



Peace River Area Monitoring Program

JANUARY 2021

Monthly Ambient Air Quality Monitoring Report

PRAMP-202101

Operation and Maintenance:

Bureau Veritas Canada

Data Validation and Report:

Peace River Area Monitoring Program

February 19, 2021

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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
Monitoring Notes during the Month of January 2021	6
986c Station	6
842b Station	6
Reno Station	7
AQHI – Cadotte Lake Station	7
VOCs Canister Sampling program:	8
Revisions to Alberta’s Ambient Air Quality Data Warehouse	8
Deviations from Authorized Monitoring Methods	10
Disclaimer	10
Certification	11
Map of PRAMP Continuous Monitoring Network	12
CONTINUOUS NETWORK EQUIPMENT AND MONITORING RESULTS SUMMARY	13
986c Station	14
842b Station	17
Reno Station	20
AQHI – Cadotte Lake Station	23
TABLES, CHARTS, WIND ROSES AND EQUIPMENT CALIBRATION RECORDS	26
986c STATION	27
842b STATION	69
RENO STATION	113
AQHI CADOTTE LAKE STATION	157
VOC CANISTER SAMPLING RESULTS	223
END OF REPORT	228

LIST OF ACRONYMS

AAAQOs	Alberta Ambient Air Quality Objectives
AEP	Alberta Environment and Parks
AMD	Air Monitoring Directive
AT	Ambient Temperature
BP	Barometric Pressure
CH ₄	Methane
EPEA	Environmental Protection and Enhancement Act
H ₂ S	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
SO ₂	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 Varsity Drive NW
Calgary, AB, T3A 0Z9
Phone #: 780-226-7068 / 587-225-2248
E-mail: pramptech@prampairshed.ca
www.prampairshed.ca

Alberta Environment and Parks (AEP)
11th Floor, Oxbridge Place
9820 106 Street
Edmonton, AB, T5K 2J6

February 19, 2021

RE: PRAMP – January 2021 Monthly Ambient Air Quality Monitoring Report

Enclosed is the January 2021 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 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.

NETWORK STATION SUMMARY

Listing of Continuous Monitoring Stations

The PRAMP continuous ambient air quality monitoring network stations are:

- 986c Station
- 842b Station
- Reno Station
- AQHI Cadotte Lake

Station ID	Station Name	Latitude	Longitude
1562	986c	56.36980	-116.92500
1561	842b	56.27406	-116.98129
1563	Reno	55.86936	-117.05739
1651	AQHI-Cadotte Lake	56.49022	-116.42739

Listing of Intermittent Monitoring Stations

- VOC Canister Sampling Station
 - 986c Station
 - 842b Station
 - Reno Station

Monitoring Notes during the Month of January 2021

986c 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.
- **All gas parameters:** The zero-span check results for the January 22 hour 6 check were not correctly recorded. Datalogger was restarted the same day, and a repeat zero-span check was completed during hour. One hour of downtime was recorded as a result.
- **THC/CH4/NMHC:** After hydrogen generator maintenance, which was performed on January 18, a series of flame-out event were observed. Troubleshooting was performed on January 19 to correct the issue. One hour of downtime was recorded as a result.

842b 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 TRS (78.8%). **AEP reference #: 375578.**
- **TRS:**
 - The analyzer span response went outside the check limits on January 1. A repeat zero-span check was completed on January 1 at hour 7 and 8; results failed the check requirements. Following a successful shut-down calibration on January 5, the convertor-to-analyzer tubing was changed, and the sample orifice was replaced. The analyzer was allowed to stabilize overnight. A post-repair calibration was successfully completed on January 6. Twenty-two hours of downtime were recorded due to this event.
 - The analyzer span response drifted low on January 23 and failed the repeat zero-span check later the day. A successful shut-down calibration could not be achieved on the Thermo 43iQTL TRS analyzer, s/n: 1200736630. On January 28, the analyzer was removed from the site, and a replacement Thermo 43i-TLE TRS analyzer, s/n: 1162460023, was installed and calibrated. Data were invalidated back to the last valid calibration check, which was January 23 hour 2. One hundred thirty-six hours of downtime were recorded due to this event.

Reno 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.
- **SO2:**
 - The analyzer showed a positive zero drift after the monthly calibration on November 3. The drift continued appearing after the December calibration. An as found points check was performed on December 23 in response to daily zero drift. This confirmed that the daily zero results were inaccurate and were not used for baseline corrections. As found zero results, which was obtained on December 23, were used for baseline correction. The drift was corrected during the January 7 site visit.
 - On February 7, the sample valve was cleaned, and the UV lamp was calibrated. Two hours of downtime were recorded due to this maintenance activity.
- **TRS:** The analyzer span response went outside the check limits on January 28. A repeat zero-span check, which was performed on January 29 hour 7, was back in control. An as-found-points check was completed to confirm the analyzer's functionality. The analyzer passed the check requirements. As the analyzer passed both the repeat zero-span check and the as-found-points check, data collected on January 28 were considered valid. No data were discarded. However, three hours of downtime were recorded due to additional quality checks.
- **THC/CH4/NMHC:**
 - The carrier gas cylinder was replaced following a control zero-span check on January 17. One hour of downtime was recorded as a result.
 - The analyzer started having a zero-drift issue on January 24 due to extreme cold temperatures. As a result, the zero check results between January 24 and January 31 were excluded from the use of the baseline correction.
 - Based on a review of all valid methane hourly averages that are available on the AEP Air Data Warehouse for the past 5 years and improvements in monitoring technology, PRAMP has changed its acceptability criteria for CH4; the acceptable lower concentration limit for CH4 concentration has changed from 1.8 ppm to 1.7 ppm. This change will affect the THC background concentration: the new THC background

concentration is 1.7ppm. As a result, THC and CH4 concentration that are recorded equal to or above 1.7 ppm are now considered valid, and data recorded below 1.7ppm will be discarded.

AQHI – Cadotte Lake 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.
- All parameters: Six hours of downtime were recorded on January 19 due to a power failure.
- **NOx/NO/NO2:** Due to calibration equipment errors, the multi-point calibration that attempted on January 19 was aborted. The analyzer was left offline overnight. A successful monthly calibration was completed on January 20 using an alternate calibration equipment. Fifteen hours of downtime were recorded due to this event.
- **THC/CH4/NMHC:**
 - The analyzer failed on January 16 hour 8 due to the depletion of the cylinder of carrier gas. The gas cylinder was replaced following a control zero-span check on January 17. Thirty-five hours of data were invalidated due to this event.
 - Data that were collected on January 20 hour 0 were considered invalid and were discarded as the analyzer was recovered from the power failure. One hour of downtime was recorded.

VOCs Canister Sampling program:

- The canister sampling program collects a 1-hour sample of air when the continuously measured methane (CH4) and/or non-methane hydrocarbon (NMHC) concentration reaches a specified trigger point. The current trigger points are 5.5 ppm for methane and 0.3 ppm for non-methane hydrocarbons. Both trigger points are based on real-time monitoring data that are averaged over a 5-minute period.
- On February 1, 2021, the methane-triggered canister program was paused pending analysis of the samples collected thus far. The methane triggered program was implemented two years ago with the objective of gathering data to help characterize air quality during elevated methane events (as detected by the continuous monitoring instruments). Over the last two years, PRAMP has collected over 20 samples; this is in the target range set out in the original project plan.
- The canister sample collection systems are in place at Station 986c, 842b, and the Reno Station; a canister sample collection system is not part of the suite of instruments currently deployed at the AQHI-Cadotte Lake Station.
- Sample analysis and analytical results were prepared and provided by InnoTech Alberta.
- In January, one NMHC-triggered event was recorded at the 986c station.

Station	Parameter	Date	Time	Concentration (ppm)
986c	Non-methane HC	Jan 8	11:30	0.30

- Non-methane Hydrocarbon-triggered sample was collected at the 986c station on January 8.

Sample Date/Time	2021-01-08 @11:30				
Canister Sample	Non-methane Hydrocarbon				
Canister ID	28886				
Method	NA-025	Method	NA-024	Method	AC-058
Maximum Reading (ppmv)	2.0 Methane	Maximum Reading (ppmv)	1.5 Hydrogen sulphide	Maximum Reading (ppmv)	397 Ethanol

- Blank sample was collected at the 986c station on January 8.

Sample Date/Time	2021-01-08 @11:30am				
Canister Sample	Blank				
Canister ID	28968				
Method	NA-025	Method	NA-024	Method	AC-058
Maximum Reading (ppmv)	-	Maximum Reading (ppmv)	-	Maximum Reading (ppmv)	1.2 Ethanol

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

At the Reno station, nearby trees exceed the height allowed under section 2.3 of the wind speed and wind direction siting criteria in Chapter 3 of the AMD. This non-conformance was documented in the updated station site documents. Further actions are being considered including siting the wind sensor so that it meets AMD Chapter 3 siting requirements, or obtaining written authorization from "The Director" to deviate from AMD Siting requirements.

Disclaimer

Baseline correction 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 Mike Bisaga in accordance with Chapter 9 of the Air Monitoring Directive (AMD 2016).

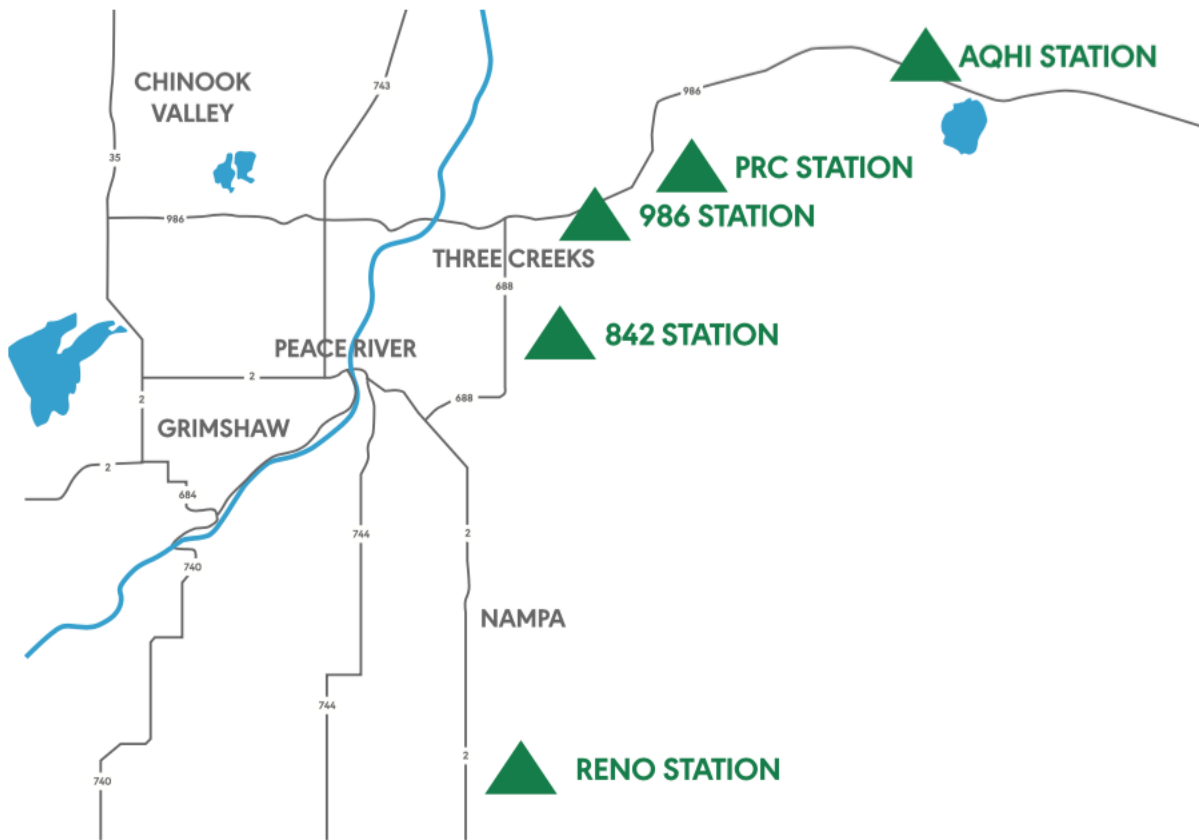
I certify that I have reviewed and verified this report and that the information is complete, accurate and representative of the monitoring results, reporting timeframe and the specified analysis, summarization and reporting requirements. I also certify that at the time of this report's submission, all air data have been electronically uploaded to Alberta'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

February 19, 2021

Map of PRAMP Continuous Monitoring Network



CONTINUOUS NETWORK EQUIPMENT AND MONITORING RESULTS SUMMARY

986c Station

Equipment Operation Summary

Parameter	Make / Model	Serial Number	
SO2	Thermo / 43iQTL	119358646	
- A successful monthly calibration was performed on January 18. - The zero-span check results for the January 22 hour 6 check were not correctly recorded. Datalogger was restarted the same day, and a repeat zero-span check was completed during hour. One hour of downtime was recorded as a result.			
TRS	Thermo / 43iQTL	1191833341	
- A successful monthly calibration was performed on January 18. - The zero-span check results for the January 22 hour 6 check were not correctly recorded. Datalogger was restarted the same day, and a repeat zero-span check was completed during hour. One hour of downtime was recorded as a result.			
THC/CH4/NMHC	Thermo / 55i	119358652	
- A successful monthly calibration was performed on January 18. The carrier gas cylinder was replaced during the time the calibration was performed. - After hydrogen generator maintenance, which was performed on January 18, a series of flame-out event were observed. Troubleshooting was performed on January 19 to correct the issue. One hour of downtime was recorded as a result. - The zero-span check results for the January 22 hour 6 check were not correctly recorded. Datalogger was restarted the same day, and a repeat zero-span check was completed during hour. One hour of downtime was recorded as a result.			
Relative Humidity (RH)	Rotronic / HC2-S3	20357528	
- Hourly data collected on January 12 hour 8 is missing due to a data polling error. One hour of downtime was recorded as a result. - The RH sensor was checked on January 18. The sensor passed the check requirements.			
Barometric Pressure (BP)	MetOne / 092	F3845	
- Hourly data collected on January 12 hour 8 is missing due to a data polling error. One hour of downtime was recorded as a result. - The BP sensor was checked on January 18. The sensor passed the check requirements.			

Parameter	Make / Model	Serial Number	
Ambient Temperature (AT)	Rotronic / HC2-S3	20357528	
- Hourly data collected on January 12 hour 8 is missing due to a data polling error. One hour of downtime was recorded as a result. - The AT sensor was checked on January 18. The sensor passed the check requirements.			
Station Temperature (ST)	Bureau Veritas Canada	N/A	
- Hourly data collected on January 12 hour 8 is missing due to a data polling error. One hour of downtime was recorded as a result. - No issue was identified this month.			
Wind Speed/Wind Direction (WS/ WD)	RM Young / 05305L	174795	
- Wind direction data contained in this report represents where the wind is coming from. - The annual wind system calibration was completed on July 16, 2020. - Hourly data collected on January 12 hour 8 is missing due to a data polling error. One hour of downtime was recorded as a result. - The anemometer sensor was checked on January 18. The sensor passed the check requirements.			

Monitored Data Summary for 986c 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	0.1	0	2	January 10 at hour 13	21.3	SSW	0.6	January 10	99.9	94.6
TRS (ppb)	10	3	-	-	-	-	0.09	0.00	0.35	January 30 at hour 2	4.3	ESE	0.22	January 31	99.9	94.6
THC (ppm)	-	-	-	-	-	-	1.99	1.83	2.50	January 30 at hour 9	2.9	SE	2.24	January 30	99.7	94.5
CH4 (ppm)	-	-	-	-	-	-	1.99	1.83	2.49	January 30 at hour 9	2.9	SE	2.23	January 30	99.7	94.5
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.09	January 18 at hour 17	12.5	SW	0.00	January 30	99.7	94.5
RH (%)	-	-	-	-	-	-	76.7	43	100	January 17 at hour 5	6.9	SW	97.0	January 17	100.0	100.0
BP (millibar)	-	-	-	-	-	-	938	914	952	January 14 at hour 10	9.7	SSW	949	January 14	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	-8.1	-28.3	5.9	January 19 at hour 14	31.8	SW	2.0	January 6	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	22.2	21.6	23.1	January 18 at hour 13	9.2	WSW	22.7	January 27	100.0	100.0
WSV (km/hr)	-	-	-	-	-	-	4.7	0.0	40.8	January 19 at hour 10	40.8	SW	24.1	January 19	100.0	100.0
WDV (sector)	-	-	-	-	-	-	207 (SSW)	-	-	-	-	-	-	-	100.0	100.0

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

Alberta Ambient Air Quality Objectives (AAAQOs) Exceedances at 986c Station

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

842b Station

Equipment Operation Summary

Parameter	Make / Model	Serial Number	
SO2	Thermo / 43iQTL	1200736629	
A successful monthly calibration was performed on January 5.			
TRS	Thermo 43iQTL / Thermo 43i-TLE	1200736630 / 1162460023	
- The analyzer span response went outside the check limits on January 1. A repeat zero-span check was completed on January 1 at hour 7 and 8; results failed the check requirements. Following a successful shut-down calibration on January 5, the convertor-to-analyzer tubing was changed, and the sample orifice was replaced. The analyzer was allowed to stabilize overnight. A post-repair calibration was successfully completed on January 6. Twenty-two hours of downtime were recorded due to this event. - The analyzer span response drifted low on January 23 and failed the repeat zero-span check later the day. A successful shut-down calibration could not be achieved on the Thermo 43iQTL TRS analyzer, s/n: 1200736630. On January 28, the analyzer was removed from the site, and a replacement Thermo 43i-TLE TRS analyzer, s/n: 1162460023, was installed and calibrated. Data were invalidated back to the last valid calibration check, which was January 23 hour 2. One hundred thirty-six hours of downtime were recorded due to this event.			
THC/CH4/NMHC	Thermo / 55i	1501663728	
A successful monthly calibration was performed on January 5.			
Relative Humidity (RH)	Rotronic / HC2-S3	20370767	
The RH sensor was checked on January 5. The sensor passed the check requirements.			
Barometric Pressure (BP)	MetOne / 092	Y23362	
The BP sensor was checked on January 5. The sensor passed the check requirements.			

Parameter	Make / Model	Serial Number	
Station Temperature (ST)	Bureau Veritas Canada	N/A	
No issue was identified this month.			
Ambient Temperature (AT)	Rotronic / HC2-S3	20370767	
The AT sensor was checked on January 5. The sensor passed the check requirements.			
Precipitation (Precip)	RM Young / 5202	15878	
The rain gauge was checked on January 5. The sensor passed the check requirements.			
Wind Speed/Wind Direction (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 December 16, 2020. - The anemometer sensor was checked on January 5. The sensor passed the check requirements.			

Monitored Data Summary for 842b 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	January 8 at hour 16	2.4	SSW	0.3	January 9	100.0	94.9
TRS (ppb)	10	3	-	-	-	-	0.67	0.13	2.41	January 4 at hour 22	5.4	NNW	2.10	January 4	78.8	74.0
THC (ppm)	-	-	-	-	-	-	1.92	1.79	2.99	January 31 at hour 5	1.9	ENE	2.36	January 31	100.0	94.9
CH4 (ppm)	-	-	-	-	-	-	1.92	1.79	2.80	January 31 at hour 5	1.9	ENE	2.31	January 31	100.0	94.9
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.19	January 31 at hour 5	1.9	ENE	0.05	January 31	100.0	94.9
RH (%)	-	-	-	-	-	-	72.0	37	97	January 17 at hour 8	7.1	WSW	91.3	January 2	100.0	100.0
BP (millibar)	-	-	-	-	-	-	936	912	951	January 14 at hour 11	9.9	SSW	948	January 18	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	-7.9	-29.0	6.1	January 19 at hour 14	31.8	WSW	2.1	January 6	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	22.4	21.1	23.4	January 30 at hour 2	1	E	22.8	January 30	100.0	100.0
Precipitation (mm)*	-	-	-	-	-	-	1.5	0.0	0.4	January 2 at hour 20	3.1	ENE	0.8	January 2	100.0	100.0
WSV (km/hr)	-	-	-	-	-	-	4.3	0.0	34.0	January 19 at hour 15	34	WSW	21.0	January 19	100.0	100.0
WDV (sector)	-	-	-	-	-	-	212 (SSW)	-	-	-	-	-	-	-	100.0	100.0

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 at 842b Station

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

Reno Station

Equipment Operation Summary

Parameter	Make / Model	Serial Number	
SO2	API / 100A	1502	
- Following a successful shut-down calibration on January 7, the sample valve was cleaned, and the UV lamp was calibrated. A post-repair calibration was completed afterwards. Two hours of downtime were recorded due to this maintenance activity. - The analyzer showed a positive zero drift after the monthly calibration on November 3. The drift continued appearing after the December calibration. An as found points check was performed on December 23 in response to daily zero drift. This confirmed that the daily zero results were inaccurate and were not used for baseline corrections. As found zero results, which was obtained on December 23, were used for baseline correction. The drift was corrected during the January 7 site visit.			
TRS	Thermo / 43i-TLE	1162460022	
- A successful monthly calibration was performed on January 7. - The analyzer span response went outside the check limits on January 28. A repeat zero-span check, which was performed on January 29 hour 7, was back in control. An as-found-points check was completed to confirm the analyzer's functionality. The analyzer passed the check requirements. As the analyzer passed both the repeat zero-span check and the as-found-points check, data collected on January 28 were considered valid. No data were discarded. However, three hours of downtime were recorded due to additional quality checks.			
THC/CH4/NMHC	Thermo / 55i	1505664392	
- A successful monthly calibration was performed on January 7. - The carrier gas cylinder was replaced following a control zero-span check on January 17. One hour of downtime was recorded as a result. - The analyzer started having a zero-drift issue on January 24 due to extreme cold temperatures. As a result, the zero check results between January 24 and January 31 were excluded from the use of the baseline correction.			

Parameter	Make / Model	Serial Number	
Relative Humidity (RH)	RM Young / 43172VC	60837897	
- No issue was identified this month. - The RH sensor was checked on January 7. The sensor passed the check requirements.			
Barometric Pressure (BP)	MetOne / 092	R12877	
- No issue was identified this month. - The BP sensor was checked on January 7. The sensor passed the check requirements.			
Ambient Temperature (AT)	RM Young / 43172VC	60837897	
- No issue was identified this month. - The AT sensor was checked on January 7. The sensor passed the check requirements.			
Station Temperature (ST)	Bureau Veritas Canada	N/A	
No issue was identified this month.			
Precipitation (Precip)	RM Young / 5202	TB1588	
- No issue was identified this month. - The rain gauge sensor was checked on January 7. The sensor passed the check requirements.			
Wind Speed/Wind Direction (WS/ WD)	RM Young / 5305VK	149769	
- Wind direction data contained in this report represents where the wind is coming from. - The annual wind system calibration was completed on June 17, 2020. - The anemometer was checked on January 7. The system passed the check requirements.			

Monitored Data Summary for Reno 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	0.8	0	6	January 11 at hour 22	10.9	SW	2.3	January 2	99.7	94.6
TRS (ppb)	10	3	-	-	-	-	0.16	0.00	0.94	January 29 at hour 12	3.6	S	0.38	January 29	99.6	94.3
THC (ppm)	-	-	-	-	-	-	1.90	1.77	2.51	January 5 at hour 8	4	S	2.05	January 5	99.9	95.0
CH4 (ppm)	-	-	-	-	-	-	1.90	1.77	2.51	January 5 at hour 8	4	S	2.05	January 5	99.9	95.0
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.01	January 30 at hour 18	1.1	SSE	0.00	January 30	99.9	95.0
RH (%)	-	-	-	-	-	-	67.4	34	100	January 17 at hour 5	7.4	SSW	93.3	January 17	100.0	100.0
BP (millibar)	-	-	-	-	-	-	933	909	949	January 14 at hour 11	6.8	SW	946	January 18	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	-7.7	-25.3	6.0	January 19 at hour 14	16.4	WSW	1.1	January 6	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	21.7	19.3	23.8	January 7 at hour 14	4.9	SSW	22.3	January 7	100.0	100.0
Precipitation (mm)*	-	-	-	-	-	-	5.3	0.0	1.0	January 1 at hour 11	6	NNE	2.0	January 19	100.0	100.0
WSV (km/hr)	-	-	-	-	-	-	3.2	0.1	22.6	January 19 at hour 16	22.6	WSW	11.2	January 19	100.0	100.0
WDV (sector)	-	-	-	-	-	-	214 (SSW)	-	-	-	-	-	-	-	100.0	100.0

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 at Reno Station

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

AQHI – Cadotte Lake Station

Equipment Operation Summary

Parameter	Make / Model	Serial Number	
SO ₂	Teledyne / T100	722	
A successful monthly calibration was performed on January 19.			
TRS	Thermo 43i-TLE	1152940011	
A successful monthly calibration was performed on January 19.			
NO _x /NO/NO ₂	Teledyne / T200	837	
Due to calibration equipment errors, the multi-point calibration that attempted on January 19 was aborted. The analyzer was left offline overnight. A successful monthly calibration was completed on January 20 using an alternate calibration equipment. Fifteen hours of downtime were recorded due to this event.			
O ₃	Teledyne / T400	824	
A successful monthly calibration was performed on January 20.			
THC/CH ₄ /NMHC	Thermo / 55i	1191032505	
- The analyzer failed on January 16 hour 8 due to the depletion of the cylinder of carrier gas. The gas cylinder was replaced following a control zero-span check on January 17. Thirty-five hours of data were invalidated due to this event. - Data that were collected on January 20 hour 0 were considered invalid and were discarded as the analyzer was recovered from the January 19's power failure event. One hour of downtime was recorded. - A successful monthly calibration was performed on January 20.			
PM 2.5	Teledyne / T640	318	
A successful monthly calibration/audit was performed on January 19.			

Parameter	Make / Model	Serial Number	
Relative Humidity (RH)	Vaisala / HMP155	N2910506	
- No issue was identified this month. - The sensor was checked on January 19. The sensor passed the check requirements.			
Ambient Temperature (AT)	Vaisala / HMP155	N2910506	
- No issue was identified this month. - The sensor was checked on January 19. The sensor passed the check requirements.			
Station Temperature (ST)	Bureau Veritas Canada	N/A	
No issue was identified this month.			
Wind Speed/Wind Direction (WS/ WD)	RM Young 05305AQ	174801	
- Wind direction data contained in this report represents where the wind is coming from. - The annual wind system calibration was completed on June 18, 2020. - No issue was identified this month. - The anemometer sensors were checked on January 19. The sensors passed the check requirements.			

Monitored Data Summary for AQHI - Cadotte Lake 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	January 31 at hour 22	6.3	E	0.0	January 31	99.2	94.1
TRS (ppb)	10	3	-	-	-	-	0.54	0.31	4.10	January 11 at hour 11	2	ENE	1.04	January 11	99.2	93.9
NOx (ppb)	-	-	-	-	-	-	2.6	0	29	January 8 at hour 10	0.4	E	8.9	January 29	97.2	91.6
NO (ppb)	-	-	-	-	-	-	0.6	0	22	January 8 at hour 10	0.4	E	3.0	January 29	97.2	91.6
NO2 (ppb)	159	-	-	0	-	-	2.0	0	17	January 28 at hour 23	0	N	6.0	January 29	97.2	91.6
O3 (ppb)	76	-	-	0	-	-	24.2	0	44	January 11 at hour 19	16.6	SW	37.7	January 20	99.2	94.1
THC (ppm)	-	-	-	-	-	-	1.98	1.89	2.28	January 31 at hour 16	2.1	SE	2.18	January 31	94.4	89.5
CH4 (ppm)	-	-	-	-	-	-	1.97	1.89	2.21	January 31 at hour 16	2.1	SE	2.14	January 31	94.4	89.5
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.16	January 31 at hour 0	0.3	NE	0.04	January 31	94.4	89.5
PM2.5 (µg/m3)	80	30	-	0	0	-	4.2	0.1	51.7	January 30 at hour 16	2.4	SSE	26.8	January 31	99.2	99.1
RH (%)	-	-	-	-	-	-	75.9	45	96	January 17 at hour 10	2.2	WNW	92.8	January 17	99.2	99.2
Ext. Temp. (°C)	-	-	-	-	-	-	-10.2	-33.3	7.3	January 19 at hour 11	26	WSW	1.9	January 19	99.2	99.2
Stn. Temp. (°C)	-	-	-	-	-	-	23.0	21.1	24.8	January 29 at hour 2	0	W	23.4	January 20	99.2	99.2
WSV (km/hr)	-	-	-	-	-	-	1.3	0.0	30.6	January 19 at hour 12	30.6	WSW	16.9	January 19	99.2	99.2
WDV (sector)	-	-	-	-	-	-	248 (WSW)	-	-	-	-	-	-	-	99.2	99.2

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

Alberta Ambient Air Quality Objectives (AAAQOs) Exceedances at AQHI - Cadotte Lake Station

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

TABLES, CHARTS, WIND ROSES AND EQUIPMENT CALIBRATION RECORDS

986c STATION



PEACE RIVER AREA MONITORING PROGRAM

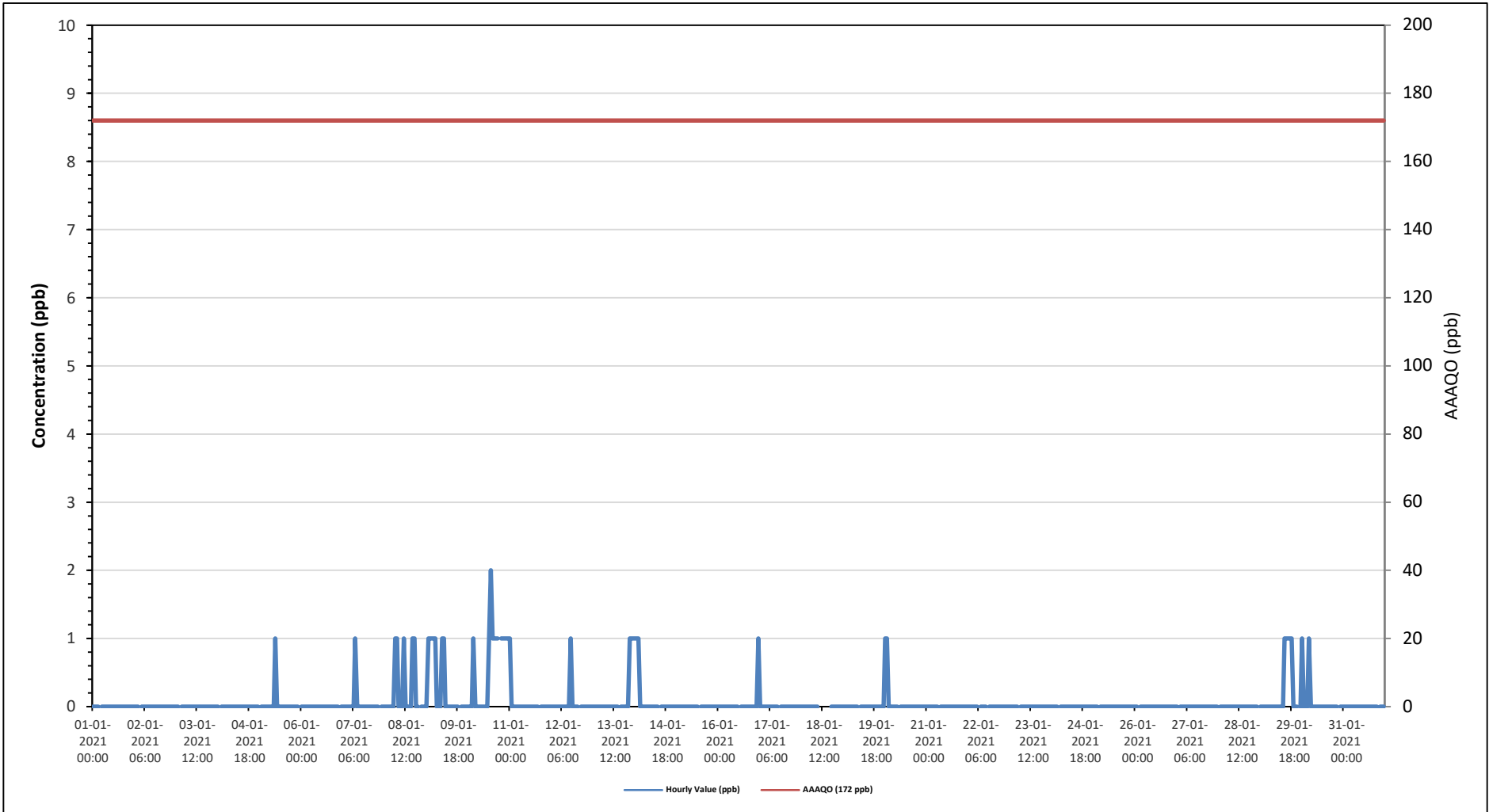
986c Station - January 2021

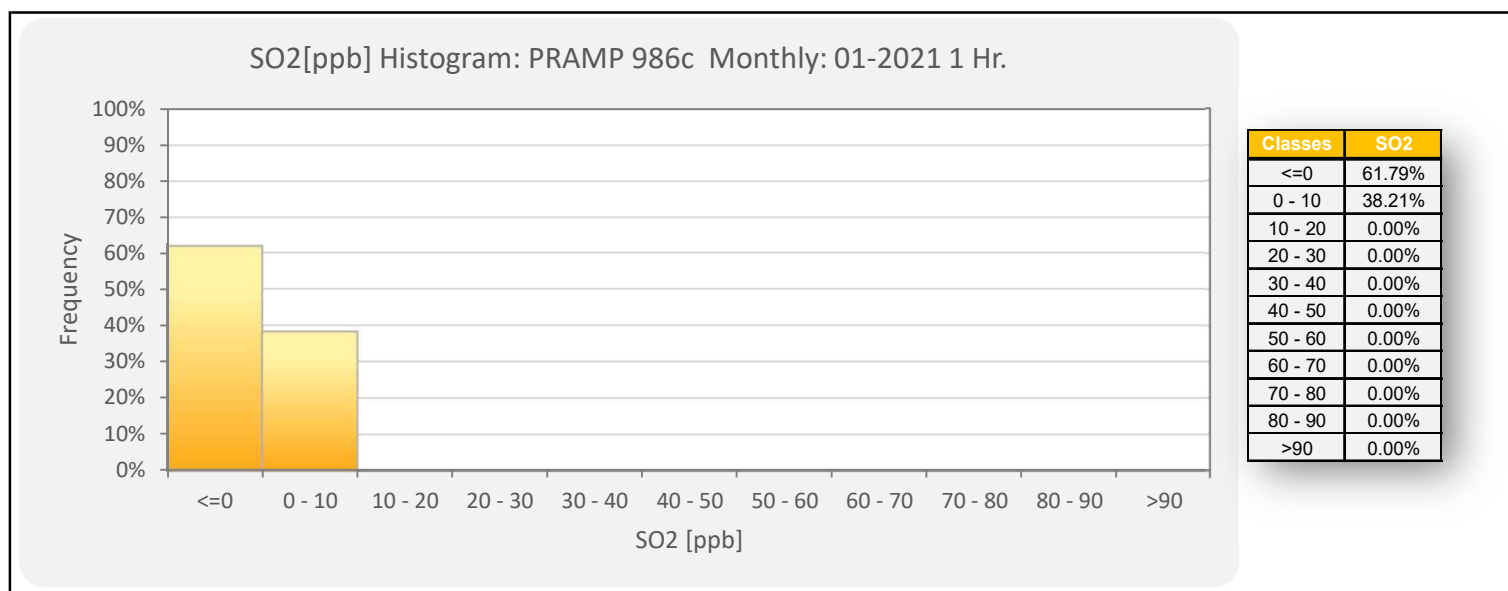
Summary of Hourly Averages

SULPHUR DIOXIDE (SO₂) 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 Exceedance:				0								
Maximum Hourly Value:				2 ppb on January 10 at hour 13				Hours in Service:				744																
Maximum Daily Value:				0.6 ppb on January 10				Hours of Data:				704																
Minimum Hourly Value:				0 ppb on January 1 at hour 0				Hours of Missing Data:				1																
Minimum Daily Value:				0.0 ppb on January 1				Hours of Calibration:				39																
Monthly Average:				0.1 ppb				Operational Uptime:				99.9																
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
Jan 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	
Jan 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	
Jan 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	
Jan 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	
Jan 5	S	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	1	0.0
Jan 6	0	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	
Jan 7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	S	S	0	0	1	0.0	
Jan 8	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	1	1	0	0	S	S	0	0	0	0	1	0.2	
Jan 9	0	1	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	S	S	0	0	0	0	0	1	0.3	
Jan 10	0	0	0	1	0	0	0	0	0	0	0	1	2	1	1	1	1	S	S	1	1	1	1	1	1	2	0.6	
Jan 11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	S	0	0	0	0	0	0	1	0.0	
Jan 12	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	S	S	0	0	0	0	0	0	1	0.0	
Jan 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	S	0	0	0	0	1	1	1	0.1	
Jan 14	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	S	0	0	0	0	0	0	1	0.1	
Jan 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	S	0	0	0	0	0	0	0	0.0	
Jan 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	S	0	0	0	0	0	0	1	0.0	
Jan 17	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	S	S	0	0	0	0	0	0	0	0.0	
Jan 18	0	0	0	0	0	0	0	0	0	0	0	S	C	C	C	C	C	C	C	0	0	0	0	0	0	0	-	
Jan 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	
Jan 20	1	1	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	
Jan 21	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	
Jan 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	
Jan 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	
Jan 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	
Jan 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	
Jan 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	
Jan 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	
Jan 28	S	0	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	
Jan 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	S	S	0	1	0.2	
Jan 30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	1	0.1	
Jan 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	1	1	1	1	1	1	1	1	0	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Diurnal Average	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance											
K	Collection Error							N	No Data (Machine Not in Service)							Y	Routine Maintenance											
X	InValid Data (Equipment Malfunction /Recovery)							NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)							P	Power Failure											
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.																												

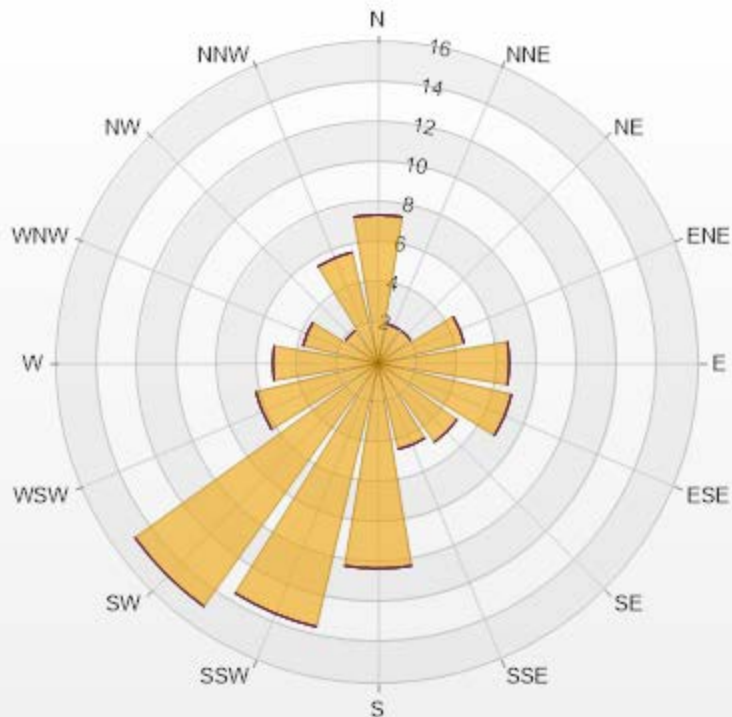
Timeseries Chart of Hourly Average for SO2 - 986c Station





Wind: PRAMP 986c Poll.: PRAMP 986c-SO2[ppb] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.62% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	7.39	0	0	0	0	7.39
NNE	1.99	0	0	0	0	1.99
NE	1.99	0	0	0	0	1.99
ENE	4.4	0	0	0	0	4.4
E	6.53	0	0	0	0	6.53
ESE	6.82	0	0	0	0	6.82
SE	4.83	0	0	0	0	4.83
SSE	4.4	0	0	0	0	4.4
S	10.23	0	0	0	0	10.23
SSW	13.49	0	0	0	0	13.49
SW	14.91	0	0	0	0	14.91
WSW	6.25	0	0	0	0	6.25
W	5.26	0	0	0	0	5.26
WNW	3.84	0	0	0	0	3.84
NW	1.99	0	0	0	0	1.99
NNW	5.68	0	0	0	0	5.68
Summary	100	0	0	0	0	100



PRAMP-202101

Page 32 of 228

% Icon Classes (ppb)

100 0-10

0 10-50

0 50-100

0 100-172

0 >172.0



PEACE RIVER AREA MONITORING PROGRAM

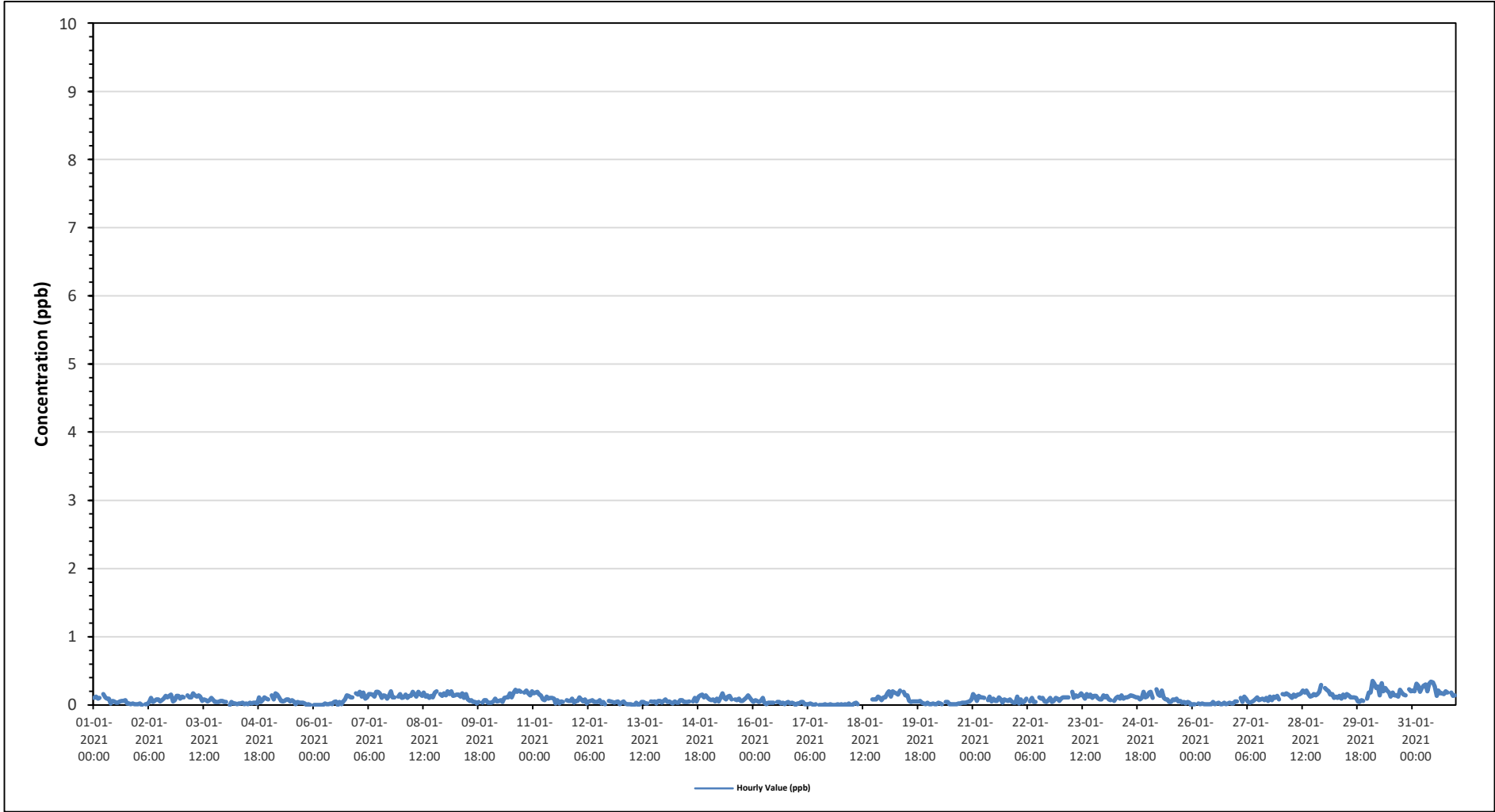
986c Station - January 2021

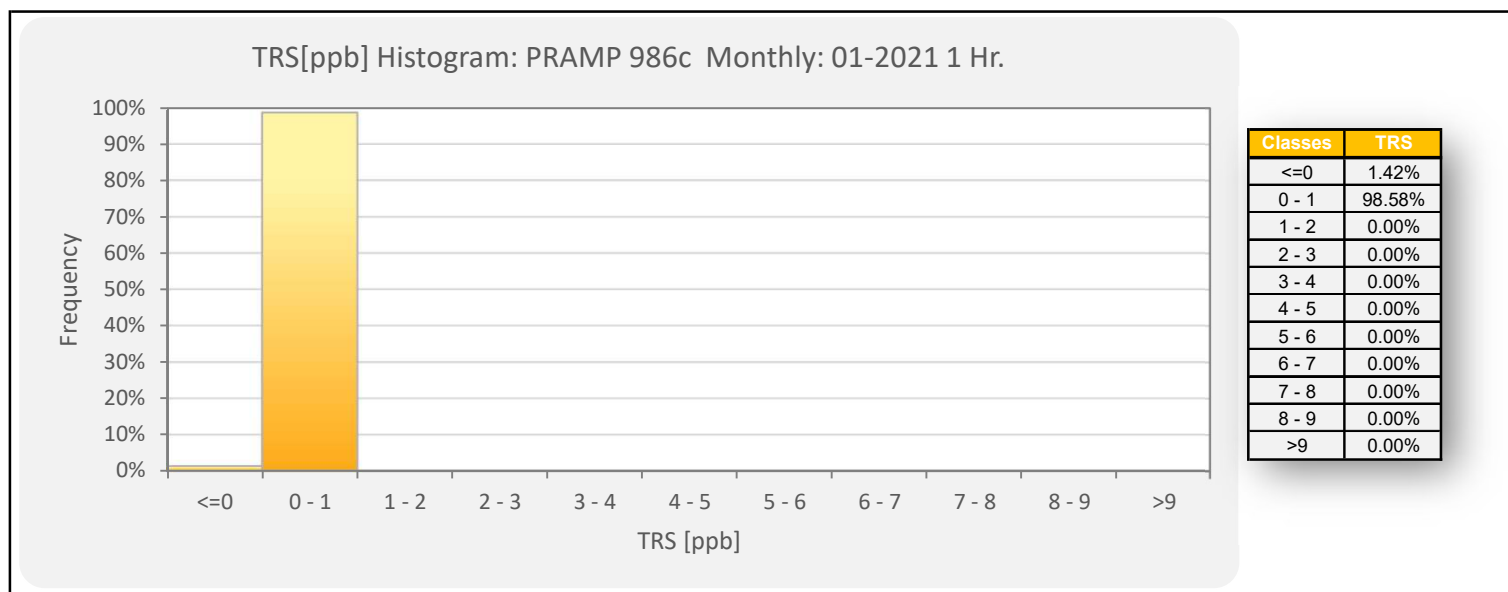
Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

Alberta Ambient Air Quality Objectives (AAAQO) for H2S: 1-Hour 10 ppb, 24-Hour 3 ppb																												
Number of 1-Hour Exceedances:					0					Number of 24-Hour Exceedances:					0													
Maximum Hourly Value:					0.35 ppb on January 30 at hour 2					Hours in Service:					744													
Maximum Daily Value:					0.22 ppb on January 31					Hours of Data:					704													
Minimum Hourly Value:					0.00 ppb on January 2 at hour 2					Hours of Missing Data:					1													
Minimum Daily Value:					0.01 ppb on January 17					Hours of Calibration:					39													
Monthly Average:					0.09 ppb					Operational Uptime:					99.9													
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
Jan 1	0.1	0.12	0.09	0.1	S	0.16	0.11	0.09	0.09	0.02	0.06	0.05	0.03	0.03	0.05	0.06	0.06	0.07	0.02	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.16	0.06
Jan 2	0.01	0.02	0	S	0.01	0.01	0.04	0.1	0.04	0.06	0.08	0.08	0.05	0.07	0.09	0.13	0.11	0.13	0.15	0.05	0.07	0.13	0.13	0.09	0.00	0.15	0.07	
Jan 3	0.12	0.11	S	0.14	0.11	0.11	0.17	0.14	0.12	0.14	0.12	0.06	0.08	0.07	0.05	0.07	0.1	0.07	0.04	0.04	0.04	0.06	0.06	0.04	0.04	0.17	0.09	
Jan 4	0.04	S	0	0.04	0.02	0.02	0.01	0.02	0.02	0.03	0.01	0.02	0.01	0.03	0.02	0.03	0.03	0.02	0.11	0.04	0.07	0.11	0.09	0.08	0.00	0.11	0.04	
Jan 5	S	0.14	0.08	0.17	0.15	0.11	0.06	0.05	0.06	0.08	0.08	0.05	0.07	0.05	0.01	0.04	0.03	0.03	0.03	0.02	0	0.01	0	S	0.00	0.17	0.06	
Jan 6	0	0	0	0	0	0	0.02	0.01	0.01	0.02	0.01	0.04	0.05	0	0.04	0.01	0.05	0.08	0.14	0.13	0.11	0.11	S	0.17	0.00	0.17	0.04	
Jan 7	0.15	0.19	0.12	0.18	0.09	0.11	0.16	0.16	0.15	0.12	0.19	0.19	0.17	0.1	0.14	0.13	0.09	0.13	0.2	0.11	0.11	S	0.12	0.16	0.09	0.20	0.14	
Jan 8	0.1	0.11	0.15	0.1	0.13	0.13	0.19	0.15	0.12	0.19	0.16	0.13	0.18	0.12	0.14	0.1	0.13	0.11	0.18	0.2	S	0.16	0.13	0.17	0.10	0.20	0.14	
Jan 9	0.14	0.2	0.16	0.2	0.13	0.14	0.15	0.15	0.12	0.17	0.1	0.16	0.08	0.06	0.07	0.04	0.04	0.02	0.04	S	0.03	0.07	0.07	0.03	0.02	0.20	0.10	
Jan 10	0.03	0.03	0.05	0.09	0.05	0.06	0.07	0.04	0.1	0.11	0.11	0.17	0.11	0.18	0.22	0.19	0.21	0.19	S	0.18	0.21	0.17	0.14	0.2	0.03	0.22	0.13	
Jan 11	0.17	0.18	0.19	0.15	0.14	0.08	0.07	0.12	0.09	0.1	0.1	0.09	0.02	0.07	0.02	0.05	0.04	S	0.07	0.06	0.06	0.09	0.03	0.06	0.02	0.19	0.09	
Jan 12	0.06	0.11	0.08	0.05	0.08	0.02	0.05	0.06	0.07	0.04	0.04	0.04	0.07	0.02	0.04	0.01	S	0.06	0.05	0.04	0.03	0.04	0.05	0.01	0.01	0.11	0.05	
Jan 13	0.03	0.05	0.02	0.01	0.01	0.01	0	0	0.03	0	0.01	0.04	0.04	0.02	0.02	S	0.05	0.04	0.05	0.02	0.06	0.06	0.03	0.06	0.00	0.06	0.03	
Jan 14	0.08	0.04	0.05	0.03	0.02	0.05	0.03	0.03	0.07	0.07	0.04	0.04	0.04	0.05	S	0.05	0.1	0.05	0.12	0.14	0.15	0.11	0.14	0.1	0.02	0.15	0.07	
Jan 15	0.08	0.07	0.08	0.05	0.09	0.05	0.1	0.17	0.1	0.08	0.12	0.13	0.08	S	0.08	0.07	0.09	0.06	0.06	0.08	0.1	0.14	0.11	0.07	0.05	0.17	0.09	
Jan 16	0.04	0.07	0.06	0.04	0.06	0.1	0.03	0.01	0.03	0.03	0.03	0.03	S	0.04	0.04	0.02	0.03	0.01	0.03	0.04	0.02	0.03	0.02	0	0.00	0.10	0.04	
Jan 17	0.02	0.02	0.04	0.04	0.01	0.01	0.01	0.02	0.01	0	0.01	S	0	0	0	0.01	0	0	0.01	0	0	0	0.01	0	0.00	0.04	0.01	
Jan 18	0.01	0	0.01	0	0.02	0	0	0.02	0.03	0.01	S	C	C	C	C	C	C	0.08	0.08	0.08	0.12	0.1	0.07	0.11	0.00	0.12	-	
Jan 19	0.11	0.17	0.2	0.12	0.2	0.18	0.17	0.15	0.21	S	0.19	0.14	0.14	0.06	0.04	0.05	0.05	0.05	0.05	0.06	0.03	0.02	0.01	0.03	0.01	0.21	0.11	
Jan 20	0.01	0.01	0.02	0.01	0.01	0.03	0.02	0.01	S	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.04	0.05	0.08	0.01	0.08	0.02	
Jan 21	0.16	0.12	0.06	0.13	0.11	0.11	0.1	S	0.07	0.12	0.05	0.09	0.06	0.06	0.11	0.08	0.03	0.08	0.07	0.06	0.08	0.05	0.03	0.03	0.03	0.16	0.08	
Jan 22	0.12	0.02	0.08	0.03	0.05	0.09	S	0.05	0.1	0.04	0.04	NRM	0.11	0.09	0.1	0.05	0.04	0.07	0.1	0.04	0.06	0.1	0.09	0.06	0.02	0.12	0.07	
Jan 23	0.09	0.11	0.11	0.11	0.11	S	0.19	0.1	0.14	0.12	0.14	0.17	0.13	0.09	0.16	0.12	0.15	0.1	0.13	0.13	0.1	0.08	0.08	0.14	0.08	0.19	0.12	
Jan 24	0.11	0.13	0.08	0.07	S	0.06	0.1	0.12	0.09	0.14	0.09	0.11	0.11	0.12	0.14	0.13	0.12	0.11	0.11	0.08	0.1	0.19	0.11	0.12	0.06	0.19	0.11	
Jan 25	0.18	0.19	0.1	S	0.23	0.15	0.13	0.21	0.1	0.08	0.08	0.04	0.04	0.08	0.07	0.09	0.05	0.06	0.03	0.04	0.02	0.04	0.03	0	0.00	0.23	0.09	
Jan 26	0.01	0.01	S	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.04	0.01	0.02	0.03	0.01	0.01	0.03	0.01	0.02	0.03	0.02	0.02	0.05	0.01	0.05	0.02	
Jan 27	0.05	S	0.1	0.04	0.12	0.09	0.04	0.03	0.04	0.06	0.08	0.11	0.07	0.08	0.09	0.07	0.1	0.06	0.12	0.07	0.12	0.1	0.13	0.08	0.03	0.13	0.08	
Jan 28	S	0.16	0.15	0.17	0.15	0.13	0.1	0.15	0.12	0.15	0.15	0.17	0.21	0.18	0.21	0.16	0.12	0.13	0.16	0.14	0.16	0.19	0.29	S	0.10	0.29	0.16	
Jan 29	0.25	0.22	0.2	0.15	0.16	0.1	0.12	0.1	0.13	0.09	0.15	0.11	0.16	0.14	0.11	0.11	0.11	0.1	0.05	0.04	0.07	0.06	S	0.09	0.04	0.25	0.12	
Jan 30	0.18	0.18	0.35	0.31	0.25	0.27	0.14	0.32	0.2	0.25	0.21	0.18	0.12	0.18	0.14	0.14	0.12	0.22	0.18	0.15	0.14	S	0.23	0.2	0.12	0.35	0.20	
Jan 31	0.21	0.2	0.31	0.28	0.19	0.25	0.28	0.3	0.2	0.31	0.34	0.33	0.27	0.13	0.21	0.17	0.17	0.16	0.2	0.18	S	0.18	0.13	0.14	0.13	0.34	0.22	
Diurnal Maximum	0.25	0.22	0.35	0.31	0.25	0.27	0.28	0.32	0.21	0.31	0.34	0.33	0.27	0.18	0.22	0.19	0.21	0.22	0.20	0.20	0.21	0.19	0.29	0.20				
Diurnal Average	0.09	0.10	0.10	0.10	0.09	0.09	0.09	0.10	0.09	0.09	0.09	0.10	0.09	0.07	0.08	0.08	0.08	0.08	0.09	0.08	0.07	0.09	0.08	0.08				
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance											
K	Collection Error							N	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.																												

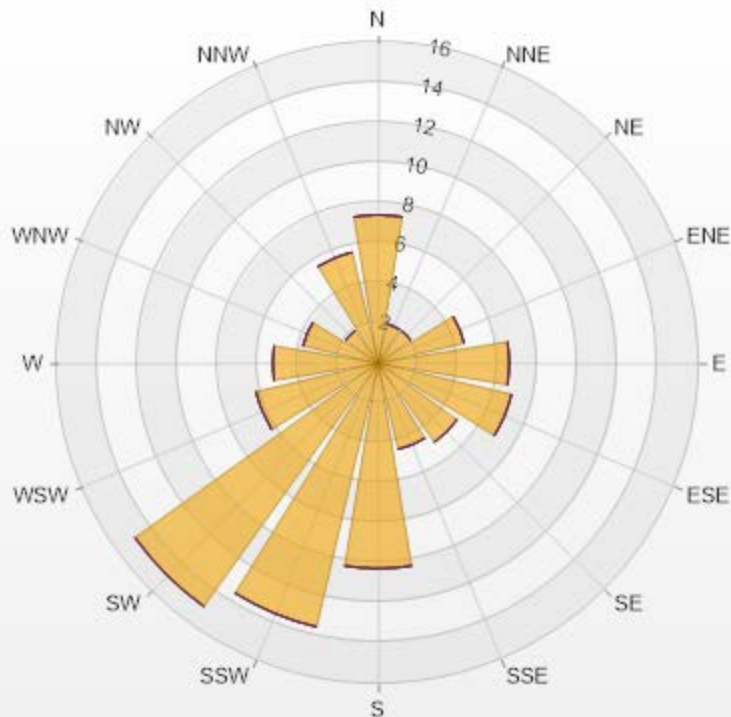
Timeseries Chart of Hourly Average for TRS - 986c Station





Wind: PRAMP 986c Poll.: PRAMP 986c-TRS[ppb] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.62% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	7.39	0	0	0	0	7.39
NNE	1.99	0	0	0	0	1.99
NE	1.99	0	0	0	0	1.99
ENE	4.4	0	0	0	0	4.4
E	6.53	0	0	0	0	6.53
ESE	6.82	0	0	0	0	6.82
SE	4.83	0	0	0	0	4.83
SSE	4.4	0	0	0	0	4.4
S	10.23	0	0	0	0	10.23
SSW	13.49	0	0	0	0	13.49
SW	14.91	0	0	0	0	14.91
WSW	6.25	0	0	0	0	6.25
W	5.26	0	0	0	0	5.26
WNW	3.84	0	0	0	0	3.84
NW	1.99	0	0	0	0	1.99
NNW	5.68	0	0	0	0	5.68
Summary	100	0	0	0	0	100



PRAMP-202101

Page 37 of 228

% Icon Classes (ppb)

100 0-2

0 2-5

0 5-10

0 10-50

0 >50.0



PEACE RIVER AREA MONITORING PROGRAM

986c Station - January 2021

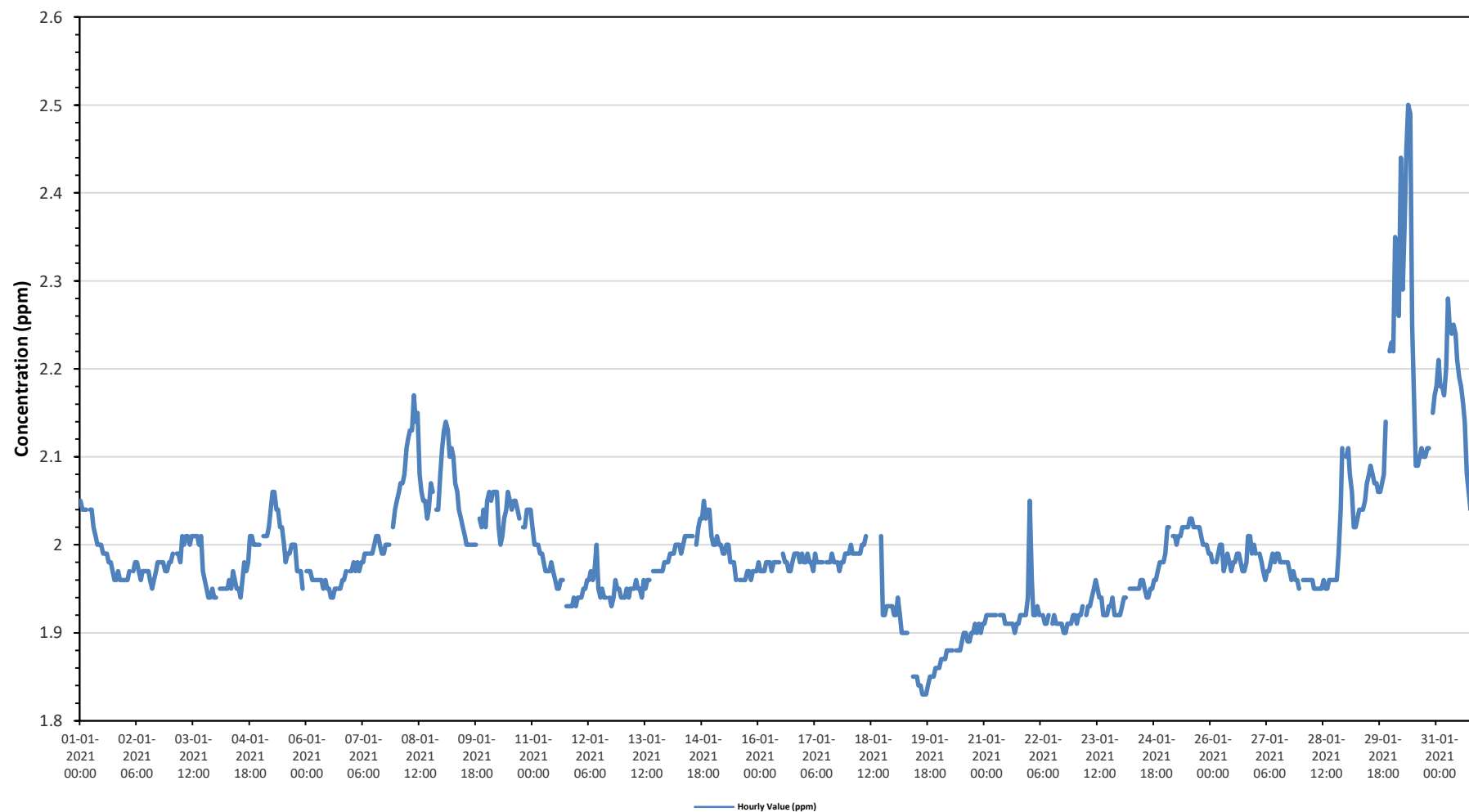
Summary of Hourly Averages

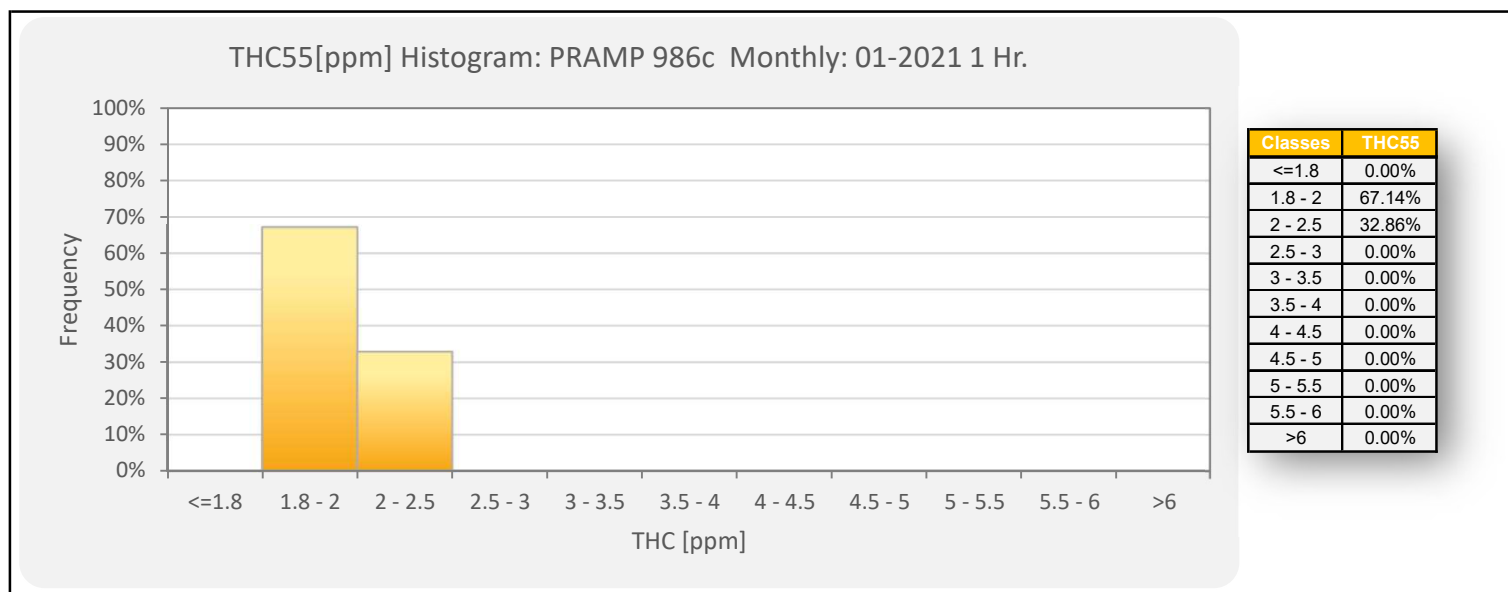
TOTAL HYDROCARBONS (THC) in ppm

Maximum Hourly Value:										2.50 ppm on January 30 at hour 9		Hours in Service:										744						
Maximum Daily Value:										2.24 ppm on January 30		Hours of Data:										703						
Minimum Hourly Value:										1.83 ppm on January 19 at hour 15		Hours of Missing Data:										2						
Minimum Daily Value:										1.87 ppm on January 19		Hours of Calibration:										39						
Monthly Average:										1.99 ppm		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	
Jan 1	2.05	2.04	2.04	2.04	S	2.04	2.04	2.02	2.01	2.00	2.00	2.00	1.99	1.99	1.99	1.98	1.98	1.97	1.96	1.96	1.97	1.96	1.96	1.96	1.96	1.96	2.05	2.00
Jan 2	1.96	1.96	1.97	S	1.97	1.98	1.98	1.97	1.96	1.97	1.97	1.97	1.97	1.96	1.95	1.96	1.97	1.98	1.98	1.98	1.98	1.97	1.97	1.98	1.95	1.98	1.97	
Jan 3	1.98	1.99	S	1.99	1.99	1.98	2.01	2.00	2.01	2.01	2.00	2.01	2.01	2.01	2.01	2.00	2.01	1.97	1.96	1.95	1.94	1.94	1.95	1.94	1.94	2.01	1.99	
Jan 4	1.94	S	S	1.95	1.95	1.95	1.95	1.95	1.96	1.95	1.97	1.96	1.95	1.95	1.94	1.96	1.98	1.97	1.98	2.01	2.01	2.00	2.00	2.00	2.00	2.01	1.97	
Jan 5	S	2.01	2.01	2.01	2.02	2.04	2.06	2.06	2.04	2.04	2.02	2.02	2.00	1.98	1.99	1.99	2.00	2.00	2.00	1.97	1.97	1.97	1.95	S	1.95	2.06	2.01	
Jan 6	1.97	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.95	1.96	1.95	1.95	1.94	1.94	1.95	1.95	1.95	1.96	1.96	1.97	S	1.97	1.94	1.97	1.96	
Jan 7	1.97	1.98	1.97	1.98	1.97	1.98	1.98	1.99	1.99	1.99	1.99	1.99	2.00	2.01	2.01	2.00	1.99	1.99	2.00	2.00	2.00	S	2.02	2.04	1.97	2.04	1.99	
Jan 8	2.05	2.06	2.07	2.07	2.08	2.11	2.12	2.13	2.13	2.17	2.14	2.15	2.08	2.06	2.05	2.05	2.03	2.04	2.07	2.06	S	2.04	2.04	2.08	2.03	2.17	2.08	
Jan 9	2.11	2.13	2.14	2.13	2.10	2.11	2.10	2.07	2.06	2.04	2.03	2.02	2.01	2.00	2.00	2.00	2.00	2.00	2.00	S	2.03	2.02	2.04	2.02	2.00	2.14	2.05	
Jan 10	2.05	2.06	2.05	2.06	2.06	2.06	2.02	2.00	2.01	2.03	2.04	2.06	2.05	2.04	2.05	2.05	2.04	2.03	S	2.02	2.02	2.04	2.04	2.04	2.00	2.06	2.04	
Jan 11	2.02	2.00	2.00	2.00	1.99	1.99	1.98	1.97	1.97	1.97	1.98	1.97	1.96	1.95	1.95	1.96	1.96	S	1.93	1.93	1.93	1.93	1.94	1.93	1.93	2.02	1.97	
Jan 12	1.94	1.94	1.94	1.95	1.95	1.96	1.96	1.97	1.96	1.97	2.00	1.95	1.94	1.95	1.94	1.94	S	1.94	1.93	1.94	1.96	1.95	1.95	1.94	1.93	2.00	1.95	
Jan 13	1.94	1.94	1.95	1.94	1.95	1.95	1.95	1.96	1.95	1.95	1.94	1.96	1.95	1.96	1.96	S	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.98	1.94	1.98	1.96	
Jan 14	1.98	1.99	1.99	1.99	2.00	2.00	2.00	1.99	2.00	2.01	2.01	2.01	2.01	2.01	S	2.00	2.02	2.03	2.03	2.05	2.03	2.04	2.04	2.01	1.98	2.05	2.01	
Jan 15	2.00	2.00	2.01	2.00	2.00	1.99	1.99	2.00	2.00	1.98	1.98	1.98	1.96	S	1.96	1.96	1.96	1.96	1.97	1.97	1.96	1.97	1.97	1.97	1.96	2.01	1.98	
Jan 16	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.97	1.98	1.98	1.98	1.98	S	1.99	1.98	1.98	1.97	1.97	1.98	1.99	1.99	1.99	1.98	1.99	1.97	1.99	1.98	
Jan 17	1.98	1.98	1.99	1.98	1.98	1.97	1.99	1.98	1.98	1.98	1.98	S	1.98	1.98	1.98	1.99	1.98	1.98	1.98	1.97	1.98	1.98	1.99	1.99	1.97	1.99	1.98	
Jan 18	1.99	2.00	1.99	1.99	1.99	1.99	1.99	2.00	2.00	2.01	S	C	C	C	C	C	C	C	2.01	1.92	1.92	1.93	1.93	1.93	1.92	2.01	-	
Jan 19	1.92	1.92	1.94	1.92	1.90	1.90	1.90	1.90	NRM	S	1.85	1.85	1.85	1.84	1.84	1.83	1.83	1.83	1.84	1.85	1.85	1.85	1.86	1.86	1.83	1.94	1.87	
Jan 20	1.86	1.87	1.87	1.87	1.88	1.88	1.88	1.88	S	1.88	1.88	1.88	1.89	1.90	1.90	1.89	1.89	1.90	1.90	1.91	1.90	1.91	1.90	1.91	1.86	1.91	1.89	
Jan 21	1.91	1.92	1.92	1.92	1.92	1.92	1.92	S	1.92	1.92	1.92	1.91	1.91	1.91	1.91	1.91	1.90	1.91	1.91	1.92	1.92	1.92	1.92	1.94	1.90	1.94	1.92	
Jan 22	2.05	1.96	1.92	1.92	1.93	1.92	S	1.92	1.91	1.91	1.92	NRM	1.91	1.92	1.91	1.91	1.91	1.91	1.90	1.90	1.91	1.91	1.91	1.92	1.90	2.05	1.92	
Jan 23	1.92	1.91	1.92	1.92	1.93	S	1.92	1.93	1.93	1.94	1.95	1.96	1.95	1.94	1.94	1.92	1.92	1.92	1.93	1.93	1.94	1.92	1.92	1.92	1.91	1.96	1.93	
Jan 24	1.92	1.93	1.94	1.94	S	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.95	1.94	1.94	1.95	1.95	1.96	1.96	1.97	1.98	1.98	1.98	1.92	1.98	1.95	
Jan 25	1.99	2.02	2.02	S	2.01	2.01	2.00	2.01	2.01	2.02	2.02	2.02	2.02	2.03	2.03	2.02	2.02	2.02	2.02	2.01	2.00	2.00	2.00	1.99	1.99	2.03	2.01	
Jan 26	1.99	1.98	S	S	1.98	1.99	2.00	2.00	1.97	1.98	1.99	1.98	1.97	1.98	1.98	1.99	1.98	1.97	1.97	1.98	2.01	2.01	1.99	2.00	1.97	2.01	1.99	
Jan 27	1.99	S	1.99	1.98	1.97	1.96	1.97	1.97	1.98	1.99	1.98	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.97	1.96	1.97	1.96	1.96	1.95	1.95	1.99	1.98	
Jan 28	S	1.96	1.96	1.96	1.96	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.96	1.95	1.95	1.96	1.96	1.96	1.96	1.96	1.99	2.04	2.11	S	1.95	2.11	1.97	
Jan 29	2.10	2.11	2.08	2.06	2.02	2.02	2.03	2.04	2.04	2.04	2.05	2.07	2.08	2.09	2.08	2.07	2.07	2.06	2.06	2.07	2.08	2.14	S	2.22	2.02	2.22	2.07	
Jan 30	2.23	2.22	2.35	2.32	2.26	2.44	2.29	2.36	2.45	2.50	2.49	2.25	2.17	2.09	2.09	2.10	2.11	2.10	2.10	2.11	2.11	S	2.15	2.17	2.09	2.50	2.24	
Jan 31	2.18	2.21	2.18	2.18	2.17	2.20	2.28	2.25	2.24	2.25	2.24	2.21	2.19	2.18	2.16	2.14	2.08	2.06	2.04	2.05	S	2.04	2.04	2.04	2.04	2.28	2.16	
Diurnal Maximum	2.23	2.22	2.35	2.32	2.26	2.44	2.29	2.36	2.45	2.50	2.49	2.25	2.19	2.18	2.16	2.14	2.11	2.10	2.10	2.11	2.11	2.14	2.15	2.22				
Diurnal Average	2.00	2.00	2.00	2.00	2.00	2.01	2.01	2.00	2.01	2.01	2.01	2.00	1.99	1.98	1.98	1.98	1.98	1.98	1.97	1.98	1.97	1.98	1.98	1.99				
C	Monthly Calibration								S	Daily Zero-Span Check								Q	Quality Assurance									
K	Collection Error								N	No Data (Machine Not in Service)								Y	Routine Maintenance									
X	InValid Data (Equipment Malfunction/Recovery)								NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)								P	Power Failure									
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.																												

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.

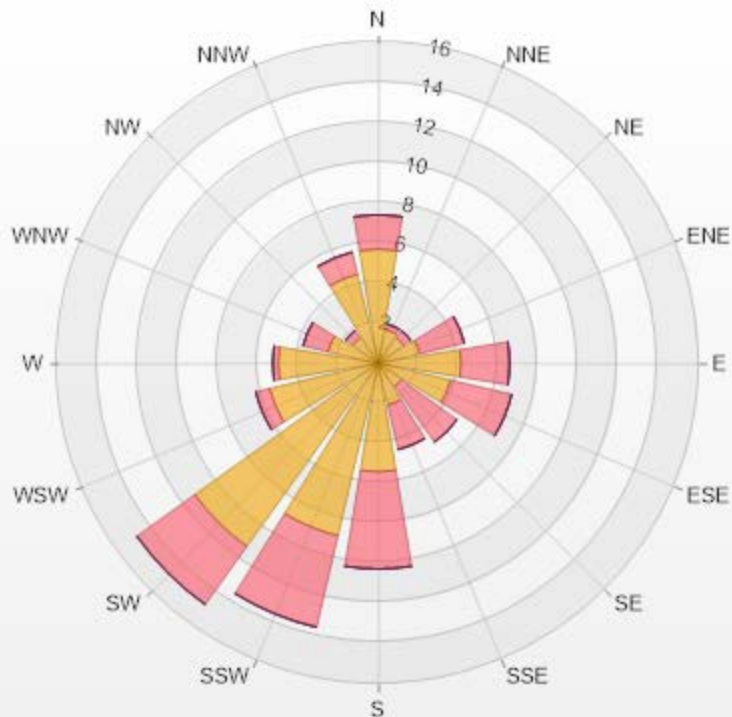
Timeseries Chart of Hourly Average for THC - 986c Station





Wind: PRAMP 986c Poll.: PRAMP 986c-THC55[ppm] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.49% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	5.69	1.71	0	0	0	7.4
NNE	1.71	0.28	0	0	0	1.99
NE	1.56	0.43	0	0	0	1.99
ENE	2.13	2.28	0	0	0	4.41
E	4.13	2.42	0	0	0	6.55
ESE	3.7	3.13	0	0	0	6.83
SE	1.42	3.41	0	0	0	4.83
SSE	2.13	2.28	0	0	0	4.41
S	5.41	4.84	0	0	0	10.25
SSW	8.82	4.69	0	0	0	13.51
SW	11.24	3.56	0	0	0	14.8
WSW	5.55	0.71	0	0	0	6.26
W	4.98	0.28	0	0	0	5.26
WNW	2.56	1.28	0	0	0	3.84
NW	1.56	0.43	0	0	0	1.99
NNW	4.55	1.14	0	0	0	5.69
Summary	67.14	32.87	0	0	0	100



PRAMP-202101

Page 42 of 228

% Icon Classes (ppm)

67

0-2

33

2-5

0

5-10

0

10-40

0

>40.0



PEACE RIVER AREA MONITORING PROGRAM

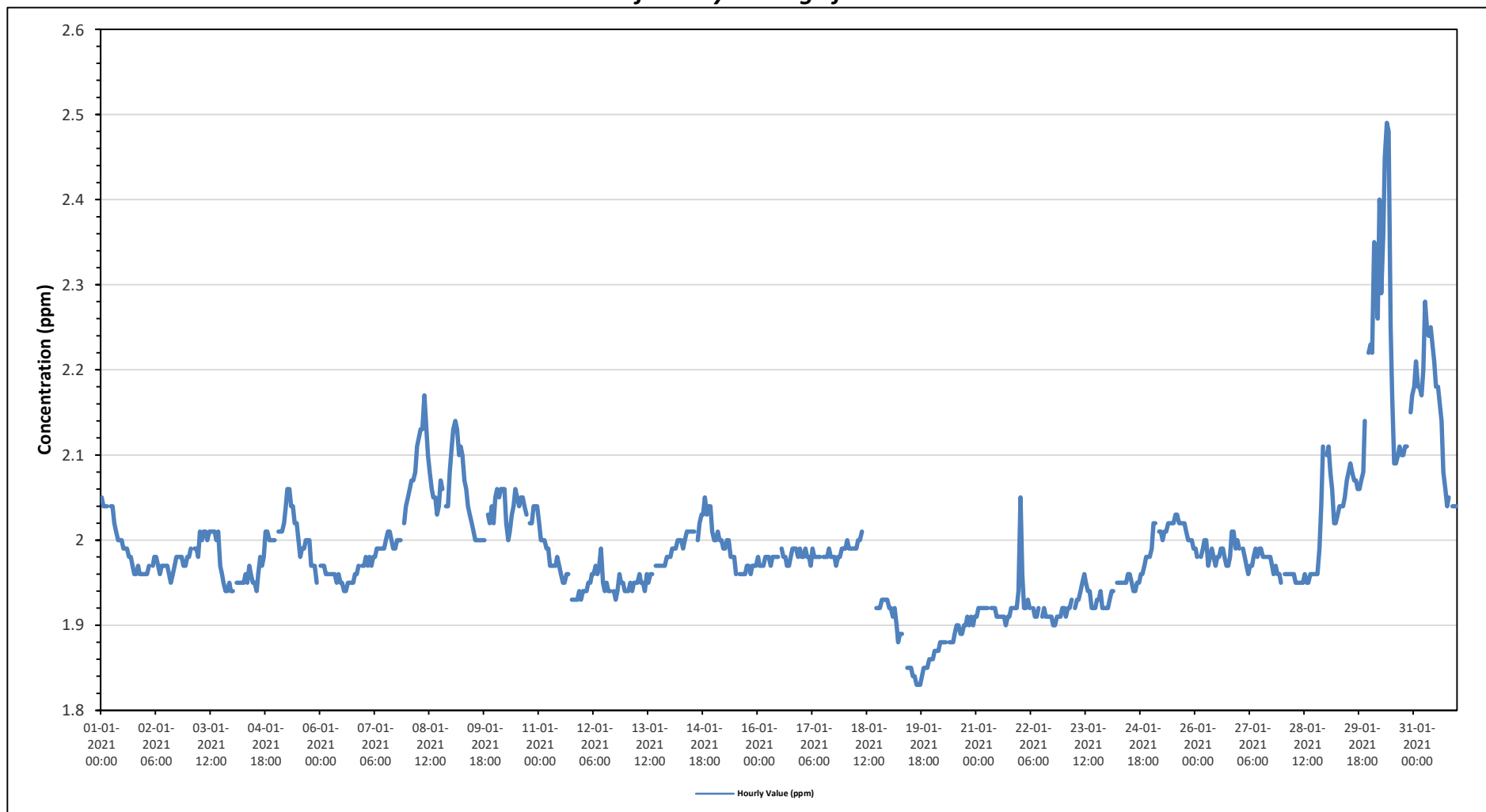
986c Station - January 2021

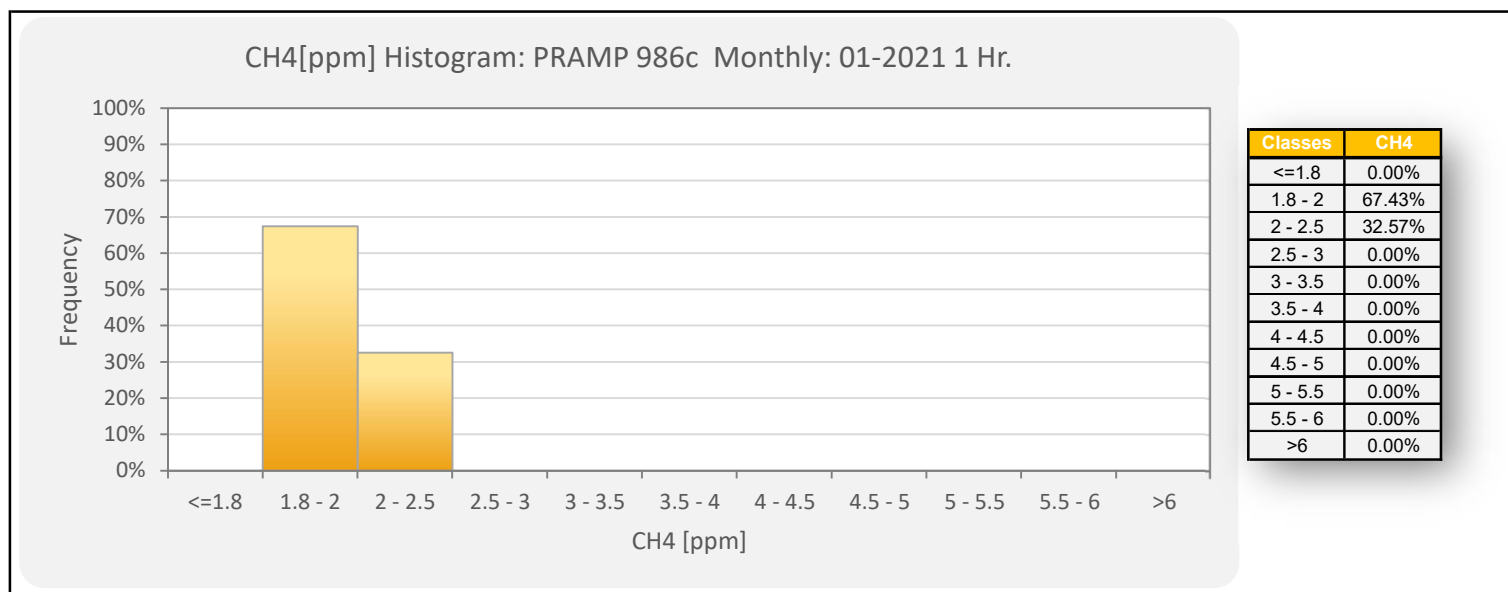
Summary of Hourly Averages

METHANE (CH4) in ppm

Maximum Hourly Value:										2.49		ppm		on January 30 at hour 9										Hours in Service:					744				
Maximum Daily Value:										2.23		ppm		on January 30										Hours of Data:					703				
Minimum Hourly Value:										1.83		ppm		on January 19 at hour 15										Hours of Missing Data:					2				
Minimum Daily Value:										1.87		ppm		on January 19										Hours of Calibration:					39				
Monthly Average:										1.99		ppm												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						
Jan 1	2.05	2.04	2.04	2.04	S	2.04	2.04	2.02	2.01	2.00	2.00	2.00	1.99	1.99	1.99	1.98	1.98	1.97	1.96	1.96	1.97	1.96	1.96	1.96	1.96	1.96	2.05	2.00					
Jan 2	1.96	1.96	1.97	S	1.97	1.98	1.98	1.97	1.96	1.97	1.97	1.97	1.97	1.96	1.95	1.96	1.97	1.98	1.98	1.98	1.98	1.97	1.97	1.98	1.95	1.98	1.97						
Jan 3	1.98	1.99	S	1.99	1.99	1.98	2.01	2.00	2.01	2.01	2.00	2.01	2.01	2.01	2.01	2.00	2.01	1.97	1.96	1.95	1.94	1.94	1.95	1.94	1.94	2.01	1.99						
Jan 4	1.94	S	S	1.95	1.95	1.95	1.95	1.95	1.96	1.95	1.97	1.96	1.95	1.95	1.94	1.96	1.98	1.97	1.98	2.01	2.01	2.00	2.00	2.00	2.00	1.94	2.01	1.97					
Jan 5	S	2.01	2.01	2.01	2.02	2.04	2.06	2.06	2.04	2.04	2.02	2.02	2.00	1.98	1.99	1.99	2.00	2.00	2.00	1.97	1.97	1.97	1.97	1.95	S	1.95	2.06	2.01					
Jan 6	1.97	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.95	1.96	1.95	1.95	1.94	1.94	1.95	1.95	1.95	1.95	1.96	1.96	1.97	S	1.97	1.94	1.97	1.96					
Jan 7	1.97	1.98	1.97	1.98	1.97	1.98	1.98	1.99	1.99	1.99	1.99	1.99	2.00	2.01	2.01	2.00	1.99	1.99	2.00	2.00	2.00	S	S	2.02	2.04	1.97	2.04	1.99					
Jan 8	2.05	2.06	2.07	2.07	2.08	2.11	2.12	2.13	2.13	2.17	2.14	2.10	2.08	2.06	2.05	2.05	2.03	2.04	2.07	2.06	S	2.04	2.04	2.08	2.03	2.17	2.08						
Jan 9	2.11	2.13	2.14	2.13	2.10	2.11	2.10	2.07	2.06	2.04	2.03	2.02	2.01	2.00	2.00	2.00	2.00	2.00	2.00	S	2.03	2.02	2.04	2.02	2.00	2.14	2.05						
Jan 10	2.05	2.06	2.05	2.06	2.06	2.06	2.02	2.00	2.01	2.03	2.04	2.06	2.05	2.04	2.05	2.05	2.04	2.03	S	2.02	2.02	2.04	2.04	2.04	2.00	2.06	2.04						
Jan 11	2.02	2.00	2.00	2.00	1.99	1.99	1.97	1.97	1.97	1.97	1.98	1.97	1.96	1.95	1.95	1.96	1.96	S	S	1.93	1.93	1.93	1.93	1.94	1.93	1.93	2.02	1.97					
Jan 12	1.94	1.94	1.94	1.95	1.95	1.96	1.96	1.97	1.96	1.97	1.99	1.95	1.94	1.95	1.94	1.94	S	1.94	1.93	1.94	1.96	1.95	1.95	1.94	1.93	1.99	1.95						
Jan 13	1.94	1.94	1.95	1.94	1.95	1.95	1.95	1.96	1.95	1.95	1.94	1.96	1.95	1.96	1.96	S	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.98	1.94	1.98	1.96						
Jan 14	1.98	1.99	1.99	1.99	2.00	2.00	2.00	1.99	2.00	2.01	2.01	2.01	2.01	2.01	S	2.00	2.02	2.03	2.03	2.05	2.03	2.04	2.04	2.01	1.98	2.05	2.01						
Jan 15	2.00	2.00	2.01	2.00	2.00	1.99	1.99	2.00	2.00	1.98	1.98	1.98	1.96	S	1.96	1.96	1.96	1.96	1.97	1.97	1.96	1.97	1.97	1.97	1.96	2.01	1.98						
Jan 16	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.97	1.98	1.98	1.98	1.98	1.98	S	1.99	1.98	1.98	1.97	1.97	1.98	1.99	1.99	1.98	1.99	1.97	1.99	1.98						
Jan 17	1.98	1.98	1.99	1.98	1.98	1.97	1.99	1.98	1.98	1.98	1.98	S	1.98	1.98	1.98	1.99	1.98	1.98	1.98	1.97	1.98	1.98	1.99	1.99	1.97	1.99	1.98						
Jan 18	1.99	2.00	1.99	1.99	1.99	1.99	1.99	2.00	2.00	2.01	S	C	C	C	C	C	C	C	1.92	1.92	1.92	1.93	1.93	1.93	1.92	2.01	-						
Jan 19	1.92	1.92	1.91	1.92	1.90	1.88	1.89	1.89	NRM	S	1.85	1.85	1.85	1.84	1.84	1.83	1.83	1.83	1.84	1.85	1.85	1.85	1.86	1.86	1.83	1.92	1.87						
Jan 20	1.86	1.87	1.87	1.87	1.88	1.88	1.88	1.88	S	1.88	1.88	1.88	1.89	1.90	1.90	1.89	1.89	1.90	1.90	1.91	1.90	1.91	1.90	1.91	1.86	1.91	1.89						
Jan 21	1.91	1.92	1.92	1.92	1.92	1.92	1.92	S	1.92	1.92	1.92	1.91	1.91	1.91	1.91	1.91	1.90	1.91	1.91	1.92	1.92	1.92	1.92	1.94	1.90	1.94	1.92						
Jan 22	2.05	1.96	1.92	1.92	1.93	1.92	S	1.92	1.91	1.91	1.92	NRM	1.91	1.92	1.91	1.91	1.91	1.91	1.91	1.90	1.91	1.91	1.91	1.92	1.90	2.05	1.92						
Jan 23	1.92	1.91	1.92	1.92	1.93	S	1.92	1.93	1.93	1.94	1.95	1.96	1.95	1.94	1.94	1.92	1.92	1.92	1.93	1.93	1.94	1.92	1.92	1.92	1.91	1.96	1.93						
Jan 24	1.92	1.93	1.94	1.94	S	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.95	1.94	1.94	1.95	1.95	1.96	1.96	1.97	1.98	1.98	1.98	1.92	1.98	1.95						
Jan 25	1.99	2.02	2.02	S	2.01	2.01	2.00	2.01	2.01	2.02	2.02	2.02	2.02	2.03	2.03	2.02	2.02	2.02	2.02	2.01	2.00	2.00	2.00	1.99	1.99	2.03	2.01						
Jan 26	1.99	1.98	S	1.98	1.99	2.00	2.00	1.97	1.98	1.99	1.98	1.97	1.98	1.98	1.99	1.99	1.98	1.97	1.97	1.98	2.01	2.01	1.99	2.00	1.97	2.01	1.99						
Jan 27	1.99	S	1.99	1.98	1.97	1.96	1.97	1.97	1.98	1.99	1.98	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.97	1.96	1.97	1.96	1.95	1.95	1.99	1.99	1.98						
Jan 28	S	1.96	1.96	1.96	1.96	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.96	1.95	1.95	1.96	1.96	1.96	1.96	1.96	1.99	2.04	2.11	S	1.95	2.11	1.97						
Jan 29	2.10	2.11	2.08	2.06	2.02	2.02	2.03	2.04	2.04	2.04	2.05	2.07	2.08	2.09	2.08	2.07	2.07	2.06	2.06	2.07	2.08	2.14	S	2.22	2.02	2.22	2.07						
Jan 30	2.23	2.22	2.35	2.31	2.26	2.40	2.29	2.36	2.45	2.49	2.48	2.25	2.17	2.09	2.09	2.10	2.11	2.10	2.10	2.11	2.11	S	2.15	2.17	2.09	2.49	2.23						
Jan 31	2.18	2.21	2.18	2.18	2.17	2.20	2.28	2.25	2.24	2.25	2.23	2.21	2.18	2.18	2.16	2.14	2.08	2.06	2.04	2.05	S	2.04	2.04	2.04	2.04	2.28	2.16						
Diurnal Maximum	2.23	2.22	2.35	2.31	2.26	2.40	2.29	2.36	2.45	2.49	2.48	2.25	2.18	2.18	2.16	2.14	2.11	2.10	2.10	2.11	2.11	2.14	2.15	2.22									
Diurnal Average	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.01	2.01	2.00	2.00	1.99	1.98	1.98	1.98	1.98	1.98	1.97	1.98	1.97	1.98	1.98	1.99									
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance																
K	Collection Error							N	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.																																	

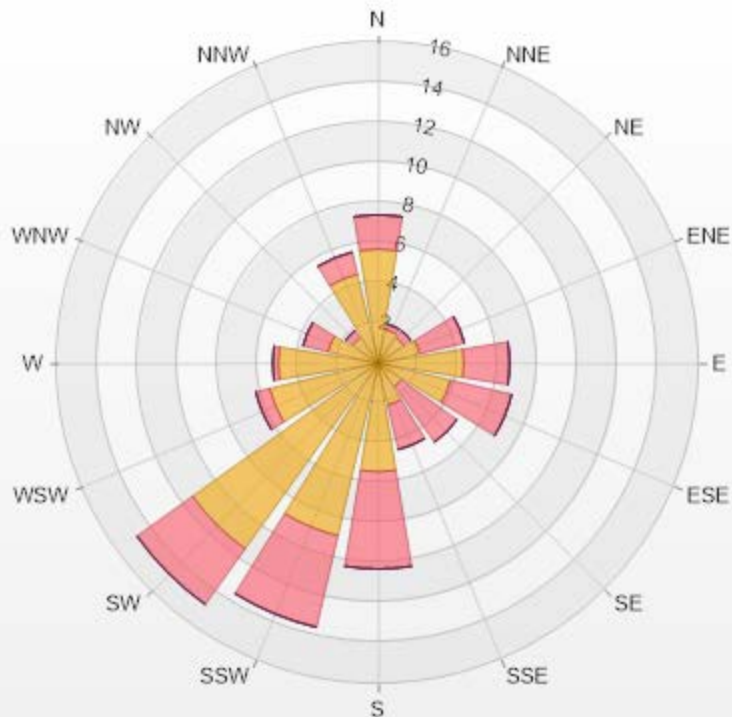
Timeseries Chart of Hourly Average for CH4 - 986c Station





Wind: PRAMP 986c Poll.: PRAMP 986c-CH4[ppm] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.49% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	5.69	1.71	0	0	0	7.4
NNE	1.71	0.28	0	0	0	1.99
NE	1.56	0.43	0	0	0	1.99
ENE	2.13	2.28	0	0	0	4.41
E	4.27	2.28	0	0	0	6.55
ESE	3.7	3.13	0	0	0	6.83
SE	1.42	3.41	0	0	0	4.83
SSE	2.13	2.28	0	0	0	4.41
S	5.41	4.84	0	0	0	10.25
SSW	8.82	4.69	0	0	0	13.51
SW	11.38	3.41	0	0	0	14.79
WSW	5.55	0.71	0	0	0	6.26
W	4.98	0.28	0	0	0	5.26
WNW	2.56	1.28	0	0	0	3.84
NW	1.56	0.43	0	0	0	1.99
NNW	4.55	1.14	0	0	0	5.69
Summary	67.42	32.58	0	0	0	100



PRAMP-202101

Page 47 of 228

% Icon Classes (ppm)	67	33	0	0	0
0-2	67	33	0	0	0
2-5	33	0	0	0	0
5-10	0	0	0	0	0
10-20	0	0	0	0	0
>20.0	0	0	0	0	0



PEACE RIVER AREA MONITORING PROGRAM

986c Station - January 2021

Summary of Hourly Averages

NON-METHANE HYDROCARBONS (NMHC) in ppm

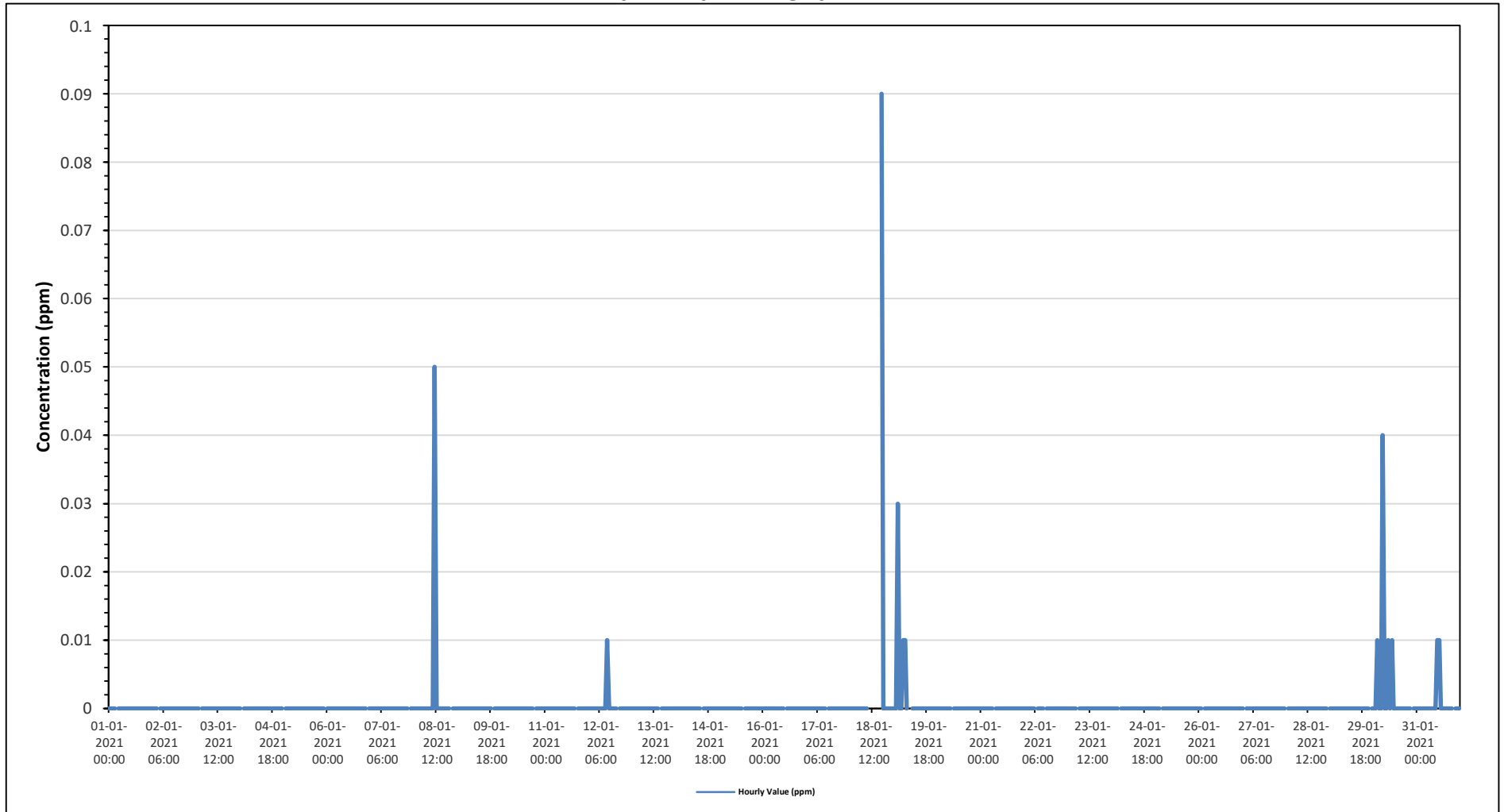
Maximum Hourly Value:	0.09 ppm on January 18 at hour 17	Hours in Service:	744
Maximum Daily Value:	0.00 ppm on January 30	Hours of Data:	703
Minimum Hourly Value:	0.00 ppm on January 1 at hour 0	Hours of Missing Data:	2
Minimum Daily Value:	0.00 ppm on January 1	Hours of Calibration:	39
Monthly Average:	0.00 ppm	Operational Uptime:	99.7

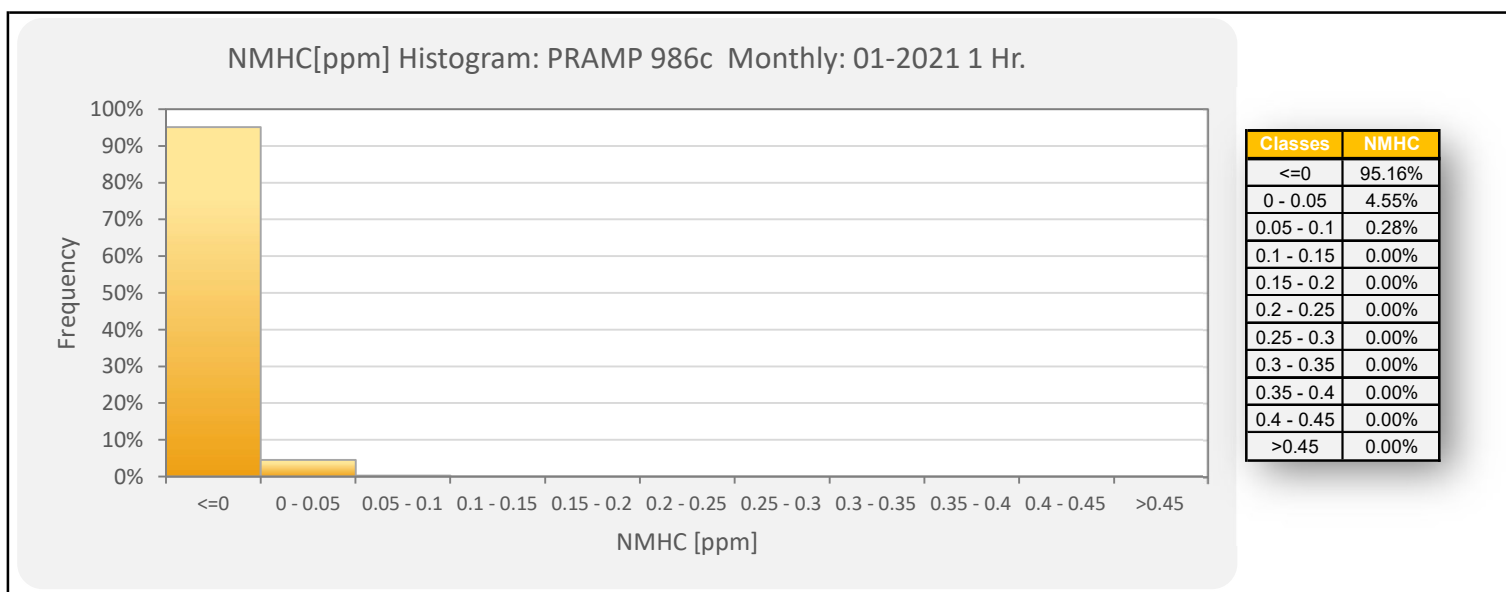
Daily Average		Hourly Period Starting at (MST)																									Daily				
Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Daily Maximum	Daily Average				
Jan 1	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Jan 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				
Jan 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				
Jan 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				
Jan 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				
Jan 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				
Jan 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				
Jan 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	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	0.05	0.00				
Jan 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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Jan 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				
Jan 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				
Jan 12	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00				
Jan 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				
Jan 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				
Jan 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				
Jan 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				
Jan 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				
Jan 18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	C	C	C	C	C	C	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	-				
Jan 19	0.00	0.00	0.03	0.00	0.00	0.01	0.01	0.00	NRM	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	0.03	0.00				
Jan 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				
Jan 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				
Jan 22	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	NRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Jan 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				
Jan 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				
Jan 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				
Jan 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				
Jan 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				
Jan 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	S	0.00	0.00	0.00	0.00				
Jan 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				
Jan 30	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.01	0.00	0.01	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	0.04	0.00	0.00				
Jan 31	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	0.00	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	0.03	0.00	0.00	0.04	0.01	0.00	0.01	0.00	0.01	0.05	0.01	0.00	0.00	0.00	0.00	0.09	0.00	0.00	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	0.00	0.00	0.00				
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance														
K	Collection Error							N	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.

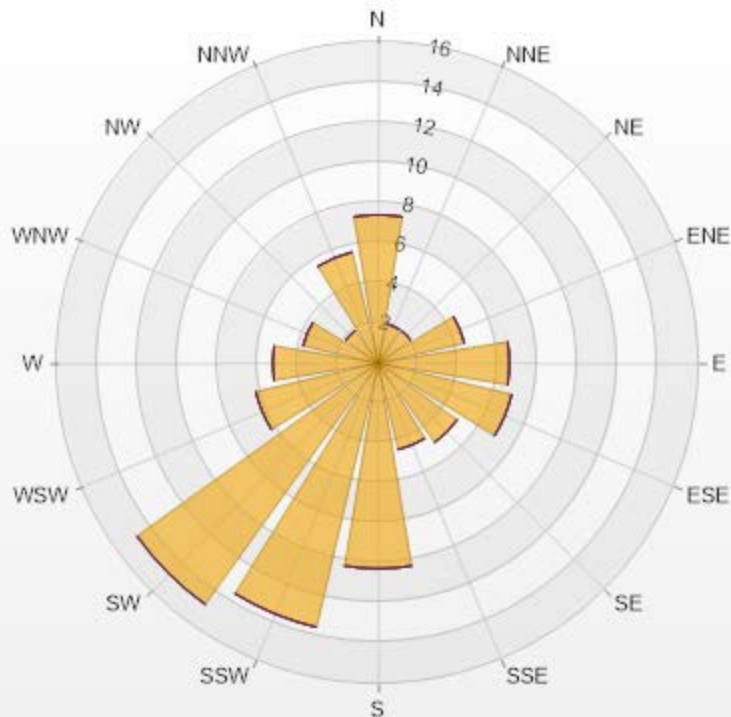
Timeseries Chart of Hourly Average for NMHC - 986c Station





Wind: PRAMP 986c Poll.: PRAMP 986c-NMHC[ppm] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.49% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-0.9	0.9-2	>2.0	Total
N	7.4	0	0	0	0	7.4
NNE	1.99	0	0	0	0	1.99
NE	1.99	0	0	0	0	1.99
ENE	4.41	0	0	0	0	4.41
E	6.54	0	0	0	0	6.54
ESE	6.83	0	0	0	0	6.83
SE	4.84	0	0	0	0	4.84
SSE	4.41	0	0	0	0	4.41
S	10.24	0	0	0	0	10.24
SSW	13.51	0	0	0	0	13.51
SW	14.79	0	0	0	0	14.79
WSW	6.26	0	0	0	0	6.26
W	5.26	0	0	0	0	5.26
WNW	3.84	0	0	0	0	3.84
NW	1.99	0	0	0	0	1.99
NNW	5.69	0	0	0	0	5.69
Summary	100	0	0	0	0	100



PRAMP-202101

Page 52 of 228

% Icon Classes (ppm)

100 0-0.1

0 0.1-0.3

0 0.3-0.9

0 0.9-2

0 >2.0



PEACE RIVER AREA MONITORING PROGRAM

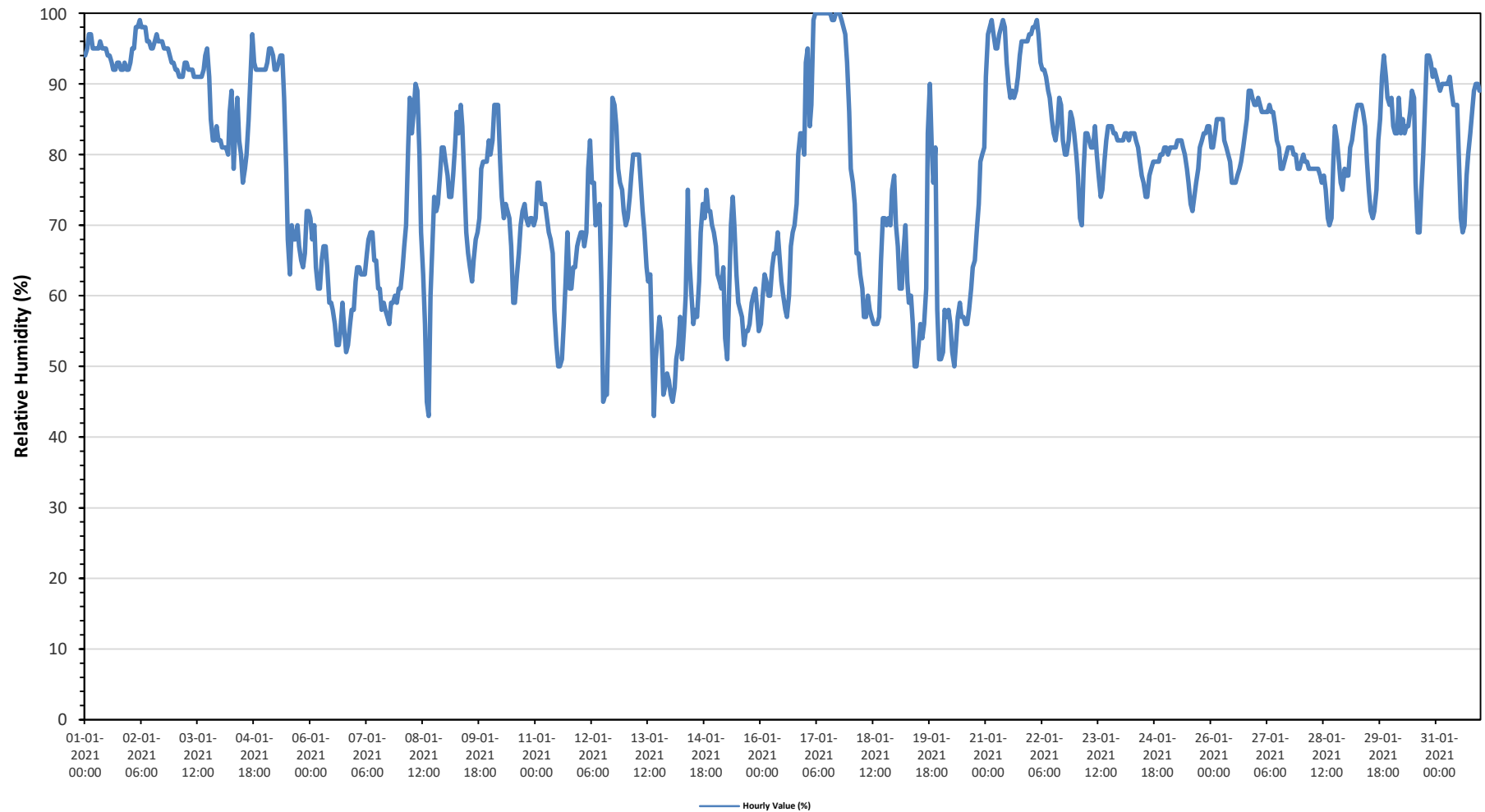
986c Station - January 2021

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

Maximum Hourly Value:	100	%	on January 17 at hour 5	Hours in Service:	744																							
Maximum Daily Value:	97.0	%	on January 17	Hours of Data:	744																							
Minimum Hourly Value:	43	%	on January 8 at hour 15	Hours of Missing Data:	0																							
Minimum Daily Value:	60.1	%	on January 6	Hours of Calibration:	0																							
Monthly Average:	76.7	%		Operational Uptime:	100.0																							
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
Jan 1	94	95	97	97	95	95	95	95	96	95	95	94	94	93	92	92	93	93	92	92	93	92	92	92	92	92	97	94.0
Jan 2	93	95	95	98	98	99	98	98	98	96	95	95	96	97	96	96	96	95	95	95	94	93	93	93	93	99	95.8	
Jan 3	92	92	91	91	91	93	93	92	92	92	91	91	91	91	92	94	95	91	85	82	82	84	82	82	95	90.0		
Jan 4	82	81	81	81	80	86	89	78	83	88	82	80	76	78	80	85	91	97	93	92	92	92	92	92	97	85.5		
Jan 5	92	93	95	95	94	92	92	93	94	94	88	78	68	63	70	68	68	70	67	65	64	66	72	72	63	95	79.7	
Jan 6	71	68	70	64	61	61	65	67	67	64	59	59	58	56	53	53	55	59	55	52	53	56	58	58	52	71	60.1	
Jan 7	62	64	64	63	63	66	68	69	69	65	65	61	61	58	59	58	57	56	59	59	60	59	61	56	69	62.0		
Jan 8	61	64	67	70	81	88	83	86	90	89	80	69	63	56	45	43	60	67	74	72	73	77	81	81	43	90	71.7	
Jan 9	79	77	74	74	77	81	86	83	87	84	76	69	66	64	62	65	68	69	71	78	79	79	79	82	62	87	75.4	
Jan 10	80	82	87	87	87	79	74	71	73	72	71	67	59	59	63	66	70	72	73	71	70	71	71	70	59	87	72.7	
Jan 11	71	76	76	73	73	73	71	69	68	66	58	53	50	50	51	56	62	69	61	61	64	64	67	68	50	76	64.6	
Jan 12	69	69	67	69	78	82	76	76	70	71	73	62	45	46	46	58	70	88	87	84	78	76	75	72	45	88	70.3	
Jan 13	70	71	74	77	80	80	80	80	76	72	69	64	62	63	53	43	51	54	57	55	46	47	49	48	43	80	63.4	
Jan 14	46	45	47	51	53	57	51	55	60	75	65	60	56	58	57	62	69	73	71	75	72	72	70	69	45	75	61.2	
Jan 15	67	63	62	61	64	54	51	59	70	74	70	63	59	58	57	53	55	55	56	59	60	61	58	55	51	74	60.2	
Jan 16	56	60	63	62	60	60	64	66	66	69	65	62	60	58	57	60	67	69	70	73	80	83	83	80	56	83	66.4	
Jan 17	93	95	84	87	99	100	100	100	100	100	100	100	100	99	99	100	100	100	99	98	97	93	86	84	100	97.0		
Jan 18	78	76	73	66	66	63	61	57	57	60	58	57	56	56	56	57	65	71	71	70	71	70	75	77	56	78	65.3	
Jan 19	70	67	61	61	66	70	62	59	60	56	50	50	53	56	54	56	61	83	90	81	76	81	58	51	50	90	63.8	
Jan 20	51	52	58	57	58	56	52	50	53	57	59	57	57	56	56	58	61	64	65	69	73	79	80	81	50	81	60.8	
Jan 21	91	97	98	99	97	95	95	97	98	99	98	93	90	88	89	88	89	91	94	96	96	96	96	97	88	99	94.5	
Jan 22	97	98	98	99	97	93	92	92	91	89	88	85	83	82	84	88	87	82	80	80	82	86	85	83	80	99	88.4	
Jan 23	80	77	71	70	78	83	83	82	81	81	84	80	77	74	75	79	82	84	84	84	83	83	82	82	70	84	80.0	
Jan 24	82	82	83	83	82	83	83	83	82	81	79	77	76	74	74	77	78	79	79	79	79	80	80	81	74	83	79.8	
Jan 25	81	80	81	81	81	81	82	82	82	81	80	78	76	73	72	74	76	78	81	82	83	83	84	84	72	84	79.8	
Jan 26	81	81	83	85	85	85	85	82	81	80	79	76	76	76	77	78	79	81	83	85	89	89	88	87	76	89	82.1	
Jan 27	87	88	87	86	86	86	86	87	86	86	84	82	81	78	78	79	80	81	81	81	80	80	78	78	78	88	82.8	
Jan 28	79	80	79	79	78	78	78	78	78	78	77	76	77	75	71	70	71	79	84	82	79	76	75	78	70	84	77.3	
Jan 29	77	77	81	82	84	86	87	87	87	86	84	79	75	72	71	72	75	82	85	91	94	91	88	87	71	94	82.5	
Jan 30	88	84	83	83	88	83	85	83	84	84	86	89	88	76	69	69	75	80	88	94	94	93	91	92	69	94	84.5	
Jan 31	91	90	89	90	90	90	90	91	89	87	87	87	79	71	69	70	77	80	83	86	89	90	90	89	69	91	85.2	
Diurnal Maximum	97	98	98	99	99	100	100	100	100	100	100	100	100	99	99	100	100	100	99	98	97	96	97					
Diurnal Average	77.8	78.0	78.0	78.1	79.7	79.8	79.2	78.9	79.6	79.8	77.3	74.1	71.2	69.6	68.6	69.8	73.6	77.4	78.0	78.3	78.2	78.9	78.3	77.7				
C	Monthly Calibration						S	Daily Zero-Span Check						Q	Quality Assurance													
K	Collection Error						N	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.																												

Timeseries Chart of Hourly Average for RH - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

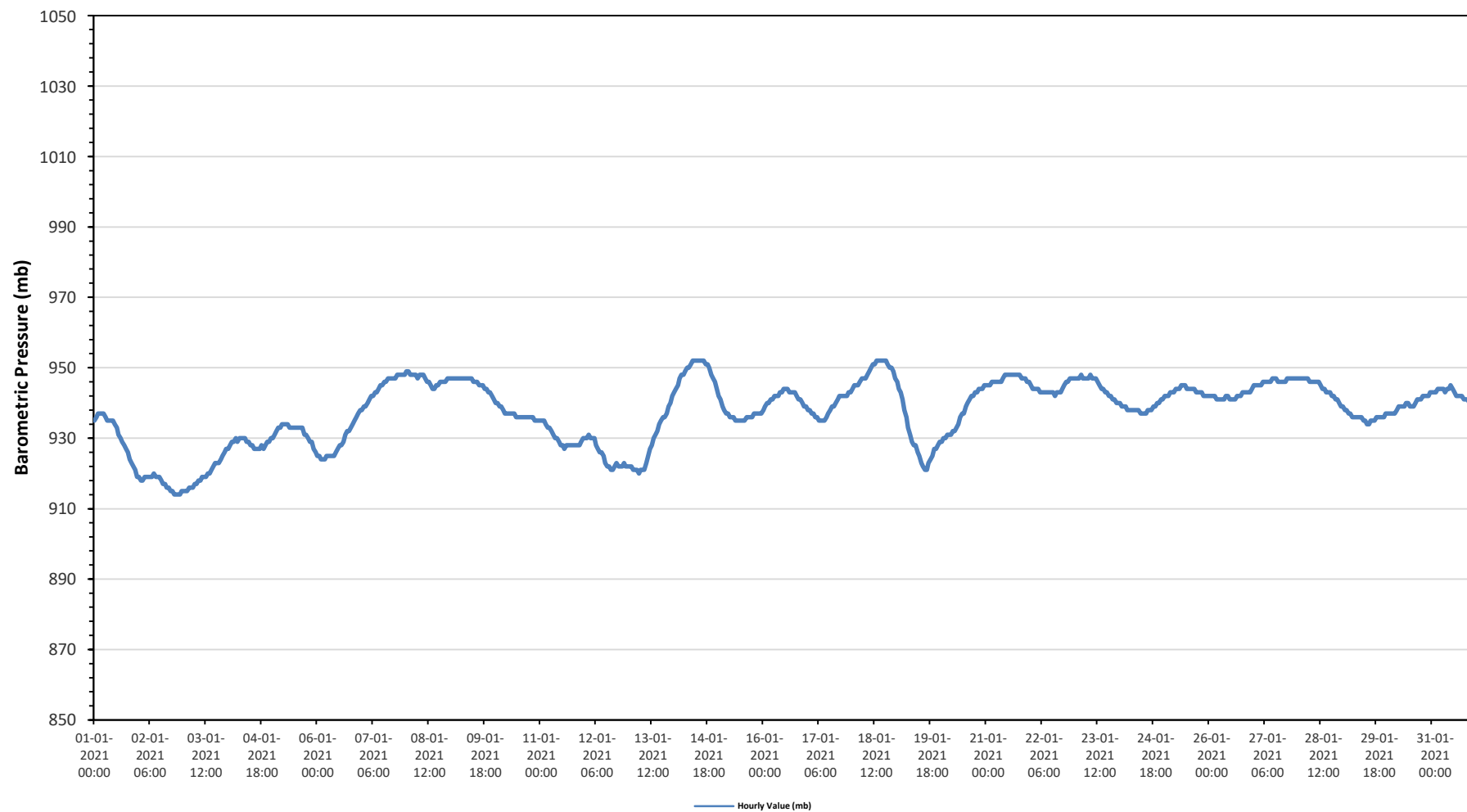
986c Station - January 2021

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

Maximum Hourly Value:				952	mb	on January 14 at hour 10				Hours in Service:				744														
Maximum Daily Value:				949	mb	on January 14				Hours of Data:				744														
Minimum Hourly Value:				914	mb	on January 2 at hour 19				Hours of Missing Data:				0														
Minimum Daily Value:				917	mb	on January 2				Hours of Calibration:				0														
Monthly Average:				938	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	
Jan 1	935	936	937	937	937	937	936	935	935	935	935	934	933	931	930	929	928	927	926	924	923	922	921	919	919	937	930.9	
Jan 2	919	918	918	919	919	919	919	919	920	919	919	919	918	917	917	916	916	915	915	914	914	914	914	915	914	920	917.2	
Jan 3	915	915	915	916	916	916	917	917	918	918	919	919	919	920	920	921	922	923	923	923	924	925	926	927	915	927	919.8	
Jan 4	927	928	929	929	930	929	930	930	930	930	929	929	928	928	927	927	927	927	928	927	928	929	929	930	927	930	928.5	
Jan 5	930	931	932	933	933	934	934	934	934	933	933	933	933	933	933	933	933	931	931	930	929	929	927	926	926	934	931.8	
Jan 6	925	925	924	924	924	925	925	925	925	925	926	927	928	928	929	931	932	932	933	934	935	936	937	938	924	938	928.9	
Jan 7	938	939	939	940	941	942	942	943	943	944	945	945	946	946	947	947	947	947	947	948	948	948	948	948	938	948	944.5	
Jan 8	949	949	948	948	948	948	947	948	948	948	947	946	946	945	944	944	945	945	946	946	946	946	947	947	944	949	946.7	
Jan 9	947	947	947	947	947	947	947	947	947	947	947	947	946	946	946	945	945	945	944	944	943	943	942	941	941	947	945.6	
Jan 10	940	940	939	939	938	937	937	937	937	937	937	936	936	936	936	936	936	936	936	936	936	935	935	935	935	940	936.8	
Jan 11	935	935	935	934	933	933	932	931	930	930	929	928	928	927	928	928	928	928	928	928	928	928	929	930	927	935	930.1	
Jan 12	930	930	931	930	930	930	928	927	926	926	925	923	922	922	921	921	922	923	922	922	922	923	922	922	921	931	925.0	
Jan 13	922	922	921	921	921	920	921	921	921	923	925	927	928	930	931	932	934	935	936	936	937	939	940	942	920	942	928.5	
Jan 14	943	944	945	947	948	948	949	950	950	951	952	952	952	952	952	952	952	951	951	950	948	947	946	944	943	952	949.0	
Jan 15	942	941	939	938	937	937	936	936	936	935	935	935	935	935	935	936	936	936	936	937	937	937	937	937	935	942	936.7	
Jan 16	938	939	940	940	941	941	942	942	942	943	943	944	944	944	943	943	943	943	942	941	941	940	939	939	938	944	941.5	
Jan 17	938	938	937	937	936	936	935	935	935	935	936	937	938	939	939	940	941	942	942	942	942	942	943	943	935	943	938.7	
Jan 18	944	945	945	945	946	947	947	947	948	949	950	951	951	952	952	952	952	952	952	951	950	950	949	947	944	952	948.9	
Jan 19	946	944	943	941	938	936	933	931	929	928	928	926	925	923	922	921	921	923	924	925	927	927	928	929	921	946	929.9	
Jan 20	929	930	930	931	931	931	932	932	933	934	936	937	937	939	940	941	942	942	943	943	944	944	944	945	929	945	937.1	
Jan 21	945	945	945	946	946	946	946	946	946	947	948	948	948	948	948	948	948	948	948	947	947	947	946	946	945	948	946.8	
Jan 22	945	944	944	944	944	943	943	943	943	943	943	943	943	942	943	943	943	944	945	946	946	947	947	947	942	947	944.1	
Jan 23	947	947	947	948	947	947	947	947	948	947	947	947	946	945	944	944	943	943	943	942	942	941	941	940	940	940	948	944.9
Jan 24	940	939	939	939	938	938	938	938	938	938	938	937	937	937	937	938	938	938	939	939	940	940	941	941	937	941	938.5	
Jan 25	942	942	942	943	943	943	944	944	944	945	945	945	944	944	944	944	944	943	943	943	943	942	942	942	942	945	943.3	
Jan 26	942	942	942	942	941	941	941	941	941	942	942	941	941	941	941	942	942	942	943	943	943	943	943	944	941	944	941.9	
Jan 27	945	945	945	945	945	946	946	946	946	946	947	947	947	946	946	946	946	946	947	947	947	947	947	947	945	947	946.2	
Jan 28	947	947	947	947	947	947	946	946	946	946	946	946	945	944	944	943	943	943	942	942	941	941	940	939	939	947	944.4	
Jan 29	939	938	938	937	937	936	936	936	936	936	936	935	935	934	934	935	935	935	936	936	936	936	937	937	934	939	936.0	
Jan 30	937	937	937	937	937	938	939	939	939	939	940	940	939	939	939	940	941	941	941	942	942	942	942	943	937	943	939.6	
Jan 31	943	943	943	944	944	944	944	943	944	944	945	944	943	942	942	942	942	941	941	941	940	940	940	940	940	940	945	942.5
Diurnal Maximum	949	949	948	948	948	948	949	950	950	951	952	952	952	952	952	952	952	952	952	951	950	950	949	948				
Diurnal Average	938	938	938	938	938	937	937	937	937	938	938	938	937	937	937	937	938	938	938	938	938	938	938	938				
C	Monthly Calibration						S	Daily Zero-Span Check						Q	Quality Assurance													
K	Collection Error						N	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.																												

Timeseries Chart of Hourly Average for BP - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

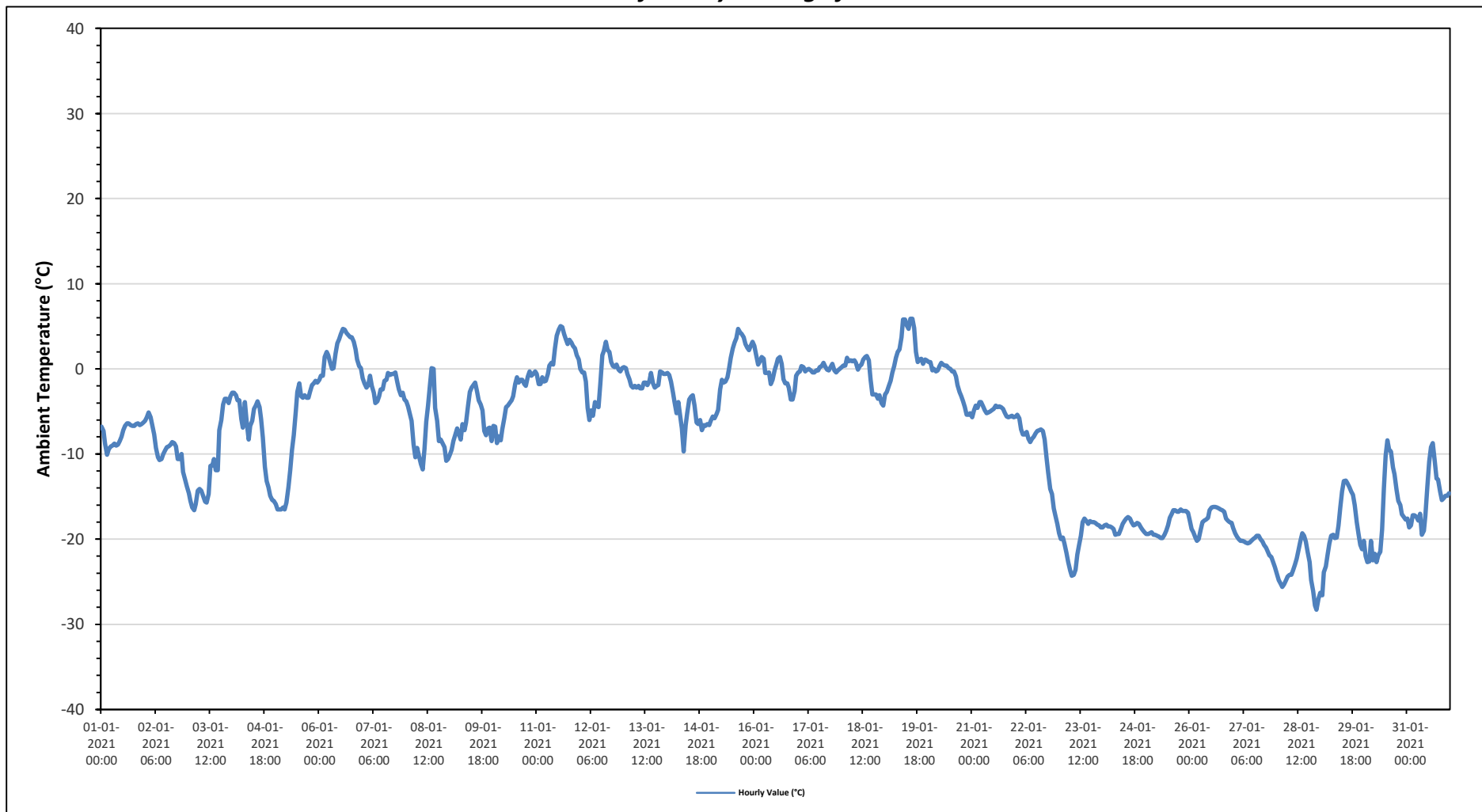
986c Station - January 2021

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

Maximum Hourly Value: 5.9 °C on January 19 at hour 14										Hours in Service: 744																	
Maximum Daily Value: 2.0 °C on January 6										Hours of Data: 744																	
Minimum Hourly Value: -28.3 °C on January 28 at hour 22										Hours of Missing Data: 0																	
Minimum Daily Value: -23.8 °C on January 28										Hours of Calibration: 0																	
Monthly Average: -8.1 °C										Operational Uptime: 100.0																	
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
Jan 1	-6.8	-7.3	-8.8	-10.1	-9.4	-9.1	-9	-8.8	-9	-8.9	-8.5	-8	-7.2	-6.7	-6.4	-6.4	-6.6	-6.7	-6.7	-6.5	-6.4	-6.6	-6.5	-6.3	-10.1	-6.3	-7.6
Jan 2	-6.1	-5.7	-5.1	-5.7	-6.7	-7.7	-9.3	-10.4	-10.7	-10.6	-10	-9.6	-9.2	-9.1	-8.9	-8.6	-8.7	-9.1	-10.6	-10.6	-10	-12.1	-13	-13.8	-13.8	-5.1	-9.2
Jan 3	-14.6	-15.5	-16.3	-16.6	-15.9	-14.3	-14.1	-14.3	-14.9	-15.6	-15.7	-14.7	-11.4	-11.3	-10.6	-11.9	-11.9	-7.2	-6	-4.2	-3.5	-3.5	-4	-3.2	-16.6	-3.2	-11.3
Jan 4	-2.8	-2.8	-3.1	-3.7	-3.7	-5.9	-6.9	-3.9	-6.2	-8.3	-6.7	-6.1	-4.7	-4.3	-3.8	-4.5	-5.9	-8.1	-11.5	-13.2	-13.9	-14.9	-15.4	-15.5	-15.5	-2.8	-7.3
Jan 5	-15.9	-16.5	-16.5	-16.5	-16.3	-16.5	-15.7	-13.9	-11.9	-9.5	-7.8	-5	-2.7	-1.7	-3.2	-3.4	-3.1	-3.4	-3.4	-2.7	-1.9	-1.7	-1.4	-1.6	-16.5	-1.4	-8.0
Jan 6	-1.3	-0.8	-0.8	1.4	2	1.6	0.7	0	0.1	1.8	3	3.5	4.1	4.7	4.6	4.2	4	3.7	3.7	3.2	2.3	1.1	0.3	0.1	-1.3	4.7	2.0
Jan 7	-1.1	-1.7	-2.2	-1.9	-0.8	-2	-2.8	-4	-3.8	-3.2	-2.4	-2.4	-1.4	-1.3	-0.5	-0.7	-0.6	-0.6	-0.4	-1.6	-2.4	-3.1	-2.8	-3.6	-4.0	-0.4	-2.0
Jan 8	-3.8	-4.4	-5.4	-6.1	-8.9	-10.4	-9.3	-10.2	-11.2	-11.8	-9.4	-6.2	-4.3	-2.1	0.1	0	-4.6	-6.1	-8.5	-8.3	-8.7	-9.2	-10.8	-10.6	-11.8	0.1	-7.1
Jan 9	-10.1	-9.5	-8.5	-7.8	-7	-7.6	-8.3	-6.5	-7.2	-6.3	-4.3	-2.7	-2.2	-1.9	-1.6	-2.6	-3.7	-4.2	-4.9	-7.3	-7.8	-7	-6.9	-8.5	-10.1	-1.6	-6.0
Jan 10	-6.7	-6.8	-8.7	-7.9	-8.4	-7.1	-5.8	-4.5	-4.3	-4	-3.7	-3.2	-1.8	-1	-1.6	-1.3	-1.3	-1.8	-2	-0.9	-0.3	-0.8	-0.6	-0.3	-8.7	-0.3	-3.5
Jan 11	-0.6	-1.8	-1.8	-1	-1.5	-1.4	-0.6	0.4	0.7	0.5	2.4	3.9	4.6	5	4.9	4.1	3.5	2.9	3.4	3.1	2.7	2.4	1.6	1.1	-1.8	5.0	1.6
Jan 12	0	-0.4	-0.4	-1.5	-4.6	-6	-4.9	-5.5	-3.9	-4.3	-4.5	-1.8	1.6	2.1	3.2	2.2	2	0.8	0.3	0.2	0.5	-0.1	-0.3	0.1	-6.0	3.2	-1.1
Jan 13	0.2	0.1	-0.6	-1.2	-2	-2.2	-2	-2.2	-2	-2.3	-2.3	-1.6	-1.6	-1.9	-1.4	-0.5	-1.7	-2.2	-2	-1.9	-0.3	-0.4	-0.6	-0.6	-2.3	0.2	-1.4
Jan 14	-0.5	-0.7	-1.5	-2.8	-3.9	-5.2	-3.9	-5.7	-7	-9.7	-6.6	-5.2	-3.6	-3.3	-3.1	-4.3	-6.3	-6.5	-6	-7.2	-6.6	-6.7	-6.5	-6.6	-9.7	-0.5	-5.0
Jan 15	-6.1	-5.6	-5.8	-5.3	-4.8	-2.4	-1.3	-1.6	-1.5	-1	0	1.3	2.4	3.1	3.6	4.7	4.3	4.1	3.7	2.9	2.5	2.2	2.8	3.2	-6.1	4.7	0.2
Jan 16	2.7	1.5	0.5	0.9	1.4	1.2	-0.5	-0.5	-0.4	-1.8	-1.3	-0.2	0.5	1.2	1.4	0.6	-1.2	-1.7	-1.7	-2.2	-3.6	-3.6	-2.6	-0.8	-3.6	2.7	-0.4
Jan 17	-0.4	-0.3	0.3	0.2	-0.3	-0.1	0	-0.2	-0.4	-0.4	-0.2	-0.2	0.2	0.3	0.7	0.3	-0.1	-0.2	0.2	0.6	-0.2	-0.4	-0.2	0	-0.4	0.7	0.0
Jan 18	0.2	0.4	0.4	1.3	0.9	1	0.9	1	0.7	-0.1	0.3	0.5	1.1	1.4	1.5	1	-1.3	-3	-3	-3	-3.5	-3.1	-4	-4.3	-4.3	1.5	-0.5
Jan 19	-3	-2.7	-2	-1.4	-0.4	0.3	1.3	2	2.3	3.7	5.8	5.8	5.1	4.7	5.9	5.9	4.8	2	0.8	1.1	1.2	0.6	1.1	1	-3.0	5.9	1.9
Jan 20	0.8	0.8	-0.2	0	-0.3	-0.2	0.3	0.7	0.5	0.4	0.4	0.1	0	-0.3	-0.3	-0.9	-1.9	-2.7	-3.2	-3.8	-4.5	-5.4	-5.4	-5.2	-5.4	0.8	-1.3
Jan 21	-5.7	-4.9	-4.3	-4.6	-3.9	-3.9	-4.4	-4.9	-5.2	-5.1	-5	-4.8	-4.7	-4.3	-4.5	-4.4	-4.5	-4.7	-5.1	-5.6	-5.7	-5.6	-5.5	-5.7	-5.7	-3.9	-4.9
Jan 22	-5.6	-5.4	-5.8	-7.1	-7.7	-7.7	-7.4	-8.2	-8.6	-8.2	-8	-7.6	-7.3	-7.2	-7.1	-7.3	-8.3	-10.6	-12.2	-14.1	-14.7	-16.4	-17.3	-18.2	-18.2	-5.4	-9.5
Jan 23	-19.3	-20	-19.8	-20.5	-21.6	-22.7	-23.7	-24.3	-24.2	-23.6	-21.8	-20.7	-19.6	-18	-17.6	-17.9	-18.2	-17.9	-18	-18	-18.1	-18.3	-18.4	-18.6	-24.3	-17.6	-20.0
Jan 24	-18.6	-18.4	-18.3	-18.5	-18.5	-18.6	-18.8	-19.5	-19.4	-19.4	-18.8	-18.2	-17.8	-17.6	-17.4	-17.6	-18	-18.4	-18.3	-18.1	-18.2	-18.6	-18.9	-19.2	-19.5	-17.4	-18.5
Jan 25	-19.4	-19.4	-19.3	-19.2	-19.5	-19.5	-19.6	-19.7	-19.9	-19.9	-19.5	-19	-18.4	-17.5	-17	-16.6	-16.6	-16.8	-16.8	-16.5	-16.7	-16.7	-16.7	-16.9	-19.9	-16.5	-18.2
Jan 26	-17.8	-18.8	-19.2	-19.8	-20.2	-20	-18.9	-18	-17.8	-17.7	-17.5	-16.6	-16.3	-16.2	-16.2	-16.3	-16.4	-16.5	-16.6	-16.8	-17.6	-17.8	-18	-18.1	-20.2	-16.2	-17.7
Jan 27	-18.7	-19.3	-19.7	-20	-20.2	-20.2	-20.3	-20.4	-20.5	-20.4	-20.2	-20	-19.8	-19.6	-19.6	-20	-20.3	-20.7	-21	-21.5	-21.9	-22.1	-22.7	-23.3	-23.3	-18.7	-20.5
Jan 28	-24	-24.8	-25.2	-25.6	-25.3	-24.8	-24.4	-24.2	-24.2	-23.7	-23	-22.3	-21.3	-20.3	-19.3	-19.6	-20.3	-21.5	-22.7	-24.8	-26.1	-27.8	-28.3	-27	-28.3	-19.3	-23.8
Jan 29	-26.3	-26.6	-23.9	-23.2	-21.8	-20.5	-19.6	-19.5	-19.9	-19.8	-18.4	-16.3	-14.4	-13.2	-13.1	-13.4	-13.9	-14.4	-14.8	-16	-18	-19.4	-20.7	-21.2	-26.6	-13.1	-18.7
Jan 30	-20.2	-22	-22.7	-22.6	-20.2	-22.5	-21.7	-22.7	-21.9	-21.5	-18.9	-14.1	-10.2	-8.4	-9.5	-9.7	-11.6	-12.4	-14.2	-15.5	-16	-17.1	-17.4	-17.7	-22.7	-8.4	-17.1
Jan 31	-17.6	-18.6	-18.4	-17.2	-17.2	-17.4	-17.8	-17	-19.5	-19	-17.2	-13.7	-10.9	-9.2	-8.7	-10.6	-12.9	-13	-14.4	-15.4	-15.2	-14.9	-14.9	-14.6	-19.5	-8.7	-15.2
Diurnal Maximum	2.7	1.5	0.5	1.4	2.0	1.6	1.3	2.0	2.3	3.7	5.8	5.8	5.1	5.0	5.9	5.9	4.8	4.1	3.7	3.2	2.7	2.4	2.8	3.2			
Diurnal Average	-8.7	-9.0	-9.1	-9.2	-9.2	-9.4	-9.3	-9.2	-9.4	-9.3	-8.4	-7.3	-6.2	-5.6	-5.3	-5.7	-6.5	-7.0	-7.5	-7.9	-8.1	-8.6	-8.8	-8.9			
C	Monthly Calibration						S	Daily Zero-Span Check						Q	Quality Assurance												
K	Collection Error						N	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.																											

Timeseries Chart of Hourly Average for AT - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - January 2021

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

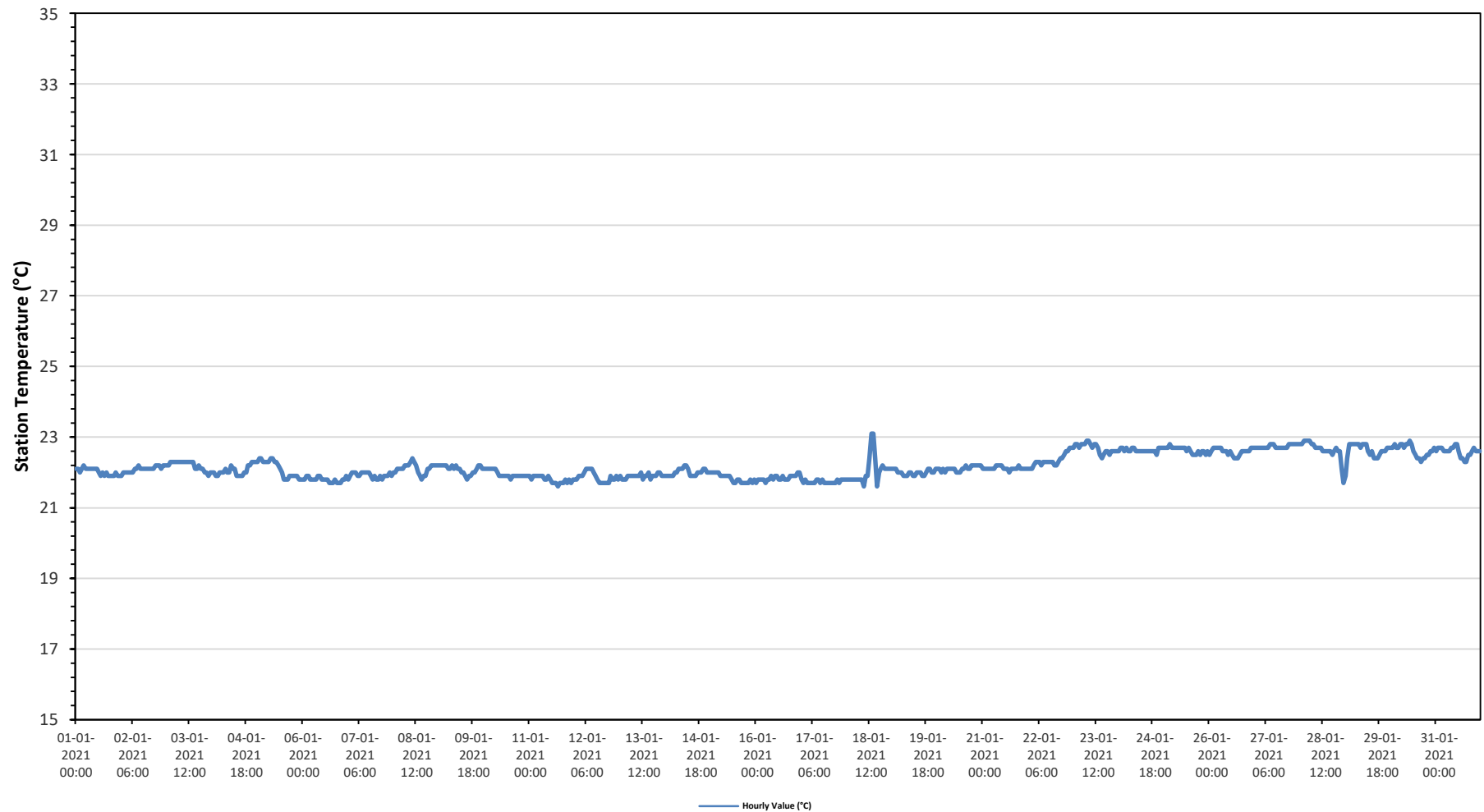
Maximum Hourly Value:	23.1	°C	on January 18 at hour 13	Hours in Service:	744
Maximum Daily Value:	22.7	°C	on January 27	Hours of Data:	744
Minimum Hourly Value:	21.6	°C	on January 11 at hour 15	Hours of Missing Data:	0
Minimum Daily Value:	21.7	°C	on January 17	Hours of Calibration:	0
Monthly Average:	22.2	°C		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		
Jan 1	22.1	22.1	22.0	22.1	22.2	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.0	21.9	22.0	21.9	22.0	21.9	21.9	21.9	21.9	22.0	21.9	21.9	21.9	22.0
Jan 2	21.9	22.0	22.0	22.0	22.0	22.0	22.0	22.1	22.1	22.2	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.2	22.2	22.2	22.1	22.2	22.2	21.9	22.2
Jan 3	22.2	22.2	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.1	22.1	22.2	22.1	22.1	22.0	22.0	21.9	22.0	21.9	22.2
Jan 4	22.0	22.0	21.9	21.9	22.0	22.0	22.0	22.1	22.0	22.0	22.2	22.1	22.1	21.9	21.9	21.9	21.9	22.0	22.0	22.2	22.2	22.3	22.3	22.3	21.9	22.3
Jan 5	22.3	22.4	22.4	22.3	22.3	22.3	22.3	22.4	22.4	22.3	22.3	22.2	22.1	22.0	21.8	21.8	21.8	21.9	21.9	21.9	21.9	21.9	21.8	21.8	21.8	22.1
Jan 6	21.8	21.8	21.9	21.9	21.8	21.8	21.8	21.8	21.8	21.9	21.9	21.8	21.8	21.8	21.7	21.7	21.7	21.8	21.7	21.7	21.7	21.8	21.8	21.9	21.7	21.9
Jan 7	21.8	21.9	22.0	22.0	22.0	21.9	21.9	22.0	22.0	22.0	22.0	22.0	21.9	21.8	21.9	21.8	21.8	21.9	21.8	21.9	21.9	21.9	22.0	21.9	21.8	22.0
Jan 8	22.0	22.0	22.1	22.1	22.1	22.1	22.2	22.2	22.2	22.3	22.4	22.3	22.2	22.0	21.9	21.8	21.9	21.9	22.1	22.1	22.2	22.2	22.2	22.2	21.8	22.4
Jan 9	22.2	22.2	22.2	22.2	22.2	22.1	22.1	22.2	22.1	22.2	22.1	22.1	22.0	22.0	21.9	21.8	21.9	21.9	22.0	22.0	22.1	22.2	22.2	22.2	21.8	22.2
Jan 10	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.0	21.9	21.9	21.9	21.9	21.9	21.9	21.8	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.8
Jan 11	21.9	21.8	21.9	21.9	21.9	21.9	21.9	21.9	21.8	21.8	21.9	21.8	21.7	21.7	21.7	21.6	21.7	21.7	21.7	21.8	21.7	21.8	21.7	21.8	21.6	21.9
Jan 12	21.8	21.8	21.9	21.9	21.9	22.0	22.1	22.1	22.1	22.1	22.0	21.9	21.8	21.7	21.7	21.7	21.7	21.7	21.7	21.9	21.8	21.8	21.9	21.8	21.7	22.1
Jan 13	21.9	21.8	21.8	21.8	21.9	21.9	21.9	21.9	21.9	21.9	22.0	21.8	21.9	22.0	21.8	21.9	22.0	21.8	21.9	21.9	22.0	22.0	21.9	21.9	21.8	22.0
Jan 14	21.9	21.9	21.9	21.9	21.9	22.0	22.0	22.1	22.1	22.1	22.2	22.2	22.1	21.9	21.9	21.9	21.9	22.0	22.0	22.0	22.1	22.1	22.0	22.0	21.9	22.2
Jan 15	22.0	22.0	22.0	22.0	22.0	21.9	21.9	21.9	21.9	21.9	21.9	21.8	21.7	21.7	21.8	21.8	21.7	21.7	21.7	21.7	21.7	21.8	21.7	21.8	21.7	22.0
Jan 16	21.7	21.8	21.8	21.8	21.8	21.7	21.8	21.8	21.9	21.8	21.9	21.9	21.8	21.8	21.9	21.8	21.8	21.8	21.9	21.9	21.9	22.0	22.0	22.0	21.7	22.0
Jan 17	21.8	21.7	21.8	21.7	21.7	21.7	21.7	21.7	21.8	21.8	21.7	21.8	21.7	21.7	21.7	21.7	21.7	21.7	21.8	21.7	21.8	21.8	21.8	21.8	21.7	21.8
Jan 18	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.6	21.9	21.9	22.4	23.1	23.1	22.4	21.6	22.0	22.1	22.2	22.1	22.1	22.1	21.6	23.1
Jan 19	22.1	22.1	22.1	22.0	22.0	22.0	21.9	21.9	21.9	22.0	22.0	21.9	21.9	22.0	22.0	22.0	21.9	21.9	22.0	22.1	22.1	22.0	22.0	22.1	21.9	22.1
Jan 20	22.1	22.1	22.0	22.1	22.0	22.1	22.1	22.1	22.1	22.1	22.0	22.0	22.1	22.1	22.1	22.2	22.1	22.1	22.1	22.2	22.2	22.2	22.2	22.2	22.0	22.2
Jan 21	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.2	22.2	22.2	22.2	22.1	22.1	22.1	22.0	22.1	22.1	22.1	22.1	22.1	22.2	22.1	22.1	22.1	22.0	22.2
Jan 22	22.1	22.1	22.1	22.2	22.3	22.3	22.3	22.2	22.3	22.3	22.3	22.3	22.3	22.3	22.2	22.2	22.3	22.4	22.4	22.5	22.6	22.6	22.7	22.7	22.1	22.7
Jan 23	22.7	22.8	22.8	22.7	22.8	22.8	22.8	22.9	22.9	22.8	22.7	22.8	22.8	22.7	22.5	22.4	22.5	22.6	22.6	22.5	22.6	22.6	22.6	22.6	22.4	22.9
Jan 24	22.6	22.7	22.7	22.6	22.7	22.6	22.6	22.7	22.7	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.7	22.7	22.5	22.7
Jan 25	22.7	22.7	22.7	22.8	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.6	22.5	22.5	22.5	22.6	22.5	22.6	22.6	22.5	22.6	22.5	22.8
Jan 26	22.5	22.6	22.7	22.7	22.7	22.7	22.7	22.6	22.6	22.6	22.5	22.6	22.5	22.4	22.4	22.4	22.5	22.6	22.6	22.6	22.6	22.6	22.7	22.7	22.4	22.7
Jan 27	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.8	22.8	22.8	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.8	22.8	22.8	22.8	22.8	22.8	22.7	22.8
Jan 28	22.8	22.8	22.9	22.9	22.9	22.9	22.8	22.8	22.7	22.7	22.7	22.7	22.6	22.6	22.6	22.6	22.6	22.5	22.6	22.6	22.6	22.6	22.1	21.7	21.7	22.9
Jan 29	21.9	22.4	22.8	22.8	22.8	22.8	22.8	22.8	22.7	22.8	22.8	22.8	22.6	22.5	22.6	22.4	22.4	22.4	22.5	22.6	22.6	22.6	22.7	22.7	21.9	22.8
Jan 30	22.7	22.7	22.8	22.7	22.7	22.8	22.8	22.7	22.8	22.8	22.9	22.8	22.6	22.5	22.4	22.4	22.3	22.4	22.4	22.5	22.5	22.6	22.6	22.7	22.3	22.9
Jan 31	22.6	22.7	22.7	22.7	22.6	22.6	22.6	22.6	22.7	22.7	22.8	22.8	22.6	22.4	22.4	22.3	22.3	22.5	22.5	22.6	22.7	22.6	22.6	22.6	22.3	22.8
Diurnal Maximum	22.8	22.8	22.9	22.9	22.9	22.9	22.8	22.9	22.9	22.8	22.9	22.8	22.8	23.1	23.1	22.7	22.7	22.7	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8
Diurnal Average	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.1	22.1	22.1	22.1	22.1	22.1	22.2	22.2	22.2	22.2	22.2	22.2

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

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.

Timeseries Chart of Hourly Average for ST - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

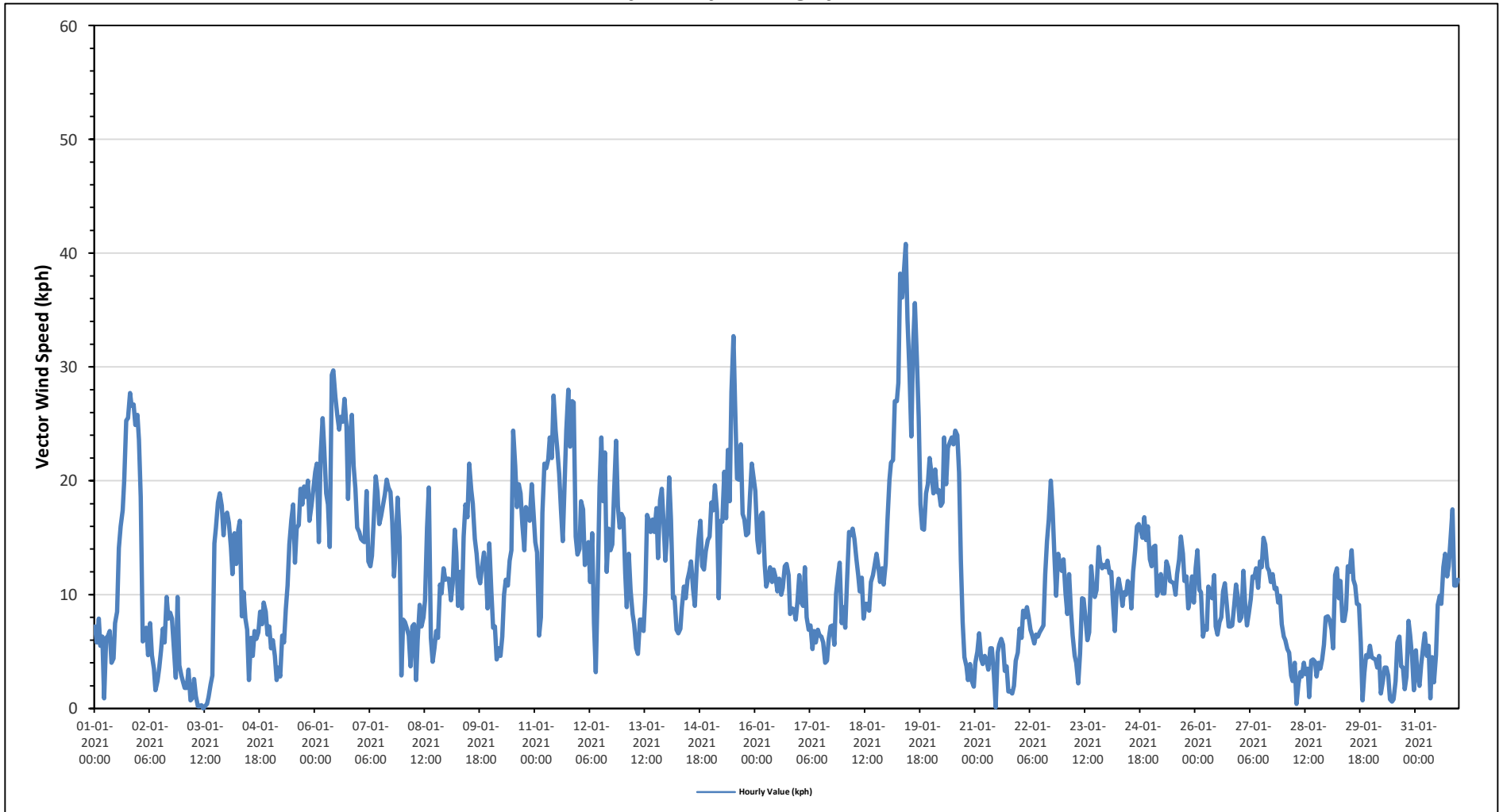
986c Station - January 2021

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

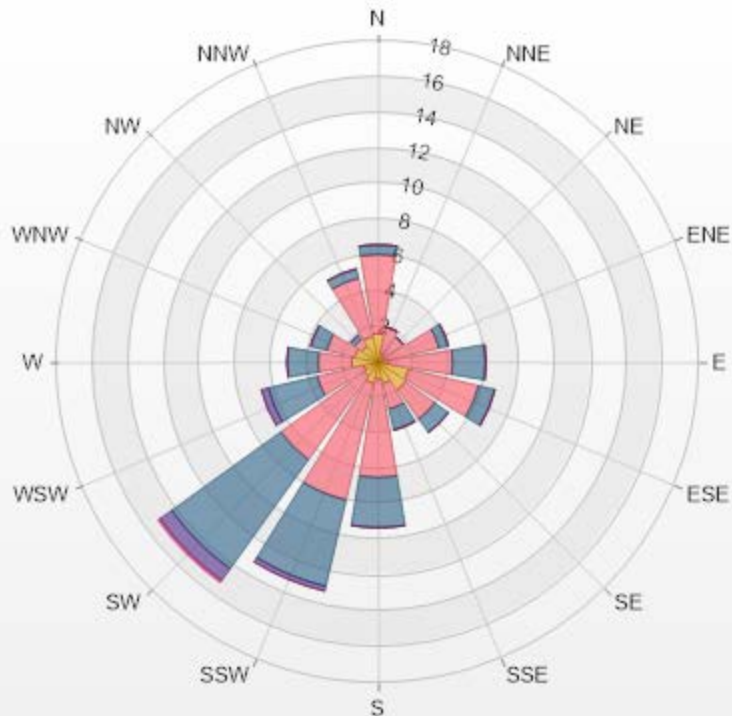
Maximum Hourly Value: 40.8 kph on January 19 at hour 10										Hours in Service: 744																	
Maximum Daily Value: 24.1 kph on January 19										Hours of Data: 744																	
Minimum Hourly Value: 0.0 kph on January 3 at hour 11										Hours of Missing Data: 0																	
Minimum Daily Value: 0.5 kph on January 28										Hours of Calibration: 0																	
Monthly Average: 4.7 kph										Operational Uptime: 100.0																	
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
Jan 1	7.2	5.8	7.9	5.5	6.3	0.9	6.2	6.3	6.8	4.0	4.4	7.5	8.5	14.1	16.0	17.4	20.0	25.3	25.5	27.7	26.6	26.7	24.9	25.8	0.9	27.7	10.7
Jan 2	23.6	18.6	5.9	6.2	7.1	4.7	7.5	4.7	3.5	1.6	2.4	3.6	5.1	7.0	5.8	9.8	7.9	8.4	7.9	5.1	2.7	9.8	3.8	2.9	1.6	23.6	3.6
Jan 3	2.3	1.8	1.8	3.4	0.7	0.9	2.6	1.1	0.2	0.2	0.3	0.0	0.2	0.4	1.0	2.1	2.9	14.5	15.9	18.1	18.9	17.8	15.2	16.9	0.0	18.9	5.0
Jan 4	17.2	16.3	14.2	11.8	15.4	12.7	15.7	16.5	8.1	10.2	7.9	6.9	2.5	6.2	4.6	6.8	6.1	6.7	8.5	7.4	9.3	8.5	6.5	7.2	2.5	17.2	4.1
Jan 5	5.3	6.0	4.6	2.5	3.6	2.8	6.4	5.8	8.7	10.8	14.4	16.6	17.9	12.8	15.9	16.1	19.3	17.9	19.5	18.6	20.0	16.5	17.8	19.2	2.5	20.0	10.4
Jan 6	20.8	21.5	14.6	22.2	25.5	22.9	18.9	17.9	14.2	29.3	29.7	27.4	25.9	24.5	25.6	25.2	27.2	24.7	18.4	24.0	25.8	21.3	19.3	15.9	14.2	29.7	20.0
Jan 7	15.5	14.9	14.7	14.6	19.1	12.9	12.5	13.4	16.5	20.4	19.0	16.2	16.9	17.9	18.8	20.1	19.4	19.0	16.4	11.6	14.2	18.5	15.0	2.9	2.9	20.4	15.5
Jan 8	7.8	7.6	7.0	6.4	3.7	7.2	7.4	2.5	6.0	9.1	7.2	8.0	9.5	15.9	19.4	6.2	4.1	5.3	6.8	6.2	10.9	10.1	12.3	11.3	2.5	19.4	6.0
Jan 9	11.4	11.4	9.5	11.0	15.7	13.7	9.0	12.0	8.8	15.1	17.9	16.8	21.5	19.2	18.0	14.9	13.6	11.6	11.0	12.4	13.7	12.4	8.8	14.5	8.8	21.5	12.7
Jan 10	10.3	7.1	7.2	4.3	5.3	4.6	6.3	10.0	11.3	10.8	13.0	13.9	24.4	21.3	17.7	19.7	18.9	16.2	13.9	17.7	17.1	16.5	19.7	17.2	4.3	24.4	12.0
Jan 11	14.6	13.7	6.4	8.0	17.2	21.5	21.1	21.9	23.8	22.0	27.5	24.4	22.9	20.6	17.5	14.7	19.5	24.4	28.0	23.0	27.0	26.9	15.1	13.5	6.4	28.0	17.9
Jan 12	14.0	18.2	17.5	12.6	13.2	14.6	11.1	15.4	7.5	3.2	10.1	19.5	23.8	18.2	22.5	12.0	15.8	13.9	14.4	18.9	23.5	17.8	15.9	17.1	3.2	23.8	12.4
Jan 13	16.7	11.9	8.9	13.6	10.4	8.3	7.4	5.3	4.8	7.8	7.8	6.8	10.1	17.0	16.5	15.5	16.6	15.5	17.6	13.2	18.3	19.3	15.8	13.0	4.8	19.3	11.2
Jan 14	15.7	20.3	16.6	9.7	9.8	6.9	6.6	7.0	8.9	10.7	9.7	11.3	12.0	12.9	10.5	9.0	12.4	14.8	16.5	12.5	12.2	13.8	14.8	15.1	6.6	20.3	8.3
Jan 15	18.1	17.4	19.6	17.3	9.7	16.5	16.4	20.8	16.7	22.7	18.2	27.8	32.7	27.0	20.2	20.1	23.2	17.1	16.6	15.2	15.4	18.7	21.5	20.3	9.7	32.7	14.9
Jan 16	19.1	14.8	13.7	17.0	17.2	12.6	10.7	11.4	12.4	11.1	12.2	11.6	10.3	11.4	10.0	10.6	12.5	12.7	11.7	8.3	8.8	8.7	7.8	9.4	7.8	19.1	11.4
Jan 17	11.7	9.3	9.0	12.4	8.0	6.9	7.3	5.2	6.8	5.8	6.9	6.4	6.3	5.8	4.0	4.2	6.1	7.2	7.3	5.6	10.1	11.6	12.8	7.5	4.0	12.8	6.8
Jan 18	8.9	7.1	11.2	15.5	15.2	15.8	14.9	13.1	11.7	10.3	11.5	7.9	9.2	9.2	8.6	11.1	11.7	12.5	13.6	12.5	11.1	12.3	10.9	12.7	7.1	15.8	9.9
Jan 19	16.5	20.1	21.6	21.8	27.0	27.0	28.6	38.2	36.1	38.4	40.8	34.1	29.4	23.9	31.8	35.6	30.6	25.6	17.9	15.8	15.7	18.9	19.7	22.0	15.7	40.8	24.1
Jan 20	20.7	18.9	21.0	19.0	19.2	17.8	18.1	23.8	19.7	22.9	23.4	23.8	23.2	24.4	24.0	20.7	13.0	7.6	4.5	3.7	2.5	3.9	2.4	1.9	1.9	24.4	12.9
Jan 21	4.0	5.0	6.6	4.3	3.9	4.6	4.2	3.4	5.3	5.3	3.0	0.1	4.9	5.6	6.1	5.6	3.3	3.7	1.5	1.5	1.3	2.0	4.2	4.9	0.1	6.6	2.0
Jan 22	7.0	6.2	8.6	8.0	8.9	8.0	6.9	6.4	5.7	6.5	6.3	6.7	7.0	7.3	11.8	14.7	16.6	20.0	17.5	13.5	9.9	13.6	12.7	12.1	5.7	20.0	6.6
Jan 23	13.1	10.1	8.3	11.8	8.7	6.4	4.6	4.0	2.2	4.8	9.7	9.6	7.8	6.0	6.7	12.5	10.9	9.8	10.4	14.2	12.9	12.3	12.6	12.4	2.2	14.2	6.9
Jan 24	13.0	11.9	12.0	9.2	6.8	10.2	11.4	10.5	9.0	10.2	10.0	11.2	10.9	8.8	12.0	13.9	16.0	16.2	15.7	15.0	16.8	14.8	16.0	13.1	6.8	16.8	11.8
Jan 25	12.5	14.2	14.3	9.9	10.5	11.8	10.1	10.1	12.9	12.4	11.2	11.1	11.0	10.0	11.8	13.1	15.1	13.6	11.2	11.6	8.8	9.8	11.6	9.3	8.8	15.1	11.2
Jan 26	12.3	13.9	10.4	10.2	6.3	7.2	6.9	10.7	10.1	9.7	11.7	7.2	6.5	7.6	8.0	10.3	11.0	9.0	7.2	7.2	7.3	9.1	10.9	9.8	6.3	13.9	6.5
Jan 27	7.7	8.0	12.1	9.1	7.3	8.3	9.6	11.6	11.5	12.3	10.6	12.9	12.4	15.0	14.4	12.4	12.1	11.1	11.8	10.5	10.6	9.3	9.9	7.4	7.3	15.0	10.6
Jan 28	6.3	6.0	5.2	4.9	2.9	2.4	4.0	0.4	2.2	3.2	2.8	4.0	3.0	3.5	1.0	4.2	4.3	4.1	2.8	4.0	3.5	4.3	5.6	8.0	0.4	8.0	0.5
Jan 29	8.1	7.8	6.9	5.3	11.7	12.3	9.7	11.2	7.7	7.7	8.7	12.5	12.0	13.9	11.3	10.8	9.2	9.1	5.8	0.7	3.1	4.7	4.5	5.5	0.7	13.9	7.4
Jan 30	4.5	4.4	4.3	3.6	4.6	1.3	2.4	3.6	3.6	2.9	0.8	0.6	0.8	2.4	5.8	6.3	3.7	3.6	1.7	2.8	7.7	6.5	4.5	1.6	0.6	7.7	1.6
Jan 31	5.1	2.9	2.0	3.9	5.5	6.6	4.6	5.5	0.9	4.5	2.3	4.7	9.1	9.9	9.2	12.4	13.6	11.6	12.5	14.8	17.5	10.8	10.8	11.3	0.9	17.5	5.9
Diurnal Maximum	24	22	22	22	27	27	29	38	36	38	41	34	33	27	32	36	31	26	28	28	27	27	25	26			
Diurnal Average	12.0	11.4	10.4	10.2	10.5	10.0	10.0	10.6	9.8	11.2	11.7	12.0	12.8	12.9	13.1	13.2	13.4	13.3	12.6	12.0	13.0	13.1	12.4	11.7			
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance										
K	Collection Error							N	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.																											

Timeseries Chart of Hourly Average for VWS - 986c Station



Wind: PRAMP 986c Monitor: WDS [KPH] Monthly: 01-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 3.49% Valid Data: 100.00%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	1.61	4.44	0.54	0	0	6.59
NNE	0.54	1.48	0	0	0	2.02
NE	0.4	1.34	0	0	0	1.74
ENE	0.27	3.23	0.54	0	0	4.04
E	0.54	3.63	1.88	0	0	6.05
ESE	1.75	4.03	0.94	0	0	6.72
SE	1.88	2.02	0.94	0	0	4.84
SSE	1.21	1.48	1.21	0	0	3.9
S	0.94	5.51	2.82	0	0	9.27
SSW	1.21	6.72	4.97	0.27	0	13.17
SW	0.94	5.78	7.53	0.81	0.13	15.19
WSW	0.81	2.69	2.82	0.4	0	6.72
W	1.48	1.88	1.75	0	0	5.11
WNW	1.34	1.61	0.94	0	0	3.89
NW	1.08	0.54	0.27	0	0	1.89
NNW	1.48	3.36	0.54	0	0	5.38
Summary	17.48	49.74	27.69	1.48	0.13	96.52



PRAMP-202101

Page 64 of 228

% Icon Classes (KPH)

17 1.8-6.0

50 6.0-15.0

28 15.0-29.0

1 29.0-39.0

0 >39.0



PEACE RIVER AREA MONITORING PROGRAM

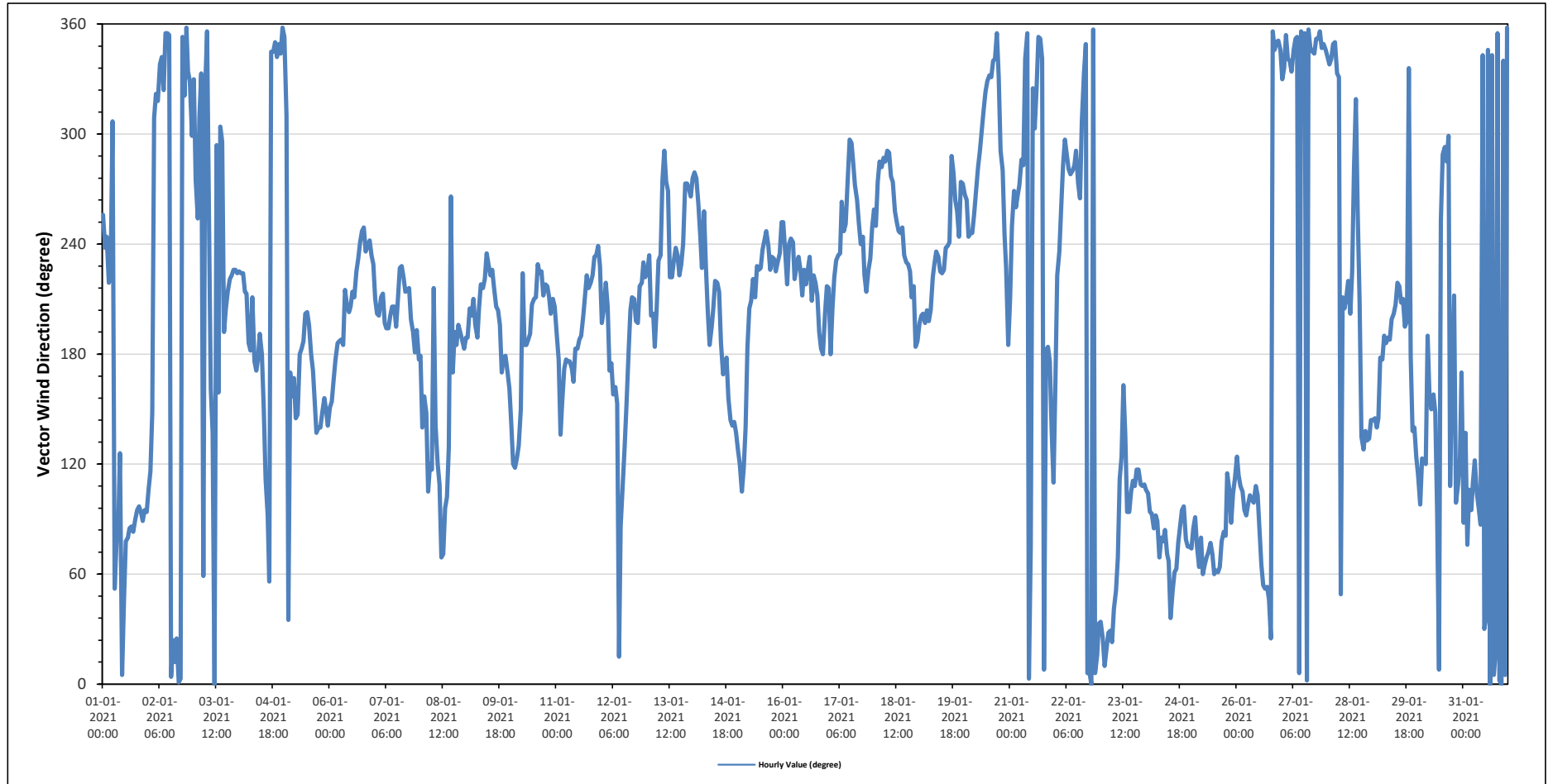
986c Station - January 2021

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

Monthly Average:										207 (SSW) degree										Hours in Service:										744	
																				Hours of Data:										744	
																				Hours of Missing Data:										0	
																				Hours of Calibration:										0	
																				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					
Jan 1	WSW	SW	WSW	SW	SW	NW	NE	ENE	E	SE	N	NE	ENE	E	E	E	E	E	E	E	E	E	E	E	91	E					
Jan 2	ESE	ESE	SE	NW	NW	NW	NNW	NNW	NW	N	N	N	N	NNE	NNE	NNE	N	N	N	NW	N	NNW	NNW	WNW	13	NNE					
Jan 3	NNW	W	WSW	NW	NNW	ENE	NW	N	WSW	SSE	SE	N	WNW	SSE	WNW	WNW	S	SSW	SSW	SW	SW	SW	SW	SW	226	SW					
Jan 4	SW	SW	SW	SSW	SSW	S	S	SSW	S	S	S	S	S	SSE	ESE	E	NE	NNW	NNW	N	NNW	NNW	NNW	N	210	SSW					
Jan 5	N	NW	NE	SSE	SSE	SSE	SE	SE	S	S	S	SSW	SSW	SSW	S	S	SSE	SE	SE	SE	SE	SSE	SSE	SE	163	SSE					
Jan 6	SSE	SSE	SSE	S	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	SW	WSW	WSW	SW	211	SSW					
Jan 7	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SSW	SSW	SW	SSW	S	S	S	S	206	SSW					
Jan 8	S	SE	SSE	SE	ESE	ESE	ESE	SW	SE	ESE	ESE	ENE	ENE	E	E	SE	W	SSE	S	S	SSW	S	S	S	142	SE					
Jan 9	S	S	SSW	SSW	SSW	SSW	S	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SSW	SSW	SSE	S	S	SSE	SSE	204	SSW					
Jan 10	SE	ESE	ESE	ESE	SE	SSE	SW	S	S	S	S	SSW	SSW	SSW	SW	SW	SW	SSW	SW	SW	SSW	SSW	SSW	SSW	203	SSW					
Jan 11	S	S	SE	SSE	S	S	S	S	S	SSE	S	S	S	S	SSW	SSW	SW	SW	SW	SW	SW	SW	WSW	SW	197	SSW					
Jan 12	SSW	SSW	SW	SSW	S	S	SSE	SSE	SSE	NNE	E	ESE	SE	SSE	S	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	187	S					
Jan 13	SW	SW	SSW	SSW	S	SSW	SW	SW	W	WNW	W	W	SW	SW	SW	SW	SW	SW	SW	WSW	W	W	W	W	239	WSW					
Jan 14	W	W	W	W	WSW	SW	WSW	SW	SSW	S	SSW	SSW	SW	SW	SSW	S	SSE	S	S	SSE	SE	SE	SE	SE	203	SSW					
Jan 15	SE	ESE	ESE	ESE	SE	S	SSW	SSW	SW	SSW	SW	SW	SW	SW	WSW	WSW	WSW	SW	SW	SW	SW	SW	WSW	215	SSW						
Jan 16	WSW	SW	SW	WSW	WSW	WSW	SW	SW	SW	SW	SSW	SW	SW	SW	SW	SSW	SW	SW	SSW	S	S	S	SSW	SW	224	SW					
Jan 17	SW	S	SSW	SW	SW	SW	SW	W	WSW	WSW	W	WNW	WNW	WNW	W	W	WSW	WSW	WSW	SW	SSW	SW	SW	WSW	238	SW					
Jan 18	WSW	WSW	W	WNW	W	WNW	WNW	WNW	WNW	W	W	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SSW	SW	S	S	S	253	WSW					
Jan 19	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WNW	W	W	WSW	WSW	W	W	231	SW					
Jan 20	W	W	WSW	WSW	WSW	WSW	W	W	WNW	WNW	NW	NW	NNW	NNW	NNW	NNW	NNW	N	NNW	WNW	W	WSW	SW	S	295	WNW					
Jan 21	SSW	WSW	W	WSW	W	W	WNW	W	NNW	N	N	ENE	NW	WNW	NW	N	N	NNW	N	S	S	S	SE	ESE	302	WNW					
Jan 22	SSE	SW	SW	WSW	W	WNW	WNW	W	W	W	W	WNW	W	W	NW	NNW	NNW	N	N	N	N	N	NNE	NNE	326	NW					
Jan 23	NE	NNE	N	NNE	NNE	NNE	NNE	NE	NE	ENE	ESE	ESE	SSE	SE	E	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	88	E					
Jan 24	ESE	ESE	E	E	E	E	E	ENE	E	ENE	E	ENE	ENE	NE	NE	ENE	ENE	ENE	E	E	E	ENE	ENE	ENE	80	E					
Jan 25	ENE	E	E	ENE	ENE	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	ESE	ESE	E	ESE	ESE	79	ENE					
Jan 26	ESE	ESE	ESE	ESE	E	E	E	ESE	E	E	ESE	ESE	E	ENE	NE	NE	NE	NE	NNE	N	NNW	N	NNW	NNW	73	ENE					
Jan 27	NNW	NNW	N	NNW	NNW	NNW	NNW	N	N	N	N	N	N	N	N	NNW	NNW	NNW	NNW	N	N	N	NNW	NNW	350	N					
Jan 28	NNW	NNW	NNW	NNW	N	NNW	NNW	NE	SSW	SSW	SSW	SW	SSW	SW	W	NW	WSW	SSW	SE	SE	SE	SE	SE	SE	237	SW					
Jan 29	SE	SE	SE	SE	S	S	S	S	S	S	S	SSW	SSW	SW	SW	SSW	SSW	SSW	SSW	NNW	S	SE	SE	ESE	186	S					
Jan 30	ESE	E	ESE	ESE	ESE	S	SSE	SSE	SSE	SE	E	N	WSW	WNW	WNW	WNW	WNW	ESE	S	SSW	E	ESE	ESE	SSE	134	SE					
Jan 31	E	SE	ENE	ESE	E	ESE	ESE	ESE	E	E	NNW	NNE	NE	NNW	N	NNW	N	NNE	N	N	NNW	N	N	N	17	NNE					
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance														
K	Collection Error							N	No Data (Machine Not in Service)							Y	Routine Maintenance														
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.																															

Timeseries Chart of Hourly Average for VWD - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - January 2021

Summary of Hourly Averages

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

WIND SPEED																												
Maximum Hourly Value:		40.8 kph on January 19 at hour 10													Hours in Service:		744											
Maximum Daily Value:		24.1 kph on January 19													Hours of Data:		744											
Minimum Hourly Value:		0.0 kph on January 3 at hour 11													Hours of Missing Data:		0											
Minimum Daily Value:		0.5 kph on January 28													Hours of Calibration:		0											
Monthly Average:		4.7 kph													Operational Uptime:		100											
WIND DIRECTION																												
Monthly Average:		207 (SSW) degree																										
Day	0	1	2	3	4	5	6	7	8	9	Hourly Period Starting at (MST)															Daily Minimum	Daily Maximum	Daily Average
Jan 1	7.2	5.8	7.9	5.5	6.3	0.9	6.2	6.3	6.8	4.0	4.4	7.5	8.5	14.1	16.0	17.4	20.0	25.3	25.5	27.7	26.6	26.7	24.9	25.8	0.9	27.7	10.7	
Jan 2	WSW	SW	WSW	SW	SW	NW	NE	ENE	E	SE	N	NE	ENE	E	E	E	E	E	E	E	E	E	E	E	E	1.6	23.6	3.6
	23.6	18.6	5.9	6.2	7.1	4.7	7.5	4.7	3.5	1.6	2.4	3.6	5.1	7.0	5.8	9.8	7.9	8.4	7.9	5.1	2.7	9.8	3.8	2.9	0.0	18.9	5.0	
Jan 3	ESE	ESE	SE	NW	NW	NW	NNW	NNW	NW	N	N	N	NNE	NNE	NNE	N	N	NW	N	NNW	NNW	NNW	NNW	NNW	NNW	0.0	18.9	5.0
	2.3	1.8	1.8	3.4	0.7	0.9	2.6	1.1	0.2	0.2	0.3	0.0	0.2	0.4	1.0	2.1	2.9	14.5	15.9	18.1	18.9	17.8	15.2	16.9	2.5	17.2	4.1	
Jan 4	NNW	W	WSW	NW	NNW	ENE	NW	N	WSW	SSE	SE	N	WNW	SSE	WNW	WSW	S	SSW	SSW	SW	SW	SW	SW	SW	SW	2.5	17.2	4.1
	17.2	16.3	14.2	11.8	15.4	12.7	15.7	16.5	8.1	10.2	7.9	6.9	2.5	6.2	4.6	6.8	6.1	6.7	8.5	7.4	9.3	8.5	6.5	7.2	2.5	17.2	4.1	
Jan 5	SW	SW	SW	SSW	SSW	S	S	SSW	S	S	S	S	S	SSE	ESE	E	NE	NNW	NNW	N	NNW	NNW	NNW	NNW	NNW	2.5	20.0	10.4
	5.3	6.0	4.6	2.5	3.6	2.8	6.4	5.8	8.7	10.8	14.4	16.6	17.9	12.8	15.9	16.1	19.3	17.9	19.5	18.6	20.0	16.5	17.8	19.2	2.5	20.0	10.4	
Jan 6	N	NW	NE	SSE	SSE	SSE	SE	SE	S	S	S	SSW	SSW	SSW	S	S	SSE	SE	SE	SE	SE	SSE	SSE	SSE	SE	14.2	29.7	20.0
	20.8	21.5	14.6	22.2	25.5	22.9	18.9	17.9	14.2	29.3	29.7	27.4	25.9	24.5	25.6	25.2	27.2	24.7	18.4	24.0	25.8	21.3	19.3	15.9	14.2	29.7	20.0	
Jan 7	SSE	SSE	SSE	S	S	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	2.9	20.4	15.5
	15.5	14.9	14.7	14.6	19.1	12.9	12.5	13.4	16.5	20.4	19.0	16.2	16.9	17.9	18.8	20.1	19.4	19.0	16.4	11.6	14.2	18.5	15.0	2.9	2.9	20.4	15.5	
Jan 8	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	2.5	19.4	6.0
	7.8	7.6	7.0	6.4	3.7	7.2	7.4	2.5	6.0	9.1	7.2	8.0	9.5	15.9	19.4	6.2	4.1	5.3	6.8	6.2	10.9	10.1	12.3	11.3	2.5	19.4	6.0	
Jan 9	S	SE	SSE	SE	ESE	ESE	ESE	SW	SE	ESE	ESE	ENE	ENE	E	E	SE	W	SSE	S	S	SSW	S	S	S	2.5	19.4	6.0	
	11.4	11.4	9.5	11.0	15.7	13.7	9.0	12.0	8.8	15.1	17.9	16.8	21.5	19.2	18.0	14.9	13.6	11.6	11.0	12.4	13.7	12.4	8.8	14.5	8.8	21.5	12.7	
Jan 10	S	S	SSW	SSW	SSW	SSW	S	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	SSE	S	S	SSE	SSE	4.3	24.4	12.0
	10.3	7.1	7.2	4.3	5.3	4.6	6.3	10.0	11.3	10.8	13.0	13.9	24.4	21.3	17.7	19.7	18.9	16.2	13.9	17.7	17.1	16.5	19.7	17.2	4.3	24.4	12.0	
Jan 11	SE	ESE	ESE	ESE	SE	SSE	SW	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	6.4	28.0	17.9
	14.6	13.7	6.4	8.0	17.2	21.5	21.1	21.9	23.8	22.0	27.5	24.4	22.9	20.6	17.5	14.7	19.5	24.4	28.0	23.0	27.0	26.9	15.1	13.5	6.4	28.0	17.9	
Jan 12	S	S	SE	SSE	S	S	S	S	S	SSE	S	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	3.2	23.8	12.4
	14.0	18.2	17.5	12.6	13.2	14.6	11.1	15.4	7.5	3.2	10.1	19.5	23.8	18.2	22.5	12.0	15.8	13.9	14.4	18.9	23.5	17.8	15.9	17.1	3.2	23.8	12.4	
Jan 13	SSW	SSW	SW	SSW	S	S	SSE	SSE	SSE	NNE	E	ESE	SE	SSE	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	4.8	19.3	11.2
	16.7	11.9	8.9	13.6	10.4	8.3	7.4	5.3	4.8	7.8	7.8	6.8	10.1	17.0	16.5	15.5	16.6	15.5	17.6	13.2	18.3	19.3	15.8	13.0	4.8	19.3	11.2	
Jan 14	SW	SW	SSW	SSW	S	SSW	SW	SW	W	WNW	W	W	SW	SW	SW	SW	SW	SW	SW	SW	WSW	W	W	W	W	6.6	20.3	8.3
	15.7	20.3	16.6	9.7	9.8	6.9	6.6	7.0	8.9	10.7	9.7	11.3	12.0	12.9	10.5	9.0	12.4	14.8	16.5	12.5	12.2	13.8	14.8	15.1	6.6	20.3	8.3	
Jan 15	W	W	W	W	WSW	SW	WSW	SW	SSW	S	SSW	SSW	SW	SW	SSW	S	SSE	S	S	SSE	SE	SE	SE	SE	SE	9.7	32.7	14.9
	18.1	17.4	19.6	17.3	9.7	16.5	16.4	20.8	16.7	22.7	18.2	27.8	32.7	27.0	20.2	20.1	23.2	17.1	16.6	15.2	15.4	18.7	21.5	20.3	9.7	32.7	14.9	
Jan 16	SE	ESE	ESE	ESE	SE	S	SSW	SSW	SW	SSW	SW	SW	SW	SW	SW	WSW	WSW	WSW	SW	SW	SW	SW	SW	SW	WSW	7.8	19.1	11.4
	19.1	14.8	13.7	17.0	17.2	12.6	10.7	11.4	12.4	11.1	12.2	11.6	10.3	11.4	10.0	10.6	12.5	12.7	11.7	8.3	8.8	8.7	7.8	9.4	7.8	19.1	11.4	
Jan 17	WSW	SW	SW	WSW	WSW	WSW	SW	SW	SW	SSW	SW	SW	SSW	SW	SW	SSW	SW	SSW	S	S	S	S	SSW	SW	SW	4.0	12.8	6.8
	11.7	9.3	9.0	12.4	8.0	6.9	7.3	5.2	6.8	5.8	6.9	6.4	6.3	5.8	4.0	4.2	6.1	7.2	7.3	5.6	10.1	11.6	12.8	7.5	4.0	12.8	6.8	
Jan 18	SW	S	SSW	SW	SW	SW	SW	W	WSW	WSW	W	WNW	WNW	WNW	W	W	WSW	WSW	WSW	WSW	SSW	SSW	SSW	SSW	SSW	7.1	15.8	9.9
	8.9	7.1	11.2	15.5	15.2	15.8	14.9	13.1	11.7	10.3	11.5	7.9	9.2	9.2	8.6	11.1	11.7	12.5	13.6	12.5	11.1	12.3	10.9	12.7	7.1	15.8	9.9	
Jan 19	WSW	WSW	W	WNW	W	WNW	WNW	WNW	WNW	W	W	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	SSW	SW	S	S	15.7	40.8	24.1
	16.5	20.1	21.6	21.8	27.0	27.0	28.6	38.2	36.1	38.4	40.8	34.1	29.4	23.9	31.8	35.6	30.6	25.6	17.9	15.8	15.7	18.9	19.7	22.0	15.7	40.8	24.1	
Jan 20	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WNW	W	W	WSW	WSW	W	W	1.9	24.4	12.9
	20.7	18.9	21.0	19.0	19.2	17.8	18.1	23.8	19.7	22.9	23.4	23.8	23.2	24.4	24.0	20.7	13.0	7.6	4.5	3.7	2.5	3.9	2.4	1.9	1.9	24.4	12.9	
Jan 20	W	W	WSW	WSW	WSW	WSW	W	W	WNW	WNW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNW	NNW	W	WSW	SW	S	1.9	24.4	12.9



PEACE RIVER AREA MONITORING PROGRAM

986c Station - January 2021

Summary of Hourly Averages

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

WIND SPEED																																							
Maximum Hourly Value:										40.8 kph on January 19 at hour 10										Hours in Service:										744									
Maximum Daily Value:										24.1 kph on January 19										Hours of Data:										744									
Minimum Hourly Value:										0.0 kph on January 3 at hour 11										Hours of Missing Data:										0									
Minimum Daily Value:										0.5 kph on January 28										Hours of Calibration:										0									
Monthly Average:										4.7 kph										Operational Uptime:										100									
WIND DIRECTION																																							
Monthly Average:										207 (SSW) degree																													
Day	0	1	2	3	4	5	6	7	8	9	Hourly Period Starting at (MST)													14	15	16	17	18	19	20	21	22	23	Daily Minimum	Daily Maximum	Daily Average			
Jan 21	4.0	5.0	6.6	4.3	3.9	4.6	4.2	3.4	5.3	5.3	3.0	0.1	4.9	5.6	6.1	5.6	3.3	3.7	1.5	1.5	1.3	2.0	4.2	4.9															
	SSW	WSW	W	WSW	W	W	WNW	W	NNW	N	N	ENE	NW	WNW	NW	N	N	NNW	N	S	S	S	SE	ESE															
Jan 22	7.0	6.2	8.6	8.0	8.9	8.0	6.9	6.4	5.7	6.5	6.3	6.7	7.0	7.3	11.8	14.7	16.6	20.0	17.5	13.5	9.9	13.6	12.7	12.1															
	SSE	SW	SW	WSW	W	WNW	WNW	W	W	W	W	WNW	W	W	NNW	NNW	NNW	N	N	N	N	N	NNE	NNE															
Jan 23	13.1	10.1	8.3	11.8	8.7	6.4	4.6	4.0	2.2	4.8	9.7	9.6	7.8	6.0	6.7	12.5	10.9	9.8	10.4	14.2	12.9	12.3	12.6	12.4															
	NE	NNE	N	NNE	NNE	NNE	NNE	NE	NE	ENE	ESE	ESE	SSE	SE	E	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE															
Jan 24	13.0	11.9	12.0	9.2	6.8	10.2	11.4	10.5	9.0	10.2	10.0	11.2	10.9	8.8	12.0	13.9	16.0	16.2	15.7	15.0	16.8	14.8	16.0	13.1															
	ESE	ESE	E	E	E	E	E	ENE	E	ENE	E	ENE	ENE	NE	NE	ENE	ENE	ENE	E	E	E	ENE	ENE	ENE															
Jan 25	12.5	14.2	14.3	9.9	10.5	11.8	10.1	10.1	12.9	12.4	11.2	11.1	11.0	10.0	11.8	13.1	15.1	13.6	11.2	11.6	8.8	9.8	11.6	9.3															
	ENE	E	E	ENE	ENE	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	ESE	ESE	E	ESE	ESE															
Jan 26	12.3	13.9	10.4	10.2	6.3	7.2	6.9	10.7	10.1	9.7	11.7	7.2	6.5	7.6	8.0	10.3	11.0	9.0	7.2	7.2	7.3	9.1	10.9	9.8															
	ESE	ESE	ESE	ESE	E	E	E	ESE	E	E	ESE	ESE	E	ENE	NE	NE	NE	NE	NNE	N	NNW	N	N	NNW															
Jan 27	7.7	8.0	12.1	9.1	7.3	8.3	9.6	11.6	11.5	12.3	10.6	12.9	12.4	15.0	14.4	12.4	12.1	11.1	11.8	10.5	10.6	9.3	9.9	7.4															
	NNW	NNW	N	NNW	NNW	NNW	NNW	N	N	N	N	N	N	N	N	NNW	NNW	NNW	N	N	N	NNW	NNW	NNW															
Jan 28	6.3	6.0	5.2	4.9	2.9	2.4	4.0	0.4	2.2	3.2	2.8	4.0	3.0	3.5	1.0	4.2	4.3	4.1	2.8	4.0	3.5	4.3	5.6	8.0															
	NNW	NNW	NNW	NNW	N	NNW	NNW	NE	SSW	SSW	SSW	SW	SSW	SW	W	NW	WSW	SSW	SE	SE	SE	SE	SE	SE															
Jan 29	8.1	7.8	6.9	5.3	11.7	12.3	9.7	11.2	7.7	7.7	8.7	12.5	12.0	13.9	11.3	10.8	9.2	9.1	5.8	0.7	3.1	4.7	4.5	5.5															
	SE	SE	SE	SE	S	S	S	S	S	S	SSW	SSW	SSW	SSW	SW	SSW	SSW	SSW	SSW	NNW	S	SE	SE	ESE															
Jan 30	4.5	4.4	4.3	3.6	4.6	1.3	2.4	3.6	3.6	2.9	0.8	0.6	0.8	2.4	5.8	6.3	3.7	3.6	1.7	2.8	7.7	6.5	4.5	1.6															
	ESE	E	ESE	ESE	ESE	S	SSE	SSE	SSE	SE	E	N	WSW	WNW	WNW	WNW	WNW	ESE	S	SSW	E	ESE	ESE	SSE															
Jan 31	5.1	2.9	2.0	3.9	5.5	6.6	4.6	5.5	0.9	4.5	2.3	4.7	9.1	9.9	9.2	12.4	13.6	11.6	12.5	14.8	17.5	10.8	10.8	11.3															
	E	SE	ENE	ESE	E	ESE	ESE	ESE	E	E	NNW	NNE	NE	NNW	N	NNW	N	NNE	N	N	N	NNW	N	N															
C	Monthly Calibration										S	Daily Zero-Span Check										Q	Quality Assurance																
K	Collection Error										N	No Data (Machine Not in Service)										Y	Routine Maintenance																
X	Invalid Data (Equipment Malfunction/Recovery)										NRM	Unit/Maint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)										P	Power Failure																
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.																																							

842b STATION



PEACE RIVER AREA MONITORING PROGRAM

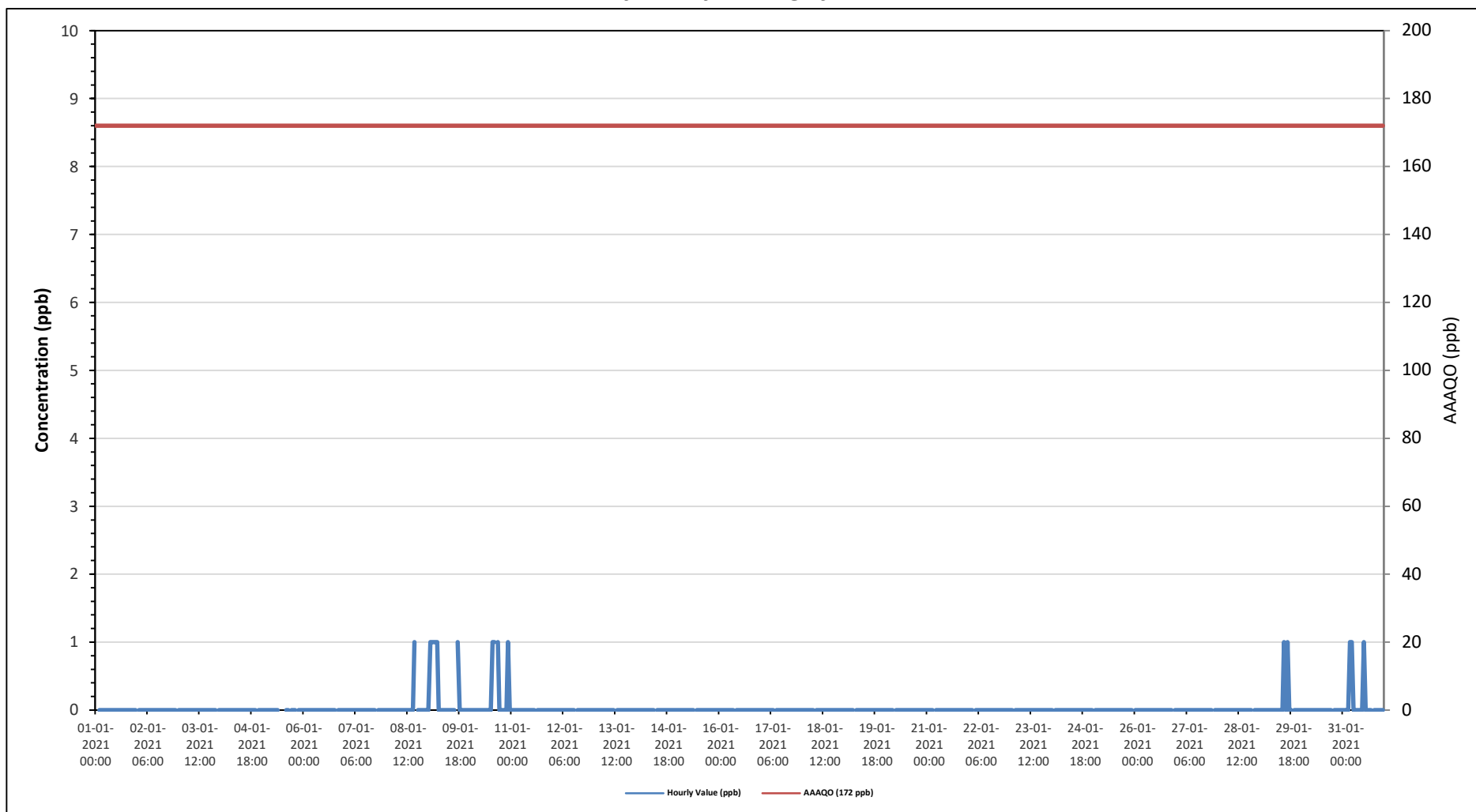
842b Station - January 2021

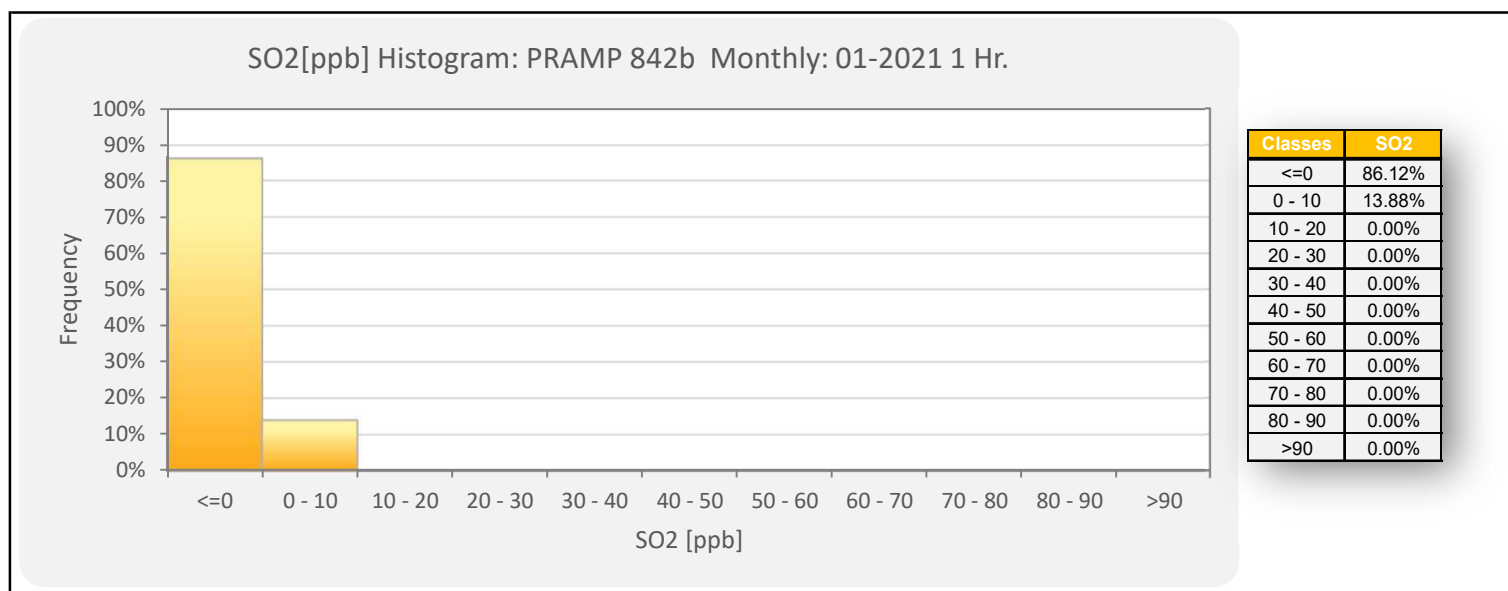
Summary of Hourly Averages

SULPHUR DIOXIDE (SO₂) 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 Exceedance:				0							
Maximum Hourly Value:				1 ppb on January 8 at hour 16				Hours in Service:				744															
Maximum Daily Value:				0.3 ppb on January 9				Hours of Data:				706															
Minimum Hourly Value:				0 ppb on January 1 at hour 0				Hours of Missing Data:				0															
Minimum Daily Value:				0.0 ppb on January 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			
Jan 1	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
Jan 2	S	0	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
Jan 3	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
Jan 4	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
Jan 5	0	0	0	0	0	0	0	0	0	0	C	C	C	C	0	0	C	0	0	0	S	0	0	0	0	0	0.0
Jan 6	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
Jan 7	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
Jan 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	S	0	0	0	0	0	0	0	1	0.0
Jan 9	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	S	1	0	0	0	0	0	0	0	1	0.3
Jan 10	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	S	1	0	0	0	0	0	1	0	0	1	0.2
Jan 11	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
Jan 12	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
Jan 13	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
Jan 14	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
Jan 15	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
Jan 16	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
Jan 17	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
Jan 18	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
Jan 19	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
Jan 20	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
Jan 21	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
Jan 22	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
Jan 23	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
Jan 24	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
Jan 25	S	0	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
Jan 26	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
Jan 27	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
Jan 28	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
Jan 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	S	0	0	0	0	0	1	0.1
Jan 30	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
Jan 31	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	S	0	0	0	0	0	0	0	1	0.1
Diurnal Maximum	0	1	1	1	1	1	0	0	0	0	0	0	1	1	1	0	1	1	0	0	0	0	1	0			
Diurnal Average	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	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							N	No Data (Machine Not in Service)							Y	Routine Maintenance										
X	InValid Data (Equipment Malfunction /Recovery)							NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)							P	Power Failure										
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.																											

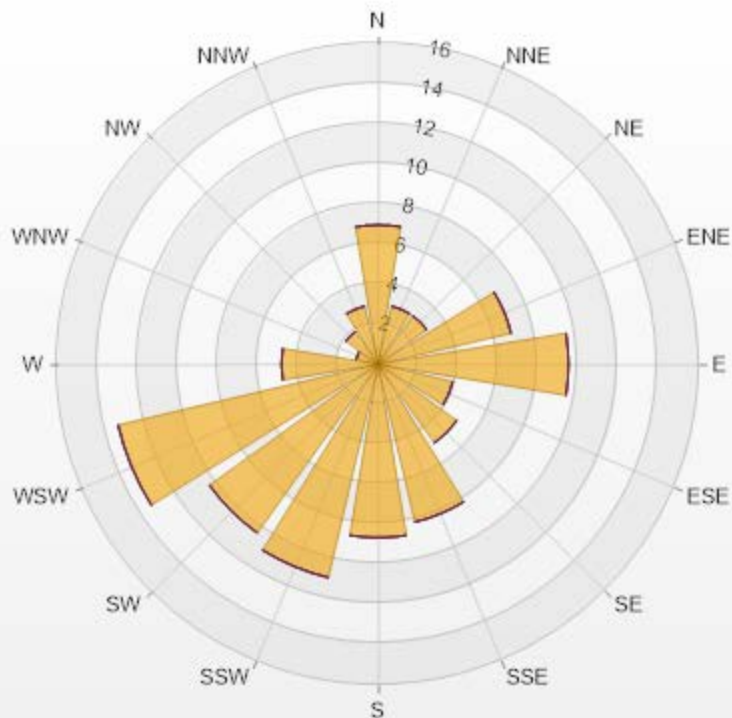
Timeseries Chart of Hourly Average for SO2 - 842b Station





Wind: PRAMP 842b Poll.: PRAMP 842b-SO2[ppb] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.89% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	6.94	0	0	0	0	6.94
NNE	2.97	0	0	0	0	2.97
NE	2.97	0	0	0	0	2.97
ENE	6.8	0	0	0	0	6.8
E	9.49	0	0	0	0	9.49
ESE	3.82	0	0	0	0	3.82
SE	4.82	0	0	0	0	4.82
SSE	8.07	0	0	0	0	8.07
S	8.64	0	0	0	0	8.64
SSW	10.91	0	0	0	0	10.91
SW	10.34	0	0	0	0	10.34
WSW	13.31	0	0	0	0	13.31
W	4.82	0	0	0	0	4.82
WNW	1.13	0	0	0	0	1.13
NW	1.98	0	0	0	0	1.98
NNW	2.97	0	0	0	0	2.97
Summary	100	0	0	0	0	100



PRAMP-202101

Page 74 of 228

% Icon Classes (ppb)

100 0-10

0 10-50

0 50-100

0 100-172

0 >172.0



PEACE RIVER AREA MONITORING PROGRAM

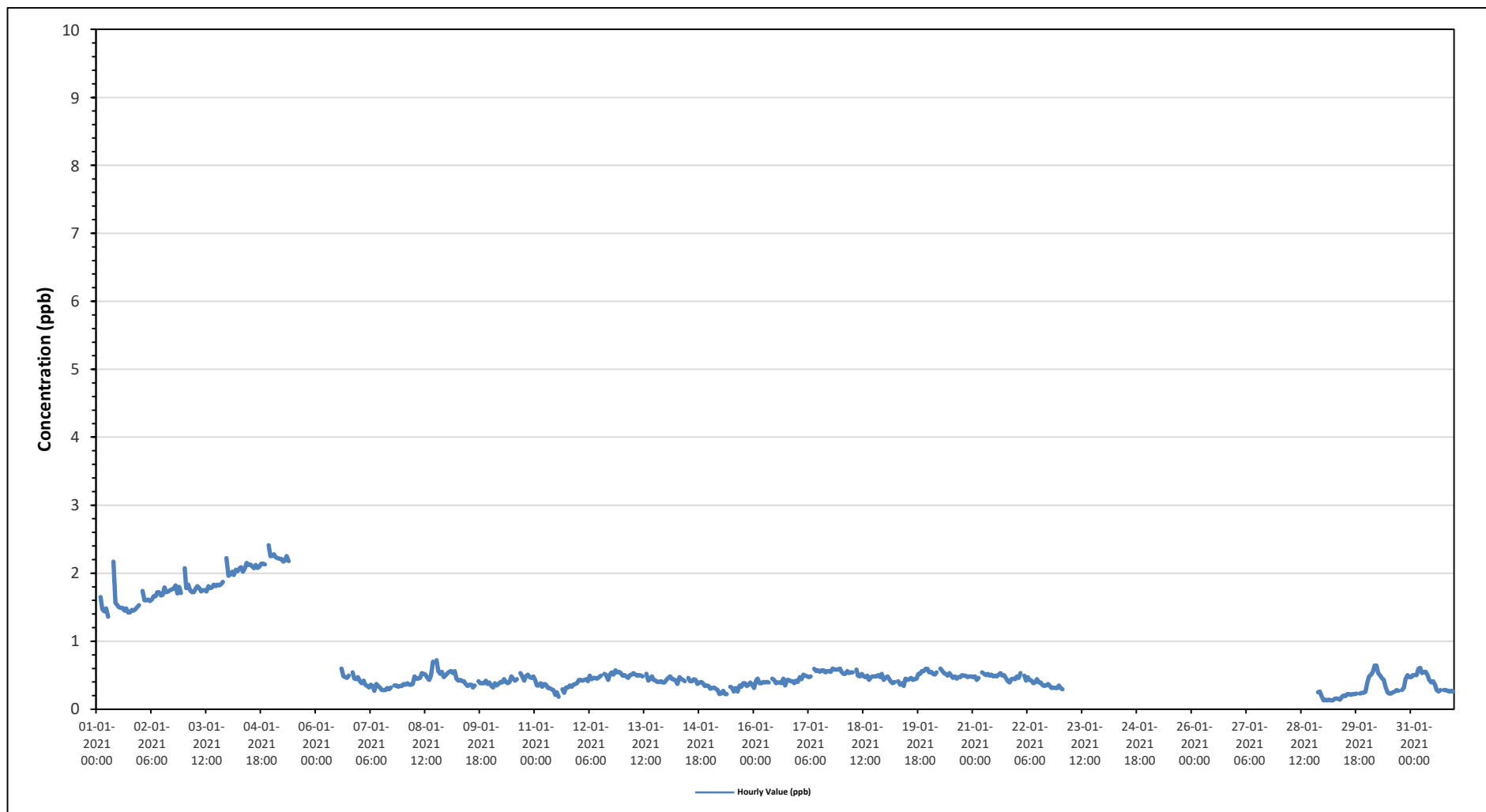
842b Station - January 2021

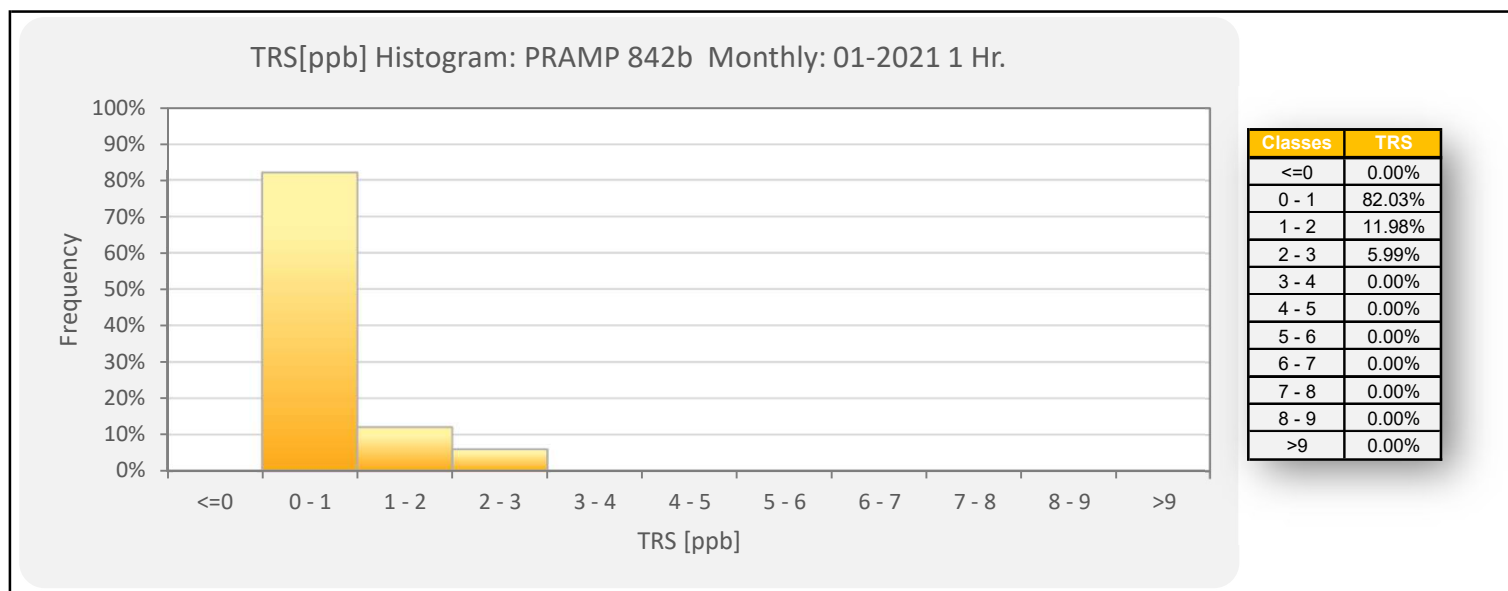
Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

Alberta Ambient Air Quality Objectives (AAAQO) for H2S: 1-Hour 10 ppb, 24-Hour 3 ppb																												
Number of 1-Hour Exceedances: 0							Number of 24-Hour Exceedances: 0																					
Maximum Hourly Value: 2.41 ppb on January 4 at hour 22							Hours in Service: 744																					
Maximum Daily Value: 2.10 ppb on January 4							Hours of Data: 551																					
Minimum Hourly Value: 0.13 ppb on January 29 at hour 0							Hours of Missing Data: 158																					
Minimum Daily Value: 0.19 ppb on January 29							Hours of Calibration: 35																					
Monthly Average: 0.67 ppb							Operational Uptime: 78.8																					
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
Jan 1	1.39	S	1.65	1.47	1.44	1.48	1.36	NRM	NRM	2.17	1.56	1.54	1.5	1.49	1.49	1.45	1.48	1.42	1.42	1.46	1.45	1.47	1.5	1.53	1.36	2.17	1.51	
Jan 2	S	1.74	1.6	1.6	1.61	1.59	1.61	1.66	1.66	1.72	1.72	1.67	1.68	1.79	1.72	1.73	1.75	1.76	1.77	1.82	1.7	1.8	1.71	S	1.59	1.82	1.70	
Jan 3	2.07	1.78	1.83	1.75	1.72	1.72	1.77	1.81	1.78	1.73	1.75	1.75	1.73	1.81	1.78	1.79	1.83	1.81	1.83	1.82	1.84	1.87	S	2.22	1.72	2.22	1.82	
Jan 4	1.96	1.98	2.02	1.97	2.05	2.03	2.07	2.09	2.02	2.07	2.15	2.12	2.13	2.1	2.07	2.12	2.08	2.1	2.14	2.14	2.13	S	2.41	2.25	1.96	2.41	2.10	
Jan 5	2.25	2.28	2.23	2.22	2.21	2.21	2.17	2.19	2.25	2.18	C	C	C	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	2.17	2.28	-	
Jan 6	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	C	C	C	C	C	0.6	0.48	0.47	0.46	0.49	S	0.54	0.45	0.44	0.47	0.44	0.60	-
Jan 7	0.41	0.38	0.42	0.36	0.34	0.32	0.36	0.34	0.27	0.37	0.34	0.32	0.28	0.28	0.31	0.29	0.32	S	0.35	0.35	0.33	0.34	0.34	0.27	0.42	0.33		
Jan 8	0.37	0.36	0.38	0.36	0.36	0.37	0.48	0.45	0.45	0.46	0.53	0.52	0.51	0.46	0.43	0.49	0.7	S	0.72	0.56	0.52	0.55	0.47	0.5	0.36	0.72	0.48	
Jan 9	0.53	0.55	0.56	0.53	0.56	0.45	0.42	0.43	0.41	0.41	0.37	0.34	0.36	0.36	0.32	0.35	S	0.41	0.38	0.38	0.38	0.42	0.37	0.39	0.32	0.56	0.42	
Jan 10	0.34	0.32	0.38	0.35	0.37	0.4	0.39	0.44	0.4	0.38	0.4	0.48	0.45	0.42	0.44	S	0.53	0.48	0.42	0.48	0.51	0.47	0.46	0.48	0.32	0.53	0.43	
Jan 11	0.43	0.35	0.35	0.38	0.33	0.37	0.36	0.31	0.31	0.29	0.28	0.21	0.25	0.18	S	0.29	0.24	0.32	0.32	0.35	0.33	0.36	0.37	0.38	0.18	0.43	0.32	
Jan 12	0.43	0.43	0.42	0.43	0.44	0.41	0.49	0.44	0.46	0.46	0.45	0.47	0.49	S	0.52	0.5	0.43	0.51	0.54	0.51	0.57	0.54	0.55	0.53	0.41	0.57	0.48	
Jan 13	0.49	0.5	0.48	0.46	0.5	0.51	0.53	0.51	0.49	0.5	0.49	0.48	S	0.52	0.42	0.44	0.48	0.43	0.42	0.4	0.4	0.41	0.39	0.39	0.39	0.53	0.46	
Jan 14	0.43	0.46	0.48	0.44	0.44	0.42	0.37	0.47	0.45	0.43	0.41	S	0.46	0.41	0.41	0.44	0.43	0.37	0.39	0.4	0.38	0.34	0.35	0.34	0.34	0.48	0.41	
Jan 15	0.3	0.31	0.32	0.3	0.28	0.22	0.23	0.27	0.22	0.22	S	0.33	0.31	0.26	0.31	0.26	0.35	0.33	0.38	0.38	0.34	0.36	0.39	0.36	0.22	0.39	0.31	
Jan 16	0.31	0.42	0.45	0.38	0.38	0.4	0.39	0.4	0.39	S	0.45	0.43	0.38	0.39	0.39	0.38	0.45	0.35	0.43	0.43	0.41	0.41	0.38	0.42	0.31	0.45	0.40	
Jan 17	0.4	0.47	0.44	0.51	0.49	0.48	0.47	0.48	S	0.59	0.56	0.57	0.55	0.57	0.57	0.54	0.56	0.56	0.55	0.6	0.58	0.58	0.58	0.6	0.40	0.60	0.53	
Jan 18	0.55	0.52	0.52	0.56	0.53	0.54	0.54	S	0.58	0.49	0.48	0.52	0.48	0.47	0.49	0.43	0.47	0.48	0.48	0.48	0.5	0.47	0.52	0.43	0.43	0.58	0.50	
Jan 19	0.46	0.48	0.45	0.4	0.38	0.4	S	0.41	0.36	0.38	0.34	0.45	0.43	0.44	0.46	0.43	0.44	0.45	0.52	0.52	0.56	0.56	0.59	0.59	0.34	0.59	0.46	
Jan 20	0.54	0.55	0.52	0.51	0.54	S	0.6	0.57	0.53	0.52	0.49	0.53	0.49	0.46	0.48	0.45	0.47	0.47	0.5	0.49	0.49	0.47	0.48	0.48	0.45	0.60	0.51	
Jan 21	0.47	0.48	0.43	0.46	S	0.54	0.52	0.5	0.52	0.49	0.51	0.48	0.49	0.48	0.51	0.53	0.49	0.5	0.46	0.41	0.39	0.44	0.45	0.44	0.39	0.54	0.48	
Jan 22	0.48	0.46	0.53	S	0.49	0.42	0.47	0.43	0.42	0.38	0.39	0.44	0.39	0.39	0.36	0.34	0.35	0.37	0.34	0.31	0.32	0.31	0.31	0.35	0.31	0.53	0.39	
Jan 23	0.31	0.29	S	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0.29	0.31	-	
Jan 24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	
Jan 25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	
Jan 26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	
Jan 27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	
Jan 28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	NRM	NRM	NRM	0.17	S	0.25	0.26	0.19	0.17	0.26	-	
Jan 29	0.13	0.14	0.13	0.14	0.13	0.13	0.15	0.16	0.15	0.14	0.18	0.2	0.19	0.22	0.22	0.21	0.22	0.22	0.23	S	0.23	0.24	0.24	0.26	0.13	0.26	0.19	
Jan 30	0.39	0.48	0.51	0.55	0.64	0.64	0.53	0.49	0.46	0.43	0.33	0.25	0.23	0.23	0.25	0.26	0.28	0.27	S	0.28	0.32	0.44	0.5	0.47	0.23	0.64	0.40	
Jan 31	0.47	0.5	0.5	0.5	0.59	0.61	0.53	0.55	0.55	0.5	0.43	0.39	0.41	0.36	0.28	0.26	0.28	S	0.28	0.28	0.27	0.26	0.27	0.26	0.26	0.61	0.41	
Diurnal Maximum	2.25	2.28	2.23	2.22	2.21	2.21	2.17	2.19	2.25	2.18	2.15	2.12	2.13	2.10	2.07	2.12	2.08	2.10	2.14	2.14	2.13	1.87	2.41	2.25				
Diurnal Average	0.66	0.68	0.73	0.72	0.73	0.72	0.73	0.70	0.69	0.75	0.66	0.66	0.65	0.64	0.64	0.63	0.66	0.65	0.68	0.65	0.65	0.58	0.60	0.61				
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance											
K	Collection Error							N	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.																												

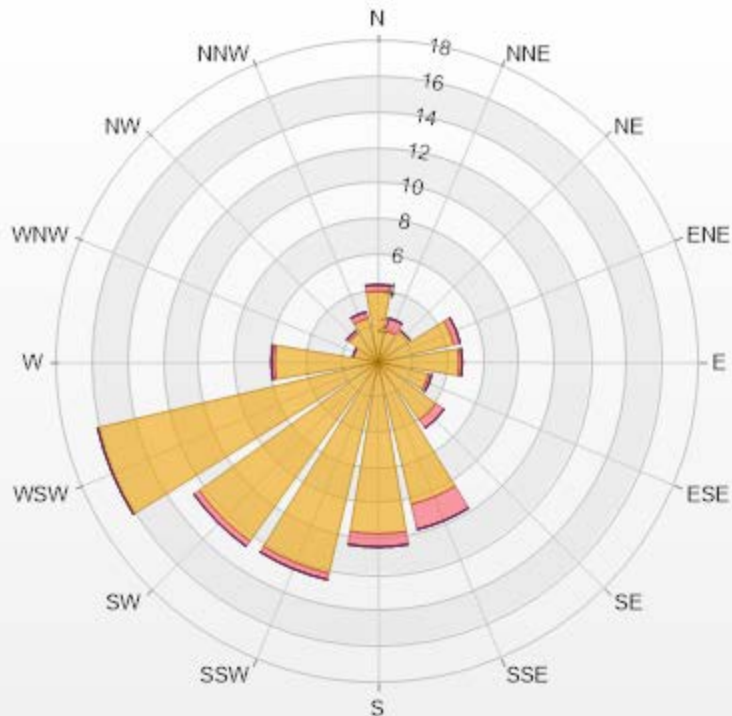
Timeseries Chart of Hourly Average for TRS - 842b Station





Wind: PRAMP 842b Poll.: PRAMP 842b-TRS[ppb] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 74.06% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	3.99	0.36	0	0	0	4.35
NNE	1.81	0.73	0	0	0	2.54
NE	2.18	0	0	0	0	2.18
ENE	4.36	0.36	0	0	0	4.72
E	4.54	0.18	0	0	0	4.72
ESE	2.9	0.18	0	0	0	3.08
SE	3.99	0.54	0	0	0	4.53
SSE	8.17	1.45	0	0	0	9.62
S	9.62	0.73	0	0	0	10.35
SSW	12.16	0.36	0	0	0	12.52
SW	12.34	0.36	0	0	0	12.7
WSW	16.15	0	0	0	0	16.15
W	5.81	0.18	0	0	0	5.99
WNW	1.45	0	0	0	0	1.45
NW	2	0.18	0	0	0	2.18
NNW	2.54	0.36	0	0	0	2.9
Summary	94.01	5.97	0	0	0	100



PRAMP-202101

Page 79 of 228

% Icon Classes (ppb)

94 0-2

6 2-5

0 5-10

0 10-50

0 >50.0



PEACE RIVER AREA MONITORING PROGRAM

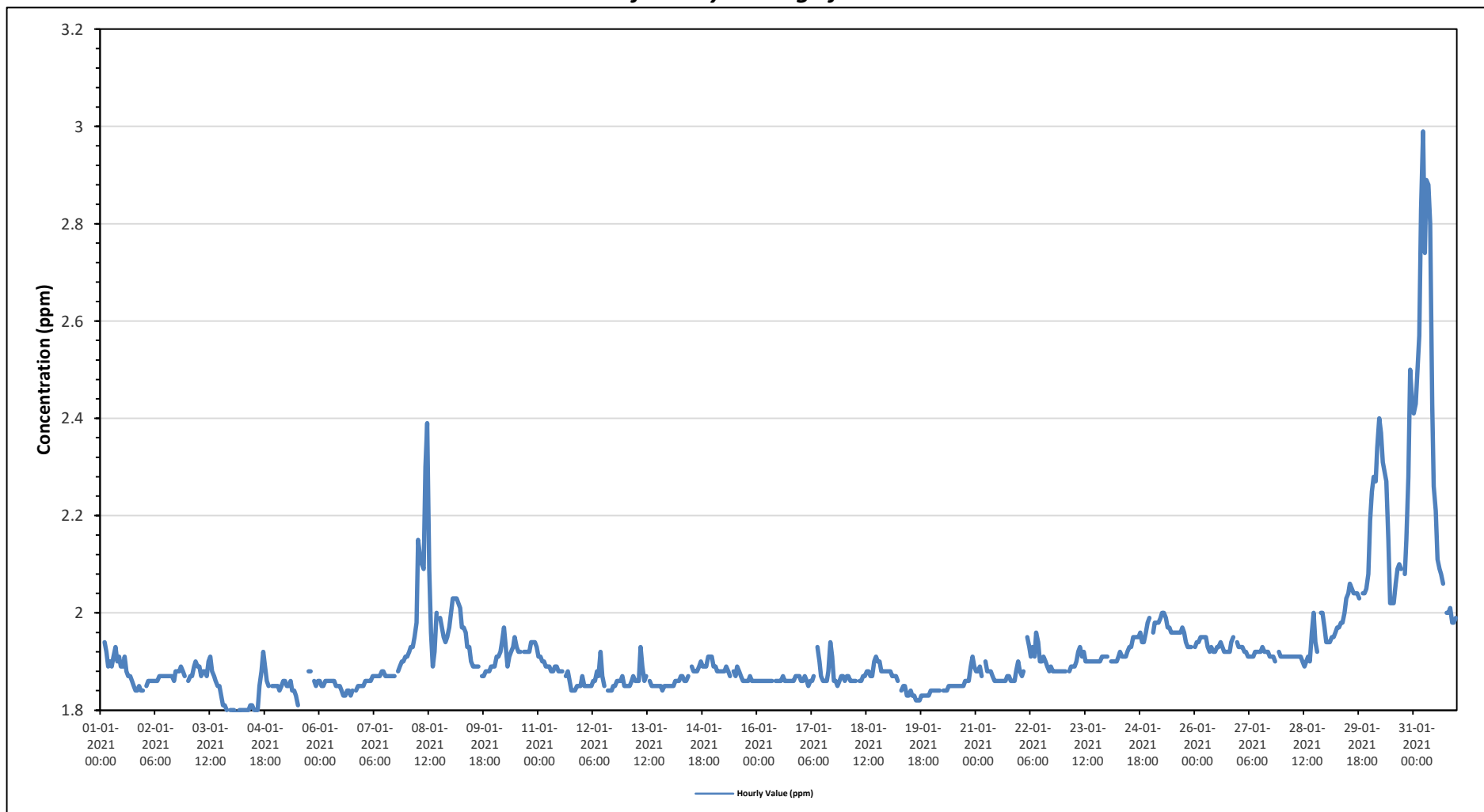
842b Station - January 2021

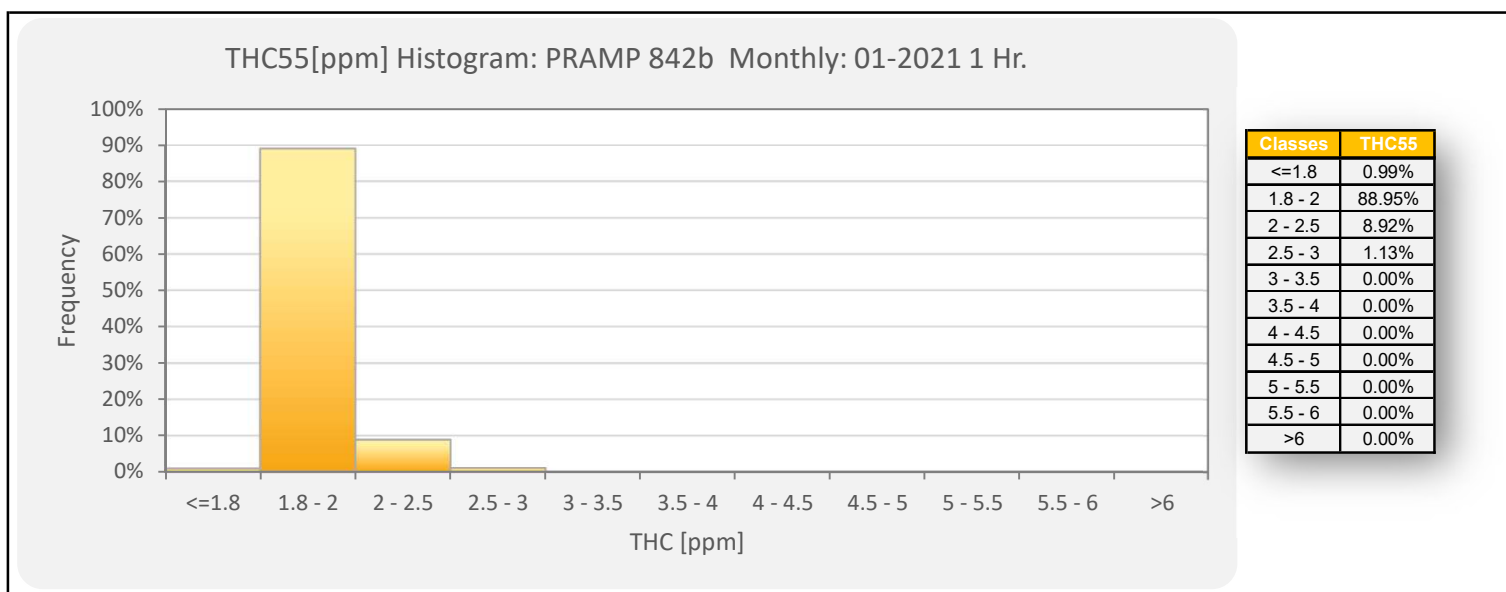
Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

Maximum Hourly Value:										2.99 ppm on January 31 at hour 5		Hours in Service:										744						
Maximum Daily Value:										2.36 ppm on January 31		Hours of Data:										706						
Minimum Hourly Value:										1.79 ppm on January 4 at hour 2		Hours of Missing Data:										0						
Minimum Daily Value:										1.82 ppm on January 4		Hours of Calibration:										38						
Monthly Average:										1.92 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	
Jan 1	1.93	S	1.94	1.92	1.89	1.90	1.89	1.91	1.93	1.90	1.91	1.89	1.89	1.91	1.88	1.87	1.87	1.86	1.85	1.84	1.84	1.85	1.84	1.84	1.84	1.84	1.84	1.88
Jan 2	S	1.85	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.86	1.88	1.88	1.88	1.89	1.88	1.87	S	1.85	1.89	1.87	
Jan 3	1.86	1.87	1.87	1.89	1.90	1.89	1.89	1.87	1.88	1.88	1.87	1.90	1.91	1.88	1.87	1.86	1.85	1.85	1.83	1.81	1.81	1.80	S	1.80	1.80	1.91	1.86	
Jan 4	1.80	1.80	1.79	1.79	1.80	1.80	1.80	1.80	1.80	1.80	1.81	1.81	1.80	1.80	1.80	1.85	1.88	1.92	1.89	1.86	1.85	S	1.85	1.85	1.79	1.92	1.82	
Jan 5	1.85	1.85	1.84	1.85	1.86	1.86	1.85	1.85	1.86	1.84	1.84	1.83	1.81	C	C	C	C	C	1.88	1.88	S	1.86	1.85	1.86	1.81	1.88	1.85	
Jan 6	1.86	1.85	1.85	1.86	1.86	1.86	1.86	1.86	1.86	1.85	1.85	1.85	1.84	1.83	1.83	1.84	1.84	1.83	1.84	S	1.84	1.85	1.85	1.85	1.83	1.86	1.85	
Jan 7	1.85	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.87	1.87	1.88	1.88	1.87	1.87	1.87	1.87	1.87	1.87	S	1.88	1.89	1.90	1.90	1.91	1.85	1.91	1.87	
Jan 8	1.91	1.92	1.93	1.93	1.95	1.98	2.15	2.12	2.10	2.09	2.30	2.39	2.09	1.96	1.89	1.92	2.00	S	1.99	1.97	1.95	1.94	1.95	1.97	1.89	2.39	2.02	
Jan 9	2.00	2.03	2.03	2.03	2.02	2.01	1.97	1.97	1.96	1.93	1.93	1.90	1.89	1.89	1.89	1.89	S	1.87	1.87	1.88	1.88	1.88	1.89	1.89	1.87	2.03	1.93	
Jan 10	1.89	1.91	1.91	1.92	1.94	1.97	1.93	1.89	1.91	1.92	1.93	1.95	1.93	1.92	1.92	S	1.92	1.92	1.92	1.92	1.94	1.94	1.94	1.93	1.89	1.97	1.92	
Jan 11	1.91	1.91	1.90	1.90	1.89	1.89	1.89	1.88	1.88	1.89	1.89	1.88	1.88	1.88	S	1.87	1.88	1.86	1.84	1.84	1.84	1.85	1.85	1.85	1.84	1.91	1.88	
Jan 12	1.87	1.85	1.85	1.85	1.85	1.85	1.86	1.86	1.88	1.87	1.92	1.87	1.85	S	1.84	1.84	1.84	1.85	1.85	1.86	1.86	1.86	1.87	1.85	1.84	1.92	1.86	
Jan 13	1.85	1.85	1.85	1.86	1.87	1.86	1.86	1.86	1.93	1.89	1.86	1.87	S	1.86	1.85	1.85	1.85	1.85	1.85	1.85	1.84	1.85	1.85	1.85	1.84	1.93	1.86	
Jan 14	1.85	1.85	1.85	1.86	1.86	1.86	1.87	1.87	1.86	1.86	1.87	S	1.89	1.88	1.88	1.88	1.89	1.90	1.89	1.89	1.91	1.91	1.91	1.91	1.85	1.91	1.88	
Jan 15	1.89	1.89	1.88	1.88	1.88	1.88	1.88	1.89	1.88	1.87	S	1.88	1.87	1.89	1.88	1.87	1.86	1.86	1.86	1.86	1.87	1.86	1.86	1.86	1.86	1.86	1.89	1.87
Jan 16	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	S	1.86	1.86	1.86	1.86	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.86	1.87	1.86	
Jan 17	1.86	1.86	1.87	1.86	1.85	1.86	1.86	1.87	S	1.93	1.90	1.87	1.86	1.86	1.86	1.88	1.94	1.91	1.86	1.86	1.85	1.86	1.87	1.87	1.85	1.94	1.87	
Jan 18	1.86	1.87	1.87	1.86	1.86	1.86	S	1.86	1.86	1.87	1.87	1.88	1.88	1.88	1.87	1.87	1.90	1.91	1.90	1.90	1.88	1.88	1.88	1.88	1.86	1.91	1.88	
Jan 19	1.88	1.88	1.87	1.87	1.87	1.86	S	1.84	1.85	1.85	1.83	1.83	1.84	1.83	1.83	1.82	1.82	1.82	1.83	1.83	1.83	1.83	1.83	1.84	1.82	1.88	1.84	
Jan 20	1.84	1.84	1.84	1.84	1.84	S	1.84	1.84	1.84	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.86	1.86	1.86	1.89	1.91	1.89	1.84	1.91	1.85	
Jan 21	1.88	1.88	1.89	1.87	S	1.90	1.88	1.88	1.88	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.87	1.86	1.86	1.88	1.90	1.86	1.90	1.87	
Jan 22	1.88	1.87	1.88	S	1.95	1.93	1.91	1.93	1.91	1.96	1.94	1.90	1.90	1.91	1.90	1.89	1.88	1.89	1.88	1.88	1.88	1.88	1.88	1.88	1.87	1.96	1.90	
Jan 23	1.88	1.88	S	1.88	1.89	1.89	1.89	1.89	1.90	1.92	1.93	1.91	1.92	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.88	1.93	1.90	
Jan 24	1.91	S	1.90	1.90	1.90	1.90	1.91	1.92	1.91	1.91	1.91	1.92	1.93	1.93	1.95	1.95	1.95	1.95	1.96	1.94	1.94	1.96	1.98	1.99	1.90	1.99	1.93	
Jan 25	S	1.96	1.98	1.98	1.98	1.99	2.00	2.00	1.99	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.97	1.96	1.94	1.93	1.93	1.93	S	1.93	2.00	1.97	
Jan 26	1.93	1.94	1.94	1.95	1.95	1.95	1.95	1.93	1.92	1.93	1.92	1.92	1.93	1.93	1.94	1.93	1.92	1.92	1.92	1.92	1.94	1.95	S	1.94	1.92	1.95	1.93	
Jan 27	1.93	1.93	1.93	1.92	1.92	1.91	1.91	1.91	1.91	1.91	1.92	1.92	1.92	1.92	1.93	1.92	1.92	1.92	1.91	1.91	1.91	1.90	S	1.92	1.91	1.90	1.92	
Jan 28	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.90	1.89	1.90	1.91	1.90	1.96	2.00	1.94	1.92	S	2.00	2.00	1.97	1.89	2.00	1.93	
Jan 29	1.94	1.94	1.94	1.95	1.95	1.96	1.97	1.97	1.98	1.98	2.00	2.03	2.04	2.06	2.05	2.04	2.04	2.04	2.03	S	2.04	2.04	2.05	2.08	1.94	2.08	2.01	
Jan 30	2.19	2.25	2.28	2.27	2.34	2.40	2.37	2.31	2.29	2.27	2.15	2.02	2.02	2.02	2.06	2.09	2.10	2.09	2.03	S	2.08	2.15	2.28	2.50	2.44	2.02	2.50	2.22
Jan 31	2.41	2.43	2.50	2.57	2.83	2.99	2.74	2.89	2.88	2.80	2.43	2.26	2.21	2.11	2.09	2.08	2.06	S	2.00	2.00	2.01	1.98	1.98	1.99	1.98	2.99	2.36	
Diurnal Maximum	2.41	2.43	2.50	2.57	2.83	2.99	2.74	2.89	2.88	2.80	2.43	2.39	2.21	2.11	2.09	2.09	2.10	2.09	2.03	2.08	2.15	2.28	2.50	2.44				
Diurnal Average	1.91	1.92	1.92	1.93	1.94	1.95	1.94	1.94	1.95	1.94	1.93	1.92	1.91	1.90	1.90	1.90	1.91	1.90	1.89	1.89	1.90	1.91	1.92	1.92				
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance											
K	Collection Error							N	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.																												

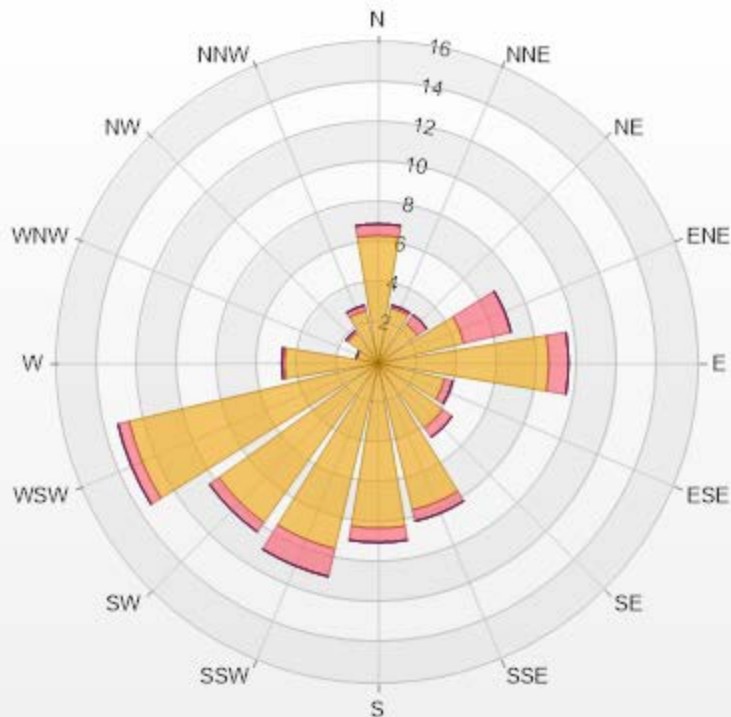
Timeseries Chart of Hourly Average for THC - 842b Station





Wind: PRAMP 842b Poll.: PRAMP 842b-THC55[ppm] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 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	6.37	0.57	0	0	0	6.94
NNE	2.83	0.14	0	0	0	2.97
NE	2.41	0.57	0	0	0	2.98
ENE	4.39	2.41	0	0	0	6.8
E	8.5	0.99	0	0	0	9.49
ESE	3.4	0.42	0	0	0	3.82
SE	3.97	0.57	0	0	0	4.54
SSE	7.51	0.57	0	0	0	8.08
S	8.22	0.71	0	0	0	8.93
SSW	9.49	1.42	0	0	0	10.91
SW	9.77	0.57	0	0	0	10.34
WSW	12.75	0.57	0	0	0	13.32
W	4.67	0.14	0	0	0	4.81
WNW	1.13	0	0	0	0	1.13
NW	1.84	0.14	0	0	0	1.98
NNW	2.69	0.28	0	0	0	2.97
Summary	89.94	10.07	0	0	0	100



PRAMP-202101

Page 84 of 228

% Icon Classes (ppm)

90

0-2

10

2-5

0

5-10

0

10-40

0

>40.0



PEACE RIVER AREA MONITORING PROGRAM

842b Station - January 2021

Summary of Hourly Averages

METHANE (CH₄) in ppm

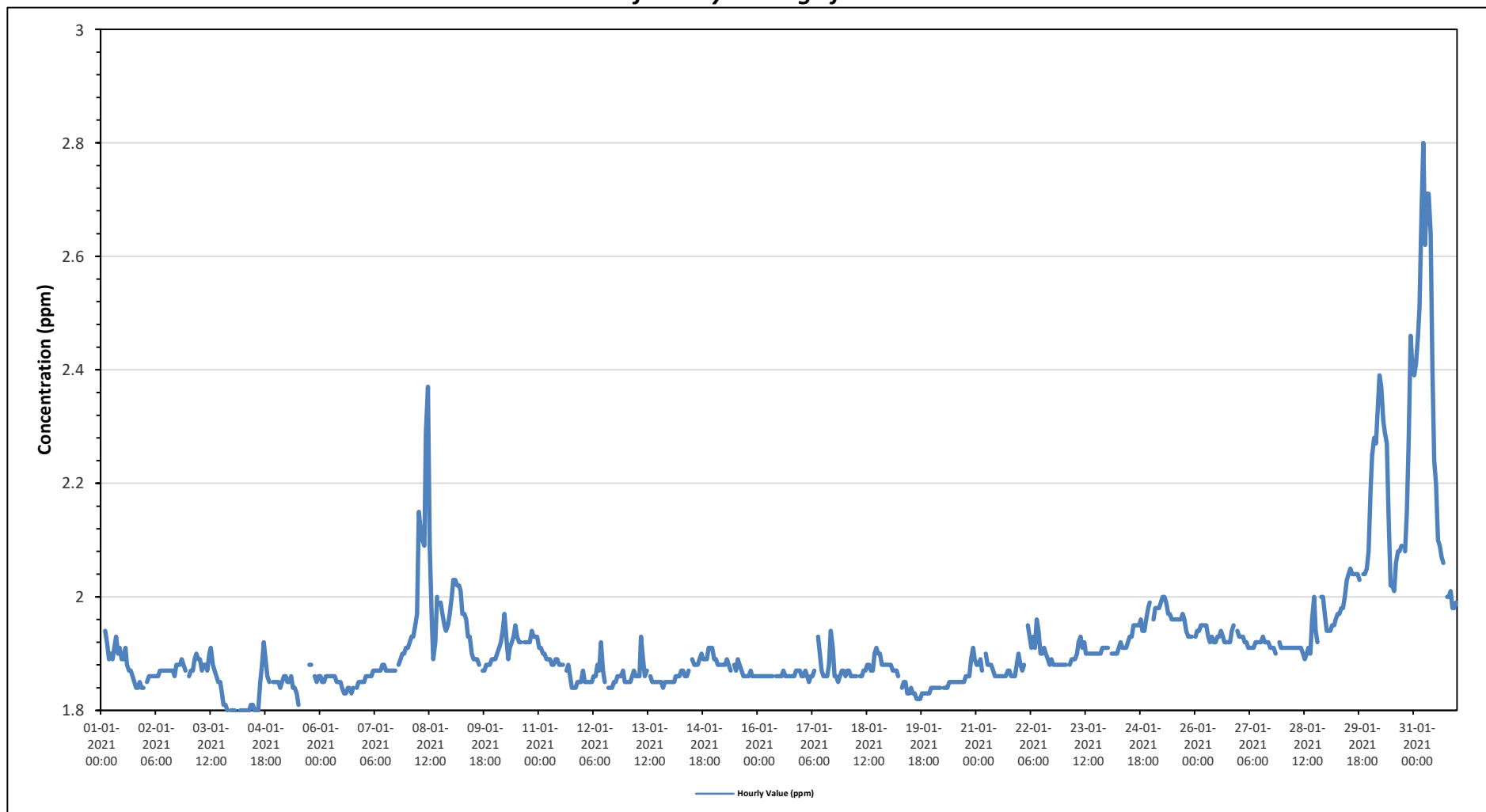
Maximum Hourly Value:	2.80 ppm on January 31 at hour 5	Hours in Service:	744
Maximum Daily Value:	2.31 ppm on January 31	Hours of Data:	706
Minimum Hourly Value:	1.79 ppm on January 4 at hour 2	Hours of Missing Data:	0
Minimum Daily Value:	1.82 ppm on January 4	Hours of Calibration:	38
Monthly Average:	1.92 ppm	Operational Uptime:	100.0

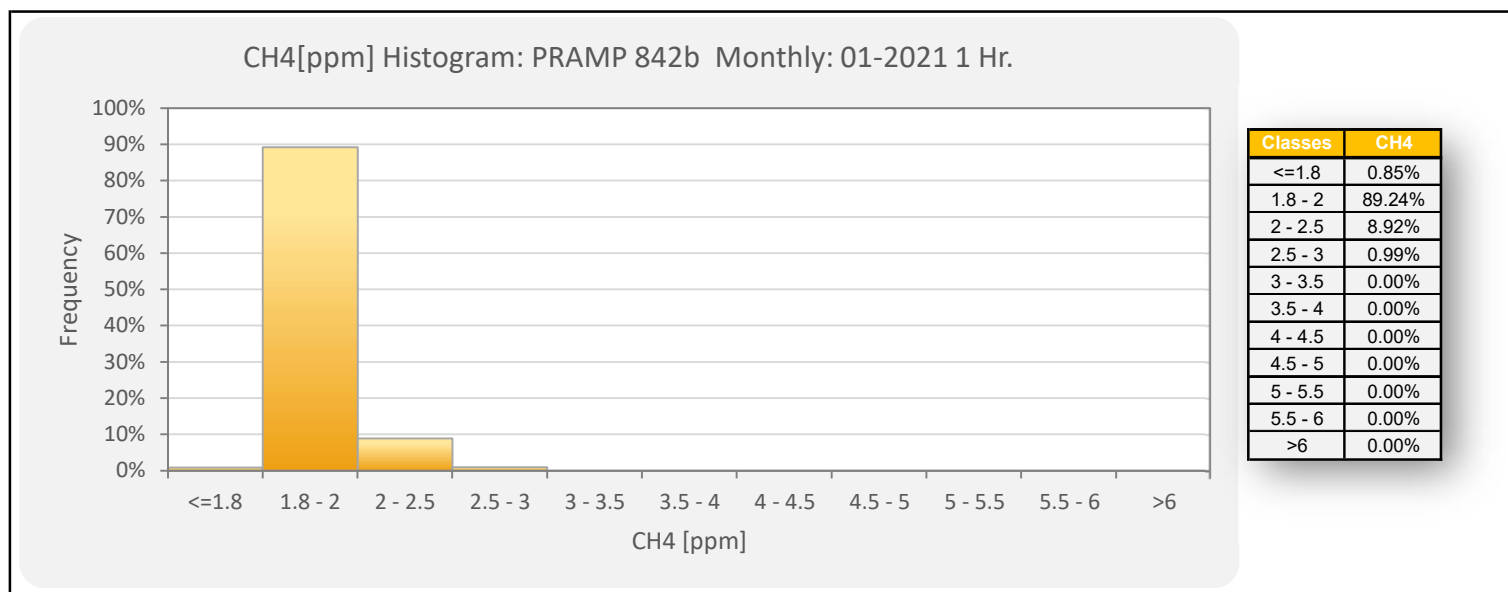
Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average	
Jan 1	1.93	S	1.94	1.92	1.89	1.90	1.89	1.91	1.93	1.90	1.91	1.89	1.89	1.91	1.88	1.87	1.87	1.86	1.85	1.84	1.84	1.85	1.84	1.84	1.84	1.84	1.94	1.88
Jan 2	S	1.85	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.86	1.88	1.88	1.88	1.89	1.88	1.87	S	1.85	1.89	1.87	
Jan 3	1.86	1.87	1.87	1.89	1.90	1.89	1.89	1.87	1.88	1.88	1.87	1.90	1.91	1.88	1.87	1.86	1.85	1.85	1.83	1.81	1.81	1.80	S	1.80	1.80	1.91	1.86	
Jan 4	1.80	1.80	1.79	1.79	1.80	1.80	1.80	1.80	1.80	1.80	1.81	1.81	1.80	1.80	1.80	1.85	1.88	1.92	1.89	1.86	1.85	S	1.85	1.85	1.79	1.92	1.82	
Jan 5	1.85	1.85	1.84	1.85	1.86	1.86	1.85	1.85	1.86	1.84	1.84	1.83	1.81	C	C	C	C	C	1.88	1.88	S	1.86	1.85	1.86	1.81	1.88	1.85	
Jan 6	1.86	1.85	1.85	1.86	1.86	1.86	1.86	1.86	1.86	1.85	1.85	1.85	1.84	1.83	1.83	1.84	1.84	1.83	1.84	S	1.84	1.85	1.85	1.85	1.83	1.86	1.85	
Jan 7	1.85	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.87	1.87	1.88	1.88	1.87	1.87	1.87	1.87	1.87	1.87	S	1.88	1.89	1.90	1.90	1.91	1.85	1.91	1.87	
Jan 8	1.91	1.92	1.93	1.93	1.95	1.97	2.15	2.12	2.10	2.09	2.29	2.37	2.09	1.96	1.89	1.92	2.00	S	1.99	1.97	1.95	1.94	1.95	1.97	1.89	2.37	2.02	
Jan 9	2.00	2.03	2.03	2.02	2.02	2.01	1.97	1.97	1.96	1.93	1.93	1.90	1.89	1.89	1.89	1.88	S	1.87	1.87	1.88	1.88	1.88	1.89	1.89	1.87	2.03	1.93	
Jan 10	1.89	1.90	1.91	1.92	1.94	1.97	1.93	1.89	1.91	1.92	1.93	1.95	1.93	1.92	1.92	S	1.92	1.92	1.92	1.92	1.94	1.93	1.93	1.93	1.89	1.97	1.92	
Jan 11	1.91	1.91	1.90	1.90	1.89	1.89	1.89	1.88	1.88	1.89	1.89	1.88	1.88	1.88	S	1.87	1.88	1.86	1.84	1.84	1.84	1.85	1.85	1.85	1.84	1.91	1.88	
Jan 12	1.87	1.85	1.85	1.85	1.85	1.85	1.86	1.86	1.88	1.87	1.92	1.87	1.85	S	1.84	1.84	1.84	1.85	1.85	1.86	1.86	1.86	1.86	1.87	1.85	1.84	1.92	1.86
Jan 13	1.85	1.85	1.85	1.86	1.87	1.86	1.86	1.86	1.93	1.89	1.86	1.87	S	1.86	1.85	1.85	1.85	1.85	1.85	1.85	1.84	1.85	1.85	1.85	1.84	1.93	1.86	
Jan 14	1.85	1.85	1.85	1.86	1.86	1.86	1.87	1.87	1.86	1.86	1.87	S	1.89	1.88	1.88	1.88	1.89	1.90	1.89	1.89	1.89	1.91	1.91	1.91	1.85	1.91	1.88	
Jan 15	1.89	1.89	1.88	1.88	1.88	1.88	1.88	1.89	1.88	1.87	S	1.88	1.87	1.89	1.88	1.87	1.86	1.86	1.86	1.86	1.86	1.87	1.86	1.86	1.86	1.86	1.89	1.87
Jan 16	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	S	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.86	1.87	1.86	
Jan 17	1.86	1.86	1.87	1.86	1.85	1.86	1.86	1.87	S	1.93	1.90	1.87	1.86	1.86	1.86	1.88	1.94	1.91	1.86	1.86	1.85	1.86	1.87	1.87	1.85	1.94	1.87	
Jan 18	1.86	1.87	1.87	1.86	1.86	1.86	1.86	S	1.86	1.86	1.87	1.87	1.88	1.88	1.87	1.87	1.90	1.91	1.90	1.90	1.88	1.88	1.88	1.88	1.86	1.91	1.88	
Jan 19	1.88	1.88	1.87	1.87	1.87	1.86	S	1.84	1.85	1.85	1.83	1.83	1.84	1.83	1.83	1.82	1.82	1.82	1.83	1.83	1.83	1.83	1.83	1.84	1.82	1.88	1.84	
Jan 20	1.84	1.84	1.84	1.84	1.84	S	1.84	1.84	1.84	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.86	1.86	1.86	1.89	1.91	1.89	1.84	1.91	1.85	
Jan 21	1.88	1.88	1.89	1.87	S	1.90	1.88	1.88	1.88	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.87	1.86	1.86	1.86	1.88	1.90	1.86	1.90	1.87	
Jan 22	1.88	1.87	1.88	S	1.95	1.93	1.91	1.93	1.91	1.96	1.94	1.90	1.90	1.90	1.91	1.90	1.89	1.88	1.89	1.88	1.88	1.88	1.88	1.88	1.87	1.96	1.90	
Jan 23	1.88	1.88	S	1.88	1.89	1.89	1.89	1.90	1.92	1.93	1.91	1.92	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.88	1.93	1.90	
Jan 24	1.91	S	1.90	1.90	1.90	1.90	1.91	1.92	1.91	1.91	1.91	1.92	1.93	1.93	1.95	1.95	1.95	1.95	1.96	1.94	1.94	1.96	1.98	1.99	1.90	1.99	1.93	
Jan 25	S	1.96	1.98	1.98	1.98	1.99	2.00	2.00	1.99	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.97	1.96	1.94	1.93	1.93	1.93	S	1.93	2.00	1.97	
Jan 26	1.93	1.94	1.94	1.95	1.95	1.95	1.95	1.93	1.92	1.93	1.92	1.92	1.93	1.93	1.94	1.93	1.92	1.92	1.92	1.92	1.94	1.95	S	1.94	1.92	1.95	1.93	
Jan 27	1.93	1.93	1.93	1.92	1.92	1.91	1.91	1.91	1.91	1.92	1.92	1.92	1.92	1.93	1.92	1.92	1.92	1.91	1.91	1.91	1.90	S	1.92	1.91	1.90	1.93	1.92	
Jan 28	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.90	1.89	1.90	1.91	1.90	1.96	2.00	1.94	1.92	S	2.00	2.00	1.97	1.89	2.00	1.93	
Jan 29	1.94	1.94	1.94	1.95	1.95	1.96	1.97	1.97	1.98	1.98	2.00	2.03	2.04	2.05	2.04	2.04	2.04	2.03	S	2.04	2.04	2.05	2.08	1.94	2.08	2.00	2.00	
Jan 30	2.19	2.25	2.28	2.27	2.33	2.39	2.37	2.31	2.29	2.27	2.14	2.02	2.02	2.01	2.06	2.08	2.08	2.09	S	2.08	2.15	2.27	2.46	2.41	2.01	2.46	2.21	
Jan 31	2.39	2.41	2.46	2.51	2.68	2.80	2.62	2.71	2.71	2.64	2.40	2.24	2.20	2.10	2.09	2.07	2.06	S	2.00	2.00	2.01	1.98	1.98	1.99	1.98	2.80	2.31	
Diurnal Maximum	2.39	2.41	2.46	2.51	2.68	2.80	2.62	2.71	2.71	2.64	2.40	2.37	2.20	2.10	2.09	2.08	2.08	2.09	2.03	2.08	2.15	2.27	2.46	2.41				
Diurnal Average	1.91	1.92	1.92	1.92	1.93	1.94	1.94	1.94	1.94	1.94	1.93	1.92	1.91	1.90	1.90	1.90	1.91	1.90	1.89	1.89	1.90	1.91	1.92	1.92				

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	N	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.

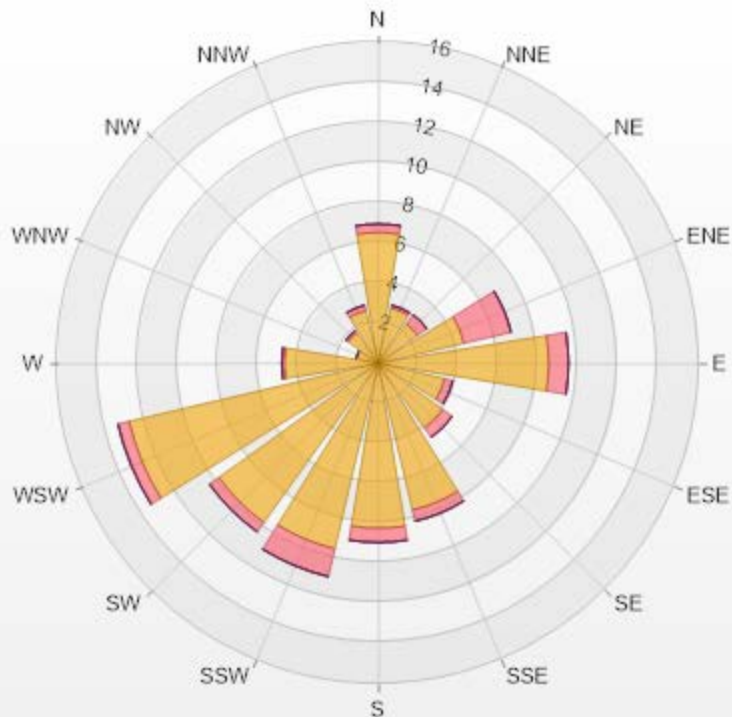
Timeseries Chart of Hourly Average for CH4 - 842b Station





Wind: PRAMP 842b Poll.: PRAMP 842b-CH4[ppm] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 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	6.52	0.42	0	0	0	6.94
NNE	2.83	0.14	0	0	0	2.97
NE	2.41	0.57	0	0	0	2.98
ENE	4.39	2.41	0	0	0	6.8
E	8.5	0.99	0	0	0	9.49
ESE	3.4	0.42	0	0	0	3.82
SE	3.97	0.57	0	0	0	4.54
SSE	7.51	0.57	0	0	0	8.08
S	8.22	0.71	0	0	0	8.93
SSW	9.49	1.42	0	0	0	10.91
SW	9.77	0.57	0	0	0	10.34
WSW	12.75	0.57	0	0	0	13.32
W	4.67	0.14	0	0	0	4.81
WNW	1.13	0	0	0	0	1.13
NW	1.84	0.14	0	0	0	1.98
NNW	2.69	0.28	0	0	0	2.97
Summary	90.09	9.92	0	0	0	100



PRAMP-202101

Page 89 of 228

% Icon Classes (ppm)

90

0-2

10

2-5

0

5-10

0

10-20

0

>20.0



PEACE RIVER AREA MONITORING PROGRAM

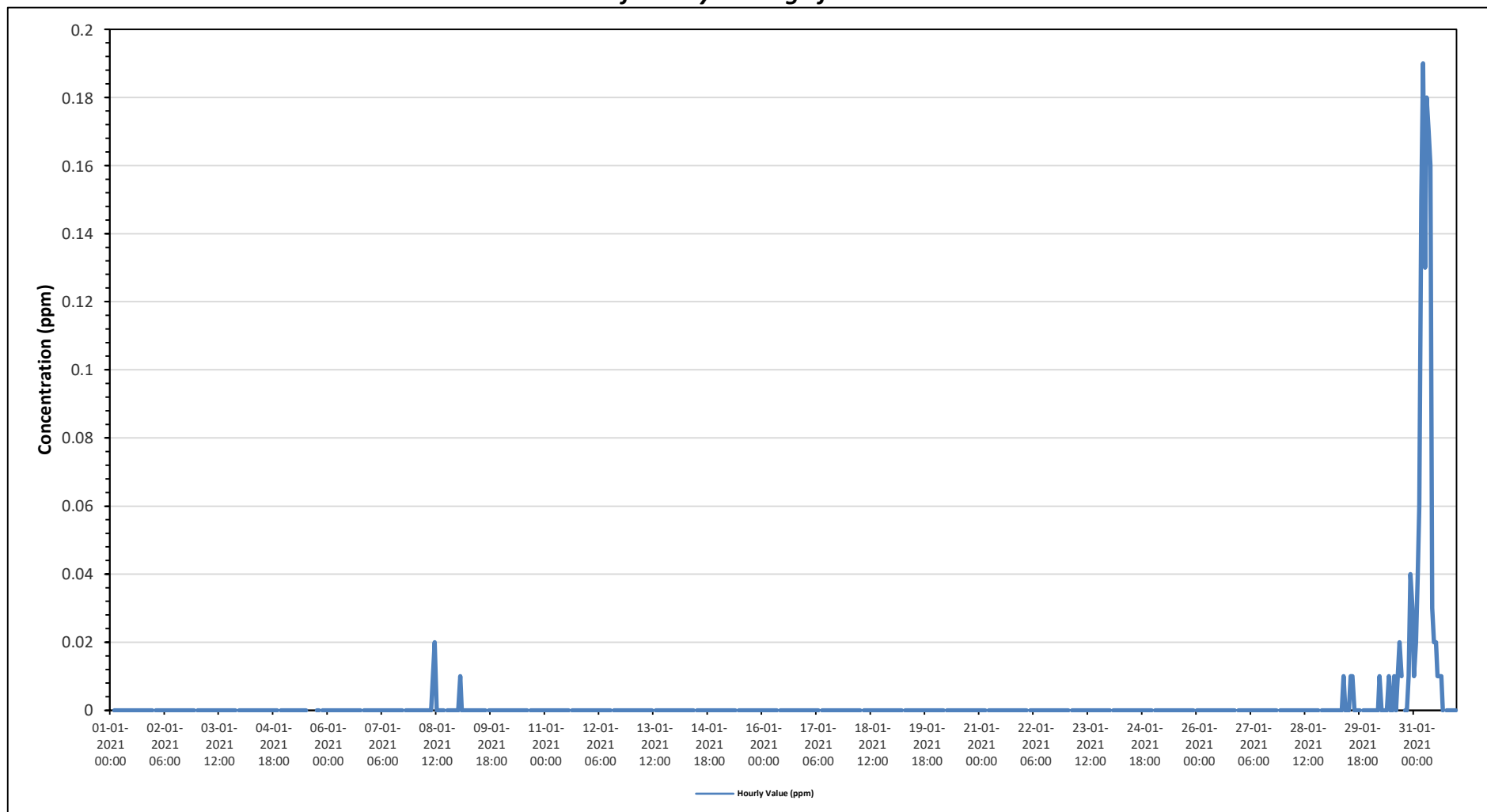
842b Station - January 2021

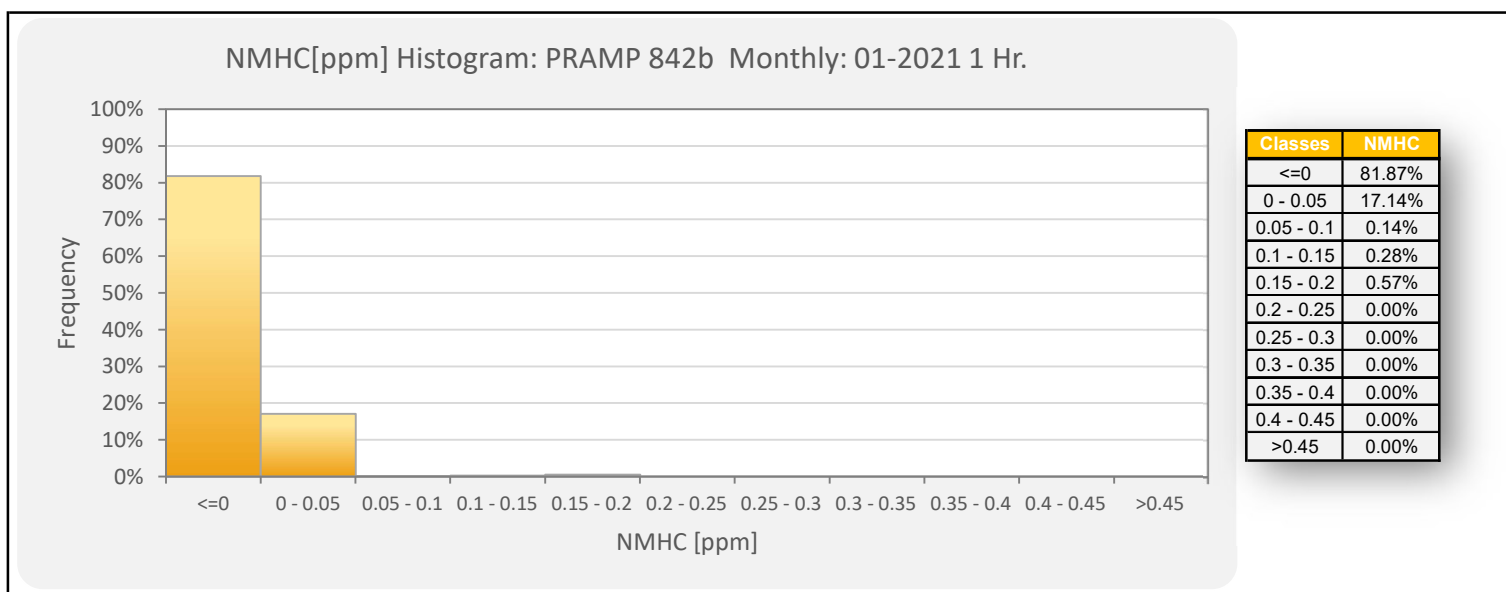
Summary of Hourly Averages

NON-METHANE HYDROCARBONS (NMHC) in ppm

Maximum Hourly Value: 0.19 ppm on January 31 at hour 5										Hours in Service: 744																	
Maximum Daily Value: 0.05 ppm on January 31										Hours of Data: 706																	
Minimum Hourly Value: 0.00 ppm on January 1 at hour 0										Hours of Missing Data: 0																	
Minimum Daily Value: 0.00 ppm on January 1										Hours of Calibration: 38																	
Monthly Average: 0.00 ppm										Operational Uptime: 100.0																	
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
Jan 1	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
Jan 2	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
Jan 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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
Jan 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	S	0.00	0.00	0.00	0.00	0.00	0.00
Jan 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	C	C	C	C	C	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jan 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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jan 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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jan 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	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	0.02	0.00
Jan 9	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Jan 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	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
Jan 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	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
Jan 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	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
Jan 13	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
Jan 14	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
Jan 15	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
Jan 16	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
Jan 17	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
Jan 18	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
Jan 19	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
Jan 20	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
Jan 21	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
Jan 22	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
Jan 23	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
Jan 24	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
Jan 25	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
Jan 26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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
Jan 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	S	0.00	0.00	0.00	0.00	0.00	0.00
Jan 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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jan 29	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	0.01	0.01	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Jan 30	0.00	0.00	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	0.01	0.02	0.01	S	0.00	0.01	0.04	0.03	0.00	0.04	0.01	0.01
Jan 31	0.01	0.02	0.04	0.06	0.15	0.19	0.13	0.18	0.17	0.16	0.03	0.02	0.02	0.01	0.01	0.01	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.05
Diurnal Maximum	0.01	0.02	0.04	0.06	0.15	0.19	0.13	0.18	0.17	0.16	0.03	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.00	0.00	0.00	0.01	0.04	0.03			
Diurnal Average	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	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		
C	Monthly Calibration						S	Daily Zero-Span Check						Q	Quality Assurance												
K	Collection Error						N	No Data (Machine Not in Service)						Y	Routine Maintenance												
X	InValid Data (Equipment Malfunction/Recovery)						NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)							Power Failure												
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.																											

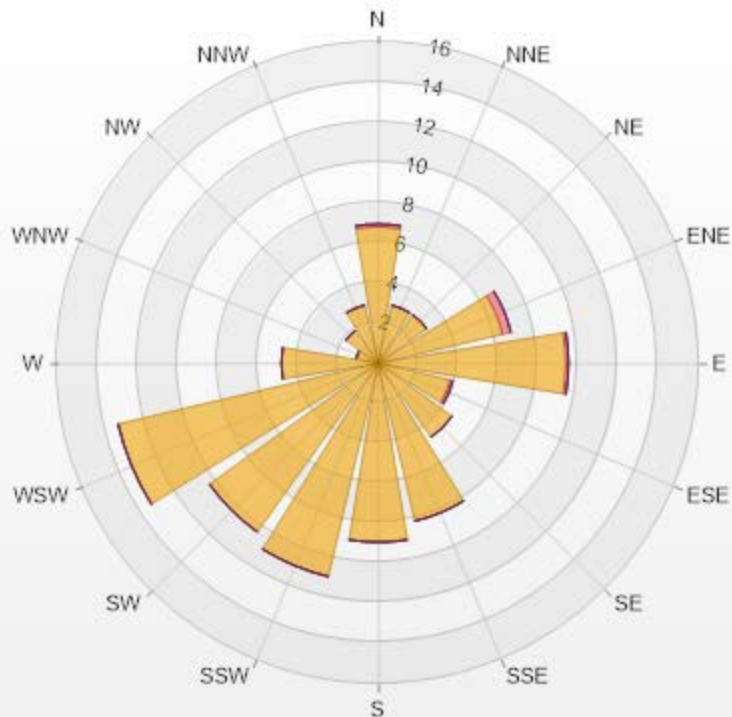
Timeseries Chart of Hourly Average for NMHC - 842b Station





Wind: PRAMP 842b Poll.: PRAMP 842b-NMHC[ppm] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.89% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-0.9	0.9-2	>2.0	Total
N	6.8	0.14	0	0	0	6.94
NNE	2.97	0	0	0	0	2.97
NE	2.97	0	0	0	0	2.97
ENE	6.37	0.42	0	0	0	6.79
E	9.35	0.14	0	0	0	9.49
ESE	3.68	0.14	0	0	0	3.82
SE	4.53	0	0	0	0	4.53
SSE	8.07	0	0	0	0	8.07
S	8.92	0	0	0	0	8.92
SSW	10.91	0	0	0	0	10.91
SW	10.34	0	0	0	0	10.34
WSW	13.31	0	0	0	0	13.31
W	4.82	0	0	0	0	4.82
WNW	1.13	0	0	0	0	1.13
NW	1.98	0	0	0	0	1.98
NNW	2.97	0	0	0	0	2.97
Summary	99.12	0.84	0	0	0	100



PRAMP-202101

Page 94 of 228

% Icon Classes (ppm)

99 0-0.1

1 0.1-0.3

0 0.3-0.9

0 0.9-2

0 >2.0



PEACE RIVER AREA MONITORING PROGRAM

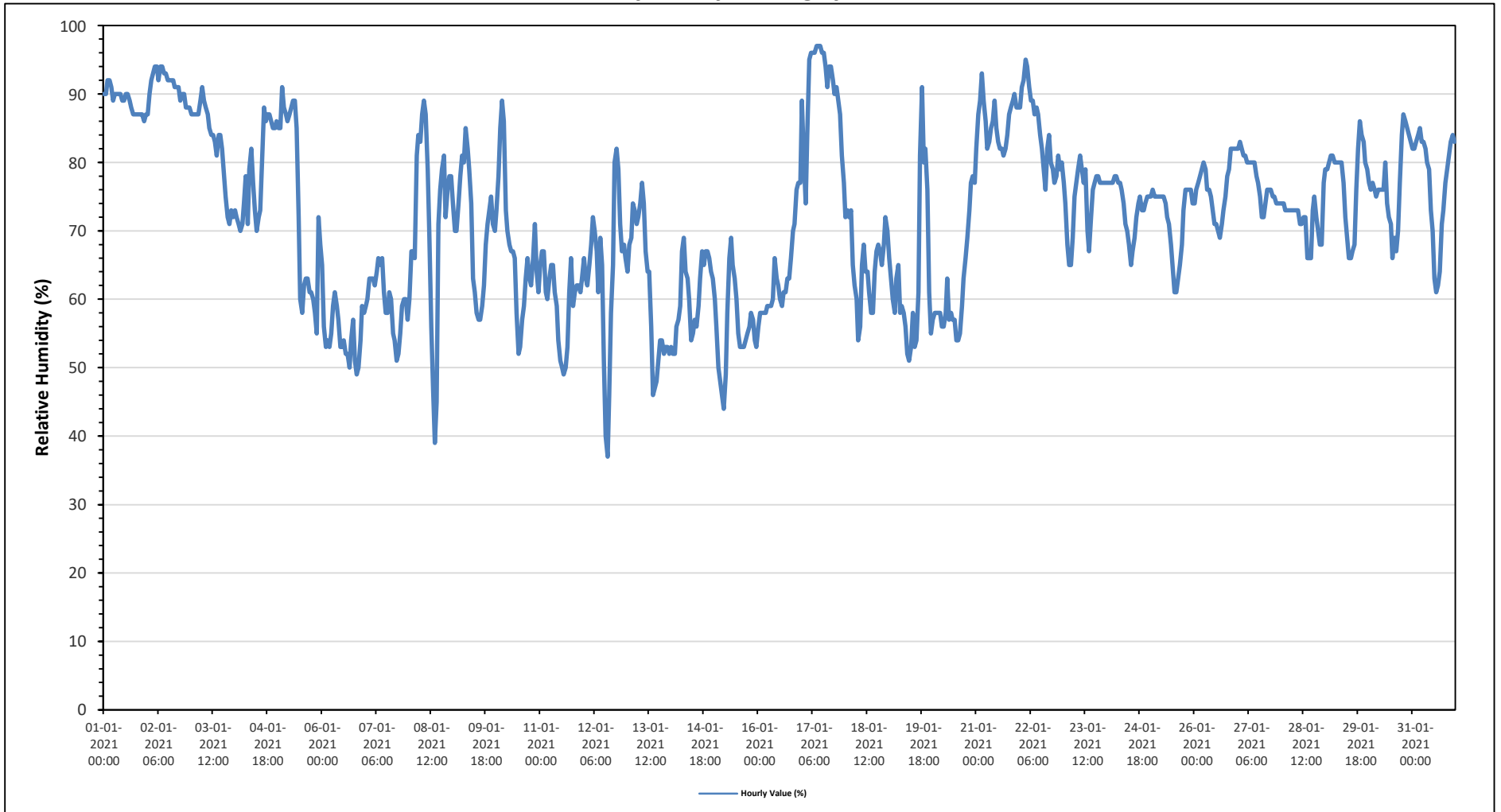
842b Station - January 2021

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

Maximum Hourly Value:				97	%	on January 17 at hour 8										Hours in Service:				744									
Maximum Daily Value:				91.3	%	on January 2										Hours of Data:				744									
Minimum Hourly Value:				37	%	on January 12 at hour 13										Hours of Missing Data:				0									
Minimum Daily Value:				54.9	%	on January 6										Hours of Calibration:				0									
Monthly Average:				72.0	%											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		
Jan 1	90	90	92	92	91	89	90	90	90	90	89	89	90	90	89	88	87	87	87	87	87	87	86	87	86	92	88.9		
Jan 2	87	90	92	93	94	94	92	94	94	93	93	92	92	92	92	91	91	91	89	90	90	88	88	88	87	94	91.3		
Jan 3	87	87	87	87	87	89	91	89	88	87	85	84	84	83	81	84	84	82	78	75	72	71	73	72	71	91	82.8		
Jan 4	73	72	71	70	71	74	78	71	79	82	77	73	70	72	73	81	88	86	87	87	86	85	85	86	70	88	78.2		
Jan 5	85	85	91	88	87	86	87	88	89	89	85	72	60	58	62	63	63	61	61	60	58	55	72	68	55	91	73.9		
Jan 6	65	56	53	54	53	55	59	61	59	57	53	53	54	52	52	50	54	57	51	49	50	54	59	58	49	65	54.9		
Jan 7	59	60	63	63	63	62	64	66	65	66	61	58	58	61	60	55	54	51	52	55	59	60	60	57	51	66	59.7		
Jan 8	60	67	67	66	81	84	83	87	89	87	79	70	56	47	39	45	71	76	79	81	72	76	78	78	39	89	71.6		
Jan 9	74	70	70	74	78	81	80	85	82	79	74	63	61	58	57	57	59	62	68	71	73	75	71	70	57	85	70.5		
Jan 10	73	78	85	89	86	73	70	68	67	67	66	58	52	53	57	59	63	66	63	62	66	71	64	61	52	89	67.4		
Jan 11	65	67	67	61	60	63	65	65	61	59	54	51	50	49	50	53	61	66	59	61	62	62	61	63	49	67	59.8		
Jan 12	66	63	62	65	68	72	70	67	61	69	65	51	40	37	46	58	65	80	82	79	71	67	68	66	37	82	64.1		
Jan 13	64	68	69	74	73	71	72	74	77	74	67	64	64	56	46	47	48	51	54	54	52	53	53	52	46	77	61.5		
Jan 14	53	52	52	56	57	59	67	69	64	63	60	54	55	57	56	59	63	67	65	67	67	66	64	63	52	69	60.6		
Jan 15	60	56	50	48	46	44	49	58	66	69	65	63	60	55	53	53	54	55	56	58	57	54	53	44	69	55.6			
Jan 16	56	58	58	58	58	59	59	59	60	66	63	62	60	59	61	61	63	63	66	70	71	76	77	77	56	77	63.3		
Jan 17	89	81	74	84	95	96	96	96	97	97	97	96	96	94	91	94	94	92	90	91	89	87	81	77	74	97	90.6		
Jan 18	72	73	72	73	65	62	60	54	56	65	68	64	64	61	58	58	64	67	68	67	65	68	72	70	54	73	65.3		
Jan 19	66	63	60	58	63	65	58	59	58	56	52	51	53	58	53	54	61	81	91	80	82	76	61	55	51	91	63.1		
Jan 20	57	58	58	58	58	56	56	58	63	57	58	57	57	54	54	55	59	63	66	69	73	77	78	77	54	78	61.5		
Jan 21	82	87	89	93	89	86	82	83	85	86	89	85	83	82	82	81	82	84	87	88	89	90	88	88	81	93	85.8		
Jan 22	88	91	92	95	94	91	89	89	87	88	87	84	82	79	76	82	84	80	79	77	78	81	79	80	76	95	84.7		
Jan 23	77	74	68	65	65	69	75	77	79	81	79	77	79	70	67	72	76	77	78	78	77	77	77	77	65	81	74.6		
Jan 24	77	77	77	77	78	78	77	77	76	74	71	70	68	65	67	69	72	74	75	73	73	74	75	75	65	78	73.7		
Jan 25	75	76	75	75	75	75	75	75	74	72	71	68	65	61	61	63	65	68	73	76	76	76	76	74	61	76	71.7		
Jan 26	74	76	77	78	79	80	79	76	76	75	73	71	71	70	69	71	73	75	78	79	82	82	82	82	69	82	76.2		
Jan 27	82	83	82	81	81	80	80	80	80	80	78	77	75	72	72	74	76	76	76	75	75	74	74	74	72	83	77.4		
Jan 28	74	74	73	73	73	73	73	73	73	73	71	71	72	72	66	66	66	73	75	72	70	68	68	77	66	77	71.6		
Jan 29	79	79	80	81	81	80	80	80	80	80	77	72	69	66	66	67	68	76	82	86	84	83	80	79	66	86	77.3		
Jan 30	77	76	77	76	75	76	76	76	76	80	74	72	71	66	69	67	70	77	84	87	86	85	84	83	66	87	76.7		
Jan 31	82	82	83	84	85	83	83	82	80	79	73	70	63	61	62	64	71	73	77	79	81	83	84	83	61	85	77.0		
Diurnal Maximum	90	91	92	95	95	96	96	96	97	97	97	96	96	94	92	94	94	92	91	91	90	90	88	88					
Diurnal Average	73.2	73.2	73.1	73.8	74.5	74.4	74.7	75.0	75.2	75.5	72.7	69.1	66.9	64.8	64.1	65.8	69.3	72.1	73.4	73.6	73.4	73.7	73.3	72.6					
C	Monthly Calibration								S	Daily Zero-Span Check								Q	Quality Assurance										
K	Collection Error								N	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.																													

Timeseries Chart of Hourly Average for RH - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

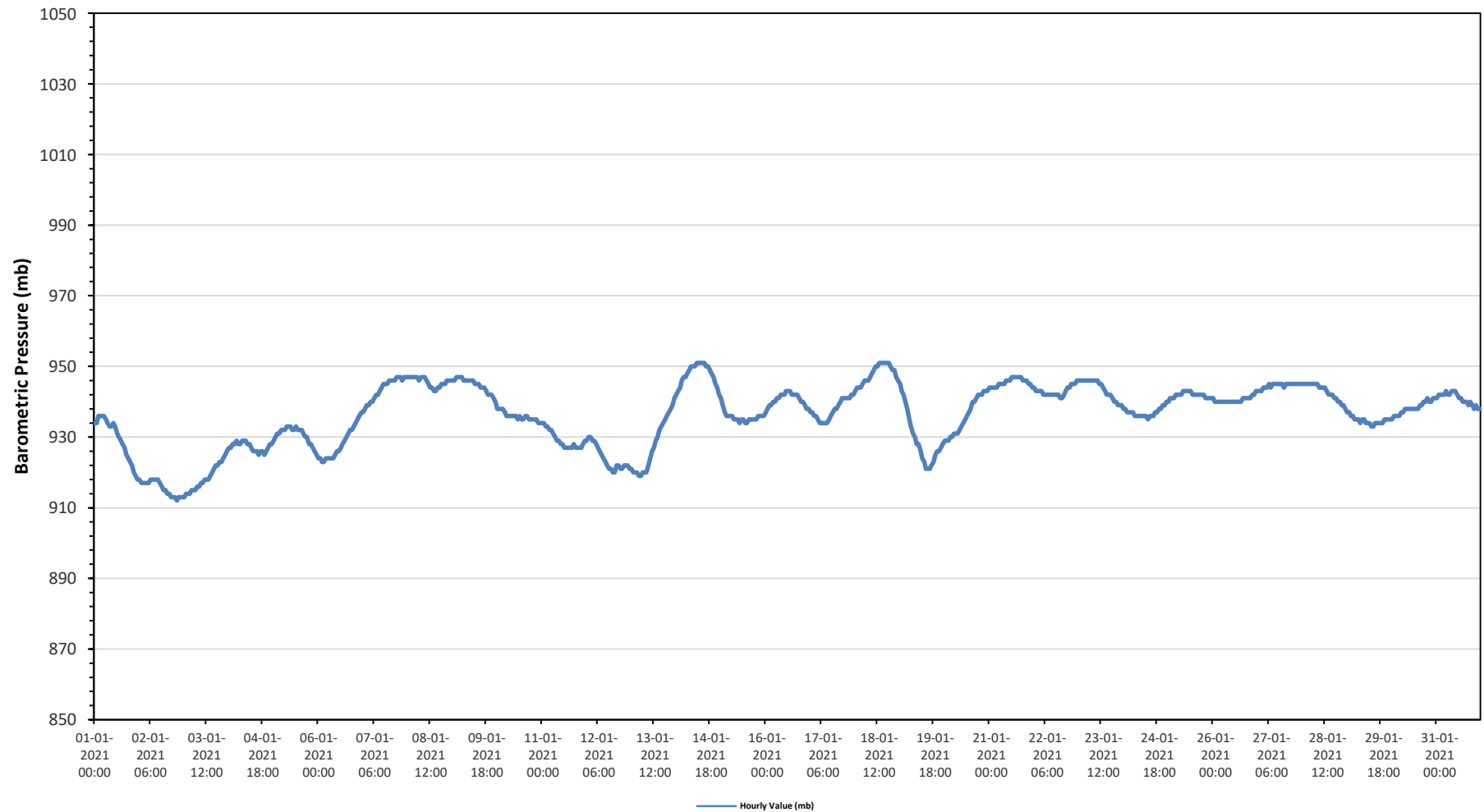
842b Station - January 2021

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

Maximum Hourly Value:										951	mb	on January 14 at hour 11										Hours in Service:										744
Maximum Daily Value:										948	mb	on January 18										Hours of Data:										744
Minimum Hourly Value:										912	mb	on January 2 at hour 20										Hours of Missing Data:										0
Minimum Daily Value:										916	mb	on January 2										Hours of Calibration:										0
Monthly Average:										936	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					
Jan 1	934	934	936	936	936	936	935	934	933	933	934	933	931	930	929	928	927	925	924	923	922	920	919	918	918	936	929.6					
Jan 2	918	917	917	917	917	917	918	918	918	918	918	917	916	915	915	914	914	913	913	913	912	913	913	913	912	918	915.6					
Jan 3	913	914	914	914	914	915	915	915	916	916	917	917	918	918	918	919	920	921	922	922	923	923	924	925	926	913	926	918.5				
Jan 4	927	927	928	928	928	929	928	928	929	929	929	928	928	927	926	926	926	925	926	926	925	926	927	928	928	925	929	927.3				
Jan 5	929	930	931	931	932	932	932	933	933	933	932	932	933	932	932	932	931	930	930	928	928	927	926	925	925	933	930.6					
Jan 6	924	924	923	923	924	924	924	924	924	924	925	926	926	927	928	929	930	931	932	932	933	934	935	936	937	923	937	928.1				
Jan 7	937	938	939	939	940	940	941	942	942	943	944	945	945	945	946	946	946	946	947	947	947	946	947	947	937	947	943.5					
Jan 8	947	947	947	947	947	947	946	947	947	947	946	945	944	944	943	943	944	944	945	945	945	946	946	946	943	947	945.6					
Jan 9	946	946	947	947	947	947	946	946	946	946	946	946	945	945	945	944	944	944	943	942	942	942	941	940	940	947	944.7					
Jan 10	938	938	938	938	937	936	936	936	936	936	936	936	935	936	935	935	936	936	935	935	935	935	934	934	934	934	938	935.9				
Jan 11	934	934	933	933	932	932	931	930	929	929	928	928	927	927	927	927	927	928	927	927	927	927	928	929	927	934	929.2					
Jan 12	929	930	930	929	929	928	927	926	925	924	923	922	921	921	920	920	922	922	921	921	922	922	922	921	920	930	924.0					
Jan 13	921	920	920	920	919	919	920	920	920	922	924	926	927	929	930	932	933	934	935	936	937	938	939	941	919	941	927.6					
Jan 14	942	943	944	946	947	947	948	949	950	950	950	951	951	951	951	951	950	950	949	948	947	945	944	942	942	951	947.8					
Jan 15	941	939	937	936	936	936	936	935	935	935	934	935	935	934	934	935	935	935	935	935	936	936	936	936	934	941	935.7					
Jan 16	937	938	939	939	940	940	941	941	942	942	942	943	943	943	942	942	942	942	941	940	940	939	938	938	937	943	940.6					
Jan 17	937	937	936	936	935	934	934	934	934	934	935	936	937	938	938	939	940	941	941	941	941	941	942	942	934	942	937.6					
Jan 18	943	944	944	944	945	946	946	946	947	948	949	950	950	951	951	951	951	951	951	950	949	949	947	946	943	951	947.9					
Jan 19	945	943	942	940	938	935	933	931	930	928	928	926	924	923	921	921	921	922	923	925	926	926	927	928	921	945	929.4					
Jan 20	929	929	929	930	930	931	931	931	932	933	934	935	936	937	938	940	940	941	942	942	942	943	943	943	929	943	935.9					
Jan 21	944	944	944	944	944	945	945	945	945	946	946	946	947	947	947	947	947	947	946	946	946	945	945	944	944	947	945.5					
Jan 22	944	943	943	943	943	942	942	942	942	942	942	942	942	942	941	941	942	943	944	944	945	945	945	946	941	946	942.9					
Jan 23	946	946	946	946	946	946	946	946	946	946	946	945	945	944	943	942	942	942	941	940	940	939	939	939	939	946	943.6					
Jan 24	938	938	937	937	937	937	936	936	936	936	936	936	936	936	936	936	936	937	937	938	938	939	939	940	935	940	937.0					
Jan 25	940	941	941	941	942	942	942	942	943	943	943	943	943	942	942	942	942	942	942	942	941	941	941	941	940	943	941.8					
Jan 26	941	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	941	941	941	941	941	942	942	943	940	943	940.5					
Jan 27	943	943	943	944	944	944	945	944	945	945	945	945	945	945	944	945	945	945	945	945	945	945	945	945	943	945	944.5					
Jan 28	945	945	945	945	945	945	945	945	945	944	944	944	944	943	942	942	942	941	941	940	940	939	939	938	938	945	942.8					
Jan 29	937	937	936	936	935	935	935	934	935	935	934	934	934	933	933	934	934	934	934	935	935	935	935	935	933	937	934.7					
Jan 30	935	936	936	936	936	937	937	938	938	938	938	938	938	938	938	939	939	940	940	941	940	940	941	941	935	941	938.3					
Jan 31	941	942	942	942	942	943	942	942	943	943	943	942	941	941	940	940	940	939	940	939	938	939	938	938	938	943	940.8					
Diurnal Maximum	947	947	947	947	947	947	948	949	950	950	950	951	951	951	951	951	951	951	951	950	949	949	947	947								
Diurnal Average	936	936	936	936	936	936	936	936	936	936	936	937	936	936	936	936	936	937	937	936	936	936	936	936								
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance															
K	Collection Error							N	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.																																

Timeseries Chart of Hourly Average for BP - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

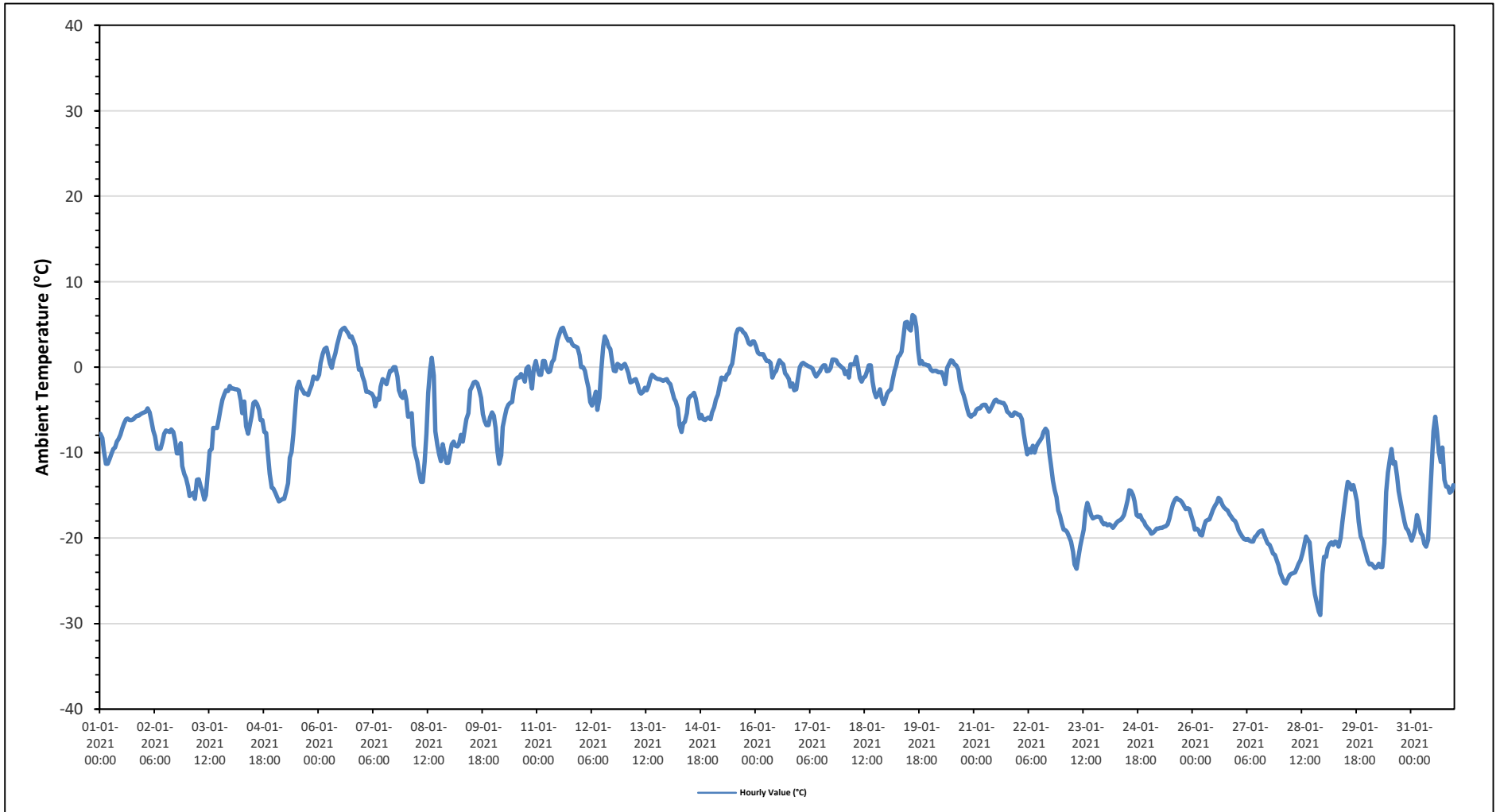
842b Station - January 2021

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

Maximum Hourly Value:		6.1	°C	on January 19 at hour 14											Hours in Service:		744										
Maximum Daily Value:		2.1	°C	on January 6											Hours of Data:		744										
Minimum Hourly Value:		-29.0	°C	on January 28 at hour 22											Hours of Missing Data:		0										
Minimum Daily Value:		-24.1	°C	on January 28											Hours of Calibration:		0										
Monthly Average:		-7.9	°C												Operational Uptime:		100.0										
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
Jan 1	-7.8	-8.3	-9.8	-11.3	-11.3	-10.7	-10.2	-9.6	-9.4	-8.7	-8.4	-7.9	-7.2	-6.6	-6.1	-6	-6.2	-6.2	-6.1	-5.9	-5.7	-5.7	-5.5	-5.4	-11.3	-5.4	-7.8
Jan 2	-5.3	-5.2	-4.8	-5.3	-6.3	-7.4	-8.1	-9.5	-9.6	-9.5	-8.8	-7.8	-7.4	-7.5	-7.6	-7.3	-7.6	-8.6	-10.1	-10.1	-8.9	-11.6	-12.5	-13	-13.0	-4.8	-8.3
Jan 3	-14	-15.1	-14.9	-14.7	-15.4	-13.2	-13.1	-13.9	-14.5	-15.5	-15	-12.2	-9.8	-9.6	-7.1	-7.1	-7.1	-6.2	-4.8	-3.8	-3.2	-2.7	-2.8	-2.2	-15.5	-2.2	-9.9
Jan 4	-2.5	-2.5	-2.6	-2.6	-2.7	-3.9	-5.4	-4	-6.9	-7.8	-6.9	-5.7	-4.2	-4	-4.3	-5	-6.2	-6.2	-7.6	-7.7	-10.2	-12.5	-14.1	-14.2	-14.2	-2.5	-6.2
Jan 5	-14.7	-15.2	-15.7	-15.6	-15.4	-15.4	-14.6	-13.6	-10.6	-9.9	-7.8	-4.6	-2.4	-1.7	-2.4	-2.7	-3.1	-3.1	-3.3	-2.7	-2.1	-1.1	-1.3	-1.4	-15.7	-1.1	-7.5
Jan 6	-0.9	0.5	1.5	2.1	2.3	1.5	0.4	-0.1	0.8	1.6	2.6	3.4	4.2	4.5	4.6	4.3	4	3.5	3.6	3	2.4	1.3	-0.3	-0.2	-0.9	4.6	2.1
Jan 7	-1.1	-1.7	-2.9	-2.9	-3	-3.1	-3.5	-4.6	-3.7	-3.8	-2.3	-1.4	-1.6	-2	-1.3	-0.4	-0.4	0	0	-1.1	-2.7	-3.4	-3.6	-2.8	-4.6	0.0	-2.2
Jan 8	-3.8	-5.8	-5.7	-5.4	-9.2	-10.2	-11	-12.3	-13.4	-13.4	-11.1	-7.8	-3	-0.4	1.1	-1	-7.5	-9.1	-10.2	-11	-9	-10.2	-11.2	-11.2	-13.4	1.1	-8.0
Jan 9	-10.1	-9	-8.7	-9.2	-9.3	-9	-7.9	-8.7	-7.2	-6.1	-5.4	-2.7	-2.3	-1.8	-1.7	-1.9	-2.6	-3.6	-5.5	-6.3	-6.8	-6.8	-5.9	-5.3	-10.1	-1.7	-6.0
Jan 10	-5.7	-7.1	-9.8	-11.3	-10.3	-7	-5.8	-4.9	-4.4	-4.2	-4.1	-2.7	-1.5	-1.2	-1.2	-0.8	-1.1	-1.7	-0.2	0.1	-1.2	-2.5	-0.2	0.7	-11.3	0.7	-3.7
Jan 11	-0.2	-0.9	-0.9	0.7	0.7	-0.2	-0.6	-0.5	0.6	0.9	2	3.2	3.9	4.5	4.6	4	3.5	3.1	3.3	2.7	2.5	2.4	2.3	1.4	-0.9	4.6	1.8
Jan 12	0	0	-0.4	-1.5	-2.4	-4.1	-4.5	-3.8	-2.9	-5	-3.6	-0.5	2.4	3.6	3.1	2.4	2.1	0.7	-0.4	-0.5	0.4	0.2	-0.2	0.2	-5.0	3.6	-0.6
Jan 13	0.4	-0.2	-0.7	-1.8	-1.7	-1.5	-1.4	-2	-2.9	-3.1	-2.9	-2.4	-2.7	-2.2	-1.3	-0.9	-1.1	-1.3	-1.4	-1.4	-1.5	-1.6	-1.5	-1.4	-3.1	0.4	-1.6
Jan 14	-1.8	-2	-2.8	-3.7	-4	-4.8	-6.8	-7.6	-6.6	-6.4	-5.4	-3.7	-3.4	-3.3	-3	-3.7	-5	-6	-5.6	-6.1	-6.2	-6	-5.9	-6.1	-7.6	-1.8	-4.8
Jan 15	-5.3	-4.7	-3.8	-3.2	-2.3	-1.2	-1.3	-1.5	-0.9	-0.7	0	0.4	2	3.8	4.4	4.5	4.4	4.1	3.9	3.4	2.8	2.6	3	3	-5.3	4.5	0.7
Jan 16	2.5	1.7	1.5	1.5	1.5	1	0.7	0.7	0.5	-1.2	-0.7	-0.4	0.3	0.8	0.5	0.3	-0.7	-1	-1.4	-2.3	-1.9	-2.7	-2.6	-1.4	-2.7	2.5	-0.1
Jan 17	0	0.4	0.5	0.3	0.2	0.1	0	-0.2	-0.7	-1.1	-0.8	-0.5	-0.1	0.2	0.2	-0.5	-0.4	-0.1	0.9	0.9	0.8	0.4	0.2	0	-1.1	0.9	0.0
Jan 18	-0.2	-0.8	-0.5	-1.2	0.3	0.3	0.3	1.2	0.2	-1.3	-1.7	-1.2	-1.1	-0.4	0.2	0.2	-1.7	-2.9	-3.5	-3.2	-2.6	-3.5	-4.3	-3.8	-4.3	1.2	-1.3
Jan 19	-3.1	-2.8	-2.6	-1.5	-0.5	0.2	1.2	1.4	1.8	3.7	5.2	5.3	4.5	4.3	6.1	5.9	4.7	2	0.4	0.7	0.3	0.3	0.2	0.2	-3.1	6.1	1.6
Jan 20	-0.3	-0.5	-0.4	-0.4	-0.6	-0.6	-0.6	-1.1	-2	-0.1	0.3	0.8	0.7	0.3	0.2	-0.3	-1.6	-2.7	-3.3	-4	-4.9	-5.6	-5.8	-5.6	-5.8	0.8	-1.6
Jan 21	-5.5	-5	-4.8	-4.8	-4.5	-4.4	-4.4	-4.8	-5.2	-4.8	-4.4	-3.9	-3.8	-4.1	-4.1	-4.2	-4.2	-4.6	-5.2	-5.4	-5.7	-5.7	-5.3	-5.4	-5.7	-3.8	-4.8
Jan 22	-5.6	-5.6	-6.1	-7.7	-9	-10.2	-9.6	-10	-9.2	-10	-9.3	-8.9	-8.6	-8.2	-7.6	-7.2	-7.5	-10.1	-11.4	-13.3	-14.4	-15.2	-16.8	-17.4	-17.4	-5.6	-10.0
Jan 23	-18.3	-19	-19.1	-19.3	-19.9	-20.4	-21.6	-23.1	-23.6	-22.3	-21	-20	-19	-16.9	-15.9	-16.6	-17.3	-17.7	-17.6	-17.5	-17.5	-17.6	-18.1	-18.4	-23.6	-15.9	-19.1
Jan 24	-18.3	-18.5	-18.4	-18.5	-18.8	-18.5	-18.2	-18	-17.9	-17.7	-17.3	-16.5	-15.5	-14.4	-14.5	-15	-15.7	-17.3	-17.5	-17.3	-17.8	-18.1	-18.5	-18.8	-18.8	-14.4	-17.4
Jan 25	-19	-19.5	-19.4	-19.2	-18.9	-18.9	-18.8	-18.8	-18.7	-18.6	-18.4	-17.7	-16.8	-16	-15.5	-15.3	-15.5	-15.6	-15.8	-16.2	-16.6	-16.5	-16.6	-17.4	-19.5	-15.3	-17.5
Jan 26	-18.1	-19	-18.9	-19.1	-19.6	-19.7	-18.6	-18	-17.9	-17.8	-17.2	-16.7	-16.2	-15.9	-15.3	-15.5	-16.1	-16.4	-16.6	-16.8	-17.2	-17.5	-17.8	-18	-19.7	-15.3	-17.5
Jan 27	-18.4	-19.1	-19.5	-19.8	-20.1	-20.2	-20.1	-20.3	-20.4	-20.4	-19.9	-19.7	-19.3	-19.2	-19.1	-19.6	-20.2	-20.6	-20.8	-21.3	-21.8	-22	-22.6	-23.2	-23.2	-18.4	-20.3
Jan 28	-24.1	-24.7	-25.2	-25.3	-24.8	-24.3	-24.2	-24.1	-24	-23.6	-23	-22.6	-21.9	-21	-19.8	-20.2	-20.5	-22.8	-25.3	-26.6	-27.7	-28.6	-29	-24.2	-29.0	-19.8	-24.1
Jan 29	-22.2	-22.2	-21.2	-20.7	-20.5	-20.8	-20.4	-20.5	-21	-20	-18.1	-16.4	-14.8	-13.4	-13.7	-14.3	-13.8	-14.7	-15.7	-18.1	-19.8	-20.3	-21.2	-21.9	-22.2	-13.4	-18.6
Jan 30	-22.7	-23.1	-23	-23.3	-23.5	-23.4	-23	-23.4	-23.4	-20.6	-14.6	-12.3	-10.9	-9.6	-11.3	-11.1	-12.8	-14.5	-15.8	-16.9	-18.1	-18.8	-19.1	-19.7	-23.5	-9.6	-18.1
Jan 31	-20.3	-19.7	-18.9	-17.3	-18	-19.4	-19.7	-20.7	-21	-20.2	-16.2	-11.6	-7.5	-5.8	-7.6	-9.9	-11.1	-9.4	-13.2	-14	-14	-14.7	-14.5	-13.8	-21.0	-5.8	-14.9
Diurnal Maximum	2.5	1.7	1.5	2.1	2.3	1.5	1.2	1.4	1.8	3.7	5.2	5.3	4.5	4.5	6.1	5.9	4.7	4.1	3.9	3.4	2.8	2.6	3.0	3.0			
Diurnal Average	-8.6	-8.9	-9.0	-9.1	-9.3	-9.3	-9.4	-9.6	-9.5	-9.3	-8.2	-6.9	-5.9	-5.3	-5.0	-5.3	-6.1	-6.7	-7.3	-7.7	-8.0	-8.5	-8.8	-8.6			
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance										
K	Collection Error							N	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.																											

Timeseries Chart of Hourly Average for AT - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

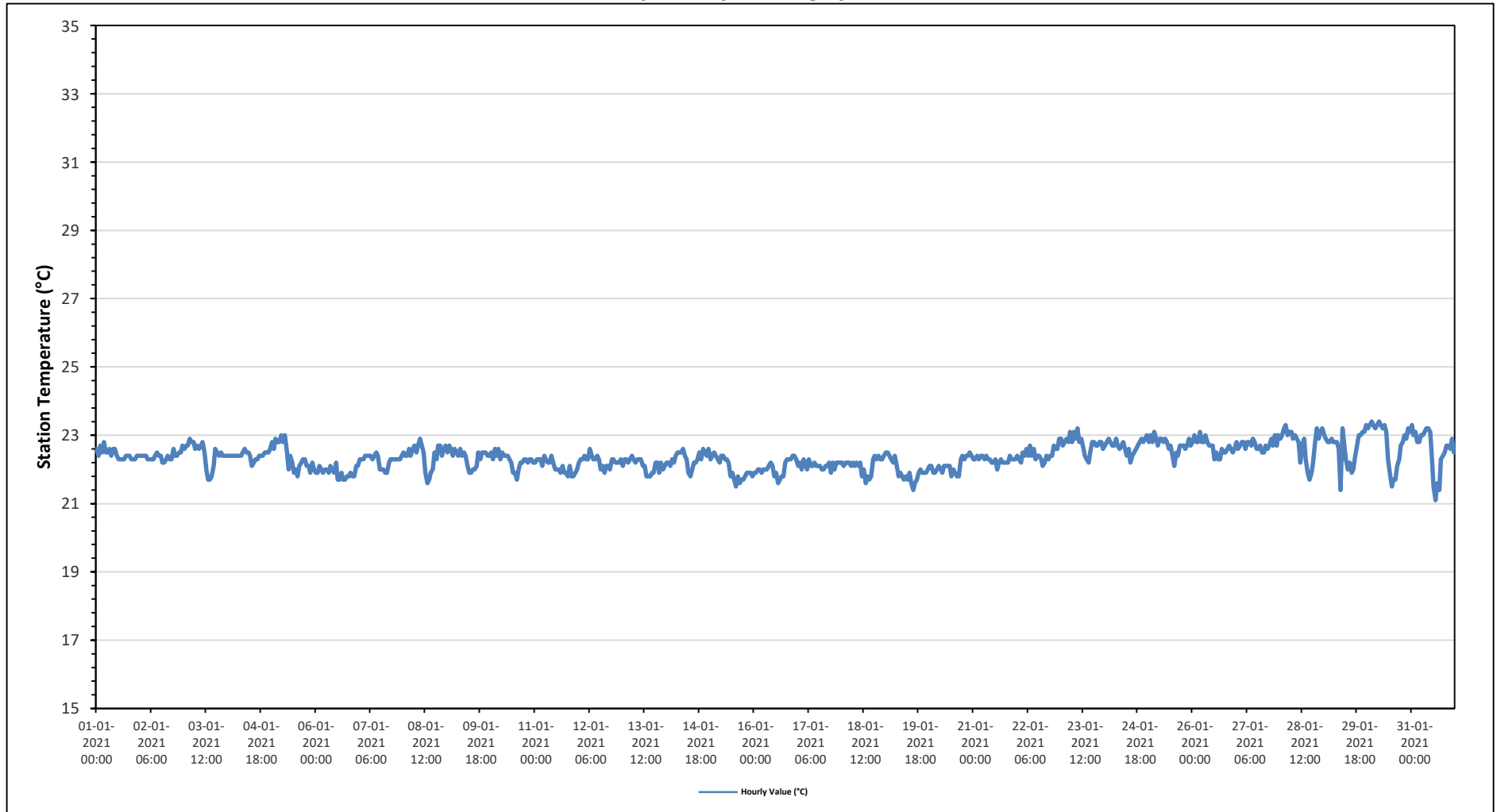
842b Station - January 2021

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

Maximum Hourly Value:										23.4	°C	on January 30 at hour 2					Hours in Service:										744					
Maximum Daily Value:										22.8	°C	on January 30					Hours of Data:										744					
Minimum Hourly Value:										21.1	°C	on January 31 at hour 13					Hours of Missing Data:										0					
Minimum Daily Value:										21.9	°C	on January 6					Hours of Calibration:										0					
Monthly Average:										22.4	°C											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								
Jan 1	22.6	22.4	22.7	22.5	22.8	22.5	22.5	22.6	22.4	22.6	22.6	22.4	22.3	22.3	22.3	22.3	22.4	22.4	22.4	22.3	22.3	22.3	22.4	22.4	22.3	22.3	22.8	22.4				
Jan 2	22.4	22.4	22.4	22.4	22.3	22.3	22.3	22.3	22.4	22.5	22.4	22.4	22.2	22.2	22.3	22.4	22.3	22.3	22.6	22.4	22.4	22.5	22.5	22.7	22.2	22.7	22.4					
Jan 3	22.6	22.7	22.7	22.9	22.8	22.8	22.6	22.7	22.6	22.7	22.8	22.5	22.0	21.7	21.7	21.8	22.1	22.6	22.5	22.4	22.5	22.4	22.4	22.4	21.7	22.9	22.5					
Jan 4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.5	22.6	22.5	22.5	22.4	22.1	22.2	22.3	22.3	22.4	22.4	22.5	22.5	22.5	22.6	22.1	22.6	22.4					
Jan 5	22.8	22.6	22.9	22.8	22.8	23.0	22.8	23.0	22.6	22.0	22.4	22.2	21.9	22.0	21.8	22.1	22.2	22.3	22.3	22.1	22.1	21.9	22.2	22.0	21.8	23.0	22.4					
Jan 6	21.9	21.9	22.1	22.0	21.9	22.0	22.0	21.9	22.1	22.0	21.9	22.2	21.7	21.7	21.9	21.7	21.7	21.8	21.8	21.9	21.8	21.8	22.1	22.1	21.7	22.2	21.9					
Jan 7	22.3	22.3	22.3	22.4	22.4	22.4	22.4	22.3	22.4	22.5	22.4	22.0	22.0	22.0	21.9	21.9	22.2	22.3	22.3	22.3	22.3	22.3	22.3	22.4	21.9	22.5	22.3					
Jan 8	22.5	22.4	22.4	22.6	22.4	22.6	22.7	22.5	22.7	22.9	22.7	22.5	21.9	21.6	21.7	21.9	22.0	22.5	22.3	22.7	22.7	22.4	22.6	22.7	21.6	22.9	22.4					
Jan 9	22.5	22.7	22.6	22.4	22.6	22.5	22.4	22.6	22.4	22.5	22.4	22.1	21.9	21.9	22.0	22.0	22.1	22.5	22.3	22.5	22.5	22.5	22.4	22.4	21.9	22.7	22.4					
Jan 10	22.5	22.3	22.6	22.4	22.6	22.3	22.5	22.4	22.4	22.4	22.3	22.2	21.9	21.9	21.7	22.0	22.2	22.2	22.3	22.3	22.2	22.3	22.3	22.2	21.7	22.6	22.3					
Jan 11	22.2	22.3	22.3	22.3	22.1	22.4	22.3	22.2	22.2	22.4	22.2	22.0	22.0	22.0	21.9	22.1	21.9	21.9	21.8	22.1	21.8	21.8	21.9	22.0	21.8	22.4	22.1					
Jan 12	22.2	22.3	22.3	22.4	22.3	22.3	22.6	22.4	22.3	22.3	22.4	22.3	22.0	22.1	21.9	22.1	22.1	22.0	22.3	22.3	22.2	22.2	22.2	22.3	21.9	22.6	22.2					
Jan 13	22.1	22.3	22.3	22.2	22.3	22.4	22.3	22.2	22.3	22.3	22.3	22.1	22.1	21.8	21.8	21.8	21.9	21.9	22.2	22.2	21.9	22.2	22.0	22.1	21.8	22.4	22.1					
Jan 14	22.2	22.2	22.1	22.3	22.2	22.4	22.5	22.5	22.5	22.6	22.4	22.3	21.9	21.8	22.0	22.2	22.2	22.3	22.5	22.3	22.6	22.5	22.4	22.6	21.8	22.6	22.3					
Jan 15	22.3	22.4	22.5	22.4	22.3	22.2	22.4	22.4	22.3	22.3	22.2	21.8	21.9	21.7	21.5	21.8	21.6	21.7	21.7	21.8	21.9	21.9	21.9	21.8	21.5	22.5	22.0					
Jan 16	21.9	21.9	22.0	22.0	21.9	22.0	22.0	22.0	22.1	22.2	22.1	21.8	21.9	21.6	21.7	21.8	21.8	22.2	22.3	22.3	22.3	22.4	22.4	22.3	21.6	22.4	22.0					
Jan 17	22.1	22.2	22.0	22.3	22.2	22.0	22.3	22.1	22.1	22.2	22.1	22.1	22.0	22.0	22.0	22.1	22.1	22.2	21.9	22.2	22.0	22.2	22.2	22.2	21.9	22.3	22.1					
Jan 18	22.2	22.1	22.2	22.2	22.2	22.1	22.2	22.1	22.2	22.1	22.2	21.8	22.0	21.6	21.8	21.7	21.8	22.3	22.4	22.3	22.4	22.3	22.3	22.4	21.6	22.4	22.1					
Jan 19	22.5	22.5	22.4	22.3	22.2	22.4	22.1	21.8	21.9	21.8	21.7	21.8	21.7	21.9	21.6	21.4	21.6	21.7	21.9	22.0	21.9	21.9	21.9	22.0	21.4	22.5	22.0					
Jan 20	22.1	22.1	21.9	21.9	22.0	22.1	22.0	21.9	22.1	22.1	22.1	22.1	21.8	22.0	21.9	21.8	21.8	22.3	22.4	22.3	22.4	22.4	22.5	22.4	21.8	22.5	22.1					
Jan 21	22.3	22.3	22.4	22.3	22.4	22.4	22.3	22.4	22.3	22.3	22.2	22.2	22.3	22.0	22.2	22.3	22.2	22.2	22.2	22.2	22.4	22.3	22.3	22.3	22.0	22.4	22.3					
Jan 22	22.4	22.3	22.2	22.5	22.4	22.6	22.4	22.7	22.4	22.6	22.3	22.4	22.4	22.3	22.1	22.2	22.4	22.3	22.4	22.4	22.7	22.6	22.6	22.9	22.1	22.9	22.4					
Jan 23	22.9	22.7	22.8	22.9	22.8	23.1	22.8	23.1	22.9	23.2	22.8	22.9	22.7	22.4	22.3	22.2	22.5	22.8	22.8	22.7	22.7	22.8	22.8	22.6	22.2	23.2	22.8					
Jan 24	22.7	22.8	22.9	22.8	22.7	22.7	22.9	22.7	22.6	22.7	22.8	22.6	22.4	22.6	22.2	22.4	22.5	22.6	22.7	22.8	22.9	22.8	22.9	23.0	22.2	23.0	22.7					
Jan 25	22.8	23.0	22.8	23.1	22.9	22.7	22.9	22.9	22.8	22.9	22.8	22.6	22.7	22.4	22.1	22.5	22.4	22.7	22.7	22.7	22.6	22.7	22.9	22.7	22.1	23.1	22.7					
Jan 26	22.8	23.0	22.8	22.8	23.1	22.8	22.8	23.0	22.8	22.7	22.7	22.7	22.3	22.5	22.3	22.3	22.6	22.5	22.5	22.6	22.7	22.6	22.5	22.6	22.3	23.1	22.7					
Jan 27	22.8	22.6	22.7	22.8	22.8	22.6	22.8	22.8	22.7	22.9	22.8	22.6	22.6	22.7	22.5	22.5	22.7	22.6	22.7	22.9	22.7	23.0	22.7	23.0	22.5	23.0	22.7					
Jan 28	22.9	23.0	23.2	23.3	23.0	23.1	23.1	22.9	23.0	22.9	22.8	22.2	22.7	22.9	22.3	21.9	21.7	21.9	22.2	22.8	23.2	22.9	23.1	23.2	21.7	23.3	22.8					
Jan 29	23.0	22.9	22.8	22.8	22.9	22.8	22.8	22.8	22.6	21.4	23.2	22.7	22.3	22.0	22.2	21.9	22.0	22.4	22.7	23.0	23.0	23.1	23.1	23.3	21.4	23.3	22.7					
Jan 30	23.2	23.3	23.4	23.3	23.2	23.3	23.4	23.3	23.2	23.3	23.1	22.3	21.9	21.5	21.7	21.7	22.1	22.3	22.7	22.8	23.0	22.9	23.2	23.1	21.5	23.4	22.8					
Jan 31	23.3	23.0	23.1	22.8	22.8	23.0	23.0	23.1	23.2	23.2	23.1	22.3	21.5	21.1	21.6	21.4	22.3	22.4	22.5	22.7	22.7	22.6	22.9	22.5	21.1	23.3	22.6					
Diurnal Maximum	23.3	23.3	23.4	23.3	23.2	23.3	23.4	23.3	23.2	23.3	23.2	22.9	22.7	22.9	22.5	22.5	22.7	22.8	22.8	23.0	23.2	23.1	23.2	23.3								
Diurnal Average	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.3	22.1	22.0	22.0	22.0	22.1	22.3	22.3	22.4	22.4	22.4	22.5	22.5								
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance															
K	Collection Error							N	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.																																

Timeseries Chart of Hourly Average for ST - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

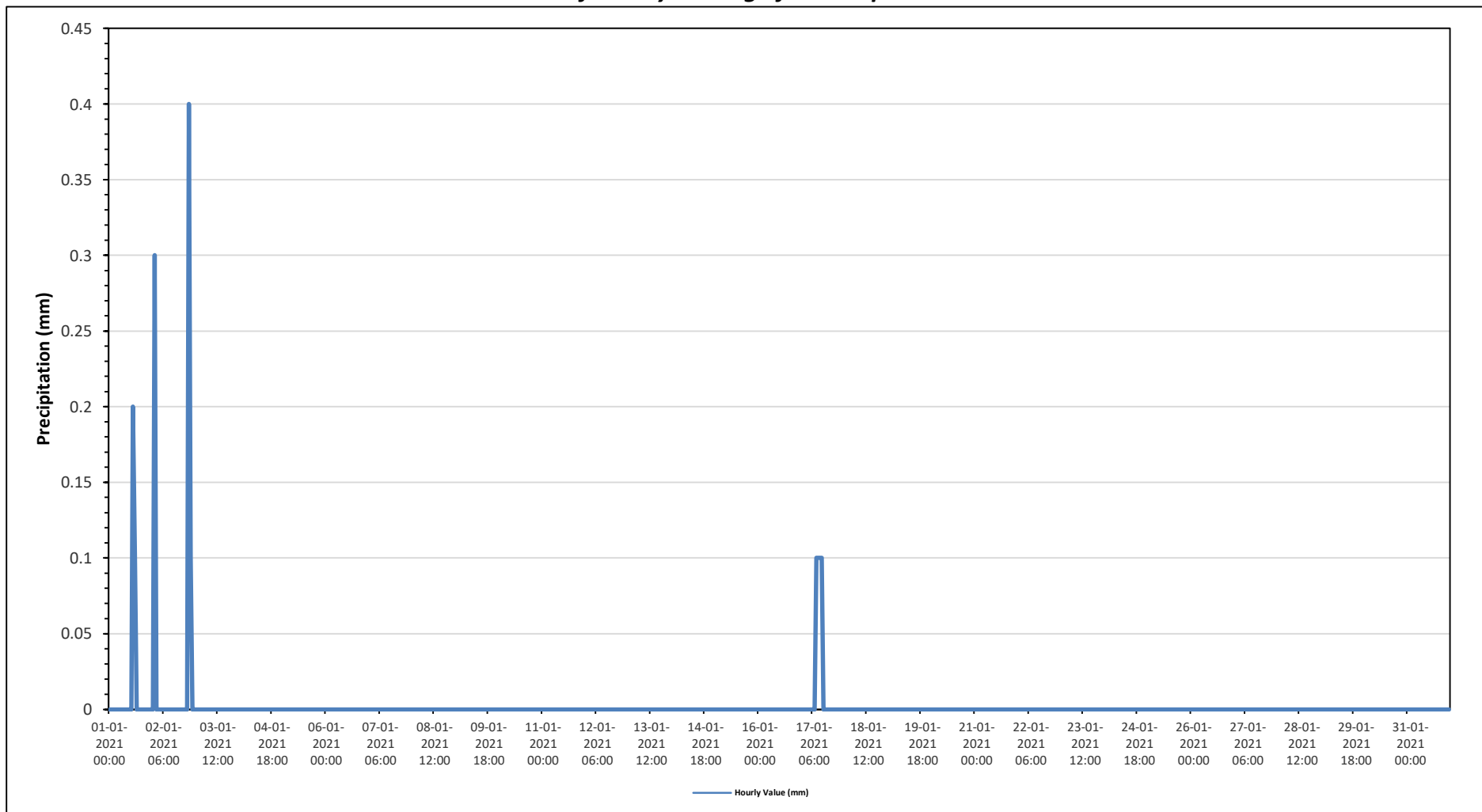
842b Station - January 2021

Summary of Hourly Averages

PRECIPITATION in mm

Maximum Hourly Value:										0.4		mm		on January 2 at hour 20										Hours in Service:					744				
Maximum Daily Value:										0.8		mm		on January 2										Hours of Data:					744				
Minimum Hourly Value:										0.0		mm		on January 1 at hour 0										Hours of Missing Data:					0				
Minimum Daily Value:										0.0		mm		on January 3										Hours of Calibration:					0				
Monthly Total:										1.5		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						
Jan 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.1	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0.3					
Jan 2	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.1	0	0	0.0	0.4	0.8					
Jan 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0					
Jan 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0					
Jan 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0					
Jan 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0					
Jan 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0					
Jan 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0					
Jan 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0					
Jan 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0					
Jan 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0					
Jan 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	0.0	0.0					
Jan 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0					
Jan 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	0.0	0.0					
Jan 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0					
Jan 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	0.0	0.0					
Jan 17	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	0.4					
Jan 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	0.0	0.0					
Jan 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	0.0	0.0					
Jan 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	0.0	0.0					
Jan 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	0.0	0.0					
Jan 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	0.0	0.0					
Jan 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0					
Jan 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0					
Jan 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	0.0	0.0					
Jan 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	0.0	0.0					
Jan 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	0.0	0.0					
Jan 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	0.0	0.0					
Jan 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	0.0	0.0					
Jan 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	0.0	0.0					
Jan 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	0.0	0.0					
Diurnal Maximum	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.4	0.1	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								N	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.																																	

Timeseries Chart of Hourly Average for Precipitation - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

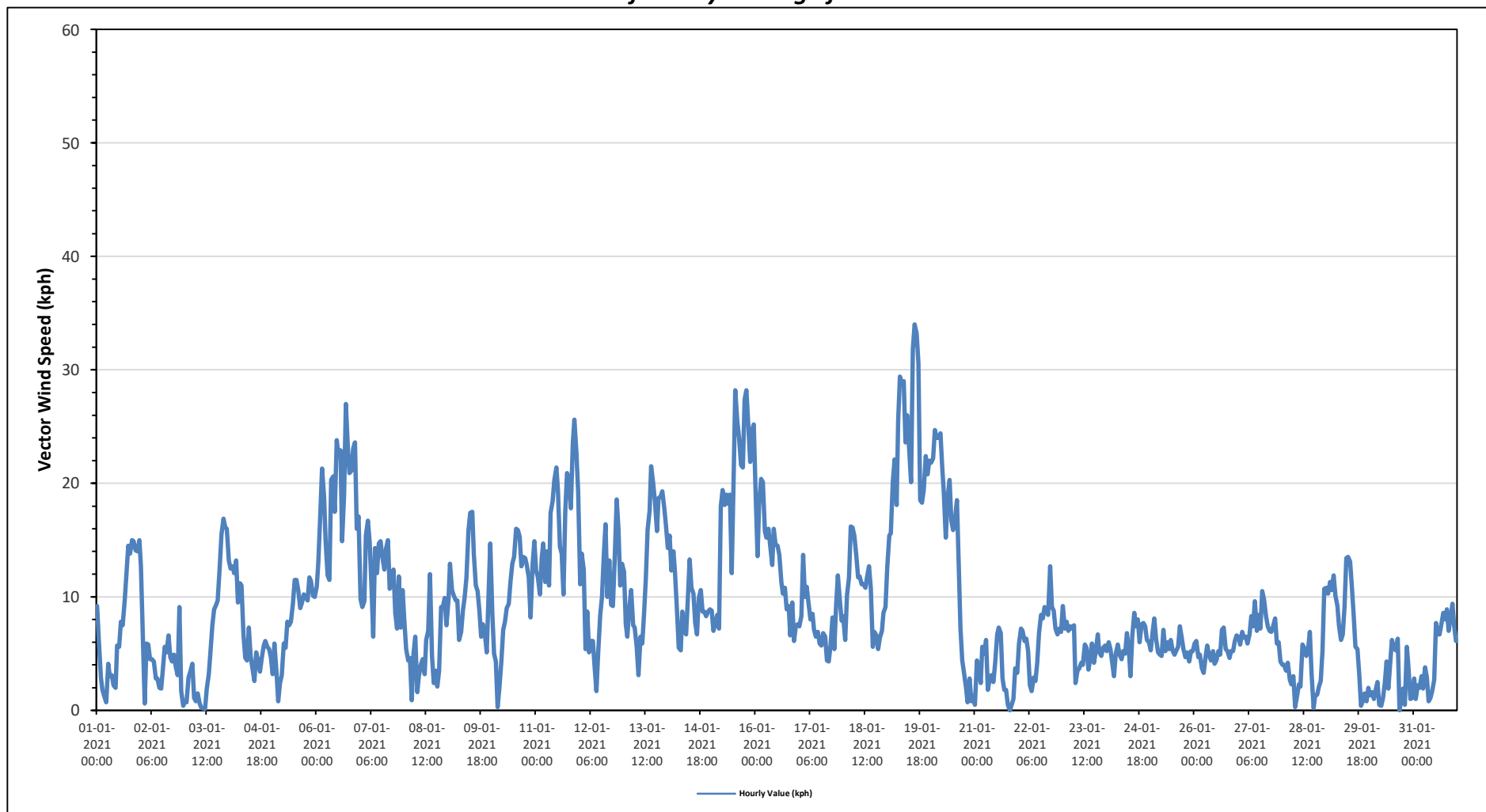
842b Station - January 2021

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

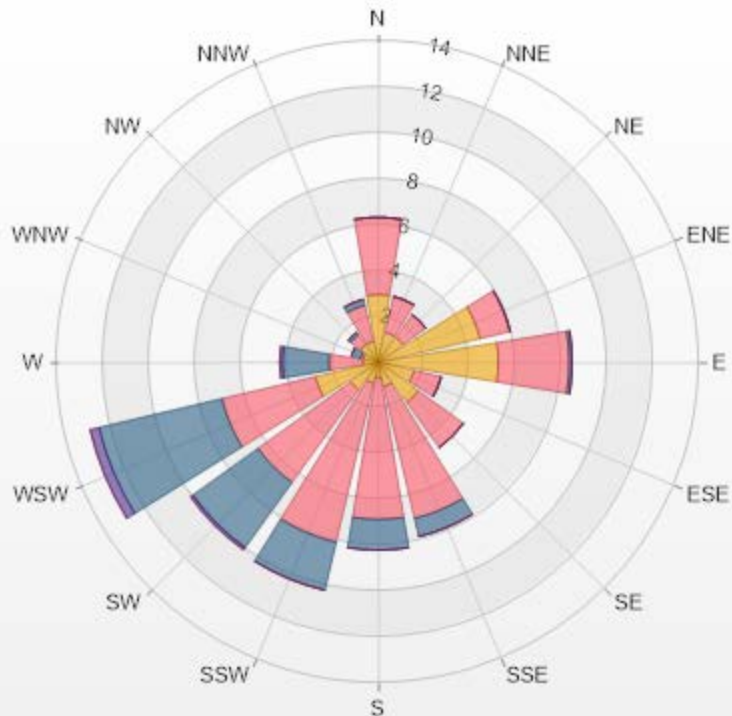
Maximum Hourly Value:										34.0		kph		on January 19 at hour 15										Hours in Service:					744				
Maximum Daily Value:										21.0		kph		on January 19										Hours of Data:					744				
Minimum Hourly Value:										0.0		kph		on January 21 at hour 19										Hours of Missing Data:					0				
Minimum Daily Value:										0.7		kph		on January 30										Hours of Calibration:					0				
Monthly Average:										4.3		kph												Operational Uptime:					100.0				
Day	Hourly Period Starting at (MST)																									Daily Minimum	Daily Maximum	Daily Average					
Jan 1	9.2	6.1	2.9	1.8	1.2	0.7	4.1	3.0	3.1	2.2	2.0	5.7	5.6	7.8	7.5	9.7	11.7	14.5	13.8	15.0	14.9	14.1	14.0	15.0	0.7	15.0	5.9						
Jan 2	12.7	7.0	0.6	5.9	5.8	4.5	4.5	4.3	2.8	2.8	2.0	1.9	3.7	5.6	5.1	6.6	4.7	4.3	4.9	3.8	3.1	9.1	1.7	0.4	0.4	12.7	3.0						
Jan 3	0.8	0.7	2.9	3.4	4.1	1.1	0.8	1.5	0.6	0.2	0.2	0.1	1.9	3.2	5.0	7.5	8.9	9.3	9.7	12.6	15.5	16.9	16.1	16.0	0.1	16.9	5.3						
Jan 4	13.2	12.5	12.7	12.1	13.2	9.5	11.2	11.0	6.6	4.6	4.4	7.3	4.8	3.6	2.6	5.1	4.4	3.4	4.6	5.7	6.1	5.6	5.4	4.7	2.6	13.2	3.1						
Jan 5	3.2	5.9	3.4	0.8	2.4	3.1	5.9	5.5	7.8	7.5	7.8	9.4	11.5	11.5	10.6	9.0	9.5	10.2	10.0	9.7	11.7	11.4	10.1	10.0	0.8	11.7	6.5						
Jan 6	10.9	12.9	17.2	21.3	18.8	14.9	11.9	11.5	20.3	20.6	17.5	23.8	22.4	22.9	14.9	19.0	27.0	23.1	20.9	21.1	23.1	23.6	16.0	17.1	10.9	27.0	16.1						
Jan 7	9.8	9.1	9.6	15.4	16.7	14.8	10.4	6.5	14.3	12.1	14.7	14.9	13.5	12.4	14.3	15.0	10.7	11.2	12.4	8.6	7.2	11.8	7.3	10.6	6.5	16.7	11.2						
Jan 8	7.8	5.4	4.4	4.6	0.9	5.0	6.5	1.6	3.0	4.0	4.5	3.2	6.2	7.0	12.0	4.8	2.4	3.5	2.1	3.5	9.1	9.0	9.9	7.5	0.9	12.0	3.6						
Jan 9	9.7	12.9	10.6	10.1	9.7	9.7	6.2	6.9	8.8	10.0	11.7	15.9	17.4	17.5	13.8	11.0	10.5	8.8	6.5	7.6	6.7	5.1	10.0	14.7	5.1	17.5	9.6						
Jan 10	8.6	5.0	4.3	0.3	2.0	4.4	7.1	7.8	9.0	9.4	11.4	12.9	13.5	16.0	15.9	15.3	12.7	13.5	13.4	12.8	11.7	8.2	12.8	14.9	0.3	16.0	9.2						
Jan 11	12.3	11.7	10.2	13.4	14.7	11.3	14.0	11.0	17.4	18.4	20.3	21.4	19.4	14.4	13.8	10.2	17.5	20.9	20.4	17.8	23.6	25.6	22.7	19.2	10.2	25.6	14.2						
Jan 12	11.1	13.8	12.4	5.4	8.7	5.1	6.1	6.1	3.8	1.7	5.1	8.4	10.0	13.6	16.4	10.0	13.2	9.3	9.2	13.2	18.6	16.0	11.0	12.9	1.7	18.6	8.1						
Jan 13	12.2	7.6	6.5	9.1	10.6	7.5	7.3	5.6	3.1	6.5	5.9	8.5	11.6	15.9	17.6	21.5	20.0	18.4	15.8	18.7	18.8	19.3	17.8	16.4	3.1	21.5	11.3						
Jan 14	14.3	15.4	12.3	14.0	12.2	8.8	5.5	5.3	8.7	7.1	6.7	9.9	13.3	10.8	10.3	7.7	6.7	9.9	10.6	8.7	8.7	8.3	8.7	8.9	5.3	15.4	6.5						
Jan 15	8.8	7.0	7.7	8.4	7.2	18.0	19.4	18.1	19.0	18.2	19.0	12.1	20.9	28.2	25.5	24.0	21.6	21.4	27.4	28.2	24.9	21.9	24.7	25.2	7.0	28.2	15.5						
Jan 16	19.5	13.6	18.0	20.4	20.1	15.8	15.2	16.0	14.5	12.8	16.0	14.6	14.5	13.7	11.3	10.3	10.8	8.9	9.2	6.6	9.5	6.1	7.4	7.6	6.1	20.4	11.8						
Jan 17	7.4	8.3	13.7	10.0	10.9	9.3	8.0	8.5	7.1	6.5	6.9	5.9	5.7	6.8	6.5	4.4	4.3	5.7	8.2	5.4	9.2	11.9	9.9	7.9	4.3	13.7	7.2						
Jan 18	8.3	6.2	10.1	11.7	16.2	16.1	15.4	13.6	11.7	11.8	11.1	11.1	10.8	11.7	12.7	10.8	5.6	6.9	6.6	5.4	6.4	7.0	8.6	9.1	5.4	16.2	8.9						
Jan 19	12.6	15.4	15.6	20.2	22.1	18.1	25.5	29.4	28.8	29.0	23.6	26.0	22.8	20.1	31.8	34.0	33.2	30.6	18.5	18.3	19.4	22.4	20.8	22.0	12.6	34.0	21.0						
Jan 20	21.8	22.2	24.7	24.0	24.0	24.4	21.4	19.3	15.2	18.7	20.3	16.7	15.9	16.7	18.5	12.9	7.2	4.4	3.3	2.0	0.7	2.8	0.8	1.3	0.7	24.7	12.0						
Jan 21	0.5	4.4	3.8	2.4	5.6	5.0	6.2	1.8	2.8	3.1	2.5	4.2	6.7	7.3	6.8	2.8	1.8	1.8	0.5	0.0	0.5	1.0	3.7	3.3	0.0	7.3	1.8						
Jan 22	5.9	7.2	7.0	6.1	6.3	5.2	2.2	1.7	2.9	2.6	4.2	6.8	8.4	8.1	9.1	8.7	8.4	12.7	9.1	8.8	7.2	6.7	7.2	6.9	1.7	12.7	3.2						
Jan 23	9.2	7.2	7.8	7.0	7.4	7.2	7.5	2.4	3.5	3.7	4.2	4.0	5.8	5.5	3.6	4.6	5.9	4.2	5.2	6.7	5.1	4.8	5.5	5.7	2.4	9.2	4.5						
Jan 24	5.2	6.0	5.4	4.2	3.0	5.0	5.8	4.9	4.5	5.2	5.0	6.8	5.2	3.0	6.5	8.6	7.4	8.0	6.0	7.6	7.7	7.4	6.2	6.0	3.0	8.6	5.7						
Jan 25	5.3	6.8	8.1	6.3	5.1	4.9	4.8	7.1	5.2	6.0	5.4	6.2	5.2	4.9	5.2	5.6	7.4	6.3	5.4	4.7	5.1	4.3	5.2	5.2	4.3	8.1	5.5						
Jan 26	5.9	6.1	4.7	4.9	3.7	3.3	4.8	5.7	4.8	4.4	5.2	4.1	4.4	5.2	4.9	7.1	7.3	5.4	5.2	4.6	5.2	5.2	6.1	6.6	3.3	7.3	4.0						
Jan 27	6.5	5.8	6.9	6.4	6.5	5.9	6.7	8.3	7.4	9.6	7.0	8.4	7.2	10.5	9.8	8.3	7.4	7.0	6.9	7.5	8.1	5.9	6.0	4.3	4.3	10.5	7.2						
Jan 28	4.0	4.0	3.5	4.2	2.7	2.3	3.0	0.3	1.3	2.3	2.1	5.8	5.5	4.8	5.1	6.9	3.2	0.2	1.3	1.4	2.1	2.6	5.2	10.7	0.2	10.7	1.0						
Jan 29	10.8	10.3	11.3	10.6	11.9	10.1	9.2	7.5	6.2	6.7	9.1	13.4	13.5	13.1	10.9	8.4	5.6	5.4	3.2	0.4	0.8	1.5	0.8	2.0	0.4	13.5	6.6						
Jan 30	1.3	1.6	1.0	1.8	2.5	0.5	0.4	1.1	2.4	4.3	1.9	4.4	6.2	5.5	5.3	6.3	0.0	0.9	1.9	0.5	5.6	3.9	1.0	1.1	0.0	6.3	0.7						
Jan 31	2.8	1.0	2.2	2.0	3.0	1.9	3.8	2.9	0.8	1.1	1.7	2.7	7.7	6.7	6.7	7.7	8.6	8.0	8.9	7.0	8.2	9.4	7.4	6.1	0.8	9.4	4.3						
Diurnal Maximum	22	22	25	24	24	24	26	29	29	29	24	26	23	28	32	34	33	31	27	28	25	26	25	25									
Diurnal Average	8.8	8.4	8.4	8.7	9.0	8.2	8.4	7.6	8.0	8.2	8.4	9.6	10.4	10.8	11.0	10.4	9.9	9.6	9.1	8.8	9.8	10.0	9.4	9.7									
C	Monthly Calibration						S	Daily Zero-Span Check						Q	Quality Assurance																		
K	Collection Error						N	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.																																	

Timeseries Chart of Hourly Average for VWS - 842b Station



Wind: PRAMP 842b Monitor: WDS [KPH] Monthly: 01-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 7.26% Valid Data: 100.00%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	2.96	3.36	0	0	0	6.32
NNE	1.34	1.61	0	0	0	2.95
NE	1.34	1.21	0	0	0	2.55
ENE	4.57	1.34	0	0	0	5.91
E	5.24	3.09	0.13	0	0	8.46
ESE	1.61	1.21	0	0	0	2.82
SE	2.15	2.42	0	0	0	4.57
SSE	1.08	5.91	0.81	0	0	7.8
S	0.67	6.18	1.34	0	0	8.19
SSW	0.94	7.12	2.15	0	0	10.21
SW	1.48	4.97	3.49	0.13	0	10.07
WSW	2.82	4.17	5.51	0.4	0	12.9
W	0.67	1.48	2.02	0.13	0	4.3
WNW	0.67	0.13	0.4	0	0	1.2
NW	0.94	0.54	0.13	0	0	1.61
NNW	0.94	1.61	0.27	0	0	2.82
Summary	29.42	46.35	16.25	0.66	0	92.68



PRAMP-202101

Page 108 of 228

% Icon Classes (KPH)

29

1.8-6.0

46

6.0-15.0

16

15.0-29.0

1

29.0-39.0

0

>39.0



PEACE RIVER AREA MONITORING PROGRAM

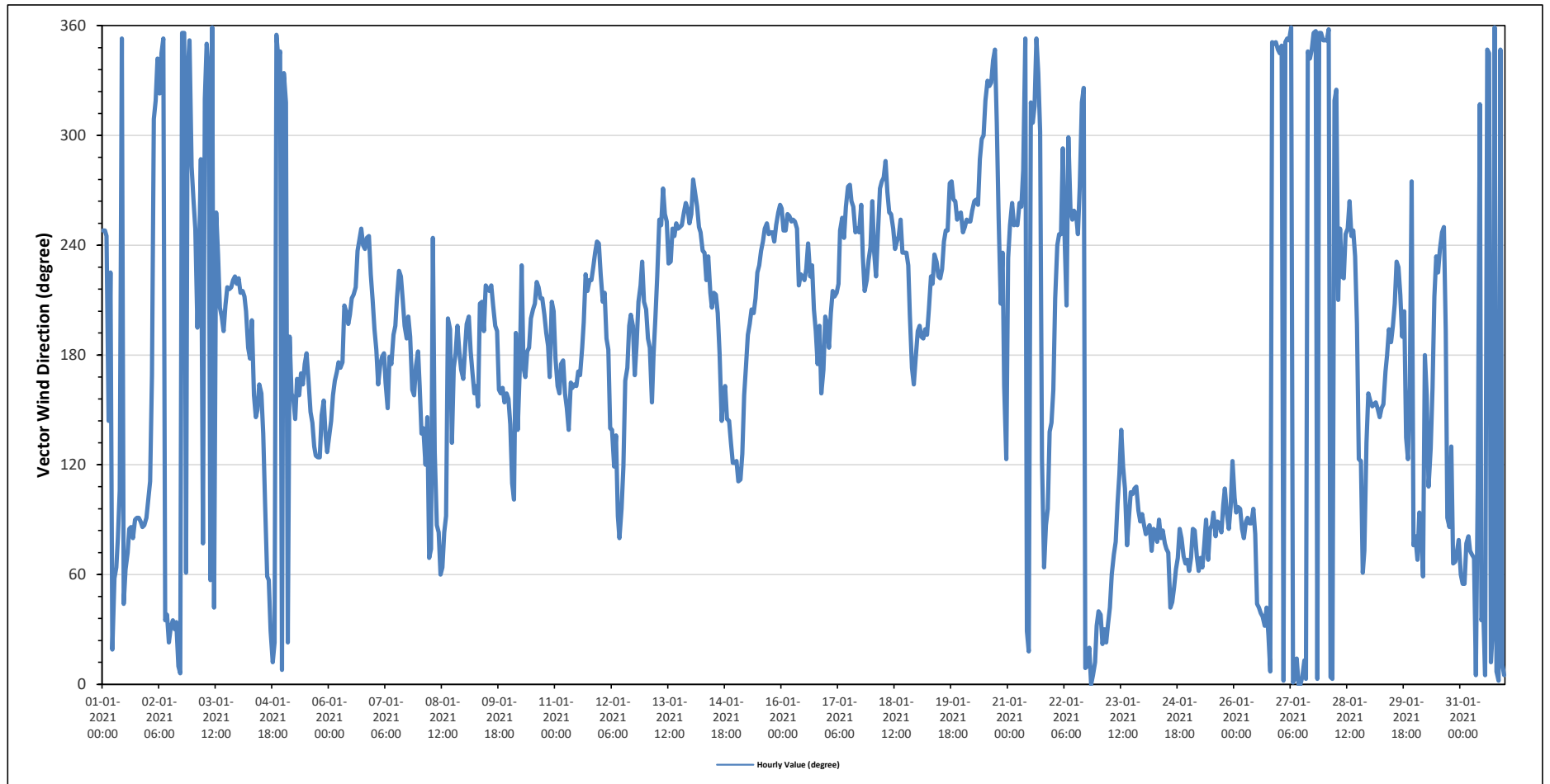
842b Station - January 2021

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

Monthly Average:										212 (SSW) degree										Hours in Service:										744		Hours of Data:										744		Hours of Missing Data:										0		Hours of Calibration:										0		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																																																					
Jan 1	WSW	WSW	WSW	SE	SW	NNE	ENE	ENE	E	ESE	N	NE	ENE	ENE	E	E	E	E	E	E	E	E	E	E	86	E																																																					
Jan 2	E	ESE	SSE	NW	NW	NNW	NW	NNW	N	NE	NE	NNE	NNE	NE	NNE	E	N	N	N	N	N	ENE	NNW	N	W	15	NNE																																																				
Jan 3	W	WSW	SSW	SW	WNW	ENE	NW	N	NNW	ENE	N	NE	WSW	SW	SSW	SSW	S	SSW	SW	SW	SW	SW	SW	SW	219	SW																																																					
Jan 4	SW	SSW	SSW	SSW	SSW	S	S	SSW	SSE	SE	SSE	SSE	SSE	SE	E	ENE	ENE	NNE	NNE	NNE	N	NNW	NNW	N	190	S																																																					
Jan 5	NNW	NW	NNE	S	SSE	SSE	SE	SSE	SSE	SSE	SSE	S	S	SSE	SSE	SE	SE	SE	ESE	ESE	SE	SSE	SE	SE	149	SSE																																																					
Jan 6	SE	SE	SSE	SSE	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	SW	WSW	WSW	SW	SSW	210	SSW																																																					
Jan 7	SSW	S	SSE	S	S	S	SSE	SSE	S	S	S	SSW	SSW	SW	SW	SSW	SSW	S	SSW	S	SSE	SSE	S	S	188	S																																																					
Jan 8	SSE	SE	SE	ESE	SE	ENE	ENE	WSW	SE	E	E	ENE	ENE	E	E	SSW	SSW	SE	S	S	SSW	S	S	SSE	135	SE																																																					
Jan 9	S	SSW	SSW	S	SSE	SSE	SSE	SSE	SSW	SSW	S	SW	SW	SSW	SW	SSW	SSW	S	SSE	SSE	SSE	SSE	SSE	SSE	190	S																																																					
Jan 10	SE	ESE	E	S	SE	S	SW	S	SSE	S	S	SSW	SSW	SSW	SW	SW	SSW	SSW	SSW	S	S	SSE	SSW	SSW	195	SSW																																																					
Jan 11	S	SSE	SSE	S	S	SSE	SSE	SE	SSE	SSE	SSE	SSE	S	SSE	S	SSW	SW	SSW	SW	SW	SW	WSW	WSW	WSW	193	S																																																					
Jan 12	SW	SSW	SSW	S	S	SE	SE	ESE	SE	E	E	ESE	SSE	S	SSW	SSW	SSW	SSW	SSE	S	SSW	SW	SW	SSW	186	S																																																					
Jan 13	SSW	S	S	SSE	S	SSW	SW	WSW	WSW	W	WSW	WSW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	240	WSW																																																				
Jan 14	WSW	W	W	W	WSW	WSW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	SSW	S	SE	SSE	SSE	SE	SE	SE	ESE	ESE	211	SSW																																																					
Jan 15	ESE	ESE	ESE	SE	SSE	S	S	SSW	SSW	SSW	SSW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	228	SW																																																					
Jan 16	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	SW	WSW	SW	SW	SSW	S	S	SSW	SSE	S	SSW	233	SW																																																					
Jan 17	SSW	S	SSW	SSW	SSW	SSW	SW	WSW	WSW	WSW	W	W	W	W	W	WSW	WSW	WSW	W	SW	SSW	SW	SW	WSW	232	SW																																																					
Jan 18	W	SW	SW	WSW	W	W	W	WNW	W	WSW	WSW	WSW	SW	WSW	WSW	WSW	SW	SW	SW	SSW	S	SSE	S		247	WSW																																																					
Jan 19	S	SSW	S	S	SSW	S	SSW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	W	W	W	W	WSW	WSW	WSW	233	SW																																																					
Jan 20	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	WNW	WNW	WNW	NW	NNW	NW	NNW	NNW	NNW	NNW	SSW	SW	SSE	ESE	ESE	278	W																																																					
Jan 21	SW	WSW	W	WSW	WSW	WSW	W	W	W	N	NNE	NNE	NW	NW	NW	N	NNW	NNW	ESE	ENE	E	E	SE	SE	292	WNW																																																					
Jan 22	SSE	SSW	WSW	WSW	WSW	WNW	WSW	SSW	WNW	WSW	WSW	WSW	WSW	WSW	W	NW	NW	N	N	NNE	N	N	NNE	NNE	303	WNW																																																					
Jan 23	NE	NE	NNE	NNE	NNE	NNE	NE	ENE	ENE	ENE	E	ESE	SE	ESE	ESE	ENE	E	ESE	ESE	ESE	ESE	E	E	E	73	ENE																																																					
Jan 24	E	E	E	E	ENE	E	E	ENE	E	E	E	ENE	ENE	ENE	NE	NE	NE	ENE	ENE	E	E	ENE	ENE	ENE	73	ENE																																																					
Jan 25	ENE	ENE	E	E	ENE	ENE	ENE	ENE	ENE	E	ENE	E	E	E	E	E	E	E	E	ESE	E	E	E	ESE	83	E																																																					
Jan 26	E	E	E	E	E	E	E	E	E	E	E	E	NE	NE	NE	NE	NNE	NE	NNE	N	N	N	NNW	N	54	NE																																																					
Jan 27	NNW	NNW	N	N	N	N	N	N	N	NNE	N	N	N	NNE	N	NNW	NNW	NNW	NNW	N	N	N	N	N	358	N																																																					
Jan 28	N	N	N	N	N	NW	NW	SSW	WSW	SW	SW	WSW	WSW	W	WSW	WSW	SW	SSW	ESE	ESE	ENE	ENE	SE	SSE	255	WSW																																																					
Jan 29	SSE	SSE	SSE	SSE	SSE	SE	SSE	SSE	S	S	SSW	S	SSW	SSW	SW	SW	SSW	S	SSW	SE	ESE	SSE	W	ENE	177	S																																																					
Jan 30	E	ENE	E	E	ENE	S	SSE	ESE	SE	SSE	SSW	SW	SW	SW	WSW	WSW	S	E	E	SE	ENE	ENE	ENE	ENE	175	S																																																					
Jan 31	ENE	NE	NE	ENE	E	ENE	ENE	ENE	N	ESE	NW	NE	NE	N	NNW	NNW	NNE	NNE	N	N	N	NNW	NNE	N	16	NNE																																																					
C	Monthly Calibration						S	Daily Zero-Span Check						Q	Quality Assurance						Y	Routine Maintenance						P	Power Failure																																																		
K	Collection Error						N	No Data (Machine Not in Service)																																																																							
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.																																																																															

Timeseries Chart of Hourly Average for VWD - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - January 2021

Summary of Hourly Averages

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

WIND SPEED																												
Maximum Hourly Value:		34.0 kph on January 19 at hour 15													Hours in Service:		744											
Maximum Daily Value:		21.0 kph on January 19													Hours of Data:		744											
Minimum Hourly Value:		0.0 kph on January 21 at hour 19													Hours of Missing Data:		0											
Minimum Daily Value:		0.7 kph on January 30													Hours of Calibration:		0											
Monthly Average:		4.3 kph													Operational Uptime:		100											
WIND DIRECTION																												
Monthly Average:		212 (SSW) degree																										
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
Jan 1	9.2	6.1	2.9	1.8	1.2	0.7	4.1	3.0	3.1	2.2	2.0	5.7	5.6	7.8	7.5	9.7	11.7	14.5	13.8	15.0	14.9	14.1	14.0	15.0	0.7	15.0	5.9	
Jan 2	WSW	WSW	WSW	SE	SW	NNE	ENE	ENE	E	ESE	N	NE	ENE	ENE	E	E	E	E	E	E	E	E	E	E	E	0.4	12.7	3.0
Jan 3	12.7	7.0	0.6	5.9	5.8	4.5	4.5	4.3	2.8	2.8	2.0	1.9	3.7	5.6	5.1	6.6	4.7	4.3	4.9	3.8	3.1	9.1	1.7	0.4	0.4	12.7	3.0	
Jan 3	E	ESE	SSE	NW	NW	NNW	NNW	NNW	N	NE	NE	NNE	NNE	NE	NNE	NE	N	N	N	ENE	NNW	N	W	W	0.1	16.9	5.3	
Jan 3	0.8	0.7	2.9	3.4	4.1	1.1	0.8	1.5	0.6	0.2	0.2	0.1	1.9	3.2	5.0	7.5	8.9	9.3	9.7	12.6	15.5	16.9	16.1	16.0	0.1	16.9	5.3	
Jan 4	W	WSW	SSW	SW	WNW	ENE	NW	N	NNW	ENE	N	NE	WSW	SW	SSW	SSW	S	SSW	SW	SW	SW	SW	SW	SW	2.6	13.2	3.1	
Jan 4	13.2	12.5	12.7	12.1	13.2	9.5	11.2	11.0	6.6	4.6	4.4	7.3	4.8	3.6	2.6	5.1	4.4	3.4	4.6	5.7	6.1	5.6	5.4	4.7	2.6	13.2	3.1	
Jan 4	SW	SSW	SSW	SSW	SSW	S	S	SSW	SSE	SE	SSE	SSE	SSE	SE	E	ENE	ENE	NNE	NNE	NNE	N	NNW	NNW	N	0.8	11.7	6.5	
Jan 5	3.2	5.9	3.4	0.8	2.4	3.1	5.9	5.5	7.8	7.5	7.8	9.4	11.5	11.5	10.6	9.0	9.5	10.2	10.0	9.7	11.7	11.4	10.1	10.0	0.8	11.7	6.5	
Jan 6	NNW	NW	NNE	S	SSE	SSE	SE	SSE	SSE	SSE	S	S	SSE	SSE	SE	SE	SE	ESE	ESE	SE	SSE	SE	SE	SE	10.9	27.0	16.1	
Jan 6	10.9	12.9	17.2	21.3	18.8	14.9	11.9	11.5	20.3	20.6	17.5	23.8	22.4	22.9	14.9	19.0	27.0	23.1	20.9	21.1	23.1	23.6	16.0	17.1	10.9	27.0	16.1	
Jan 7	SE	SE	SSE	SSE	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	SW	WSW	WSW	SW	SSW	6.5	16.7	11.2	
Jan 7	9.8	9.1	9.6	15.4	16.7	14.8	10.4	6.5	14.3	12.1	14.7	14.9	13.5	12.4	14.3	15.0	10.7	11.2	12.4	8.6	7.2	11.8	7.3	10.6	6.5	16.7	11.2	
Jan 8	SSW	S	SSE	S	S	S	SSE	SSE	S	S	S	SSW	SSW	SW	SW	SSW	SSW	S	SSW	S	SSE	SSE	S	S	0.9	12.0	3.6	
Jan 8	7.8	5.4	4.4	4.6	0.9	5.0	6.5	1.6	3.0	4.0	4.5	3.2	6.2	7.0	12.0	4.8	2.4	3.5	2.1	3.5	9.1	9.0	9.9	7.5	0.9	12.0	3.6	
Jan 9	SSE	SE	SE	ESE	SE	ENE	ENE	WSW	SE	E	E	ENE	ENE	E	E	SSW	SSW	SE	S	S	SSW	S	S	SSE	5.1	17.5	9.6	
Jan 9	9.7	12.9	10.6	10.1	9.7	9.7	6.2	6.9	8.8	10.0	11.7	15.9	17.4	17.5	13.8	11.0	10.5	8.8	6.5	7.6	6.7	5.1	10.0	14.7	5.1	17.5	9.6	
Jan 9	S	SSW	SSW	S	SSE	SSE	SSE	SSE	SSW	SSW	S	SW	SW	SSW	SW	SSW	SSW	S	SSE	SSE	SSE	SSE	SSE	SSE	0.3	16.0	9.2	
Jan 10	8.6	5.0	4.3	0.3	2.0	4.4	7.1	7.8	9.0	9.4	11.4	12.9	13.5	16.0	15.9	15.3	12.7	13.5	13.4	12.8	11.7	8.2	12.8	14.9	0.3	16.0	9.2	
Jan 10	SE	ESE	E	S	SE	S	SW	S	SSE	S	S	SSW	SSW	SSW	SW	SW	SSW	SSW	SSW	S	S	SSE	SSW	SSW	10.2	25.6	14.2	
Jan 11	12.3	11.7	10.2	13.4	14.7	11.3	14.0	11.0	17.4	18.4	20.3	21.4	19.4	14.4	13.8	10.2	17.5	20.9	20.4	17.8	23.6	25.6	22.7	19.2	10.2	25.6	14.2	
Jan 11	S	SSE	SSE	S	S	SSE	SSE	SE	SSE	SSE	SSE	SSE	S	SSE	S	SSW	SW	SSW	SW	SW	SW	SW	WSW	WSW	1.7	18.6	8.1	
Jan 12	11.1	13.8	12.4	5.4	8.7	5.1	6.1	6.1	3.8	1.7	5.1	8.4	10.0	13.6	16.4	10.0	13.2	9.3	9.2	13.2	18.6	16.0	11.0	12.9	1.7	18.6	8.1	
Jan 12	SW	SSW	SSW	S	S	SE	SE	ESE	SE	E	E	E	ESE	SSE	S	SSW	SSW	SSW	SSE	S	SSW	SW	SW	SSW	3.1	21.5	11.3	
Jan 13	12.2	7.6	6.5	9.1	10.6	7.5	7.3	5.6	3.1	6.5	5.9	8.5	11.6	15.9	17.6	21.5	20.0	18.4	15.8	18.7	18.8	19.3	17.8	16.4	3.1	21.5	11.3	
Jan 13	SSW	S	S	SSE	S	SSW	SW	WSW	WSW	W	WSW	WSW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	5.3	15.4	6.5	
Jan 14	14.3	15.4	12.3	14.0	12.2	8.8	5.5	5.3	8.7	7.1	6.7	9.9	13.3	10.8	10.3	7.7	6.7	9.9	10.6	8.7	8.7	8.3	8.7	8.9	5.3	15.4	6.5	
Jan 15	WSW	W	W	W	WSW	WSW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	SSW	S	SE	SSE	SSE	SE	SE	ESE	ESE	7.0	28.2	15.5		
Jan 15	8.8	7.0	7.7	8.4	7.2	18.0	19.4	18.1	19.0	18.2	19.0	12.1	20.9	28.2	25.5	24.0	21.6	21.4	27.4	28.2	24.9	21.9	24.7	25.2	7.0	28.2	15.5	
Jan 16	ESE	ESE	ESE	SE	SSE	S	S	SSW	SSW	SSW	SSW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	6.1	20.4	11.8	
Jan 16	19.5	13.6	18.0	20.4	20.1	15.8	15.2	16.0	14.5	12.8	16.0	14.6	14.5	13.7	11.3	10.3	10.8	8.9	9.2	6.6	9.5	6.1	7.4	7.6	6.1	20.4	11.8	
Jan 17	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	WSW	SW	SW	SSW	S	S	SSW	SSE	S	SSW	4.3	13.7	7.2	
Jan 17	7.4	8.3	13.7	10.0	10.9	9.3	8.0	8.5	7.1	6.5	6.9	5.9	5.7	6.8	6.5	4.4	4.3	5.7	8.2	5.4	9.2	11.9	9.9	7.9	4.3	13.7	7.2	
Jan 17	SSW	S	SSW	SSW	SSW	SSW	SSW	SSW	WSW	WSW	W	W	W	W	W	WSW	WSW	WSW	W	SW	SSW	SW	SW	WSW	5.4	16.2	8.9	
Jan 18	8.3	6.2	10.1	11.7	16.2	16.1	15.4	13.6	11.7	11.8	11.1	11.1	10.8	11.7	12.7	10.8	5.6	6.9	6.6	5.4	6.4	7.0	8.6	9.1	5.4	16.2	8.9	
Jan 18	W	SW	SW	WSW	W	W	W	NNW	W	WSW	WSW	WSW	SW	WSW	WSW	WSW	SW	SW	SW	SSW	S	SSE	S	12.6	34.0	21.0		
Jan 19	12.6	15.4	15.6	20.2	22.1	18.1	25.5	29.4	28.8	29.0	23.6	26.0	22.8	20.1	31.8	34.0	33.2	30.6	18.5	18.3	19.4	22.4	20.8	22.0	12.6	34.0	21.0	
Jan 19	S	SSW	S	S	SSW	S	SSW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	W	W	W	W	WSW	WSW	WSW	0.7	24.7	12.0	
Jan 20	21.8	22.2	24.7	24.0	24.0	24.4	21.4	19.3	15.2	18.7	20.3	16.7	15.9	16.7	18.5	12.9	7.2	4.4	3.3	2.0	0.7	2.8	0.8	1.3	0.7	24.7	12.0	
Jan 20	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	0.7	24.7	12.0	



PEACE RIVER AREA MONITORING PROGRAM

842b Station - January 2021

Summary of Hourly Averages

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

WIND SPEED																													
Maximum Hourly Value: 34.0 kph on January 19 at hour 15														Hours in Service: 744															
Maximum Daily Value: 21.0 kph on January 19														Hours of Data: 744															
Minimum Hourly Value: 0.0 kph on January 21 at hour 19														Hours of Missing Data: 0															
Minimum Daily Value: 0.7 kph on January 30														Hours of Calibration: 0															
Monthly Average: 4.3 kph														Operational Uptime: 100															
WIND DIRECTION																													
Monthly Average: 212 (SSW) degree																													
Day	Hourly Period Starting at (MST)																									Daily Minimum	Daily Maximum	Daily Average	
Jan 21	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0.0	7.3	1.8		
	SW	WSW	W	WSW	WSW	WSW	W	W	W	N	NNE	NNE	NW	NW	NW	N	NNW	WNW	ESE	ENE	E	E	SE	SE					
Jan 22	5.9	7.2	7.0	6.1	6.3	5.2	2.2	1.7	2.9	2.6	4.2	6.8	8.4	8.1	9.1	8.7	8.4	12.7	9.1	8.8	7.2	6.7	7.2	6.9	1.7	12.7	3.2		
	SSE	SSW	WSW	WSW	WSW	WNW	WSW	SSW	WNW	WSW	WSW	WSW	WSW	WSW	W	NW	NW	N	N	NNE	N	N	NNE	NNE					
Jan 23	9.2	7.2	7.8	7.0	7.4	7.2	7.5	2.4	3.5	3.7	4.2	4.0	5.8	5.5	3.6	4.6	5.9	4.2	5.2	6.7	5.1	4.8	5.5	5.7	2.4	9.2	4.5		
	NE	NE	NNE	NNE	NNE	NNE	ENE	ENE	ENE	E	ESE	SE	ESE	ESE	ENE	E	ESE	ESE	ESE	ESE	E	E	E	E					
Jan 24	5.2	6.0	5.4	4.2	3.0	5.0	5.8	4.9	4.5	5.2	5.0	6.8	5.2	3.0	6.5	8.6	7.4	8.0	6.0	7.6	7.7	7.4	6.2	6.0	3.0	8.6	5.7		
	E	E	E	E	ENE	E	E	ENE	E	E	E	ENE	ENE	ENE	NE	NE	NE	ENE	ENE	E	E	ENE	ENE	ENE					
Jan 25	5.3	6.8	8.1	6.3	5.1	4.9	4.8	7.1	5.2	6.0	5.4	6.2	5.2	4.9	5.2	5.6	7.4	6.3	5.4	4.7	5.1	4.3	5.2	5.2	4.3	8.1	5.5		
	ENE	ENE	E	E	ENE	ENE	ENE	ENE	ENE	E	ENE	E	E	E	E	E	E	E	E	ESE	E	E	E	ESE					
Jan 26	5.9	6.1	4.7	4.9	3.7	3.3	4.8	5.7	4.8	4.4	5.2	4.1	4.4	5.2	4.9	7.1	7.3	5.4	5.2	4.6	5.2	5.2	6.1	6.6	3.3	7.3	4.0		
	E	E	E	E	E	E	E	E	E	E	E	E	NE	NE	NE	NE	NNE	NE	NNE	N	N	N	N	NNW					
Jan 27	6.5	5.8	6.9	6.4	6.5	5.9	6.7	8.3	7.4	9.6	7.0	8.4	7.2	10.5	9.8	8.3	7.4	7.0	6.9	7.5	8.1	5.9	6.0	4.3	4.3	10.5	7.2		
	NNW	NNW	N	N	N	N	N	N	N	NNE	N	N	N	NNE	N	NNW	NNW	NNW	N	N	N	N	N	N					
Jan 28	4.0	4.0	3.5	4.2	2.7	2.3	3.0	0.3	1.3	2.3	2.1	5.8	5.5	4.8	5.1	6.9	3.2	0.2	1.3	1.4	2.1	2.6	5.2	10.7	0.2	10.7	1.0		
	N	N	N	N	N	NW	NW	SSW	WSW	SW	SW	WSW	WSW	W	WSW	WSW	SW	SSW	ESE	ESE	ENE	ENE	SE	SSE					
Jan 29	10.8	10.3	11.3	10.6	11.9	10.1	9.2	7.5	6.2	6.7	9.1	13.4	13.5	13.1	10.9	8.4	5.6	5.4	3.2	0.4	0.8	1.5	0.8	2.0	0.4	13.5	6.6		
	SSE	SSE	SSE	SSE	SSE	SE	SSE	SSE	S	S	SSW	S	SSW	SSW	SW	SW	SSW	S	SSW	SE	ESE	SSE	W	ENE					
Jan 30	1.3	1.6	1.0	1.8	2.5	0.5	0.4	1.1	2.4	4.3	1.9	4.4	6.2	5.5	5.3	6.3	0.0	0.9	1.9	0.5	5.6	3.9	1.0	1.1	0.0	6.3	0.7		
	E	ENE	E	E	ENE	S	SSE	ESE	SE	SSE	SSW	SW	SW	SW	WSW	WSW	S	E	E	SE	ENE	ENE	ENE	ENE					
Jan 31	2.8	1.0	2.2	2.0	3.0	1.9	3.8	2.9	0.8	1.1	1.7	2.7	7.7	6.7	6.7	7.7	8.6	8.0	8.9	7.0	8.2	9.4	7.4	6.1	0.8	9.4	4.3		
	ENE	NE	NE	ENE	E	ENE	ENE	ENE	N	ESE	NW	NE	NE	N	NNW	NNW	NNE	NNE	N	N	N	NNW	NNE	N					
C	Monthly Calibration							S	Daily Zero-Span Check										Q	Quality Assurance									
K	Collection Error							N	No Data (Machine Not in Service)										Y	Routine Maintenance									
X	Invalid Data (Equipment Malfunction/Recovery)							NRM	Unit/Maint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)										P	Power Failure									
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 STATION



PEACE RIVER AREA MONITORING PROGRAM

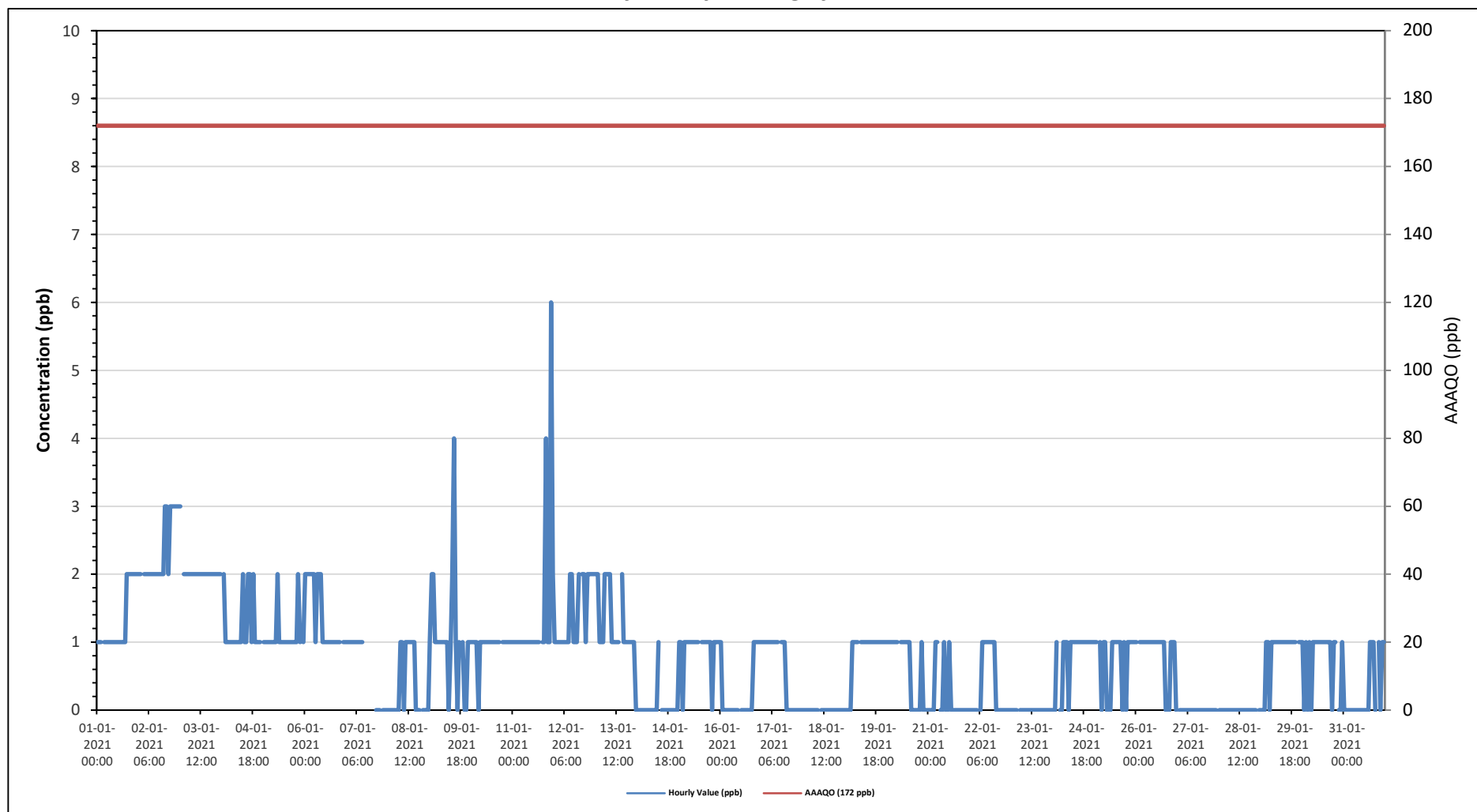
Reno Station - January 2021

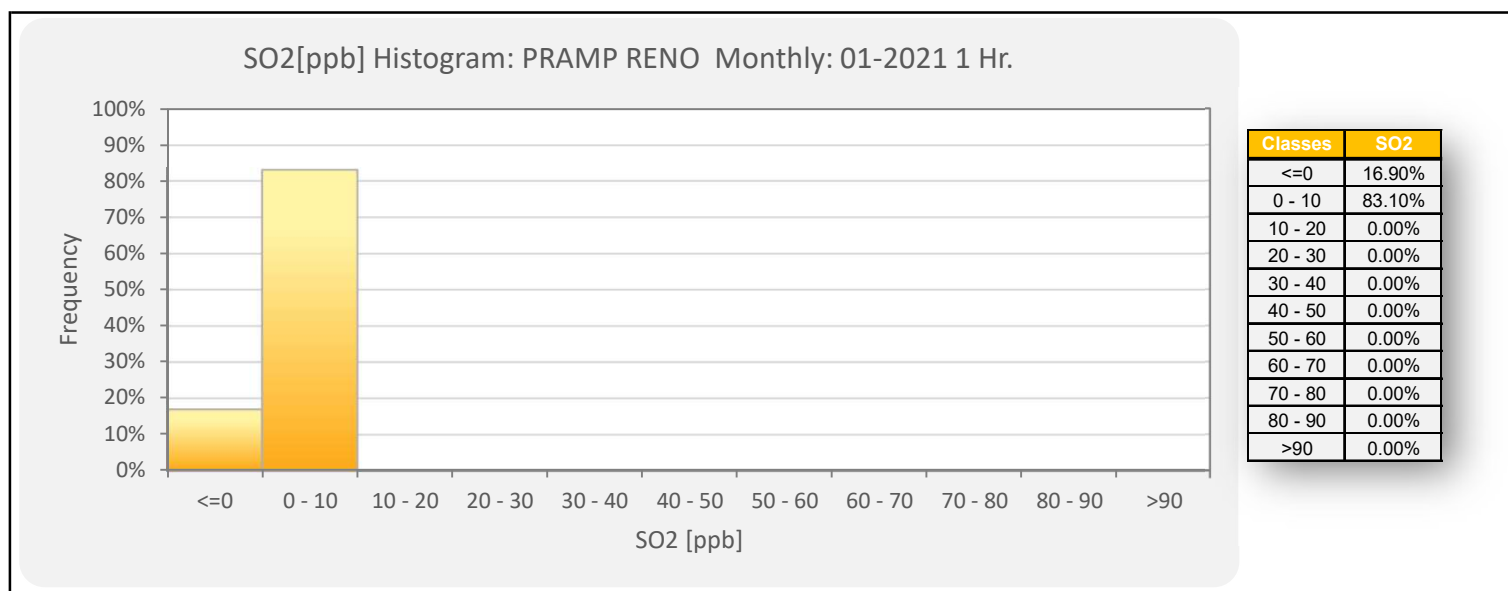
Summary of Hourly Averages

SULPHUR DIOXIDE (SO₂) 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 Exceedance:				0							
Maximum Hourly Value:				6 ppb on January 11 at hour 22				Hours in Service:				744															
Maximum Daily Value:				2.3 ppb on January 2				Hours of Data:				704															
Minimum Hourly Value:				0 ppb on January 7 at hour 17				Hours of Missing Data:				2															
Minimum Daily Value:				0.0 ppb on January 18				Hours of Calibration:				38															
Monthly Average:				0.8 ppb				Operational Uptime:				99.7															
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
Jan 1	1	1	1	S	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	1	2	1.3
Jan 2	2	2	S	2	2	2	2	2	2	2	2	2	2	2	3	3	2	3	3	3	3	3	3	3	2	3	2.3
Jan 3	3	S	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2.0
Jan 4	S	2	1	1	1	1	1	1	1	1	1	2	1	1	2	2	1	2	1	1	1	1	1	S	1	2	1.2
Jan 5	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	S	1	1	1	2	1.1
Jan 6	2	2	2	2	2	2	1	2	2	2	1	1	1	1	1	1	1	1	1	1	S	1	1	1	1	2	1.4
Jan 7	1	1	1	1	1	1	1	1	1	1	C	C	Y	Y	C	C	C	0	0	0	S	0	0	0	0	1	-
Jan 8	0	0	0	0	0	0	0	1	1	0	1	1	1	1	1	1	0	0	0	S	0	0	0	0	0	1	0.3
Jan 9	1	2	2	1	1	1	1	1	1	1	1	0	1	2	4	1	0	1	S	1	0	0	1	1	0	4	1.1
Jan 10	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	S	1	1	1	1	1	1	0	1	1.0
Jan 11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	S	1	1	4	1	1	6	2	1	6	1.4
Jan 12	1	1	1	1	1	1	1	1	1	2	2	1	1	1	2	S	2	2	1	2	2	2	2	2	1	2	1.4
Jan 13	2	2	1	1	1	2	2	2	2	1	1	1	1	1	S	2	1	1	1	1	1	1	1	0	0	2	1.3
Jan 14	0	0	0	0	0	0	0	0	0	0	0	0	1	S	0	0	0	0	0	0	0	0	0	0	0	1	0.0
Jan 15	1	1	0	1	1	1	1	1	1	1	1	1	S	1	1	1	1	1	1	0	1	1	1	1	0	1	0.9
Jan 16	1	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	1	1	1	1	1	0	1	0.3
Jan 17	1	1	1	1	1	1	1	1	1	1	S	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0.6
Jan 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
Jan 19	0	0	0	0	1	1	1	1	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.8
Jan 20	1	1	1	1	1	1	1	S	1	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	1	0.6
Jan 21	0	0	0	0	1	1	S	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2
Jan 22	0	0	0	0	0	S	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0.3
Jan 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
Jan 24	0	0	1	S	0	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.8
Jan 25	1	1	S	1	0	1	1	0	0	0	1	1	1	1	1	1	0	1	0	1	1	1	1	1	0	1	0.7
Jan 26	1	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	0	0	1	0.8
Jan 27	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
Jan 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
Jan 29	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	S	1	1	0	1	0.8
Jan 30	1	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	S	0	0	1	0	1	0.7
Jan 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	S	1	0	0	1	1	0	1	0.3
Diurnal Maximum	3	2	2	2	2	2	2	2	2	2	2	2	2	2	4	3	3	2	3	4	3	3	6	3			
Diurnal Average	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.7	0.7	0.7	0.9	0.9	0.7	1.0	0.8			
C	Monthly Calibration						S	Daily Zero-Span Check						Q	Quality Assurance												
K	Collection Error						N	No Data (Machine Not in Service)						Y	Routine Maintenance												
X	InValid Data (Equipment Malfunction /Recovery)						NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)						P	Power Failure												
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.																											

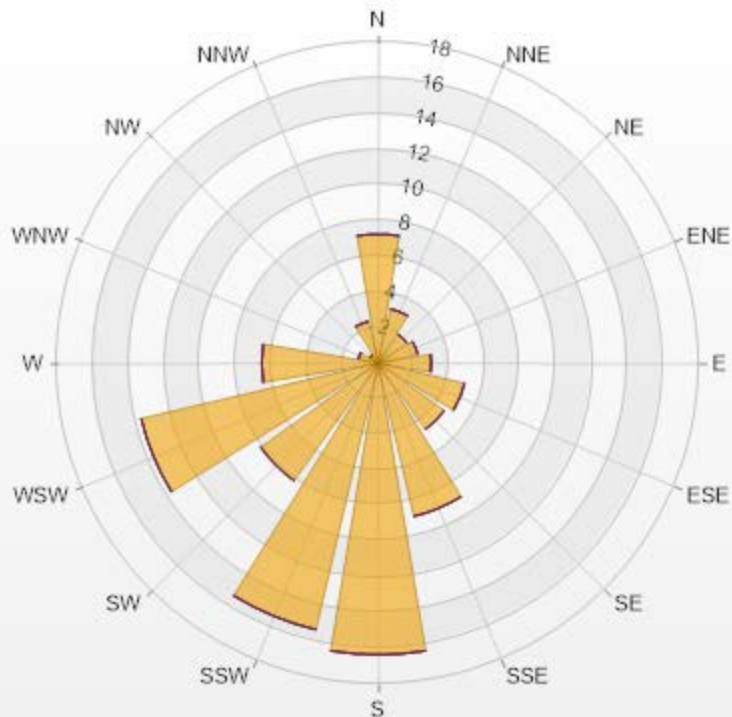
Timeseries Chart of Hourly Average for SO2 - Reno Station





Wind: PRAMP RENO Poll.: PRAMP RENO-SO2[ppb] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.62% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	7.24	0	0	0	0	7.24
NNE	3.13	0	0	0	0	3.13
NE	1.99	0	0	0	0	1.99
ENE	2.27	0	0	0	0	2.27
E	2.98	0	0	0	0	2.98
ESE	4.97	0	0	0	0	4.97
SE	4.55	0	0	0	0	4.55
SSE	8.81	0	0	0	0	8.81
S	16.34	0	0	0	0	16.34
SSW	15.34	0	0	0	0	15.34
SW	8.1	0	0	0	0	8.1
WSW	13.64	0	0	0	0	13.64
W	6.53	0	0	0	0	6.53
WNW	1.14	0	0	0	0	1.14
NW	0.57	0	0	0	0	0.57
NNW	2.41	0	0	0	0	2.41
Summary	100	0	0	0	0	100



PRAMP-202101

Page 118 of 228

% Icon Classes (ppb)

100 0-10

0 10-50

0 50-100

0 100-172

0 >172.0



PEACE RIVER AREA MONITORING PROGRAM

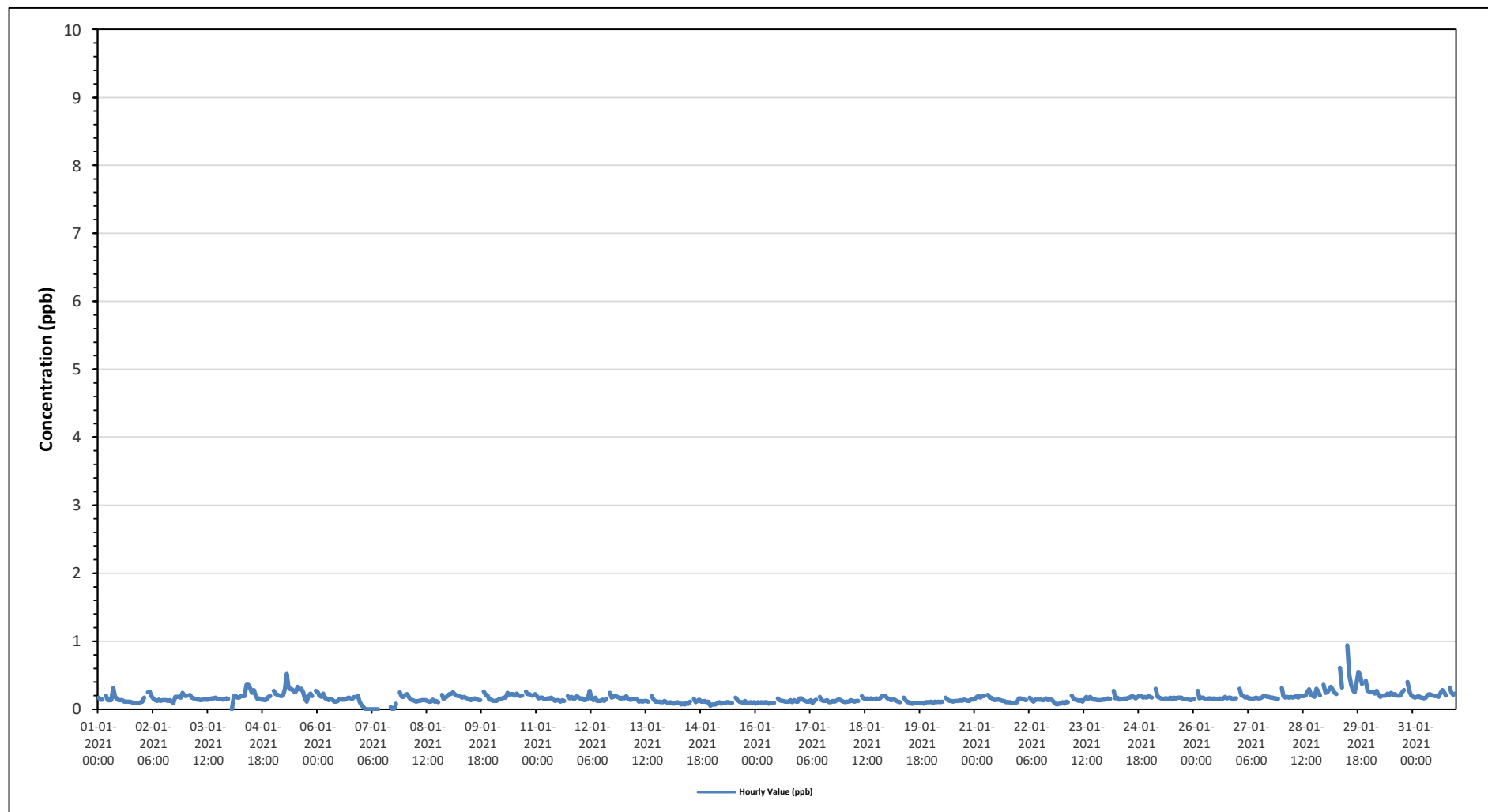
Reno Station - January 2021

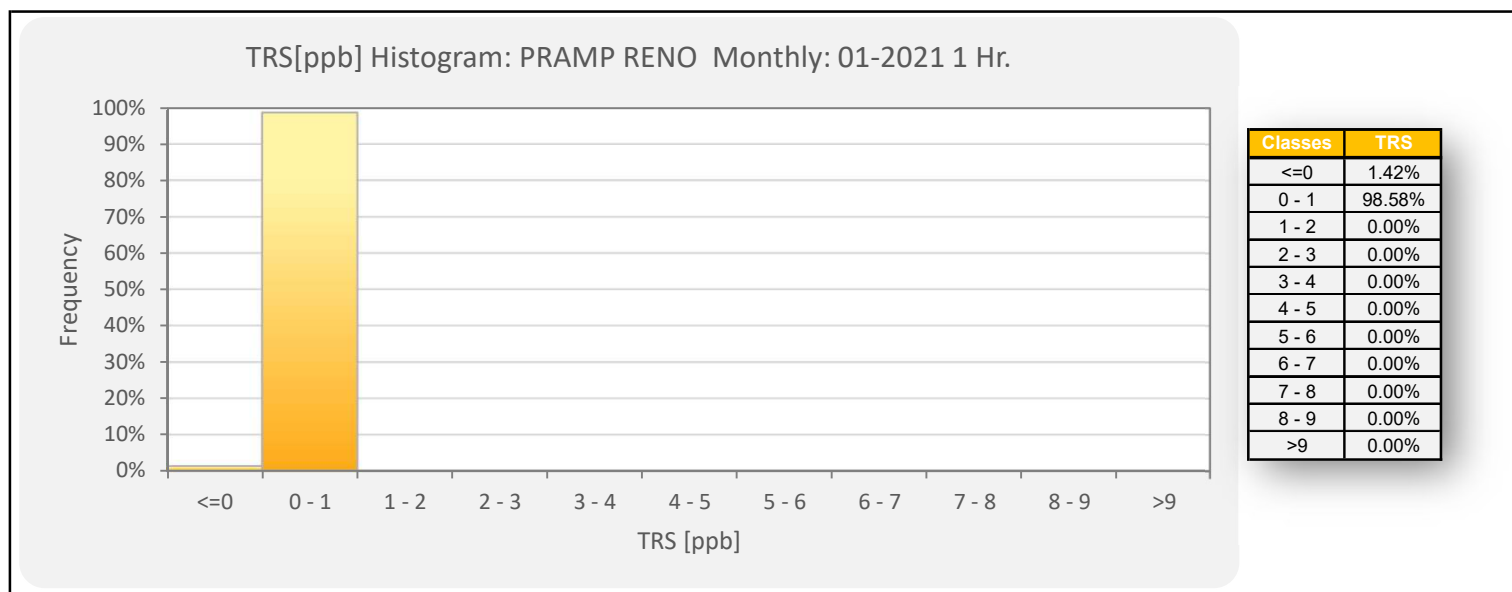
Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

Alberta Ambient Air Quality Objectives (AAAQO) for H2S: 1-Hour 10 ppb, 24-Hour 3 ppb																														
Number of 1-Hour Exceedances:				0				Number of 24-Hour Exceedances:				0																		
Maximum Hourly Value:				0.94 ppb on January 29 at hour 12				Hours in Service:				744																		
Maximum Daily Value:				0.38 ppb on January 29				Hours of Data:				702																		
Minimum Hourly Value:				0.00 ppb on January 4 at hour 1				Hours of Missing Data:				3																		
Minimum Daily Value:				0.10 ppb on January 15				Hours of Calibration:				39																		
Monthly Average:				0.16 ppb				Operational Uptime:				99.6																		
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average			
Jan 1	0.17	0.14	0.14	S	0.2	0.13	0.13	0.13	0.31	0.18	0.15	0.13	0.13	0.13	0.11	0.11	0.11	0.11	0.1	0.09	0.09	0.09	0.09	0.1	0.09	0.31	0.13			
Jan 2	0.11	0.17	S	0.25	0.26	0.19	0.15	0.13	0.12	0.14	0.12	0.13	0.13	0.13	0.12	0.13	0.11	0.09	0.18	0.18	0.18	0.17	0.24	0.2	0.09	0.26	0.16			
Jan 3	0.19	S	0.21	0.17	0.16	0.15	0.14	0.14	0.13	0.14	0.14	0.14	0.14	0.15	0.16	0.16	0.17	0.15	0.15	0.15	0.14	0.15	0.16	0.15	0.13	0.21	0.15			
Jan 4	S	0	0.19	0.2	0.17	0.17	0.2	0.19	0.19	0.36	0.36	0.31	0.24	0.28	0.2	0.15	0.16	0.14	0.14	0.13	0.14	0.18	0.19	S	0.00	0.36	0.20			
Jan 5	0.27	0.22	0.21	0.2	0.19	0.2	0.3	0.52	0.34	0.29	0.29	0.26	0.26	0.33	0.29	0.3	0.25	0.15	0.11	0.2	0.23	0.19	S	0.27	0.11	0.52	0.26			
Jan 6	0.25	0.2	0.18	0.23	0.16	0.16	0.13	0.15	0.14	0.11	0.11	0.12	0.15	0.14	0.14	0.14	0.16	0.17	0.16	0.15	0.18	S	0.2	0.11	0.11	0.25	0.16			
Jan 7	0.06	0.03	0	0	0	0	0	0	0	0	C	C	C	C	C	C	0.03	0	0.01	0.08	S	0.25	0.18	0.18	0.00	0.25	-			
Jan 8	0.21	0.22	0.17	0.14	0.13	0.12	0.11	0.12	0.12	0.13	0.13	0.13	0.12	0.11	0.11	0.14	0.11	0.12	0.1	S	0.21	0.15	0.17	0.19	0.10	0.22	0.14			
Jan 9	0.22	0.22	0.25	0.22	0.2	0.19	0.19	0.17	0.18	0.17	0.16	0.14	0.13	0.15	0.16	0.15	0.13	0.13	S	0.26	0.21	0.2	0.14	0.14	0.13	0.26	0.18			
Jan 10	0.12	0.12	0.12	0.14	0.15	0.16	0.17	0.17	0.24	0.21	0.22	0.22	0.2	0.23	0.2	0.19	0.2	S	0.26	0.22	0.22	0.2	0.2	0.22	0.12	0.26	0.19			
Jan 11	0.19	0.16	0.17	0.17	0.15	0.15	0.16	0.16	0.17	0.14	0.12	0.13	0.13	0.11	0.13	0.12	S	0.19	0.16	0.18	0.15	0.16	0.19	0.17	0.11	0.19	0.15			
Jan 12	0.15	0.16	0.13	0.14	0.16	0.27	0.16	0.13	0.17	0.12	0.12	0.12	0.14	0.12	0.15	S	0.24	0.17	0.18	0.2	0.18	0.17	0.15	0.17	0.12	0.27	0.16			
Jan 13	0.16	0.19	0.15	0.14	0.14	0.15	0.15	0.14	0.11	0.12	0.11	0.12	0.12	0.11	S	0.19	0.14	0.11	0.11	0.11	0.1	0.1	0.12	0.1	0.10	0.19	0.13			
Jan 14	0.09	0.1	0.09	0.08	0.09	0.1	0.09	0.07	0.08	0.07	0.09	0.08	0.11	S	0.15	0.1	0.12	0.14	0.11	0.11	0.12	0.1	0.11	0.05	0.05	0.15	0.10			
Jan 15	0.07	0.07	0.07	0.09	0.1	0.08	0.09	0.09	0.1	0.1	0.09	0.09	S	0.17	0.13	0.11	0.1	0.09	0.12	0.09	0.09	0.1	0.09	0.1	0.07	0.17	0.10			
Jan 16	0.08	0.1	0.09	0.1	0.09	0.1	0.1	0.08	0.09	0.09	0.09	S	0.16	0.13	0.12	0.12	0.11	0.11	0.11	0.13	0.1	0.13	0.11	0.11	0.08	0.16	0.11			
Jan 17	0.16	0.16	0.13	0.12	0.11	0.11	0.13	0.09	0.12	0.14	S	0.18	0.13	0.12	0.12	0.13	0.1	0.1	0.12	0.11	0.12	0.14	0.14	0.12	0.09	0.18	0.13			
Jan 18	0.11	0.1	0.11	0.11	0.13	0.12	0.11	0.12	0.12	S	0.19	0.16	0.15	0.16	0.15	0.16	0.15	0.15	0.16	0.15	0.16	0.19	0.2	0.19	0.10	0.20	0.15			
Jan 19	0.16	0.15	0.13	0.14	0.14	0.12	0.11	0.1	S	0.17	0.13	0.1	0.1	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.08	0.1	0.1	0.1	0.08	0.17	0.11			
Jan 20	0.11	0.09	0.11	0.1	0.11	0.1	0.11	S	0.17	0.14	0.12	0.12	0.11	0.12	0.12	0.12	0.13	0.12	0.14	0.13	0.12	0.12	0.15	0.14	0.09	0.17	0.12			
Jan 21	0.15	0.18	0.19	0.17	0.19	0.19	S	0.21	0.17	0.17	0.14	0.13	0.14	0.14	0.13	0.12	0.12	0.1	0.1	0.1	0.09	0.09	0.09	0.1	0.09	0.21	0.14			
Jan 22	0.16	0.16	0.15	0.14	0.13	S	0.17	0.14	0.11	0.14	0.14	0.14	0.14	0.13	0.13	0.16	0.13	0.14	0.14	0.11	0.08	0.07	0.08	0.08	0.07	0.17	0.13			
Jan 23	0.1	0.08	0.11	0.1	S	0.2	0.15	0.14	0.13	0.12	0.13	0.11	0.15	0.18	0.15	0.18	0.16	0.14	0.14	0.13	0.13	0.13	0.14	0.14	0.08	0.20	0.14			
Jan 24	0.15	0.16	0.15	S	0.27	0.16	0.17	0.14	0.15	0.15	0.16	0.15	0.17	0.17	0.19	0.18	0.16	0.18	0.19	0.2	0.17	0.18	0.17	0.19	0.14	0.27	0.17			
Jan 25	0.18	0.17	S	0.3	0.18	0.17	0.16	0.15	0.16	0.16	0.15	0.17	0.15	0.17	0.15	0.17	0.17	0.17	0.15	0.15	0.15	0.14	0.13	0.14	0.13	0.30	0.16			
Jan 26	0.15	S	0.27	0.16	0.17	0.17	0.15	0.15	0.16	0.16	0.15	0.16	0.15	0.15	0.16	0.15	0.16	0.18	0.16	0.17	0.17	0.15	0.16	0.16	0.15	0.27	0.16			
Jan 27	S	0.3	0.2	0.2	0.17	0.18	0.16	0.16	0.15	0.16	0.17	0.16	0.16	0.17	0.19	0.19	0.18	0.18	0.17	0.17	0.16	0.16	0.15	S	0.15	0.30	0.18			
Jan 28	0.31	0.19	0.17	0.18	0.17	0.18	0.17	0.18	0.19	0.17	0.19	0.19	0.19	0.2	0.25	0.29	0.21	0.19	0.18	0.3	0.26	0.2	S	0.36	0.17	0.36	0.21			
Jan 29	0.24	0.25	0.29	0.33	0.28	0.24	0.22	NRM	0.61	0.32	NRM	NRM	0.94	0.5	0.36	0.28	0.25	0.39	0.55	0.51	0.37	S	0.42	0.27	0.22	0.94	0.38			
Jan 30	0.26	0.25	0.26	0.23	0.27	0.21	0.18	0.2	0.2	0.2	0.23	0.21	0.24	0.21	0.22	0.2	0.2	0.2	0.25	0.28	S	0.4	0.26	0.2	0.18	0.40	0.23			
Jan 31	0.18	0.17	0.18	0.19	0.17	0.17	0.16	0.17	0.21	0.22	0.21	0.2	0.19	0.2	0.18	0.24	0.28	0.25	0.2	S	0.32	0.24	0.21	0.23	0.16	0.32	0.21			
Diurnal Maximum	0.31	0.30	0.29	0.33	0.28	0.27	0.30	0.52	0.61	0.36	0.36	0.31	0.94	0.50	0.36	0.30	0.28	0.39	0.55	0.51	0.37	0.40	0.42	0.36						
Diurnal Average	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.15	0.17	0.16	0.16	0.16	0.15	0.18	0.17	0.16	0.15	0.15	0.16	0.17	0.16	0.16	0.16	0.16						
C	Monthly Calibration								S	Daily Zero-Span Check								Q	Quality Assurance											
K	Collection Error								N	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.																														

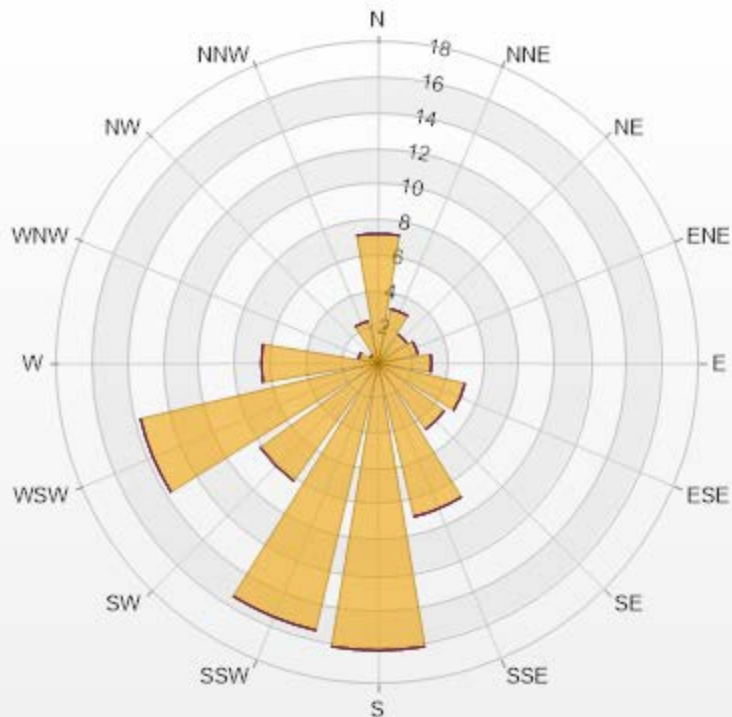
Timeseries Chart of Hourly Average for TRS - Reno Station





Wind: PRAMP RENO Poll.: PRAMP RENO-TRS[ppb] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.35% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	7.26	0	0	0	0	7.26
NNE	3.13	0	0	0	0	3.13
NE	1.99	0	0	0	0	1.99
ENE	2.28	0	0	0	0	2.28
E	2.99	0	0	0	0	2.99
ESE	4.99	0	0	0	0	4.99
SE	4.56	0	0	0	0	4.56
SSE	8.83	0	0	0	0	8.83
S	16.1	0	0	0	0	16.1
SSW	15.38	0	0	0	0	15.38
SW	8.12	0	0	0	0	8.12
WSW	13.68	0	0	0	0	13.68
W	6.55	0	0	0	0	6.55
WNW	1.14	0	0	0	0	1.14
NW	0.57	0	0	0	0	0.57
NNW	2.42	0	0	0	0	2.42
Summary	100	0	0	0	0	100



PRAMP-202101

Page 123 of 228

% Icon Classes (ppb)

100 0-2

0 2-5

0 5-10

0 10-50

0 >50.0



PEACE RIVER AREA MONITORING PROGRAM

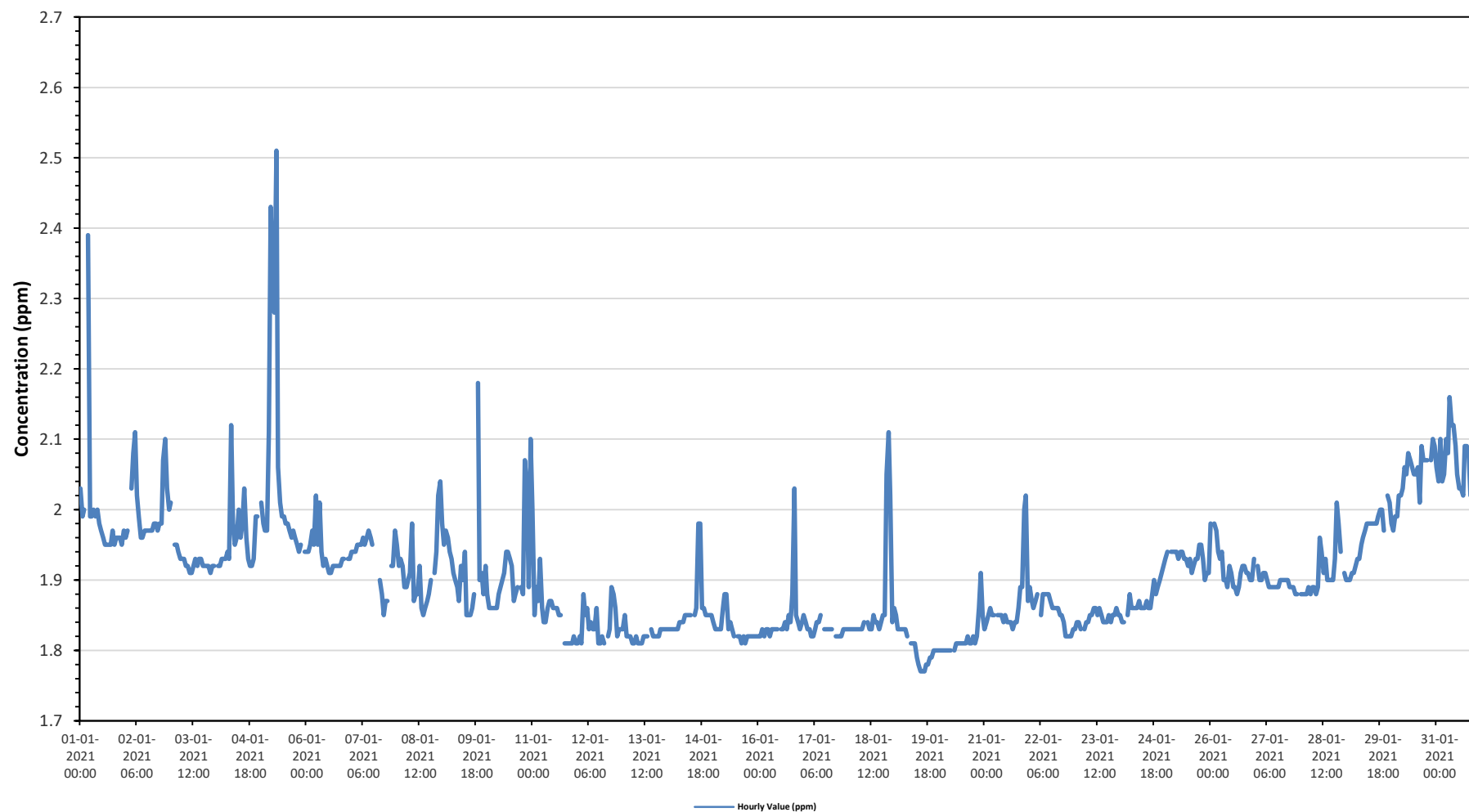
Reno Station - January 2021

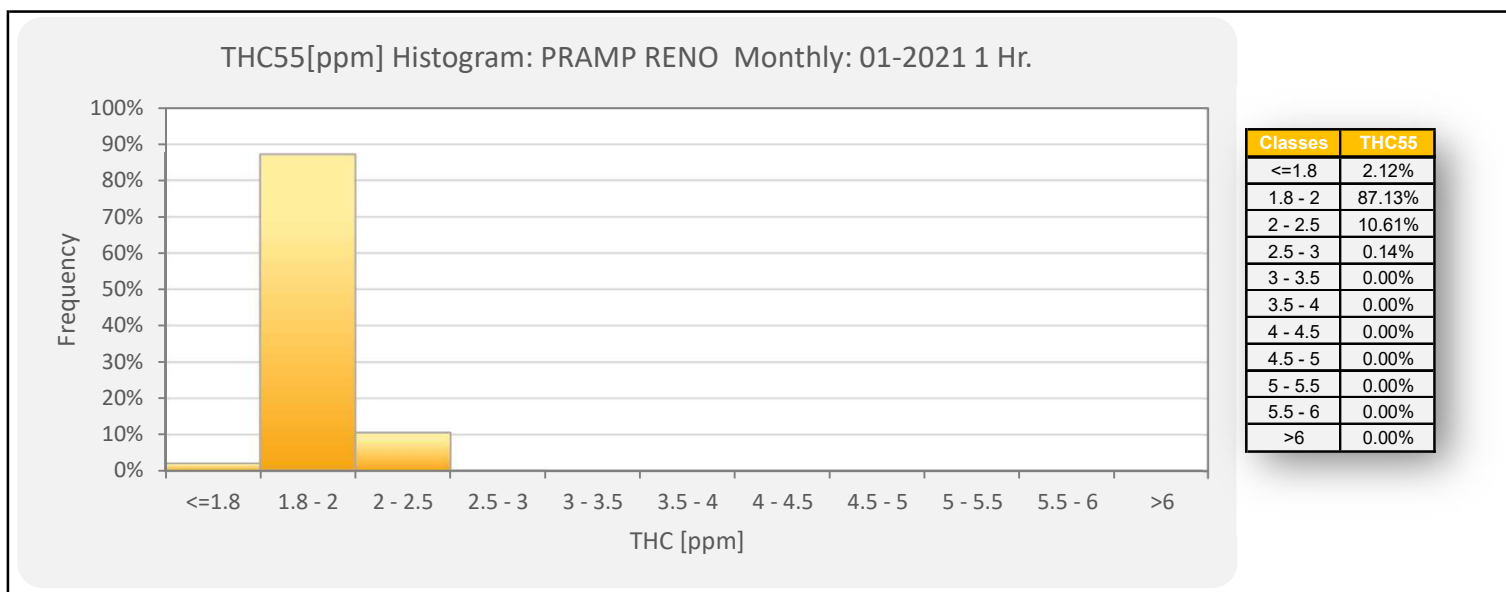
Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

Maximum Hourly Value:										2.51 ppm on January 5 at hour 8		Hours in Service:										744						
Maximum Daily Value:										2.05 ppm on January 5		Hours of Data:										707						
Minimum Hourly Value:										1.77 ppm on January 19 at hour 14		Hours of Missing Data:										1						
Minimum Daily Value:										1.81 ppm on January 19		Hours of Calibration:										36						
Monthly Average:										1.90 ppm		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	
Jan 1	2.03	1.99	2.00	S	2.39	1.99	1.99	2.00	1.99	2.00	1.98	1.97	1.96	1.95	1.95	1.95	1.95	1.97	1.95	1.96	1.96	1.96	1.95	1.97	1.95	2.39	1.99	
Jan 2	1.96	1.97	S	2.03	2.08	2.11	2.02	1.99	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.98	1.98	1.97	1.98	1.98	2.07	2.10	2.03	2.00	1.96	2.11	2.00	
Jan 3	2.01	S	1.95	1.95	1.94	1.93	1.93	1.93	1.92	1.92	1.91	1.91	1.92	1.93	1.92	1.93	1.93	1.92	1.92	1.92	1.92	1.91	1.92	1.92	1.91	2.01	1.93	
Jan 4	S	1.92	1.92	1.93	1.93	1.93	1.94	1.93	2.12	1.98	1.95	1.96	2.00	1.96	1.98	2.03	1.96	1.93	1.92	1.92	1.92	1.93	1.99	1.99	S	1.92	2.12	1.96
Jan 5	2.01	1.98	1.97	1.97	2.11	2.43	2.33	2.28	2.51	2.06	2.01	1.99	1.99	1.98	1.98	1.97	1.96	1.97	1.96	1.95	1.94	1.95	S	1.94	1.94	2.51	2.05	
Jan 6	1.94	1.94	1.95	1.97	1.95	2.02	1.95	2.01	1.94	1.92	1.93	1.92	1.91	1.91	1.92	1.92	1.92	1.92	1.92	1.93	1.93	S	1.93	1.93	1.91	2.02	1.94	
Jan 7	1.94	1.94	1.94	1.95	1.95	1.95	1.96	1.95	1.96	1.97	1.96	1.95	C	C	C	1.90	1.88	1.85	1.87	1.87	S	1.92	1.92	1.97	1.85	1.97	1.93	
Jan 8	1.95	1.92	1.93	1.92	1.89	1.89	1.90	1.91	1.98	1.87	1.88	1.88	1.92	1.86	1.85	1.86	1.87	1.88	1.90	S	1.91	1.94	2.02	2.04	1.85	2.04	1.91	
Jan 9	1.98	1.95	1.97	1.96	1.94	1.93	1.91	1.90	1.89	1.87	1.92	1.90	1.94	1.85	1.85	1.85	1.86	1.88	S	2.18	1.90	1.91	1.88	1.92	1.85	2.18	1.92	
Jan 10	1.88	1.86	1.86	1.86	1.86	1.86	1.88	1.89	1.90	1.91	1.94	1.94	1.93	1.92	1.87	1.88	1.89	S	1.89	1.88	2.07	2.03	1.89	2.10	1.86	2.10	1.91	
Jan 11	2.00	1.85	1.89	1.87	1.93	1.86	1.84	1.84	1.86	1.87	1.87	1.86	1.86	1.86	1.85	1.85	S	1.81	1.81	1.81	1.81	1.81	1.82	1.81	1.81	2.00	1.85	
Jan 12	1.81	1.82	1.81	1.88	1.85	1.86	1.83	1.84	1.83	1.83	1.86	1.81	1.81	1.82	1.81	S	1.82	1.83	1.89	1.88	1.86	1.82	1.83	1.83	1.81	1.89	1.84	
Jan 13	1.83	1.85	1.82	1.82	1.82	1.81	1.81	1.82	1.81	1.81	1.81	1.82	1.82	1.82	S	1.83	1.82	1.82	1.82	1.82	1.83	1.83	1.83	1.83	1.81	1.85	1.82	
Jan 14	1.83	1.83	1.83	1.83	1.83	1.83	1.84	1.84	1.84	1.85	1.85	1.85	1.85	S	1.85	1.86	1.98	1.98	1.86	1.86	1.85	1.85	1.85	1.85	1.83	1.98	1.86	
Jan 15	1.84	1.83	1.83	1.83	1.83	1.86	1.88	1.88	1.83	1.84	1.83	1.82	S	1.82	1.82	1.81	1.82	1.81	1.82	1.82	1.82	1.82	1.82	1.82	1.81	1.88	1.83	
Jan 16	1.82	1.82	1.83	1.82	1.83	1.83	1.82	1.83	1.83	1.83	1.83	S	1.83	1.83	1.84	1.83	1.85	1.84	1.88	2.03	1.85	1.84	1.83	1.84	1.82	2.03	1.84	
Jan 17	1.85	1.84	1.83	1.83	1.82	1.82	1.83	1.84	1.84	1.85	S	1.83	1.83	1.83	1.83	1.83	NRM	1.82	1.82	1.82	1.82	1.83	1.83	1.83	1.82	1.85	1.83	
Jan 18	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.84	S	1.84	1.83	1.83	1.85	1.84	1.84	1.83	1.84	1.85	1.85	2.05	2.11	2.02	1.84	1.83	2.11	1.87
Jan 19	1.86	1.85	1.83	1.83	1.83	1.83	1.83	1.82	S	1.81	1.81	1.81	1.79	1.78	1.77	1.77	1.77	1.78	1.78	1.79	1.79	1.80	1.80	1.80	1.77	1.86	1.81	
Jan 20	1.80	1.80	1.80	1.80	1.80	1.80	1.80	S	1.80	1.81	1.81	1.81	1.81	1.81	1.81	1.82	1.81	1.81	1.82	1.81	1.82	1.86	1.91	1.85	1.80	1.91	1.82	
Jan 21	1.83	1.84	1.85	1.86	1.85	1.85	S	1.85	1.85	1.85	1.84	1.85	1.84	1.84	1.84	1.83	1.84	1.84	1.86	1.89	1.89	2.00	2.02	1.87	1.83	2.02	1.86	
Jan 22	1.89	1.87	1.86	1.87	1.88	S	1.85	1.88	1.88	1.88	1.88	1.87	1.86	1.86	1.86	1.86	1.85	1.85	1.84	1.82	1.82	1.82	1.82	1.83	1.82	1.89	1.86	
Jan 23	1.83	1.84	1.84	1.83	S	1.83	1.84	1.84	1.85	1.85	1.86	1.86	1.85	1.86	1.85	1.84	1.84	1.84	1.85	1.84	1.85	1.85	1.86	1.85	1.83	1.86	1.85	
Jan 24	1.85	1.84	1.84	S	1.85	1.88	1.86	1.86	1.86	1.86	1.87	1.86	1.86	1.86	1.87	1.86	1.86	1.88	1.90	1.88	1.89	1.90	1.91	1.92	1.84	1.92	1.87	
Jan 25	1.93	1.94	S	1.94	1.94	1.94	1.94	1.93	1.94	1.94	1.93	1.93	1.92	1.93	1.91	1.92	1.93	1.93	1.95	1.95	1.93	1.90	1.91	1.91	1.90	1.95	1.93	
Jan 26	1.98	S	1.98	1.97	1.94	1.93	1.94	1.90	1.90	1.89	1.92	1.91	1.89	1.89	1.88	1.89	1.91	1.92	1.92	1.92	1.91	1.91	1.90	1.90	1.88	1.98	1.92	
Jan 27	S	1.92	1.90	1.90	1.91	1.91	1.90	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.89	1.89	1.89	1.88	1.88	S	1.88	1.92	1.90	
Jan 28	1.88	1.88	1.88	1.88	1.89	1.88	1.89	1.89	1.88	1.89	1.96	1.94	1.91	1.93	1.90	1.90	1.90	1.90	1.93	2.01	1.98	1.94	S	1.91	1.88	2.01	1.91	
Jan 29	1.90	1.90	1.90	1.91	1.91	1.92	1.93	1.93	1.95	1.96	1.97	1.98	1.98	1.98	1.98	1.98	1.98	1.99	2.00	2.00	1.97	S	2.02	2.01	1.90	2.02	1.96	
Jan 30	1.98	1.97	1.99	1.99	2.02	2.02	2.03	2.06	2.05	2.08	2.07	2.06	2.05	2.05	2.06	2.01	2.09	2.07	2.07	2.07	S	2.07	2.10	2.09	1.97	2.10	2.05	
Jan 31	2.06	2.04	2.10	2.04	2.05	2.10	2.08	2.16	2.12	2.12	2.09	2.05	2.03	2.03	2.02	2.09	2.09	2.08	2.02	S	1.97	1.96	1.96	1.96	1.96	2.16	2.05	
Diurnal Maximum	2.06	2.04	2.10	2.04	2.39	2.43	2.33	2.28	2.51	2.12	2.09	2.06	2.05	2.05	2.06	2.09	2.09	2.08	2.07	2.18	2.07	2.11	2.10	2.10				
Diurnal Average	1.91	1.89	1.89	1.90	1.92	1.92	1.91	1.92	1.93	1.91	1.91	1.90	1.90	1.89	1.89	1.89	1.90	1.89	1.90	1.91	1.90	1.91	1.91	1.91				
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance											
K	Collection Error							N	No Data (Machine Not in Service)							Y	Routine Maintenance											
X	InValid Data (Equipment Malfunction /Recovery)							NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)								Power Failure											
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.																												

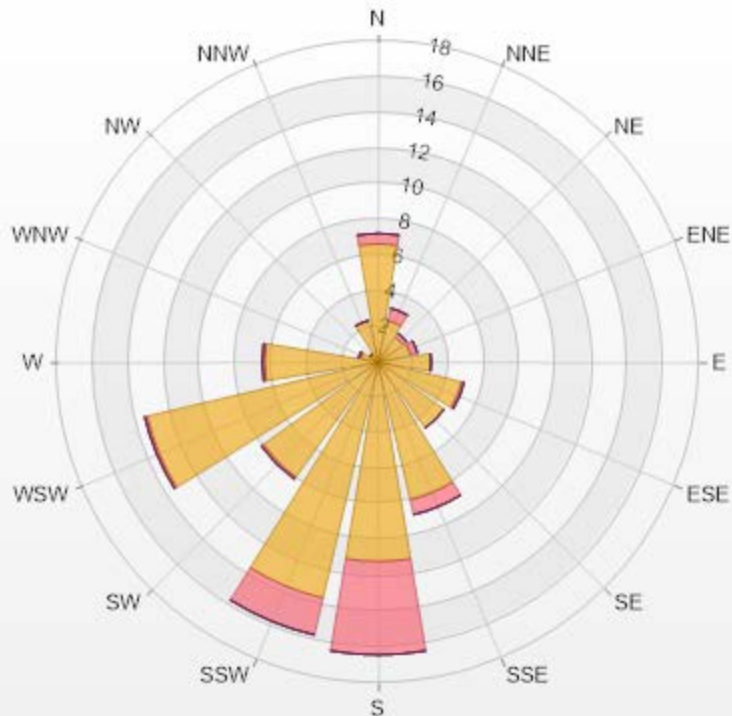
Timeseries Chart of Hourly Average for THC - Reno Station





Wind: PRAMP RENO Poll.: PRAMP RENO-THC55[ppm] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.03% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	6.65	0.57	0	0	0	7.22
NNE	2.4	0.71	0	0	0	3.11
NE	1.7	0.28	0	0	0	1.98
ENE	1.84	0.42	0	0	0	2.26
E	2.97	0	0	0	0	2.97
ESE	4.81	0.14	0	0	0	4.95
SE	4.53	0	0	0	0	4.53
SSE	7.92	0.85	0	0	0	8.77
S	11.17	5.23	0	0	0	16.4
SSW	13.58	2.12	0	0	0	15.7
SW	7.92	0.14	0	0	0	8.06
WSW	13.3	0.14	0	0	0	13.44
W	6.36	0.14	0	0	0	6.5
WNW	0.99	0.14	0	0	0	1.13
NW	0.57	0	0	0	0	0.57
NNW	2.4	0	0	0	0	2.4
Summary	89.11	10.88	0	0	0	100



PRAMP-202101

Page 128 of 228

% Icon Classes (ppm)

89 0-2

11 2-5

0 5-10

0 10-40

0 >40.0



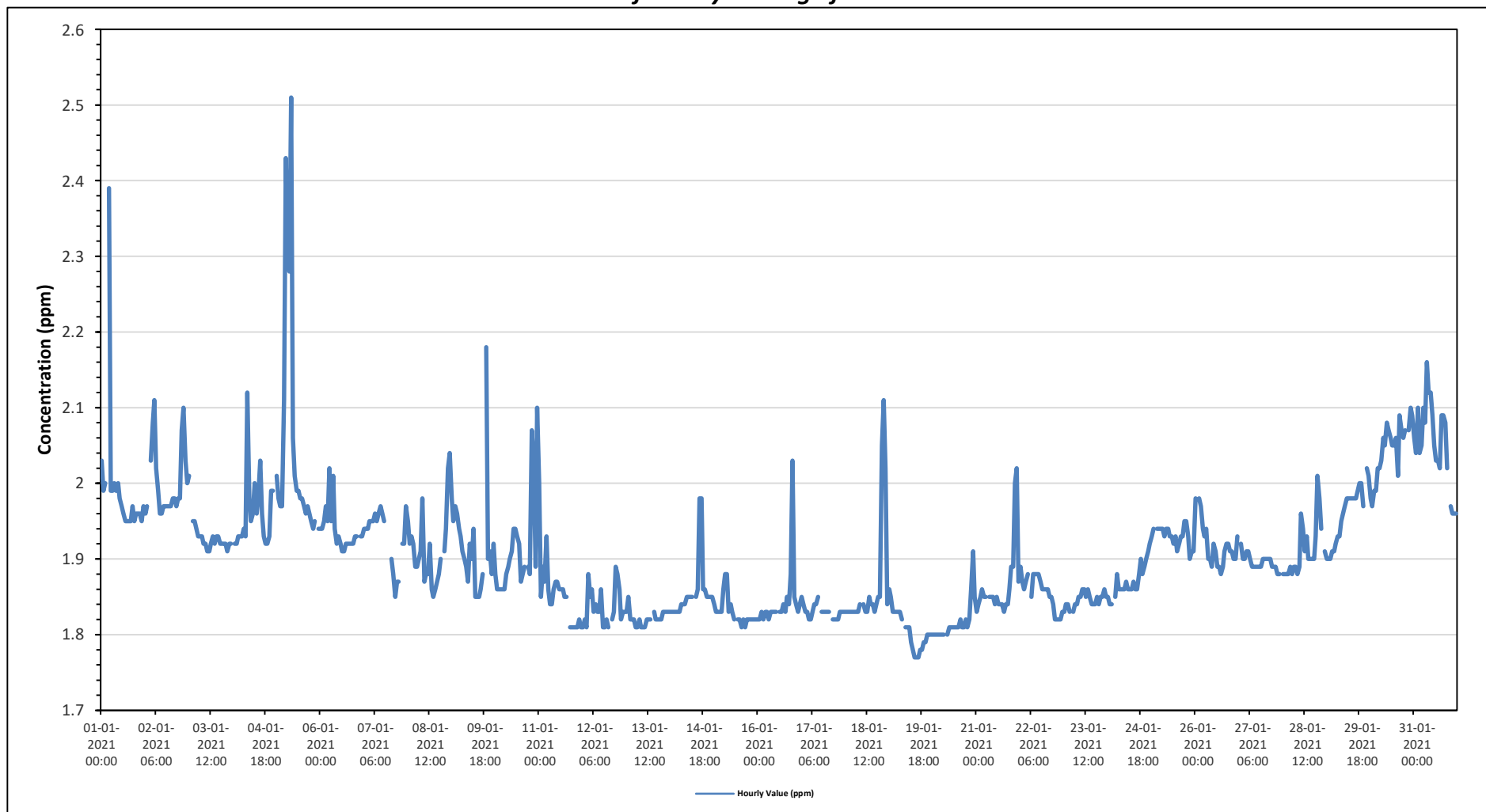
PEACE RIVER AREA MONITORING PROGRAM

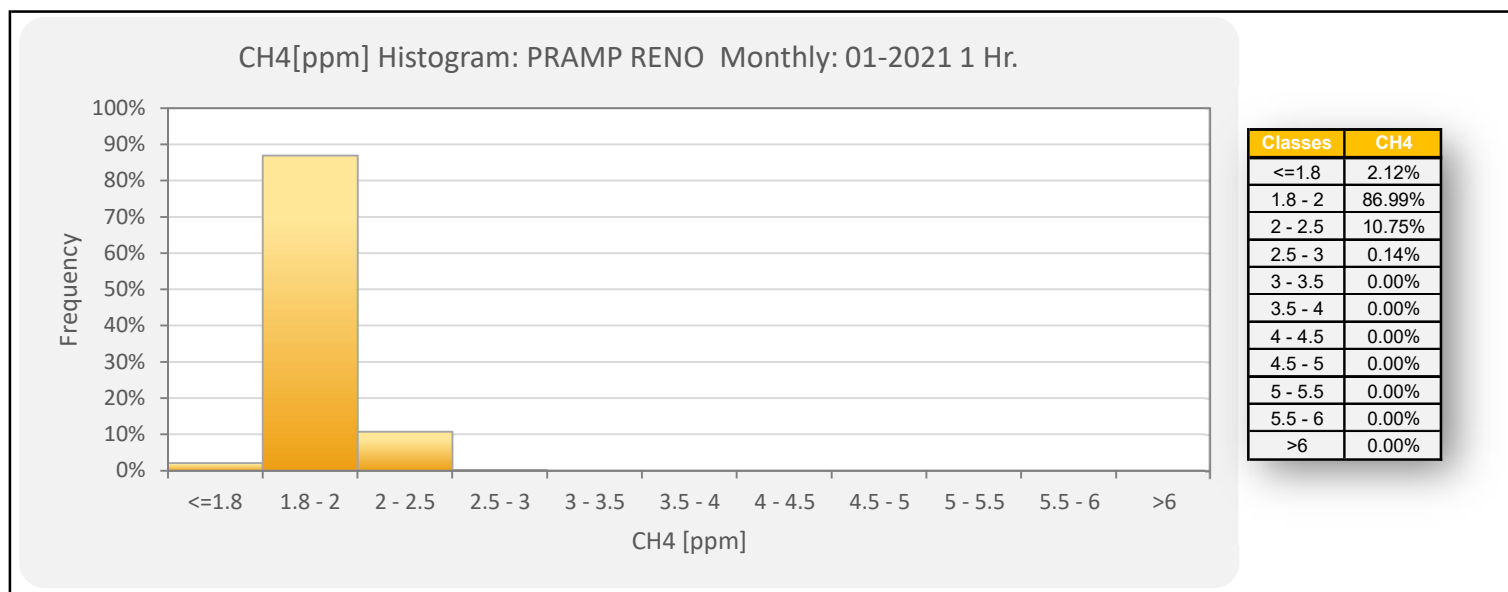
Reno Station - January 2021
Summary of Hourly Averages

METHANE (CH₄) in ppm

Maximum Hourly Value:		2.51 ppm on January 5 at hour 8														Hours in Service:		744																	
Maximum Daily Value:		2.05 ppm on January 5														Hours of Data:		707																	
Minimum Hourly Value:		1.77 ppm on January 19 at hour 14														Hours of Missing Data:		1																	
Minimum Daily Value:		1.81 ppm on January 19														Hours of Calibration:		36																	
Monthly Average:		1.90 ppm														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								
Jan 1	2.03	1.99	2.00	S	2.39	1.99	1.99	2.00	1.99	2.00	1.98	1.97	1.96	1.95	1.95	1.95	1.95	1.97	1.95	1.96	1.96	1.96	1.95	1.97	1.95	2.39	1.99								
Jan 2	1.96	1.97	S	2.03	2.08	2.11	2.02	1.99	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.98	1.98	1.97	1.98	1.98	2.07	2.10	2.03	2.00	1.96	2.11	2.00								
Jan 3	2.01	S	1.95	1.95	1.94	1.93	1.93	1.93	1.92	1.92	1.91	1.91	1.92	1.93	1.92	1.93	1.93	1.92	1.92	1.92	1.92	1.91	1.92	1.92	1.91	2.01	1.93								
Jan 4	S	1.92	1.92	1.93	1.93	1.93	1.94	1.93	2.12	1.98	1.95	1.96	2.00	1.96	1.98	2.03	1.96	1.93	1.92	1.92	1.93	1.99	1.99	S	1.92	2.12	1.96								
Jan 5	2.01	1.98	1.97	1.97	2.11	2.43	2.33	2.28	2.51	2.06	2.01	1.99	1.99	1.98	1.98	1.97	1.96	1.97	1.96	1.95	1.94	1.95	S	1.94	1.94	2.51	2.05								
Jan 6	1.94	1.94	1.95	1.97	1.95	2.02	1.95	2.01	1.94	1.92	1.93	1.92	1.91	1.91	1.92	1.92	1.92	1.92	1.92	1.93	1.93	S	1.93	1.93	1.91	2.02	1.94								
Jan 7	1.94	1.94	1.94	1.95	1.95	1.95	1.96	1.95	1.96	1.97	1.96	1.95	C	C	C	1.90	1.88	1.85	1.87	1.87	S	1.92	1.92	1.97	1.85	1.97	1.93								
Jan 8	1.95	1.92	1.93	1.92	1.89	1.89	1.90	1.91	1.98	1.87	1.88	1.88	1.92	1.86	1.85	1.86	1.87	1.88	1.90	S	1.91	1.94	2.02	2.04	1.85	2.04	1.91								
Jan 9	1.98	1.95	1.97	1.96	1.94	1.93	1.91	1.90	1.89	1.87	1.92	1.90	1.94	1.85	1.85	1.85	1.86	1.88	S	2.18	1.90	1.91	1.88	1.92	1.85	2.18	1.92								
Jan 10	1.88	1.86	1.86	1.86	1.86	1.86	1.88	1.89	1.90	1.91	1.94	1.94	1.93	1.92	1.87	1.88	1.89	S	1.89	1.88	2.07	2.03	1.89	2.10	1.86	2.10	1.91								
Jan 11	2.00	1.85	1.89	1.87	1.93	1.86	1.84	1.84	1.86	1.87	1.87	1.86	1.86	1.86	1.85	1.85	S	1.81	1.81	1.81	1.81	1.81	1.82	1.81	1.81	2.00	1.85								
Jan 12	1.81	1.82	1.81	1.88	1.85	1.86	1.83	1.84	1.83	1.83	1.86	1.81	1.81	1.82	1.82	S	1.82	1.83	1.89	1.88	1.86	1.82	1.83	1.83	1.81	1.89	1.84								
Jan 13	1.83	1.85	1.82	1.82	1.82	1.81	1.81	1.82	1.81	1.81	1.81	1.82	1.82	1.82	S	1.83	1.82	1.82	1.82	1.82	1.83	1.83	1.83	1.83	1.81	1.85	1.82								
Jan 14	1.83	1.83	1.83	1.83	1.83	1.83	1.84	1.84	1.84	1.85	1.85	1.85	S	1.85	1.85	1.86	1.98	1.98	1.86	1.86	1.85	1.85	1.85	1.85	1.83	1.98	1.86								
Jan 15	1.84	1.83	1.83	1.83	1.83	1.86	1.88	1.88	1.83	1.84	1.83	1.82	S	1.82	1.82	1.81	1.82	1.81	1.82	1.82	1.82	1.82	1.82	1.82	1.81	1.88	1.83								
Jan 16	1.82	1.82	1.83	1.82	1.83	1.83	1.82	1.83	1.83	1.83	1.83	S	1.83	1.83	1.84	1.83	1.85	1.84	1.88	2.03	1.85	1.84	1.83	1.84	1.82	2.03	1.84								
Jan 17	1.85	1.84	1.83	1.83	1.82	1.82	1.83	1.84	1.84	1.85	S	1.83	1.83	1.83	1.83	1.83	NRM	1.82	1.82	1.82	1.82	1.83	1.83	1.83	1.82	1.85	1.83								
Jan 18	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.84	S	1.84	1.83	1.83	1.85	1.84	1.84	1.83	1.84	1.85	1.85	2.05	2.11	2.02	1.84	1.83	2.11	1.87							
Jan 19	1.86	1.85	1.83	1.83	1.83	1.83	1.83	1.83	1.82	S	1.81	1.81	1.81	1.79	1.78	1.77	1.77	1.78	1.78	1.79	1.79	1.80	1.80	1.80	1.77	1.86	1.81								
Jan 20	1.80	1.80	1.80	1.80	1.80	1.80	1.80	S	1.80	1.81	1.81	1.81	1.81	1.81	1.81	1.82	1.81	1.81	1.82	1.81	1.82	1.86	1.91	1.85	1.80	1.91	1.82								
Jan 21	1.83	1.84	1.85	1.86	1.85	1.85	S	1.85	1.85	1.85	1.84	1.85	1.84	1.84	1.84	1.83	1.84	1.84	1.86	1.89	1.89	2.00	2.02	1.87	1.83	2.02	1.86								
Jan 22	1.89	1.87	1.86	1.87	1.88	S	1.85	1.88	1.88	1.88	1.88	1.87	1.86	1.86	1.86	1.86	1.85	1.85	1.84	1.82	1.82	1.82	1.82	1.83	1.82	1.89	1.86								
Jan 23	1.83	1.84	1.84	1.83	S	1.83	1.84	1.84	1.85	1.85	1.86	1.86	1.85	1.86	1.85	1.84	1.84	1.84	1.85	1.84	1.85	1.85	1.86	1.85	1.83	1.86	1.85								
Jan 24	1.85	1.84	1.84	S	1.85	1.88	1.86	1.86	1.86	1.86	1.87	1.86	1.86	1.86	1.87	1.86	1.86	1.88	1.90	1.88	1.89	1.90	1.91	1.92	1.84	1.92	1.87								
Jan 25	1.93	1.94	S	1.94	1.94	1.94	1.94	1.93	1.94	1.94	1.93	1.93	1.92	1.93	1.91	1.92	1.93	1.93	1.95	1.95	1.93	1.90	1.91	1.91	1.90	1.95	1.93								
Jan 26	1.98	S	1.98	1.97	1.94	1.93	1.94	1.90	1.90	1.89	1.92	1.91	1.89	1.89	1.88	1.89	1.91	1.92	1.92	1.91	1.91	1.90	1.90	1.93	1.88	1.98	1.92								
Jan 27	S	1.92	1.90	1.90	1.91	1.91	1.90	1.89	1.89	1.89	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.89	1.89	1.88	1.88	S	1.88	1.92	1.90									
Jan 28	1.88	1.88	1.88	1.88	1.89	1.88	1.89	1.89	1.88	1.89	1.96	1.94	1.91	1.93	1.90	1.90	1.90	1.90	1.93	2.01	1.98	1.94	S	1.91	1.88	2.01	1.91								
Jan 29	1.90	1.90	1.90	1.91	1.91	1.92	1.93	1.93	1.95	1.96	1.97	1.98	1.98	1.98	1.98	1.98	1.98	1.99	2.00	2.00	1.97	S	2.02	2.01	1.90	2.02	1.96								
Jan 30	1.98	1.97	1.99	1.99	2.02	2.02	2.03	2.06	2.05	2.08	2.07	2.06	2.05	2.05	2.06	2.01	2.09	2.07	2.06	2.07	S	2.07	2.10	2.09	1.97	2.10	2.05								
Jan 31	2.06	2.04	2.10	2.04	2.05	2.10	2.08	2.16	2.12	2.12	2.09	2.05	2.03	2.03	2.02	2.09	2.09	2.08	2.02	S	1.97	1.96	1.96	1.96	1.96	2.16	2.05								
Diurnal Maximum	2.06	2.04	2.10	2.04	2.39	2.43	2.33	2.28	2.51	2.12	2.09	2.06	2.05	2.05	2.06	2.09	2.09	2.08	2.06	2.18	2.07	2.11	2.10	2.10											
Diurnal Average	1.91	1.89	1.89	1.90	1.92	1.92	1.91	1.92	1.93	1.91	1.91	1.90	1.90	1.89	1.89	1.89	1.90	1.89	1.90	1.91	1.90	1.91	1.91	1.91											
C	Monthly Calibration								S	Daily Zero-Span Check								Q	Quality Assurance																
K	Collection Error								N	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.																																			

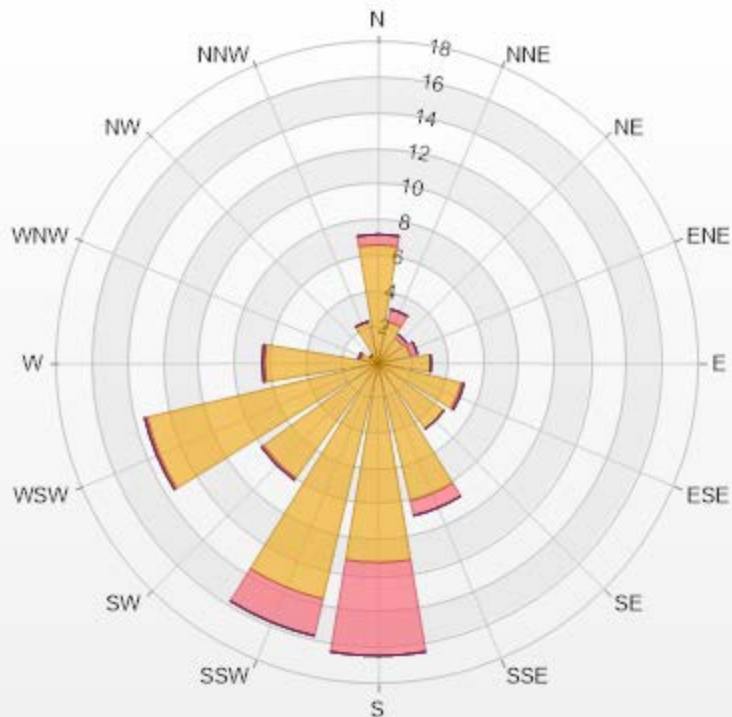
Timeseries Chart of Hourly Average for CH4 - Reno Station





Wind: PRAMP RENO Poll.: PRAMP RENO-CH4[ppm] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.03% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	6.65	0.57	0	0	0	7.22
NNE	2.4	0.71	0	0	0	3.11
NE	1.7	0.28	0	0	0	1.98
ENE	1.84	0.42	0	0	0	2.26
E	2.97	0	0	0	0	2.97
ESE	4.81	0.14	0	0	0	4.95
SE	4.53	0	0	0	0	4.53
SSE	7.92	0.85	0	0	0	8.77
S	11.17	5.23	0	0	0	16.4
SSW	13.58	2.12	0	0	0	15.7
SW	7.92	0.14	0	0	0	8.06
WSW	13.3	0.14	0	0	0	13.44
W	6.36	0.14	0	0	0	6.5
WNW	0.99	0.14	0	0	0	1.13
NW	0.57	0	0	0	0	0.57
NNW	2.4	0	0	0	0	2.4
Summary	89.11	10.88	0	0	0	100



PRAMP-202101

Page 133 of 228

% Icon Classes (ppm)

89

0-2

11

2-5

0

5-10

0

10-20

0

>20.0



PEACE RIVER AREA MONITORING PROGRAM

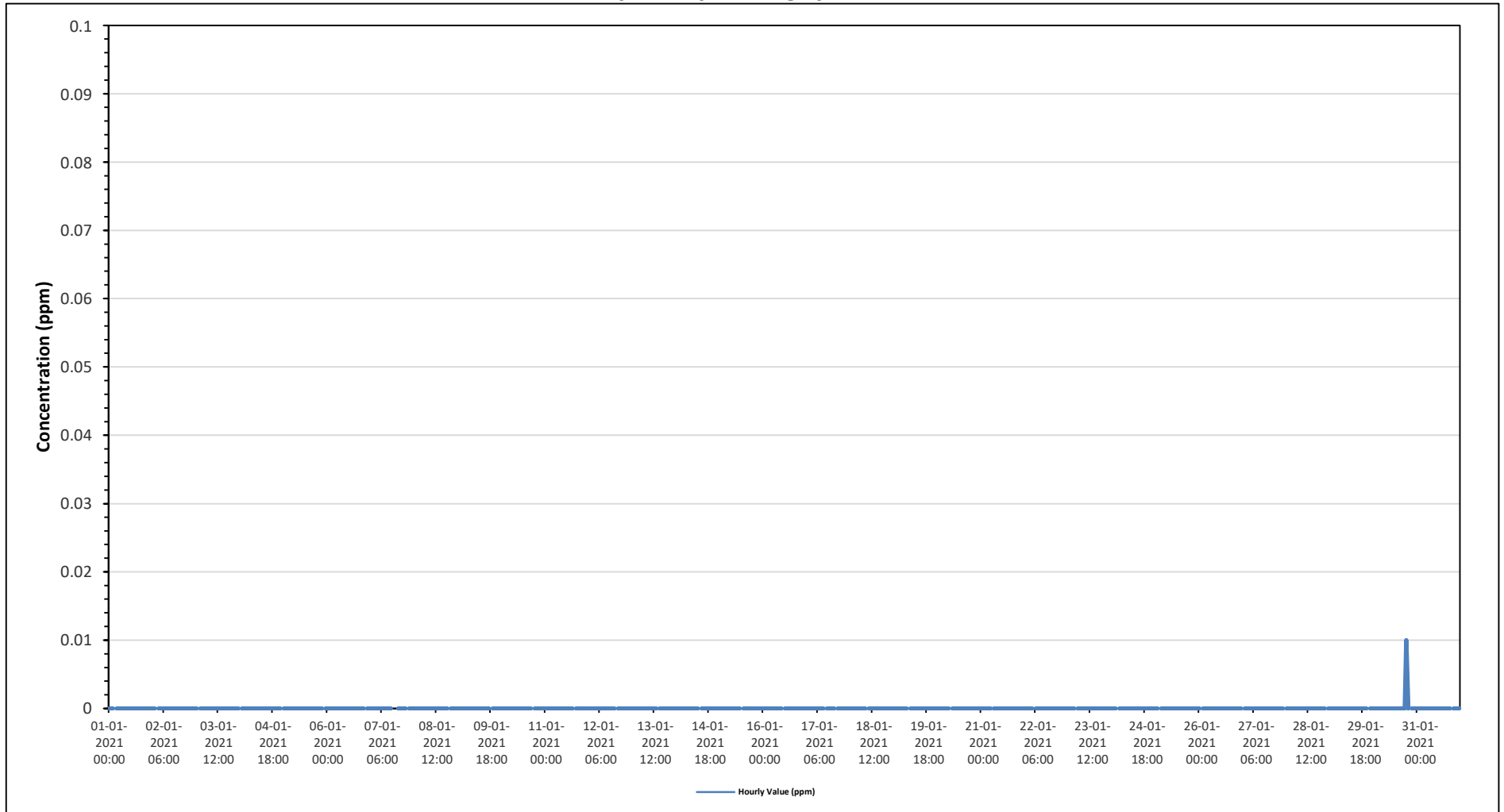
Reno Station - January 2021

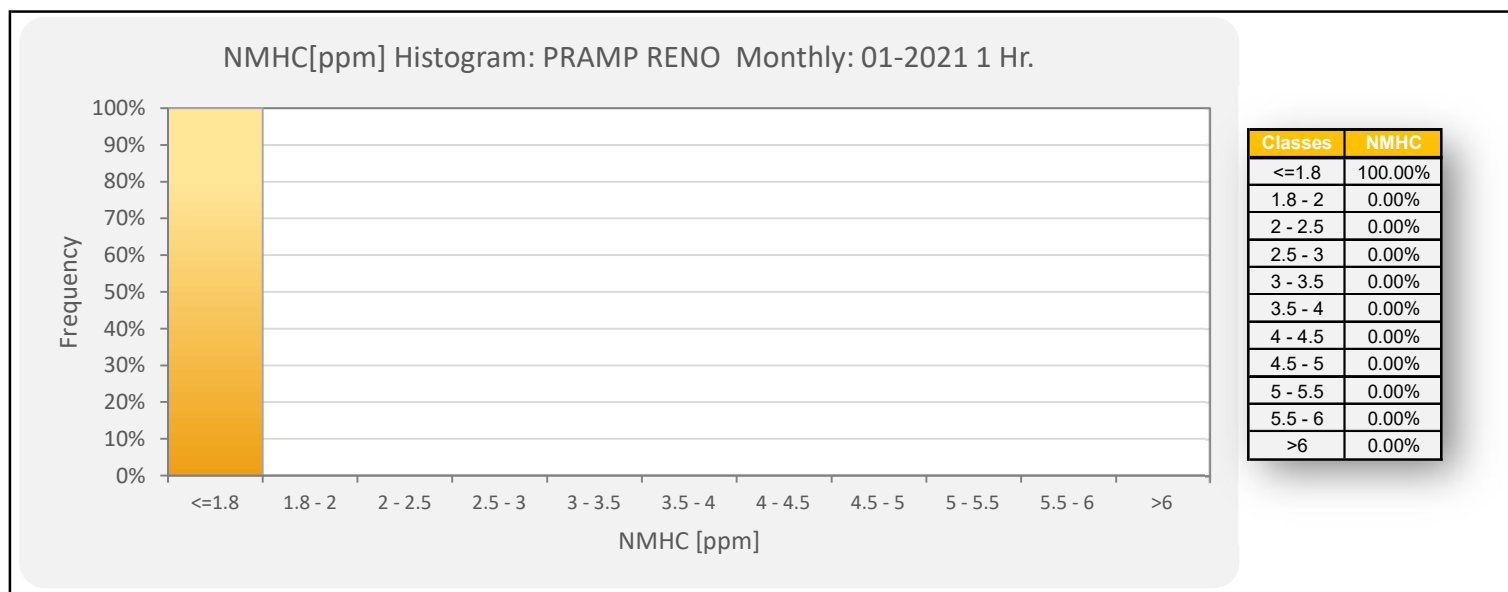
Summary of Hourly Averages

NON-METHANE HYDROCARBONS (NMHC) in ppm

Maximum Hourly Value:										0.01 ppm on January 30 at hour 18										Hours in Service:										744									
Maximum Daily Value:										0.00 ppm on January 30										Hours of Data:										707									
Minimum Hourly Value:										0.00 ppm on January 1 at hour 0										Hours of Missing Data:										1									
Minimum Daily Value:										0.00 ppm on January 1										Hours of Calibration:										36									
Monthly Average:										0.00 ppm										Operational Uptime:										99.9									
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average													
Jan 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
Jan 2	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	0.00	0.00										
Jan 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
Jan 4	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	S	0.00	0.00	0.00										
Jan 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	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00										
Jan 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	0.00	S	0.00	0.00	0.00	0.00	0.00										
Jan 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	C	C	C	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										
Jan 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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
Jan 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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
Jan 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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
Jan 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	0.00	0.00										
Jan 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	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										
Jan 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	0.00	0.00										
Jan 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
Jan 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	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										
Jan 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
Jan 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	NRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
Jan 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	0.00	0.00										
Jan 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	0.00	0.00										
Jan 20	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	0.00	0.00										
Jan 21	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	0.00	0.00										
Jan 22	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	0.00	0.00										
Jan 23	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	0.00	0.00										
Jan 24	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	0.00	0.00										
Jan 25	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	0.00	0.00										
Jan 26	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	0.00	0.00										
Jan 27	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	S	0.00	0.00	0.00										
Jan 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	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00										
Jan 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	0.00	S	0.00	0.00	0.00	0.00	0.00										
Jan 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	0.01	0.00	S	0.00	0.00	0.00	0.00	0.00	0.01	0.00										
Jan 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	S	0.00	0.00	0.00	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	0.01	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00										
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance																						
K	Collection Error							N	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.																																							

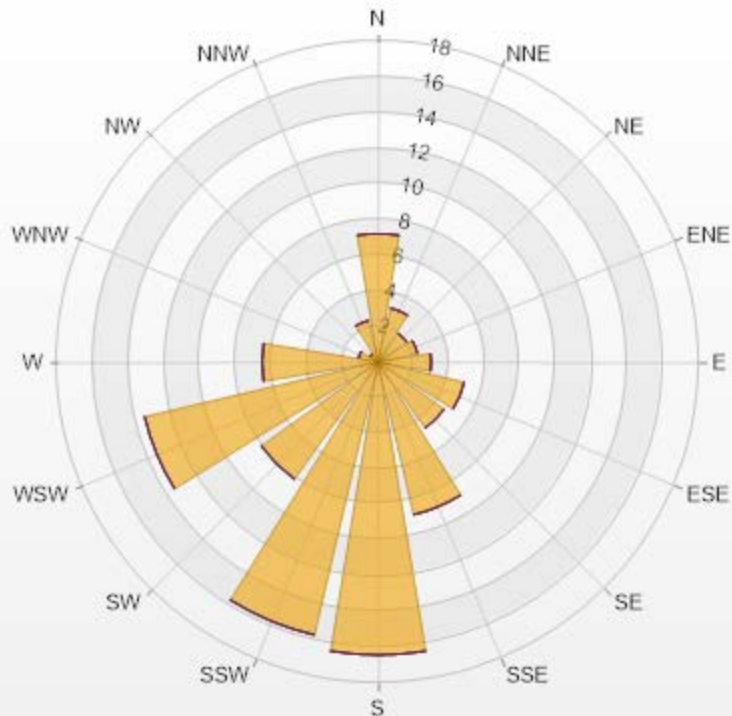
Timeseries Chart of Hourly Average for NMHC - Reno Station





Wind: PRAMP RENO Poll.: PRAMP RENO-NMHC[ppm] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.03% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-0.9	0.9-2	>2.0	Total
N	7.21	0	0	0	0	7.21
NNE	3.11	0	0	0	0	3.11
NE	1.98	0	0	0	0	1.98
ENE	2.26	0	0	0	0	2.26
E	2.97	0	0	0	0	2.97
ESE	4.95	0	0	0	0	4.95
SE	4.53	0	0	0	0	4.53
SSE	8.77	0	0	0	0	8.77
S	16.41	0	0	0	0	16.41
SSW	15.7	0	0	0	0	15.7
SW	8.06	0	0	0	0	8.06
WSW	13.44	0	0	0	0	13.44
W	6.51	0	0	0	0	6.51
WNW	1.13	0	0	0	0	1.13
NW	0.57	0	0	0	0	0.57
NNW	2.4	0	0	0	0	2.4
Summary	100	0	0	0	0	100



PRAMP-202101

Page 138 of 228

% Icon Classes (ppm)

100 0-0.1

0 0.1-0.3

0 0.3-0.9

0 0.9-2

0 >2.0



PEACE RIVER AREA MONITORING PROGRAM

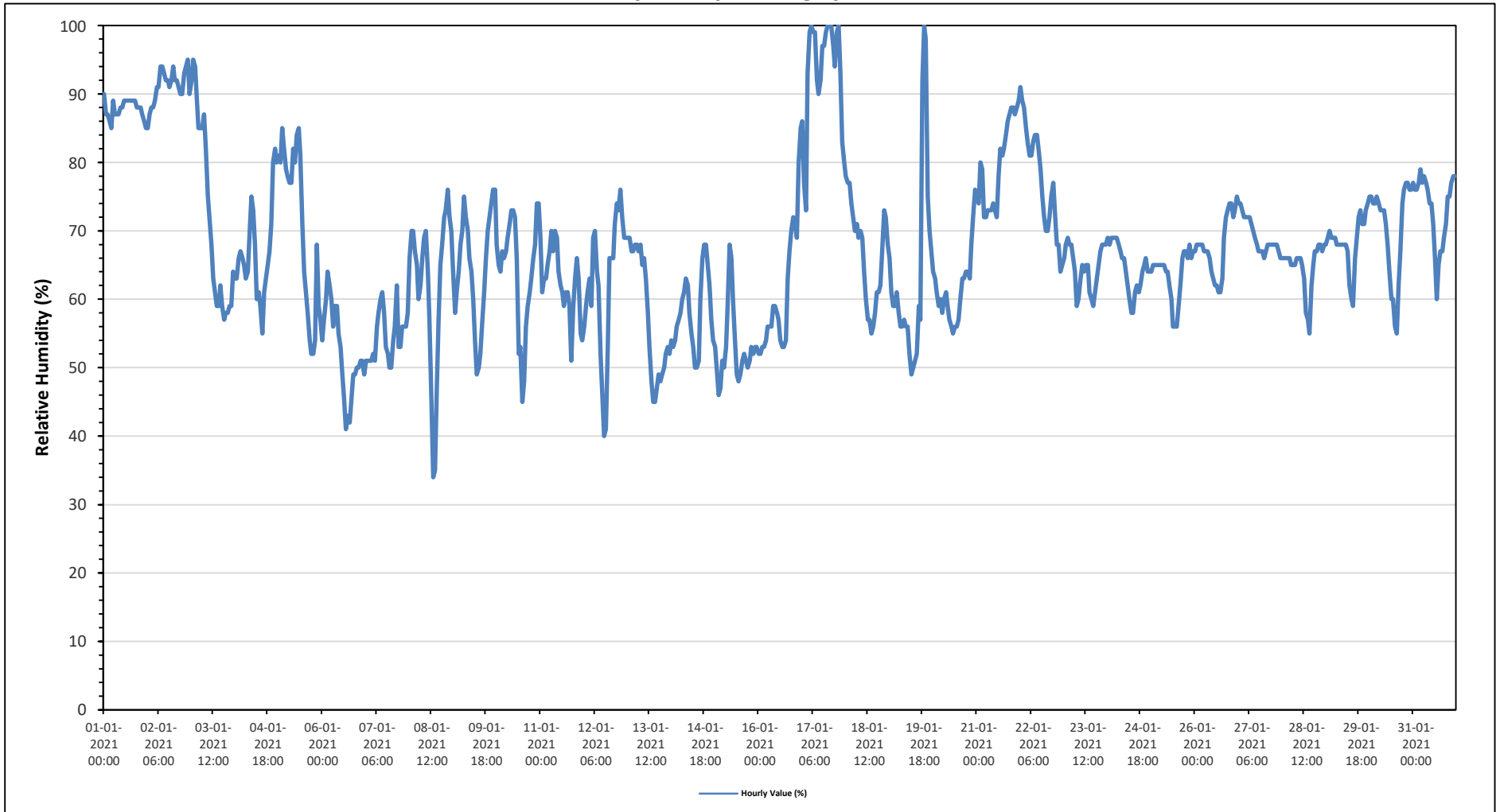
Reno Station - January 2021

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

Maximum Hourly Value:			100	%	on January 17 at hour 5										Hours in Service:			744									
Maximum Daily Value:			93.3	%	on January 17										Hours of Data:			744									
Minimum Hourly Value:			34	%	on January 8 at hour 13										Hours of Missing Data:			0									
Minimum Daily Value:			52.3	%	on January 6										Hours of Calibration:			0									
Monthly Average:			67.4	%											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
Jan 1	90	87	87	86	85	89	87	87	87	88	88	89	89	89	89	89	89	89	88	88	88	87	86	85	85	90	87.8
Jan 2	85	87	88	88	89	91	91	94	94	93	92	92	91	92	94	92	92	91	90	90	93	94	95	90	85	95	91.2
Jan 3	92	95	94	89	85	85	85	87	82	75	72	68	63	61	59	59	62	59	57	58	58	59	59	64	57	95	72.0
Jan 4	63	63	66	67	66	65	63	64	69	75	73	68	60	61	59	55	61	63	65	67	71	80	82	80	55	82	66.9
Jan 5	81	80	85	82	79	78	77	77	82	80	84	85	81	71	64	61	58	54	52	52	54	68	59	57	52	85	70.9
Jan 6	54	57	60	64	62	60	56	59	59	55	53	49	46	41	43	42	45	49	49	50	50	51	51	49	41	64	52.3
Jan 7	51	51	51	51	52	51	56	58	60	61	58	53	52	50	50	54	56	62	53	53	56	56	56	58	50	62	54.5
Jan 8	66	70	70	67	65	60	62	66	69	70	64	57	45	34	35	47	57	65	68	72	73	76	72	70	34	76	62.5
Jan 9	64	58	61	64	68	70	75	72	70	66	64	60	54	49	50	52	57	61	66	70	72	74	76	76	49	76	64.5
Jan 10	68	65	64	67	66	67	69	71	73	73	72	66	52	53	45	48	56	59	61	63	66	68	74	74	45	74	64.2
Jan 11	69	61	63	63	65	67	70	67	70	69	64	62	61	59	61	61	59	51	59	63	66	63	55	54	51	70	62.6
Jan 12	56	59	61	63	59	69	70	64	62	52	46	40	41	54	66	66	66	71	74	73	76	72	69	69	40	76	62.4
Jan 13	69	69	67	67	68	68	67	68	65	66	63	58	53	48	45	45	47	49	48	49	50	52	53	52	45	69	57.8
Jan 14	54	53	54	56	57	58	60	61	63	62	58	55	53	50	50	51	60	66	68	68	65	62	57	54	50	68	58.1
Jan 15	53	50	46	47	51	50	53	59	68	66	60	54	49	48	49	51	52	51	50	51	53	52	53	53	46	68	52.9
Jan 16	52	52	53	53	54	56	56	56	59	59	58	57	54	53	53	54	63	67	70	72	71	69	80	85	52	85	60.7
Jan 17	86	77	73	93	99	100	99	99	92	90	92	97	97	99	100	100	100	97	94	99	100	93	83	80	73	100	93.3
Jan 18	78	77	77	74	72	70	71	69	70	69	64	60	57	57	55	56	58	61	61	62	67	73	72	68	55	78	66.6
Jan 19	66	61	59	59	61	58	56	56	57	56	56	52	49	50	51	52	59	57	92	100	98	75	70	67	49	100	63.2
Jan 20	64	63	61	59	60	58	60	61	59	57	56	55	56	56	57	60	63	63	64	64	63	68	72	76	55	76	61.5
Jan 21	75	74	80	79	72	72	73	73	73	74	73	72	78	82	81	82	84	86	87	88	88	87	88	89	72	89	79.6
Jan 22	91	89	88	85	83	81	81	83	84	84	82	79	75	72	70	70	72	75	77	73	68	68	64	65	64	91	77.5
Jan 23	66	68	69	68	68	66	64	59	60	63	65	64	65	65	61	60	59	61	63	65	67	68	68	68	59	69	64.6
Jan 24	69	68	69	69	69	69	68	67	66	66	64	62	60	58	58	61	62	61	62	64	65	66	64	64	58	69	64.6
Jan 25	64	65	65	65	65	65	65	65	65	64	64	62	60	56	56	59	62	66	67	67	66	68	66	67	56	68	63.5
Jan 26	67	68	68	68	68	67	67	67	66	64	63	62	62	61	61	63	69	72	73	74	74	72	73	75	61	75	67.7
Jan 27	74	74	73	72	72	72	72	71	70	69	68	67	67	67	66	67	68	68	68	68	68	68	67	66	66	74	69.3
Jan 28	66	66	66	66	66	65	65	65	66	66	66	65	63	58	57	55	62	65	67	67	68	68	67	68	55	68	64.7
Jan 29	68	69	70	69	69	69	68	68	68	68	68	68	67	62	60	59	66	69	72	73	71	71	73	74	59	74	68.3
Jan 30	75	75	74	74	75	74	73	73	73	71	68	64	60	60	56	55	62	67	74	76	77	77	76	76	55	77	70.2
Jan 31	77	76	76	77	79	77	78	77	76	74	74	71	66	60	65	67	67	69	71	75	75	77	78	78	60	79	73.3
Diurnal Maximum	92	95	94	93	99	100	99	99	94	93	92	97	97	99	100	100	100	97	94	100	100	94	95	90			
Diurnal Average	69.5	68.6	69.0	69.4	69.3	69.3	69.6	69.8	70.2	69.2	67.4	64.9	62.0	60.5	60.2	61.1	64.3	65.9	68.1	69.5	70.2	70.4	69.6	69.4			
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance										
K	Collection Error							N	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.																											

Timeseries Chart of Hourly Average for RH - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

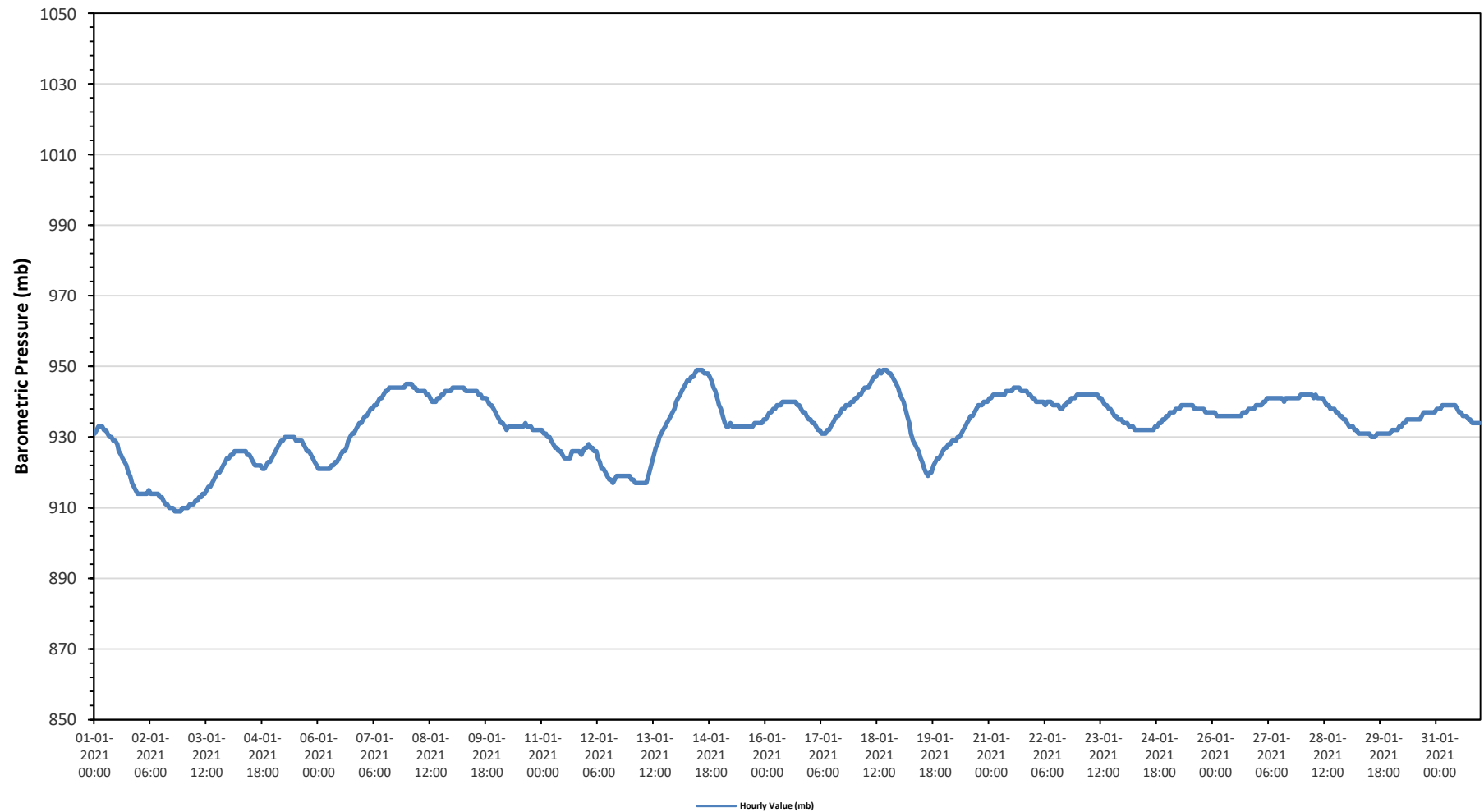
Reno Station - January 2021

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

Maximum Hourly Value:										949	mb	on January 14 at hour 11										Hours in Service:										744									
Maximum Daily Value:										946	mb	on January 18										Hours of Data:										744									
Minimum Hourly Value:										909	mb	on January 2 at hour 19										Hours of Missing Data:										0									
Minimum Daily Value:										912	mb	on January 2										Hours of Calibration:										0									
Monthly Average:										933	mb											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																	
Jan 1	931	932	933	933	933	932	932	931	930	930	929	929	928	926	925	924	923	922	920	919	917	916	915	914	914	933	926.0														
Jan 2	914	914	914	914	914	915	914	914	914	914	914	913	913	912	911	911	910	910	910	909	909	909	909	910	909	915	912.1														
Jan 3	910	910	910	911	911	911	912	912	913	913	914	914	915	916	916	917	918	919	920	920	921	922	923	923	924	910	924	915.5													
Jan 4	924	925	925	926	926	926	926	926	926	926	925	925	924	923	922	922	922	922	921	921	922	923	923	924	921	926	924.0														
Jan 5	925	926	927	928	929	929	930	930	930	930	930	930	929	929	929	929	928	927	926	926	925	924	923	922	922	930	927.5														
Jan 6	921	921	921	921	921	921	921	922	922	923	923	924	925	926	926	927	929	930	931	931	932	933	934	934	921	934	925.8														
Jan 7	935	936	936	937	938	938	939	939	940	941	941	942	943	943	944	944	944	944	944	944	944	944	944	945	935	945	941.2														
Jan 8	945	945	945	944	944	943	943	943	943	943	942	942	941	940	940	940	941	941	942	942	943	943	943	943	940	945	942.5														
Jan 9	944	944	944	944	944	944	944	943	943	943	943	943	943	943	942	942	941	941	941	940	939	939	938	937	937	944	942.0														
Jan 10	936	935	934	934	933	932	933	933	933	933	933	933	933	933	933	934	933	933	933	932	932	932	932	932	932	936	933.1														
Jan 11	932	931	931	930	930	929	928	927	927	926	926	925	924	924	924	924	926	926	926	926	925	926	926	927	924	932	926.9														
Jan 12	927	928	927	927	926	926	924	923	921	921	920	919	918	918	917	918	919	919	919	919	919	919	919	919	917	928	921.3														
Jan 13	918	918	917	917	917	917	917	917	917	919	921	923	925	927	928	930	931	932	933	934	935	936	937	938	917	938	925.2														
Jan 14	940	941	942	943	944	945	946	946	947	947	948	949	949	949	949	948	948	948	947	946	944	943	941	939	939	949	945.4														
Jan 15	938	936	934	933	933	934	933	933	933	933	933	933	933	933	933	933	933	933	934	934	934	934	934	935	933	938	933.7														
Jan 16	935	936	937	937	938	938	939	939	939	940	940	940	940	940	940	940	939	939	938	937	937	936	935	935	935	940	938.3														
Jan 17	935	934	934	933	932	932	931	931	931	932	932	933	934	935	936	936	937	938	938	939	939	939	940	940	931	940	935.0														
Jan 18	941	941	942	942	943	944	944	944	945	946	947	947	948	949	948	949	949	949	948	948	947	946	945	944	941	949	945.7														
Jan 19	942	941	940	938	936	934	931	929	928	927	926	924	923	921	920	919	920	920	922	923	924	924	925	926	919	942	927.6														
Jan 20	927	927	928	928	929	929	929	930	930	931	932	933	934	935	936	936	937	938	939	939	939	940	940	940	927	940	933.6														
Jan 21	941	941	942	942	942	942	942	942	942	943	943	943	943	944	944	944	944	943	943	943	943	942	942	941	941	944	942.5														
Jan 22	941	940	940	940	940	940	939	940	940	940	939	939	939	938	938	938	939	939	940	940	941	941	941	942	938	942	939.8														
Jan 23	942	942	942	942	942	942	942	942	942	942	942	941	941	940	939	939	938	938	937	936	936	935	935	935	935	942	939.7														
Jan 24	934	934	934	933	933	933	932	932	932	932	932	932	932	932	932	932	932	933	933	934	934	935	935	936	932	936	933.0														
Jan 25	936	937	937	937	938	938	938	939	939	939	939	939	939	939	938	938	938	938	938	938	937	937	937	937	936	939	937.9														
Jan 26	937	937	936	936	936	936	936	936	936	936	936	936	936	936	936	936	937	937	937	938	938	938	938	939	936	939	936.7														
Jan 27	939	939	939	940	940	941	941	941	941	941	941	941	941	941	940	941	941	941	941	941	941	941	941	942	939	942	940.7														
Jan 28	942	942	942	942	942	942	941	942	941	941	941	941	941	940	939	939	938	938	937	937	937	936	936	935	935	942	939.5														
Jan 29	934	933	933	933	932	932	931	931	931	931	931	931	931	930	930	930	931	931	931	931	931	931	931	931	930	934	931.3														
Jan 30	932	932	932	932	933	933	934	934	935	935	935	935	935	935	935	935	936	937	937	937	937	937	937	937	932	937	934.9														
Jan 31	938	938	938	939	939	939	939	939	939	939	939	938	937	937	936	936	936	935	935	934	934	934	934	934	934	939	936.9														
Diurnal Maximum	945	945	945	944	944	945	946	946	947	947	948	949	949	949	949	949	949	949	948	948	947	946	945	945																	
Diurnal Average	933	933	933	933	933	933	933	933	933	933	933	933	933	933	933	933	933	934	934	934	933	933	933	933																	
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance																								
K	Collection Error							N	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.																																									

Timeseries Chart of Hourly Average for BP - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

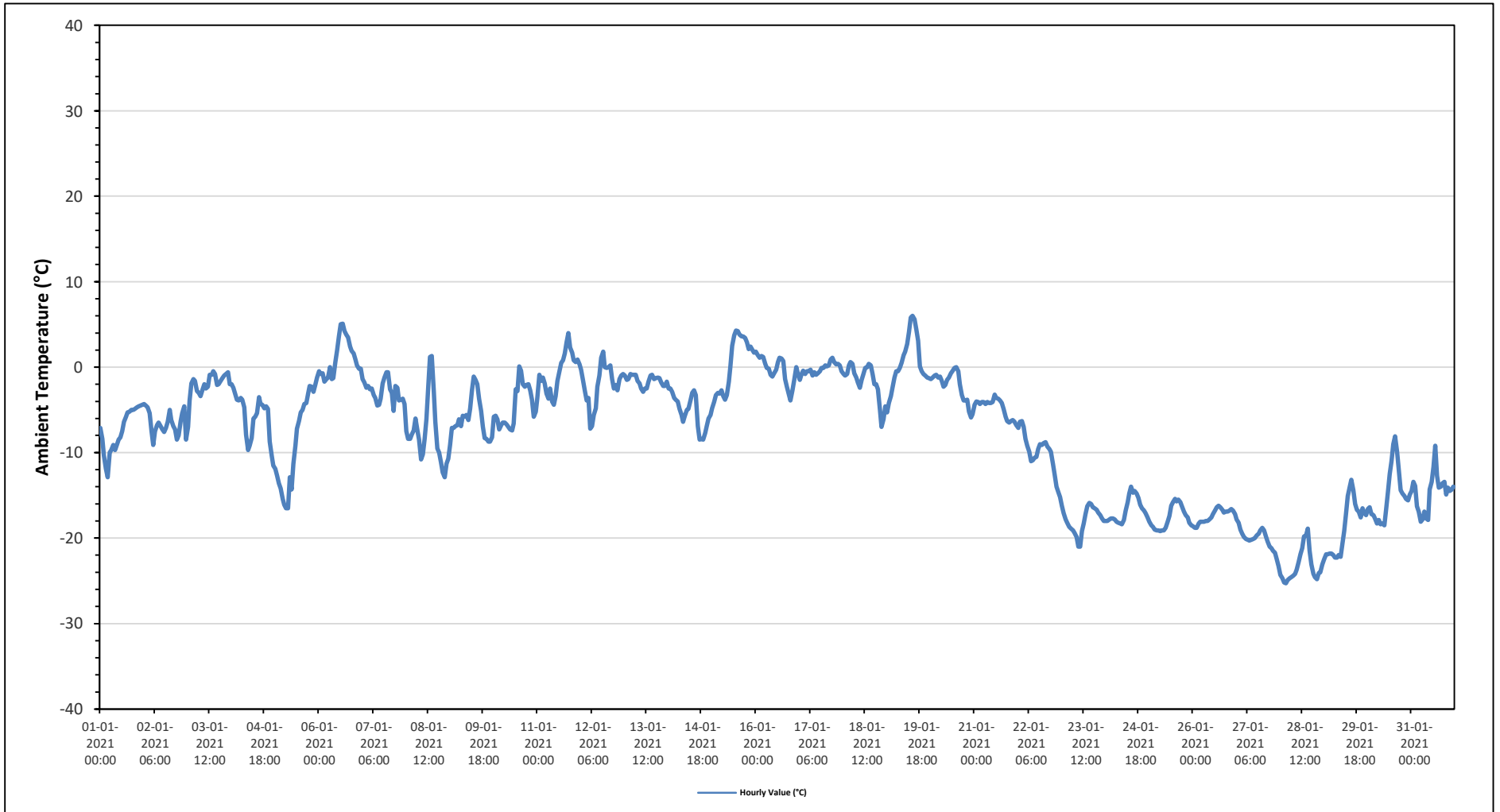
Reno Station - January 2021

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

Maximum Hourly Value:		6.0	°C	on January 19 at hour 14										Hours in Service:		744											
Maximum Daily Value:		1.1	°C	on January 6										Hours of Data:		744											
Minimum Hourly Value:		-25.3	°C	on January 28 at hour 3										Hours of Missing Data:		0											
Minimum Daily Value:		-23.3	°C	on January 28										Hours of Calibration:		0											
Monthly Average:		-7.7	°C											Operational Uptime:		100.0											
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
Jan 1	-7.1	-8.4	-10.3	-11.9	-12.9	-10	-9.7	-9.1	-9.7	-9.1	-8.5	-8.2	-7.5	-6.4	-5.8	-5.3	-5.2	-5	-5	-4.9	-4.7	-4.6	-4.5	-4.4	-12.9	-4.4	-7.4
Jan 2	-4.3	-4.5	-4.7	-5.4	-7.4	-9.1	-7.5	-6.8	-6.5	-6.9	-7.3	-7.6	-7.1	-6.4	-5	-6.2	-6.9	-7.3	-8.5	-8	-6.3	-5.4	-4.6	-8.5	-9.1	-4.3	-6.6
Jan 3	-7	-3.9	-1.9	-1.4	-1.6	-2.8	-3	-3.4	-2.7	-2	-2.5	-2.3	-0.9	-0.9	-0.5	-0.8	-2.1	-2	-1.6	-1.3	-1	-0.8	-0.6	-2	-7.0	-0.5	-2.0
Jan 4	-2	-2.4	-3.2	-3.8	-3.9	-3.6	-3.8	-4.7	-7.9	-9.7	-9.2	-8.3	-6	-5.8	-5.4	-3.5	-4.3	-4.4	-4.8	-4.6	-4.9	-8.7	-10.4	-11.5	-11.5	-2.0	-5.7
Jan 5	-11.9	-12.7	-13.6	-14.2	-15.4	-16.1	-16.5	-16.5	-12.9	-14.3	-11.3	-9.2	-7.2	-6.3	-5.3	-5	-4.3	-4.2	-3.1	-2.2	-2.3	-2.9	-2.1	-1.2	-16.5	-1.2	-8.8
Jan 6	-0.5	-0.8	-0.7	-1.7	-1.4	-1.2	0	-1.4	-1.3	0.6	2	3.6	5	5.1	4.2	3.8	3.5	2.4	1.9	1.6	0.9	0.2	-0.2	-0.2	-1.7	5.1	1.1
Jan 7	-1.4	-1.8	-2.4	-2.2	-2.6	-2.5	-3.3	-3.6	-4.5	-4.4	-3.7	-1.9	-1.2	-0.6	-0.6	-2.6	-3	-5.1	-2.2	-2.4	-3.9	-3.8	-3.7	-4.3	-5.1	-0.6	-2.8
Jan 8	-7.5	-8.4	-8.4	-7.9	-7.4	-6	-7.3	-8.5	-10.8	-10.2	-8.4	-6.1	-2.4	1.2	1.3	-2.8	-6.4	-9.5	-10	-11.1	-12.3	-12.9	-11.3	-10.7	-12.9	1.3	-7.7
Jan 9	-9.1	-7.1	-7.1	-6.9	-6.8	-6.1	-6.9	-5.7	-5.8	-5.6	-6.2	-4.8	-2.7	-1.1	-1.5	-2	-3.7	-5.1	-7	-8.3	-8.4	-8.7	-8.7	-8.2	-9.1	-1.1	-6.0
Jan 10	-5.8	-5.7	-6.1	-7.3	-6.8	-6.5	-6.5	-6.7	-7	-7.3	-7.4	-6.6	-2.6	-2.8	0.1	-0.4	-2	-2.3	-2.1	-2	-2.7	-3.8	-5.8	-5.2	-7.4	0.1	-4.6
Jan 11	-3.6	-0.9	-1.6	-1.2	-1.9	-3.1	-3.7	-2.5	-4	-4.4	-3.4	-1.6	-0.5	0.5	0.8	1.6	2.9	4	2.3	1.7	0.8	0.6	0.9	0.3	-4.4	4.0	-0.7
Jan 12	-0.3	-1.6	-2.8	-3.9	-3.6	-7.2	-6.9	-5.6	-4.8	-2.3	-1	1.1	1.8	0	-0.1	0	0.2	-1.4	-2.5	-2.1	-2.7	-1.4	-1	-0.8	-7.2	1.8	-2.0
Jan 13	-1	-1.5	-1.4	-0.8	-0.9	-0.9	-0.9	-1.6	-1.9	-2.5	-2.9	-2.5	-2.5	-1.7	-1	-0.9	-1.4	-1.3	-1.2	-1.3	-1.8	-2.2	-2.2	-1.7	-2.9	-0.8	-1.6
Jan 14	-2.5	-2.5	-2.9	-3.6	-3.8	-4	-4.9	-5.6	-6.4	-5.7	-5	-4.9	-3.9	-3	-2.7	-3.3	-6.9	-8.5	-8.4	-8.5	-7.7	-6.9	-6	-5.6	-8.5	-2.5	-5.1
Jan 15	-4.8	-4.1	-3.3	-3	-3.1	-2.7	-3.4	-3.8	-3.3	-1.7	0.1	2.5	3.7	4.3	4.2	3.8	3.6	3.6	3.4	2.9	2.1	2.4	2	1.7	-4.8	4.3	0.3
Jan 16	1.8	1.4	1.1	1.3	1.2	0.4	-0.1	-0.2	-0.9	-1.1	-0.7	-0.3	0.6	1.1	1	0.7	-1.4	-2.3	-3.2	-3.9	-2.7	-1.5	0	-0.7	-3.9	1.8	-0.4
Jan 17	-1.5	-0.8	-0.4	-0.8	-0.5	-0.5	-0.3	-1	-0.6	-0.9	-0.7	-0.5	-0.1	-0.1	0.2	0.1	0.2	0.9	1.1	0.6	0.3	0.4	0.2	-0.5	-1.5	1.1	-0.2
Jan 18	-0.8	-1	-0.8	0.2	0.6	0.4	-0.7	-1.2	-1.8	-2.4	-1.5	-0.8	-0.1	0	0.4	0.2	-0.8	-2	-2	-2.6	-5	-7	-6.1	-4.6	-7.0	0.6	-1.6
Jan 19	-5.3	-4.2	-3.4	-2.3	-1.2	-0.5	-0.5	-0.1	0.5	1.4	1.8	2.7	4.1	5.8	6	5.6	4.4	3.1	0.1	-0.5	-0.8	-1	-1.2	-1.3	-5.3	6.0	0.6
Jan 20	-1.4	-1.2	-1	-0.9	-1.2	-1.1	-1.6	-2.3	-2.1	-1.5	-1.2	-0.7	-0.4	-0.1	0	-0.5	-2	-3.3	-3.9	-3.9	-3.8	-5.2	-5.9	-5.5	-5.9	0.0	-2.1
Jan 21	-4.4	-4	-4.1	-4.3	-4.1	-4.1	-4.3	-4.1	-4.2	-4.2	-4.1	-3.2	-3.6	-3.7	-3.9	-4.2	-4.9	-5.8	-6.3	-6.5	-6.3	-6.2	-6.4	-6.8	-6.8	-3.2	-4.7
Jan 22	-7.1	-6.4	-6.3	-7	-8.4	-9.2	-9.9	-11	-10.9	-10.6	-10.5	-9.6	-9	-9.1	-8.9	-8.8	-9.3	-9.6	-9.9	-11.3	-12.6	-14	-14.6	-15.2	-15.2	-6.3	-10.0
Jan 23	-16.2	-17.1	-17.8	-18.2	-18.7	-18.9	-19.1	-19.4	-19.9	-21	-21	-19.2	-18.3	-17.2	-16.3	-15.9	-16	-16.4	-16.5	-16.7	-17	-17.3	-17.7	-18	-21.0	-15.9	-17.9
Jan 24	-18	-18	-17.8	-17.7	-17.7	-17.8	-18.1	-18.2	-18.3	-18.4	-17.9	-16.8	-15.8	-14.8	-14	-14.7	-14.5	-14.8	-15.3	-16.1	-16.5	-16.8	-17.1	-17.6	-18.4	-14.0	-16.8
Jan 25	-18.1	-18.5	-18.7	-19	-19.1	-19.1	-19.2	-19.1	-19.1	-18.8	-18.1	-17.4	-16.2	-15.8	-15.4	-15.7	-15.5	-15.8	-16.3	-16.9	-17.3	-17.6	-18.2	-18.5	-19.2	-15.4	-17.6
Jan 26	-18.6	-18.8	-18.8	-18.3	-18.1	-18.1	-18.1	-18	-18	-17.8	-17.6	-17.2	-16.8	-16.4	-16.2	-16.4	-16.7	-17	-16.9	-16.9	-16.8	-16.6	-16.8	-17.2	-18.8	-16.2	-17.4
Jan 27	-17.8	-18.2	-19	-19.5	-19.9	-20.1	-20.2	-20.3	-20.2	-20.1	-20	-19.7	-19.5	-19.1	-18.8	-19.1	-19.9	-20.4	-21	-21.2	-21.5	-21.7	-22.5	-23.3	-23.3	-17.8	-20.1
Jan 28	-24.3	-24.7	-25.2	-25.3	-24.9	-24.7	-24.6	-24.4	-24.2	-23.7	-22.8	-21.9	-21.2	-19.8	-19.7	-18.9	-21.5	-23.1	-24.2	-24.6	-24.8	-24.1	-24	-23.1	-25.3	-18.9	-23.3
Jan 29	-22.5	-21.9	-21.9	-21.8	-21.8	-22	-22.3	-22.3	-22	-22.2	-20.7	-19.2	-17.2	-15.1	-14	-13.2	-14.4	-16	-16.7	-16.9	-17.6	-16.5	-17.1	-17.3	-22.5	-13.2	-18.9
Jan 30	-16.6	-16.4	-17.2	-17.3	-17.7	-18.3	-17.9	-18.4	-18.3	-18.5	-16.6	-14.6	-12.5	-11	-9	-8.1	-9.9	-11.8	-14.4	-14.8	-15.1	-15.4	-15.6	-14.9	-18.5	-8.1	-15.0
Jan 31	-14.5	-13.4	-13.9	-16.3	-16.9	-18.1	-17.8	-16.9	-17.7	-17.9	-14.3	-13.4	-11.7	-9.2	-12.7	-14.1	-14	-13.6	-13.4	-14.9	-14.1	-14.5	-14.3	-14	-18.1	-9.2	-14.7
Diurnal Maximum	1.8	1.4	1.1	1.3	1.2	0.4	0.0	-0.1	0.5	1.4	2.0	3.6	5.0	5.8	6.0	5.6	4.4	4.0	3.4	2.9	2.1	2.4	2.0	1.7			
Diurnal Average	-8.2	-8.0	-8.2	-8.5	-8.6	-8.8	-9.0	-9.1	-9.3	-9.1	-8.4	-7.4	-6.2	-5.4	-5.1	-5.4	-6.2	-6.9	-7.3	-7.7	-8.0	-8.2	-8.2	-8.4			
C	Monthly Calibration						S	Daily Zero-Span Check						Q	Quality Assurance												
K	Collection Error						N	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.																											

Timeseries Chart of Hourly Average for AT - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

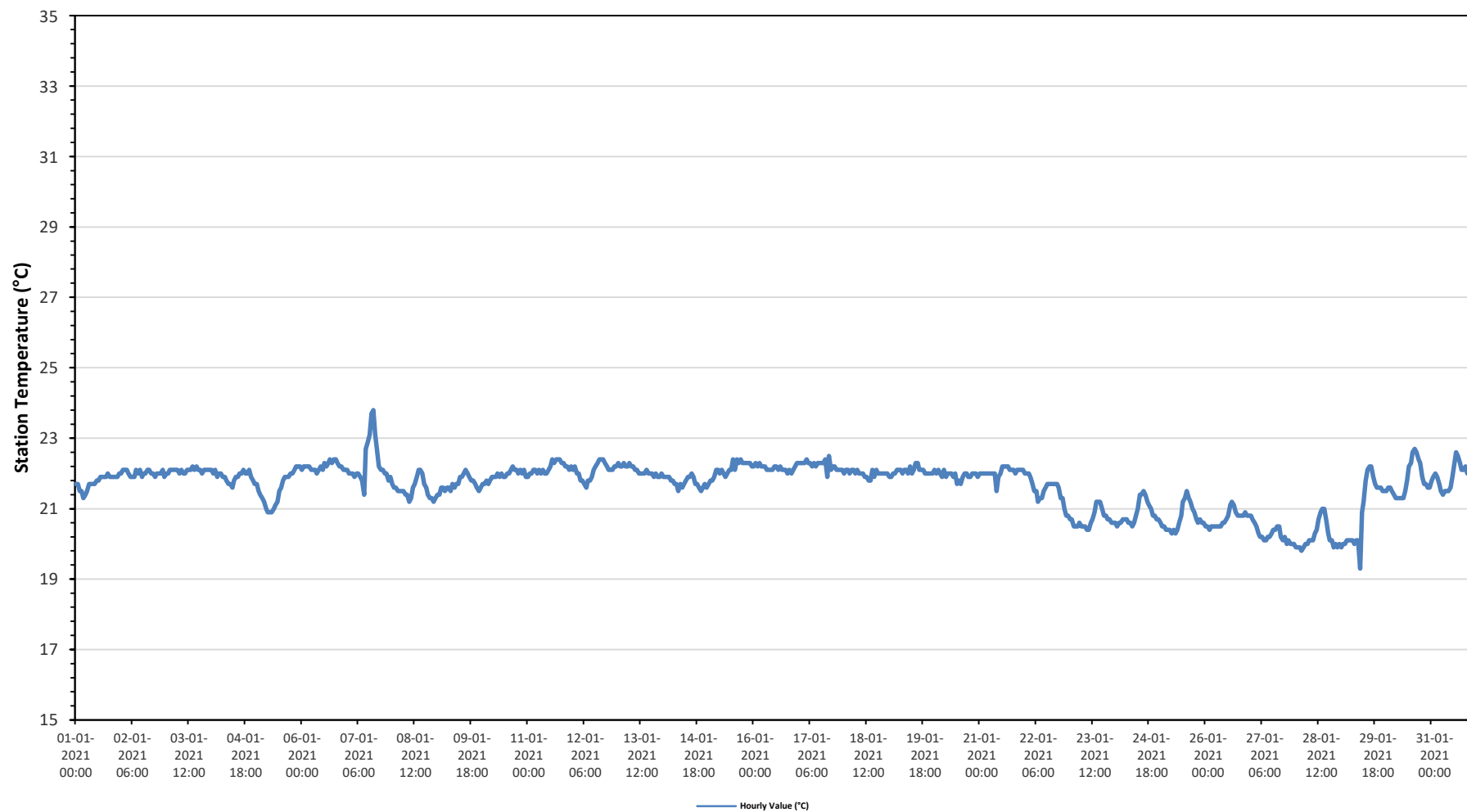
Reno Station - January 2021

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

Maximum Hourly Value:					23.8	°C	on January 7 at hour 14										Hours in Service:					744					
Maximum Daily Value:					22.3	°C	on January 7										Hours of Data:					744					
Minimum Hourly Value:					19.3	°C	on January 29 at hour 10										Hours of Missing Data:					0					
Minimum Daily Value:					20.2	°C	on January 28										Hours of Calibration:					0					
Monthly Average:					21.7	°C											Operational Uptime:					100.0					
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
Jan 1	21.7	21.7	21.5	21.5	21.3	21.4	21.5	21.7	21.7	21.7	21.7	21.8	21.8	21.9	21.9	21.9	21.9	22.0	21.9	21.9	21.9	21.9	21.9	22.0	21.3	22.0	21.8
Jan 2	22.0	22.1	22.1	22.1	22.0	21.9	21.9	21.9	22.1	22.0	22.1	21.9	22.0	22.0	22.1	22.1	22.0	22.0	21.9	22.0	22.0	22.0	22.1	21.9	21.9	22.1	22.0
Jan 3	22.0	22.0	22.1	22.1	22.1	22.1	22.1	22.0	22.1	22.0	22.0	22.1	22.1	22.1	22.2	22.1	22.2	22.1	22.1	22.0	22.1	22.1	22.1	22.1	22.0	22.2	22.1
Jan 4	22.1	22.0	22.1	21.9	22.0	22.0	21.9	21.9	21.8	21.7	21.7	21.6	21.8	21.9	21.9	22.0	22.0	22.1	22.0	22.0	22.1	21.9	21.8	21.7	21.6	22.1	21.9
Jan 5	21.7	21.5	21.4	21.3	21.2	21.0	20.9	20.9	20.9	21.0	21.1	21.2	21.5	21.6	21.8	21.9	21.9	21.9	22.0	22.0	22.1	22.2	22.2	22.2	20.9	22.2	21.6
Jan 6	22.1	22.2	22.2	22.2	22.2	22.1	22.1	22.1	22.0	22.1	22.2	22.1	22.3	22.2	22.3	22.4	22.3	22.4	22.4	22.3	22.2	22.2	22.1	22.1	22.0	22.4	22.2
Jan 7	22.1	22.0	22.0	22.0	21.9	22.0	22.0	21.9	21.8	21.4	22.7	22.9	23.1	23.7	23.8	23.1	22.6	22.2	22.1	22.1	22.0	22.0	21.8	21.9	21.4	23.8	22.3
Jan 8	21.7	21.6	21.6	21.5	21.5	21.5	21.5	21.4	21.4	21.2	21.3	21.6	21.7	21.9	22.1	22.1	22.0	21.7	21.6	21.4	21.3	21.3	21.2	21.3	21.2	22.1	21.6
Jan 9	21.4	21.4	21.6	21.6	21.5	21.6	21.6	21.5	21.7	21.6	21.7	21.7	21.9	21.9	22.0	22.1	22.0	21.9	21.8	21.8	21.7	21.6	21.5	21.6	21.4	22.1	21.7
Jan 10	21.7	21.7	21.8	21.7	21.8	21.9	21.9	21.9	22.0	21.9	22.0	21.9	21.9	22.0	22.0	22.1	22.2	22.1	22.1	22.0	22.1	22.0	22.1	21.9	21.7	22.2	21.9
Jan 11	21.9	22.0	22.0	22.1	22.1	22.0	22.1	22.0	22.1	22.0	22.0	22.1	22.2	22.4	22.3	22.4	22.4	22.4	22.3	22.3	22.2	22.2	22.1	22.2	21.9	22.4	22.2
Jan 12	22.1	22.2	22.0	22.0	21.8	21.8	21.7	21.6	21.8	21.8	21.9	22.1	22.2	22.3	22.4	22.4	22.4	22.3	22.2	22.1	22.1	22.1	22.2	22.2	21.6	22.4	22.1
Jan 13	22.3	22.2	22.2	22.3	22.2	22.2	22.3	22.2	22.2	22.1	22.1	22.0	22.0	22.0	22.0	22.1	22.0	22.0	22.0	21.9	22.0	21.9	21.9	22.0	21.9	22.3	22.1
Jan 14	21.9	21.9	21.9	21.9	21.8	21.8	21.7	21.7	21.5	21.7	21.6	21.7	21.8	21.9	21.9	22.0	21.9	21.7	21.7	21.6	21.5	21.6	21.7	21.6	21.5	22.0	21.8
Jan 15	21.7	21.8	21.8	21.9	22.1	22.1	22.0	22.1	22.0	21.9	22.0	22.1	22.1	22.4	22.1	22.4	22.3	22.4	22.3	22.3	22.3	22.3	22.3	22.2	21.7	22.4	22.1
Jan 16	22.2	22.3	22.2	22.3	22.2	22.2	22.2	22.1	22.1	22.1	22.1	22.2	22.2	22.1	22.2	22.1	22.1	22.1	22.0	22.1	22.0	22.1	22.2	22.3	22.0	22.3	22.2
Jan 17	22.3	22.3	22.3	22.3	22.4	22.3	22.3	22.2	22.3	22.2	22.3	22.3	22.3	22.3	22.4	21.9	22.5	22.1	22.2	22.2	22.1	22.1	22.1	22.1	21.9	22.5	22.2
Jan 18	22.0	22.1	22.1	22.0	22.1	22.1	22.0	22.1	22.0	22.0	22.0	21.9	21.8	21.8	22.1	21.9	22.1	22.0	22.0	22.0	22.0	22.0	22.0	22.0	21.8	22.1	22.0
Jan 19	21.9	21.9	22.0	22.0	22.1	22.1	22.1	22.0	22.1	22.1	22.0	22.2	22.0	22.1	22.3	22.3	22.1	22.1	22.1	22.0	22.0	22.0	22.0	22.0	21.9	22.3	22.1
Jan 20	22.1	22.0	22.1	22.0	21.9	22.1	21.9	22.0	22.0	22.0	21.9	22.0	21.7	21.8	21.7	21.9	22.0	22.0	21.9	21.9	22.0	22.0	22.0	21.9	21.7	22.1	22.0
Jan 21	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	21.5	21.9	22.0	22.2	22.2	22.2	22.2	22.1	22.1	22.1	22.0	22.1	22.1	22.1	22.1	21.5	22.2	22.0
Jan 22	22.0	22.0	22.0	21.9	21.7	21.5	21.5	21.2	21.3	21.3	21.5	21.6	21.7	21.7	21.7	21.7	21.7	21.6	21.3	21.3	21.3	21.0	20.8	20.8	20.8	22.0	21.5
Jan 23	20.7	20.7	20.5	20.5	20.5	20.6	20.5	20.5	20.5	20.5	20.4	20.4	20.6	20.7	20.9	21.2	21.2	21.2	21.0	20.8	20.8	20.7	20.7	20.6	20.4	21.2	20.7
Jan 24	20.6	20.5	20.6	20.6	20.7	20.7	20.7	20.6	20.6	20.5	20.6	20.8	21.0	21.4	21.4	21.5	21.4	21.2	21.1	21.0	20.8	20.8	20.7	20.7	20.5	21.5	20.9
Jan 25	20.6	20.5	20.5	20.4	20.4	20.4	20.3	20.4	20.3	20.4	20.6	20.8	21.2	21.3	21.5	21.3	21.2	21.0	20.9	20.7	20.6	20.7	20.6	20.6	20.3	21.5	20.7
Jan 26	20.5	20.5	20.4	20.5	20.5	20.5	20.5	20.5	20.5	20.6	20.6	20.7	20.8	21.1	21.2	21.1	20.9	20.8	20.8	20.8	20.8	20.9	20.8	20.8	20.4	21.2	20.7
Jan 27	20.8	20.7	20.6	20.5	20.3	20.2	20.2	20.1	20.1	20.2	20.2	20.3	20.4	20.4	20.5	20.5	20.2	20.1	20.2	20.0	20.1	20.0	20.0	20.0	20.0	20.8	20.3
Jan 28	19.9	19.9	19.9	19.8	19.9	20.0	20.0	20.1	20.1	20.1	20.3	20.4	20.7	20.9	21.0	21.0	20.7	20.3	20.1	20.1	19.9	20.0	19.9	20.0	19.8	21.0	20.2
Jan 29	19.9	20.0	20.0	20.1	20.1	20.1	20.1	20.0	20.1	20.1	19.3	20.9	21.2	21.8	22.1	22.2	22.2	21.9	21.7	21.6	21.6	21.5	21.5	19.3	22.2	20.9	
Jan 30	21.5	21.6	21.6	21.5	21.4	21.3	21.3	21.3	21.3	21.3	21.5	21.8	22.2	22.3	22.6	22.7	22.6	22.4	22.3	21.9	21.7	21.7	21.6	21.6	21.3	22.7	21.8
Jan 31	21.8	21.9	22.0	21.9	21.7	21.5	21.4	21.5	21.5	21.5	21.6	21.9	22.2	22.6	22.5	22.3	22.1	22.1	22.2	22.0	22.0	21.9	21.9	22.0	21.4	22.6	21.9
Diurnal Maximum	22.3	22.3	22.3	22.3	22.4	22.3	22.3	22.2	22.3	22.2	22.7	22.9	23.1	23.7	23.8	23.1	22.6	22.4	22.4	22.3	22.3	22.3	22.3	22.3			
Diurnal Average	21.6	21.6	21.6	21.6	21.5	21.5	21.5	21.5	21.5	21.4	21.5	21.7	21.8	21.9	22.0	22.0	21.9	21.8	21.8	21.7	21.7	21.6	21.6	21.6			
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance										
K	Collection Error							N	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.																											

Timeseries Chart of Hourly Average for ST - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

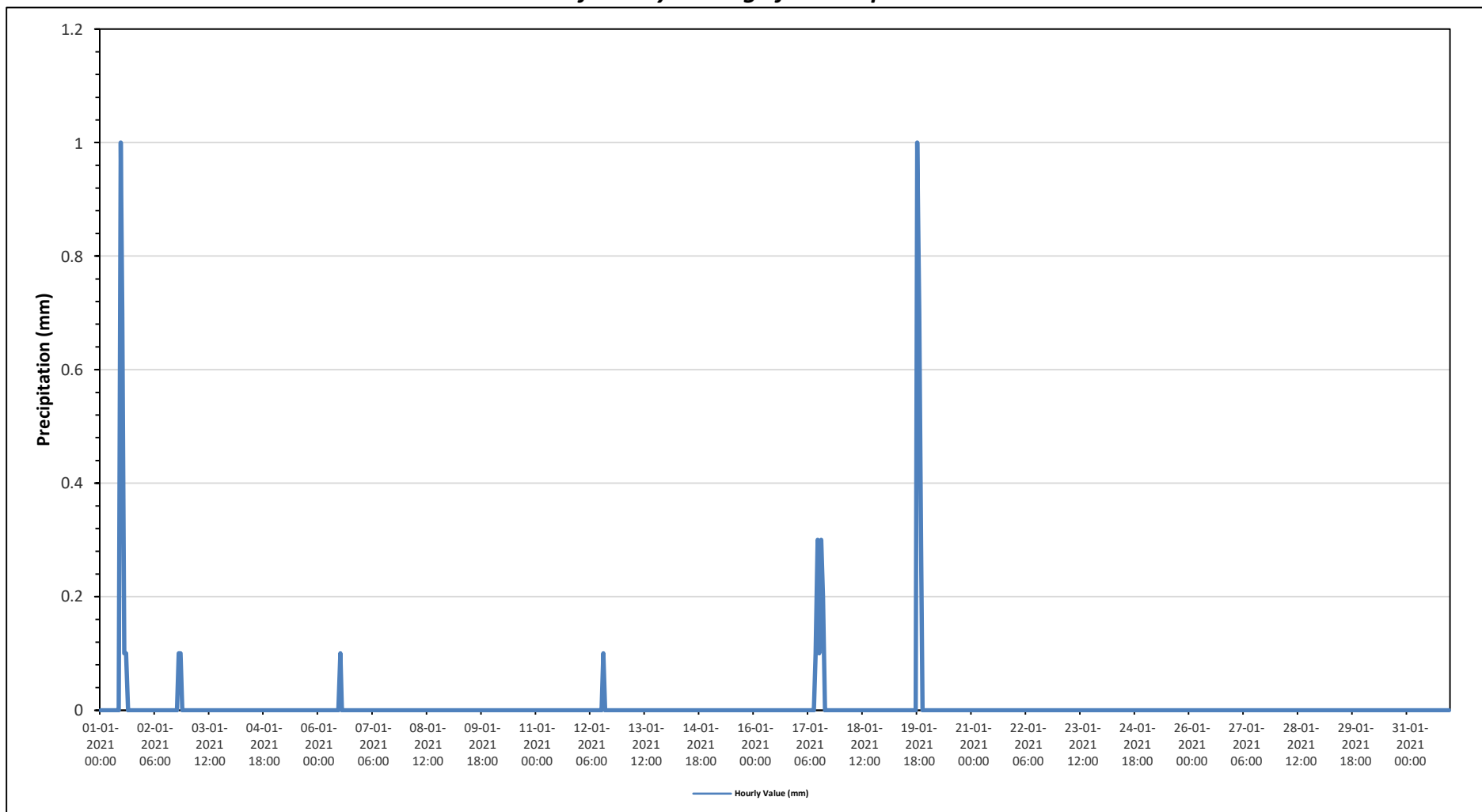
Reno Station - January 2021

Summary of Hourly Averages

PRECIPITATION in mm

Maximum Hourly Value:										1.0 mm on January 1 at hour 11		Hours in Service:										744						
Maximum Daily Value:										2.0 mm on January 19		Hours of Data:										744						
Minimum Hourly Value:										0.0 mm on January 1 at hour 0		Hours of Missing Data:										0						
Minimum Daily Value:										0.0 mm on January 3		Hours of Calibration:										0						
Monthly Total:										5.3 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	
Jan 1	0	0	0	0	0	0	0	0	0	0	0	1	0.7	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0.0	1.0	1.9
Jan 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	0	0	0	0.0	0.1	0.2
Jan 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Jan 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Jan 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Jan 6	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	0.1	0.1
Jan 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Jan 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Jan 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Jan 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Jan 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Jan 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0.0	0.1	0.1
Jan 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Jan 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	0.0	0.0
Jan 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Jan 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	0.0	0.0
Jan 17	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	0.1	0.3	0.2	0	0	0	0	0	0	0	0	0	0.0	0.3	1.0
Jan 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	0.0	0.0
Jan 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.7	0.3	0	0	0	0	0.0	1.0	2.0
Jan 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	0.0	0.0
Jan 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	0.0	0.0
Jan 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	0.0	0.0
Jan 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Jan 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Jan 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	0.0	0.0
Jan 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	0.0	0.0
Jan 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	0.0	0.0
Jan 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	0.0	0.0
Jan 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	0.0	0.0
Jan 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	0.0	0.0
Jan 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	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	0.1	1.0	0.7	0.3	0.2	0.0	0.0	0.0	1.0	0.7	0.3	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	0.0			
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance											
K	Collection Error							N	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.																												

Timeseries Chart of Hourly Average for Precipitation - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

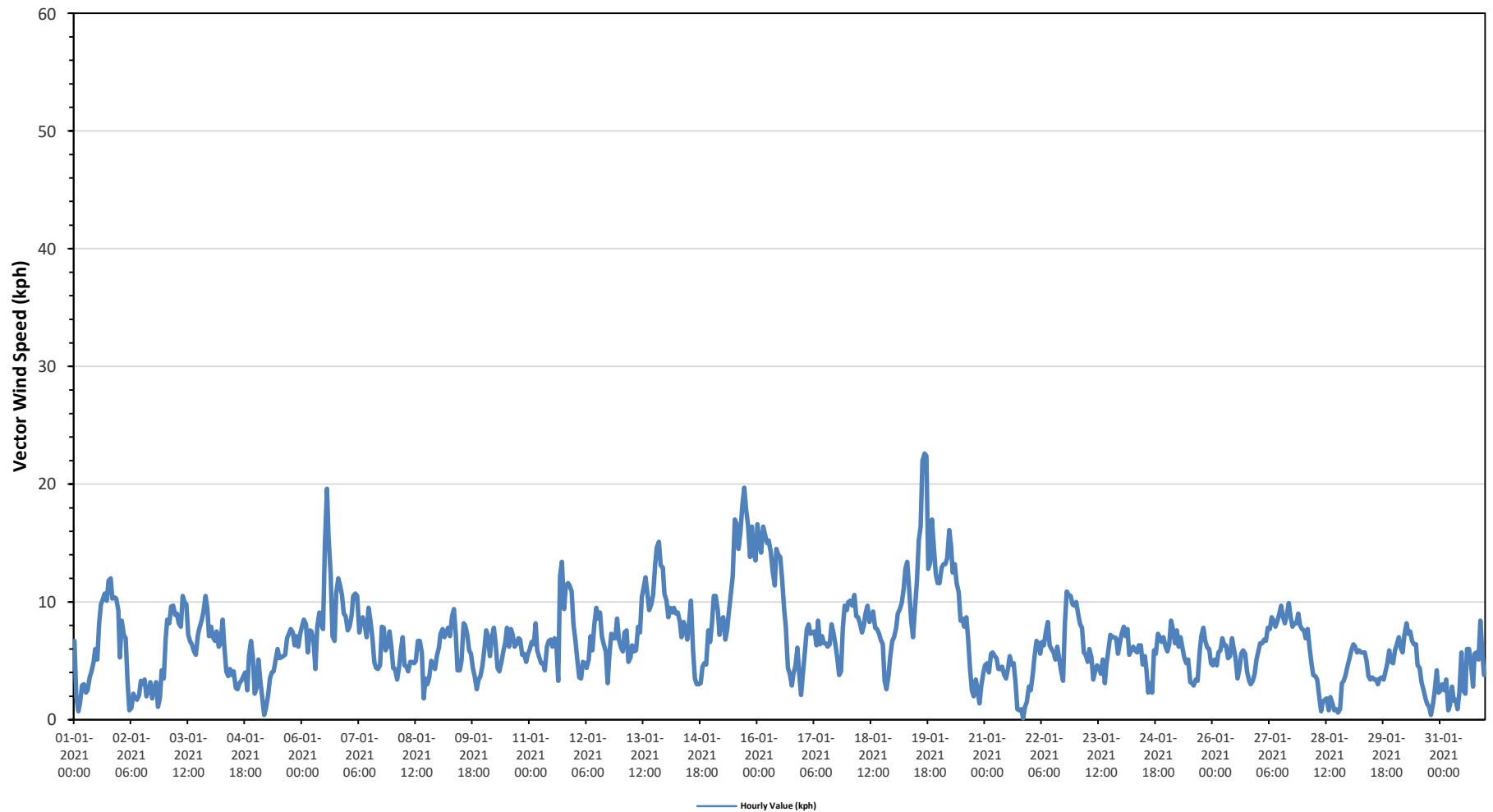
Reno Station - January 2021

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

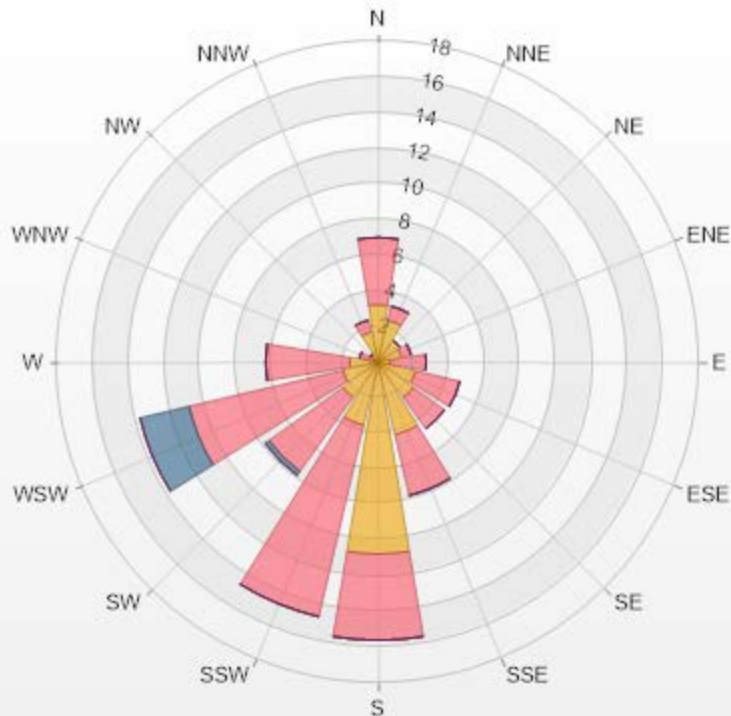
Maximum Hourly Value: 22.6 kph on January 19 at hour 16										Hours in Service: 744																		
Maximum Daily Value: 11.2 kph on January 19										Hours of Data: 744																		
Minimum Hourly Value: 0.1 kph on January 21 at hour 20										Hours of Missing Data: 0																		
Minimum Daily Value: 0.9 kph on January 28										Hours of Calibration: 0																		
Monthly Average: 3.2 kph										Operational Uptime: 100.0																		
Day	Hourly Period Starting at (MST)																									Daily Minimum	Daily Maximum	Daily Average
Jan 1	6.7	2.0	0.7	1.4	2.9	3.0	2.3	2.5	3.6	4.1	4.9	6.0	5.1	8.2	9.8	10.3	10.7	10.1	11.8	12.0	10.3	10.4	10.3	9.3	0.7	12.0	5.1	
Jan 2	5.3	8.4	7.2	6.9	3.3	0.8	1.0	2.2	1.8	1.7	2.1	3.3	3.0	3.4	2.0	2.5	3.2	1.8	2.7	3.2	1.1	1.8	4.2	3.5	0.8	8.4	1.2	
Jan 3	6.8	8.5	8.2	9.6	9.7	8.9	9.0	8.2	7.9	10.5	10.0	9.8	7.2	6.6	6.4	5.8	5.5	7.2	7.8	8.4	9.2	10.5	9.4	7.1	5.5	10.5	8.1	
Jan 4	7.9	7.0	6.7	7.5	6.2	6.5	8.5	6.3	4.1	3.7	4.3	3.8	4.1	2.7	2.6	3.1	3.3	3.7	4.0	2.5	5.4	6.7	5.3	2.2	2.2	8.5	2.0	
Jan 5	2.7	5.1	3.2	1.8	0.4	1.0	2.1	3.5	4.0	4.1	5.0	6.0	5.2	5.3	5.4	5.5	6.9	7.3	7.7	7.4	6.3	7.1	6.2	7.3	0.4	7.7	3.8	
Jan 6	8.0	8.5	8.1	5.7	7.6	7.5	6.6	4.3	7.9	9.1	8.1	7.7	14.8	19.6	15.5	12.4	7.1	6.7	10.7	12.0	11.4	10.6	9.0	8.8	4.3	19.6	8.5	
Jan 7	7.6	7.9	8.9	10.5	10.7	10.5	7.4	8.2	8.7	8.0	7.0	9.5	8.5	6.9	4.9	4.4	4.3	4.6	7.9	7.8	5.9	6.2	7.5	6.2	4.3	10.7	7.4	
Jan 8	4.4	4.3	3.4	4.4	5.9	7.0	4.6	4.5	4.1	4.9	4.9	4.8	5.0	6.7	6.7	5.7	1.8	3.5	3.0	3.6	5.0	4.7	4.3	5.4	1.8	7.0	3.9	
Jan 9	6.1	7.3	7.7	7.0	7.5	7.8	7.1	8.8	9.4	7.3	4.2	4.2	5.0	8.2	8.0	7.2	5.9	5.6	4.4	3.7	2.6	3.4	3.7	4.5	2.6	9.4	6.0	
Jan 10	6.0	7.6	7.1	5.4	6.9	7.8	6.4	4.4	4.1	4.9	5.8	6.5	7.8	6.2	7.7	7.2	6.2	6.4	6.9	6.8	5.5	5.6	4.9	5.6	4.1	7.8	6.0	
Jan 11	6.0	6.6	6.4	8.2	5.9	5.3	4.8	4.8	4.2	6.2	6.7	6.8	6.2	6.9	6.3	3.3	12.2	13.4	9.4	11.3	11.6	11.4	10.9	8.1	3.3	13.4	6.7	
Jan 12	6.6	5.2	3.6	3.5	4.9	4.8	4.4	5.1	7.1	5.9	8.0	9.5	8.6	9.1	7.1	6.4	5.8	3.1	5.6	7.3	6.9	6.9	8.6	6.8	3.1	9.5	5.3	
Jan 13	6.1	5.8	7.4	7.6	4.9	5.3	6.3	5.8	5.9	7.9	7.4	10.4	11.2	12.1	10.6	9.3	9.8	10.6	13.2	14.6	15.1	13.1	12.9	10.7	4.9	15.1	8.9	
Jan 14	10.1	8.7	9.5	9.1	9.5	9.0	9.1	8.3	7.0	8.3	7.7	6.8	8.3	10.1	5.9	3.5	3.0	3.0	3.1	4.5	4.8	4.7	7.6	6.6	3.0	10.1	5.6	
Jan 15	8.2	10.5	10.5	9.3	7.2	8.5	8.7	6.8	7.7	9.3	10.7	12.2	17.0	16.7	14.5	15.9	18.3	19.7	17.8	16.6	13.8	16.4	14.1	13.5	6.8	19.7	10.6	
Jan 16	16.6	15.0	14.2	16.4	15.7	15.0	15.2	14.2	12.6	11.4	14.5	14.0	13.8	11.9	9.3	7.9	4.4	3.9	2.9	3.9	4.6	6.1	3.9	2.1	2.1	16.6	10.1	
Jan 17	3.9	5.9	7.7	8.1	7.3	7.4	7.5	6.3	8.4	6.4	7.1	6.5	6.5	6.2	6.4	8.1	7.4	6.5	5.2	3.8	4.1	7.8	9.7	9.3	3.8	9.7	6.0	
Jan 18	10.0	10.1	9.7	10.6	8.8	8.7	8.2	7.4	8.0	9.0	9.7	8.3	8.7	9.2	7.8	7.7	7.3	6.8	6.4	3.3	2.6	3.8	5.3	6.7	2.6	10.6	7.3	
Jan 19	7.0	7.8	9.0	9.4	9.9	11.2	12.8	13.4	10.9	8.4	7.0	9.3	11.8	15.2	16.4	22.0	22.6	22.4	12.8	13.3	17.0	14.4	12.3	11.6	7.0	22.6	11.2	
Jan 20	11.6	12.9	13.2	13.2	13.7	16.1	14.7	12.5	13.2	11.6	10.8	8.4	8.6	7.9	8.7	6.8	4.3	2.5	2.0	3.4	2.6	1.4	2.9	4.0	1.4	16.1	8.1	
Jan 21	4.6	4.8	4.0	5.6	5.7	5.4	5.2	4.3	4.3	4.5	3.8	3.5	4.4	5.4	4.7	4.8	3.2	0.9	0.8	0.9	0.1	1.1	1.5	2.8	0.1	5.7	2.5	
Jan 22	2.5	3.9	5.3	6.7	6.5	5.6	6.6	6.3	7.5	8.3	6.3	6.0	5.7	5.1	6.2	5.2	4.2	3.3	8.2	10.9	10.6	10.5	9.8	9.7	2.5	10.9	3.9	
Jan 23	10.0	8.9	8.1	7.8	5.7	5.5	4.9	6.0	5.3	3.4	4.2	4.6	4.4	3.9	5.1	3.1	4.7	6.0	7.2	7.0	7.0	6.9	5.6	6.6	3.1	10.0	3.3	
Jan 24	7.3	7.9	7.1	7.7	5.5	5.9	6.2	5.9	5.7	6.3	6.3	4.7	5.4	4.3	2.3	3.1	2.3	5.9	5.6	7.3	7.0	6.6	7.0	6.2	2.3	7.9	5.3	
Jan 25	5.8	6.4	8.4	7.7	6.5	7.6	6.2	7.0	6.0	5.2	4.8	5.1	3.2	3.1	2.9	3.4	3.3	5.8	7.1	7.8	6.7	6.1	6.0	4.8	2.9	8.4	5.2	
Jan 26	4.6	5.1	4.6	5.7	5.9	6.9	6.3	6.3	5.2	5.4	6.9	6.1	5.3	3.5	4.3	5.6	5.9	5.6	4.1	3.3	3.0	3.3	3.9	5.1	3.0	6.9	2.7	
Jan 27	5.8	6.5	6.5	6.8	6.7	7.8	7.7	8.7	8.4	7.9	8.4	9.0	9.7	8.7	8.2	9.0	9.9	8.7	7.9	8.2	8.2	9.0	8.0	7.7	5.8	9.9	8.0	
Jan 28	7.6	6.9	7.7	6.1	4.7	3.8	3.7	3.4	1.9	0.7	1.5	1.7	1.8	0.8	1.9	1.4	0.8	0.9	0.6	0.9	3.1	3.3	3.8	4.5	0.6	7.7	0.9	
Jan 29	5.2	5.9	6.4	6.2	5.7	5.9	5.7	5.7	5.7	5.0	3.7	3.4	3.6	3.4	3.4	3.0	3.5	3.6	3.4	4.1	4.8	5.9	4.9	4.8	3.0	6.4	4.7	
Jan 30	5.9	6.4	7.0	6.1	5.7	7.2	8.2	7.3	7.5	6.7	6.4	6.4	4.6	4.4	3.2	2.5	1.8	1.3	1.1	0.4	1.4	2.4	4.2	2.3	0.4	8.2	4.6	
Jan 31	2.5	3.0	2.5	3.4	0.8	1.2	2.8	1.6	1.7	0.9	2.3	5.7	2.5	2.2	6.0	6.0	4.8	2.8	5.6	5.7	5.1	8.4	5.8	3.8	0.8	8.4	2.3	
Diurnal Maximum	17	15	14	16	16	16	15	14	13	12	15	14	17	20	16	22	23	22	18	17	17	16	14	14				
Diurnal Average	6.8	7.1	7.1	7.3	6.7	6.9	6.8	6.5	6.4	6.4	6.5	6.8	7.0	7.2	6.8	6.5	6.3	6.2	6.4	6.6	6.5	7.0	6.9	6.4				
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance											
K	Collection Error							N	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.																												

Timeseries Chart of Hourly Average for VWS - Reno Station



Wind: PRAMP RENO Monitor: WDS [KPH] Monthly: 01-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 4.70% Valid Data: 100.00%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	3.23	3.76	0	0	0	6.99
NNE	2.42	0.81	0	0	0	3.23
NE	1.48	0	0	0	0	1.48
ENE	1.34	0.54	0	0	0	1.88
E	0.67	2.02	0	0	0	2.69
ESE	2.15	2.55	0	0	0	4.7
SE	2.42	2.15	0	0	0	4.57
SSE	4.17	3.49	0	0	0	7.66
S	10.75	4.84	0	0	0	15.59
SSW	3.63	11.02	0	0	0	14.65
SW	2.42	5.11	0.27	0	0	7.8
WSW	2.02	8.87	2.82	0	0	13.71
W	1.61	4.7	0	0	0	6.31
WNW	0.27	0.81	0	0	0	1.08
NW	0.54	0	0	0	0	0.54
NNW	1.75	0.67	0	0	0	2.42
Summary	40.87	51.34	3.09	0	0	95.3



PRAMP-202101

Page 152 of 228

% Icon Classes (KPH)

41 1.8-6.0

51 6.0-15.0

3 15.0-29.0

0 29.0-39.0

0 >39.0



PEACE RIVER AREA MONITORING PROGRAM

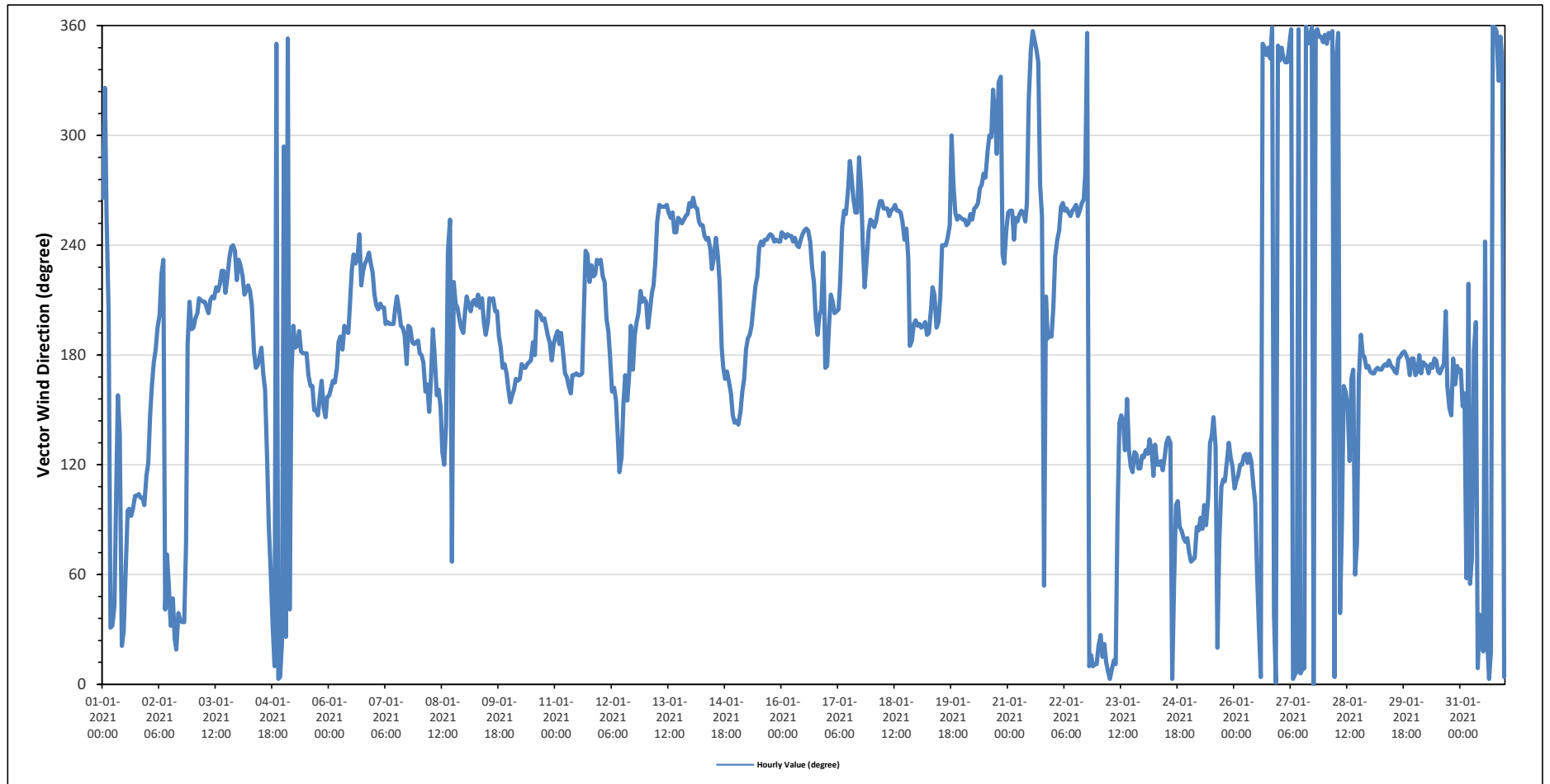
Reno Station - January 2021

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

Monthly Average:										214 (SSW) degree										Hours in Service:										744																					
																				Hours of Data:										744																					
																				Hours of Missing Data:										0																					
																				Hours of Calibration:										0																					
																				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																
Jan 1										W	NW	WSW	SSW	NNE	NNE	NE	ESE	SSE	SE	NNE	NNE	ENE	E	E	E	E	ESE	ESE	ESE	E	E	E	ESE	94	E																
Jan 2										ESE	SE	SSE	S	S	SSW	SSW	SW	SW	NE	ENE	NE	NNE	NE	NNE	NNE	NE	NE	NE	ENE	E	S	SSW	SSW	127	SE																
Jan 3										SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SSW	SW	SW	SW	SSW	SW	SW	WSW	WSW	SW	SW	216	SW																
Jan 4										SW	SW	SW	SSW	SSW	SW	SSW	SSW	S	S	S	S	S	SSE	SSE	ESE	E	ENE	NNE	N	N	N	N	NNE	206	SSW																
Jan 5										WNW	NNE	N	NE	SSE	SSW	S	S	S	S	S	S	SSE	SSE	SSE	SSE	SSE	SE	SSE	SSE	SSE	SE	SSE	162	SSE																	
Jan 6										SSE	SSE	SSE	SSE	S	S	S	S	SSW	S	S	SSW	SW	SW	SW	SW	WSW	SW	SW	SW	SW	SW	SW	SW	212	SSW																
Jan 7										SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	S	SSW	SSW	S	S	S	S	199	SSW																
Jan 8										S	S	S	SSE	SSE	SSE	SSE	SSW	S	SSE	SSE	SSE	SE	ESE	SE	SW	WSW	ENE	SW	SSW	SSW	SSW	S	172	S																	
Jan 9										SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	SSW	SSW	S	S	S	S	SSE	SSE	202	SSW																
Jan 10										SSE	SSE	SSE	SSE	SSE	SSE	S	S	S	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	S	S	S	S	181	S																	
Jan 11										S	S	S	S	S	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSW	SW	SW	SW	SW	SW	SW	SW	SW	202	SSW																	
Jan 12										SW	SW	SW	SSW	S	S	SSE	SSE	SSE	SE	ESE	ESE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	SSW	SSW	SSW	SSW	179	S																
Jan 13										SSW	SSW	SSW	SSW	SW	SW	WSW	W	W	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	249	WSW																
Jan 14										W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	WSW	SW	SW	SW	S	S	SSE	S	SSE	SSE	SE	SE	232	SW																
Jan 15										SE	SE	SSE	SSE	SSE	S	S	S	SSW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	223	SW																
Jan 16										WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SSW	S	SSW	SSW	SW	S	241	WSW															
Jan 17										S	SSW	SSW	SSW	SSW	SSW	SSW	SW	WSW	WSW	WSW	W	WNW	W	W	WSW	WSW	WNW	W	WSW	SW	SW	WSW	WSW	241	WSW																
Jan 18										WSW	WSW	WSW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	SW	S	S	SSW	SSW	251	WSW																
Jan 19										SSW	SSW	SSW	SSW	SSW	S	S	SSW	SW	SSW	SSW	SSW	SSW	WSW	WSW	WSW	WSW	WSW	WNW	W	WSW	WSW	WSW	WSW	231	SW																
Jan 20										WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	WNW	WNW	NW	NW	WNW	NNW	NNW	SW	SW	WSW	268	W																	
Jan 21										WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	NW	NNW	N	N	NNW	NNW	W	WSW	NE	SSW	S	S	S	277	W																	
Jan 22										SSW	SW	WSW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	W	W	W	N	N	NNE	N	NNE	NNE	292	WNW																
Jan 23										NNE	NNE	NNE	NNE	NNE	N	N	N	NNE	NNE	E	SE	SE	SE	SE	SE	SSE	SE	ESE	ESE	SE	SE	ESE	ESE	76	ENE																
Jan 24										ESE	SE	SE	SE	SE	ESE	SE	ESE	ESE	ESE	SE	SE	SE	SE	SE	N	NE	E	E	E	E	E	ENE	E	110	ESE																
Jan 25										ENE	ENE	ENE	ENE	E	E	E	E	E	E	E	E	SE	SE	SE	SE	SE	NNE	ENE	ESE	ESE	ESE	SE	ESE	ESE	98	E															
Jan 26										ESE	ESE	ESE	ESE	ESE	SE	SE	ESE	SE	ESE	ESE	E	ENE	NNE	N	NNW	NNW	NNW	NNW	N	NE	N	NNW	75	ENE																	
Jan 27										NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	356	N																
Jan 28										N	N	N	N	N	N	NNW	N	NE	E	SSE	SSE	SSE	ESE	SSE	S	ENE	ENE	SSE	S	S	S	S	S	8	N																
Jan 29										S	SSE	SSE	S	S	S	S	S	S	S	S	S	S	S	S	SSE	S	S	S	S	S	S	S	SSE	S	S	174	S														
Jan 30										SSE	S	S	SSE	S	S	S	SSE	S	S	S	S	S	S	SSE	S	S	SSW	SSE	SSE	SE	S	SSE	S	S	173	S															
Jan 31										S	SSE	SSE	ENE	SW	NE	ENE	S	SSW	N	NE	NNE	NNE	WSW	NNE	N	NNE	N	N	N	NNW	N	NNW	N	10	N																
C										Monthly Calibration						S						Daily Zero-Span Check						Q						Quality Assurance																	
K										Collection Error						N						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.																																																			

Timeseries Chart of Hourly Average for VWD - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - January 2021

Summary of Hourly Averages

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

WIND SPEED																												
Maximum Hourly Value:		22.6	kph	on January 19 at hour 16										Hours in Service:		744												
Maximum Daily Value:		11.2	kph	on January 19										Hours of Data:		744												
Minimum Hourly Value:		0.1	kph	on January 21 at hour 20										Hours of Missing Data:		0												
Minimum Daily Value:		0.9	kph	on January 28										Hours of Calibration:		0												
Monthly Average:		3.2	kph											Operational Uptime:		100												
WIND DIRECTION																												
Monthly Average:		214	(SSW)	degree																								
Day	0	1	2	3	4	5	6	7	8	9	Hourly Period Starting at (MST)													Daily Minimum	Daily Maximum	Daily Average		
Jan 1	6.7	2.0	0.7	1.4	2.9	3.0	2.3	2.5	3.6	4.1	4.9	6.0	11.2	13.1	8.2	9.8	10.3	10.7	10.1	11.8	12.0	10.3	10.4	10.3	9.3	0.7	12.0	5.1
Jan 2	W	NW	WSW	SSW	NNE	NNE	NE	ESE	SSE	SE	NNE	NNE	ENE	E	E	E	E	ESE	ESE	ESE	E	E	E	ESE	0.8	8.4	1.2	
	5.3	8.4	7.2	6.9	3.3	0.8	1.0	2.2	1.8	1.7	2.1	3.3	3.0	3.4	2.0	2.5	3.2	1.8	2.7	3.2	1.1	1.8	4.2	3.5	5.5	10.5	8.1	
Jan 3	ESE	SE	SSE	S	S	SSW	SSW	SW	SW	NE	ENE	NE	NNE	NE	NNE	NE	NE	NE	NE	ENE	S	SSW	SSW	SSW	5.5	10.5	8.1	
	6.8	8.5	8.2	9.6	9.7	8.9	9.0	8.2	7.9	10.5	10.0	9.8	7.2	6.6	6.4	5.8	5.5	7.2	7.8	8.4	9.2	10.5	9.4	7.1	2.2	8.5	2.0	
Jan 4	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	2.2	8.5	2.0	
	7.9	7.0	6.7	7.5	6.2	6.5	8.5	6.3	4.1	3.7	4.3	3.8	4.1	2.7	2.6	3.1	3.3	3.7	4.0	2.5	5.4	6.7	5.3	2.2	2.2	8.5	2.0	
Jan 5	SW	SW	SW	SSW	SSW	SW	SSW	SSW	S	S	S	S	S	SSE	SSE	ESE	E	ENE	NNE	N	N	N	N	NNE	0.4	7.7	3.8	
	2.7	5.1	3.2	1.8	0.4	1.0	2.1	3.5	4.0	4.1	5.0	6.0	5.2	5.3	5.4	5.5	6.9	7.3	7.7	7.4	6.3	7.1	6.2	7.3	0.4	7.7	3.8	
Jan 6	WNW	NNE	N	NE	SSE	SSW	S	S	S	S	S	S	S	SSE	SSE	SSE	SSE	SSE	SE	SSE	SSE	SSE	SSE	SSE	4.3	19.6	8.5	
	8.0	8.5	8.1	5.7	7.6	7.5	6.6	4.3	7.9	9.1	8.1	7.7	14.8	19.6	15.5	12.4	7.1	6.7	10.7	12.0	11.4	10.6	9.0	8.8	4.3	19.6	8.5	
Jan 7	SSE	SSE	SSE	SSE	S	S	S	S	SSW	S	S	SSW	SW	SW	SW	SW	WSW	SW	SW	SW	SW	SW	SW	SW	4.3	10.7	7.4	
	7.6	7.9	8.9	10.5	10.7	10.5	7.4	8.2	8.7	8.0	7.0	9.5	8.5	6.9	4.9	4.4	4.3	4.6	7.9	7.8	5.9	6.2	7.5	6.2	4.3	10.7	7.4	
Jan 8	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	S	SSW	SSW	S	S	S	S	1.8	7.0	3.9	
	4.4	4.3	3.4	4.4	5.9	7.0	4.6	4.5	4.1	4.9	4.9	4.8	5.0	6.7	6.7	5.7	1.8	3.5	3.0	3.6	5.0	4.7	4.3	5.4	1.8	7.0	3.9	
Jan 9	S	S	S	SSE	SSE	SSE	SSE	SSW	S	SSE	SSE	SSE	SE	ESE	SE	SW	WSW	ENE	SW	SSW	SSW	SSW	SSW	S	2.6	9.4	6.0	
	6.1	7.3	7.7	7.0	7.5	7.8	7.1	8.8	9.4	7.3	4.2	4.2	5.0	8.2	8.0	7.2	5.9	5.6	4.4	3.7	2.6	3.4	3.7	4.5	2.6	9.4	6.0	
Jan 10	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	SSW	S	S	S	SSE	SSE	SSE	4.1	7.8	6.0	
	6.0	7.6	7.1	5.4	6.9	7.8	6.4	4.4	4.1	4.9	5.8	6.5	7.8	6.2	7.7	7.2	6.2	6.4	6.9	6.8	5.5	5.6	4.9	5.6	4.1	7.8	6.0	
Jan 11	SSE	SSE	SSE	SSE	SSE	SSE	S	S	S	S	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	S	S	S	S	3.3	13.4	6.7	
	6.0	6.6	6.4	8.2	5.9	5.3	4.8	4.8	4.2	6.2	6.7	6.8	6.2	6.9	6.3	3.3	12.2	13.4	9.4	11.3	11.6	11.4	10.9	8.1	3.3	13.4	6.7	
Jan 12	S	S	S	S	S	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SW	SW	SW	SW	SW	SW	SW	SW	SW	3.1	9.5	5.3	
	6.6	5.2	3.6	3.5	4.9	4.8	4.4	5.1	7.1	5.9	8.0	9.5	8.6	9.1	7.1	6.4	5.8	3.1	5.6	7.3	6.9	6.9	8.6	6.8	3.1	9.5	5.3	
Jan 13	SW	SW	SW	SSW	S	S	SSE	SSE	SSE	SE	ESE	ESE	SSE	SSE	SSE	SSE	SSW	S	S	SSW	SSW	SSW	SSW	SSW	4.9	15.1	8.9	
	6.1	5.8	7.4	7.6	4.9	5.3	6.3	5.8	5.9	7.9	7.4	10.4	11.2	12.1	10.6	9.3	9.8	10.6	13.2	14.6	15.1	13.1	12.9	10.7	4.9	15.1	8.9	
Jan 14	SSW	SSW	SSW	SSW	SW	SW	WSW	W	W	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	3.0	10.1	5.6	
	10.1	8.7	9.5	9.1	9.5	9.0	9.1	8.3	7.0	8.3	7.7	6.8	8.3	10.1	5.9	3.5	3.0	3.0	3.1	4.5	4.8	4.7	7.6	6.6	3.0	10.1	5.6	
Jan 15	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	S	S	SSE	S	SSE	SSE	SE	SE	6.8	19.7	10.6	
	8.2	10.5	10.5	9.3	7.2	8.5	8.7	6.8	7.7	9.3	10.7	12.2	17.0	16.7	14.5	15.9	18.3	19.7	17.8	16.6	13.8	16.4	14.1	13.5	6.8	19.7	10.6	
Jan 16	SE	SE	SSE	SSE	SSE	S	S	S	SSW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	2.1	16.6	10.1	
	16.6	15.0	14.2	16.4	15.7	15.0	15.2	14.2	12.6	11.4	14.5	14.0	13.8	11.9	9.3	7.9	4.4	3.9	2.9	3.9	4.6	6.1	3.9	2.1	2.1	16.6	10.1	
Jan 17	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	S	SSW	SSW	SW	S	3.8	9.7	6.0	
	3.9	5.9	7.7	8.1	7.3	7.4	7.5	6.3	8.4	6.4	7.1	6.5	6.5	6.2	6.4	8.1	7.4	6.5	5.2	3.8	4.1	7.8	9.7	9.3	3.8	9.7	6.0	
Jan 18	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	2.6	10.6	7.3	
	10.0	10.1	9.7	10.6	8.8	8.7	8.2	7.4	8.0	9.0	9.7	8.3	8.7	9.2	7.8	7.7	7.3	6.8	6.4	3.3	2.6	3.8	5.3	6.7	2.6	10.6	7.3	
Jan 19	WSW	WSW	WSW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	7.0	7.8	9.0	
	7.0	7.8	9.0	9.4	9.9	11.2	12.8	13.4	10.9	8.4	7.0	9.3	11.8	15.2	16.4	22.0	22.6	22.4	12.8	13.3	17.0	14.4	12.3	11.6	7.0	22.6	11.2	
Jan 20	SSW	SSW	SSW	SSW	SSW	S	S	SSW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	1.4	16.1	8.1	
	11.6	12.9	13.2	13.2	13.7	16.1	14.7	12.5	13.2	11.6	10.8	8.4	8.6	7.9	8.7	6.8	4.3	2.5	2.0	3.4	2.6	1.4	2.9	4.0	1.4	16.1	8.1	
Jan 20	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	W	W	WNW	WNW	WNW	NW	NW	WNW	NNW	NNW	SW	SW	WSW	WSW	WSW	WSW



PEACE RIVER AREA MONITORING PROGRAM

Reno Station - January 2021

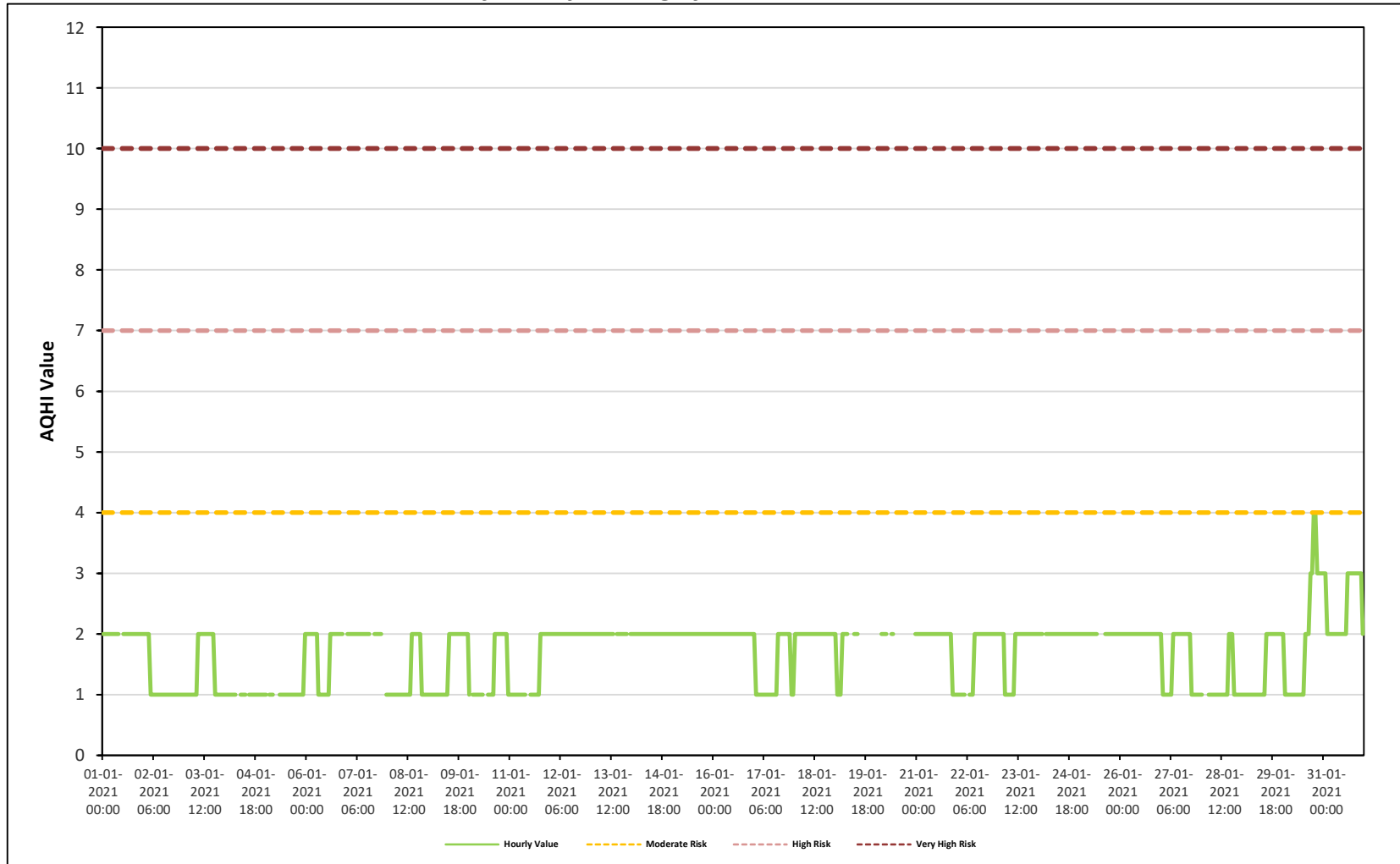
Summary of Hourly Averages

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

WIND SPEED																																				
Maximum Hourly Value:													22.6	kph	on January 19 at hour 16										Hours in Service:				744							
Maximum Daily Value:													11.2	kph	on January 19										Hours of Data:				744							
Minimum Hourly Value:													0.1	kph	on January 21 at hour 20										Hours of Missing Data:				0							
Minimum Daily Value:													0.9	kph	on January 28										Hours of Calibration:				0							
Monthly Average:													3.2	kph											Operational Uptime:				100							
WIND DIRECTION																																				
Monthly Average:													214 (SSW) degree																							
Day	0	1	2	3	4	5	6	7	8	9	Hourly Period Starting at (MST)													14	15	16	17	18	19	20	21	22	23	Daily Minimum	Daily Maximum	Daily Average
Jan 21	4.6	4.8	4.0	5.6	5.7	5.4	5.2	4.3	4.3	4.5	3.8	3.5	4.4	5.4	4.7	4.8	3.2	0.9	0.8	0.9	0.1	1.1	1.5	2.8	0.1	5.7	2.5									
	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	NW	NNW	N	N	NNW	NNW	W	WSW	NE	SSW	S	S	S												
Jan 22	2.5	3.9	5.3	6.7	6.5	5.6	6.6	6.3	7.5	8.3	6.3	6.0	5.7	5.1	6.2	5.2	4.2	3.3	8.2	10.9	10.6	10.5	9.8	9.7	2.5	10.9	3.9									
	SSW	SW	WSW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	W	W	W	N	NNE	N	NNE	NNE	NNE												
Jan 23	10.0	8.9	8.1	7.8	5.7	5.5	4.9	6.0	5.3	3.4	4.2	4.6	4.4	3.9	5.1	3.1	4.7	6.0	7.2	7.0	7.0	6.9	5.6	6.6	3.1	10.0	3.3									
	NNE	NNE	NNE	NNE	NNE	N	N	N	NNE	NNE	E	SE	SE	SE	SE	SSE	E	ESE	ESE	SE	SE	ESE	ESE	SE												
Jan 24	7.3	7.9	7.1	7.7	5.5	5.9	6.2	5.9	5.7	6.3	6.3	4.7	5.4	4.3	2.3	3.1	2.3	5.9	5.6	7.3	7.0	6.6	7.0	6.2	2.3	7.9	5.3									
	ESE	SE	SE	SE	SE	ESE	SE	ESE	ESE	ESE	ESE	SE	SE	SE	SE	N	NE	E	E	E	E	E	ENE	E												
Jan 25	5.8	6.4	8.4	7.7	6.5	7.6	6.2	7.0	6.0	5.2	4.8	5.1	3.2	3.1	2.9	3.4	3.3	5.8	7.1	7.8	6.7	6.1	6.0	4.8	2.9	8.4	5.2									
	ENE	ENE	ENE	ENE	E	E	E	E	E	E	E	SE	SE	SE	SE	NNE	ENE	ESE	ESE	ESE	ESE	SE	ESE	ESE												
Jan 26	4.6	5.1	4.6	5.7	5.9	6.9	6.3	6.3	5.2	5.4	6.9	6.1	5.3	3.5	4.3	5.6	5.9	5.6	4.1	3.3	3.0	3.3	3.9	5.1	3.0	6.9	2.7									
	ESE	ESE	ESE	ESE	ESE	SE	SE	ESE	SE	ESE	ESE	E	ENE	NNE	N	NNW	NNW	NNW	NNW	NNW	N	NE	N	NNW												
Jan 27	5.8	6.5	6.5	6.8	6.7	7.8	7.7	8.7	8.4	7.9	8.4	9.0	9.7	8.7	8.2	9.0	9.9	8.7	7.9	8.2	8.2	9.0	8.0	7.7	5.8	9.9	8.0									
	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N												
Jan 28	7.6	6.9	7.7	6.1	4.7	3.8	3.7	3.4	1.9	0.7	1.5	1.7	1.8	0.8	1.9	1.4	0.8	0.9	0.6	0.9	3.1	3.3	3.8	4.5	0.6	7.7	0.9									
	N	N	N	N	N	N	NNW	N	NE	E	SSE	SSE	SSE	ESE	SSE	S	ENE	ENE	SSE	S	S	S	S	S												
Jan 29	5.2	5.9	6.4	6.2	5.7	5.9	5.7	5.7	5.0	3.7	3.4	3.6	3.4	3.4	3.0	3.5	3.6	3.4	4.1	4.8	5.9	4.9	4.8	4.8	3.0	6.4	4.7									
	S	SSE	SSE	S	S	S	S	S	S	S	S	S	S	S	SSE	S	S	S	S	S	S	SSE	S	S												
Jan 30	5.9	6.4	7.0	6.1	5.7	7.2	8.2	7.3	7.5	6.7	6.4	6.4	4.6	4.4	3.2	2.5	1.8	1.3	1.1	0.4	1.4	2.4	4.2	2.3	0.4	8.2	4.6									
	SSE	S	S	SSE	S	S	S	SSE	S	S	S	S	S	SSE	S	S	SSW	SSE	SSE	SE	S	SSE	S	S												
Jan 31	2.5	3.0	2.5	3.4	0.8	1.2	2.8	1.6	1.7	0.9	2.3	5.7	2.5	2.2	6.0	6.0	4.8	2.8	5.6	5.7	5.1	8.4	5.8	3.8	0.8	8.4	2.3									
	S	SSE	SSE	ENE	SW	NE	ENE	S	SSW	N	NE	NNE	NNE	WSW	NNE	N	NNE	N	N	N	NNW	N	NNW	N												
C	Monthly Calibration										S	Daily Zero-Span Check										Q	Quality Assurance													
K	Collection Error										N	No Data (Machine Not in Service)										Y	Routine Maintenance													
X	Invalid Data (Equipment Malfunction/Recovery)										NRM	Unit/Maint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)										P	Power Failure													
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 CADOTTE LAKE STATION

Timeseries Chart of Hourly Average for AQHI - AQHI - Cadotte Lake Station





PEACE RIVER AREA MONITORING PROGRAM

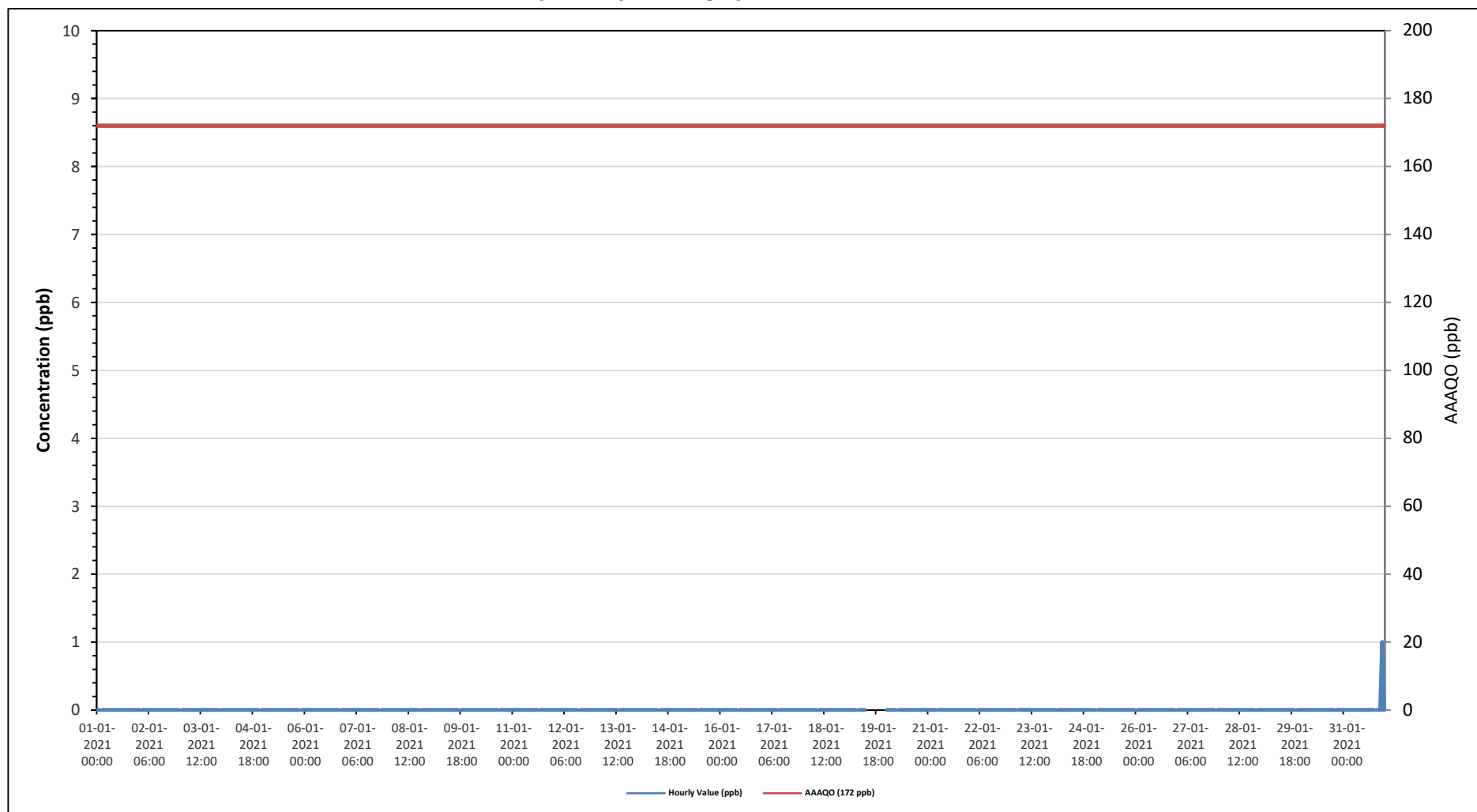
AQHI - Cadotte Lake Station - January 2021

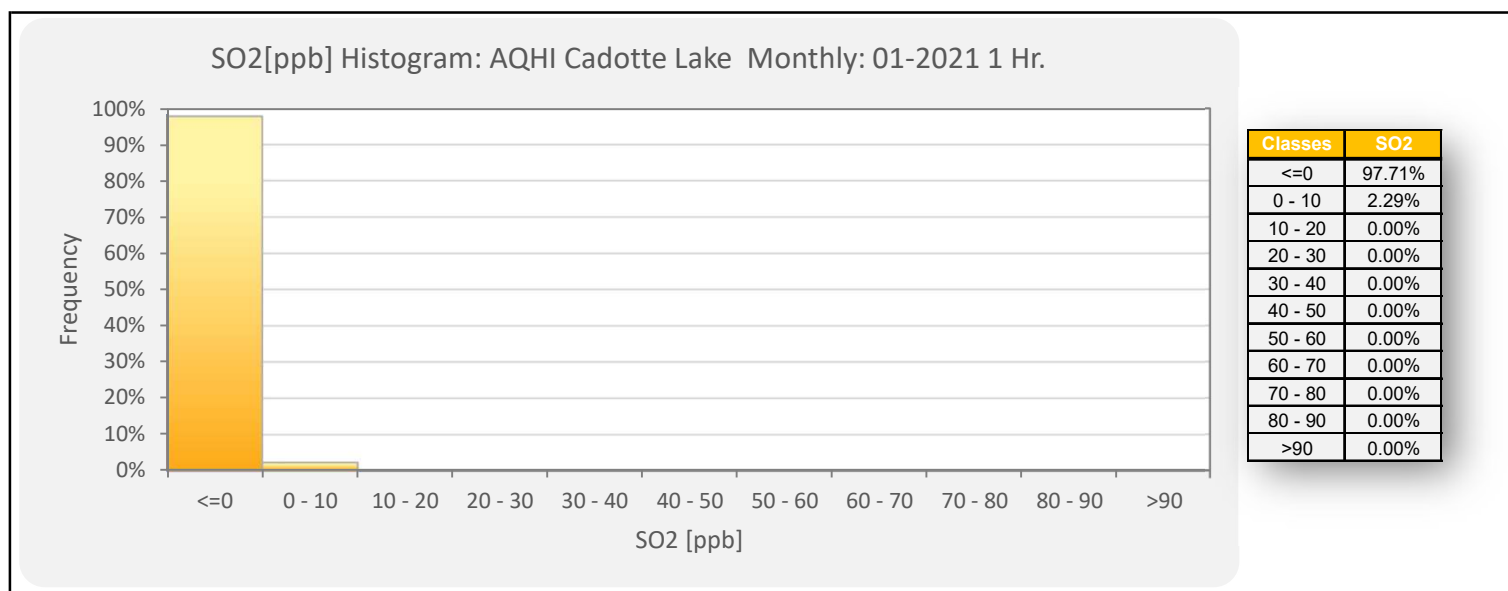
Summary of Hourly Averages

SULPHUR DIOXIDE (SO₂) 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 Exceedance:			0													
Maximum Hourly Value:			1 ppb on January 31 at hour 22			Hours in Service:			744																			
Maximum Daily Value:			0.0 ppb on January 31			Hours of Data:			700																			
Minimum Hourly Value:			0 ppb on January 1 at hour 0			Hours of Missing Data:			6																			
Minimum Daily Value:			0.0 ppb on January 1			Hours of Calibration:			38																			
Monthly Average:			0.0 ppb			Operational Uptime:			99.2																			
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				
Jan 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	
Jan 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	
Jan 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	
Jan 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	
Jan 5	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	
Jan 6	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	
Jan 7	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	
Jan 8	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	
Jan 9	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	
Jan 10	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	
Jan 11	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	
Jan 12	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	
Jan 13	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	
Jan 14	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	
Jan 15	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	
Jan 16	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	
Jan 17	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	
Jan 18	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	
Jan 19	0	0	0	0	0	0	S	0	0	0	C	C	C	C	C	0	P	P	P	P	P	P	P	0	0	-		
Jan 20	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	
Jan 21	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	
Jan 22	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	
Jan 23	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	
Jan 24	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	
Jan 25	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	0.0	
Jan 26	0	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	
Jan 27	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	
Jan 28	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	
Jan 29	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	
Jan 30	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	
Jan 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	1	0	0	0	0	1	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	1	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							N	No Data (Machine Not in Service)							Y	Routine Maintenance											
X	InValid Data (Equipment Malfunction /Recovery)							NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)							P	Power Failure											
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.																												

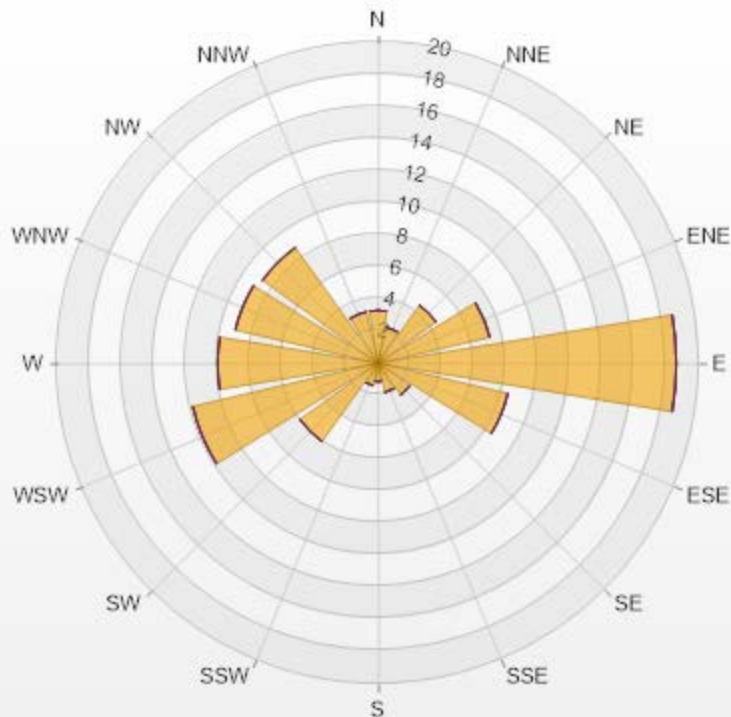
Timeseries Chart of Hourly Average for SO2 - AQHI - Cadotte Lake Station





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-SO2[ppb] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.09% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	3.29	0	0	0	0	3.29
NNE	2.29	0	0	0	0	2.29
NE	4.43	0	0	0	0	4.43
ENE	7.14	0	0	0	0	7.14
E	18.57	0	0	0	0	18.57
ESE	8.29	0	0	0	0	8.29
SE	2.43	0	0	0	0	2.43
SSE	1.86	0	0	0	0	1.86
S	1.14	0	0	0	0	1.14
SSW	1.43	0	0	0	0	1.43
SW	6	0	0	0	0	6
WSW	11.86	0	0	0	0	11.86
W	10	0	0	0	0	10
WNW	9.14	0	0	0	0	9.14
NW	8.86	0	0	0	0	8.86
NNW	3.29	0	0	0	0	3.29
Summary	100	0	0	0	0	100



PRAMP-202101

Page 163 of 228

% Icon Classes (ppb)

100 0-10

0 10-50

0 50-100

0 100-172

0 >172.0



PEACE RIVER AREA MONITORING PROGRAM

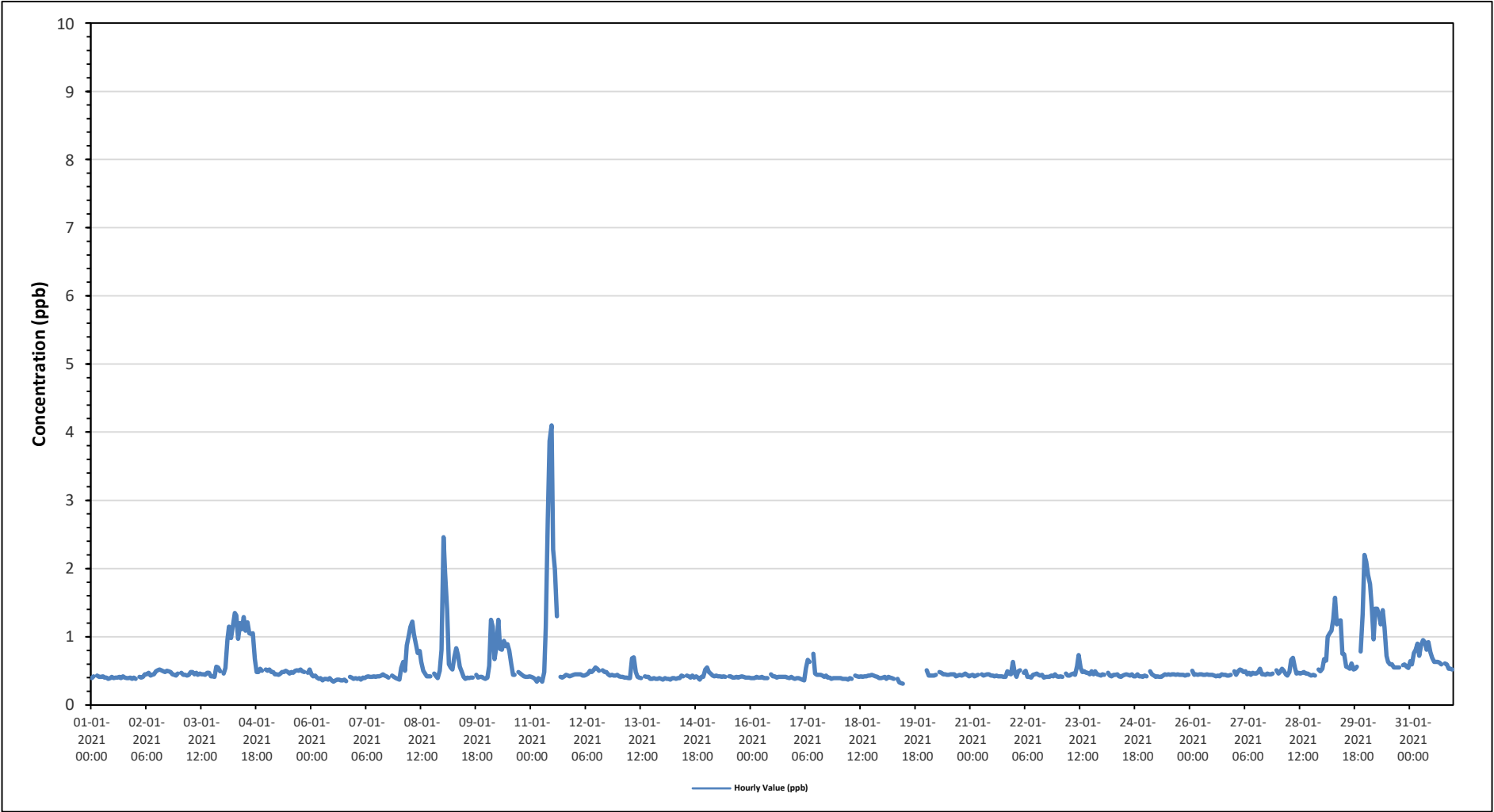
AQHI - Cadotte Lake Station - January 2021

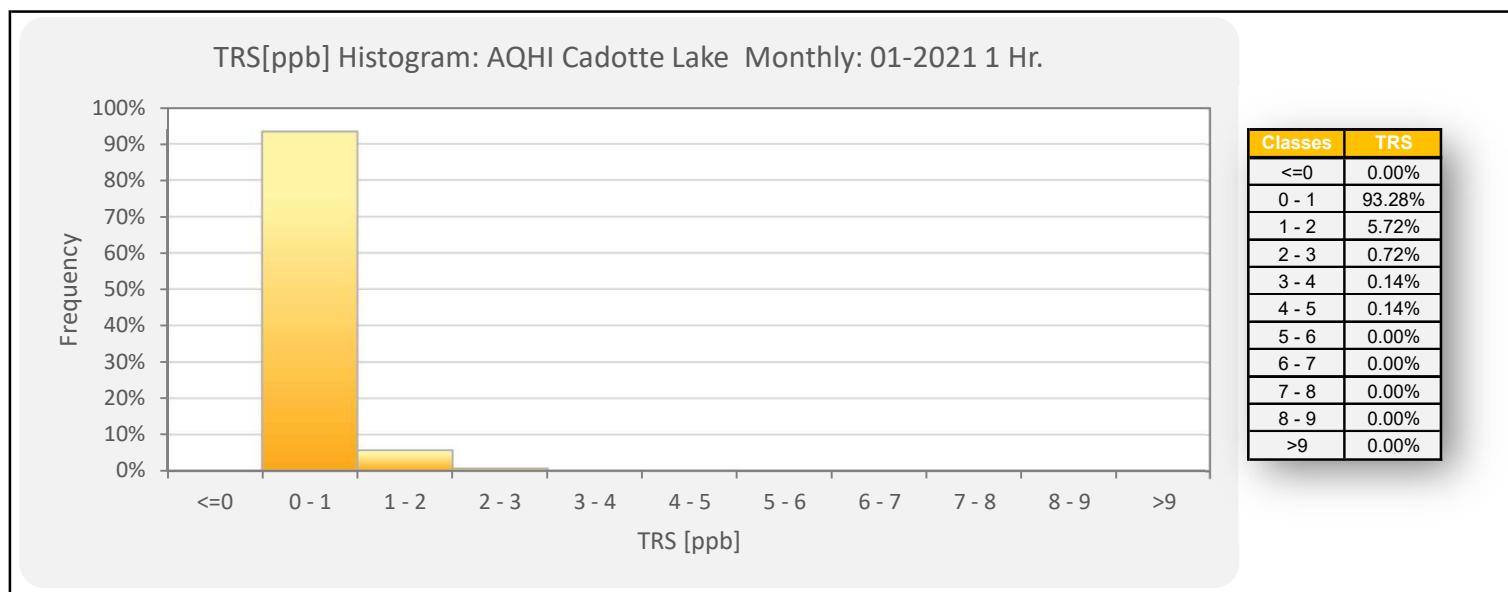
Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

Alberta Ambient Air Quality Objectives (AAAQO) for H2S: 1-Hour 10 ppb, 24-Hour 3 ppb																											
Number of 1-Hour Exceedances: 0										Number of 24-Hour Exceedances: 0																	
Maximum Hourly Value: 4.10 ppb on January 11 at hour 11										Hours in Service: 744																	
Maximum Daily Value: 1.04 ppb on January 11										Hours of Data: 699																	
Minimum Hourly Value: 0.31 ppb on January 19 at hour 11										Hours of Missing Data: 6																	
Minimum Daily Value: 0.38 ppb on January 6										Hours of Calibration: 39																	
Monthly Average: 0.54 ppb										Operational Uptime: 99.2																	
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
Jan 1	0.39	0.42	S	0.43	0.41	0.41	0.42	0.4	0.4	0.38	0.39	0.41	0.39	0.4	0.4	0.41	0.39	0.42	0.4	0.39	0.39	0.4	0.38	0.4	0.38	0.43	0.40
Jan 2	0.38	S	0.41	0.4	0.41	0.45	0.45	0.47	0.43	0.44	0.45	0.49	0.51	0.52	0.51	0.49	0.48	0.5	0.49	0.48	0.45	0.44	0.43	0.46	0.38	0.52	0.46
Jan 3	S	0.47	0.44	0.44	0.43	0.44	0.48	0.48	0.45	0.47	0.44	0.46	0.45	0.45	0.44	0.47	0.47	0.42	0.42	0.41	0.56	0.55	0.49	S	0.41	0.56	0.46
Jan 4	0.46	0.54	0.96	1.15	0.98	1.15	1.35	1.31	0.97	1.2	1.11	1.29	1.09	1.21	1.05	1.04	1.05	0.67	0.48	0.48	0.53	0.5	S	0.52	0.46	1.35	0.92
Jan 5	0.5	0.52	0.48	0.48	0.45	0.45	0.44	0.46	0.48	0.48	0.5	0.48	0.46	0.48	0.47	0.5	0.51	0.5	0.52	0.49	0.48	S	0.47	0.52	0.44	0.52	0.48
Jan 6	0.44	0.42	0.43	0.4	0.38	0.39	0.36	0.38	0.38	0.37	0.39	0.36	0.34	0.36	0.37	0.37	0.36	0.36	0.37	0.35	S	0.41	0.4	0.38	0.34	0.44	0.38
Jan 7	0.39	0.38	0.39	0.37	0.4	0.39	0.41	0.42	0.41	0.41	0.42	0.41	0.42	0.42	0.43	0.45	0.43	0.42	0.4	S	0.43	0.41	0.39	0.38	0.37	0.45	0.41
Jan 8	0.37	0.54	0.63	0.5	0.87	1	1.14	1.22	1.04	0.89	0.76	0.79	0.63	0.5	0.46	0.42	0.42	0.42	S	0.46	0.42	0.39	0.5	0.81	0.37	1.22	0.66
Jan 9	2.46	1.94	1.4	0.6	0.55	0.52	0.69	0.83	0.73	0.56	0.49	0.41	0.38	0.4	0.39	0.4	0.4	S	0.44	0.4	0.41	0.41	0.39	0.38	0.38	2.46	0.68
Jan 10	0.4	0.57	1.25	1.15	0.67	0.87	1.25	0.82	0.81	0.94	0.86	0.89	0.8	0.6	0.44	0.44	S	0.48	0.46	0.44	0.42	0.41	0.41	0.42	0.40	1.25	0.69
Jan 11	0.41	0.4	0.38	0.34	0.39	0.37	0.34	0.48	1.13	2.73	3.87	4.1	2.28	1.99	1.3	S	0.41	0.4	0.42	0.44	0.43	0.42	0.43	0.44	0.34	4.10	1.04
Jan 12	0.45	0.45	0.45	0.45	0.43	0.43	0.44	0.46	0.5	0.48	0.51	0.55	0.53	0.5	S	0.51	0.48	0.48	0.45	0.43	0.44	0.43	0.43	0.44	0.43	0.55	0.47
Jan 13	0.42	0.41	0.41	0.4	0.4	0.39	0.39	0.68	0.7	0.48	0.41	0.4	0.39	S	0.42	0.41	0.41	0.38	0.38	0.39	0.38	0.38	0.39	0.38	0.38	0.70	0.43
Jan 14	0.37	0.39	0.38	0.38	0.37	0.39	0.39	0.38	0.39	0.39	0.43	0.42	S	0.43	0.42	0.4	0.43	0.4	0.42	0.4	0.37	0.41	0.41	0.52	0.37	0.52	0.40
Jan 15	0.55	0.48	0.46	0.43	0.42	0.43	0.42	0.42	0.41	0.42	0.41	S	0.42	0.42	0.4	0.4	0.41	0.4	0.41	0.42	0.41	0.4	0.4	0.4	0.40	0.55	0.42
Jan 16	0.39	0.39	0.39	0.41	0.4	0.4	0.41	0.39	0.39	0.39	0.38	S	0.45	0.42	0.42	0.4	0.41	0.41	0.41	0.41	0.41	0.4	0.39	0.41	0.39	0.45	0.40
Jan 17	0.38	0.39	0.39	0.38	0.37	0.36	0.54	0.66	0.63	S	0.75	0.46	0.44	0.44	0.44	0.43	0.41	0.43	0.4	0.4	0.38	0.39	0.39	0.39	0.36	0.75	0.45
Jan 18	0.39	0.39	0.38	0.38	0.38	0.37	0.39	0.38	S	0.43	0.42	0.41	0.42	0.41	0.42	0.42	0.43	0.43	0.44	0.43	0.42	0.41	0.39	0.39	0.37	0.44	0.41
Jan 19	0.4	0.41	0.38	0.41	0.4	0.39	0.38	S	0.38	0.33	0.32	0.31	C	C	C	C	C	C	P	P	P	P	P	P	0.31	0.41	-
Jan 20	0.51	0.43	0.43	0.43	0.43	0.44	S	0.48	0.47	0.45	0.45	0.44	0.44	0.45	0.45	0.45	0.45	0.42	0.43	0.44	0.43	0.44	0.46	0.44	0.42	0.51	0.44
Jan 21	0.43	0.44	0.42	0.43	0.44	S	0.45	0.43	0.44	0.45	0.45	0.43	0.43	0.42	0.43	0.42	0.42	0.42	0.41	0.41	0.49	0.46	0.45	0.63	0.41	0.63	0.44
Jan 22	0.47	0.41	0.49	0.51	S	0.47	0.5	0.41	0.41	0.4	0.44	0.45	0.46	0.44	0.43	0.44	0.4	0.41	0.41	0.41	0.43	0.42	0.45	0.42	0.40	0.51	0.44
Jan 23	0.41	0.42	0.41	S	0.46	0.43	0.43	0.45	0.46	0.44	0.57	0.73	0.54	0.48	0.49	0.47	0.47	0.45	0.49	0.45	0.49	0.45	0.44	0.43	0.41	0.73	0.47
Jan 24	0.45	0.44	S	0.47	0.43	0.42	0.44	0.44	0.45	0.42	0.41	0.43	0.44	0.45	0.44	0.43	0.45	0.42	0.42	0.45	0.42	0.42	0.41	0.43	0.41	0.47	0.43
Jan 25	0.42	S	0.49	0.45	0.43	0.41	0.42	0.41	0.41	0.43	0.45	0.44	0.45	0.44	0.45	0.45	0.44	0.45	0.44	0.44	0.44	0.43	0.44	0.44	0.41	0.49	0.44
Jan 26	S	0.5	0.44	0.45	0.44	0.45	0.45	0.44	0.44	0.45	0.44	0.44	0.44	0.43	0.42	0.43	0.42	0.45	0.44	0.44	0.43	0.43	0.44	S	0.42	0.50	0.44
Jan 27	0.49	0.44	0.49	0.52	0.51	0.48	0.49	0.45	0.47	0.44	0.47	0.46	0.46	0.48	0.53	0.45	0.45	0.44	0.46	0.45	0.45	0.46	S	0.51	0.44	0.53	0.47
Jan 28	0.46	0.48	0.53	0.5	0.45	0.43	0.48	0.66	0.69	0.54	0.46	0.47	0.46	0.47	0.48	0.46	0.46	0.44	0.43	0.44	0.43	S	0.52	0.49	0.43	0.69	0.49
Jan 29	0.53	0.67	0.65	1	1.05	1.09	1.26	1.57	1.18	1.23	1.24	0.75	0.74	0.56	0.55	0.53	0.61	0.52	0.53	0.56	S	0.78	1.33	2.2	0.52	2.20	0.92
Jan 30	2.1	1.91	1.77	1.42	0.96	1.41	1.41	1.31	1.18	1.39	1.14	0.72	0.63	0.59	0.6	0.55	0.55	0.55	0.55	S	0.58	0.59	0.56	0.54	0.54	2.10	1.00
Jan 31	0.64	0.59	0.76	0.81	0.9	0.72	0.87	0.95	0.92	0.81	0.92	0.77	0.69	0.63	0.63	0.63	0.62	0.59	S	0.61	0.59	0.53	0.53	0.52	0.52	0.95	0.71
Diurnal Maximum	2.46	1.94	1.77	1.42	1.05	1.41	1.41	1.57	1.18	2.73	3.87	4.10	2.28	1.99	1.30	1.04	1.05	0.67	0.55	0.61	0.59	0.78	1.33	2.20			
Diurnal Average	0.57	0.56	0.58	0.55	0.52	0.55	0.60	0.62	0.61	0.64	0.68	0.65	0.57	0.54	0.51	0.47	0.47	0.45	0.44	0.44	0.45	0.45	0.47	0.52			
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance										
K	Collection Error							N	No Data (Machine Not in Service)							Y	Routine Maintenance										
X	InValid Data (Equipment Malfunction /Recovery)							NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)								Power Failure										
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.																											

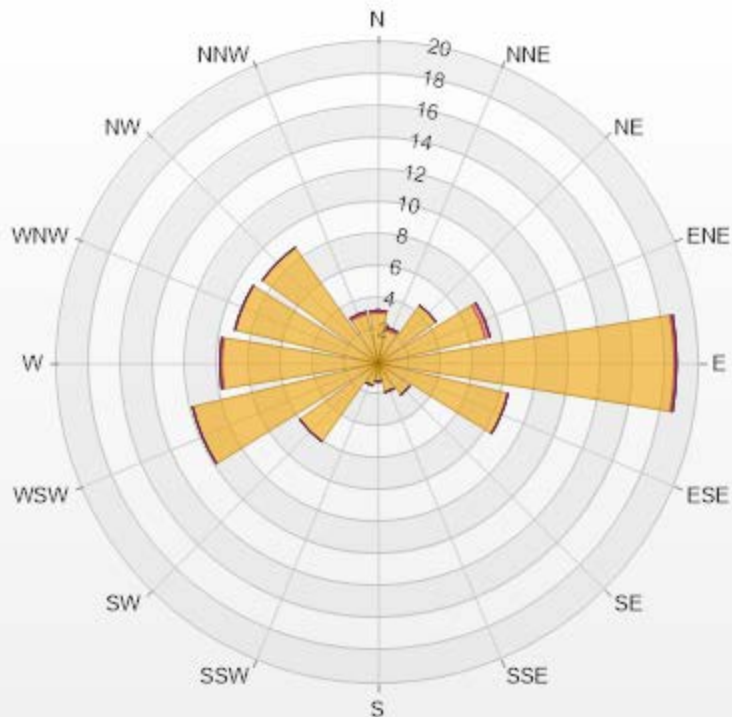
Timeseries Chart of Hourly Average for TRS - AQHI - Cadotte Lake Station





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-TRS[ppb] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 93.95% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	3.15	0.14	0	0	0	3.29
NNE	2.15	0.14	0	0	0	2.29
NE	4.43	0	0	0	0	4.43
ENE	6.87	0.29	0	0	0	7.16
E	18.45	0.14	0	0	0	18.59
ESE	8.3	0	0	0	0	8.3
SE	2.43	0	0	0	0	2.43
SSE	1.86	0	0	0	0	1.86
S	1.14	0	0	0	0	1.14
SSW	1.43	0	0	0	0	1.43
SW	6.01	0	0	0	0	6.01
WSW	11.87	0	0	0	0	11.87
W	9.73	0.14	0	0	0	9.87
WNW	9.16	0	0	0	0	9.16
NW	8.87	0	0	0	0	8.87
NNW	3.15	0.14	0	0	0	3.29
Summary	99	0.99	0	0	0	100



PRAMP-202101

Page 168 of 228

% Icon Classes (ppb)

99 0-2

1 2-5

0 5-10

0 10-50

0 >50.0



PEACE RIVER AREA MONITORING PROGRAM

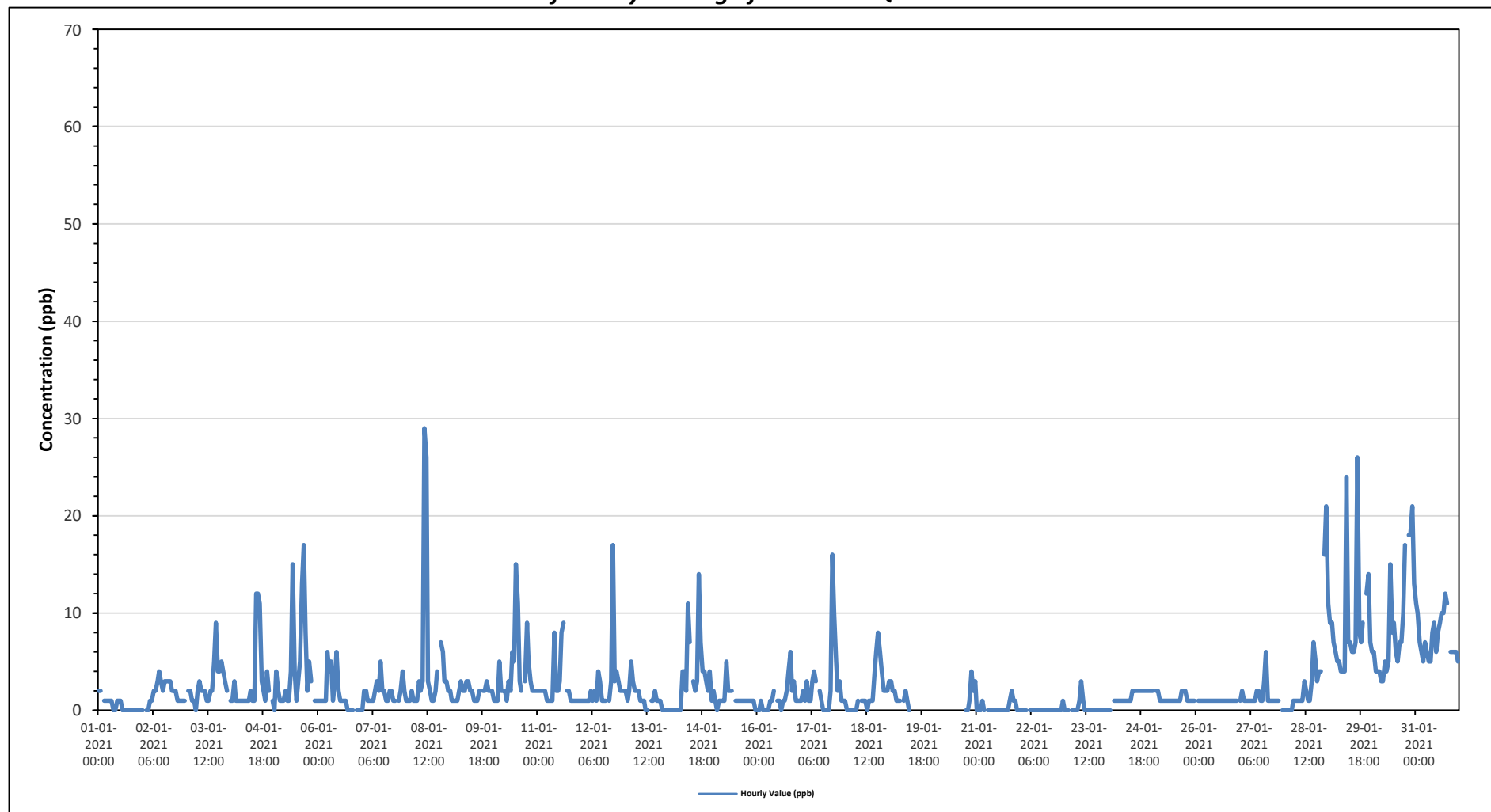
AQHI - Cadotte Lake Station - January 2021

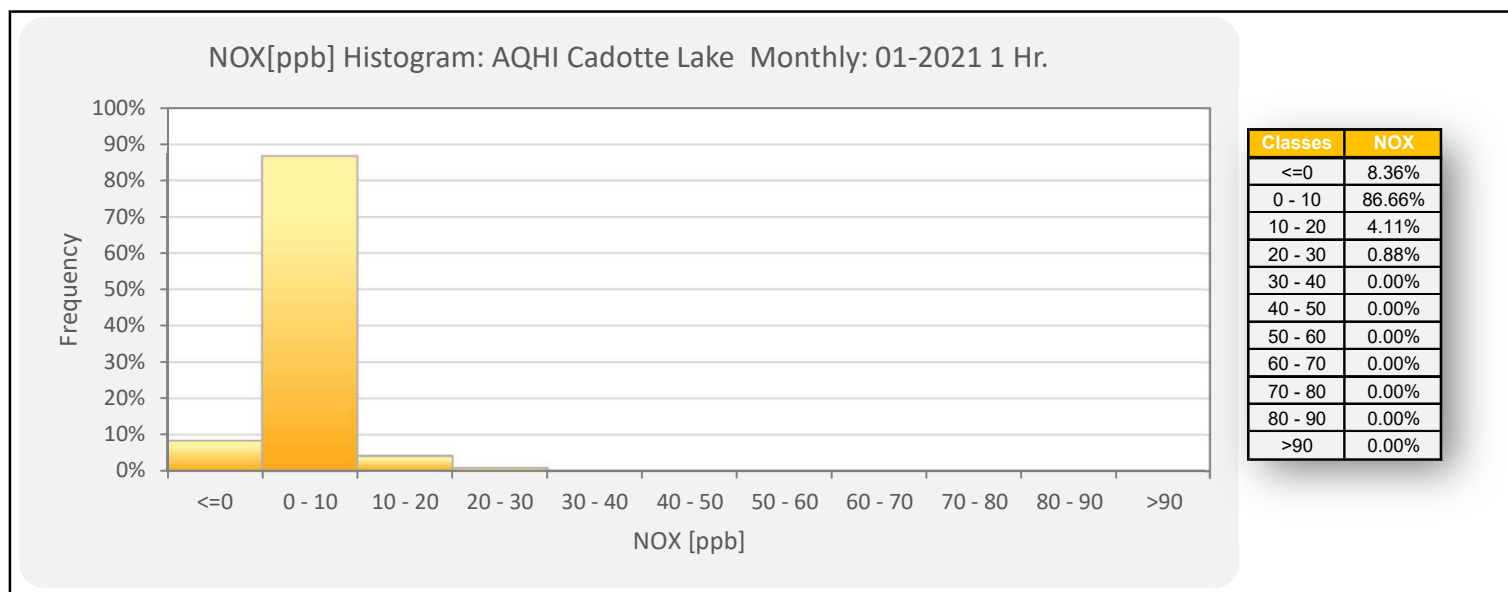
Summary of Hourly Averages

OXIDES OF NITROGEN (NOx) in ppb

Maximum Hourly Value:		29	ppb	on January 8 at hour 10											Hours in Service:		744											
Maximum Daily Value:		8.9	ppb	on January 29											Hours of Data:		682											
Minimum Hourly Value:		0	ppb	on January 1 at hour 8											Hours of Missing Data:		21											
Minimum Daily Value:		0.0	ppb	on January 22											Hours of Calibration:		41											
Monthly Average:		2.6	ppb												Operational Uptime:		97.2											
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
Jan 1	2	2	S	1	1	1	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.5
Jan 2	0	S	0	0	1	1	2	2	3	4	3	2	3	3	3	2	2	2	1	1	1	1	1	1	1	0	4	1.8
Jan 3	S	2	2	1	1	0	2	3	2	2	2	1	1	2	2	5	9	4	4	5	4	3	2	S	S	0	9	2.7
Jan 4	1	1	3	1	1	1	1	1	1	1	1	2	1	1	12	12	11	3	2	1	4	2	S	1	1	1	12	2.8
Jan 5	0	4	2	1	1	1	2	1	1	4	15	4	1	3	5	13	17	8	2	5	3	S	1	1	0	17	4.1	
Jan 6	1	1	1	1	1	6	4	5	1	3	6	2	1	1	1	0	0	0	0	S	0	0	0	0	0	6	1.6	
Jan 7	0	2	2	1	1	1	1	2	3	2	5	2	2	1	1	2	2	1	S	1	2	4	2	0	5	1.8		
Jan 8	1	1	1	2	1	1	1	3	2	3	29	26	3	2	1	1	2	4	S	7	6	3	3	2	1	29	4.6	
Jan 9	2	1	1	1	1	2	3	2	2	3	3	2	2	1	1	1	2	S	2	2	3	2	2	2	1	3	1.9	
Jan 10	1	1	1	5	2	2	2	1	3	2	6	5	15	11	3	2	S	3	9	5	3	2	2	2	1	15	3.8	
Jan 11	2	2	2	2	2	1	1	1	1	8	2	2	3	8	9	S	2	2	1	1	1	1	1	1	1	9	2.4	
Jan 12	1	1	1	1	1	2	1	2	1	4	3	1	1	1	S	1	3	17	3	4	3	2	2	2	1	17	2.5	
Jan 13	2	1	2	5	3	2	2	2	1	1	1	0	0	S	1	1	2	1	1	1	0	0	0	0	0	5	1.3	
Jan 14	0	0	0	0	0	0	0	4	4	2	11	7	S	3	2	3	14	7	4	4	3	2	4	1	0	14	3.3	
Jan 15	2	1	0	1	1	1	1	5	2	2	2	S	1	1	1	1	1	1	1	1	1	1	1	0	0	5	1.3	
Jan 16	0	0	1	0	0	0	0	1	1	2	S	1	1	0	1	1	2	4	6	2	3	1	1	1	0	6	1.3	
Jan 17	1	2	1	3	1	1	3	4	3	S	2	1	0	0	0	0	2	16	10	5	2	3	1	1	0	16	2.7	
Jan 18	1	0	0	0	0	0	0	1	S	1	1	1	0	1	1	1	4	6	8	6	4	2	2	2	0	8	1.8	
Jan 19	3	3	2	2	1	1	1	S	1	2	1	0	NRM	NRM	NRM	NRM	NRM	NRM	P	P	P	P	P	P	0	3	-	
Jan 20	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	C	C	C	C	C	C	C	C	C	0	0	1	4	2	3	0	4	-
Jan 21	0	0	0	1	0	S	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	1	0	0	0	2	0.3	
Jan 22	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.0	
Jan 23	0	0	0	S	0	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.2	
Jan 24	0	0	S	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	0	2	1.4	
Jan 25	2	S	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	2	1.3	
Jan 26	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	S	1	1	1.0	
Jan 27	1	2	1	1	1	1	1	1	1	2	2	1	1	3	6	1	1	1	1	1	1	1	S	0	0	6	1.4	
Jan 28	0	0	0	0	0	1	1	1	1	1	1	3	2	1	1	3	7	5	3	4	4	S	16	21	0	21	3.3	
Jan 29	11	9	9	7	6	5	5	4	4	4	24	7	7	6	6	7	26	8	7	9	S	12	14	7	4	26	8.9	
Jan 30	6	6	4	4	4	3	3	5	4	5	15	8	9	6	5	7	7	10	17	S	18	18	21	13	3	21	8.6	
Jan 31	11	10	7	6	5	7	6	5	5	8	9	6	8	9	10	10	12	11	S	6	6	6	6	5	5	12	7.6	
Diurnal Maximum	11	10	9	7	6	7	6	5	5	8	29	26	15	11	12	13	26	17	17	9	18	18	21	21				
Diurnal Average	1.8	1.9	1.6	1.8	1.3	1.5	1.6	2.1	1.8	2.5	5.1	3.0	2.4	2.4	2.7	2.9	4.8	4.3	3.2	2.7	2.8	2.6	3.2	2.6				
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance											
K	Collection Error							N	No Data (Machine Not in Service)							Y	Routine Maintenance											
X	InValid Data (Equipment Malfunction/Recovery)							NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)								P Power Failure											
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.																												

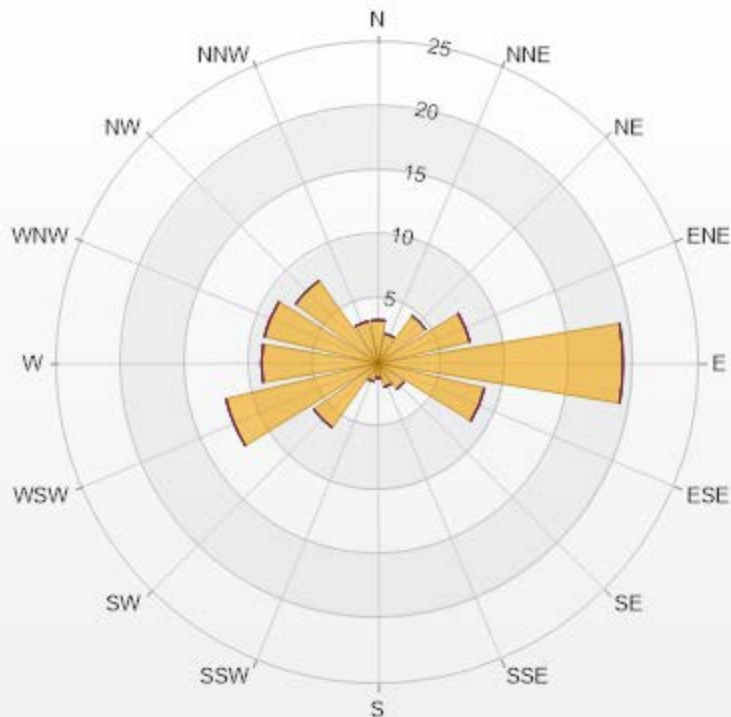
Timeseries Chart of Hourly Average for NOx - AQHI - Cadotte Lake Station





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-NOX[ppb] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 91.67% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	3.37	0	0	0	0	3.37
NNE	2.35	0	0	0	0	2.35
NE	4.55	0	0	0	0	4.55
ENE	7.33	0	0	0	0	7.33
E	19.06	0	0	0	0	19.06
ESE	8.5	0	0	0	0	8.5
SE	2.49	0	0	0	0	2.49
SSE	1.91	0	0	0	0	1.91
S	1.17	0	0	0	0	1.17
SSW	1.47	0	0	0	0	1.47
SW	6.16	0	0	0	0	6.16
WSW	12.17	0	0	0	0	12.17
W	9.09	0	0	0	0	9.09
WNW	9.09	0	0	0	0	9.09
NW	7.92	0	0	0	0	7.92
NNW	3.37	0	0	0	0	3.37
Summary	100	0	0	0	0	100



PRAMP-202101

Page 173 of 228

% Icon Classes (ppb)

100 0-30

0 30-50

0 50-76

0 76-159

0 >159.0



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - January 2021

Summary of Hourly Averages

NITRIC OXIDE (NO) in ppb

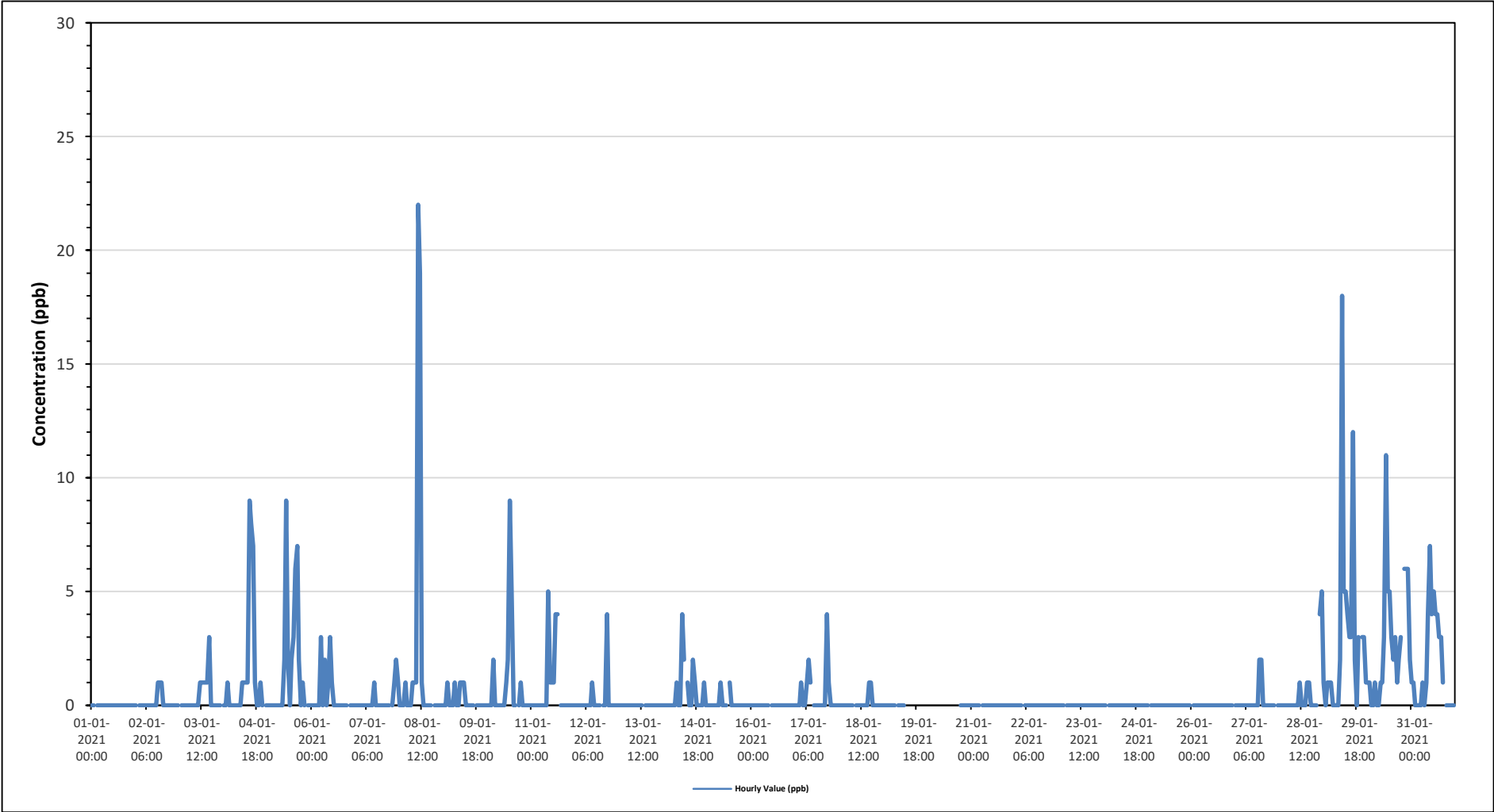
Maximum Hourly Value:	22	ppb	on January 8 at hour 10	Hours in Service:	744
Maximum Daily Value:	3.0	ppb	on January 29	Hours of Data:	682
Minimum Hourly Value:	0	ppb	on January 1 at hour 0	Hours of Missing Data:	21
Minimum Daily Value:	0.0	ppb	on January 1	Hours of Calibration:	41
Monthly Average:	0.6	ppb		Operational Uptime:	97.2

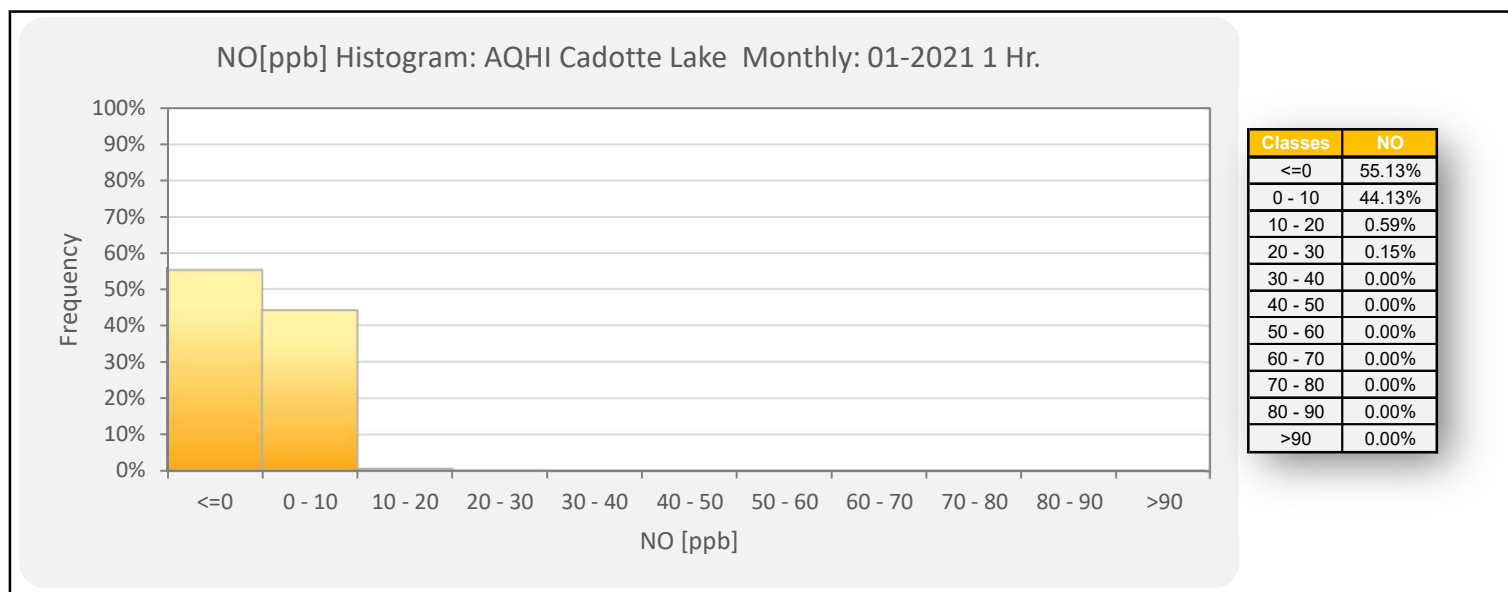
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Jan 1	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Jan 2	0	S	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0.1
Jan 3	S	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	3	0	0	0	0	0	0	0	S	3	0.4
Jan 4	0	0	1	0	0	0	0	0	0	0	1	1	1	1	9	8	7	1	0	0	1	0	S	0	0	9	1.3
Jan 5	0	0	0	0	0	0	0	0	0	2	9	2	0	2	3	6	7	2	0	1	0	S	0	0	0	9	1.5
Jan 6	0	0	0	0	0	3	0	2	0	1	3	1	0	0	0	0	0	0	0	S	S	0	0	0	0	3	0.4
Jan 7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	S	0	1	2	1	0	2	0.2
Jan 8	0	0	0	1	0	0	0	1	1	1	22	19	1	0	0	0	0	0	S	0	0	0	0	0	0	22	2.0
Jan 9	0	0	1	0	0	0	1	0	0	1	1	1	0	0	0	0	0	S	S	0	0	0	0	0	0	1	0.2
Jan 10	0	0	0	2	0	0	0	0	0	0	1	2	9	5	0	0	S	0	1	0	0	0	0	0	0	9	0.9
Jan 11	0	0	0	0	0	0	0	0	0	5	1	1	1	4	4	S	0	0	0	0	0	0	0	0	0	5	0.7
Jan 12	0	0	0	0	0	0	0	0	0	1	0	0	0	0	S	0	0	4	0	0	0	0	0	0	0	4	0.2
Jan 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
Jan 14	0	0	0	0	0	0	0	1	0	0	4	2	S	1	0	0	2	1	0	0	0	0	1	0	0	4	0.5
Jan 15	0	0	0	0	0	0	0	1	0	0	0	S	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1
Jan 16	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
Jan 17	0	0	0	1	0	0	1	2	1	S	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	4	0.4
Jan 18	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0.1
Jan 19	0	0	0	0	0	0	0	S	0	0	0	0	NRM	NRM	NRM	NRM	NRM	NRM	P	P	P	P	P	P	0	0	-
Jan 20	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	C	C	C	C	C	C	C	C	C	0	0	0	0	0	0	0	0	-
Jan 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
Jan 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
Jan 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
Jan 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
Jan 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
Jan 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
Jan 27	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	S	0	0	2	0.2
Jan 28	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	S	4	5	0	5	0.5
Jan 29	1	0	1	1	1	0	0	0	0	2	18	5	5	4	3	3	12	2	0	3	S	3	3	1	0	18	3.0
Jan 30	1	1	0	0	1	0	0	1	1	3	11	5	5	3	2	3	1	2	3	S	6	6	6	2	0	11	2.7
Jan 31	1	1	0	0	0	0	1	0	1	4	7	4	5	4	4	3	3	1	S	0	0	0	0	0	0	7	1.7
Diurnal Maximum	1	1	1	2	1	3	1	2	1	5	22	19	9	5	9	8	12	4	3	3	6	6	6	5			
Diurnal Average	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.3	0.1	0.7	2.7	1.6	1.1	1.0	1.0	0.9	1.3	0.6	0.2	0.1	0.3	0.4	0.6	0.3			

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

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.

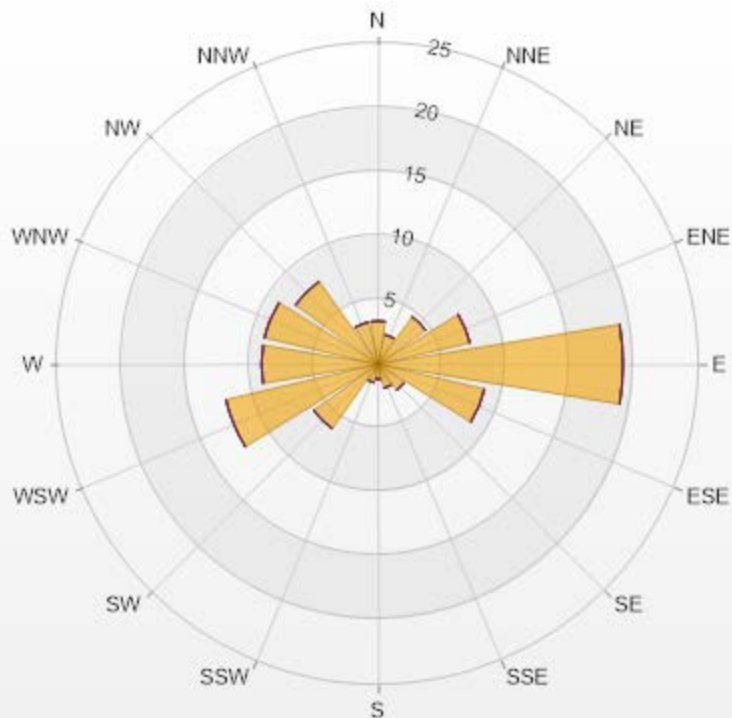
Timeseries Chart of Hourly Average for NO - AQHI - Cadotte Lake Station





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-NO[ppb] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 91.67% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	3.37	0	0	0	0	3.37
NNE	2.35	0	0	0	0	2.35
NE	4.55	0	0	0	0	4.55
ENE	7.33	0	0	0	0	7.33
E	19.06	0	0	0	0	19.06
ESE	8.5	0	0	0	0	8.5
SE	2.49	0	0	0	0	2.49
SSE	1.91	0	0	0	0	1.91
S	1.17	0	0	0	0	1.17
SSW	1.47	0	0	0	0	1.47
SW	6.16	0	0	0	0	6.16
WSW	12.17	0	0	0	0	12.17
W	9.09	0	0	0	0	9.09
WNW	9.09	0	0	0	0	9.09
NW	7.92	0	0	0	0	7.92
NNW	3.37	0	0	0	0	3.37
Summary	100	0	0	0	0	100



PRAMP-202101

Page 178 of 228

% Icon Classes (ppb)

100 0-30

0 30-50

0 50-76

0 76-159

0 >159.0



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - January 2021

Summary of Hourly Averages

NITROGEN DIOXIDE (NO₂) in ppb

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

Number of 1-Hour Exceedances: 0

Maximum Hourly Value: 17 ppb on January 28 at hour 23

Hours in Service: 744

Maximum Daily Value: 6.0 ppb on January 29

Hours of Data: 682

Minimum Hourly Value: 0 ppb on January 1 at hour 8

Hours of Missing Data: 21

Minimum Daily Value: 0.0 ppb on January 22

Hours of Calibration: 41

Monthly Average: 2.0 ppb

Operational Uptime: 97.2

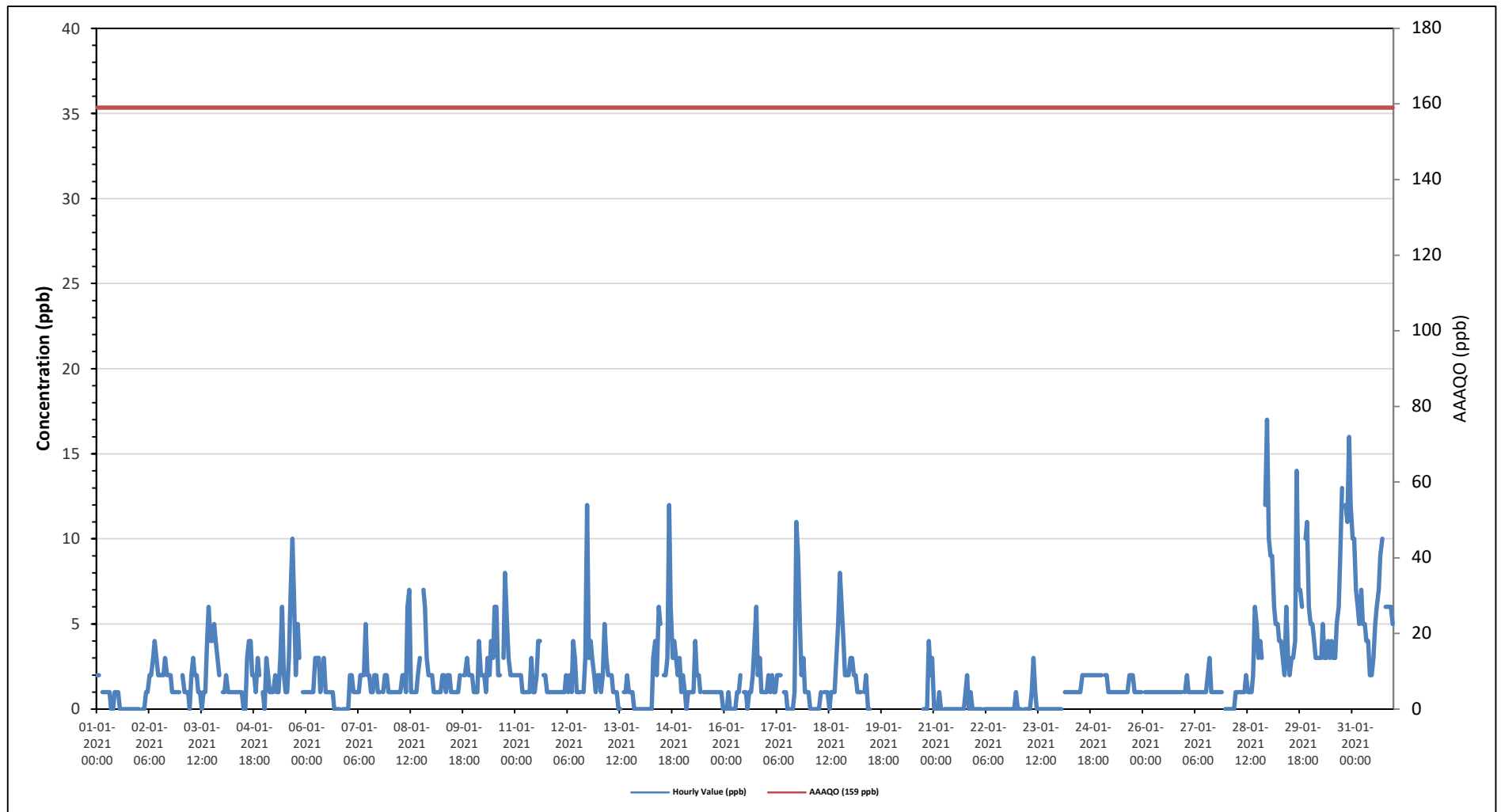
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
Jan 1	2	2	S	1	1	1	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.5
Jan 2	0	S	0	0	1	1	2	2	3	4	3	2	2	2	2	3	2	2	2	1	1	1	1	1	1	0	4	1.7
Jan 3	S	2	1	1	1	0	2	3	2	2	1	1	0	1	1	4	6	4	4	5	4	3	2	2	S	0	6	2.3
Jan 4	1	1	2	1	1	1	1	1	1	1	1	1	0	0	3	4	4	2	2	1	3	2	S	1	0	4	1.5	
Jan 5	0	3	2	1	1	1	2	1	1	3	6	2	1	1	3	7	10	6	2	5	3	S	1	1	0	10	2.7	
Jan 6	1	1	1	1	1	3	3	3	1	2	3	1	1	1	1	1	0	0	0	0	S	0	0	0	0	3	1.1	
Jan 7	0	2	2	1	1	1	1	2	2	2	5	2	2	1	1	2	2	1	1	S	1	2	2	1	0	5	1.6	
Jan 8	1	1	1	1	1	1	1	2	2	1	6	7	1	1	1	1	2	3	S	7	6	3	2	2	1	7	2.3	
Jan 9	2	1	1	1	1	1	2	2	1	2	2	1	1	1	1	1	2	S	2	2	3	2	2	2	1	3	1.6	
Jan 10	1	1	1	4	2	2	2	1	3	2	4	3	6	6	2	2	S	3	8	5	3	2	2	2	1	8	2.9	
Jan 11	2	2	2	2	1	1	1	1	1	3	1	1	2	4	4	S	2	2	1	1	1	1	1	1	1	4	1.7	
Jan 12	1	1	1	1	1	2	1	2	1	4	3	1	1	1	S	1	3	12	3	4	3	2	1	2	1	12	2.3	
Jan 13	2	1	2	5	3	2	2	2	1	1	1	0	0	S	1	1	2	1	1	1	0	0	0	0	0	5	1.3	
Jan 14	0	0	0	0	0	0	0	3	4	2	6	5	S	2	2	3	12	6	3	4	3	2	3	1	0	12	2.7	
Jan 15	2	1	0	1	1	1	1	4	2	2	1	S	1	1	1	1	1	1	1	1	1	1	1	0	0	4	1.2	
Jan 16	0	0	1	0	0	0	0	1	1	2	S	1	1	0	1	1	2	4	6	2	3	1	1	1	0	6	1.3	
Jan 17	1	2	1	2	1	1	2	2	2	S	1	1	0	0	0	0	1	11	9	5	2	3	1	1	0	11	2.1	
Jan 18	1	0	0	0	0	0	0	1	S	1	1	1	0	1	1	1	3	5	8	6	4	2	2	2	0	8	1.7	
Jan 19	3	3	2	2	1	1	1	S	1	2	0	0	NRM	NRM	NRM	NRM	NRM	NRM	P	P	P	P	P	P	0	3	-	
Jan 20	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	C	C	C	C	C	C	C	C	C	0	0	0	4	2	3	0	4	-
Jan 21	0	0	0	1	0	S	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	1	0	0	0	2	0.2	
Jan 22	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.0	
Jan 23	0	0	0	S	0	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.2	
Jan 24	0	0	S	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	0	2	1.4	
Jan 25	2	S	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	2	1.3	
Jan 26	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	S	1	1	1.0	
Jan 27	1	2	1	1	1	1	1	1	1	1	1	1	1	2	3	1	1	1	1	1	1	1	S	0	0	3	1.1	
Jan 28	0	0	0	0	0	1	1	1	1	1	1	2	1	1	1	2	6	5	3	4	3	S	12	17	0	17	2.7	
Jan 29	10	9	9	6	5	5	4	4	3	2	6	3	2	3	3	4	14	7	7	6	S	10	11	6	2	14	6.0	
Jan 30	5	5	4	3	3	3	3	5	3	3	4	3	4	3	3	5	6	9	13	S	12	11	16	12	3	16	6.0	
Jan 31	10	10	7	6	5	7	5	5	4	4	2	2	3	5	6	7	9	10	S	6	6	6	6	5	2	10	5.9	
Diurnal Maximum	10	10	9	6	5	7	5	5	4	4	6	7	6	6	6	7	14	12	13	7	12	11	16	17				
Diurnal Average	1.7	1.8	1.6	1.6	1.2	1.4	1.4	1.8	1.6	1.8	2.2	1.6	1.2	1.5	1.6	2.0	3.4	3.6	3.0	2.6	2.4	2.3	2.6	2.3				

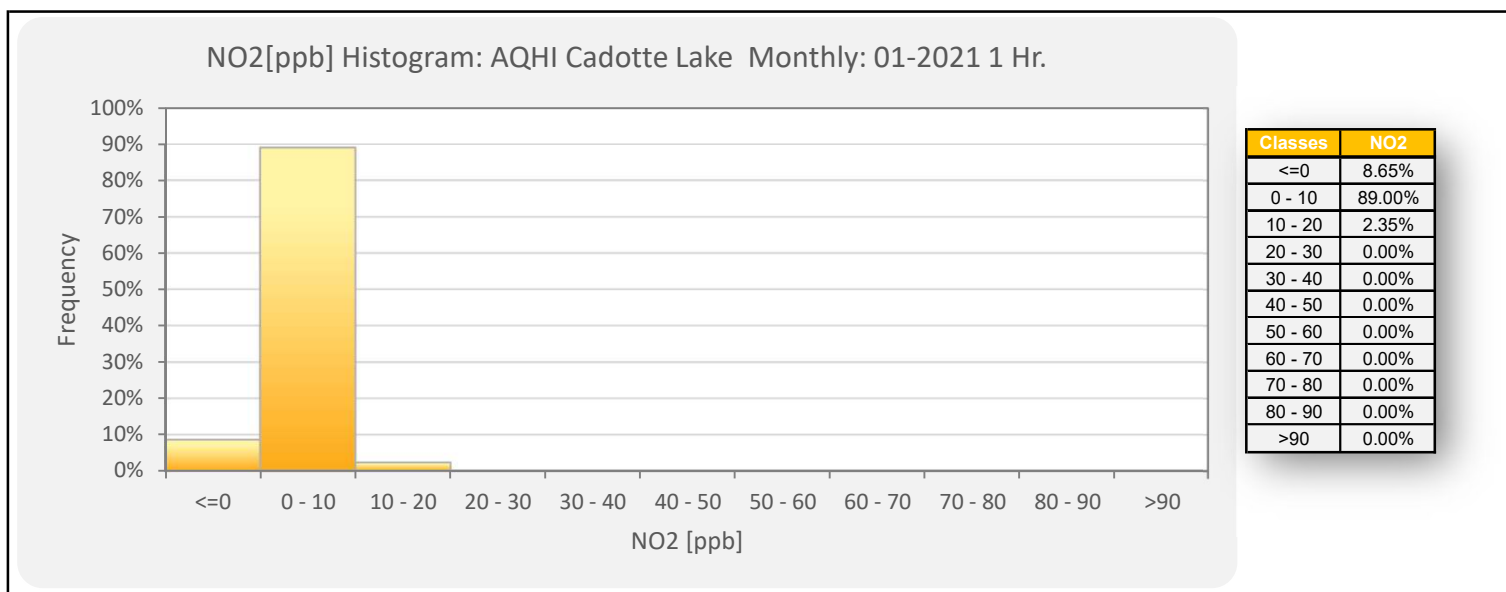
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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.

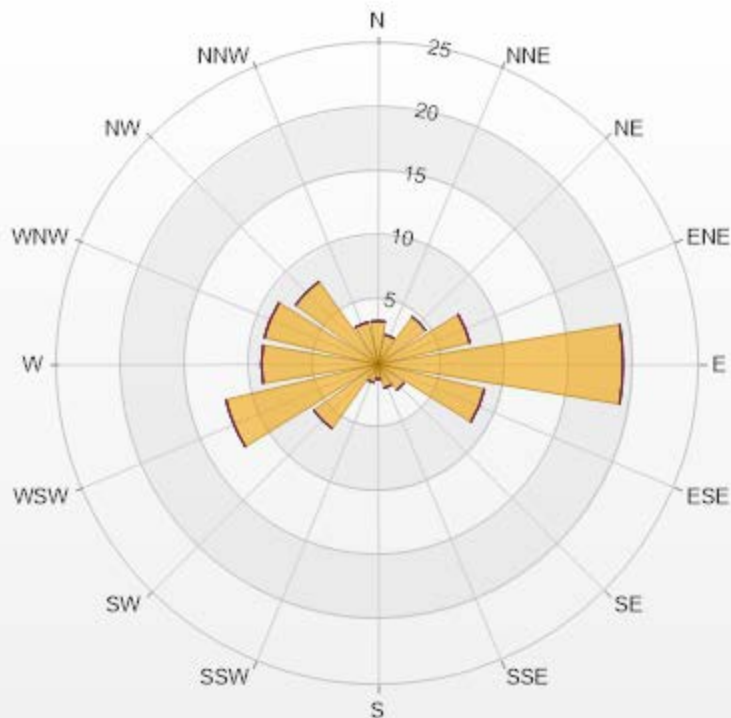
Timeseries Chart of Hourly Average for NO2 - AQHI - Cadotte Lake Station





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-NO2[ppb] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 91.67% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	3.37	0	0	0	0	3.37
NNE	2.35	0	0	0	0	2.35
NE	4.55	0	0	0	0	4.55
ENE	7.33	0	0	0	0	7.33
E	19.06	0	0	0	0	19.06
ESE	8.5	0	0	0	0	8.5
SE	2.49	0	0	0	0	2.49
SSE	1.91	0	0	0	0	1.91
S	1.17	0	0	0	0	1.17
SSW	1.47	0	0	0	0	1.47
SW	6.16	0	0	0	0	6.16
WSW	12.17	0	0	0	0	12.17
W	9.09	0	0	0	0	9.09
WNW	9.09	0	0	0	0	9.09
NW	7.92	0	0	0	0	7.92
NNW	3.37	0	0	0	0	3.37
Summary	100	0	0	0	0	100



PRAMP-202101

Page 183 of 228

% Icon Classes (ppb)

100 0-30

0 30-50

0 50-76

0 76-159

0 >159.0



PEACE RIVER AREA MONITORING PROGRAM

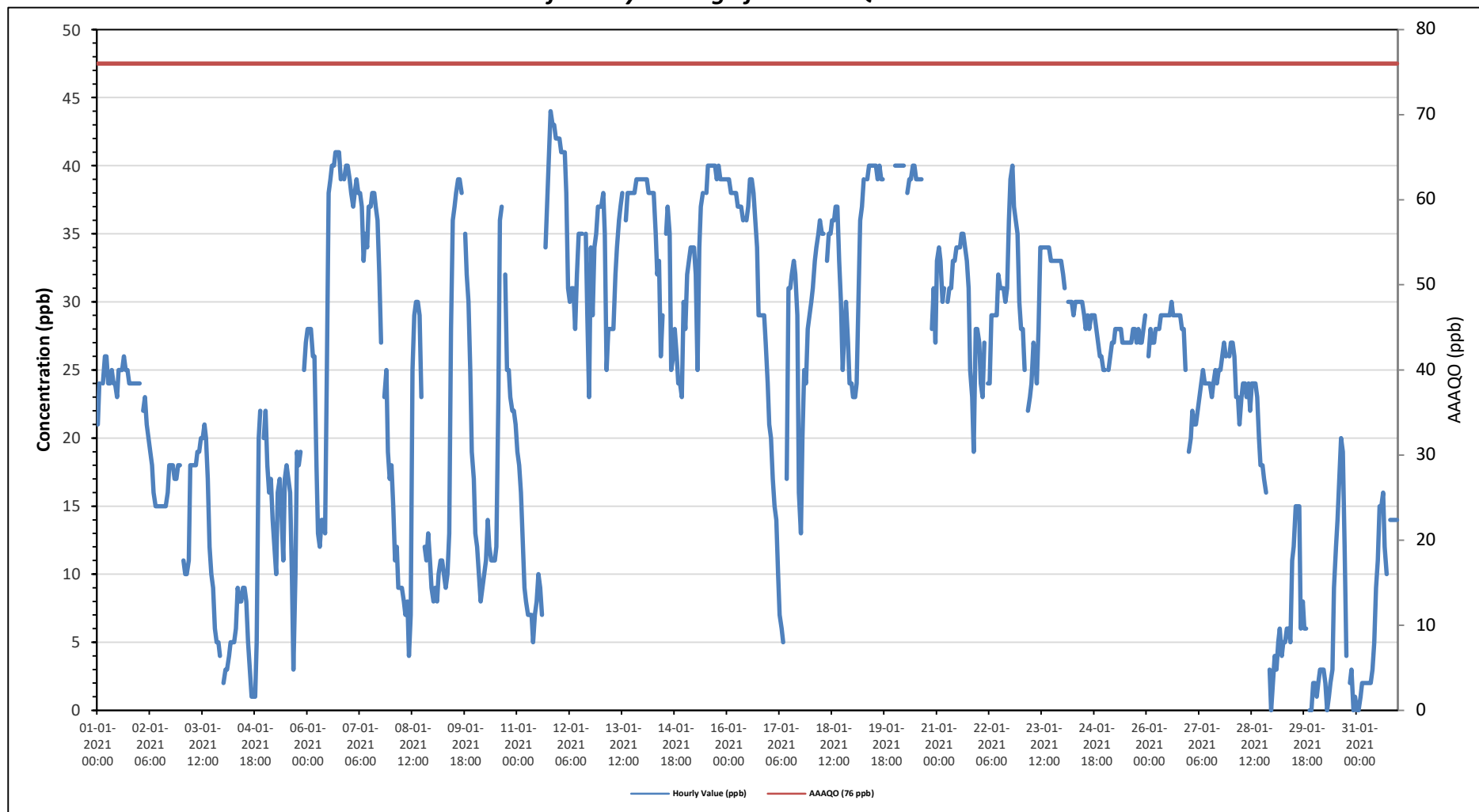
AQHI - Cadotte Lake Station - January 2021

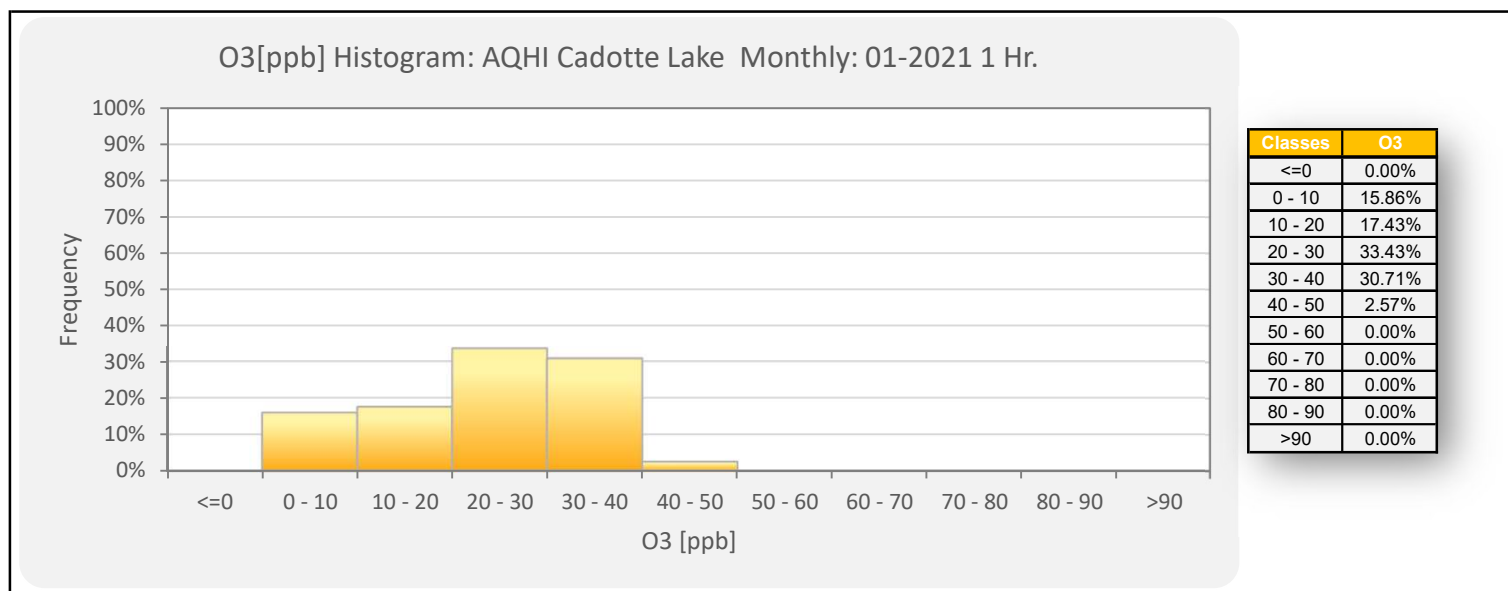
Summary of Hourly Averages

OZONE (O₃) in ppb

Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 76 ppb																											
Number of 1-Hour Exceedances:		0																									
Maximum Hourly Value: 44 ppb on January 11 at hour 19													Hours in Service: 744														
Maximum Daily Value: 37.7 ppb on January 20													Hours of Data: 700														
Minimum Hourly Value: 0 ppb on January 28 at hour 23													Hours of Missing Data: 6														
Minimum Daily Value: 5.9 ppb on January 30													Hours of Calibration: 38														
Monthly Average: 24.2 ppb													Operational Uptime: 99.2														
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
Jan 1	21	24	S	24	26	26	24	24	25	24	24	23	25	25	26	25	25	24	24	24	24	24	24	24	21	26	24.3
Jan 2	24	S	22	23	21	20	19	18	16	15	15	15	15	15	15	16	18	18	18	17	17	18	18	15	24	17.7	
Jan 3	S	11	10	10	11	18	18	18	18	19	19	20	20	21	20	17	12	10	9	6	5	5	4	S	4	21	13.7
Jan 4	2	3	3	4	5	5	5	6	9	8	8	9	9	8	5	3	1	1	1	5	20	22	S	20	1	22	7.0
Jan 5	22	18	16	17	14	12	10	16	17	15	11	17	18	17	16	10	3	10	19	18	19	S	25	27	3	27	16.0
Jan 6	28	28	28	26	26	18	13	12	14	14	13	25	38	39	40	40	41	41	41	39	S	39	40	40	12	41	29.7
Jan 7	39	38	37	38	39	38	38	37	33	35	34	37	37	38	38	37	36	32	27	S	23	25	19	17	17	39	33.6
Jan 8	18	15	11	12	9	9	9	8	7	8	4	7	25	29	30	30	29	23	S	12	11	13	11	9	4	30	14.7
Jan 9	8	9	8	10	11	11	10	9	10	13	28	36	37	38	39	39	38	S	35	32	30	25	19	17	8	39	22.3
Jan 10	13	12	10	8	9	10	11	14	12	11	11	12	23	36	37	S	S	32	25	25	23	22	22	21	8	37	17.8
Jan 11	19	18	16	13	9	8	7	7	7	5	7	8	10	9	7	S	34	37	41	44	43	43	42	42	5	44	20.7
Jan 12	42	41	41	41	38	31	30	31	31	28	32	35	35	35	S	35	29	23	34	29	34	35	37	37	23	42	34.1
Jan 13	37	38	35	25	28	28	28	28	32	34	36	37	38	S	36	38	38	38	38	38	39	39	39	39	25	39	35.0
Jan 14	39	39	39	38	38	38	38	35	32	33	26	29	S	35	37	35	25	26	28	26	24	24	23	30	23	39	32.0
Jan 15	28	32	33	34	34	34	32	25	34	37	38	S	38	40	40	40	40	40	39	40	39	39	39	39	25	40	36.3
Jan 16	39	39	38	38	38	38	37	37	37	36	S	36	37	39	39	38	36	34	29	29	29	29	27	24	24	39	34.9
Jan 17	21	20	17	15	14	10	7	6	5	S	17	31	31	32	33	32	29	16	13	20	25	24	28	29	5	33	20.7
Jan 18	30	31	33	34	35	36	35	35	S	33	35	35	36	36	37	37	33	30	25	28	30	27	24	24	24	37	32.1
Jan 19	23	23	24	30	36	37	39	S	39	40	40	40	40	40	39	40	39	39	P	P	P	P	P	P	23	40	-
Jan 20	40	40	40	40	40	40	S	38	39	39	40	40	39	39	39	39	C	C	C	C	C	28	31	27	27	40	37.7
Jan 21	33	34	33	30	31	S	30	31	31	33	33	34	34	34	35	35	34	33	31	25	23	19	28	28	19	35	31.0
Jan 22	27	24	23	27	S	24	24	29	29	29	29	32	31	31	31	30	31	36	39	40	37	36	35	30	23	40	30.6
Jan 23	28	28	25	S	22	23	24	27	26	24	28	34	34	34	34	34	34	33	33	33	33	33	33	33	22	34	30.0
Jan 24	32	31	S	30	30	30	29	30	30	30	30	30	29	28	29	28	29	29	29	28	27	26	26	25	25	32	28.9
Jan 25	25	S	25	26	27	27	28	28	28	28	28	27	27	27	27	27	28	28	27	28	27	27	28	29	25	29	27.2
Jan 26	S	26	28	27	27	28	28	28	28	29	29	29	29	29	30	29	29	29	29	29	28	28	25	S	25	30	28.3
Jan 27	19	20	22	21	21	22	23	24	25	24	24	24	24	23	24	25	24	25	25	26	27	26	S	26	19	27	23.7
Jan 28	27	27	26	23	23	21	23	24	24	23	24	22	24	24	24	23	20	18	18	17	16	S	3	0	0	27	20.6
Jan 29	2	4	3	5	6	4	5	5	6	6	5	11	12	15	15	15	6	8	6	6	S	0	0	2	0	15	6.4
Jan 30	2	1	2	3	3	3	2	0	1	2	3	9	12	14	17	20	19	12	4	S	2	3	0	1	0	20	5.9
Jan 31	0	0	1	2	2	2	2	2	2	3	5	9	11	15	15	16	12	10	S	14	14	14	14	14	0	16	7.8
Diurnal Maximum	42	41	41	41	40	40	39	38	39	40	40	40	40	40	40	41	41	41	41	44	43	43	42	42			
Diurnal Average	23.7	23.2	22.4	22.5	22.4	21.7	20.9	21.1	21.6	22.6	22.5	25.1	26.9	27.7	28.4	29.0	26.6	25.4	25.4	25.1	24.8	24.7	23.7	24.0			
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance										
K	Collection Error							N	No Data (Machine Not in Service)							Y	Routine Maintenance										
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.																											

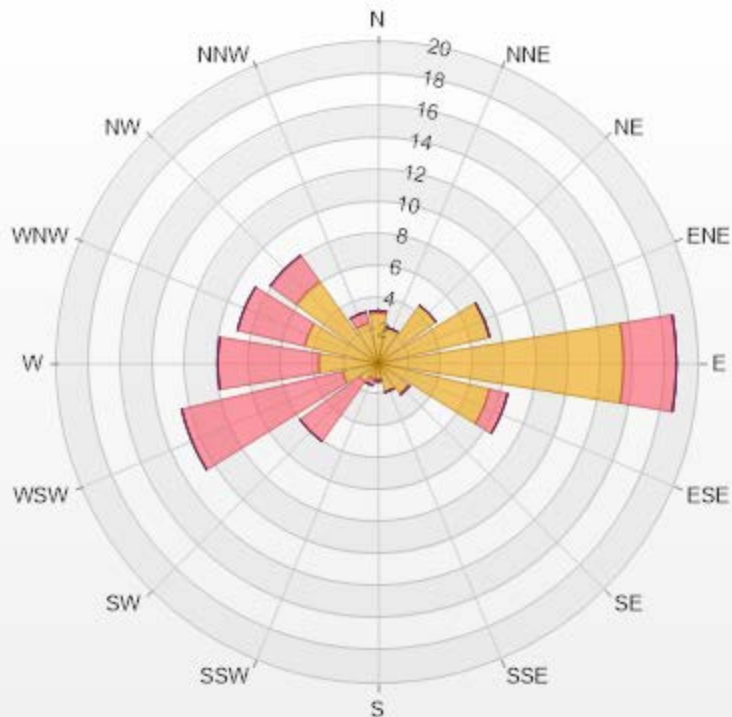
Timeseries Chart of Hourly Average for O3 - AQHI - Cadotte Lake Station





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-O3[ppb] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.09% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	3.14	0.14	0	0	0	3.28
NNE	2.29	0	0	0	0	2.29
NE	4.43	0	0	0	0	4.43
ENE	7.14	0	0	0	0	7.14
E	15.29	3.29	0	0	0	18.58
ESE	7.14	1.14	0	0	0	8.28
SE	2.29	0.14	0	0	0	2.43
SSE	1.86	0	0	0	0	1.86
S	1	0.14	0	0	0	1.14
SSW	1	0.43	0	0	0	1.43
SW	1.43	4.57	0	0	0	6
WSW	2.29	10.29	0	0	0	12.58
W	3.71	6.29	0	0	0	10
WNW	4.71	4.29	0	0	0	9
NW	6.29	2	0	0	0	8.29
NNW	2.57	0.71	0	0	0	3.28
Summary	66.58	33.43	0	0	0	100



PRAMP-202101

Page 188 of 228

% Icon Classes (ppb)

67

0-30

33

30-50

50-76

0

76-159

0

>159.0



PEACE RIVER AREA MONITORING PROGRAM

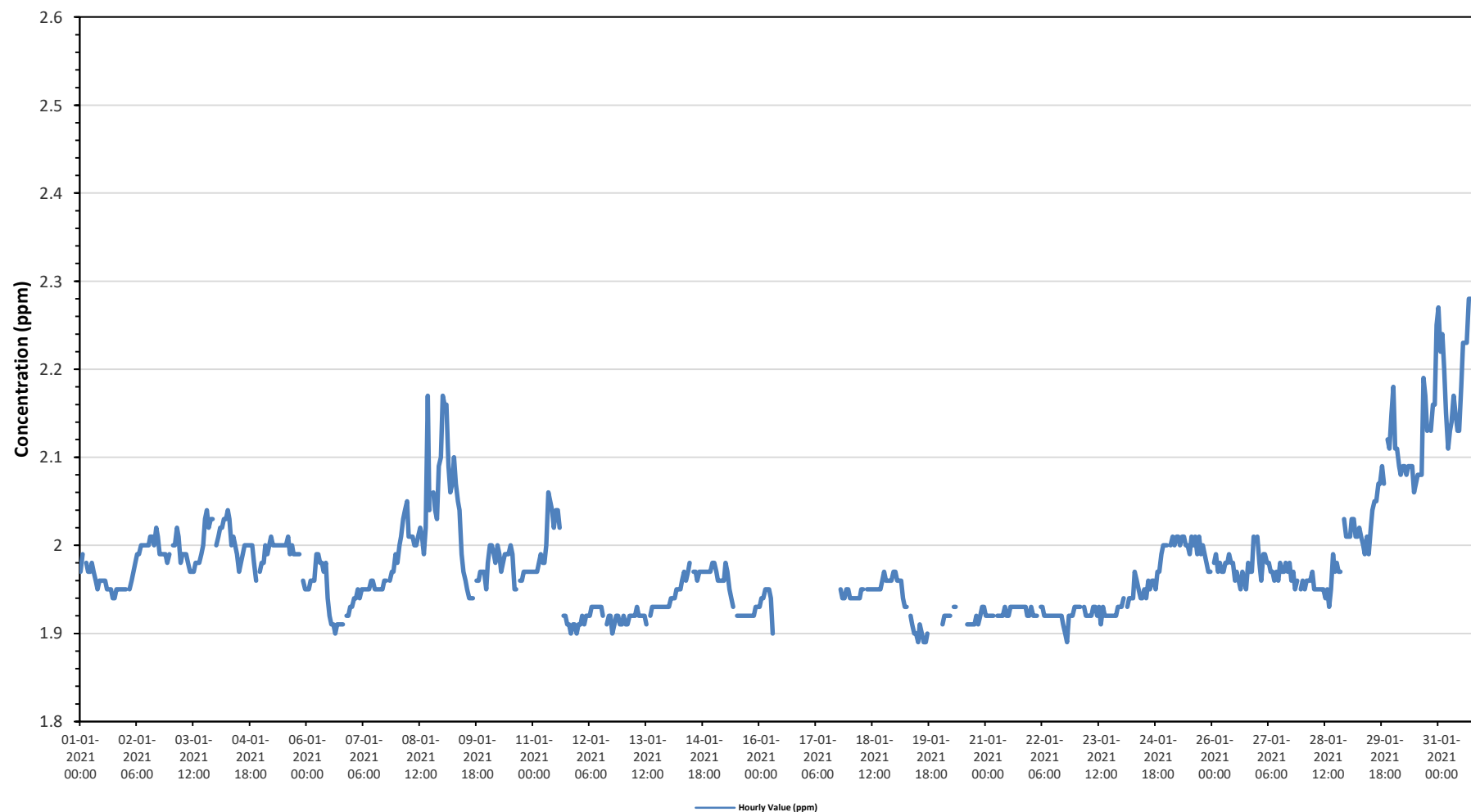
AQHI - Cadotte Lake Station - January 2021

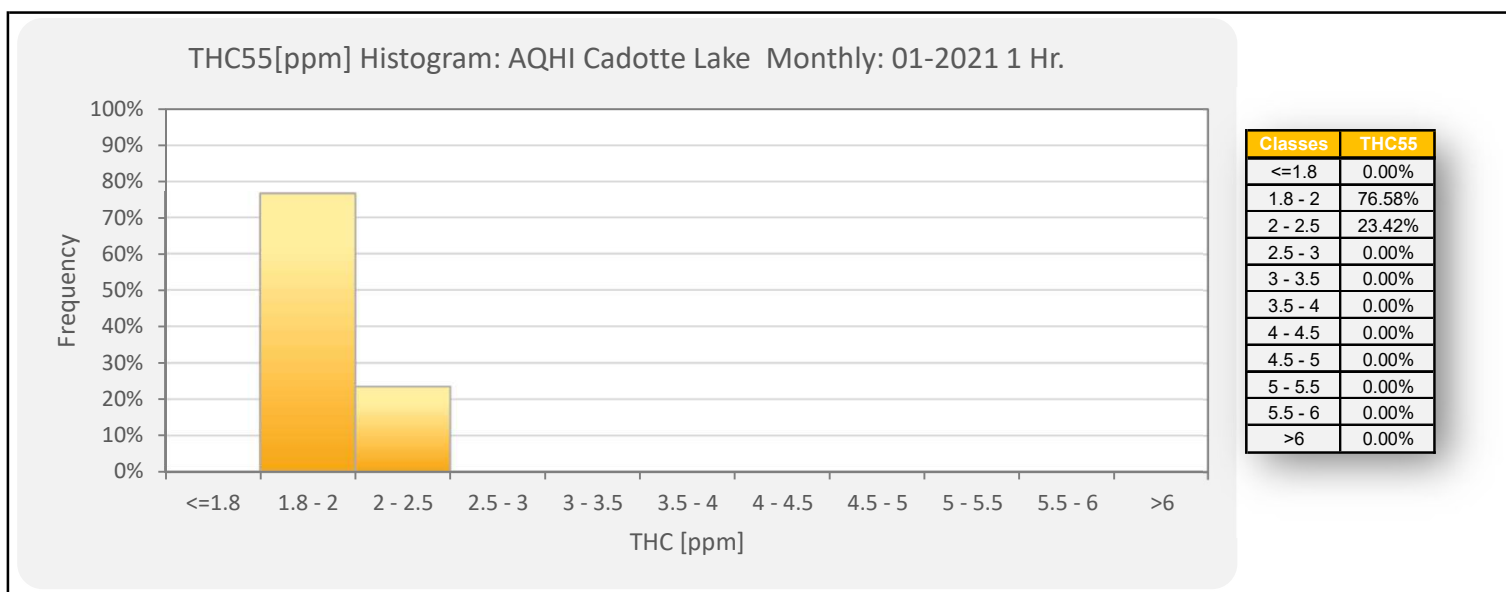
Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

Maximum Hourly Value:										2.28 ppm on January 31 at hour 16										Hours in Service:										744									
Maximum Daily Value:										2.18 ppm on January 31										Hours of Data:										666									
Minimum Hourly Value:										1.89 ppm on January 19 at hour 12										Hours of Missing Data:										42									
Minimum Daily Value:										1.92 ppm on January 12										Hours of Calibration:										36									
Monthly Average:										1.98 ppm										Operational Uptime:										94.4									
Day	Hourly Period Starting at (MST)																									Daily Minimum	Daily Maximum	Daily Average											
Jan 1	1.97	1.99	S	1.98	1.97	1.97	1.98	1.97	1.96	1.95	1.96	1.96	1.96	1.96	1.95	1.95	1.95	1.94	1.94	1.95	1.95	1.95	1.95	1.95	1.94	1.99	1.96												
Jan 2	1.95	S	1.95	1.96	1.97	1.98	1.99	1.99	2.00	2.00	2.00	2.00	2.01	2.01	2.00	2.02	2.01	1.99	1.99	1.99	1.99	1.99	1.98	1.99	1.95	2.02	1.99												
Jan 3	S	2.00	2.00	2.02	2.01	1.98	1.99	1.99	1.99	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.99	2.00	2.03	2.04	2.02	2.03	2.03	S	1.97	2.04	2.00												
Jan 4	2.00	2.01	2.02	2.02	2.03	2.03	2.04	2.03	2.00	2.01	2.00	1.99	1.97	1.98	1.99	2.00	2.00	2.00	2.00	2.00	1.98	1.96	S	1.97	1.96	2.04	2.00												
Jan 5	1.98	1.98	2.00	1.99	2.00	2.01	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.01	1.99	2.00	1.99	1.99	1.99	1.99	1.99	S	1.96	1.95	1.95	2.01	1.99												
Jan 6	1.95	1.95	1.96	1.96	1.96	1.99	1.99	1.98	1.98	1.97	1.98	1.94	1.92	1.91	1.91	1.90	1.91	1.91	1.91	1.91	S	1.92	1.92	1.93	1.90	1.99	1.94												
Jan 7	1.93	1.94	1.94	1.95	1.94	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.96	1.96	S	1.96	1.97	1.97	1.99	1.93	1.99	1.95												
Jan 8	1.98	2.00	2.01	2.03	2.04	2.05	2.01	2.01	2.01	2.00	2.00	2.01	2.02	2.01	1.99	2.02	2.17	2.04	S	2.06	2.04	2.03	2.09	2.10	1.98	2.17	2.03												
Jan 9	2.17	2.16	2.16	2.09	2.06	2.07	2.10	2.07	2.05	2.04	1.99	1.97	1.96	1.95	1.94	1.94	1.94	S	1.96	1.96	1.97	1.97	1.97	1.95	1.94	2.17	2.02												
Jan 10	1.98	2.00	2.00	1.99	1.98	2.00	1.99	1.97	1.98	1.99	1.99	1.99	2.00	1.99	1.95	1.95	S	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.95	2.00	1.98												
Jan 11	1.97	1.97	1.97	1.98	1.99	1.98	1.98	2.00	2.06	2.05	2.04	2.02	2.04	2.04	2.02	S	1.92	1.92	1.91	1.91	1.90	1.91	1.91	1.90	1.90	2.06	1.97												
Jan 12	1.91	1.91	1.92	1.91	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.93	1.92	S	1.91	1.92	1.92	1.90	1.91	1.92	1.92	1.91	1.91	1.91	1.90	1.93	1.92												
Jan 13	1.92	1.91	1.91	1.92	1.92	1.92	1.92	1.93	1.92	1.92	1.92	1.92	1.91	S	1.92	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.91	1.93	1.92												
Jan 14	1.93	1.94	1.94	1.94	1.95	1.95	1.95	1.96	1.97	1.96	1.97	1.98	S	1.97	1.97	1.96	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.93	1.98	1.96												
Jan 15	1.98	1.97	1.96	1.96	1.96	1.96	1.98	1.97	1.95	1.94	1.93	S	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.92	1.98	1.94												
Jan 16	1.93	1.94	1.94	1.95	1.95	1.95	1.94	1.90	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1.90	1.95	-												
Jan 17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	NRM	1.95	1.94	1.94	1.95	1.95	1.94	1.95												
Jan 18	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.95	S	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.97	1.96	1.96	1.96	1.96	1.97	1.94	1.97	1.95												
Jan 19	1.97	1.96	1.96	1.96	1.96	1.94	1.93	1.93	S	1.92	1.91	1.90	1.90	1.89	1.91	1.90	1.89	1.89	1.90	P	P	P	P	P	P	1.89	1.97	-											
Jan 20	X	1.91	1.92	1.92	1.92	1.92	S	1.93	1.93	C	C	C	C	C	1.91	1.91	1.91	1.91	1.91	1.92	1.91	1.92	1.93	1.93	1.91	1.93	-												
Jan 21	1.92	1.92	1.92	1.92	1.92	S	1.92	1.92	1.92	1.92	1.93	1.92	1.92	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.92	1.92	1.92	1.93	1.92												
Jan 22	1.93	1.92	1.92	1.92	S	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.91	1.90	1.89	1.92	1.92	1.92	1.93	1.89	1.93	1.92												
Jan 23	1.93	1.93	1.93	S	1.93	1.92	1.92	1.92	1.92	1.93	1.93	1.92	1.93	1.91	1.93	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.91	1.93	1.92												
Jan 24	1.93	1.94	S	1.93	1.94	1.94	1.94	1.97	1.96	1.95	1.94	1.94	1.95	1.94	1.96	1.95	1.96	1.96	1.95	1.97	1.97	1.99	2.00	2.00	1.93	2.00	1.96												
Jan 25	2.00	S	2.00	2.01	2.00	2.01	2.01	2.00	2.01	2.01	2.00	2.00	1.99	2.01	2.00	2.01	1.99	2.01	1.99	2.00	1.99	1.98	1.97	1.97	1.97	2.01	2.00												
Jan 26	S	1.98	1.99	1.97	1.98	1.97	1.97	1.98	1.98	1.99	1.98	1.98	1.96	1.97	1.96	1.95	1.97	1.96	1.95	1.98	1.97	1.97	2.01	S	1.95	2.01	1.97												
Jan 27	2.01	1.98	1.96	1.99	1.99	1.98	1.98	1.97	1.97	1.96	1.97	1.96	1.98	1.97	1.97	1.98	1.97	1.98	1.96	1.97	1.95	1.96	S	1.95	1.95	2.01	1.97												
Jan 28	1.96	1.95	1.96	1.96	1.96	1.97	1.95	1.95	1.95	1.95	1.95	1.95	1.94	1.95	1.93	1.95	1.99	1.97	1.98	1.97	1.97	S	2.03	2.01	1.93	2.03	1.96												
Jan 29	2.01	2.01	2.03	2.03	2.01	2.01	2.02	2.01	2.00	1.99	2.01	1.99	2.02	2.04	2.05	2.05	2.07	2.07	2.09	2.07	S	2.12	2.12	2.11	2.15	1.99	2.15	2.04											
Jan 30	2.18	2.11	2.11	2.09	2.08	2.09	2.08	2.09	2.08	2.09	2.09	2.06	2.07	2.08	2.08	2.08	2.19	2.17	2.13	S	2.13	2.16	2.16	2.25	2.06	2.25	2.12												
Jan 31	2.27	2.22	2.24	2.20	2.15	2.11	2.13	2.14	2.17	2.15	2.13	2.13	2.18	2.23	2.23	2.23	2.28	2.28	S	2.19	2.16	2.14	2.12	2.12	2.11	2.28	2.18												
Diurnal Maximum	2.27	2.22	2.24	2.20	2.15	2.11	2.13	2.14	2.17	2.15	2.13	2.13	2.18	2.23	2.23	2.23	2.28	2.28	2.13	2.19	2.16	2.16	2.16	2.25															
Diurnal Average	1.99	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.98	1.98	1.96	1.97	1.97	1.98	1.98	1.98															
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance																						
K	Collection Error							N	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.																																							

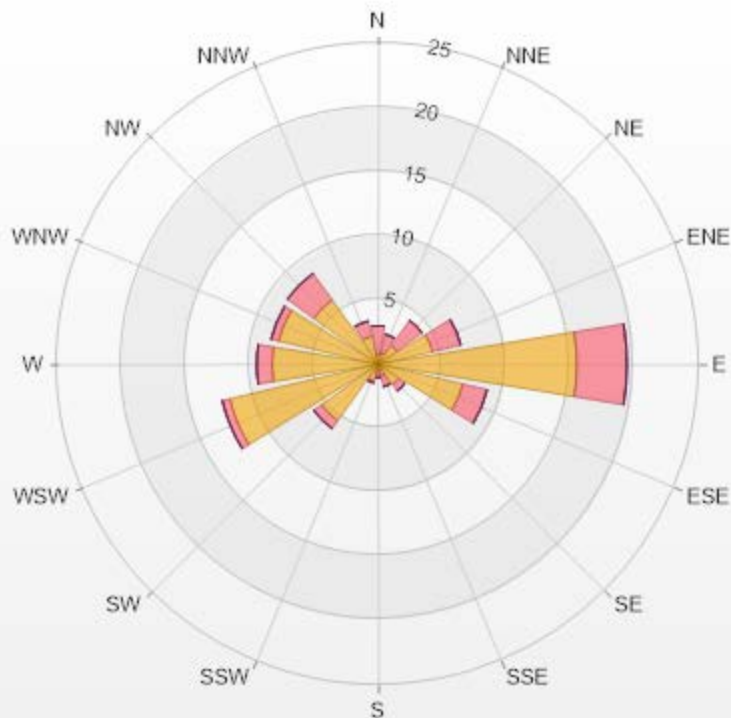
Timeseries Chart of Hourly Average for THC - AQHI - Cadotte Lake Station





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-THC55[ppm] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 89.52% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	0.75	2.25	0	0	0	3
NNE	0.9	1.5	0	0	0	2.4
NE	1.8	2.4	0	0	0	4.2
ENE	4.35	2.25	0	0	0	6.6
E	15.47	3.9	0	0	0	19.37
ESE	6.76	1.95	0	0	0	8.71
SE	1.95	0.6	0	0	0	2.55
SSE	0.9	0.9	0	0	0	1.8
S	0.45	0.6	0	0	0	1.05
SSW	1.35	0.15	0	0	0	1.5
SW	5.41	0.75	0	0	0	6.16
WSW	11.86	0.6	0	0	0	12.46
W	8.26	1.2	0	0	0	9.46
WNW	7.96	0.6	0	0	0	8.56
NW	6.16	2.55	0	0	0	8.71
NNW	2.25	1.2	0	0	0	3.45
Summary	76.58	23.4	0	0	0	100



PRAMP-202101

Page 193 of 228

% Icon Classes (ppm)

77

0-2

23

2-5

0

5-10

0

10-40

0

>40.0



PEACE RIVER AREA MONITORING PROGRAM

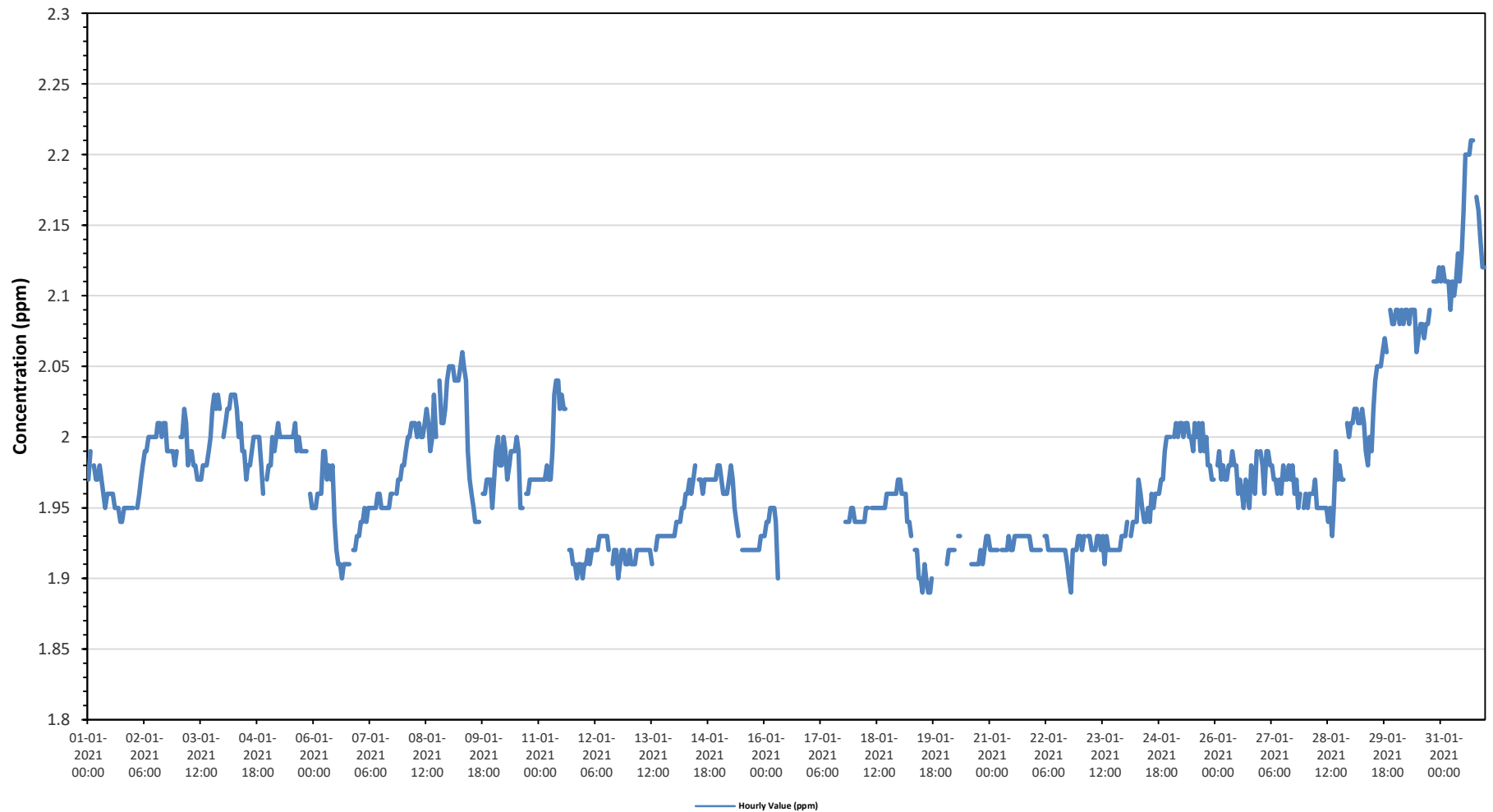
AQHI - Cadotte Lake Station - January 2021

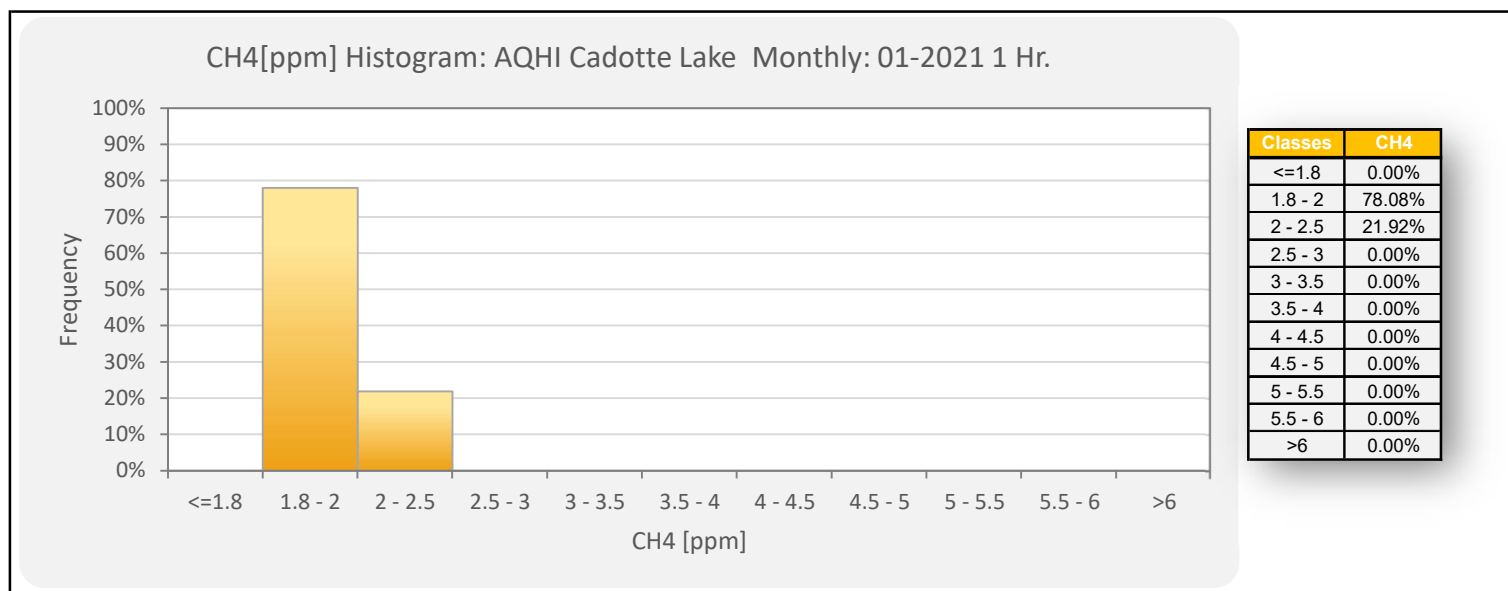
Summary of Hourly Averages

METHANE (CH4) in ppm

Maximum Hourly Value:										2.21 ppm		on January 31 at hour 16										Hours in Service:										744	
Maximum Daily Value:										2.14 ppm		on January 31										Hours of Data:										666	
Minimum Hourly Value:										1.89 ppm		on January 19 at hour 12										Hours of Missing Data:										42	
Minimum Daily Value:										1.92 ppm		on January 12										Hours of Calibration:										36	
Monthly Average:										1.97 ppm												Operational Uptime:										94.4	
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average							
Jan 1	1.97	1.99	S	1.98	1.97	1.97	1.98	1.97	1.96	1.95	1.96	1.96	1.96	1.96	1.95	1.95	1.95	1.94	1.94	1.95	1.95	1.95	1.95	1.95	1.94	1.99	1.96						
Jan 2	1.95	S	1.95	1.96	1.97	1.98	1.99	1.99	2.00	2.00	2.00	2.00	2.01	2.01	2.00	2.01	2.01	1.99	1.99	1.99	1.99	1.99	1.98	1.99	1.95	2.01	1.99						
Jan 3	S	2.00	2.00	2.02	2.01	1.98	1.99	1.99	1.98	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.99	2.00	2.02	2.03	2.02	2.03	2.02	S	1.97	2.03	2.00						
Jan 4	2.00	2.01	2.02	2.02	2.03	2.03	2.03	2.02	2.00	2.01	1.99	1.99	1.97	1.98	1.98	1.99	2.00	2.00	2.00	2.00	1.98	1.96	S	1.97	1.96	2.03	2.00						
Jan 5	1.98	1.98	2.00	1.99	2.00	2.01	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.01	1.99	2.00	1.99	1.99	1.99	1.99	1.99	S	1.96	1.95	1.95	2.01	1.99						
Jan 6	1.95	1.95	1.96	1.96	1.96	1.99	1.99	1.97	1.98	1.97	1.98	1.94	1.92	1.91	1.91	1.90	1.91	1.91	1.91	1.91	S	1.92	1.92	1.93	1.90	1.99	1.94						
Jan 7	1.93	1.94	1.94	1.95	1.94	1.95	1.95	1.95	1.95	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.96	S	1.96	1.97	1.97	1.98	1.93	1.98	1.95						
Jan 8	1.98	1.99	2.00	2.00	2.01	2.01	2.01	2.00	2.01	2.00	2.00	2.01	2.02	2.01	1.99	2.00	2.03	2.00	S	2.04	2.01	2.01	2.02	2.04	1.98	2.04	2.01						
Jan 9	2.05	2.05	2.05	2.04	2.04	2.04	2.05	2.06	2.05	2.04	1.99	1.97	1.96	1.95	1.94	1.94	1.94	S	1.96	1.96	1.97	1.97	1.97	1.95	1.94	2.06	2.00						
Jan 10	1.97	1.99	2.00	1.98	1.98	2.00	1.99	1.97	1.98	1.99	1.99	1.99	2.00	1.99	1.95	1.95	S	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.95	2.00	1.98						
Jan 11	1.97	1.97	1.97	1.97	1.98	1.97	1.97	1.99	2.03	2.04	2.04	2.02	2.03	2.02	2.02	S	1.92	1.92	1.91	1.91	1.90	1.91	1.91	1.90	1.90	2.04	1.97						
Jan 12	1.91	1.91	1.92	1.91	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.93	1.92	S	1.91	1.92	1.92	1.90	1.91	1.92	1.92	1.91	1.91	1.90	1.93	1.92						
Jan 13	1.92	1.91	1.91	1.91	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.91	S	1.92	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.91	1.93	1.92						
Jan 14	1.93	1.94	1.94	1.94	1.95	1.95	1.96	1.96	1.97	1.96	1.97	1.98	S	1.97	1.97	1.96	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.93	1.98	1.96						
Jan 15	1.98	1.97	1.96	1.96	1.96	1.97	1.98	1.97	1.95	1.94	1.93	S	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.92	1.98	1.94						
Jan 16	1.93	1.94	1.94	1.95	1.95	1.95	1.94	1.90	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1.90	1.95	-						
Jan 17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	NRM	1.94	1.94	1.94	1.95	1.95	1.94	1.95						
Jan 18	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.95	S	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.96	1.96	1.97	1.94	1.97	1.95							
Jan 19	1.97	1.96	1.96	1.96	1.96	1.94	1.94	1.93	S	1.92	1.92	1.90	1.90	1.89	1.91	1.90	1.89	1.89	1.90	P	P	P	P	P	P	1.89	1.97						
Jan 20	X	1.91	1.92	1.92	1.92	1.92	S	1.93	1.93	C	C	C	C	C	1.91	1.91	1.91	1.91	1.91	1.91	1.92	1.91	1.92	1.93	1.91	1.93	-						
Jan 21	1.92	1.92	1.92	1.92	1.92	S	1.92	1.92	1.92	1.92	1.93	1.92	1.92	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.92	1.92	1.92	1.93	1.92						
Jan 22	1.92	1.92	1.92	1.92	S	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.91	1.90	1.89	1.92	1.92	1.92	1.93	1.89	1.93	1.92						
Jan 23	1.93	1.92	1.93	S	1.93	1.93	1.92	1.92	1.92	1.93	1.93	1.92	1.93	1.91	1.93	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.91	1.93	1.92						
Jan 24	1.93	1.94	S	1.93	1.94	1.94	1.94	1.97	1.96	1.95	1.94	1.94	1.95	1.94	1.96	1.95	1.96	1.96	1.96	1.97	1.97	1.99	2.00	2.00	1.93	2.00	1.96						
Jan 25	2.00	S	2.00	2.01	2.00	2.01	2.01	2.00	2.01	2.01	2.00	2.00	1.99	2.01	2.00	2.01	1.99	2.01	1.99	2.00	1.98	1.98	1.97	1.97	1.97	2.01	2.00						
Jan 26	S	1.98	1.99	1.97	1.98	1.97	1.97	1.98	1.98	1.99	1.98	1.98	1.96	1.97	1.96	1.95	1.97	1.96	1.95	1.98	1.97	1.96	1.99	S	1.95	1.99	1.97						
Jan 27	1.99	1.98	1.96	1.99	1.99	1.98	1.98	1.97	1.97	1.96	1.97	1.96	1.98	1.97	1.97	1.98	1.97	1.98	1.96	1.97	1.95	1.96	S	1.95	1.95	1.99	1.97						
Jan 28	1.96	1.95	1.96	1.96	1.96	1.97	1.95	1.95	1.95	1.95	1.95	1.95	1.94	1.95	1.93	1.95	1.99	1.97	1.98	1.97	1.97	S	2.01	2.00	1.93	2.01	1.96						
Jan 29	2.01	2.01	2.02	2.02	2.01	2.01	2.02	2.01	1.99	1.98	2.00	1.99	2.02	2.04	2.05	2.05	2.06	2.07	2.06	S	2.11	2.09	2.08	2.08	1.98	2.09	2.03						
Jan 30	2.09	2.09	2.08	2.09	2.08	2.09	2.09	2.08	2.09	2.09	2.09	2.06	2.07	2.08	2.08	2.07	2.08	2.08	2.09	S	2.11	2.11	2.11	2.12	2.06	2.12	2.09						
Jan 31	2.11	2.12	2.11	2.11	2.11	2.09	2.11	2.10	2.11	2.13	2.11	2.13	2.16	2.20	2.20	2.20	2.21	2.21	S	2.17	2.16	2.14	2.12	2.12	2.09	2.21	2.14						
Diurnal Maximum	2.11	2.12	2.11	2.11	2.11	2.09	2.11	2.10	2.11	2.13	2.11	2.13	2.16	2.20	2.20	2.20	2.21	2.21	2.09	2.17	2.16	2.14	2.12	2.12									
Diurnal Average	1.97	1.97	1.97	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.96	1.97	1.97	1.97	1.97	1.97									
C	Monthly Calibration						S	Daily Zero-Span Check						Q	Quality Assurance																		
K	Collection Error						N	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.																																	

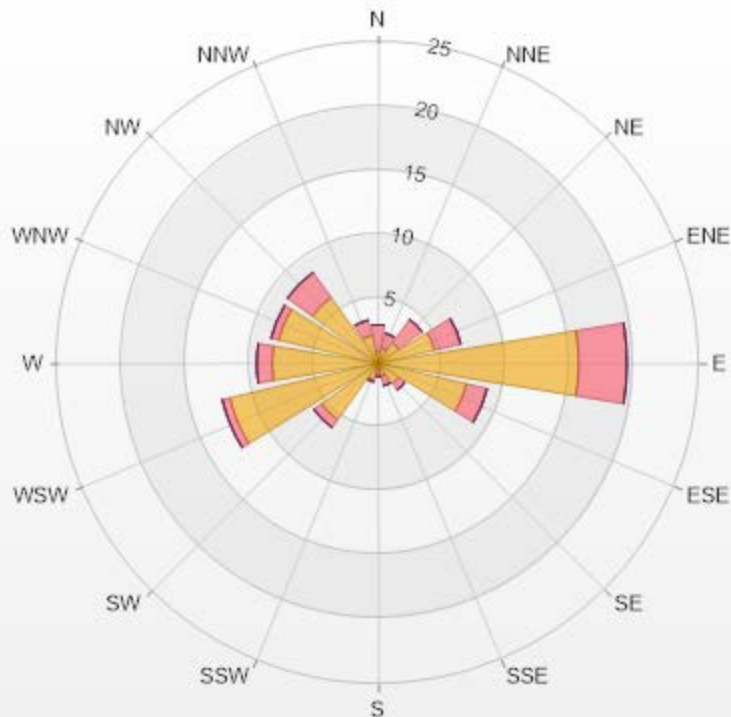
Timeseries Chart of Hourly Average for CH4 - AQHI - Cadotte Lake Station





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-CH4[ppm] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 89.52% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	0.9	2.1	0	0	0	3
NNE	1.2	1.2	0	0	0	2.4
NE	1.95	2.25	0	0	0	4.2
ENE	4.5	2.1	0	0	0	6.6
E	15.62	3.75	0	0	0	19.37
ESE	7.06	1.65	0	0	0	8.71
SE	1.95	0.6	0	0	0	2.55
SSE	1.05	0.75	0	0	0	1.8
S	0.45	0.6	0	0	0	1.05
SSW	1.35	0.15	0	0	0	1.5
SW	5.41	0.75	0	0	0	6.16
WSW	11.86	0.6	0	0	0	12.46
W	8.26	1.2	0	0	0	9.46
WNW	7.96	0.6	0	0	0	8.56
NW	6.31	2.4	0	0	0	8.71
NNW	2.25	1.2	0	0	0	3.45
Summary	78.08	21.9	0	0	0	100



PRAMP-202101

Page 198 of 228

% Icon Classes (ppm)	78	22	0	0	0
0-2	2-5	5-10	10-20	>20.0	



PEACE RIVER AREA MONITORING PROGRAM

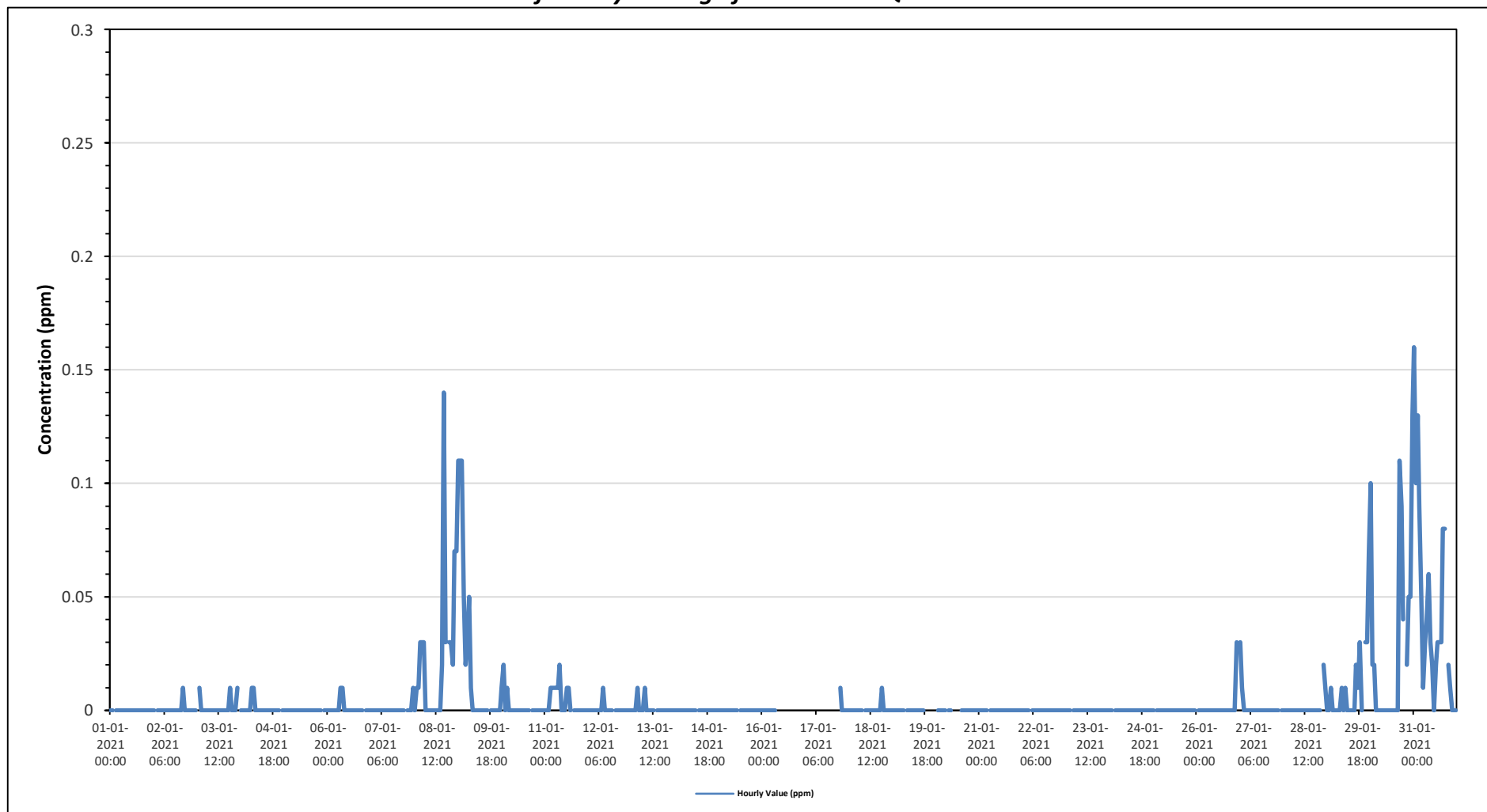
AQHI - Cadotte Lake Station - January 2021

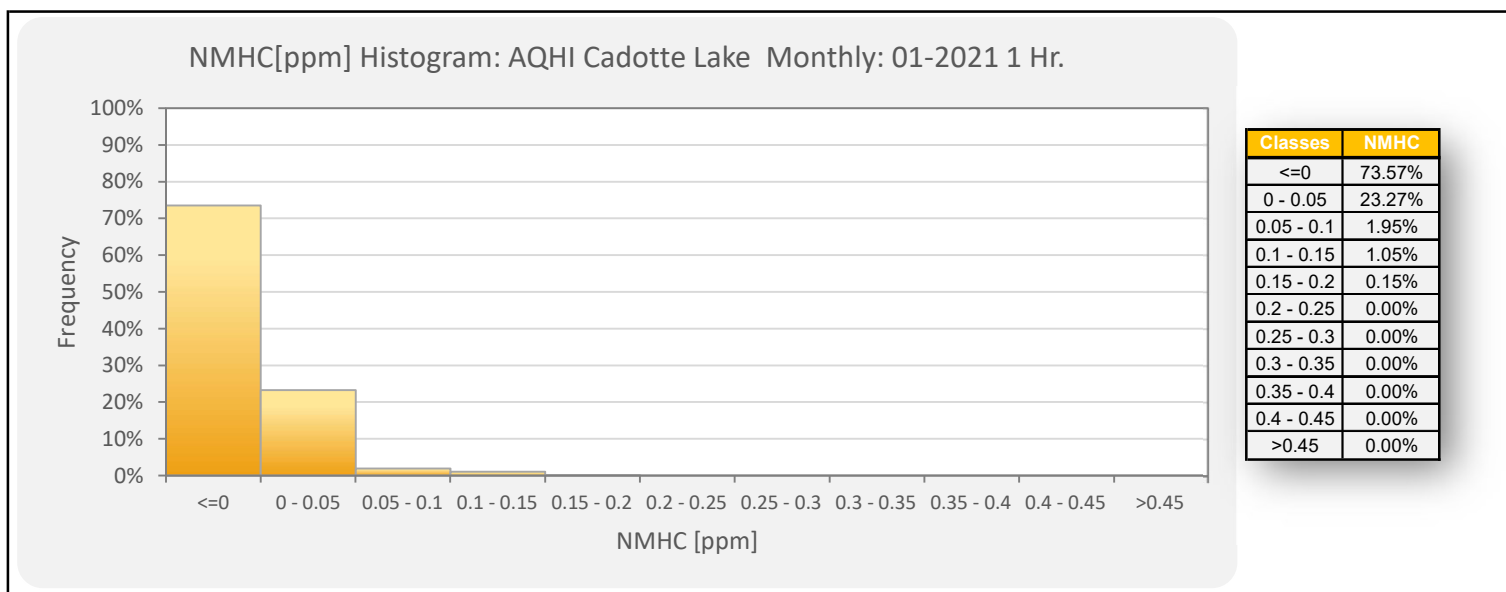
Summary of Hourly Averages

NON-METHANE HYDROCARBONS (NMHC) in ppm

Maximum Hourly Value:										0.16 ppm on January 31 at hour 0										Hours in Service:										744									
Maximum Daily Value:										0.04 ppm on January 31										Hours of Data:										666									
Minimum Hourly Value:										0.00 ppm on January 1 at hour 0										Hours of Missing Data:										42									
Minimum Daily Value:										0.00 ppm on January 1										Hours of Calibration:										36									
Monthly Average:										0.00 ppm										Operational Uptime:										94.4									
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average													
Jan 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	0.00	0.00	0.00	0.00								
Jan 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	0.01	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								
Jan 3	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	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	S	0.00	0.00	0.01	0.00	0.00									
Jan 4	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.01	0.00	0.00	0.00									
Jan 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	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
Jan 6	0.00	0.00	0.00	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	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00									
Jan 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	0.01	0.00	0.01	0.00	0.00									
Jan 8	0.00	0.01	0.01	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.14	0.03	S	0.03	0.03	0.02	0.07	0.07	0.00	0.14	0.02	0.00	0.00	0.00									
Jan 9	0.11	0.11	0.11	0.05	0.02	0.03	0.05	0.01	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	0.11	0.02	0.00									
Jan 10	0.01	0.02	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00									
Jan 11	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.00	0.00	0.00	0.01	0.01	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	0.02	0.00	0.00									
Jan 12	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	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	0.01	0.00	0.00									
Jan 13	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	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	0.01	0.00	0.00									
Jan 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	0.00	0.00	0.00									
Jan 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	0.00	0.00	0.00									
Jan 16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0.00	0.00	-									
Jan 17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	NRM	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	-									
Jan 18	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	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00									
Jan 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	P	P	P	P	P	P	P	P	0.00	0.00	-	0.00									
Jan 20	X	0.00	0.00	0.00	0.00	0.00	S	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	0.00	-									
Jan 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	0.00	0.00	0.00									
Jan 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	0.00	0.00	0.00									
Jan 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	0.00	0.00	0.00									
Jan 24	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	0.00	0.00	0.00									
Jan 25	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	0.00	0.00	0.00									
Jan 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	0.03	S	0.00	0.03	0.00	0.00										
Jan 27	0.03	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	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.03	0.00	0.00									
Jan 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	0.00	S	0.02	0.01	0.00	0.02	0.00	0.00	0.00									
Jan 29	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.03	0.00	S	0.03	0.03	0.03	0.07	0.00	0.07	0.01	0.00	0.00									
Jan 30	0.10	0.02	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	0.11	0.09	0.04	S	0.02	0.05	0.05	0.13	0.00	0.13	0.03	0.00	0.00	0.00									
Jan 31	0.16	0.10	0.13	0.09	0.05	0.01	0.03	0.04	0.06	0.03	0.02	0.00	0.02	0.03	0.03	0.03	0.08	0.08	S	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.04									
Diurnal Maximum	0.16	0.11	0.13	0.09	0.05	0.03	0.05	0.04	0.06	0.03	0.02	0.00	0.02	0.03	0.03	0.03	0.14	0.09	0.04	0.03	0.03	0.05	0.07	0.13															
Diurnal Average	0.02	0.01	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	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01															
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance																						
K	Collection Error							N	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.																																							

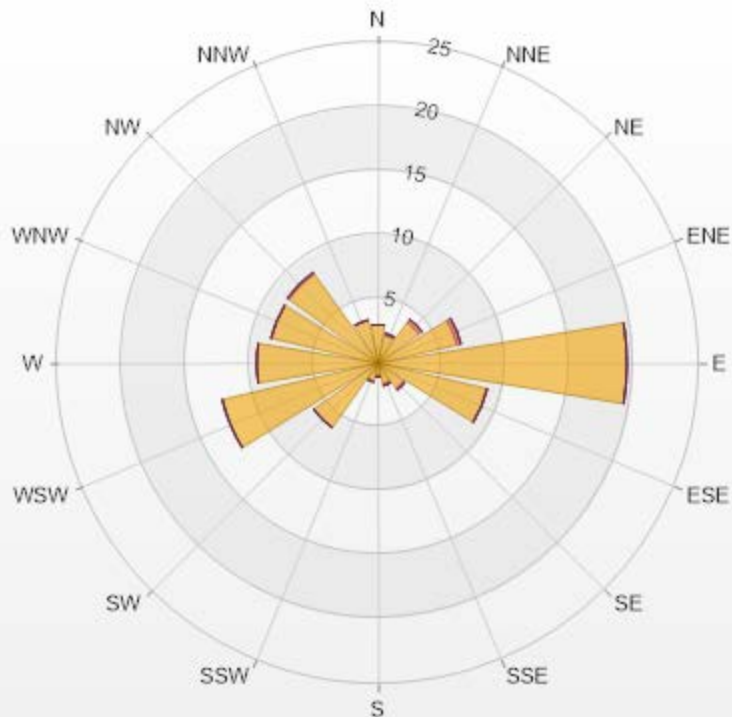
Timeseries Chart of Hourly Average for NMHC - AQHI - Cadotte Lake Station





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-NMHC[ppm] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 89.52% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-0.9	0.9-2	>2.0	Total
N	3	0	0	0	0	3
NNE	2.25	0.15	0	0	0	2.4
NE	3.9	0.3	0	0	0	4.2
ENE	6.31	0.3	0	0	0	6.61
E	19.37	0	0	0	0	19.37
ESE	8.71	0	0	0	0	8.71
SE	2.4	0.15	0	0	0	2.55
SSE	1.65	0.15	0	0	0	1.8
S	1.05	0	0	0	0	1.05
SSW	1.5	0	0	0	0	1.5
SW	6.16	0	0	0	0	6.16
WSW	12.46	0	0	0	0	12.46
W	9.46	0	0	0	0	9.46
WNW	8.56	0	0	0	0	8.56
NW	8.56	0.15	0	0	0	8.71
NNW	3.45	0	0	0	0	3.45
Summary	98.79	1.2	0	0	0	100



PRAMP-202101

Page 203 of 228

% Icon Classes (ppm)

99 0-0.1

1 0.1-0.3

0 0.3-0.9

0 0.9-2

0 >2.0



PEACE RIVER AREA MONITORING PROGRAM

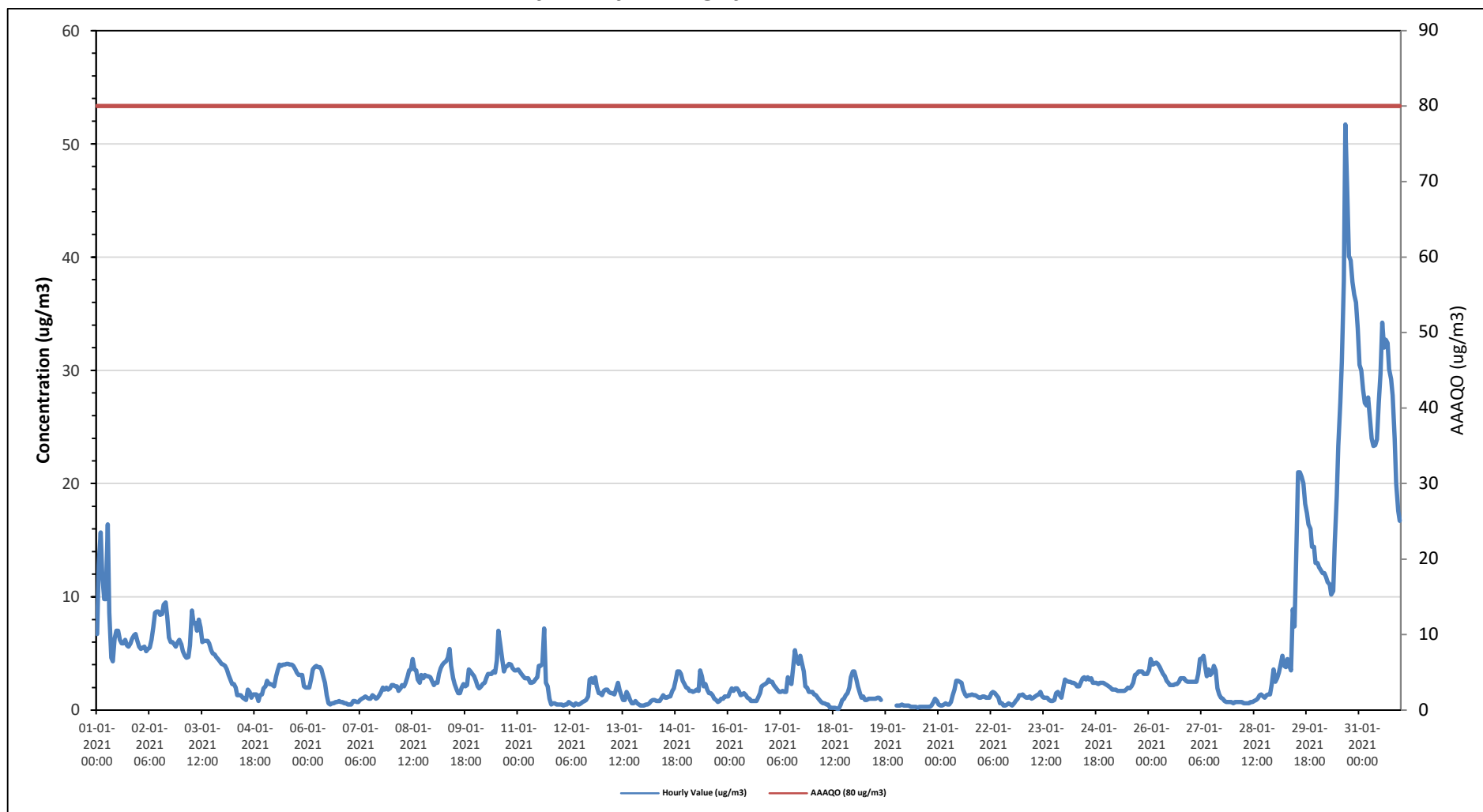
AQHI - Cadotte Lake Station - January 2021

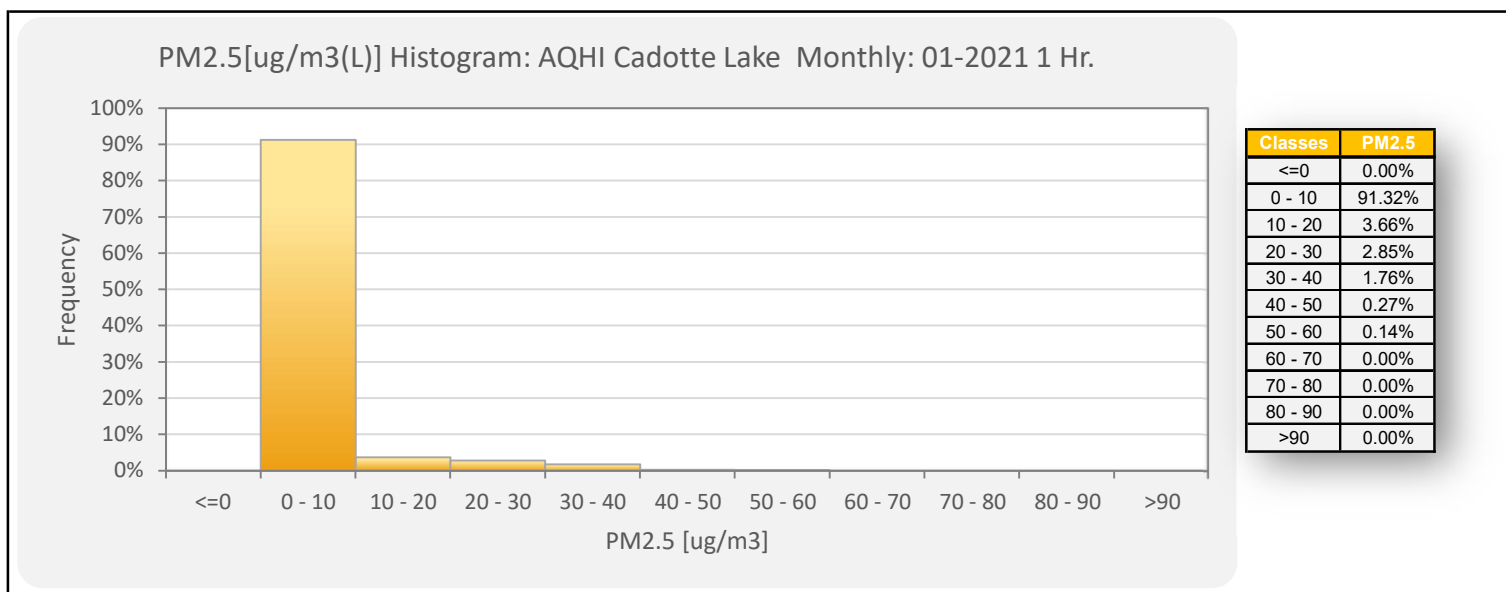
Summary of Hourly Averages

PARTICULATE MATTER 2.5 (PM_{2.5}) in µg/m³

Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 80 µg/m ³ , 24-Hour 29 µg/m ³																												
Number of 1-Hour Exceedances: 0														Number of 24-Hour Exceedances: 0														
Maximum Hourly Value: 51.7 µg/m ³ on January 30 at hour 16														Hours in Service: 744														
Maximum Daily Value: 26.8 µg/m ³ on January 31														Hours of Data: 737														
Minimum Hourly Value: 0.1 µg/m ³ on January 18 at hour 14														Hours of Missing Data: 6														
Minimum Daily Value: 0.4 µg/m ³ on January 20														Hours of Calibration: 1														
Monthly Average: 4.2 µg/m ³														Operational Uptime: 99.2														
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				
Jan 1	6.7	12.8	15.7	12	9.8	9.8	16.4	8.6	4.6	4.3	6.3	7	7	6.2	5.9	5.9	6.2	5.7	5.6	5.9	6.3	6.6	6.7	6.1	4.3	16.4	7.8	
Jan 2	6	5	6	6	5	5	6	6	7	9	9	9	8	9	9	10	8	6	6	6	6	6	6	6	5.2	9.5	6.8	
Jan 3	6	5	5	5	5	6	9	8	8	7	8	7	6	6	6	6	6	5	5	5	5	4	4	4	4.1	8.8	5.8	
Jan 4	4	4	4	3	3	2	2	2	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	2	0.8	4.0	1.9	
Jan 5	2	3	2	2	2	2	3	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	2	2	2.0	4.1	3.2	
Jan 6	2	2	3	4	4	4	4	4	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	3.9	1.8	
Jan 7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	0.5	2.0	1.2	
Jan 8	2	2	2	2	2	2	2	2	2	3	4	4	5	4	4	3	2	3	3	3	3	3	3	3	1.7	4.5	2.8	
Jan 9	2	2	2	3	4	4	4	4	5	5	4	3	2	2	2	2	2	2	2	2	4	3	3	3	1.5	5.4	3.0	
Jan 10	3	2	2	2	2	2	3	3	3	3	3	3	4	7	6	5	3	4	4	4	4	4	4	4	1.9	7.0	3.5	
Jan 11	4	3	3	3	3	3	3	2	2	3	3	3	4	4	4	7	2	2	1	1	1	1	1	1	0.5	7.2	2.6	
Jan 12	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	3	3	2	3	2	2	2	0.4	2.9	1.1	
Jan 13	1	2	2	2	2	2	2	1	2	2	2	1	1	1	2	1	1	1	1	1	1	1	0	0	0.4	2.4	1.2	
Jan 14	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	3	3	3	3	2	2	0.4	3.4	1.5	
Jan 15	2	2	2	2	2	2	2	2	4	3	2	2	2	2	2	1	1	1	1	1	1	1	1	1	0.7	3.5	1.6	
Jan 16	1	2	2	2	2	2	2	1	1	2	1	1	1	1	1	1	1	1	2	2	2	2	3	3	0.8	2.7	1.5	
Jan 17	3	3	2	2	2	2	2	2	2	2	3	3	2	4	5	4	4	5	4	3	2	2	2	2	1.6	5.3	2.7	
Jan 18	2	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	2	2	3	3	0.1	3.4	1.0	
Jan 19	3	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	C	1	P	P	P	P	P	P	0.8	3.4	-	
Jan 20	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.2	1.0	0.4	
Jan 21	1	0	0	1	1	1	1	1	1	2	3	3	3	2	2	1	1	1	1	1	1	1	1	1	0.4	2.6	1.3	
Jan 22	1	1	1	1	1	1	2	2	2	1	1	1	1	0	0	1	1	1	0	1	1	1	1	1	0.4	1.6	1.0	
Jan 23	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	2	1	1	2	0.8	1.9	1.2	
Jan 24	3	3	3	3	2	2	2	2	2	2	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2.1	2.9	2.5	
Jan 25	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	1.7	3.4	2.4	
Jan 26	4	5	4	4	4	4	4	4	3	3	3	2	2	2	2	2	2	3	3	3	3	3	3	3	2.2	4.5	3.0	
Jan 27	3	3	3	3	3	5	5	5	4	3	4	3	3	4	4	2	1	1	1	1	1	1	1	1	0.7	4.8	2.5	
Jan 28	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	4	0.6	3.6	1.1	
Jan 29	3	3	3	4	5	4	4	5	4	4	9	7	14	21	21	21	20	18	17	16	16	14	14	13	2.5	21.0	10.8	
Jan 30	13	13	12	12	12	12	11	11	10	11	15	19	23	27	31	38	52	46	40	40	38	37	36	34	10.2	51.7	24.6	
Jan 31	31	30	28	27	27	28	26	24	23	23	24	27	30	34	32	33	32	30	29	28	24	20	18	17	16.7	34.2	26.8	
Diurnal Maximum	31	30	28	27	27	28	26	24	23	23	24	27	30	34	32	38	52	46	40	40	38	37	36	34				
Diurnal Average	3.6	3.8	3.7	3.6	3.5	3.6	3.9	3.5	3.4	3.5	3.9	3.9	4.3	4.9	5.0	5.2	5.5	5.1	4.9	4.9	4.7	4.4	4.3	4.2				
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance											
K	Collection Error							N	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.																												

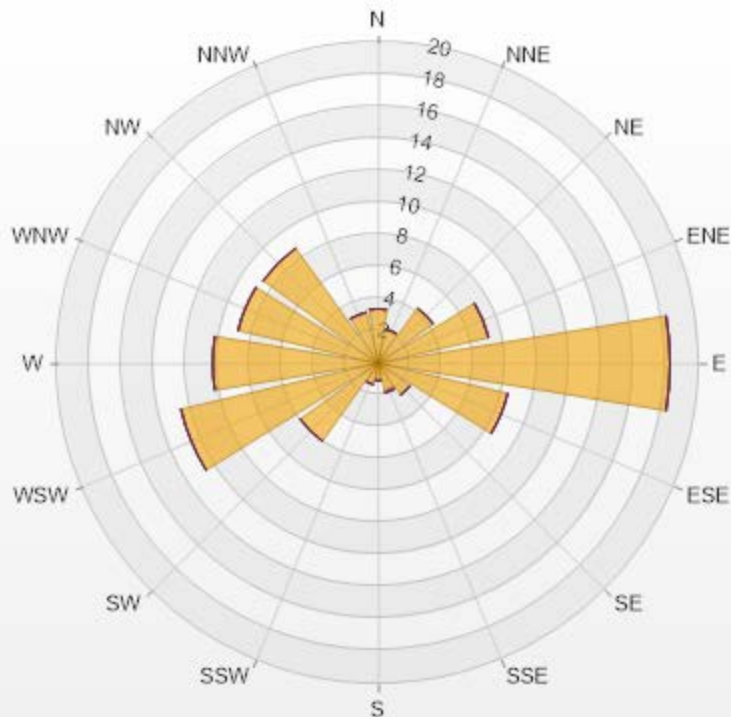
Timeseries Chart of Hourly Average for PM2.5 - AQHI - Cadotte Lake Station





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-PM2.5[ug/m3(L)] Monthly: 01-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 99.06% Calm Avg: 0.00 [ug/m3(L)]

Direction	0-50	50-80	80-120	120-240	>240.0	Total
N	3.39	0	0	0	0	3.39
NNE	2.17	0	0	0	0	2.17
NE	4.21	0	0	0	0	4.21
ENE	7.06	0	0	0	0	7.06
E	18.18	0	0	0	0	18.18
ESE	8.28	0	0	0	0	8.28
SE	2.44	0	0	0	0	2.44
SSE	1.76	0.14	0	0	0	1.9
S	1.09	0	0	0	0	1.09
SSW	1.36	0	0	0	0	1.36
SW	5.97	0	0	0	0	5.97
WSW	12.62	0	0	0	0	12.62
W	10.31	0	0	0	0	10.31
WNW	8.96	0	0	0	0	8.96
NW	8.82	0	0	0	0	8.82
NNW	3.26	0	0	0	0	3.26
Summary	100	0.14	0	0	0	100



PRAMP-202101

Page 208 of 228

% Icon Classes (ug/m3(L))

100 0-50

0 50-80

0 80-120

0 120-240

0 >240.0



PEACE RIVER AREA MONITORING PROGRAM

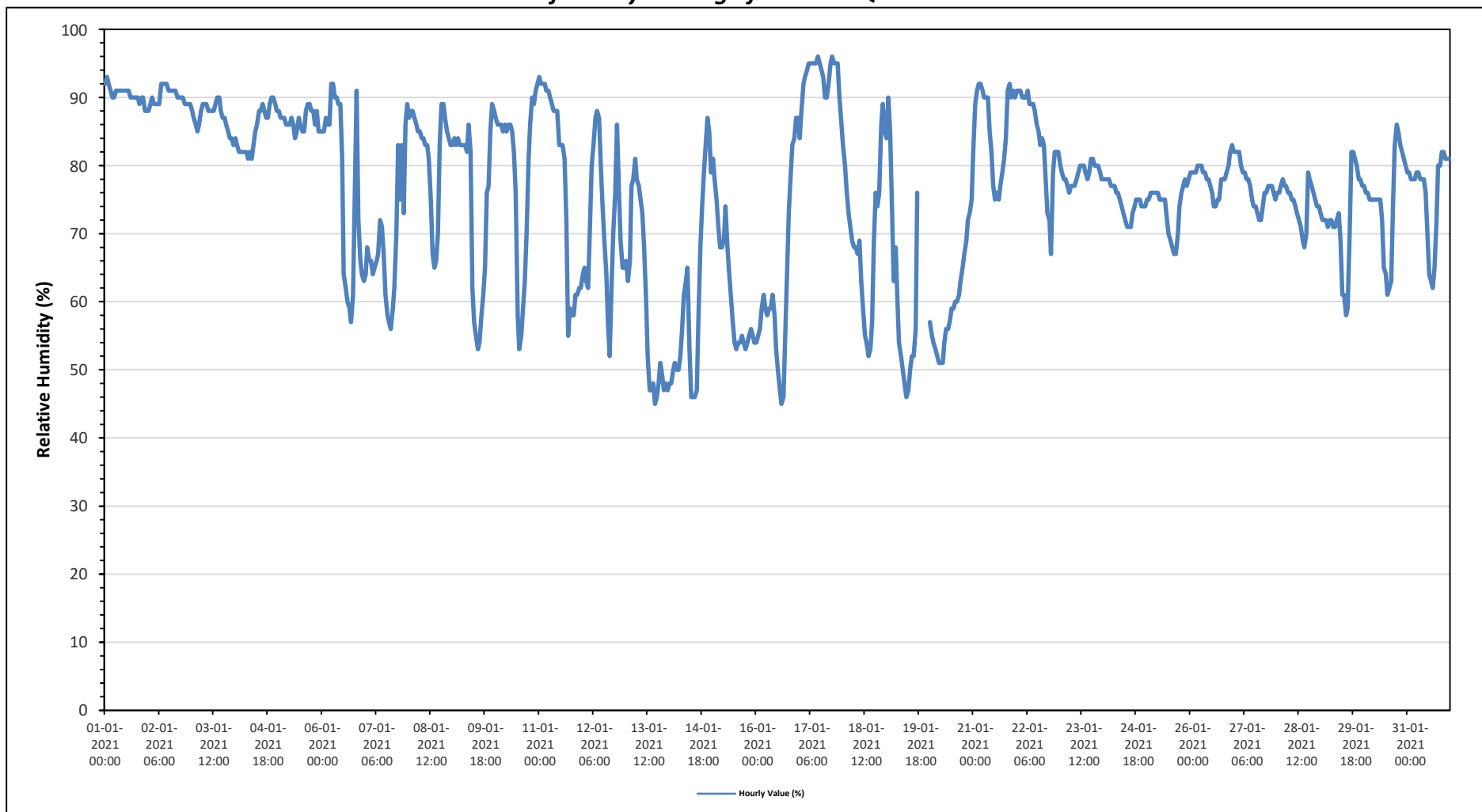
AQHI - Cadotte Lake Station - January 2021

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

Maximum Hourly Value:			96	%	on January 17 at hour 10										Hours in Service:			744									
Maximum Daily Value:			92.8	%	on January 17										Hours of Data:			738									
Minimum Hourly Value:			45	%	on January 13 at hour 16										Hours of Missing Data:			6									
Minimum Daily Value:			59.6	%	on January 20										Hours of Calibration:			0									
Monthly Average:			75.9	%											Operational Uptime:			99.2									
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
Jan 1	92	93	92	91	90	90	91	91	91	91	91	91	91	91	90	90	90	90	90	89	90	90	88	88	88	93	90.5
Jan 2	88	89	90	89	89	89	89	92	92	92	92	91	91	91	91	91	90	90	90	90	89	89	89	89	88	92	90.1
Jan 3	88	87	86	85	86	88	89	89	89	88	88	88	88	89	90	90	88	87	87	86	85	84	84	83	83	90	87.2
Jan 4	84	83	82	82	82	82	82	81	82	81	83	85	86	88	88	89	88	87	87	89	90	90	89	88	81	90	85.3
Jan 5	88	87	87	87	86	86	86	87	86	84	85	87	86	85	85	88	89	89	88	88	86	88	85	85	84	89	86.6
Jan 6	85	85	87	86	86	92	92	90	90	89	89	81	64	62	60	59	57	61	76	91	72	66	64	63	57	92	77.0
Jan 7	64	68	66	66	64	65	66	67	72	71	67	61	58	57	56	59	62	70	83	75	83	73	86	89	56	89	68.7
Jan 8	87	88	88	87	86	85	85	84	84	83	83	81	75	67	65	66	70	83	89	89	87	85	84	83	65	89	81.8
Jan 9	83	84	83	84	83	83	83	83	82	86	82	62	57	55	53	54	58	61	65	76	77	85	89	88	53	89	74.8
Jan 10	87	86	86	86	85	86	85	86	86	85	82	76	58	53	55	59	63	70	81	86	90	89	91	92	53	92	79.3
Jan 11	93	92	92	92	91	91	90	89	88	88	88	83	83	83	81	72	55	59	58	58	61	61	62	62	55	93	78.0
Jan 12	64	65	63	62	71	80	83	87	88	87	80	74	69	64	57	52	63	70	76	86	77	69	65	65	52	88	71.5
Jan 13	66	63	66	77	78	81	78	77	75	73	68	60	52	47	47	48	45	46	48	51	49	47	48	47	45	81	59.9
Jan 14	48	48	50	51	50	50	52	56	61	63	65	53	46	46	46	47	57	68	74	79	83	87	85	79	46	87	60.2
Jan 15	81	78	75	71	68	68	69	74	68	64	61	57	54	53	54	55	54	53	54	55	56	55	54	53	81	61.9	
Jan 16	54	55	56	59	61	59	58	59	59	61	58	53	50	47	45	46	55	64	73	79	83	84	87	87	45	87	62.2
Jan 17	84	88	92	93	94	95	95	95	95	95	96	95	94	93	90	90	92	95	96	95	95	95	90	86	84	96	92.8
Jan 18	83	80	76	73	71	69	68	68	67	69	63	59	55	54	52	53	57	69	76	74	76	86	89	85	52	89	69.7
Jan 19	84	90	85	73	63	68	60	54	52	50	48	46	47	50	52	52	56	76	P	P	P	P	P	P	46	90	61.4
Jan 20	57	55	54	53	52	51	51	51	54	56	56	57	59	59	60	60	61	63	65	67	69	72	73	75	51	75	59.6
Jan 21	82	89	91	92	92	91	90	90	90	85	82	77	75	76	75	77	79	81	84	91	92	90	91	90	75	92	85.5
Jan 22	91	91	91	90	90	90	91	89	89	89	88	86	85	83	84	83	78	73	72	67	79	82	82	82	67	91	84.4
Jan 23	80	79	78	78	77	76	77	77	77	78	79	80	80	80	79	78	79	81	81	80	80	80	79	78	76	81	78.8
Jan 24	78	78	78	78	77	77	77	76	76	75	74	73	72	71	71	71	73	74	75	75	75	74	74	74	71	78	74.8
Jan 25	75	75	76	76	76	76	76	75	75	75	75	72	70	69	68	67	67	70	74	76	77	78	77	78	67	78	73.9
Jan 26	79	79	79	79	80	80	80	79	79	78	78	77	76	74	74	75	75	78	78	78	79	80	82	83	74	83	78.3
Jan 27	82	82	82	82	80	79	79	78	78	77	75	74	74	73	72	72	74	76	76	77	77	77	76	75	72	82	77.0
Jan 28	76	76	77	78	77	77	76	76	75	75	74	73	72	71	69	68	70	79	78	77	76	75	74	74	68	79	74.7
Jan 29	73	72	72	72	71	72	72	71	71	72	73	69	61	61	58	59	70	82	82	81	80	78	78	77	58	82	72.0
Jan 30	77	76	76	75	75	75	75	75	75	75	72	65	64	61	62	63	74	83	86	85	83	82	81	80	61	86	74.8
Jan 31	79	79	78	78	78	79	79	78	78	78	76	70	64	63	62	65	72	80	80	82	82	81	81	81	62	82	76.0
Diurnal Maximum	93	93	92	93	94	95	95	95	95	95	96	95	94	93	91	91	92	95	96	95	95	95	91	92			
Diurnal Average	78.5	78.7	78.5	78.2	77.7	78.4	78.2	78.2	78.2	77.8	76.5	72.8	69.5	68.3	67.5	67.6	69.7	74.5	77.4	79.0	79.2	79.1	79.3	78.7			
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance										
K	Collection Error							N	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.																											

Timeseries Chart of Hourly Average for RH - AQHI - Cadotte Lake Station





PEACE RIVER AREA MONITORING PROGRAM

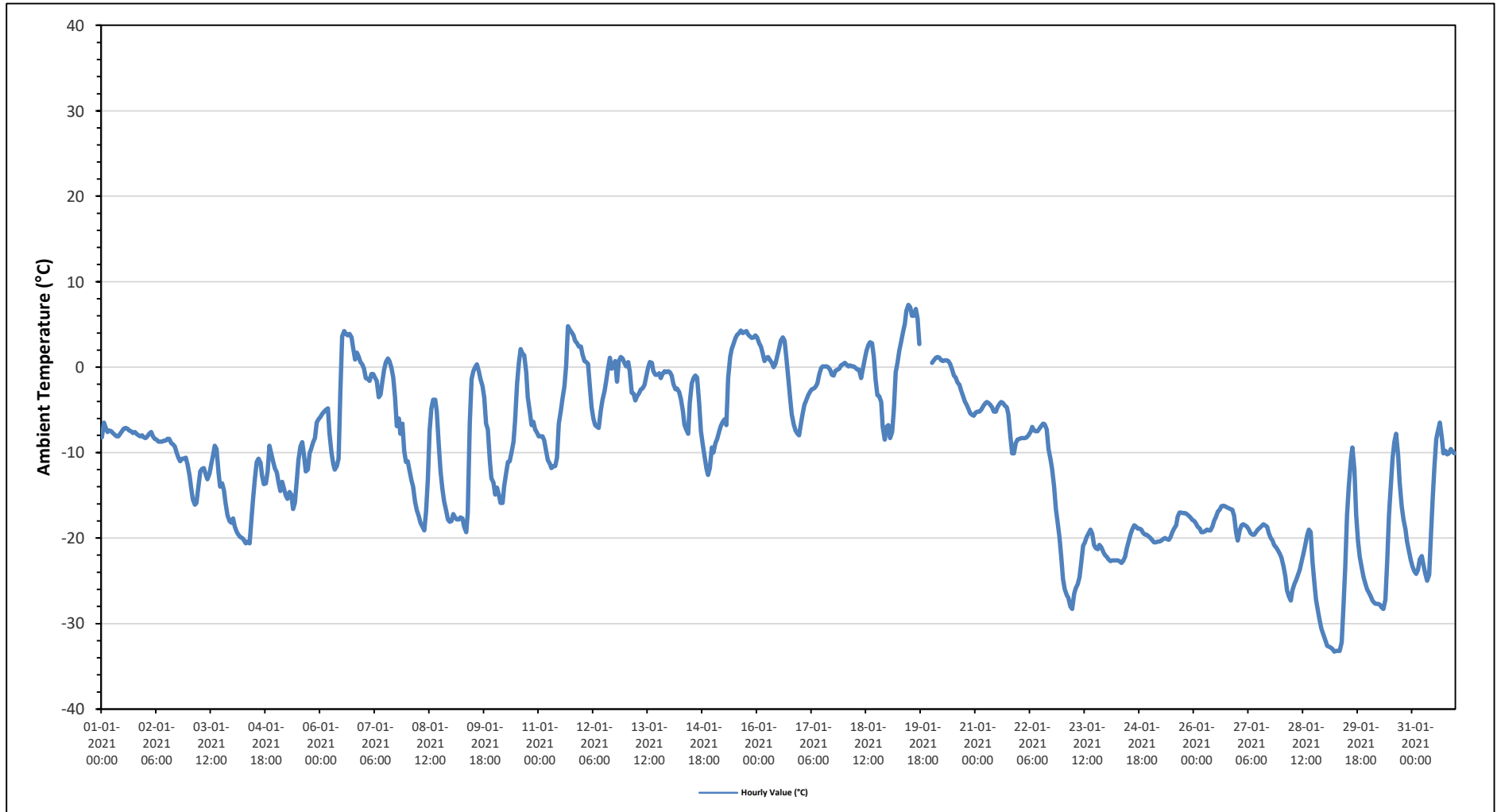
AQHI - Cadotte Lake Station - January 2021

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

Maximum Hourly Value:				7.3	°C	on January 19 at hour 11				Hours in Service:				744													
Maximum Daily Value:				1.9	°C	on January 19				Hours of Data:				738													
Minimum Hourly Value:				-33.3	°C	on January 29 at hour 5				Hours of Missing Data:				6													
Minimum Daily Value:				-25.1	°C	on January 29				Hours of Calibration:				0													
Monthly Average:				-10.2	°C					Operational Uptime:				99.2													
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
Jan 1	-8.2	-6.5	-7	-7.6	-7.4	-7.5	-7.7	-7.9	-8.1	-8.1	-7.8	-7.5	-7.2	-7.1	-7.2	-7.4	-7.5	-7.7	-7.6	-7.8	-8	-8.1	-8	-8.2	-8.2	-6.5	-7.6
Jan 2	-8.3	-8.1	-7.8	-7.6	-8.1	-8.4	-8.5	-8.7	-8.7	-8.7	-8.6	-8.6	-8.4	-8.4	-8.9	-9	-9.3	-10	-10.6	-11	-10.7	-10.7	-10.6	-11.4	-11.4	-7.6	-9.1
Jan 3	-12.7	-14.1	-15.5	-16.1	-15.9	-13.9	-12.2	-11.9	-11.8	-12.6	-13.1	-12.5	-11.4	-10.2	-9.2	-9.6	-12.4	-14	-13.6	-14.4	-16	-17.3	-18	-18.2	-18.2	-9.2	-13.6
Jan 4	-17.7	-18.7	-19.3	-19.6	-19.9	-20	-20.2	-20.6	-20.4	-20.6	-18.3	-15.3	-13	-11.1	-10.7	-11.2	-12.7	-13.7	-13.6	-12.2	-9.2	-10.1	-11.1	-11.8	-20.6	-9.2	-15.5
Jan 5	-12.3	-13.5	-14.5	-13.4	-14.3	-15	-15.4	-14.6	-14.9	-16.6	-15.9	-13.1	-10.9	-9.3	-8.8	-10.3	-12.2	-12	-10.1	-9.6	-8.8	-8.3	-6.5	-6.1	-16.6	-6.1	-11.9
Jan 6	-5.8	-5.5	-5.2	-5	-4.8	-7.7	-10	-11.3	-12	-11.6	-10.7	-2.8	3.6	4.2	3.9	3.7	3.9	3.5	2.3	0.9	1.7	1.3	0.6	0.3	-12.0	4.2	-2.6
Jan 7	-0.2	-1.3	-1.4	-1.6	-0.8	-0.8	-1.3	-1.6	-3.5	-3.2	-1.9	-0.3	0.6	1	0.7	-0.1	-1.2	-3.5	-6.9	-6	-7.8	-6.6	-9.8	-11.1	-11.1	1.0	-2.9
Jan 8	-11	-12.1	-13.3	-14	-15.8	-16.8	-17.4	-18.2	-18.7	-19.1	-16.9	-13.2	-7.4	-4.8	-3.8	-3.8	-5.1	-9.1	-12.2	-14.2	-15.7	-16.8	-17.8	-18.1	-19.1	-3.8	-13.1
Jan 9	-18	-17.2	-17.6	-17.8	-17.8	-17.6	-17.7	-18.7	-19.3	-17	-6.5	-1.4	-0.5	0	0.3	-0.4	-1.4	-2.2	-3.6	-6.6	-7.3	-11	-13	-13.5	-19.3	0.3	-10.2
Jan 10	-14.9	-14.1	-14.9	-15.9	-15.9	-14	-12.4	-11.1	-11	-10	-8.7	-6.3	-1.9	0.5	2.1	1.6	1.4	-0.6	-3.5	-5.2	-6.8	-6.4	-7.3	-7.7	-15.9	2.1	-7.6
Jan 11	-8.1	-8.1	-8.1	-8.6	-9.8	-10.9	-11.3	-11.8	-11.6	-11.6	-10.6	-6.6	-5.1	-3.6	-2.3	0.2	4.8	4.4	4.1	3.7	3.1	2.8	2.4	2.4	-11.8	4.8	-4.2
Jan 12	1.5	0.7	0.6	0.4	-2.2	-4.7	-6	-6.8	-7	-7.1	-5.1	-3.8	-2.8	-1.7	-0.1	1.1	-0.2	0.2	0.7	-1.7	0.7	1.2	1	0.5	-7.1	1.5	-1.7
Jan 13	0.1	0.6	-0.5	-3	-3.1	-3.9	-3.4	-3.1	-2.6	-2.5	-2.1	-1.1	-0.1	0.6	0.5	-0.5	-0.9	-0.9	-0.7	-1.3	-0.8	-0.5	-0.6	-0.5	-3.9	0.6	-1.3
Jan 14	-0.6	-1	-2	-2.6	-2.5	-2.9	-3.7	-5.1	-6.7	-7.3	-7.8	-4.2	-1.9	-1.3	-1	-1.2	-4.2	-7.5	-9	-10.4	-11.9	-12.6	-11.8	-9.4	-12.6	-0.6	-5.4
Jan 15	-10	-8.9	-8.4	-7.5	-6.9	-6.4	-6.1	-6.8	-1.3	1.2	2.1	2.7	3.4	3.8	4	4.3	4	4.1	4.2	3.8	3.6	3.4	3.5	3.7	-10.0	4.3	-0.4
Jan 16	3.5	2.8	2.4	1.6	0.7	1.1	1.2	0.8	0.5	0	0.4	1.4	2.3	3.1	3.5	3.1	1.1	-1.1	-3.7	-5.5	-6.7	-7.4	-7.8	-8	-8.0	3.5	-0.4
Jan 17	-6.5	-5.3	-4.4	-3.8	-3.3	-2.9	-2.6	-2.5	-2.3	-1.9	-0.9	-0.1	0.1	0.1	0.1	0	-0.3	-0.9	-1	-0.4	-0.3	-0.2	0.2	0.3	-6.5	0.3	-1.6
Jan 18	0.5	0.3	0.1	0.2	0.1	0.1	-0.1	-0.3	-0.3	-1.3	-0.2	0.9	1.9	2.6	2.9	2.8	1.2	-1.5	-3.3	-3.4	-4.1	-7	-8.5	-7	-8.5	2.9	-1.0
Jan 19	-6.8	-8.3	-7.6	-4.8	-0.6	0.5	1.9	2.9	4	5.1	6.6	7.3	7	6	6	6.8	5.7	2.7	P	P	P	P	P	P	-8.3	7.3	1.9
Jan 20	0.5	0.8	1.1	1.2	1.1	0.8	0.7	0.8	0.8	0.7	0.4	-0.3	-1	-1.2	-1.8	-2.1	-2.7	-3.4	-4	-4.4	-4.9	-5.4	-5.6	-5.7	-5.7	1.2	-1.4
Jan 21	-5.3	-5.2	-5.2	-5	-4.6	-4.3	-4.1	-4.2	-4.4	-4.7	-5.2	-5.2	-4.7	-4.3	-4.1	-4.2	-4.5	-4.7	-5.5	-8.1	-10.1	-10.1	-8.9	-8.5	-10.1	-4.1	-5.6
Jan 22	-8.4	-8.3	-8.3	-8.3	-8.2	-8	-7.6	-7	-7.4	-7.5	-7.5	-7.2	-6.9	-6.6	-6.7	-7.3	-9.6	-10.8	-11.9	-14	-16.6	-18.2	-19.9	-22.2	-22.2	-6.6	-10.2
Jan 23	-24.8	-26	-26.7	-27	-28	-28.3	-26.5	-25.9	-25.4	-24.6	-22.8	-20.9	-20.5	-19.9	-19.5	-19	-19.5	-20.8	-21.2	-21.3	-20.8	-21.1	-21.6	-22	-28.3	-19.0	-23.1
Jan 24	-22.2	-22.5	-22.7	-22.6	-22.6	-22.6	-22.6	-22.7	-22.9	-22.7	-22.2	-21.2	-20.3	-19.6	-19	-18.5	-18.6	-18.9	-18.9	-19	-19.4	-19.6	-19.6	-19.8	-22.9	-18.5	-20.9
Jan 25	-20	-20.3	-20.5	-20.5	-20.4	-20.4	-20.3	-20.1	-20	-20.1	-20.2	-19.9	-19.3	-18.9	-18.5	-17.5	-17	-17	-17.1	-17.1	-17.2	-17.4	-17.6	-17.9	-20.5	-17.0	-19.0
Jan 26	-18	-18.3	-18.7	-18.9	-19.3	-19.3	-19.2	-19	-19.1	-19.1	-18.6	-18	-17.5	-16.9	-16.7	-16.3	-16.2	-16.3	-16.4	-16.5	-16.6	-16.7	-17.4	-19.4	-19.4	-16.2	-17.9
Jan 27	-20.3	-19.1	-18.5	-18.4	-18.5	-18.7	-19	-19.4	-19.6	-19.6	-19.3	-19	-18.8	-18.6	-18.4	-18.5	-18.7	-19.4	-20	-20.3	-20.8	-21.1	-21.4	-21.8	-21.8	-18.4	-19.5
Jan 28	-22.3	-23.3	-24.4	-26.1	-26.8	-27.3	-26.1	-25.4	-24.9	-24.4	-23.7	-22.8	-21.9	-20.9	-19.7	-19	-19.3	-22.7	-25.4	-27.2	-28.6	-29.7	-30.6	-31.3	-31.3	-19.0	-24.7
Jan 29	-31.9	-32.6	-32.7	-32.8	-33	-33.3	-33.2	-33.2	-33.2	-32.2	-28	-23.4	-17.3	-13.9	-10.9	-9.4	-12	-17.3	-20.3	-22.2	-23.5	-24.6	-25.3	-26	-33.3	-9.4	-25.1
Jan 30	-26.4	-26.8	-27.3	-27.6	-27.7	-27.7	-27.8	-28.1	-28.3	-27.2	-22.7	-17.3	-14	-10.7	-8.8	-7.8	-10.3	-13.5	-16.3	-17.8	-19	-20.4	-21.6	-22.6	-28.3	-7.8	-20.7
Jan 31	-23.4	-23.9	-24.2	-23.7	-22.5	-22.1	-23.2	-24.2	-25	-24.3	-20.3	-15.3	-11.5	-8.4	-7.4	-6.5	-8.3	-10.1	-9.8	-10.2	-10.1	-9.6	-9.9	-10.1	-25.0	-6.5	-16.0
Diurnal Maximum	3.5	2.8	2.4	1.6	1.1	1.1	1.9	2.9	4.0	5.1	6.6	7.3	7.0	6.0	6.0	6.8	5.7	4.4	4.2	3.8	3.6	3.4	3.5	3.7			
Diurnal Average	-11.5	-11.7	-12.0	-12.1	-12.2	-12.4	-12.3	-12.4	-12.4	-12.2	-10.8	-8.9	-7.3	-6.3	-5.8	-5.7	-6.5	-7.9	-9.2	-10.0	-10.4	-10.9	-11.4	-11.7			
C	Monthly Calibration								S	Daily Zero-Span Check								Q	Quality Assurance								
K	Collection Error								N	No Data (Machine Not in Service)								Y	Routine Maintenance								
X	InValid Data (Equipment Malfunction /Recovery)								NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)								P	Power Failure								
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.																											

Timeseries Chart of Hourly Average for AT - AQHI - Cadotte Lake Station





PEACE RIVER AREA MONITORING PROGRAM

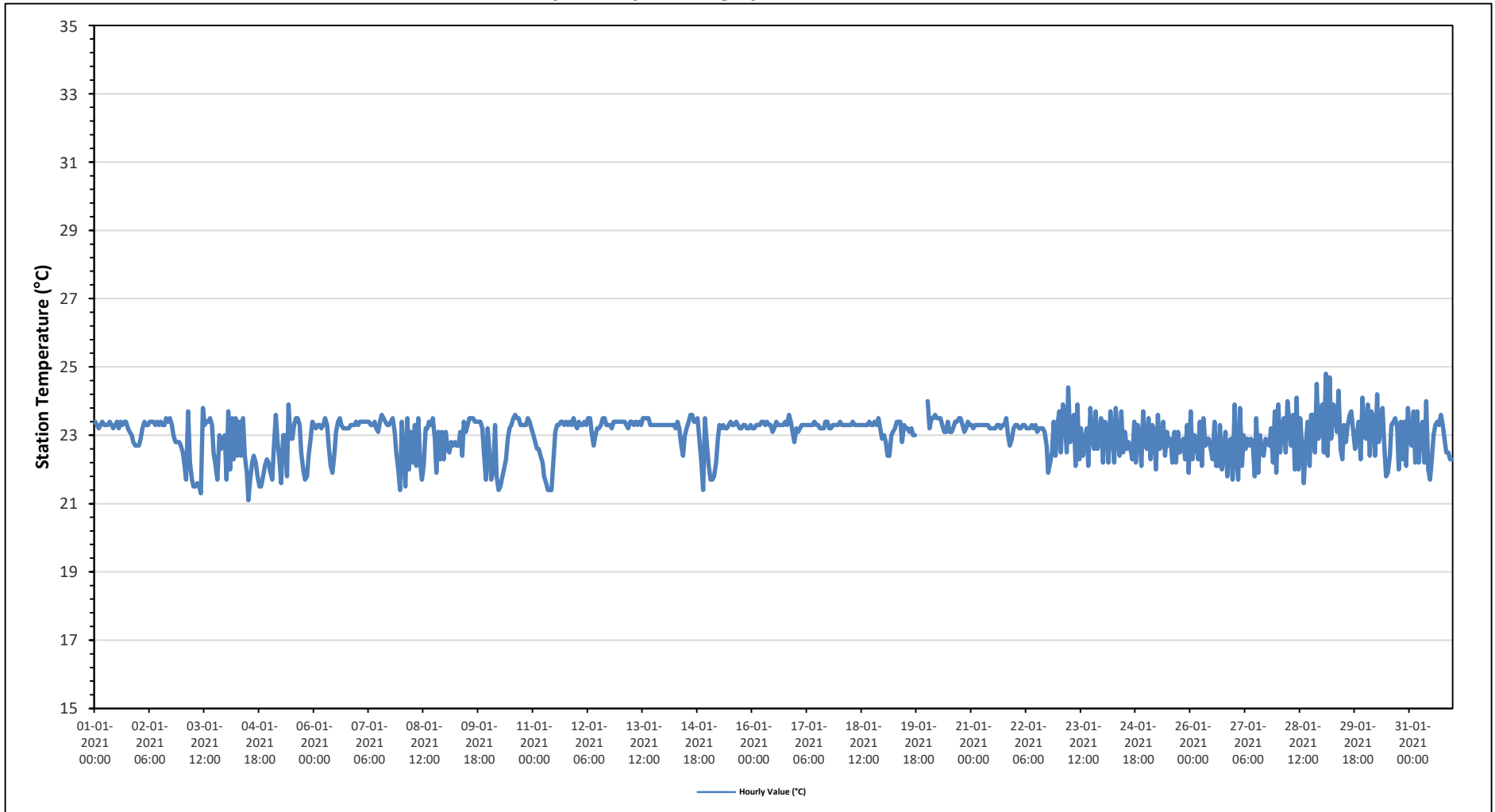
AQHI - Cadotte Lake Station - January 2021

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

Maximum Hourly Value: 24.8 °C on January 29 at hour 2										Hours in Service: 744																	
Maximum Daily Value: 23.4 °C on January 20										Hours of Data: 738																	
Minimum Hourly Value: 21.1 °C on January 4 at hour 12										Hours of Missing Data: 6																	
Minimum Daily Value: 22.3 °C on January 4										Hours of Calibration: 0																	
Monthly Average: 23.0 °C										Operational Uptime: 99.2																	
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			
Jan 1	23.4	23.3	23.2	23.3	23.4	23.3	23.3	23.3	23.4	23.3	23.2	23.3	23.4	23.2	23.4	23.3	23.4	23.4	23.2	23.1	23.0	22.8	22.7	22.7	22.7	23.4	23.2
Jan 2	22.7	22.9	23.2	23.4	23.3	23.3	23.4	23.4	23.4	23.3	23.4	23.3	23.4	23.3	23.3	23.5	23.4	23.5	23.3	23.0	22.8	22.8	22.8	22.7	22.7	23.5	23.2
Jan 3	22.5	22.1	21.7	23.7	22.2	21.7	21.5	21.5	21.6	21.5	21.3	23.8	23.3	23.4	23.4	23.5	23.3	22.5	22.1	21.7	23.0	22.6	22.9	23.0	21.3	23.8	22.5
Jan 4	21.7	23.7	22.0	23.5	22.3	23.5	22.4	23.4	22.4	23.5	22.4	21.9	21.1	21.7	22.2	22.4	22.2	21.8	21.5	21.5	21.8	22.1	22.3	22.2	21.1	23.7	22.3
Jan 5	21.9	21.7	22.6	23.6	22.8	22.2	21.6	23.0	23.0	21.8	23.9	22.9	22.9	23.3	23.5	23.5	23.3	22.5	22.0	21.7	21.8	22.4	22.9	23.4	21.6	23.9	22.7
Jan 6	23.3	23.2	23.3	23.3	23.2	23.3	23.5	23.3	22.7	22.1	21.9	22.5	23.1	23.4	23.5	23.3	23.2	23.2	23.2	23.3	23.3	23.3	23.4	23.4	21.9	23.5	23.1
Jan 7	23.3	23.4	23.4	23.4	23.4	23.4	23.4	23.3	23.3	23.3	23.2	23.1	23.4	23.6	23.5	23.4	23.3	23.3	23.4	23.5	23.1	22.5	22.0	21.4	21.4	23.6	23.2
Jan 8	23.4	22.5	21.5	23.5	22.0	23.1	22.2	23.3	22.1	23.5	22.2	21.7	22.1	23.2	23.2	23.4	23.3	23.5	22.9	21.9	23.1	22.3	23.1	22.3	21.5	23.5	22.7
Jan 9	23.1	22.6	22.5	22.8	22.7	22.8	22.7	22.7	23.1	22.4	23.4	23.1	23.3	23.5	23.5	23.5	23.4	23.4	23.4	23.4	23.2	22.5	21.7	23.2	21.7	23.5	23.0
Jan 10	22.5	21.7	22.0	23.3	21.8	21.4	21.5	21.8	22.0	22.3	22.9	23.2	23.3	23.5	23.6	23.5	23.5	23.3	23.3	23.3	23.3	23.5	23.4	23.2	21.4	23.6	22.8
Jan 11	23.0	22.8	22.6	22.6	22.4	22.2	21.8	21.6	21.4	21.4	22.3	23.1	23.3	23.3	23.3	23.4	23.4	23.3	23.4	23.3	23.4	23.3	23.5	23.3	21.4	23.5	22.7
Jan 12	23.2	23.4	23.3	23.3	23.4	23.3	23.5	23.5	23.1	22.7	23.0	23.2	23.2	23.3	23.5	23.5	23.3	23.3	23.3	23.2	23.4	23.4	23.4	23.4	22.7	23.5	23.3
Jan 13	23.4	23.4	23.4	23.3	23.2	23.4	23.4	23.3	23.4	23.3	23.4	23.3	23.5	23.5	23.5	23.5	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.2	23.5	23.4
Jan 14	23.3	23.3	23.3	23.3	23.3	23.3	23.2	23.4	23.2	22.7	22.4	23.0	23.2	23.4	23.6	23.6	23.4	23.4	23.5	22.9	22.2	21.4	23.5	22.8	21.4	23.6	23.1
Jan 15	22.1	21.7	21.7	21.8	22.2	22.9	23.3	23.2	23.3	23.2	23.2	23.3	23.4	23.3	23.3	23.4	23.3	23.2	23.2	23.3	23.3	23.2	23.2	23.3	21.7	23.4	23.0
Jan 16	23.2	23.2	23.3	23.3	23.3	23.4	23.4	23.3	23.4	23.3	23.3	23.1	23.2	23.4	23.3	23.3	23.3	23.3	23.4	23.3	23.6	23.4	23.1	22.8	22.8	23.6	23.3
Jan 17	23.2	23.1	23.2	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.4	23.3	23.3	23.2	23.2	23.2	23.4	23.4	23.2	23.2	23.3	23.3	23.3	23.3	23.1	23.4	23.3
Jan 18	23.4	23.3	23.3	23.3	23.3	23.3	23.3	23.4	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.4	23.3	23.3	23.3	23.4	23.3	23.5	23.2	22.9	22.9	23.5
Jan 19	23.0	22.8	22.4	22.4	23.0	23.1	23.2	23.4	23.4	23.4	22.8	23.3	23.2	23.2	23.1	23.2	23.0	23.0	P	P	P	P	P	P	22.4	23.4	23.1
Jan 20	24.0	23.2	23.5	23.5	23.6	23.5	23.5	23.5	23.3	23.1	23.1	23.4	23.1	23.1	23.2	23.4	23.4	23.5	23.5	23.3	23.1	23.2	23.4	23.3	23.1	24.0	23.4
Jan 21	23.3	23.2	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.2	23.2	23.2	23.2	23.3	23.3	23.2	23.3	23.3	23.5	23.0	22.7	22.9	23.2	22.7	23.5	23.2
Jan 22	23.3	23.3	23.2	23.2	23.3	23.3	23.3	23.2	23.2	23.2	23.3	23.2	23.3	23.1	23.2	23.2	23.1	22.7	21.9	22.2	22.5	23.4	22.4	23.3	21.9	23.4	23.1
Jan 23	23.7	22.5	23.9	23.6	22.5	24.4	22.8	23.0	23.6	22.1	23.9	22.3	23.2	22.4	22.9	23.2	22.1	23.8	22.9	22.6	23.7	22.6	22.9	23.5	22.1	24.4	23.1
Jan 24	22.2	23.4	23.3	22.2	23.7	23.1	22.2	23.8	22.9	22.4	23.7	22.5	23.1	22.6	22.8	22.6	22.3	23.4	22.2	23.3	23.0	22.1	23.7	22.7	22.1	23.8	22.9
Jan 25	22.6	23.5	22.3	23.3	23.1	22.0	23.6	22.6	22.7	23.4	22.4	23.1	22.7	22.9	22.2	23.1	22.2	23.1	22.5	22.6	22.9	22.3	23.3	21.9	21.9	23.6	22.8
Jan 26	23.7	22.3	23.0	22.9	22.3	23.4	22.1	23.5	22.7	22.9	22.9	22.6	22.3	23.4	22.1	22.1	23.3	22.0	22.4	23.1	21.8	22.8	22.9	21.7	21.7	23.7	22.7
Jan 27	23.9	22.4	21.7	23.8	22.1	23.0	22.6	22.9	22.7	22.9	22.8	21.8	23.5	21.9	23.0	22.5	22.4	22.9	22.8	22.7	23.2	22.2	23.7	21.9	21.7	23.9	22.7
Jan 28	23.9	22.5	23.2	23.5	22.5	24.0	23.3	22.7	23.6	22.0	24.1	22.0	23.5	22.6	21.6	22.7	23.4	22.1	23.6	23.6	22.5	24.5	22.9	23.7	21.6	24.5	23.1
Jan 29	23.9	22.5	24.8	22.4	24.7	22.9	23.9	23.7	23.1	24.3	22.6	22.3	23.3	22.8	23.3	23.6	23.7	23.1	22.6	23.0	23.4	22.3	24.1	23.0	22.3	24.8	23.3
Jan 30	22.9	23.9	22.4	23.7	23.5	22.4	24.2	22.8	23.2	23.8	22.7	21.8	21.9	22.4	23.3	23.4	23.5	23.2	22.0	23.4	22.3	23.4	22.1	23.8	21.8	24.2	23.0
Jan 31	22.9	22.7	23.7	22.2	23.7	22.2	23.2	23.4	22.2	24.0	22.0	21.7	22.2	23.0	23.3	23.4	23.3	23.6	23.3	22.9	22.5	22.5	22.3	22.3	21.7	24.0	22.9
Diurnal Maximum	24.0	23.9	24.8	23.8	24.7	24.4	24.2	23.8	23.6	24.3	24.1	23.8	23.5	23.6	23.6	23.6	23.7	23.8	23.6	23.6	23.7	24.5	24.1	23.8			
Diurnal Average	23.1	22.9	22.9	23.2	23.0	23.0	23.0	23.1	22.9	22.9	22.9	22.8	23.0	23.1	23.1	23.2	23.2	23.1	22.9	22.9	22.9	22.9	23.0	22.9			
C	Monthly Calibration						S	Daily Zero-Span Check						Q	Quality Assurance												
K	Collection Error						N	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.																											

Timeseries Chart of Hourly Average for ST - AQHI - Cadotte Lake Station





PEACE RIVER AREA MONITORING PROGRAM

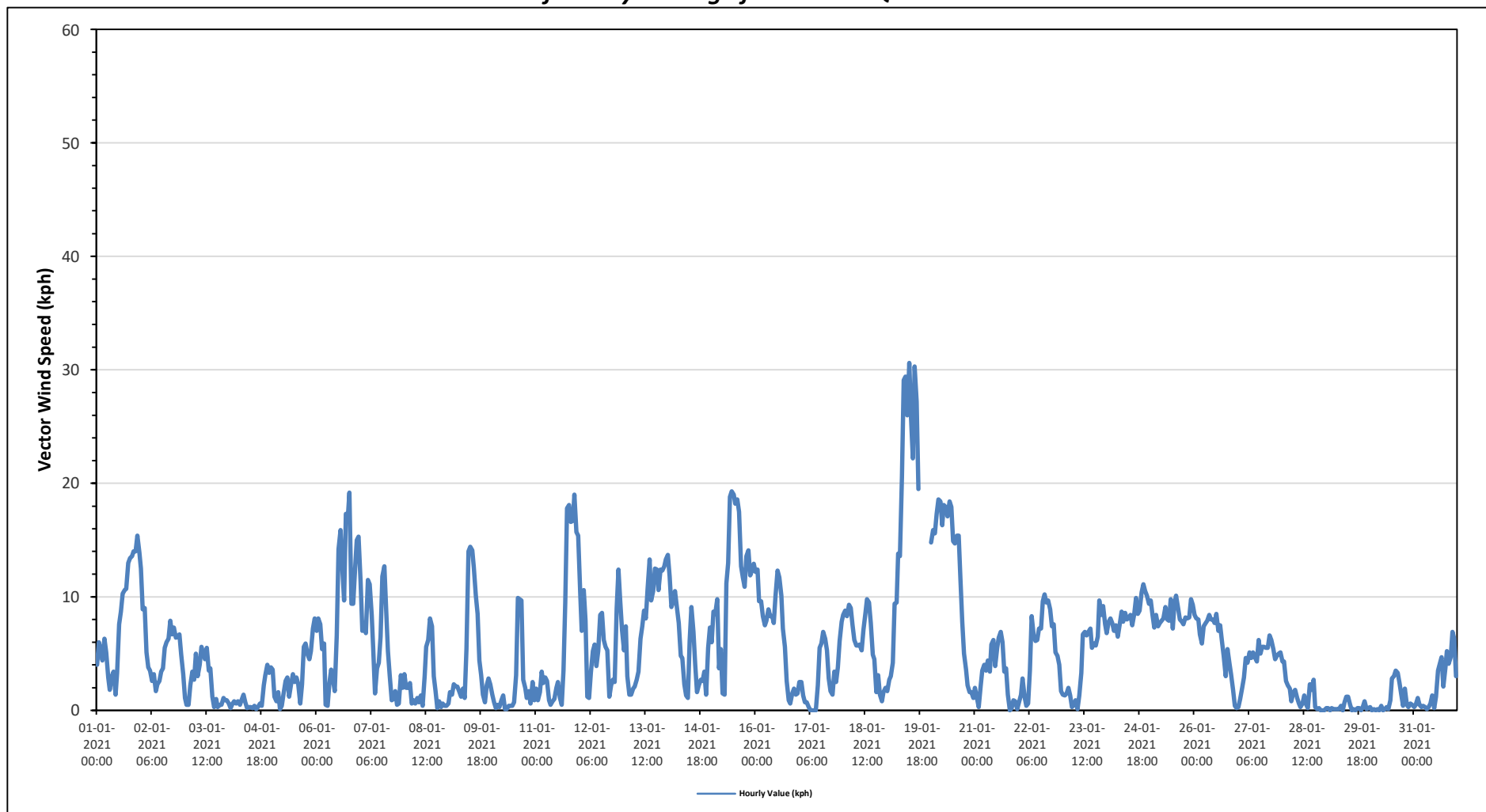
AQHI - Cadotte Lake Station - January 2021

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

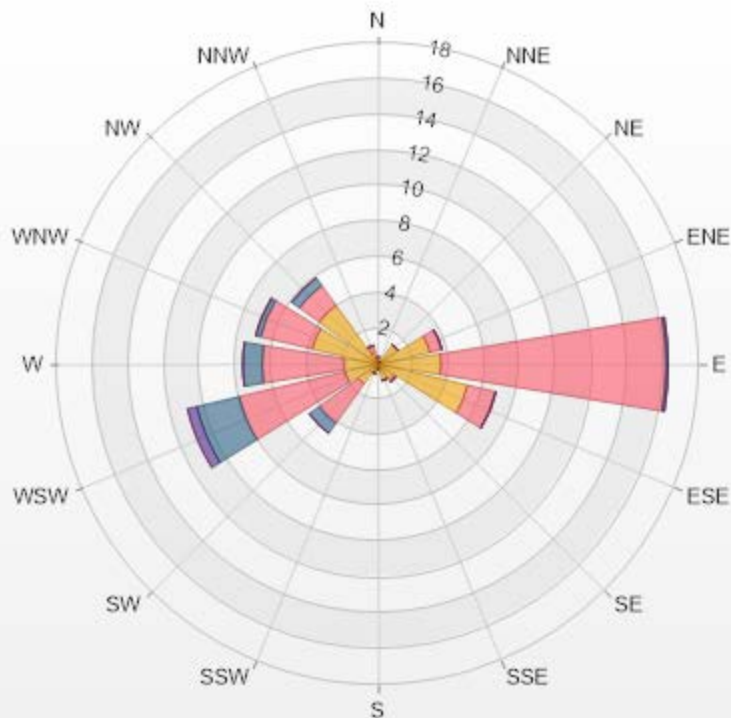
Maximum Hourly Value:										30.6		kph		on January 19 at hour 12										Hours in Service:										744									
Maximum Daily Value:										16.9		kph		on January 19										Hours of Data:										738									
Minimum Hourly Value:										0.0		kph		on January 17 at hour 6										Hours of Missing Data:										6									
Minimum Daily Value:										0.1		kph		on January 29										Hours of Calibration:										0									
Monthly Average:										1.3		kph												Operational Uptime:										99.2									
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average																	
Jan 1	4.0	6.0	5.3	4.4	6.3	5.1	2.9	1.8	3.0	3.4	1.4	3.3	7.6	8.7	10.3	10.6	10.7	13.0	13.4	13.6	14.0	14.0	15.4	13.9	1.4	15.4	5.3																
Jan 2	12.5	8.9	9.0	5.1	3.8	3.5	2.6	3.2	1.7	2.3	2.6	3.4	3.7	5.5	6.0	6.3	7.9	6.7	7.3	6.4	6.5	6.7	4.9	3.2	1.7	12.5	5.2																
Jan 3	1.1	0.5	0.5	2.2	3.4	2.7	5.0	3.0	4.0	5.6	5.0	4.5	5.5	3.5	3.7	1.2	0.3	1.0	0.3	0.5	0.5	1.1	0.9	0.9	0.3	5.6	2.1																
Jan 4	0.6	0.2	0.6	0.8	0.6	0.8	0.5	0.9	1.4	0.7	0.2	0.3	0.3	0.2	0.4	0.1	0.3	0.6	0.4	2.2	3.1	4.0	3.3	3.8	0.1	4.0	0.4																
Jan 5	3.6	1.2	0.8	1.6	0.1	0.4	1.6	2.6	2.9	1.2	2.2	3.2	2.5	2.9	2.3	0.6	2.3	5.6	5.9	4.9	4.5	5.2	7.2	8.1	0.1	8.1	3.0																
Jan 6	7.0	8.1	7.6	5.4	5.9	0.5	0.4	2.4	3.6	2.6	1.7	6.6	14.2	15.9	12.9	9.7	17.3	17.1	19.2	9.4	9.4	12.3	15.0	15.3	0.4	19.2	5.8																
Jan 7	11.4	7.0	7.7	6.8	11.5	11.1	8.4	5.4	1.5	3.7	4.2	6.5	11.8	12.7	8.9	5.2	3.1	0.9	1.0	1.7	0.5	0.6	3.1	2.0	0.5	12.7	5.1																
Jan 8	3.2	2.0	2.0	2.4	0.6	0.9	0.6	1.1	0.7	1.3	0.4	3.0	5.6	6.2	8.1	7.4	3.0	1.7	0.2	0.8	0.3	0.6	0.4	0.4	0.2	8.1	1.7																
Jan 9	0.6	1.6	1.4	2.3	2.1	2.1	1.7	1.2	1.9	1.1	5.4	14.0	14.4	14.1	12.6	10.1	8.5	4.4	3.1	1.4	0.7	2.2	2.8	2.3	0.6	14.4	2.9																
Jan 10	1.4	0.7	0.2	0.5	0.3	0.9	1.3	0.1	0.1	0.4	0.4	0.4	0.7	3.1	9.9	9.8	9.7	2.7	2.0	1.1	1.7	0.6	2.5	0.9	0.1	9.9	1.2																
Jan 11	1.9	0.9	1.6	3.4	2.4	2.9	2.6	0.9	0.5	0.8	1.0	2.0	2.5	1.1	0.5	3.5	9.5	17.8	18.1	16.6	16.7	19.0	15.7	15.4	0.5	19.0	4.5																
Jan 12	10.4	7.0	10.6	7.9	1.2	1.1	3.3	5.2	5.8	3.9	5.2	8.4	8.6	6.2	5.6	5.3	1.2	2.2	2.7	2.5	9.0	12.4	9.6	7.1	1.1	12.4	2.3																
Jan 13	5.3	7.4	3.0	1.4	1.4	1.9	2.1	2.7	3.4	6.3	7.4	8.8	8.1	10.7	13.3	9.7	10.5	12.5	12.4	10.6	12.4	12.3	12.7	13.3	1.4	13.3	7.5																
Jan 14	13.7	11.8	9.1	9.6	10.5	9.0	7.7	4.8	4.6	2.3	1.3	1.1	6.1	9.1	6.9	4.0	1.6	2.2	2.7	2.6	3.4	1.4	5.5	7.3	1.1	13.7	3.6																
Jan 15	6.0	8.7	8.5	9.8	3.7	5.4	1.5	1.4	11.2	13.0	18.8	19.3	19.0	18.2	18.6	17.5	12.7	11.7	10.9	13.6	14.1	11.9	12.3	12.9	1.4	19.3	8.3																
Jan 16	12.2	12.4	9.6	9.6	8.3	7.5	7.9	8.9	8.3	8.3	7.7	10.1	12.3	11.7	10.1	7.2	5.6	2.6	0.9	0.6	1.5	1.9	1.4	1.5	0.6	12.4	6.4																
Jan 17	2.5	2.5	1.3	0.7	0.7	0.3	0.0	0.0	0.0	0.0	2.2	5.5	5.9	6.9	6.3	5.3	2.8	1.7	1.4	3.4	2.5	3.8	6.1	7.8	0.0	7.8	2.2																
Jan 18	8.4	8.8	8.3	9.3	9.0	7.5	6.2	5.7	5.7	5.8	5.3	7.1	8.6	9.8	9.5	7.7	4.9	4.5	1.6	3.1	1.4	0.8	1.6	2.0	0.8	9.8	5.6																
Jan 19	1.7	2.7	3.0	4.2	9.4	9.5	13.8	13.6	20.6	29.1	29.4	26.0	30.6	25.7	22.2	30.3	27.2	19.5	P	P	P	P	P	P	P	1.7	30.6	16.9															
Jan 20	14.8	15.9	15.6	17.3	18.6	18.4	16.3	18.1	17.9	17.1	18.4	17.9	14.9	14.7	15.4	15.4	11.5	7.8	5.0	3.6	2.2	1.6	1.6	1.1	1.1	18.6	11.7																
Jan 21	2.0	1.1	0.3	2.2	3.5	4.0	3.5	4.4	3.4	5.8	6.2	3.9	5.5	6.4	6.9	6.0	3.4	3.7	1.4	0.0	0.2	0.9	0.8	0.1	0.0	6.9	3.0																
Jan 22	0.7	1.4	2.8	1.2	0.4	0.6	3.5	8.3	6.6	6.1	6.2	7.2	7.2	9.6	10.2	9.5	9.7	8.9	7.4	7.6	5.1	4.8	4.0	1.7	0.4	10.2	4.5																
Jan 23	1.4	1.3	1.5	2.0	1.3	0.3	0.5	0.9	0.1	1.3	3.3	6.7	6.9	6.6	6.9	7.2	5.5	5.9	5.7	6.5	9.7	8.4	9.2	7.6	0.1	9.7	3.6																
Jan 24	6.8	7.8	8.1	7.7	7.0	7.5	6.5	7.5	8.7	7.8	8.6	8.0	8.2	8.4	7.5	8.5	9.9	8.5	8.8	10.4	11.1	10.5	10.1	9.4	6.5	11.1	8.4																
Jan 25	9.7	8.4	7.3	8.4	7.4	7.7	7.9	8.1	9.1	8.0	7.9	9.8	7.2	9.5	10.1	9.0	8.0	7.8	7.6	8.2	8.1	8.2	9.8	9.3	7.2	10.1	8.4																
Jan 26	8.4	8.1	8.0	6.7	5.9	7.4	7.7	7.9	8.4	8.0	8.0	7.7	8.5	7.0	7.5	6.1	4.8	3.0	5.4	4.1	3.2	1.8	0.4	0.2	0.2	8.5	5.8																
Jan 27	0.3	1.0	2.0	2.9	4.6	4.2	5.1	4.6	5.1	4.7	4.3	6.2	5.0	5.6	5.6	5.5	5.5	6.6	6.2	5.4	4.5	4.8	5.0	5.1	0.3	6.6	4.4																
Jan 28	4.3	4.3	2.6	2.2	1.9	0.8	1.6	1.8	1.1	0.6	0.3	0.6	1.3	0.5	0.2	2.3	1.8	2.7	0.3	0.1	0.2	0.0	0.0	0.0	0.0	0.0	4.3	0.5															
Jan 29	0.2	0.2	0.0	0.2	0.1	0.1	0.1	0.1	0.4	0.0	0.7	1.2	1.2	0.5	0.0	0.1	0.0	0.2	0.2	0.0	0.3	0.8	0.1	0.2	0.0	1.2	0.1																
Jan 30	0.3	0.0	0.1	0.0	0.1	0.0	0.4	0.0	0.1	0.3	0.1	0.9	2.8	3.0	3.5	3.3	2.4	1.4	0.4	1.9	0.5	0.3	0.6	0.5	0.0	3.5	0.5																
Jan 31	0.3	0.5	1.1	0.5	0.3	0.4	0.3	0.1	0.3	0.6	1.3	0.2	1.2	3.5	4.0	4.7	2.1	3.7	5.2	4.1	4.7	6.9	6.3	3.0	0.1	6.9	1.9																
Diurnal Maximum	15	16	16	17	19	18	16	18	21	29	29	26	31	26	22	30	27	20	19	17	19	16	15																				
Diurnal Average	5.1	4.8	4.5	4.5	4.3	4.0	4.0	4.1	4.6	4.9	5.4	6.6	7.7	8.0	7.9	7.4	6.6	6.1	5.2	4.9	5.1	5.3	5.6	5.2																			
C	Monthly Calibration										S	Daily Zero-Span Check										Q	Quality Assurance																				
K	Collection Error										N	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.																																											

Timeseries Chart of Hourly Average for VWS - AQHI - Cadotte Lake Station



Wind: AQHI Cadotte Lake Monitor: WDS [KPH] Monthly: 01-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 31.03% Valid Data: 99.19%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	0.27	0.14	0	0	0	0.41
NNE	0.14	0	0	0	0	0.14
NE	1.36	0	0	0	0	1.36
ENE	2.98	0.68	0	0	0	3.66
E	3.52	12.6	0.14	0	0	16.26
ESE	5.15	1.63	0	0	0	6.78
SE	1.08	0.14	0	0	0	1.22
SSE	0.95	0	0	0	0	0.95
S	0.27	0	0	0	0	0.27
SSW	0.54	0	0	0	0	0.54
SW	1.36	2.71	0.68	0	0	4.75
WSW	1.9	6.1	2.44	0.54	0	10.98
W	1.9	4.61	1.08	0	0	7.59
WNW	3.79	2.98	0.27	0	0	7.04
NW	4.07	1.36	0.54	0	0	5.97
NNW	0.68	0.41	0	0	0	1.09
Summary	29.96	33.36	5.15	0.54	0	69.01



PRAMP-202101

Page 218 of 228



PEACE RIVER AREA MONITORING PROGRAM

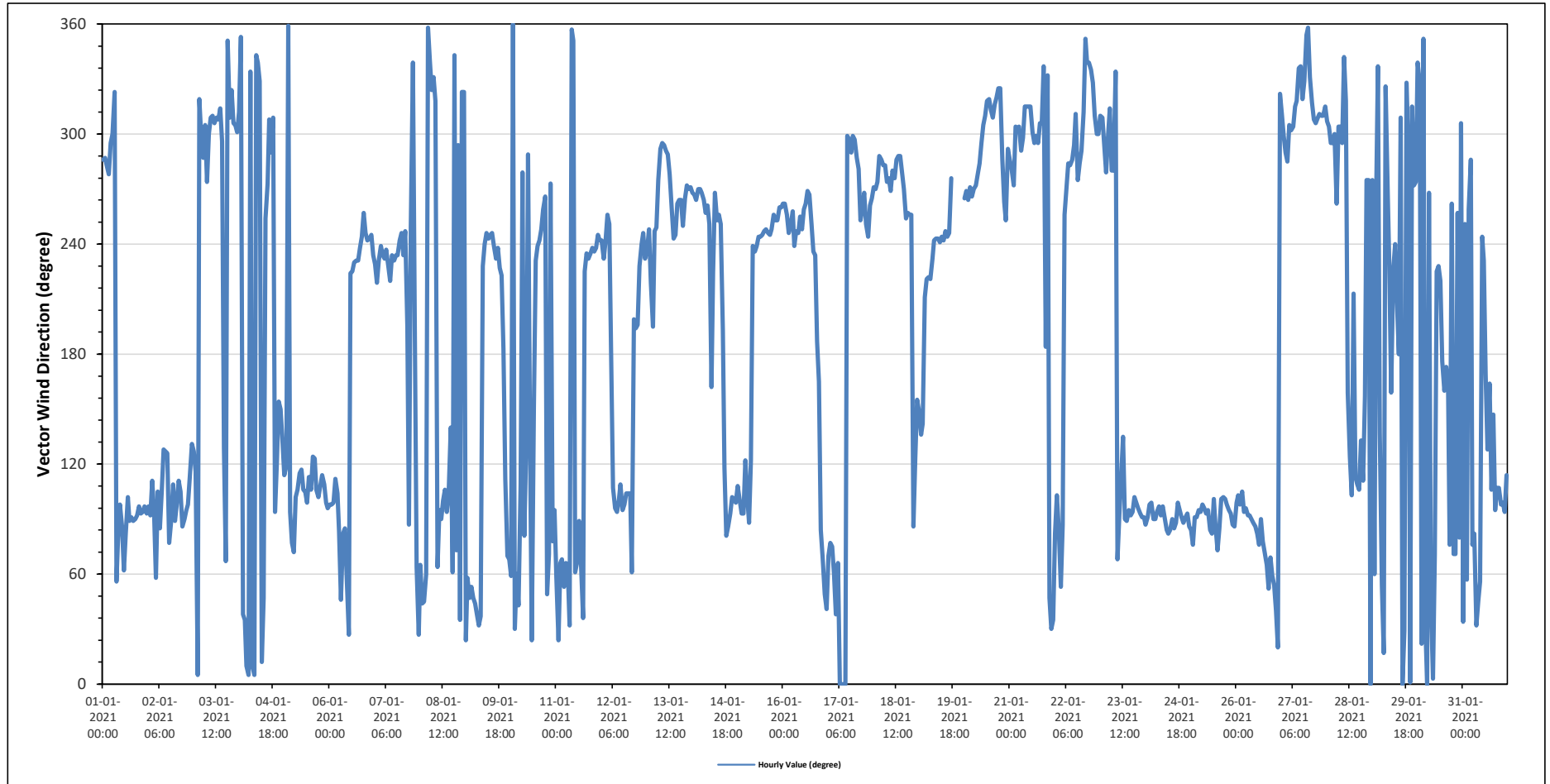
AQHI - Cadotte Lake Station - January 2021

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

Monthly Average:										248 (WSW) degree										Hours in Service:										744		Hours of Data:										738		Hours of Missing Data:										6		Hours of Calibration:										0		Operational Uptime:										99.2	
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																																																					
Jan 1	WNW	WNW	W	W	WNW	WNW	NW	NE	E	E	E	ENE	E	E	E	E	E	E	E	E	E	E	E	E	86	E																																																					
Jan 2	E	E	ESE	E	ENE	ESE	E	ESE	SE	SE	SE	ENE	E	ESE	E	E	ESE	ESE	E	E	E	E	ESE	SE	99	E																																																					
Jan 3	SE	ESE	N	NW	WNW	WNW	WNW	W	WNW	NW	NW	NW	NW	NW	NW	WNW	SE	ENE	N	NW	NW	NW	WNW	WNW	306	NW																																																					
Jan 4	NW	N	NE	NE	N	N	NNW	N	N	NNW	NNW	NNW	NNE	NE	WSW	W	NW	WNW	NW	E	ESE	SSE	SSE	SE	107	ESE																																																					
Jan 5	ESE	ESE	N	E	ENE	ENE	E	ESE	ESE	ESE	ESE	ESE	E	ESE	ESE	ESE	ESE	ESE	E	ESE	ESE	ESE	E	E	105	ESE																																																					
Jan 6	E	E	E	ESE	ESE	E	NE	E	E	ENE	NNE	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	228	SW																																																					
Jan 7	SW	SW	SW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	SW	WSW	SSW	E	WSW	NNW	SSW	ENE	NNE	234	SW																																																					
Jan 8	ENE	NE	NE	ENE	N	NNW	NW	NNW	NW	ENE	E	E	E	ESE	E	ESE	SE	ENE	NNW	ENE	WNW	NE	NW	NW	84	E																																																					
Jan 9	NNE	ENE	NE	NE	NE	NE	NE	NNE	NE	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	S	ESE	ENE	ENE	242	WSW																																																					
Jan 10	ENE	N	NNE	ENE	NE	ESE	W	E	SE	WNW	SE	NNE	SSE	SW	WSW	WSW	WSW	WSW	W	NE	ENE	W	ENE	E	244	WSW																																																					
Jan 11	ENE	NNE	ENE	ENE	NE	ENE	ENE	NNE	N	N	ENE	ENE	E	ENE	NE	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	236	SW																																																					
Jan 12	WSW	SW	WSW	WSW	WSW	S	ESE	E	E	E	ESE	E	E	ESE	ESE	ESE	ENE	SSW	SSW	SSW	SW	WSW	WSW	SW	190	S																																																					
Jan 13	SW	WSW	SW	SSW	WSW	WSW	W	WNW	WNW	WNW	WNW	WNW	W	WSW	WSW	WSW	W	W	W	WSW	W	W	W	W	264	W																																																					
Jan 14	W	W	W	W	W	W	W	WSW	W	WSW	SSE	SW	W	WSW	WSW	WSW	S	ESE	E	E	E	E	E	E	258	WSW																																																					
Jan 15	ESE	E	E	E	ESE	ESE	E	ESE	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	240	WSW																																																					
Jan 16	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	SW	SW	S	SSE	E	ENE	NE	NE	NE	255	WSW																																																					
Jan 17	ENE	ENE	ENE	ENE	NE	ENE	N	N	N	NNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WSW	WSW	W	WSW	WSW	W	W	283	W																																																					
Jan 18	W	W	W	WNW	WNW	W	W	W	W	W	W	W	WNW	WNW	WNW	WNW	W	W	WSW	WSW	WSW	E	ESE	SSE	277	W																																																					
Jan 19	SE	SE	SE	SSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	P	P	P	P	P	P	241	WSW																																																					
Jan 20	W	W	W	W	W	W	W	W	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	W	WSW	WNW	290	WNW																																																					
Jan 21	WNW	W	W	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	WNW	WNW	WNW	WNW	NW	NW	NNW	S	NNW	NE	NNE	NE	305	WNW																																																					
Jan 22	E	ESE	E	NE	E	WSW	W	WNW	W	WNW	WNW	NW	W	WNW	WNW	NW	N	NNW	NNW	NNW	NNW	NW	WNW	WNW	309	NW																																																					
Jan 23	NW	NW	WNW	W	WNW	NW	W	NNW	ENE	E	ESE	SE	E	E	E	E	E	E	E	E	E	E	E	E	96	E																																																					
Jan 24	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	91	E																																																					
Jan 25	E	ENE	E	E	E	E	E	E	E	E	E	E	E	E	E	ENE	E	E	E	E	E	E	E	E	91	E																																																					
Jan 26	E	ESE	E	ESE	E	E	E	E	E	E	E	ENE	E	ENE	E	ENE	ENE	NE	ENE	ENE	NE	NE	NNE	NW	85	E																																																					
Jan 27	NW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NNW	NNW	NW	NNW	N	N	NNW	NW	NW	NW	NW	NW	NW	NW	NW	318	NW																																																					
Jan 28	NW	WNW	WNW	WNW	WNW	W	WNW	WNW	WNW	NNW	NW	SSE	ESE	ESE	SSW	ESE	ESE	ESE	SE	ESE	SSE	W	W	N	306	NW																																																					
Jan 29	W	ENE	W	NNW	SE	NE	NNE	NW	W	SW	SSE	SW	WSW	SSW	S	NW	N	NNE	NNW	WNW	N	NW	W	W	257	WSW																																																					
Jan 30	NNW	NNW	NNE	N	NNE	N	W	NE	N	ENE	SW	SW	SW	S	SSE	S	SSE	ENE	W	ENE	ENE	WSW	E	NW	167	SSE																																																					
Jan 31	NE	WSW	ENE	WSW	WNW	ENE	E	NNE	NE	NE	WSW	SW	SSE	SE	SSE	ESE	SE	E	ESE	ESE	E	E	E	ESE	111	ESE																																																					
C	Monthly Calibration						S	Daily Zero-Span Check						Q	Quality Assurance						Y	Routine Maintenance						P	Power Failure																																																		
K	Collection Error						N	No Data (Machine Not in Service)																																																																							
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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.																																																																															

Timeseries Chart of Hourly Average for VWD - AQHI - Cadotte Lake Station





PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - January 2021

Summary of Hourly Averages

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

WIND SPEED																											
Maximum Hourly Value:		30.6 kph on January 19 at hour 12													Hours in Service:		744										
Maximum Daily Value:		16.9 kph on January 19													Hours of Data:		738										
Minimum Hourly Value:		0.0 kph on January 17 at hour 6													Hours of Missing Data:		6										
Minimum Daily Value:		0.1 kph on January 29													Hours of Calibration:		0										
Monthly Average:		1.3 kph													Operational Uptime:		99.2										
WIND DIRECTION																											
Monthly Average:		248 (WSW) degree																									
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
Jan 1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	1.4	15.4	5.3
Jan 2	WNW	WNW	W	W	WNW	WNW	NW	NE	E	E	E	ENE	E	E	E	E	E	E	E	E	E	E	E	E	1.7	12.5	5.2
Jan 3	12.5	8.9	9.0	5.1	3.8	3.5	2.6	3.2	1.7	2.3	2.6	3.4	3.7	5.5	6.0	6.3	7.9	6.7	7.3	6.4	6.5	6.7	4.9	3.2	0.3	5.6	2.1
Jan 4	E	E	ESE	E	ENE	ESE	E	ESE	SE	SE	SE	ENE	E	ESE	E	E	ESE	ESE	E	E	E	ESE	ESE	SE	0.1	4.0	0.4
Jan 5	1.1	0.5	0.5	2.2	3.4	2.7	5.0	3.0	4.0	5.6	5.0	4.5	5.5	3.5	3.7	1.2	0.3	1.0	0.3	0.5	0.5	1.1	0.9	0.9	0.3	5.6	2.1
Jan 6	SE	ESE	N	NW	WNW	WNW	WNW	W	WNW	NW	NW	NW	NW	NW	NW	SE	ENE	N	NW	NW	NW	WNW	WNW	WNW	0.1	4.0	0.4
Jan 7	0.6	0.2	0.6	0.8	0.6	0.8	0.5	0.9	1.4	0.7	0.2	0.3	0.3	0.2	0.4	0.1	0.3	0.6	0.4	2.2	3.1	4.0	3.3	3.8	0.1	4.0	0.4
Jan 8	NW	N	NE	NE	N	N	NNW	N	N	NNW	NNW	NNW	NNE	NE	WSW	W	NW	WNW	NW	E	ESE	SSE	SSE	SE	0.1	8.1	3.0
Jan 9	3.6	1.2	0.8	1.6	0.1	0.4	1.6	2.6	2.9	1.2	2.2	3.2	2.5	2.9	2.3	0.6	2.3	5.6	5.9	4.9	4.5	5.2	7.2	8.1	0.1	8.1	3.0
Jan 10	ESE	ESE	N	E	ENE	ENE	E	ESE	ESE	ESE	ESE	ESE	E	ESE	ESE	ESE	ESE	ESE	E	ESE	ESE	ESE	E	E	0.4	19.2	5.8
Jan 11	7.0	8.1	7.6	5.4	5.9	0.5	0.4	2.4	3.6	2.6	1.7	6.6	14.2	15.9	12.9	9.7	17.3	17.1	19.2	9.4	9.4	12.3	15.0	15.3	0.4	19.2	5.8
Jan 12	E	E	E	ESE	ESE	E	NE	E	E	ENE	NNE	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	0.5	12.7	5.1
Jan 13	11.4	7.0	7.7	6.8	11.5	11.1	8.4	5.4	1.5	3.7	4.2	6.5	11.8	12.7	8.9	5.2	3.1	0.9	1.0	1.7	0.5	0.6	3.1	2.0	0.5	12.7	5.1
Jan 14	SW	SW	SW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	SW	WSW	SSW	E	WSW	NNW	SSW	ENE	NNE	0.2	8.1	1.7
Jan 15	3.2	2.0	2.0	2.4	0.6	0.9	0.6	1.1	0.7	1.3	0.4	3.0	5.6	6.2	8.1	7.4	3.0	1.7	0.2	0.8	0.3	0.6	0.4	0.4	0.2	8.1	1.7
Jan 16	ENE	NE	NE	ENE	N	NNW	NW	NNW	NW	ENE	E	E	ESE	E	ESE	SE	ENE	NNW	ENE	WNW	NE	NW	NW	0.6	14.4	2.9	
Jan 17	0.6	1.6	1.4	2.3	2.1	2.1	1.7	1.2	1.9	1.1	5.4	14.0	14.4	14.1	12.6	10.1	8.5	4.4	3.1	1.4	0.7	2.2	2.8	2.3	0.6	14.4	2.9
Jan 18	NNE	ENE	NE	NE	NE	NE	NE	NNE	NE	SW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	S	ESE	ENE	ENE	ENE	0.1	9.9	1.2
Jan 19	1.4	0.7	0.2	0.5	0.3	0.9	1.3	0.1	0.1	0.4	0.4	0.4	0.7	3.1	9.9	9.8	9.7	2.7	2.0	1.1	1.7	0.6	2.5	0.9	0.1	9.9	1.2
Jan 20	ENE	N	NNE	ENE	NE	ESE	W	E	SE	WNW	SE	NNE	SSE	SW	WSW	WSW	WSW	WSW	W	NE	ENE	W	ENE	E	0.5	19.0	4.5
Jan 21	1.9	0.9	1.6	3.4	2.4	2.9	2.6	0.9	0.5	0.8	1.0	2.0	2.5	1.1	0.5	3.5	9.5	17.8	18.1	16.6	16.7	19.0	15.7	15.4	0.5	19.0	4.5
Jan 22	ENE	NNE	ENE	ENE	NE	ENE	ENE	NNE	N	N	ENE	ENE	E	ENE	NE	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	0.1	9.9	1.2
Jan 23	10.4	7.0	10.6	7.9	1.2	1.1	3.3	5.2	5.8	3.9	5.2	8.4	8.6	6.2	5.6	5.3	1.2	2.2	2.7	2.5	9.0	12.4	9.6	7.1	1.1	12.4	2.3
Jan 24	WSW	SW	WSW	WSW	WSW	S	ESE	E	E	E	ESE	E	E	ESE	ESE	ESE	ENE	SSW	SSW	SSW	SSW	SSW	SSW	SW	1.4	13.3	7.5
Jan 25	5.3	7.4	3.0	1.4	1.4	1.9	2.1	2.7	3.4	6.3	7.4	8.8	8.1	10.7	13.3	9.7	10.5	12.5	12.4	10.6	12.4	12.3	12.7	13.3	1.4	13.3	7.5
Jan 26	SW	WSW	SW	SSW	WSW	WSW	W	WNW	WNW	WNW	WNW	WNW	W	WSW	WSW	WSW	W	W	W	WSW	W	W	W	W	1.1	13.7	3.6
Jan 27	13.7	11.8	9.1	9.6	10.5	9.0	7.7	4.8	4.6	2.3	1.3	1.1	6.1	9.1	6.9	4.0	1.6	2.2	2.7	2.6	3.4	1.4	5.5	7.3	1.1	13.7	3.6
Jan 28	W	W	W	W	W	W	W	WSW	W	WSW	SSE	SW	W	WSW	WSW	WSW	S	ESE	E	E	E	E	E	E	1.4	19.3	8.3
Jan 29	6.0	8.7	8.5	9.8	3.7	5.4	1.5	1.4	11.2	13.0	18.8	19.3	19.0	18.2	18.6	17.5	12.7	11.7	10.9	13.6	14.1	11.9	12.3	12.9	1.4	19.3	8.3
Jan 30	ESE	E	E	E	ESE	ESE	E	ESE	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	0.6	12.4	6.4
Jan 31	12.2	12.4	9.6	9.6	8.3	7.5	7.9	8.9	8.3	8.3	7.7	10.1	12.3	11.7	10.1	7.2	5.6	2.6	0.9	0.6	1.5	1.9	1.4	1.5	0.6	12.4	6.4
Jan 32	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	SW	S	SSE	E	ENE	NE	NE	0.0	7.8	2.2	
Jan 33	2.5	2.5	1.3	0.7	0.7	0.3	0.0	0.0	0.0	0.0	2.2	5.5	5.9	6.9	6.3	5.3	2.8	1.7	1.4	3.4	2.5	3.8	6.1	7.8	0.0	7.8	2.2
Jan 34	ENE	ENE	ENE	ENE	NE	ENE	N	N	N	N	WNW	WNW	WNW	WNW	WNW	WNW	W	WSW	WSW	W	WSW	WSW	W	W	0.8	9.8	5.6
Jan 35	8.4	8.8	8.3	9.3	9.0	7.5	6.2	5.7	5.7	5.8	5.3	7.1	8.6	9.8	9.5	7.7	4.9	4.5	1.6	3.1	1.4	0.8	1.6	2.0	0.8	9.8	5.6
Jan 36	W	W	W	WNW	WNW	W	W	W	W	W	W	W	WNW	WNW	WNW	W	W	WSW	WSW	WSW	WSW	E	ESE	SSE	1.7	30.6	16.9
Jan 37	1.7	2.7	3.0	4.2	9.4	9.5	13.8	13.6	20.6	29.1	29.4	26.0	30.6	25.7	22.2	30.3	27.2	19.5	P	P	P	P	P	P	1.7	30.6	16.9
Jan 38	SE	SE	SE	SSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	P	P	P	P	P	1.1	18.6	11.7
Jan 39	14.8	15.9	15.6	17.3	18.6	18.4	16.3	18.1	17.9	17.1	18.4	17.9	14.9	14.7	15.4	15.4	11.5	7.8	5.0	3.6	2.2	1.6	1.6	1.1	1.1	18.6	11.7
Jan 40	W	W	W	W	W	W	W	W	W	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	W	WSW	WNW	1.1	18.6	11.7



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - January 2021

Summary of Hourly Averages

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

WIND SPEED																											
Maximum Hourly Value: 30.6 kph on January 19 at hour 12														Hours in Service: 744													
Maximum Daily Value: 16.9 kph on January 19														Hours of Data: 738													
Minimum Hourly Value: 0.0 kph on January 17 at hour 6														Hours of Missing Data: 6													
Minimum Daily Value: 0.1 kph on January 29														Hours of Calibration: 0													
Monthly Average: 1.3 kph														Operational Uptime: 99.2													
WIND DIRECTION																											
Monthly Average: 248 (WSW) degree																											
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
Jan 21	2.0	1.1	0.3	2.2	3.5	4.0	3.5	4.4	3.4	5.8	6.2	3.9	5.5	6.4	6.9	6.0	3.4	3.7	1.4	0.0	0.2	0.9	0.8	0.1	0.0	6.9	3.0
Jan 22	WNW	W	W	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	WNW	WNW	WNW	WNW	NW	NW	NNW	S	NNW	NE	NNE	NE	0.4	10.2	4.5
Jan 23	0.7	1.4	2.8	1.2	0.4	0.6	3.5	8.3	6.6	6.1	6.2	7.2	7.2	9.6	10.2	9.5	9.7	8.9	7.4	7.6	5.1	4.8	4.0	1.7	0.1	9.7	3.6
Jan 24	E	ESE	E	NE	E	WSW	W	WNW	W	WNW	NNW	NW	W	WNW	NNW	NW	N	NNW	NNW	NNW	NNW	NW	WNW	WNW	6.5	11.1	8.4
Jan 25	1.4	1.3	1.5	2.0	1.3	0.3	0.5	0.9	0.1	1.3	3.3	6.7	6.9	6.6	6.9	7.2	5.5	5.9	5.7	6.5	9.7	8.4	9.2	7.6	7.2	10.1	8.4
Jan 26	NW	NW	WNW	W	WNW	NW	W	NNW	ENE	E	ESE	SE	E	E	E	E	E	E	E	E	E	E	E	E	0.2	8.5	5.8
Jan 27	6.8	7.8	8.1	7.7	7.0	7.5	6.5	7.5	8.7	7.8	8.6	8.0	8.2	8.4	7.5	8.5	9.9	8.5	8.8	10.4	11.1	10.5	10.1	9.4	0.3	6.6	4.4
Jan 28	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	0.0	4.3	0.5
Jan 29	9.7	8.4	7.3	8.4	7.4	7.7	7.9	8.1	9.1	8.0	7.9	9.8	7.2	9.5	10.1	9.0	8.0	7.8	7.6	8.2	8.1	8.2	9.8	9.3	0.0	1.2	0.1
Jan 30	E	ENE	E	E	E	E	E	E	E	E	E	E	E	E	ENE	E	E	E	E	E	E	E	E	E	0.0	3.5	0.5
Jan 31	8.4	8.1	8.0	6.7	5.9	7.4	7.7	7.9	8.4	8.0	8.0	7.7	8.5	7.0	7.5	6.1	4.8	3.0	5.4	4.1	3.2	1.8	0.4	0.2	0.0	6.9	1.9
Jan 32	E	ESE	E	ESE	E	E	E	E	E	E	E	E	ENE	E	ENE	ENE	ENE	ENE	ENE	NE	ENE	NE	NNE	NW	0.0	3.5	0.5
Jan 33	0.3	1.0	2.0	2.9	4.6	4.2	5.1	4.6	5.1	4.7	4.3	6.2	5.0	5.6	5.5	5.5	6.6	6.2	5.4	4.5	4.8	5.0	5.1	0.3	6.6	4.4	
Jan 34	NW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NNW	NNW	NW	NNW	N	N	NNW	NW	NW	NW	NW	NW	NW	NW	NW	0.0	4.3	0.5
Jan 35	4.3	4.3	2.6	2.2	1.9	0.8	1.6	1.8	1.1	0.6	0.3	0.6	1.3	0.5	0.2	2.3	1.8	2.7	0.3	0.1	0.2	0.0	0.0	0.0	0.0	4.3	0.5
Jan 36	NW	WNW	WNW	WNW	WNW	W	WNW	WNW	WNW	NNW	NW	SSE	ESE	ESE	SSW	ESE	ESE	ESE	SE	ESE	SSE	W	W	N	0.0	1.2	0.1
Jan 37	0.2	0.2	0.0	0.2	0.1	0.1	0.1	0.1	0.4	0.0	0.7	1.2	1.2	0.5	0.0	0.1	0.0	0.2	0.2	0.0	0.3	0.8	0.1	0.2	0.0	1.2	0.1
Jan 38	W	ENE	W	NNW	SE	NE	NNE	NW	W	SW	SSE	SW	WSW	SSW	S	NW	N	NNE	NNW	WNW	N	NW	W	W	0.0	3.5	0.5
Jan 39	0.3	0.0	0.1	0.0	0.1	0.0	0.4	0.0	0.1	0.3	0.1	0.9	2.8	3.0	3.5	3.3	2.4	1.4	0.4	1.9	0.5	0.3	0.6	0.5	0.0	3.5	0.5
Jan 40	NNW	NNW	NNE	N	NNE	N	W	NE	N	ENE	SW	SW	SW	S	SSE	S	SSE	ENE	W	ENE	ENE	WSW	E	NW	0.1	6.9	1.9
Jan 41	0.3	0.5	1.1	0.5	0.3	0.4	0.3	0.1	0.3	0.6	1.3	0.2	1.2	3.5	4.0	4.7	2.1	3.7	5.2	4.1	4.7	6.9	6.3	3.0	0.1	6.9	1.9
Jan 42	NE	WSW	ENE	WSW	WNW	ENE	E	NNE	NE	NE	WSW	SW	SSE	SE	SSE	ESE	SE	E	ESE	ESE	E	E	E	ESE	0.1	6.9	1.9
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance										
K	Collection Error							N	No Data (Machine Not in Service)							Y	Routine Maintenance										
X	Invalid Data (Equipment Malfunction/Recovery)							NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)							P	Power Failure										
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.																											

VOC CANISTER SAMPLING RESULTS

PEACE RIVER AREA MONITORING PROGRAM

986c Site - January 2021

Volatile Organic Compounds (VOCs) Results

Sample Date/Time Canister Sample Canister ID			2021-01-08 @11:30 Non-methane Hydrocarbon 28886					
Method NA-025			Method NA-024			Method AC-058		
Maximum Reading (ppmv) 2.0 Methane			Maximum Reading (ppmv) 1.5 Hydrogen sulphide			Maximum Reading (ppmv) 397 Ethanol		
Parameter	Result (ppmv)	RDL (ppmv)	Parameter	Result (ppbv)	RDL (ppbv)	Parameter	Result (ppbv)	RDL (ppbv)
1-Butene	0	0.16	2,5-Dimethylthiophene	0	0.5	1,1,1-Trichloroethane	0	0.03
Acetylene	0	0.12	2-Ethylthiophene	0	0.3	1,1,2,2-Tetrachloroethane	0	0.03
cis-2-Butene	0	0.06	2-Methylthiophene	0	0.3	1,1,2-Trichloroethane	0	0.03
Ethane	0	0.2	3-Methylthiophene	0	0.5	1,1-Dichloroethane	0	0.03
Ethylacetylene	0	0.09	Butyl mercaptan	0	0.5	1,1-Dichloroethylene	0	0.06
Ethylene	0	0.11	Carbon disulphide	0	0.3	1,2,3-Trimethylbenzene	0	0.08
Isobutane	0	0.2	Carbonyl sulphide	1.2	0.5	1,2,4-Trichlorobenzene	0	1.2
Isobutylene	0	0.2	Dimethyl disulphide	0	0.3	1,2,4-Trimethylbenzene	0	0.08
Methane	2.0	0.2	Dimethyl sulphide	0	0.3	1,2-Dibromoethane	0	0.03
n-Butane	0	0.3	Ethyl mercaptan	0	0.5	1,2-Dichlorobenzene	0	0.05
n-Propane	0	0.11	Ethyl sulphide	0	0.5	1,2-Dichloroethane	0	0.02
Propylene	0	0.2	Hydrogen sulphide	1.5	0.5	1,2-Dichloropropane	0	0.02
Propyne	0	0.2	Isobutyl mercaptan	0	0.5	1,3,5-Trimethylbenzene	0	0.03
trans-2-Butene	0	0.14	Isopropyl mercaptan	0	0.5	1,3-Butadiene	0	0.03
			Methyl mercaptan	0	0.3	1,3-Dichlorobenzene	0	0.5
			Pentyl mercaptan	0	0.6	1,4-Dichlorobenzene	0	0.6
			Propyl mercaptan	0	0.6	1,4-Dioxane	0	0.6
			tert-Butyl mercaptan	0	0.5	1-Butene/Isobutylene	1.74	0.03
			Thiophene	0	0.3	1-Hexene/2-Methyl-1-pentene	0.26	0.03
						1-Pentene	0.75	0.02
						2,2,4-Trimethylpentane	0	0.02
						2,2-Dimethylbutane	0.31	0.02
						2,3,4-Trimethylpentane	0	0.02
						2,3-Dimethylbutane	0	0.03
						2,3-Dimethylpentane	0	0.03
						2,4-Dimethylpentane	0	0.02
						2-Methylheptane	0	0.02
						2-Methylhexane	0	0.02
						2-Methylpentane	0.82	0.02
						3-Methylheptane	0	0.03
						3-Methylhexane	0.24	0.03
						3-Methylpentane	0.6	0.02
						Acetone	5	3.7
						Acrolein	0.9	0.5
						Benzene	0.42	0.02
						Benzyl chloride	0	0.6
						Bromodichloromethane	0	0.03
						Bromoform	0	0.03
						Bromomethane	0	0.02
						Carbon disulfide	0	0.02
						Carbon tetrachloride	0	0.02
						Chlorobenzene	0	0.03
						Chloroethane	0.3	0.03
						Chloroform	0	0.03
						Chloromethane	1.52	0.03
						cis-1,2-Dichloroethene	0	0.02
						cis-1,3-Dichloropropene	0	0.06
						cis-2-Butene	0	0.03
						cis-2-Pentene	0	0.03
						Cyclohexane	0	0.03
						Cyclopentane	0	0.02
						Dibromochloromethane	0	0.02
						Ethanol	397	2.8
						Ethyl acetate	0	0.6
						Ethylbenzene	0	0.02
						Freon-11	0.47	0.03
						Freon-113	0.21	0.02
						Freon-114	0.07	0.03

PEACE RIVER AREA MONITORING PROGRAM

986c Site - January 2021

Volatile Organic Compounds (VOCs) Results

Sample Date/Time Canister Sample Canister ID		2021-01-08 @11:30 Non-methane Hydrocarbon 28886			
Method NA-025		Method NA-024		Method AC-058	
Maximum Reading (ppmv) 2.0 Methane		Maximum Reading (ppmv) 1.5 Hydrogen sulphide		Maximum Reading (ppmv) 397 Ethanol	
Parameter	Result (ppmv) RDL (ppmv)	Parameter	Result (ppbv) RDL (ppbv)	Parameter	Result (ppbv) RDL (ppbv)
				Freon-12	0.92 0.03
				Hexachloro-1,3-butadiene	0 0.78
				Isobutane	3.04 0.03
				Isopentane	7.68 0.05
				Isoprene	0 0.02
				Isopropyl alcohol	2.3 3.7
				Isopropylbenzene	0 0.02
				m,p-Xylene	0 0.05
				m-Diethylbenzene	0 0.06
				m-Ethyltoluene	0 0.12
				Methyl butyl ketone	0 0.78
				Methyl ethyl ketone	0 0.5
				Methyl isobutyl ketone	0 0.6
				Methyl methacrylate	0 0.11
				Methyl tert butyl ether	0 0.05
				Methylcyclohexane	0.23 0.02
				Methylcyclopentane	0 0.03
				Methylene chloride	0 0.5
				n-Butane	2.67 0.05
				n-Decane	0 0.09
				n-Dodecane	0 0.6
				n-Heptane	0.36 0.02
				n-Hexane	1.36 0.02
				n-Nonane	0 0.02
				n-Octane	0.22 0.03
				n-Pentane	7.3 0.2
				n-Propylbenzene	0 0.08
				n-Undecane	0 0.8
				Naphthalene	0 0.8
				o-Ethyltoluene	0 0.02
				o-Xylene	0 0.02
				p-Diethylbenzene	0 0.06
				p-Ethyltoluene	0 0.11
				Styrene	0 0.06
				Tetrachloroethylene	0 0.06
				Tetrahydrofuran	0 0.6
				Toluene	0 0.02
				trans-1,2-Dichloroethylene	0.56 0.09
				trans-1,3-Dichloropropylene	0 0.06
				trans-2-Butene	0 0.02
				trans-2-Pentene	0 0.03
				Trichloroethylene	0 0.06
				Vinyl acetate	0 0.6
				Vinyl chloride	0 0.03

PEACE RIVER AREA MONITORING PROGRAM

986c Site - January 2021

Volatile Organic Compounds (VOCs) Results

Sample Date/Time Canister Sample Canister ID			2021-01-08 @11:30am Blank 28968		
Method NA-025			Method NA-024		
Maximum Reading (ppmv) -			Maximum Reading (ppmv) -		
Parameter	Result (ppmv)	RDL (ppmv)	Parameter	Result (ppbv)	RDL (ppbv)
1-Butene	0.0	0.1	2,5-Dimethylthiophene	0	0.3
Acetylene	0	0.08	2-Ethylthiophene	0	0.2
cis-2-Butene	0	0.04	2-Methylthiophene	0	0.2
Ethane	0	0.1	3-Methylthiophene	0	0.3
Ethylacetylene	0	0.06	Butyl mercaptan	0	0.3
Ethylene	0	0.07	Carbon disulphide	0	0.2
Isobutane	0	0.1	Carbonyl sulphide	0	0.3
Isobutylene	0	0.1	Dimethyl disulphide	0	0.2
Methane	0	0.1	Dimethyl sulphide	0	0.2
n-Butane	0	0.2	Ethyl mercaptan	0	0.3
n-Propane	0	0.07	Ethyl sulphide	0	0.3
Propylene	0	0.1	Hydrogen sulphide	0	0.3
Propyne	0	0.1	Isobutyl mercaptan	0	0.3
trans-2-Butene	0	0.09	Isopropyl mercaptan	0	0.3
			Methyl mercaptan	0	0.2
			Pentyl mercaptan	0	0.4
			Propyl mercaptan	0	0.4
			tert-Butyl mercaptan	0	0.3
			Thiophene	0	0.2
			1,1,1-Trichloroethane	0	0.02
			1,1,2,2-Tetrachloroethane	0	0.02
			1,1,2-Trichloroethane	0	0.02
			1,1-Dichloroethane	0	0.02
			1,1-Dichloroethylene	0	0.04
			1,2,3-Trimethylbenzene	0	0.05
			1,2,4-Trichlorobenzene	0	0.8
			1,2,4-Trimethylbenzene	0	0.05
			1,2-Dibromoethane	0	0.02
			1,2-Dichlorobenzene	0	0.03
			1,2-Dichloroethane	0	0.01
			1,2-Dichloropropane	0	0.01
			1,3,5-Trimethylbenzene	0	0.02
			1,3-Butadiene	0	0.02
			1,3-Dichlorobenzene	0	0.3
			1,4-Dichlorobenzene	0	0.4
			1,4-Dioxane	0	0.4
			1-Butene/Isobutylene	0.73	0.02
			1-Hexene/2-Methyl-1-pentene	0	0.02
			1-Pentene	0	0.01
			2,2,4-Trimethylpentane	0	0.01
			2,2-Dimethylbutane	0	0.01
			2,3,4-Trimethylpentane	0	0.01
			2,3-Dimethylbutane	0	0.02
			2,3-Dimethylpentane	0	0.02
			2,4-Dimethylpentane	0	0.01
			2-Methylheptane	0	0.01
			2-Methylhexane	0	0.01
			2-Methylpentane	0	0.01
			3-Methylheptane	0	0.02
			3-Methylhexane	0	0.02
			3-Methylpentane	0	0.01
			Acetone	0.5	0.4
			Acrolein	0	0.3
			Benzene	0	0.01
			Benzyl chloride	0	0.4
			Bromodichloromethane	0	0.02
			Bromoform	0	0.02
			Bromomethane	0	0.01
			Carbon disulfide	0	0.01
			Carbon tetrachloride	0	0.01
			Chlorobenzene	0	0.02
			Chloroethane	0	0.02
			Chloroform	0	0.02
			Chloromethane	0	0.02
			cis-1,2-Dichloroethene	0	0.01
			cis-1,3-Dichloropropene	0	0.04
			cis-2-Butene	0	0.02
			cis-2-Pentene	0	0.02
			Cyclohexane	0	0.02
			Cyclopentane	0	0.01
			Dibromochloromethane	0	0.01
			Ethanol	1.2	0.3
			Ethyl acetate	0	0.4
			Ethylbenzene	0	0.01
			Freon-11	0	0.02
			Freon-113	0	0.01
			Freon-114	0	0.02
			Freon-12	0.07	0.02
			Hexachloro-1,3-butadiene	0	0.50
			Isobutane	0.61	0.02
			Isopentane	0.18	0.03



PEACE RIVER AREA MONITORING PROGRAM

986c Site - January 2021

Volatile Organic Compounds (VOCs) Results

Sample Date/Time Canister Sample Canister ID		2021-01-08 @11:30am Blank 28968																					
Method			NA-025			Method			NA-024			Method			AC-058								
Maximum Reading (ppmv)			-			Maximum Reading (ppmv)			-			Maximum Reading (ppmv)			1.2 Ethanol								
Parameter			Result (ppmv) RDL (ppmv)			Parameter			Result (ppbv) RDL (ppbv)			Parameter			Result (ppbv) RDL (ppbv)								
						Isoprene						0						0.01					
						Isopropyl alcohol						0.5						0.4					
						Isopropylbenzene						0						0.01					
						m,p-Xylene						0						0.03					
						m-Diethylbenzene						0						0.04					
						m-Ethyltoluene						0						0.08					
						Methyl butyl ketone						0						0.50					
						Methyl ethyl ketone						0						0.3					
						Methyl isobutyl ketone						0						0.4					
						Methyl methacrylate						0						0.07					
						Methyl tert butyl ether						0						0.03					
						Methylcyclohexane						0						0.01					
						Methylcyclopentane						0						0.02					
						Methylene chloride						0						0.3					
						n-Butane						0.26						0.03					
						n-Decane						0						0.06					
						n-Dodecane						0						0.4					
						n-Heptane						0						0.01					
						n-Hexane						0						0.01					
						n-Nonane						0						0.01					
						n-Octane						0						0.02					
						n-Pentane						0						0.1					
						n-Propylbenzene						0						0.05					
						n-Undecane						0						0.5					
						Naphthalene						0						0.5					
						o-Ethyltoluene						0						0.01					
						o-Xylene						0						0.01					
						p-Diethylbenzene						0						0.04					
						p-Ethyltoluene						0						0.07					
						Styrene						0						0.04					
						Tetrachloroethylene						0						0.04					
						Tetrahydrofuran						0						0.4					
						Toluene						0						0.01					
trans-1,2-Dichloroethylene						0						0.01											
trans-1,3-Dichloropropylene						0						0.04											
trans-2-Butene						0						0.01											
trans-2-Pentene						0						0.02											
Trichloroethylene						0						0.04											
Vinyl acetate						0						0.4											
Vinyl chloride						0						0.02											

END OF REPORT

This page, 228 of 228, ends the January 2021 Monthly Ambient Air Quality Monitoring Report.



Peace River Area Monitoring Program

JANUARY 2021

Ambient Air Monitoring Calibration Report

- 842b STATION-

CAL-PRAMP-202101-01561

Operation and Maintenance:

Bureau Veritas Canada

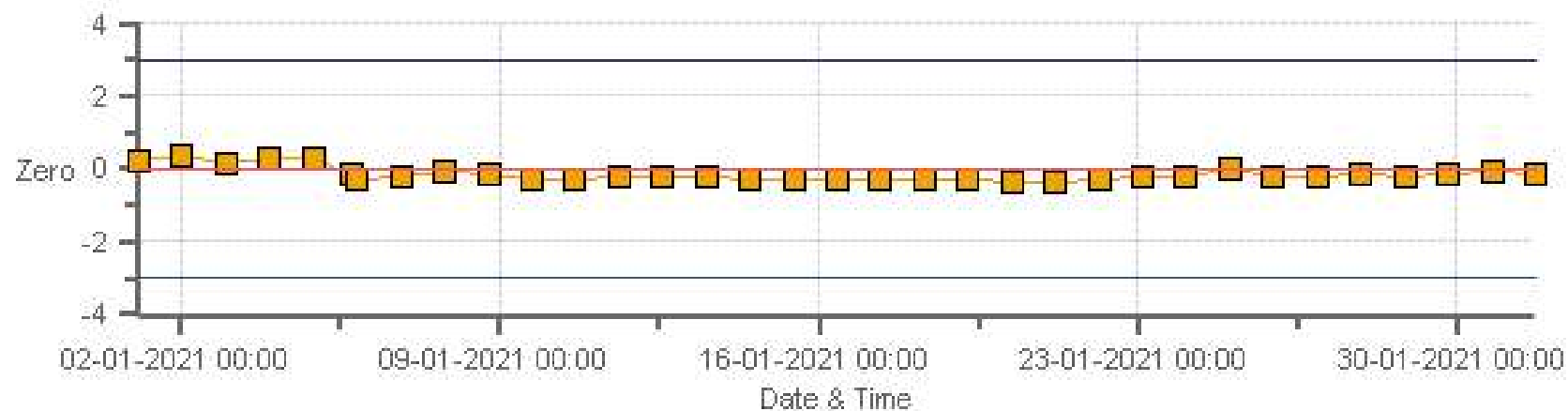
Data Validation and Report:

Bureau Veritas Canada

February 18, 2021

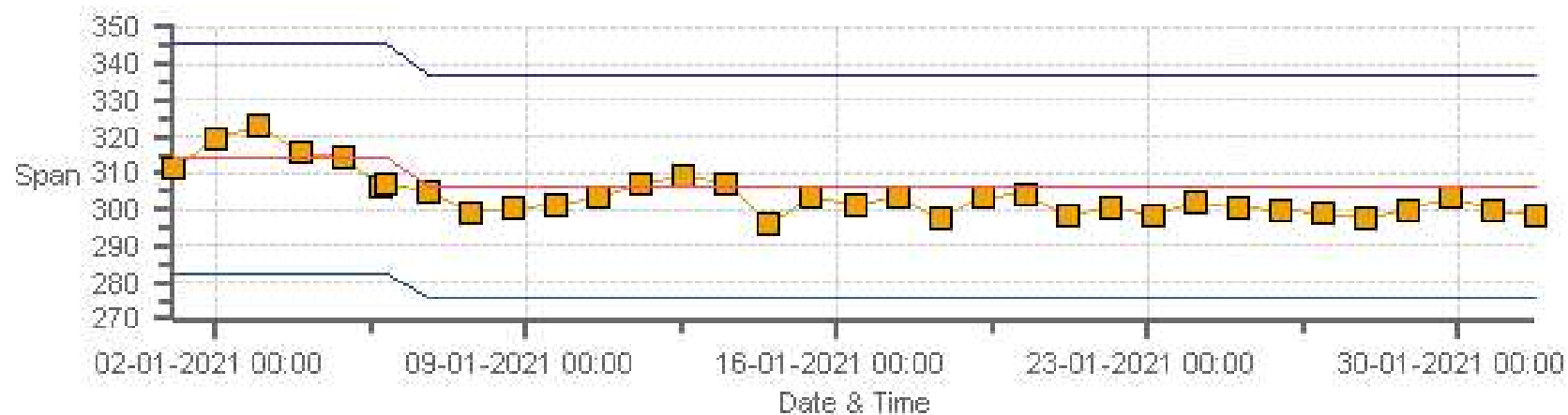
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

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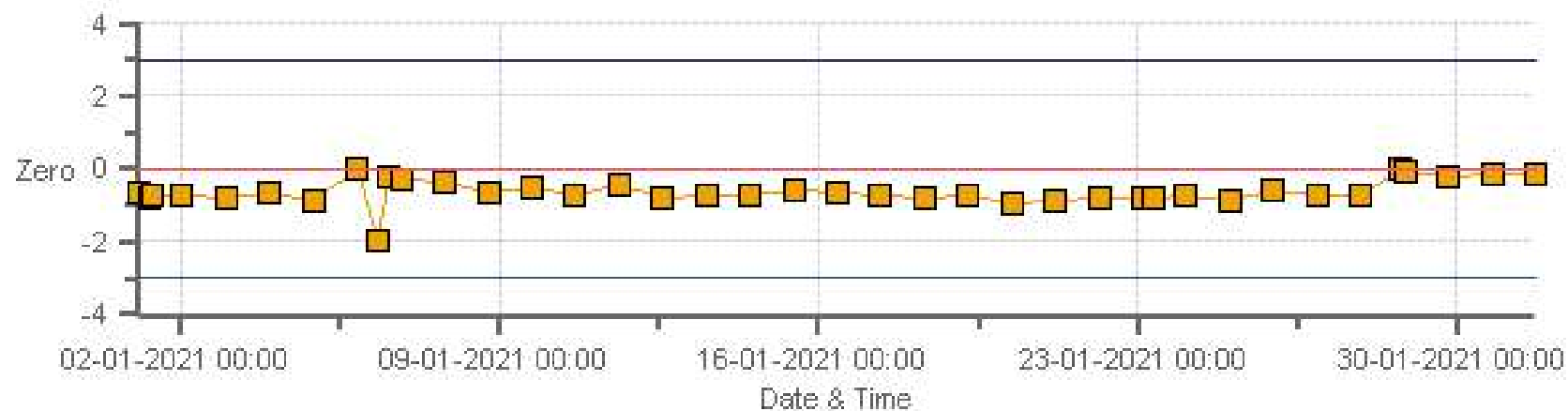
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SO₂[ppb] Calibration: PRAMP 842b Monthly: 01-2021 Type: SpanAndZero - Span



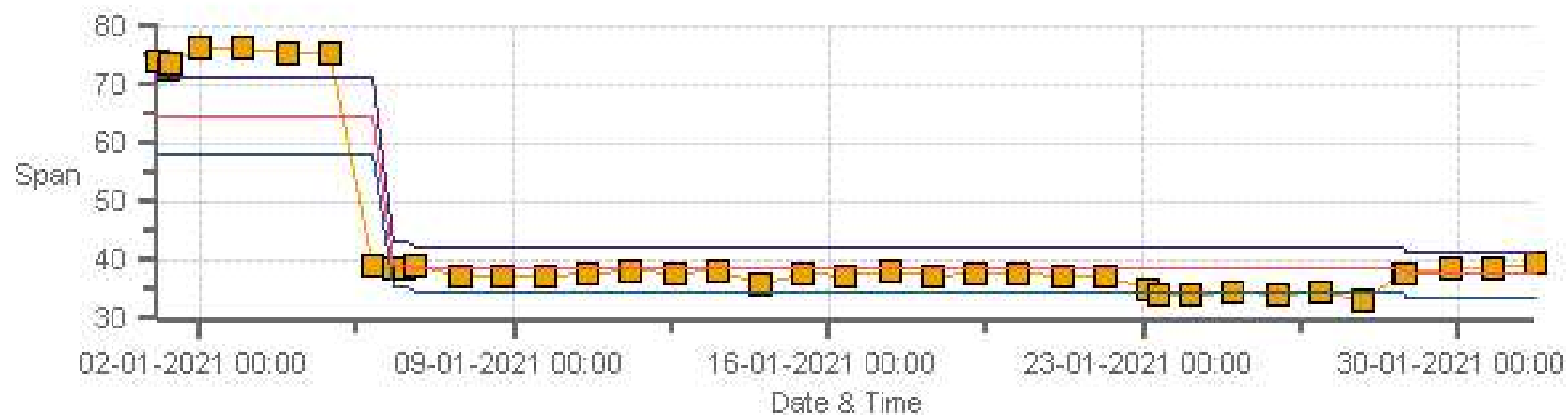
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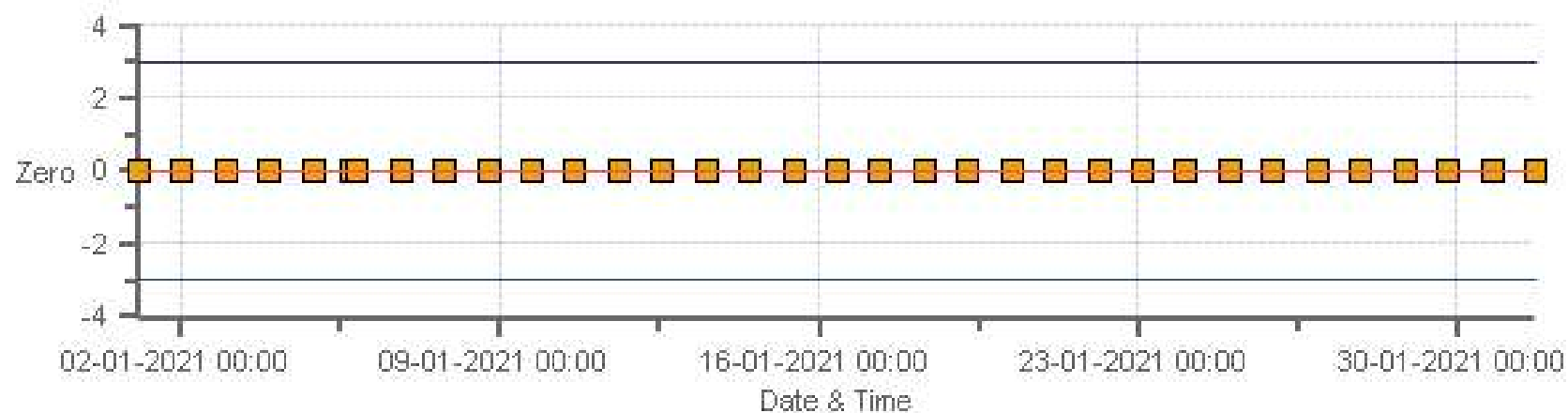
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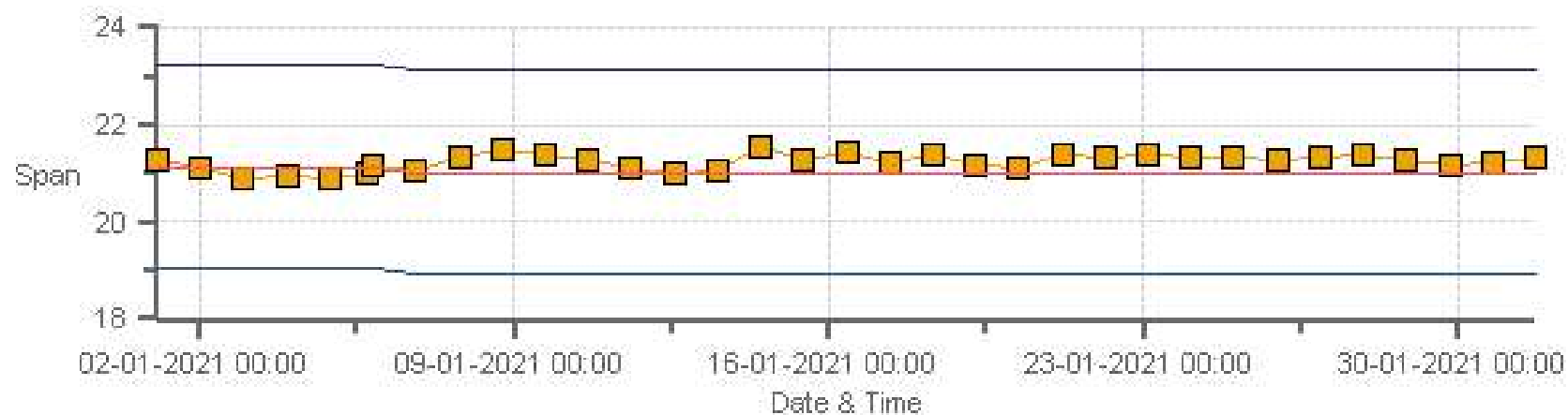
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THC55[ppm] Calibration: PRAMP 842b Monthly: 01-2021 Type: SpanAndZero - Zero



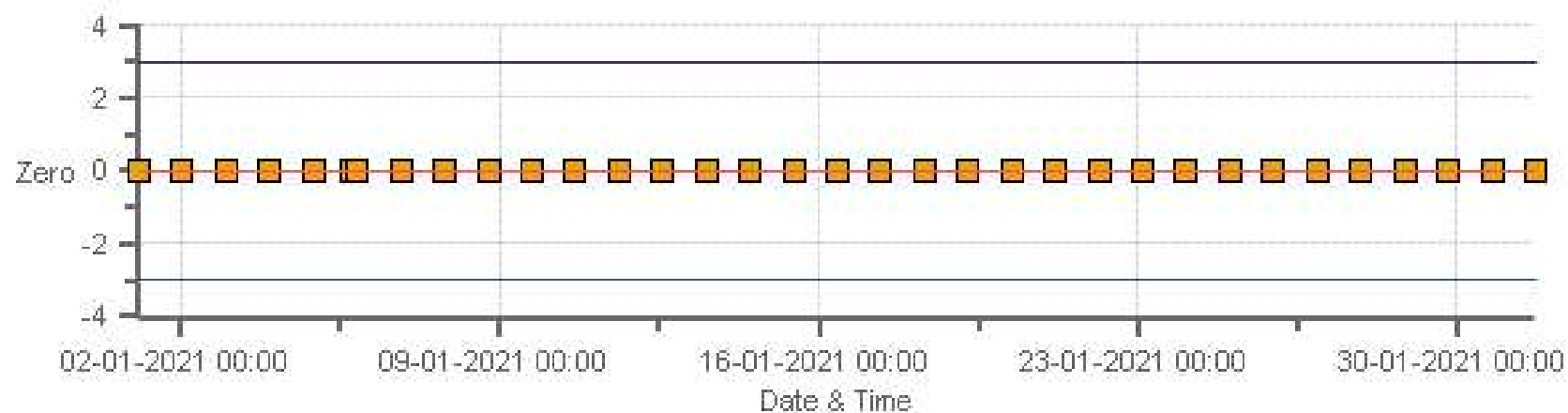
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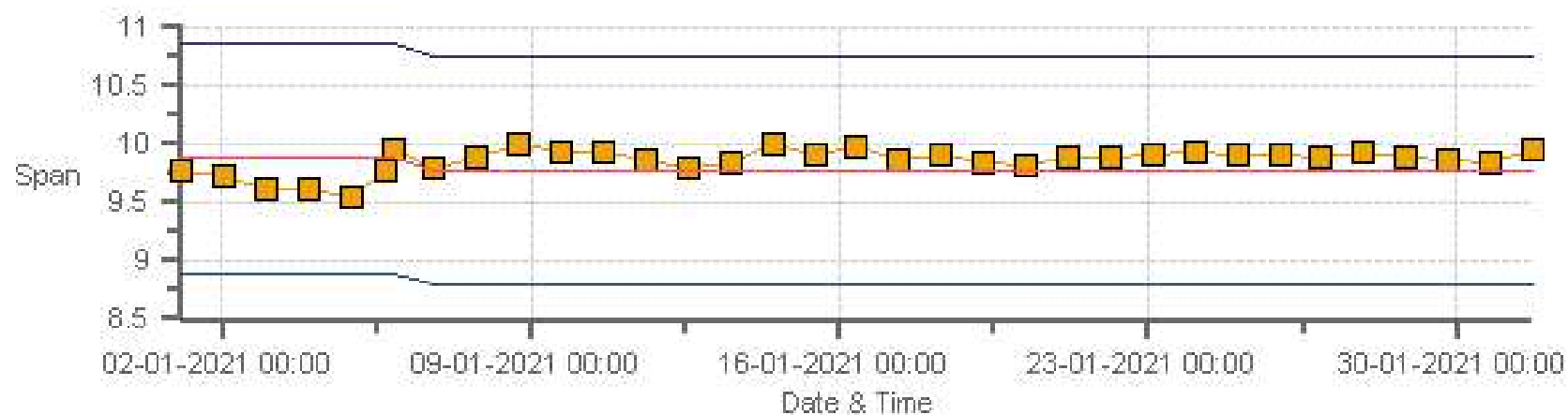
Span Span Ref Span Low Span High

CH₄[ppm] Calibration: PRAMP 842b Monthly: 01-2021 Type: SpanAndZero - Zero



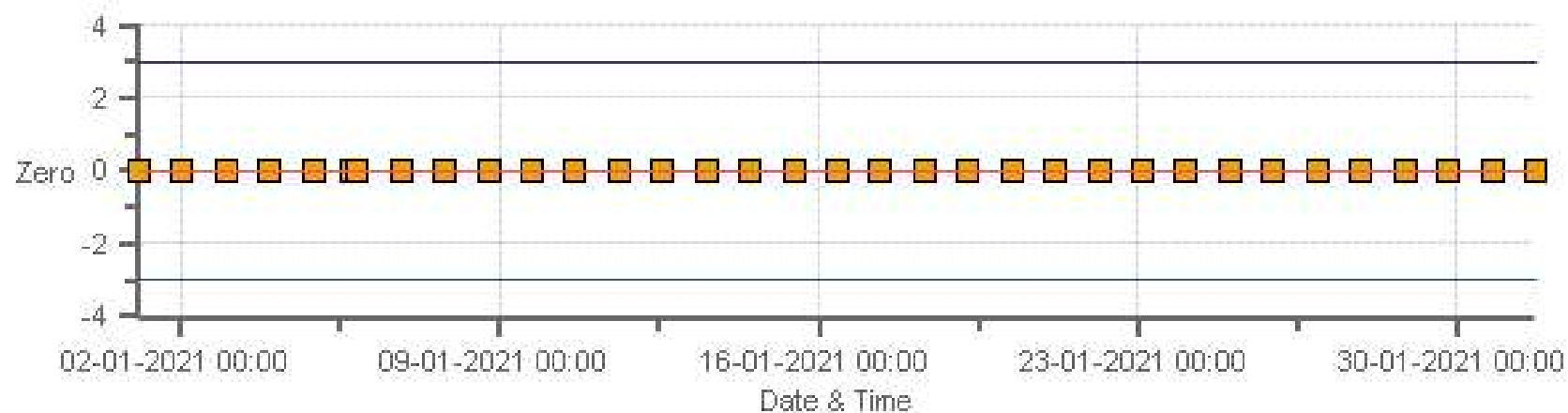
Zero Zero Ref Zero Low Zero High

CH₄[ppm] Calibration: PRAMP 842b Monthly: 01-2021 Type: SpanAndZero - Span



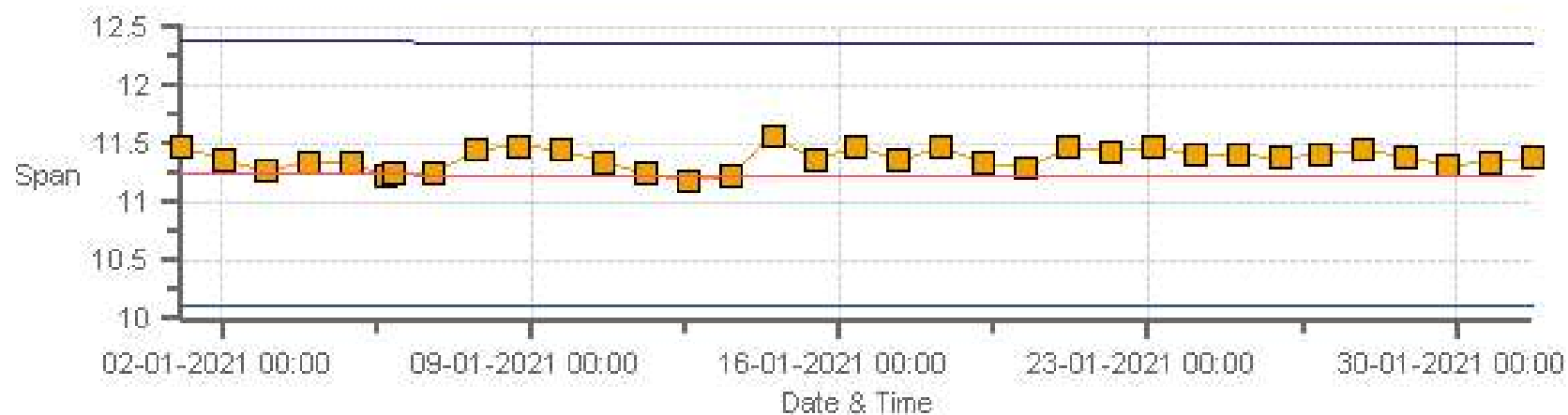
Span SpanRef Span Low Span High

NMHC[ppm] Calibration: PRAMP 842b Monthly: 01-2021 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: PRAMP 842b Monthly: 01-2021 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	05-Jan-2021	PREVIOUS CALIBRATION DATE:	17-Dec-2020
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	20.4
LOCATION:	842b	BAROMETRIC (mBar):	933
PURPOSE:	Routine	START TIME (MST):	09:48
PERFORMED BY:	Limin Li	END TIME (MST):	13:26

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	500 ppb
SERIAL #	1200736629	FLOW (mL/min)	422
INITIAL		FINAL	
BKG/OFFSET	8	BKG/OFFSET	8.2
COEF/SLOPE	1.088	COEF/SLOPE	1.067
Expected (reference) Value	314	Expected (reference) Value	306.4

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	API
MODEL:	2010	MODEL:	701
ID:	17200415	ID:	1105
MFC CALIBRATION DATE:	01-Oct-2020	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY 0001011	HIGH ID	n/a
CONC (ppm):	50.10	EXPIRY DATE	n/a
CYLINDER (psi):	600	LOW ID	n/a
EXPIRY DATE	01-Jul-2027	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	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
6000	45.50	6000	0.00	0.1	0	0.979	1.000
5955	45.50	6000	379.93	388	380	0.979	1.000
5979	21.50	6000	179.53	n/a	181.3	n/a	0.990
5989	10.80	6000	90.18	n/a	89.4	n/a	1.009

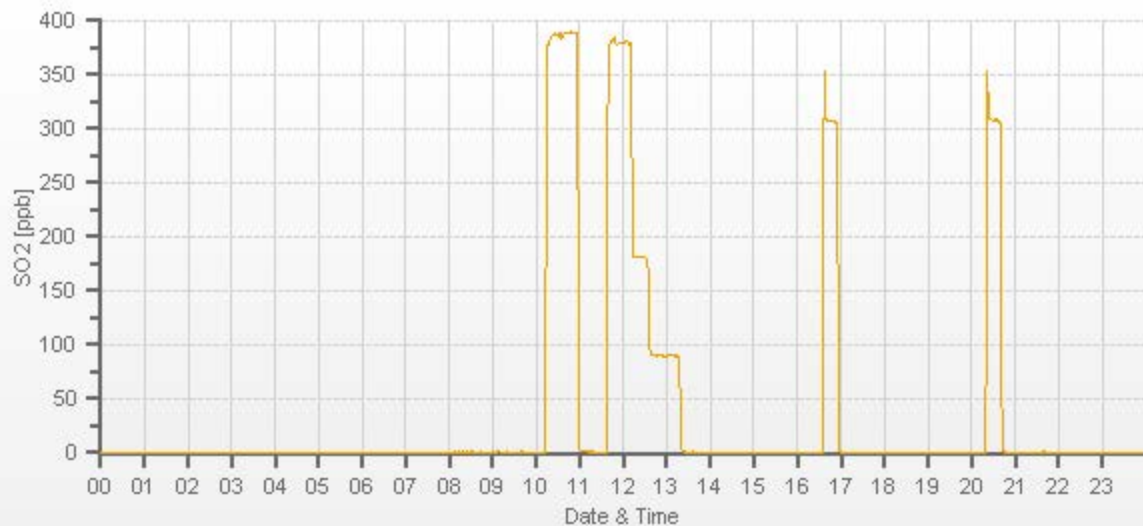
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	0.0%

COMMENTS:

No issues

SO2[ppb] Station: PRAMP 842b Daily: 05-01-2021 Type: AVG 1 Min. [1 Min.]



CAL-PRAMP-202101-016561

TRS Analyzer Calibration by Dilution



DATE:	05-Jan-2021	PREVIOUS CALIBRATION DATE:	22-Dec-2020
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	20.4
LOCATION:	842b	BAROMETRIC (mBar):	933
PURPOSE:	Removal/Shut-down	START TIME (MST):	09:48
PERFORMED BY:	Limin Li	END TIME (MST):	12:42

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	1200736630	FLOW (mL/min)	431
INITIAL		FINAL	
BKG/OFFSET	16.3	BKG/OFFSET	n/a
COEF/SLOPE	1.134	COEF/SLOPE	n/a
Expected (reference) Value	64.7	Expected (reference) Value	n/a

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	6100	MODEL:	701
ID:	5212	ID:	1105
MFC CALIBRATION DATE:	28-Sep-2020	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0001074	HIGH ID	n/a
CONC (ppm):	10.00	EXPIRY DATE	n/a
CYLINDER (psi):	1600	LOW ID	n/a
EXPIRY DATE	16-Jul-2022	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:	10:12	SO2 Conc (ppb)	380
END TIME:	10:32	Analyzer Response (ppb)	0.0

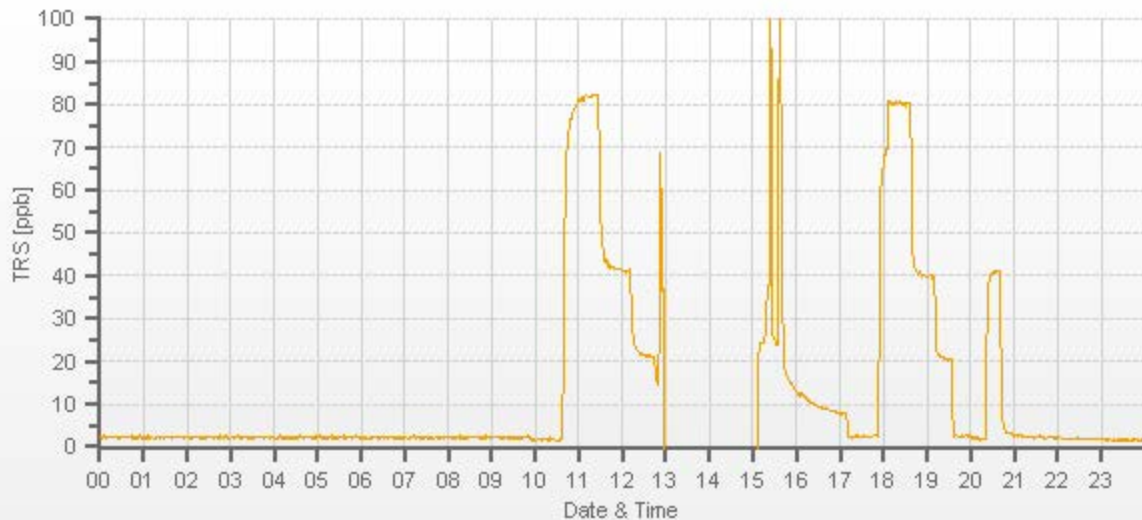
CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
7500	58.50	7500	0.00	-0.6	n/a	0.970	n/a
7442	58.50	7500	78.00	79.8	n/a	0.970	n/a
7472	28.50	7500	38.00	38.8	n/a	0.964	n/a
7486	14.25	7500	19.00	18.9	n/a	0.974	n/a

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.031	-0.6%

COMMENTS:



TRS Analyzer Calibration by Dilution



DATE:	06-Jan-2021	PREVIOUS CALIBRATION DATE:	n/a
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	n/a
CLIENT:	PRAMP	TEMPERATURE (°C):	21.9
LOCATION:	842b	BAROMETRIC (mBar):	925
PURPOSE:	Install/Post-Repair	START TIME (MST):	09:18
PERFORMED BY:	Limin Li	END TIME (MST):	13:51

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	1200736630	FLOW (mL/min)	413
INITIAL		FINAL	
BKG/OFFSET	16.4	BKG/OFFSET	13.6
COEF/SLOPE	0.991	COEF/SLOPE	0.95
Expected (reference) Value	39.2	Expected (reference) Value	38.59

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	6100	MODEL:	701
ID:	5212	ID:	1105
MFC CALIBRATION DATE:	28-Sep-2020	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0001074	HIGH ID	n/a
CONC (ppm):	10.00	EXPIRY DATE	n/a
CYLINDER (psi):	1600	LOW ID	n/a
EXPIRY DATE	16-Jul-2022	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:	10:12	SO2 Conc (ppb)	380
END TIME:	10:32	Analyzer Response (ppb)	0.0

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
7500	58.50	7500	0.00	n/a	0	n/a	0.997
7442	58.50	7500	78.00	n/a	78.22	n/a	0.997
7472	28.50	7500	38.00	n/a	37.94	n/a	1.002
7486	14.25	7500	19.00	n/a	18.64	n/a	1.019

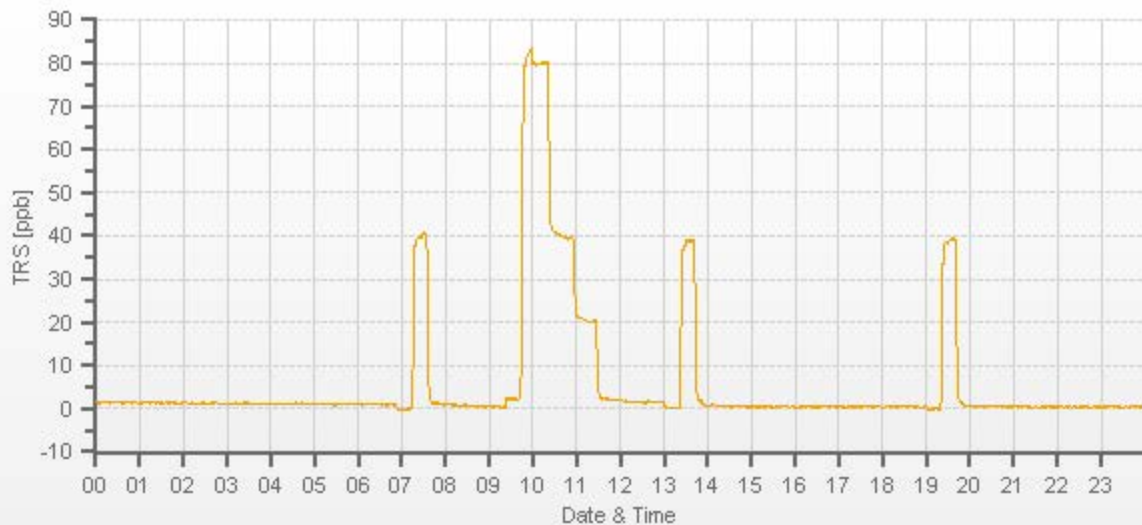
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.004	-0.2%

COMMENTS:

Analyzer drifted after maintenance. Required longer time to stabilize. Calibration repeated the following day.

TRS[ppb] Station: PRAMP 842b Daily: 06-01-2021 Type: AVG 1 Min. [1 Min.]



CAL-PRAMP-202101-016561

TRS Analyzer Calibration by Dilution



DATE:	28-Jan-2021	PREVIOUS CALIBRATION DATE:	n/a
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	n/a
CLIENT:	PRAMP	TEMPERATURE (°C):	22.7
LOCATION:	842b	BAROMETRIC (mBar):	944
PURPOSE	Install/Post-Repair	START TIME (MST):	16:00
PERFORMED BY:	Limin Li	END TIME (MST):	19:00

ANALYZER:

MAKE/MODEL	Thermo 43I-TLE	RANGE	100 ppb
SERIAL #	1162460023	FLOW (mL/min)	393
INITIAL		FINAL	
BKG/OFFSET	n/a	BKG/OFFSET	3.42
COEF/SLOPE	n/a	COEF/SLOPE	1.031
Expected (reference) Value	n/a	Expected (reference) Value	37.53

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	6100	MODEL:	701
ID:	5212	ID:	1105
MFC CALIBRATION DATE:	28-Sep-2020	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0001074	HIGH ID	n/a
CONC (ppm):	10.00	EXPIRY DATE	n/a
CYLINDER (psi):	1600	LOW ID	n/a
EXPIRY DATE	16-Jul-2022	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:	16:27	SO2 Conc (ppb)	380
END TIME:	16:49	Analyzer Response (ppb)	0.0

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
7500	58.50	7500	0.00	n/a	0	n/a	1.000
7442	58.50	7500	78.00	n/a	78	n/a	1.000
7472	28.50	7500	38.00	n/a	38	n/a	1.000
7486	14.25	7500	19.00	n/a	18.9	n/a	1.005

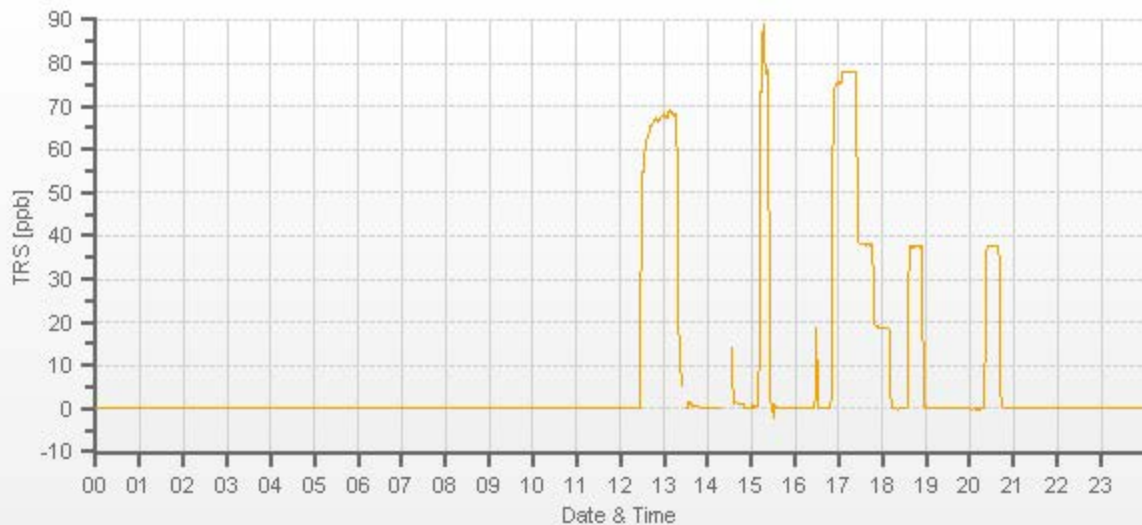
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	0.0%

COMMENTS:

n/a

TRS[ppb] Station: PRAMP 842b Daily: 28-01-2021 Type: AVG 1 Min. [1 Min.]



CAL-PRAMP-202101-016561

Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	05-Jan-2021	PREVIOUS CALIBRATION DATE:	22-Dec-2020	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	21.8		Thermo 55i	1501663728	1135
LOCATION:	842b	BAROMETRIC (mBar):	933	PARAMETER:	CH4	NMHC	THC
PURPOSE:	Routine	START TIME (MST):	13:26	RANGE (ppm):	20	20	40
PERFORMED BY:	Limin Li	END TIME (MST):	17:40	PREVIOUS CF:	1.001	1.001	1.001

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	API	CYLINDER ID:	LL70331	HIGH ID:	n/a
MODEL:	2010	MODEL:	701	CH ₄ /C ₃ H ₈ (ppm):	909.0 308.0	HIGH EXPIRY:	n/a
ID:	17200415	ID:	1105	CYLINDER (psi):	1700	LOW ID:	n/a
MFC CALIBRATION DATE:	01-Oct-2020	OXIDIZER ID:	111	EXPIRY DATE	21-Jan-2028	LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH ₄ /NMHC)	HIGH	MID	LOW	CH ₄ EQUIVILANCE	
TARGET	14	7	3.5	C ₃ H ₈ as CH ₄	847.0
RANGE	12 - 16	6 - 8	2 - 4	THC as CH ₄	1756.0

EXPECTED (REFERENCE) VALUE:

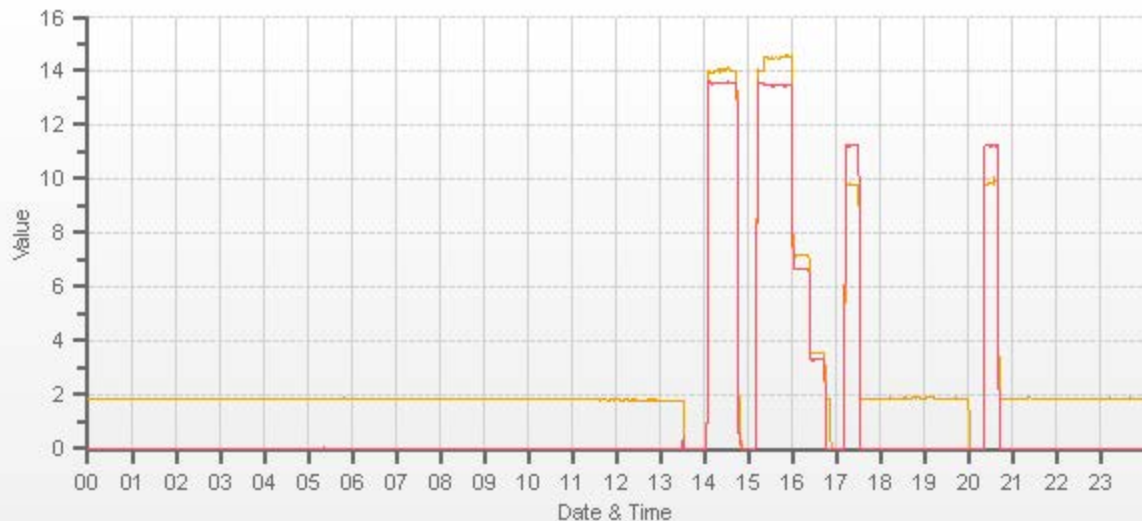
INITIAL	CH ₄	NMHC	THC	FINAL	CH ₄	NMHC	THC
	9.88	11.25	21.13		9.78	11.23	21.01

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC
3500	55.80	3500	0.00	0.00	0.00	0.02	0.00	0.02	0.02	0.00	0.02	1.031	0.996	1.014	0.997	1.002	0.999
3444	55.80	3500	14.49	13.50	28.00	14.06	13.56	27.62	14.54	13.48	28.02	1.031	0.996	1.014	0.997	1.002	0.999
3472	27.90	3500	7.25	6.75	14.00	n/a	n/a	n/a	7.20	6.69	13.89	n/a	n/a	n/a	1.006	1.009	1.008
3486	13.95	3500	3.62	3.38	7.00	n/a	n/a	n/a	3.58	3.31	6.89	n/a	n/a	n/a	1.012	1.020	1.016

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT	Comments:			
CH ₄	1.000	1.003	-0.1%	change sample filter.			
NMHC	1.000	0.999	-0.2%				
THC	1.000	1.001	-0.1%				
				Use Zero Chrom?		No	



CAL-PRAMP-202101-016561

Page 18 of 20
CH4 [ppm] NMHC [ppm]

Meteorological System Checklist



Date:	January 5, 2021		
Technician:	Limin Li		
Station:	PRAMP 842b		
Unit:	Make:	Model:	Serial #:
Precipitation Sampler:	RM Young	52202	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:	December 16, 2020		
Is the sensor Level?	yes		
Is the heater operating properly?	yes		
Are the bucket drain holes clean?	yes		
Is the screen on the housing? (screen should be on between July and September)	no		
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 ml)			
# of Tips	Data Logger Response (ml):	Manual Specification = +/- 0.1 ml	
10	1.00	0.00	
AMBIENT TEMPERATURE SENSOR CHECK			
Previous check date:	n/a		
Parameter:	Temperature @ 2 metres		
Reference Thermometer ID:	Fisher #160459244/ 10-Jun-2021		
Reference Temperature (°C):	-4.8		
Station - Ambient Temperature (°C):	-3.4		
Temperature Difference (°C):	-1.4		
BAROMETRIC PRESSURE SENSOR CHECK			
Previous check date:	n/a		
Reference Barometer ID:	Brunton 05490 expires Jan 08, 2021		
Reference Pressure - Units/Reading:	millibar	933.1	
Station Pressure - Units/Reading:	millibar	932.3	
Pressure Tolerance +/- 15% of error:	793 - 1073	0.09%	
RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK			
Previous check date:	n/a		
Reference Hygrometer ID:	Fisher #160459244/ 10-Jun-2021		
Reference Hygrometer % RH- Reading:	73.20		
Station Hygrometer % RH- Reading:	66.20		
RH Tolerance +/- 15% of difference:	62.22 - 84.18	9.6%	
Comments			
n/a			



Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	Performed By:	Chris Wesson
Audit Location:	842b	Reviewed By:	Ferdinand Roy
Audit Date:	December 16, 2020	Start/End Time (mst):	16:48 / 17:04
Calibration Purpose:	installation	Weather Conditions:	Light snow

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 #:	174802	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 #R9133 Exp: Aug 06, 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	353	0.0	2.0	1.0
30	330	28	328	2.0	2.0	2.0
60	300	58	298	2.0	2.0	2.0
90	270	88	269	2.0	1.0	1.5
120	240	119	239	1.0	1.0	1.0
150	210	149	210	1.0	0.0	0.5
180	180	179	179	1.0	1.0	1.0
210	150	211	149	-1.0	1.0	1.0
240	120	240	118	0.0	2.0	1.0
270	90	270	88	0.0	2.0	1.0
300	60	299	58	1.0	2.0	1.5
330	30	330	28	0.0	2.0	1.0
355	0	354	0	1.0	0.0	0.5
The audit meets AMD requirements.				Average Absolute Degrees Difference=		1.2

Comments:

Signal translated via RMYoung32400
Declination = 16°E



Peace River Area Monitoring Program

JANUARY 2021

Ambient Air Monitoring Calibration Report

- 986c STATION-

CAL-PRAMP-202101-01562

Operation and Maintenance:

Bureau Veritas Canada

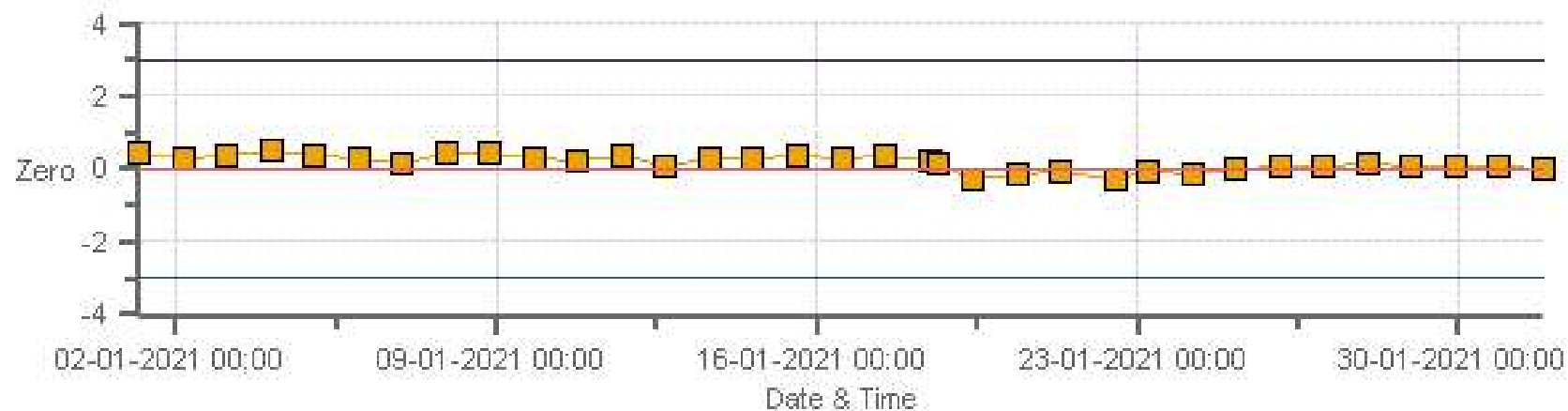
Data Validation and Report:

Bureau Veritas Canada

February 18, 2021

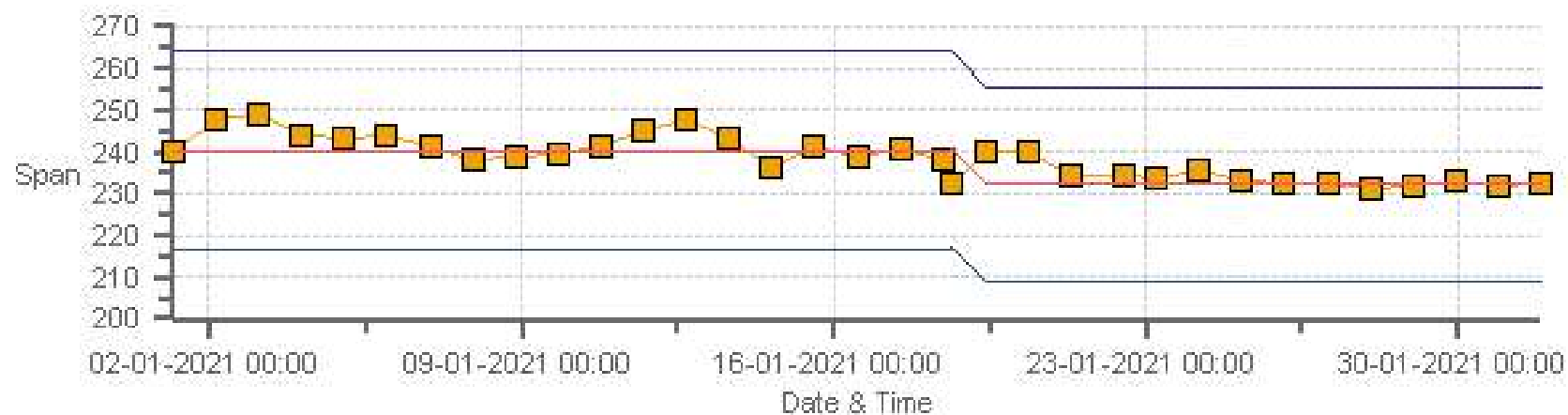
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO₂[ppb] Calibration: PRAMP 986c Monthly: 01-2021 Type: SpanAndZero - Zero



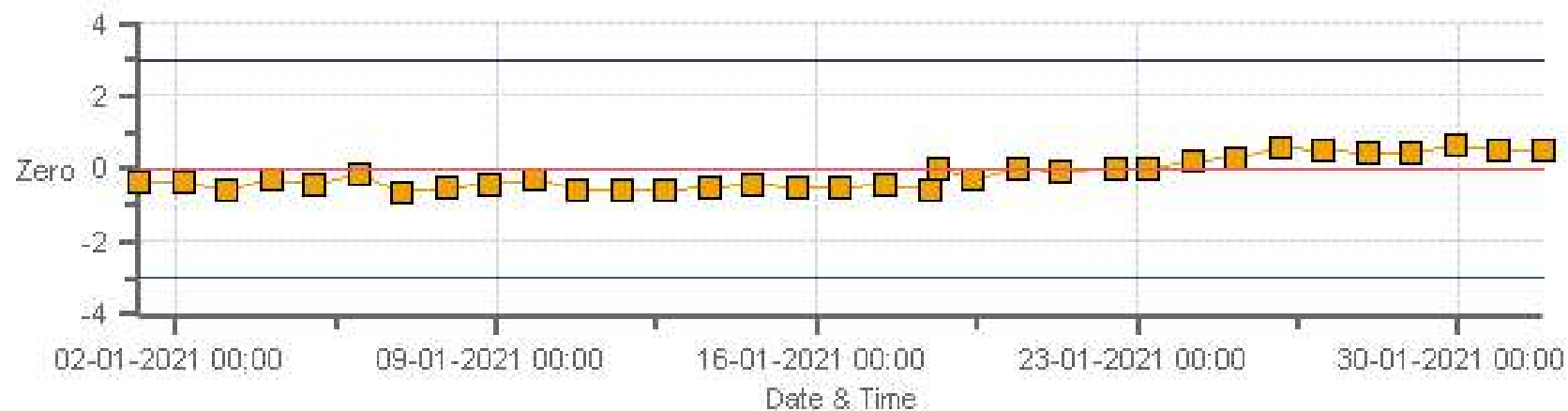
Zero Zero Ref Zero Low Zero High

SO₂[ppb] Calibration: PRAMP 986c Monthly: 01-2021 Type: SpanAndZero - Span



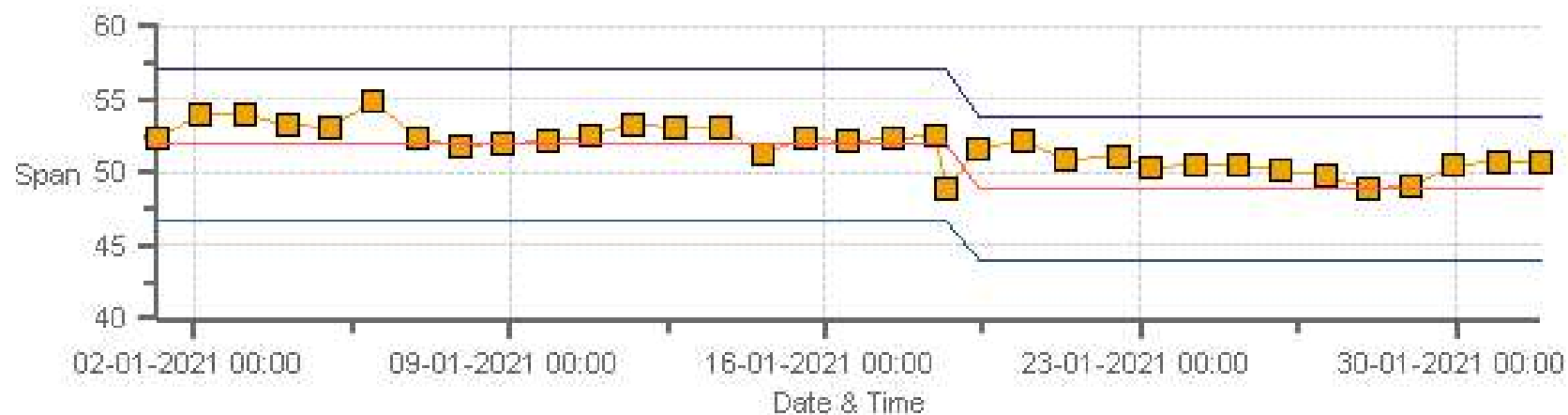
Span SpanRef Span Low Span High

TRS[ppb] Calibration: PRAMP 986c Monthly: 01-2021 Type: SpanAndZero - Zero



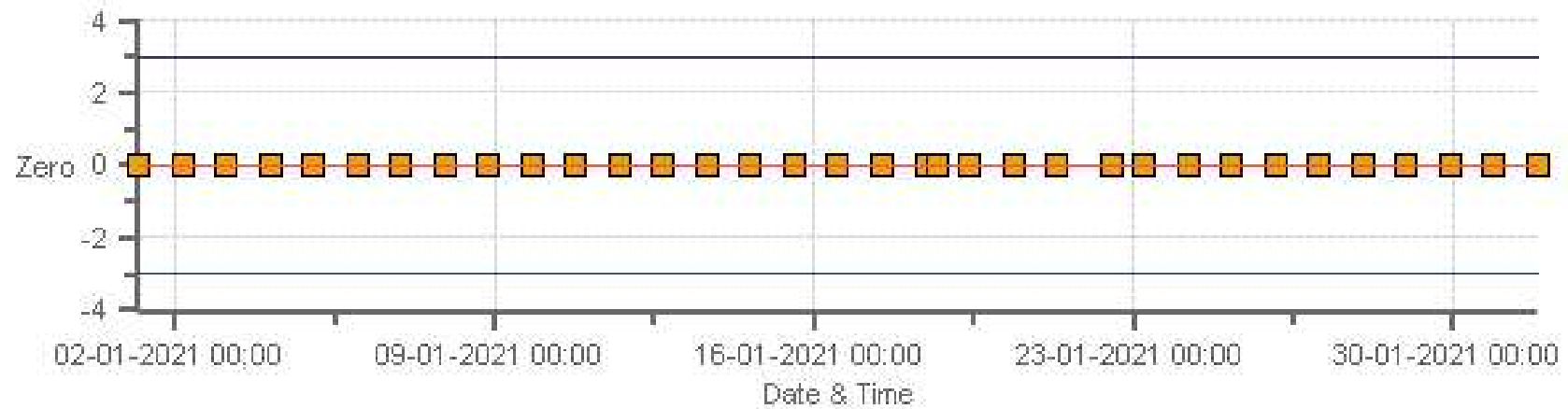
Zero Zero Ref Zero Low Zero High

TRS[ppb] Calibration: PRAMP 986c Monthly: 01-2021 Type: SpanAndZero - Span



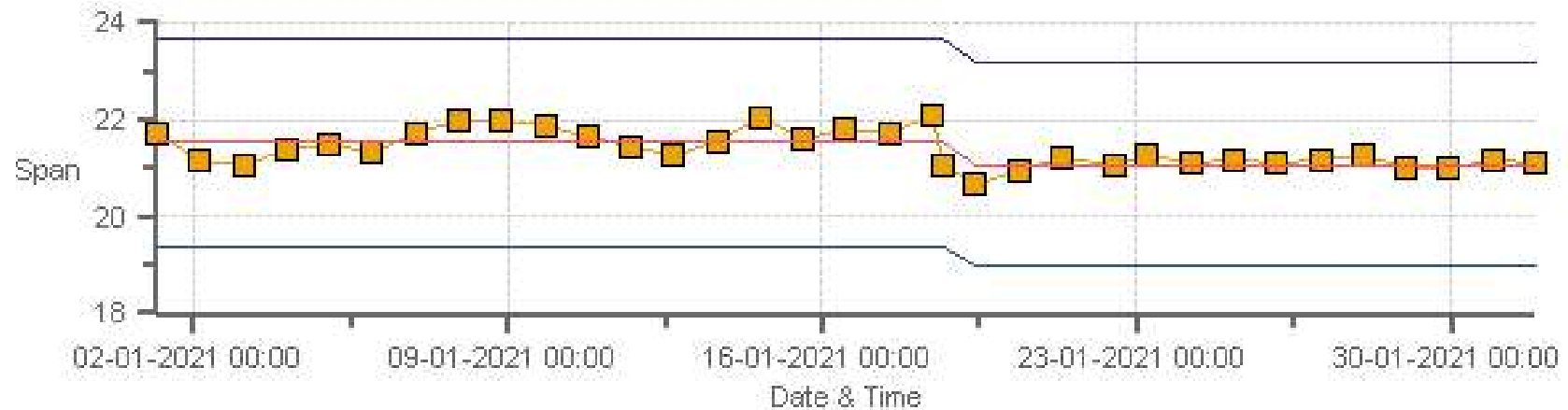
Span SpanRef Span Low Span High

THC55[ppm] Calibration: PRAMP 986c Monthly: 01-2021 Type: SpanAndZero - Zero



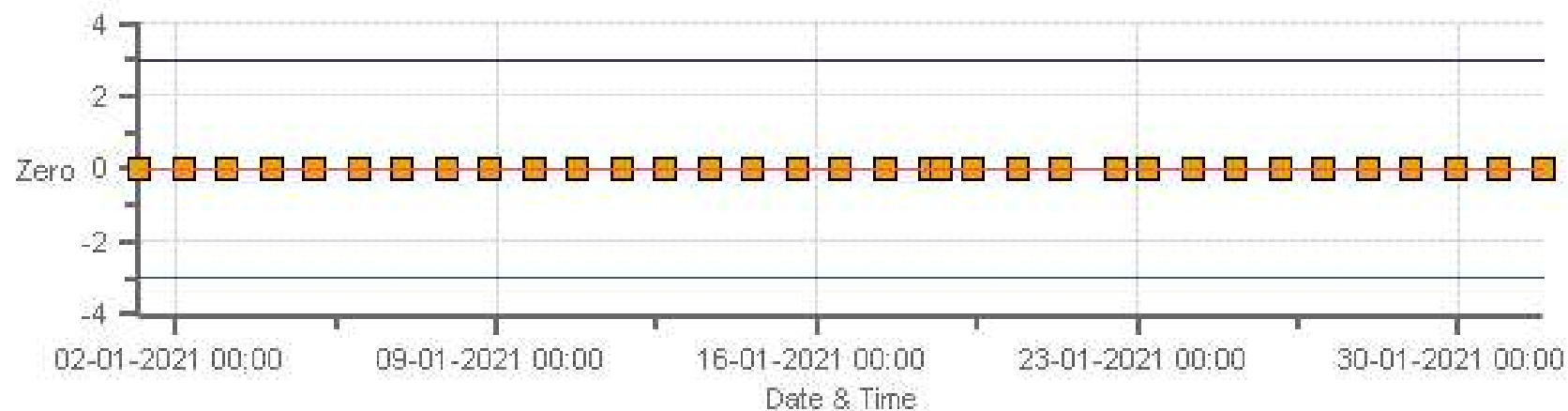
Zero Zero Ref Zero Low Zero High

THC55[ppm] Calibration: PRAMP 986c Monthly: 01-2021 Type: SpanAndZero - Span



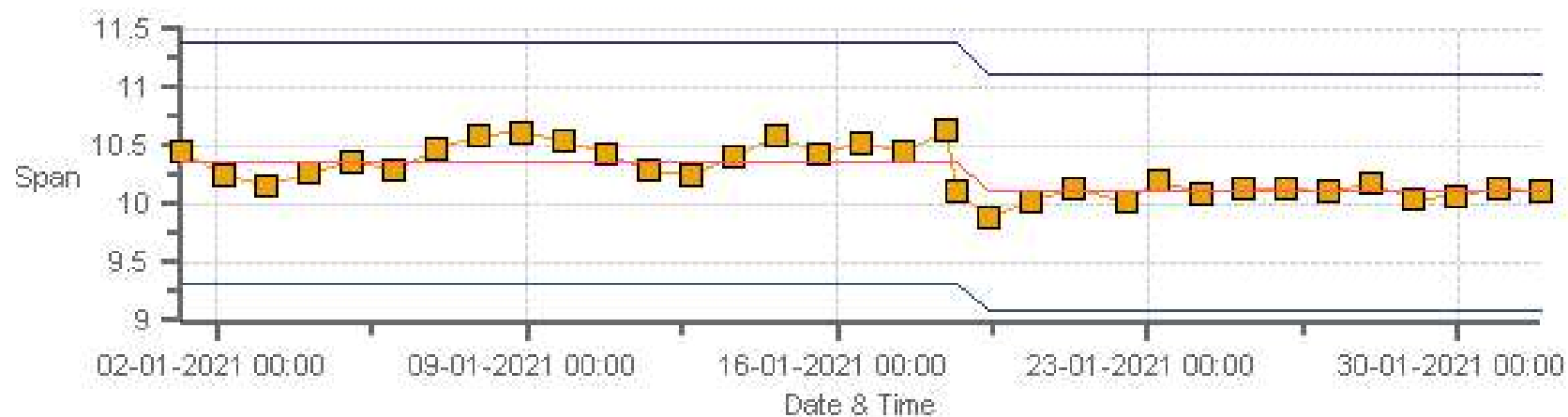
Span Span Ref Span Low Span High

CH4[ppm] Calibration: PRAMP 986c Monthly: 01-2021 Type: SpanAndZero - Zero



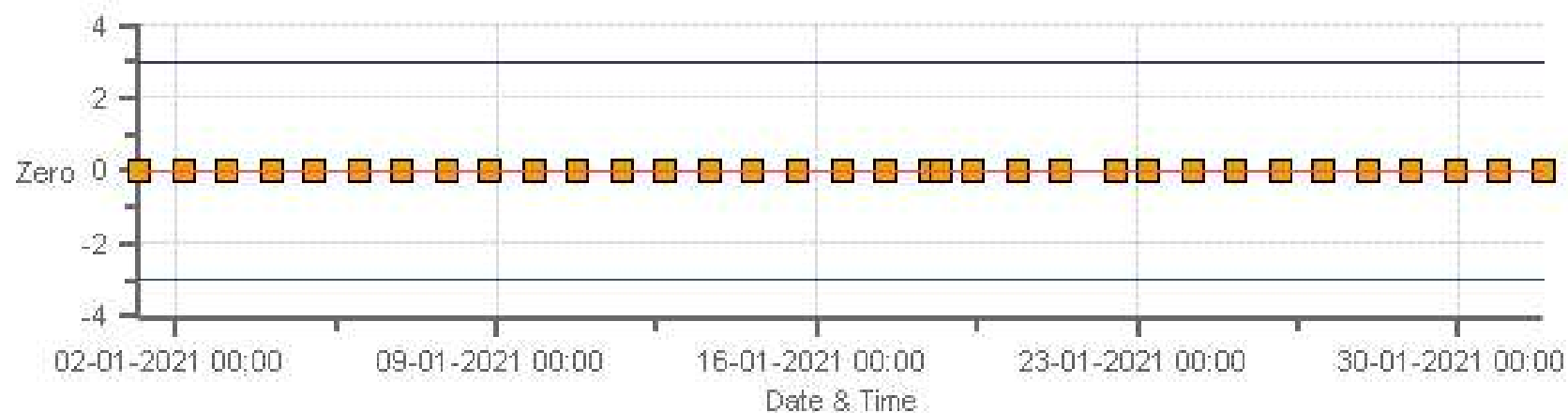
Zero Zero Ref Zero Low Zero High

CH4[ppm] Calibration: PRAMP 986c Monthly: 01-2021 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

NMHC[ppm] Calibration: PRAMP 986c Monthly: 01-2021 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: PRAMP 986c Monthly: 01-2021 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	18-Jan-2021	PREVIOUS CALIBRATION DATE:	15-Dec-2020
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	22.4
LOCATION:	986C	BAROMETRIC (mBar):	950
PURPOSE:	Routine	START TIME (MST):	10:51
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	16:08

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	500 ppb
SERIAL #	1193585646	FLOW (mL/min)	430
INITIAL		FINAL	
BKG/OFFSET	11.6	BKG/OFFSET	11.8
COEF/SLOPE	1.024	COEF/SLOPE	1.008
Expected (reference) Value	240.4	Expected (reference) Value	232.2

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	58100720	ID:	5004
MFC CALIBRATION DATE:	23-Nov-2020	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002357	HIGH ID	n/a
CONC (ppm):	24.90	EXPIRY DATE	n/a
CYLINDER (psi):	1900	LOW ID	n/a
EXPIRY DATE	13-Nov-2024	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	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4000	61.10	4000	0.00	0.1	0	0.989	1.000
3941	61.10	4002	380.16	384.4	380	0.989	1.000
3974	28.90	4003	179.77	n/a	183.6	n/a	0.979
3986	14.50	4000	90.26	n/a	93.2	n/a	0.968

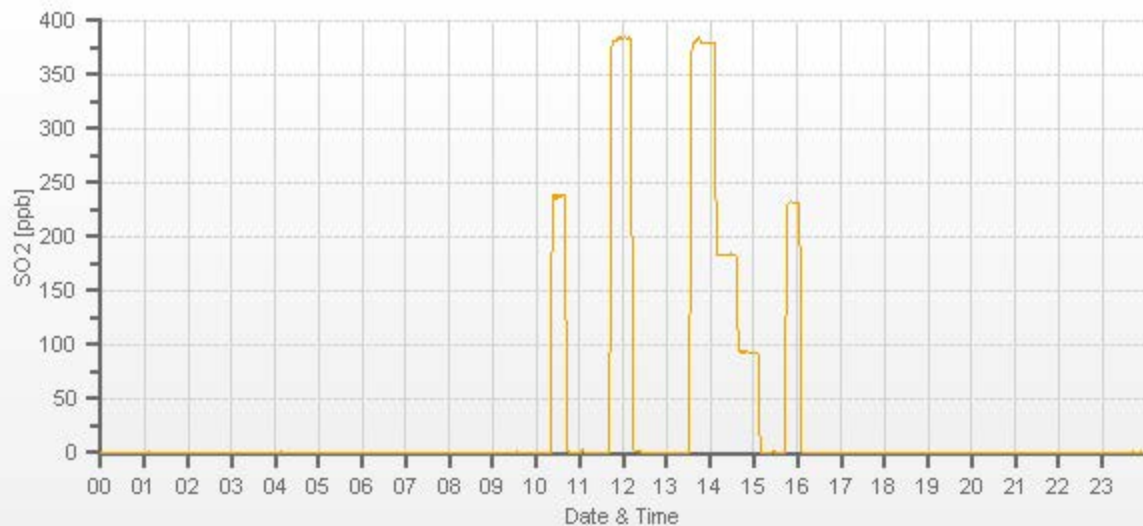
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.998	0.4%

COMMENTS:

Sample filter changed. Monthly calibration - no issues.

SO2[ppb] Station: PRAMP 986c Daily: 18-01-2021 Type: AVG 1 Min. [1 Min.]



CAL-PRAMP-202101-01562

TRS Analyzer Calibration by Dilution



DATE:	18-Jan-2021	PREVIOUS CALIBRATION DATE:	15-Dec-2020
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	0.999
CLIENT:	PRAMP	TEMPERATURE (°C):	22.4
LOCATION:	986C	BAROMETRIC (mBar):	950
PURPOSE:	Routine	START TIME (MST):	10:51
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	16:08

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	1191833341	FLOW (mL/min)	429
INITIAL		FINAL	
BKG/OFFSET	14.1	BKG/OFFSET	13.1
COEF/SLOPE	0.949	COEF/SLOPE	0.92
Expected (reference) Value	51.91	Expected (reference) Value	48.94

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio 2010	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	58100720	ID:	5004
MFC CALIBRATION DATE:	23-Nov-2020	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0000644	HIGH ID	n/a
CONC (ppm):	10.00	EXPIRY DATE	n/a
CYLINDER (psi):	1150	LOW ID	n/a
EXPIRY DATE	16-Jul-2022	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	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4000	31.20	4000	0.00	-0.79	0	0.953	1.000
3971	31.20	4002	77.96	81.01	77.98	0.953	1.000
3988	15.20	4003	37.97	n/a	38.01	n/a	0.999
3992	7.60	4000	19.00	n/a	19.26	n/a	0.987

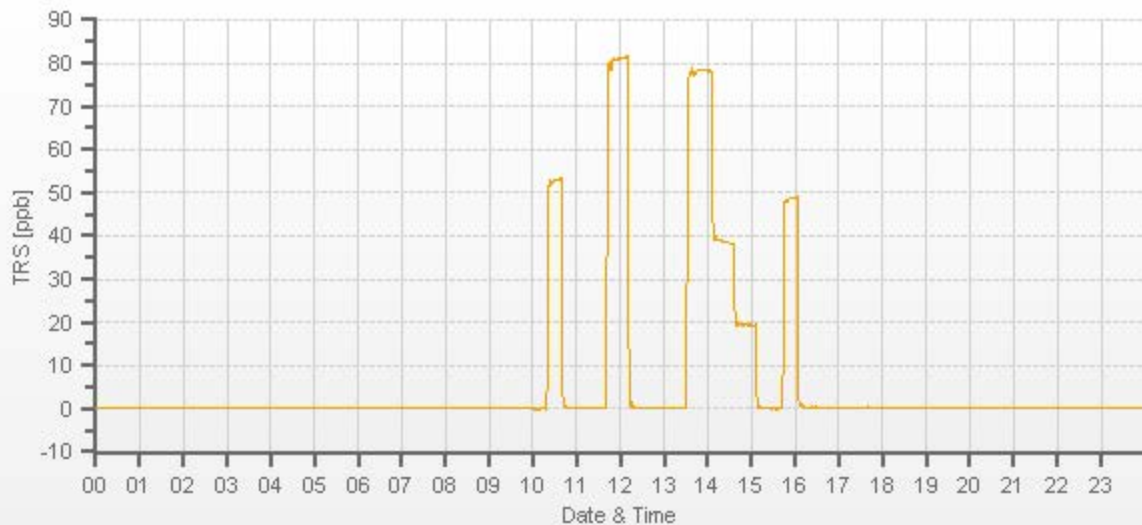
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.999	0.1%

COMMENTS:

Sample filter changed. Monthly calibration - no issues.

TRS[ppb] Station: PRAMP 986c Daily: 18-01-2021 Type: AVG 1 Min. [1 Min.]



CAL-PRAMP-202101-01562

Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	18-Jan-2021	PREVIOUS CALIBRATION DATE:	15-Dec-2020	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	22.4		Thermo 55i	1193585652	1309.3
LOCATION:	986C	BAROMETRIC (mBar):	950	PARAMETER:	CH4	NMHC	THC
PURPOSE:	Routine	START TIME (MST):	10:51	RANGE (ppm):	20	20	40
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	16:30	PREVIOUS CF:	0.998	1.000	0.999

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	LL84567	HIGH ID:	148944
MODEL:	2010	MODEL:	M701	CH ₄ /C ₃ H ₈ (ppm):	591.0 200.0	HIGH EXPIRY:	16-Nov-2021
ID:	17100415	ID:	5004	CYLINDER (psi):	1100	LOW ID:	152019
MFC CALIBRATION DATE:	n/a	OXIDIZER ID:	Internal	EXPIRY DATE	17-Jul-2027	LOW EXPIRY:	16-Nov-2021

CALIBRATION PARAMETERS:

POINT (CH ₄ /NMHC)	HIGH	MID	LOW	CH ₄ EQUIVILANCE	
TARGET	14	7	3.5	C ₃ H ₈ as CH ₄	550.0
RANGE	12 - 16	6 - 8	2 - 4	THC as CH ₄	1141.0

EXPECTED (REFERENCE) VALUE:

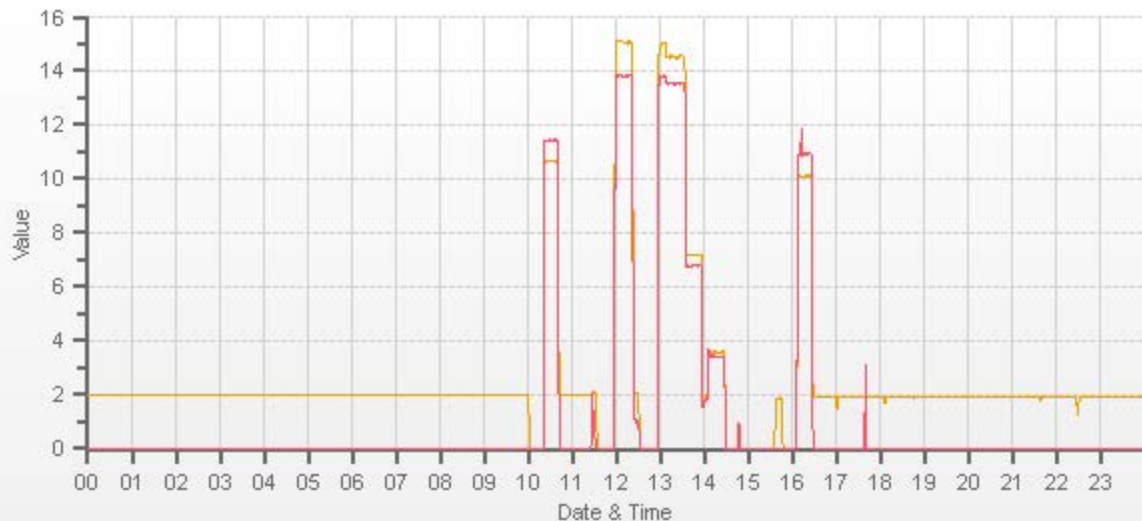
INITIAL	CH ₄	NMHC	THC	FINAL	CH ₄	NMHC	THC
	10.36	11.16	21.52		10.11	10.96	21.07

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC
3286	X	3286	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	X	X	X	X	X	X
3205	80.79	3286	14.53	13.52	28.05	15.06	13.83	28.89	14.56	13.53	28.09	0.965	0.978	0.971	0.998	0.999	0.999
3253	40.28	3293	7.23	6.73	13.96	n/a	n/a	n/a	7.18	6.79	13.96	n/a	n/a	n/a	1.007	0.991	1.000
3269	20.02	3289	3.60	3.35	6.95	n/a	n/a	n/a	3.58	3.42	7.00	n/a	n/a	n/a	1.005	0.979	0.992

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT	Comments:			
CH ₄	1.000	1.002	-0.1%	Sample filter changed.			
NMHC	1.000	0.999	0.2%				
THC	1.000	1.001	0.0%				
				Use Zero Chrom?		No	



CAL-PRAMP-202101-01562

Page 14 of 16
CH4 [ppm] NMHC [ppm]

Meteorological System Checklist



Date:	January 18, 2021		
Technician:	Ferdinand Roy		
Station:	PRAMP 986c		
Unit:	Make:	Model:	Serial #:
Precipitation Sampler:	EML	ARG100	190114
Temperature Sensor:	Rotronic	HC2-S3	20357528
Barometric Pressure Sensor:	MetOne	092	Y23358
Relative Humidity Sensor:	Rotronic	HC2-S3	20357528
Anemometer:	RM Young	05305L	174795
AMBIENT TEMPERATURE SENSOR CHECK			
Previous check date:	December 15, 2020		
Parameter:	Temperature @ 2 metres		
Reference Thermometer ID:	F.S. 160348895 expires Sep 4, 2022		
Reference Temperature (°C):	1.9		
Station - Ambient Temperature (°C):	1.4		
Temperature Difference (°C):	0.5		
BAROMETRIC PRESSURE SENSOR CHECK			
Previous check date:	December 15, 2020		
Reference Barometer ID:	Reference Barometer ID: F.S. 10528 expires February 26, 2021		
Reference Pressure - Units/Reading:	millibar	951	
Station Pressure - Units/Reading:	millibar	951.7	
Pressure Tolerance +/- 15% of error:	808 - 1094	-0.07%	
RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK			
Previous check date:	December 15, 2020		
Reference Hygrometer ID:	F.S. 160348895 expires Sep 4, 2022		
Reference Hygrometer % RH- Reading:	53.37		
Station Hygrometer % RH- Reading:	55.90		
RH Tolerance +/- 15% of difference:	45.36 - 61.38	-4.7%	
ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK			
WIND SPEED		WIND DIRECTION	
Previous check date:	December 15, 2020	Previous check date:	December 15, 2020
Wind Speed Observed (kph):	5~15	Wind Direction Observed:	SW
Wind speed on Data Logger (kph):	12	Wind Direction on Data Logger:	SW
		Wind Direction Pass/Fail?:	Pass
Comments			
No issues.			



Meteorological Sensor Audit/Calibration

Location Information

Company: PRAMP
Audit Location: 986C
Audit Date: July 16, 2020
Calibration Purpose: installation

Performed By: Chris Wesson
Reviewed By: Ferdinand Roy
Start/End Time (mst): 15:07 / 16:17
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:	05305L	Velocity Unit Output Range:	0-180
Serial #:	174795	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 18802 id# CA03309 expires November 20, 2020

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	0.0	1.0	0.5
30	330	30	330	0.0	0.0	0.0
60	300	59	299	1.0	1.0	1.0
90	270	90	270	0.0	0.0	0.0
120	240	119	240	1.0	0.0	0.5
150	210	150	210	0.0	0.0	0.0
180	180	181	180	-1.0	0.0	0.5
210	150	211	150	-1.0	0.0	0.5
240	120	241	120	-1.0	0.0	0.5
270	90	270	89	0.0	1.0	0.5
300	60	300	59	0.0	1.0	0.5
330	30	330	30	0.0	0.0	0.0
355	0	354	0	1.0	0.0	0.5
The audit meets AMD requirements.			Average Absolute Degrees Difference=		0.4	

Comments:

Magnetic declination = 15Deg(E)



Peace River Area Monitoring Program

JANUARY 2021

Ambient Air Monitoring Calibration Report

- RENO STATION-

CAL-PRAMP-202101-01563

Operation and Maintenance:

Bureau Veritas Canada

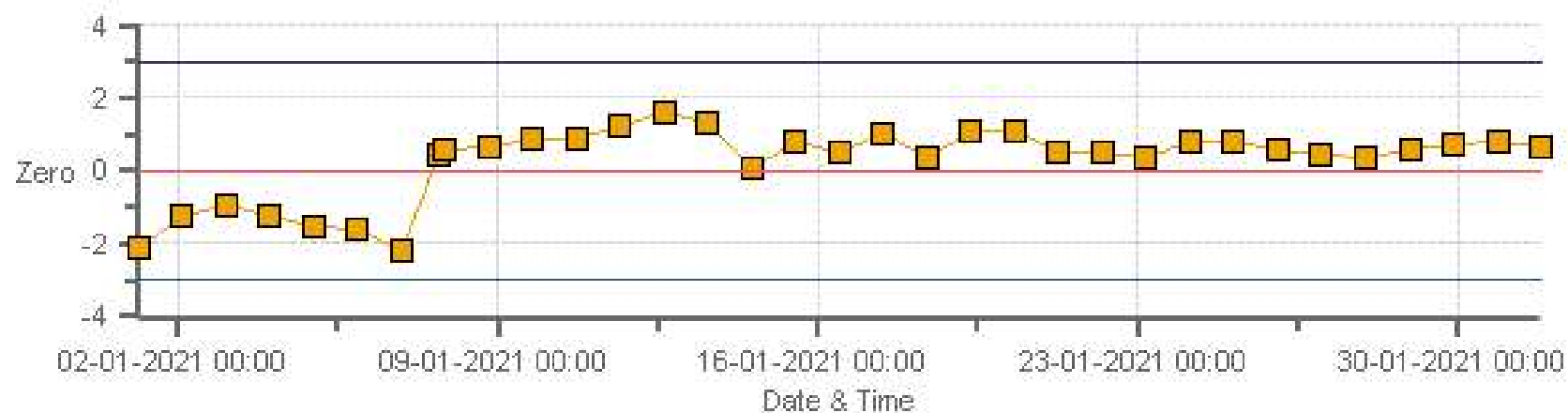
Data Validation and Report:

Bureau Veritas Canada

February 18, 2021

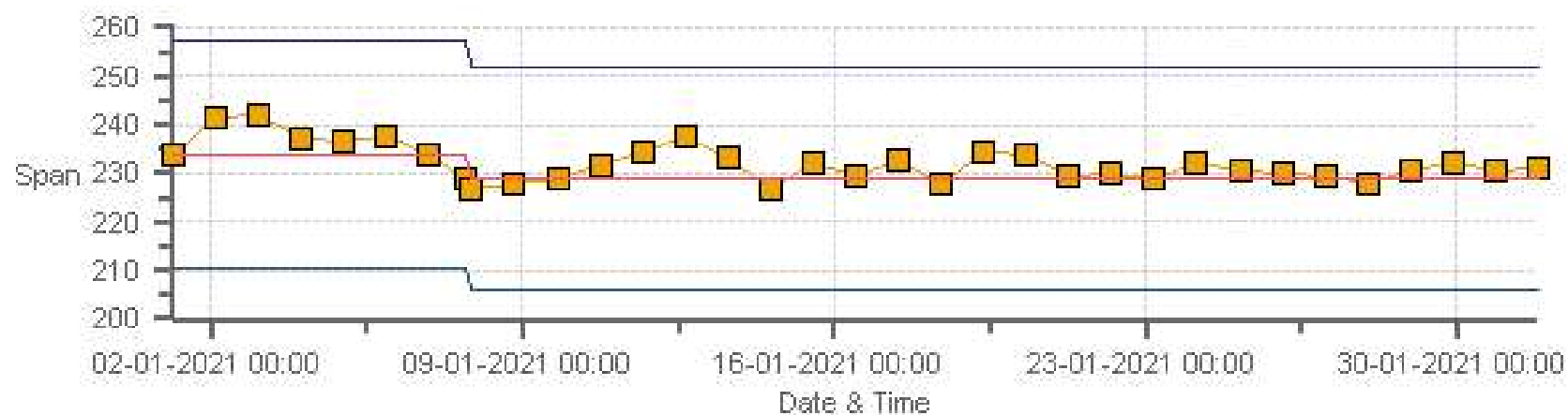
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: PRAMP RENO Monthly: 01-2021 Type: SpanAndZero - Zero



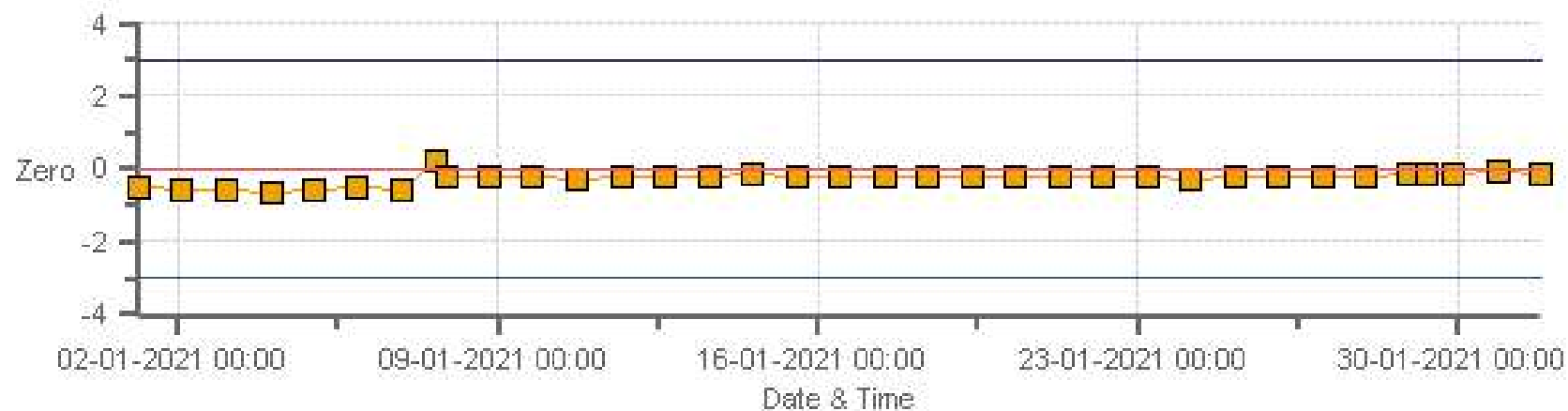
Zero Zero Ref Zero Low Zero High

SO2[ppb] Calibration: PRAMP RENO Monthly: 01-2021 Type: SpanAndZero - Span



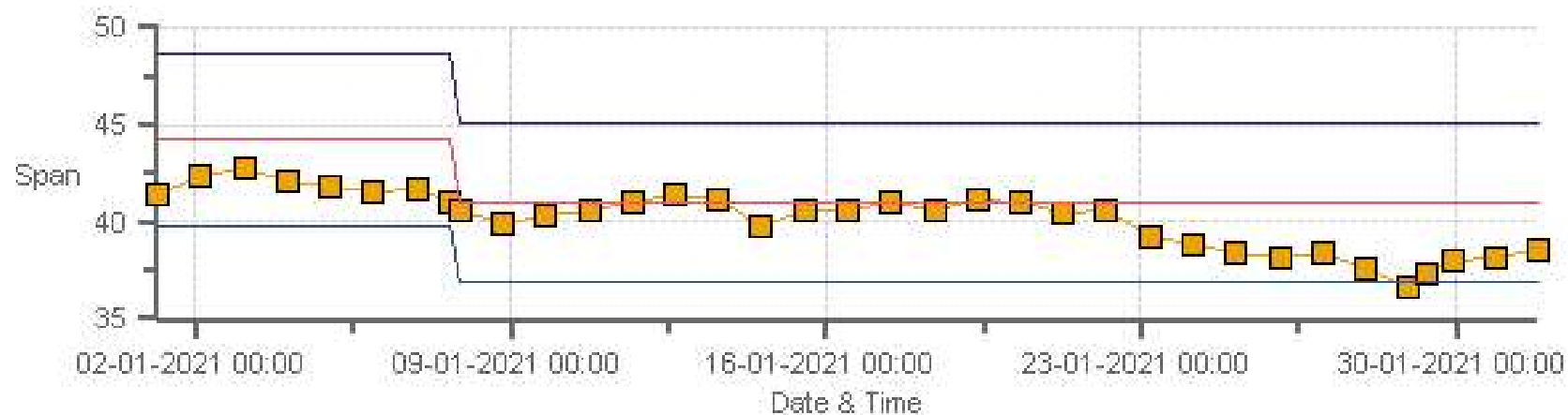
Span Span Ref Span Low Span High

TRS[ppb] Calibration: PRAMP RENO Monthly: 01-2021 Type: SpanAndZero - Zero



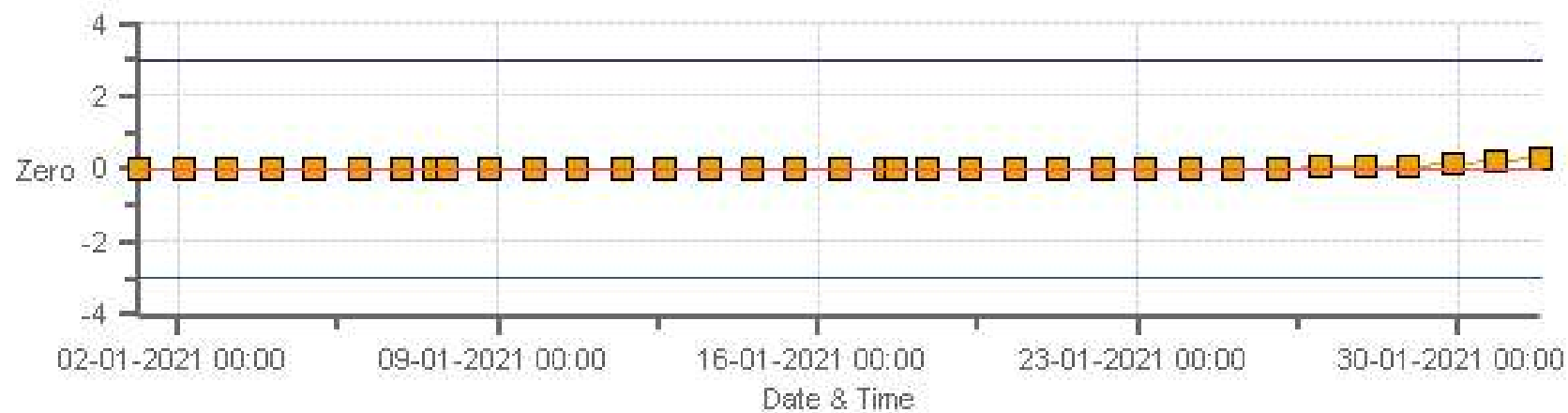
Zero Zero Ref Zero Low Zero High

TRS[ppb] Calibration: PRAMP RENO Monthly: 01-2021 Type: SpanAndZero - Span



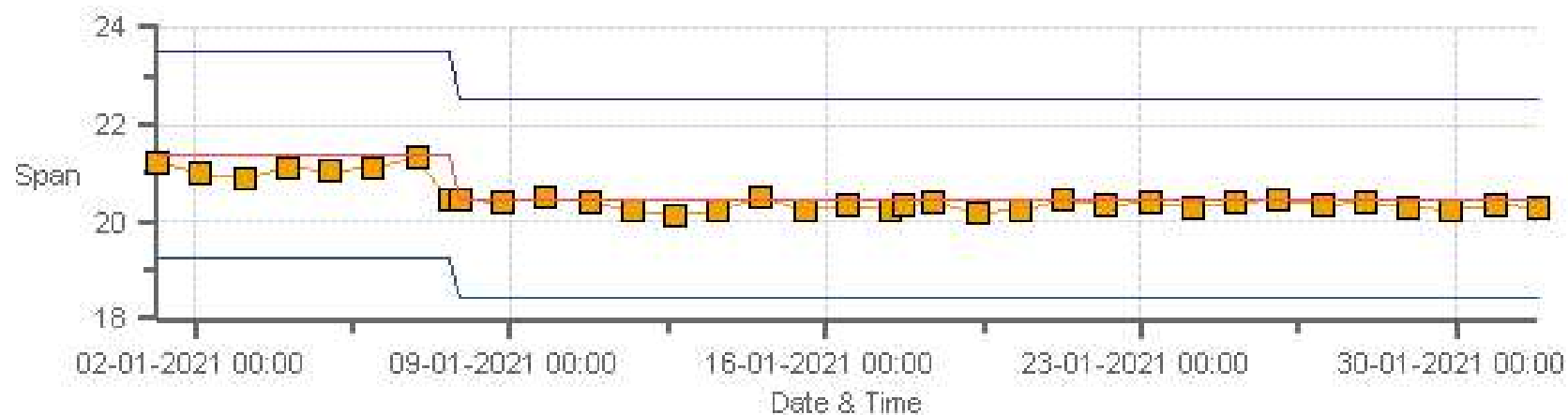
Span Span Ref Span Low Span High

THC55[ppm] Calibration: PRAMP RENO Monthly: 01-2021 Type: SpanAndZero - Zero



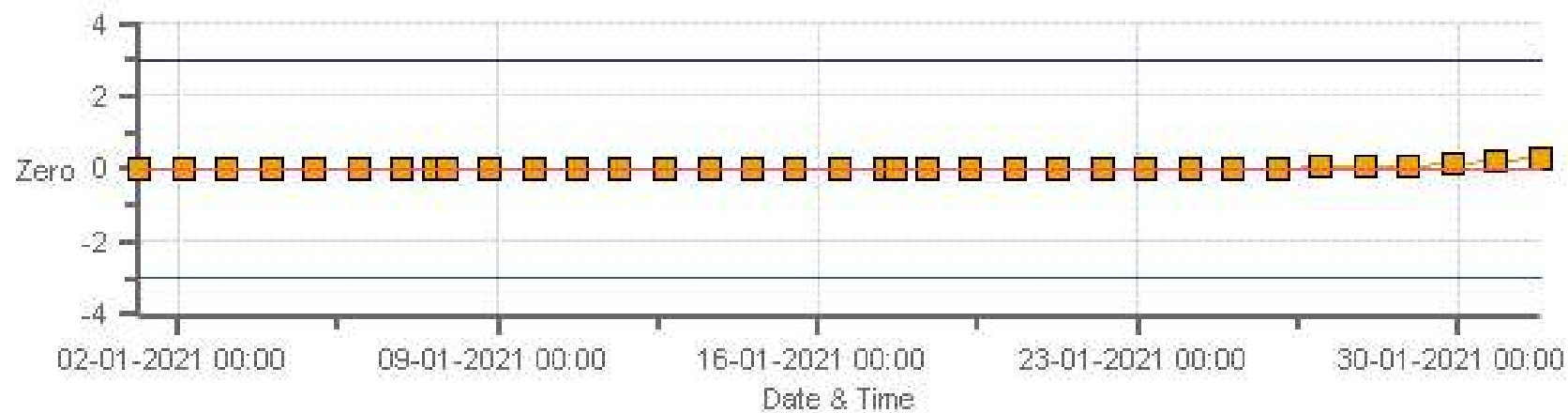
Zero Zero Ref Zero Low Zero High

THC55[ppm] Calibration: PRAMP RENO Monthly: 01-2021 Type: SpanAndZero - Span



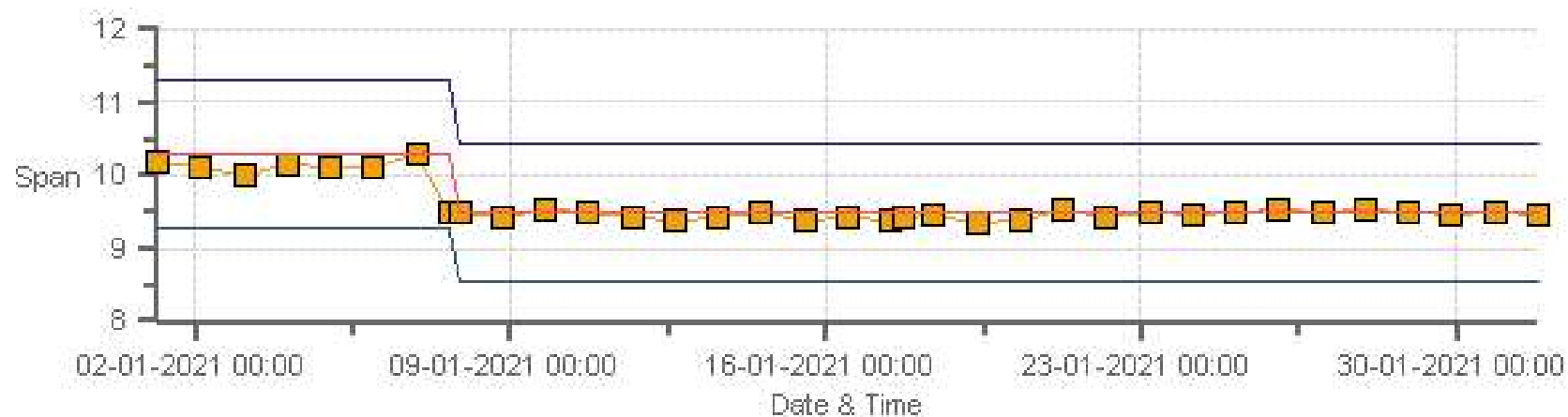
Span Span Ref Span Low Span High

CH4[ppm] Calibration: PRAMP RENO Monthly: 01-2021 Type: SpanAndZero - Zero



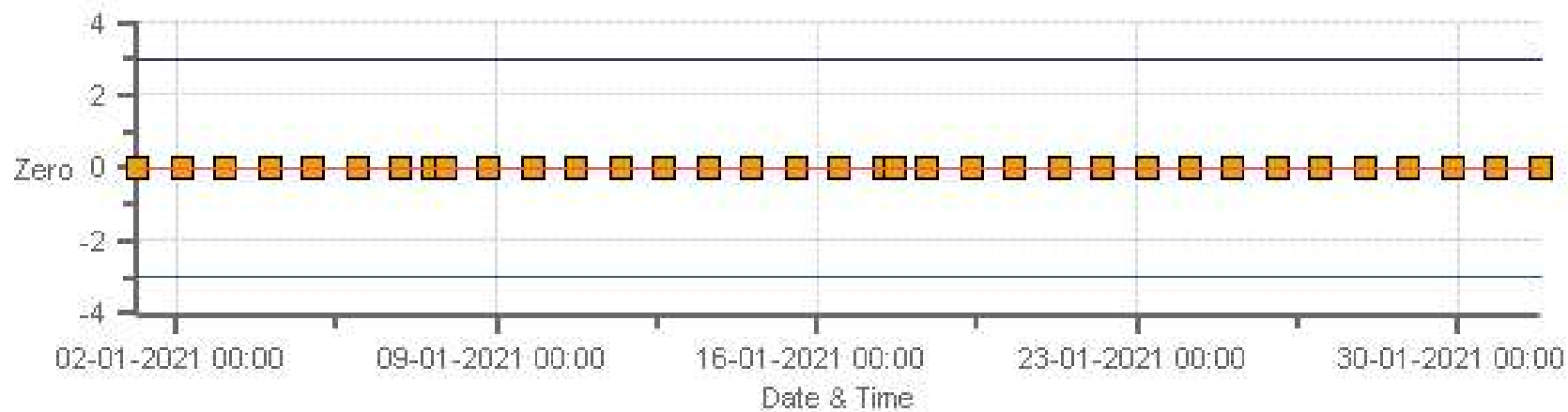
Zero Zero Ref Zero Low Zero High

CH4[ppm] Calibration: PRAMP RENO Monthly: 01-2021 Type: SpanAndZero - Span



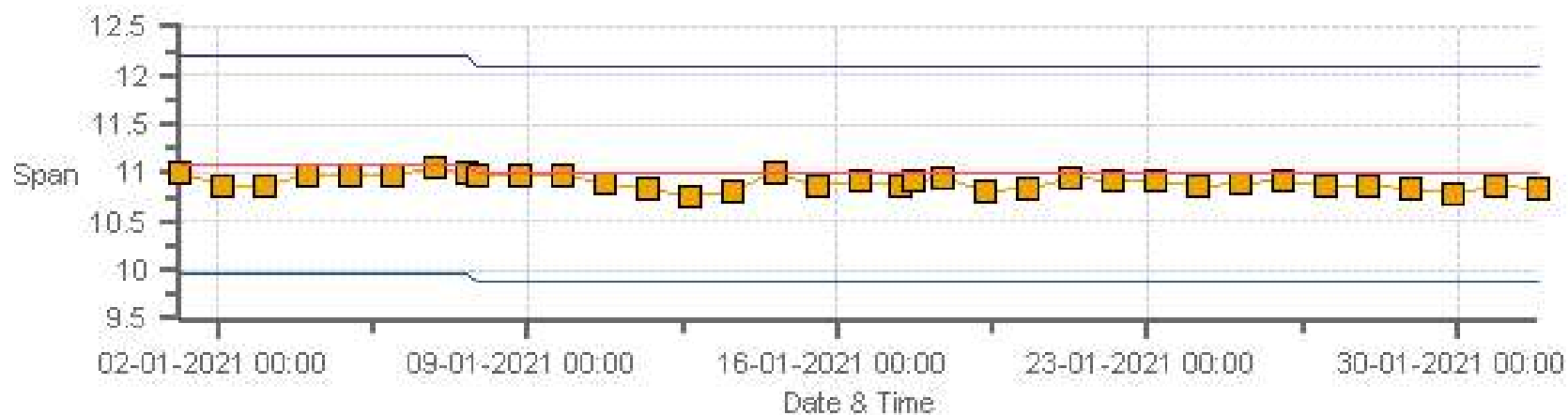
Span SpanRef Span Low Span High

NMHC[ppm] Calibration: PRAMP RENO Monthly: 01-2021 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: PRAMP RENO Monthly: 01-2021 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	07-Jan-2021	PREVIOUS CALIBRATION DATE:	01-Dec-2020
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	21.0
LOCATION:	Reno	BAROMETRIC (mBar):	941
PURPOSE:	Removal/Shut-down	START TIME (MST):	10:01
PERFORMED BY:	Limin Li	END TIME (MST):	11:43

ANALYZER:

MAKE/MODEL	API 100A	RANGE	500 ppb
SERIAL #	1502	FLOW (mL/min)	584
INITIAL		FINAL	
BKG/OFFSET	94.1	BKG/OFFSET	n/a
COEF/SLOPE	0.961	COEF/SLOPE	n/a
Expected (reference) Value	233.9	Expected (reference) Value	n/a

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	701
ID:	17200415	ID:	1105
MFC CALIBRATION DATE:	01-Oct-2020	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY 0001011	HIGH ID	n/a
CONC (ppm):	50.10	EXPIRY DATE	n/a
CYLINDER (psi):	600	LOW ID	n/a
EXPIRY DATE	01-Jul-2027	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	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
6000	45.50	6000	0.00	3.1	n/a	0.962	n/a
5955	45.50	6000	379.93	398.1	n/a	0.962	n/a
5978	21.60	6000	180.36	189.2	n/a	0.969	n/a
5989	10.80	6000	90.18	95.7	n/a	0.974	n/a

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.040	0.5%

COMMENTS:

Shutdown for maintenance of sample valve.

SO2 Analyzer Calibration by Dilution



DATE:	07-Jan-2021	PREVIOUS CALIBRATION DATE:	n/a
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	n/a
CLIENT:	PRAMP	TEMPERATURE (°C):	24.5
LOCATION:	Reno	BAROMETRIC (mBar):	944
PURPOSE:	Install/Post-Repair	START TIME (MST):	14:22
PERFORMED BY:	Limin Li	END TIME (MST):	17:10

ANALYZER:

MAKE/MODEL	API 100A	RANGE	500 ppb
SERIAL #	1502	FLOW (mL/min)	661
INITIAL		FINAL	
BKG/OFFSET	94.1	BKG/OFFSET	79.9
COEF/SLOPE	0.961	COEF/SLOPE	1.04
Expected (reference) Value	n/a	Expected (reference) Value	228.8

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	701
ID:	17200415	ID:	1105
MFC CALIBRATION DATE:	01-Oct-2020	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY 0001011	HIGH ID	n/a
CONC (ppm):	50.10	EXPIRY DATE	n/a
CYLINDER (psi):	600	LOW ID	n/a
EXPIRY DATE	01-Jul-2027	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:

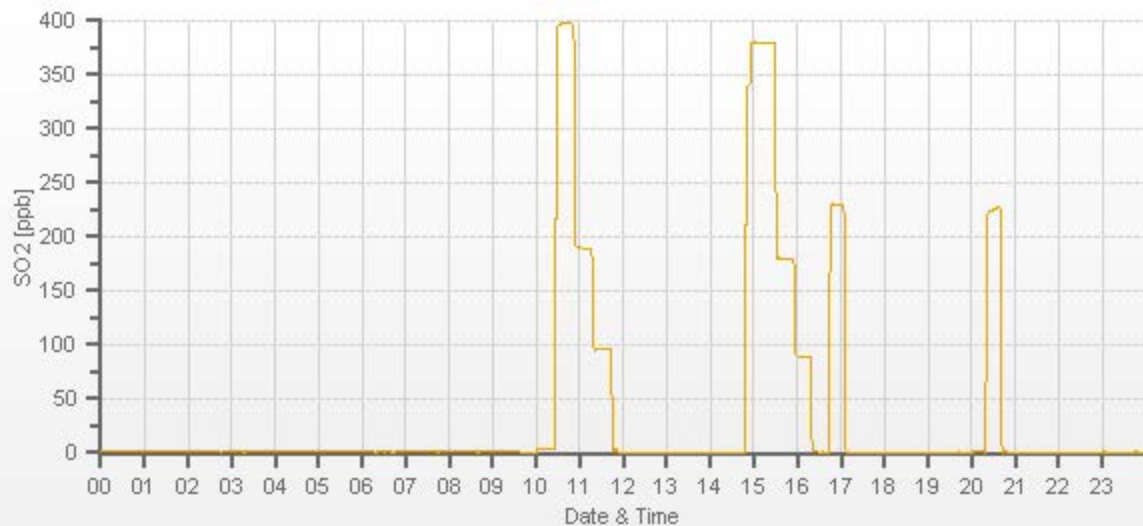
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
6000	45.50	6000	0.00	n/a	0	n/a	1.000
5955	45.50	6000	379.93	n/a	380	n/a	1.000
5978	21.60	6000	180.36	n/a	179.3	n/a	1.006
5989	10.80	6000	90.18	n/a	88.9	n/a	1.014

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	-0.2%

COMMENTS:

Change sample filter.



TRS Analyzer Calibration by Dilution



DATE:	07-Jan-2021	PREVIOUS CALIBRATION DATE:	03-Dec-2020
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	21.0
LOCATION:	Reno	BAROMETRIC (mBar):	941
PURPOSE:	Routine	START TIME (MST):	10:01
PERFORMED BY:	Limin Li	END TIME (MST):	15:42

ANALYZER:

MAKE/MODEL	Thermo 43I-TLE	RANGE	100 ppb
SERIAL #	1162460022	FLOW (mL/min)	420
INITIAL		FINAL	
BKG/OFFSET	3.55	BKG/OFFSET	3.2
COEF/SLOPE	1.269	COEF/SLOPE	1.253
Expected (reference) Value	44.26	Expected (reference) Value	40.96

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	Teledyne
MODEL:	6100	MODEL:	701
ID:	5212	ID:	1105
MFC CALIBRATION DATE:	28-Sep-2020	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0001074	HIGH ID	n/a
CONC (ppm):	10.00	EXPIRY DATE	n/a
CYLINDER (psi):	1600	LOW ID	n/a
EXPIRY DATE	16-Jul-2022	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:	10:28	SO2 Conc (ppb)	380
END TIME:	10:48	Analyzer Response (ppb)	0.2

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
7500	58.50	7500	0.00	-0.42	0	0.975	1.000
7442	58.50	7500	78.00	79.6	78	0.975	1.000
7472	28.50	7500	38.00	n/a	38.1	n/a	0.997
7486	14.25	7500	19.00	n/a	19	n/a	1.000

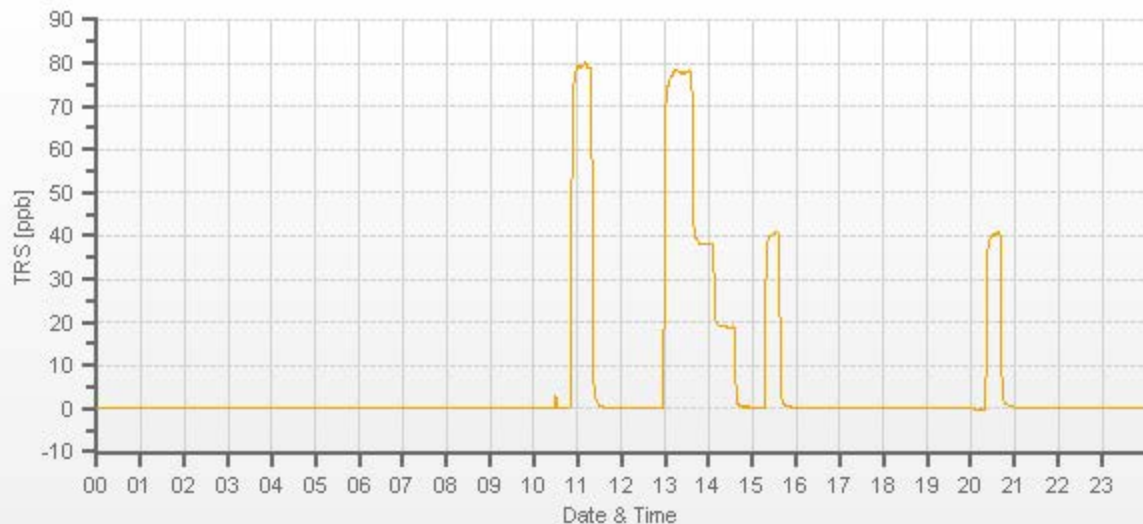
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	0.0%

COMMENTS:

Change sample filter.

TRS[ppb] Station: PRAMP RENO Daily: 07-01-2021 Type: AVG 1 Min. [1 Min.]



CAL-PRAMP-202101-01563

TRS Analyzer Calibration by Dilution



DATE:	29-Jan-2021	PREVIOUS CALIBRATION DATE:	07-Jan-2021
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	19.1
LOCATION:	Reno	BAROMETRIC (mBar):	931
PURPOSE:	As-Found	START TIME (MST):	10:27
PERFORMED BY:	Limin Li	END TIME (MST):	11:53

ANALYZER:

MAKE/MODEL	Thermo 43I-TLE	RANGE	100 ppb
SERIAL #	1162460022	FLOW (mL/min)	417
INITIAL		FINAL	
BKG/OFFSET	3.21	BKG/OFFSET	3.21
COEF/SLOPE	1.253	COEF/SLOPE	1.253
Expected (reference) Value	40.96	Expected (reference) Value	40.96

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	Teledyne
MODEL:	6100	MODEL:	701
ID:	5212	ID:	1105
MFC CALIBRATION DATE:	28-Sep-2020	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0001074	HIGH ID	n/a
CONC (ppm):	10.00	EXPIRY DATE	n/a
CYLINDER (psi):	1600	LOW ID	n/a
EXPIRY DATE	16-Jul-2022	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	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
7500	58.50	7500	0.00	-0.1	n/a	1.025	n/a
7442	58.50	7500	78.00	76	n/a	1.025	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

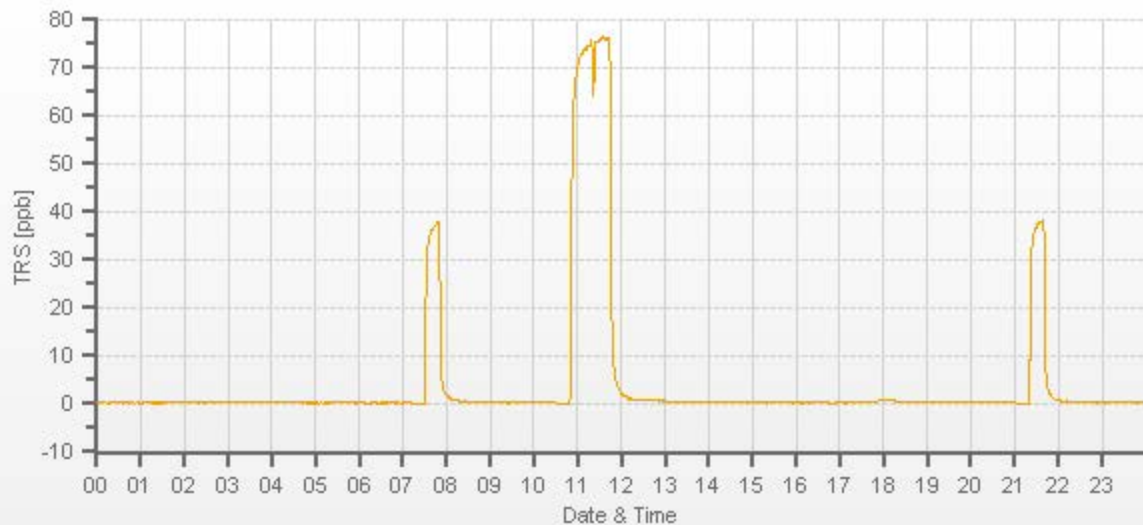
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	n/a	n/a	n/a

COMMENTS:

Flush regulator at 11:20am. Point restarts at 11:23

TRS[ppb] Station: PRAMP RENO Daily: 29-01-2021 Type: AVG 1 Min. [1 Min.]



CAL-PRAMP-202101-01563

Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	07-Jan-2021	PREVIOUS CALIBRATION DATE:	01-Dec-2020	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	23.1		Thermo 55i	150564392	1086
LOCATION:	Reno	BAROMETRIC (mBar):	943	PARAMETER:	CH4	NMHC	THC
PURPOSE:	Routine	START TIME (MST):	11:48	RANGE (ppm):	20	20	40
PERFORMED BY:	LiminLi	END TIME (MST):	15:08	PREVIOUS CF:	1.001	1.000	1.001

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	LL70331	HIGH ID:	n/a
MODEL:	2010	MODEL:	701	CH ₄ /C ₃ H ₈ (ppm):	909.0 308.0	HIGH EXPIRY:	n/a
ID:	17200415	ID:	1105	CYLINDER (psi):	1700	LOW ID:	n/a
MFC CALIBRATION DATE:	01-Oct-2020	OXIDIZER ID:	111	EXPIRY DATE	21-Jan-2028	LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH ₄ /NMHC)	HIGH	MID	LOW	CH ₄ EQUIVILANCE	
TARGET	14	7	3.5	C ₃ H ₈ as CH ₄	847.0
RANGE	12 - 16	6 - 8	2 - 4	THC as CH ₄	1756.0

EXPECTED (REFERENCE) VALUE:

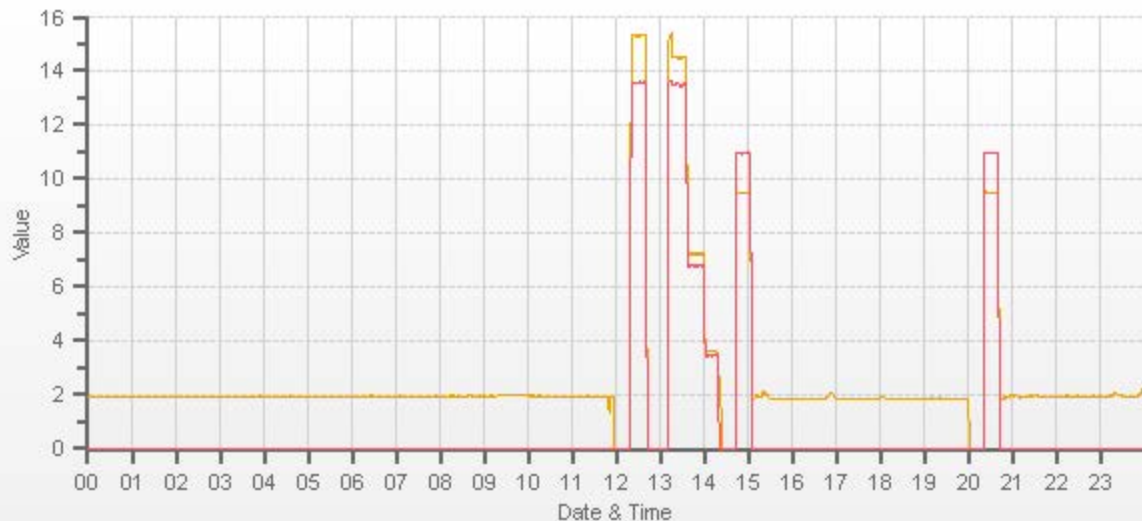
INITIAL	CH ₄	NMHC	THC	FINAL	CH ₄	NMHC	THC
	10.12	11.40	21.52		9.49	10.99	20.48

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC
3500	X	3500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	X	X	X	X	X	X
3444	55.80	3500	14.49	13.50	28.00	15.31	13.57	28.88	14.51	13.53	28.04	0.947	0.995	0.969	0.999	0.998	0.998
3472	27.90	3500	7.25	6.75	14.00	n/a	n/a	n/a	7.23	6.79	14.02	n/a	n/a	n/a	1.002	0.994	0.998
3486	13.90	3500	3.61	3.36	6.97	n/a	n/a	n/a	3.61	3.46	7.07	n/a	n/a	n/a	1.000	0.972	0.986

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT	Comments:			
CH ₄	1.000	1.001	0.0%	Sample filter changed. Monthly calibration - no issues.			
NMHC	1.000	1.000	0.2%				
THC	1.000	1.001	0.1%				
				Use Zero Chrom?		No	



CAL-PRAMP-202101-01563

Meteorological System Checklist



Date:	January 7, 2021		
Technician:	Limin Li		
Station:	PRAMP Reno		
Unit:	Make:	Model:	Serial #:
Precipitation Sampler:	RM Young	5202	TB 1588
Temperature Sensor:	RM Young	43172VC	60837897
Barometric Pressure Sensor:	MetOne	92	R12877
Relative Humidity Sensor:	RM Young	43172VC	60837897
Anemometer:	RM Young	05305VK	149769
AMBIENT TEMPERATURE SENSOR CHECK			
Previous check date:	December 1, 2020		
Parameter:	Temperature @ 2 metres		
Reference Thermometer ID:	FS 160459244 expires June 10, 2021		
Reference Temperature (°C):	-3.9		
Station - Ambient Temperature (°C):	-2.6		
Temperature Difference (°C):	-1.3		
BAROMETRIC PRESSURE SENSOR CHECK			
Previous check date:	December 1, 2020		
Reference Barometer ID:	Brunton 05490 expires Jan08, 2021		
Reference Pressure - Units/Reading:	millibar	942	
Station Pressure - Units/Reading:	millibar	941.7	
Pressure Tolerance +/- 15% of error:	801 - 1083	0.03%	
RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK			
Previous check date:	December 1, 2020		
Reference Hygrometer ID:	FS 160459244 expires June 10, 2021		
Reference Hygrometer % RH- Reading:	64.00		
Station Hygrometer % RH- Reading:	55.60		
RH Tolerance +/- 15% of difference:	54.40 - 73.60	13.1%	
ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK			
WIND SPEED		WIND DIRECTION	
Previous check date:	December 1, 2020	Previous check date:	December 1, 2020
Wind Speed Observed (kph):	10~20	Wind Direction Observed:	SW
Wind speed on Data Logger (kph):	15.8	Wind Direction on Data Logger:	SW
		Wind Direction Pass/Fail?:	Pass
Comments			
Tested from 11:04-05am. Ok.			



Meteorological Sensor Audit/Calibration

Location Information

Company: PRAMP
 Audit Location: Reno
 Audit Date: June 17, 2020
 Calibration Purpose: routine annual

Performed By: Chris Wesson
 Reviewed By: Ferdinand Roy
 Start/End Time (mst): 16:12 / 17:13
 Weather Conditions: Light rain/scattered showers

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 #:	149769	Direction Voltage Output Range:	0-1
Previous Cal/Audit Date:	April 24, 2019	Direction Unit Output Range:	0-360

Wind Calibrator Information

Calibrator I.D. and Expiry Date: RM Young 18802 id# CA03309 expires November 20, 2020

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	18.4	18.4	1.002
2000	36.9	36.8	36.8	1.002
3000	55.3	55.2	55.2	1.002
4000	73.7	73.6	73.6	1.002
5000	92.2	92.2	92.2	0.999
6000	110.6	110.6	110.6	1.000
7000	129.0	129.2	129.2	0.999
8000	147.4	147.8	147.8	0.998
9000	165.9	166.2	166.2	0.998
10000	184.3	184.8	185.0	0.997
The audit meets AMD requirements.			Average Correction Factor=	1.000

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	0.0	1.0	0.5
30	330	31	328	-1.0	2.0	1.5
60	300	61	298	-1.0	2.0	1.5
90	270	91	269	-1.0	1.0	1.0
120	240	121	239	-1.0	1.0	1.0
150	210	151	209	-1.0	1.0	1.0
180	180	180	180	0.0	0.0	0.0
210	150	210	150	0.0	0.0	0.0
240	120	240	121	0.0	-1.0	0.5
270	90	269	90	1.0	0.0	0.5
300	60	299	61	1.0	-1.0	1.0
330	30	328	30	2.0	0.0	1.0
355	0	354	0	1.0	0.0	0.5
The audit meets AMD requirements.				Average Absolute Degrees Difference=		0.8

Comments:

Bearings replaced. Declination = 15deg East



Peace River Area Monitoring Program

JANUARY 2021

Ambient Air Monitoring Calibration Report

- AQHI - CADOTTE LAKE STATION-

CAL-PRAMP-202101-01651

Operation and Maintenance:

Bureau Veritas Canada

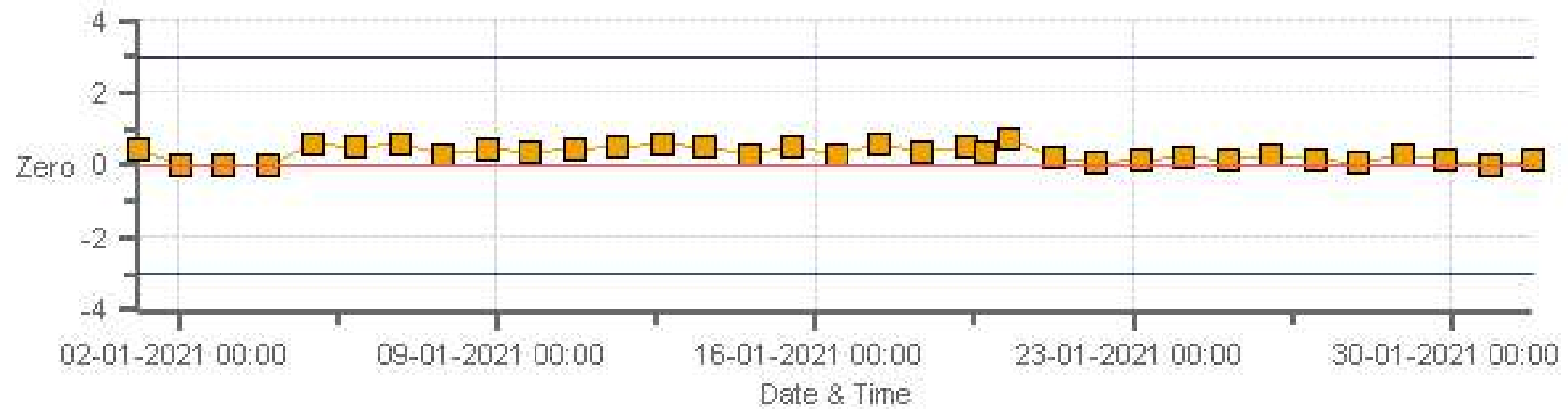
Data Validation and Report:

Bureau Veritas Canada

February 18, 2021

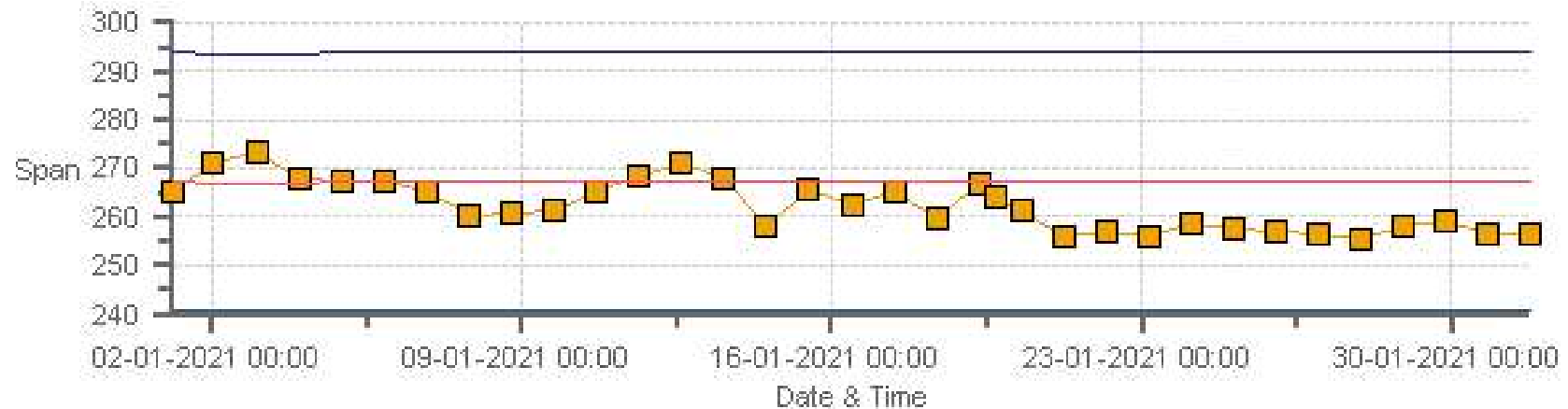
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Zero



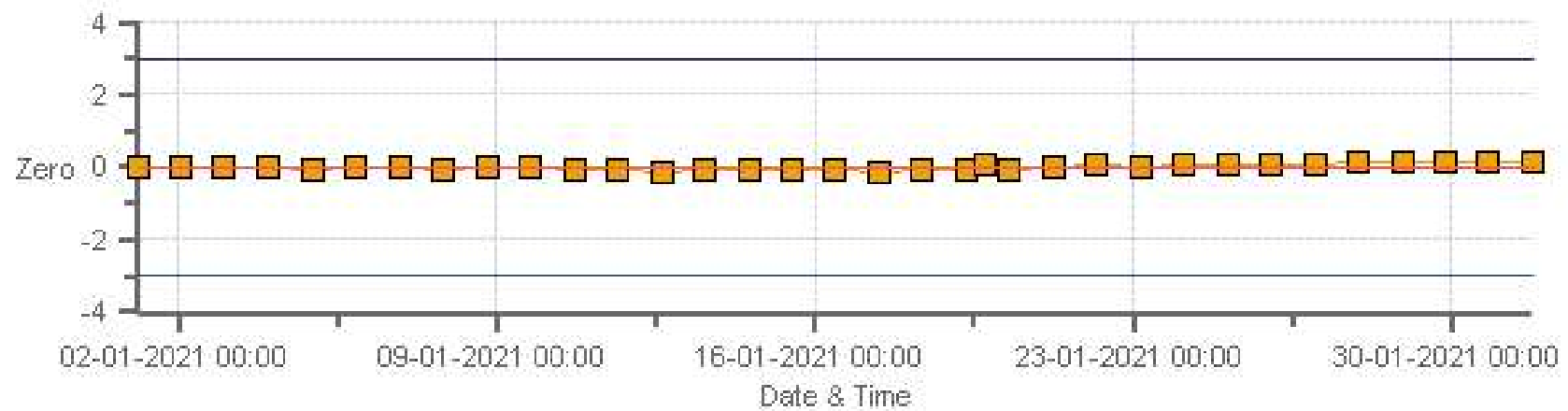
Zero Zero Ref Zero Low Zero High

SO2[ppb] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Span



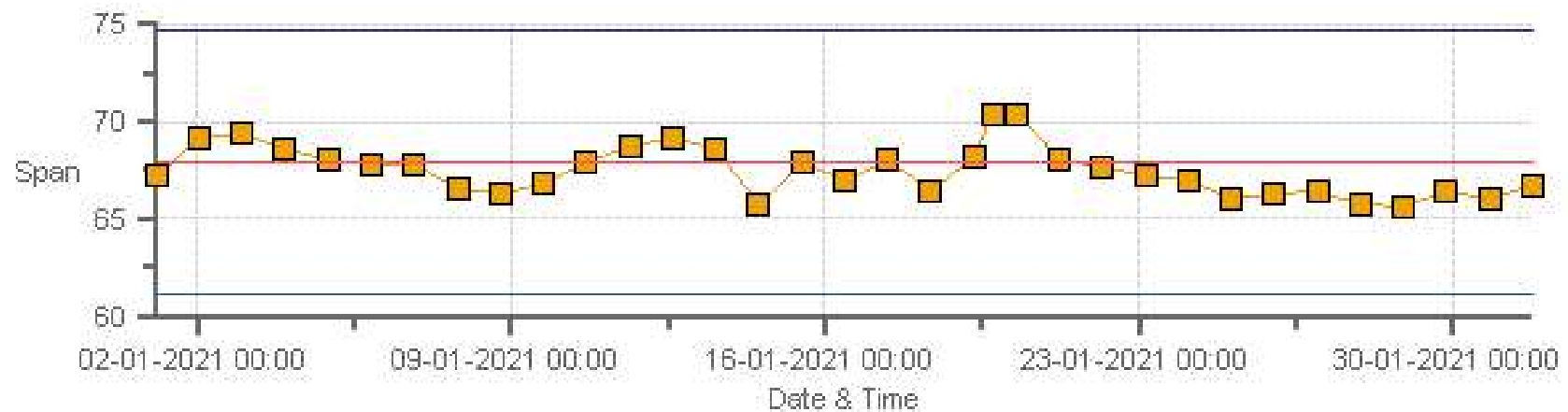
Span SpanRef Span Low Span High

TRS[ppb] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Zero



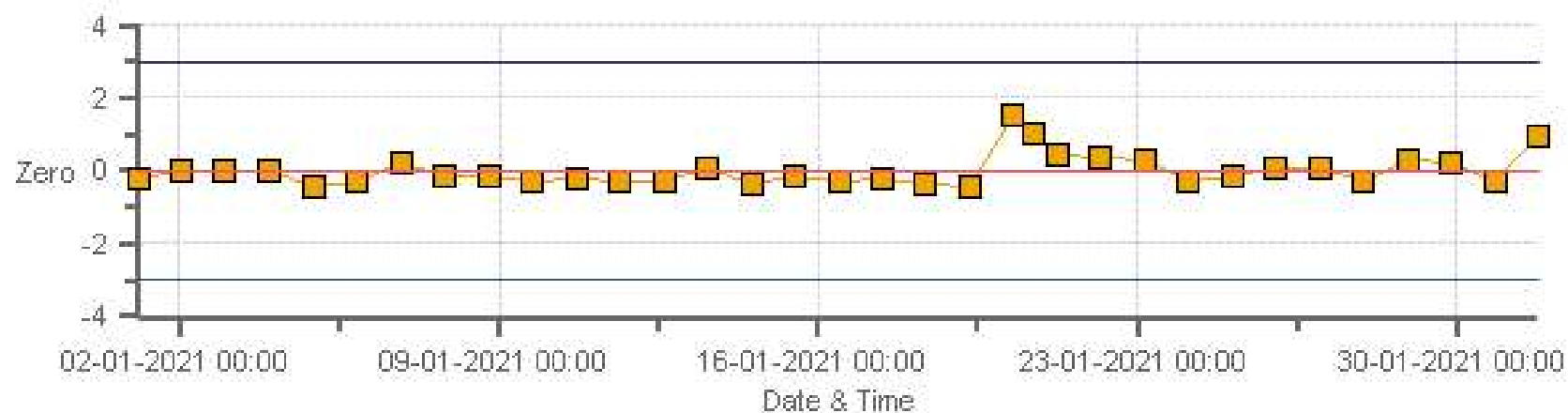
Zero Zero Ref Zero Low Zero High

TRS[ppb] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Span



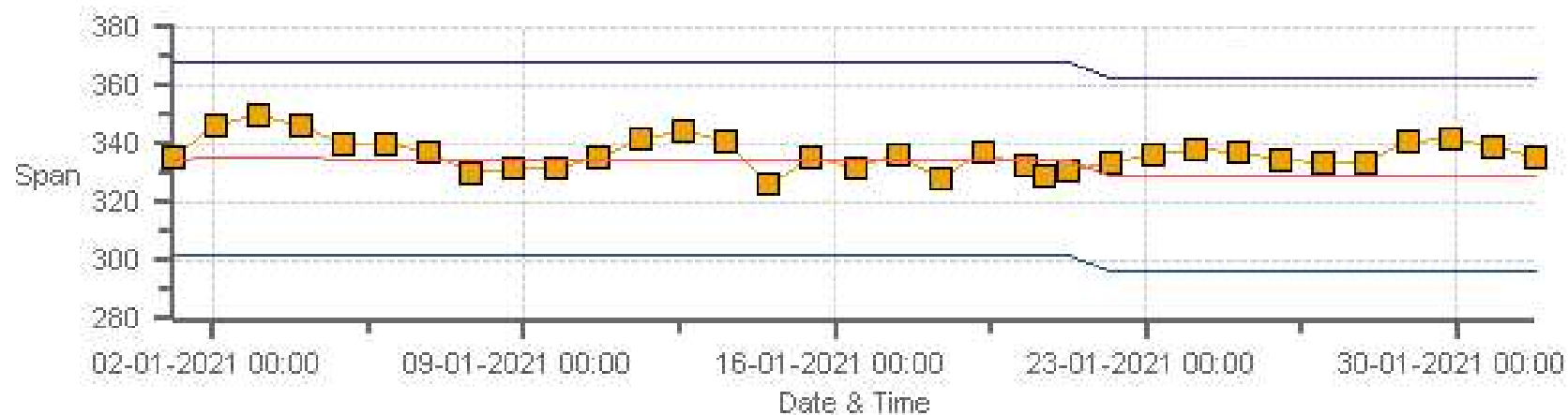
Span Span Ref Span Low Span High

NOX[ppb] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Zero



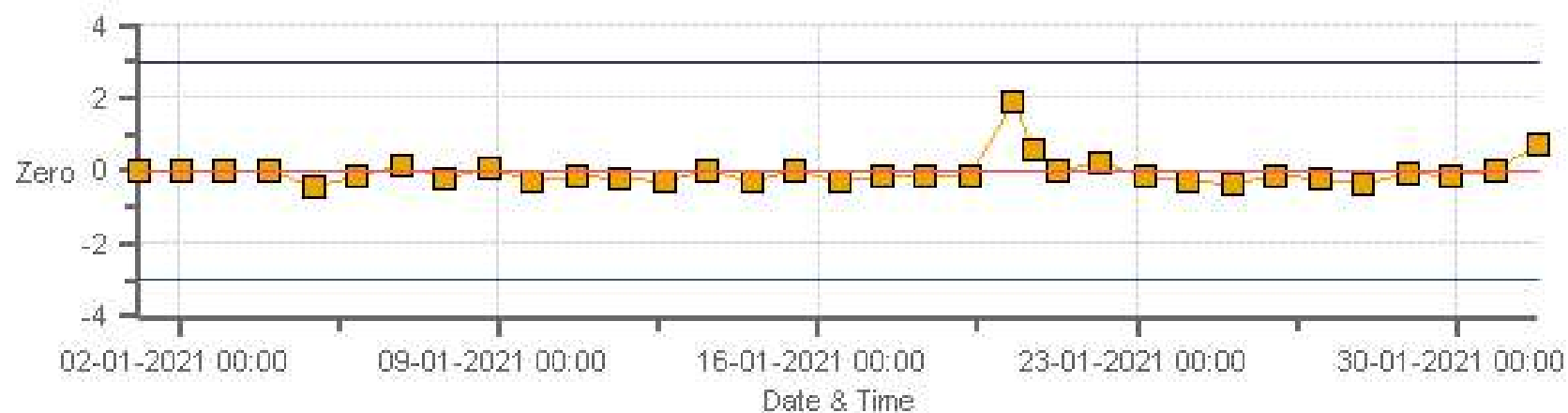
Zero Zero Ref Zero Low Zero High

NOX[ppb] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Span



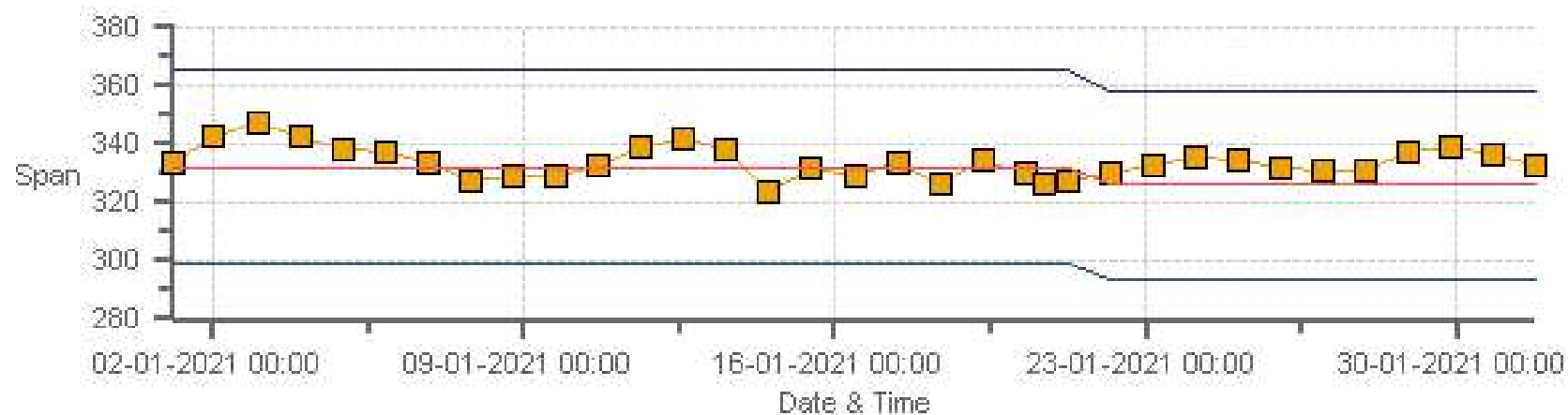
Span SpanRef Span Low Span High

NO2[ppb] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Zero



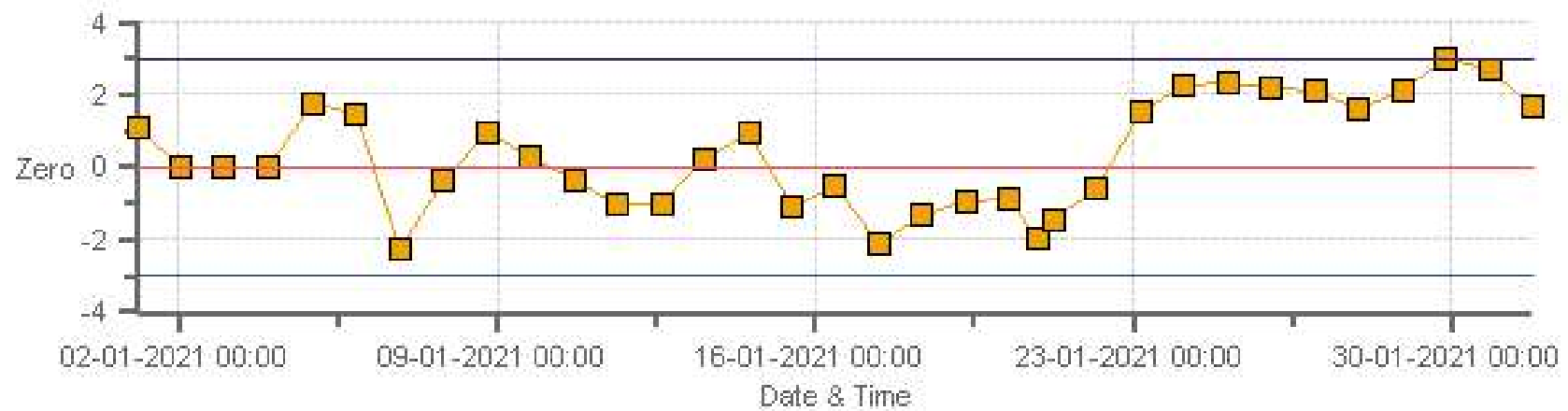
Zero Zero Ref Zero Low Zero High

NO2[ppb] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Span



Span SpanRef Span Low Span High

03[ppb] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Zero



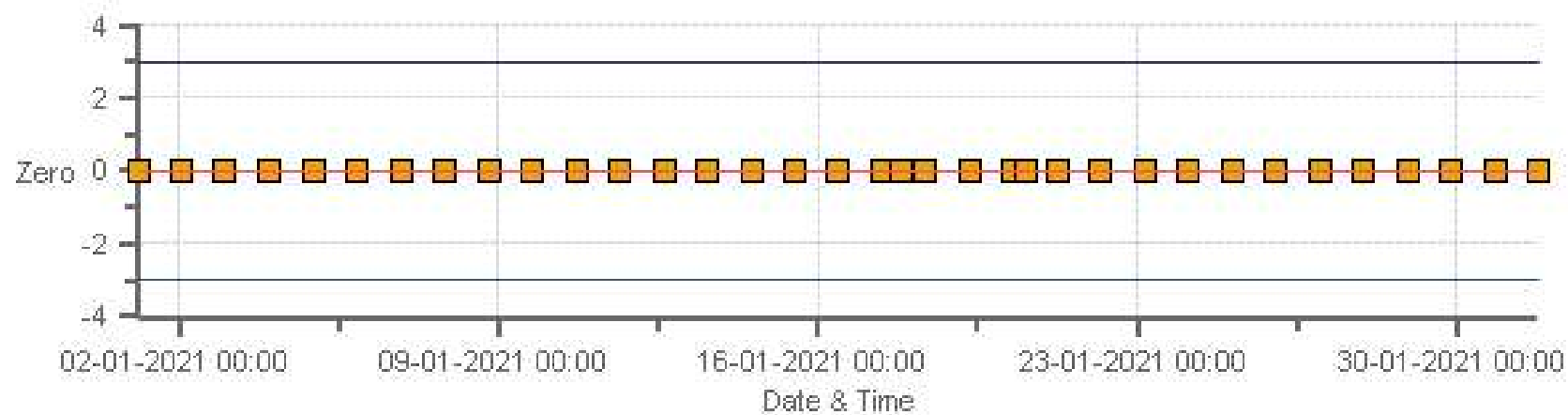
Zero Zero Ref Zero Low Zero High

03[ppb] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Span



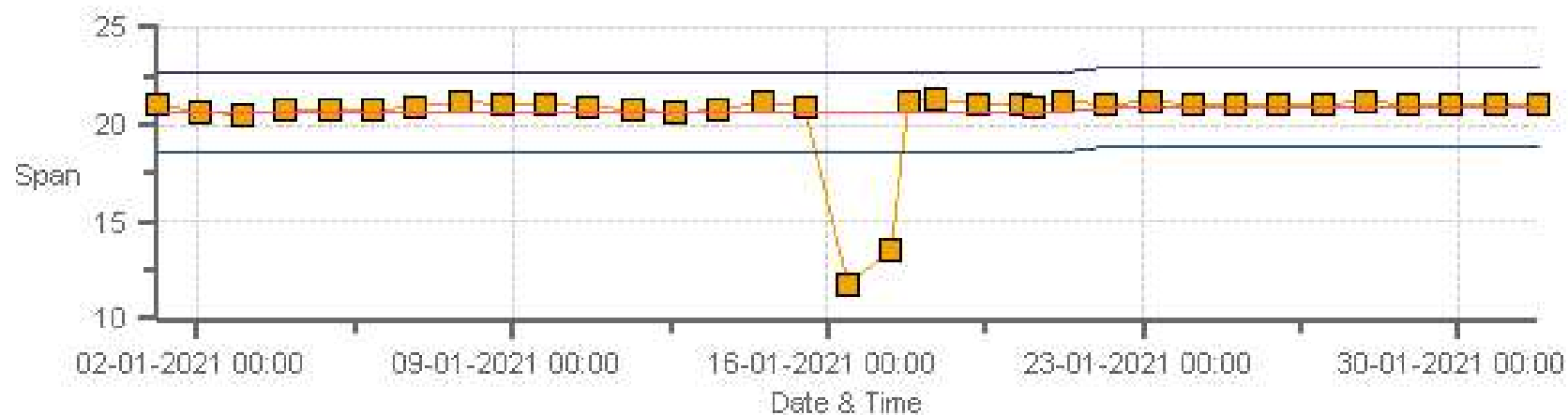
Span SpanRef Span Low Span High

THC55[ppm] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Zero



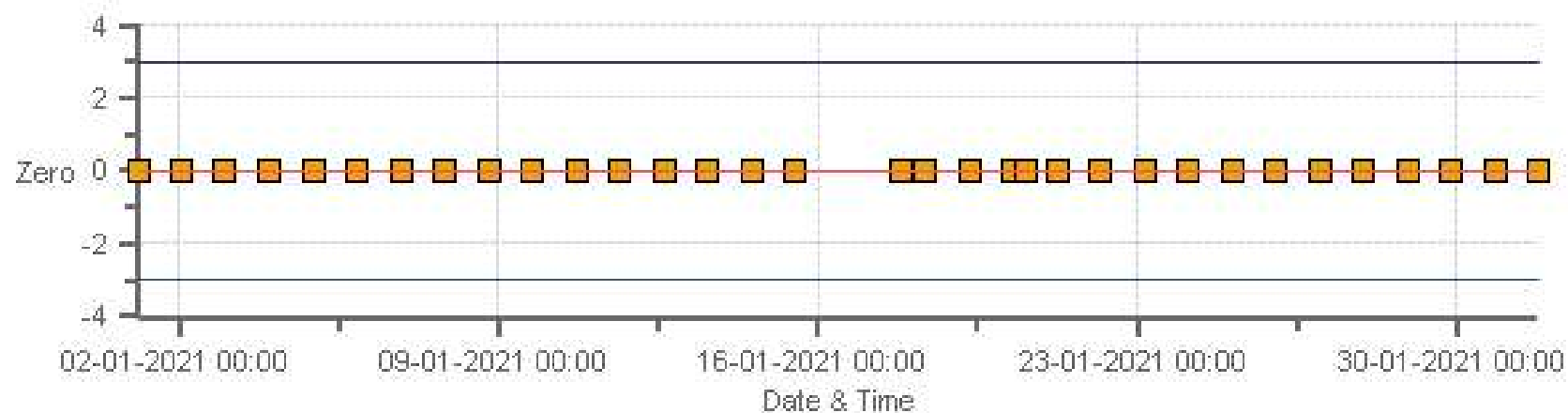
Zero Zero Ref Zero Low Zero High

THC55[ppm] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

CH4[ppm] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Zero



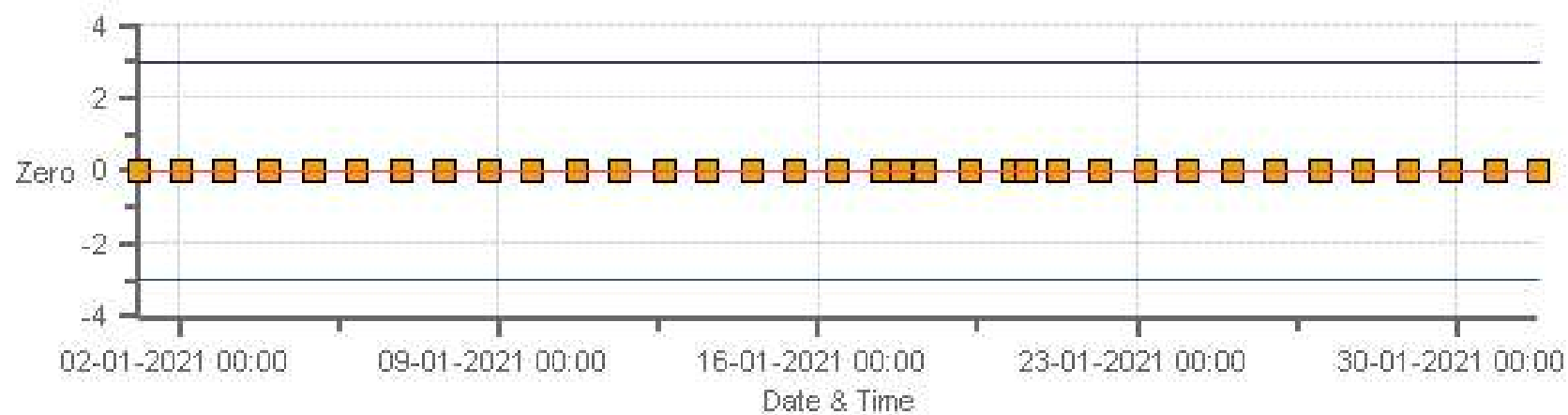
Zero Zero Ref Zero Low Zero High

CH4[ppm] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Span



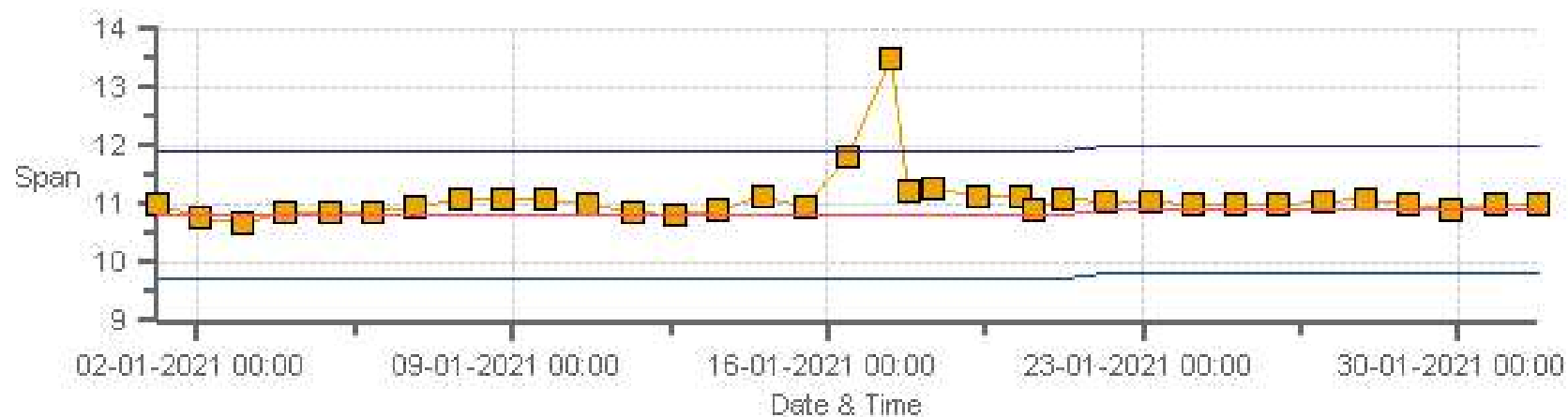
Span Span Ref Span Low Span High

NMHC[ppm] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: AQHI Cadotte Lake Monthly: 01-2021 Type: SpanAndZero - Span



Span SpanRef Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	19-Jan-2021	PREVIOUS CALIBRATION DATE:	16-Dec-2020
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.0
LOCATION:	Cadotte Lake	BAROMETRIC (mBar):	927
PURPOSE:	Routine	START TIME (MST):	11:51
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	17:03

ANALYZER:

MAKE/MODEL	Teledyne T100	RANGE	500 ppb
SERIAL #	722	FLOW (mL/min)	516
INITIAL		FINAL	
BKG/OFFSET	18.7	BKG/OFFSET	19.2
COEF/SLOPE	0.931	COEF/SLOPE	0.905
Expected (reference) Value	267.1	Expected (reference) Value	263.9

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	58100720	ID:	5004
MFC CALIBRATION DATE:	23-Nov-2020	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002493	HIGH ID	n/a
CONC (ppm):	49.40	EXPIRY DATE	n/a
CYLINDER (psi):	1800	LOW ID	n/a
EXPIRY DATE	13-Nov-2028	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:

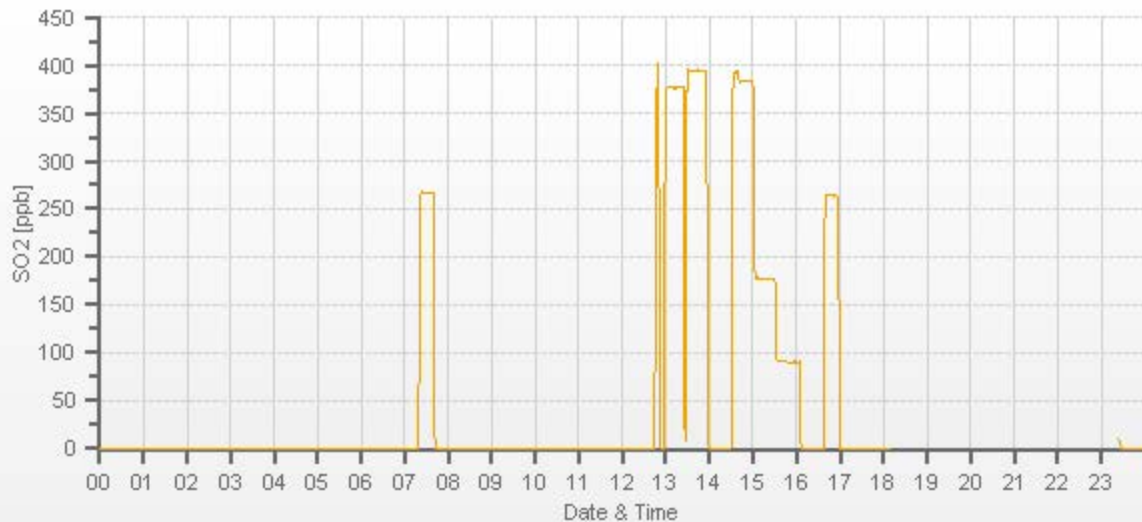
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
5002	38.80	5002	0.00	0.2	0	0.972	1.000
4964	38.80	5003	383.11	394.3	383.1	0.972	1.000
4983	17.70	5001	174.84	n/a	177.4	n/a	0.986
4993	8.80	5002	86.91	n/a	90.9	n/a	0.956

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.997	0.4%

COMMENTS:

SO2 is running in parallel with NOx. User errors 12:31-12:57 (as-found high). Restart point at 12:57. Repeat as found at 13:27 with 395ppb NO target (for GPT/O3). No effect on calibration validity. Sample filter changed.



TRS Analyzer Calibration by Dilution



DATE:	19-Jan-2021	PREVIOUS CALIBRATION DATE:	16-Dec-2020
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.0
LOCATION:	Cadotte Lake	BAROMETRIC (mBar):	927
PURPOSE:	Routine	START TIME (MST):	11:51
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	17:29

ANALYZER:

MAKE/MODEL	Thermo 43I-TLE	RANGE	100 ppb
SERIAL #	1152940011	FLOW (mL/min)	462
INITIAL		FINAL	
BKG/OFFSET	2.27	BKG/OFFSET	2.19
COEF/SLOPE	1.087	COEF/SLOPE	1.097
Expected (reference) Value	67.94	Expected (reference) Value	70.4

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	17100415	ID:	5004
MFC CALIBRATION DATE:	n/a	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0000644	HIGH ID	148944
CONC (ppm):	10.00	EXPIRY DATE	16-Nov-2021
CYLINDER (psi):	1150	LOW ID	152019
EXPIRY DATE	16-Jul-2022	EXPIRY DATE	16-Nov-2021

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:	12:32	SO2 Conc (ppb)	380
END TIME:	12:50	Analyzer Response (ppb)	0.0

CALIBRATION:

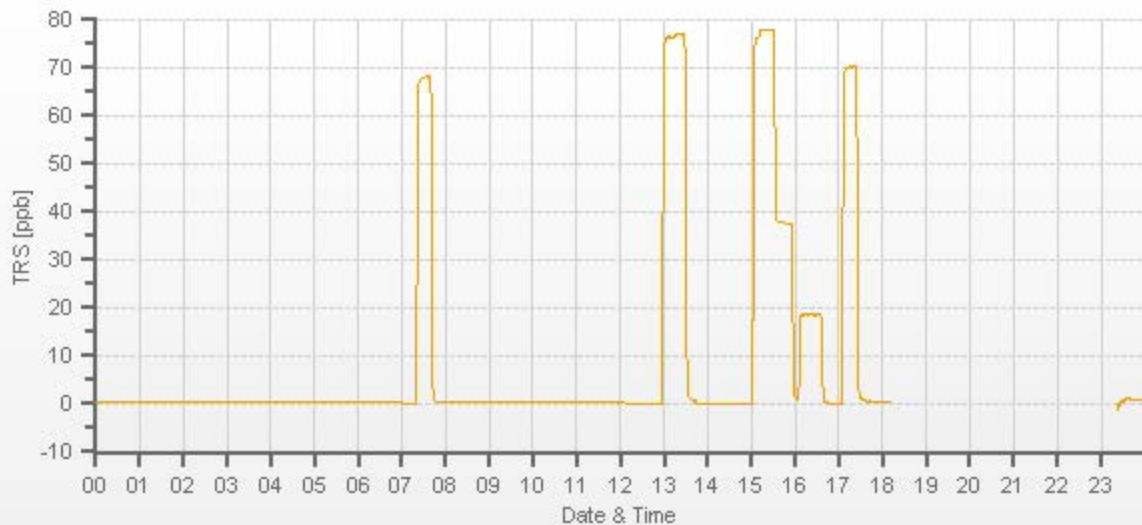
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
7536	58.65	7536	0.00	-0.08	0	1.012	1.000
7458	58.65	7517	78.02	77.02	78	1.012	1.000
7498	28.23	7527	37.51	n/a	37.54	n/a	0.999
7501	14.18	7515	18.87	n/a	18.68	n/a	1.010

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	-0.1%

COMMENTS:

Sample filter changed. Monthly calibration - no issues.



NOx Calibration by Dilution/Gas-Phase Titration



CALIBRATION:				ANALYZER:			
DATE:	20-Jan-2021	PREVIOUS CALIBRATION DATE:	16-Dec-2020	MAKE/MODEL:	Teledyne T200	PREVIOUS CF.	
CLIENT:	PRAMP	TEMPERATURE (°C):	22.7	SERIAL #:	837	NOx	1.000
LOCATION:	Cadotte Lake	BAROMETRIC (mBar):	935	FLOW (mL/min)	443	NO	1.000
PURPOSE:	Routine	START TIME (MST):	08:59	RANGE (ppb)	500	NO2	1.002
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	17:23	GPT FOR O3?		Yes	

CALIBRATION SYSTEM:				FLOWMETERS (if applicable):			
CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	EY0002493	HIGH ID:	148944
MODEL:	2010	MODEL:	M701	NO/NOx (PPM):	50.9 51.1	HIGH EXPIRY:	16-Nov-2021
ID:	17100415	ID:	5004	CYLINDER (psi):	1800	LOW ID:	152019
MFC CALIBRATION DATE:	n/a	OXIDIZER ID:	n/a	EXPIRY DATE	13-Nov-2028	LOW EXPIRY:	16-Nov-2021

CALIBRATION SETTINGS:							
INITIAL	NOx	NO	NO2	FINAL	NOx	NO	NO2
BKG/OFFSET:	0.7	0.1	n/a	BKG/OFFSET:	0.3	-0.6	n/a
SLOPE/COEF/CE:	1.087	1.081	1	SLOPE/COEF/CE:	1.064	1.062	0.9993

EXPECTED (REFERENCE) VALUE:							
INITIAL	NOx	NO	NO2	FINAL	NOx	NO	NO2
	334.9	2.7	332.2		329.5	3.6	326.0

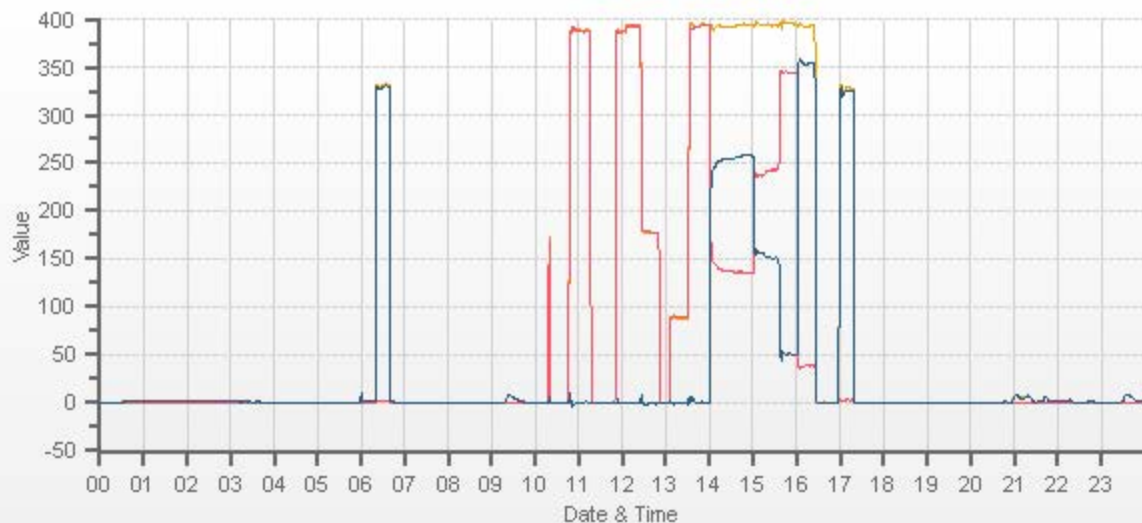
CALIBRATION PARAMETERS:				
POINT	NO TARGET (PPB)	NO2 TARGET (PPB)	NO2 RANGE	O3 POINT
HIGH	395	250	240-275	n/a
MID	180	154	150-157	Mid
LOW	90	54	50-58	Low
EXTRA 1	n/a	340	300-370	High

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
5042	X	5042	0.0	0.0	0.0	-0.7	0.0	0.7	0.0	0.0	0.0	X	X	X	X	X	X
4981	38.69	5019	392.4	393.9	1.5	387.8	390.5	2.7	392.4	394.0	1.6	1.010	1.009	X	1.000	1.000	X
5011	17.63	5029	178.4	179.1	0.7	n/a	n/a	n/a	178.3	178.2	-0.1	n/a	n/a	X	1.001	1.005	X
5015	8.81	5024	89.2	89.6	0.4	n/a	n/a	n/a	88.9	89.4	0.4	n/a	n/a	X	1.004	1.002	X

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	38.69	5019.2	0	393.3	394.6	1.3				
AS-FOUND HIGH	38.69	5019.2	250	137.0	393.3	256.3	256.3	255	1.005	99.49%
ADJUSTED HIGH	38.69	5019.2	250	135.4	394.2	258.8	257.9	257.5	1.002	99.84%
MID	38.69	5019.2	147	242.3	394.5	152.2	151	150.9	1.001	99.93%
LOW	38.69	5019.2	49	344.1	395.5	51.4	49.2	50.1	0.982	101.83%
NO2 COEF/CONVERTER EFFICIENCY ADJUSTED									AVERAGE:	100.54%

LINEAR REGRESSION ANALYSIS:				COMMENTS:
	CORRELATION	SLOPE	INTERCEPT	
NO	1.000	1.000	-0.03%	
NOx	1.000	1.000	-0.06%	
NO2	1.000	0.994	0.22%	

Operator error - 09:00-10:15. Restarted as found zero at 10:18.
Extra O3 SETPOINT = 340; NO DROP/O3 = 354.5



CAL-PRAMP-202101-01651

Ozone Calibration by Direct GPT



DATE:	20-Jan-2021	PREVIOUS CALIBRATION DATE:	16-Dec-2020
PARAMETER:	O3	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.2
LOCATION:	Cadotte Lake	BAROMETRIC (mBar):	944
PURPOSE:	Routine	START TIME (MST):	16:46
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	21:00

ANALYZER:

MAKE/MODEL	Teledyne T400	RANGE	500 ppb
SERIAL #	824	FLOW (mL/min)	755
INITIAL		FINAL	
BKG/OFFSET	-0.9	BKG/OFFSET	-0.5
COEF/SLOPE	1.04	COEF/SLOPE	1.039
Expected (reference) Value	323.1	Expected (reference) Value	TBD

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	17100415	ID:	5004
MFC CALIBRATION DATE:	n/a	OXIDIZER ID:	n/a
CALIBRATION METHOD:		Direct GPT	
GPT DATE:	20-Jan-2021	GPT END TIME:	16:26

CALIBRATION PARAMETERS:

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

CALIBRATION:

FLOW RATES			CONCENTRATION (ppb)			CORRECTION FACTOR	
(mL/min)			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
5019	5019	5019	0.0	0.1	0.0	0.992	1.000
5019	5019	5019	354.5	357.5	354.5	0.992	1.000
5019	5019	5019	151.0	n/a	154.2	n/a	0.979
5019	5019	5019	49.2	n/a	51.4	n/a	0.957

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.998	0.3%

COMMENTS:

Operator error - Stopped As-found High at 17:30, (incorrect setting on calibrator). Restart at 17:35.



Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	20-Jan-2021	PREVIOUS CALIBRATION DATE:	16-Dec-2020	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	21.9		Thermo 55i	1191032505	1196.5
LOCATION:	Cadotte Lake	BAROMETRIC (mBar):	935	PARAMETER:	CH4	NMHC	THC
PURPOSE:	Routine	START TIME (MST):	09:21	RANGE (ppm):	20	20	40
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:50	PREVIOUS CF:	0.996	1.002	0.999

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	LL84567	HIGH ID:	148944
MODEL:	2010	MODEL:	M701	CH ₄ /C ₃ H ₈ (ppm):	591.0 200.0	HIGH EXPIRY:	16-Nov-2021
ID:	58100720	ID:	5004	CYLINDER (psi):	1250	LOW ID:	152019
MFC CALIBRATION DATE:	23-Nov-2020	OXIDIZER ID:	Internal	EXPIRY DATE:	17-Jul-2027	LOW EXPIRY:	16-Nov-2021

CALIBRATION PARAMETERS:

POINT (CH ₄ /NMHC)	HIGH	MID	LOW	CH ₄ EQUIVILANCE	
TARGET	14	7	3.5	C ₃ H ₈ as CH ₄	550.0
RANGE	12 - 16	6 - 8	2 - 4	THC as CH ₄	1141.0

EXPECTED (REFERENCE) VALUE:

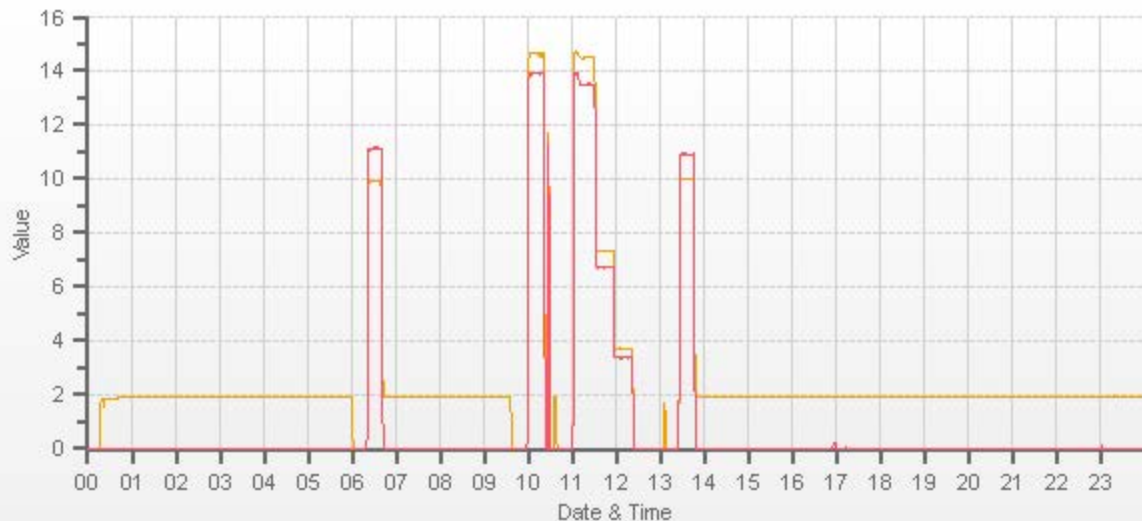
INITIAL	CH ₄	NMHC	THC	FINAL	CH ₄	NMHC	THC
	9.83	10.81	20.64		10.00	10.91	20.91

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC
3103	X	3103	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	X	X	X	X	X	X
3027	76.10	3103	14.49	13.49	27.98	14.58	13.90	28.49	14.49	13.49	27.98	0.994	0.970	0.982	1.000	1.000	1.000
3066	38.00	3104	7.24	6.73	13.97	n/a	n/a	n/a	7.33	6.74	14.07	n/a	n/a	n/a	0.987	0.999	0.993
3084	19.00	3103	3.62	3.37	6.99	n/a	n/a	n/a	3.73	3.37	7.11	n/a	n/a	n/a	0.970	0.999	0.983

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT	Comments:			
CH ₄	1.000	0.998	0.3%	Sample filter changed. Monthly calibration - no issues.			
NMHC	1.000	1.000	0.0%				
THC	1.000	0.999	0.2%				
				Use Zero Chrom?		Yes	



CAL-PRAMP-202101-01651

Page 21 of 24
CH4 [ppm] NMHC [ppm]



Teledyne T640 Audit/Calibration

Date/Previous Audit Date:	January 19, 2021	December 16, 2020	Weather Conditions:	Cloudy/Overcast	
Company:	PRAMP		Start Time (mst):	15:46	
Station:	Cadotte Lake		End Time (mst):	16:41	
Parameter:	PM 2.5	Performed By/Reviewer:	Ferdinand Roy	Chris Wesson	
Instrument Data:					
Make/Model:	Teledyne T640		Serial Number:	318	
Owner:	PRAMP		Alarms (detail in comments):	No	
Reference Standards/I.D./Expiry Date:					
Flow Standard: Maxxam ID #3 expires June 11, 2021			Temperature: F.S. 160348895 expires Sep 4, 2022		
Digital Manometer: Dwyer 475 Mark III id# 2 expires Feb 11, 2021			Pressure: F.S. 10528 expires Feb 26, 2021		
DIAGNOSTICS:					
Ambient Pressure (mmHg)	692.0	Ambient Temp (°C)	7.4	ASC Heater Duty (%)	0.0
Box Temp (°C)	26.7	Current PMT HV (V)	1541	LED Temp (°C)	34.64
P3 Value	46	PMT Setting (V)	1547	Pump PWM (%)	39
Sample Flow (L/min)	5.02	Sample RH (%RH)	16.0	Sample Temp (°C)	24.6
Item:	As-found		As-left		Tolerance
	Reference	T640x	Reference	T640x	
Zero Test (Leak Check)	PM10	0.0	PM10	0.0	0.0 to 0.2
	PM2.5	0.0	PM2.5	0.0	
Ambient Pressure (mmHg)	692.3	691.7	691.5568	691.7	+/- 10 mm Hg
Ambient Temperature (°C)	5.60	6.9	n/a		+/- 2°C
Sample Flow (L/min)	5.00	5	4.98	5.01	+/- 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:	January 19, 2021		
Technician:	Ferdinand Roy		
Station:	PRAMP Cadotte Lake		
Unit:	Make:	Model:	Serial #:
Temperature Sensor:	Vaisala	HMP155	N2910506
Relative Humidity Sensor:	Vaisala	HMP155	N2910506
Anemometer:	RM Young	05305AQ	174801
AMBIENT TEMPERATURE SENSOR CHECK			
Previous check date:	December 16, 2020		
Parameter:	Temperature @ 2 metres		
Reference Thermometer ID:	F.S. 160348895 expires Sep 4, 2022		
Reference Temperature (°C):	5.2		
Station - Ambient Temperature (°C):	5.5		
Temperature Difference (°C):	-0.3		
RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK			
Previous check date:	December 16, 2020		
Reference Hygrometer ID:	F.S. 160348895 expires Sep 4, 2022		
Reference Hygrometer % RH- Reading:	52.40		
Station Hygrometer % RH- Reading:	52.50		
RH Tolerance +/- 15% of difference:	44.54 - 60.26	-0.2%	
ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK			
WIND SPEED		WIND DIRECTION	
Previous check date:	December 16, 2020	Previous check date:	December 16, 2020
Wind Speed Observed (kph):	10~20	Wind Direction Observed:	SW
Wind speed on Data Logger (kph):	11.2	Wind Direction on Data Logger:	SW
		Wind Direction Pass/Fail?:	Pass
Comments			
No issues. Temp/RH @12:28; WS/Wd @ 14:23			



Meteorological Sensor Audit/Calibration

Location Information

Company: PRAMP
Audit Location: Cadotte Lake
Audit Date: June 18, 2020
Calibration Purpose: installation

Performed By: Chris Wesson
Reviewed By: Ferdinand Roy
Start/End Time (mst): 14:28 / 15:15
Weather Conditions: Mix of sun and 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 #:	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 18802 id# CA03309 expires November 20, 2020

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	353	0.1	2.0	1.1
30	330	28	329	2.0	1.0	1.5
60	300	58	299	2.0	1.0	1.5
90	270	88	268	2.0	2.0	2.0
120	240	119	239	1.0	1.0	1.0
150	210	149	209	1.0	1.0	1.0
180	180	179	179	1.0	1.0	1.0
210	150	209	149	1.0	1.0	1.0
240	120	239	119	1.0	1.0	1.0
270	90	270	89	0.0	1.0	0.5
300	60	299	58	1.0	2.0	1.5
330	30	329	29	1.0	1.0	1.0
355	0	354	1	1.0	0.6	0.8
The audit meets AMD requirements.				Average Absolute Degrees Difference=		1.1

Comments:

Declination = 15deg East



Peace River Area Monitoring Program

JANUARY 2021

Ambient Air Monitoring

Certified Laboratory Analysis Report

LAB-PRAMP-202101

Operation and Maintenance:

Bureau Veritas Canada

Data Validation and Report:

Peace River Area Monitoring Program

December 20, 2020



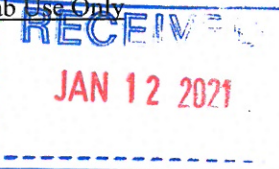
Highway 16A & 75 Street
PO Bag 4000
Vegreville, AB, T9C 1T4
Environmental Analytical Services
Phone: (780) 632-8403 Fax: (780) 632-8620

EAS CANISTER
Sample ID 21010044-001 Priority Normal



Customer ID: PRAMP
Cust Samp ID: PRAMP_986-2021/01/09

Date Received- Lab Use Only



Client Contact Details:

Contact: Karla Ressor, Michael Bisaga/ Lily Lin
Company: PRAMP Airshed
PO#: ☐ 842 Station ☐ 986 Station ☐ Reno Station
Address: ☐ 842 (Lat. 56.27406N, Long. 116.98129W)
☒ 986 (Lat. 56.36988N, Long. 116.925636W)
☐ Reno (Lat. 55.86936N, Long. 117.05739W)
Telephone: 403-8072995, 780-2667068/587-2252248
Email: karla@prampairshed.ca, pramptech@prampairshed.ca

RUSH (Surcharge) ☐

Invoice Instructions:

Send to: officemanager@prampairshed.ca, karla@prampairshed.ca,
pramptech@prampairshed.ca Attention: PRAMP Office Manager
Any correspondence related to canister analysis, send the information to karla@prampairshed.ca
and pramptech@prampairshed.ca

InnoTech Contact: Graham Knox Phone: 780-6328403 Cell: 780-6321519

Email: Graham.Knox@innotechalberta.ca

Sample ID (PRAMP_station_yyyymmdd)	Canister Number	Sample Description	Date/Time Sampled		Analysis Requested
			From/To		
			Date (dd/mm/yy)	Time (24 Hr) (MST)	
PRAMP_842- _____ (Sample date: yyyymmdd)	28886 →	☐ Methane Trigger	08/01/21	11:35am	* AIR C1C4, AIR VOC, AIR RSC
PRAMP_986- 2021/01/09 (Sample date: yyyymmdd)		☒ NMHC Trigger			* Unknown to be reported
PRAMP_Reno- _____ (Sample date: yyyymmdd)	28969 →	☐ Methane Blank			* Carbon Isotopic Analysis (if sample is collected from Methane trigger)
		☒ NMHC Blank			
		☐ Expired Canister – No further analysis is required.			

Sample Collection:

Collect By Dwayne Stepaniak (Name) of NA

(Company) on _____

Jan 9/2021 @ 11:30am
(Date/Time (MST)).

 Canister ID: <u>28886</u> This cleaned canister meets or exceeds TO-15 Method Specifications Proofed by: <u>DOS4</u> on: <u>NOV 13 2020</u> Evacuated: <u>NOV 18 2020</u> Recertified: <u>DEC 09 2020</u> (Use within: 3 months from evacuation or recertification date) Laboratory Contact Number: 780-632-8403	Sample ID: <u>PRAMP-986-2021-01-08</u>	
	Sampled By: <u>Dwayne Stepanuk</u>	
	Starting Vacuum: <u>-26.8</u> "Hg	End Vacuum: <u>-2</u> "Hg/psig

 Canister ID: <u>28968</u> This cleaned canister meets or exceeds TO-15 Method Specifications Proofed by: <u>DOS4</u> on: <u>NOV 12 2020</u> Evacuated: <u>NOV 16 2020</u> Recertified: <u>DEC 09 2020</u> (Use within: 3 months from evacuation or recertification date) Laboratory Contact Number: 780-632-8403	Sample ID: <u>PRAMP-986-NMHC-Blank</u>	
	Sampled By: <u>Dwayne Stepanuk</u>	
	Starting Vacuum: <u>-27.0</u> "Hg	End Vacuum: <u>-27.0</u> "Hg/psig

Sample ID 21010044-001 Priority Normal



Customer ID: PRAMP

Cust Samp ID: PRAMP_986-2021/01/09

ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

Page 1 of 18

RESULTS: Office Manager
Peace River Area Monitoring Program Committee

INVOICE: Karla Reesor 403 807 2995

CLIENT SAMPLE ID

PRAMP_986-2021/01/09

Matrix

Ambient Air

CANISTER ID: 28886

PRIORITY: Normal

DESCRIPTION: NMHC Trigger

DATE SAMPLED: 08-Jan-21 11:35

DATE RECEIVED: 12-Jan-21

REPORT CREATED: 15-Jan-21

REPORT NUMBER: 21010044

VERSION: Version 01

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
21010044-001	1-Butene	K, T, U	< 0.14 ppmv	0.14	NA-025	13-Jan-21
21010044-001	Acetylene	K, T, U	< 0.11 ppmv	0.11	NA-025	13-Jan-21
21010044-001	n-Butane	K, T, U	< 0.3 ppmv	0.3	NA-025	13-Jan-21
21010044-001	cis-2-Butene	K, T, U	< 0.06 ppmv	0.06	NA-025	13-Jan-21
21010044-001	Ethane	K, T, U	< 0.1 ppmv	0.1	NA-025	13-Jan-21
21010044-001	Ethylacetylene	K, T, U	< 0.08 ppmv	0.08	NA-025	13-Jan-21
21010044-001	Ethylene	K, T, U	< 0.10 ppmv	0.10	NA-025	13-Jan-21
21010044-001	Isobutane	K, T, U	< 0.1 ppmv	0.1	NA-025	13-Jan-21
21010044-001	Isobutylene	K, T, U	< 0.1 ppmv	0.1	NA-025	13-Jan-21
21010044-001	Methane		2.0 ppmv	0.1	NA-025	13-Jan-21
21010044-001	n-Propane	K, T, U	< 0.10 ppmv	0.10	NA-025	13-Jan-21
21010044-001	Propylene	K, T, U	< 0.1 ppmv	0.1	NA-025	13-Jan-21
21010044-001	Propyne	K, T, U	< 0.1 ppmv	0.1	NA-025	13-Jan-21
21010044-001	trans-2-Butene	K, T, U	< 0.12 ppmv	0.12	NA-025	13-Jan-21
21010044-001	2,5-Dimethylthiophene	K, T, U	< 0.4 ppbv	0.4	NA-024	12-Jan-21
21010044-001	2-Ethylthiophene	K, T, U	< 0.3 ppbv	0.3	NA-024	12-Jan-21
21010044-001	2-Methylthiophene	K, T, U	< 0.3 ppbv	0.3	NA-024	12-Jan-21
21010044-001	3-Methylthiophene	K, T, U	< 0.4 ppbv	0.4	NA-024	12-Jan-21

Report certified by: Rebecca Holgate, Account Coordinator

On behalf of: PJ Pretorius, Manager, Analysis and Testing Services

Date: January 15, 2021

LAB-PRAMP-202101

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID		CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_986-2021/01/09		28886	Ambient Air	08-Jan-21	11:35
DESCRIPTION:	NMHC Trigger				
REPORT NUMBER:	21010044	REPORT CREATED:	15-Jan-21	VERSION:	Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
21010044-001	Butyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	12-Jan-21
21010044-001	Carbon disulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	12-Jan-21
21010044-001	Carbonyl sulphide		1.2	ppbv	0.4	NA-024	12-Jan-21
21010044-001	Dimethyl disulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	12-Jan-21
21010044-001	Dimethyl sulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	12-Jan-21
21010044-001	Ethyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	12-Jan-21
21010044-001	Ethyl sulphide	K, T, U	< 0.4	ppbv	0.4	NA-024	12-Jan-21
21010044-001	Hydrogen sulphide		1.5	ppbv	0.4	NA-024	12-Jan-21
21010044-001	Isobutyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	12-Jan-21
21010044-001	Isopropyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	12-Jan-21
21010044-001	Methyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	12-Jan-21
21010044-001	Pentyl mercaptan	K, T, U	< 0.6	ppbv	0.6	NA-024	12-Jan-21
21010044-001	Propyl mercaptan	K, T, U	< 0.6	ppbv	0.6	NA-024	12-Jan-21
21010044-001	tert-Butyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	12-Jan-21
21010044-001	Thiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	12-Jan-21
21010044-001	1,1,1-Trichloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	1,1,2,2-Tetrachloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	1,1,2-Trichloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	1,1-Dichloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	1,1-Dichloroethylene	K, T, U	< 0.06	ppbv	0.06	AC-058	14-Jan-21
21010044-001	1,2,3-Trimethylbenzene	K, T, U	< 0.07	ppbv	0.07	AC-058	14-Jan-21
21010044-001	1,2,4-Trichlorobenzene	K, T, U	< 1.1	ppbv	1.1	AC-058	14-Jan-21
21010044-001	1,2,4-Trimethylbenzene	K, T, U	< 0.07	ppbv	0.07	AC-058	14-Jan-21
21010044-001	1,2-Dibromoethane	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	1,2-Dichlorobenzene	K, T, U	< 0.04	ppbv	0.04	AC-058	14-Jan-21

Report certified by: Rebecca Holgate, Account Coordinator

On behalf of: PJ Pretorius, Manager, Analysis and Testing Services

Date: January 15, 2021

LAB-PRAMP-202101

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID		CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_986-2021/01/09		28886	Ambient Air	08-Jan-21	11:35
DESCRIPTION:	NMHC Trigger				
REPORT NUMBER:	21010044	REPORT CREATED:	15-Jan-21	VERSION:	Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
21010044-001	1,2-Dichloroethane	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	1,2-Dichloropropane	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	1,3,5-Trimethylbenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	1,3-Butadiene	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	1,3-Dichlorobenzene	K, T, U	< 0.4	ppbv	0.4	AC-058	14-Jan-21
21010044-001	1,4-Dichlorobenzene	K, T, U	< 0.6	ppbv	0.6	AC-058	14-Jan-21
21010044-001	1,4-Dioxane	K, T, U	< 0.6	ppbv	0.6	AC-058	14-Jan-21
21010044-001	1-Butene/Isobutylene		1.74	ppbv	0.03	AC-058	14-Jan-21
21010044-001	1-Hexene/2-Methyl-1-pentene	I	0.26	ppbv	0.03	AC-058	14-Jan-21
21010044-001	1-Pentene		0.75	ppbv	0.01	AC-058	14-Jan-21
21010044-001	2,2,4-Trimethylpentane	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	2,2-Dimethylbutane		0.31	ppbv	0.01	AC-058	14-Jan-21
21010044-001	2,3,4-Trimethylpentane	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	2,3-Dimethylbutane	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	2,3-Dimethylpentane	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	2,4-Dimethylpentane	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	2-Methylheptane	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	2-Methylhexane	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	2-Methylpentane		0.82	ppbv	0.01	AC-058	14-Jan-21
21010044-001	3-Methylheptane	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	3-Methylhexane		0.24	ppbv	0.03	AC-058	14-Jan-21
21010044-001	3-Methylpentane		0.60	ppbv	0.01	AC-058	14-Jan-21
21010044-001	Acetone		5.0	ppbv	0.6	AC-058	14-Jan-21
21010044-001	Acrolein		0.9	ppbv	0.4	AC-058	14-Jan-21
21010044-001	Benzene		0.42	ppbv	0.01	AC-058	14-Jan-21

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CLIENT SAMPLE ID		CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_986-2021/01/09		28886	Ambient Air	08-Jan-21	11:35
DESCRIPTION:	NMHC Trigger				
REPORT NUMBER:	21010044	REPORT CREATED:	15-Jan-21	VERSION:	Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
21010044-001	Benzyl chloride	K, T, U	< 0.6	ppbv	0.6	AC-058	14-Jan-21
21010044-001	Bromodichloromethane	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	Bromoform	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	Bromomethane	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	Carbon disulfide	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	Carbon tetrachloride	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	Chlorobenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	Chloroethane	I	0.30	ppbv	0.03	AC-058	14-Jan-21
21010044-001	Chloroform	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	Chloromethane		1.52	ppbv	0.03	AC-058	14-Jan-21
21010044-001	cis-1,2-Dichloroethene	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	cis-1,3-Dichloropropene	K, T, U	< 0.06	ppbv	0.06	AC-058	14-Jan-21
21010044-001	cis-2-Butene	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	cis-2-Pentene	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	Cyclohexane	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	Cyclopentane	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	Dibromochloromethane	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	Ethanol		397	ppbv	6.2	AC-058	14-Jan-21
21010044-001	Ethyl acetate	K, T, U	< 0.6	ppbv	0.6	AC-058	14-Jan-21
21010044-001	Ethylbenzene	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	Freon-11		0.47	ppbv	0.03	AC-058	14-Jan-21
21010044-001	Freon-113	I	0.21	ppbv	0.01	AC-058	14-Jan-21
21010044-001	Freon-114	I	0.07	ppbv	0.03	AC-058	14-Jan-21
21010044-001	Freon-12		0.92	ppbv	0.03	AC-058	14-Jan-21
21010044-001	Hexachloro-1,3-butadiene	K, T, U	< 0.69	ppbv	0.69	AC-058	14-Jan-21

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PRAMP_986-2021/01/09		28886	Ambient Air	08-Jan-21	11:35
DESCRIPTION:	NMHC Trigger				
REPORT NUMBER:	21010044	REPORT CREATED:	15-Jan-21	VERSION:	Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
21010044-001	Isobutane		3.04	ppbv	0.03	AC-058	14-Jan-21
21010044-001	Isopentane		7.68	ppbv	0.04	AC-058	14-Jan-21
21010044-001	Isoprene	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	Isopropyl alcohol		2.3	ppbv	0.6	AC-058	14-Jan-21
21010044-001	Isopropylbenzene	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	m,p-Xylene	K, T, U	< 0.04	ppbv	0.04	AC-058	14-Jan-21
21010044-001	m-Diethylbenzene	K, T, U	< 0.06	ppbv	0.06	AC-058	14-Jan-21
21010044-001	m-Ethyltoluene	K, T, U	< 0.11	ppbv	0.11	AC-058	14-Jan-21
21010044-001	Methyl butyl ketone	K, T, U	< 0.69	ppbv	0.69	AC-058	14-Jan-21
21010044-001	Methyl ethyl ketone	K, T, U	< 0.4	ppbv	0.4	AC-058	14-Jan-21
21010044-001	Methyl isobutyl ketone	K, T, U	< 0.6	ppbv	0.6	AC-058	14-Jan-21
21010044-001	Methyl methacrylate	K, T, U	< 0.10	ppbv	0.10	AC-058	14-Jan-21
21010044-001	Methyl tert butyl ether	K, T, U	< 0.04	ppbv	0.04	AC-058	14-Jan-21
21010044-001	Methylcyclohexane		0.23	ppbv	0.01	AC-058	14-Jan-21
21010044-001	Methylcyclopentane	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	Methylene chloride	K, T, U	< 0.4	ppbv	0.4	AC-058	14-Jan-21
21010044-001	n-Butane		2.67	ppbv	0.04	AC-058	14-Jan-21
21010044-001	n-Decane	K, T, U	< 0.08	ppbv	0.08	AC-058	14-Jan-21
21010044-001	n-Dodecane	K, T, U	< 0.6	ppbv	0.6	AC-058	14-Jan-21
21010044-001	n-Heptane		0.36	ppbv	0.01	AC-058	14-Jan-21
21010044-001	n-Hexane		1.36	ppbv	0.01	AC-058	14-Jan-21
21010044-001	n-Octane		0.22	ppbv	0.03	AC-058	14-Jan-21
21010044-001	n-Pentane		7.3	ppbv	0.1	AC-058	14-Jan-21
21010044-001	n-Propylbenzene	K, T, U	< 0.07	ppbv	0.07	AC-058	14-Jan-21
21010044-001	n-Undecane	K, T, U	< 0.7	ppbv	0.7	AC-058	14-Jan-21

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CLIENT SAMPLE ID		CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_986-2021/01/09		28886	Ambient Air	08-Jan-21	11:35
DESCRIPTION:	NMHC Trigger				
REPORT NUMBER:	21010044	REPORT CREATED:	15-Jan-21	VERSION:	Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
21010044-001	Naphthalene	K, T, U	< 0.7	ppbv	0.7	AC-058	14-Jan-21
21010044-001	n-Nonane	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	o-Ethyltoluene	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	o-Xylene	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	p-Diethylbenzene	K, T, U	< 0.06	ppbv	0.06	AC-058	14-Jan-21
21010044-001	p-Ethyltoluene	K, T, U	< 0.10	ppbv	0.10	AC-058	14-Jan-21
21010044-001	Styrene	K, T, U	< 0.06	ppbv	0.06	AC-058	14-Jan-21
21010044-001	Tetrachloroethylene	K, T, U	< 0.06	ppbv	0.06	AC-058	14-Jan-21
21010044-001	Tetrahydrofuran	K, T, U	< 0.6	ppbv	0.6	AC-058	14-Jan-21
21010044-001	Toluene	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	trans-1,2-Dichloroethylene		0.56	ppbv	0.01	AC-058	14-Jan-21
21010044-001	trans-1,3-Dichloropropylene	K, T, U	< 0.06	ppbv	0.06	AC-058	14-Jan-21
21010044-001	trans-2-Butene	K, T, U	< 0.01	ppbv	0.01	AC-058	14-Jan-21
21010044-001	trans-2-Pentene	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21
21010044-001	Trichloroethylene	K, T, U	< 0.06	ppbv	0.06	AC-058	14-Jan-21
21010044-001	Vinyl acetate	K, T, U	< 0.6	ppbv	0.6	AC-058	14-Jan-21
21010044-001	Vinyl chloride	K, T, U	< 0.03	ppbv	0.03	AC-058	14-Jan-21

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LAB-PRAMP-202101

Inquiries: (780) 632 8455

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CLIENT SAMPLE ID		CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_986-NMHC_Blank		28968	Ambient Air	08-Jan-21	11:35
DESCRIPTION:	NMHC Blank				
REPORT NUMBER:	21010044	REPORT CREATED:	15-Jan-21	VERSION:	Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
21010044-002	1-Butene	K, T, U	< 0.10	ppmv	0.10	NA-025	13-Jan-21
21010044-002	Acetylene	K, T, U	< 0.08	ppmv	0.08	NA-025	13-Jan-21
21010044-002	n-Butane	K, T, U	< 0.2	ppmv	0.2	NA-025	13-Jan-21
21010044-002	cis-2-Butene	K, T, U	< 0.04	ppmv	0.04	NA-025	13-Jan-21
21010044-002	Ethane	K, T, U	< 0.1	ppmv	0.1	NA-025	13-Jan-21
21010044-002	Ethylacetylene	K, T, U	< 0.06	ppmv	0.06	NA-025	13-Jan-21
21010044-002	Ethylene	K, T, U	< 0.07	ppmv	0.07	NA-025	13-Jan-21
21010044-002	Isobutane	K, T, U	< 0.1	ppmv	0.1	NA-025	13-Jan-21
21010044-002	Isobutylene	K, T, U	< 0.1	ppmv	0.1	NA-025	13-Jan-21
21010044-002	Methane	K, T, U	< 0.1	ppmv	0.1	NA-025	13-Jan-21
21010044-002	n-Propane	K, T, U	< 0.07	ppmv	0.07	NA-025	13-Jan-21
21010044-002	Propylene	K, T, U	< 0.1	ppmv	0.1	NA-025	13-Jan-21
21010044-002	Propyne	K, T, U	< 0.1	ppmv	0.1	NA-025	13-Jan-21
21010044-002	trans-2-Butene	K, T, U	< 0.09	ppmv	0.09	NA-025	13-Jan-21
21010044-002	2,5-Dimethylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	12-Jan-21
21010044-002	2-Ethylthiophene	K, T, U	< 0.2	ppbv	0.2	NA-024	12-Jan-21
21010044-002	2-Methylthiophene	K, T, U	< 0.2	ppbv	0.2	NA-024	12-Jan-21
21010044-002	3-Methylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	12-Jan-21
21010044-002	Butyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	12-Jan-21
21010044-002	Carbon disulphide	K, T, U	< 0.2	ppbv	0.2	NA-024	12-Jan-21
21010044-002	Carbonyl sulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	12-Jan-21
21010044-002	Dimethyl disulphide	K, T, U	< 0.2	ppbv	0.2	NA-024	12-Jan-21
21010044-002	Dimethyl sulphide	K, T, U	< 0.2	ppbv	0.2	NA-024	12-Jan-21
21010044-002	Ethyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	12-Jan-21
21010044-002	Ethyl sulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	12-Jan-21

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CLIENT SAMPLE ID		CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_986-NMHC_Blank		28968	Ambient Air	08-Jan-21	11:35
DESCRIPTION:	NMHC Blank				
REPORT NUMBER:	21010044	REPORT CREATED:	15-Jan-21	VERSION:	Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
21010044-002	Hydrogen sulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	12-Jan-21
21010044-002	Isobutyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	12-Jan-21
21010044-002	Isopropyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	12-Jan-21
21010044-002	Methyl mercaptan	K, T, U	< 0.2	ppbv	0.2	NA-024	12-Jan-21
21010044-002	Pentyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	12-Jan-21
21010044-002	Propyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	12-Jan-21
21010044-002	tert-Butyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	12-Jan-21
21010044-002	Thiophene	K, T, U	< 0.2	ppbv	0.2	NA-024	12-Jan-21
21010044-002	1,1,1-Trichloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	1,1,2,2-Tetrachloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	1,1,2-Trichloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	1,1-Dichloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	1,1-Dichloroethylene	K, T, U	< 0.04	ppbv	0.04	AC-058	13-Jan-21
21010044-002	1,2,3-Trimethylbenzene	K, T, U	< 0.05	ppbv	0.05	AC-058	13-Jan-21
21010044-002	1,2,4-Trichlorobenzene	K, T, U	< 0.8	ppbv	0.8	AC-058	13-Jan-21
21010044-002	1,2,4-Trimethylbenzene	K, T, U	< 0.05	ppbv	0.05	AC-058	13-Jan-21
21010044-002	1,2-Dibromoethane	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	1,2-Dichlorobenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	13-Jan-21
21010044-002	1,2-Dichloroethane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	1,2-Dichloropropane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	1,3,5-Trimethylbenzene	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	1,3-Butadiene	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	1,3-Dichlorobenzene	K, T, U	< 0.3	ppbv	0.3	AC-058	13-Jan-21
21010044-002	1,4-Dichlorobenzene	K, T, U	< 0.4	ppbv	0.4	AC-058	13-Jan-21
21010044-002	1,4-Dioxane	K, T, U	< 0.4	ppbv	0.4	AC-058	13-Jan-21

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CLIENT SAMPLE ID		CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_986-NMHC_Blank		28968	Ambient Air	08-Jan-21	11:35
DESCRIPTION:	NMHC Blank				
REPORT NUMBER:	21010044	REPORT CREATED:	15-Jan-21	VERSION:	Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
21010044-002	1-Butene/Isobutylene		0.73	ppbv	0.02	AC-058	13-Jan-21
21010044-002	1-Hexene/2-Methyl-1-pentene	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	1-Pentene	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	2,2,4-Trimethylpentane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	2,2-Dimethylbutane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	2,3,4-Trimethylpentane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	2,3-Dimethylbutane	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	2,3-Dimethylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	2,4-Dimethylpentane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	2-Methylheptane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	2-Methylhexane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	2-Methylpentane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	3-Methylheptane	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	3-Methylhexane	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	3-Methylpentane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	Acetone		0.5	ppbv	0.4	AC-058	13-Jan-21
21010044-002	Acrolein	K, T, U	< 0.3	ppbv	0.3	AC-058	13-Jan-21
21010044-002	Benzene	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	Benzyl chloride	K, T, U	< 0.4	ppbv	0.4	AC-058	13-Jan-21
21010044-002	Bromodichloromethane	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	Bromoform	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	Bromomethane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	Carbon disulfide	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	Carbon tetrachloride	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	Chlorobenzene	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21

Report certified by: Rebecca Holgate, Account Coordinator

On behalf of: PJ Pretorius, Manager, Analysis and Testing Services

Date: January 15, 2021

LAB-PRAMP-202101

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID		CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_986-NMHC_Blank		28968	Ambient Air	08-Jan-21	11:35
DESCRIPTION:	NMHC Blank				
REPORT NUMBER:	21010044	REPORT CREATED:	15-Jan-21	VERSION:	Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
21010044-002	Chloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	Chloroform	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	Chloromethane	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	cis-1,2-Dichloroethene	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	cis-1,3-Dichloropropene	K, T, U	< 0.04	ppbv	0.04	AC-058	13-Jan-21
21010044-002	cis-2-Butene	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	cis-2-Pentene	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	Cyclohexane	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	Cyclopentane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	Dibromochloromethane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	Ethanol		1.2	ppbv	0.3	AC-058	13-Jan-21
21010044-002	Ethyl acetate	K, T, U	< 0.4	ppbv	0.4	AC-058	13-Jan-21
21010044-002	Ethylbenzene	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	Freon-11	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	Freon-113	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	Freon-114	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	Freon-12	I	0.07	ppbv	0.02	AC-058	13-Jan-21
21010044-002	Hexachloro-1,3-butadiene	K, T, U	< 0.50	ppbv	0.50	AC-058	13-Jan-21
21010044-002	Isobutane		0.61	ppbv	0.02	AC-058	13-Jan-21
21010044-002	Isopentane		0.18	ppbv	0.03	AC-058	13-Jan-21
21010044-002	Isoprene	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	Isopropyl alcohol		0.5	ppbv	0.4	AC-058	13-Jan-21
21010044-002	Isopropylbenzene	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	m,p-Xylene	K, T, U	< 0.03	ppbv	0.03	AC-058	13-Jan-21
21010044-002	m-Diethylbenzene	K, T, U	< 0.04	ppbv	0.04	AC-058	13-Jan-21

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DESCRIPTION:	NMHC Blank				
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Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
21010044-002	m-Ethyltoluene	K, T, U	< 0.08	ppbv	0.08	AC-058	13-Jan-21
21010044-002	Methyl butyl ketone	K, T, U	< 0.50	ppbv	0.50	AC-058	13-Jan-21
21010044-002	Methyl ethyl ketone	K, T, U	< 0.3	ppbv	0.3	AC-058	13-Jan-21
21010044-002	Methyl isobutyl ketone	K, T, U	< 0.4	ppbv	0.4	AC-058	13-Jan-21
21010044-002	Methyl methacrylate	K, T, U	< 0.07	ppbv	0.07	AC-058	13-Jan-21
21010044-002	Methyl tert butyl ether	K, T, U	< 0.03	ppbv	0.03	AC-058	13-Jan-21
21010044-002	Methylcyclohexane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	Methylcyclopentane	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	Methylene chloride	K, T, U	< 0.3	ppbv	0.3	AC-058	13-Jan-21
21010044-002	n-Butane		0.26	ppbv	0.03	AC-058	13-Jan-21
21010044-002	n-Decane	K, T, U	< 0.06	ppbv	0.06	AC-058	13-Jan-21
21010044-002	n-Dodecane	K, T, U	< 0.4	ppbv	0.4	AC-058	13-Jan-21
21010044-002	n-Heptane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	n-Hexane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	n-Octane	K, T, U	< 0.02	ppbv	0.02	AC-058	13-Jan-21
21010044-002	n-Pentane	K, T, U	< 0.1	ppbv	0.1	AC-058	13-Jan-21
21010044-002	n-Propylbenzene	K, T, U	< 0.05	ppbv	0.05	AC-058	13-Jan-21
21010044-002	n-Undecane	K, T, U	< 0.5	ppbv	0.5	AC-058	13-Jan-21
21010044-002	Naphthalene	K, T, U	< 0.5	ppbv	0.5	AC-058	13-Jan-21
21010044-002	n-Nonane	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	o-Ethyltoluene	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	o-Xylene	K, T, U	< 0.01	ppbv	0.01	AC-058	13-Jan-21
21010044-002	p-Diethylbenzene	K, T, U	< 0.04	ppbv	0.04	AC-058	13-Jan-21
21010044-002	p-Ethyltoluene	K, T, U	< 0.07	ppbv	0.07	AC-058	13-Jan-21
21010044-002	Styrene	K, T, U	< 0.04	ppbv	0.04	AC-058	13-Jan-21

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On behalf of: PJ Pretorius, Manager, Analysis and Testing Services

Date: January 15, 2021

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DESCRIPTION:	NMHC Blank				
REPORT NUMBER:	21010044	REPORT CREATED:	15-Jan-21	VERSION:	Version 01

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
21010044-002	Tetrachloroethylene	K, T, U	< 0.04 ppbv	0.04	AC-058	13-Jan-21
21010044-002	Tetrahydrofuran	K, T, U	< 0.4 ppbv	0.4	AC-058	13-Jan-21
21010044-002	Toluene	K, T, U	< 0.01 ppbv	0.01	AC-058	13-Jan-21
21010044-002	trans-1,2-Dichloroethylene	K, T, U	< 0.01 ppbv	0.01	AC-058	13-Jan-21
21010044-002	trans-1,3-Dichloropropylene	K, T, U	< 0.04 ppbv	0.04	AC-058	13-Jan-21
21010044-002	trans-2-Butene	K, T, U	< 0.01 ppbv	0.01	AC-058	13-Jan-21
21010044-002	trans-2-Pentene	K, T, U	< 0.02 ppbv	0.02	AC-058	13-Jan-21
21010044-002	Trichloroethylene	K, T, U	< 0.04 ppbv	0.04	AC-058	13-Jan-21
21010044-002	Vinyl acetate	K, T, U	< 0.4 ppbv	0.4	AC-058	13-Jan-21
21010044-002	Vinyl chloride	K, T, U	< 0.02 ppbv	0.02	AC-058	13-Jan-21

Report certified by: Rebecca Holgate, Account Coordinator

On behalf of: PJ Pretorius, Manager, Analysis and Testing Services

Date: January 15, 2021

LAB-PRAMP-202101

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca



PO Bag 4000
Vegreville, Alberta
Canada T9C 1T4
(780) 632-8211

ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

Page 13 of 18

Revision History

Order ID	Ver	Date	Reason
21010044	01	15-Jan-21	Report created

Methods

Method	Description
AC-058	Determination of Volatile Organic Compounds in Ambient Air by Gas Chromatography Mass Spectrometry
NA-024	Analysis for Reduced Sulfur Compounds in Air Samples
NA-025	Determination of Light Hydrocarbons (C1C4) in Ambient Air by Gas Chromatography Flame Ionization Detector

Qualifiers

Data Qualifier Translation

B	Blank contamination; Analyte detected above the method reporting limit in an associated blank
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
J1	Reported value is estimated; Surrogate recoveries limits were exceeded
J2	Reported value is estimated; No known QC criteria for this component
J3	Reported value is estimated; The value failed to meet QC criteria for either precision or accuracy
J4	Reported value is estimated; The sample matrix interfered with the analysis
K	Off-scale low. Actual value is known to be less than the value given
L	Off-scale high. Actual value is known to be greater than value given
N	Non-target analyte; Tentatively identified compound (using mass spectroscopy)
Q	Sample held beyond the accepted holding time
R	Rejected data; Not suitable for the projects intended use
T	Value reported is less than the laboratory method detection limit
U	Compound was analyzed for but not detected
V	Analyte was detected in both the sample and the associated method blank



PO Bag 4000
Vegreville, Alberta
Canada T9C 1T4
(780) 632-8211

ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

Page 16 of 18

Order Comments



PO Bag 4000
Vegreville, Alberta
Canada T9C 1T4
(780) 632-8211

ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

Page 17 of 18

Sample Comments

Result Comments

Note:

- 1. Results relate only to items tested and apply to the sample as received.*
- 2. This report shall not be reproduced, except in full, without the explicit approval of the laboratory.*

End of Report