



Peace River Area Monitoring Program

MARCH 2021

Monthly Ambient Air Quality Monitoring Report

PRAMP-202103

Operation and Maintenance:

Bureau Veritas Canada

Data Validation and Report:

Peace River Area Monitoring Program

April 11, 2021

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LIST OF ACRONYMS

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



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April 11, 2021

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

Enclosed is the March 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
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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 March 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.
- No issues were identified this month.

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.
- All parameters: No data were recorded on March 28 between hour 2 and hour 6, possible due to a Windows update; the datalogger was rebooted to resolve the issue. Five hours of downtime were recorded. This event affected the scheduled daily zero-span check, which occurred at hour 7. A successful repeat zero-span check was initiated at hour 8. One hour of downtime was recorded for all gas parameters due to the additional quality check.

- **THC/CH4/NMHC:** The analyzer failed the daily span check on March 14 due to the span gas depletion. The gas cylinder was replaced following by a repeat zero-span check on March 15. Data quality was not affected by this issue. However, one hour of downtime was recorded due to the additional quality check.

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.
- **TRS:** The analyzer failed the daily span check and the as-found points check on March 5. The probable cause was a hydrogen gas leak during the monthly calibration on March 3 that had an adverse effect on the analyzer response. The analyzer was re-calibrated on March 5. Data were invalidated back to the March 3 calibration. Forty-five hours of downtime were recorded due to this event.

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.
- **PM2.5:** A software/firmware crashed on March 15 and March 30 resulted in 26 hours of downtime.
- **O3:** A repeat zero-span check was initiated on March 11 hour 7 to assess drift in span response. The check result was within the acceptable limit. No further action was needed. One hour of downtime was recorded due to the additional quality check.

VOCs Canister Sampling program:

- The canister sampling program collects a 1-hour sample of air when the continuously measured non-methane hydrocarbon (NMHC) concentration reaches a specified trigger point. The current trigger points is 0.3 ppm for non-methane hydrocarbons. The trigger point is based on real-time monitoring data that are averaged over a 5-minute period.
- The canister sample collection systems are in place at Station 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.
- No canister event was recorded in March.

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).

A handwritten signature in blue ink, appearing to read 'Lily Lin', written in a cursive style.

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).

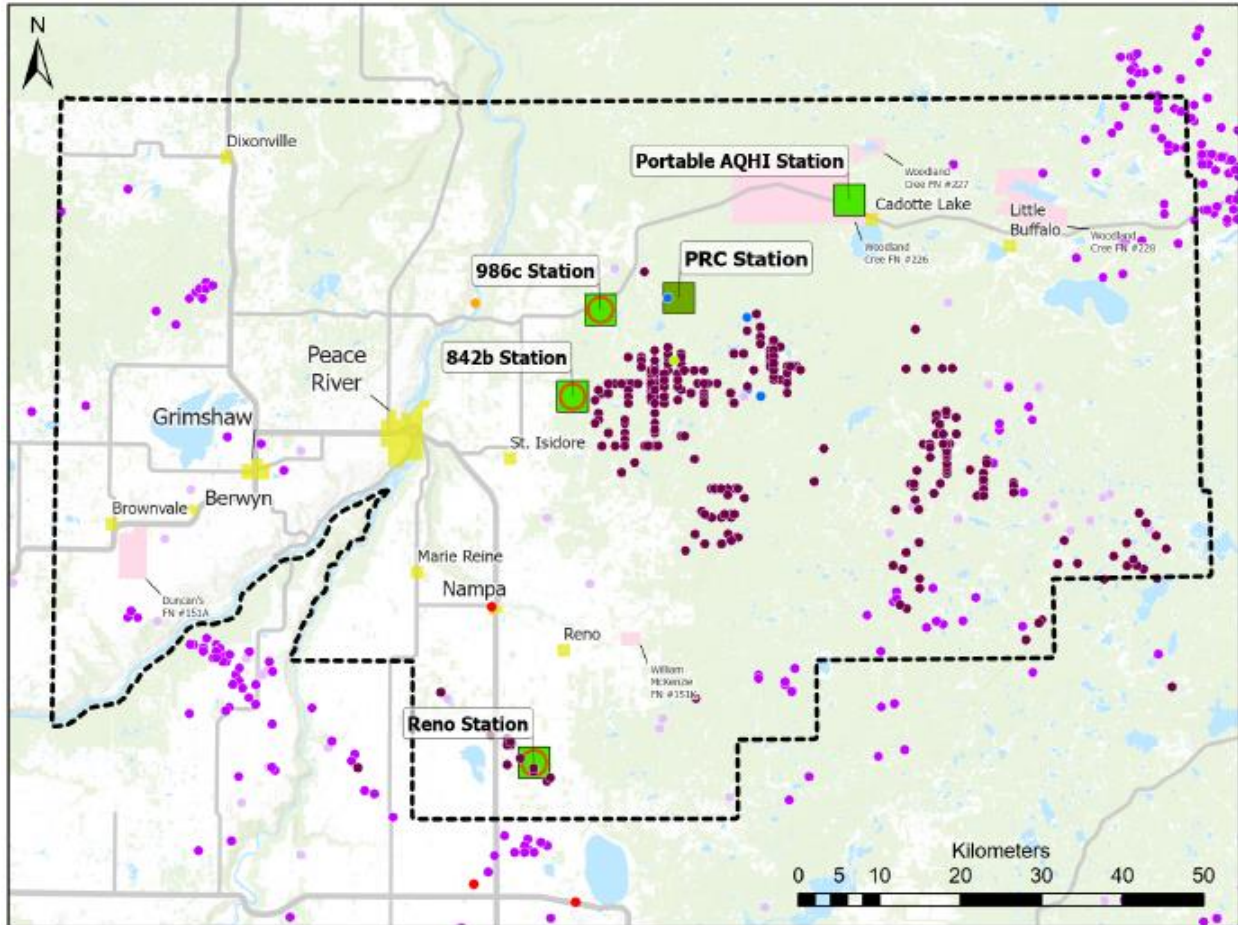
I certify that I have reviewed and verified this report and that the information is complete, accurate and representative of the monitoring results, reporting timeframe and the specified analysis, summarization and reporting requirements. I also certify that at the time of this report's submission, all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

A handwritten signature in blue ink, appearing to read 'Michael Bisaga', written in a cursive style.

Michael Bisaga, Technical Program Manager, PRAMP Airshed

April 11, 2021

Map of PRAMP Continuous Monitoring Network



Map Legend

Monitoring Methods	Industrial Facilities
■ Continuous (existing)	● Heavy Oil/Bitumen Wells and Batteries
■ Continuous (planned)	● Conventional Oil Wells and Batteries
○ Triggered Canister (existing)	● Natural Gas Wells and Batteries
	● In-Situ Oil Sands Facilities
	● Compressor Stations and Pipeline Facilities
	● Power Plants and Generating Stations
	● Pulp and Paper
	● Agricultural Storage and Transfer

CONTINUOUS NETWORK EQUIPMENT AND MONITORING RESULTS SUMMARY

986c Station

Equipment Operation Summary

Parameter	Make / Model	Serial Number	
SO2	Thermo / 43iQTL	1193585646	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on March 16. • No operational issues were identified this month. 			
TRS	Thermo / 43iQTL	1191833341	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on March 16. • No operational issues were identified this month. 			
THC/CH4/NMHC	Thermo / 55i	1193585652	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on March 16. • No operational issues were identified this month. 			
Relative Humidity (RH)	Rotronic / HC2-S3	20357528	
<ul style="list-style-type: none"> • The RH sensor was checked on March 16. The sensor passed the check requirements. • No operational issues were identified this month. 			
Barometric Pressure (BP)	MetOne / 092	Y23358	
<ul style="list-style-type: none"> • The BP sensor was checked on March 16. The sensor passed the check requirements. • No operational issues were identified this month. 			
Ambient Temperature (AT)	Rotronic / HC2-S3	20357528	
<ul style="list-style-type: none"> • The AT sensor was checked on March 16. The sensor passed the check requirements. • No operational issues were identified this month. 			

Parameter	Make / Model	Serial Number	
Station Temperature (ST)	Bureau Veritas Canada	N/A	
<ul style="list-style-type: none"> No operational issues were identified this month. 			
Wind Speed/Wind Direction (WS/ WD)	RM Young / 05305L	174795	
<ul style="list-style-type: none"> 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. The anemometer sensor was checked on March 16. The sensor passed the check requirements. No operational issues were identified this month. 			

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	0.2	0	4	March 8 at hour 16	10.2	ENE	0.7	March 5	100.0	94.9
TRS (ppb)	-	-	-	-	-	-	0.06	0.00	0.66	March 16 at hour 15	22.2	SW	0.28	March 8	100.0	94.9
THC (ppm)	-	-	-	-	-	-	1.97	1.89	2.31	March 30 at hour 4	5.8	SE	2.05	March 5	100.0	95.0
CH4 (ppm)	-	-	-	-	-	-	1.97	1.89	2.31	March 30 at hour 4	5.8	SE	2.05	March 5	100.0	95.0
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.00	March 1 at hour 0	3.7	S	0.00	March 1	100.0	95.0
RH (%)	-	-	-	-	-	-	67.4	26	100	March 21 at hour 21	15.1	E	90.3	March 1	100.0	100.0
BP (millibar)	-	-	-	-	-	-	937	921	949	March 22 at hour 23	13.3	ESE	946	March 10	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	-3.2	-17.7	10.0	March 18 at hour 14	9.7	WSW	3.8	March 31	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	22.2	21.5	24.2	March 16 at hour 13	30.4	SW	22.6	March 18	100.0	100.0
WSV (km/hr)	-	-	-	-	-	-	4.6	0.7	31.8	March 16 at hour 12	31.8	WSW	20.4	March 13	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

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	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on March 4. • No operational issues were identified this month. 			
TRS	Thermo 43i-TLE	1162460023	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on March 4. • No operational issues were identified this month. 			
THC/CH4/NMHC	Thermo / 55i	1501663728	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on March 4. • The analyzer failed the daily span check on March 14 due to the span gas depletion. The gas cylinder was replaced following by a repeat zero-span check on March 15. Data quality was not affected by this issue. However, one hour of downtime was recorded due to the additional quality check. 			
Relative Humidity (RH)	Rotronic / HC2A-S3	20370767	
<ul style="list-style-type: none"> • The RH sensor was checked on March 4. The sensor passed the check requirements. • No operational issues were identified this month. 			
Barometric Pressure (BP)	MetOne / 092	Y23362	
<ul style="list-style-type: none"> • The BP sensor was checked on March 4. The sensor passed the check requirements. • No operational issues were identified this month. 			
Station Temperature (ST)	Bureau Veritas Canada	N/A	
<ul style="list-style-type: none"> • No operational issues were identified this month. 			

Parameter	Make / Model	Serial Number	
Ambient Temperature (AT)	Rotronic / HC2A-S3	20370767	
<ul style="list-style-type: none"> • The AT sensor was checked on March 4. The sensor passed the check requirements. • No operational issues were identified this month. 			
Precipitation (Precip)	RM Young / 52202	15878	
<ul style="list-style-type: none"> • The rain gauge was checked on March 4. The sensor passed the check requirements. • No operational issues were identified this month. 			
Wind Speed/Wind Direction (WS/ WD)	RM Young / 05305AQ	174802	
<ul style="list-style-type: none"> • 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 March 4. The sensor passed the check requirements. • No operational issues were identified this month. 			

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	0.1	0	2	March 6 at hour 21	12.4	SW	0.5	March 5	99.2	94.3
TRS (ppb)	-	-	-	-	-	-	0.13	0.03	0.41	March 18 at hour 22	4.3	ENE	0.19	March 11	99.2	94.2
THC (ppm)	-	-	-	-	-	-	1.90	1.80	2.28	March 19 at hour 1	4.8	ENE	2.10	March 1	99.1	94.2
CH4 (ppm)	-	-	-	-	-	-	1.90	1.80	2.27	March 19 at hour 2	3.8	E	2.10	March 1	99.1	94.2
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.02	March 19 at hour 1	4.8	ENE	0.00	March 19	99.1	94.2
RH (%)	-	-	-	-	-	-	63.8	26	96	March 13 at hour 1	9.1	E	84.1	March 1	99.3	99.3
BP (millibar)	-	-	-	-	-	-	936	920	948	March 22 at hour 23	5.8	ESE	945	March 10	99.3	99.3
Ext. Temp. (°C)	-	-	-	-	-	-	-3.1	-17.9	10.6	March 5 at hour 15	10.5	ESE	3.8	March 5	99.3	99.3
Stn. Temp. (°C)	-	-	-	-	-	-	22.1	20.9	23.0	March 4 at hour 11	6.8	ENE	22.3	March 25	99.3	99.3
Precipitation (mm)*	-	-	-	-	-	-	5.4	0.0	0.7	March 27 at hour 19	16.8	SSW	1.5	March 27	99.3	99.3
WSV (km/hr)	-	-	-	-	-	-	4.1	0.3	26.3	March 16 at hour 14	26.3	WSW	15.8	March 6	99.3	99.3
WDV (sector)	-	-	-	-	-	-	216 (SW)	-	-	-	-	-	-	-	99.3	99.3

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

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

Alberta Ambient Air Quality Objectives (AAAQOs) Exceedances 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	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on March 3. • No operational issues were identified this month. 			
TRS	Thermo / 43i-TLE	1162460022	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on March 3. • The analyzer failed the daily span check and the as-found points check on March 5. The probable cause was a hydrogen gas leak during the monthly calibration on March 3 that had an adverse effect on the analyzer response. The analyzer was re-calibrated on March 5. Data were invalidated back to the March 3 calibration. Forty-five hours of downtime were recorded due to this event. 			
THC/CH4/NMHC	Thermo / 55i	1505664392	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on March 3. • No operational issues were identified this month. 			
Relative Humidity (RH)	RM Young / 43172VC	60837897	
<ul style="list-style-type: none"> • The RH sensor was checked on March 3. The sensor passed the check requirements. • No operational issues were identified this month. 			
Barometric Pressure (BP)	MetOne / 092	R12877	
<ul style="list-style-type: none"> • The BP sensor was checked on March 3. The sensor passed the check requirements. • No operational issues were identified this month. 			

Parameter	Make / Model	Serial Number	
Ambient Temperature (AT)	RM Young / 43172VC	60837897	
<ul style="list-style-type: none"> • The AT sensor was checked on March 3. The sensor passed the check requirements. • No operational issues were identified this month. 			
Station Temperature (ST)	Bureau Veritas Canada	N/A	
<ul style="list-style-type: none"> • No operational issues were identified this month. 			
Precipitation (Precip)	RM Young / 5202	TB15877	
<ul style="list-style-type: none"> • The rain gauge sensor was checked on March 3. The sensor passed the check requirements. • No operational issues were identified this month. 			
Wind Speed/Wind Direction (WS/ WD)	RM Young / 5305VK	149769	
<ul style="list-style-type: none"> • 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 March 3. The system passed the check requirements. • No operational issues were identified this month. 			

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	0.1	0	6	March 2 at hour 13	15.9	WSW	0.8	March 26	100.0	95.3
TRS (ppb)	-	-	-	-	-	-	0.18	0.00	0.92	March 1 at hour 7	1.9	SSE	0.36	March 1	94.0	89.1
THC (ppm)	-	-	-	-	-	-	2.01	1.80	8.79	March 3 at hour 4	5.4	S	3.69	March 3	100.0	95.0
CH4 (ppm)	-	-	-	-	-	-	2.01	1.80	8.72	March 3 at hour 4	5.4	S	3.67	March 3	100.0	95.0
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.07	March 3 at hour 4	5.4	S	0.01	March 3	100.0	95.0
RH (%)	-	-	-	-	-	-	61.8	25	100	March 24 at hour 1	2.2	N	85.5	March 9	100.0	100.0
BP (millibar)	-	-	-	-	-	-	933	918	944	March 10 at hour 11	3.2	E	942	March 10	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	-3.0	-19.1	13.0	March 18 at hour 16	3.2	S	3.6	March 13	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	23.5	22.0	24.8	March 7 at hour 16	4.8	WSW	24.0	March 7	100.0	100.0
Precipitation (mm)*	-	-	-	-	-	-	5.3	0.0	0.6	March 27 at hour 20	11.4	SW	2.0	March 23	100.0	100.0
WSV (km/hr)	-	-	-	-	-	-	2.2	0.1	16.0	March 14 at hour 19	16	NNW	9.4	March 13	100.0	100.0
WDV (sector)	-	-	-	-	-	-	217 (SW)	-	-	-	-	-	-	-	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	
SO2	Teledyne / T100	722	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on March 17. • No operational issues were identified this month. 			
TRS	Thermo 43i-TLE	1152940011	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on March 17. • No operational issues were identified this month. 			
NOx/NO/NO2	Teledyne / T200	837	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on March 17. • No operational issues were identified this month. 			
O3	Teledyne / T400	824	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on March 17. • A repeat zero-span check was initiated on March 11 hour 7 to assess drift in span response. The check result was within the acceptable limit. No further action was needed. One hour of downtime was recorded due to the additional quality check. 			
THC/CH4/NMHC	Thermo / 55i	1191032505	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on March 17. • No operational issues were identified this month. 			
PM 2.5	Teledyne / T640	318	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on March 17. • A software/firmware analyzer crashed on March 15 and March 30 resulted in 26 hours of downtime. 			

Parameter	Make / Model	Serial Number	
Relative Humidity (RH)	Vaisala / HMP155	N2910506	
<ul style="list-style-type: none"> • The sensor was checked on March 17. The sensor passed the check requirements. • No operational issues were identified this month. 			
Ambient Temperature (AT)	Vaisala / HMP155	N2910506	
<ul style="list-style-type: none"> • The sensor was checked on March 17. The sensor passed the check requirements. • No operational issues were identified this month. 			
Station Temperature (ST)	Bureau Veritas Canada	N/A	
<ul style="list-style-type: none"> • No operational issues were identified this month. 			
Wind Speed/Wind Direction (WS/ WD)	RM Young 05305AQ	174801	
<ul style="list-style-type: none"> • 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. • The anemometer sensors were checked on March 17. The sensor passed the check requirements. • No operational issues were identified this month. 			

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	3	March 6 at hour 22	9.4	SW	0.3	March 6	100.0	95.0
TRS (ppb)	-	-	-	-	-	-	0.81	0.34	11.74	March 18 at hour 22	0.5	SW	2.22	March 18	100.0	94.9
NOx (ppb)	-	-	-	-	-	-	1.3	0	22	March 5 at hour 7	0.5	SW	3.3	March 5	100.0	94.6
NO (ppb)	-	-	-	-	-	-	0.1	0	9	March 5 at hour 7	0.5	SW	0.8	March 5	100.0	94.6
NO2 (ppb)	159	-	-	0	-	-	1.1	0	13	March 5 at hour 7	0.5	SW	2.5	March 5	100.0	94.6
O3 (ppb)	76	-	-	0	-	-	33.8	10	51	March 19 at hour 15	22.5	WSW	43.0	March 6	99.9	95.0
THC (ppm)	-	-	-	-	-	-	1.96	1.88	2.24	March 4 at hour 13	9.1	E	2.05	March 5	100.0	95.0
CH4 (ppm)	-	-	-	-	-	-	1.96	1.88	2.23	March 4 at hour 13	9.1	E	2.04	March 5	100.0	95.0
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.19	March 18 at hour 20	0.7	ESE	0.02	March 18	100.0	95.0
PM2.5 (µg/m3)	80	30	-	0	0	-	2.8	0.0	15.7	March 14 at hour 9	6.8	W	5.2	March 5	96.5	96.4
RH (%)	-	-	-	-	-	-	65.2	22	94	March 12 at hour 22	0.9	ESE	85.6	March 1	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	-3.9	-25.8	13.7	March 18 at hour 15	9.5	SW	4.0	March 31	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	23.0	20.8	24.3	March 11 at hour 3	0.2	NNW	23.4	March 13	100.0	100.0
WSV (km/hr)	-	-	-	-	-	-	2.4	0.1	22.5	March 19 at hour 15	22.5	WSW	13.4	March 6	100.0	100.0
WDV (sector)	-	-	-	-	-	-	246 (WSW)	-	-	-	-	-	-	-	100.0	100.0

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

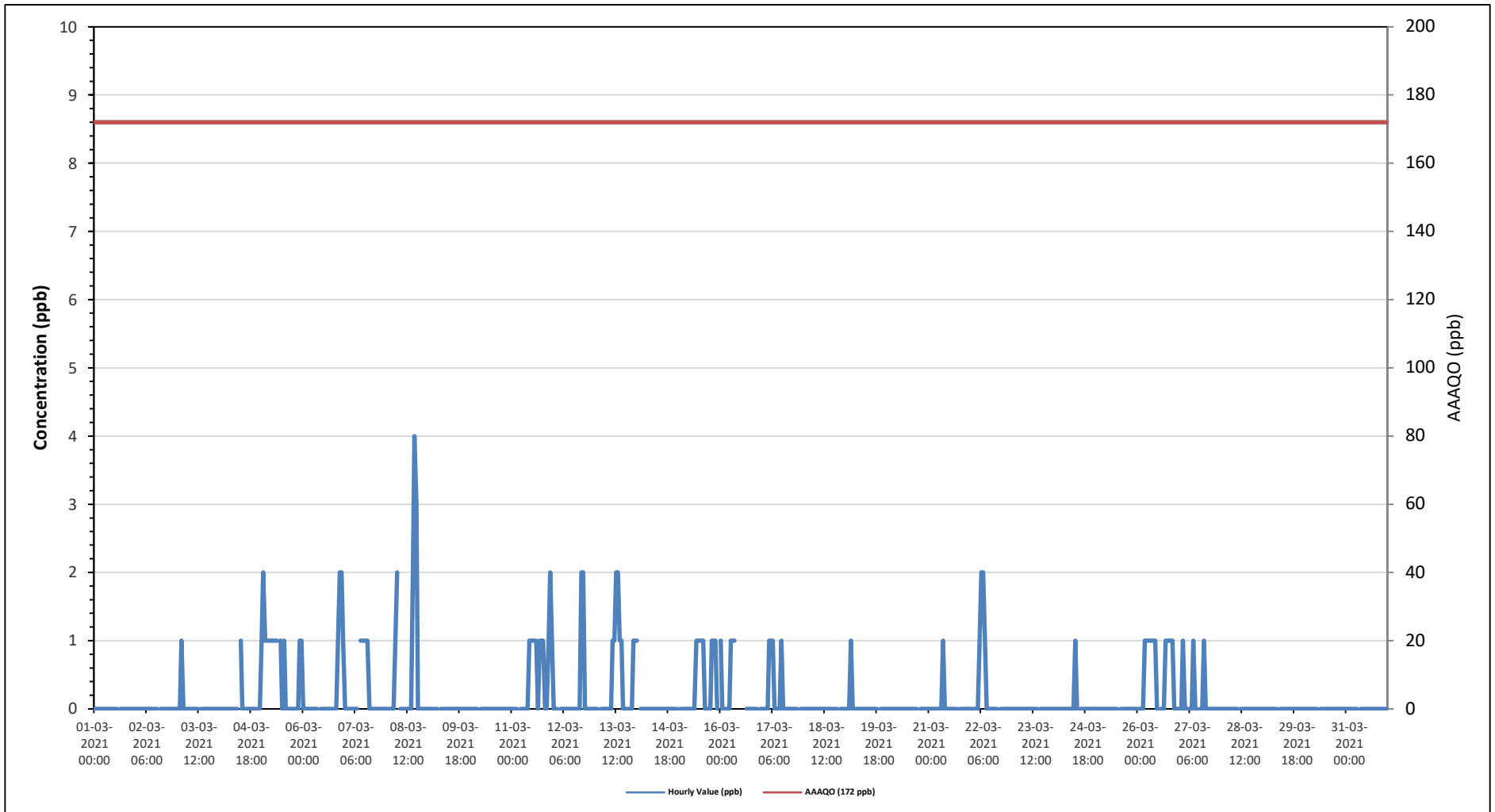
Alberta Ambient Air Quality Objectives (AAAQOs) Exceedances at AQHI - Cadotte Lake Station

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

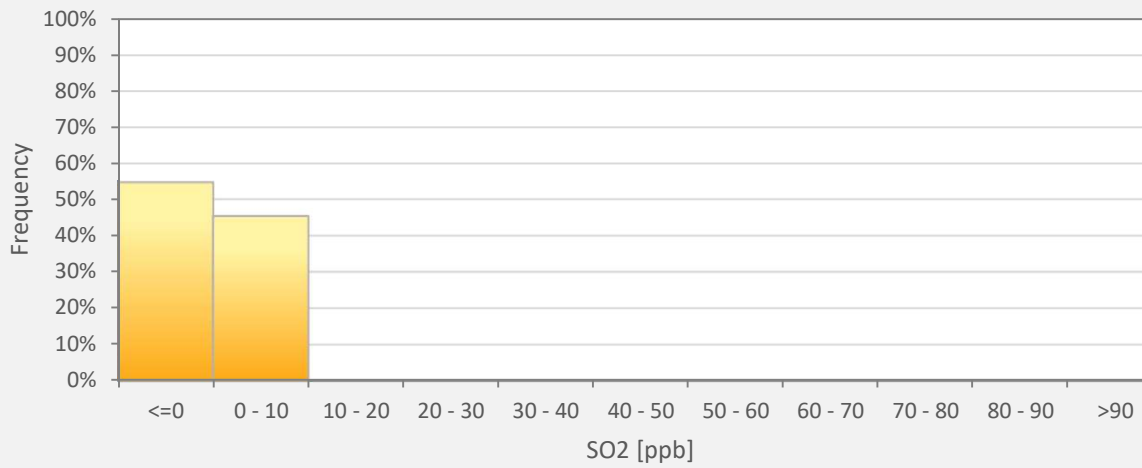
TABLES, CHARTS, WIND ROSES AND EQUIPMENT CALIBRATION RECORDS

986c STATION

Timeseries Chart of Hourly Average for SO2 - 986c Station



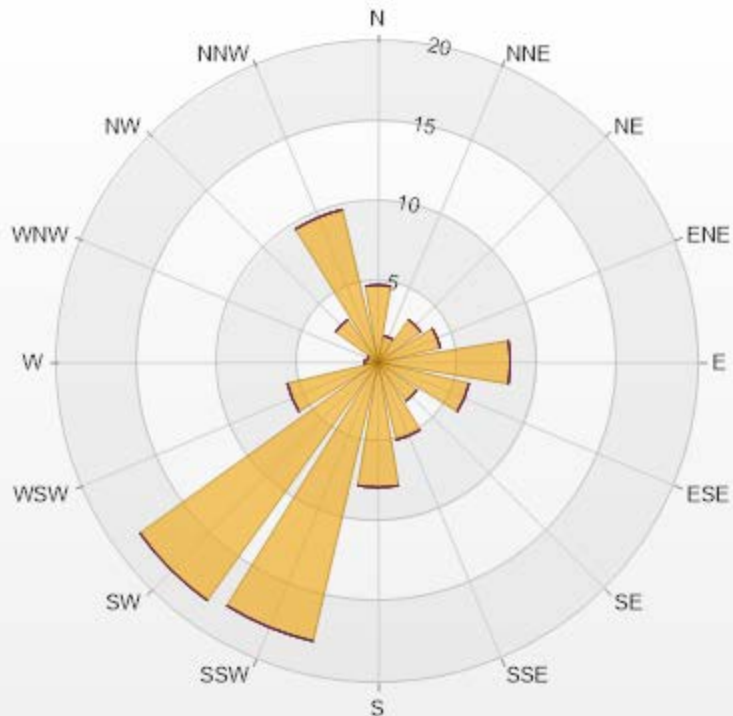
SO2[ppb] Histogram: PRAMP 986c Monthly: 03-2021 1 Hr.



Classes	SO2
<=0	54.67%
0 - 10	45.33%
10 - 20	0.00%
20 - 30	0.00%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: PRAMP 986c Poll.: PRAMP 986c-SO2[ppb] Monthly: 03-2021 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	4.82	0	0	0	0	4.82
NNE	1.7	0	0	0	0	1.7
NE	3.26	0	0	0	0	3.26
ENE	3.97	0	0	0	0	3.97
E	8.22	0	0	0	0	8.22
ESE	5.81	0	0	0	0	5.81
SE	2.97	0	0	0	0	2.97
SSE	4.96	0	0	0	0	4.96
S	7.79	0	0	0	0	7.79
SSW	17.85	0	0	0	0	17.85
SW	18.27	0	0	0	0	18.27
WSW	5.81	0	0	0	0	5.81
W	0.85	0	0	0	0	0.85
WNW	0.71	0	0	0	0	0.71
NW	3.26	0	0	0	0	3.26
NNW	9.77	0	0	0	0	9.77
Summary	100	0	0	0	0	100



PRAMP-202103

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% 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 - March 2021

Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

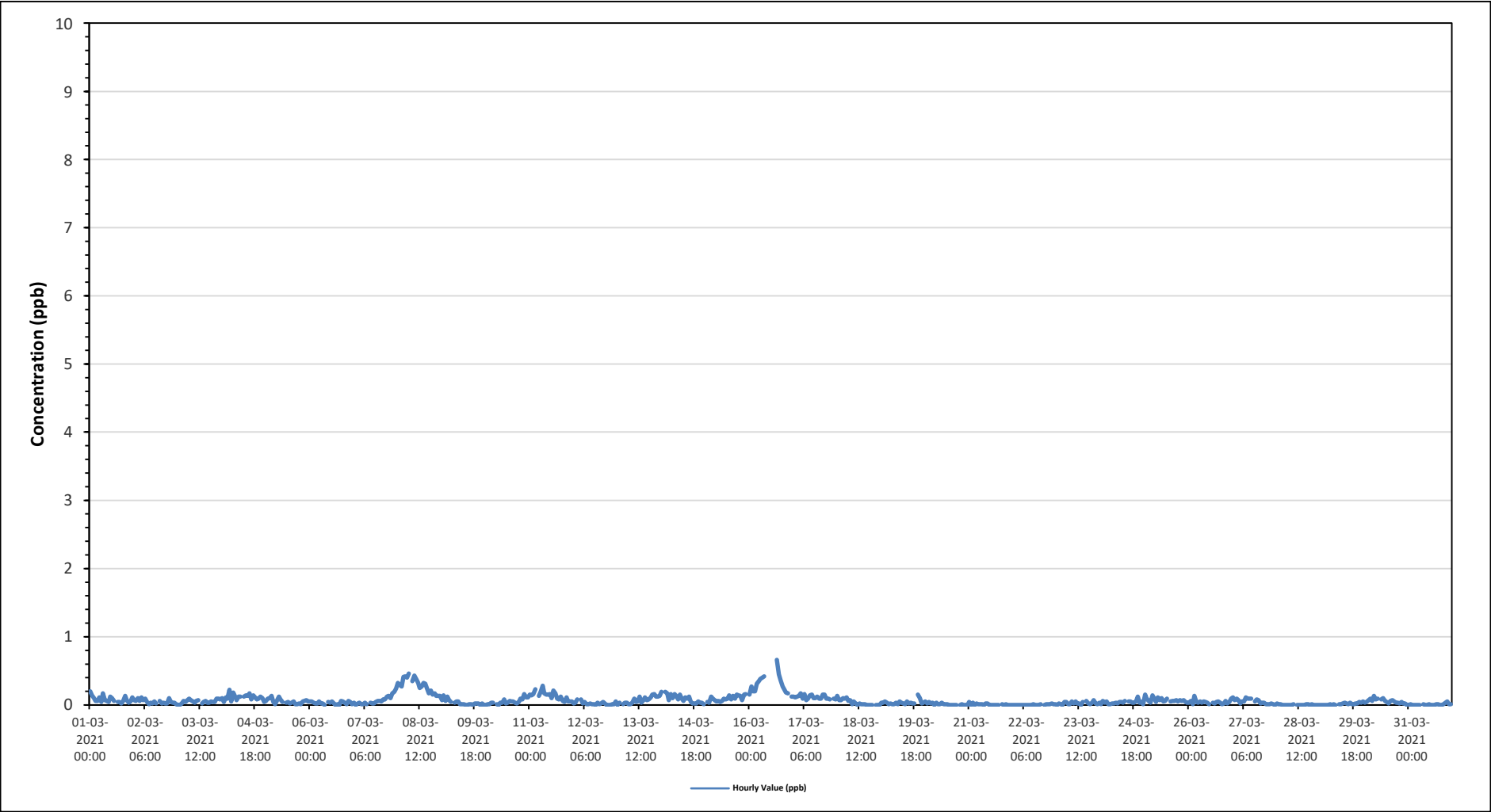
Maximum Hourly Value:	0.66	ppb	on March 16 at hour 15	Hours in Service:	744
Maximum Daily Value:	0.28	ppb	on March 8	Hours of Data:	706
Minimum Hourly Value:	0.00	ppb	on March 3 at hour 0	Hours of Missing Data:	0
Minimum Daily Value:	0.00	ppb	on March 28	Hours of Calibration:	38
Monthly Average:	0.06	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	
Mar 1	0.20	0.14	0.10	0.06	0.06	0.11	0.04	0.17	0.07	0.06	0.04	0.12	0.10	0.06	S	0.04	0.04	0.02	0.06	0.13	0.07	0.03	0.05	0.11	0.02	0.20	0.08	
Mar 2	0.07	0.06	0.10	0.06	0.11	0.07	0.09	0.04	0.01	0.03	0.02	0.05	0.02	S	0.06	0.02	0.03	0.02	0.02	0.10	0.04	0.03	0.03	0.01	0.01	0.11	0.05	
Mar 3	0.00	0.00	0.02	0.06	0.04	0.07	0.09	0.07	0.05	0.03	0.06	0.07	S	0.02	0.04	0.06	0.03	0.03	0.05	0.04	0.04	0.09	0.09	0.08	0.00	0.09	0.05	
Mar 4	0.10	0.04	0.11	0.09	0.22	0.05	0.18	0.13	0.07	0.12	0.12	S	0.12	0.14	0.13	0.17	0.08	0.14	0.11	0.08	0.09	0.12	0.10	0.04	0.04	0.22	0.11	
Mar 5	0.06	0.09	0.10	0.13	0.04	0.01	0.07	0.12	0.08	0.04	S	0.03	0.04	0.02	0.03	0.05	0.01	0.01	0.02	0.01	0.05	0.06	0.07	0.05	0.01	0.13	0.05	
Mar 6	0.05	0.05	0.03	0.02	0.02	0.05	0.02	0.02	0.00	S	0.04	0.03	0.05	0.02	0.00	0.01	0.00	0.06	0.05	0.03	0.01	0.06	0.04	0.01	0.00	0.06	0.03	
Mar 7	0.03	0.00	0.02	0.03	0.01	0.01	0.03	0.01	S	0.03	0.02	0.02	0.04	0.06	0.06	0.05	0.08	0.08	0.12	0.13	0.10	0.17	0.19	0.24	0.00	0.24	0.07	
Mar 8	0.32	0.29	0.27	0.41	0.42	0.40	0.46	S	0.35	0.43	0.38	0.32	0.25	0.27	0.32	0.31	0.23	0.17	0.21	0.15	0.17	0.13	0.13	0.13	0.13	0.46	0.28	
Mar 9	0.07	0.14	0.06	0.12	0.07	0.04	S	0.03	0.05	0.05	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.02	0.02	0.00	0.02	0.00	0.00	0.00	0.14	0.03	
Mar 10	0.00	0.01	0.01	0.03	0.03	S	0.01	0.00	0.03	0.03	0.08	0.01	0.02	0.03	0.06	0.05	0.03	0.02	0.04	0.09	0.08	0.16	0.11	0.11	0.00	0.16	0.05	
Mar 11	0.15	0.14	0.16	0.23	S	0.13	0.19	0.28	0.17	0.15	0.15	0.16	0.10	0.21	0.17	0.09	0.08	0.12	0.06	0.04	0.11	0.05	0.05	0.05	0.04	0.28	0.13	
Mar 12	0.02	0.03	0.08	S	0.08	0.02	0.04	0.01	0.01	0.02	0.01	0.01	0.00	0.03	0.01	0.02	0.04	0.02	0.00	0.00	0.01	0.01	0.05	0.00	0.08	0.02	0.02	
Mar 13	0.00	0.03	S	0.01	0.03	0.03	0.01	0.01	0.03	0.09	0.04	0.05	0.12	0.03	0.07	0.11	0.07	0.08	0.11	0.15	0.16	0.12	0.12	0.13	0.00	0.16	0.07	
Mar 14	0.19	S	0.19	0.17	0.07	0.16	0.10	0.16	0.13	0.08	0.15	0.09	0.06	0.11	0.09	0.12	0.04	0.02	0.02	0.02	0.05	0.03	0.03	0.01	0.01	0.19	0.09	
Mar 15	S	0.04	0.03	0.12	0.09	0.07	0.05	0.06	0.04	0.06	0.09	0.08	0.09	0.14	0.08	0.13	0.09	0.15	0.14	0.13	0.07	0.15	0.16	S	0.03	0.16	0.09	
Mar 16	0.15	0.27	0.20	0.20	0.31	0.35	0.38	0.40	0.42	C	C	C	C	C	C	0.66	0.45	0.36	0.27	0.23	0.18	0.17	S	0.12	0.12	0.66	-	
Mar 17	0.12	0.11	0.12	0.13	0.17	0.09	0.16	0.07	0.09	0.14	0.15	0.10	0.10	0.12	0.09	0.09	0.15	0.15	0.09	0.09	0.08	S	0.09	0.08	0.07	0.17	0.11	
Mar 18	0.13	0.07	0.07	0.10	0.09	0.11	0.06	0.07	0.01	0.05	0.02	0.00	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.13	0.04	
Mar 19	0.03	0.03	0.05	0.03	0.01	0.02	0.01	0.01	0.03	0.01	0.05	0.03	0.02	0.01	0.05	0.02	0.03	0.02	0.02	S	0.15	0.10	0.02	0.03	0.01	0.15	0.03	
Mar 20	0.05	0.02	0.04	0.02	0.03	0.00	0.03	0.01	0.01	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.01	0.00	0.00	0.00	0.00	0.05	0.01
Mar 21	0.04	0.00	0.03	0.00	0.02	0.01	0.01	0.01	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.04	0.01
Mar 22	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	0.01	S	0.00	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.00	0.02	0.00
Mar 23	0.00	0.02	0.01	0.00	0.04	0.04	0.01	0.01	0.05	0.02	0.05	0.02	0.02	0.00	0.04	S	0.06	0.02	0.01	0.03	0.07	0.02	0.01	0.03	0.00	0.07	0.03	0.03
Mar 24	0.01	0.06	0.03	0.05	0.01	0.01	0.02	0.02	0.03	0.02	0.04	0.03	0.06	S	0.05	0.05	0.05	0.03	0.03	0.05	0.12	0.03	0.04	0.01	0.01	0.12	0.04	0.01
Mar 25	0.15	0.09	0.06	0.03	0.14	0.09	0.04	0.11	0.07	0.10	0.05	0.06	0.09	S	0.05	0.06	0.06	0.07	0.05	0.07	0.06	0.07	0.04	0.03	0.03	0.15	0.07	0.07
Mar 26	0.03	0.06	0.01	0.13	0.04	0.03	0.05	0.03	0.05	0.04	0.03	0.01	S	0.03	0.02	0.04	0.05	0.03	0.01	0.02	0.06	0.02	0.04	0.09	0.01	0.13	0.04	0.04
Mar 27	0.11	0.07	0.09	0.07	0.02	0.05	0.05	0.11	0.09	0.09	0.09	S	0.05	0.08	0.07	0.02	0.03	0.03	0.01	0.01	0.01	0.02	0.01	0.00	0.00	0.11	0.05	0.05
Mar 28	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	S	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Mar 29	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	S	0.01	0.01	0.01	0.02	0.03	0.02	0.01	0.03	0.01	0.01	0.02	0.02	0.04	0.03	0.05	0.00	0.05	0.01
Mar 30	0.03	0.04	0.07	0.09	0.06	0.13	0.08	0.09	S	0.08	0.10	0.06	0.04	0.02	0.06	0.07	0.05	0.03	0.03	0.02	0.04	0.02	0.02	0.00	0.00	0.13	0.05	0.05
Mar 31	0.00	0.01	0.00	0.00	0.00	0.00	0.00	S	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.03	0.05	0.01	0.01	0.00	0.05	0.01	0.01
Diurnal Maximum	0.32	0.29	0.27	0.41	0.42	0.40	0.46	0.40	0.42	0.43	0.38	0.32	0.25	0.27	0.32	0.66	0.45	0.36	0.27	0.23	0.18	0.17	0.19	0.24	0.00	0.46	0.28	0.13
Diurnal Average	0.07	0.06	0.07	0.08	0.07	0.07	0.08	0.07	0.07	0.07	0.07	0.05	0.05	0.05	0.05	0.08	0.06	0.06	0.05	0.06	0.06	0.06	0.05	0.05	0.00	0.08	0.02	0.02

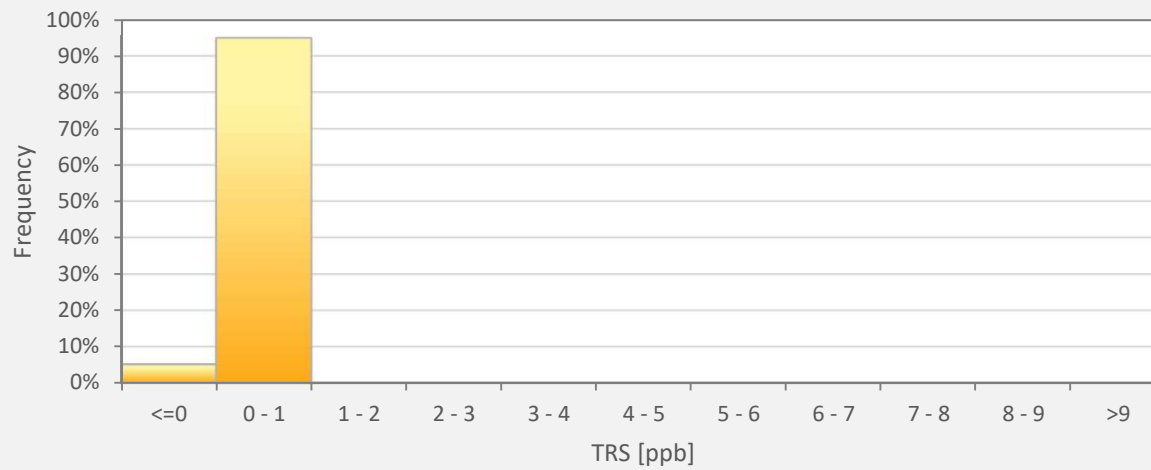
C	Monthly Calibration	S	Daily Zero-Span Check
K	Collection Error	N	No Data (Machine Not in Service)
X	InValid Data (Equipment Malfunction/Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)
		Q	Quality Assurance
		Y	Routine Maintenance
		P	Power Failure

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 TRS - 986c Station



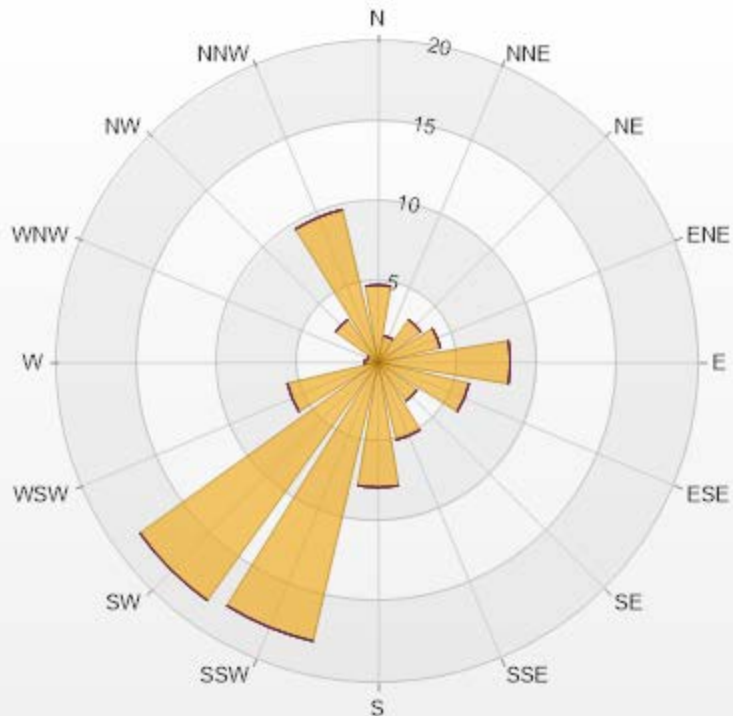
TRS[ppb] Histogram: PRAMP 986c Monthly: 03-2021 1 Hr.



Classes	TRS
<=0	5.10%
0 - 1	94.90%
1 - 2	0.00%
2 - 3	0.00%
3 - 4	0.00%
4 - 5	0.00%
5 - 6	0.00%
6 - 7	0.00%
7 - 8	0.00%
8 - 9	0.00%
>9	0.00%

Wind: PRAMP 986c Poll.: PRAMP 986c-TRS[ppb] Monthly: 03-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.89% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	4.82	0	0	0	0	4.82
NNE	1.7	0	0	0	0	1.7
NE	3.26	0	0	0	0	3.26
ENE	3.97	0	0	0	0	3.97
E	8.22	0	0	0	0	8.22
ESE	5.81	0	0	0	0	5.81
SE	2.97	0	0	0	0	2.97
SSE	4.96	0	0	0	0	4.96
S	7.79	0	0	0	0	7.79
SSW	17.85	0	0	0	0	17.85
SW	18.27	0	0	0	0	18.27
WSW	5.81	0	0	0	0	5.81
W	0.85	0	0	0	0	0.85
WNW	0.71	0	0	0	0	0.71
NW	3.26	0	0	0	0	3.26
NNW	9.77	0	0	0	0	9.77
Summary	100	0	0	0	0	100



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% 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 - March 2021

Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

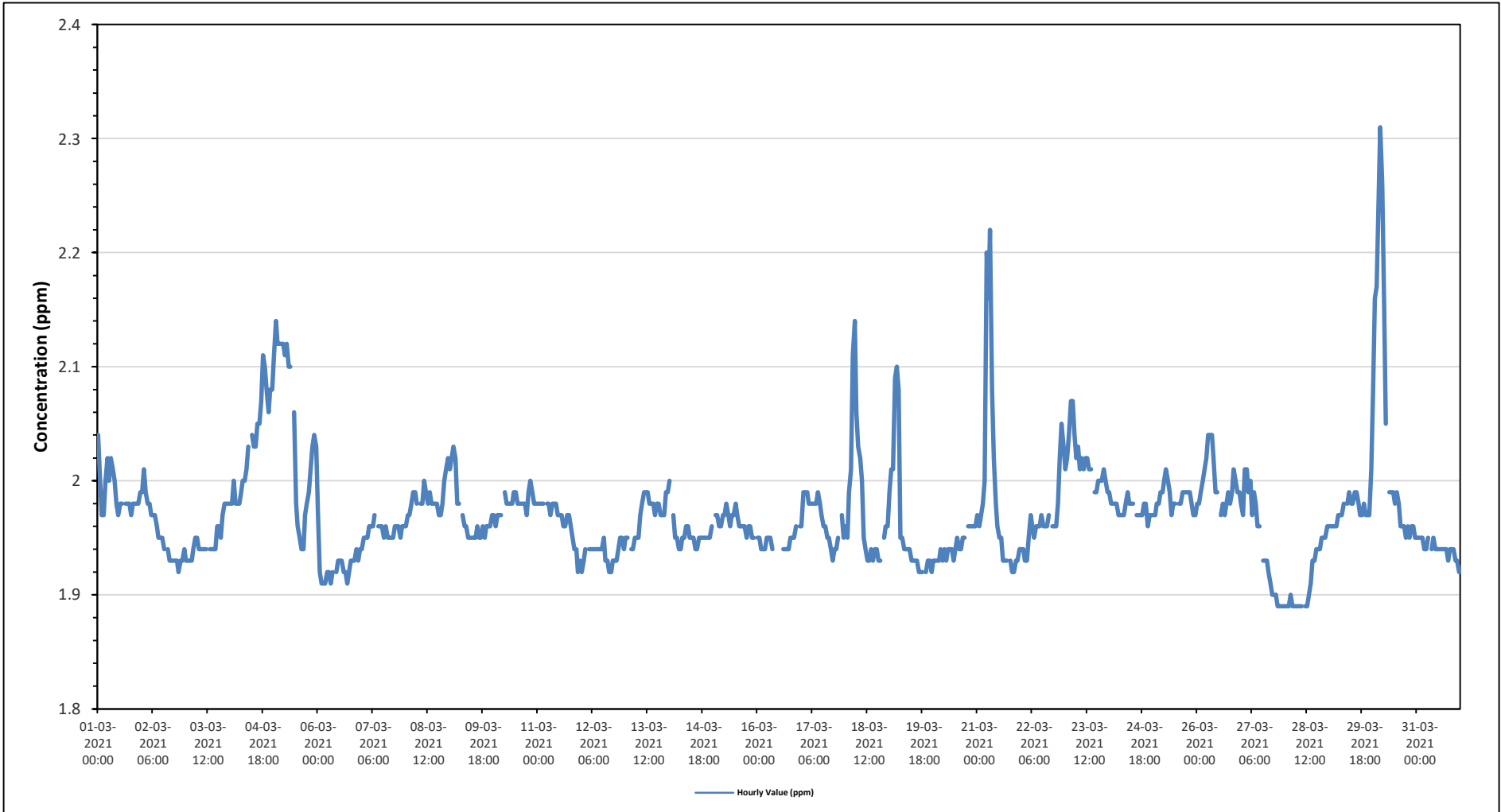
Maximum Hourly Value:	2.31 ppm on March 30 at hour 4	Hours in Service:	744
Maximum Daily Value:	2.05 ppm on March 5	Hours of Data:	707
Minimum Hourly Value:	1.89 ppm on March 27 at hour 20	Hours of Missing Data:	0
Minimum Daily Value:	1.91 ppm on March 28	Hours of Calibration:	37
Monthly Average:	1.97 ppm	Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Mar 1	2.04	2.00	1.97	1.97	2.00	2.02	2.00	2.02	2.01	2.00	1.98	1.97	1.98	1.98	S	1.98	1.98	1.98	1.97	1.98	1.98	1.98	1.98	1.99	1.97	2.04	1.99	
Mar 2	1.99	2.01	1.99	1.98	1.98	1.97	1.97	1.97	1.96	1.95	1.95	1.95	1.94	S	1.94	1.93	1.93	1.93	1.93	1.93	1.92	1.93	1.93	1.94	1.92	2.01	1.95	
Mar 3	1.93	1.93	1.93	1.93	1.94	1.95	1.95	1.94	1.94	1.94	1.94	1.94	S	1.94	1.94	1.94	1.94	1.96	1.96	1.95	1.97	1.98	1.98	1.98	1.93	1.98	1.95	
Mar 4	1.98	1.98	2.00	1.98	1.98	1.98	1.99	2.00	2.00	2.01	2.03	S	2.04	2.03	2.03	2.05	2.05	2.07	2.11	2.10	2.08	2.06	2.08	2.08	1.98	2.11	2.03	
Mar 5	2.11	2.14	2.12	2.12	2.12	2.12	2.11	2.12	2.10	2.10	S	2.06	1.98	1.96	1.95	1.94	1.94	1.97	1.98	1.99	2.01	2.03	2.04	2.03	1.94	2.14	2.05	
Mar 6	1.97	1.92	1.91	1.91	1.92	1.92	1.92	1.91	1.92	S	1.92	1.93	1.93	1.93	1.92	1.92	1.91	1.92	1.93	1.93	1.93	1.94	1.93	1.94	1.91	1.97	1.92	
Mar 7	1.94	1.95	1.95	1.95	1.96	1.96	1.96	1.97	S	1.96	1.96	1.96	1.95	1.96	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.95	1.96	1.96	1.94	1.97	1.96	
Mar 8	1.96	1.97	1.97	1.98	1.99	1.99	1.98	S	1.98	1.98	2.00	1.99	1.98	1.99	1.98	1.98	1.98	1.98	1.97	1.97	1.98	2.00	2.01	2.02	1.96	2.02	1.98	
Mar 9	2.01	2.02	2.03	2.02	1.98	1.98	S	1.97	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.96	1.95	1.95	1.96	1.95	1.96	1.96	1.96	1.97	1.95	2.03	1.97	
Mar 10	1.97	1.96	1.97	1.97	1.97	S	1.99	1.98	1.98	1.98	1.98	1.98	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.97	1.99	2.00	1.99	1.98	1.96	2.00	1.98	
Mar 11	1.98	1.98	1.98	1.98	S	1.98	1.98	1.97	1.98	1.98	1.98	1.97	1.97	1.97	1.96	1.96	1.97	1.97	1.96	1.95	1.94	1.94	1.92	1.93	1.92	1.98	1.97	
Mar 12	1.92	1.93	1.94	S	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.93	1.93	1.92	1.92	1.93	1.93	1.93	1.94	1.95	1.95	1.94	1.92	1.95	1.94	
Mar 13	1.95	1.95	S	1.94	1.94	1.95	1.95	1.95	1.97	1.98	1.99	1.99	1.98	1.98	1.98	1.97	1.98	1.98	1.97	1.97	1.97	1.99	1.99	1.99	1.94	1.99	1.97	
Mar 14	2.00	S	1.97	1.95	1.95	1.94	1.94	1.95	1.95	1.95	1.96	1.96	1.95	1.95	1.95	1.94	1.94	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.94	2.00	1.95	
Mar 15	S	1.97	1.97	1.96	1.96	1.97	1.97	1.98	1.97	1.96	1.97	1.97	1.98	1.97	1.96	1.96	1.96	1.96	1.95	1.96	1.96	1.95	1.95	S	1.95	1.98	1.96	
Mar 16	1.95	1.95	1.94	1.94	1.94	1.95	1.95	1.95	1.94	C	C	C	C	C	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.96	S	1.96	1.94	1.96	1.95	
Mar 17	1.96	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.99	1.98	1.97	1.96	1.96	1.95	1.95	1.94	1.93	1.94	1.94	1.94	1.95	S	1.97	1.95	1.93	1.99	1.97
Mar 18	1.96	1.95	1.99	2.01	2.11	2.14	2.06	2.03	2.02	2.00	1.95	1.94	1.93	1.93	1.94	1.93	1.94	1.94	1.93	1.93	S	1.95	1.96	1.96	1.93	2.14	1.98	
Mar 19	1.99	2.01	2.01	2.09	2.10	2.08	1.95	1.95	1.94	1.94	1.94	1.94	1.93	1.93	1.93	1.93	1.92	1.92	1.92	S	1.92	1.93	1.93	1.92	1.92	2.10	1.96	
Mar 20	1.93	1.93	1.93	1.93	1.94	1.93	1.94	1.93	1.94	1.94	1.94	1.93	1.94	1.95	1.94	1.94	1.95	1.95	S	1.96	1.96	1.96	1.96	1.96	1.93	1.96	1.94	
Mar 21	1.97	1.96	1.97	1.98	2.00	2.20	2.16	2.22	2.08	2.02	1.98	1.96	1.95	1.95	1.93	1.93	1.93	S	1.93	1.92	1.92	1.93	1.93	1.94	1.92	2.22	1.99	
Mar 22	1.94	1.94	1.93	1.93	1.95	1.97	1.96	1.95	1.96	1.96	1.96	1.96	1.96	1.96	1.97	S	1.96	1.96	1.96	1.96	1.98	2.02	2.05	2.03	1.93	2.05	1.97	
Mar 23	2.01	2.02	2.04	2.07	2.07	2.04	2.02	2.03	2.01	2.02	2.01	2.02	2.02	2.01	2.01	S	1.99	1.99	2.00	2.00	2.00	2.01	2.00	1.99	1.99	2.07	2.02	
Mar 24	1.99	1.98	1.98	1.98	1.98	1.97	1.97	1.97	1.97	1.98	1.99	1.98	1.98	1.98	S	1.97	1.97	1.97	1.97	1.98	1.98	1.96	1.97	1.97	1.96	1.99	1.98	
Mar 25	1.97	1.97	1.98	1.98	1.99	1.99	2.00	2.01	2.00	1.99	1.97	1.98	1.98	S	1.98	1.98	1.99	1.99	1.99	1.99	1.99	1.99	1.98	1.97	1.97	1.97	1.98	
Mar 26	1.98	1.98	1.99	2.00	2.01	2.02	2.04	2.04	2.04	2.02	1.99	1.99	S	1.97	1.98	1.97	1.98	1.99	1.98	1.99	1.99	2.01	2.00	1.99	1.97	2.04	2.00	
Mar 27	1.98	1.97	2.01	2.01	1.99	2.00	1.97	1.99	1.98	1.96	1.96	S	1.93	1.93	1.93	1.92	1.91	1.90	1.90	1.90	1.89	1.89	1.89	1.89	1.89	2.01	1.94	
Mar 28	1.89	1.89	1.89	1.90	1.89	1.89	1.89	1.89	1.89	1.89	S	1.89	1.89	1.90	1.91	1.93	1.93	1.94	1.94	1.94	1.95	1.95	1.95	1.96	1.89	1.96	1.91	
Mar 29	1.96	1.96	1.96	1.96	1.96	1.97	1.97	1.97	1.98	S	1.98	1.99	1.98	1.98	1.99	1.99	1.98	1.97	1.97	1.97	1.97	1.97	2.01	1.96	2.01	1.97	1.97	
Mar 30	2.08	2.16	2.17	2.25	2.31	2.26	2.16	2.05	S	1.99	1.99	1.99	1.98	1.99	1.98	1.96	1.96	1.96	1.95	1.96	1.95	1.96	1.96	1.95	1.95	2.31	2.04	
Mar 31	1.95	1.95	1.95	1.95	1.94	1.94	1.95	S	1.94	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.94	1.94	1.94	1.93	1.93	1.92	1.92	1.95	1.94	1.94	
Diurnal Maximum	2.11	2.16	2.17	2.25	2.31	2.26	2.16	2.22	2.10	2.10	2.03	2.06	2.04	2.03	2.03	2.05	2.05	2.07	2.11	2.10	2.08	2.06	2.08	2.08	1.92	2.08	2.08	
Diurnal Average	1.98	1.98	1.98	1.99	1.99	2.00	1.99	1.99	1.98	1.98	1.98	1.97	1.97	1.96	1.96	1.96	1.95	1.96	1.96	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.97	

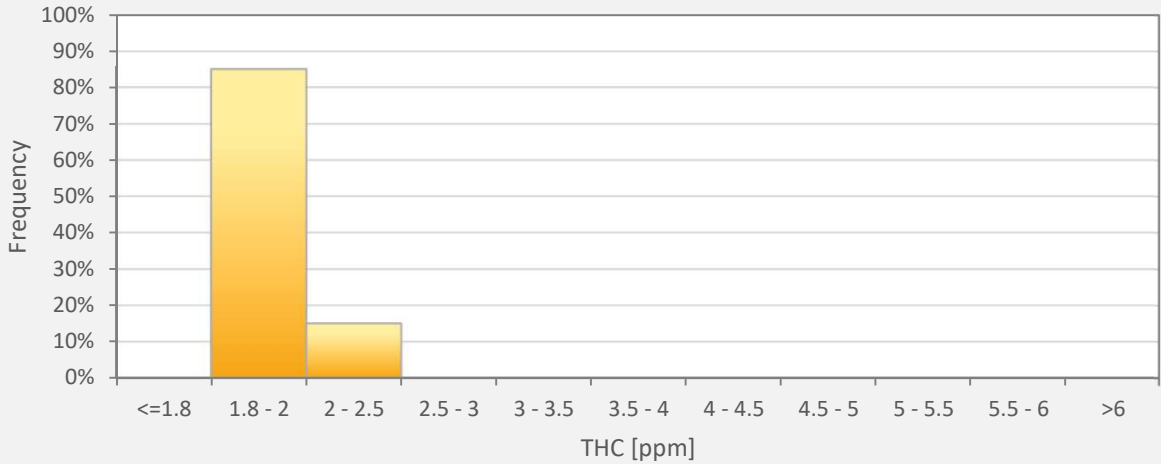
C	Monthly Calibration	S	Daily Zero-Span Check
K	Collection Error	N	No Data (Machine Not in Service)
X	InValid Data (Equipment Malfunction/Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)
		Q	Quality Assurance
		Y	Routine Maintenance
		P	Power Failure

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 THC - 986c Station



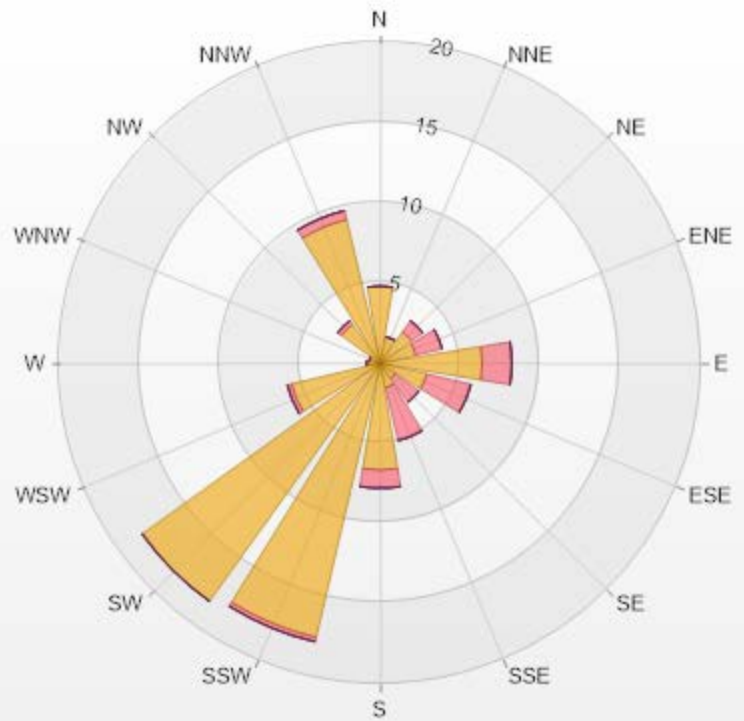
THC55[ppm] Histogram: PRAMP 986c Monthly: 03-2021 1 Hr.



Classes	THC55
<=1.8	0.00%
1.8 - 2	85.01%
2 - 2.5	14.99%
2.5 - 3	0.00%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: PRAMP 986c Poll.: PRAMP 986c-THC55[ppm] Monthly: 03-2021 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	4.81	0	0	0	0	4.81
NNE	1.7	0	0	0	0	1.7
NE	2.4	0.85	0	0	0	3.25
ENE	2.26	1.7	0	0	0	3.96
E	6.36	1.84	0	0	0	8.2
ESE	2.97	2.83	0	0	0	5.8
SE	1.13	1.84	0	0	0	2.97
SSE	1.56	3.39	0	0	0	4.95
S	6.65	1.13	0	0	0	7.78
SSW	17.54	0.28	0	0	0	17.82
SW	18.25	0	0	0	0	18.25
WSW	5.66	0.28	0	0	0	5.94
W	0.85	0	0	0	0	0.85
WNW	0.71	0	0	0	0	0.71
NW	2.97	0.28	0	0	0	3.25
NNW	9.19	0.57	0	0	0	9.76
Summary	85.01	14.99	0	0	0	100



PRAMP-202103

% Icon Classes (ppm)	85	0-2	15	2-5	0	5-10	0	10-40	0	>40.0
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PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2021

Summary of Hourly Averages

METHANE (CH4) in ppm

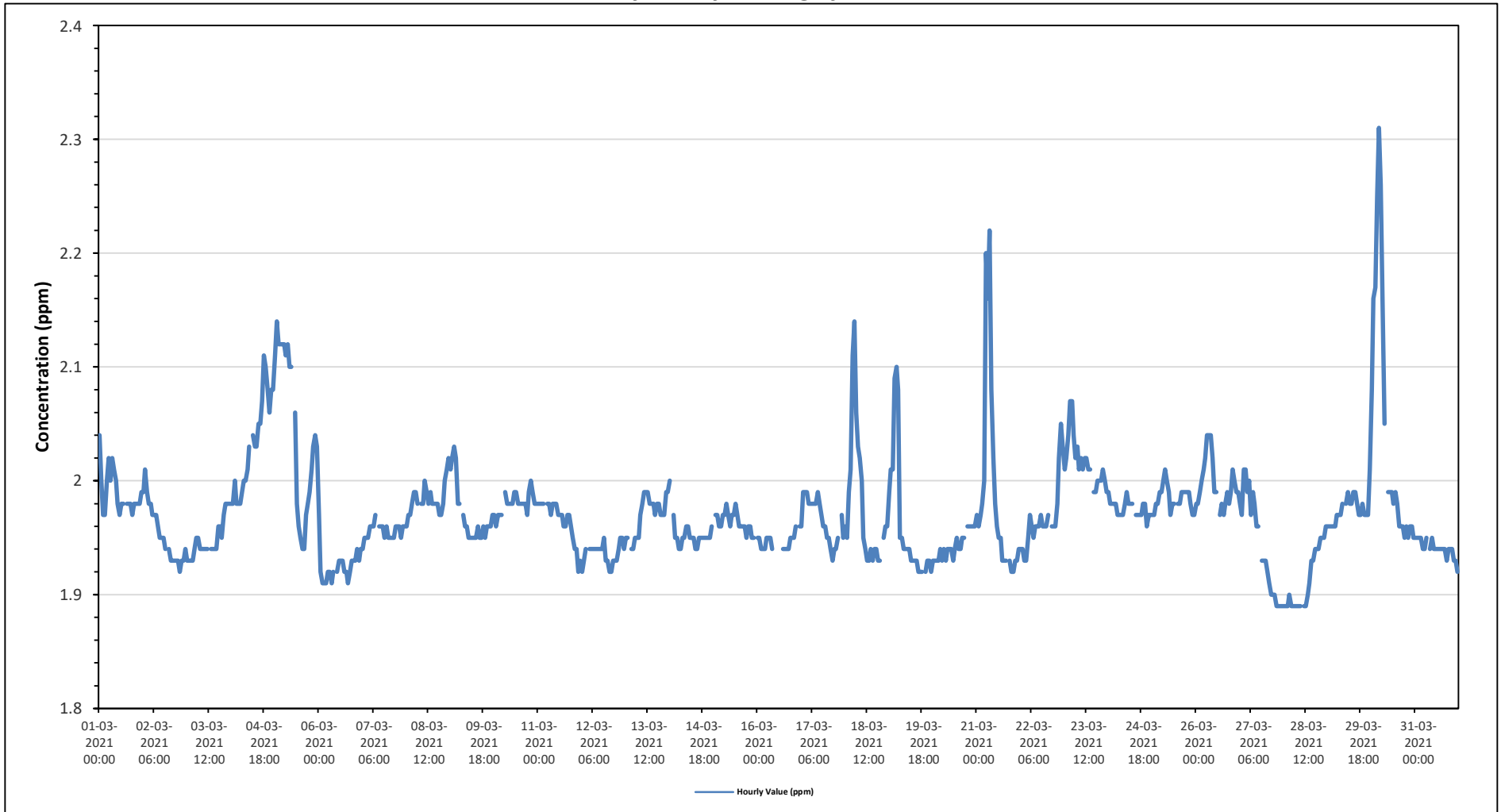
Maximum Hourly Value: 2.31 ppm on March 30 at hour 4	Hours in Service: 744
Maximum Daily Value: 2.05 ppm on March 5	Hours of Data: 707
Minimum Hourly Value: 1.89 ppm on March 27 at hour 20	Hours of Missing Data: 0
Minimum Daily Value: 1.91 ppm on March 28	Hours of Calibration: 37
Monthly Average: 1.97 ppm	Operational Uptime: 100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Mar 1	2.04	2.00	1.97	1.97	2.00	2.02	2.00	2.02	2.01	2.00	1.98	1.97	1.98	1.98	S	1.98	1.98	1.98	1.97	1.98	1.98	1.98	1.98	1.99	1.97	2.04	1.99	
Mar 2	1.99	2.01	1.99	1.98	1.98	1.97	1.97	1.97	1.96	1.95	1.95	1.95	1.94	S	1.94	1.93	1.93	1.93	1.93	1.93	1.92	1.93	1.93	1.93	1.94	1.92	2.01	1.95
Mar 3	1.93	1.93	1.93	1.93	1.94	1.95	1.95	1.94	1.94	1.94	1.94	1.94	S	1.94	1.94	1.94	1.94	1.96	1.96	1.95	1.97	1.98	1.98	1.98	1.93	1.98	1.95	
Mar 4	1.98	1.98	2.00	1.98	1.98	1.98	1.99	2.00	2.00	2.01	2.03	S	2.04	2.03	2.03	2.05	2.05	2.07	2.11	2.10	2.08	2.06	2.08	2.08	1.98	2.11	2.03	
Mar 5	2.11	2.14	2.12	2.12	2.12	2.12	2.11	2.12	2.10	2.10	S	2.06	1.98	1.96	1.95	1.94	1.94	1.97	1.98	1.99	2.01	2.03	2.04	2.03	1.94	2.14	2.05	
Mar 6	1.97	1.92	1.91	1.91	1.92	1.92	1.92	1.91	1.92	S	1.92	1.93	1.93	1.93	1.92	1.92	1.91	1.92	1.93	1.93	1.93	1.94	1.93	1.94	1.91	1.97	1.92	
Mar 7	1.94	1.95	1.95	1.95	1.96	1.96	1.96	1.97	S	1.96	1.96	1.96	1.95	1.96	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.95	1.96	1.96	1.94	1.97	1.96	
Mar 8	1.96	1.97	1.97	1.98	1.99	1.99	1.98	S	1.98	1.98	2.00	1.99	1.98	1.99	1.98	1.98	1.98	1.98	1.97	1.97	1.98	2.00	2.01	2.02	1.96	2.02	1.98	
Mar 9	2.01	2.02	2.03	2.02	1.98	1.98	S	1.97	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.96	1.95	1.95	1.96	1.95	1.96	1.96	1.96	1.97	1.95	2.03	1.97	
Mar 10	1.97	1.96	1.97	1.97	1.97	S	1.99	1.98	1.98	1.98	1.98	1.98	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.97	1.99	2.00	1.99	1.98	1.96	2.00	1.98	
Mar 11	1.98	1.98	1.98	1.98	S	1.98	1.98	1.97	1.98	1.98	1.98	1.97	1.97	1.97	1.96	1.96	1.97	1.97	1.96	1.95	1.94	1.94	1.92	1.93	1.92	1.98	1.97	
Mar 12	1.92	1.93	1.94	S	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.93	1.93	1.92	1.92	1.93	1.93	1.93	1.94	1.95	1.95	1.94	1.92	1.95	1.94	
Mar 13	1.95	1.95	S	1.94	1.94	1.95	1.95	1.95	1.97	1.98	1.99	1.99	1.98	1.98	1.98	1.97	1.98	1.98	1.97	1.97	1.97	1.99	1.99	1.99	1.94	1.99	1.97	
Mar 14	2.00	S	1.97	1.95	1.95	1.94	1.94	1.95	1.95	1.95	1.96	1.96	1.95	1.95	1.95	1.94	1.94	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.94	2.00	1.95	
Mar 15	S	1.97	1.97	1.96	1.96	1.97	1.97	1.98	1.97	1.96	1.97	1.97	1.98	1.97	1.96	1.96	1.96	1.96	1.95	1.96	1.96	1.95	1.95	S	1.95	1.98	1.96	
Mar 16	1.95	1.95	1.94	1.94	1.94	1.95	1.95	1.95	1.94	C	C	C	C	C	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.96	S	1.96	1.94	1.96	1.95	
Mar 17	1.96	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.99	1.98	1.97	1.96	1.96	1.95	1.95	1.94	1.93	1.94	1.94	1.94	1.95	S	1.97	1.95	1.93	1.99	
Mar 18	1.96	1.95	1.99	2.01	2.11	2.14	2.06	2.03	2.02	2.00	1.95	1.94	1.93	1.93	1.94	1.93	1.94	1.94	1.93	1.93	S	1.95	1.96	1.96	1.93	2.14	1.98	
Mar 19	1.99	2.01	2.01	2.09	2.10	2.08	1.95	1.95	1.94	1.94	1.94	1.94	1.93	1.93	1.93	1.93	1.92	1.92	1.92	S	1.92	1.93	1.93	1.92	1.92	2.10	1.96	
Mar 20	1.93	1.93	1.93	1.93	1.94	1.93	1.94	1.93	1.94	1.94	1.94	1.93	1.94	1.95	1.94	1.94	1.95	1.95	S	1.96	1.96	1.96	1.96	1.96	1.93	1.96	1.94	
Mar 21	1.97	1.96	1.97	1.98	2.00	2.20	2.16	2.22	2.08	2.02	1.98	1.96	1.95	1.95	1.93	1.93	1.93	S	1.93	1.92	1.92	1.93	1.93	1.94	1.92	2.22	1.99	
Mar 22	1.94	1.94	1.93	1.93	1.95	1.97	1.96	1.95	1.96	1.96	1.96	1.96	1.97	1.96	1.96	1.96	1.97	S	1.96	1.96	1.96	1.98	2.02	2.05	2.03	1.93	2.05	
Mar 23	2.01	2.02	2.04	2.07	2.07	2.04	2.02	2.03	2.01	2.02	2.01	2.02	2.02	2.01	2.01	S	1.99	1.99	2.00	2.00	2.00	2.01	2.00	1.99	1.99	2.07	2.02	
Mar 24	1.99	1.98	1.98	1.98	1.98	1.97	1.97	1.97	1.97	1.98	1.99	1.98	1.98	1.98	S	1.97	1.97	1.97	1.97	1.98	1.98	1.96	1.97	1.97	1.96	1.99	1.98	
Mar 25	1.97	1.97	1.98	1.98	1.99	1.99	2.00	2.01	2.00	1.99	1.97	1.98	1.98	S	1.98	1.98	1.99	1.99	1.99	1.99	1.99	1.99	1.98	1.97	1.97	1.97	1.98	
Mar 26	1.98	1.98	1.99	2.00	2.01	2.02	2.04	2.04	2.04	2.02	1.99	1.99	S	1.97	1.98	1.97	1.98	1.99	1.98	1.99	1.98	1.99	2.01	2.00	1.99	1.99	2.00	
Mar 27	1.98	1.97	2.01	2.01	1.99	2.00	1.97	1.99	1.98	1.96	1.96	S	1.93	1.93	1.93	1.92	1.91	1.90	1.90	1.90	1.89	1.89	1.89	1.89	1.89	2.01	1.94	
Mar 28	1.89	1.89	1.89	1.90	1.89	1.89	1.89	1.89	1.89	1.89	S	1.89	1.89	1.90	1.91	1.93	1.93	1.94	1.94	1.94	1.95	1.95	1.95	1.96	1.89	1.96	1.91	
Mar 29	1.96	1.96	1.96	1.96	1.96	1.97	1.97	1.97	1.98	S	1.98	1.99	1.98	1.98	1.99	1.99	1.98	1.97	1.97	1.97	1.97	1.97	2.01	1.96	2.01	1.97	1.97	
Mar 30	2.08	2.16	2.17	2.25	2.31	2.26	2.16	2.05	S	1.99	1.99	1.99	1.98	1.99	1.98	1.96	1.96	1.96	1.95	1.96	1.95	1.96	1.96	1.95	1.95	2.31	2.04	
Mar 31	1.95	1.95	1.95	1.95	1.94	1.94	1.95	S	1.94	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.94	1.94	1.93	1.93	1.93	1.92	1.92	1.95	1.94	1.94	
Diurnal Maximum	2.11	2.16	2.17	2.25	2.31	2.26	2.16	2.22	2.10	2.10	2.03	2.06	2.04	2.03	2.03	2.05	2.05	2.07	2.11	2.10	2.08	2.06	2.08	2.08	1.92	2.08	2.08	
Diurnal Average	1.98	1.98	1.98	1.99	1.99	2.00	1.99	1.99	1.98	1.98	1.98	1.97	1.97	1.96	1.96	1.96	1.95	1.96	1.96	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.97	

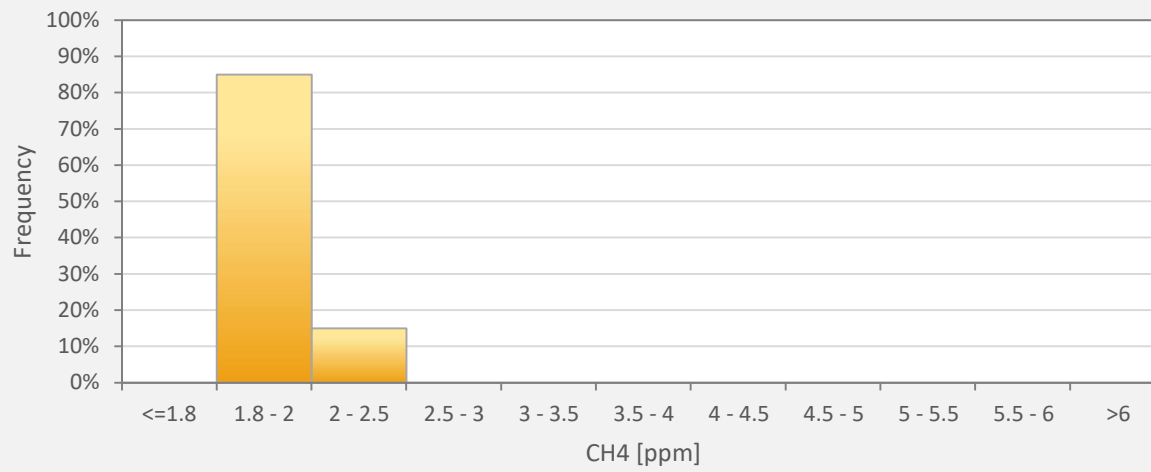
C Monthly Calibration	S Daily Zero-Span Check	Q Quality Assurance
K Collection Error	N No Data (Machine Not in Service)	Y Routine Maintenance
X InValid Data (Equipment Malfunction/Recovery)	NRM UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P Power Failure

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 CH4 - 986c Station



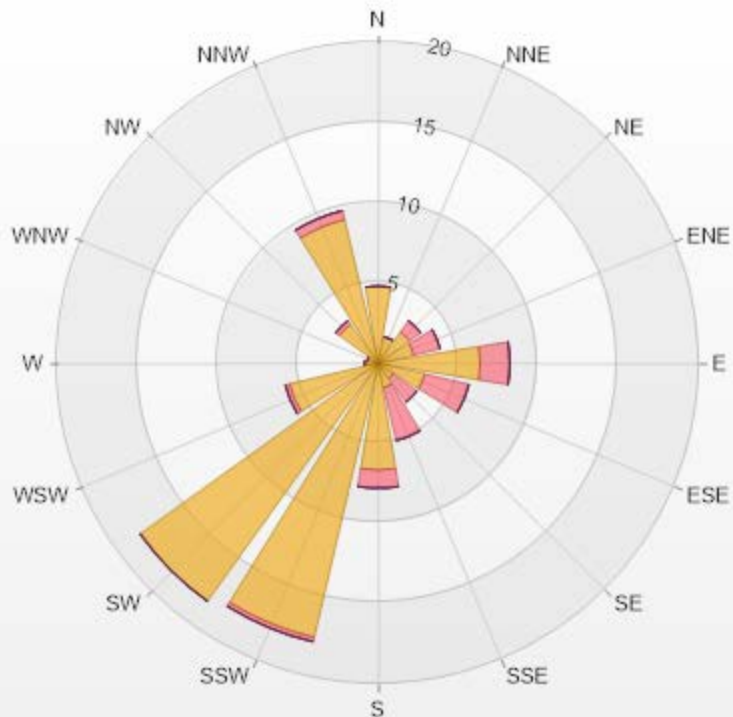
CH4[ppm] Histogram: PRAMP 986c Monthly: 03-2021 1 Hr.



Classes	CH4
<=1.8	0.00%
1.8 - 2	85.01%
2 - 2.5	14.99%
2.5 - 3	0.00%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: PRAMP 986c Poll.: PRAMP 986c-CH4[ppm] Monthly: 03-2021 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	4.81	0	0	0	0	4.81
NNE	1.7	0	0	0	0	1.7
NE	2.4	0.85	0	0	0	3.25
ENE	2.26	1.7	0	0	0	3.96
E	6.36	1.84	0	0	0	8.2
ESE	2.97	2.83	0	0	0	5.8
SE	1.13	1.84	0	0	0	2.97
SSE	1.56	3.39	0	0	0	4.95
S	6.65	1.13	0	0	0	7.78
SSW	17.54	0.28	0	0	0	17.82
SW	18.25	0	0	0	0	18.25
WSW	5.66	0.28	0	0	0	5.94
W	0.85	0	0	0	0	0.85
WNW	0.71	0	0	0	0	0.71
NW	2.97	0.28	0	0	0	3.25
NNW	9.19	0.57	0	0	0	9.76
Summary	85.01	14.99	0	0	0	100



PRAMP-202103

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% Icon Classes (ppm)

85

0-2

15

2-5

0

5-10

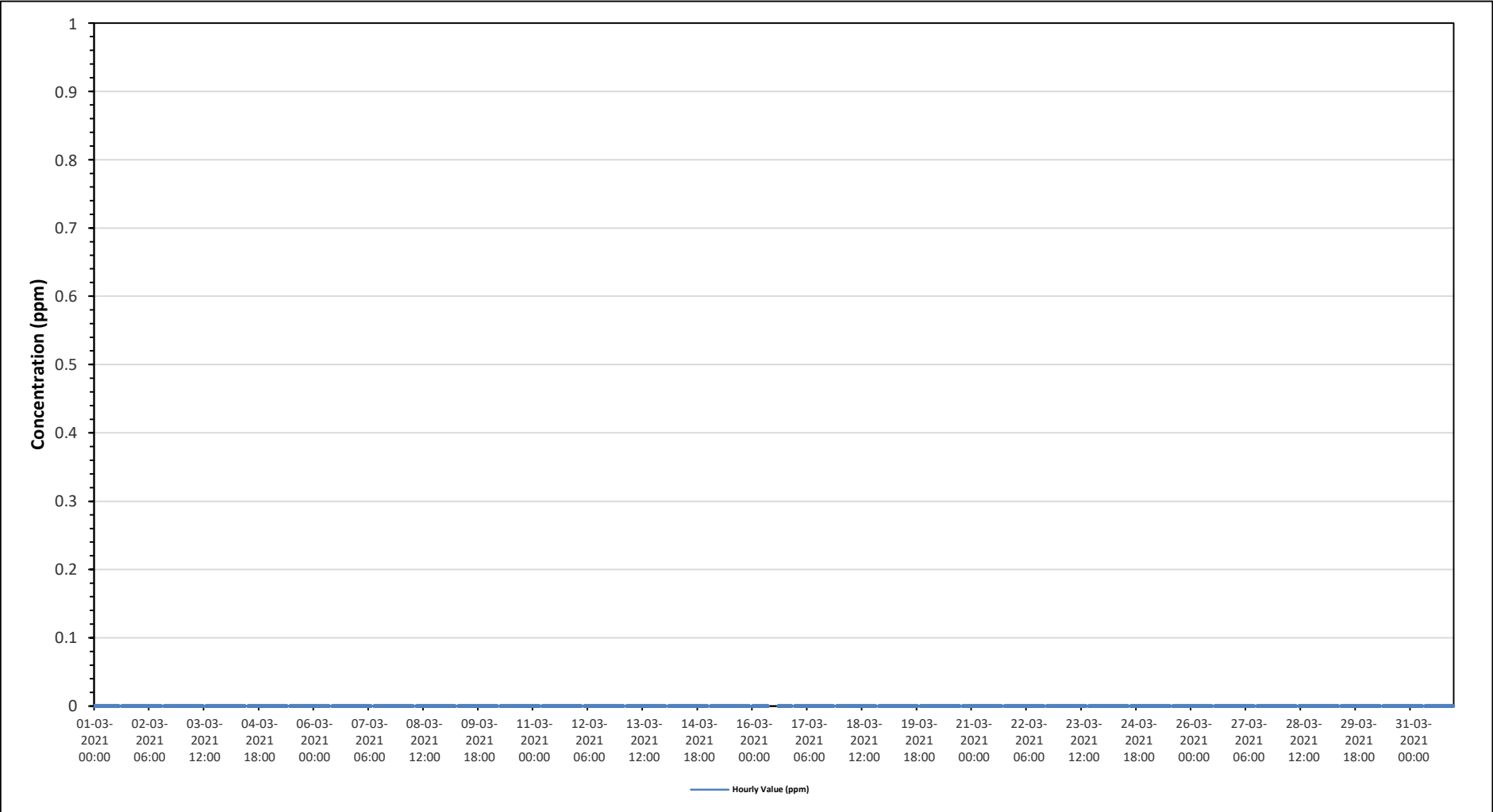
0

10-20

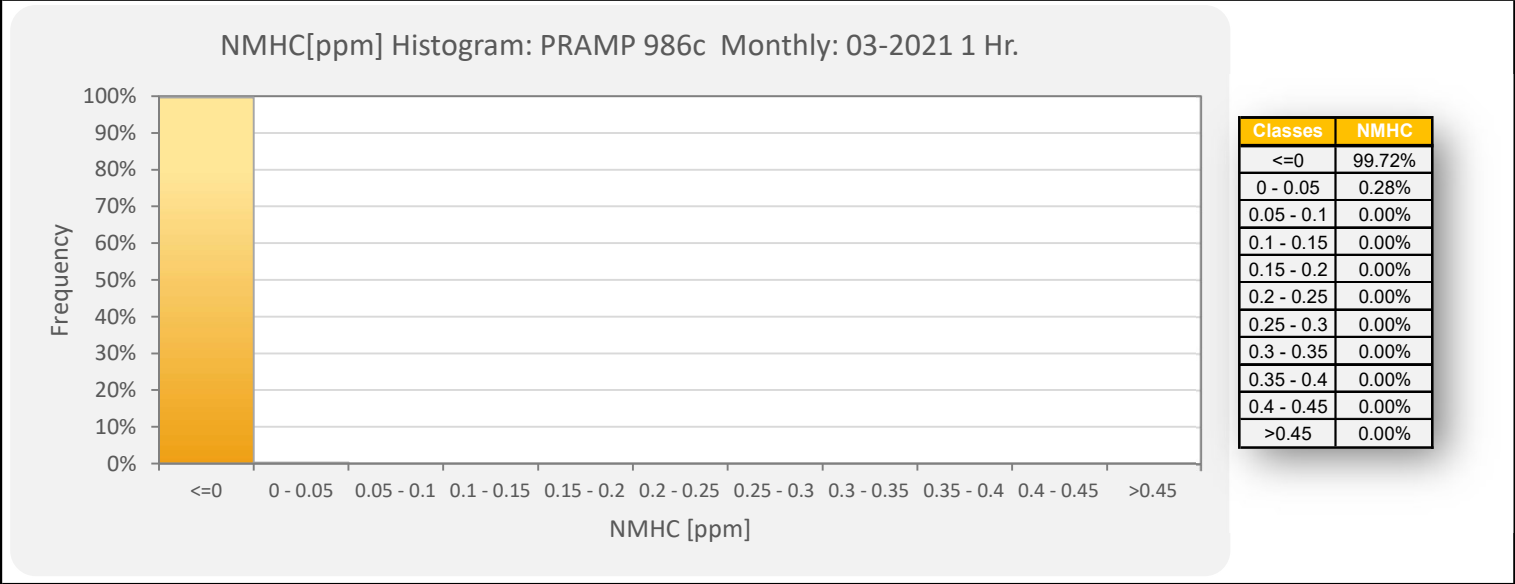
0

>20.0

Timeseries Chart of Hourly Average for NMHC - 986c Station

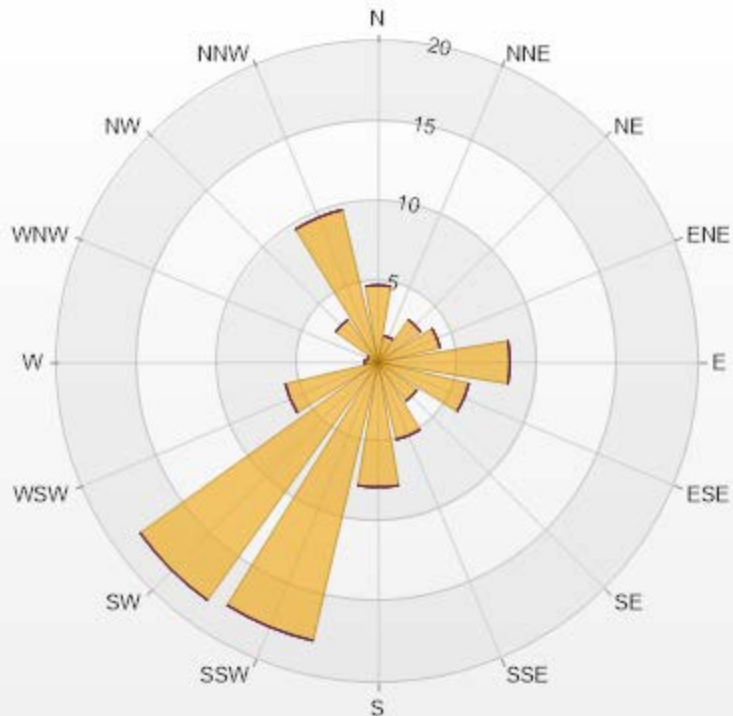


NMHC[ppm] Histogram: PRAMP 986c Monthly: 03-2021 1 Hr.



Wind: PRAMP 986c Poll.: PRAMP 986c-NMHC[ppm] Monthly: 03-2021 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	4.81	0	0	0	0	4.81
NNE	1.7	0	0	0	0	1.7
NE	3.25	0	0	0	0	3.25
ENE	3.96	0	0	0	0	3.96
E	8.2	0	0	0	0	8.2
ESE	5.8	0	0	0	0	5.8
SE	2.97	0	0	0	0	2.97
SSE	4.95	0	0	0	0	4.95
S	7.78	0	0	0	0	7.78
SSW	17.82	0	0	0	0	17.82
SW	18.25	0	0	0	0	18.25
WSW	5.94	0	0	0	0	5.94
W	0.85	0	0	0	0	0.85
WNW	0.71	0	0	0	0	0.71
NW	3.25	0	0	0	0	3.25
NNW	9.76	0	0	0	0	9.76
Summary	100	0	0	0	0	100




PRAMP-202103

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% 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 - March 2021

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

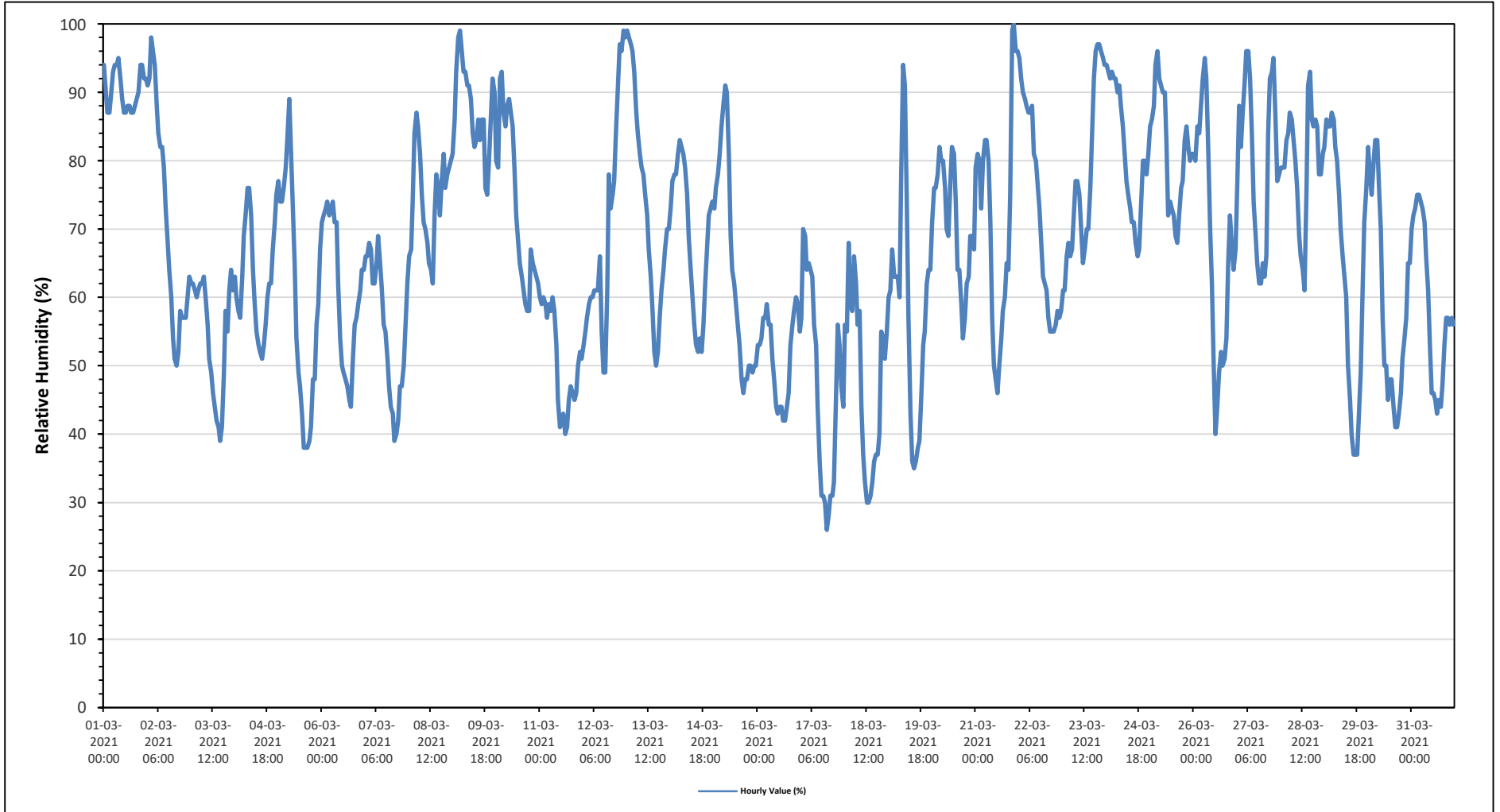
Maximum Hourly Value:	100 %	on March 21 at hour 21	Hours in Service:	744
Maximum Daily Value:	90.3 %	on March 1	Hours of Data:	744
Minimum Hourly Value:	26 %	on March 17 at hour 14	Hours of Missing Data:	0
Minimum Daily Value:	47.0 %	on March 17	Hours of Calibration:	0
Monthly Average:	67.4 %		Operational 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
Mar 1	94	90	87	87	90	93	94	94	95	92	89	87	87	88	88	87	87	88	89	90	94	94	92	92	87	95	90.3
Mar 2	91	92	98	96	94	88	84	82	82	79	73	68	64	60	54	51	50	52	58	57	57	57	60	63	50	98	71.3
Mar 3	62	62	61	60	61	62	62	63	60	56	51	49	46	44	42	41	39	41	49	58	55	61	64	61	39	64	54.6
Mar 4	63	60	58	57	63	69	72	76	76	72	64	59	55	53	52	51	53	56	60	62	62	67	71	75	51	76	62.8
Mar 5	77	74	74	76	79	83	89	81	73	65	54	49	47	43	38	38	38	39	41	48	48	56	59	67	38	89	59.8
Mar 6	71	72	73	74	72	73	74	71	71	62	54	50	49	48	47	45	44	51	56	57	59	61	64	64	44	74	60.9
Mar 7	66	66	68	67	62	62	65	69	65	61	56	55	51	47	44	43	39	40	42	47	47	50	56	62	39	69	55.4
Mar 8	66	67	74	84	87	85	81	75	71	70	68	65	64	62	72	78	76	72	77	81	76	78	79	80	62	87	74.5
Mar 9	81	86	93	98	99	96	93	93	91	91	89	84	82	83	86	83	86	86	76	75	80	86	92	90	75	99	87.5
Mar 10	80	79	92	93	87	85	88	89	87	85	79	72	68	65	63	61	59	58	58	67	65	64	63	62	58	93	73.7
Mar 11	60	59	60	59	57	59	58	60	58	53	45	41	42	43	40	41	45	47	46	45	46	50	52	51	40	60	50.7
Mar 12	53	55	57	59	60	60	61	61	61	66	55	49	49	61	78	73	75	77	85	91	97	96	99	98	49	99	69.8
Mar 13	99	98	97	96	93	87	84	81	79	78	75	72	67	63	58	52	50	52	57	61	64	67	70	70	50	99	73.8
Mar 14	73	77	78	78	81	83	82	81	79	75	69	64	60	56	53	52	54	52	56	62	67	72	73	74	52	83	68.8
Mar 15	73	76	78	81	85	88	91	90	81	69	64	62	59	56	53	48	46	48	48	50	50	49	50	50	46	91	64.4
Mar 16	53	53	54	57	57	59	56	56	51	48	44	43	44	44	42	42	44	46	53	56	58	60	59	55	42	60	51.4
Mar 17	57	70	69	64	65	64	63	56	53	44	36	31	31	30	26	28	31	31	33	45	56	53	47	44	26	70	47.0
Mar 18	56	55	68	59	58	66	62	56	58	44	37	33	30	30	31	33	36	37	37	40	55	54	51	55	30	68	47.5
Mar 19	60	61	67	63	63	63	60	77	94	91	75	57	43	36	35	36	38	39	46	53	55	62	64	64	35	94	58.4
Mar 20	71	76	76	78	82	80	80	76	70	69	77	82	81	74	64	64	59	54	57	62	63	69	69	67	54	82	70.8
Mar 21	79	81	80	73	80	83	83	80	71	57	50	48	46	50	54	58	60	65	64	75	99	100	96	96	46	100	72.0
Mar 22	95	92	90	89	88	87	87	88	81	80	77	73	68	63	62	61	57	55	55	55	56	58	57	58	55	95	72.2
Mar 23	61	61	66	68	66	67	72	77	77	75	70	65	67	70	70	76	84	92	96	97	97	96	95	94	61	97	77.5
Mar 24	94	93	92	93	92	92	90	91	88	85	81	77	75	73	71	71	68	66	67	74	80	80	78	81	66	94	81.3
Mar 25	85	86	88	94	96	92	91	90	90	83	72	74	73	72	69	68	72	76	77	83	85	82	80	81	68	96	81.6
Mar 26	81	80	85	84	88	92	95	92	81	70	62	50	40	44	49	52	50	51	54	65	72	67	64	67	40	95	68.1
Mar 27	77	88	82	87	91	96	96	92	84	74	69	65	62	62	65	63	66	84	92	93	95	86	77	78	62	96	80.2
Mar 28	79	79	79	83	84	87	86	83	80	76	69	66	64	61	76	91	93	86	85	86	85	78	78	81	61	93	79.8
Mar 29	82	86	85	85	87	86	82	80	75	70	66	63	60	50	45	40	37	37	37	43	49	62	71	76	37	87	64.8
Mar 30	82	78	75	80	83	83	76	70	57	50	50	45	48	48	44	41	41	43	46	51	54	57	65	65	41	83	59.7
Mar 31	70	72	73	75	75	74	73	71	66	61	53	46	46	45	43	45	44	47	53	57	57	56	57	56	43	75	59.0
Diurnal Maximum	99	98	98	98	99	96	96	94	95	92	89	87	87	88	88	91	93	92	96	97	99	100	99	98			
Diurnal Average	73.9	75.0	76.7	77.3	78.2	78.8	78.4	77.5	74.4	69.4	63.6	59.5	57.0	55.6	55.3	55.3	55.5	57.0	59.7	64.1	67.2	68.6	69.4	70.2			

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 RH - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2021

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

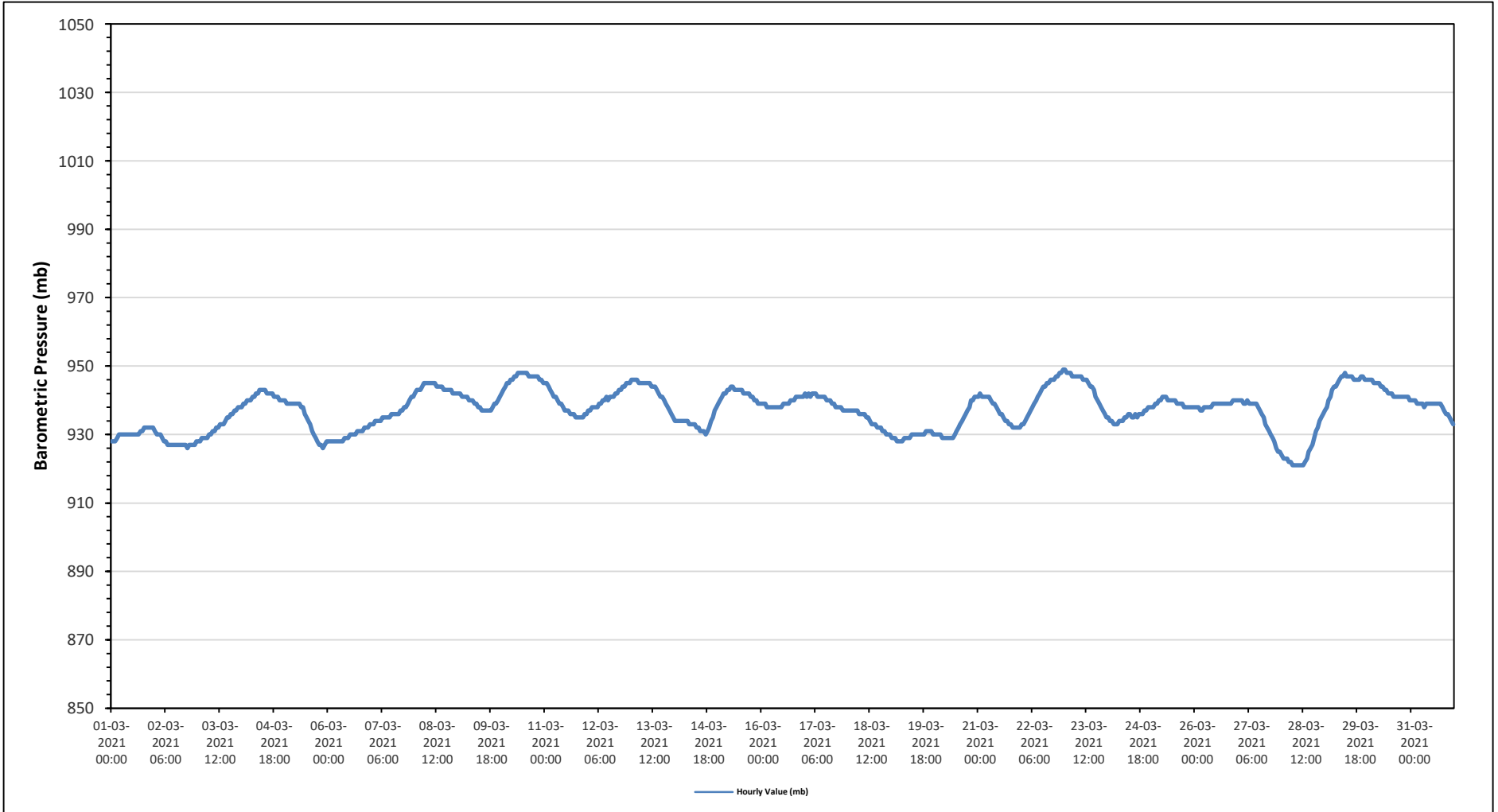
Maximum Hourly Value:	949 mb on March 22 at hour 23	Hours in Service:	744
Maximum Daily Value:	946 mb on March 10	Hours of Data:	744
Minimum Hourly Value:	921 mb on March 28 at hour 6	Hours of Missing Data:	0
Minimum Daily Value:	925 mb on March 28	Hours of Calibration:	0
Monthly Average:	937 mb	Operational 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
Mar 1	928	928	928	929	930	930	930	930	930	930	930	930	930	930	930	930	931	931	932	932	932	932	932	932	928	932	930.3
Mar 2	931	930	930	930	929	928	928	927	927	927	927	927	927	927	927	927	927	927	927	926	927	927	927	928	926	931	927.7
Mar 3	928	928	929	929	929	929	930	930	931	931	932	932	933	933	933	934	935	935	936	936	937	937	938	938	928	938	932.6
Mar 4	938	939	939	940	940	940	941	941	942	942	943	943	943	943	942	942	942	941	941	941	940	940	940	938	943	941.0	
Mar 5	940	939	939	939	939	939	939	939	939	938	938	936	935	934	933	931	930	929	928	927	927	926	927	928	926	940	934.1
Mar 6	928	928	928	928	928	928	928	928	928	929	929	930	930	930	930	931	931	931	931	931	932	932	932	933	928	933	929.7
Mar 7	933	933	934	934	934	934	935	935	935	935	935	936	936	936	936	936	937	937	938	938	939	940	941	941	933	941	936.2
Mar 8	942	943	943	943	944	945	945	945	945	945	945	945	944	944	944	944	943	943	943	943	943	942	942	942	942	945	943.6
Mar 9	942	942	941	941	941	941	940	940	939	939	938	938	937	937	937	937	937	937	937	938	939	939	940	941	937	942	939.2
Mar 10	942	943	944	945	945	946	946	947	947	948	948	948	948	948	948	947	947	947	947	947	947	946	946	945	942	948	946.3
Mar 11	945	945	944	943	942	941	941	940	939	939	938	937	937	937	936	936	936	935	935	935	935	935	936	936	935	945	938.5
Mar 12	937	937	938	938	938	938	939	939	940	940	941	941	941	941	941	942	942	943	943	944	944	945	945	945	937	945	940.9
Mar 13	946	946	946	946	945	945	945	945	945	945	944	944	944	944	943	942	941	941	940	939	938	937	936	935	935	946	942.6
Mar 14	934	934	934	934	934	934	934	934	933	933	933	932	932	931	931	931	930	931	932	934	935	937	938	930	938	933.3	
Mar 15	939	940	941	942	942	943	943	944	944	943	943	943	943	943	942	942	942	941	941	940	940	939	939	939	939	944	941.7
Mar 16	939	939	939	938	938	938	938	938	938	938	938	939	939	939	939	940	940	940	941	941	941	941	941	941	938	941	939.2
Mar 17	942	941	942	941	942	942	942	941	941	941	941	940	940	940	939	939	938	938	938	938	938	937	937	937	937	942	939.9
Mar 18	937	937	937	937	937	937	936	936	936	936	935	935	934	933	933	933	932	932	932	931	931	930	930	930	930	937	934.0
Mar 19	929	929	929	928	928	928	928	929	929	929	929	929	930	930	930	930	930	930	931	931	931	931	930	928	931	929.5	
Mar 20	930	930	930	930	929	929	929	929	929	929	930	931	932	933	934	935	936	937	938	940	940	941	941	929	941	933.0	
Mar 21	941	942	941	941	941	941	941	940	939	938	937	936	936	935	934	934	933	933	932	932	932	932	932	932	932	942	936.8
Mar 22	933	933	934	935	936	937	938	939	940	941	942	943	944	944	945	945	946	946	946	947	947	948	948	949	933	949	941.9
Mar 23	949	948	948	948	947	947	947	947	947	946	946	946	945	944	944	943	941	940	939	938	937	936	935	935	949	944.0	
Mar 24	935	934	934	933	933	933	934	934	934	935	935	936	936	935	935	936	936	936	936	936	937	937	938	938	933	938	935.2
Mar 25	938	938	939	939	940	940	941	941	941	940	940	940	940	939	939	939	939	938	938	938	938	938	938	938	938	941	939.2
Mar 26	938	938	938	937	937	938	938	938	938	938	938	939	939	939	939	939	939	939	939	939	939	940	940	940	937	940	938.6
Mar 27	940	940	940	939	939	940	939	939	939	939	939	938	937	936	935	933	932	931	930	929	928	926	925	925	925	940	934.9
Mar 28	924	923	923	923	922	922	921	921	921	921	921	921	921	922	923	925	926	927	929	931	932	934	935	936	921	936	925.2
Mar 29	937	938	940	941	943	944	944	945	946	947	947	948	947	947	947	946	946	946	946	946	947	947	946	937	948	944.9	
Mar 30	946	946	946	945	945	945	945	944	944	943	943	942	942	942	941	941	941	941	941	941	941	941	940	940	946	946	942.8
Mar 31	940	940	940	939	939	939	939	938	939	939	939	939	939	939	939	939	938	937	936	936	935	934	933	933	940	938.1	
Diurnal Maximum	949	948	948	948	947	947	947	947	947	948	948	948	948	948	947	947	947	947	947	947	948	948	949				
Diurnal Average	937	937	937	937	937	937	938	938	938	938	938	937	937	937	937	937	937	937	937	937	937	937	937				

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 BP - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2021

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

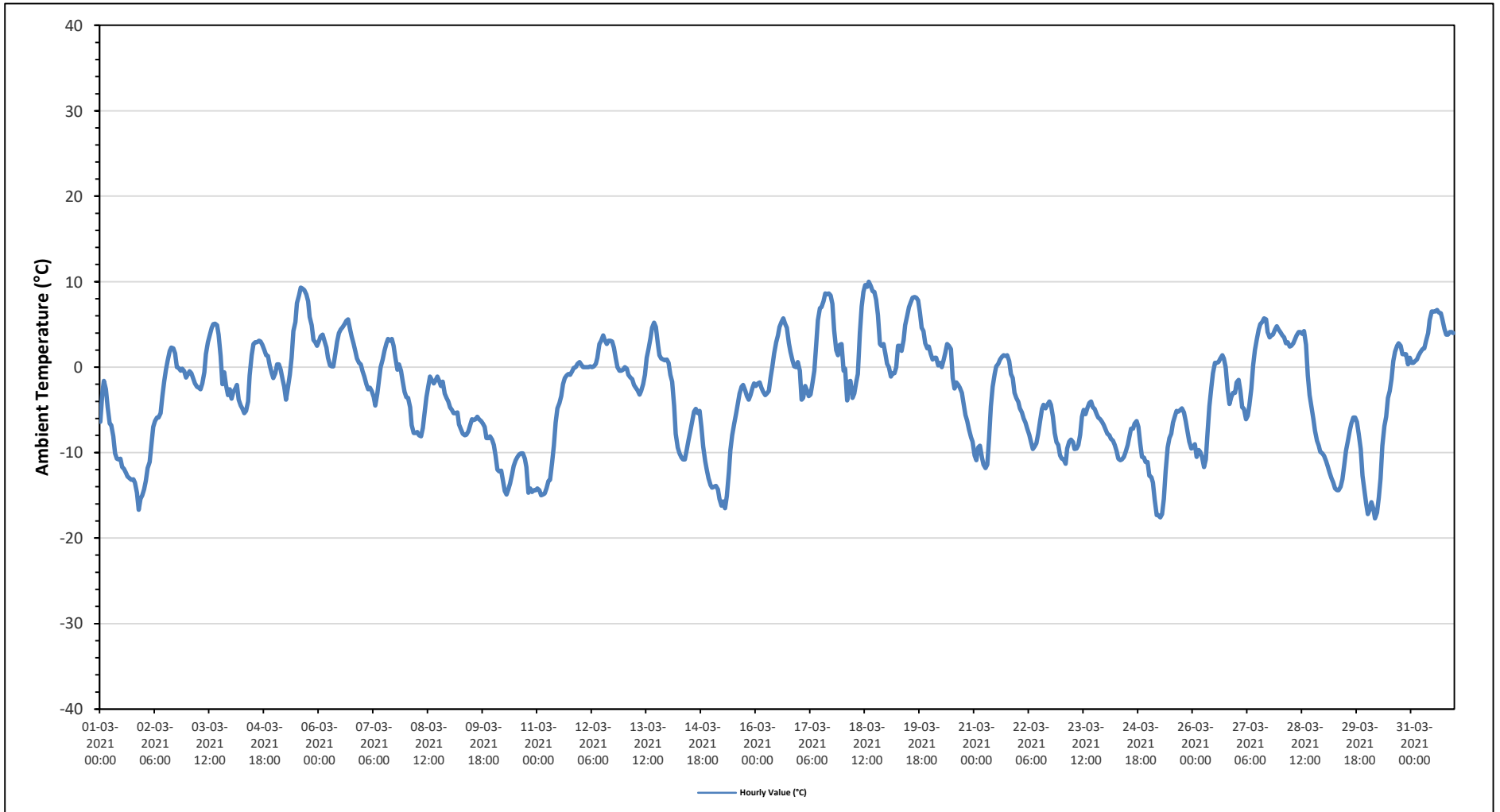
Maximum Hourly Value:	10.0 °C	on March 18 at hour 14	Hours in Service:	744
Maximum Daily Value:	3.8 °C	on March 31	Hours of Data:	744
Minimum Hourly Value:	-17.7 °C	on March 30 at hour 4	Hours of Missing Data:	0
Minimum Daily Value:	-12.4 °C	on March 10	Hours of Calibration:	0
Monthly Average:	-3.2 °C		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
Mar 1	-6.4	-3	-1.6	-2.6	-4.7	-6.6	-6.8	-8.1	-10.1	-10.7	-10.8	-10.7	-11.7	-11.9	-12.4	-12.8	-13	-13.2	-13.1	-13.5	-14.7	-16.7	-15.4	-15	-16.7	-1.6	-10.2
Mar 2	-14.3	-13.3	-11.8	-11.1	-9	-7	-6.3	-5.9	-5.4	-3.4	-1.7	-0.3	0.8	1.9	2.3	2.2	1.6	0	-0.1	-0.4	-0.2	-0.5	-1.2	-14.3	2.3	-3.7	
Mar 3	-0.8	-0.5	-0.7	-1.4	-1.9	-2.3	-2.4	-2.6	-1.9	-0.6	1.5	2.9	3.7	4.6	5	5.1	4.9	3.8	1.3	-2	-0.6	-2.1	-3.3	-2.6	-3.3	5.1	0.3
Mar 4	-3.7	-2.9	-2.5	-2.1	-3.8	-4.5	-4.8	-5.4	-5.1	-4	-1	1.4	2.7	2.9	2.9	3.1	3	2.6	2	1.4	1.3	0.2	-0.7	-1.3	-5.4	3.1	-0.8
Mar 5	-0.7	0.3	0.3	-0.3	-1.5	-2.3	-3.8	-2.3	-0.9	1.1	4.2	5.3	7.5	8.4	9.3	9.2	9	8.5	7.7	5.9	4.9	3.2	2.9	2.5	-3.8	9.3	3.3
Mar 6	3.1	3.6	3.8	3.1	2.3	1.1	0.2	0.1	0.1	1.6	3	4	4.4	4.7	5	5.4	5.6	4.4	3.6	2.7	1.8	1	0.5	0.3	0.1	5.6	2.7
Mar 7	-0.5	-1.1	-2	-2.6	-2.4	-2.8	-3.5	-4.5	-3.1	-1.4	0	0.9	1.9	2.8	3.3	3.1	3.3	2.5	1.1	-0.3	0.3	-0.4	-1.7	-2.9	-4.5	3.3	-0.4
Mar 8	-3.5	-3.6	-4.7	-6.8	-7.7	-7.7	-7.6	-8	-8.1	-7.1	-5.3	-3.5	-2.3	-1.1	-1.5	-1.9	-1.6	-1.1	-1.6	-2.2	-1.7	-3.1	-3.6	-4	-8.1	-1.1	-4.1
Mar 9	-4.7	-5	-5.4	-5.4	-5.3	-6.7	-7.3	-7.8	-8	-7.9	-7.5	-6.8	-6.1	-6.2	-6.1	-5.8	-6.1	-6.3	-6.6	-7	-8.3	-8.3	-8.1	-8.5	-8.5	-4.7	-6.7
Mar 10	-9.1	-10.4	-12	-12.2	-12.1	-13.1	-14.5	-14.9	-14.3	-13.6	-12.5	-11.6	-10.9	-10.5	-10.2	-10.1	-10.1	-10.7	-11.7	-14.7	-14.2	-14.6	-14.4	-14.4	-14.9	-9.1	-12.4
Mar 11	-14.2	-14.4	-15	-14.9	-14.8	-14.2	-13.3	-13.2	-11.2	-9.2	-6.5	-4.8	-4.2	-3.4	-2	-1.3	-1	-0.8	-0.9	-0.5	-0.1	0	0.4	0.6	-15.0	0.6	-6.6
Mar 12	0.3	0	0	0	0	0.1	0	0.1	0.4	1.1	2.7	3.1	3.7	3.2	2.7	3.1	3.1	3	2.3	1.1	0	-0.4	-0.4	-0.3	-0.4	3.7	1.2
Mar 13	0	-0.2	-0.9	-1.2	-1.4	-2.1	-2.4	-2.7	-3.2	-2.8	-2	-0.9	1.1	2.1	3.4	4.6	5.2	4.7	2.7	1.4	1	0.9	0.8	0.9	-3.2	5.2	0.4
Mar 14	0.5	-0.9	-1.7	-4.6	-7.8	-9.4	-10.1	-10.6	-10.8	-10.8	-9.6	-8.6	-7.4	-6.3	-5.2	-4.9	-5.4	-5.1	-7	-9.3	-11	-12	-13	-13.8	-13.8	0.5	-7.7
Mar 15	-14.1	-14	-13.9	-14.3	-15.4	-16.2	-15.7	-16.5	-15.1	-12.3	-9.7	-8	-6.6	-5.5	-4.3	-3.1	-2.3	-2.1	-2.7	-3.4	-3.8	-3.3	-2.4	-1.9	-16.5	-1.9	-8.6
Mar 16	-2.2	-1.9	-1.8	-2.4	-2.9	-3.3	-3.1	-2.8	-1.2	0.1	1.6	2.9	3.7	4.7	5.3	5.7	5.1	4.6	2.8	1.8	0.8	0.1	0	0.6	-3.3	5.7	0.8
Mar 17	-0.4	-3.8	-3.6	-2.2	-2.7	-3.4	-3.2	-1.8	-0.4	2.5	5.5	6.9	7	7.7	8.6	8.5	8.6	8.4	7.4	4.3	2	1.4	2.6	2.7	-3.8	8.6	2.6
Mar 18	-0.4	-0.2	-3.9	-1.7	-1.6	-3.6	-3.1	-1.7	-0.8	4	7.1	8.8	9.6	9.4	10	9.5	8.9	8.8	7.9	6.1	2.7	2.5	2.7	1.6	-3.9	10.0	3.4
Mar 19	0.4	0	-1.1	-0.7	-0.7	0	2.5	2.5	1.9	3.2	4.9	6	7	7.6	8.1	8.2	8.1	7.8	6.4	4.6	4.2	2.8	2.2	2.4	-1.1	8.2	3.7
Mar 20	1.5	0.9	1.1	1.1	0.2	0.5	0	0.8	1.7	2.7	2.5	2.1	-1.3	-2.5	-1.8	-2.1	-2.4	-3	-4.3	-5.6	-6.3	-7.3	-8.2	-8.7	-8.7	2.7	-1.6
Mar 21	-10.3	-10.9	-9.4	-9.2	-10.6	-11.4	-11.8	-11.4	-8.3	-4.6	-2.3	-0.8	0.1	0.4	0.9	1.2	1.4	1.3	1.4	0.7	-0.8	-1.3	-3	-3.6	-11.8	1.4	-4.3
Mar 22	-4.1	-4.8	-5.3	-6	-6.5	-7.2	-7.9	-8.8	-9.6	-9.3	-8.9	-7.8	-6.4	-4.9	-4.4	-4.8	-4.4	-4	-4.4	-5.8	-7.7	-8.8	-9.1	-10.3	-10.3	-4.0	-6.7
Mar 23	-10.7	-10.8	-11.3	-9.5	-8.7	-8.5	-8.8	-9.6	-9.5	-9.1	-7.9	-5.8	-5	-5.5	-4.8	-4.2	-4	-4.7	-4.9	-5.5	-5.9	-6.1	-6.4	-6.8	-11.3	-4.0	-7.3
Mar 24	-7.3	-7.8	-8	-8.4	-8.6	-9.1	-9.8	-10.7	-10.9	-10.8	-10.5	-9.9	-9.1	-8.2	-7.2	-7.2	-6.6	-6.3	-7	-8.9	-10.5	-10.6	-11.1	-11.1	-11.1	-6.3	-9.0
Mar 25	-12.7	-12.9	-13.5	-15.5	-17.3	-17.3	-17.2	-15.4	-12.2	-9.4	-8.3	-7.8	-6.5	-5.7	-5.1	-5.2	-5	-4.8	-5.3	-6.3	-7.7	-8.7	-9.5	-17.6	-4.8	-10.3	
Mar 26	-9.4	-9	-10.5	-9.7	-9.9	-10.5	-11.7	-10.8	-7.6	-4.6	-2.3	-0.7	0.5	0.5	0.6	1	1.4	1	0	-2.7	-4.3	-3.5	-3	-3	-11.7	1.4	-4.5
Mar 27	-1.8	-1.5	-2.8	-4.7	-4.9	-6.1	-5.7	-4.5	-2.5	0.2	2	3.2	4.4	5	5.3	5.7	5.6	4.1	3.5	3.7	3.8	4.4	4.8	4.4	-6.1	5.7	1.1
Mar 28	4.1	3.7	3.5	2.8	2.9	2.4	2.5	2.8	3.3	3.7	4.1	4.1	3.9	4.2	2.6	-1	-3.3	-4.6	-6.1	-7.4	-8.6	-9.2	-9.9	-10.1	-10.1	4.2	-0.4
Mar 29	-10.4	-11	-11.6	-12.4	-13	-13.5	-14.2	-14.4	-14.4	-14	-13.1	-11.5	-9.8	-8.7	-7.4	-6.6	-5.9	-5.9	-6.4	-7.8	-9.6	-12.7	-14.3	-15.9	-15.9	-5.9	-11.0
Mar 30	-17.2	-16.7	-15.8	-16.6	-17.7	-17	-15.3	-13	-9.2	-6.9	-5.8	-3.6	-2.8	-1.4	0.7	1.8	2.5	2.8	2.5	1.5	1.5	1.5	0.3	1.1	-17.7	2.8	-6.0
Mar 31	0.5	0.5	0.7	0.9	1.4	1.8	2.1	2.2	3.1	4	5.5	6.5	6.5	6.5	6.7	6.4	6.3	5.6	4.5	3.8	3.8	4.1	4.1	4	0.5	6.7	3.8
Diurnal Maximum	4.1	3.7	3.8	3.1	2.9	2.4	2.5	2.8	3.3	4	7.1	8.8	9.6	9.4	10.0	9.5	9.0	8.8	7.9	6.1	4.9	4.4	4.8	4.4			
Diurnal Average	-4.8	-4.9	-5.2	-5.5	-6.0	-6.4	-6.6	-6.5	-5.7	-4.3	-2.7	-1.5	-0.8	-0.2	0.3	0.4	0.4	0.1	-0.8	-2.0	-2.8	-3.4	-3.7	-4.0			

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 AT - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2021

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

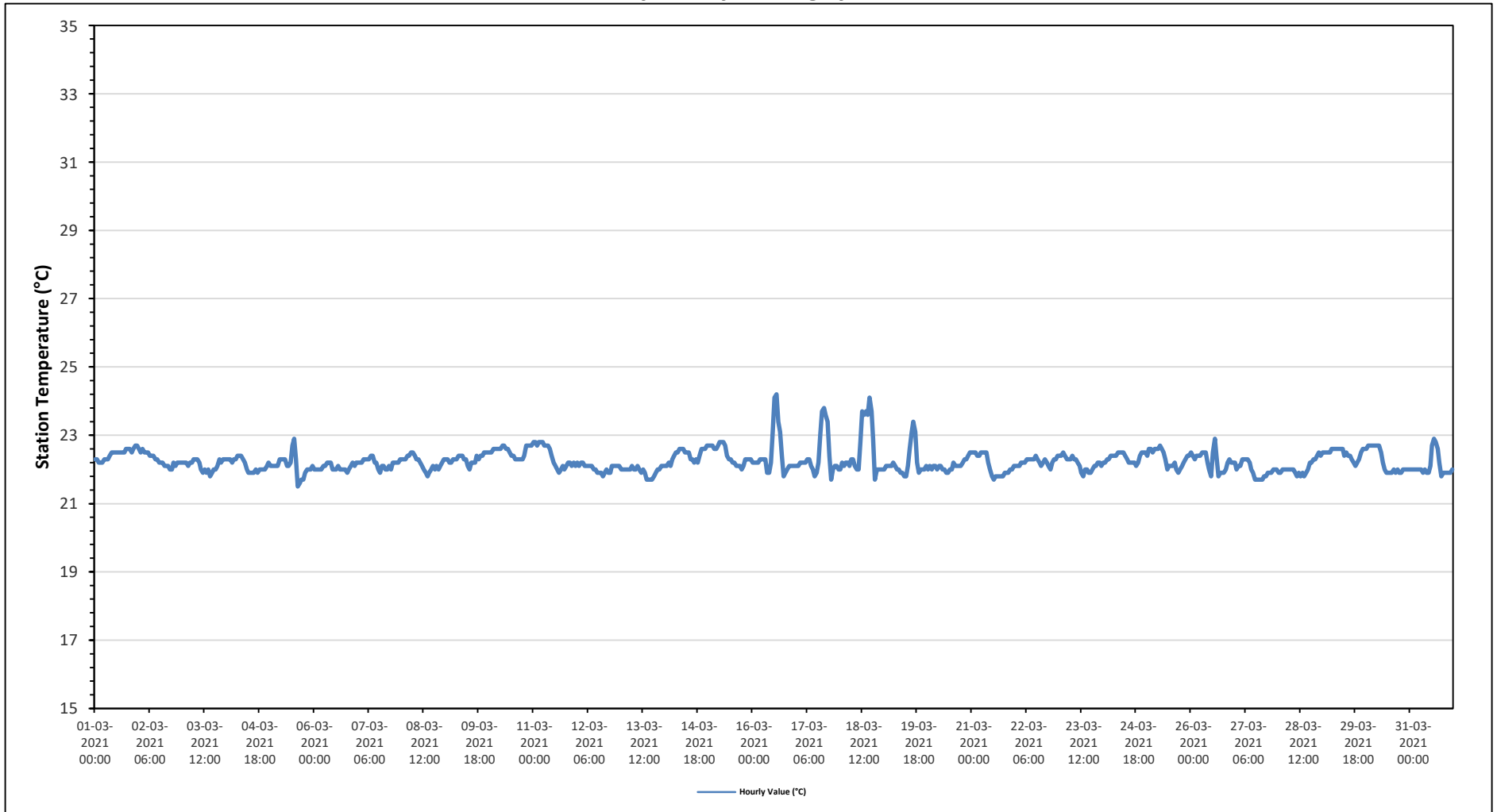
Maximum Hourly Value:	24.2 °C	on March 16 at hour 13	Hours in Service:	744
Maximum Daily Value:	22.6 °C	on March 18	Hours of Data:	744
Minimum Hourly Value:	21.5 °C	on March 5 at hour 15	Hours of Missing Data:	0
Minimum Daily Value:	21.9 °C	on March 13	Hours of Calibration:	0
Monthly Average:	22.2 °C		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
Mar 1	22.3	22.3	22.2	22.2	22.2	22.3	22.3	22.3	22.4	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.6	22.6	22.6	22.5	22.6	22.7	22.7	22.2	22.7	22.5
Mar 2	22.6	22.5	22.6	22.5	22.5	22.5	22.4	22.4	22.4	22.3	22.3	22.2	22.2	22.1	22.1	22.1	22.0	22.0	22.2	22.2	22.2	22.2	22.2	22.2	22.0	22.6	22.3
Mar 3	22.2	22.2	22.2	22.1	22.2	22.2	22.3	22.3	22.3	22.2	22.0	21.9	22.0	21.9	22.0	21.8	21.9	22.0	22.0	22.1	22.3	22.2	22.3	22.3	21.8	22.3	22.1
Mar 4	22.3	22.3	22.3	22.2	22.3	22.3	22.4	22.4	22.4	22.3	22.2	22.0	21.9	21.9	21.9	21.9	22.0	21.9	22.0	22.0	22.0	22.1	22.2	21.9	22.4	22.1	
Mar 5	22.1	22.1	22.1	22.1	22.1	22.3	22.3	22.3	22.3	22.1	22.1	22.2	22.7	22.9	22.3	21.5	21.6	21.7	21.7	21.9	22.0	22.0	22.0	22.1	21.5	22.9	22.1
Mar 6	22.0	22.0	22.0	22.0	22.0	22.1	22.1	22.2	22.2	22.2	22.0	22.0	22.0	22.1	22.0	22.0	22.0	21.9	22.0	22.1	22.2	22.1	22.2	21.9	22.2	22.1	
Mar 7	22.2	22.2	22.2	22.3	22.3	22.3	22.3	22.4	22.4	22.2	22.2	22.0	21.9	22.1	22.1	22.0	22.0	22.1	22.0	22.2	22.2	22.2	22.2	21.9	22.4	22.2	
Mar 8	22.3	22.3	22.3	22.4	22.4	22.5	22.5	22.4	22.3	22.2	22.1	22.0	21.9	21.8	21.9	22.0	22.1	22.0	22.1	22.0	22.1	22.2	22.3	21.8	22.5	22.2	
Mar 9	22.3	22.3	22.2	22.2	22.3	22.3	22.3	22.4	22.4	22.4	22.3	22.3	22.1	22.0	22.2	22.2	22.2	22.4	22.3	22.4	22.4	22.5	22.5	22.0	22.5	22.3	
Mar 10	22.5	22.5	22.6	22.6	22.6	22.6	22.6	22.7	22.7	22.6	22.6	22.5	22.4	22.4	22.3	22.3	22.3	22.3	22.3	22.4	22.7	22.7	22.7	22.3	22.7	22.5	
Mar 11	22.8	22.8	22.7	22.8	22.8	22.8	22.7	22.7	22.7	22.6	22.4	22.2	22.1	22.0	21.9	22.0	22.1	22.0	22.1	22.2	22.2	22.1	22.2	21.9	22.8	22.4	
Mar 12	22.2	22.1	22.2	22.2	22.1	22.1	22.1	22.1	22.1	22.0	22.0	21.9	21.9	21.9	21.8	21.9	22.0	21.9	21.9	22.1	22.1	22.1	22.1	21.8	22.2	22.0	
Mar 13	22.0	22.0	22.0	22.0	22.0	22.0	22.1	22.0	22.0	22.1	22.0	21.9	22.0	21.9	21.7	21.7	21.7	21.8	21.9	22.0	22.0	22.1	22.1	21.7	22.1	21.9	
Mar 14	22.1	22.1	22.2	22.1	22.3	22.4	22.5	22.5	22.6	22.6	22.6	22.5	22.5	22.5	22.3	22.3	22.2	22.3	22.2	22.4	22.6	22.6	22.6	22.1	22.7	22.4	
Mar 15	22.7	22.7	22.7	22.6	22.6	22.7	22.8	22.8	22.8	22.7	22.4	22.3	22.3	22.2	22.2	22.1	22.1	22.1	22.0	22.1	22.3	22.3	22.3	22.0	22.8	22.4	
Mar 16	22.2	22.2	22.2	22.2	22.3	22.3	22.3	22.3	21.9	21.9	22.2	23.1	24.1	24.2	23.4	23.1	22.4	21.8	21.9	22.0	22.1	22.1	22.1	21.8	24.2	22.4	
Mar 17	22.1	22.1	22.2	22.2	22.2	22.2	22.3	22.3	22.1	22.0	21.8	21.9	22.2	23.0	23.7	23.8	23.6	23.4	22.4	21.7	22.0	22.1	22.1	22.0	21.7	23.8	22.4
Mar 18	22.0	22.2	22.1	22.2	22.2	22.1	22.3	22.3	22.1	22.0	22.0	22.8	23.7	23.6	23.7	23.6	24.1	23.7	22.9	21.7	22.0	22.0	22.0	21.7	24.1	22.6	
Mar 19	22.0	22.1	22.1	22.1	22.1	22.2	22.1	22.0	22.0	21.9	21.9	21.8	21.8	22.1	22.6	23.1	23.4	23.1	22.2	21.9	22.0	22.0	22.1	21.8	23.4	22.2	
Mar 20	22.0	22.1	22.0	22.1	22.1	22.0	22.1	22.1	22.0	22.0	21.9	21.9	22.0	22.0	22.2	22.1	22.1	22.1	22.1	22.2	22.3	22.3	22.4	22.5	21.9	22.5	22.1
Mar 21	22.5	22.5	22.5	22.4	22.4	22.5	22.5	22.5	22.5	22.2	22.0	21.8	21.7	21.8	21.8	21.8	21.8	21.8	21.9	21.9	22.0	22.0	22.1	21.7	22.5	22.1	
Mar 22	22.1	22.1	22.1	22.2	22.2	22.2	22.3	22.3	22.3	22.3	22.3	22.4	22.3	22.2	22.1	22.2	22.3	22.2	22.1	22.0	22.2	22.3	22.3	22.4	22.0	22.4	22.2
Mar 23	22.4	22.4	22.5	22.4	22.3	22.3	22.4	22.3	22.4	22.3	22.2	22.1	21.9	21.8	22.0	22.0	21.9	21.9	22.0	22.1	22.2	22.2	22.1	21.8	22.5	22.2	
Mar 24	22.2	22.2	22.3	22.3	22.4	22.4	22.4	22.4	22.5	22.5	22.5	22.4	22.3	22.2	22.2	22.2	22.2	22.1	22.2	22.4	22.5	22.5	22.5	22.1	22.5	22.3	
Mar 25	22.4	22.6	22.6	22.5	22.6	22.6	22.6	22.7	22.6	22.5	22.3	22.0	22.1	22.1	22.1	22.2	22.0	21.9	22.0	22.1	22.2	22.3	22.4	21.9	22.7	22.3	
Mar 26	22.5	22.4	22.3	22.4	22.4	22.4	22.5	22.5	22.5	22.2	22.0	21.8	22.5	22.9	22.4	21.8	21.9	21.9	21.9	22.0	22.2	22.3	22.2	21.8	22.9	22.3	
Mar 27	22.2	22.0	22.1	22.1	22.3	22.3	22.3	22.2	22.0	21.9	21.7	21.7	21.7	21.7	21.7	21.8	21.8	21.9	21.9	21.9	22.0	22.0	22.0	21.7	22.3	22.0	
Mar 28	21.9	21.9	22.0	22.0	22.0	22.0	22.0	22.0	21.9	21.8	21.9	21.8	21.9	21.8	21.9	22.0	22.2	22.2	22.2	22.3	22.3	22.4	22.5	21.8	22.5	22.0	
Mar 29	22.5	22.5	22.5	22.5	22.5	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.4	22.5	22.4	22.4	22.3	22.2	22.1	22.2	22.3	22.5	22.6	22.1	22.6	22.5	
Mar 30	22.6	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.5	22.2	22.0	21.9	21.9	21.9	21.9	22.0	21.9	22.0	21.9	21.9	22.0	22.0	22.0	21.9	22.7	22.2	
Mar 31	22.0	22.0	22.0	22.0	22.0	22.0	22.0	21.9	22.0	21.9	21.9	22.1	22.7	22.9	22.8	22.6	22.2	21.8	21.9	21.9	21.9	21.9	22.0	21.8	22.9	22.1	
Diurnal Maximum	22.8	22.8	22.7	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.7	22.6	23.1	24.1	24.2	23.7	23.8	24.1	23.7	22.9	22.6	22.7	22.7	22.7	22.7	22.7	
Diurnal Average	22.3	22.3	22.3	22.3	22.3	22.3	22.4	22.4	22.3	22.2	22.2	22.2	22.2	22.3	22.3	22.2	22.2	22.2	22.1	22.1	22.2	22.2	22.2	22.3	22.3	22.3	

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 ST - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2021

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

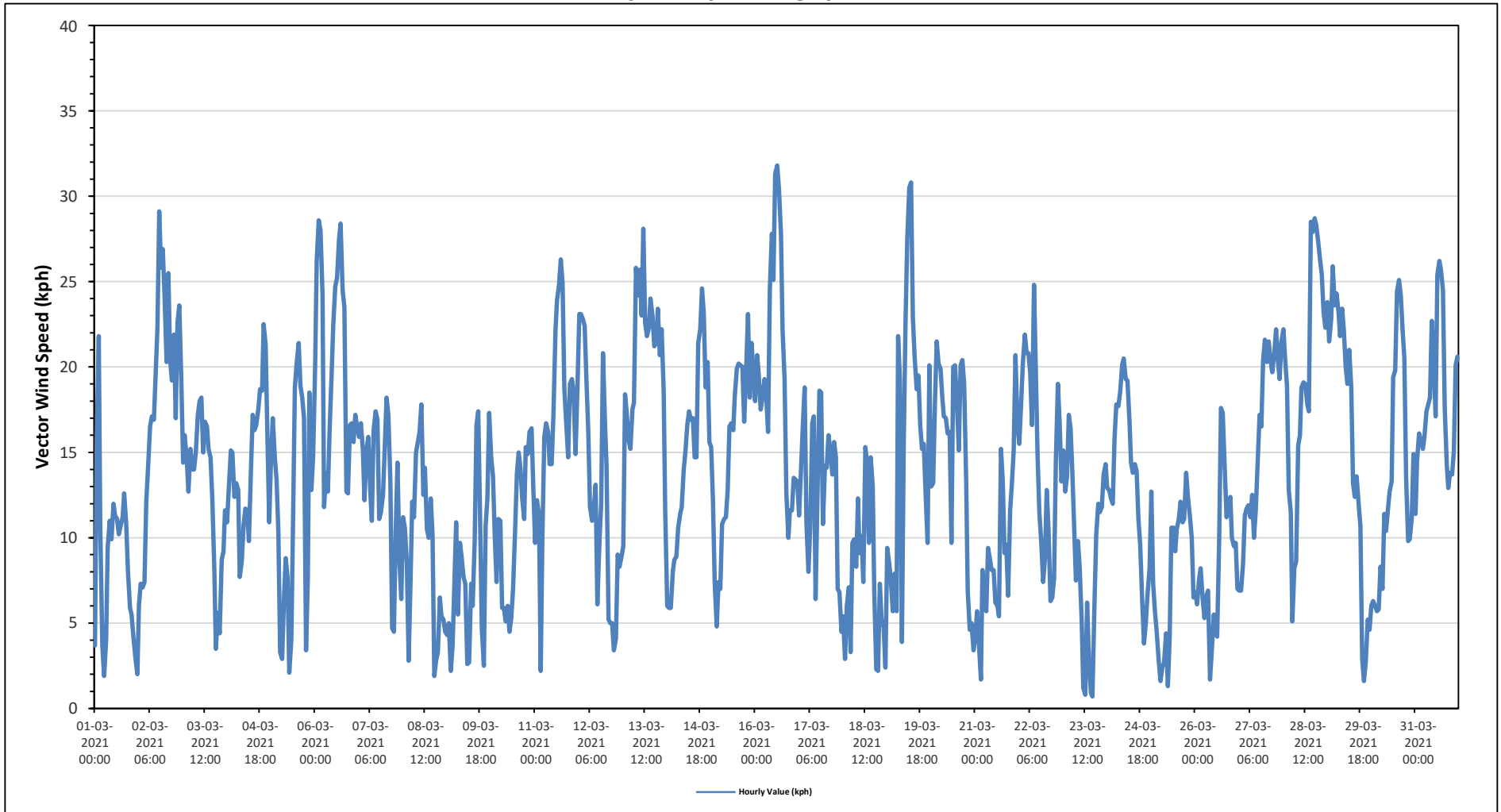
Maximum Hourly Value:	31.8 kph on March 16 at hour 12	Hours in Service:	744
Maximum Daily Value:	20.4 kph on March 13	Hours of Data:	744
Minimum Hourly Value:	0.7 kph on March 23 at hour 16	Hours of Missing Data:	0
Minimum Daily Value:	4.5 kph on March 1	Hours of Calibration:	0
Monthly Average:	4.6 kph	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
Mar 1	3.7	15.7	21.8	10.5	3.7	1.9	4.0	9.4	11.0	9.9	12.0	11.3	11.1	10.2	10.7	11.2	12.6	10.8	8.0	5.9	5.5	4.1	3.0	2.0	1.9	21.8	4.5
Mar 2	6.0	7.3	7.1	7.4	12.1	14.1	16.5	17.1	16.9	19.2	22.3	29.1	25.8	26.9	24.1	20.3	25.5	20.4	19.2	21.9	17.0	22.6	23.6	19.2	6.0	29.1	17.8
Mar 3	14.4	16.0	14.7	12.7	15.2	14.0	14.0	15.0	17.2	18.0	18.2	15.0	16.8	16.5	15.2	14.7	12.3	8.1	3.5	5.6	4.4	8.7	9.2	11.6	3.5	18.2	10.9
Mar 4	10.9	12.9	15.1	15.0	12.4	13.2	12.8	7.7	8.6	10.7	11.7	11.6	9.8	13.9	17.2	16.3	16.6	17.5	18.7	18.6	22.5	21.3	15.9	10.9	7.7	22.5	13.7
Mar 5	14.6	17.0	14.7	13.4	10.4	3.3	2.9	6.4	8.8	7.7	2.1	4.0	11.1	18.8	20.2	21.4	18.9	18.2	17.0	3.4	7.6	18.5	12.8	14.8	2.1	21.4	10.0
Mar 6	20.2	26.2	28.6	28.0	24.2	11.8	13.8	12.7	16.4	19.7	22.4	24.7	25.2	27.5	28.4	24.5	23.5	12.7	12.6	16.6	16.7	15.6	17.2	16.5	11.8	28.6	19.9
Mar 7	15.9	16.7	15.1	12.2	15.1	15.9	12.7	11.0	16.3	17.4	16.9	11.1	11.5	12.5	15.3	18.2	17.2	13.3	4.7	4.5	10.4	14.4	8.5	6.4	4.5	18.2	9.7
Mar 8	11.2	10.6	8.5	2.8	7.2	12.1	11.2	15.0	15.5	16.2	17.8	12.5	14.1	10.5	10.0	12.3	10.2	1.9	2.8	3.3	6.5	5.4	5.2	4.5	1.9	17.8	7.5
Mar 9	4.3	5.0	2.2	3.7	7.8	10.9	5.5	9.7	8.8	7.7	7.3	2.6	2.7	7.3	6.0	9.8	16.6	17.4	11.4	4.7	2.5	10.7	12.3	17.3	2.2	17.4	6.9
Mar 10	14.7	13.6	10.1	7.4	11.1	11.0	5.9	5.9	5.1	6.0	4.5	5.3	7.0	10.4	13.7	15.0	14.1	12.3	11.1	15.3	14.9	16.2	16.4	12.8	4.5	16.4	5.0
Mar 11	9.7	12.2	11.4	2.2	9.6	15.9	16.7	16.2	14.3	14.3	17.2	22.1	23.9	24.8	26.3	24.9	18.7	16.8	14.7	19.0	19.3	18.6	14.9	18.5	2.2	26.3	15.8
Mar 12	23.1	23.1	22.8	22.4	19.2	16.3	11.8	11.0	11.7	13.1	6.1	9.7	12.0	20.8	17.2	14.2	5.2	5.0	5.0	3.4	4.1	9.0	8.3	8.8	3.4	23.1	9.6
Mar 13	9.5	18.4	17.4	15.7	15.2	17.5	17.9	25.8	24.2	25.7	23.0	28.1	22.6	21.8	22.3	24.0	23.0	21.2	21.4	23.4	20.7	22.2	18.6	11.6	9.5	28.1	20.4
Mar 14	6.0	5.9	5.9	8.0	8.7	8.9	10.6	11.4	11.8	14.0	15.1	16.6	17.4	16.9	17.0	14.7	14.7	21.4	22.2	24.6	23.1	18.8	20.3	15.6	5.9	24.6	14.2
Mar 15	15.3	12.2	7.3	4.8	7.4	7.0	10.8	11.1	11.2	12.8	16.5	16.7	16.3	18.3	19.9	20.2	20.1	20.0	16.8	19.5	23.1	18.2	21.4	19.8	4.8	23.1	12.9
Mar 16	18.0	20.7	19.6	17.5	18.2	19.3	18.5	16.2	24.6	27.8	25.1	31.3	31.8	30.4	27.7	22.2	19.3	12.6	10.0	11.6	11.6	13.5	13.4	13.3	10.0	31.8	19.2
Mar 17	11.3	14.1	16.6	18.8	10.9	8.0	10.6	16.7	17.1	6.4	12.9	18.6	18.5	10.8	14.2	14.1	16.0	15.1	13.7	15.6	14.7	7.0	6.8	4.5	4.5	18.8	12.4
Mar 18	5.4	2.9	6.0	7.1	3.3	9.7	9.9	8.3	12.3	9.1	10.1	7.4	15.3	14.5	9.7	14.7	13.0	6.9	2.3	2.2	7.3	4.9	5.1	2.4	2.2	15.3	5.9
Mar 19	9.4	8.5	7.6	5.7	7.9	5.7	21.8	19.3	3.9	15.4	22.5	27.5	30.5	30.8	22.9	20.6	18.7	19.5	16.6	15.2	15.5	12.3	9.7	20.1	3.9	30.8	13.5
Mar 20	13.0	13.2	17.9	21.5	20.2	19.9	18.2	17.1	17.0	16.1	16.2	9.7	20.0	20.1	17.7	15.1	20.1	20.4	19.0	13.3	6.9	4.6	5.0	3.4	3.4	21.5	7.2
Mar 21	4.1	5.7	3.8	1.7	8.1	6.1	5.7	9.4	8.7	8.1	8.1	6.2	6.0	5.4	15.2	13.3	9.1	9.6	6.6	11.6	13.2	15.1	20.7	16.6	1.7	20.7	6.1
Mar 22	15.5	18.1	20.2	21.9	20.8	20.8	19.7	16.6	24.8	19.9	14.8	11.5	9.6	7.4	8.8	12.8	10.5	6.3	6.5	7.6	14.5	19.0	16.7	13.3	6.3	24.8	12.9
Mar 23	15.1	12.7	13.6	17.2	16.4	13.8	10.2	7.5	9.8	8.2	5.0	1.2	0.8	6.2	3.0	0.9	0.7	6.1	10.2	12.0	11.5	11.8	13.7	14.3	0.7	17.2	7.8
Mar 24	12.9	12.8	12.3	12.0	15.8	17.8	17.7	18.5	20.1	20.5	19.3	19.2	16.8	14.4	13.8	14.3	13.9	11.1	9.6	6.3	3.8	5.0	6.7	8.2	3.8	20.5	12.3
Mar 25	12.7	7.3	5.7	4.5	2.8	1.6	2.4	2.7	4.4	1.3	4.1	10.6	10.6	9.2	10.5	11.1	12.1	10.9	11.1	13.8	12.4	11.2	10.0	6.5	1.3	13.8	5.1
Mar 26	6.8	6.1	7.6	8.2	6.4	5.3	6.6	6.9	1.7	3.4	5.5	4.5	4.2	9.9	17.6	17.3	14.4	11.2	11.8	12.4	10.0	9.5	9.7	7.0	1.7	17.6	7.4
Mar 27	6.9	6.9	8.5	11.3	11.7	11.9	11.2	12.5	10.0	11.6	14.6	17.2	16.5	20.4	21.6	20.3	21.5	20.4	19.7	20.8	22.2	20.4	19.3	21.5	6.9	22.2	15.1
Mar 28	22.2	20.6	18.9	12.8	11.5	5.1	8.2	8.6	15.4	16.0	18.8	19.1	19.0	17.8	17.4	28.5	27.9	28.7	28.3	27.3	26.3	25.4	23.2	22.3	5.1	28.7	10.9
Mar 29	23.8	21.5	22.8	25.9	23.6	24.3	23.2	21.8	23.4	22.1	20.0	19.0	21.0	18.8	13.2	12.4	13.6	12.0	10.7	2.9	1.6	2.7	5.2	4.6	1.6	25.9	15.0
Mar 30	6.0	6.3	6.0	5.7	5.8	8.3	7.0	11.4	10.4	11.6	12.7	13.3	19.4	19.8	24.4	25.1	24.2	22.2	20.5	13.5	9.8	9.9	11.1	14.9	5.7	25.1	12.0
Mar 31	11.4	14.5	16.1	15.7	15.2	15.9	17.4	17.8	18.2	22.7	20.7	17.1	25.4	26.2	25.7	24.5	17.6	14.3	12.9	13.8	13.7	15.1	20.1	20.6	11.4	26.2	17.7
Diurnal Maximum	24	26	29	28	24	24	23	26	25	28	25	31	32	31	28	29	28	29	28	27	26	25	24	22			
Diurnal Average	12.1	13.1	13.1	12.1	12.2	11.8	12.1	12.8	13.5	14.0	14.3	14.6	15.9	16.7	17.0	17.1	16.2	14.3	12.9	12.6	12.7	13.3	13.0	12.4			

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

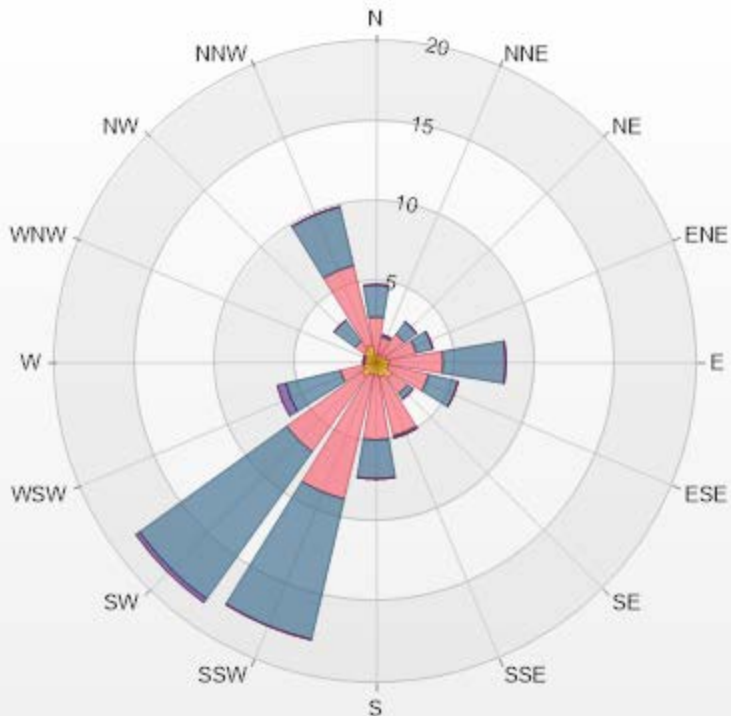
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

Timeseries Chart of Hourly Average for VWS - 986c Station



Wind: PRAMP 986c Monitor: WDS [KPH] Monthly: 03-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 1.21% 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	0.4	2.42	2.02	0	0	4.84
NNE	0.54	1.08	0.13	0	0	1.75
NE	0.54	1.61	0.94	0	0	3.09
ENE	0.67	1.88	1.08	0	0	3.63
E	0.81	3.36	3.9	0	0	8.07
ESE	0.81	2.55	1.88	0	0	5.24
SE	1.21	1.21	0.4	0	0	2.82
SSE	0.94	3.76	0.13	0	0	4.83
S	0.81	4.03	2.42	0	0	7.26
SSW	0.81	7.93	9.01	0	0	17.75
SW	1.08	5.78	11.29	0.27	0	18.42
WSW	0.81	1.48	3.49	0.54	0	6.32
W	0.67	0.13	0	0	0	0.8
WNW	0.67	0.13	0	0	0	0.8
NW	0.94	0.67	1.61	0	0	3.22
NNW	1.08	5.11	3.76	0	0	9.95
Summary	12.79	43.13	42.06	0.81	0	98.79



PRAMP-202103

% Icon Classes (KPH)

13

1.8-6.0

43

6.0-15.0

42

15.0-29.0

1

29.0-39.0

0

>39.0



PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2021

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

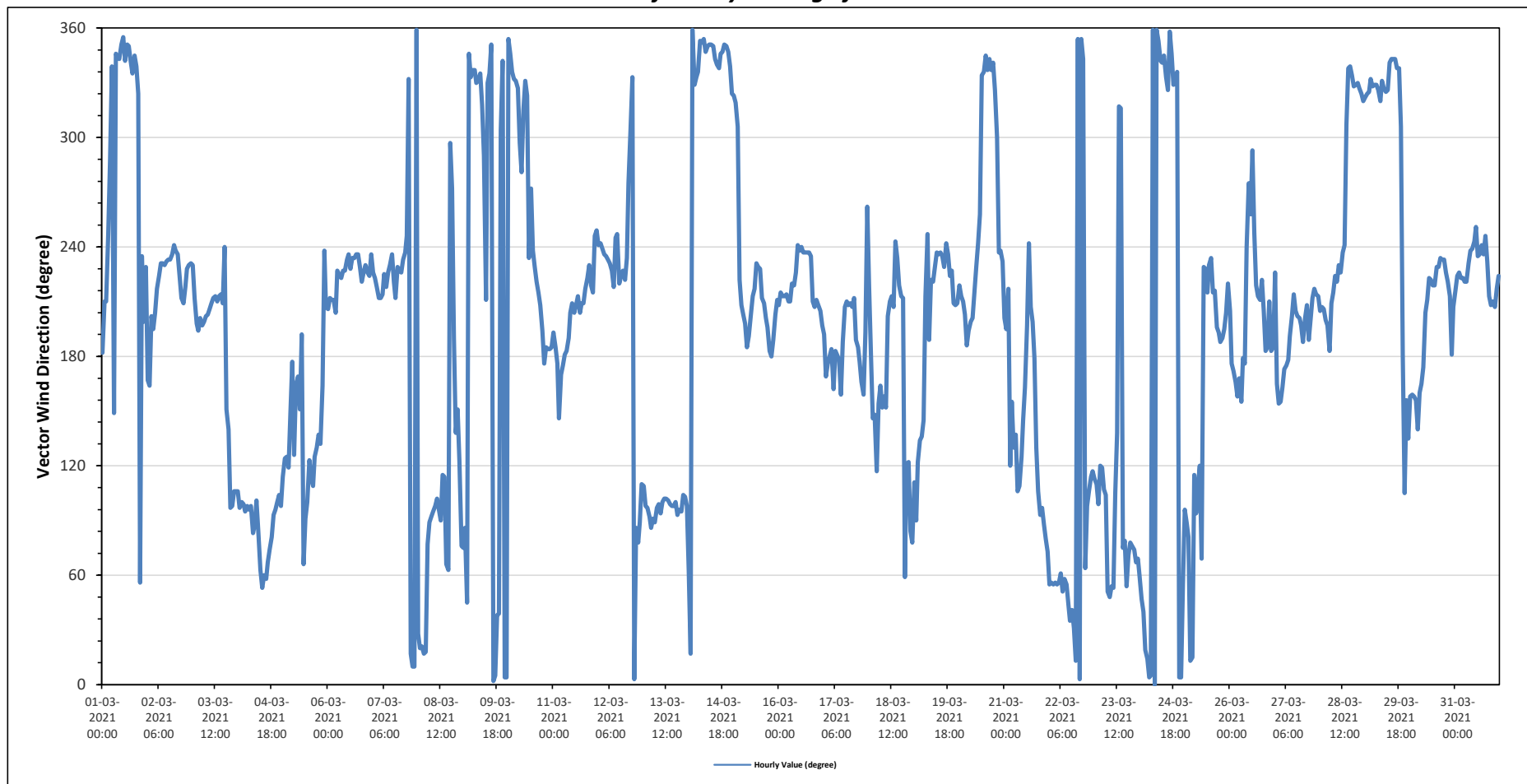
Monthly Average:	212 (SSW) degree	Hours in Service:	744
		Hours of Data:	744
		Hours of Missing Data:	0
		Hours of Calibration:	0
		Operational Uptime:	100.0

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
Mar 1	S	SSW	SSW	WSW	WNW	NNW	SSE	NNW	NNW	NNW	N	N	NNW	N	N	NNW	NNW	NNW	NNW	NW	NE	SW	SSW	SW	321	NW
Mar 2	SSE	SSE	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	SW	SW	SW	SSW	SSW	SSW	SW	SW	SW	SW	225	SW
Mar 3	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSE	SE	E	E	ESE	ESE	199	SSW
Mar 4	ESE	E	E	E	E	E	E	E	E	E	E	E	ENE	NE	ENE	ENE	ENE	ENE	E	E	E	E	ESE	E	87	E
Mar 5	ESE	ESE	SE	ESE	SSE	S	SE	SSE	SSE	SSE	S	ENE	E	ESE	ESE	ESE	SE	SE	SE	SE	SSE	SW	SSW	132	SE	
Mar 6	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	225	SW
Mar 7	SW	SW	SW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	SSW	SW	SW	SW	SW	WSW	NNW	NNE	N	N	N	231	SW	
Mar 8	NNE	NNE	NNE	NNE	NNE	ENE	E	E	E	E	E	E	ESE	ESE	ENE	ENE	WNW	W	S	SE	SSE	ESE	ENE	84	E	
Mar 9	ENE	E	NE	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	WNW	SSW	NNW	NNW	N	N	NE	NE	WNW	NNW	N	N	353	N	
Mar 10	N	NNW	NNW	NNW	NNW	NW	WNW	W	NW	NNW	NW	SW	W	SW	SW	SW	SSW	SSW	SSW	S	S	S	S	241	WSW	
Mar 11	S	S	S	SE	SSE	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	207	SSW	
Mar 12	WSW	WSW	WSW	SW	SW	SW	SW	SW	SW	WSW	WSW	SW	SW	SW	SW	W	WNW	NNW	N	E	ENE	E	ESE	233	SW	
Mar 13	ESE	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	ESE	ESE	E	98	E
Mar 14	ENE	NNE	N	NNW	NNW	NNW	N	N	N	NNW	N	N	N	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNW	NNW	NW	347	NNW
Mar 15	NW	NW	NW	SW	SSW	SSW	SSW	S	S	SSW	SSW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	S	S	S	SSW	SSW	211	SSW
Mar 16	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	WSW	SW	WSW	SW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	SSW	223	SW	
Mar 17	S	SSE	S	S	S	SSE	S	S	S	SSE	S	SSW	SSW	SSW	SSW	SSW	S	S	S	SSE	SSE	S	W	188	S	
Mar 18	SW	S	SE	SE	ESE	SSE	SSE	SSE	SSE	SSE	SSE	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	ENE	ESE	ESE	E	ENE	184	S
Mar 19	ESE	E	ESE	SE	SE	SE	SSW	WSW	S	SW	SW	SW	SW	SW	SW	SW	WSW	SW	SW	SW	SSW	SSW	SSW	221	SW	
Mar 20	SW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	SSW	WSW	WSW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	WNW	SW	SW	259	WSW	
Mar 21	SSW	SSW	SW	ESE	SSE	SE	SE	ESE	ESE	SE	SE	SSE	SSW	WSW	SSW	SSW	S	SE	ESE	E	E	E	ENE	131	SE	
Mar 22	NE	NE	NE	NE	NE	NE	ENE	NE	ENE	NE	NE	NE	NE	NNE	NNE	N	N	N	NNW	ENE	E	ESE	ESE	ESE	56	NE
Mar 23	ESE	ESE	E	ESE	ESE	ESE	ESE	NE	NE	NE	NE	ESE	SE	NW	NW	ENE	ENE	NE	ENE	ENE	ENE	ENE	ENE	85	E	
Mar 24	ENE	NE	NE	NNE	NNE	N	N	N	N	N	N	NNW	NNW	NNW	NNW	NW	N	NNW	NNW	NNW	NNW	N	N	NE	0	N
Mar 25	E	E	E	NNE	NNE	ESE	E	ESE	ESE	ENE	SW	SW	SSW	SW	SW	SSW	SW	SSW	S	S	S	SSW	SSW	SW	193	S
Mar 26	SSW	S	S	SSE	SSE	SSE	SSE	S	S	S	WSW	W	WSW	WNW	WSW	SW	SSW	SSW	SSW	S	S	SSW	S	202	SSW	
Mar 27	SW	SSE	SSE	SSE	SSE	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	S	SSW	SSW	S	SSW	SSW	SW	SSW	197	SSW	
Mar 28	SSW	SSW	SSW	SSW	SSW	S	SSW	SSW	SW	SW	SW	SW	WSW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	281	W
Mar 29	NW	NW	NW	NNW	NNW	NNW	NNW	NW	NW	NNW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	S	ESE	SSE	SE	330	NNW
Mar 30	SSE	SSE	SSE	SSE	SE	SSE	SSE	S	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	S	SSW	212	SSW	
Mar 31	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	SW	SW	WSW	SW	WSW	SW	SSW	SSW	SSW	SSW	SSW	SW	229	SW

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)	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 VWD - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2021

Summary of Hourly Averages

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

WIND SPEED																												
Maximum Hourly Value:		31.8 kph on March 16 at hour 12												Hours in Service:		744												
Maximum Daily Value:		20.4 kph on March 13												Hours of Data:		744												
Minimum Hourly Value:		0.7 kph on March 23 at hour 16												Hours of Missing Data:		0												
Minimum Daily Value:		4.5 kph on March 1												Hours of Calibration:		0												
Monthly Average:		4.6 kph												Operational Uptime:		100												
WIND DIRECTION																												
Monthly Average:		212 (SSW) degree																										
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				
Mar 1	3.7	15.7	21.8	10.5	3.7	1.9	4.0	9.4	11.0	9.9	12.0	11.3	11.1	10.2	10.7	11.2	12.6	10.8	8.0	5.9	5.5	4.1	3.0	2.0	1.9	21.8	4.5	
	S	SSW	SSW	WSW	WNW	NNW	SSE	NNW	NNW	NNW	N	N	NNW	N	N	NNW	NNW	NNW	NNW	NW	NE	SW	SSW	SW				
Mar 2	6.0	7.3	7.1	7.4	12.1	14.1	16.5	17.1	16.9	19.2	22.3	29.1	25.8	26.9	24.1	20.3	25.5	20.4	19.2	21.9	17.0	22.6	23.6	19.2	6.0	29.1	17.8	
	SSE	SSE	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	SW	SW	SW	SSW	SSW	SW	SW	SW	SW				
Mar 3	14.4	16.0	14.7	12.7	15.2	14.0	14.0	15.0	17.2	18.0	18.2	15.0	16.8	16.5	15.2	14.7	12.3	8.1	3.5	5.6	4.4	8.7	9.2	11.6	3.5	18.2	10.9	
	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSE	SE	E	E	ESE	ESE			
Mar 4	10.9	12.9	15.1	15.0	12.4	13.2	12.8	7.7	8.6	10.7	11.7	11.6	9.8	13.9	17.2	16.3	16.6	17.5	18.7	18.6	22.5	21.3	15.9	10.9	7.7	22.5	13.7	
	ESE	E	E	E	E	E	E	E	E	E	E	E	E	ENE	NE	ENE	ENE	ENE	ENE	E	E	E	E	ESE	E			
Mar 5	14.6	17.0	14.7	13.4	10.4	3.3	2.9	6.4	8.8	7.7	2.1	4.0	11.1	18.8	20.2	21.4	18.9	18.2	17.0	3.4	7.6	18.5	12.8	14.8	2.1	21.4	10.0	
	ESE	ESE	SE	ESE	SSE	S	SE	SSE	SSE	SSE	S	ENE	E	E	ESE	ESE	ESE	SE	SE	SE	SE	SSE	SW	SSW				
Mar 6	20.2	26.2	28.6	28.0	24.2	11.8	13.8	12.7	16.4	19.7	22.4	24.7	25.2	27.5	28.4	24.5	23.5	12.7	12.6	16.6	16.7	15.6	17.2	16.5	11.8	28.6	19.9	
	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW				
Mar 7	15.9	16.7	15.1	12.2	15.1	15.9	12.7	11.0	16.3	17.4	16.9	11.1	11.5	12.5	15.3	18.2	17.2	13.3	4.7	4.5	10.4	14.4	8.5	6.4	4.5	18.2	9.7	
	SW	SW	SW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SSW	SW	SW	SW	SW	SW	SW	WSW	NNW	NNE	N	N	N				
Mar 8	11.2	10.6	8.5	2.8	7.2	12.1	11.2	15.0	15.5	16.2	17.8	12.5	14.1	10.5	10.0	12.3	10.2	1.9	2.8	3.3	6.5	5.4	5.2	4.5	1.9	17.8	7.5	
	NNE	NNE	NNE	NNE	NNE	ENE	E	E	E	E	E	E	E	ESE	ESE	ENE	ENE	WNW	W	S	SE	SSE	ESE	ENE				
Mar 9	4.3	5.0	2.2	3.7	7.8	10.9	5.5	9.7	8.8	7.7	7.3	2.6	2.7	7.3	6.0	9.8	16.6	17.4	11.4	4.7	2.5	10.7	12.3	17.3	2.2	17.4	6.9	
	ENE	E	NE	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	WNW	SSW	NNW	NNW	N	N	N	NE	NE	WNW	NNW	N	N				
Mar 10	14.7	13.6	10.1	7.4	11.1	11.0	5.9	5.9	5.1	6.0	4.5	5.3	7.0	10.4	13.7	15.0	14.1	12.3	11.1	15.3	14.9	16.2	16.4	12.8	4.5	16.4	5.0	
	N	NNW	NNW	NNW	NNW	NW	WNW	W	NW	NNW	NW	SW	W	SW	SW	SW	SSW	SSW	SSW	S	S	S	S	S				
Mar 11	9.7	12.2	11.4	2.2	9.6	15.9	16.7	16.2	14.3	14.3	17.2	22.1	23.9	24.8	26.3	24.9	18.7	16.8	14.7	19.0	19.3	18.6	14.9	18.5	2.2	26.3	15.8	
	S	S	S	SE	SSE	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW				
Mar 12	23.1	23.1	22.8	22.4	19.2	16.3	11.8	11.0	11.7	13.1	6.1	9.7	12.0	20.8	17.2	14.2	5.2	5.0	5.0	3.4	4.1	9.0	8.3	8.8	3.4	23.1	9.6	
	WSW	WSW	WSW	SW	SW	SW	SW	SW	WSW	WSW	SW	SW	SW	SW	SW	SW	W	WNW	NNW	N	E	ENE	E	ESE				
Mar 13	9.5	18.4	17.4	15.7	15.2	17.5	17.9	25.8	24.2	25.7	23.0	28.1	22.6	21.8	22.3	24.0	23.0	21.2	21.4	23.4	20.7	22.2	18.6	11.6	9.5	28.1	20.4	
	ESE	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	ESE	ESE	E				
Mar 14	6.0	5.9	5.9	8.0	8.7	8.9	10.6	11.4	11.8	14.0	15.1	16.6	17.4	16.9	17.0	14.7	14.7	21.4	22.2	24.6	23.1	18.8	20.3	15.6	5.9	24.6	14.2	
	ENE	NNE	N	NNW	NNW	NNW	N	N	N	NNW	N	N	N	N	NNW	NNW	NNW	NNW	NNW	N	N	NNW	NNW	NW				
Mar 15	15.3	12.2	7.3	4.8	7.4	7.0	10.8	11.1	11.2	12.8	16.5	16.7	16.3	18.3	19.9	20.2	20.1	20.0	16.8	19.5	23.1	18.2	21.4	19.8	4.8	23.1	12.9	
	NW	NW	NW	SW	SSW	SSW	SSW	S	S	SSW	SSW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	S	S	S	SSW	SSW				
Mar 16	18.0	20.7	19.6	17.5	18.2	19.3	18.5	16.2	24.6	27.8	25.1	31.3	31.8	30.4	27.7	22.2	19.3	12.6	10.0	11.6	11.6	13.5	13.4	13.3	10.0	31.8	19.2	
	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW				
Mar 17	11.3	14.1	16.6	18.8	10.9	8.0	10.6	16.7	17.1	6.4	12.9	18.6	18.5	10.8	14.2	14.1	16.0	15.1	13.7	15.6	14.7	7.0	6.8	4.5	4.5	18.8	12.4	
	S	SSE	S	S	SSE	S	S	SSE	S	S	SSE	S	SSW	SSW	SSW	SSW	S	S	S	SSE	SSE	S	W	W				
Mar 18	5.4	2.9	6.0	7.1	3.3	9.7	9.9	8.3	12.3	9.1	10.1	7.4	15.3	14.5	9.7	14.7	13.0	6.9	2.3	2.2	7.3	4.9	5.1	2.4	2.2	15.3	5.9	
	SW	S	SE	SE	ESE	SSE	SSE	SSE	SSE	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	ENE	ENE	ESE	ESE	E	ENE				
Mar 19	9.4	8.5	7.6	5.7	7.9	5.7	21.8	19.3	3.9	15.4	22.5	27.5	30.5	30.8	22.9	20.6	18.7	19.5	16.6	15.2	15.5	12.3	9.7	20.1	3.9	30.8	13.5	
	ESE	E	ESE	SE	SE	SE	SSW	WSW	S	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW				
Mar 20	13.0	13.2	17.9	21.5	20.2	19.9	18.2	17.1	17.0	16.1	16.2	9.7	20.0	20.1	17.7	15.1	20.1	20.4	19.0	13.3	6.9	4.6	5.0	3.4	3.4	21.5	7.2	
	SW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	SW	WSW	WSW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	WNW	SW	SW				



PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2021

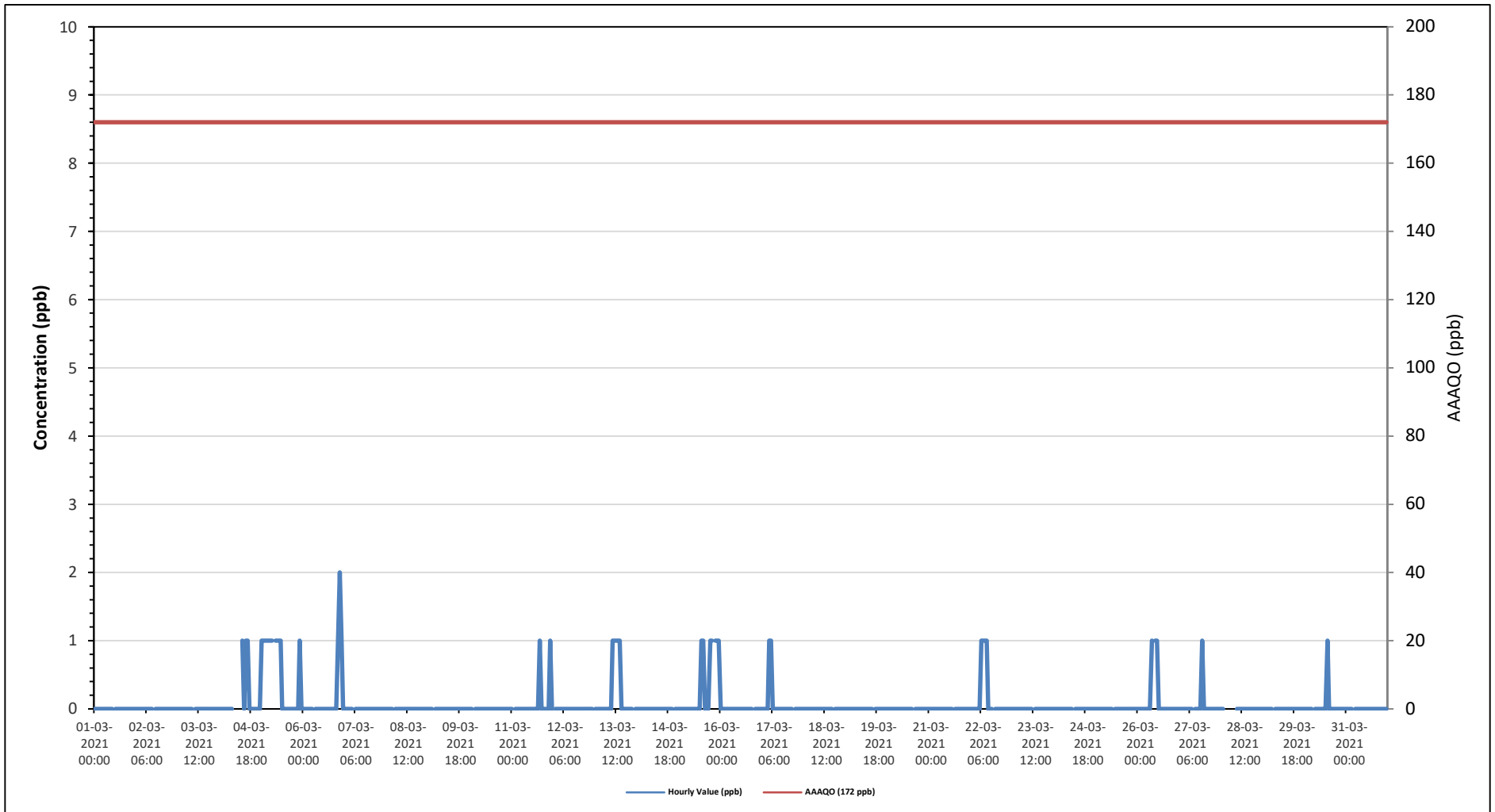
Summary of Hourly Averages

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

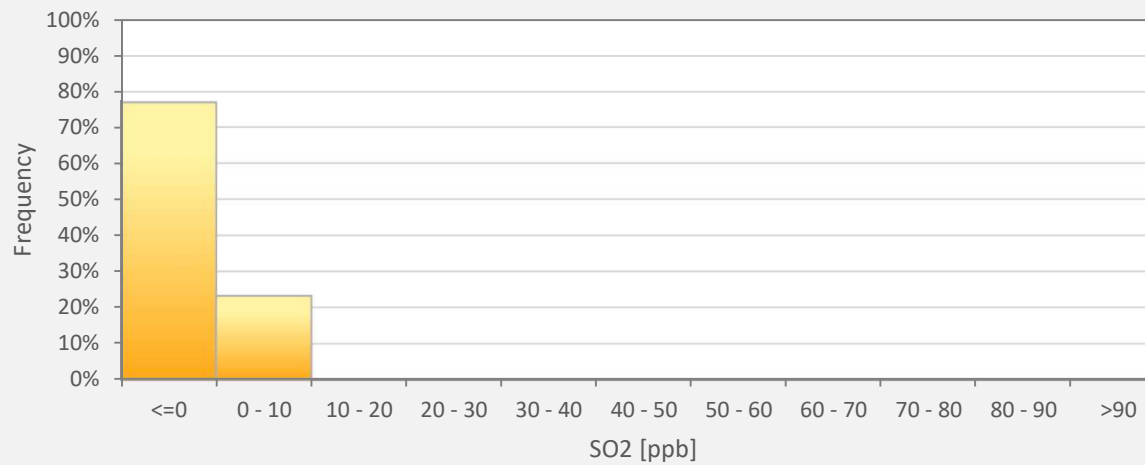
WIND SPEED																																													
Maximum Hourly Value:	31.8 kph on March 16 at hour 12															Hours in Service:	744																												
Maximum Daily Value:	20.4 kph on March 13															Hours of Data:	744																												
Minimum Hourly Value:	0.7 kph on March 23 at hour 16															Hours of Missing Data:	0																												
Minimum Daily Value:	4.5 kph on March 1															Hours of Calibration:	0																												
Monthly Average:	4.6 kph															Operational Uptime:	100																												
WIND DIRECTION																																													
Monthly Average:	212 (SSW) degree																																												
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																					
Mar 21	4.1	5.7	3.8	1.7	8.1	6.1	5.7	9.4	8.7	8.1	6.2	6.0	5.4	15.2	13.3	9.1	9.6	6.6	11.6	13.2	15.1	20.7	16.6	1.7	20.7	6.1																			
	SSW	SSW	SW	ESE	SSE	SE	SE	ESE	ESE	SE	SSE	SSW	WSW	SSW	SSW	S	SE	ESE	E	E	E	E	ENE																						
Mar 22	15.5	18.1	20.2	21.9	20.8	20.8	19.7	16.6	24.8	19.9	14.8	11.5	9.6	7.4	8.8	12.8	10.5	6.3	6.5	7.6	14.5	19.0	16.7	13.3	6.3	24.8	12.9																		
	NE	NE	NE	NE	NE	ENE	NE	ENE	NE	NE	NE	NE	NNE	NNE	N	N	N	NNW	ENE	E	ESE	ESE	ESE																						
Mar 23	15.1	12.7	13.6	17.2	16.4	13.8	10.2	7.5	9.8	8.2	5.0	1.2	0.8	6.2	3.0	0.9	0.7	6.1	10.2	12.0	11.5	11.8	13.7	14.3	0.7	17.2	7.8																		
	ESE	ESE	E	ESE	ESE	ESE	ESE	NE	NE	NE	ESE	SE	NW	NW	ENE	ENE	NE	ENE	ENE	ENE	ENE	ENE	ENE																						
Mar 24	12.9	12.8	12.3	12.0	15.8	17.8	17.7	18.5	20.1	20.5	19.3	19.2	16.8	14.4	13.8	14.3	13.9	11.1	9.6	6.3	3.8	5.0	6.7	8.2	3.8	20.5	12.3																		
	ENE	NE	NE	NNE	NNE	N	N	N	N	N	NNW	NNW	NNW	NNW	NW	N	NNW	NNW	NNW	NNW	NNW	N	N	NE																					
Mar 25	12.7	7.3	5.7	4.5	2.8	1.6	2.4	2.7	4.4	1.3	4.1	10.6	10.6	9.2	10.5	11.1	12.1	10.9	11.1	13.8	12.4	11.2	10.0	6.5	1.3	13.8	5.1																		
	E	E	E	NNE	NNE	ESE	E	ESE	ESE	ENE	SW	SW	SSW	SW	SW	SSW	SW	SSW	S	S	S	SSW	SSW	SW																					
Mar 26	6.8	6.1	7.6	8.2	6.4	5.3	6.6	6.9	1.7	3.4	5.5	4.5	4.2	9.9	17.6	17.3	14.4	11.2	11.8	12.4	10.0	9.5	9.7	7.0	1.7	17.6	7.4																		
	SSW	S	S	SSE	SSE	SSE	SSE	S	S	WSW	W	WSW	W	WSW	WSW	SW	SSW	SSW	SW	SSW	S	S	SSW	S																					
Mar 27	6.9	6.9	8.5	11.3	11.7	11.9	11.2	12.5	10.0	11.6	14.6	17.2	16.5	20.4	21.6	20.3	21.5	20.4	19.7	20.8	22.2	20.4	19.3	21.5	6.9	22.2	15.1																		
	SW	SSE	SSE	SSE	SSE	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	S	SSW	SSW	S	SSW	SSW	SW	SSW	SSW																					
Mar 28	22.2	20.6	18.9	12.8	11.5	5.1	8.2	8.6	15.4	16.0	18.8	19.1	19.0	17.8	17.4	28.5	27.9	28.7	28.3	27.3	26.3	25.4	23.2	22.3	5.1	28.7	10.9																		
	SSW	SSW	SSW	SSW	SSW	S	SSW	SSW	SW	SW	SW	SW	SW	WSW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	NW																					
Mar 29	23.8	21.5	22.8	25.9	23.6	24.3	23.2	21.8	23.4	22.1	20.0	19.0	21.0	18.8	13.2	12.4	13.6	12.0	10.7	2.9	1.6	2.7	5.2	4.6	1.6	25.9	15.0																		
	NW	NW	NW	NNW	NNW	NNW	NNW	NW	NW	NNW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	S	ESE	SSE	SE																				
Mar 30	6.0	6.3	6.0	5.7	5.8	8.3	7.0	11.4	10.4	11.6	12.7	13.3	19.4	19.8	24.4	25.1	24.2	22.2	20.5	13.5	9.8	9.9	11.1	14.9	5.7	25.1	12.0																		
	SSE	SSE	SSE	SSE	SE	SSE	SSE	S	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	S	SSW																				
Mar 31	11.4	14.5	16.1	15.7	15.2	15.9	17.4	17.8	18.2	22.7	20.7	17.1	25.4	26.2	25.7	24.5	17.6	14.3	12.9	13.8	13.7	15.1	20.1	20.6	11.4	26.2	17.7																		
	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	SW	SW	WSW	SW	SSW	SSW	SSW	SSW	SSW	SW																					
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.																																													

842b STATION

Timeseries Chart of Hourly Average for SO2 - 842b Station



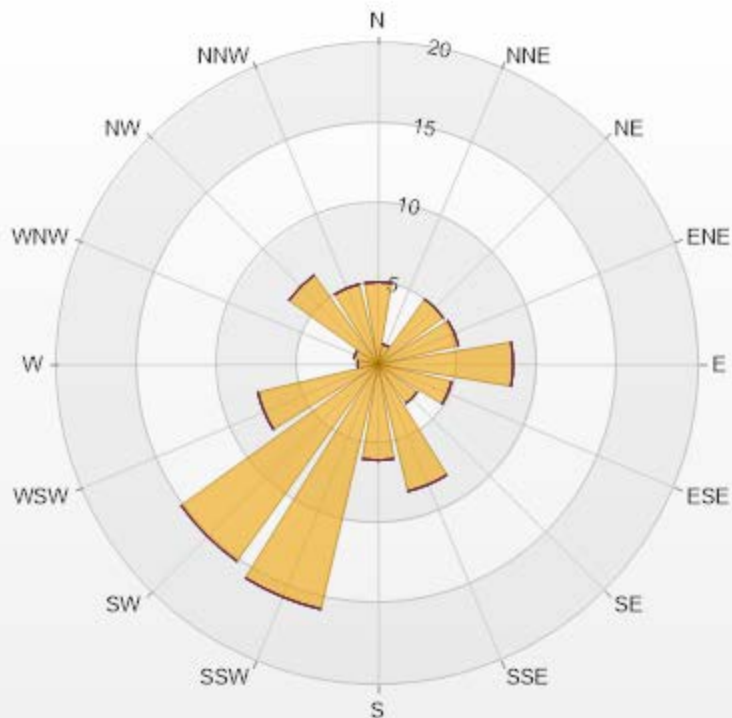
SO2[ppb] Histogram: PRAMP 842b Monthly: 03-2021 1 Hr.



Classes	SO2
<=0	76.78%
0 - 10	23.22%
10 - 20	0.00%
20 - 30	0.00%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: PRAMP 842b Poll.: PRAMP 842b-SO2[ppb] Monthly: 03-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.35% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	5.13	0	0	0	0	5.13
NNE	1.28	0	0	0	0	1.28
NE	4.99	0	0	0	0	4.99
ENE	5.13	0	0	0	0	5.13
E	8.4	0	0	0	0	8.4
ESE	4.7	0	0	0	0	4.7
SE	2.99	0	0	0	0	2.99
SSE	8.12	0	0	0	0	8.12
S	5.98	0	0	0	0	5.98
SSW	15.67	0	0	0	0	15.67
SW	15.1	0	0	0	0	15.1
WSW	7.69	0	0	0	0	7.69
W	1.28	0	0	0	0	1.28
WNW	1.57	0	0	0	0	1.57
NW	6.84	0	0	0	0	6.84
NNW	5.13	0	0	0	0	5.13
Summary	100	0	0	0	0	100



PRAMP-202103

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% 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 - March 2021

Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

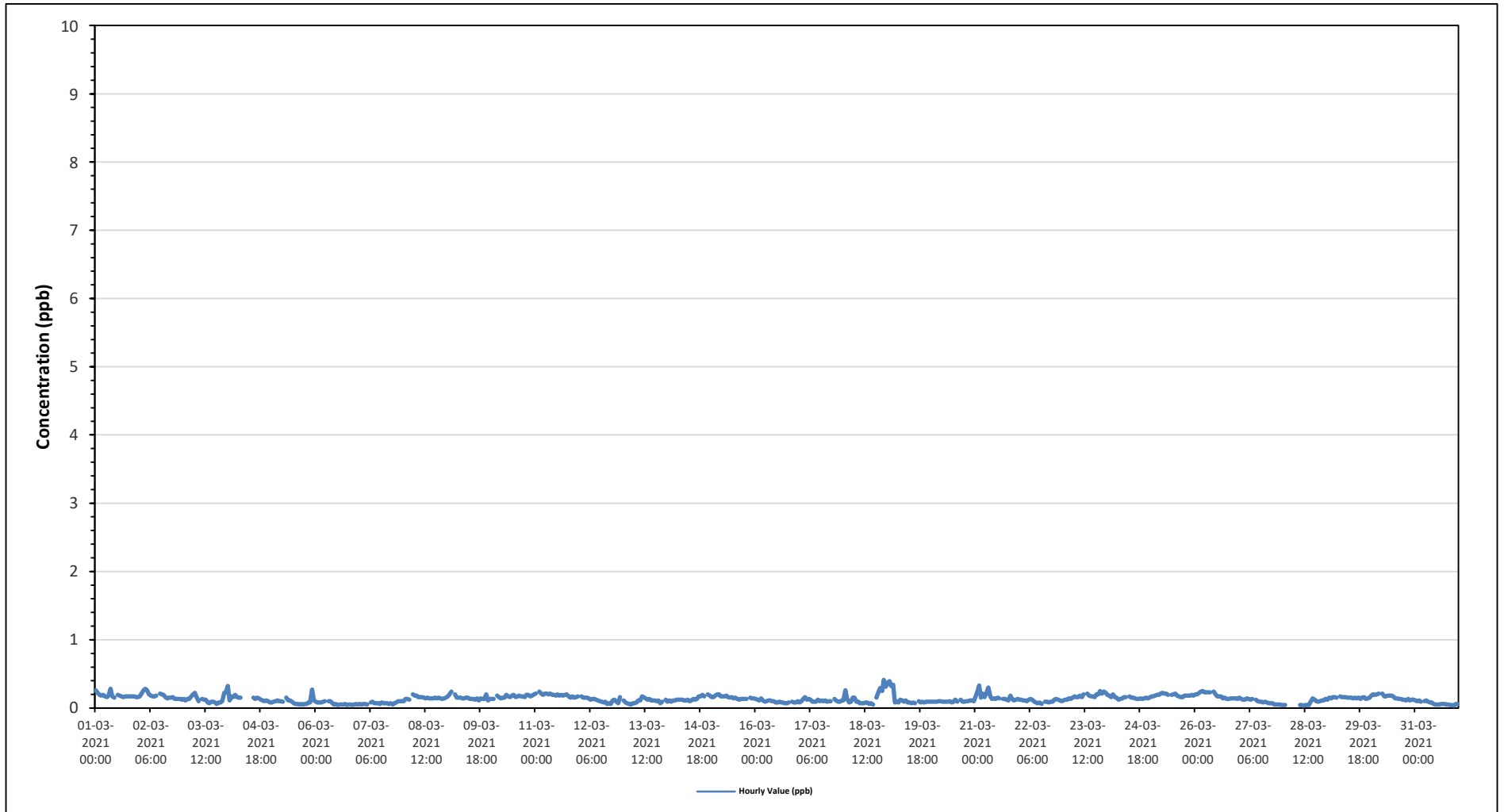
Maximum Hourly Value: 0.41 ppb on March 18 at hour 22	Hours in Service: 744
Maximum Daily Value: 0.19 ppb on March 11	Hours of Data: 701
Minimum Hourly Value: 0.03 ppb on March 28 at hour 11	Hours of Missing Data: 6
Minimum Daily Value: 0.06 ppb on March 6	Hours of Calibration: 37
Monthly Average: 0.13 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	
Mar 1	0.26	0.22	0.19	0.18	0.19	0.17	0.16	0.18	0.28	0.17	0.15	S	0.19	0.18	0.17	0.16	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.15	0.28	0.18		
Mar 2	0.17	0.21	0.26	0.28	0.26	0.2	0.18	0.17	0.18	S	0.21	0.2	0.19	0.16	0.14	0.15	0.15	0.15	0.16	0.13	0.13	0.13	0.13	0.12	0.12	0.28	0.18	
Mar 3	0.13	0.11	0.13	0.13	0.17	0.2	0.22	0.16	0.1	S	0.13	0.12	0.12	0.08	0.07	0.09	0.09	0.08	0.06	0.08	0.08	0.1	0.22	0.23	0.06	0.23	0.13	
Mar 4	0.32	0.11	0.17	0.16	0.19	0.16	0.15	0.15	S	C	C	C	C	C	0.15	0.13	0.15	0.14	0.12	0.11	0.1	0.11	0.1	0.08	0.08	0.32	0.14	
Mar 5	0.08	0.09	0.1	0.11	0.1	0.1	0.09	S	0.15	0.11	0.11	0.09	0.07	0.06	0.06	0.05	0.06	0.05	0.06	0.06	0.08	0.08	0.27	0.11	0.05	0.27	0.09	
Mar 6	0.09	0.08	0.08	0.08	0.09	0.1	S	0.1	0.1	0.07	0.05	0.06	0.04	0.05	0.05	0.05	0.06	0.04	0.05	0.05	0.04	0.05	0.06	0.05	0.04	0.10	0.06	
Mar 7	0.06	0.05	0.06	0.06	0.05	S	0.08	0.09	0.07	0.07	0.07	0.06	0.08	0.07	0.07	0.07	0.06	0.07	0.05	0.07	0.08	0.1	0.1	0.1	0.05	0.10	0.07	
Mar 8	0.1	0.13	0.13	0.12	S	0.2	0.18	0.18	0.16	0.16	0.16	0.15	0.14	0.15	0.14	0.14	0.14	0.15	0.14	0.15	0.14	0.13	0.14	0.15	0.10	0.20	0.15	
Mar 9	0.17	0.2	0.24	S	0.2	0.15	0.15	0.15	0.14	0.14	0.15	0.15	0.13	0.13	0.13	0.12	0.14	0.11	0.14	0.13	0.13	0.2	0.11	0.13	0.11	0.24	0.15	
Mar 10	0.13	0.13	S	0.18	0.16	0.14	0.15	0.15	0.19	0.17	0.16	0.18	0.19	0.16	0.17	0.18	0.17	0.17	0.16	0.19	0.19	0.17	0.18	0.2	0.13	0.20	0.17	
Mar 11	0.21	S	0.24	0.21	0.19	0.21	0.21	0.2	0.21	0.19	0.19	0.18	0.2	0.18	0.19	0.18	0.19	0.2	0.17	0.15	0.17	0.15	0.16	0.17	0.15	0.24	0.19	
Mar 12	S	0.17	0.15	0.15	0.15	0.14	0.12	0.13	0.13	0.12	0.11	0.1	0.09	0.08	0.09	0.06	0.07	0.06	0.11	0.12	0.09	0.07	0.16	S	0.06	0.17	0.11	
Mar 13	0.11	0.08	0.07	0.06	0.05	0.07	0.07	0.08	0.11	0.11	0.17	0.16	0.14	0.12	0.13	0.11	0.11	0.11	0.1	0.11	0.07	0.09	S	0.12	0.05	0.17	0.10	
Mar 14	0.09	0.11	0.09	0.11	0.11	0.12	0.12	0.12	0.12	0.11	0.11	0.12	0.1	0.11	0.13	0.12	0.13	0.17	0.17	0.19	0.17	S	0.2	0.18	0.09	0.20	0.13	
Mar 15	0.16	0.16	0.18	0.2	0.2	0.17	0.17	0.17	0.18	0.16	0.15	0.16	0.14	0.15	0.13	0.12	0.13	0.13	0.13	0.13	0.13	S	0.15	0.14	0.14	0.12	0.20	0.15
Mar 16	0.13	0.12	0.11	0.14	0.11	0.09	0.1	0.11	0.11	0.1	0.1	0.08	0.08	0.09	0.08	0.08	0.07	0.07	0.08	S	0.09	0.08	0.08	0.1	0.07	0.14	0.10	
Mar 17	0.08	0.1	0.13	0.16	0.12	0.13	0.12	0.09	0.09	0.09	0.12	0.1	0.11	0.1	0.11	0.09	0.1	0.1	S	S	0.13	0.11	0.09	0.09	0.11	0.08	0.16	0.11
Mar 18	0.11	0.26	0.13	0.08	0.09	0.15	0.15	0.09	0.09	0.07	0.07	0.07	0.08	0.08	0.06	0.07	0.05	S	0.15	0.23	0.29	0.25	0.41	0.31	0.05	0.41	0.15	
Mar 19	0.37	0.39	0.32	0.34	0.08	0.09	0.08	0.12	0.11	0.09	0.11	0.08	0.08	0.07	0.08	0.07	S	0.1	0.08	0.09	0.08	0.09	0.09	0.09	0.07	0.39	0.13	
Mar 20	0.09	0.09	0.09	0.09	0.1	0.1	0.09	0.09	0.09	0.09	0.1	0.08	0.09	0.12	0.08	S	0.12	0.09	0.09	0.1	0.1	0.11	0.11	0.1	0.08	0.12	0.10	
Mar 21	0.16	0.24	0.33	0.15	0.21	0.16	0.22	0.3	0.17	0.13	0.14	0.13	0.15	0.14	S	0.13	0.13	0.12	0.11	0.18	0.13	0.11	0.12	0.13	0.11	0.33	0.16	
Mar 22	0.12	0.12	0.11	0.11	0.1	0.12	0.13	0.12	0.09	0.08	0.07	0.08	0.06	S	0.09	0.09	0.08	0.09	0.09	0.12	0.13	0.12	0.11	0.1	0.06	0.13	0.10	
Mar 23	0.11	0.12	0.12	0.14	0.13	0.15	0.17	0.16	0.16	0.18	0.16	0.2	S	0.21	0.18	0.17	0.17	0.16	0.2	0.2	0.25	0.21	0.24	0.22	0.11	0.25	0.17	
Mar 24	0.19	0.18	0.16	0.2	0.16	0.15	0.12	0.13	0.14	0.16	0.16	S	0.17	0.15	0.15	0.14	0.13	0.13	0.14	0.13	0.14	0.15	0.14	0.15	0.12	0.20	0.15	
Mar 25	0.17	0.17	0.18	0.19	0.19	0.21	0.22	0.21	0.21	0.19	S	0.19	0.2	0.21	0.18	0.17	0.16	0.16	0.18	0.18	0.18	0.18	0.19	0.18	0.16	0.22	0.19	
Mar 26	0.2	0.2	0.22	0.24	0.25	0.23	0.23	0.23	0.23	S	0.24	0.2	0.17	0.17	0.17	0.14	0.15	0.13	0.13	0.14	0.14	0.14	0.14	0.13	0.13	0.25	0.18	
Mar 27	0.15	0.13	0.12	0.12	0.14	0.13	0.12	S	0.12	0.1	0.09	0.09	0.08	0.09	0.08	0.07	0.07	0.07	0.05	0.05	0.05	0.05	0.04	0.04	0.15	0.09	0.09	
Mar 28	0.04	0.04	X	X	X	X	X	S	NRM	0.04	0.04	0.03	0.04	0.04	0.04	0.1	0.14	0.12	0.1	0.09	0.1	0.11	0.11	0.13	0.03	0.14	-	
Mar 29	0.12	0.15	0.14	0.16	0.16	0.15	S	0.17	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.15	0.14	0.15	0.13	0.15	0.16	0.13	0.14	0.15	0.12	0.17	0.15	
Mar 30	0.18	0.2	0.19	0.2	0.21	S	0.21	0.17	0.17	0.18	0.18	0.18	0.17	0.14	0.14	0.13	0.13	0.12	0.12	0.11	0.13	0.11	0.12	0.12	0.11	0.21	0.16	
Mar 31	0.11	0.1	0.11	0.09	S	0.1	0.11	0.09	0.08	0.08	0.06	0.05	0.05	0.05	0.06	0.06	0.05	0.05	0.04	0.04	0.03	0.06	0.06	0.06	0.03	0.11	0.07	
Diurnal Maximum	0.37	0.39	0.33	0.34	0.26	0.23	0.23	0.30	0.28	0.19	0.24	0.21	0.20	0.21	0.19	0.18	0.19	0.20	0.20	0.23	0.29	0.25	0.41	0.31				
Diurnal Average	0.15	0.15	0.16	0.15	0.15	0.15	0.15	0.15	0.14	0.13	0.13	0.12	0.12	0.12	0.12	0.11	0.12	0.12	0.12	0.13	0.13	0.12	0.14	0.14				

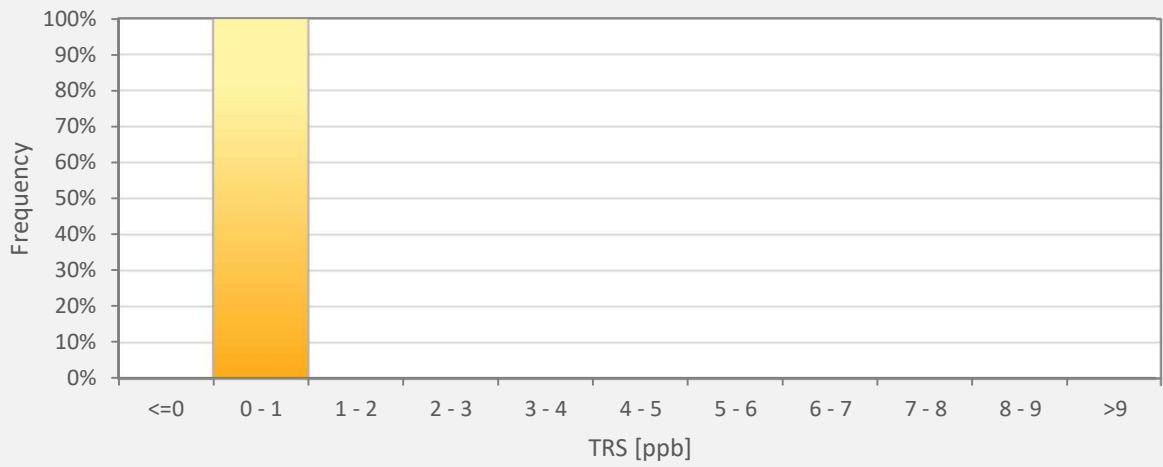
C Monthly Calibration	S Daily Zero-Span Check	Q Quality Assurance	
K Collection Error	N No Data (Machine Not in Service)	Y Routine Maintenance	P Power Failure
X InValid Data (Equipment Malfunction/Recovery)	NRM UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)		

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



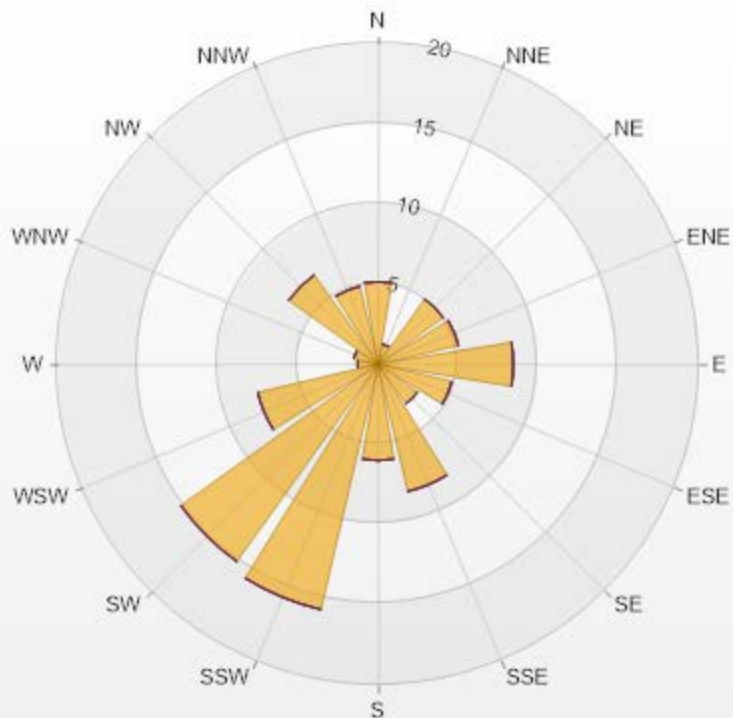
TRS[ppb] Histogram: PRAMP 842b Monthly: 03-2021 1 Hr.



Classes	TRS
<=0	0.00%
0 - 1	100.00%
1 - 2	0.00%
2 - 3	0.00%
3 - 4	0.00%
4 - 5	0.00%
5 - 6	0.00%
6 - 7	0.00%
7 - 8	0.00%
8 - 9	0.00%
>9	0.00%

Wind: PRAMP 842b Poll.: PRAMP 842b-TRS[ppb] Monthly: 03-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.22% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	5.14	0	0	0	0	5.14
NNE	1.28	0	0	0	0	1.28
NE	4.99	0	0	0	0	4.99
ENE	5.14	0	0	0	0	5.14
E	8.42	0	0	0	0	8.42
ESE	4.71	0	0	0	0	4.71
SE	3	0	0	0	0	3
SSE	8.13	0	0	0	0	8.13
S	5.99	0	0	0	0	5.99
SSW	15.69	0	0	0	0	15.69
SW	15.12	0	0	0	0	15.12
WSW	7.7	0	0	0	0	7.7
W	1.28	0	0	0	0	1.28
WNW	1.57	0	0	0	0	1.57
NW	6.85	0	0	0	0	6.85
NNW	4.99	0	0	0	0	4.99
Summary	100	0	0	0	0	100



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% Icon Classes (ppb)

100 0-2

0 2-5

0 5-10

0 10-50

0 >50.0



PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2021

Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

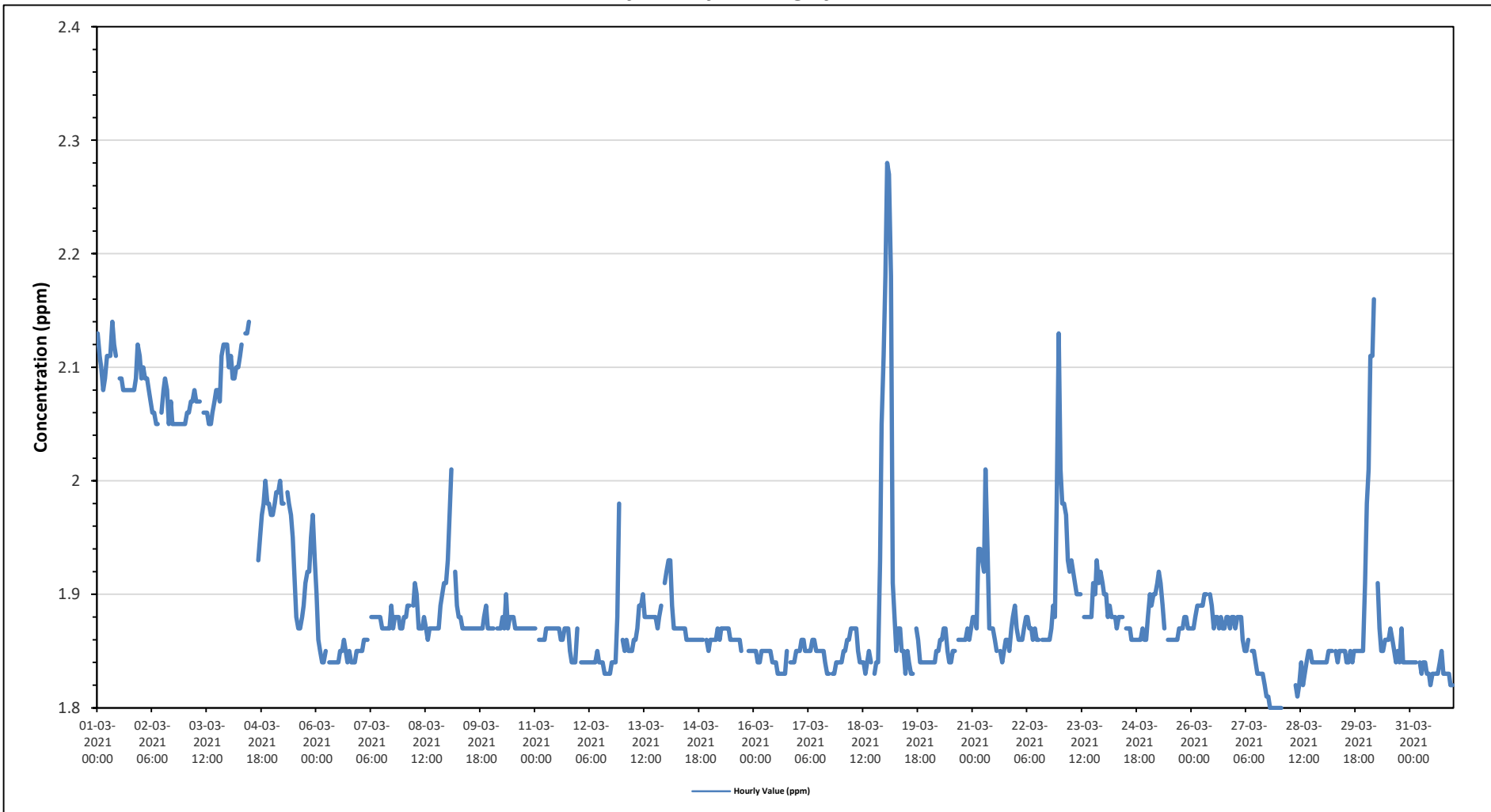
Maximum Hourly Value:	2.28 ppm on March 19 at hour 1	Hours in Service:	744
Maximum Daily Value:	2.10 ppm on March 1	Hours of Data:	701
Minimum Hourly Value:	1.80 ppm on March 27 at hour 19	Hours of Missing Data:	7
Minimum Daily Value:	1.83 ppm on March 31	Hours of Calibration:	36
Monthly Average:	1.90 ppm	Operational Uptime:	99.1

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	
Mar 1	2.13	2.11	2.10	2.08	2.09	2.11	2.11	2.11	2.14	2.12	2.11	S	2.09	2.09	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.09	2.12	2.11	2.08	2.14	2.10	
Mar 2	2.09	2.10	2.09	2.09	2.08	2.07	2.06	2.06	2.05	2.05	S	2.06	2.08	2.09	2.08	2.05	2.07	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.10	2.07
Mar 3	2.05	2.06	2.06	2.07	2.07	2.08	2.07	2.07	2.07	2.07	S	2.06	2.06	2.05	2.05	2.06	2.07	2.08	2.08	2.07	2.11	2.12	2.12	2.12	2.05	2.12	2.07	
Mar 4	2.10	2.11	2.09	2.09	2.10	2.10	2.11	2.12	S	2.13	2.13	2.14	C	C	C	C	1.93	1.95	1.97	1.98	2.00	1.98	1.98	1.97	1.93	2.14	2.05	
Mar 5	1.97	1.98	1.99	1.99	2.00	1.98	1.98	S	1.99	1.98	1.97	1.95	1.91	1.88	1.87	1.87	1.88	1.89	1.91	1.92	1.92	1.95	1.97	1.93	1.87	2.00	1.94	
Mar 6	1.90	1.86	1.85	1.84	1.84	1.85	S	1.84	1.84	1.84	1.84	1.84	1.84	1.85	1.85	1.86	1.85	1.84	1.85	1.84	1.84	1.84	1.85	1.85	1.84	1.90	1.85	
Mar 7	1.85	1.85	1.86	1.86	1.86	S	1.88	1.88	1.88	1.88	1.88	1.88	1.87	1.87	1.87	1.87	1.87	1.89	1.87	1.88	1.88	1.88	1.87	1.87	1.85	1.89	1.87	
Mar 8	1.88	1.88	1.89	1.89	S	1.89	1.91	1.90	1.87	1.87	1.87	1.88	1.87	1.86	1.87	1.87	1.87	1.87	1.87	1.87	1.89	1.90	1.91	1.91	1.86	1.91	1.88	
Mar 9	1.93	1.97	2.01	S	1.92	1.89	1.88	1.88	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.88	1.89	1.87	1.87	1.87	2.01	1.89	
Mar 10	1.87	1.87	S	1.87	1.87	1.87	1.88	1.87	1.87	1.90	1.87	1.88	1.88	1.88	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.90	1.87	
Mar 11	1.87	S	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	1.86	1.87	1.87	1.87	1.87	1.85	1.84	1.84	1.84	1.87	1.84	1.86	
Mar 12	S	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.85	1.84	1.84	1.84	1.83	1.83	1.83	1.83	1.84	1.84	1.84	1.88	1.98	S	1.83	1.98	1.85
Mar 13	1.86	1.85	1.86	1.85	1.85	1.85	1.86	1.86	1.87	1.89	1.89	1.90	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.87	1.88	1.89	S	1.91	1.85	1.91	1.87
Mar 14	1.92	1.93	1.93	1.89	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	S	1.86	1.85	1.85	1.93	1.87
Mar 15	1.86	1.86	1.86	1.86	1.87	1.86	1.87	1.87	1.87	1.87	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.85	NRM	1.86	S	1.85	1.85	1.85	1.85	1.85	1.87	1.86
Mar 16	1.85	1.85	1.84	1.84	1.85	1.85	1.85	1.85	1.85	1.85	1.84	1.84	1.84	1.83	1.83	1.83	1.83	1.83	1.83	1.85	S	1.84	1.84	1.84	1.85	1.83	1.85	1.84
Mar 17	1.85	1.85	1.86	1.86	1.85	1.85	1.85	1.85	1.85	1.86	1.86	1.85	1.85	1.85	1.85	1.84	1.83	1.83	S	S	1.83	1.83	1.84	1.84	1.84	1.83	1.86	1.85
Mar 18	1.84	1.85	1.85	1.86	1.86	1.87	1.87	1.87	1.87	1.87	1.85	1.84	1.84	1.84	1.83	1.84	1.85	1.84	S	1.83	1.84	1.84	1.93	2.05	2.11	1.83	2.11	1.87
Mar 19	2.18	2.28	2.27	2.18	1.91	1.88	1.85	1.87	1.87	1.85	1.85	1.83	1.85	1.84	1.83	1.83	S	1.87	1.86	1.84	1.84	1.84	1.84	1.84	1.84	1.83	2.28	1.92
Mar 20	1.84	1.84	1.84	1.84	1.85	1.85	1.86	1.86	1.87	1.87	1.85	1.84	1.84	1.85	1.85	S	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.86	1.87	1.84	1.87	1.85
Mar 21	1.88	1.88	1.87	1.94	1.94	1.93	1.92	2.01	1.94	1.87	1.87	1.87	1.86	1.85	S	1.85	1.84	1.85	1.86	1.86	1.85	1.87	1.88	1.89	1.84	2.01	1.89	
Mar 22	1.87	1.86	1.86	1.86	1.87	1.88	1.88	1.87	1.87	1.86	1.87	1.86	1.86	S	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.89	1.88	1.98	2.13	1.86	2.13	1.88
Mar 23	2.01	1.98	1.98	1.97	1.93	1.92	1.93	1.92	1.91	1.90	1.90	1.90	1.90	S	1.88	1.88	1.88	1.88	1.88	1.91	1.90	1.93	1.91	1.92	1.91	1.88	2.01	1.92
Mar 24	1.90	1.90	1.88	1.89	1.88	1.88	1.88	1.87	1.88	1.88	1.88	S	1.87	1.87	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.86	1.86	1.86	1.90	1.87
Mar 25	1.88	1.90	1.89	1.90	1.90	1.91	1.92	1.91	1.89	1.87	S	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.88	1.88	1.87	1.87	1.86	1.92	1.88
Mar 26	1.87	1.87	1.88	1.89	1.89	1.89	1.89	1.90	1.90	S	1.90	1.89	1.87	1.88	1.88	1.87	1.88	1.87	1.87	1.87	1.88	1.88	1.87	1.88	1.88	1.87	1.90	1.88
Mar 27	1.87	1.88	1.88	1.88	1.86	1.85	1.85	S	1.85	1.85	1.84	1.83	1.83	1.83	1.83	1.82	1.81	1.81	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.88	1.84
Mar 28	1.80	1.80	X	X	X	X	X	S	NRM	1.82	1.81	1.82	1.84	1.82	1.83	1.84	1.85	1.85	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	-
Mar 29	1.84	1.84	1.84	1.85	1.85	1.85	S	1.85	1.84	1.85	1.85	1.85	1.85	1.84	1.84	1.85	1.84	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.91	1.84	1.91	1.85
Mar 30	1.98	2.01	2.11	2.11	2.16	S	1.91	1.87	1.85	1.85	1.86	1.86	1.86	1.86	1.87	1.86	1.85	1.84	1.85	1.84	1.87	1.84	1.84	1.84	1.84	1.84	2.16	1.90
Mar 31	1.84	1.84	1.84	1.84	S	1.84	1.83	1.84	1.84	1.83	1.83	1.82	1.83	1.83	1.83	1.83	1.84	1.85	1.83	1.83	1.83	1.83	1.83	1.82	1.82	1.82	1.85	1.83
Diurnal Maximum	2.18	2.28	2.27	2.18	2.16	2.11	2.11	2.12	2.14	2.13	2.13	2.14	2.09	2.09	2.08	2.08	2.08	2.08	2.08	2.08	2.11	2.12	2.12	2.13				
Diurnal Average	1.92	1.92	1.93	1.92	1.92	1.91	1.91	1.90	1.90	1.89	1.89	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.89	1.88	1.89	1.90	1.91			

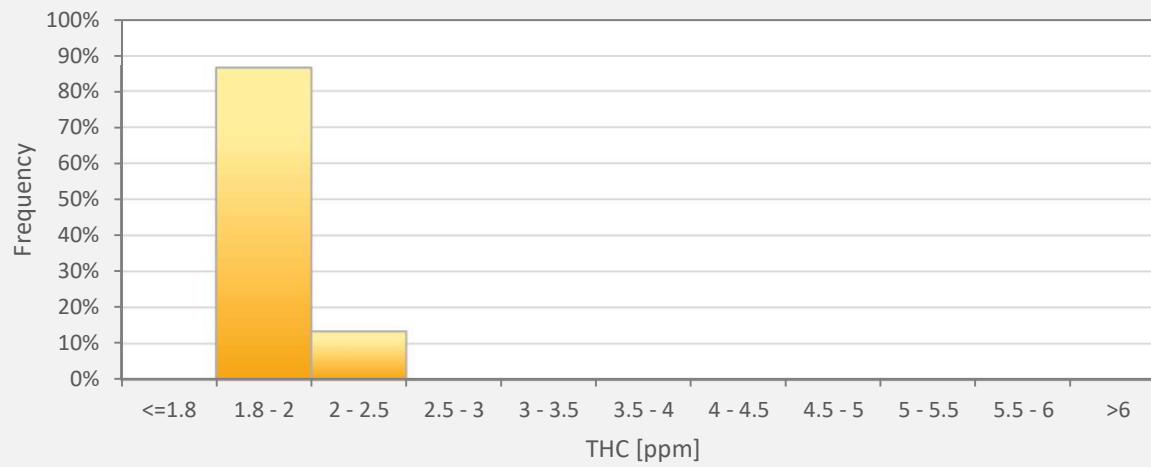
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	InValid Data (Equipment Malfunction/Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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 THC - 842b Station



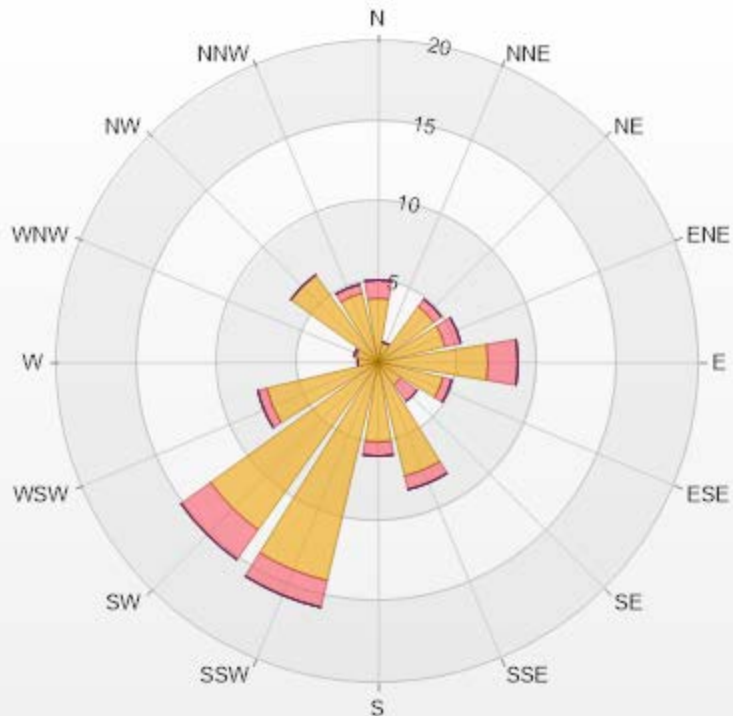
THC55[ppm] Histogram: PRAMP 842b Monthly: 03-2021 1 Hr.



Classes	THC55
<=1.8	0.14%
1.8 - 2	86.45%
2 - 2.5	13.41%
2.5 - 3	0.00%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: PRAMP 842b Poll.: PRAMP 842b-THC55[ppm] Monthly: 03-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.22% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	3.99	1.14	0	0	0	5.13
NNE	1.28	0	0	0	0	1.28
NE	4.28	0.57	0	0	0	4.85
ENE	4.28	1	0	0	0	5.28
E	6.85	1.85	0	0	0	8.7
ESE	4.14	0.57	0	0	0	4.71
SE	1.71	1.28	0	0	0	2.99
SSE	7.28	0.86	0	0	0	8.14
S	4.99	0.86	0	0	0	5.85
SSW	13.98	1.71	0	0	0	15.69
SW	12.84	2.28	0	0	0	15.12
WSW	7.13	0.57	0	0	0	7.7
W	1.28	0	0	0	0	1.28
WNW	1.43	0.14	0	0	0	1.57
NW	6.7	0	0	0	0	6.7
NNW	4.42	0.57	0	0	0	4.99
Summary	86.58	13.4	0	0	0	100



PRAMP-202103

% Icon Classes (ppm)	87	13	0	0	0
0-2	87	13	0	0	0
2-5		13			
5-10			0		
10-40				0	
>40.0					0



PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2021

Summary of Hourly Averages

METHANE (CH4) in ppm

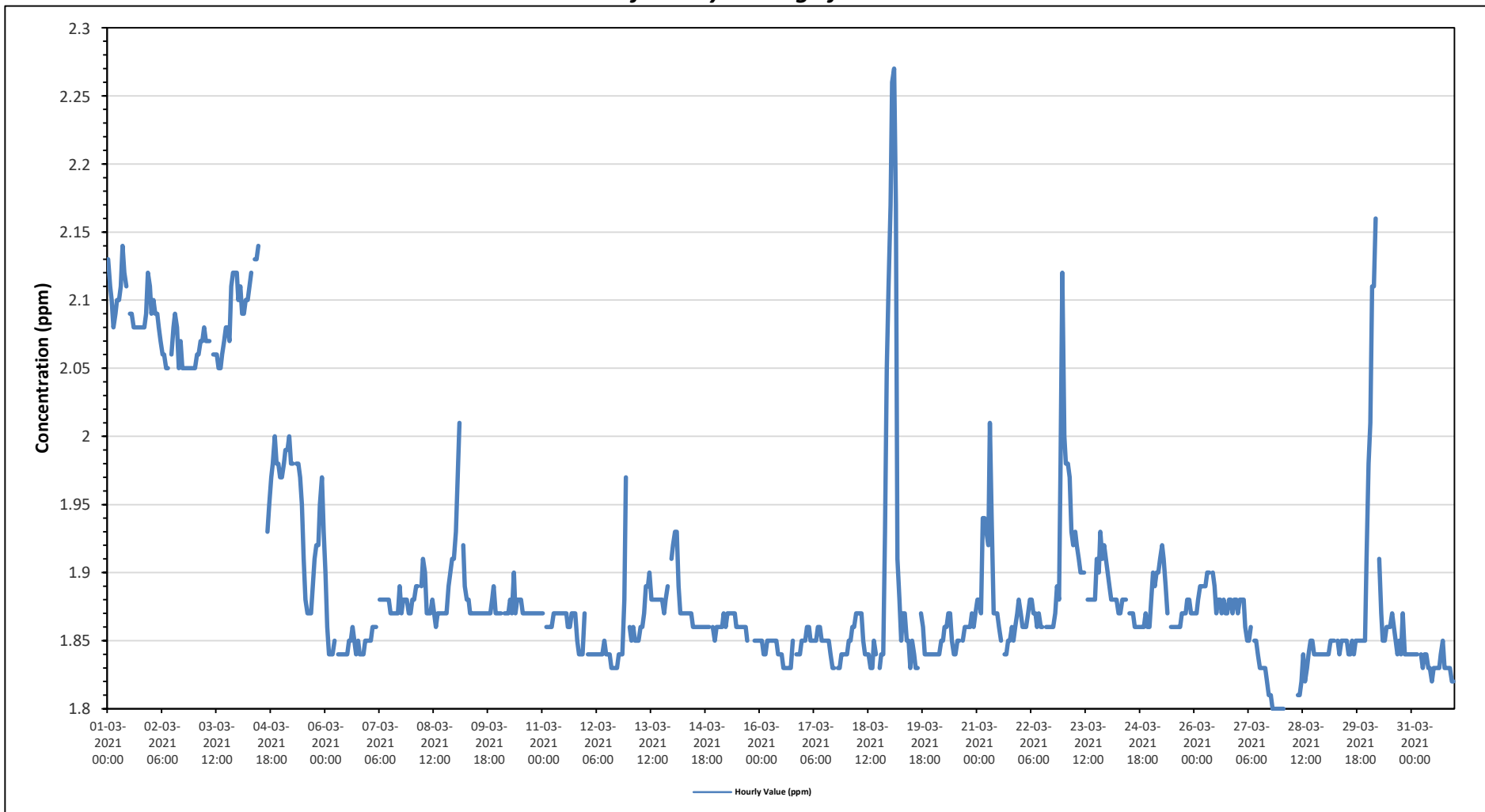
Maximum Hourly Value:	2.27 ppm on March 19 at hour 2	Hours in Service:	744
Maximum Daily Value:	2.10 ppm on March 1	Hours of Data:	701
Minimum Hourly Value:	1.80 ppm on March 27 at hour 19	Hours of Missing Data:	7
Minimum Daily Value:	1.83 ppm on March 31	Hours of Calibration:	36
Monthly Average:	1.90 ppm	Operational Uptime:	99.1

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	
Mar 1	2.13	2.11	2.10	2.08	2.09	2.10	2.10	2.11	2.14	2.12	2.11	S	2.09	2.09	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.09	2.12	2.11	2.08	2.14	2.10	
Mar 2	2.09	2.10	2.09	2.09	2.08	2.07	2.06	2.06	2.05	2.05	S	2.06	2.08	2.09	2.08	2.05	2.07	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.10	2.07
Mar 3	2.05	2.06	2.06	2.07	2.07	2.08	2.07	2.07	2.07	2.07	S	2.06	2.06	2.05	2.05	2.06	2.07	2.08	2.08	2.07	2.11	2.12	2.12	2.12	2.05	2.12	2.07	
Mar 4	2.10	2.11	2.09	2.09	2.10	2.10	2.11	2.12	S	2.13	2.13	2.14	C	C	C	C	1.93	1.95	1.97	1.98	2.00	1.98	1.98	1.97	1.93	2.14	2.05	
Mar 5	1.97	1.98	1.99	1.99	2.00	1.98	1.98	S	1.98	1.98	1.97	1.95	1.91	1.88	1.87	1.87	1.87	1.89	1.91	1.92	1.92	1.95	1.97	1.93	1.87	2.00	1.94	
Mar 6	1.90	1.86	1.84	1.84	1.84	1.85	S	1.84	1.84	1.84	1.84	1.84	1.84	1.85	1.85	1.86	1.85	1.84	1.85	1.84	1.84	1.84	1.85	1.85	1.84	1.90	1.85	
Mar 7	1.85	1.85	1.86	1.86	1.86	S	1.88	1.88	1.88	1.88	1.88	1.88	1.87	1.87	1.87	1.87	1.87	1.89	1.87	1.88	1.88	1.88	1.87	1.87	1.85	1.89	1.87	
Mar 8	1.88	1.88	1.89	1.89	S	1.89	1.91	1.90	1.87	1.87	1.87	1.88	1.87	1.86	1.87	1.87	1.87	1.87	1.87	1.87	1.89	1.90	1.91	1.91	1.86	1.91	1.88	
Mar 9	1.93	1.97	2.01	S	1.92	1.89	1.88	1.88	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.88	1.89	1.87	1.87	1.87	2.01	1.89	
Mar 10	1.87	1.87	S	1.87	1.87	1.87	1.88	1.87	1.87	1.90	1.87	1.88	1.88	1.88	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.90	1.87	
Mar 11	1.87	S	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	1.86	1.87	1.87	1.87	1.85	1.84	1.84	1.84	1.87	1.84	1.87	1.86	
Mar 12	S	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.85	1.84	1.84	1.84	1.83	1.83	1.83	1.83	1.84	1.84	1.84	1.88	1.97	S	1.83	1.97	1.85	
Mar 13	1.86	1.85	1.86	1.85	1.85	1.85	1.86	1.86	1.87	1.89	1.89	1.90	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.87	1.88	1.89	S	1.91	1.85	1.91	1.87	
Mar 14	1.92	1.93	1.93	1.89	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	S	1.86	1.85	1.85	1.87	
Mar 15	1.86	1.86	1.86	1.86	1.87	1.86	1.87	1.87	1.87	1.87	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.85	NRM	1.86	S	1.85	1.85	1.85	1.85	1.87	1.86	
Mar 16	1.85	1.85	1.84	1.84	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.84	1.84	1.83	1.83	1.83	1.83	1.83	1.83	1.85	S	1.84	1.84	1.84	1.85	1.83	1.85	1.84
Mar 17	1.85	1.85	1.86	1.86	1.85	1.85	1.85	1.85	1.85	1.86	1.86	1.85	1.85	1.85	1.85	1.84	1.83	1.83	S	S	1.83	1.83	1.84	1.84	1.84	1.83	1.86	1.85
Mar 18	1.84	1.85	1.85	1.86	1.86	1.87	1.87	1.87	1.87	1.85	1.84	1.84	1.84	1.83	1.83	1.85	1.84	S	1.83	1.84	1.84	1.93	2.05	2.11	1.83	2.11	1.87	
Mar 19	2.17	2.26	2.27	2.17	1.91	1.88	1.85	1.87	1.87	1.85	1.85	1.83	1.85	1.84	1.83	1.83	S	1.87	1.86	1.84	1.84	1.84	1.84	1.84	1.83	2.27	1.92	
Mar 20	1.84	1.84	1.84	1.84	1.85	1.85	1.86	1.86	1.87	1.87	1.85	1.84	1.84	1.85	1.85	S	1.85	1.86	1.86	1.86	1.86	1.86	1.87	1.86	1.87	1.84	1.87	1.85
Mar 21	1.88	1.88	1.87	1.94	1.94	1.93	1.92	2.01	1.94	1.87	1.87	1.87	1.86	1.85	S	1.84	1.84	1.85	1.85	1.86	1.85	1.86	1.87	1.88	1.84	2.01	1.88	
Mar 22	1.87	1.86	1.86	1.86	1.87	1.88	1.88	1.87	1.87	1.86	1.87	1.86	1.86	S	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.89	1.88	1.98	2.12	1.86	2.12	1.88
Mar 23	2.00	1.98	1.98	1.97	1.93	1.92	1.93	1.92	1.91	1.90	1.90	1.90	1.90	S	1.88	1.88	1.88	1.88	1.88	1.91	1.90	1.93	1.91	1.92	1.91	1.88	2.00	1.92
Mar 24	1.90	1.89	1.88	1.88	1.88	1.87	1.87	1.88	1.88	1.88	S	1.87	1.87	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.90	1.87
Mar 25	1.88	1.90	1.89	1.90	1.90	1.91	1.92	1.91	1.89	1.87	S	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.88	1.88	1.87	1.87	1.86	1.92	1.88	
Mar 26	1.87	1.87	1.88	1.89	1.89	1.89	1.89	1.90	1.90	S	1.90	1.89	1.87	1.88	1.88	1.87	1.88	1.87	1.87	1.87	1.88	1.88	1.87	1.88	1.88	1.87	1.90	1.88
Mar 27	1.87	1.88	1.88	1.88	1.86	1.85	1.85	S	1.85	1.85	1.84	1.83	1.83	1.83	1.83	1.82	1.81	1.81	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.84	1.84
Mar 28	1.80	1.80	X	X	X	X	X	S	NRM	1.81	1.81	1.82	1.84	1.82	1.83	1.84	1.85	1.85	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	-
Mar 29	1.84	1.84	1.84	1.85	1.85	1.85	S	1.85	1.84	1.85	1.85	1.85	1.85	1.84	1.84	1.85	1.84	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.84	1.91	1.85
Mar 30	1.98	2.01	2.11	2.11	2.16	S	1.91	1.87	1.85	1.85	1.86	1.86	1.86	1.86	1.86	1.85	1.84	1.85	1.84	1.87	1.84	1.84	1.84	1.84	1.84	1.84	2.16	1.90
Mar 31	1.84	1.84	1.84	1.84	S	1.84	1.83	1.84	1.84	1.83	1.83	1.82	1.83	1.83	1.83	1.83	1.84	1.85	1.83	1.83	1.83	1.83	1.83	1.82	1.82	1.82	1.85	1.83
Diurnal Maximum	2.17	2.26	2.27	2.17	2.16	2.10	2.11	2.12	2.14	2.13	2.13	2.14	2.09	2.09	2.08	2.08	2.08	2.08	2.08	2.08	2.11	2.12	2.12	2.12	1.82	2.27	1.92	
Diurnal Average	1.92	1.92	1.93	1.92	1.92	1.91	1.91	1.90	1.90	1.89	1.89	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.89	1.89	1.90	1.91	1.88	1.85	1.83

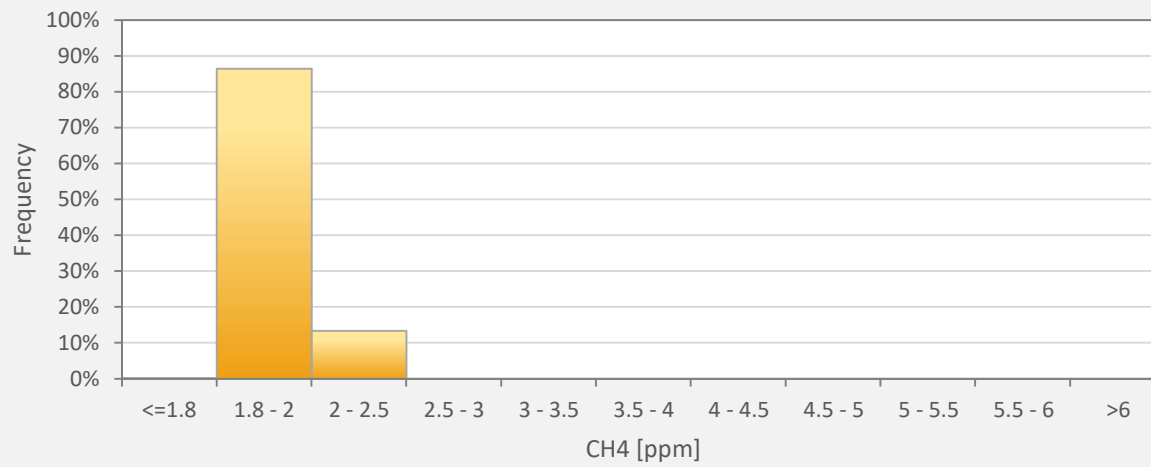
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	InValid Data (Equipment Malfunction/Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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 CH4 - 842b Station



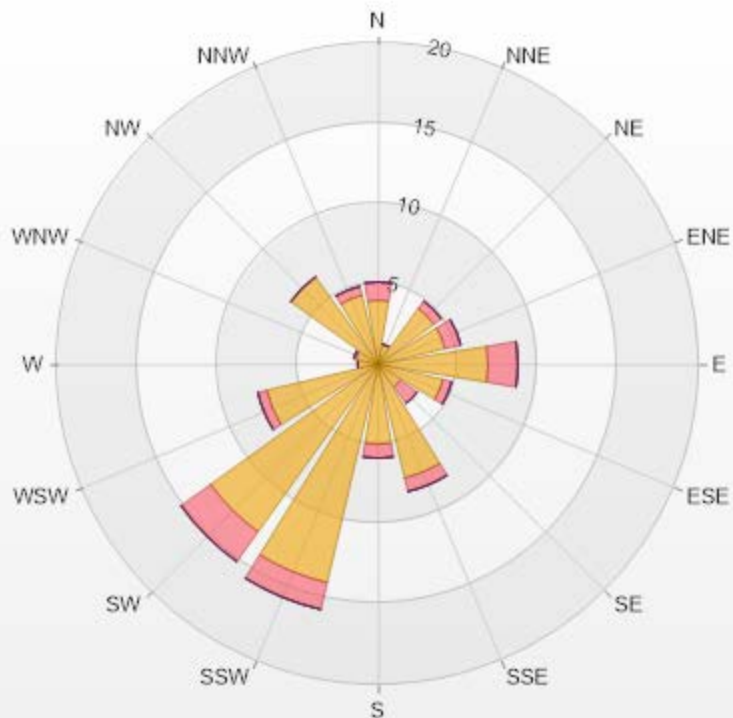
CH4[ppm] Histogram: PRAMP 842b Monthly: 03-2021 1 Hr.



Classes	CH4
<=1.8	0.14%
1.8 - 2	86.45%
2 - 2.5	13.41%
2.5 - 3	0.00%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: PRAMP 842b Poll.: PRAMP 842b-CH4[ppm] Monthly: 03-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.22% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	3.99	1.14	0	0	0	5.13
NNE	1.28	0	0	0	0	1.28
NE	4.28	0.57	0	0	0	4.85
ENE	4.28	1	0	0	0	5.28
E	6.85	1.85	0	0	0	8.7
ESE	4.14	0.57	0	0	0	4.71
SE	1.71	1.28	0	0	0	2.99
SSE	7.28	0.86	0	0	0	8.14
S	4.99	0.86	0	0	0	5.85
SSW	13.98	1.71	0	0	0	15.69
SW	12.84	2.28	0	0	0	15.12
WSW	7.13	0.57	0	0	0	7.7
W	1.28	0	0	0	0	1.28
WNW	1.43	0.14	0	0	0	1.57
NW	6.7	0	0	0	0	6.7
NNW	4.42	0.57	0	0	0	4.99
Summary	86.58	13.4	0	0	0	100



PRAMP-202103

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% Icon Classes (ppm)

87

0-2

13

2-5

0

5-10

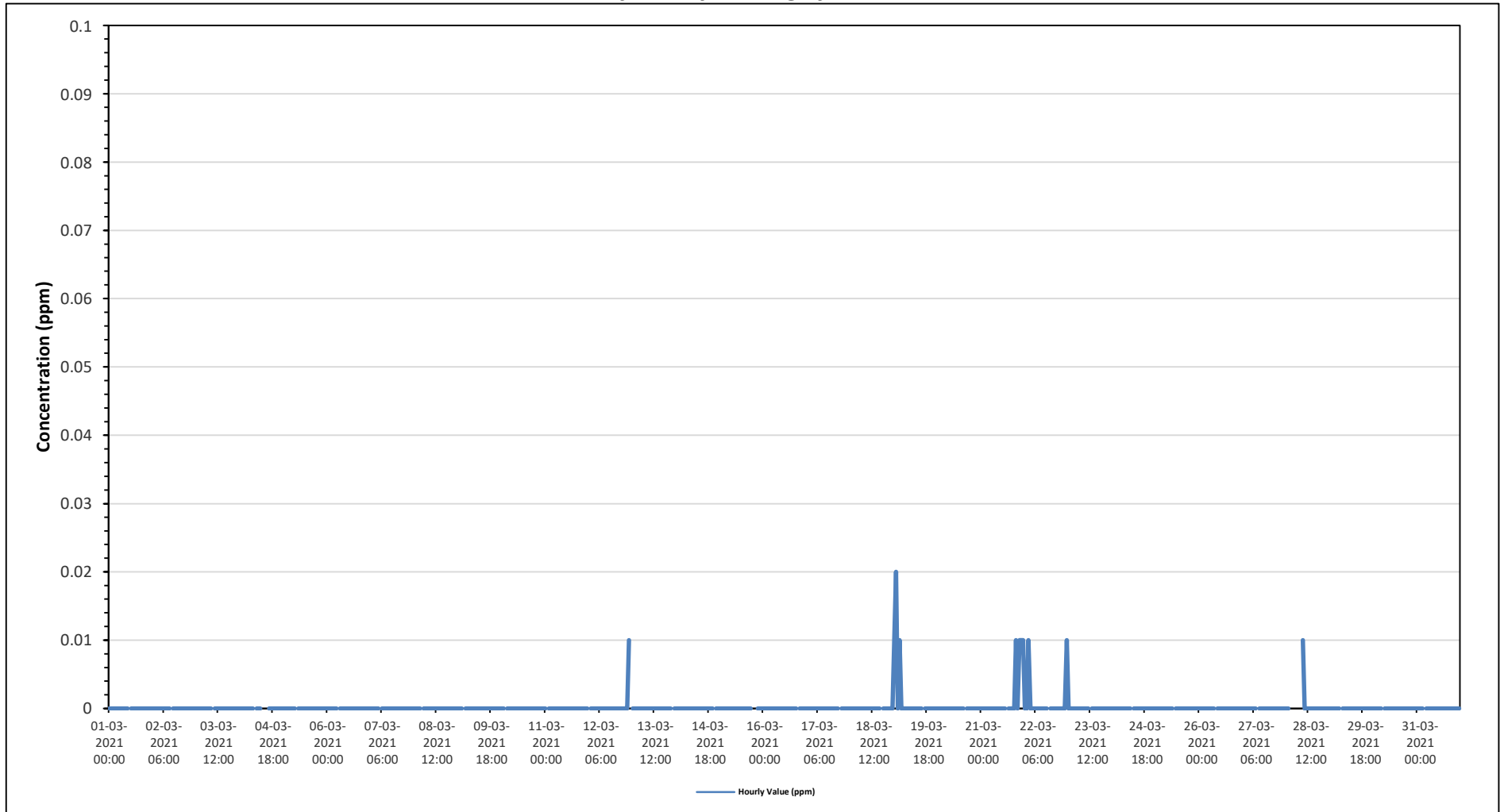
0

10-20

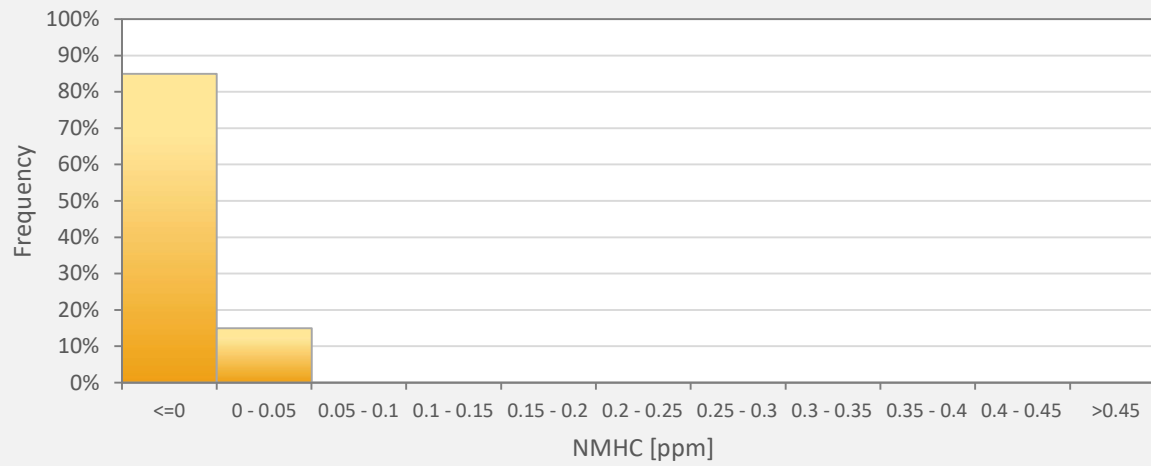
0

>20.0

Timeseries Chart of Hourly Average for NMHC - 842b Station



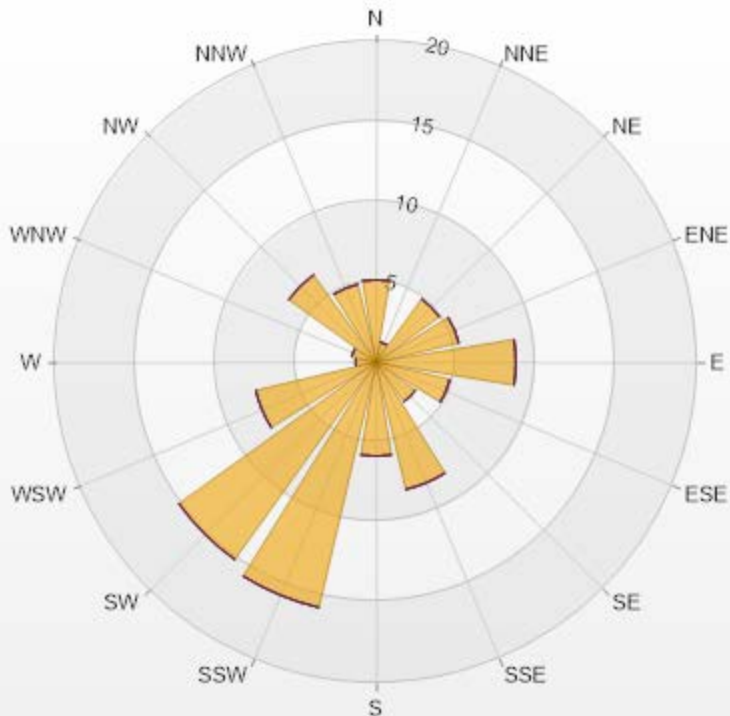
NMHC[ppm] Histogram: PRAMP 842b Monthly: 03-2021 1 Hr.



Classes	NMHC
<=0	85.02%
0 - 0.05	14.98%
0.05 - 0.1	0.00%
0.1 - 0.15	0.00%
0.15 - 0.2	0.00%
0.2 - 0.25	0.00%
0.25 - 0.3	0.00%
0.3 - 0.35	0.00%
0.35 - 0.4	0.00%
0.4 - 0.45	0.00%
>0.45	0.00%

Wind: PRAMP 842b Poll.: PRAMP 842b-NMHC[ppm] Monthly: 03-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.22% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-0.9	0.9-2	>2.0	Total
N	5.14	0	0	0	0	5.14
NNE	1.28	0	0	0	0	1.28
NE	4.85	0	0	0	0	4.85
ENE	5.28	0	0	0	0	5.28
E	8.7	0	0	0	0	8.7
ESE	4.71	0	0	0	0	4.71
SE	3	0	0	0	0	3
SSE	8.13	0	0	0	0	8.13
S	5.85	0	0	0	0	5.85
SSW	15.69	0	0	0	0	15.69
SW	15.12	0	0	0	0	15.12
WSW	7.7	0	0	0	0	7.7
W	1.28	0	0	0	0	1.28
WNW	1.57	0	0	0	0	1.57
NW	6.7	0	0	0	0	6.7
NNW	4.99	0	0	0	0	4.99
Summary	100	0	0	0	0	100




PRAMP-202103

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% 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

842b Station - March 2021

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

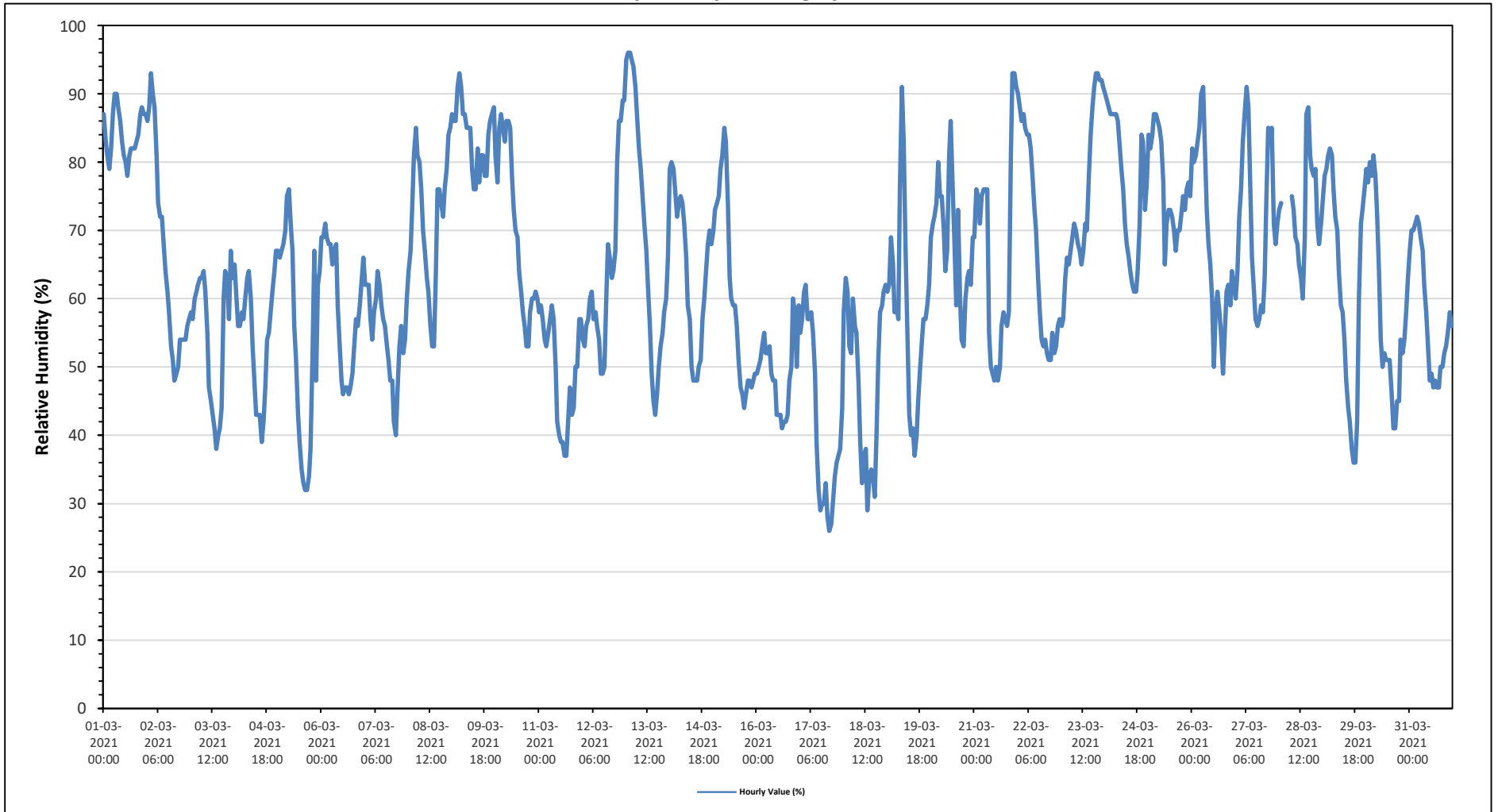
Maximum Hourly Value:	96 %	on March 13 at hour 1	Hours in Service:	744
Maximum Daily Value:	84.1 %	on March 1	Hours of Data:	739
Minimum Hourly Value:	26 %	on March 17 at hour 16	Hours of Missing Data:	5
Minimum Daily Value:	41.8 %	on March 17	Hours of Calibration:	0
Monthly Average:	63.8 %		Operational Uptime:	99.3

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Mar 1	87	83	81	79	82	87	90	90	88	86	83	81	80	78	81	82	82	82	83	84	87	88	87	87	78	90	84.1
Mar 2	86	88	93	90	88	81	74	72	72	68	64	61	58	53	51	48	49	50	54	54	54	56	57	57	48	93	65.6
Mar 3	58	57	60	61	62	63	63	64	61	55	47	45	43	41	38	40	41	44	60	64	63	67	67	63	38	67	54.9
Mar 4	65	61	56	56	58	57	60	63	64	60	53	48	43	43	43	39	42	47	54	55	58	61	64	67	39	67	54.9
Mar 5	67	66	67	68	70	75	76	71	67	56	51	43	39	35	33	32	32	34	38	52	67	48	62	64	32	76	54.7
Mar 6	69	69	71	69	68	68	65	67	68	59	53	48	46	47	47	46	47	49	53	57	56	59	62	66	46	71	58.7
Mar 7	62	62	62	57	54	58	60	64	62	59	57	56	53	51	48	48	42	40	47	53	56	52	54	60	40	64	54.9
Mar 8	64	67	73	81	85	81	80	76	70	67	63	61	56	53	53	63	76	76	74	72	76	79	84	85	53	85	71.5
Mar 9	87	86	86	91	93	91	87	87	85	85	85	79	76	76	82	77	81	81	78	78	84	86	87	88	76	93	84.0
Mar 10	81	77	85	87	85	83	86	86	85	78	73	70	69	64	61	58	56	53	53	58	60	60	61	60	53	87	70.4
Mar 11	58	59	57	54	53	55	57	59	57	50	42	40	39	39	37	37	42	47	43	44	50	50	57	57	37	59	49.3
Mar 12	54	53	56	57	60	61	57	58	56	54	49	49	50	61	68	66	63	64	67	80	86	86	89	89	49	89	63.9
Mar 13	95	96	96	95	94	91	87	82	79	75	71	67	62	56	49	45	43	46	50	53	55	58	60	66	43	96	69.6
Mar 14	79	80	79	76	72	74	75	74	71	66	59	57	50	48	48	48	50	51	57	60	64	68	70	68	48	80	64.3
Mar 15	70	73	74	75	79	81	85	83	74	63	60	59	59	56	51	47	46	44	46	48	48	47	48	49	44	85	61.0
Mar 16	49	50	51	53	55	52	52	53	49	48	48	43	43	43	41	42	42	43	48	50	60	58	50	59	41	60	49.3
Mar 17	55	57	61	62	57	57	58	55	49	39	32	29	30	30	33	28	26	27	30	34	36	37	38	44	26	62	41.8
Mar 18	58	63	61	53	52	60	56	55	48	39	33	37	38	29	34	35	34	31	40	51	58	59	61	62	29	63	47.8
Mar 19	61	62	69	65	58	59	57	76	91	83	68	56	43	40	41	37	40	45	50	54	57	57	59	62	37	91	57.9
Mar 20	69	71	72	74	80	75	75	70	64	67	81	86	76	68	59	73	60	54	53	60	63	64	62	69	53	86	68.5
Mar 21	69	76	75	71	75	76	76	76	55	50	49	48	50	48	50	56	58	57	56	58	81	93	93	91	48	93	66.1
Mar 22	90	88	86	87	85	84	84	82	78	73	70	63	58	54	53	54	52	51	51	55	52	53	56	57	51	90	67.3
Mar 23	56	57	63	66	65	67	69	71	70	68	67	65	67	71	70	78	84	88	91	93	93	92	92	91	56	93	74.8
Mar 24	90	89	88	87	87	87	87	86	83	79	76	71	68	66	64	62	61	61	64	71	84	83	73	77	61	90	76.8
Mar 25	84	82	84	87	87	86	85	83	77	65	71	73	73	72	70	67	70	70	72	75	73	76	77	75	65	87	76.4
Mar 26	82	80	81	83	85	90	91	83	73	68	65	60	50	58	61	58	55	49	55	61	62	59	64	62	49	91	68.1
Mar 27	60	64	72	76	83	87	91	88	77	66	61	57	56	57	59	58	63	75	85	83	85	71	68	71	56	91	71.4
Mar 28	73	74	X	X	X	X	X	75	73	69	68	65	63	60	69	87	88	81	79	78	79	71	68	71	60	88	73.2
Mar 29	74	78	79	81	82	81	76	72	70	64	59	58	54	48	44	42	38	36	36	42	60	71	73	76	36	82	62.3
Mar 30	79	77	80	78	81	78	72	64	54	50	52	51	51	51	46	41	41	45	45	54	52	54	58	63	41	81	59.0
Mar 31	67	70	70	71	72	71	69	67	62	58	53	48	49	47	48	47	47	50	50	52	53	55	58	56	47	72	57.9
Diurnal Maximum	95	96	96	95	94	91	91	90	91	86	85	86	80	78	82	87	88	88	91	93	93	93	93	91			
Diurnal Average	70.9	71.5	72.9	73.0	73.6	73.9	73.3	72.6	68.8	63.5	60.1	57.2	54.6	53.0	52.6	52.9	53.3	53.9	56.8	60.7	64.9	64.7	66.4	68.1			

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 RH - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2021

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

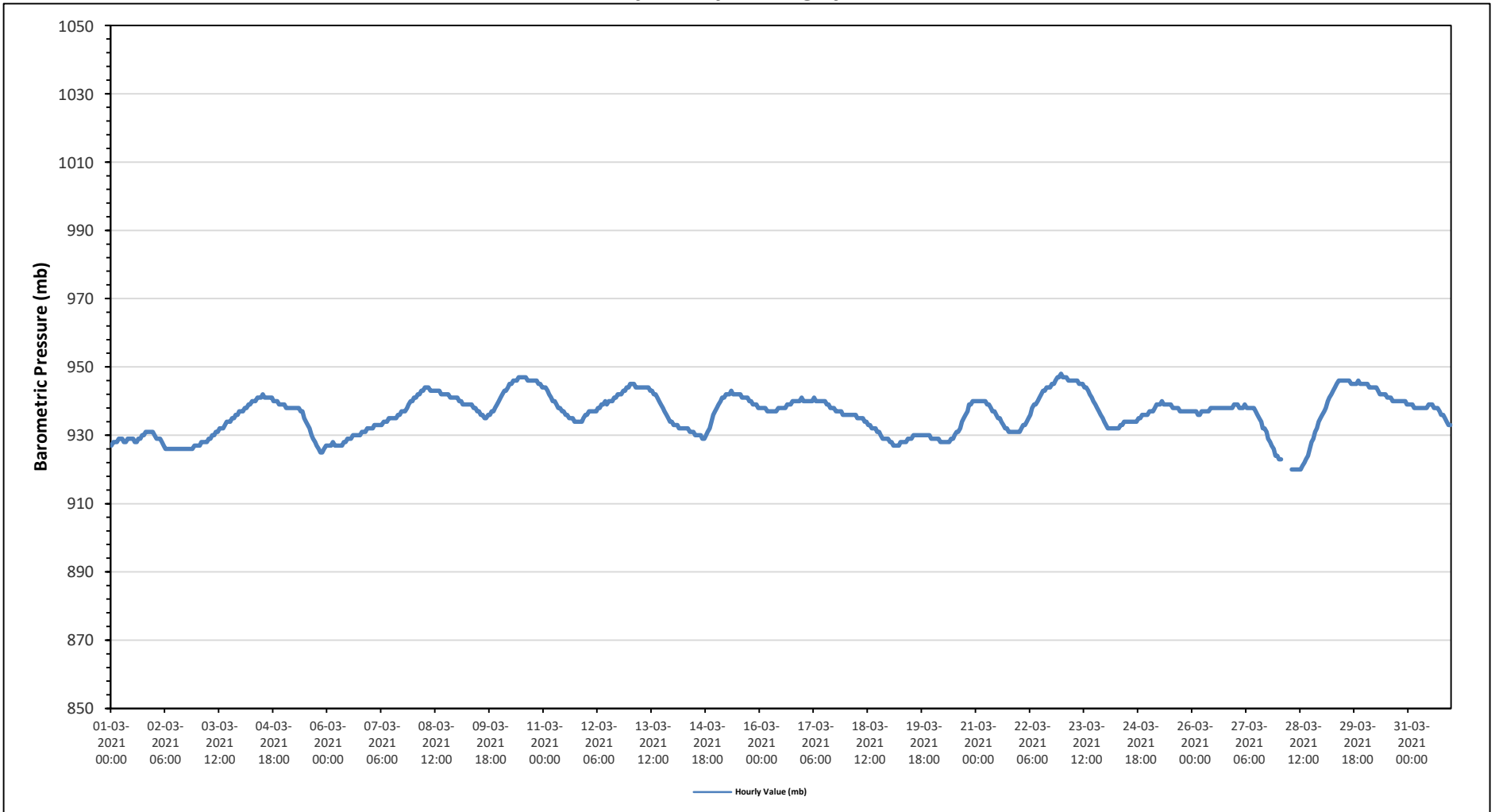
Maximum Hourly Value:	948 mb on March 22 at hour 23	Hours in Service:	744
Maximum Daily Value:	945 mb on March 10	Hours of Data:	739
Minimum Hourly Value:	920 mb on March 28 at hour 7	Hours of Missing Data:	5
Minimum Daily Value:	925 mb on March 28	Hours of Calibration:	0
Monthly Average:	936 mb	Operational Uptime:	99.3

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Mar 1	927	928	928	928	929	929	929	928	928	929	929	929	929	928	928	929	929	930	930	931	931	931	931	931	927	931	929.1
Mar 2	930	929	929	929	928	927	926	926	926	926	926	926	926	926	926	926	926	926	926	926	926	926	926	926	926	930	926.8
Mar 3	927	927	928	928	928	928	929	929	930	930	931	931	932	932	932	933	934	934	934	935	935	936	936	937	927	937	931.5
Mar 4	937	937	938	938	939	939	940	940	940	941	941	941	942	941	941	941	941	941	940	940	939	939	939	937	942	939.8	
Mar 5	939	938	938	938	938	938	938	938	938	937	937	935	934	933	932	930	929	928	927	926	925	925	926	927	925	939	933.1
Mar 6	927	927	927	928	927	927	927	927	928	928	929	929	929	930	930	930	930	930	931	931	931	932	932	927	932	928.9	
Mar 7	932	932	933	933	933	933	933	934	934	934	935	935	935	935	935	936	936	937	937	937	938	939	940	940	932	940	935.3
Mar 8	941	941	942	942	943	943	944	944	944	943	943	943	943	943	943	942	942	942	942	941	941	941	941	941	941	944	942.3
Mar 9	941	940	940	939	939	939	939	939	938	938	937	937	936	936	935	935	936	936	937	937	938	939	940	935	941	937.9	
Mar 10	941	942	943	943	944	945	945	946	946	946	947	947	947	947	946	946	946	946	946	946	946	945	945	944	941	947	945.3
Mar 11	944	944	943	942	941	940	940	939	938	938	937	937	936	936	935	935	935	934	934	934	934	934	935	936	934	944	937.5
Mar 12	936	937	937	937	937	937	938	938	939	939	940	940	940	940	941	941	942	942	942	943	943	944	944	936	944	939.8	
Mar 13	945	945	945	944	944	944	944	944	944	944	943	943	942	942	941	940	939	938	937	936	935	934	934	934	945	945	941.3
Mar 14	933	933	933	932	932	932	932	932	932	931	931	931	930	930	930	929	929	930	931	932	934	936	937	929	937	931.8	
Mar 15	938	939	940	941	941	942	942	942	943	942	942	942	942	941	941	941	941	940	940	939	939	939	938	938	943	940.7	
Mar 16	938	938	938	938	937	937	937	937	937	937	938	938	938	938	939	939	939	940	940	940	940	941	941	937	941	938.4	
Mar 17	940	940	940	940	940	940	941	940	940	940	940	940	939	939	938	938	938	937	937	937	936	936	936	936	941	938.9	
Mar 18	936	936	936	936	936	936	935	935	935	935	934	934	933	933	932	932	932	931	931	930	929	929	929	929	929	936	933.1
Mar 19	928	928	927	927	927	927	928	928	928	928	929	929	929	930	930	930	930	930	930	930	930	930	929	927	930	928.8	
Mar 20	929	929	929	929	928	928	928	928	928	929	929	930	931	931	932	934	935	936	937	939	939	940	940	928	940	931.9	
Mar 21	940	940	940	940	940	940	939	939	938	937	937	936	935	935	934	933	932	931	931	931	931	931	931	931	931	940	935.5
Mar 22	931	932	933	933	934	935	936	938	939	939	940	941	942	943	943	944	944	944	945	945	946	947	947	948	931	948	940.4
Mar 23	947	947	947	946	946	946	946	946	946	945	945	945	944	944	943	942	941	940	939	938	937	936	935	934	934	947	942.7
Mar 24	933	932	932	932	932	932	932	932	933	933	934	934	934	934	934	934	935	935	935	936	936	936	936	932	936	933.7	
Mar 25	937	937	937	938	939	939	939	940	939	939	939	939	939	938	938	938	938	937	937	937	937	937	937	937	937	940	938.0
Mar 26	937	937	937	936	936	937	937	937	937	937	938	938	938	938	938	938	938	938	938	938	938	938	938	936	939	937.5	
Mar 27	939	939	938	938	938	939	938	938	938	938	938	937	936	935	934	932	932	931	929	928	927	926	924	924	939	934.0	
Mar 28	923	923	X	X	X	X	X	920	920	920	920	920	920	921	922	923	924	926	928	929	931	932	934	935	920	935	924.8
Mar 29	936	937	938	940	941	942	943	944	945	946	946	946	946	946	946	945	945	945	945	945	946	945	945	936	946	943.7	
Mar 30	945	945	944	944	944	944	944	943	942	942	942	942	941	941	941	940	940	940	940	940	940	940	939	939	945	941.8	
Mar 31	939	939	939	938	938	938	938	938	938	938	938	939	939	939	938	938	937	936	936	935	934	933	933	933	933	939	937.3
Diurnal Maximum	947	947	947	946	946	946	946	946	946	946	947	947	947	947	946	946	946	946	946	946	947	947	948	933	939	937.3	
Diurnal Average	936	936	937	937	937	937	937	936	936	936	937	937	936	936	936	936	936	936	936	936	936	936	936	933	939	937.3	

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 BP - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2021

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

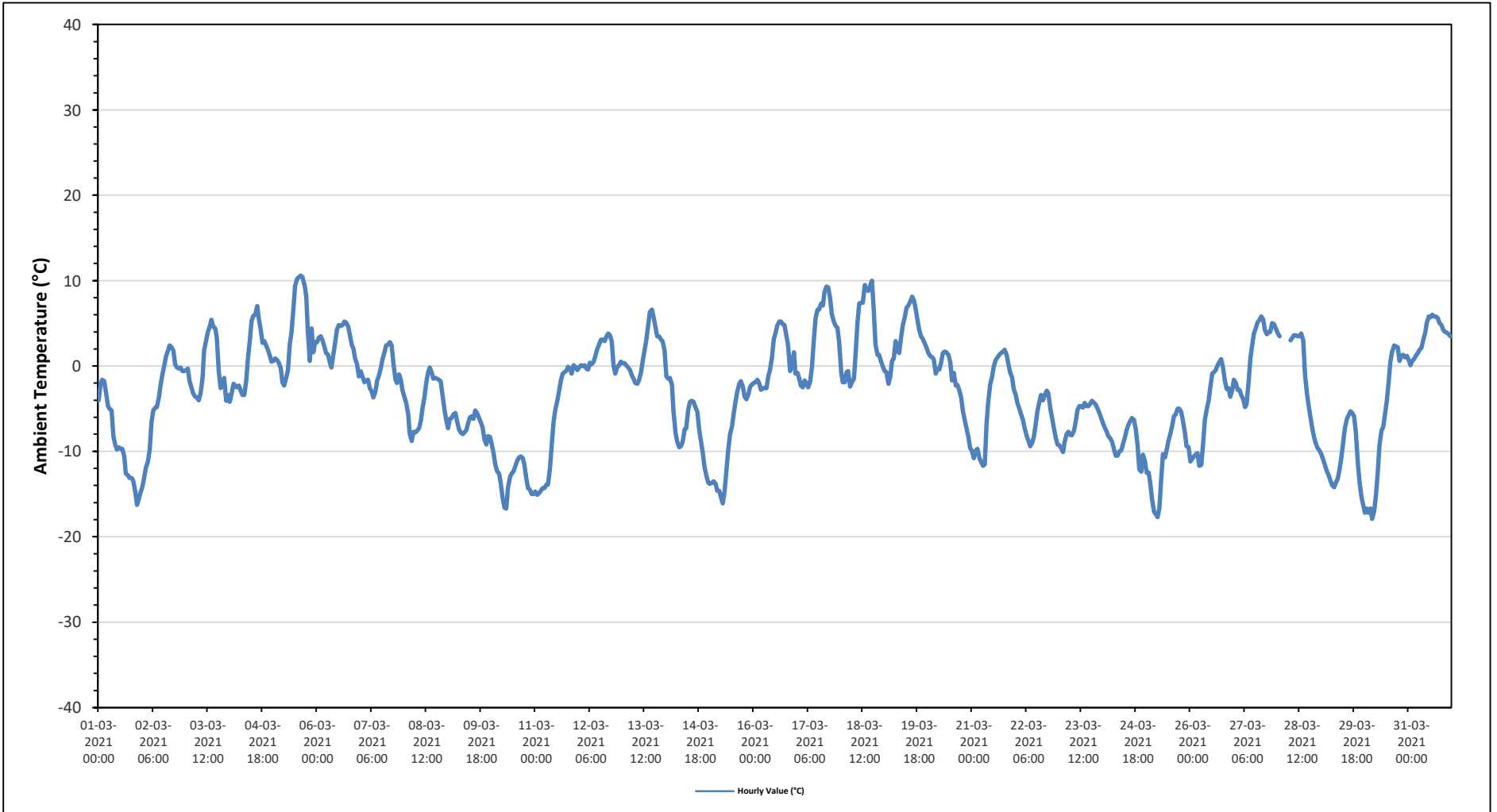
Maximum Hourly Value:	10.6 °C	on March 5 at hour 15	Hours in Service:	744
Maximum Daily Value:	3.8 °C	on March 5	Hours of Data:	739
Minimum Hourly Value:	-17.9 °C	on March 30 at hour 4	Hours of Missing Data:	5
Minimum Daily Value:	-12.9 °C	on March 10	Hours of Calibration:	0
Monthly Average:	-3.1 °C		Operational Uptime:	99.3

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Mar 1	-4	-2.1	-1.6	-1.8	-3.1	-4.7	-5	-5.2	-8.2	-9.2	-9.8	-9.5	-9.7	-9.7	-10.6	-12.6	-12.8	-13.1	-13.1	-13.4	-14.7	-16.3	-15.6	-14.8	-16.3	-1.6	-9.2
Mar 2	-14.2	-13.1	-11.9	-11.2	-9.8	-6.6	-5.2	-4.9	-4.8	-3.7	-2.2	-1	0	1.1	1.8	2.4	2.2	1.8	0.2	-0.2	-0.3	-0.2	-0.6	-0.6	-14.2	2.4	-3.4
Mar 3	-0.5	-0.3	-1.8	-2.6	-3.2	-3.6	-3.7	-4	-3.2	-1.4	1.8	3	4	4.7	5.4	4.6	4.4	3.3	-0.7	-2.6	-2.3	-1.4	-4.1	-3.4	-4.1	5.4	-0.3
Mar 4	-4.2	-3.3	-2.1	-2.3	-2.5	-2.3	-2.8	-3.4	-3.4	-1.7	0.7	3	5.3	5.9	6	7	5.6	4.4	2.7	2.9	2.4	1.9	1.2	0.5	-4.2	7.0	0.9
Mar 5	0.6	0.9	0.7	0.4	-0.3	-1.9	-2.3	-1.4	-0.5	2.5	4	6.9	9.4	10.2	10.4	10.6	10.4	9.5	8.2	4.2	0.6	4.4	1.6	2.8	-2.3	10.6	3.8
Mar 6	2.8	3.3	3.5	3	2.2	1.5	1.3	0.4	-0.2	1.4	2.8	4.3	4.8	4.7	4.8	5.2	5.1	4.6	3.7	2.5	2	0.9	0.2	-1.2	-1.2	5.2	2.7
Mar 7	-0.6	-1.2	-1.9	-1.7	-1.6	-2.6	-3	-3.7	-3	-1.7	-1.2	-0.3	0.8	1.6	2.4	2.5	2.8	2.4	0.3	-1.6	-2	-1	-1.6	-2.9	-3.7	2.8	-0.8
Mar 8	-3.6	-4.3	-5.6	-7.9	-8.8	-7.7	-7.8	-7.6	-7.3	-6.4	-4.8	-3.7	-2	-0.8	-0.2	-0.8	-1.5	-1.4	-1.5	-1.6	-1.8	-3.6	-5.1	-6.4	-8.8	-0.2	-4.3
Mar 9	-7.3	-6.2	-6.1	-5.7	-5.5	-6.4	-7.4	-7.8	-8	-7.8	-7.5	-6.7	-6	-5.9	-6.2	-5.2	-5.5	-6.1	-6.6	-7.2	-8.6	-9.2	-8.2	-8.3	-9.2	-5.2	-6.9
Mar 10	-9.2	-10.2	-11.6	-12.3	-12.6	-13.7	-15.5	-16.6	-16.7	-14.2	-13	-12.6	-12.3	-11.7	-11.1	-10.7	-10.6	-10.8	-11.5	-13.2	-14.3	-14.5	-15	-15	-16.7	-9.2	-12.9
Mar 11	-14.7	-15.1	-14.9	-14.6	-14.3	-14.3	-13.9	-13.9	-12	-9.2	-6.6	-5.1	-4.1	-2.9	-1.7	-0.9	-0.7	-0.6	-0.1	-0.3	-0.9	0.1	-0.1	-0.5	-15.1	0.1	-6.7
Mar 12	-0.2	0.1	0	0.1	-0.3	-0.4	0.4	0.2	0.5	1.1	2	2.5	3.1	3.1	2.9	3.4	3.8	3.6	2.9	0.1	-0.9	-0.1	0.1	0.5	-0.9	3.8	1.2
Mar 13	0.3	0.3	0.1	-0.2	-0.5	-1.1	-1.5	-2	-2.1	-1.7	-0.8	0.6	1.8	3	4.9	6.3	6.6	5.7	4.4	3.5	3.5	3.1	2.9	1.8	-2.1	6.6	1.6
Mar 14	-1.2	-1.5	-1.4	-2.2	-5.3	-7.8	-8.9	-9.5	-9.4	-8.9	-7.4	-7.3	-5.1	-4.2	-4.1	-4.2	-4.9	-5.4	-7.4	-8.8	-10.3	-11.8	-12.8	-13.7	-13.7	-1.2	-6.8
Mar 15	-13.8	-13.7	-13.5	-13.8	-14.6	-14.6	-15.4	-16.1	-14.7	-12	-10	-8.1	-7.1	-5.6	-4.2	-3	-2.1	-1.8	-2.4	-3.6	-3.9	-3.4	-2.4	-2.2	-16.1	-1.8	-8.4
Mar 16	-2	-1.9	-1.6	-2	-2.8	-2.6	-2.6	-2.6	-1.2	-0.4	0.9	3.2	3.9	4.7	5.2	5.2	4.9	4.8	3.4	2.4	-0.6	0	1.6	-0.9	-2.8	5.2	0.8
Mar 17	-0.8	-1.5	-2.3	-2.5	-1.7	-2	-2.5	-1.8	-0.1	2.9	5.6	6.6	6.6	7.3	7.1	8.6	9.3	9.2	8	6.1	5.2	4.7	4.5	2.8	-2.5	9.3	3.3
Mar 18	-0.7	-1.9	-1.9	-0.7	-0.6	-2.4	-1.9	-1.5	1.1	5.1	7.3	7.4	7.4	9.5	8.9	8.8	9.4	10	6.6	2.5	1.3	1.3	0.5	-0.1	-2.4	10.0	3.1
Mar 19	-0.6	-0.7	-2.1	-1.3	0.6	0.9	2.9	1.8	1.5	3.4	4.7	5.7	6.8	7.1	7.5	8.1	7.7	6.7	5.4	4.2	3.5	3.2	2.6	2.2	-2.1	8.1	3.4
Mar 20	1.5	1.2	1	0.8	-0.9	-0.3	-0.4	0.4	1.5	1.7	1.6	1.3	0.5	-1.7	-0.8	-2.3	-2.2	-2.9	-3.7	-5.3	-6.3	-7.3	-8.4	-9.6	-9.6	1.7	-1.7
Mar 21	-10	-10.8	-9.9	-9.7	-10.8	-11.2	-11.7	-11.5	-6.7	-4.1	-2.2	-1.2	-0.1	0.7	1	1.3	1.5	1.7	1.9	1.3	0.2	-0.8	-1.3	-2.7	-11.7	1.9	-4.0
Mar 22	-3.4	-4.3	-5	-5.7	-6.3	-7.3	-8.2	-8.8	-9.4	-9	-8.3	-6.9	-5.3	-4.2	-3.4	-4	-3.4	-2.9	-3.2	-5	-6.1	-7.3	-8.4	-9.2	-9.4	-2.9	-6.0
Mar 23	-9.3	-9.6	-10.1	-8.9	-8	-7.7	-8.1	-8.1	-7.6	-6.5	-5.1	-4.7	-4.7	-4.9	-4.3	-4.7	-4.7	-4.4	-4.1	-4.3	-4.5	-5	-5.5	-6.1	-10.1	-4.1	-6.3
Mar 24	-6.7	-7.2	-7.7	-8.2	-8.5	-8.9	-9.7	-10.5	-10.5	-10	-9.9	-9.1	-8.3	-7.5	-6.9	-6.4	-6.1	-6.3	-7.4	-9.2	-12.1	-12.4	-10.4	-11.1	-12.4	-6.1	-8.8
Mar 25	-12.5	-12.5	-13.7	-15.6	-17.1	-17.3	-17.7	-16.7	-13.3	-10.3	-10.7	-9.8	-8.7	-8	-6.9	-5.9	-5.7	-5	-5	-5.4	-6.5	-7.9	-9.4	-9.5	-17.7	-5.0	-10.5
Mar 26	-11.2	-10.9	-10.6	-10.3	-10.2	-11.7	-11.6	-9.1	-6.3	-5.1	-4	-2.6	-0.9	-0.7	-0.5	0.1	0.5	0.8	-0.1	-1.8	-2.7	-2.6	-3.6	-2.8	-11.7	0.8	-4.9
Mar 27	-1.6	-2	-2.8	-2.8	-3.4	-3.9	-4.8	-4.5	-1.9	0.9	2.4	3.8	4.5	5.1	5.4	5.8	5.4	4.2	3.7	4	4	5	4.9	4.4	-4.8	5.8	1.5
Mar 28	3.9	3.5	X	X	X	X	X	X	3	3.3	3.6	3.6	3.5	3.8	3	-1	-3	-4.6	-6.1	-7.2	-8.4	-9.1	-9.6	-9.9	-9.9	3.9	-1.3
Mar 29	-10.3	-11	-11.6	-12.3	-12.8	-13.4	-14	-14.2	-13.7	-13.2	-12.1	-10.7	-9	-7.3	-6.2	-5.8	-5.3	-5.5	-5.9	-7.7	-11.4	-13.7	-15.3	-16.3	-16.3	-5.3	-10.8
Mar 30	-17.2	-16.7	-17.2	-16.7	-17.9	-17	-15.2	-12.6	-9.3	-7.6	-7.1	-5.6	-4.1	-1.9	0.5	1.7	2.4	2.3	2.2	0.6	1.2	1.3	1	1.2	-17.9	2.4	-6.3
Mar 31	0.7	0.1	0.6	0.8	1.2	1.5	1.9	2.1	3	3.9	5	5.8	5.7	6	5.8	5.8	5.6	5	4.8	4.2	4	3.9	3.7	3.5	0.1	6.0	3.5
Diurnal Maximum	3.9	3.5	3.5	3.0	2.2	1.5	2.9	3.0	3.3	5.1	7.3	7.4	9.4	10.2	10.4	10.6	10.4	10.0	8.2	6.1	5.2	5.0	4.9	4.4			
Diurnal Average	-4.8	-4.9	-5.4	-5.6	-6.0	-6.3	-6.5	-6.1	-5.2	-3.8	-2.6	-1.5	-0.6	0.0	0.5	0.6	0.6	0.3	-0.7	-1.9	-2.9	-3.2	-3.6	-4.1			

C	Monthly Calibration	S	Daily Zero-Span Check
K	Collection Error	N	No Data (Machine Not in Service)
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)
		Q	Quality Assurance
		Y	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 - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2021

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

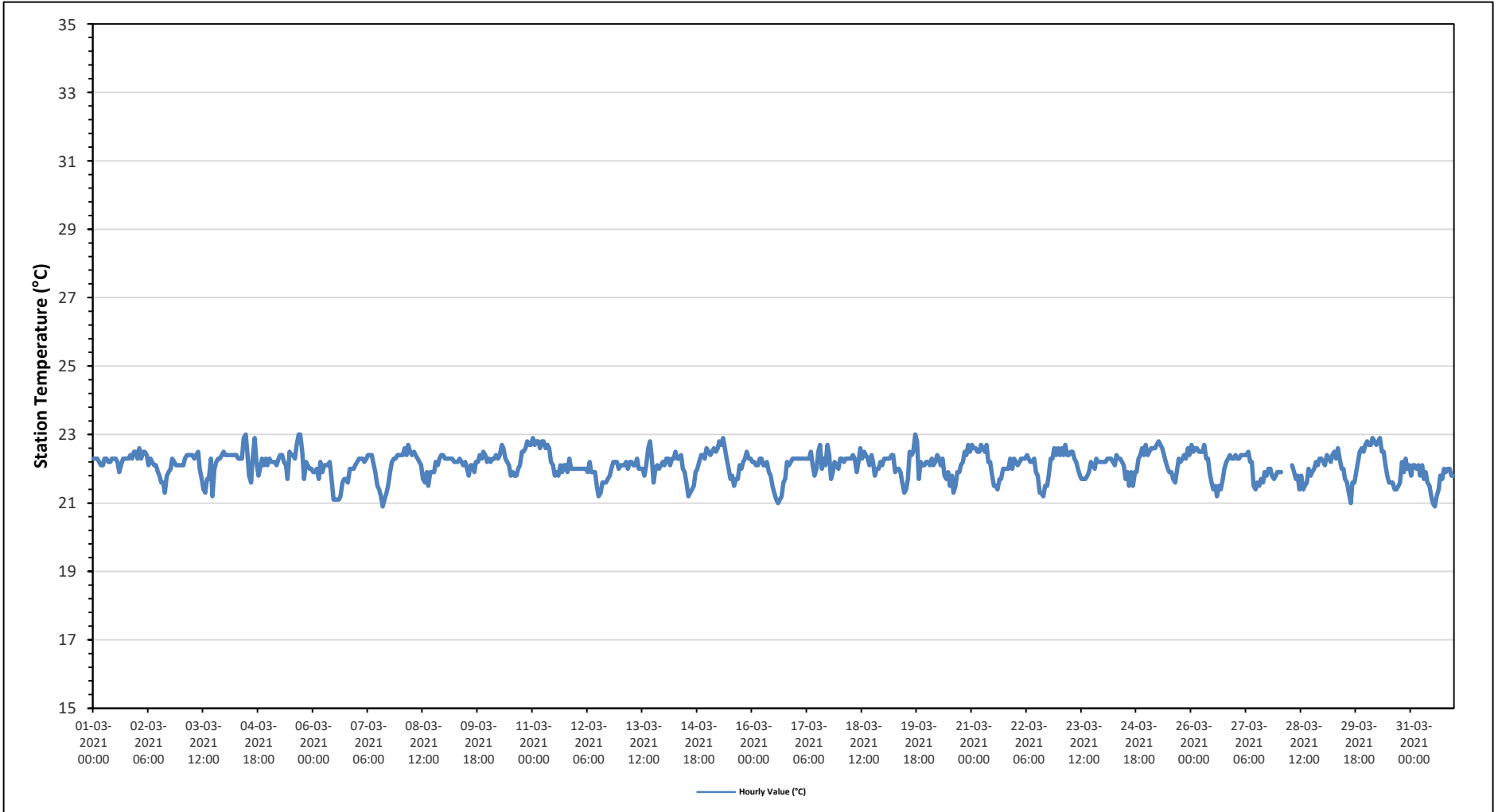
Maximum Hourly Value:	23.0	°C	on March 4 at hour 11	Hours in Service:	744
Maximum Daily Value:	22.3	°C	on March 25	Hours of Data:	739
Minimum Hourly Value:	20.9	°C	on March 7 at hour 14	Hours of Missing Data:	5
Minimum Daily Value:	21.7	°C	on March 31	Hours of Calibration:	0
Monthly Average:	22.1	°C		Operational Uptime:	99.3

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Mar 1	22.3	22.3	22.3	22.2	22.1	22.1	22.3	22.3	22.2	22.2	22.3	22.3	22.3	22.2	21.9	22.1	22.3	22.3	22.3	22.3	22.4	22.3	22.5	22.5	21.9	22.5	22.3	
Mar 2	22.3	22.6	22.3	22.5	22.5	22.4	22.1	22.3	22.2	22.1	22.1	21.9	21.8	21.6	21.6	21.3	21.8	21.9	22.0	22.3	22.2	22.1	22.1	22.1	21.3	22.6	22.1	
Mar 3	22.1	22.1	22.3	22.4	22.4	22.4	22.4	22.3	22.4	22.5	22.0	21.7	21.4	21.3	21.7	21.7	22.3	21.2	22.0	22.2	22.3	22.3	22.4	22.5	21.2	22.5	22.1	
Mar 4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.3	22.3	22.3	22.9	23.0	22.5	21.8	21.6	22.3	22.9	22.2	21.8	22.0	22.3	22.1	22.3	22.1	21.6	23.0	22.3	
Mar 5	22.3	22.2	22.2	22.2	22.1	22.3	22.4	22.4	22.2	22.1	21.7	22.5	22.4	22.4	22.3	22.2	23.0	23.0	22.5	21.7	22.2	22.1	22.0	22.0	21.7	23.0	22.3	
Mar 6	21.9	21.9	22.0	21.7	22.2	21.9	22.1	22.1	22.2	21.7	21.1	21.1	21.1	21.1	21.1	21.2	21.6	21.7	21.7	21.6	22.0	22.0	22.0	22.1	21.1	22.2	21.8	
Mar 7	22.2	22.3	22.3	22.3	22.2	22.3	22.4	22.4	22.4	22.1	21.9	21.5	21.4	21.2	20.9	21.1	21.3	21.5	21.9	22.2	22.3	22.3	22.4	22.4	20.9	22.4	22.0	
Mar 8	22.4	22.4	22.6	22.4	22.7	22.5	22.4	22.5	22.4	22.3	22.2	22.1	21.7	21.6	21.9	21.5	21.9	21.9	21.9	22.2	22.1	22.3	22.4	22.4	21.5	22.7	22.2	
Mar 9	22.3	22.3	22.3	22.3	22.3	22.2	22.2	22.2	22.3	22.2	22.1	22.2	22.0	21.8	22.1	22.1	21.9	22.2	22.2	22.2	22.4	22.3	22.5	22.4	22.2	21.8	22.5	22.2
Mar 10	22.3	22.2	22.3	22.3	22.4	22.3	22.4	22.7	22.6	22.3	22.2	22.1	21.8	21.9	21.8	21.8	22.0	22.1	22.5	22.5	22.6	22.8	22.7	22.7	21.8	22.8	22.3	
Mar 11	22.9	22.7	22.8	22.8	22.6	22.8	22.8	22.6	22.7	22.6	22.2	22.1	21.8	21.9	21.8	22.1	21.9	22.1	22.1	21.9	22.3	22.0	22.0	22.0	21.8	22.9	22.3	
Mar 12	22.0	22.0	22.0	22.0	22.0	22.0	21.9	22.2	21.9	21.9	21.9	21.5	21.2	21.3	21.6	21.6	21.6	21.7	21.8	22.0	22.2	22.2	22.2	22.0	21.2	22.2	21.9	
Mar 13	22.1	22.1	22.1	22.2	22.0	22.2	22.2	22.1	22.1	22.3	22.0	22.0	22.0	21.8	22.1	22.6	22.8	22.4	21.6	22.0	22.1	22.0	22.1	22.2	21.6	22.8	22.1	
Mar 14	22.1	22.3	22.3	22.1	22.3	22.3	22.5	22.3	22.3	22.4	22.0	21.9	21.6	21.2	21.3	21.4	21.5	21.9	22.0	22.2	22.4	22.4	22.3	22.6	21.2	22.6	22.1	
Mar 15	22.5	22.4	22.5	22.6	22.5	22.6	22.8	22.7	22.9	22.6	22.3	22.0	21.7	21.8	21.5	21.7	21.7	22.1	22.0	22.2	22.3	22.5	22.3	22.3	21.5	22.9	22.3	
Mar 16	22.2	22.2	22.1	22.1	22.3	22.3	22.1	22.1	22.2	21.9	21.8	21.5	21.3	21.1	21.0	21.1	21.2	21.6	21.7	22.2	22.1	22.2	22.3	22.3	21.0	22.3	21.9	
Mar 17	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.5	22.1	21.8	22.0	22.5	22.7	22.0	22.3	22.1	22.7	22.4	21.7	21.9	22.2	22.1	22.0	21.7	22.7	22.2	
Mar 18	22.3	22.3	22.2	22.3	22.3	22.3	22.3	22.4	22.3	21.9	22.2	22.6	22.3	22.5	22.4	22.3	22.1	22.4	22.2	21.8	22.0	22.0	22.2	22.1	21.8	22.6	22.2	
Mar 19	22.3	22.3	22.3	22.3	22.4	22.4	21.9	22.0	22.0	21.9	21.6	21.3	21.4	21.7	22.5	22.4	22.5	23.0	22.8	21.7	22.2	22.1	22.1	22.2	21.3	23.0	22.1	
Mar 20	22.2	22.1	22.3	22.1	22.2	22.4	22.3	22.1	22.3	21.8	21.7	21.9	21.5	21.8	21.3	21.5	21.9	21.9	22.1	22.2	22.5	22.4	22.7	22.5	21.3	22.7	22.1	
Mar 21	22.7	22.6	22.6	22.5	22.5	22.7	22.6	22.5	22.7	22.2	22.2	21.8	21.5	21.5	21.4	21.7	21.7	22.0	22.0	22.0	22.0	22.3	22.0	22.3	21.4	22.7	22.2	
Mar 22	22.2	22.1	22.2	22.3	22.3	22.3	22.4	22.3	22.2	22.2	22.3	21.9	21.8	21.3	21.3	21.2	21.5	21.5	21.8	22.3	22.3	22.6	22.4	22.6	21.2	22.6	22.1	
Mar 23	22.4	22.6	22.4	22.7	22.4	22.4	22.5	22.5	22.3	22.2	22.0	21.8	21.7	21.7	21.7	21.8	21.9	22.2	22.1	22.0	22.3	22.2	22.2	22.2	21.7	22.7	22.2	
Mar 24	22.2	22.2	22.3	22.3	22.3	22.2	22.1	22.4	22.3	22.3	22.2	22.1	21.7	21.9	21.5	21.9	21.5	21.9	21.9	22.3	22.4	22.6	22.4	22.7	21.5	22.7	22.2	
Mar 25	22.4	22.5	22.6	22.6	22.6	22.7	22.8	22.7	22.6	22.4	22.2	22.0	21.9	21.9	21.7	21.6	21.9	22.3	22.2	22.3	22.4	22.3	22.6	22.4	21.6	22.8	22.3	
Mar 26	22.7	22.5	22.6	22.6	22.5	22.5	22.5	22.7	22.3	22.3	21.9	21.6	21.4	21.5	21.2	21.5	21.4	21.7	22.0	22.2	22.3	22.4	22.3	22.3	21.2	22.7	22.1	
Mar 27	22.4	22.3	22.3	22.4	22.4	22.4	22.4	22.5	22.2	22.2	21.5	21.4	21.6	21.5	21.7	21.6	21.9	21.8	22.0	22.0	21.8	21.7	21.8	21.9	21.4	22.5	22.0	
Mar 28	21.9	21.9	X	X	X	X	X	22.1	21.9	21.7	21.8	21.4	21.8	21.4	21.5	21.6	22.0	21.8	21.9	22.0	22.2	22.1	22.3	22.3	21.4	22.3	21.9	
Mar 29	22.2	22.1	22.4	22.3	22.2	22.4	22.5	22.3	22.6	22.3	22.0	22.0	21.7	21.6	21.3	21.0	21.6	21.6	21.9	22.2	22.5	22.6	22.5	22.7	21.0	22.7	22.1	
Mar 30	22.8	22.7	22.7	22.9	22.8	22.7	22.8	22.9	22.5	22.5	22.1	21.8	21.6	21.6	21.6	21.4	21.4	21.5	21.6	22.2	21.9	22.3	22.0	22.1	21.4	22.9	22.2	
Mar 31	21.8	22.1	22.1	22.0	22.1	21.8	22.1	21.7	21.9	21.6	21.5	21.2	21.0	20.9	21.2	21.4	21.8	21.7	22.0	21.9	22.0	22.0	21.8	21.8	20.9	22.1	21.7	
Diurnal Maximum	22.9	22.7	22.8	22.9	22.8	22.8	22.9	22.9	22.6	22.9	23.0	22.5	22.7	22.5	22.7	23.0	23.0	22.8	22.5	22.6	22.8	22.7	22.7					
Diurnal Average	22.3	22.3	22.3	22.3	22.3	22.4	22.4	22.4	22.3	22.2	22.0	21.9	21.7	21.7	21.6	21.7	21.9	22.0	22.0	22.1	22.2	22.3	22.3					

C	Monthly Calibration	S	Daily Zero-Span Check
K	Collection Error	N	No Data (Machine Not in Service)
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)
		Q	Quality Assurance
		Y	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 - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2021

Summary of Hourly Averages

PRECIPITATION in mm

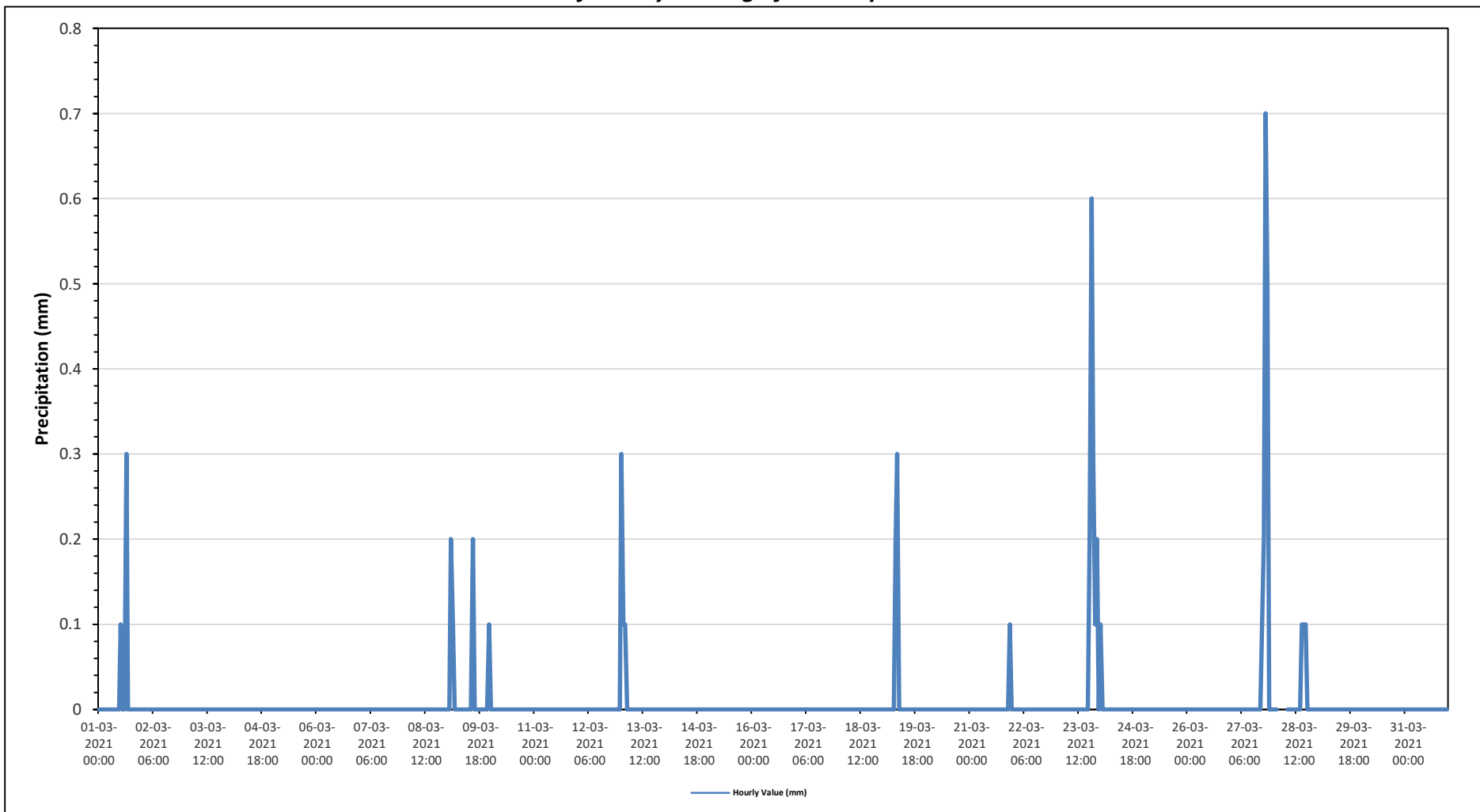
Maximum Hourly Value:	0.7 mm on March 27 at hour 19	Hours in Service:	744
Maximum Daily Value:	1.5 mm on March 27	Hours of Data:	739
Minimum Hourly Value:	0.0 mm on March 1 at hour 0	Hours of Missing Data:	5
Minimum Daily Value:	0.0 mm on March 2	Hours of Calibration:	0
Monthly Total:	5.4 mm	Operational Uptime:	99.3

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
Mar 1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0.3	0	0	0	0	0	0	0	0	0.0	0.3	0.4
Mar 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Mar 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
Mar 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
Mar 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
Mar 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
Mar 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
Mar 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
Mar 9	0	0	0.2	0.1	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	0.1	0.0	0.2	0.6
Mar 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
Mar 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
Mar 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
Mar 13	0.3	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3	0.5
Mar 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
Mar 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
Mar 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
Mar 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Mar 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
Mar 19	0	0	0	0	0	0	0	0.2	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3	0.5
Mar 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
Mar 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0.0	0.1	0.1
Mar 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
Mar 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6	0.3	0.1	0.2	0	0.0	0.6	1.4
Mar 24	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	0.1
Mar 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
Mar 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
Mar 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	0.7	0.5	0	0	0	0.0	0.7	1.5
Mar 28	0	0	X	X	X	X	X	0	0	0	0	0	0	0	0.1	0.1	0.1	0	0	0	0	0	0	0	0.0	0.1	0.3
Mar 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
Mar 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
Mar 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
Diurnal Maximum	0.3	0.1	0.2	0.1	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.0	0.1	0.0	0.2	0.3	0.1	0.1	0.2	0.7	0.5	0.1	0.2	0.1			
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 Precipitation - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2021

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

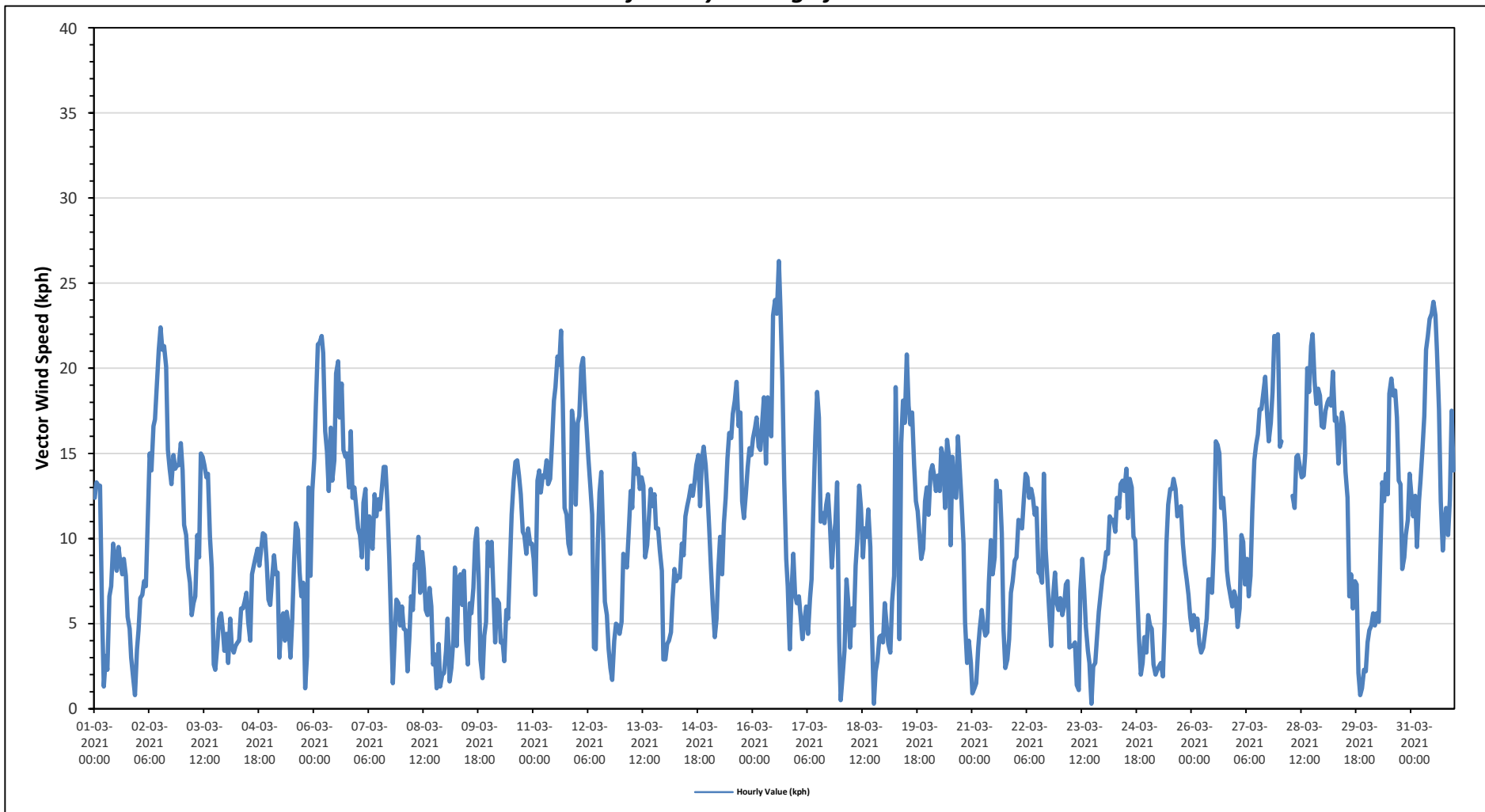
Maximum Hourly Value: 26.3 kph on March 16 at hour 14	Hours in Service: 744
Maximum Daily Value: 15.8 kph on March 6	Hours of Data: 739
Minimum Hourly Value: 0.3 kph on March 18 at hour 18	Hours of Missing Data: 5
Minimum Daily Value: 2.0 kph on March 23	Hours of Calibration: 0
Monthly Average: 4.1 kph	Operational Uptime: 99.3

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	12.4	13.3	13.1	13.1	5.7	1.3	3.1	2.3	6.6	7.2	9.7	8.9	8.1	9.5	8.6	7.9	8.8	7.8	5.4	4.7	3.0	1.8	0.8	3.5	0.8	13.3	2.3
Mar 2	4.6	6.5	6.7	7.5	7.2	10.8	15.0	14.0	16.6	17.0	19.2	21.1	22.4	21.1	21.3	20.1	15.2	14.1	13.2	14.9	14.1	14.3	14.3	15.6	4.6	22.4	13.5
Mar 3	14.0	10.8	10.2	8.3	7.4	5.5	6.2	6.6	10.2	8.9	15.0	14.8	14.3	13.6	13.8	10.1	8.3	2.6	2.3	3.7	5.3	5.6	4.6	3.4	2.3	15.0	6.6
Mar 4	4.4	2.7	5.3	3.7	3.3	3.7	3.9	4.0	5.9	5.9	6.3	6.8	5.1	4.0	7.9	8.4	8.9	9.4	8.4	9.5	10.3	10.2	8.6	6.4	2.7	10.3	5.5
Mar 5	6.1	7.6	9.0	7.9	8.0	3.0	5.2	5.6	4.0	5.7	4.9	3.0	5.3	8.6	10.9	10.5	8.0	6.6	7.4	1.2	3.1	13.0	7.8	12.8	1.2	13.0	5.3
Mar 6	14.7	17.8	21.4	21.5	21.9	20.9	16.3	15.1	12.8	16.5	13.4	14.6	19.7	20.4	17.1	19.1	15.2	14.8	15.0	13.0	16.3	12.4	13.0	11.9	11.9	21.9	15.8
Mar 7	10.6	10.2	8.9	12.1	12.9	8.2	11.3	10.0	9.4	12.6	11.3	12.3	11.7	13.0	14.2	14.2	12.2	8.8	5.1	1.5	4.0	6.4	6.2	4.9	1.5	14.2	7.8
Mar 8	6.0	4.7	4.6	2.2	4.1	6.6	5.8	8.5	8.3	10.1	6.8	9.2	8.2	5.8	5.5	7.1	6.0	2.6	3.2	1.2	3.8	1.3	2.0	2.1	1.2	10.1	3.3
Mar 9	3.4	5.3	1.6	2.4	4.1	8.3	3.7	7.7	7.9	6.1	8.1	4.0	2.6	6.2	5.6	7.1	9.8	10.6	7.7	2.9	1.8	4.3	5.1	9.8	1.6	10.6	4.6
Mar 10	8.4	9.8	6.9	3.9	6.4	6.2	3.9	4.0	2.8	5.8	5.3	8.4	11.4	13.4	14.5	14.6	13.7	12.6	10.4	10.2	9.1	10.6	9.7	9.7	2.8	14.6	4.5
Mar 11	8.8	6.7	13.4	14.0	12.7	13.7	13.6	14.6	13.2	13.5	15.5	18.1	18.9	20.7	20.2	22.2	17.9	11.8	11.4	9.7	9.1	17.5	16.5	12.0	6.7	22.2	12.7
Mar 12	16.8	17.2	20.1	20.6	18.2	16.5	14.7	13.0	11.4	3.6	3.5	9.7	12.7	13.9	10.3	6.3	5.5	3.5	2.4	1.7	4.0	5.0	4.9	4.4	1.7	20.6	7.9
Mar 13	5.1	9.1	8.7	8.3	10.3	12.8	11.8	15.0	13.8	14.1	12.9	13.6	13.1	8.9	9.6	11.0	12.9	11.9	12.6	10.6	10.6	9.3	8.1	2.9	2.9	15.0	10.7
Mar 14	2.9	3.8	4.0	4.5	6.4	8.2	7.5	7.8	7.7	9.7	9.0	11.3	11.9	12.4	13.1	12.5	13.3	14.3	14.9	11.9	14.6	15.4	14.3	12.7	2.9	15.4	9.9
Mar 15	10.6	8.2	6.1	4.2	5.3	8.2	10.1	7.9	10.9	12.4	14.7	16.2	15.9	17.3	18.1	19.2	16.6	17.4	12.2	11.2	12.7	14.2	15.3	14.9	4.2	19.2	10.5
Mar 16	15.9	16.5	17.1	15.4	15.2	17.0	18.3	14.4	18.3	16.8	16.0	23.1	24.0	23.2	26.3	23.6	19.2	13.5	8.8	7.2	3.5	6.9	9.1	6.7	3.5	26.3	14.5
Mar 17	6.2	6.6	5.4	4.1	5.1	6.0	4.4	6.5	7.6	11.8	16.0	18.6	17.1	11.0	11.5	10.9	12.0	12.6	10.7	8.3	9.9	10.9	13.3	4.0	4.0	18.6	8.8
Mar 18	0.5	2.0	3.4	7.6	6.2	3.6	5.9	4.9	8.4	9.8	13.1	11.8	8.9	10.6	10.1	11.7	9.5	4.8	0.3	2.2	2.8	4.2	4.3	3.9	0.3	13.1	3.7
Mar 19	6.2	4.8	3.8	3.3	6.3	7.8	18.9	13.7	4.1	15.6	18.1	16.8	20.8	17.8	16.7	17.4	14.3	12.2	11.6	10.2	8.8	9.4	12.2	13.0	3.3	20.8	9.9
Mar 20	11.4	13.9	14.3	13.7	12.8	13.7	12.8	15.3	14.8	11.8	15.8	14.9	9.6	14.8	12.5	12.4	16.0	14.1	12.2	9.7	5.1	2.7	4.0	2.7	2.7	16.0	6.4
Mar 21	0.9	1.2	1.5	3.6	4.7	5.8	4.9	4.3	4.5	7.4	9.9	7.9	8.9	13.4	12.2	12.8	10.3	4.6	2.4	2.9	4.1	6.8	7.5	8.7	0.9	13.4	3.8
Mar 22	8.9	11.1	11.0	10.6	12.3	13.8	13.6	12.4	12.9	12.4	11.4	11.8	8.0	7.9	7.4	13.8	9.4	7.4	5.5	3.7	6.5	8.0	6.2	5.8	3.7	13.8	8.1
Mar 23	6.5	5.5	6.0	7.3	7.5	3.6	3.7	3.7	3.9	1.4	1.1	6.9	8.8	7.0	4.8	3.4	2.7	0.3	2.5	2.7	4.0	5.7	6.7	7.8	0.3	8.8	2.0
Mar 24	8.2	9.2	9.1	11.3	11.1	11.1	10.4	12.4	11.8	13.2	13.4	12.8	14.1	11.2	13.5	13.0	10.1	9.9	7.1	4.0	2.0	2.7	4.2	3.3	2.0	14.1	8.5
Mar 25	5.5	4.9	4.7	2.6	2.0	2.3	2.5	2.7	1.9	5.1	9.7	12.0	12.9	12.9	13.5	12.9	11.3	11.6	11.9	9.7	8.5	7.6	6.7	5.4	1.9	13.5	5.0
Mar 26	4.6	5.5	4.8	5.3	3.8	3.3	3.6	4.3	5.3	7.6	7.6	6.8	9.5	15.7	15.5	15.0	11.8	12.4	10.9	8.1	7.3	6.6	6.0	6.9	3.3	15.7	6.8
Mar 27	6.5	4.8	5.9	10.2	9.8	7.3	8.8	6.6	7.8	11.6	14.6	15.5	16.1	17.6	17.6	18.6	19.5	17.4	15.7	16.8	18.6	21.9	21.3	22.0	4.8	22.0	12.6
Mar 28	15.4	15.7	X	X	X	X	X	12.5	11.8	14.8	14.9	14.2	13.6	13.7	15.0	20.0	18.6	21.3	22.0	19.2	17.9	18.8	18.4	16.6	11.8	22.0	10.7
Mar 29	16.5	17.5	18.0	18.2	17.8	19.8	16.9	17.1	14.4	16.2	17.4	16.6	13.9	12.4	6.6	7.9	5.9	7.5	7.3	2.1	0.8	1.2	2.3	2.2	0.8	19.8	11.0
Mar 30	3.9	4.6	4.9	5.6	4.9	5.6	5.1	9.4	13.3	12.2	13.8	12.6	18.5	19.4	18.4	18.7	17.1	13.4	13.2	8.2	8.9	10.2	11.1	13.8	3.9	19.4	9.7
Mar 31	12.4	11.3	12.5	9.5	12.2	13.4	15.3	17.2	21.1	21.9	22.9	23.2	23.9	23.1	21.0	17.6	12.2	9.3	10.7	11.8	10.2	12.3	17.5	14.0	9.3	23.9	15.2
Diurnal Maximum	17	18	21	22	22	21	19	17	21	22	23	23	24	23	26	24	20	21	22	19	19	22	21	22	17	21	22
Diurnal Average	8.3	8.7	8.7	8.8	8.9	8.9	9.2	9.5	9.8	10.9	12.0	12.8	13.2	13.6	13.3	13.5	12.0	10.4	9.2	7.6	7.8	8.9	9.1	8.5			

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

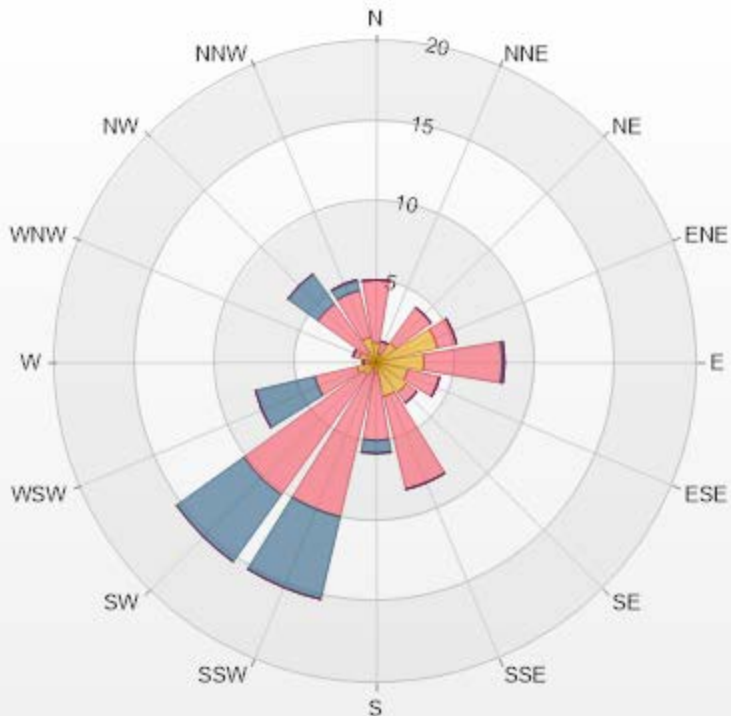
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

Timeseries Chart of Hourly Average for VWS - 842b Station



Wind: PRAMP 842b Monitor: WDS [KPH] Monthly: 03-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 2.71% Valid Data: 99.33%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	1.22	3.92	0	0	0	5.14
NNE	0.54	0.81	0	0	0	1.35
NE	1.49	2.71	0	0	0	4.2
ENE	3.92	1.22	0	0	0	5.14
E	2.98	4.87	0.14	0	0	7.99
ESE	2.03	2.03	0	0	0	4.06
SE	2.3	0.81	0	0	0	3.11
SSE	2.17	5.95	0	0	0	8.12
S	0.68	4.19	0.81	0	0	5.68
SSW	0.41	9.47	5.28	0	0	15.16
SW	0.95	9.2	5.14	0	0	15.29
WSW	1.22	2.71	3.79	0	0	7.72
W	0.41	0.41	0	0	0	0.82
WNW	1.08	0.41	0	0	0	1.49
NW	0.68	3.79	2.3	0	0	6.77
NNW	1.62	2.98	0.68	0	0	5.28
Summary	23.7	55.48	18.14	0	0	97.32



PRAMP-202103

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% Icon Classes (KPH)

24

1.8-6.0

55

6.0-15.0

18

15.0-29.0

0

29.0-39.0

0

>39.0



PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2021

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

Monthly Average:	216 (SW) degree	Hours in Service:	744
		Hours of Data:	739
		Hours of Missing Data:	5
		Hours of Calibration:	0
		Operational Uptime:	99.3

Day	Hourly Period Starting at (MST)																							Daily Average			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant	
Mar 1	S	S	SSW	SW	WNW	NE	E	NNW	N	N	N	NNE	N	N	N	NNW	NNW	N	NNW	NNW	NE	SW	SSW	SW	327	NW	
Mar 2	SSE	S	SSW	S	SSE	SSW	SSW	SSW	SSW	SW	SW	WSW	SW	SW	WSW	SW	SW	S	S	S	SSW	SSW	SW	SW	217	SW	
Mar 3	SW	SSW	SSE	SSE	SE	SE	SE	SE	SSE	SSE	S	SSW	SSW	SW	SSW	SW	WSW	ENE	ESE	ESE	ESE	ESE	E	E	184	S	
Mar 4	E	E	E	E	E	E	E	E	ENE	E	ENE	ENE	ENE	NNW	NW	NE	NE	ENE	ENE	E	E	E	E	ESE	75	ENE	
Mar 5	ESE	ESE	ESE	ESE	SE	S	SE	SE	SE	SE	SW	E	E	E	ESE	ESE	E	ESE	ESE	ENE	ESE	S	SW	SSW	134	SE	
Mar 6	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	WSW	WSW	WSW	WSW	SW	SW	SSW	SW	SW	SW	SW	SW	SW	221	SW	
Mar 7	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SSW	SW	SW	WSW	WSW	W	N	NNE	NNE	NNE	221	SW	
Mar 8	NNE	NNE	NNE	NE	N	ENE	ENE	E	E	E	E	ENE	E	ESE	E	SW	W	WNW	NNW	E	SE	ESE	E	ENE	75	ENE	
Mar 9	ENE	ENE	NE	N	NW	NNW	NNW	NW	NW	NW	WNW	WNW	SW	WNW	NNW	N	N	N	NE	NE	NW	NNW	NNW	N	342	NNW	
Mar 10	N	N	NNW	NNW	NW	NW	NW	WNW	W	NW	WSW	SW	SW	SW	SSW	SSW	SSW	SSW	S	SSE	SSE	SSE	SSE	SSE	219	SW	
Mar 11	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	192	S	
Mar 12	WSW	WSW	WSW	SW	SW	SW	SW	SSW	SSW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WNW	NNW	NE	ENE	ENE	E	E	234	SW	
Mar 13	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	92	E	
Mar 14	NNE	NNE	N	N	NNW	N	N	N	N	N	NNW	NNW	N	N	NNW	NNW	NNW	NNW	NNW	N	NNW	NNW	NNW	NW	348	NNW	
Mar 15	NW	WNW	NW	SW	SW	SSW	SSW	S	SSW	SSW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	S	SSE	SSE	S	SSW	SSW	206	SSW	
Mar 16	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SSE	SW	SSW	227	SW
Mar 17	S	SSE	SSE	SSE	SSE	SE	SSE	SSE	SSE	SSE	S	SSW	S	S	WSW	SSW	SSW	S	S	SSE	SSE	SSE	S	176	S		
Mar 18	W	SSW	SSE	SE	SE	SE	SE	SE	SE	SE	SSE	SSW	WSW	WSW	SW	WSW	WSW	SW	SW	NE	ENE	ENE	ENE	NE	188	S	
Mar 19	ENE	ENE	E	SE	SE	SSE	SSW	WSW	S	SW	SW	SW	SW	SW	SSW	SW	SW	SW	SW	SW	SSW	SSW	S	SSW	213	SSW	
Mar 20	SSW	SSW	SSW	S	SSE	S	S	SSW	SW	WSW	SW	WNW	NNW	NW	NW	NW	NW	NNW	NW	W	WNW	WSW	WSW	243	WSW		
Mar 21	S	ESE	E	SE	ESE	ESE	ENE	ESE	SE	SSE	S	SW	SSW	SSW	SSW	SSE	ESE	ESE	NE	E	E	ENE	ENE	149	SSE		
Mar 22	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NNW	NW	NNW	N	NE	ENE	E	ESE	ESE	ESE	40	NE	
Mar 23	ESE	ESE	E	ESE	ESE	E	ENE	NE	NE	W	WNW	NW	NW	WNW	WSW	WSW	E	ENE	NE	ENE	ENE	ENE	ENE	61	ENE		
Mar 24	NE	NE	NE	NNE	NNE	NNE	N	N	N	N	N	NNW	NNW	NNW	NW	NW	NNW	NW	NNW	NW	NNW	NW	NW	N	355	N	
Mar 25	ENE	E	ENE	NE	N	ENE	ENE	ENE	ENE	WSW	WSW	SW	SW	SW	SSW	SSW	SSW	SSW	S	S	S	S	S	SSW	199	SSW	
Mar 26	S	SSE	SSE	SSE	SSE	SSE	SE	S	SSW	WSW	WSW	SW	SW	SW	SSW	SSW	SSW	SSW	S	SSE	S	S	SSE	198	SSW		
Mar 27	SE	E	ESE	SE	SSE	SSE	SSE	SSE	SSW	SSW	SSW	SSW	S	S	SSW	S	SSW	SSW	S	SSW	SSW	SW	SSW	SW	194	SSW	
Mar 28	SSW	SW	X	X	X	X	X	SW	SW	SW	SW	SW	WSW	WSW	W	NNW	NNW	NW	NW	NNW	NNW	NW	NW	NW	286	WNW	
Mar 29	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	NW	NW	NW	E	ESE	E	ESE	318	NW	
Mar 30	ENE	SE	SE	SE	SE	SE	SSE	SSE	SSW	SSW	SW	SW	SW	SSW	SW	SW	WSW	SW	SSW	SSW	SSW	SSW	SSW	SSW	209	SSW	
Mar 31	SW	SW	SW	SSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW	229	SW	

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)	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.



PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2021

Summary of Hourly Averages

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

WIND SPEED																											
Maximum Hourly Value:		26.3 kph on March 16 at hour 14														Hours in Service:		744									
Maximum Daily Value:		15.8 kph on March 6														Hours of Data:		739									
Minimum Hourly Value:		0.3 kph on March 18 at hour 18														Hours of Missing Data:		5									
Minimum Daily Value:		2.0 kph on March 23														Hours of Calibration:		0									
Monthly Average:		4.1 kph														Operational Uptime:		99.3									
WIND DIRECTION																											
Monthly Average:		216 (SW) degree																									
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			
Mar 1	12.4	13.3	13.1	13.1	5.7	1.3	3.1	2.3	6.6	7.2	9.7	8.9	8.1	9.5	8.6	7.9	8.8	7.8	5.4	4.7	3.0	1.8	0.8	3.5	0.8	13.3	2.3
	S	S	SSW	SW	WNW	NE	E	NNW	N	N	N	NNE	N	N	N	NNW	NNW	N	NNW	NNW	NE	SW	SSW	SW			
Mar 2	4.6	6.5	6.7	7.5	7.2	10.8	15.0	14.0	16.6	17.0	19.2	21.1	22.4	21.1	21.3	20.1	15.2	14.1	13.2	14.9	14.1	14.3	14.3	15.6	4.6	22.4	13.5
	SSE	S	SSW	S	SSE	SSW	SSW	SSW	SW	SW	SW	WSW	SW	SW	WSW	SW	S	S	SSW	SSW	SW	SW	SW	SW			
Mar 3	14.0	10.8	10.2	8.3	7.4	5.5	6.2	6.6	10.2	8.9	15.0	14.8	14.3	13.6	13.8	10.1	8.3	2.6	3.7	5.3	5.6	4.6	3.4	2.3	15.0	6.6	
	SW	SSW	SSE	SSE	SE	SE	SE	SE	SSE	SSE	S	SSW	SSW	SW	SSW	SW	SW	WSW	ENE	ESE	SE	ESE	ENE	E			
Mar 4	4.4	2.7	5.3	3.7	3.3	3.7	3.9	4.0	5.9	5.9	6.3	6.8	5.1	4.0	7.9	8.4	8.9	9.4	8.4	9.5	10.3	10.2	8.6	6.4	2.7	10.3	5.5
	E	E	E	E	E	E	E	ENE	E	ENE	ENE	ENE	NNW	NW	NE	NE	ENE	ENE	E	E	E	E	ESE	ESE			
Mar 5	6.1	7.6	9.0	7.9	8.0	3.0	5.2	5.6	4.0	5.7	4.9	3.0	5.3	8.6	10.9	10.5	8.0	6.6	7.4	1.2	3.1	13.0	7.8	12.8	1.2	13.0	5.3
	ESE	ESE	ESE	ESE	SE	S	SE	SE	SE	SE	SW	E	E	E	ESE	ESE	E	ESE	ESE	ENE	ESE	S	SW	SW			
Mar 6	14.7	17.8	21.4	21.5	21.9	20.9	16.3	15.1	12.8	16.5	13.4	14.6	19.7	20.4	17.1	19.1	15.2	14.8	15.0	13.0	16.3	12.4	13.0	11.9	11.9	21.9	15.8
	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	WSW	SW	SW	SSW	SW	SW	SW	SW	SW	SW			
Mar 7	10.6	10.2	8.9	12.1	12.9	8.2	11.3	10.0	9.4	12.6	11.3	12.3	11.7	13.0	14.2	14.2	12.2	8.8	5.1	1.5	4.0	6.4	6.2	4.9	1.5	14.2	7.8
	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	SSW	SW	SW	WSW	WSW	W	N	NNE	NNE	NNE			
Mar 8	6.0	4.7	4.6	2.2	4.1	6.6	5.8	8.5	8.3	10.1	6.8	9.2	8.2	5.8	5.5	7.1	6.0	2.6	3.2	1.2	3.8	1.3	2.0	2.1	1.2	10.1	3.3
	NNE	NNE	NNE	NE	N	ENE	ENE	E	E	E	ENE	E	ESE	E	SW	W	WNW	NNW	E	SE	ESE	E	ENE				
Mar 9	3.4	5.3	1.6	2.4	4.1	8.3	3.7	7.7	7.9	6.1	8.1	4.0	2.6	6.2	5.6	7.1	9.8	10.6	7.7	2.9	1.8	4.3	5.1	9.8	1.6	10.6	4.6
	ENE	ENE	NE	N	NW	NNW	NW	NW	NW	WNW	WNW	SW	WNW	NNW	N	N	N	NE	NE	NW	NNW	NNW	N	N			
Mar 10	8.4	9.8	6.9	3.9	6.4	6.2	3.9	4.0	2.8	5.8	5.3	8.4	11.4	13.4	14.5	14.6	13.7	12.6	10.4	10.2	9.1	10.6	9.7	9.7	2.8	14.6	4.5
	N	N	NNW	NNW	NW	NW	NW	WNW	W	NW	WSW	SW	SW	SSW	SSW	SSW	SSW	SSW	S	SSE	SSE	SSE	SSE	SSE			
Mar 11	8.8	6.7	13.4	14.0	12.7	13.7	13.6	14.6	13.2	13.5	15.5	18.1	18.9	20.7	20.2	22.2	17.9	11.8	11.4	9.7	9.1	17.5	16.5	12.0	6.7	22.2	12.7
	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW			
Mar 12	16.8	17.2	20.1	20.6	18.2	16.5	14.7	13.0	11.4	3.6	3.5	9.7	12.7	13.9	10.3	6.3	5.5	3.5	2.4	1.7	4.0	5.0	4.9	4.4	1.7	20.6	7.9
	WSW	WSW	WSW	SW	SW	SW	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WNW	NNW	NE	ENE	ENE	ENE	E			
Mar 13	5.1	9.1	8.7	8.3	10.3	12.8	11.8	15.0	13.8	14.1	12.9	13.6	13.1	8.9	9.6	11.0	12.9	11.9	12.6	10.6	10.6	9.3	8.1	2.9	2.9	15.0	10.7
	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	ENE			
Mar 14	2.9	3.8	4.0	4.5	6.4	8.2	7.5	7.8	7.7	9.7	9.0	11.3	11.9	12.4	13.1	12.5	13.3	14.3	14.9	11.9	14.6	15.4	14.3	12.7	2.9	15.4	9.9
	NNE	NNE	N	N	NNW	N	N	N	N	N	NNW	NNW	N	N	NNW	NNW	NNW	NNW	NNW	N	NNW	NNW	NNW	NW			
Mar 15	10.6	8.2	6.1	4.2	5.3	8.2	10.1	7.9	10.9	12.4	14.7	16.2	15.9	17.3	18.1	19.2	16.6	17.4	14.2	11.2	12.7	14.2	15.3	14.9	4.2	19.2	10.5
	NW	WNW	NW	SW	SW	SSW	SSW	S	SSW	SSW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	S	SSE	SSE	S	SSW	SSW			
Mar 16	15.9	16.5	17.1	15.4	15.2	17.0	18.3	14.4	18.3	16.8	16.0	23.1	24.0	23.2	26.3	23.6	19.2	13.5	8.8	7.2	3.5	6.9	9.1	6.7	3.5	26.3	14.5
	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SSW	SSW	SSW	SSW	SSW			
Mar 17	6.2	6.6	5.4	4.1	5.1	6.0	4.4	6.5	7.6	11.8	16.0	18.6	17.1	11.0	11.5	10.9	12.0	12.6	10.7	8.3	9.9	10.9	13.3	4.0	4.0	18.6	8.8
	S	SSE	SSE	SSE	SE	SSE	SE	SSE	SSE	SSE	S	SSW	S	S	WSW	SSW	SSW	S	S	SSE	SSE	SSE	SSE	S			
Mar 18	0.5	2.0	3.4	7.6	6.2	3.6	5.9	4.9	8.4	9.8	13.1	11.8	8.9	10.6	10.1	11.7	9.5	4.8	0.3	2.2	2.8	4.2	4.3	3.9	0.3	13.1	3.7
	W	SSW	SSE	SE	SE	SE	SE	SE	SE	SE	SSE	SSW	WSW	WSW	SW	WSW	WSW	SW	SW	NE	ENE	ENE	ENE	ENE			
Mar 19	6.2	4.8	3.8	3.3	6.3	7.8	18.9	13.7	4.1	15.6	18.1	16.8	20.8	17.8	16.7	17.4	14.3	12.2	11.6	10.2	8.8	9.4	12.2	13.0	3.3	20.8	9.9
	ENE	ENE	E	SE	SE	SSE	SSW	WSW	S	SW	SW	SW	SW	SW	SW	SSW	SW	SW	SW	SW	SSW	SSW	S	SSW			
Mar 20	11.4	13.9	14.3	13.7	12.8	13.7	12.8	15.3	14.8	11.8	15.8	14.9	9.6	14.8	12.5	12.4	16.0	14.1	12.2	9.7	5.1	2.7	4.0	2.7	2.7	16.0	6.4
	SSW	SSW	SSW	S	SSE	S	S	S	SSW	SW	WSW	SW	WNW	NNW	NW	NW	NW	NW	NNW	NW	W	WNW	WSW	WSW			



PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2021

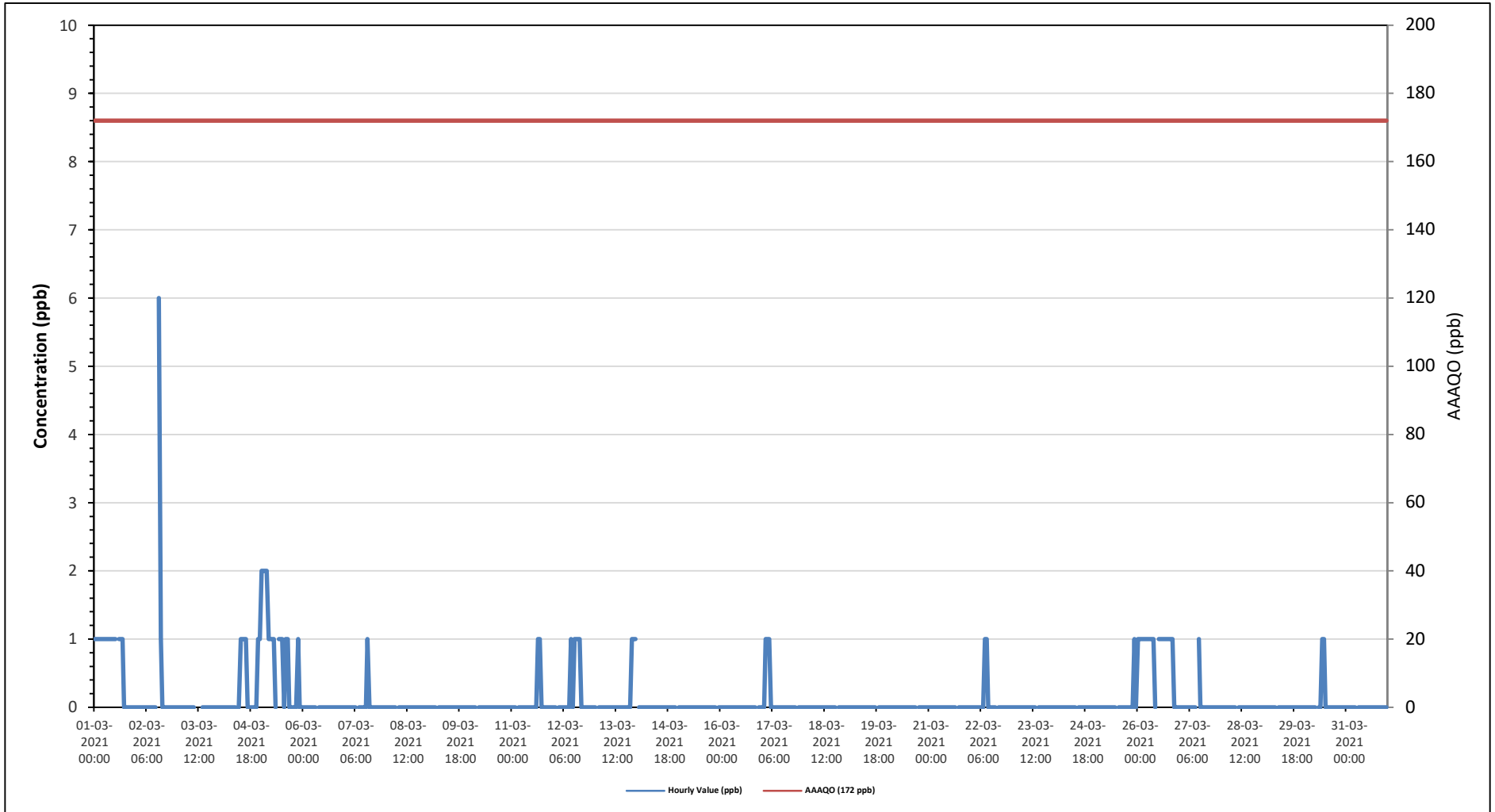
Summary of Hourly Averages

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

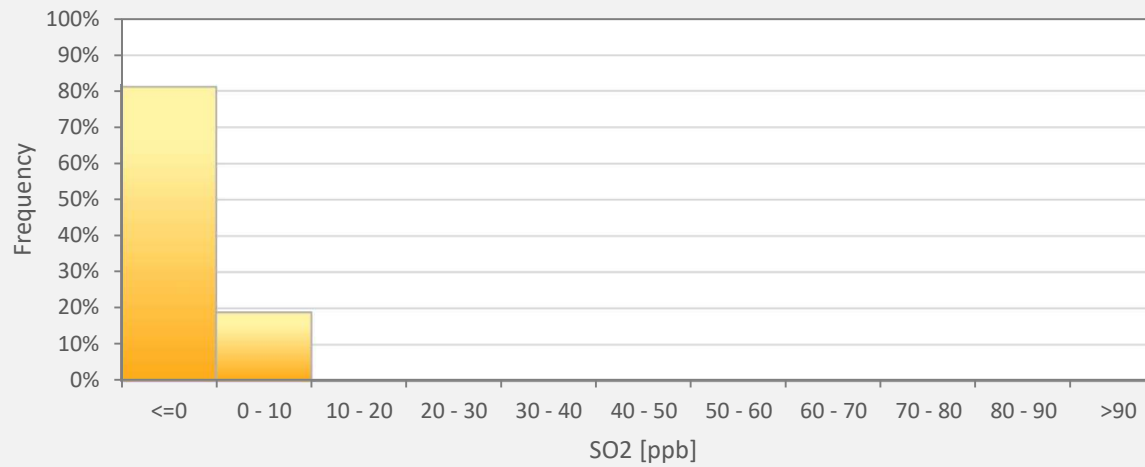
WIND SPEED																															
Maximum Hourly Value:	26.3 kph on March 16 at hour 14																														
Maximum Daily Value:	15.8 kph on March 6																														
Minimum Hourly Value:	0.3 kph on March 18 at hour 18																														
Minimum Daily Value:	2.0 kph on March 23																														
Monthly Average:	4.1 kph																														
Hours in Service:	744																														
Hours of Data:	739																														
Hours of Missing Data:	5																														
Hours of Calibration:	0																														
Operational Uptime:	99.3																														
WIND DIRECTION																															
Monthly Average:	216 (SW) degree																														
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							
Mar 21	0.9	1.2	1.5	3.6	4.7	5.8	4.9	4.3	4.5	7.4	9.9	7.9	8.9	13.4	12.2	12.8	10.3	4.6	2.4	2.9	4.1	6.8	7.5	8.7	0.9	13.4	3.8				
	S	ESE	E	SE	ESE	ESE	ESE	ENE	ESE	SE	SSE	S	SW	SSW	SSW	SSE	ESE	ENE	E	E	ENE	ENE	ENE								
Mar 22	8.9	11.1	11.0	10.6	12.3	13.8	13.6	12.4	12.9	12.4	11.4	11.8	8.0	7.9	7.4	13.8	9.4	7.4	5.5	3.7	6.5	8.0	6.2	5.8	3.7	13.8	8.1				
	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NNW	NW	NNW	N	NE	ENE	E	ESE	ESE	ESE							
Mar 23	6.5	5.5	6.0	7.3	7.5	3.6	3.7	3.7	3.9	1.4	1.1	6.9	8.8	7.0	4.8	3.4	2.7	0.3	2.5	2.7	4.0	5.7	6.7	7.8	0.3	8.8	2.0				
	ESE	ESE	E	ESE	ESE	E	ENE	NE	NE	NE	W	WNW	NW	NW	WNW	WSW	WSW	E	ENE	NE	ENE	ENE	ENE	ENE							
Mar 24	8.2	9.2	9.1	11.3	11.1	11.1	10.4	12.4	11.8	13.2	13.4	12.8	14.1	11.2	13.5	13.0	10.1	9.9	7.1	4.0	2.0	2.7	4.2	3.3	2.0	14.1	8.5				
	NE	NE	NE	NNE	NNE	NNE	N	N	N	N	N	NNW	NNW	NNW	NW	NW	NNW	NW	NW	NNW	NW	NNW	N	NE							
Mar 25	5.5	4.9	4.7	2.6	2.0	2.3	2.5	2.7	1.9	5.1	9.7	12.0	12.9	12.9	13.5	12.9	11.3	11.6	11.9	9.7	8.5	7.6	6.7	5.4	1.9	13.5	5.0				
	ENE	E	ENE	NE	N	ENE	ENE	ENE	ENE	WSW	WSW	SW	SW	SW	SSW	SSW	SSW	SSW	S	S	S	S	S	SSW							
Mar 26	4.6	5.5	4.8	5.3	3.8	3.3	3.6	4.3	5.3	7.6	7.6	6.8	9.5	15.7	15.5	15.0	11.8	12.4	10.9	8.1	7.3	6.6	6.0	6.9	3.3	15.7	6.8				
	S	SSE	SSE	SSE	SSE	SSE	SE	S	SSW	WSW	WSW	SW	SW	SW	SSW	SSW	SSW	S	SSE	S	S	S	SSE	SSE							
Mar 27	6.5	4.8	5.9	10.2	9.8	7.3	8.8	6.6	7.8	11.6	14.6	15.5	16.1	17.6	17.6	18.6	19.5	17.4	15.7	16.8	18.6	21.9	21.3	22.0	4.8	22.0	12.6				
	SE	E	ESE	SE	SSE	SSE	SSE	SSE	SSW	SSW	SSW	SSW	S	S	SSW	S	SSW	S	SSW	S	SSW	SSW	SSW	SSW							
Mar 28	15.4	15.7	X	X	X	X	X	12.5	11.8	14.8	14.9	14.2	13.6	13.7	15.0	20.0	18.6	21.3	22.0	19.2	17.9	18.8	18.4	16.6	11.8	22.0	10.7				
	SSW	SW	X	X	X	X	X	SW	SW	SW	SW	SW	WSW	WSW	W	NNW	NNW	NW	NW	NNW	NNW	NW	NW	NW							
Mar 29	16.5	17.5	18.0	18.2	17.8	19.8	16.9	17.1	14.4	16.2	17.4	16.6	13.9	12.4	6.6	7.9	5.9	7.5	7.3	2.1	0.8	1.2	2.3	2.2	0.8	19.8	11.0				
	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	NW	NW	NW	E	ESE	E	ESE							
Mar 30	3.9	4.6	4.9	5.6	4.9	5.6	5.1	9.4	13.3	12.2	13.8	12.6	18.5	19.4	18.4	18.7	17.1	13.4	13.2	8.2	8.9	10.2	11.1	13.8	3.9	19.4	9.7				
	ESE	SE	SE	SE	SE	SE	SSE	SSE	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW							
Mar 31	12.4	11.3	12.5	9.5	12.2	13.4	15.3	17.2	21.1	21.9	22.9	23.2	23.9	23.1	21.0	17.6	12.2	9.3	10.7	11.8	10.2	12.3	17.5	14.0	9.3	23.9	15.2				
	SW	SW	SW	SSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW							
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.																															

RENO STATION

Timeseries Chart of Hourly Average for SO2 - Reno Station



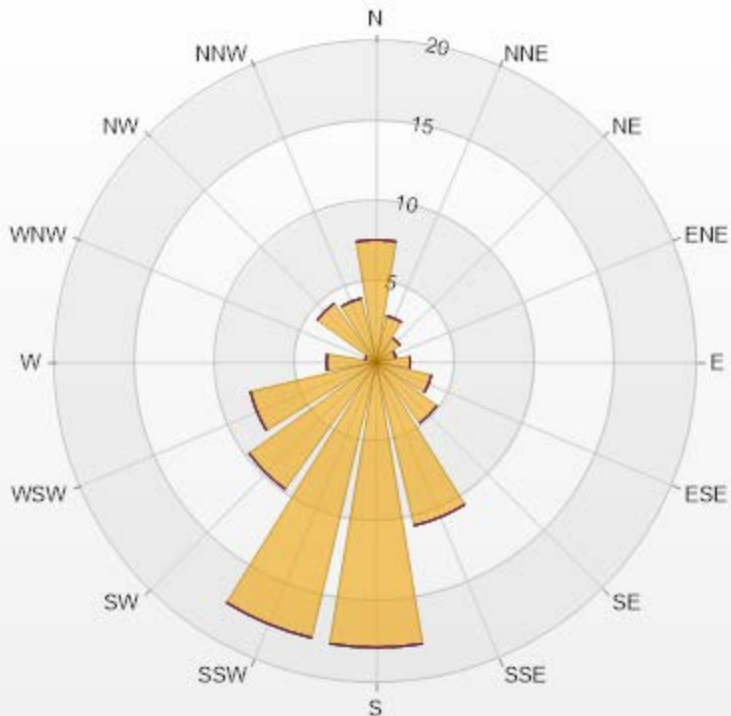
SO2[ppb] Histogram: PRAMP RENO Monthly: 03-2021 1 Hr.



Classes	SO2
<=0	81.10%
0 - 10	18.90%
10 - 20	0.00%
20 - 30	0.00%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: PRAMP RENO Poll.: PRAMP RENO-SO2[ppb] Monthly: 03-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.30% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	7.62	0	0	0	0	7.62
NNE	2.96	0	0	0	0	2.96
NE	1.83	0	0	0	0	1.83
ENE	1.27	0	0	0	0	1.27
E	2.12	0	0	0	0	2.12
ESE	3.53	0	0	0	0	3.53
SE	4.65	0	0	0	0	4.65
SSE	10.44	0	0	0	0	10.44
S	17.77	0	0	0	0	17.77
SSW	17.63	0	0	0	0	17.63
SW	9.73	0	0	0	0	9.73
WSW	8.04	0	0	0	0	8.04
W	3.1	0	0	0	0	3.1
WNW	0.71	0	0	0	0	0.71
NW	4.51	0	0	0	0	4.51
NNW	4.09	0	0	0	0	4.09
Summary	100	0	0	0	0	100



PRAMP-202103

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% 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 - March 2021 Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

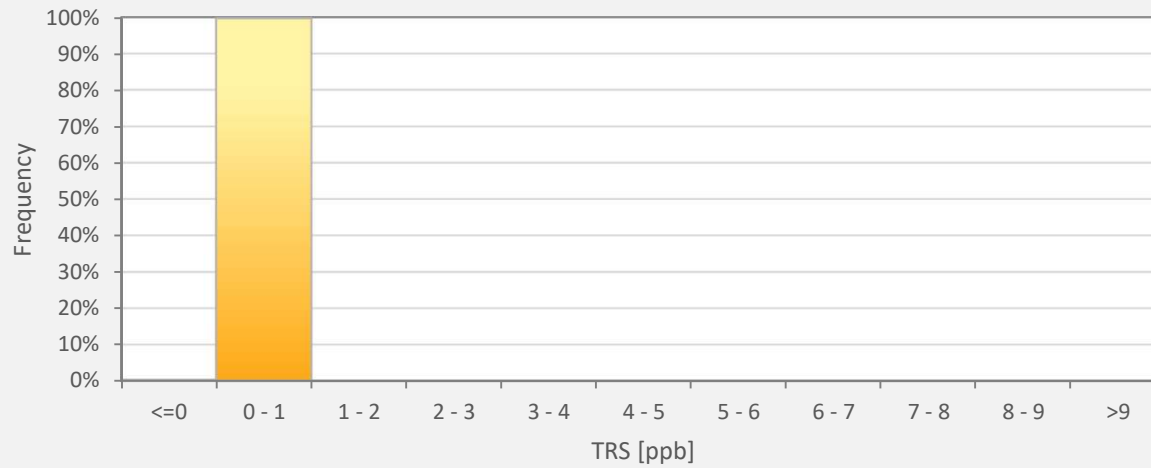
Maximum Hourly Value: 0.92 ppb on March 1 at hour 7	Hours in Service: 744
Maximum Daily Value: 0.36 ppb on March 1	Hours of Data: 663
Minimum Hourly Value: 0.00 ppb on March 5 at hour 15	Hours of Missing Data: 45
Minimum Daily Value: 0.12 ppb on March 14	Hours of Calibration: 36
Monthly Average: 0.18 ppb	Operational Uptime: 94.0

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	
Mar 1	0.51	0.53	0.51	0.46	0.54	0.5	0.44	0.92	0.82	0.61	0.42	0.18	0.17	S	0.23	0.2	0.17	0.15	0.16	0.16	0.14	0.15	0.14	0.19	0.14	0.92	0.36	
Mar 2	0.42	0.56	0.63	0.52	0.24	0.17	0.14	0.16	0.17	0.16	0.17	0.16	S	0.68	0.31	0.18	0.14	0.11	0.09	0.11	0.07	0.08	0.06	0.05	0.05	0.68	0.23	
Mar 3	0.13	0.28	0.36	0.68	0.83	0.59	0.5	0.44	0.31	0.26	C	C	C	C	C	C	X	X	X	X	X	X	X	X	0.13	0.83	-	
Mar 4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-
Mar 5	X	X	X	X	X	X	X	X	X	X	NRM	NRM	NRM	NRM	0.07	0	0	0.13	0.28	0.21	0.4	0.14	0.04	0.05	0.00	0.40	-	
Mar 6	0.04	0.03	0.04	0.06	0.09	0.11	0.14	0.14	S	0.23	0.19	0.18	0.11	0.09	0.09	0.08	0.13	0.1	0.12	0.13	0.14	0.13	0.16	0.19	0.03	0.23	0.12	
Mar 7	0.23	0.18	0.18	0.19	0.22	0.21	0.2	S	0.26	0.24	0.22	0.21	0.22	0.21	0.2	0.15	0.17	0.17	0.16	0.16	0.15	0.16	0.16	0.16	0.15	0.26	0.19	
Mar 8	0.15	0.19	0.2	0.19	0.16	0.17	S	0.23	0.21	0.19	0.21	0.18	0.17	0.17	0.17	0.15	0.14	0.13	0.13	0.12	0.13	0.19	0.18	0.23	0.12	0.23	0.17	
Mar 9	0.22	0.22	0.19	0.16	0.17	S	0.18	0.18	0.18	0.22	0.24	0.18	0.15	0.1	0.12	0.11	0.14	0.14	0.13	0.13	0.14	0.13	0.16	0.16	0.10	0.24	0.16	
Mar 10	0.16	0.12	0.17	0.17	S	0.19	0.16	0.14	0.14	0.15	0.15	0.16	0.16	0.15	0.13	0.13	0.14	0.14	0.16	0.19	0.22	0.2	0.2	0.21	0.12	0.22	0.16	
Mar 11	0.21	0.2	0.2	S	0.31	0.23	0.23	0.19	0.21	0.21	0.19	0.19	0.19	0.15	0.15	0.18	0.21	0.19	0.14	0.11	0.12	0.13	0.14	0.16	0.11	0.31	0.18	
Mar 12	0.12	0.13	S	0.19	0.15	0.14	0.14	0.13	0.17	0.21	0.28	0.21	0.16	0.12	0.17	0.14	0.08	0.08	0.11	0.09	0.11	0.1	0.12	0.12	0.08	0.28	0.14	
Mar 13	0.12	S	0.18	0.15	0.15	0.15	0.15	0.13	0.14	0.12	0.11	0.15	0.21	0.22	0.13	0.09	0.08	0.1	0.11	0.08	0.12	0.12	0.12	0.1	0.08	0.22	0.13	
Mar 14	S	0.2	0.14	0.11	0.15	0.09	0.11	0.12	0.11	0.11	0.12	0.09	0.07	0.07	0.07	0.08	0.08	0.12	0.15	0.14	0.18	0.14	0.14	S	0.07	0.20	0.12	
Mar 15	0.18	0.13	0.12	0.12	0.13	0.1	0.11	0.1	0.11	0.13	0.16	0.16	0.16	0.16	0.17	0.18	0.19	0.19	0.19	0.19	0.15	0.13	S	0.21	0.10	0.21	0.15	
Mar 16	0.19	0.18	0.15	0.17	0.17	0.15	0.16	0.15	0.19	0.19	0.18	0.16	0.13	0.11	0.09	0.1	0.1	0.11	0.12	0.11	0.12	S	0.28	0.27	0.09	0.28	0.16	
Mar 17	0.27	0.28	0.29	0.27	0.26	0.24	0.2	0.22	0.18	0.17	0.17	0.16	0.12	0.1	0.12	0.11	0.1	0.1	0.1	0.14	S	0.23	0.15	0.13	0.10	0.29	0.18	
Mar 18	0.17	0.19	0.18	0.17	0.17	0.17	0.22	0.23	0.17	0.14	0.13	0.13	0.11	0.14	0.12	0.11	0.12	0.12	0.12	S	0.17	0.14	0.14	0.15	0.11	0.23	0.15	
Mar 19	0.15	0.17	0.22	0.27	0.23	0.18	0.19	0.18	0.19	0.17	0.18	0.14	0.12	0.12	0.15	0.14	0.12	0.12	S	0.2	0.16	0.21	0.21	0.21	0.12	0.27	0.18	
Mar 20	0.21	0.18	0.19	0.16	0.15	0.15	0.18	0.17	0.16	0.16	0.15	0.13	0.22	0.5	0.25	0.14	0.13	S	0.18	0.18	0.17	0.16	0.19	0.19	0.13	0.50	0.19	
Mar 21	0.15	0.13	0.3	0.34	0.26	0.16	0.13	0.18	0.26	0.21	0.13	0.11	0.11	0.1	0.09	0.09	S	0.14	0.13	0.17	0.13	0.11	0.11	0.1	0.09	0.34	0.16	
Mar 22	0.12	0.1	0.12	0.14	0.13	0.1	0.13	0.16	0.17	0.18	0.16	0.14	0.12	0.1	0.1	S	0.18	0.18	0.2	0.15	0.15	0.14	0.15	0.17	0.10	0.20	0.14	
Mar 23	0.17	0.14	0.21	0.25	0.17	0.25	0.19	0.2	0.19	0.21	0.21	0.18	0.17	0.17	S	0.25	0.2	0.19	0.21	0.27	0.21	0.19	0.23	0.43	0.14	0.43	0.21	
Mar 24	0.57	0.27	0.21	0.21	0.21	0.19	0.2	0.18	0.16	0.17	0.17	0.2	0.19	S	0.26	0.21	0.22	0.22	0.21	0.19	0.17	0.16	0.16	0.15	0.15	0.57	0.21	
Mar 25	0.12	0.14	0.12	0.11	0.12	0.11	0.1	0.1	0.1	0.1	0.12	0.14	S	0.18	0.11	0.11	0.11	0.13	0.14	0.12	0.12	0.14	0.22	0.26	0.10	0.26	0.13	
Mar 26	0.19	0.19	0.31	0.28	0.22	0.22	0.28	0.37	0.37	0.23	0.21	S	0.22	0.19	0.21	0.19	0.19	0.17	0.19	0.2	0.2	0.22	0.31	0.31	0.17	0.37	0.24	
Mar 27	0.33	0.33	0.35	0.25	0.22	0.21	0.24	0.32	0.24	0.21	S	0.29	0.19	0.13	0.12	0.12	0.1	0.1	0.1	0.1	0.11	0.11	0.13	0.13	0.10	0.35	0.19	
Mar 28	0.15	0.13	0.14	0.14	0.12	0.12	0.13	0.12	0.1	S	0.14	0.11	0.12	0.08	0.09	0.1	0.17	0.21	0.17	0.18	0.16	0.14	0.11	0.12	0.08	0.21	0.13	
Mar 29	0.12	0.13	0.11	0.11	0.11	0.11	0.12	0.12	S	0.2	0.15	0.15	0.16	0.15	0.14	0.14	0.16	0.16	0.17	0.17	0.17	0.15	0.16	0.14	0.11	0.20	0.14	
Mar 30	0.18	0.17	0.19	0.22	0.19	0.17	0.2	S	0.3	0.23	0.25	0.24	0.22	0.19	0.16	0.13	0.12	0.13	0.12	0.13	0.15	0.16	0.2	0.18	0.12	0.30	0.18	
Mar 31	0.15	0.15	0.13	0.12	0.12	0.1	S	0.16	0.11	0.1	0.11	0.09	0.11	0.08	0.07	0.09	0.07	0.08	0.11	0.15	0.14	0.16	0.15	0.16	0.07	0.16	0.12	
Diurnal Maximum	0.57	0.56	0.63	0.68	0.83	0.59	0.50	0.92	0.82	0.61	0.42	0.29	0.22	0.68	0.31	0.25	0.22	0.22	0.28	0.27	0.40	0.23	0.31	0.43				
Diurnal Average	0.20	0.20	0.22	0.22	0.21	0.19	0.19	0.21	0.21	0.20	0.18	0.16	0.16	0.17	0.15	0.13	0.14	0.14	0.15	0.15	0.16	0.15	0.16	0.18				

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.

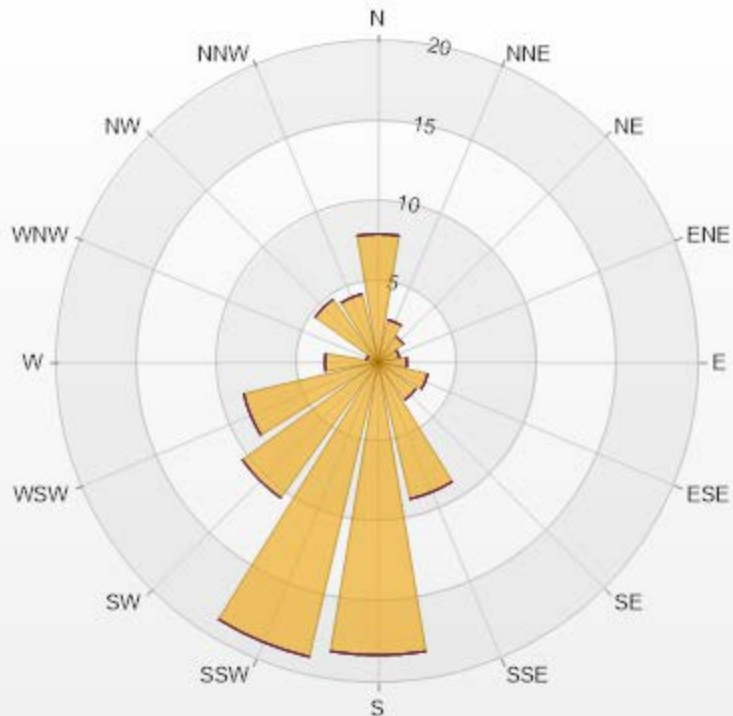
TRS[ppb] Histogram: PRAMP RENO Monthly: 03-2021 1 Hr.



Classes	TRS
<=0	0.30%
0 - 1	99.70%
1 - 2	0.00%
2 - 3	0.00%
3 - 4	0.00%
4 - 5	0.00%
5 - 6	0.00%
6 - 7	0.00%
7 - 8	0.00%
8 - 9	0.00%
>9	0.00%

Wind: PRAMP RENO Poll.: PRAMP RENO-TRS[ppb] Monthly: 03-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 89.11% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	7.99	0	0	0	0	7.99
NNE	2.71	0	0	0	0	2.71
NE	1.96	0	0	0	0	1.96
ENE	1.36	0	0	0	0	1.36
E	1.81	0	0	0	0	1.81
ESE	3.17	0	0	0	0	3.17
SE	2.87	0	0	0	0	2.87
SSE	8.75	0	0	0	0	8.75
S	18.25	0	0	0	0	18.25
SSW	18.85	0	0	0	0	18.85
SW	10.41	0	0	0	0	10.41
WSW	8.6	0	0	0	0	8.6
W	3.32	0	0	0	0	3.32
WNW	0.75	0	0	0	0	0.75
NW	4.83	0	0	0	0	4.83
NNW	4.37	0	0	0	0	4.37
Summary	100	0	0	0	0	100



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% 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 - March 2021
Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

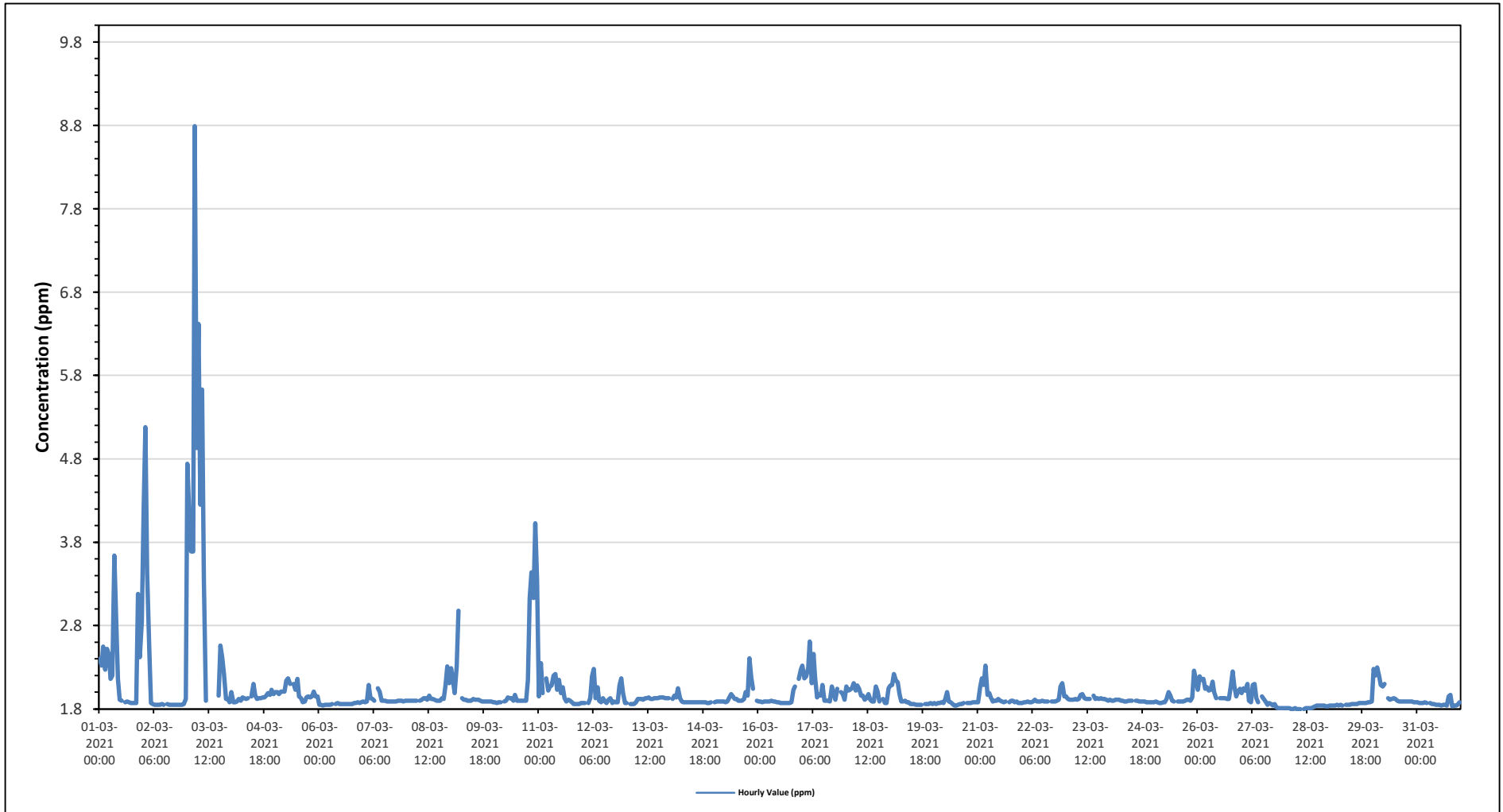
Maximum Hourly Value:	8.79 ppm on March 3 at hour 4	Hours in Service:	744
Maximum Daily Value:	3.69 ppm on March 3	Hours of Data:	707
Minimum Hourly Value:	1.80 ppm on March 28 at hour 3	Hours of Missing Data:	0
Minimum Daily Value:	1.82 ppm on March 28	Hours of Calibration:	37
Monthly Average:	2.01 ppm	Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Mar 1	2.40	2.32	2.55	2.27	2.52	2.45	2.16	2.20	3.64	2.89	2.16	1.91	1.90	S	1.88	1.89	1.88	1.87	1.87	1.87	3.18	2.42	2.85	1.87	3.64	2.30		
Mar 2	4.16	5.18	3.42	2.55	1.87	1.85	1.85	1.85	1.85	1.85	1.86	1.85	S	1.86	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.86	1.86	1.92	1.85	5.18	2.20	
Mar 3	4.74	4.09	3.69	3.69	8.79	4.93	6.42	4.25	5.63	3.34	1.90	S	C	C	C	C	C	1.96	2.56	2.42	2.22	1.92	1.92	1.88	1.88	8.79	3.69	
Mar 4	2.00	1.88	1.88	1.89	1.92	1.90	1.94	1.93	1.92	1.93	S	1.95	2.10	1.96	1.92	1.93	1.93	1.94	1.94	1.96	1.99	1.97	2.03	1.98	1.88	2.10	1.95	
Mar 5	2.00	2.00	1.98	2.01	2.01	2.01	2.14	2.17	2.10	S	2.10	2.03	2.16	1.95	1.93	1.88	1.89	1.94	1.95	1.94	1.95	2.01	1.95	1.95	1.88	2.17	2.00	
Mar 6	1.85	1.85	1.84	1.85	1.85	1.85	1.85	1.86	S	1.86	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.87	1.88	1.87	1.88	1.84	1.88	1.86	
Mar 7	1.89	1.88	1.89	2.09	1.93	1.92	1.90	S	2.05	2.01	1.90	1.90	1.90	1.89	1.89	1.89	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.89	1.90	1.88	2.09	1.92
Mar 8	1.90	1.90	1.90	1.90	1.90	1.90	S	1.90	1.91	1.93	1.93	1.91	1.96	1.92	1.92	1.91	1.90	1.90	1.90	1.93	1.92	2.08	2.31	2.11	1.90	2.31	1.95	
Mar 9	2.29	2.15	1.99	2.31	2.98	S	1.93	1.91	1.91	1.90	1.90	1.90	1.92	1.91	1.91	1.91	1.90	1.89	1.89	1.89	1.89	1.89	1.89	1.88	1.88	2.98	2.00	
Mar 10	1.88	1.87	1.88	1.88	S	1.89	1.90	1.94	1.93	1.93	1.90	1.90	1.97	1.90	1.90	1.90	1.90	1.90	1.90	2.15	3.13	3.44	3.13	4.03	3.34	1.87	4.03	2.24
Mar 11	1.95	2.35	1.99	S	2.17	2.02	2.07	2.08	2.20	2.22	2.03	2.15	1.99	2.06	1.93	1.89	1.91	1.90	1.88	1.86	1.86	1.86	1.86	1.87	1.86	2.35	2.00	
Mar 12	1.87	1.87	S	1.87	1.93	2.19	2.28	1.93	2.06	1.90	1.88	1.93	1.89	1.87	1.91	1.93	1.87	1.89	1.88	1.88	2.08	2.17	1.99	1.87	1.87	2.28	1.95	
Mar 13	1.87	S	S	1.86	1.86	1.88	1.88	1.92	1.92	1.91	1.93	1.93	1.94	1.92	1.92	1.93	1.93	1.93	1.94	1.94	1.94	1.93	1.93	1.93	1.86	1.94	1.91	
Mar 14	S	1.92	1.96	1.94	2.05	1.93	1.89	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.87	1.87	1.88	S	1.87	2.05	1.90	
Mar 15	1.88	1.89	1.89	1.89	1.89	1.89	1.88	1.89	1.94	1.98	1.95	1.92	1.92	1.90	1.90	1.90	1.92	2.00	1.96	2.41	2.18	2.04	S	1.90	1.88	2.41	1.95	
Mar 16	1.89	1.89	1.88	1.89	1.89	1.89	1.89	1.90	1.89	1.89	1.88	1.88	1.87	1.87	1.87	1.87	1.87	1.87	1.88	2.03	2.07	S	2.16	2.27	1.87	2.27	1.93	
Mar 17	2.32	2.17	2.19	2.29	2.61	2.11	2.46	2.18	1.94	1.98	1.96	2.09	1.90	1.90	1.90	1.89	2.07	1.98	1.91	2.04	S	2.00	1.98	1.91	1.89	2.61	2.08	
Mar 18	2.07	2.02	2.03	2.05	2.11	2.02	2.08	2.04	1.96	1.96	1.91	1.93	1.98	1.91	1.89	1.89	2.07	2.01	1.89	S	1.92	1.87	1.87	2.05	1.87	2.11	1.98	
Mar 19	2.08	2.09	2.22	2.14	2.12	1.98	1.89	1.89	1.90	1.88	1.88	1.86	1.86	1.86	1.85	1.85	1.85	1.85	S	1.86	1.86	1.86	1.87	1.86	1.85	2.22	1.93	
Mar 20	1.87	1.86	1.87	1.87	1.88	1.87	1.92	2.00	1.89	1.88	1.86	1.84	1.84	1.85	1.86	1.86	1.86	1.87	S	1.87	1.87	1.87	1.88	1.88	1.84	2.00	1.88	
Mar 21	1.88	2.06	2.17	2.09	2.32	1.97	1.99	1.94	1.89	1.90	1.90	1.92	1.90	1.89	1.88	1.89	S	1.88	1.90	1.90	1.88	1.89	1.87	1.87	1.87	2.32	1.95	
Mar 22	1.87	1.88	1.88	1.89	1.88	1.88	1.89	1.91	1.89	1.89	1.89	1.90	1.89	1.89	1.89	S	1.89	1.89	1.89	1.90	1.91	2.07	2.11	1.95	1.87	2.11	1.91	
Mar 23	1.95	1.92	1.91	1.91	1.91	1.92	1.91	1.92	1.97	1.98	1.93	1.92	1.92	1.92	S	1.96	1.92	1.93	1.92	1.93	1.92	1.92	1.91	1.90	1.90	1.98	1.93	
Mar 24	1.91	1.90	1.90	1.91	1.91	1.91	1.90	1.90	1.89	1.89	1.90	1.90	1.90	S	1.90	1.90	1.89	1.89	1.89	1.89	1.88	1.88	1.88	1.88	1.88	1.91	1.90	
Mar 25	1.88	1.89	1.88	1.87	1.87	1.88	1.88	1.92	2.00	1.96	1.90	1.89	S	1.89	1.89	1.89	1.90	1.91	1.91	1.90	1.94	2.26	2.14	1.87	2.26	1.93		
Mar 26	2.03	2.19	2.15	2.16	2.04	2.06	2.02	2.03	2.13	2.00	1.93	S	1.93	1.93	1.93	1.93	1.92	1.92	2.06	2.25	2.08	1.95	2.01	2.04	1.92	2.25	2.03	
Mar 27	1.99	2.05	2.02	2.10	1.90	1.88	2.09	2.10	1.93	1.88	S	1.95	1.92	1.89	1.85	1.87	1.86	1.84	1.86	1.82	1.81	1.81	1.81	1.81	1.81	2.10	1.91	
Mar 28	1.81	1.81	1.81	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	1.83	1.84	1.84	1.84	1.84	1.83	1.83	1.80	1.84	1.82	
Mar 29	1.84	1.84	1.84	1.84	1.85	1.84	1.85	1.84	S	1.85	1.85	1.85	1.86	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.87	1.87	1.88	1.88	1.89	1.84	1.89	1.86
Mar 30	2.28	2.20	2.30	2.19	2.09	2.07	2.10	S	1.93	1.91	1.92	1.93	1.92	1.90	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.88	1.88	1.88	2.30	1.98	
Mar 31	1.88	1.87	1.87	1.87	1.88	1.87	S	1.87	1.86	1.86	1.85	1.85	1.85	1.84	1.85	1.85	1.84	1.95	1.97	1.83	1.84	1.84	1.85	1.88	1.83	1.97	1.87	
Diurnal Maximum	4.74	5.18	3.69	3.69	8.79	4.93	6.42	4.25	5.63	3.34	2.16	2.15	2.16	2.06	1.93	1.96	2.07	2.01	2.56	3.13	3.44	3.18	4.03	3.34				
Diurnal Average	2.14	2.16	2.09	2.06	2.26	2.05	2.13	2.03	2.13	2.01	1.92	1.92	1.92	1.90	1.89	1.89	1.90	1.90	1.93	1.99	1.98	2.01	2.03	2.01				

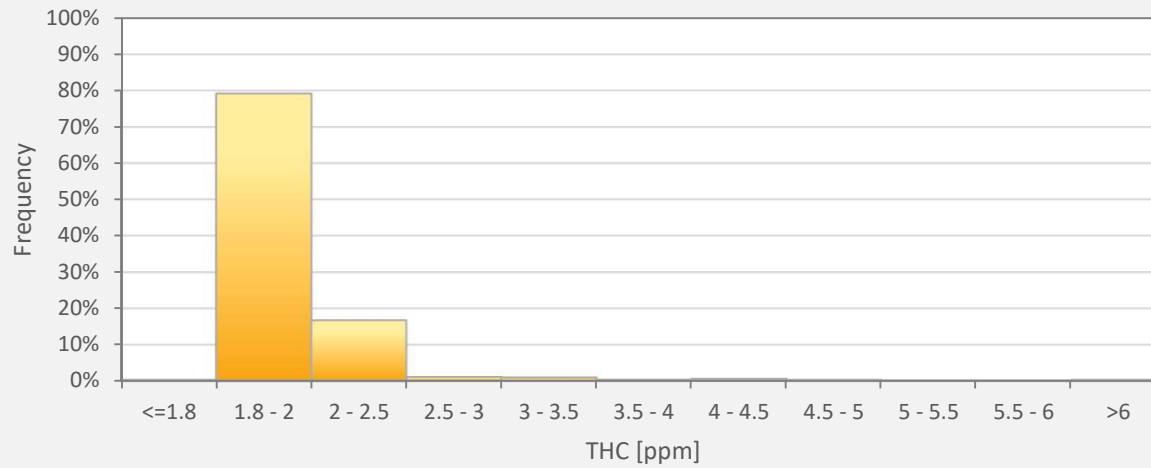
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	InValid Data (Equipment Malfunction/Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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 THC - Reno Station



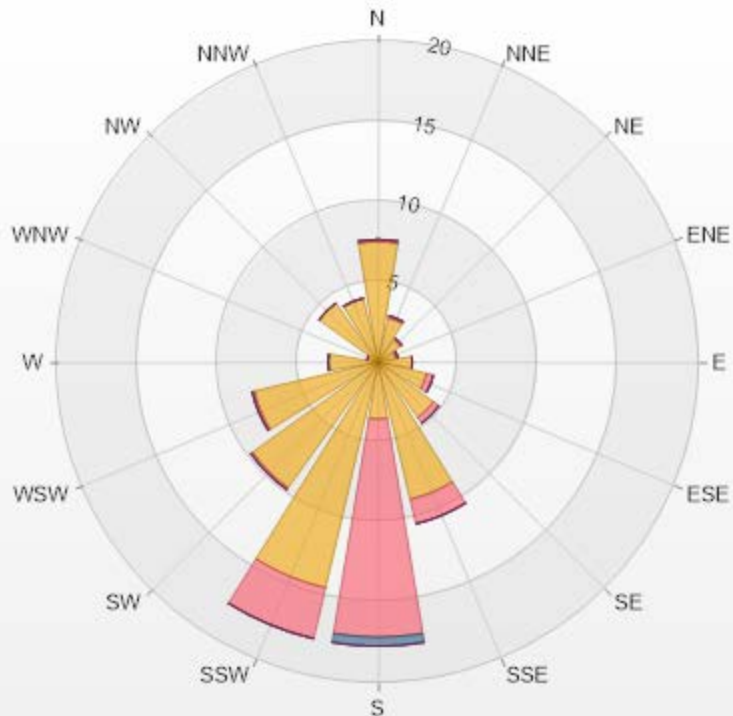
THC55[ppm] Histogram: PRAMP RENO Monthly: 03-2021 1 Hr.



Classes	THC55
<=1.8	0.28%
1.8 - 2	79.07%
2 - 2.5	16.69%
2.5 - 3	1.13%
3 - 3.5	0.99%
3.5 - 4	0.42%
4 - 4.5	0.57%
4.5 - 5	0.28%
5 - 5.5	0.14%
5.5 - 6	0.14%
>6	0.28%

Wind: PRAMP RENO Poll.: PRAMP RENO-THC55[ppm] Monthly: 03-2021 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	7.5	0.14	0	0	0	7.64
NNE	2.83	0.14	0	0	0	2.97
NE	1.7	0.14	0	0	0	1.84
ENE	1.13	0.14	0	0	0	1.27
E	2.12	0	0	0	0	2.12
ESE	3.11	0.42	0	0	0	3.53
SE	4.24	0.42	0	0	0	4.66
SSE	8.77	1.56	0	0	0	10.33
S	3.54	13.58	0.57	0	0	17.69
SSW	14.43	3.25	0	0	0	17.68
SW	9.62	0.14	0	0	0	9.76
WSW	7.92	0.14	0	0	0	8.06
W	3.11	0	0	0	0	3.11
WNW	0.71	0	0	0	0	0.71
NW	4.53	0	0	0	0	4.53
NNW	4.1	0	0	0	0	4.1
Summary	79.36	20.07	0.57	0	0	100



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% Icon Classes (ppm)	79	0-2	20	2-5	1	5-10	0	10-40	0	>40.0
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PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2021
Summary of Hourly Averages

METHANE (CH4) in ppm

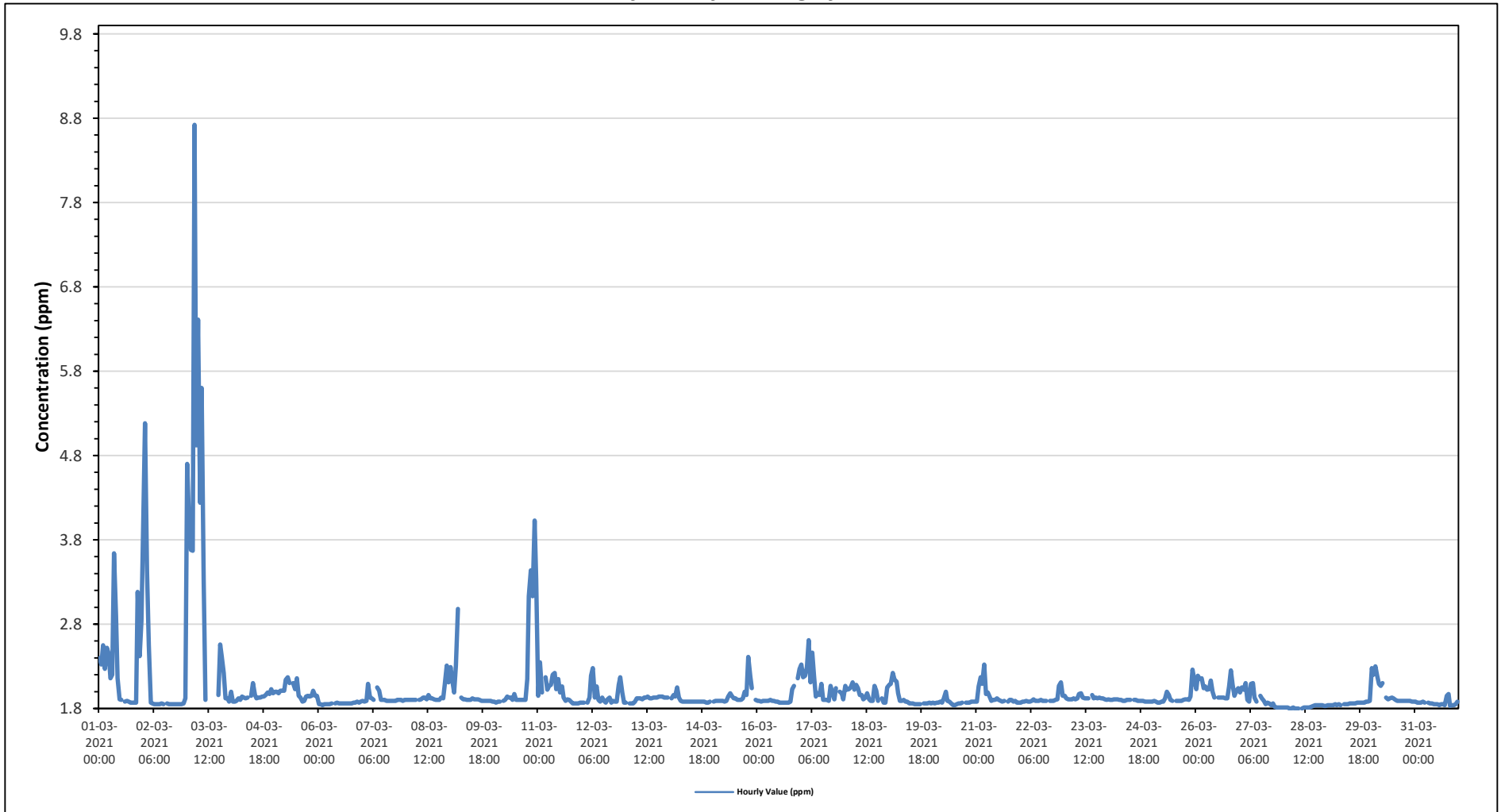
Maximum Hourly Value:	8.72 ppm on March 3 at hour 4	Hours in Service:	744
Maximum Daily Value:	3.67 ppm on March 3	Hours of Data:	707
Minimum Hourly Value:	1.80 ppm on March 28 at hour 3	Hours of Missing Data:	0
Minimum Daily Value:	1.82 ppm on March 28	Hours of Calibration:	37
Monthly Average:	2.01 ppm	Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Mar 1	2.40	2.32	2.55	2.27	2.52	2.45	2.16	2.20	3.64	2.89	2.16	1.91	1.90	S	1.88	1.89	1.88	1.87	1.87	1.87	3.18	2.42	2.84	1.87	3.64	2.30		
Mar 2	4.16	5.18	3.42	2.55	1.87	1.86	1.85	1.85	1.85	1.85	1.86	1.85	S	1.86	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.86	1.86	1.92	1.85	5.18	2.20	
Mar 3	4.70	4.06	3.68	3.67	8.72	4.92	6.41	4.24	5.60	3.33	1.90	S	C	C	C	C	C	1.96	2.56	2.42	2.22	1.92	1.92	1.88	1.88	8.72	3.67	
Mar 4	2.00	1.88	1.88	1.89	1.92	1.90	1.94	1.93	1.92	1.93	S	1.95	2.10	1.96	1.92	1.93	1.93	1.94	1.94	1.96	1.99	1.97	2.03	1.98	1.88	2.10	1.95	
Mar 5	2.00	2.00	1.98	2.01	2.01	2.01	2.14	2.17	2.10	S	2.10	2.03	2.16	1.95	1.93	1.88	1.89	1.94	1.95	1.94	1.95	2.01	1.95	1.95	1.88	2.17	2.00	
Mar 6	1.85	1.85	1.84	1.85	1.85	1.85	1.85	1.86	S	1.86	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.87	1.88	1.87	1.88	1.84	1.88	1.86	
Mar 7	1.89	1.88	1.89	2.09	1.93	1.92	1.90	S	2.05	2.01	1.90	1.90	1.90	1.89	1.89	1.89	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.89	1.90	1.88	2.09	1.92
Mar 8	1.90	1.90	1.90	1.90	1.90	1.90	S	1.90	1.91	1.93	1.93	1.91	1.96	1.92	1.92	1.91	1.90	1.90	1.90	1.93	1.92	2.08	2.31	2.11	1.90	2.31	1.95	
Mar 9	2.29	2.15	1.99	2.31	2.98	S	1.93	1.91	1.91	1.90	1.90	1.90	1.92	1.91	1.91	1.91	1.90	1.89	1.89	1.89	1.89	1.89	1.89	1.88	1.88	2.98	2.00	
Mar 10	1.88	1.87	1.88	1.88	S	1.89	1.90	1.94	1.93	1.93	1.90	1.90	1.97	1.90	1.90	1.90	1.90	1.90	1.90	2.15	3.13	3.44	3.13	4.03	3.34	1.87	4.03	2.24
Mar 11	1.95	2.35	1.99	S	2.17	2.02	2.07	2.08	2.20	2.22	2.03	2.15	1.99	2.06	1.93	1.89	1.91	1.90	1.88	1.86	1.86	1.86	1.86	1.87	1.86	2.35	2.00	
Mar 12	1.87	1.87	S	1.87	1.93	2.19	2.28	1.93	2.06	1.90	1.88	1.93	1.89	1.87	1.91	1.93	1.87	1.89	1.88	1.88	2.08	2.17	1.99	1.87	1.87	2.28	1.95	
Mar 13	1.87	S	S	1.86	1.86	1.88	1.92	1.92	1.91	1.93	1.93	1.94	1.92	1.92	1.93	1.93	1.93	1.94	1.94	1.94	1.93	1.93	1.93	1.93	1.86	1.94	1.91	
Mar 14	S	1.92	1.96	1.94	2.05	1.93	1.89	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.87	1.87	1.88	S	1.87	2.05	1.90	
Mar 15	1.88	1.89	1.89	1.89	1.89	1.89	1.88	1.89	1.94	1.98	1.95	1.92	1.92	1.90	1.90	1.90	1.92	2.00	1.96	2.41	2.18	2.04	S	1.90	1.88	2.41	1.95	
Mar 16	1.89	1.89	1.88	1.89	1.89	1.89	1.89	1.90	1.89	1.89	1.88	1.88	1.87	1.87	1.87	1.87	1.87	1.87	1.88	2.03	2.07	S	2.16	2.27	1.87	2.27	1.93	
Mar 17	2.32	2.17	2.19	2.29	2.61	2.11	2.46	2.18	1.94	1.98	1.96	2.09	1.90	1.90	1.90	1.89	2.07	1.98	1.91	2.04	S	2.00	1.98	1.91	1.89	2.61	2.08	
Mar 18	2.07	2.02	2.03	2.05	2.11	2.02	2.08	2.04	1.96	1.96	1.91	1.93	1.98	1.91	1.89	1.89	2.07	2.01	1.89	S	1.92	1.87	1.87	2.05	1.87	2.11	1.98	
Mar 19	2.08	2.09	2.22	2.14	2.12	1.98	1.89	1.89	1.90	1.88	1.88	1.86	1.86	1.86	1.85	1.85	1.85	1.85	S	1.86	1.86	1.86	1.87	1.86	1.85	2.22	1.93	
Mar 20	1.87	1.86	1.87	1.87	1.88	1.87	1.92	2.00	1.89	1.88	1.86	1.84	1.84	1.85	1.86	1.86	1.87	S	1.87	1.87	1.87	1.88	1.88	1.88	1.84	2.00	1.88	
Mar 21	1.88	2.06	2.17	2.09	2.32	1.97	1.99	1.94	1.89	1.90	1.90	1.92	1.90	1.89	1.88	1.89	S	1.88	1.90	1.90	1.88	1.89	1.87	1.87	1.87	2.32	1.95	
Mar 22	1.87	1.88	1.88	1.89	1.88	1.88	1.89	1.91	1.89	1.89	1.89	1.89	1.90	1.89	1.89	1.89	S	1.89	1.89	1.89	1.90	1.91	2.07	2.11	1.95	1.87	2.11	1.91
Mar 23	1.95	1.92	1.91	1.91	1.91	1.92	1.91	1.92	1.97	1.98	1.93	1.92	1.92	1.92	S	1.96	1.92	1.93	1.92	1.93	1.92	1.92	1.91	1.90	1.90	1.98	1.93	
Mar 24	1.91	1.90	1.90	1.91	1.91	1.91	1.90	1.90	1.89	1.89	1.90	1.90	1.90	S	1.90	1.90	1.89	1.89	1.89	1.89	1.88	1.88	1.88	1.88	1.88	1.88	1.91	1.90
Mar 25	1.88	1.89	1.88	1.87	1.87	1.88	1.88	1.92	2.00	1.96	1.90	1.89	S	1.89	1.89	1.89	1.90	1.91	1.91	1.90	1.94	2.26	2.14	1.87	2.26	1.93		
Mar 26	2.03	2.19	2.15	2.16	2.04	2.06	2.02	2.03	2.13	2.00	1.93	S	1.93	1.93	1.93	1.93	1.92	1.92	2.06	2.25	2.08	1.95	2.01	2.04	1.92	2.25	2.03	
Mar 27	1.99	2.05	2.02	2.10	1.90	1.88	2.09	2.10	1.93	1.88	S	1.95	1.92	1.89	1.85	1.87	1.86	1.84	1.86	1.82	1.81	1.81	1.81	1.81	1.81	2.10	1.91	
Mar 28	1.81	1.81	1.81	1.80	1.80	1.81	1.80	1.80	1.80	S	1.80	1.81	1.81	1.81	1.81	1.81	1.82	1.83	1.84	1.84	1.84	1.84	1.84	1.83	1.83	1.80	1.84	1.82
Mar 29	1.84	1.84	1.84	1.84	1.85	1.84	1.85	1.84	S	1.85	1.85	1.85	1.86	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.87	1.87	1.88	1.88	1.89	1.84	1.89	1.86
Mar 30	2.28	2.20	2.30	2.19	2.09	2.07	2.10	S	1.93	1.91	1.92	1.93	1.92	1.90	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.88	1.88	1.88	2.30	1.98
Mar 31	1.88	1.87	1.87	1.87	1.88	1.87	S	1.87	1.86	1.86	1.85	1.85	1.85	1.84	1.85	1.85	1.84	1.95	1.97	1.83	1.84	1.84	1.85	1.88	1.83	1.97	1.87	
Diurnal Maximum	4.70	5.18	3.68	3.67	8.72	4.92	6.41	4.24	5.60	3.33	2.16	2.15	2.16	2.06	1.93	1.96	2.07	2.01	2.56	3.13	3.44	3.18	4.03	3.34				
Diurnal Average	2.14	2.16	2.09	2.06	2.26	2.05	2.13	2.03	2.13	2.01	1.92	1.92	1.92	1.90	1.89	1.89	1.90	1.90	1.93	1.99	1.98	2.01	2.03	2.01				

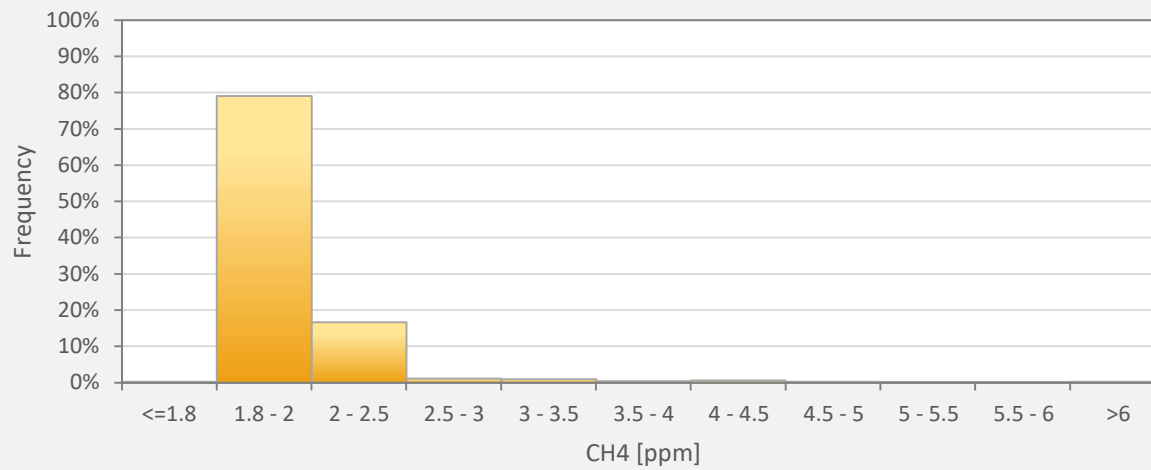
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	InValid Data (Equipment Malfunction/Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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 CH4 - Reno Station



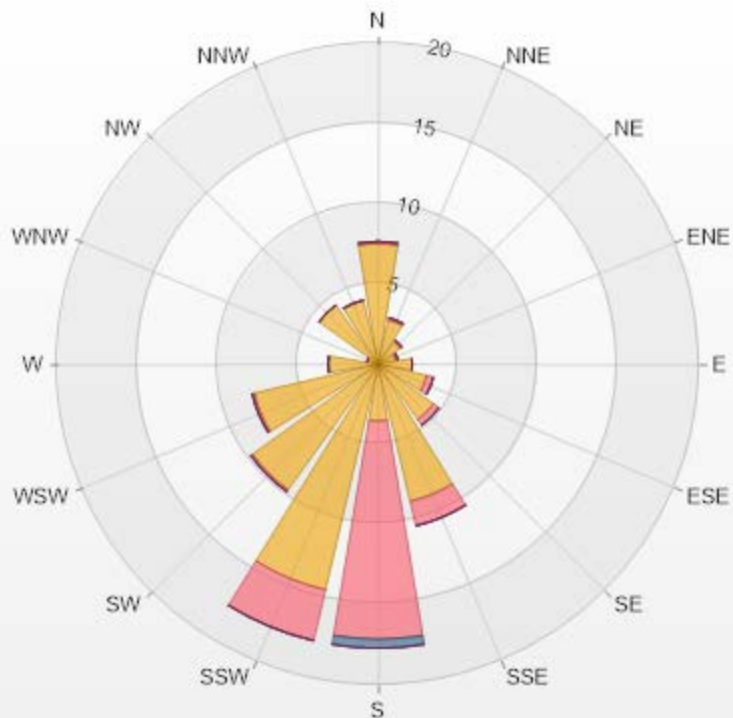
CH4[ppm] Histogram: PRAMP RENO Monthly: 03-2021 1 Hr.



Classes	CH4
<=1.8	0.28%
1.8 - 2	79.07%
2 - 2.5	16.69%
2.5 - 3	1.13%
3 - 3.5	0.99%
3.5 - 4	0.42%
4 - 4.5	0.57%
4.5 - 5	0.28%
5 - 5.5	0.14%
5.5 - 6	0.14%
>6	0.28%

Wind: PRAMP RENO Poll.: PRAMP RENO-CH4[ppm] Monthly: 03-2021 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	7.5	0.14	0	0	0	7.64
NNE	2.83	0.14	0	0	0	2.97
NE	1.7	0.14	0	0	0	1.84
ENE	1.13	0.14	0	0	0	1.27
E	2.12	0	0	0	0	2.12
ESE	3.11	0.42	0	0	0	3.53
SE	4.24	0.42	0	0	0	4.66
SSE	8.77	1.56	0	0	0	10.33
S	3.54	13.58	0.57	0	0	17.69
SSW	14.43	3.25	0	0	0	17.68
SW	9.62	0.14	0	0	0	9.76
WSW	7.92	0.14	0	0	0	8.06
W	3.11	0	0	0	0	3.11
WNW	0.71	0	0	0	0	0.71
NW	4.53	0	0	0	0	4.53
NNW	4.1	0	0	0	0	4.1
Summary	79.36	20.07	0.57	0	0	100



PRAMP-202103

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% Icon Classes (ppm)

79 0-2

20 2-5

1 5-10

0 10-20

0 >20.0



PEACE RIVER AREA MONITORING PROGRAM

**Reno Station - March 2021
Summary of Hourly Averages**

NON-METHANE HYDROCARBONS (NMHC) in ppm

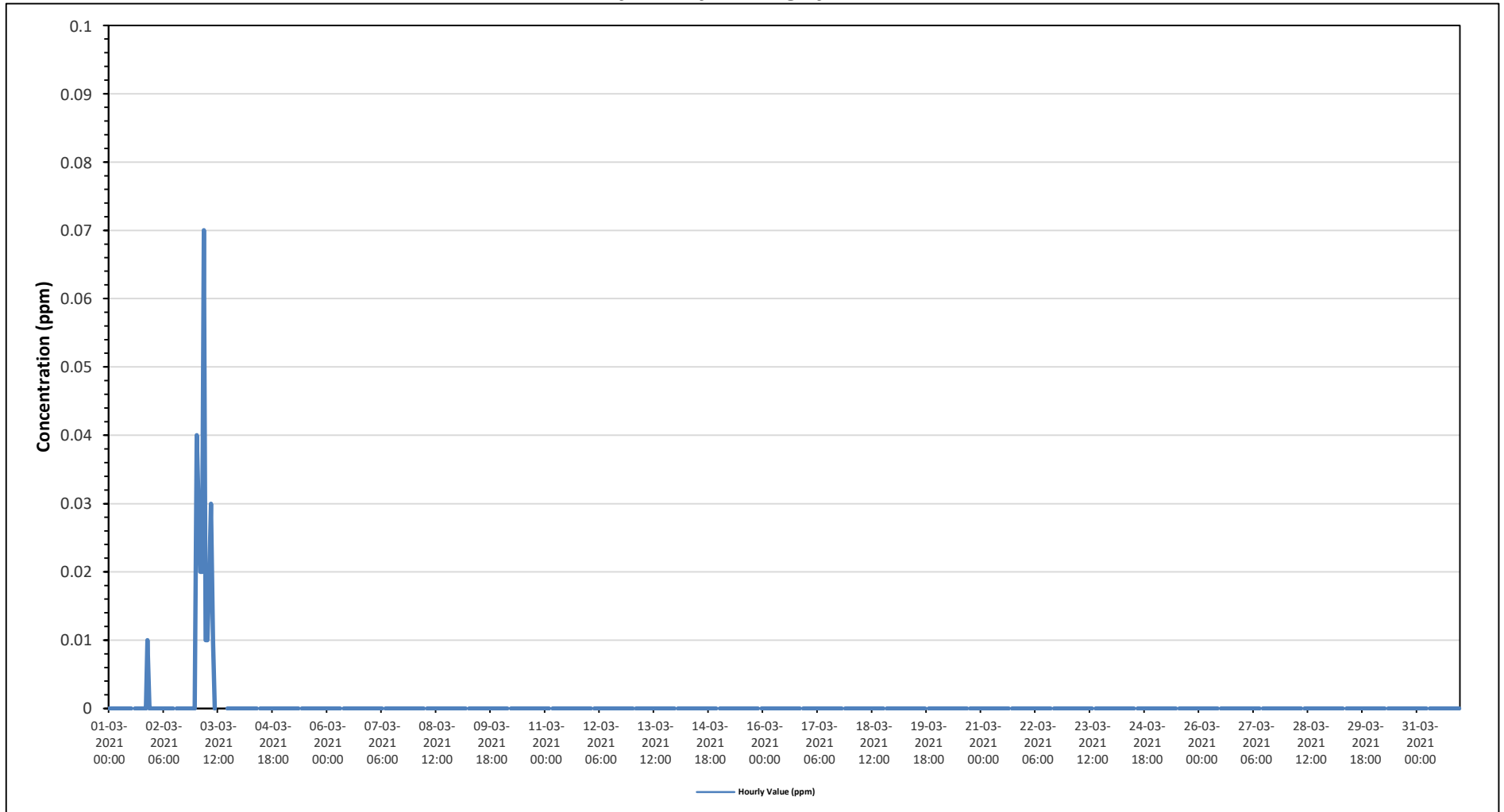
Maximum Hourly Value:	0.07 ppm on March 3 at hour 4	Hours in Service:	744
Maximum Daily Value:	0.01 ppm on March 3	Hours of Data:	707
Minimum Hourly Value:	0.00 ppm on March 1 at hour 0	Hours of Missing Data:	0
Minimum Daily Value:	0.00 ppm on March 2	Hours of Calibration:	37
Monthly Average:	0.00 ppm	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
Mar 1	0.00	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	0.00	0.01	0.00
Mar 2	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
Mar 3	0.04	0.03	0.02	0.02	0.07	0.01	0.01	0.02	0.03	0.01	0.00	S	C	C	C	C	C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.01
Mar 4	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
Mar 5	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
Mar 6	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
Mar 7	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
Mar 8	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
Mar 9	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
Mar 10	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
Mar 11	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
Mar 12	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
Mar 13	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
Mar 14	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	S	0.00	0.00
Mar 15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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
Mar 16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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
Mar 17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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
Mar 18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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
Mar 19	0.00	0.00	0.00	0.00	0.00	0.00	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
Mar 20	0.00	0.00	0.00	0.00	0.00	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
Mar 21	0.00	0.00	0.00	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
Mar 22	0.00	0.00	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
Mar 23	0.00	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
Mar 24	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
Mar 25	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
Mar 26	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
Mar 27	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
Mar 28	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
Mar 29	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
Mar 30	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
Mar 31	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
Diurnal Maximum	0.04	0.03	0.02	0.02	0.07	0.01	0.01	0.02	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	0.01	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

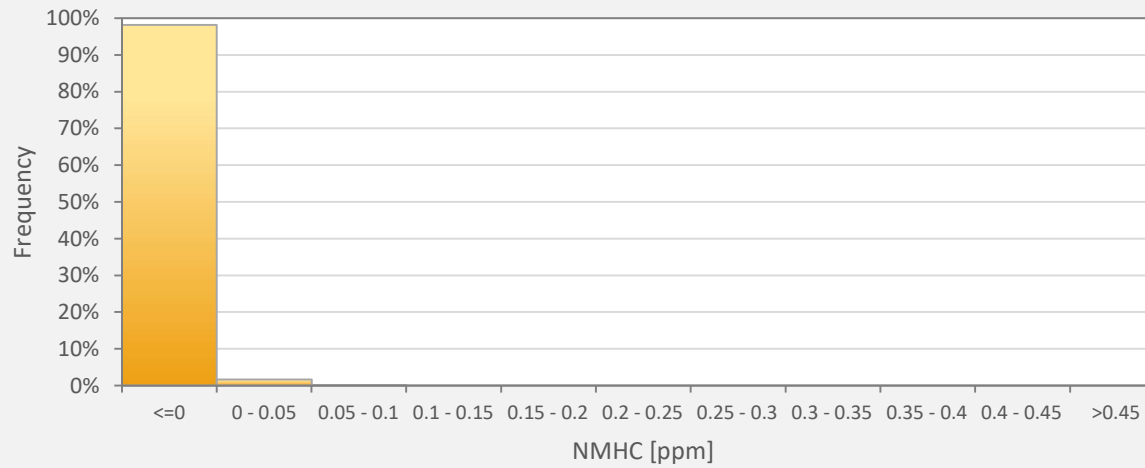
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	InValid Data (Equipment Malfunction/Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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 NMHC - Reno Station



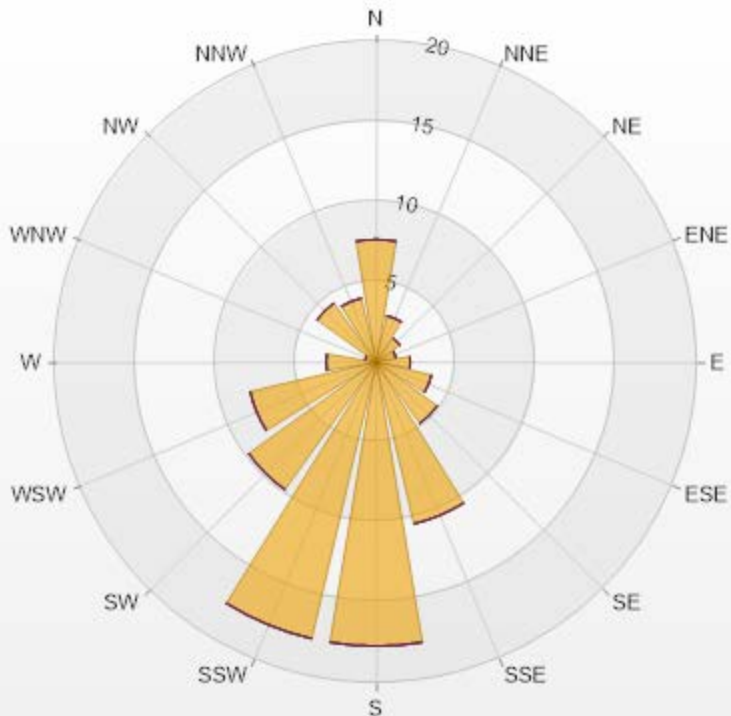
NMHC[ppm] Histogram: PRAMP RENO Monthly: 03-2021 1 Hr.



Classes	NMHC
<=0	98.16%
0 - 0.05	1.70%
0.05 - 0.1	0.14%
0.1 - 0.15	0.00%
0.15 - 0.2	0.00%
0.2 - 0.25	0.00%
0.25 - 0.3	0.00%
0.3 - 0.35	0.00%
0.35 - 0.4	0.00%
0.4 - 0.45	0.00%
>0.45	0.00%

Wind: PRAMP RENO Poll.: PRAMP RENO-NMHC[ppm] Monthly: 03-2021 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	7.64	0	0	0	0	7.64
NNE	2.97	0	0	0	0	2.97
NE	1.84	0	0	0	0	1.84
ENE	1.27	0	0	0	0	1.27
E	2.12	0	0	0	0	2.12
ESE	3.54	0	0	0	0	3.54
SE	4.67	0	0	0	0	4.67
SSE	10.33	0	0	0	0	10.33
S	17.68	0	0	0	0	17.68
SSW	17.68	0	0	0	0	17.68
SW	9.76	0	0	0	0	9.76
WSW	8.06	0	0	0	0	8.06
W	3.11	0	0	0	0	3.11
WNW	0.71	0	0	0	0	0.71
NW	4.53	0	0	0	0	4.53
NNW	4.1	0	0	0	0	4.1
Summary	100	0	0	0	0	100





PRAMP-202103

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% 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 - March 2021 Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

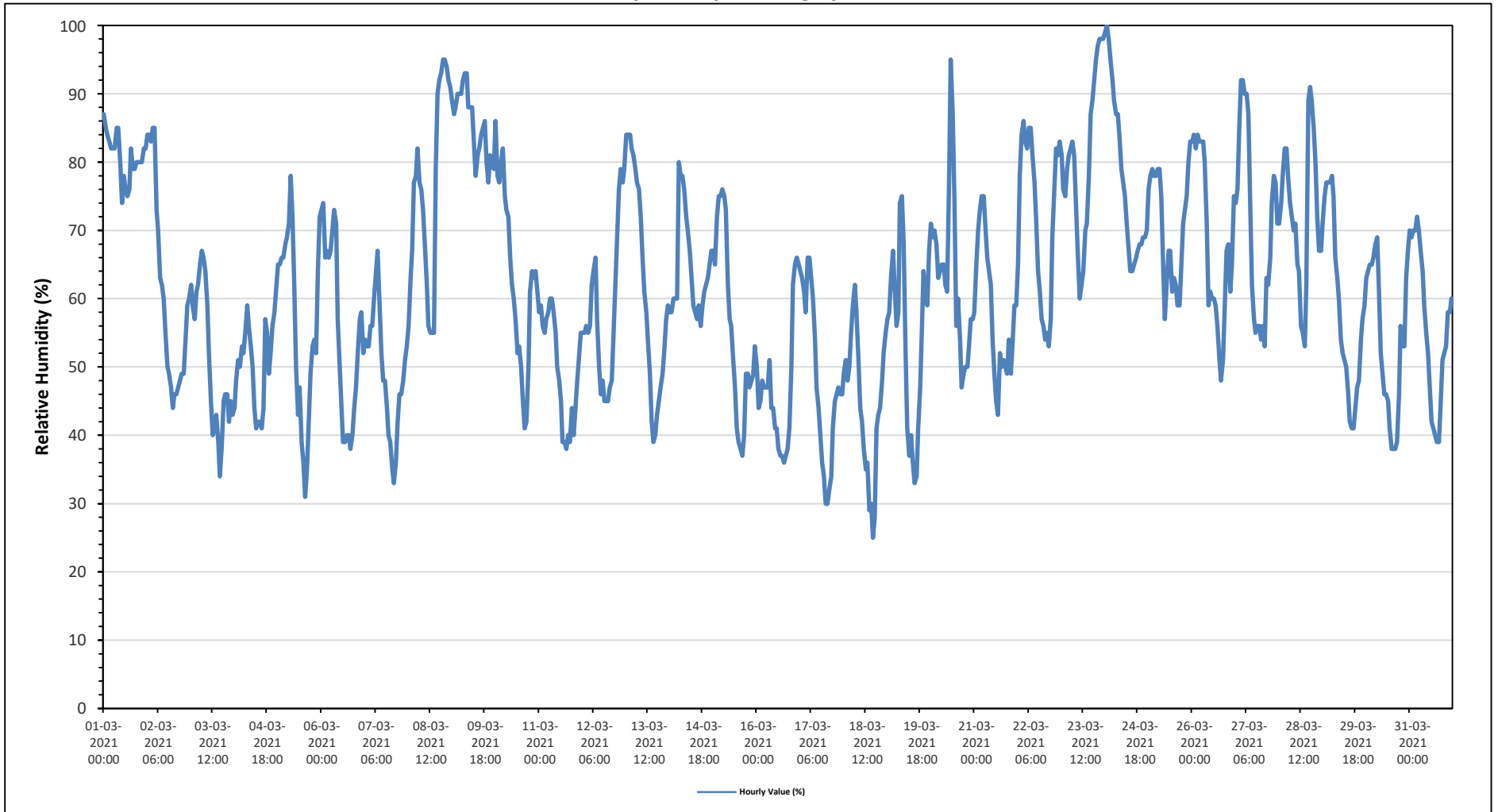
Maximum Hourly Value:	100 %	on March 24 at hour 1	Hours in Service:	744
Maximum Daily Value:	85.5 %	on March 9	Hours of Data:	744
Minimum Hourly Value:	25 %	on March 18 at hour 16	Hours of Missing Data:	0
Minimum Daily Value:	44.7 %	on March 18	Hours of Calibration:	0
Monthly Average:	61.8 %		Operational 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
Mar 1	87	85	84	83	82	82	82	85	85	80	74	78	76	75	76	82	79	79	80	80	80	80	82	82	74	87	80.8
Mar 2	84	84	83	85	85	73	70	63	62	60	55	50	49	47	44	46	46	47	48	49	49	54	59	60	44	85	60.5
Mar 3	62	59	57	61	62	65	67	66	64	59	52	45	40	41	43	39	34	38	45	46	46	42	45	43	34	67	50.9
Mar 4	44	48	51	50	53	52	55	59	56	53	50	44	41	42	42	41	44	57	55	49	52	56	58	61	41	61	50.5
Mar 5	65	65	66	66	68	69	71	78	72	62	50	43	47	39	36	31	35	43	49	53	54	52	64	72	31	78	56.3
Mar 6	73	74	66	67	66	67	70	73	71	57	50	44	39	39	40	40	38	40	44	47	52	57	58	52	38	74	55.2
Mar 7	54	53	53	56	56	60	64	67	59	52	48	48	44	40	39	35	33	36	42	46	46	48	51	53	33	67	49.3
Mar 8	56	63	67	77	78	82	77	76	73	68	62	56	55	55	55	79	90	92	93	95	95	94	92	91	55	95	75.9
Mar 9	89	87	88	90	90	90	92	93	93	88	88	88	83	78	81	82	84	85	86	80	77	81	80	79	77	93	85.5
Mar 10	86	78	77	80	82	75	73	72	66	62	60	57	52	53	50	45	41	42	50	61	64	63	64	61	41	86	63.1
Mar 11	58	59	56	55	57	58	60	60	58	55	50	48	45	39	39	38	40	39	44	40	44	48	52	55	38	60	49.9
Mar 12	55	55	56	55	56	62	64	66	57	50	46	48	45	45	45	47	48	54	62	69	76	79	77	79	45	79	58.2
Mar 13	84	84	84	82	81	79	77	76	72	66	61	58	54	49	42	39	40	43	45	47	49	52	57	59	39	84	61.7
Mar 14	58	58	60	60	60	80	78	78	76	72	70	67	63	59	58	57	59	56	59	61	62	63	65	67	56	80	64.4
Mar 15	67	65	72	75	75	76	75	73	62	57	56	51	47	41	39	38	37	40	49	49	47	48	49	53	37	76	55.9
Mar 16	50	44	45	48	47	47	47	51	44	44	41	41	38	37	37	36	37	38	41	50	62	65	66	65	36	66	46.7
Mar 17	64	63	61	58	66	66	63	60	54	47	44	40	36	34	30	30	32	34	41	45	46	47	46	46	30	66	48.0
Mar 18	49	51	48	50	55	59	62	58	51	44	42	38	35	36	29	30	25	28	41	43	44	48	52	55	25	62	44.7
Mar 19	57	58	63	67	62	56	58	74	75	68	53	41	37	40	36	33	34	41	47	56	64	60	59	67	33	75	54.4
Mar 20	71	69	70	68	63	64	65	65	62	61	78	95	87	74	56	60	54	47	49	50	50	53	57	57	47	95	63.5
Mar 21	58	65	70	73	75	75	71	66	64	62	54	49	45	43	52	50	51	50	49	54	49	53	59	59	43	75	58.2
Mar 22	65	78	84	86	83	82	85	85	81	77	72	64	61	57	56	54	55	53	57	69	76	82	81	83	53	86	71.9
Mar 23	81	76	75	79	81	82	83	81	74	66	60	62	64	70	71	78	87	89	92	95	97	98	98	98	60	98	80.7
Mar 24	99	100	98	95	92	89	87	87	84	79	77	75	71	67	64	64	65	66	67	68	68	69	69	70	64	100	77.9
Mar 25	76	78	79	78	78	79	79	75	64	57	62	67	67	61	63	62	59	59	64	71	73	75	80	83	57	83	70.4
Mar 26	83	84	82	84	83	83	83	80	71	59	61	60	60	59	56	51	48	51	59	67	68	61	65	75	48	84	68.0
Mar 27	74	76	85	92	92	90	90	87	74	62	57	55	56	56	54	56	53	63	62	66	74	78	77	71	53	92	70.8
Mar 28	71	74	78	82	82	78	74	72	70	71	65	64	56	55	53	62	89	91	89	85	80	72	67	67	53	91	72.8
Mar 29	71	75	77	77	77	78	75	66	63	60	54	52	51	50	46	42	41	41	44	47	48	54	57	59	41	78	58.5
Mar 30	63	64	65	65	66	68	69	61	52	49	46	46	45	41	38	38	38	39	46	56	53	53	63	67	38	69	53.8
Mar 31	70	69	70	70	72	70	67	64	59	55	52	47	42	41	40	39	39	44	51	52	53	58	58	60	39	72	55.9
Diurnal Maximum	99	100	98	95	92	90	92	93	93	88	88	95	87	78	81	82	90	92	93	95	97	98	98	98			
Diurnal Average	68.5	69.1	70.0	71.4	71.8	72.1	72.0	71.5	66.7	61.4	57.7	55.5	52.6	50.4	48.7	49.2	50.2	52.4	56.5	59.5	61.2	62.7	64.7	66.1			

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)	NRIM	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 RH - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2021
Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

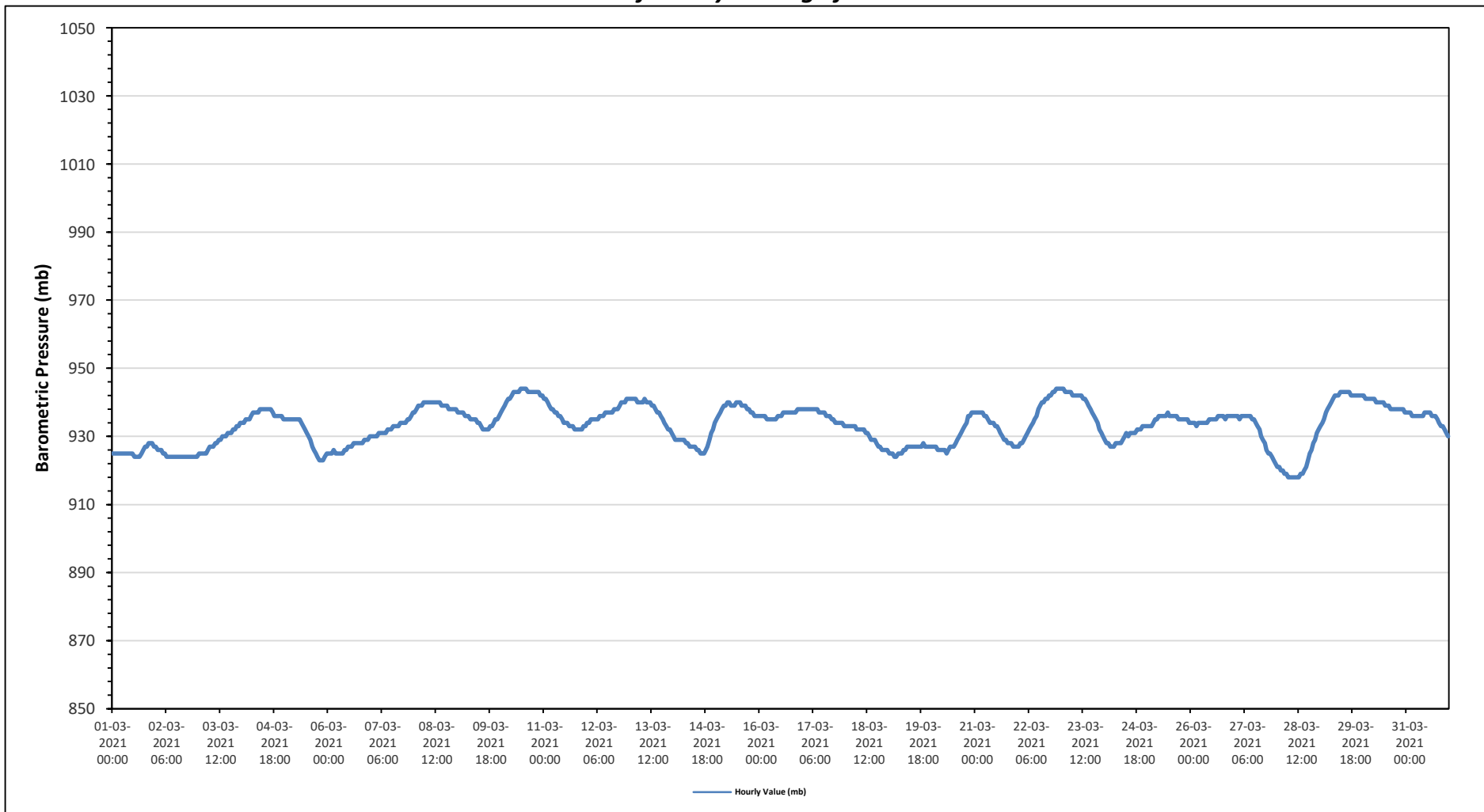
Maximum Hourly Value:	944 mb on March 10 at hour 11	Hours in Service:	744
Maximum Daily Value:	942 mb on March 10	Hours of Data:	744
Minimum Hourly Value:	918 mb on March 28 at hour 6	Hours of Missing Data:	0
Minimum Daily Value:	922 mb on March 28	Hours of Calibration:	0
Monthly Average:	933 mb	Operational 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		
Mar 1	925	925	925	925	925	925	925	925	925	925	925	925	924	924	924	924	924	925	926	927	927	928	928	928	927	924	928	925.5	
Mar 2	927	926	926	926	925	925	924	924	924	924	924	924	924	924	924	924	924	924	924	924	924	924	924	924	924	924	924	924	924
Mar 3	925	925	925	925	925	925	926	927	927	927	928	928	929	929	930	930	930	931	931	931	932	932	933	933	934	925	934	928.9	
Mar 4	934	934	935	935	935	936	937	937	937	937	938	938	938	938	938	938	938	937	936	936	936	936	936	935	934	938	938	936.5	
Mar 5	935	935	935	935	935	935	935	935	935	934	933	932	931	930	929	927	926	925	924	923	923	923	924	925	923	935	935	930.2	
Mar 6	925	925	925	926	925	925	925	925	925	926	926	927	927	927	928	928	928	928	928	928	929	929	929	930	925	930	926.8		
Mar 7	930	930	930	930	931	931	931	931	931	932	932	932	933	933	933	933	934	934	934	934	934	935	935	936	937	930	937	932.6	
Mar 8	937	938	939	939	939	940	940	940	940	940	940	940	940	940	940	939	939	939	939	939	938	938	938	938	937	940	939.1		
Mar 9	937	937	937	937	936	936	936	935	935	935	935	935	934	934	933	932	932	932	933	933	933	934	935	935	936	932	937	934.6	
Mar 10	937	938	939	940	941	941	942	943	943	943	943	944	944	944	944	943	943	943	943	943	943	943	943	942	942	937	944	942.1	
Mar 11	941	941	940	939	938	938	937	937	936	936	935	934	934	934	933	933	933	932	932	932	932	932	933	933	932	941	941	935.2	
Mar 12	934	934	935	935	935	935	935	936	936	936	937	937	937	937	937	938	938	938	939	940	940	940	941	941	934	941	937.1		
Mar 13	941	941	941	941	940	940	940	940	941	940	940	940	939	939	938	937	936	935	934	933	932	932	931	931	931	941	941	937.8	
Mar 14	930	929	929	929	929	929	929	928	928	927	927	927	927	926	926	925	925	925	926	927	929	932	932	934	925	934	928.1		
Mar 15	935	936	937	938	939	939	940	940	939	939	939	940	940	940	939	939	939	938	938	937	937	936	936	936	935	940	938.2		
Mar 16	936	936	936	936	935	935	935	935	935	935	936	936	936	936	937	937	937	937	937	937	937	938	938	938	935	938	936.3		
Mar 17	938	938	938	938	938	938	938	938	938	937	937	937	937	936	936	935	935	934	934	934	934	934	933	933	933	938	938	936.3	
Mar 18	933	933	933	933	933	933	932	932	932	932	932	931	931	930	929	929	929	928	927	927	926	926	926	926	926	926	933	930.1	
Mar 19	925	925	925	924	924	925	925	925	926	926	927	927	927	927	927	927	927	927	927	927	928	927	927	927	924	928	926.2		
Mar 20	927	927	927	926	926	926	926	926	925	926	927	927	927	928	929	930	931	932	933	934	936	936	937	937	925	937	929.4		
Mar 21	937	937	937	937	937	936	936	935	934	934	934	933	933	932	931	930	929	929	928	928	928	927	927	927	927	927	937	932.3	
Mar 22	927	928	928	929	930	931	932	933	934	935	936	938	939	940	940	941	941	942	942	943	943	944	944	944	927	944	936.8		
Mar 23	944	944	943	943	943	943	942	942	942	942	942	942	941	941	940	939	938	937	936	935	934	932	931	930	930	944	944	939.4	
Mar 24	929	928	928	927	927	927	928	928	928	929	930	931	931	930	931	931	931	932	932	932	933	933	933	927	933	933	929.9		
Mar 25	933	933	933	934	935	935	936	936	936	936	936	936	936	936	936	936	935	935	935	935	935	935	934	933	937	937	935.2		
Mar 26	934	934	934	933	934	934	934	934	934	934	934	935	935	935	935	935	936	936	936	936	935	936	936	936	933	936	934.9		
Mar 27	936	936	936	935	936	936	936	936	936	936	935	935	934	933	932	930	929	928	926	925	925	924	923	922	922	936	931.7		
Mar 28	921	921	920	920	919	919	918	918	918	918	918	918	918	919	919	920	921	923	925	926	928	929	931	932	918	932	921.6		
Mar 29	933	934	935	937	938	939	940	941	942	942	942	943	943	943	943	943	942	942	942	942	942	942	942	942	933	943	940.6		
Mar 30	942	941	941	941	941	941	940	940	940	940	940	940	939	939	939	938	938	938	938	938	938	938	938	937	937	942	939.4		
Mar 31	937	937	937	936	936	936	936	936	936	936	937	937	937	937	936	936	936	935	934	933	933	932	931	930	930	937	935.3		
Diurnal Maximum	944	944	943	943	943	943	942	943	943	943	943	944	944	944	943	943	943	943	943	943	943	943	944	944	927	944	944		
Diurnal Average	933	933	933	933	933	933	933	933	933	934	934	934	934	933	933	933	933	933	933	933	933	933	933	933	930	937	935.3		

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 BP - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2021
Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

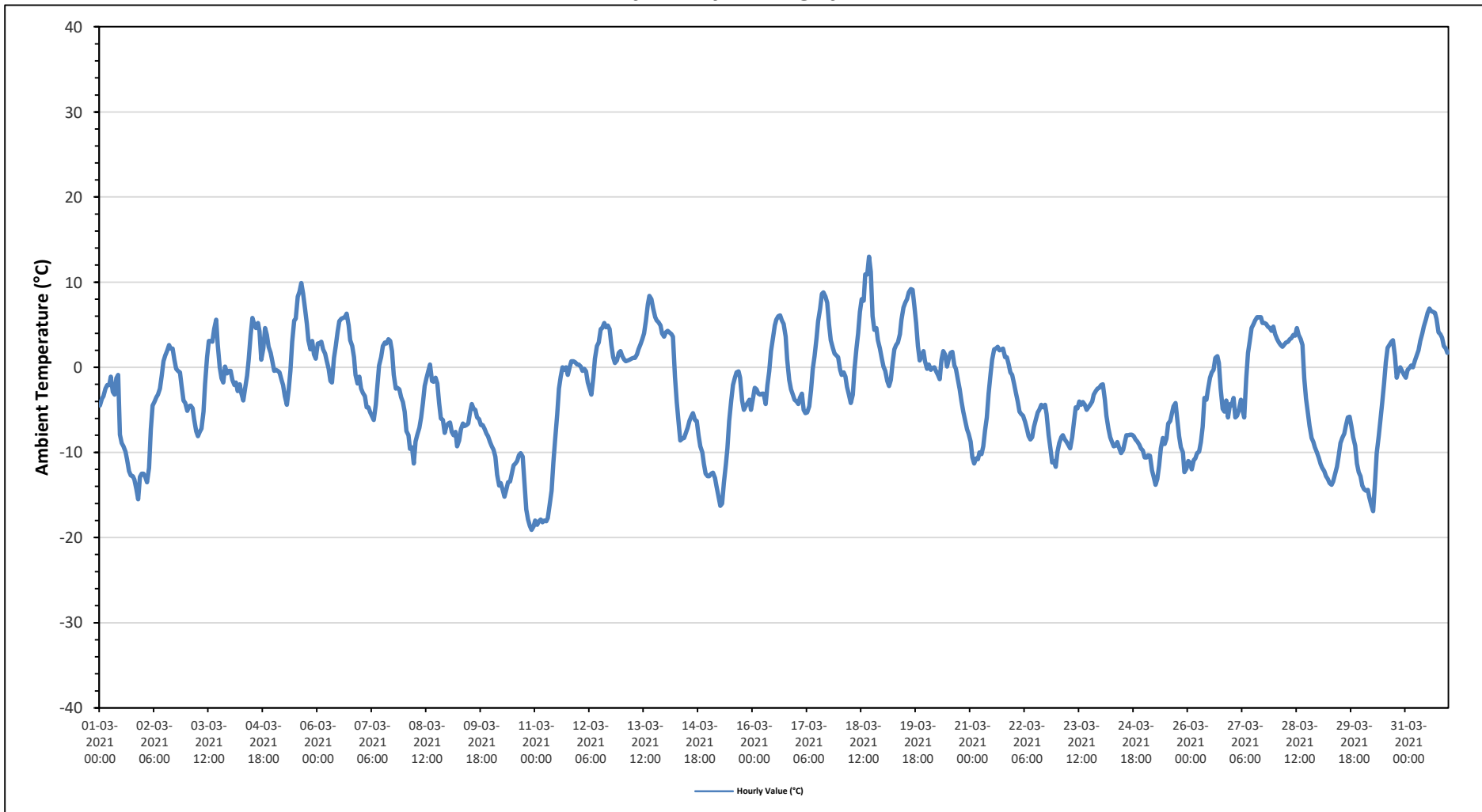
Maximum Hourly Value:	13.0 °C	on March 18 at hour 16	Hours in Service:	744
Maximum Daily Value:	3.6 °C	on March 13	Hours of Data:	744
Minimum Hourly Value:	-19.1 °C	on March 10 at hour 22	Hours of Missing Data:	0
Minimum Daily Value:	-13.4 °C	on March 10	Hours of Calibration:	0
Monthly Average:	-3.0 °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
Mar 1	-4.5	-3.7	-3.4	-2.5	-2.1	-2.1	-1.1	-2.9	-3.2	-1.3	-0.9	-7.9	-8.9	-9.3	-9.9	-10.8	-12.2	-12.7	-12.8	-13.2	-14.3	-15.5	-12.9	-12.5	-15.5	-0.9	-7.5
Mar 2	-12.5	-12.9	-13.5	-11.8	-7.3	-4.5	-4.1	-3.5	-3.2	-2.5	-1	0.7	1.4	1.9	2.6	2.2	0.9	-0.2	-0.4	-0.6	-2.1	-3.9	-4.2	-13.5	2.6	-3.2	
Mar 3	-5.1	-4.6	-4.5	-4.8	-6.1	-7.5	-8.1	-7.6	-7.2	-5.2	-2	1.2	3.1	3.1	3	4.5	5.6	2.7	0	-1.3	-1.8	0.1	-0.7	-0.4	-8.1	5.6	-1.8
Mar 4	-0.4	-1.5	-2.1	-1.8	-2.8	-2	-3	-3.9	-2.5	-1	0.8	3.8	5.8	5.1	4.6	5.2	4.2	0.9	2.2	4.6	3.8	2.4	1.7	0.8	-3.9	5.8	1.0
Mar 5	-0.4	-0.3	-0.4	-0.6	-1.5	-2.1	-3.4	-4.4	-2.7	-0.4	3	5.5	5.7	8.3	8.9	9.9	8.7	6.8	5.1	3.2	2.1	3.1	1.5	1	-4.4	9.9	2.4
Mar 6	2.8	2.8	3	2.1	1.6	0.8	-0.2	-1.6	-1.8	1.1	2.5	4.1	5.4	5.7	5.8	5.9	6.3	4.9	3.2	2.5	1.2	-0.9	-1.9	-1.1	-1.9	6.3	2.3
Mar 7	-2.5	-3	-3.4	-4.7	-4.7	-5.3	-5.8	-6.2	-4.4	-1.9	0.2	1.2	2.5	2.9	2.8	3.3	3.1	1.9	-0.9	-2.5	-2.4	-2.6	-3.5	-4.1	-6.2	3.3	-1.7
Mar 8	-5.2	-7.5	-8	-9.6	-9.4	-11.3	-8.7	-7.9	-7.1	-5.9	-4.2	-2.2	-1.3	-0.5	0.3	-1.6	-1.7	-1.2	-1.9	-4.2	-6	-6.2	-7.7	-6.9	-11.3	0.3	-5.2
Mar 9	-6.6	-6.5	-7.6	-8	-7.6	-9.3	-8.6	-7.3	-6.6	-6.9	-6.8	-6.6	-5.3	-4.3	-4.9	-5	-5.9	-6.1	-6.8	-6.8	-7.2	-7.8	-8.1	-8.8	-9.3	-4.3	-6.9
Mar 10	-9.6	-9.7	-10.5	-12.6	-13.9	-13.6	-14.4	-15.2	-14.4	-13.5	-13.4	-12.6	-11.5	-11.3	-11	-10.3	-10.1	-10.5	-13.2	-16.7	-17.9	-18.6	-19.1	-18.7	-19.1	-9.3	-13.4
Mar 11	-18	-18.5	-18.1	-17.9	-18.2	-18	-18.1	-17.7	-16	-14.5	-11.2	-8.5	-5.6	-2.5	-1.1	0	-0.3	0	-0.9	0.1	0.7	0.7	0.6	0.3	-18.5	0.7	-8.4
Mar 12	0.3	0.1	-0.4	-0.2	-0.5	-1.8	-2.5	-3.2	-1.1	1	2.5	2.9	4.5	4.6	5.2	4.7	4.9	4.5	2.6	1.2	0.5	0.8	1.7	1.9	-3.2	5.2	1.4
Mar 13	1.3	0.9	0.7	0.8	0.9	1	1.1	1.1	1.5	2.1	2.7	3.3	4	5.4	7.4	8.4	8	6.9	5.9	5.5	5.3	4.9	4	3.6	0.7	8.4	3.6
Mar 14	4.1	4.3	4.1	3.9	3.6	-1.1	-4.1	-6.7	-8.6	-8.4	-8.3	-7.8	-7.1	-6.3	-5.8	-5.4	-6.2	-6.3	-8	-9.3	-10	-11.3	-12.5	-12.8	-12.8	4.3	-5.3
Mar 15	-12.8	-12.5	-12.4	-13	-14	-15.2	-16.3	-16	-13.6	-11.4	-9.5	-6.3	-3.9	-2.1	-1.3	-0.6	-0.5	-1.2	-3.9	-5	-4.6	-4.2	-3.8	-5	-16.3	-0.5	-7.9
Mar 16	-3.8	-2.4	-2.6	-3.1	-3.2	-3.1	-3.1	-4.3	-2.1	-0.5	1.9	3.5	4.9	5.6	6	6.1	5.5	5.1	3.6	0.9	-1.5	-2.6	-3.3	-3.8	-4.3	6.1	0.2
Mar 17	-4	-4.3	-3.6	-3.1	-5	-5.4	-5.3	-4.6	-2.7	-0.2	1.3	3.5	5.4	6.9	8.6	8.8	8.3	7.6	5.1	3.2	2.3	1.6	1.4	1.2	-5.4	8.8	1.1
Mar 18	-0.3	-0.9	-0.6	-1.1	-2.3	-3.3	-4.2	-3.2	-0.4	2.1	4	6.5	8	7.8	10.9	10.9	13	11.2	6	4.4	4.6	3.2	2.2	1.1	-4.2	13.0	3.3
Mar 19	0.1	-0.4	-1.6	-2.2	-1.5	0.5	2.1	2.6	2.9	3.9	5.6	7	7.6	8	8.8	9.2	9.1	7.2	5.2	2.5	0.8	1.3	1.9	0.7	-2.2	9.2	3.4
Mar 20	-0.2	0.3	-0.3	-0.1	0	-0.5	-0.9	-1.4	0.9	1.9	1.5	0.1	1	1.7	1.8	0.2	-0.2	-1.5	-2.6	-4	-5.2	-6.2	-7.3	-7.8	-7.8	1.9	-1.2
Mar 21	-8.7	-10.6	-11.3	-10.7	-10.8	-10	-10.2	-9.3	-7.4	-5.9	-3.1	-0.7	0.9	2.1	2.2	2.4	2	2.1	2.2	1.2	1.2	0.4	-0.6	-0.9	-11.3	2.4	-3.5
Mar 22	-2	-2.9	-4	-5.2	-5.5	-5.7	-6.4	-7.2	-8.1	-8.5	-8.2	-7	-6.2	-5.3	-5	-4.4	-4.7	-4.4	-5.5	-8	-9.5	-11.2	-11	-11.7	-11.7	-2.0	-6.6
Mar 23	-9.9	-8.9	-8.2	-8	-8.5	-8.8	-9.2	-9.5	-8.2	-6.4	-4.7	-4.8	-4	-4.4	-4.1	-4.4	-5	-4.7	-4.4	-4	-3.2	-2.8	-2.5	-2.4	-9.9	-2.4	-5.9
Mar 24	-2.1	-2	-3.8	-5.7	-7.2	-8.2	-8.8	-9.3	-9.2	-8.8	-9.5	-10.1	-9.7	-8.9	-8	-8	-7.9	-7.9	-8.1	-8.5	-8.7	-9.1	-9.5	-9.8	-10.1	-2.0	-7.9
Mar 25	-10.6	-10.6	-10.3	-10.4	-12.1	-12.8	-13.8	-13.1	-11.6	-9.5	-8.3	-9	-8.4	-6.6	-6.3	-5.5	-4.6	-4.2	-5.9	-8.1	-9.4	-10	-12.3	-11.9	-13.8	-4.2	-9.4
Mar 26	-11	-11.2	-12	-10.9	-10.7	-10.1	-9.9	-8.8	-7	-3.6	-3.8	-2.6	-1.2	-0.6	-0.3	1.1	1.3	0.5	-2.5	-4.9	-5.2	-3.9	-5.9	-4.3	-12.0	1.3	-5.3
Mar 27	-4.5	-3.6	-5.9	-5.7	-5	-3.8	-5.1	-5.9	-1.3	1.7	3.1	4.6	5.1	5.5	5.9	5.9	5.9	5.2	5.2	5.1	4.8	4.6	4.3	4.8	-5.9	5.9	1.3
Mar 28	3.9	3.3	2.9	2.6	2.4	2.7	2.9	3	3.3	3.4	3.8	3.7	4.6	3.8	3.3	2.6	-1.3	-3.7	-5.5	-6.9	-8.3	-8.8	-9.4	-10	-10.0	4.6	-0.1
Mar 29	-10.6	-11.4	-11.8	-12.2	-12.8	-13.1	-13.6	-13.8	-13.4	-12.5	-11.7	-10.4	-8.9	-8.3	-7.8	-6.9	-5.9	-5.8	-6.9	-8.2	-9.2	-11.3	-12.3	-12.8	-13.8	-5.8	-10.5
Mar 30	-13.9	-14.3	-14.5	-14.4	-15.3	-16.2	-16.9	-13.7	-10.1	-8.1	-6.1	-4.1	-1.9	0.6	2.3	2.6	3	3.2	1.3	-1.2	-0.3	0	-0.5	-0.9	-16.9	3.2	-5.8
Mar 31	-1.2	-0.3	-0.1	0.2	0	0.8	1.4	2	3.1	4	4.8	5.6	6.4	6.9	6.6	6.5	6.4	5.7	4.1	3.9	3.5	2.5	2.2	1.7	-1.2	6.9	3.2
Diurnal Maximum	4.1	4.3	4.1	3.9	3.6	2.7	2.9	3.0	3.3	4.0	5.6	7.0	8.0	8.3	10.9	10.9	13.0	11.2	6.0	5.5	5.3	4.9	4.3	4.8			
Diurnal Average	-4.8	-4.9	-5.3	-5.5	-5.8	-6.1	-6.4	-6.4	-5.2	-3.7	-2.4	-1.4	-0.2	0.5	1.0	1.2	1.0	0.2	-1.2	-2.4	-3.0	-3.5	-4.1	-4.3			

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 AT - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2021
Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

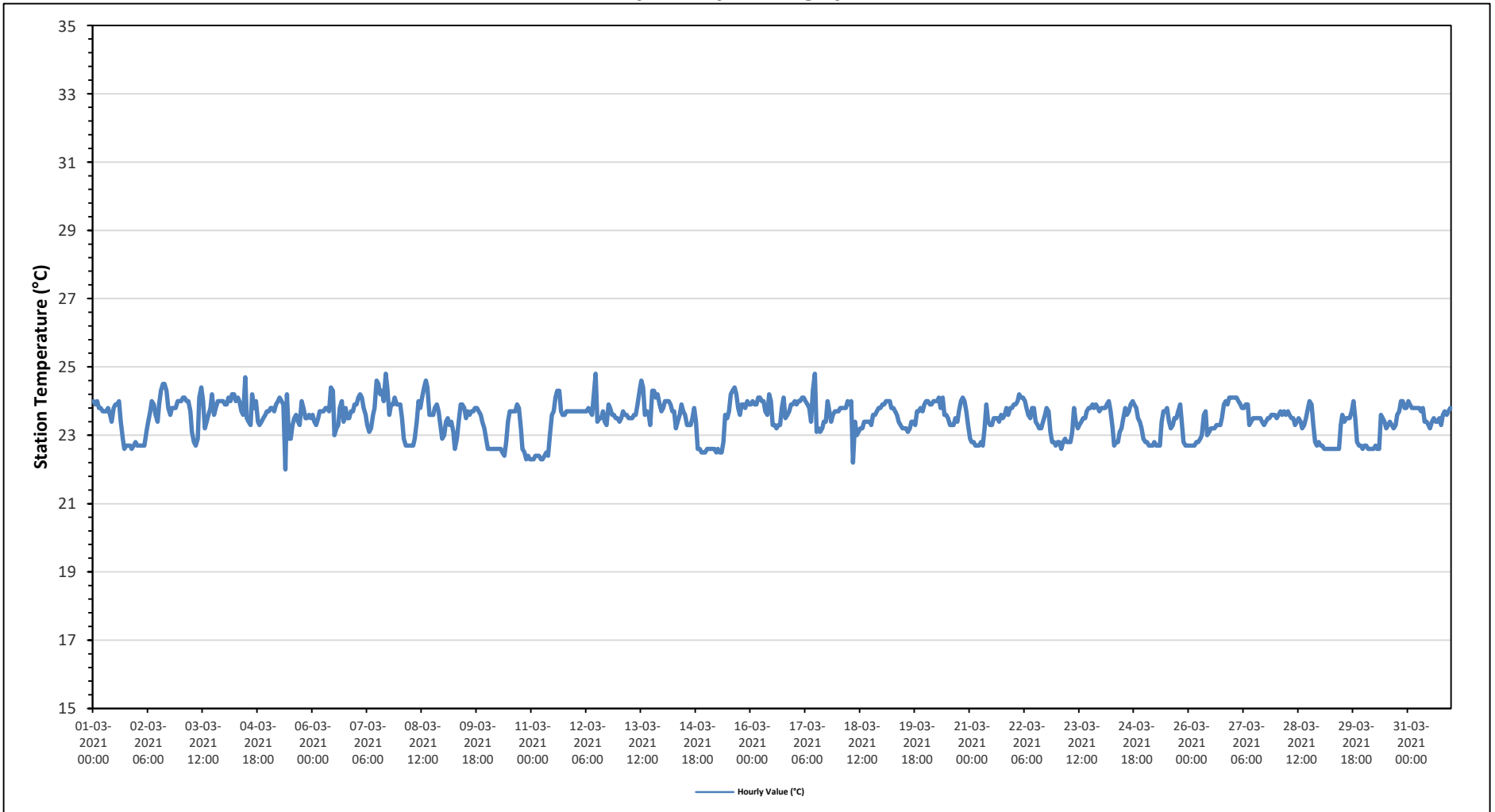
Maximum Hourly Value:	24.8 °C	on March 7 at hour 16	Hours in Service:	744
Maximum Daily Value:	24.0 °C	on March 7	Hours of Data:	744
Minimum Hourly Value:	22.0 °C	on March 5 at hour 9	Hours of Missing Data:	0
Minimum Daily Value:	22.9 °C	on March 10	Hours of Calibration:	0
Monthly Average:	23.5 °C		Operational 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	
Mar 1	24.0	23.9	24.0	23.8	23.8	23.7	23.7	23.7	23.8	23.6	23.4	23.8	23.9	23.9	24.0	23.4	22.9	22.6	22.7	22.7	22.6	22.7	22.8	22.6	24.0	23.4		
Mar 2	22.7	22.7	22.7	22.7	22.7	23.1	23.4	23.7	24.0	23.9	23.6	23.4	23.9	24.3	24.5	24.5	24.3	23.8	23.6	23.8	23.8	23.8	24.0	24.0	22.7	24.5	23.6	
Mar 3	24.0	24.1	24.1	24.0	24.0	23.7	23.1	22.8	22.7	22.9	24.1	24.4	24.0	23.2	23.4	23.6	23.8	24.2	23.6	23.8	24.0	24.0	24.0	24.0	22.7	24.4	23.7	
Mar 4	23.9	23.9	24.1	24.0	24.2	24.2	24.0	24.1	24.0	23.7	23.6	24.7	23.5	23.4	23.3	24.2	23.8	24.0	23.4	23.3	23.4	23.5	23.6	23.7	23.3	24.7	23.8	
Mar 5	23.7	23.8	23.8	23.7	23.9	24.0	24.1	24.0	23.9	22.0	24.2	22.9	22.9	23.3	23.5	23.6	23.4	23.3	24.0	23.8	23.5	23.5	23.6	23.5	22.0	24.2	23.6	
Mar 6	23.6	23.4	23.3	23.5	23.7	23.7	23.7	23.8	23.8	23.7	24.4	24.3	23.0	23.2	23.3	23.8	24.0	23.4	23.8	23.5	23.5	23.7	23.7	23.9	23.0	24.4	23.7	
Mar 7	23.9	24.1	24.2	24.1	23.8	23.6	23.3	23.1	23.2	23.6	23.8	24.6	24.5	24.2	24.3	24.0	24.8	24.4	23.6	23.9	23.9	24.1	23.9	23.9	23.1	24.8	24.0	
Mar 8	23.9	23.5	22.9	22.7	22.7	22.7	22.7	22.7	22.9	23.4	24.0	23.8	24.1	24.4	24.6	24.4	23.6	23.6	23.6	23.8	23.9	23.7	23.3	22.9	22.7	24.6	23.5	
Mar 9	23.0	23.4	23.5	23.3	23.4	23.1	22.6	22.9	23.4	23.9	23.9	23.8	23.5	23.7	23.6	23.7	23.7	23.7	23.8	23.8	23.7	23.6	23.4	23.2	22.9	22.6	23.9	23.5
Mar 10	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.5	22.4	22.8	23.4	23.7	23.7	23.7	23.9	23.8	23.2	22.6	22.5	23.3	22.4	22.3	22.3	23.9	22.9	
Mar 11	22.3	22.3	22.4	22.4	22.4	22.3	22.3	22.4	22.5	22.4	23.0	23.6	23.7	24.1	24.3	24.3	23.7	23.6	23.6	23.7	23.7	23.7	23.7	23.7	22.3	24.3	23.2	
Mar 12	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.8	23.7	23.6	24.2	24.8	23.4	23.5	23.5	23.7	23.4	23.3	23.9	23.8	23.6	23.6	23.5	23.5	23.3	24.8	23.7	
Mar 13	23.4	23.5	23.7	23.6	23.6	23.5	23.5	23.5	23.5	23.6	23.6	23.9	24.3	24.6	24.4	23.6	23.7	23.6	23.3	24.3	24.3	24.1	24.2	23.9	23.7	23.3	24.6	23.8
Mar 14	23.8	24.0	24.0	24.0	23.9	23.7	23.7	23.2	23.4	23.6	23.9	23.7	23.6	23.3	23.3	23.3	23.5	23.8	23.4	22.6	22.6	22.5	22.5	22.5	22.5	24.0	23.4	
Mar 15	22.6	22.6	22.6	22.6	22.6	22.5	22.6	22.5	22.5	22.8	23.6	23.5	23.7	24.2	24.3	24.4	24.2	23.8	23.6	23.9	23.9	23.8	24.0	23.9	22.5	24.4	23.4	
Mar 16	23.9	24.0	23.9	23.9	24.1	24.1	24.0	24.0	23.7	23.6	24.2	24.0	23.3	23.3	23.2	23.3	23.3	23.8	24.1	23.5	23.6	23.7	23.9	23.9	23.2	24.2	23.8	
Mar 17	24.0	23.9	24.0	24.0	24.1	24.1	24.0	23.9	23.8	23.4	24.3	24.8	23.1	23.2	23.1	23.2	23.4	24.0	23.7	23.4	23.6	23.7	23.7	23.7	23.1	24.8	23.7	
Mar 18	23.7	23.8	23.8	23.8	23.8	24.0	23.9	24.0	22.2	23.4	23.0	23.1	23.2	23.2	23.4	23.4	23.4	23.4	23.3	23.6	23.6	23.7	23.8	23.8	22.2	24.0	23.5	
Mar 19	23.9	23.9	24.0	24.0	24.0	23.8	23.8	23.7	23.6	23.4	23.3	23.2	23.2	23.1	23.2	23.4	23.4	23.3	23.7	23.7	23.8	23.7	23.9	23.1	24.0	23.6	23.6	
Mar 20	24.0	24.0	23.9	23.9	24.0	24.0	24.0	24.1	23.8	24.1	23.6	23.6	23.5	23.3	23.3	23.3	23.5	23.4	23.7	24.0	24.1	24.0	23.7	23.3	23.3	24.1	23.8	
Mar 21	22.9	22.8	22.8	22.7	22.7	22.7	22.8	22.7	23.2	23.9	23.4	23.3	23.5	23.5	23.5	23.5	23.4	23.6	23.5	23.6	23.8	23.6	23.8	23.8	22.7	23.9	23.3	
Mar 22	23.9	23.9	24.0	24.2	24.1	24.1	24.0	23.8	23.6	23.5	23.8	23.8	23.4	23.3	23.2	23.2	23.4	23.6	23.8	23.7	23.1	22.8	22.8	22.7	22.7	24.2	23.6	
Mar 23	22.8	22.8	22.6	22.8	22.9	22.8	22.8	22.8	23.1	23.8	23.4	23.2	23.3	23.4	23.5	23.5	23.7	23.8	23.8	23.9	23.8	23.9	23.8	23.7	22.6	23.9	23.3	
Mar 24	23.8	23.8	23.8	23.9	24.0	23.7	23.2	22.7	22.8	22.8	23.1	23.2	23.5	23.8	23.6	23.7	23.9	24.0	23.9	23.8	23.5	23.4	23.2	22.9	22.7	24.0	23.5	
Mar 25	22.8	22.8	22.7	22.7	22.7	22.8	22.7	22.7	22.7	22.7	23.4	23.7	23.7	23.8	23.4	23.2	23.3	23.5	23.5	23.7	23.9	23.4	22.8	22.7	22.7	23.9	23.1	
Mar 26	22.7	22.7	22.7	22.7	22.8	22.8	22.9	23.0	23.6	23.7	23.0	23.1	23.2	23.2	23.2	23.3	23.3	23.3	23.5	23.9	24.0	23.9	24.1	24.1	22.7	24.1	23.3	
Mar 27	24.1	24.1	24.1	24.0	23.9	23.8	23.8	23.9	23.9	23.3	23.4	23.5	23.5	23.5	23.5	23.5	23.4	23.3	23.4	23.5	23.5	23.6	23.6	23.3	23.3	24.1	23.7	
Mar 28	23.5	23.6	23.7	23.6	23.7	23.6	23.7	23.6	23.5	23.5	23.3	23.4	23.5	23.4	23.2	23.3	23.5	23.8	24.0	23.9	23.3	22.8	22.7	22.8	22.7	24.0	23.5	
Mar 29	22.7	22.7	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	23.3	23.6	23.4	23.5	23.5	23.5	23.7	24.0	23.5	22.8	22.7	22.6	22.6	24.0	23.0	
Mar 30	22.7	22.7	22.6	22.6	22.6	22.6	22.7	22.6	22.6	23.6	23.5	23.4	23.2	23.3	23.4	23.3	23.2	23.3	23.6	23.7	24.0	24.0	23.8	23.8	22.6	24.0	23.2	
Mar 31	24.0	23.9	23.8	23.8	23.8	23.8	23.8	23.7	23.8	23.4	23.4	23.3	23.2	23.4	23.5	23.4	23.4	23.5	23.3	23.6	23.7	23.6	23.7	23.8	23.2	24.0	23.6	
Diurnal Maximum	24.1	24.1	24.2	24.2	24.2	24.2	24.1	24.1	24.0	24.1	24.4	24.8	24.6	24.4	24.6	24.5	24.8	24.4	24.3	24.3	24.1	24.2	24.1	24.1	23.3	24.1	23.8	
Diurnal Average	23.4	23.4	23.4	23.4	23.4	23.4	23.3	23.3	23.3	23.4	23.6	23.7	23.5	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.5	23.5	23.5	23.4	23.4	23.4	23.4	

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
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 - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2021
Summary of Hourly Averages

PRECIPITATION in mm

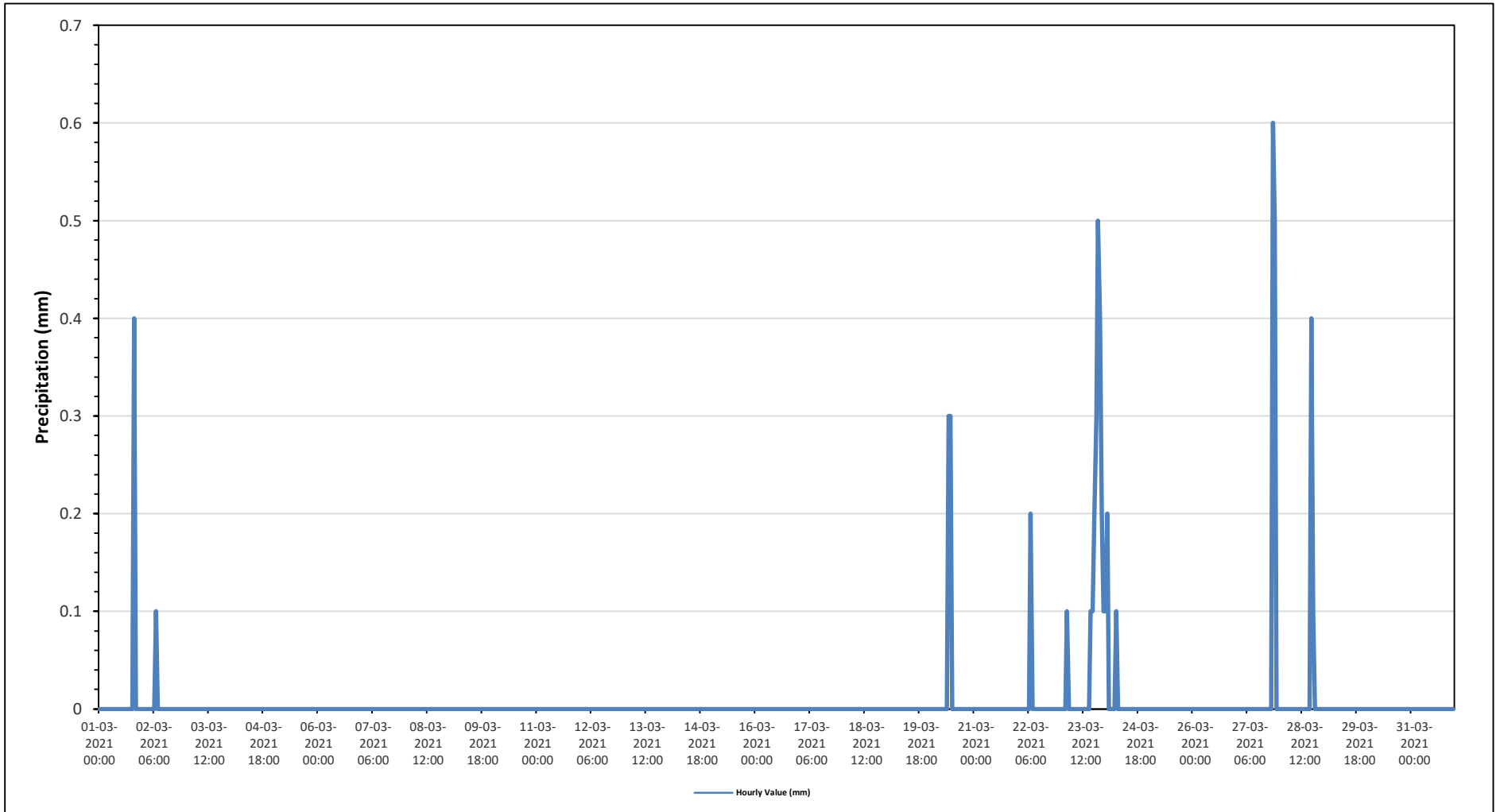
Maximum Hourly Value:	0.6 mm on March 27 at hour 20	Hours in Service:	744
Maximum Daily Value:	2.0 mm on March 23	Hours of Data:	744
Minimum Hourly Value:	0.0 mm on March 1 at hour 0	Hours of Missing Data:	0
Minimum Daily Value:	0.0 mm on March 3	Hours of Calibration:	0
Monthly Total:	5.3 mm	Operational 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		
Mar 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0	0	0	0	0.0	0.4	0.4		
Mar 2	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	0.1		
Mar 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		
Mar 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		
Mar 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		
Mar 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		
Mar 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		
Mar 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		
Mar 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		
Mar 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		
Mar 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		
Mar 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		
Mar 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		
Mar 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		
Mar 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		
Mar 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		
Mar 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0		
Mar 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		
Mar 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		
Mar 20	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3	0.6		
Mar 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		
Mar 22	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0.2		
Mar 23	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.2	0.3	0.5	0.4	0.2	0.1	0.0	0.5	2.0
Mar 24	0.1	0.2	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0.4		
Mar 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		
Mar 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		
Mar 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0.5	0	0	0.0	0.6	1.1	
Mar 28	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	0.0	0.4	0.5		
Mar 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		
Mar 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		
Mar 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		
Diurnal Maximum	0.1	0.2	0.0	0.1	0.0	0.0	0.1	0.2	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.1	0.4	0.2	0.4	0.6	0.5	0.2	0.1					
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
K	Collection Error	N	No Data (Machine Not in Service)
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)
		Q	Quality Assurance
		Y	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 Precipitation - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2021 Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

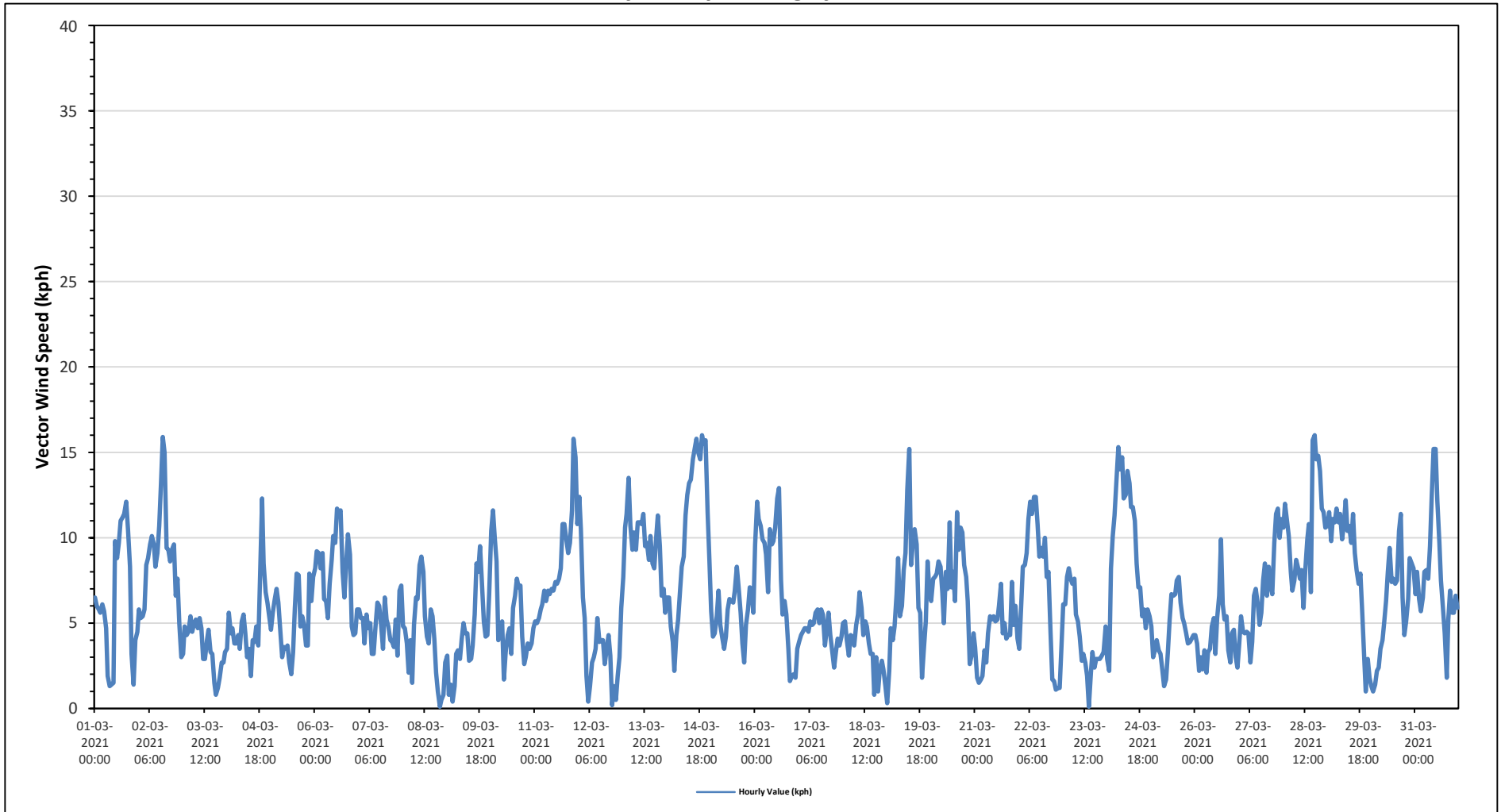
Maximum Hourly Value:	16.0 kph on March 14 at hour 19	Hours in Service:	744
Maximum Daily Value:	9.4 kph on March 13	Hours of Data:	744
Minimum Hourly Value:	0.1 kph on March 8 at hour 20	Hours of Missing Data:	0
Minimum Daily Value:	1.8 kph on March 1	Hours of Calibration:	0
Monthly Average:	2.2 kph	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
Mar 1	6.5	6.0	5.8	5.6	6.1	5.7	4.7	1.9	1.3	1.4	1.5	9.8	8.8	9.7	11.0	11.2	11.4	12.1	10.5	8.3	3.2	1.4	4.0	4.5	1.3	12.1	1.8
Mar 2	5.8	5.3	5.4	5.8	8.4	8.8	9.6	10.1	9.6	8.3	9.1	10.7	13.2	15.9	15.0	9.4	9.3	8.6	9.3	9.6	6.6	7.6	5.0	3.0	3.0	15.9	8.3
Mar 3	3.2	4.8	4.3	4.5	5.4	4.5	5.0	5.2	4.7	5.3	4.7	2.9	2.9	4.0	4.6	3.3	3.2	1.5	0.8	1.2	1.8	2.7	2.7	3.3	0.8	5.4	3.5
Mar 4	3.5	5.6	4.4	4.7	3.8	3.8	4.3	3.5	5.1	5.5	4.4	3.0	3.5	1.9	4.0	3.9	4.8	3.7	7.7	12.3	8.5	6.8	6.2	5.4	1.9	12.3	3.7
Mar 5	4.6	5.6	6.4	7.0	6.2	4.7	3.0	3.6	3.5	3.7	2.7	2.0	3.3	5.9	7.9	7.8	4.8	5.4	4.9	3.7	3.7	7.9	6.3	7.7	2.0	7.9	4.4
Mar 6	8.2	9.2	9.1	8.2	9.1	6.4	6.3	5.3	7.3	8.7	10.1	9.7	11.7	11.4	11.6	8.0	6.5	8.7	10.2	9.0	4.8	4.3	4.4	5.8	4.3	11.7	7.8
Mar 7	5.8	5.3	5.3	3.8	5.5	4.7	5.0	3.2	3.2	4.9	6.2	6.0	5.0	3.5	6.5	5.2	4.8	4.0	3.9	3.6	5.2	3.1	6.9	7.2	3.1	7.2	3.2
Mar 8	4.8	4.7	3.8	2.1	4.0	1.5	4.9	6.5	6.4	8.4	8.9	8.0	5.4	4.2	3.8	5.8	5.4	4.1	2.1	1.0	0.1	0.5	0.8	2.7	0.1	8.9	2.5
Mar 9	3.1	0.8	1.4	0.4	1.3	3.2	3.4	2.9	4.1	5.0	4.4	4.4	2.8	2.9	3.7	5.5	8.0	9.5	7.5	5.1	4.2	4.3	6.7	0.4	9.5	3.3	
Mar 10	10.4	11.6	10.0	8.6	4.0	4.5	5.1	1.7	3.3	4.3	4.7	3.2	5.9	6.6	7.6	7.1	7.2	4.2	2.6	3.0	3.8	3.5	3.8	4.7	1.7	11.6	2.1
Mar 11	5.1	5.0	5.3	5.8	6.1	6.9	6.3	6.9	6.7	7.0	6.9	7.4	7.3	7.6	8.2	10.8	10.8	10.0	9.1	9.7	11.6	15.8	14.7	10.8	5.0	15.8	7.1
Mar 12	12.4	10.5	6.5	5.3	1.9	0.4	1.3	2.7	3.0	3.5	5.3	3.9	4.0	4.0	2.6	3.4	4.3	3.1	0.2	1.3	0.5	1.9	3.0	5.9	0.2	12.4	2.4
Mar 13	7.7	10.6	11.4	13.5	10.7	9.3	10.3	9.3	10.9	10.9	10.8	11.4	9.5	9.7	8.7	10.1	8.5	8.2	10.1	11.3	9.5	6.6	7.0	5.6	5.6	13.5	9.4
Mar 14	6.5	6.5	4.8	3.9	2.2	4.3	5.2	7.0	8.3	8.9	11.3	12.5	13.2	13.4	14.6	15.2	15.8	15.0	14.6	16.0	15.5	15.7	11.5	8.7	2.2	16.0	8.4
Mar 15	5.7	4.2	4.4	5.4	6.9	4.9	4.2	3.5	4.2	5.8	6.4	6.3	6.2	6.9	8.3	7.1	5.6	3.8	2.7	4.9	5.8	7.1	7.0	5.6	2.7	8.3	4.3
Mar 16	9.6	12.1	11.1	10.7	9.9	9.7	9.0	6.8	10.5	9.6	9.8	10.6	12.3	12.9	7.5	5.5	6.3	5.5	3.5	1.6	1.9	2.0	1.8	3.5	1.6	12.9	7.2
Mar 17	3.9	4.3	4.5	4.7	4.7	4.5	5.1	4.9	5.0	5.6	5.8	5.0	5.8	5.5	3.7	4.7	5.6	4.3	3.3	2.4	3.3	4.1	3.7	4.2	2.4	5.8	4.5
Mar 18	5.0	5.1	4.0	3.1	4.3	4.2	3.7	4.9	5.5	6.8	5.9	4.3	5.1	4.8	3.8	3.2	3.2	0.8	3.0	1.0	2.3	2.8	2.3	1.3	0.8	6.8	2.9
Mar 19	0.3	2.2	4.7	4.0	4.8	6.7	8.8	5.4	6.0	8.1	9.1	12.8	15.2	8.4	9.7	10.5	9.6	5.9	5.6	1.8	3.4	5.1	8.6	6.9	0.3	15.2	6.4
Mar 20	6.3	7.6	7.7	7.9	8.6	8.3	6.8	5.0	8.0	7.0	10.9	7.1	8.0	6.3	11.5	9.3	10.6	10.3	8.4	7.7	6.3	2.6	3.1	4.4	2.6	11.5	5.8
Mar 21	3.6	1.8	1.5	1.7	1.9	3.4	2.7	4.4	5.4	5.2	5.4	5.1	5.2	6.0	7.3	4.4	5.0	4.1	4.3	4.3	7.4	4.9	6.0	4.1	1.5	7.4	3.5
Mar 22	3.5	6.2	8.3	8.4	9.1	11.1	12.1	11.4	12.4	12.4	10.8	8.9	9.4	8.9	10.0	7.7	8.0	4.5	1.7	1.6	1.1	1.2	1.2	3.6	1.1	12.4	6.0
Mar 23	6.1	6.1	7.7	8.2	7.6	7.3	7.6	5.5	5.1	4.2	2.8	3.2	2.7	1.9	0.1	2.1	3.3	2.4	2.9	2.9	2.9	3.1	3.3	4.8	0.1	8.2	3.6
Mar 24	2.9	2.2	8.2	10.1	11.3	13.2	15.3	14.0	14.7	12.3	12.5	13.9	13.2	11.8	11.8	11.0	8.5	7.1	7.1	5.4	5.8	4.7	5.8	5.4	2.2	15.3	9.0
Mar 25	4.8	3.0	3.4	4.0	3.4	3.2	2.3	1.3	1.7	3.3	5.2	6.7	6.6	6.7	7.5	7.7	6.2	5.3	5.0	4.4	3.8	3.9	4.1	4.3	1.3	7.7	2.4
Mar 26	4.3	3.8	2.2	3.0	2.3	3.4	2.1	3.3	3.5	4.8	5.3	3.2	5.3	6.6	9.9	6.1	5.2	5.4	3.4	2.7	4.4	4.6	3.0	2.4	2.1	9.9	3.7
Mar 27	3.8	5.4	4.5	4.4	4.5	4.4	2.7	3.9	6.6	7.0	6.1	4.9	5.6	7.5	8.5	6.6	8.3	7.2	6.7	9.7	11.4	11.7	10.0	11.1	2.7	11.7	6.5
Mar 28	10.6	12.0	11.0	10.1	8.0	6.9	7.5	8.7	8.2	7.6	8.1	5.9	8.1	9.9	10.8	6.8	15.7	16.0	14.6	14.8	13.9	11.7	11.5	10.6	5.9	16.0	6.3
Mar 29	10.7	11.5	9.8	11.1	10.9	11.7	10.9	11.4	9.9	10.8	12.2	10.4	10.7	9.7	11.4	9.1	8.1	7.3	7.9	5.7	3.3	1.0	2.9	1.8	1.0	12.2	8.0
Mar 30	1.3	1.0	1.4	2.2	2.4	3.5	4.0	5.1	6.3	8.0	9.4	7.4	7.6	7.3	7.5	10.4	11.4	6.5	4.3	5.1	6.4	8.8	8.5	8.2	1.0	11.4	5.7
Mar 31	6.7	8.0	6.4	5.7	6.5	8.0	8.1	7.6	9.5	12.5	15.2	15.2	12.1	9.7	7.5	5.9	4.4	1.8	5.2	6.9	5.6	5.6	6.6	5.9	1.8	15.2	7.2
Diurnal Maximum	12	12	11	14	11	13	15	14	15	13	15	15	15	16	15	15	16	16	15	16	16	16	15	11			
Diurnal Average	5.7	6.1	6.0	5.9	5.9	5.9	6.0	5.7	6.4	7.0	7.5	7.3	7.6	7.5	8.0	7.3	7.4	6.3	6.0	5.8	5.4	5.4	5.5	5.5			

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

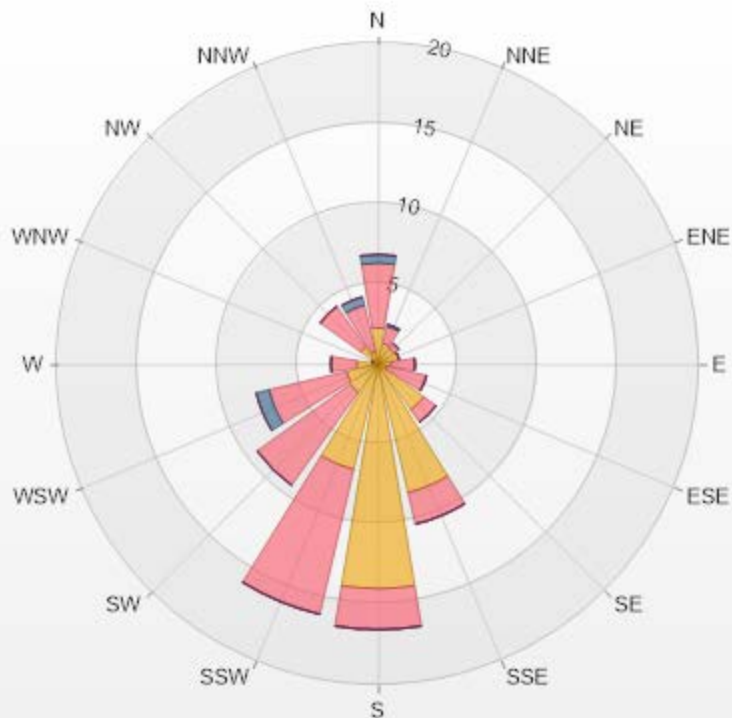
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

Timeseries Chart of Hourly Average for VWS - Reno Station



Wind: PRAMP RENO Monitor: WDS [KPH] Monthly: 03-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 5.91% 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	2.28	4.03	0.54	0	0	6.85
NNE	1.34	1.08	0.13	0	0	2.55
NE	1.21	0.4	0	0	0	1.61
ENE	1.34	0	0	0	0	1.34
E	0.81	1.48	0	0	0	2.29
ESE	0.54	2.55	0	0	0	3.09
SE	3.49	0.94	0	0	0	4.43
SSE	8.2	2.02	0	0	0	10.22
S	13.98	2.55	0	0	0	16.53
SSW	6.72	9.27	0	0	0	15.99
SW	2.15	7.12	0	0	0	9.27
WSW	2.02	4.97	0.81	0	0	7.8
W	1.34	1.61	0	0	0	2.95
WNW	0.27	0.13	0	0	0	0.4
NW	1.34	3.09	0	0	0	4.43
NNW	0.81	2.96	0.54	0	0	4.31
Summary	47.84	44.2	2.02	0	0	94.06



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% Icon Classes (KPH)	48	1.8-6.0	44	6.0-15.0	2	15.0-29.0	0	29.0-39.0	0	>39.0
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PEACE RIVER AREA MONITORING PROGRAM

**Reno Station - March 2021
Summary of Hourly Averages**

WIND DIRECTION (VWD) in sector

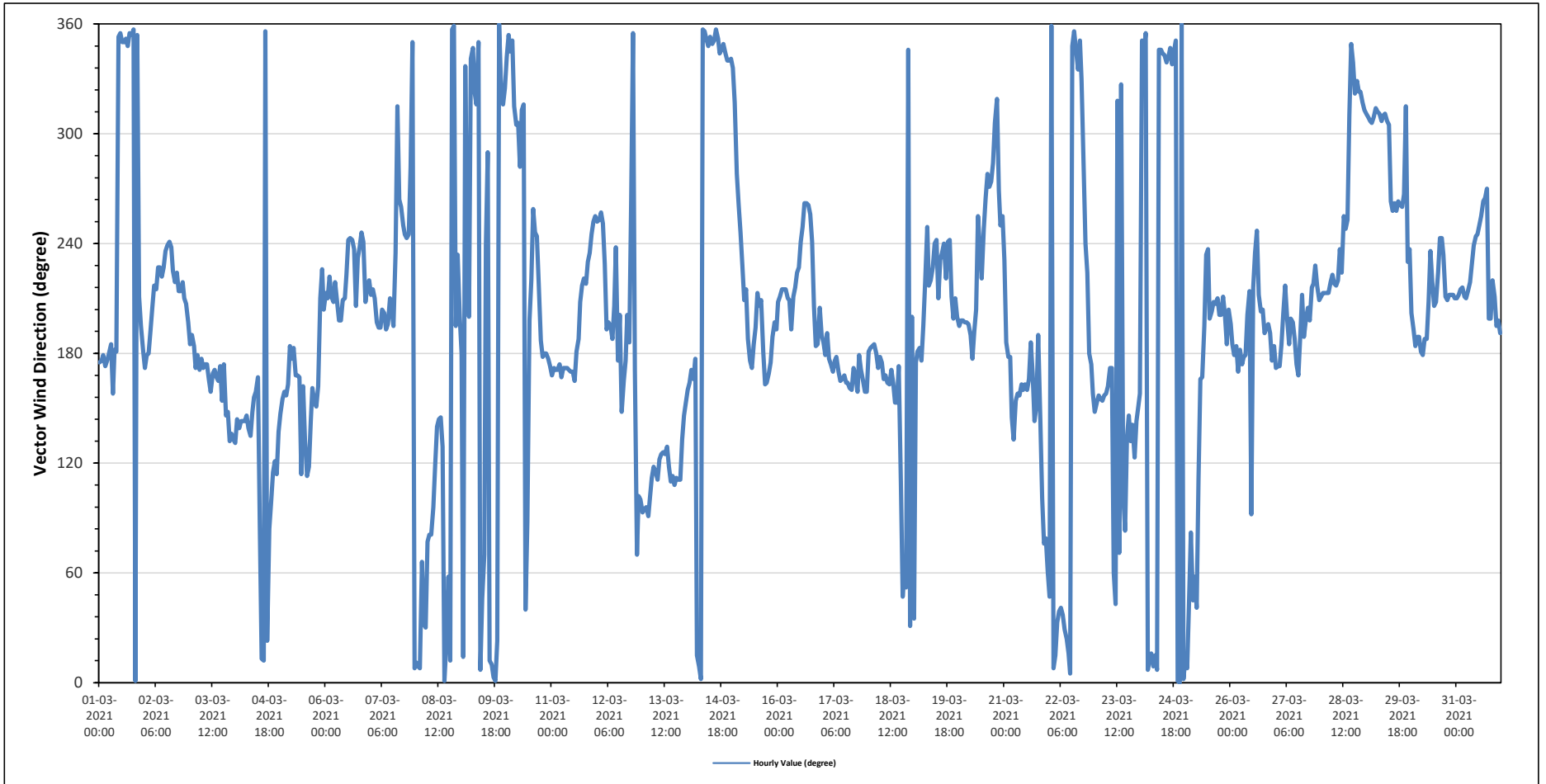
Monthly Average:	217 (SW) degree	Hours in Service:	744
		Hours of Data:	744
		Hours of Missing Data:	0
		Hours of Calibration:	0
		Operational Uptime:	100.0

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	
Mar 1	S	S	S	S	S	S	S	SSE	S	S	N	N	N	N	N	NNW	N	N	N	N	N	SSW	SSW	S	346	NNW	
Mar 2	S	S	S	S	SSW	SW	SSW	SW	SW	SW	SW	SW	WSW	WSW	SW	SW	SW	SW	SSW	SSW	SW	SSW	SSW	S	220	SW	
Mar 3	S	S	S	S	S	S	S	S	S	S	SSE	SSE	SSE	S	SSE	SSE	S	SSE	S	SE	SE	SE	SE	SE	169	SSE	
Mar 4	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SSE	SSE	SSE	E	NNE	NNE	N	NNE	E	E	ESE	ESE	ESE	SE	119	ESE	
Mar 5	SE	SSE	SSE	SSE	SSE	S	S	S	SSE	SSE	SSE	ESE	SSE	SE	ESE	ESE	SE	SSE	SSE	SSE	SSE	SSW	SW	SSW	162	SSE	
Mar 6	SSW	SSW	SW	SSW	SSW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SW	WSW	WSW	SW	SSW	SW	SW	WSW	WSW	SSW	SW	SW	223	SW	
Mar 7	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	SW	NW	W	WSW	WSW	WSW	WSW	WSW	W	N	N	231	SW	
Mar 8	NNE	N	N	ENE	NNE	NNE	ENE	E	E	E	ESE	SE	SE	SE	N	NNE	ENE	NNE	N	N	SSW	SW	SSW	78	ENE		
Mar 9	S	NNE	NNW	WSW	SSW	NNW	NNW	NW	NW	N	N	NE	ENE	WSW	WNW	NNE	N	N	N	NNE	N	NW	NW	NW	352	N	
Mar 10	NNW	N	NNW	N	NW	WNW	NW	W	NW	NW	NE	E	SSW	SW	WSW	WSW	WSW	SW	S	S	S	S	S	S	287	WNW	
Mar 11	SSE	S	S	S	S	SSE	S	S	S	S	SSE	SSE	SSE	S	S	SSW	SW	SW	SW	SW	SW	WSW	WSW	WSW	203	SSW	
Mar 12	WSW	WSW	WSW	WSW	SW	S	SSW	SSW	S	SSW	SW	S	SSW	SE	SSE	S	SSW	S	W	N	S	ENE	E	E	213	SSW	
Mar 13	E	E	E	E	E	ESE	ESE	ESE	ESE	ESE	SE	SE	SE	SE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SSE	114	ESE	
Mar 14	SSE	SSE	S	SSE	S	NNE	N	N	N	N	N	NNW	N	NNW	N	N	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	350	N	
Mar 15	NNW	NW	W	W	WSW	SW	SSW	SSW	S	S	S	S	SSW	SSW	SSW	SSW	S	SSE	SSE	SSE	S	S	SSW	S	204	SSW	
Mar 16	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSW	SW	SW	SW	WSW	WSW	W	W	W	WSW	WSW	SSW	S	S	SSW	S	223	SW	
Mar 17	S	S	S	S	S	SSE	S	S	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	SSE	SSE	S	S	SSE	SSE	SSE	170	SSE	
Mar 18	S	S	S	S	S	S	S	S	SSE	SSE	SSE	SSE	SSE	S	SSE	SSE	SSE	S	ESE	NE	ENE	NE	NNW	NNE	SSW	166	SSE
Mar 19	NE	S	S	S	S	SSW	SW	WSW	SW	SW	SW	WSW	WSW	SSW	SW	SW	WSW	SW	WSW	WSW	SSW	SSW	SSW	SSW	221	SW	
Mar 20	SSW	SSW	SSW	SSW	SSW	SSW	S	S	S	SSW	WSW	SW	SW	WSW	W	W	W	W	WNW	NW	NW	W	WSW	WSW	237	SW	
Mar 21	SW	S	S	S	SE	SE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	SSE	SE	SSE	S	SE	E	ENE	ENE	ENE	150	SSE	
Mar 22	NE	N	N	NNE	NNE	NE	NE	NE	NNE	NNE	NNE	N	NNW	N	NNW	NNW	N	NNW	WNW	WSW	SW	S	S	SSE	13	NNE	
Mar 23	SE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	ENE	NE	NW	ENE	NW	E	E	SE	SE	SE	SE	ESE	SE	SSE	145	SE	
Mar 24	SSE	N	NNW	N	N	NNE	NNE	N	NNE	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	356	N	
Mar 25	NNE	N	NE	E	NE	ENE	NE	ESE	SSE	SSE	SSW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSW	199	SSW	
Mar 26	SSW	S	S	S	SSE	S	S	S	S	SSW	SSW	E	SW	SW	WSW	SSW	SSW	SSW	S	SSW	SSW	S	S	S	200	SSW	
Mar 27	S	S	S	S	SSW	SW	SSW	S	SSW	SSW	S	SSE	S	SSW	S	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SSW	201	SSW	
Mar 28	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	NW	NNW	NNW	NW	NNW	NW	NW	NW	NW	271	W	
Mar 29	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	W	WSW	W	WSW	W	W	WSW	W	NW	SW	SW	294	WNW	
Mar 30	SSW	S	S	S	S	S	S	S	S	S	SSW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	215	SSW	
Mar 31	SSW	SSW	SSW	SW	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	W	W	SSW	SSW	SW	SSW	SSW	SSW	S	228	SW	

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)	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 VWD - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2021
Summary of Hourly Averages

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

WIND SPEED																												
Maximum Hourly Value:		16.0 kph on March 14 at hour 19										Hours in Service:		744														
Maximum Daily Value:		9.4 kph on March 13										Hours of Data:		744														
Minimum Hourly Value:		0.1 kph on March 8 at hour 20										Hours of Missing Data:		0														
Minimum Daily Value:		1.8 kph on March 1										Hours of Calibration:		0														
Monthly Average:		2.2 kph										Operational Uptime:		100														
WIND DIRECTION																												
Monthly Average:		217 (SW) degree																										
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				
Mar 1	6.5	6.0	5.8	5.6	6.1	5.7	4.7	1.9	1.3	1.4	1.5	9.8	8.8	9.7	11.0	11.2	11.4	12.1	10.5	8.3	3.2	1.4	4.0	4.5	1.3	12.1	1.8	
Mar 2	S	S	S	S	S	S	S	SSE	S	S	N	N	N	N	NNW	N	N	N	N	N	SSW	SSW	S	3.0	15.9	8.3		
Mar 3	5.8	5.3	5.4	5.8	8.4	8.8	9.6	10.1	9.6	8.3	9.1	10.7	13.2	15.9	15.0	9.4	9.3	8.6	9.3	9.6	6.6	7.6	5.0	3.0	0.8	5.4	3.5	
Mar 4	S	S	S	S	SSW	SW	SSW	SW	SW	SW	SW	WSW	WSW	SW	SW	SW	SW	SSW	SSW	SW	SSW	SSW	SSW	SSW	1.9	12.3	3.7	
Mar 5	3.2	4.8	4.3	4.5	5.4	4.5	5.0	5.2	4.7	5.3	4.7	2.9	2.9	4.0	4.6	3.3	3.2	1.5	0.8	1.2	1.8	2.7	2.7	3.3	2.0	7.9	4.4	
Mar 6	S	S	S	S	S	S	S	S	S	S	SSE	SSE	SSE	S	SSE	SSE	S	SSE	S	SE	SE	SE	SE	SE	4.3	11.7	7.8	
Mar 7	3.5	5.6	4.4	4.7	3.8	3.8	4.3	3.5	5.1	5.5	4.4	3.0	3.5	1.9	4.0	3.9	4.8	3.7	7.7	12.3	8.5	6.8	6.2	5.4	3.1	7.2	3.2	
Mar 8	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SSE	SSE	SSE	E	NNE	NNE	N	NNE	E	E	ESE	ESE	ESE	SE	0.1	8.9	2.5	
Mar 9	4.6	5.6	6.4	7.0	6.2	4.7	3.0	3.6	3.5	3.7	2.7	2.0	3.3	5.9	7.9	7.8	4.8	5.4	4.9	3.7	3.7	7.9	6.3	7.7	0.4	9.5	3.3	
Mar 10	SE	SSE	SSE	SSE	SSE	S	S	SSE	SSE	SSE	ESE	ESE	SSE	SE	ESE	ESE	SE	SSE	SSE	SSE	SSW	SSW	SSW	SSW	1.7	11.6	2.1	
Mar 11	8.2	9.2	9.1	8.2	9.1	6.4	6.3	5.3	7.3	8.7	10.1	9.7	11.7	11.4	11.6	8.0	6.5	8.7	10.2	9.0	4.8	4.3	4.4	5.8	5.0	15.8	7.1	
Mar 12	SSW	SSW	SW	SSW	SSW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	0.2	12.4	2.4	
Mar 13	5.8	5.3	5.3	3.8	5.5	4.7	5.0	3.2	3.2	4.9	6.2	6.0	5.0	3.5	6.5	5.2	4.8	4.0	3.9	3.6	5.2	3.1	6.9	7.2	5.6	13.5	9.4	
Mar 14	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	SSW	SSW	NW	W	WSW	WSW	WSW	WSW	W	N	N	2.2	16.0	8.4	
Mar 15	4.8	4.7	3.8	2.1	4.0	1.5	4.9	6.5	6.4	8.4	8.9	8.0	5.4	4.2	3.8	5.8	5.4	4.1	2.1	1.0	0.1	0.5	0.8	2.7	2.7	8.3	4.3	
Mar 16	NNE	N	N	ENE	NNE	NNE	ENE	E	E	E	ESE	SE	SE	SE	SE	N	NNE	ENE	NNE	N	N	SSW	SSW	SSW	1.6	12.9	7.2	
Mar 17	3.1	0.8	1.4	0.4	1.3	3.2	3.4	2.9	4.1	5.0	4.4	4.4	2.8	2.9	3.7	5.5	8.5	8.0	9.5	7.5	5.1	4.2	4.3	6.7	2.4	5.8	4.5	
Mar 18	S	NNE	NNW	WSW	SSW	NNW	NNW	NW	NW	N	N	NE	ENE	WSW	WNW	NNE	N	N	NNE	N	NW	NW	NW	NW	0.8	6.8	2.9	
Mar 19	10.4	11.6	10.0	8.6	4.0	4.5	5.1	1.7	3.3	4.3	4.7	3.2	5.9	6.6	7.6	7.1	7.2	4.2	2.6	3.0	3.8	3.5	3.8	4.7	2.6	11.5	5.8	
Mar 20	NNW	N	NNW	N	NW	WNW	NW	NW	NW	NE	E	SSW	SW	WSW	WSW	WSW	WSW	SW	S	S	S	S	S	S	2.6	11.5	5.8	
Mar 21	5.1	5.0	5.3	5.8	6.1	6.9	6.3	6.9	6.7	7.0	6.9	7.4	7.3	7.6	8.2	10.8	10.8	10.0	9.1	9.7	11.6	15.8	14.7	10.8	2.4	12.4	2.4	
Mar 22	SSE	S	S	S	S	SSE	S	S	S	SSE	SSE	SSE	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	0.2	12.4	2.4	
Mar 23	12.4	10.5	6.5	5.3	1.9	0.4	1.3	2.7	3.0	3.5	5.3	3.9	4.0	4.0	2.6	3.4	4.3	3.1	0.2	1.3	0.5	1.9	3.0	5.9	5.6	13.5	9.4	
Mar 24	WSW	WSW	WSW	WSW	SW	S	SSW	SSW	S	SSW	SSW	S	SSW	SSW	SE	SSE	S	SSW	S	W	N	S	ENE	E	E	2.2	16.0	8.4
Mar 25	7.7	10.6	11.4	13.5	10.7	9.3	10.3	9.3	10.9	10.9	10.8	11.4	9.5	9.7	8.7	10.1	8.5	8.2	10.1	11.3	9.5	6.6	7.0	5.6	2.7	8.3	4.3	
Mar 26	E	E	E	E	E	ESE	ESE	ESE	ESE	ESE	SE	SE	SE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SE	SE	SSE	1.6	12.9	7.2	
Mar 27	6.5	6.5	4.8	3.9	2.2	4.3	5.2	7.0	8.3	8.9	11.3	12.5	13.2	13.4	14.6	15.2	15.8	15.0	14.6	16.0	15.5	15.7	11.5	8.7	2.4	5.8	4.5	
Mar 28	SSE	SSE	S	SSE	S	NNE	N	N	N	N	NNW	N	NNW	N	N	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	0.8	6.8	2.9	
Mar 29	5.7	4.2	4.4	5.4	6.9	4.9	4.2	3.5	4.2	5.8	6.4	6.3	6.2	6.9	8.3	7.1	5.6	3.8	2.7	4.9	5.8	7.1	7.0	5.6	2.4	5.8	4.5	
Mar 30	NNW	NW	W	W	WSW	SW	SSW	SSW	S	S	S	S	SSW	SSW	SSW	SSW	S	SSE	SSE	SSE	S	S	SSW	S	0.8	6.8	2.9	
Mar 31	9.6	12.1	11.1	10.7	9.9	9.7	9.0	6.8	10.5	9.6	9.8	10.6	12.3	12.9	7.5	5.5	6.3	5.5	3.5	1.6	1.9	2.0	1.8	3.5	2.4	5.8	4.5	
Mar 32	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	0.3	15.2	6.4	
Mar 33	3.9	4.3	4.5	4.7	4.7	4.5	5.1	4.9	5.0	5.6	5.8	5.0	5.8	5.5	3.7	4.7	5.6	4.3	3.3	2.4	3.3	4.1	3.7	4.2	2.4	5.8	4.5	
Mar 34	S	S	S	S	S	SSE	S	S	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	0.8	6.8	2.9	
Mar 35	5.0	5.1	4.0	3.1	4.3	4.2	3.7	4.9	5.5	6.8	5.9	4.3	5.1	4.8	3.8	3.2	3.2	0.8	3.0	1.0	2.3	2.8	2.3	1.3	0.3	15.2	6.4	
Mar 36	S	S	S	S	S	S	S	S	SSE	SSE	SSE	SSE	S	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	2.6	11.5	5.8	
Mar 37	0.3	2.2	4.7	4.0	4.8	6.7	8.8	5.4	6.0	8.1	9.1	12.8	15.2	8.4	9.7	10.5	9.6	5.9	5.6	1.8	3.4	5.1	8.6	6.9	2.6	11.5	5.8	
Mar 38	NE	S	S	S	S	SSW	SW	WSW	SW	SW	SW	WSW	WSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	2.6	11.5	5.8	
Mar 39	6.3	7.6	7.7	7.9	8.6	8.3	6.8	5.0	8.0	7.0	10.9	7.1	8.0	6.3	11.5	9.3	10.6	10.3	8.4	7.7	6.3	2.6	3.1	4.4	2.6	11.5	5.8	
Mar 40	SSW	SSW	SSW	SSW	SSW	SSW	S	S	S	SSW	WSW	SW	WSW	W	W	W	W	W	WNW	NW	NW	W	WSW	WSW	2.6	11.5	5.8	



PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2021

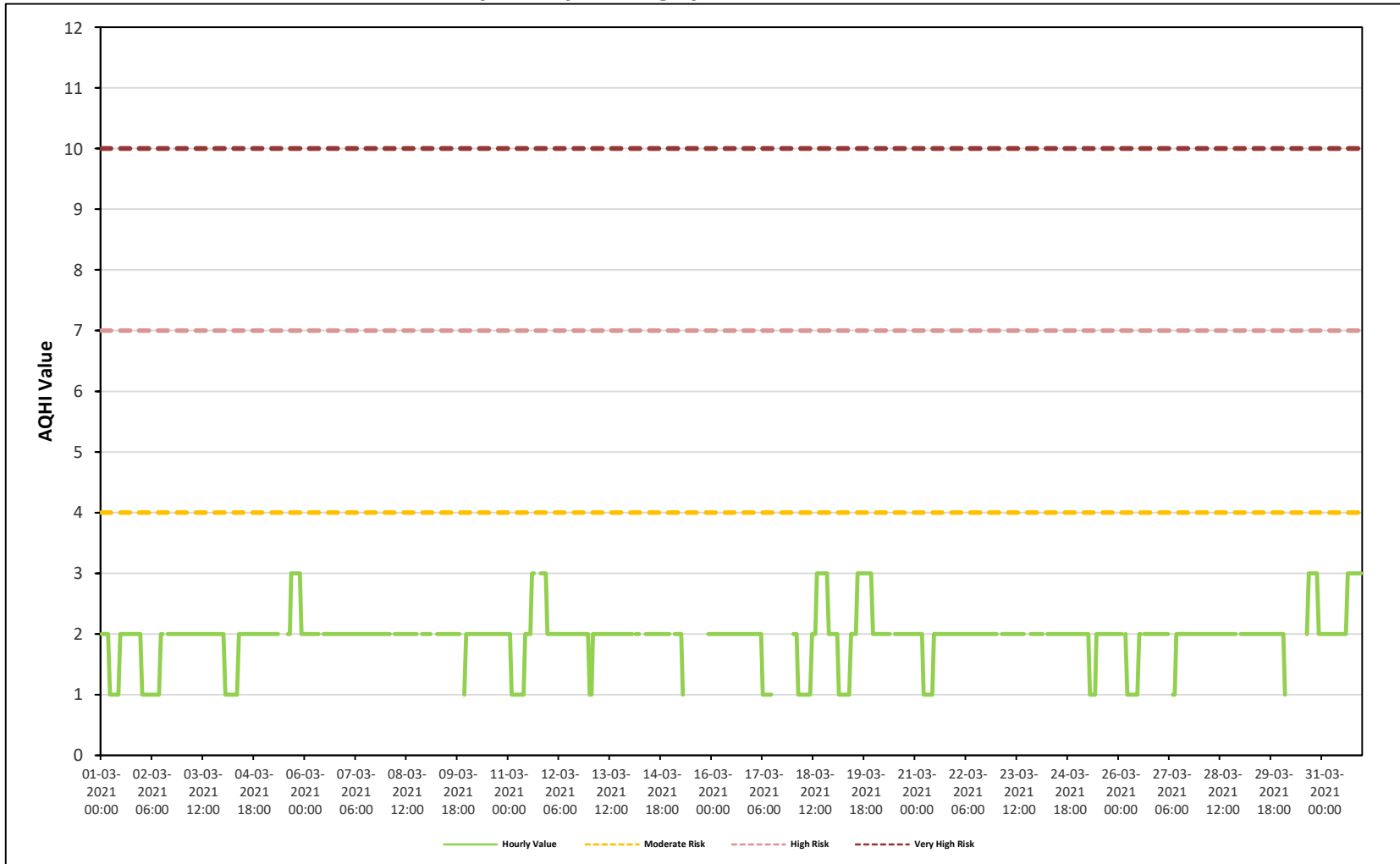
Summary of Hourly Averages

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

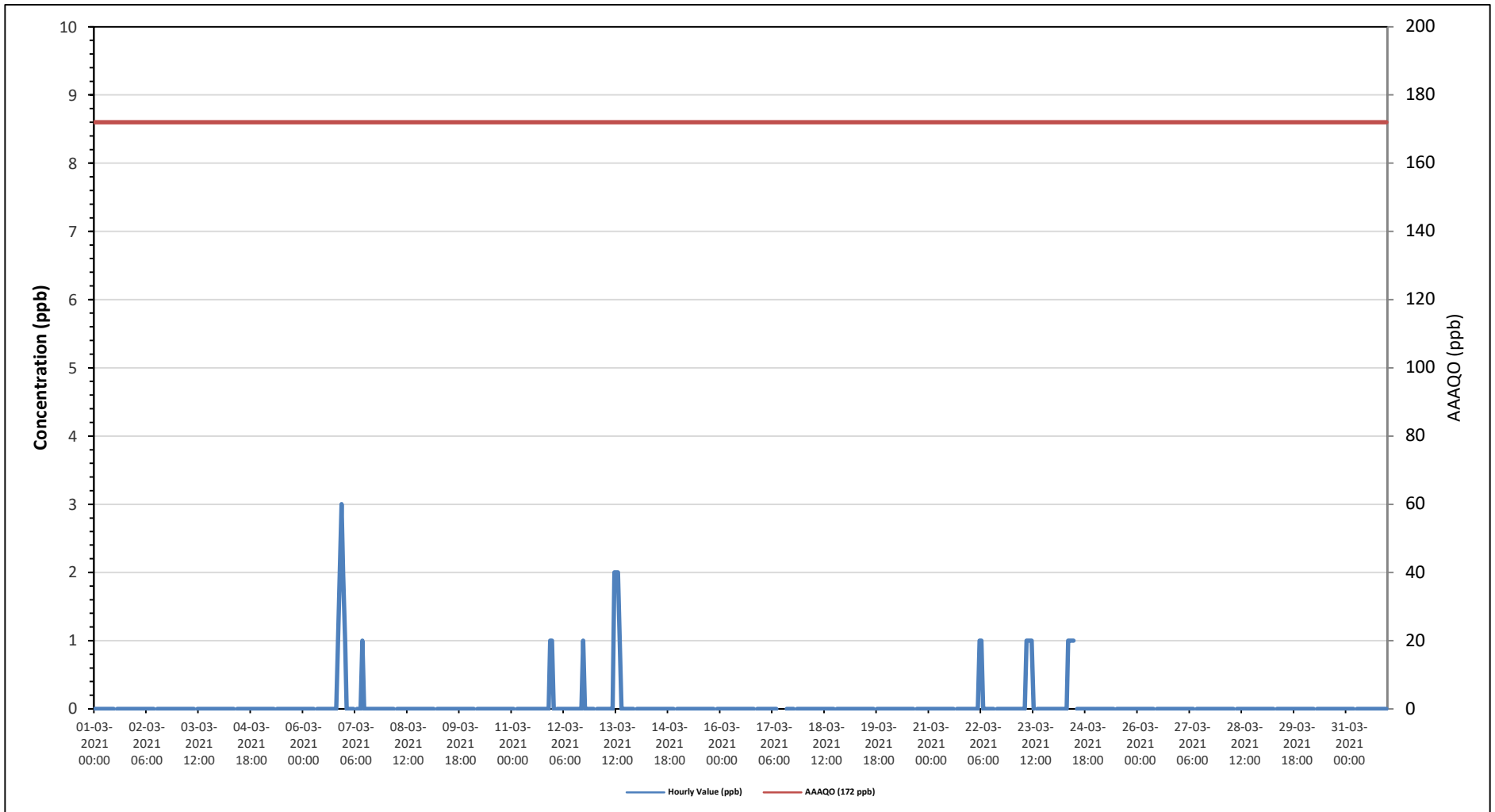
WIND SPEED																												
Maximum Hourly Value:	16.0 kph on March 14 at hour 19															Hours in Service:	744											
Maximum Daily Value:	9.4 kph on March 13															Hours of Data:	744											
Minimum Hourly Value:	0.1 kph on March 8 at hour 20															Hours of Missing Data:	0											
Minimum Daily Value:	1.8 kph on March 1															Hours of Calibration:	0											
Monthly Average:	2.2 kph															Operational Uptime:	100											
WIND DIRECTION																												
Monthly Average:	217 (SW) degree																											
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				
Mar 21	3.6	1.8	1.5	1.7	1.9	3.4	2.7	4.4	5.4	5.2	5.4	5.1	5.2	6.0	7.3	4.4	5.0	4.1	4.3	4.3	7.4	4.9	6.0	4.1	1.5	7.4	3.5	
	SW	S	S	S	SE	SE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	SSE	SE	SSE	S	SE	E	ENE	ENE	ENE				
Mar 22	3.5	6.2	8.3	8.4	9.1	11.1	12.1	11.4	12.4	12.4	10.8	8.9	9.4	8.9	10.0	7.7	8.0	4.5	1.7	1.6	1.1	1.2	1.2	3.6	1.1	12.4	6.0	
	NE	N	N	NNE	NNE	NE	NE	NE	NNE	NNE	NNE	N	NNW	N	NNW	NNW	N	NNW	WNW	WSW	SW	S	S	SSE				
Mar 23	6.1	6.1	7.7	8.2	7.6	7.3	7.6	5.5	5.1	4.2	2.8	3.2	2.7	1.9	0.1	2.1	3.3	2.4	2.9	2.9	2.9	3.1	3.3	4.8	0.1	8.2	3.6	
	SE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	ENE	NE	NW	ENE	NW	E	E	SE	SE	SE	ESE	SE	SSE	SSE				
Mar 24	2.9	2.2	8.2	10.1	11.3	13.2	15.3	14.0	14.7	12.3	12.5	13.9	13.2	11.8	11.8	11.0	8.5	7.1	7.1	5.4	5.8	4.7	5.8	5.4	2.2	15.3	9.0	
	SSE	N	NNW	N	N	NNE	NNE	N	NNE	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N				
Mar 25	4.8	3.0	3.4	4.0	3.4	3.2	2.3	1.3	1.7	3.3	5.2	6.7	6.6	6.7	7.5	7.7	6.2	5.3	5.0	4.4	3.8	3.9	4.1	4.3	1.3	7.7	2.4	
	NNE	N	NE	E	NE	ENE	NE	ESE	SSE	SSE	SSW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSW			
Mar 26	4.3	3.8	2.2	3.0	2.3	3.4	2.1	3.3	3.5	4.8	5.3	3.2	5.3	6.6	9.9	6.1	5.2	5.4	3.4	2.7	4.4	4.6	3.0	2.4	2.1	9.9	3.7	
	SSW	S	S	S	SSE	S	S	S	S	SSW	SSW	E	SW	SW	WSW	SSW	SSW	SSW	S	SSW	SSW	S	S	S				
Mar 27	3.8	5.4	4.5	4.4	4.5	4.4	2.7	3.9	6.6	7.0	6.1	4.9	5.6	7.5	8.5	6.6	8.3	7.2	6.7	9.7	11.4	11.7	10.0	11.1	2.7	11.7	6.5	
	S	S	S	S	SSW	SW	SSW	S	SSW	SSW	S	S	SSE	S	SSW	S	SSW	S	SSW	SSW	SSW	SW	SW	SW	SSW			
Mar 28	10.6	12.0	11.0	10.1	8.0	6.9	7.5	8.7	8.2	7.6	8.1	5.9	8.1	9.9	10.8	6.8	15.7	16.0	14.6	14.8	13.9	11.7	11.5	10.6	5.9	16.0	6.3	
	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	NW	NNW	NNW	NW	NNW	NW	NW	NW	NW				
Mar 29	10.7	11.5	9.8	11.1	10.9	11.7	10.9	11.4	9.9	10.8	12.2	10.4	10.7	9.7	11.4	9.1	8.1	7.3	7.9	5.7	3.3	1.0	2.9	1.8	1.0	12.2	8.0	
	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	W	WSW	W	WSW	W	W	WSW	W	NW	SW	SW				
Mar 30	1.3	1.0	1.4	2.2	2.4	3.5	4.0	5.1	6.3	8.0	9.4	7.4	7.6	7.3	7.5	10.4	11.4	6.5	4.3	5.1	6.4	8.8	8.5	8.2	1.0	11.4	5.7	
	SSW	S	S	S	S	S	S	S	S	SSW	SW	SW	SSW	SSW	SSW	SW	WSW	WSW	SW	SSW	SSW	SSW	SSW	SSW				
Mar 31	6.7	8.0	6.4	5.7	6.5	8.0	8.1	7.6	9.5	12.5	15.2	12.1	9.7	7.5	5.9	4.4	1.8	5.2	6.9	5.6	5.6	6.6	5.9	1.8	15.2	7.2		
	SSW	SSW	SSW	SW	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	W	W	SSW	SSW	SW	SSW	SSW	SSW	S				
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.																												

AQHI CADOTTE LAKE STATION

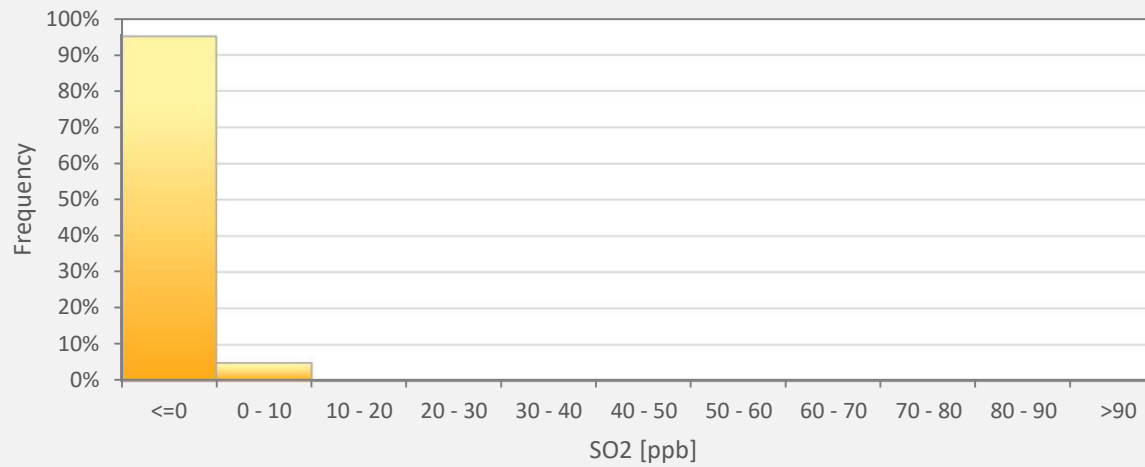
Timeseries Chart of Hourly Average for AQHI - AQHI - Cadotte Lake Station



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



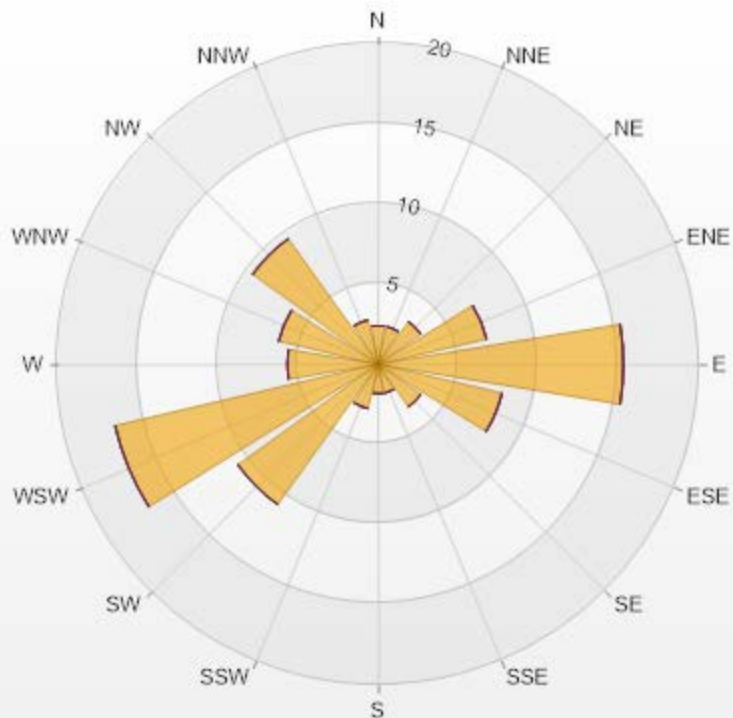
SO2[ppb] Histogram: AQHI Cadotte Lake Monthly: 03-2021 1 Hr.



Classes	SO2
<=0	95.05%
0 - 10	4.95%
10 - 20	0.00%
20 - 30	0.00%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-SO2[ppb] Monthly: 03-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.03% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	2.4	0	0	0	0	2.4
NNE	2.4	0	0	0	0	2.4
NE	3.25	0	0	0	0	3.25
ENE	6.93	0	0	0	0	6.93
E	15.28	0	0	0	0	15.28
ESE	7.92	0	0	0	0	7.92
SE	3.25	0	0	0	0	3.25
SSE	1.84	0	0	0	0	1.84
S	1.84	0	0	0	0	1.84
SSW	2.83	0	0	0	0	2.83
SW	10.75	0	0	0	0	10.75
WSW	16.83	0	0	0	0	16.83
W	5.66	0	0	0	0	5.66
WNW	6.36	0	0	0	0	6.36
NW	9.62	0	0	0	0	9.62
NNW	2.83	0	0	0	0	2.83
Summary	100	0	0	0	0	100



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% 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 - March 2021

Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

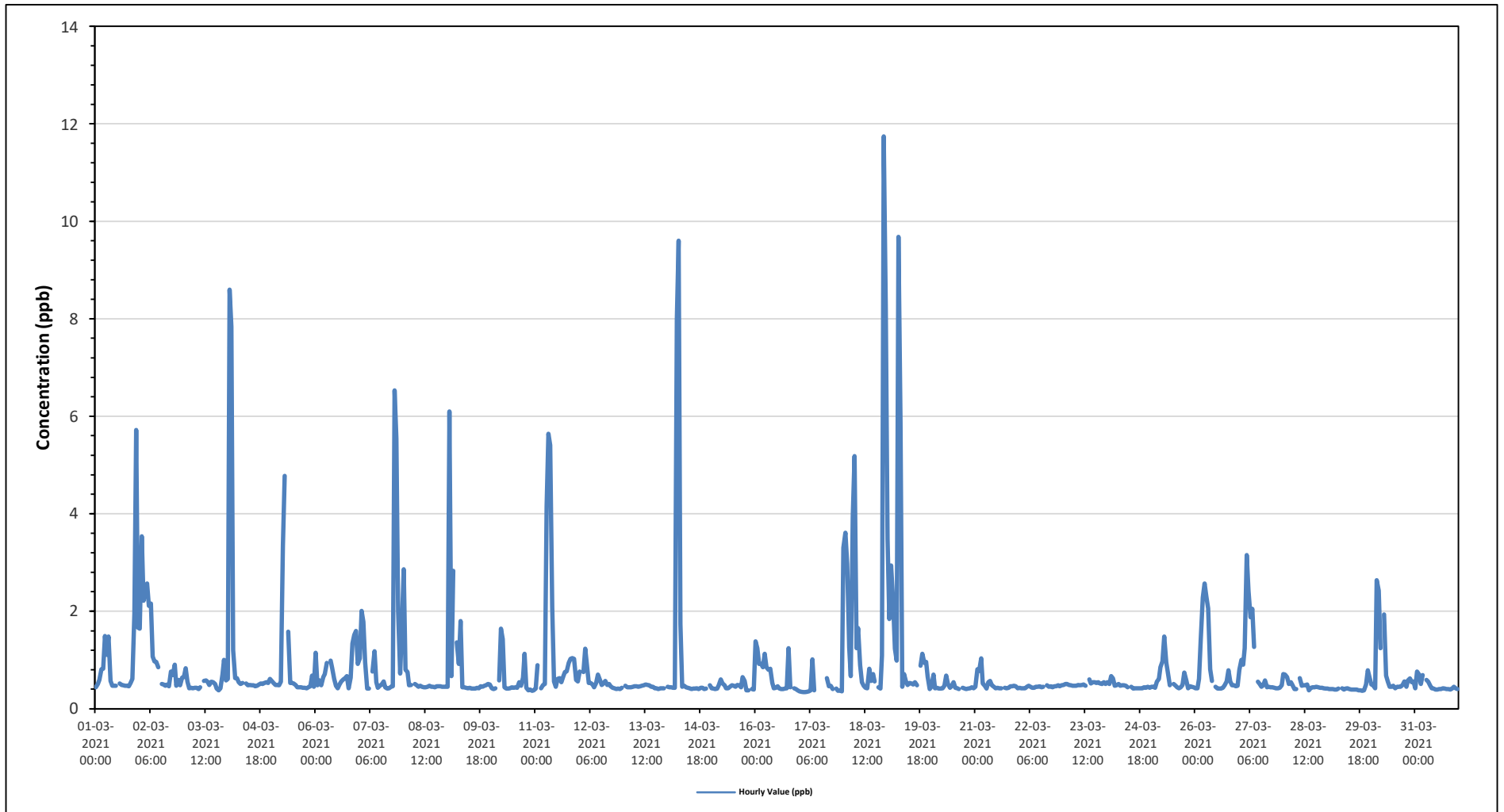
Maximum Hourly Value:	11.74 ppb	on March 18 at hour 22	Hours in Service:	744
Maximum Daily Value:	2.22 ppb	on March 18	Hours of Data:	706
Minimum Hourly Value:	0.34 ppb	on March 17 at hour 2	Hours of Missing Data:	0
Minimum Daily Value:	0.43 ppb	on March 29	Hours of Calibration:	38
Monthly Average:	0.81 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	
Mar 1	0.44	0.51	0.59	0.81	0.82	1.49	1.11	1.48	0.57	0.47	0.47	S	0.52	0.49	0.48	0.47	0.47	0.46	0.53	0.61	1.95	5.72	1.66	0.44	5.72	0.98		
Mar 2	1.64	3.54	2.22	2.4	2.57	2.11	2.16	1.07	0.97	0.96	0.85	S	0.57	0.58	0.55	0.49	0.55	0.54	0.51	0.41	0.38	0.42	0.7	1	0.58	0.38	1.00	0.53
Mar 3	0.65	0.83	0.55	0.42	0.43	0.42	0.43	0.43	0.4	0.44	S	0.57	0.58	0.55	0.49	0.55	0.54	0.51	0.41	0.38	0.42	0.7	1	0.58	0.38	1.00	0.53	
Mar 4	0.61	8.6	7.84	1.2	0.63	0.63	0.54	0.51	0.53	S	0.52	0.48	0.49	0.48	0.48	0.46	0.47	0.5	0.52	0.51	0.53	0.54	0.53	0.61	0.46	8.60	1.23	
Mar 5	0.57	0.53	0.49	0.49	0.48	0.55	3.34	4.78	S	1.58	0.53	0.53	0.52	0.49	0.44	0.44	0.44	0.43	0.43	0.42	0.44	0.46	0.68	0.45	0.42	4.78	0.85	
Mar 6	1.15	0.48	0.58	0.48	0.65	0.71	0.94	S	0.99	0.84	0.61	0.47	0.42	0.5	0.56	0.6	0.63	0.67	0.42	0.64	1.34	1.51	1.6	0.92	0.42	1.60	0.77	
Mar 7	1.03	2.01	1.78	0.95	0.41	0.41	S	0.76	1.18	0.54	0.43	0.47	0.5	0.56	0.44	0.41	0.42	0.45	0.46	6.53	5.55	1.99	0.72	1.58	0.41	6.53	1.29	
Mar 8	2.86	0.8	0.75	0.48	0.49	S	0.51	0.49	0.45	0.47	0.45	0.44	0.44	0.45	0.47	0.45	0.45	0.44	0.46	0.46	0.46	0.45	0.45	0.45	0.44	2.86	0.59	
Mar 9	0.45	6.1	0.67	2.83	S	1.36	0.92	1.8	0.44	0.44	0.43	0.42	0.43	0.41	0.41	0.41	0.43	0.42	0.46	0.45	0.47	0.48	0.51	0.5	0.41	6.10	0.92	
Mar 10	0.42	0.4	0.42	S	0.58	1.64	1.43	0.44	0.41	0.41	0.42	0.44	0.43	0.44	0.43	0.54	0.47	0.64	1.13	0.43	0.38	0.39	0.37	0.38	0.37	1.64	0.57	
Mar 11	0.41	0.89	S	0.42	0.49	0.51	4.16	5.64	5.41	2.08	0.56	0.45	0.61	0.63	0.54	0.67	0.75	0.77	0.94	1.02	1.04	1.02	0.59	0.56	0.41	5.64	1.31	
Mar 12	0.76	S	0.75	1.23	0.88	0.53	0.53	0.5	0.44	0.53	0.7	0.59	0.49	0.52	0.57	0.49	0.51	0.46	0.43	0.42	0.4	0.41	0.4	0.43	0.40	1.23	0.56	
Mar 13	S	0.47	0.44	0.44	0.44	0.45	0.46	0.46	0.45	0.46	0.47	0.48	0.5	0.49	0.48	0.45	0.45	0.42	0.42	0.4	0.42	0.42	0.42	S	0.40	0.50	0.45	
Mar 14	0.45	0.44	0.44	0.43	0.43	7.99	9.6	1.74	0.45	0.47	0.44	0.43	0.42	0.4	0.41	0.41	0.42	0.4	0.43	0.43	0.4	0.41	S	0.48	0.40	9.60	1.21	
Mar 15	0.42	0.41	0.4	0.41	0.48	0.6	0.52	0.48	0.42	0.42	0.45	0.48	0.47	0.45	0.49	0.48	0.44	0.65	0.57	0.38	0.38	S	0.4	0.39	0.38	0.65	0.46	
Mar 16	1.38	1.24	0.92	0.92	0.85	1.13	0.85	0.8	0.82	0.53	0.42	0.43	0.46	0.41	0.4	0.4	0.41	0.42	1.24	0.44	S	0.42	0.4	0.38	0.38	1.38	0.68	
Mar 17	0.36	0.35	0.34	0.34	0.35	0.36	0.38	1.01	0.38	C	C	C	C	C	C	0.63	0.46	0.47	0.4	S	0.41	0.37	0.38	0.36	0.34	1.01	-	
Mar 18	3.3	3.61	2.97	1.26	0.67	3.93	5.18	1.24	1.65	0.89	0.54	0.47	0.43	0.42	0.82	0.57	0.71	0.56	S	0.44	0.41	1.09	11.74	8.21	0.41	11.74	2.22	
Mar 19	3.48	1.84	2.94	2.2	1.23	0.99	9.68	5.88	0.45	0.71	0.57	0.49	0.53	0.52	0.5	0.54	0.48	S	0.88	1.13	0.94	0.96	0.66	0.4	0.40	9.68	1.65	
Mar 20	0.45	0.7	0.42	0.43	0.41	0.41	0.42	0.47	0.68	0.51	0.43	0.46	0.54	0.43	0.42	0.4	S	0.43	0.41	0.4	0.41	0.42	0.44	0.42	0.40	0.70	0.46	
Mar 21	0.45	0.81	0.78	1.03	0.52	0.47	0.41	0.54	0.57	0.48	0.45	0.42	0.43	0.42	0.42	S	0.43	0.42	0.43	0.46	0.46	0.47	0.46	0.42	0.41	1.03	0.51	
Mar 22	0.43	0.42	0.42	0.42	0.45	0.47	0.45	0.43	0.43	0.45	0.45	0.46	0.44	0.45	S	0.48	0.45	0.46	0.44	0.46	0.46	0.48	0.46	0.48	0.42	0.48	0.45	
Mar 23	0.49	0.51	0.51	0.49	0.48	0.47	0.47	0.47	0.49	0.48	0.49	0.5	0.47	S	0.6	0.52	0.54	0.54	0.53	0.54	0.52	0.51	0.54	0.51	0.47	0.60	0.51	
Mar 24	0.54	0.51	0.67	0.62	0.47	0.48	0.51	0.47	0.48	0.48	0.47	0.44	S	0.45	0.41	0.42	0.42	0.42	0.42	0.42	0.44	0.43	0.45	0.43	0.41	0.67	0.47	
Mar 25	0.45	0.45	0.43	0.55	0.61	0.85	0.97	1.48	0.95	0.75	0.48	S	0.51	0.48	0.44	0.42	0.44	0.49	0.74	0.58	0.42	0.46	0.45	0.44	0.42	1.48	0.60	
Mar 26	0.42	0.42	0.61	1.44	2.28	2.57	2.3	2.06	0.81	0.57	S	0.45	0.41	0.41	0.41	0.43	0.48	0.56	0.79	0.56	0.48	0.48	0.46	0.47	0.41	2.57	0.86	
Mar 27	0.8	1	0.9	1.24	3.15	2.41	1.88	2.05	1.27	S	0.55	0.51	0.45	0.48	0.58	0.44	0.45	0.44	0.44	0.43	0.42	0.42	0.43	0.48	0.42	3.15	0.92	
Mar 28	0.71	0.7	0.65	0.51	0.54	0.49	0.4	0.4	S	0.63	0.47	0.48	0.48	0.5	0.38	0.43	0.44	0.44	0.45	0.44	0.43	0.43	0.42	0.41	0.38	0.71	0.49	
Mar 29	0.41	0.4	0.4	0.4	0.39	0.39	0.41	S	0.42	0.39	0.41	0.42	0.4	0.39	0.39	0.39	0.38	0.38	0.37	0.38	0.5	0.79	0.66	0.37	0.79	0.43		
Mar 30	0.5	0.48	0.42	2.64	2.42	1.24	S	1.93	0.68	0.55	0.45	0.45	0.47	0.42	0.45	0.45	0.45	0.49	0.56	0.45	0.58	0.62	0.54	0.56	0.42	2.64	0.77	
Mar 31	0.42	0.76	0.7	0.51	0.69	S	0.59	0.55	0.47	0.42	0.41	0.39	0.39	0.4	0.4	0.42	0.41	0.4	0.4	0.39	0.41	0.45	0.42	0.4	0.39	0.76	0.47	
Diurnal Maximum	3.48	8.60	7.84	2.83	3.15	7.99	9.68	5.88	5.41	2.08	0.85	0.59	0.61	0.63	0.82	0.67	0.75	0.77	1.24	6.53	5.55	1.99	11.74	8.21				
Diurnal Average	0.88	1.34	1.07	0.93	0.84	1.24	1.78	1.39	0.82	0.64	0.50	0.47	0.47	0.47	0.48	0.48	0.48	0.50	0.56	0.71	0.68	0.66	1.10	0.82				

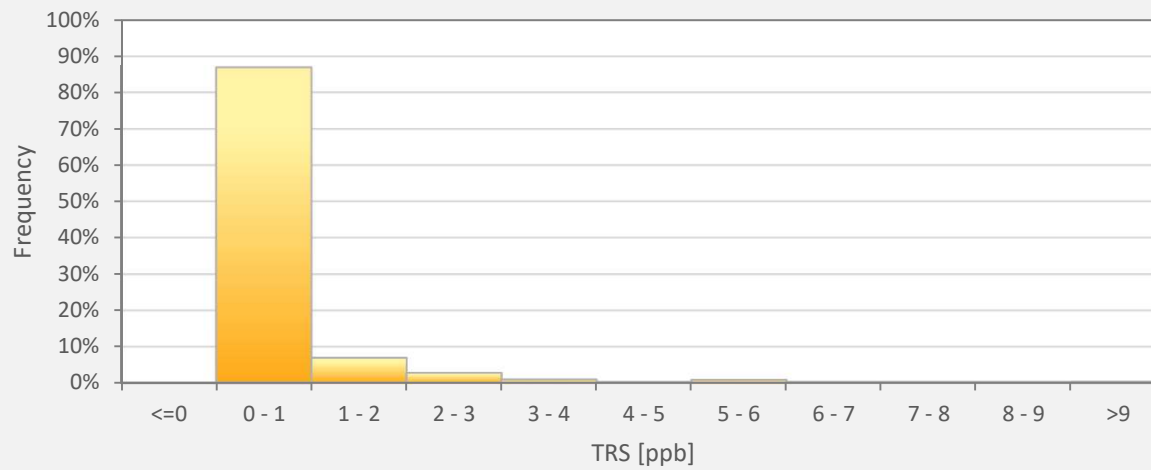
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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 TRS - AQHI - Cadotte Lake Station



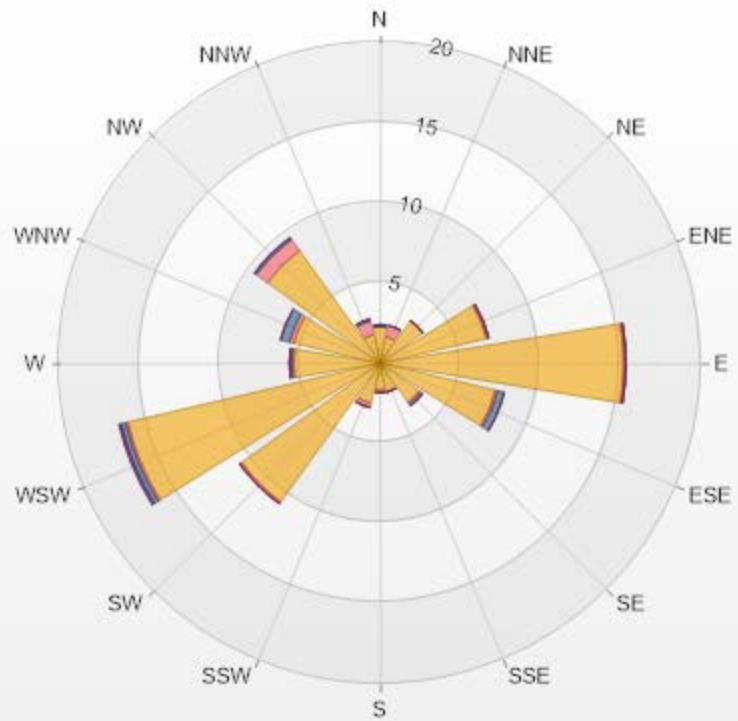
TRS[ppb] Histogram: AQHI Cadotte Lake Monthly: 03-2021 1 Hr.



Classes	TRS
<=0	0.00%
0 - 1	86.83%
1 - 2	6.94%
2 - 3	2.83%
3 - 4	0.99%
4 - 5	0.28%
5 - 6	0.85%
6 - 7	0.28%
7 - 8	0.28%
8 - 9	0.28%
>9	0.42%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-TRS[ppb] Monthly: 03-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.89% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	2.27	0	0.14	0	0	2.41
NNE	1.7	0.71	0	0	0	2.41
NE	3.26	0	0	0	0	3.26
ENE	6.8	0.14	0	0	0	6.94
E	15.16	0.14	0	0	0	15.3
ESE	7.37	0.14	0.42	0	0	7.93
SE	2.97	0.14	0.14	0	0	3.25
SSE	1.84	0	0	0	0	1.84
S	1.7	0.14	0	0	0	1.84
SSW	2.55	0.28	0	0	0	2.83
SW	10.62	0.14	0	0	0	10.76
WSW	16.15	0.14	0.28	0.14	0	16.71
W	5.38	0.14	0.14	0	0	5.66
WNW	5.52	0.28	0.57	0	0	6.37
NW	8.64	0.85	0.14	0	0	9.63
NNW	1.84	0.85	0.14	0	0	2.83
Summary	93.77	4.09	1.97	0.14	0	100



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% Icon Classes (ppb)	94	4	2	0	0
0-2	94	4	2	0	0
2-5		4			
5-10			2		
10-50				0	
>50.0					0



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - March 2021

Summary of Hourly Averages

OXIDES OF NITROGEN (NOx) in ppb

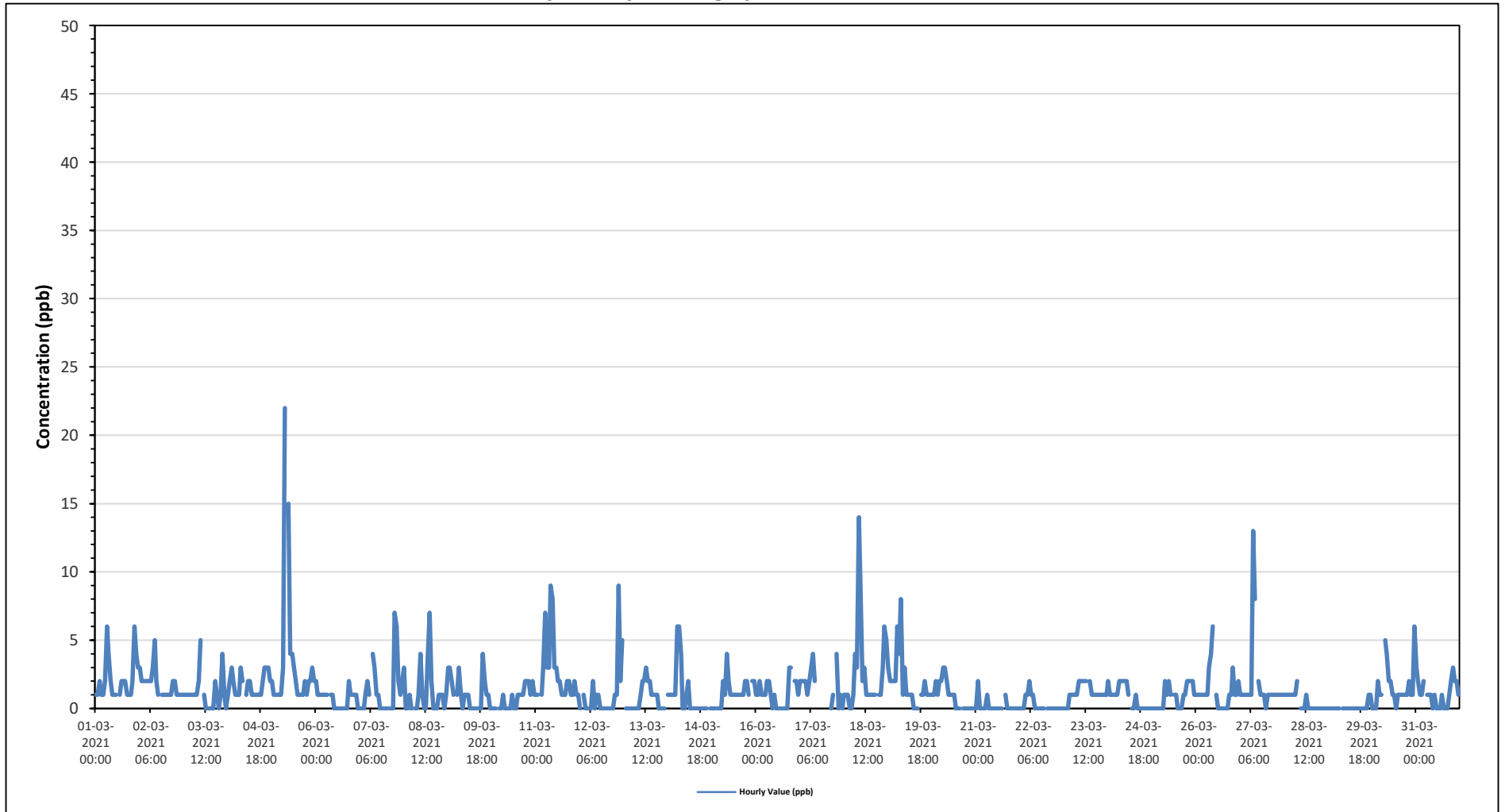
Maximum Hourly Value: 22 ppb on March 5 at hour 7	Hours in Service: 744
Maximum Daily Value: 3.3 ppb on March 5	Hours of Data: 704
Minimum Hourly Value: 0 ppb on March 3 at hour 12	Hours of Missing Data: 0
Minimum Daily Value: 0.1 ppb on March 29	Hours of Calibration: 40
Monthly Average: 1.3 ppb	Operational Uptime: 100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Mar 1	1	1	2	1	1	2	6	4	2	1	1	1	S	1	2	2	2	1	1	1	2	6	4	3	1	6	2.1
Mar 2	3	2	2	2	2	2	3	5	2	1	S	1	1	1	1	1	1	2	2	1	1	1	1	1	1	5	1.7
Mar 3	1	1	1	1	1	1	1	1	2	5	S	1	0	0	0	0	2	1	0	1	4	1	0	0	0	5	1.1
Mar 4	1	2	3	2	1	1	1	3	2	S	1	2	2	1	1	1	1	1	1	2	3	3	3	2	1	3	1.7
Mar 5	2	1	1	1	1	1	3	22	S	15	4	4	3	2	1	1	1	2	1	2	2	3	2	1	22	3.3	
Mar 6	2	1	1	1	1	1	1	S	1	1	0	0	0	0	0	0	0	0	2	1	1	1	1	0	0	2	0.7
Mar 7	0	0	0	1	2	1	S	4	3	1	1	0	0	0	0	0	0	0	0	7	6	2	1	2	0	7	1.3
Mar 8	3	0	0	1	0	S	0	0	1	4	1	0	0	4	7	2	0	0	0	1	1	1	0	1	0	7	1.2
Mar 9	3	3	2	1	S	1	3	1	0	1	1	1	0	0	0	0	0	0	4	2	1	1	0	0	4	1.1	
Mar 10	0	0	0	S	0	0	1	0	0	0	0	1	0	0	1	1	1	1	2	2	1	2	1	0	0	2	0.7
Mar 11	1	1	S	1	3	7	3	3	9	8	3	3	2	2	1	1	1	2	2	1	1	2	1	1	1	9	2.6
Mar 12	0	S	1	0	0	0	0	2	0	1	1	0	0	0	0	0	0	0	0	1	1	9	2	5	0	9	1.0
Mar 13	S	0	0	0	0	0	0	0	0	1	2	2	3	2	2	1	1	1	1	0	0	0	0	S	0	0	0.7
Mar 14	1	1	1	1	1	6	6	4	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	S	0	6	1.0
Mar 15	0	0	0	0	0	0	2	1	4	2	1	1	1	1	1	1	1	1	2	2	1	S	2	2	0	4	1.1
Mar 16	1	1	2	1	1	1	2	2	1	0	1	0	0	0	0	0	0	0	3	3	S	2	2	1	0	3	1.0
Mar 17	2	2	2	2	1	2	3	4	2	C	C	C	C	C	C	C	C	0	1	S	4	0	1	0	0	4	-
Mar 18	1	1	1	0	0	1	4	3	14	9	2	3	1	1	1	1	1	1	S	1	1	3	6	5	0	14	2.7
Mar 19	3	2	2	2	2	6	4	8	1	3	1	1	1	1	0	0	0	S	1	1	2	1	1	1	0	8	1.9
Mar 20	1	1	2	1	2	2	3	3	2	1	1	1	1	0	0	0	S	0	0	0	0	0	0	0	0	3	0.9
Mar 21	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	S	1	0	0	0	0	0	0	0	0	2	0.2
Mar 22	0	0	0	1	1	2	1	1	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	2	0.3
Mar 23	0	0	0	1	1	1	1	1	2	2	2	2	2	S	2	1	1	1	1	1	1	1	1	1	0	2	1.1
Mar 24	2	1	1	1	1	1	2	2	2	2	2	1	S	0	0	1	0	0	0	0	0	0	0	0	0	2	0.8
Mar 25	0	0	0	0	0	0	0	2	1	2	1	S	1	1	0	0	0	1	1	2	2	2	2	1	0	2	0.8
Mar 26	1	1	1	1	1	1	1	3	4	6	S	1	0	0	0	0	0	0	1	1	3	1	1	2	0	6	1.3
Mar 27	1	1	1	1	1	1	1	13	8	S	2	1	1	1	0	1	1	1	1	1	1	1	1	1	0	13	1.8
Mar 28	1	1	1	1	1	1	1	2	S	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0.4
Mar 29	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.1
Mar 30	0	0	0	2	1	1	S	5	4	2	2	1	1	0	1	1	1	1	1	1	2	1	1	6	0	6	1.5
Mar 31	3	2	1	1	2	S	1	1	1	0	1	0	0	1	0	0	0	1	2	3	2	2	1	0	0	3	1.1
Diurnal Maximum	3	3	3	2	3	7	6	22	14	15	4	4	3	4	7	2	2	2	3	7	6	9	6	6	6		
Diurnal Average	1.1	0.9	0.9	0.9	0.9	1.5	1.9	3.4	2.4	2.5	1.2	1.0	0.8	0.6	0.8	0.6	0.5	0.5	0.9	1.3	1.4	1.6	1.4	1.3			

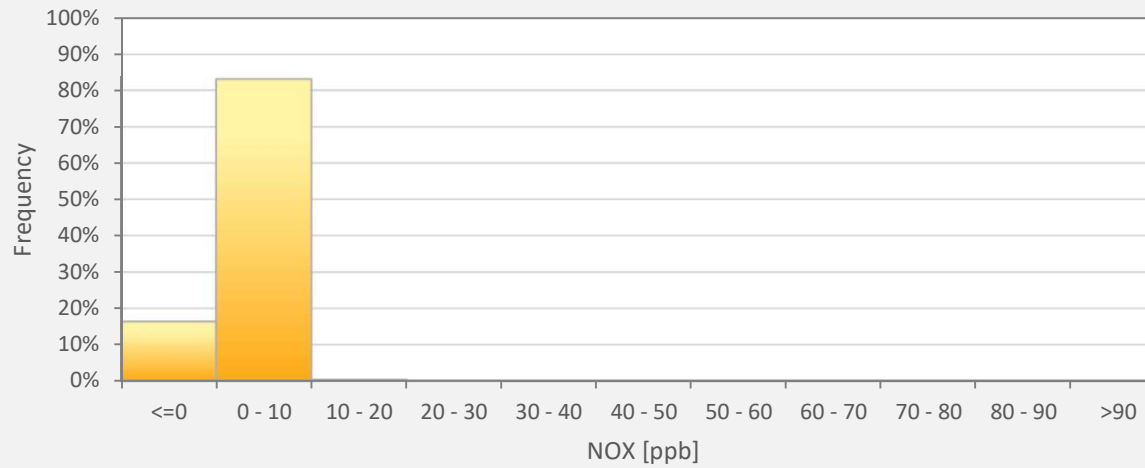
C Monthly Calibration	S Daily Zero-Span Check	Q Quality Assurance
K Collection Error	N No Data (Machine Not in Service)	Y Routine Maintenance
X InValid Data (Equipment Malfunction/Recovery)	NRM UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P Power Failure

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 NOx - AQHI - Cadotte Lake Station



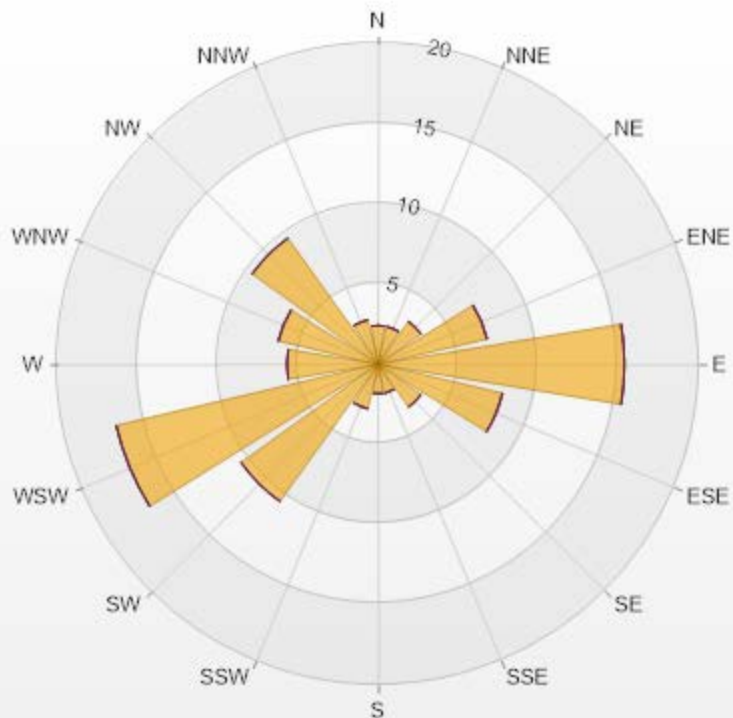
NOX[ppb] Histogram: AQHI Cadotte Lake Monthly: 03-2021 1 Hr.



Classes	NOX
<=0	16.34%
0 - 10	83.10%
10 - 20	0.43%
20 - 30	0.14%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-NOX[ppb] Monthly: 03-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.62% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	2.41	0	0	0	0	2.41
NNE	2.41	0	0	0	0	2.41
NE	3.27	0	0	0	0	3.27
ENE	6.96	0	0	0	0	6.96
E	15.34	0	0	0	0	15.34
ESE	7.95	0	0	0	0	7.95
SE	3.27	0	0	0	0	3.27
SSE	1.85	0	0	0	0	1.85
S	1.85	0	0	0	0	1.85
SSW	2.84	0	0	0	0	2.84
SW	10.51	0	0	0	0	10.51
WSW	16.76	0	0	0	0	16.76
W	5.68	0	0	0	0	5.68
WNW	6.39	0	0	0	0	6.39
NW	9.66	0	0	0	0	9.66
NNW	2.84	0	0	0	0	2.84
Summary	100	0	0	0	0	100



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% Icon Classes (ppb)

100

0-30

0

30-50

0

50-76

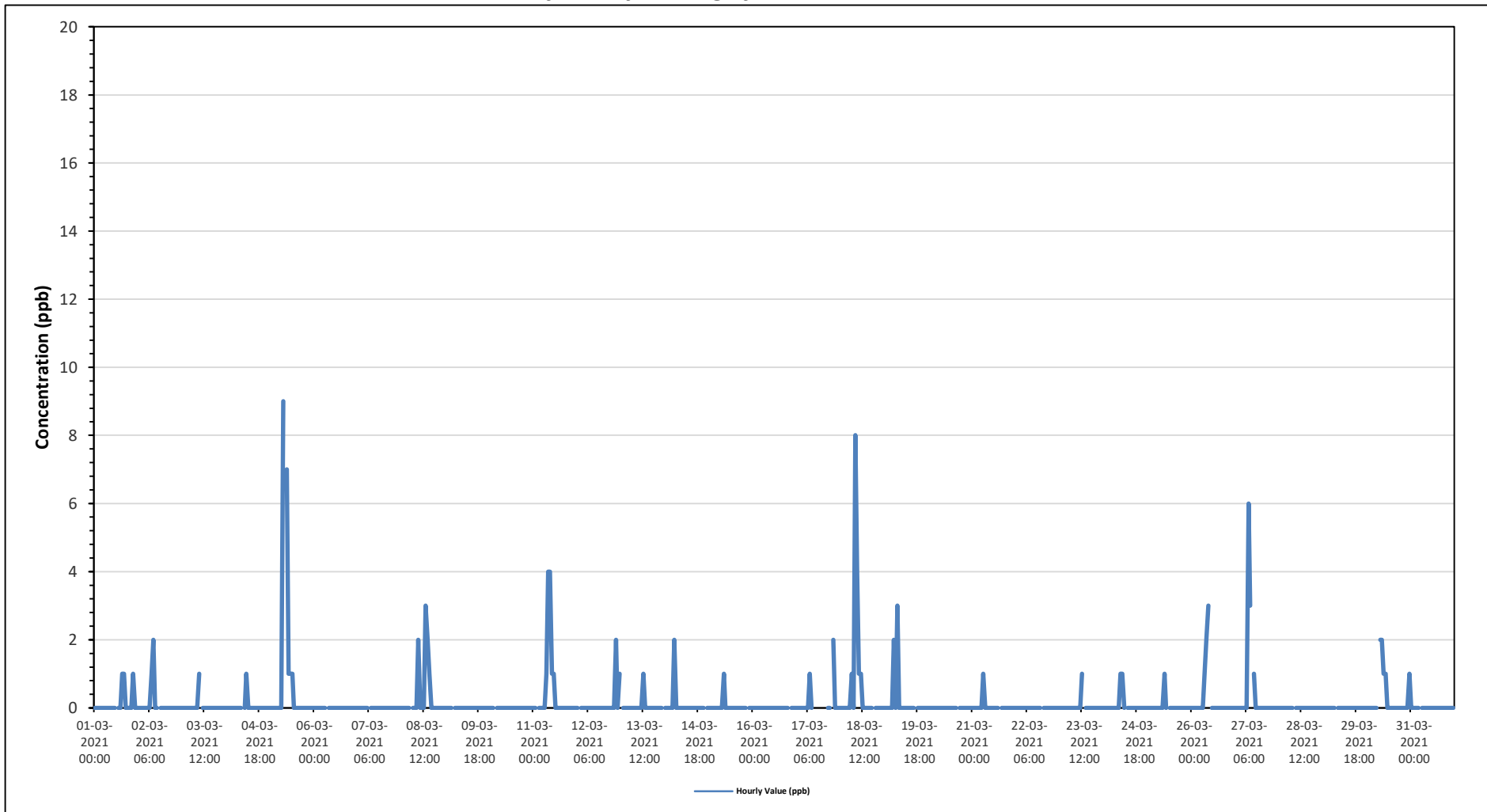
0

76-159

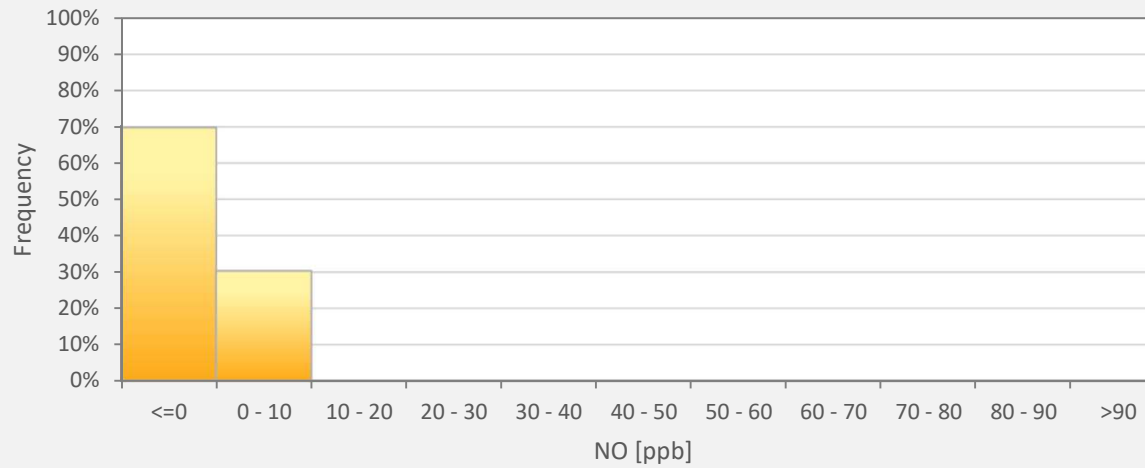
0

>159.0

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



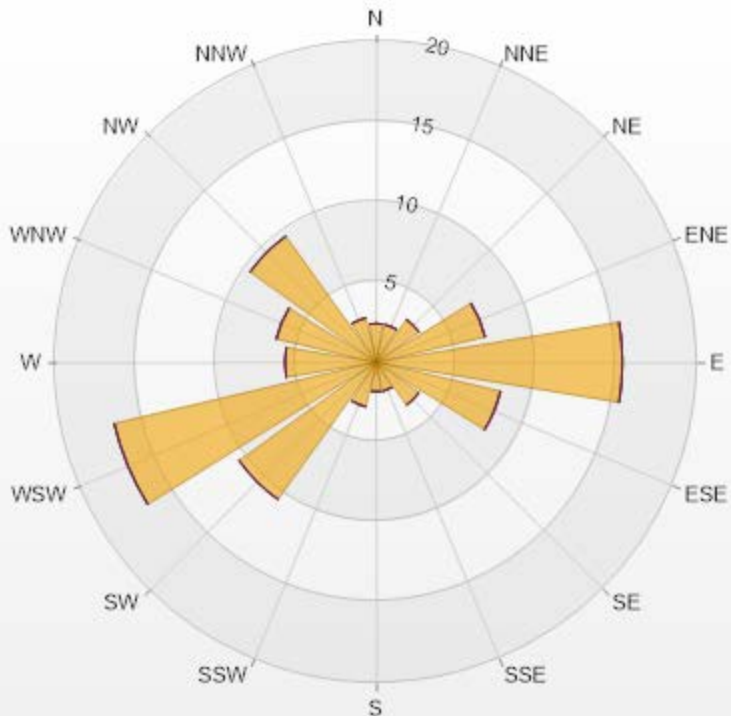
NO[ppb] Histogram: AQHI Cadotte Lake Monthly: 03-2021 1 Hr.



Classes	NO
<=0	69.74%
0 - 10	30.26%
10 - 20	0.00%
20 - 30	0.00%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-NO[ppb] Monthly: 03-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.62% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	2.41	0	0	0	0	2.41
NNE	2.41	0	0	0	0	2.41
NE	3.27	0	0	0	0	3.27
ENE	6.96	0	0	0	0	6.96
E	15.34	0	0	0	0	15.34
ESE	7.95	0	0	0	0	7.95
SE	3.27	0	0	0	0	3.27
SSE	1.85	0	0	0	0	1.85
S	1.85	0	0	0	0	1.85
SSW	2.84	0	0	0	0	2.84
SW	10.51	0	0	0	0	10.51
WSW	16.76	0	0	0	0	16.76
W	5.68	0	0	0	0	5.68
WNW	6.39	0	0	0	0	6.39
NW	9.66	0	0	0	0	9.66
NNW	2.84	0	0	0	0	2.84
Summary	100	0	0	0	0	100



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% Icon Classes (ppb)	100	0-30	0	30-50	0	50-76	0	76-159	0	>159.0
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PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - March 2021

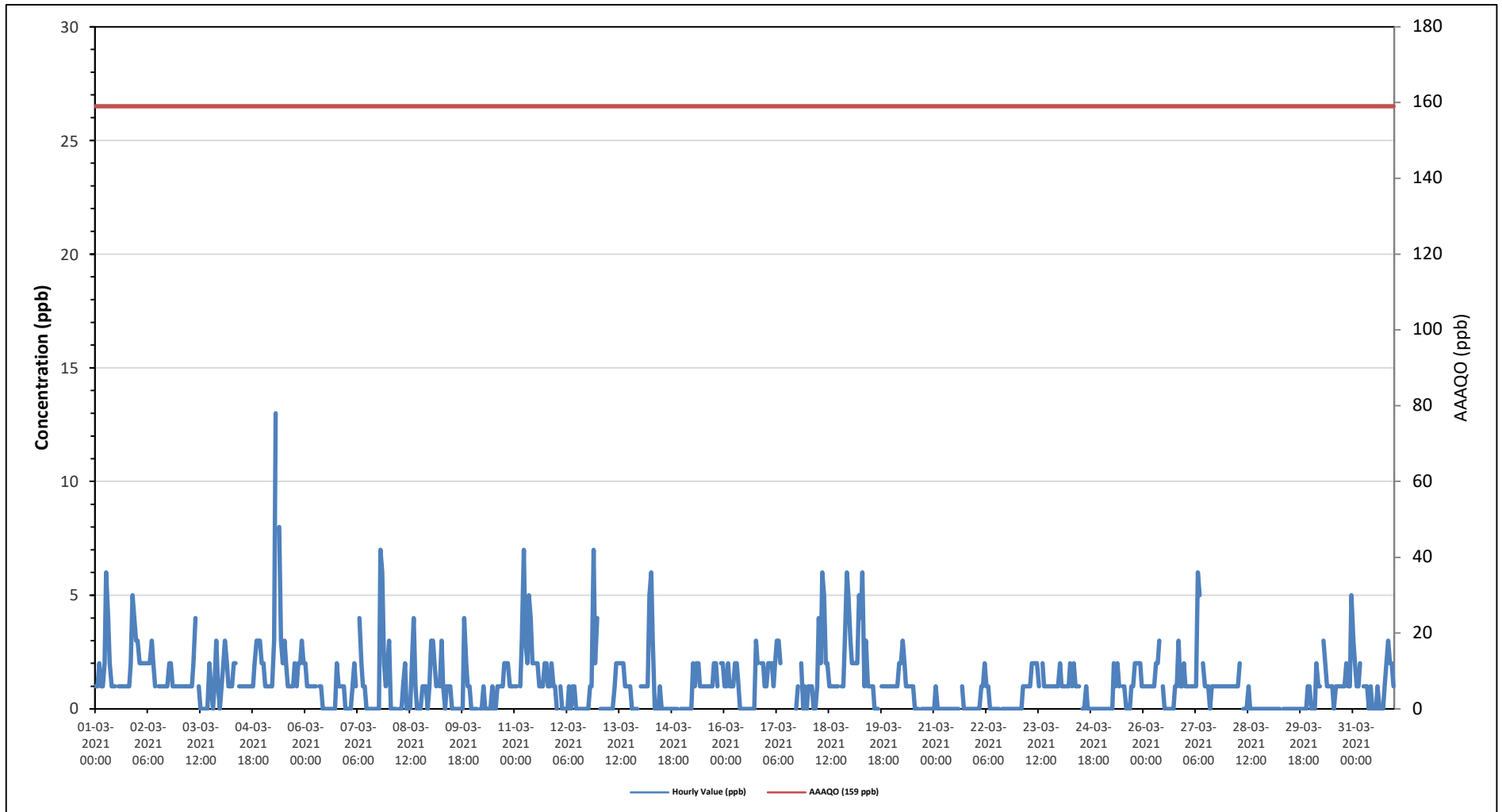
Summary of Hourly Averages

NITROGEN DIOXIDE (NO₂) in ppb

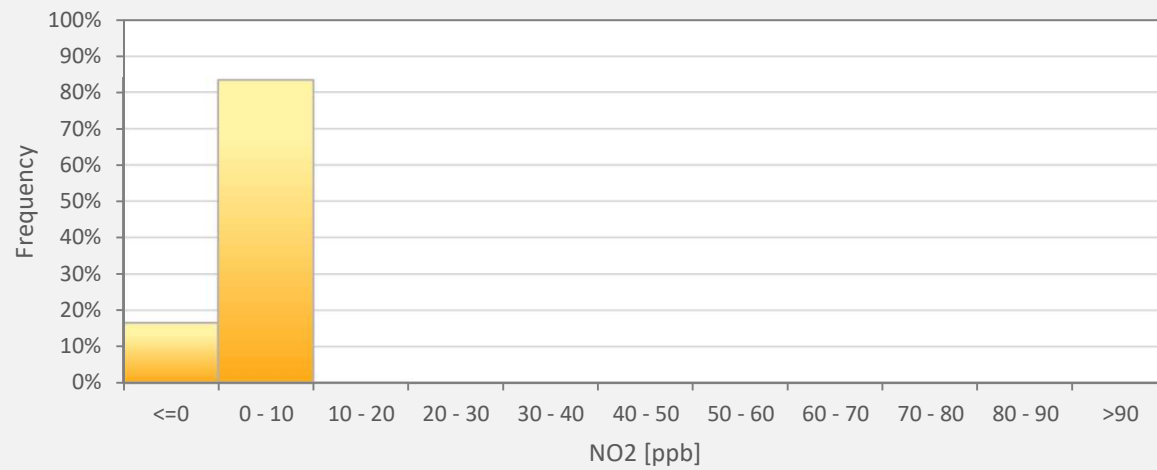
Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 159 ppb																																																			
Number of 1-Hour Exceedances: 0																																																			
Maximum Hourly Value: 13 ppb on March 5 at hour 7												Hours in Service: 744																																							
Maximum Daily Value: 2.5 ppb on March 5												Hours of Data: 704																																							
Minimum Hourly Value: 0 ppb on March 3 at hour 12												Hours of Missing Data: 0																																							
Minimum Daily Value: 0.1 ppb on March 21												Hours of Calibration: 40																																							
Monthly Average: 1.1 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																								
Mar 1	1	1	2	1	1	2	6	4	2	1	1	1	S	1	1	1	1	1	1	1	2	5	4	3	1	6	1.9																								
Mar 2	3	2	2	2	2	2	2	2	3	2	1	S	1	1	1	1	1	1	2	2	1	1	1	1	0	3	1.6																								
Mar 3	1	1	1	1	1	1	1	1	2	4	S	1	0	0	0	0	2	1	0	1	3	1	0	0	0	4	1.0																								
Mar 4	1	2	3	2	1	1	1	2	2	S	1	1	1	1	1	1	1	1	2	3	3	3	2	2	1	3	1.6																								
Mar 5	2	1	1	1	1	1	3	13	S	8	3	2	3	2	1	1	1	1	2	1	2	2	3	2	1	13	2.5																								
Mar 6	2	1	1	1	1	1	1	S	1	1	0	0	0	0	0	0	0	2	1	1	1	1	1	0	2	0.7																									
Mar 7	0	0	0	1	2	1	S	4	2	1	1	0	0	0	0	0	0	0	7	6	2	1	2	0	7	1.3																									
Mar 8	3	0	0	0	0	S	0	0	1	2	0	0	0	2	4	1	0	0	0	1	1	1	0	1	0	4	0.7																								
Mar 9	3	3	2	1	S	1	3	1	0	1	1	1	0	0	0	0	0	0	4	2	1	1	1	0	4	1.1																									
Mar 10	0	0	0	S	0	0	1	0	0	0	0	0	0	1	1	1	1	2	2	2	1	1	1	1	0	2	0.7																								
Mar 11	1	1	S	1	3	7	3	2	5	4	2	2	2	2	1	1	1	2	2	1	2	1	1	1	1	7	2.1																								
Mar 12	0	S	1	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	1	1	7	2	4	0	7	0.8																								
Mar 13	S	0	0	0	0	0	0	0	1	2	2	2	2	2	1	1	1	1	0	0	0	0	0	0	S	0	2	0.7																							
Mar 14	1	1	1	1	1	5	6	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	S	0	0	6	0.9																								
Mar 15	0	0	0	0	0	0	2	1	2	2	1	1	1	1	1	1	1	1	2	2	1	S	2	2	0	2	1.0																								
Mar 16	1	1	2	1	1	1	2	2	1	0	0	0	0	0	0	0	0	0	3	2	S	2	2	1	0	3	1.0																								
Mar 17	1	2	2	2	1	2	3	3	2	C	C	C	C	C	C	C	0	1	S	2	0	1	0	0	0	3	-																								
Mar 18	1	1	1	0	0	1	4	2	6	5	2	2	1	1	1	1	1	1	S	1	1	3	6	5	0	6	2.0																								
Mar 19	3	2	2	2	2	5	4	6	1	3	1	1	1	1	0	0	0	S	1	1	1	1	1	1	1	0	6	1.7																							
Mar 20	1	1	1	1	2	2	3	2	1	1	1	1	1	0	0	0	S	0	0	0	0	0	0	0	0	0	3	0.8																							
Mar 21	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	S	1	0	0	0	0	0	0	0	0	0	1	0.1																							
Mar 22	0	0	0	1	1	2	1	1	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	2	0.3																							
Mar 23	0	0	0	1	1	1	1	1	2	2	2	2	1	S	2	1	1	1	1	1	1	1	1	1	1	0	2	1.1																							
Mar 24	2	1	1	1	1	1	2	1	2	1	1	1	S	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0.7																							
Mar 25	0	0	0	0	0	0	0	2	1	2	1	S	1	0	0	0	0	1	1	2	2	2	2	1	0	2	0.8																								
Mar 26	1	1	1	1	1	1	1	2	2	3	S	1	0	0	0	0	0	0	1	1	3	1	1	2	0	3	1.0																								
Mar 27	1	1	1	1	1	1	1	6	5	S	2	1	1	1	0	1	1	1	1	1	1	1	1	1	0	6	1.4																								
Mar 28	1	1	1	1	1	1	1	2	S	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0.4																								
Mar 29	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0.1																								
Mar 30	0	0	0	2	1	1	S	3	2	1	1	1	1	0	1	1	1	1	1	1	2	1	1	5	0	5	1.2																								
Mar 31	3	2	1	1	2	S	1	1	1	0	1	0	0	1	0	0	0	1	2	3	2	2	1	0	0	3	1.1																								
Diurnal Maximum	3	3	3	2	3	7	6	13	6	8	3	2	3	2	4	1	1	2	3	7	6	7	6	5																											
Diurnal Average	1.1	0.9	0.9	0.9	0.9	1.4	1.8	2.3	1.6	1.6	0.9	0.8	0.6	0.6	0.6	0.5	0.4	0.5	0.9	1.2	1.3	1.4	1.3	1.3																											
C	Monthly Calibration												S	Daily Zero-Span Check												Q	Quality Assurance																								
K	Collection Error												N	No Data (Machine Not in Service)												Y	Routine Maintenance												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 NO2 - AQHI - Cadotte Lake Station



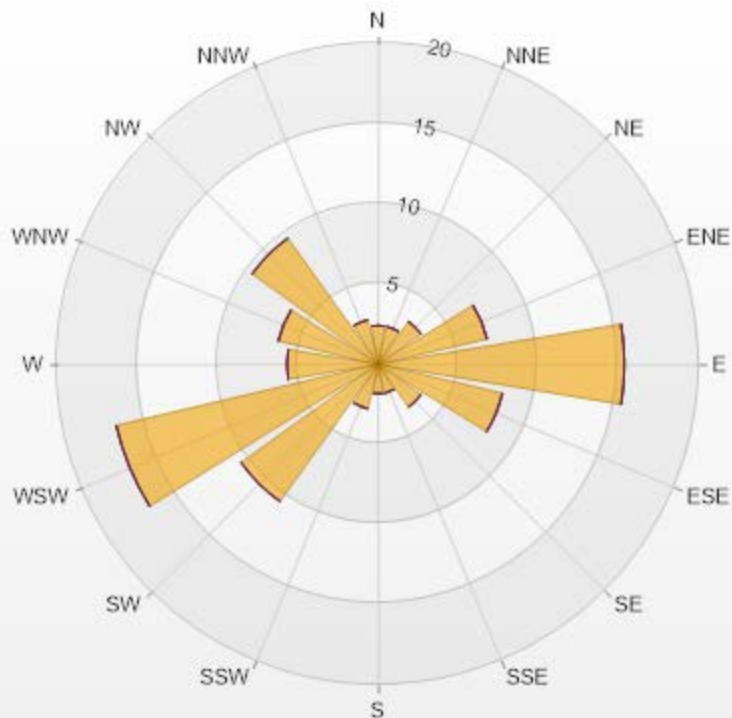
NO2[ppb] Histogram: AQHI Cadotte Lake Monthly: 03-2021 1 Hr.



Classes	NO2
<=0	16.48%
0 - 10	83.38%
10 - 20	0.14%
20 - 30	0.00%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-NO2[ppb] Monthly: 03-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.62% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	2.41	0	0	0	0	2.41
NNE	2.41	0	0	0	0	2.41
NE	3.27	0	0	0	0	3.27
ENE	6.96	0	0	0	0	6.96
E	15.34	0	0	0	0	15.34
ESE	7.95	0	0	0	0	7.95
SE	3.27	0	0	0	0	3.27
SSE	1.85	0	0	0	0	1.85
S	1.85	0	0	0	0	1.85
SSW	2.84	0	0	0	0	2.84
SW	10.51	0	0	0	0	10.51
WSW	16.76	0	0	0	0	16.76
W	5.68	0	0	0	0	5.68
WNW	6.39	0	0	0	0	6.39
NW	9.66	0	0	0	0	9.66
NNW	2.84	0	0	0	0	2.84
Summary	100	0	0	0	0	100



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% Icon Classes (ppb)	100	0-30	0	30-50	0	50-76	0	76-159	0	>159.0
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PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - March 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: 51 ppb on March 19 at hour 15	Hours in Service: 744
Maximum Daily Value: 43.0 ppb on March 6	Hours of Data: 707
Minimum Hourly Value: 10 ppb on March 11 at hour 8	Hours of Missing Data: 1
Minimum Daily Value: 22.8 ppb on March 1	Hours of Calibration: 36
Monthly Average: 33.8 ppb	Operational Uptime: 99.9

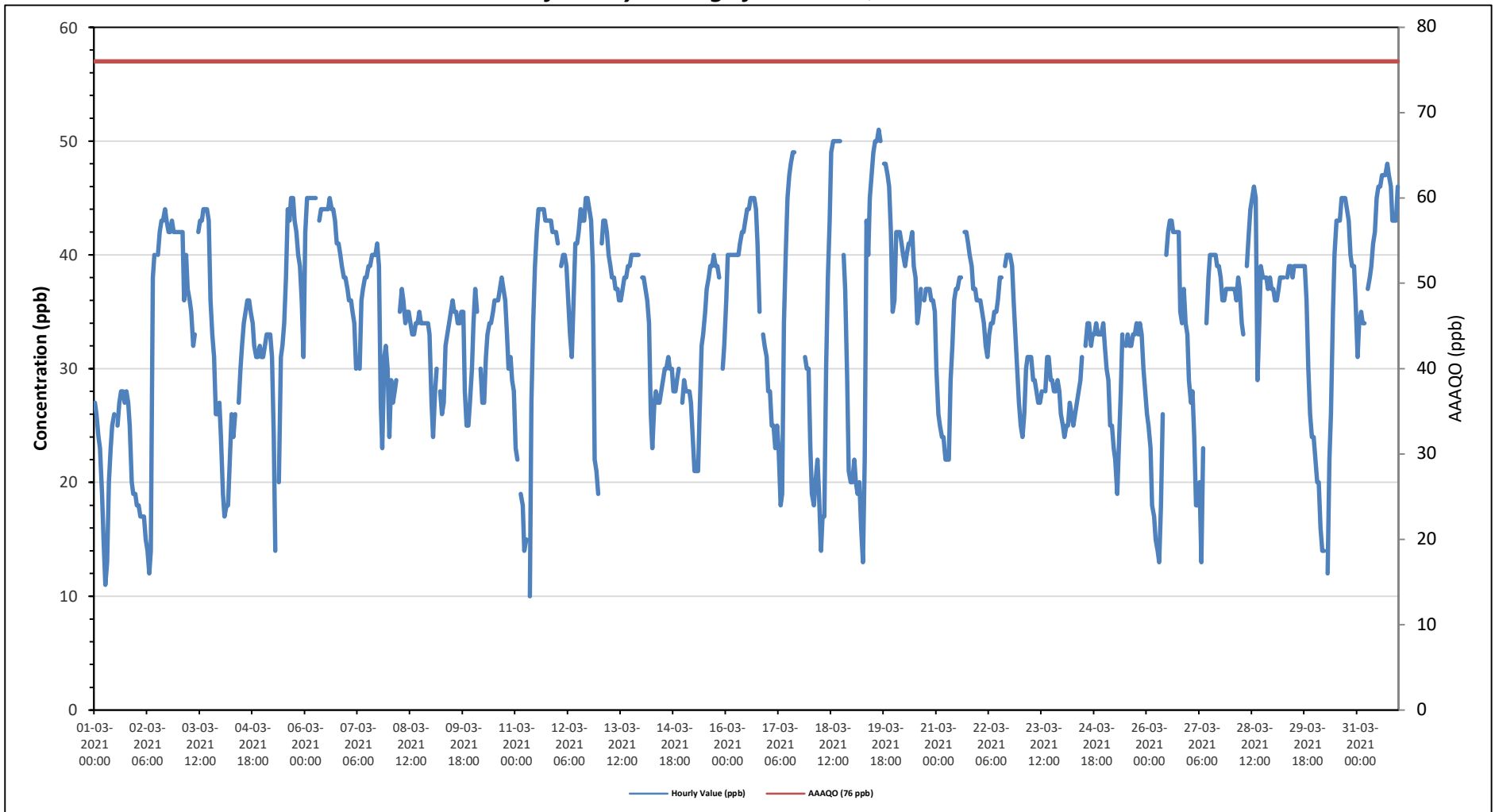
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Mar 1	27	26	24	23	19	15	11	13	20	23	25	26	S	25	27	28	28	27	28	27	25	20	19	19	11.0	28.0	22.8
Mar 2	18	18	17	17	17	15	14	12	14	38	40	S	42	43	43	44	44	43	42	42	43	42	26	27	12.0	44.0	31.7
Mar 3	42	42	42	36	40	37	36	35	32	33	S	42	43	43	44	44	44	43	36	33	31	26	26	27	26.0	44.0	37.3
Mar 4	24	19	17	18	18	22	26	24	26	S	27	30	32	34	35	36	36	35	34	32	31	31	32	31	17.0	36.0	28.3
Mar 5	31	32	33	33	33	31	24	14	S	20	31	32	34	38	44	43	45	45	43	42	40	39	36	31	14.0	45.0	34.5
Mar 6	42	45	45	45	45	45	45	S	43	44	44	44	44	44	45	44	44	43	41	41	40	39	38	38	38.0	45.0	43.0
Mar 7	37	36	36	35	34	30	S	30	36	37	38	38	39	39	40	40	40	41	39	27	23	31	32	30	23.0	41.0	35.1
Mar 8	24	29	27	28	29	S	35	37	36	34	35	35	34	33	33	34	34	35	34	34	34	34	34	33	24.0	37.0	32.8
Mar 9	27	24	28	30	S	28	26	27	32	33	34	35	36	35	35	34	34	35	35	28	25	25	27	30	24.0	36.0	30.6
Mar 10	34	37	35	S	30	27	27	31	33	34	34	35	36	36	36	37	38	37	36	33	30	31	29	28	27.0	38.0	33.2
Mar 11	23	22	S	19	18	14	15	NRM	10	27	34	39	42	44	44	44	44	43	43	43	43	42	42	42	10.0	44.0	33.5
Mar 12	41	S	39	40	40	39	36	33	31	36	41	41	42	44	43	43	45	45	44	43	39	22	21	19	19.0	45.0	37.7
Mar 13	S	41	43	43	42	40	39	38	38	37	37	36	36	37	38	38	39	39	40	40	40	40	40	S	36.0	43.0	39.1
Mar 14	38	38	37	36	34	26	23	27	28	27	27	28	29	30	30	31	30	30	28	28	29	30	S	27	23.0	38.0	30.0
Mar 15	29	28	28	28	27	24	21	21	21	26	32	33	35	37	38	39	39	40	39	39	38	S	30	32	21.0	40.0	31.5
Mar 16	36	40	40	40	40	40	40	40	41	42	42	43	44	44	45	45	45	44	41	35	S	33	32	31	31.0	45.0	40.1
Mar 17	28	28	25	25	23	25	23	18	19	34	40	45	47	48	49	49	C	C	C	C	C	31	30	30	18.0	49.0	32.5
Mar 18	23	19	18	20	22	19	14	17	17	30	38	43	49	50	50	50	50	S	40	37	29	21	20	20	14.0	50.0	31.6
Mar 19	20	22	20	19	20	16	13	22	43	40	45	47	49	50	50	51	50	S	48	48	47	46	42	35	13.0	51.0	36.7
Mar 20	36	42	42	42	41	40	39	40	41	41	42	39	38	34	35	37	S	36	37	37	37	36	36	35	34.0	42.0	38.4
Mar 21	30	26	25	24	24	22	22	29	32	36	37	37	38	38	S	42	42	42	41	40	39	37	37	36	22.0	42.0	32.9
Mar 22	36	36	35	34	32	31	33	34	34	35	35	36	38	38	S	39	40	40	40	39	36	33	30	27	27.0	40.0	35.3
Mar 23	25	24	26	30	31	31	31	29	29	28	27	27	28	S	28	31	31	29	29	28	28	29	28	26	24.0	31.0	28.4
Mar 24	25	24	25	25	27	26	25	26	27	28	29	31	S	32	34	34	32	33	33	33	34	33	33	34	24.0	34.0	29.7
Mar 25	32	30	29	25	25	23	22	19	23	28	33	S	32	33	32	32	33	33	34	33	34	33	30	28	19.0	34.0	29.4
Mar 26	26	25	23	18	17	15	14	13	18	26	S	40	42	43	43	42	42	42	42	42	35	34	37	34	13.0	43.0	30.6
Mar 27	29	27	28	24	18	18	20	13	23	S	34	38	40	40	40	40	39	39	38	36	36	37	37	37	13.0	40.0	31.8
Mar 28	37	37	37	36	38	37	34	33	S	39	42	44	45	46	45	29	34	39	38	38	38	37	38	37	29.0	46.0	38.2
Mar 29	37	36	36	37	38	38	38	S	38	39	39	38	39	39	39	39	39	39	39	39	36	30	26	24	24.0	39.0	36.0
Mar 30	22	20	20	16	14	14	S	12	22	26	35	40	43	43	43	45	45	45	44	43	40	39	39	36	12.0	45.0	32.4
Mar 31	31	34	35	34	34	S	37	38	39	41	42	45	46	46	47	47	47	48	47	46	43	43	46	46	31.0	48.0	41.7
Diurnal Maximum	42	45	45	45	45	45	45	40	43	44	45	47	49	50	50	51	50	50	48	48	47	46	43	46			
Diurnal Average	30.3	30.2	30.5	29.3	29.0	27.2	27.0	25.6	29.1	33.0	35.8	37.5	39.3	39.5	39.8	39.8	39.8	39.3	38.4	36.7	35.3	33.7	32.7	31.5			

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

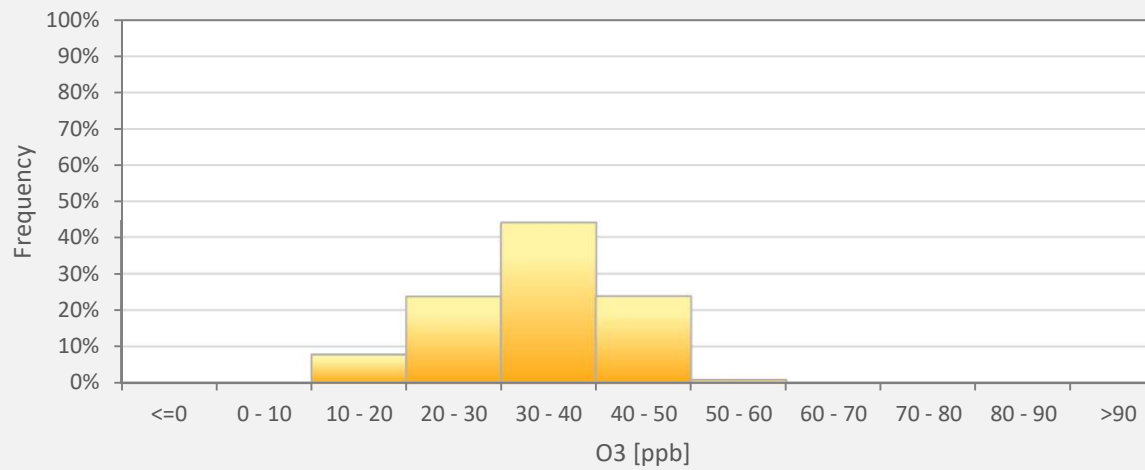
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

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

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



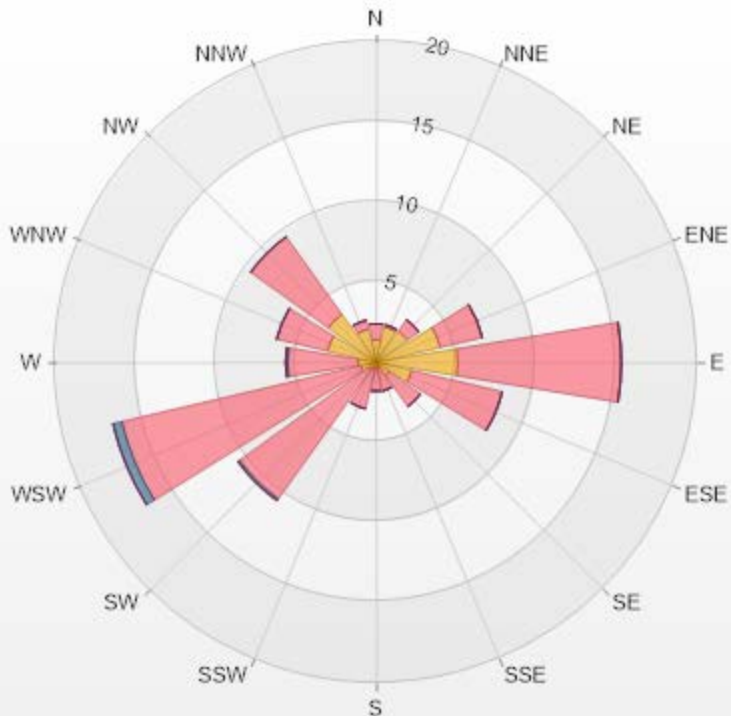
O3[ppb] Histogram: AQHI Cadotte Lake Monthly: 03-2021 1 Hr.



Classes	O3
<=0	0.00%
0 - 10	0.00%
10 - 20	7.78%
20 - 30	23.62%
30 - 40	43.99%
40 - 50	23.76%
50 - 60	0.85%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-O3[ppb] Monthly: 03-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.03% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	1.41	0.99	0	0	0	2.4
NNE	2.26	0.14	0	0	0	2.4
NE	2.4	0.85	0	0	0	3.25
ENE	4.1	2.69	0	0	0	6.79
E	5.09	10.18	0	0	0	15.27
ESE	2.26	5.8	0	0	0	8.06
SE	0.99	2.4	0	0	0	3.39
SSE	0.28	1.56	0	0	0	1.84
S	0.42	1.41	0	0	0	1.83
SSW	0.42	2.55	0	0	0	2.97
SW	0.57	9.9	0.14	0	0	10.61
WSW	0.99	15.28	0.57	0	0	16.84
W	1.13	4.38	0.14	0	0	5.65
WNW	3.11	3.25	0	0	0	6.36
NW	3.68	5.94	0	0	0	9.62
NNW	2.12	0.57	0	0	0	2.69
Summary	31.23	67.89	0.85	0	0	100



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% Icon Classes (ppb)	31	68	1	0	0
0-30	31	0	0	0	0
30-50	0	68	0	0	0
50-76	0	0	1	0	0
76-159	0	0	0	0	0
>159.0	0	0	0	0	1



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - March 2021

Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

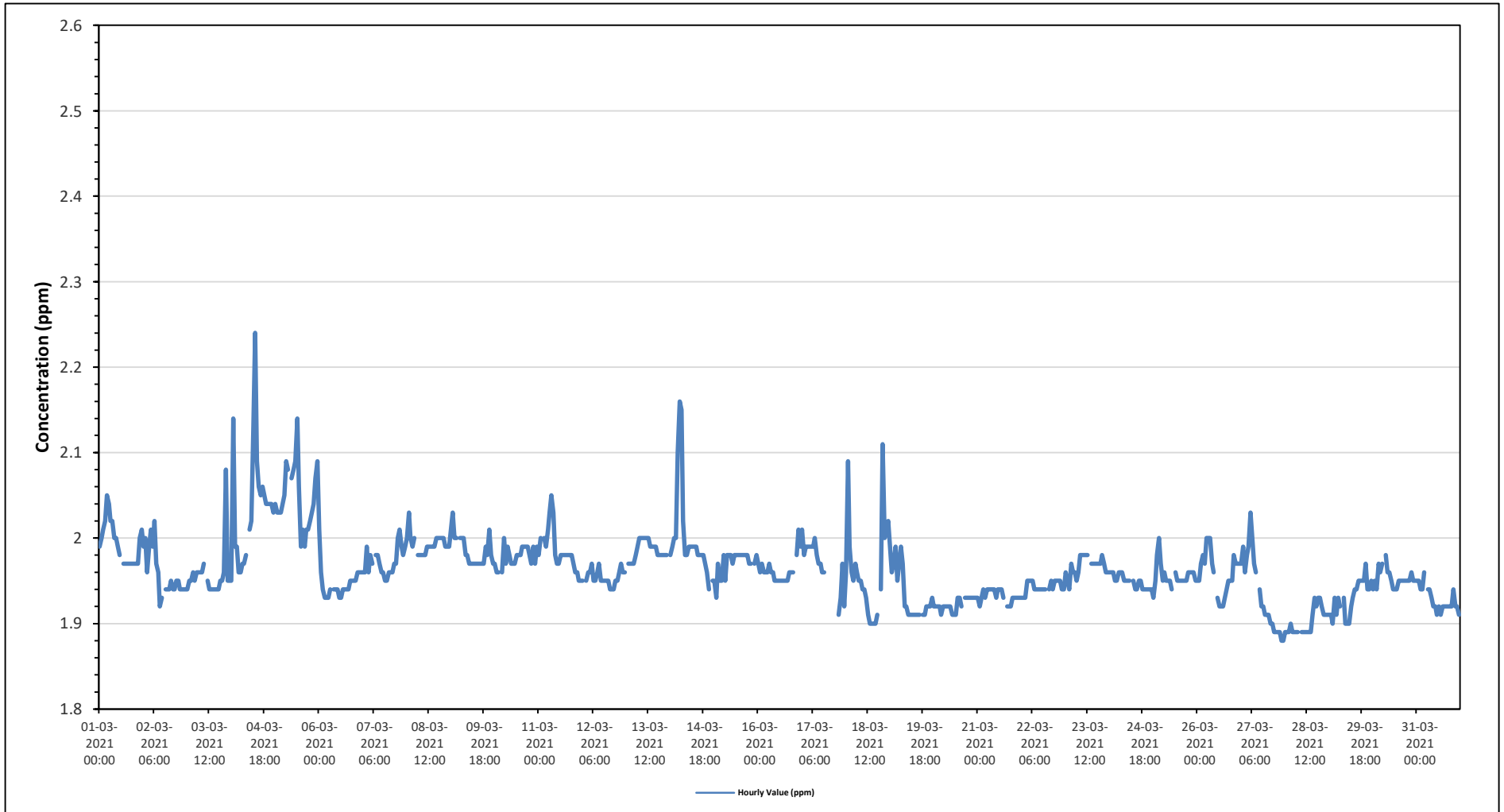
Maximum Hourly Value: 2.24 ppm on March 4 at hour 13	Hours in Service: 744
Maximum Daily Value: 2.05 ppm on March 5	Hours of Data: 707
Minimum Hourly Value: 1.88 ppm on March 27 at hour 22	Hours of Missing Data: 0
Minimum Daily Value: 1.90 ppm on March 28	Hours of Calibration: 37
Monthly Average: 1.96 ppm	Operational Uptime: 100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Mar 1	1.99	2.00	2.01	2.02	2.05	2.04	2.02	2.02	2.02	2.00	2.00	1.99	1.98	S	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	2.00	2.01	1.97	2.05	1.99	
Mar 2	1.99	2.00	1.96	1.99	2.01	1.99	2.02	1.97	1.96	1.92	1.93	S	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.95	1.94	1.94	1.94	1.92	2.02	1.96
Mar 3	1.94	1.95	1.95	1.96	1.95	1.96	1.96	1.96	1.96	1.97	S	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.95	1.96	2.09	1.95	1.95	1.94	2.09	1.96
Mar 4	1.95	2.14	1.99	1.98	1.96	1.96	1.97	1.97	1.98	S	2.01	2.02	2.13	2.24	2.09	2.06	2.05	2.06	2.05	2.04	2.04	2.04	2.04	2.03	1.95	2.24	2.03	
Mar 5	2.04	2.03	2.03	2.03	2.04	2.05	2.09	2.08	S	2.07	2.08	2.09	2.14	2.06	1.99	2.01	1.99	2.01	2.01	2.02	2.03	2.04	2.07	2.09	1.99	2.14	2.05	
Mar 6	2.01	1.96	1.94	1.93	1.93	1.93	1.94	S	1.94	1.94	1.94	1.93	1.93	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.93	2.01	1.95		
Mar 7	1.95	1.96	1.99	1.97	1.98	1.97	S	1.98	1.98	1.97	1.96	1.96	1.95	1.95	1.96	1.96	1.96	1.97	1.97	2.00	2.01	1.99	1.98	1.99	1.95	2.01	1.97	
Mar 8	2.01	2.03	2.00	1.99	2.00	S	1.98	1.98	1.98	1.97	1.98	1.98	1.98	1.99	1.99	1.99	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.97	2.03	1.99		
Mar 9	2.01	2.03	1.99	2.00	S	2.00	2.00	2.00	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.99	1.98	2.01	1.98	1.97	1.97	2.03	1.98	
Mar 10	1.97	1.96	1.96	S	1.96	2.00	1.97	1.99	1.98	1.97	1.97	1.97	1.98	1.98	1.99	1.99	1.99	1.99	1.99	1.98	1.97	1.99	1.97	1.99	1.96	2.00	1.98	
Mar 11	1.98	2.01	S	2.00	1.99	2.01	2.03	2.05	2.03	1.98	1.97	1.97	1.98	1.98	1.97	1.98	1.98	1.98	1.98	1.97	1.96	1.96	1.95	1.94	1.94	2.05	1.98	
Mar 12	1.95	S	1.95	1.96	1.96	1.97	1.95	1.95	1.96	1.97	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.94	1.95	1.95	1.96	1.97	1.96	1.96	1.94	1.97	1.95	
Mar 13	S	1.97	1.97	1.97	1.97	1.98	1.99	2.00	1.99	2.00	2.00	2.00	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.98	1.98	S	1.97	2.00	1.99	
Mar 14	1.98	1.99	1.99	2.00	2.09	2.16	2.15	2.02	1.98	1.98	1.98	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.97	1.96	1.94	S	1.95	1.94	2.16	2.00	
Mar 15	1.95	1.93	1.97	1.95	1.95	1.98	1.95	1.98	1.98	1.98	1.97	1.97	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.97	1.97	S	1.97	1.98	1.93	1.98	1.97	
Mar 16	1.97	1.96	1.97	1.96	1.96	1.96	1.97	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.96	S	1.99	2.01	1.99	1.95	2.01	1.96		
Mar 17	2.01	1.98	1.99	1.99	1.99	1.99	1.99	2.00	1.98	1.97	1.97	1.96	1.95	C	C	C	C	C	1.91	S	1.91	1.93	1.97	1.92	1.91	2.01	1.97	
Mar 18	1.96	2.08	1.99	1.96	1.95	1.97	1.96	1.95	1.95	1.94	1.94	1.93	1.91	1.90	1.90	1.90	1.90	1.91	S	1.94	2.11	2.00	2.01	2.02	1.90	2.11	1.96	
Mar 19	1.99	1.96	1.97	1.99	1.95	1.97	1.99	1.97	1.92	1.92	1.91	1.91	1.91	1.91	1.91	1.90	1.91	S	1.91	1.91	1.92	1.92	1.92	1.93	1.90	1.99	1.93	
Mar 20	1.92	1.92	1.92	1.92	1.91	1.92	1.92	1.92	1.92	1.92	1.91	1.91	1.91	1.93	1.93	1.92	S	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.91	1.93	1.92	
Mar 21	1.93	1.92	1.93	1.94	1.93	1.94	1.94	1.94	1.94	1.93	1.93	1.94	1.94	1.94	1.93	S	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.92	1.94	1.93	
Mar 22	1.93	1.93	1.93	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	S	1.94	1.95	1.94	1.94	1.95	1.95	1.95	1.94	1.94	1.93	1.95	1.94	
Mar 23	1.96	1.95	1.94	1.97	1.96	1.96	1.95	1.96	1.98	1.97	1.98	1.98	1.98	S	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.97	1.96	1.96	1.94	1.98	1.97	
Mar 24	1.96	1.96	1.96	1.95	1.95	1.96	1.96	1.96	1.96	1.95	1.95	1.95	1.95	S	1.95	1.94	1.94	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.96	1.95
Mar 25	1.93	1.95	1.98	2.00	1.97	1.95	1.96	1.95	1.95	1.94	1.94	S	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.96	1.95	1.93	2.00	1.96	
Mar 26	1.95	1.95	1.97	1.98	1.97	2.00	2.00	2.00	1.97	1.96	S	1.93	1.92	1.92	1.93	1.93	1.94	1.95	1.95	1.95	1.95	1.98	1.97	1.97	1.97	1.92	2.00	1.96
Mar 27	1.97	1.99	1.96	1.98	1.99	2.03	2.00	1.97	1.96	S	1.94	1.92	1.92	1.91	1.91	1.91	1.90	1.89	1.89	1.89	1.89	1.88	1.88	1.88	1.88	1.88	2.03	1.93
Mar 28	1.88	1.89	1.89	1.90	1.89	1.89	1.89	1.89	S	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.91	1.93	1.92	1.92	1.93	1.92	1.91	1.91	1.91	1.88	1.93	1.90
Mar 29	1.91	1.91	1.90	1.93	1.91	1.93	1.92	S	1.93	1.90	1.90	1.90	1.92	1.93	1.94	1.94	1.95	1.95	1.94	1.97	1.94	1.94	1.95	1.90	1.97	1.97	1.93	
Mar 30	1.94	1.95	1.94	1.97	1.96	1.97	S	1.98	1.96	1.96	1.95	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.94	1.98	1.95	
Mar 31	1.95	1.95	1.94	1.94	1.96	S	1.94	1.94	1.93	1.92	1.92	1.91	1.92	1.91	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.94	1.92	1.91	1.91	1.96	1.93	
Diurnal Maximum	2.04	2.14	2.03	2.03	2.09	2.16	2.15	2.08	2.03	2.07	2.08	2.09	2.14	2.24	2.09	2.06	2.05	2.06	2.05	2.04	2.11	2.09	2.07	2.09	1.91	2.16	2.00	
Diurnal Average	1.96	1.97	1.96	1.97	1.97	1.98	1.98	1.98	1.96	1.96	1.96	1.96	1.95	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	

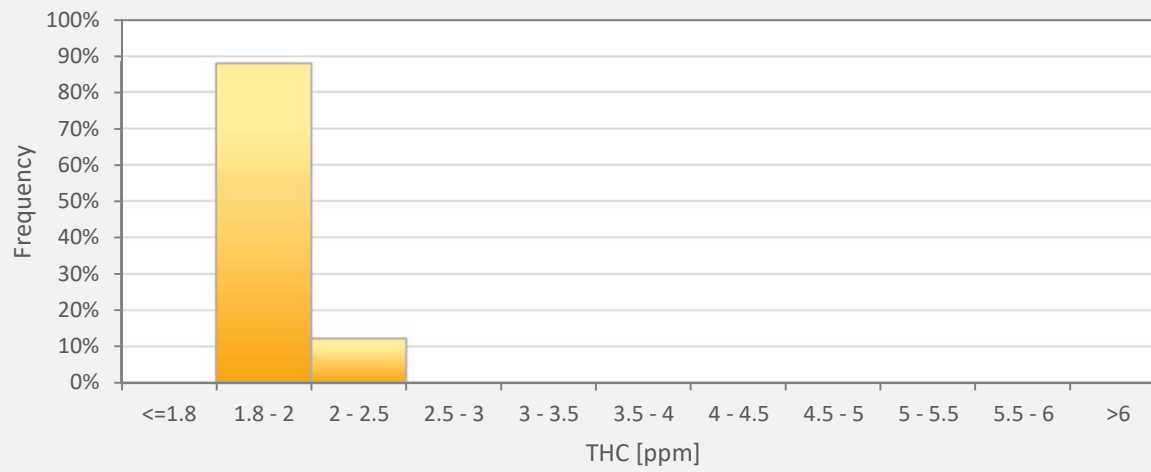
C Monthly Calibration	S Daily Zero-Span Check	Q Quality Assurance
K Collection Error	N No Data (Machine Not in Service)	Y Routine Maintenance
X InValid Data (Equipment Malfunction/Recovery)	NRM UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P Power Failure

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 THC - AQHI - Cadotte Lake Station



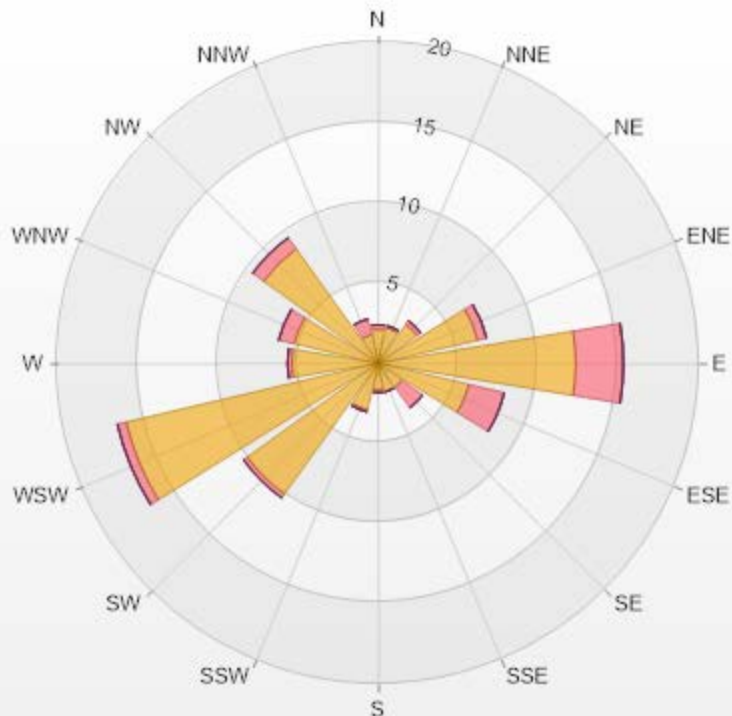
THC55[ppm] Histogram: AQHI Cadotte Lake Monthly: 03-2021 1 Hr.



Classes	THC55
<=1.8	0.00%
1.8 - 2	87.84%
2 - 2.5	12.16%
2.5 - 3	0.00%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-THC55[ppm] Monthly: 03-2021 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	2.12	0.28	0	0	0	2.4
NNE	2.26	0.14	0	0	0	2.4
NE	2.97	0.28	0	0	0	3.25
ENE	6.36	0.57	0	0	0	6.93
E	12.31	2.97	0	0	0	15.28
ESE	5.8	2.26	0	0	0	8.06
SE	1.84	1.56	0	0	0	3.4
SSE	1.84	0	0	0	0	1.84
S	1.7	0.14	0	0	0	1.84
SSW	2.97	0.14	0	0	0	3.11
SW	10.04	0.28	0	0	0	10.32
WSW	16.12	0.57	0	0	0	16.69
W	5.37	0.28	0	0	0	5.65
WNW	5.37	0.99	0	0	0	6.36
NW	8.77	0.85	0	0	0	9.62
NNW	1.84	0.99	0	0	0	2.83
Summary	87.68	12.3	0	0	0	100



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% Icon Classes (ppm)	88	12	0	0	0
0-2	88	12	0	0	0
2-5		12			
5-10			0		
10-40				0	
>40.0					0



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - March 2021

Summary of Hourly Averages

METHANE (CH4) in ppm

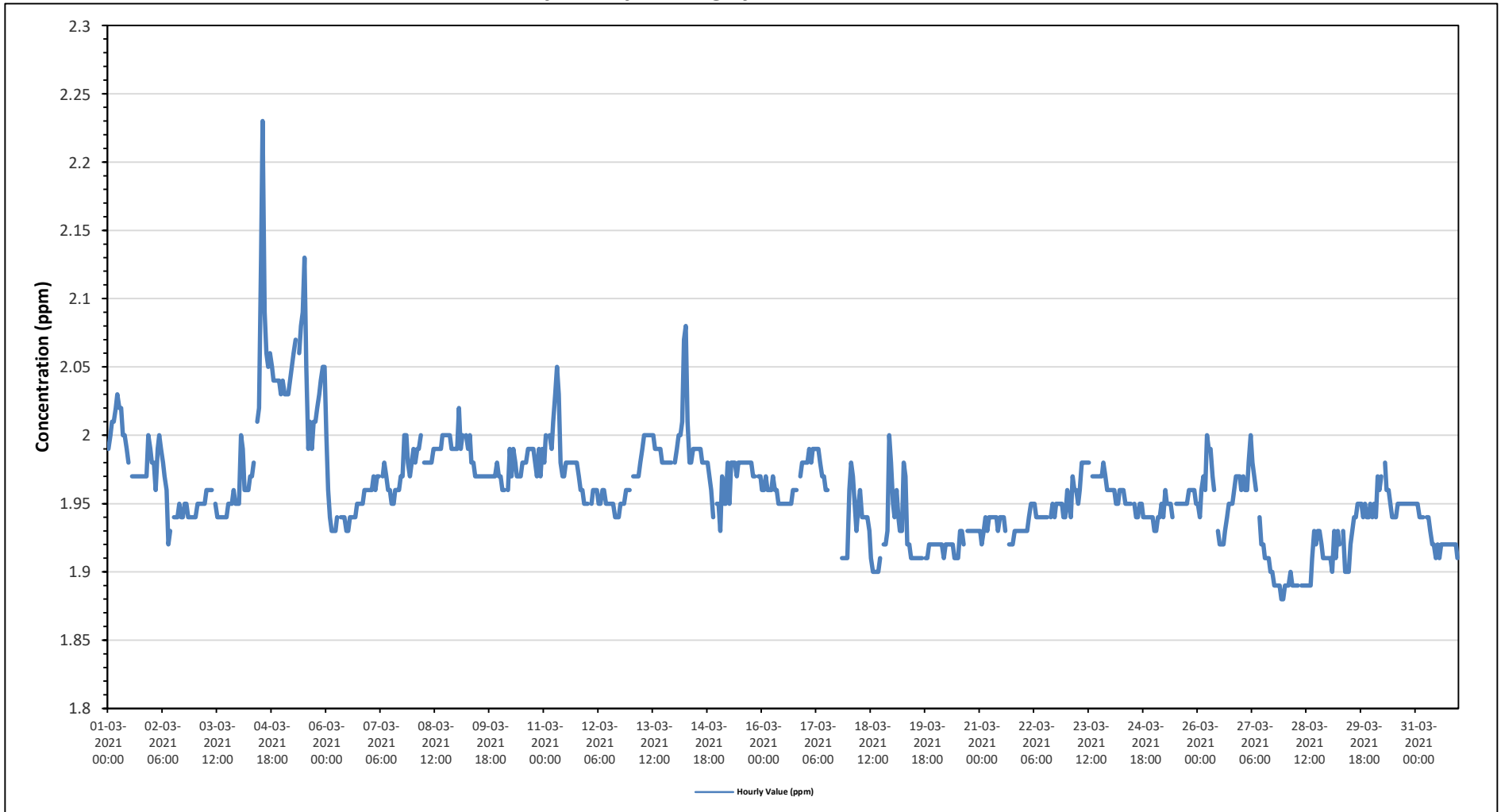
Maximum Hourly Value: 2.23 ppm on March 4 at hour 13	Hours in Service: 744
Maximum Daily Value: 2.04 ppm on March 5	Hours of Data: 707
Minimum Hourly Value: 1.88 ppm on March 27 at hour 22	Hours of Missing Data: 0
Minimum Daily Value: 1.90 ppm on March 28	Hours of Calibration: 37
Monthly Average: 1.96 ppm	Operational Uptime: 100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Mar 1	1.99	2.00	2.01	2.01	2.02	2.03	2.02	2.02	2.00	2.00	1.99	1.98	S	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	2.00	1.99	1.97	2.03	1.99	
Mar 2	1.98	1.98	1.96	1.99	2.00	1.99	1.98	1.97	1.96	1.92	1.93	S	1.94	1.94	1.94	1.95	1.94	1.94	1.94	1.95	1.94	1.94	1.94	1.94	1.94	1.92	2.00	1.96
Mar 3	1.94	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.96	S	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.96	1.95	1.95	1.94	1.96	1.95
Mar 4	1.95	2.00	1.99	1.96	1.96	1.96	1.97	1.97	1.98	S	2.01	2.02	2.13	2.23	2.09	2.06	2.05	2.06	2.05	2.04	2.04	2.04	2.04	2.03	1.95	2.23	2.03	
Mar 5	2.04	2.03	2.03	2.03	2.04	2.05	2.06	2.07	S	2.06	2.08	2.09	2.13	2.05	1.99	2.01	1.99	2.01	2.01	2.02	2.03	2.04	2.05	2.05	1.99	2.13	2.04	
Mar 6	2.00	1.96	1.94	1.93	1.93	1.93	1.94	S	1.94	1.94	1.94	1.93	1.93	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.93	2.00	1.95	1.95	
Mar 7	1.96	1.96	1.97	1.96	1.97	1.97	S	1.97	1.98	1.97	1.96	1.96	1.95	1.95	1.96	1.96	1.96	1.97	1.97	2.00	2.00	1.98	1.97	1.98	1.95	2.00	1.97	
Mar 8	1.99	1.98	1.99	1.99	2.00	S	1.98	1.98	1.98	1.98	1.98	1.98	1.99	1.99	1.99	1.99	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.98	2.00	1.99	1.99	
Mar 9	1.99	2.02	1.99	2.00	S	2.00	1.99	2.00	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.97	1.97	2.02	1.98	
Mar 10	1.97	1.96	1.96	S	1.96	1.99	1.97	1.99	1.98	1.97	1.97	1.97	1.98	1.98	1.99	1.99	1.99	1.99	1.98	1.97	1.99	1.97	1.99	1.96	1.99	1.99	1.98	
Mar 11	1.98	2.00	S	2.00	1.99	2.01	2.03	2.05	2.03	1.98	1.97	1.97	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.97	1.96	1.96	1.95	1.95	1.95	2.05	1.99	
Mar 12	1.95	S	1.95	1.96	1.96	1.96	1.95	1.95	1.96	1.96	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.95	1.95	1.95	1.96	1.96	1.96	1.94	1.96	1.95	1.95	
Mar 13	S	1.97	1.97	1.97	1.97	1.98	1.99	2.00	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.97	2.00	1.99	
Mar 14	1.98	1.99	2.00	2.00	2.01	2.07	2.08	2.01	1.98	1.98	1.99	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.97	1.96	1.94	S	1.95	1.94	2.08	1.99	
Mar 15	1.95	1.93	1.97	1.95	1.95	1.98	1.95	1.98	1.98	1.98	1.97	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.97	1.97	S	1.97	1.97	1.93	1.98	1.97	
Mar 16	1.96	1.96	1.97	1.96	1.96	1.96	1.97	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.96	S	1.97	1.98	1.98	1.95	1.98	1.96	1.96	
Mar 17	1.98	1.98	1.99	1.98	1.99	1.99	1.99	1.99	1.98	1.97	1.97	1.96	1.96	C	C	C	C	C	1.91	S	S	1.91	1.91	1.91	1.91	1.99	1.96	
Mar 18	1.96	1.98	1.97	1.95	1.93	1.95	1.96	1.94	1.94	1.94	1.94	1.93	1.91	1.90	1.90	1.90	1.90	1.91	S	1.92	1.92	1.92	1.93	2.00	1.98	1.94		
Mar 19	1.95	1.94	1.96	1.94	1.93	1.93	1.98	1.97	1.92	1.92	1.91	1.91	1.91	1.91	1.91	1.91	1.91	S	1.91	1.91	1.92	1.92	1.92	1.92	1.91	1.98	1.93	
Mar 20	1.92	1.92	1.92	1.92	1.91	1.92	1.92	1.92	1.92	1.92	1.91	1.91	1.91	1.93	1.93	1.92	S	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.91	1.93	1.92	
Mar 21	1.93	1.92	1.93	1.94	1.93	1.94	1.94	1.94	1.94	1.94	1.93	1.94	1.94	1.94	1.93	S	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.92	1.94	1.93	
Mar 22	1.93	1.93	1.93	1.94	1.95	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	S	1.94	1.95	1.94	1.95	1.95	1.95	1.95	1.94	1.94	1.93	1.95	1.94	
Mar 23	1.96	1.95	1.94	1.97	1.96	1.96	1.95	1.96	1.98	1.98	1.98	1.98	1.98	S	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.97	1.96	1.94	1.98	1.97	
Mar 24	1.96	1.96	1.96	1.95	1.95	1.96	1.96	1.96	1.95	1.95	1.95	1.95	S	1.95	1.94	1.94	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.96	1.95	
Mar 25	1.93	1.93	1.94	1.94	1.95	1.94	1.96	1.95	1.95	1.95	1.94	S	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.96	1.95	1.93	1.96	1.95	
Mar 26	1.95	1.94	1.96	1.97	1.96	2.00	1.99	1.99	1.97	1.96	S	1.93	1.92	1.92	1.92	1.93	1.94	1.95	1.95	1.95	1.96	1.97	1.97	1.97	1.92	2.00	1.96	
Mar 27	1.96	1.97	1.96	1.96	1.98	2.00	1.98	1.97	1.96	S	1.94	1.92	1.92	1.91	1.91	1.91	1.90	1.89	1.89	1.89	1.89	1.88	1.88	1.88	1.88	2.00	1.93	
Mar 28	1.89	1.89	1.89	1.90	1.89	1.89	1.89	1.89	S	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.91	1.93	1.92	1.93	1.93	1.92	1.91	1.91	1.89	1.93	1.90	
Mar 29	1.91	1.91	1.90	1.93	1.91	1.93	1.92	S	1.93	1.90	1.90	1.90	1.92	1.93	1.94	1.94	1.95	1.95	1.95	1.94	1.95	1.94	1.94	1.95	1.90	1.95	1.93	
Mar 30	1.94	1.95	1.94	1.97	1.96	1.97	S	1.98	1.96	1.96	1.95	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.94	1.98	1.95	
Mar 31	1.95	1.95	1.94	1.94	1.94	S	1.94	1.94	1.93	1.92	1.92	1.91	1.92	1.91	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.91	1.91	1.95	1.93	
Diurnal Maximum	2.04	2.03	2.03	2.03	2.04	2.07	2.08	2.07	2.03	2.06	2.08	2.09	2.13	2.23	2.09	2.06	2.05	2.06	2.05	2.04	2.04	2.04	2.05	2.05	1.91	2.05	2.05	
Diurnal Average	1.96	1.96	1.96	1.96	1.96	1.97	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	

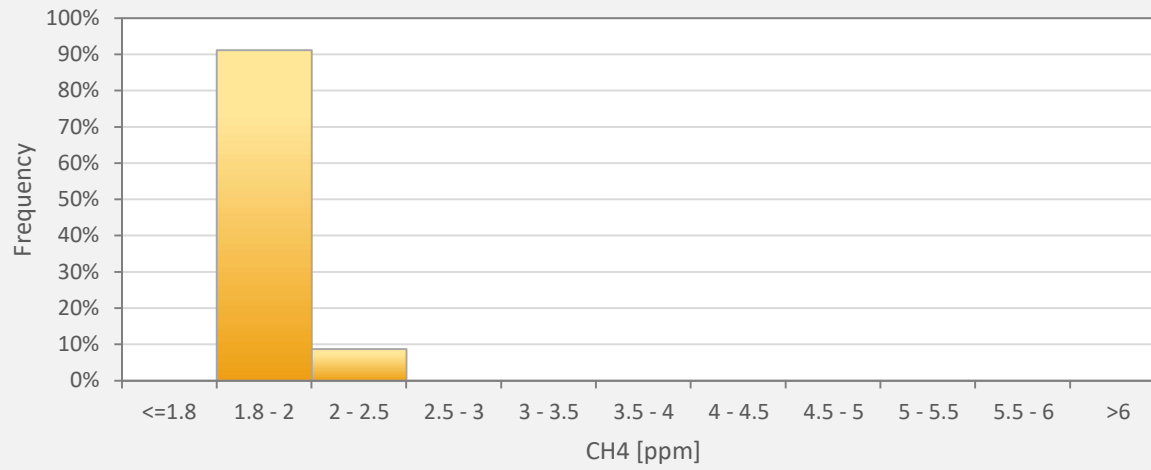
C Monthly Calibration	S Daily Zero-Span Check	Q Quality Assurance
K Collection Error	N No Data (Machine Not in Service)	Y Routine Maintenance
X InValid Data (Equipment Malfunction/Recovery)	NRM UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P Power Failure

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 CH4 - AQHI - Cadotte Lake Station



CH4[ppm] Histogram: AQHI Cadotte Lake Monthly: 03-2021 1 Hr.



Classes	CH4
<=1.8	0.00%
1.8 - 2	91.23%
2 - 2.5	8.77%
2.5 - 3	0.00%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-CH4[ppm] Monthly: 03-2021 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	2.4	0	0	0	0	2.4
NNE	2.26	0.14	0	0	0	2.4
NE	3.25	0	0	0	0	3.25
ENE	6.65	0.28	0	0	0	6.93
E	12.87	2.4	0	0	0	15.27
ESE	6.08	1.98	0	0	0	8.06
SE	1.84	1.56	0	0	0	3.4
SSE	1.84	0	0	0	0	1.84
S	1.7	0.14	0	0	0	1.84
SSW	2.97	0.14	0	0	0	3.11
SW	10.18	0.14	0	0	0	10.32
WSW	16.27	0.42	0	0	0	16.69
W	5.52	0.14	0	0	0	5.66
WNW	5.52	0.85	0	0	0	6.37
NW	9.34	0.28	0	0	0	9.62
NNW	2.26	0.57	0	0	0	2.83
Summary	90.95	9.04	0	0	0	100



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - March 2021

Summary of Hourly Averages

NON-METHANE HYDROCARBONS (NMHC) in ppm

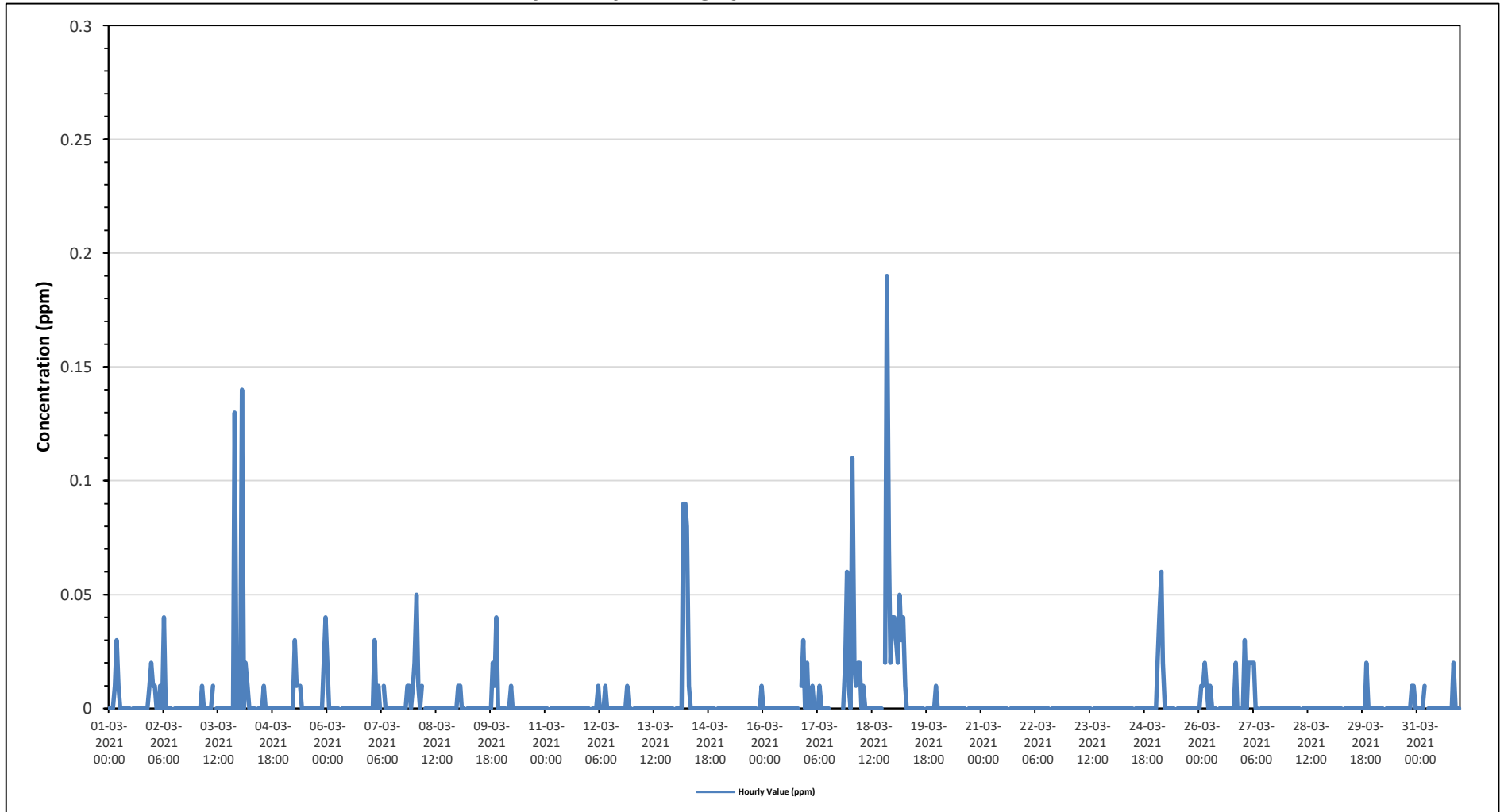
Maximum Hourly Value: 0.19 ppm on March 18 at hour 20	Hours in Service: 744
Maximum Daily Value: 0.02 ppm on March 18	Hours of Data: 707
Minimum Hourly Value: 0.00 ppm on March 1 at hour 0	Hours of Missing Data: 0
Minimum Daily Value: 0.00 ppm on March 11	Hours of Calibration: 37
Monthly Average: 0.00 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
Mar 1	0.00	0.00	0.00	0.01	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.03	0.00	
Mar 2	0.01	0.01	0.00	0.00	0.01	0.00	0.04	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	0.04	0.00
Mar 3	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.13	0.01
Mar 4	0.00	0.14	0.00	0.02	0.01	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.01
Mar 5	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	S	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.00	0.04	0.00
Mar 6	0.02	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	0.02	0.00
Mar 7	0.00	0.00	0.03	0.00	0.01	0.00	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	0.01	0.01	0.00	0.01	0.00	0.03	0.00
Mar 8	0.02	0.05	0.01	0.00	0.01	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
Mar 9	0.01	0.01	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	0.02	0.01	0.04	0.00	0.00	0.00	0.04	0.00
Mar 10	0.00	0.00	0.00	S	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Mar 11	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
Mar 12	0.00	S	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	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00
Mar 13	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
Mar 14	0.00	0.00	0.00	0.00	0.09	0.09	0.08	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	0.09	0.01
Mar 15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.01	0.00	0.01	0.00
Mar 16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.01	0.03	0.00	0.00	0.03	0.00
Mar 17	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	C	C	C	C	C	0.00	S	0.00	0.02	0.06	0.01	0.00	0.06	0.01
Mar 18	0.00	0.11	0.02	0.01	0.02	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	S	0.02	0.19	0.07	0.02	0.04	0.00	0.19	0.02
Mar 19	0.04	0.03	0.02	0.05	0.03	0.04	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	0.00	0.00	0.00	0.01	0.00	0.05	0.01
Mar 20	0.00	0.00	0.00	0.00	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
Mar 21	0.00	0.00	0.00	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
Mar 22	0.00	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
Mar 23	0.00	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
Mar 24	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
Mar 25	0.00	0.02	0.04	0.06	0.02	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	0.06	0.01
Mar 26	0.00	0.01	0.01	0.02	0.01	0.00	0.01	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	0.02	0.00	0.00	0.00	0.00	0.02	0.00
Mar 27	0.00	0.03	0.00	0.02	0.02	0.02	0.02	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	0.03	0.00
Mar 28	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
Mar 29	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	0.02	0.00	0.00	0.00	0.00	0.02	0.00
Mar 30	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	0.01	0.01	0.00	0.00	0.01	0.00
Mar 31	0.00	0.00	0.00	0.00	0.01	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02	0.00
Diurnal Maximum	0.04	0.14	0.04	0.06	0.09	0.09	0.08	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.19	0.13	0.06	0.04	0.00	0.19	0.02
Diurnal Average	0.00	0.01	0.00	0.01	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	0.01	0.01	0.01	0.00	0.00	0.01	0.00

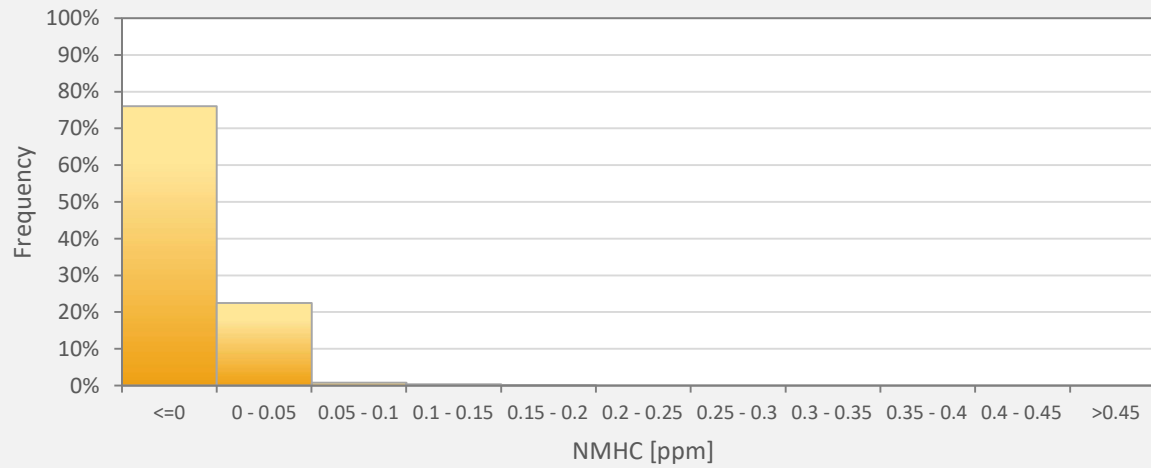
C Monthly Calibration	S Daily Zero-Span Check	Q Quality Assurance	
K Collection Error	N No Data (Machine Not in Service)	Y Routine Maintenance	P Power Failure
X InValid Data (Equipment Malfunction/Recovery)	NRM UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)		

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 - AQHI - Cadotte Lake Station



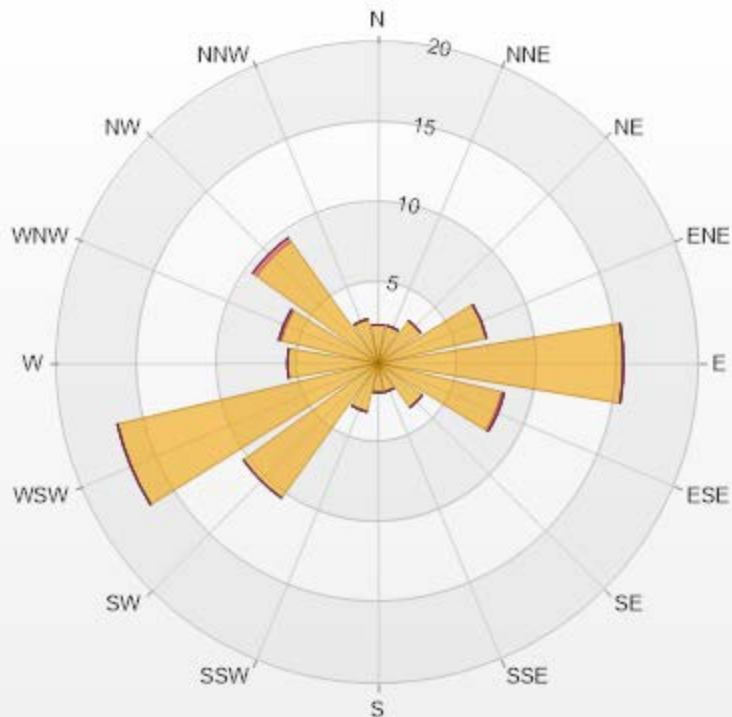
NMHC[ppm] Histogram: AQHI Cadotte Lake Monthly: 03-2021 1 Hr.



Classes	NMHC
<=0	76.10%
0 - 0.05	22.49%
0.05 - 0.1	0.85%
0.1 - 0.15	0.42%
0.15 - 0.2	0.14%
0.2 - 0.25	0.00%
0.25 - 0.3	0.00%
0.3 - 0.35	0.00%
0.35 - 0.4	0.00%
0.4 - 0.45	0.00%
>0.45	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-NMHC[ppm] Monthly: 03-2021 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	2.4	0	0	0	0	2.4
NNE	2.4	0	0	0	0	2.4
NE	3.25	0	0	0	0	3.25
ENE	6.93	0	0	0	0	6.93
E	15.28	0	0	0	0	15.28
ESE	7.92	0.14	0	0	0	8.06
SE	3.39	0	0	0	0	3.39
SSE	1.84	0	0	0	0	1.84
S	1.84	0	0	0	0	1.84
SSW	3.11	0	0	0	0	3.11
SW	10.33	0	0	0	0	10.33
WSW	16.69	0	0	0	0	16.69
W	5.66	0	0	0	0	5.66
WNW	6.22	0.14	0	0	0	6.36
NW	9.34	0.28	0	0	0	9.62
NNW	2.83	0	0	0	0	2.83
Summary	99.43	0.56	0	0	0	100



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% Icon Classes (ppm)	99	1	0	0	0
0-0.1	99	1	0	0	0
0.1-0.3		1			
0.3-0.9			0		
0.9-2				0	
>2.0					0



PEACE RIVER AREA MONITORING PROGRAM

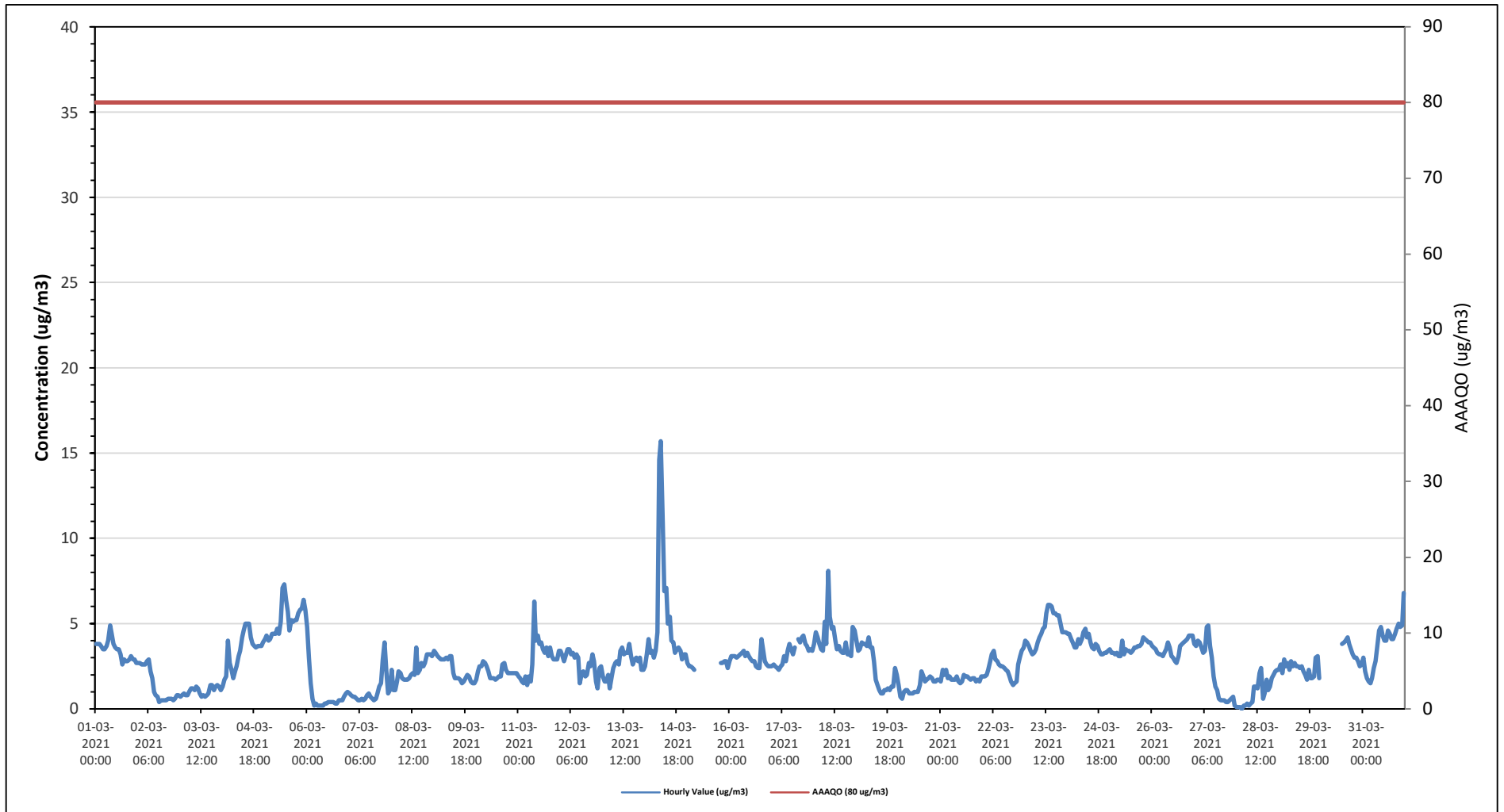
AQHI - Cadotte Lake Station - March 2021

Summary of Hourly Averages

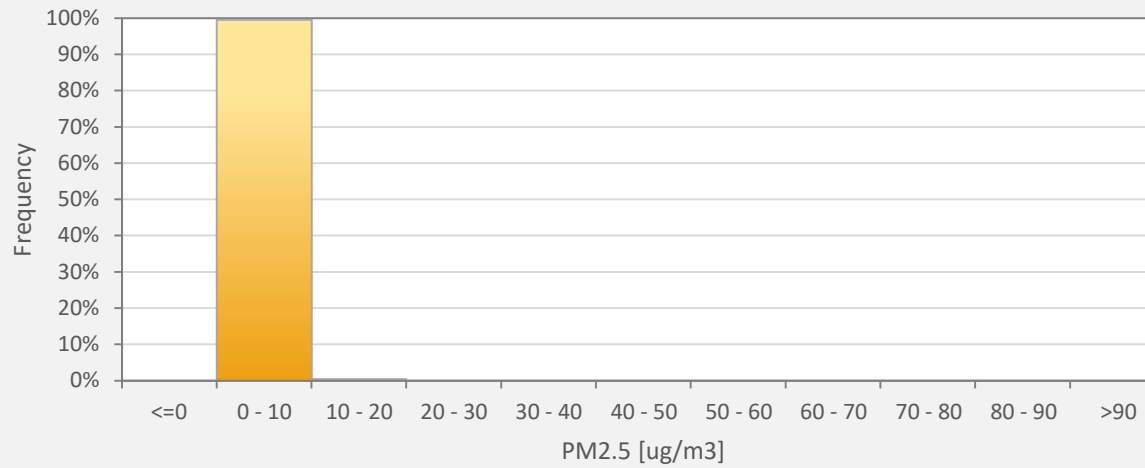
PARTICULATE MATTER 2.5 (PM_{2.5}) in µg/m³

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: 15.7 µg/m ³ on March 14 at hour 9										Hours in Service: 744																					
Maximum Daily Value: 5.2 µg/m ³ on March 5										Hours of Data: 717																					
Minimum Hourly Value: 0.0 µg/m ³ on March 28 at hour 3										Hours of Missing Data: 26																					
Minimum Daily Value: 0.8 µg/m ³ on March 6										Hours of Calibration: 1																					
Monthly Average: 2.8 µg/m ³										Operational Uptime: 96.5																					
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average					
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23				
Mar 1	3.8	3.8	3.8	3.7	3.5	3.5	3.7	4	4.9	4.4	3.8	3.6	3.5	3.5	3.2	2.6	2.9	2.8	2.8	2.9	3.1	2.9	2.9	2.7	2.6	4.9	3.4				
Mar 2	3	3	3	3	3	3	3	2	2	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0.4	2.9	1.3				
Mar 3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.4	1.0				
Mar 4	1	2	2	4	3	2	2	2	3	3	3	4	5	5	5	5	4	4	4	4	4	4	4	4	1.3	5.0	3.4				
Mar 5	4	4	4	4	4	4	4	5	4	5	7	7	6	6	5	5	5	5	5	6	6	6	6	6	4.0	7.3	5.2				
Mar 6	5	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0.2	4.8	0.8				
Mar 7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	2	1	1	0.5	3.9	1.1				
Mar 8	2	1	1	2	2	2	2	2	2	2	2	2	2	2	4	2	2	3	3	3	3	3	3	3	1.1	3.6	2.2				
Mar 9	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	1.5	3.4	2.3				
Mar 10	2	2	3	3	3	3	3	2	2	2	2	2	2	2	2	3	2	2	2	2	2	2	2	2	1.7	2.8	2.2				
Mar 11	2	2	2	2	2	1	2	2	3	6	4	4	4	4	4	3	4	3	4	3	3	3	3	3	1.4	6.3	3.0				
Mar 12	3	3	3	3	4	4	3	3	3	3	3	2	2	2	2	3	3	3	3	3	2	1	2	3	1.2	3.5	2.7				
Mar 13	2	2	2	2	1	2	2	3	3	3	3	4	3	3	3	4	3	3	3	3	3	3	2	2	1.2	3.8	2.6				
Mar 14	3	3	4	3	3	3	3	5	15	16	11	7	7	5	5	4	4	3	4	4	3	3	3	3	2.5	15.7	5.2				
Mar 15	3	3	3	2	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	3	3	3	2	2.3	2.8	-				
Mar 16	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	4	4	4	3	3	3	3	2.4	4.1	3.0				
Mar 17	3	3	3	2	2	3	3	3	3	3	4	4	3	4	C	4	4	4	4	4	4	3	4	3	2.3	4.3	3.3				
Mar 18	4	5	4	4	4	3	5	4	8	5	5	4	4	4	4	3	3	3	4	3	3	3	5	5	3.1	8.1	4.1				
Mar 19	4	3	4	4	4	4	4	4	4	4	3	2	1	1	1	1	1	1	1	1	1	1	2	2	0.9	4.2	2.4				
Mar 20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	0.6	2.2	1.4				
Mar 21	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1.5	2.3	1.8				
Mar 22	2	2	2	2	3	3	3	3	3	3	3	3	2	2	2	2	2	1	2	2	3	3	4	4	1.4	3.6	2.4				
Mar 23	4	4	4	3	3	3	4	4	4	4	5	5	6	6	6	6	6	6	6	6	6	5	5	5	3.2	6.1	4.6				
Mar 24	4	4	4	4	4	4	4	4	4	5	5	4	4	4	4	4	4	4	3	3	3	3	3	3	3.2	4.7	3.8				
Mar 25	4	3	3	3	3	3	3	4	3	4	3	3	3	3	4	4	4	4	4	4	4	4	4	4	3.1	4.2	3.6				
Mar 26	4	4	4	3	3	3	3	3	4	4	4	3	3	3	3	3	4	4	4	4	4	4	4	4	2.7	4.3	3.5				
Mar 27	4	4	4	4	4	3	3	5	5	4	3	2	1	1	1	1	1	1	0	0	1	1	1	0	0.2	4.9	2.1				
Mar 28	0	0	0	0	0	0	0	0	0	0	1	1	1	2	2	1	1	2	1	1	2	2	2	2	0.0	2.4	1.0				
Mar 29	2	3	2	3	3	3	2	3	3	3	3	2	3	2	2	2	2	2	2	2	2	3	3	2	1.7	3.1	2.4				
Mar 30	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4	4	4	4	4	3	3	3	3	3	2.5	4.2	-				
Mar 31	3	2	2	2	2	2	2	3	4	5	5	4	4	4	5	4	4	4	4	5	5	5	7	1.5	6.8	3.8					
Diurnal Maximum	5	5	4	4	4	4	5	5	15	16	11	7	7	6	6	6	6	6	6	6	6	6	7	6	6	6	7				
Diurnal Average	2.7	2.6	2.5	2.6	2.5	2.5	2.6	2.7	3.3	3.4	3.2	2.9	2.8	2.8	2.7	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.7	2.8	2.8				
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance														
K	Collection Error							N	No Data (Machine Not in Service)							Y	Routine Maintenance							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



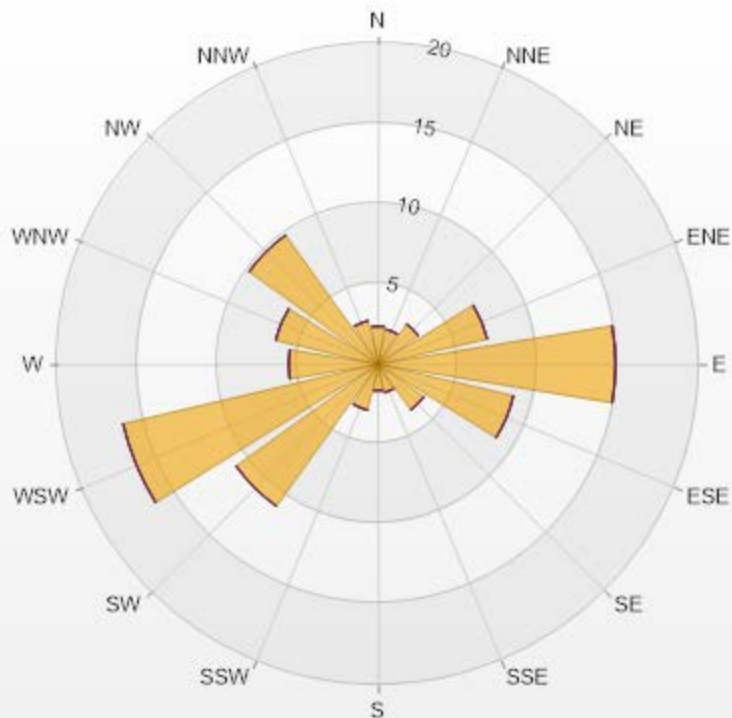
PM2.5[ug/m3(L)] Histogram: AQHI Cadotte Lake Monthly: 03-2021 1 Hr.



Classes	PM2.5
<=0	0.00%
0 - 10	99.58%
10 - 20	0.42%
20 - 30	0.00%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-PM2.5[ug/m3(L)] Monthly: 03-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 96.37% Calm Avg: 0.00 [ug/m3(L)]

Direction	0-50	50-80	80-120	120-240	>240.0	Total
N	2.37	0	0	0	0	2.37
NNE	2.23	0	0	0	0	2.23
NE	3.07	0	0	0	0	3.07
ENE	6.97	0	0	0	0	6.97
E	14.78	0	0	0	0	14.78
ESE	8.65	0	0	0	0	8.65
SE	3.49	0	0	0	0	3.49
SSE	1.81	0	0	0	0	1.81
S	1.67	0	0	0	0	1.67
SSW	2.93	0	0	0	0	2.93
SW	10.88	0	0	0	0	10.88
WSW	16.32	0	0	0	0	16.32
W	5.58	0	0	0	0	5.58
WNW	6.56	0	0	0	0	6.56
NW	9.9	0	0	0	0	9.9
NNW	2.79	0	0	0	0	2.79
Summary	100	0	0	0	0	100



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% 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 - March 2021

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

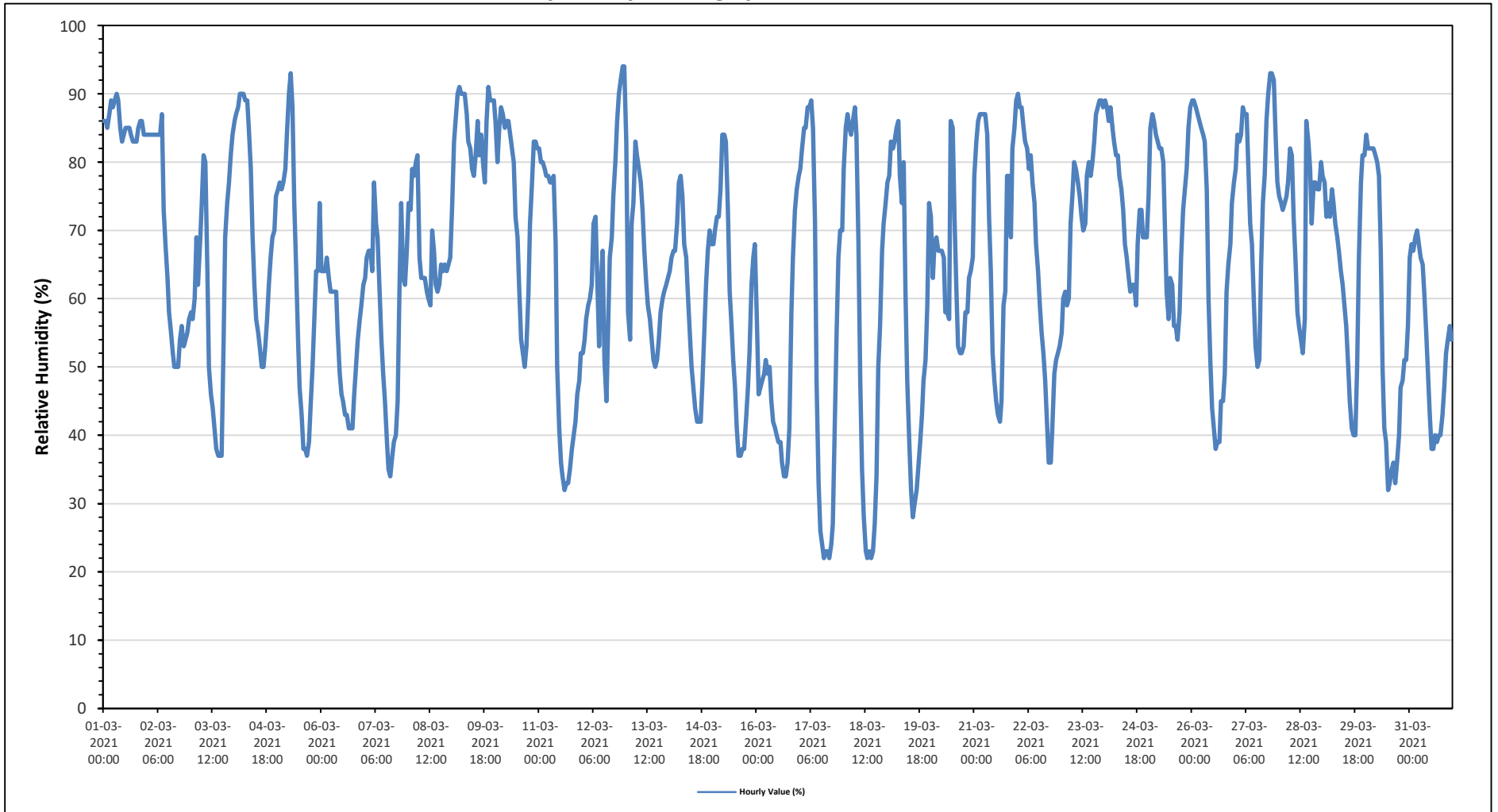
Maximum Hourly Value:	94 %	on March 12 at hour 22	Hours in Service:	744
Maximum Daily Value:	85.6 %	on March 1	Hours of Data:	744
Minimum Hourly Value:	22 %	on March 17 at hour 13	Hours of Missing Data:	0
Minimum Daily Value:	49.0 %	on March 16	Hours of Calibration:	0
Monthly Average:	65.2 %		Operational 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	
Mar 1	86	86	85	87	89	88	89	90	89	85	83	84	85	85	85	84	83	83	83	85	86	86	84	84	83	90	85.6	
Mar 2	84	84	84	84	84	84	84	84	84	87	73	68	63	58	55	52	50	50	50	54	56	53	54	55	57	50	87	67.0
Mar 3	58	57	60	69	62	68	74	81	80	64	50	46	44	41	38	37	37	37	54	69	74	77	81	84	37	84	60.1	
Mar 4	86	87	88	90	90	90	89	89	85	79	69	62	57	55	53	50	50	53	57	62	66	69	70	75	50	90	71.7	
Mar 5	76	77	76	77	79	84	90	93	88	74	65	54	47	43	38	38	37	39	44	50	57	64	64	74	37	93	63.7	
Mar 6	64	64	64	66	63	61	61	61	61	55	49	46	45	43	43	41	41	41	46	50	54	57	59	62	41	66	54.0	
Mar 7	63	66	67	67	64	77	71	69	61	54	49	45	39	35	34	37	39	40	45	61	74	63	62	67	34	77	56.2	
Mar 8	74	73	79	78	80	81	66	63	63	63	61	60	59	70	67	62	61	62	65	64	65	64	65	66	59	81	67.1	
Mar 9	73	83	86	90	91	90	90	90	87	83	82	79	78	81	86	81	84	80	77	86	91	89	89	89	73	91	84.8	
Mar 10	86	80	85	88	87	85	86	86	84	82	80	72	69	62	54	52	50	53	61	71	77	83	83	82	50	88	74.9	
Mar 11	82	80	80	79	78	78	77	77	78	68	50	41	36	34	32	33	33	35	38	40	42	46	48	52	32	82	55.7	
Mar 12	52	54	57	59	60	62	71	72	64	53	62	67	51	45	55	66	69	75	80	86	90	92	94	94	45	94	67.9	
Mar 13	83	58	54	71	74	83	81	79	77	73	67	62	59	57	54	51	50	51	54	58	60	61	62	63	50	83	64.3	
Mar 14	64	66	67	67	71	77	78	75	68	66	61	55	50	47	44	42	42	42	48	55	62	67	70	68	42	78	60.5	
Mar 15	68	70	72	72	76	84	84	83	73	61	57	51	47	41	37	37	38	38	42	47	52	62	66	68	37	84	59.4	
Mar 16	57	46	47	48	49	51	49	50	45	42	41	40	39	39	36	34	34	36	41	58	66	73	76	78	34	78	49.0	
Mar 17	79	82	85	85	88	88	89	85	71	48	33	26	24	22	23	23	22	24	27	42	55	66	70	70	22	89	55.3	
Mar 18	79	85	87	85	84	86	88	84	68	48	35	28	23	22	23	22	23	27	34	50	56	67	71	74	22	88	56.2	
Mar 19	77	78	83	82	83	85	86	78	74	80	61	48	39	32	28	30	32	35	39	43	48	51	59	74	28	86	59.4	
Mar 20	72	63	68	69	67	67	67	66	58	58	57	86	85	72	62	53	52	52	53	58	58	63	64	66	52	86	64.0	
Mar 21	78	83	86	87	87	87	87	84	72	64	52	48	45	43	42	45	59	61	78	78	69	82	85	89	42	89	70.5	
Mar 22	90	88	88	85	83	82	79	81	77	74	68	64	59	55	52	48	42	36	36	41	49	51	52	53	36	90	63.9	
Mar 23	55	60	61	59	60	71	75	80	79	77	75	72	70	71	78	80	78	80	83	87	88	89	89	88	55	89	75.2	
Mar 24	89	88	86	88	85	83	81	81	78	76	73	68	66	63	61	62	59	68	73	73	69	69	69	69	59	89	73.8	
Mar 25	75	85	87	86	84	83	82	82	80	71	61	57	63	62	56	56	54	58	66	73	76	79	85	88	54	88	72.9	
Mar 26	89	89	88	87	86	85	84	83	76	60	51	44	41	38	39	39	45	45	49	61	65	68	74	77	38	89	65.1	
Mar 27	79	84	83	84	88	87	87	79	71	68	59	53	50	51	65	74	78	86	90	93	93	92	84	77	50	93	77.3	
Mar 28	75	74	73	74	75	77	82	81	72	66	58	56	54	52	57	86	83	79	71	77	77	76	76	80	52	86	72.1	
Mar 29	78	77	72	74	72	76	74	71	69	67	64	62	59	56	50	45	41	40	40	50	66	77	81	81	40	81	64.3	
Mar 30	84	82	82	82	82	81	80	78	67	50	41	39	32	33	35	36	33	36	40	47	48	51	51	56	32	84	56.1	
Mar 31	66	68	67	69	70	68	66	65	61	55	49	43	38	38	40	39	40	40	43	47	52	54	56	54	38	70	53.7	
Diurnal Maximum	90	89	88	90	91	90	90	93	89	85	83	86	85	85	86	86	84	86	90	93	93	92	94	94				
Diurnal Average	74.9	74.7	75.7	77.0	77.1	79.0	78.9	78.1	73.0	65.7	59.1	55.5	52.0	49.8	49.0	49.5	49.7	50.7	55.0	61.9	65.9	69.1	70.8	72.9				

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)	NRIM	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 RH - AQHI - Cadotte Lake Station





PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - March 2021

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

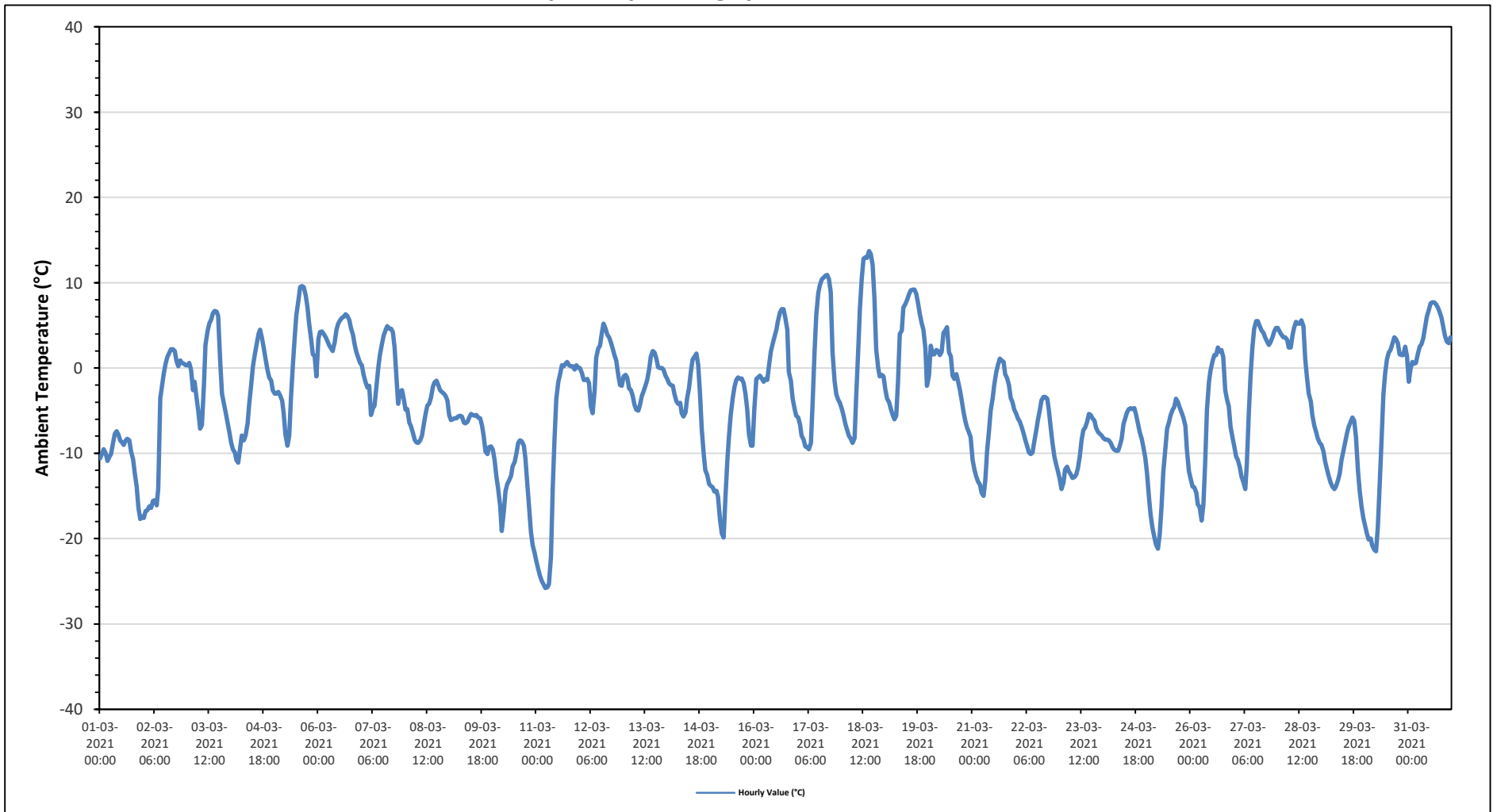
Maximum Hourly Value:	13.7 °C	on March 18 at hour 15	Hours in Service:	744
Maximum Daily Value:	4.0 °C	on March 31	Hours of Data:	744
Minimum Hourly Value:	-25.8 °C	on March 11 at hour 5	Hours of Missing Data:	0
Minimum Daily Value:	-13.5 °C	on March 10	Hours of Calibration:	0
Monthly Average:	-3.9 °C		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
Mar 1	-10.6	-10	-9.5	-10	-10.9	-10.4	-10.1	-8.8	-7.7	-7.4	-7.8	-8.5	-8.7	-9	-8.5	-8.3	-8.5	-9.8	-10.7	-12.2	-13.9	-16.4	-17.7	-17.4	-17.7	-7.4	-10.5
Mar 2	-17.6	-16.8	-16.7	-16.2	-16.4	-15.6	-15.5	-16.1	-14.1	-3.5	-2.1	-0.6	0.5	1.3	1.8	2.2	2.2	2	0.8	0.2	0.9	0.6	0.5	0.3	-17.6	2.2	-5.7
Mar 3	0.3	0.6	-0.2	-2.6	-1.6	-3.5	-5.1	-7.1	-6.7	-2	2.7	4.3	5.2	5.7	6.4	6.7	6.6	6.1	0.8	-3	-4.1	-5.1	-6.4	-7.5	-7.5	6.7	-0.4
Mar 4	-8.7	-9.5	-9.9	-10.8	-11.1	-9.3	-7.9	-8.5	-7.9	-6.5	-4.3	-2	0.2	1.5	2.7	4	4.5	3.6	2.3	1	-0.2	-1.1	-1.5	-2.6	-11.1	4.5	-3.4
Mar 5	-3	-3	-2.8	-3.2	-3.8	-5.3	-7.8	-9.1	-7.9	-3.4	0.2	3.8	6.2	7.9	9.5	9.6	9.5	8.5	7.1	5.3	3.4	1.6	1.4	-1	-9.1	9.6	1.0
Mar 6	3.4	4.2	4.3	4	3.6	3.2	2.6	2.3	2	3	4.5	5.2	5.6	5.9	6	6.3	6.1	5.6	4.7	3.9	2.7	1.9	1.2	0.6	0.6	6.3	3.9
Mar 7	0.3	-0.8	-1.7	-2.3	-2.1	-5.5	-4.7	-4.4	-2	0.1	1.5	2.8	3.8	4.5	4.9	4.6	4.6	4.2	2.4	-1.4	-4.2	-2.8	-2.6	-3.6	-5.5	4.9	-0.2
Mar 8	-4.9	-4.8	-6.4	-6.8	-7.6	-8.4	-8.7	-8.8	-8.5	-7.9	-6.6	-5.4	-4.4	-4.2	-3.5	-2.2	-1.7	-1.5	-2	-2.6	-2.8	-3	-3.3	-3.8	-8.8	-1.5	-5.0
Mar 9	-5.5	-6.1	-6	-5.9	-5.9	-5.7	-5.6	-5.7	-6.4	-6.5	-6.3	-5.8	-5.4	-5.5	-5.6	-5.5	-5.8	-5.9	-6.7	-8	-9.8	-10.1	-9.3	-9.2	-10.1	-5.4	-6.6
Mar 10	-9.6	-10.8	-12.7	-14.2	-16.2	-19.1	-16.9	-14.4	-13.6	-13.2	-12.6	-11.5	-11	-10	-8.8	-8.5	-8.6	-9.1	-10.5	-13.7	-16.4	-19.2	-20.8	-21.7	-21.7	-8.5	-13.5
Mar 11	-22.6	-23.6	-24.4	-25	-25.4	-25.8	-25.7	-25.3	-22.1	-14	-8.3	-3.6	-1.6	-0.7	0.3	0.2	0.5	0.7	0.3	0.2	0.2	-0.2	0.3	0	-25.8	0.7	-10.2
Mar 12	0	-0.6	-1.4	-1.4	-1.3	-1.8	-4.5	-5.3	-2.6	1.2	2.3	2.6	4.2	5.2	4.6	3.9	3.6	3	2.3	1.5	0.9	-0.8	-2	-2.1	-5.3	5.2	0.5
Mar 13	-1	-0.8	-1.1	-2.4	-2.6	-3.3	-4.3	-4.9	-5	-4.4	-3.3	-2.7	-2.1	-1.4	-0.1	1.3	2	1.8	1	0.1	0	0	-0.2	-0.9	-5.0	2.0	-1.4
Mar 14	-1.3	-1.8	-2	-2.1	-3	-3.9	-4.2	-4.1	-5.3	-5.7	-5.2	-3.6	-2.3	-0.4	1	1.3	1.7	0.3	-3	-7.2	-10.2	-12	-12.5	-13.6	-13.6	1.7	-4.1
Mar 15	-13.8	-14	-14.5	-14.4	-15.1	-17.8	-19.4	-19.9	-15.3	-10.7	-8.1	-5.5	-3.5	-2.2	-1.4	-1.1	-1.3	-1.2	-1.8	-3	-4.8	-7.8	-9.1	-9.1	-19.9	-1.1	-9.0
Mar 16	-4.8	-1.3	-1.1	-0.9	-1.2	-1.6	-1.3	-1.4	0.3	1.9	2.8	3.7	4.5	5.5	6.5	6.9	6.9	5.9	4.5	-0.5	-1.5	-3.6	-4.8	-5.6	-5.6	6.9	0.8
Mar 17	-5.8	-6.6	-7.9	-8.4	-9.2	-9.3	-9.5	-8.8	-3.8	1.7	6.2	8.8	9.7	10.4	10.6	10.8	10.9	10.4	8.9	1.9	-1.5	-3.1	-3.7	-4.1	-9.5	10.9	0.4
Mar 18	-4.8	-5.5	-6.6	-7.3	-7.9	-8.3	-8.8	-8.2	-3.5	1.9	7	10.4	12.8	13	12.9	13.7	13.3	12.1	8.3	2.2	0	-1	-0.8	-1	-8.8	13.7	1.8
Mar 19	-2.5	-3.6	-4	-4.8	-5.5	-6	-5.6	-1.6	4	4.4	7.1	7.5	8	8.6	9.1	9.2	9.2	8.7	7.6	6.3	5.3	4.5	2.3	-2.1	-6.0	9.2	2.8
Mar 20	-0.9	2.6	1.6	1.6	2.1	2	1.5	1.9	4.1	4.4	4.8	1.8	1.4	-0.9	-1.3	-0.7	-1.5	-2.6	-3.8	-5.1	-6.2	-7	-7.6	-8.1	-8.1	4.8	-0.7
Mar 21	-10.8	-11.9	-12.7	-13.3	-13.7	-14.6	-15	-13.1	-9.7	-7.5	-5	-3.5	-2	-0.5	0.4	1.1	0.9	0.7	-0.7	-1.2	-2	-3.5	-4	-4.9	-15.0	1.1	-6.1
Mar 22	-5.4	-5.9	-6.3	-6.9	-7.6	-8.4	-9.2	-9.9	-10.1	-9.9	-8.6	-7.4	-6.1	-4.9	-3.8	-3.4	-3.4	-3.6	-4.9	-7.1	-8.9	-10.4	-11.3	-12.1	-12.1	-3.4	-7.3
Mar 23	-13	-14.2	-13.4	-11.9	-11.6	-12.1	-12.5	-12.9	-12.8	-12.5	-11.7	-10.4	-8.5	-7.3	-7	-6.3	-5.4	-5.5	-5.9	-6.2	-7	-7.5	-7.7	-7.9	-14.2	-5.4	-9.6
Mar 24	-8.2	-8.4	-8.4	-8.5	-8.8	-9.3	-9.6	-9.7	-9.7	-9.2	-8.3	-6.6	-5.8	-5.2	-4.8	-4.7	-4.8	-4.7	-5.5	-6.5	-7.5	-8.3	-9.2	-10.5	-10.5	-4.7	-7.6
Mar 25	-12.4	-15.3	-17.2	-18.7	-19.9	-20.7	-21.2	-19.5	-16.3	-12.2	-9.5	-7.1	-6.4	-5.5	-4.9	-4.6	-3.6	-4	-4.6	-5.2	-5.8	-6.8	-9.6	-12.1	-21.2	-3.6	-11.0
Mar 26	-13	-13.9	-14	-14.6	-16	-16.3	-17.9	-16	-11.1	-4.9	-1.6	-0.3	0.8	1.5	1.5	2.4	1.9	2.1	1.3	-2.6	-3.7	-4.5	-6.9	-8.2	-17.9	2.4	-6.4
Mar 27	-9.1	-10.4	-10.8	-11.6	-12.7	-13.4	-14.2	-11.3	-5.2	-0.8	2.4	4.6	5.5	5.5	4.9	4.4	4.1	3.6	3.1	2.7	3	3.6	4.3	4.7	-14.2	5.5	-1.8
Mar 28	4.7	4.2	3.9	3.6	3.6	3.3	2.4	2.4	3.8	4.7	5.4	5.2	5.6	4.9	1.1	-1.1	-3	-3.9	-5.5	-6.8	-7.5	-8.2	-8.8	-8.8	5.6	0.8	
Mar 29	-9	-9.8	-10.9	-11.9	-12.7	-13.4	-13.9	-14.2	-13.9	-13.2	-12.4	-10.8	-9.8	-8.8	-7.6	-6.9	-6.3	-5.8	-6.2	-8.1	-12.1	-14.5	-16.3	-17.6	-17.6	-5.8	-11.1
Mar 30	-18.5	-19.4	-20.1	-20	-20.8	-21.3	-21.5	-18.7	-14	-8.3	-3.1	-0.6	1	1.8	2.1	2.8	3.6	3.4	2.9	1.6	1.5	1.5	2.5	1.4	-21.5	3.6	-6.7
Mar 31	-1.6	-0.1	0.7	0.5	0.6	1.7	2.5	2.8	3.5	4.9	6	6.8	7.6	7.7	7.7	7.5	7.1	6.6	5.9	4.8	3.7	3.1	2.9	3.6	-1.6	7.7	4.0
Diurnal Maximum	4.7	4.2	4.3	4.0	3.6	3.3	2.6	2.8	4.1	4.9	7.1	10.4	12.8	13.0	12.9	13.7	13.3	12.1	8.9	6.3	5.3	4.5	4.3	4.7			
Diurnal Average	-6.8	-7.0	-7.5	-7.9	-8.4	-9.0	-9.4	-9.0	-7.0	-4.4	-2.3	-0.9	0.1	0.8	1.3	1.5	1.5	1.1	-0.2	-2.2	-3.5	-4.5	-5.2	-6.0			

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 AT - AQHI - Cadotte Lake Station





PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - March 2021

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

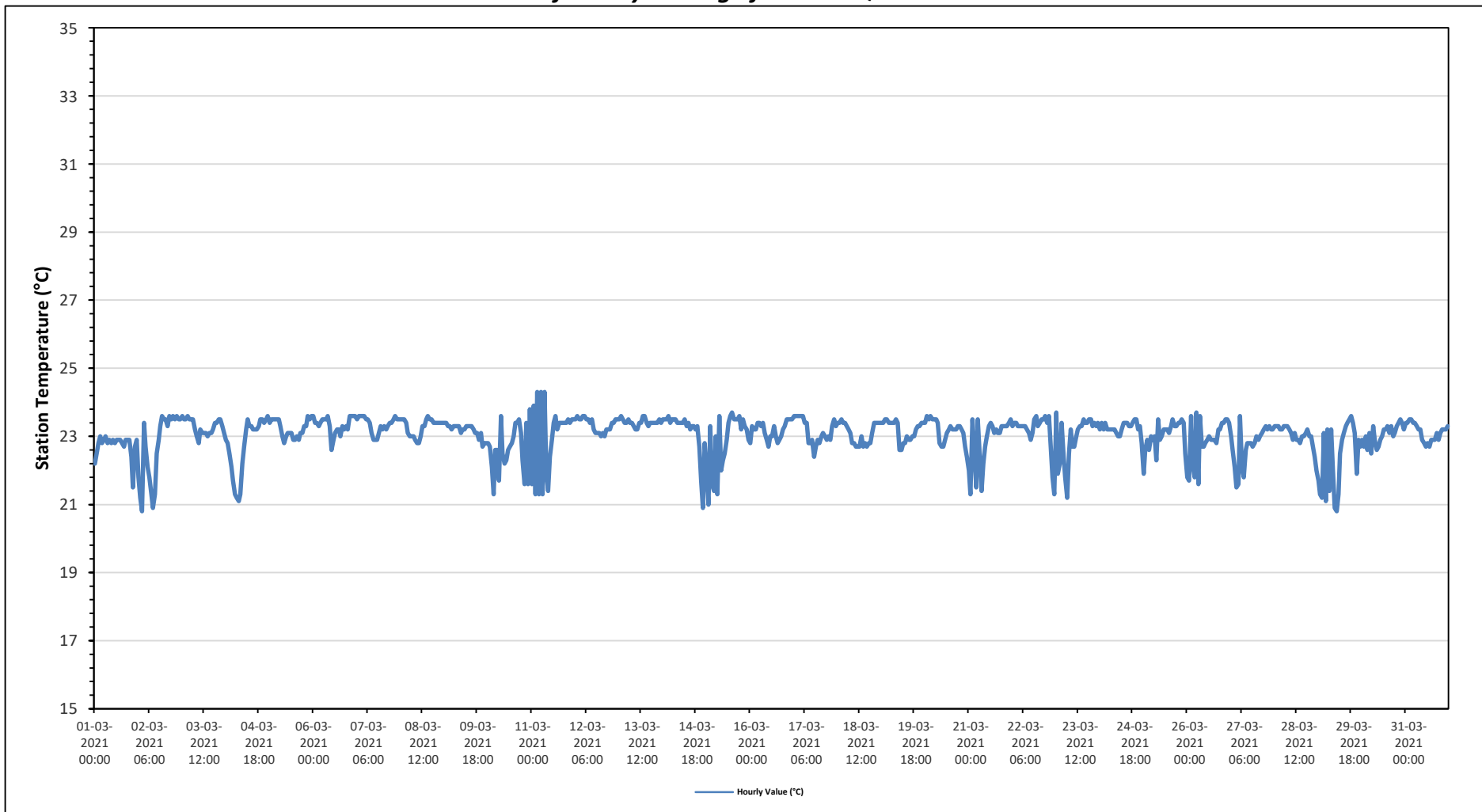
Maximum Hourly Value:	24.3 °C	on March 11 at hour 3	Hours in Service:	744
Maximum Daily Value:	23.4 °C	on March 13	Hours of Data:	744
Minimum Hourly Value:	20.8 °C	on March 2 at hour 2	Hours of Missing Data:	0
Minimum Daily Value:	22.4 °C	on March 29	Hours of Calibration:	0
Monthly Average:	23.0 °C		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
Mar 1	22.2	22.5	22.8	23.0	22.8	22.9	23.0	22.8	22.9	22.8	22.9	22.8	22.9	22.9	22.9	22.8	22.7	22.9	22.9	22.9	22.4	21.5	22.7	22.9	21.5	23.0	22.7
Mar 2	21.8	21.2	20.8	23.4	22.7	22.1	21.8	21.3	20.9	21.3	22.5	22.9	23.3	23.6	23.5	23.5	23.3	23.6	23.5	23.6	23.5	23.6	23.5	23.5	20.8	23.6	22.7
Mar 3	23.6	23.5	23.5	23.6	23.5	23.5	23.5	23.2	23.0	22.8	23.2	23.1	23.1	23.1	23.0	23.1	23.1	23.2	23.4	23.4	23.5	23.5	23.3	23.1	22.8	23.6	23.3
Mar 4	22.9	22.8	22.5	22.1	21.7	21.3	21.2	21.1	21.3	22.2	22.7	23.2	23.5	23.3	23.3	23.2	23.2	23.2	23.3	23.5	23.5	23.4	23.5	23.6	21.1	23.6	22.7
Mar 5	23.4	23.5	23.5	23.5	23.5	23.5	23.3	23.0	22.8	23.0	23.1	23.1	23.1	22.9	22.9	23.0	22.9	23.1	23.1	23.3	23.3	23.6	23.5	23.6	22.8	23.6	23.2
Mar 6	23.6	23.4	23.4	23.3	23.4	23.5	23.5	23.5	23.6	23.3	22.6	22.9	23.1	23.2	23.2	23.0	23.3	23.2	23.3	23.2	23.6	23.6	23.6	23.6	22.6	23.6	23.3
Mar 7	23.5	23.6	23.6	23.6	23.6	23.5	23.5	23.4	23.1	22.9	22.9	22.9	23.1	23.3	23.2	23.3	23.2	23.3	23.4	23.4	23.5	23.6	23.5	23.5	22.9	23.6	23.4
Mar 8	23.5	23.5	23.5	23.4	23.1	23.0	23.0	23.0	22.9	22.8	22.8	23.0	23.3	23.3	23.5	23.6	23.5	23.5	23.4	23.4	23.4	23.4	23.4	23.4	22.8	23.6	23.3
Mar 9	23.4	23.4	23.3	23.3	23.2	23.3	23.3	23.3	23.3	23.1	23.2	23.2	23.3	23.3	23.3	23.3	23.2	23.1	23.1	22.9	23.1	22.9	22.8	22.8	22.7	23.4	23.2
Mar 10	22.8	22.7	22.1	21.3	22.6	22.6	21.7	23.6	22.5	22.2	22.3	22.6	22.7	22.8	23.0	23.4	23.4	23.5	23.1	22.3	21.6	23.4	21.6	23.8	21.3	23.8	22.7
Mar 11	21.6	23.9	21.3	24.3	21.3	24.3	21.3	24.3	21.9	21.4	22.4	22.9	23.4	23.6	23.2	23.4	23.4	23.4	23.4	23.4	23.4	23.5	23.4	23.5	21.3	24.3	23.0
Mar 12	23.5	23.6	23.5	23.5	23.6	23.6	23.5	23.5	23.4	23.5	23.2	23.1	23.1	23.1	23.0	23.1	23.0	23.2	23.2	23.2	23.4	23.4	23.5	23.5	23.0	23.6	23.3
Mar 13	23.5	23.6	23.5	23.4	23.4	23.5	23.4	23.4	23.3	23.2	23.2	23.4	23.6	23.6	23.4	23.3	23.4	23.4	23.4	23.4	23.4	23.4	23.5	23.4	23.2	23.6	23.4
Mar 14	23.5	23.5	23.5	23.6	23.4	23.5	23.5	23.5	23.4	23.4	23.4	23.4	23.5	23.3	23.4	23.2	23.3	23.3	23.2	23.3	22.7	21.7	20.9	22.8	20.9	23.6	23.2
Mar 15	21.9	21.0	23.3	21.6	21.4	23.0	21.3	23.6	22.0	22.3	22.5	22.9	23.4	23.6	23.7	23.5	23.5	23.5	23.6	23.2	23.5	23.3	23.2	22.9	21.0	23.7	22.8
Mar 16	22.8	23.3	23.2	23.2	23.4	23.4	23.3	23.4	23.1	22.9	22.7	23.0	23.3	23.0	22.8	22.9	23.0	23.2	23.2	23.3	23.5	23.5	23.5	23.5	22.7	23.5	23.2
Mar 17	23.6	23.6	23.6	23.6	23.6	23.6	23.4	23.4	22.8	22.8	22.9	22.4	22.7	22.9	22.8	23.0	23.1	23.0	22.9	23.0	22.9	23.3	23.5	23.3	22.4	23.6	23.2
Mar 18	23.4	23.4	23.5	23.4	23.4	23.3	23.2	23.1	22.8	22.8	22.7	22.7	22.7	23.0	22.7	22.8	22.7	22.8	22.8	23.1	23.4	23.4	23.4	23.4	22.7	23.5	23.1
Mar 19	23.4	23.4	23.5	23.5	23.4	23.4	23.4	23.4	23.5	23.4	22.6	22.6	22.8	22.8	23.0	22.9	22.9	23.0	23.0	23.2	23.3	23.3	23.4	23.4	22.6	23.5	23.2
Mar 20	23.4	23.6	23.5	23.6	23.5	23.5	23.5	23.4	22.8	22.7	22.9	23.1	23.2	23.3	23.2	23.2	23.2	23.2	23.3	23.3	23.2	23.1	22.7	22.4	22.4	23.6	23.2
Mar 21	22.0	21.3	23.5	22.6	21.5	23.5	22.4	21.4	22.2	22.7	23.0	23.3	23.4	23.3	23.1	23.2	23.1	23.1	23.3	23.3	23.3	23.4	23.5	21.3	23.5	22.9	
Mar 22	23.3	23.4	23.4	23.3	23.3	23.3	23.3	23.3	23.2	23.1	22.9	23.1	23.5	23.6	23.3	23.4	23.5	23.5	23.6	23.4	23.6	22.7	21.8	21.3	21.3	23.6	23.2
Mar 23	23.7	21.9	22.2	23.4	22.4	21.8	21.2	22.5	23.2	22.7	22.7	23.0	23.2	23.3	23.3	23.5	23.4	23.4	23.5	23.5	23.3	23.4	23.3	21.2	23.7	23.0	
Mar 24	23.2	23.4	23.2	23.4	23.2	23.2	23.2	23.2	23.2	23.1	23.0	23.0	23.2	23.4	23.4	23.4	23.3	23.3	23.4	23.5	23.5	23.2	23.3	22.8	22.8	23.5	23.3
Mar 25	21.9	22.6	22.9	22.6	23.0	22.9	23.0	22.3	23.5	22.9	23.0	23.2	23.2	23.2	23.1	23.3	23.5	23.3	23.3	23.4	23.4	23.5	23.4	22.5	21.9	23.5	23.0
Mar 26	21.8	21.7	23.6	22.2	21.8	23.7	21.6	23.6	22.7	22.7	22.8	22.9	23.0	22.9	22.9	22.8	23.2	23.2	23.4	23.4	23.5	23.5	23.4	21.6	23.7	22.9	
Mar 27	23.0	22.6	22.1	21.5	21.6	23.6	22.1	21.8	22.6	22.8	22.8	22.7	22.8	23.0	22.9	23.0	23.1	23.2	23.3	23.2	23.3	23.2	23.2	21.5	23.6	22.8	
Mar 28	23.3	23.3	23.3	23.2	23.2	23.3	23.3	23.3	23.2	23.1	22.9	23.1	22.9	22.9	22.8	23.0	23.0	23.1	23.2	23.0	23.0	22.7	22.4	22.0	22.0	23.3	23.0
Mar 29	21.7	21.3	21.2	23.1	21.1	23.2	21.4	23.2	22.0	20.9	20.8	21.3	22.5	22.9	23.1	23.3	23.4	23.5	23.6	23.4	23.1	21.9	22.9	22.7	20.8	23.6	22.4
Mar 30	22.9	22.7	23.0	22.6	23.1	22.5	23.3	22.9	22.6	22.7	22.9	23.0	23.2	23.2	23.3	23.1	23.3	23.0	23.1	23.3	23.4	23.5	23.4	23.2	22.5	23.5	23.1
Mar 31	23.4	23.4	23.5	23.5	23.4	23.4	23.3	23.2	23.2	22.9	22.8	22.7	22.8	22.7	22.9	22.9	22.9	23.1	22.9	23.1	23.2	23.2	23.3	22.7	23.5	23.1	
Diurnal Maximum	23.7	23.9	23.6	24.3	23.6	24.3	23.5	24.3	23.6	23.5	23.4	23.4	23.5	23.6	23.7	23.6	23.5	23.6	23.6	23.6	23.6	23.6	23.8				
Diurnal Average	23.0	22.9	23.0	23.1	22.8	23.2	22.8	23.0	22.8	22.7	22.8	22.9	23.1	23.2	23.2	23.2	23.2	23.2	23.3	23.3	23.2	23.2	23.1	23.1			

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 ST - AQHI - Cadotte Lake Station





PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - March 2021

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

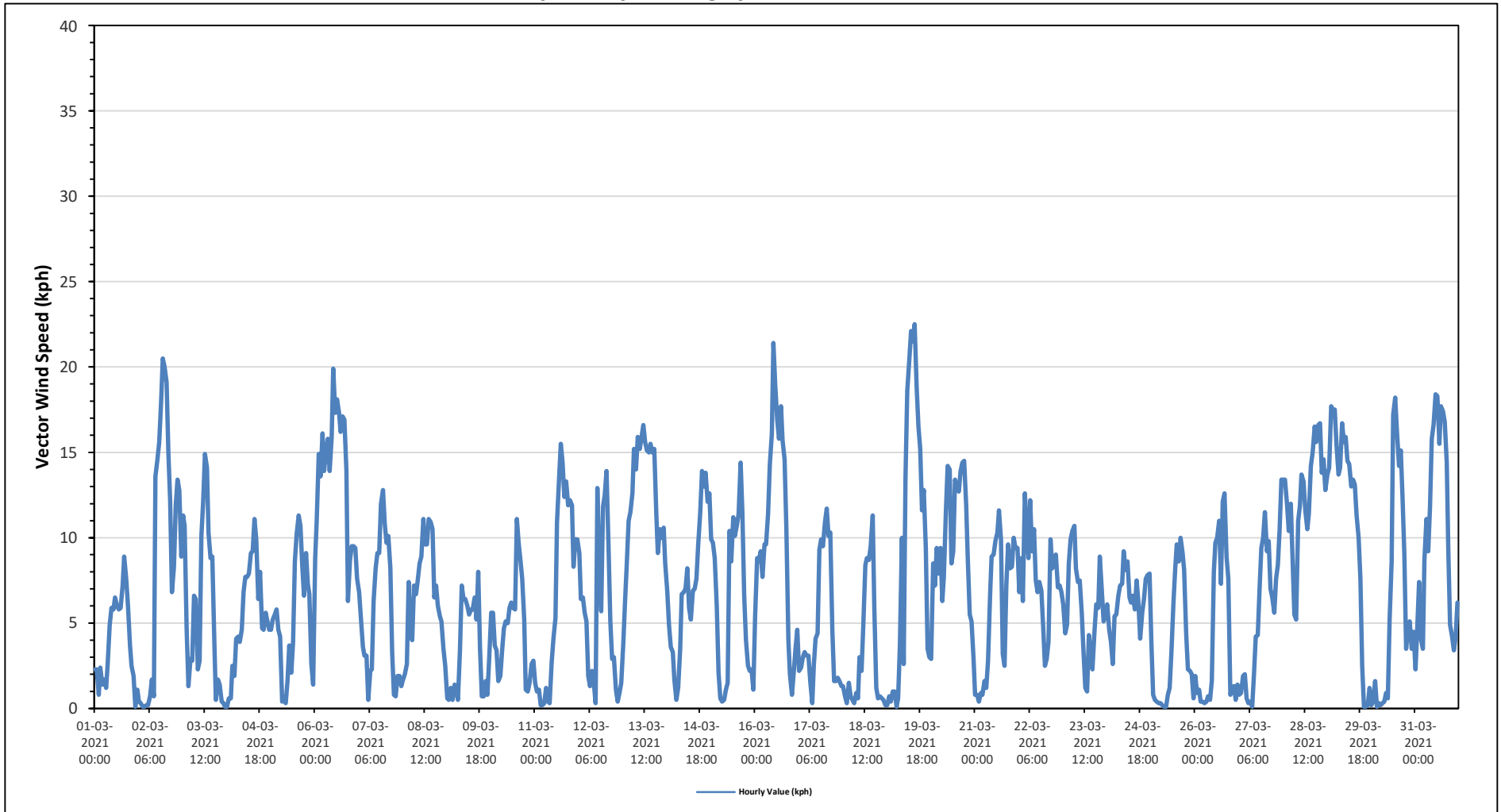
Maximum Hourly Value: 22.5 kph on March 19 at hour 15	Hours in Service: 744
Maximum Daily Value: 13.4 kph on March 6	Hours of Data: 744
Minimum Hourly Value: 0.1 kph on March 1 at hour 22	Hours of Missing Data: 0
Minimum Daily Value: 2.1 kph on March 18	Hours of Calibration: 0
Monthly Average: 2.4 kph	Operational Uptime: 100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Mar 1	2.3	2.3	0.8	2.4	1.4	1.7	1.2	2.6	4.9	5.9	5.8	6.5	6.0	5.8	5.9	7.2	8.9	7.6	6.0	3.7	2.5	1.9	0.1	1.1	0.1	8.9	3.2
Mar 2	0.4	0.3	0.1	0.1	0.2	0.2	0.7	1.7	0.7	13.6	14.6	15.6	17.8	20.5	20.0	19.1	15.0	12.2	6.8	8.3	11.9	13.4	12.8	8.9	0.1	20.5	8.6
Mar 3	11.3	10.7	4.6	1.3	2.9	2.8	6.6	6.4	2.3	2.8	10.1	12.1	14.9	14.1	10.3	8.8	8.9	3.9	0.5	1.7	1.4	0.4	0.3	0.1	0.1	14.9	4.0
Mar 4	0.1	0.6	0.6	2.5	1.9	4.1	4.2	3.9	4.6	6.8	7.7	7.7	7.9	9.1	9.2	11.1	9.9	6.4	8.0	4.7	4.6	5.6	5.1	4.6	0.1	11.1	5.1
Mar 5	4.6	5.2	5.5	5.8	4.6	4.2	0.4	0.5	0.3	1.6	3.7	2.1	3.9	8.6	10.2	11.3	10.7	8.4	6.6	9.1	7.3	6.7	2.6	1.4	0.3	11.3	5.0
Mar 6	8.8	11.0	14.9	13.6	16.1	13.9	15.1	15.8	13.9	15.9	19.9	17.3	18.1	17.3	16.2	17.1	16.9	13.9	6.3	8.7	9.5	9.5	9.4	7.6	6.3	19.9	13.4
Mar 7	6.8	5.3	3.6	3.1	3.1	0.5	2.2	2.3	6.3	8.2	9.1	9.1	12.0	12.8	10.8	9.7	10.1	8.2	3.3	0.8	0.7	1.9	1.9	1.3	0.5	12.8	5.1
Mar 8	1.7	2.0	2.6	7.4	4.2	4.0	7.2	6.7	7.4	8.5	8.9	11.1	9.6	9.6	11.1	10.9	10.5	6.5	7.2	6.0	5.4	5.1	3.5	2.5	1.7	11.1	6.3
Mar 9	0.6	0.5	1.2	0.5	1.4	1.2	0.5	3.4	7.2	6.4	6.4	6.0	5.5	5.8	5.8	6.5	5.2	8.0	3.5	0.7	0.7	1.6	0.8	2.9	0.5	8.0	2.6
Mar 10	5.6	5.6	3.7	3.4	1.6	1.9	3.4	4.7	5.1	5.0	5.9	6.2	5.9	5.8	11.1	9.7	8.7	7.6	5.2	1.1	1.0	1.5	2.6	2.8	1.0	11.1	3.7
Mar 11	1.5	1.0	1.1	0.2	0.2	0.3	1.2	0.4	0.3	2.7	4.1	5.3	10.9	13.4	15.5	14.4	12.4	13.3	11.9	12.2	11.9	8.3	9.9	9.9	0.2	15.5	5.8
Mar 12	9.1	6.4	6.5	5.6	5.1	1.9	1.3	2.2	1.5	0.3	12.9	8.0	5.7	11.8	12.5	13.9	9.4	5.1	2.9	3.0	1.1	0.4	0.9	1.5	0.3	13.9	4.5
Mar 13	3.8	6.3	8.2	11.0	11.5	12.6	15.2	14.0	15.9	15.2	15.9	16.6	15.6	15.1	15.0	15.5	15.0	15.2	11.4	9.1	10.5	10.0	10.6	8.5	3.8	16.6	12.4
Mar 14	6.9	4.9	3.6	3.3	1.7	0.5	1.2	3.5	6.7	6.8	7.0	8.2	5.9	5.2	6.9	7.0	7.6	9.6	11.5	13.9	13.0	13.8	12.1	12.6	0.5	13.9	5.3
Mar 15	9.9	9.7	8.8	6.0	2.1	0.6	0.4	0.5	1.1	1.5	10.4	8.6	11.2	10.1	10.7	11.4	14.4	11.4	6.6	4.0	2.5	2.2	2.3	1.1	0.4	14.4	4.7
Mar 16	5.4	8.8	8.6	9.2	7.7	9.6	9.6	11.4	14.3	16.1	21.4	19.0	16.9	15.8	17.7	15.7	14.6	10.6	4.0	2.0	0.8	2.1	3.5	4.6	0.8	21.4	9.2
Mar 17	2.2	2.4	3.0	3.3	3.1	3.1	1.6	0.3	2.5	4.1	4.4	9.3	9.9	9.5	10.9	11.7	10.1	10.3	4.6	1.6	1.6	1.8	1.6	1.3	0.3	11.7	2.3
Mar 18	1.3	0.7	0.3	1.5	0.7	0.5	0.3	0.9	0.6	3.0	2.2	4.9	8.4	8.8	8.7	9.5	11.3	6.1	1.2	0.6	0.7	0.6	0.5	0.2	0.2	11.3	2.1
Mar 19	0.2	0.7	0.4	1.0	1.0	0.1	0.6	3.7	10.0	2.6	13.5	18.6	20.4	22.1	21.5	22.5	18.8	16.5	15.2	11.6	12.8	9.4	3.5	3.0	0.1	22.5	9.0
Mar 20	2.9	8.5	7.2	9.4	7.9	9.4	6.3	7.7	11.5	14.2	14.0	8.5	9.2	13.4	12.9	12.7	13.9	14.4	14.5	11.9	8.9	5.5	5.1	2.9	2.9	14.5	7.6
Mar 21	0.8	0.8	0.4	0.9	0.8	1.6	1.2	2.8	6.6	8.9	9.0	9.8	10.3	11.6	9.9	3.2	2.5	7.2	9.6	8.2	8.3	10.0	9.4	9.4	0.4	11.6	5.7
Mar 22	6.8	8.8	6.3	12.6	10.6	8.8	12.2	9.2	10.5	7.5	6.8	7.4	6.9	4.8	2.5	2.9	3.9	9.9	8.2	8.6	9.0	7.1	7.2	6.8	2.5	12.6	7.0
Mar 23	6.1	4.4	4.9	8.5	9.9	10.4	10.7	8.2	7.4	7.5	5.6	3.6	1.2	1.0	4.3	3.3	2.3	4.5	6.1	5.9	8.9	6.9	5.1	5.5	1.0	10.7	5.6
Mar 24	6.1	4.6	3.9	2.6	5.4	5.5	6.6	7.2	7.3	9.2	8.1	8.6	6.5	6.2	6.6	5.8	7.5	6.2	4.1	5.6	6.4	7.6	7.8	7.9	2.6	9.2	4.6
Mar 25	3.9	0.8	0.5	0.4	0.3	0.3	0.2	0.1	0.1	0.8	1.2	3.3	6.2	8.2	9.6	8.6	10.0	9.1	8.1	4.4	2.3	2.2	2.0	0.6	0.1	10.0	2.4
Mar 26	1.9	0.9	1.1	0.4	0.4	0.3	0.4	0.7	0.5	1.6	8.0	9.7	10.0	11.0	7.3	12.1	12.6	8.9	7.6	0.8	1.1	1.3	0.5	1.4	0.3	12.6	3.4
Mar 27	0.8	0.9	1.9	2.0	0.6	0.3	0.4	0.1	2.0	4.2	4.3	7.0	9.4	10.0	11.5	9.2	9.8	7.0	6.5	5.6	7.6	8.4	10.5	13.4	0.1	13.4	4.5
Mar 28	13.4	13.4	12.0	10.4	12.0	9.2	5.5	5.2	11.0	11.9	13.7	13.3	11.6	10.5	11.4	14.2	15.0	16.5	15.6	16.6	16.7	13.8	14.6	12.8	5.2	16.7	9.6
Mar 29	13.7	14.1	17.7	17.5	17.5	15.4	13.7	14.1	16.7	15.6	15.9	14.5	14.3	13.0	13.4	13.1	11.3	10.0	7.6	2.5	0.1	0.1	0.2	1.2	0.1	17.7	11.2
Mar 30	0.2	0.4	1.6	0.1	0.3	0.2	0.3	0.4	0.9	0.6	5.2	8.6	17.2	18.2	16.2	14.2	15.1	12.3	9.0	3.5	4.9	5.1	3.5	4.5	0.1	18.2	5.6
Mar 31	2.3	4.4	7.4	4.1	3.5	8.7	11.1	9.2	11.8	15.8	16.6	18.4	18.3	15.5	17.7	17.4	16.8	14.4	9.3	4.9	4.2	3.4	4.2	6.2	2.3	18.4	9.6
Diurnal Maximum	14	14	18	18	18	15	15	16	17	16	21	19	20	22	22	23	19	17	16	17	17	14	15	13			
Diurnal Average	4.6	4.7	4.6	4.8	4.5	4.3	4.6	4.8	6.2	7.3	9.4	9.8	10.6	11.1	11.4	11.3	10.9	9.7	7.4	5.8	5.8	5.4	5.0	4.8			

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

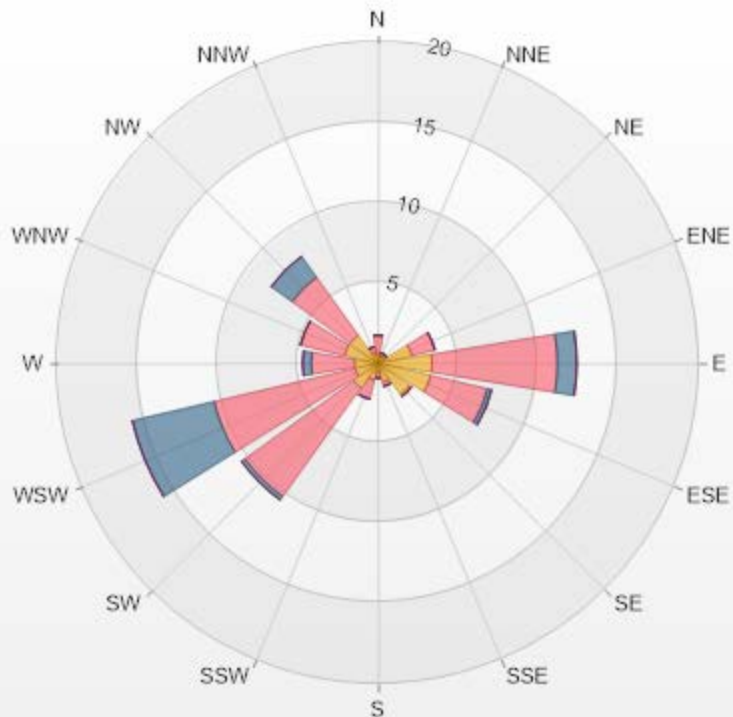
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

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



Wind: AQHI Cadotte Lake Monitor: WDS [KPH] Monthly: 03-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 21.24% 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	0.54	1.21	0	0	0	1.75
NNE	0.4	0.27	0	0	0	0.67
NE	0.54	0.13	0	0	0	0.67
ENE	2.15	1.48	0	0	0	3.63
E	3.36	7.8	1.21	0	0	12.37
ESE	3.36	3.63	0.27	0	0	7.26
SE	2.42	0.13	0	0	0	2.55
SSE	1.21	0.27	0	0	0	1.48
S	0.54	0.4	0	0	0	0.94
SSW	1.08	1.21	0	0	0	2.29
SW	1.88	8.33	0.27	0	0	10.48
WSW	1.48	9.01	5.24	0	0	15.73
W	1.48	2.69	0.54	0	0	4.71
WNW	2.15	2.82	0	0	0	4.97
NW	2.15	4.44	1.61	0	0	8.2
NNW	0.67	0.4	0	0	0	1.07
Summary	25.41	44.22	9.14	0	0	78.77



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% Icon Classes (KPH)	25	1.8-6.0	44	6.0-15.0	9	15.0-29.0	0	29.0-39.0	0	>39.0
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PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - March 2021

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

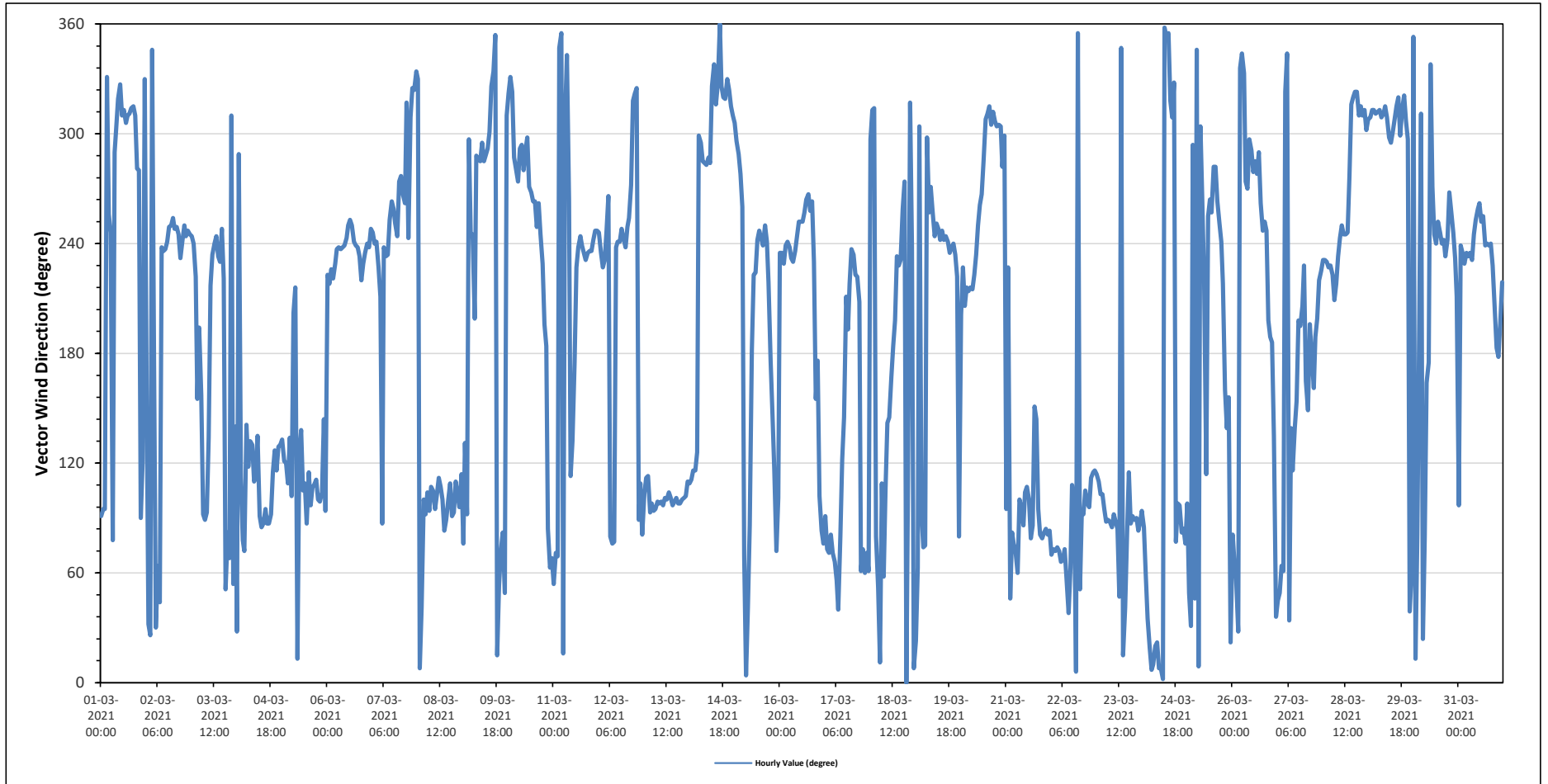
Monthly Average:	246 (WSW) degree	Hours in Service:	744
		Hours of Data:	744
		Hours of Missing Data:	0
		Hours of Calibration:	0
		Operational Uptime:	100.0

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
Mar 1	E	E	E	NNW	WSW	WSW	ENE	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	W	W	E	ESE	NNW	313	NW
Mar 2	SSE	NNE	NNE	NNW	S	NNE	ENE	NE	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW	246	WSW
Mar 3	WSW	WSW	SW	SSE	SSW	SSE	E	E	E	SE	SW	SW	WSW	WSW	SW	SW	WSW	SW	NE	E	ENE	NW	NE	SE	225	SW
Mar 4	NNE	WNW	ESE	ENE	ENE	SE	ESE	SE	SE	ESE	ESE	SE	E	E	E	E	E	E	E	ESE	SE	ESE	SE	SE	106	ESE
Mar 5	SE	ESE	ESE	ESE	SE	E	SSW	SW	NNE	SE	SE	ESE	ESE	E	ESE	E	ESE	ESE	E	E	ESE	SE	E	E	110	ESE
Mar 6	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	SW	WSW	SW	WSW	237	SW
Mar 7	WSW	WSW	WSW	SW	SSW	E	SW	SW	SW	WSW	W	WSW	WSW	WSW	W	W	W	W	NW	WSW	NW	NW	NW	NNW	258	WSW
Mar 8	NNW	N	NE	E	E	ESE	E	ESE	ESE	E	ESE	ESE	ESE	E	E	E	E	ESE	E	E	ESE	ESE	E	ESE	98	E
Mar 9	ENE	SE	E	WNW	WSW	WSW	SSW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NNW	N	NNE	NE	ENE	E	NE	NW	309	NW
Mar 10	NW	NNW	NW	WNW	W	W	WNW	WNW	W	WNW	WNW	W	W	W	W	WSW	W	WSW	SW	SSW	S	E	ENE	ENE	276	W
Mar 11	NE	ENE	ENE	NNW	N	NNE	NW	NNW	W	ESE	SE	S	SW	SW	WSW	WSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	234	SW
Mar 12	WSW	SW	SW	SW	WSW	W	E	ENE	ENE	SW	WSW	WSW	WSW	WSW	SW	WSW	WSW	W	NW	NW	NW	E	ESE	E	247	WSW
Mar 13	ESE	ESE	ESE	E	E	E	E	E	E	E	E	E	E	ESE	E	E	E	E	E	E	E	E	E	ESE	100	E
Mar 14	ESE	ESE	ESE	ESE	SE	WNW	WNW	WNW	WNW	W	WNW	WNW	NW	NNW	NW	NW	N	NW	NW	NW	NNW	NW	NW	NW	319	NW
Mar 15	NW	WNW	WNW	W	WSW	ENE	N	NE	E	S	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	S	SE	ESE	ENE	E	247	WSW
Mar 16	SW	SW	SW	WSW	WSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	W	SW	SSE	S	E	E	ENE	247	WSW
Mar 17	E	ENE	ENE	E	ENE	ENE	NE	NE	E	ESE	SE	SSW	S	SW	SW	SW	SW	SW	SSW	ENE	ENE	ENE	ENE	ENE	195	SSW
Mar 18	WNW	NW	NW	E	NE	NNE	ESE	ENE	ESE	SE	SSE	S	SSW	SW	SW	SW	WSW	W	N	ESE	NW	SW	N	213	SSW	
Mar 19	NNE	ENE	WNW	E	ENE	ENE	WNW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	WSW	SW	SW	E	244	WSW
Mar 20	SSW	SW	SSW	SW	SSW	SW	SSW	SW	SW	WSW	W	W	WNW	NW	NW	NW	WNW	NW	NW	WNW	WNW	WNW	W	WNW	273	W
Mar 21	E	SW	NE	E	ENE	ENE	ENE	E	E	ESE	ESE	E	ENE	E	SSE	SE	E	E	ENE	E	E	E	E	E	90	E
Mar 22	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	ENE	ESE	E	N	N	NE	E	E	ESE	E	E	ESE	ESE	ESE	79	ENE
Mar 23	ESE	ESE	ESE	ESE	E	E	E	E	E	E	E	NE	NNW	NNE	NE	E	ESE	E	E	E	E	E	E	E	89	E
Mar 24	E	E	ENE	NE	NNE	N	NNE	NNE	N	N	N	N	N	N	NW	NW	NNW	ENE	E	E	E	E	E	ENE	28	NNE
Mar 25	E	NE	NNE	WNW	NE	NNW	N	WNW	W	SW	ESE	WSW	W	WSW	W	W	WSW	WSW	SW	SSE	SE	SSE	NNE	254	WSW	
Mar 26	E	ENE	ENE	NNE	NNW	NNW	NNW	W	W	WNW	WNW	W	WNW	W	WSW	WSW	WSW	SSW	S	S	SE	NE	270	W		
Mar 27	NE	NE	ENE	ENE	NW	NNW	NE	SE	ESE	SE	SSE	SSW	SSW	SW	SSE	SSW	S	SSE	S	SSW	SW	SW	SW	190	S	
Mar 28	SW	SW	SW	SW	SW	SW	SSW	SW	SW	WSW	WSW	WSW	WSW	W	NW	NW	NW	NW	NW	NW	NW	NW	WNW	272	W	
Mar 29	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	NW	NW	NW	WNW	NW	NW	NW	NW	WNW	NE	ENE	310	NW
Mar 30	N	NNE	E	SSW	NW	NNE	E	SSE	S	NNW	W	WSW	WSW	WSW	WSW	WSW	SW	WSW	W	WSW	WSW	SSW	SSW	244	WSW	
Mar 31	E	WSW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	SW	SSW	S	S	SSW	SW	240	WSW

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)	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 VWD - AQHI - Cadotte Lake Station





PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - March 2021

Summary of Hourly Averages

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

WIND SPEED																												
Maximum Hourly Value:	22.5	kph	on March 19	at hour 15	Hours in Service:	744																						
Maximum Daily Value:	13.4	kph	on March 6	Hours of Data:			744																					
Minimum Hourly Value:	0.1	kph	on March 1	at hour 22	Hours of Missing Data:	0																						
Minimum Daily Value:	2.1	kph	on March 18	Hours of Calibration:			0																					
Monthly Average:	2.4	kph	Operational Uptime:			100																						
WIND DIRECTION																												
Monthly Average:	246 (WSW) degree																											
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				
Mar 1	2.3	2.3	0.8	2.4	1.4	1.7	1.2	2.6	4.9	5.9	5.8	6.5	6.0	5.8	5.9	7.2	8.9	7.6	6.0	3.7	2.5	1.9	0.1	1.1	0.1	8.9	3.2	
	E	E	E	NNW	WSW	WSW	ENE	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	W	W	E	ESE	NNW			
Mar 2	0.4	0.3	0.1	0.1	0.2	0.2	0.7	1.7	0.7	13.6	14.6	15.6	17.8	20.5	20.0	19.1	15.0	12.2	6.8	8.3	11.9	13.4	12.8	8.9	0.1	20.5	8.6	
	SSE	NNE	NNE	NNW	S	NNE	ENE	NE	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW				
Mar 3	11.3	10.7	4.6	1.3	2.9	2.8	6.6	6.4	2.3	2.8	10.1	12.1	14.9	14.1	10.3	8.8	8.9	3.9	0.5	1.7	1.4	0.4	0.3	0.1	0.1	14.9	4.0	
	WSW	WSW	SW	SSE	SSW	SSE	E	E	E	SE	SW	SW	WSW	WSW	SW	SW	WSW	SW	NE	E	ENE	NW	NE	SE				
Mar 4	0.1	0.6	0.6	2.5	1.9	4.1	4.2	3.9	4.6	6.8	7.7	7.7	7.9	9.1	9.2	11.1	9.9	6.4	8.0	4.7	4.6	5.6	5.1	4.6	0.1	11.1	5.1	
	NNE	WNW	ESE	ENE	ENE	SE	ESE	SE	SE	ESE	ESE	SE	E	E	E	E	E	E	E	ESE	SE	ESE	SE	SE				
Mar 5	4.6	5.2	5.5	5.8	4.6	4.2	0.4	0.5	0.3	1.6	3.7	2.1	3.9	8.6	10.2	11.3	10.7	8.4	6.6	9.1	7.3	6.7	2.6	1.4	0.3	11.3	5.0	
	SE	ESE	ESE	ESE	SE	E	SSW	SW	NNE	SE	SE	ESE	ESE	E	ESE	ESE	ESE	ESE	E	E	ESE	SE	E	E				
Mar 6	8.8	11.0	14.9	13.6	16.1	13.9	15.1	15.8	13.9	15.9	19.9	17.3	18.1	17.3	16.2	17.1	16.9	13.9	6.3	8.7	9.5	9.5	9.4	7.6	6.3	19.9	13.4	
	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	WSW	SW	WSW				
Mar 7	6.8	5.3	3.6	3.1	3.1	0.5	2.2	2.3	6.3	8.2	9.1	9.1	12.0	12.8	10.8	9.7	10.1	8.2	3.3	0.8	0.7	1.9	1.9	1.3	0.5	12.8	5.1	
	WSW	WSW	WSW	SW	SSW	E	SW	SW	SW	WSW	W	WSW	WSW	WSW	W	W	W	NW	WSW	NW	NW	NW	NNW					
Mar 8	1.7	2.0	2.6	7.4	4.2	4.0	7.2	6.7	7.4	8.5	8.9	11.1	9.6	9.6	11.1	10.9	10.5	6.5	7.2	6.0	5.4	5.1	3.5	2.5	1.7	11.1	6.3	
	NNW	N	NE	E	E	ESE	E	ESE	ESE	E	ESE	ESE	ESE	E	E	E	E	ESE	E	E	ESE	ESE	E	ESE				
Mar 9	0.6	0.5	1.2	0.5	1.4	1.2	0.5	3.4	7.2	6.4	6.4	6.0	5.5	5.8	5.8	6.5	5.2	8.0	3.5	0.7	0.7	1.6	0.8	2.9	0.5	8.0	2.6	
	ENE	SE	E	WNW	WSW	WSW	SSW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NNW	N	NNE	NE	ENE	E	NE	NW				
Mar 10	5.6	5.6	3.7	3.4	1.6	1.9	3.4	4.7	5.1	5.0	5.9	6.2	5.9	5.8	11.1	9.7	8.7	7.6	5.2	1.1	1.0	1.5	2.6	2.8	1.0	11.1	3.7	
	NW	NNW	NW	WNW	W	W	WNW	WNW	W	WNW	WNW	W	W	W	W	WSW	W	WSW	SW	SSW	S	E	ENE	ENE				
Mar 11	1.5	1.0	1.1	0.2	0.2	0.3	1.2	0.4	0.3	2.7	4.1	5.3	10.9	13.4	15.5	14.4	12.4	13.3	11.9	12.2	11.9	8.3	9.9	9.9	0.2	15.5	5.8	
	NE	ENE	ENE	NNW	N	NNE	NW	NNW	W	ESE	SE	S	SW	WSW	WSW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW				
Mar 12	9.1	6.4	6.5	5.6	5.1	1.9	1.3	2.2	1.5	0.3	12.9	8.0	5.7	11.8	12.5	13.9	9.4	5.1	2.9	3.0	1.1	0.4	0.9	1.5	0.3	13.9	4.5	
	WSW	SW	SW	SW	WSW	W	E	ENE	ENE	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	NW	NW	NW	E	ESE	E				
Mar 13	3.8	6.3	8.2	11.0	11.5	12.6	15.2	14.0	15.9	15.2	15.9	16.6	15.6	15.1	15.0	15.5	15.0	15.2	11.4	9.1	10.5	10.0	10.6	8.5	3.8	16.6	12.4	
	ESE	ESE	ESE	E	E	E	E	E	E	E	E	E	E	E	ESE	E	E	E	E	E	E	E	E	ESE				
Mar 14	6.9	4.9	3.6	3.3	1.7	0.5	1.2	3.5	6.7	6.8	7.0	8.2	5.9	5.2	6.9	7.0	7.6	9.6	11.5	13.9	13.0	13.8	12.1	12.6	0.5	13.9	5.3	
	ESE	ESE	ESE	ESE	SE	WNW	WNW	WNW	WNW	W	NNW	NNW	NW	NNW	NW	NW	N	NW	NW	NNW	NW	NW	NW	NW				
Mar 15	9.9	9.7	8.8	6.0	2.1	0.6	0.4	0.5	1.1	1.5	10.4	8.6	11.2	10.1	10.7	11.4	14.4	11.4	6.6	4.0	2.5	2.2	2.3	1.1	0.4	14.4	4.7	
	NW	WNW	WNW	W	WSW	ENE	N	NE	E	S	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	S	SE	ESE	ENE	E				
Mar 16	5.4	8.8	8.6	9.2	7.7	9.6	9.6	11.4	14.3	16.1	21.4	19.0	16.9	15.8	17.7	15.7	14.6	10.6	4.0	2.0	0.8	2.1	3.5	4.6	0.8	21.4	9.2	
	SW	SW	SW	WSW	WSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	W	SW	SSE	S	E	ENE				
Mar 17	2.2	2.4	3.0	3.3	3.1	3.1	1.6	0.3	2.5	4.1	4.4	9.3	9.9	9.5	10.9	11.7	10.1	10.3	4.6	1.6	1.6	1.8	1.6	1.3	0.3	11.7	2.3	
	E	ENE	ENE	E	ENE	ENE	NE	E	ESE	SE	SSW	S	SW	SW	SW	SW	SW	SW	SSW	ENE	ENE	ENE	ENE	ENE				
Mar 18	1.3	0.7	0.3	1.5	0.7	0.5	0.3	0.9	0.6	3.0	2.2	4.9	8.4	8.8	8.7	9.5	11.3	6.1	1.2	0.6	0.7	0.6	0.5	0.2	0.2	11.3	2.1	
	WNW	NW	NW	E	NE	NNE	ESE	ENE	ESE	SE	SE	SSE	S	SSW	SW	SW	WSW	W	N	ESE	NW	SW	N					
Mar 19	0.2	0.7	0.4	1.0	1.0	0.1	0.6	3.7	10.0	2.6	13.5	18.6	20.4	22.1	21.5	22.5	18.8	16.5	15.2	11.6	12.8	9.4	3.5	3.0	0.1	22.5	9.0	
	NNE	ENE	NNW	E	ENE	ENE	WNW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	WSW	SW	E				
Mar 20	2.9	8.5	7.2	9.4	7.9	9.4	6.3	7.7	11.5	14.2	14.0	8.5	9.2	13.4	12.9	12.7	13.9	14.4	14.5	11.9	8.9	5.5	5.1	2.9	2.9	14.5	7.6	
	SSW	SW	SSW	SW	SSW	SW	SW	SW	WSW	W	W	WNW	NW	NW	NW	WNW	NW	NW	WNW	NW	WNW	WNW	WNW	W				



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - March 2021

Summary of Hourly Averages

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

WIND SPEED																																		
Maximum Hourly Value:	22.5 kph on March 19 at hour 15															Hours in Service:	744																	
Maximum Daily Value:	13.4 kph on March 6															Hours of Data:	744																	
Minimum Hourly Value:	0.1 kph on March 1 at hour 22															Hours of Missing Data:	0																	
Minimum Daily Value:	2.1 kph on March 18															Hours of Calibration:	0																	
Monthly Average:	2.4 kph															Operational Uptime:	100																	
WIND DIRECTION																																		
Monthly Average:	246 (WSW, degree)																																	
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										
Mar 21	0.8	0.8	0.4	0.9	0.8	1.6	1.2	2.8	6.6	8.9	9.0	9.8	10.3	11.6	9.9	3.2	2.5	7.2	9.6	8.2	8.3	10.0	9.4	9.4	0.4	11.6	5.7							
Mar 22	E	SW	NE	E	ENE	ENE	ENE	E	E	E	ESE	ESE	E	ENE	E	SSE	SE	E	E	ENE	E	E	E	E	2.5	12.6	7.0							
Mar 23	6.1	4.4	4.9	8.5	9.9	10.4	10.7	8.2	7.4	7.5	5.6	3.6	1.2	1.0	4.3	3.3	2.3	4.5	6.1	5.9	8.9	6.9	5.1	5.5	1.0	10.7	5.6							
Mar 24	ESE	ESE	ESE	ESE	E	E	E	E	E	E	E	NE	NNW	NNE	NE	E	ESE	E	E	E	E	E	E	E	2.6	9.2	4.6							
Mar 25	6.1	4.6	3.9	2.6	5.4	5.5	6.6	7.2	7.3	9.2	8.1	8.6	6.5	6.2	6.6	5.8	7.5	6.2	4.1	5.6	6.4	7.6	7.8	7.9	0.1	10.0	2.4							
Mar 26	E	E	ENE	NE	NNE	N	N	NNE	NNE	N	N	N	N	N	N	NW	NW	NNW	ENE	E	E	E	E	ENE	0.3	12.6	3.4							
Mar 27	3.9	0.8	0.5	0.4	0.3	0.3	0.2	0.1	0.1	0.8	1.2	3.3	6.2	8.2	9.6	8.6	10.0	9.1	8.1	4.4	2.3	2.2	2.0	0.6	0.1	13.4	4.5							
Mar 28	E	NE	NNE	WNW	NE	NNW	N	WNW	W	SW	ESE	WSW	W	WSW	W	W	W	WSW	WSW	SW	SSE	SE	SSE	NNE	5.2	16.7	9.6							
Mar 29	1.9	0.9	1.1	0.4	0.4	0.3	0.4	0.7	0.5	1.6	8.0	9.7	10.0	11.0	7.3	12.1	12.6	8.9	7.6	0.8	1.1	1.3	0.5	1.4	0.1	17.7	11.2							
Mar 30	E	ENE	ENE	NNE	NNW	NNW	NNW	W	W	WNW	WNW	W	WNW	W	WNW	W	WSW	WSW	WSW	SSW	S	S	SE	NE	0.1	18.2	5.6							
Mar 31	0.8	0.9	1.9	2.0	0.6	0.3	0.4	0.1	2.0	4.2	4.3	7.0	9.4	10.0	11.5	9.2	9.8	7.0	6.5	5.6	7.6	8.4	10.5	13.4	2.3	18.4	9.6							
Mar 31	NE	NE	ENE	ENE	NW	NNW	NE	SE	ESE	SE	SSE	SSW	SSW	SSW	SW	SSE	SSE	SSW	S	SSE	S	SSW	SW	SW	2.3	18.4	9.6							
Mar 31	13.4	13.4	12.0	10.4	12.0	9.2	5.5	5.2	11.0	11.9	13.7	13.3	11.6	10.5	11.4	14.2	15.0	16.5	15.6	16.6	16.7	13.8	14.6	12.8										
Mar 31	SW	SW	SW	SW	SW	SW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	NW	NW	NW	NW	NW	NW	NW	NW	WNW										
Mar 31	13.7	14.1	17.7	17.5	17.5	15.4	13.7	14.1	16.7	15.6	15.9	14.5	14.3	13.0	13.4	13.1	11.3	10.0	7.6	2.5	0.1	0.1	0.2	1.2	0.1	17.7	11.2							
Mar 31	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	WNW	NW	NW	NW	WNW	NW	NW	NW	WNW	NE	ENE										
Mar 31	0.2	0.4	1.6	0.1	0.3	0.2	0.3	0.4	0.9	0.6	5.2	8.6	17.2	18.2	16.2	14.2	15.1	12.3	9.0	3.5	4.9	5.1	3.5	4.5	0.1	18.2	5.6							
Mar 31	N	NNE	E	SSW	NW	NNE	E	SSE	S	NNW	W	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	W	WSW	WSW	SSW											
Mar 31	2.3	4.4	7.4	4.1	3.5	8.7	11.1	9.2	11.8	15.8	16.6	18.4	18.3	15.5	17.7	17.4	16.8	14.4	9.3	4.9	4.2	3.4	4.2	6.2	2.3	18.4	9.6							
Mar 31	E	WSW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	SW	SSW	S	S	SSW	SW										
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	Unit/Maint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)																	
Daily Average is shown "N" if minimum data completeness criteria of 75% or 18 hours per day is not met.																																		
Monthly Average is shown "X" if minimum data completeness criteria of 75% of days per month is not met.																																		

END OF REPORT

This page, 221 of 221, ends the March 2021 Monthly Ambient Air Quality Monitoring Report.



Peace River Area Monitoring Program

MARCH 2021

Ambient Air Monitoring Calibration Report

- 842b STATION-

CAL-PRAMP-202103-01561

Operation and Maintenance:

Bureau Veritas Canada

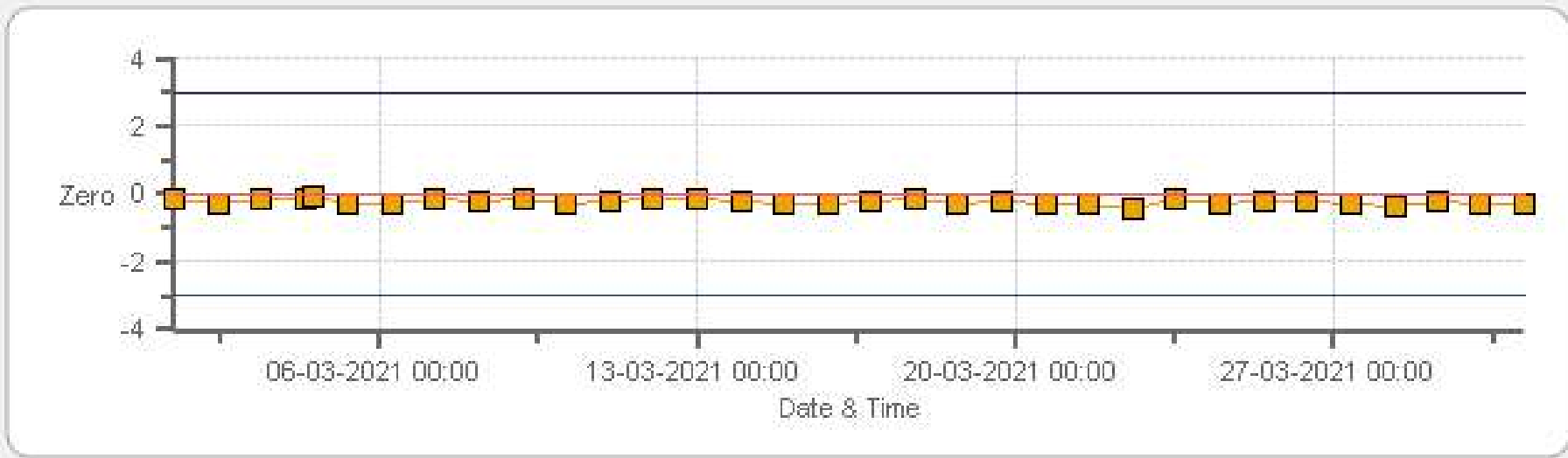
Data Validation and Report:

Bureau Veritas Canada

April 11, 2021

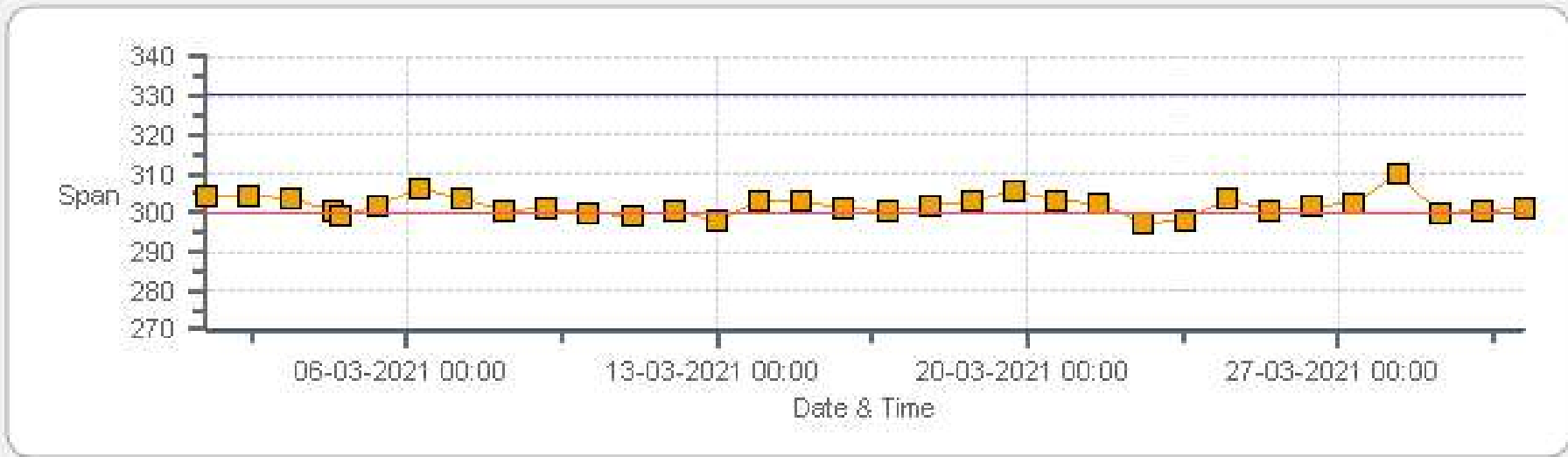
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: PRAMP 842b Monthly: 03-2021 Type: SpanAndZero - Zero



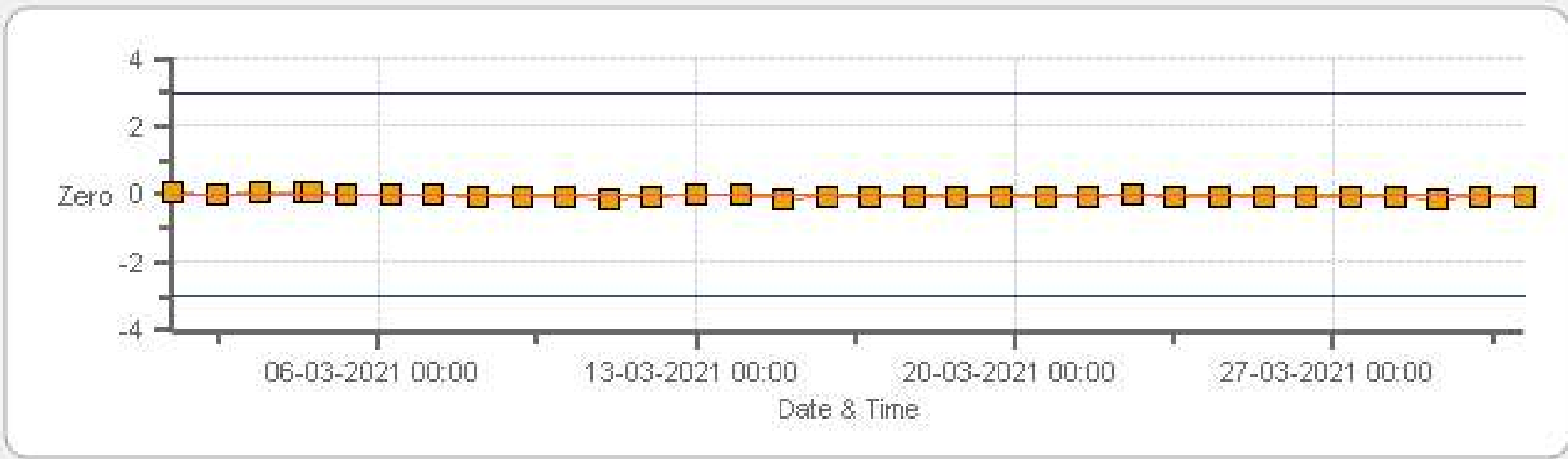
Zero Zero Ref Zero Low Zero High

SO2[ppb] Calibration: PRAMP 842b Monthly: 03-2021 Type: SpanAndZero - Span



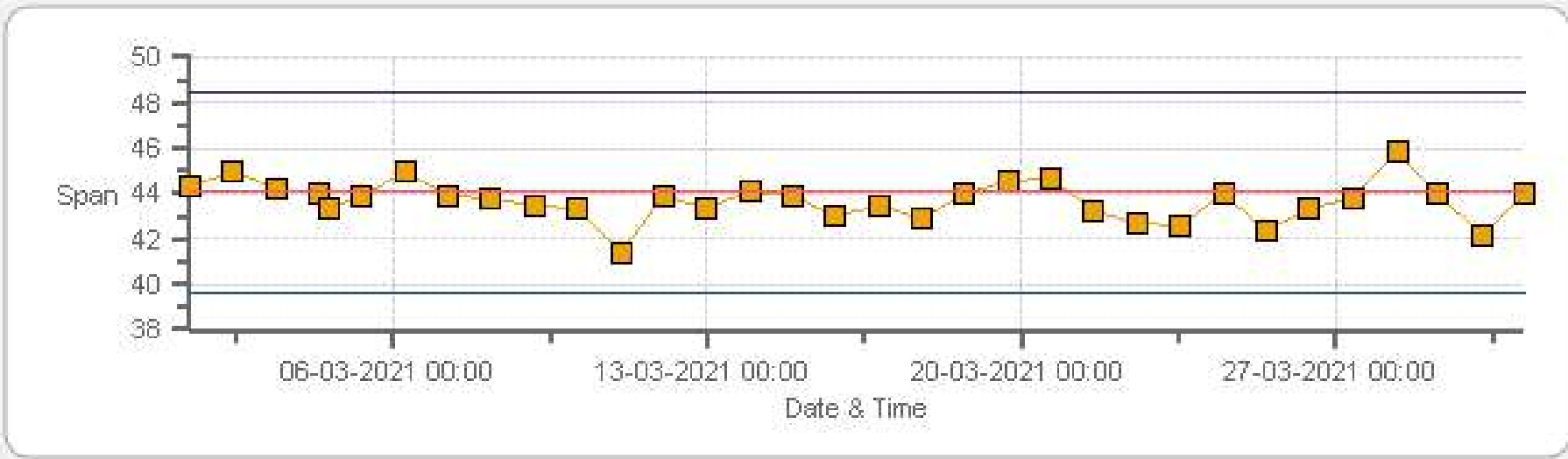
Span SpanRef Span Low Span High

TRS[ppb] Calibration: PRAMP 842b Monthly: 03-2021 Type: SpanAndZero - Zero



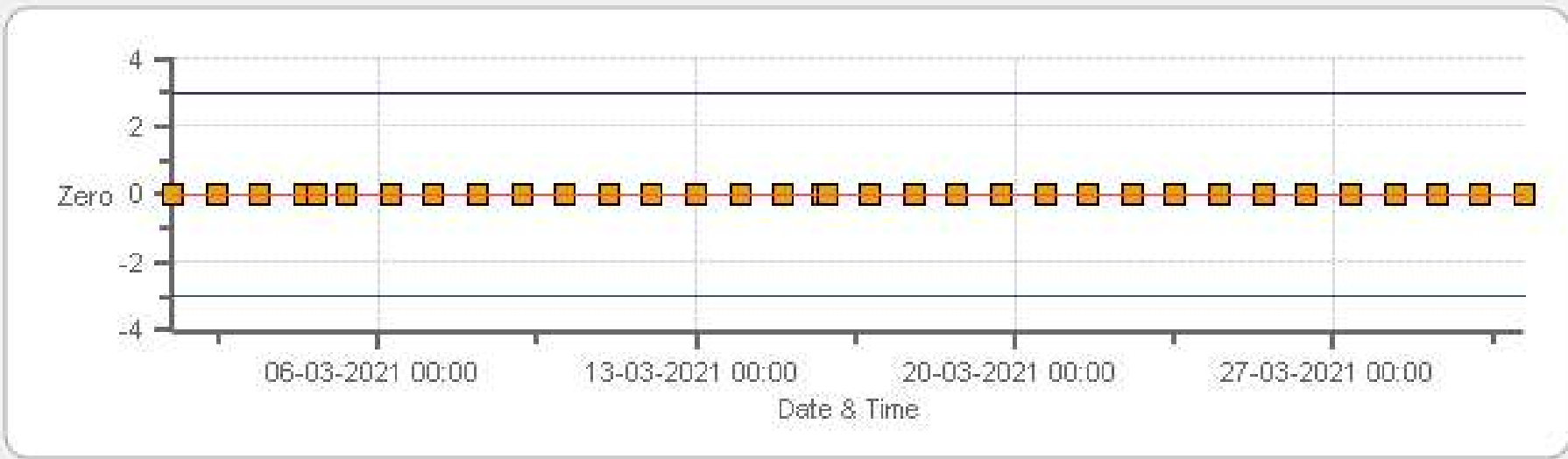
Zero Zero Ref Zero Low Zero High

TRS[ppb] Calibration: PRAMP 842b Monthly: 03-2021 Type: SpanAndZero - Span



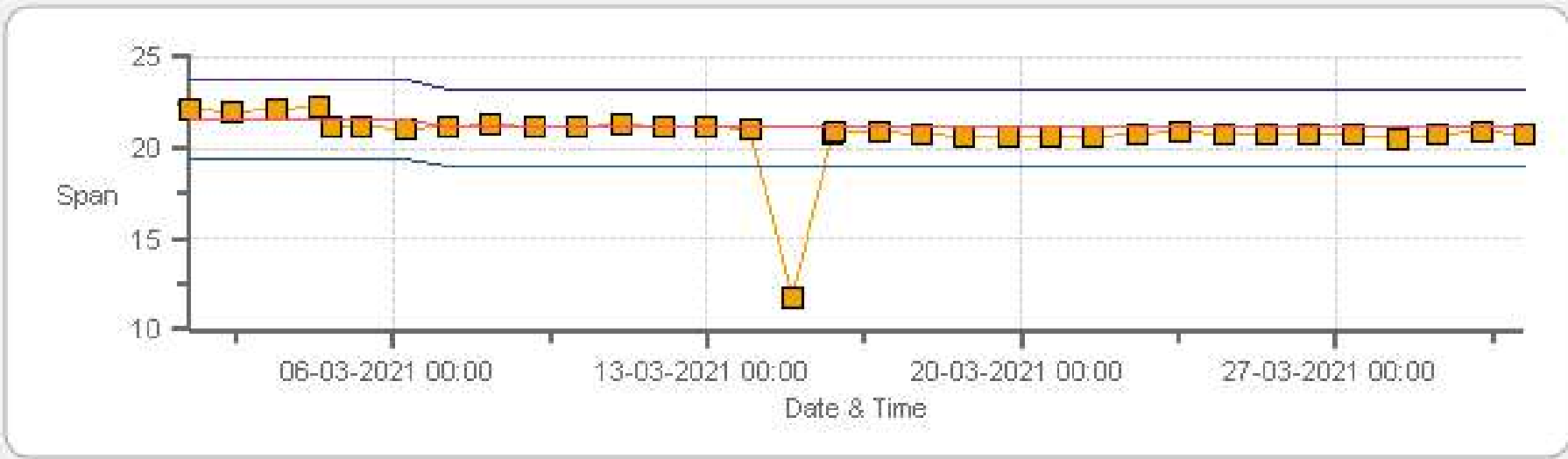
Span Span Ref Span Low Span High

THC55[ppm] Calibration: PRAMP 842b Monthly: 03-2021 Type: SpanAndZero - Zero



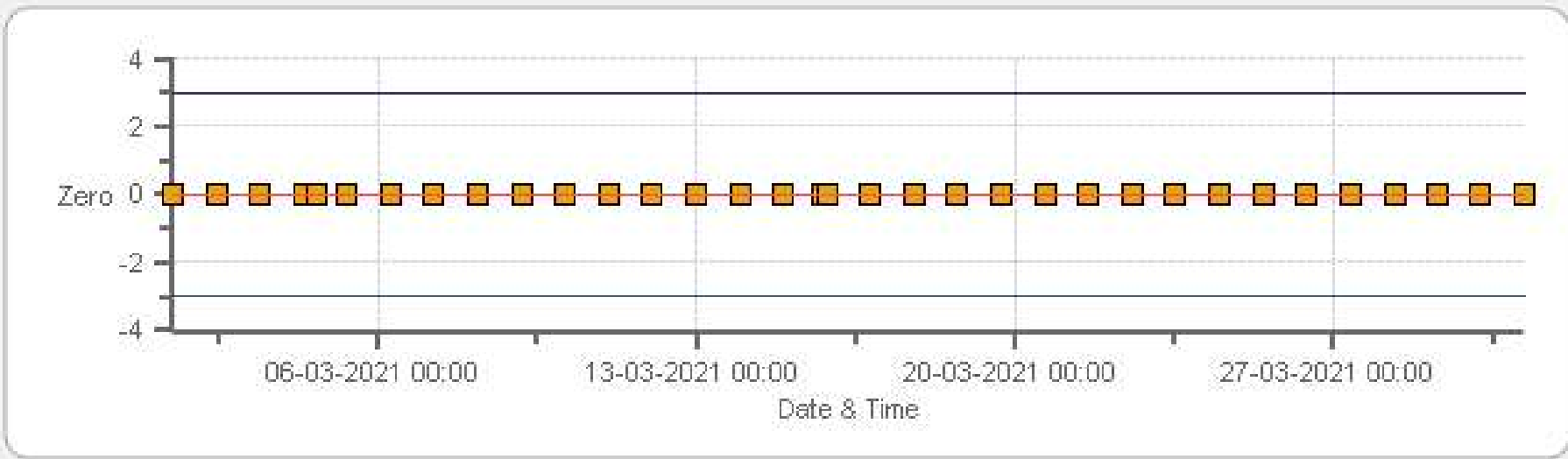
Zero Zero Ref Zero Low Zero High

THC55[ppm] Calibration: PRAMP 842b Monthly: 03-2021 Type: SpanAndZero - Span



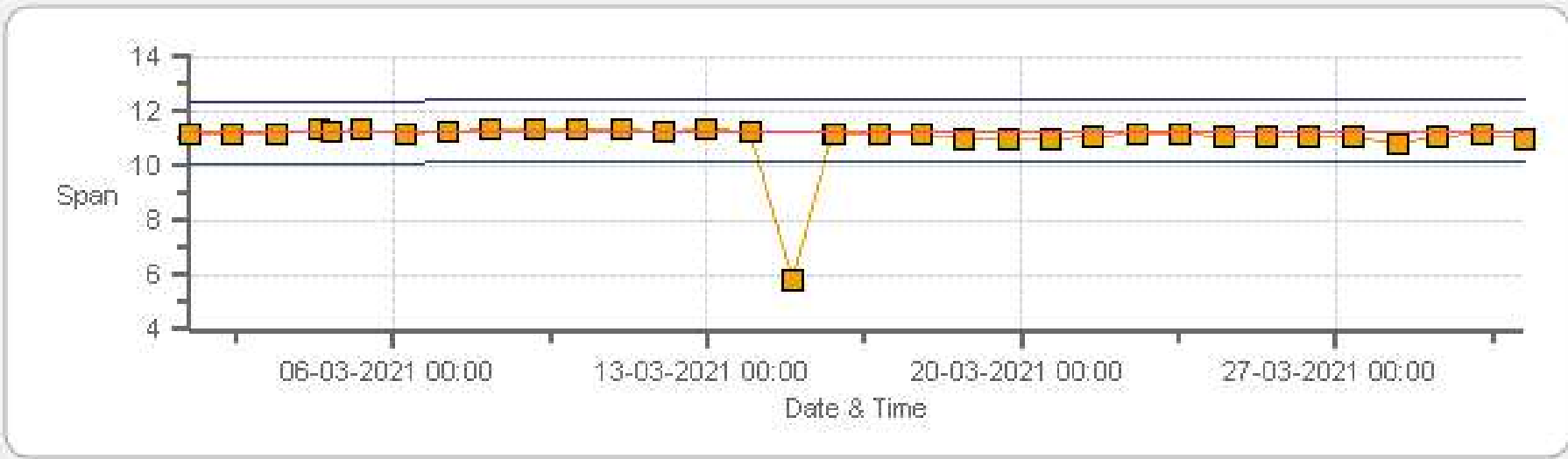
Span Span Ref Span Low Span High

NMHC[ppm] Calibration: PRAMP 842b Monthly: 03-2021 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: PRAMP 842b Monthly: 03-2021 Type: SpanAndZero - Span



Span SpanRef Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	04-Mar-2021	PREVIOUS CALIBRATION DATE:	03-Feb-2021
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	22.1
LOCATION:	842b	BAROMETRIC (mBar):	941
PURPOSE:	Routine	START TIME (MST):	09:08
PERFORMED BY:	Limin Li	END TIME (MST):	12:45

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	500 ppb
SERIAL #	1200736629	FLOW (mL/min)	425
INITIAL		FINAL	
BKG/OFFSET	8.1	BKG/OFFSET	8.1
COEF/SLOPE	1.081	COEF/SLOPE	1.083
Expected (reference) Value	300.2	Expected (reference) Value	300.2

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:

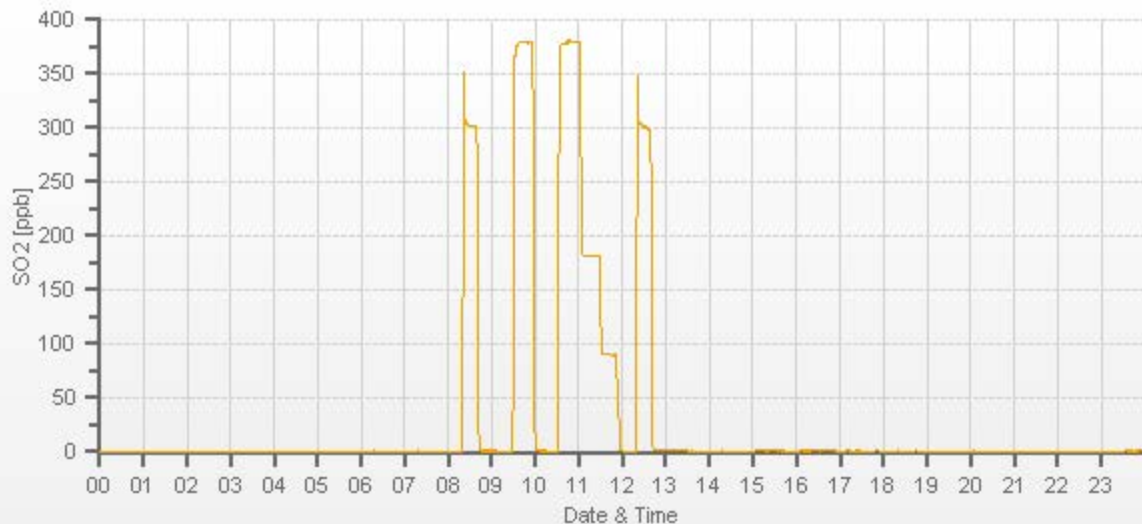
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
6000	45.50	6000	0.00	-0.1	0	1.001	1.000
5955	45.50	6000	379.93	379.6	380	1.001	1.000
5978	21.60	6000	180.36	n/a	181.4	n/a	0.994
5989	10.80	6000	90.18	n/a	89.7	n/a	1.005

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	0.0%

COMMENTS:

Sample filter changed. Monthly calibration - no issues.



TRS Analyzer Calibration by Dilution



DATE:	04-Mar-2021	PREVIOUS CALIBRATION DATE:	24-Feb-2021
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	22.1
LOCATION:	842b	BAROMETRIC (mBar):	941
PURPOSE:	Routine	START TIME (MST):	09:08
PERFORMED BY:	Limin Li	END TIME (MST):	13:36

ANALYZER:

MAKE/MODEL	Thermo 43I-TLE	RANGE	100 ppb
SERIAL #	1162460023	FLOW (mL/min)	388
INITIAL		FINAL	
BKG/OFFSET	3.26	BKG/OFFSET	3.3
COEF/SLOPE	1.048	COEF/SLOPE	1.032
Expected (reference) Value	44.07	Expected (reference) Value	44.07

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:	09:29	SO2 Conc (ppb)	380
END TIME:	09:50	Analyzer Response (ppb)	0.1

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	0	0.994	1.000
7442	58.50	7500	78.00	78.5	78	0.994	1.000
7472	28.50	7500	38.00	n/a	37.9	n/a	1.003
7486	14.25	7500	19.00	n/a	18.8	n/a	1.011

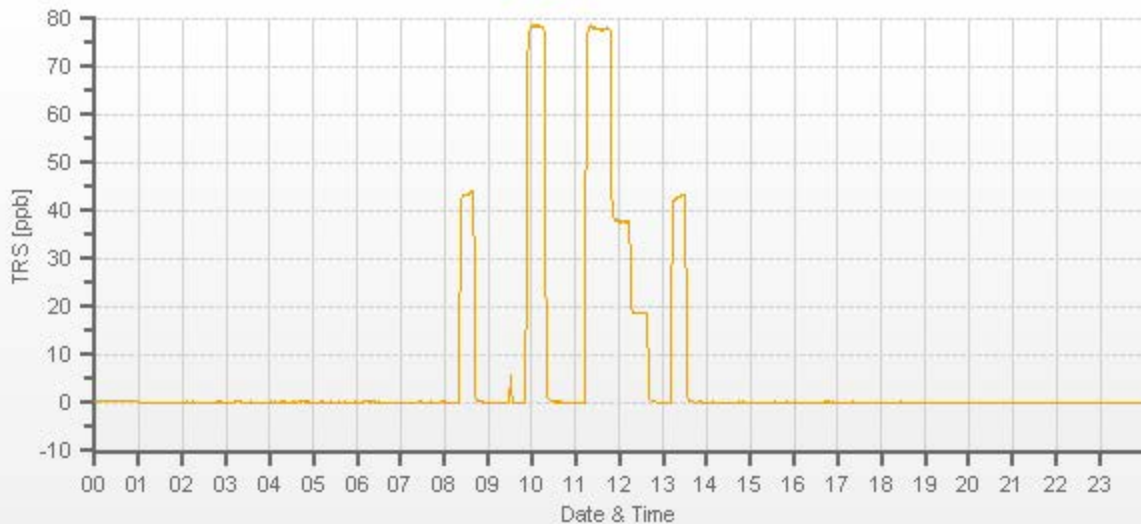
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	-0.1%

COMMENTS:

Sample filter changed. Monthly calibration - no issues.

TRS[ppb] Station: PRAMP 842b Daily: 04-03-2021 Type: AVG 1 Min. [1 Min.]



CAL-PRAMP-202103-01561

Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	04-Mar-2021	PREVIOUS CALIBRATION DATE:	03-Feb-2021	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	23.0		Thermo 55i	1501663728	1117
LOCATION:	842b	BAROMETRIC (mBar):	942	PARAMETER:	CH4	NMHC	THC
PURPOSE:	Routine	START TIME (MST):	11:54	RANGE (ppm):	20	20	40
PERFORMED BY:	Limin Li	END TIME (MST):	15:22	PREVIOUS CF:	0.998	1.001	1.000

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):	1500	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
	10.36	11.23	21.59		9.84	11.29	21.12

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	15.89	13.40	29.29	14.50	13.52	28.02	0.912	1.008	0.956	0.999	0.999	0.999
3472	27.90	3500	7.25	6.75	14.00	n/a	n/a	n/a	7.13	6.70	13.83	n/a	n/a	n/a	1.016	1.008	1.012
3486	13.95	3500	3.62	3.38	7.00	n/a	n/a	n/a	3.53	3.32	6.85	n/a	n/a	n/a	1.026	1.017	1.022

LINEAR REGRESSION ANALYSIS:

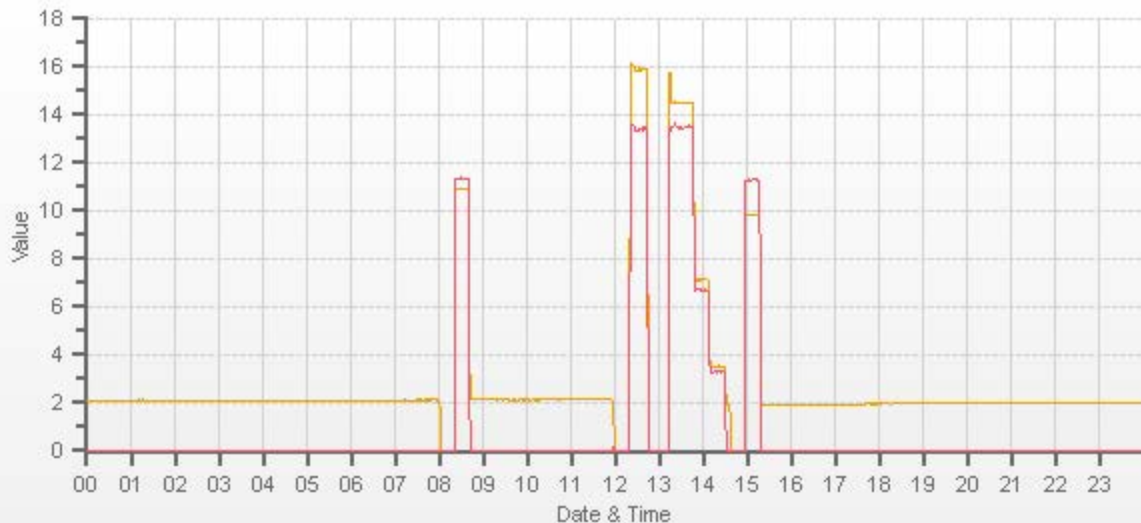
	CORRELATION	SLOPE	INTERCEPT
CH ₄	1.000	1.002	-0.3%
NMHC	1.000	1.002	-0.2%
THC	1.000	1.002	-0.2%

Comments:

Sample filter changed. Monthly calibration - no issues.

Use Zero Chrom?

No



CAL-PRAMP-202103-01561

Meteorological System Checklist



Date:	March 3, 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:	February 3, 2021	
Is the heater operating properly?	yes	
Are the bucket drain holes clean?	yes	
Is the housing clean?	yes	
Is the area around the housing clean and free from obstacles?	yes	

AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	February 3, 2021	
Parameter:	Temperature @ 2 metres	
Reference Thermometer ID:	FS 160459244 expires June 10, 2021	
Reference Temperature (°C):	3.2	
Station - Ambient Temperature (°C):	3.5	
Temperature Difference (°C):	-0.3	

BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	February 3, 2021	
Reference Barometer ID:	Brunton 05490 expires Jan 12, 2022	
Reference Pressure - Units/Reading:	millibar	941.9
Station Pressure - Units/Reading:	millibar	941.4
Pressure Tolerance +/- 15% of error:	801 - 1083	

RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	February 3, 2021	
Reference Hygrometer ID:	FS 160459244 expires June 10, 2021	
Reference Hygrometer % RH- Reading:	47.56	
Station Hygrometer % RH- Reading:	47.90	
RH Tolerance +/- 15% of difference:	40.43 - 54.69	-0.7%

ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	February 3, 2021	Previous check date:	February 3, 2021
Wind Speed Observed (kph):	5~10	Wind Direction Observed:	E
Wind speed on Data Logger (kph):	6.8	Wind Direction on Data Logger:	E
		Wind Direction Pass/Fail?:	Pass

Comments

11:49am



Meteorological Sensor Audit/Calibration

Location Information

Company: PRAMP
 Audit Location: 842b
 Audit Date: December 16, 2020
 Calibration Purpose: installation

Performed By: Chris Wesson
 Reviewed By: Ferdinand Roy
 Start/End Time (mst): 16:48 / 17:04
 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

MARCH 2021

Ambient Air Monitoring Calibration Report

- 986c STATION-

CAL-PRAMP-202103-01562

Operation and Maintenance:

Bureau Veritas Canada

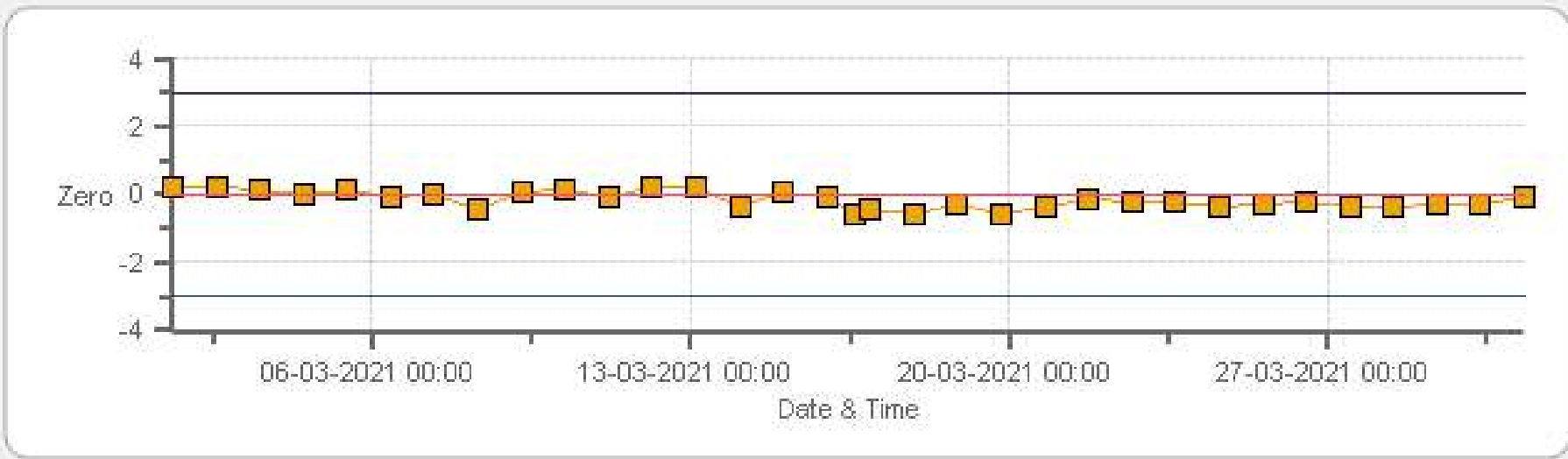
Data Validation and Report:

Bureau Veritas Canada

April 11, 2021

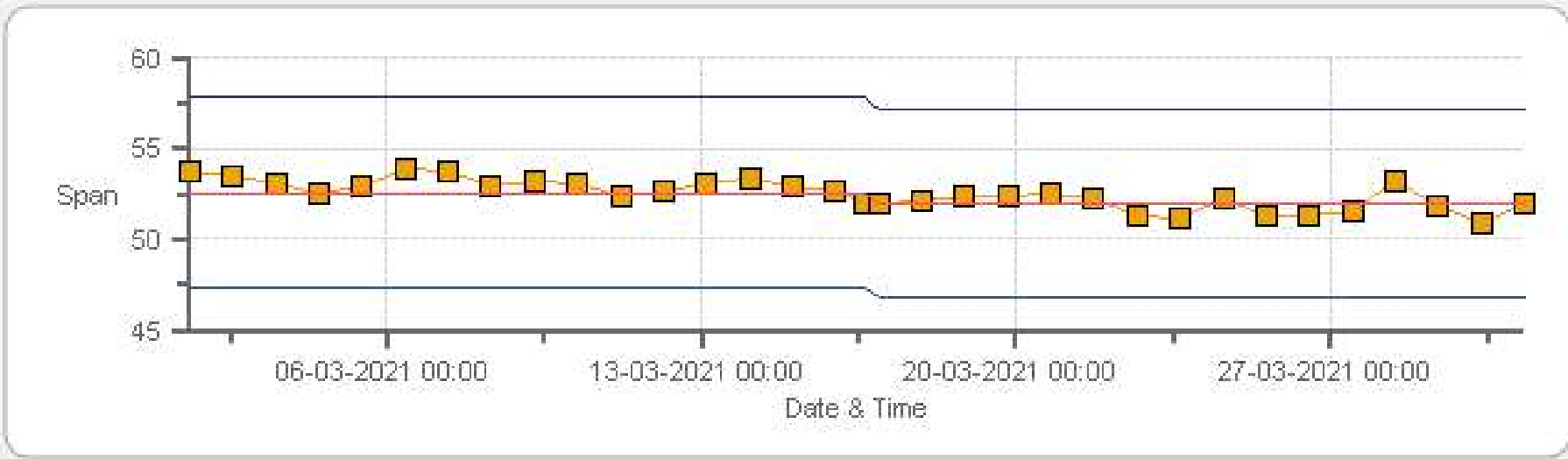
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

TRS[ppb] Calibration: PRAMP 986c Monthly: 03-2021 Type: SpanAndZero - Zero



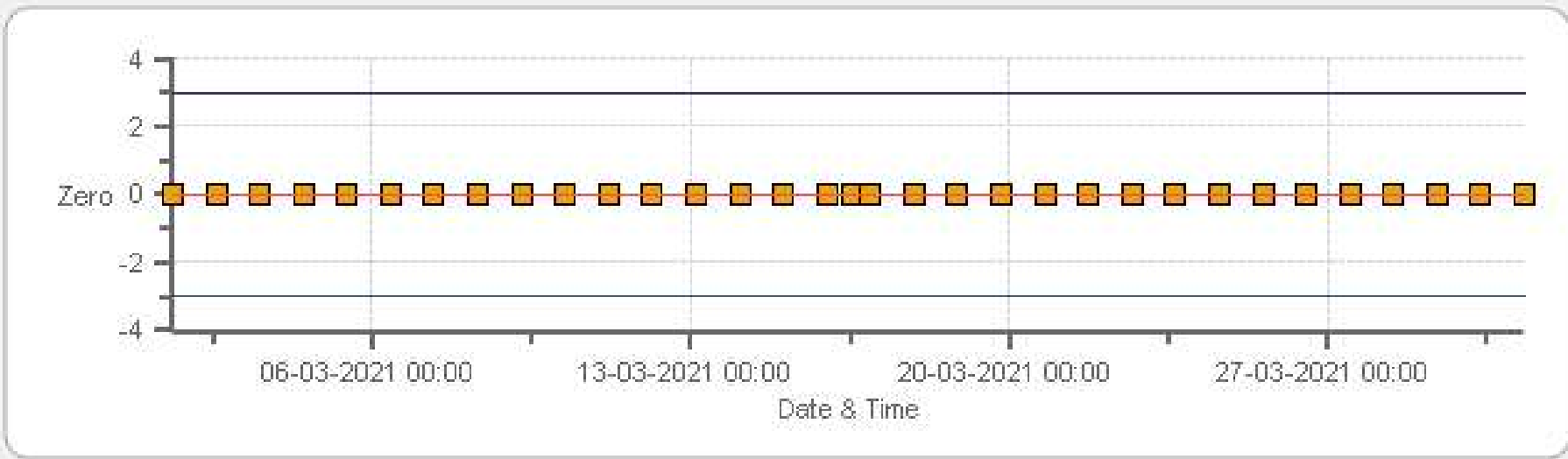
Zero Zero Ref Zero Low Zero High

TRS[ppb] Calibration: PRAMP 986c Monthly: 03-2021 Type: SpanAndZero - Span



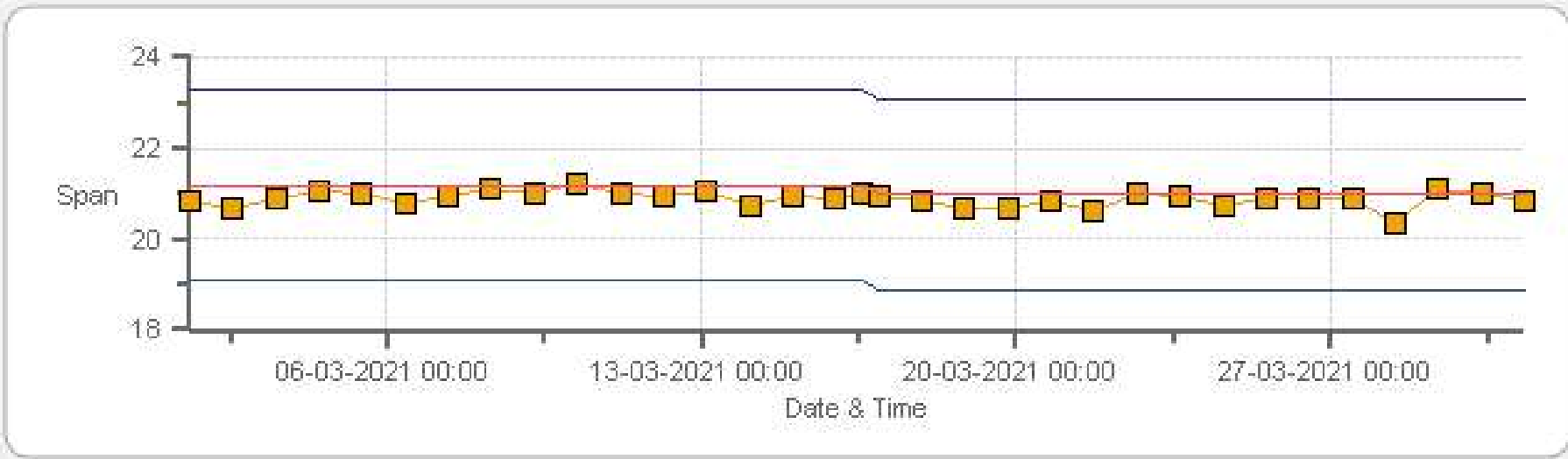
Span Span Ref Span Low Span High

THC55[ppm] Calibration: PRAMP 986c Monthly: 03-2021 Type: SpanAndZero - Zero



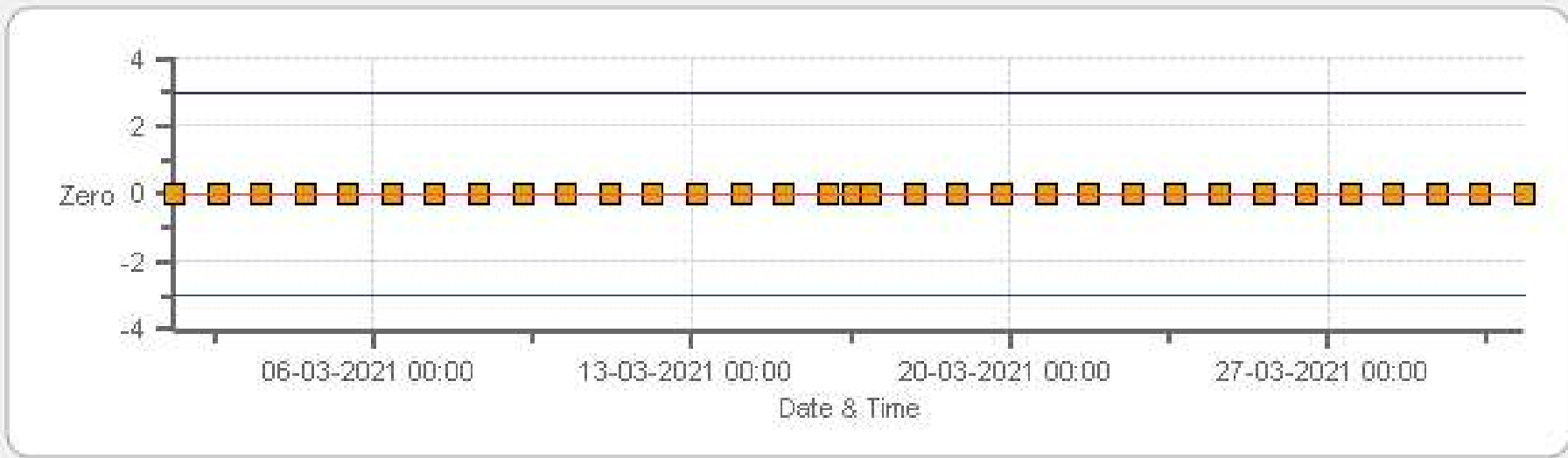
Zero Zero Ref Zero Low Zero High

THC55[ppm] Calibration: PRAMP 986c Monthly: 03-2021 Type: SpanAndZero - Span



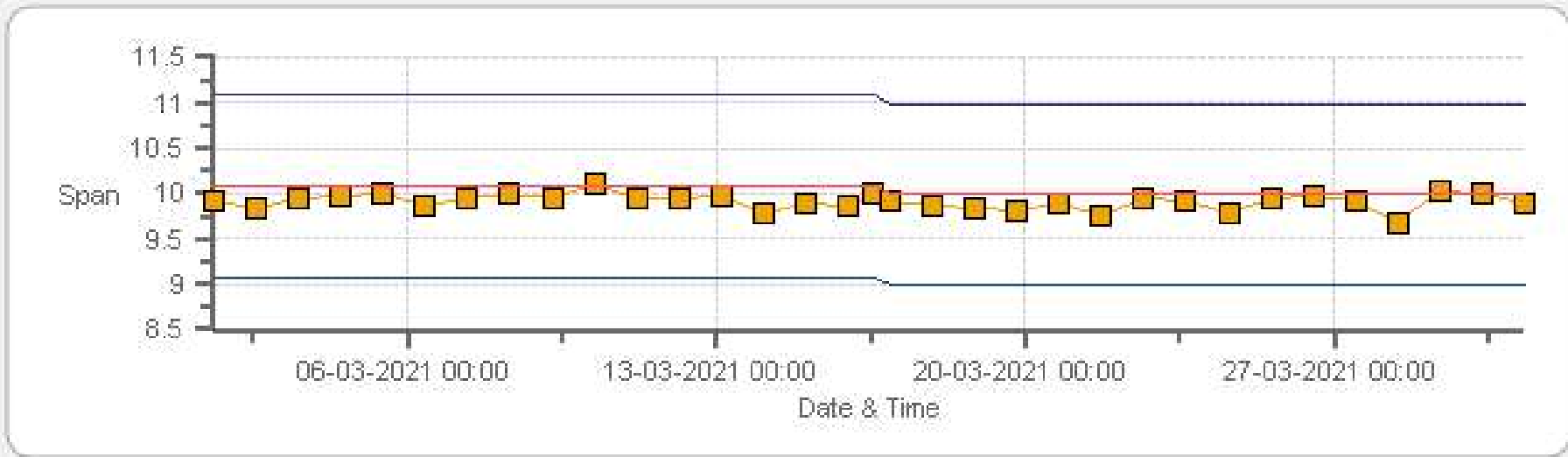
Span Span Ref Span Low Span High

CH4[ppm] Calibration: PRAMP 986c Monthly: 03-2021 Type: SpanAndZero - Zero



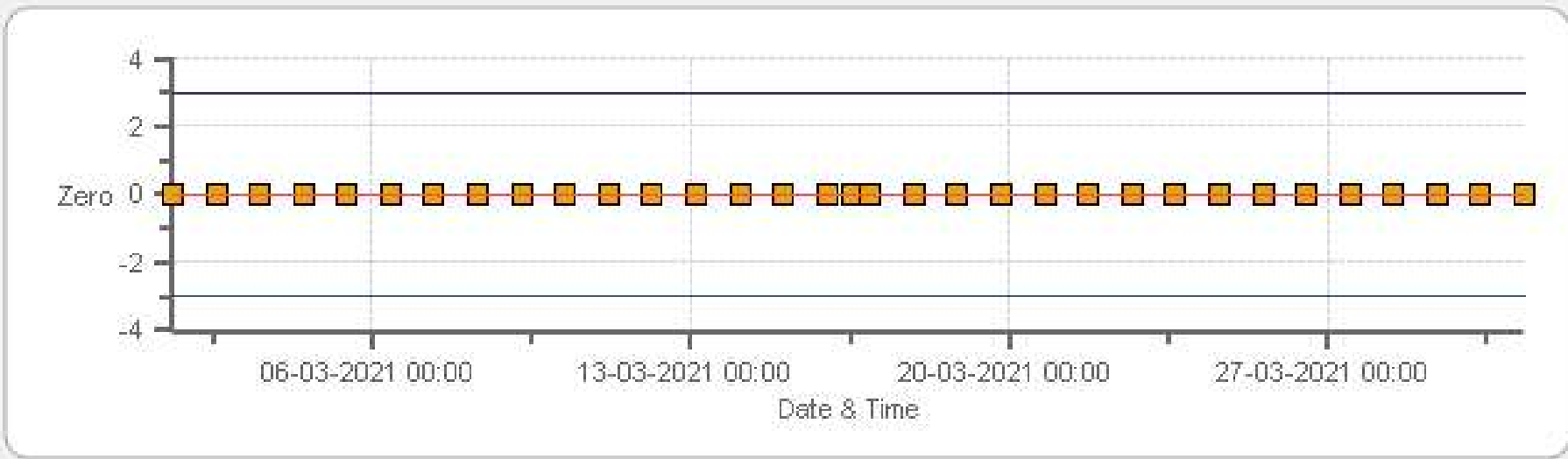
Zero Zero Ref Zero Low Zero High

CH4[ppm] Calibration: PRAMP 986c Monthly: 03-2021 Type: SpanAndZero - Span



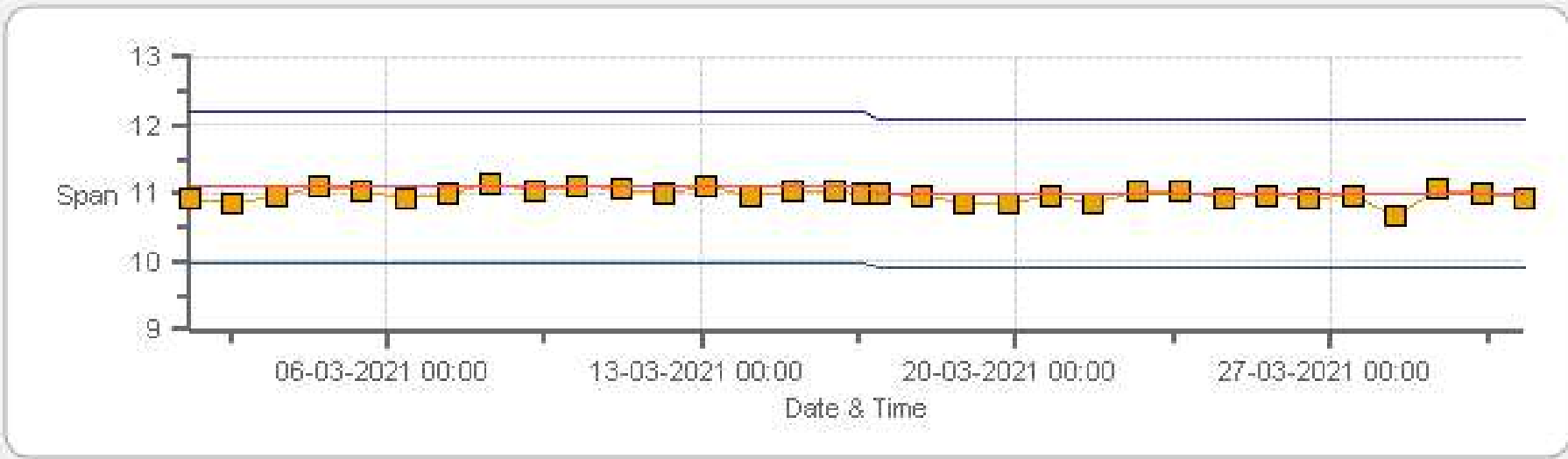
Span Span Ref Span Low Span High

NMHC[ppm] Calibration: PRAMP 986c Monthly: 03-2021 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: PRAMP 986c Monthly: 03-2021 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	16-Mar-2021	PREVIOUS CALIBRATION DATE:	23-Feb-2021
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	22.0
LOCATION:	986C	BAROMETRIC (mBar):	938
PURPOSE:	Routine	START TIME (MST):	09:16
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	14:51

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	500 ppb
SERIAL #	1193585646	FLOW (mL/min)	427
INITIAL		FINAL	
BKG/OFFSET	12.6	BKG/OFFSET	13
COEF/SLOPE	1.042	COEF/SLOPE	1.035
Expected (reference) Value	242.4	Expected (reference) Value	240.2

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	Teledyne
MODEL:	2000	MODEL:	M701
ID:	1991	ID:	5004
MFC CALIBRATION DATE:	14-Oct-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):	1780	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:

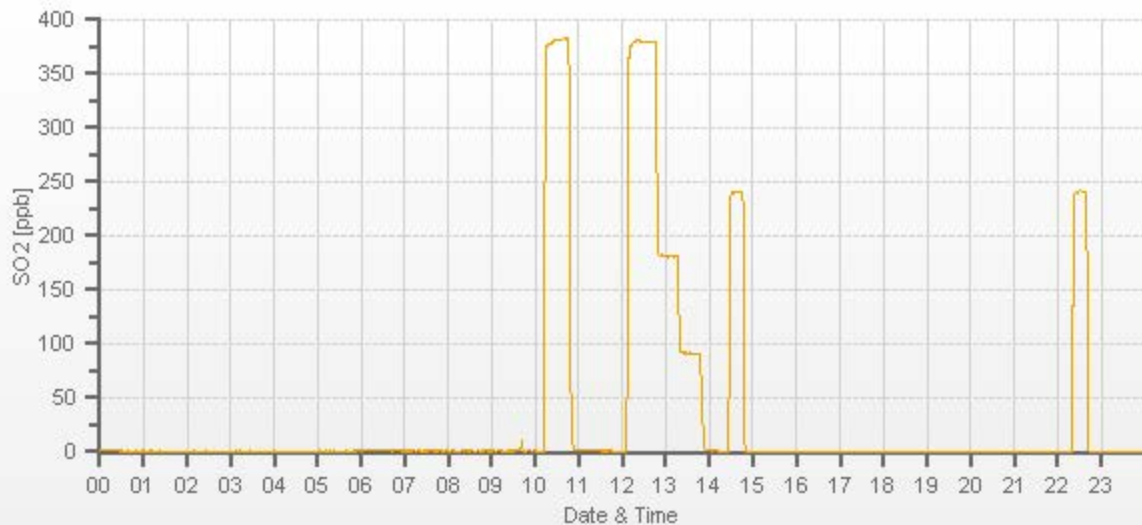
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4001	61.05	4001	0.00	0.2	0	0.994	1.000
3940	61.05	4001	379.98	382.5	380	0.994	1.000
3974	28.89	4003	179.73	n/a	181.1	n/a	0.992
3989	14.45	4003	89.86	n/a	91.2	n/a	0.985

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.999	0.2%

COMMENTS:

Sample filter changed. Monthly calibration - no issues.



TRS Analyzer Calibration by Dilution



DATE:	16-Mar-2021	PREVIOUS CALIBRATION DATE:	23-Feb-2021
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	22.0
LOCATION:	986C	BAROMETRIC (mBar):	938
PURPOSE:	Routine	START TIME (MST):	09:16
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	14:51

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	1191833341	FLOW (mL/min)	426
INITIAL		FINAL	
BKG/OFFSET	14	BKG/OFFSET	14.1
COEF/SLOPE	0.956	COEF/SLOPE	0.942
Expected (reference) Value	52.56	Expected (reference) Value	51.92

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	Teledyne
MODEL:	2000	MODEL:	M701
ID:	1991	ID:	5004
MFC CALIBRATION DATE:	14-Oct-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):	950	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:

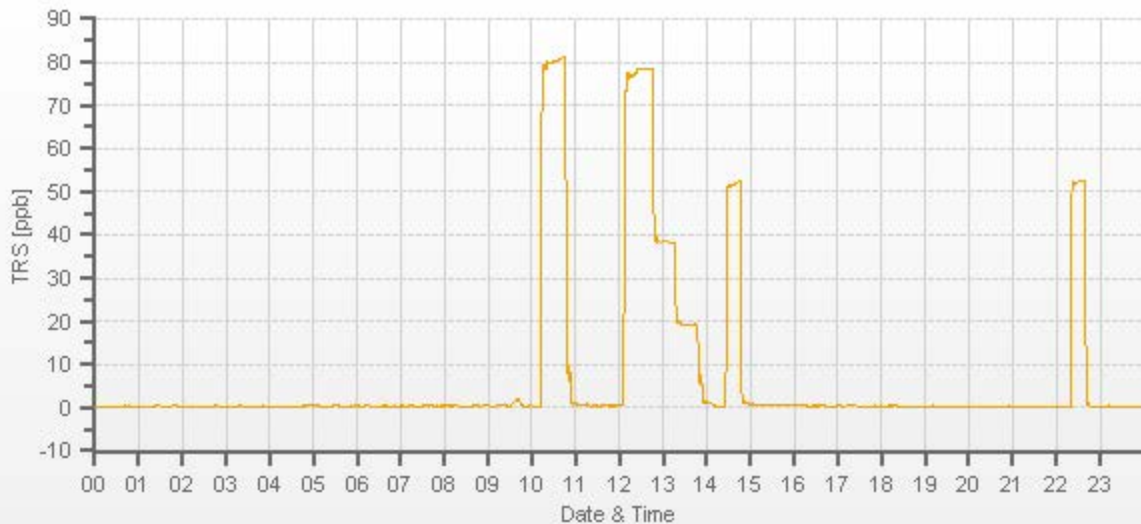
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4001	31.20	4001	0.00	-0.21	0	0.966	1.000
3969	31.20	4001	78.00	80.57	77.99	0.966	1.000
3988	15.21	4003	38.01	n/a	37.59	n/a	1.011
3996	7.61	4003	19.01	n/a	18.72	n/a	1.016

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	-0.2%

COMMENTS:

Sample filter changed. Monthly calibration - no issues.



Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	16-Mar-2021	PREVIOUS CALIBRATION DATE:	23-Feb-2021	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	22.0		Thermo 55i	1193585652	1282.5
LOCATION:	986C	BAROMETRIC (mBar):	938	PARAMETER:	CH4	NMHC	THC
PURPOSE:	Routine	START TIME (MST):	09:17	RANGE (ppm):	20	20	40
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:41	PREVIOUS CF:	1.002	1.000	1.001

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):	1050	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
	10.09	11.10	21.19		9.99	11.00	20.99

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
3220	X	3220	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	X	X	X	X	X	X
3144	78.95	3223	14.48	13.47	27.95	14.26	13.47	27.73	14.47	13.47	27.94	1.015	1.000	1.008	1.001	1.000	1.000
3182	39.47	3221	7.24	6.74	13.98	n/a	n/a	n/a	7.24	6.74	13.97	n/a	n/a	n/a	1.000	1.000	1.001
3206	19.74	3226	3.62	3.36	6.98	n/a	n/a	n/a	3.60	3.39	6.98	n/a	n/a	n/a	1.004	0.993	1.000

LINEAR REGRESSION ANALYSIS:

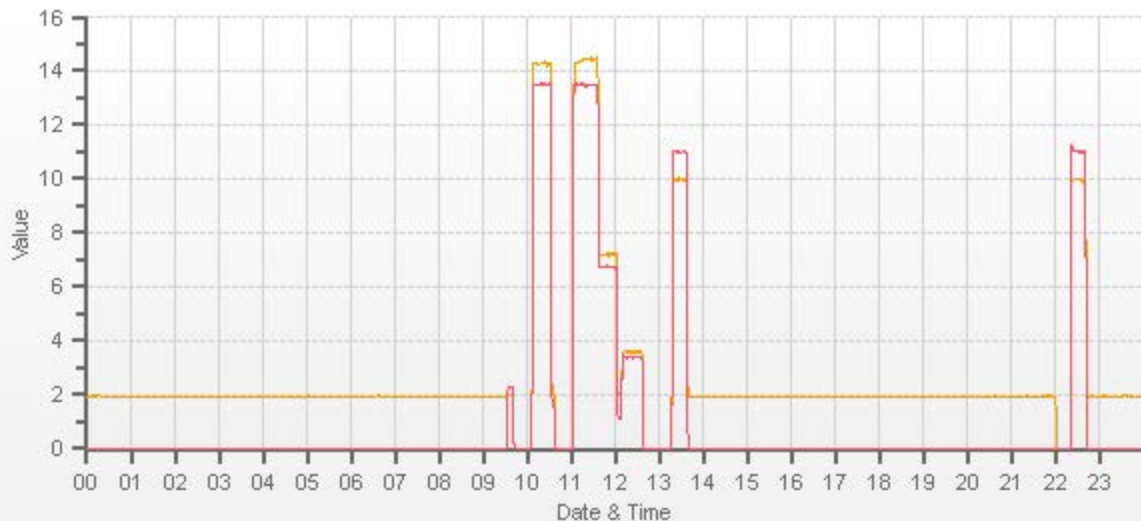
	CORRELATION	SLOPE	INTERCEPT
CH ₄	1.000	1.000	0.0%
NMHC	1.000	0.999	0.1%
THC	1.000	0.999	0.0%

Comments:

Sample filter changed. Monthly calibration - no issues.

Use Zero Chrom?

No



Meteorological System Checklist



Date:	March 16, 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:	February 23, 2021		
Parameter:	Temperature @ 2 metres		
Reference Thermometer ID:	F.S. 160348895 expires Sep 4, 2022		
Reference Temperature (°C):	0.9		
Station - Ambient Temperature (°C):	1.9		
Temperature Difference (°C):	-1.0		
BAROMETRIC PRESSURE SENSOR CHECK			
Previous check date:	February 23, 2021		
Reference Barometer ID:	Reference Barometer ID: Brunton 05535 expires February 17, 2022		
Reference Pressure - Units/Reading:	millibar	938.3	
Station Pressure - Units/Reading:	millibar	938.4	
Pressure Tolerance +/- 15% of error:	798 - 1079	-0.01%	
RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK			
Previous check date:	February 23, 2021		
Reference Hygrometer ID:	F.S. 160348895 expires Sep 4, 2022		
Reference Hygrometer % RH- Reading:	44.54		
Station Hygrometer % RH- Reading:	43.40		
RH Tolerance +/- 15% of difference:	37.86 - 51.22	2.6%	
ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK			
WIND SPEED		WIND DIRECTION	
Previous check date:	February 23, 2021	Previous check date:	February 23, 2021
Wind Speed Observed (kph):	20~30	Wind Direction Observed:	SW
Wind speed on Data Logger (kph):	25.6	Wind Direction on Data Logger:	SW
		Wind Direction Pass/Fail?:	Pass
Comments			
No issues.			



Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	Performed By:	Chris Wesson
Audit Location:	986C	Reviewed By:	Ferdinand Roy
Audit Date:	July 16, 2020	Start/End Time (mst):	15:07 / 16:17
Calibration Purpose:	installation	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

MARCH 2021

Ambient Air Monitoring Calibration Report

- RENO STATION-

CAL-PRAMP-202103-01563

Operation and Maintenance:

Bureau Veritas Canada

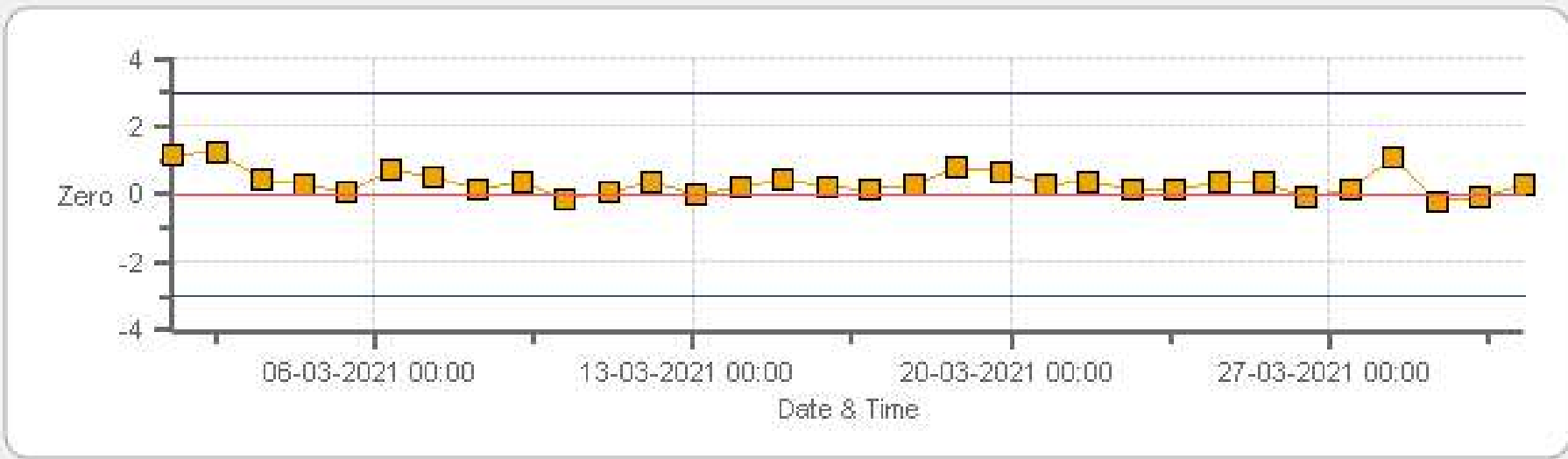
Data Validation and Report:

Bureau Veritas Canada

April 11, 2021

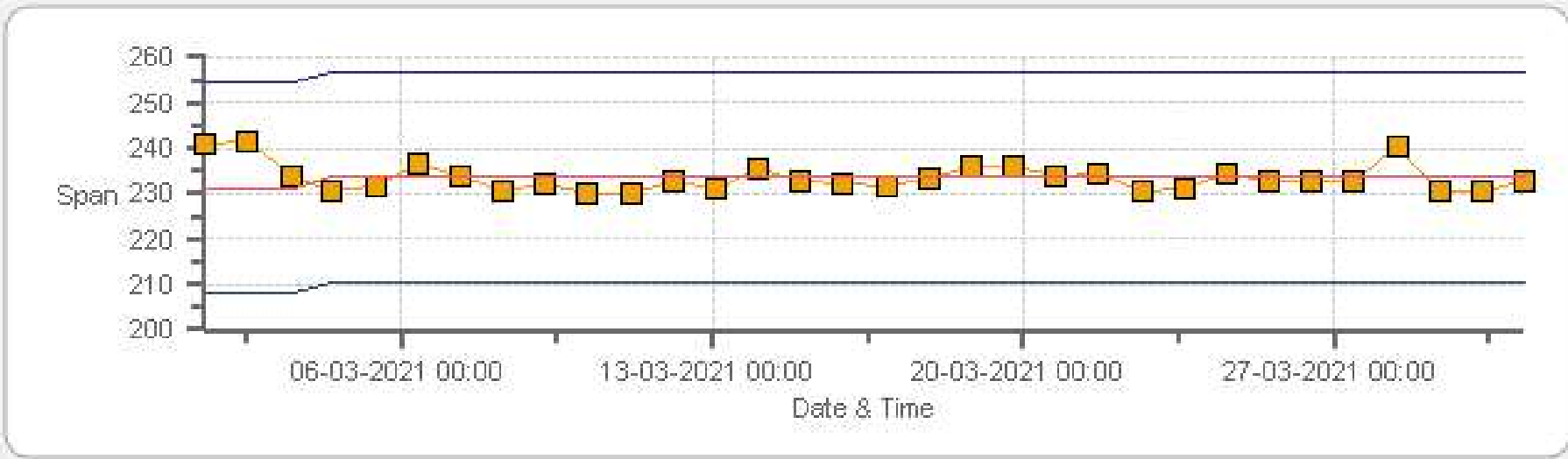
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: PRAMP RENO Monthly: 03-2021 Type: SpanAndZero - Zero



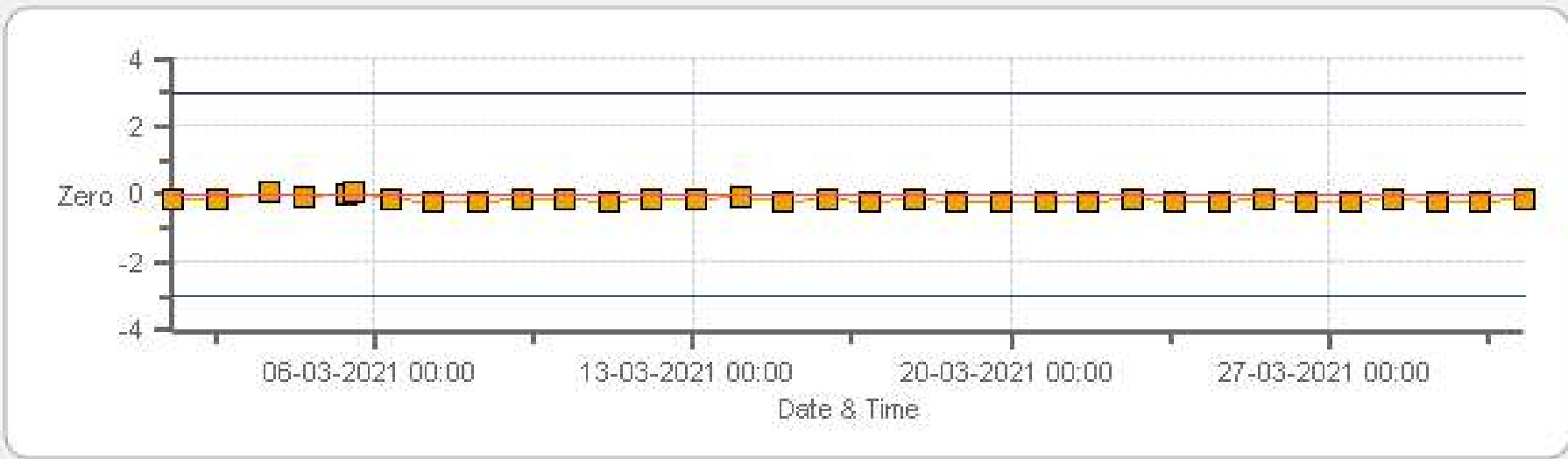
Zero Zero Ref Zero Low Zero High

SO2[ppb] Calibration: PRAMP RENO Monthly: 03-2021 Type: SpanAndZero - Span



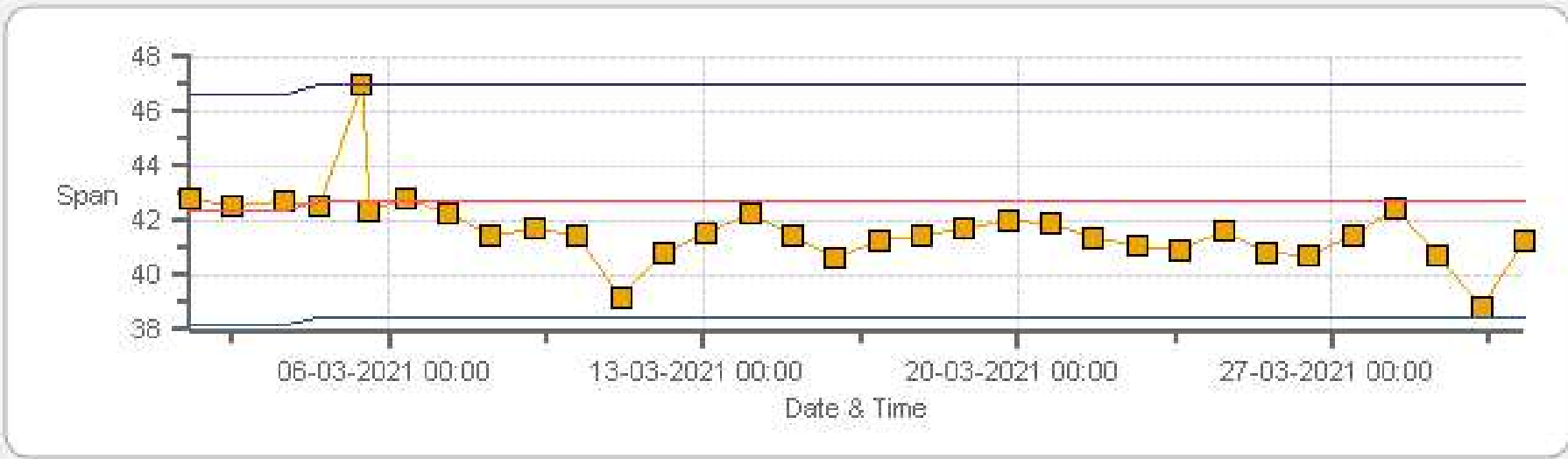
Span Span Ref Span Low Span High

TRS[ppb] Calibration: PRAMP RENO Monthly: 03-2021 Type: SpanAndZero - Zero

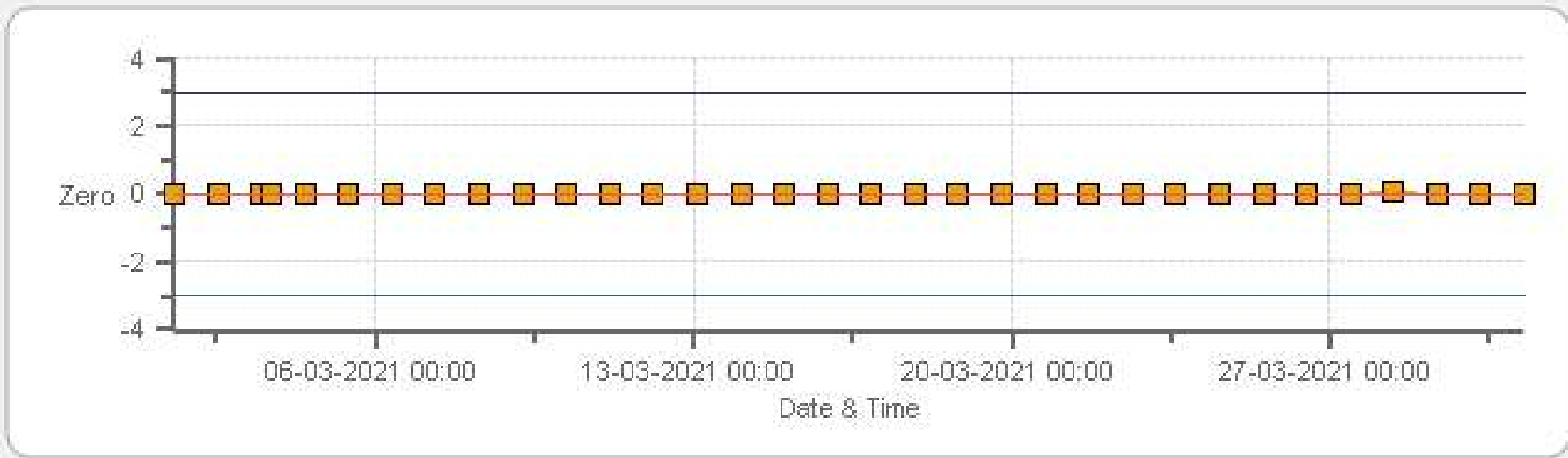


Zero Zero Ref Zero Low Zero High

TRS[ppb] Calibration: PRAMP RENO Monthly: 03-2021 Type: SpanAndZero - Span

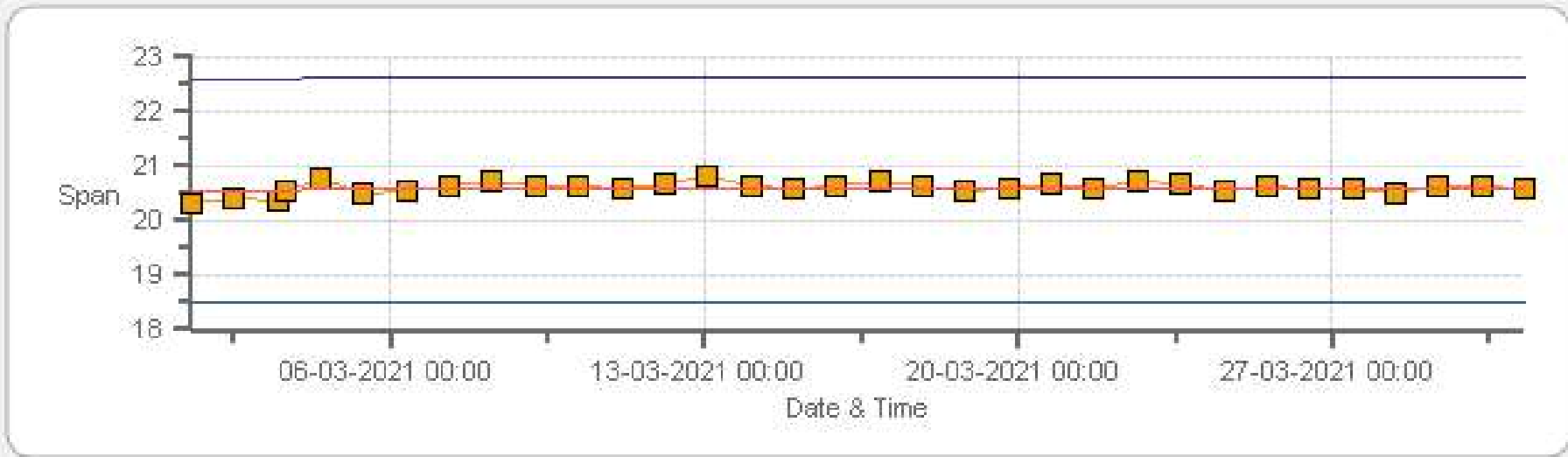


THC55[ppm] Calibration: PRAMP RENO Monthly: 03-2021 Type: SpanAndZero - Zero



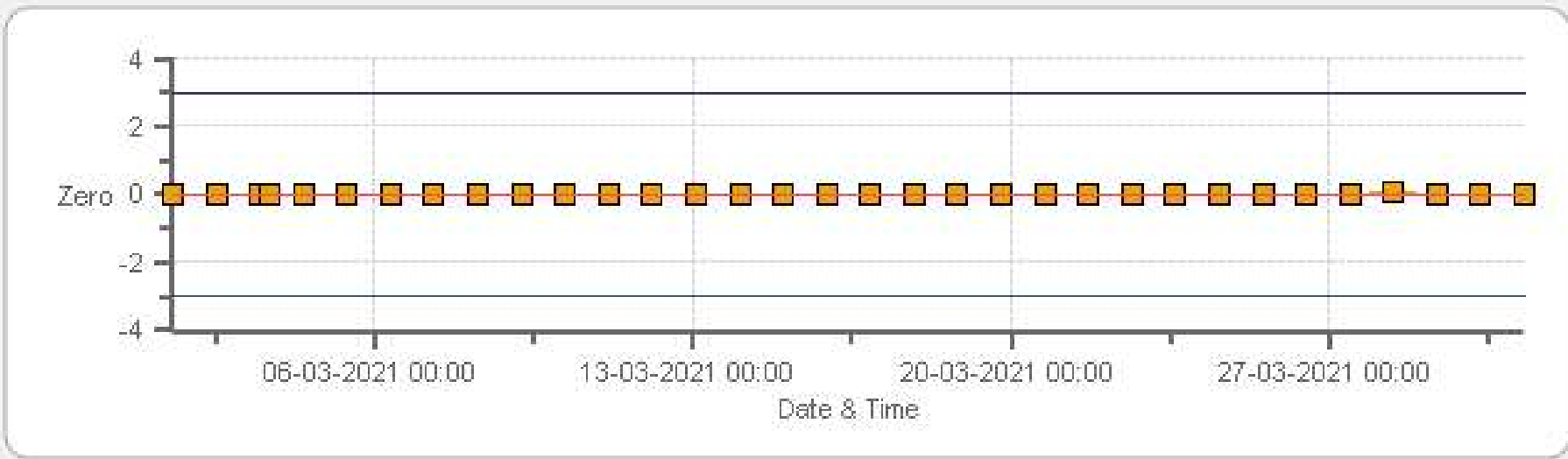
Zero Zero Ref Zero Low Zero High

THC55[ppm] Calibration: PRAMP RENO Monthly: 03-2021 Type: SpanAndZero - Span



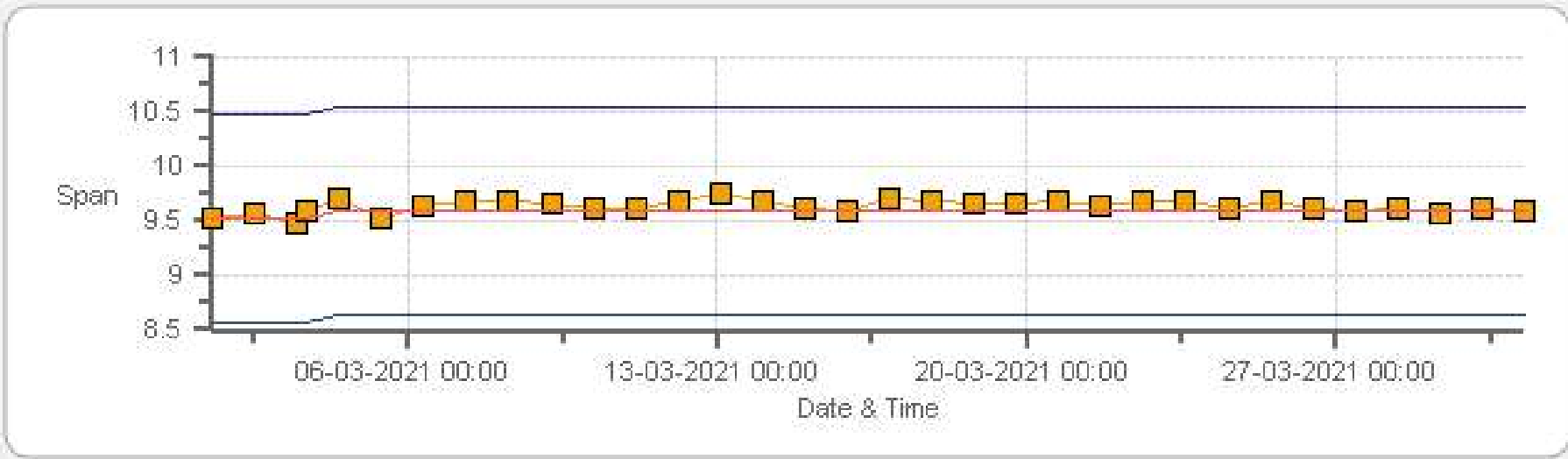
Span Span Ref Span Low Span High

CH4[ppm] Calibration: PRAMP RENO Monthly: 03-2021 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

CH4[ppm] Calibration: PRAMP RENO Monthly: 03-2021 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	03-Mar-2021	PREVIOUS CALIBRATION DATE:	04-Feb-2021
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.001
CLIENT:	PRAMP	TEMPERATURE (°C):	23.1
LOCATION:	Reno	BAROMETRIC (mBar):	929
PURPOSE:	Routine	START TIME (MST):	10:00
PERFORMED BY:	Limin Li	END TIME (MST):	13:20

ANALYZER:

MAKE/MODEL	API 100A	RANGE	500 ppb
SERIAL #	1502	FLOW (mL/min)	648
INITIAL		FINAL	
BKG/OFFSET	79.5	BKG/OFFSET	80.1
COEF/SLOPE	1.055	COEF/SLOPE	1.036
Expected (reference) Value	231.2	Expected (reference) Value	233.6

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:

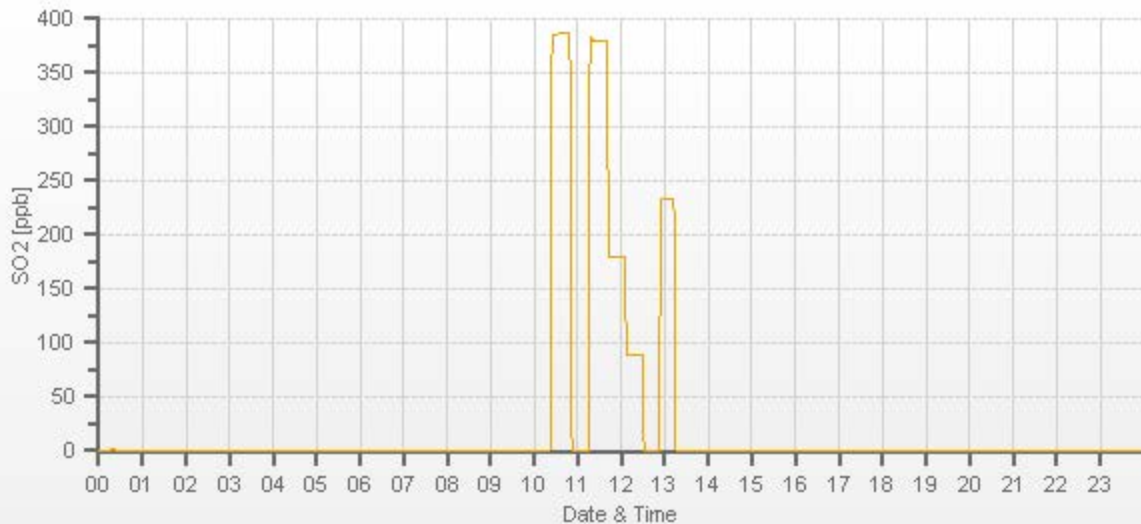
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
6000	45.50	6000	0.00	0.4	0	0.983	1.000
5955	45.50	6000	379.93	387	380	0.983	1.000
5978	21.60	6000	180.36	n/a	179.3	n/a	1.006
5989	10.80	6000	90.18	n/a	89	n/a	1.013

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	-0.1%

COMMENTS:

n/a



TRS Analyzer Calibration by Dilution



DATE:	03-Mar-2021	PREVIOUS CALIBRATION DATE:	24-Feb-2021
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.1
LOCATION:	Reno	BAROMETRIC (mBar):	929
PURPOSE:	Routine	START TIME (MST):	10:00
PERFORMED BY:	Limin Li	END TIME (MST):	16:46

ANALYZER:

MAKE/MODEL	Thermo 43I-TLE	RANGE	100 ppb
SERIAL #	1162460022	FLOW (mL/min)	405
INITIAL		FINAL	
BKG/OFFSET	3.24	BKG/OFFSET	3.58
COEF/SLOPE	1.018	COEF/SLOPE	1.123
Expected (reference) Value	42.38	Expected (reference) Value	42.74

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:	10:22	SO2 Conc (ppb)	380
END TIME:	10:42	Analyzer Response (ppb)	0.2

CALIBRATION:

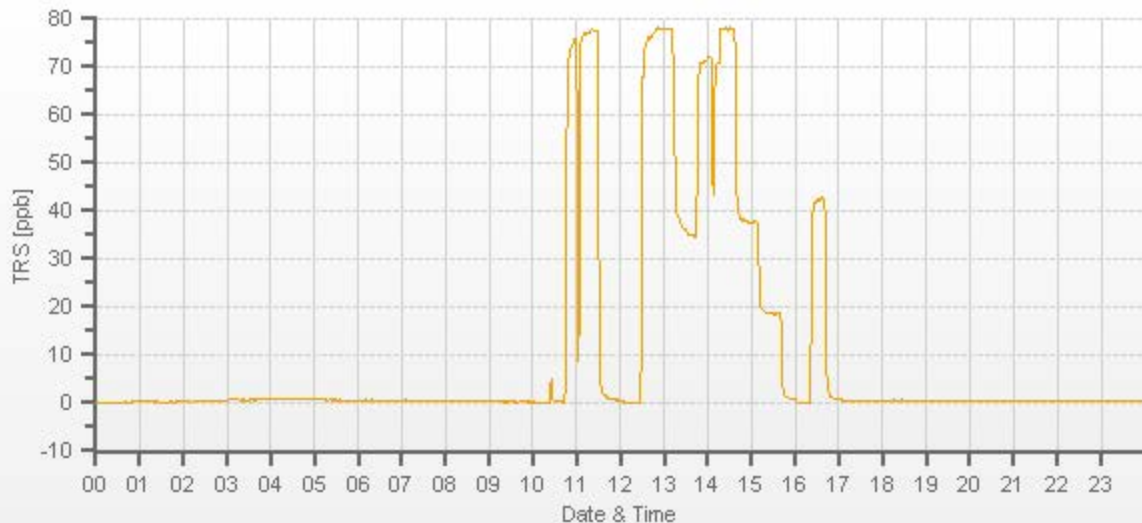
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
7500	58.50	7500	0.00	0	0	1.006	1.000
7442	58.50	7500	78.00	77.5	78	1.006	1.000
7472	28.50	7500	38.00	n/a	37.8	n/a	1.005
7486	14.25	7500	19.00	n/a	18.9	n/a	1.005

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	-0.1%

COMMENTS:

Daily ZS @ 11:00, restart as found high.
 Initial mid point failed. (34.8ppb/38ppb). Checked high point (72ppb/78ppb) = operator error.
 Repeat adjustment and restart calibration at adjusted high point.



TRS Analyzer Calibration by Dilution



DATE:	05-Mar-2021	PREVIOUS CALIBRATION DATE:	03-Mar-2021
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.5
LOCATION:	Reno	BAROMETRIC (mBar):	934
PURPOSE:	Repeat	START TIME (MST):	09:47
PERFORMED BY:	Limin Li	END TIME (MST):	13:45

ANALYZER:

MAKE/MODEL	Thermo 43I-TLE	RANGE	100 ppb
SERIAL #	1162460022	FLOW (mL/min)	409
INITIAL		FINAL	
BKG/OFFSET	3.58	BKG/OFFSET	3.19
COEF/SLOPE	1.123	COEF/SLOPE	1.005
Expected (reference) Value	42.74	Expected (reference) Value	42.74

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:

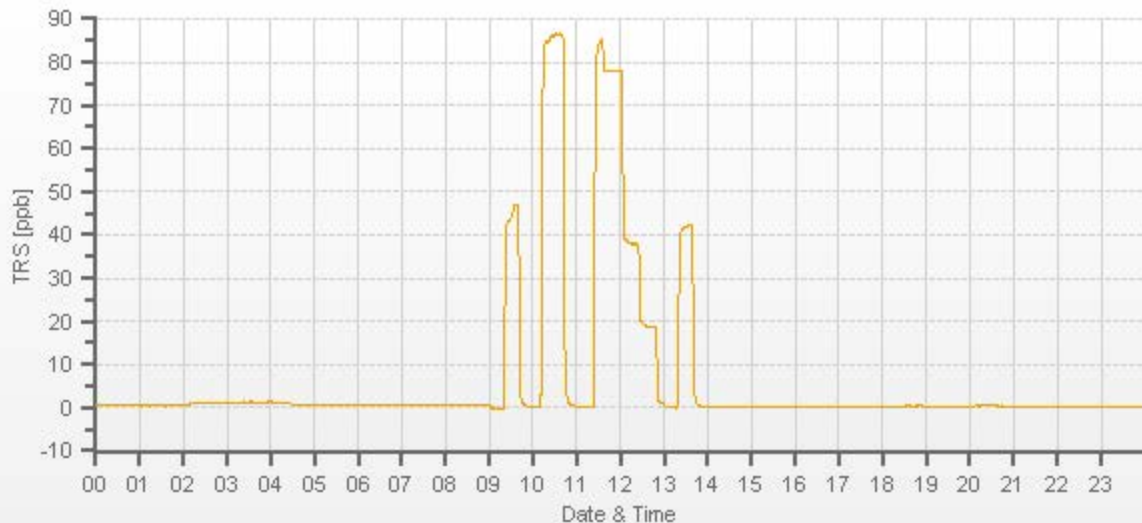
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
7500	58.50	7500	0.00	0	0	0.902	1.000
7442	58.50	7500	78.00	86.51	78	0.902	1.000
7472	28.50	7500	38.00	n/a	38	n/a	1.000
7486	14.25	7500	19.00	n/a	18.9	n/a	1.005

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	0.0%

COMMENTS:

Do repeat calibration due to daily span check failed.



Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	03-Mar-2021	PREVIOUS CALIBRATION DATE:	04-Feb-2021	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	25.8		Thermo 55i	1505664392	1194
LOCATION:	Reno	BAROMETRIC (mBar):	929	PARAMETER:	CH4	NMHC	THC
PURPOSE:	Routine	START TIME (MST):	12:32	RANGE (ppm):	20	20	40
PERFORMED BY:	Limin Li	END TIME (MST):	16:46	PREVIOUS CF:	0.999	0.999	0.999

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):	1500	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
	9.52	11.02	20.55		9.59	10.98	20.57

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	14.40	13.39	27.79	14.54	13.58	28.12	1.006	1.008	1.007	0.997	0.994	0.996
3472	27.90	3500	7.25	6.75	14.00	n/a	n/a	n/a	7.26	6.77	14.03	n/a	n/a	n/a	0.998	0.997	0.998
3486	13.95	3500	3.62	3.38	7.00	n/a	n/a	n/a	3.66	3.46	7.12	n/a	n/a	n/a	0.990	0.976	0.983

LINEAR REGRESSION ANALYSIS:

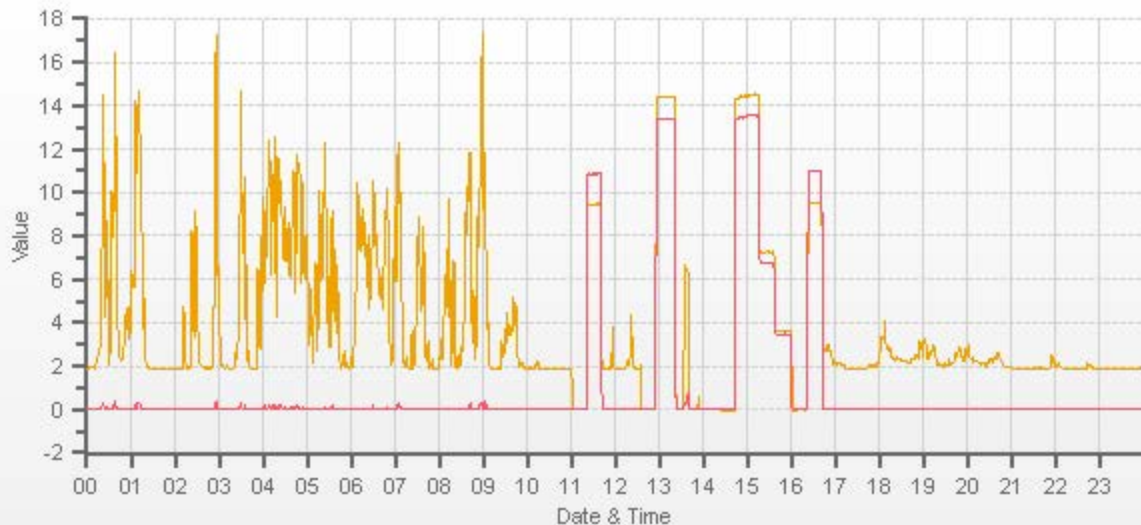
	CORRELATION	SLOPE	INTERCEPT
CH ₄	1.000	1.003	0.0%
NMHC	1.000	1.004	0.1%
THC	1.000	1.003	0.1%

Comments:

Sample filter changed.
Change H2 and N2 gas after as found high point.

Use Zero Chrom?

No



CAL-PRAMP-202103-01563

Page 16 of 18
CH4 [ppm] NMHC [ppm]

Meteorological System Checklist



Date:	March 3, 2021		
Technician:	Limin Li		
Station:	PRAMP Reno		
Unit:	Make:	Model:	Serial #:
Precipitation Sampler:	RM Young	5202	TB 15877
Temperature Sensor:	RM Young	43172VC	60837897
Barometric Pressure Sensor:	MetOne	92	R12877
Relative Humidity Sensor:	RM Young	43172VC	60837897
Anemometer:	RM Young	05305VK	149769
PRECIPITATION SENSOR CHECK			
Checklist:	Reply:	Comments:	
Is the heater operating properly?	yes		
Are the bucket drain holes clean?	yes		
Is the housing clean?	yes		
Is the area around the housing clean and free from obstacles?	yes		
AMBIENT TEMPERATURE SENSOR CHECK			
Previous check date:	February 4, 2021		
Parameter:	Temperature @ 2 metres		
Reference Thermometer ID:	FS 160459244 expires June 10, 2021		
Reference Temperature (°C):	2.8		
Station - Ambient Temperature (°C):	2.6		
Temperature Difference (°C):	0.2		
BAROMETRIC PRESSURE SENSOR CHECK			
Previous check date:	February 4, 2021		
Reference Barometer ID:	Brunton 05490 expires Jan 12, 2022		
Reference Pressure - Units/Reading:	millibar	929.8	
Station Pressure - Units/Reading:	millibar	929.9	
Pressure Tolerance +/- 15% of error:	790 - 1069	-0.01%	
RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK			
Previous check date:	February 4, 2021		
Reference Hygrometer ID:	FS 160459244 expires June 10, 2021		
Reference Hygrometer % RH- Reading:	44.90		
Station Hygrometer % RH- Reading:	44.80		
RH Tolerance +/- 15% of difference:	38.17 - 51.64	0.2%	
ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK			
WIND SPEED		WIND DIRECTION	
Previous check date:	February 4, 2021	Previous check date:	February 4, 2021
Wind Speed Observed (kph):	0~10	Wind Direction Observed:	S
Wind speed on Data Logger (kph):	4.4	Wind Direction on Data Logger:	S
		Wind Direction Pass/Fail?:	Pass
Comments			



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

MARCH 2021

Ambient Air Monitoring Calibration Report

- AQHI - CADOTTE LAKE STATION-

CAL-PRAMP-202103-01651

Operation and Maintenance:

Bureau Veritas Canada

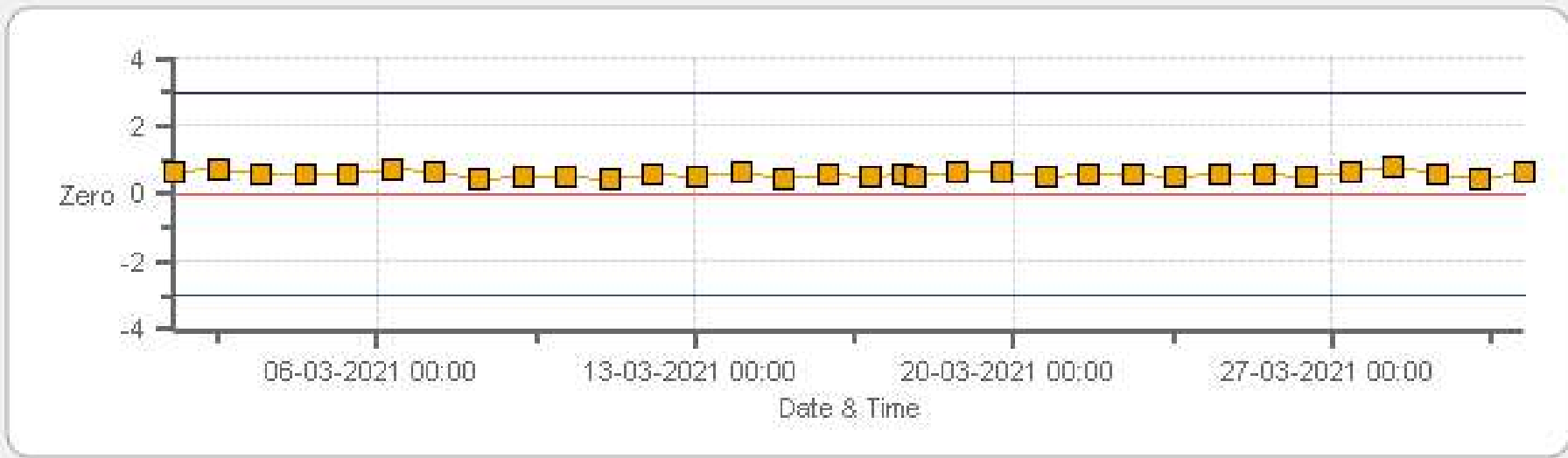
Data Validation and Report:

Bureau Veritas Canada

April 11, 2021

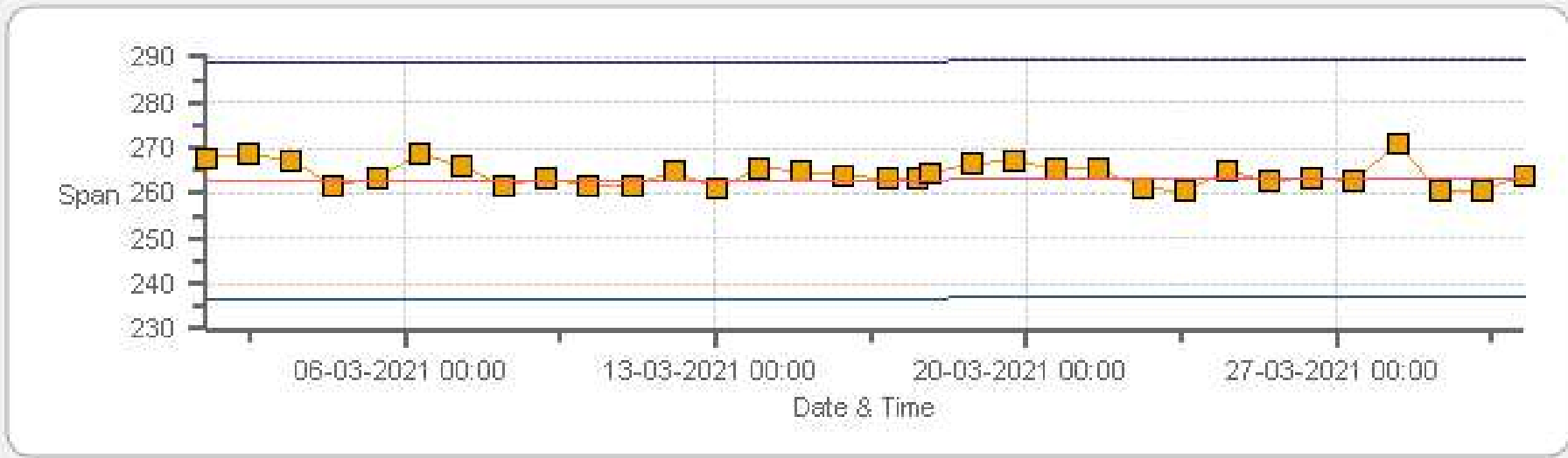
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: AQHI Cadotte Lake Monthly: 03-2021 Type: SpanAndZero - Zero



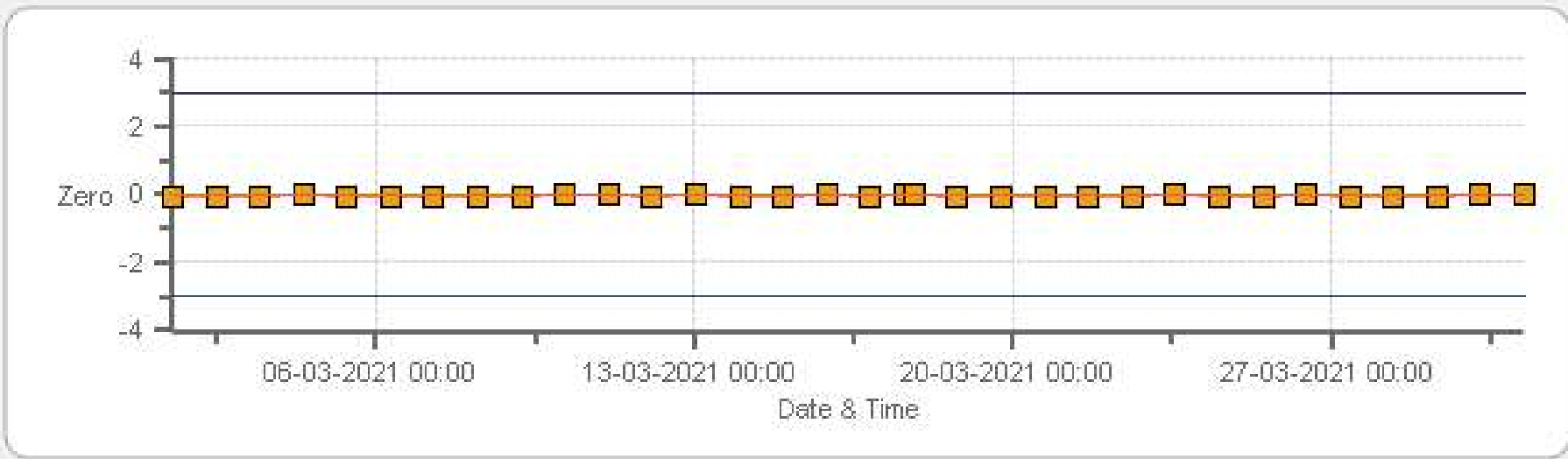
Zero Zero Ref Zero Low Zero High

SO2[ppb] Calibration: AQHI Cadotte Lake Monthly: 03-2021 Type: SpanAndZero - Span



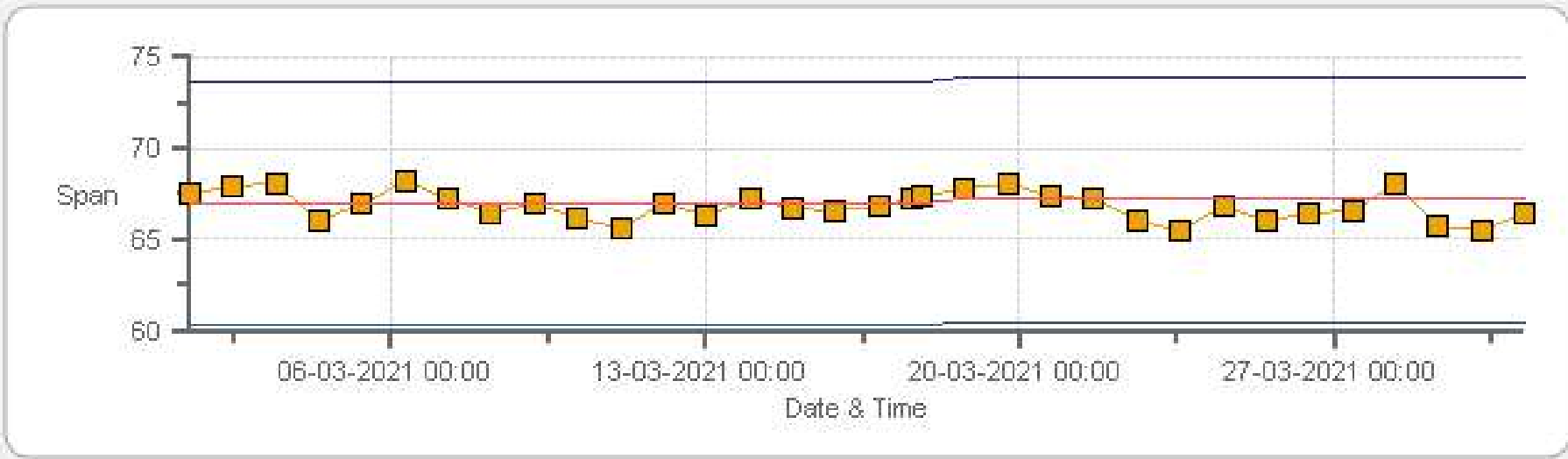
Span SpanRef Span Low Span High

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



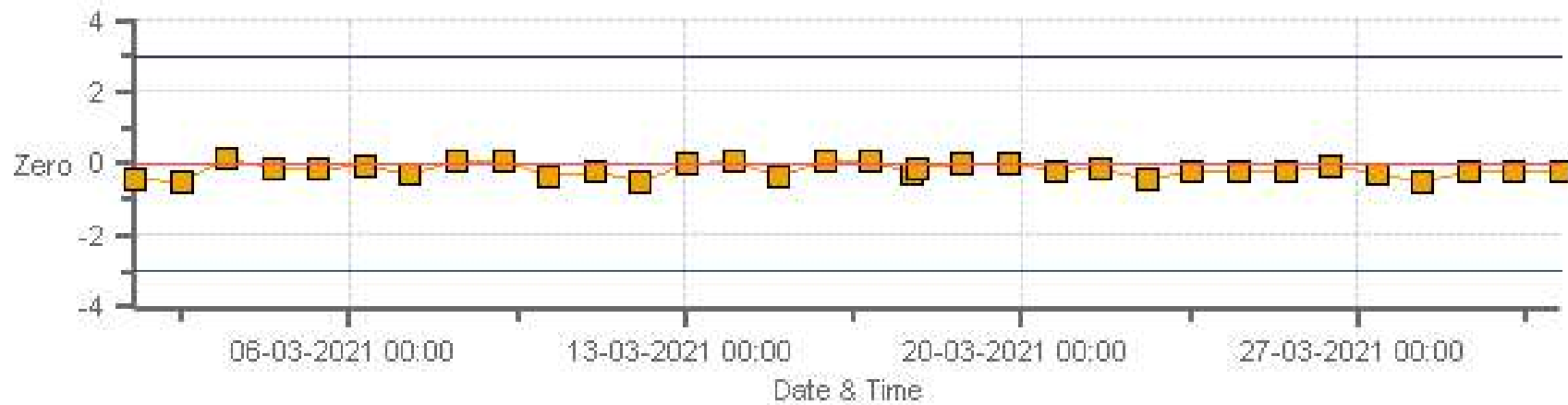
Zero Zero Ref Zero Low Zero High

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



Span Span Ref Span Low Span High

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



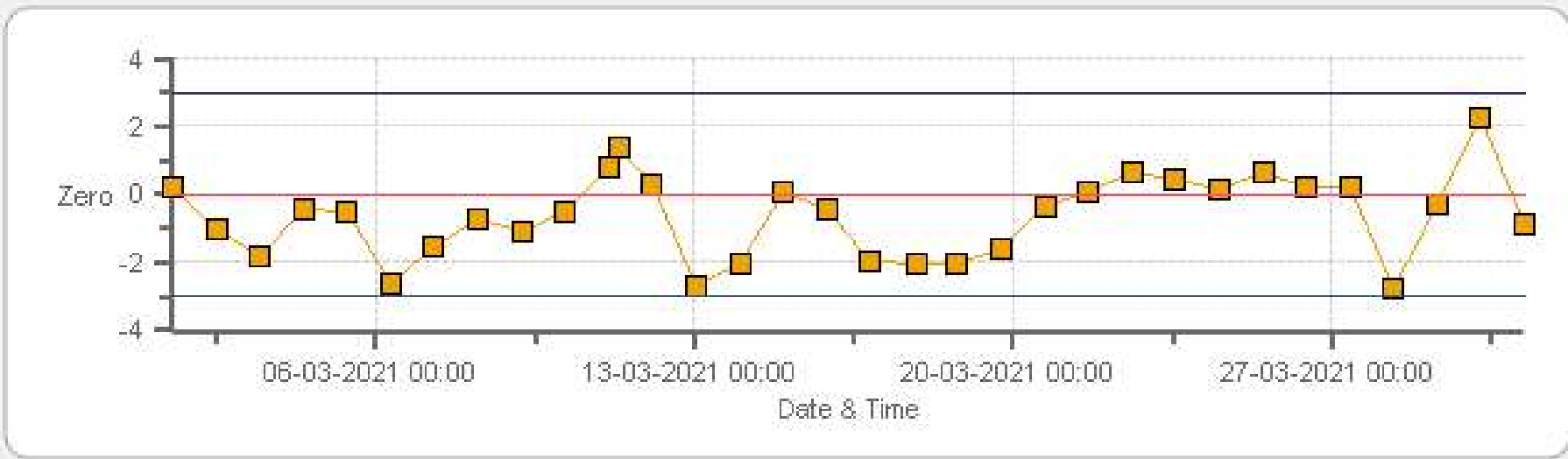
Zero Zero Ref Zero Low Zero High

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



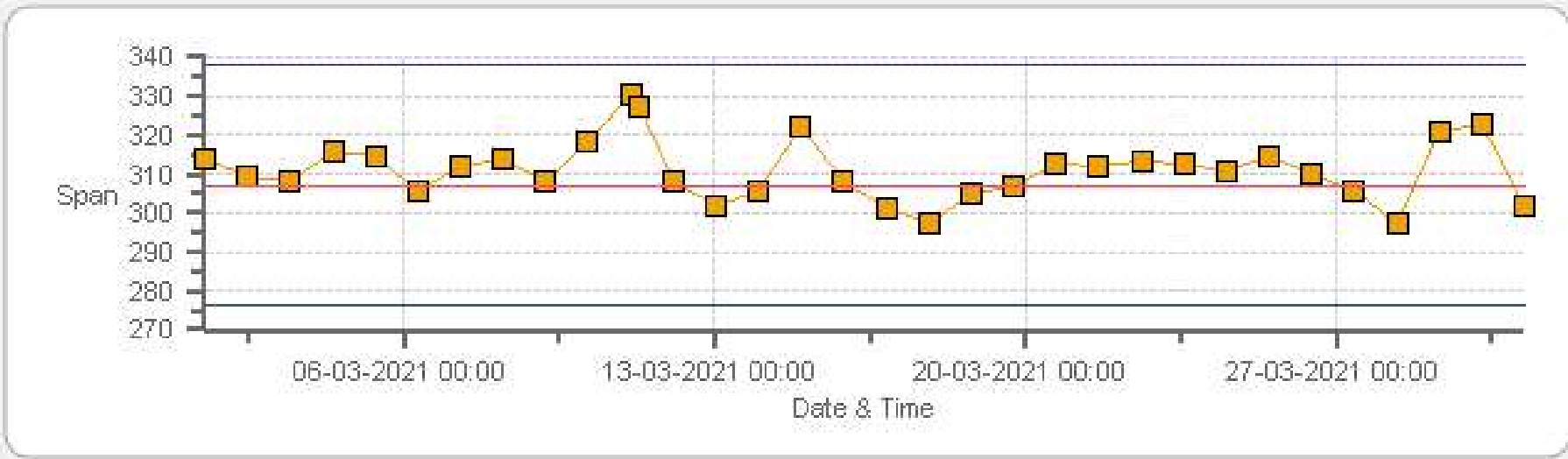
Span SpanRef Span Low Span High

O3[ppb] Calibration: AQHI Cadotte Lake Monthly: 03-2021 Type: SpanAndZero - Zero



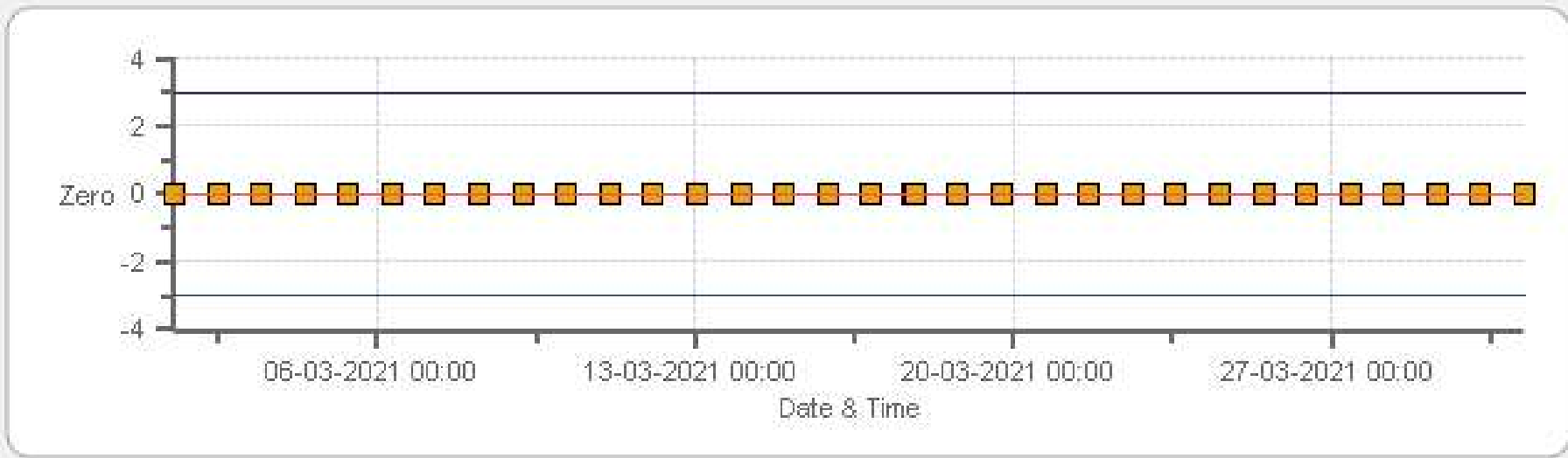
Zero Zero Ref Zero Low Zero High

O3[ppb] Calibration: AQHI Cadotte Lake Monthly: 03-2021 Type: SpanAndZero - Span



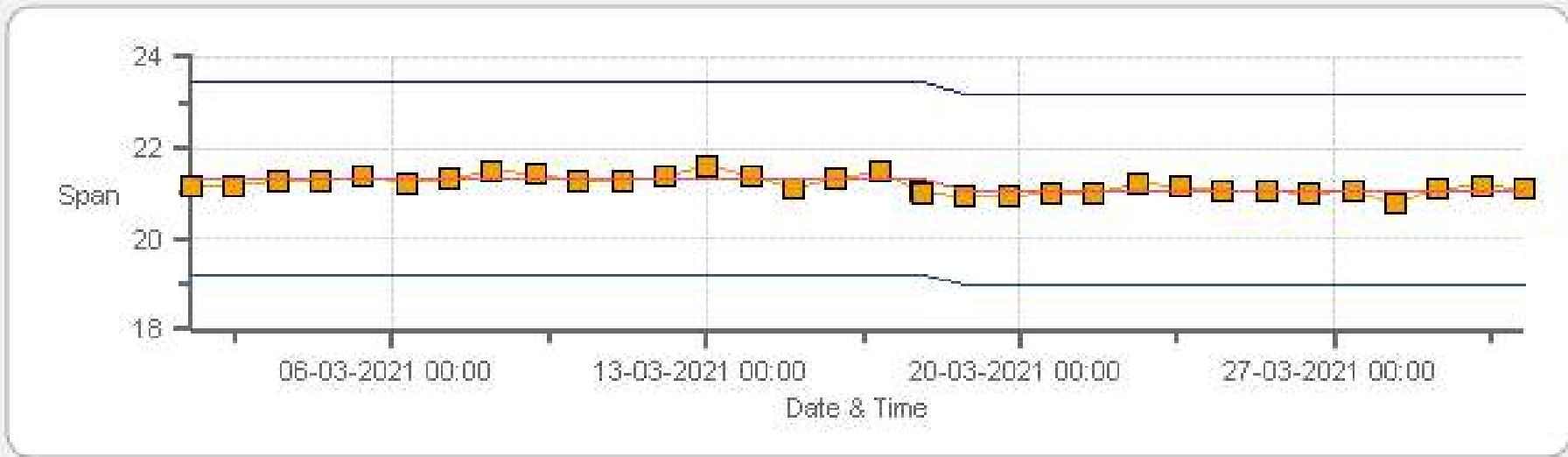
Span SpanRef Span Low Span High

THC55[ppm] Calibration: AQHI Cadotte Lake Monthly: 03-2021 Type: SpanAndZero - Zero



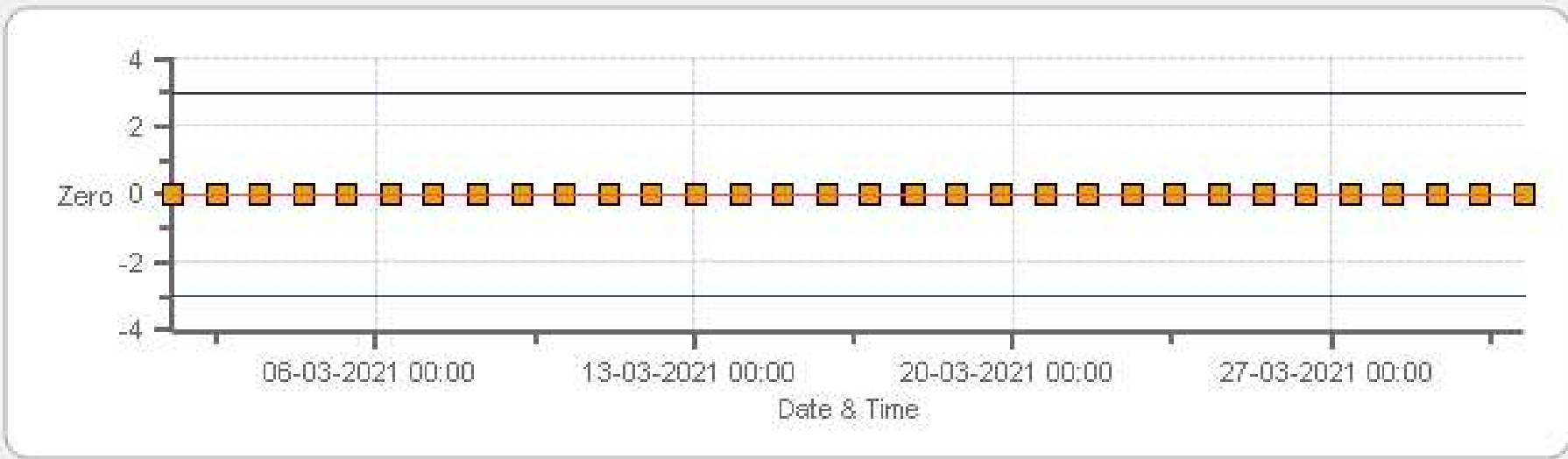
Zero Zero Ref Zero Low Zero High

THC55[ppm] Calibration: AQHI Cadotte Lake Monthly: 03-2021 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

CH4[ppm] Calibration: AQHI Cadotte Lake Monthly: 03-2021 Type: SpanAndZero - Zero



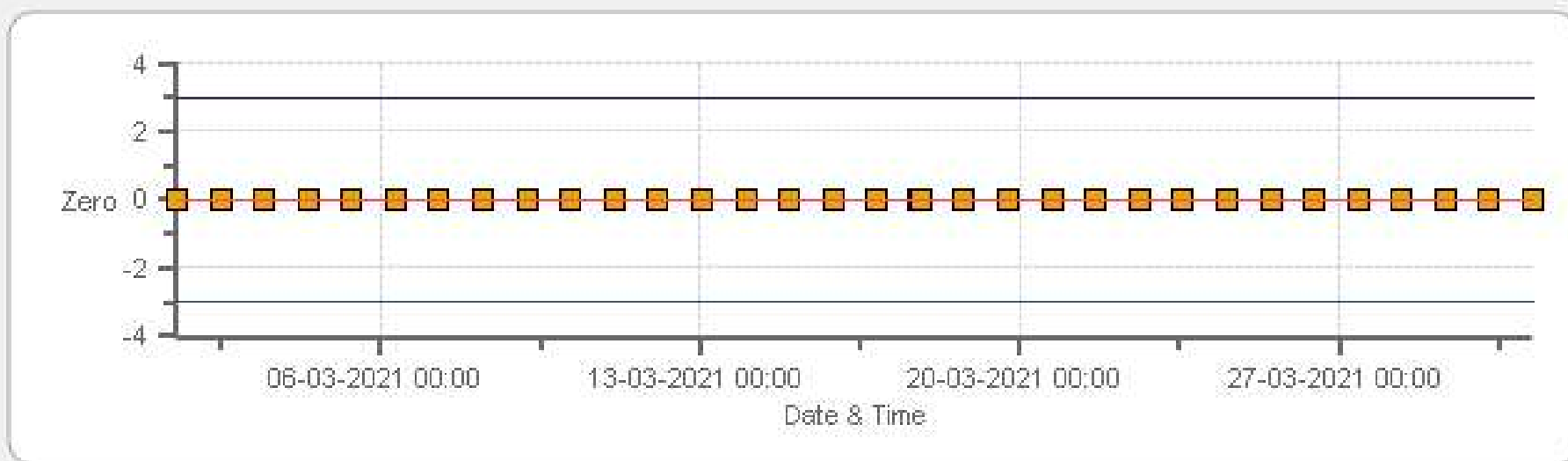
Zero Zero Ref Zero Low Zero High

CH4[ppm] Calibration: AQHI Cadotte Lake Monthly: 03-2021 Type: SpanAndZero - Span



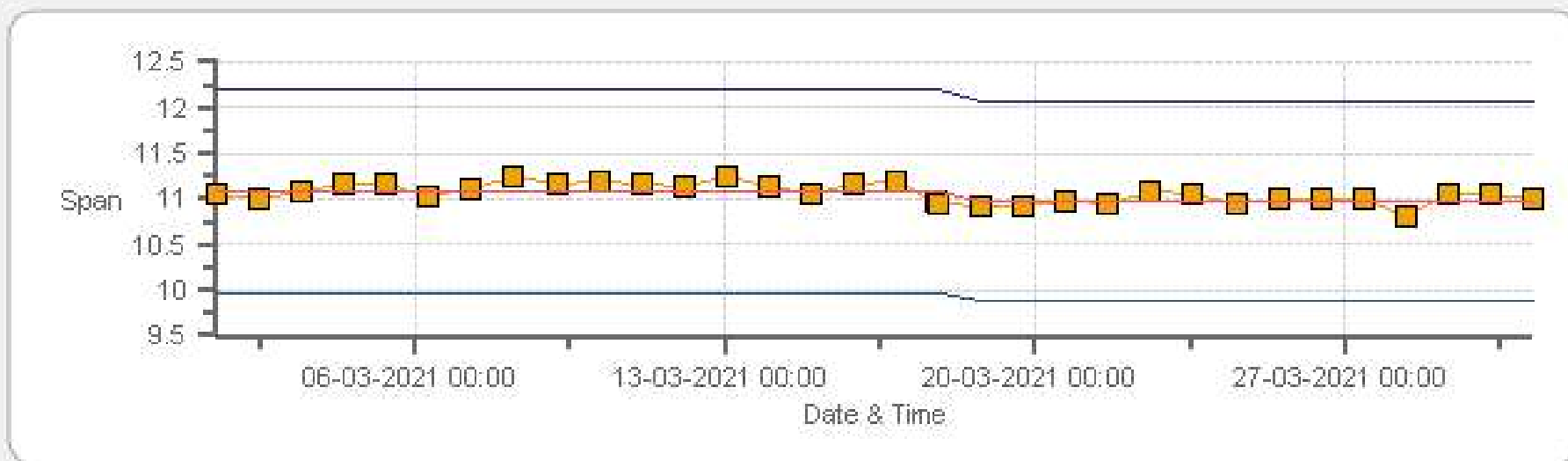
Span Span Ref Span Low Span High

NMHC[ppm] Calibration: AQHI Cadotte Lake Monthly: 03-2021 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: AQHI Cadotte Lake Monthly: 03-2021 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	17-Mar-2021	PREVIOUS CALIBRATION DATE:	24-Feb-2021
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	24.2
LOCATION:	Cadotte Lake	BAROMETRIC (mBar):	944
PURPOSE:	Routine	START TIME (MST):	08:47
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:21

ANALYZER:

MAKE/MODEL	Teledyne T100	RANGE	500 ppb
SERIAL #	722	FLOW (mL/min)	530
INITIAL		FINAL	
BKG/OFFSET	18.7	BKG/OFFSET	18.9
COEF/SLOPE	0.928	COEF/SLOPE	0.928
Expected (reference) Value	262.8	Expected (reference) Value	263.2

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:	EY0002493	HIGH ID	148944
CONC (ppm):	49.40	EXPIRY DATE	16-Nov-2021
CYLINDER (psi):	1500	LOW ID	152019
EXPIRY DATE	13-Nov-2028	EXPIRY DATE	16-Nov-2021

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:

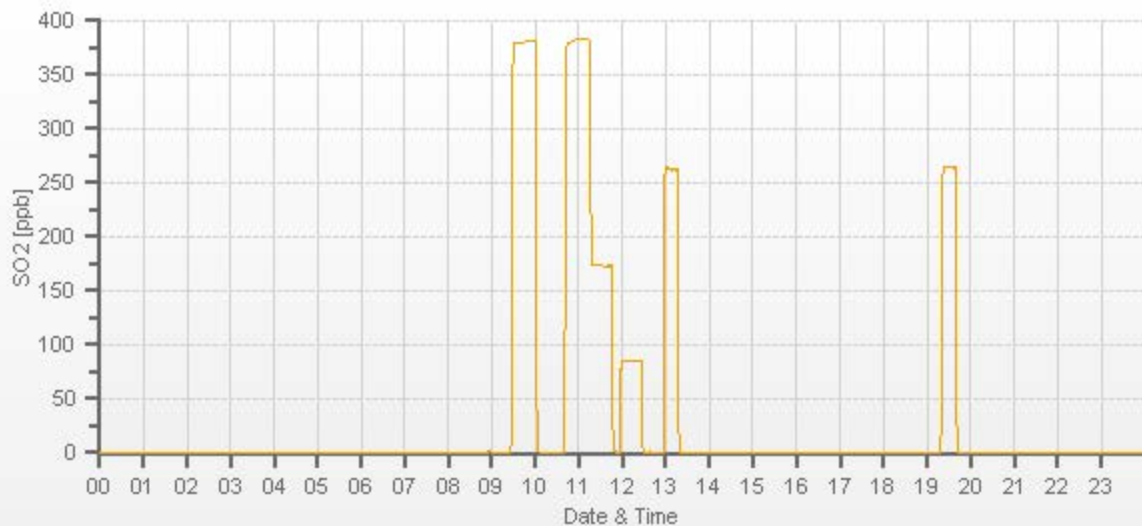
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
5006	38.80	5006	0.00	0.2	0	1.006	1.000
4957	38.80	4996	383.65	381.7	383.7	1.006	1.000
4981	17.67	4999	174.63	n/a	174.1	n/a	1.003
5005	8.85	5013	87.20	n/a	86.8	n/a	1.005

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	-0.1%

COMMENTS:

Sample filter changed. Monthly calibration - no issues.



TRS Analyzer Calibration by Dilution



DATE:	17-Mar-2021	PREVIOUS CALIBRATION DATE:	24-Feb-2021
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	24.2
LOCATION:	Cadotte Lake	BAROMETRIC (mBar):	944
PURPOSE:	Routine	START TIME (MST):	08:46
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	14:35

ANALYZER:

MAKE/MODEL	Thermo 43I-TLE	RANGE	100 ppb
SERIAL #	1152940011	FLOW (mL/min)	471
INITIAL		FINAL	
BKG/OFFSET	2.32	BKG/OFFSET	2.3
COEF/SLOPE	1.098	COEF/SLOPE	1.096
Expected (reference) Value	66.96	Expected (reference) Value	67.19

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	Teledyne
MODEL:	2000	MODEL:	M701
ID:	1991	ID:	5004
MFC CALIBRATION DATE:	14-Oct-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):	930	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:	09:27	SO2 Conc (ppb)	380
END TIME:	09:45	Analyzer Response (ppb)	0.0

CALIBRATION:

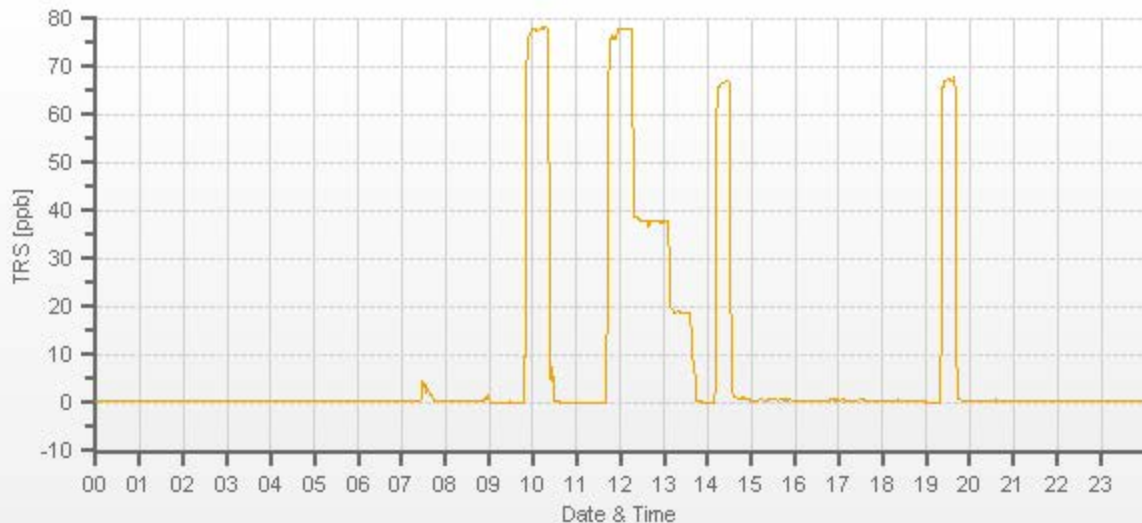
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4000	31.22	4000	0.00	-0.04	0	0.997	1.001
3970	31.22	4001	78.03	78.21	77.99	0.997	1.001
3985	15.23	4001	38.06	n/a	37.89	n/a	1.004
3993	7.62	4001	19.06	n/a	18.84	n/a	1.012

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	-0.1%

COMMENTS:

Sample filter changed.
Operator error at 12:37 . Mid-point restarted.



NOx Calibration by Dilution/Gas-Phase Titration



CALIBRATION:				ANALYZER:			
DATE:	17-Mar-2021	PREVIOUS CALIBRATION DATE:	24-Feb-2021	MAKE/MODEL:	Teledyne T200	PREVIOUS CF.	
CLIENT:	PRAMP	TEMPERATURE (°C):	24.2	SERIAL #:	837	NOx	1.000
LOCATION:	Cadotte Lake	BAROMETRIC (mBar):	944	FLOW (mL/min)	446	NO	1.000
PURPOSE:	Routine	START TIME (MST):	08:47	RANGE (ppb)	500	NO2	1.000
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	16:46	GPT FOR O3?		Yes	

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	EY0002493	HIGH ID:	148944
MODEL:	2020	MODEL:	M701	NO/NOx (PPM):	50.9 51.1	HIGH EXPIRY:	16-Nov-2021
ID:	17100415	ID:	5004	CYLINDER (psi):	1500	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:	0.6	0.4	n/a	BKG/OFFSET:	0.4	-0.1	n/a
SLOPE/COEF/CE:	1.051	1.048	0.9993	SLOPE/COEF/CE:	1.071	1.063	0.9993

EXPECTED (REFERENCE) VALUE:							
INITIAL	NOx	NO	NO2	FINAL	NOx	NO	NO2
	328.9	2.3	326.7		328.9	2.5	326.4

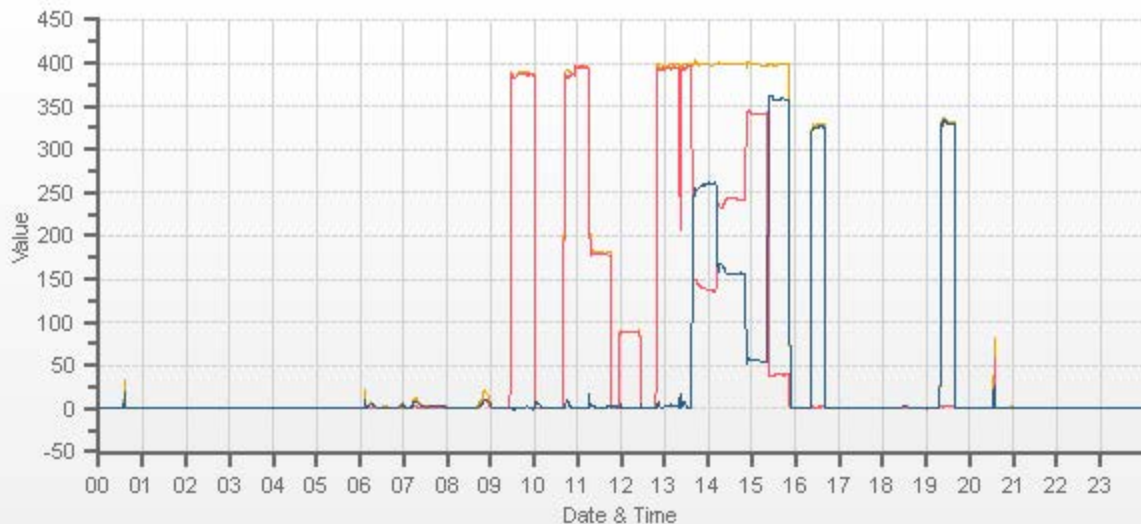
POINT	NO TARGET (PPB)	NO2 TARGET (PPB)	NO2 RANGE	O3 POINT
HIGH	395	250	240-275	n/a
MID	180	154	150-157	Mid
LOW	90	54	50-58	Low
EXTRA 1	n/a	340	300-370	High

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
5006	38.80	5006	0.0	0.0	0.0	-0.6	-0.3	0.2	0.0	0.0	0.0	1.021	1.025	0.999	1.000	1.000	0.996
4957	38.80	4996	395.3	396.9	1.6	386.7	386.7	0.0	395.3	396.9	1.6	1.021	1.025	0.999	1.000	1.000	0.996
4981	17.67	4999	179.9	180.6	0.7	n/a	n/a	n/a	178.4	181.3	2.9	n/a	n/a	0.999	1.009	0.996	0.996
5005	8.85	5013	89.8	90.2	0.4	n/a	n/a	n/a	89.9	89.8	-0.1	n/a	n/a	0.999	1.004	0.996	0.996

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	38.80	4996.3	0	395.1	398.2	3.1	258.8	258.2	1.002	99.77%
AS-FOUND HIGH	38.80	4996.3	250	136.3	397.7	261.3	258.8	258.2	1.002	99.77%
ADJUSTED HIGH	38.80	4996.3	250	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MID	38.80	4996.3	147	241.8	399.2	157.5	153.3	154.4	0.993	100.72%
LOW	38.80	4996.3	50	342.3	396.6	54.3	52.8	51.2	1.031	96.97%
NO2 adjustment not required.									AVERAGE:	99.15%

LINEAR REGRESSION ANALYSIS:				COMMENTS:
	CORRELATION	SLOPE	INTERCEPT	
NO	1.000	1.000	-0.06%	
NOx	1.000	1.001	0.00%	
NO2	1.000	1.005	-0.22%	

Operator error at 13:20 - wrong input for GPT As-found high.
 Restarted GPT reference point at 13:22.
 Extra O3 SETPOINT = 340; NO DROP/O3 = 355.3



CAL-PRAMP-202103-01651

Ozone Calibration by Direct GPT



DATE:	17-Mar-2021	PREVIOUS CALIBRATION DATE:	24-Feb-2021
PARAMETER:	O3	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.2
LOCATION:	Cadotte Lake	BAROMETRIC (mBar):	942
PURPOSE:	Routine	START TIME (MST):	16:02
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	20:45

ANALYZER:

MAKE/MODEL	Teledyne T400	RANGE	500 ppb
SERIAL #	824	FLOW (mL/min)	753
INITIAL		FINAL	
BKG/OFFSET	0.2	BKG/OFFSET	-0.6
COEF/SLOPE	1.034	COEF/SLOPE	1.032
Expected (reference) Value	307.1	Expected (reference) Value	307.1

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:	17-Mar-2021	GPT END TIME:	15:51

CALIBRATION PARAMETERS:

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

CALIBRATION:

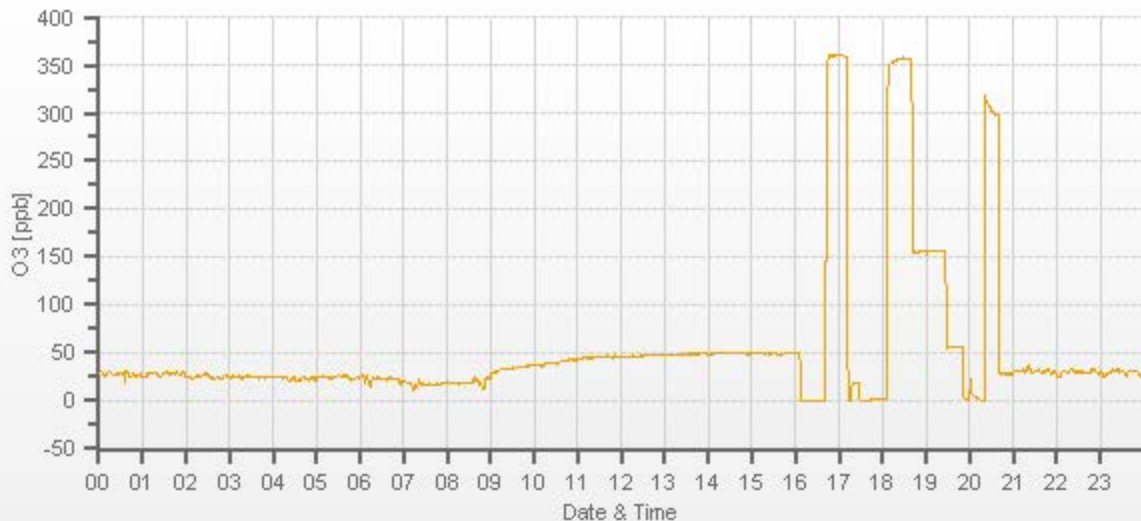
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4996	 	4996	0.0	-1.1	0.0	 	
4996	 	4996	355.3	357.2	355.3	0.992	1.000
4996	 	4996	153.3	n/a	153.6	n/a	0.998
4996	 	4996	52.8	n/a	53.9	n/a	0.980

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.999	0.1%

COMMENTS:

Sample filter changed.
Daily Zero/Span at 19:00, mid-point restarted



Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	17-Mar-2021	PREVIOUS CALIBRATION DATE:	24-Feb-2021	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	23.2		Thermo 55i	1191032505	1199.8
LOCATION:	Cadotte Lake	BAROMETRIC (mBar):	943	PARAMETER:	CH4	NMHC	THC
PURPOSE:	Routine	START TIME (MST):	13:57	RANGE (ppm):	20	20	40
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	18:00	PREVIOUS CF:	1.000	0.995	0.998

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	EnviroNics	MAKE:	Teledyne	CYLINDER ID:	LL84567	HIGH ID:	n/a
MODEL:	2000	MODEL:	M701	CH ₄ /C ₃ H ₈ (ppm):	591.0 200.0	HIGH EXPIRY:	n/a
ID:	1991	ID:	5004	CYLINDER (psi):	1020	LOW ID:	n/a
MFC CALIBRATION DATE:	14-Oct-2020	OXIDIZER ID:	Internal	EXPIRY DATE	17-Jul-2027	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		550.0
RANGE	12 - 16	6 - 8	2 - 4	THC as CH ₄		1141.0

EXPECTED (REFERENCE) VALUE:

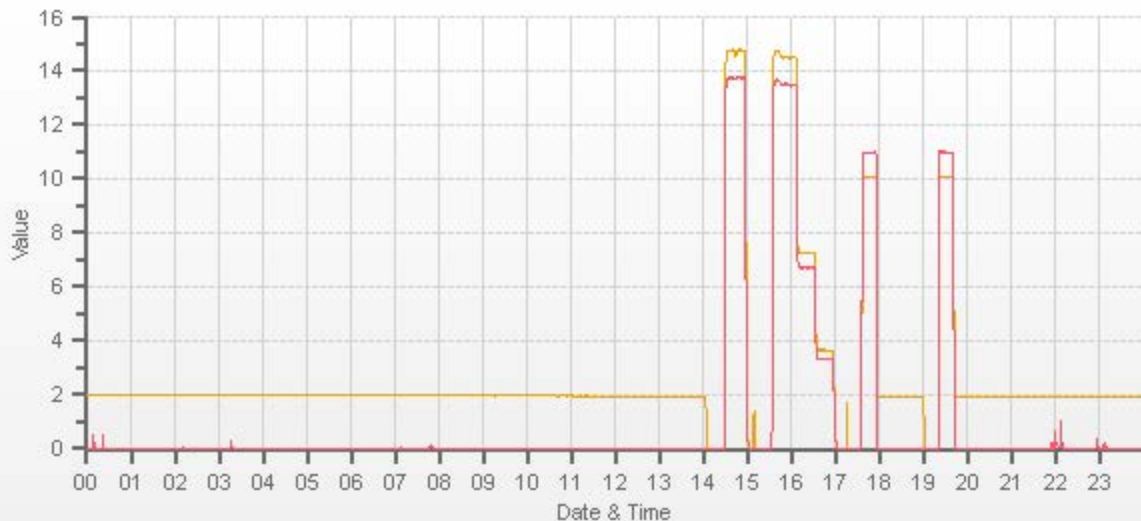
INITIAL	CH ₄	NMHC	THC	FINAL	CH ₄	NMHC	THC
	10.22	11.08	21.31		10.11	10.97	21.07

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
3002	X	3002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	X	X	X	X	X	X
2930	73.65	3003	14.49	13.49	27.98	14.76	13.74	28.51	14.49	13.49	27.98	0.982	0.982	0.982	1.000	1.000	1.000
2965	36.79	3002	7.24	6.74	13.99	n/a	n/a	n/a	7.27	6.72	13.99	n/a	n/a	n/a	0.997	1.003	1.000
2982	18.38	3001	3.62	3.37	6.99	n/a	n/a	n/a	3.66	3.33	6.98	n/a	n/a	n/a	0.989	1.012	1.001

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT	Comments:	
CH ₄	1.000	0.999	0.1%	Sample filter changed. Monthly calibration - no issues.	
NMHC	1.000	1.001	-0.1%		
THC	1.000	1.000	0.0%		
				Use Zero Chrom?	Yes



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CH4 [ppm] NMHC [ppm]



Teledyne T640 Audit/Calibration

Date/Previous Audit Date:	March 17, 2021	February 24, 2021	Weather Conditions:		Mainly clear
Company:	PRAMP		Start Time (mst):		14:04
Station:	Cadotte Lake		End Time (mst):		15:03
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 17, 2022			Pressure: Brunton 05535 expires Feb 17, 2022		
DIAGNOSTICS:					
Ambient Pressure (mmHg)	706.7	Ambient Temp (°C)	11.4	ASC Heater Duty (%)	0.0
Box Temp (°C)	26.7	Current PMT HV (V)	1541	LED Temp (°C)	34.92
P3 Value	47	PMT Setting (V)	1547	Pump PWM (%)	39
Sample Flow (L/min)	4.99	Sample RH (%RH)	8.4	Sample Temp (°C)	24.8
Item:	As-found		As-left		Tolerance
	Reference	T640x	Reference	T640x	
Zero Test (Leak Check)	PM10	0.0	0	0.0	0.0 to 0.2
	PM2.5	0.0	0	0.0	
Ambient Pressure (mmHg)	706.9	706.6	706.783	706.6	+/- 10 mm Hg
Ambient Temperature (°C)	10.35	11.6	n/a		+/- 2°C
Sample Flow (L/min)	5.04	4.99	5.01	5	+/- 5% of T640x (e.g., 4.75 – 5.25 lpm)
Additional Monthly Maintenance :					Completed
Inlet cleaned?					Yes
Sample tubing inspected (inner and outer)?					Yes
Quarterly Audit/Calibration:					
SpanDust™ Standard	Peak at Channel		Lot No:		Expiry:
	10.9		100128-050-023		27-05-2021
Item:	Verification:		Calibration (if needed):		Tolerance
	Reference	T640x	Reference	T640x	
Peak Channel	10.9	11.2	n/a	n/a	± 0.5
PMT Setting (V)	n/a	1547	n/a	n/a	n/a
Peak Channel Counts:	n/a	502	n/a	n/a	n/a
Comments:					
No issues.					

Meteorological System Checklist



Date:		March 17, 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:		February 24, 2021	
Parameter:		Temperature @ 2 metres	
Reference Thermometer ID:		F.S. 160348895 expires Sep 4, 2022	
Reference Temperature (°C):		8.4	
Station - Ambient Temperature (°C):		8.1	
Temperature Difference (°C):		0.3	
RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK			
Previous check date:		February 24, 2021	
Reference Hygrometer ID:		F.S. 160348895 expires Sep 4, 2022	
Reference Hygrometer % RH- Reading:		27.66	
Station Hygrometer % RH- Reading:		27.70	
RH Tolerance +/- 15% of difference:		23.51 - 31.81	-0.1%
ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK			
WIND SPEED		WIND DIRECTION	
Previous check date:		February 24, 2021	
Wind Speed Observed (kph):		Previous check date:	
5~10		February 24, 2021	
Wind speed on Data Logger (kph):		Wind Direction Observed:	
5		S	
		Wind Direction on Data Logger:	
		S	
		Wind Direction Pass/Fail?:	
		Pass	
Comments			
No issues. Temp/RH @10:59; WS/Wd @ 11:09			



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