE	E			
Aug 7	8.0	7.3	6.1	4.7	5.1	5.7	6.7	8.9	7.4	9.3	7.8	5.7	4.0	1.9	4.2	10.6	9.3	8.0	9.8	9.2	7.6	7.2	9.1	4.9	1.9	10.6	7.0
	ENE	ENE	E	E	ENE	E	E	E	E	E	ENE	NE	E	SSE	ESE	E	ESE	ESE	ESE	ESE	ESE	E	E	SSE			
Aug 8	5.4	13.4	14.2	12.8	11.5	10.8	10.8	14.9	14.9	15.4	11.6	6.9	8.0	1.4	2.4	1.8	0.5	8.6	10.3	7.9	7.8	8.8	9.3	10.6	0.5	15.4	9.2
	ESE	E	ESE	ESE	E	E	E	E	ESE	ESE	SE	SSE	SW	ESE	SSE	S	E	ESE	SE	SE	ESE	ESE	ESE	ESE			
Aug 9	11.1	11.3	12.0	11.5	9.6	9.6	11.5	10.9	10.8	7.2	6.5	5.1	5.6	5.4	6.1	6.2	6.9	6.4	4.4	2.7	3.0	3.5	4.9	3.9	2.7	12.0	7.3
	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SE	SE	SE	S	SE	SE	SSE	SSE	SSE	S	WSW	W	SW	E	SSE	S	S			
Aug 10	3.7	5.5	6.8	9.0	9.2	7.4	10.4	12.9	15.1	20.0	13.6	16.7	22.1	26.2	24.0	17.5	20.1	14.7	17.4	11.3	12.3	9.8	6.0	5.1	3.7	26.2	13.2
	ENE	SE	SSE	S	SW	WSW	WSW	W	W	W	W	W	WNW	W	W	NW	NW	NW	WNW	NNW	NNW	NW	W	W			
Aug 11	3.7	4.2	5.6	3.0	2.8	3.4	4.7	6.3	8.9	9.4	K	12.5	16.7	19.0	20.6	23.0	19.4	14.8	13.7	9.1	4.6	5.4	6.7	9.1	2.8	23.0	9.9
	W	W	WNW	W	W	SW	SW	SW	WSW	WSW	K	WSW	WSW	W	W	WSW	WSW	SW	SW	SSW	SW	WSW	WSW	WSW			
Aug 12	9.7	11.0	8.4	8.3	8.6	10.1	9.2	13.3	16.7	17.1	17.4	17.6	19.2	19.0	17.8	19.2	18.7	15.9	11.2	5.5	4.0	9.3	6.9	6.7	4.0	19.2	12.5
	SW	WSW	WSW	SW	SSW	SW	SW	W	W	W	W	W	W	W	WNW	WNW	W	W	WNW	WNW	SSE	SSE	SSW	S			
Aug 13	7.8	9.7	8.9	12.1	9.3	8.5	8.3	12.5	15.5	16.6	21.9	25.8	28.0	30.8	31.7	30.4	29.8	27.4	23.2	18.9	15.5	16.8	13.0	13.2	7.8	31.7	**18.2**
	S	SSW	SSW	S	S	S	SSW	SW	SW	WSW	WSW	W	W	WSW	WSW	WSW	WSW	W	W	W	WSW	WSW	WSW	SW			
Aug 14	13.7	10.5	9.1	11.1	7.9	9.1	1.2	1.7	1.3	4.2	5.2	6.5	7.4	12.4	13.1	18.2	19.4	17.9	11.9	4.8	0.8	5.0	7.1	7.4	0.8	19.4	8.6
	WSW	W	WSW	WSW	W	NW	W	WSW	SSE	SSW	WSW	NNW	N	WNW	WNW	WNW	WNW	WNW	NW	NW	S	SSE	SSE	S			
Aug 15	6.5	6.7	9.6	10.8	8.5	7.3	6.6	8.1	11.1	13.7	16.7	13.4	13.9	15.0	26.6	24.9	**32.6**	26.1	12.3	15.0	6.7	5.4	4.4	5.0	4.4	**32.6**	12.8
	S	S	S	S	S	S	SSW	SW	SW	SW	SW	SW	SW	WSW	WSW	W	WNW	N	NNW	NNW	W	WNW	WNW	WNW			
Aug 16	7.5	7.5	5.4	3.5	2.5	1.2	1.6	4.9	4.4	6.3	6.8	12.7	16.7	16.6	17.9	18.0	17.1	14.1	7.7	4.8	8.2	9.8	7.7	6.9	1.2	18.0	8.7
	WSW	SW	WSW	SW	WSW	SSW	ESE	SSW	SSE	S	S	SSW	SW	SW	SW	SW	WSW	SW	SSW	SE	SE	SSE	S	SSW			
Aug 17	4.3	6.2	5.1	1.7	6.7	8.8	6.8	9.9	16.6	20.1	K	K	16.3	17.7	16.8	16.4	16.2	16.2	9.0	8.8	6.6	11.4	11.1	13.1	1.7	20.1	11.2
	SW	WSW	WSW	SW	SSW	SSW	SW	WSW	W	W	K	K	W	WSW	WSW	WSW	WNW	NW	NW	N	NNE	N	NE	NE			
Aug 18	7.3	8.0	11.7	9.1	7.6	7.1	14.7	13.1	15.0	17.1	15.6	11.3	11.2	16.0	18.4	14.4	13.0	15.0	10.6	8.4	7.1	6.6	4.4	6.4	4.4	18.4	11.2
	NNE	N	N	N	N	NNE	N	N	N	N	N	NNW	WNW	NW	NNW	NNW	NNW	NW	NW	WNW	NW	WNW	NW	NW			
Aug 19	3.3	4.4	3.9	5.7	5.5	5.9	4.8	6.3	8.3	8.3	11.8	10.1	9.8	12.2	12.2	10.9	12.1	13.5	13.8	8.7	10.7	11.4	12.3	12.5	3.3	13.8	9.1
	SSW	SSW	SW	SSW	SSW	SSW	S	SSW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	SW	SW	SSW	S	S	SSE	SSE	SSE			
Aug 20	13.5	13.7	12.8	10.8	10.7	10.9	13.5	11.7	11.7	12.2	10.3	10.1	7.8	10.0	9.5	10.4	9.4	11.2	11.4	9.3	10.7	12.1	13.1	12.4	7.8	13.7	11.2
	SSE	SSE	SSE	SSE	SE	SSE	SSE	SSE	SSE	S	SE	SE	SSE	SE	SE	ESE	SE	SE	SE	SE	ESE	ESE	SE	SE			
Aug 21	10.8	10.9	11.2	11.6	10.9	11.3	11.4	11.3	14.6	17.9	14.7	15.8	15.5	17.6	16.2	15.8	14.0	15.5	12.3	9.5	8.3	11.5	12.7	12.2	8.3	17.9	13.1
	ESE	ESE	ESE	E	E	E	E	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SE	ESE	ESE	ESE	E	E	E	ESE	ESE			
Aug 22	13.8	12.4	12.5	11.0	12.0	10.8	11.3	6.0	4.3	7.5	14.4	14.1	12.1	11.7	8.9	8.6	9.3	10.3	9.3	6.9	4.3	1.4	3.6	3.3	1.4	14.4	9.2
	ESE	ESE	ESE	ESE	ESE	E	ESE	E	SE	E	ESE	SE	SE	SE	SE	SSE	SSE	SSE	SSE	SE	ESE	ENE	E	ENE			
Aug 23	5.2	5.5	7.4	6.2	5.6	5.5	6.0	8.2	9.7	9.1	10.3	12.9	12.4	12.6	11.7	11.1	11.5	11.0	10.6	12.8	14.9	16.6	14.3	9.2	5.2	16.6	10.0
	ENE	NE	ENE	ENE	ENE	ENE	NE	NE	ENE	NE	NE	NE	NE	NE	NE	NE	NE	NNE	NNE	NNE	NE	NE	NE	NNE			
Aug 24	7.1	8.8	9.5	11.2	13.1	12.2	10.8	10.0	7.4	8.5	8.0	4.0	2.6	1.8	0.8	2.6	6.6	9.2	8.7	10.3	10.6	12.2	10.5	10.6	0.8	13.1	8.2
	NNE	N	N	N	N	N	N	N	N	N	N	N	NNE	N	NNW	SW	SW	SW	SSW	S	SSE	SSE	SSE	SSE			
Aug 25	11.2	12.5	12.0	10.9	12.4	12.8	13.2	13.6	15.0	15.1	12.1	10.8	11.0	10.5	10.2	10.7	11.2	11.8	9.8	5.8	8.6	9.8	10.4	12.4	5.8	15.1	11.4
	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	SSW	SSW	SSW	SSW	SW	SSW	SSW	SSW	S	SSE	SSE	SE	SSE			
Aug 26	13.0	13.2	13.6	11.0	10.5	10.3	10.3	12.1	13.2	14.5	15.9	15.6	15.0	15.9	16.0	15.4	13.8	11.2	10.1	7.4	4.6	0.4	2.6	2.5	0.4	16.0	11.2
	SSE	SSE	S	S	S	S	S	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	SW	SW	SW	NE	S	SSW			
Aug 27	0.6	2.6	3.8	3.7	7.0	7.4	9.7	9.9	12.5	12.4	11.2	13.2	16.8	19.7	20.2	18.7	16.8	14.1	11.4	9.8	10.1	9.1	5.7	8.2	0.6	20.2	10.6
	ESE	S	S	SSW	S	S	S	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	WSW	SW	SSW	S	S	S	S	S			
Aug 28	9.1	10.2	11.7	11.3	9.0	9.1	9.2	9.6	11.5	11.9	12.2	11.9	12.5	12.6	13.2	13.8	13.4	10.1	8.3	10.9	13.8	14.8	14.7	15.3	8.3	15.3	11.7
	S	S	S	S	S	S	S	S	SSW	SSW	SW	SW	SW	SW	SW	SW	SSW	SSW	S	SSE	SSE	SSE	SSE	SSE			
Aug 29	12.8	11.4	11.2	9.8	9.5	11.3	11.5	12.6	14.0	13.9	12.6	12.1	12.3	11.0	9.3	7.0	9.0	5.8	1.5	0.9	1.6	1.7	1.2	2.2	0.9	14.0	8.6
	S	S	S	SSE	SSE	SSE	SSE	SSE	SSE	S	S	SSW	SSW	SSW	SSW	WSW	WSW	WSW	SSW	E	SE	ESE	ESE	ENE			
Aug 30	1.6	2.9	1.4	1.9	4.3	5.7	4.6	6.0	6.8	10.3	10.0	10.3	9.8	10.8	13.1	12.2	10.3	11.9	7.7	4.3	4.9	10.6	14.1	18.1	1.4	18.1	8.1
	ENE	SW	SSW	SSE	SSW	S	SSW	SSW	SSW	SW	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW			
Aug 31	17.6	12.4	10.5	12.1	10.1	11.4	11.0	14.3	17.9	15.4	9.5	8.0	8.7	12.9	13.3	10.9	11.1	9.3	4.1	2.3	2.9	1.0	2.7	3.3	1.0	17.9	9.7
	WSW	WSW	SW	WSW	SW	SSW	SW	WSW	WSW	W	WNW	WNW	WNW	WNW	NNW	NNW	NW	NW	WNW	NW	S	S	SSW	SSW			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance		
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P	Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)				

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

PRC STATION

Peace River Area Monitoring Program

Peace River Complex (PRC) Station - August 2023

Summary of Hourly Averages

SULPHUR DIOXIDE (SO_2) in ppb

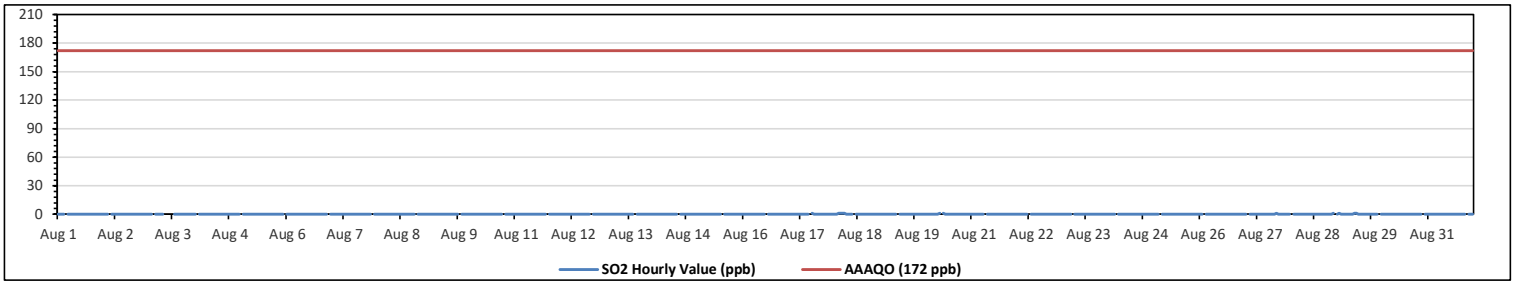
Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb

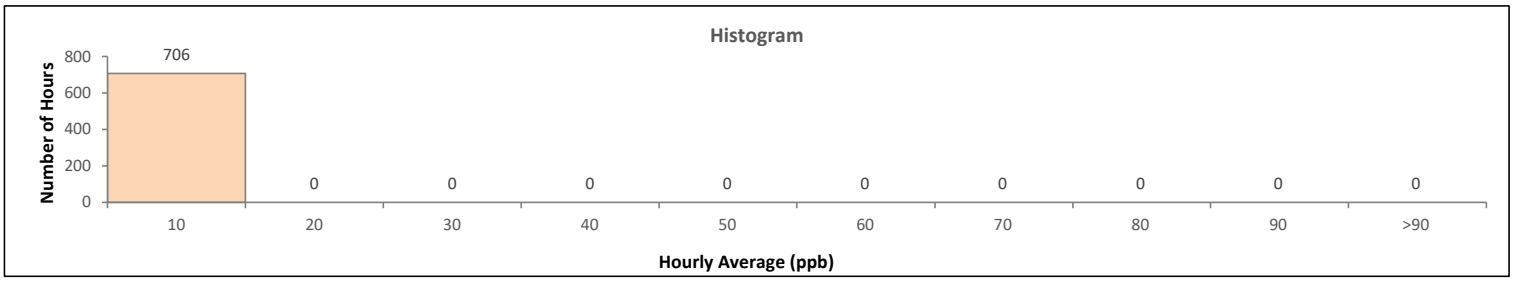
Number of 1-Hour Exceedances:	0	Number of 24-Hour Exceedances:	0	30-Day Exceedence:	0	
Maximum Hourly Value:	1	ppb	on Aug 17 at hr 12	Hours in Service:	744	
Maximum Daily Value:	0.2	ppb	on Aug 18	Hours of Data:	706	
Minimum Hourly Value:	0	ppb	on Aug 1 at hr 0	Hours of Missing Data:	0	
Minimum Daily Value:	0.0	ppb	on Aug 1	Hours of Calibration:	38	
Monthly Average:	0.0	ppb		Operational Uptime:	100.0	

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 2	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 3	0	0	S	0	0	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 4	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 5	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0.0
Aug 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0.0
Aug 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0.0
Aug 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0.0
Aug 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0.0
Aug 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0.0
Aug 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0.0
Aug 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0.0
Aug 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0.0
Aug 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 15	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 16	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 17	0	0	0	0	0	0	0	0	0	0	0	S	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0
Aug 18	0	0	1	1	1	1	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2
Aug 19	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 20	0	0	0	0	0	0	0	1	S	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1
Aug 21	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 22	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 23	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 24	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 25	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 26	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 27	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.0
Aug 28	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	S	0	1	0.0
Aug 29	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	S	0	0	1	0.1
Aug 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0.0
Aug 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0.0
Diurnal Maximum	0	1	1	1	1	1	0	1	0	1	1	0	1	0	0	0	1	0	0	0	0	0	1	0			
Diurnal Average	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	0.0			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



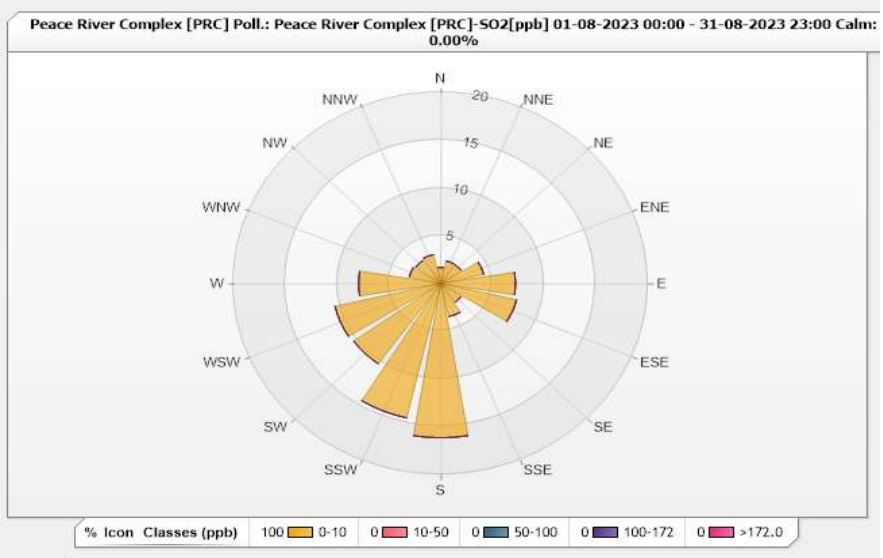


Station: Peace River Complex [PRC] Poll.: Peace River Complex [PRC]-SO2[ppb] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.89% Calm Avg: 0.00 [ppm]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	1.7	0	0	0	0	1.7
NNE	2.41	0	0	0	0	2.41
NE	2.41	0	0	0	0	2.41
ENE	4.25	0	0	0	0	4.25
E	7.22	0	0	0	0	7.22
ESE	7.51	0	0	0	0	7.51
SE	2.41	0	0	0	0	2.41
SSE	3.54	0	0	0	0	3.54
S	16.15	0	0	0	0	16.15
SSW	14.45	0	0	0	0	14.45
SW	10.34	0	0	0	0	10.34
WSW	10.48	0	0	0	0	10.48
W	7.93	0	0	0	0	7.93
WNW	3.12	0	0	0	0	3.12
NW	2.97	0	0	0	0	2.97
NNW	3.12	0	0	0	0	3.12
Summary	100	0	0	0	0	100



Peace River Area Monitoring Program

Peace River Complex (PRC) Station - August 2023

Summary of Hourly Averages

HYDROGEN SULPHIDE (H_2S) in ppb

Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 10 ppb, 24-Hour 3 ppb

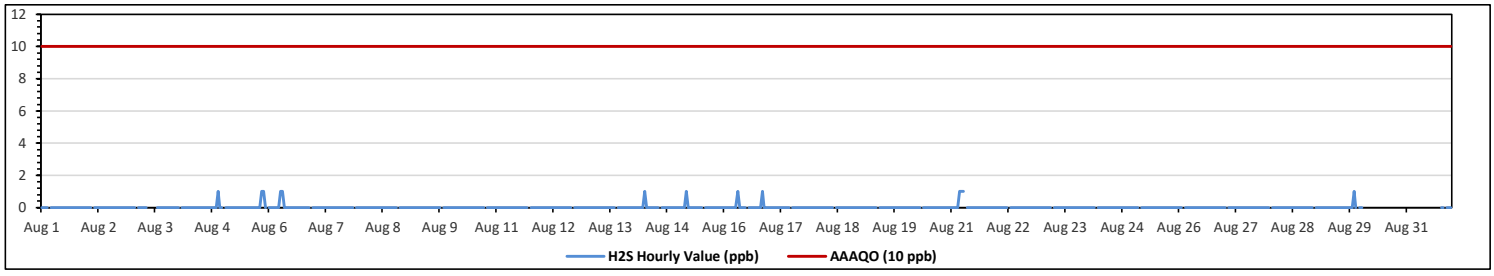
Number of 1-Hour Exceedances:	0		Number of 24-Hour Exceedances:	0		
Maximum Hourly Value:	1	ppb	on Aug 4 at hr 21	Hours in Service:	744	
Maximum Daily Value:	0.0	ppb	on Aug 1	Hours of Data:	666	
Minimum Hourly Value:	0	ppb	on Aug 1 at hr 0	Hours of Missing Data:	41	
Minimum Daily Value:	0.0	ppb	on Aug 1	Hours of Calibration:	37	
Monthly Average:	0.0	ppb		Operational Uptime:	94.5	

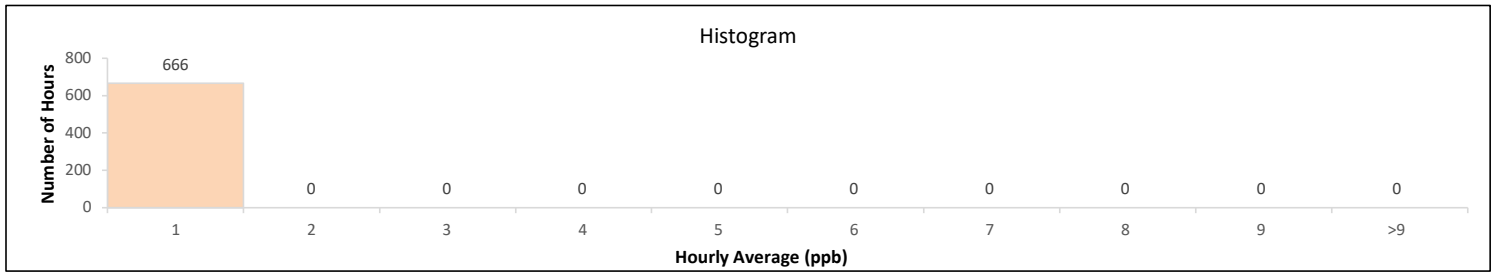
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 2	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 3	0	0	S	0	0	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 4	0	S	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
Aug 5	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	S	0	1	0.0
Aug 6	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	1	0.0
Aug 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0.0
Aug 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0.0
Aug 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0.0
Aug 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0.0
Aug 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0.0
Aug 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0.0
Aug 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0.0
Aug 14	0	0	0	0	0	0	1	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	1	0.0
Aug 15	0	0	0	0	1	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	1	0.0
Aug 16	0	0	0	0	0	0	0	1	0	0	0	0	S	0	0	0	0	0	0	0	1	0	0	0	0	1	0.0
Aug 17	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 18	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 19	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 20	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 21	0	0	0	0	1	1	1	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0
Aug 22	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 23	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 24	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 25	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 26	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 27	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 28	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0.0
Aug 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	S	0	0	1	0.0
Aug 30	0	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0	0	-
Aug 31	X	X	X	X	X	X	X	X	X	X	X	X	X	NRM	NRM	NRM	NRM	NRM	0	0	S	0	0	0	0	0	-
Diurnal Maximum	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0			
Diurnal Average	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



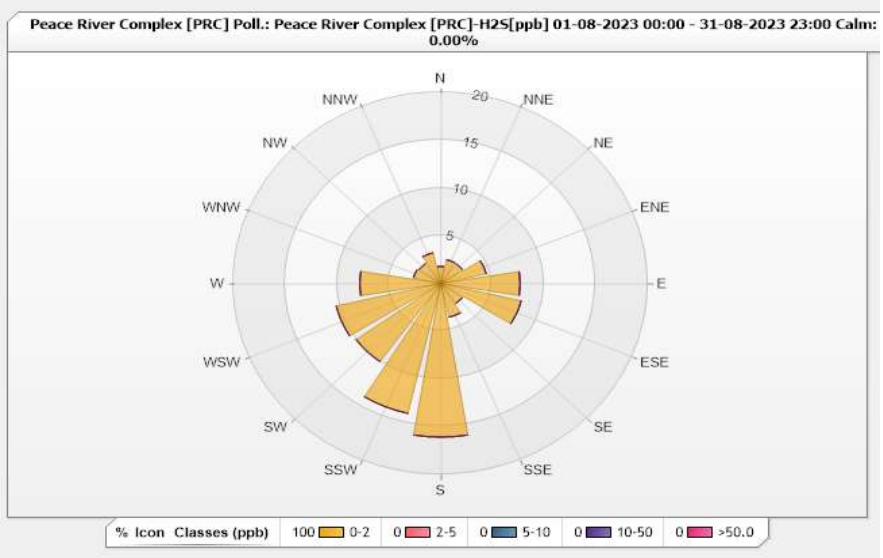


Station: Peace River Complex [PRC] Poll.: Peace River Complex [PRC]-H2S[ppb] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 89.52% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	1.8	0	0	0	0	1.8
NNE	2.55	0	0	0	0	2.55
NE	2.55	0	0	0	0	2.55
ENE	4.5	0	0	0	0	4.5
E	7.66	0	0	0	0	7.66
ESE	7.96	0	0	0	0	7.96
SE	2.55	0	0	0	0	2.55
SSE	3.6	0	0	0	0	3.6
S	16.07	0	0	0	0	16.07
SSW	13.96	0	0	0	0	13.96
SW	10.06	0	0	0	0	10.06
WSW	10.36	0	0	0	0	10.36
W	7.81	0	0	0	0	7.81
WNW	2.7	0	0	0	0	2.7
NW	2.55	0	0	0	0	2.55
NNW	3.3	0	0	0	0	3.3
Summary	100	0	0	0	0	100



Peace River Area Monitoring Program

Peace River Complex (PRC) Station - August 2023

Summary of Hourly Averages

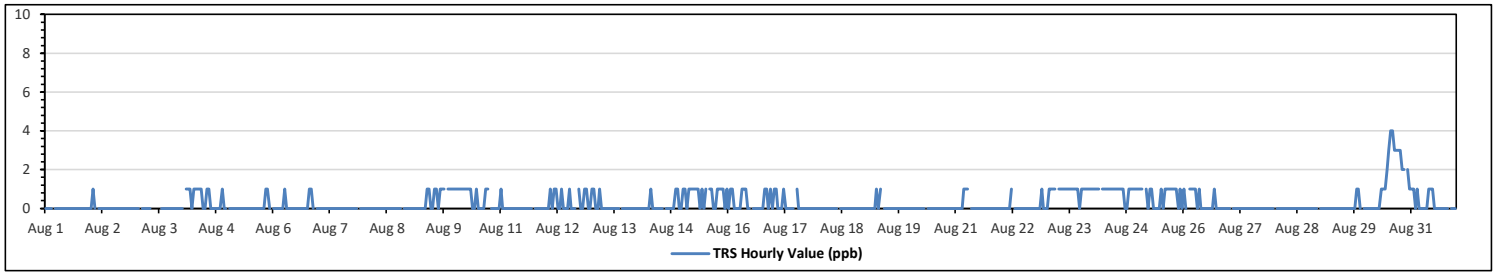
TOTAL REDUCED SULPHUR (TRS) in ppb

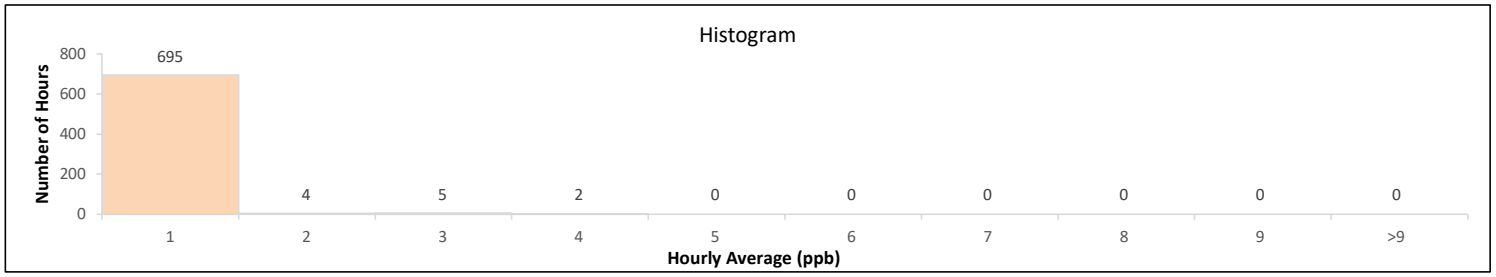
Maximum Hourly Value:	4	ppb	on Aug 30 at hr 13	Hours in Service:	744
Maximum Daily Value:	1.5	ppb	on Aug 30	Hours of Data:	706
Minimum Hourly Value:	0	ppb	on Aug 1 at hr 0	Hours of Missing Data:	0
Minimum Daily Value:	0.0	ppb	on Aug 1	Hours of Calibration:	38
Monthly Average:	0.3	ppb		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 2	0	1	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0
Aug 3	0	0	S	0	0	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 4	0	S	1	1	1	0	1	1	1	1	1	0	0	1	1	0	0	0	0	0	0	1	0	0	0	1	0.5
Aug 5	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	S	0	1	0.1
Aug 6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	S	0	0	1	0.1
Aug 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0.0
Aug 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0.0
Aug 9	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	1	1	1	S	1	1	1	1	0	1	0.5
Aug 10	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0	1	1	S	0	0	0	0	0	0	1	0.5
Aug 11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	1	0.0
Aug 12	0	0	1	0	1	1	0	0	1	0	0	0	1	0	0	0	S	1	0	0	1	1	0	0	0	1	0.3
Aug 13	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	1	0.1
Aug 14	0	0	0	0	0	0	0	1	0	0	0	0	0	0	S	0	0	0	0	0	1	1	0	0	0	1	0.1
Aug 15	1	1	0	1	1	1	1	1	1	0	1	0	1	S	1	1	0	0	1	1	1	1	0	1	0	1	0.7
Aug 16	0	1	1	0	0	0	0	1	1	1	0	0	S	0	0	0	0	0	0	1	1	0	1	0	0	1	0.3
Aug 17	1	1	0	0	0	1	0	0	0	0	0	S	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2
Aug 18	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 19	0	0	0	0	0	0	1	0	1	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1
Aug 20	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 21	0	0	0	0	1	1	1	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1
Aug 22	0	0	0	0	0	1	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.1
Aug 23	0	1	1	1	1	S	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	0.9
Aug 24	1	1	1	1	S	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	0	1	0.9
Aug 25	1	1	1	S	1	0	1	1	0	0	0	0	1	0	1	1	1	1	1	1	1	1	0	1	0	1	0.7
Aug 26	1	0	S	1	1	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.3
Aug 27	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 28	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0.0
Aug 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	S	0	0	1	0.1
Aug 30	0	0	0	0	0	0	0	0	1	1	1	2	3	4	4	3	3	3	3	2	2	S	2	1	0	4	1.5
Aug 31	1	1	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	S	0	0	0	0	1	0.3
Diurnal Maximum	1	1	1	1	1	1	1	1	1	1	1	2	3	4	4	3	3	3	3	2	2	1	2	1			
Diurnal Average	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.4	0.3	0.2	0.2			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



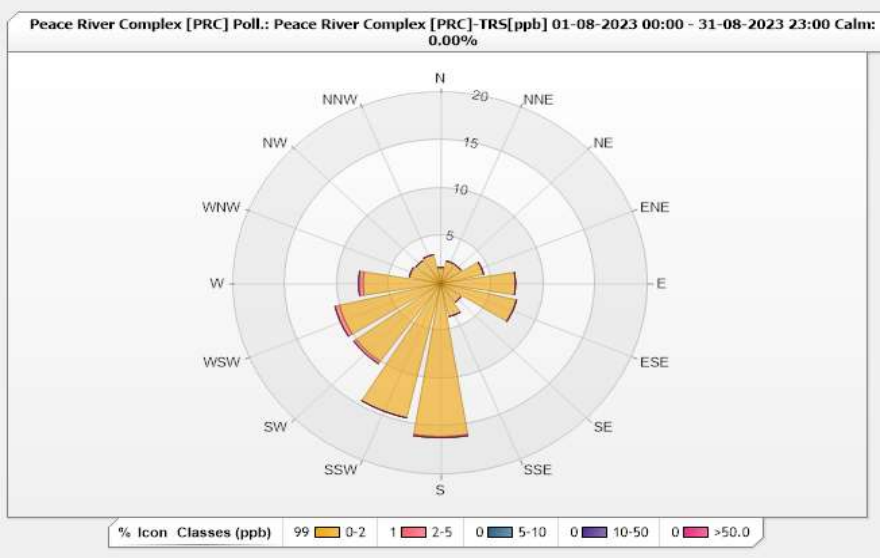


Station: Peace River Complex [PRC] Poll.: Peace River Complex [PRC]-TRS[ppb] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.89% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	1.7	0	0	0	0	1.7
NNE	2.41	0	0	0	0	2.41
NE	2.41	0	0	0	0	2.41
ENE	4.25	0	0	0	0	4.25
E	7.22	0	0	0	0	7.22
ESE	7.51	0	0	0	0	7.51
SE	2.41	0	0	0	0	2.41
SSE	3.54	0	0	0	0	3.54
S	16.01	0.14	0	0	0	16.15
SSW	14.45	0	0	0	0	14.45
SW	10.06	0.28	0	0	0	10.34
WSW	10.06	0.42	0	0	0	10.48
W	7.51	0.42	0	0	0	7.93
WNW	3.12	0	0	0	0	3.12
NW	2.97	0	0	0	0	2.97
NNW	3.12	0	0	0	0	3.12
Summary	98.75	1.26	0	0	0	100



Peace River Area Monitoring Program

Peace River Complex (PRC) Station - August 2023

Summary of Hourly Averages

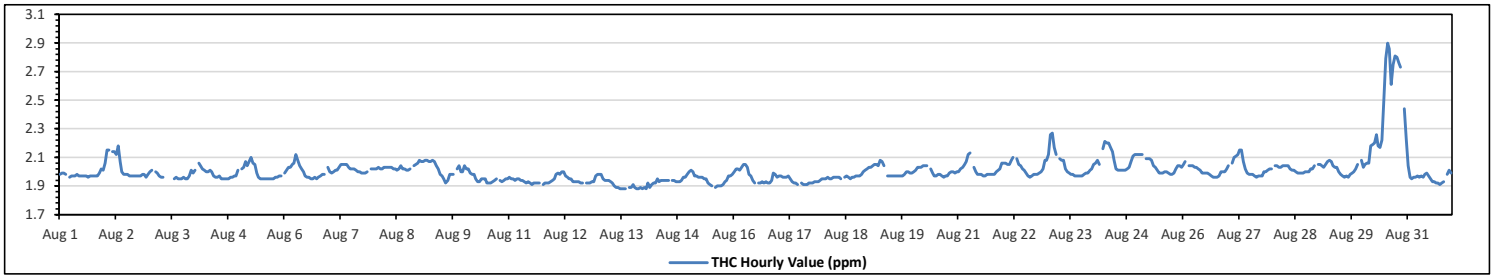
TOTAL HYDROCARBONS (THC) in ppm

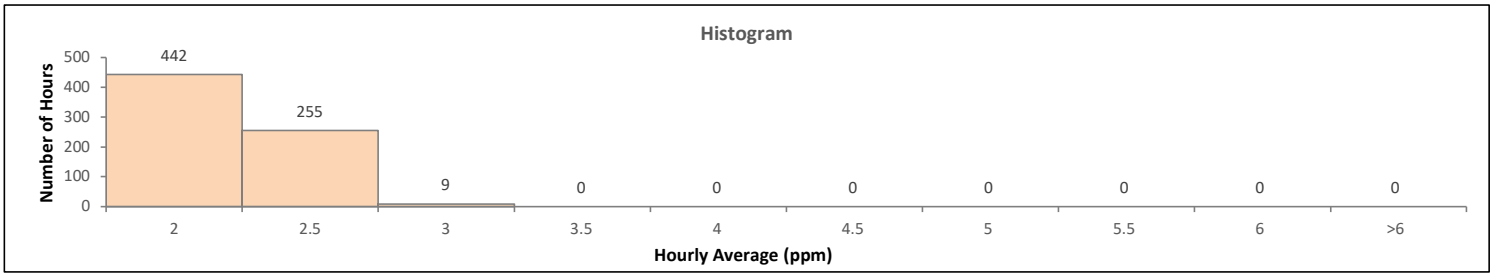
Maximum Hourly Value:	2.90	ppm	on Aug 30 at hr 13	Hours in Service:	744
Maximum Daily Value:	2.43	ppm	on Aug 30	Hours of Data:	706
Minimum Hourly Value:	1.88	ppm	on Aug 13 at hr 11	Hours of Missing Data:	0
Minimum Daily Value:	1.91	ppm	on Aug 13	Hours of Calibration:	38
Monthly Average:	2.01	ppm		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	1.98	1.99	1.99	1.98	S	1.96	1.97	1.97	1.97	1.98	1.97	1.97	1.97	1.97	1.97	1.96	1.97	1.97	1.97	1.97	1.97	1.99	2.02	2.01	1.96	2.02	1.98
Aug 2	2.06	2.15	2.15	S	2.14	2.14	2.12	2.18	2.07	2.00	1.98	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.98	1.96	1.98	1.96	2.18	2.03
Aug 3	2.00	2.01	S	2.00	1.99	1.97	1.96	1.96	C	C	C	C	C	1.95	1.96	1.95	1.95	1.95	1.96	1.95	1.95	1.97	2.01	1.99	1.95	2.01	1.97
Aug 4	2.01	S	2.06	2.04	2.02	2.01	2.00	2.00	2.01	2.00	1.97	1.96	1.96	1.97	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.97	1.97	2.01	1.95	2.06	1.98
Aug 5	S	2.02	2.03	2.07	2.04	2.07	2.10	2.06	2.05	1.99	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.97	1.97	S	1.95	2.10	1.99
Aug 6	1.99	2.01	2.03	2.03	2.05	2.06	2.12	2.08	2.04	2.02	2.00	1.97	1.96	1.96	1.95	1.95	1.96	1.95	1.96	1.97	1.98	1.98	S	2.03	1.95	2.12	2.00
Aug 7	2.00	1.99	2.00	2.01	2.01	2.03	2.05	2.05	2.05	2.05	2.03	2.02	2.02	2.02	2.01	2.00	2.00	1.99	1.99	1.99	2.00	S	2.02	2.02	1.99	2.05	2.02
Aug 8	2.02	2.02	2.03	2.02	2.02	2.03	2.03	2.03	2.03	2.03	2.02	2.02	2.01	2.02	2.04	2.02	2.02	2.01	2.01	2.02	S	2.04	2.05	2.06	2.01	2.06	2.03
Aug 9	2.08	2.07	2.07	2.08	2.08	2.07	2.07	2.08	2.07	2.04	2.02	1.98	1.97	1.95	1.92	1.94	1.98	1.98	1.98	S	2.02	2.04	2.00	2.00	1.92	2.08	2.02
Aug 10	2.04	2.02	2.02	1.99	1.98	1.98	1.95	1.93	1.93	1.95	1.95	1.95	1.92	1.92	1.92	1.93	1.94	1.95	S	1.94	1.93	1.94	1.95	1.95	1.92	2.04	1.96
Aug 11	1.96	1.95	1.95	1.94	1.95	1.95	1.94	1.94	1.93	1.92	1.93	1.92	1.91	1.92	1.92	1.92	1.92	S	1.91	1.92	1.92	1.92	1.93	1.94	1.91	1.96	1.93
Aug 12	1.95	1.98	1.99	1.98	2.00	2.00	1.97	1.96	1.95	1.95	1.93	1.93	1.93	1.93	1.92	1.92	S	1.92	1.92	1.92	1.93	1.93	1.97	1.98	1.92	2.00	1.95
Aug 13	1.98	1.98	1.95	1.94	1.94	1.94	1.93	1.92	1.90	1.89	1.89	1.88	1.88	1.88	1.88	S	1.89	1.89	1.91	1.89	1.88	1.88	1.89	1.88	1.88	1.98	1.91
Aug 14	1.89	1.88	1.92	1.89	1.91	1.92	1.92	1.95	1.93	1.94	1.94	1.94	1.94	1.94	S	1.94	1.94	1.93	1.93	1.93	1.94	1.96	1.96	1.98	1.88	1.98	1.93
Aug 15	2.00	2.01	2.00	1.97	1.97	1.96	1.96	1.96	1.95	1.95	1.92	1.91	1.90	S	1.89	1.90	1.90	1.90	1.91	1.93	1.94	1.97	1.97	1.98	1.89	2.01	1.95
Aug 16	2.00	2.02	2.02	2.01	2.03	2.05	2.05	2.03	1.98	1.97	1.94	1.92	S	1.92	1.92	1.93	1.92	1.93	1.92	1.92	1.94	1.99	1.98	1.96	1.92	2.05	1.97
Aug 17	1.97	1.97	1.96	1.96	1.96	1.97	1.95	1.93	1.92	1.92	1.91	S	1.92	1.91	1.91	1.91	1.92	1.92	1.92	1.93	1.93	1.93	1.94	1.95	1.91	1.97	1.94
Aug 18	1.95	1.95	1.96	1.95	1.95	1.96	1.96	1.96	1.96	1.95	S	1.96	1.97	1.96	1.95	1.96	1.96	1.97	1.97	1.97	1.98	2.00	2.01	2.02	1.95	2.02	1.97
Aug 19	2.03	2.03	2.04	2.05	2.05	2.04	2.08	2.07	2.04	S	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	2.00	2.00	1.99	1.99	1.97	2.08	2.01
Aug 20	2.00	2.01	2.03	2.03	2.03	2.04	2.04	2.04	S	2.02	1.99	1.97	1.97	1.98	1.98	1.97	1.96	1.97	1.97	1.99	2.00	2.00	1.99	2.00	1.96	2.04	2.00
Aug 21	2.00	2.02	2.03	2.05	2.07	2.12	2.13	S	2.03	2.00	1.98	1.98	1.98	1.97	1.97	1.98	1.98	1.98	1.98	1.98	2.00	2.01	2.02	2.06	1.97	2.13	2.01
Aug 22	2.06	2.06	2.05	2.05	2.08	2.10	S	2.09	2.05	2.04	2.02	2.01	1.99	1.97	1.96	1.97	1.98	1.98	1.98	1.99	2.00	2.02	2.08	2.08	1.96	2.10	2.03
Aug 23	2.12	2.26	2.27	2.17	2.12	S	2.09	2.08	2.08	2.02	2.00	1.99	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.98	1.99	1.99	2.01	2.02	1.97	2.27	2.04
Aug 24	2.05	2.06	2.08	2.05	S	2.16	2.21	2.20	2.20	2.17	2.14	2.08	2.02	2.01	2.01	2.01	2.01	2.01	2.02	2.03	2.07	2.11	2.12	2.12	2.01	2.21	2.08
Aug 25	2.12	2.12	2.12	S	2.09	2.09	2.09	2.08	2.04	2.03	2.01	1.99	1.99	1.99	2.00	2.00	1.99	1.98	1.98	1.99	2.02	2.04	2.04	2.03	1.98	2.12	2.04
Aug 26	2.05	2.07	S	2.04	2.04	2.04	2.03	2.03	2.02	2.01	1.99	1.99	1.99	1.99	1.98	1.97	1.96	1.96	1.96	1.97	2.00	2.00	2.00	2.02	1.96	2.07	2.00
Aug 27	2.04	S	2.06	2.10	2.11	2.12	2.15	2.15	2.07	2.02	1.99	1.98	1.98	1.98	1.97	1.96	1.97	1.97	1.97	2.00	2.00	2.01	2.02	2.02	1.96	2.15	2.03
Aug 28	S	2.04	2.04	2.03	2.03	2.04	2.04	2.04	2.04	2.02	2.01	2.01	2.00	1.99	1.99	1.99	1.99	2.00	2.00	2.00	2.02	2.02	2.04	S	1.99	2.04	2.02
Aug 29	2.05	2.05	2.04	2.03	2.05	2.07	2.08	2.07	2.04	2.03	2.03	2.00	1.98	1.97	1.96	1.97	1.96	1.98	1.99	2.00	2.02	2.05	S	2.08	1.96	2.08	2.02
Aug 30	2.03	2.05	2.06	2.06	2.18	2.19	2.20	2.26	2.18	2.17	2.22	2.50	2.79	**2.90**	2.86	2.61	2.75	2.81	2.80	2.76	2.73	S	2.44	2.23	2.03	**2.90**	**2.43**
Aug 31	2.04	1.96	1.95	1.96	1.96	1.97	1.96	1.97	1.96	1.98	1.99	1.97	1.95	1.93	1.93	1.92	1.92	1.91	1.92	1.93	S	1.98	2.01	1.99	1.91	2.04	1.96
Diurnal Maximum	2.12	2.26	2.27	2.17	2.18	2.19	2.21	2.26	2.20	2.17	2.22	2.50	2.79	2.90	2.86	2.61	2.75	2.81	2.80	2.76	2.73	2.11	2.44	2.23			
Diurnal Average	2.02	2.03	2.03	2.02	2.03	2.04	2.04	2.04	2.02	2.00	1.99	1.99	1.99	1.99	1.99	1.98	1.99	1.99	1.99	1.99	2.00	1.99	2.01	2.01			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance		
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P	Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)				

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



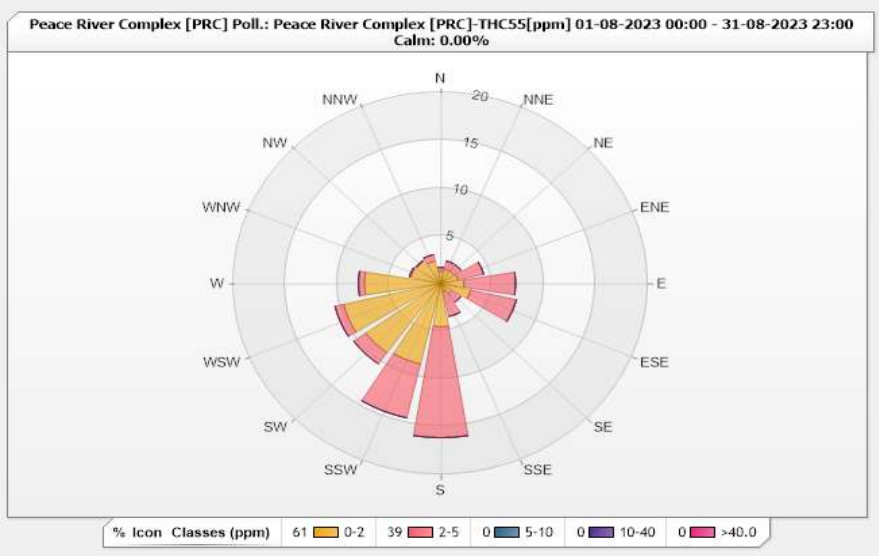


Station: Peace River Complex [PRC] Poll.: Peace River Complex [PRC]-THC55[ppm] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.89% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	1.27	0.42	0	0	0	1.69
NNE	1.56	0.85	0	0	0	2.41
NE	1.56	0.85	0	0	0	2.41
ENE	1.7	2.55	0	0	0	4.25
E	2.27	4.96	0	0	0	7.23
ESE	2.97	4.53	0	0	0	7.5
SE	1.27	1.13	0	0	0	2.4
SSE	0.85	2.69	0	0	0	3.54
S	4.53	11.61	0	0	0	16.14
SSW	8.64	5.81	0	0	0	14.45
SW	8.92	1.42	0	0	0	10.34
WSW	9.63	0.85	0	0	0	10.48
W	7.37	0.57	0	0	0	7.94
WNW	2.97	0.14	0	0	0	3.11
NW	2.83	0.14	0	0	0	2.97
NNW	2.41	0.71	0	0	0	3.12
Summary	60.75	39.23	0	0	0	100



Peace River Area Monitoring Program

Peace River Complex (PRC) Station - August 2023

Summary of Hourly Averages

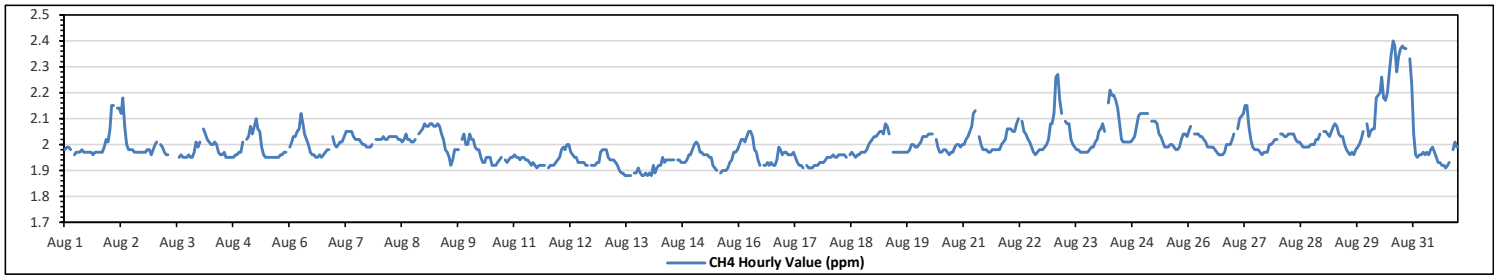
METHANE (CH4) in ppm

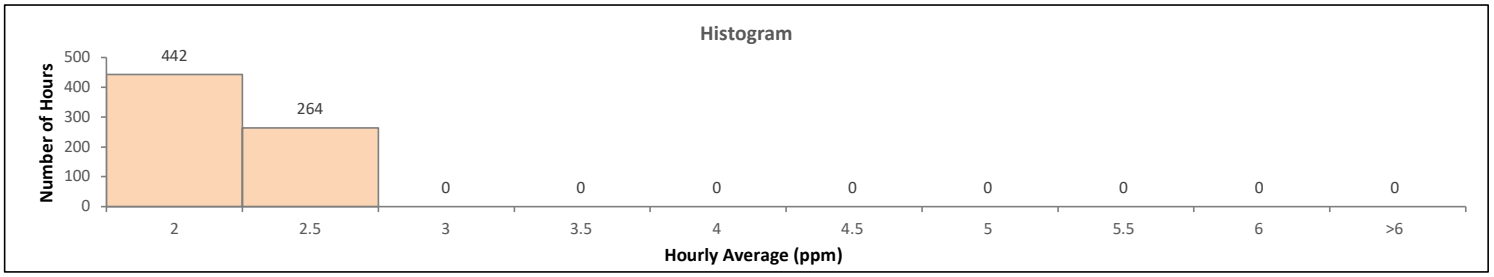
Maximum Hourly Value:	2.40	ppm	on Aug 30 at hr 13	Hours in Service:	744
Maximum Daily Value:	2.25	ppm	on Aug 30	Hours of Data:	706
Minimum Hourly Value:	1.88	ppm	on Aug 13 at hr 11	Hours of Missing Data:	0
Minimum Daily Value:	1.91	ppm	on Aug 13	Hours of Calibration:	38
Monthly Average:	2.00	ppm		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	1.98	1.99	1.99	1.98	S	1.96	1.97	1.97	1.97	1.98	1.97	1.97	1.97	1.97	1.97	1.96	1.97	1.97	1.97	1.97	1.97	1.99	2.02	2.01	1.96	2.02	1.98
Aug 2	2.06	2.15	2.15	S	2.14	2.14	2.12	2.18	2.07	2.00	1.98	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.98	1.96	1.98	1.96	2.18	2.03
Aug 3	2.00	2.01	S	2.00	1.99	1.97	1.96	1.96	C	C	C	C	C	1.95	1.96	1.95	1.95	1.95	1.96	1.95	1.95	1.97	2.01	1.99	1.95	2.01	1.97
Aug 4	2.01	S	2.06	2.04	2.02	2.01	2.00	2.00	2.01	2.00	1.97	1.96	1.96	1.97	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.97	1.97	2.01	1.95	2.06	1.98
Aug 5	S	2.02	2.03	2.07	2.04	2.07	2.10	2.06	2.05	1.99	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.97	1.97	S	1.95	2.10	1.99
Aug 6	1.99	2.01	2.03	2.03	2.05	2.06	2.12	2.08	2.04	2.02	2.00	1.97	1.96	1.96	1.95	1.95	1.96	1.95	1.96	1.97	1.98	1.98	S	2.03	1.95	2.12	2.00
Aug 7	2.00	1.99	2.00	2.01	2.01	2.03	2.05	2.05	2.05	2.05	2.03	2.02	2.02	2.02	2.01	2.00	2.00	1.99	1.99	1.99	2.00	S	2.02	2.02	1.99	2.05	2.02
Aug 8	2.02	2.02	2.03	2.02	2.02	2.03	2.03	2.03	2.03	2.03	2.02	2.02	2.01	2.02	2.04	2.02	2.02	2.01	2.01	2.02	S	2.04	2.05	2.06	2.01	2.06	2.03
Aug 9	2.08	2.07	2.07	2.08	2.08	2.07	2.07	2.08	2.07	2.04	2.02	1.98	1.97	1.95	1.92	1.94	1.98	1.98	1.98	S	2.02	2.04	2.00	2.00	1.92	2.08	2.02
Aug 10	2.04	2.02	2.02	1.99	1.98	1.98	1.95	1.93	1.93	1.95	1.95	1.95	1.92	1.92	1.92	1.93	1.94	1.95	S	1.94	1.93	1.94	1.95	1.95	1.92	2.04	1.96
Aug 11	1.96	1.95	1.95	1.94	1.95	1.95	1.94	1.94	1.93	1.92	1.93	1.92	1.91	1.92	1.92	1.92	1.92	S	1.91	1.92	1.92	1.92	1.93	1.94	1.91	1.96	1.93
Aug 12	1.95	1.98	1.99	1.98	2.00	2.00	1.97	1.96	1.95	1.95	1.93	1.93	1.93	1.93	1.92	1.92	S	1.92	1.92	1.92	1.93	1.93	1.97	1.98	1.92	2.00	1.95
Aug 13	1.98	1.98	1.95	1.94	1.94	1.94	1.93	1.92	1.90	1.89	1.89	1.88	1.88	1.88	1.88	S	1.89	1.89	1.91	1.89	1.88	1.88	1.89	1.88	1.88	1.98	1.91
Aug 14	1.89	1.88	1.92	1.89	1.91	1.92	1.92	1.95	1.93	1.94	1.94	1.94	1.94	1.94	S	1.94	1.94	1.93	1.93	1.93	1.94	1.96	1.96	1.98	1.88	1.98	1.93
Aug 15	2.00	2.01	2.00	1.97	1.97	1.96	1.96	1.96	1.95	1.95	1.92	1.91	1.90	S	1.89	1.90	1.90	1.90	1.91	1.93	1.94	1.97	1.97	1.98	1.89	2.01	1.95
Aug 16	2.00	2.02	2.02	2.01	2.03	2.05	2.05	2.03	1.98	1.97	1.94	1.92	S	1.92	1.92	1.93	1.92	1.93	1.92	1.92	1.94	1.99	1.98	1.96	1.92	2.05	1.97
Aug 17	1.97	1.97	1.96	1.96	1.96	1.97	1.95	1.93	1.92	1.92	1.91	S	1.92	1.91	1.91	1.91	1.92	1.92	1.92	1.93	1.93	1.93	1.94	1.95	1.91	1.97	1.94
Aug 18	1.95	1.95	1.96	1.95	1.95	1.96	1.96	1.96	1.96	1.95	S	1.96	1.97	1.96	1.95	1.96	1.96	1.97	1.97	1.97	1.98	2.00	2.01	2.02	1.95	2.02	1.97
Aug 19	2.03	2.03	2.04	2.05	2.05	2.04	2.08	2.07	2.04	S	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	2.00	2.00	1.99	1.99	1.97	2.08	2.01
Aug 20	2.00	2.01	2.03	2.03	2.03	2.04	2.04	2.04	S	2.02	1.99	1.97	1.97	1.98	1.98	1.97	1.96	1.97	1.97	1.99	2.00	2.00	1.99	2.00	1.96	2.04	2.00
Aug 21	2.00	2.02	2.03	2.05	2.07	2.12	2.13	S	2.03	2.00	1.98	1.98	1.98	1.97	1.97	1.98	1.98	1.98	1.98	1.98	2.00	2.01	2.02	2.06	1.97	2.13	2.01
Aug 22	2.06	2.06	2.05	2.05	2.08	2.10	S	2.09	2.05	2.04	2.02	2.01	1.99	1.97	1.96	1.97	1.98	1.98	1.98	1.99	2.00	2.02	2.08	2.08	1.96	2.10	2.03
Aug 23	2.12	2.26	2.27	2.17	2.12	S	2.09	2.08	2.08	2.02	2.00	1.99	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.98	1.99	1.99	2.01	2.02	1.97	2.27	2.04
Aug 24	2.05	2.06	2.08	2.05	S	2.16	2.21	2.19	2.19	2.17	2.14	2.08	2.02	2.01	2.01	2.01	2.01	2.01	2.02	2.03	2.07	2.11	2.12	2.12	2.01	2.21	2.08
Aug 25	2.12	2.12	2.12	S	2.09	2.09	2.09	2.08	2.04	2.03	2.01	1.99	1.99	1.99	2.00	2.00	1.99	1.98	1.98	1.99	2.02	2.04	2.04	2.03	1.98	2.12	2.04
Aug 26	2.05	2.07	S	2.04	2.04	2.04	2.03	2.03	2.02	2.01	1.99	1.99	1.99	1.99	1.98	1.97	1.96	1.96	1.96	1.97	2.00	2.00	2.00	2.02	1.96	2.07	2.00
Aug 27	2.04	S	2.06	2.10	2.11	2.12	2.15	2.15	2.07	2.02	1.99	1.98	1.98	1.98	1.97	1.96	1.97	1.97	1.97	2.00	2.00	2.01	2.02	2.02	1.96	2.15	2.03
Aug 28	S	2.04	2.04	2.03	2.03	2.04	2.04	2.04	2.04	2.02	2.01	2.01	2.00	1.99	1.99	1.99	1.99	2.00	2.00	2.00	2.02	2.02	2.04	S	1.99	2.04	2.02
Aug 29	2.05	2.05	2.04	2.03	2.05	2.07	2.08	2.07	2.04	2.03	2.03	2.00	1.98	1.97	1.96	1.97	1.96	1.98	1.99	2.00	2.02	2.05	S	2.08	1.96	2.08	2.02
Aug 30	2.03	2.05	2.06	2.06	2.18	2.19	2.20	2.26	2.18	2.17	2.20	2.28	2.35	**2.40**	2.38	2.28	2.34	2.37	2.38	2.37	2.37	S	2.33	2.23	2.03	**2.40**	**2.25**
Aug 31	2.04	1.96	1.95	1.96	1.96	1.97	1.96	1.97	1.96	1.98	1.99	1.97	1.95	1.93	1.93	1.92	1.92	1.91	1.92	1.93	S	1.98	2.01	1.99	1.91	2.04	1.96
Diurnal Maximum	2.12	2.26	2.27	2.17	2.18	2.19	2.21	2.26	2.19	2.17	2.20	2.28	2.35	2.40	2.38	2.28	2.34	2.37	2.38	2.37	2.37	2.11	2.33	2.23			
Diurnal Average	2.02	2.03	2.03	2.02	2.03	2.04	2.04	2.04	2.02	2.00	1.99	1.98	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.98	1.99	1.99	2.01	2.01			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



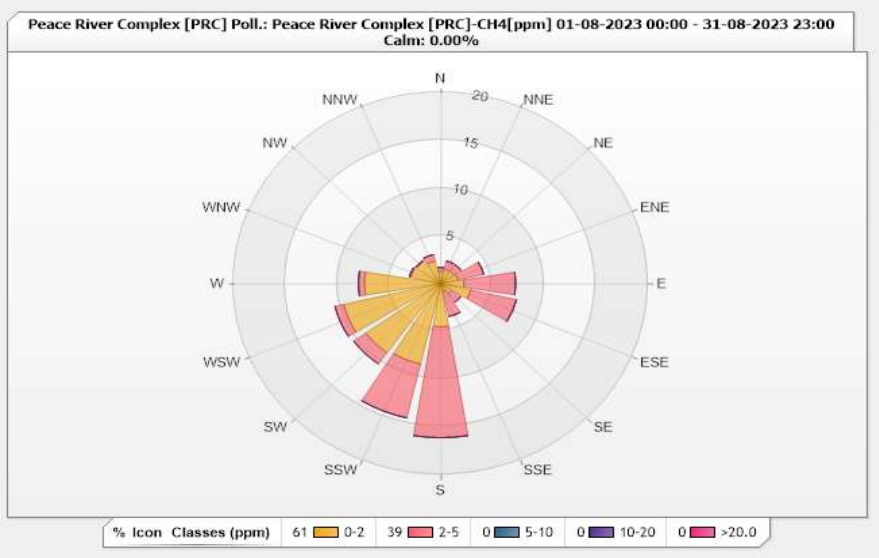


Station: Peace River Complex [PRC] Poll.: Peace River Complex [PRC]-CH4[ppm] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.89% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	1.27	0.42	0	0	0	1.69
NNE	1.56	0.85	0	0	0	2.41
NE	1.56	0.85	0	0	0	2.41
ENE	1.7	2.55	0	0	0	4.25
E	2.27	4.96	0	0	0	7.23
ESE	2.97	4.53	0	0	0	7.5
SE	1.27	1.13	0	0	0	2.4
SSE	0.85	2.69	0	0	0	3.54
S	4.53	11.61	0	0	0	16.14
SSW	8.64	5.81	0	0	0	14.45
SW	8.92	1.42	0	0	0	10.34
WSW	9.63	0.85	0	0	0	10.48
W	7.37	0.57	0	0	0	7.94
WNW	2.97	0.14	0	0	0	3.11
NW	2.83	0.14	0	0	0	2.97
NNW	2.41	0.71	0	0	0	3.12
Summary	60.75	39.23	0	0	0	100



Peace River Area Monitoring Program

Peace River Complex (PRC) Station - August 2023

Summary of Hourly Averages

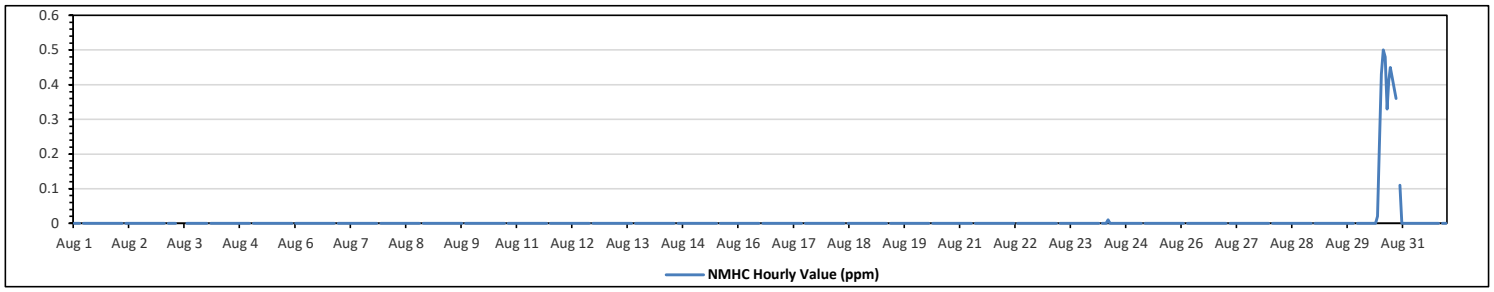
NON-METHANE HYDROCARBONS (NMHC) in ppm

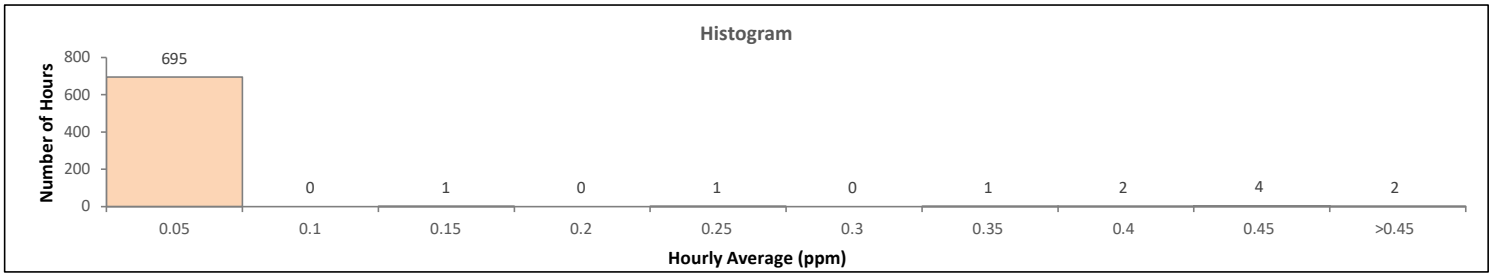
Maximum Hourly Value:	0.50	ppm	on Aug 30 at hr 13	Hours in Service:	744
Maximum Daily Value:	0.18	ppm	on Aug 30	Hours of Data:	706
Minimum Hourly Value:	0.00	ppm	on Aug 1 at hr 0	Hours of Missing Data:	0
Minimum Daily Value:	0.00	ppm	on Aug 1	Hours of Calibration:	38
Monthly Average:	0.01	ppm		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 2	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 3	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	C	C	C	C	C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 4	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 5	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00
Aug 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00
Aug 7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00
Aug 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00
Aug 9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 22	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 23	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 24	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Aug 25	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 26	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 27	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 28	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00
Aug 29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00
Aug 30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.23	0.43	**0.50**	0.48	0.33	0.41	0.45	0.42	0.39	0.36	S	0.11	0.00	0.00	**0.50**	**0.18**
Aug 31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00
Diurnal Maximum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.23	0.43	0.50	0.48	0.33	0.41	0.45	0.42	0.39	0.36	0.00	0.11	0.00			
Diurnal Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.00	0.00	0.00			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



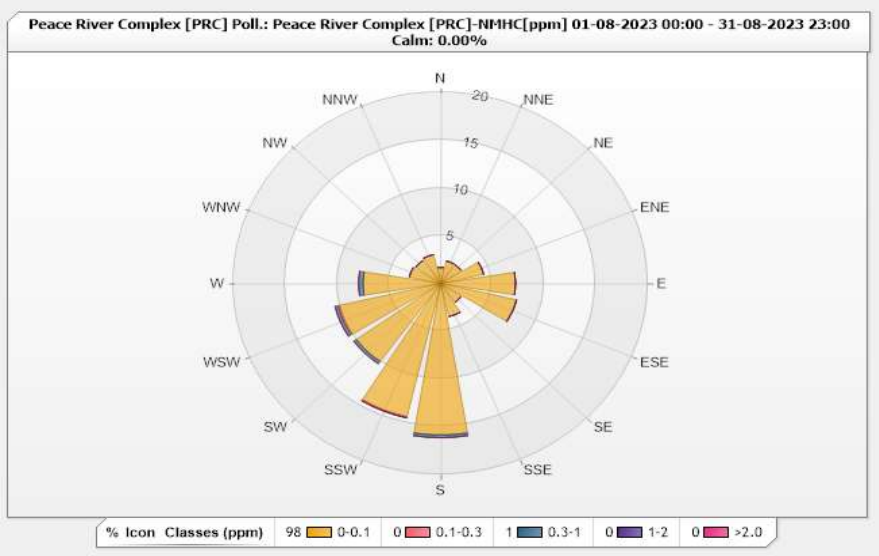


Station: Peace River Complex [PRC] Poll.: Peace River Complex [PRC]-NMHC[ppm] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.89% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	1.7	0	0	0	0	1.7
NNE	2.41	0	0	0	0	2.41
NE	2.41	0	0	0	0	2.41
ENE	4.25	0	0	0	0	4.25
E	7.22	0	0	0	0	7.22
ESE	7.51	0	0	0	0	7.51
SE	2.41	0	0	0	0	2.41
SSE	3.54	0	0	0	0	3.54
S	15.86	0	0.28	0	0	16.14
SSW	14.31	0.14	0	0	0	14.45
SW	10.06	0	0.28	0	0	10.34
WSW	10.06	0.14	0.28	0	0	10.48
W	7.51	0	0.42	0	0	7.93
WNW	3.12	0	0	0	0	3.12
NW	2.97	0	0	0	0	2.97
NNW	3.12	0	0	0	0	3.12
Summary	98.46	0.28	1.26	0	0	100



Peace River Area Monitoring Program

Peace River Complex (PRC) Station - August 2023

Summary of Hourly Averages

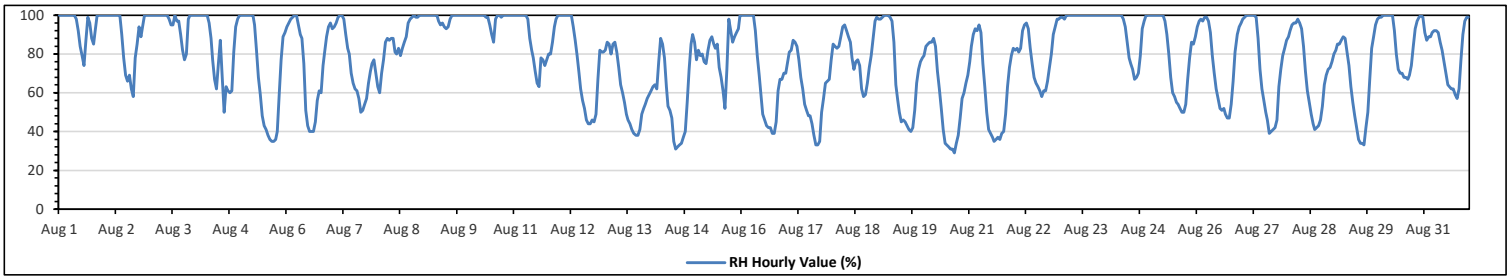
RELATIVE HUMIDITY (RH) in %

Maximum Hourly Value:	100	%	on Aug 1 at hr 0	Hours in Service:	744
Maximum Daily Value:	99.8	%	on Aug 23	Hours of Data:	744
Minimum Hourly Value:	29	%	on Aug 20 at hr 16	Hours of Missing Data:	0
Minimum Daily Value:	57.4	%	on Aug 20	Hours of Calibration:	0
Monthly Average:	78.5	%		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	98	92	84	79	74	87	99	96	88	85	92	**100**	**100**	**100**	**100**	74	**100**	94.8
Aug 2	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	90	78	69	66	69	62	58	78	85	94	89	94	**100**	**100**	**100**	58	**100**	88.8
Aug 3	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	98	95	95	**100**	97	97	90	82	77	80	98	**100**	**100**	**100**	77	**100**	96.2
Aug 4	**100**	**100**	**100**	**100**	**100**	**100**	**100**	96	88	77	67	62	75	87	68	50	63	61	60	61	81	94	98	**100**	50	**100**	82.8
Aug 5	**100**	**100**	**100**	**100**	**100**	**100**	**100**	95	82	68	59	48	43	41	38	36	35	35	36	40	59	77	89	91	35	**100**	69.7
Aug 6	94	96	98	99	**100**	**100**	95	90	88	75	51	43	40	40	40	45	56	61	60	74	81	89	94	96	40	**100**	75.2
Aug 7	93	94	96	99	**100**	**100**	98	90	83	80	70	65	62	61	57	50	51	54	57	65	71	75	77	70	50	**100**	75.8
Aug 8	63	60	70	77	86	88	87	88	88	81	80	83	79	83	86	89	96	98	99	**100**	99	99	**100**	**100**	60	**100**	86.6
Aug 9	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	97	95	96	94	93	94	98	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	93	**100**	98.6
Aug 10	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	99	99	95	90	86	98	**100**	**100**	99	**100**	**100**	**100**	**100**	**100**	**100**	86	**100**	98.6
Aug 11	**100**	**100**	**100**	**100**	**100**	**100**	**100**	98	88	82	78	71	65	63	78	77	74	77	80	80	86	94	98	**100**	63	**100**	87.0
Aug 12	**100**	**100**	**100**	**100**	**100**	**100**	**100**	94	87	79	70	62	56	52	46	44	44	46	45	49	67	82	81	81	44	**100**	74.4
Aug 13	82	86	85	80	85	86	81	73	64	60	55	49	46	44	41	39	38	38	41	49	52	54	57	59	38	86	60.2
Aug 14	61	63	64	62	76	88	85	78	63	53	51	47	35	31	32	33	34	37	40	55	72	85	90	86	31	90	59.2
Aug 15	77	82	79	80	76	75	82	87	89	85	83	85	73	68	61	52	72	98	92	86	89	91	93	**100**	52	**100**	81.5
Aug 16	**100**	**100**	**100**	**100**	**100**	**100**	**100**	92	79	69	58	49	46	43	42	42	39	39	45	61	67	67	70	70	39	**100**	69.9
Aug 17	75	81	82	87	86	84	77	68	62	54	51	48	48	44	38	33	33	35	50	57	65	66	67	77	33	87	61.2
Aug 18	85	84	83	84	89	94	95	92	89	86	78	72	76	77	74	62	58	59	65	73	79	88	97	99	58	99	80.8
Aug 19	98	98	99	**100**	**100**	**100**	99	97	86	64	56	50	45	46	45	43	41	40	42	51	65	72	76	78	40	**100**	70.5
Aug 20	79	84	85	86	86	88	84	71	62	52	41	34	33	32	31	31	**29**	34	38	47	57	60	65	69	**29**	88	**57.4**
Aug 21	76	84	90	93	92	95	91	75	63	50	41	39	37	35	36	37	36	39	40	49	63	73	79	83	35	95	62.3
Aug 22	82	83	81	83	92	95	96	93	83	75	68	65	63	61	58	61	61	66	73	80	90	94	98	98	58	98	79.1
Aug 23	99	99	98	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	98	**100**	**99.8**
Aug 24	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	98	94	86	78	75	72	67	68	70	79	93	97	**100**	**100**	**100**	67	**100**	90.7
Aug 25	**100**	**100**	**100**	**100**	**100**	**100**	**100**	97	90	80	68	60	58	55	54	52	50	50	54	67	78	86	85	89	50	**100**	78.0
Aug 26	94	97	98	97	99	99	97	91	79	70	62	57	52	51	52	49	47	47	54	66	81	90	94	96	47	99	75.8
Aug 27	98	99	**100**	**100**	**100**	**100**	**100**	99	88	72	62	56	50	46	39	40	41	42	46	63	72	79	83	87	39	**100**	73.4
Aug 28	89	92	95	96	96	98	96	93	84	71	61	55	49	44	41	42	43	46	53	64	69	72	73	76	41	98	70.8
Aug 29	80	82	85	85	87	89	88	81	74	63	55	48	42	36	34	34	33	42	50	67	83	89	95	98	33	98	67.5
Aug 30	99	99	**100**	**100**	**100**	**100**	**100**	**100**	92	80	72	70	70	68	68	67	69	74	84	93	97	99	**100**	99	67	**100**	87.5
Aug 31	91	87	89	89	91	92	92	91	86	82	76	70	64	63	62	62	59	57	62	77	90	97	99	99	57	99	80.3
Diurnal Maximum	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100			
Diurnal Average	90.8	91.9	92.8	93.5	94.9	95.8	94.9	91.3	85.0	77.0	70.0	64.9	61.5	60.3	59.2	57.8	59.2	61.3	64.5	71.9	80.7	86.2	89.0	90.4			

C	Monthly Calibration	**S**	Daily Zero-Span Check	**Q**	Quality Assurance	
K	Collection Error	**ND**	No Data (Machine Not in Service)	**Y**	Routine Maintenance	**P** Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	**NRM**	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

Peace River Complex (PRC) Station - August 2023

Summary of Hourly Averages

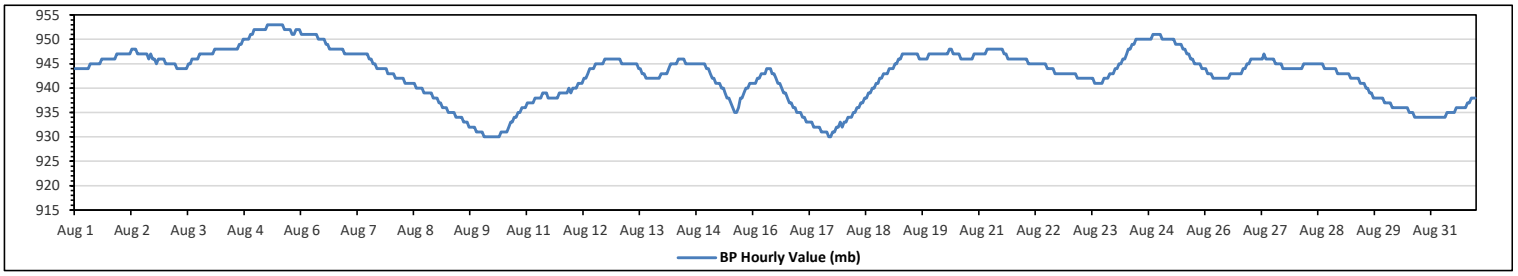
BAROMETRIC PRESSURE (BP) in millibar

Maximum Hourly Value:	953	mb	on Aug 5 at hr 6	Hours in Service:	744	
Maximum Daily Value:	952	mb	on Aug 5	Hours of Data:	744	
Minimum Hourly Value:	930	mb	on Aug 10 at hr 1	Hours of Missing Data:	0	
Minimum Daily Value:	932	mb	on Aug 10	Hours of Calibration:	0	
Monthly Average:	943	mb		Operational Uptime:	100.0	

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Aug 1	944	944	944	944	944	944	944	944	945	945	945	945	945	945	946	946	946	946	946	946	946	946	947	947	944	947	945
Aug 2	947	947	947	947	947	947	948	948	948	947	947	947	947	947	947	946	947	946	946	945	946	946	946	946	945	948	947
Aug 3	945	945	945	945	945	945	944	944	944	944	944	944	945	945	946	946	946	946	947	947	947	947	947	947	944	947	945
Aug 4	947	947	948	948	948	948	948	948	948	948	948	948	948	948	948	949	949	950	950	950	950	951	951	952	947	952	949
Aug 5	952	952	952	952	952	952	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	952	952	952	952	951	951	952	952	952	951	**953**	**952**
Aug 6	951	951	951	951	951	951	951	951	951	950	950	950	950	949	949	948	948	948	948	948	948	948	948	947	947	951	950
Aug 7	947	947	947	947	947	947	947	947	947	947	947	947	946	946	945	945	944	944	944	944	944	944	943	943	943	947	946
Aug 8	943	943	942	942	942	942	942	941	941	941	941	941	941	940	940	940	940	939	939	939	939	939	938	938	938	943	941
Aug 9	938	937	937	936	936	936	935	935	935	935	934	934	934	934	933	933	933	932	932	932	932	931	931	931	931	938	934
Aug 10	931	**930**	**930**	**930**	**930**	**930**	**930**	**930**	**930**	**930**	931	931	931	931	932	933	933	934	934	935	935	936	936	936	**930**	936	**932**
Aug 11	937	937	937	937	938	938	938	938	939	939	939	938	938	938	938	938	938	939	939	939	939	939	940	939	937	940	938
Aug 12	940	940	940	941	941	941	942	942	943	944	944	944	945	945	945	945	945	946	946	946	946	946	946	946	940	946	944
Aug 13	946	946	945	945	945	945	945	945	945	945	945	944	944	943	943	942	942	942	942	942	942	942	942	943	942	946	944
Aug 14	943	943	943	944	945	945	945	945	946	946	946	946	945	945	945	945	945	945	945	945	945	945	945	944	943	946	945
Aug 15	944	943	942	942	941	941	941	940	940	939	938	938	937	936	935	935	936	938	938	939	940	940	941	941	935	944	939
Aug 16	941	941	942	942	943	943	943	944	944	944	943	943	942	941	941	940	939	939	938	937	937	936	936	935	935	944	941
Aug 17	935	935	934	934	933	933	933	933	932	932	932	932	931	931	931	931	**930**	**930**	931	931	932	932	933	932	**930**	935	932
Aug 18	933	933	934	934	934	935	935	936	936	937	937	938	938	939	939	940	940	941	941	942	942	943	943	943	933	943	938
Aug 19	944	944	944	945	945	946	946	947	947	947	947	947	947	947	947	947	946	946	946	946	946	947	947	947	944	947	946
Aug 20	947	947	947	947	947	947	947	947	948	948	947	947	947	947	946	946	946	946	946	946	946	947	947	947	946	948	947
Aug 21	947	947	947	947	948	948	948	948	948	948	948	948	948	947	947	946	946	946	946	946	946	946	946	946	946	948	947
Aug 22	946	946	945	945	945	945	945	945	945	945	945	945	944	944	944	944	943	943	943	943	943	943	943	943	943	946	944
Aug 23	943	943	943	943	942	942	942	942	942	942	942	942	942	941	941	941	941	941	942	942	942	943	943	943	941	943	942
Aug 24	944	944	945	945	946	946	947	948	948	949	949	950	950	950	950	950	950	950	950	950	951	951	951	951	944	951	949
Aug 25	951	950	950	950	950	950	950	950	949	949	949	949	948	948	947	947	946	946	945	945	945	945	944	944	944	951	948
Aug 26	944	943	943	943	942	942	942	942	942	942	942	942	942	943	943	943	943	943	943	943	944	944	945	945	942	945	943
Aug 27	946	946	946	946	946	946	946	947	946	946	946	946	946	945	945	945	945	944	944	944	944	944	944	944	944	947	945
Aug 28	944	944	944	944	945	945	945	945	945	945	945	945	945	945	945	944	944	944	944	944	944	944	943	943	943	945	944
Aug 29	943	943	943	943	943	942	942	942	942	942	941	941	941	940	940	939	939	938	938	938	938	938	938	937	937	943	940
Aug 30	937	937	937	936	936	936	936	936	936	936	936	936	935	935	935	934	934	934	934	934	934	934	934	934	934	937	935
Aug 31	934	934	934	934	934	934	934	934	935	935	935	935	935	936	936	936	936	936	936	937	937	938	938	938	934	938	935
Diurnal Maximum	952	952	952	952	952	952	953	953	953	953	953	953	953	953	953	952	952	952	952	951	951	952	952	952			
Diurnal Average	943	943	943	943	943	943	943	943	943	943	943	943	943	943	943	942	942	942	942	942	943	943	943	943			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

Peace River Complex (PRC) Station - August 2023

Summary of Hourly Averages

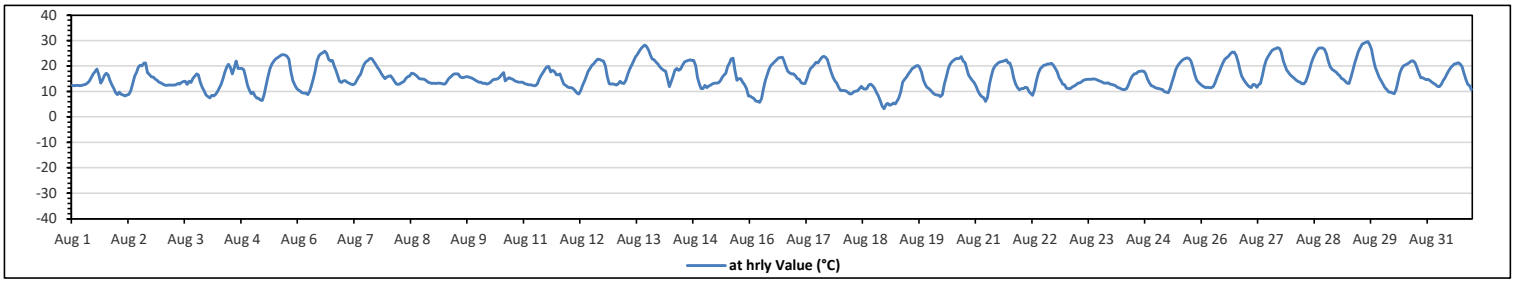
AMBIENT TEMPERATURE (AT) in Degree Celsius

Maximum Hourly Value:	29.6	°C	on Aug 29 at hr 16	Hours in Service:	744
Maximum Daily Value:	20.7	°C	on Aug 29	Hours of Data:	744
Minimum Hourly Value:	3.2	°C	on Aug 18 at hr 23	Hours of Missing Data:	0
Minimum Daily Value:	9.9	°C	on Aug 18	Hours of Calibration:	0
Monthly Average:	15.8	°C		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Aug 1	12.4	12.3	12.4	12.4	12.3	12.4	12.6	12.8	13.3	14.1	15.4	16.8	17.8	18.8	16.5	13.3	14.4	16.2	17.2	16.5	14.3	12.5	11.1	9.6	9.6	18.8	14.1
Aug 2	8.8	9.7	8.9	8.6	8.2	8.6	8.9	10.5	13.2	16	17.6	19.5	20.3	20	21.2	21.2	17.4	16.7	15.9	15.7	14.9	14.4	13.7	13.4	8.2	21.2	14.3
Aug 3	12.9	12.5	12.4	12.5	12.5	12.5	12.5	12.7	13.2	12.9	13.5	13.9	14.1	12.8	14	13.5	15.2	16	17	16.5	13.6	11.7	10.3	8.6	8.6	17.0	13.2
Aug 4	8	7.5	8.5	8.3	8.9	10	11.3	12.8	15	17.7	19.8	20.7	19.4	17	19.2	21.9	19	19.1	19.1	18.6	15.6	12.3	10.4	9.2	7.5	21.9	14.6
Aug 5	9.7	8.3	7.4	7.4	6.6	6.5	9	12.6	16	19	20.8	22	22.8	23.4	23.9	24.3	24.5	24.3	23.9	22.7	17.9	14.5	12.6	11.3	6.5	24.5	16.3
Aug 6	10.6	10.1	9.5	9.3	9.3	8.8	10.1	12.1	14.9	18.1	22.1	24.1	24.9	25.3	25.8	25	22.7	21.9	22.2	20.2	18.3	16	14.1	13.5	8.8	25.8	17.0
Aug 7	14.2	14.3	13.7	13.3	12.9	12.7	13.1	14.5	15.9	16.8	19.1	20.7	21.7	22.2	22.9	22.9	21.8	20.7	19.6	18.6	17.2	16	15	15.7	12.7	22.9	17.3
Aug 8	16	16.2	15.2	14.2	13.1	12.8	13.1	13.5	13.9	15	15.8	16	17.2	17.1	16.5	16	15.2	14.9	14.9	14.7	14.3	13.7	13.4	13.2	12.8	17.2	14.8
Aug 9	13.3	13.2	13.3	13.3	13.2	12.9	13.1	14.1	15.2	15.9	16.5	16.9	17	16.9	15.9	15.5	15.6	15.8	15.9	15.6	15.3	14.9	14.5	14.1	12.9	17.0	14.9
Aug 10	13.6	13.6	13.2	13.3	12.9	13.2	13.7	14.4	14.8	14.8	15.1	15.7	16.7	17.4	14.2	14.9	15.4	15.1	14.7	14.2	13.9	13.7	13.7	13.7	12.9	17.4	14.4
Aug 11	13.2	12.9	12.6	12.6	12.5	12.3	12.3	12.9	14.8	16.3	17.4	18.7	19.8	19.9	17.7	18.3	17.8	16.6	16.6	16.9	14.8	12.9	12.4	11.8	11.8	19.9	15.2
Aug 12	11.6	11.5	11.2	10.4	9.4	9	10.5	12.5	14.2	16.1	18	19.1	20.3	21	21.9	22.7	22.6	22.2	21.9	20.1	15.9	13.1	13	13.1	9.0	22.7	15.9
Aug 13	12.8	12.5	13.1	14.1	13.3	13.2	14.4	16.8	18.8	20.3	22	23.6	24.6	25.8	27	27.7	28.2	27.7	26.3	24.2	22.8	22.5	21.6	20.9	12.5	28.2	20.6
Aug 14	19.8	18.9	18.4	18.1	15.1	11.9	13.6	15.9	18.4	19	18.4	18.8	20.3	21.6	22	22.3	22.5	22.3	22.3	20.2	15.5	12.8	11.2	11.1	11.1	22.5	17.9
Aug 15	12.4	11.5	12.1	12.5	13.1	13.3	13.3	13.4	14.2	15.6	16.5	17.1	19.9	21.2	22.8	23.1	18.2	14.4	15	15.1	13.7	12.6	11.2	8.3	8.3	23.1	15.0
Aug 16	8.1	7.6	7.3	6.3	6.2	5.8	7.3	11.1	14.4	16.7	18.7	20.2	21	21.7	22.5	23.2	23.4	23.5	22.1	19.9	18	17.3	17	16.9	5.8	23.5	15.7
Aug 17	16.1	15	14.7	13.4	13.2	13.2	15.2	17.3	19	19.7	20.4	21.4	21.2	22.4	23.3	23.9	23.5	22.5	19.9	17.4	15.4	14.1	13.3	11.7	11.7	23.9	17.8
Aug 18	10.4	10.4	10.4	10.2	9.6	9.1	9.2	9.9	10.2	10.3	11.2	12	11.1	10.9	11.2	12.5	12.9	12.2	11.3	9.6	8.3	6.4	4.2	**3.2**	**3.2**	12.9	**9.9**
Aug 19	4.9	5.3	4.6	4.9	5.5	5.2	6.2	7.5	9.9	13.6	14.8	15.7	17	18	19	19.5	20.1	20.2	19.4	17.6	14.4	12.7	11.7	11.1	4.6	20.2	12.5
Aug 20	10.5	9.5	8.9	8.6	8.6	8	8.8	12.8	15.6	18.7	20.5	21.5	22.2	22.8	23	22.9	23.7	22	21.3	19.1	16.4	15.3	14.3	13.4	8.0	23.7	16.2
Aug 21	11.9	10	8.9	8	7.6	6.1	7.8	12.6	16	18.8	20.1	20.9	21.4	21.7	21.8	22.1	22.5	21.2	21.2	18.9	15.3	13	11.6	10.6	6.1	22.5	15.4
Aug 22	11.1	11.2	11.7	11.6	9.9	9.2	8.5	10.7	14.3	17.2	18.9	19.7	20.3	20.4	20.9	20.9	21.1	20.3	19.1	17.7	15.5	14.2	13	12.6	8.5	21.1	15.4
Aug 23	11.3	11.2	11.2	11.8	12.1	12.7	13.3	13.4	13.9	14.4	14.6	14.8	14.8	14.7	14.9	14.9	14.6	14.3	14	13.6	13.3	13.3	13.4	13	11.2	14.9	13.5
Aug 24	12.8	12.5	12.2	11.7	11.4	11	10.8	10.7	11.1	12.8	14.8	16.2	16.9	17.1	17.8	18	18.1	18	17.1	14.9	13.4	12.3	12	11.5	10.7	18.1	14.0
Aug 25	11.3	11.2	10.9	10.7	9.9	9.7	9.5	11.3	13.8	16.2	18.5	20.1	21.1	21.9	22.6	22.9	23.2	22.9	22	19.5	16.6	14.4	13.7	12.9	9.5	23.2	16.1
Aug 26	12.3	11.9	11.6	11.7	11.5	11.5	12	13.7	15.8	17.6	19.6	21.3	22.7	23.3	23.9	24.9	25.4	25.4	24.2	21.7	18.5	16.2	14.7	13.6	11.5	25.4	17.7
Aug 27	12.6	11.9	11.5	12.8	12.7	11.7	12.6	13.2	16.1	19.9	22.4	23.8	25	26.1	26.6	26.8	27.2	26.9	25.5	22.3	20.1	18.5	17.4	16.4	11.5	27.2	19.2
Aug 28	15.9	15.2	14.4	13.9	13.6	13.1	13.1	14	16.2	18.8	21.2	23.2	24.9	26.2	27	27.1	27.1	26.6	24.9	21.9	19.8	18.7	18.2	17.7	13.1	27.1	19.7
Aug 29	16.8	16.2	15.2	14.8	14.1	13.3	13.2	15.7	18.5	21.3	23.8	25.7	27.2	28.6	29.1	29.4	**29.6**	28.5	26.6	22.6	19.5	17.5	15.6	14.3	13.2	**29.6**	**20.7**
Aug 30	12.9	11.6	10.7	9.8	9.7	9.3	9.2	10.8	14	16.9	18.9	20.1	20.5	20.9	21.3	21.9	22.1	21.3	19.5	17.3	15.5	15.4	15	14.6	9.2	22.1	15.8
Aug 31	14.7	14.3	13.6	13.2	12.7	12	11.9	12.8	14.3	15.4	17	18.3	19.4	20.1	20.9	21	21.3	20.8	19.9	17.2	14.8	12.8	12.3	10.8	10.8	21.3	15.9
Diurnal Maximum	19.8	18.9	18.4	18.1	15.1	13.3	15.2	17.3	19.0	21.3	23.8	25.7	27.2	28.6	29.1	29.4	29.6	28.5	26.6	24.2	22.8	22.5	21.6	20.9			
Diurnal Average	12.4	11.9	11.6	11.4	11.0	10.7	11.3	12.9	14.8	16.6	18.2	19.3	20.1	20.6	20.9	21.1	20.8	20.3	19.7	18.1	15.9	14.4	13.4	12.6			

C	Monthly Calibration	**S**	Daily Zero-Span Check	**Q**	Quality Assurance	
K	Collection Error	**ND**	No Data (Machine Not in Service)	**Y**	Routine Maintenance	**P** Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	**NRM**	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

Peace River Complex (PRC) Station - August 2023

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

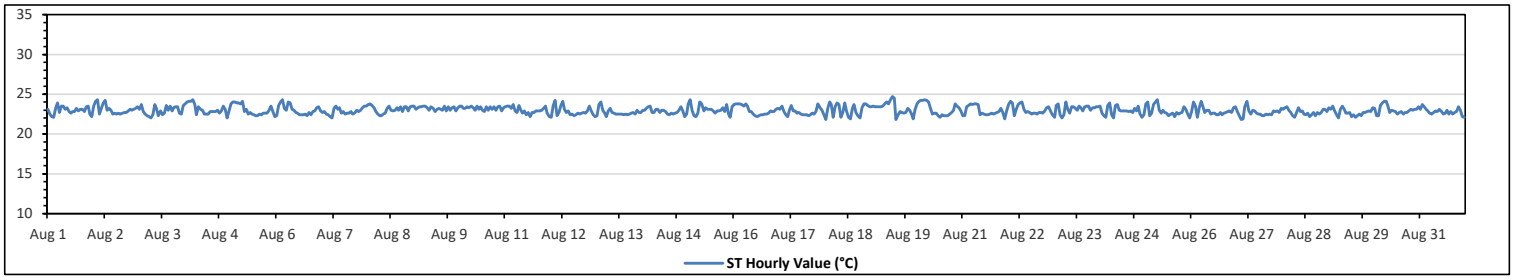
Maximum Hourly Value:	24.7	°C	on Aug 19 at hr 11	Hours in Service:	744
Maximum Daily Value:	23.3	°C	on Aug 10	Hours of Data:	744
Minimum Hourly Value:	21.8	°C	on Aug 18 at hr 0	Hours of Missing Data:	0
Minimum Daily Value:	22.7	°C	on Aug 27	Hours of Calibration:	0
Monthly Average:	23.0	°C		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Aug 1	23.1	22.5	22.2	22.1	23.2	23.9	22.7	23.5	23.5	23.1	23.3	22.8	22.6	22.8	22.8	23.2	22.9	23.1	23.1	22.8	23.4	23.5	22.5	22.2	22.1	23.9	23.0
Aug 2	23.5	24.1	24.3	22.5	23.2	23.9	24.2	23.0	23.2	23.0	22.5	22.6	22.5	22.6	22.5	22.6	22.7	22.7	22.9	23.1	23.0	23.1	23.2	23.4	22.5	24.3	23.1
Aug 3	23.1	23.7	22.8	22.5	22.3	22.2	22.0	22.4	23.7	23.2	22.3	22.9	22.4	22.6	23.6	23.0	23.5	22.9	23.3	23.4	23.4	22.6	22.5	23.6	22.0	23.7	22.9
Aug 4	23.8	24.0	24.1	24.1	24.3	23.7	22.4	23.4	23.1	23.0	22.5	22.5	22.5	22.8	22.8	22.8	22.8	23.0	22.6	22.9	23.5	23.1	22.0	22.9	22.0	24.3	23.1
Aug 5	23.8	24.0	24.0	23.9	23.9	23.8	24.1	22.8	23.1	22.5	22.7	22.5	22.4	22.3	22.3	22.5	22.4	22.6	22.6	22.6	23.0	23.5	22.8	22.2	22.2	24.1	23.0
Aug 6	22.3	23.6	24.0	24.3	23.2	23.0	24.0	23.9	23.1	23.0	22.7	22.6	22.4	22.4	22.4	22.5	22.3	22.7	22.4	22.8	22.9	23.3	23.4	22.9	22.3	24.3	23.0
Aug 7	22.7	22.8	22.5	22.4	22.2	22.0	23.2	23.5	23.1	23.3	22.6	22.8	22.5	22.6	22.6	22.8	22.5	22.7	23.0	22.8	23.0	23.3	23.5	23.5	22.0	23.5	22.8
Aug 8	23.7	23.8	23.6	23.3	22.8	22.5	22.3	22.3	22.5	22.6	23.2	23.5	23.0	22.9	23.0	23.3	23.0	23.4	22.8	23.4	23.4	22.9	23.4	23.5	22.3	23.8	23.1
Aug 9	23.5	23.1	23.3	23.4	23.4	23.5	23.5	23.3	23.0	23.4	23.2	22.8	23.1	23.2	23.1	23.0	23.5	22.9	23.4	23.0	23.3	23.4	22.9	23.3	22.8	23.5	23.2
Aug 10	23.5	23.5	23.2	23.2	23.4	23.3	23.5	23.3	23.0	23.5	23.1	23.4	23.0	22.8	23.4	23.0	23.4	23.1	23.4	23.0	23.4	23.5	22.9	23.3	22.8	23.5	**23.3**
Aug 11	23.4	23.5	23.5	23.2	23.7	22.9	22.7	23.6	23.0	22.6	22.9	22.4	22.7	22.2	22.7	22.7	22.9	22.9	22.9	23.0	23.2	23.5	22.6	22.2	22.2	23.7	23.0
Aug 12	22.1	23.6	24.2	22.3	22.7	23.6	24.1	23.1	22.7	22.9	22.4	22.5	22.3	22.4	22.6	22.5	22.6	22.7	22.6	22.9	23.5	22.9	22.4	22.2	22.1	24.2	22.8
Aug 13	22.3	23.7	24.0	23.0	22.6	22.2	22.9	23.2	22.7	22.6	22.5	22.5	22.5	22.5	22.4	22.5	22.4	22.5	22.6	22.7	22.5	23.0	22.7	22.7	22.2	24.0	22.7
Aug 14	23.0	23.0	23.2	23.4	23.5	22.7	22.7	23.1	23.1	22.7	23.0	23.0	22.8	22.5	22.4	22.6	22.5	22.6	22.7	23.0	23.4	22.9	22.2	22.5	22.2	23.5	22.9
Aug 15	23.8	24.3	23.0	22.3	22.2	22.6	24.0	23.8	22.9	23.3	23.1	23.1	23.1	22.9	22.6	22.9	22.9	23.0	23.3	22.8	23.7	22.5	22.1	23.4	22.1	24.3	23.1
Aug 16	23.7	23.8	23.8	23.8	23.7	23.5	23.8	23.5	22.8	22.8	22.5	22.3	22.2	22.3	22.4	22.4	22.5	22.5	22.6	22.9	22.8	22.8	23.1	23.2	22.2	23.8	23.0
Aug 17	23.1	23.5	22.8	22.4	22.2	23.0	23.6	22.9	22.9	22.6	22.7	22.5	22.4	22.4	22.4	22.3	22.4	22.6	22.5	22.8	23.8	23.3	23.0	22.4	22.2	23.8	22.8
Aug 18	**21.8**	23.2	24.0	23.7	22.1	23.4	23.9	23.7	22.1	22.7	23.9	22.8	22.1	21.9	23.2	23.7	22.7	22.3	22.0	23.3	23.8	23.8	23.6	23.4	**21.8**	24.0	23.0
Aug 19	23.4	23.5	23.4	23.4	23.4	23.4	23.5	23.8	24.0	23.8	24.3	**24.7**	24.5	**21.8**	22.4	22.8	22.7	22.6	22.7	23.2	23.0	22.5	21.9	23.1	**21.8**	**24.7**	23.2
Aug 20	23.8	24.1	24.2	24.2	24.3	24.2	24.0	23.2	22.5	22.6	22.6	22.3	22.1	22.4	22.3	22.3	22.3	22.5	22.7	23.0	23.8	23.5	23.3	22.9	22.1	24.3	23.1
Aug 21	22.3	22.3	23.4	23.6	23.8	23.7	23.8	23.8	23.7	22.4	22.6	22.5	22.4	22.4	22.5	22.6	22.5	22.6	22.7	22.8	23.2	22.7	21.9	22.9	21.9	23.8	22.9
Aug 22	23.7	24.1	23.9	22.3	23.1	23.7	23.9	24.0	23.1	22.7	22.8	22.7	22.5	22.6	22.6	22.5	22.7	22.7	22.6	22.9	23.3	23.4	22.9	22.4	22.3	24.1	23.0
Aug 23	22.1	23.6	23.8	22.4	22.0	22.4	24.0	23.1	22.6	23.4	23.4	23.2	23.0	23.5	23.3	22.9	23.4	23.5	23.5	23.0	23.3	23.3	23.4	23.4	22.0	24.0	23.1
Aug 24	23.5	22.6	22.3	22.1	23.6	23.9	22.4	22.0	23.6	23.7	23.0	22.9	22.9	22.9	22.9	22.8	22.9	22.7	23.2	22.9	23.5	22.5	22.1	22.4	22.0	23.9	22.9
Aug 25	23.8	24.0	22.3	22.6	23.7	24.0	24.3	23.0	22.6	23.0	22.7	22.6	22.3	22.5	22.6	22.2	22.7	22.5	22.6	22.7	23.4	23.1	22.5	22.0	22.0	24.3	22.9
Aug 26	22.8	24.0	23.5	22.1	23.3	24.1	23.5	22.7	23.0	23.0	22.5	22.6	22.6	22.4	22.4	22.7	22.4	22.6	22.7	22.8	22.9	22.7	23.3	23.4	22.1	24.1	22.9
Aug 27	22.8	22.3	**21.8**	21.9	23.4	24.1	22.9	22.5	23.0	22.9	22.6	22.5	22.5	22.3	22.3	22.5	22.4	22.5	22.4	22.9	22.8	22.9	22.7	23.2	**21.8**	24.1	**22.7**
Aug 28	23.1	23.3	23.4	23.0	22.7	22.3	22.1	22.7	23.3	22.8	22.9	22.5	22.4	22.6	22.2	22.4	22.7	22.3	22.7	22.5	22.7	23.1	23.1	22.8	22.1	23.4	22.7
Aug 29	23.3	23.1	23.5	22.9	22.4	22.0	23.1	23.5	23.1	22.6	22.6	22.7	22.2	22.4	22.1	22.3	22.5	22.3	22.7	22.7	22.8	22.9	22.8	23.3	22.0	23.5	22.7
Aug 30	23.2	22.3	22.3	23.6	23.9	24.1	24.1	23.6	22.7	23.0	22.9	22.8	22.5	22.7	22.8	22.5	22.7	22.7	22.9	23.1	23.0	23.1	23.1	23.4	22.3	24.1	23.0
Aug 31	23.1	23.7	23.4	23.1	22.9	22.6	22.5	22.7	22.9	22.8	23.1	22.8	22.5	22.6	23.0	22.5	22.8	22.5	22.7	22.8	23.4	23.0	22.2	22.1	22.1	23.7	22.8
Diurnal Maximum	23.8	24.3	24.3	24.3	24.3	24.2	24.3	24.0	24.0	23.8	24.3	24.7	24.5	23.5	23.6	23.7	23.5	23.5	23.5	23.4	23.8	23.8	23.6	23.6			
Diurnal Average	23.1	23.4	23.3	23.0	23.1	23.2	23.3	23.2	23.0	23.0	22.9	22.8	22.6	22.6	22.7	22.7	22.7	22.7	22.8	22.9	23.2	23.1	22.8	22.9			

C	Monthly Calibration	**S**	Daily Zero-Span Check	**Q**	Quality Assurance	
K	Collection Error	**ND**	No Data (Machine Not in Service)	**Y**	Routine Maintenance	**P** Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	**NRM**	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

Peace River Complex (PRC) Station - August 2023

Summary of Hourly Averages

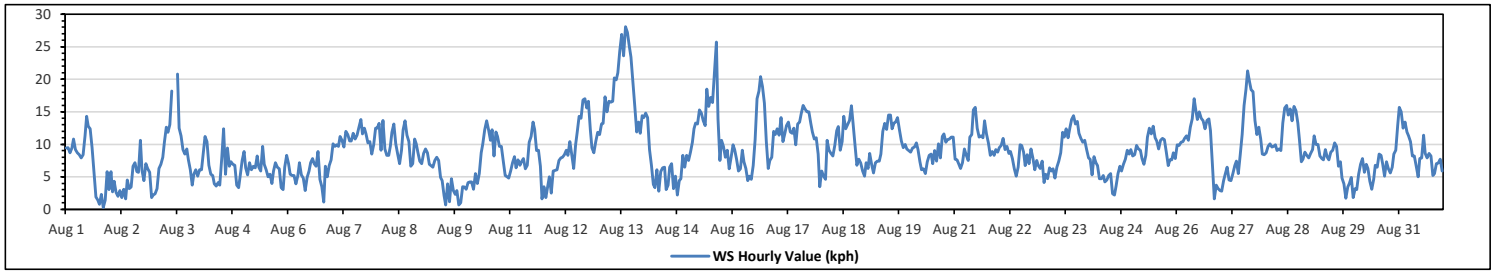
VECTOR WIND SPEED (VWS) in km/hr

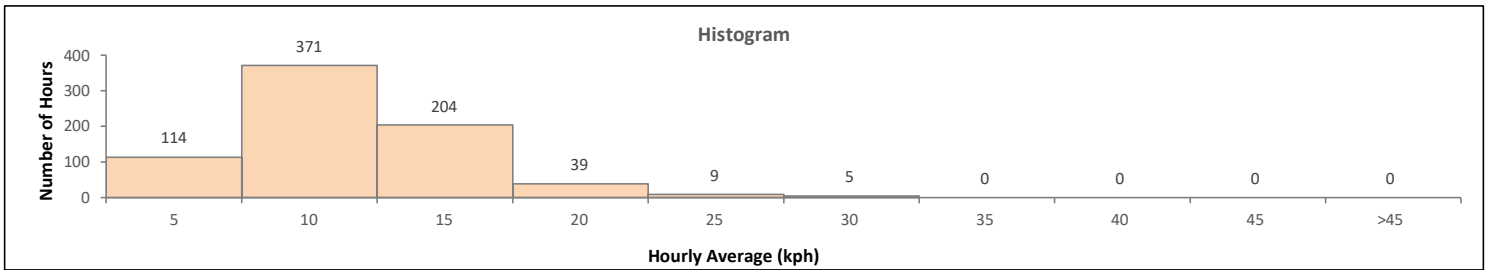
Maximum Hourly Value:	28.1	kph	on Aug 13 at hr 14	Hours in Service:	744	
Maximum Daily Value:	18.6	kph	on Aug 13	Hours of Data:	742	
Minimum Hourly Value:	0.3	kph	on Aug 1 at hr 20	Hours of Missing Data:	0	
Minimum Daily Value:	4.5	kph	on Aug 2	Hours of Calibration:	2	
Monthly Average:	3.8	kph		Operational Uptime:	100.0	

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	9.4	9.5	8.7	9.4	10.8	9.2	8.7	8.4	7.9	8.4	11.3	14.3	12.8	12.4	9.5	5.7	1.9	1.4	0.8	2.3	**0.3**	1.4	5.8	3.0	**0.3**	14.3	7.2
Aug 2	5.8	2.7	4.3	2.6	2.0	2.9	1.8	3.1	1.6	4.5	3.2	3.4	6.6	7.2	5.8	5.7	10.6	6.0	4.4	7.0	6.2	5.7	1.8	2.2	1.6	10.6	**4.5**
Aug 3	2.4	3.2	6.3	6.9	8.0	10.3	12.6	11.8	13.0	18.2	C	C	20.8	12.5	11.3	9.2	8.5	9.3	7.6	6.1	3.7	5.4	6.1	5.1	2.4	20.8	9.0
Aug 4	6.1	6.1	8.9	11.2	10.4	6.8	5.4	5.2	3.9	3.6	4.1	3.7	7.7	12.4	5.4	9.4	6.6	7.3	6.9	6.8	3.7	3.3	5.2	7.5	3.3	12.4	6.6
Aug 5	8.9	6.4	5.3	7.2	6.1	6.6	6.4	8.2	6.5	5.9	9.7	6.9	6.1	5.0	5.4	4.0	5.9	7.2	6.5	6.2	3.3	3.0	6.5	8.3	3.0	9.7	6.3
Aug 6	7.0	5.4	5.2	5.2	3.9	5.2	7.2	5.3	4.8	2.9	4.9	5.9	7.2	7.8	7.0	6.6	8.9	4.6	3.5	1.1	6.6	5.0	6.7	7.6	1.1	8.9	5.6
Aug 7	10.1	9.7	9.9	9.7	11.2	10.6	9.6	12.0	11.5	10.5	10.5	11.7	10.8	11.4	12.6	13.8	11.6	12.5	11.6	10.2	10.4	8.5	9.9	12.5	8.5	13.8	11.0
Aug 8	12.5	13.2	9.1	13.7	9.3	8.3	8.3	9.7	11.8	13.1	10.1	8.5	7.0	9.1	12.2	13.6	11.4	10.4	6.6	7.0	10.8	10.1	8.8	7.4	6.6	13.7	10.1
Aug 9	7.0	8.6	9.3	8.7	6.9	6.7	6.5	7.5	8.0	7.5	4.9	4.4	2.1	0.7	3.9	1.2	4.7	2.9	2.3	2.9	0.7	1.0	3.5	3.4	0.7	9.3	4.8
Aug 10	3.1	4.1	4.2	4.2	3.1	5.5	4.0	5.5	8.7	10.1	12.2	13.6	12.2	10.6	12.2	8.2	11.9	11.2	9.7	9.7	7.4	5.2	5.0	4.8	3.1	13.6	7.8
Aug 11	5.9	7.2	8.1	6.4	7.6	6.8	7.4	7.8	6.2	6.8	10.3	11.2	13.4	12.3	9.0	9.1	6.6	1.6	3.5	1.8	3.6	5.0	2.5	5.9	1.6	13.4	6.9
Aug 12	6.0	6.1	7.5	7.9	8.0	8.4	9.1	8.3	10.4	8.4	6.3	9.9	11.8	14.3	14.0	16.8	17.0	15.6	16.6	12.3	9.5	8.7	10.4	11.8	6.0	17.0	10.6
Aug 13	11.5	13.1	13.2	17.3	15.0	16.6	16.5	16.6	20.2	19.9	21.0	24.3	26.9	23.6	**28.1**	27.2	25.4	23.4	19.6	15.8	11.9	13.4	11.7	14.4	11.5	**28.1**	**18.6**
Aug 14	14.1	14.8	14.1	9.2	6.8	3.8	3.3	6.1	2.8	5.8	6.4	6.5	3.0	3.7	6.5	7.0	3.2	5.1	2.2	4.4	4.7	8.3	6.5	8.3	2.2	14.8	6.5
Aug 15	7.5	8.8	10.3	12.4	13.3	13.1	15.3	14.8	13.6	12.9	18.5	15.8	17.2	16.4	21.1	25.7	13.9	7.5	10.6	9.7	8.0	9.1	6.2	8.0	6.2	25.7	12.9
Aug 16	9.9	9.2	7.7	5.9	6.2	9.1	7.3	6.3	4.4	5.1	4.6	6.7	10.7	17.0	18.2	20.4	18.9	16.3	10.4	6.3	7.5	8.0	12.0	11.5	4.4	20.4	10.0
Aug 17	12.4	11.4	14.1	10.4	11.7	12.9	13.4	11.9	11.7	12.5	9.9	13.1	13.4	14.7	16.0	15.4	15.0	15.0	13.2	11.9	10.8	11.0	8.5	3.5	3.5	16.0	12.2
Aug 18	5.9	5.1	4.6	10.6	9.1	8.6	8.2	9.8	12.1	12.7	9.1	10.4	14.3	12.4	13.0	13.7	15.9	13.3	10.0	6.8	7.7	7.1	5.9	5.1	4.6	15.9	9.6
Aug 19	7.2	6.3	8.6	6.9	5.6	7.2	7.4	7.4	8.5	12.0	13.2	12.3	14.5	14.5	12.4	13.3	13.4	14.1	12.2	10.5	9.5	10.0	9.3	9.0	5.6	14.5	10.2
Aug 20	8.8	9.4	9.6	10.2	9.2	7.3	6.1	6.2	5.5	7.3	8.3	8.5	7.0	9.0	7.4	10.1	7.9	11.2	11.6	10.3	10.7	10.8	11.1	11.1	5.5	11.6	8.9
Aug 21	7.7	7.6	7.0	6.3	7.2	9.3	8.3	7.5	11.1	11.5	15.3	15.7	12.5	11.1	11.3	11.0	13.6	11.6	10.2	8.3	8.9	8.3	9.2	8.8	6.3	15.7	10.0
Aug 22	9.5	9.8	10.9	9.2	9.7	8.6	8.9	7.8	6.2	5.1	6.5	9.9	9.8	8.8	6.7	8.4	7.0	9.3	7.9	6.1	7.5	6.7	6.3	7.4	5.1	10.9	8.1
Aug 23	4.1	5.4	4.7	6.4	5.9	6.2	4.8	6.5	7.4	8.7	11.8	11.1	12.4	11.0	12.6	13.8	14.4	13.1	13.5	11.7	10.9	10.3	10.6	9.2	4.1	14.4	9.4
Aug 24	7.9	7.7	5.3	8.1	7.2	6.7	4.7	4.7	5.2	4.2	4.5	5.2	5.5	2.4	2.2	3.6	5.5	6.6	5.9	6.9	7.7	9.1	8.5	9.2	2.2	9.2	6.0
Aug 25	8.2	8.4	9.8	9.3	9.1	7.8	6.9	8.3	11.1	12.5	11.6	12.8	11.0	10.5	9.3	10.6	10.9	10.7	8.8	6.7	7.6	7.6	8.7	7.8	6.7	12.8	9.4
Aug 26	9.9	9.8	10.3	10.4	10.9	11.3	10.6	12.6	13.9	17.0	15.3	13.8	15.0	14.0	13.6	12.4	13.7	13.9	12.1	6.9	1.6	3.7	3.2	2.9	1.6	17.0	10.8
Aug 27	2.8	4.4	5.4	6.5	4.5	4.4	5.5	6.7	7.4	5.5	8.4	11.5	16.0	18.5	21.3	19.6	18.4	18.1	13.7	11.5	12.6	10.8	8.5	8.4	2.8	21.3	10.4
Aug 28	8.7	9.7	10.1	9.6	9.7	9.9	9.0	9.3	9.0	13.3	15.6	16.0	14.5	15.4	13.6	15.8	15.2	13.3	10.7	7.3	7.7	8.8	8.3	7.9	7.3	16.0	11.2
Aug 29	8.6	9.2	11.3	10.0	10.0	8.2	7.8	7.6	9.2	8.0	7.6	8.8	9.1	10.2	9.7	6.6	7.3	4.8	3.9	1.7	3.4	4.0	4.9	1.8	1.7	11.3	7.2
Aug 30	3.2	3.0	5.4	6.9	7.8	5.7	6.9	6.3	4.3	3.1	4.6	6.8	6.5	8.5	8.3	7.0	5.1	7.3	6.2	5.6	6.5	8.5	9.1	12.9	3.0	12.9	6.5
Aug 31	15.7	15.0	12.5	13.4	11.9	11.3	10.4	8.2	8.2	6.6	5.0	7.8	7.9	11.4	8.6	7.9	8.6	8.2	5.2	5.5	7.0	7.1	7.7	5.9	5.0	15.7	9.0
Diurnal Maximum	15.7	15.0	14.1	17.3	15.0	16.6	16.5	16.6	20.2	19.9	21.0	24.3	26.9	23.6	28.1	27.2	25.4	23.4	19.6	15.8	12.6	13.4	12.0	14.4			
Diurnal Average	8.0	8.1	8.4	8.8	8.3	8.2	8.0	8.3	8.6	9.1	9.5	10.4	11.2	11.3	11.2	11.4	10.9	10.1	8.6	7.3	7.0	7.3	7.4	7.5			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance			
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P	Power Failure	
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)					

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



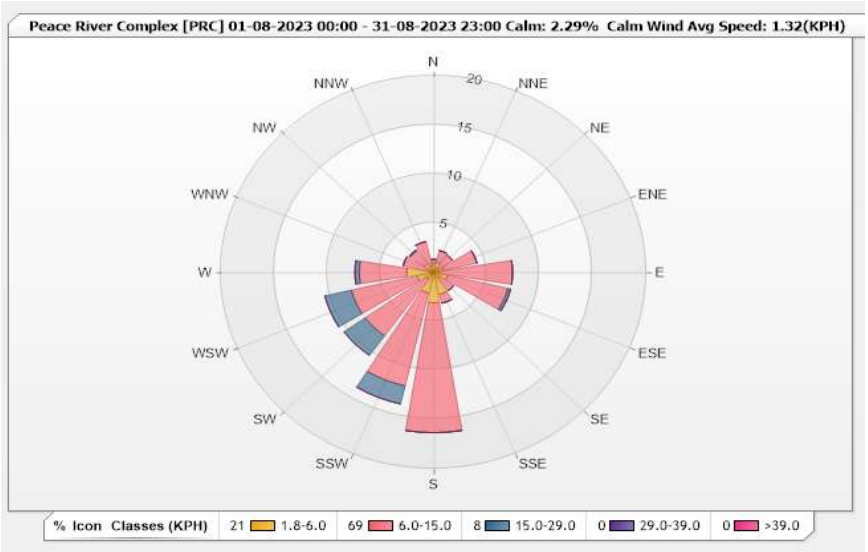


Station: Peace River Complex [PRC] Monitor: WDS [KPH] Monthly: 08-2023

Type: Wind Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm (WS<1.8kph): 2.29% Valid Data: 99.73%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	0.94	0.4	0	0	0	1.34
NNE	1.08	1.21	0	0	0	2.29
NE	0.54	1.62	0	0	0	2.16
ENE	0.94	3.23	0	0	0	4.17
E	0.54	6.87	0	0	0	7.41
ESE	1.35	5.8	0.27	0	0	7.42
SE	0.67	1.62	0	0	0	2.29
SSE	2.29	0.94	0	0	0	3.23
S	3.1	13.21	0	0	0	16.31
SSW	2.16	9.7	1.89	0	0	13.75
SW	0.81	7.14	2.43	0	0	10.38
WSW	1.62	6.33	2.56	0	0	10.51
W	2.56	4.45	0.4	0	0	7.41
WNW	0.27	2.7	0	0	0	2.97
NW	1.08	1.62	0.13	0	0	2.83
NNW	0.67	2.56	0	0	0	3.23
Summary	20.62	69.4	7.68	0	0	97.7



Peace River Area Monitoring Program

Peace River Complex (PRC) Station - August 2023

Summary of Hourly Averages

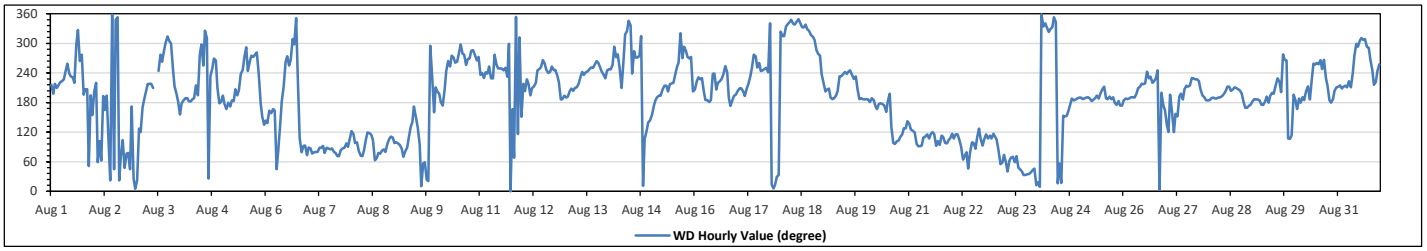
WIND DIRECTION (VWD) in sector

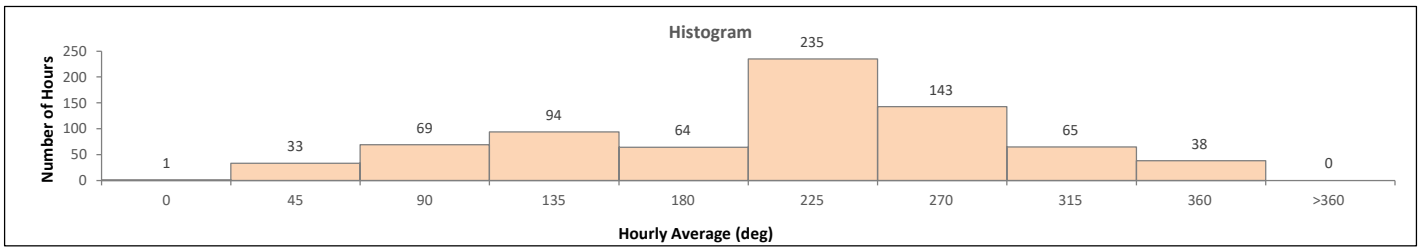
Monthly Average:	207 (SSW)	degree	
Hours in Service:	744		
Hours of Data:	742		
Hours of Missing Data:	0		
Hours of Calibration:	2		
Operational Uptime:	100.0		

Day	Hourly Period Starting at (MST)																							Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant
Aug 1	SW	SSW	SW	SSW	SSW	SW	SW	SW	WSW	WSW	WSW	SW	SW	SW	WNW	NW	W	W	SSW	SSW	SSW	NE	SSW	SSE	229	SW
Aug 2	SSW	SW	ENE	E	ENE	S	SSE	SSW	ESE	NNE	N	NE	NNW	N	NNE	ENE	ESE	NE	ENE	ENE	NE	S	NNE	N	62	ENE
Aug 3	NNE	SE	ESE	SSE	S	SSW	SW	SW	SW	SSW	C	C	WSW	W	W	WNW	WNW	NW	WNW	WNW	WSW	SSW	SSW	S	235	SW
Aug 4	SSE	S	S	S	S	S	S	S	S	SSW	SSW	W	WNW	WSW	NW	NW	NNE	SW	WSW	W	W	SSW	S	S	219	SW
Aug 5	SSW	S	SSE	S	S	S	S	SSW	SSW	SSW	SW	WSW	W	WNW	WSW	W	W	W	W	W	WSW	S	SSE	SE	215	SSW
Aug 6	SE	SE	SSE	SSE	SSE	SSE	NE	E	SE	S	SSW	W	W	WSW	W	NW	WNW	N	SW	ESE	ENE	E	E	ENE	162	SSE
Aug 7	E	E	ENE	ENE	E	E	E	E	E	ENE	E	E	E	E	E	ENE	ENE	ENE	E	E	E	E	E	ESE	85	E
Aug 8	ESE	ESE	E	E	E	ENE	ENE	E	ESE	ESE	ESE	ESE	ESE	ENE	ENE	ENE	ENE	E	E	E	ESE	ESE	ESE	ESE	95	E
Aug 9	E	E	E	E	E	ENE	E	E	ESE	SE	SE	S	SSE	SE	E	N	NE	ENE	NNE	NNE	WNW	SW	SSE	SSW	99	E
Aug 10	SSW	SSW	S	S	SSW	WSW	W	WSW	W	W	W	W	W	WNW	W	W	WSW	W	W	WNW	WNW	W	W	W	265	W
Aug 11	SW	WSW	SW	WSW	WSW	WSW	SW	SW	W	WSW	WSW	WSW	WSW	WSW	WSW	SW	WNW	N	SSE	ENE	N	ESE	NW	SSE	244	WSW
Aug 12	SW	SSW	SW	SW	SSW	SSW	SSW	SW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	S	S	SSW	232	SW
Aug 13	S	S	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	SW	SW	WSW	236	SW
Aug 14	WSW	WSW	WSW	WNW	W	W	WSW	SSW	W	NW	NW	NNW	NNW	WSW	CCCC	W	W	W	NW	NNE	ESE	ESE	SE	SE	264	W
Aug 15	SSE	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	WSW	W	NW	W	WNW	WNW	W	W	W	SSW	229	SW
Aug 16	SSW	SW	SW	SW	SW	SSW	S	S	S	S	SW	WSW	SSW	SW	SW	SW	SW	WSW	WSW	S	S	S	S	SSW	216	SW
Aug 17	SSW	SSW	SSW	SSW	S	SSW	SW	SW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	NNW	NNE	N	NNE	NNE	NNE	248	WSW
Aug 18	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	NW	NW	WNW	W	W	SW	326	NW
Aug 19	SW	SSW	SSW	SSW	S	S	S	SSW	SSW	SW	SW	SW	WSW	SW	WSW	WSW	SW	SW	SW	SSW	S	S	S	S	218	SW
Aug 20	S	S	S	S	S	S	SSE	S	S	S	S	SSE	S	SSW	SE	E	E	E	ESE	ESE	ESE	SE	SE	SE	150	SSE
Aug 21	SE	SE	ESE	ESE	E	E	E	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	E	E	E	ESE	ESE	E	E	ESE	ESE	108	ESE
Aug 22	ESE	ESE	ESE	ESE	ESE	E	ENE	ENE	ENE	NE	ENE	E	E	E	ESE	SE	ESE	E	ESE	ESE	ESE	ESE	ESE	ESE	100	E
Aug 23	ESE	ESE	E	NE	ENE	ENE	ENE	NE	ENE	ENE	ENE	ENE	ENE	NE	NE	NE	NNE	NNE	NE	NE	NE	NE	NE	NNE	50	NE
Aug 24	NNE	N	N	NNW	NNW	NNW	NW	NNW	NNW	N	NNW	NNE	NE	NNE	SSE	SSE	SSE	SSE	S	S	S	S	S	S	327	NW
Aug 25	S	S	S	S	S	S	S	S	S	SSW	S	SSW	SSW	SSW	S	S	S	S	S	S	S	S	S	S	189	S
Aug 26	S	S	S	S	S	S	S	SSW	SSW	SSW	SW	SW	SW	WSW	SW	SW	SW	SW	SW	WSW	N	SSW	S	SSE	211	SSW
Aug 27	SE	ESE	SSW	SSE	ESE	SSE	SSE	S	SSW	S	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SSW	SSW	S	S	S	206	SSW
Aug 28	S	S	S	S	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSE	SSE	S	S	197	SSW
Aug 29	S	S	S	S	S	S	S	S	S	S	SSW	SSW	SSW	SSW	SW	SW	SSW	W	W	W	ESE	ESE	ESE	SSW	193	S
Aug 30	S	SSE	S	S	S	S	SSW	SSW	S	SW	WSW	WSW	WSW	WSW	W	WSW	W	SW	SSW	S	S	S	SSW	SSW	215	SSW
Aug 31	SSW	SSW	SSW	SSW	SSW	SSW	SW	SSW	WSW	W	WNW	WNW	NW	NW	NW	NW	WNW	WNW	W	WSW	SW	SW	WSW	WSW	246	WSW

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Machine Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.





Peace River Area Monitoring Program

Peace River Complex (PRC) Station - August 2023

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr & WIND DIRECTION (VWD) in sector

WIND SPEED

Maximum Hourly Value:	28.1	kph	on Aug 13 at hr 14	Hours in Service:	744
Maximum Daily Value:	18.6	kph	on Aug 13	Hours of Data:	742
Minimum Hourly Value:	0.3	kph	on Aug 1 at hr 20	Hours of Missing Data:	0
Minimum Daily Value:	4.5	kph	on Aug 2	Hours of Calibration:	2
Monthly Average:	3.8	kph		Operational Uptime:	100.0

WIND DIRECTION

Monthly Average: 207 degree (SSW)

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	9.4	9.5	8.7	9.4	10.8	9.2	8.7	8.4	7.9	8.4	11.3	14.3	12.8	12.4	9.5	5.7	1.9	1.4	0.8	2.3	**0.3**	1.4	5.8	3.0	**0.3**	14.3	7.2
	SW	SSW	SW	SSW	SSW	SW	SW	SW	WSW	WSW	WSW	SW	SW	SW	WNW	NW	W	W	SSW	SSW	SSW	NE	SSW	SSE			
Aug 2	5.8	2.7	4.3	2.6	2.0	2.9	1.8	3.1	1.6	4.5	3.2	3.4	6.6	7.2	5.8	5.7	10.6	6.0	4.4	7.0	6.2	5.7	1.8	2.2	1.6	10.6	**4.5**
	SSW	SW	ENE	E	ENE	S	SSE	SSW	ESE	NNE	N	NE	NNW	N	NNE	ENE	ESE	NE	ENE	ENE	NE	S	NNE	N			
Aug 3	2.4	3.2	6.3	6.9	8.0	10.3	12.6	11.8	13.0	18.2	**C**	**C**	20.8	12.5	11.3	9.2	8.5	9.3	7.6	6.1	3.7	5.4	6.1	5.1	2.4	20.8	9.0
	NNE	SE	ESE	SSE	S	SSW	SW	SW	SW	SSW	**C**	**C**	WSW	W	W	WNW	WNW	NW	WNW	WNW	WSW	SSW	SSW	S			
Aug 4	6.1	6.1	8.9	11.2	10.4	6.8	5.4	5.2	3.9	3.6	4.1	3.7	7.7	12.4	5.4	9.4	6.6	7.3	6.9	6.8	3.7	3.3	5.2	7.5	3.3	12.4	6.6
	SSE	S	S	S	S	S	S	S	S	SSW	SSW	W	WNW	WSW	NW	NW	NNE	SW	WSW	W	W	SSW	S	S			
Aug 5	8.9	6.4	5.3	7.2	6.1	6.6	6.4	8.2	6.5	5.9	9.7	6.9	6.1	5.0	5.4	4.0	5.9	7.2	6.5	6.2	3.3	3.0	6.5	8.3	3.0	9.7	6.3
	SSW	S	SSE	S	S	S	S	SSW	SSW	SSW	SW	WSW	W	WNW	WSW	W	W	W	W	W	WSW	S	SSE	SE			
Aug 6	7.0	5.4	5.2	5.2	3.9	5.2	7.2	5.3	4.8	2.9	4.9	5.9	7.2	7.8	7.0	6.6	8.9	4.6	3.5	1.1	6.6	5.0	6.7	7.6	1.1	8.9	5.6
	SE	SE	SSE	SSE	SSE	SSE	NE	E	SE	S	SSW	W	W	WSW	W	NW	WNW	N	SW	ESE	ENE	E	E	ENE			
Aug 7	10.1	9.7	9.9	9.7	11.2	10.6	9.6	12.0	11.5	10.5	10.5	11.7	10.8	11.4	12.6	13.8	11.6	12.5	11.6	10.2	10.4	8.5	9.9	12.5	8.5	13.8	11.0
	E	E	ENE	ENE	E	E	E	E	E	ENE	E	E	E	E	E	ENE	ENE	ENE	E	E	E	E	E	ESE			
Aug 8	12.5	13.2	9.1	13.7	9.3	8.3	8.3	9.7	11.8	13.1	10.1	8.5	7.0	9.1	12.2	13.6	11.4	10.4	6.6	7.0	10.8	10.1	8.8	7.4	6.6	13.7	10.1
	ESE	ESE	E	E	E	ENE	ENE	E	ESE	ESE	ESE	ESE	ESE	ENE	ENE	ENE	ENE	E	E	E	E	ESE	ESE	ESE			
Aug 9	7.0	8.6	9.3	8.7	6.9	6.7	6.5	7.5	8.0	7.5	4.9	4.4	2.1	0.7	3.9	1.2	4.7	2.9	2.3	2.9	0.7	1.0	3.5	3.4	0.7	9.3	4.8
	E	E	E	E	E	ENE	E	E	ESE	SE	SE	S	SSE	SE	E	N	NE	ENE	NNE	NNE	WNW	SW	SSE	SSW			
Aug 10	3.1	4.1	4.2	4.2	3.1	5.5	4.0	5.5	8.7	10.1	12.2	13.6	12.2	10.6	12.2	8.2	11.9	11.2	9.7	9.7	7.4	5.2	5.0	4.8	3.1	13.6	7.8
	SSW	SSW	S	S	SSW	WSW	W	WSW	W	W	W	W	W	WNW	W	W	WSW	W	W	WNW	WNW	W	W	W			
Aug 11	5.9	7.2	8.1	6.4	7.6	6.8	7.4	7.8	6.2	6.8	10.3	11.2	13.4	12.3	9.0	9.1	6.6	1.6	3.5	1.8	3.6	5.0	2.5	5.9	1.6	13.4	6.9
	SW	WSW	SW	WSW	WSW	WSW	SW	SW	W	WSW	WSW	WSW	WSW	WSW	WSW	SW	WNW	N	SSE	ENE	N	ESE	NW	SSE			
Aug 12	6.0	6.1	7.5	7.9	8.0	8.4	9.1	8.3	10.4	8.4	6.3	9.9	11.8	14.3	14.0	16.8	17.0	15.6	16.6	12.3	9.5	8.7	10.4	11.8	6.0	17.0	10.6
	SW	SSW	SW	SW	SSW	SSW	SSW	SW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	S	S	SSW			
Aug 13	11.5	13.1	13.2	17.3	15.0	16.6	16.5	16.6	20.2	19.9	21.0	24.3	26.9	23.6	**28.1**	27.2	25.4	23.4	19.6	15.8	11.9	13.4	11.7	14.4	11.5	**28.1**	**18.6**
	S	S	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	SW	SW	WSW			
Aug 14	14.1	14.8	14.1	9.2	6.8	3.8	3.3	6.1	2.8	5.8	6.4	6.5	3.0	3.7	6.5	7.0	3.2	5.1	2.2	4.4	4.7	8.3	6.5	8.3	2.2	14.8	6.5
	WSW	WSW	WSW	WNW	W	W	WSW	SSW	W	NW	NW	NNW	NNW	WSW	CCCC	W	W	W	NW	NNE	ESE	ESE	SE	SE			
Aug 15	7.5	8.8	10.3	12.4	13.3	13.1	15.3	14.8	13.6	12.9	18.5	15.8	17.2	16.4	21.1	25.7	13.9	7.5	10.6	9.7	8.0	9.1	6.2	8.0	6.2	25.7	12.9
	SSE	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	WSW	W	NW	W	WNW	WNW	W	W	W	SSW			
Aug 16	9.9	9.2	7.7	5.9	6.2	9.1	7.3	6.3	4.4	5.1	4.6	6.7	10.7	17.0	18.2	20.4	18.9	16.3	10.4	6.3	7.5	8.0	12.0	11.5	4.4	20.4	10.0
	SSW	SW	SW	SW	SW	SSW	S	S	S	S	SW	WSW	SSW	SW	SW	SW	SW	WSW	WSW	S	S	S	S	SSW			
Aug 17	12.4	11.4	14.1	10.4	11.7	12.9	13.4	11.9	11.7	12.5	9.9	13.1	13.4	14.7	16.0	15.4	15.0	15.0	13.2	11.9	10.8	11.0	8.5	3.5	3.5	16.0	12.2
	SSW	SSW	SSW	SSW	S	SSW	SW	SW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	NNW	NNE	N	NNE	NNE	NNE			
Aug 18	5.9	5.1	4.6	10.6	9.1	8.6	8.2	9.8	12.1	12.7	9.1	10.4	14.3	12.4	13.0	13.7	15.9	13.3	10.0	6.8	7.7	7.1	5.9	5.1	4.6	15.9	9.6
	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	NW	NW	WNW	W	W	SW			
Aug 19	7.2	6.3	8.6	6.9	5.6	7.2	7.4	7.4	8.5	12.0	13.2	12.3	14.5	14.5	12.4	13.3	13.4	14.1	12.2	10.5	9.5	10.0	9.3	9.0	5.6	14.5	10.2
	SW	SSW	SSW	SSW	S	S	S	SSW	SSW	SW	SW	SW	WSW	SW	WSW	WSW	SW	SW	SW	SSW	S	S	S	S			
Aug 20	8.8	9.4	9.6	10.2	9.2	7.3	6.1	6.2	5.5	7.3	8.3	8.5	7.0	9.0	7.4	10.1	7.9	11.2	11.6	10.3	10.7	10.8	11.1	11.1	5.5	11.6	8.9
	S	S	S	S	S	S	SSE	S	S	S	S	SSE	S	SSW	SE	E	E	E	ESE	ESE	ESE	SE	SE	SE			
Aug 21	7.7	7.6	7.0	6.3	7.2	9.3	8.3	7.5	11.1	11.5	15.3	15.7	12.5	11.1	11.3	11.0	13.6	11.6	10.2	8.3	8.9	8.3	9.2	8.8	6.3	15.7	10.0
	SE	SE	ESE	ESE	E	E	E	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	E	E	E	ESE	ESE	E	E	ESE	ESE			
Aug 22	9.5	9.8	10.9	9.2	9.7	8.6	8.9	7.8	6.2	5.1	6.5	9.9	9.8	8.8	6.7	8.4	7.0	9.3	7.9	6.1	7.5	6.7	6.3	7.4	5.1	10.9	8.1
	ESE	ESE	ESE	ESE	ESE	E	ENE	ENE	ENE	NE	ENE	E	E	E	ESE	SE	ESE	E	ESE	ESE	ESE	ESE	ESE	ESE			
Aug 23	4.1	5.4	4.7	6.4	5.9	6.2	4.8	6.5	7.4	8.7	11.8	11.1	12.4	11.0	12.6	13.8	14.4	13.1	13.5	11.7	10.9	10.3	10.6	9.2	4.1	14.4	9.4
	ESE	ESE	E	NE	ENE	ENE	ENE	NE	ENE	ENE	ENE	ENE	ENE	NE	NE	NE	NNE	NNE	NE	NE	NE	NE	NE	NNE			
Aug 24	7.9	7.7	5.3	8.1	7.2	6.7	4.7	4.7	5.2	4.2	4.5	5.2	5.5	2.4	2.2	3.6	5.5	6.6	5.9	6.9	7.7	9.1	8.5	9.2	2.2	9.2	6.0
	NNE	N	N	NNW	NNW	NNW	NW	NNW	NNW	N	NNW	NNE	NE	NNE	SSE	SSE	SSE	SSE	S	S	S	S	S	S			
Aug 25	8.2	8.4	9.8	9.3	9.1	7.8	6.9	8.3	11.1	12.5	11.6	12.8	11.0	10.5	9.3	10.6	10.9	10.7	8.8	6.7	7.6	7.6	8.7	7.8	6.7	12.8	9.4
	S	S	S	S	S	S	S	S	S	SSW	S	SSW	SSW	SSW	S	S	S	S	S	S	S	S	S	S			
Aug 26	9.9	9.8	10.3	10.4	10.9	11.3	10.6	12.6	13.9	17.0	15.3	13.8	15.0	14.0	13.6	12.4	13.7	13.9	12.1	6.9	1.6	3.7	3.2	2.9	1.6	17.0	10.8
	S	S	S	S	S	S	S	SSW	SSW	SSW	SW	SW	SW	WSW	SW	SW	SW	SW	SW	WSW	N	SSW	S	SSE			
Aug 27	2.8	4.4	5.4	6.5	4.5	4.4	5.5	6.7	7.4	5.5	8.4	11.5	16.0	18.5	21.3	19.6	18.4	18.1	13.7	11.5	12.6	10.8	8.5	8.4	2.8	21.3	10.4
	SE	ESE	SSW	SSE	ESE	SSE	SSE	S	SSW	S	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SSW	SSW	S	S	S			
Aug 28	8.7	9.7	10.1	9.6	9.7	9.9	9.0	9.3	9.0	13.3	15.6	16.0	14.5	15.4	13.6	15.8	15.2	13.3	10.7	7.3	7.7	8.8	8.3	7.9	7.3	16.0	11.2
	S	S	S	S	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSE	SSE	S	S			
Aug 29	8.6	9.2	11.3	10.0	10.0	8.2	7.8	7.6	9.2	8.0	7.6	8.8	9.1	10.2	9.7	6.6	7.3	4.8	3.9	1.7	3.4	4.0	4.9	1.8	1.7	11.3	7.2
	S	S	S	S	S	S	S	S	S	S	SSW	SSW	SSW	SW	SW	SW	SSW	W	W	W	ESE	ESE	ESE	SSW			
Aug 30	3.2	3.0	5.4	6.9	7.8	5.7	6.9	6.3	4.3	3.1	4.6	6.8	6.5	8.5	8.3	7.0	5.1	7.3	6.2	5.6	6.5	8.5	9.1	12.9	3.0	12.9	6.5
	S	SSE	S	S	S	S	SSW	SSW	S	SW	WSW	WSW	WSW	WSW	W	WSW	W	SW	SSW	S	S	S	SSW	SSW			
Aug 31	15.7	15.0	12.5	13.4	11.9	11.3	10.4	8.2	8.2	6.6	5.0	7.8	7.9	11.4	8.6	7.9	8.6	8.2	5.2	5.5	7.0	7.1	7.7	5.9	5.0	15.7	9.0
	SSW	SSW	SSW	SSW	SSW	SSW	SW	SSW	WSW	W	WNW	WNW	NW	NW	NW	NW	WNW	WNW	W	WSW	SW	SW	WSW	WSW			

C	Monthly Calibration	**S**	Daily Zero-Span Check	**Q**	Quality Assurance			
K	Collection Error	**ND**	No Data (Machine Not in Service)	**Y**	Routine Maintenance	**P**	Power Failure	
X	InValid Data (Equipment Malfunction /Recovery)	**NRM**	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)					

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

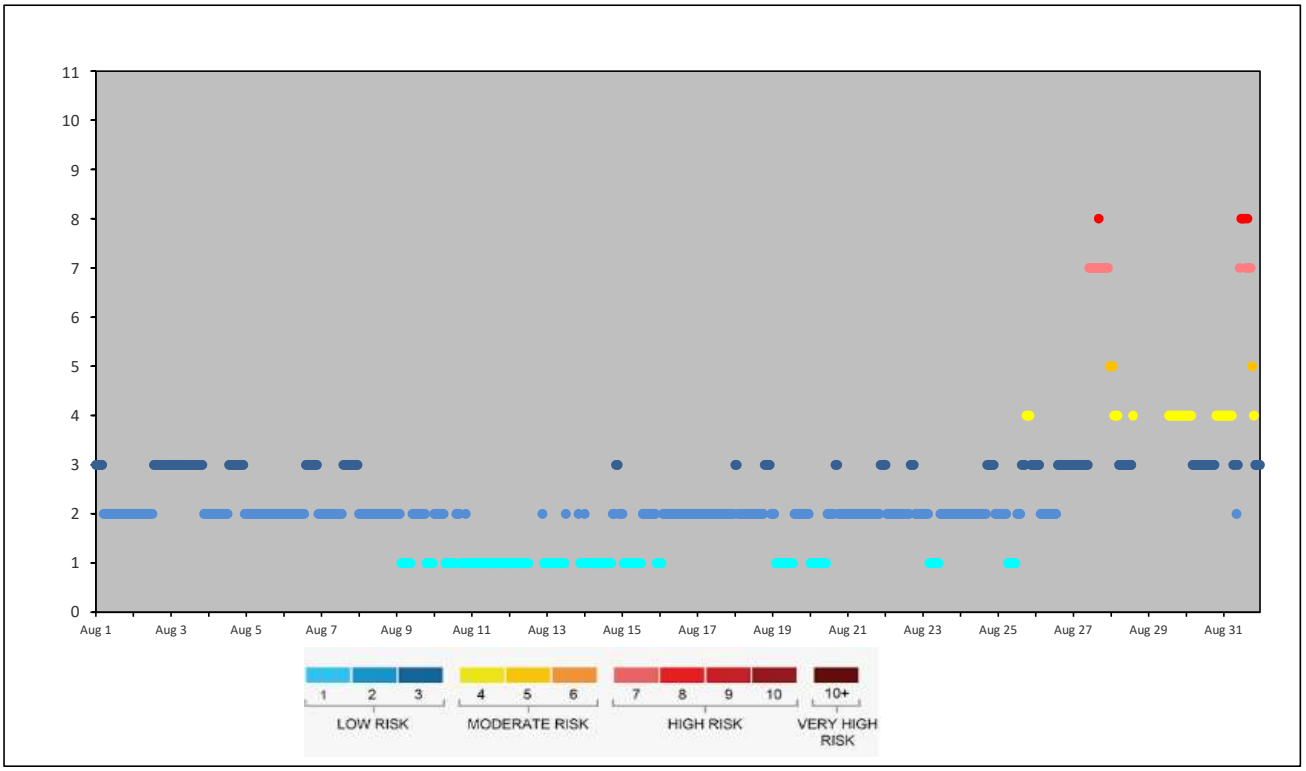
AQHI GRIMSHAW STATION

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION

St. Lina Site - August 2023

AIR QUALITY HEALTH INDEX

Day	Hourly Period Starting at (MST)																						
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Aug 1	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Aug 2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3
Aug 3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2
Aug 4	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	2
Aug 5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Aug 6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	2	2
Aug 7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3
Aug 8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Aug 9	2	2	2	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1	1	1
Aug 10	2	2	2	2	2	2	2	1	1	1	1	1	1	1	2	2	2	1	1	1	2	1	1	1
Aug 11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aug 12	1	1	1	1	1	1	1	1	1	1	1	1	1									2	1	1
Aug 13	1	1	1	1	1	1	1	1	1	1	1	1	2								2	1	1	1
Aug 14	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	3	3	2	2
Aug 15	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	1	1
Aug 16	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Aug 17	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Aug 18	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	2
Aug 19	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
Aug 20	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	2	2	2	2	2	2
Aug 21	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3
Aug 22	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	2	2	2	2	2
Aug 23	2	2	2	2	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2
Aug 24	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	2	2
Aug 25	2	2	2	2	2	2	1	1	1	1	1	1	2	2	2	3	3	3	4	4	4	3	3	3
Aug 26	3	3	3	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3
Aug 27	3	3	3	3	3	3	3	3	3	3	7	7	7	7	7	7	8	7	7	7	7	7	7	5
Aug 28	5	5	4	4	4	3	3	3	3	3	3	3	3	3	4									
Aug 29														4	4	4	4	4	4	4	4	4	4	4
Aug 30	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4
Aug 31	4	4	4	4	4	4	3	3	2	3	7	8	8	8	7	8	7	7	5	4	3	3	3	3



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

SULPHUR DIOXIDE (SO_2) in ppb

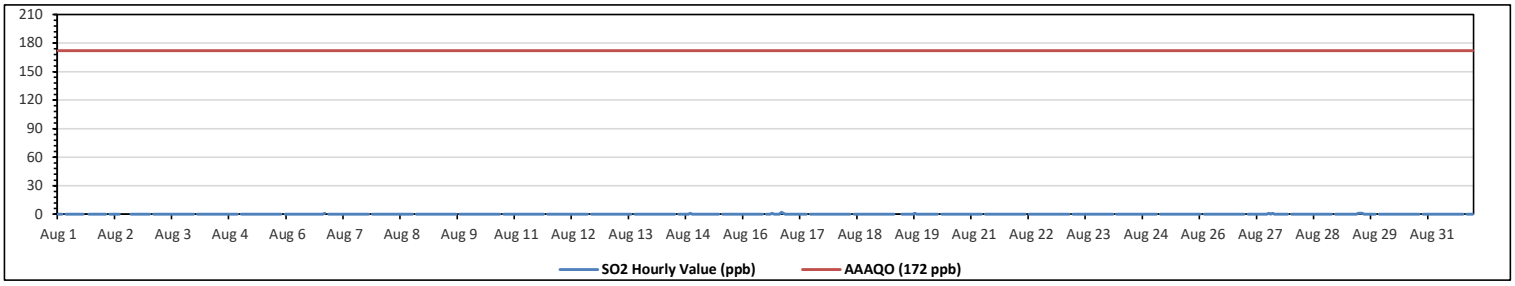
Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb

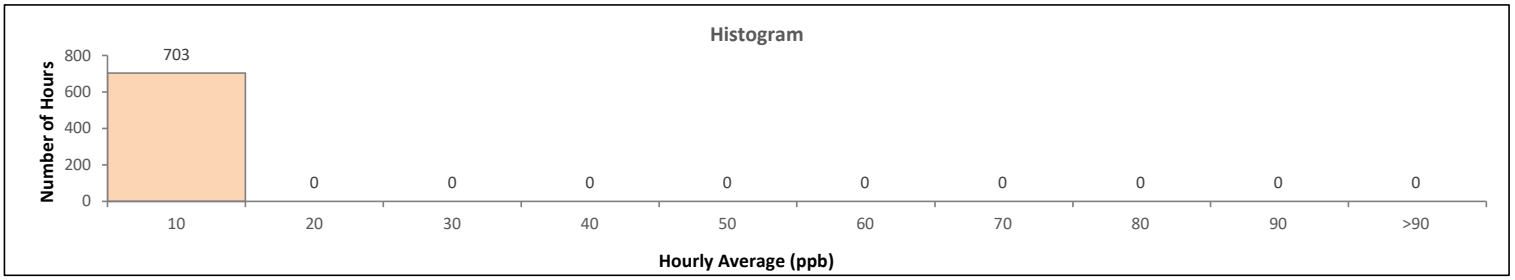
Number of 1-Hour Exceedances:	0	Number of 24-Hour Exceedances:	0	30-Day Exceedence:	0	
Maximum Hourly Value:	2	ppb	on Aug 16 at hr 20	Hours in Service:	744	
Maximum Daily Value:	0.2	ppb	on Aug 16	Hours of Data:	703	
Minimum Hourly Value:	0	ppb	on Aug 1 at hr 0	Hours of Missing Data:	3	
Minimum Daily Value:	0.0	ppb	on Aug 1	Hours of Calibration:	38	
Monthly Average:	0.0	ppb		Operational Uptime:	99.6	

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0	0	0	S	0	0	0	0	0	0	0	0	0	0	NRM	NRM	0	0	0	0	0	0	0	0	0	0	0.0
Aug 2	0	0	S	0	0	0	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 3	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 4	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0.0
Aug 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0.0
Aug 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	S	0	0	0	1	0.0
Aug 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0.0
Aug 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0.0
Aug 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0.0
Aug 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0.0
Aug 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0.0
Aug 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0.0
Aug 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 14	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	1	0	0	0	0	1	0.0
Aug 15	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 16	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	1	0	0	0	0	2	1	0	0	0	2	0.2
Aug 17	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 18	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 19	0	0	0	0	0	0	0	0	S	0	K	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.0
Aug 20	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 21	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 22	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 23	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 24	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 25	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 26	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 27	S	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	S	0	1	0.1
Aug 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0.0
Aug 29	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	S	0	0	0	1	0.1
Aug 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0.0
Aug 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0.0
Diurnal Maximum	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	1	0	2	1	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



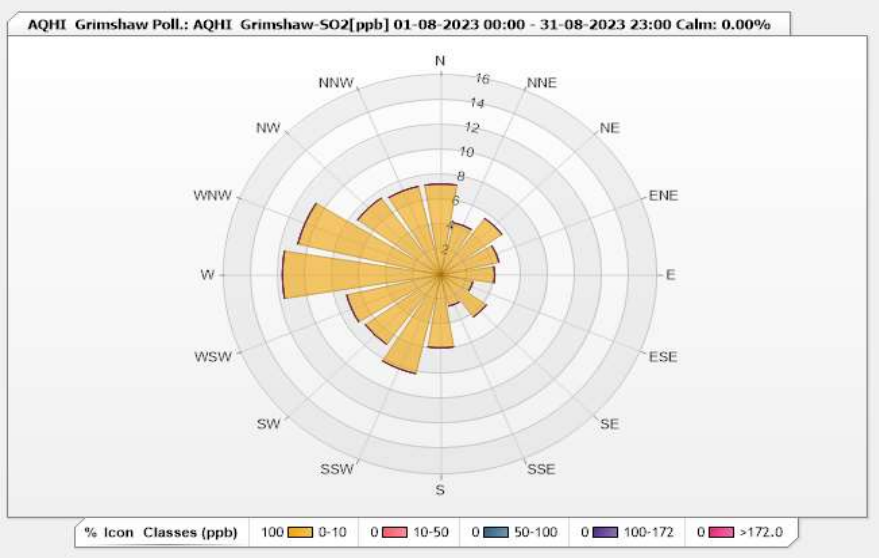


Station: AQHI Grimshaw Poll.: AQHI Grimshaw-SO2[ppb] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.22% Calm Avg: 0.00 [ppm]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	7.28	0	0	0	0	7.28
NNE	4.28	0	0	0	0	4.28
NE	5.56	0	0	0	0	5.56
ENE	4.42	0	0	0	0	4.42
E	3.99	0	0	0	0	3.99
ESE	2.43	0	0	0	0	2.43
SE	4.14	0	0	0	0	4.14
SSE	2.57	0	0	0	0	2.57
S	5.85	0	0	0	0	5.85
SSW	8.13	0	0	0	0	8.13
SW	6.85	0	0	0	0	6.85
WSW	7.13	0	0	0	0	7.13
W	11.7	0	0	0	0	11.7
WNW	10.84	0	0	0	0	10.84
NW	7.56	0	0	0	0	7.56
NNW	7.28	0	0	0	0	7.28
Summary	100	0	0	0	0	100



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

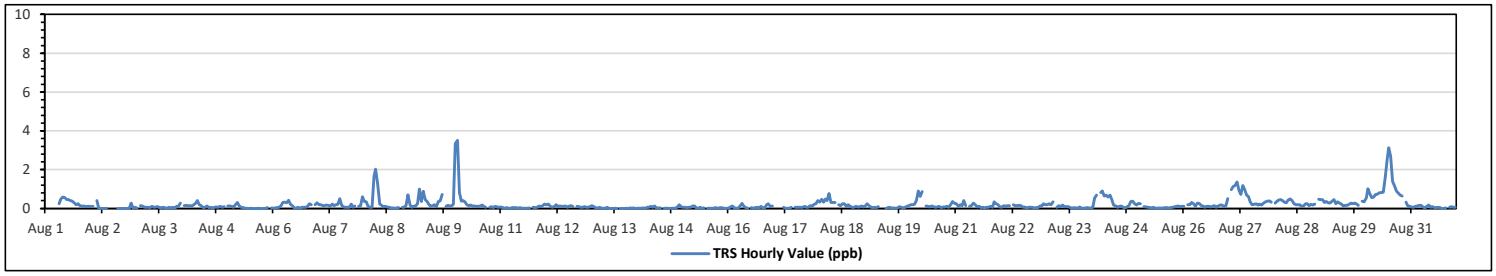
TOTAL REDUCED SULPHUR (TRS) in ppb

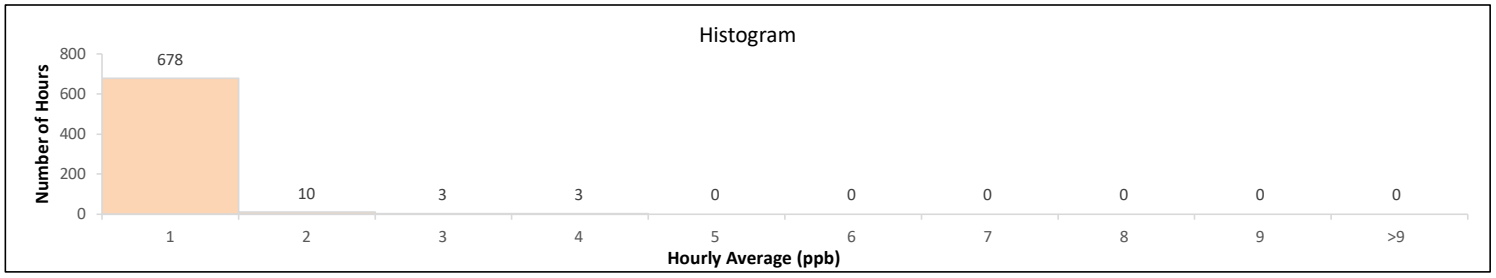
Maximum Hourly Value:	3.51	ppb	on Aug 10 at hr 1	Hours in Service:	744
Maximum Daily Value:	1.02	ppb	on Aug 30	Hours of Data:	694
Minimum Hourly Value:	0.00	ppb	on Aug 2 at hr 4	Hours of Missing Data:	12
Minimum Daily Value:	0.02	ppb	on Aug 13	Hours of Calibration:	38
Monthly Average:	0.20	ppb		Operational Uptime:	98.4

Day	Hourly Period Starting at (MST)																						Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	X	X	X	X	X	X	S	0.24	0.47	0.6	0.55	0.45	0.45	0.4	0.37	0.29	0.2	0.23	0.16	0.11	0.13	0.09	0.11	0.11	0.09	0.60	NA
Aug 2	0.09	0.11	S	0.4	0	0.01	0	0	0.02	C	C	C	C	C	0	0	0	0	0	0	0	0.27	0.03	0.07	0.00	0.40	0.06
Aug 3	0.03	S	0.15	0.13	0.05	0.05	0.07	0.04	0.1	0.06	0.08	0.09	0.04	0.04	0.05	0.03	0.02	0.07	0.03	0.07	0.02	0.1	0.11	0.27	0.02	0.27	0.07
Aug 4	S	0.14	0.16	0.14	0.14	0.12	0.19	0.27	0.41	0.19	0.14	0.04	0.05	0.12	0.04	0.05	0.03	0.06	0.08	0.05	0.11	0.05	0.09	S	0.03	0.41	0.12
Aug 5	0.12	0.13	0.11	0.07	0.18	0.3	0.12	0.07	0.04	0.01	0.01	0	0.01	0	0	0	0.01	0	0	0	0.01	0.04	S	0.03	0.00	0.30	0.05
Aug 6	0.02	0.03	0.04	0.06	0.12	0.3	0.33	0.29	0.43	0.21	0.14	0.03	0.02	0.05	0.02	0.05	0.05	0.07	0.09	0.24	0.19	S	0.18	0.29	0.02	0.43	0.14
Aug 7	0.2	0.18	0.15	0.15	0.17	0.16	0.11	0.22	0.15	0.2	0.21	0.5	0.16	0.08	0.06	0.06	0.06	0.22	0.06	0.13	S	0.1	0.13	0.61	0.06	0.61	0.18
Aug 8	0.36	0.34	0.09	0.05	0.06	1.67	2.01	1.31	0.22	0.16	0.08	0.11	0.08	0.05	0.03	0.03	0.02	0.03	0.04	S	0.05	0.05	0.15	0.7	0.02	2.01	0.33
Aug 9	0.16	0.05	0.11	0.13	0.24	0.99	0.36	0.88	0.46	0.35	0.18	0.11	0.14	0.2	0.09	0.36	0.39	0.71	S	0.11	0.16	0.13	0.14	0.21	0.05	0.99	0.29
Aug 10	3.34	**3.51**	0.82	0.37	0.42	0.34	0.19	0.15	0.17	0.13	0.12	0.11	0.1	0.12	0.17	0.1	0.05	S	0.06	0.09	0.04	0.1	0.08	0.06	0.04	**3.51**	0.46
Aug 11	0.08	0.04	0.02	0.04	0.01	0.02	0.04	0.04	0.04	0.02	0.04	0.01	0.02	0.01	0.02	0.03	S	0.06	0.04	0.05	0.13	0.09	0.15	0.22	0.01	0.22	0.05
Aug 12	0.17	0.22	0.11	0.07	0.09	0.18	0.11	0.13	0.1	0.11	0.12	0.05	0.12	0.14	0.09	S	0.1	0.09	0.07	0.05	0.09	0.05	0.05	0.09	0.05	0.22	0.10
Aug 13	0.14	0.09	0.03	0.03	0.05	0.02	0.02	0.01	0.06	0	0	0	0.01	0	S	0	0	0	0.01	0	0.03	0.02	0.03	0	0.00	0.14	0.02
Aug 14	0.02	0.02	0.01	0.03	0.02	0.05	0.07	0.11	0.07	0.12	0.02	0.03	0.03	S	0.02	0.01	0.01	0	0.02	0.01	0.02	0.09	0.19	0.08	0.00	0.19	0.05
Aug 15	0.06	0.06	0.04	0.07	0.05	0.12	0.12	0.01	0.01	0.05	0.01	0.03	S	0.01	0.02	0.01	0.02	0.04	0.02	0.03	0.04	0.03	0	0.02	0.00	0.12	0.04
Aug 16	0.02	0.08	0.13	0.03	0.01	0.02	0.13	0.26	0.1	0.04	0.02	S	0.04	0.01	0.04	0.05	0.02	0.1	0.03	0.03	0.2	0.23	0.09	0.12	0.01	0.26	0.08
Aug 17	X	X	X	X	X	0.06	0	0.02	0.02	0.06	S	0.05	0.05	0.06	0.07	0.07	0.11	0.07	0.07	0.15	0.1	0.21	0.23	0.4	0.00	0.40	0.10
Aug 18	0.33	0.47	0.33	0.49	0.42	0.78	0.3	0.3	0.3	S	0.19	0.14	0.23	0.25	0.11	0.18	0.11	0.07	0.06	0.1	0.08	0.08	0.13	0.08	0.06	0.78	0.24
Aug 19	0.12	0.25	0.14	0.07	0.04	0.05	0.04	0.09	S	0.06	K	0	0.04	0.05	0.02	0.03	0.01	0.03	0.09	0.06	0.03	0.07	0.1	0.15	0.00	0.25	0.07
Aug 20	0.19	0.19	0.21	0.42	0.9	0.62	0.87	S	0.13	0.11	0.08	0.12	0.09	0.07	0.08	0.1	0.04	0.08	0.08	0.11	0.05	0.19	0.36	0.26	0.04	0.90	0.23
Aug 21	0.26	0.1	0.18	0.15	0.4	0.15	S	0.11	0.14	0.27	0.2	0.08	0.1	0.04	0.06	0.03	0.05	0.06	0.11	0.06	0.34	0.24	0.18	0.08	0.03	0.40	0.15
Aug 22	0.07	0.15	0.11	0.14	0.14	S	0.2	0.14	0.14	0.16	0.14	0.07	0.08	0.02	0.07	0.05	0.05	0.03	0.04	0.04	0.12	0.12	0.24	0.19	0.02	0.24	0.11
Aug 23	0.18	0.23	0.2	0.34	S	0.06	0.15	0.09	0.17	0.09	0.09	0.09	0.04	0.02	0.04	0.03	0.02	0.08	0.02	0.02	0.03	0.04	0.03	0.02	0.02	0.34	0.09
Aug 24	0.04	0.54	0.69	S	0.81	0.89	0.63	0.69	0.6	0.68	0.44	0.17	0.13	0.06	0.1	0.12	0.07	0.03	0.08	0.14	0.36	0.38	0.23	0.17	0.03	0.89	0.35
Aug 25	0.26	0.24	S	0.09	0.08	0.06	0.04	0.03	0.06	0.02	0.02	0.03	0.01	0.03	0.04	0.04	0.03	0.04	0.07	0.08	0.1	0.12	0.09	0.11	0.01	0.26	0.07
Aug 26	0.11	S	0.2	0.19	0.3	0.24	0.11	0.28	0.26	0.16	0.12	0.06	0.1	0.11	0.08	0.1	0.15	0.07	0.12	0.17	0.17	0.11	0.13	0.5	0.06	0.50	0.17
Aug 27	S	0.97	1.13	1.19	1.36	0.93	0.72	1.19	0.97	0.69	0.61	0.34	0.18	0.21	0.25	0.17	0.22	0.17	0.28	0.34	0.38	0.39	0.32	S	0.17	1.36	0.59
Aug 28	0.27	0.38	0.44	0.46	0.42	0.33	0.29	0.44	0.49	0.41	0.24	0.2	0.19	0.2	0.1	0.13	0.24	0.23	0.14	0.21	0.17	0.22	S	0.47	0.10	0.49	0.29
Aug 29	0.46	0.45	0.31	0.36	0.29	0.28	0.36	0.45	0.24	0.34	0.27	0.22	0.12	0.16	0.16	0.21	0.27	0.24	0.27	0.22	0.16	S	0.38	0.34	0.12	0.46	0.29
Aug 30	0.53	1.02	0.75	0.55	0.58	0.73	0.74	0.8	0.81	0.84	1.57	2.5	3.14	2.69	1.39	1.16	0.91	0.79	0.69	0.63	S	0.32	0.15	0.1	0.10	3.14	**1.02**
Aug 31	0.08	0.07	0.11	0.13	0.16	0.16	0.08	0.03	0.1	0.17	0.07	0.09	0.04	0.04	0.05	0.04	0	0	0.03	S	0.05	0.09	0.06	0.05	0.00	0.17	0.07
Diurnal Maximum	3.34	3.51	1.13	1.19	1.36	1.67	2.01	1.31	0.97	0.84	1.57	2.50	3.14	2.69	1.39	1.16	0.91	0.79	0.69	0.63	0.38	0.39	0.38	0.70			
Diurnal Average	0.29	0.37	0.25	0.23	0.27	0.33	0.29	0.29	0.24	0.22	0.21	0.20	0.20	0.18	0.12	0.12	0.11	0.12	0.10	0.11	0.12	0.14	0.14	0.20			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



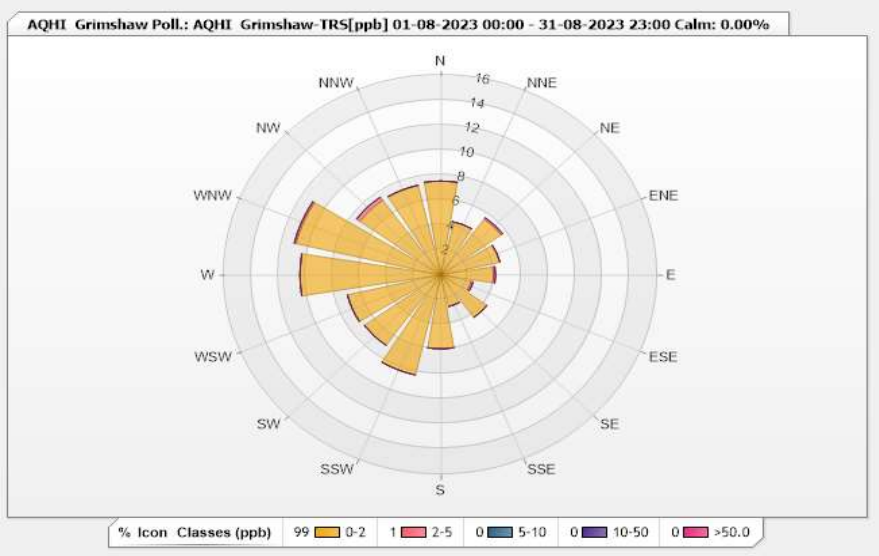


Station: AQHI Grimshaw Poll.: AQHI Grimshaw-TRS[ppb] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 93.01% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	7.51	0	0	0	0	7.51
NNE	4.34	0	0	0	0	4.34
NE	5.49	0.14	0	0	0	5.63
ENE	4.48	0	0	0	0	4.48
E	3.9	0.14	0	0	0	4.04
ESE	2.31	0.14	0	0	0	2.45
SE	4.19	0	0	0	0	4.19
SSE	2.6	0	0	0	0	2.6
S	5.92	0	0	0	0	5.92
SSW	8.24	0	0	0	0	8.24
SW	6.94	0	0	0	0	6.94
WSW	7.08	0	0	0	0	7.08
W	10.4	0	0	0	0	10.4
WNW	10.98	0.14	0	0	0	11.12
NW	7.37	0.29	0	0	0	7.66
NNW	7.37	0	0	0	0	7.37
Summary	99.12	0.85	0	0	0	100



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

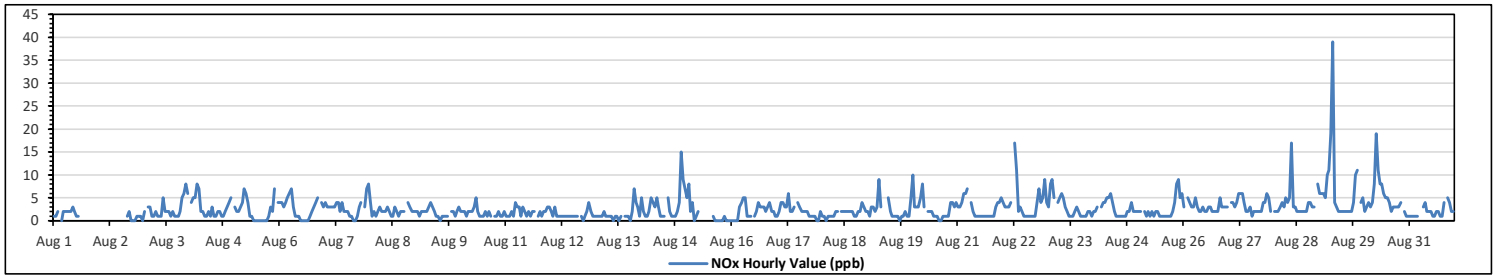
OXIDES OF NITROGEN (NOx) in ppb

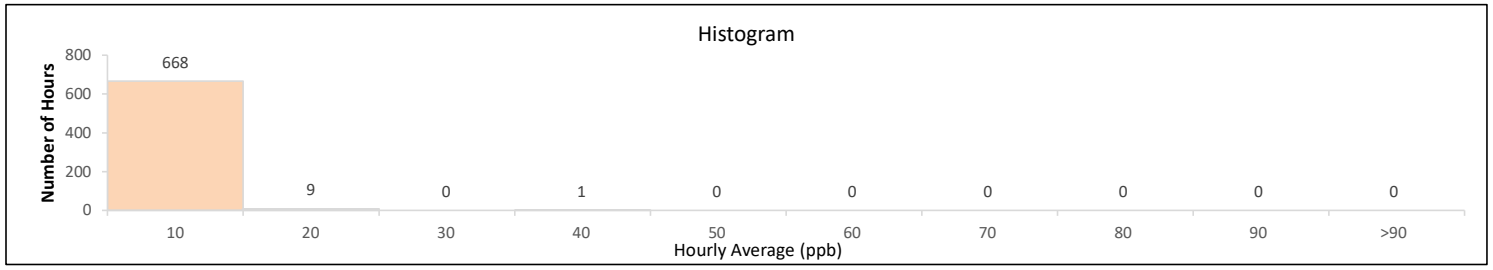
Maximum Hourly Value:	39	ppb	on Aug 29 at hr 7	Hours in Service:	744	
Maximum Daily Value:	6.9	ppb	on Aug 29	Hours of Data:	678	
Minimum Hourly Value:	0	ppb	on Aug 1 at hr 4	Hours of Missing Data:	24	
Minimum Daily Value:	1.3	ppb	on Aug 12	Hours of Calibration:	42	
Monthly Average:	2.7	ppb		Operational Uptime:	96.8	

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	1	1	2	S	0	2	2	2	2	2	3	2	1	1	C	C	C	C	NRM	NRM	NRM	NRM	NRM	NRM	0	3	NA
Aug 2	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	C	C	C	C	C	C	C	1	2	0	0	0	1	1	1	0	0	2	NA
Aug 3	2	S	3	3	1	1	2	1	1	1	5	2	2	2	1	2	1	1	1	2	5	6	8	6	1	8	2.6
Aug 4	S	4	5	5	8	7	2	2	1	1	2	1	3	1	1	2	2	1	1	2	3	4	5	S	1	8	2.9
Aug 5	3	2	2	3	4	7	6	4	1	1	0	0	0	0	0	0	0	0	1	3	2	7	S	4	0	7	2.2
Aug 6	4	4	3	4	5	6	7	3	1	1	1	0	0	0	0	0	1	2	3	4	5	S	4	3	0	7	2.7
Aug 7	4	3	3	3	3	3	4	4	2	4	2	2	2	1	1	0	0	1	3	4	S	3	7	8	0	8	2.9
Aug 8	4	1	2	1	2	3	2	2	2	3	2	1	1	3	2	1	2	2	2	S	4	3	2	2	1	4	2.1
Aug 9	2	2	1	2	2	2	2	3	4	3	2	1	1	0	1	1	1	1	S	2	2	1	2	3	0	4	1.8
Aug 10	2	2	2	1	2	2	2	3	5	2	1	1	2	1	1	2	1	S	1	1	2	1	1	2	1	5	1.7
Aug 11	1	1	1	2	1	4	3	3	1	3	2	1	2	1	2	2	S	1	2	1	2	2	3	3	1	4	1.9
Aug 12	2	1	3	1	1	1	1	1	1	1	1	1	1	1	1	S	1	0	1	2	4	2	1	1	0	4	1.3
Aug 13	1	1	1	1	2	1	1	1	1	0	1	1	0	1	S	1	1	1	0	2	7	4	3	1	0	7	1.4
Aug 14	5	2	1	1	2	5	4	3	5	3	1	1	1	S	5	2	1	1	1	2	4	15	9	7	1	15	3.5
Aug 15	5	8	2	4	0	1	2	NRM	NRM	NRM	NRM	NRM	NRM	NRM	1	0	0	0	0	0	1	0	0	0	0	8	NA
Aug 16	0	0	0	0	3	4	5	5	1	1	1	S	1	2	4	3	3	3	2	3	4	2	2	1	0	5	2.2
Aug 17	1	2	4	4	3	3	6	2	2	3	S	4	3	2	2	2	2	1	1	1	1	0	0	2	0	6	2.2
Aug 18	1	1	0	1	1	1	1	2	2	S	2	2	2	2	2	2	2	1	1	2	2	4	3	2	0	4	1.7
Aug 19	2	1	3	3	2	3	9	3	S	1	K	5	2	1	1	1	1	0	1	1	2	1	1	5	0	9	2.2
Aug 20	10	3	3	3	5	8	3	S	2	2	2	1	1	1	0	0	1	1	1	1	4	4	3	4	0	10	2.7
Aug 21	3	3	4	6	6	7	S	4	2	1	1	1	1	1	1	1	1	1	1	1	3	4	4	5	1	7	2.7
Aug 22	4	3	3	3	4	S	17	11	2	3	2	1	1	1	1	1	1	1	4	7	4	5	9	4	1	17	4.0
Aug 23	3	8	9	5	S	4	5	6	5	3	2	1	1	1	2	3	2	1	1	1	1	2	2	1	1	9	3.0
Aug 24	2	2	3	S	3	4	4	5	5	6	4	2	1	1	1	1	1	1	2	2	4	2	2	2	1	6	2.6
Aug 25	2	2	S	2	1	2	1	2	1	2	2	1	1	1	1	1	1	1	2	4	8	9	5	6	1	9	2.5
Aug 26	3	S	5	4	3	3	5	3	2	2	3	2	2	3	3	2	2	2	2	5	3	3	3	3	2	5	3.0
Aug 27	S	4	4	3	4	6	6	6	4	2	2	3	1	2	2	2	2	2	4	4	6	5	2	S	1	6	3.5
Aug 28	2	2	2	3	4	3	5	4	5	17	3	3	2	2	2	2	2	2	4	4	3	3	S	8	2	17	3.8
Aug 29	6	6	6	5	10	11	19	39	4	3	2	2	2	2	2	2	2	2	4	10	11	S	4	5	2	39	6.9
Aug 30	2	3	4	3	4	8	19	11	8	8	6	5	5	4	2	3	3	3	3	4	S	2	1	1	1	19	4.9
Aug 31	1	1	1	1	1	NRM	NRM	3	4	2	2	2	1	1	2	2	1	1	4	S	5	4	2	2	1	5	2.0
Diurnal Maximum	10	8	9	6	10	11	19	39	8	17	6	5	5	4	5	3	3	3	4	10	11	15	9	8			
Diurnal Average	2.8	2.6	2.8	2.8	3.0	4.0	5.2	4.9	2.7	2.9	2.1	1.8	1.4	1.4	1.6	1.4	1.4	1.2	1.8	2.7	3.7	3.5	3.2	3.3			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



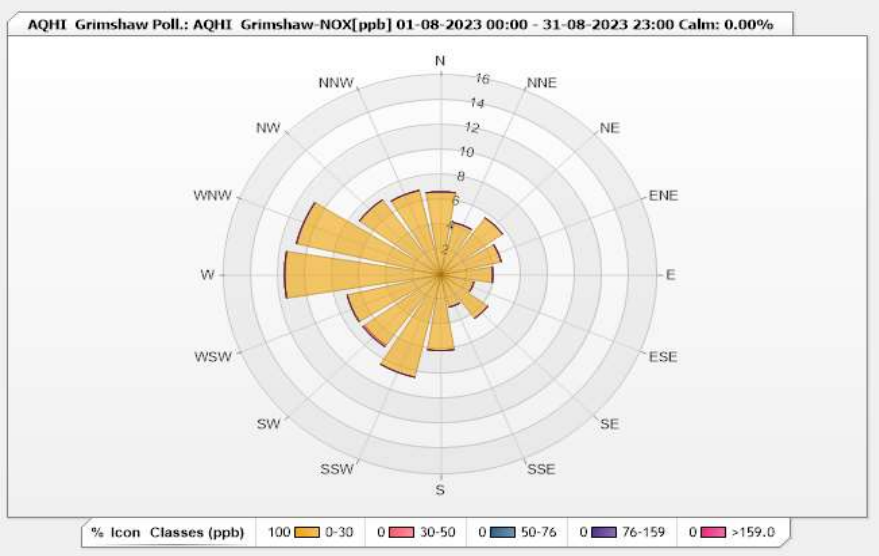


Station: AQHI Grimshaw Poll.: AQHI Grimshaw-NOX[ppb] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 90.86% Calm Avg: 0.00 [ppm]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	6.66	0	0	0	0	6.66
NNE	4.29	0	0	0	0	4.29
NE	5.62	0	0	0	0	5.62
ENE	4.59	0	0	0	0	4.59
E	3.85	0	0	0	0	3.85
ESE	2.51	0	0	0	0	2.51
SE	4.29	0	0	0	0	4.29
SSE	2.66	0	0	0	0	2.66
S	6.07	0	0	0	0	6.07
SSW	8.43	0	0	0	0	8.43
SW	6.95	0.15	0	0	0	7.1
WSW	7.1	0	0	0	0	7.1
W	11.54	0	0	0	0	11.54
WNW	10.95	0	0	0	0	10.95
NW	7.4	0	0	0	0	7.4
NNW	6.95	0	0	0	0	6.95
Summary	100	0.15	0	0	0	100



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

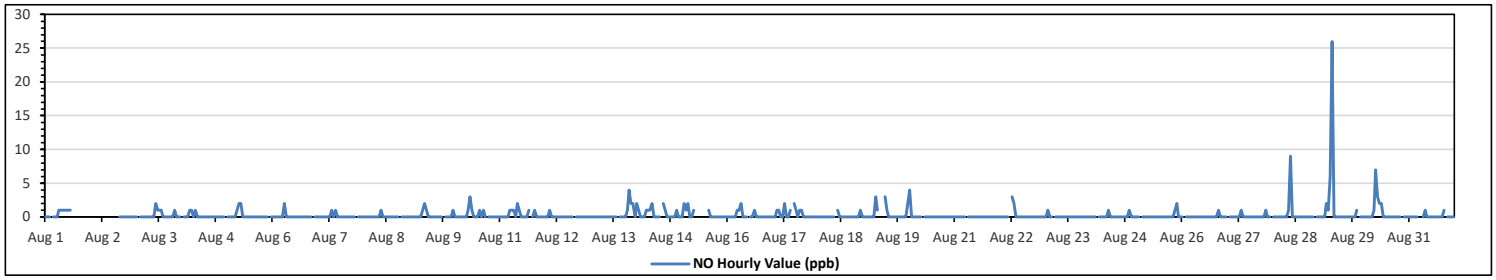
NITRIC OXIDE (NO) in ppb

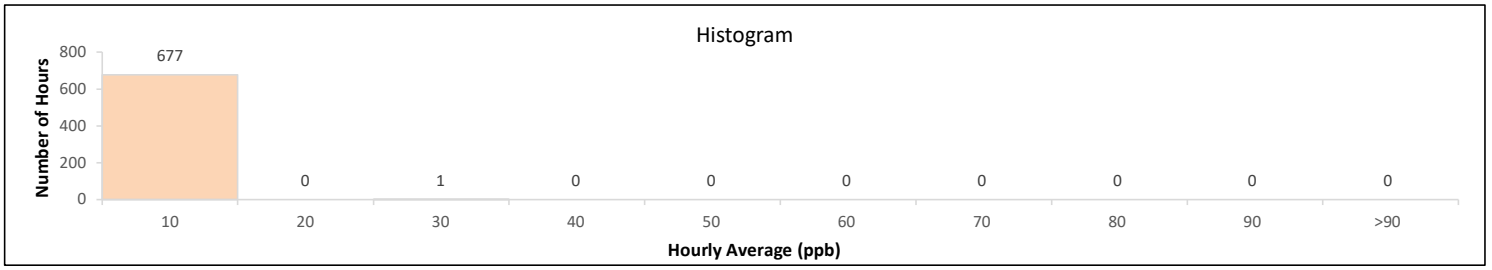
Maximum Hourly Value:	26	ppb	on Aug 29 at hr 7	Hours in Service:	744
Maximum Daily Value:	1.6	ppb	on Aug 29	Hours of Data:	678
Minimum Hourly Value:	0	ppb	on Aug 1 at hr 0	Hours of Missing Data:	24
Minimum Daily Value:	0.0	ppb	on Aug 21	Hours of Calibration:	42
Monthly Average:	0.3	ppb		Operational Uptime:	96.8

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0	0	0	S	0	0	0	1	1	1	1	1	1	1	C	C	C	C	NRM	NRM	NRM	NRM	NRM	NRM	0	1	NA
Aug 2	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	C	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	NA
Aug 3	0	S	0	0	0	0	0	0	0	0	2	1	1	1	0	0	0	0	0	0	1	0	0	0	0	2	0.3
Aug 4	S	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	1	0.1
Aug 5	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	2	0.2
Aug 6	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	2	0.1
Aug 7	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	1	0.1
Aug 8	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	1	0.0
Aug 9	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	S	0	0	0	0	1	0	2	0.2
Aug 10	0	0	0	0	0	0	0	1	3	1	0	0	0	1	0	1	0	S	0	0	0	0	0	0	0	3	0.3
Aug 11	0	0	0	0	0	1	1	1	0	2	1	0	0	0	0	1	S	0	1	0	0	0	0	0	0	2	0.3
Aug 12	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	1	0.0
Aug 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	1	4	2	2	0	0	4	0.4
Aug 14	2	1	0	0	0	1	1	1	2	0	0	0	0	S	2	1	0	0	0	0	0	1	0	0	0	2	0.5
Aug 15	0	2	1	2	0	0	1	NRM	NRM	NRM	NRM	NRM	NRM	NRM	1	0	0	0	0	0	0	0	0	0	0	2	NA
Aug 16	0	0	0	0	0	1	1	2	0	0	0	S	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0.2
Aug 17	0	0	1	1	0	0	2	0	0	1	S	2	1	0	1	1	0	0	0	0	0	0	0	0	0	2	0.4
Aug 18	0	0	0	0	0	0	0	0	0	S	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.1
Aug 19	0	0	0	0	0	0	3	1	S	0	K	3	1	0	0	0	0	0	0	0	0	0	0	2	0	3	0.5
Aug 20	4	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0.2
Aug 21	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Aug 22	0	0	0	0	0	S	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.2
Aug 23	0	1	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0
Aug 24	0	0	0	S	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.1
Aug 25	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	2	0.1
Aug 26	0	S	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
Aug 27	S	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	S	0	1	0.1
Aug 28	0	0	0	0	0	0	0	0	1	9	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	9	0.4
Aug 29	0	0	0	0	2	1	6	26	0	0	0	0	0	0	0	0	0	0	0	0	1	S	0	0	0	**26**	**1.6**
Aug 30	0	0	0	0	0	1	7	3	2	2	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	7	0.7
Aug 31	0	0	0	0	0	NRM	NRM	0	1	0	0	0	0	0	0	0	0	0	1	S	0	0	0	0	0	1	0.1
Diurnal Maximum	4	2	1	2	2	1	7	26	3	9	2	3	1	1	2	1	0	0	1	1	4	2	2	2			
Diurnal Average	0.2	0.1	0.1	0.1	0.1	0.3	1.0	1.6	0.4	0.7	0.2	0.3	0.1	0.1	0.2	0.1	0.0	0.0	0.1	0.1	0.3	0.2	0.1	0.1			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



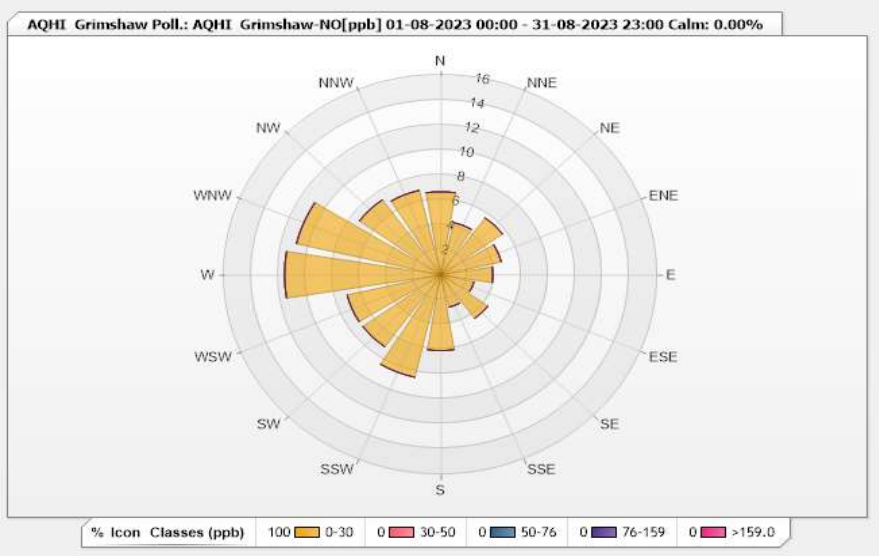


Station: AQHI Grimshaw Poll.: AQHI Grimshaw-NO[ppb] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 90.86% Calm Avg: 0.00 [ppm]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	6.66	0	0	0	0	6.66
NNE	4.29	0	0	0	0	4.29
NE	5.62	0	0	0	0	5.62
ENE	4.59	0	0	0	0	4.59
E	3.85	0	0	0	0	3.85
ESE	2.51	0	0	0	0	2.51
SE	4.29	0	0	0	0	4.29
SSE	2.66	0	0	0	0	2.66
S	6.07	0	0	0	0	6.07
SSW	8.43	0	0	0	0	8.43
SW	7.1	0	0	0	0	7.1
WSW	7.1	0	0	0	0	7.1
W	11.54	0	0	0	0	11.54
WNW	10.95	0	0	0	0	10.95
NW	7.4	0	0	0	0	7.4
NNW	6.95	0	0	0	0	6.95
Summary	100	0	0	0	0	100



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

NITROGEN DIOXIDE (NO_2) in ppb

Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 159 ppb

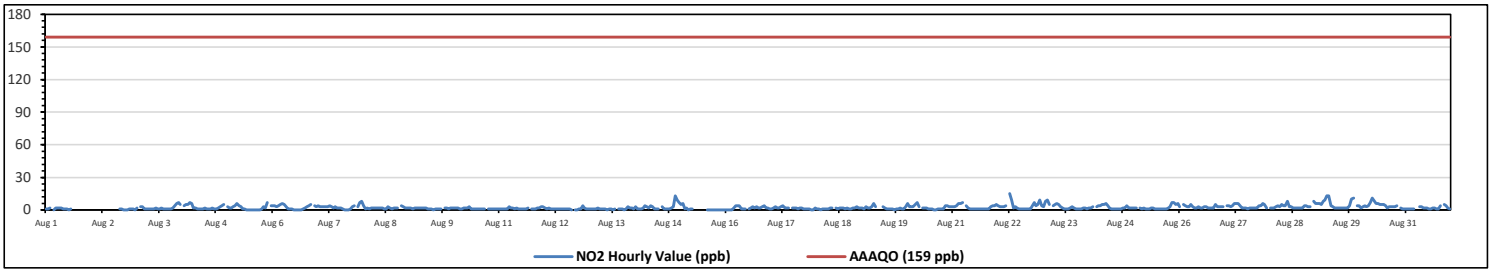
Number of 1-Hour Exceedances: 0

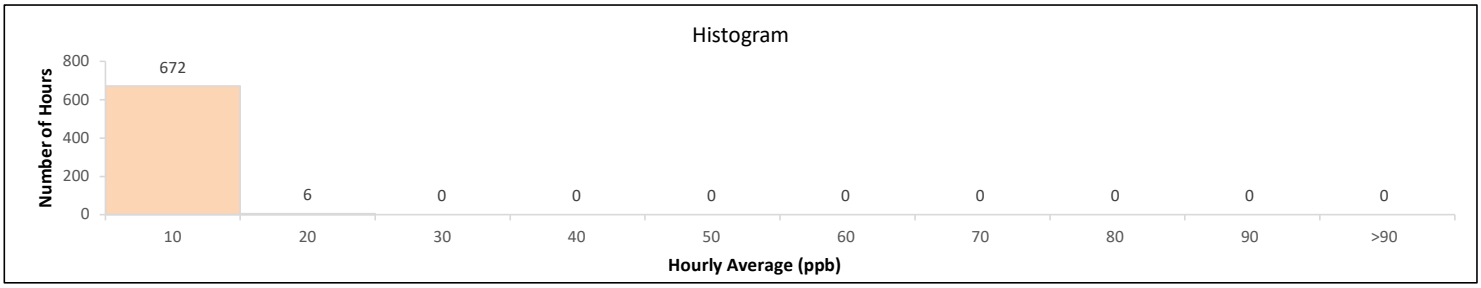
Maximum Hourly Value:	15	ppb	on Aug 22 at hr 6	Hours in Service:	744
Maximum Daily Value:	5.3	ppb	on Aug 29	Hours of Data:	678
Minimum Hourly Value:	0	ppb	on Aug 1 at hr 4	Hours of Missing Data:	24
Minimum Daily Value:	1.1	ppb	on Aug 13	Hours of Calibration:	42
Monthly Average:	2.4	ppb		Operational Uptime:	96.8

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	1	1	2	S	0	2	2	2	2	1	1	1	0	1	C	C	C	C	NRM	NRM	NRM	NRM	NRM	NRM	0	2	NA
Aug 2	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	C	C	C	C	C	C	C	1	1	0	0	0	1	1	1	0	0	1	NA
Aug 3	2	S	3	3	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	2	4	6	7	5	1	7	2.1
Aug 4	S	4	5	5	7	6	2	2	1	1	1	1	2	1	1	1	2	1	1	2	3	4	5	S	1	7	2.6
Aug 5	3	2	2	3	4	6	4	3	1	1	0	0	0	0	0	0	0	0	1	3	2	7	S	4	0	7	2.0
Aug 6	4	4	3	4	5	6	5	3	1	1	1	0	0	0	0	0	1	2	3	4	5	S	4	3	0	6	2.6
Aug 7	4	3	3	3	3	3	4	3	2	3	2	2	2	1	0	0	0	1	3	4	S	3	7	8	0	8	2.8
Aug 8	4	1	2	1	2	2	2	2	2	2	2	1	1	3	2	1	2	2	2	S	4	3	2	2	1	4	2.0
Aug 9	2	2	1	2	2	2	2	2	2	2	1	1	1	0	1	1	1	1	S	2	2	1	2	2	0	2	1.5
Aug 10	2	2	2	1	1	2	2	2	3	1	1	1	1	1	1	1	1	S	1	1	1	1	1	1	1	3	1.3
Aug 11	1	1	1	1	1	3	2	2	1	2	1	1	1	1	1	2	S	1	1	1	2	2	3	3	1	3	1.5
Aug 12	2	1	2	1	1	1	1	1	1	1	1	1	1	1	0	S	0	0	1	1	4	2	1	1	0	4	1.1
Aug 13	1	1	1	1	2	1	1	1	1	0	1	1	0	1	S	1	1	1	0	1	3	2	2	1	0	3	1.1
Aug 14	3	1	1	1	2	4	3	2	4	3	1	1	1	S	3	1	1	1	1	2	3	13	9	7	1	13	3.0
Aug 15	5	6	1	2	0	1	1	NRM	NRM	NRM	NRM	NRM	NRM	NRM	0	0	0	0	0	0	0	0	0	0	0	6	NA
Aug 16	0	0	0	0	2	4	4	4	1	1	1	S	1	2	3	2	3	2	2	3	4	2	2	1	0	4	1.9
Aug 17	1	2	3	2	2	3	4	2	2	2	S	2	2	2	1	2	2	1	1	1	1	0	0	2	0	4	1.7
Aug 18	1	1	0	1	1	1	1	2	2	S	2	1	2	2	2	1	2	1	1	2	2	3	2	2	0	3	1.5
Aug 19	2	1	3	2	2	3	6	3	S	1	K	3	2	1	1	1	1	0	1	1	2	1	1	3	0	6	1.9
Aug 20	6	3	3	3	5	7	3	S	2	2	2	1	1	1	0	0	1	1	1	1	4	4	3	3	0	7	2.5
Aug 21	3	3	4	6	6	7	S	4	2	1	1	1	1	1	1	1	1	1	1	1	3	4	4	5	1	7	2.7
Aug 22	4	3	3	3	4	S	15	9	2	3	2	1	1	1	1	1	1	1	4	7	4	5	9	4	1	15	3.8
Aug 23	3	8	9	5	S	4	5	6	5	3	2	1	1	1	2	3	2	1	1	1	1	2	2	1	1	9	3.0
Aug 24	2	2	3	S	3	4	4	5	5	6	4	2	1	1	1	1	1	1	2	2	4	2	2	2	1	6	2.6
Aug 25	2	2	S	2	1	2	1	1	1	2	2	1	1	1	1	1	1	1	2	3	7	7	5	6	1	7	2.3
Aug 26	3	S	5	4	3	3	5	3	2	2	3	2	2	3	3	2	2	2	2	5	3	3	3	3	2	5	3.0
Aug 27	S	4	4	3	4	6	6	6	4	2	2	2	1	2	2	2	2	2	4	4	6	5	2	S	1	6	3.4
Aug 28	2	2	2	3	4	3	5	4	4	8	3	3	2	2	2	2	2	2	4	4	3	3	S	8	2	8	3.3
Aug 29	6	6	6	5	8	9	13	13	4	3	2	2	2	2	2	2	2	2	4	10	11	S	4	4	2	13	5.3
Aug 30	2	3	4	3	4	7	11	8	6	6	5	5	5	4	2	3	3	3	3	4	S	2	1	1	1	11	4.1
Aug 31	1	1	1	1	1	NRM	NRM	3	3	2	2	2	1	1	2	2	1	1	4	S	5	4	2	1	1	5	2.0
Diurnal Maximum	6	8	9	6	8	9	15	13	6	8	5	5	5	4	3	3	3	3	4	10	11	13	9	8			
Diurnal Average	2.6	2.5	2.7	2.5	2.8	3.7	4.1	3.5	2.4	2.3	1.8	1.5	1.3	1.4	1.3	1.2	1.3	1.1	1.8	2.6	3.4	3.3	3.1	3.0			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



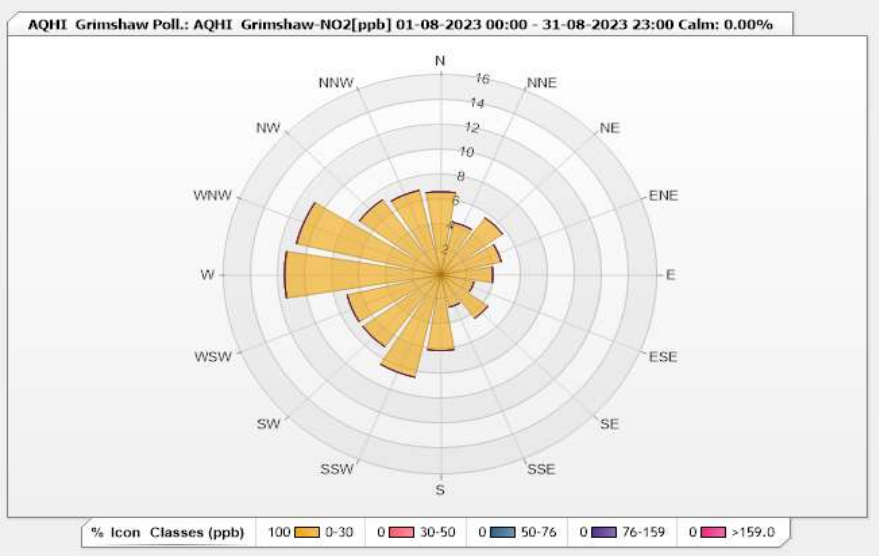


Station: AQHI Grimshaw Poll.: AQHI Grimshaw-NO2[ppb] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 90.86% Calm Avg: 0.00 [ppm]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	6.66	0	0	0	0	6.66
NNE	4.29	0	0	0	0	4.29
NE	5.62	0	0	0	0	5.62
ENE	4.59	0	0	0	0	4.59
E	3.85	0	0	0	0	3.85
ESE	2.51	0	0	0	0	2.51
SE	4.29	0	0	0	0	4.29
SSE	2.66	0	0	0	0	2.66
S	6.07	0	0	0	0	6.07
SSW	8.43	0	0	0	0	8.43
SW	7.1	0	0	0	0	7.1
WSW	7.1	0	0	0	0	7.1
W	11.54	0	0	0	0	11.54
WNW	10.95	0	0	0	0	10.95
NW	7.4	0	0	0	0	7.4
NNW	6.95	0	0	0	0	6.95
Summary	100	0	0	0	0	100



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

OZONE (O_3) in ppb

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

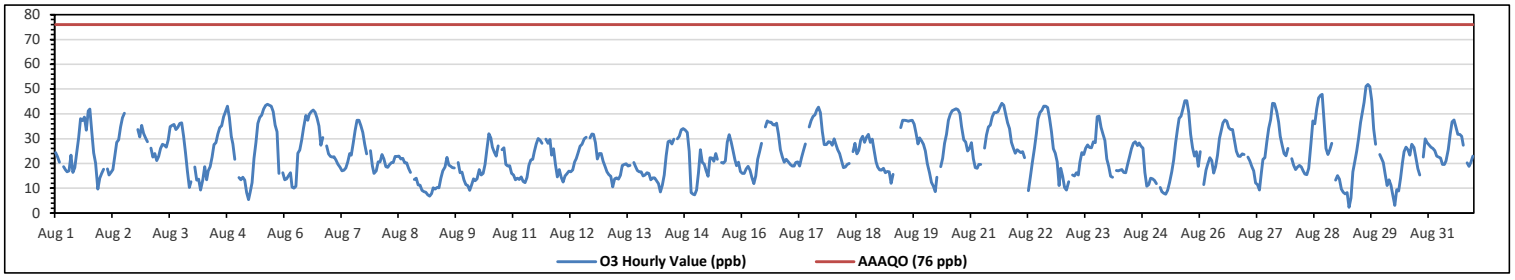
Number of 1-Hour Exceedances: 0

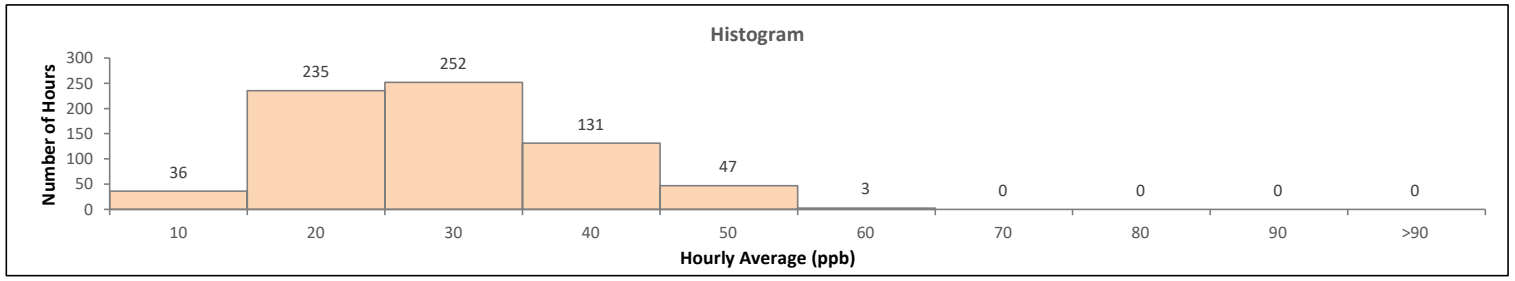
Maximum Hourly Value:	51.9	ppb	on Aug 29 at hr 16	Hours in Service:	744
Maximum Daily Value:	31.9	ppb	on Aug 21	Hours of Data:	704
Minimum Hourly Value:	2.3	ppb	on Aug 29 at hr 6	Hours of Missing Data:	1
Minimum Daily Value:	13.6	ppb	on Aug 9	Hours of Calibration:	39
Monthly Average:	24.1	ppb		Operational Uptime:	99.9

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	24.4	22.7	20.5	S	18.7	17.4	16.6	17.1	23.3	16.4	18.3	24.3	30.3	38.1	37.2	38.7	33.4	41.1	41.9	32.8	24.2	20.1	9.7	14.1	9.7	41.9	25.3
Aug 2	16	17.6	S	17.8	15.3	16.4	17.5	22.9	28.5	29.6	34.7	38.5	40.3	C	C	C	C	C	C	33.7	30.7	35.4	32.2	30.3	15.3	40.3	NA
Aug 3	28.7	S	26.2	22.5	24	21.2	22.8	26	27.8	27.4	26.6	29.5	34.8	35.3	35.8	33.7	34.5	36.2	36.4	31	24.2	16.8	10.3	12.7	10.3	36.4	27.1
Aug 4	S	18.6	13.2	13.6	9.2	13.4	18.7	13.3	17	18.7	22.5	27.6	28.3	31.9	34.4	35.2	38.8	40.8	43	38.6	30.9	27.9	21.6	S	9.2	43.0	25.3
Aug 5	14.3	13.3	14.5	13.2	8.2	5.4	8.4	12.2	22	28.3	36.1	38.6	39.5	41.9	43.3	43.8	43.4	43	40.8	35.5	32.7	16	S	16.2	5.4	43.8	26.5
Aug 6	13.4	13.7	15.1	16.3	10.5	10.1	10.9	24.1	25.4	29.4	34.4	39.3	37.4	39.8	40.8	41.5	40.7	38.4	35.1	27.3	30.4	S	27.1	23.8	10.1	41.5	27.2
Aug 7	22.8	22.6	22.7	21.5	19.7	18.4	17	17.3	18.1	20.6	23.9	23.4	28	33.3	37.4	37.4	35.2	32.4	27.7	23.8	S	25.1	19	16	16.0	37.4	24.5
Aug 8	17.1	20.6	20.6	23.6	21.8	18.7	18.4	19.6	20.3	20.4	22.8	22.8	22.9	21.8	22	20.2	20.2	18	16.4	S	13.5	14	11.3	11.1	11.1	23.6	19.0
Aug 9	9.1	8.6	8.4	7.3	6.8	7.8	10.2	9.7	10.3	10.2	14.1	17	18.6	22.4	19.4	18.9	18.3	18.1	S	20.3	16.3	16.5	13.3	11.5	6.8	22.4	**13.6**
Aug 10	11	9.1	11.3	13.7	13	13.8	17.5	15.3	16	19.6	25.9	32	30.2	26.6	24.5	23	27.1	S	25.5	26.3	19.6	19	19.1	16	9.1	32.0	19.8
Aug 11	15.3	13.3	14.1	13.5	14.6	12.8	12.3	14.3	19.3	21.4	21.6	24.8	27.9	30.1	29.4	28.1	S	29.8	28.1	29.7	23.4	25.9	19.6	14.6	12.3	30.1	21.0
Aug 12	17.5	14.4	12.5	15	15.8	16.9	16.7	17.4	20.6	21.9	24.3	26.9	27.8	30	30.5	S	30.2	31.9	31.7	28.4	21.7	23.9	24	20.9	12.5	31.9	22.6
Aug 13	18.9	16.7	15.4	14.9	10.6	13.7	14.2	13.6	15.2	19.3	19.5	19.8	19	19.3	S	20.3	18.9	17.2	16.7	16.6	15	15.3	16.2	15.9	10.6	20.3	16.6
Aug 14	13.3	14.2	14.2	13	11.9	8.5	11.1	15.3	23.1	28.8	29.1	27.9	29.8	S	29.9	30.9	33.5	34.1	33.6	32.4	24.9	8.2	7.6	7.3	7.3	34.1	21.0
Aug 15	9.3	16.2	25.5	20.3	19.7	17	14.8	22.3	22.1	20.9	23.9	21.6	S	20.3	20.1	21.1	28.6	31.6	28.7	25.2	21.5	19.1	20.5	16.8	9.3	31.6	21.2
Aug 16	15.9	16	17.7	18.9	17.3	14.3	11.8	15	21.6	24.7	28.1	S	34.7	37.1	36.6	36.6	35.6	35.5	36.3	31.8	25.6	22.7	20.5	21.6	11.8	37.1	25.0
Aug 17	20.7	19.5	19	19	20.4	20.6	19	22.3	25.2	27.9	S	34.7	37.2	38.9	39.6	41.7	42.7	40.5	32.9	27.6	27.6	28.8	28.6	27.3	19.0	42.7	28.8
Aug 18	29.9	27.9	25.6	23.9	21.2	18.3	18.6	19.6	20	S	24.7	28	23.8	25.3	29.5	30.9	28.5	30.5	31.7	28.5	29.8	25.2	20.6	18.5	18.3	31.7	25.2
Aug 19	17.4	17.3	18	16.2	16.8	16.6	12	15.6	S	25.1	K	34.4	37.4	37.4	37.3	37	37.2	37.4	35.9	32.1	27.9	30.2	29.2	27.7	12.0	37.4	27.1
Aug 20	25	20	16.3	12.4	10.9	8.6	14.4	S	18.7	22	28.1	31.7	37.4	39.8	41.2	41.7	42.1	41.6	40.1	34.9	29.5	28.6	25	26	8.6	42.1	27.7
Aug 21	28.4	21.9	18.3	18	19.5	19.6	S	26.1	31.5	34.7	35.5	38.8	40.5	40.5	40.9	42.8	44.2	43.5	39.8	36.4	34.1	28.5	26.2	24.1	18.0	44.2	**31.9**
Aug 22	25.5	24.9	24.4	24.8	22.3	S	8.9	14.5	20.1	26.1	32.2	37.9	40.5	41.4	43.1	43	42.6	38.3	32.9	25.9	24.1	20.6	11	18	8.9	43.1	28.0
Aug 23	14.9	10.3	9.3	12.7	S	15.3	15	16.2	15.3	20.5	24.4	23.7	26.1	27.5	26.4	26.3	28.8	28.4	38.8	39.1	34.5	31.9	29.3	21.8	9.3	39.1	23.3
Aug 24	18.9	14.9	14.4	S	17.2	17	17.3	17.5	16.4	16.3	19.6	22.7	25.9	28	28.7	27.2	28.2	26.9	26.2	16.4	10.8	11.5	14	13.8	10.8	28.7	19.6
Aug 25	13.1	11.8	S	10.3	8.7	8	7.6	9.1	12.2	16.6	21.4	28.2	34	38.2	39	42	45.2	45.3	40.7	31.7	26.3	22.9	24.7	18.9	7.6	45.3	24.2
Aug 26	24.7	S	11.5	17.3	20	22.3	21.2	16.1	18.7	23.3	30.1	32.8	36.4	37.5	37	34.4	33.7	33.7	29.3	24.9	23	22.8	23.8	23.6	11.5	37.5	26.0
Aug 27	S	22.6	21.1	18.8	17	12.1	11.4	9.2	16.3	21.6	22.3	28.6	34.2	37.6	44.2	44.1	40.9	36.6	30.9	27.3	23.9	23.1	26	S	9.2	44.2	25.9
Aug 28	21.9	19.2	17.5	18.5	19.2	18.6	16.9	15.7	15.4	18	28	37.1	36	42	46.5	47.5	47.9	37	26	23.6	25.5	28.1	S	13.2	13.2	47.9	26.9
Aug 29	15.1	13.6	9.7	8.4	7.7	8.3	2.3	6	16.6	20.7	25	30.3	36.5	40.8	44.6	51.1	**51.9**	51	45.3	34	27.8	S	23.6	22.1	**2.3**	**51.9**	25.8
Aug 30	20.3	15.6	11	13.4	11.2	7.1	3.1	9.4	8.8	14.1	20.3	24.8	26.6	25.5	23.4	27.8	26.4	22.3	17.9	15.3	S	22.5	29.9	28.3	3.1	29.9	18.5
Aug 31	27.5	26.6	26	25.2	22.9	22.5	22.2	19.6	19.5	21	25.6	31.8	36.7	37.5	34.7	31.7	31.8	31	27.4	S	20.2	18.9	20.5	22.9	18.9	37.5	26.2
Diurnal Maximum	29.9	27.9	26.2	25.2	24.0	22.5	22.8	26.1	31.5	34.7	36.1	39.3	40.5	42.0	46.5	51.1	51.9	51.0	45.3	39.1	34.5	35.4	32.2	30.3			
Diurnal Average	19.0	17.4	17.0	16.7	15.7	14.7	14.3	16.4	19.5	22.2	25.6	29.3	32.0	33.3	34.4	34.4	34.8	34.2	32.3	28.7	24.8	22.4	20.8	19.1			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



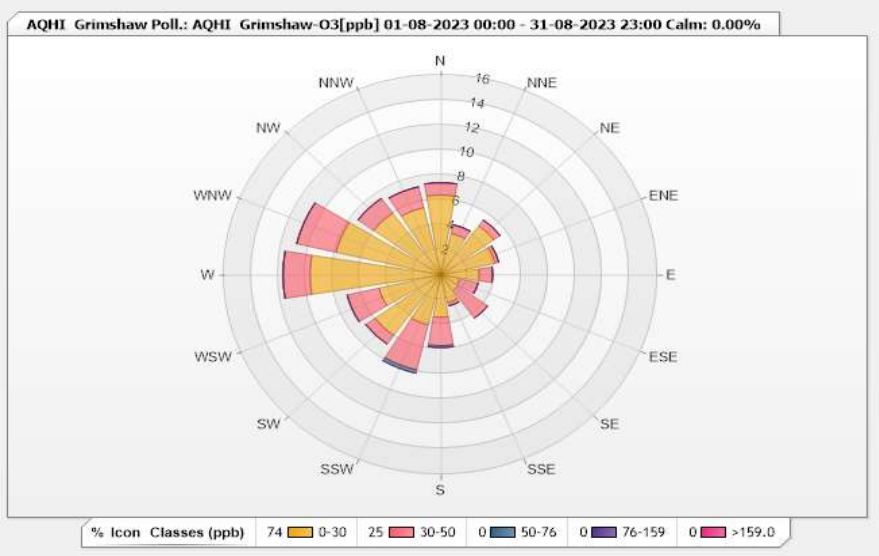


Station: AQHI Grimshaw Poll.: AQHI Grimshaw-O3[ppb] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 94.62% Calm Avg: 0.00 [ppm]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	6.39	0.99	0	0	0	7.38
NNE	3.41	0.71	0	0	0	4.12
NE	4.83	0.57	0	0	0	5.4
ENE	4.12	0.28	0	0	0	4.4
E	2.84	0.99	0	0	0	3.83
ESE	1.42	1.42	0	0	0	2.84
SE	1.56	2.7	0	0	0	4.26
SSE	2.27	0.28	0	0	0	2.55
S	3.41	2.27	0.14	0	0	5.82
SSW	4.12	3.69	0.28	0	0	8.09
SW	5.97	0.85	0	0	0	6.82
WSW	4.69	2.41	0	0	0	7.1
W	9.66	1.99	0	0	0	11.65
WNW	7.95	2.98	0	0	0	10.93
NW	6.11	1.42	0	0	0	7.53
NNW	5.54	1.7	0	0	0	7.24
Summary	74.29	25.25	0.42	0	0	100



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

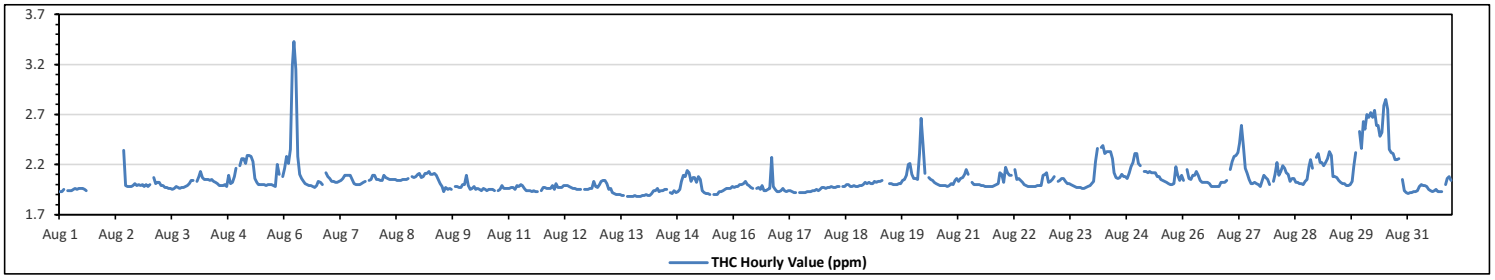
TOTAL HYDROCARBONS (THC) in ppm

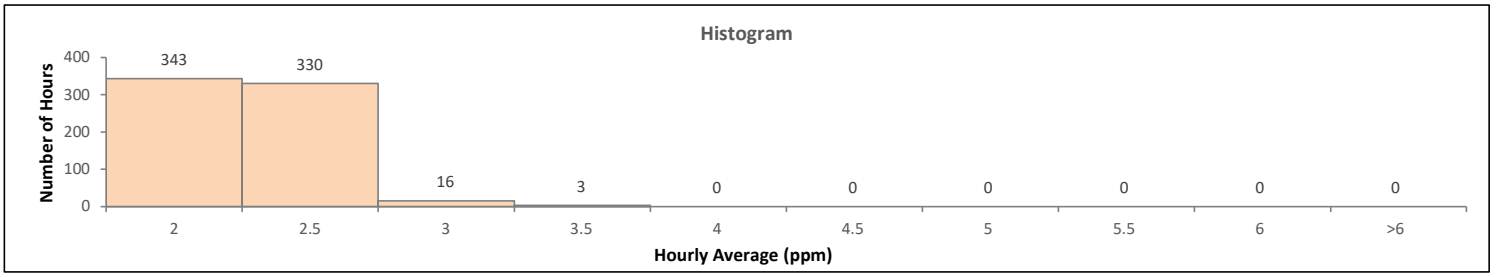
Maximum Hourly Value:	3.43	ppm	on Aug 6 at hr 5	Hours in Service:	744
Maximum Daily Value:	2.47	ppm	on Aug 30	Hours of Data:	692
Minimum Hourly Value:	1.88	ppm	on Aug 13 at hr 15	Hours of Missing Data:	16
Minimum Daily Value:	1.93	ppm	on Aug 13	Hours of Calibration:	36
Monthly Average:	2.05	ppm		Operational Uptime:	97.8

Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	1.93	1.93	1.95	S	1.94	1.94	1.94	1.95	1.96	1.95	1.96	1.96	1.96	1.95	1.94	C	C	NRM	NRM	NRM	NRM	NRM	NRM	NRM	1.93	1.96	NA
Aug 2	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	C	C	2.34	1.99	1.98	1.98	1.98	1.99	2.01	1.99	2.00	1.99	2.00	1.98	2.00	1.98	1.98	2.34	NA
Aug 3	2.00	S	2.07	2.01	2.02	2.02	1.99	1.99	1.97	1.97	1.96	1.96	1.95	1.96	1.98	1.97	1.96	1.97	1.97	1.98	1.99	2.01	2.04	2.04	1.95	2.07	1.99
Aug 4	S	2.03	2.08	2.13	2.07	2.05	2.05	2.05	2.04	2.05	2.03	2.02	2.01	1.99	1.99	1.99	2.00	1.98	2.09	2.01	2.02	2.08	2.16	S	1.98	2.16	2.04
Aug 5	2.19	2.26	2.26	2.21	2.29	2.29	2.28	2.23	2.06	2.02	2.00	2.00	2.00	2.00	1.99	2.00	2.00	2.00	1.99	1.98	2.20	2.10	S	2.08	1.98	2.29	2.11
Aug 6	2.16	2.28	2.21	2.35	3.18	**3.43**	3.15	2.28	2.10	2.06	2.03	2.01	2.00	1.99	1.99	1.98	1.97	1.99	2.03	2.02	2.00	S	2.12	2.08	1.97	**3.43**	2.24
Aug 7	2.06	2.03	2.03	2.02	2.02	2.03	2.04	2.06	2.09	2.09	2.09	2.09	2.05	2.01	2.00	2.00	2.00	2.01	2.02	2.03	S	2.04	2.05	2.09	2.00	2.09	2.04
Aug 8	2.09	2.05	2.05	2.04	2.04	2.09	2.07	2.06	2.05	2.05	2.05	2.05	2.04	2.04	2.04	2.05	2.05	2.05	2.06	S	2.08	2.07	2.08	2.10	2.04	2.10	2.06
Aug 9	2.11	2.07	2.08	2.11	2.11	2.13	2.10	2.10	2.11	2.09	2.05	2.01	1.98	1.93	1.97	1.95	1.96	1.95	S	1.98	1.98	1.97	1.97	2.00	1.93	2.13	2.03
Aug 10	2.00	2.09	1.99	1.95	1.96	1.98	1.95	1.96	1.95	1.94	1.96	1.95	1.94	1.95	1.95	1.95	1.94	S	1.94	1.95	1.99	1.96	1.96	1.96	1.94	2.09	1.96
Aug 11	1.96	1.97	1.97	1.95	1.99	1.98	2.00	1.99	1.96	1.94	1.94	1.94	1.93	1.94	1.93	1.93	S	1.94	1.97	1.97	1.96	1.96	1.96	1.99	1.93	2.00	1.96
Aug 12	1.95	2.01	1.97	1.97	1.97	1.99	1.99	1.99	1.98	1.97	1.96	1.96	1.95	1.95	1.95	S	1.95	1.95	1.95	1.96	1.96	2.03	1.98	1.97	1.95	2.03	1.97
Aug 13	2.00	2.03	2.04	2.04	2.01	1.95	1.96	1.92	1.91	1.90	1.90	1.90	1.89	1.89	S	1.88	1.88	1.88	1.88	1.89	1.88	1.88	1.88	1.89	1.88	2.04	1.93
Aug 14	1.89	1.90	1.89	1.89	1.91	1.94	1.94	1.96	1.93	1.94	1.94	1.95	1.95	S	1.92	1.91	1.94	1.92	1.93	1.95	2.03	2.09	2.08	2.14	1.89	2.14	1.95
Aug 15	2.12	2.03	2.07	2.07	2.02	2.08	2.05	1.94	1.92	1.91	1.91	1.90	S	1.90	1.90	1.90	1.93	1.93	1.94	1.95	1.96	1.96	1.96	1.98	1.90	2.12	1.97
Aug 16	1.97	1.98	1.98	2.00	2.00	2.01	2.03	2.00	1.99	1.97	1.96	S	1.96	1.97	1.95	1.99	1.94	1.94	1.95	1.96	2.27	1.98	1.95	1.93	1.93	2.27	1.99
Aug 17	1.93	1.94	1.96	1.94	1.93	1.94	1.94	1.93	1.92	1.92	S	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.94	1.94	1.95	1.94	1.95	1.97	1.92	1.97	1.94
Aug 18	1.97	1.96	1.97	1.97	1.98	1.97	1.97	1.98	1.98	S	1.98	1.98	2.00	2.00	1.98	1.98	1.99	1.98	1.98	1.99	1.99	2.00	2.02	2.01	1.96	2.02	1.98
Aug 19	2.02	2.01	2.01	2.03	2.02	2.03	2.03	2.04	S	2.04	K	2.01	2.01	2.00	2.00	2.00	2.01	2.01	2.04	2.05	2.09	2.20	2.21	2.10	2.00	2.21	2.04
Aug 20	2.06	2.06	2.05	2.31	2.66	2.40	2.11	S	2.07	2.05	2.04	2.02	2.01	2.00	1.99	1.99	1.99	1.99	1.98	1.99	2.01	2.00	2.04	2.06	1.98	2.66	2.08
Aug 21	2.03	2.06	2.07	2.10	2.15	2.10	S	2.02	2.00	2.00	2.00	2.00	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.99	2.00	2.01	2.12	2.10	1.98	2.15	2.03
Aug 22	2.02	2.17	2.12	2.09	2.09	S	2.15	2.05	2.06	2.04	2.02	2.00	1.99	1.98	1.98	1.98	1.98	1.98	1.99	1.99	1.99	2.09	2.10	2.12	1.98	2.17	2.04
Aug 23	2.02	2.03	2.05	2.08	S	2.03	2.04	2.06	2.06	2.03	2.01	2.01	2.00	1.99	1.98	1.97	1.97	1.97	1.96	1.96	1.97	1.98	1.99	2.01	1.96	2.08	2.01
Aug 24	2.03	2.23	2.36	S	2.37	2.39	2.31	2.33	2.33	2.33	2.26	2.12	2.07	2.06	2.07	2.10	2.08	2.08	2.06	2.11	2.18	2.22	2.31	2.31	2.03	2.39	2.20
Aug 25	2.21	2.19	S	2.13	2.13	2.12	2.13	2.12	2.12	2.12	2.08	2.08	2.05	2.04	2.03	2.02	2.01	2.00	2.00	2.01	2.18	2.09	2.04	2.09	2.00	2.21	2.09
Aug 26	2.04	S	2.15	2.06	2.05	2.09	2.09	2.13	2.09	2.04	2.02	2.02	2.02	2.02	2.01	1.98	1.98	1.98	1.98	1.98	2.02	2.02	2.02	2.04	1.98	2.15	2.04
Aug 27	S	2.15	2.23	2.28	2.29	2.32	2.41	2.59	2.39	2.16	2.11	2.05	2.01	2.01	2.02	2.01	2.00	1.98	2.04	2.09	2.07	2.05	2.00	S	1.98	2.59	2.15
Aug 28	2.03	2.10	2.22	2.09	2.13	2.19	2.16	2.12	2.10	2.03	2.06	2.06	2.02	2.02	2.01	2.01	2.00	2.03	2.05	2.18	2.25	2.16	S	2.27	2.00	2.27	2.10
Aug 29	2.31	2.22	2.22	2.19	2.22	2.26	2.33	2.29	2.08	2.08	2.07	2.04	2.02	2.01	2.01	1.99	1.99	2.00	2.03	2.18	2.32	S	2.53	2.36	1.99	2.53	2.16
Aug 30	2.63	2.55	2.70	2.67	2.72	2.67	2.74	2.59	2.59	2.48	2.52	2.79	2.85	2.75	2.35	2.32	2.31	2.25	2.25	2.26	S	2.05	1.94	1.92	1.92	2.85	**2.47**
Aug 31	1.91	1.92	1.92	1.93	1.93	1.94	1.98	2.00	1.99	1.99	1.98	1.95	1.94	1.93	1.94	1.95	1.93	1.93	1.93	S	2.00	2.06	2.08	2.04	1.91	2.08	1.96
Diurnal Maximum	2.63	2.55	2.70	2.67	3.18	3.43	3.15	2.59	2.59	2.48	2.52	2.79	2.85	2.75	2.35	2.32	2.31	2.25	2.25	2.26	2.32	2.22	2.53	2.36			
Diurnal Average	2.06	2.08	2.09	2.09	2.14	2.15	2.14	2.09	2.06	2.04	2.04	2.02	2.02	2.01	1.99	1.99	1.99	1.99	2.00	2.01	2.05	2.04	2.06	2.06			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



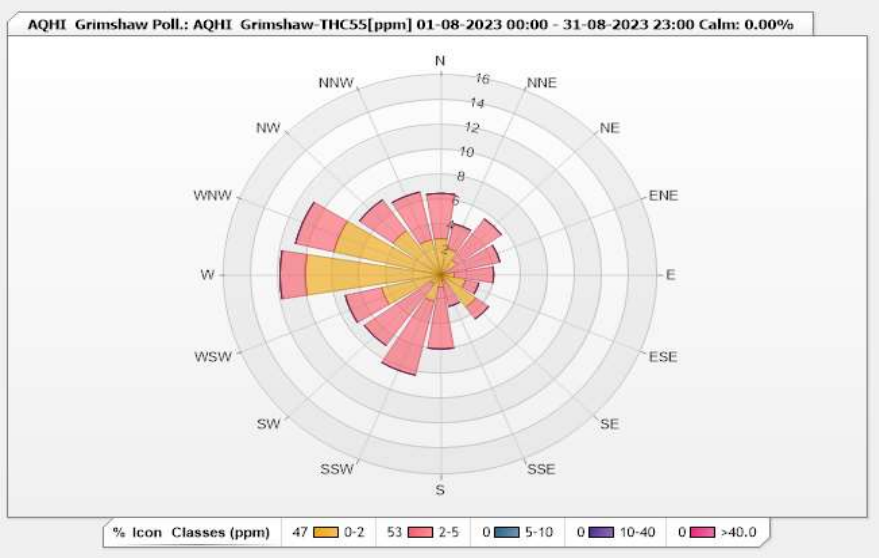


Station: AQHI Grimshaw Poll.: AQHI Grimshaw-THC55[ppm] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 92.74% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	2.9	3.62	0	0	0	6.52
NNE	2.17	2.03	0	0	0	4.2
NE	1.45	4.06	0	0	0	5.51
ENE	0.14	4.35	0	0	0	4.49
E	1.01	2.9	0	0	0	3.91
ESE	1.88	1.01	0	0	0	2.89
SE	3.19	1.16	0	0	0	4.35
SSE	0.43	2.17	0	0	0	2.6
S	1.01	4.93	0	0	0	5.94
SSW	2.17	6.09	0	0	0	8.26
SW	0.87	6.09	0	0	0	6.96
WSW	4.49	2.75	0	0	0	7.24
W	10	1.88	0	0	0	11.88
WNW	8.12	2.9	0	0	0	11.02
NW	4.35	3.04	0	0	0	7.39
NNW	2.9	3.91	0	0	0	6.81
Summary	47.08	52.89	0	0	0	100



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

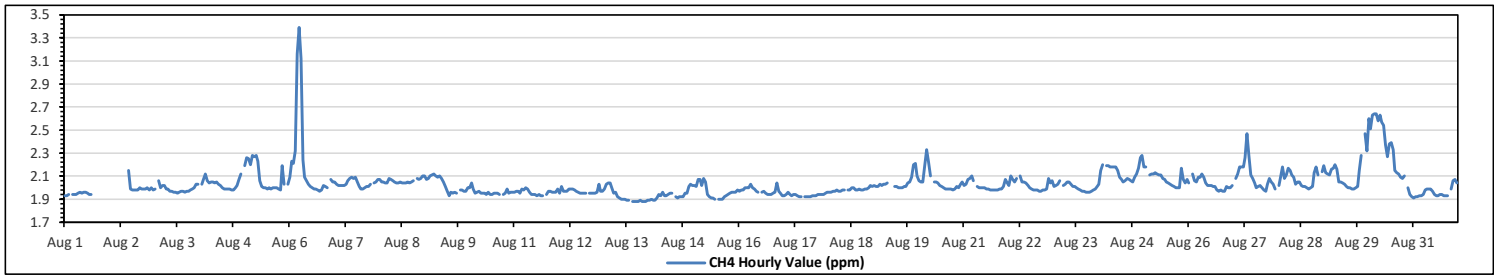
METHANE (CH4) in ppm

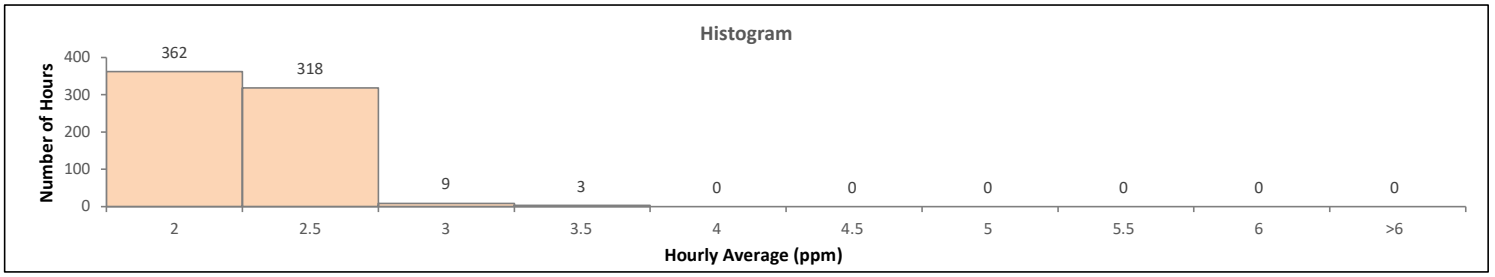
Maximum Hourly Value:	3.39	ppm	on Aug 6 at hr 5	Hours in Service:	744	
Maximum Daily Value:	2.33	ppm	on Aug 30	Hours of Data:	692	
Minimum Hourly Value:	1.88	ppm	on Aug 13 at hr 15	Hours of Missing Data:	16	
Minimum Daily Value:	1.92	ppm	on Aug 13	Hours of Calibration:	36	
Monthly Average:	2.03	ppm		Operational Uptime:	97.8	

Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	1.93	1.93	1.94	S	1.94	1.94	1.94	1.95	1.96	1.95	1.96	1.96	1.95	1.94	1.94	C	C	NRM	NRM	NRM	NRM	NRM	NRM	NRM	1.93	1.96	NA
Aug 2	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	C	C	2.15	1.99	1.98	1.98	1.98	1.98	2.00	1.99	1.99	1.99	2.00	1.98	2.00	1.98	1.98	2.15	NA
Aug 3	1.99	S	2.06	2.00	2.02	2.02	1.99	1.99	1.97	1.97	1.96	1.96	1.95	1.96	1.97	1.97	1.96	1.97	1.97	1.98	1.99	2.00	2.03	2.03	1.95	2.06	1.99
Aug 4	S	2.03	2.07	2.12	2.06	2.04	2.05	2.05	2.04	2.05	2.03	2.02	2.00	1.99	1.99	1.99	1.99	1.98	1.98	2.00	2.02	2.07	2.12	S	1.98	2.12	2.03
Aug 5	2.19	2.26	2.25	2.20	2.28	2.27	2.28	2.23	2.06	2.01	2.00	2.00	1.99	2.00	1.99	2.00	2.00	2.00	1.99	1.98	2.19	2.03	S	2.03	1.98	2.28	2.10
Aug 6	2.09	2.23	2.21	2.32	3.16	**3.39**	3.12	2.24	2.09	2.06	2.03	2.01	2.00	1.99	1.99	1.98	1.97	1.98	2.02	2.01	2.00	S	2.07	2.05	1.97	**3.39**	2.22
Aug 7	2.05	2.03	2.02	2.02	2.02	2.02	2.03	2.06	2.08	2.09	2.08	2.09	2.05	2.01	1.99	1.99	2.00	2.01	2.01	2.03	S	2.04	2.05	2.07	1.99	2.09	2.04
Aug 8	2.07	2.05	2.05	2.04	2.04	2.08	2.07	2.06	2.05	2.04	2.04	2.05	2.04	2.04	2.04	2.05	2.04	2.05	2.06	S	2.08	2.07	2.08	2.10	2.04	2.10	2.06
Aug 9	2.10	2.07	2.08	2.10	2.11	2.12	2.10	2.09	2.10	2.08	2.05	2.01	1.97	1.93	1.96	1.95	1.96	1.95	S	1.98	1.98	1.97	1.97	2.00	1.93	2.12	2.03
Aug 10	2.00	2.04	1.99	1.95	1.96	1.97	1.95	1.95	1.95	1.94	1.96	1.94	1.94	1.95	1.95	1.95	1.94	S	1.94	1.95	1.99	1.95	1.96	1.96	1.94	2.04	1.96
Aug 11	1.96	1.97	1.97	1.95	1.99	1.98	2.00	1.99	1.96	1.94	1.94	1.94	1.93	1.94	1.93	1.93	S	1.94	1.97	1.97	1.96	1.96	1.96	1.99	1.93	2.00	1.96
Aug 12	1.95	2.01	1.97	1.97	1.97	1.99	1.99	1.99	1.98	1.97	1.96	1.95	1.95	1.95	1.95	S	1.95	1.95	1.95	1.95	1.96	2.03	1.97	1.97	1.95	2.03	1.97
Aug 13	1.99	2.03	2.04	2.04	2.00	1.95	1.96	1.92	1.91	1.90	1.90	1.90	1.89	1.89	S	1.88	1.88	1.88	1.88	1.89	1.88	1.88	1.88	1.89	1.88	2.04	1.92
Aug 14	1.89	1.90	1.89	1.89	1.91	1.94	1.93	1.96	1.93	1.93	1.94	1.95	1.95	S	1.92	1.91	1.92	1.92	1.92	1.95	1.95	2.01	2.03	2.02	1.89	2.03	1.94
Aug 15	2.02	2.01	2.07	2.07	2.02	2.08	2.05	1.94	1.92	1.91	1.91	1.90	S	1.90	1.90	1.90	1.92	1.93	1.94	1.95	1.96	1.96	1.96	1.98	1.90	2.08	1.97
Aug 16	1.97	1.98	1.98	2.00	2.00	2.00	2.03	2.00	1.99	1.97	1.96	S	1.96	1.97	1.95	1.94	1.94	1.94	1.95	1.96	2.04	1.97	1.95	1.93	1.93	2.04	1.97
Aug 17	1.93	1.94	1.96	1.94	1.93	1.94	1.94	1.93	1.92	1.92	S	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.94	1.94	1.94	1.94	1.95	1.96	1.92	1.96	1.93
Aug 18	1.96	1.96	1.97	1.97	1.98	1.97	1.97	1.98	1.98	S	1.98	1.98	2.00	2.00	1.98	1.98	1.99	1.98	1.98	1.99	1.99	2.00	2.02	2.01	1.96	2.02	1.98
Aug 19	2.02	2.01	2.01	2.03	2.02	2.03	2.03	2.04	S	2.04	K	2.01	2.01	2.00	2.00	2.00	2.01	2.01	2.04	2.05	2.09	2.20	2.21	2.10	2.00	2.21	2.04
Aug 20	2.06	2.05	2.05	2.19	2.33	2.22	2.10	S	2.05	2.05	2.04	2.02	2.01	2.00	1.99	1.99	1.99	1.99	1.98	1.99	2.01	2.00	2.03	2.05	1.98	2.33	2.05
Aug 21	2.02	2.03	2.07	2.08	2.10	2.06	S	2.01	2.00	2.00	2.00	2.00	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.99	1.99	2.01	2.07	2.04	1.98	2.10	2.02
Aug 22	2.02	2.10	2.07	2.05	2.08	S	2.10	2.05	2.05	2.04	2.02	2.00	1.99	1.98	1.98	1.98	1.97	1.97	1.98	1.98	1.99	2.08	2.04	2.06	1.97	2.10	2.03
Aug 23	2.01	2.02	2.03	2.06	S	2.02	2.03	2.05	2.05	2.03	2.01	2.01	2.00	1.99	1.98	1.97	1.97	1.96	1.96	1.96	1.97	1.98	1.99	2.01	1.96	2.06	2.00
Aug 24	2.03	2.15	2.20	S	2.19	2.19	2.18	2.18	2.18	2.18	2.15	2.09	2.07	2.05	2.06	2.08	2.07	2.06	2.05	2.09	2.12	2.17	2.26	2.28	2.03	2.28	2.13
Aug 25	2.18	2.18	S	2.11	2.12	2.12	2.13	2.12	2.11	2.11	2.08	2.07	2.05	2.04	2.03	2.02	2.01	2.00	2.00	2.00	2.17	2.07	2.04	2.07	2.00	2.18	2.08
Aug 26	2.04	S	2.12	2.06	2.05	2.09	2.09	2.12	2.09	2.04	2.02	2.02	2.02	2.01	2.01	1.98	1.97	1.98	1.97	1.97	2.01	2.00	2.00	2.02	1.97	2.12	2.03
Aug 27	S	2.08	2.12	2.18	2.18	2.18	2.26	2.47	2.28	2.11	2.08	2.04	2.00	2.01	2.02	2.00	1.98	1.97	2.03	2.08	2.05	2.03	1.99	S	1.97	2.47	2.10
Aug 28	2.02	2.09	2.18	2.08	2.11	2.17	2.15	2.11	2.09	2.03	2.05	2.05	2.02	2.01	2.01	2.00	1.99	2.00	2.01	2.13	2.18	2.11	S	2.14	1.99	2.18	2.08
Aug 29	2.19	2.13	2.12	2.11	2.16	2.17	2.20	2.16	2.05	2.05	2.04	2.03	2.01	2.00	2.00	1.99	1.99	2.00	2.01	2.15	2.28	S	2.47	2.32	1.99	2.47	2.11
Aug 30	2.60	2.51	2.63	2.64	2.64	2.58	2.63	2.57	2.54	2.37	2.27	2.38	2.39	2.33	2.15	2.13	2.12	2.09	2.08	2.10	S	2.00	1.94	1.92	1.92	2.64	**2.33**
Aug 31	1.91	1.92	1.92	1.93	1.93	1.94	1.98	1.99	1.99	1.99	1.97	1.94	1.93	1.93	1.94	1.94	1.93	1.93	1.93	S	1.99	2.06	2.07	2.04	1.91	2.07	1.96
Diurnal Maximum	2.60	2.51	2.63	2.64	3.16	3.39	3.12	2.57	2.54	2.37	2.27	2.38	2.39	2.33	2.15	2.13	2.12	2.09	2.08	2.15	2.28	2.20	2.47	2.32			
Diurnal Average	2.04	2.06	2.07	2.08	2.11	2.12	2.11	2.08	2.05	2.03	2.02	2.01	2.00	1.99	1.98	1.98	1.98	1.98	1.98	2.00	2.03	2.02	2.04	2.04			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance			
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P	Power Failure	
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)					

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



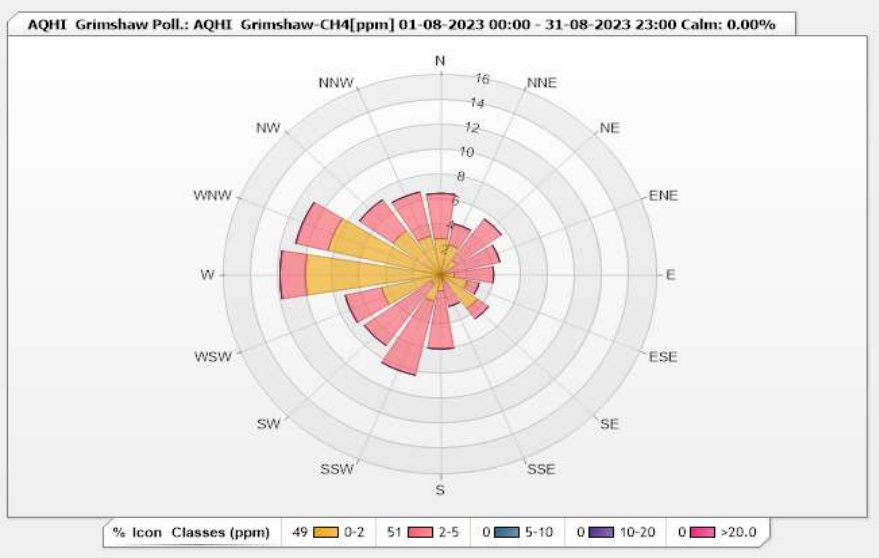


Station: AQHI Grimshaw Poll.: AQHI Grimshaw-CH4[ppm] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 92.74% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	2.9	3.62	0	0	0	6.52
NNE	2.46	1.74	0	0	0	4.2
NE	1.45	4.06	0	0	0	5.51
ENE	0.14	4.35	0	0	0	4.49
E	1.01	2.9	0	0	0	3.91
ESE	2.03	0.87	0	0	0	2.9
SE	3.33	1.01	0	0	0	4.34
SSE	0.43	2.17	0	0	0	2.6
S	1.3	4.64	0	0	0	5.94
SSW	2.17	6.09	0	0	0	8.26
SW	0.87	6.09	0	0	0	6.96
WSW	4.49	2.75	0	0	0	7.24
W	10	1.88	0	0	0	11.88
WNW	8.55	2.46	0	0	0	11.01
NW	4.35	3.04	0	0	0	7.39
NNW	3.19	3.62	0	0	0	6.81
Summary	48.67	51.29	0	0	0	100



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

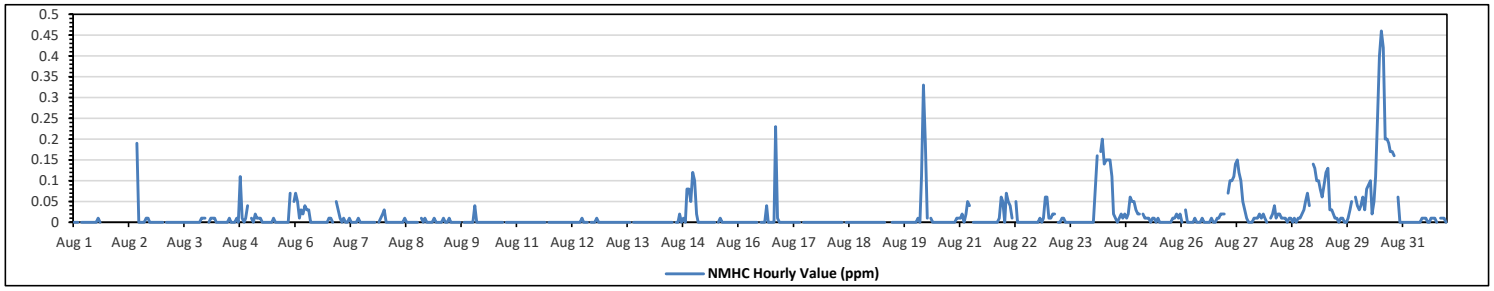
NON-METHANE HYDROCARBONS (NMHC) in ppm

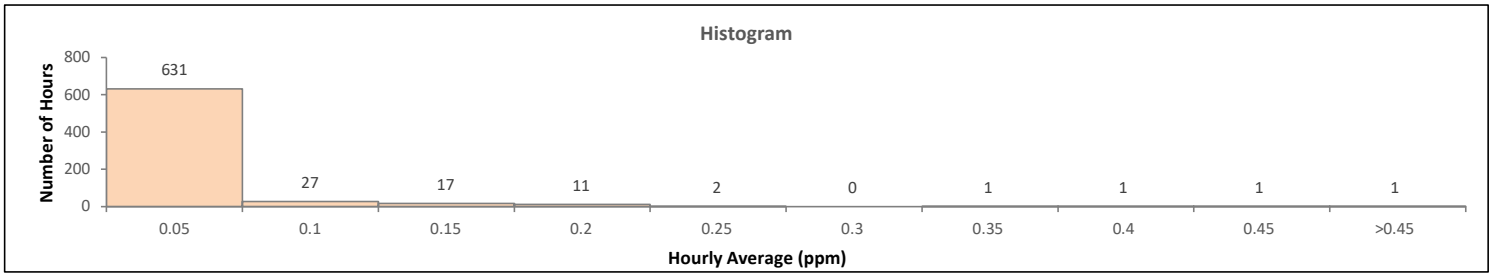
Maximum Hourly Value:	0.46	ppm	on Aug 30 at hr 12	Hours in Service:	744
Maximum Daily Value:	0.14	ppm	on Aug 30	Hours of Data:	692
Minimum Hourly Value:	0.00	ppm	on Aug 1 at hr 0	Hours of Missing Data:	16
Minimum Daily Value:	0.00	ppm	on Aug 11	Hours of Calibration:	36
Monthly Average:	0.02	ppm		Operational Uptime:	97.8

Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	C	C	NRM	NRM	NRM	NRM	NRM	NRM	NRM	0.00	0.01	NA
Aug 2	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	C	C	0.19	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	NA
Aug 3	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01	0.00
Aug 4	S	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.11	0.01	0.00	0.01	0.04	S	0.00	0.11	0.01
Aug 5	0.01	0.00	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	S	0.05	0.00	0.07	0.01
Aug 6	0.07	0.05	0.01	0.03	0.02	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	S	0.05	0.03	0.00	0.07	0.02
Aug 7	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.01	0.02	0.00	0.02	0.00
Aug 8	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.01	0.00	0.01	0.00	0.00	0.03	0.00
Aug 9	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Aug 10	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
Aug 11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	S	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Aug 13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.02	0.00	0.01	0.00	0.08	0.08	0.05	0.12	0.00	0.12	0.02
Aug 15	0.10	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.01
Aug 16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.23	0.01	0.00	0.00	0.00	0.23	0.01
Aug 17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug 20	0.00	0.01	0.00	0.11	0.33	0.19	0.01	S	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.33	0.03
Aug 21	0.01	0.02	0.00	0.02	0.05	0.04	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.05	0.00	0.06	0.01
Aug 22	0.00	0.07	0.05	0.04	0.01	S	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.06	0.06	0.00	0.07	0.02
Aug 23	0.01	0.01	0.02	0.02	S	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
Aug 24	0.00	0.08	0.16	S	0.17	0.20	0.14	0.15	0.15	0.15	0.11	0.02	0.01	0.00	0.01	0.02	0.01	0.02	0.01	0.02	0.06	0.05	0.05	0.03	0.00	0.20	0.07
Aug 25	0.02	0.02	S	0.02	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.01	0.02	0.00	0.02	0.01
Aug 26	0.00	S	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.00	0.03	0.01
Aug 27	S	0.07	0.10	0.10	0.11	0.14	0.15	0.12	0.10	0.05	0.03	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.01	0.02	0.01	0.00	S	0.00	0.15	0.05
Aug 28	0.01	0.02	0.04	0.01	0.02	0.02	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.02	0.03	0.05	0.07	0.04	S	0.14	0.00	0.14	0.02
Aug 29	0.13	0.10	0.10	0.08	0.06	0.09	0.12	0.13	0.03	0.03	0.02	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.03	0.05	S	0.06	0.04	0.00	0.13	0.05
Aug 30	0.03	0.04	0.06	0.03	0.08	0.09	0.10	0.02	0.05	0.11	0.25	0.40	**0.46**	0.42	0.20	0.20	0.19	0.17	0.17	0.16	S	0.06	0.00	0.00	0.00	**0.46**	**0.14**
Aug 31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.00	S	0.01	0.01	0.01	0.00	0.00	0.01	0.00
Diurnal Maximum	0.13	0.10	0.16	0.11	0.33	0.20	0.15	0.15	0.15	0.15	0.25	0.40	0.46	0.42	0.20	0.20	0.19	0.17	0.17	0.16	0.23	0.08	0.06	0.14			
Diurnal Average	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.02			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



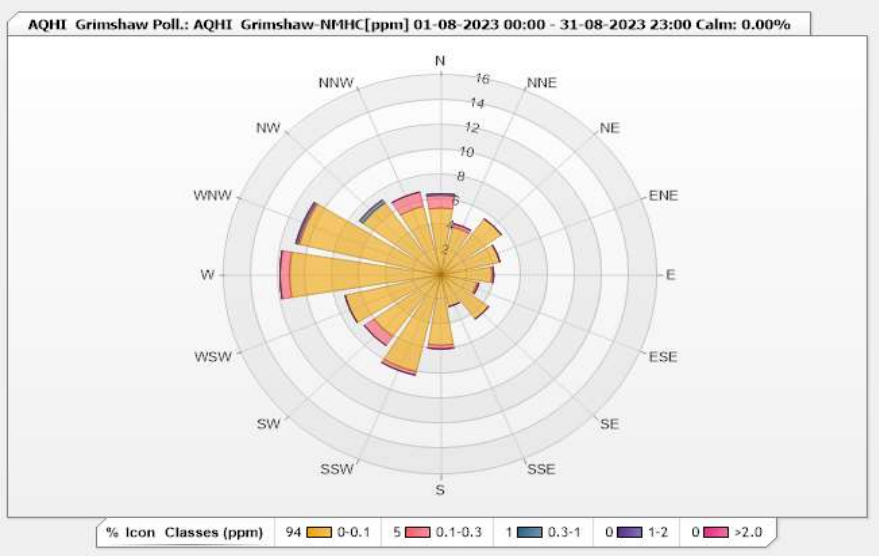


Station: AQHI Grimshaw Poll.: AQHI Grimshaw-NMHC[ppm] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 92.74% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	5.36	1.01	0.14	0	0	6.51
NNE	3.91	0.29	0	0	0	4.2
NE	5.51	0	0	0	0	5.51
ENE	4.49	0	0	0	0	4.49
E	3.77	0.14	0	0	0	3.91
ESE	2.75	0.14	0	0	0	2.89
SE	4.35	0	0	0	0	4.35
SSE	2.61	0	0	0	0	2.61
S	5.65	0.29	0	0	0	5.94
SSW	7.97	0.29	0	0	0	8.26
SW	6.09	0.87	0	0	0	6.96
WSW	7.25	0	0	0	0	7.25
W	11.16	0.72	0	0	0	11.88
WNW	10.72	0.14	0.14	0	0	11
NW	7.1	0	0.29	0	0	7.39
NNW	5.65	1.16	0	0	0	6.81
Summary	94.34	5.05	0.57	0	0	100



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

PARTICULATE MATTER 2.5 ($PM_{2.5}$) in µg/m^3

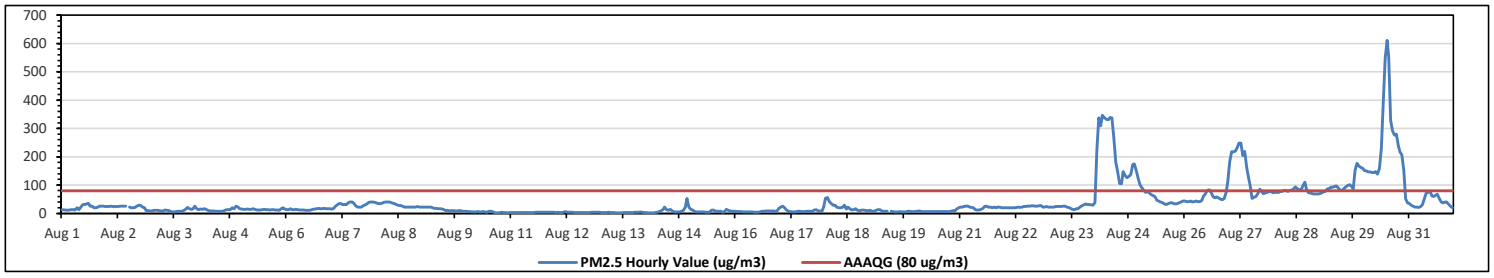
Alberta Ambient Air Quality Guideline (AAAQG): 1-Hour 80 µg/m3, Alberta Ambient Air Quality Objective (AAAQO): 24-Hour 29 µg/m3

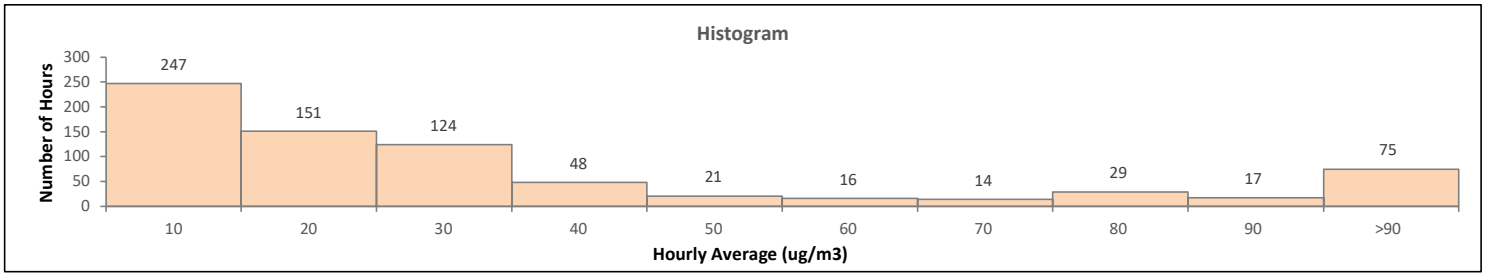
Number of 1-Hour Exceedances:	92	Number of 24-Hour Exceedances:	10
Maximum Hourly Value:	611 µg/m^3 on Aug 30 at hr 12	Hours in Service:	744
Maximum Daily Value:	239.2 µg/m^3 on Aug 30	Hours of Data:	742
Minimum Hourly Value:	2 µg/m^3 on Aug 10 at hr 16	Hours of Missing Data:	1
Minimum Daily Value:	3 µg/m^3 on Aug 13	Hours of Calibration:	1
Monthly Average:	40.2 µg/m^3	Operational Uptime:	99.9

Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	13	12	12	11	12	13	13	12	20	13	22	31	31	33	36	26	25	20	19	23	26	25	25	24	11	36	20.7
Aug 2	24	24	25	24	24	24	24	25	26	26	25	C	23	20	20	21	26	29	28	22	20	10	10	9	9	29	22.1
Aug 3	9	11	11	11	10	9	9	12	11	10	8	5	5	6	7	7	7	10	14	21	16	14	15	26	5	26	11.0
Aug 4	16	13	15	14	17	14	11	9	9	9	8	8	8	7	8	11	13	13	13	19	16	25	23	17	7	25	13.2
Aug 5	15	14	14	15	14	14	16	14	12	12	12	13	14	13	13	12	13	13	12	12	11	17	19	15	11	19	13.7
Aug 6	13	13	17	13	13	14	13	12	12	12	11	11	11	12	14	15	17	18	17	17	18	16	16	16	11	18	14.2
Aug 7	15	17	24	30	35	34	32	31	32	38	41	41	36	27	23	23	23	28	30	33	39	40	40	39	15	41	31.3
Aug 8	37	35	35	36	39	40	41	41	38	36	33	30	28	28	25	23	22	22	22	23	23	23	24	23	22	41	30.3
Aug 9	22	22	23	22	22	22	20	18	18	17	16	15	13	10	11	9	10	10	9	9	10	10	8	7	7	23	14.7
Aug 10	7	6	6	5	5	5	6	5	5	6	5	4	7	8	6	3	2	2	3	4	3	3	2	3	**2**	8	4.6
Aug 11	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	3	4	3.5
Aug 12	3	4	3	3	4	6	4	4	4	4	3	3	3	3	3	3	3	3	3	4	4	4	4	4	3	6	3.6
Aug 13	3	3	3	3	4	3	3	3	2	2	2	2	3	3	3	3	3	3	4	4	4	5	4	3	**2**	5	**3.1**
Aug 14	3	2	2	2	2	3	4	6	9	13	22	13	11	14	9	5	5	5	5	7	11	23	52	22	**2**	52	10.4
Aug 15	14	12	6	5	5	5	5	5	4	4	4	11	12	9	8	8	8	4	5	14	11	9	7	7	4	14	7.6
Aug 16	7	6	6	6	5	5	5	5	5	5	4	4	4	5	7	8	9	9	9	9	9	8	7	18	4	18	6.9
Aug 17	23	25	19	12	7	6	5	5	5	7	7	6	6	6	7	8	7	7	12	13	9	9	8	22	5	25	10.0
Aug 18	54	56	42	35	29	29	22	19	19	21	29	15	22	17	12	13	16	11	9	11	12	11	10	10	9	56	21.8
Aug 19	11	8	8	11	13	13	9	8	8	7	K	7	6	5	5	5	6	5	5	5	7	7	6	6	5	13	7.4
Aug 20	6	8	9	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	10	9	15	19	6	19	7.5
Aug 21	23	23	24	25	25	22	21	19	13	12	12	14	18	24	26	23	22	20	23	19	22	22	19	19	12	26	20.4
Aug 22	19	19	19	20	19	20	21	22	21	23	24	24	25	26	27	27	26	25	27	28	22	22	24	23	19	28	23.0
Aug 23	22	22	23	24	24	24	24	25	25	23	21	18	14	13	16	17	23	27	30	33	32	31	30	29	13	33	23.8
Aug 24	38	225	337	309	347	339	332	331	339	338	266	182	146	106	104	147	134	126	131	137	172	175	151	124	38	347	209.8
Aug 25	100	90	81	75	77	71	66	63	58	47	43	40	38	33	32	34	37	38	34	33	35	38	40	44	32	100	52.0
Aug 26	44	42	42	43	41	42	43	42	42	46	61	68	81	84	74	60	55	58	55	51	48	53	74	112	41	112	56.7
Aug 27	181	217	217	220	234	249	249	204	219	163	126	98	53	57	60	70	85	76	70	71	74	76	78	73	53	249	134.2
Aug 28	74	75	75	78	78	80	80	78	80	82	87	94	88	83	84	98	110	85	73	72	70	69	68	68	68	110	80.4
Aug 29	70	72	76	78	86	87	93	92	96	97	89	81	80	88	94	99	101	96	87	153	177	167	162	159	70	177	103.3
Aug 30	151	150	146	146	145	144	147	139	159	230	393	547	**611**	552	329	291	276	280	240	218	207	153	50	37	37	**611**	**239.2**
Aug 31	34	29	25	23	22	21	24	30	51	71	74	79	62	59	64	67	53	40	37	41	40	32	24	19	19	79	42.5
Diurnal Maximum	181	225	337	309	347	339	332	331	339	338	393	547	611	552	329	291	276	280	240	218	207	175	162	159			
Diurnal Average	34.0	40.6	43.5	42.2	44.1	44.1	43.6	41.5	43.6	44.6	48.6	49.1	47.4	43.9	36.7	37.0	37.0	35.3	33.4	36.0	37.5	35.8	32.9	32.3			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



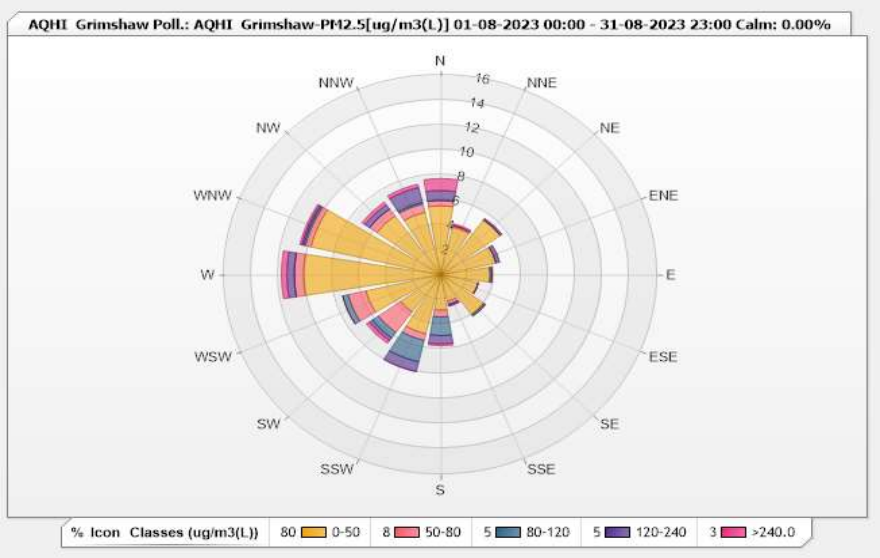


Station: AQHI Grimshaw Poll.: AQHI Grimshaw-PM2.5[ug/m3(L)] Monthly: 08-2023

Type: Pollution Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm: 0.00% Valid Data: 99.46% Calm Avg: 0.00 [ppm]

Direction	0-50	50-80	80-120	120-240	>240.0	Total
N	5.54	0.41	0	0.81	0.95	7.71
NNE	3.92	0.14	0	0	0.14	4.2
NE	5.41	0	0	0.14	0	5.55
ENE	4.19	0	0	0.27	0	4.46
E	3.65	0	0.14	0	0	3.79
ESE	2.84	0	0	0	0	2.84
SE	3.92	0	0.14	0	0	4.06
SSE	2.16	0.27	0	0.14	0	2.57
S	2.84	0.54	1.49	0.68	0.14	5.69
SSW	4.86	0.54	1.76	0.81	0	7.97
SW	3.65	2.03	0.54	0.27	0.27	6.76
WSW	5.68	1.35	0.41	0	0	7.44
W	10.14	0.68	0	0.54	0.41	11.77
WNW	9.86	0.41	0.14	0.14	0.14	10.69
NW	5.81	0.68	0	0.41	0.27	7.17
NNW	5.14	0.68	0.14	1.22	0.27	7.45
Summary	79.61	7.73	4.76	5.43	2.59	100



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

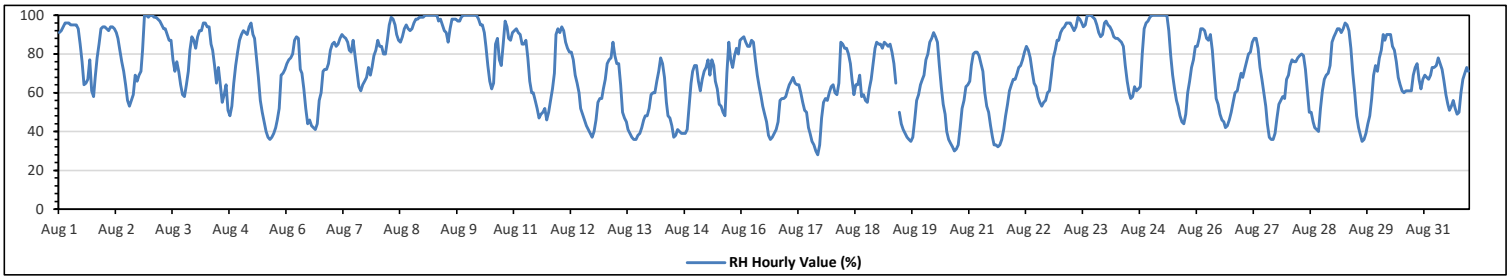
Maximum Hourly Value:	100	%	on Aug 2 at hr 21	Hours in Service:	744	
Maximum Daily Value:	97.4	%	on Aug 9	Hours of Data:	743	
Minimum Hourly Value:	28	%	on Aug 17 at hr 16	Hours of Missing Data:	1	
Minimum Daily Value:	51.9	%	on Aug 17	Hours of Calibration:	0	
Monthly Average:	71.1	%		Operational Uptime:	99.9	

Day	Hourly Period Starting at (MST)																						Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Aug 1	91	92	94	96	96	96	95	95	95	95	93	85	76	64	65	67	77	61	58	68	78	85	93	94	58	96	83.7
Aug 2	94	93	92	94	94	93	91	88	82	76	71	64	56	53	56	59	69	66	69	71	82	**100**	**100**	99	53	**100**	79.7
Aug 3	**100**	**100**	99	99	98	97	95	93	93	90	87	87	77	71	76	71	64	59	58	64	71	82	89	87	58	**100**	83.6
Aug 4	83	89	92	92	96	96	94	94	85	82	74	65	73	64	55	59	64	51	48	53	65	74	81	87	48	96	75.7
Aug 5	90	92	91	90	94	96	90	88	78	68	56	50	45	40	37	36	37	39	42	46	52	69	70	72	36	96	65.3
Aug 6	75	77	78	80	87	89	88	72	70	62	52	44	46	43	42	41	44	56	60	71	72	72	75	82	41	89	65.8
Aug 7	85	86	84	85	88	90	89	88	86	82	81	87	79	71	63	61	64	66	68	73	69	73	79	82	61	90	78.3
Aug 8	87	84	84	80	80	87	95	99	98	95	90	87	86	89	93	95	93	92	93	96	98	98	99	99	80	99	91.5
Aug 9	99	**100**	**100**	**100**	**100**	**100**	**100**	**100**	97	98	95	92	91	86	93	98	98	98	97	97	99	**100**	**100**	**100**	86	**100**	**97.4**
Aug 10	**100**	**100**	**100**	**100**	**100**	98	95	95	91	84	74	66	62	65	85	88	77	74	85	97	94	88	87	91	62	**100**	87.3
Aug 11	92	93	91	90	85	85	87	78	66	60	60	56	52	47	49	50	52	46	50	56	62	70	90	93	46	93	69.2
Aug 12	91	94	92	86	83	81	81	77	69	65	60	52	49	46	43	41	39	37	40	46	55	57	57	62	37	94	62.6
Aug 13	67	75	77	78	86	79	75	75	64	50	47	45	41	39	37	36	36	38	39	42	46	48	48	52	36	86	55.0
Aug 14	59	60	60	66	71	78	75	68	55	48	47	43	37	38	41	40	39	39	39	41	53	65	71	74	37	78	54.5
Aug 15	74	66	61	67	71	73	77	69	77	74	66	62	54	53	50	48	70	86	77	73	79	83	80	87	48	87	69.9
Aug 16	88	89	86	84	84	87	86	77	69	63	58	53	49	45	38	36	37	39	41	45	56	57	57	58	36	89	61.8
Aug 17	61	64	66	68	65	64	64	60	55	51	50	42	39	35	33	30	**28**	33	47	55	57	56	60	63	**28**	68	**51.9**
Aug 18	64	60	59	65	86	85	83	83	80	75	67	59	64	64	69	58	59	56	55	62	67	75	83	86	55	86	69.3
Aug 19	85	85	83	86	85	84	85	81	75	65	**K**	50	44	41	39	37	36	35	37	46	56	59	64	67	35	86	62.0
Aug 20	69	77	80	86	88	91	89	86	74	63	54	49	40	36	34	32	30	31	33	42	52	56	63	64	30	91	59.1
Aug 21	66	74	80	81	81	79	75	71	60	53	50	43	37	33	33	32	33	36	41	48	54	61	64	67	32	81	56.3
Aug 22	67	70	73	74	77	81	84	82	78	71	65	63	58	55	53	55	56	60	61	69	78	82	87	87	53	87	70.3
Aug 23	91	93	94	96	96	96	94	92	94	99	98	96	94	95	**100**	**100**	**100**	99	98	95	91	89	90	96	89	**100**	95.3
Aug 24	97	95	94	92	89	88	88	87	86	84	74	66	60	57	58	63	61	62	63	80	93	96	97	99	57	99	80.4
Aug 25	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	92	79	69	62	56	53	48	45	44	49	60	66	73	77	84	44	**100**	77.4
Aug 26	84	88	93	93	92	88	87	90	82	69	57	54	49	46	45	42	43	46	50	55	60	61	66	70	42	93	67.1
Aug 27	68	72	76	80	81	86	88	88	83	73	67	60	53	44	37	36	36	39	47	54	56	58	57	67	36	88	62.8
Aug 28	69	74	77	76	76	78	79	80	79	72	61	50	50	45	42	41	40	52	61	67	69	70	74	86	40	86	65.3
Aug 29	89	91	93	93	91	93	96	95	92	83	70	60	48	42	38	35	36	39	44	48	57	69	74	71	35	96	68.6
Aug 30	78	82	90	87	90	90	90	84	82	76	68	64	61	60	61	61	61	61	69	73	75	67	62	67	60	90	73.3
Aug 31	69	68	67	69	73	73	74	78	75	72	66	59	54	51	53	56	52	49	50	60	67	70	73	71	49	78	64.5
Diurnal Maximum	100	100	100	100	100	100	100	100	100	99	98	96	94	95	100	100	100	99	98	97	99	100	100	100			
Diurnal Average	81.7	83.3	84.1	84.9	86.5	87.1	86.7	84.3	79.7	73.9	67.9	62.0	57.6	54.0	53.9	53.3	54.1	54.5	57.1	63.0	68.7	73.0	76.4	79.5			

C	Monthly Calibration	**S**	Daily Zero-Span Check	**Q**	Quality Assurance	
K	Collection Error	**ND**	No Data (Machine Not in Service)	**Y**	Routine Maintenance	**P** Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	**NRM**	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

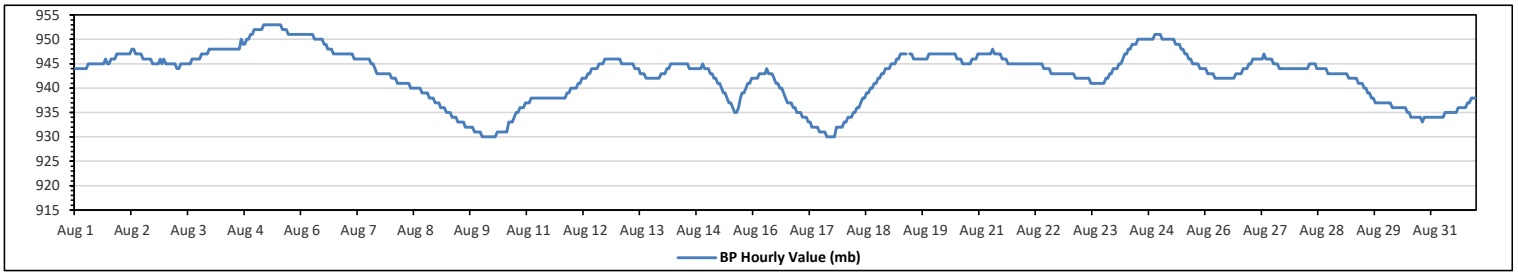
BAROMETRIC PRESSURE (BP) in millibar

Maximum Hourly Value:	953	mb	on Aug 5 at hr 4	Hours in Service:	744
Maximum Daily Value:	952	mb	on Aug 5	Hours of Data:	743
Minimum Hourly Value:	930	mb	on Aug 10 at hr 0	Hours of Missing Data:	1
Minimum Daily Value:	932	mb	on Aug 17	Hours of Calibration:	0
Monthly Average:	943	mb		Operational Uptime:	99.9

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Aug 1	944	944	944	944	944	944	944	945	945	945	945	945	945	945	945	945	946	945	945	946	946	946	947	947	944	947	945
Aug 2	947	947	947	947	947	947	948	948	947	947	947	947	946	946	946	946	946	945	945	945	945	946	945	946	945	948	946
Aug 3	945	945	945	945	945	945	944	944	945	945	945	945	945	945	946	946	946	946	946	947	947	947	947	948	944	948	946
Aug 4	948	948	948	948	948	948	948	948	948	948	948	948	948	948	948	948	950	949	949	950	950	951	951	952	948	952	949
Aug 5	952	952	952	952	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	**953**	952	952	952	951	951	951	951	951	951	951	951	**953**	**952**
Aug 6	951	951	951	951	951	951	951	950	950	950	950	950	949	949	948	948	948	947	947	947	947	947	947	947	947	951	949
Aug 7	947	947	947	947	946	946	946	946	946	946	946	946	946	945	945	944	943	943	943	943	943	943	943	943	943	947	945
Aug 8	942	942	942	941	941	941	941	941	941	941	940	940	940	940	940	940	939	939	939	939	938	938	938	937	937	942	940
Aug 9	937	937	936	936	936	935	935	935	934	934	934	933	933	933	933	932	932	932	932	932	931	931	931	931	931	937	934
Aug 10	**930**	**930**	**930**	**930**	**930**	**930**	**930**	**930**	931	931	931	931	931	931	933	933	933	934	935	935	936	936	936	937	**930**	937	932
Aug 11	937	937	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	939	939	940	937	940	938
Aug 12	940	940	940	941	941	942	942	942	943	943	944	944	944	944	945	945	945	946	946	946	946	946	946	946	940	946	944
Aug 13	946	946	945	945	945	945	945	945	945	944	944	944	943	943	943	942	942	942	942	942	942	942	942	943	942	946	944
Aug 14	943	943	944	944	945	945	945	945	945	945	945	945	945	945	944	944	944	944	944	944	944	945	944	944	943	945	944
Aug 15	944	943	943	942	942	941	941	940	939	939	938	937	937	936	935	935	936	938	939	939	940	941	941	942	935	944	940
Aug 16	942	942	942	943	943	943	943	944	943	943	943	942	941	941	940	940	939	938	937	937	937	936	936	935	935	944	940
Aug 17	935	935	934	934	934	933	933	932	932	932	932	931	931	931	931	**930**	**930**	**930**	**930**	**930**	932	932	932	932	**930**	935	**932**
Aug 18	933	933	934	934	934	935	935	936	936	937	938	938	939	939	940	940	941	941	942	942	943	943	944	944	933	944	938
Aug 19	944	945	945	945	946	946	947	947	947	947	**K**	947	947	946	946	946	946	946	946	946	946	947	947	947	944	947	946
Aug 20	947	947	947	947	947	947	947	947	947	947	947	947	946	946	946	945	945	945	945	945	946	946	946	947	945	947	946
Aug 21	947	947	947	947	947	947	947	948	947	947	947	947	946	946	946	945	945	945	945	945	945	945	945	945	945	948	946
Aug 22	945	945	945	945	945	945	945	945	945	945	944	944	944	944	943	943	943	943	943	943	943	943	943	943	943	945	944
Aug 23	943	943	943	942	942	942	942	942	942	942	942	941	941	941	941	941	941	941	941	942	942	943	943	944	941	944	942
Aug 24	944	944	945	945	946	947	947	948	948	949	949	949	950	950	950	950	950	950	950	950	950	951	951	951	944	951	949
Aug 25	951	950	950	950	950	950	950	950	949	949	949	948	948	947	947	946	946	945	945	945	945	944	944	944	944	951	948
Aug 26	944	943	943	943	943	942	942	942	942	942	942	942	942	942	942	942	943	943	943	943	944	944	944	945	942	945	943
Aug 27	945	946	946	946	946	946	946	947	946	946	946	946	945	945	945	944	944	944	944	944	944	944	944	944	944	947	945
Aug 28	944	944	944	944	944	944	944	945	945	945	945	944	944	944	944	944	944	943	943	943	943	943	943	943	943	945	944
Aug 29	943	943	943	943	942	942	942	942	942	941	941	941	940	940	939	939	938	938	937	937	937	937	937	937	937	943	940
Aug 30	937	937	937	936	936	936	936	936	936	936	936	935	935	934	934	934	934	934	934	933	934	934	934	934	933	937	935
Aug 31	934	934	934	934	934	934	934	935	935	935	935	935	935	935	936	936	936	936	936	937	937	938	938	938	934	938	935
Diurnal Maximum	952	952	952	952	953	953	953	953	953	953	953	953	953	953	952	952	952	951	951	951	951	951	951	952			
Diurnal Average	943	943	943	943	943	943	943	943	943	943	943	943	942	942	942	942	942	942	942	942	942	943	943	943			

C	Monthly Calibration	**S**	Daily Zero-Span Check	**Q**	Quality Assurance	
K	Collection Error	**ND**	No Data (Machine Not in Service)	**Y**	Routine Maintenance	**P** Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	**NRM**	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

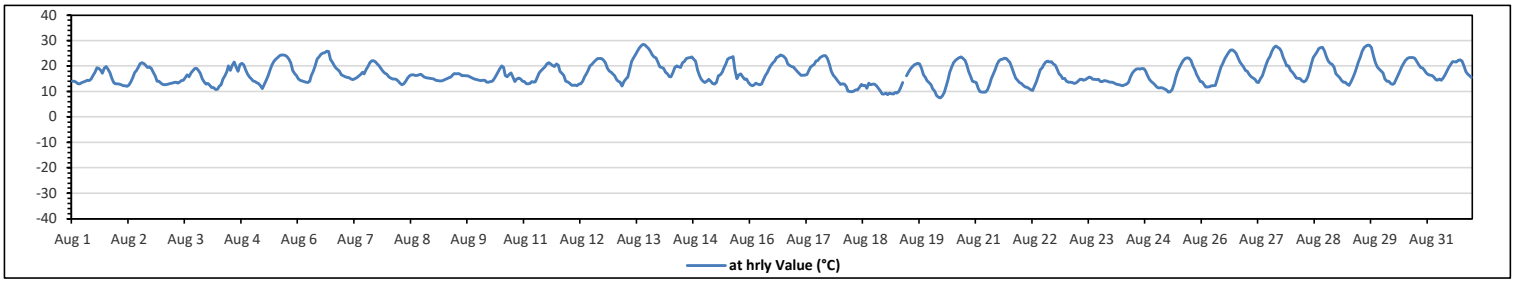
Maximum Hourly Value:	28.5	°C	on Aug 13 at hr 15	Hours in Service:	744	
Maximum Daily Value:	21.4	°C	on Aug 13	Hours of Data:	743	
Minimum Hourly Value:	7.5	°C	on Aug 20 at hr 5	Hours of Missing Data:	1	
Minimum Daily Value:	11.5	°C	on Aug 18	Hours of Calibration:	0	
Monthly Average:	17.1	°C		Operational Uptime:	99.9	

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	14.1	14	13.6	13.1	13.1	13.5	13.8	14	14.4	14.3	14.9	16.3	17.6	19.3	19.1	18.3	17.2	19.2	19.9	18.7	17.3	15.1	13.4	13.1	13.1	19.9	15.7
Aug 2	13.1	12.9	12.7	12.2	12.2	12	12.5	13.8	15.5	17.4	18.4	19.4	21	21.3	21	20.3	19.4	19.8	19	17.5	16.2	14	14.1	13.3	12.0	21.3	16.2
Aug 3	12.8	12.7	12.8	12.9	13.2	13.3	13.5	13.6	13.3	13.6	14.3	14.5	15.5	16.5	15.8	17.3	18.2	19.1	19	18.4	17.2	15.1	13.8	13	12.7	19.1	15.0
Aug 4	13.2	12.4	11.5	11.5	10.8	10.9	12	12.7	14.9	16.1	17.8	20.1	18.4	20.3	21.5	19.6	17.9	20.6	21.1	20.5	18.5	16.8	15.7	15	10.8	21.5	16.2
Aug 5	14.2	13.9	13.4	13.2	12.2	11.2	12.8	14.5	16.1	18.5	20.4	21.8	22.7	23.4	24.1	24.3	24.4	24.2	23.8	22.7	21.2	18.2	17.1	16.1	11.2	24.4	18.5
Aug 6	15	14.4	14.2	13.9	13.6	13.5	14	16.3	17.9	20	22.7	23.6	24.6	25.2	25.3	25.8	25.7	22.6	21.4	20.3	19.2	18.6	17.9	16.6	13.5	25.8	19.3
Aug 7	16.1	15.8	15.6	15.4	14.9	14.6	15	15.4	16	16.7	17.5	17	18.6	19.9	21.3	22.1	22.1	21.6	20.9	20	18.9	17.9	17.2	16.8	14.6	22.1	17.8
Aug 8	15.9	15.3	14.9	14.9	14.7	14.2	13.3	12.7	13.1	14	15.3	16.1	16.6	16.5	16.3	16.3	16.5	16.8	16.3	15.7	15.4	15.3	15.2	15.1	12.7	16.8	15.3
Aug 9	14.9	14.5	14.3	14.2	14.2	14.5	14.7	15	15.5	15.7	16.6	17.1	16.9	17.1	16.8	16.1	16.3	16.1	16.1	15.9	15.5	15	14.8	14.6	14.2	17.1	15.5
Aug 10	14.4	14.3	14.5	14.4	13.7	13.6	13.9	14	14.9	16.1	17.6	18.9	20	19.4	16.3	15.8	16.7	17.3	15.7	13.9	14.9	15.3	14.9	14	13.6	20.0	15.6
Aug 11	13.9	13.1	13.1	13.2	13.9	13.7	13.8	15.6	17.3	18.2	18.9	19.8	20.8	21.3	20.8	20.2	19.9	20.9	20.3	18	17.2	16.3	14.1	13.8	13.1	21.3	17.0
Aug 12	13.3	12.5	12.4	12.5	12.3	12.9	13.1	14	15.9	17.1	18.4	20.1	20.7	21.5	22.4	22.9	23	23	22.4	21.3	19.2	18.1	17.6	16.9	12.3	23.0	17.6
Aug 13	16.1	14.6	14	13.7	12.1	13.9	14.9	15.7	18.7	21.8	23.2	24.5	25.9	27.1	28	**28.5**	28.3	27.6	26.9	25.7	24.5	23.6	23.2	21.5	12.1	**28.5**	**21.4**
Aug 14	19.7	19.4	19	17.6	17	15.8	15.9	17.4	19.4	20	19.7	19.5	21.3	21.8	22.9	23.2	23.3	23.6	22.7	21.8	18.5	16.3	14.9	14	14.0	23.6	19.4
Aug 15	13.5	14.1	14.8	14	13.2	13	13.5	16.2	16.6	17.6	19.4	20.7	22.7	23.2	23.4	23.8	18.4	15.1	16.6	16.9	15.9	14.7	14.9	13.5	13.0	23.8	16.9
Aug 16	12.7	12.3	12.5	13.3	13	12.6	12.9	14.6	16.3	17.4	18.8	20.2	21.2	22	23.3	23.8	24.3	24.1	23.7	22.8	20.9	20.2	19.9	19.6	12.3	24.3	18.4
Aug 17	18.7	17.8	17.1	16.3	16.4	16.4	16.7	18.1	19.6	20.2	20.6	22	22.3	23.2	23.7	24.1	24	23	20.7	18	16.4	15.6	14.6	13.7	13.7	24.1	19.1
Aug 18	12.8	13.1	12.9	11.9	10.2	10	9.9	10.2	10.6	10.6	11.7	12.8	12.3	12.4	11.3	13.3	12.6	13	13	12.2	11.3	10.3	9	9	9.0	13.3	**11.5**
Aug 19	9.4	8.8	9.3	9.2	9.1	9.6	9.3	10	11.7	13.5	K	16.2	17.6	18.8	19.7	20.4	20.9	21.1	20.8	19.1	16.6	15.6	14.3	13.5	8.8	21.1	14.5
Aug 20	12.8	11	10.1	8.4	7.8	**7.5**	8.2	9.6	12.1	14.7	17.5	19.6	21.3	22.2	22.8	23.3	23.6	22.9	22.3	20.6	17.9	16	14.1	13.8	**7.5**	23.6	15.8
Aug 21	13.5	11.3	10	9.8	9.8	9.8	10.6	12.5	15	16.8	18.6	20.7	22.1	22.6	22.7	23.1	22.9	22.1	21.4	19.5	17.3	15.3	14.4	13.5	9.8	23.1	16.5
Aug 22	13.2	12.4	11.8	11.7	11.2	10.6	10.5	12.1	13.9	16.2	18.6	19.3	20.6	21.5	22	21.6	21.7	20.9	20.3	18.7	16.9	16.2	15.1	15.2	10.5	22.0	16.3
Aug 23	14	13.7	13.6	13.5	13.2	13.4	14	14.7	14.7	14.4	14.6	15.2	15.7	15.4	14.8	14.8	14.6	14.7	13.9	13.9	14.3	14.2	13.9	13.7	13.2	15.7	14.3
Aug 24	13.6	13.4	13.1	12.8	12.6	12.4	12.3	12.6	13	13.6	15.9	17.3	18.2	18.8	18.9	18.8	19.1	18.9	18.1	16.3	14.8	13.9	13.3	12.5	12.3	19.1	15.2
Aug 25	11.7	11.4	11.5	11.4	11	10.6	9.7	9.9	10.7	13	15.4	17.8	19.5	21	22.2	22.9	23.2	23.1	22.3	20.1	18.6	16.6	15.4	13.9	9.7	23.2	16.0
Aug 26	13.8	13	11.8	11.8	11.9	12.3	12.3	12.4	14.8	17.3	19.7	21.2	22.9	24.2	25.3	26.3	26.4	25.9	25	23.2	21.5	20.7	19.8	18.4	11.8	26.4	18.8
Aug 27	17.9	16.7	15.9	15.3	14.8	13.7	13.5	15.1	16.1	18.5	20.7	22.6	23.9	25.9	27.3	27.9	27.4	26.9	25.8	23.5	21.7	20.1	20.1	18.3	13.5	27.9	20.4
Aug 28	17.5	16.5	15.3	15.2	15	14.2	13.8	14.3	15.9	18.3	20.8	23.3	24.5	25.6	26.8	27.3	27.4	26	23.8	22	21.1	20.7	19.6	17	13.8	27.4	20.1
Aug 29	16.2	15.4	14.4	13.7	13.6	12.9	12.4	13.8	15.4	17.3	19.6	21.5	23.5	25.8	27.2	27.9	28.2	28.1	27.3	24.1	21.4	19.8	18.8	18.1	12.4	28.2	19.9
Aug 30	17.3	14.9	14	14	13.2	12.8	13.2	14.8	16.4	17.8	19.6	21	22.3	22.9	23.4	23.4	23.3	23	21.7	20.4	19.4	19.2	18.5	17.3	12.8	23.4	18.5
Aug 31	16.7	16.4	16.3	15.7	14.6	14.5	14.9	14.4	15.3	16.6	18.1	19.6	20.7	21.7	21.7	21.6	22.2	22.5	22	20.1	17.8	16.8	16.1	15.6	14.4	22.5	18.0
Diurnal Maximum	19.7	19.4	19.0	17.6	17.0	16.4	16.7	18.1	19.6	21.8	23.2	24.5	25.9	27.1	28.0	28.5	28.3	28.1	27.3	25.7	24.5	23.6	23.2	21.5			
Diurnal Average	14.6	13.9	13.6	13.2	12.9	12.7	12.9	13.9	15.2	16.6	18.2	19.3	20.4	21.2	21.6	21.8	21.6	21.4	20.8	19.4	18.0	16.8	16.0	15.2			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

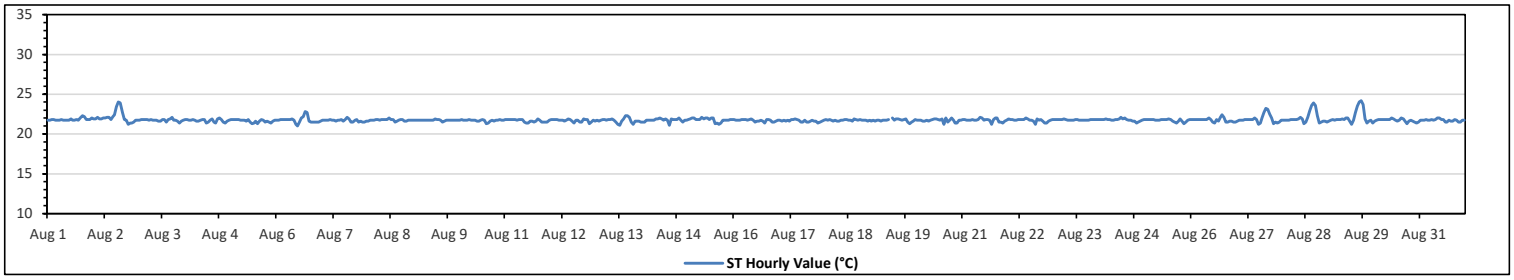
Maximum Hourly Value:	24.2	°C	on Aug 29 at hr 17	Hours in Service:	744	
Maximum Daily Value:	22.1	°C	on Aug 2	Hours of Data:	743	
Minimum Hourly Value:	21.0	°C	on Aug 6 at hr 11	Hours of Missing Data:	1	
Minimum Daily Value:	21.6	°C	on Aug 5	Hours of Calibration:	0	
Monthly Average:	21.8	°C		Operational Uptime:	99.9	

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	21.7	21.7	21.8	21.8	21.7	21.7	21.7	21.8	21.7	21.7	21.7	21.7	21.9	21.7	21.7	21.8	21.7	22.0	22.3	22.2	21.8	21.8	21.8	22.0	21.7	22.3	21.8
Aug 2	21.9	21.9	22.1	21.9	21.9	22.0	22.0	22.1	22.1	21.8	22.2	22.4	23.4	24.0	23.9	22.7	21.8	21.7	21.2	21.4	21.4	21.5	21.7	21.7	21.2	24.0	**22.1**
Aug 3	21.7	21.8	21.8	21.8	21.8	21.7	21.8	21.7	21.7	21.7	21.6	21.6	21.8	21.8	21.5	21.8	21.9	22.1	21.7	21.7	21.6	21.4	21.6	21.7	21.4	22.1	21.7
Aug 4	21.8	21.8	21.7	21.7	21.8	21.7	21.6	21.6	21.7	21.8	21.8	21.4	21.5	21.7	21.9	21.5	21.4	21.9	22.0	21.8	21.5	21.4	21.6	21.7	21.4	22.0	21.7
Aug 5	21.8	21.8	21.8	21.8	21.8	21.7	21.7	21.7	21.6	21.8	21.5	21.3	21.4	21.6	21.3	21.6	21.8	21.7	21.5	21.6	21.5	21.4	21.6	21.7	21.3	21.8	**21.6**
Aug 6	21.7	21.7	21.8	21.8	21.8	21.8	21.8	21.8	21.9	21.7	21.2	**21.0**	21.5	22.0	22.2	22.8	22.7	21.6	21.5	21.5	21.5	21.5	21.5	21.6	**21.0**	22.8	21.7
Aug 7	21.7	21.7	21.7	21.7	21.8	21.7	21.7	21.6	21.7	21.7	21.8	21.6	21.8	22.1	21.9	21.5	21.5	21.7	21.8	21.5	21.6	21.5	21.5	21.6	21.5	22.1	21.7
Aug 8	21.6	21.7	21.7	21.7	21.8	21.8	21.7	21.8	21.8	21.8	21.8	22.0	21.8	21.8	21.5	21.6	21.7	21.8	21.8	21.6	21.6	21.7	21.7	21.7	21.5	22.0	21.7
Aug 9	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.9	21.8	21.8	21.7	21.5	21.6	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.5	21.9	21.7
Aug 10	21.7	21.8	21.7	21.7	21.7	21.8	21.7	21.7	21.7	21.6	21.6	21.7	21.8	21.7	21.3	21.4	21.6	21.7	21.6	21.7	21.7	21.8	21.7	21.7	21.3	21.8	21.7
Aug 11	21.8	21.8	21.8	21.8	21.8	21.8	21.7	21.8	21.8	21.8	21.5	21.4	21.4	21.6	21.6	21.5	21.6	21.9	21.7	21.5	21.5	21.5	21.5	21.7	21.4	21.9	21.7
Aug 12	21.8	21.8	21.8	21.8	21.7	21.7	21.7	21.6	21.7	21.9	21.8	21.6	21.4	21.7	21.7	21.5	21.5	21.9	21.8	21.8	21.3	21.5	21.7	21.6	21.3	21.9	21.7
Aug 13	21.7	21.6	21.7	21.8	21.8	21.7	21.8	21.8	21.9	21.7	21.5	21.2	21.1	21.6	21.9	22.3	22.3	22.1	21.5	21.2	21.6	21.6	21.6	21.5	21.1	22.3	21.7
Aug 14	21.5	21.5	21.7	21.7	21.7	21.7	21.7	21.9	21.9	22.0	21.9	21.7	21.9	21.7	21.1	21.9	21.8	21.8	21.8	22.0	21.7	21.5	21.7	21.7	21.1	22.0	21.7
Aug 15	21.8	21.9	22.0	22.0	21.8	21.8	21.8	22.1	21.9	22.0	22.0	21.8	22.0	22.0	21.3	21.4	21.2	21.4	21.7	21.7	21.7	21.7	21.8	21.8	21.2	22.1	21.8
Aug 16	21.8	21.7	21.7	21.7	21.8	21.8	21.8	21.7	21.8	21.9	21.7	21.5	21.6	21.6	21.7	21.6	21.4	21.8	21.8	21.7	21.5	21.5	21.6	21.7	21.4	21.9	21.7
Aug 17	21.7	21.6	21.7	21.6	21.7	21.6	21.8	21.8	21.9	21.8	21.7	21.5	21.5	21.7	21.5	21.5	21.6	21.7	21.6	21.6	21.4	21.5	21.6	21.7	21.4	21.9	21.6
Aug 18	21.8	21.7	21.8	21.7	21.6	21.7	21.6	21.6	21.7	21.7	21.8	21.8	21.7	21.7	21.6	21.9	21.8	21.7	21.8	21.7	21.7	21.7	21.6	21.7	21.6	21.9	21.7
Aug 19	21.6	21.7	21.6	21.7	21.7	21.6	21.7	21.7	21.7	21.8	**K**	22.0	21.7	21.9	21.9	21.8	21.7	21.8	21.9	21.5	21.3	21.5	21.6	21.8	21.3	22.0	21.7
Aug 20	21.7	21.7	21.7	21.6	21.6	21.7	21.6	21.7	21.8	21.9	21.9	21.8	21.7	21.9	21.2	22.0	21.5	21.7	22.0	21.7	21.4	21.4	21.7	21.7	21.2	22.0	21.7
Aug 21	21.8	21.8	21.7	21.7	21.7	21.8	21.7	21.7	21.8	22.1	22.0	21.7	21.8	21.8	21.7	21.2	21.8	22.0	22.0	21.5	21.5	21.4	21.6	21.7	21.2	22.1	21.7
Aug 22	21.9	21.8	21.8	21.7	21.7	21.8	21.8	21.8	21.8	22.0	21.9	21.7	21.7	21.6	21.2	21.9	21.7	21.8	21.6	21.4	21.4	21.6	21.7	21.8	21.2	22.0	21.7
Aug 23	21.8	21.8	21.8	21.8	21.8	21.9	21.8	21.7	21.7	21.7	21.7	21.8	21.8	21.7	21.7	21.7	21.7	21.7	21.7	21.8	21.8	21.8	21.8	21.8	21.7	21.9	21.8
Aug 24	21.8	21.8	21.8	21.9	21.8	21.8	21.7	21.7	21.8	21.8	21.9	22.1	21.9	22.0	21.8	21.7	21.7	21.6	21.6	21.4	21.5	21.6	21.7	21.8	21.4	22.1	21.8
Aug 25	21.8	21.8	21.8	21.8	21.8	21.7	21.7	21.7	21.8	21.8	21.8	21.8	21.9	21.8	21.6	21.5	21.4	21.6	21.9	21.6	21.3	21.5	21.7	21.8	21.3	21.9	21.7
Aug 26	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	22.0	21.8	21.5	21.4	21.8	21.6	22.1	22.4	22.1	21.5	21.5	21.6	21.6	21.5	21.5	21.4	22.4	21.8
Aug 27	21.6	21.7	21.7	21.7	21.8	21.8	21.8	21.8	21.8	22.0	21.8	21.2	21.4	22.0	22.7	23.2	23.1	22.5	22.0	21.3	21.5	21.4	21.5	21.7	21.2	23.2	21.9
Aug 28	21.7	21.7	21.7	21.7	21.8	21.8	21.8	21.8	21.9	22.1	21.9	21.3	21.5	22.1	22.9	23.6	23.9	23.6	22.3	21.4	21.5	21.6	21.6	21.5	21.3	23.9	22.0
Aug 29	21.6	21.7	21.8	21.7	21.8	21.8	21.8	21.9	21.8	22.0	22.0	21.6	21.2	21.7	22.7	23.5	24.0	**24.2**	23.7	21.9	21.4	21.6	21.7	21.4	21.2	**24.2**	22.1
Aug 30	21.6	21.7	21.8	21.8	21.8	21.8	21.8	21.8	21.8	22.0	21.9	21.7	21.6	21.7	22.0	21.9	21.6	21.3	21.6	21.7	21.6	21.5	21.4	21.5	21.3	22.0	21.7
Aug 31	21.7	21.7	21.7	21.8	21.7	21.7	21.8	21.7	21.8	22.0	22.0	21.8	21.8	21.5	21.5	21.7	21.6	21.6	21.8	21.7	21.5	21.5	21.7	21.7	21.5	22.0	21.7
Diurnal Maximum	21.9	21.9	22.1	22.0	21.9	22.0	22.0	22.1	22.1	22.1	22.2	22.4	23.4	24.0	23.9	23.6	24.0	24.2	23.7	22.2	21.8	21.8	21.8	22.0			
Diurnal Average	21.7	21.7	21.8	21.8	21.8	21.8	21.7	21.8	21.8	21.8	21.8	21.6	21.7	21.8	21.8	21.9	21.9	21.9	21.8	21.6	21.5	21.6	21.6	21.7			

C	Monthly Calibration	**S**	Daily Zero-Span Check	**Q**	Quality Assurance	
K	Collection Error	**ND**	No Data (Machine Not in Service)	**Y**	Routine Maintenance	**P** Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	**NRM**	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

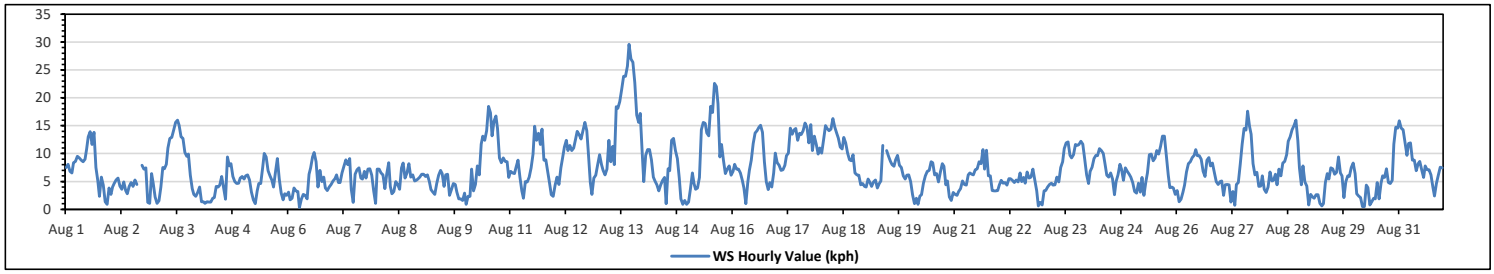
VECTOR WIND SPEED (VWS) in km/hr

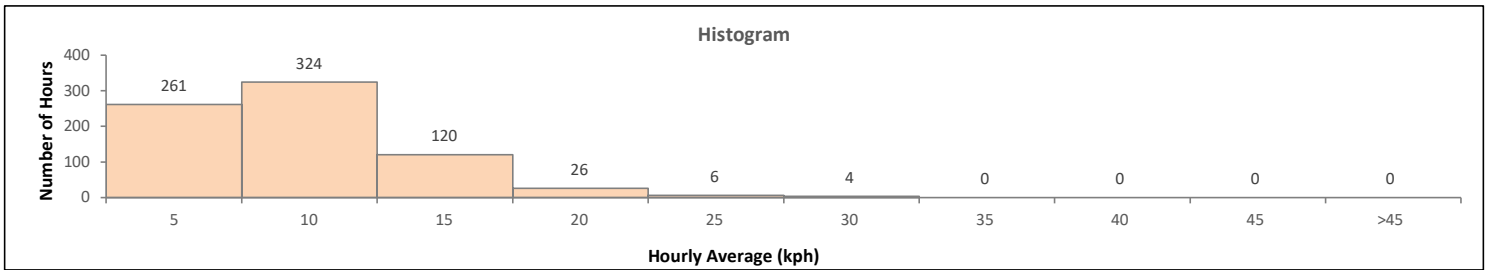
Maximum Hourly Value:	29.6	kph	on Aug 13 at hr 16	Hours in Service:	744	
Maximum Daily Value:	16.5	kph	on Aug 13	Hours of Data:	741	
Minimum Hourly Value:	0.3	kph	on Aug 6 at hr 6	Hours of Missing Data:	1	
Minimum Daily Value:	4.0	kph	on Aug 4	Hours of Calibration:	2	
Monthly Average:	7.3	kph		Operational Uptime:	99.9	

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	7.5	8.1	6.8	6.5	8.4	8.6	9.5	9.2	8.8	8.5	9.0	10.8	13.0	13.9	11.6	13.8	7.5	5.1	2.3	5.8	4.3	1.4	0.9	3.8	0.9	13.9	7.7
Aug 2	2.7	4.0	4.6	5.3	5.6	4.2	3.6	4.9	3.4	2.8	4.1	4.8	4.1	5.3	4.5	C	C	7.9	7.2	7.4	1.2	1.1	6.4	4.7	1.1	7.9	4.5
Aug 3	2.2	1.1	1.5	4.0	7.5	7.3	8.1	11.0	12.7	12.9	14.2	15.6	16.0	15.1	13.0	12.7	10.2	9.5	9.9	6.1	3.7	2.7	2.3	3.0	1.1	16.0	8.4
Aug 4	4.0	1.4	1.4	1.1	1.4	1.3	1.3	2.0	2.1	4.1	4.0	4.3	5.9	3.9	1.8	9.4	7.8	8.2	5.9	5.0	4.6	4.7	5.6	5.9	1.1	9.4	**4.0**
Aug 5	5.4	6.0	6.2	5.3	3.1	1.7	1.0	3.3	4.6	4.6	7.4	10.0	9.4	6.9	6.0	5.2	4.0	6.6	9.1	5.4	2.9	1.7	2.8	2.5	1.0	10.0	5.0
Aug 6	3.1	1.7	2.0	3.8	3.3	3.2	**0.3**	1.8	2.7	2.5	1.9	6.3	7.4	9.4	10.2	8.5	4.0	7.0	5.0	5.8	3.8	3.4	4.0	4.5	**0.3**	10.2	4.4
Aug 7	5.1	5.5	6.2	4.8	4.8	6.5	7.7	8.9	8.0	9.1	3.6	1.2	6.3	7.1	7.4	5.6	5.4	6.8	5.6	7.2	7.3	6.1	3.3	1.1	1.1	9.1	5.9
Aug 8	7.2	7.2	6.5	6.2	3.7	6.4	8.4	4.1	2.8	3.2	5.0	4.5	3.6	7.4	8.3	5.6	6.5	8.2	5.8	6.2	5.1	5.2	5.4	5.8	2.8	8.4	5.8
Aug 9	6.3	6.3	5.9	6.2	5.0	3.5	3.1	2.7	4.6	6.1	7.0	6.4	4.1	6.2	6.3	2.5	3.5	4.6	4.5	3.1	1.9	1.9	1.6	2.9	1.6	7.0	4.4
Aug 10	0.9	2.3	2.3	7.2	3.3	4.5	7.8	6.2	11.7	13.1	12.4	14.1	18.5	17.3	13.2	15.8	16.7	14.5	9.2	8.4	9.2	8.6	8.5	5.7	0.9	18.5	9.6
Aug 11	6.8	6.5	6.4	7.6	8.8	5.8	3.3	2.0	5.0	4.9	5.8	7.4	9.9	14.9	12.4	13.6	11.6	14.4	8.8	8.9	6.7	4.9	2.6	2.3	2.0	14.9	7.6
Aug 12	4.3	5.8	4.5	7.4	9.1	11.2	12.4	10.5	11.5	10.5	11.0	12.6	14.0	13.4	12.6	14.1	15.6	14.1	10.0	4.8	2.7	5.6	6.1	8.0	2.7	15.6	9.7
Aug 13	9.8	8.0	7.0	6.2	7.2	12.4	8.5	11.3	8.0	18.4	18.1	19.3	21.5	23.9	23.9	25.7	**29.6**	27.0	26.4	22.7	16.9	15.6	17.2	10.3	6.2	**29.6**	**16.5**
Aug 14	5.0	9.7	10.7	10.7	8.9	5.8	5.1	4.4	3.3	4.4	5.2	5.7	1.0	7.3	6.9	12.4	12.7	10.5	9.1	5.6	1.9	0.9	1.6	0.9	0.9	12.7	6.2
Aug 15	1.3	3.7	6.5	4.6	3.6	3.8	5.7	14.3	15.6	15.4	13.7	13.2	18.5	17.4	22.6	22.0	18.9	9.4	11.6	8.8	6.4	7.2	7.8	6.1	1.3	22.6	10.8
Aug 16	6.8	8.1	7.2	7.2	6.5	5.2	3.8	1.0	4.8	7.0	8.8	11.8	13.7	14.1	14.7	15.1	13.8	8.5	4.9	3.5	4.8	4.0	6.5	10.1	1.0	15.1	8.0
Aug 17	8.4	7.9	7.0	7.1	7.9	9.6	10.1	14.6	13.5	14.2	14.5	12.4	13.6	13.4	14.1	15.5	14.7	11.9	15.2	10.5	13.1	11.7	9.9	11.0	7.0	15.5	11.7
Aug 18	10.1	12.5	15.0	14.5	14.1	14.4	16.3	14.7	13.6	12.8	11.2	10.8	12.9	11.9	10.1	8.9	8.7	9.8	6.5	6.2	6.1	4.4	4.6	4.1	4.1	16.3	10.6
Aug 19	4.0	5.4	4.9	4.1	4.9	5.3	3.8	4.6	5.1	11.5	K	10.5	9.5	8.6	8.0	7.7	8.9	9.7	7.9	7.5	6.0	5.4	6.1	6.2	3.8	11.5	6.8
Aug 20	5.0	2.6	1.0	2.0	0.9	2.4	2.6	4.7	6.0	6.8	7.0	8.5	8.4	6.2	6.4	4.9	6.7	8.2	7.7	4.4	5.1	2.2	1.6	3.0	0.9	8.5	4.8
Aug 21	2.7	2.5	3.2	3.7	5.1	4.5	4.3	6.2	6.5	6.3	6.2	7.1	7.3	8.5	8.2	10.7	7.2	10.6	6.0	6.0	3.4	3.3	3.3	3.4	2.5	10.7	5.7
Aug 22	4.3	5.2	4.7	4.8	4.3	5.5	5.5	5.2	4.8	5.3	4.9	6.5	5.0	5.7	4.7	6.7	5.6	5.8	7.2	5.3	3.3	0.6	1.2	0.8	0.6	7.2	4.7
Aug 23	3.3	3.4	4.0	4.5	4.7	4.3	4.4	5.8	4.9	7.5	8.5	10.9	11.9	12.1	9.7	9.2	9.8	11.6	11.5	11.6	12.2	11.7	9.0	6.2	3.3	12.2	8.0
Aug 24	4.6	6.8	7.6	9.1	9.7	9.6	10.9	10.5	10.0	8.3	6.1	5.8	6.5	5.4	2.6	5.0	6.2	8.1	7.2	5.2	7.4	6.8	6.3	5.8	2.6	10.9	7.1
Aug 25	4.8	3.2	2.9	4.7	3.1	5.7	2.5	4.9	6.5	9.8	9.9	8.7	9.2	10.5	9.9	11.3	13.1	13.1	9.7	6.2	3.9	4.0	3.8	2.7	2.5	13.1	6.8
Aug 26	3.4	1.4	1.8	3.1	4.3	6.7	8.2	8.5	9.3	9.7	10.7	9.6	9.6	9.0	6.8	5.9	8.8	9.3	7.8	8.3	6.6	5.0	4.5	5.0	1.4	10.7	6.8
Aug 27	5.1	2.5	4.4	4.5	4.4	1.3	3.2	0.7	4.5	4.8	8.1	11.7	14.5	14.2	17.6	14.9	13.5	8.2	6.2	6.6	4.1	4.2	6.0	3.6	0.7	17.6	7.0
Aug 28	3.0	4.0	6.7	5.1	5.2	6.3	4.4	7.2	6.0	8.3	8.6	9.8	12.2	13.0	14.3	15.0	16.0	12.3	7.4	4.4	7.8	4.9	4.2	0.8	0.8	16.0	7.8
Aug 29	2.7	2.2	2.0	2.6	2.6	1.1	0.6	1.0	4.8	6.4	5.4	7.4	7.3	6.3	6.6	9.4	6.5	6.0	2.1	5.0	6.0	5.9	7.5	8.3	0.6	9.4	4.8
Aug 30	6.4	2.8	2.4	2.1	0.5	0.5	4.3	3.9	0.8	1.4	2.0	1.9	4.8	1.9	4.7	6.0	5.7	7.3	4.8	4.6	5.2	11.7	14.7	14.6	0.5	14.7	4.8
Aug 31	15.9	14.6	14.3	12.0	9.7	11.8	11.9	8.8	8.8	6.9	8.2	8.6	7.1	5.7	7.8	7.1	7.1	6.2	4.0	2.4	4.6	6.1	7.6	7.4	2.4	15.9	8.5
Diurnal Maximum	15.9	14.6	15.0	14.5	14.1	14.4	16.3	14.7	15.6	18.4	18.1	19.3	21.5	23.9	23.9	25.7	29.6	27.0	26.4	22.7	16.9	15.6	17.2	14.6			
Diurnal Average	5.2	5.2	5.4	5.7	5.5	5.8	5.9	6.4	6.9	8.0	8.1	9.0	9.9	10.2	9.9	10.7	10.2	9.7	8.0	6.7	5.7	5.3	5.6	5.2			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



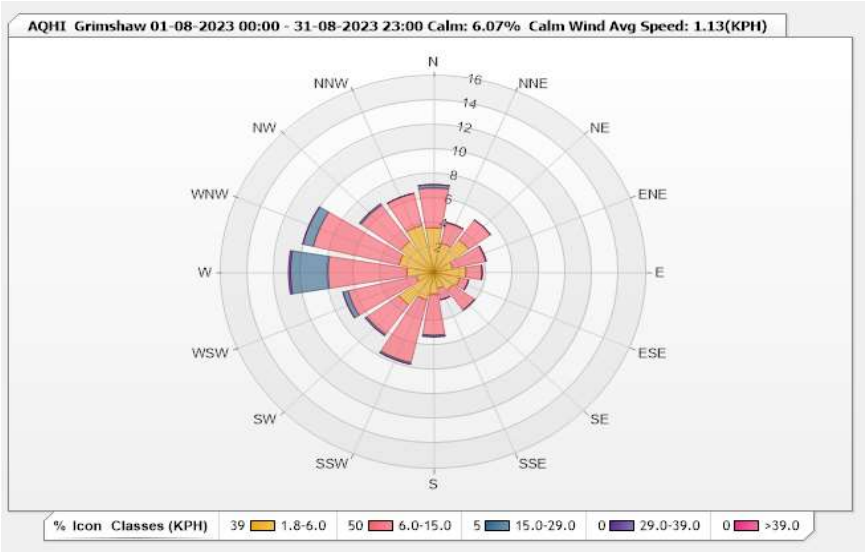


Station: AQHI Grimshaw Monitor: WDS [KPH] Monthly: 08-2023

Type: Wind Rose
Direction: Blowing From (Wind Frequency)
Time Base: 1 - Hour

Calm (WS<1.8kph): 6.07% Valid Data: 99.60%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	3.64	3.24	0.27	0	0	7.15
NNE	2.43	1.75	0	0	0	4.18
NE	3.24	2.02	0	0	0	5.26
ENE	1.48	2.56	0	0	0	4.04
E	2.43	1.21	0	0	0	3.64
ESE	2.02	0.67	0	0	0	2.69
SE	1.75	2.02	0	0	0	3.77
SSE	1.35	0.94	0	0	0	2.29
S	1.75	3.37	0.13	0	0	5.25
SSW	2.29	5.26	0.13	0	0	7.68
SW	3.24	2.97	0.13	0	0	6.34
WSW	1.35	5.26	0.4	0	0	7.01
W	2.02	5.94	2.83	0.13	0	10.92
WNW	2.7	6.61	0.81	0	0	10.12
NW	3.1	3.64	0.13	0	0	6.87
NNW	3.91	2.7	0	0	0	6.61
Summary	38.7	50.16	4.83	0.13	0	93.82



Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

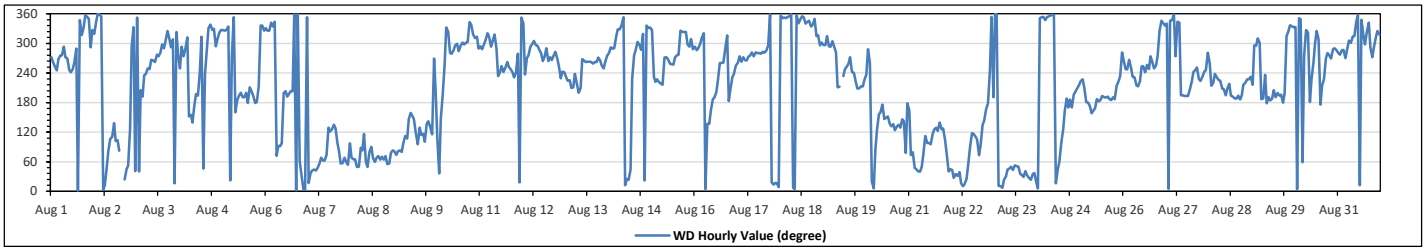
WIND DIRECTION (VWD) in sector

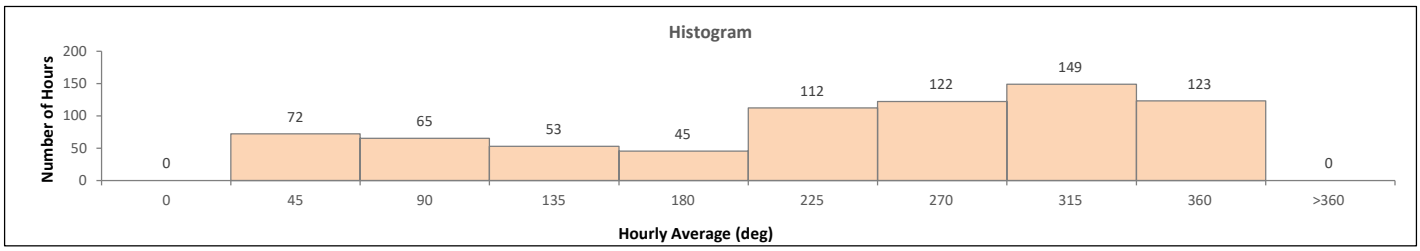
Monthly Average:	285 (WNW) degree	Hours in Service:	744
		Hours of Data:	741
		Hours of Missing Data:	1
		Hours of Calibration:	2
		Operational Uptime:	99.9

Day	Hourly Period Starting at (MST)																							Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant
Aug 1	W	W	WSW	WSW	W	W	W	WNW	W	W	WSW	WSW	WSW	W	WNW	N	NNW	NW	NNW	N	N	N	WNW	NW	290	WNW
Aug 2	NW	NNW	N	N	N	N	NNE	NE	E	ESE	ESE	SE	E	ESE	E	C	C	NNE	NE	NE	SE	WNW	NNW	NE	42	NE
Aug 3	N	NE	SSW	S	SW	WSW	WSW	WSW	W	W	W	W	W	W	WNW	WNW	NW	NW	NW	WNW	NW	NNE	NW	W	283	W
Aug 4	WSW	WNW	W	WNW	NW	SSE	SSE	SE	SSE	SSW	SSW	WSW	NW	NE	SW	WNW	NNW	NNW	NW	NNW	WNW	NW	NW	NW	283	W
Aug 5	NW	NW	NW	NNW	NNE	W	N	SSE	S	S	SSW	S	S	SSW	S	SSW	SSW	S	S	S	SSW	NNW	NNW	NW	233	SW
Aug 6	NNW	NW	NW	NNW	NNW	NNW	ENE	E	E	E	SSW	SSW	S	SSW	SSW	SSW	N	N	N	ENE	NNE	N	N	N	5	N
Aug 7	NNE	NE	NE	NE	NE	NE	NE	ENE	ENE	ENE	ENE	SE	ESE	SE	SE	SE	E	E	NE	ENE	ENE	ENE	NE	E	72	ENE
Aug 8	ENE	ENE	ENE	NE	NE	E	E	ESE	ENE	NE	E	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	NE	ENE	E		69	ENE
Aug 9	E	ENE	E	E	E	E	ESE	ESE	SE	SSE	SSE	SE	ESE	E	SE	ESE	ESE	E	SE	SE	SE	ESE	W	SSW	119	ESE
Aug 10	ESE	NE	SE	SSW	WSW	NNW	NW	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NNW	NNW	NW	NW	NW	WNW	302	WNW
Aug 11	WNW	WNW	WNW	NW	NW	NW	WNW	NW	NW	WNW	SW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	SW	WSW	W	NNE	N	279	W
Aug 12	NNW	SW	W	W	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	WNW	W	W	W	W	W	W	WSW	SW	WSW	WSW	275	W
Aug 13	SW	SW	SW	SSW	SSW	SW	SW	SSW	SSW	W	W	W	W	W	W	WSW	W	W	W	W	WSW	WSW	W	W	247	WSW
Aug 14	W	WNW	WNW	WNW	NW	NNW	NNW	NNW	N	NNE	NNE	NNE	NE	SW	W	WNW	WNW	WNW	WNW	NW	NNE	NNW	NNW	NNW	322	NW
Aug 15	NW	SW	SW	SW	SW	SW	SW	W	W	W	WSW	WSW	WSW	W	W	W	NW	NW	NW	NW	WNW	WNW	NW	WNW	273	W
Aug 16	WNW	WNW	WNW	WNW	NW	NW	N	SE	SE	SSE	S	S	SSW	SW	WSW	WSW	W	WNW	NW	S	SSW	SW	SW	WSW	249	WSW
Aug 17	WSW	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	WNW	WNW	N	NNE	NNE	NNE	NNE	N	295	WNW
Aug 18	N	N	N	N	N	N	N	N	N	N	NNW	NNW	N	N	NNW	NNW	NNW	NNW	NNW	N	NW	NW	WNW	WNW	344	NNW
Aug 19	WNW	WNW	NW	WNW	WNW	WNW	WNW	W	SSW	SSW	K	SW	WSW	WSW	WSW	W	WSW	WSW	SW	SSW	SSW	SSW	SSW	SW	253	WSW
Aug 20	SW	WNW	WSW	NNE	N	E	ESE	SSE	SSE	S	SE	SSE	SSE	SE	SE	SE	ESE	SE	SE	SE	SE	SE	ENE	S	141	SE
Aug 21	SSE	ENE	ENE	NE	NE	NE	NE	NE	ENE	ESE	E	E	E	ESE	SE	SE	ESE	SE	SE	SE	ESE	ENE	NE	NE	90	E
Aug 22	NE	NNE	NE	NNE	NE	NNE	N	NNE	NNE	NE	E	ESE	ESE	ESE	ESE	ENE	E	SE	SE	SSE	S	WSW	N	S	74	ENE
Aug 23	N	N	NNE	N	N	NNE	NNE	NE	NE	NE	NE	NE	NE	NE	NE	NNE	NNE	NE	NNE	NNE	NNE	NE	NE	NNE	30	NNE
Aug 24	N	N	N	N	NNW	N	N	N	N	N	NNE	NE	ENE	E	SE	SSE	S	SSE	S	SSE	SSW	SSW	SSW	SW	26	NNE
Aug 25	SW	SW	SSW	S	S	S	SSE	SSE	SSE	S	S	S	S	S	S	S	S	S	S	S	SSW	SW	SW	W	195	SSW
Aug 26	W	WSW	WSW	W	WSW	SW	SW	SSW	SSW	SW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	W	NW	NNW	NNW	NNW	260	WSW
Aug 27	NNW	N	NNW	NNW	N	W	NNW	NNW	SSW	SSW	S	S	S	SSW	SW	WSW	WSW	WSW	SW	SW	SW	WSW	WSW	W	254	WSW
Aug 28	WSW	SSW	SW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	SW	SSW	S	S	S	SSW	S	SSW	SW	SW	SW	SW	SW	213	SSW
Aug 29	SW	WNW	WNW	NW	WNW	S	S	SW	S	S	S	S	SSW	S	SSW	SSW	SSW	S	SSW	NW	NW	NNW	NNW	NNW	232	SW
Aug 30	NNW	N	N	NNW	ENE	W	NW	NW	S	SW	WSW	WNW	NW	NW	S	SSW	SW	W	W	W	W	WNW	WNW	WNW	289	WNW
Aug 31	W	W	WNW	WNW	W	WNW	NW	WNW	NW	NW	NNW	N	NNE	NNW	NW	WNW	NW	NNW	WNW	W	WNW	NW	NW	NW	309	NW

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	ND	No Data (Machine Not in Service)	Y	Routine Maintenance	P Power Failure
X	InValid Data (Machine Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.





Peace River Area Monitoring Program

AQHI - Grimshaw Station - August 2023

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr & WIND DIRECTION (VWD) in sector

WIND SPEED

Maximum Hourly Value:	29.6	kph	on Aug 13 at hr 16	Hours in Service:	744
Maximum Daily Value:	16.5	kph	on Aug 13	Hours of Data:	741
Minimum Hourly Value:	0.3	kph	on Aug 6 at hr 6	Hours of Missing Data:	1
Minimum Daily Value:	4.0	kph	on Aug 4	Hours of Calibration:	2
Monthly Average:	7.3	kph		Operational Uptime:	99.9

WIND DIRECTION

Monthly Average: 285 degree (WNW)

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Aug 1	7.5	8.1	6.8	6.5	8.4	8.6	9.5	9.2	8.8	8.5	9.0	10.8	13.0	13.9	11.6	13.8	7.5	5.1	2.3	5.8	4.3	1.4	0.9	3.8	0.9	13.9	7.7
	W	W	WSW	WSW	W	W	W	WNW	W	W	WSW	WSW	WSW	W	WNW	N	NNW	NW	NNW	N	N	N	WNW	NW			
Aug 2	2.7	4.0	4.6	5.3	5.6	4.2	3.6	4.9	3.4	2.8	4.1	4.8	4.1	5.3	4.5	C	C	7.9	7.2	7.4	1.2	1.1	6.4	4.7	1.1	7.9	4.5
	NW	NNW	N	N	N	N	NNE	NE	E	ESE	ESE	SE	E	ESE	E	C	C	NNE	NE	NE	SE	WNW	NNW	NE			
Aug 3	2.2	1.1	1.5	4.0	7.5	7.3	8.1	11.0	12.7	12.9	14.2	15.6	16.0	15.1	13.0	12.7	10.2	9.5	9.9	6.1	3.7	2.7	2.3	3.0	1.1	16.0	8.4
	N	NE	SSW	S	SW	WSW	WSW	WSW	W	W	W	W	W	W	WNW	WNW	NW	NW	NW	WNW	NW	NNE	NW	W			
Aug 4	4.0	1.4	1.4	1.1	1.4	1.3	1.3	2.0	2.1	4.1	4.0	4.3	5.9	3.9	1.8	9.4	7.8	8.2	5.9	5.0	4.6	4.7	5.6	5.9	1.1	9.4	**4.0**
	WSW	WNW	W	WNW	NW	SSE	SSE	SE	SSE	SSW	SSW	WSW	NW	NE	SW	WNW	NNW	NNW	NW	NNW	WNW	NW	NW	NW			
Aug 5	5.4	6.0	6.2	5.3	3.1	1.7	1.0	3.3	4.6	4.6	7.4	10.0	9.4	6.9	6.0	5.2	4.0	6.6	9.1	5.4	2.9	1.7	2.8	2.5	1.0	10.0	5.0
	NW	NW	NW	NNW	NNE	W	N	SSE	S	S	SSW	S	S	SSW	S	SSW	SSW	S	S	S	SSW	NNW	NNW	NW			
Aug 6	3.1	1.7	2.0	3.8	3.3	3.2	**0.3**	1.8	2.7	2.5	1.9	6.3	7.4	9.4	10.2	8.5	4.0	7.0	5.0	5.8	3.8	3.4	4.0	4.5	**0.3**	10.2	4.4
	NNW	NW	NW	NNW	NNW	NNW	ENE	E	E	E	SSW	SSW	S	SSW	SSW	SSW	N	N	N	ENE	NNE	N	N	N			
Aug 7	5.1	5.5	6.2	4.8	4.8	6.5	7.7	8.9	8.0	9.1	3.6	1.2	6.3	7.1	7.4	5.6	5.4	6.8	5.6	7.2	7.3	6.1	3.3	1.1	1.1	9.1	5.9
	NNE	NE	NE	NE	NE	NE	NE	ENE	ENE	ENE	ENE	SE	ESE	SE	SE	SE	E	E	NE	ENE	ENE	ENE	NE	E			
Aug 8	7.2	7.2	6.5	6.2	3.7	6.4	8.4	4.1	2.8	3.2	5.0	4.5	3.6	7.4	8.3	5.6	6.5	8.2	5.8	6.2	5.1	5.2	5.4	5.8	2.8	8.4	5.8
	ENE	ENE	ENE	NE	NE	E	E	ESE	ENE	NE	E	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	NE	ENE	E			
Aug 9	6.3	6.3	5.9	6.2	5.0	3.5	3.1	2.7	4.6	6.1	7.0	6.4	4.1	6.2	6.3	2.5	3.5	4.6	4.5	3.1	1.9	1.9	1.6	2.9	1.6	7.0	4.4
	E	ENE	E	E	E	E	ESE	ESE	SE	SSE	SSE	SE	ESE	E	SE	ESE	ESE	E	SE	SE	SE	ESE	W	SSW			
Aug 10	0.9	2.3	2.3	7.2	3.3	4.5	7.8	6.2	11.7	13.1	12.4	14.1	18.5	17.3	13.2	15.8	16.7	14.5	9.2	8.4	9.2	8.6	8.5	5.7	0.9	18.5	9.6
	ESE	NE	SE	SSW	WSW	NNW	NW	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NNW	NNW	NW	NW	NW	WNW			
Aug 11	6.8	6.5	6.4	7.6	8.8	5.8	3.3	2.0	5.0	4.9	5.8	7.4	9.9	14.9	12.4	13.6	11.6	14.4	8.8	8.9	6.7	4.9	2.6	2.3	2.0	14.9	7.6
	WNW	WNW	WNW	NW	NW	NW	WNW	NW	NW	WNW	SW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	SW	WSW	W	NNE	N			
Aug 12	4.3	5.8	4.5	7.4	9.1	11.2	12.4	10.5	11.5	10.5	11.0	12.6	14.0	13.4	12.6	14.1	15.6	14.1	10.0	4.8	2.7	5.6	6.1	8.0	2.7	15.6	9.7
	NNW	SW	W	W	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	WNW	W	W	W	W	W	W	WSW	SW	WSW	WSW			
Aug 13	9.8	8.0	7.0	6.2	7.2	12.4	8.5	11.3	8.0	18.4	18.1	19.3	21.5	23.9	23.9	25.7	**29.6**	27.0	26.4	22.7	16.9	15.6	17.2	10.3	6.2	**29.6**	**16.5**
	SW	SW	SW	SSW	SSW	SW	SW	SSW	SSW	W	W	W	W	W	W	WSW	W	W	W	W	WSW	WSW	W	W			
Aug 14	5.0	9.7	10.7	10.7	8.9	5.8	5.1	4.4	3.3	4.4	5.2	5.7	1.0	7.3	6.9	12.4	12.7	10.5	9.1	5.6	1.9	0.9	1.6	0.9	0.9	12.7	6.2
	W	WNW	WNW	WNW	NW	NNW	NNW	NNW	N	NNE	NNE	NNE	NE	SW	W	WNW	WNW	WNW	WNW	NW	NNE	NNW	NNW	NNW			
Aug 15	1.3	3.7	6.5	4.6	3.6	3.8	5.7	14.3	15.6	15.4	13.7	13.2	18.5	17.4	22.6	22.0	18.9	9.4	11.6	8.8	6.4	7.2	7.8	6.1	1.3	22.6	10.8
	NW	SW	SW	SW	SW	SW	SW	W	W	W	WSW	WSW	WSW	W	W	W	NW	NW	NW	NW	WNW	WNW	NW	WNW			
Aug 16	6.8	8.1	7.2	7.2	6.5	5.2	3.8	1.0	4.8	7.0	8.8	11.8	13.7	14.1	14.7	15.1	13.8	8.5	4.9	3.5	4.8	4.0	6.5	10.1	1.0	15.1	8.0
	WNW	WNW	WNW	WNW	NW	NW	N	SE	SE	SSE	S	S	SSW	SW	WSW	WSW	W	WNW	NW	S	SSW	SW	SW	WSW			
Aug 17	8.4	7.9	7.0	7.1	7.9	9.6	10.1	14.6	13.5	14.2	14.5	12.4	13.6	13.4	14.1	15.5	14.7	11.9	15.2	10.5	13.1	11.7	9.9	11.0	7.0	15.5	11.7
	WSW	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	WNW	WNW	N	NNE	NNE	NNE	NNE	N			
Aug 18	10.1	12.5	15.0	14.5	14.1	14.4	16.3	14.7	13.6	12.8	11.2	10.8	12.9	11.9	10.1	8.9	8.7	9.8	6.5	6.2	6.1	4.4	4.6	4.1	4.1	16.3	10.6
	N	N	N	N	N	N	N	N	N	N	NNW	NNW	N	N	NNW	NNW	NNW	NNW	NNW	N	NW	NW	WNW	WNW			
Aug 19	4.0	5.4	4.9	4.1	4.9	5.3	3.8	4.6	5.1	11.5	K	10.5	9.5	8.6	8.0	7.7	8.9	9.7	7.9	7.5	6.0	5.4	6.1	6.2	3.8	11.5	6.8
	WNW	WNW	NW	WNW	WNW	WNW	WNW	W	SSW	SSW	K	SW	WSW	WSW	WSW	W	WSW	WSW	SW	SSW	SSW	SSW	SSW	SW			
Aug 20	5.0	2.6	1.0	2.0	0.9	2.4	2.6	4.7	6.0	6.8	7.0	8.5	8.4	6.2	6.4	4.9	6.7	8.2	7.7	4.4	5.1	2.2	1.6	3.0	0.9	8.5	4.8
	SW	WNW	WSW	NNE	N	E	ESE	SSE	SSE	S	SE	SSE	SSE	SE	SE	SE	ESE	SE	SE	SE	SE	SE	ENE	S			
Aug 21	2.7	2.5	3.2	3.7	5.1	4.5	4.3	6.2	6.5	6.3	6.2	7.1	7.3	8.5	8.2	10.7	7.2	10.6	6.0	6.0	3.4	3.3	3.3	3.4	2.5	10.7	5.7
	SSE	ENE	ENE	NE	NE	NE	NE	NE	ENE	ESE	E	E	E	ESE	SE	SE	ESE	SE	SE	SE	ESE	ENE	NE	NE			
Aug 22	4.3	5.2	4.7	4.8	4.3	5.5	5.5	5.2	4.8	5.3	4.9	6.5	5.0	5.7	4.7	6.7	5.6	5.8	7.2	5.3	3.3	0.6	1.2	0.8	0.6	7.2	4.7
	NE	NNE	NE	NNE	NE	NNE	N	NNE	NNE	NE	E	ESE	ESE	ESE	ESE	ENE	E	SE	SE	SSE	S	WSW	N	S			
Aug 23	3.3	3.4	4.0	4.5	4.7	4.3	4.4	5.8	4.9	7.5	8.5	10.9	11.9	12.1	9.7	9.2	9.8	11.6	11.5	11.6	12.2	11.7	9.0	6.2	3.3	12.2	8.0
	N	N	NNE	N	N	NNE	NNE	NE	NE	NE	NE	NE	NE	NE	NE	NNE	NNE	NE	NNE	NNE	NNE	NE	NE	NNE			
Aug 24	4.6	6.8	7.6	9.1	9.7	9.6	10.9	10.5	10.0	8.3	6.1	5.8	6.5	5.4	2.6	5.0	6.2	8.1	7.2	5.2	7.4	6.8	6.3	5.8	2.6	10.9	7.1
	N	N	N	N	NNW	N	N	N	N	N	NNE	NE	ENE	E	SE	SSE	S	SSE	S	SSE	SSW	SSW	SSW	SW			
Aug 25	4.8	3.2	2.9	4.7	3.1	5.7	2.5	4.9	6.5	9.8	9.9	8.7	9.2	10.5	9.9	11.3	13.1	13.1	9.7	6.2	3.9	4.0	3.8	2.7	2.5	13.1	6.8
	SW	SW	SSW	S	S	S	SSE	SSE	SSE	S	S	S	S	S	S	S	S	S	S	S	SSW	SW	SW	W			
Aug 26	3.4	1.4	1.8	3.1	4.3	6.7	8.2	8.5	9.3	9.7	10.7	9.6	9.6	9.0	6.8	5.9	8.8	9.3	7.8	8.3	6.6	5.0	4.5	5.0	1.4	10.7	6.8
	W	WSW	WSW	W	WSW	SW	SW	SSW	SSW	SW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	W	NW	NNW	NNW	NNW			
Aug 27	5.1	2.5	4.4	4.5	4.4	1.3	3.2	0.7	4.5	4.8	8.1	11.7	14.5	14.2	17.6	14.9	13.5	8.2	6.2	6.6	4.1	4.2	6.0	3.6	0.7	17.6	7.0
	NNW	N	NNW	NNW	N	W	NNW	NNW	SSW	SSW	S	S	S	SSW	SW	WSW	WSW	WSW	SW	SW	SW	WSW	WSW	W			
Aug 28	3.0	4.0	6.7	5.1	5.2	6.3	4.4	7.2	6.0	8.3	8.6	9.8	12.2	13.0	14.3	15.0	16.0	12.3	7.4	4.4	7.8	4.9	4.2	0.8	0.8	16.0	7.8
	WSW	SSW	SW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	SW	SSW	S	S	S	SSW	S	SSW	SW	SW	SW	SW	SW			
Aug 29	2.7	2.2	2.0	2.6	2.6	1.1	0.6	1.0	4.8	6.4	5.4	7.4	7.3	6.3	6.6	9.4	6.5	6.0	2.1	5.0	6.0	5.9	7.5	8.3	0.6	9.4	4.8
	SW	WNW	WNW	NW	WNW	S	S	SW	S	S	S	S	SSW	S	SSW	SSW	SSW	S	SSW	NW	NW	NNW	NNW	NNW			
Aug 30	6.4	2.8	2.4	2.1	0.5	0.5	4.3	3.9	0.8	1.4	2.0	1.9	4.8	1.9	4.7	6.0	5.7	7.3	4.8	4.6	5.2	11.7	14.7	14.6	0.5	14.7	4.8
	NNW	N	N	NNW	ENE	W	NW	NW	S	SW	WSW	WNW	NW	NW	S	SSW	SW	W	W	W	W	WNW	WNW	WNW			
Aug 31	15.9	14.6	14.3	12.0	9.7	11.8	11.9	8.8	8.8	6.9	8.2	8.6	7.1	5.7	7.8	7.1	7.1	6.2	4.0	2.4	4.6	6.1	7.6	7.4	2.4	15.9	8.5
	W	W	WNW	WNW	W	WNW	NW	WNW	NW	NW	NNW	N	NNE	NNW	NW	WNW	NW	NNW	WNW	W	WNW	NW	NW	NW			

C	Monthly Calibration	**S**	Daily Zero-Span Check	**Q**	Quality Assurance	
K	Collection Error	**ND**	No Data (Machine Not in Service)	**Y**	Routine Maintenance	**P** Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	**NRM**	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

END OF REPORT

This page, 152 of 152, ends the August 2023 Monthly Ambient Air Quality Monitoring Report.

Peace River Area Monitoring Program

AUGUST 2023

Ambient Air Monitoring Calibration Report

- 842-B STATION-

CAL-PRAMP-202308-01561

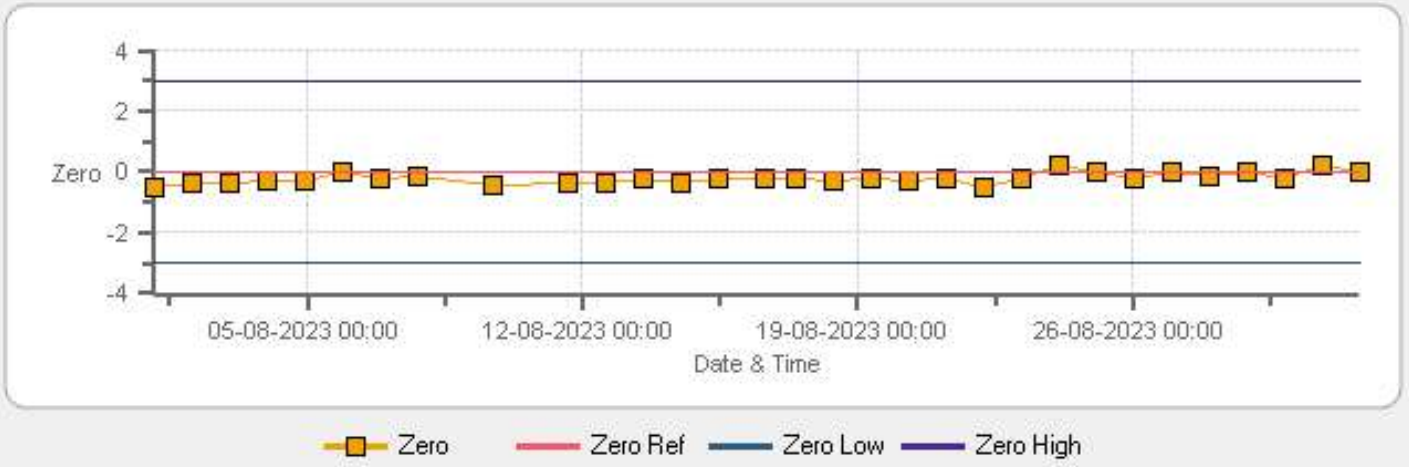
Operation and Maintenance:
Bureau Veritas Canada

Data Validation and Report:
Bureau Veritas Canada

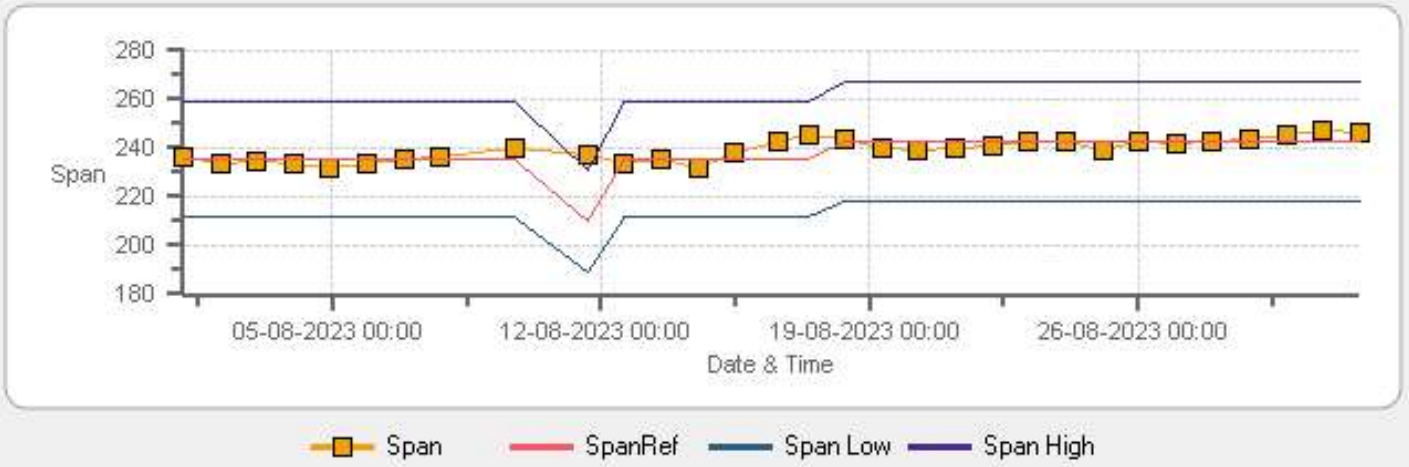
September 19, 2023

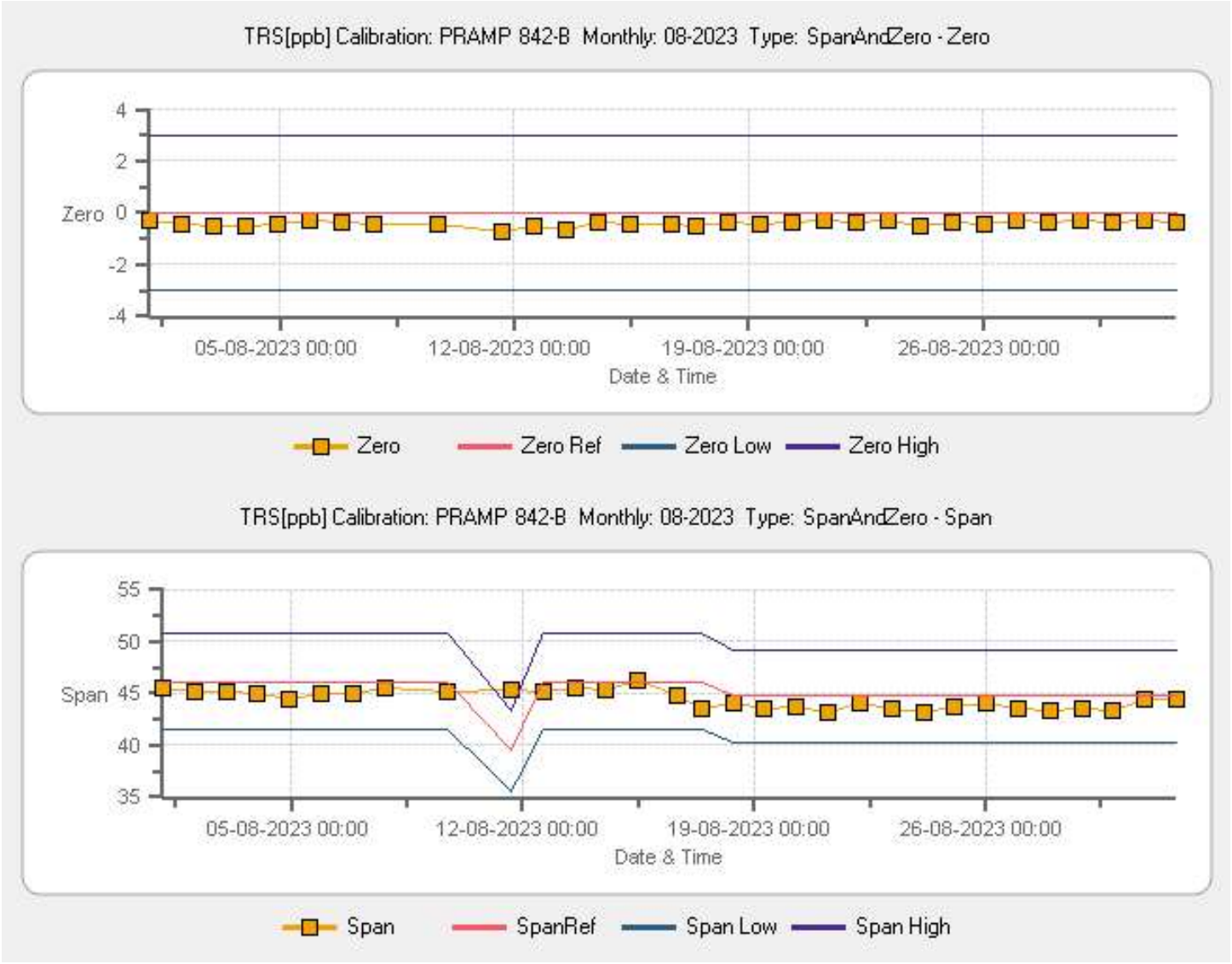
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

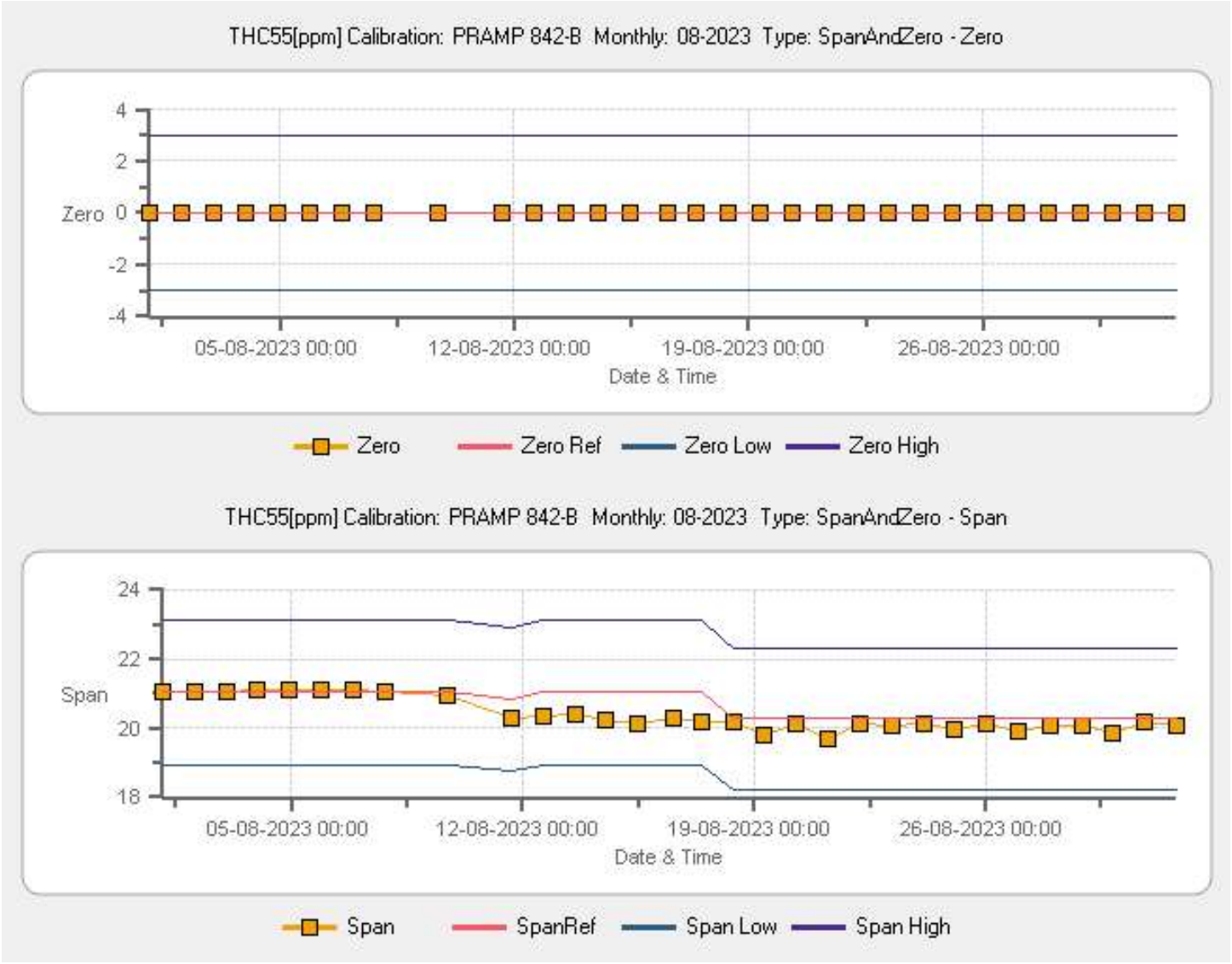
SO2[ppb] Calibration: PRAMP 842-B Monthly: 08-2023 Type: SpanAndZero - Zero



SO2[ppb] Calibration: PRAMP 842-B Monthly: 08-2023 Type: SpanAndZero - Span

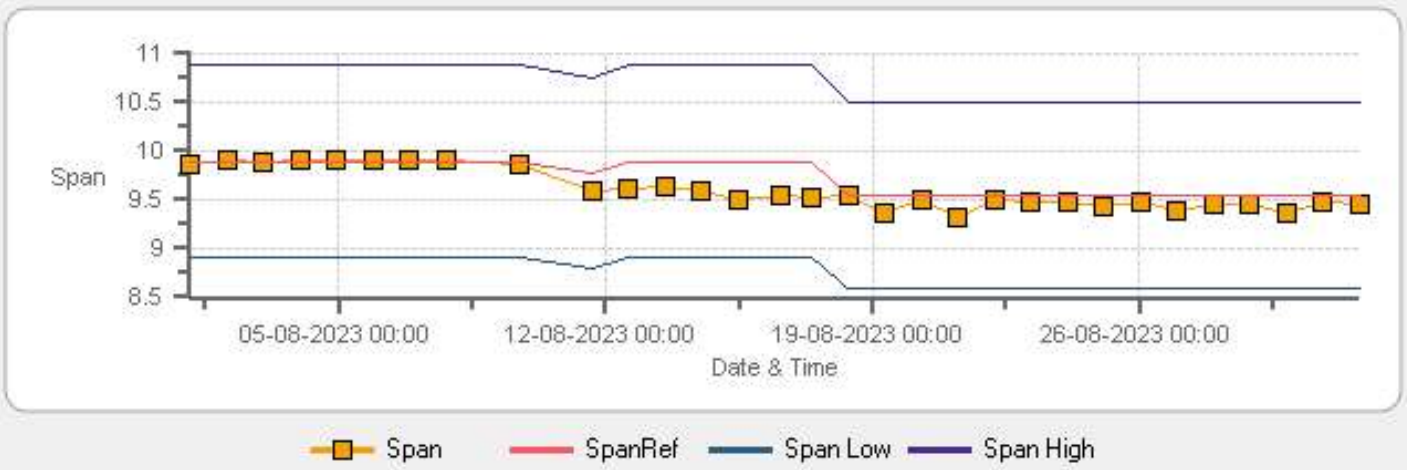


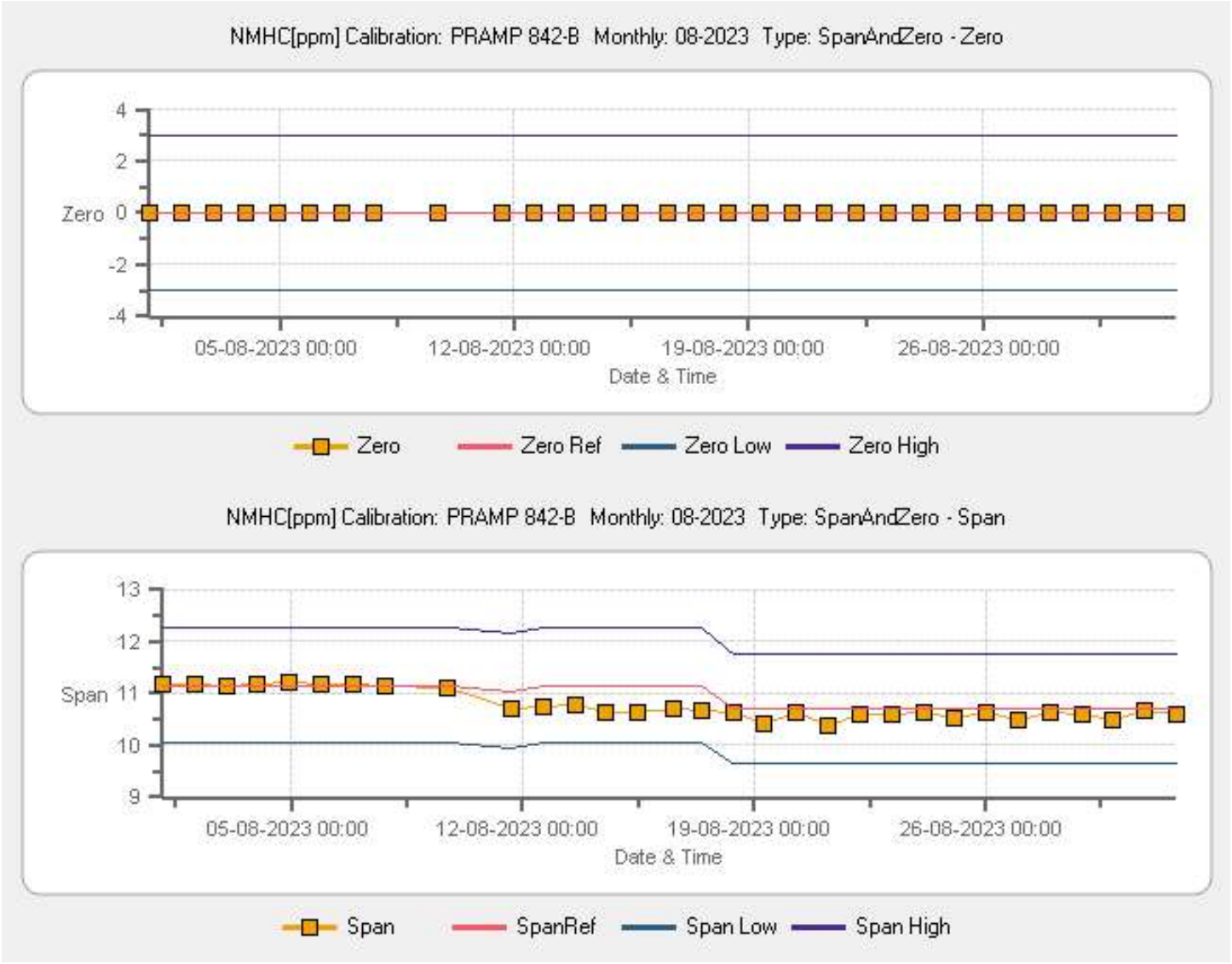

TRS[ppb] Calibration: PRAMP 842-B Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
TRS[ppb] Calibration: PRAMP 842-B Monthly: 08-2023 Type: SpanAndZero - Span
55
50
Span 45
40
35
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High


THC55[ppm] Calibration: PRAMP 842-B Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
THC55[ppm] Calibration: PRAMP 842-B Monthly: 08-2023 Type: SpanAndZero - Span
24
22
Span
20
18
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High

CH4[ppm] Calibration: PRAMP 842-B Monthly: 08-2023 Type: SpanAndZero - Zero

CH4[ppm] Calibration: PRAMP 842-B Monthly: 08-2023 Type: SpanAndZero - Span




NMHC[ppm] Calibration: PRAMP 842-B Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
NMHC[ppm] Calibration: PRAMP 842-B Monthly: 08-2023 Type: SpanAndZero - Span
13
12
Span 11
10
9
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution

DATE:	16-Aug-2023	PREVIOUS CALIBRATION DATE:	13-Jul-2023
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.0
LOCATION:	842b	BAROMETRIC (mBar):	942
PURPOSE	Routine	START TIME (MST):	09:00
PERFORMED BY:	Kevin Sebastian	END TIME (MST):	15:00

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	500 ppb
SERIAL #	1200736629	FLOW (mL/min)	425
INITIAL		FINAL	
BKG/OFFSET	8.5	BKG/OFFSET	8.9
COEF/SLOPE	1.076	COEF/SLOPE	1.107
Expected (reference) Value	235.2	Expected (reference) Value	242.8

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	T701
ID:	58100720	ID:	5004
MFC CALIBRATION DATE:	15-Mar-2023	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL109693	HIGH ID	n/a
CONC (ppm):	25.00	EXPIRY DATE	n/a
CYLINDER (psi):	2000	LOW ID	n/a
EXPIRY DATE	02-Nov-2025	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

POINT	HIGH	MID	LOW
TARGET	390	190	95
RANGE	300 - 400	150 - 200	50 - 100

SCRUBBER CHECK (15 MINS; TRS/H2S ONLY):

START TIME:	n/a	SO2 Conc (ppb)	n/a
END TIME:	n/a	Analyzer Response (ppb)	n/a

CALIBRATION:

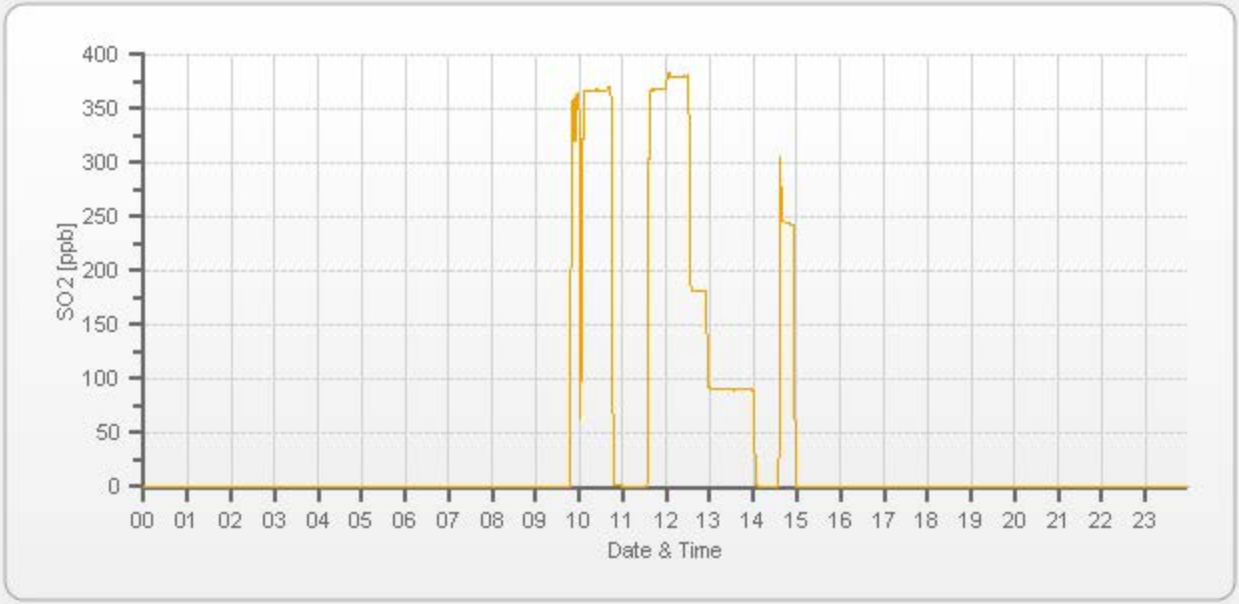
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
4001		4001	0.00	-0.2	0		
3942	60.80	4003	379.72	367.4	380	1.033	0.999
3974	28.80	4003	179.87	n/a	181	n/a	0.994
3989	14.40	4003	89.93	n/a	90.9	n/a	0.989

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	0.1%

COMMENTS:

Sample filter changed.
09:53-09:56 Regulator Flushed
10:00- Daily ZS -As found High Restarted


SO2[ppb] Station: PRAMP 842-B Daily: 16-08-2023 Type: AVG 1 Min. [1 Min.]
400
350
300
250
200
150
100
50
0
SO2 [ppb]
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Date & Time
SO2 [ppb]

TRS Analyzer Calibration by Dilution

DATE:	16-Aug-2023	PREVIOUS CALIBRATION DATE:	13-Jul-2023
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.0
LOCATION:	842b	BAROMETRIC (mBar):	942
PURPOSE	Routine	START TIME (MST):	09:00
PERFORMED BY:	Kevin Sebastian	END TIME (MST):	16:39

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	1200736630	FLOW (mL/min)	373
INITIAL		FINAL	
BKG/OFFSET	14.4	BKG/OFFSET	14.2
COEF/SLOPE	0.939	COEF/SLOPE	0.882
Expected (reference) Value	46.13	Expected (reference) Value	44.76

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	T701
ID:	58100720	ID:	5004
MFC CALIBRATION DATE:	15-Mar-2023	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002519	HIGH ID	n/a
CONC (ppm):	9.41	EXPIRY DATE	n/a
CYLINDER (psi):	600	LOW ID	n/a
EXPIRY DATE	10-Nov-2023	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

POINT	HIGH	MID	LOW
TARGET	78	38	19
RANGE	60 - 80	30 - 40	10 - 20

SCRUBBER CHECK (15 MINS; TRS/H2S ONLY):

START TIME:	n/a	SO2 Conc (ppb)	n/a
END TIME:	n/a	Analyzer Response (ppb)	n/a

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
4001		4001	0.00	-0.3	0		
3970	33.10	4003	77.81	78.6	77.89	0.986	0.999
3987	16.20	4003	38.08	n/a	37.35	n/a	1.020
3996	8.10	4004	19.04	n/a	18.49	n/a	1.030

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.003	-0.4%

COMMENTS:

TRS Converter CDNOVA CDN #583. Sample filter changed.
10:00- Daily ZS- As found High Restarted
14:00-Calibration Fails at low point. Calibration Restarted at Adjusted High Point.
14:11-14:20-User Error

TRS[ppb] Station: PRAMP 842-B Daily: 16-08-2023 Type: AVG 1 Min. [1 Min.]

Methane/Non-Methane Analyzer Calibration by Dilution

CALIBRATION:

DATE:	16-Aug-2023	PREVIOUS CALIBRATION DATE:	13-Jul-2023
CLIENT:	PRAMP	TEMPERATURE (°C):	23.0
LOCATION:	842b	BAROMETRIC (mBar):	942
PURPOSE	Routine	START TIME (MST):	08:59
PERFORMED BY:	Kevin Sebastian	END TIME (MST):	13:57

ANALYZER:

VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
	Thermo 55i	1314057759	1235
PARAMETER:	CH4	NMHC	THC
RANGE (ppm):	20	20	40
PREVIOUS CF:	0.998	0.996	0.997

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	SABIO	MAKE:	API	CYLINDER ID:	LL68768		HIGH ID:	n/a
MODEL:	2010	MODEL:	T701	CH_4/C_3H_8 (ppm):	897.0	301.0	HIGH EXPIRY:	n/a
ID:	26801218	ID:	5004	CYLINDER (psi):	1700		LOW ID:	n/a
MFC CALIBRATION DATE:	09-Mar-2023	OXIDIZER ID:	Internal	EXPIRY DATE	11-Aug-2029		LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH4/NMHC)	HIGH	MID	LOW	CH4 EQUIVILANCE	
TARGET	14	7	3.5	C_3H_8 as CH_4	827.8
RANGE	12 - 16	6 - 8	2 - 4	THC as CH_4	1724.8

EXPECTED (REFERENCE) VALUE:

INITIAL	CH4	NMHC	THC	FINAL	CH4	NMHC	THC
	9.89	11.16	21.04		9.55	10.71	20.27

CALIBRATION:

FLOW RATE (mL/min)			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC
3100		3100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
3050	50.30	3100	14.55	13.43	27.99	14.69	13.52	28.22	14.55	13.42	27.98	0.991	0.993	0.992	1.000	1.001	1.000
3074	25.20	3099	7.29	6.73	14.03	n/a	n/a	n/a	7.27	6.75	14.02	n/a	n/a	n/a	1.003	0.997	1.000
3087	12.60	3100	3.65	3.36	7.01	n/a	n/a	n/a	3.66	3.37	7.03	n/a	n/a	n/a	0.996	0.998	0.997

LINEAR REGRESSION ANALYSIS:

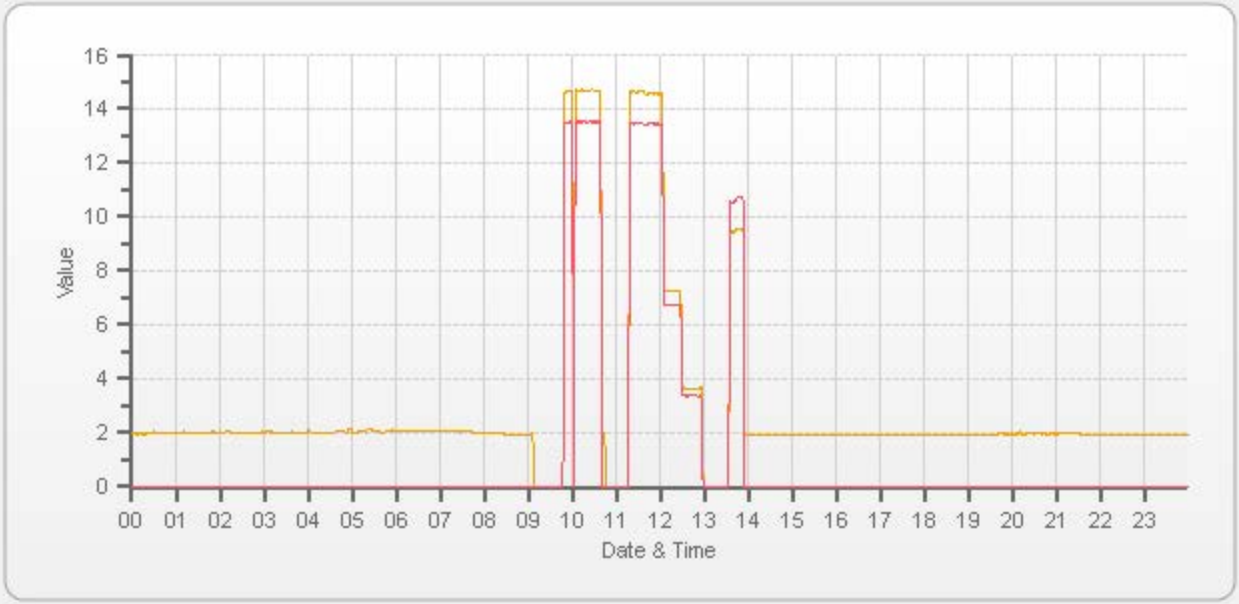
	CORRELATION	SLOPE	INTERCEPT
CH4	1.000	0.999	0.0%
NMHC	1.000	0.999	0.0%
THC	1.000	1.000	0.0%

Comments:

H2 = AMA HG300 #190567058
BV analyzer. Sample filter changed.
10:00- Daily ZS, AF High Restarted

Use Zero Chrom? **No**

Station: PRAMP 842-B Daily: 16-08-2023 Type: AVG 1 Min. [1 Min.]



Meteorological System Checklist

Date:	August 16, 2023		
Technician:	Kevin Sebastian		
Station:	PRAMP 842b		
Unit:	**Make:**	**Model:**	**Serial #:**
Precipitation Sampler:	RM Young	52202	TB 15878
Temperature Sensor:	Rotronic	HC2A-S3	20370767
Barometric Pressure Sensor:	MetOne	92	Y23362
Relative Humidity Sensor:	Rotronic	HC2A-S3	20370767
Anemometer:	RM Young	05305AQ	174802

PRECIPITATION SENSOR CHECK

Checklist:	**Reply:**	**Comments:**
Previous check date:	July 13, 2023	
Is the sensor Level?	yes	
Is the heater operating properly?	yes	
Are the bucket drain holes clean?	yes	test time: 13:16-13:38, 14:32-14:35
Is the screen on the housing? (screen should be on between July and September	yes	
Is the housing clean?	yes	
Is the area around the housing clean and free from obstacles?	yes	

TIP TEST - Slowly pour water until 10 tips are heard. (10 tips = 1 mm)

# of Tips	**Data Logger Response (mm):**	**Manual Specification = +/- 0.1 mm**
10	1.0	0.00

AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	July 13, 2023	
Parameter:	Temperature @ 2 metres	
Reference Thermometer ID:	F.S. 170286131 expires May 18, 2024	
Reference Temperature (^{o}C):	21.9	
Station - Ambient Temperature (^{o}C):	21.6	
Temperature Difference (^{o}C):	0.3	

BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	July 13, 2023	
Reference Barometer ID:	Brunton 05490 Expires Feb 27, 2024	
Reference Pressure - Units/Reading:	millibar	832
Station Pressure - Units/Reading:	millibar	940
Pressure Tolerance +/- 15% of error:	707 - 957	-12.98%

RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	July 13, 2023	
Reference Hygrometer ID:	F.S. 170286131 expires May 18, 2024	
Reference Hygrometer % RH- Reading:	50.00	
Station Hygrometer % RH- Reading:	43.00	
RH Tolerance +/- 15% of difference:	42.50 - 57.50	14.0%

ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	July 13, 2023	Previous check date:	July 13, 2023
Wind Speed Observed (kph):	10~20	Wind Direction Observed:	SW
Wind speed on Data Logger (kph):	12	Wind Direction on Data Logger:	SW
		Wind Direction Pass/Fail?:	Pass

Comments

Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	**Performed By:**	Limin Li
Audit Location:	842b	**Reviewed By:**	Chris Wesson
Audit Date:	August 3, 2022	**Start/End Time (mst):**	16:30/17:58
Calibration Purpose:	routine annual	**Weather Conditions:**	Mainly sunny

Wind Sensor Information

Sensor ID Data:		**Sensor Outputs:**	
Sensor Make:	RM Young	**Velocity Voltage Output Range:**	n/a
Sensor Model:	05305AQ	**Velocity Unit Output Range:**	0-200
Serial #:	174802	**Direction Voltage Output Range:**	n/a
Previous Cal/Audit Date:	July 4, 2022	**Direction Unit Output Range:**	0-360

Wind Calibrator Information

Calibrator I.D. and Expiry Date: RM Young 18802 id# CA03309 expires June 07, 2023

Wind Speed Audit Data **+/- 2% of the average correction factor is the limit**

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.0	0.0	-
1000	18.4	18.3	18.3	1.007
2000	36.9	36.7	36.7	1.004
3000	55.3	55.1	55.1	1.003
4000	73.7	73.6	73.6	1.002
5000	92.2	92.0	92.0	1.002
6000	110.6	110.5	110.5	1.001
7000	129.0	128.9	128.9	1.001
8000	147.4	147.3	147.3	1.001
9000	165.9	165.8	165.8	1.000
10000	184.3	184.2	184.2	1.001
		The audit meets AMD requirements.	**Average Correction Factor=**	**1.002**

Wind Direction Audit Data **+/- 3° of the absolute average degrees difference for all points is the limit**

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	1	355	1.0	0.0	0.5
30	330	29	334	1.0	-4.0	2.5
60	300	58	305	2.0	-5.0	3.5
90	270	88	275	2.0	-5.0	3.5
120	240	119	244	1.0	-4.0	2.5
150	210	149	212	1.0	-2.0	1.5
180	180	180	180	0.0	0.0	0.0
210	150	211	150	-1.0	0.0	0.5
240	120	243	119	-3.0	1.0	2.0
270	90	275	88	-5.0	2.0	3.5
300	60	305	59	-5.0	1.0	3.0
330	30	333	30	-3.0	0.0	1.5
355	0	355	1	0.0	1.0	0.5
The audit meets AMD requirements.			**Average Absolute Degrees Difference=**			**1.9**

Comments:

Physical inspection completed. No issues.

Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	**Performed By:**	Chris Wesson
Audit Location:	842b	**Reviewed By:**	Limin Li
Audit Date:	August 3, 2023	**Start/End Time (mst):**	15:57 / 17:00
Calibration Purpose:	routine annual	**Weather Conditions:**	Mix of sun and clouds with rain showers

Wind Sensor Information

Sensor ID Data:		**Sensor Outputs:**	
Sensor Make:	RM Young	**Velocity Voltage Output Range:**	n/a
Sensor Model:	05305AQ	**Velocity Unit Output Range:**	0-200
Serial #:	174802	**Direction Voltage Output Range:**	n/a
Previous Cal/Audit Date:	August 3, 2022	**Direction Unit Output Range:**	0-360

Wind Calibrator Information

Calibrator I.D. and Expiry Date: RM Young 18802 id# R9133 expires Oct 18, 2024

Wind Speed Audit Data **+/- 2% of the average correction factor is the limit**

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.0	0.0	-
1000	18.4	18.3	18.3	1.007
2000	36.9	36.7	36.7	1.004
3000	55.3	55.1	55.1	1.003
4000	73.7	73.6	73.6	1.002
5000	92.2	92.0	92.0	1.002
6000	110.6	110.5	110.5	1.001
7000	129.0	128.9	128.9	1.001
8000	147.4	147.3	147.3	1.001
9000	165.9	165.8	165.8	1.000
10000	184.3	184.2	184.2	1.001
		The audit meets AMD requirements.	**Average Correction Factor=**	**1.002**

Wind Direction Audit Data **+/- 3° of the absolute average degrees difference for all points is the limit**

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	2	354	2.0	1.0	1.5
30	330	23	332	7.0	-2.0	4.5
60	300	59	303	1.0	-3.0	2.0
90	270	88	274	2.0	-4.0	3.0
120	240	118	242	2.0	-2.0	2.0
150	210	149	209	1.0	1.0	1.0
180	180	179	178	1.0	2.0	1.5
210	150	210	146	0.0	4.0	2.0
240	120	243	117	-3.0	3.0	3.0
270	90	274	89	-4.0	1.0	2.5
300	60	304	57	-4.0	3.0	3.5
330	30	334	29	-4.0	1.0	2.5
355	0	354	2	1.0	2.0	1.5
The audit meets AMD requirements.			**Average Absolute Degrees Difference=**			**2.3**

Comments:

Declination = 15 deg East
Physical inspection completed, no issues
Potentiometer noisy. Replacement required.

END OF REPORT

Peace River Area Monitoring Program

AUGUST 2023

Ambient Air Monitoring Calibration Report

- 986-C STATION-

CAL-PRAMP-202308-01562

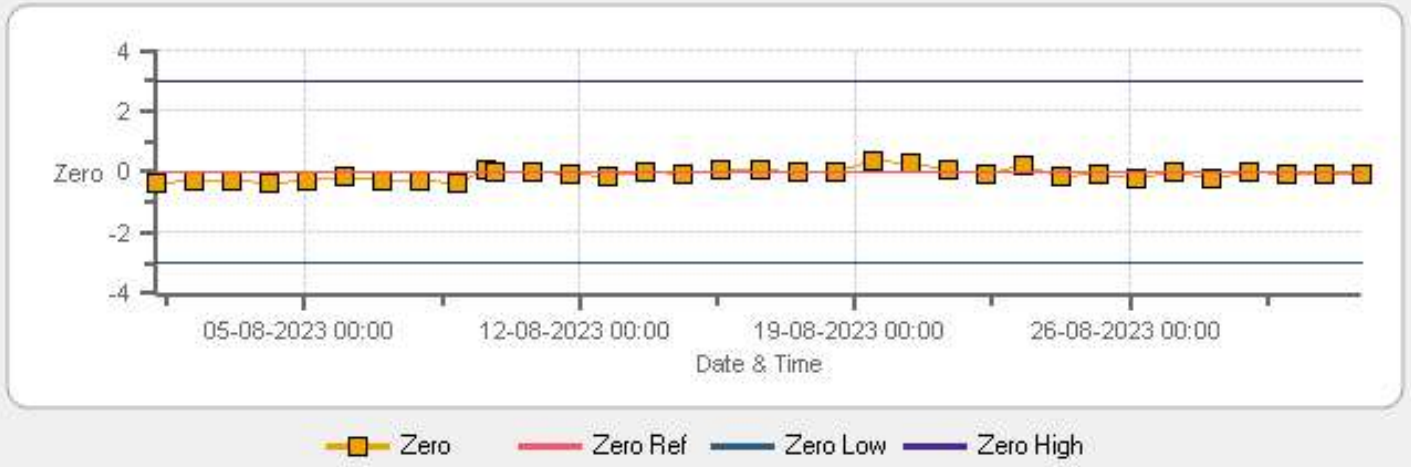
Operation and Maintenance:
Bureau Veritas Canada

Data Validation and Report:
Bureau Veritas Canada

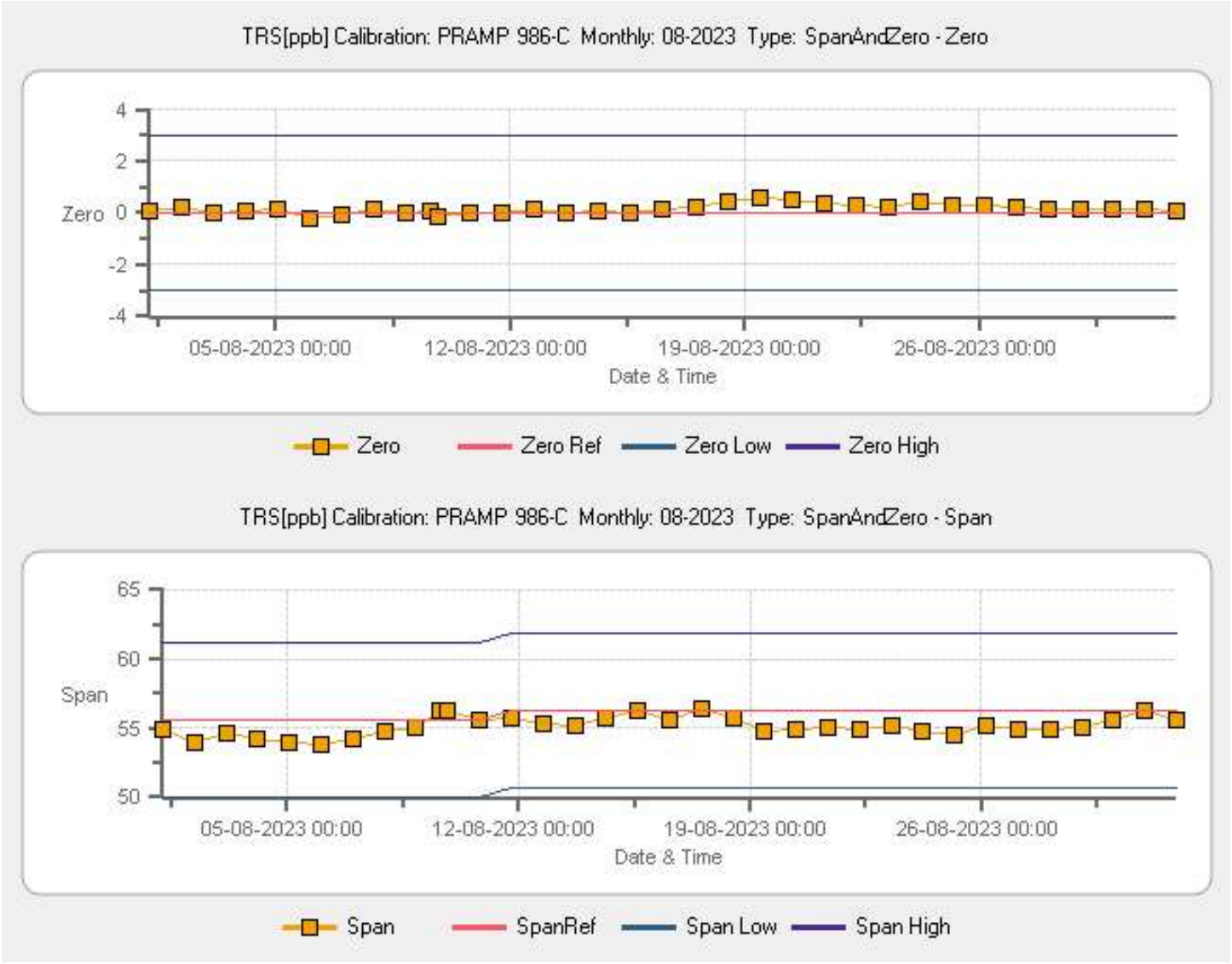
September 19, 2023

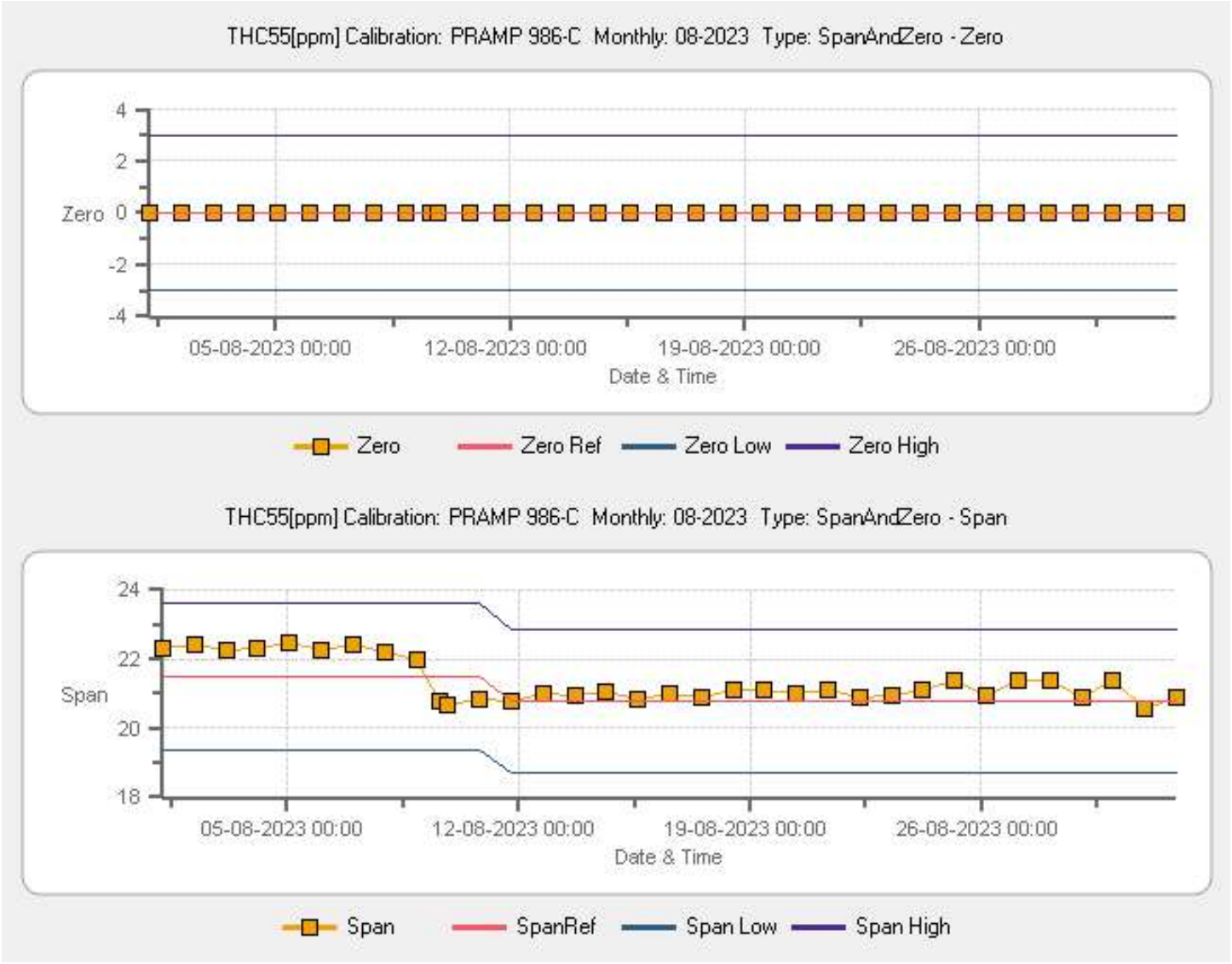
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: PRAMP 986-C Monthly: 08-2023 Type: SpanAndZero - Zero

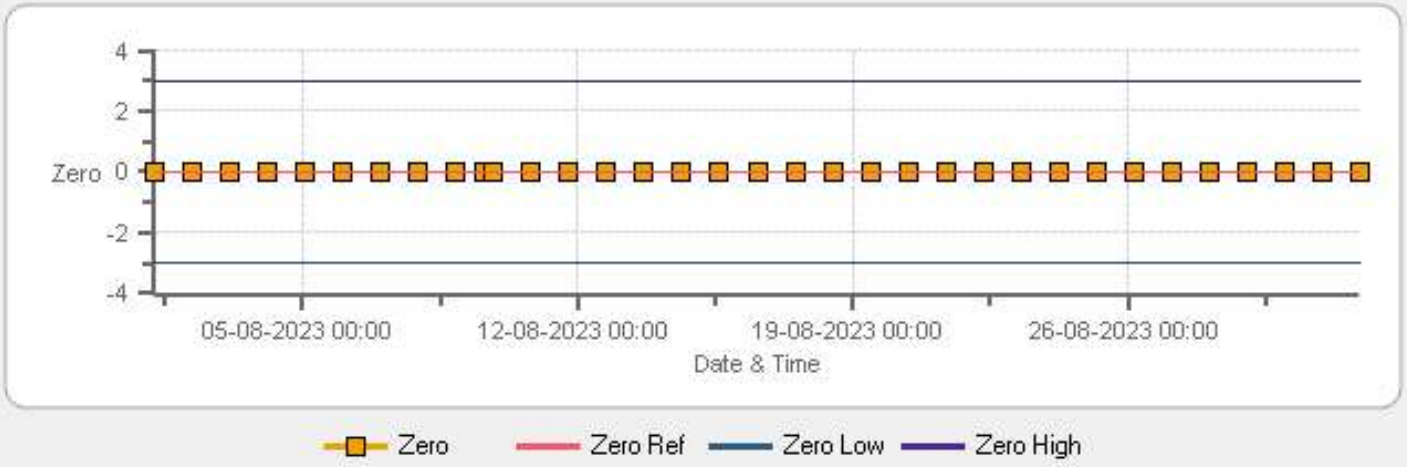


SO2[ppb] Calibration: PRAMP 986-C Monthly: 08-2023 Type: SpanAndZero - Span

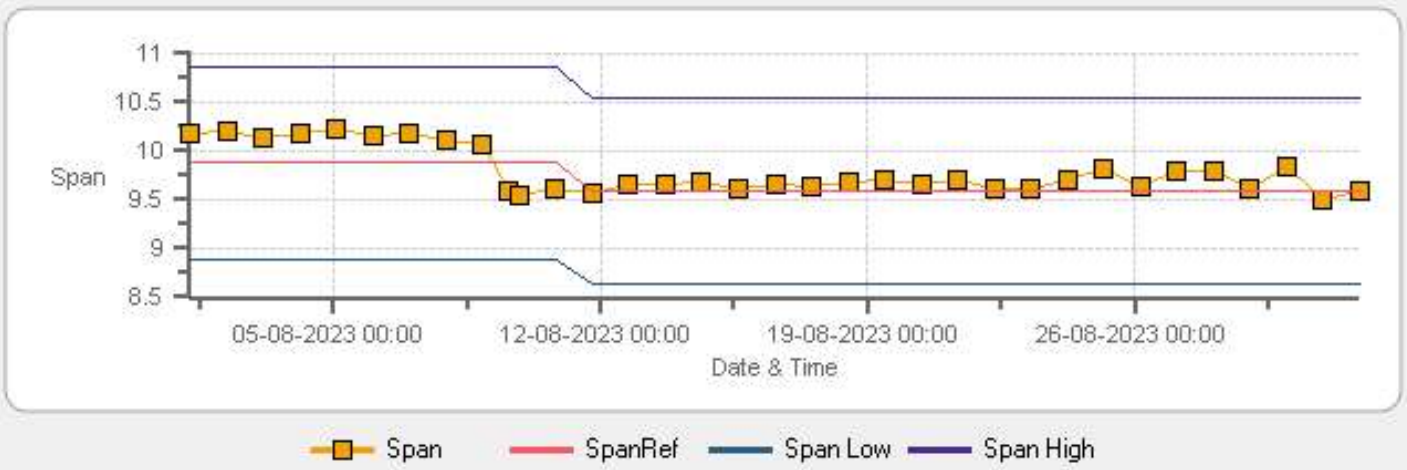

TRS[ppb] Calibration: PRAMP 986-C Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
TRS[ppb] Calibration: PRAMP 986-C Monthly: 08-2023 Type: SpanAndZero - Span
65
60
Span
55
50
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High


THC55[ppm] Calibration: PRAMP 986-C Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
THC55[ppm] Calibration: PRAMP 986-C Monthly: 08-2023 Type: SpanAndZero - Span
24
22
Span
20
18
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High

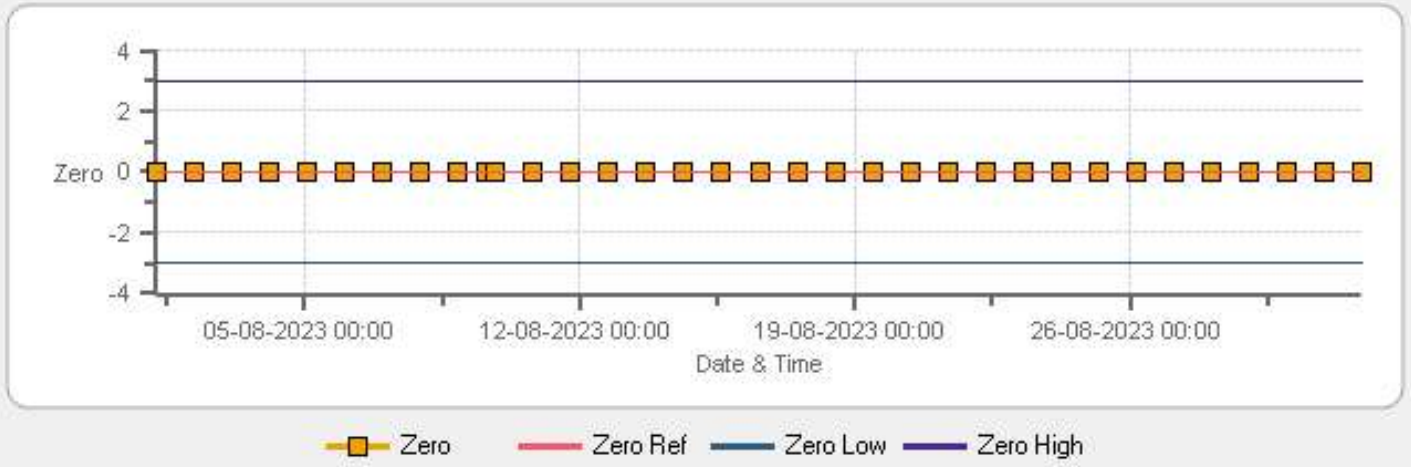
CH4[ppm] Calibration: PRAMP 986-C Monthly: 08-2023 Type: SpanAndZero - Zero



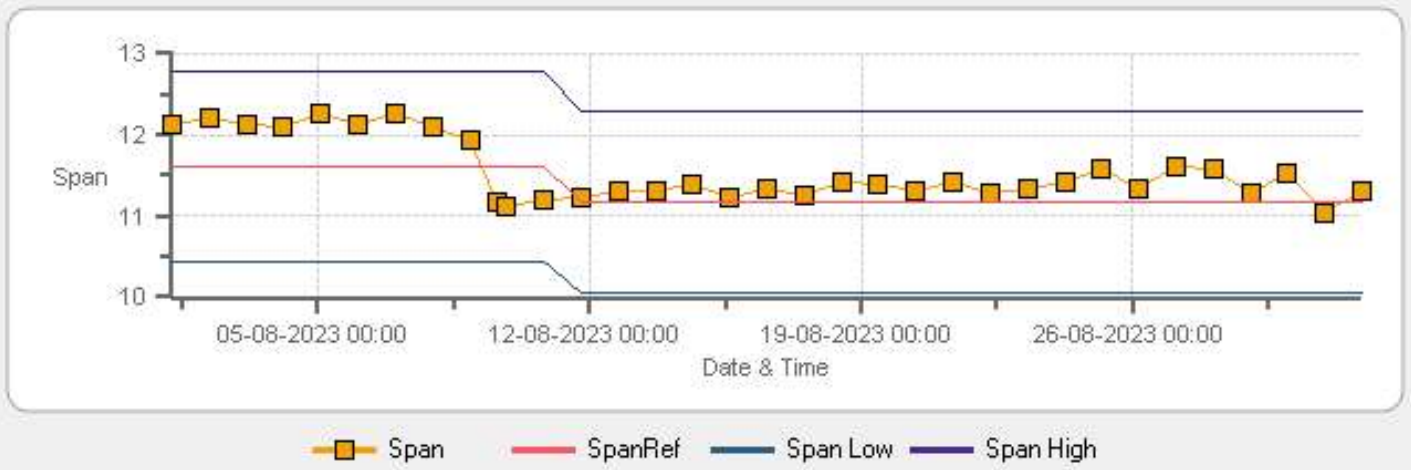
CH4[ppm] Calibration: PRAMP 986-C Monthly: 08-2023 Type: SpanAndZero - Span



NMHC[ppm] Calibration: PRAMP 986-C Monthly: 08-2023 Type: SpanAndZero - Zero



NMHC[ppm] Calibration: PRAMP 986-C Monthly: 08-2023 Type: SpanAndZero - Span



MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution

DATE:	09-Aug-2023	PREVIOUS CALIBRATION DATE:	05-Jul-2023
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.001
CLIENT:	PRAMP	TEMPERATURE (°C):	24.1
LOCATION:	986c	BAROMETRIC (mBar):	931
PURPOSE	Routine	START TIME (MST):	09:31
PERFORMED BY:	Kevin Sebastian	END TIME (MST):	14:43

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	500 ppb
SERIAL #	1193585646	FLOW (mL/min)	429
INITIAL		FINAL	
BKG/OFFSET	17.3	BKG/OFFSET	16.9
COEF/SLOPE	1.044	COEF/SLOPE	1.028
Expected (reference) Value	315.1	Expected (reference) Value	294.2

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	SABIO	MAKE:	Teledyne
MODEL:	2010	MODEL:	701
ID:	58100720	ID:	5004
MFC CALIBRATION DATE:	15-Mar-2023	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL109693	HIGH ID	n/a
CONC (ppm):	25.00	EXPIRY DATE	n/a
CYLINDER (psi):	2000	LOW ID	n/a
EXPIRY DATE	02-Nov-2025	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

POINT	HIGH	MID	LOW
TARGET	390	190	95
RANGE	300 - 400	150 - 200	50 - 100

SCRUBBER CHECK (15 MINS; TRS/H2S ONLY):

START TIME:	n/a	SO2 Conc (ppb)	n/a
END TIME:	n/a	Analyzer Response (ppb)	n/a

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
3999		3999	0.00	-0.4	0		
3941	60.80	4002	379.81	383.1	379.4	0.990	1.001
3973	28.80	4002	179.91	n/a	181.4	n/a	0.992
3986	14.40	4000	90.00	n/a	90.8	n/a	0.991

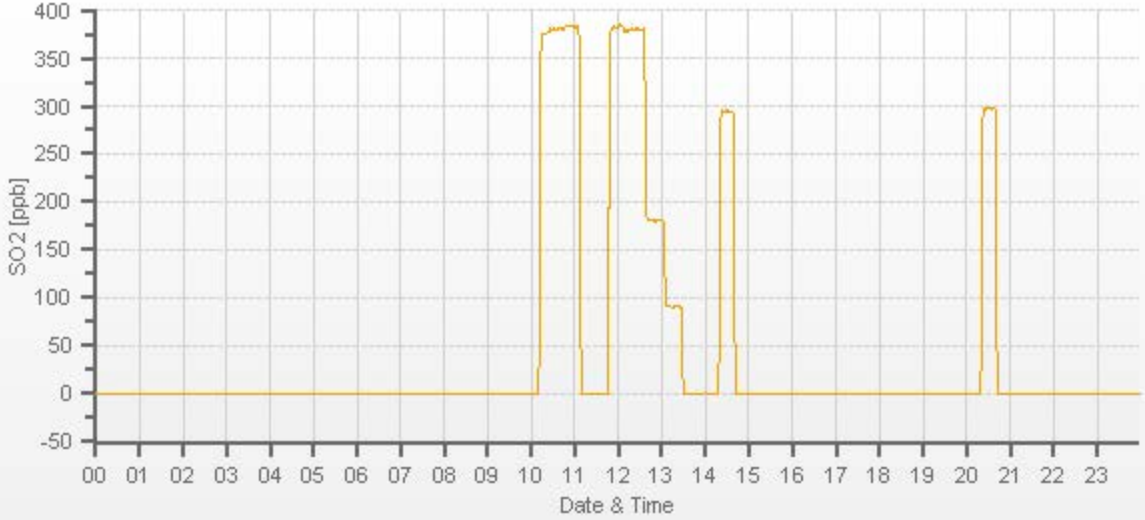
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.998	0.1%

COMMENTS:

Sample filter changed.

SO2[ppb] Station: PRAMP 986-C Daily: 09-08-2023 Type: AVG 1 Min. [1 Min.]



TRS Analyzer Calibration by Dilution

DATE:	09-Aug-2023	PREVIOUS CALIBRATION DATE:	05-Jul-2023
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.001
CLIENT:	PRAMP	TEMPERATURE (°C):	24.1
LOCATION:	986C	BAROMETRIC (mBar):	931
PURPOSE	Routine	START TIME (MST):	09:31
PERFORMED BY:	Kevin Sebastian	END TIME (MST):	14:43

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	1191833341	FLOW (mL/min)	419
INITIAL		FINAL	
BKG/OFFSET	14	BKG/OFFSET	14.1
COEF/SLOPE	0.896	COEF/SLOPE	0.908
Expected (reference) Value	55.62	Expected (reference) Value	56.3

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	SABIO	MAKE:	Teledyne
MODEL:	2010	MODEL:	701
ID:	58100720	ID:	5004
MFC CALIBRATION DATE:	15-Mar-2023	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002519	HIGH ID	n/a
CONC (ppm):	9.41	EXPIRY DATE	n/a
CYLINDER (psi):	600	LOW ID	n/a
EXPIRY DATE	10-Nov-2023	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

POINT	HIGH	MID	LOW
TARGET	78	38	19
RANGE	60 - 80	30 - 40	10 - 20

SCRUBBER CHECK (15 MINS; TRS/H2S ONLY):

START TIME:	n/a	SO2 Conc (ppb)	n/a
END TIME:	n/a	Analyzer Response (ppb)	n/a

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
3999		3999	0.00	-0.18	0		
3969	33.10	4002	77.83	74.94	77.77	1.036	1.001
3986	16.20	4002	38.09	n/a	37.69	n/a	1.011
3994	8.10	4002	19.05	n/a	18.66	n/a	1.021

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	-0.2%

COMMENTS:

TRS Converter BV's CDNOVA CDN #552
Sample filter changed.

TRS[ppb] Station: PRAMP 986-C Daily: 09-08-2023 Type: AVG 1 Min. [1 Min.]

Methane/Non-Methane Analyzer Calibration by Dilution

CALIBRATION:

DATE:	09-Aug-2023	PREVIOUS CALIBRATION DATE:	05-Jul-2023
CLIENT:	PRAMP	TEMPERATURE (°C):	24.1
LOCATION:	986C	BAROMETRIC (mBar):	934
PURPOSE	Routine	START TIME (MST):	09:31
PERFORMED BY:	Kevin Sebastian	END TIME (MST):	14:44

ANALYZER:

VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
	Thermo 55i	1022143392	1014
PARAMETER:	CH4	NMHC	THC
RANGE (ppm):	20	20	40
PREVIOUS CF:	1.001	0.993	0.997

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	SABIO	MAKE:	Teledyne	CYLINDER ID:	LL68768		HIGH ID:	n/a
MODEL:	2010	MODEL:	701	CH_4/C_3H_8 (ppm):	897.0	301.0	HIGH EXPIRY:	n/a
ID:	26801218	ID:	5004	CYLINDER (psi):	1900		LOW ID:	n/a
MFC CALIBRATION DATE:	09-Mar-2023	OXIDIZER ID:	111	EXPIRY DATE	11-Aug-2029		LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH4/NMHC)	HIGH	MID	LOW	CH4 EQUIVILANCE	
TARGET	14	7	3.5	C_3H_8 as CH_4	827.8
RANGE	12 - 16	6 - 8	2 - 4	THC as CH_4	1724.8

EXPECTED (REFERENCE) VALUE:

INITIAL	CH4	NMHC	THC	FINAL	CH4	NMHC	THC
	9.88	11.61	21.49		9.59	11.18	20.77

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC
3097		3097	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
3050	50.30	3100	14.55	13.43	27.99	15.22	14.28	29.48	14.51	13.39	27.90	0.956	0.941	0.949	1.003	1.003	1.003
3075	25.20	3100	7.29	6.73	14.02	n/a	n/a	n/a	7.23	6.69	13.92	n/a	n/a	n/a	1.009	1.006	1.007
3086	12.60	3099	3.65	3.37	7.01	n/a	n/a	n/a	3.62	3.35	6.97	n/a	n/a	n/a	1.007	1.005	1.006

LINEAR REGRESSION ANALYSIS:

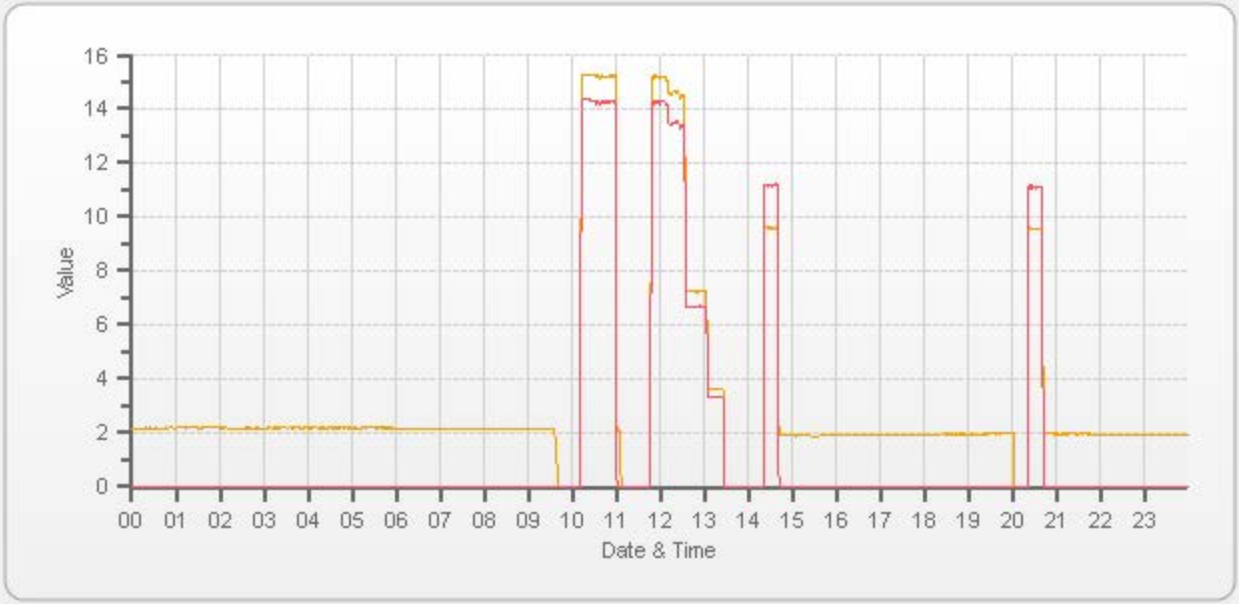
	CORRELATION	SLOPE	INTERCEPT
CH4	1.000	0.997	-0.1%
NMHC	1.000	0.997	0.0%
THC	1.000	0.997	0.0%

Comments:

Sample filter changed
BV analyzer

Use Zero Chrom? **Yes**

Station: PRAMP 986-C Daily: 09-08-2023 Type: AVG 1 Min. [1 Min.]



Meteorological System Checklist

Date:	August 9, 2023		
Technician:	Kevin Sebastian		
Station:	PRAMP 986c		
Unit:	**Make:**	**Model:**	**Serial #:**
Precipitation Sampler:	RM Young	52202	TB 16325
Temperature Sensor:	Rotronic	HC2-S3	20626912
Barometric Pressure Sensor:	MetOne	092	Y23358
Relative Humidity Sensor:	Rotronic	HC2-S3	20626912
Anemometer:	RM Young	05305AQ	180340

PRECIPITATION SENSOR CHECK

Checklist:	**Reply:**	**Comments:**
Previous check date:	July 5, 2023	
Is the sensor Level?	yes	
Is the heater operating properly?	yes	
Are the bucket drain holes clean?	yes	Tested: 02:48 pm-2:59 pm
Is the screen on the housing? (screen should be on between July and September	yes	
Is the housing clean?	yes	
Is the area around the housing clean and free from obstacles?	yes	

TIP TEST - Slowly pour water until 10 tips are heard. (10 tips = 1 mm)

# of Tips	**Data Logger Response (mm):**	**Manual Specification = +/- 0.1 mm**
10	1.0	0.00

AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	July 5, 2023	
Parameter:	Temperature @ 2 metres	
Reference Thermometer ID:	F.S. 170286131 expires May 18, 2024	
Reference Temperature (^{o}C):	22.1	
Station - Ambient Temperature (^{o}C):	20.8	
Temperature Difference (^{o}C):	1.3	

BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	July 5, 2023	
Reference Barometer ID:	Brunton 05490 Expires Feb 27, 2024	
Reference Pressure - Units/Reading:	millibar	933
Station Pressure - Units/Reading:	millibar	932.6
Pressure Tolerance +/- 15% of error:	793 - 1073	0.04%

RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	July 5, 2023	
Reference Hygrometer ID:	F.S. 170286131 expires May 18, 2024	
Reference Hygrometer % RH- Reading:	86.00	
Station Hygrometer % RH- Reading:	94.00	
RH Tolerance +/- 15% of difference:	73.10 - 98.90	-9.3%

ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	July 5, 2023	Previous check date:	July 5, 2023
Wind Speed Observed (kph):	0-~`5	Wind Direction Observed:	E
Wind speed on Data Logger (kph):	4.6	Wind Direction on Data Logger:	E
		Wind Direction Pass/Fail?:	Pass

Comments

No issues

Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	**Performed By:**	Limin Li
Audit Location:	986C	**Reviewed By:**	Chris Wesson
Audit Date:	August 5, 2022	**Start/End Time (mst):**	09:37/10:32
Calibration Purpose:	routine annual	**Weather Conditions:**	A few clouds

Wind Sensor Information

Sensor ID Data:		**Sensor Outputs:**	
Sensor Make:	RM Young	**Velocity Voltage Output Range:**	n/a
Sensor Model:	05305AQ	**Velocity Unit Output Range:**	0-180
Serial #:	180340	**Direction Voltage Output Range:**	n/a
Previous Cal/Audit Date:	July 3, 2021	**Direction Unit Output Range:**	0-360

Wind Calibrator Information

Calibrator I.D. and Expiry Date: RM Young 18802 id# CA03309 expires June 07, 2023

Wind Speed Audit Data **+/- 2% of the average correction factor is the limit**

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.0	0.0	-
1000	18.4	18.3	18.3	1.007
2000	36.9	36.7	36.7	1.004
3000	55.3	55.1	55.1	1.003
4000	73.7	73.6	73.6	1.002
5000	92.2	92.0	92.0	1.002
6000	110.6	110.5	110.5	1.001
7000	129.0	128.9	128.9	1.001
8000	147.4	147.3	147.3	1.001
9000	165.9	165.8	165.8	1.000
10000	184.3	184.2	184.2	1.001
		The audit meets AMD requirements.	**Average Correction Factor=**	**1.002**

Wind Direction Audit Data **+/- 3° of the absolute average degrees difference for all points is the limit**

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	2	354	2.0	1.0	1.5
30	330	32	333	-2.0	-3.0	2.5
60	300	61	303	-1.0	-3.0	2.0
90	270	90	273	0.0	-3.0	1.5
120	240	120	242	0.0	-2.0	1.0
150	210	150	210	0.0	0.0	0.0
180	180	180	179	0.0	1.0	0.5
210	150	210	149	0.0	1.0	0.5
240	120	242	120	-2.0	0.0	1.0
270	90	273	90	-3.0	0.0	1.5
300	60	303	61	-3.0	-1.0	2.0
330	30	332	32	-2.0	-2.0	2.0
355	0	354	2	1.0	2.0	1.5
The audit meets AMD requirements.			**Average Absolute Degrees Difference=**			**1.3**

Comments:

Magnetic declination = 15Deg(E)

Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	**Performed By:**	Chris Wesson
Audit Location:	986C	**Reviewed By:**	Limin Li
Audit Date:	August 3, 2023	**Start/End Time (mst):**	14:01 / 15:03
Calibration Purpose:	routine annual	**Weather Conditions:**	Rain fall heavy at times

Wind Sensor Information

Sensor ID Data:		**Sensor Outputs:**	
Sensor Make:	RM Young	**Velocity Voltage Output Range:**	n/a
Sensor Model:	05305AQ	**Velocity Unit Output Range:**	0-200
Serial #:	180340	**Direction Voltage Output Range:**	n/a
Previous Cal/Audit Date:	August 5, 2022	**Direction Unit Output Range:**	0-360

Wind Calibrator Information

Calibrator I.D. and Expiry Date: RM Young 18802 id# R9133 expires Oct 18, 2024

Wind Speed Audit Data **+/- 2% of the average correction factor is the limit**

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.0	0.0	-
1000	18.4	18.3	18.3	1.007
2000	36.9	36.7	36.7	1.004
3000	55.3	55.1	55.1	1.003
4000	73.7	73.6	73.6	1.002
5000	92.2	92.0	92.0	1.002
6000	110.6	110.5	110.1	1.003
7000	129.0	128.9	129.3	0.999
8000	147.4	147.3	147.3	1.001
9000	165.9	165.8	165.8	1.000
10000	184.3	184.2	184.2	1.001
		The audit meets AMD requirements.	**Average Correction Factor=**	**1.002**

Wind Direction Audit Data **+/- 3° of the absolute average degrees difference for all points is the limit**

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	2	354	2.0	1.0	1.5
30	330	31	331	-1.0	-1.0	1.0
60	300	60	301	0.0	-1.0	0.5
90	270	90	271	0.0	-1.0	0.5
120	240	119	240	1.0	0.0	0.5
150	210	148	207	2.0	3.0	2.5
180	180	178	178	2.0	2.0	2.0
210	150	208	148	2.0	2.0	2.0
240	120	240	122	0.0	-2.0	1.0
270	90	272	90	-2.0	0.0	1.0
300	60	301	60	-1.0	0.0	0.5
330	30	331	32	-1.0	-2.0	1.5
355	0	354	2	1.0	2.0	1.5
The audit meets AMD requirements.			**Average Absolute Degrees Difference=**			**1.2**

Comments:

Declination = 15 deg East
Physical inspection completed, no issues

END OF REPORT

Peace River Area Monitoring Program

AUGUST 2023

Ambient Air Monitoring Calibration Report

- RENO-B STATION-

CAL-PRAMP-202308-01563

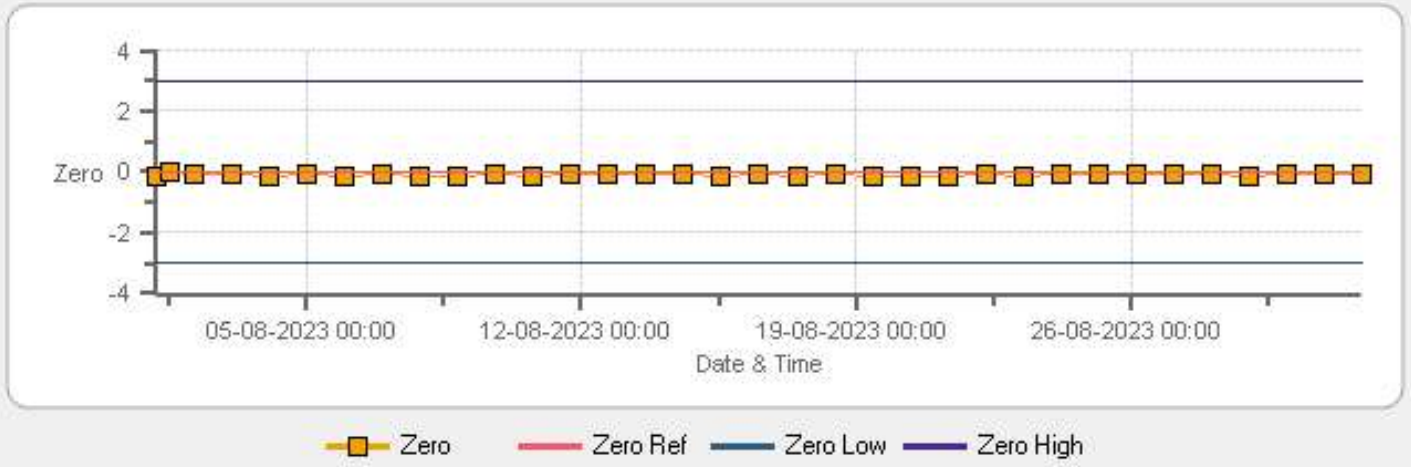
Operation and Maintenance:
Bureau Veritas Canada

Data Validation and Report:
Bureau Veritas Canada

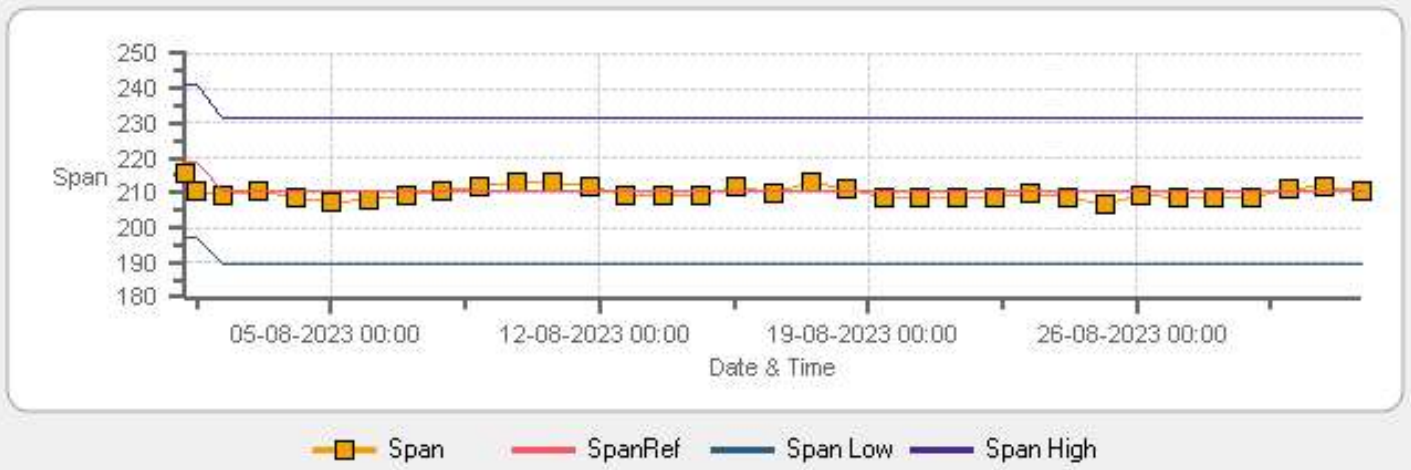
September 19, 2023

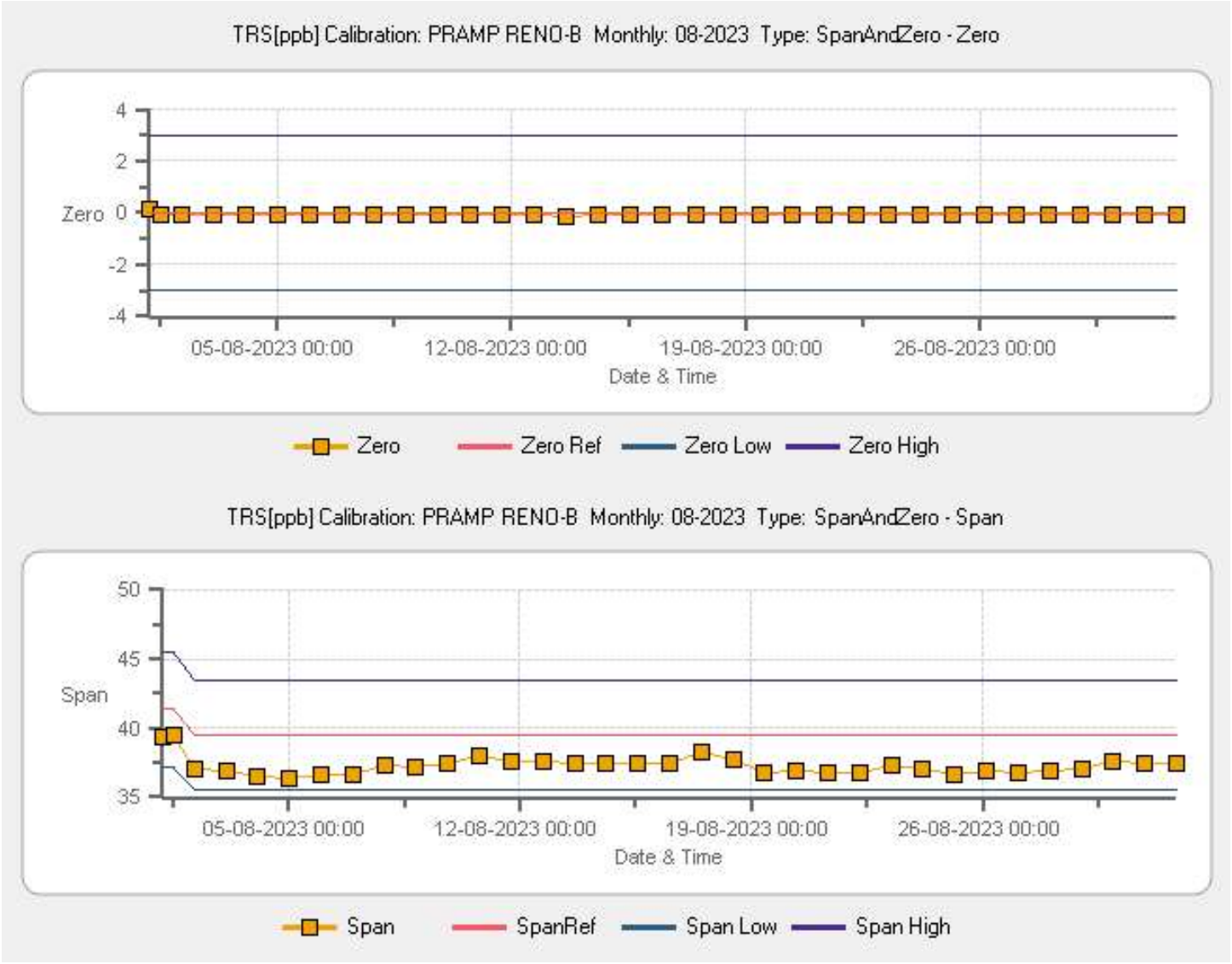
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

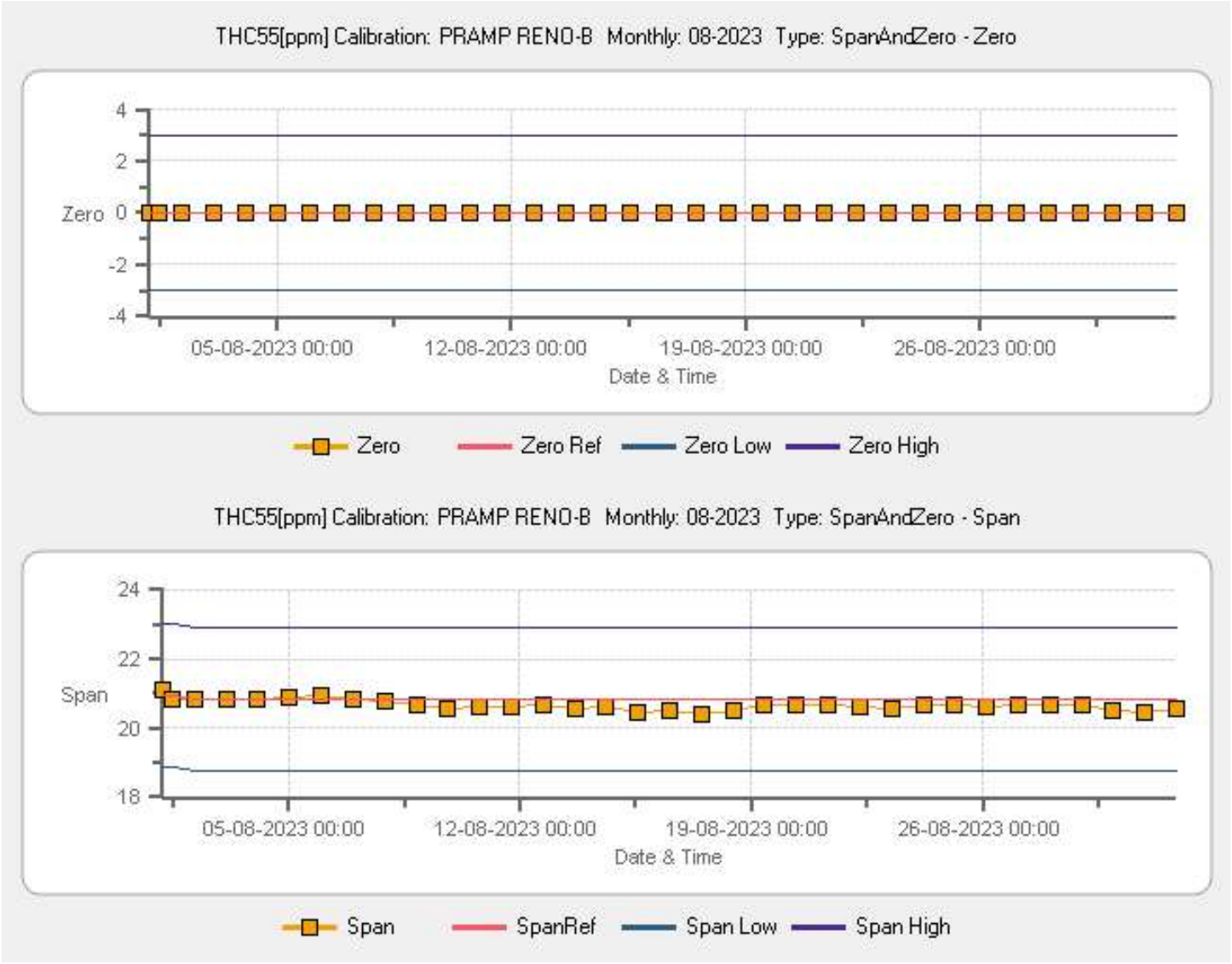
SO2[ppb] Calibration: PRAMP RENO-B Monthly: 08-2023 Type: SpanAndZero - Zero

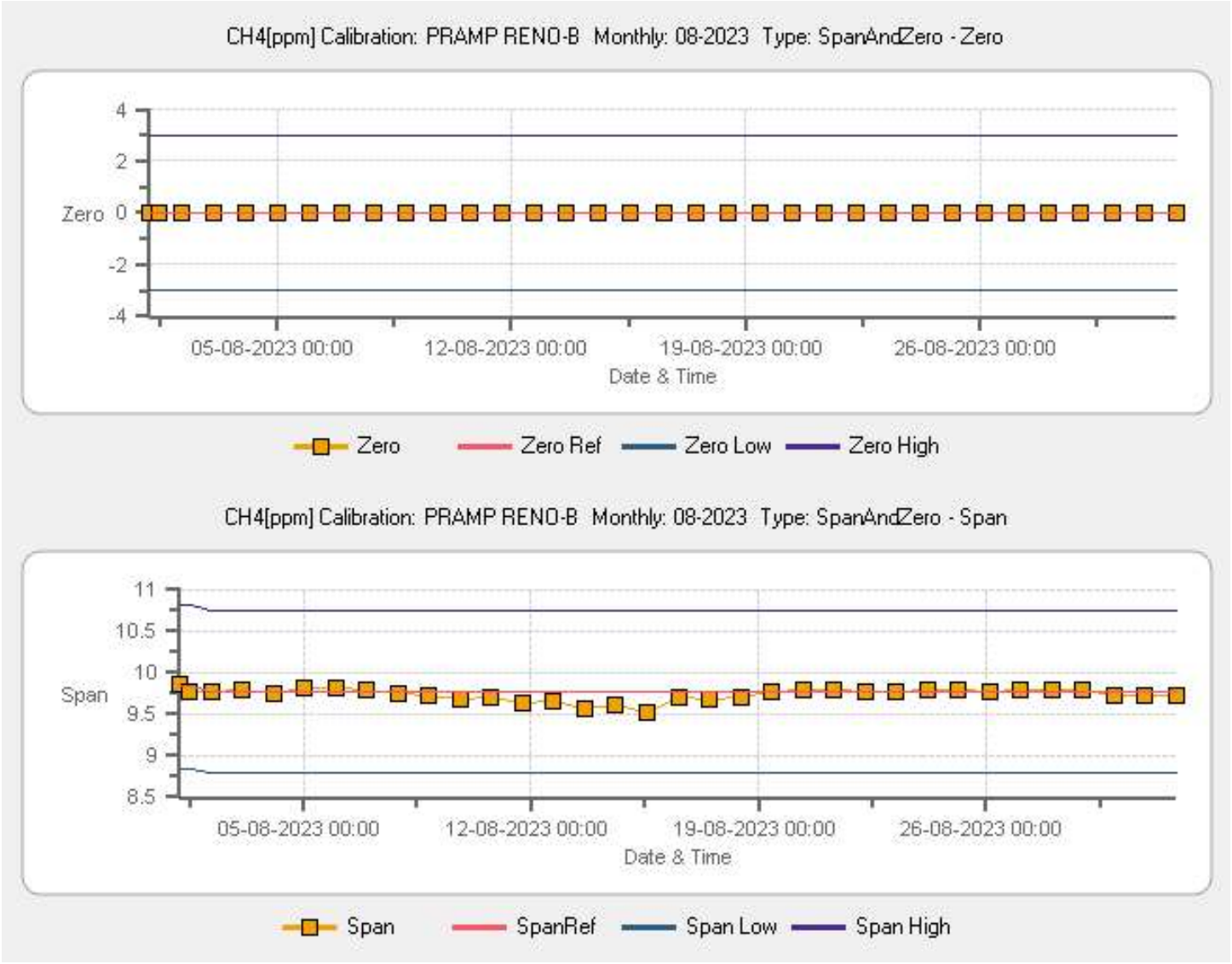


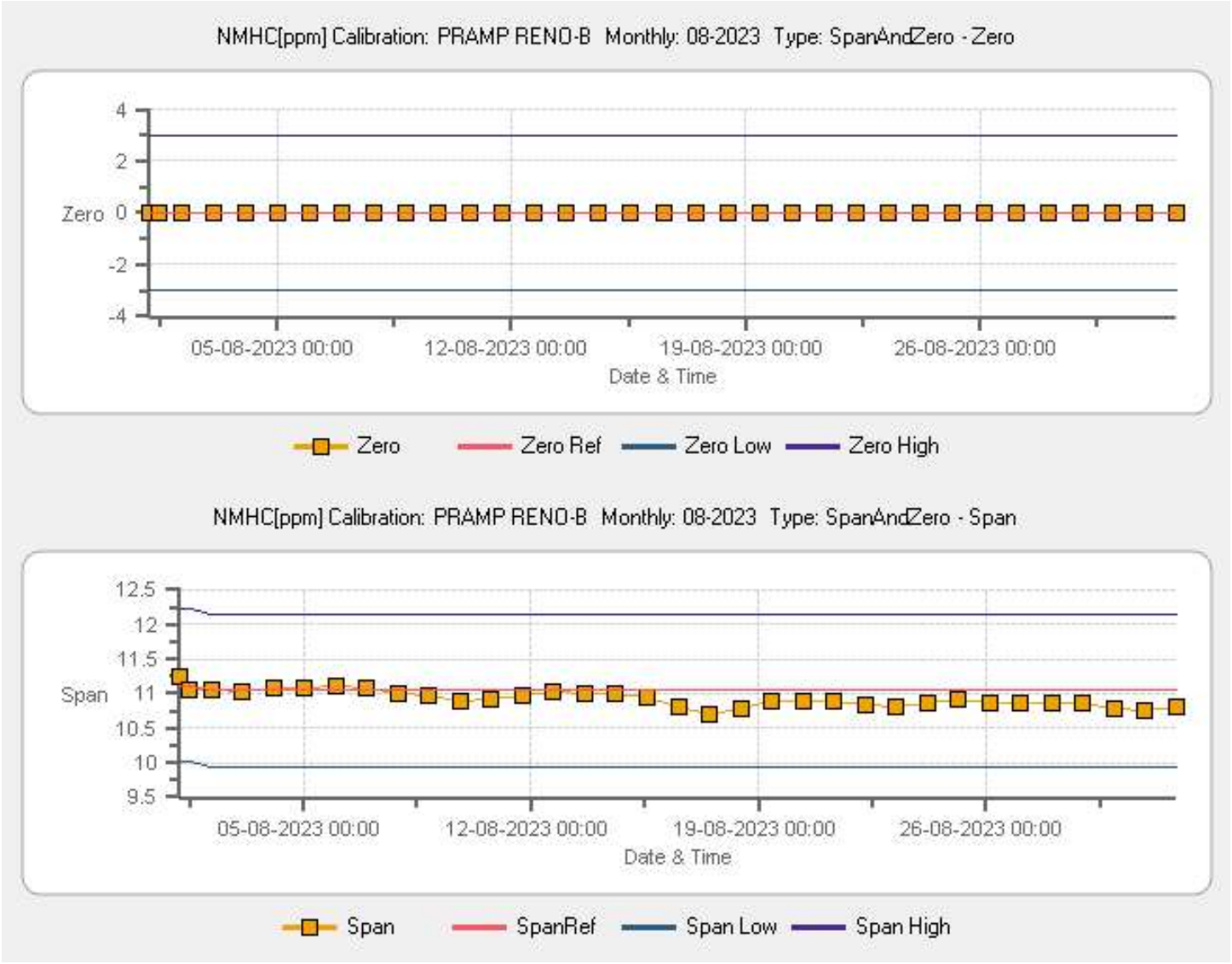
SO2[ppb] Calibration: PRAMP RENO-B Monthly: 08-2023 Type: SpanAndZero - Span




TRS[ppb] Calibration: PRAMP RENO-B Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
TRS[ppb] Calibration: PRAMP RENO-B Monthly: 08-2023 Type: SpanAndZero - Span
50
45
Span
40
35
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High


THC55[ppm] Calibration: PRAMP RENO-B Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
THC55[ppm] Calibration: PRAMP RENO-B Monthly: 08-2023 Type: SpanAndZero - Span
24
22
Span
20
18
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High


CH4[ppm] Calibration: PRAMP RENO-B Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
CH4[ppm] Calibration: PRAMP RENO-B Monthly: 08-2023 Type: SpanAndZero - Span
11
10.5
10
Span
9.5
9
8.5
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High


NMHC[ppm] Calibration: PRAMP RENO-B Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
NMHC[ppm] Calibration: PRAMP RENO-B Monthly: 08-2023 Type: SpanAndZero - Span
12.5
12
11.5
Span 11
10.5
10
9.5
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution

DATE:	01-Aug-2023	PREVIOUS CALIBRATION DATE:	18-Jul-2023
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.003
CLIENT:	PRAMP	TEMPERATURE (°C):	24.2
LOCATION:	Reno-B	BAROMETRIC (mBar):	943
PURPOSE	Routine	START TIME (MST):	08:15
PERFORMED BY:	Chris Wesson	END TIME (MST):	12:17

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	500 ppb
SERIAL #	12101910505	FLOW (mL/min)	437
INITIAL		FINAL	
BKG/OFFSET	1.19	BKG/OFFSET	1.13
COEF/SLOPE	0.923	COEF/SLOPE	0.906
Expected (reference) Value	219	Expected (reference) Value	210.3

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	75401122	ID:	4568
MFC CALIBRATION DATE:	13-Mar-2023	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL107286	HIGH ID	n/a
CONC (ppm):	25.10	EXPIRY DATE	n/a
CYLINDER (psi):	800	LOW ID	n/a
EXPIRY DATE	27-Jan-2025	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

POINT	HIGH	MID	LOW
TARGET	390	190	95
RANGE	300 - 400	150 - 200	50 - 100

SCRUBBER CHECK (15 MINS; TRS/H2S ONLY):

START TIME:	n/a	SO2 Conc (ppb)	n/a
END TIME:	n/a	Analyzer Response (ppb)	n/a

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
3999		3999	0.00	-0.1	0		
3939	60.60	4000	380.27	383.3	380.2	0.992	1.000
3971	28.70	4000	180.09	n/a	181.1	n/a	0.994
3985	14.30	3999	89.75	n/a	89.6	n/a	1.002

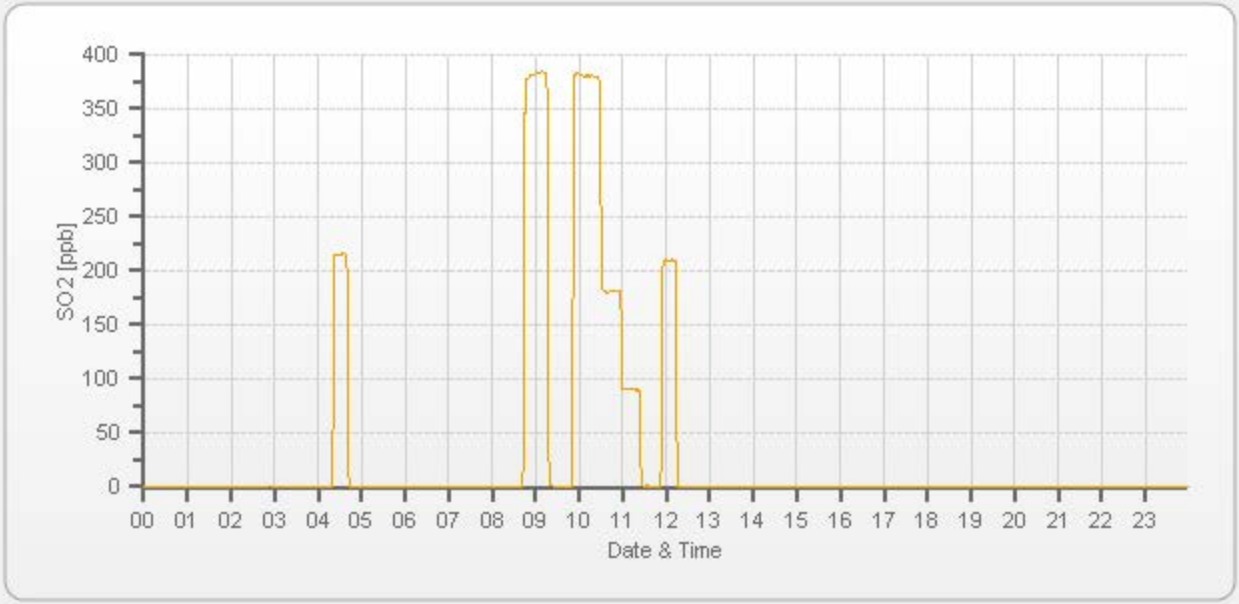
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	0.0%

COMMENTS:

sample filter changed

SO2[ppb] Station: PRAMP RENO-B Daily: 01-08-2023 Type: AVG 1 Min. [1 Min.]



TRS Analyzer Calibration by Dilution

DATE:	01-Aug-2023	PREVIOUS CALIBRATION DATE:	n/a
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	n/a
CLIENT:	PRAMP	TEMPERATURE (°C):	21.9
LOCATION:	Reno-B	BAROMETRIC (mBar):	943
PURPOSE	Install/Post-Repair	START TIME (MST):	09:17
PERFORMED BY:	Chris Wesson	END TIME (MST):	12:17

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	12101910504	FLOW (mL/min)	400
INITIAL		FINAL	
BKG/OFFSET	1.03	BKG/OFFSET	1.04
COEF/SLOPE	0.958	COEF/SLOPE	0.926
Expected (reference) Value	41.35	Expected (reference) Value	39.5

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	75401122	ID:	4568
MFC CALIBRATION DATE:	13-Mar-2023	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL131374	HIGH ID	n/a
CONC (ppm):	10.09	EXPIRY DATE	n/a
CYLINDER (psi):	2000	LOW ID	n/a
EXPIRY DATE	03-Jan-2026	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

POINT	HIGH	MID	LOW
TARGET	78	38	19
RANGE	60 - 80	30 - 40	10 - 20

SCRUBBER CHECK (15 MINS; TRS/H2S ONLY):

START TIME:	n/a	SO2 Conc (ppb)	n/a
END TIME:	n/a	Analyzer Response (ppb)	n/a

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
3999		3999	0.00	n/a	0		
3969	30.90	4000	77.95	n/a	77.92	n/a	1.000
3985	15.10	4000	38.09	n/a	37.51	n/a	1.015
3992	7.50	3999	18.92	n/a	18.34	n/a	1.032

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.002	-0.3%

COMMENTS:

TRS Converter CDNOVA CDN-101 #590.
Post-repair following converter repair (new thermocouple)

TRS[ppb] Station: PRAMP RENO-B Daily: 01-08-2023 Type: AVG 1 Min. [1 Min.]

Methane/Non-Methane Analyzer Calibration by Dilution

CALIBRATION:

DATE:	01-Aug-2023	PREVIOUS CALIBRATION DATE:	18-Jul-2023
CLIENT:	PRAMP	TEMPERATURE (°C):	24.2
LOCATION:	Reno-B	BAROMETRIC (mBar):	943
PURPOSE	Routine	START TIME (MST):	08:15
PERFORMED BY:	Chris Wesson	END TIME (MST):	12:06

ANALYZER:

VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
	Thermo 55i	12101910497	1108
PARAMETER:	CH4	NMHC	THC
RANGE (ppm):	20	20	40
PREVIOUS CF:	1.001	0.999	1.000

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	LL68768		HIGH ID:	n/a
MODEL:	2010	MODEL:	M701	CH_4/C_3H_8 (ppm):	897	301	HIGH EXPIRY:	n/a
ID:	26701218	ID:	4568	CYLINDER (psi):	2000		LOW ID:	n/a
MFC CALIBRATION DATE:	15-Mar-2023	OXIDIZER ID:	Internal	EXPIRY DATE	11-Aug-29		LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH4/NMHC)	HIGH	MID	LOW	CH4 EQUIVILANCE	
TARGET	14	7	3.5	C_3H_8 as CH_4	827.8
RANGE	12 - 16	6 - 8	2 - 4	THC as CH_4	1724.8

EXPECTED (REFERENCE) VALUE:

INITIAL	CH4	NMHC	THC	FINAL	CH4	NMHC	THC
	9.83	11.12	20.95		9.77	11.05	20.83

CALIBRATION:

FLOW RATE (mL/min)			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC
3250		3250	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
3198	52.80	3251	14.57	13.44	28.01	14.64	13.70	28.35	14.57	13.47	28.04	0.995	0.981	0.988	1.000	0.998	0.999
3224	26.40	3250	7.29	6.72	14.01	n/a	n/a	n/a	7.25	6.74	13.99	n/a	n/a	n/a	1.005	0.998	1.001
3235	13.20	3248	3.65	3.36	7.01	n/a	n/a	n/a	3.63	3.44	7.07	n/a	n/a	n/a	1.004	0.978	0.991

LINEAR REGRESSION ANALYSIS:

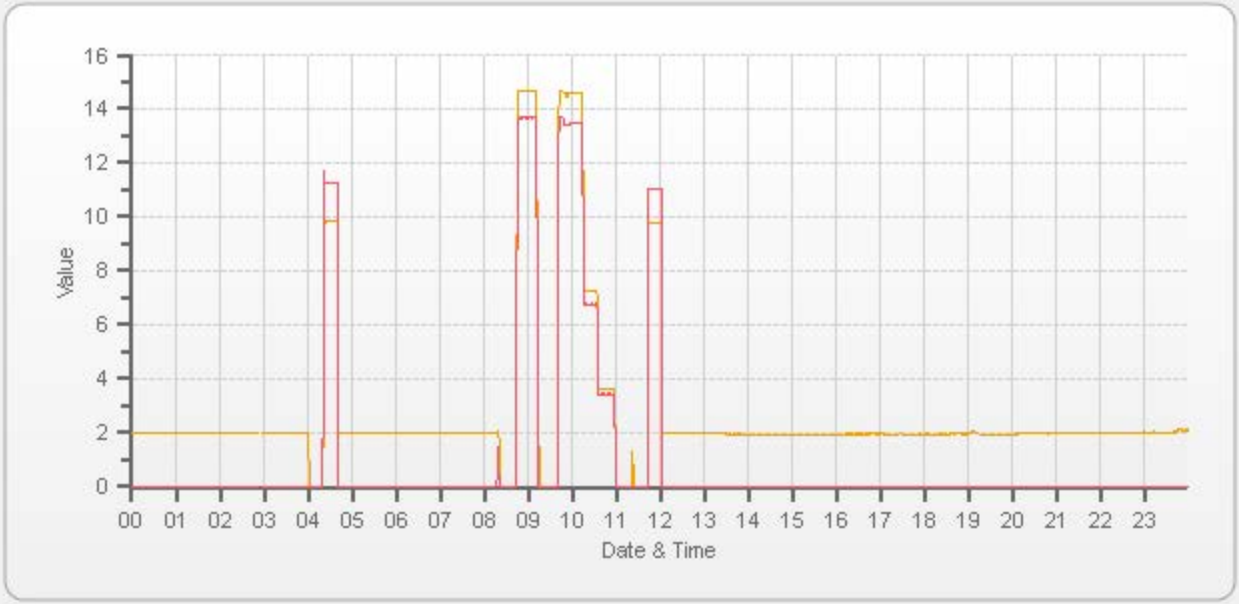
	CORRELATION	SLOPE	INTERCEPT
CH4	1.000	1.000	-0.1%
NMHC	1.000	1.000	0.1%
THC	1.000	1.000	0.0%

Comments:

Sample filter changed
H2 = AMA HG300 #210467069

Use Zero Chrom? **No**

Station: PRAMP RENO-B Daily: 01-08-2023 Type: AVG 1 Min. [1 Min.]



Meteorological System Checklist

Date:	August 1, 2023		
Technician:	Chris Wesson		
Station:	PRAMP Reno		
Unit:	**Make:**	**Model:**	**Serial #:**
Precipitation Sampler:	RM Young	52202	TB 15877
Temperature Sensor:	Rotronic	HC2-S3	20467597
Barometric Pressure Sensor:	MetOne	92	A17940
Relative Humidity Sensor:	Rotronic	HC2-S3	20467597

PRECIPITATION SENSOR CHECK

Checklist:	**Reply:**	**Comments:**
Previous check date:	July 18, 2023	
Is the sensor Level?	yes	
Is the heater operating properly?	yes	
Are the bucket drain holes clean?	yes	Audit: 09:34 - 09:44
Is the screen on the housing? (screen should be on between July and September	yes	
Is the housing clean?	yes	
Is the area around the housing clean and free from obstacles?	yes	

TIP TEST - Slowly pour water until 10 tip are heard. (10 tips = 1 mm)

# of Tips	**Data Logger Response (mm):**	**Manual Specification = +/- 0.1 mm**
10	1.00	0.00

AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	July 18, 2023	
Parameter:	Temperature @ 2 metres	
Reference Thermometer ID:	FS 160459244 expires July 17, 2024	
Reference Temperature (^{o}C):	15.4	
Station - Ambient Temperature (^{o}C):	14.8	
Temperature Difference (^{o}C):	0.6	

BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	July 18, 2023	
Reference Barometer ID:	DeltaCal DC1 #206578 expires September 20, 2023	
Reference Pressure - Units/Reading:	millibar	943.9
Station Pressure - Units/Reading:	millibar	943.2
Pressure Tolerance +/- 15% of error:	802 - 1085	0.07%

RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	July 18, 2023	
Reference Hygrometer ID:	FS 160459244 expires July 17, 2024	
Reference Hygrometer % RH- Reading:	85.80	
Station Hygrometer % RH- Reading:	91.00	
RH Tolerance +/- 15% of difference:	72.93 - 98.67	-6.1%

Comments

Annual wind audit completed - see sheet

Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	**Performed By:**	Chris Wesson
Audit Location:	Reno-B	**Reviewed By:**	Limin Li
Audit Date:	August 1, 2023	**Start/End Time (mst):**	09:54 / 11:18
Calibration Purpose:	routine annual	**Weather Conditions:**	Mainly cloudy with drizzle

Wind Sensor Information

Sensor ID Data:		**Sensor Outputs:**	
Sensor Make:	RM Young	**Velocity Voltage Output Range:**	n/a
Sensor Model:	05305AQ	**Velocity Unit Output Range:**	0-200
Serial #:	174795	**Direction Voltage Output Range:**	n/a
Previous Cal/Audit Date:	November 23, 2022	**Direction Unit Output Range:**	0-360

Wind Calibrator Information

Calibrator I.D. and Expiry Date: RM Young 18802 id# R9133 expires Oct 18, 2024

Wind Speed Audit Data **+/- 2% of the average correction factor is the limit**

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.0	0.0	-
1000	18.4	18.3	18.3	1.007
2000	36.9	36.7	36.7	1.004
3000	55.3	55.1	55.1	1.003
4000	73.7	73.6	73.6	1.002
5000	92.2	92.0	92.0	1.002
6000	110.6	110.5	110.5	1.001
7000	129.0	128.9	128.9	1.001
8000	147.4	147.3	147.3	1.001
9000	165.9	165.8	165.8	1.000
10000	184.3	184.2	184.6	0.999
		The audit meets AMD requirements.	**Average Correction Factor=**	**1.002**

Wind Direction Audit Data **+/- 3° of the absolute average degrees difference for all points is the limit**

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	1	354	1.0	1.0	1.0
30	330	30	332	0.0	-2.0	1.0
60	300	60	302	0.0	-2.0	1.0
90	270	89	272	1.0	-2.0	1.5
120	240	120	241	0.0	-1.0	0.5
150	210	149	211	1.0	-1.0	1.0
180	180	181	182	-1.0	-2.0	1.5
210	150	211	150	-1.0	0.0	0.5
240	120	241	120	-1.0	0.0	0.5
270	90	271	90	-1.0	0.0	0.5
300	60	301	60	-1.0	0.0	0.5
330	30	331	29	-1.0	1.0	1.0
355	0	354	1	1.0	1.0	1.0
The audit meets AMD requirements.			**Average Absolute Degrees Difference=**			**0.9**

Comments:

Declination = 15 deg East
Physical inspection completed, no issues

END OF REPORT

Peace River Area Monitoring Program

AUGUST 2023

Ambient Air Monitoring Calibration Report

- AQHI - GRIMSHAW STATION-

CAL-PRAMP-202308-01689

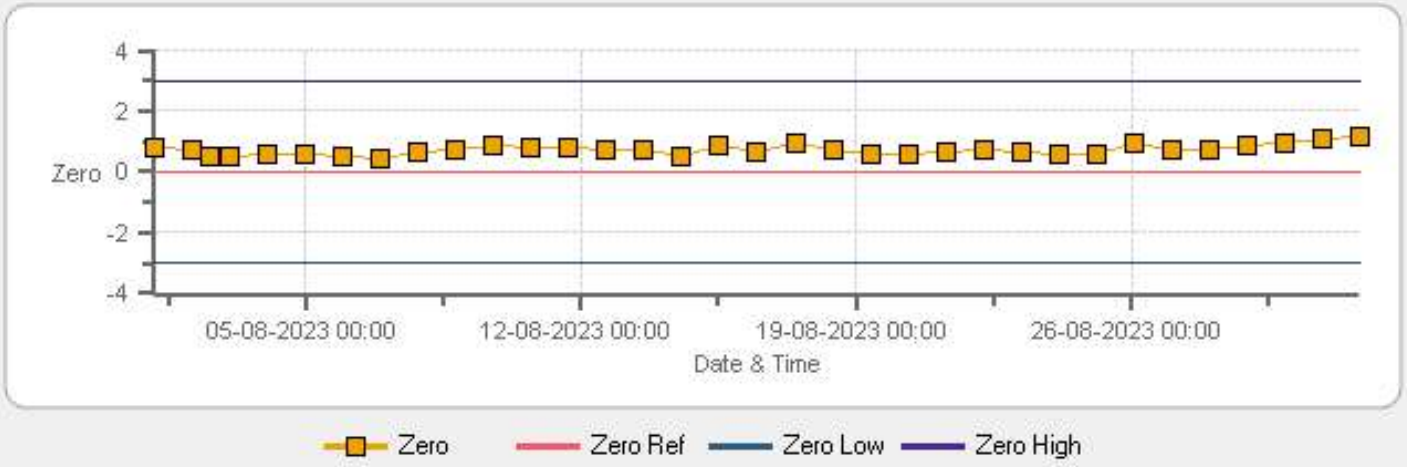
Operation and Maintenance:
Bureau Veritas Canada

Data Validation and Report:
Bureau Veritas Canada

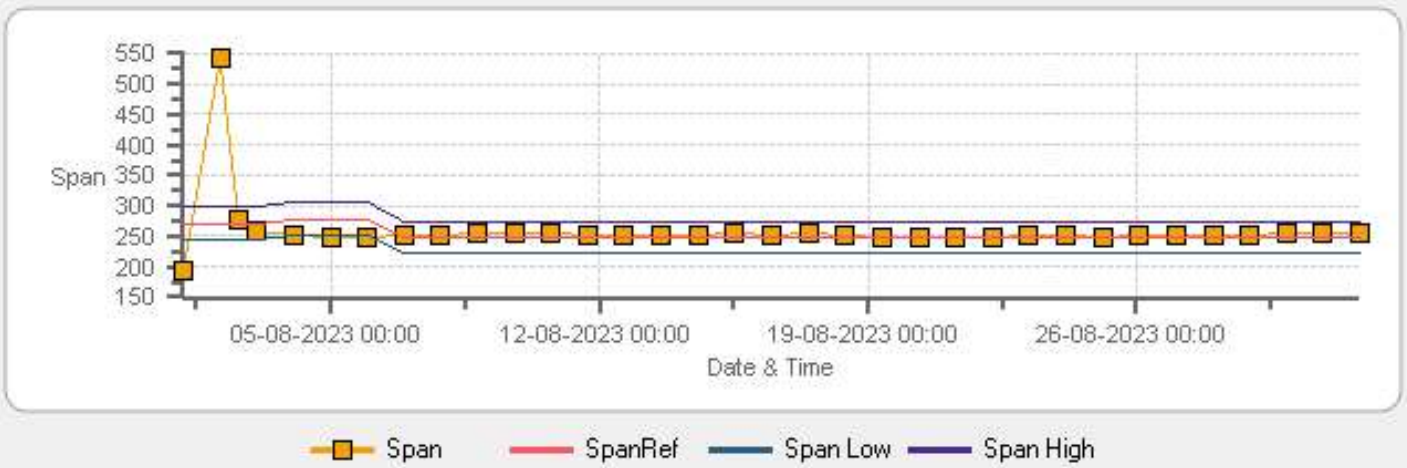
September 19, 2023

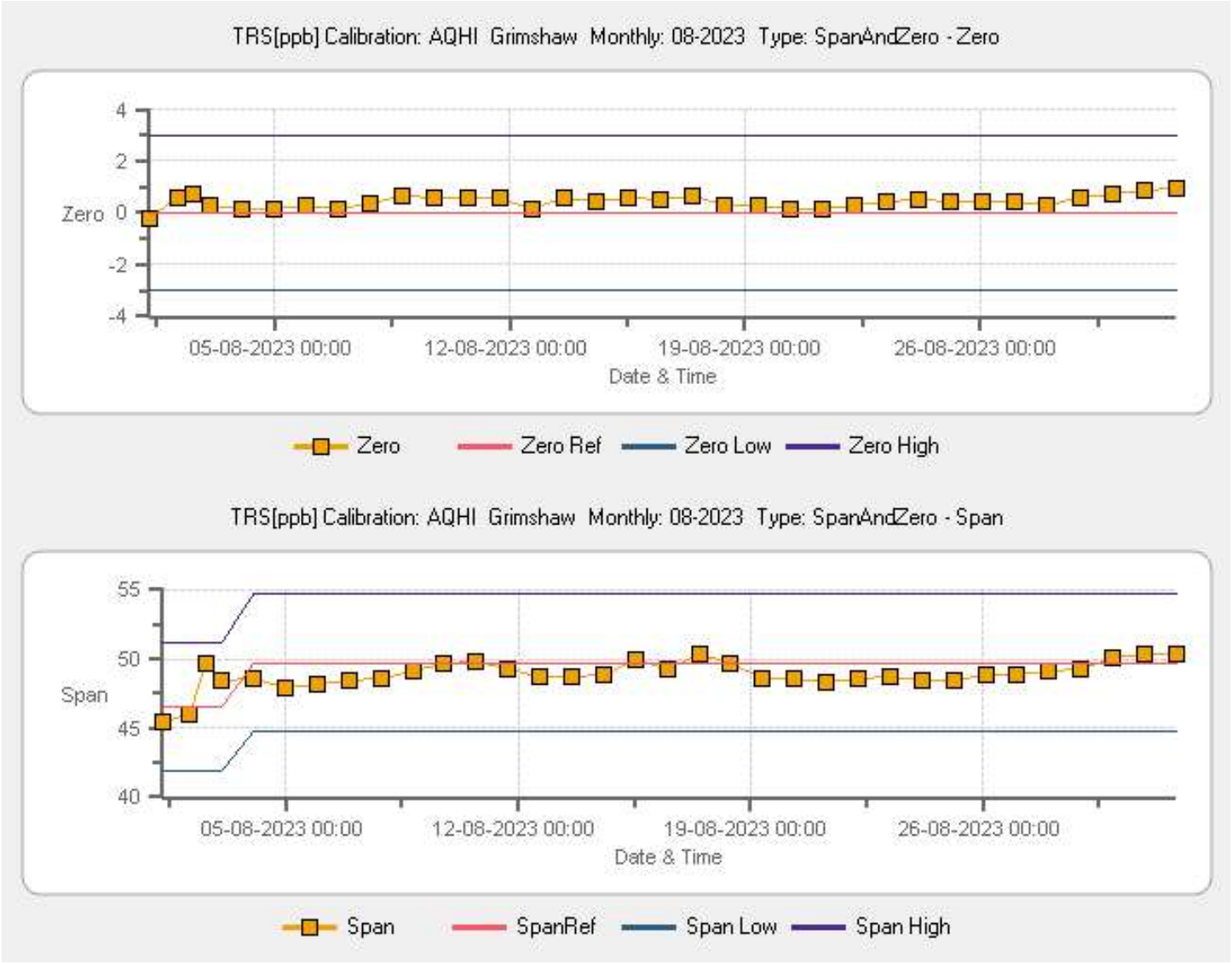
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Zero

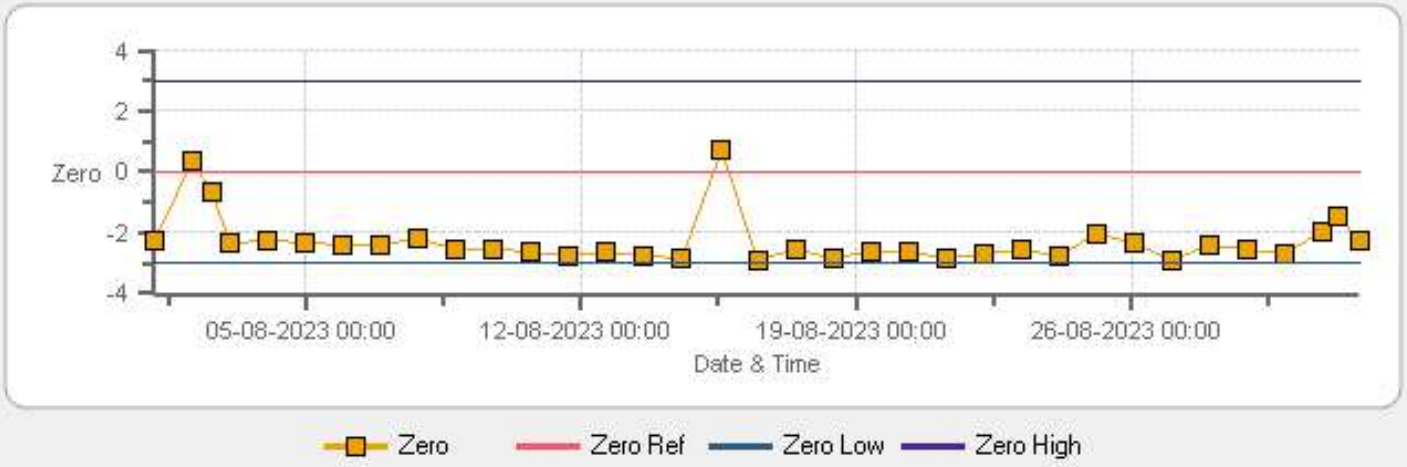


SO2[ppb] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Span

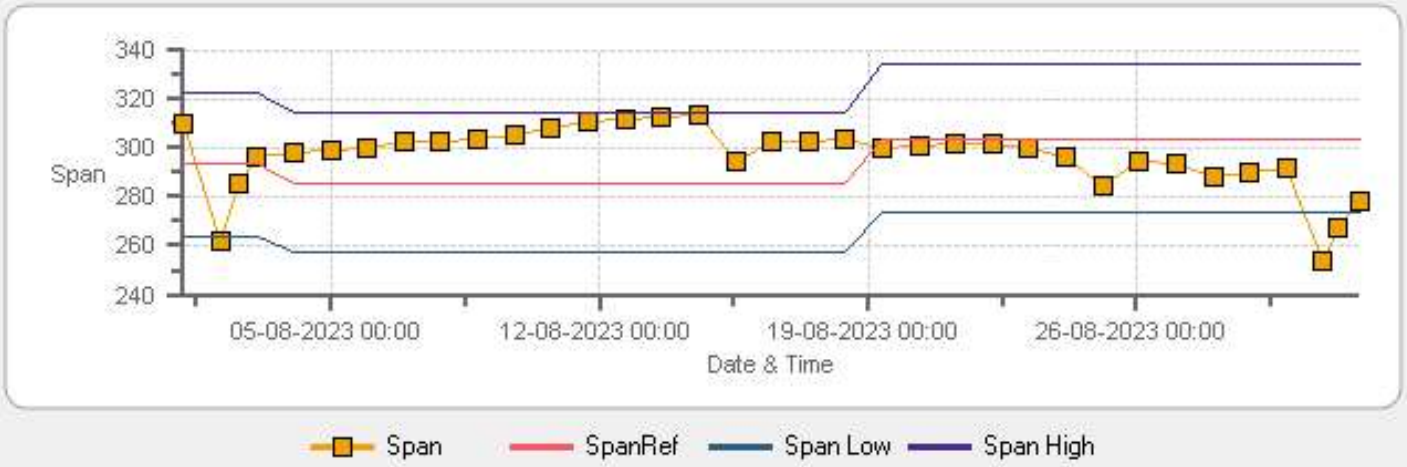



TRS[ppb] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
TRS[ppb] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Span
55
50
Span
45
40
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High

NOX[ppb] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Zero

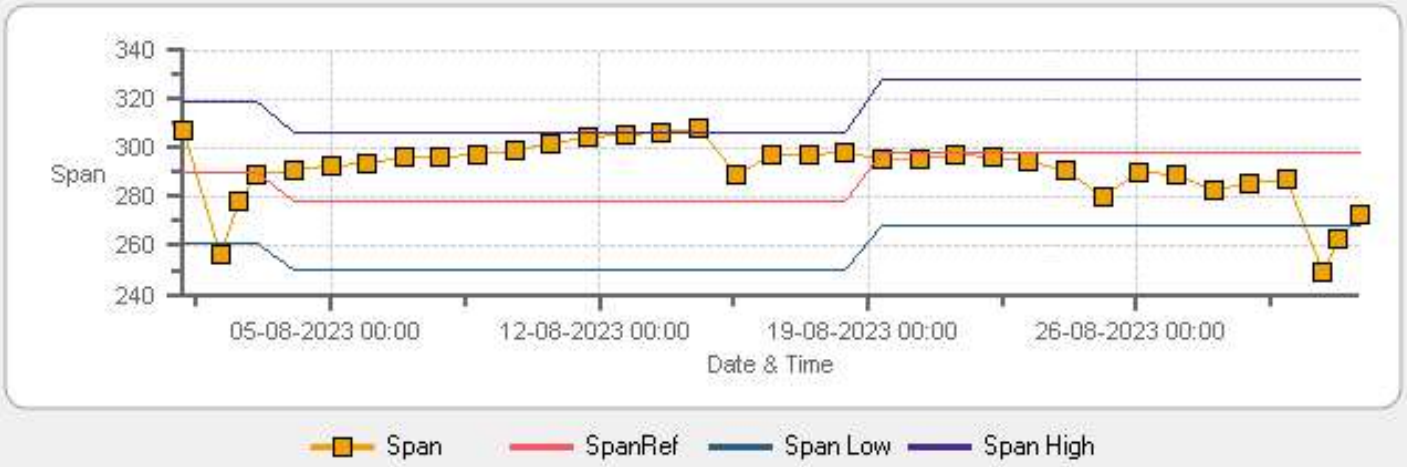


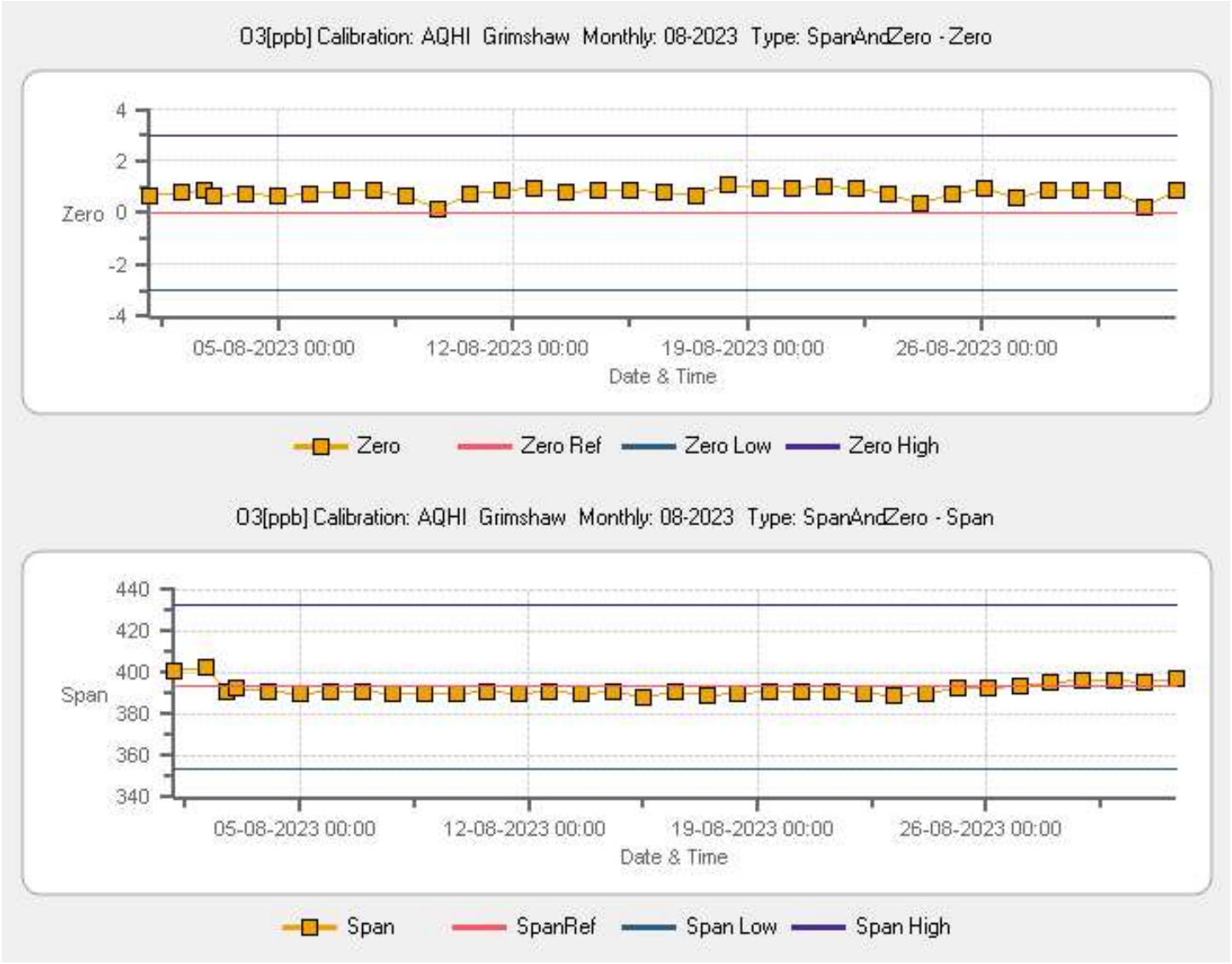
NOX[ppb] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Span

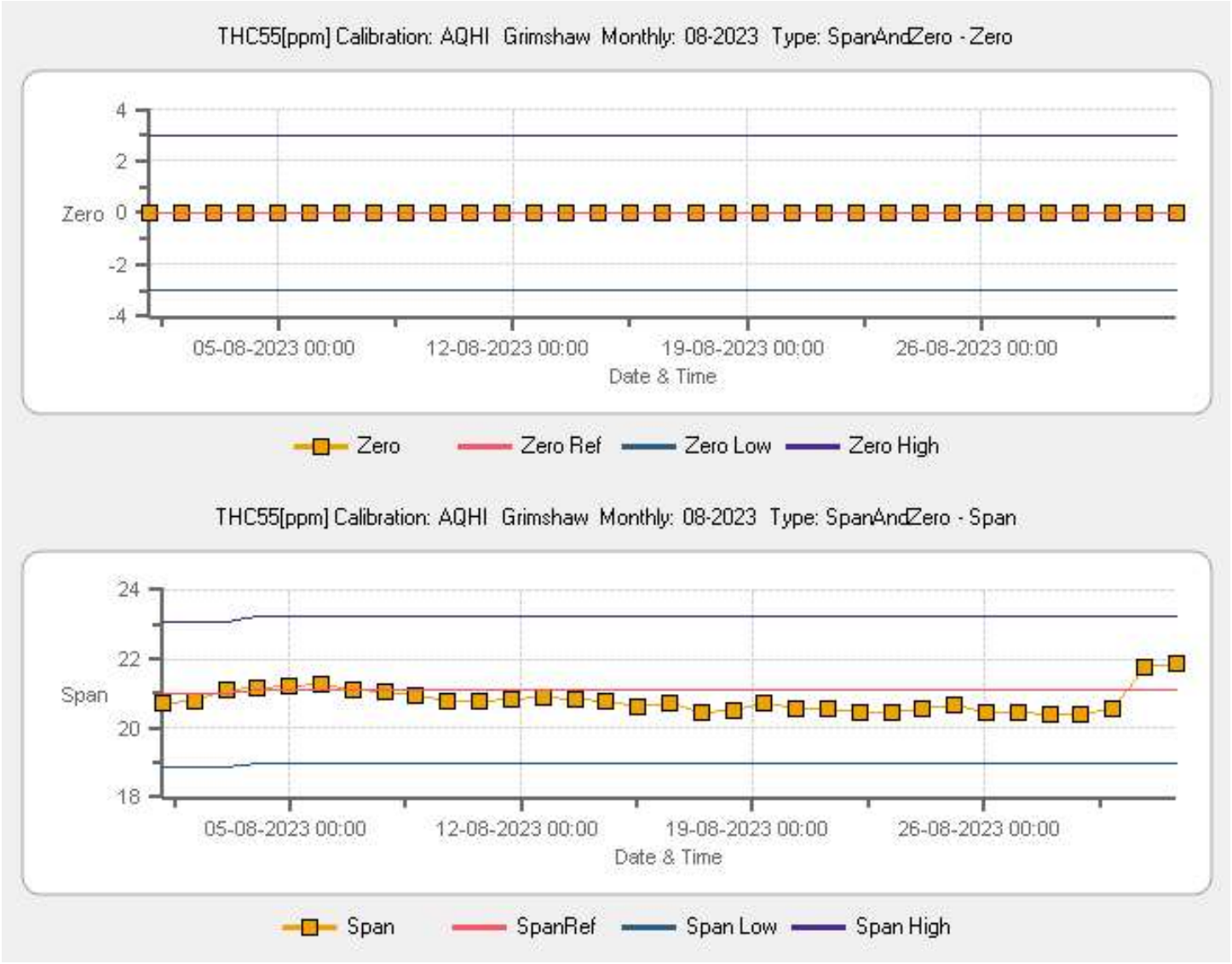


NO2[ppb] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Zero

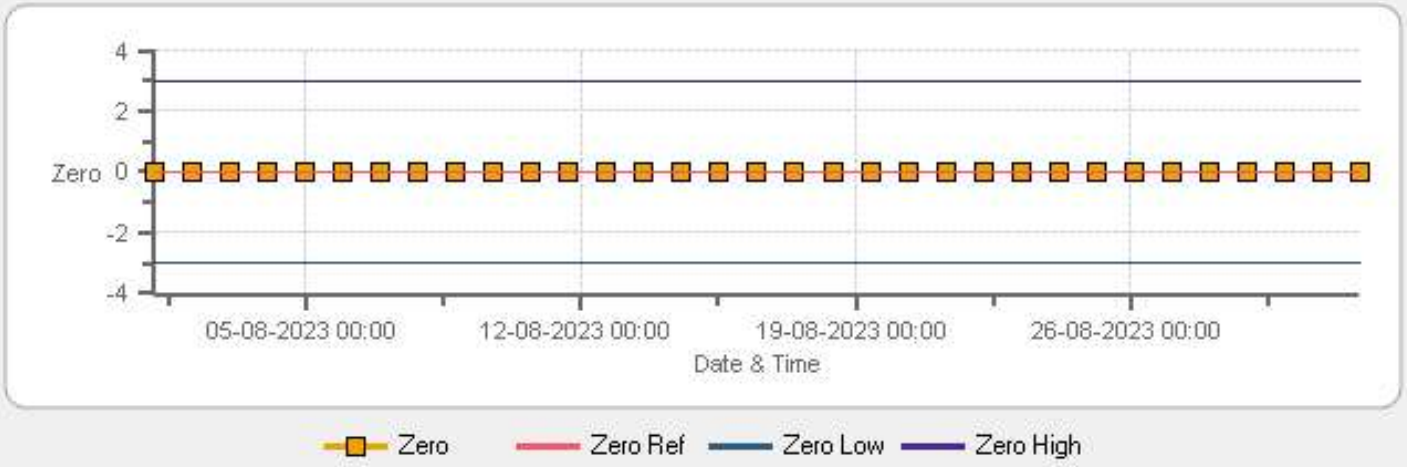
NO2[ppb] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Span



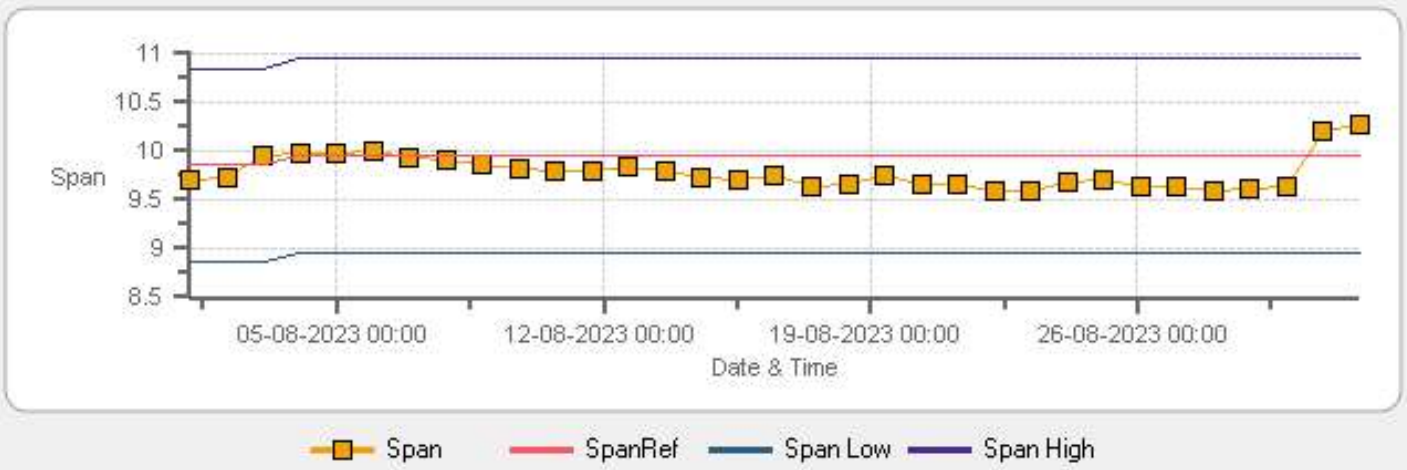

O3[ppb] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
O3[ppb] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Span
440
420
400
Span
380
360
340
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High

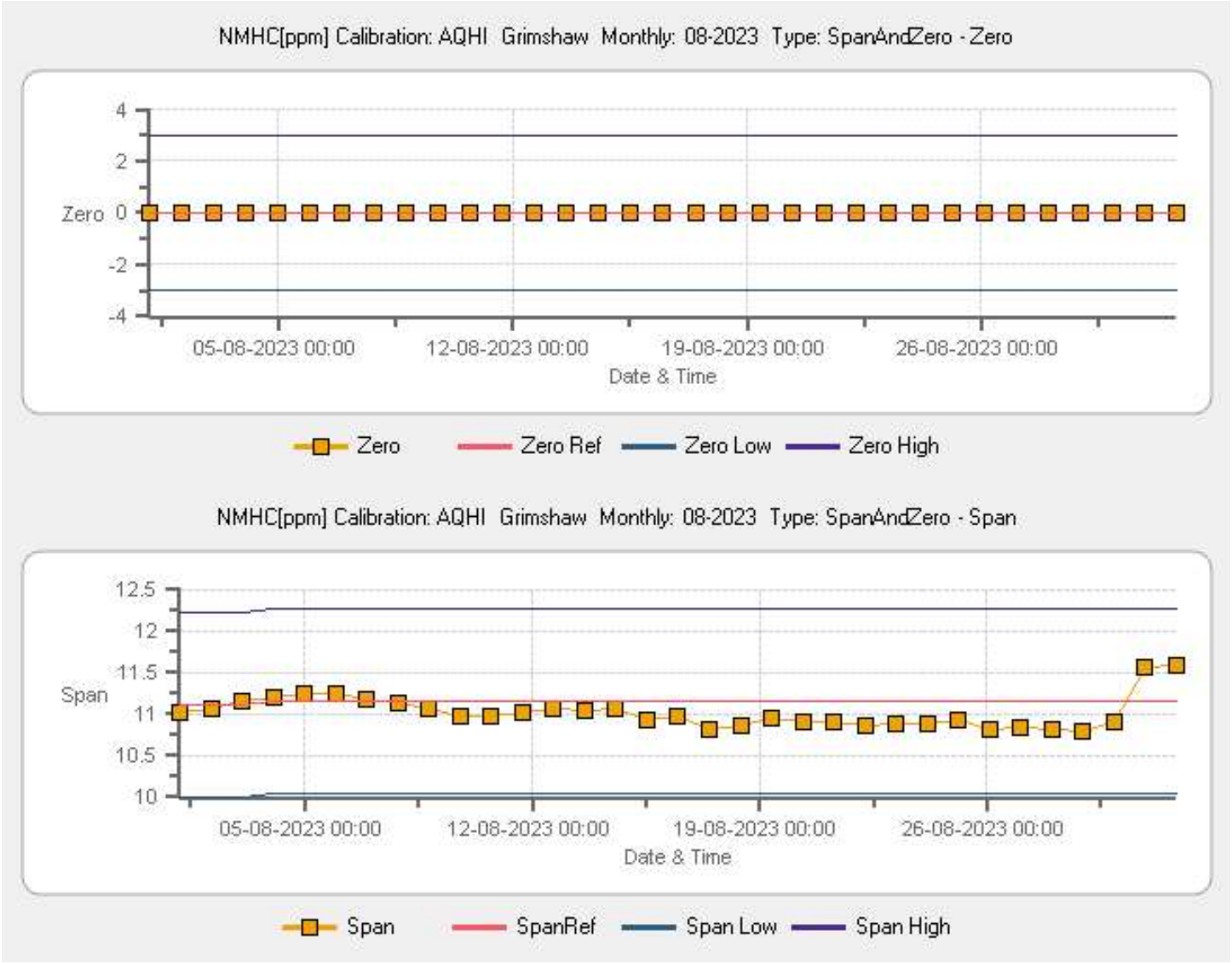

THC55[ppm] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
THC55[ppm] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Span
24
22
Span
20
18
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High

CH4[ppm] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Zero



CH4[ppm] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Span




NMHC[ppm] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
NMHC[ppm] Calibration: AQHI Grimshaw Monthly: 08-2023 Type: SpanAndZero - Span
12.5
12
11.5
Span 11
10.5
10
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution

DATE:	02-Aug-2023	PREVIOUS CALIBRATION DATE:	11-Jul-2023
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	21.9
LOCATION:	Grimshaw	BAROMETRIC (mBar):	947
PURPOSE	Routine	START TIME (MST):	09:40
PERFORMED BY:	Chris Wesson	END TIME (MST):	14:09

ANALYZER:

MAKE/MODEL	Teledyne T100	RANGE	500 ppb
SERIAL #	722	FLOW (mL/min)	516
INITIAL		FINAL	
BKG/OFFSET	30.2	BKG/OFFSET	30.7
COEF/SLOPE	0.923	COEF/SLOPE	0.918
Expected (reference) Value	271.6	Expected (reference) Value	278.9

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	75401122	ID:	4568
MFC CALIBRATION DATE:	13-Mar-2023	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL107286	HIGH ID	n/a
CONC (ppm):	25.10	EXPIRY DATE	n/a
CYLINDER (psi):	800	LOW ID	n/a
EXPIRY DATE	27-Jan-2025	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

POINT	HIGH	MID	LOW
TARGET	390	190	95
RANGE	300 - 400	150 - 200	50 - 100

SCRUBBER CHECK (15 MINS; TRS/H2S ONLY):

START TIME:	n/a	SO2 Conc (ppb)	n/a
END TIME:	n/a	Analyzer Response (ppb)	n/a

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
4000		4000	0.00	0.4	0		
3939	60.60	4000	380.27	381.4	380.1	0.998	1.000
3970	28.70	3999	180.14	n/a	179.9	n/a	1.001
3985	14.30	3999	89.75	n/a	90.1	n/a	0.996

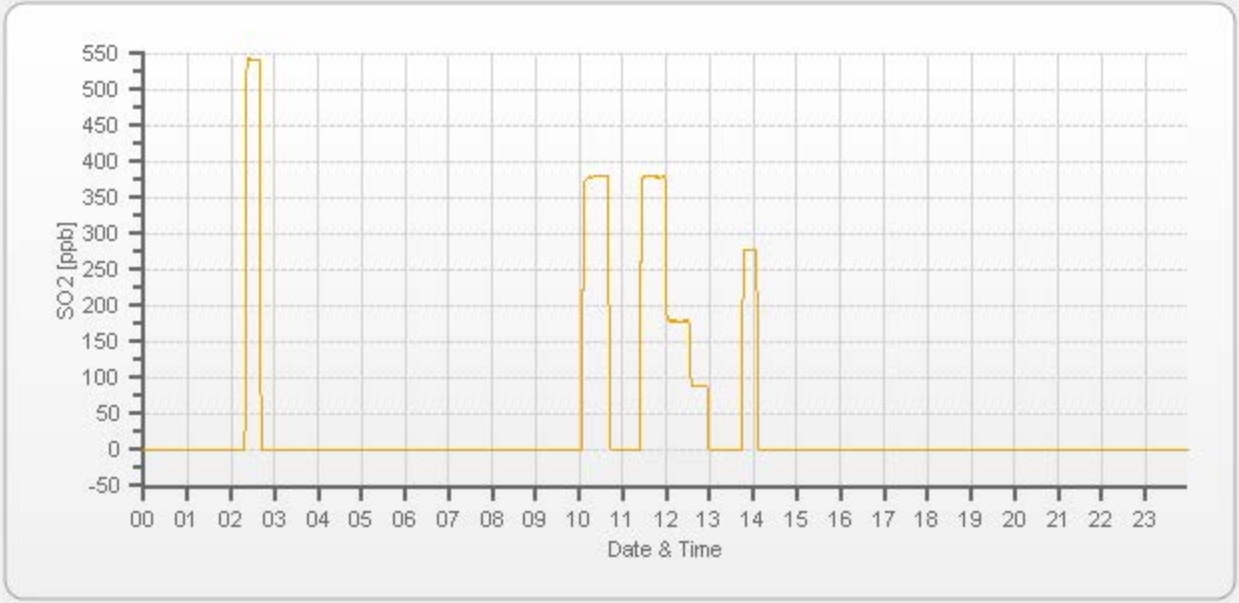
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.999	0.0%

COMMENTS:

Sample filter changed.

SO2[ppb] Station: AQHI Grimshaw Daily: 02-08-2023 Type: AVG 1 Min. [1 Min.]



TRS Analyzer Calibration by Dilution

DATE:	02-Aug-2023	PREVIOUS CALIBRATION DATE:	11-Jul-2023
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	21.9
LOCATION:	Grimshaw	BAROMETRIC (mBar):	947
PURPOSE	Routine	START TIME (MST):	09:40
PERFORMED BY:	Chris Wesson	END TIME (MST):	14:09

ANALYZER:

MAKE/MODEL	Teledyne T100U	RANGE	100 ppb
SERIAL #	132	FLOW (mL/min)	546
INITIAL		FINAL	
BKG/OFFSET	39.7	BKG/OFFSET	40.1
COEF/SLOPE	1.04	COEF/SLOPE	1.098
Expected (reference) Value	46.51	Expected (reference) Value	49.74

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	75401122	ID:	4568
MFC CALIBRATION DATE:	13-Mar-2023	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL131374	HIGH ID	n/a
CONC (ppm):	10.09	EXPIRY DATE	n/a
CYLINDER (psi):	2000	LOW ID	n/a
EXPIRY DATE	03-Jan-2026	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

POINT	HIGH	MID	LOW
TARGET	78	38	19
RANGE	60 - 80	30 - 40	10 - 20

SCRUBBER CHECK (15 MINS; TRS/H2S ONLY):

START TIME:	n/a	SO2 Conc (ppb)	n/a
END TIME:	n/a	Analyzer Response (ppb)	n/a

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
4000		4000	0.00	0.14	0		
3969	30.90	4000	77.95	74.38	78.01	1.050	0.999
3984	15.10	3999	38.10	n/a	37.02	n/a	1.029
3992	7.50	3999	18.92	n/a	18.09	n/a	1.046

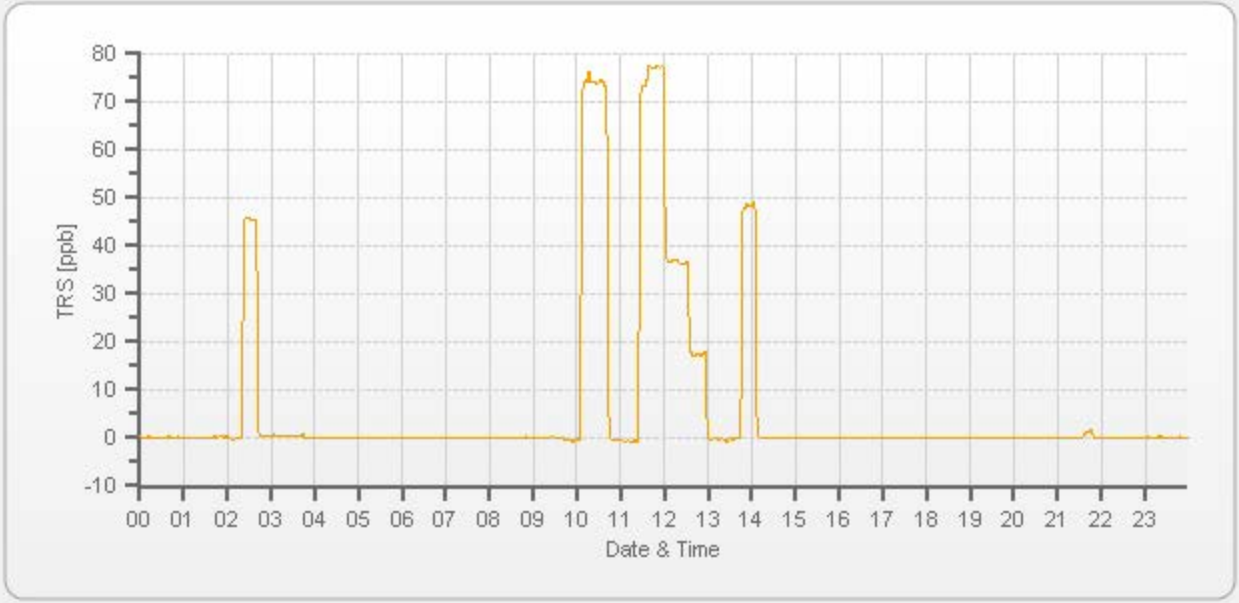
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.003	-0.6%

COMMENTS:

Converter, CDNova CDN-101 #576.
10:15 = regulator flushed. AF high restarted.

TRS[ppb] Station: AQHI Grimshaw Daily: 02-08-2023 Type: AVG 1 Min. [1 Min.]



NOx Calibration by Dilution/Gas-Phase Titration

CALIBRATION:

				ANALYZER:			
DATE:	01-Aug-2023	PREVIOUS CALIBRATION DATE:	11-Jul-2023	MAKE/MODEL:	Teledyne T200	PREVIOUS CF.	
CLIENT:	PRAMP	TEMPERATURE (°C):	21.5	SERIAL #:	837	NOx	1.000
LOCATION:	Grimshaw	BAROMETRIC (mBar):	945	FLOW (mL/min)	444	NO	1.000
PURPOSE	Removal/Shut-down	START TIME (MST):	14:18	RANGE (ppb)	500	NO2	1.000
PERFORMED BY:	Chris Wesson	END TIME (MST):	18:09	GPT FOR O3?		No	

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	EY0001013		HIGH ID:	n/a
MODEL:	2010	MODEL:	M701	NO/NOx (PPM):	49.2	49.4	HIGH EXPIRY:	n/a
ID:	26701218	ID:	4568	CYLINDER (psi):	1500		LOW ID:	n/a
MFC CALIBRATION DATE:	15-Mar-2023	OXIDIZER ID:	n/a	EXPIRY DATE	11-Nov-2029		LOW EXPIRY:	n/a

CALIBRATION SETTINGS:

INITIAL	NOx	NO	NO2	FINAL	NOx	NO	NO2
BKG/OFFSET:	3.4	-1.4	n/a	BKG/OFFSET:	n/a	n/a	n/a
SLOPE/COEF/CE:	1.132	1.125	1	SLOPE/COEF/CE:	n/a	n/a	n/a

EXPECTED (REFERENCE) VALUE:

INITIAL	NOx	NO	NO2	FINAL	NOx	NO	NO2
	293.2	3.2	290.0		n/a	n/a	n/a

CALIBRATION PARAMETERS:

POINT	NO TARGET (PPB)	NO2 TARGET (PPB)	NO2 RANGE	O3 POINT
HIGH	380	250	230-265	n/a
MID	180	125	115-150	n/a
LOW	90	45	40-55	n/a
EXTRA 1	n/a	n/a	n/a	n/a

NO/NOx CALIBRATION:

FLOW RATE (mL/min)			CONCENTRATION (ppb)									CORRECTION FACTOR (CF.)					
			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	NO	NOx	NO2	NO	NOx	NO2	NO	NOx	NO2	NO	NOx	NO2	NO	NOx	NO2
4999		4999	0.0	0.0	0.0	0.3	0.7	0.4	n/a	n/a	n/a						
4959	38.60	4998	380.0	381.5	1.5	406.2	410.8	4.7	n/a	n/a	n/a	0.936	0.930		n/a	n/a	
4983	18.30	5001	180.0	180.8	0.7	193.5	193.2	-0.3	n/a	n/a	n/a	0.932	0.939		n/a	n/a	
4991	9.10	5000	89.5	89.9	0.4	94.9	95.8	0.9	n/a	n/a	n/a	0.947	0.945		n/a	n/a	

GPT CALIBRATION:

Point	CALIBRATOR			INDICATED (ppb)			NO DROP / O3 Conc (ppb)	NO2 GAIN (ppb)	NO2 Corr. FACTOR	CONV. EFFICIENCY
	GAS	TOTAL	O3 SETPOINT	NO	NOx	NO2				
REFERENCE	38.60	4999	0	408.4	410.8	2.4				
AS-FOUND HIGH	38.60	4999	250	141.2	410.7	269.5	267.2	267.1	1.000	99.96%
ADJUSTED HIGH	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	**n/a**	n/a
MID	38.60	4999	135	263.8	408.9	145.1	144.6	142.7	1.013	98.69%
LOW	38.60	4999	48	353.8	408.8	55.0	54.6	52.6	1.038	96.34%
NO2 adjustment not required.									AVERAGE:	98.33%

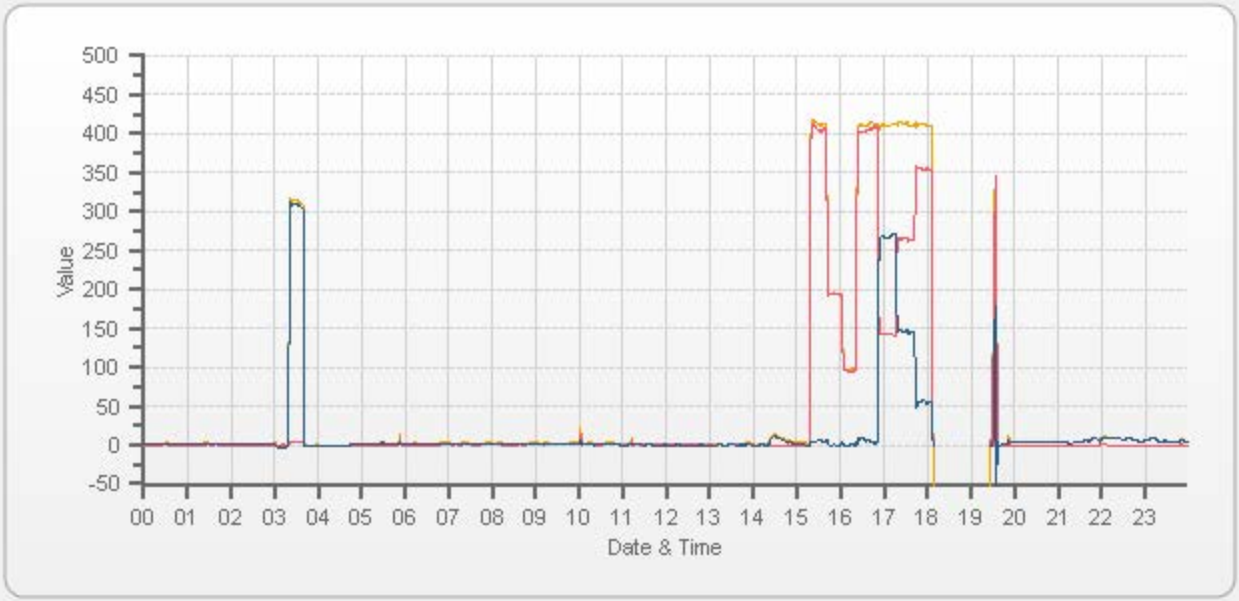
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
NO	1.000	1.069	0.01%
NOx	1.000	1.076	-0.06%
NO2	1.000	1.009	-0.55%

COMMENTS:

Shutdown for removal (shop maintenance)

Station: AQHI Grimshaw Daily: 01-08-2023 Type: AVG 1 Min. [1 Min.]



NOx Calibration by Dilution/Gas-Phase Titration

CALIBRATION:

				ANALYZER:			
DATE:	02-Aug-2023	PREVIOUS CALIBRATION DATE:	n/a	MAKE/MODEL:	API 200E	PREVIOUS CF.	
CLIENT:	PRAMP	TEMPERATURE (°C):	24.4	SERIAL #:	594	NOx	n/a
LOCATION:	Grimshaw	BAROMETRIC (mBar):	947	FLOW (mL/min)	443	NO	n/a
PURPOSE	Install/Post-Repair	START TIME (MST):	07:49	RANGE (ppb)	500	NO2	n/a
PERFORMED BY:	Chris Wesson	END TIME (MST):	14:40	GPT FOR O3?		Yes	

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	EY0001013		HIGH ID:	n/a
MODEL:	2010	MODEL:	M701	NO/NOx (PPM):	49.2	49.4	HIGH EXPIRY:	n/a
ID:	26701218	ID:	4568	CYLINDER (psi):	1500		LOW ID:	n/a
MFC CALIBRATION DATE:	15-Mar-2023	OXIDIZER ID:	n/a	EXPIRY DATE	11-Nov-2029		LOW EXPIRY:	n/a

CALIBRATION SETTINGS:

INITIAL	NOx	NO	NO2	FINAL	NOx	NO	NO2
BKG/OFFSET:	n/a	n/a	n/a	BKG/OFFSET:	4.8	-0.6	n/a
SLOPE/COEF/CE:	n/a	n/a	n/a	SLOPE/COEF/CE:	1.192	1.187	0.995

EXPECTED (REFERENCE) VALUE:

INITIAL	NOx	NO	NO2	FINAL	NOx	NO	NO2
	n/a	n/a	n/a		285.9	7.8	278.2

CALIBRATION PARAMETERS:

POINT	NO TARGET (PPB)	NO2 TARGET (PPB)	NO2 RANGE	O3 POINT
HIGH	395	250	240-275	n/a
MID	180	154	150-157	Mid
LOW	90	54	50-58	Low
EXTRA 1	n/a	340	300-370	High

NO/NOx CALIBRATION:

FLOW RATE			CONCENTRATION (ppb)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	NO	NOx	NO2	NO	NOx	NO2	NO	NOx	NO2	NO	NOx	NO2	NO	NOx	NO2
5000		5000	0.0	0.0	0.0	n/a	n/a	n/a	0.0	0.0	0.0						
4960	40.10	5000	394.6	396.2	1.6	n/a	n/a	n/a	394.4	395.5	1.0	n/a	n/a		1.000	1.002	
4980	18.30	4998	180.1	180.9	0.7	n/a	n/a	n/a	179.1	178.7	-0.7	n/a	n/a		1.006	1.012	
4990	9.10	4999	89.6	89.9	0.4	n/a	n/a	n/a	90.5	89.6	-1.1	n/a	n/a		0.990	1.004	

GPT CALIBRATION:

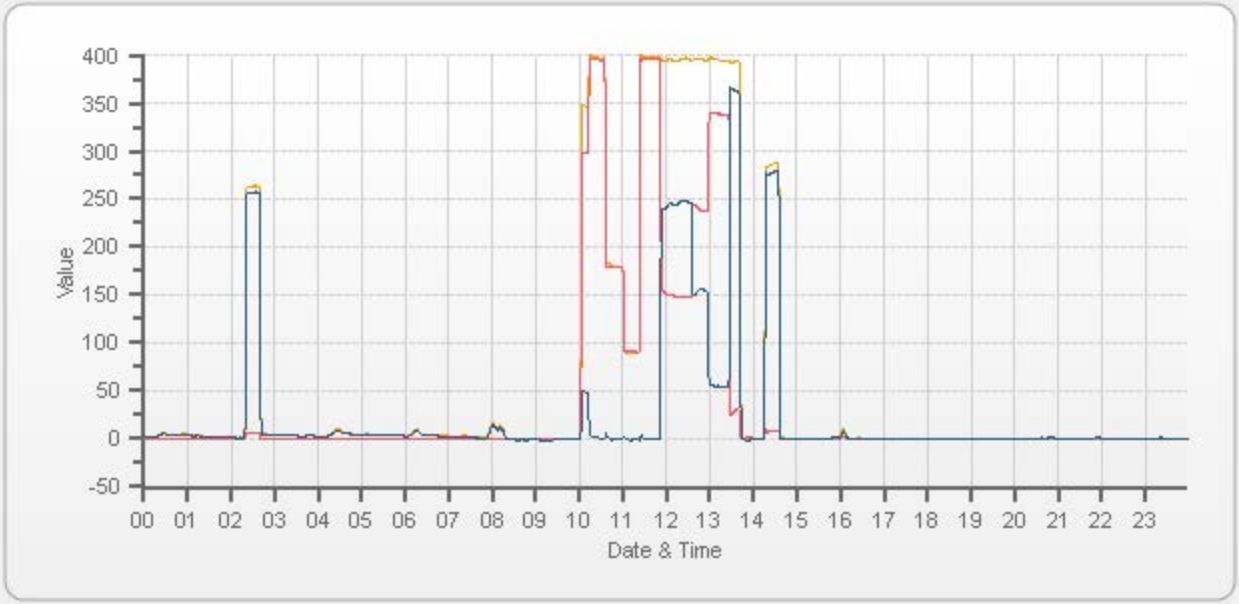
Point	CALIBRATOR			INDICATED (ppb)			NO DROP / O3 Conc (ppb)	NO2 GAIN (ppb)	NO2 Corr. FACTOR	CONV. EFFICIENCY
	GAS	TOTAL	O3 SETPOINT	NO	NOx	NO2				
REFERENCE	40.10	5000	0	395.5	395.7	0.1				
AS-FOUND HIGH	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	**n/a**	n/a
ADJUSTED HIGH	40.10	5000	250	147.7	395.6	247.6	247.8	247.5	1.001	99.88%
MID	40.10	5000	160	237.4	393.3	155.8	158.1	155.7	1.015	98.48%
LOW	40.10	5000	60	338.3	393.1	54.9	57.2	54.8	1.044	95.80%
NO2 COEF/CONVERTER EFFICIENCY ADJUSTED									AVERAGE:	98.06%

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
NO	1.000	0.999	0.04%
NOx	1.000	0.998	-0.10%
NO2	1.000	1.011	-0.67%

COMMENTS:

Sample filter changed
Additional point for O3: Setpoint = 360, O3 conc = 364.7


Station: AQHI Grimshaw Daily: 02-08-2023 Type: AVG 1 Min. [1 Min.]
Value
400
350
300
250
200
150
100
50
0
-50
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Date & Time
NOX [ppb]
NO [ppb]
NO2 [ppb]

NOx Calibration by Dilution/Gas-Phase Titration

CALIBRATION:

DATE:	15-Aug-2023	PREVIOUS CALIBRATION DATE:	02-Aug-2023
CLIENT:	PRAMP	TEMPERATURE (°C):	23.6
LOCATION:	Grimshaw	BAROMETRIC (mBar):	938
PURPOSE	Repeat	START TIME (MST):	07:43
PERFORMED BY:	Kevin Sebastian	END TIME (MST):	14:01

ANALYZER:

MAKE/MODEL:	API 200E	PREVIOUS CF.	
SERIAL #:	594	NOx	1.002
FLOW (mL/min)	432	NO	1.000
RANGE (ppb)	500	NO2	1.001
GPT FOR O3?		Yes	

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	EY0001716		HIGH ID:	n/a
MODEL:	2010	MODEL:	M701	NO/NOx (PPM):	49.2	49.4	HIGH EXPIRY:	n/a
ID:	26801218	ID:	5004	CYLINDER (psi):	1250		LOW ID:	n/a
MFC CALIBRATION DATE:	09-Mar-2023	OXIDIZER ID:	n/a	EXPIRY DATE	11-Nov-2029		LOW EXPIRY:	n/a

CALIBRATION SETTINGS:

INITIAL	NOx	NO	NO2	FINAL	NOx	NO	NO2
BKG/OFFSET:	4.8	-0.6	n/a	BKG/OFFSET:	4.8	-0.3	n/a
SLOPE/COEF/CE:	1.192	1.187	0.995	SLOPE/COEF/CE:	1.137	1.129	0.995

EXPECTED (REFERENCE) VALUE:

INITIAL	NOx	NO	NO2	FINAL	NOx	NO	NO2
	285.9	7.8	278.2		303.8	5.6	298.2

CALIBRATION PARAMETERS:

POINT	NO TARGET (PPB)	NO2 TARGET (PPB)	NO2 RANGE	O3 POINT
HIGH	395	250	240-275	n/a
MID	180	154	150-157	Mid
LOW	90	54	50-58	Low
EXTRA 1	n/a	340	300-370	High

NO/NOx CALIBRATION:

FLOW RATE (mL/min)			CONCENTRATION (ppb)									CORRECTION FACTOR (CF.)					
			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	NO	NOx	NO2	NO	NOx	NO2	NO	NOx	NO2	NO	NOx	NO2	NO	NOx	NO2
4999		4999	0.0	0.0	0.0	-0.2	2.0	2.1	0.0	0.0	0.0						
4960	39.10	4999	384.8	386.4	1.6	405.1	403.7	-1.5	384.7	386.4	1.6	0.949	0.962		1.000	1.000	
4981	18.30	4999	180.1	180.8	0.7	n/a	n/a	n/a	178.1	179.3	0.9	n/a	n/a		1.011	1.009	
4990	9.20	4999	90.5	90.9	0.4	n/a	n/a	n/a	88.7	88.6	0.0	n/a	n/a		1.021	1.026	

GPT CALIBRATION:

Point	CALIBRATOR			INDICATED (ppb)			NO DROP / O3 Conc (ppb)	NO2 GAIN (ppb)	NO2 Corr. FACTOR	CONV. EFFICIENCY
	GAS	TOTAL	O3 SETPOINT	NO	NOx	NO2				
REFERENCE	39.10	5000	0	384.8	385.7	0.8				
AS-FOUND HIGH	39.10	5000	250	136.5	386.1	249.4	248.3	248.6	0.999	100.12%
ADJUSTED HIGH	n/a	n/a	n/a	n/a		n/a	n/a	**n/a**	**n/a**	n/a
MID	39.10	5000	155	232.4	385.1	153.5	152.4	152.7	0.998	100.20%
LOW	39.10	5000	55	333.4	385.8	52.4	51.4	51.6	0.996	100.39%
NO2 adjustment not required.									AVERAGE:	100.24%

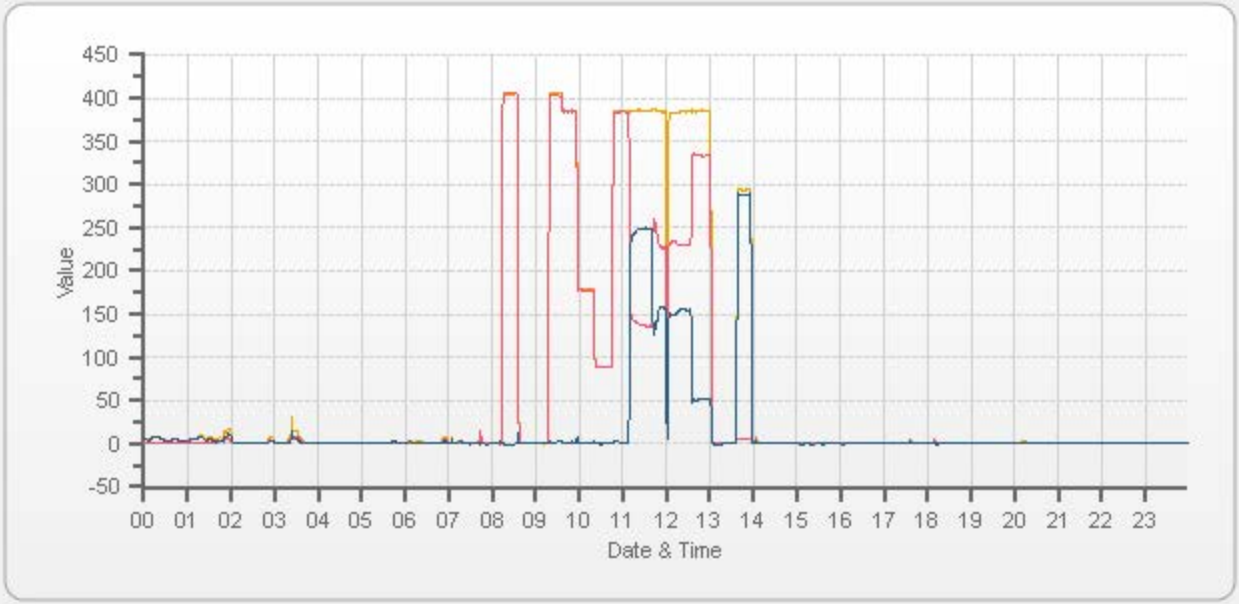
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
NO	1.000	1.001	-0.23%
NOx	1.000	1.002	-0.25%
NO2	1.000	1.001	0.04%

COMMENTS:

Tech Error at start of GPT mid- Incorrect target chosen.
Daily ZS at 12:00, GPT mid point restarted.

Station: AQHI Grimshaw Daily: 15-08-2023 Type: AVG 1 Min. [1 Min.]



Ozone Calibration by Direct GPT

DATE:	02-Aug-2023	PREVIOUS CALIBRATION DATE:	12-Jul-2023
PARAMETER:	O3	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	24.2
LOCATION:	Grimshaw	BAROMETRIC (mBar):	946
PURPOSE	Routine	START TIME (MST):	13:45
PERFORMED BY:	Chris Wesson	END TIME (MST):	18:56

ANALYZER:

MAKE/MODEL	API 400A	RANGE	500 ppb
SERIAL #	445	FLOW (mL/min)	823
INITIAL		FINAL	
BKG/OFFSET	-1.2	BKG/OFFSET	-3.3
COEF/SLOPE	1.001	COEF/SLOPE	0.965
Expected (reference) Value	393.2	Expected (reference) Value	393.2

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	26701218	ID:	4568
MFC CALIBRATION DATE:	15-Mar-2023	OXIDIZER ID:	n/a
CALIBRATION METHOD:		Direct GPT	
GPT DATE:	02-Aug-2023	GPT END TIME:	14:40

CALIBRATION PARAMETERS:

POINT	HIGH	MID	LOW
RANGE	300 - 400	150 - 200	50 - 100

CALIBRATION:

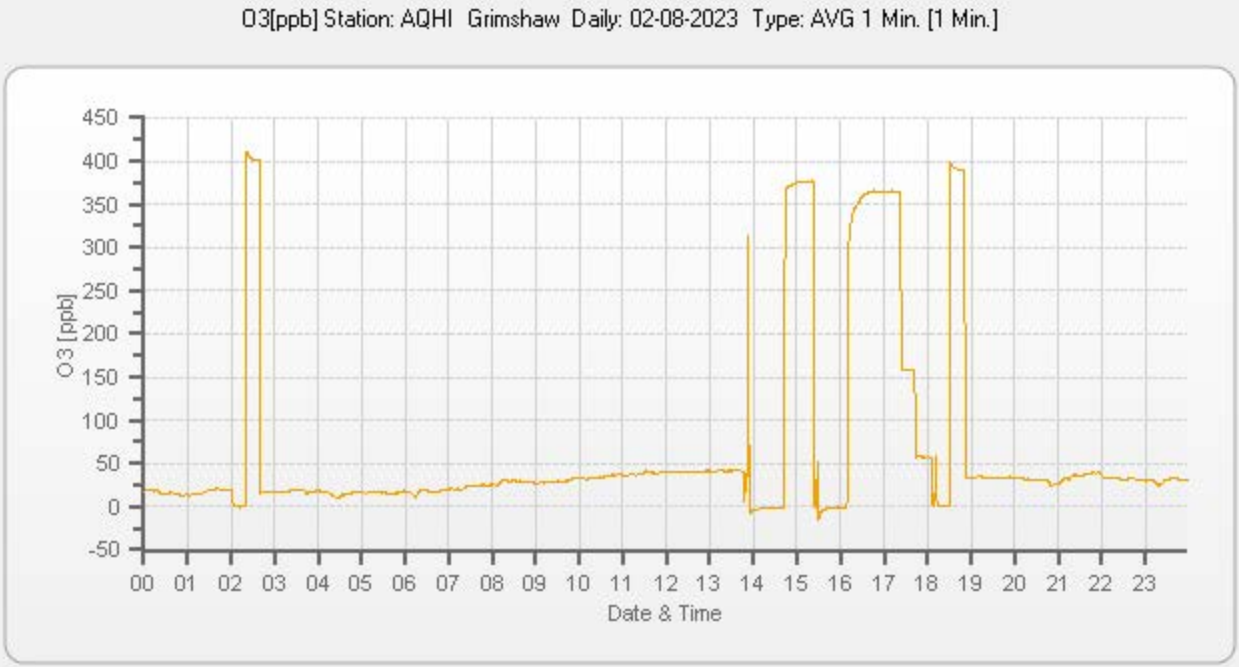
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
5000		5000	0.0	0.1	0.0		
5000		5000	364.7	377.4	364.8	0.967	1.000
5000		5000	158.1	n/a	159.0	n/a	0.994
5000		5000	57.2	n/a	58.5	n/a	0.978

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.999	0.1%

COMMENTS:

Sample filter changed


O3[ppb] Station: AQHI Grimshaw Daily: 02-08-2023 Type: AVG 1 Min. [1 Min.]
O3 [ppb]
450
400
350
300
250
200
150
100
50
0
-50
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Date & Time
O3 [ppb]

Methane/Non-Methane Analyzer Calibration by Dilution

CALIBRATION:

DATE:	01-Aug-2023	PREVIOUS CALIBRATION DATE:	11-Jul-2023
CLIENT:	PRAMP	TEMPERATURE (°C):	21.7
LOCATION:	Grimshaw	BAROMETRIC (mBar):	945
PURPOSE	Removal/Shut-down	START TIME (MST):	15:00
PERFORMED BY:	Chris Wesson	END TIME (MST):	16:44

ANALYZER:

VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
	Thermo 55i	1191032505	103
PARAMETER:	CH4	NMHC	THC
RANGE (ppm):	20	20	40
PREVIOUS CF:	0.996	0.998	0.997

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	LL68768		HIGH ID:	n/a
MODEL:	2010	MODEL:	M701	CH_4/C_3H_8 (ppm):	897.0	301.0	HIGH EXPIRY:	n/a
ID:	75401122	ID:	4568	CYLINDER (psi):	2100		LOW ID:	n/a
MFC CALIBRATION DATE:	13-Mar-2023	OXIDIZER ID:	Internal	EXPIRY DATE	08-Nov-2029		LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH4/NMHC)	HIGH	MID	LOW	CH4 EQUIVILANCE	
TARGET	14	7	3.5	C_3H_8 as CH_4	827.8
RANGE	12 - 16	6 - 8	2 - 4	THC as CH_4	1724.8

EXPECTED (REFERENCE) VALUE:

INITIAL	CH4	NMHC	THC	FINAL	CH4	NMHC	THC
	9.86	11.12	20.98		n/a	n/a	n/a

CALIBRATION:

FLOW RATE (mL/min)			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC
3249		3249	0.00	0.00	0.00	0.01	0.00	0.01	n/a	n/a	n/a						
3197	52.80	3250	14.57	13.45	28.02	14.14	13.21	27.36	n/a	n/a	n/a	1.031	1.018	1.024	n/a	n/a	n/a
3223	26.40	3249	7.29	6.73	14.01	7.10	6.66	13.76	n/a	n/a	n/a	1.027	1.010	1.019	n/a	n/a	n/a
3236	13.20	3249	3.64	3.36	7.01	3.58	3.40	6.98	n/a	n/a	n/a	1.018	0.989	1.004	n/a	n/a	n/a

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
CH4	1.000	0.969	0.1%
NMHC	1.000	0.980	0.2%
THC	1.000	0.975	0.2%

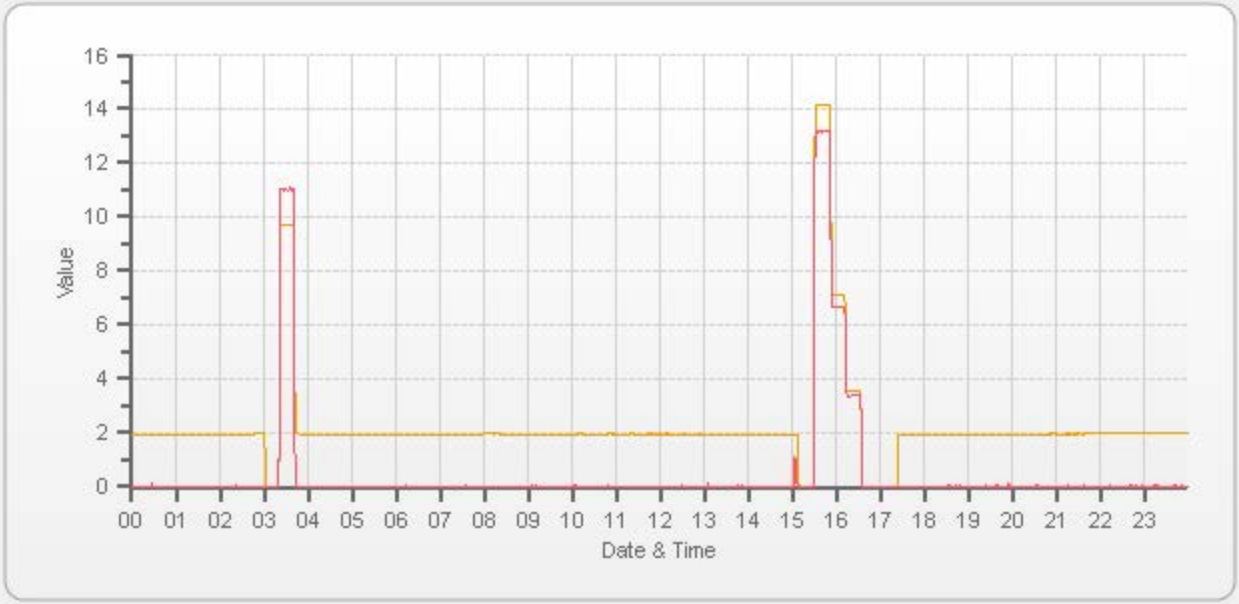
Comments:

H2 = AMA HG300 #190567059

Shutdown to rebuild sample pump

Use Zero Chrom? **No**

Station: AQHI Grimshaw Daily: 01-08-2023 Type: AVG 1 Min. [1 Min.]



Methane/Non-Methane Analyzer Calibration by Dilution

CALIBRATION:

DATE:	02-Aug-2023	PREVIOUS CALIBRATION DATE:	n/a
CLIENT:	PRAMP	TEMPERATURE (°C):	24.4
LOCATION:	Grimshaw	BAROMETRIC (mBar):	947
PURPOSE	Install/Post-Repair	START TIME (MST):	07:49
PERFORMED BY:	Chris Wesson	END TIME (MST):	10:02

ANALYZER:

VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
	Thermo 55i	1191032505	1074
PARAMETER:	CH4	NMHC	THC
RANGE (ppm):	20	20	40
PREVIOUS CF:	n/a	n/a	n/a

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	LL68768		HIGH ID:	n/a
MODEL:	2010	MODEL:	M701	CH_4/C_3H_8 (ppm):	897.0	301.0	HIGH EXPIRY:	n/a
ID:	75401122	ID:	4568	CYLINDER (psi):	2100		LOW ID:	n/a
MFC CALIBRATION DATE:	13-Mar-2023	OXIDIZER ID:	Internal	EXPIRY DATE	08-Nov-2029		LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH4/NMHC)	HIGH	MID	LOW	CH4 EQUIVILANCE	
TARGET	14	7	3.5	C_3H_8 as CH_4	827.8
RANGE	12 - 16	6 - 8	2 - 4	THC as CH_4	1724.8

EXPECTED (REFERENCE) VALUE:

INITIAL	CH4	NMHC	THC	FINAL	CH4	NMHC	THC
	9.86	11.12	20.98		9.96	11.16	21.11

CALIBRATION:

FLOW RATE (mL/min)			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC
3250		3250	0.00	0.00	0.00	n/a	n/a	n/a	0.00	0.00	0.00						
3196	52.80	3249	14.58	13.45	28.03	n/a	n/a	n/a	14.56	13.45	28.01	n/a	n/a	n/a	1.001	1.000	1.001
3223	26.40	3249	7.29	6.73	14.01	n/a	n/a	n/a	7.29	6.74	14.03	n/a	n/a	n/a	1.000	0.998	0.999
3236	13.20	3249	3.64	3.36	7.01	n/a	n/a	n/a	3.67	3.41	7.08	n/a	n/a	n/a	0.993	0.986	0.990

LINEAR REGRESSION ANALYSIS:

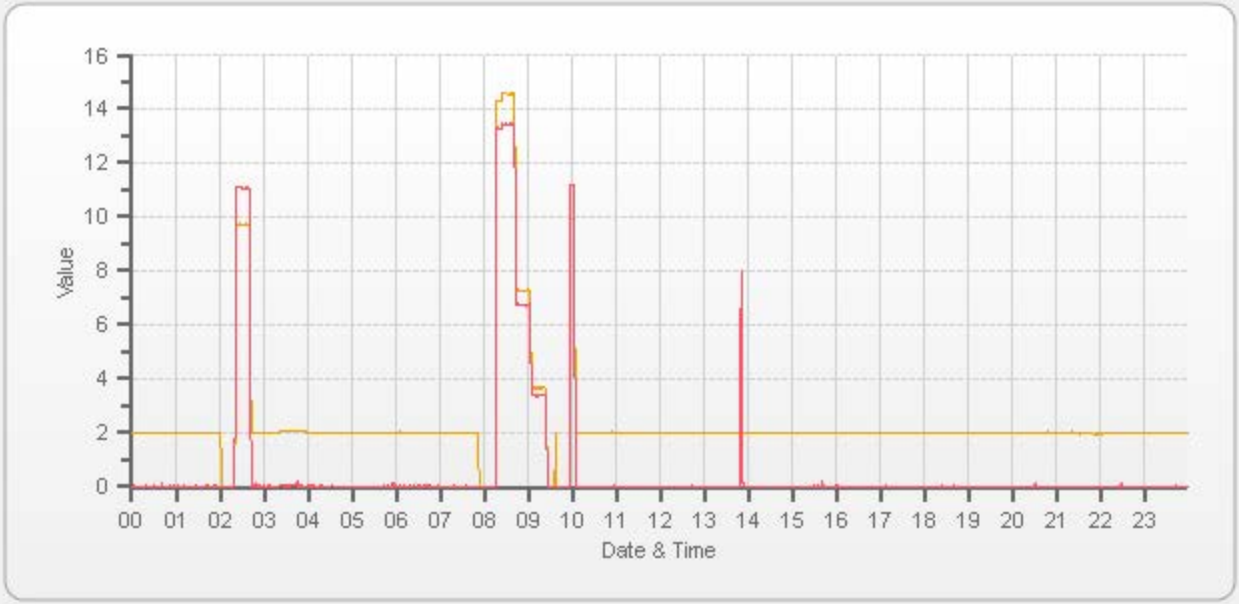
	CORRELATION	SLOPE	INTERCEPT
CH4	1.000	0.998	0.1%
NMHC	1.000	0.999	0.1%
THC	1.000	0.998	0.1%

Comments:

H2 = AMA HG300 #190567059
Sample pump rebuilt
Post-cal ZS did not complete.

Use Zero Chrom? **No**

Station: AQHI Grimshaw Daily: 02-08-2023 Type: AVG 1 Min. [1 Min.]



Teledyne T640 Audit/Calibration

Date/Previous Audit Date:	August 2, 2023	July 12, 2023	**Weather Conditions:**	Mix of sun and clouds
Company:	PRAMP		**Start Time (mst):**	10:48
Station:	Grimshaw		**End Time (mst):**	11:19
Parameter:	PM 2.5		**Performed By/Reviewer:**	Chris Wesson / Limin Li

Instrument Data:

Make/Model:	Teledyne T640	**Serial Number:**	318
Owner:	PRAMP	**Alarms (detail in comments):**	No

Reference Standards/I.D./Expiry Date:

Flow Standard:	DeltaCal DC1 #206578, expires Sept 20, 2023	**Temperature:**	DeltaCal DC1 #206578, expires Sept 20, 2023
Digital Manometer:	DeltaCal DC1 #206578, expires Sept 20, 2023	**Pressure:**	DeltaCal DC1 #206578, expires Sept 20, 2023

DIAGNOSTICS:

Ambient Pressure (mmHg)	712.6	Ambient Temp (°C)	18.7	ASC Heater Duty (%)	100.0
Box Temp (°C)	28.0	Current PMT HV (V)	1543	LED Temp (°C)	37.84
P3 Value	47	PMT Setting (V)	1546	Pump PWM (%)	38
Sample Flow (L/min)	5.02	Sample RH (%RH)	36.1	Sample Temp (°C)	30.7

Item:	As-found		As-left		Tolerance
	Reference	T640x	Reference	T640x	
Zero Test (Leak Check)	PM10	0.0	0	0.0	0.0 to 0.2
	PM2.5	0.0	0	0.0	
Ambient Pressure (mmHg)	711.5	712.5	n/a	n/a	+/- 10 mm Hg
Ambient Temperature (°C)	18.60	18.6	n/a		+/- 2°C
Sample Flow (L/min)	5.19	5.01	4.99	4.99	+/-5% of T640x (e.g., 4.75 – 5.25 lpm)

Additional Monthly Maintenance :	***Completed***
Inlet cleaned?	Yes
Sample tubing inspected (inner and outer)?	Yes

Comments:

No issues

Meteorological System Checklist

Date:	August 2, 2023		
Technician:	Chris Wesson		
Station:	PRAMP Grimshaw		
Unit:	**Make:**	**Model:**	**Serial #:**
Temperature Sensor:	Vaisala	HMP155	N2910506
Barometric Pressure Sensor:	MetOne	92	A2397
Relative Humidity Sensor:	Vaisala	HMP155	N2910506
Anemometer:	RM Young	05305AQ	174801
AMBIENT TEMPERATURE SENSOR CHECK			
Previous check date:	July 11, 2023		
Parameter:	Temperature @ 2 metres		
Reference Thermometer ID:	F.S. 160459244 expires July 17, 2024		
Reference Temperature (^{o}C):	17.2		
Station - Ambient Temperature (^{o}C):	17.2		
Temperature Difference (^{o}C):	0.0		
BAROMETRIC PRESSURE SENSOR CHECK			
Previous check date:	July 11, 2023		
Reference Barometer ID:	DeltaCal DC1 #206578, expires Sept 20, 2023		
Reference Pressure - Units/Reading:	millibar	948.6	
Station Pressure - Units/Reading:	millibar	947.2	
Pressure Tolerance +/- 15% of error:	806 - 1091	0.15%	
RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK			
Previous check date:	July 11, 2023		
Reference Hygrometer ID:	F.S. 160459244 expires July 17, 2024		
Reference Hygrometer % RH- Reading:	79.30		
Station Hygrometer % RH- Reading:	79.00		
RH Tolerance +/- 15% of difference:	67.41 - 91.20	0.4%	
ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK			
WIND SPEED		WIND DIRECTION	
Previous check date:	July 11, 2023	Previous check date:	July 11, 2023
Wind Speed Observed (kph):	0-5	Wind Direction Observed:	SE
Wind speed on Data Logger (kph):	2.6	Wind Direction on Data Logger:	SE
		Wind Direction Pass/Fail?:	Pass

Comments

No issues
Annual wind audit completed (see separate sheet)

Meteorological Sensor Audit/Calibration

Location Information

Company:	Bureau Veritas	**Performed By:**	Ferdinand Roy
Audit Location:	Grimshaw	**Reviewed By:**	Chris Wesson
Audit Date:	July 12, 2022	**Start/End Time (mst):**	13:57 / 16:52
Calibration Purpose:	routine annual	**Weather Conditions:**	Cloudy/Overcast

Wind Sensor Information

Sensor ID Data:		**Sensor Outputs:**	
Sensor Make:	RM Young	**Velocity Voltage Output Range:**	n/a
Sensor Model:	05305AQ	**Velocity Unit Output Range:**	0-200
Serial #:	174801	**Direction Voltage Output Range:**	n/a
Previous Cal/Audit Date:	n/a	**Direction Unit Output Range:**	0-360

Wind Calibrator Information

Calibrator I.D. and Expiry Date: RM Young 18801 id# CA01648 expires August 6, 2022

Wind Speed Audit Data **+/- 2% of the average correction factor is the limit**

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.0	0.0	-
1000	18.4	18.3	18.3	1.007
2000	36.9	36.7	36.7	1.004
3000	55.3	55.1	55.1	1.003
4000	73.7	73.6	73.6	1.002
5000	92.2	92.0	92.0	1.002
6000	110.6	110.5	110.5	1.001
7000	129.0	128.9	128.9	1.001
8000	147.4	147.3	147.3	1.001
9000	165.9	165.8	165.8	1.000
10000	184.3	184.2	184.2	1.001
		The audit meets AMD requirements.	**Average Correction Factor=**	**1.002**

Wind Direction Audit Data **+/- 3° of the absolute average degrees difference for all points is the limit**

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	0	354	0.2	0.8	0.5
30	330	27	331	3.3	-0.6	2.0
60	300	56	300	3.8	-0.3	2.1
90	270	87	268	2.8	1.9	2.3
120	240	117	236	3.3	4.0	3.7
150	210	147	204	2.6	5.6	4.1
180	180	177	175	3.3	4.6	4.0
210	150	207	145	3.1	4.8	4.0
240	120	238	115	2.4	5.0	3.7
270	90	270	85	0.3	5.1	2.7
300	60	300	57	-0.3	3.1	1.7
330	30	330	26	-0.3	3.6	2.0
355	0	354	0	0.8	0.1	0.5
The audit meets AMD requirements.			**Average Absolute Degrees Difference=**			**2.5**

Comments:

Output via RMY32400 serial interface

Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	**Performed By:**	Chris Wesson
Audit Location:	Grimshaw	**Reviewed By:**	Limin Li
Audit Date:	August 2, 2023	**Start/End Time (mst):**	14:55 / 16:16
Calibration Purpose:	routine annual	**Weather Conditions:**	Mainly cloudy with sunny breaks

Wind Sensor Information

Sensor ID Data:		**Sensor Outputs:**	
Sensor Make:	RM Young	**Velocity Voltage Output Range:**	n/a
Sensor Model:	05305AQ	**Velocity Unit Output Range:**	0-200
Serial #:	174801	**Direction Voltage Output Range:**	n/a
Previous Cal/Audit Date:	July 12, 2022	**Direction Unit Output Range:**	0-360

Wind Calibrator Information

Calibrator I.D. and Expiry Date: RM Young 18802 id# R9133 expires Oct 18, 2024

Wind Speed Audit Data **+/- 2% of the average correction factor is the limit**

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.0	0.0	-
1000	18.4	18.3	18.3	1.007
2000	36.9	36.7	36.7	1.004
3000	55.3	55.1	55.1	1.003
4000	73.7	73.6	73.6	1.002
5000	92.2	92.0	92.0	1.002
6000	110.6	110.5	110.5	1.001
7000	129.0	128.9	128.9	1.001
8000	147.4	147.3	147.3	1.001
9000	165.9	165.8	165.8	1.000
10000	184.3	184.2	184.2	1.001
		The audit meets AMD requirements.	**Average Correction Factor=**	**1.002**

Wind Direction Audit Data **+/- 3° of the absolute average degrees difference for all points is the limit**

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	2	354	2.0	1.0	1.5
30	330	29	333	1.0	-3.0	2.0
60	300	58	300	2.0	0.0	1.0
90	270	88	271	2.0	-1.0	1.5
120	240	119	237	1.0	3.0	2.0
150	210	149	206	1.0	4.0	2.5
180	180	178	177	2.0	3.0	2.5
210	150	206	148	4.0	2.0	3.0
240	120	238	119	2.0	1.0	1.5
270	90	272	87	-2.0	3.0	2.5
300	60	304	57	-4.0	3.0	3.5
330	30	333	30	-3.0	0.0	1.5
355	0	354	1	1.0	1.0	1.0
The audit meets AMD requirements.			**Average Absolute Degrees Difference=**			**2.0**

Comments:

Declination = 15 deg East
Horizontal bearings replaced.
Potentiometer noisy. Replacement required.

END OF REPORT

Peace River Area Monitoring Program

AUGUST 2023

Ambient Air Monitoring Calibration Report

- PEACE RIVER COMPLEX (PRC) STATION-

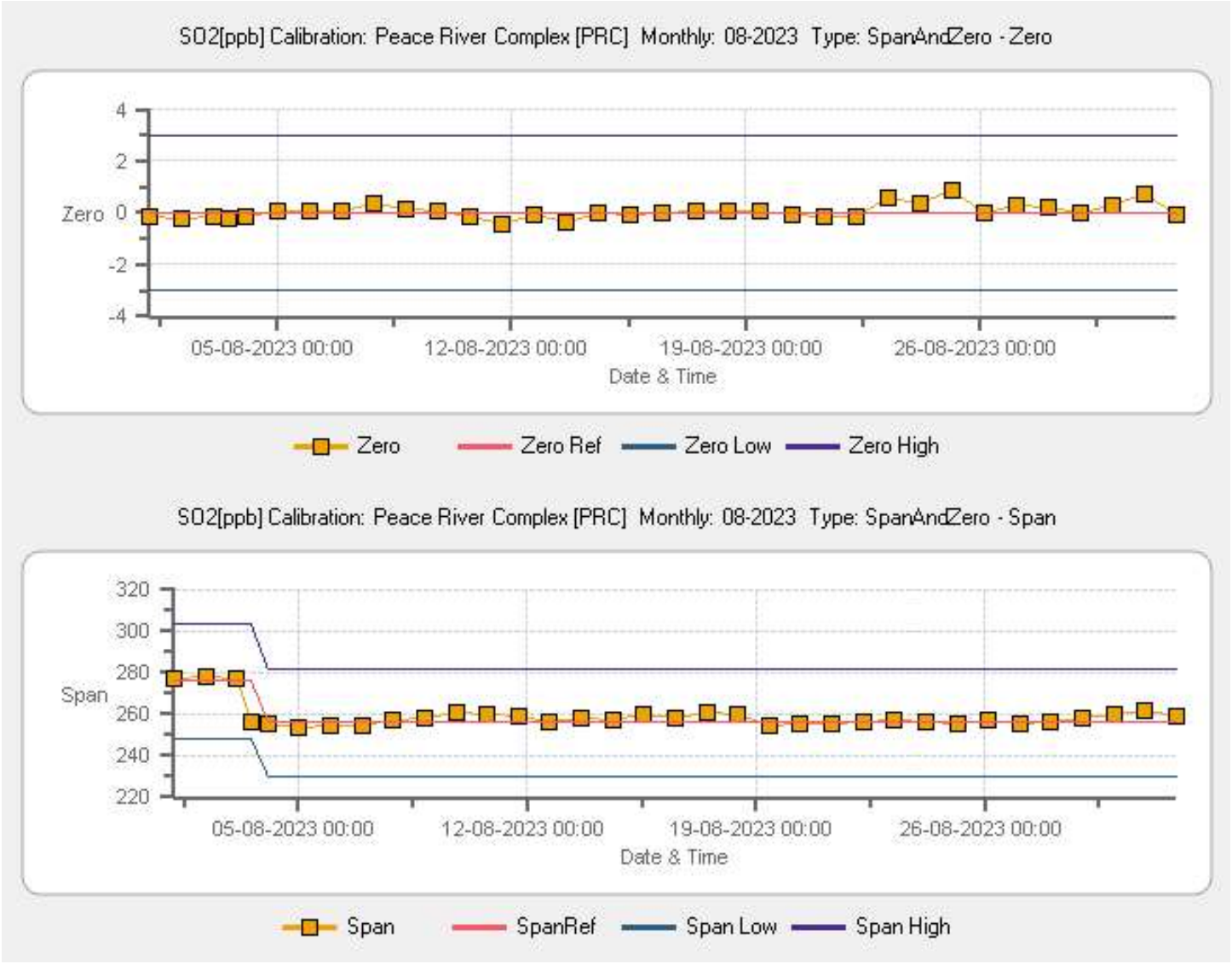
CAL-PRAMP-202308-01698

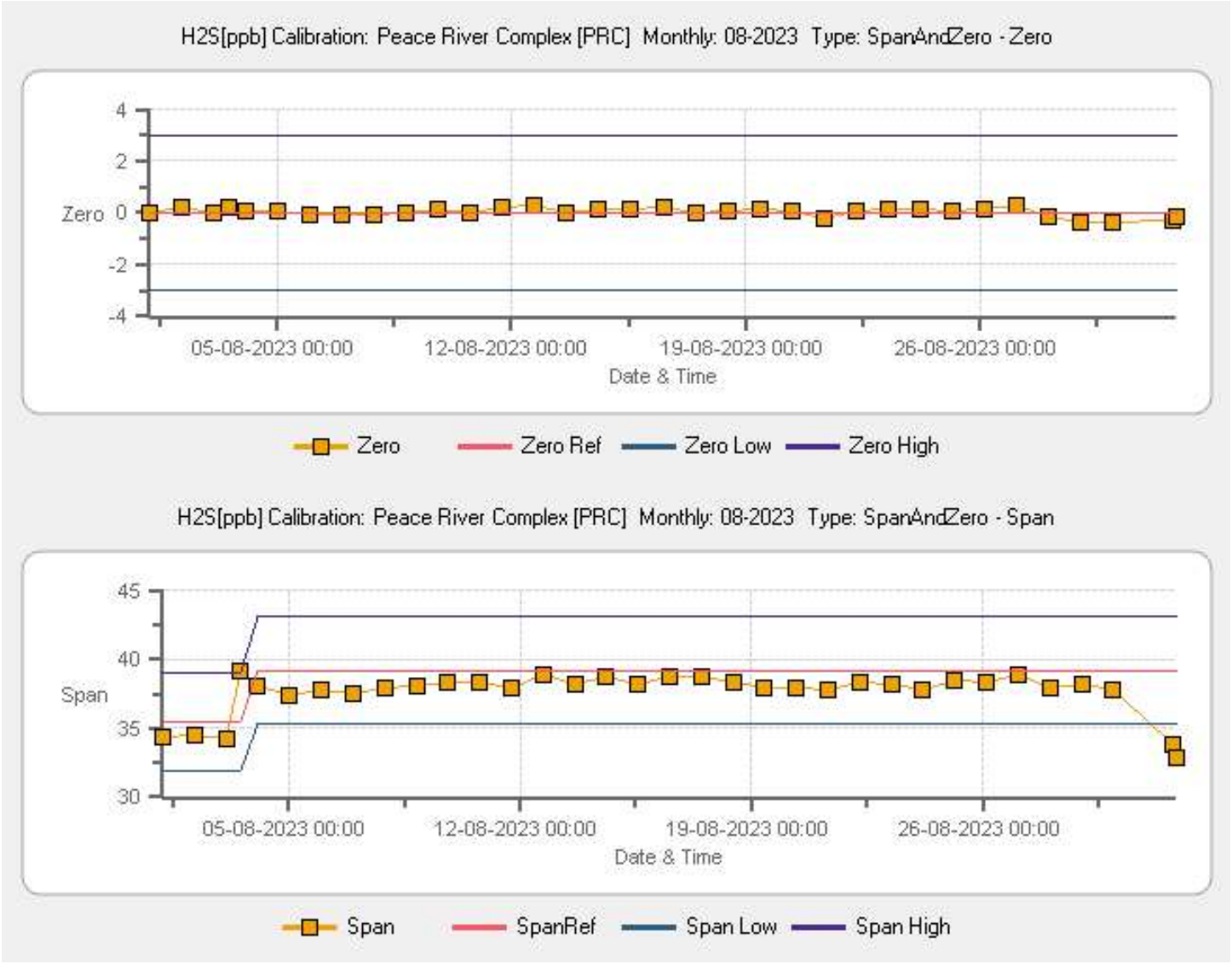
Operation and Maintenance:
Bureau Veritas Canada

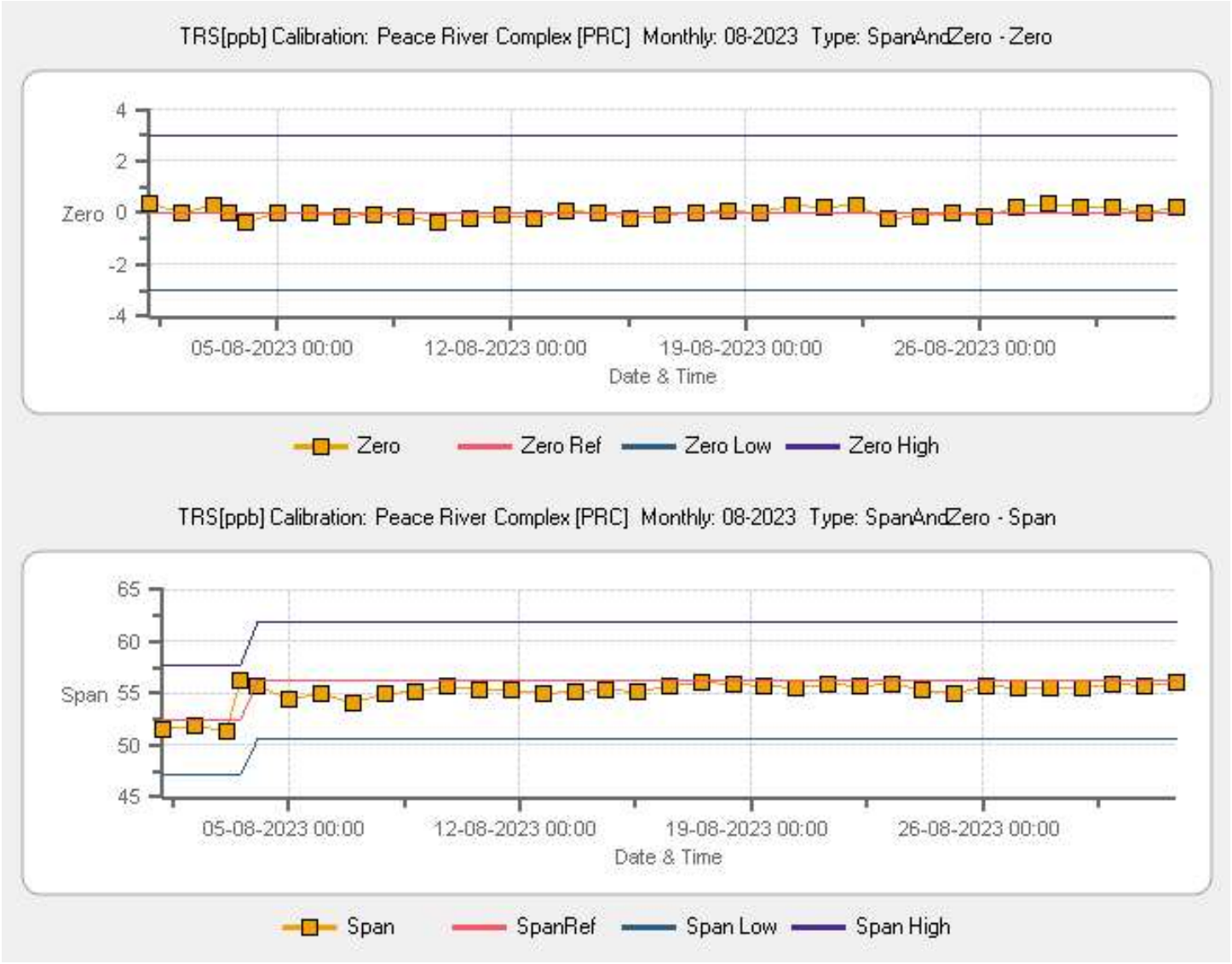
Data Validation and Report:
Bureau Veritas Canada

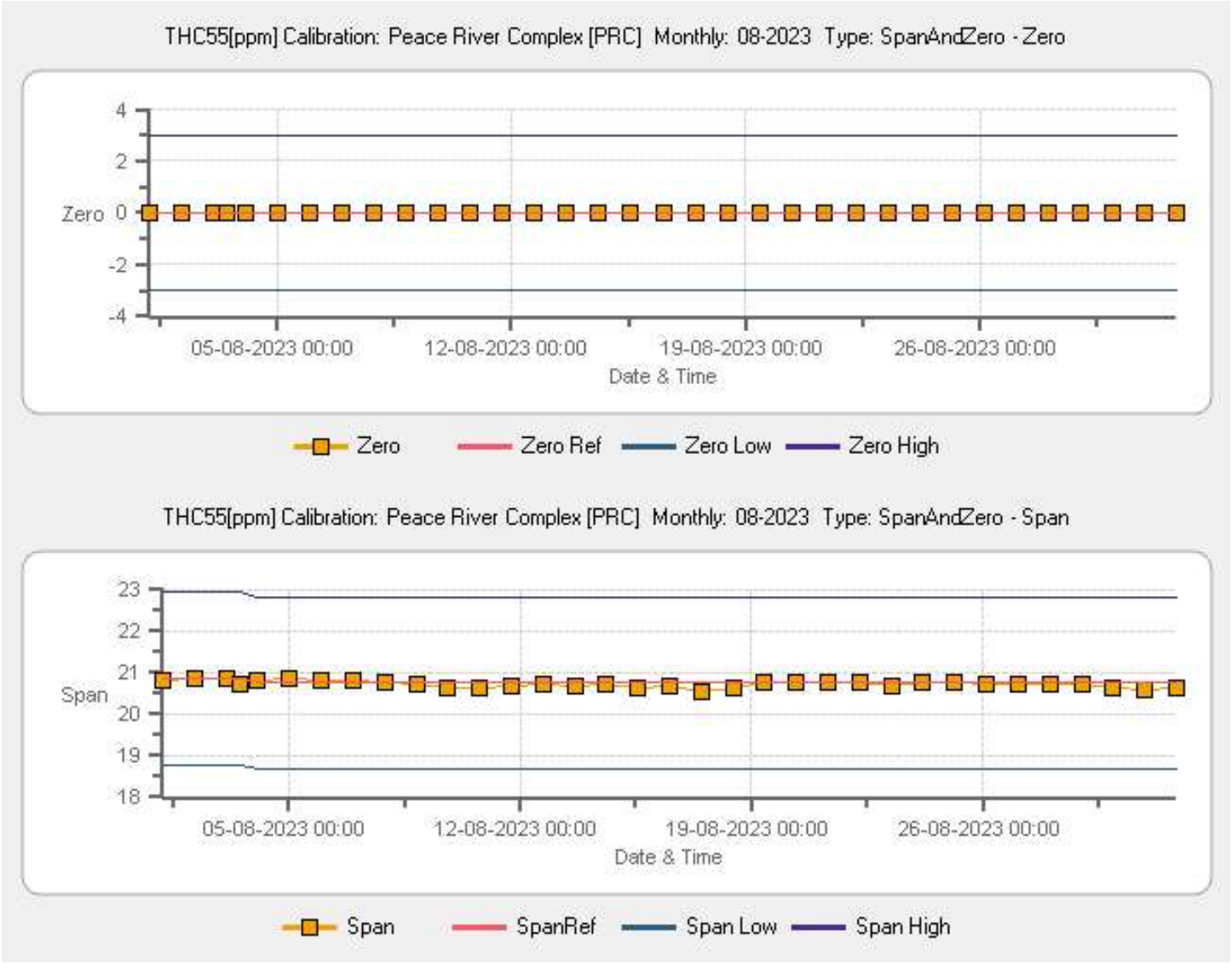
September 19, 2023

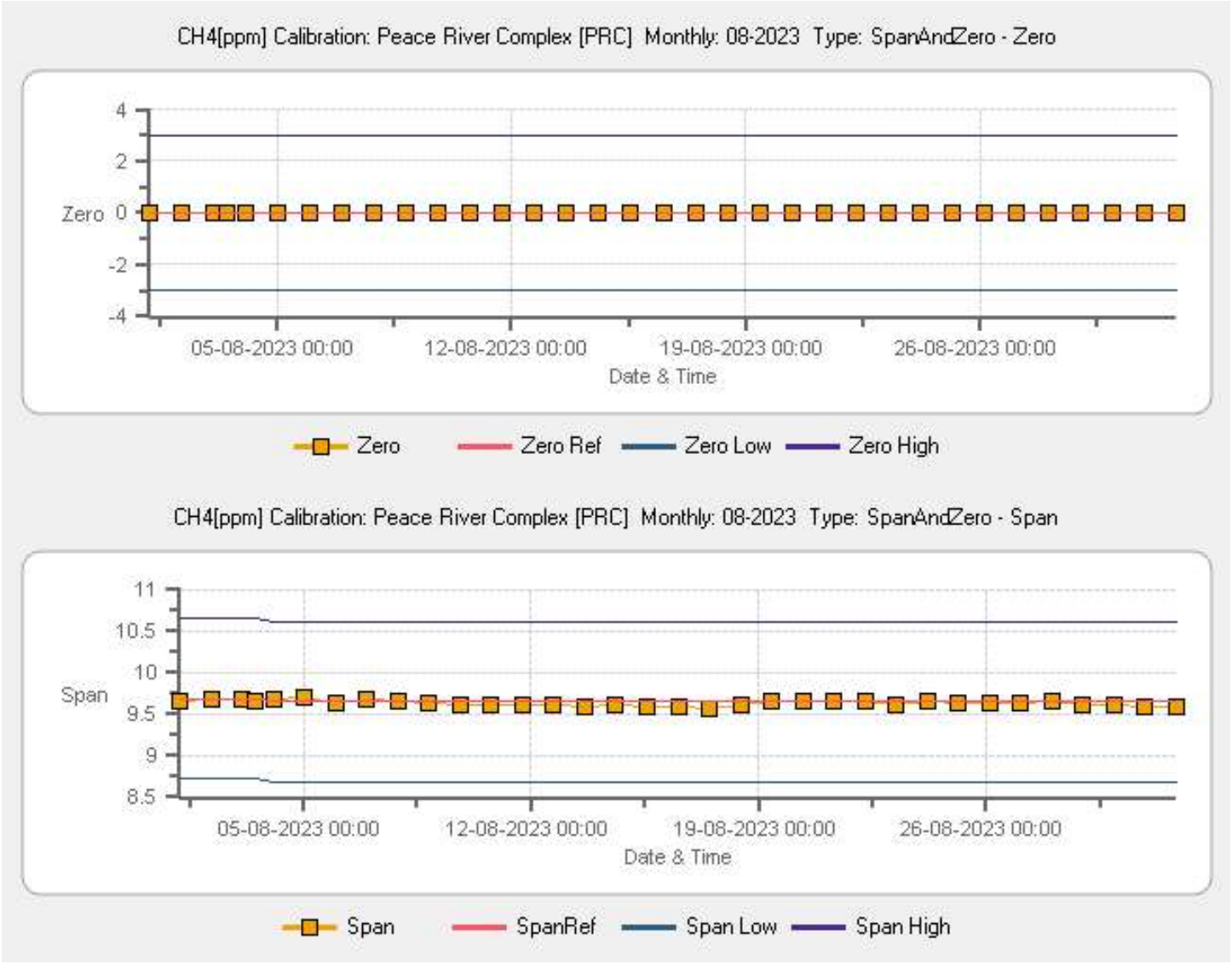
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

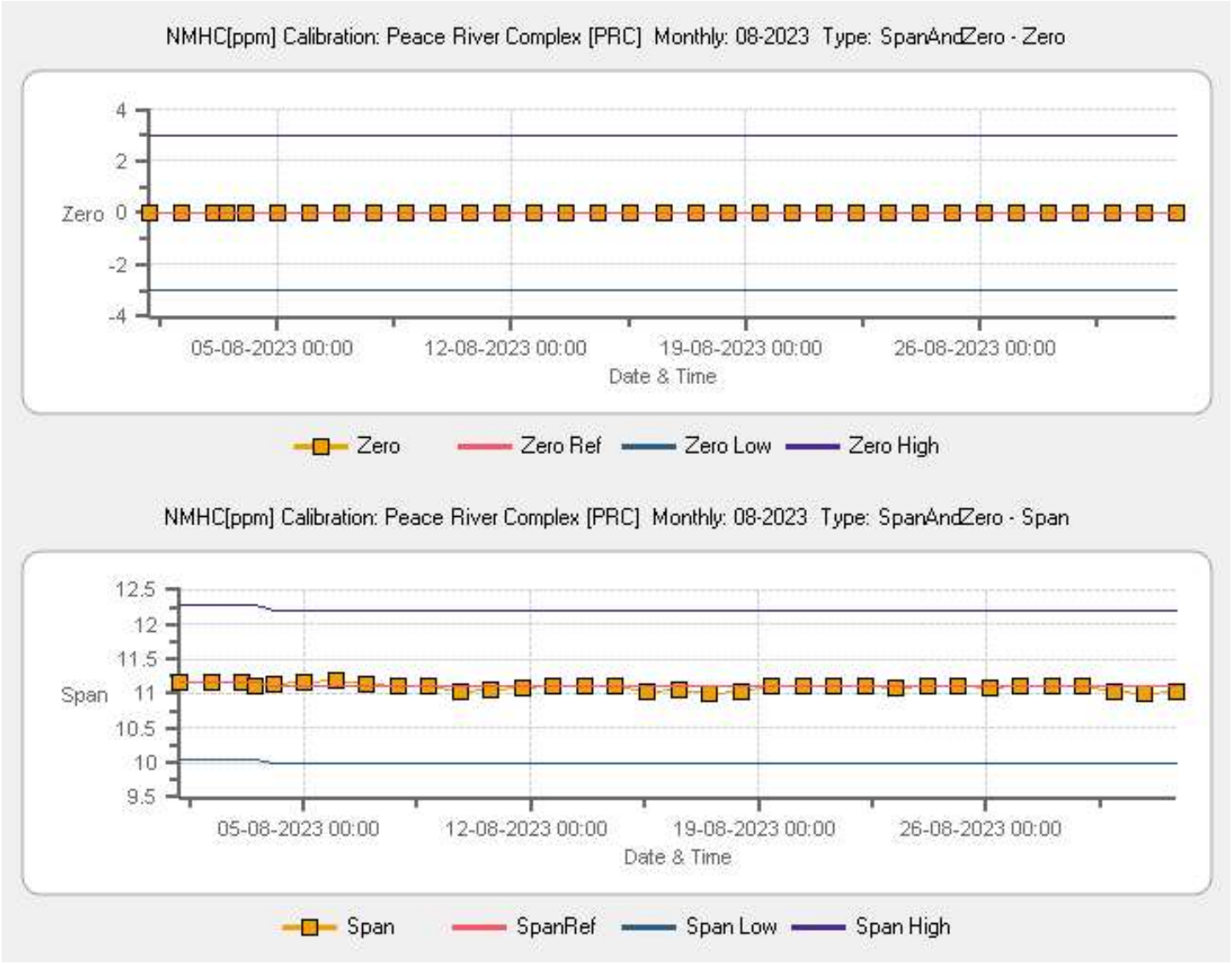

SO2[ppb] Calibration: Peace River Complex [PRC] Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
SO2[ppb] Calibration: Peace River Complex [PRC] Monthly: 08-2023 Type: SpanAndZero - Span
320
300
280
Span
260
240
220
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High


H2S[ppb] Calibration: Peace River Complex [PRC] Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
H2S[ppb] Calibration: Peace River Complex [PRC] Monthly: 08-2023 Type: SpanAndZero - Span
45
40
Span
35
30
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High


TRS[ppb] Calibration: Peace River Complex [PRC] Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
TRS[ppb] Calibration: Peace River Complex [PRC] Monthly: 08-2023 Type: SpanAndZero - Span
65
60
Span 55
50
45
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High


THC55[ppm] Calibration: Peace River Complex [PRC] Monthly: 08-2023 Type: SpanAndZero - Zero
Zero
4
2
0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
THC55[ppm] Calibration: Peace River Complex [PRC] Monthly: 08-2023 Type: SpanAndZero - Span
Span
23
22
21
20
19
18
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High


CH4[ppm] Calibration: Peace River Complex [PRC] Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
CH4[ppm] Calibration: Peace River Complex [PRC] Monthly: 08-2023 Type: SpanAndZero - Span
11
10.5
10
Span
9.5
9
8.5
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High


NMHC[ppm] Calibration: Peace River Complex [PRC] Monthly: 08-2023 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
NMHC[ppm] Calibration: Peace River Complex [PRC] Monthly: 08-2023 Type: SpanAndZero - Span
12.5
12
11.5
Span 11
10.5
10
9.5
05-08-2023 00:00
12-08-2023 00:00
19-08-2023 00:00
26-08-2023 00:00
Date & Time
Span
SpanRef
Span Low
Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution

DATE:	03-Aug-2023	PREVIOUS CALIBRATION DATE:	06-Jul-2023
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	0.998
CLIENT:	PRAMP	TEMPERATURE (°C):	24.6
LOCATION:	Peace River Compliance	BAROMETRIC (mBar):	944
PURPOSE	Routine	START TIME (MST):	08:21
PERFORMED BY:	Chris Wesson	END TIME (MST):	13:10

ANALYZER:

MAKE/MODEL	Thermo 43i	RANGE	500 ppb
SERIAL #	1034746225	FLOW (mL/min)	440
INITIAL		FINAL	
BKG/OFFSET	20.3	BKG/OFFSET	18.8
COEF/SLOPE	1.162	COEF/SLOPE	1.075
Expected (reference) Value	276.1	Expected (reference) Value	256

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	75401122	ID:	4568
MFC CALIBRATION DATE:	13-Mar-2023	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0001923	HIGH ID	n/a
CONC (ppm):	25.10	EXPIRY DATE	n/a
CYLINDER (psi):	800	LOW ID	n/a
EXPIRY DATE	02-Nov-2025	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

POINT	HIGH	MID	LOW
TARGET	390	190	95
RANGE	300 - 400	150 - 200	50 - 100

SCRUBBER CHECK (15 MINS; TRS/H2S ONLY):

START TIME:	n/a	SO2 Conc (ppb)	n/a
END TIME:	n/a	Analyzer Response (ppb)	n/a

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
3999		3999	0.00	-0.1	0		
3939	60.60	4000	380.27	405.2	379.5	0.938	1.002
3970	28.70	3999	180.14	n/a	180.2	n/a	1.000
3985	14.30	3999	89.75	n/a	89.9	n/a	0.998

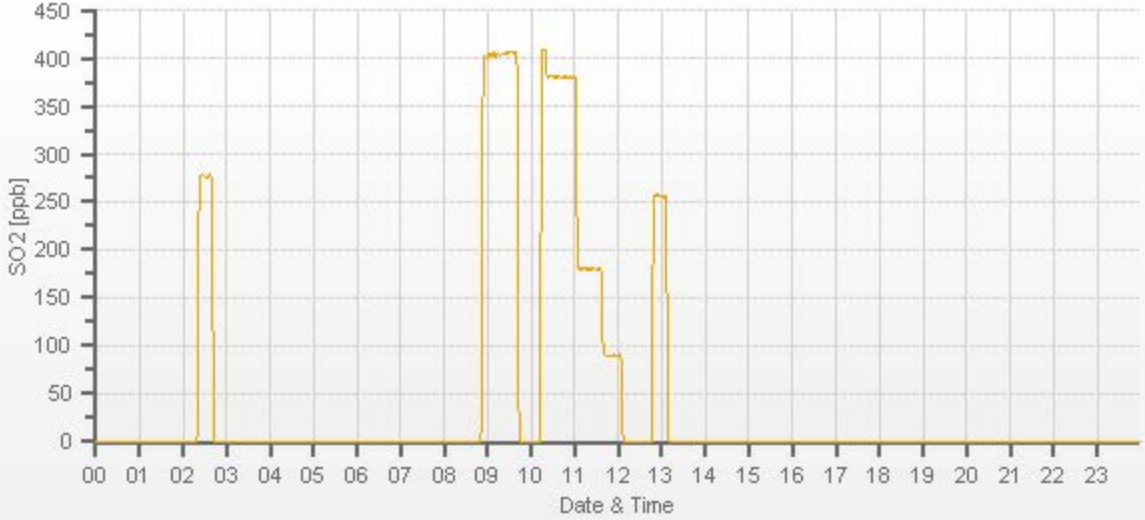
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.998	0.0%

COMMENTS:

Sample filter changed.

SO2[ppb] Station: Peace River Complex [PRC] Daily: 03-08-2023 Type: AVG 1 Min. [1 Min.]



H2S Analyzer Calibration by Dilution

DATE:	03-Aug-2023	PREVIOUS CALIBRATION DATE:	06-Jul-2023
PARAMETER:	H2S	PREVIOUS CORRECTION FACTOR:	1.002
CLIENT:	PRAMP	TEMPERATURE (°C):	24.6
LOCATION:	Peace River Compliance	BAROMETRIC (mBar):	944
PURPOSE	Routine	START TIME (MST):	08:21
PERFORMED BY:	Chris Wesson	END TIME (MST):	13:10

ANALYZER:

MAKE/MODEL	Thermo 450i	RANGE	100 ppb
SERIAL #	1308857354	FLOW (mL/min)	937
INITIAL		FINAL	
BKG/OFFSET	14.4	BKG/OFFSET	15.8
COEF/SLOPE	1.024	COEF/SLOPE	1.121
Expected (reference) Value	35.5	Expected (reference) Value	39.2

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	75401122	ID:	4568
MFC CALIBRATION DATE:	13-Mar-2023	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL131374	HIGH ID	n/a
CONC (ppm):	10.09	EXPIRY DATE	n/a
CYLINDER (psi):	2000	LOW ID	n/a
EXPIRY DATE	03-Jan-2026	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

POINT	HIGH	MID	LOW
TARGET	78	38	19
RANGE	60 - 80	30 - 40	10 - 20

SCRUBBER CHECK (15 MINS; TRS/H2S ONLY):

START TIME:	n/a	SO2 Conc (ppb)	n/a
END TIME:	n/a	Analyzer Response (ppb)	n/a

CALIBRATION:

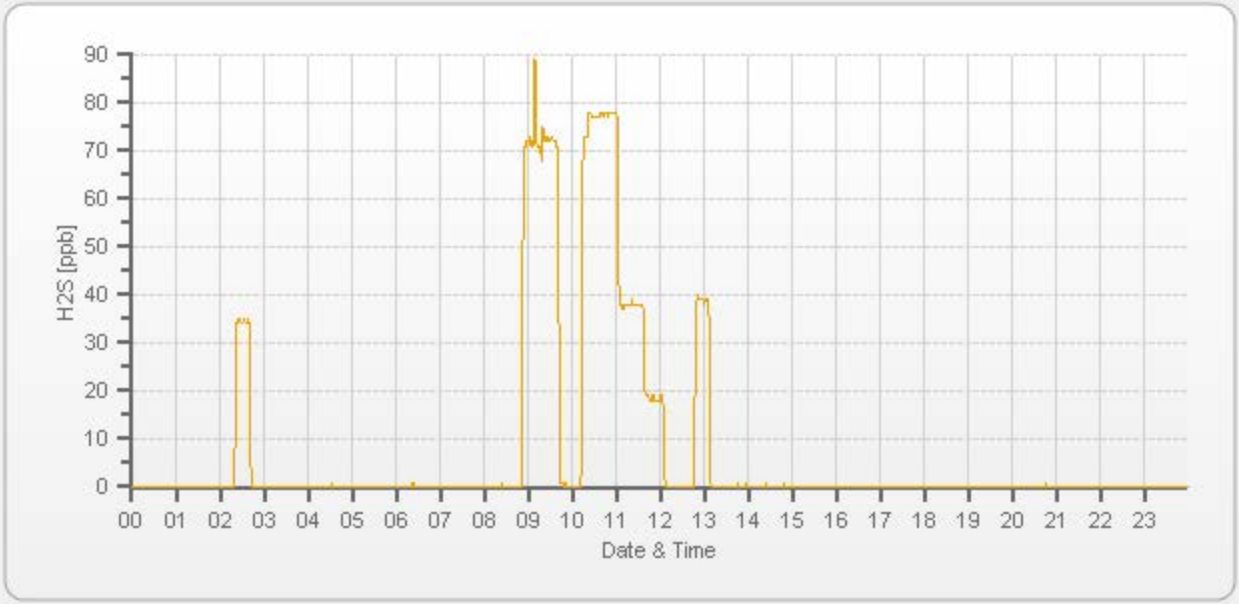
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
3999		3999	0.00	0.2	0		
3969	30.90	4000	77.95	71.6	78.2	1.092	0.997
3984	15.10	3999	38.10	n/a	37.8	n/a	1.008
3992	7.50	3999	18.92	n/a	18.4	n/a	1.028

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.005	-0.3%

COMMENTS:

Sample filter changed
09:07-09:20 = calibration system check due to low reponse. AF high restarted


H2S[ppb] Station: Peace River Complex [PRC] Daily: 03-08-2023 Type: AVG 1 Min. [1 Min.]
H2S [ppb]
90
80
70
60
50
40
30
20
10
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Date & Time
H2S [ppb]

H2S Analyzer Calibration by Dilution

DATE:	31-Aug-2023	PREVIOUS CALIBRATION DATE:	n/a
PARAMETER:	H2S	PREVIOUS CORRECTION FACTOR:	n/a
CLIENT:	PRAMP	TEMPERATURE (°C):	23.6
LOCATION:	Peace River Compliance	BAROMETRIC (mBar):	936
PURPOSE	Install/Post-Repair	START TIME (MST):	12:55
PERFORMED BY:	Kevin Sebastian	END TIME (MST):	18:06

ANALYZER:

MAKE/MODEL	Thermo 450i	RANGE	100 ppb
SERIAL #	1308857354	FLOW (mL/min)	941
INITIAL		FINAL	
BKG/OFFSET	n/a	BKG/OFFSET	15.3
COEF/SLOPE	n/a	COEF/SLOPE	1.058
Expected (reference) Value	n/a	Expected (reference) Value	33.9

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	58100720	ID:	4568
MFC CALIBRATION DATE:	15-Mar-2023	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002519	HIGH ID	n/a
CONC (ppm):	9.41	EXPIRY DATE	n/a
CYLINDER (psi):	600	LOW ID	n/a
EXPIRY DATE	10-Nov-2023	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

POINT	HIGH	MID	LOW
TARGET	78	38	19
RANGE	60 - 80	30 - 40	10 - 20

SCRUBBER CHECK (15 MINS; TRS/H2S ONLY):

START TIME:	n/a	SO2 Conc (ppb)	n/a
END TIME:	n/a	Analyzer Response (ppb)	n/a

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
3999		3999	0.00	n/a	0		
3969	33.10	4002	77.83	n/a	77.9	n/a	0.999
3987	16.20	4003	38.08	n/a	37.4	n/a	1.018
3995	8.10	4003	19.04	n/a	18.2	n/a	1.046

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.004	-0.5%

COMMENTS:

Power Supply Replaced
Calibration fails at low point Restarted calibration from Adjusted high.
15:49-15:52- Flushed Out Regulator


H2S[ppb] Station: Peace River Complex [PRC] Daily: 31-08-2023 Type: AVG 1 Min. [1 Min.]
H2S [ppb]
90
80
70
60
50
40
30
20
10
0
-10
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Date & Time
H2S [ppb]

TRS Analyzer Calibration by Dilution

DATE:	03-Aug-2023	PREVIOUS CALIBRATION DATE:	06-Jul-2023
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	0.997
CLIENT:	PRAMP	TEMPERATURE (°C):	24.6
LOCATION:	Peace River Compliance	BAROMETRIC (mBar):	944
PURPOSE	Routine	START TIME (MST):	08:21
PERFORMED BY:	Chris Wesson	END TIME (MST):	13:11

ANALYZER:

MAKE/MODEL	Thermo 450i	RANGE	100 ppb
SERIAL #	1034746224	FLOW (mL/min)	697
INITIAL		FINAL	
BKG/OFFSET	25.6	BKG/OFFSET	27.4
COEF/SLOPE	1.019	COEF/SLOPE	1.092
Expected (reference) Value	52.45	Expected (reference) Value	56.35

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	75401122	ID:	4568
MFC CALIBRATION DATE:	13-Mar-2023	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL131374	HIGH ID	n/a
CONC (ppm):	10.09	EXPIRY DATE	n/a
CYLINDER (psi):	2000	LOW ID	n/a
EXPIRY DATE	03-Jan-2026	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

POINT	HIGH	MID	LOW
TARGET	78	38	19
RANGE	60 - 80	30 - 40	10 - 20

SCRUBBER CHECK (15 MINS; TRS/H2S ONLY):

START TIME:	n/a	SO2 Conc (ppb)	n/a
END TIME:	n/a	Analyzer Response (ppb)	n/a

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
3999		3999	0.00	-0.04	0		
3969	30.90	4000	77.95	71.87	77.9	1.084	1.001
3984	15.10	3999	38.10	n/a	37.72	n/a	1.010
3992	7.50	3999	18.92	n/a	18.22	n/a	1.039

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.002	-0.4%

COMMENTS:

TRS Converter CDNOVA CDN-101 #506.
09:07-09:20 = calibration system check due to low reponse. AF high restarted


TRS[ppb] Station: Peace River Complex [PRC] Daily: 03-08-2023 Type: AVG 1 Min. [1 Min.]
100
90
80
70
60
50
40
30
20
10
0
-10
TRS [ppb]
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Date & Time
TRS [ppb]

Methane/Non-Methane Analyzer Calibration by Dilution

CALIBRATION:

DATE:	03-Aug-2023	PREVIOUS CALIBRATION DATE:	06-Jul-2023
CLIENT:	PRAMP	TEMPERATURE (°C):	24.6
LOCATION:	Peace River Compliance	BAROMETRIC (mBar):	944
PURPOSE	Routine	START TIME (MST):	08:21
PERFORMED BY:	Chris Wesson	END TIME (MST):	12:41

ANALYZER:

VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
	Thermo 55i	1034745845	1133
PARAMETER:	CH4	NMHC	THC
RANGE (ppm):	20	20	40
PREVIOUS CF:	1.002	1.001	1.001

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	LL68768		HIGH ID:	n/a
MODEL:	2010	MODEL:	M701	CH_4/C_3H_8 (ppm):	897.0	301.0	HIGH EXPIRY:	n/a
ID:	26701218	ID:	4568	CYLINDER (psi):	2000		LOW ID:	n/a
MFC CALIBRATION DATE:	15-Mar-2023	OXIDIZER ID:	Internal	EXPIRY DATE	08-Nov-2029		LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH4/NMHC)	HIGH	MID	LOW	CH4 EQUIVILANCE	
TARGET	14	7	3.5	C_3H_8 as CH_4	827.8
RANGE	12 - 16	6 - 8	2 - 4	THC as CH_4	1724.8

EXPECTED (REFERENCE) VALUE:

INITIAL	CH4	NMHC	THC	FINAL	CH4	NMHC	THC
	9.69	11.17	20.86		9.65	11.10	20.75

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC
3249		3249	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
3197	52.70	3250	14.55	13.42	27.97	14.60	13.48	28.08	14.55	13.41	27.96	0.996	0.996	0.996	1.000	1.001	1.000
3224	26.40	3250	7.29	6.72	14.01	n/a	n/a	n/a	7.28	6.71	13.99	n/a	n/a	n/a	1.001	1.002	1.001
3236	13.20	3249	3.64	3.36	7.01	n/a	n/a	n/a	3.64	3.37	7.01	n/a	n/a	n/a	1.001	0.998	1.000

LINEAR REGRESSION ANALYSIS:

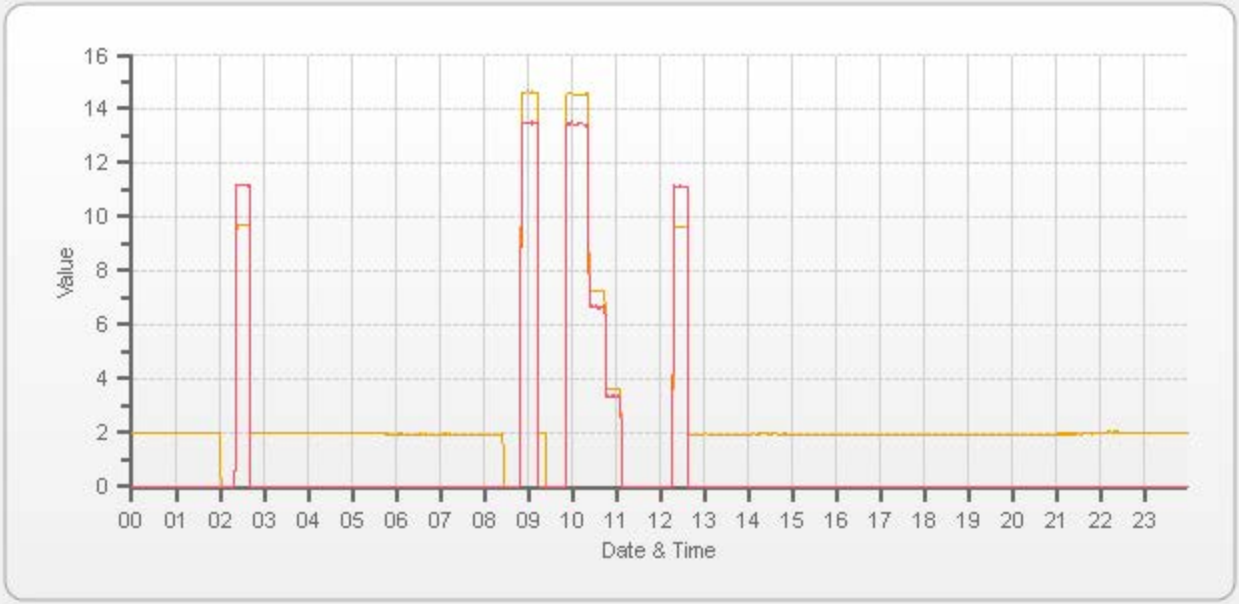
	CORRELATION	SLOPE	INTERCEPT
CH4	1.000	1.000	0.0%
NMHC	1.000	0.999	0.0%
THC	1.000	1.000	0.0%

Comments:

No issues

Use Zero Chrom? **No**

Station: Peace River Complex [PRC] Daily: 03-08-2023 Type: AVG 1 Min. [1 Min.]



Meteorological System Checklist

Date:	August 3, 2023		
Technician:	Chris Wesson		
Station:	Peace River Compliance		
Unit:	**Make:**	**Model:**	**Serial #:**
Temperature Sensor:	Rotronic	HC2-S3	20558318
Barometric Pressure Sensor:	MetOne	092	B19577
Relative Humidity Sensor:	Rotronic	HC2-S3	20558318
Anemometer:	RM Young	05305VK	129612
AMBIENT TEMPERATURE SENSOR CHECK			
Previous check date:	June 21, 2023		
Parameter:	Temperature @ 2 metres		
Reference Thermometer ID:	F.S. 160459244 expires July 17, 2024		
Reference Temperature (°C):	15.2		
Station - Ambient Temperature (°C):	15.0		
Temperature Difference (°C):	0.2		
BAROMETRIC PRESSURE SENSOR CHECK			
Previous check date:	June 21, 2023		
Reference Barometer ID:	DeltaCal DC1 #206578 expires Sept 20, 2023		
Reference Pressure - Units/Reading:	millibar	942.6	
Station Pressure - Units/Reading:	millibar	944	
Pressure Tolerance +/- 15% of error:	801 - 1084	-0.15%	
RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK			
Previous check date:	June 21, 2023		
Reference Hygrometer ID:	F.S. 160459244 expires July 17, 2024		
Reference Hygrometer % RH- Reading:	91.70		
Station Hygrometer % RH- Reading:	92.90		
RH Tolerance +/- 15% of difference:	77.95 - 105.46	-1.3%	

ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK			
WIND SPEED		WIND DIRECTION	
Previous check date:	June 21, 2023	Previous check date:	June 21, 2023
Wind Speed Observed (kph):	10~20	Wind Direction Observed:	SW
Wind speed on Data Logger (kph):	18	Wind Direction on Data Logger:	SW
		Wind Direction Pass/Fail?:	Pass

Comments

No issues.

Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	**Performed By:**	Ferdinand Roy
Audit Location:	Peace River Compliance	**Reviewed By:**	Chris Wesson
Audit Date:	August 17, 2022	**Start/End Time (mst):**	8:15/9:20
Calibration Purpose:	routine annual	**Weather Conditions:**	Mainly clear

Wind Sensor Information

Sensor ID Data:		**Sensor Outputs:**	
Sensor Make:	RM Young	**Velocity Voltage Output Range:**	0-1
Sensor Model:	05305VK	**Velocity Unit Output Range:**	0-200
Serial #:	129612	**Direction Voltage Output Range:**	0-1
Previous Cal/Audit Date:	June 16, 2021	**Direction Unit Output Range:**	0-360

Wind Calibrator Information

Calibrator I.D. and Expiry Date: RM Young 18802 id# CA03309 expires June 7, 2023

Wind Speed Audit Data **+/- 2% of the average correction factor is the limit**

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.1	0.1	-
1000	18.4	18.5	18.5	0.996
2000	36.9	36.9	37.0	0.998
3000	55.3	55.4	55.4	0.998
4000	73.7	73.9	73.9	0.998
5000	92.2	92.4	92.4	0.997
6000	110.6	110.9	110.9	0.997
7000	129.0	129.5	129.5	0.996
8000	147.4	148.0	148.0	0.996
9000	165.9	166.6	166.6	0.996
10000	184.3	185.1	185.2	0.995
		The audit meets AMD requirements.	**Average Correction Factor=**	**0.997**

Wind Direction Audit Data **+/- 3° of the absolute average degrees difference for all points is the limit**

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	1	354	1.0	1.0	1.0
30	330	29	329	1.0	1.0	1.0
60	300	59	300	1.0	0.0	0.5
90	270	89	271	1.0	-1.0	1.0
120	240	119	241	1.0	-1.0	1.0
150	210	151	212	-1.0	-2.0	1.5
180	180	181	181	-1.0	-1.0	1.0
210	150	211	151	-1.0	-1.0	1.0
240	120	241	120	-1.0	0.0	0.5
270	90	271	89	-1.0	1.0	1.0
300	60	300	59	0.0	1.0	0.5
330	30	329	29	1.0	1.0	1.0
355	0	354	1	1.0	1.0	1.0
The audit meets AMD requirements.			**Average Absolute Degrees Difference=**			**0.9**

Comments:

Physical inspection completed - no issues.

Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	**Performed By:**	Chris Wesson
Audit Location:	PRC Compliance	**Reviewed By:**	Limin Li
Audit Date:	August 3, 2023	**Start/End Time (mst):**	10:40 / 11:32
Calibration Purpose:	routine annual	**Weather Conditions:**	Mainly cloudy with drizzle

Wind Sensor Information

Sensor ID Data:		**Sensor Outputs:**	
Sensor Make:	RM Young	**Velocity Voltage Output Range:**	0-1
Sensor Model:	05305VK	**Velocity Unit Output Range:**	0-200
Serial #:	129612	**Direction Voltage Output Range:**	0-1
Previous Cal/Audit Date:	August 17, 2022	**Direction Unit Output Range:**	0-360

Wind Calibrator Information

Calibrator I.D. and Expiry Date: RM Young 18802 id# R9133 expires Oct 18, 2024

Wind Speed Audit Data **+/- 2% of the average correction factor is the limit**

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.1	0.1	-
1000	18.4	18.6	18.5	0.994
2000	36.9	37.1	37.0	0.995
3000	55.3	55.5	55.4	0.997
4000	73.7	74.0	73.8	0.998
5000	92.2	92.5	92.4	0.997
6000	110.6	111.0	111.0	0.996
7000	129.0	129.6	129.6	0.995
8000	147.4	148.0	148.3	0.995
9000	165.9	166.7	166.6	0.995
10000	184.3	185.3	185.3	0.995
		The audit meets AMD requirements.	**Average Correction Factor=**	**0.996**

Wind Direction Audit Data **+/- 3° of the absolute average degrees difference for all points is the limit**

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	0	352	0.0	3.0	1.5
30	330	31	328	-1.0	2.0	1.5
60	300	59	298	1.0	2.0	1.5
90	270	90	270	0.0	0.0	0.0
120	240	120	240	0.0	0.0	0.0
150	210	151	210	-1.0	0.0	0.5
180	180	180	180	0.0	0.0	0.0
210	150	211	150	-1.0	0.0	0.5
240	120	241	120	-1.0	0.0	0.5
270	90	271	91	-1.0	-1.0	1.0
300	60	299	59	1.0	1.0	1.0
330	30	328	29	2.0	1.0	1.5
355	0	353	1	2.0	1.0	1.5
The audit meets AMD requirements.			**Average Absolute Degrees Difference=**			**0.8**

Comments:

Declination = 15 deg East
Physical inspection completed, bearings replaced

END OF REPORT

Parameter	Method & Procedure
SULPHUR DIOXIDE (SO_2)	Bureau Veritas EMS SOP-00209: Ambient Sulphur Monitoring
HYDROGEN SULPHIDE (H_2S)	Bureau Veritas EMS SOP-00209: Ambient Sulphur Monitoring
TOTAL HYDROCARBONS (THC), METHANE (CH4), NON-METHANE(NMHC)	Bureau Veritas EMS SOP-00001: Methane, Non-Methane Hydrocarbon Analyzer Monitoring
OXIDES OF NITROGEN (NOx), NITRIC OXIDE (NO) & NITROGEN DIOXIDE (NO_2)	Bureau Veritas EMS SOP-00213: Ambient NO/NO_2/NOx Monitoring
OZONE (O3)	Bureau Veritas EMS SOP-00212: Ambient O3 Monitoring
PARTICULATE MATTER < 2.5 MICRONS ($PM_{2.5}$)	Bureau Veritas EMS SOP-00010: Thermo Model 5030 SHARP Monitor & EMS SOP-00015: Teledyne API PM Monitor Model T640
WIND SPEED (WS) & WIND DIRECTION (WD)	Bureau Veritas EMS SOP-00013: RM Young Wind Monitor Calibration
RELATIVE HUMIDITY (RH)	Operation Manual
BAROMETRIC PRESSURE (BP)	Operation Manual
AMBIENT TEMPERATURE (AmbTPX)	Operation Manual
STATION TEMPERATURE (StnTPX)	Operation Manual
PRECIPITATION	Bureau Veritas EMS SOP-00242: Precipitation Collector Installation / Maintenance

Peace River Area Monitoring Program

AUGUST 2023

Monthly Ambient Air Quality Monitoring Integrated Sampling Report

PRAMP-202308-INTEGRATED

September 19, 2023

Pages may be left blank for double-sided printing

Table of Contents

NETWORK STATION SUMMARY 5
Listing of Integrated Sampling Stations 5
Listing of Passives: 1-Month Exposure Sampling Sites 5
List of Contractors who performed the air monitoring activities 5
Monitoring Notes during the Month of August 2023 6
Revisions to Alberta's Ambient Air Quality Data Warehouse 6
Deviations from Authorized Monitoring Methods 6
Certification 7
Map of PRAMP Continuous Monitoring and Integrated Sampling Network 8
INTEGRATED SAMPLING RESULTS SUMMARY 9
ANALYTICAL SAMPLING RESULTS 10
Passives 11

End of Report 13

Peace River Area Monitoring Program
Suite 91, 305 – 4625 Varity Drive NW
Calgary, AB, T3A 0Z9
Phone #: 780-226-7068 / 587-225-2248
E-mail: pramptech@prampairshed.ca
www.prampairshed.ca

September 19, 2023

Alberta Environment and Protected Areas (EPA)
11th Floor, Oxbridge Place
9820 106 Street
Edmonton, AB, T5K 2J6

RE: PRAMP –August 2023 Monthly Ambient Air Quality Monitoring Integrated Sampling Report

Enclosed is the August 2023 Monthly Ambient Air Quality Monitoring Integrated Sampling Report for the Peace River Area Monitoring Program's (PRAMP) regional air quality monitoring network. This report summarizes monitoring data for samples collected using integrated methods, including volatile organic compounds (NMHC canister sampling program), hydrogen sulphide, and sulphur dioxide (passive sampling program).

The representative of the Person Responsible for this monitoring program is

PRAMP Airshed
Michael Bisaga / Lily Lin, Technical Program Managers
Suite 91, 305 – 4625 Varsity Drive NW
Calgary, AB, T3A 0Z9
Phone #: 780-226-7068 / 587-225-2248
E-mail: pramptech@prampairshed.ca

This report has been prepared, reviewed and submitted by Michael Bisaga & Lily Lin of the PRAMP Airshed. This report is also submitted on behalf of the industrial member companies to satisfy the requirements of the facility Operating Approvals.

NETWORK STATION SUMMARY

Listing of Integrated Sampling Stations

- 986-C Station
- 842-B Station
- Reno-B Station
- Peace River Complex (PRC) Station

Station Name	986-C	842-B	Reno-B	PRC
Station ID	1562	1561	1563	1698
Coordinates	56.36980, -116.92500	56.27406, -116.98129	55.86936, -117.05739	56.38257, -116.769283
NMHC Canister (VOCs)	√	√	√	
Passives: 2-Month exposure (PACs)	√			
Passives: 1-Month Exposure (H_2S, SO_2)				√

Listing of Passives: 1-Month Exposure Sampling Sites

Site ID	Latitude	Longitude
1	56.377841	-116.787142
2	56.378638	-116.780496
3	56.382958	-116.783813
4	56.377044	-116.794220
7	56.384796	-116.780488
8	56.388710	-116.771234
9	56.388943	-116.756205
10	56.388642	-116.797817
11	56.383771	-116.841165
12	56.388962	-116.885263
13	56.390972	-116.822083
14	56.424825	-116.853181

List of Contractors who performed the air monitoring activities

Sampling Program	Monitoring Activities Conducted By	Sample Analysis Conducted By	Data/Report Prepared By	Electronic Submission Conducted By
NMHC Canister (VOCs)	Bureau Veritas	InnoTech Alberta Inc	PRAMP	PRAMP
Passives: PACs	PRAMP	ECCC	AEP	AEP
Passives: H_2S, SO_2	PRAMP	Bureau Veritas	PRAMP	PRAMP

Monitoring Notes during the Month of August 2023

- **NMHC Canister Sampling Program - Volatile Organic Compounds (VOCs)**
  - The canister sampling program collects a 1-hour sample of air when the continuously measured non-methane hydrocarbon (NMHC) concentration reaches a specified trigger point. The current trigger point is 0.3 ppm for non-methane hydrocarbons. The trigger point is based on real-time monitoring data that are averaged over a 5-minute period.
  - The canister system at the 842-B station was triggered on August 29 29 at 18:05, at concentration of 1.1 ppm, by widespread forest fire smoke. However, the sample was not collected due to a configuration error dating back to the urgent datalogger swap on August 10. The error was corrected, and the system was re-armed on August 31. No canister samples were sent to the laboratory for analysis this month.

- **Passive Polycyclic Aromatic Compounds (PACs) Sampling Program**
  - The PAC sampling program began in December 2019, and is designed to collect a 2-month integrated sample.
  - The sample media for sampling period of July and August were installed on July 4 and were removed on August 31.
  - The sample media for sampling period of September and October were installed on August 31. They are scheduled to be replaced by the end of October.

- **Passives H_2S and SO_2 Sampling Program**
  - The passive sample filters were installed at the stations on August 1 and were removed on September 1.

Revisions to Alberta's Ambient Air Quality Data Warehouse

No revisions to historical data previously submitted to the Alberta's Ambient Air Quality Data Warehouse were made this month.

Deviations from Authorized Monitoring Methods

There were no deviations from authorized monitoring methods.

Certification

The report was prepared and submitted by Lily Lin in accordance with Chapter 9 of the Air Monitoring Directive (AMD 2016).

Lily Lin, Technical Program Manager, PRAMP Airshed

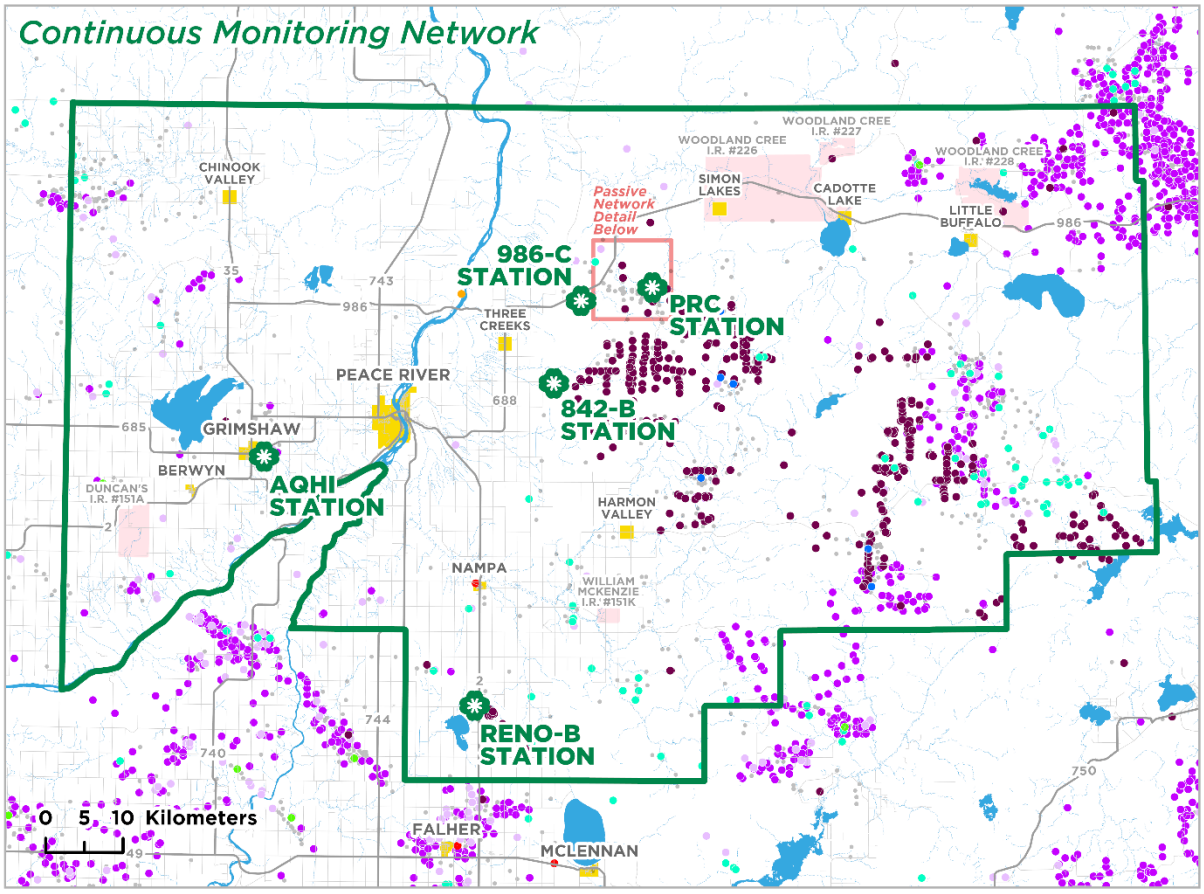
The report was reviewed by Mike Bisaga in accordance with Chapter 9 of the Air Monitoring Directive (AMD 2016).

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. I also certify that at the time of this report's submission, all air data have been electronically uploaded to Alberta ETS as required by the AMD.

Michael Bisaga, Technical Program Manager, PRAMP Airshed

September 19, 2023

Map of PRAMP Continuous Monitoring and Integrated Sampling Network

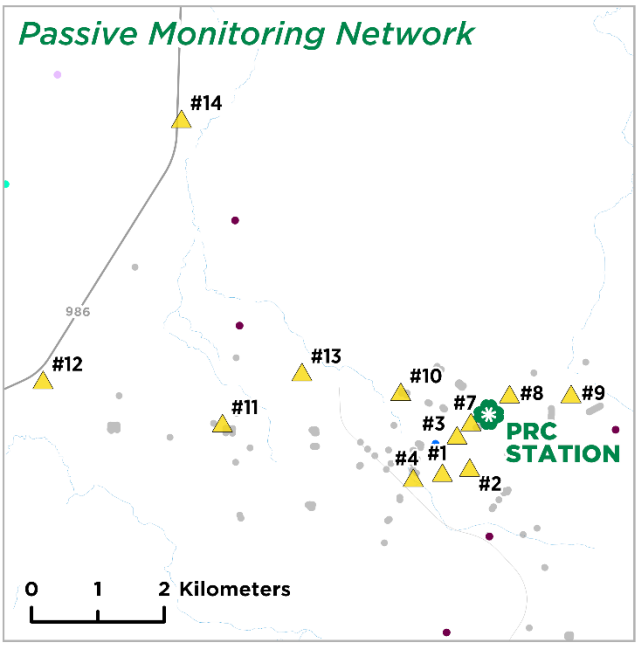


Legend

- PRAMP Boundary
- Populated Place
- First Nation
- Continuous Monitoring Station
- Passive Monitoring Station

Industrial Facilities

- In-Situ Oil Sands
- Heavy Oil/Bitumen Well or Battery
- Conventional Oil Well or Battery
- Natural Gas Well or Battery
- Gas Plant or Gas Processing
- Compressor Station or Pipeline
- Agricultural Storage and Transfer
- Pulp and Paper
- Well (Not Associated with Batteries)



Service Layer Credits: Esri, CGIAR, USGS, Esri, USGS

INTEGRATED SAMPLING RESULTS SUMMARY

- **NMHC analytical results**

  None to report.

- **Passive analytical results**

	H_2S		SO_2	
Minimum (ppb)	0.18	#1	<0.1	#2
Maximum (ppb)	0.59	#4	0.4	#13
Average (ppb)	0.31	-	0.25	-

ANALYTICAL SAMPLING RESULTS

Passives

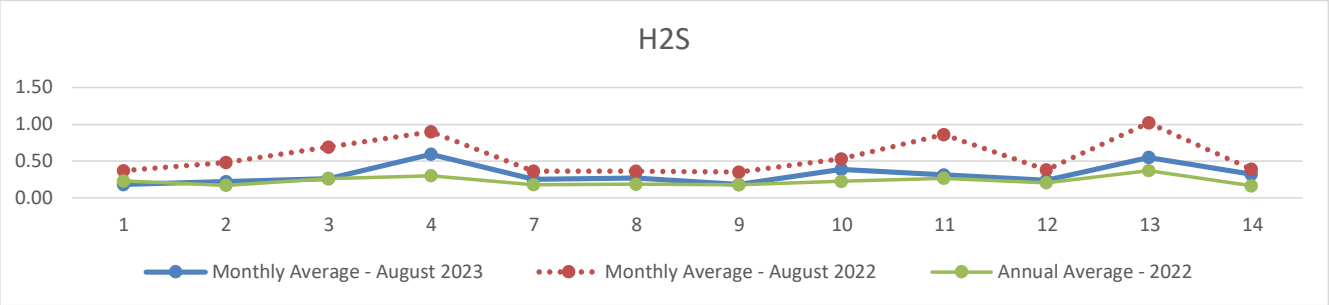
PEACE RIVER AREA MONITORING PROGRAM

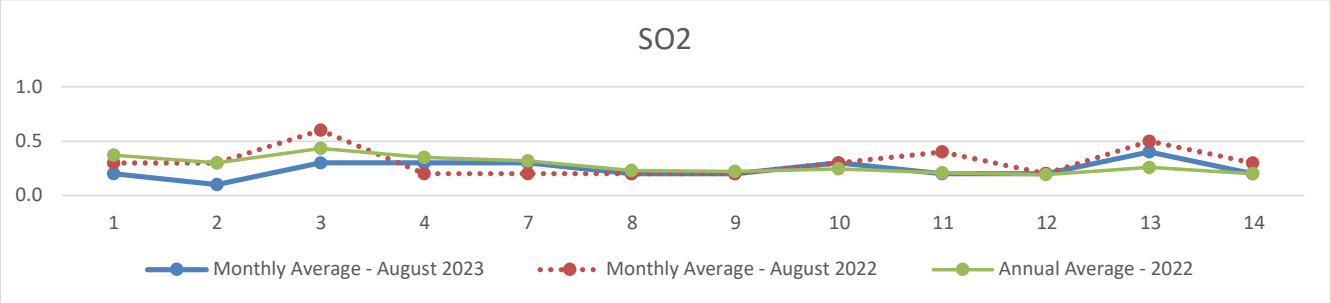
PRC Site - August 2023

Passive Results

	H_2S		SO_2	
Minimum (ppb)	0.18	#1	<0.1	#2
Maximum (ppb)	0.59	#4	0.4	#13
Average (ppb)	0.31	-	0.25	-

No.	Calculated Value	Calculated Value
1	0.18	0.2
2	0.22	<0.1
3	0.26	0.3
4	0.59	0.3
7	0.25	0.3
8	0.27	0.2
9	0.18	0.2
10	0.39	0.3
11	0.31	0.2
12	0.24	0.2
13	0.55	0.4
14	0.32	0.2
Reportable Detection Limit (RDL)	**0.02**	**0.1**





End of Report

Peace River Area Monitoring Program

AUGUST 2023

Ambient Air Monitoring

Certified Laboratory Analysis Report

LAB-PRAMP-202308

Operation and Maintenance:
Bureau Veritas Canada

Data Validation and Report:
Peace River Area Monitoring Program

September 19, 2023

Table of Contents

Passive Sampling Analytical Results 3
End of Report 10

Passive Sampling Analytical Results

6744 - 50 St. Edmonton AB Canada T6B 3M9

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Bureau Veritas Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Invoice To	Report To	Service Requested	Company Name / Project Name/LSD
Company Name	Name & Email Address	☐ RUSH (Please contact for TAT)	Company Name: Peace River
Contact Name		☐ REGULAR	Project Name/LSD: Peace River
Address			
City/Postal Code			
Phone/Fax#			

ANALYTICAL INFORMATION

Analysis Required

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) *PM/TSP Only*	SO2	H2S	NO2	O3	NH3	PM2.5	PM10	TSP	Dustfall				
1	01/08/23	8:00am	01/09/23	8:00am		X	X											
2	↓	↓	↓	↓		X	X											
3						X	X											
4						X	X											
7						X	X											
8						X	X											
9						X	X											
10						X	X											
11						X	X											
12						X	X											
13	↓		↓			X	X											
14		10:00am		10:00am		X	X											
Blank						X	X											
Blank						X	X											

Notes/Comments: Client 12521 / Scenario 18009

Sampled By Bo Guerin Phone/Email 618/880 Received By Bo Guerin Date/Time Sep. 1. 23 Project # CNRL PRC

Date Shipped Sep. 1. 23 Signature PO#

RECD RL 9/6/23 7:30

SO2 = 14 H2S = 14

Your Project #: 2023/08/01-2023/09/01
Site Location: PEACE RIVER COMPLEX

Attention: Michael and Lily

Peace River Area Monitoring Program Committee
Three Creeks
Suite 91, 305 –
4625 Varsity Drive NW
Calgary, AB
CANADA T3A0Z9

Report Date: 2023/09/15
Report #: R3395729
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C369757
Received: 2023/09/06, 07:30

Sample Matrix: Air
Samples Received: 12

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
H2S Passive Analysis	12	2023/09/12	2023/09/14	PTC SOP-00150	Passive H2S in ATM
SO2 Passive Analysis	12	2023/09/06	2023/09/14	PTC SOP-00149	Passive SO2 in ATM

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Rowena Geron
Project Manager Assistant
15 Sep 2023 14:02:58

Please direct all questions regarding this Certificate of Analysis to:
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

==========

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Branko Banjac, General Manager responsible for Alberta Petroleum laboratory operations.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C369757
Report Date: 2023/09/15

Peace River Area Monitoring Program Committee
Client Project #: 2023/08/01-2023/09/01
Site Location: PEACE RIVER COMPLEX
Sampler Initials: BG

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		BYH540	BYH541	BYH542	BYH543	BYH544	BYH545	BYH546		
Sampling Date		2023/08/01 08:00	2023/08/01 08:00	2023/08/01 08:00	2023/08/01 08:00	2023/08/01 08:00	2023/08/01 08:00	2023/08/01 08:00		
	UNITS	1	2	3	4	7	8	9	RDL	QC Batch
Passive Monitoring										
Calculated H2S	ppb	0.18	0.22	0.26	0.59	0.25	0.27	0.18	0.02	B103440
Calculated SO2	ppb	0.2	<0.1	0.3	0.3	0.3	0.2	0.2	0.1	B097060
RDL = Reportable Detection Limit										

Bureau Veritas ID		BYH547	BYH548	BYH549	BYH550	BYH551		
Sampling Date		2023/08/01 08:00	2023/08/01 08:00	2023/08/01 08:00	2023/08/01 08:00	2023/08/01 10:00		
	UNITS	10	11	12	13	14	RDL	QC Batch
Passive Monitoring								
Calculated H2S	ppb	0.39	0.31	0.24	0.55	0.32	0.02	B103440
Calculated SO2	ppb	0.3	0.2	0.2	0.4	0.2	0.1	B097060
RDL = Reportable Detection Limit								

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C369757
Report Date: 2023/09/15

Peace River Area Monitoring Program Committee
Client Project #: 2023/08/01-2023/09/01
Site Location: PEACE RIVER COMPLEX
Sampler Initials: BG

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
B097060	OZ	Spiked Blank	Calculated SO2			97	%	90 - 110
B097060	OZ	Method Blank	Calculated SO2		<0.1		ppb	
B103440	YYA	Spiked Blank	Calculated H2S			98	%	90 - 110

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

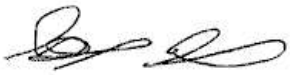
Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C369757
Report Date: 2023/09/15

Peace River Area Monitoring Program Committee
Client Project #: 2023/08/01-2023/09/01
Site Location: PEACE RIVER COMPLEX
Sampler Initials: BG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Steven Gloux, Senior Analyst

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

End of Report