Peace River Area Monitoring Program

MARCH 2022

Monthly Ambient Air Quality Monitoring Report

PRAMP-202203

Operation and Maintenance:
Bureau Veritas Canada

Data Validation and Report:
Peace River Area Monitoring Program

April 20, 2022

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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 20, 2022

RE: PRAMP – March 2022 Monthly Ambient Air Quality Monitoring Report

Enclosed is the March 2022 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. This report is also submitted on behalf of the industrial member companies to satisfy the requirements of the facility operating approvals.

NETWORK STATION SUMMARY

Listing of Continuous Monitoring Stations

The PRAMP continuous ambient air quality monitoring network stations are:

- 986c Station
- 842b Station
- Reno Station
- AQHI Grimshaw
- Peace River Complex (PRC) Station

Station ID	Station Name	Latitude	Longitude
1562	986c	56.36980	-116.92500
1561	842b	56.27406	-116.98129
1563	Reno	55.86936	-117.05739
1689	AQHI-Grimshaw	56.18657	-117.604994
1698	PRC	56.38257	-116.769283

Listing of Intermittent Monitoring Stations

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

Listing of PRAMP member with EPEA Facility Operating Approval

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

Monitoring Notes during the Month of March 2022

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.

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.

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.

PRC Station

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.
- All data collected this month were compliant with the requirements outlined in the AMD 2016.
- All parameters met the 90% operational uptime requirement.
- PRAMP began managing the PRC station, starting March 1. Data collected from the PRC station is included in this monthly report.

AQHI – Grimshaw Station

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

VOCs Canister Sampling program

- The canister sampling program collects a 1-hour sample of air when the continuously measured non-methane hydrocarbon (NMHC) concentration reaches a specified trigger point. The current trigger point is 0.3 ppm for non-methane hydrocarbons. The trigger point is based on real-time monitoring data that are averaged over a 5-minute period.
- The canister sample collection systems are in place at Station 986c, 842b, and the Reno Station; a canister sample collection system is not part of the suite of instruments currently deployed at the AQHI-Grimshaw Station.
- Sample analysis and analytical results were prepared and provided by InnoTech Alberta.
- One canister event was recorded at the 842b station this month.

Station	Parameter	Date	Time	Concentration (ppm)
842b	Non-methane HC	15-Mar	04:40	0.31

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

Equipment calibration / maintenance records were provided by Bureau Veritas.

Certification

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

Lily Lin, Technical Program Manager, PRAMP Airshed

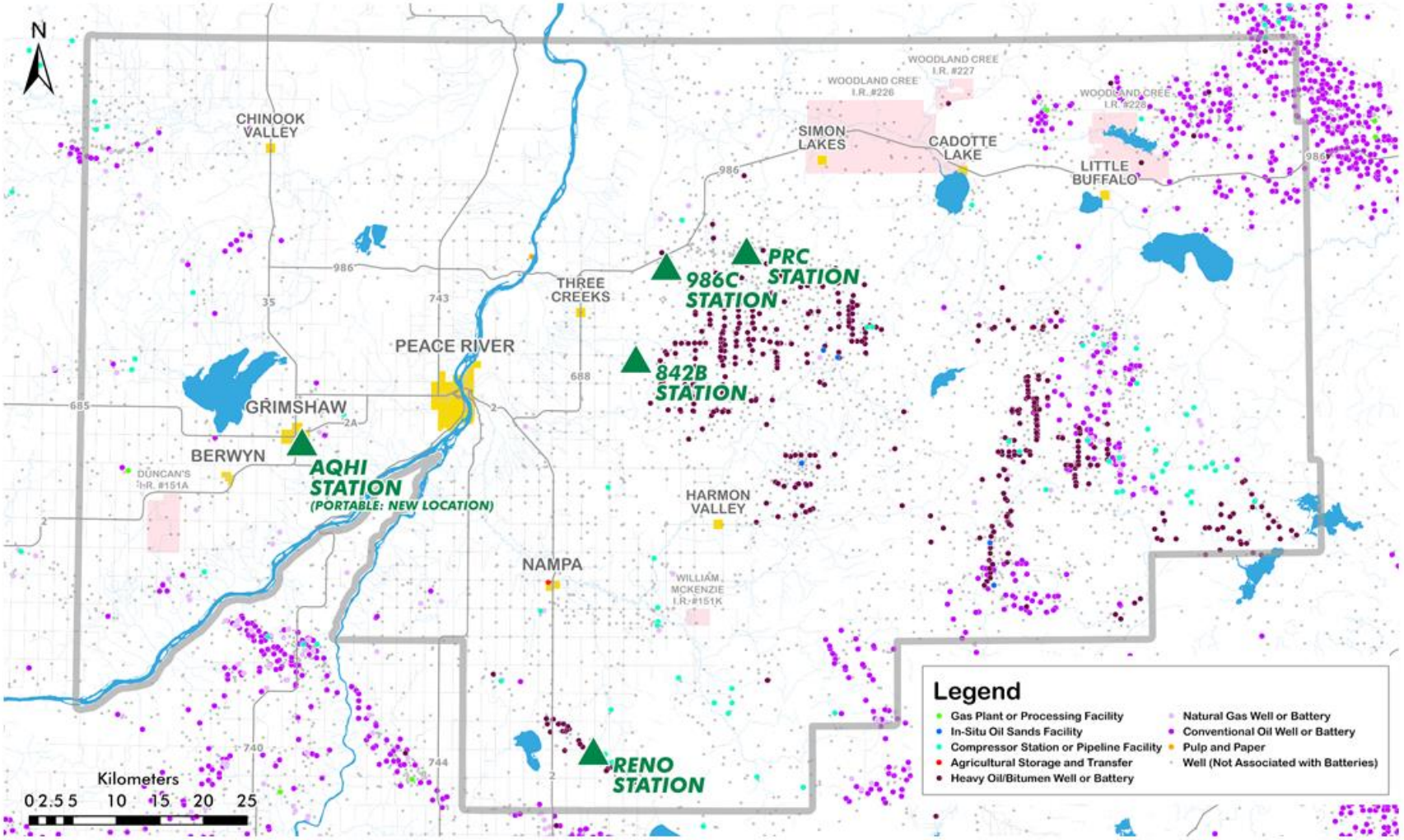
This report was reviewed by Mike Bisaga in accordance with Chapter 9 of the Air Monitoring Directive (AMD 2016).

I certify that I have reviewed and verified this report and that the information is complete, accurate and representative of the monitoring results, reporting timeframe and the specified analysis, summarization and reporting requirements. I also certify that at the time of this report's submission, all air data have been electronically uploaded to Alberta's Ambient Air Quality Data Warehouse as required by the AMD. Uploading of VOC data from the canister sampling program was not required at the time of completing this report.

Michael Bisaga, Technical Program Manager, PRAMP Airshed

April 20, 2022

Map of PRAMP Continuous Monitoring Network



CONTINUOUS NETWORK EQUIPMENT AND MONITORING RESULTS SUMMARY

986c Station

Equipment Operation Summary

Parameter	Make / Model	Serial Number	
SO2	**Thermo / 43iQTL**	**1193585646**	
• A successful monthly calibration was performed on March 10. • No operational issues were identified this month.			
TRS	**Thermo / 43iQTL**	**1191833341**	
• A successful monthly calibration was performed on March 10. • No operational issues were identified this month.			
THC/CH4/NMHC	**Thermo / 55i**	**1193585652**	
• A successful monthly calibration was performed on March 10. • Two as-found points checks were completed; one was on March 11, and the other was on March 22 due to apparent high methane concentrations. As the analyzer passed check criteria, data were considered valid. Four hours of downtime were recorded due to these additional quality checks.			
Relative Humidity (RH)	**Rotronic / HC2-S3**	**61116376**	
• The RH sensor was checked on March 10. The sensor passed the check requirements. • No operational issues were identified this month.			

Parameter	Make / Model	Serial Number	
Barometric Pressure (BP)	**MetOne / 092**	**Y23358**	
• The BP sensor was checked on March 10. The sensor passed the check requirements. • No operational issues were identified this month.			
Ambient Temperature (AT)	**Rotronic / HC2-S3**	**61116376**	
• The AT sensor was checked on March 10. The sensor passed the check requirements. • No operational issues were identified this month.			
Station Temperature (ST)	**COMET**	**18961918**	
• The ST sensor was checked on March 10. The sensor passed the check requirements. • No operational issues were identified this month.			
Precipitation (Precip)	**RM Young 52202**	**TB 16325**	
• The precipitation gauge was checked on March 10. The sensor passed the check requirements. • No operational issues were identified this month.			
Wind Speed/Wind Direction (WS/ WD)	**RM Young / 05305L**	**174795**	
• Wind direction data contained in this report represents where the wind is coming from. • The annual wind system calibration was completed on July 3, 2021. • The anemometer sensor was checked on March 10. 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	0.1	0	3	March 1 at hour 18	16.1	E	0.8	March 1	100.0	95.1
TRS (ppb)	-	-	-	-	-	-	0.09	0.00	0.42	March 21 at hour 17	7.6	W	0.21	March 21	100.0	95.0
THC (ppm)	-	-	-	-	-	-	2.21	2.12	2.53	March 6 at hour 1	7.2	S	2.26	March 15	99.5	94.6
CH4 (ppm)	-	-	-	-	-	-	2.21	2.12	2.53	March 6 at hour 1	7.2	S	2.26	March 15	99.5	94.6
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.00	March 1 at hour 0	6.2	ESE	0.00	March 1	99.5	94.6
RH (%)	-	-	-	-	-	-	64.5	29	92	March 12 at hour 3	12.7	NNW	80.1	March 1	100.0	100.0
BP (millibar)	-	-	-	-	-	-	941	924	960	March 8 at hour 20	2.2	NE	959	March 8	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	-3.2	-18.3	10.8	March 23 at hour 10	9.4	W	6.0	March 23	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	23.6	22.8	24.8	March 20 at hour 13	21.6	WSW	24.0	March 13	100.0	100.0
Precipitation (mm)*	-	-	-	-	-	-	1.1	0.0	0.4	March 23 at hour 14	14.4	WNW	0.5	March 23	99.5	99.5
WSV (km/hr)	-	-	-	-	-	-	4.8	0.3	36.2	March 7 at hour 4	36.2	NNW	20.4	March 7	100.0	100.0
WDV (sector)	-	-	-	-	-	-	234 (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) and/or Alberta Ambient Air Quality Guidelines (AAAQGs) Exceedances at 986c Station

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

842b Station

Equipment Operation Summary

Parameter	Make / Model	Serial Number	
SO2	**Thermo / 43iQTL**	**1200736629**	
• A successful monthly calibration was performed on March 9. • No operational issues were identified this month.			
TRS	**Thermo 43iQTL**	**1200736630**	
• A successful monthly calibration was performed on March 9. • No operational issues were identified this month.			
THC/CH4/NMHC	**Thermo / 55i**	**1501663728**	
• Following a shut-down calibration on March 9, a routine maintenance was performed on the analyzer. The analyzer was allowed to stabilize overnight, and a successful post-repair calibration was completed on March 10. Twenty-four hours of downtime were recorded due to this maintenance activity.			
Relative Humidity (RH)	**Rotronic / HC2A-S3**	**20370767**	
• The RH sensor was checked on March 9. The sensor passed the check requirements. • No operational issues were identified this month.			
Barometric Pressure (BP)	**MetOne / 092**	**Y23362**	
• The BP sensor was checked on March 9. The sensor passed the check requirements. • No operational issues were identified this month.			

Parameter	Make / Model	Serial Number	
Ambient Temperature (AT)	**Rotronic / HC2A-S3**	**20370767**	
• The temperature sensor was checked on March 9. The sensor passed the check requirements. • No operational issues were identified this month.			
Station Temperature (ST)	**COMET**	**20790297**	
• No operational issues were identified this month.			
Precipitation (Precip)	**RM Young / 52202**	**TB 15878**	
• The precipitation gauge was checked on March 9. The sensor passed the check requirements. • No operational issues were identified this month.			
Wind Speed/Wind Direction (WS/ WD)	**RM Young / 05305AQ**	**174802**	
• Wind direction data contained in this report represents where the wind is coming from. • The annual wind system calibration was completed on July 4, 2021. • The anemometer sensors were checked on March 9. 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 1 at hour 18	7.6	ENE	0.8	March 1	100.0	95.0
TRS (ppb)	-	-	-	-	-	-	0.30	0.11	0.85	March 15 at hour 5	3.9	SE	0.43	March 1	100.0	95.0
THC (ppm)	-	-	-	-	-	-	1.95	1.84	4.95	March 15 at hour 5	3.9	SE	2.48	March 15	96.8	91.8
CH4 (ppm)	-	-	-	-	-	-	1.95	1.84	4.61	March 15 at hour 5	3.9	SE	2.42	March 15	96.8	91.8
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.34	March 15 at hour 5	3.9	SE	0.06	March 15	96.8	91.8
RH (%)	-	-	-	-	-	-	69.8	33	100	March 31 at hour 16	8.7	WSW	89.5	March 5	100.0	100.0
BP (millibar)	-	-	-	-	-	-	940	923	958	March 7 at hour 19	4.8	NNW	958	March 8	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	-3.3	-19.7	11.6	March 23 at hour 11	12.7	SSW	6.0	March 23	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	22.3	20.9	23.7	March 22 at hour 17	14.9	S	22.7	March 9	100.0	100.0
Precipitation (mm)*	-	-	-	-	-	-	2.7	0.0	0.3	March 15 at hour 11	1.5	ESE	0.7	March 15	100.0	100.0
WSV (km/hr)	-	-	-	-	-	-	2.8	0.0	23.6	March 7 at hour 4	23.6	NNW	15.1	March 7	100.0	100.0
WDV (sector)	-	-	-	-	-	-	218 (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) and/or Alberta Ambient Air Quality Guidelines (AAAQGs) 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	**Thermo 43iQTL**	**12101910505**	
• A successful monthly calibration was performed on March 8. • The scheduled daily zero-span check was affected by Windows updates on the data acquisition system on March 14 hour 3. A repeat zero-span check was completed at hour 7 to confirm the analyzer's functionality. One hour of downtime was recorded due to this additional quality check. • Due to collection issues on the datalogger, hourly data collected on March 28 hour 3 to hour 12 were lost. Datalogger was reset to restore functionality, and a zero-span check was initiated to confirm the analyzer's functionality afterwards. Eleven hours of downtime were recorded.			
TRS	**Thermo 43iQTL**	**12101910504**	
• A successful monthly calibration was performed on March 8. • The scheduled daily zero-span check was affected by Windows updates on the data acquisition system on March 14 hour 3. A repeat zero-span check was completed at hour 7 to confirm the analyzer's functionality. One hour of downtime was recorded due to this additional quality check. • Due to collection issues on the datalogger, hourly data collected on March 28 hour 3 to hour 12 were lost. Datalogger was reset to restore functionality, and a zero-span check was initiated to confirm the analyzer's functionality afterwards. Eleven hours of downtime were recorded.			
THC/CH4/NMHC	**Thermo / 55i**	**12101910497**	
• The analyzer failed the zero-span check on March 6. A repeat zero-span check was completed on March 7 hour 7 to investigate the issue. The span check failure was caused by span gas depletion. The span gas cylinder was replaced on March 8. One hour of downtime was recorded due to the additional quality check. • A successful monthly calibration was performed on March 8. • The scheduled daily zero-span check was affected by Windows updates on the data acquisition system. A repeat zero-span check was completed at hour 7 to confirm the analyzer's functionality. One hour of downtime was recorded due to this additional quality check. • The N2 gas cylinder was replaced on March 24. • Due to collection issues on the datalogger, hourly data collected on March 28 hour 3 to hour 12 were lost. Datalogger was reset to restore functionality, and a zero-span check was initiated to confirm the analyzer's functionality afterwards. Eleven hours of downtime were recorded.			

Parameter	Make / Model	Serial Number	
Relative Humidity (RH)	**RM Young / 43172VC**	**60837897**	
• The RH sensor was checked on March 8. The sensor passed the check requirements. • Due to collection issues on the datalogger, hourly data collected on March 28 hour 3 to hour 12 were lost. Datalogger was reset to restore functionality. Ten hours of downtime were recorded.			
Barometric Pressure (BP)	**MetOne / 092**	**K12864**	
• The RH sensor was checked on March 8. The sensor passed the check requirements. • Due to collection issues on the datalogger, hourly data collected on March 28 hour 3 to hour 12 were lost. Datalogger was reset to restore functionality. Ten hours of downtime were recorded.			
Ambient Temperature (AT)	**RM Young / 43172VC**	**60837897**	
• The RH sensor was checked on March 8. The sensor passed the check requirements. • No operational issues were identified this month. • Due to collection issues on the datalogger, hourly data collected on March 28 hour 3 to hour 12 were lost. Datalogger was reset to restore functionality. Ten hours of downtime were recorded.			
Station Temperature (ST)	**Bureau Veritas Canada**	**N/A**	
• The RH sensor was checked on March 8. The sensor passed the check requirements. • Due to collection issues on the datalogger, hourly data collected on March 28 hour 3 to hour 12 were lost. Datalogger was reset to restore functionality. Ten hours of downtime were recorded.			
Precipitation (Precip)	**RM Young / 5202**	**TB15877**	
• The precipitation gauge was checked on March 8. The sensor passed the check requirements. • Due to collection issues on the datalogger, hourly data collected on March 28 hour 3 to hour 12 were lost. Datalogger was reset to restore functionality. Ten hours of downtime were recorded.			
Wind Speed/Wind Direction (WS/ WD)	**RM Young / 5305VK**	**149769**	
• Wind direction data contained in this report represents where the wind is coming from. • The annual wind system calibration was completed on July 5, 2021. • The anemometer sensors were checked on March 8. The sensor passed the check requirements. • Due to collection issues on the datalogger, hourly data collected on March 28 hour 3 to hour 12 were lost. Datalogger was reset to restore functionality. Ten hours of downtime were recorded.			

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	2	March 1 at hour 21	9.8	ENE	0.4	March 1	98.5	93.8
TRS (ppb)	-	-	-	-	-	-	0.16	0.00	0.40	March 6 at hour 3	2.5	SSW	0.20	March 9	98.5	93.5
THC (ppm)	-	-	-	-	-	-	2.01	1.89	2.79	March 6 at hour 2	1.8	SSW	2.20	March 6	98.4	93.7
CH4 (ppm)	-	-	-	-	-	-	2.01	1.89	2.78	March 6 at hour 2	1.8	SSW	2.20	March 6	98.4	93.7
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.01	March 5 at hour 3	2.9	SW	0.00	March 5	98.4	93.7
RH (%)	-	-	-	-	-	-	63.0	32	100	March 31 at hour 23	0.2	SW	77.6	March 5	98.7	98.7
BP (millibar)	-	-	-	-	-	-	939	922	957	March 7 at hour 20	5	NNW	956	March 8	98.7	98.7
Ext. Temp. (°C)	-	-	-	-	-	-	-3.4	-19.1	12.3	March 23 at hour 12	5.5	WSW	5.1	March 23	98.7	98.7
Stn. Temp. (°C)	-	-	-	-	-	-	23.7	22.3	25.1	March 21 at hour 23	3.7	S	24.2	March 22	98.7	98.7
Precipitation (mm)*	-	-	-	-	-	-	4.3	0.0	1.4	March 31 at hour 23	0.2	SW	2.1	March 31	98.7	98.7
WSV (km/hr)	-	-	-	-	-	-	1.2	0.2	17.7	March 7 at hour 7	17.7	NNW	11.1	March 25	98.7	98.7
WDV (sector)	-	-	-	-	-	-	218 (SW)	-	-	-	-	-	-	-	98.7	98.7

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) and/or Alberta Ambient Air Quality Guidelines (AAAQGs) Exceedances at Reno Station

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

PRC Station

Equipment Operation Summary

Parameter	Make / Model	Serial Number	
SO2	**Thermo 43i**	**1034746225**	
• The scheduled daily zero-span check was switched to a 23-hour cycle from a 24-hour cycle to match PRAMP's zero-span check standard on March 13. • A successful monthly calibration was performed on March 22. • Due to collection issues on the datalogger, hourly data collected from March 21 hour 2 to hour 5 and hour 9 to hour 17, and from March 28 hour 2 to hour 6 were lost. Datalogger was reset to restore functionality. An additional zero-span check was initiated to confirm the analyzer's functionality on March 28 hour 8 and hour 9. Twenty hours of downtime were recorded due to these events.			
H2S	**Thermo 450i**	**1308857354**	
• The scheduled daily zero-span check was switched to a 23-hour cycle from a 24-hour cycle to match PRAMP's zero-span check standard on March 13. • A successful monthly calibration was performed on March 22. • Due to collection issues on the datalogger, hourly data collected from March 21 hour 2 to hour 5 and hour 9 to hour 17, and from March 28 hour 2 to hour 6 were lost. Datalogger was reset to restore functionality. An additional zero-span check was initiated to confirm the analyzer's functionality on March 28 hour 8 and hour 9. Twenty hours of downtime were recorded due to these events.			
TRS	**Thermo 43i-TLE**	**1162460022**	
• The scheduled daily zero-span check was switched to a 23-hour cycle from a 24-hour cycle to match PRAMP's zero-span check standard on March 13. • A successful monthly calibration was performed on March 22. • Due to collection issues on the datalogger, hourly data collected from March 21 hour 2 to hour 5 and hour 9 to hour 17, and from March 28 hour 2 to hour 6 were lost. Datalogger was reset to restore functionality. An additional zero-span check was initiated to confirm the analyzer's functionality on March 28 hour 8 and hour 9. Twenty hours of downtime were recorded due to these events.			

Parameter	Make / Model	Serial Number	
THC/CH4/NMHC	**Thermo / 55i**	**1022143392**	

- The scheduled daily zero-span check was switched to a 23-hour cycle from a 24-hour cycle to match PRAMP's zero-span check standard on March 13.
- The N2 gas cylinder was replaced on March 20 hour 8. One hour of downtime was recorded due to this maintenance activity.
- The analyzer failed due to the zero air generator failure on March 20 hour 13. On March 21, the BV-supplied zero air generator was removed, and the PRAMP-owned API T701H zero air generator, s/n: 954, was installed. The analyzer passed the later zero-span check, which confirmed the analyzer's functionality. Twenty-nine hours of downtime were recorded due to this event.
- A successful monthly calibration was performed on March 22.
- Due to collection issues on the datalogger, hourly data collected on March 28 hour 2 to hour 6 were lost. Datalogger was reset to restore functionality. An additional zero-span check was initiated to confirm the analyzer's functionality on March 28 hour 8 and hour 9. Seven hours of downtime were recorded due to these events.

Ambient Temperature (AT)	**MetOne / 064-2**	**F6705**	

- No operational issues were identified this month.
- Due to collection issues on the datalogger, hourly data collected from March 21 hour 2 to hour 5 and hour 9 to hour 17, and from March 28 hour 2 to hour 6 were lost. Datalogger was reset to restore functionality. Eighteen hours of downtime were recorded due to these events.

Station Temperature (ST)	**Canadian Natural**	**N/A**	

- No operational issues were identified this month.
- Due to collection issues on the datalogger, hourly data collected from March 21 hour 2 to hour 5 and hour 9 to hour 17, and from March 28 hour 2 to hour 6 were lost. Datalogger was reset to restore functionality. Eighteen hours of downtime were recorded due to these events.

Wind Speed/Wind Direction (WS/ WD)	**RM Young / 05305VK**	**129612**	

- Wind direction data contained in this report represents where the wind is coming from.
- The annual wind system calibration was completed on June 16, 2021.
- Due to collection issues on the datalogger, hourly data collected from March 21 hour 2 to hour 5 and hour 9 to hour 17, and from March 28 hour 2 to hour 6 were lost. Datalogger was reset to restore functionality. Eighteen hours of downtime were recorded due to these events.

Monitored Data Summary for Peace River Complex (PRC) Station

Parameter	Objectives/Guidelines			Exceedances			Monthly Avg.	Min. 1-hr	Max. 1-hr	Date/Time	VWS (km/hr)	VWD (sector)	Max. 24-hr	Date	Operational Uptime (%)	Valid Data (%)
	1-hr	24-hr	30-day	1-hr	24-hr	30-day										
SO2 (ppb)	172	48	11	0	0	0	0.1	0	2	March 1 at hour 17	13.4	ENE	0.7	March 1	97.3	92.3
H2S (ppb)	10	3	-	0	0	-	0.0	0	0	March 1 at hour 0	4.2	NE	0.0	March 1	97.3	92.3
TRS (ppb)	-	-	-	-	-	-	0.4	0	1	March 19 at hour 0	8.6	SSE	0.5	March 1	97.3	92.2
THC (ppm)	-	-	-	-	-	-	2.03	1.91	2.22	March 5 at hour 8	7.5	SSW	2.12	March 5	95.0	90.3
CH4 (ppm)	-	-	-	-	-	-	2.03	1.91	2.22	March 5 at hour 8	7.5	SSW	2.12	March 5	95.0	90.3
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.00	March 1 at hour 0	4.2	NE	0.00	March 1	95.0	90.3
Ext. Temp. (°C)	-	-	-	-	-	-	-3.5	-20.0	13.0	March 23 at hour 11	13.3	SW	6.2	March 23	97.6	97.6
Stn. Temp. (°C)	-	-	-	-	-	-	23.7	18.9	26.3	March 1 at hour 1	5.7	ENE	25.5	March 1	97.6	97.6
WSV (km/hr)	-	-	-	-	-	-	3.4	1.0	27.9	March 17 at hour 15	27.9	SW	19.4	March 17	97.6	97.6
WDV (sector)	-	-	-	-	-	-	214 (SSW)	-	-	-	-	-	-	-	97.6	97.6

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

Alberta Ambient Air Quality Objectives (AAAQOs) and/or Alberta Ambient Air Quality Guidelines (AAAQGs) Exceedances at Peace River Complex Station

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

AQHI – Grimshaw Station

Equipment Operation Summary

Parameter	Make / Model	Serial Number	
SO2	**Teledyne / T100**	**722**	
• A successful monthly calibration was performed on March 23. • No operational issues were identified this month.			
TRS	**Teledyne / T100U**	**132**	
• A successful monthly calibration was performed on March 23. • No operational issues were identified this month.			
NOx/NO/NO2	**Teledyne / T200**	**837**	
• A successful monthly calibration was performed on March 23. • No operational issues were identified this month.			
O3	**API / 400A**	**445**	
• A successful monthly calibration was performed on March 23. • No operational issues were identified this month.			
THC/CH4/NMHC	**Thermo / 55i**	**1191032505**	
• A successful monthly calibration was performed on March 23. • The analyzer showed bad injections, starting on March 29 hour 16. A shut-down calibration was attempted but could not be achieved. On March 30, both the actuator and the rotor for the valve were replaced, and column conditioning was performed. A successful post-repair calibration was completed on March 31. Forty-three hours of downtime were recorded due to this event.			

Parameter	Make / Model	Serial Number	
PM 2.5	**Teledyne / T640**	**318**	
• A successful monthly calibration was performed on March 23. • No operational issues were identified this month.			
Relative Humidity (RH)	**Vaisala / HMP155**	**N2910506**	
• The sensor was checked on March 23. The sensor passed the check requirements. • No operational issues were identified this month.			
Barometric Pressure (BP)	**MetOne / 092**	**A2397**	
• The sensor was checked on March 23. The sensor passed the check requirements. • No operational issues were identified this month.			
Ambient Temperature (AT)	**Vaisala / HMP155**	**N2910506**	
• The sensor was checked on March 23. The sensor passed the check requirements. • No operational issues were identified this month.			
Station Temperature (ST)	**COMET**	**N/A**	
• No operational issues were identified this month.			
Wind Speed/Wind Direction (WS/ WD)	**RM Young / 05305AQ**	**174801**	
• Wind direction data contained in this report represents where the wind is coming from. • The annual wind system calibration was completed on July 22, 2021. • The anemometer sensors were checked on March 23. The sensor passed the check requirements. • No operational issues were identified this month.			

Monitored Data Summary for AQHI - Grimshaw Station

Parameter	Objectives/Guidelines			Exceedances			Monthly Avg.	Min. 1-hr	Max. 1-hr	Date/Time	VWS (km/hr)	VWD (sector)	Max. 24-hr	Date	Operational Uptime (%)	Valid Data (%)
	1-hr	24-hr	30-day	1-hr	24-hr	30-day										
SO2 (ppb)	172	48	11	0	0	0	0.1	0	2	March 1 at hour 20	11.1	NE	0.6	March 2	100.0	95.0
TRS (ppb)	-	-	-	-	-	-	0.38	0.01	1.52	March 23 at hour 7	2.2	NE	0.68	March 23	100.0	95.0
NOx (ppb)	-	-	-	-	-	-	5.9	0	63	March 23 at hour 7	2.2	NE	14.3	March 15	100.0	94.7
NO (ppb)	-	-	-	-	-	-	1.3	0	28	March 23 at hour 7	2.2	NE	3.6	March 15	100.0	94.7
NO2 (ppb)	159	-	-	0	-	-	4.6	0	34	March 23 at hour 7	2.2	NE	11.2	March 19	100.0	94.7
O3 (ppb)	76	-	-	0	-	-	33.8	2	52	March 19 at hour 15	1.3	NNW	43.4	March 17	100.0	95.1
THC (ppm)	-	-	-	-	-	-	2.06	1.96	3.06	March 23 at hour 7	2.2	NE	2.15	March 4	94.2	89.8
CH4 (ppm)	-	-	-	-	-	-	2.06	1.96	2.36	March 29 at hour 5	2.8	E	2.15	March 4	94.2	89.8
NMHC (ppm)	-	-	-	-	-	-	0.01	0.00	0.92	March 8 at hour 18	7.5	N	0.07	March 23	94.2	89.8
PM2.5 (µg/m3)	80	30	-	0	0	-	4.0	0.0	24.0	March 14 at hour 21	2.5	NW	9.8	March 27	100.0	99.9
RH (%)	-	-	-	-	-	-	69.5	35	97	March 27 at hour 6	3.2	SE	85.5	March 4	100.0	100.0
BP (millibar)	-	-	-	-	-	-	942	925	961	March 7 at hour 20	4.8	WNW	960	March 8	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	-3.5	-17.1	8.3	March 23 at hour 12	8.2	WSW	4.7	March 30	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	22.5	21.0	23.5	March 12 at hour 13	3.8	ESE	23.1	March 20	100.0	100.0
WSV (km/hr)	-	-	-	-	-	-	8.4	0.1	27.4	March 7 at hour 5	27.4	NNW	15.6	March 7	100.0	100.0
WDV (sector)	-	-	-	-	-	-	308 (NW)	-	-	-	-	-	-	-	100.0	100.0

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

Alberta Ambient Air Quality Objectives (AAAQOs) and/or Alberta Ambient Air Quality Guidelines (AAAQGs) Exceedances at AQHI - Grimshaw Station

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

TABLES, CHARTS, WIND ROSES AND EQUIPMENT CALIBRATION RECORDS

986c STATION

peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2022

Summary of Hourly Averages

SULPHUR DIOXIDE (SO_2) in ppb

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

Number of 1-Hour Exceedances: 0 Number of 24-Hour Exceedances: 0 30-Day Exceedance: 0

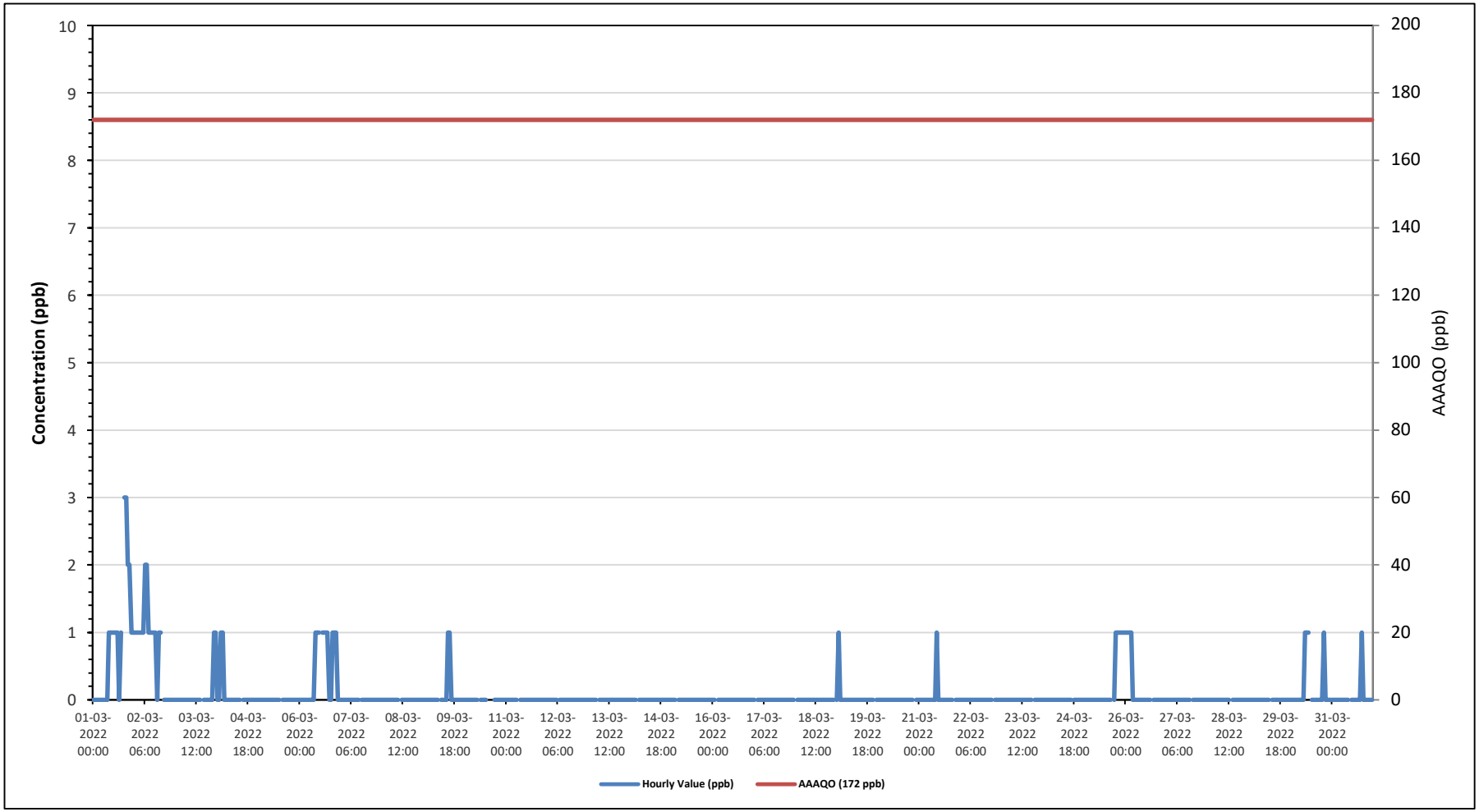
Maximum Hourly Value:	3	ppb	on March 1 at hour 18	Hours in Service:	744
Maximum Daily Value:	0.8	ppb	on March 1	Hours of Data:	708
Minimum Hourly Value:	0	ppb	on March 1 at hour 0	Hours of Missing Data:	0
Minimum Daily Value:	0.0	ppb	on March 5	Hours of Calibration:	36
Monthly Average:	0.1	ppb		Operational Uptime:	100.0

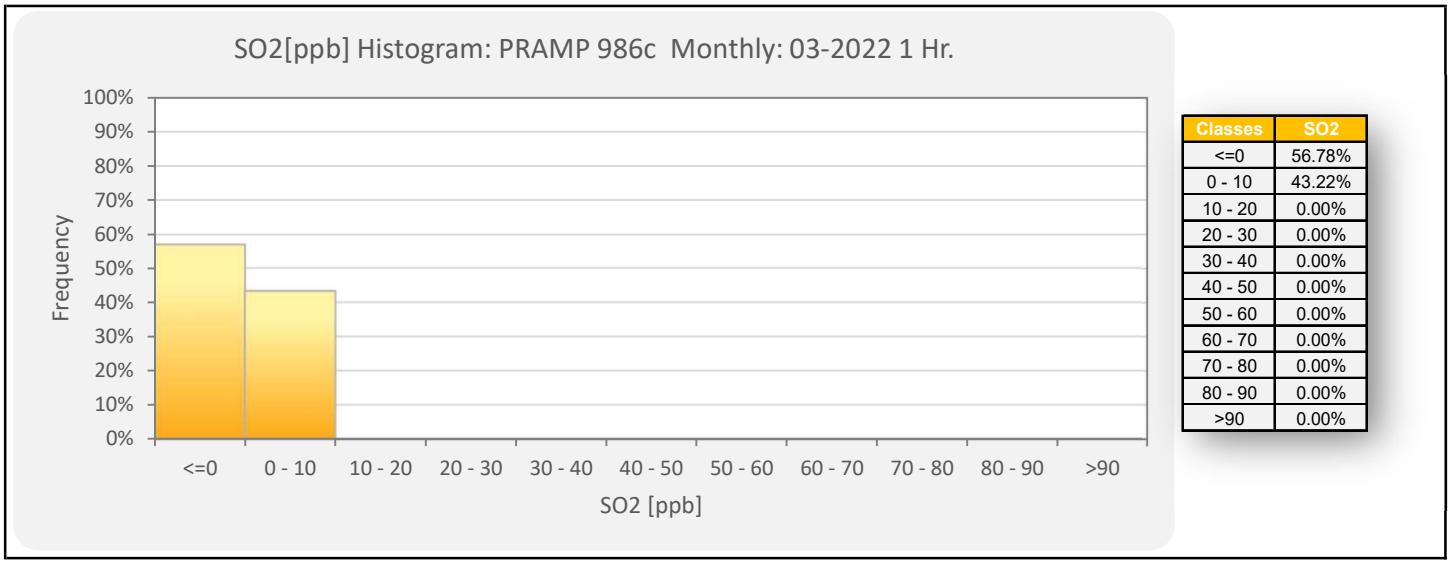
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Mar 1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	1	S	3	3	2	2	1	1	0	3	0.8
Mar 2	1	1	1	1	1	1	2	2	1	1	1	1	1	0	1	1	S	0	0	0	0	0	0	0	0	2	0.7
Mar 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	1	1	0	1	0.1
Mar 4	0	0	1	1	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	1	0.1
Mar 5	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 6	0	0	0	0	0	0	0	0	0	1	1	1	S	1	1	1	1	0	0	1	1	1	0	0	0	1	0.4
Mar 7	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 8	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 9	0	0	0	0	0	0	0	0	0	S	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0.1
Mar 10	0	0	0	0	0	0	0	0	S	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0.0
Mar 11	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 12	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 13	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 14	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 15	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 16	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 17	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 18	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0.0
Mar 19	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	1	0.0
Mar 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0.0
Mar 21	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	S	0	0	0	0	1	0.0
Mar 22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0.0
Mar 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0.0
Mar 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0.0
Mar 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	1	1	1	1	1	1	0	1	0.3
Mar 26	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	1	0.2
Mar 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 28	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 29	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 30	0	0	0	0	0	0	0	0	1	1	1	S	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.2
Mar 31	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.0
Diurnal Maximum	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	3	3	2	2	1	1			
Diurnal Average	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.1			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance	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 SO2 - 986c Station

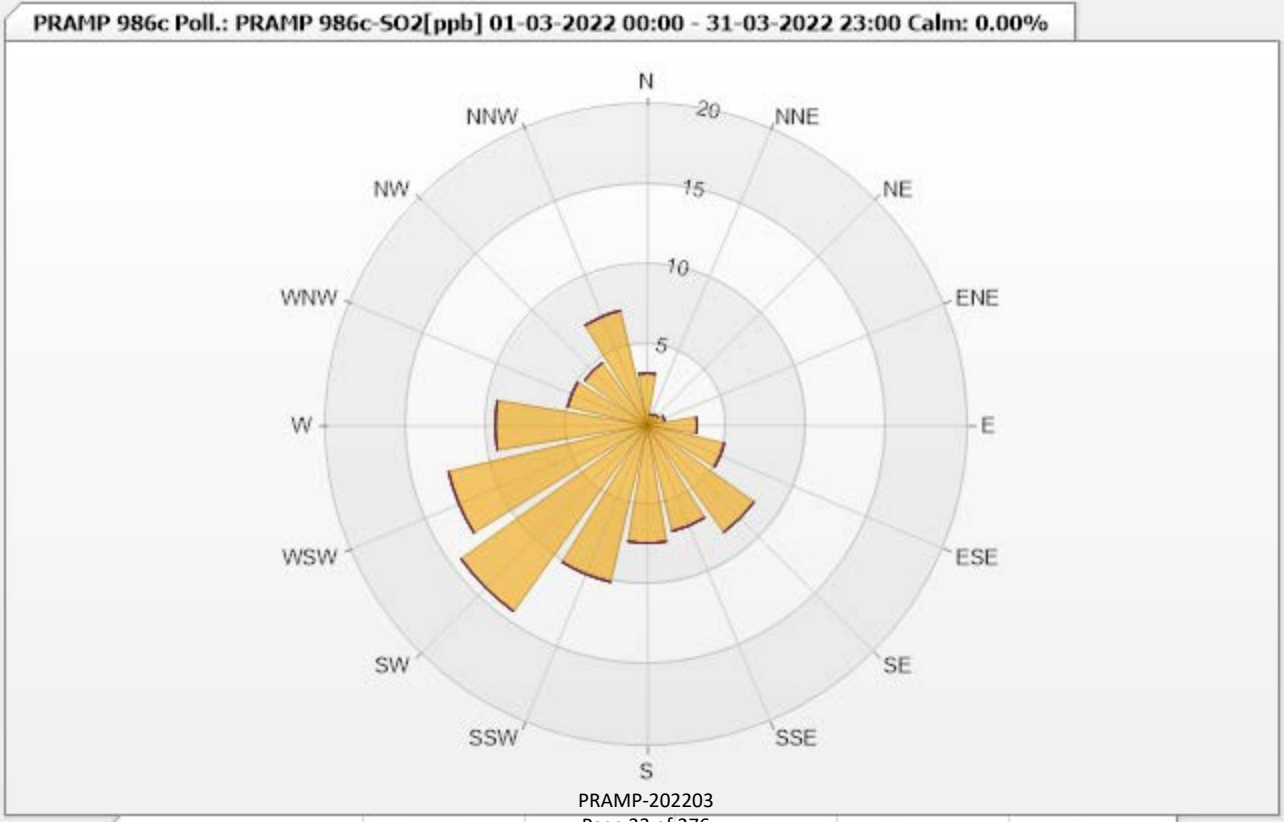




Classes	SO2
<=0	56.78%
0 - 10	43.22%
10 - 20	0.00%
20 - 30	0.00%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: PRAMP 986c Poll.: PRAMP 986c-SO2[ppb] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 95.16% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	3.25	0	0	0	0	3.25
NNE	0.71	0	0	0	0	0.71
NE	0.85	0	0	0	0	0.85
ENE	1.13	0	0	0	0	1.13
E	3.11	0	0	0	0	3.11
ESE	4.94	0	0	0	0	4.94
SE	8.19	0	0	0	0	8.19
SSE	6.78	0	0	0	0	6.78
S	7.34	0	0	0	0	7.34
SSW	10.03	0	0	0	0	10.03
SW	14.27	0	0	0	0	14.27
WSW	12.71	0	0	0	0	12.71
W	9.46	0	0	0	0	9.46
WNW	5.08	0	0	0	0	5.08
NW	4.8	0	0	0	0	4.8
NNW	7.34	0	0	0	0	7.34
Summary	100	0	0	0	0	100


PRAMP 986c Poll.: PRAMP 986c-SO2[ppb] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppb)
100 0-10
0 10-50
0 50-100
0 100-172
0 >172.0

peace river area monitoring program
pramp

PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2022

Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

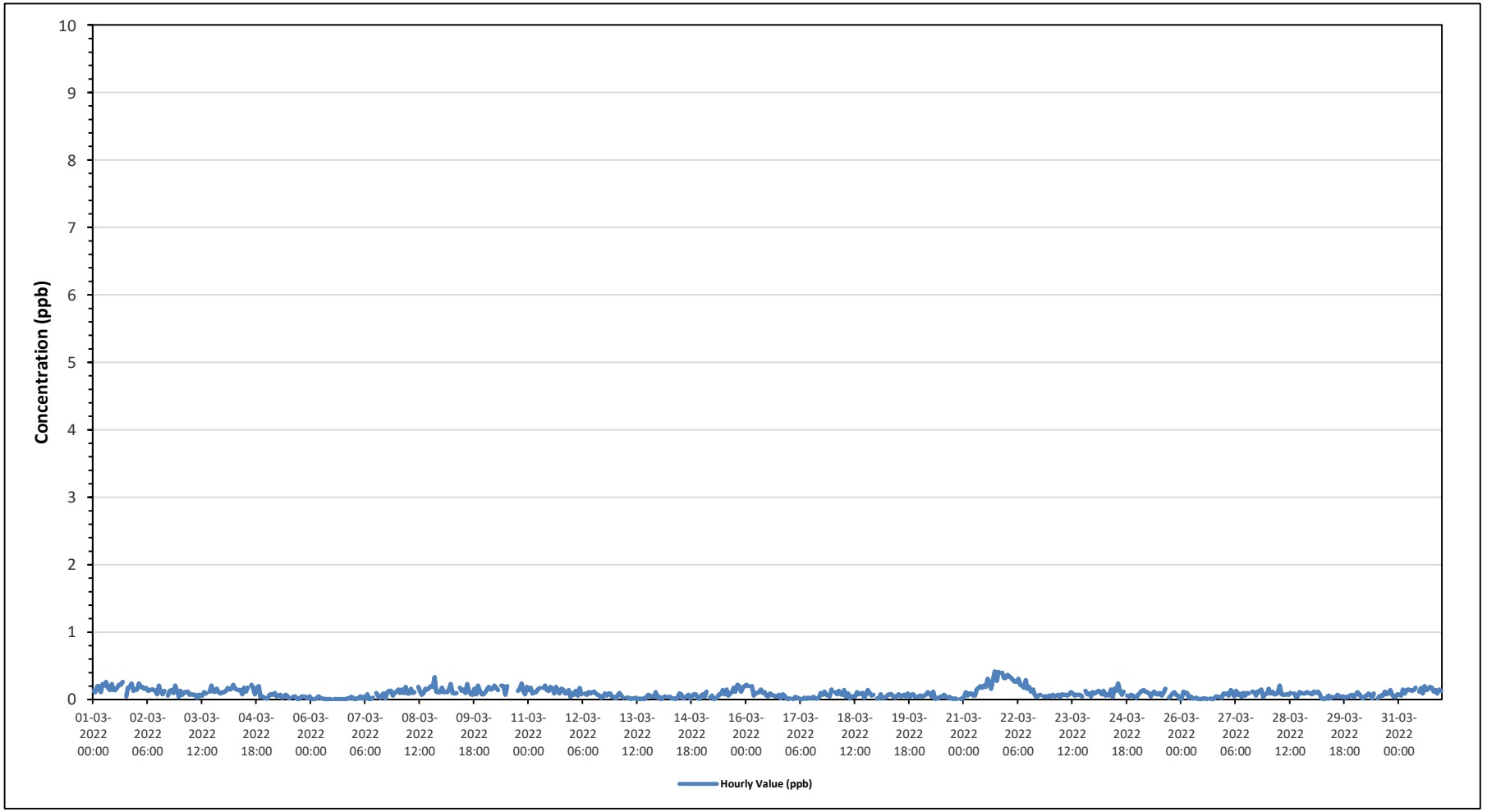
Maximum Hourly Value:	0.42	ppb	on March 21 at hour 17	Hours in Service:	744
Maximum Daily Value:	0.21	ppb	on March 21	Hours of Data:	707
Minimum Hourly Value:	0.00	ppb	on March 5 at hour 17	Hours of Missing Data:	0
Minimum Daily Value:	0.01	ppb	on March 6	Hours of Calibration:	37
Monthly Average:	0.09	ppb		Operational Uptime:	100.0

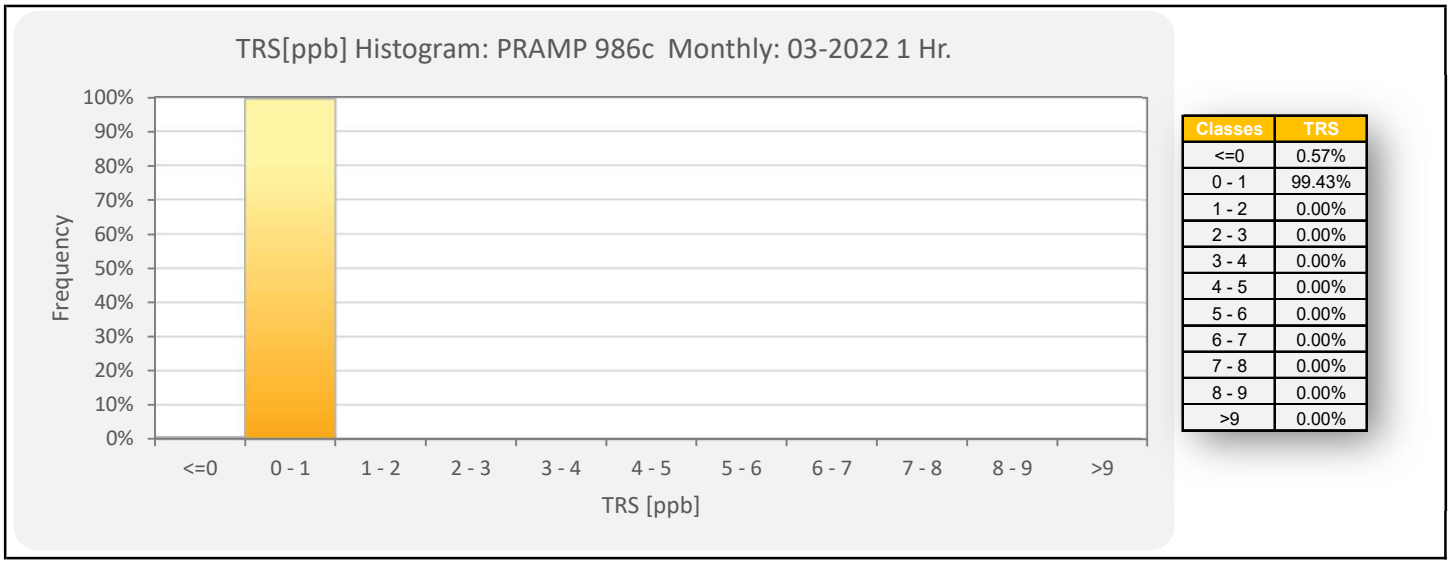
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	0.13	0.11	0.2	0.2	0.11	0.23	0.21	0.26	0.18	0.14	0.23	0.14	0.14	0.18	0.22	0.22	0.26	S	0.05	0.18	0.19	0.24	0.13	0.15	0.05	0.26	0.18
Mar 2	0.15	0.24	0.19	0.19	0.16	0.17	0.13	0.14	0.15	0.15	0.13	0.08	0.21	0.12	0.08	0.13	S	0.06	0.13	0.14	0.1	0.21	0.13	0.04	0.04	0.24	0.14
Mar 3	0.13	0.07	0.11	0.11	0.12	0.07	0.08	0.07	0.07	0.03	0.07	0.06	0.06	0.11	0.09	S	0.12	0.21	0.12	0.12	0.16	0.11	0.09	0.11	0.03	0.21	0.10
Mar 4	0.11	0.13	0.17	0.15	0.16	0.22	0.16	0.15	0.14	0.14	0.08	0.18	0.12	0.18	S	0.22	0.18	0.08	0.18	0.2	0.04	0.05	0.03	0.02	0.02	0.22	0.13
Mar 5	0.02	0.07	0.08	0.07	0.1	0.05	0.06	0.07	0.03	0.05	0.07	0.05	0.02	S	0.04	0.05	0.02	0	0.03	0.05	0.04	0.04	0.02	0.05	**0.00**	0.10	0.05
Mar 6	0.02	0	0.01	0.02	0.05	0.03	0.02	0.01	0.01	0	0.01	0	S	0.01	0	0.01	0	0.01	0	0.01	0.02	0.02	0.04	0.03	**0.00**	0.05	0.01
Mar 7	0	0.02	0.02	0.05	0.02	0.04	0.02	0.08	0	0.01	0.03	S	0.1	0.05	0.03	0.07	0.09	0.02	0.11	0.13	0.13	0.06	0.1	0.12	**0.00**	0.13	0.06
Mar 8	0.15	0.1	0.15	0.1	0.19	0.09	0.09	0.16	0.1	0.11	S	0.19	0.12	0.07	0.1	0.16	0.15	0.17	0.2	0.19	0.33	0.12	0.11	0.11	0.07	0.33	0.14
Mar 9	0.18	0.11	0.12	0.11	0.15	0.23	0.1	0.09	0.1	S	0.18	0.13	0.15	0.1	0.23	0.12	0.08	0.07	0.16	0.08	0.21	0.13	0.08	0.08	0.07	0.23	0.13
Mar 10	0.11	0.15	0.19	0.15	0.16	0.21	0.18	0.14	S	0.21	0.2	0.07	0.2	C	C	C	C	C	0.13	0.16	0.24	0.13	0.08	0.19	0.07	0.24	0.16
Mar 11	0.14	0.18	0.09	0.11	0.11	0.15	0.17	S	0.17	0.21	0.14	0.13	0.19	0.16	0.09	0.19	0.13	0.09	0.16	0.15	0.09	0.1	0.14	0.04	0.04	0.21	0.14
Mar 12	0.1	0.07	0.13	0.06	0.17	0.08	S	0.09	0.07	0.11	0.09	0.11	0.12	0.09	0.07	0.06	0.03	0.05	0.09	0.06	0.09	0.09	0.04	0.04	0.03	0.17	0.08
Mar 13	0.02	0.06	0.1	0.06	0.03	S	0.03	0.03	0.01	0.02	0.02	0.03	0	0.02	0	0.02	0.01	0.05	0.07	0.05	0.05	0.04	0.11	0.03	**0.00**	0.11	0.04
Mar 14	0.04	0	0.03	0.05	S	0.04	0.04	0.02	0.02	0.01	0.03	0.09	0.08	0.02	0.03	0.05	0.07	0.02	0.05	0.08	0.08	0.03	0.01	0.06	**0.00**	0.09	0.04
Mar 15	0.08	0.04	0.12	S	0.03	0.06	0.01	0.02	0.04	0.08	0.08	0.14	0.08	0.15	0.06	0.09	0.11	0.18	0.12	0.22	0.2	0.12	0.17	0.2	0.01	0.22	0.10
Mar 16	0.22	0.2	S	0.2	0.06	0.1	0.1	0.11	0.15	0.1	0.11	0.06	0.05	0.09	0.07	0.06	0.05	0.05	0.07	0.02	0.08	0.06	0.02	0.01	0.01	0.22	0.09
Mar 17	0.02	S	0.01	0.04	0.03	0.02	0	0.01	0.03	0.01	0.03	0.02	0.03	0.04	0.02	0.02	0.03	0.1	0.07	0.12	0.07	0.06	0.05	0.15	**0.00**	0.15	0.04
Mar 18	S	0.11	0.08	0.13	0.08	0.07	0.14	0.04	0.09	0.02	0.05	0.05	0.05	0.11	0.08	0.09	0.1	0.03	0.08	0.14	0.1	0.06	0.07	S	0.02	0.14	0.08
Mar 19	0.02	0.02	0.08	0.03	0.03	0.04	0.07	0.08	0.08	0.05	0.03	0.06	0.08	0.05	0.06	0.07	0.05	0.09	0.04	0.07	0.08	0.04	S	0.05	0.02	0.09	0.06
Mar 20	0.06	0.05	0.06	0.07	0.11	0.09	0.05	0.12	0.01	0.02	0.03	0.04	0.05	0.07	0.04	0.03	0.04	0.02	0.01	0.02	0.01	S	0.01	0.02	0.01	0.12	0.04
Mar 21	0.04	0.11	0.06	0.09	0.09	0.06	0.06	0.15	0.17	0.2	0.18	0.21	0.19	0.31	0.25	0.16	0.29	**0.42**	0.28	0.41	S	0.4	0.32	0.32	0.04	**0.42**	**0.21**
Mar 22	0.37	0.34	0.32	0.29	0.27	0.27	0.31	0.22	0.21	0.18	0.29	0.16	0.19	0.12	0.15	0.07	0.04	0.06	0.07	S	0.05	0.05	0.04	0.06	0.04	0.37	0.18
Mar 23	0.05	0.07	0.05	0.06	0.07	0.04	0.08	0.07	0.07	0.06	0.08	0.11	0.09	0.06	0.07	0.07	0.07	0.05	S	0.13	0.08	0.09	0.05	0.11	0.04	0.13	0.07
Mar 24	0.09	0.11	0.13	0.12	0.08	0.13	0.06	0.08	0.06	0.15	0.04	0.16	0.13	0.24	0.12	0.07	0.12	S	0.06	0.05	0.07	0.06	0.04	0.03	0.03	0.24	0.10
Mar 25	0.07	0.1	0.13	0.14	0.12	0.11	0.09	0.05	0.09	0.12	0.08	0.08	0.1	0.06	0.1	0.16	S	0.03	0.06	0.09	0.11	0.07	0.06	0.01	0.01	0.16	0.09
Mar 26	0.02	0.12	0.1	0.1	0.03	0.05	0.02	0.02	0.03	0.01	0.01	0.01	0.02	0.02	0.01	S	0.02	0	0.02	0.05	0.04	0.04	0.03	0.09	**0.00**	0.12	0.04
Mar 27	0.08	0.09	0.06	0.14	0.11	0.05	0.13	0.07	0.09	0.04	0.1	0.06	0.1	0.09	S	0.12	0.11	0.06	0.12	0.13	0.15	0.04	0.08	0.09	0.04	0.15	0.09
Mar 28	0.16	0.09	0.12	0.08	0.08	0.1	0.21	0.08	0.07	0.07	0.08	0.07	0.1	S	0.09	0.04	0.05	0.11	0.1	0.09	0.09	0.11	0.1	0.09	0.04	0.21	0.09
Mar 29	0.08	0.12	0.1	0.12	0.09	0.03	0.01	0.01	0.03	0.06	0.02	0.04	S	0.04	0.07	0.05	0.04	0.05	0.03	0.04	0.04	0.06	0.07	0.04	0.01	0.12	0.05
Mar 30	0.07	0.11	0.08	0.04	0.02	0.05	0.06	0.09	0.07	0.02	0.09	S	0.02	0.05	0.06	0.06	0.12	0.08	0.09	0.14	0.07	0.04	0.04	0.08	0.02	0.14	0.07
Mar 31	0.07	0.06	0.15	0.09	0.14	0.15	0.14	0.13	0.14	0.18	S	0.12	0.17	0.09	0.2	0.14	0.16	0.19	0.18	0.12	0.14	0.09	0.15	0.13	0.06	0.20	0.14
Diurnal Maximum	0.37	0.34	0.32	0.29	0.27	0.27	0.31	0.26	0.21	0.21	0.29	0.21	0.21	0.31	0.25	0.22	0.29	0.42	0.28	0.41	0.33	0.40	0.32	0.32			
Diurnal Average	0.09	0.10	0.11	0.11	0.10	0.10	0.09	0.09	0.08	0.09	0.09	0.09	0.10	0.10	0.09	0.09	0.09	0.08	0.10	0.11	0.11	0.09	0.08	0.09			

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

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

Timeseries Chart of Hourly Average for TRS - 986c Station

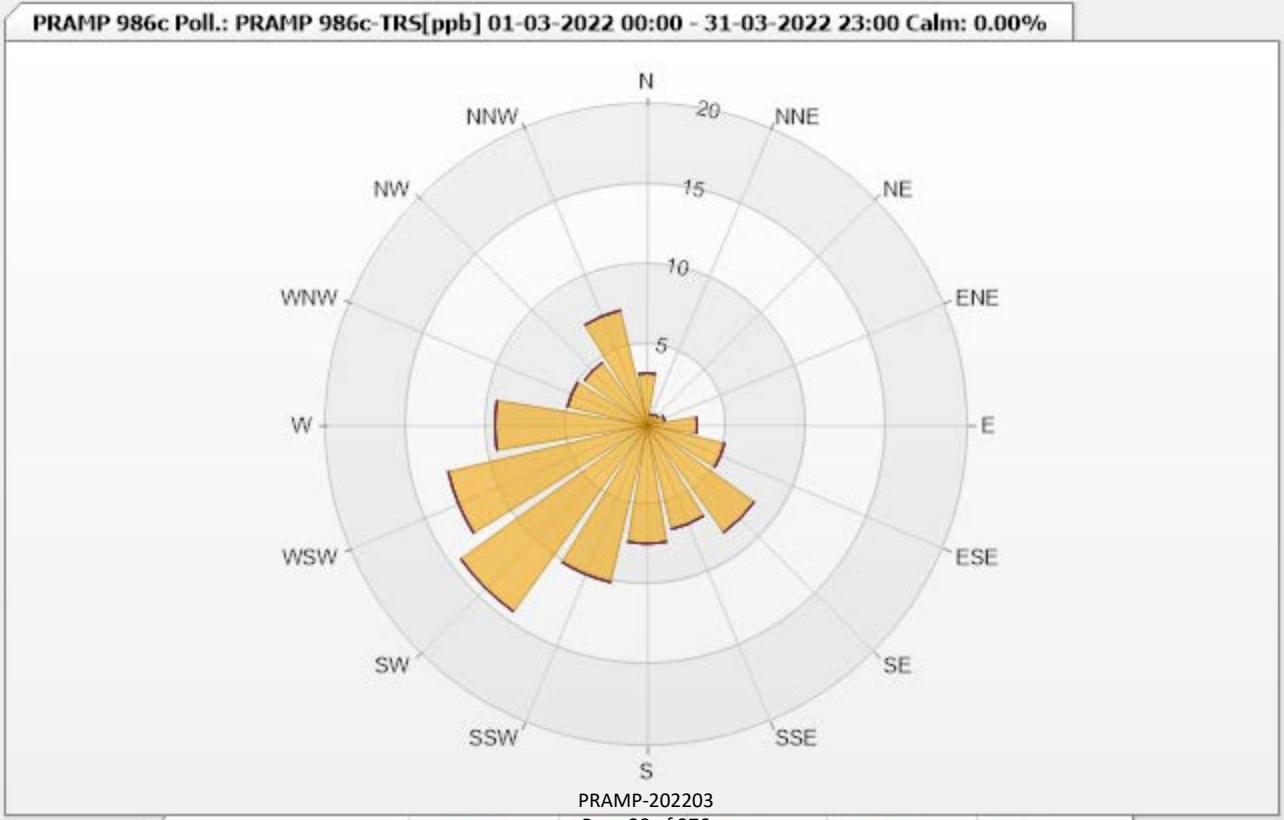




Classes	TRS
<=0	0.57%
0 - 1	99.43%
1 - 2	0.00%
2 - 3	0.00%
3 - 4	0.00%
4 - 5	0.00%
5 - 6	0.00%
6 - 7	0.00%
7 - 8	0.00%
8 - 9	0.00%
>9	0.00%

Wind: PRAMP 986c Poll.: PRAMP 986c-TRS[ppb] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 95.03% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	3.25	0	0	0	0	3.25
NNE	0.71	0	0	0	0	0.71
NE	0.85	0	0	0	0	0.85
ENE	1.13	0	0	0	0	1.13
E	3.11	0	0	0	0	3.11
ESE	4.95	0	0	0	0	4.95
SE	8.2	0	0	0	0	8.2
SSE	6.65	0	0	0	0	6.65
S	7.36	0	0	0	0	7.36
SSW	10.04	0	0	0	0	10.04
SW	14.29	0	0	0	0	14.29
WSW	12.73	0	0	0	0	12.73
W	9.48	0	0	0	0	9.48
WNW	5.09	0	0	0	0	5.09
NW	4.81	0	0	0	0	4.81
NNW	7.36	0	0	0	0	7.36
Summary	100	0	0	0	0	100


PRAMP 986c Poll.: PRAMP 986c-TRS[ppb] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppb)
100 0-2
0 2-5
0 5-10
0 10-50
0 >50.0

peace river area monitoring program
pramp

PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2022

Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

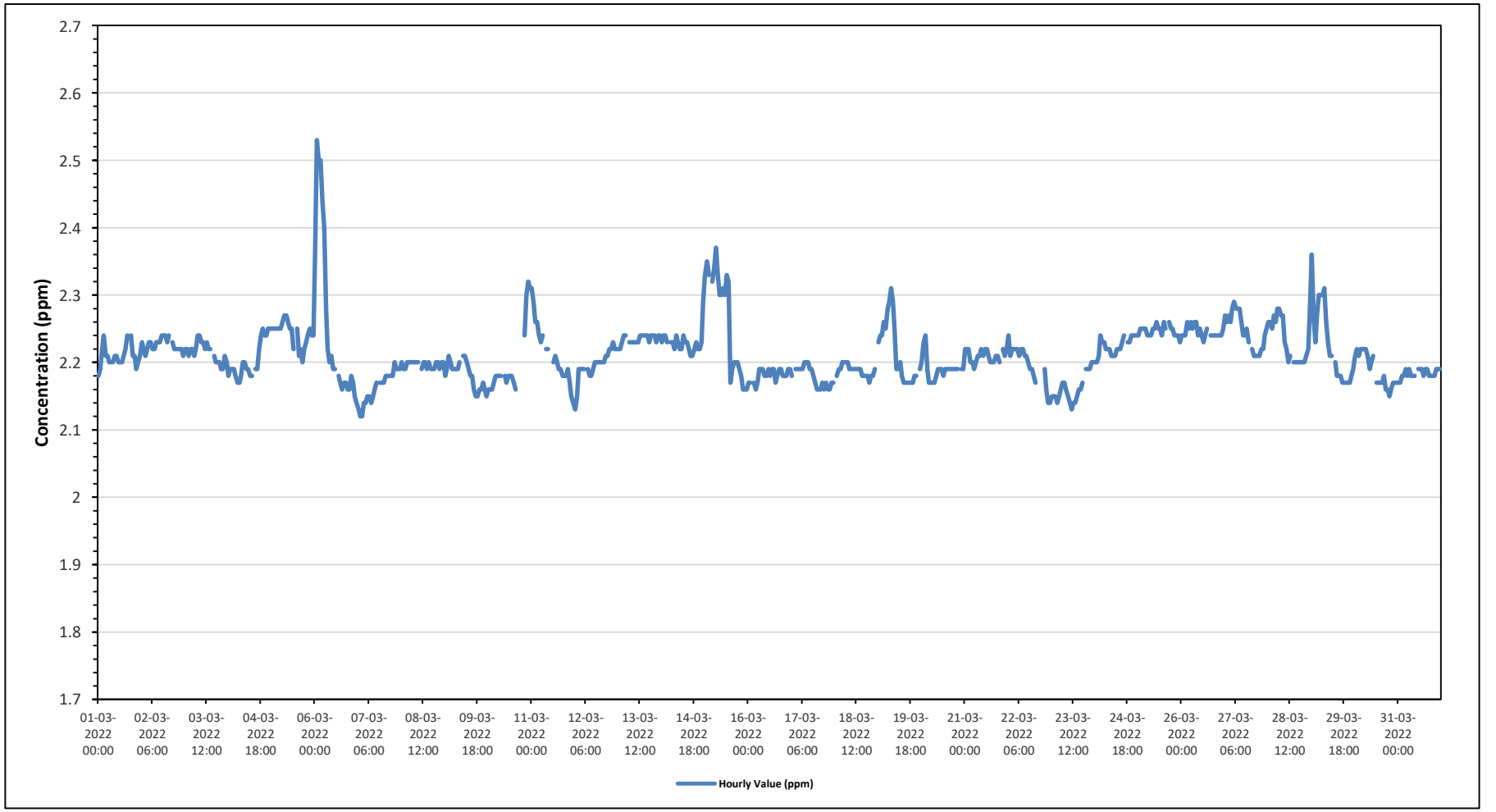
Maximum Hourly Value:	2.53	ppm	on March 6 at hour 1	Hours in Service:	744
Maximum Daily Value:	2.26	ppm	on March 15	Hours of Data:	704
Minimum Hourly Value:	2.12	ppm	on March 7 at hour 1	Hours of Missing Data:	4
Minimum Daily Value:	2.16	ppm	on March 23	Hours of Calibration:	36
Monthly Average:	2.21	ppm		Operational Uptime:	99.5

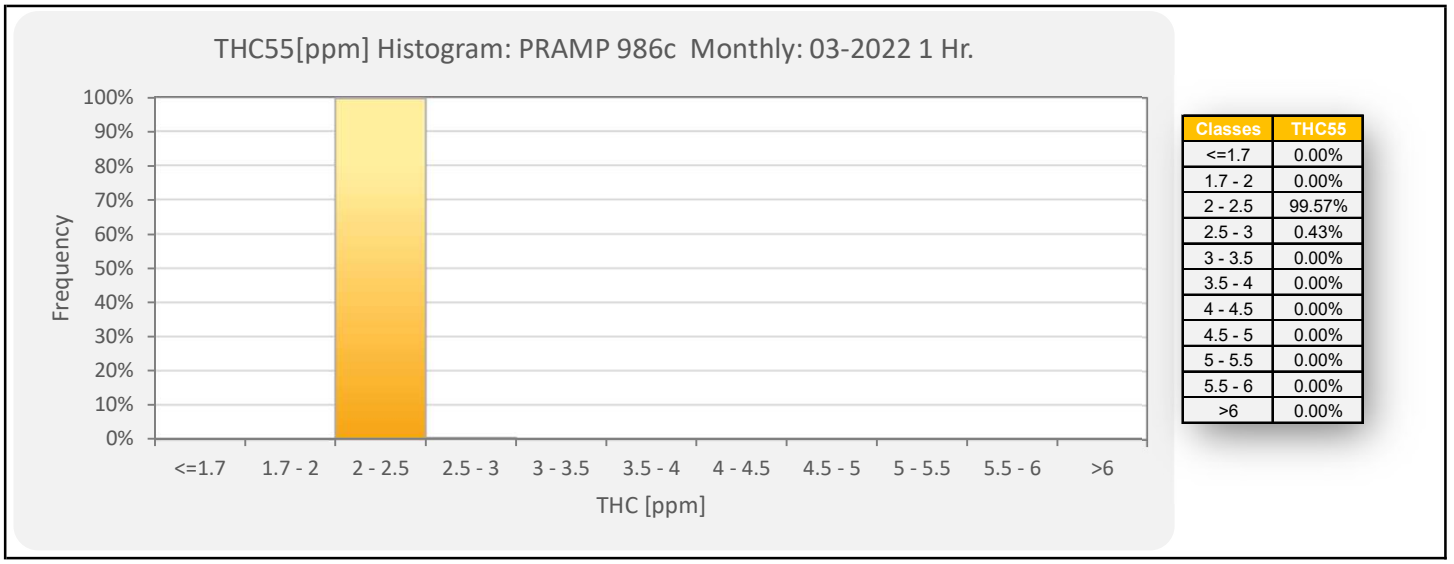
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	2.18	2.19	2.22	2.24	2.21	2.21	2.20	2.20	2.20	2.21	2.21	2.20	2.20	2.20	2.21	2.22	2.24	S	2.24	2.21	2.21	2.19	2.20	2.21	2.18	2.24	2.21
Mar 2	2.23	2.22	2.21	2.22	2.23	2.23	2.22	2.22	2.23	2.23	2.23	2.24	2.24	2.24	2.23	2.24	S	2.23	2.22	2.22	2.22	2.22	2.22	2.21	2.21	2.24	2.23
Mar 3	2.22	2.22	2.21	2.22	2.22	2.21	2.22	2.24	2.24	2.23	2.23	2.22	2.23	2.22	2.22	S	2.21	2.20	2.20	2.20	2.19	2.19	2.21	2.20	2.19	2.24	2.22
Mar 4	2.18	2.19	2.19	2.19	2.18	2.17	2.17	2.18	2.20	2.20	2.19	2.19	2.18	2.18	S	2.19	2.19	2.22	2.24	2.25	2.24	2.24	2.25	2.25	2.17	2.25	2.20
Mar 5	2.25	2.25	2.25	2.25	2.25	2.25	2.26	2.27	2.27	2.26	2.25	2.25	2.22	S	2.25	2.21	2.22	2.20	2.22	2.23	2.24	2.25	2.24	2.24	2.20	2.27	2.24
Mar 6	2.36	2.53	2.50	2.50	2.44	2.40	2.28	2.22	2.20	2.21	2.19	2.19	S	2.18	2.17	2.16	2.17	2.17	2.16	2.16	2.18	2.17	2.15	2.14	2.14	2.53	2.25
Mar 7	2.13	2.12	2.12	2.14	2.14	2.15	2.15	2.14	2.15	2.16	2.17	S	2.17	2.17	2.17	2.18	2.18	2.18	2.18	2.18	2.20	2.19	2.19	2.19	2.12	2.20	2.16
Mar 8	2.20	2.19	2.19	2.20	2.20	2.20	2.20	2.20	2.20	2.20	S	2.19	2.20	2.20	2.19	2.20	2.19	2.19	2.19	2.20	2.20	2.19	2.20	2.20	2.19	2.20	2.20
Mar 9	2.18	2.19	2.21	2.20	2.19	2.19	2.19	2.19	2.20	S	2.21	2.21	2.20	2.19	2.18	2.18	2.16	2.15	2.15	2.16	2.16	2.17	2.16	2.15	2.15	2.21	2.18
Mar 10	2.16	2.16	2.16	2.17	2.18	2.18	2.18	2.18	S	2.18	2.17	2.18	2.18	2.18	2.17	2.16	C	C	C	C	2.24	2.30	2.32	2.31	2.16	2.32	2.20
Mar 11	2.31	2.29	2.26	2.26	2.24	2.23	2.24	S	2.22	2.22	NRM	NRM	2.20	2.21	2.20	2.19	2.19	2.18	2.18	2.18	2.19	2.17	2.15	2.14	2.14	2.31	2.21
Mar 12	2.13	2.15	2.19	2.19	2.19	2.19	S	2.19	2.18	2.18	2.19	2.20	2.20	2.20	2.20	2.20	2.20	2.21	2.21	2.22	2.22	2.23	2.22	2.22	2.13	2.23	2.20
Mar 13	2.22	2.22	2.23	2.24	2.24	S	2.23	2.23	2.23	2.23	2.23	2.23	2.24	2.24	2.24	2.24	2.24	2.23	2.24	2.24	2.24	2.23	2.24	2.24	2.22	2.24	2.23
Mar 14	2.23	2.24	2.24	2.23	S	2.23	2.23	2.22	2.24	2.23	2.22	2.22	2.24	2.23	2.23	2.22	2.21	2.21	2.22	2.23	2.22	2.22	2.23	2.29	2.21	2.29	2.23
Mar 15	2.33	2.35	2.33	S	2.32	2.34	2.37	2.33	2.30	2.30	2.31	2.30	2.33	2.32	2.17	2.19	2.20	2.20	2.20	2.19	2.18	2.16	2.16	2.16	2.16	2.37	2.26
Mar 16	2.17	2.17	S	2.17	2.16	2.17	2.19	2.19	2.19	2.18	2.18	2.19	2.18	2.19	2.19	2.17	2.18	2.19	2.19	2.18	2.18	2.18	2.19	2.19	2.16	2.19	2.18
Mar 17	2.18	S	2.19	2.19	2.19	2.19	2.19	2.20	2.20	2.20	2.19	2.19	2.18	2.17	2.16	2.16	2.16	2.17	2.16	2.17	2.16	2.16	2.17	2.17	2.16	2.20	2.18
Mar 18	S	2.18	2.19	2.19	2.20	2.20	2.20	2.20	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.18	2.18	2.18	2.18	2.17	2.18	2.18	2.19	S	2.17	2.20	2.19
Mar 19	2.23	2.24	2.24	2.26	2.25	2.28	2.29	2.31	2.29	2.25	2.19	2.19	2.20	2.18	2.17	2.17	2.17	2.17	2.17	2.17	2.18	2.18	S	2.19	2.17	2.31	2.22
Mar 20	2.20	2.23	2.24	2.19	2.17	2.17	2.17	2.17	2.18	2.19	2.19	2.19	2.18	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	S	2.19	2.19	2.17	2.24	2.19
Mar 21	2.22	2.22	2.22	2.20	2.20	2.19	2.20	2.21	2.21	2.22	2.21	2.22	2.22	2.21	2.20	2.20	2.20	2.21	2.21	2.20	S	2.22	2.21	2.22	2.19	2.22	2.21
Mar 22	2.24	2.21	2.22	2.22	2.22	2.22	2.21	2.22	2.22	2.21	2.21	2.20	2.19	2.19	2.18	2.17	NRM	NRM	2.19	S	2.19	2.16	2.14	2.14	2.14	2.24	2.20
Mar 23	2.15	2.15	2.15	2.14	2.15	2.16	2.17	2.17	2.16	2.15	2.14	2.13	2.14	2.14	2.15	2.16	2.16	2.17	S	2.19	2.19	2.19	2.20	2.20	2.13	2.20	2.16
Mar 24	2.20	2.20	2.21	2.24	2.23	2.23	2.22	2.22	2.22	2.21	2.21	2.21	2.22	2.22	2.22	2.23	2.24	S	2.23	2.23	2.24	2.24	2.24	2.24	2.20	2.24	2.22
Mar 25	2.24	2.25	2.25	2.25	2.25	2.24	2.24	2.24	2.25	2.25	2.26	2.25	2.25	2.24	2.26	2.25	S	2.26	2.25	2.25	2.24	2.24	2.24	2.23	2.23	2.26	2.25
Mar 26	2.24	2.24	2.24	2.26	2.25	2.26	2.25	2.26	2.26	2.24	2.25	2.24	2.23	2.24	2.25	S	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.25	2.23	2.26	2.25
Mar 27	2.27	2.26	2.27	2.26	2.28	2.29	2.28	2.28	2.28	2.26	2.24	2.24	2.25	2.23	S	2.22	2.21	2.21	2.21	2.21	2.22	2.22	2.24	2.25	2.21	2.29	2.25
Mar 28	2.26	2.26	2.25	2.27	2.26	2.28	2.28	2.27	2.27	2.23	2.22	2.20	2.21	S	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.21	2.22	2.29	2.20	2.29	2.23
Mar 29	2.36	2.27	2.23	2.27	2.30	2.30	2.30	2.31	2.26	2.23	2.21	2.21	S	2.20	2.18	2.18	2.18	2.17	2.17	2.17	2.17	2.17	2.18	2.19	2.17	2.36	2.23
Mar 30	2.21	2.22	2.21	2.22	2.22	2.22	2.22	2.21	2.19	2.20	2.21	S	2.17	2.17	2.17	2.17	2.18	2.16	2.16	2.15	2.16	2.17	2.17	2.17	2.15	2.22	2.19
Mar 31	2.17	2.17	2.18	2.18	2.19	2.18	2.19	2.18	2.18	2.18	S	2.19	2.19	2.19	2.18	2.19	2.19	2.18	2.18	2.18	2.18	2.19	2.19	2.19	2.17	2.19	2.18
Diurnal Maximum	2.36	2.53	2.50	2.50	2.44	2.40	2.37	2.33	2.30	2.30	2.31	2.30	2.33	2.32	2.26	2.25	2.24	2.26	2.25	2.25	2.24	2.30	2.32	2.31			
Diurnal Average	2.22	2.23	2.23	2.23	2.23	2.23	2.22	2.22	2.22	2.21	2.21	2.21	2.21	2.20	2.20	2.19	2.20	2.20	2.20	2.20	2.20	2.20	2.21	2.21			

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

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

Timeseries Chart of Hourly Average for THC - 986c Station

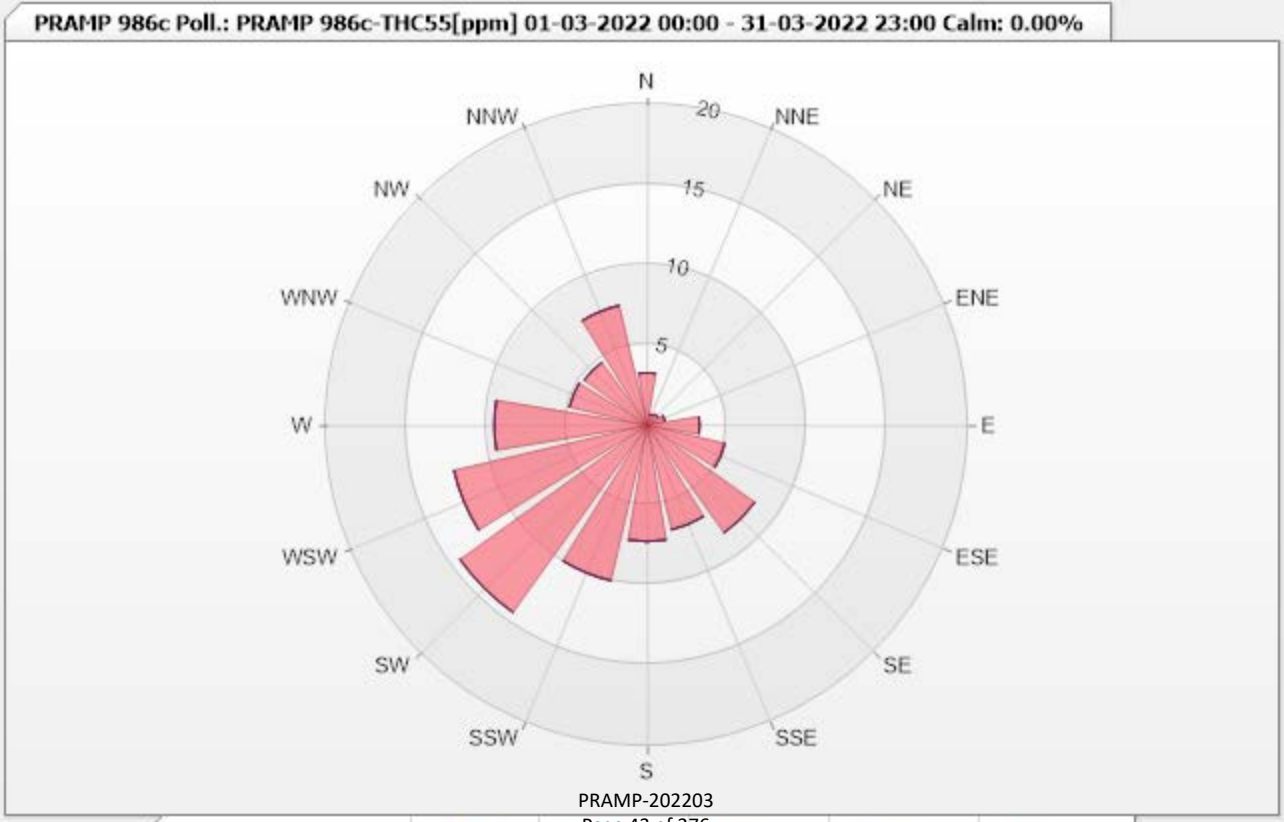




Classes	THC55
<=1.7	0.00%
1.7 - 2	0.00%
2 - 2.5	99.57%
2.5 - 3	0.43%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: PRAMP 986c Poll.: PRAMP 986c-THC55[ppm] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 94.62% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	0	3.27	0	0	0	3.27
NNE	0	0.71	0	0	0	0.71
NE	0	0.85	0	0	0	0.85
ENE	0	1.14	0	0	0	1.14
E	0	3.27	0	0	0	3.27
ESE	0	4.97	0	0	0	4.97
SE	0	8.24	0	0	0	8.24
SSE	0	6.68	0	0	0	6.68
S	0	7.24	0	0	0	7.24
SSW	0	9.94	0	0	0	9.94
SW	0	14.35	0	0	0	14.35
WSW	0	12.36	0	0	0	12.36
W	0	9.52	0	0	0	9.52
WNW	0	4.97	0	0	0	4.97
NW	0	4.83	0	0	0	4.83
NNW	0	7.67	0	0	0	7.67
Summary	0	100	0	0	0	100


PRAMP 986c Poll.: PRAMP 986c-THC55[ppm] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppm)
0 0-2
100 2-5
0 5-10
0 10-40
0 >40.0

peace river area monitoring program
pramp

PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2022

Summary of Hourly Averages

METHANE (CH4) in ppm

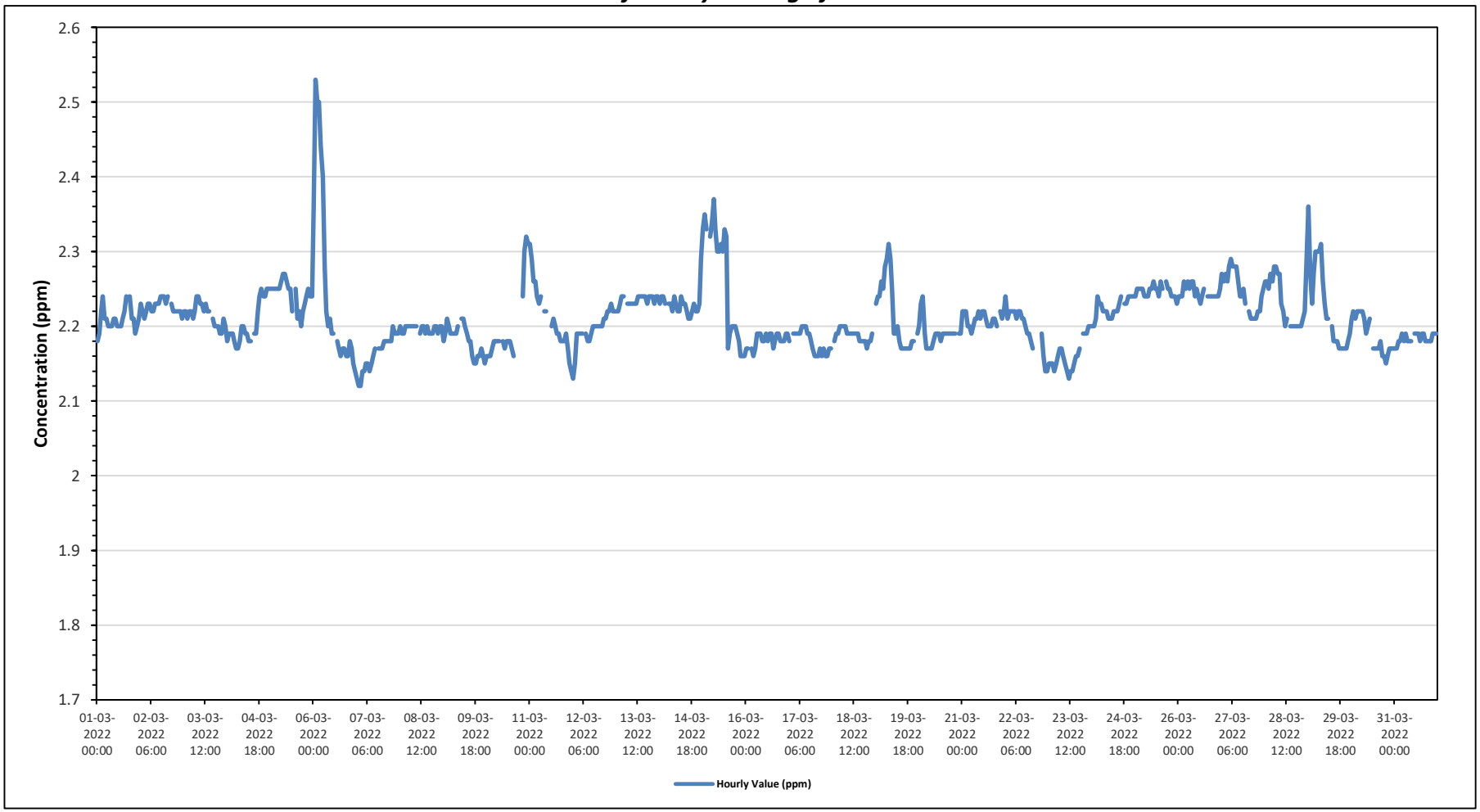
Maximum Hourly Value:	2.53	ppm	on March 6 at hour 1	Hours in Service:	744
Maximum Daily Value:	2.26	ppm	on March 15	Hours of Data:	704
Minimum Hourly Value:	2.12	ppm	on March 7 at hour 1	Hours of Missing Data:	4
Minimum Daily Value:	2.16	ppm	on March 23	Hours of Calibration:	36
Monthly Average:	2.21	ppm		Operational Uptime:	99.5

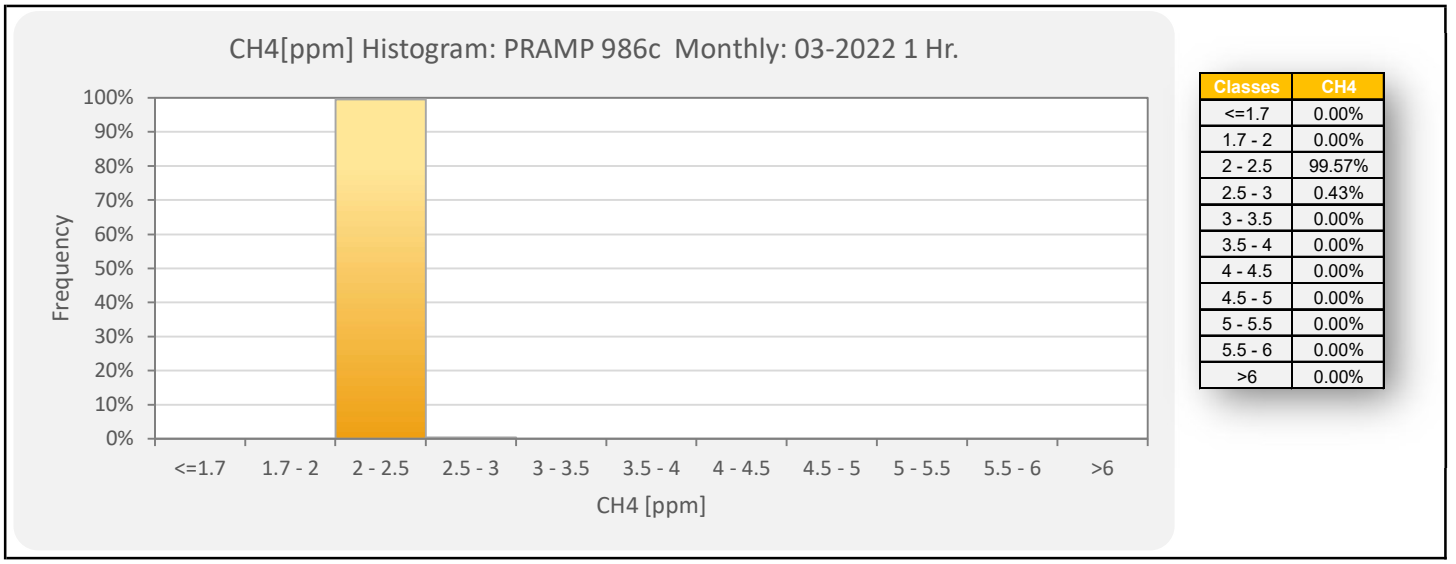
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	2.18	2.19	2.22	2.24	2.21	2.21	2.20	2.20	2.20	2.21	2.21	2.20	2.20	2.20	2.21	2.22	2.24	S	2.24	2.21	2.21	2.19	2.20	2.21	2.18	2.24	2.21
Mar 2	2.23	2.22	2.21	2.22	2.23	2.23	2.22	2.22	2.23	2.23	2.23	2.24	2.24	2.24	2.23	2.24	S	2.23	2.22	2.22	2.22	2.22	2.22	2.21	2.21	2.24	2.23
Mar 3	2.22	2.22	2.21	2.22	2.22	2.21	2.22	2.24	2.24	2.23	2.23	2.22	2.23	2.22	2.22	S	2.21	2.20	2.20	2.20	2.19	2.19	2.21	2.20	2.19	2.24	2.22
Mar 4	2.18	2.19	2.19	2.19	2.18	2.17	2.17	2.18	2.20	2.20	2.19	2.19	2.18	2.18	S	2.19	2.19	2.22	2.24	2.25	2.24	2.24	2.25	2.25	2.17	2.25	2.20
Mar 5	2.25	2.25	2.25	2.25	2.25	2.25	2.26	2.27	2.27	2.26	2.25	2.25	2.22	S	2.25	2.21	2.22	2.20	2.22	2.23	2.24	2.25	2.24	2.24	2.20	2.27	2.24
Mar 6	2.36	2.53	2.50	2.50	2.44	2.40	2.28	2.22	2.20	2.21	2.19	2.19	S	2.18	2.17	2.16	2.17	2.17	2.16	2.16	2.18	2.17	2.15	2.14	2.14	2.53	2.25
Mar 7	2.13	2.12	2.12	2.14	2.14	2.15	2.15	2.14	2.15	2.16	2.17	S	2.17	2.17	2.17	2.18	2.18	2.18	2.18	2.18	2.20	2.19	2.19	2.19	2.12	2.20	2.16
Mar 8	2.20	2.19	2.19	2.20	2.20	2.20	2.20	2.20	2.20	2.20	S	2.19	2.20	2.20	2.19	2.20	2.19	2.19	2.19	2.20	2.20	2.19	2.20	2.20	2.19	2.20	2.20
Mar 9	2.18	2.19	2.21	2.20	2.19	2.19	2.19	2.19	2.20	S	2.21	2.21	2.20	2.19	2.18	2.18	2.16	2.15	2.15	2.16	2.16	2.17	2.16	2.15	2.15	2.21	2.18
Mar 10	2.16	2.16	2.16	2.17	2.18	2.18	2.18	2.18	S	2.18	2.17	2.18	2.18	2.18	2.17	2.16	C	C	C	C	2.24	2.30	2.32	2.31	2.16	2.32	2.20
Mar 11	2.31	2.29	2.26	2.26	2.24	2.23	2.24	S	2.22	2.22	NRM	NRM	2.20	2.21	2.20	2.19	2.19	2.18	2.18	2.18	2.19	2.17	2.15	2.14	2.14	2.31	2.21
Mar 12	2.13	2.15	2.19	2.19	2.19	2.19	S	2.19	2.18	2.18	2.19	2.20	2.20	2.20	2.20	2.20	2.20	2.21	2.21	2.22	2.22	2.23	2.22	2.22	2.13	2.23	2.20
Mar 13	2.22	2.22	2.23	2.24	2.24	S	2.23	2.23	2.23	2.23	2.23	2.23	2.24	2.24	2.24	2.24	2.24	2.23	2.24	2.24	2.24	2.23	2.24	2.24	2.22	2.24	2.23
Mar 14	2.23	2.24	2.24	2.23	S	2.23	2.23	2.22	2.24	2.23	2.22	2.22	2.24	2.23	2.23	2.22	2.21	2.21	2.22	2.23	2.22	2.22	2.23	2.29	2.21	2.29	2.23
Mar 15	2.33	2.35	2.33	S	2.32	2.34	2.37	2.33	2.30	2.30	2.31	2.30	2.33	2.32	2.17	2.19	2.20	2.20	2.20	2.19	2.18	2.16	2.16	2.16	2.16	2.37	2.26
Mar 16	2.17	2.17	S	2.17	2.16	2.17	2.19	2.19	2.19	2.18	2.18	2.19	2.18	2.19	2.19	2.17	2.18	2.19	2.19	2.18	2.18	2.18	2.19	2.19	2.16	2.19	2.18
Mar 17	2.18	S	2.19	2.19	2.19	2.19	2.19	2.20	2.20	2.20	2.19	2.19	2.18	2.17	2.16	2.16	2.16	2.17	2.16	2.17	2.16	2.16	2.17	2.17	2.16	2.20	2.18
Mar 18	S	2.18	2.19	2.19	2.20	2.20	2.20	2.20	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.18	2.18	2.18	2.18	2.17	2.18	2.18	2.19	S	2.17	2.20	2.19
Mar 19	2.23	2.24	2.24	2.26	2.25	2.28	2.29	2.31	2.29	2.25	2.19	2.19	2.20	2.18	2.17	2.17	2.17	2.17	2.17	2.17	2.18	2.18	S	2.19	2.17	2.31	2.22
Mar 20	2.20	2.23	2.24	2.19	2.17	2.17	2.17	2.17	2.18	2.19	2.19	2.19	2.18	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	S	2.19	2.19	2.17	2.24	2.19
Mar 21	2.22	2.22	2.22	2.20	2.20	2.19	2.20	2.21	2.21	2.22	2.21	2.22	2.22	2.21	2.20	2.20	2.20	2.21	2.21	2.20	S	2.22	2.21	2.22	2.19	2.22	2.21
Mar 22	2.24	2.21	2.22	2.22	2.22	2.22	2.21	2.22	2.22	2.21	2.21	2.20	2.19	2.19	2.18	2.17	NRM	NRM	2.19	S	2.19	2.16	2.14	2.14	2.14	2.24	2.20
Mar 23	2.15	2.15	2.15	2.14	2.15	2.16	2.17	2.17	2.16	2.15	2.14	2.13	2.14	2.14	2.15	2.16	2.16	2.17	S	2.19	2.19	2.19	2.20	2.20	2.13	2.20	2.16
Mar 24	2.20	2.20	2.21	2.24	2.23	2.23	2.22	2.22	2.22	2.21	2.21	2.21	2.22	2.22	2.22	2.23	2.24	S	2.23	2.23	2.24	2.24	2.24	2.24	2.20	2.24	2.22
Mar 25	2.24	2.25	2.25	2.25	2.25	2.24	2.24	2.24	2.25	2.25	2.26	2.25	2.25	2.24	2.26	2.25	S	2.26	2.25	2.25	2.24	2.24	2.24	2.23	2.23	2.26	2.25
Mar 26	2.24	2.24	2.24	2.26	2.25	2.26	2.25	2.26	2.26	2.24	2.25	2.24	2.23	2.24	2.25	S	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.25	2.23	2.26	2.25
Mar 27	2.27	2.26	2.27	2.26	2.28	2.29	2.28	2.28	2.28	2.26	2.24	2.24	2.25	2.23	S	2.22	2.21	2.21	2.21	2.21	2.22	2.22	2.24	2.25	2.21	2.29	2.25
Mar 28	2.26	2.26	2.25	2.27	2.26	2.28	2.28	2.27	2.27	2.23	2.22	2.20	2.21	S	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.21	2.22	2.29	2.20	2.29	2.23
Mar 29	2.36	2.27	2.23	2.27	2.30	2.30	2.30	2.31	2.26	2.23	2.21	2.21	S	2.20	2.18	2.18	2.18	2.17	2.17	2.17	2.17	2.17	2.18	2.19	2.17	2.36	2.23
Mar 30	2.21	2.22	2.21	2.22	2.22	2.22	2.22	2.21	2.19	2.20	2.21	S	2.17	2.17	2.17	2.17	2.18	2.16	2.16	2.15	2.16	2.17	2.17	2.17	2.15	2.22	2.19
Mar 31	2.17	2.17	2.18	2.18	2.19	2.18	2.19	2.18	2.18	2.18	S	2.19	2.19	2.19	2.18	2.19	2.19	2.19	2.18	2.18	2.18	2.19	2.19	2.19	2.17	2.19	2.18
Diurnal Maximum	2.36	2.53	2.50	2.50	2.44	2.40	2.37	2.33	2.30	2.30	2.31	2.30	2.33	2.32	2.26	2.25	2.24	2.26	2.25	2.25	2.24	2.30	2.32	2.31			
Diurnal Average	2.22	2.23	2.23	2.23	2.23	2.23	2.22	2.22	2.22	2.21	2.21	2.21	2.21	2.20	2.20	2.19	2.20	2.20	2.20	2.20	2.20	2.20	2.21	2.21			

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

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

Timeseries Chart of Hourly Average for CH4 - 986c Station

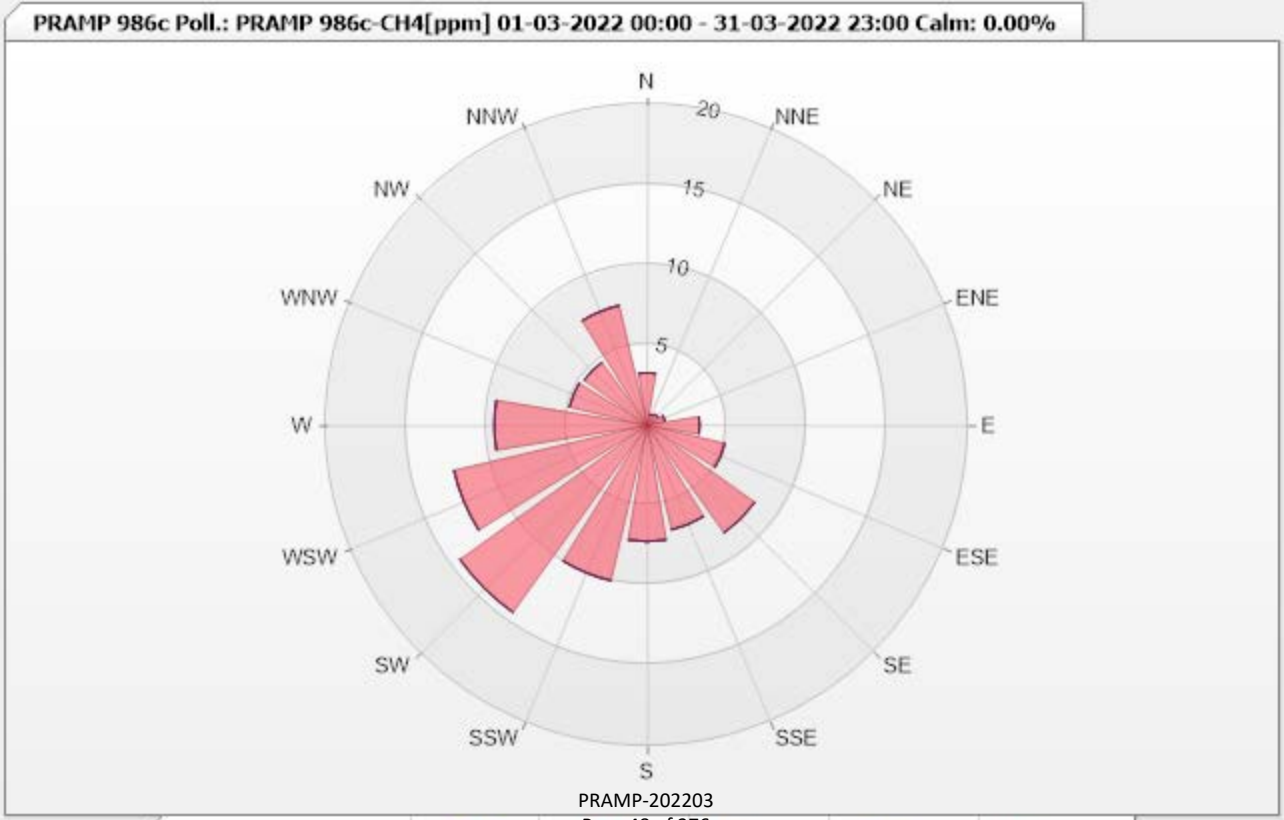




Classes	CH4
<=1.7	0.00%
1.7 - 2	0.00%
2 - 2.5	99.57%
2.5 - 3	0.43%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: PRAMP 986c Poll.: PRAMP 986c-CH4[ppm] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 94.62% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	0	3.27	0	0	0	3.27
NNE	0	0.71	0	0	0	0.71
NE	0	0.85	0	0	0	0.85
ENE	0	1.14	0	0	0	1.14
E	0	3.27	0	0	0	3.27
ESE	0	4.97	0	0	0	4.97
SE	0	8.24	0	0	0	8.24
SSE	0	6.68	0	0	0	6.68
S	0	7.24	0	0	0	7.24
SSW	0	9.94	0	0	0	9.94
SW	0	14.35	0	0	0	14.35
WSW	0	12.36	0	0	0	12.36
W	0	9.52	0	0	0	9.52
WNW	0	4.97	0	0	0	4.97
NW	0	4.83	0	0	0	4.83
NNW	0	7.67	0	0	0	7.67
Summary	0	100	0	0	0	100


PRAMP 986c Poll.: PRAMP 986c-CH4[ppm] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppm)
0 0-2
100 2-5
0 5-10
0 10-20
0 >20.0

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PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2022

Summary of Hourly Averages

NON-METHANE HYDROCARBONS (NMHC) in ppm

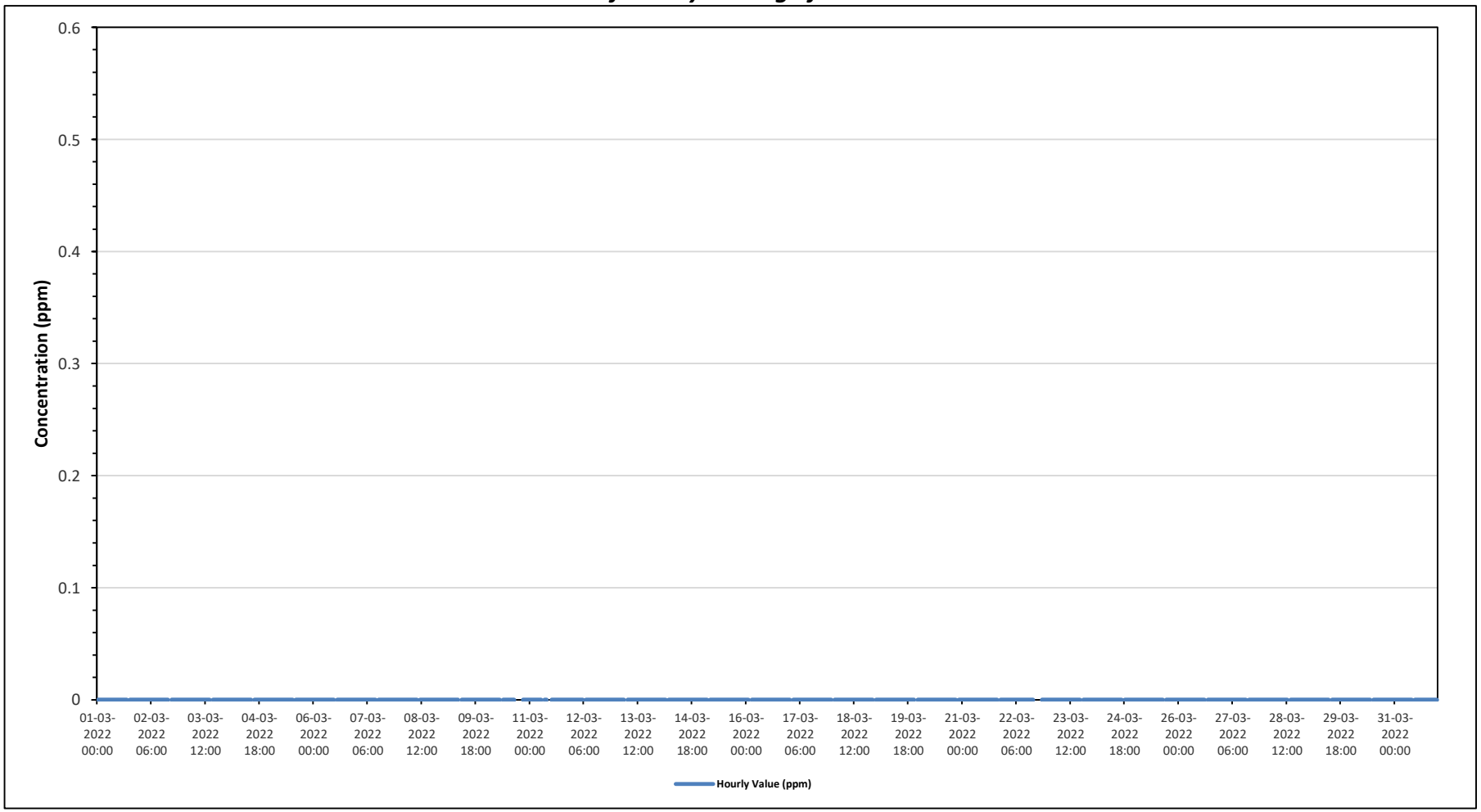
Maximum Hourly Value:	0.00	ppm	on March 1 at hour 0	Hours in Service:	744
Maximum Daily Value:	0.00	ppm	on March 1	Hours of Data:	704
Minimum Hourly Value:	0.00	ppm	on March 1 at hour 0	Hours of Missing Data:	4
Minimum Daily Value:	0.00	ppm	on March 1	Hours of Calibration:	36
Monthly Average:	0.00	ppm		Operational Uptime:	99.5

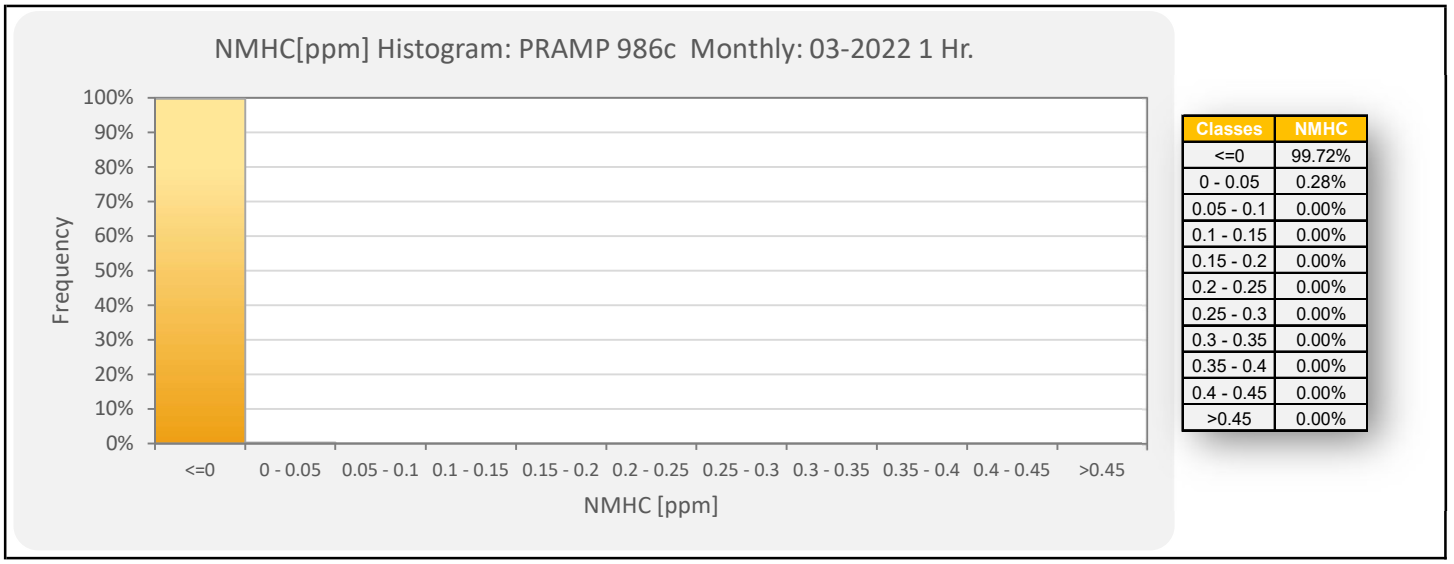
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00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

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

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

Timeseries Chart of Hourly Average for NMHC - 986c Station

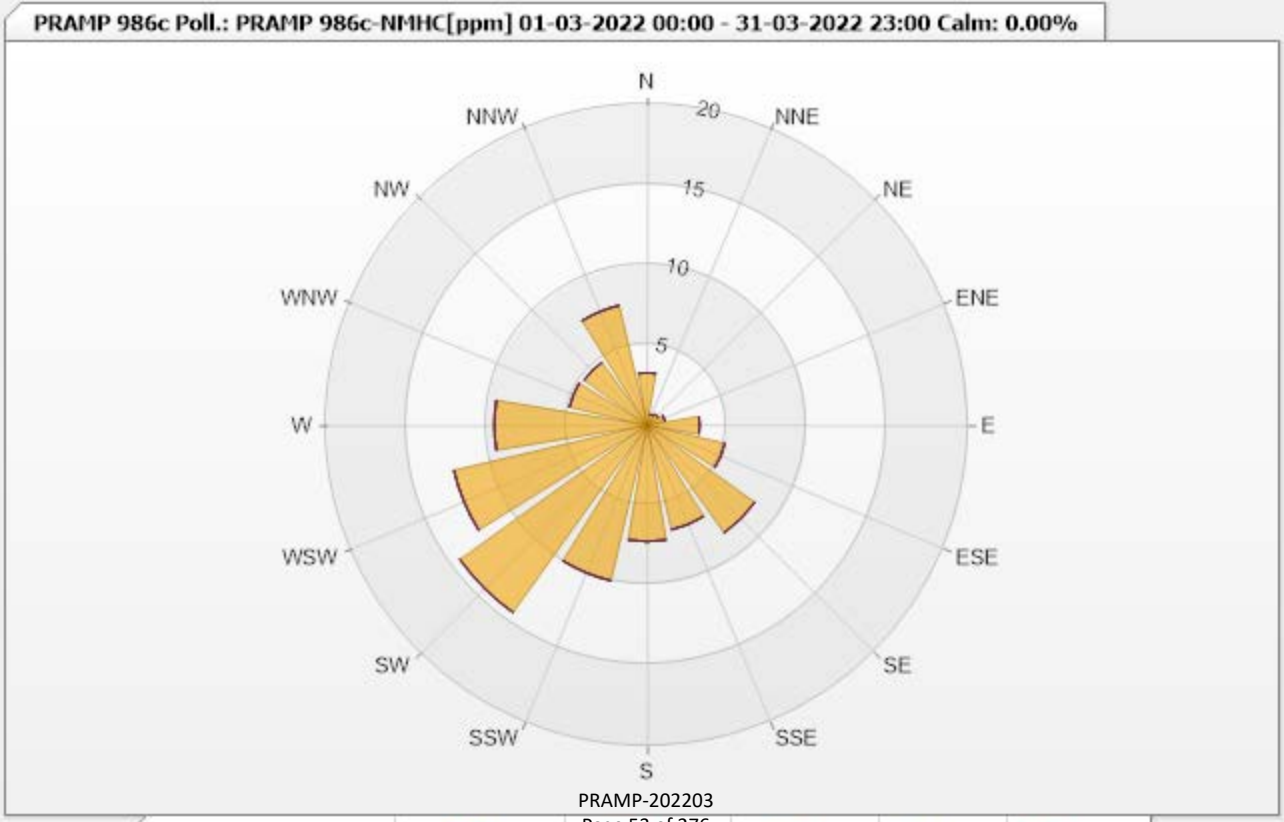




Classes	NMHC
<=0	99.72%
0 - 0.05	0.28%
0.05 - 0.1	0.00%
0.1 - 0.15	0.00%
0.15 - 0.2	0.00%
0.2 - 0.25	0.00%
0.25 - 0.3	0.00%
0.3 - 0.35	0.00%
0.35 - 0.4	0.00%
0.4 - 0.45	0.00%
>0.45	0.00%

Wind: PRAMP 986c Poll.: PRAMP 986c-NMHC[ppm] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 94.62% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	3.27	0	0	0	0	3.27
NNE	0.71	0	0	0	0	0.71
NE	0.85	0	0	0	0	0.85
ENE	1.14	0	0	0	0	1.14
E	3.27	0	0	0	0	3.27
ESE	4.97	0	0	0	0	4.97
SE	8.24	0	0	0	0	8.24
SSE	6.68	0	0	0	0	6.68
S	7.24	0	0	0	0	7.24
SSW	9.94	0	0	0	0	9.94
SW	14.35	0	0	0	0	14.35
WSW	12.36	0	0	0	0	12.36
W	9.52	0	0	0	0	9.52
WNW	4.97	0	0	0	0	4.97
NW	4.83	0	0	0	0	4.83
NNW	7.67	0	0	0	0	7.67
Summary	100	0	0	0	0	100


PRAMP 986c Poll.: PRAMP 986c-NMHC[ppm] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppm)
100 0-0.1
0 0.1-0.3
0 0.3-1
0 1-2
0 >2.0

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PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2022

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

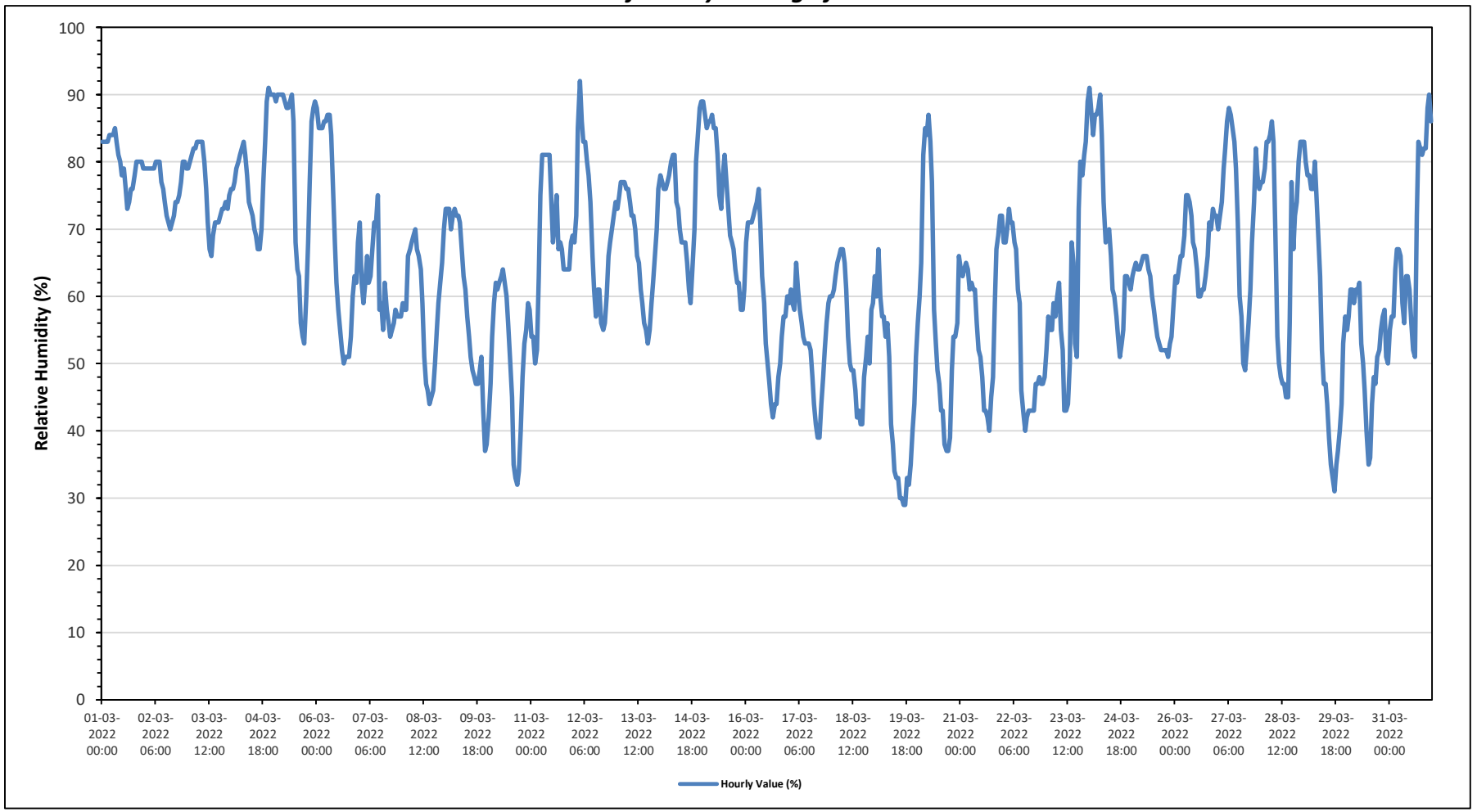
Maximum Hourly Value:	92	%	on March 12 at hour 3	Hours in Service:	744
Maximum Daily Value:	80.1	%	on March 1	Hours of Data:	744
Minimum Hourly Value:	29	%	on March 19 at hour 16	Hours of Missing Data:	0
Minimum Daily Value:	44.0	%	on March 19	Hours of Calibration:	0
Monthly Average:	64.5	%		Operational 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	83	83	83	83	84	84	84	85	83	81	80	78	79	76	73	74	76	76	78	80	80	80	80	79	73	85	**80.1**
Mar 2	79	79	79	79	79	79	80	80	80	77	76	74	72	71	70	71	72	74	74	75	77	80	80	79	70	80	76.5
Mar 3	79	80	81	82	82	83	83	83	83	80	76	71	67	66	69	71	71	71	72	73	73	74	73	75	66	83	75.8
Mar 4	76	76	77	79	80	81	82	83	81	78	74	73	72	70	69	67	67	70	77	83	89	91	90	90	67	91	78.1
Mar 5	90	89	90	90	90	90	89	88	88	89	90	86	68	64	63	56	54	53	60	68	77	86	88	89	53	90	79.0
Mar 6	88	85	85	85	86	86	87	87	84	76	68	62	58	55	52	50	51	51	51	54	60	63	62	68	50	88	68.9
Mar 7	71	62	59	62	66	62	63	67	71	71	75	58	59	55	62	58	56	54	55	56	58	57	57	57	54	75	61.3
Mar 8	59	58	58	66	67	68	69	70	67	66	64	59	51	47	46	44	45	46	50	55	59	62	65	70	44	70	58.8
Mar 9	73	73	73	70	72	73	72	72	71	67	63	61	57	54	51	49	48	47	47	49	51	43	37	38	37	73	58.8
Mar 10	42	47	54	59	62	61	62	63	64	62	60	56	51	45	35	33	32	34	40	48	53	55	59	58	32	64	51.5
Mar 11	54	54	50	52	63	75	81	81	81	81	81	75	68	71	75	67	68	67	64	64	64	64	68	69	50	81	68.2
Mar 12	68	72	85	**92**	86	83	83	80	78	74	66	61	57	61	61	56	55	56	60	66	68	70	72	74	55	**92**	70.2
Mar 13	73	75	77	77	77	76	76	74	72	72	70	66	65	61	59	56	55	53	55	59	62	66	70	76	53	77	67.6
Mar 14	78	77	76	76	77	78	80	81	81	74	73	70	68	68	68	65	61	59	64	70	80	84	88	89	59	89	74.4
Mar 15	89	87	85	86	86	87	85	85	81	75	73	78	81	77	73	69	68	67	64	62	62	58	58	61	58	89	74.9
Mar 16	68	71	71	71	72	73	74	76	71	63	59	53	50	47	44	42	44	44	48	50	54	57	57	60	42	76	59.1
Mar 17	59	61	59	58	65	61	58	56	54	53	53	53	52	48	44	41	39	39	44	48	52	56	59	60	39	65	53.0
Mar 18	60	61	63	65	66	67	67	65	61	54	50	49	49	46	42	43	41	41	48	51	54	50	58	59	41	67	54.6
Mar 19	63	60	67	60	57	57	54	56	51	41	38	34	33	33	30	30	**29**	**29**	33	32	35	40	44	51	**29**	67	44.0
Mar 20	56	60	65	81	85	84	87	83	77	58	53	49	47	43	43	38	37	37	39	49	54	54	56	66	37	87	58.4
Mar 21	64	63	64	65	64	61	62	61	61	56	52	51	48	43	43	42	40	45	48	59	67	69	72	72	40	72	57.2
Mar 22	68	68	70	73	71	71	68	67	61	59	46	43	40	42	43	43	43	43	47	47	48	47	47	48	40	73	54.3
Mar 23	52	57	55	55	59	57	60	62	55	52	43	43	44	50	68	65	53	51	73	80	78	81	83	89	43	89	61.0
Mar 24	91	88	84	87	87	88	90	84	74	68	69	70	66	61	60	57	54	51	53	55	63	63	62	61	51	91	70.3
Mar 25	63	64	65	64	64	65	66	66	66	64	63	60	58	56	54	53	52	52	52	52	51	53	54	59	51	66	59.0
Mar 26	63	62	64	66	66	69	75	75	74	72	68	67	64	60	60	61	61	63	66	71	70	73	72	72	60	75	67.3
Mar 27	70	72	74	79	82	86	88	87	85	83	79	71	60	57	50	49	52	56	61	68	74	82	78	76	49	88	71.6
Mar 28	77	77	79	83	83	84	86	83	70	54	50	48	47	47	45	45	56	77	67	72	74	80	83	83	45	86	68.8
Mar 29	83	80	78	78	76	76	80	75	69	63	52	47	47	44	39	35	33	31	35	37	40	44	53	57	31	83	56.3
Mar 30	55	57	61	61	59	61	61	62	53	50	46	40	35	36	44	48	47	51	52	55	57	58	51	50	35	62	52.1
Mar 31	55	57	57	64	67	67	66	59	56	63	63	61	56	52	51	72	83	82	81	82	82	88	90	86	51	90	68.3
Diurnal Maximum	91	89	90	92	90	90	90	88	88	89	90	86	81	77	75	74	83	82	81	83	89	91	90	90			
Diurnal Average	69.3	69.5	70.6	72.5	73.5	74.0	74.8	74.1	71.1	67.0	63.6	60.2	57.1	55.0	54.4	53.2	53.0	53.9	56.7	60.3	63.4	65.4	66.6	68.4			

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

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

Timeseries Chart of Hourly Average for RH - 986c Station



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PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2022

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

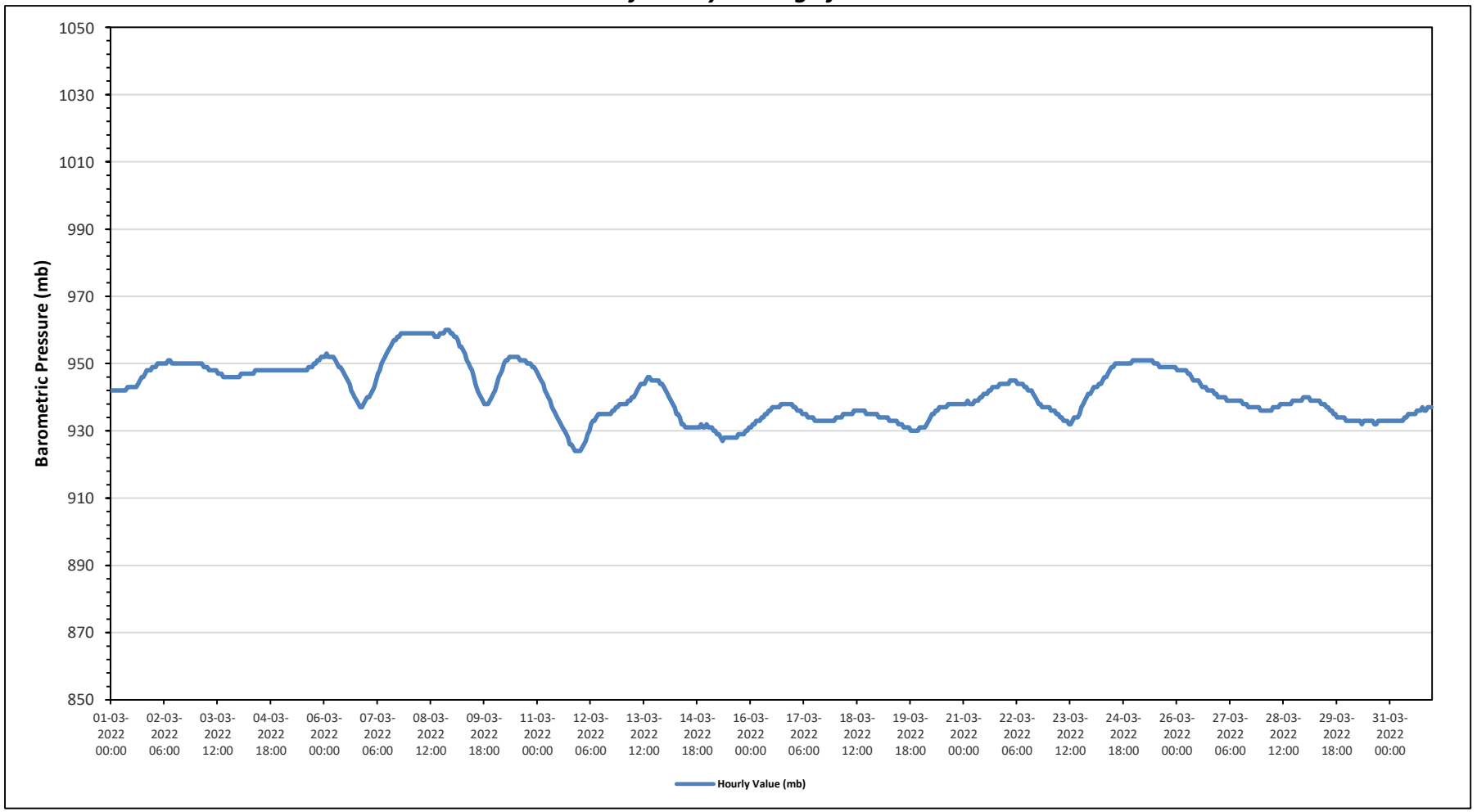
Maximum Hourly Value:	960	mb	on March 8 at hour 20	Hours in Service:	744
Maximum Daily Value:	959	mb	on March 8	Hours of Data:	744
Minimum Hourly Value:	924	mb	on March 11 at hour 21	Hours of Missing Data:	0
Minimum Daily Value:	929	mb	on March 15	Hours of Calibration:	0
Monthly Average:	941	mb		Operational 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	942	942	942	942	942	942	942	942	942	943	943	943	943	943	943	944	945	946	946	947	948	948	948	949	942	949	944.0
Mar 2	949	949	950	950	950	950	950	950	951	951	950	950	950	950	950	950	950	950	950	950	950	950	950	950	949	951	950.0
Mar 3	950	950	950	950	949	949	949	948	948	948	948	948	947	947	947	946	946	946	946	946	946	946	946	946	946	950	947.6
Mar 4	946	947	947	947	947	947	947	947	947	948	948	948	948	948	948	948	948	948	948	948	948	948	948	948	946	948	947.6
Mar 5	948	948	948	948	948	948	948	948	948	948	948	948	948	948	948	949	949	949	950	950	951	951	952	952	948	952	948.9
Mar 6	952	953	952	952	952	952	951	950	949	949	948	947	946	945	944	942	941	940	939	938	937	937	938	939	937	953	945.5
Mar 7	940	940	941	942	943	945	947	948	950	951	952	953	954	955	956	957	957	958	958	959	959	959	959	959	940	959	951.8
Mar 8	959	959	959	959	959	959	959	959	959	959	959	959	959	959	958	958	958	959	959	959	**960**	**960**	**960**	959	958	**960**	**959.0**
Mar 9	959	958	958	957	955	955	954	953	951	950	949	948	946	944	942	941	940	939	938	938	938	939	940	941	938	959	947.2
Mar 10	942	944	946	947	948	950	951	951	952	952	952	952	952	952	951	951	951	951	950	950	950	949	949	948	942	952	949.6
Mar 11	947	946	945	944	942	941	940	939	937	936	935	934	933	932	931	930	929	928	926	926	925	**924**	**924**	**924**	**924**	947	934.1
Mar 12	**924**	925	926	927	929	930	932	933	933	934	935	935	935	935	935	935	935	935	936	936	937	937	938	938	**924**	938	933.1
Mar 13	938	938	938	939	939	940	940	941	942	943	944	944	944	945	946	946	945	945	945	945	945	944	944	943	938	946	942.6
Mar 14	942	941	940	939	938	937	935	935	934	932	932	931	931	931	931	931	931	931	931	931	932	931	931	932	931	942	933.8
Mar 15	931	931	931	930	930	929	929	928	927	928	928	928	928	928	928	928	928	929	929	929	929	930	930	931	927	931	929.0
Mar 16	931	932	932	933	933	933	934	934	935	935	936	936	937	937	937	937	937	938	938	938	938	938	938	938	931	938	935.6
Mar 17	937	937	936	936	936	935	935	935	934	934	934	934	933	933	933	933	933	933	933	933	933	933	933	933	933	937	934.1
Mar 18	934	934	934	934	935	935	935	935	935	935	936	936	936	936	936	936	936	935	935	935	935	935	935	935	934	936	935.1
Mar 19	934	934	934	934	934	934	933	933	933	933	933	932	932	932	931	931	931	931	930	930	930	930	930	931	930	934	932.1
Mar 20	931	931	931	932	933	934	935	935	936	936	937	937	937	937	937	938	938	938	938	938	938	938	938	938	931	938	935.9
Mar 21	938	938	939	938	938	938	939	939	939	940	940	941	941	941	942	942	943	943	943	943	944	944	944	944	938	944	940.9
Mar 22	944	944	945	945	945	945	944	944	944	944	943	943	942	942	942	941	940	939	938	938	937	937	937	937	937	945	941.7
Mar 23	937	936	936	936	935	935	934	934	933	933	933	932	932	933	934	934	934	935	937	938	939	940	941	941	932	941	935.5
Mar 24	942	943	943	943	944	944	945	946	946	947	948	949	949	950	950	950	950	950	950	950	950	950	950	951	942	951	947.5
Mar 25	951	951	951	951	951	951	951	951	951	951	951	950	950	950	949	949	949	949	949	949	949	949	949	949	949	951	950.0
Mar 26	948	948	948	948	948	948	947	947	946	945	945	945	945	944	943	943	943	942	942	942	942	941	941	940	940	948	944.6
Mar 27	940	940	940	940	939	939	939	939	939	939	939	939	939	938	938	938	937	937	937	937	937	937	937	936	936	940	938.3
Mar 28	936	936	936	936	936	936	937	937	937	937	938	938	938	938	938	938	938	939	939	939	939	939	939	940	936	940	937.7
Mar 29	940	940	940	939	939	939	939	939	939	938	938	938	937	937	936	936	935	935	934	934	934	934	934	933	933	940	937.0
Mar 30	933	933	933	933	933	933	933	933	932	933	933	933	933	933	933	932	932	933	933	933	933	933	933	933	932	933	932.9
Mar 31	933	933	933	933	933	933	933	933	934	934	935	935	935	935	935	936	936	936	937	936	936	937	937	937	933	937	934.8
Diurnal Maximum	959	959	959	959	959	959	959	959	959	959	959	959	959	959	958	958	958	959	959	959	960	960	960	959			
Diurnal Average	941	941	941	941	941	941	942	941	941	941	942	941	941	941	941	941	941	941	941	941	941	941	941	941			

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

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

Timeseries Chart of Hourly Average for BP - 986c Station



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PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2022

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

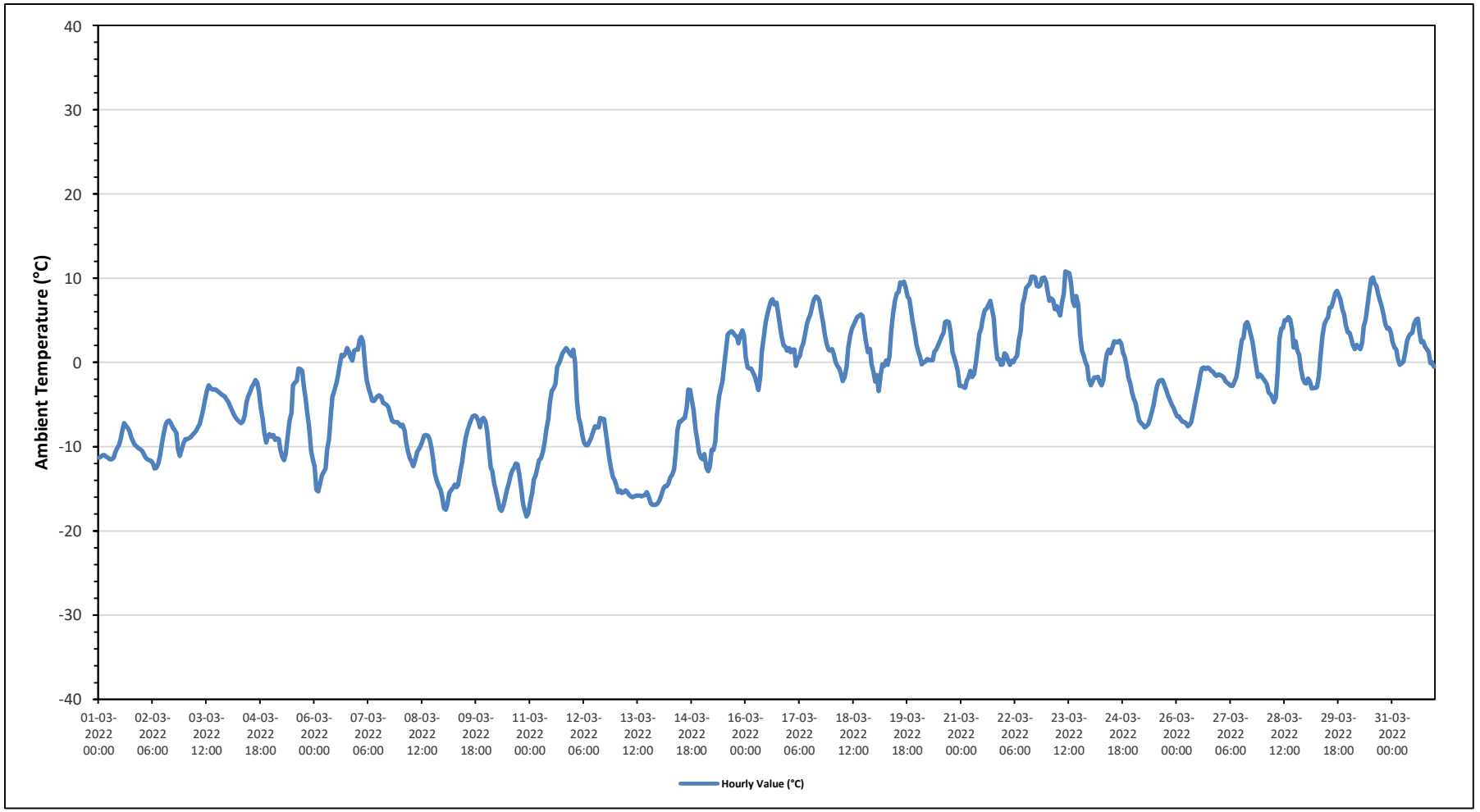
Maximum Hourly Value:	10.8	°C	on March 23 at hour 10	Hours in Service:	744
Maximum Daily Value:	6.0	°C	on March 23	Hours of Data:	744
Minimum Hourly Value:	-18.3	°C	on March 10 at hour 22	Hours of Missing Data:	0
Minimum Daily Value:	-15.9	°C	on March 13	Hours of Calibration:	0
Monthly Average:	-3.2	°C		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	-11.3	-11.2	-11	-11	-11.2	-11.3	-11.5	-11.5	-11.3	-10.7	-10.2	-9.8	-9.2	-8.1	-7.2	-7.5	-7.8	-8.2	-8.9	-9.4	-9.8	-10	-10.2	-10.3	-11.5	-7.2	-9.9
Mar 2	-10.5	-10.9	-11.3	-11.5	-11.6	-11.7	-12	-12.6	-12.5	-12	-11	-9.6	-8.4	-7.4	-7	-6.9	-7.2	-7.7	-8	-8.4	-10.3	-11.1	-10.3	-9.6	-12.6	-6.9	-10.0
Mar 3	-9.1	-9.1	-9	-8.9	-8.6	-8.4	-8.1	-7.7	-7.3	-6.5	-5.6	-4.4	-3.4	-2.7	-3	-3.2	-3.2	-3.2	-3.4	-3.6	-3.8	-3.9	-4	-4.4	-9.1	-2.7	-5.6
Mar 4	-4.7	-5.2	-5.7	-6.2	-6.5	-6.8	-7	-7.2	-7	-6.3	-4.9	-4	-3.6	-2.9	-2.6	-2.1	-2.4	-3.4	-5.3	-6.6	-8.4	-9.5	-8.7	-8.5	-9.5	-2.1	-5.6
Mar 5	-8.8	-8.6	-9.2	-9	-9.1	-10.4	-11.2	-11.6	-10.9	-8.7	-6.9	-6	-2.7	-2.4	-2.2	-0.7	-0.8	-1	-2.8	-4.3	-6.2	-7.6	-10.5	-11.6	-11.6	-0.7	-6.8
Mar 6	-12.3	-15.1	-15.3	-14.4	-13.4	-13	-12.6	-10.3	-9.1	-6.2	-4.1	-3.3	-2.5	-1.6	-0.3	0.9	0.7	1	1.7	1.3	0.6	0.2	1.4	1.5	-15.3	1.7	-5.2
Mar 7	1.5	2.7	3	2.4	-0.2	-2	-3.1	-3.8	-4.5	-4.6	-4.3	-4	-3.9	-4.1	-4.8	-4.9	-5	-5.3	-6	-6.9	-7.1	-7.1	-7.1	-7.3	-7.3	3.0	-3.6
Mar 8	-7.6	-7.4	-8.1	-9.5	-10.6	-11.4	-11.8	-12.3	-11.5	-10.6	-10.3	-9.9	-9.3	-8.7	-8.6	-8.7	-9.1	-10.1	-11.6	-13.2	-14	-14.7	-15.1	-16	-16.0	-7.4	-10.8
Mar 9	-17.3	-17.5	-16.8	-15.5	-15.1	-14.9	-14.5	-14.8	-14.5	-13.1	-11.8	-10.4	-9	-8.1	-7.5	-6.9	-6.4	-6.3	-6.4	-6.9	-7.7	-6.8	-6.6	-7	-17.5	-6.3	-10.9
Mar 10	-8.1	-10.4	-12.5	-12.9	-14.4	-15.3	-16.3	-17.4	-17.6	-17	-16.2	-15.2	-14.3	-13.5	-12.8	-12.5	-12	-12.1	-13.4	-15	-16.8	-17.6	**-18.3**	-17.9	**-18.3**	-8.1	-14.6
Mar 11	-16.6	-15.4	-13.9	-13.4	-12.4	-11.6	-11.4	-10.7	-9.5	-7.9	-6.7	-4.8	-3.4	-3.1	-2.6	-0.5	-0.1	0.4	1.1	1.4	1.7	1.4	1	0.8	-16.6	1.7	-5.7
Mar 12	1.5	0	-4.5	-6.6	-7.4	-8.7	-9.5	-9.8	-9.8	-9.4	-8.9	-8.2	-7.6	-7.7	-7.7	-6.6	-6.7	-6.7	-8.3	-9.7	-11.3	-12.6	-13.6	-14	-14.0	1.5	-8.1
Mar 13	-14.7	-15.4	-15.2	-15.5	-15.4	-15.2	-15.4	-15.7	-15.9	-16	-15.9	-15.8	-15.8	-15.8	-15.9	-15.8	-15.7	-15.4	-16	-16.7	-16.9	-16.9	-16.9	-16.7	-16.9	-14.7	-15.9
Mar 14	-16.3	-15.7	-15	-14.7	-14.7	-14.3	-13.7	-13.3	-12.7	-10.8	-8	-7	-7	-6.7	-6.6	-5.4	-3.2	-3.3	-4.6	-5.6	-8	-9.4	-10.7	-11.3	-16.3	-3.2	-9.9
Mar 15	-11.5	-10.9	-12.5	-12.9	-12.4	-10.4	-10.4	-9.4	-6.3	-4.1	-3.1	-2.3	-0.3	1.6	3.3	3.6	3.7	3.5	3.2	3.1	2.3	3.2	3.8	3.2	-12.9	3.8	-3.0
Mar 16	0.6	-0.6	-0.7	-0.7	-1.2	-1.7	-2.4	-3.3	-1.7	1.3	2.9	4.8	5.7	6.6	7.3	7.5	6.9	7.1	5.7	4.4	3	2	1.9	1.4	-3.3	7.5	2.4
Mar 17	1.7	1.2	1.5	1.5	-0.4	0.4	0.8	1.7	2.3	3.4	4.6	5.2	5.7	6.8	7.5	7.8	7.7	7.3	6	4.6	3.3	2.2	1.5	1.4	-0.4	7.8	3.6
Mar 18	1.6	1	0	-0.4	-0.7	-1.4	-2.2	-1.8	-0.5	1.7	3.1	4	4.4	4.9	5.4	5.5	5.7	5.5	3.9	2.4	1.2	1.6	-0.2	-1.1	-2.2	5.7	1.8
Mar 19	-2.3	-1.5	-3.4	-1.6	-0.2	-0.4	0.2	-0.3	0.7	3.8	5.8	7.3	8.2	8.4	9.5	9.3	9.6	8.9	7.8	7.5	6.2	4.7	3.6	2.1	-3.4	9.6	3.9
Mar 20	1.3	0.6	-0.2	0	0.1	0.4	0.3	0.3	0.3	1.3	1.5	2	2.5	3.1	3.5	4.8	4.9	4.8	3.6	1.3	0.5	-0.1	-1	-2.8	-2.8	4.9	1.4
Mar 21	-2.8	-2.9	-3	-2.1	-1.8	-1	-1.7	-1.4	-0.1	1.7	3.4	4	5.3	6.2	6.4	6.8	7.3	6.4	5.3	2.3	0.4	0.4	-0.3	-0.2	-3.0	7.3	1.6
Mar 22	1.1	0.9	0.2	-0.3	0.2	0	0.5	0.8	2.5	3.8	6.9	7.7	8.8	9.1	9.3	10.2	10.2	10.1	9.1	9	9.2	10	10.1	9.6	-0.3	10.2	5.8
Mar 23	8.5	7.3	7.6	7.4	6.3	6.7	6	5.6	7.1	8.2	**10.8**	10.7	10.6	9.5	7.3	6.7	7.9	6.8	3.3	1.4	0.9	0.1	-0.4	-2	-2.0	**10.8**	**6.0**
Mar 24	-2.7	-2.2	-1.8	-1.8	-1.7	-2.3	-2.7	-2	-0.3	1	1.5	1.1	1.7	2.5	2.4	2.4	2.6	2.2	1.2	0.5	-0.6	-1.8	-2.5	-3.6	-3.6	2.6	-0.3
Mar 25	-4.3	-4.8	-6.1	-6.9	-7.2	-7.4	-7.7	-7.6	-7.3	-6.6	-5.9	-5	-3.7	-2.8	-2.2	-2.1	-2.1	-2.7	-3.3	-3.9	-4.4	-5	-5.4	-5.9	-7.7	-2.1	-5.0
Mar 26	-6.4	-6.4	-6.7	-7	-7.1	-7.2	-7.6	-7.4	-7.1	-6	-4.7	-3.7	-2.7	-1.4	-0.7	-0.6	-0.8	-0.6	-0.7	-1	-1.1	-1.4	-1.6	-1.4	-7.6	-0.6	-3.8
Mar 27	-1.5	-1.6	-1.8	-2.2	-2.4	-2.6	-2.8	-2.8	-2.3	-1.7	-0.6	1	2.7	2.9	4.5	4.8	4.3	3.4	2.5	1	-0.4	-1.7	-1.4	-1.6	-2.8	4.8	0.0
Mar 28	-1.9	-2.2	-2.6	-3.6	-3.8	-4.1	-4.7	-4.2	-1.2	2.8	4	4.1	5	5	5.4	5.1	3.9	1.8	2.5	1.4	0.9	-0.8	-1.9	-2.4	-4.7	5.4	0.4
Mar 29	-2.5	-1.9	-2.3	-3.1	-3	-3	-2.9	-1.6	1	3.2	4.5	5	5.4	6.5	6.6	7.3	8.2	8.5	8	7.5	6.4	5.7	4.4	3.6	-3.1	8.5	3.0
Mar 30	3.5	2.9	2	1.6	2.1	1.8	1.6	2.4	4.3	5.1	6.7	8.4	9.9	10.1	9.4	9.1	8.1	7.3	6.6	5.6	4.6	4	4.1	3.6	1.6	10.1	5.2
Mar 31	2.4	1.8	1.5	0.4	-0.3	-0.1	0.1	1.2	2.6	3.1	3.4	3.5	4.5	5.1	5.2	3.4	2.4	2.5	1.9	1.6	1.3	-0.1	0	-0.5	-0.5	5.2	2.0
Diurnal Maximum	8.5	7.3	7.6	7.4	6.3	6.7	6.0	5.6	7.1	8.2	10.8	10.7	10.6	10.1	9.5	10.2	10.2	10.1	9.1	9.0	9.2	10.0	10.1	9.6			
Diurnal Average	-4.8	-5.1	-5.6	-5.8	-5.9	-6.0	-6.2	-6.1	-5.2	-3.8	-2.6	-1.8	-0.9	-0.3	0.0	0.3	0.4	0.0	-0.8	-1.8	-2.7	-3.3	-3.7	-4.2			

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

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

Timeseries Chart of Hourly Average for AT - 986c Station



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PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2022

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

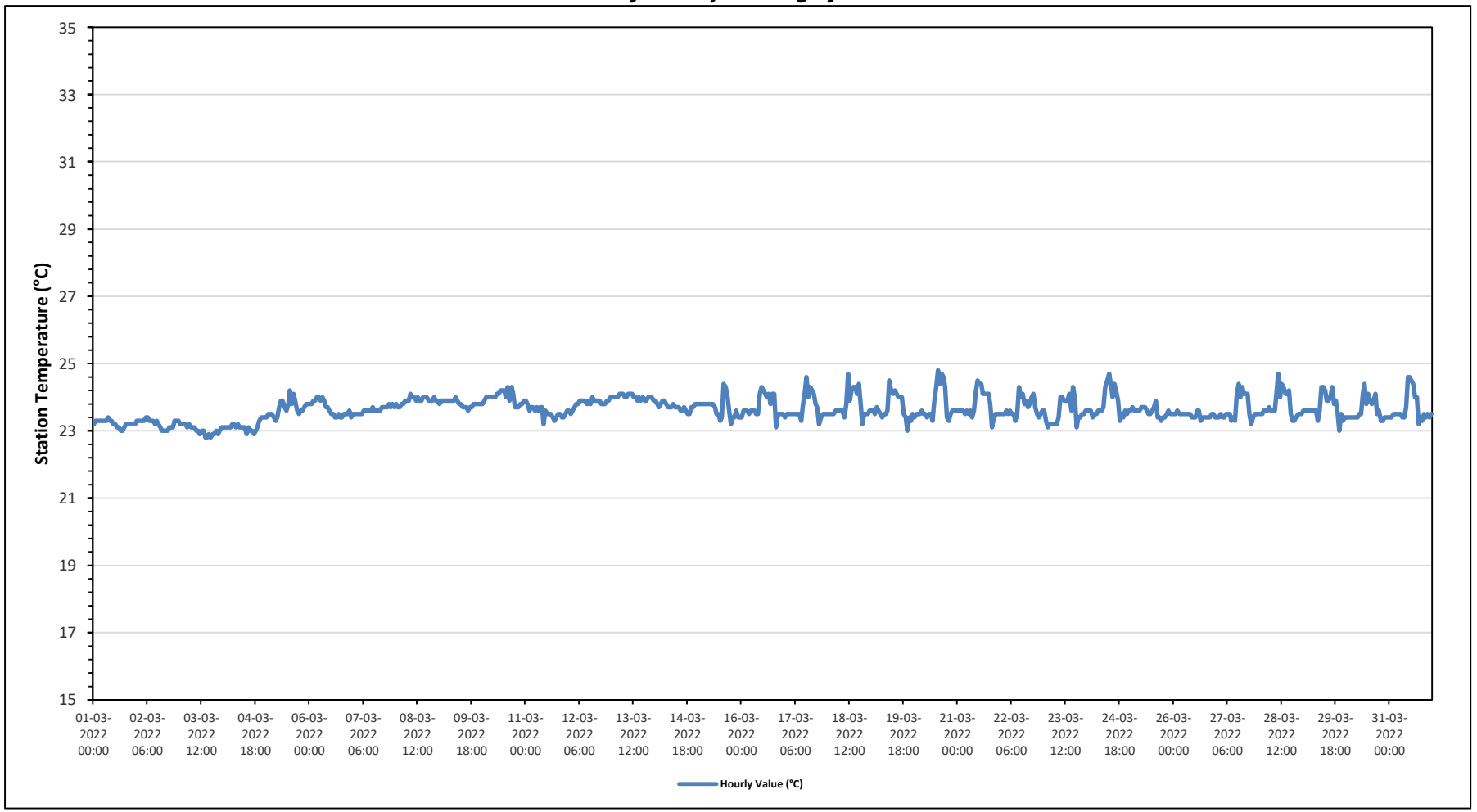
Maximum Hourly Value:	24.8	°C	on March 20 at hour 13	Hours in Service:	744
Maximum Daily Value:	24.0	°C	on March 13	Hours of Data:	744
Minimum Hourly Value:	22.8	°C	on March 3 at hour 14	Hours of Missing Data:	0
Minimum Daily Value:	23.0	°C	on March 3	Hours of Calibration:	0
Monthly Average:	23.6	°C		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	23.2	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.4	23.3	23.3	23.2	23.2	23.1	23.1	23.0	23.0	23.1	23.2	23.2	23.2	23.2	23.2	23.2	23.0	23.4	23.2
Mar 2	23.3	23.3	23.3	23.3	23.3	23.4	23.4	23.3	23.3	23.3	23.2	23.3	23.2	23.1	23.0	23.0	23.0	23.0	23.1	23.1	23.1	23.3	23.3	23.3	23.0	23.4	23.2
Mar 3	23.2	23.2	23.2	23.2	23.1	23.2	23.1	23.1	23.1	23.0	23.0	22.9	23.0	23.0	**22.8**	**22.8**	22.9	**22.8**	22.9	22.9	23.0	22.9	23.0	23.1	**22.8**	23.2	23.0
Mar 4	23.1	23.1	23.1	23.1	23.1	23.2	23.2	23.1	23.2	23.1	23.1	23.1	23.1	22.9	23.1	23.0	23.0	22.9	23.0	23.1	23.3	23.4	23.4	23.4	22.9	23.4	23.1
Mar 5	23.4	23.5	23.5	23.5	23.4	23.3	23.4	23.7	23.9	23.9	23.7	23.6	23.8	24.2	23.8	24.1	23.9	23.6	23.5	23.6	23.6	23.7	23.8	23.8	23.3	24.2	23.7
Mar 6	23.8	23.8	23.9	23.9	24.0	24.0	23.9	24.0	23.9	23.7	23.7	23.6	23.5	23.5	23.4	23.4	23.5	23.4	23.4	23.5	23.5	23.5	23.6	23.4	23.4	24.0	23.7
Mar 7	23.5	23.5	23.5	23.5	23.5	23.5	23.6	23.6	23.6	23.6	23.6	23.7	23.6	23.6	23.6	23.6	23.7	23.7	23.7	23.7	23.8	23.7	23.8	23.7	23.5	23.8	23.6
Mar 8	23.8	23.7	23.7	23.8	23.8	23.9	23.9	23.9	24.1	24.0	24.0	23.9	24.0	23.9	23.9	24.0	24.0	24.0	23.9	23.9	23.9	24.0	23.9	23.9	23.7	24.1	23.9
Mar 9	23.8	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	24.0	23.9	23.8	23.8	23.7	23.7	23.7	23.6	23.7	23.7	23.8	23.8	23.8	23.8	23.8	23.6	24.0	23.8
Mar 10	23.8	23.9	24.0	24.0	24.0	24.0	24.0	24.0	24.1	24.1	24.2	24.2	24.2	24.0	24.3	23.9	24.3	24.1	23.7	23.7	23.7	23.8	23.8	23.9	23.7	24.3	24.0
Mar 11	23.9	23.8	23.6	23.7	23.7	23.6	23.7	23.6	23.7	23.7	23.2	23.6	23.5	23.5	23.5	23.4	23.3	23.4	23.5	23.5	23.4	23.4	23.5	23.6	23.2	23.9	23.6
Mar 12	23.6	23.5	23.6	23.7	23.8	23.8	23.9	23.9	23.9	23.9	23.8	23.9	23.8	24.0	23.9	23.9	23.9	23.9	23.8	23.8	23.8	23.9	23.9	24.0	23.5	24.0	23.8
Mar 13	24.0	24.0	24.0	24.0	24.1	24.1	24.1	24.0	24.0	24.1	24.1	24.1	24.0	24.0	23.9	24.0	23.9	24.0	23.9	23.9	24.0	24.0	24.0	23.9	23.9	24.1	**24.0**
Mar 14	23.9	23.8	23.7	23.8	23.9	23.9	23.8	23.7	23.7	23.7	23.8	23.7	23.7	23.7	23.6	23.6	23.7	23.6	23.5	23.5	23.7	23.7	23.8	23.8	23.5	23.9	23.7
Mar 15	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.7	23.5	23.5	23.3	23.4	24.4	24.3	24.0	23.6	23.2	23.4	23.4	23.6	23.4	23.4	23.2	24.4	23.7
Mar 16	23.4	23.6	23.6	23.6	23.5	23.6	23.6	23.6	23.5	23.5	24.1	24.3	24.2	24.1	24.0	24.1	23.8	24.1	24.1	23.1	23.5	23.5	23.5	23.5	23.1	24.3	23.7
Mar 17	23.4	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.3	23.8	24.1	24.6	24.0	24.3	24.2	24.1	23.8	23.7	23.2	23.4	23.5	23.5	23.5	23.2	24.6	23.7
Mar 18	23.5	23.5	23.5	23.5	23.6	23.6	23.6	23.6	23.6	23.4	23.8	24.7	23.9	24.2	24.3	24.3	24.1	24.4	23.8	23.2	23.5	23.5	23.5	23.6	23.2	24.7	23.8
Mar 19	23.6	23.6	23.5	23.7	23.6	23.5	23.4	23.5	23.5	23.6	24.5	24.2	24.1	24.2	24.1	24.0	24.0	24.0	23.5	23.4	23.0	23.4	23.3	23.5	23.0	24.5	23.7
Mar 20	23.4	23.5	23.5	23.5	23.6	23.5	23.5	23.4	23.5	23.5	23.3	23.9	24.3	**24.8**	24.4	24.7	24.6	24.3	23.4	23.3	23.5	23.6	23.6	23.6	23.3	**24.8**	23.8
Mar 21	23.6	23.6	23.6	23.6	23.5	23.6	23.5	23.6	23.4	23.6	24.2	24.5	24.4	24.4	24.1	24.1	24.1	24.1	23.8	23.1	23.4	23.5	23.5	23.5	23.1	24.5	23.8
Mar 22	23.5	23.5	23.5	23.6	23.5	23.6	23.5	23.5	23.3	23.5	24.3	24.0	24.1	23.8	23.9	23.7	23.8	24.0	24.1	23.7	23.5	23.4	23.5	23.6	23.3	24.3	23.7
Mar 23	23.6	23.3	23.1	23.2	23.2	23.2	23.2	23.2	23.4	24.0	24.0	23.9	23.9	23.9	24.1	23.6	24.3	24.0	23.1	23.4	23.4	23.5	23.5	23.6	23.1	24.3	23.6
Mar 24	23.6	23.6	23.6	23.4	23.5	23.5	23.6	23.6	23.6	23.7	24.3	24.5	24.7	24.4	24.0	24.4	24.2	23.9	23.3	23.5	23.4	23.6	23.5	23.6	23.3	24.7	23.8
Mar 25	23.6	23.7	23.6	23.6	23.6	23.6	23.7	23.7	23.7	23.6	23.5	23.5	23.6	23.7	23.9	23.4	23.4	23.3	23.4	23.4	23.5	23.6	23.5	23.5	23.3	23.9	23.6
Mar 26	23.5	23.5	23.6	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.4	23.4	23.4	23.6	23.6	23.3	23.4	23.4	23.4	23.4	23.4	23.5	23.5	23.4	23.3	23.6	23.5
Mar 27	23.4	23.4	23.5	23.4	23.4	23.5	23.5	23.5	23.3	23.4	23.3	24.1	24.4	24.0	24.3	24.1	24.1	24.1	23.5	23.2	23.4	23.5	23.5	23.5	23.2	24.4	23.6
Mar 28	23.5	23.5	23.6	23.6	23.6	23.7	23.6	23.6	23.6	24.1	24.7	24.0	24.4	24.3	24.1	24.1	24.2	23.5	23.3	23.3	23.4	23.5	23.5	23.5	23.3	24.7	23.8
Mar 29	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.3	23.6	24.3	24.3	24.2	23.9	23.9	24.0	24.3	23.8	23.9	23.5	23.0	23.5	23.3	23.4	23.0	24.3	23.7
Mar 30	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.5	23.5	24.1	24.4	23.8	24.1	23.9	23.8	23.9	24.1	23.5	23.6	23.3	23.3	23.4	23.4	23.4	23.3	24.4	23.6
Mar 31	23.4	23.4	23.5	23.5	23.5	23.5	23.5	23.4	23.4	23.7	24.6	24.6	24.5	24.4	24.0	24.0	23.2	23.4	23.3	23.5	23.4	23.5	23.4	23.5	23.2	24.6	23.7
Diurnal Maximum	24.0	24.0	24.0	24.0	24.1	24.1	24.1	24.0	24.1	24.1	24.7	24.7	24.7	24.8	24.4	24.7	24.6	24.4	24.1	23.9	24.0	24.0	24.0	24.0			
Diurnal Average	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.7	23.8	23.9	23.9	23.8	23.8	23.8	23.8	23.7	23.5	23.4	23.5	23.5	23.5	23.6			

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

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

Timeseries Chart of Hourly Average for ST - 986c Station



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PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2022

Summary of Hourly Averages

PRECIPITATION in mm

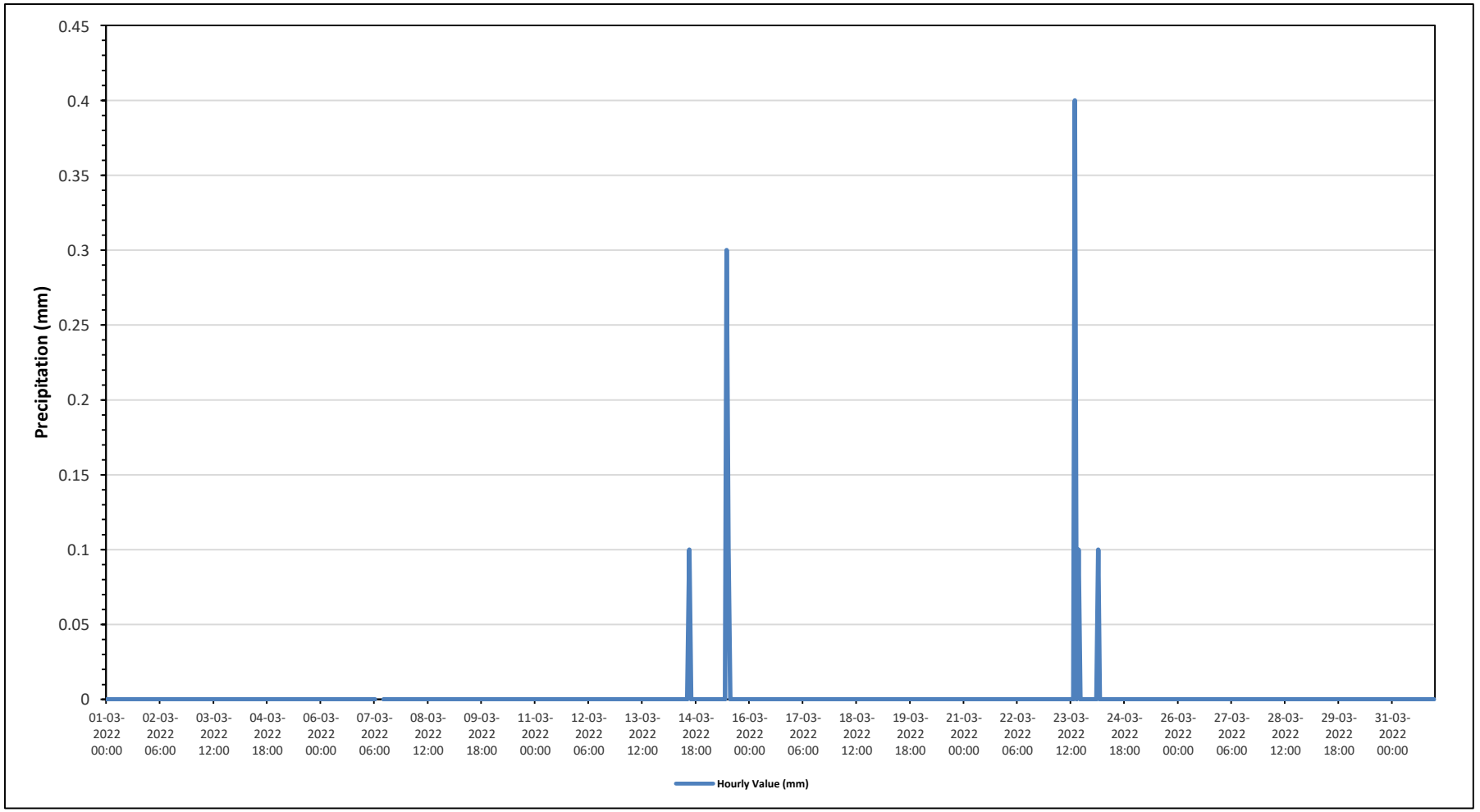
Maximum Hourly Value:	0.4	mm	on March 23 at hour 14	Hours in Service:	744
Maximum Daily Value:	0.5	mm	on March 23	Hours of Data:	740
Minimum Hourly Value:	0.0	mm	on March 1 at hour 0	Hours of Missing Data:	4
Minimum Daily Value:	0.0	mm	on March 1	Hours of Calibration:	0
Monthly Total:	1.1	mm		Operational Uptime:	99.5

Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Total
Mar 1	0	0	0	0	0	0	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 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	K	K	K	K	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	0.1	0	0	0	0	0	0	0	0	0	0.0	0.1	0.1
Mar 15	0	0	0	0	0	0	0	0	0	0	0	0.3	0.1	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3	0.4
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	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	0	0.0	0.0	0.0
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	**0.4**	0	0.1	0	0	0	0	0	0	0	0.0	**0.4**	**0.5**
Mar 24	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	0.1
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	0	0	0.0	0.0	0.0
Mar 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Diurnal Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

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

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

Timeseries Chart of Hourly Average for Precipitation - 986c Station



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PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2022

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

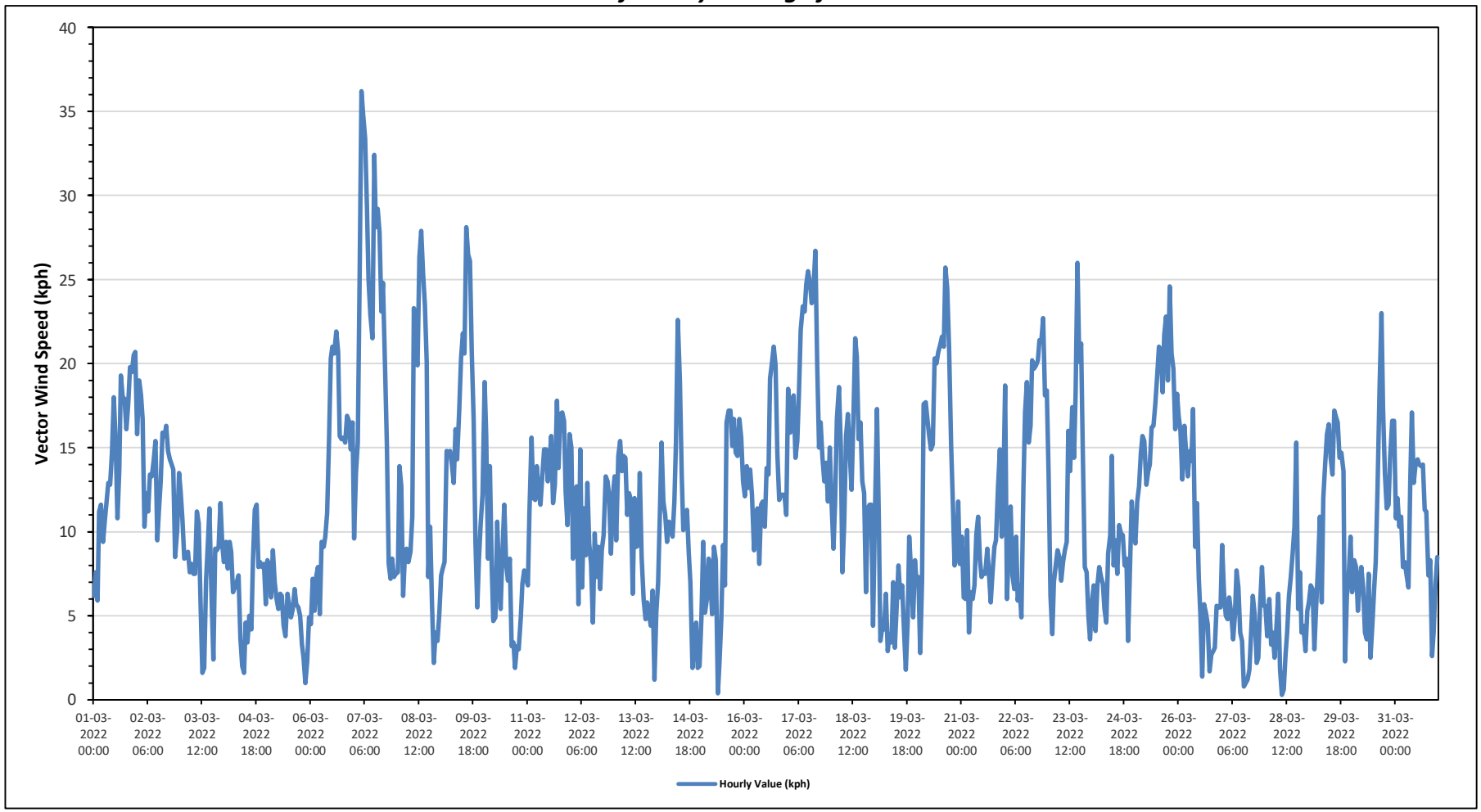
Maximum Hourly Value:	36.2	kph	on March 7 at hour 4	Hours in Service:	744
Maximum Daily Value:	20.4	kph	on March 7	Hours of Data:	744
Minimum Hourly Value:	0.3	kph	on March 28 at hour 9	Hours of Missing Data:	0
Minimum Daily Value:	1.4	kph	on March 28	Hours of Calibration:	0
Monthly Average:	4.8	kph		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	6.2	7.6	5.9	11.2	11.6	9.4	10.7	11.7	12.9	12.8	14.7	18.0	15.4	10.8	13.7	19.3	18.0	17.9	16.1	17.6	19.8	19.5	20.5	20.7	5.9	20.7	13.3
Mar 2	15.8	19.0	18.1	16.7	10.3	12.3	11.2	13.4	13.3	14.2	15.4	9.5	11.2	13.0	15.9	15.7	16.3	14.8	14.3	14.0	13.7	8.5	10.1	13.5	8.5	19.0	11.9
Mar 3	12.4	10.7	8.4	8.5	8.8	7.6	8.1	7.5	7.5	11.2	10.5	5.8	1.6	1.9	7.1	9.3	11.4	6.7	2.4	9.0	8.9	9.1	11.7	9.2	1.6	12.4	6.8
Mar 4	8.2	9.4	7.8	9.4	8.8	6.4	6.7	7.0	7.4	3.7	2.0	1.6	4.6	3.4	5.0	4.2	8.3	11.3	11.6	7.9	8.2	7.9	8.1	5.7	1.6	11.6	4.4
Mar 5	8.3	7.9	6.1	8.9	7.0	6.0	5.4	6.3	6.2	4.4	3.8	6.3	5.6	4.9	5.4	6.6	5.7	5.5	5.0	3.3	2.5	1.0	2.3	4.9	1.0	8.9	4.3
Mar 6	4.5	7.2	5.3	7.4	7.9	5.1	9.4	9.1	9.7	11.1	15.3	20.3	21.0	20.6	21.9	20.7	15.7	15.5	15.6	15.3	16.9	16.6	14.9	16.5	4.5	21.9	11.1
Mar 7	9.6	13.5	15.3	25.1	**36.2**	34.7	33.4	29.3	25.0	22.9	21.5	32.4	28.1	29.2	27.8	23.1	24.8	19.8	15.2	8.1	7.2	8.4	7.3	7.5	7.2	**36.2**	**20.4**
Mar 8	7.6	13.9	12.7	6.2	8.7	9.0	8.2	8.8	10.9	23.3	20.7	19.9	26.3	27.9	25.4	23.5	20.1	7.3	10.3	5.8	2.2	4.0	3.5	5.1	2.2	27.9	11.2
Mar 9	7.4	7.8	8.2	14.8	14.7	14.8	14.0	12.9	16.1	14.3	17.2	20.3	21.8	20.6	28.1	26.5	26.1	20.6	16.7	9.4	5.5	8.3	10.5	12.2	5.5	28.1	13.8
Mar 10	18.9	15.7	8.4	13.9	8.0	4.7	4.9	10.6	7.2	5.4	8.8	11.6	8.1	7.1	8.4	3.2	3.4	1.9	3.2	3.0	4.9	6.9	7.7	7.2	1.9	18.9	3.3
Mar 11	6.8	11.2	15.6	12.0	11.9	13.9	12.5	11.6	13.3	14.9	14.9	13.0	14.3	15.7	11.7	12.8	17.8	13.8	17.0	17.1	16.6	12.4	10.4	15.8	6.8	17.8	12.8
Mar 12	15.0	8.4	12.3	12.7	5.7	14.9	6.7	11.4	8.6	12.9	9.3	8.1	4.6	9.9	7.3	9.1	6.6	8.9	9.8	13.3	13.0	12.1	8.7	12.1	4.6	15.0	2.0
Mar 13	13.3	9.5	14.5	15.4	13.6	14.5	14.4	11.0	12.3	11.9	6.3	12.0	9.1	9.2	13.5	8.5	5.9	4.8	5.8	5.1	4.4	6.5	1.2	5.2	1.2	15.4	6.3
Mar 14	7.0	11.3	15.3	11.8	11.0	9.4	10.6	10.5	9.7	11.8	15.3	22.6	19.0	13.4	10.1	10.4	11.3	8.7	7.0	1.9	3.4	4.6	1.9	2.0	1.9	22.6	4.6
Mar 15	4.8	9.4	5.2	6.0	8.4	6.9	5.1	9.1	8.3	0.4	2.2	4.8	9.2	6.8	16.5	17.2	17.2	15.1	16.7	14.7	14.5	16.7	15.6	13.0	0.4	17.2	6.2
Mar 16	12.1	13.9	12.6	13.7	12.2	8.9	10.9	11.4	8.1	11.6	11.8	10.3	13.8	13.4	19.1	20.0	21.0	19.9	14.6	11.9	12.2	12.2	12.2	11.0	8.1	21.0	12.4
Mar 17	18.5	15.9	17.7	18.1	14.4	15.4	18.1	22.0	23.4	23.1	24.7	25.5	24.8	23.6	24.6	26.7	19.9	15.0	16.5	14.4	13.0	14.1	11.8	15.0	11.8	26.7	17.2
Mar 18	11.6	9.0	11.6	16.7	18.6	15.1	7.6	10.5	15.7	17.0	15.1	12.5	16.7	21.5	20.4	15.5	16.5	13.0	12.3	6.4	11.4	11.6	11.6	4.4	4.4	21.5	12.1
Mar 19	10.8	17.3	10.8	3.5	4.3	4.2	6.3	2.9	3.9	3.4	7.0	3.1	5.5	8.0	6.1	6.8	4.2	1.8	4.6	9.7	7.7	4.9	8.3	7.0	1.8	17.3	3.9
Mar 20	7.3	2.8	7.1	17.6	17.7	16.6	15.6	14.9	15.2	20.3	20.0	20.7	21.1	21.6	21.0	25.7	24.5	21.0	15.1	12.0	8.0	8.8	11.8	8.1	2.8	25.7	13.7
Mar 21	9.7	6.1	6.0	10.1	4.0	6.4	6.0	6.8	9.8	10.9	8.3	7.3	7.6	7.5	9.0	7.6	5.8	7.6	9.1	9.5	12.7	14.9	9.7	12.2	4.0	14.9	7.1
Mar 22	18.7	6.0	9.1	11.5	7.4	6.6	9.7	5.9	6.8	4.9	12.8	17.1	18.9	15.3	16.3	20.2	19.7	19.9	20.2	21.4	21.3	22.7	18.1	18.4	4.9	22.7	13.4
Mar 23	13.3	6.2	3.9	7.0	8.0	8.9	8.5	7.1	8.2	8.9	9.4	16.0	13.6	17.4	14.4	18.3	26.0	20.1	21.2	15.1	7.9	7.6	4.9	3.6	3.6	26.0	8.7
Mar 24	5.8	6.8	4.1	6.8	7.9	7.3	6.9	5.4	4.6	8.7	9.8	14.5	8.0	9.5	7.5	10.4	9.9	9.8	8.0	8.4	3.5	7.6	11.8	10.1	3.5	14.5	3.7
Mar 25	9.3	11.8	12.7	14.7	15.7	15.4	12.8	13.6	14.0	16.2	16.3	17.6	19.0	21.0	20.8	18.3	21.7	22.8	19.0	24.6	20.6	19.7	16.1	18.2	9.3	24.6	15.7
Mar 26	16.9	16.0	13.1	16.3	14.8	13.3	14.8	14.2	17.3	9.1	11.7	7.2	5.1	1.4	5.7	5.2	4.5	1.7	2.7	2.9	3.1	5.6	5.5	5.5	1.4	17.3	6.6
Mar 27	9.2	6.4	5.0	4.8	6.1	5.1	3.6	5.1	7.7	6.7	4.0	3.5	0.8	1.0	1.2	1.8	3.8	6.2	5.1	2.2	2.5	5.7	7.9	5.6	0.8	9.2	3.3
Mar 28	5.6	3.8	6.0	3.3	4.0	2.5	4.3	6.3	1.8	**0.3**	0.6	2.7	4.0	6.2	7.3	8.7	10.3	15.3	5.4	7.6	4.0	4.4	2.9	5.3	**0.3**	15.3	**1.4**
Mar 29	5.8	6.8	6.6	3.0	5.3	8.0	10.9	5.8	12.0	14.0	15.8	16.4	14.4	13.4	17.2	16.8	16.5	14.4	14.7	13.6	2.3	6.2	7.4	9.7	2.3	17.2	8.4
Mar 30	6.4	8.3	7.9	5.3	7.1	7.9	6.7	4.0	3.6	7.5	2.5	4.4	6.6	8.2	12.6	18.7	23.0	17.3	13.5	11.4	11.6	14.4	16.6	16.6	2.5	23.0	8.9
Mar 31	10.8	12.0	10.3	10.9	7.9	8.2	7.4	6.7	13.1	17.1	12.9	14.0	14.3	14.0	13.9	14.0	11.3	11.2	7.4	8.3	2.6	4.0	6.9	8.5	2.6	17.1	6.7
Diurnal Maximum	19	19	18	25	36	35	33	29	25	23	25	32	28	29	28	27	26	23	21	25	21	23	21	21			
Diurnal Average	10.2	10.1	9.8	11.1	10.6	10.3	10.0	10.1	10.8	11.4	11.6	12.9	12.7	12.8	14.0	14.3	14.4	12.6	11.5	10.5	9.2	9.9	9.6	10.0			

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

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

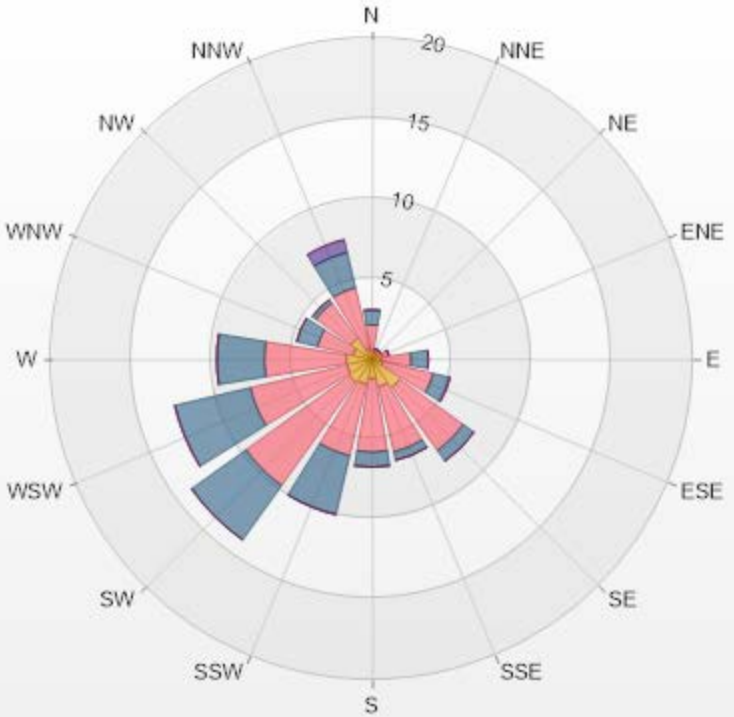
Timeseries Chart of Hourly Average for VWS - 986c Station



Wind: PRAMP 986c Monitor: WDS [KPH] Monthly: 03-2022 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 1.88% 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	1.61	0.94	0	0	3.09
NNE	0.4	0.27	0	0	0	0.67
NE	0.4	0.27	0	0	0	0.67
ENE	0.67	0.4	0	0	0	1.07
E	0.54	1.88	1.08	0	0	3.5
ESE	0.67	3.23	1.08	0	0	4.98
SE	2.15	4.84	0.81	0	0	7.8
SSE	1.75	4.17	0.54	0	0	6.46
S	1.21	4.57	0.94	0	0	6.72
SSW	1.61	4.57	3.76	0	0	9.94
SW	1.75	7.93	4.17	0	0	13.85
WSW	1.61	6.18	4.84	0	0	12.63
W	1.61	5.11	2.96	0	0	9.68
WNW	1.21	2.28	1.34	0	0	4.83
NW	1.61	2.69	0.27	0	0	4.57
NNW	0.67	3.9	2.28	0.81	0	7.66
Summary	18.4	53.9	25.01	0.81	0	98.12

PRAMP 986c 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 1.88% Calm Wind Avg Speed: 1.17(KPH)



% Icon Classes (KPH)	18 1.8-6.0	54 6.0-15.0	25 15.0-29.0	1 29.0-39.0	0 >39.0

PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2022

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

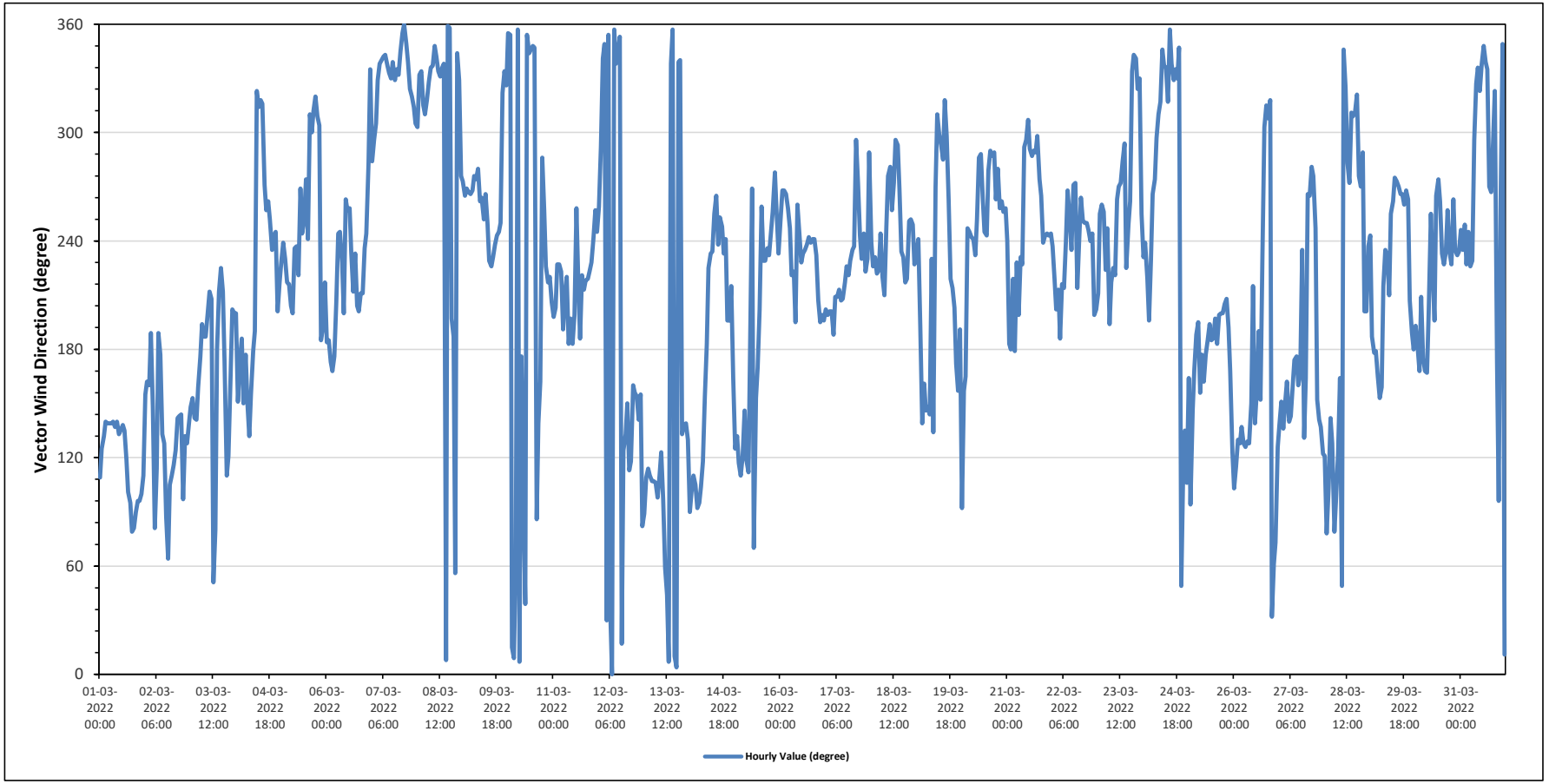
Monthly Average:	234 (SW)	degree	
Hours in Service:	744		
Hours of Data:	744		
Hours of Missing Data:	0		
Hours of Calibration:	0		
Operational Uptime:	100.0		

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	ESE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	ESE	E	E	ENE	E	E	E	E	E	ESE	115	ESE
Mar 2	SSE	SSE	SSE	S	SE	E	ESE	S	S	SE	SE	E	ENE	ESE	ESE	ESE	ESE	SE	SE	SE	E	SE	SE	SE	135	SE
Mar 3	SE	SSE	SE	SE	SSE	S	SSW	S	S	SSW	SSW	SSW	NE	E	S	SSW	SW	SSW	S	ESE	ESE	SSE	SSW	SSW	177	S
Mar 4	SSW	SSE	S	S	SSE	S	SSE	SE	SSE	S	S	NW	NW	NW	NW	W	WSW	W	WSW	SW	WSW	WSW	SSW	SW	211	SSW
Mar 5	SW	WSW	SW	SW	SW	SSW	SSW	SW	SW	SW	W	WSW	WSW	W	WSW	NW	WNW	NW	NW	NW	WNW	S	S	SW	245	WSW
Mar 6	S	S	S	SSE	S	SSW	WSW	WSW	SW	SSW	W	WSW	WSW	SW	SSW	SW	SSW	SSW	SSW	SSW	SW	WSW	W	NNW	231	SW
Mar 7	WNW	WNW	WNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNW	NNW	NW	NW	NW	WNW	335	NNW
Mar 8	WNW	NNW	NNW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	SSW	S	NE	NNW	NNW	W	336	NNW
Mar 9	W	W	W	W	W	W	W	W	W	W	W	WSW	W	WSW	SW	SW	SW	SW	WSW	WSW	WSW	NW	NNW	NW	258	WSW
Mar 10	N	N	NNE	N	ENE	N	N	S	E	NE	N	NNW	NNW	NNW	NNW	E	SE	SSE	WNW	WSW	SW	SW	SW	SSW	356	N
Mar 11	SSW	SSW	SW	SW	SW	S	SSW	SW	S	SSW	S	SSW	WSW	SW	S	SW	SSW	SW	SW	SW	SW	WSW	WSW	WSW	217	SW
Mar 12	WSW	WNW	NNW	NNW	NNE	N	NE	N	N	NNW	NNW	N	NNE	ESE	SE	SSE	ESE	ESE	SSE	SSE	SSE	SE	SSE	E	53	NE
Mar 13	E	ESE	ESE	ESE	ESE	ESE	ESE	E	ESE	ESE	E	ENE	NE	N	NNW	N	N	N	NNW	NNW	SE	SE	SE	SE	85	E
Mar 14	E	E	ESE	ESE	E	E	ESE	ESE	SSE	S	SW	SW	SW	WSW	W	SW	WSW	WSW	SW	WSW	SSW	SSW	SSW	SSE	189	S
Mar 15	SE	SE	ESE	ESE	ESE	SE	ESE	ESE	S	W	ENE	SSE	SSE	SSW	WSW	SW	SW	SW	SW	WSW	WSW	W	WSW	SW	217	SW
Mar 16	WSW	W	W	W	WSW	WSW	SW	SW	SSW	WSW	WSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	SW	SSW	SSW	SSW	SSW	236	SW
Mar 17	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	WNW	W	WSW	SW	WSW	SW	SW	WNW	224	SW
Mar 18	WSW	SW	SW	SW	SW	WSW	SW	SSW	WSW	W	W	WSW	W	WNW	WNW	W	SW	SW	SW	SW	WSW	WSW	WSW	SW	250	WSW
Mar 19	SW	WSW	S	SE	SSE	SE	SE	SE	SW	SE	W	NW	WNW	WNW	WNW	NW	WNW	W	SW	SSW	SSW	S	SSE	S	222	SW
Mar 20	E	SSE	SSE	WSW	WSW	WSW	WSW	SW	WSW	WNW	WNW	W	WSW	WSW	W	WNW	WNW	WNW	W	W	WSW	W	WSW	WSW	262	W
Mar 21	WSW	S	S	SW	S	SW	SSW	SW	SW	WNW	WNW	NW	WNW	WNW	WNW	WNW	WNW	W	W	WSW	WSW	WSW	WSW	WSW	252	WSW
Mar 22	SW	SW	SSW	SSW	S	SW	SSW	WSW	W	WSW	SW	W	W	SSW	SW	W	WSW	WSW	WSW	WSW	WSW	WSW	SSW	SSW	238	SW
Mar 23	SSW	WSW	WSW	WSW	SW	WSW	SSW	SW	SW	SW	W	W	W	WNW	WNW	SW	WSW	W	NNW	NNW	NNW	NW	NNW	WSW	266	W
Mar 24	SW	WSW	SW	SSW	SW	W	W	WNW	NW	NW	NNW	NNW	NNW	NW	N	NNW	NNW	NNW	NNW	NNW	NE	ESE	SE	ESE	319	NW
Mar 25	SSE	E	SE	SSE	S	SSW	SSE	S	SSE	S	S	SSW	S	S	SSW	S	SSW	SSW	SSW	SSW	SSW	S	SSE	ESE	182	S
Mar 26	ESE	ESE	SE	SE	SE	SE	SE	SE	SE	SSE	SSW	SE	SSE	S	SSE	SW	WNW	NW	NW	NW	NNE	ENE	ENE	SE	130	SE
Mar 27	SE	SSE	SE	SSE	SSE	SE	SE	SSE	S	S	SSE	SSE	SW	SE	SSE	W	W	W	W	WSW	SSE	SE	SE	ESE	163	SSE
Mar 28	ESE	ENE	ESE	SE	SE	ENE	E	ESE	SSE	NE	NNW	NW	W	W	NW	NW	NW	NW	W	W	WNW	SSW	SSW	SW	289	WNW
Mar 29	WSW	S	S	S	SSE	SSE	SSE	SSW	SW	SW	SSW	WSW	W	W	W	W	W	W	WSW	W	W	SSW	S	S	238	SW
Mar 30	S	S	SSE	SSW	S	SSE	SSE	SSW	WSW	SW	SSW	W	W	W	SW	SW	SW	WSW	SW	SW	W	SW	SW	SW	227	SW
Mar 31	WSW	SW	WSW	SW	WSW	SW	SW	WNW	NW	NNW	NW	NNW	NNW	NNW	NNW	W	W	WNW	NW	S	E	W	NNW	NNE	297	WNW

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

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

Timeseries Chart of Hourly Average for VWD - 986c Station



peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2022

Summary of Hourly Averages

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

WIND SPEED

Maximum Hourly Value:	36.2	kph	on March 7 at hour 4	Hours in Service:	744
Maximum Daily Value:	20.4	kph	on March 7	Hours of Data:	744
Minimum Hourly Value:	0.3	kph	on March 28 at hour 9	Hours of Missing Data:	0
Minimum Daily Value:	1.4	kph	on March 28	Hours of Calibration:	0
Monthly Average:	4.8	kph		Operational Uptime:	100

WIND DIRECTION

Monthly Average: 234 (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	6.2	7.6	5.9	11.2	11.6	9.4	10.7	11.7	12.9	12.8	14.7	18.0	15.4	10.8	13.7	19.3	18.0	17.9	16.1	17.6	19.8	19.5	20.5	20.7	5.9	20.7	13.3
	ESE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	ESE	E	E	ENE	E	E	E	E	E	ESE			
Mar 2	15.8	19.0	18.1	16.7	10.3	12.3	11.2	13.4	13.3	14.2	15.4	9.5	11.2	13.0	15.9	15.7	16.3	14.8	14.3	14.0	13.7	8.5	10.1	13.5	8.5	19.0	11.9
	SSE	SSE	SSE	S	SE	E	ESE	S	S	SE	SE	E	ENE	ESE	ESE	ESE	ESE	SE	SE	SE	E	SE	SE	SE			
Mar 3	12.4	10.7	8.4	8.5	8.8	7.6	8.1	7.5	7.5	11.2	10.5	5.8	1.6	1.9	7.1	9.3	11.4	6.7	2.4	9.0	8.9	9.1	11.7	9.2	1.6	12.4	6.8
	SE	SSE	SE	SE	SSE	S	SSW	S	S	SSW	SSW	SSW	NE	E	S	SSW	SW	SSW	S	ESE	ESE	SSE	SSW	SSW			
Mar 4	8.2	9.4	7.8	9.4	8.8	6.4	6.7	7.0	7.4	3.7	2.0	1.6	4.6	3.4	5.0	4.2	8.3	11.3	11.6	7.9	8.2	7.9	8.1	5.7	1.6	11.6	4.4
	SSW	SSE	S	S	SSE	S	SSE	SE	SSE	S	S	NW	NW	NW	NW	W	WSW	W	WSW	SW	WSW	WSW	SSW	SW			
Mar 5	8.3	7.9	6.1	8.9	7.0	6.0	5.4	6.3	6.2	4.4	3.8	6.3	5.6	4.9	5.4	6.6	5.7	5.5	5.0	3.3	2.5	1.0	2.3	4.9	1.0	8.9	4.3
	SW	WSW	SW	SW	SW	SSW	SSW	SW	SW	SW	W	WSW	WSW	W	WSW	NW	WNW	NW	NW	NW	WNW	S	S	SW			
Mar 6	4.5	7.2	5.3	7.4	7.9	5.1	9.4	9.1	9.7	11.1	15.3	20.3	21.0	20.6	21.9	20.7	15.7	15.5	15.6	15.3	16.9	16.6	14.9	16.5	4.5	21.9	11.1
	S	S	S	SSE	S	SSW	WSW	WSW	SW	SSW	W	WSW	WSW	SW	SSW	SW	SSW	SSW	SSW	SSW	SW	WSW	W	NNW			
Mar 7	9.6	13.5	15.3	25.1	**36.2**	34.7	33.4	29.3	25.0	22.9	21.5	32.4	28.1	29.2	27.8	23.1	24.8	19.8	15.2	8.1	7.2	8.4	7.3	7.5	7.2	**36.2**	**20.4**
	WNW	WNW	WNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNW	NNW	NW	NW	NW	WNW			
Mar 8	7.6	13.9	12.7	6.2	8.7	9.0	8.2	8.8	10.9	23.3	20.7	19.9	26.3	27.9	25.4	23.5	20.1	7.3	10.3	5.8	2.2	4.0	3.5	5.1	2.2	27.9	11.2
	WNW	NNW	NNW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	SSW	S	NE	NNW	NNW	W			
Mar 9	7.4	7.8	8.2	14.8	14.7	14.8	14.0	12.9	16.1	14.3	17.2	20.3	21.8	20.6	28.1	26.5	26.1	20.6	16.7	9.4	5.5	8.3	10.5	12.2	5.5	28.1	13.8
	W	W	W	W	W	W	W	W	W	W	W	WSW	W	WSW	SW	SW	SW	SW	WSW	WSW	WSW	NW	NNW	NW			
Mar 10	18.9	15.7	8.4	13.9	8.0	4.7	4.9	10.6	7.2	5.4	8.8	11.6	8.1	7.1	8.4	3.2	3.4	1.9	3.2	3.0	4.9	6.9	7.7	7.2	1.9	18.9	3.3
	N	N	NNE	N	ENE	N	N	S	E	NE	N	NNW	NNW	NNW	NNW	E	SE	SSE	WNW	WSW	SW	SW	SW	SSW			
Mar 11	6.8	11.2	15.6	12.0	11.9	13.9	12.5	11.6	13.3	14.9	14.9	13.0	14.3	15.7	11.7	12.8	17.8	13.8	17.0	17.1	16.6	12.4	10.4	15.8	6.8	17.8	12.8
	SSW	SSW	SW	SW	SW	S	SSW	SW	S	SSW	S	SSW	WSW	SW	S	SW	SSW	SW	SW	SW	SW	WSW	WSW	WSW			
Mar 12	15.0	8.4	12.3	12.7	5.7	14.9	6.7	11.4	8.6	12.9	9.3	8.1	4.6	9.9	7.3	9.1	6.6	8.9	9.8	13.3	13.0	12.1	8.7	12.1	4.6	15.0	2.0
	WSW	WNW	NNW	NNW	NNE	N	NE	N	N	NNW	NNW	N	NNE	ESE	SE	SSE	ESE	ESE	SSE	SSE	SSE	SE	SSE	E			
Mar 13	13.3	9.5	14.5	15.4	13.6	14.5	14.4	11.0	12.3	11.9	6.3	12.0	9.1	9.2	13.5	8.5	5.9	4.8	5.8	5.1	4.4	6.5	1.2	5.2	1.2	15.4	6.3
	E	ESE	ESE	ESE	ESE	ESE	ESE	E	ESE	ESE	E	ENE	NE	N	NNW	N	N	N	NNW	NNW	SE	SE	SE	SE			
Mar 14	7.0	11.3	15.3	11.8	11.0	9.4	10.6	10.5	9.7	11.8	15.3	22.6	19.0	13.4	10.1	10.4	11.3	8.7	7.0	1.9	3.4	4.6	1.9	2.0	1.9	22.6	4.6
	E	E	ESE	ESE	E	E	ESE	ESE	SSE	S	SW	SW	SW	WSW	W	SW	WSW	WSW	SW	WSW	WSW	SSW	SSW	SSE			
Mar 15	4.8	9.4	5.2	6.0	8.4	6.9	5.1	9.1	8.3	0.4	2.2	4.8	9.2	6.8	16.5	17.2	17.2	15.1	16.7	14.7	14.5	16.7	15.6	13.0	0.4	17.2	6.2
	SE	SE	ESE	ESE	ESE	SE	ESE	ESE	S	W	ENE	SSE	SSE	SSW	WSW	SW	SW	SW	SW	WSW	WSW	W	WSW	SW			
Mar 16	12.1	13.9	12.6	13.7	12.2	8.9	10.9	11.4	8.1	11.6	11.8	10.3	13.8	13.4	19.1	20.0	21.0	19.9	14.6	11.9	12.2	12.2	12.2	11.0	8.1	21.0	12.4
	WSW	W	W	W	WSW	WSW	SW	SW	SSW	WSW	WSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	SW	SSW	SSW	SSW	SSW			
Mar 17	18.5	15.9	17.7	18.1	14.4	15.4	18.1	22.0	23.4	23.1	24.7	25.5	24.8	23.6	24.6	26.7	19.9	15.0	16.5	14.4	13.0	14.1	11.8	15.0	11.8	26.7	17.2
	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SW	WNW	W	WSW	SW	WSW	SW	SW	WNW			
Mar 18	11.6	9.0	11.6	16.7	18.6	15.1	7.6	10.5	15.7	17.0	15.1	12.5	16.7	21.5	20.4	15.5	16.5	13.0	12.3	6.4	11.4	11.6	11.6	4.4	4.4	21.5	12.1
	WSW	SW	SW	SW	SW	WSW	SW	SSW	WSW	W	W	WSW	W	WNW	WNW	W	SW	SW	SW	SW	WSW	WSW	WSW	SW			
Mar 19	10.8	17.3	10.8	3.5	4.3	4.2	6.3	2.9	3.9	3.4	7.0	3.1	5.5	8.0	6.1	6.8	4.2	1.8	4.6	9.7	7.7	4.9	8.3	7.0	1.8	17.3	3.9
	SW	WSW	S	SE	SSE	SE	SE	SE	SW	SE	W	NW	WNW	WNW	WNW	NW	WNW	W	SW	SSW	SSW	S	SSE	S			
Mar 20	7.3	2.8	7.1	17.6	17.7	16.6	15.6	14.9	15.2	20.3	20.0	20.7	21.1	21.6	21.0	25.7	24.5	21.0	15.1	12.0	8.0	8.8	11.8	8.1	2.8	25.7	13.7
	E	SSE	SSE	WSW	WSW	WSW	WSW	SW	WSW	WNW	WNW	W	WSW	WSW	W	WNW	WNW	WNW	W	W	WSW	W	WSW	WSW			

PEACE RIVER AREA MONITORING PROGRAM

986c Station - March 2022

Summary of Hourly Averages

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

WIND SPEED

Maximum Hourly Value:	36.2	kph	on March 7 at hour 4	Hours in Service:	744
Maximum Daily Value:	20.4	kph	on March 7	Hours of Data:	744
Minimum Hourly Value:	0.3	kph	on March 28 at hour 9	Hours of Missing Data:	0
Minimum Daily Value:	1.4	kph	on March 28	Hours of Calibration:	0
Monthly Average:	4.8	kph		Operational Uptime:	100

WIND DIRECTION

Monthly Average: 234 (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	9.7	6.1	6.0	10.1	4.0	6.4	6.0	6.8	9.8	10.9	8.3	7.3	7.6	7.5	9.0	7.6	5.8	7.6	9.1	9.5	12.7	14.9	9.7	12.2	4.0	14.9	7.1
	WSW	S	S	SW	S	SW	SSW	SW	SW	WNW	WNW	NW	WNW	WNW	WNW	WNW	WNW	W	W	WSW	WSW	WSW	WSW	WSW			
Mar 22	18.7	6.0	9.1	11.5	7.4	6.6	9.7	5.9	6.8	4.9	12.8	17.1	18.9	15.3	16.3	20.2	19.7	19.9	20.2	21.4	21.3	22.7	18.1	18.4	4.9	22.7	13.4
	SW	SW	SSW	SSW	S	SW	SSW	WSW	W	WSW	SW	W	W	SSW	SW	W	WSW	WSW	WSW	WSW	WSW	WSW	SSW	SSW			
Mar 23	13.3	6.2	3.9	7.0	8.0	8.9	8.5	7.1	8.2	8.9	9.4	16.0	13.6	17.4	14.4	18.3	26.0	20.1	21.2	15.1	7.9	7.6	4.9	3.6	3.6	26.0	8.7
	SSW	WSW	WSW	WSW	SW	WSW	SSW	SW	SW	SW	W	W	W	WNW	WNW	SW	WSW	W	NNW	NNW	NNW	NW	NNW	WSW			
Mar 24	5.8	6.8	4.1	6.8	7.9	7.3	6.9	5.4	4.6	8.7	9.8	14.5	8.0	9.5	7.5	10.4	9.9	9.8	8.0	8.4	3.5	7.6	11.8	10.1	3.5	14.5	3.7
	SW	WSW	SW	SSW	SW	W	W	WNW	NW	NW	NNW	NNW	NNW	NW	N	NNW	NNW	NNW	NNW	NNW	NE	ESE	SE	ESE			
Mar 25	9.3	11.8	12.7	14.7	15.7	15.4	12.8	13.6	14.0	16.2	16.3	17.6	19.0	21.0	20.8	18.3	21.7	22.8	19.0	24.6	20.6	19.7	16.1	18.2	9.3	24.6	15.7
	SSE	E	SE	SSE	S	SSW	SSE	S	SSE	S	S	SSW	S	S	SSW	S	SSW	SSW	SSW	SSW	SSW	S	SSE	ESE			
Mar 26	16.9	16.0	13.1	16.3	14.8	13.3	14.8	14.2	17.3	9.1	11.7	7.2	5.1	1.4	5.7	5.2	4.5	1.7	2.7	2.9	3.1	5.6	5.5	5.5	1.4	17.3	6.6
	ESE	ESE	SE	SE	SE	SE	SE	SE	SE	SSE	SSW	SE	SSE	S	SSE	SW	WNW	NW	NW	NW	NNE	ENE	ENE	SE			
Mar 27	9.2	6.4	5.0	4.8	6.1	5.1	3.6	5.1	7.7	6.7	4.0	3.5	0.8	1.0	1.2	1.8	3.8	6.2	5.1	2.2	2.5	5.7	7.9	5.6	0.8	9.2	3.3
	SE	SSE	SE	SSE	SSE	SE	SE	SSE	S	S	SSE	SSE	SW	SE	SSE	W	W	W	W	WSW	SSE	SE	SE	ESE			
Mar 28	5.6	3.8	6.0	3.3	4.0	2.5	4.3	6.3	1.8	**0.3**	0.6	2.7	4.0	6.2	7.3	8.7	10.3	15.3	5.4	7.6	4.0	4.4	2.9	5.3	**0.3**	15.3	**1.4**
	ESE	ENE	ESE	SE	SE	ENE	E	ESE	SSE	NE	NNW	NW	W	W	NW	NW	NW	NW	W	W	WNW	SSW	SSW	SW			
Mar 29	5.8	6.8	6.6	3.0	5.3	8.0	10.9	5.8	12.0	14.0	15.8	16.4	14.4	13.4	17.2	16.8	16.5	14.4	14.7	13.6	2.3	6.2	7.4	9.7	2.3	17.2	8.4
	WSW	S	S	S	SSE	SSE	SSE	SSW	SW	SW	SSW	WSW	W	W	W	W	W	W	WSW	W	W	SSW	S	S			
Mar 30	6.4	8.3	7.9	5.3	7.1	7.9	6.7	4.0	3.6	7.5	2.5	4.4	6.6	8.2	12.6	18.7	23.0	17.3	13.5	11.4	11.6	14.4	16.6	16.6	2.5	23.0	8.9
	S	S	SSE	SSW	S	SSE	SSE	SSW	WSW	SW	SSW	W	W	W	SW	SW	SW	WSW	SW	SW	W	SW	SW	SW			
Mar 31	10.8	12.0	10.3	10.9	7.9	8.2	7.4	6.7	13.1	17.1	12.9	14.0	14.3	14.0	13.9	14.0	11.3	11.2	7.4	8.3	2.6	4.0	6.9	8.5	2.6	17.1	6.7
	WSW	SW	WSW	SW	WSW	SW	SW	WNW	NW	NNW	NW	NNW	NNW	NNW	NNW	W	W	WNW	NW	S	E	W	NNW	NNE			

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

peace river area monitoring program
pramp

PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2022

Summary of Hourly Averages

SULPHUR DIOXIDE (SO_2) in ppb

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

Number of 1-Hour Exceedances: 0 Number of 24-Hour Exceedances: 0 30-Day Exceedance: 0

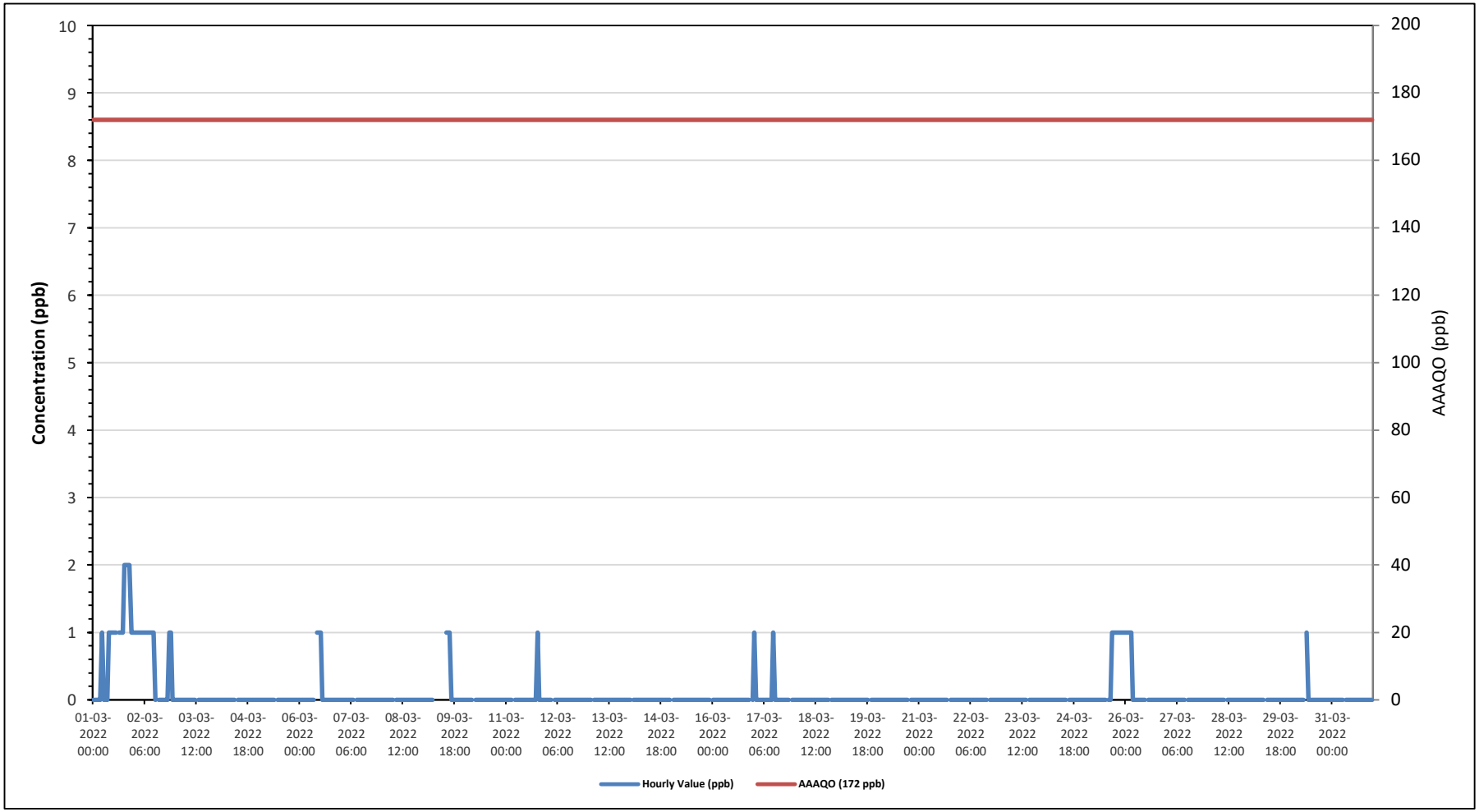
Maximum Hourly Value:	2	ppb	on March 1 at hour 18	Hours in Service:	744
Maximum Daily Value:	0.8	ppb	on March 1	Hours of Data:	707
Minimum Hourly Value:	0	ppb	on March 1 at hour 0	Hours of Missing Data:	0
Minimum Daily Value:	0.0	ppb	on March 3	Hours of Calibration:	37
Monthly Average:	0.1	ppb		Operational Uptime:	100.0

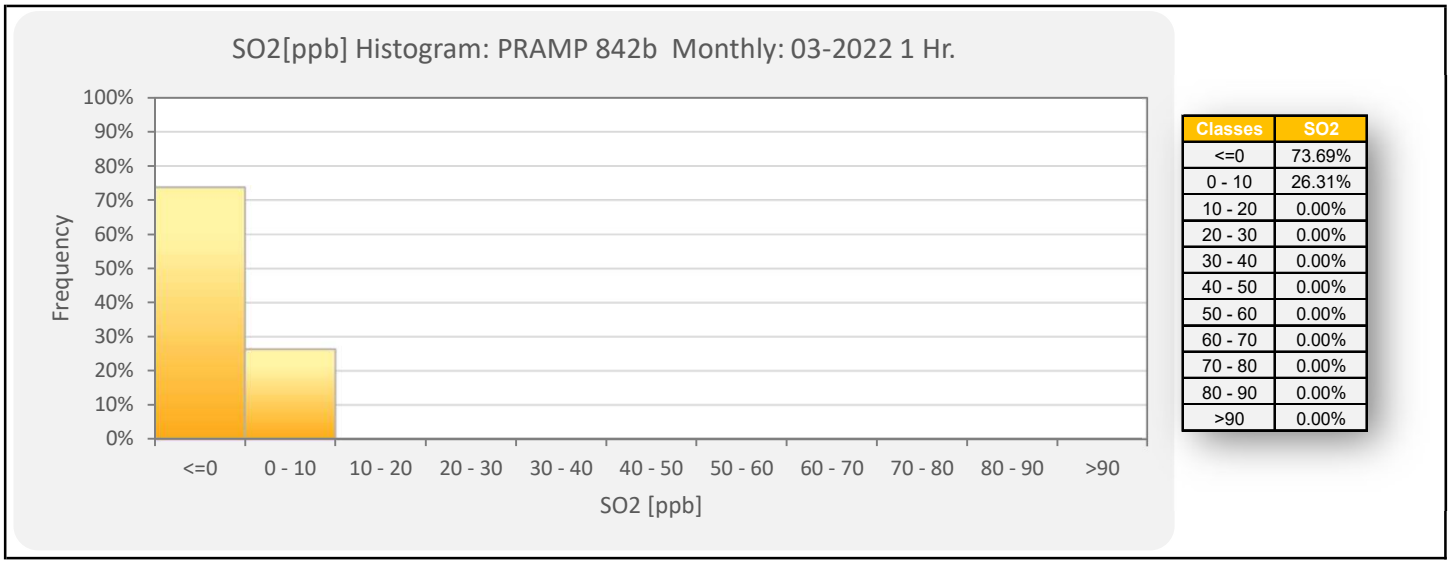
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Mar 1	0	0	0	0	0	1	0	0	0	1	1	1	1	1	S	1	1	1	2	2	2	2	1	1	0	2	0.8
Mar 2	1	1	1	1	1	1	1	1	1	1	1	1	0	S	0	0	0	0	0	0	1	1	0	0	0	1	0.6
Mar 3	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 4	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 5	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 6	0	0	0	0	0	0	0	0	0	S	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1
Mar 7	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 8	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 9	0	0	0	0	0	0	S	0	C	C	C	C	C	1	1	1	0	0	0	0	0	0	0	0	0	1	0.2
Mar 10	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 11	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.0
Mar 12	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 13	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 14	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 15	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0.0
Mar 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0.0
Mar 17	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	S	0	0	0	1	0.1
Mar 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0.0
Mar 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0.0
Mar 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0.0
Mar 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0.0
Mar 22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0.0
Mar 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0.0
Mar 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 25	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	1	1	1	1	1	1	1	1	0	1	0.3
Mar 26	1	1	1	1	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2
Mar 27	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 28	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 29	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 30	0	0	0	0	0	0	0	0	S	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0
Mar 31	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Diurnal Maximum	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1			
Diurnal Average	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance	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 SO2 - 842b Station

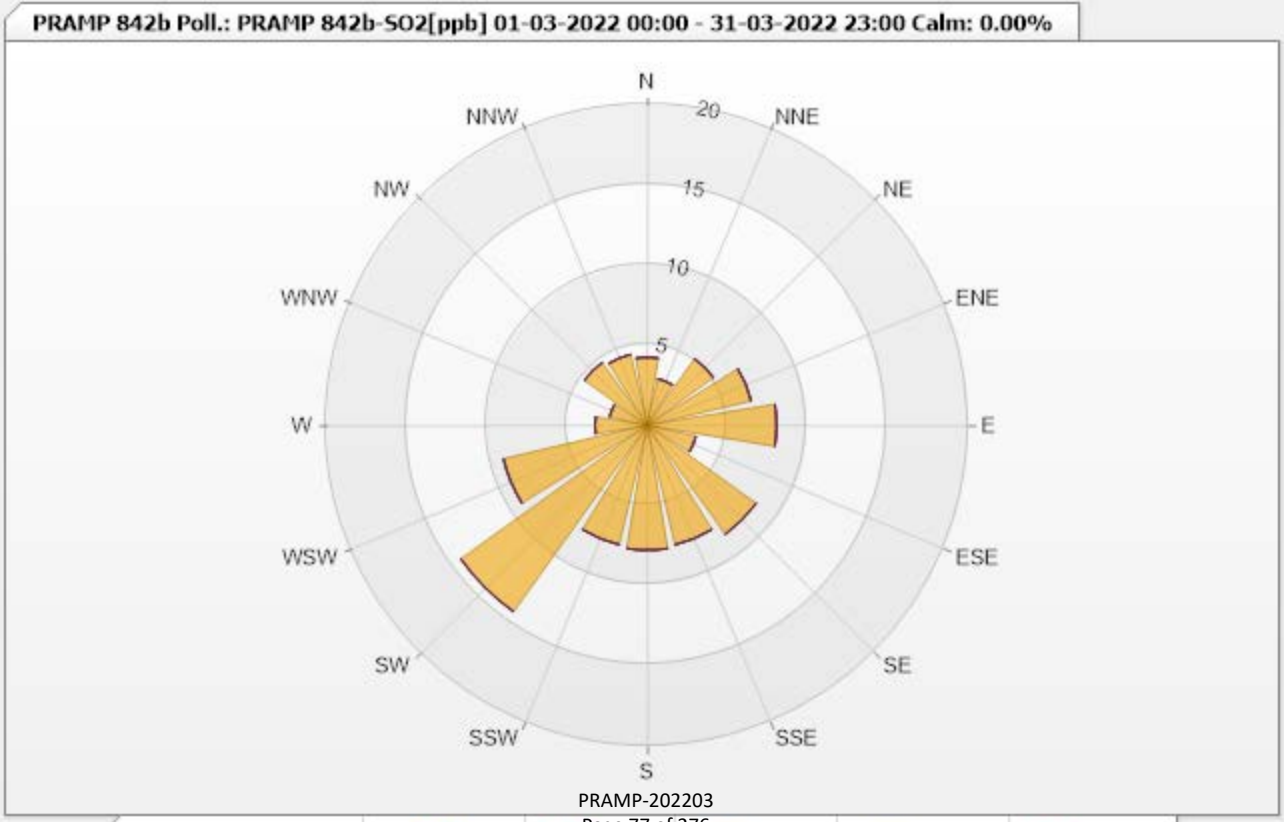




Classes	SO2
<=0	73.69%
0 - 10	26.31%
10 - 20	0.00%
20 - 30	0.00%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: PRAMP 842b Poll.: PRAMP 842b-SO2[ppb] Monthly: 03-2022 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	4.24	0	0	0	0	4.24
NNE	2.97	0	0	0	0	2.97
NE	5.09	0	0	0	0	5.09
ENE	6.65	0	0	0	0	6.65
E	8.06	0	0	0	0	8.06
ESE	3.11	0	0	0	0	3.11
SE	8.35	0	0	0	0	8.35
SSE	7.64	0	0	0	0	7.64
S	7.78	0	0	0	0	7.78
SSW	7.64	0	0	0	0	7.64
SW	14.29	0	0	0	0	14.29
WSW	9.19	0	0	0	0	9.19
W	3.25	0	0	0	0	3.25
WNW	2.4	0	0	0	0	2.4
NW	4.81	0	0	0	0	4.81
NNW	4.53	0	0	0	0	4.53
Summary	100	0	0	0	0	100


PRAMP 842b Poll.: PRAMP 842b-SO2[ppb] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppb)
100 0-10
0 10-50
0 50-100
0 100-172
0 >172.0

peace river area monitoring program
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PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2022

Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

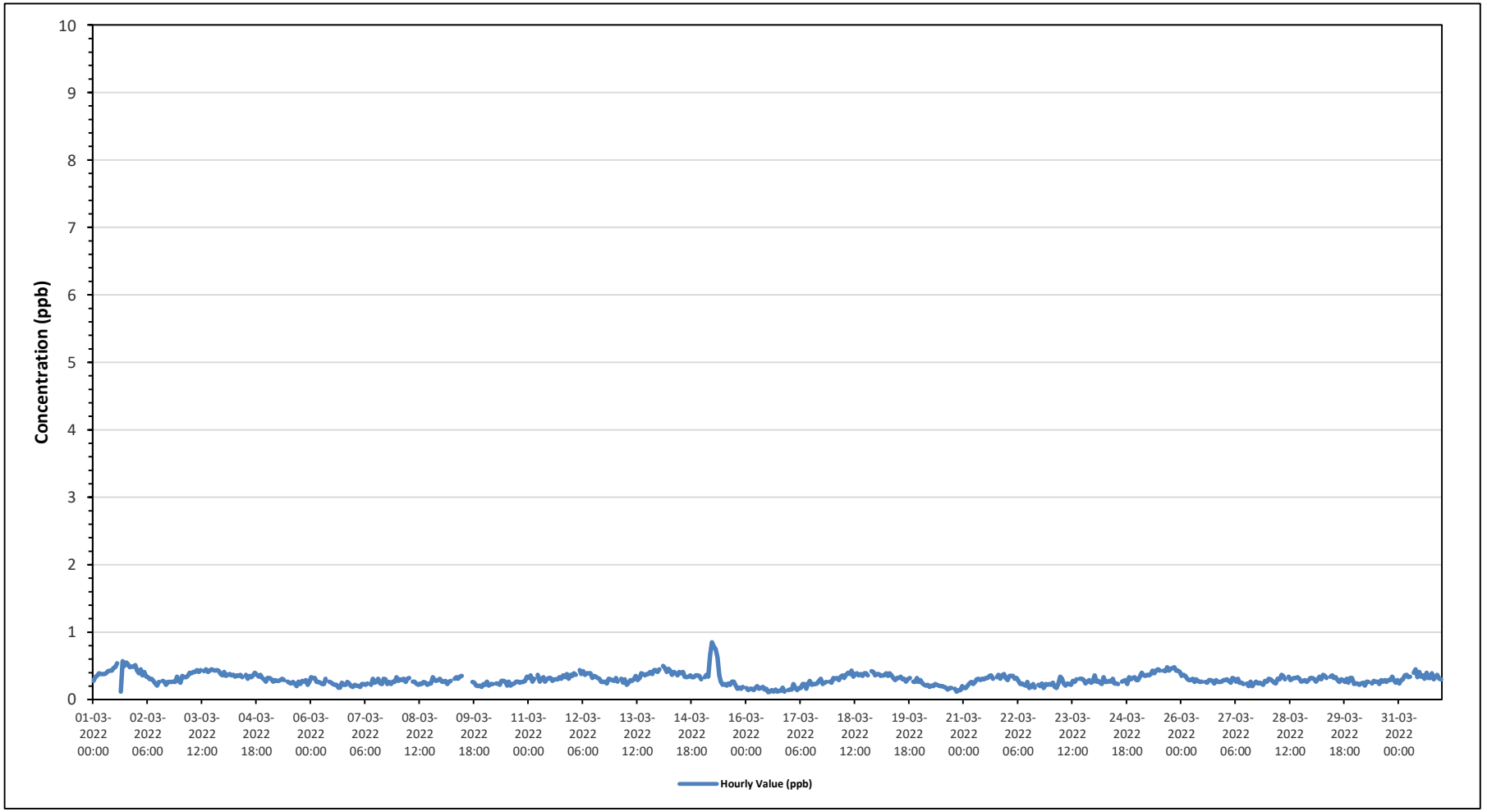
Maximum Hourly Value:	0.85	ppb	on March 15 at hour 5	Hours in Service:	744
Maximum Daily Value:	0.43	ppb	on March 1	Hours of Data:	707
Minimum Hourly Value:	0.11	ppb	on March 16 at hour 12	Hours of Missing Data:	0
Minimum Daily Value:	0.15	ppb	on March 16	Hours of Calibration:	37
Monthly Average:	0.30	ppb		Operational Uptime:	100.0

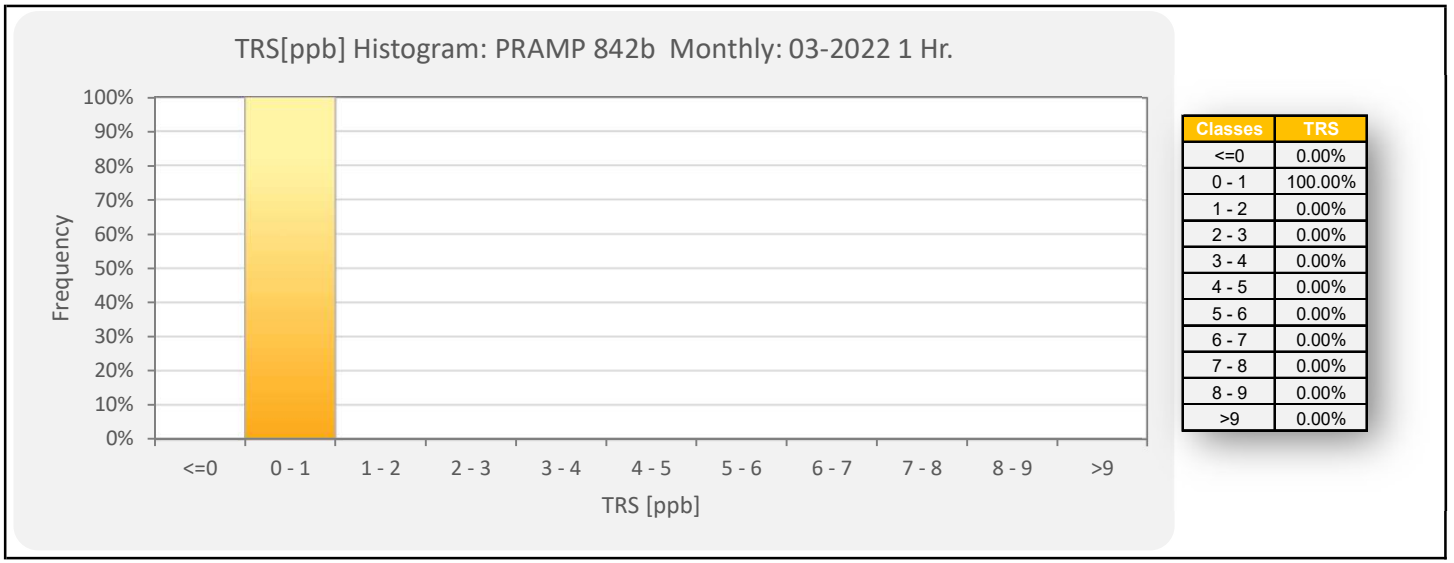
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	0.28	0.33	0.36	0.39	0.38	0.38	0.38	0.39	0.42	0.43	0.43	0.47	0.48	0.54	S	0.12	0.57	0.5	0.55	0.53	0.48	0.49	0.49	0.51	0.12	0.57	**0.43**
Mar 2	0.43	0.39	0.45	0.36	0.41	0.34	0.33	0.3	0.31	0.28	0.24	0.21	0.26	S	0.28	0.27	0.22	0.26	0.26	0.26	0.27	0.26	0.34	0.28	0.21	0.45	0.30
Mar 3	0.25	0.35	0.33	0.33	0.35	0.4	0.39	0.41	0.41	0.44	0.41	0.44	S	0.42	0.45	0.41	0.43	0.45	0.44	0.43	0.44	0.43	0.38	0.36	0.25	0.45	0.40
Mar 4	0.41	0.35	0.37	0.38	0.36	0.37	0.34	0.36	0.35	0.37	0.33	S	0.37	0.31	0.35	0.33	0.36	0.4	0.37	0.34	0.37	0.32	0.3	0.27	0.27	0.41	0.35
Mar 5	0.32	0.32	0.3	0.27	0.29	0.28	0.28	0.29	0.31	0.29	S	0.27	0.25	0.24	0.26	0.23	0.2	0.27	0.23	0.28	0.27	0.29	0.22	0.27	0.20	0.32	0.27
Mar 6	0.33	0.32	0.32	0.26	0.26	0.25	0.23	0.23	0.31	S	0.27	0.25	0.23	0.22	0.22	0.18	0.18	0.25	0.22	0.22	0.26	0.24	0.2	0.19	0.18	0.33	0.25
Mar 7	0.22	0.21	0.2	0.19	0.23	0.23	0.22	0.24	S	0.22	0.31	0.25	0.26	0.31	0.24	0.23	0.31	0.3	0.23	0.26	0.23	0.27	0.26	0.33	0.19	0.33	0.25
Mar 8	0.28	0.3	0.29	0.31	0.26	0.31	0.32	S	0.27	0.27	0.24	0.22	0.24	0.23	0.26	0.25	0.22	0.24	0.24	0.33	0.29	0.28	0.29	0.31	0.22	0.33	0.27
Mar 9	0.27	0.26	0.28	0.23	0.27	0.28	S	0.31	0.33	0.31	0.34	0.35	C	C	C	C	C	0.26	0.25	0.21	0.2	0.21	0.19	0.23	0.19	0.35	0.27
Mar 10	0.22	0.27	0.21	0.23	0.23	S	0.24	0.24	0.22	0.28	0.28	0.27	0.21	0.27	0.21	0.23	0.24	0.27	0.27	0.25	0.26	0.26	0.28	0.34	0.21	0.34	0.25
Mar 11	0.32	0.36	0.27	0.31	S	0.37	0.27	0.31	0.33	0.27	0.3	0.32	0.32	0.28	0.3	0.3	0.3	0.33	0.31	0.36	0.33	0.38	0.31	0.37	0.27	0.38	0.32
Mar 12	0.35	0.39	0.37	S	0.44	0.38	0.42	0.37	0.39	0.39	0.39	0.32	0.35	0.34	0.32	0.31	0.26	0.26	0.27	0.24	0.31	0.3	0.29	0.28	0.24	0.44	0.34
Mar 13	0.32	0.27	S	0.31	0.25	0.3	0.22	0.25	0.29	0.28	0.3	0.35	0.29	0.32	0.39	0.38	0.36	0.38	0.38	0.41	0.38	0.44	0.44	0.41	0.22	0.44	0.34
Mar 14	0.45	S	0.5	0.47	0.41	0.46	0.43	0.37	0.41	0.39	0.36	0.41	0.39	0.41	0.34	0.33	0.34	0.36	0.33	0.33	0.36	0.36	0.35	0.3	0.30	0.50	0.39
Mar 15	S	0.33	0.37	0.34	0.66	**0.85**	0.79	0.75	0.63	0.36	0.26	0.22	0.23	0.21	0.24	0.22	0.27	0.27	0.22	0.16	0.18	0.16	0.19	S	0.16	**0.85**	0.36
Mar 16	0.17	0.14	0.16	0.16	0.14	0.18	0.2	0.16	0.17	0.19	0.15	0.16	0.11	0.12	0.14	0.12	0.15	0.12	0.13	0.13	0.18	0.12	S	0.14	**0.11**	0.20	0.15
Mar 17	0.15	0.15	0.23	0.18	0.14	0.17	0.17	0.23	0.23	0.16	0.23	0.28	0.22	0.23	0.23	0.24	0.28	0.31	0.23	0.25	0.26	S	0.27	0.25	0.14	0.31	0.22
Mar 18	0.32	0.31	0.32	0.29	0.34	0.36	0.32	0.37	0.4	0.38	0.43	0.34	0.38	0.39	0.36	0.38	0.35	0.39	0.39	0.36	S	0.42	0.41	0.36	0.29	0.43	0.36
Mar 19	0.38	0.38	0.35	0.36	0.36	0.39	0.35	0.39	0.36	0.32	0.29	0.32	0.32	0.34	0.3	0.31	0.27	0.3	0.32	S	0.27	0.26	0.32	0.26	0.26	0.39	0.33
Mar 20	0.29	0.24	0.22	0.21	0.22	0.19	0.21	0.2	0.23	0.22	0.21	0.2	0.2	0.19	0.18	0.15	0.17	0.17	S	0.16	0.12	0.14	0.14	0.2	0.12	0.29	0.19
Mar 21	0.17	0.17	0.21	0.24	0.26	0.23	0.26	0.3	0.31	0.29	0.31	0.3	0.32	0.32	0.35	0.36	0.31	S	0.33	0.37	0.31	0.36	0.38	0.32	0.17	0.38	0.29
Mar 22	0.29	0.35	0.35	0.35	0.31	0.32	0.28	0.23	0.24	0.22	0.21	0.26	0.17	0.19	0.23	0.18	S	0.22	0.2	0.24	0.17	0.23	0.22	0.23	0.17	0.35	0.25
Mar 23	0.22	0.25	0.19	0.17	0.24	0.34	0.31	0.24	0.21	0.24	0.23	0.22	0.28	0.26	0.3	S	0.31	0.31	0.29	0.24	0.27	0.29	0.25	0.26	0.17	0.34	0.26
Mar 24	0.36	0.27	0.28	0.25	0.23	0.33	0.26	0.26	0.28	0.27	0.31	0.24	0.24	0.23	S	0.27	0.28	0.29	0.23	0.33	0.3	0.32	0.33	0.29	0.23	0.36	0.28
Mar 25	0.29	0.34	0.4	0.36	0.35	0.37	0.36	0.38	0.43	0.39	0.44	0.45	0.43	S	0.43	0.42	0.48	0.43	0.46	0.47	0.48	0.43	0.43	0.41	0.29	0.48	0.41
Mar 26	0.35	0.37	0.35	0.31	0.29	0.29	0.31	0.26	0.3	0.28	0.26	0.27	S	0.26	0.25	0.29	0.29	0.28	0.24	0.29	0.26	0.26	0.27	0.29	0.24	0.37	0.29
Mar 27	0.29	0.3	0.28	0.25	0.32	0.31	0.27	0.31	0.25	0.25	0.23	S	0.24	0.2	0.27	0.2	0.24	0.27	0.24	0.25	0.24	0.22	0.28	0.27	0.20	0.32	0.26
Mar 28	0.31	0.3	0.28	0.25	0.24	0.31	0.3	0.37	0.35	0.3	S	0.34	0.29	0.31	0.32	0.32	0.33	0.31	0.27	0.28	0.29	0.26	0.29	0.32	0.24	0.37	0.30
Mar 29	0.32	0.31	0.27	0.3	0.34	0.3	0.37	0.35	0.32	S	0.34	0.36	0.32	0.33	0.29	0.26	0.3	0.29	0.26	0.31	0.25	0.32	0.32	0.23	0.23	0.37	0.31
Mar 30	0.24	0.24	0.22	0.24	0.25	0.21	0.27	0.26	S	0.24	0.28	0.26	0.27	0.23	0.29	0.27	0.29	0.26	0.29	0.29	0.34	0.29	0.25	0.29	0.21	0.34	0.26
Mar 31	0.24	0.29	0.3	0.36	0.37	0.33	0.34	S	0.4	0.45	0.33	0.41	0.34	0.36	0.31	0.4	0.32	0.32	0.39	0.3	0.34	0.37	0.31	0.3	0.24	0.45	0.34
Diurnal Maximum	0.45	0.39	0.50	0.47	0.66	0.85	0.79	0.75	0.63	0.45	0.44	0.47	0.48	0.54	0.45	0.42	0.57	0.50	0.55	0.53	0.48	0.49	0.49	0.51			
Diurnal Average	0.29	0.30	0.30	0.29	0.31	0.33	0.31	0.31	0.33	0.30	0.30	0.30	0.29	0.29	0.29	0.27	0.30	0.30	0.29	0.30	0.29	0.30	0.30	0.30			

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

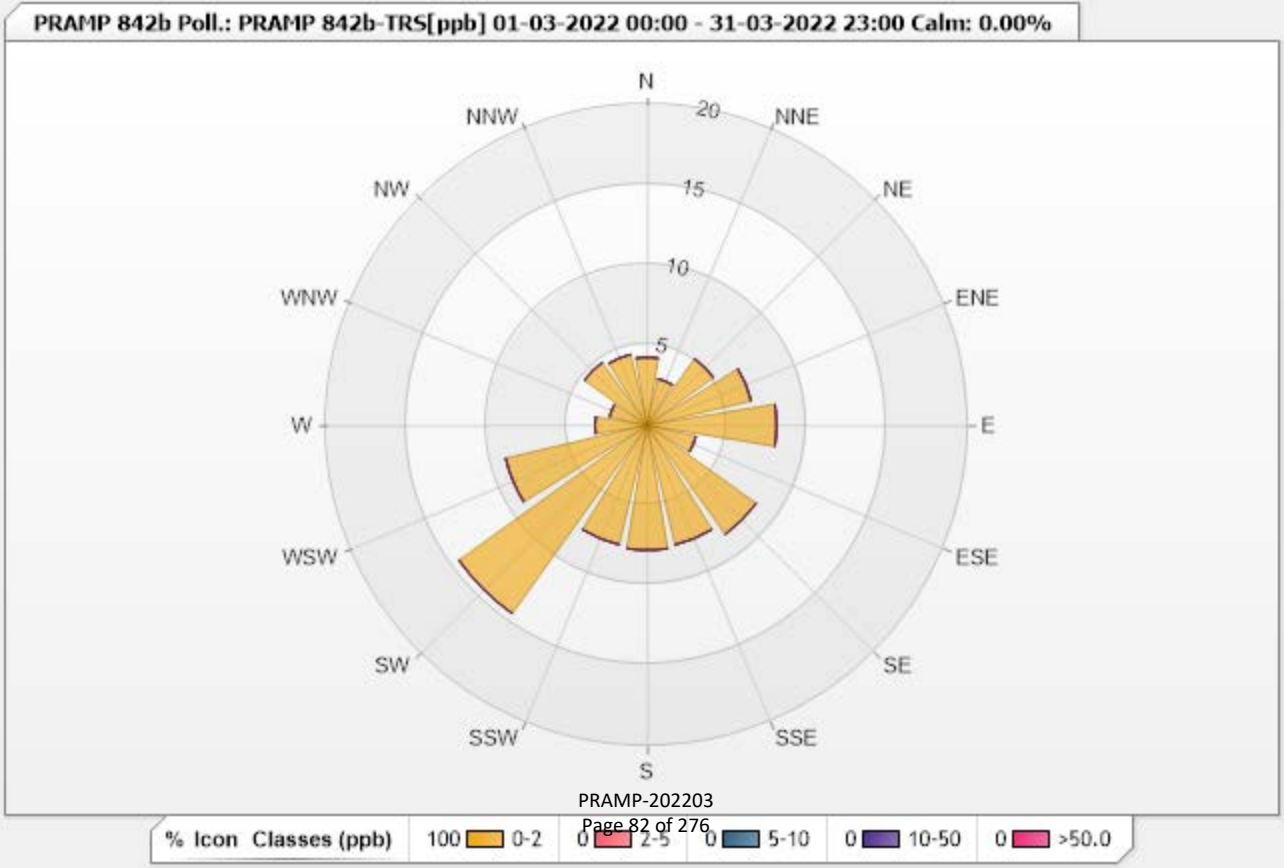




Classes	TRS
<=0	0.00%
0 - 1	100.00%
1 - 2	0.00%
2 - 3	0.00%
3 - 4	0.00%
4 - 5	0.00%
5 - 6	0.00%
6 - 7	0.00%
7 - 8	0.00%
8 - 9	0.00%
>9	0.00%

Wind: PRAMP 842b Poll.: PRAMP 842b-TRS[ppb] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 95.03% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	4.24	0	0	0	0	4.24
NNE	2.97	0	0	0	0	2.97
NE	5.09	0	0	0	0	5.09
ENE	6.65	0	0	0	0	6.65
E	8.06	0	0	0	0	8.06
ESE	3.11	0	0	0	0	3.11
SE	8.35	0	0	0	0	8.35
SSE	7.64	0	0	0	0	7.64
S	7.78	0	0	0	0	7.78
SSW	7.64	0	0	0	0	7.64
SW	14.43	0	0	0	0	14.43
WSW	9.05	0	0	0	0	9.05
W	3.25	0	0	0	0	3.25
WNW	2.4	0	0	0	0	2.4
NW	4.81	0	0	0	0	4.81
NNW	4.53	0	0	0	0	4.53
Summary	100	0	0	0	0	100


PRAMP 842b Poll.: PRAMP 842b-TRS[ppb] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppb)
100 0-2
0 2-5
0 5-10
0 10-50
0 >50.0

peace river area monitoring program
pramp

PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2022

Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

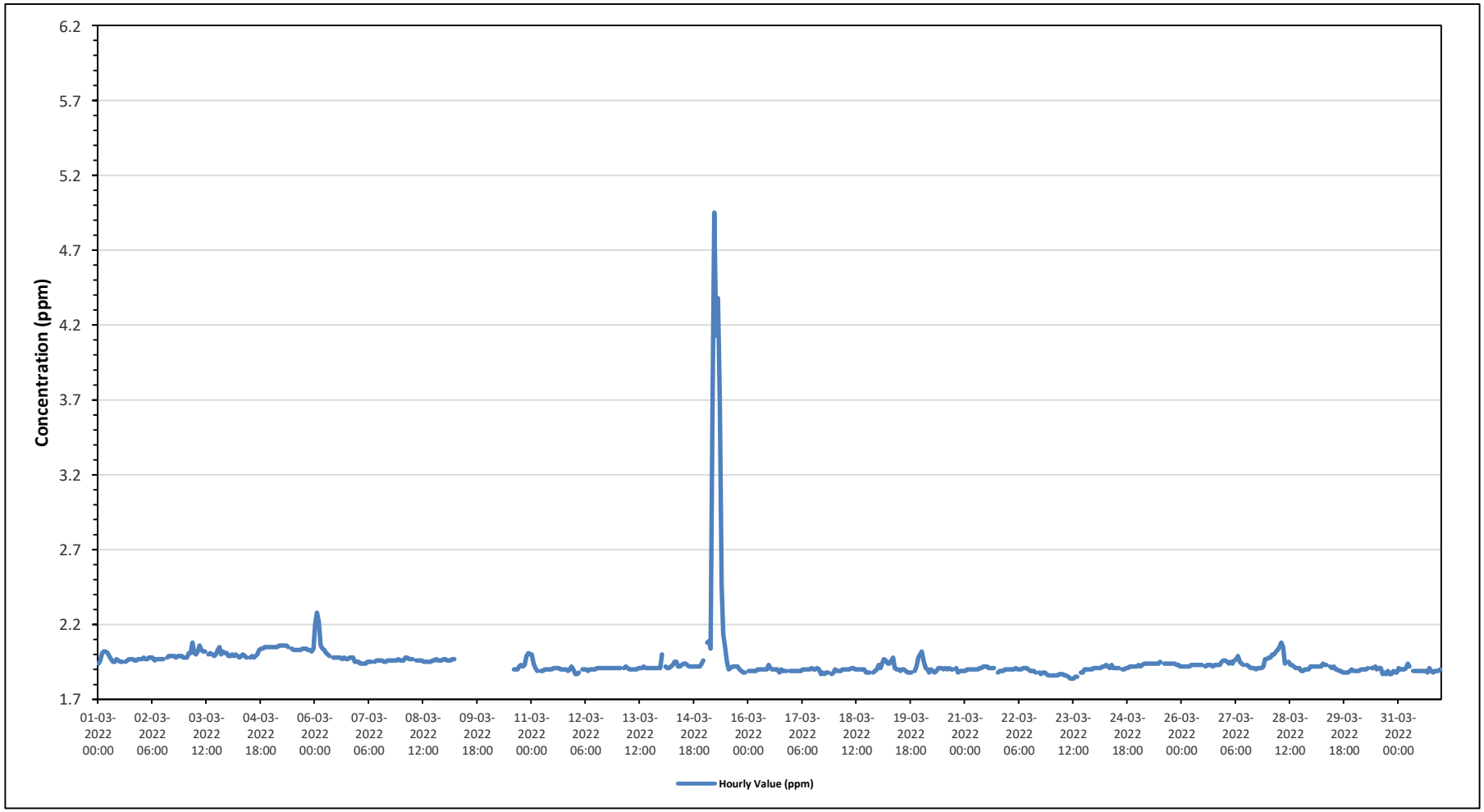
Maximum Hourly Value:	4.95	ppm	on March 15 at hour 5	Hours in Service:	744
Maximum Daily Value:	2.48	ppm	on March 15	Hours of Data:	683
Minimum Hourly Value:	1.84	ppm	on March 23 at hour 10	Hours of Missing Data:	24
Minimum Daily Value:	1.87	ppm	on March 23	Hours of Calibration:	37
Monthly Average:	1.95	ppm		Operational Uptime:	96.8

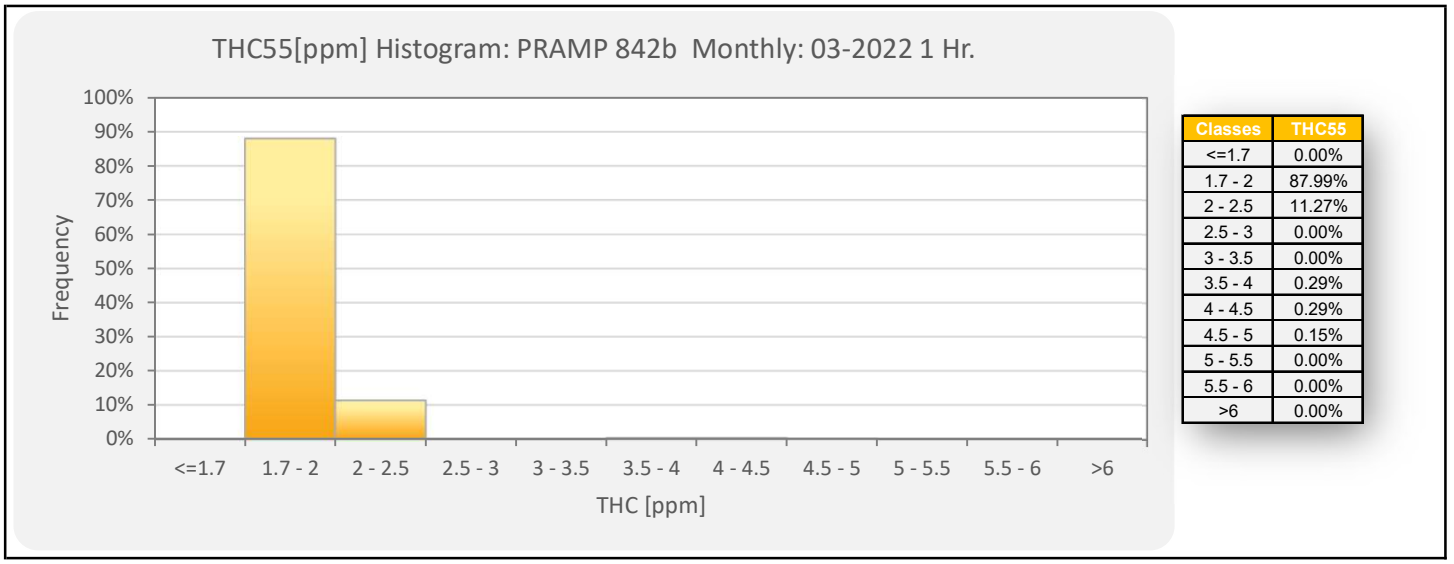
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	1.94	1.96	2.01	2.02	2.02	2.01	1.99	1.97	1.95	1.95	1.97	1.96	1.95	1.95	S	1.95	1.96	1.97	1.97	1.97	1.96	1.96	1.97	1.97	1.94	2.02	1.97
Mar 2	1.97	1.98	1.97	1.97	1.98	1.98	1.98	1.96	1.97	1.97	1.97	1.97	1.97	S	1.98	1.99	1.99	1.99	1.99	1.98	1.99	1.99	1.99	1.98	1.96	1.99	1.98
Mar 3	1.98	1.98	2.01	2.01	2.08	2.01	2.00	2.02	2.06	2.03	2.02	2.02	S	2.00	2.01	2.00	1.99	2.00	2.03	2.05	2.00	2.02	2.01	2.01	1.98	2.08	2.01
Mar 4	1.99	1.99	2.00	1.99	2.00	1.99	1.98	1.99	2.00	1.99	1.98	S	1.98	1.99	1.98	1.99	2.00	2.03	2.04	2.04	2.05	2.05	2.05	2.05	1.98	2.05	2.01
Mar 5	2.05	2.05	2.05	2.05	2.06	2.06	2.06	2.06	2.06	2.05	S	2.04	2.03	2.03	2.03	2.03	2.03	2.04	2.04	2.04	2.03	2.03	2.02	2.04	2.02	2.06	2.04
Mar 6	2.20	2.28	2.22	2.06	2.04	2.03	2.01	2.00	1.99	S	1.98	1.98	1.98	1.98	1.98	1.97	1.98	1.97	1.97	1.98	1.98	1.98	1.95	1.95	1.95	2.28	2.02
Mar 7	1.95	1.94	1.94	1.94	1.94	1.95	1.95	1.95	S	1.95	1.96	1.96	1.96	1.96	1.95	1.95	1.96	1.96	1.96	1.96	1.96	1.96	1.97	1.96	1.94	1.97	1.95
Mar 8	1.96	1.96	1.98	1.98	1.97	1.97	1.97	S	1.96	1.96	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.97	1.96	1.96	1.96	1.97	1.95	1.98	1.96
Mar 9	1.97	1.96	1.96	1.96	1.97	1.97	S	2.01	C	C	C	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	1.96	2.01	-
Mar 10	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	C	C	C	1.90	1.90	1.90	1.92	1.93	1.92	1.93	1.99	2.01	2.00	1.90	2.01	-
Mar 11	2.00	1.94	1.91	1.89	S	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.91	1.90	1.90	1.90	1.90	1.89	1.90	1.92	1.90	1.89	2.00	1.91
Mar 12	1.87	1.87	1.88	S	1.90	1.90	1.90	1.89	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.87	1.91	1.90
Mar 13	1.91	1.91	S	1.91	1.92	1.91	1.90	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.92	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.90	1.92	1.91
Mar 14	2.00	S	1.92	1.91	1.91	1.92	1.93	1.95	1.95	1.92	1.92	1.93	1.94	1.94	1.93	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.94	1.96	1.91	2.00	1.93
Mar 15	S	2.08	2.09	2.04	3.61	4.95	4.13	4.38	3.70	2.46	2.14	2.05	1.95	1.90	1.91	1.92	1.92	1.92	1.92	1.90	1.89	1.88	1.88	S	1.88	4.95	2.48
Mar 16	1.89	1.89	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.90	1.93	1.91	1.90	1.90	1.90	1.90	1.88	1.90	1.89	1.89	1.89	S	1.89	1.88	1.93	1.90
Mar 17	1.89	1.89	1.89	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.91	1.90	1.90	1.91	1.90	1.87	1.88	1.87	1.88	1.88	S	1.87	1.88	1.87	1.91	1.89
Mar 18	1.90	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.91	1.91	1.90	1.90	1.90	1.90	1.90	1.90	1.88	1.88	1.88	S	1.88	1.89	1.90	1.88	1.91	1.90
Mar 19	1.93	1.91	1.94	1.97	1.96	1.94	1.94	1.96	1.98	1.91	1.90	1.90	1.89	1.90	1.90	1.89	1.88	1.88	1.88	S	1.89	1.92	1.98	2.00	1.88	2.00	1.92
Mar 20	2.02	1.95	1.91	1.90	1.88	1.90	1.89	1.88	1.89	1.91	1.91	1.91	1.90	1.91	1.90	1.91	1.90	1.90	S	1.91	1.88	1.89	1.89	1.89	1.88	2.02	1.91
Mar 21	1.89	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.91	1.92	1.92	1.92	1.91	1.91	1.91	1.91	S	1.88	1.89	1.89	1.89	1.90	1.90	1.88	1.92	1.90
Mar 22	1.90	1.90	1.90	1.90	1.91	1.90	1.90	1.90	1.91	1.91	1.91	1.90	1.89	1.89	1.89	1.88	S	1.88	1.87	1.88	1.88	1.87	1.86	1.86	1.86	1.91	1.89
Mar 23	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.86	1.86	1.85	1.84	1.84	1.84	1.85	1.85	S	1.88	1.88	1.90	1.90	1.90	1.90	1.90	1.91	1.84	1.91	1.87
Mar 24	1.91	1.91	1.91	1.91	1.92	1.92	1.93	1.92	1.91	1.93	1.91	1.91	1.91	1.91	S	1.90	1.90	1.91	1.91	1.92	1.92	1.92	1.92	1.92	1.90	1.93	1.91
Mar 25	1.93	1.92	1.93	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.95	S	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.93	1.92	1.92	1.95	1.94
Mar 26	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.93	1.93	1.93	S	1.92	1.93	1.93	1.93	1.92	1.93	1.93	1.93	1.93	1.95	1.96	1.92	1.96	1.93
Mar 27	1.96	1.95	1.94	1.95	1.94	1.96	1.97	1.99	1.95	1.94	1.93	S	1.93	1.92	1.91	1.91	1.91	1.90	1.91	1.91	1.91	1.92	1.97	1.97	1.90	1.99	1.94
Mar 28	1.98	1.98	2.00	2.00	2.02	2.03	2.05	2.08	2.05	1.94	S	1.95	1.93	1.93	1.92	1.91	1.91	1.91	1.89	1.89	1.90	1.90	1.90	1.92	1.89	2.08	1.96
Mar 29	1.92	1.92	1.92	1.92	1.92	1.92	1.94	1.93	1.93	S	1.92	1.91	1.92	1.90	1.90	1.89	1.89	1.88	1.88	1.88	1.88	1.89	1.90	1.89	1.88	1.94	1.91
Mar 30	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.91	S	1.91	1.91	1.92	1.90	1.91	1.91	1.87	1.88	1.87	1.89	1.87	1.87	1.89	1.88	1.88	1.87	1.92	1.89
Mar 31	1.91	1.90	1.90	1.90	1.91	1.94	1.92	S	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.88	1.91	1.89	1.88	1.89	1.89	1.89	1.90	1.88	1.94	1.90
Diurnal Maximum	2.20	2.28	2.22	2.06	3.61	4.95	4.13	4.38	3.70	2.46	2.14	2.05	2.03	2.03	2.03	2.03	2.03	2.04	2.04	2.05	2.05	2.05	2.05	2.05			
Diurnal Average	1.95	1.95	1.95	1.94	2.00	2.04	2.02	2.03	2.01	1.95	1.93	1.93	1.93	1.92	1.93	1.93	1.92	1.92	1.93	1.93	1.93	1.93	1.94	1.94			

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

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

Timeseries Chart of Hourly Average for THC - 842b Station

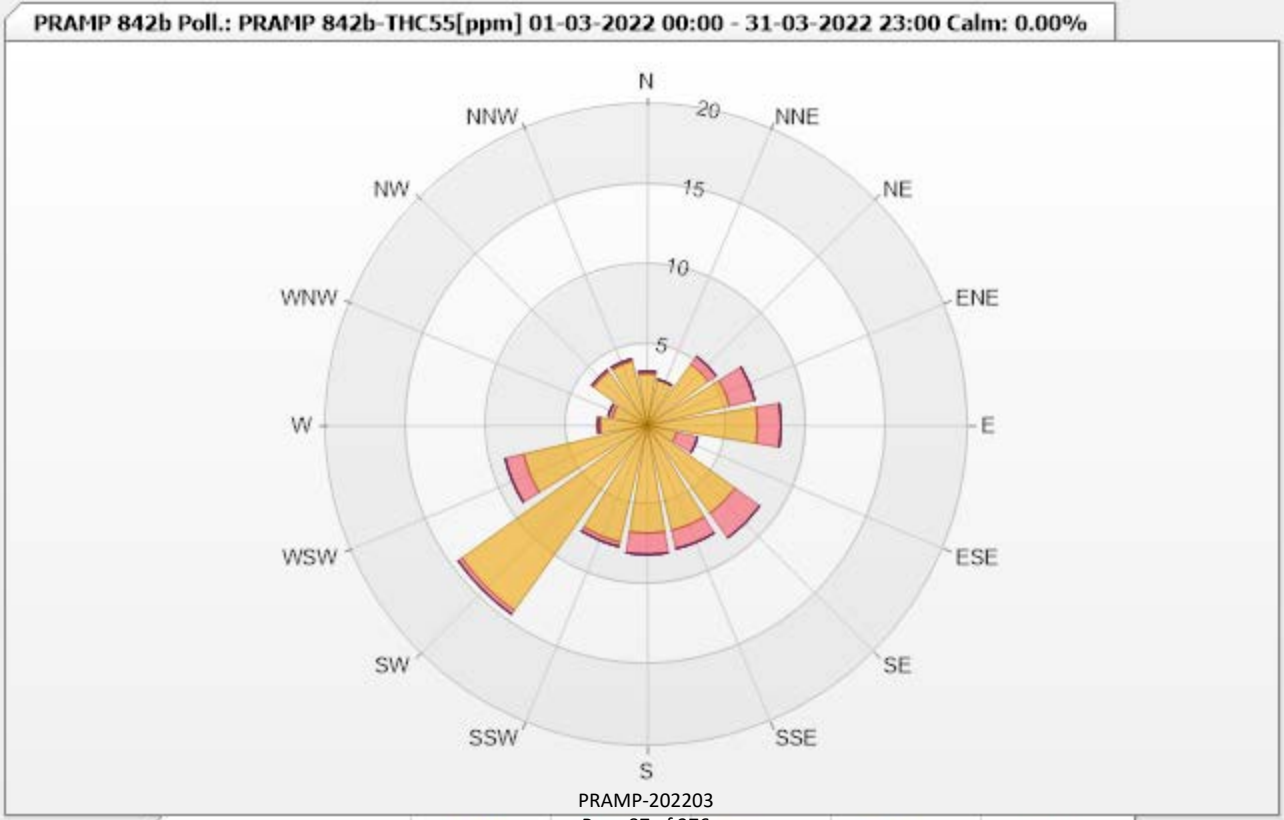




Classes	THC55
<=1.7	0.00%
1.7 - 2	87.99%
2 - 2.5	11.27%
2.5 - 3	0.00%
3 - 3.5	0.00%
3.5 - 4	0.29%
4 - 4.5	0.29%
4.5 - 5	0.15%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: PRAMP 842b Poll.: PRAMP 842b-THC55[ppm] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 91.80% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	3.22	0.15	0	0	0	3.37
NNE	2.93	0	0	0	0	2.93
NE	4.69	0.59	0	0	0	5.28
ENE	5.27	1.61	0	0	0	6.88
E	6.88	1.46	0	0	0	8.34
ESE	1.9	1.32	0	0	0	3.22
SE	6.73	1.9	0	0	0	8.63
SSE	6.73	1.17	0	0	0	7.9
S	6.73	1.32	0	0	0	8.05
SSW	7.47	0.29	0	0	0	7.76
SW	14.2	0.29	0	0	0	14.49
WSW	7.91	1.17	0	0	0	9.08
W	2.93	0.15	0	0	0	3.08
WNW	2.2	0.29	0	0	0	2.49
NW	4.1	0.15	0	0	0	4.25
NNW	4.1	0.15	0	0	0	4.25
Summary	87.99	12.01	0	0	0	100


PRAMP 842b Poll.: PRAMP 842b-THC55[ppm] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppm)
88 0-2
12 2-5
0 5-10
0 10-40
0 >40.0

peace river area monitoring program
pramp

PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2022

Summary of Hourly Averages

METHANE (CH4) in ppm

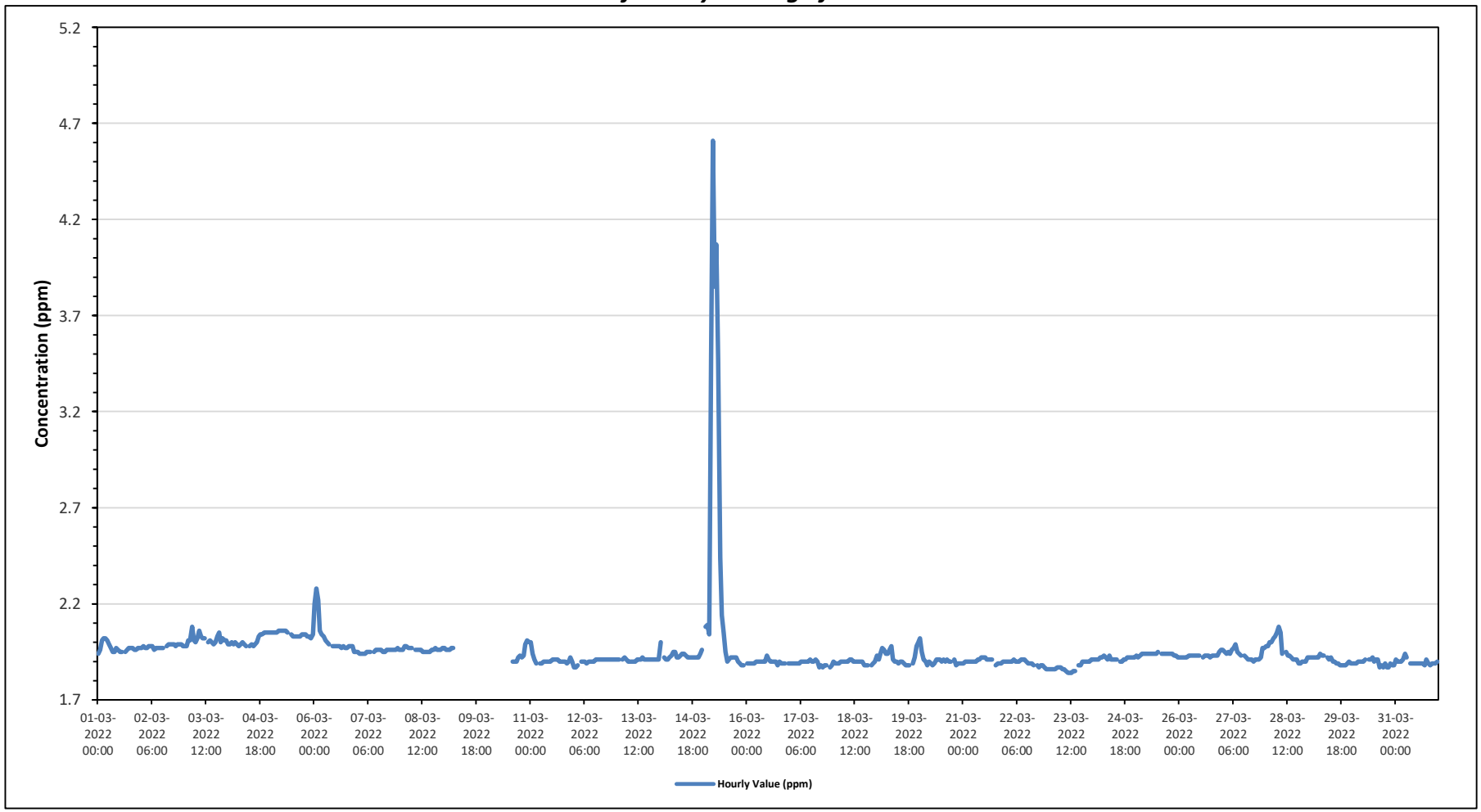
Maximum Hourly Value:	4.61	ppm	on March 15 at hour 5	Hours in Service:	744
Maximum Daily Value:	2.42	ppm	on March 15	Hours of Data:	683
Minimum Hourly Value:	1.84	ppm	on March 23 at hour 10	Hours of Missing Data:	24
Minimum Daily Value:	1.87	ppm	on March 23	Hours of Calibration:	37
Monthly Average:	1.95	ppm		Operational Uptime:	96.8

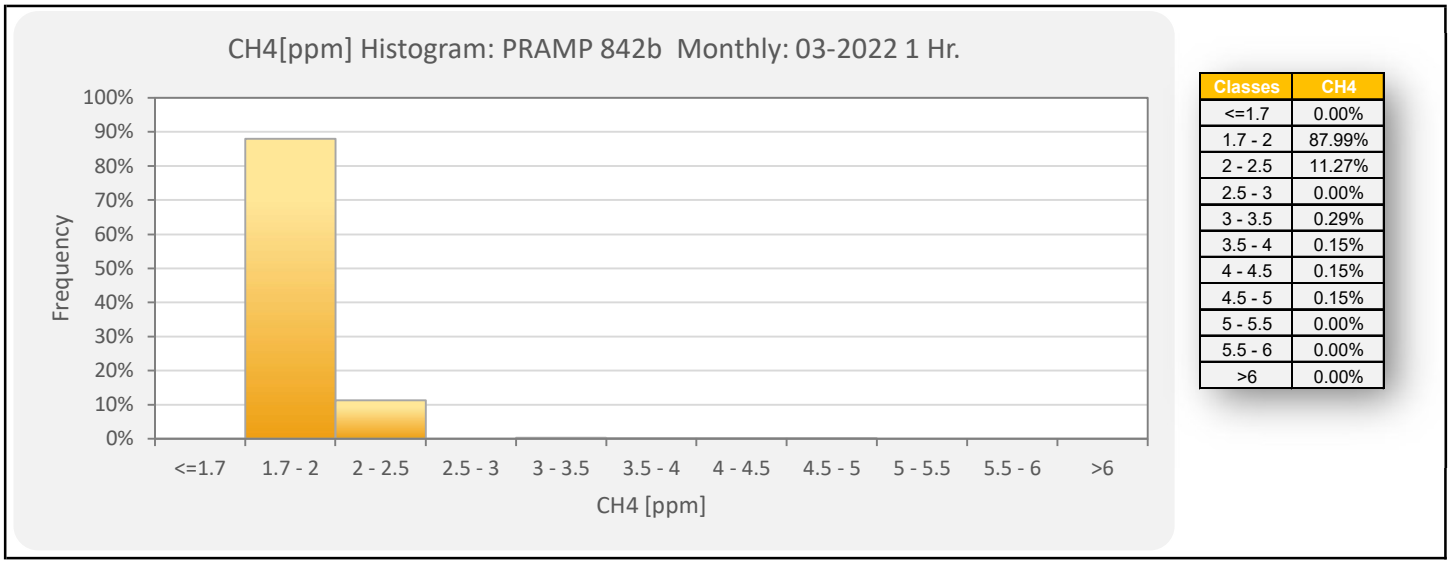
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	1.94	1.96	2.01	2.02	2.02	2.01	1.99	1.97	1.95	1.95	1.97	1.96	1.95	1.95	S	1.95	1.96	1.97	1.97	1.97	1.96	1.96	1.97	1.97	1.94	2.02	1.97
Mar 2	1.97	1.98	1.97	1.97	1.98	1.98	1.98	1.96	1.97	1.97	1.97	1.97	1.97	S	1.98	1.99	1.99	1.99	1.99	1.98	1.99	1.99	1.99	1.98	1.96	1.99	1.98
Mar 3	1.98	1.98	2.01	2.01	2.08	2.01	2.00	2.02	2.06	2.03	2.02	2.02	S	2.00	2.01	2.00	1.99	2.00	2.03	2.05	2.00	2.02	2.01	2.01	1.98	2.08	2.01
Mar 4	1.99	1.99	2.00	1.99	2.00	1.99	1.98	1.99	2.00	1.99	1.98	S	1.98	1.99	1.98	1.99	2.00	2.03	2.04	2.04	2.05	2.05	2.05	2.05	1.98	2.05	2.01
Mar 5	2.05	2.05	2.05	2.05	2.06	2.06	2.06	2.06	2.06	2.05	S	2.04	2.03	2.03	2.03	2.03	2.03	2.04	2.04	2.04	2.03	2.03	2.02	2.04	2.02	2.06	2.04
Mar 6	2.20	2.28	2.22	2.06	2.04	2.03	2.01	2.00	1.99	S	1.98	1.98	1.98	1.98	1.98	1.97	1.98	1.97	1.97	1.98	1.98	1.98	1.95	1.95	1.95	2.28	2.02
Mar 7	1.95	1.94	1.94	1.94	1.94	1.95	1.95	1.95	S	1.95	1.96	1.96	1.96	1.96	1.95	1.95	1.96	1.96	1.96	1.96	1.96	1.96	1.97	1.96	1.94	1.97	1.95
Mar 8	1.96	1.96	1.98	1.98	1.97	1.97	1.97	S	1.96	1.96	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.97	1.96	1.96	1.96	1.97	1.95	1.98	1.96
Mar 9	1.97	1.96	1.96	1.96	1.97	1.97	S	2.01	C	C	C	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	1.96	2.01	-
Mar 10	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	C	C	C	1.90	1.90	1.90	1.92	1.93	1.92	1.93	1.99	2.01	2.00	1.90	2.01	-
Mar 11	2.00	1.94	1.91	1.89	S	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.91	1.90	1.90	1.90	1.90	1.89	1.90	1.92	1.90	1.89	2.00	1.91
Mar 12	1.87	1.87	1.88	S	1.90	1.90	1.90	1.89	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.87	1.91	1.90
Mar 13	1.91	1.91	S	1.91	1.92	1.91	1.90	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.92	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.90	1.92	1.91
Mar 14	2.00	S	1.92	1.91	1.91	1.92	1.93	1.95	1.95	1.92	1.92	1.93	1.94	1.94	1.93	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.94	1.96	1.91	2.00	1.93
Mar 15	S	2.08	2.09	2.04	3.47	4.61	3.85	4.07	3.47	2.44	2.14	2.05	1.95	1.90	1.91	1.92	1.92	1.92	1.92	1.90	1.89	1.88	1.88	S	1.88	4.61	2.42
Mar 16	1.89	1.89	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.90	1.93	1.91	1.90	1.90	1.90	1.90	1.88	1.90	1.89	1.89	1.89	S	1.89	1.88	1.93	1.90
Mar 17	1.89	1.89	1.89	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.91	1.90	1.90	1.91	1.90	1.87	1.88	1.87	1.88	1.88	S	1.87	1.88	1.87	1.91	1.89
Mar 18	1.90	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.91	1.91	1.90	1.90	1.90	1.90	1.90	1.90	1.88	1.88	1.88	S	1.88	1.89	1.90	1.88	1.91	1.90
Mar 19	1.93	1.91	1.94	1.97	1.96	1.94	1.94	1.96	1.98	1.91	1.90	1.90	1.89	1.90	1.90	1.89	1.88	1.88	1.88	S	1.89	1.92	1.98	2.00	1.88	2.00	1.92
Mar 20	2.02	1.95	1.91	1.90	1.88	1.90	1.89	1.88	1.89	1.91	1.91	1.91	1.90	1.91	1.90	1.91	1.90	1.90	S	1.91	1.88	1.89	1.89	1.89	1.88	2.02	1.91
Mar 21	1.89	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.91	1.92	1.92	1.92	1.91	1.91	1.91	1.91	S	1.88	1.89	1.89	1.89	1.90	1.90	1.88	1.92	1.90
Mar 22	1.90	1.90	1.90	1.90	1.91	1.90	1.90	1.90	1.91	1.91	1.91	1.90	1.89	1.89	1.89	1.88	S	1.88	1.87	1.88	1.88	1.87	1.86	1.86	1.86	1.91	1.89
Mar 23	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.86	1.86	1.85	1.84	1.84	1.84	1.85	1.85	S	1.88	1.88	1.90	1.90	1.90	1.90	1.90	1.91	1.84	1.91	1.87
Mar 24	1.91	1.91	1.91	1.91	1.92	1.92	1.93	1.92	1.91	1.93	1.91	1.91	1.91	1.91	S	1.90	1.90	1.91	1.91	1.92	1.92	1.92	1.92	1.92	1.90	1.93	1.91
Mar 25	1.93	1.92	1.93	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.95	S	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.93	1.92	1.92	1.95	1.94
Mar 26	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.93	1.93	1.93	S	1.92	1.93	1.93	1.93	1.92	1.93	1.93	1.93	1.93	1.95	1.96	1.92	1.96	1.93
Mar 27	1.96	1.95	1.94	1.95	1.94	1.96	1.97	1.99	1.95	1.94	1.93	S	1.93	1.92	1.91	1.91	1.91	1.90	1.91	1.91	1.91	1.92	1.97	1.97	1.90	1.99	1.94
Mar 28	1.98	1.98	2.00	2.00	2.02	2.03	2.05	2.08	2.05	1.94	S	1.95	1.93	1.93	1.92	1.91	1.91	1.91	1.89	1.89	1.90	1.90	1.90	1.92	1.89	2.08	1.96
Mar 29	1.92	1.92	1.92	1.92	1.92	1.92	1.94	1.93	1.93	S	1.92	1.91	1.92	1.90	1.90	1.89	1.89	1.88	1.88	1.88	1.88	1.89	1.90	1.89	1.88	1.94	1.91
Mar 30	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.91	S	1.91	1.91	1.92	1.90	1.91	1.91	1.87	1.88	1.87	1.89	1.87	1.87	1.89	1.88	1.88	1.87	1.92	1.89
Mar 31	1.91	1.90	1.90	1.90	1.91	1.94	1.92	S	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.88	1.91	1.89	1.88	1.89	1.89	1.89	1.90	1.88	1.94	1.90
Diurnal Maximum	2.20	2.28	2.22	2.06	3.47	4.61	3.85	4.07	3.47	2.44	2.14	2.05	2.03	2.03	2.03	2.03	2.03	2.04	2.04	2.05	2.05	2.05	2.05	2.05			
Diurnal Average	1.95	1.95	1.95	1.94	2.00	2.03	2.01	2.02	2.00	1.95	1.93	1.93	1.93	1.92	1.93	1.93	1.92	1.92	1.93	1.93	1.93	1.93	1.94	1.94			

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

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

Timeseries Chart of Hourly Average for CH4 - 842b Station

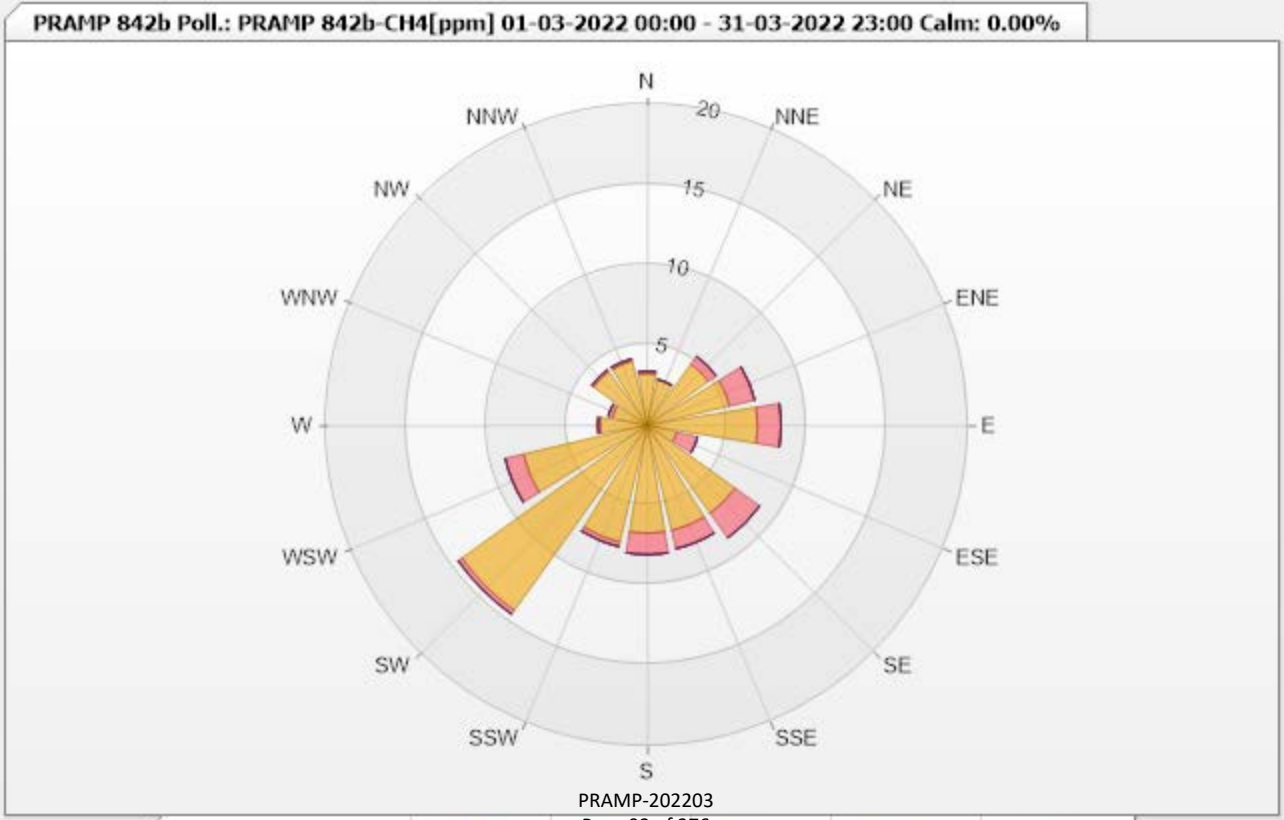




Classes	CH4
<=1.7	0.00%
1.7 - 2	87.99%
2 - 2.5	11.27%
2.5 - 3	0.00%
3 - 3.5	0.29%
3.5 - 4	0.15%
4 - 4.5	0.15%
4.5 - 5	0.15%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: PRAMP 842b Poll.: PRAMP 842b-CH4[ppm] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 91.80% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	3.22	0.15	0	0	0	3.37
NNE	2.93	0	0	0	0	2.93
NE	4.69	0.59	0	0	0	5.28
ENE	5.27	1.61	0	0	0	6.88
E	6.88	1.46	0	0	0	8.34
ESE	1.9	1.32	0	0	0	3.22
SE	6.73	1.9	0	0	0	8.63
SSE	6.73	1.17	0	0	0	7.9
S	6.73	1.32	0	0	0	8.05
SSW	7.47	0.29	0	0	0	7.76
SW	14.2	0.29	0	0	0	14.49
WSW	7.91	1.17	0	0	0	9.08
W	2.93	0.15	0	0	0	3.08
WNW	2.2	0.29	0	0	0	2.49
NW	4.1	0.15	0	0	0	4.25
NNW	4.1	0.15	0	0	0	4.25
Summary	87.99	12.01	0	0	0	100


PRAMP 842b Poll.: PRAMP 842b-CH4[ppm] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppm)
88 0-2
12 2-5
0 5-10
0 10-20
0 >20.0

peace river area monitoring program
pramp

PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2022

Summary of Hourly Averages

NON-METHANE HYDROCARBONS (NMHC) in ppm

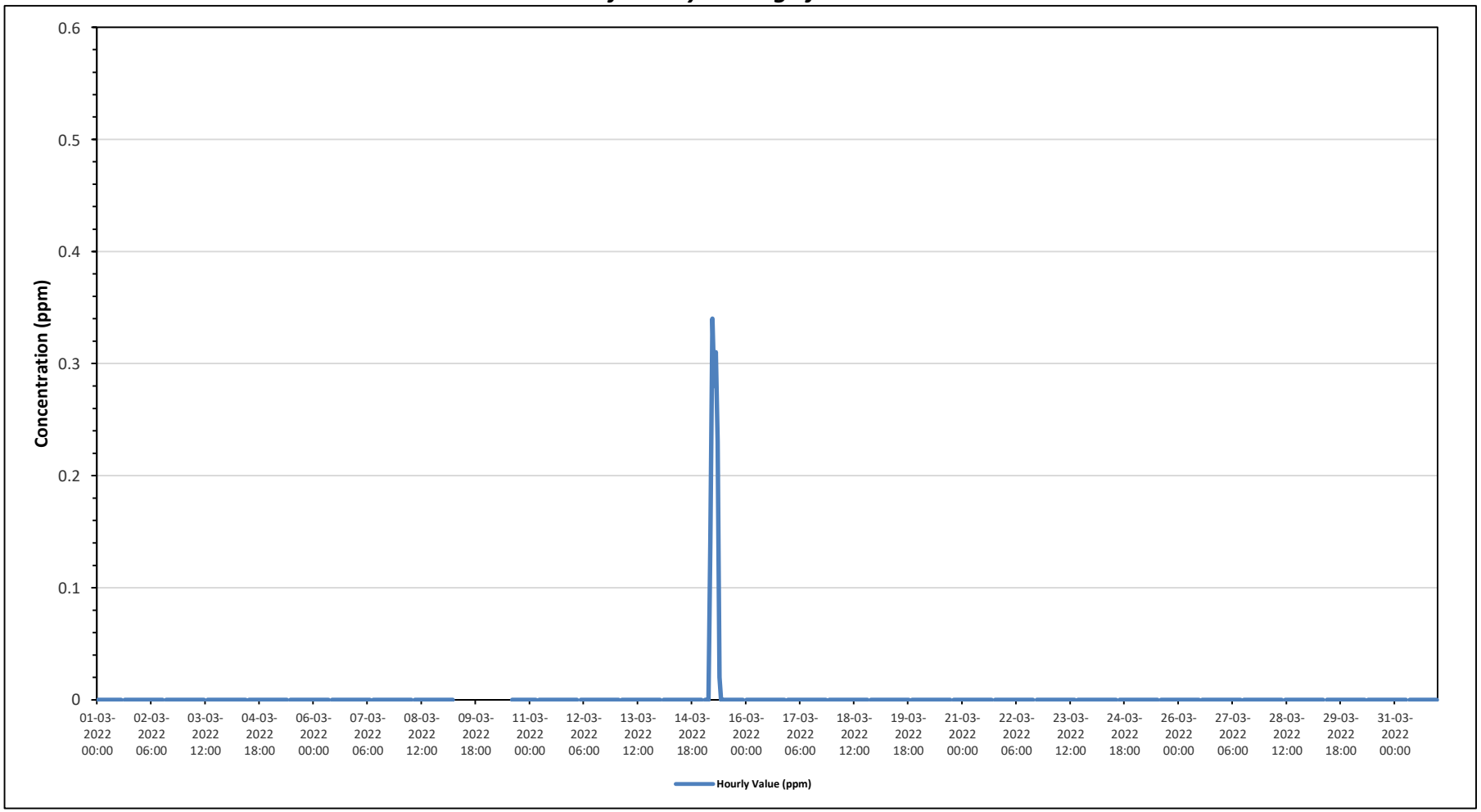
Maximum Hourly Value:	0.34	ppm	on March 15 at hour 5	Hours in Service:	744
Maximum Daily Value:	0.06	ppm	on March 15	Hours of Data:	683
Minimum Hourly Value:	0.00	ppm	on March 1 at hour 0	Hours of Missing Data:	24
Minimum Daily Value:	0.00	ppm	on March 1	Hours of Calibration:	37
Monthly Average:	0.00	ppm		Operational Uptime:	96.8

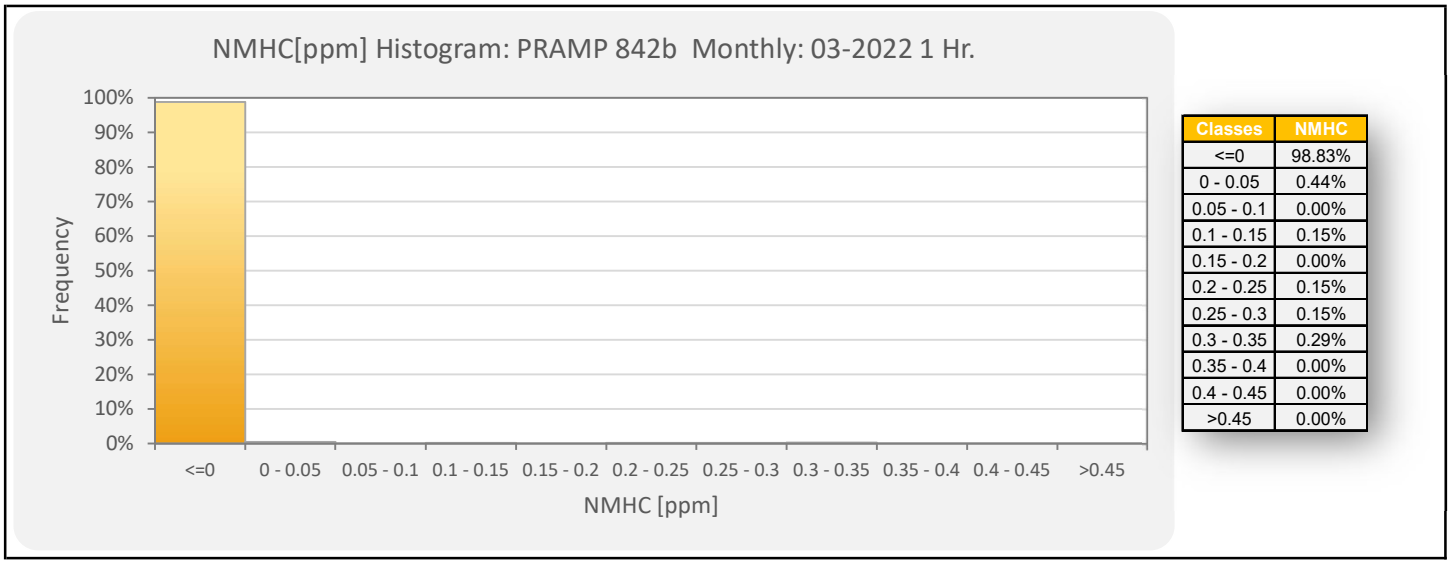
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar 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	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 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 4	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 5	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 6	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 7	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 8	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 9	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	C	C	C	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	0.00	0.00	-
Mar 10	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	NRM	C	C	C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Mar 11	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 12	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 13	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 14	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 15	S	0.00	0.00	0.00	0.14	**0.34**	0.28	0.31	0.23	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	**0.34**	**0.06**
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	S	0.00	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	0.00	S	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	0.00	S	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	0.00	S	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	0.00	S	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	0.00	0.00	S	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	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 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	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 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	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 25	0.00	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 26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 27	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 28	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 29	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 30	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 31	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
Diurnal Maximum	0.00	0.00	0.00	0.00	0.14	0.34	0.28	0.31	0.23	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Diurnal Average	0.00	0.00	0.00	0.00	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	0.00	0.00			

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

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

Timeseries Chart of Hourly Average for NMHC - 842b Station

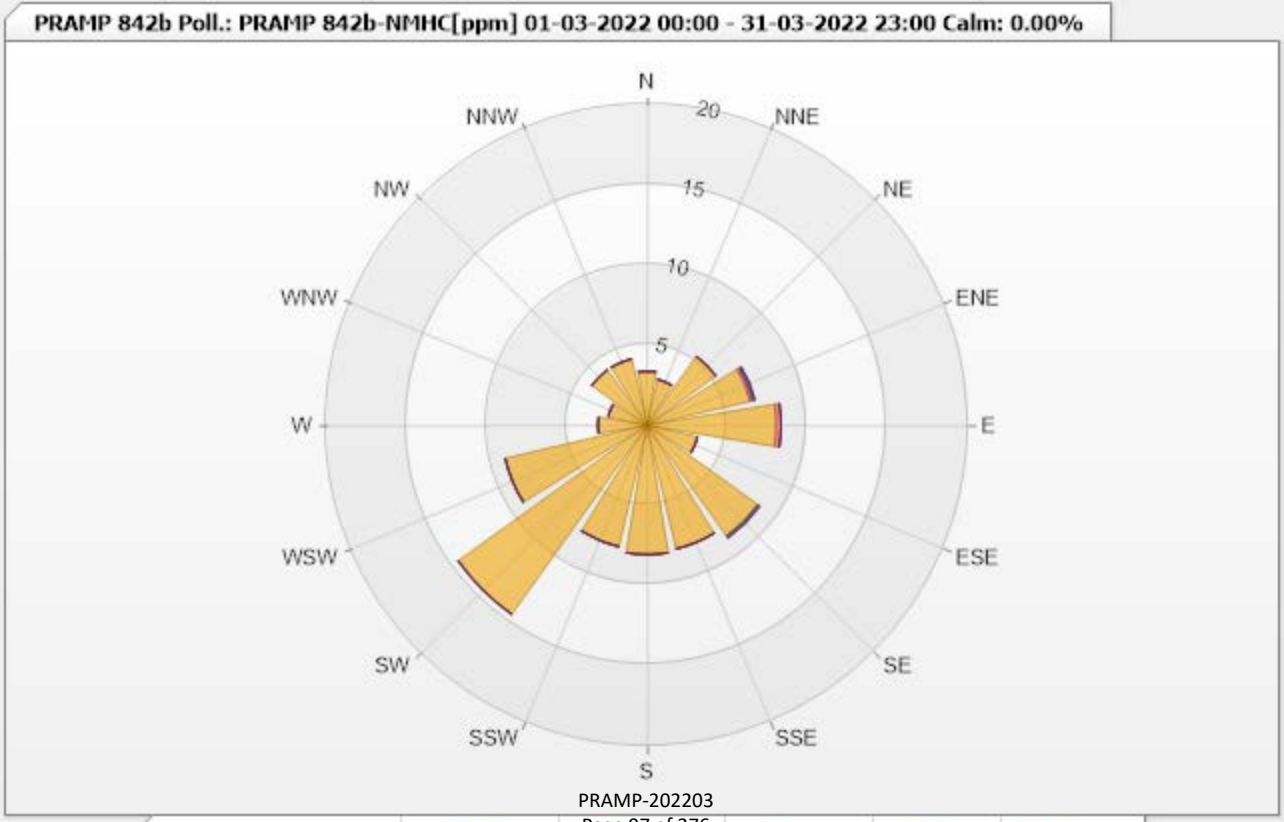




Classes	NMHC
<=0	98.83%
0 - 0.05	0.44%
0.05 - 0.1	0.00%
0.1 - 0.15	0.15%
0.15 - 0.2	0.00%
0.2 - 0.25	0.15%
0.25 - 0.3	0.15%
0.3 - 0.35	0.29%
0.35 - 0.4	0.00%
0.4 - 0.45	0.00%
>0.45	0.00%

Wind: PRAMP 842b Poll.: PRAMP 842b-NMHC[ppm] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 91.80% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	3.37	0	0	0	0	3.37
NNE	2.93	0	0	0	0	2.93
NE	5.27	0	0	0	0	5.27
ENE	6.59	0.15	0.15	0	0	6.89
E	8.05	0.29	0	0	0	8.34
ESE	3.22	0	0	0	0	3.22
SE	8.49	0	0.15	0	0	8.64
SSE	7.91	0	0	0	0	7.91
S	8.05	0	0	0	0	8.05
SSW	7.76	0	0	0	0	7.76
SW	14.49	0	0	0	0	14.49
WSW	9.08	0	0	0	0	9.08
W	3.07	0	0	0	0	3.07
WNW	2.49	0	0	0	0	2.49
NW	4.25	0	0	0	0	4.25
NNW	4.25	0	0	0	0	4.25
Summary	99.27	0.44	0.3	0	0	100


PRAMP 842b Poll.: PRAMP 842b-NMHC[ppm] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppm)
99 0-0.1
0 0.1-0.3
0 0.3-1
0 1-2
0 >2.0

peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2022

Summary of Hourly Averages

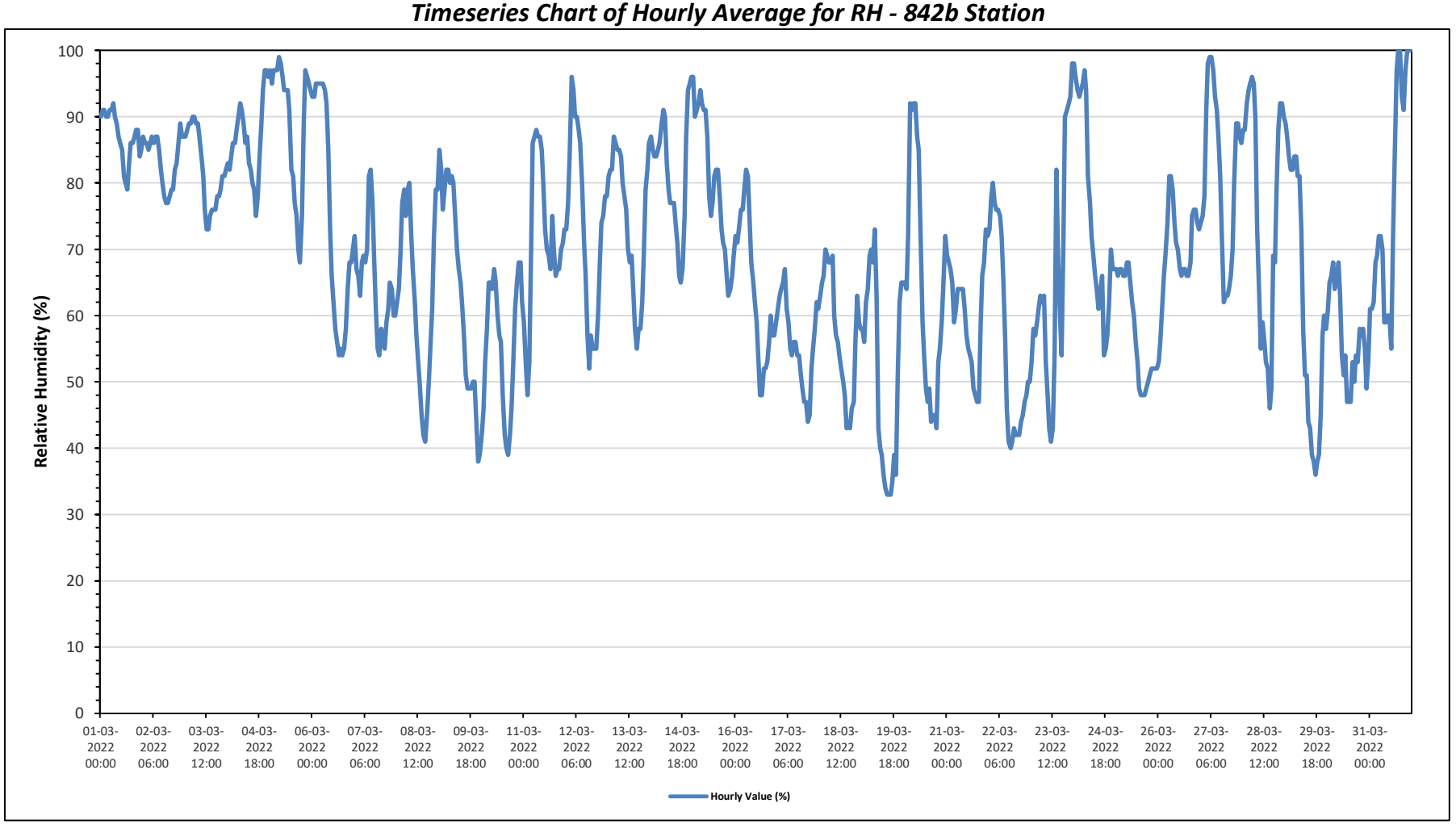
RELATIVE HUMIDITY (RH) in %

Maximum Hourly Value:	100	%	on March 31 at hour 16	Hours in Service:	744
Maximum Daily Value:	89.5	%	on March 5	Hours of Data:	744
Minimum Hourly Value:	33	%	on March 19 at hour 14	Hours of Missing Data:	0
Minimum Daily Value:	51.1	%	on March 19	Hours of Calibration:	0
Monthly Average:	69.8	%		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	90	91	91	90	90	91	91	92	90	89	87	86	85	81	80	79	83	86	86	87	88	88	84	85	79	92	87.1
Mar 2	87	86	86	85	86	87	86	87	87	85	82	80	78	77	77	78	79	79	82	83	86	89	87	87	77	89	83.6
Mar 3	87	88	89	89	90	90	89	89	87	84	81	76	73	73	75	76	76	76	78	78	79	81	81	82	73	90	82.0
Mar 4	83	82	84	86	86	88	90	92	91	89	86	87	83	82	80	79	75	78	84	89	94	97	97	96	75	97	86.6
Mar 5	97	95	97	97	97	99	98	96	94	94	94	91	82	81	77	75	70	68	75	89	97	96	95	94	68	99	**89.5**
Mar 6	93	93	95	95	95	95	95	94	92	85	73	66	62	58	56	54	55	54	55	58	64	68	68	70	54	95	74.7
Mar 7	72	67	66	63	68	69	68	70	81	82	77	69	61	55	54	58	56	55	59	61	65	64	60	60	54	82	65.0
Mar 8	62	64	69	77	79	75	79	80	73	67	62	57	53	49	45	42	41	45	50	56	61	72	79	79	41	80	63.2
Mar 9	85	82	76	79	82	82	80	81	80	75	70	67	65	61	57	51	49	49	49	50	50	44	38	39	38	85	64.2
Mar 10	42	46	53	58	65	65	64	67	65	60	57	56	48	42	40	39	42	46	53	61	65	68	68	62	39	68	55.5
Mar 11	59	53	48	53	70	86	87	88	87	87	85	80	73	70	69	67	75	70	66	67	67	70	71	73	48	88	71.7
Mar 12	73	77	84	96	94	90	90	88	86	80	71	66	57	52	57	55	55	55	60	68	74	75	78	78	52	96	73.3
Mar 13	81	82	82	87	86	85	85	84	80	78	76	70	68	69	64	58	55	58	58	62	69	79	82	86	55	87	74.3
Mar 14	87	85	84	84	85	86	89	91	90	83	79	77	77	77	74	71	66	65	67	75	87	94	95	96	65	96	81.8
Mar 15	96	90	91	92	94	92	91	91	87	78	75	77	81	82	82	78	73	71	70	66	63	64	66	69	63	96	80.0
Mar 16	72	71	73	76	76	79	82	81	75	68	65	62	59	53	48	48	52	52	53	56	60	57	57	59	48	82	63.9
Mar 17	61	63	64	65	67	61	59	55	54	56	56	54	54	51	49	47	47	44	45	52	55	58	62	61	44	67	55.8
Mar 18	63	65	66	70	69	68	68	69	60	57	56	54	52	50	48	43	44	43	46	47	56	63	59	58	43	70	57.3
Mar 19	58	56	62	64	69	70	68	73	63	43	40	39	36	34	**33**	**33**	**33**	35	39	36	51	62	65	65	**33**	73	51.1
Mar 20	65	64	72	92	91	92	92	87	85	71	59	54	49	47	49	44	45	45	43	53	55	59	66	72	43	92	64.6
Mar 21	69	68	67	65	59	61	64	64	64	64	61	57	55	54	53	49	48	47	47	59	66	68	73	72	47	73	60.6
Mar 22	73	78	80	77	76	76	75	72	65	56	46	41	40	41	43	42	42	42	44	45	47	48	50	50	40	80	56.2
Mar 23	53	58	57	59	61	63	62	63	53	48	43	41	43	54	82	68	61	54	71	90	91	92	93	98	41	98	64.9
Mar 24	98	96	94	93	94	95	97	94	81	77	72	69	66	64	61	64	66	54	55	57	62	70	67	67	54	98	75.5
Mar 25	67	66	67	67	66	66	68	68	65	62	60	56	53	49	48	48	48	49	50	51	52	52	52	52	48	68	57.6
Mar 26	53	56	61	66	69	74	81	81	79	74	71	70	67	66	67	67	66	66	68	75	76	76	74	73	53	81	69.8
Mar 27	74	75	78	91	98	99	99	97	93	91	87	81	71	62	63	63	64	66	70	80	89	89	87	86	62	99	81.4
Mar 28	88	88	92	94	95	96	95	90	73	63	55	59	56	53	52	46	49	69	68	79	88	92	92	90	46	96	75.9
Mar 29	89	87	84	82	82	84	84	81	81	73	58	51	51	44	43	39	38	36	38	39	45	57	60	58	36	89	61.8
Mar 30	61	65	66	68	64	66	68	63	54	51	54	47	47	47	53	50	54	53	58	57	58	55	49	53	47	68	56.7
Mar 31	61	61	62	68	69	72	72	70	59	59	60	60	55	72	85	97	**100**	**100**	93	91	97	**100**	**100**	**100**	55	**100**	77.6
Diurnal Maximum	98	96	97	97	98	99	99	97	94	94	94	91	85	82	85	97	100	100	93	91	97	100	100	100			
Diurnal Average	74.2	74.1	75.5	78.3	79.7	80.7	81.2	80.6	76.6	71.9	67.7	64.5	61.3	59.7	60.1	58.3	58.3	58.4	60.6	65.1	69.6	72.5	72.7	73.2			

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

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


Timeseries Chart of Hourly Average for RH - 842b Station
Relative Humidity (%)
100
90
80
70
60
50
40
30
20
10
0
01-03-2022 00:00
02-03-2022 06:00
03-03-2022 12:00
04-03-2022 18:00
06-03-2022 00:00
07-03-2022 06:00
08-03-2022 12:00
09-03-2022 18:00
11-03-2022 00:00
12-03-2022 06:00
13-03-2022 12:00
14-03-2022 18:00
16-03-2022 00:00
17-03-2022 06:00
18-03-2022 12:00
19-03-2022 18:00
21-03-2022 00:00
22-03-2022 06:00
23-03-2022 12:00
24-03-2022 18:00
26-03-2022 00:00
27-03-2022 06:00
28-03-2022 12:00
29-03-2022 18:00
31-03-2022 00:00
Hourly Value (%)

PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2022

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

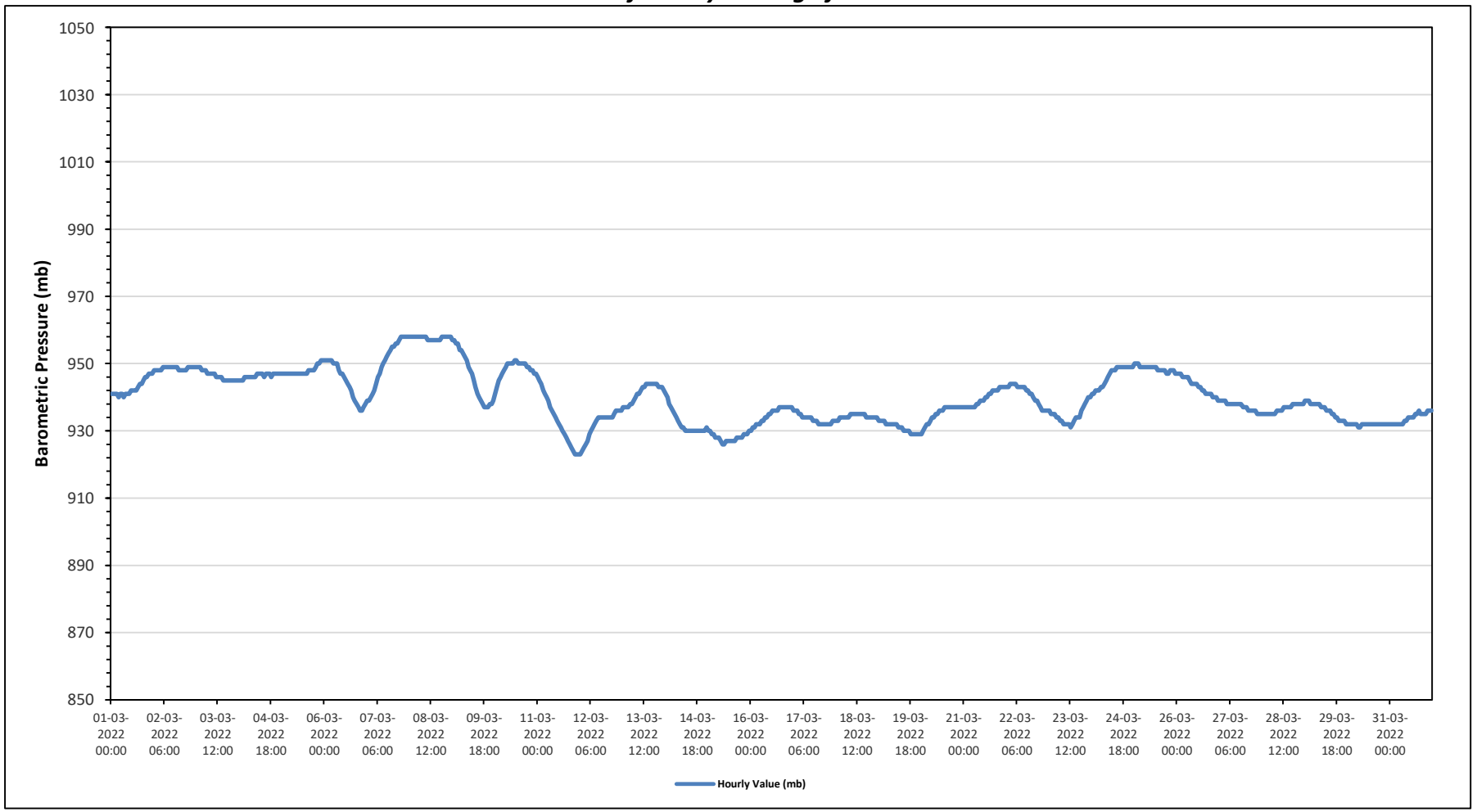
Maximum Hourly Value:	958	mb	on March 7 at hour 19	Hours in Service:	744
Maximum Daily Value:	958	mb	on March 8	Hours of Data:	744
Minimum Hourly Value:	923	mb	on March 11 at hour 21	Hours of Missing Data:	0
Minimum Daily Value:	928	mb	on March 15	Hours of Calibration:	0
Monthly Average:	940	mb		Operational 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	941	941	941	941	940	941	941	940	941	941	941	942	942	942	942	943	944	944	945	946	946	947	947	947	940	947	942.8
Mar 2	948	948	948	948	948	949	949	949	949	949	949	949	949	949	948	948	948	948	948	949	949	949	949	949	948	949	948.6
Mar 3	949	949	949	948	948	948	947	947	947	947	947	946	946	946	946	945	945	945	945	945	945	945	945	945	945	949	946.5
Mar 4	945	945	945	946	946	946	946	946	946	946	947	947	947	947	946	947	947	947	946	947	947	947	947	947	945	947	946.4
Mar 5	947	947	947	947	947	947	947	947	947	947	947	947	947	947	947	948	948	948	948	949	950	950	951	951	947	951	947.8
Mar 6	951	951	951	951	951	950	950	950	948	947	947	946	945	944	943	942	940	939	938	937	936	936	937	938	936	951	944.5
Mar 7	939	939	940	941	942	944	946	947	949	950	951	952	953	954	955	955	956	956	957	**958**	**958**	**958**	**958**	**958**	939	**958**	950.7
Mar 8	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	**958**	957	957	957	957	957	957	957	957	**958**	**958**	**958**	**958**	**958**	**958**	957	**958**	**957.7**
Mar 9	957	957	956	956	954	954	953	952	951	949	948	947	945	943	941	940	939	938	937	937	937	938	938	939	937	957	946.1
Mar 10	941	943	945	946	947	948	949	950	950	950	950	951	951	950	950	950	950	950	949	949	948	948	947	947	941	951	948.3
Mar 11	946	945	944	942	941	940	939	937	936	935	934	933	932	931	930	929	928	927	926	925	924	**923**	**923**	**923**	**923**	946	933.0
Mar 12	**923**	924	925	926	927	929	930	931	932	933	934	934	934	934	934	934	934	934	934	935	936	936	936	936	**923**	936	931.9
Mar 13	937	937	937	937	938	938	939	940	941	941	942	943	943	944	944	944	944	944	944	944	943	943	943	942	937	944	941.3
Mar 14	941	940	938	937	936	935	934	933	932	931	931	930	930	930	930	930	930	930	930	930	930	930	930	931	930	941	932.5
Mar 15	930	930	929	929	928	928	928	927	926	926	927	927	927	927	927	927	928	928	928	928	929	929	929	930	926	930	928.0
Mar 16	930	931	931	932	932	932	933	933	934	934	935	935	936	936	936	936	937	937	937	937	937	937	937	937	930	937	934.7
Mar 17	936	936	936	935	935	934	934	934	934	934	934	933	933	933	932	932	932	932	932	932	932	932	933	933	932	936	933.5
Mar 18	933	933	934	934	934	934	934	934	935	935	935	935	935	935	935	935	935	934	934	934	934	934	934	934	933	935	934.3
Mar 19	933	933	933	933	932	932	932	932	932	932	932	931	931	931	930	930	930	930	929	929	929	929	929	929	929	933	931.0
Mar 20	929	930	931	932	932	933	934	934	935	935	936	936	936	937	937	937	937	937	937	937	937	937	937	937	929	937	935.0
Mar 21	937	937	937	937	937	937	937	938	938	939	939	939	940	940	941	941	942	942	942	942	943	943	943	943	937	943	939.8
Mar 22	943	943	944	944	944	944	943	943	943	943	943	942	942	941	941	940	939	939	938	937	936	936	936	936	936	944	940.8
Mar 23	936	935	935	935	934	934	933	933	932	932	932	932	931	932	933	934	934	934	936	937	938	939	940	940	931	940	934.6
Mar 24	941	941	942	942	942	943	943	944	945	946	947	948	948	948	949	949	949	949	949	949	949	949	949	949	941	949	946.3
Mar 25	950	950	950	949	949	949	949	949	949	949	949	949	949	948	948	948	948	948	947	947	948	948	948	947	947	950	948.5
Mar 26	947	947	947	946	946	946	946	945	944	944	944	944	943	943	942	942	941	941	941	941	940	940	940	939	939	947	943.3
Mar 27	939	939	939	939	938	938	938	938	938	938	938	938	938	937	937	937	936	936	936	936	936	935	935	935	935	939	937.3
Mar 28	935	935	935	935	935	935	935	935	936	936	936	936	937	937	937	937	937	938	938	938	938	938	938	938	935	938	936.5
Mar 29	939	939	939	938	938	938	938	938	938	937	937	937	936	936	936	935	935	934	934	933	933	933	933	932	932	939	936.1
Mar 30	932	932	932	932	932	932	931	931	932	932	932	932	932	932	932	932	932	932	932	932	932	932	932	932	931	932	931.9
Mar 31	932	932	932	932	932	932	932	932	933	933	934	934	934	934	935	935	936	935	935	935	935	936	936	936	932	936	933.8
Diurnal Maximum	958	958	958	958	958	958	958	958	958	958	957	957	957	957	957	957	957	957	958	958	958	958	958	958			
Diurnal Average	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940			

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

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

Timeseries Chart of Hourly Average for BP - 842b Station



peace river area monitoring program

PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2022

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

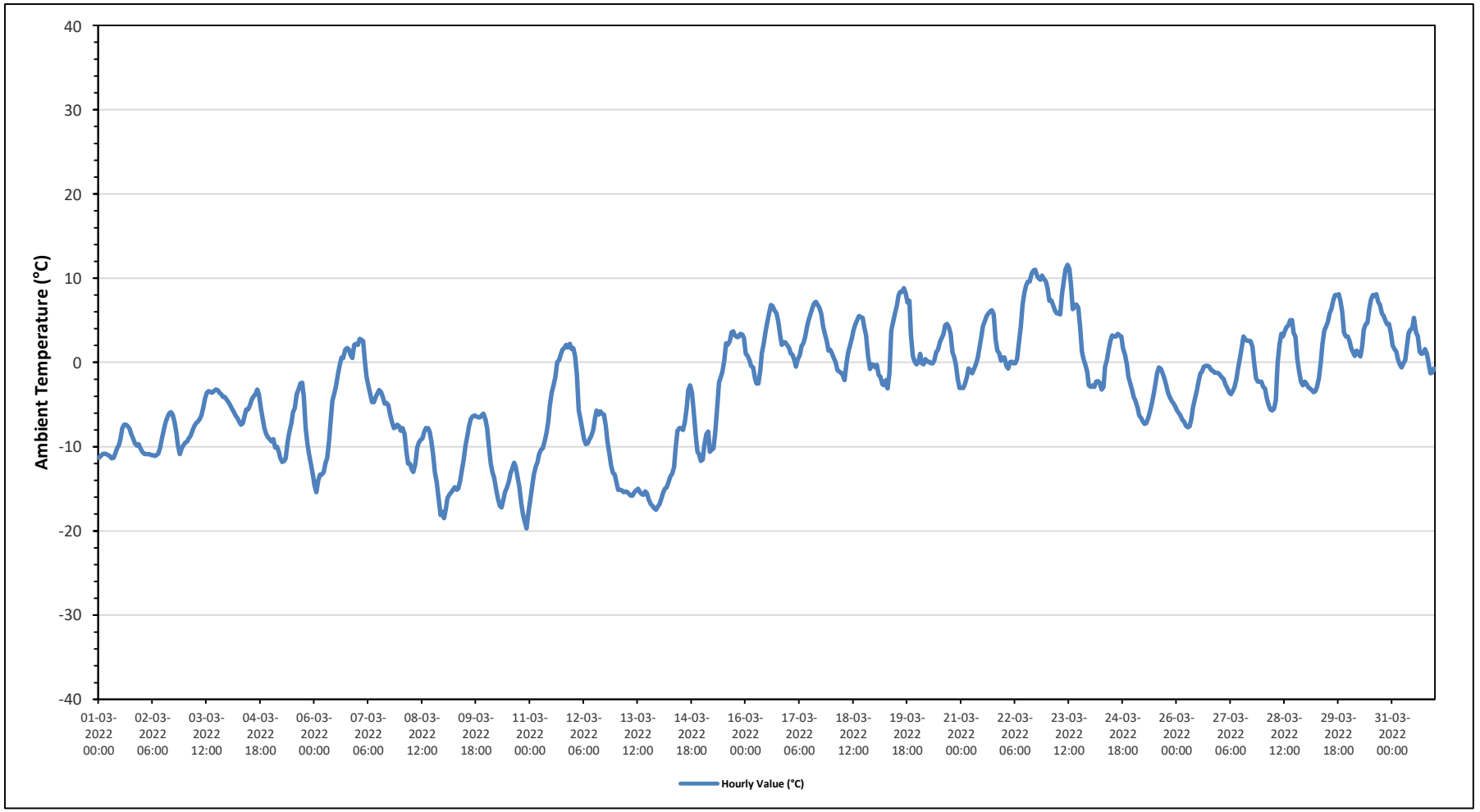
Maximum Hourly Value:	11.6	°C	on March 23 at hour 11	Hours in Service:	744
Maximum Daily Value:	6.0	°C	on March 23	Hours of Data:	744
Minimum Hourly Value:	-19.7	°C	on March 10 at hour 22	Hours of Missing Data:	0
Minimum Daily Value:	-15.8	°C	on March 13	Hours of Calibration:	0
Monthly Average:	-3.3	°C		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	-11.3	-11.1	-10.9	-10.8	-10.9	-11	-11.1	-11.4	-11.3	-10.8	-10.2	-9.8	-9.1	-7.8	-7.4	-7.4	-7.6	-7.9	-8.5	-9	-9.6	-9.9	-9.7	-10.2	-11.4	-7.4	-9.8
Mar 2	-10.6	-10.8	-10.9	-10.9	-10.9	-11	-11	-11.1	-11	-10.8	-10.1	-9	-8	-7.1	-6.6	-6.1	-5.9	-6.2	-7.1	-8.4	-9.9	-10.9	-10.2	-9.8	-11.1	-5.9	-9.3
Mar 3	-9.5	-9.4	-9	-8.7	-8.1	-7.6	-7.2	-7	-6.7	-6.3	-5.4	-4.3	-3.6	-3.4	-3.5	-3.6	-3.4	-3.2	-3.3	-3.6	-3.8	-4.1	-4.1	-4.4	-9.5	-3.2	-5.6
Mar 4	-4.7	-5.1	-5.5	-5.9	-6.3	-6.6	-7	-7.4	-7.2	-6.3	-5.6	-5.6	-5.1	-4.4	-4	-3.8	-3.2	-3.8	-5.3	-6.6	-7.8	-8.5	-8.9	-9.1	-9.1	-3.2	-6.0
Mar 5	-9.4	-9.1	-10.1	-10	-10.6	-11.4	-11.8	-11.7	-11.4	-9.3	-8.1	-7.2	-5.9	-5.4	-3.8	-3.2	-2.5	-2.4	-4	-7.7	-9.7	-10.9	-12.2	-13.4	-13.4	-2.4	-8.4
Mar 6	-14.6	-15.4	-14	-13.3	-13.3	-13	-11.9	-11.4	-9.4	-6.7	-4.5	-3.6	-2.6	-1.4	-0.3	0.6	0.5	1.5	1.7	1.5	0.9	0.5	2.1	2.2	-15.4	2.2	-5.2
Mar 7	2.1	2.8	2.7	2.5	0	-1.7	-2.9	-3.9	-4.7	-4.7	-4.1	-3.7	-3.3	-3.6	-4.2	-4.9	-4.8	-5.1	-6.1	-7.1	-7.8	-7.7	-7.4	-7.6	-7.8	2.8	-3.6
Mar 8	-8.1	-7.8	-8.5	-10.4	-12	-12	-12.7	-13	-12	-10.1	-9.5	-9.2	-9	-8.3	-7.8	-7.8	-8.2	-9.4	-11.1	-13	-14.2	-16.3	-18.1	-17.7	-18.1	-7.8	-11.1
Mar 9	-18.5	-17.4	-16.1	-15.7	-15.4	-15.1	-14.8	-15.1	-15	-14.1	-12.6	-11.5	-9.8	-8.7	-7.6	-6.7	-6.4	-6.3	-6.4	-6.5	-6.5	-6.3	-6.1	-6.8	-18.5	-6.1	-11.1
Mar 10	-7.8	-10	-12	-13	-13.7	-15	-16.1	-17	-17.2	-16.3	-15.4	-14.9	-14.1	-13.2	-12.6	-11.9	-12.4	-13.6	-14.8	-16.7	-18.1	-19	**-19.7**	-17.9	**-19.7**	-7.8	-14.7
Mar 11	-16.4	-14.6	-13.3	-12.4	-11.8	-10.9	-10.4	-10.2	-9.4	-8.4	-7	-5.1	-3.6	-2.7	-1.7	0	0.3	0.9	1.5	1.7	2.1	1.8	2.2	1.6	-16.4	2.2	-5.2
Mar 12	1.7	0.8	-1.5	-5.7	-6.8	-8	-9.1	-9.7	-9.6	-9.1	-8.7	-8	-6.6	-5.7	-6.2	-5.8	-6.1	-6.2	-7.5	-9.3	-10.7	-12.2	-13.1	-13.3	-13.3	1.7	-7.4
Mar 13	-14.3	-15.1	-15.1	-15.2	-15.4	-15.3	-15.4	-15.6	-15.8	-15.8	-15.4	-15.2	-15	-15.4	-15.6	-15.7	-15.3	-15.5	-16.3	-16.8	-17	-17.3	-17.5	-17.1	-17.5	-14.3	-15.8
Mar 14	-16.8	-16.1	-15.4	-15	-14.8	-14.2	-13.6	-13.2	-12.4	-10.1	-8.1	-7.8	-7.8	-8	-7.1	-5.4	-3.3	-2.7	-3.6	-5.6	-8.5	-10.6	-10.9	-11.7	-16.8	-2.7	-10.1
Mar 15	-11.5	-9.9	-8.5	-8.2	-10.6	-10.4	-10.2	-8.2	-5.8	-2.4	-1.7	-1.1	0.2	2.3	2.1	2.5	3.6	3.7	3.2	3	3	3.4	3.3	2.9	-11.5	3.7	-2.3
Mar 16	1	0.8	0.3	-0.4	-0.6	-1.9	-2.5	-2.5	-1	1.1	2.2	3.8	4.8	5.9	6.8	6.7	6.2	5.8	4.8	3.4	2.1	2.4	2.4	2.1	-2.5	6.8	2.2
Mar 17	1.7	1.1	0.9	0.3	-0.5	0.4	0.9	1.9	2.3	3	4.2	5	5.7	6.5	7	7.2	6.8	6.5	5.8	4.2	3.4	2.6	1.4	1.5	-0.5	7.2	3.3
Mar 18	1.1	0.5	0	-0.9	-1.1	-1.2	-1.5	-2.1	0	1.2	2	2.9	3.8	4.5	5	5.5	5.4	5.3	4.2	3.2	0.9	-0.8	-0.2	-0.3	-2.1	5.5	1.6
Mar 19	-0.6	-0.3	-1.5	-1.7	-2.6	-2.7	-2.1	-3.1	-1.2	3.8	4.8	5.8	6.7	8	8.4	8.4	8.8	8.2	7.1	7.3	3.2	0.8	0.1	-0.2	-3.1	8.8	2.7
Mar 20	0	1	-0.1	-0.2	0.4	0.1	0.1	-0.1	-0.1	0.3	1.2	1.5	2.4	2.9	3.4	4.4	4.6	4.2	3.4	1.2	0.6	-0.3	-2	-3	-3.0	4.6	1.1
Mar 21	-3	-3	-2.5	-1.7	-0.7	-0.9	-1.3	-0.8	-0.2	0.5	1.6	2.9	4.3	4.9	5.5	5.8	6.1	6.2	5.7	2.8	1.4	1.1	0.2	0.6	-3.0	6.2	1.5
Mar 22	0.6	-0.4	-0.7	0	0.1	-0.1	-0.1	0.4	2.1	4.2	6.9	8.3	9.1	9.6	9.6	10.5	10.9	11	10.4	10	9.8	10.3	9.9	9.6	-0.7	11.0	5.9
Mar 23	8.8	7.3	7.4	6.8	6.2	5.8	5.9	5.7	8.1	9.7	11	**11.6**	11.1	9.3	6.3	6.6	6.9	6.5	4.2	1.3	0.4	-0.3	-1.1	-2.7	-2.7	**11.6**	**6.0**
Mar 24	-2.9	-2.7	-2.9	-2.3	-2.2	-2.4	-3.2	-2.9	-0.5	0.3	1.6	2.5	3.2	3.1	3.1	3.4	3.2	3.1	1.7	0.9	-0.2	-1.7	-2.5	-3.3	-3.3	3.4	-0.2
Mar 25	-4.1	-4.6	-5.4	-6.3	-6.6	-7	-7.3	-7.2	-6.5	-5.7	-4.9	-3.8	-2.5	-1.3	-0.6	-0.8	-1.3	-1.9	-2.7	-3.5	-4.1	-4.6	-4.9	-5.2	-7.3	-0.6	-4.3
Mar 26	-5.7	-6	-6.3	-6.8	-7.1	-7.5	-7.7	-7.6	-6.8	-5.3	-4.2	-3.4	-2.3	-1.3	-1.1	-0.5	-0.4	-0.4	-0.5	-0.9	-1	-1.2	-1.2	-1.3	-7.7	-0.4	-3.6
Mar 27	-1.5	-1.8	-2	-2.6	-3	-3.5	-3.8	-3.4	-2.9	-2	-0.8	0.4	1.9	3.1	2.7	2.6	2.6	2.5	1.9	-0.1	-1.9	-2.3	-2.3	-2.3	-3.8	3.1	-0.8
Mar 28	-2.9	-3.1	-4.3	-5.1	-5.6	-5.7	-5.5	-4.5	-0.1	2.1	3.4	3.1	3.7	4.2	4.4	5	5	3.5	3	0.4	-1.1	-2.3	-2.7	-2.3	-5.7	5.0	-0.3
Mar 29	-2.5	-2.9	-3.1	-3.3	-3.5	-3.4	-2.9	-1.9	-0.1	2.3	3.8	4.3	4.9	5.8	6.4	7.4	8	8	8.1	7.3	6	3.5	3.1	3.1	-3.5	8.1	2.4
Mar 30	2.5	1.7	1.2	0.8	1.4	1.1	0.7	1.9	3.9	4.5	4.7	6.4	7.5	8	7.9	8.1	7.2	6.8	5.8	5.5	5	4.5	4.6	3.5	0.7	8.1	4.4
Mar 31	2	1.6	1.3	0.4	-0.2	-0.6	-0.1	0.3	2.1	3.5	3.9	4.1	5.3	3.6	3.1	1.3	1	1.1	1.6	1.1	-0.1	-1.3	-1.2	-0.7	-1.3	5.3	1.4
Diurnal Maximum	8.8	7.3	7.4	6.8	6.2	5.8	5.9	5.7	8.1	9.7	11.0	11.6	11.1	9.6	9.6	10.5	10.9	11.0	10.4	10.0	9.8	10.3	9.9	9.6			
Diurnal Average	-5.0	-5.1	-5.3	-5.7	-6.0	-6.2	-6.3	-6.2	-5.2	-3.8	-2.7	-2.0	-1.1	-0.5	-0.3	0.1	0.2	0.0	-0.7	-1.9	-3.0	-3.8	-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	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

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

Timeseries Chart of Hourly Average for AT - 842b Station



peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2022

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

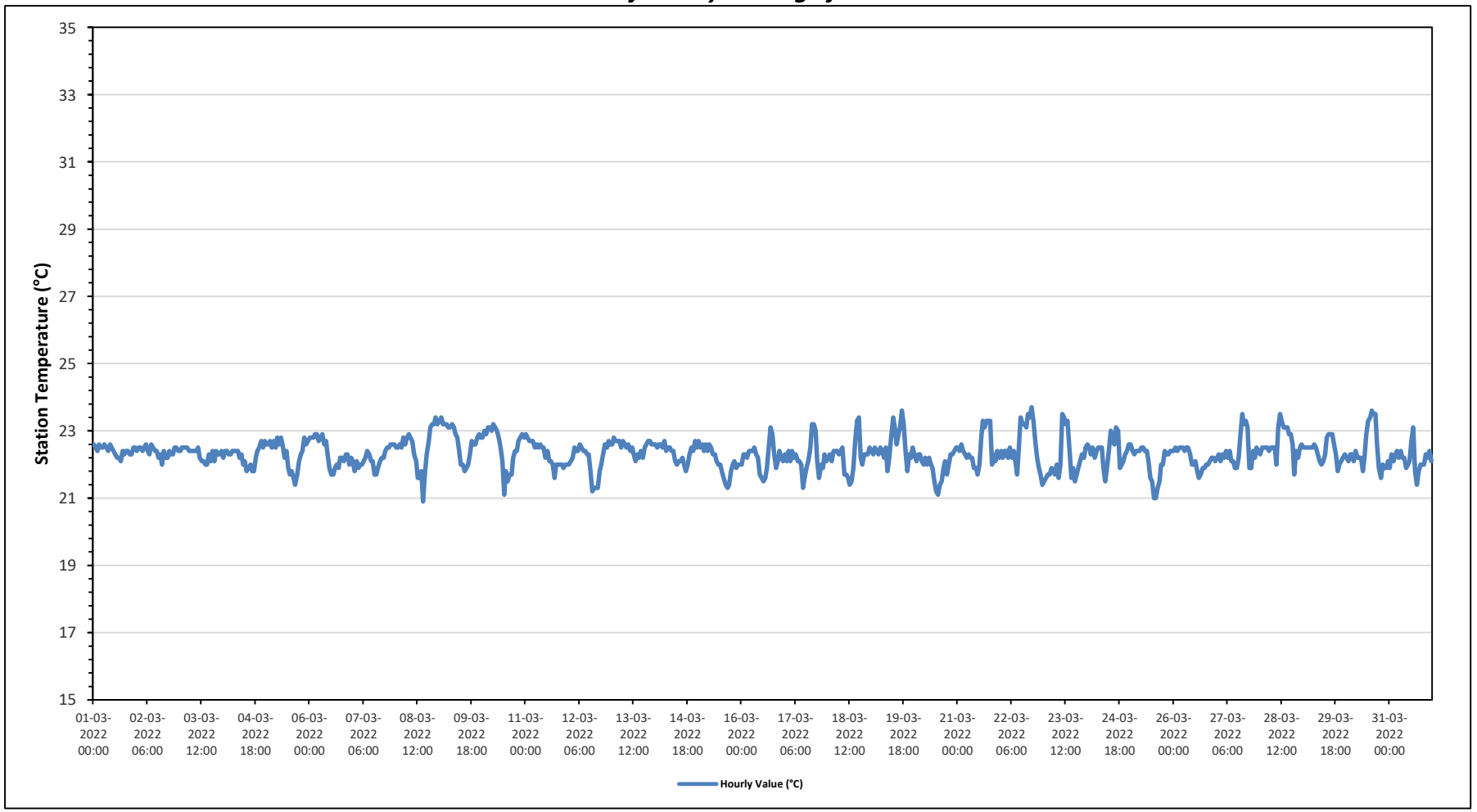
Maximum Hourly Value:	23.7	°C	on March 22 at hour 17	Hours in Service:	744
Maximum Daily Value:	22.7	°C	on March 9	Hours of Data:	744
Minimum Hourly Value:	20.9	°C	on March 8 at hour 15	Hours of Missing Data:	0
Minimum Daily Value:	22.0	°C	on March 20	Hours of Calibration:	0
Monthly Average:	22.3	°C		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	22.6	22.5	22.4	22.6	22.5	22.5	22.6	22.5	22.4	22.6	22.5	22.4	22.3	22.2	22.2	22.1	22.4	22.3	22.4	22.4	22.3	22.3	22.5	22.5	22.1	22.6	22.4
Mar 2	22.4	22.5	22.5	22.4	22.5	22.6	22.4	22.3	22.6	22.5	22.4	22.4	22.2	22.3	22.0	22.4	22.2	22.2	22.4	22.3	22.3	22.5	22.5	22.4	22.0	22.6	22.4
Mar 3	22.4	22.5	22.5	22.5	22.5	22.4	22.4	22.4	22.4	22.4	22.5	22.2	22.1	22.1	22.0	22.0	22.3	22.1	22.4	22.1	22.4	22.3	22.3	22.4	22.0	22.5	22.3
Mar 4	22.2	22.4	22.4	22.3	22.3	22.4	22.4	22.4	22.4	22.2	22.3	22.0	22.1	21.8	21.9	22.0	21.8	21.8	22.2	22.4	22.5	22.7	22.5	22.7	21.8	22.7	22.3
Mar 5	22.6	22.6	22.7	22.5	22.7	22.5	22.8	22.6	22.8	22.6	22.2	22.4	21.9	21.7	21.8	21.6	21.4	21.7	22.1	22.3	22.4	22.8	22.6	22.7	21.4	22.8	22.3
Mar 6	22.8	22.8	22.8	22.9	22.9	22.7	22.8	22.9	22.6	22.7	22.3	21.9	21.7	21.7	21.9	22.0	21.9	22.2	22.2	22.1	22.3	22.3	22.0	22.2	21.7	22.9	22.4
Mar 7	22.1	21.8	22.1	21.9	22.0	22.0	22.1	22.2	22.4	22.3	22.1	22.1	21.7	21.7	21.9	22.1	22.2	22.2	22.4	22.5	22.5	22.6	22.6	22.6	21.7	22.6	22.2
Mar 8	22.5	22.5	22.6	22.5	22.8	22.6	22.8	22.9	22.8	22.7	22.3	22.1	21.6	21.6	21.8	**20.9**	21.7	22.3	22.7	23.1	23.2	23.2	23.4	23.2	**20.9**	23.4	22.5
Mar 9	23.3	23.4	23.2	23.2	23.2	23.1	23.1	23.2	23.1	22.9	22.8	22.4	22.0	22.0	21.8	21.9	22.0	22.3	22.7	22.6	22.6	22.8	22.9	22.8	21.8	23.4	**22.7**
Mar 10	22.8	23.0	22.9	23.1	23.1	23.0	23.2	23.1	23.0	22.8	22.5	22.1	21.1	21.8	21.5	21.7	21.7	22.2	22.4	22.4	22.7	22.8	22.9	22.8	21.1	23.2	22.5
Mar 11	22.9	22.8	22.7	22.7	22.7	22.5	22.6	22.5	22.6	22.5	22.5	22.2	22.4	22.1	22.1	22.0	21.6	22.0	22.0	22.0	22.0	21.9	22.0	22.0	21.6	22.9	22.3
Mar 12	22.0	22.1	22.2	22.5	22.4	22.4	22.6	22.5	22.4	22.4	22.3	22.3	21.8	21.2	21.3	21.3	21.3	21.8	22.0	22.3	22.6	22.5	22.7	22.6	21.2	22.7	22.1
Mar 13	22.6	22.8	22.7	22.7	22.7	22.5	22.7	22.6	22.5	22.6	22.4	22.5	22.3	22.1	22.3	22.2	22.4	22.2	22.5	22.6	22.7	22.7	22.6	22.6	22.1	22.8	22.5
Mar 14	22.6	22.5	22.6	22.6	22.5	22.7	22.4	22.5	22.5	22.4	22.4	22.1	22.0	22.1	22.1	22.2	22.0	21.8	22.0	22.3	22.5	22.4	22.7	22.5	21.8	22.7	22.4
Mar 15	22.7	22.5	22.6	22.4	22.6	22.4	22.6	22.5	22.3	22.3	22.1	22.0	22.0	21.8	21.6	21.4	21.3	21.4	21.8	22.0	22.1	21.9	22.0	22.0	21.3	22.7	22.1
Mar 16	22.0	22.3	22.3	22.2	22.4	22.4	22.4	22.5	22.3	22.2	21.7	21.6	21.5	21.6	21.9	22.5	23.1	22.9	22.3	21.9	22.1	22.4	22.2	22.1	21.5	23.1	22.2
Mar 17	22.3	22.1	22.4	22.1	22.4	22.2	22.3	22.1	22.1	22.0	21.3	21.6	21.9	22.1	22.5	23.2	23.2	23.0	22.1	21.6	22.0	21.9	22.3	22.1	21.3	23.2	22.2
Mar 18	22.2	22.3	22.1	22.4	22.4	22.4	22.3	22.4	22.5	21.7	21.7	21.6	21.4	21.5	21.9	22.7	23.3	23.4	22.2	22.0	22.3	22.3	22.3	22.5	21.4	23.4	22.2
Mar 19	22.4	22.3	22.5	22.4	22.3	22.5	22.4	22.2	22.5	21.8	22.2	22.8	23.4	23.1	22.6	22.9	23.1	23.6	23.2	22.3	21.8	22.3	22.2	22.5	21.8	23.6	22.6
Mar 20	22.3	22.1	22.3	22.3	22.1	22.0	22.2	22.0	22.2	22.0	21.9	21.5	21.2	21.1	21.4	21.5	21.9	22.1	21.7	22.0	22.3	22.3	22.4	22.5	21.1	22.5	22.0
Mar 21	22.5	22.4	22.6	22.4	22.3	22.2	22.3	22.2	22.2	21.9	21.9	21.7	22.0	22.8	23.3	23.1	23.3	23.3	23.3	22.0	22.3	22.1	22.4	22.2	21.7	23.3	22.4
Mar 22	22.4	22.2	22.4	22.4	22.2	22.5	22.2	22.4	22.1	21.7	22.6	23.4	23.2	23.2	23.1	23.5	23.4	**23.7**	23.3	22.7	22.2	21.9	21.7	21.4	21.4	**23.7**	22.6
Mar 23	21.5	21.6	21.7	21.7	21.9	21.8	21.7	22.0	21.6	22.0	23.5	23.4	23.2	23.3	22.5	21.6	21.9	21.5	21.7	21.9	22.1	22.3	22.2	22.5	21.5	23.5	22.1
Mar 24	22.6	22.5	22.3	22.5	22.2	22.4	22.5	22.5	22.5	21.9	21.5	22.0	22.5	23.0	22.7	22.6	23.1	23.0	21.9	22.0	22.1	22.3	22.4	22.6	21.5	23.1	22.4
Mar 25	22.6	22.4	22.3	22.4	22.4	22.4	22.5	22.5	22.4	22.4	22.1	21.6	21.5	21.0	21.0	21.3	21.5	22.0	22.0	22.4	22.3	22.3	22.4	22.4	21.0	22.6	22.1
Mar 26	22.4	22.5	22.4	22.5	22.5	22.5	22.4	22.5	22.5	22.3	22.0	22.0	22.1	21.8	21.6	21.7	21.9	21.9	22.0	22.0	22.1	22.2	22.2	22.1	21.6	22.5	22.2
Mar 27	22.2	22.3	22.1	22.3	22.2	22.4	22.2	22.4	22.1	22.1	21.9	21.9	22.2	22.9	23.5	23.2	23.3	23.1	21.9	21.9	22.4	22.2	22.5	22.4	21.9	23.5	22.4
Mar 28	22.3	22.5	22.5	22.5	22.5	22.4	22.5	22.5	22.5	22.0	23.1	23.5	23.3	23.1	23.1	23.1	22.9	22.9	22.6	21.7	22.4	22.2	22.5	22.6	21.7	23.5	22.6
Mar 29	22.5	22.5	22.5	22.5	22.5	22.5	22.6	22.5	22.3	22.1	22.0	22.1	22.3	22.8	22.9	22.9	22.9	22.6	22.3	21.8	22.0	22.1	22.2	22.3	21.8	22.9	22.4
Mar 30	22.2	22.1	22.3	22.3	22.1	22.4	22.2	22.2	22.2	21.8	22.2	22.9	23.3	23.4	23.6	23.5	23.5	22.6	21.9	21.6	22.0	21.9	21.9	22.1	21.6	23.6	22.4
Mar 31	21.9	22.3	22.1	22.3	22.4	22.2	22.4	22.2	22.2	21.9	22.0	22.1	22.7	23.1	21.8	21.4	21.8	22.0	22.0	22.0	22.3	22.2	22.4	22.1	21.4	23.1	22.2
Diurnal Maximum	23.3	23.4	23.2	23.2	23.2	23.1	23.2	23.2	23.1	22.9	23.5	23.5	23.4	23.4	23.6	23.5	23.5	23.7	23.3	23.1	23.2	23.2	23.4	23.2			
Diurnal Average	22.4	22.4	22.4	22.5	22.5	22.4	22.5	22.5	22.4	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.3	22.4	22.3	22.2	22.3	22.3	22.4	22.4			

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

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

Timeseries Chart of Hourly Average for ST - 842b Station



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PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2022

Summary of Hourly Averages

PRECIPITATION in mm

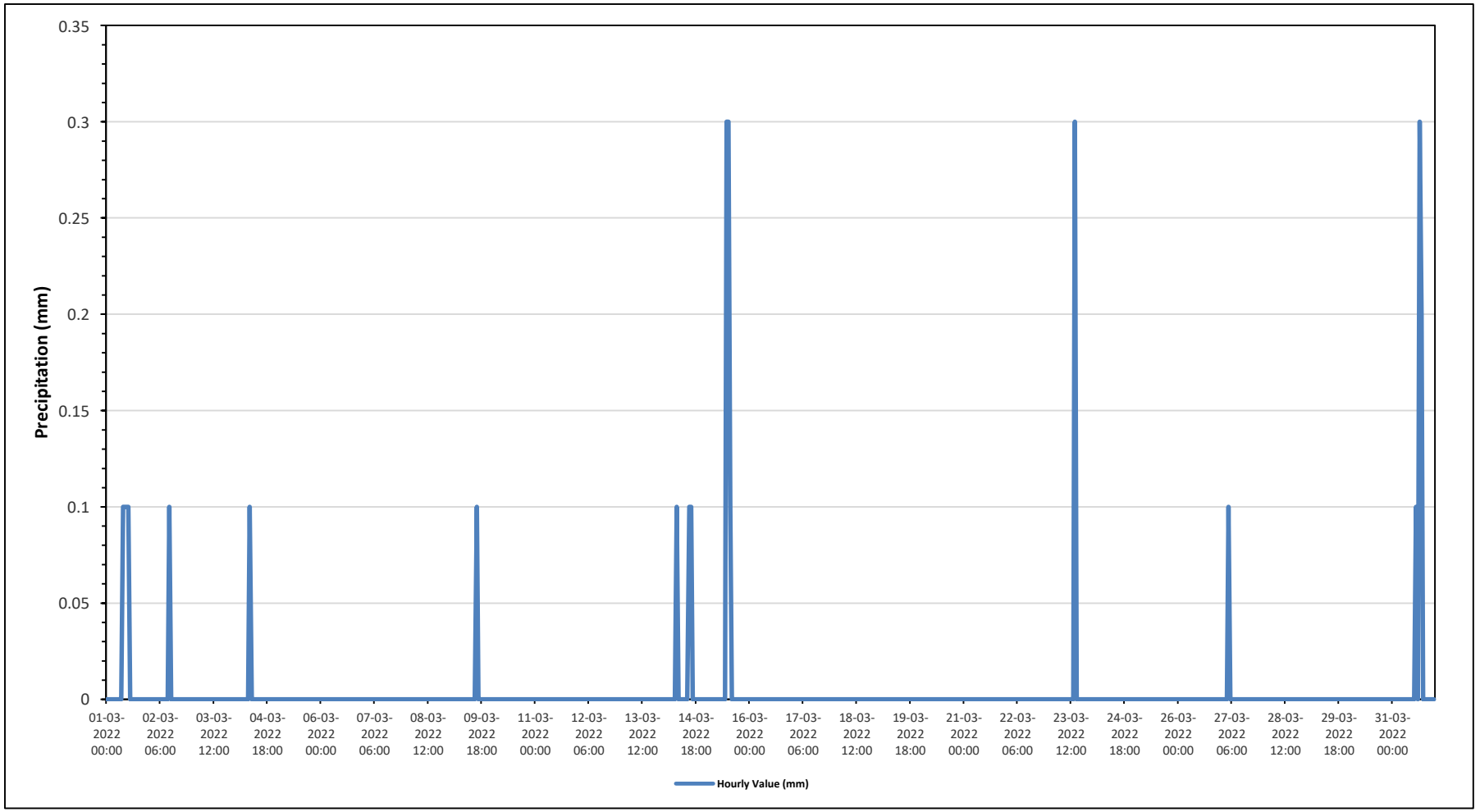
Maximum Hourly Value:	0.3	mm	on March 15 at hour 11	Hours in Service:	744
Maximum Daily Value:	0.7	mm	on March 15	Hours of Data:	744
Minimum Hourly Value:	0.0	mm	on March 1 at hour 0	Hours of Missing Data:	0
Minimum Daily Value:	0.0	mm	on March 3	Hours of Calibration:	0
Monthly Total:	2.7	mm		Operational 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	Total
Mar 1	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	0.4
Mar 2	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	0.1
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	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	0.1
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	0.1	0	0	0	0	0	0	0	0	0.0	0.1	0.1
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	0.1	0	0	0	0	0	0	0.1	0.1	0	0	0	0	0	0	0	0	0.0	0.1	0.3
Mar 15	0	0	0	0	0	0	0	0	0	0	0	**0.3**	**0.3**	0.1	0	0	0	0	0	0	0	0	0	0	0.0	**0.3**	**0.7**
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	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	0	0.0	0.0	0.0
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	**0.3**	0	0	0	0	0	0	0	0	0	0.0	**0.3**	0.3
Mar 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
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	0.1	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 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
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	0.1	0	**0.3**	0.2	0	0	0	0	0	0	0	0.0	**0.3**	0.6
Diurnal Maximum	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.3	0.3	0.1	0.3	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Diurnal Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

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

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

Timeseries Chart of Hourly Average for Precipitation - 842b Station



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PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2022

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

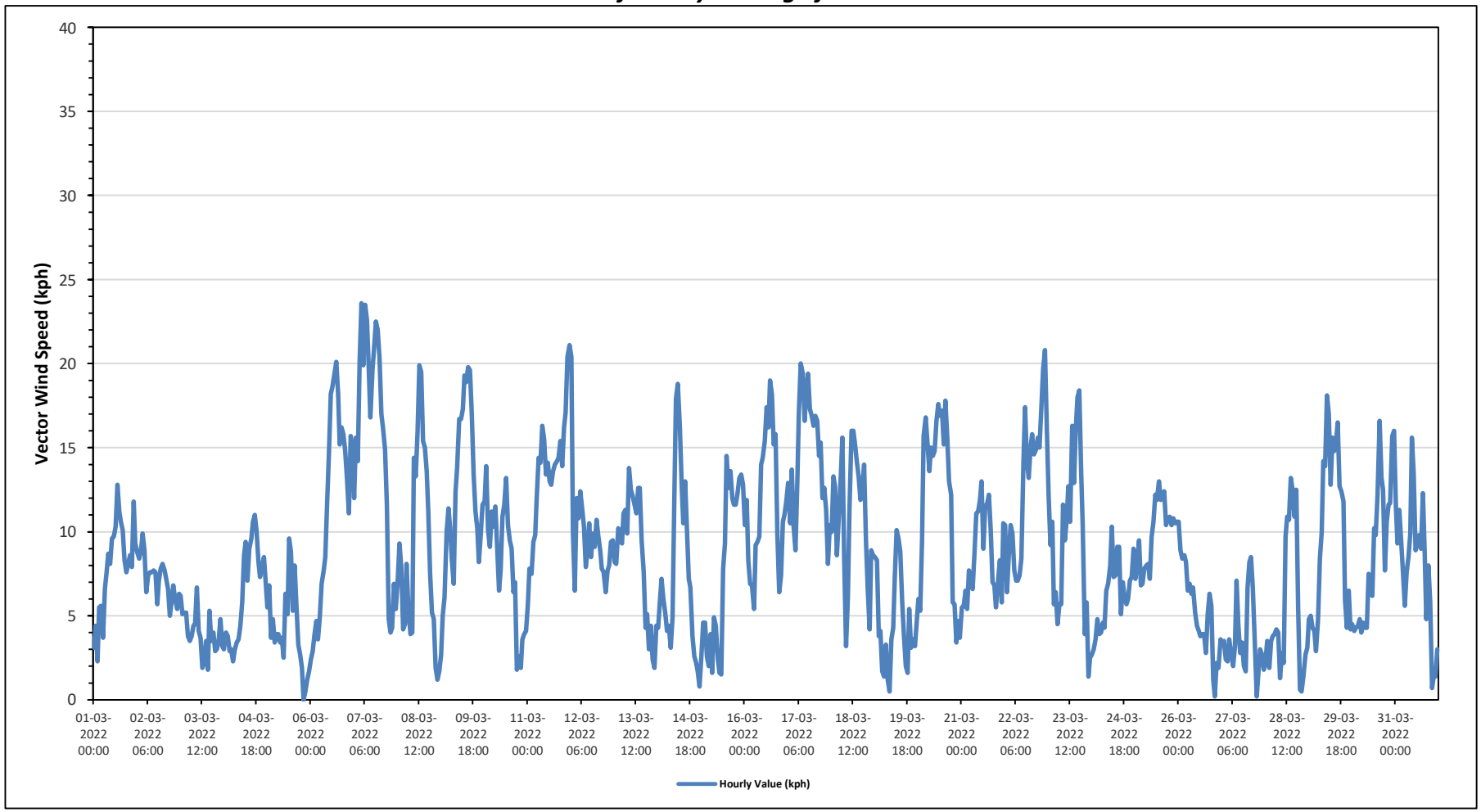
Maximum Hourly Value:	23.6	kph	on March 7 at hour 4	Hours in Service:	744
Maximum Daily Value:	15.1	kph	on March 7	Hours of Data:	744
Minimum Hourly Value:	0.0	kph	on March 5 at hour 20	Hours of Missing Data:	0
Minimum Daily Value:	1.2	kph	on March 19	Hours of Calibration:	0
Monthly Average:	2.8	kph		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	3.1	4.4	2.3	5.5	5.6	3.7	6.6	7.5	8.7	8.1	9.6	9.7	10.3	12.8	11.2	10.6	10.1	8.3	7.6	8.1	8.6	7.9	11.8	9.3	2.3	12.8	7.8
Mar 2	8.8	8.4	8.9	9.9	8.9	6.4	7.4	7.6	7.6	7.7	7.6	5.7	7.1	7.8	8.1	7.7	7.2	6.6	5.0	5.9	6.8	6.0	5.4	6.3	5.0	9.9	7.1
Mar 3	6.2	5.1	5.2	5.2	3.8	3.5	3.8	4.4	4.5	6.7	4.1	3.7	1.9	2.2	3.5	1.8	5.3	3.5	4.0	2.9	3.0	3.5	4.8	3.2	1.8	6.7	2.9
Mar 4	3.0	4.0	3.8	2.9	3.0	2.3	3.0	3.4	3.6	4.4	5.8	8.6	9.4	7.1	9.0	9.6	10.6	11.0	10.0	8.2	7.3	8.0	8.5	6.9	2.3	11.0	4.1
Mar 5	5.5	6.8	3.7	4.8	3.4	3.9	3.9	3.4	3.7	2.5	6.3	5.1	9.6	8.8	5.3	8.0	5.9	3.3	2.7	1.9	**0.0**	0.5	1.2	1.7	**0.0**	9.6	2.9
Mar 6	2.4	2.9	3.9	4.7	3.6	4.9	6.9	7.7	8.5	11.7	14.7	18.2	18.6	19.3	20.1	18.2	15.2	16.2	15.8	14.8	13.1	11.1	15.7	15.0	2.4	20.1	9.4
Mar 7	12.0	15.6	14.2	20.1	**23.6**	19.9	23.5	22.6	20.1	16.8	19.6	21.1	22.5	22.0	20.3	17.0	16.2	14.9	11.6	4.8	4.0	4.3	6.9	5.4	4.0	**23.6**	**15.1**
Mar 8	7.3	9.3	7.9	4.2	4.5	8.1	5.4	3.9	4.0	14.4	13.3	15.9	19.9	19.5	15.4	15.0	13.6	11.2	7.5	5.2	4.8	1.9	1.2	1.7	1.2	19.9	8.2
Mar 9	2.7	5.0	6.1	10.0	11.4	10.3	8.3	6.9	12.4	13.8	16.7	16.7	17.3	19.3	18.9	19.8	19.6	17.0	13.4	11.2	10.2	8.2	9.8	11.6	2.7	19.8	10.8
Mar 10	11.8	13.9	10.1	9.1	11.2	10.3	11.5	9.0	6.5	7.7	10.9	11.6	13.2	10.4	9.5	9.0	6.4	7.0	1.8	2.6	1.9	3.6	3.9	4.1	1.8	13.9	5.7
Mar 11	5.7	7.8	7.5	9.4	9.8	12.1	14.4	14.1	16.3	15.5	13.4	14.1	13.0	12.8	13.6	14.0	14.2	14.4	15.4	13.9	16.2	17.1	20.4	21.1	5.7	21.1	11.3
Mar 12	20.4	9.9	6.5	12.0	10.8	12.4	11.4	10.3	7.9	8.8	10.5	8.5	9.9	9.1	10.7	9.7	8.9	7.8	7.6	6.4	7.7	8.0	9.4	9.5	6.4	20.4	7.3
Mar 13	8.2	8.1	10.2	9.7	9.3	11.1	11.3	9.9	13.8	12.5	12.1	11.6	11.1	12.6	12.6	9.5	7.6	4.3	5.1	3.0	4.4	2.4	1.9	4.4	1.9	13.8	8.1
Mar 14	4.3	5.9	7.2	6.0	5.2	4.1	4.4	3.1	4.9	12.2	17.9	18.8	16.2	12.7	10.5	13.0	10.1	7.2	6.7	3.8	2.6	2.2	1.7	0.8	0.8	18.8	5.0
Mar 15	2.6	4.6	4.6	2.6	2.0	3.9	1.6	4.9	4.4	2.4	1.6	1.5	7.8	9.3	14.5	12.6	13.6	12.0	11.6	11.6	12.3	13.2	13.4	12.8	1.5	14.5	5.3
Mar 16	10.4	11.9	8.3	6.9	6.8	5.4	9.2	9.4	9.7	14.0	14.4	15.4	17.4	16.2	19.0	18.2	15.2	15.8	9.8	6.4	7.4	10.6	11.0	11.8	5.4	19.0	11.0
Mar 17	12.9	10.5	13.7	10.3	8.9	12.9	17.1	20.0	19.4	16.6	18.3	19.4	17.3	16.9	16.3	16.9	16.6	14.5	15.3	12.0	12.6	11.3	8.1	10.4	8.1	20.0	13.7
Mar 18	10.0	13.3	12.7	8.6	11.1	13.3	15.6	8.3	3.2	6.1	11.3	16.0	16.0	15.1	14.2	13.3	11.9	12.6	14.0	9.5	6.5	4.2	8.9	8.6	3.2	16.0	10.1
Mar 19	8.5	8.3	3.8	4.1	1.7	1.4	3.3	1.2	0.5	3.6	4.3	7.3	10.1	9.6	8.8	5.9	3.8	2.0	1.6	5.4	3.1	3.6	3.2	4.5	0.5	10.1	**1.2**
Mar 20	6.0	5.3	9.5	15.7	16.8	15.2	13.6	15.0	14.5	14.8	16.6	17.6	16.9	17.2	15.2	17.8	15.7	13.0	12.2	5.8	5.7	3.4	4.7	3.7	3.4	17.8	11.1
Mar 21	5.5	5.6	6.5	5.4	7.7	7.1	6.6	8.7	11.1	11.2	11.9	13.0	9.0	11.5	11.7	12.2	10.1	7.0	6.8	5.5	7.1	8.3	5.8	10.5	5.4	13.0	7.2
Mar 22	10.4	6.4	8.6	10.4	9.9	7.7	7.1	7.1	7.4	8.4	14.2	17.4	14.2	13.2	15.0	15.8	14.6	14.9	15.6	15.0	17.3	19.7	20.8	16.2	6.4	20.8	12.4
Mar 23	12.1	9.2	10.6	5.7	6.4	4.5	5.7	5.7	11.6	9.5	10.7	12.7	10.6	16.3	12.9	15.9	18.0	18.4	13.6	10.4	3.9	5.8	1.4	2.5	1.4	18.4	6.0
Mar 24	2.7	3.0	3.6	4.8	3.9	4.0	4.6	4.3	6.5	6.9	8.0	10.3	7.3	7.4	9.1	9.1	5.1	7.0	6.1	5.7	6.0	7.1	7.3	9.0	2.7	10.3	3.2
Mar 25	7.2	8.1	9.5	6.8	6.9	7.8	8.0	8.1	7.2	9.7	10.6	12.2	11.9	13.0	11.9	12.0	12.4	10.4	10.8	10.9	10.4	10.8	10.5	10.6	6.8	13.0	9.7
Mar 26	10.6	8.9	8.4	8.6	8.2	6.5	6.9	6.3	6.7	5.2	4.4	4.1	3.8	3.9	3.9	2.8	5.1	6.3	5.6	1.2	0.2	2.2	1.9	3.6	0.2	10.6	4.0
Mar 27	3.3	3.5	2.4	2.3	3.6	2.7	2.0	3.2	7.1	4.4	2.8	3.4	2.0	1.7	6.7	8.2	8.5	6.7	3.7	0.2	1.5	3.0	2.7	1.8	0.2	8.5	1.7
Mar 28	2.2	3.5	1.9	3.5	3.8	3.9	4.2	4.0	1.3	2.8	2.2	9.7	10.9	10.7	13.2	12.5	10.9	12.5	5.5	0.6	0.5	1.4	2.7	3.1	0.5	13.2	1.5
Mar 29	4.8	5.0	4.3	4.1	2.9	4.8	8.4	10.0	14.2	13.9	18.1	17.0	12.8	15.6	14.8	15.4	16.5	12.7	12.4	11.8	5.9	4.3	6.5	4.2	2.9	18.1	9.1
Mar 30	4.5	4.1	4.3	4.4	4.8	4.0	4.6	4.3	4.3	7.5	6.5	6.2	10.2	9.8	12.2	16.6	13.2	12.5	7.7	10.6	11.6	11.7	15.7	16.0	4.0	16.6	7.0
Mar 31	11.5	9.3	11.3	9.5	7.6	5.6	7.6	8.5	9.9	15.6	13.4	8.9	9.3	9.8	9.0	12.3	8.7	4.8	8.0	5.8	0.7	1.4	1.4	3.0	0.7	15.6	6.1
Diurnal Maximum	20	16	14	20	24	20	24	23	20	17	20	21	23	22	20	20	20	18	16	15	17	20	21	21			
Diurnal Average	7.3	7.3	7.1	7.3	7.3	7.2	8.0	7.8	8.4	9.5	10.7	11.7	11.9	12.1	12.2	12.3	11.3	10.2	8.9	7.1	6.6	6.7	7.4	7.5			

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

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

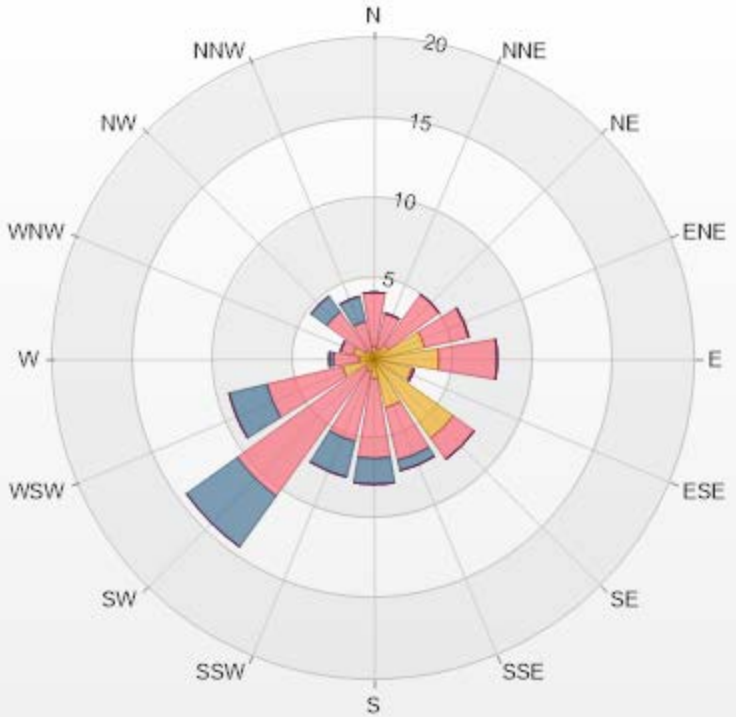
Timeseries Chart of Hourly Average for VWS - 842b Station



Wind: PRAMP 842b Monitor: WDS [KPH] Monthly: 03-2022 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 4.03% 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	0.81	3.36	0	0	0	4.17
NNE	0.67	2.28	0	0	0	2.95
NE	1.08	3.9	0	0	0	4.98
ENE	3.23	2.82	0	0	0	6.05
E	4.03	3.63	0	0	0	7.66
ESE	2.42	0.13	0	0	0	2.55
SE	6.05	1.61	0	0	0	7.66
SSE	3.09	3.36	0.67	0	0	7.12
S	1.21	4.97	1.61	0	0	7.79
SSW	0.81	4.44	2.28	0	0	7.53
SW	0.67	9.81	3.9	0	0	14.38
WSW	2.02	4.84	2.42	0	0	9.28
W	0.94	1.61	0.27	0	0	2.82
WNW	1.34	0.81	0	0	0	2.15
NW	0.67	2.96	1.21	0	0	4.84
NNW	0.4	2.02	1.61	0	0	4.03
Summary	29.44	52.55	13.97	0	0	95.96

PRAMP 842b 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 4.03% Calm Wind Avg Speed: 1.18(KPH)



% Icon Classes (KPH)	29 1.8-6.0	53 6.0-15.0	14 15.0-29.0	0 29.0-39.0	0 >39.0

PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2022

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

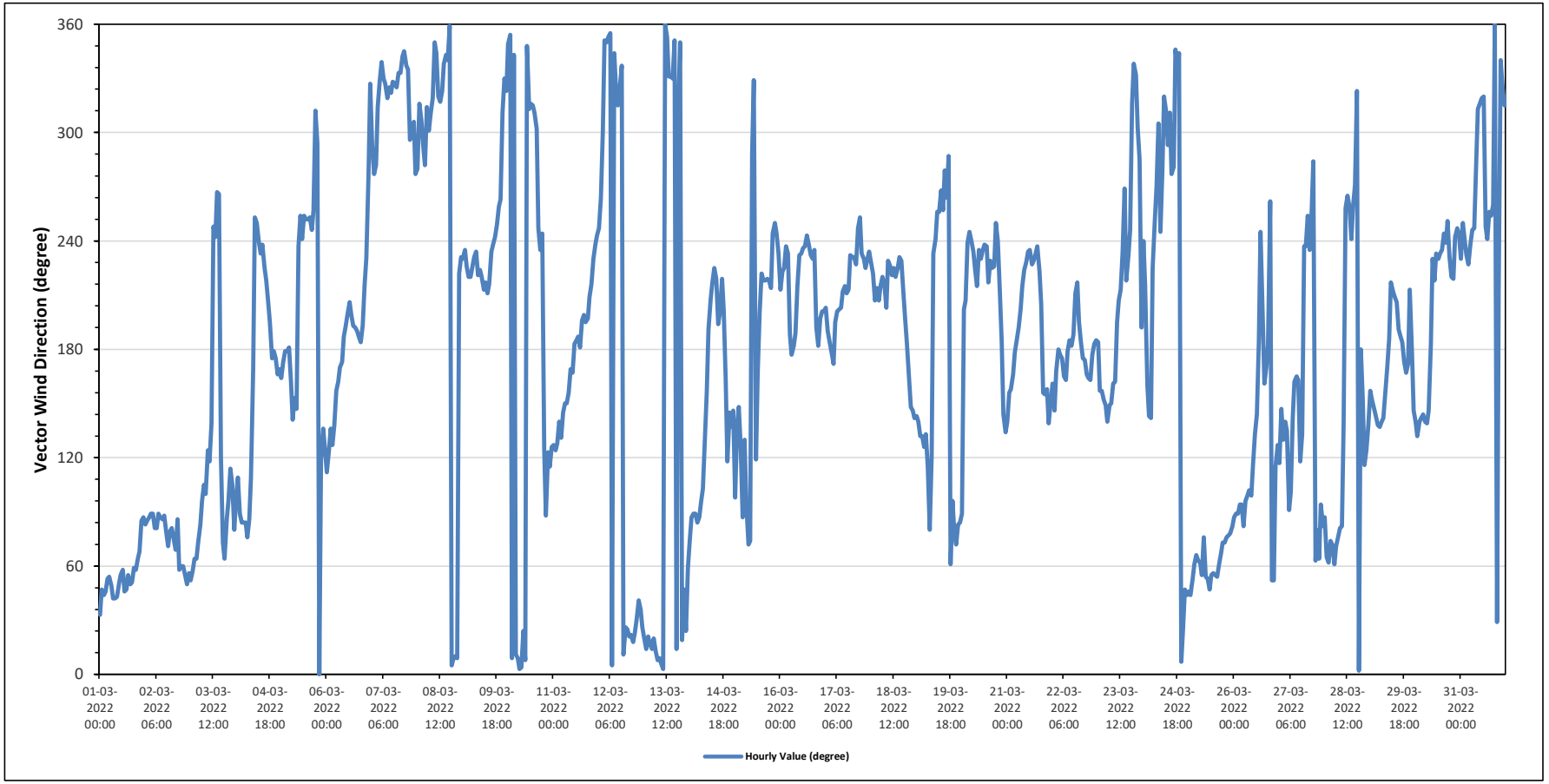
Monthly Average:	218 (SW)	degree	
Hours in Service:	744		
Hours of Data:	744		
Hours of Missing Data:	0		
Hours of Calibration:	0		
Operational Uptime:	100.0		

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	NNE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	ENE	NE	NE	NE	NE	NE	ENE	ENE	ENE	ENE	E	E	55	NE
Mar 2	E	E	E	E	E	E	E	E	E	E	E	ENE	ENE	ENE	E	ENE	ENE	E	ENE	ENE	ENE	NE	NE	NE	78	ENE
Mar 3	NE	ENE	ENE	ENE	ENE	E	E	ESE	E	ESE	ESE	SE	WSW	WSW	W	W	ESE	ENE	ENE	E	E	ESE	ESE	E	92	E
Mar 4	E	ESE	E	E	E	E	ENE	E	ESE	SSE	WSW	WSW	WSW	SW	SW	SW	SW	SSW	SSW	S	S	S	SSE	SSE	192	S
Mar 5	SSE	S	S	S	S	SSE	SE	SSE	SE	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	NW	WNW	N	ESE	SE	SE	218	SW
Mar 6	ESE	ESE	SE	SE	SE	SSE	SSE	SSE	S	S	S	SSW	SSW	SSW	S	S	S	S	S	S	SW	SW	W	NW	196	SSW
Mar 7	WNW	W	W	NW	NNW	NNW	NNW	NW	NW	NW	NW	NNW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	WNW	WNW	NW	W	323	NW
Mar 8	W	NW	NW	WNW	W	NW	WNW	NW	NW	N	NNW	NW	NW	NW	NNW	NNW	NNW	N	N	N	N	N	SW	SW	329	NNW
Mar 9	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SW	SSW	SW	SW	SW	WSW	WSW	WSW	W	NW	NNW	NW	235	SW
Mar 10	NNW	N	N	NNW	NNE	N	N	N	NNE	N	NNW	NW	NW	NW	NW	WNW	WSW	SW	WSW	SE	E	ESE	ESE	SE	344	NNW
Mar 11	SE	ESE	SE	SE	SE	SE	SSE	SSE	SSE	SSE	SSE	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	WSW	185	S
Mar 12	WSW	W	WNW	N	N	N	N	N	NNW	NW	NW	NW	NNW	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NE	NE	NNE	353	N
Mar 13	NNE	NNE	NNE	NNE	NNE	NNE	NNE	N	N	N	N	N	N	NNW	NNW	NNW	N	NNE	NW	N	NNE	NE	NNE	ENE	3	N
Mar 14	ENE	E	E	E	E	E	E	ESE	SE	SSE	S	SSW	SW	SW	SW	SSW	SSW	SW	SSW	SSE	ESE	SE	SE	SE	178	S
Mar 15	E	SE	SE	SE	E	SE	E	ENE	ENE	WNW	NNW	ESE	SSE	SSW	SW	SW	SW	SW	SW	SSW	WSW	WSW	WSW	SW	213	SSW
Mar 16	SSW	SW	SW	SW	SW	S	S	S	S	SSW	SW	SW	SW	SW	WSW	SW	SW	SW	SW	S	S	SSW	SSW	SSW	220	SW
Mar 17	SSW	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	WSW	WSW	SW	SW	SW	SW	SW	215	SSW
Mar 18	SW	SW	SSW	SSW	SSW	SSW	SW	SW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SSW	S	SSE	SE	SE	SE	211	SSW
Mar 19	SE	SE	SE	SE	SE	SE	ESE	E	ESE	SW	WSW	WSW	WSW	W	WSW	W	W	WNW	ENE	E	ENE	ENE	E	E	197	SSW
Mar 20	E	SSW	SSW	WSW	WSW	WSW	SW	SW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	SSW	S	SE	SE	228	SW
Mar 21	SE	SSE	SSE	SSE	S	S	S	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SSE	SSE	SSE	SE	SSE	201	SSW
Mar 22	SSE	SE	SSE	S	S	S	SSE	SSE	S	S	S	S	SSW	SW	SSW	S	S	S	SSE	SSE	SSE	S	S	S	179	S
Mar 23	S	SSE	SSE	SSE	SSE	SE	SSE	SSE	SSE	SSE	SSW	SSW	SSW	SW	W	SW	SW	WSW	NW	NNW	NNW	WNW	WNW	S	212	SSW
Mar 24	WSW	SSW	SSE	SE	SE	SW	WSW	W	WNW	WSW	W	NW	NW	WNW	NW	W	W	NNW	NNW	NNW	N	NNE	NE	NE	310	NW
Mar 25	NE	NE	NE	ENE	ENE	ENE	ENE	NE	ENE	NE	NE	NE	NE	NE	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	62	ENE
Mar 26	E	E	E	E	E	E	E	E	E	E	ESE	SE	SE	S	WSW	SSW	SSE	SSE	S	W	NE	NE	ESE	SE	113	ESE
Mar 27	ESE	SE	SE	SE	SE	E	E	SE	SSE	SSE	SSE	ESE	SE	SW	SW	WSW	SW	WSW	WNW	ENE	E	ENE	E	E	176	S
Mar 28	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	SE	WSW	W	WSW	WSW	WSW	W	NW	N	S	SSE	ESE	ESE	SE	276	W
Mar 29	SSE	SSE	SE	SE	SE	SE	SE	SE	SSE	SSE	S	SW	SSW	SSW	SSW	S	S	S	S	SSE	S	SSW	S	SE	180	S
Mar 30	SE	SE	SE	SE	SE	SE	SE	SE	S	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	SW	SW	SW	WSW	WSW	WSW	223	SW
Mar 31	SW	WSW	WSW	SW	SW	SW	WSW	WSW	W	NW	NW	NW	NW	WSW	WSW	WSW	WSW	WSW	N	NNE	SSW	NNW	NW	NW	271	W

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

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

Timeseries Chart of Hourly Average for VWD - 842b Station



peace river area monitoring program

pramp

PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2022

Summary of Hourly Averages

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

WIND SPEED

Maximum Hourly Value:	23.6	kph	on March 7 at hour 4	Hours in Service:	744
Maximum Daily Value:	15.1	kph	on March 7	Hours of Data:	744
Minimum Hourly Value:	0.0	kph	on March 5 at hour 20	Hours of Missing Data:	0
Minimum Daily Value:	1.2	kph	on March 19	Hours of Calibration:	0
Monthly Average:	2.8	kph		Operational Uptime:	100

WIND DIRECTION

Monthly Average: 218 (SW) degree

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	3.1	4.4	2.3	5.5	5.6	3.7	6.6	7.5	8.7	8.1	9.6	9.7	10.3	12.8	11.2	10.6	10.1	8.3	7.6	8.1	8.6	7.9	11.8	9.3	2.3	12.8	7.8
	NNE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	ENE	NE	NE	NE	NE	NE	ENE	ENE	ENE	ENE	E	E			
Mar 2	8.8	8.4	8.9	9.9	8.9	6.4	7.4	7.6	7.6	7.7	7.6	5.7	7.1	7.8	8.1	7.7	7.2	6.6	5.0	5.9	6.8	6.0	5.4	6.3	5.0	9.9	7.1
	E	E	E	E	E	E	E	E	E	E	E	ENE	ENE	ENE	E	ENE	ENE	E	ENE	ENE	ENE	NE	NE	NE			
Mar 3	6.2	5.1	5.2	5.2	3.8	3.5	3.8	4.4	4.5	6.7	4.1	3.7	1.9	2.2	3.5	1.8	5.3	3.5	4.0	2.9	3.0	3.5	4.8	3.2	1.8	6.7	2.9
	NE	ENE	ENE	ENE	ENE	E	E	ESE	E	ESE	ESE	SE	WSW	WSW	W	W	ESE	ENE	ENE	E	E	ESE	ESE	E			
Mar 4	3.0	4.0	3.8	2.9	3.0	2.3	3.0	3.4	3.6	4.4	5.8	8.6	9.4	7.1	9.0	9.6	10.6	11.0	10.0	8.2	7.3	8.0	8.5	6.9	2.3	11.0	4.1
	E	ESE	E	E	E	E	ENE	E	ESE	SSE	WSW	WSW	WSW	SW	SW	SW	SW	SSW	SSW	S	S	S	SSE	SSE			
Mar 5	5.5	6.8	3.7	4.8	3.4	3.9	3.9	3.4	3.7	2.5	6.3	5.1	9.6	8.8	5.3	8.0	5.9	3.3	2.7	1.9	**0.0**	0.5	1.2	1.7	**0.0**	9.6	2.9
	SSE	S	S	S	S	SSE	SE	SSE	SE	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	NW	WNW	N	ESE	SE	SE			
Mar 6	2.4	2.9	3.9	4.7	3.6	4.9	6.9	7.7	8.5	11.7	14.7	18.2	18.6	19.3	20.1	18.2	15.2	16.2	15.8	14.8	13.1	11.1	15.7	15.0	2.4	20.1	9.4
	ESE	ESE	SE	SE	SE	SSE	SSE	SSE	S	S	S	SSW	SSW	SSW	S	S	S	S	S	S	SW	SW	W	NW			
Mar 7	12.0	15.6	14.2	20.1	**23.6**	19.9	23.5	22.6	20.1	16.8	19.6	21.1	22.5	22.0	20.3	17.0	16.2	14.9	11.6	4.8	4.0	4.3	6.9	5.4	4.0	**23.6**	**15.1**
	WNW	W	W	NW	NNW	NNW	NNW	NW	NW	NW	NW	NNW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	WNW	WNW	NW	W			
Mar 8	7.3	9.3	7.9	4.2	4.5	8.1	5.4	3.9	4.0	14.4	13.3	15.9	19.9	19.5	15.4	15.0	13.6	11.2	7.5	5.2	4.8	1.9	1.2	1.7	1.2	19.9	8.2
	W	NW	NW	WNW	W	NW	WNW	NW	NW	N	NNW	NW	NW	NW	NNW	NNW	NNW	N	N	N	N	N	SW	SW			
Mar 9	2.7	5.0	6.1	10.0	11.4	10.3	8.3	6.9	12.4	13.8	16.7	16.7	17.3	19.3	18.9	19.8	19.6	17.0	13.4	11.2	10.2	8.2	9.8	11.6	2.7	19.8	10.8
	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SW	SSW	SW	SW	SW	WSW	WSW	WSW	W	NW	NNW	NW			
Mar 10	11.8	13.9	10.1	9.1	11.2	10.3	11.5	9.0	6.5	7.7	10.9	11.6	13.2	10.4	9.5	9.0	6.4	7.0	1.8	2.6	1.9	3.6	3.9	4.1	1.8	13.9	5.7
	NNW	N	N	NNW	NNE	N	N	N	NNE	N	NNW	NW	NW	NW	NW	WNW	WSW	SW	WSW	SE	E	ESE	ESE	SE			
Mar 11	5.7	7.8	7.5	9.4	9.8	12.1	14.4	14.1	16.3	15.5	13.4	14.1	13.0	12.8	13.6	14.0	14.2	14.4	15.4	13.9	16.2	17.1	20.4	21.1	5.7	21.1	11.3
	SE	ESE	SE	SE	SE	SE	SSE	SSE	SSE	SSE	SSE	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	WSW			
Mar 12	20.4	9.9	6.5	12.0	10.8	12.4	11.4	10.3	7.9	8.8	10.5	8.5	9.9	9.1	10.7	9.7	8.9	7.8	7.6	6.4	7.7	8.0	9.4	9.5	6.4	20.4	7.3
	WSW	W	WNW	N	N	N	N	N	NNW	NW	NW	NW	NNW	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NE	NE	NNE			
Mar 13	8.2	8.1	10.2	9.7	9.3	11.1	11.3	9.9	13.8	12.5	12.1	11.6	11.1	12.6	12.6	9.5	7.6	4.3	5.1	3.0	4.4	2.4	1.9	4.4	1.9	13.8	8.1
	NNE	NNE	NNE	NNE	NNE	NNE	NNE	N	N	N	N	N	N	NNW	NNW	NNW	N	NNE	NW	N	NNE	NE	NNE	ENE			
Mar 14	4.3	5.9	7.2	6.0	5.2	4.1	4.4	3.1	4.9	12.2	17.9	18.8	16.2	12.7	10.5	13.0	10.1	7.2	6.7	3.8	2.6	2.2	1.7	0.8	0.8	18.8	5.0
	ENE	E	E	E	E	E	E	ESE	SE	SSE	S	SSW	SW	SW	SW	SSW	SSW	SW	SSW	SSE	ESE	SE	SE	SE			
Mar 15	2.6	4.6	4.6	2.6	2.0	3.9	1.6	4.9	4.4	2.4	1.6	1.5	7.8	9.3	14.5	12.6	13.6	12.0	11.6	11.6	12.3	13.2	13.4	12.8	1.5	14.5	5.3
	E	SE	SE	SE	E	SE	E	ENE	ENE	WNW	NNW	ESE	SSE	SSW	SW	SW	SW	SW	SW	SSW	WSW	WSW	WSW	SW			
Mar 16	10.4	11.9	8.3	6.9	6.8	5.4	9.2	9.4	9.7	14.0	14.4	15.4	17.4	16.2	19.0	18.2	15.2	15.8	9.8	6.4	7.4	10.6	11.0	11.8	5.4	19.0	11.0
	SSW	SW	SW	SW	SW	S	S	S	S	SSW	SW	SW	SW	SW	WSW	SW	SW	SW	SW	S	S	SSW	SSW	SSW			
Mar 17	12.9	10.5	13.7	10.3	8.9	12.9	17.1	20.0	19.4	16.6	18.3	19.4	17.3	16.9	16.3	16.9	16.6	14.5	15.3	12.0	12.6	11.3	8.1	10.4	8.1	20.0	13.7
	SSW	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	WSW	WSW	SW	SW	SW	SW	SW			
Mar 18	10.0	13.3	12.7	8.6	11.1	13.3	15.6	8.3	3.2	6.1	11.3	16.0	16.0	15.1	14.2	13.3	11.9	12.6	14.0	9.5	6.5	4.2	8.9	8.6	3.2	16.0	10.1
	SW	SW	SSW	SSW	SSW	SSW	SW	SW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SSW	S	SSE	SE	SE	SE			
Mar 19	8.5	8.3	3.8	4.1	1.7	1.4	3.3	1.2	0.5	3.6	4.3	7.3	10.1	9.6	8.8	5.9	3.8	2.0	1.6	5.4	3.1	3.6	3.2	4.5	0.5	10.1	**1.2**
	SE	SE	SE	SE	SE	SE	ESE	E	ESE	SW	WSW	WSW	WSW	W	WSW	W	W	WNW	ENE	E	ENE	ENE	E	E			
Mar 20	6.0	5.3	9.5	15.7	16.8	15.2	13.6	15.0	14.5	14.8	16.6	17.6	16.9	17.2	15.2	17.8	15.7	13.0	12.2	5.8	5.7	3.4	4.7	3.7	3.4	17.8	11.1
	E	SSW	SSW	WSW	WSW	WSW	SW	SW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	SSW	S	SE	SE			

PEACE RIVER AREA MONITORING PROGRAM

842b Station - March 2022

Summary of Hourly Averages

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

WIND SPEED

Maximum Hourly Value:	23.6	kph	on March 7 at hour 4	Hours in Service:	744
Maximum Daily Value:	15.1	kph	on March 7	Hours of Data:	744
Minimum Hourly Value:	0.0	kph	on March 5 at hour 20	Hours of Missing Data:	0
Minimum Daily Value:	1.2	kph	on March 19	Hours of Calibration:	0
Monthly Average:	2.8	kph		Operational Uptime:	100

WIND DIRECTION

Monthly Average: 218 (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	5.5	5.6	6.5	5.4	7.7	7.1	6.6	8.7	11.1	11.2	11.9	13.0	9.0	11.5	11.7	12.2	10.1	7.0	6.8	5.5	7.1	8.3	5.8	10.5	5.4	13.0	7.2
	SE	SSE	SSE	SSE	S	S	S	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SSE	SSE	SSE	SE	SSE			
Mar 22	10.4	6.4	8.6	10.4	9.9	7.7	7.1	7.1	7.4	8.4	14.2	17.4	14.2	13.2	15.0	15.8	14.6	14.9	15.6	15.0	17.3	19.7	20.8	16.2	6.4	20.8	12.4
	SSE	SE	SSE	S	S	S	SSE	SSE	S	S	S	S	SSW	SW	SSW	S	S	S	SSE	SSE	SSE	S	S	S			
Mar 23	12.1	9.2	10.6	5.7	6.4	4.5	5.7	5.7	11.6	9.5	10.7	12.7	10.6	16.3	12.9	15.9	18.0	18.4	13.6	10.4	3.9	5.8	1.4	2.5	1.4	18.4	6.0
	S	SSE	SSE	SSE	SSE	SE	SSE	SSE	SSE	SSE	SSW	SSW	SSW	SW	W	SW	SW	WSW	NW	NNW	NNW	WNW	WNW	S			
Mar 24	2.7	3.0	3.6	4.8	3.9	4.0	4.6	4.3	6.5	6.9	8.0	10.3	7.3	7.4	9.1	9.1	5.1	7.0	6.1	5.7	6.0	7.1	7.3	9.0	2.7	10.3	3.2
	WSW	SSW	SSE	SE	SE	SW	WSW	W	WNW	WSW	W	NW	NW	WNW	NW	W	W	NNW	NNW	NNW	N	NNE	NE	NE			
Mar 25	7.2	8.1	9.5	6.8	6.9	7.8	8.0	8.1	7.2	9.7	10.6	12.2	11.9	13.0	11.9	12.0	12.4	10.4	10.8	10.9	10.4	10.8	10.5	10.6	6.8	13.0	9.7
	NE	NE	NE	ENE	ENE	ENE	ENE	NE	ENE	NE	NE	NE	NE	NE	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E			
Mar 26	10.6	8.9	8.4	8.6	8.2	6.5	6.9	6.3	6.7	5.2	4.4	4.1	3.8	3.9	3.9	2.8	5.1	6.3	5.6	1.2	0.2	2.2	1.9	3.6	0.2	10.6	4.0
	E	E	E	E	E	E	E	E	E	E	ESE	SE	SE	S	WSW	SSW	SSE	SSE	S	W	NE	NE	ESE	SE			
Mar 27	3.3	3.5	2.4	2.3	3.6	2.7	2.0	3.2	7.1	4.4	2.8	3.4	2.0	1.7	6.7	8.2	8.5	6.7	3.7	0.2	1.5	3.0	2.7	1.8	0.2	8.5	1.7
	ESE	SE	SE	SE	SE	E	E	SE	SSE	SSE	SSE	ESE	SE	SW	SW	WSW	SW	WSW	WNW	ENE	E	ENE	E	E			
Mar 28	2.2	3.5	1.9	3.5	3.8	3.9	4.2	4.0	1.3	2.8	2.2	9.7	10.9	10.7	13.2	12.5	10.9	12.5	5.5	0.6	0.5	1.4	2.7	3.1	0.5	13.2	1.5
	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	SE	WSW	W	WSW	WSW	WSW	W	NW	N	S	SSE	ESE	ESE	SE			
Mar 29	4.8	5.0	4.3	4.1	2.9	4.8	8.4	10.0	14.2	13.9	18.1	17.0	12.8	15.6	14.8	15.4	16.5	12.7	12.4	11.8	5.9	4.3	6.5	4.2	2.9	18.1	9.1
	SSE	SSE	SE	SE	SE	SE	SE	SE	SSE	SSE	S	SW	SSW	SSW	SSW	S	S	S	S	SSE	S	SSW	S	SE			
Mar 30	4.5	4.1	4.3	4.4	4.8	4.0	4.6	4.3	4.3	7.5	6.5	6.2	10.2	9.8	12.2	16.6	13.2	12.5	7.7	10.6	11.6	11.7	15.7	16.0	4.0	16.6	7.0
	SE	SE	SE	SE	SE	SE	SE	SE	S	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	SW	SW	SW	WSW	WSW	WSW			
Mar 31	11.5	9.3	11.3	9.5	7.6	5.6	7.6	8.5	9.9	15.6	13.4	8.9	9.3	9.8	9.0	12.3	8.7	4.8	8.0	5.8	0.7	1.4	1.4	3.0	0.7	15.6	6.1
	SW	WSW	WSW	SW	SW	SW	WSW	WSW	W	NW	NW	NW	NW	WSW	WSW	WSW	WSW	WSW	N	NNE	SSW	NNW	NW	NW			

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

peace river area monitoring program
pramp

PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2022

Summary of Hourly Averages

SULPHUR DIOXIDE (SO_2) in ppb

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

Number of 1-Hour Exceedances: 0 Number of 24-Hour Exceedances: 0 30-Day Exceedance: 0

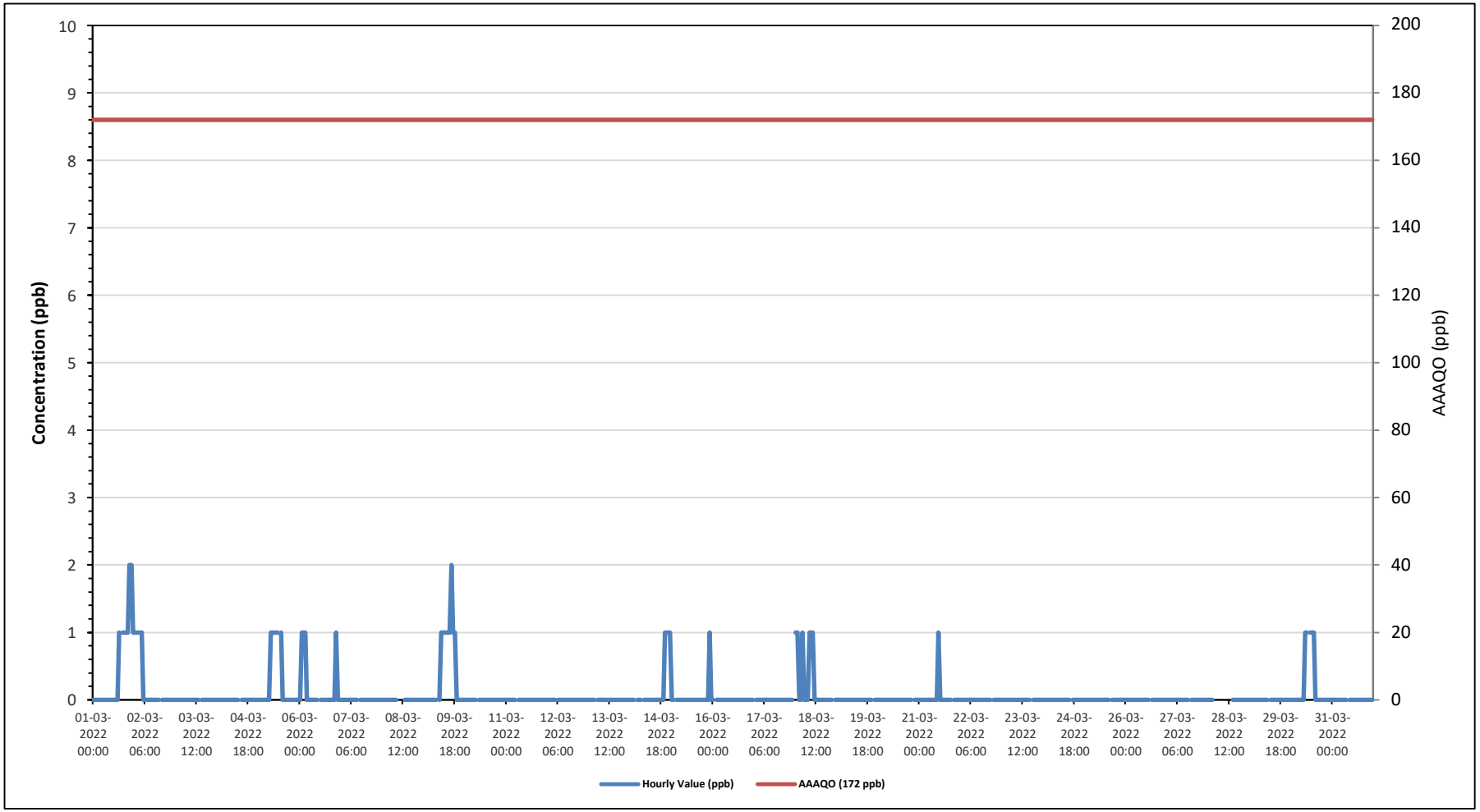
Maximum Hourly Value:	2	ppb	on March 1 at hour 21	Hours in Service:	744
Maximum Daily Value:	0.4	ppb	on March 1	Hours of Data:	698
Minimum Hourly Value:	0	ppb	on March 1 at hour 0	Hours of Missing Data:	11
Minimum Daily Value:	0.0	ppb	on March 3	Hours of Calibration:	35
Monthly Average:	0.1	ppb		Operational Uptime:	98.5

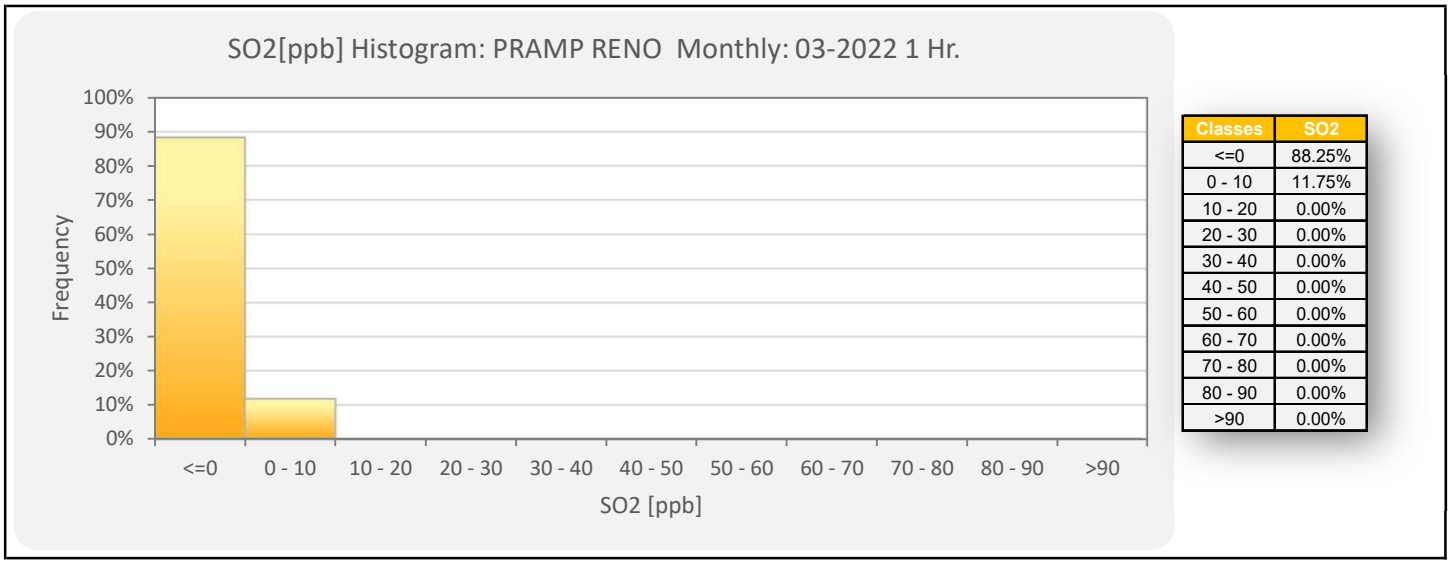
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Mar 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	S	1	1	1	1	2	2	1	0	2	0.4
Mar 2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	1	0.2
Mar 3	0	0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

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance	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 SO2 - Reno Station

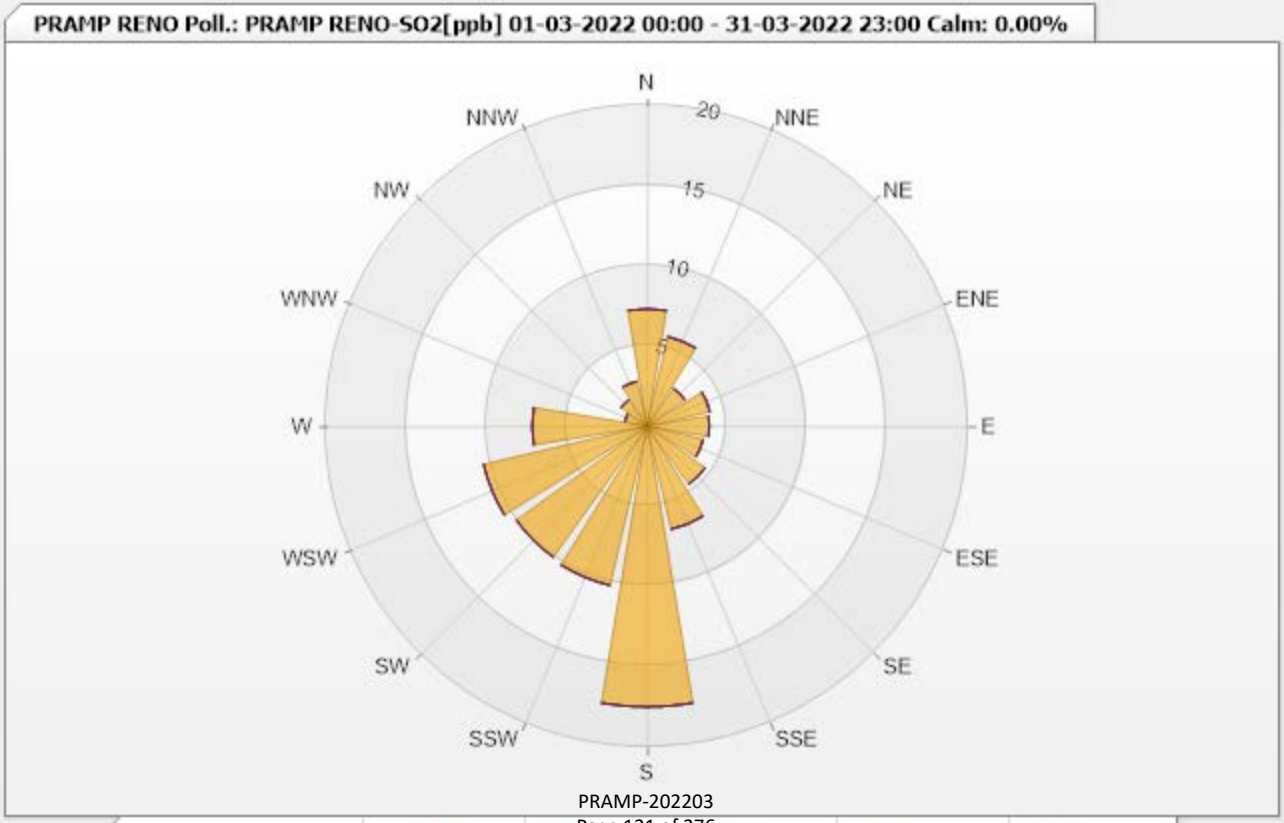




Classes	SO2
<=0	88.25%
0 - 10	11.75%
10 - 20	0.00%
20 - 30	0.00%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: PRAMP RENO Poll.: PRAMP RENO-SO2[ppb] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 93.82% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	7.31	0	0	0	0	7.31
NNE	5.73	0	0	0	0	5.73
NE	2.87	0	0	0	0	2.87
ENE	4.01	0	0	0	0	4.01
E	3.87	0	0	0	0	3.87
ESE	3.58	0	0	0	0	3.58
SE	4.44	0	0	0	0	4.44
SSE	6.59	0	0	0	0	6.59
S	17.48	0	0	0	0	17.48
SSW	10.17	0	0	0	0	10.17
SW	10.03	0	0	0	0	10.03
WSW	10.46	0	0	0	0	10.46
W	7.16	0	0	0	0	7.16
WNW	1.43	0	0	0	0	1.43
NW	2.01	0	0	0	0	2.01
NNW	2.87	0	0	0	0	2.87
Summary	100	0	0	0	0	100


PRAMP RENO Poll.: PRAMP RENO-SO2[ppb] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppb)
100 0-10
0 10-50
0 50-100
0 100-172
0 >172.0

peace river area monitoring program
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PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2022

Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

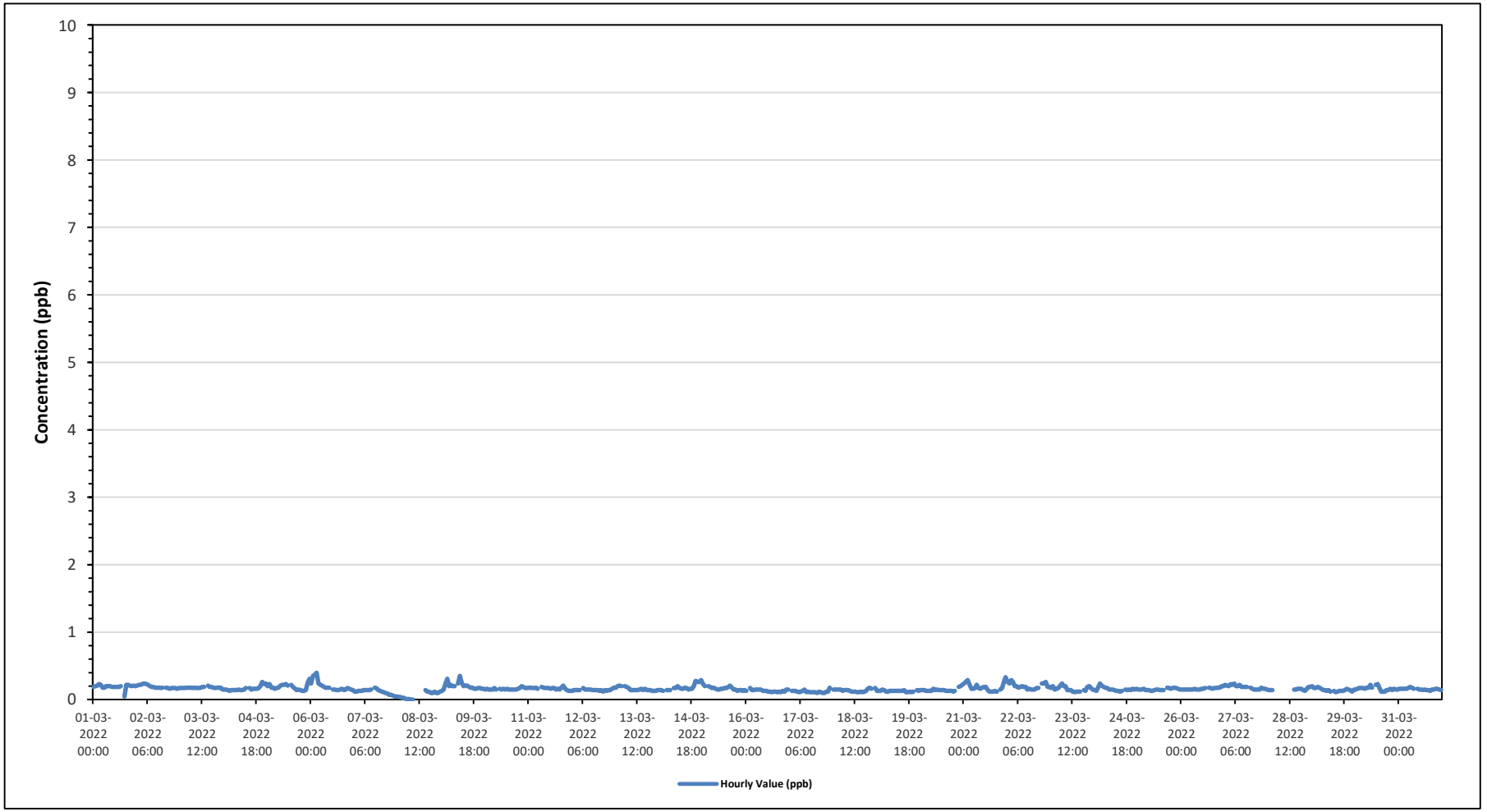
Maximum Hourly Value:	0.40	ppb	on March 6 at hour 3	Hours in Service:	744
Maximum Daily Value:	0.20	ppb	on March 9	Hours of Data:	696
Minimum Hourly Value:	0.00	ppb	on March 8 at hour 7	Hours of Missing Data:	11
Minimum Daily Value:	0.07	ppb	on March 8	Hours of Calibration:	37
Monthly Average:	0.16	ppb		Operational Uptime:	98.5

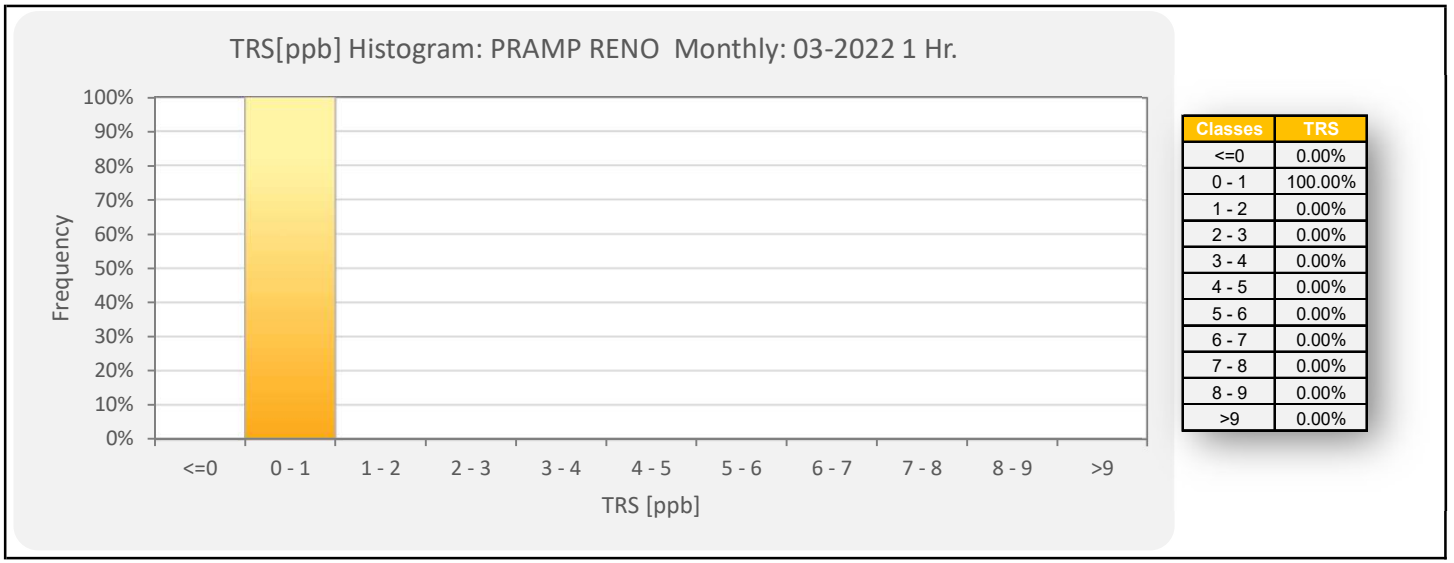
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	0.19	0.2	0.21	0.23	0.22	0.18	0.18	0.2	0.2	0.2	0.19	0.19	0.19	0.19	0.19	0.2	S	0.05	0.22	0.22	0.21	0.2	0.21	0.2	0.05	0.23	0.19
Mar 2	0.21	0.22	0.22	0.23	0.24	0.23	0.22	0.2	0.19	0.19	0.18	0.18	0.18	0.17	0.18	S	0.18	0.17	0.16	0.17	0.17	0.17	0.16	0.17	0.16	0.24	0.19
Mar 3	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.17	0.18	0.17	0.17	0.18	0.19	0.19	S	0.21	0.19	0.19	0.18	0.17	0.18	0.18	0.18	0.15	0.15	0.21	0.18
Mar 4	0.15	0.15	0.14	0.13	0.14	0.14	0.14	0.14	0.15	0.14	0.14	0.15	0.17	S	0.17	0.15	0.16	0.16	0.16	0.17	0.2	0.26	0.23	0.24	0.13	0.26	0.16
Mar 5	0.2	0.23	0.18	0.18	0.16	0.17	0.18	0.21	0.22	0.22	0.23	0.21	S	0.22	0.19	0.16	0.14	0.15	0.14	0.13	0.13	0.14	0.25	0.31	0.13	0.31	0.19
Mar 6	0.24	0.35	0.37	**0.4**	0.24	0.22	0.21	0.19	0.18	0.18	0.18	S	0.15	0.15	0.14	0.14	0.15	0.16	0.14	0.15	0.17	0.16	0.15	0.14	0.14	**0.40**	0.20
Mar 7	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.15	S	0.18	0.17	0.14	0.13	0.12	0.11	0.1	0.09	0.07	0.07	0.06	0.05	0.05	0.05	0.18	0.12
Mar 8	0.04	0.04	0.03	0.03	0.01	0.01	0.01	0	0	C	C	C	C	C	C	0.14	0.12	0.12	0.1	0.1	0.12	0.1	0.1	0.12	**0.00**	0.14	0.07
Mar 9	0.13	0.15	0.23	0.31	0.2	0.22	0.2	0.2	S	0.24	0.35	0.25	0.2	0.21	0.21	0.19	0.18	0.18	0.16	0.16	0.17	0.17	0.16	0.16	0.13	0.35	**0.20**
Mar 10	0.15	0.16	0.15	0.15	0.15	0.17	0.15	S	0.16	0.15	0.16	0.15	0.16	0.15	0.15	0.15	0.15	0.15	0.16	0.17	0.2	0.19	0.17	0.17	0.15	0.20	0.16
Mar 11	0.18	0.18	0.17	0.17	0.18	0.16	S	0.19	0.18	0.17	0.17	0.17	0.16	0.17	0.17	0.15	0.16	0.15	0.18	0.21	0.16	0.14	0.13	0.13	0.13	0.21	0.17
Mar 12	0.13	0.14	0.14	0.14	0.14	S	0.17	0.15	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.13	0.14	0.12	0.14	0.13	0.14	0.14	0.16	0.18	0.12	0.18	0.14
Mar 13	0.18	0.2	0.21	0.2	S	0.2	0.19	0.17	0.14	0.14	0.14	0.14	0.14	0.15	0.16	0.14	0.16	0.14	0.14	0.14	0.13	0.13	0.13	0.14	0.13	0.21	0.16
Mar 14	0.14	0.14	0.13	S	0.14	0.14	0.14	NRM	0.17	0.17	0.2	0.18	0.16	0.16	0.18	0.17	0.15	0.16	0.16	0.2	0.28	0.26	0.26	0.29	0.13	0.29	0.18
Mar 15	0.23	0.2	S	0.2	0.19	0.17	0.18	0.16	0.15	0.15	0.16	0.16	0.17	0.17	0.19	0.21	0.18	0.15	0.15	0.13	0.14	0.14	0.13	0.14	0.13	0.23	0.17
Mar 16	0.13	S	0.17	0.14	0.14	0.15	0.15	0.15	0.15	0.13	0.13	0.13	0.12	0.12	0.11	0.12	0.12	0.11	0.12	0.11	0.13	0.12	0.15	0.15	0.11	0.17	0.13
Mar 17	S	0.13	0.13	0.13	0.12	0.11	0.12	0.13	0.15	0.11	0.12	0.11	0.11	0.11	0.11	0.1	0.12	0.11	0.1	0.1	0.12	0.12	0.18	S	0.10	0.18	0.12
Mar 18	0.15	0.15	0.15	0.15	0.15	0.13	0.14	0.14	0.14	0.13	0.12	0.12	0.12	0.11	0.11	0.12	0.11	0.12	0.13	0.16	0.18	0.16	S	0.17	0.11	0.18	0.14
Mar 19	0.13	0.13	0.13	0.15	0.14	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.14	0.11	0.11	0.12	0.11	0.12	S	0.14	0.13	0.11	0.15	0.13
Mar 20	0.14	0.14	0.14	0.13	0.13	0.13	0.13	0.16	0.14	0.15	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.13	0.12	0.13	S	0.19	0.2	0.22	0.12	0.22	0.14
Mar 21	0.24	0.27	0.29	0.23	0.16	0.16	0.17	0.22	0.17	0.16	0.18	0.19	0.19	0.14	0.12	0.12	0.12	0.13	0.12	S	0.15	0.17	0.27	0.33	0.12	0.33	0.19
Mar 22	0.26	0.24	0.29	0.26	0.2	0.2	0.18	0.19	0.2	0.19	0.19	0.15	0.16	0.15	0.15	0.15	0.17	0.17	S	0.24	0.24	0.26	0.19	0.19	0.15	0.29	0.20
Mar 23	0.17	0.2	0.15	0.16	0.17	0.21	0.24	0.2	0.2	0.14	0.14	0.14	0.12	0.11	0.12	0.12	0.12	S	0.14	0.13	0.19	0.2	0.17	0.15	0.11	0.24	0.16
Mar 24	0.14	0.13	0.19	0.24	0.21	0.19	0.18	0.17	0.15	0.15	0.15	0.14	0.13	0.13	0.12	0.13	S	0.15	0.14	0.15	0.14	0.16	0.15	0.16	0.12	0.24	0.16
Mar 25	0.15	0.15	0.15	0.16	0.14	0.14	0.14	0.13	0.13	0.14	0.15	0.15	0.14	0.14	0.14	S	0.18	0.17	0.16	0.17	0.18	0.17	0.16	0.15	0.13	0.18	0.15
Mar 26	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.15	0.15	0.15	0.16	0.16	0.17	S	0.18	0.17	0.16	0.17	0.17	0.18	0.18	0.2	0.2	0.15	0.20	0.16
Mar 27	0.22	0.21	0.2	0.23	0.22	0.24	0.2	0.2	0.22	0.19	0.19	0.19	0.19	S	0.18	0.16	0.15	0.15	0.15	0.15	0.18	0.16	0.16	0.15	0.15	0.24	0.19
Mar 28	0.14	0.14	0.14	K	K	K	K	K	K	K	K	K	K	S	0.15	0.15	0.16	0.16	0.16	0.14	0.13	0.16	0.19	0.19	0.13	0.19	-
Mar 29	0.2	0.17	0.17	0.19	0.18	0.16	0.14	0.14	0.13	0.14	0.12	S	0.13	0.11	0.12	0.13	0.13	0.13	0.14	0.16	0.15	0.14	0.12	0.15	0.11	0.20	0.15
Mar 30	0.15	0.16	0.17	0.17	0.17	0.16	0.18	0.18	0.22	0.18	S	0.22	0.23	0.18	0.12	0.12	0.12	0.14	0.14	0.16	0.14	0.16	0.15	0.15	0.12	0.23	0.16
Mar 31	0.16	0.16	0.16	0.16	0.16	0.17	0.19	0.18	0.16	S	0.16	0.15	0.15	0.14	0.15	0.14	0.14	0.13	0.15	0.15	0.16	0.16	0.15	0.14	0.13	0.19	0.16
Diurnal Maximum	0.26	0.35	0.37	0.40	0.24	0.24	0.24	0.22	0.22	0.24	0.35	0.25	0.23	0.22	0.21	0.21	0.19	0.19	0.22	0.24	0.28	0.26	0.27	0.33			
Diurnal Average	0.17	0.17	0.18	0.18	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.16	0.16	0.15	0.15	0.15	0.15	0.14	0.14	0.15	0.16	0.17	0.17	0.17			

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

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

Timeseries Chart of Hourly Average for TRS - Reno Station

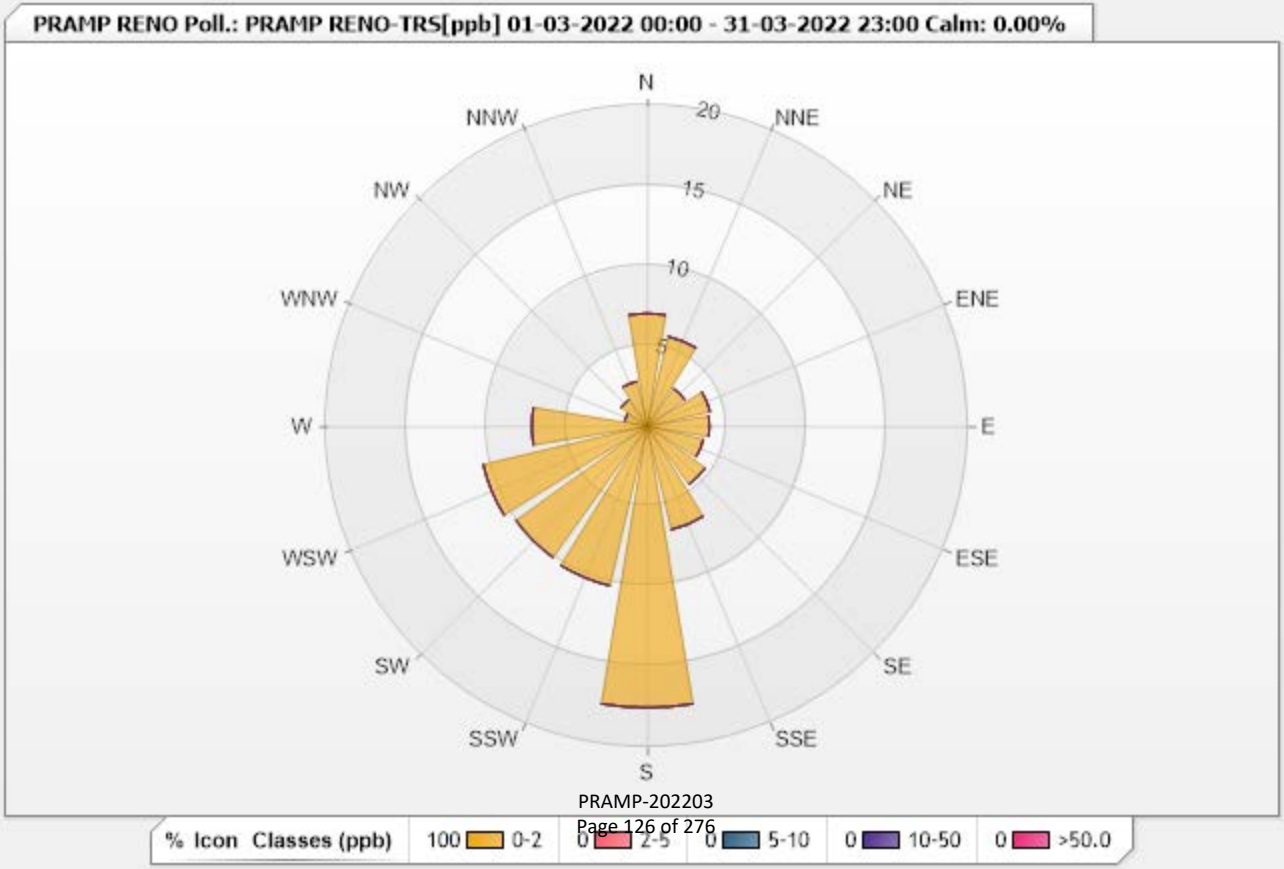




Classes	TRS
<=0	0.00%
0 - 1	100.00%
1 - 2	0.00%
2 - 3	0.00%
3 - 4	0.00%
4 - 5	0.00%
5 - 6	0.00%
6 - 7	0.00%
7 - 8	0.00%
8 - 9	0.00%
>9	0.00%

Wind: PRAMP RENO Poll.: PRAMP RENO-TRS[ppb] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 93.55% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	7.04	0	0	0	0	7.04
NNE	5.75	0	0	0	0	5.75
NE	2.87	0	0	0	0	2.87
ENE	4.02	0	0	0	0	4.02
E	3.88	0	0	0	0	3.88
ESE	3.59	0	0	0	0	3.59
SE	4.45	0	0	0	0	4.45
SSE	6.61	0	0	0	0	6.61
S	17.53	0	0	0	0	17.53
SSW	10.2	0	0	0	0	10.2
SW	10.06	0	0	0	0	10.06
WSW	10.49	0	0	0	0	10.49
W	7.18	0	0	0	0	7.18
WNW	1.44	0	0	0	0	1.44
NW	2.01	0	0	0	0	2.01
NNW	2.87	0	0	0	0	2.87
Summary	100	0	0	0	0	100


PRAMP RENO Poll.: PRAMP RENO-TRS[ppb] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppb)
100 0-2
0 2-5
0 5-10
0 10-50
0 >50.0

peace river area monitoring program
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PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2022

Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

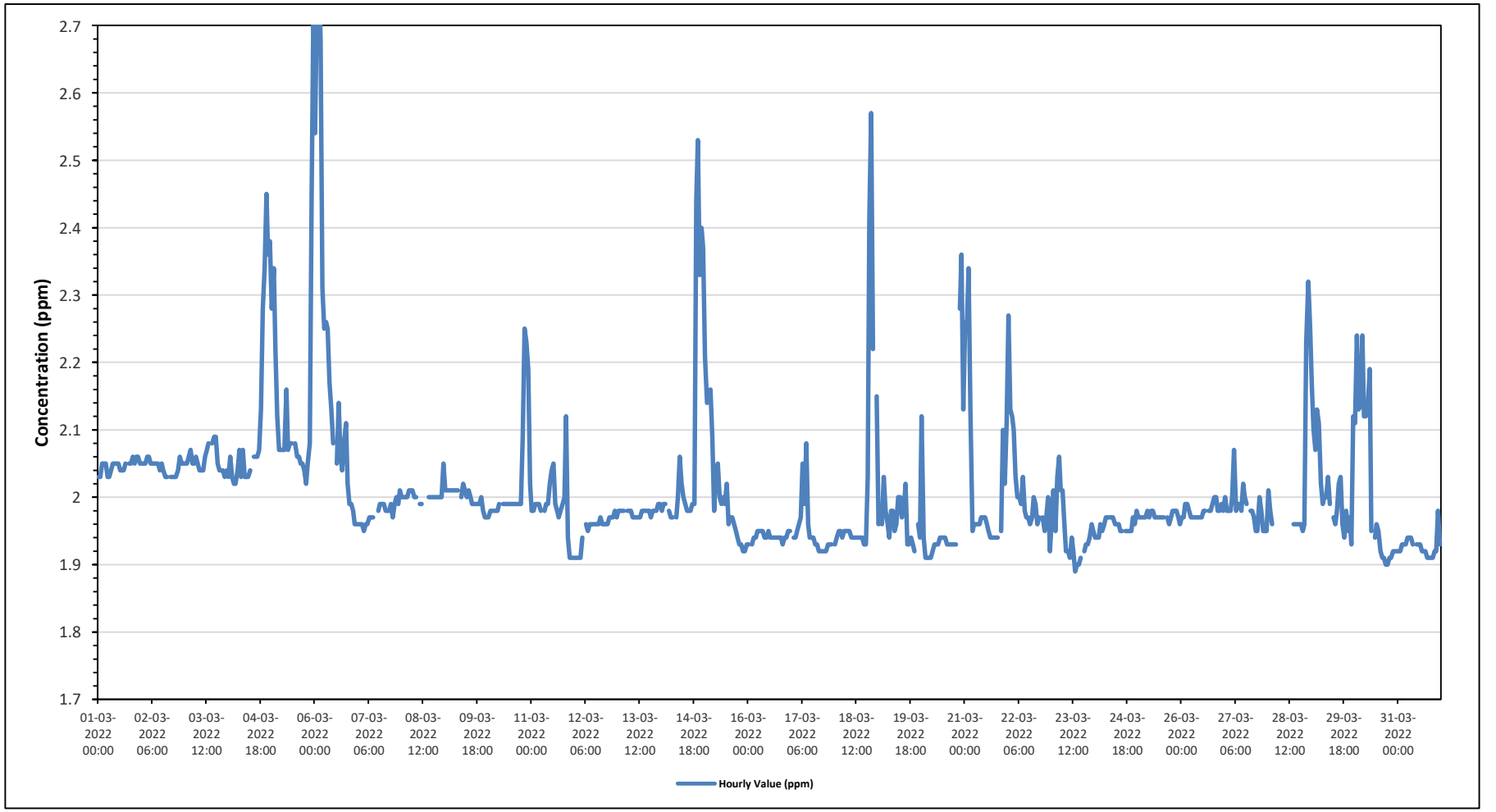
Maximum Hourly Value:	2.79	ppm	on March 6 at hour 2	Hours in Service:	744
Maximum Daily Value:	2.20	ppm	on March 6	Hours of Data:	697
Minimum Hourly Value:	1.89	ppm	on March 23 at hour 13	Hours of Missing Data:	12
Minimum Daily Value:	1.93	ppm	on March 31	Hours of Calibration:	35
Monthly Average:	2.01	ppm		Operational Uptime:	98.4

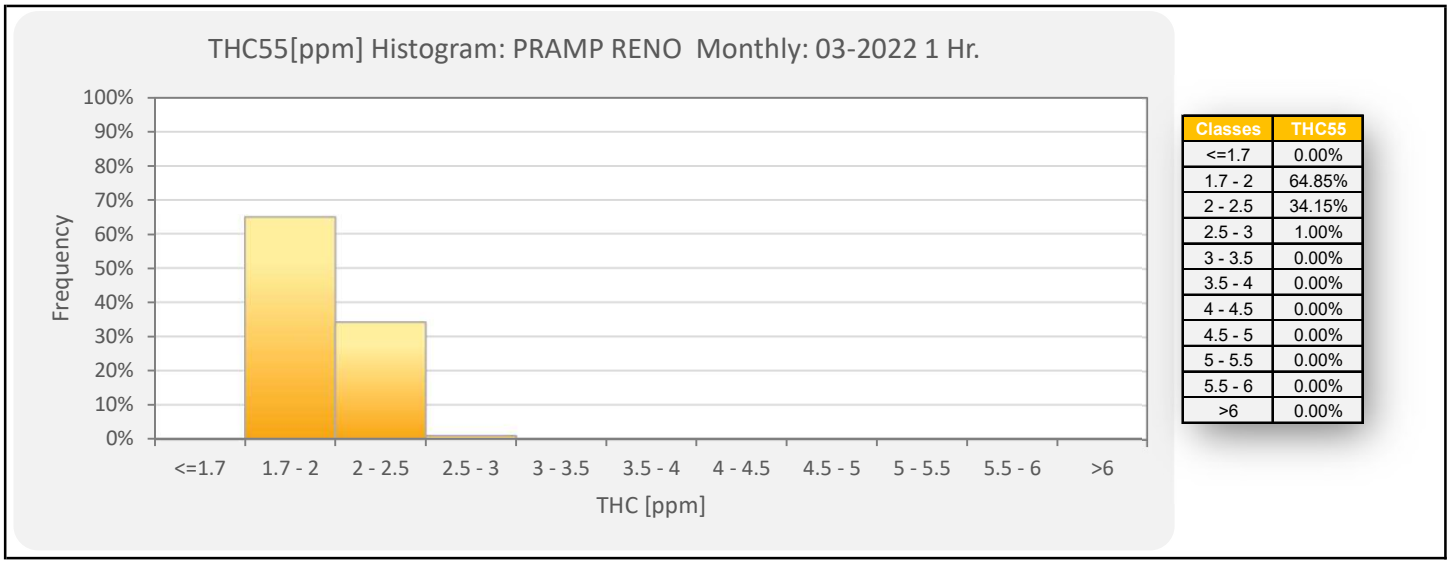
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	2.03	2.03	2.05	2.05	2.05	2.03	2.03	2.04	2.05	2.05	2.05	2.05	2.04	2.04	2.04	2.05	S	2.05	2.05	2.06	2.05	2.06	2.06	2.05	2.03	2.06	2.05
Mar 2	2.05	2.05	2.05	2.06	2.06	2.05	2.05	2.05	2.05	2.05	2.04	2.05	2.04	2.03	2.03	S	2.03	2.03	2.03	2.03	2.04	2.06	2.05	2.05	2.03	2.06	2.04
Mar 3	2.05	2.05	2.06	2.07	2.05	2.05	2.06	2.05	2.04	2.04	2.04	2.06	2.07	2.08	S	2.08	2.09	2.09	2.05	2.04	2.04	2.04	2.03	2.04	2.03	2.09	2.06
Mar 4	2.03	2.06	2.03	2.02	2.02	2.04	2.07	2.03	2.07	2.03	2.03	2.03	2.04	S	2.06	2.06	2.06	2.07	2.13	2.28	2.34	2.45	2.36	2.38	2.02	2.45	2.12
Mar 5	2.28	2.34	2.22	2.12	2.07	2.07	2.07	2.07	2.16	2.07	2.08	2.08	S	2.08	2.06	2.06	2.05	2.05	2.04	2.02	2.05	2.08	2.45	2.73	2.02	2.73	2.14
Mar 6	2.54	2.73	**2.79**	2.68	2.31	2.25	2.26	2.25	2.17	2.13	2.08	S	2.05	2.14	2.07	2.04	2.08	2.11	2.02	1.99	1.99	1.98	1.96	1.96	1.96	**2.79**	**2.20**
Mar 7	1.96	1.96	1.96	1.95	1.96	1.96	1.97	1.97	1.97	NRM	S	1.98	1.99	1.99	1.99	1.98	1.98	1.98	1.99	1.97	1.99	2.00	1.99	2.01	1.95	2.01	1.98
Mar 8	2.00	2.00	2.00	2.00	2.01	2.01	2.01	2.00	2.00	S	1.99	1.99	C	C	C	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.05	1.99	2.05	2.00
Mar 9	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	S	2.00	2.02	2.01	2.00	2.01	2.00	1.99	1.99	1.99	1.99	1.99	2.00	1.98	1.97	1.97	1.97	2.02	2.00
Mar 10	1.97	1.98	1.98	1.98	1.98	1.98	1.99	S	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	2.09	2.25	2.23	2.19	2.02	1.97	2.25	2.02
Mar 11	1.98	1.98	1.99	1.99	1.99	1.98	S	1.98	1.99	1.99	2.02	2.04	2.05	1.99	1.98	1.97	1.98	1.99	2.00	2.12	1.94	1.91	1.91	1.91	1.91	2.12	1.99
Mar 12	1.91	1.91	1.91	1.91	1.94	S	1.96	1.95	1.96	1.96	1.96	1.96	1.96	1.96	1.97	1.96	1.96	1.96	1.96	1.97	1.97	1.97	1.98	1.97	1.91	1.98	1.95
Mar 13	1.98	1.98	1.98	1.98	S	1.98	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.98	1.98	1.98	1.98	1.98	1.97	1.98	1.98	1.98	1.99	1.99	1.97	1.99	1.98
Mar 14	1.98	1.99	1.99	S	1.98	1.97	1.97	NRM	1.97	2.00	2.06	2.02	2.00	1.99	1.98	1.98	1.98	1.99	1.99	2.44	2.53	2.33	2.40	2.37	1.97	2.53	2.09
Mar 15	2.21	2.14	S	2.16	2.09	1.98	2.04	2.05	2.00	1.99	2.00	1.99	2.02	1.96	1.97	1.97	1.96	1.95	1.94	1.93	1.93	1.92	1.92	1.93	1.92	2.21	2.00
Mar 16	1.93	S	1.93	1.94	1.94	1.95	1.95	1.95	1.95	1.94	1.94	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.94	1.94	1.95	1.95	1.93	1.95	1.94
Mar 17	S	1.94	1.94	1.95	1.96	1.97	2.05	1.99	2.08	1.96	1.94	1.94	1.94	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.93	S	1.92	2.08	1.95
Mar 18	1.93	1.94	1.95	1.95	1.94	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.93	2.03	2.41	2.57	2.22	S	2.15	1.93	2.57	2.01
Mar 19	1.96	1.97	1.96	2.03	1.98	1.96	1.94	1.98	1.98	1.95	1.96	2.00	2.00	1.97	1.98	2.02	1.93	1.93	1.94	1.93	1.92	S	1.96	1.94	1.92	2.03	1.96
Mar 20	2.12	1.94	1.91	1.91	1.91	1.91	1.92	1.93	1.93	1.93	1.94	1.94	1.94	1.94	1.93	1.93	1.93	1.93	1.93	1.93	S	2.28	2.36	2.13	1.91	2.36	1.98
Mar 21	2.26	2.26	2.34	2.13	1.95	1.96	1.96	1.96	1.96	1.97	1.97	1.97	1.96	1.95	1.94	1.94	1.94	1.94	1.94	S	1.95	2.10	2.02	2.11	1.94	2.34	2.02
Mar 22	2.27	2.13	2.12	2.10	2.03	2.00	2.00	1.99	2.03	1.98	1.97	1.97	1.96	1.97	2.00	1.99	1.96	1.97	S	1.97	1.95	1.97	2.00	1.92	1.92	2.27	2.01
Mar 23	1.97	2.01	1.95	2.03	2.06	2.01	2.01	1.96	1.92	1.92	1.91	1.94	1.92	1.89	1.90	1.90	1.91	S	1.92	1.93	1.93	1.94	1.96	1.95	**1.89**	2.06	1.95
Mar 24	1.94	1.94	1.94	1.96	1.95	1.96	1.97	1.97	1.97	1.97	1.97	1.96	1.96	1.96	1.95	1.95	S	1.95	1.95	1.95	1.95	1.97	1.96	1.98	1.94	1.98	1.96
Mar 25	1.97	1.97	1.97	1.97	1.97	1.98	1.97	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.97	S	1.97	1.96	1.97	1.98	1.98	1.98	1.97	1.96	1.96	1.98	1.97
Mar 26	1.97	1.97	1.99	1.99	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.98	S	1.98	1.98	1.99	2.00	2.00	1.98	1.98	1.99	1.98	1.97	2.00	1.98
Mar 27	2.00	1.98	1.98	1.98	2.00	2.07	1.98	1.99	1.99	1.98	2.02	2.00	1.99	S	1.98	1.98	1.97	1.95	1.95	2.00	1.98	1.95	1.95	1.95	1.95	2.07	1.98
Mar 28	2.01	1.98	1.96	K	K	K	K	K	K	K	K	K	K	S	1.96	1.96	1.96	1.96	1.96	1.95	1.96	2.23	2.32	2.25	1.95	2.32	-
Mar 29	2.17	2.10	2.07	2.13	2.11	2.02	1.99	2.00	2.00	2.03	1.99	S	1.97	1.96	1.98	2.02	2.03	1.96	1.94	1.98	1.95	1.97	1.93	2.12	1.93	2.17	2.02
Mar 30	2.11	2.24	2.13	2.14	2.24	2.12	2.12	2.13	2.19	1.95	S	1.94	1.96	1.95	1.92	1.91	1.91	1.90	1.90	1.91	1.91	1.92	1.92	1.92	1.90	2.24	2.01
Mar 31	1.92	1.92	1.93	1.93	1.93	1.94	1.94	1.94	1.93	S	1.93	1.93	1.93	1.92	1.92	1.92	1.91	1.91	1.91	1.91	1.92	1.92	1.98	1.93	1.91	1.98	1.93
Diurnal Maximum	2.54	2.73	2.79	2.68	2.31	2.25	2.26	2.25	2.19	2.13	2.08	2.08	2.07	2.14	2.07	2.08	2.09	2.11	2.13	2.44	2.57	2.45	2.45	2.73			
Diurnal Average	2.05	2.05	2.04	2.04	2.02	2.00	2.01	2.00	2.01	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.98	2.02	2.03	2.04	2.05	2.06			

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

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

Timeseries Chart of Hourly Average for THC - Reno Station

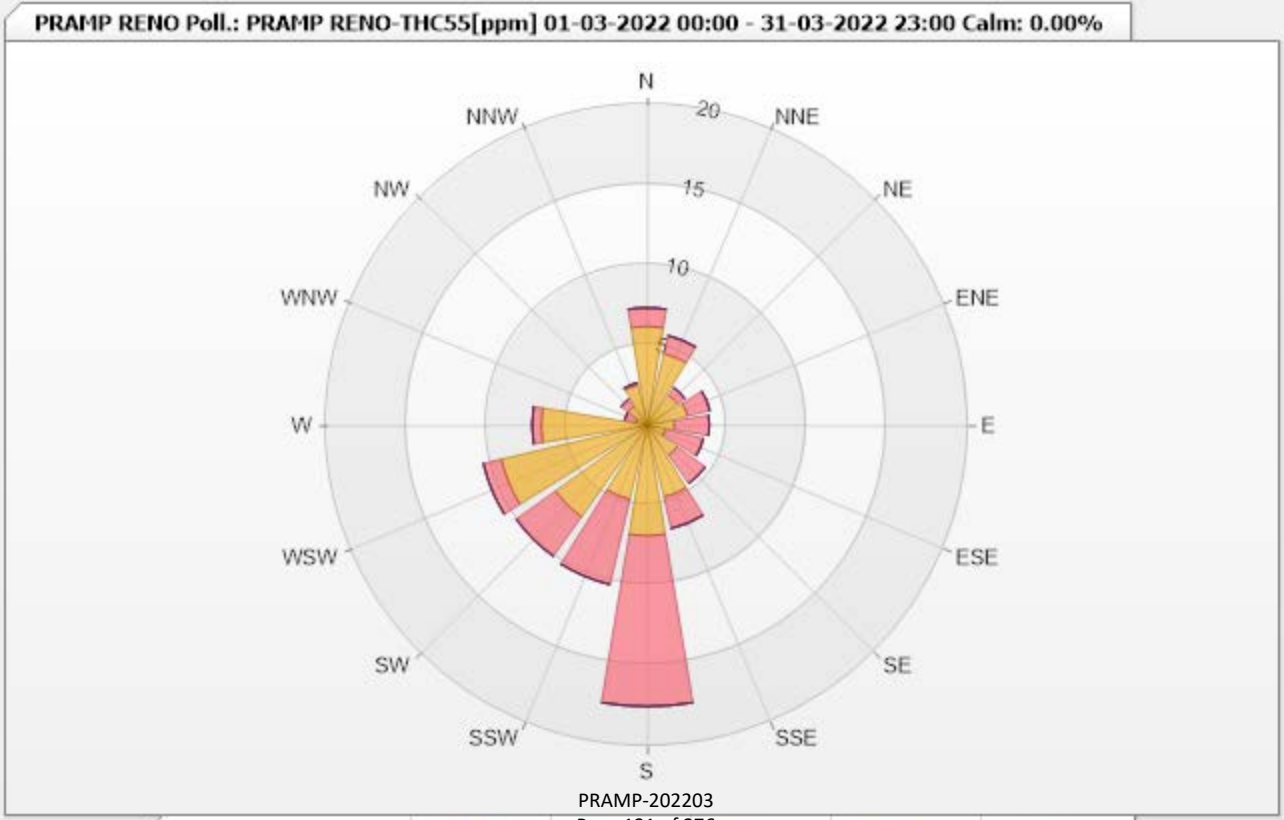




Classes	THC55
<=1.7	0.00%
1.7 - 2	64.85%
2 - 2.5	34.15%
2.5 - 3	1.00%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: PRAMP RENO Poll.: PRAMP RENO-THC55[ppm] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 93.68% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	6.17	1.15	0	0	0	7.32
NNE	4.59	1.15	0	0	0	5.74
NE	2.3	0.57	0	0	0	2.87
ENE	2.58	1.43	0	0	0	4.01
E	1.72	2.15	0	0	0	3.87
ESE	1.15	2.44	0	0	0	3.59
SE	2.3	2.15	0	0	0	4.45
SSE	4.59	2.01	0	0	0	6.6
S	6.89	10.62	0	0	0	17.51
SSW	4.73	5.45	0	0	0	10.18
SW	7.03	3.01	0	0	0	10.04
WSW	9.33	1.15	0	0	0	10.48
W	6.6	0.57	0	0	0	7.17
WNW	0.72	0.72	0	0	0	1.44
NW	1.43	0.57	0	0	0	2
NNW	2.58	0.14	0	0	0	2.72
Summary	64.71	35.28	0	0	0	100


PRAMP RENO Poll.: PRAMP RENO-THC55[ppm] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppm)
65 0-2
35 2-5
0 5-10
0 10-40
0 >40.0

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PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2022

Summary of Hourly Averages

METHANE (CH4) in ppm

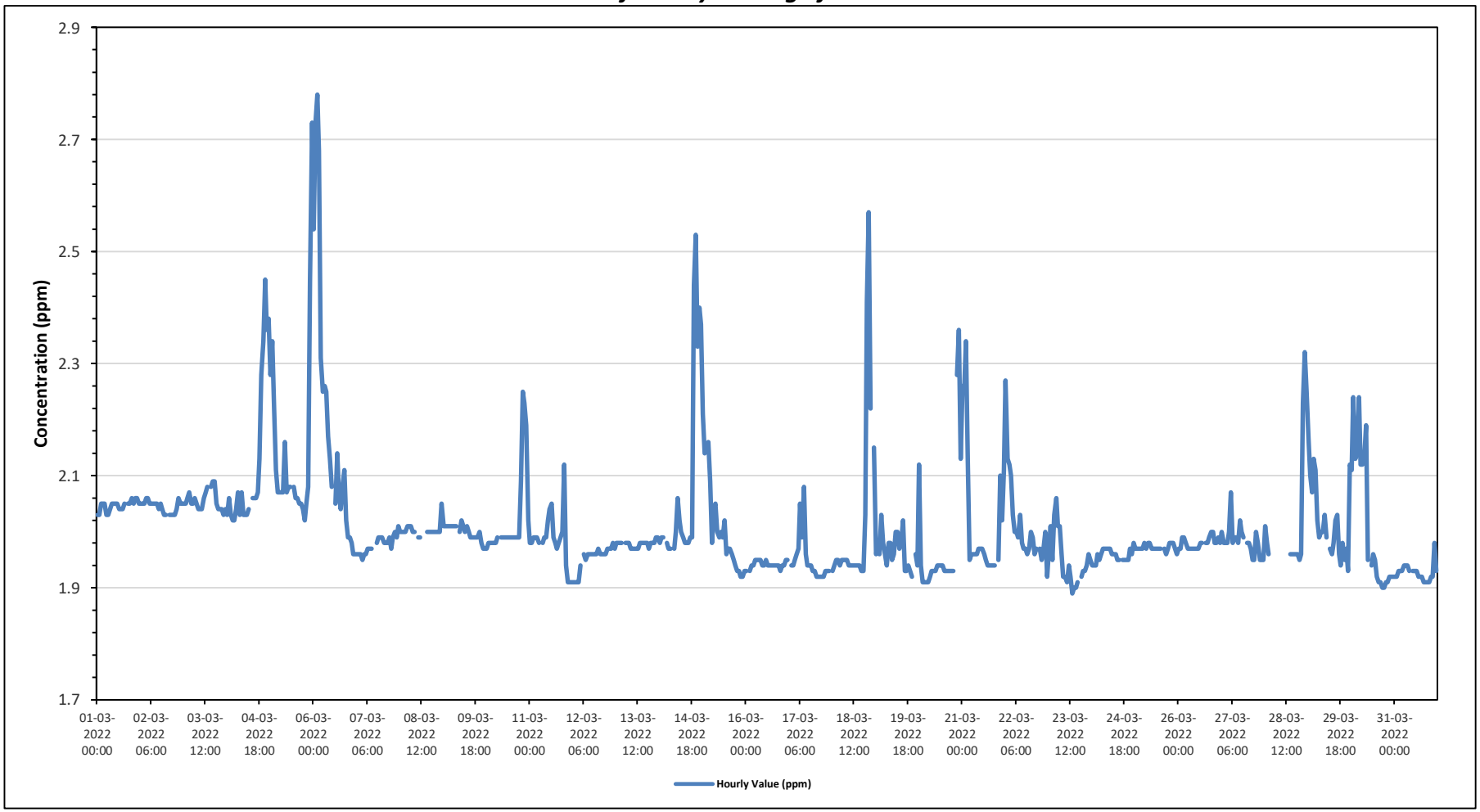
Maximum Hourly Value:	2.78	ppm	on March 6 at hour 2	Hours in Service:	744
Maximum Daily Value:	2.20	ppm	on March 6	Hours of Data:	697
Minimum Hourly Value:	1.89	ppm	on March 23 at hour 13	Hours of Missing Data:	12
Minimum Daily Value:	1.93	ppm	on March 31	Hours of Calibration:	35
Monthly Average:	2.01	ppm		Operational Uptime:	98.4

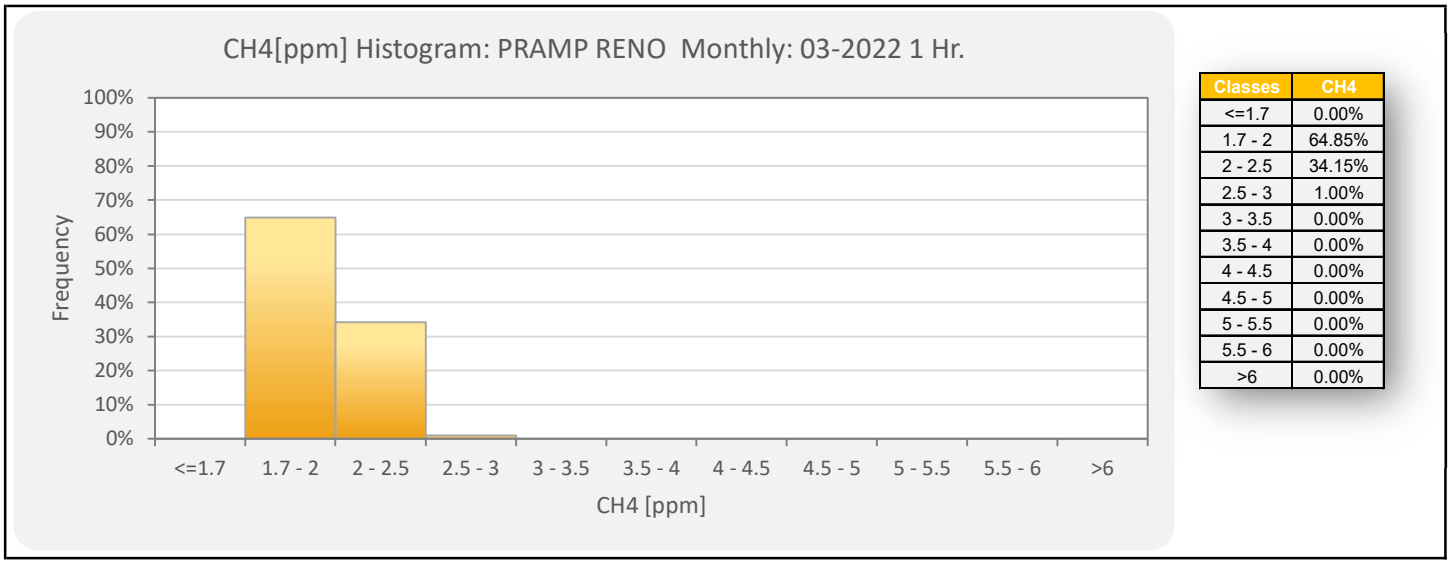
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	2.03	2.03	2.05	2.05	2.05	2.03	2.03	2.04	2.05	2.05	2.05	2.05	2.04	2.04	2.04	2.05	S	2.05	2.05	2.06	2.05	2.06	2.06	2.05	2.03	2.06	2.05
Mar 2	2.05	2.05	2.05	2.06	2.06	2.05	2.05	2.05	2.05	2.05	2.04	2.05	2.04	2.03	2.03	S	2.03	2.03	2.03	2.03	2.04	2.06	2.05	2.05	2.03	2.06	2.04
Mar 3	2.05	2.05	2.06	2.07	2.05	2.05	2.06	2.05	2.04	2.04	2.04	2.06	2.07	2.08	S	2.08	2.09	2.09	2.05	2.04	2.04	2.04	2.03	2.04	2.03	2.09	2.06
Mar 4	2.03	2.06	2.03	2.02	2.02	2.04	2.07	2.03	2.07	2.03	2.03	2.03	2.04	S	2.06	2.06	2.06	2.07	2.13	2.28	2.34	2.45	2.36	2.38	2.02	2.45	2.12
Mar 5	2.28	2.34	2.22	2.11	2.07	2.07	2.07	2.07	2.16	2.07	2.08	2.08	S	2.08	2.06	2.06	2.05	2.05	2.04	2.02	2.05	2.08	2.45	2.73	2.02	2.73	2.14
Mar 6	2.54	2.73	**2.78**	2.68	2.31	2.25	2.26	2.25	2.17	2.13	2.08	S	2.05	2.14	2.07	2.04	2.08	2.11	2.02	1.99	1.99	1.98	1.96	1.96	1.96	**2.78**	**2.20**
Mar 7	1.96	1.96	1.96	1.95	1.96	1.96	1.97	1.97	1.97	NRM	S	1.98	1.99	1.99	1.99	1.98	1.98	1.98	1.99	1.97	1.99	2.00	1.99	2.01	1.95	2.01	1.98
Mar 8	2.00	2.00	2.00	2.00	2.01	2.01	2.01	2.00	2.00	S	1.99	1.99	C	C	C	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.05	1.99	2.05	2.00
Mar 9	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	S	2.00	2.02	2.01	2.00	2.01	2.00	1.99	1.99	1.99	1.99	1.99	2.00	1.98	1.97	1.97	1.97	2.02	2.00
Mar 10	1.97	1.98	1.98	1.98	1.98	1.98	1.99	S	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	2.09	2.25	2.23	2.19	2.02	1.97	2.25	2.02
Mar 11	1.98	1.98	1.99	1.99	1.99	1.98	S	1.98	1.99	1.99	2.02	2.04	2.05	1.99	1.98	1.97	1.98	1.99	2.00	2.12	1.94	1.91	1.91	1.91	1.91	2.12	1.99
Mar 12	1.91	1.91	1.91	1.91	1.94	S	1.96	1.95	1.96	1.96	1.96	1.96	1.96	1.96	1.97	1.96	1.96	1.96	1.96	1.97	1.97	1.97	1.98	1.97	1.91	1.98	1.95
Mar 13	1.98	1.98	1.98	1.98	S	1.98	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.98	1.98	1.98	1.98	1.98	1.97	1.98	1.98	1.98	1.99	1.99	1.97	1.99	1.98
Mar 14	1.98	1.99	1.99	S	1.98	1.97	1.97	NRM	1.97	2.00	2.06	2.02	2.00	1.99	1.98	1.98	1.98	1.99	1.99	2.44	2.53	2.33	2.40	2.37	1.97	2.53	2.09
Mar 15	2.21	2.14	S	2.16	2.09	1.98	2.04	2.05	2.00	1.99	2.00	1.99	2.02	1.96	1.97	1.97	1.96	1.95	1.94	1.93	1.93	1.92	1.92	1.93	1.92	2.21	2.00
Mar 16	1.93	S	1.93	1.94	1.94	1.95	1.95	1.95	1.95	1.94	1.94	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.94	1.94	1.95	1.95	1.93	1.95	1.94
Mar 17	S	1.94	1.94	1.95	1.96	1.97	2.05	1.99	2.08	1.96	1.94	1.94	1.94	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.93	S	1.92	2.08	1.95
Mar 18	1.93	1.94	1.95	1.95	1.94	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.93	2.03	2.41	2.57	2.22	S	2.15	1.93	2.57	2.01
Mar 19	1.96	1.97	1.96	2.03	1.98	1.96	1.94	1.98	1.98	1.95	1.96	2.00	2.00	1.97	1.98	2.02	1.93	1.93	1.94	1.93	1.92	S	1.96	1.94	1.92	2.03	1.96
Mar 20	2.12	1.94	1.91	1.91	1.91	1.91	1.92	1.93	1.93	1.93	1.94	1.94	1.94	1.94	1.93	1.93	1.93	1.93	1.93	1.93	S	2.28	2.36	2.13	1.91	2.36	1.98
Mar 21	2.26	2.26	2.34	2.13	1.95	1.96	1.96	1.96	1.96	1.97	1.97	1.97	1.96	1.95	1.94	1.94	1.94	1.94	1.94	S	1.95	2.10	2.02	2.11	1.94	2.34	2.02
Mar 22	2.27	2.13	2.12	2.10	2.03	2.00	2.00	1.99	2.03	1.98	1.97	1.97	1.96	1.97	2.00	1.99	1.96	1.97	S	1.97	1.95	1.97	2.00	1.92	1.92	2.27	2.01
Mar 23	1.97	2.01	1.95	2.03	2.06	2.01	2.01	1.96	1.92	1.92	1.91	1.94	1.92	1.89	1.90	1.90	1.91	S	1.92	1.93	1.93	1.94	1.96	1.95	**1.89**	2.06	1.95
Mar 24	1.94	1.94	1.94	1.96	1.95	1.96	1.97	1.97	1.97	1.97	1.97	1.96	1.96	1.96	1.95	1.95	S	1.95	1.95	1.95	1.95	1.97	1.96	1.98	1.94	1.98	1.96
Mar 25	1.97	1.97	1.97	1.97	1.97	1.98	1.97	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.97	S	1.97	1.96	1.97	1.98	1.98	1.98	1.97	1.96	1.96	1.98	1.97
Mar 26	1.97	1.97	1.99	1.99	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.98	S	1.98	1.98	1.99	2.00	2.00	1.98	1.98	1.99	1.98	1.97	2.00	1.98
Mar 27	2.00	1.98	1.98	1.98	2.00	2.07	1.98	1.99	1.99	1.98	2.02	2.00	1.99	S	1.98	1.98	1.97	1.95	1.95	2.00	1.98	1.95	1.95	1.95	1.95	2.07	1.98
Mar 28	2.01	1.98	1.96	K	K	K	K	K	K	K	K	K	K	S	1.96	1.96	1.96	1.96	1.96	1.95	1.96	2.23	2.32	2.25	1.95	2.32	-
Mar 29	2.17	2.10	2.07	2.13	2.11	2.02	1.99	2.00	2.00	2.03	1.99	S	1.97	1.96	1.98	2.02	2.03	1.96	1.94	1.98	1.95	1.97	1.93	2.12	1.93	2.17	2.02
Mar 30	2.11	2.24	2.13	2.14	2.24	2.12	2.12	2.13	2.19	1.95	S	1.94	1.96	1.95	1.92	1.91	1.91	1.90	1.90	1.91	1.91	1.92	1.92	1.92	1.90	2.24	2.01
Mar 31	1.92	1.92	1.93	1.93	1.93	1.94	1.94	1.94	1.93	S	1.93	1.93	1.93	1.92	1.92	1.92	1.91	1.91	1.91	1.91	1.92	1.92	1.98	1.93	1.91	1.98	1.93
Diurnal Maximum	2.54	2.73	2.78	2.68	2.31	2.25	2.26	2.25	2.19	2.13	2.08	2.08	2.07	2.14	2.07	2.08	2.09	2.11	2.13	2.44	2.57	2.45	2.45	2.73			
Diurnal Average	2.05	2.05	2.04	2.04	2.02	2.00	2.01	2.00	2.01	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.98	2.02	2.03	2.04	2.05	2.06			

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

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

Timeseries Chart of Hourly Average for CH4 - Reno Station

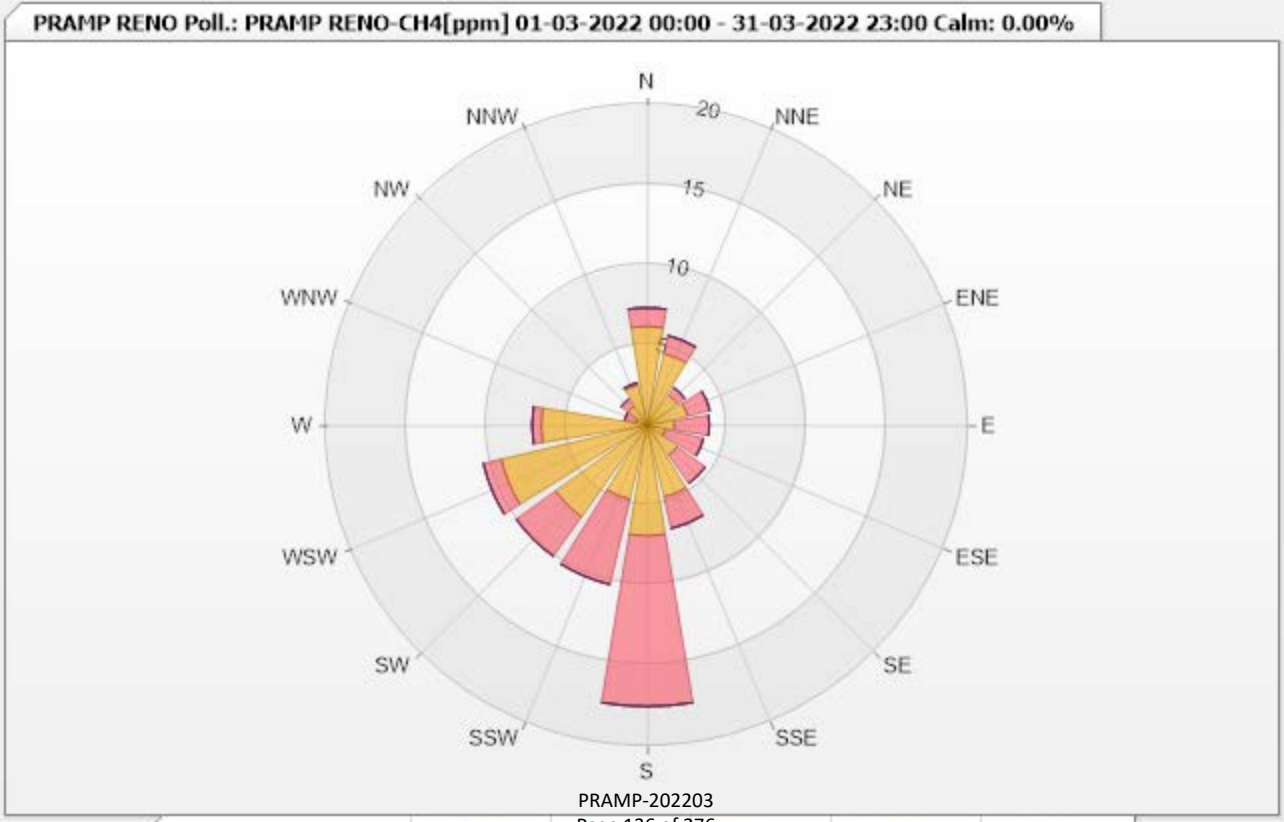




Classes	CH4
<=1.7	0.00%
1.7 - 2	64.85%
2 - 2.5	34.15%
2.5 - 3	1.00%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: PRAMP RENO Poll.: PRAMP RENO-CH4[ppm] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 93.68% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	6.17	1.15	0	0	0	7.32
NNE	4.59	1.15	0	0	0	5.74
NE	2.3	0.57	0	0	0	2.87
ENE	2.58	1.43	0	0	0	4.01
E	1.72	2.15	0	0	0	3.87
ESE	1.15	2.44	0	0	0	3.59
SE	2.3	2.15	0	0	0	4.45
SSE	4.59	2.01	0	0	0	6.6
S	6.89	10.62	0	0	0	17.51
SSW	4.73	5.45	0	0	0	10.18
SW	7.03	3.01	0	0	0	10.04
WSW	9.33	1.15	0	0	0	10.48
W	6.6	0.57	0	0	0	7.17
WNW	0.72	0.72	0	0	0	1.44
NW	1.43	0.57	0	0	0	2
NNW	2.58	0.14	0	0	0	2.72
Summary	64.71	35.28	0	0	0	100


PRAMP RENO Poll.: PRAMP RENO-CH4[ppm] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppm)
65 0-2
35 2-5
0 5-10
0 10-20
0 >20.0

peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2022

Summary of Hourly Averages

NON-METHANE HYDROCARBONS (NMHC) in ppm

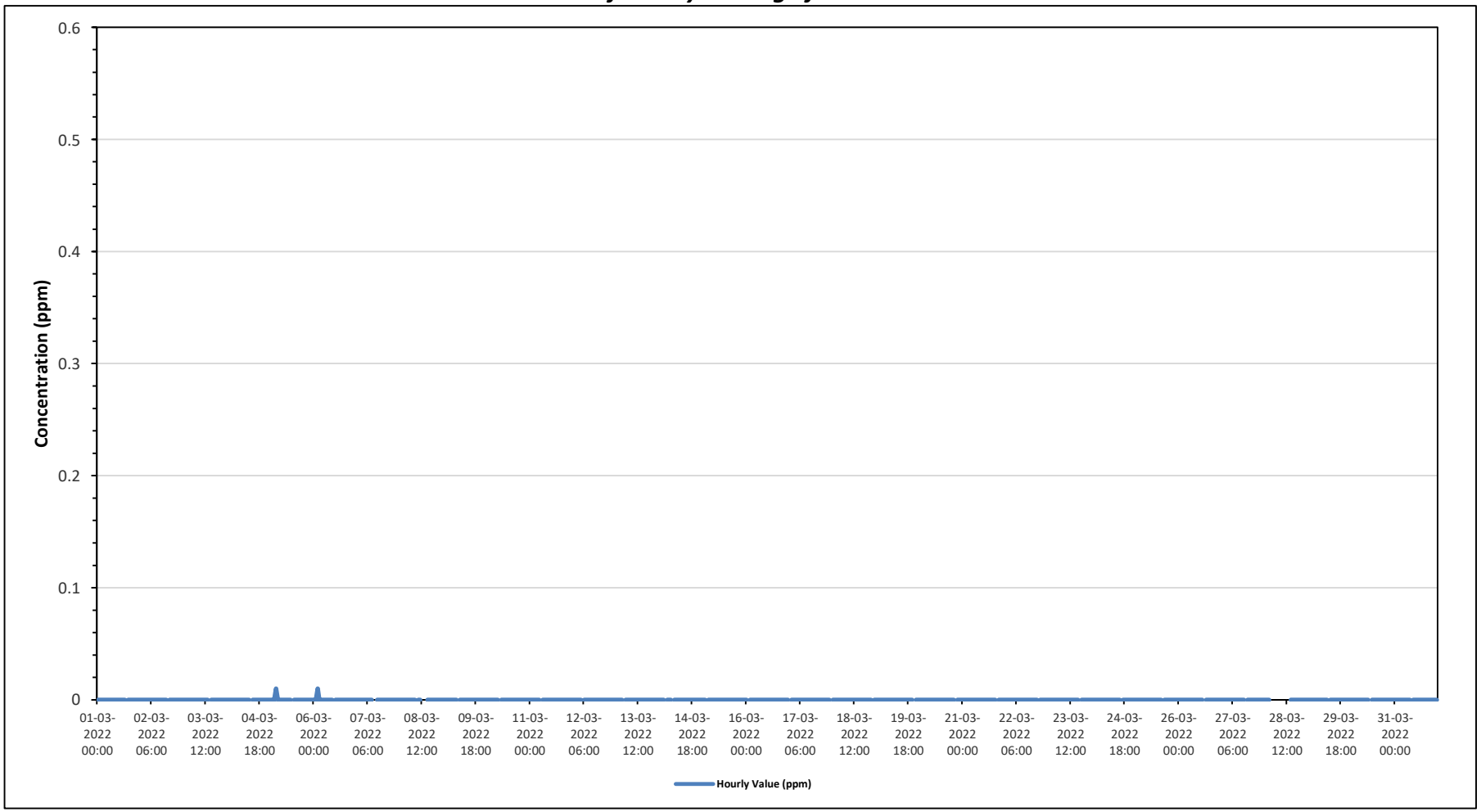
Maximum Hourly Value:	0.01	ppm	on March 5 at hour 3	Hours in Service:	744
Maximum Daily Value:	0.00	ppm	on March 5	Hours of Data:	697
Minimum Hourly Value:	0.00	ppm	on March 1 at hour 0	Hours of Missing Data:	12
Minimum Daily Value:	0.00	ppm	on March 1	Hours of Calibration:	35
Monthly Average:	0.00	ppm		Operational Uptime:	98.4

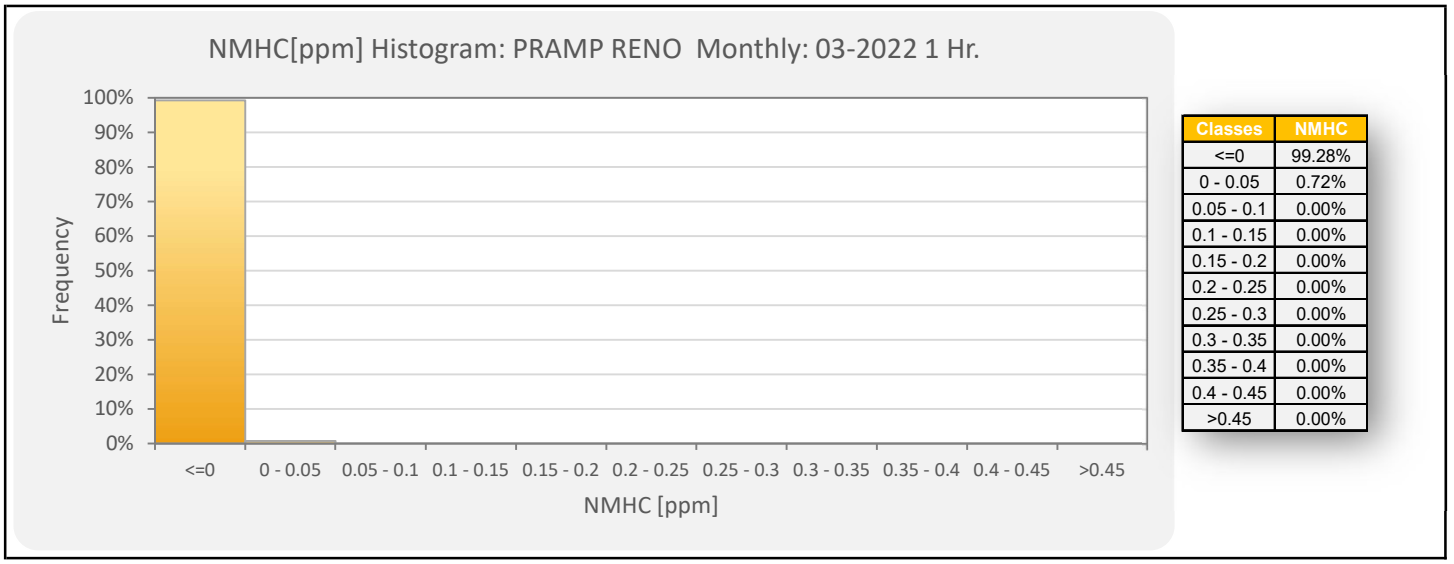
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00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

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

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

Timeseries Chart of Hourly Average for NMHC - Reno Station

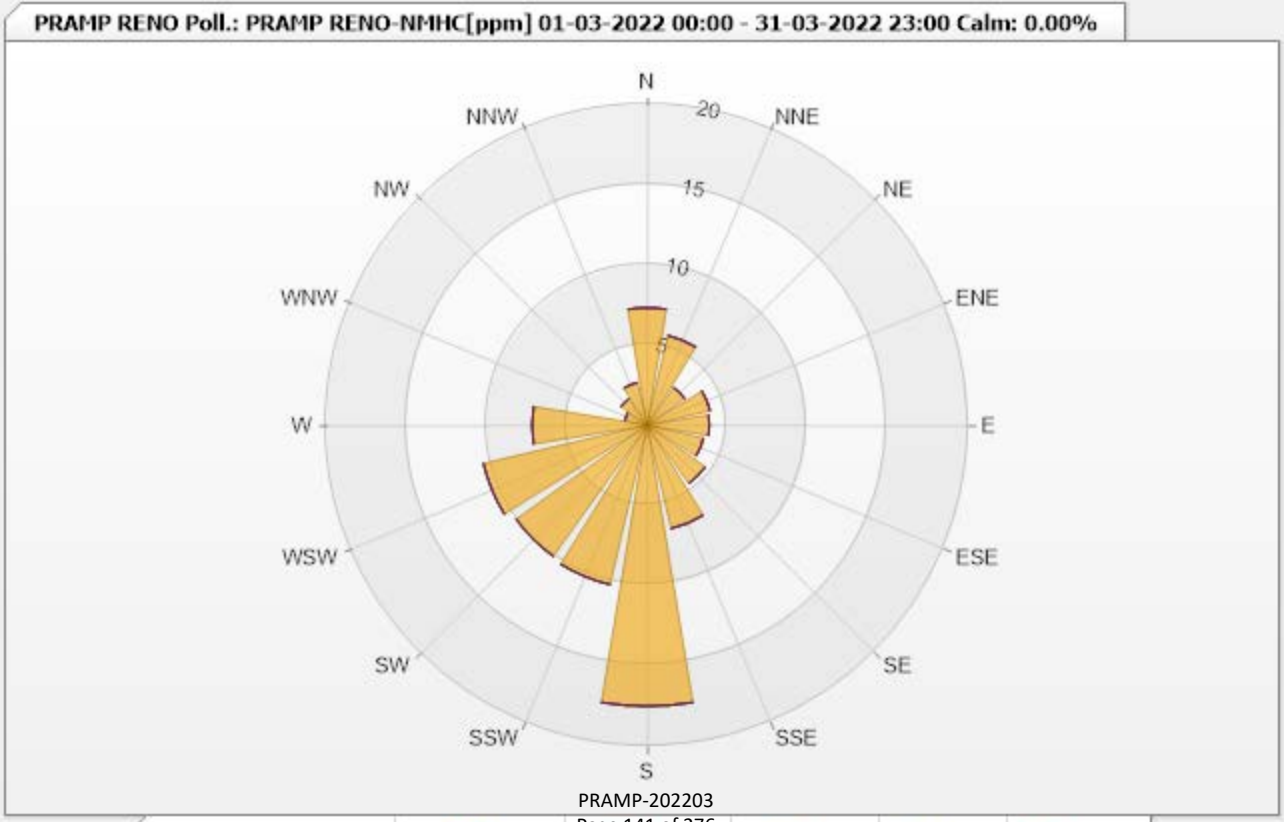




Classes	NMHC
<=0	99.28%
0 - 0.05	0.72%
0.05 - 0.1	0.00%
0.1 - 0.15	0.00%
0.15 - 0.2	0.00%
0.2 - 0.25	0.00%
0.25 - 0.3	0.00%
0.3 - 0.35	0.00%
0.35 - 0.4	0.00%
0.4 - 0.45	0.00%
>0.45	0.00%

Wind: PRAMP RENO Poll.: PRAMP RENO-NMHC[ppm] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 93.68% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	7.32	0	0	0	0	7.32
NNE	5.74	0	0	0	0	5.74
NE	2.87	0	0	0	0	2.87
ENE	4.02	0	0	0	0	4.02
E	3.87	0	0	0	0	3.87
ESE	3.59	0	0	0	0	3.59
SE	4.45	0	0	0	0	4.45
SSE	6.6	0	0	0	0	6.6
S	17.5	0	0	0	0	17.5
SSW	10.19	0	0	0	0	10.19
SW	10.04	0	0	0	0	10.04
WSW	10.47	0	0	0	0	10.47
W	7.17	0	0	0	0	7.17
WNW	1.43	0	0	0	0	1.43
NW	2.01	0	0	0	0	2.01
NNW	2.73	0	0	0	0	2.73
Summary	100	0	0	0	0	100


PRAMP RENO Poll.: PRAMP RENO-NMHC[ppm] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppm)
100 0-0.1
0 0.1-0.3
0 0.3-1
0 1-2
0 >2.0

peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2022

Summary of Hourly Averages

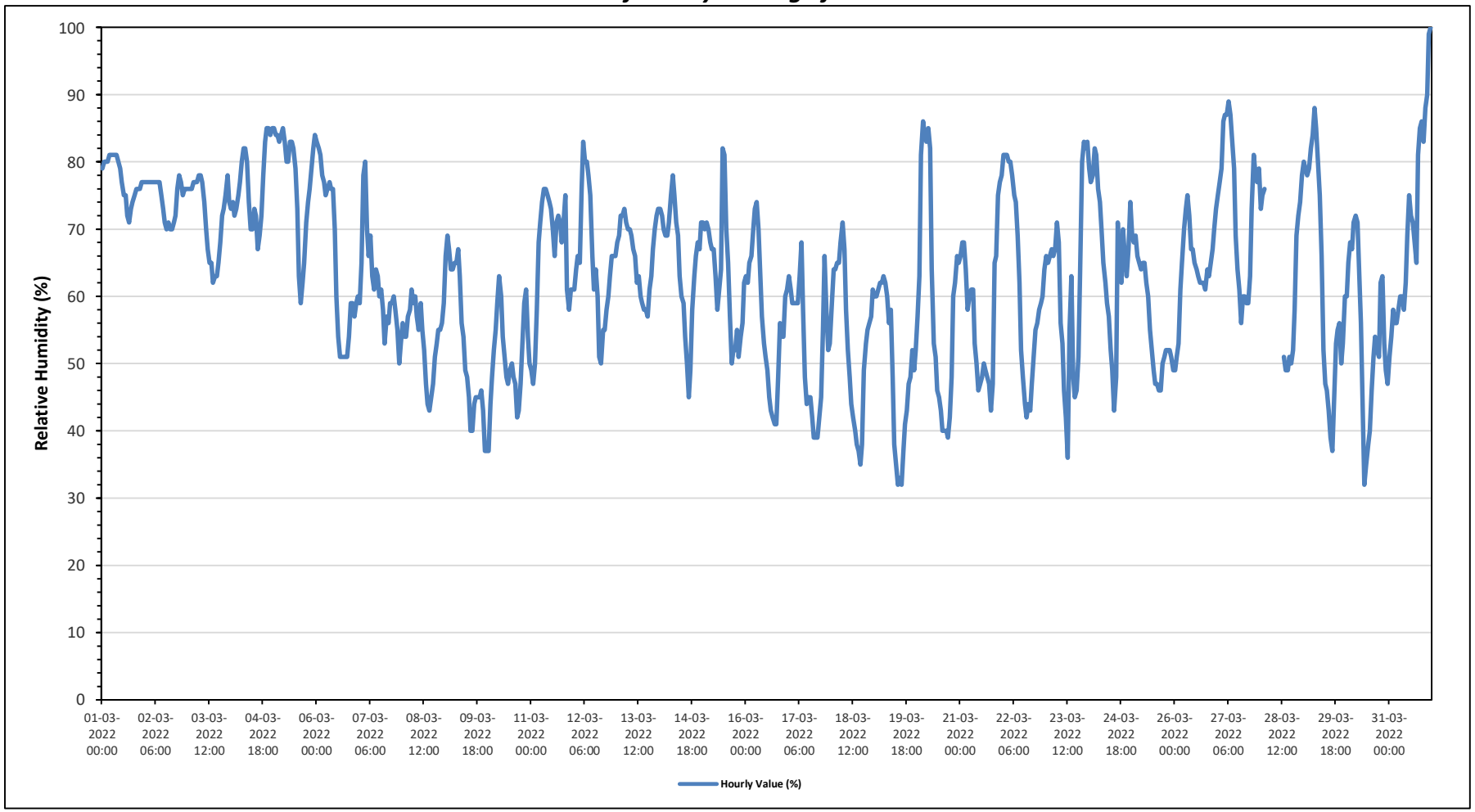
RELATIVE HUMIDITY (RH) in %

Maximum Hourly Value:	100	%	on March 31 at hour 23	Hours in Service:	744
Maximum Daily Value:	77.6	%	on March 5	Hours of Data:	734
Minimum Hourly Value:	32	%	on March 19 at hour 13	Hours of Missing Data:	10
Minimum Daily Value:	49.6	%	on March 19	Hours of Calibration:	0
Monthly Average:	63.0	%		Operational Uptime:	98.7

Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	79	80	80	80	81	81	81	81	81	80	79	77	75	75	72	71	73	74	75	76	76	76	77	77	71	81	77.4
Mar 2	77	77	77	77	77	77	77	77	77	75	73	71	70	71	70	70	71	72	76	78	77	75	76	76	70	78	74.8
Mar 3	76	76	76	77	77	77	78	78	77	74	70	67	65	65	62	63	63	65	68	72	73	75	78	74	62	78	71.9
Mar 4	73	74	72	73	75	77	80	82	82	80	74	70	70	73	72	67	69	72	78	83	85	85	84	85	67	85	76.5
Mar 5	85	84	84	83	84	85	83	80	80	83	83	82	79	73	63	59	62	65	71	74	76	79	82	84	59	85	**77.6**
Mar 6	83	82	81	78	77	75	76	77	76	76	70	60	54	51	51	51	51	51	54	59	59	57	59	60	51	83	65.3
Mar 7	59	65	78	80	70	66	69	63	61	64	63	60	61	58	53	57	56	59	59	60	58	55	50	53	50	80	61.5
Mar 8	56	54	54	57	58	61	59	60	57	55	59	55	52	47	44	43	45	47	51	53	55	55	56	59	43	61	53.8
Mar 9	66	69	67	64	64	65	65	67	63	56	54	49	48	45	40	40	44	45	45	45	46	43	37	37	37	69	52.7
Mar 10	37	44	48	52	55	59	63	60	54	51	48	47	49	50	48	47	42	43	47	53	59	61	54	50	37	63	50.9
Mar 11	49	47	50	58	68	71	74	76	76	75	74	73	70	66	71	72	71	68	71	75	61	58	61	61	47	76	66.5
Mar 12	61	64	66	65	76	83	80	80	78	75	66	61	64	60	51	50	55	55	58	60	63	66	66	66	50	83	65.4
Mar 13	68	69	72	72	73	71	70	70	69	67	66	62	63	60	59	58	58	57	61	63	67	70	72	73	57	73	66.3
Mar 14	73	72	70	69	69	71	75	78	75	71	69	63	60	59	54	50	45	49	58	63	66	68	67	71	45	78	65.2
Mar 15	71	70	71	70	68	67	67	63	58	61	64	82	81	70	65	57	50	52	52	55	51	54	56	62	50	82	63.2
Mar 16	63	62	65	66	70	73	74	70	64	57	53	51	49	45	43	42	41	41	48	56	54	54	60	61	41	74	56.8
Mar 17	63	61	59	59	59	59	63	68	58	48	44	45	45	42	39	39	39	42	45	55	66	58	52	53	39	68	52.5
Mar 18	59	64	64	65	65	68	71	67	58	52	48	44	42	40	38	37	35	38	49	53	55	56	57	61	35	71	53.6
Mar 19	60	60	61	62	62	63	62	60	56	58	48	38	35	**32**	33	**32**	37	41	43	47	48	52	49	52	**32**	63	49.6
Mar 20	57	63	81	86	84	83	85	82	64	53	51	46	45	43	40	40	40	39	42	48	60	62	66	65	39	86	59.4
Mar 21	66	68	68	64	58	60	61	61	53	50	46	47	48	50	49	48	47	43	47	65	66	75	77	78	43	78	58.1
Mar 22	81	81	81	80	80	78	75	74	69	62	52	48	44	42	44	43	47	51	55	56	58	59	60	64	42	81	61.8
Mar 23	66	65	66	67	66	67	71	68	56	53	46	42	36	55	63	48	45	46	51	63	80	83	82	83	36	83	61.2
Mar 24	79	77	78	82	81	76	74	70	65	62	59	57	52	49	43	48	71	64	62	70	66	63	67	74	43	82	66.2
Mar 25	69	68	69	66	65	64	65	65	62	60	55	52	49	47	47	46	46	50	51	52	52	52	51	49	46	69	56.3
Mar 26	49	51	53	61	65	70	73	75	72	67	67	65	64	63	62	62	62	61	64	63	65	67	70	73	49	75	64.3
Mar 27	75	77	79	86	87	87	89	87	83	79	69	64	61	56	60	60	59	59	63	73	81	78	77	79	56	89	73.7
Mar 28	73	75	76	K	K	K	K	K	K	K	K	K	K	51	49	49	51	50	52	58	69	72	74	78	49	78	-
Mar 29	80	79	78	79	82	84	88	85	80	75	66	52	47	46	43	39	37	45	53	55	56	50	53	60	37	88	63.0
Mar 30	60	65	68	67	71	72	71	64	56	43	**32**	35	38	40	46	51	54	52	51	62	63	53	49	47	**32**	72	54.6
Mar 31	51	54	58	56	56	58	60	60	58	62	69	75	72	71	68	65	81	85	86	83	88	90	99	**100**	51	**100**	71.0
Diurnal Maximum	85	84	84	86	87	87	89	87	83	83	83	82	81	75	72	72	81	85	86	83	88	90	99	100			
Diurnal Average	66.6	67.6	69.4	70.0	70.8	71.6	72.6	71.6	67.3	64.1	60.6	58.0	56.3	54.7	53.0	51.7	53.1	54.2	57.6	62.2	64.5	64.5	65.1	66.6			

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

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


Timeseries Chart of Hourly Average for RH - Reno Station
Relative Humidity (%)
100
90
80
70
60
50
40
30
20
10
0
01-03-2022 00:00
02-03-2022 06:00
03-03-2022 12:00
04-03-2022 18:00
06-03-2022 00:00
07-03-2022 06:00
08-03-2022 12:00
09-03-2022 18:00
11-03-2022 00:00
12-03-2022 06:00
13-03-2022 12:00
14-03-2022 18:00
16-03-2022 00:00
17-03-2022 06:00
18-03-2022 12:00
19-03-2022 18:00
21-03-2022 00:00
22-03-2022 06:00
23-03-2022 12:00
24-03-2022 18:00
26-03-2022 00:00
27-03-2022 06:00
28-03-2022 12:00
29-03-2022 18:00
31-03-2022 00:00
Hourly Value (%)

peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2022

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

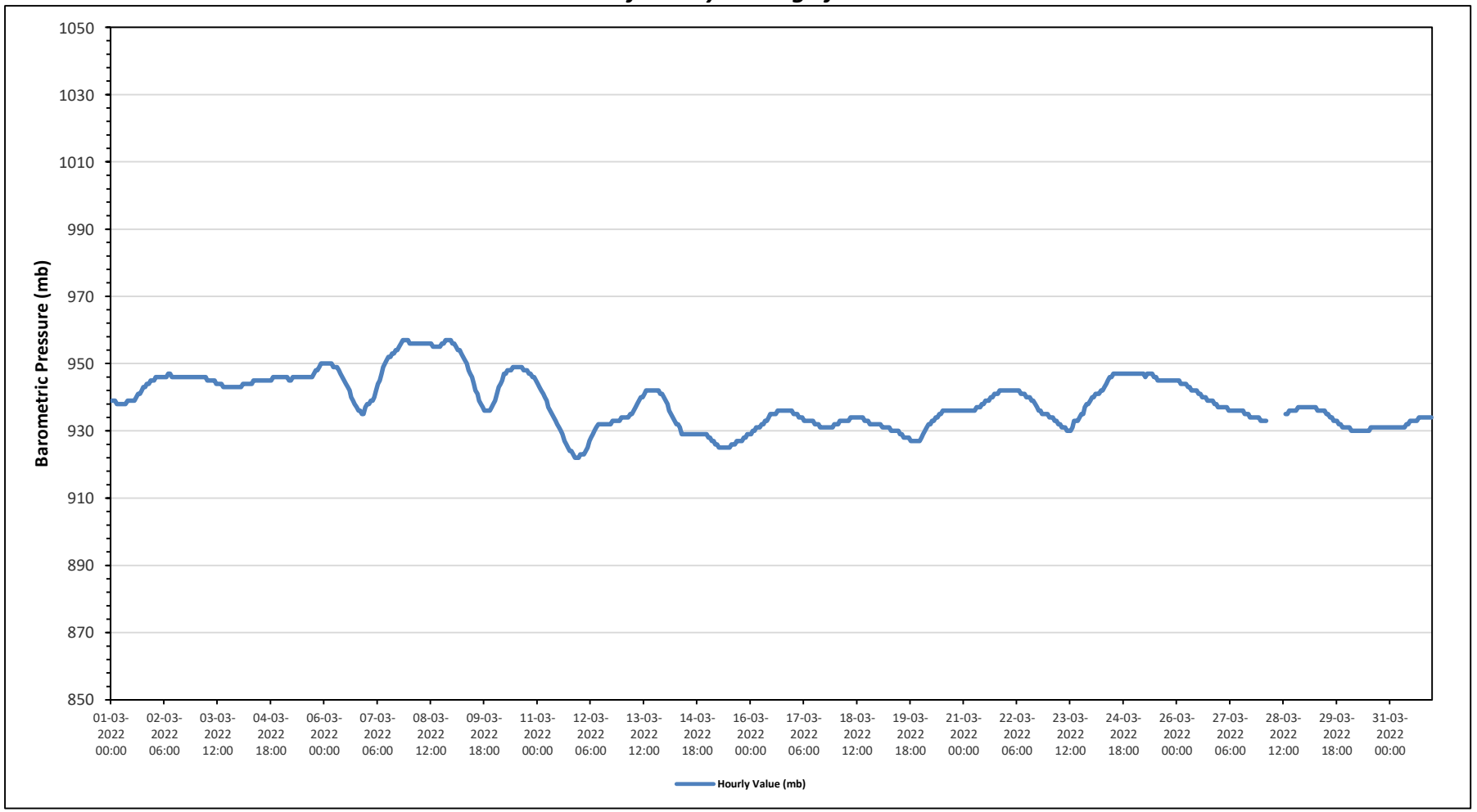
Maximum Hourly Value:	957	mb	on March 7 at hour 20	Hours in Service:	744
Maximum Daily Value:	956	mb	on March 8	Hours of Data:	734
Minimum Hourly Value:	922	mb	on March 11 at hour 21	Hours of Missing Data:	10
Minimum Daily Value:	927	mb	on March 15	Hours of Calibration:	0
Monthly Average:	939	mb		Operational Uptime:	98.7

Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	939	939	939	938	938	938	938	938	938	939	939	939	939	939	940	941	941	942	943	943	944	944	945	945	938	945	940.3
Mar 2	945	946	946	946	946	946	946	946	947	947	946	946	946	946	946	946	946	946	946	946	946	946	946	946	945	947	946.0
Mar 3	946	946	946	946	946	946	945	945	945	945	945	944	944	944	944	943	943	943	943	943	943	943	943	943	943	946	944.3
Mar 4	943	943	944	944	944	944	944	944	945	945	945	945	945	945	945	945	945	945	945	946	946	946	946	946	943	946	944.8
Mar 5	946	946	946	946	945	945	946	946	946	946	946	946	946	946	946	946	946	946	947	948	948	949	950	950	945	950	946.6
Mar 6	950	950	950	950	950	949	949	949	948	947	946	945	944	943	942	940	939	938	937	936	936	935	935	937	935	950	943.5
Mar 7	938	938	939	939	940	942	944	945	947	949	950	951	952	952	953	953	954	954	955	956	**957**	**957**	**957**	**957**	938	**957**	949.1
Mar 8	956	956	956	956	956	956	956	956	956	956	956	956	956	955	955	955	955	955	956	956	**957**	**957**	**957**	**957**	955	**957**	**956.0**
Mar 9	956	956	955	954	954	953	952	951	950	948	947	946	944	942	941	939	938	937	936	936	936	936	937	938	936	956	945.1
Mar 10	939	941	943	944	945	947	947	948	948	948	949	949	949	949	949	949	948	948	948	947	947	946	946	945	939	949	946.6
Mar 11	944	943	942	941	940	939	937	936	935	934	933	932	931	930	929	927	926	925	924	924	923	**922**	**922**	**922**	**922**	944	931.7
Mar 12	923	923	923	924	925	927	928	929	930	931	932	932	932	932	932	932	932	932	933	933	933	933	933	934	923	934	929.9
Mar 13	934	934	934	934	935	935	936	937	938	939	940	940	941	942	942	942	942	942	942	942	942	941	941	940	934	942	939.0
Mar 14	939	938	936	935	934	933	932	932	931	929	929	929	929	929	929	929	929	929	929	929	929	929	929	929	929	939	931.0
Mar 15	928	928	927	927	926	926	925	925	925	925	925	925	925	926	926	926	927	927	927	927	928	928	929	929	925	929	926.5
Mar 16	929	930	930	931	931	931	932	932	933	933	934	935	935	935	935	936	936	936	936	936	936	936	936	936	929	936	933.8
Mar 17	935	935	935	934	934	934	933	933	933	933	933	933	932	932	932	931	931	931	931	931	931	931	931	932	931	935	932.5
Mar 18	932	932	933	933	933	933	933	933	934	934	934	934	934	934	934	934	933	933	933	932	932	932	932	932	932	934	933.0
Mar 19	932	932	931	931	931	931	931	930	930	930	930	930	929	929	928	928	928	928	927	927	927	927	927	927	927	932	929.2
Mar 20	928	929	930	931	932	932	933	933	934	934	935	935	936	936	936	936	936	936	936	936	936	936	936	936	928	936	934.1
Mar 21	936	936	936	936	936	936	936	937	937	937	938	938	939	939	939	940	940	941	941	941	942	942	942	942	936	942	938.6
Mar 22	942	942	942	942	942	942	942	942	941	941	941	940	940	940	939	939	938	937	936	936	935	935	935	935	935	942	939.3
Mar 23	934	934	934	933	933	932	932	931	931	931	930	930	930	931	933	933	933	934	935	935	937	938	938	939	930	939	933.4
Mar 24	940	940	941	941	941	942	942	943	944	945	946	946	947	947	947	947	947	947	947	947	947	947	947	947	940	947	944.8
Mar 25	947	947	947	947	947	947	946	947	947	947	947	946	946	945	945	945	945	945	945	945	945	945	945	945	945	947	946.0
Mar 26	945	945	944	944	944	944	943	943	942	942	942	942	941	941	940	940	940	939	939	939	939	938	938	937	937	945	941.3
Mar 27	937	937	937	937	937	936	936	936	936	936	936	936	936	936	935	935	935	934	934	934	934	934	934	933	933	937	935.5
Mar 28	933	933	933	K	K	K	K	K	K	K	K	K	K	935	935	936	936	936	936	936	937	937	937	937	933	937	-
Mar 29	937	937	937	937	937	937	937	936	936	936	936	936	935	935	934	934	933	933	933	932	932	931	931	931	931	937	934.7
Mar 30	931	931	930	930	930	930	930	930	930	930	930	930	930	931	931	931	931	931	931	931	931	931	931	931	930	931	930.5
Mar 31	931	931	931	931	931	931	931	931	931	932	932	933	933	933	933	933	934	934	934	934	934	934	934	934	931	934	932.5
Diurnal Maximum	956	956	956	956	956	956	956	956	956	956	956	956	956	955	955	955	955	955	956	956	957	957	957	957			
Diurnal Average	939	939	939	939	939	939	939	939	939	939	939	939	939	939	939	938	938	938	938	938	938	938	938	938			

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

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

Timeseries Chart of Hourly Average for BP - Reno Station



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PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2022

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

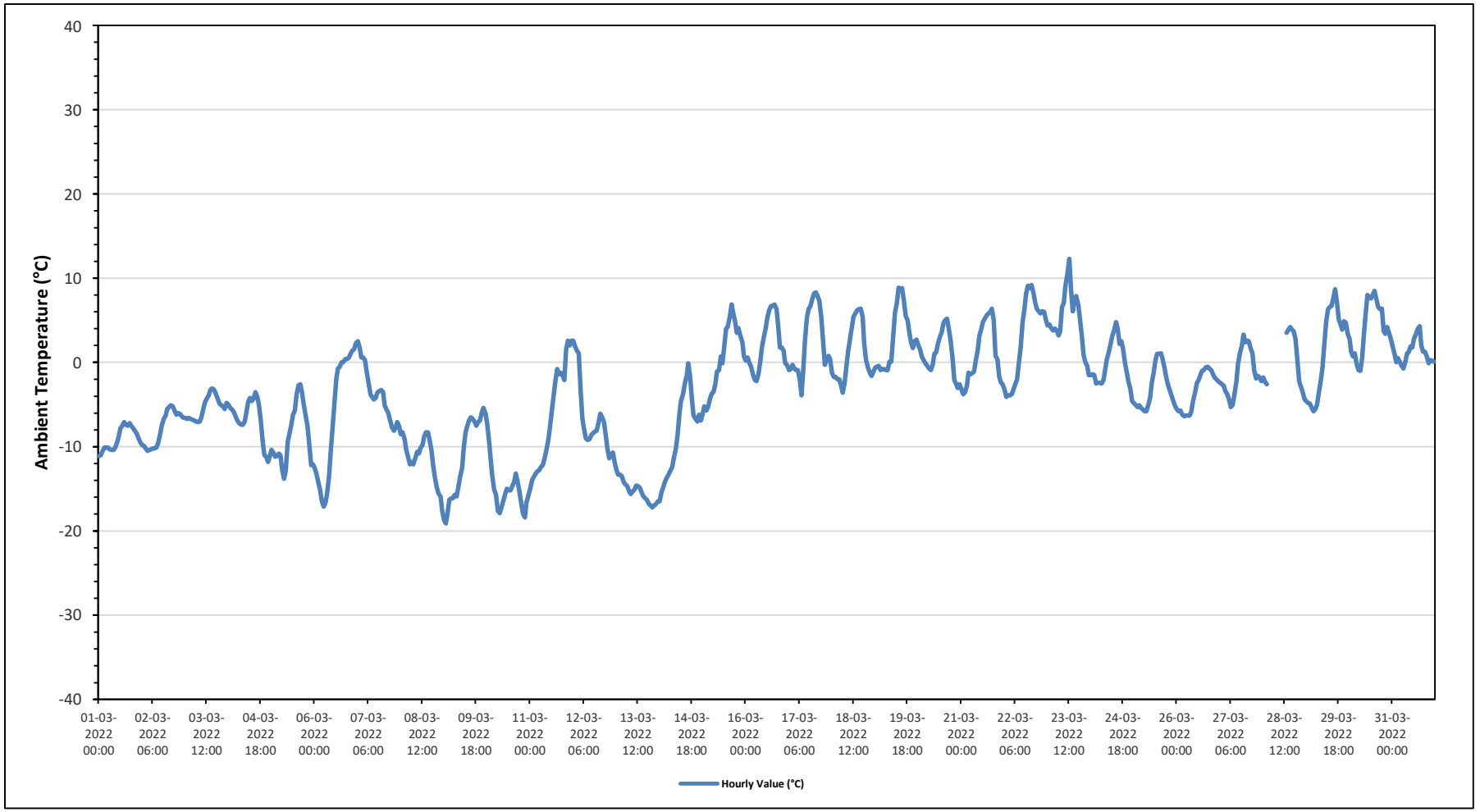
Maximum Hourly Value:	12.3	°C	on March 23 at hour 12	Hours in Service:	744
Maximum Daily Value:	5.1	°C	on March 23	Hours of Data:	734
Minimum Hourly Value:	-19.1	°C	on March 9 at hour 1	Hours of Missing Data:	10
Minimum Daily Value:	-15.3	°C	on March 13	Hours of Calibration:	0
Monthly Average:	-3.4	°C		Operational Uptime:	98.7

Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	-11.1	-11	-10.5	-10.1	-10.1	-10.1	-10.3	-10.4	-10.4	-10.1	-9.5	-8.7	-7.8	-7.5	-7.1	-7.4	-7.5	-7.2	-7.5	-7.8	-8.1	-8.5	-9	-9.5	-11.1	-7.1	-9.1
Mar 2	-9.8	-9.9	-10.2	-10.5	-10.4	-10.3	-10.2	-10.2	-10.1	-9.5	-8.5	-7.4	-6.7	-6.3	-5.5	-5.3	-5.1	-5.2	-5.7	-6.2	-6	-6.1	-6.4	-6.6	-10.5	-5.1	-7.8
Mar 3	-6.6	-6.7	-6.6	-6.7	-6.8	-6.9	-7	-7.1	-7	-6.5	-5.6	-4.7	-4.3	-3.9	-3.2	-3.1	-3.2	-3.7	-4.3	-4.9	-5.1	-5.2	-5.5	-4.8	-7.1	-3.1	-5.4
Mar 4	-5	-5.4	-5.6	-5.9	-6.4	-6.9	-7.2	-7.4	-7.4	-7	-6	-4.7	-4.2	-4.6	-4.3	-3.5	-4.1	-5	-6.8	-9.2	-11	-11.2	-11.8	-11.2	-11.8	-3.5	-6.7
Mar 5	-10.4	-10.7	-11.2	-11.1	-10.8	-11	-12.8	-13.8	-12.9	-9.4	-8.4	-7.3	-6.2	-5.7	-3.7	-2.7	-2.6	-3.7	-5	-6.3	-7.5	-9.4	-12.2	-12.1	-13.8	-2.6	-8.6
Mar 6	-12.5	-13.2	-14.2	-15.1	-16.5	-17.1	-16.6	-15.5	-13.6	-10.4	-8	-4.7	-1.9	-0.7	-0.5	0	0	0.4	0.4	0.6	1	1.4	1.6	2.3	-17.1	2.3	-6.4
Mar 7	2.5	1.7	0.6	0.6	0.3	-1	-2.5	-3.8	-4.1	-4.4	-4.2	-3.6	-3.4	-3.3	-3.5	-5.1	-5.6	-6	-6.8	-7.7	-8.1	-7.8	-7.1	-7.6	-8.1	2.5	-3.7
Mar 8	-8.5	-8.3	-9.1	-10.4	-11.2	-12.1	-11.8	-12.1	-11.3	-10.6	-10.8	-10.1	-9.8	-8.8	-8.3	-8.3	-9.2	-10.4	-12.3	-13.6	-14.8	-15.6	-15.9	-17.6	-17.6	-8.3	-11.3
Mar 9	-18.7	**-19.1**	-18	-16.3	-16.1	-16.1	-15.7	-15.9	-14.9	-13.6	-12.5	-10.2	-8.3	-7.5	-6.9	-6.5	-6.7	-7.1	-7.5	-7.1	-6.9	-6	-5.4	-6.1	**-19.1**	-5.4	-11.2
Mar 10	-7.2	-9.2	-11.6	-13.6	-15.1	-15.7	-17.6	-17.9	-17.2	-16.4	-15.7	-15	-15.2	-15.2	-14.7	-14.2	-13.2	-14.1	-15.3	-16.7	-18	-18.4	-16.6	-15.8	-18.4	-7.2	-15.0
Mar 11	-15	-13.9	-13.6	-13.2	-12.9	-12.8	-12.4	-12.2	-11.4	-10.4	-9.2	-7.8	-5.9	-4	-2.2	-0.8	-1.4	-1.2	-1.5	-2.1	1.6	2.6	2	2.6	-15.0	2.6	-6.5
Mar 12	2.6	1.9	1.4	1.1	-3.3	-6.7	-7.9	-9	-9.2	-9.1	-8.6	-8.4	-8.2	-8.1	-7.2	-6.1	-6.5	-7.1	-8.7	-10.2	-11.4	-11	-10.7	-11.9	-11.9	2.6	-6.8
Mar 13	-12.8	-13.3	-13.3	-13.5	-14.2	-14.5	-14.7	-15.3	-15.6	-15.3	-15.1	-14.6	-14.7	-14.9	-15.4	-15.9	-16.1	-16.3	-16.8	-17	-17.2	-17	-16.8	-16.5	-17.2	-12.8	-15.3
Mar 14	-16.5	-15.4	-14.8	-14.2	-13.7	-13.3	-12.9	-12.4	-11.2	-10.4	-8.7	-6.2	-4.6	-3.8	-2.5	-1.6	-0.1	-1.7	-4.4	-6.3	-6.7	-7	-6.2	-6.9	-16.5	-0.1	-8.4
Mar 15	-6.1	-5.2	-5.7	-5.2	-4.4	-3.7	-3.5	-2.6	-1.1	-0.9	0.7	-0.1	1.9	4	4.2	5.4	6.9	5.9	4.9	3.5	4.1	3.2	2.4	0.7	-6.1	6.9	0.4
Mar 16	0.2	0.6	-0.1	-0.5	-1.5	-2.1	-2.2	-1.4	0	1.7	2.9	4.1	5.3	6.2	6.7	6.7	6.9	6.4	4.1	1.8	1.8	1.4	-0.1	-0.3	-2.2	6.9	2.0
Mar 17	-0.9	-0.8	-0.3	-0.7	-0.9	-0.9	-2.1	-3.9	-0.8	2.9	5.4	6.3	6.7	7.6	8.2	8.3	7.8	7.3	5.5	2.3	-0.3	0.4	0.8	0.4	-3.9	8.3	2.4
Mar 18	-1.2	-1.7	-1.7	-2	-2	-2.8	-3.6	-2.5	-0.2	1.4	2.8	4.2	5.4	5.8	6.2	6.3	6.4	5.4	2.2	0.3	-0.6	-1.3	-1.6	-1.1	-3.6	6.4	1.0
Mar 19	-0.6	-0.5	-0.4	-0.9	-0.8	-0.8	-0.9	-0.9	0.1	0.1	3	5.9	7	8.9	8.6	8.8	7.3	5.5	5	3.5	2.4	1.7	2.5	2.7	-0.9	8.9	2.8
Mar 20	2	1.5	0.7	0.3	-0.1	-0.4	-0.7	-0.9	-0.2	1	1.2	2.3	3	3.6	4.7	5	5.2	4	2.6	0.6	-2.1	-2.5	-3	-2.6	-3.0	5.2	1.1
Mar 21	-3.2	-3.8	-3.5	-2.8	-1.2	-1.4	-1.3	-1.1	0.3	1.4	3.1	3.9	4.8	5.2	5.6	5.8	6	6.4	5	0.8	0.4	-1.7	-2.4	-2.6	-3.8	6.4	1.0
Mar 22	-3.2	-4.1	-3.9	-3.9	-3.8	-3.2	-2.6	-2	-0.3	1.9	4.8	6.3	8.1	9.1	8.8	9.2	8.3	7.1	6.4	6.1	5.8	6.1	6	5	-4.1	9.2	3.0
Mar 23	4.4	4.5	4.1	3.8	4	3.8	3.2	3.7	6.6	7.1	9.1	10.6	**12.3**	8.8	6.1	7.4	7.9	6.8	5	3	0.9	0	-0.4	-1.5	-1.5	**12.3**	**5.1**
Mar 24	-1.5	-1.4	-1.5	-2.5	-2.4	-2.4	-2.5	-2.1	-0.9	0.4	1.2	2	3.1	3.9	4.8	4	2.2	2.5	1.7	-0.1	-1.2	-2.3	-3.1	-4.6	-4.6	4.8	-0.1
Mar 25	-4.8	-5	-5.3	-5.1	-5.4	-5.6	-5.8	-5.8	-5	-4.1	-2.4	-1.2	0.3	1	1	1.1	0.4	-0.6	-1.8	-2.6	-3.3	-4	-4.7	-5.2	-5.8	1.1	-3.1
Mar 26	-5.6	-5.8	-5.7	-6.2	-6.4	-6.3	-6.3	-6.3	-5.9	-4.6	-3.5	-2.5	-2.1	-1.5	-1	-0.9	-0.6	-0.5	-0.7	-0.9	-1.4	-1.8	-2	-2.3	-6.4	-0.5	-3.4
Mar 27	-2.4	-2.6	-2.8	-3.4	-3.8	-4.4	-5.3	-5	-3.7	-2.3	-0.2	1	2	3.3	2.4	2.6	2.5	1.7	1.1	-1	-1.9	-1.6	-1.8	-2.2	-5.3	3.3	-1.2
Mar 28	-1.8	-2.3	-2.6	K	K	K	K	K	K	K	K	K	K	3.5	3.9	4.2	3.9	3.7	2.8	0.4	-2.2	-2.9	-3.6	-4.4	-4.4	4.2	-
Mar 29	-4.6	-4.8	-4.9	-5.4	-5.8	-5.5	-5	-3.6	-2.2	-0.6	2.2	4.9	6.3	6.6	6.7	7.6	8.7	7.1	5.1	4.6	3.9	4.9	4.7	3.4	-5.8	8.7	1.4
Mar 30	2.8	1.3	0.7	1.1	-0.2	-0.9	-1	0.6	3.1	5.7	8	7.7	7.6	8.1	8.5	7.5	6.6	6.3	6.4	3.7	3.4	4.2	3.5	2.8	-1.0	8.5	4.1
Mar 31	1.9	1	0	0.5	0.1	-0.4	-0.7	0	1.1	1.2	1.9	1.8	2.8	3.4	4	4.3	2	1.3	1.3	0.7	-0.1	0.3	0.2	0.1	-0.7	4.3	1.2
Diurnal Maximum	4.4	4.5	4.1	3.8	4.0	3.8	3.2	3.7	6.6	7.1	9.1	10.6	12.3	9.1	8.8	9.2	8.7	7.3	6.4	6.1	5.8	6.1	6.0	5.0			
Diurnal Average	-5.0	-5.2	-5.5	-5.7	-6.1	-6.4	-6.7	-6.6	-5.5	-4.4	-3.0	-1.9	-0.9	-0.2	0.1	0.4	0.2	-0.4	-1.5	-2.8	-3.5	-3.7	-4.0	-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	P Power Failure
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

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

Timeseries Chart of Hourly Average for AT - Reno Station



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PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2022

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

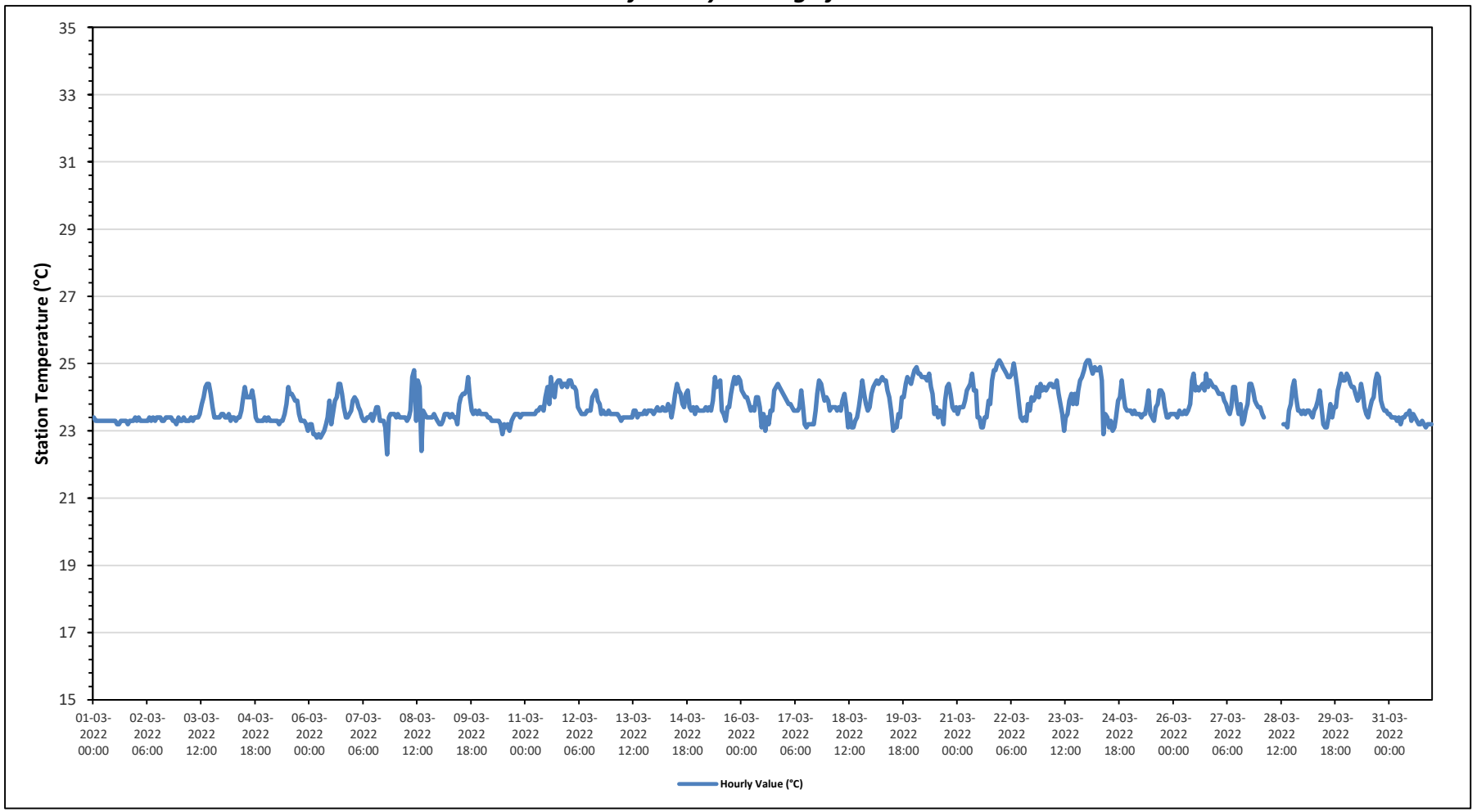
Maximum Hourly Value:	25.1	°C	on March 21 at hour 23	Hours in Service:	744
Maximum Daily Value:	24.2	°C	on March 22	Hours of Data:	734
Minimum Hourly Value:	22.3	°C	on March 7 at hour 19	Hours of Missing Data:	10
Minimum Daily Value:	23.3	°C	on March 1	Hours of Calibration:	0
Monthly Average:	23.7	°C		Operational Uptime:	98.7

Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	23.4	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.2	23.2	23.3	23.3	23.3	23.3	23.2	23.3	23.3	23.3	23.4	23.2	23.4	23.3
Mar 2	23.3	23.4	23.3	23.3	23.3	23.3	23.3	23.4	23.3	23.4	23.3	23.4	23.4	23.4	23.3	23.3	23.4	23.4	23.4	23.4	23.3	23.3	23.2	23.4	23.2	23.4	23.3
Mar 3	23.3	23.3	23.4	23.3	23.3	23.3	23.4	23.3	23.4	23.4	23.4	23.5	23.8	24.0	24.3	24.4	24.4	24.1	23.7	23.4	23.4	23.4	23.4	23.5	23.3	24.4	23.6
Mar 4	23.5	23.4	23.4	23.5	23.3	23.4	23.4	23.3	23.4	23.4	23.6	24.0	24.3	24.0	24.0	24.0	24.2	23.9	23.4	23.3	23.3	23.3	23.3	23.4	23.3	24.3	23.6
Mar 5	23.3	23.4	23.3	23.3	23.3	23.3	23.3	23.2	23.3	23.3	23.5	23.8	24.3	24.1	24.1	24.0	23.9	23.9	23.5	23.3	23.3	23.3	23.2	23.0	23.0	24.3	23.5
Mar 6	23.2	23.2	22.9	22.9	22.8	22.9	22.8	22.9	23.0	23.2	23.4	23.9	23.2	23.6	23.9	24.0	24.4	24.4	24.1	23.7	23.4	23.4	23.5	23.6	22.8	24.4	23.4
Mar 7	23.9	24.0	23.9	23.7	23.6	23.4	23.3	23.3	23.4	23.4	23.5	23.3	23.5	23.7	23.7	23.3	23.3	23.3	23.1	**22.3**	23.4	23.5	23.5	23.5	**22.3**	24.0	23.5
Mar 8	23.4	23.5	23.4	23.4	23.4	23.4	23.3	23.4	23.6	24.6	24.8	23.3	24.5	24.3	22.4	23.6	23.5	23.4	23.4	23.4	23.4	23.5	23.4	23.3	22.4	24.8	23.6
Mar 9	23.2	23.2	23.3	23.5	23.5	23.5	23.4	23.5	23.4	23.4	23.2	23.8	24.0	24.1	24.1	24.2	24.6	24.0	23.6	23.5	23.6	23.5	23.6	23.5	23.2	24.6	23.6
Mar 10	23.5	23.5	23.5	23.4	23.4	23.3	23.3	23.3	23.3	23.3	23.2	22.9	23.2	23.1	23.2	23.0	23.3	23.4	23.5	23.5	23.5	23.4	23.5	23.5	22.9	23.5	23.3
Mar 11	23.5	23.5	23.5	23.5	23.5	23.5	23.6	23.6	23.7	23.7	23.6	24.0	24.3	23.8	24.6	24.1	24.0	24.4	24.5	24.5	24.3	24.4	24.4	24.3	23.5	24.6	24.0
Mar 12	24.5	24.5	24.3	24.3	24.2	23.7	23.6	23.5	23.5	23.5	23.6	23.6	23.6	24.0	24.1	24.2	23.9	23.8	23.5	23.6	23.5	23.5	23.6	23.5	23.5	24.5	23.8
Mar 13	23.5	23.5	23.5	23.5	23.4	23.3	23.4	23.4	23.4	23.4	23.4	23.4	23.6	23.6	23.4	23.5	23.5	23.5	23.6	23.5	23.6	23.6	23.6	23.5	23.3	23.6	23.5
Mar 14	23.6	23.7	23.6	23.6	23.7	23.6	23.6	23.8	23.7	23.4	23.7	24.1	24.4	24.2	24.1	23.8	23.7	24.1	24.2	23.7	23.6	23.7	23.5	23.7	23.4	24.4	23.8
Mar 15	23.6	23.6	23.6	23.6	23.7	23.6	23.7	23.6	23.9	24.6	24.3	24.4	24.5	23.6	23.5	23.3	23.7	23.7	24.1	24.4	24.6	24.4	24.6	24.5	23.3	24.6	24.0
Mar 16	24.2	24.1	24.0	24.0	23.8	23.6	23.7	23.6	24.0	24.0	23.7	23.1	23.5	23.0	23.4	23.2	23.6	23.6	24.2	24.3	24.4	24.3	24.2	24.1	23.0	24.4	23.8
Mar 17	24.0	23.9	23.8	23.8	23.7	23.6	23.6	23.6	23.7	24.2	23.7	23.2	23.1	23.2	23.2	23.2	23.2	23.6	24.1	24.5	24.4	24.1	23.9	24.0	23.1	24.5	23.7
Mar 18	23.9	23.6	23.7	23.7	23.7	23.6	23.7	23.6	23.9	24.1	23.7	23.1	23.5	23.1	23.1	23.3	23.4	23.7	24.1	24.5	24.1	23.8	23.6	23.7	23.1	24.5	23.7
Mar 19	24.1	24.3	24.4	24.5	24.4	24.5	24.6	24.5	24.5	24.2	24.0	23.6	23.0	23.1	23.1	23.5	23.4	24.0	24.0	24.4	24.6	24.5	24.4	24.6	23.0	24.6	24.1
Mar 20	24.8	24.9	24.7	24.7	24.6	24.6	24.6	24.5	24.7	24.3	24.1	23.5	23.7	23.4	23.6	23.5	23.2	23.9	24.3	24.4	24.1	23.7	23.6	23.7	23.2	24.9	24.1
Mar 21	23.5	23.7	23.7	23.7	23.9	24.2	24.3	24.4	24.7	24.2	24.2	23.4	23.4	23.1	23.1	23.4	23.4	23.9	23.8	24.5	24.8	24.8	25.0	**25.1**	23.1	**25.1**	24.0
Mar 22	25.0	24.9	24.8	24.7	24.6	24.6	24.7	25.0	24.7	24.3	23.8	23.4	23.3	23.4	23.3	23.8	23.6	24.0	23.9	24.0	24.3	24.0	24.4	24.2	23.3	25.0	**24.2**
Mar 23	24.3	24.2	24.3	24.4	24.4	24.3	24.3	24.5	24.1	23.8	23.5	23.0	23.4	23.5	23.9	24.1	23.8	24.1	23.8	24.2	24.5	24.6	24.8	25.0	23.0	25.0	24.1
Mar 24	**25.1**	**25.1**	24.9	24.7	24.9	24.8	24.8	24.9	24.5	22.9	23.5	23.4	23.1	23.3	23.0	23.1	23.4	23.9	24.0	24.5	24.1	23.7	23.6	23.6	22.9	**25.1**	24.0
Mar 25	23.6	23.5	23.6	23.5	23.5	23.5	23.4	23.5	23.5	23.8	24.2	23.5	23.4	23.3	23.7	23.8	24.2	24.2	24.1	23.7	23.4	23.4	23.5	23.5	23.3	24.2	23.6
Mar 26	23.5	23.5	23.4	23.6	23.5	23.5	23.6	23.5	23.6	23.8	24.5	24.7	24.2	24.3	24.2	24.3	24.4	24.2	24.7	24.3	24.5	24.4	24.3	24.3	23.4	24.7	24.0
Mar 27	24.2	24.1	24.1	24.1	23.9	23.8	23.6	23.5	23.7	24.3	24.3	23.8	23.5	23.8	23.2	23.3	23.6	23.8	24.4	24.4	24.2	23.9	23.8	23.7	23.2	24.4	23.9
Mar 28	23.7	23.5	23.4	K	K	K	K	K	K	K	K	K	K	23.2	23.2	23.1	23.6	23.8	24.3	24.5	24.0	23.6	23.6	23.5	23.1	24.5	-
Mar 29	23.6	23.5	23.6	23.6	23.5	23.4	23.6	23.7	23.9	24.2	23.7	23.2	23.1	23.1	23.4	23.8	23.4	23.7	23.7	24.2	24.4	24.7	24.5	24.5	23.1	24.7	23.8
Mar 30	24.7	24.6	24.4	24.3	24.3	24.1	23.9	24.0	24.4	24.1	23.7	23.5	23.4	23.7	23.9	24.0	24.5	24.7	24.6	23.9	23.7	23.6	23.6	23.5	23.4	24.7	24.0
Mar 31	23.5	23.4	23.4	23.4	23.3	23.4	23.2	23.4	23.4	23.5	23.5	23.6	23.3	23.5	23.4	23.3	23.2	23.2	23.3	23.2	23.1	23.2	23.2	23.2	23.1	23.6	23.3
Diurnal Maximum	25.1	25.1	24.9	24.7	24.9	24.8	24.8	25.0	24.7	24.6	24.8	24.7	24.5	24.3	24.6	24.4	24.6	24.7	24.7	24.5	24.8	24.8	25.0	25.1			
Diurnal Average	23.8	23.8	23.8	23.8	23.7	23.7	23.7	23.7	23.8	23.8	23.7	23.6	23.6	23.6	23.6	23.6	23.7	23.8	23.9	23.9	23.9	23.8	23.8	23.8			

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 ST - Reno Station



peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2022

Summary of Hourly Averages

PRECIPITATION in mm

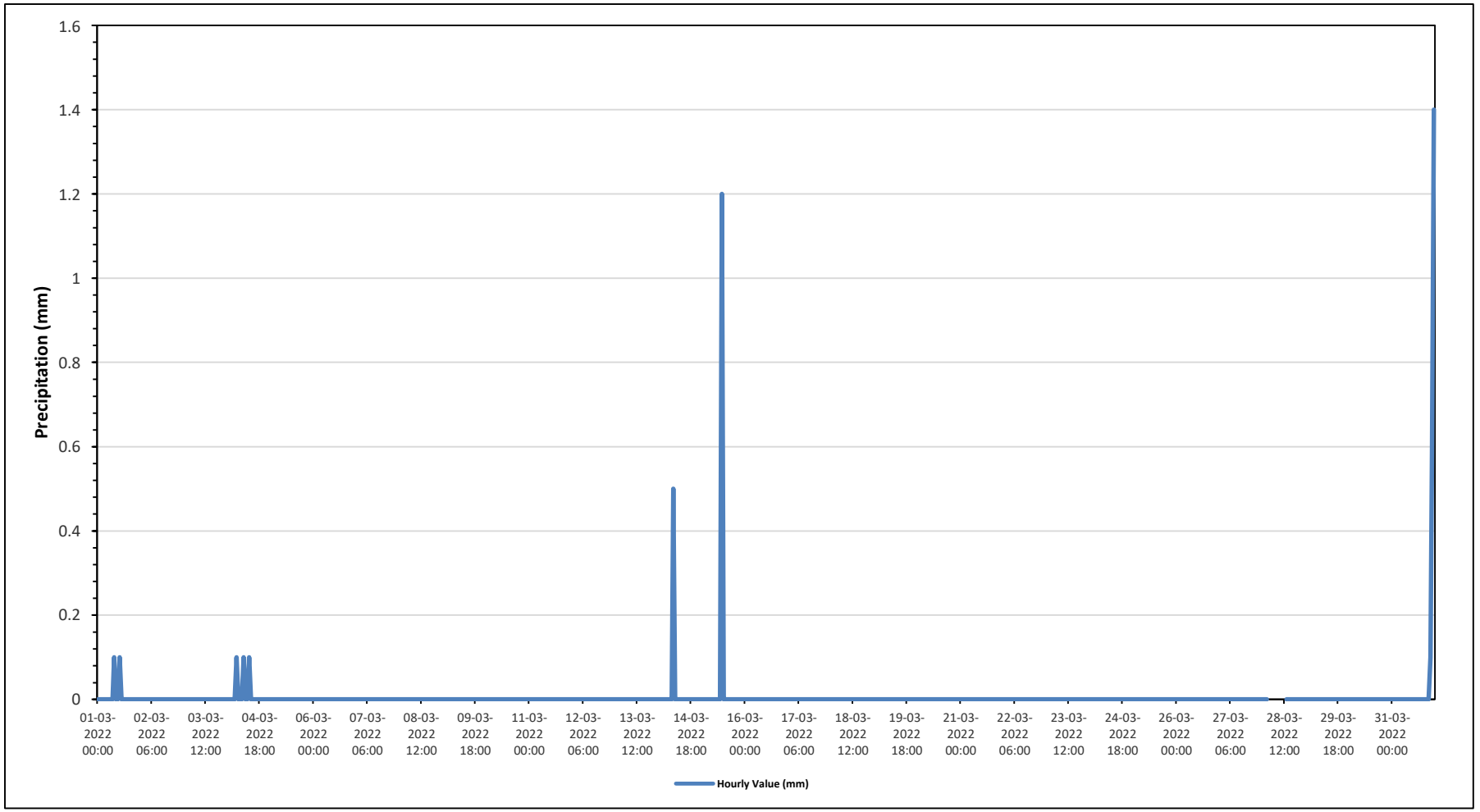
Maximum Hourly Value:	1.4	mm	on March 31 at hour 23	Hours in Service:	744
Maximum Daily Value:	2.1	mm	on March 31	Hours of Data:	734
Minimum Hourly Value:	0.0	mm	on March 1 at hour 0	Hours of Missing Data:	10
Minimum Daily Value:	0.0	mm	on March 2	Hours of Calibration:	0
Monthly Total:	4.3	mm		Operational Uptime:	98.7

Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Total
Mar 1	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	0.2
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	0.1	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	0.3
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	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.5	0.5
Mar 15	0	0	0	0	0	0	0	0	0	0	0	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0.0	1.2	1.2
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	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	0	0.0	0.0	0.0
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	0	0	0	0	0	0.0	0.0	0.0
Mar 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
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	0	0	0.0	0.0	0.0
Mar 28	0	0	0	K	K	K	K	K	K	K	K	K	K	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	-
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	0.1	0.6	**1.4**	0.0	**1.4**	**2.1**
Diurnal Maximum	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.5	0.1	0.0	1.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	1.4			
Diurnal Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

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

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

Timeseries Chart of Hourly Average for Precipitation - Reno Station



peace river area monitoring program
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PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2022

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

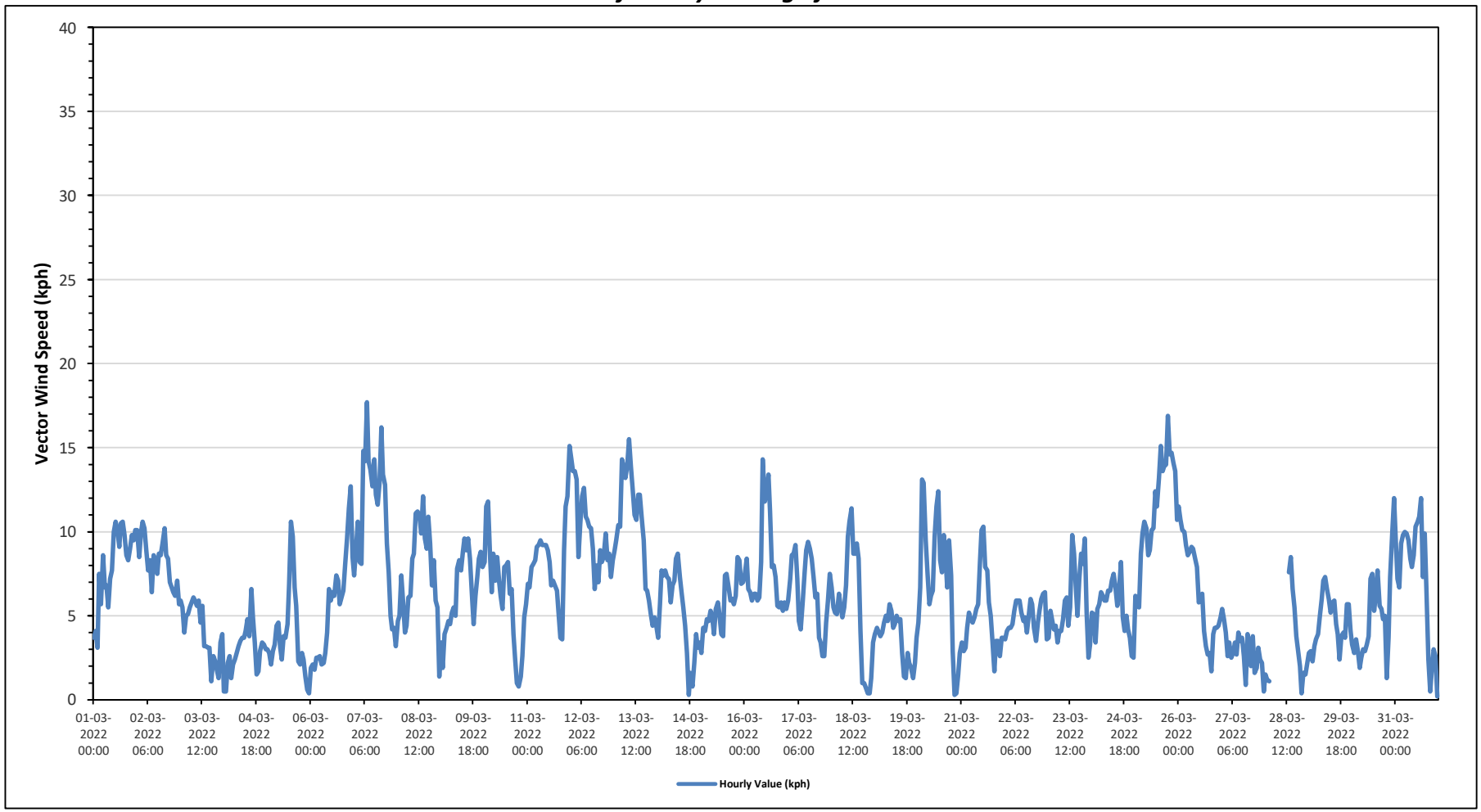
Maximum Hourly Value:	17.7	kph	on March 7 at hour 7	Hours in Service:	744
Maximum Daily Value:	11.1	kph	on March 25	Hours of Data:	734
Minimum Hourly Value:	0.2	kph	on March 31 at hour 23	Hours of Missing Data:	10
Minimum Daily Value:	1.4	kph	on March 27	Hours of Calibration:	0
Monthly Average:	1.2	kph		Operational Uptime:	98.7

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	3.7	4.1	3.1	7.5	5.7	8.6	6.7	6.8	5.5	7.2	7.7	10.0	10.6	10.1	9.1	10.5	10.6	9.8	8.6	8.3	9.0	9.8	9.5	10.1	3.1	10.6	7.2
Mar 2	10.1	8.5	10.0	10.6	10.2	8.9	7.7	8.3	6.4	8.6	8.3	7.5	8.7	8.6	9.3	10.2	8.6	8.4	7.0	6.7	6.4	6.2	7.1	5.7	5.7	10.6	8.0
Mar 3	5.9	5.5	4.0	5.0	5.1	5.5	5.8	6.1	5.9	5.6	5.9	4.6	5.6	3.2	3.2	3.1	3.1	1.1	2.6	2.3	1.8	1.3	3.4	3.9	1.1	6.1	3.4
Mar 4	0.5	0.5	2.2	2.6	1.3	2.1	2.4	2.8	3.2	3.5	3.7	3.7	4.1	4.8	3.8	6.6	4.9	3.4	1.5	1.7	2.9	3.4	3.3	3.0	0.5	6.6	2.3
Mar 5	3.0	2.8	2.1	2.9	3.3	4.4	4.6	3.1	2.4	3.8	3.7	4.5	6.9	10.6	9.7	6.7	5.6	2.3	2.1	2.8	2.4	1.4	0.6	0.4	0.4	10.6	3.2
Mar 6	1.9	2.1	1.8	2.5	2.5	2.6	2.1	2.2	2.8	4.0	6.6	5.9	6.4	6.2	7.4	7.1	5.7	6.1	6.5	8.1	9.6	11.4	12.7	8.5	1.8	12.7	4.8
Mar 7	7.4	8.9	10.6	8.2	8.1	14.8	14.2	**17.7**	14.2	13.7	12.7	14.3	12.2	11.6	12.9	16.2	13.4	12.8	9.3	7.6	5.0	4.2	4.3	3.2	3.2	**17.7**	9.6
Mar 8	4.7	5.0	7.4	5.8	4.0	4.4	6.1	6.2	8.4	8.7	11.1	11.2	11.0	9.9	12.1	9.6	9.0	10.9	9.3	6.8	8.3	5.9	5.5	1.4	1.4	12.1	7.0
Mar 9	3.4	1.9	3.9	4.3	4.7	4.5	5.2	5.5	5.0	7.8	8.3	7.7	8.8	9.6	8.9	9.6	8.4	6.4	4.5	6.2	7.3	8.4	8.8	7.9	1.9	9.6	5.5
Mar 10	8.2	11.5	11.8	8.8	6.4	8.7	7.1	8.5	7.1	6.2	5.4	7.9	8.0	8.2	6.3	6.6	3.9	2.5	1.0	0.8	1.4	2.6	4.9	5.7	0.8	11.8	4.5
Mar 11	6.9	6.7	7.9	8.1	8.3	9.1	9.2	9.5	9.2	9.2	9.2	8.9	8.2	6.8	7.1	6.8	6.5	5.2	3.7	3.6	8.9	11.5	12.1	15.1	3.6	15.1	7.0
Mar 12	14.3	13.6	13.6	13.1	8.5	10.5	12.1	12.6	10.9	10.7	10.3	10.2	9.0	6.6	8.0	7.0	8.9	8.2	8.5	9.9	8.3	8.7	7.3	8.3	6.6	14.3	7.0
Mar 13	8.9	9.5	10.4	10.3	14.3	13.9	13.2	13.9	15.5	13.9	12.5	11.0	10.7	12.2	12.2	10.9	9.5	6.6	6.5	5.9	5.1	4.4	4.9	4.4	4.4	15.5	9.9
Mar 14	3.7	5.7	7.7	7.4	7.7	7.3	7.2	5.8	6.8	7.1	8.4	8.7	7.3	6.3	5.5	4.4	2.8	0.3	1.6	0.8	2.2	3.9	3.1	3.4	0.3	8.7	4.0
Mar 15	2.8	4.3	4.1	4.8	4.7	5.3	5.0	3.9	5.4	5.8	5.1	3.9	3.8	7.4	7.5	6.7	5.9	6.0	5.7	6.2	8.5	8.3	6.9	7.0	2.8	8.5	5.0
Mar 16	7.5	8.4	6.6	6.4	5.9	6.3	6.3	5.9	6.1	8.2	14.3	11.8	12.4	13.4	11.2	7.9	8.0	7.3	5.6	5.5	5.8	5.3	5.8	5.4	5.3	14.3	7.5
Mar 17	5.9	7.2	8.6	8.7	9.2	7.2	4.7	4.2	5.9	7.6	8.9	9.4	9.0	8.4	7.3	6.1	6.3	3.7	3.4	2.6	2.6	4.6	5.9	7.5	2.6	9.4	6.1
Mar 18	6.7	5.5	5.2	5.1	6.3	5.5	4.9	5.5	6.8	9.7	10.6	11.4	8.7	8.7	9.3	8.4	4.1	1.0	1.0	0.7	0.4	0.4	1.3	3.4	0.4	11.4	5.0
Mar 19	3.9	4.3	4.0	3.8	4.0	4.6	5.0	4.7	5.7	5.3	4.3	4.5	5.0	4.7	4.8	2.8	1.4	1.3	2.8	2.2	1.9	1.3	2.2	3.7	1.3	5.7	3.1
Mar 20	4.6	6.7	13.1	12.9	9.5	7.5	5.7	6.2	6.5	9.7	11.5	12.4	8.3	7.6	9.8	8.7	6.7	9.5	7.4	2.9	0.3	0.4	1.5	2.8	0.3	13.1	6.9
Mar 21	3.4	2.9	3.1	4.3	5.2	4.8	4.6	4.9	5.4	5.7	8.2	10.1	10.3	7.9	7.7	5.8	5.0	3.4	1.7	3.5	3.5	2.6	3.7	3.7	1.7	10.3	4.3
Mar 22	3.6	4.1	4.3	4.3	4.5	5.3	5.9	5.9	5.9	5.2	4.7	4.9	4.0	5.0	6.0	5.7	4.3	3.5	4.6	5.3	6.0	6.3	6.4	3.6	3.5	6.4	5.0
Mar 23	3.7	5.3	4.7	4.2	4.4	3.4	4.1	4.1	4.8	5.9	6.1	4.4	5.5	9.8	8.7	6.9	5.0	7.2	8.7	8.1	9.6	5.2	2.5	3.3	2.5	9.8	3.4
Mar 24	5.2	5.1	3.4	5.4	5.7	6.4	6.2	5.9	5.9	6.5	6.5	7.1	7.5	6.7	5.6	6.6	8.2	4.9	4.1	5.0	4.2	3.7	2.6	2.5	2.5	8.2	2.8
Mar 25	6.2	5.7	5.5	8.7	9.9	10.6	10.2	8.6	8.9	10.1	10.2	12.4	11.5	13.2	15.1	13.6	13.9	14.0	16.9	14.6	14.7	14.1	13.6	10.7	5.5	16.9	**11.1**
Mar 26	11.5	10.7	10.1	10.0	9.2	8.6	8.8	9.1	9.0	8.4	7.9	5.8	6.1	6.3	4.1	3.2	2.7	2.8	1.7	3.9	4.3	4.3	4.4	4.9	1.7	11.5	6.4
Mar 27	5.4	4.8	4.0	2.6	3.4	2.5	2.8	3.4	2.7	4.0	3.5	3.7	2.6	0.9	3.9	2.7	2.0	3.8	1.6	1.9	3.1	2.4	2.2	0.5	0.5	5.4	**1.4**
Mar 28	1.5	1.2	1.1	K	K	K	K	K	K	K	K	K	K	7.6	8.5	6.6	5.5	3.8	2.9	2.0	0.4	1.6	1.5	2.2	0.4	8.5	-
Mar 29	2.8	2.9	2.3	3.2	3.6	3.9	5.0	6.0	7.1	7.3	6.6	6.0	5.2	5.8	5.9	4.5	3.9	2.4	3.8	4.0	3.7	5.7	5.7	4.1	2.3	7.3	4.6
Mar 30	3.3	2.8	3.6	2.9	1.9	2.5	3.0	2.9	3.3	3.8	7.2	7.5	5.3	6.2	7.7	5.6	5.4	4.8	5.0	1.3	3.7	7.3	9.9	12.0	1.3	12.0	4.5
Mar 31	9.3	7.2	6.7	9.3	9.8	10.0	9.9	9.5	8.4	7.9	8.6	10.3	10.6	10.9	12.0	7.3	9.9	6.8	2.4	0.5	2.0	3.0	2.6	**0.2**	**0.2**	12.0	5.8
Diurnal Maximum	14	14	14	13	14	15	14	18	16	14	14	14	12	13	15	16	14	14	17	15	15	14	14	15			
Diurnal Average	5.5	5.7	6.0	6.5	6.2	6.7	6.5	6.7	6.7	7.4	7.9	8.1	7.8	7.9	8.1	7.2	6.4	5.5	4.9	4.6	4.9	5.1	5.4	5.1			

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

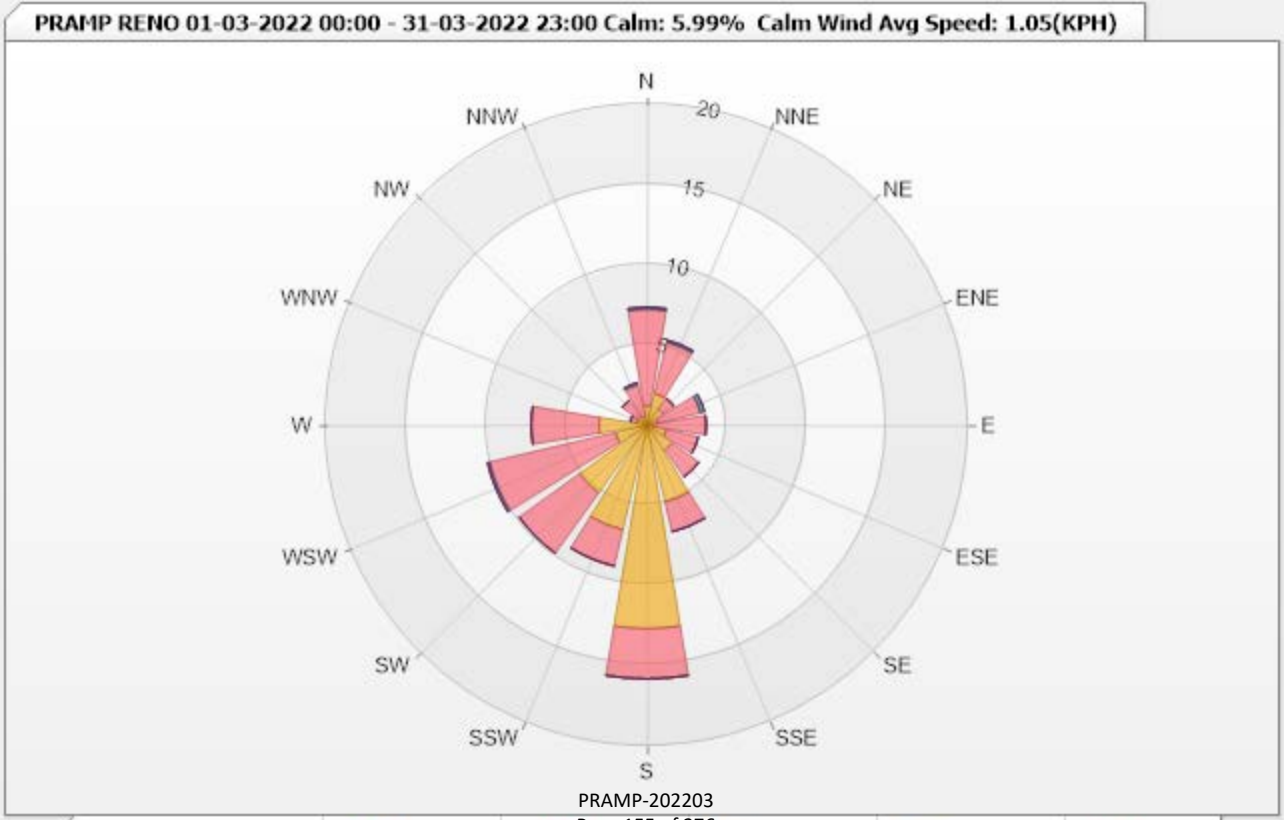
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

Timeseries Chart of Hourly Average for VWS - Reno Station



Wind: PRAMP RENO Monitor: WDS [KPH] Monthly: 03-2022 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 5.99% Valid Data: 98.66%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	1.23	5.99	0.14	0	0	7.36
NNE	2.04	3.27	0.14	0	0	5.45
NE	1.23	0.82	0	0	0	2.05
ENE	0.68	2.72	0.27	0	0	3.67
E	0.41	3.27	0	0	0	3.68
ESE	1.23	2.04	0	0	0	3.27
SE	1.91	2.04	0	0	0	3.95
SSE	4.9	1.91	0	0	0	6.81
S	12.67	3.13	0	0	0	15.8
SSW	6.68	2.32	0	0	0	9
SW	5.18	4.63	0	0	0	9.81
WSW	2.04	8.04	0.14	0	0	10.22
W	3	4.22	0	0	0	7.22
WNW	0.68	0.41	0	0	0	1.09
NW	0.68	1.23	0	0	0	1.91
NNW	0.54	2.04	0.14	0	0	2.72
Summary	45.1	48.08	0.83	0	0	94.01


PRAMP RENO 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 5.99% Calm Wind Avg Speed: 1.05(KPH)
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (KPH)
45 1.8-6.0
48 6.0-15.0
1 15.0-29.0
0 29.0-39.0
0 >39.0

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PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2022

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

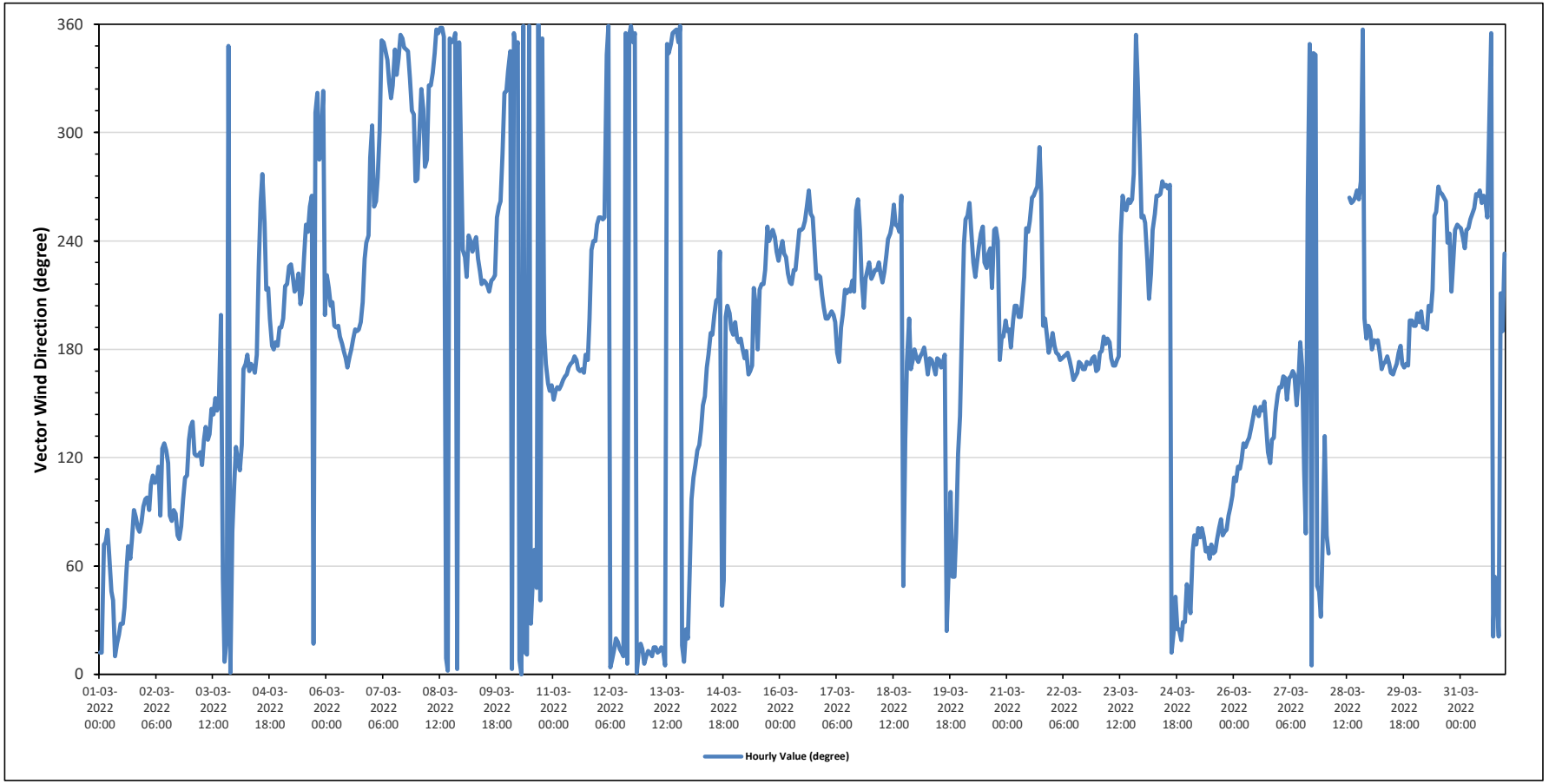
Monthly Average:	218 (SW)	degree	
Hours in Service:	744		
Hours of Data:	734		
Hours of Missing Data:	10		
Hours of Calibration:	0		
Operational Uptime:	98.7		

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	NNE	NNE	ENE	ENE	E	ENE	NE	NE	N	NNE	NNE	NNE	NNE	NE	ENE	ENE	ENE	ENE	E	E	E	ENE	E	E	59	ENE
Mar 2	E	E	E	ESE	ESE	ESE	ESE	ESE	E	SE	SE	ESE	ESE	E	E	E	E	ENE	ENE	E	E	ESE	ESE	SE	102	E
Mar 3	SE	SE	ESE	ESE	ESE	ESE	ESE	SE	SE	SE	SE	SE	SE	SSE	SE	SSE	SSW	NE	N	NNE	NNW	N	ENE	ESE	127	SE
Mar 4	SE	ESE	ESE	SE	SSE	S	S	SSE	S	SSE	SSE	S	SW	W	W	WSW	SSW	SSW	SSW	S	S	S	S	S	196	SSW
Mar 5	S	SSW	SSW	SW	SW	SW	SW	SSW	SSW	SW	SSW	SSW	SW	WSW	WSW	WSW	W	NNE	NW	NW	WNW	WNW	NW	SSW	238	SW
Mar 6	SW	SSW	SSW	SSW	S	S	S	S	S	S	S	SSE	S	S	S	S	S	S	SSW	SSW	SW	WSW	WSW	WNW	206	SSW
Mar 7	WNW	WSW	W	W	WNW	N	N	NNW	NNW	NNW	NW	NW	NNW	NNW	NNW	N	N	NNW	NNW	NNW	NNW	NW	NW	W	331	NNW
Mar 8	W	WNW	NW	NW	W	WNW	NW	NW	NNW	NNW	N	N	N	N	N	N	N	N	N	N	N	N	N	WNW	343	NNW
Mar 9	SW	SW	SW	WSW	WSW	SW	WSW	WSW	SW	SW	SW	SW	SW	SSW	SSW	SW	SW	SW	WSW	WSW	W	WNW	NW	NW	239	WSW
Mar 10	NNW	NNW	N	N	NNW	N	N	N	N	NNE	NNE	N	NNE	NE	ENE	NE	N	NE	N	S	S	SSE	SSE	SSE	11	NNE
Mar 11	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	S	S	SSE	SSE	SSE	SSE	S	S	SSW	SW	WSW	WSW	WSW	183	S
Mar 12	WSW	WSW	WSW	WSW	NNW	N	N	N	NNE	NNE	NNE	NNE	NNE	N	N	N	N	N	N	N	N	NNE	NNE	NNE	348	NNW
Mar 13	N	N	NNE	NNE	N	NNE	NNE	NNE	NNE	NNE	NNE	N	NNW	NNW	NNW	N	N	N	N	N	NNE	N	NNE	NNE	6	N
Mar 14	ENE	E	ESE	ESE	ESE	SE	SE	SSE	SSE	SSE	S	S	S	SSW	SSW	SSW	SW	NE	NE	SSW	SSW	SSW	S	S	159	SSE
Mar 15	SSW	S	S	S	S	S	S	SSE	SSE	S	SSW	SSW	S	SSW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	SW	SW	211	SSW
Mar 16	SW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	SW	SW	SW	SW	SSW	SSW	238	SW
Mar 17	SSW	SSW	SSW	SSW	SSW	SSW	S	S	S	SSW	SSW	SSW	SSW	SSW	SW	SSW	WSW	W	WSW	SW	SSW	SW	SW	SW	209	SSW
Mar 18	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	NE	SE	S	SSW	SSE	S	S	235	SW
Mar 19	S	S	S	S	S	S	SSE	S	S	S	SSE	S	S	SSE	S	S	NNE	ENE	E	NE	NE	ENE	ESE	SE	163	SSE
Mar 20	S	SW	WSW	WSW	W	WSW	SW	SW	SW	SW	WSW	WSW	SW	SW	SW	SW	SSW	WSW	WSW	WSW	S	S	S	SSW	238	SW
Mar 21	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SW	WSW	WSW	WSW	W	W	W	W	WNW	W	S	SSW	S	S	S	228	SW
Mar 22	S	S	S	S	S	S	S	S	S	S	SSE	SSE	SSE	SSE	S	S	SSE	SSE	S	S	S	S	S	SSE	174	S
Mar 23	SSE	S	S	S	S	S	S	S	S	S	S	S	WSW	W	WSW	WSW	W	W	W	W	N	NNW	WNW	WSW	233	SW
Mar 24	WSW	WSW	SW	SSW	SW	WSW	WSW	W	W	W	W	W	W	W	W	NNE	NNE	NE	NNE	NNE	NNE	NNE	NNE	NE	285	WNW
Mar 25	NE	NE	ENE	ENE	ENE	E	ENE	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	ENE	ENE	E	E	E	E	76	ENE
Mar 26	ESE	ESE	ESE	ESE	ESE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SSE	SE	ESE	ESE	SE	SE	SE	SSE	129	SE
Mar 27	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	SSE	ESE	ENE	W	NNW	N	NNW	NNW	NE	NE	NNE	E	145	SE
Mar 28	SE	ENE	ENE	K	K	K	K	K	K	K	K	K	K	W	W	W	W	W	W	W	N	SSW	S	S	-	WSW
Mar 29	S	S	S	S	S	S	SSE	S	S	S	S	SSE	SSE	SSE	S	S	S	S	SSE	S	S	SSW	SSW	S	177	S
Mar 30	S	SSW	SSW	SSW	S	S	S	SSW	SSW	SSW	WSW	WSW	W	W	W	W	W	WSW	WSW	SSW	SW	WSW	WSW	WSW	240	WSW
Mar 31	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	W	WSW	WNW	N	NNE	NE	NE	NNE	SSW	S	SW	263	W

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

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

Timeseries Chart of Hourly Average for VWD - Reno Station



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PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2022

Summary of Hourly Averages

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

WIND SPEED

Maximum Hourly Value:	17.7	kph	on March 7 at hour 7	Hours in Service:	744
Maximum Daily Value:	11.1	kph	on March 25	Hours of Data:	734
Minimum Hourly Value:	0.2	kph	on March 31 at hour 23	Hours of Missing Data:	10
Minimum Daily Value:	1.4	kph	on March 27	Hours of Calibration:	0
Monthly Average:	1.2	kph		Operational Uptime:	98.7

WIND DIRECTION

Monthly Average: 218 (SW) degree

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	4.1	3.1	7.5	5.7	8.6	6.7	6.8	5.5	7.2	7.7	10.0	10.6	10.1	9.1	10.5	10.6	9.8	8.6	8.3	9.0	9.8	9.5	10.1	3.1	10.6	7.2
	NNE	NNE	ENE	ENE	E	ENE	NE	NE	N	NNE	NNE	NNE	NNE	NE	ENE	ENE	ENE	ENE	E	E	E	ENE	E	E			
Mar 2	10.1	8.5	10.0	10.6	10.2	8.9	7.7	8.3	6.4	8.6	8.3	7.5	8.7	8.6	9.3	10.2	8.6	8.4	7.0	6.7	6.4	6.2	7.1	5.7	5.7	10.6	8.0
	E	E	E	ESE	ESE	ESE	ESE	ESE	E	SE	SE	ESE	ESE	E	E	E	E	ENE	ENE	E	E	ESE	ESE	SE			
Mar 3	5.9	5.5	4.0	5.0	5.1	5.5	5.8	6.1	5.9	5.6	5.9	4.6	5.6	3.2	3.2	3.1	3.1	1.1	2.6	2.3	1.8	1.3	3.4	3.9	1.1	6.1	3.4
	SE	SE	ESE	ESE	ESE	ESE	ESE	SE	SE	SE	SE	SE	SE	SSE	SE	SSE	SSW	NE	N	NNE	NNW	N	ENE	ESE			
Mar 4	0.5	0.5	2.2	2.6	1.3	2.1	2.4	2.8	3.2	3.5	3.7	3.7	4.1	4.8	3.8	6.6	4.9	3.4	1.5	1.7	2.9	3.4	3.3	3.0	0.5	6.6	2.3
	SE	ESE	ESE	SE	SSE	S	S	SSE	S	SSE	SSE	S	SW	W	W	WSW	SSW	SSW	SSW	S	S	S	S	S			
Mar 5	3.0	2.8	2.1	2.9	3.3	4.4	4.6	3.1	2.4	3.8	3.7	4.5	6.9	10.6	9.7	6.7	5.6	2.3	2.1	2.8	2.4	1.4	0.6	0.4	0.4	10.6	3.2
	S	SSW	SSW	SW	SW	SW	SW	SSW	SSW	SW	SSW	SSW	SW	WSW	WSW	WSW	W	NNE	NW	NW	WNW	WNW	NW	SSW			
Mar 6	1.9	2.1	1.8	2.5	2.5	2.6	2.1	2.2	2.8	4.0	6.6	5.9	6.4	6.2	7.4	7.1	5.7	6.1	6.5	8.1	9.6	11.4	12.7	8.5	1.8	12.7	4.8
	SW	SSW	SSW	SSW	S	S	S	S	S	S	S	SSE	S	S	S	S	S	S	SSW	SSW	SW	WSW	WSW	WNW			
Mar 7	7.4	8.9	10.6	8.2	8.1	14.8	14.2	**17.7**	14.2	13.7	12.7	14.3	12.2	11.6	12.9	16.2	13.4	12.8	9.3	7.6	5.0	4.2	4.3	3.2	3.2	**17.7**	9.6
	WNW	WSW	W	W	WNW	N	N	NNW	NNW	NNW	NW	NW	NNW	NNW	NNW	N	N	NNW	NNW	NNW	NNW	NW	NW	W			
Mar 8	4.7	5.0	7.4	5.8	4.0	4.4	6.1	6.2	8.4	8.7	11.1	11.2	11.0	9.9	12.1	9.6	9.0	10.9	9.3	6.8	8.3	5.9	5.5	1.4	1.4	12.1	7.0
	W	WNW	NW	NW	W	WNW	NW	NW	NNW	NNW	N	N	N	N	N	N	N	N	N	N	N	N	N	WNW			
Mar 9	3.4	1.9	3.9	4.3	4.7	4.5	5.2	5.5	5.0	7.8	8.3	7.7	8.8	9.6	8.9	9.6	8.4	6.4	4.5	6.2	7.3	8.4	8.8	7.9	1.9	9.6	5.5
	SW	SW	SW	WSW	WSW	SW	WSW	WSW	SW	SW	SW	SW	SW	SSW	SSW	SW	SW	SW	WSW	WSW	W	WNW	NW	NW			
Mar 10	8.2	11.5	11.8	8.8	6.4	8.7	7.1	8.5	7.1	6.2	5.4	7.9	8.0	8.2	6.3	6.6	3.9	2.5	1.0	0.8	1.4	2.6	4.9	5.7	0.8	11.8	4.5
	NNW	NNW	N	N	NNW	N	N	N	N	NNE	NNE	N	NNE	NE	ENE	NE	N	NE	N	S	S	SSE	SSE	SSE			
Mar 11	6.9	6.7	7.9	8.1	8.3	9.1	9.2	9.5	9.2	9.2	9.2	8.9	8.2	6.8	7.1	6.8	6.5	5.2	3.7	3.6	8.9	11.5	12.1	15.1	3.6	15.1	7.0
	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	S	S	SSE	SSE	SSE	SSE	S	S	SSW	SW	WSW	WSW	WSW			
Mar 12	14.3	13.6	13.6	13.1	8.5	10.5	12.1	12.6	10.9	10.7	10.3	10.2	9.0	6.6	8.0	7.0	8.9	8.2	8.5	9.9	8.3	8.7	7.3	8.3	6.6	14.3	7.0
	WSW	WSW	WSW	WSW	NNW	N	N	N	NNE	NNE	NNE	NNE	NNE	N	N	N	N	N	N	N	N	NNE	NNE	NNE			
Mar 13	8.9	9.5	10.4	10.3	14.3	13.9	13.2	13.9	15.5	13.9	12.5	11.0	10.7	12.2	12.2	10.9	9.5	6.6	6.5	5.9	5.1	4.4	4.9	4.4	4.4	15.5	9.9
	N	N	NNE	NNE	N	NNE	NNE	NNE	NNE	NNE	NNE	N	NNW	NNW	NNW	N	N	N	N	N	NNE	N	NNE	NNE			
Mar 14	3.7	5.7	7.7	7.4	7.7	7.3	7.2	5.8	6.8	7.1	8.4	8.7	7.3	6.3	5.5	4.4	2.8	0.3	1.6	0.8	2.2	3.9	3.1	3.4	0.3	8.7	4.0
	ENE	E	ESE	ESE	ESE	SE	SE	SSE	SSE	SSE	S	S	S	SSW	SSW	SW	NE	NE	SSW	SSW	SSW	S	S				
Mar 15	2.8	4.3	4.1	4.8	4.7	5.3	5.0	3.9	5.4	5.8	5.1	3.9	3.8	7.4	7.5	6.7	5.9	6.0	5.7	6.2	8.5	8.3	6.9	7.0	2.8	8.5	5.0
	SSW	S	S	S	S	S	S	SSE	SSE	S	SSW	SSW	S	SSW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	SW	SW			
Mar 16	7.5	8.4	6.6	6.4	5.9	6.3	6.3	5.9	6.1	8.2	14.3	11.8	12.4	13.4	11.2	7.9	8.0	7.3	5.6	5.5	5.8	5.3	5.8	5.4	5.3	14.3	7.5
	SW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	SW	SW	SW	SW	SSW	SSW			
Mar 17	5.9	7.2	8.6	8.7	9.2	7.2	4.7	4.2	5.9	7.6	8.9	9.4	9.0	8.4	7.3	6.1	6.3	3.7	3.4	2.6	2.6	4.6	5.9	7.5	2.6	9.4	6.1
	SSW	SSW	SSW	SSW	SSW	SSW	S	S	S	SSW	SSW	SSW	SSW	SSW	SW	SSW	WSW	W	WSW	SW	SSW	SW	SW	SW			
Mar 18	6.7	5.5	5.2	5.1	6.3	5.5	4.9	5.5	6.8	9.7	10.6	11.4	8.7	8.7	9.3	8.4	4.1	1.0	1.0	0.7	0.4	0.4	1.3	3.4	0.4	11.4	5.0
	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	NE	SE	S	SSW	SSE	S	S			
Mar 19	3.9	4.3	4.0	3.8	4.0	4.6	5.0	4.7	5.7	5.3	4.3	4.5	5.0	4.7	4.8	2.8	1.4	1.3	2.8	2.2	1.9	1.3	2.2	3.7	1.3	5.7	3.1
	S	S	S	S	S	S	SSE	S	S	S	SSE	S	S	SSE	S	S	NNE	ENE	E	NE	NE	ENE	ESE	SE			
Mar 20	4.6	6.7	13.1	12.9	9.5	7.5	5.7	6.2	6.5	9.7	11.5	12.4	8.3	7.6	9.8	8.7	6.7	9.5	7.4	2.9	0.3	0.4	1.5	2.8	0.3	13.1	6.9
	S	SW	WSW	WSW	W	WSW	SW	SW	SW	SW	WSW	WSW	SW	SW	SW	SW	SSW	WSW	WSW	WSW	S	S	S	SSW			

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PEACE RIVER AREA MONITORING PROGRAM

Reno Station - March 2022

Summary of Hourly Averages

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

WIND SPEED

Maximum Hourly Value:	17.7	kph	on March 7 at hour 7	Hours in Service:	744
Maximum Daily Value:	11.1	kph	on March 25	Hours of Data:	734
Minimum Hourly Value:	0.2	kph	on March 31 at hour 23	Hours of Missing Data:	10
Minimum Daily Value:	1.4	kph	on March 27	Hours of Calibration:	0
Monthly Average:	1.2	kph		Operational Uptime:	98.7

WIND DIRECTION

Monthly Average: 218 (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	3.4	2.9	3.1	4.3	5.2	4.8	4.6	4.9	5.4	5.7	8.2	10.1	10.3	7.9	7.7	5.8	5.0	3.4	1.7	3.5	3.5	2.6	3.7	3.7	1.7	10.3	4.3
	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SW	WSW	WSW	WSW	W	W	W	W	WNW	W	S	SSW	S	S	S			
Mar 22	3.6	4.1	4.3	4.3	4.5	5.3	5.9	5.9	5.9	5.2	4.7	4.9	4.0	5.0	6.0	5.7	4.3	3.5	4.6	5.3	6.0	6.3	6.4	3.6	3.5	6.4	5.0
	S	S	S	S	S	S	S	S	S	S	SSE	SSE	SSE	SSE	S	S	SSE	SSE	S	S	S	S	S	SSE			
Mar 23	3.7	5.3	4.7	4.2	4.4	3.4	4.1	4.1	4.8	5.9	6.1	4.4	5.5	9.8	8.7	6.9	5.0	7.2	8.7	8.1	9.6	5.2	2.5	3.3	2.5	9.8	3.4
	SSE	S	S	S	S	S	S	S	S	S	S	S	WSW	W	WSW	WSW	W	W	W	W	N	NNW	WNW	WSW			
Mar 24	5.2	5.1	3.4	5.4	5.7	6.4	6.2	5.9	5.9	6.5	6.5	7.1	7.5	6.7	5.6	6.6	8.2	4.9	4.1	5.0	4.2	3.7	2.6	2.5	2.5	8.2	2.8
	WSW	WSW	SW	SSW	SW	WSW	WSW	W	W	W	W	W	W	W	W	NNE	NNE	NE	NNE	NNE	NNE	NNE	NNE	NE			
Mar 25	6.2	5.7	5.5	8.7	9.9	10.6	10.2	8.6	8.9	10.1	10.2	12.4	11.5	13.2	15.1	13.6	13.9	14.0	16.9	14.6	14.7	14.1	13.6	10.7	5.5	16.9	**11.1**
	NE	NE	ENE	ENE	ENE	E	ENE	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	ENE	ENE	E	E	E	E			
Mar 26	11.5	10.7	10.1	10.0	9.2	8.6	8.8	9.1	9.0	8.4	7.9	5.8	6.1	6.3	4.1	3.2	2.7	2.8	1.7	3.9	4.3	4.3	4.4	4.9	1.7	11.5	6.4
	ESE	ESE	ESE	ESE	ESE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SSE	SE	ESE	ESE	SE	SE	SE	SSE			
Mar 27	5.4	4.8	4.0	2.6	3.4	2.5	2.8	3.4	2.7	4.0	3.5	3.7	2.6	0.9	3.9	2.7	2.0	3.8	1.6	1.9	3.1	2.4	2.2	0.5	0.5	5.4	**1.4**
	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	SSE	ESE	ENE	W	NNW	N	NNW	NNW	NE	NE	NNE	E			
Mar 28	1.5	1.2	1.1	**K**	**K**	**K**	**K**	**K**	**K**	**K**	**K**	**K**	**K**	7.6	8.5	6.6	5.5	3.8	2.9	2.0	0.4	1.6	1.5	2.2	0.4	8.5	-
	SE	ENE	ENE	**K**	**K**	**K**	**K**	**K**	**K**	**K**	**K**	**K**	**K**	W	W	W	W	W	W	W	N	SSW	S	S			
Mar 29	2.8	2.9	2.3	3.2	3.6	3.9	5.0	6.0	7.1	7.3	6.6	6.0	5.2	5.8	5.9	4.5	3.9	2.4	3.8	4.0	3.7	5.7	5.7	4.1	2.3	7.3	4.6
	S	S	S	S	S	S	SSE	S	S	S	S	SSE	SSE	SSE	S	S	S	S	SSE	S	S	SSW	SSW	S			
Mar 30	3.3	2.8	3.6	2.9	1.9	2.5	3.0	2.9	3.3	3.8	7.2	7.5	5.3	6.2	7.7	5.6	5.4	4.8	5.0	1.3	3.7	7.3	9.9	12.0	1.3	12.0	4.5
	S	SSW	SSW	SSW	S	S	S	SSW	SSW	SSW	WSW	WSW	W	W	W	W	W	WSW	WSW	SSW	SW	WSW	WSW	WSW			
Mar 31	9.3	7.2	6.7	9.3	9.8	10.0	9.9	9.5	8.4	7.9	8.6	10.3	10.6	10.9	12.0	7.3	9.9	6.8	2.4	0.5	2.0	3.0	2.6	**0.2**	**0.2**	12.0	5.8
	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	W	WSW	WNW	N	NNE	NE	NE	NNE	SSW	S	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.

PRC STATION

peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex Station - March 2022

Summary of Hourly Averages

SULPHUR DIOXIDE (SO_2) in ppb

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

Number of 1-Hour Exceedances: 0 Number of 24-Hour Exceedances: 0 30-Day Exceedance: 0

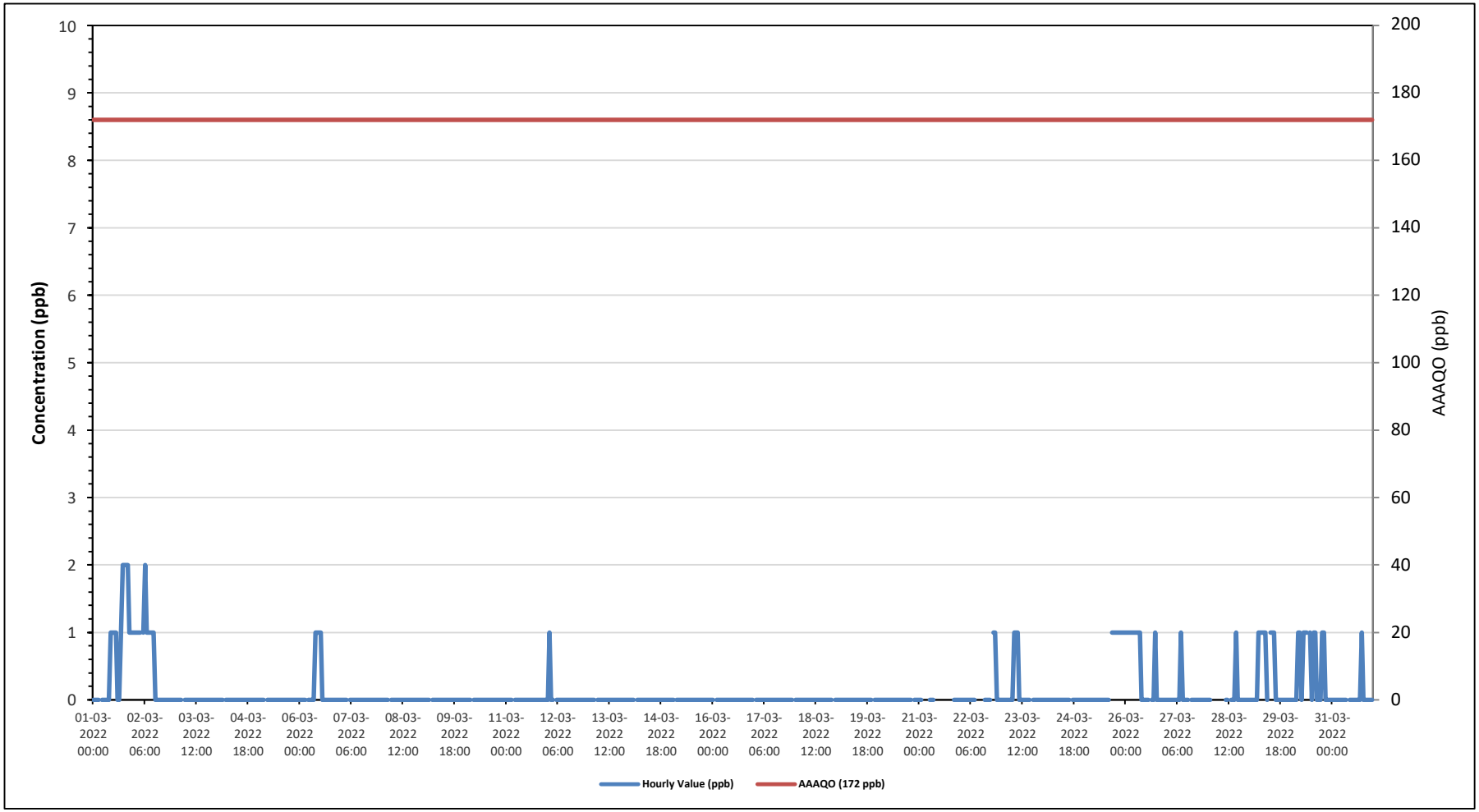
Maximum Hourly Value:	2	ppb	on March 1 at hour 17	Hours in Service:	744
Maximum Daily Value:	0.7	ppb	on March 1	Hours of Data:	687
Minimum Hourly Value:	0	ppb	on March 1 at hour 0	Hours of Missing Data:	20
Minimum Daily Value:	0.0	ppb	on March 3	Hours of Calibration:	37
Monthly Average:	0.1	ppb		Operational Uptime:	97.3

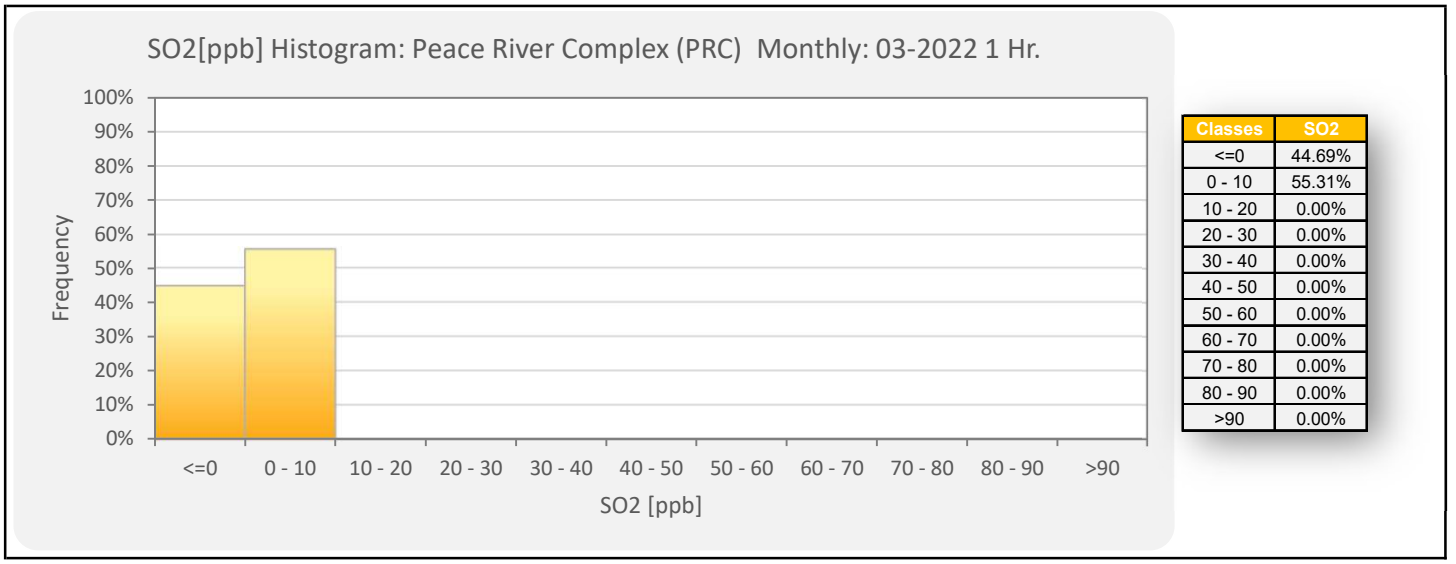
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Mar 1	0	0	0	0	S	0	0	0	0	0	1	1	1	1	0	0	1	2	2	2	2	1	1	1	0	2	0.7
Mar 2	1	1	1	1	S	1	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.5
Mar 3	0	0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

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance			
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance	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 SO2 - Peace River Complex Station



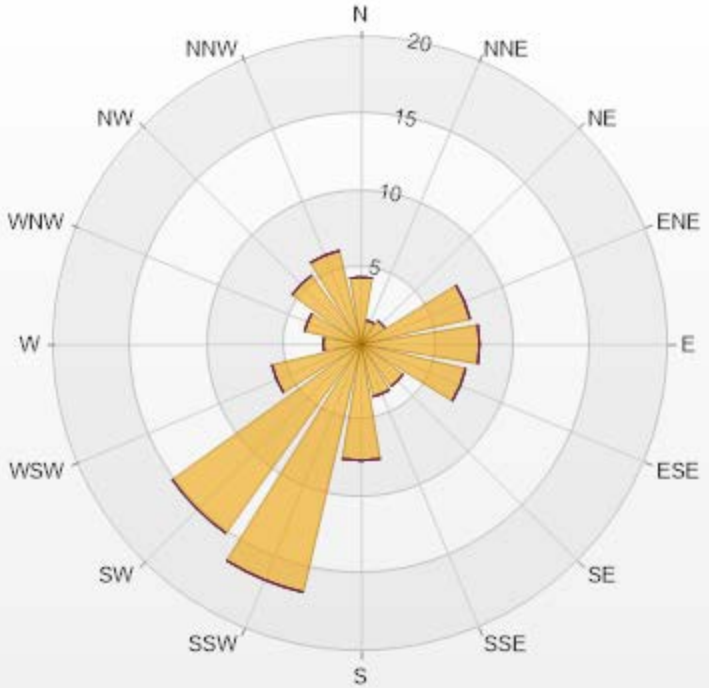


Classes	SO2
<=0	44.69%
0 - 10	55.31%
10 - 20	0.00%
20 - 30	0.00%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: Peace River Complex (PRC) Poll.: Peace River Complex (PRC)-SO2[ppb] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 92.34% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	4.37	0	0	0	0	4.37
NNE	1.6	0	0	0	0	1.6
NE	1.89	0	0	0	0	1.89
ENE	7.28	0	0	0	0	7.28
E	7.71	0	0	0	0	7.71
ESE	6.99	0	0	0	0	6.99
SE	3.35	0	0	0	0	3.35
SSE	3.49	0	0	0	0	3.49
S	7.57	0	0	0	0	7.57
SSW	16.59	0	0	0	0	16.59
SW	15.14	0	0	0	0	15.14
WSW	5.97	0	0	0	0	5.97
W	2.47	0	0	0	0	2.47
WNW	3.78	0	0	0	0	3.78
NW	5.53	0	0	0	0	5.53
NNW	6.26	0	0	0	0	6.26
Summary	100	0	0	0	0	100

Peace River Complex (PRC) Poll.: Peace River Complex (PRC)-SO2[ppb] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%



% Icon Classes (ppb)	100 0-10	0 10-50	0 50-100	0 100-172	0 >172.0

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PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex Station - March 2022

Summary of Hourly Averages

HYDROGEN SULPHIDE (H_2S) in ppb

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

Number of 1-Hour Exceedances: 0 Number of 24-Hour Exceedances: 0

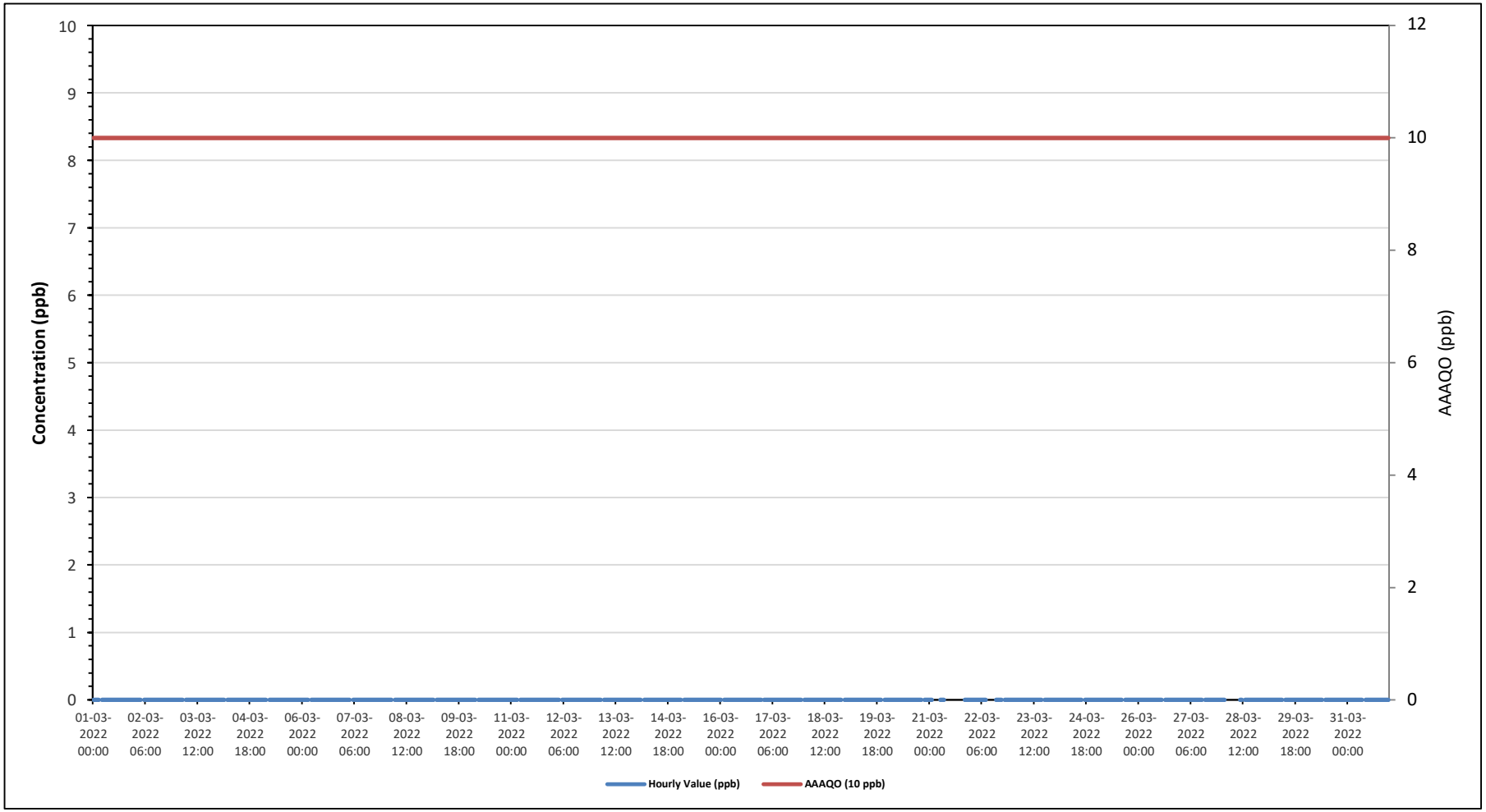
Maximum Hourly Value:	0	ppb	on March 1 at hour 0	Hours in Service:	744
Maximum Daily Value:	0.0	ppb	on March 1	Hours of Data:	687
Minimum Hourly Value:	0	ppb	on March 1 at hour 0	Hours of Missing Data:	20
Minimum Daily Value:	0.0	ppb	on March 1	Hours of Calibration:	37
Monthly Average:	0.0	ppb		Operational Uptime:	97.3

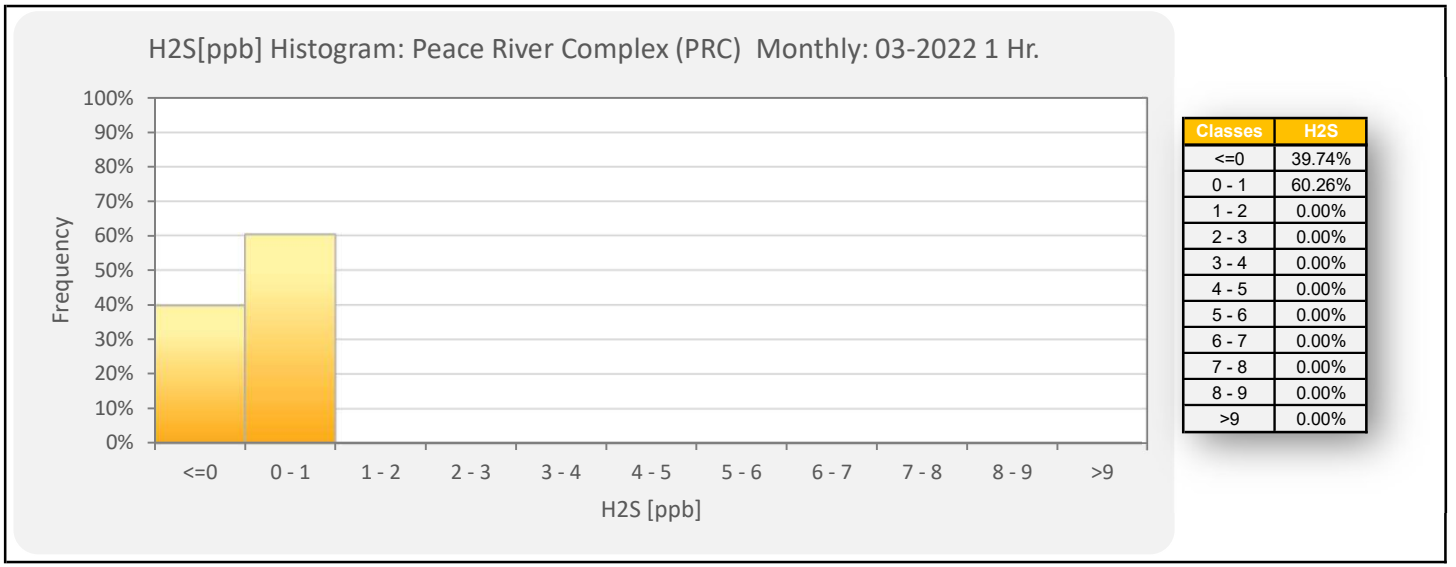
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Mar 1	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 2	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 3	0	0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

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	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 H2S - Peace River Complex Station



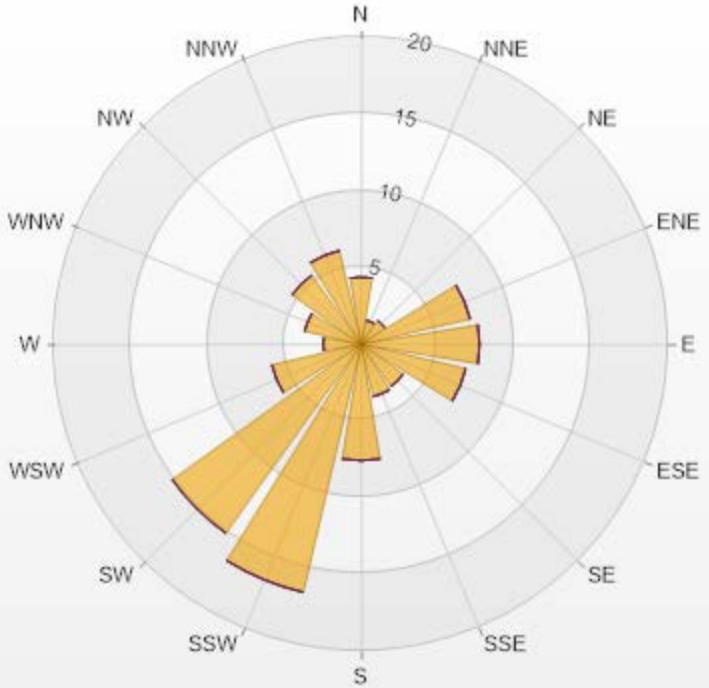


Classes	H2S
<=0	39.74%
0 - 1	60.26%
1 - 2	0.00%
2 - 3	0.00%
3 - 4	0.00%
4 - 5	0.00%
5 - 6	0.00%
6 - 7	0.00%
7 - 8	0.00%
8 - 9	0.00%
>9	0.00%

Wind: Peace River Complex (PRC) Poll.: Peace River Complex (PRC)-H2S[ppb] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 92.34% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	4.37	0	0	0	0	4.37
NNE	1.6	0	0	0	0	1.6
NE	1.89	0	0	0	0	1.89
ENE	7.28	0	0	0	0	7.28
E	7.71	0	0	0	0	7.71
ESE	6.99	0	0	0	0	6.99
SE	3.35	0	0	0	0	3.35
SSE	3.49	0	0	0	0	3.49
S	7.57	0	0	0	0	7.57
SSW	16.59	0	0	0	0	16.59
SW	15.14	0	0	0	0	15.14
WSW	5.97	0	0	0	0	5.97
W	2.47	0	0	0	0	2.47
WNW	3.78	0	0	0	0	3.78
NW	5.53	0	0	0	0	5.53
NNW	6.26	0	0	0	0	6.26
Summary	100	0	0	0	0	100

Peace River Complex (PRC) Poll.: Peace River Complex (PRC)-H2S[ppb] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%



% Icon Classes (ppb)	100 0-2	0 2-5	0 5-10	0 10-50	0 >50.0

peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex Station - March 2022

Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

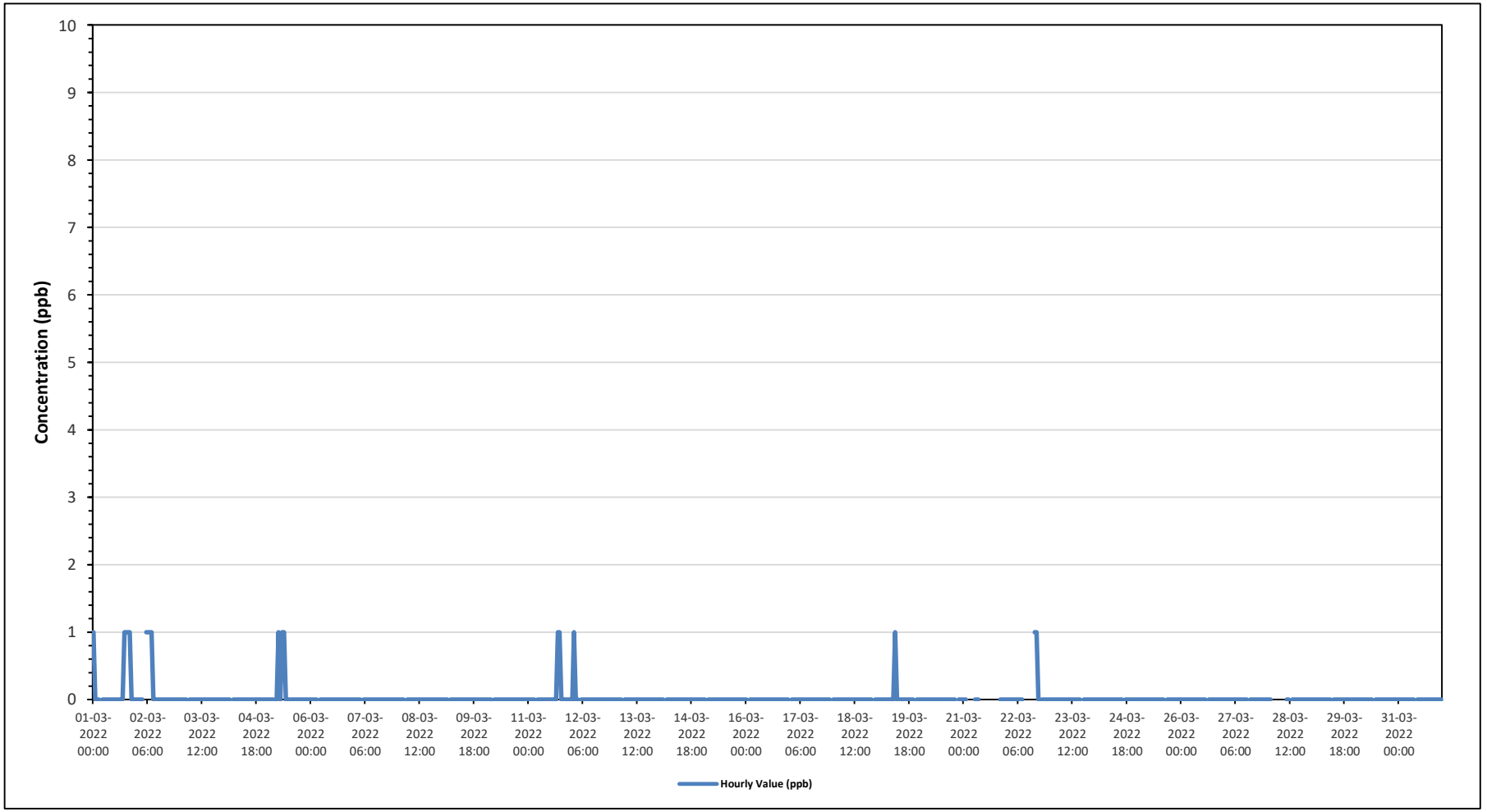
Maximum Hourly Value:	1	ppb	on March 19 at hour 0	Hours in Service:	744
Maximum Daily Value:	0.5	ppb	on March 1	Hours of Data:	686
Minimum Hourly Value:	0	ppb	on March 29 at hour 1	Hours of Missing Data:	20
Minimum Daily Value:	0.4	ppb	on March 29	Hours of Calibration:	38
Monthly Average:	0.4	ppb		Operational Uptime:	97.3

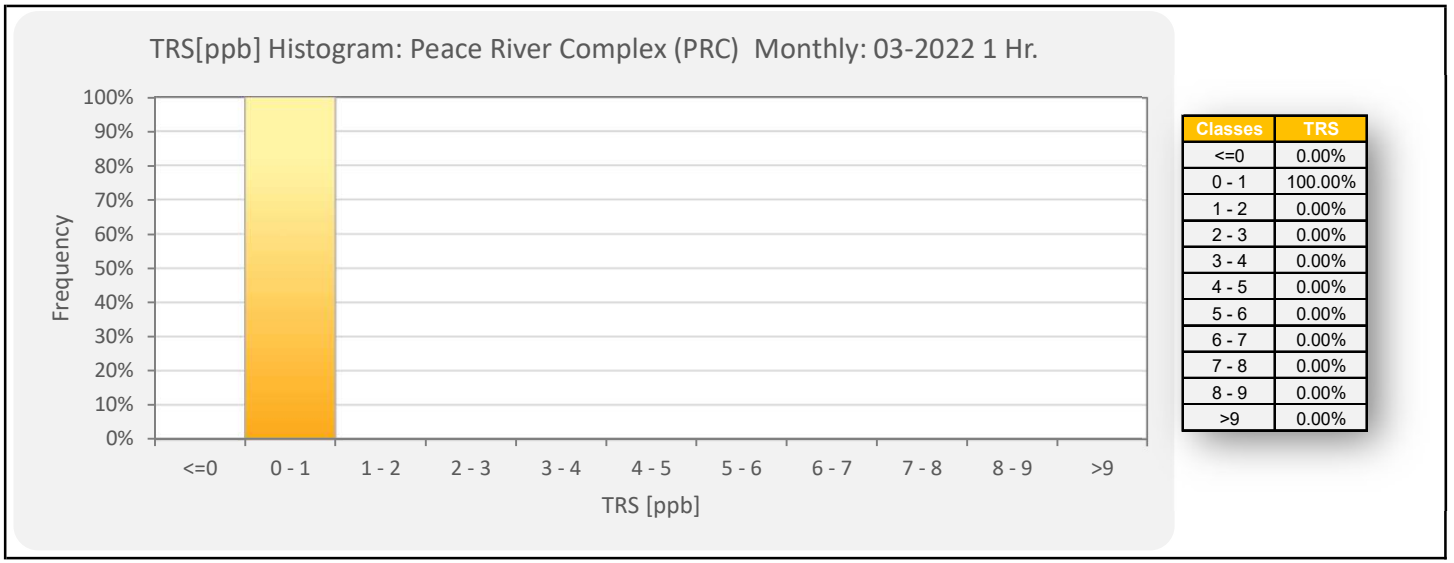
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Mar 1	1	0	1	0	S	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	1	**0.5**
Mar 2	0	0	0	0	S	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5
Mar 3	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5
Mar 4	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5
Mar 5	0	0	0	0	S	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5
Mar 6	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4
Mar 7	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4
Mar 8	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5
Mar 9	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5
Mar 10	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4
Mar 11	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0.5
Mar 12	0	1	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5
Mar 13	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4
Mar 14	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4
Mar 15	0	0	S	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4
Mar 16	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4
Mar 17	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0.4
Mar 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0.4
Mar 19	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0	S	0	0	0	**1**	0.4
Mar 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0.4
Mar 21	0	0	K	K	K	K	0	0	0	K	K	K	K	K	K	K	K	K	0	S	0	0	0	0	0	0	-
Mar 22	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	1	1	0	S	0	0	0	0	0	0	1	-
Mar 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0.4
Mar 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0.4
Mar 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0.4
Mar 26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0.4
Mar 27	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0.4
Mar 28	0	1	K	K	K	K	K	0	NRM	NRM	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	1	-
Mar 29	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0.4
Mar 30	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0.4
Mar 31	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4
Diurnal Maximum	0.54	0.56	0.50	0.49	0.45	0.53	0.51	0.51	0.52	0.51	0.60	0.49	0.49	0.49	0.49	0.54	0.58	0.59	0.54	0.50	0.50	0.49	0.49	0.49			
Diurnal Average	0.42	0.43	0.43	0.43	0.40	0.43	0.43	0.42	0.44	0.43	0.44	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.42	0.43	0.42	0.42	0.42	0.42			

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 - Peace River Complex Station



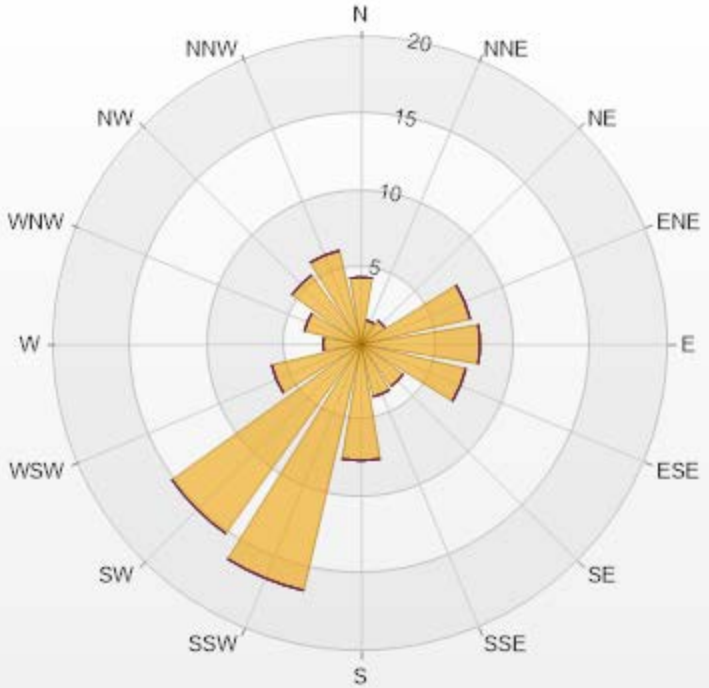


Classes	TRS
<=0	0.00%
0 - 1	100.00%
1 - 2	0.00%
2 - 3	0.00%
3 - 4	0.00%
4 - 5	0.00%
5 - 6	0.00%
6 - 7	0.00%
7 - 8	0.00%
8 - 9	0.00%
>9	0.00%

Wind: Peace River Complex (PRC) Poll.: Peace River Complex (PRC)-TRS[ppb] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 92.20% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	4.37	0	0	0	0	4.37
NNE	1.6	0	0	0	0	1.6
NE	1.9	0	0	0	0	1.9
ENE	7.29	0	0	0	0	7.29
E	7.73	0	0	0	0	7.73
ESE	7	0	0	0	0	7
SE	3.35	0	0	0	0	3.35
SSE	3.5	0	0	0	0	3.5
S	7.58	0	0	0	0	7.58
SSW	16.47	0	0	0	0	16.47
SW	15.16	0	0	0	0	15.16
WSW	5.98	0	0	0	0	5.98
W	2.48	0	0	0	0	2.48
WNW	3.79	0	0	0	0	3.79
NW	5.54	0	0	0	0	5.54
NNW	6.27	0	0	0	0	6.27
Summary	100	0	0	0	0	100

Peace River Complex (PRC) Poll.: Peace River Complex (PRC)-TRS[ppb] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%



% Icon Classes (ppb) | 100 0-2 | 0 2-5 | 0 5-10 | 0 10-50 | 0 >50.0

peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex Station - March 2022

Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

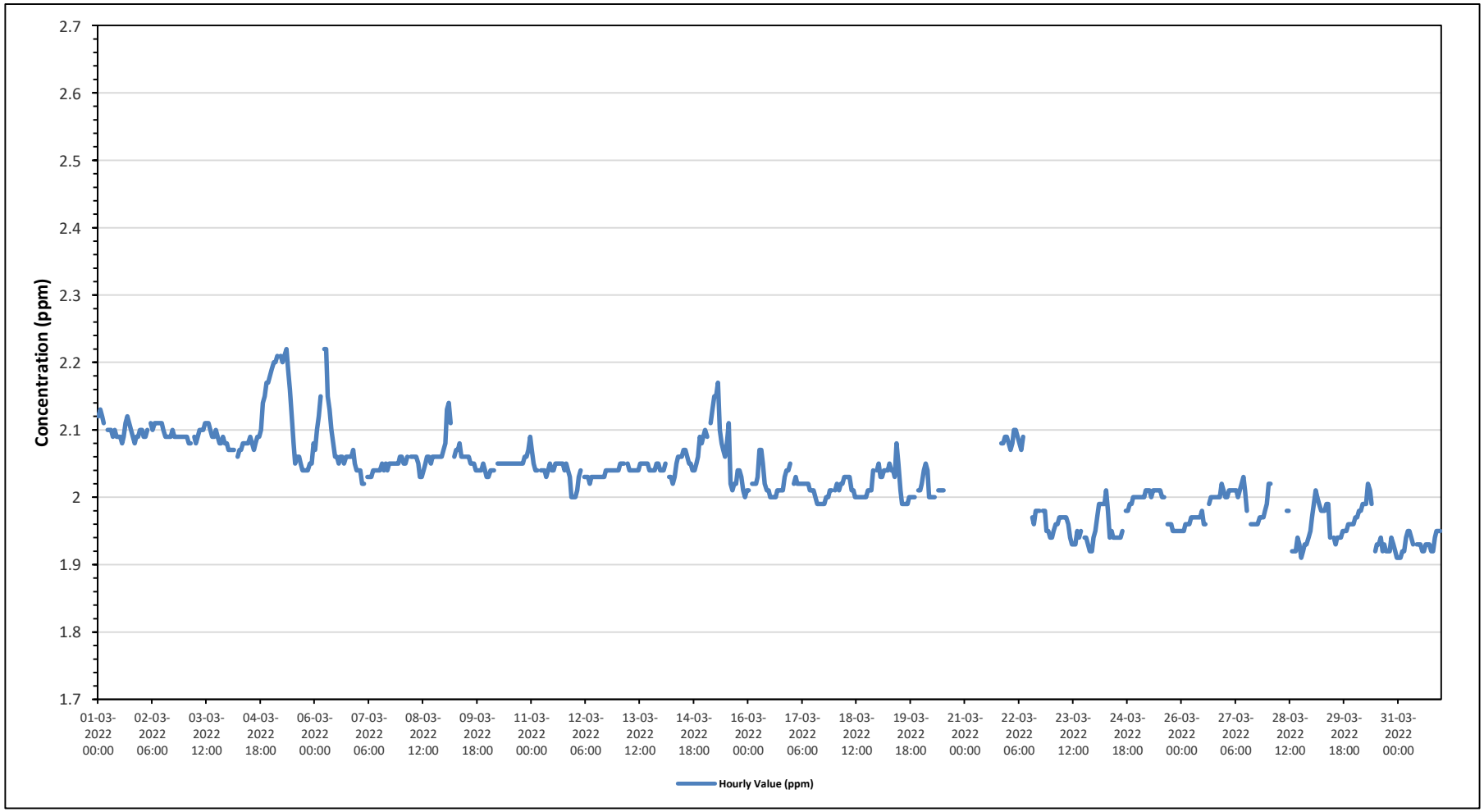
Maximum Hourly Value:	2.22	ppm	on March 5 at hour 8	Hours in Service:	744
Maximum Daily Value:	2.12	ppm	on March 5	Hours of Data:	672
Minimum Hourly Value:	1.91	ppm	on March 28 at hour 18	Hours of Missing Data:	37
Minimum Daily Value:	1.93	ppm	on March 31	Hours of Calibration:	35
Monthly Average:	2.03	ppm		Operational Uptime:	95.0

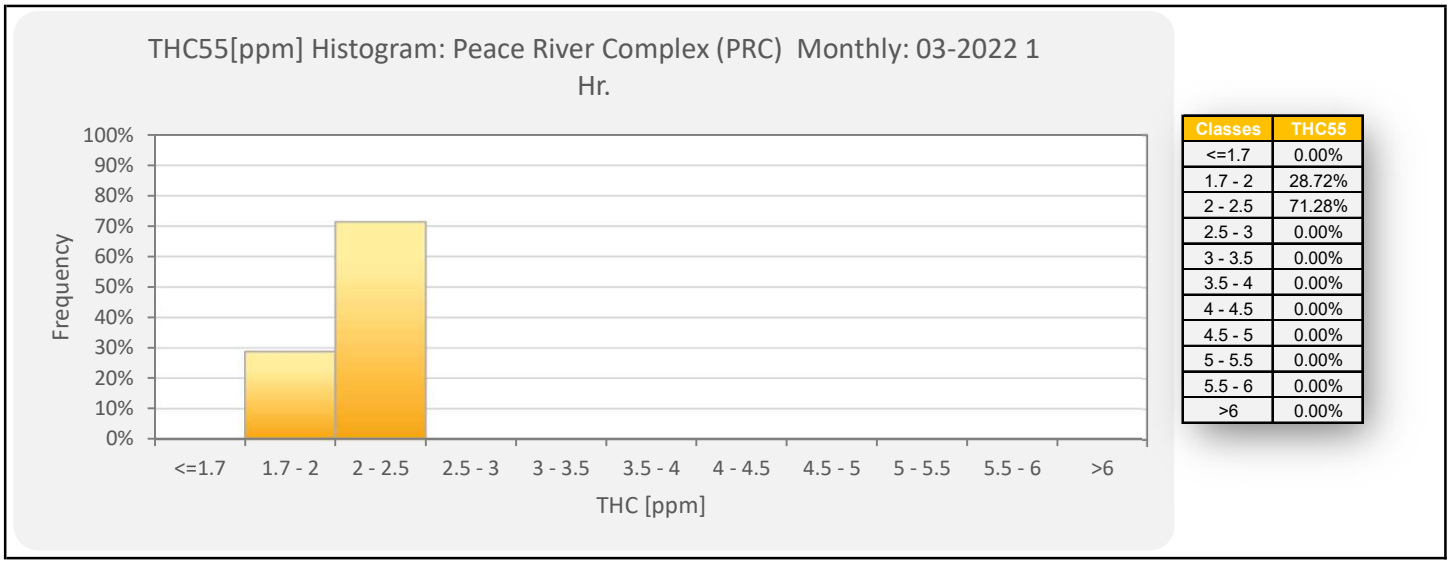
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	2.12	2.13	2.12	2.11	S	2.10	2.10	2.10	2.09	2.10	2.09	2.09	2.09	2.08	2.09	2.11	2.12	2.11	2.10	2.09	2.08	2.09	2.09	2.10	2.08	2.13	2.10
Mar 2	2.10	2.09	2.09	2.10	S	2.11	2.10	2.11	2.11	2.11	2.11	2.11	2.10	2.09	2.09	2.09	2.09	2.10	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.11	2.10
Mar 3	2.09	2.09	2.08	2.08	S	2.09	2.08	2.09	2.10	2.10	2.10	2.11	2.11	2.11	2.10	2.09	2.09	2.09	2.08	2.08	2.08	2.09	2.08	2.08	2.08	2.11	2.09
Mar 4	2.07	2.07	2.07	2.07	S	2.06	2.07	2.07	2.08	2.08	2.08	2.08	2.09	2.08	2.07	2.08	2.09	2.09	2.10	2.14	2.15	2.17	2.17	2.18	2.06	2.18	2.10
Mar 5	2.19	2.20	2.20	2.21	S	2.21	2.20	2.21	**2.22**	2.19	2.16	2.12	2.08	2.05	2.06	2.06	2.05	2.04	2.04	2.04	2.04	2.05	2.05	2.08	2.04	**2.22**	**2.12**
Mar 6	2.07	2.10	2.12	2.15	S	**2.22**	**2.22**	2.15	2.13	2.10	2.08	2.06	2.06	2.05	2.06	2.06	2.05	2.06	2.06	2.06	2.06	2.07	2.05	2.04	2.04	**2.22**	2.09
Mar 7	2.04	2.04	2.02	2.02	S	2.03	2.03	2.03	2.04	2.04	2.04	2.04	2.04	2.05	2.04	2.05	2.04	2.05	2.05	2.05	2.05	2.05	2.05	2.06	2.02	2.06	2.04
Mar 8	2.06	2.05	2.05	2.06	S	2.06	2.06	2.06	2.06	2.05	2.03	2.03	2.04	2.05	2.06	2.06	2.05	2.06	2.06	2.06	2.06	2.06	2.06	2.07	2.03	2.07	2.05
Mar 9	2.08	2.13	2.14	2.11	S	2.06	2.07	2.07	2.08	2.06	2.06	2.06	2.06	2.06	2.05	2.05	2.05	2.04	2.04	2.04	2.04	2.05	2.04	2.03	2.03	2.14	2.06
Mar 10	2.03	2.04	2.04	2.04	S	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.06	2.06	2.07	2.09	2.03	2.09	2.05
Mar 11	2.07	2.05	2.04	2.04	S	2.04	2.04	2.04	2.03	2.04	2.05	2.04	2.04	2.05	2.05	2.05	2.05	2.05	2.04	2.05	2.04	2.03	2.00	2.00	2.00	2.07	2.04
Mar 12	2.00	2.01	2.03	2.04	S	2.03	2.03	2.03	2.02	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.00	2.04	2.03
Mar 13	2.04	2.05	2.05	2.05	S	2.05	2.04	2.04	2.04	2.04	2.04	2.04	2.05	2.05	2.05	2.05	2.05	2.04	2.04	2.04	2.04	2.05	2.05	2.04	2.04	2.05	2.04
Mar 14	2.04	2.04	2.05	S	2.03	2.03	2.02	2.03	2.05	2.06	2.06	2.06	2.07	2.07	2.06	2.05	2.05	2.04	2.04	2.05	2.06	2.09	2.08	2.09	2.02	2.09	2.05
Mar 15	2.10	2.09	S	2.11	2.13	2.15	2.15	2.17	2.10	2.08	2.07	2.06	2.08	2.11	2.02	2.01	2.02	2.02	2.04	2.04	2.03	2.01	2.00	2.01	2.00	2.17	2.07
Mar 16	2.01	S	2.02	2.02	2.02	2.03	2.07	2.07	2.05	2.02	2.01	2.01	2.00	2.00	2.00	2.00	2.01	2.01	2.01	2.01	2.03	2.04	2.04	2.05	2.00	2.07	2.02
Mar 17	S	2.02	2.03	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.01	2.01	2.01	2.00	1.99	1.99	1.99	1.99	1.99	2.00	2.00	2.01	2.01	S	1.99	2.03	2.01
Mar 18	2.01	2.02	2.01	2.02	2.02	2.03	2.03	2.03	2.03	2.01	2.01	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.01	2.01	2.01	2.04	S	2.04	2.00	2.04	2.01
Mar 19	2.05	2.03	2.03	2.04	2.04	2.04	2.05	2.04	2.04	2.03	2.08	2.05	2.01	1.99	1.99	1.99	1.99	2.00	2.00	2.00	2.00	S	2.01	2.01	1.99	2.08	2.02
Mar 20	2.02	2.04	2.05	2.04	2.00	2.00	2.00	2.00	Y	2.01	2.01	2.01	2.01	X	X	X	X	X	X	X	X	X	X	X	2.00	2.05	-
Mar 21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2.07	S	2.08	2.08	2.09	2.09	2.07	2.09	-
Mar 22	2.08	2.07	2.08	2.10	2.10	2.09	2.08	2.07	2.09	C	C	C	C	1.97	1.96	1.98	1.98	1.98	S	1.98	1.98	1.95	1.95	1.94	1.94	2.10	2.02
Mar 23	1.94	1.95	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.96	1.94	1.93	1.93	1.93	1.95	1.94	1.95	S	1.94	1.94	1.93	1.92	1.92	1.94	1.92	1.97	1.95
Mar 24	1.95	1.97	1.99	1.99	1.99	1.99	2.01	1.98	1.94	1.95	1.94	1.94	1.94	1.94	1.94	1.95	S	1.98	1.98	1.99	1.99	2.00	2.00	2.00	1.94	2.01	1.97
Mar 25	2.00	2.00	2.00	2.00	2.01	2.01	2.01	2.00	2.01	2.01	2.01	2.01	2.01	2.00	2.00	S	1.96	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.95	2.01	1.99
Mar 26	1.95	1.95	1.96	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.96	1.96	S	1.99	2.00	2.00	2.00	2.00	2.00	2.00	2.02	2.01	1.95	2.02	1.98
Mar 27	2.00	2.00	2.01	2.01	2.01	2.01	2.01	2.00	2.01	2.02	2.03	2.01	1.98	S	1.96	1.96	1.96	1.96	1.96	1.97	1.97	1.97	1.98	1.99	1.96	2.03	1.99
Mar 28	2.02	2.02	K	K	K	K	K	1.97	NRM	NRM	1.98	1.98	S	1.92	1.92	1.92	1.94	1.93	1.91	1.92	1.93	1.93	1.94	1.95	**1.91**	2.02	-
Mar 29	1.97	1.99	2.01	2.00	1.99	1.98	1.98	1.98	1.99	1.99	1.94	S	1.94	1.93	1.94	1.94	1.94	1.95	1.95	1.95	1.96	1.96	1.96	1.96	1.93	2.01	1.97
Mar 30	1.97	1.97	1.98	1.98	1.99	1.99	1.99	2.02	2.01	1.99	S	1.92	1.93	1.93	1.94	1.92	1.93	1.92	1.92	1.92	1.94	1.93	1.92	1.91	**1.91**	2.02	1.95
Mar 31	1.91	1.91	1.92	1.92	1.94	1.95	1.95	1.94	1.93	S	1.93	1.93	1.93	1.92	1.92	1.93	1.93	1.93	1.92	1.92	1.94	1.95	1.95	1.95	**1.91**	1.95	1.93
Diurnal Maximum	2.19	2.20	2.20	2.21	2.13	2.22	2.22	2.21	2.22	2.19	2.16	2.12	2.11	2.11	2.10	2.11	2.12	2.11	2.10	2.14	2.15	2.17	2.17	2.18			
Diurnal Average	2.03	2.04	2.04	2.04	2.01	2.05	2.05	2.04	2.05	2.04	2.03	2.03	2.02	2.02	2.01	2.01	2.02	2.02	2.02	2.02	2.02	2.03	2.02	2.03			

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

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

Timeseries Chart of Hourly Average for THC - Peace River Complex Station

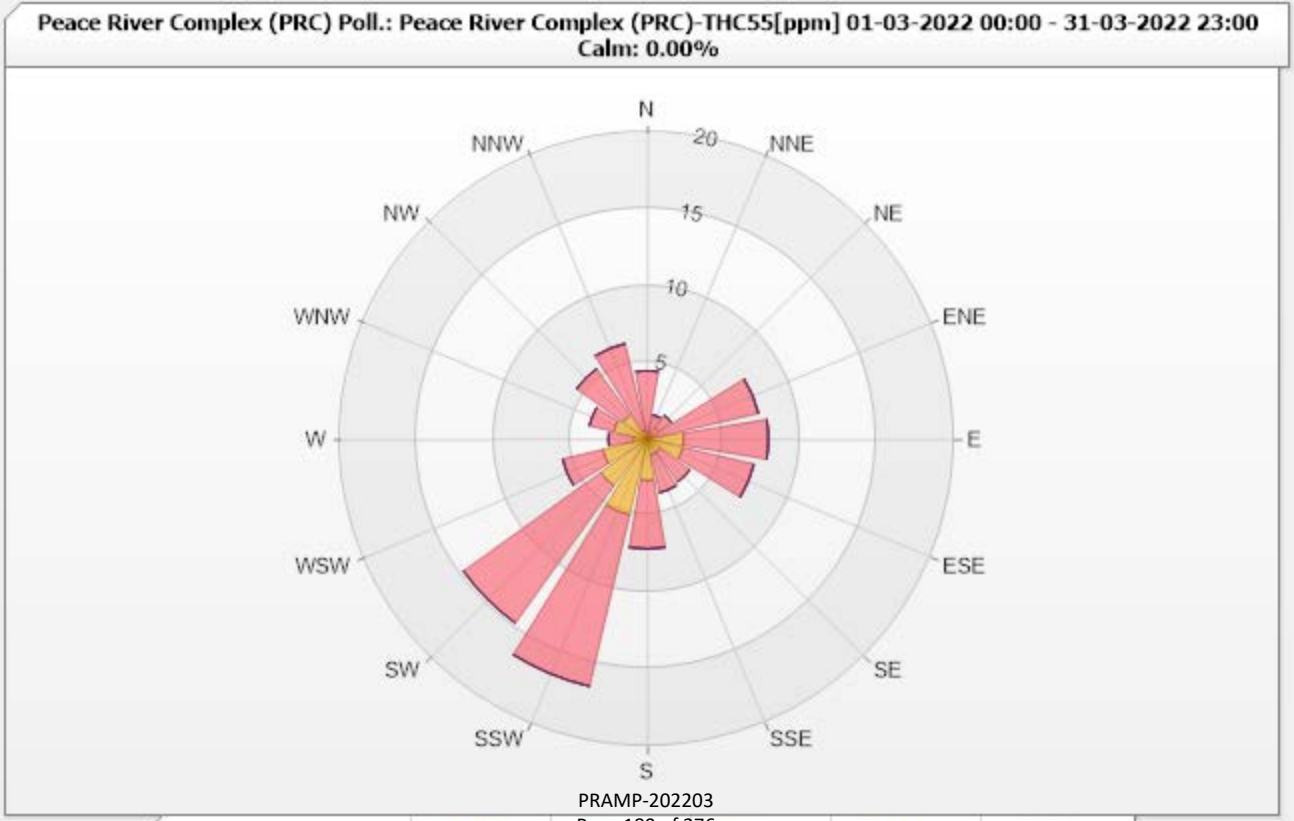




Classes	THC55
<=1.7	0.00%
1.7 - 2	28.72%
2 - 2.5	71.28%
2.5 - 3	0.00%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: Peace River Complex (PRC) Poll.: Peace River Complex (PRC)-THC55[ppm] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 90.32% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	0.45	4.02	0	0	0	4.47
NNE	0.15	1.49	0	0	0	1.64
NE	0.89	1.04	0	0	0	1.93
ENE	0.3	7.14	0	0	0	7.44
E	2.38	5.51	0	0	0	7.89
ESE	2.38	4.76	0	0	0	7.14
SE	1.04	2.38	0	0	0	3.42
SSE	1.04	2.53	0	0	0	3.57
S	2.68	4.46	0	0	0	7.14
SSW	5.06	11.46	0	0	0	16.52
SW	3.72	11.01	0	0	0	14.73
WSW	2.98	2.68	0	0	0	5.66
W	0.89	1.64	0	0	0	2.53
WNW	2.23	1.64	0	0	0	3.87
NW	1.93	3.72	0	0	0	5.65
NNW	0.6	5.8	0	0	0	6.4
Summary	28.72	71.28	0	0	0	100


Peace River Complex (PRC) Poll.: Peace River Complex (PRC)-THC55[ppm] 01-03-2022 00:00 - 31-03-2022 23:00
Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppm)
29 0-2
71 2-5
0 5-10
0 10-40
0 >40.0

peace river area monitoring program
pramp

PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex Station - March 2022

Summary of Hourly Averages

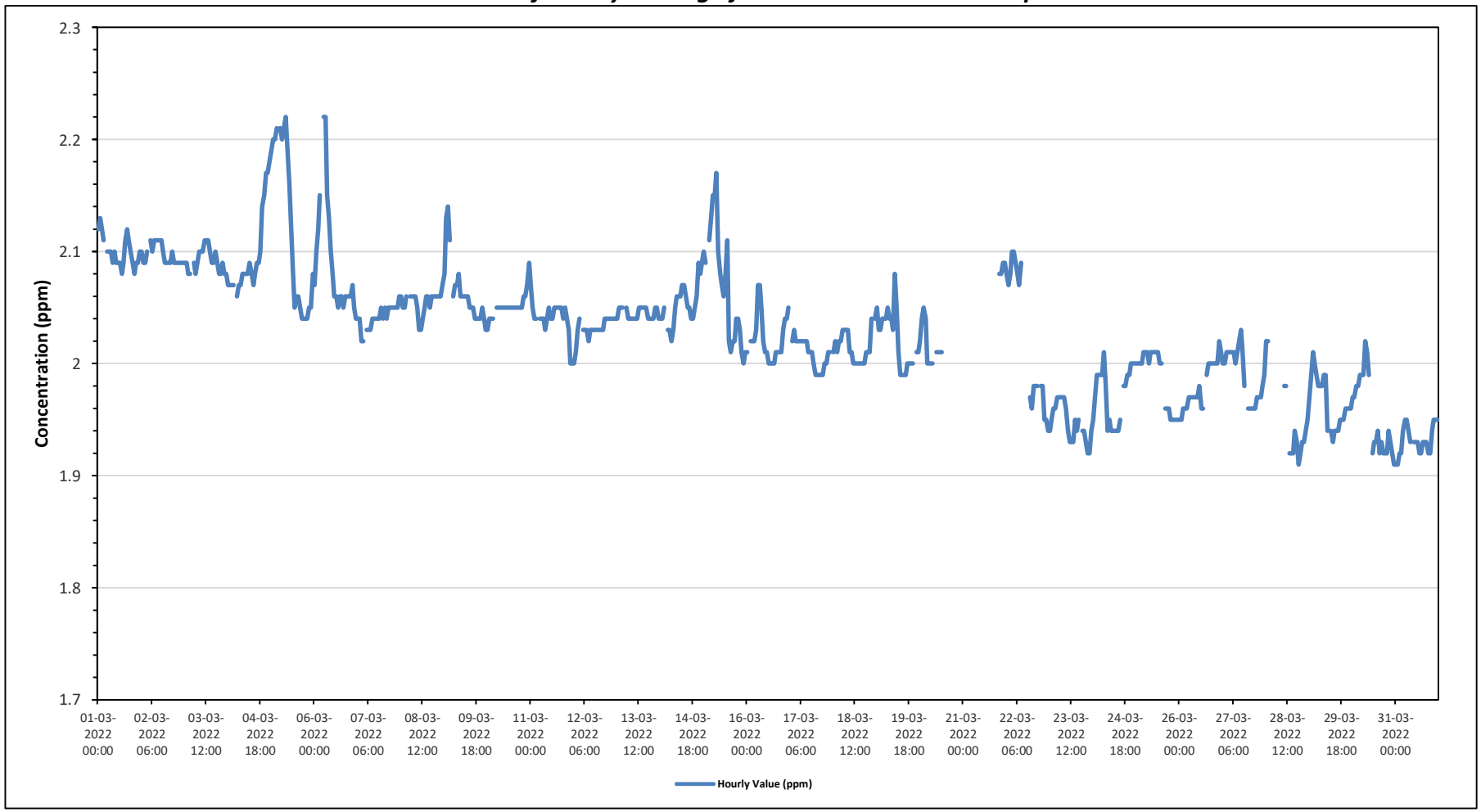
METHANE (CH4) in ppm

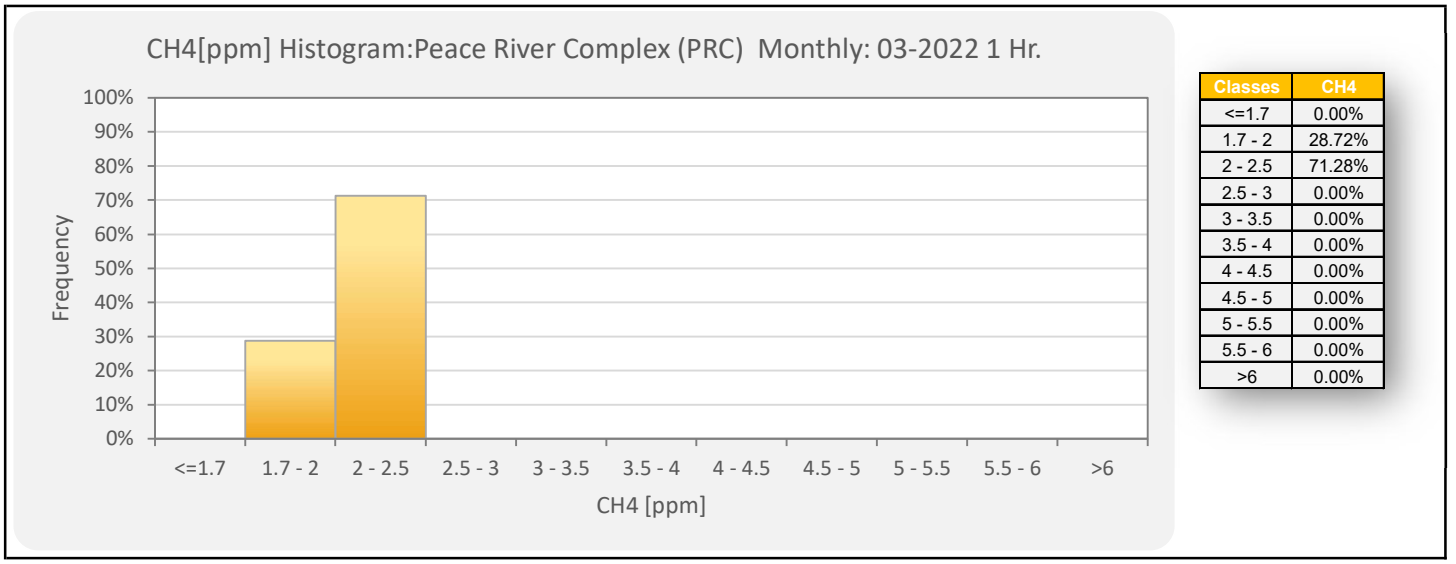
Maximum Hourly Value:	2.22	ppm	on March 5 at hour 8	Hours in Service:	744
Maximum Daily Value:	2.12	ppm	on March 5	Hours of Data:	672
Minimum Hourly Value:	1.91	ppm	on March 28 at hour 18	Hours of Missing Data:	37
Minimum Daily Value:	1.93	ppm	on March 31	Hours of Calibration:	35
Monthly Average:	2.03	ppm		Operational Uptime:	95.0

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	2.12	2.13	2.12	2.11	S	2.10	2.10	2.10	2.09	2.10	2.09	2.09	2.09	2.08	2.09	2.11	2.12	2.11	2.10	2.09	2.08	2.09	2.09	2.10	2.08	2.13	2.10
Mar 2	2.10	2.09	2.09	2.10	S	2.11	2.10	2.11	2.11	2.11	2.11	2.11	2.10	2.09	2.09	2.09	2.09	2.10	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.11	2.10
Mar 3	2.09	2.09	2.08	2.08	S	2.09	2.08	2.09	2.10	2.10	2.10	2.11	2.11	2.11	2.10	2.09	2.09	2.09	2.08	2.08	2.08	2.09	2.08	2.08	2.08	2.11	2.09
Mar 4	2.07	2.07	2.07	2.07	S	2.06	2.07	2.07	2.08	2.08	2.08	2.08	2.09	2.08	2.07	2.08	2.09	2.09	2.10	2.14	2.15	2.17	2.17	2.18	2.06	2.18	2.10
Mar 5	2.19	2.20	2.20	2.21	S	2.21	2.20	2.21	**2.22**	2.19	2.16	2.12	2.08	2.05	2.06	2.06	2.05	2.04	2.04	2.04	2.04	2.05	2.05	2.08	2.04	**2.22**	**2.12**
Mar 6	2.07	2.10	2.12	2.15	S	**2.22**	**2.22**	2.15	2.13	2.10	2.08	2.06	2.06	2.05	2.06	2.06	2.05	2.06	2.06	2.06	2.06	2.07	2.05	2.04	2.04	**2.22**	2.09
Mar 7	2.04	2.04	2.02	2.02	S	2.03	2.03	2.03	2.04	2.04	2.04	2.04	2.04	2.05	2.04	2.05	2.04	2.05	2.05	2.05	2.05	2.05	2.05	2.06	2.02	2.06	2.04
Mar 8	2.06	2.05	2.05	2.06	S	2.06	2.06	2.06	2.06	2.05	2.03	2.03	2.04	2.05	2.06	2.06	2.05	2.06	2.06	2.06	2.06	2.06	2.06	2.07	2.03	2.07	2.05
Mar 9	2.08	2.13	2.14	2.11	S	2.06	2.07	2.07	2.08	2.06	2.06	2.06	2.06	2.06	2.05	2.05	2.05	2.04	2.04	2.04	2.04	2.05	2.04	2.03	2.03	2.14	2.06
Mar 10	2.03	2.04	2.04	2.04	S	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.06	2.06	2.07	2.09	2.03	2.09	2.05
Mar 11	2.07	2.05	2.04	2.04	S	2.04	2.04	2.04	2.03	2.04	2.05	2.04	2.04	2.05	2.05	2.05	2.05	2.05	2.04	2.05	2.04	2.03	2.00	2.00	2.00	2.07	2.04
Mar 12	2.00	2.01	2.03	2.04	S	2.03	2.03	2.03	2.02	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.00	2.04	2.03
Mar 13	2.04	2.05	2.05	2.05	S	2.05	2.04	2.04	2.04	2.04	2.04	2.04	2.05	2.05	2.05	2.05	2.05	2.04	2.04	2.04	2.04	2.05	2.05	2.04	2.04	2.05	2.04
Mar 14	2.04	2.04	2.05	S	2.03	2.03	2.02	2.03	2.05	2.06	2.06	2.06	2.07	2.07	2.06	2.05	2.05	2.04	2.04	2.05	2.06	2.09	2.08	2.09	2.02	2.09	2.05
Mar 15	2.10	2.09	S	2.11	2.13	2.15	2.15	2.17	2.10	2.08	2.07	2.06	2.08	2.11	2.02	2.01	2.02	2.02	2.04	2.04	2.03	2.01	2.00	2.01	2.00	2.17	2.07
Mar 16	2.01	S	2.02	2.02	2.02	2.03	2.07	2.07	2.05	2.02	2.01	2.01	2.00	2.00	2.00	2.00	2.01	2.01	2.01	2.01	2.03	2.04	2.04	2.05	2.00	2.07	2.02
Mar 17	S	2.02	2.03	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.01	2.01	2.01	2.00	1.99	1.99	1.99	1.99	1.99	2.00	2.00	2.01	2.01	S	1.99	2.03	2.01
Mar 18	2.01	2.02	2.01	2.02	2.02	2.03	2.03	2.03	2.03	2.01	2.01	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.01	2.01	2.01	2.04	S	2.00	2.04	2.01
Mar 19	2.05	2.03	2.03	2.04	2.04	2.04	2.05	2.04	2.04	2.03	2.08	2.05	2.01	1.99	1.99	1.99	1.99	2.00	2.00	2.00	2.00	S	2.01	2.01	1.99	2.08	2.02
Mar 20	2.02	2.04	2.05	2.04	2.00	2.00	2.00	2.00	Y	2.01	2.01	2.01	2.01	X	X	X	X	X	X	X	X	X	X	X	2.00	2.05	-
Mar 21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2.07	S	2.08	2.08	2.09	2.09	2.07	2.09	-
Mar 22	2.08	2.07	2.08	2.10	2.10	2.09	2.08	2.07	2.09	C	C	C	C	1.97	1.96	1.98	1.98	1.98	S	1.98	1.98	1.95	1.95	1.94	1.94	2.10	2.02
Mar 23	1.94	1.95	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.96	1.94	1.93	1.93	1.93	1.95	1.94	1.95	S	1.94	1.94	1.93	1.92	1.92	1.94	1.92	1.97	1.95
Mar 24	1.95	1.97	1.99	1.99	1.99	1.99	2.01	1.98	1.94	1.95	1.94	1.94	1.94	1.94	1.94	1.95	S	1.98	1.98	1.99	1.99	2.00	2.00	2.00	1.94	2.01	1.97
Mar 25	2.00	2.00	2.00	2.00	2.01	2.01	2.01	2.00	2.01	2.01	2.01	2.01	2.01	2.00	2.00	S	1.96	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.95	2.01	1.99
Mar 26	1.95	1.95	1.96	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.96	1.96	S	1.99	2.00	2.00	2.00	2.00	2.00	2.00	2.02	2.01	1.95	2.02	1.98
Mar 27	2.00	2.00	2.01	2.01	2.01	2.01	2.01	2.00	2.01	2.02	2.03	2.01	1.98	S	1.96	1.96	1.96	1.96	1.96	1.97	1.97	1.97	1.98	1.99	1.96	2.03	1.99
Mar 28	2.02	2.02	K	K	K	K	K	1.97	NRM	NRM	1.98	1.98	S	1.92	1.92	1.92	1.94	1.93	1.91	1.92	1.93	1.93	1.94	1.95	**1.91**	2.02	-
Mar 29	1.97	1.99	2.01	2.00	1.99	1.98	1.98	1.98	1.99	1.99	1.94	S	1.94	1.93	1.94	1.94	1.94	1.95	1.95	1.95	1.96	1.96	1.96	1.96	1.93	2.01	1.97
Mar 30	1.97	1.97	1.98	1.98	1.99	1.99	1.99	2.02	2.01	1.99	S	1.92	1.93	1.93	1.94	1.92	1.93	1.92	1.92	1.92	1.94	1.93	1.92	1.91	**1.91**	2.02	1.95
Mar 31	1.91	1.91	1.92	1.92	1.94	1.95	1.95	1.94	1.93	S	1.93	1.93	1.93	1.92	1.92	1.93	1.93	1.93	1.92	1.92	1.94	1.95	1.95	1.95	**1.91**	1.95	1.93
Diurnal Maximum	2.19	2.20	2.20	2.21	2.13	2.22	2.22	2.21	2.22	2.19	2.16	2.12	2.11	2.11	2.10	2.11	2.12	2.11	2.10	2.14	2.15	2.17	2.17	2.18			
Diurnal Average	2.03	2.04	2.04	2.04	2.01	2.05	2.05	2.04	2.05	2.04	2.03	2.03	2.02	2.02	2.01	2.01	2.02	2.02	2.02	2.02	2.02	2.03	2.02	2.03			

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

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


Timeseries Chart of Hourly Average for CH4 - Peace River Complex Station
Concentration (ppm)
2.3
2.2
2.1
2
1.9
1.8
1.7
01-03-2022 00:00
02-03-2022 06:00
03-03-2022 12:00
04-03-2022 18:00
06-03-2022 00:00
07-03-2022 06:00
08-03-2022 12:00
09-03-2022 18:00
11-03-2022 00:00
12-03-2022 06:00
13-03-2022 12:00
14-03-2022 18:00
16-03-2022 00:00
17-03-2022 06:00
18-03-2022 12:00
19-03-2022 18:00
21-03-2022 00:00
22-03-2022 06:00
23-03-2022 12:00
24-03-2022 18:00
26-03-2022 00:00
27-03-2022 06:00
28-03-2022 12:00
29-03-2022 18:00
31-03-2022 00:00
Hourly Value (ppm)

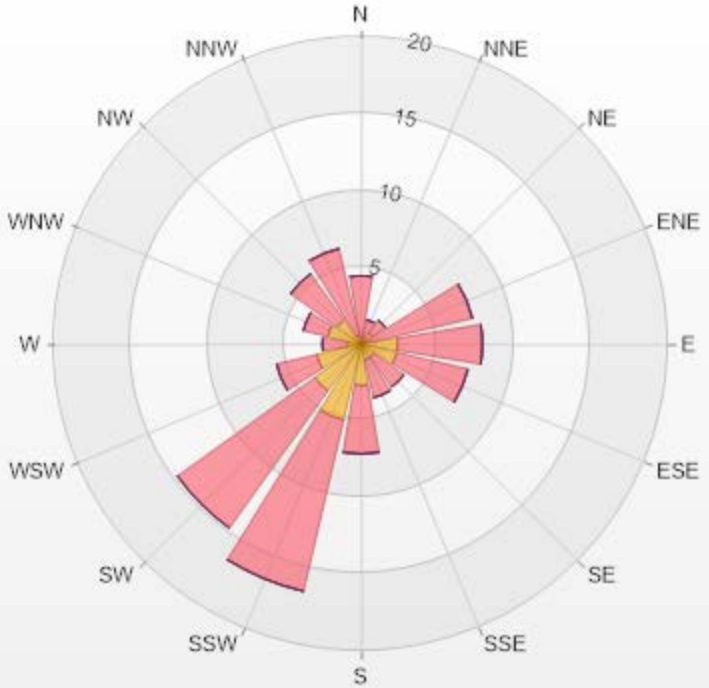


Classes	CH4
<=1.7	0.00%
1.7 - 2	28.72%
2 - 2.5	71.28%
2.5 - 3	0.00%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: Peace River Complex (PRC) Poll.: Peace River Complex (PRC)-CH4[ppm] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 90.32% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	0.45	4.02	0	0	0	4.47
NNE	0.15	1.49	0	0	0	1.64
NE	0.89	1.04	0	0	0	1.93
ENE	0.3	7.14	0	0	0	7.44
E	2.38	5.51	0	0	0	7.89
ESE	2.38	4.76	0	0	0	7.14
SE	1.04	2.38	0	0	0	3.42
SSE	1.04	2.53	0	0	0	3.57
S	2.68	4.46	0	0	0	7.14
SSW	5.06	11.46	0	0	0	16.52
SW	3.72	11.01	0	0	0	14.73
WSW	2.98	2.68	0	0	0	5.66
W	0.89	1.64	0	0	0	2.53
WNW	2.23	1.64	0	0	0	3.87
NW	1.93	3.72	0	0	0	5.65
NNW	0.6	5.8	0	0	0	6.4
Summary	28.72	71.28	0	0	0	100

Peace River Complex (PRC) Poll.: Peace River Complex (PRC)-CH4[ppm] 01-03-2022 00:00 - 31-03-2022 23:00
Calm: 0.00%



% Icon Classes (ppm)	29 0-2	71 2-5	0 5-10	0 10-20	0 >20.0

peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex Station - March 2022

Summary of Hourly Averages

NON-METHANE HYDROCARBONS (NMHC) in ppm

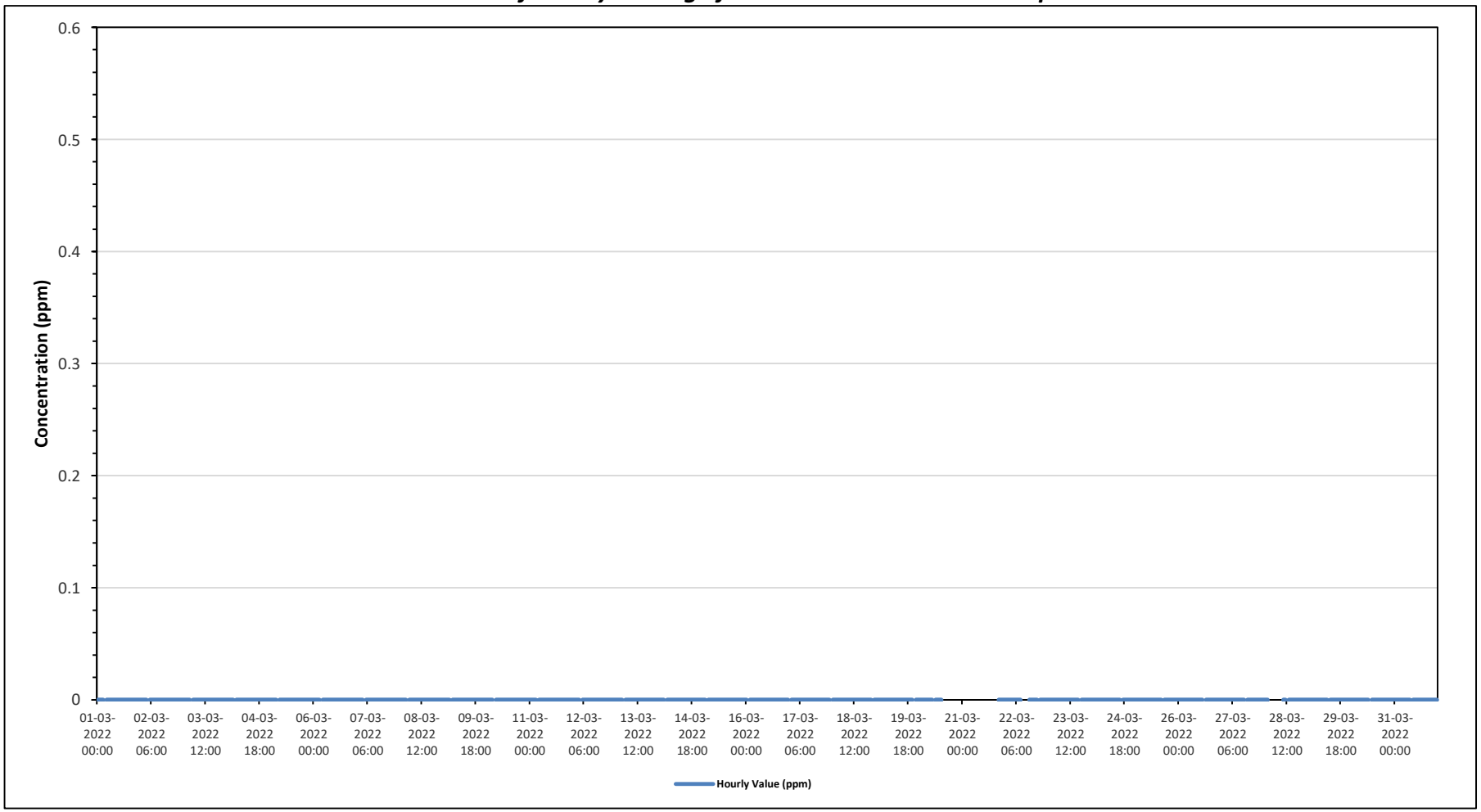
Maximum Hourly Value:	0.00	ppm	on March 1 at hour 0	Hours in Service:	744
Maximum Daily Value:	0.00	ppm	on March 1	Hours of Data:	672
Minimum Hourly Value:	0.00	ppm	on March 1 at hour 0	Hours of Missing Data:	37
Minimum Daily Value:	0.00	ppm	on March 1	Hours of Calibration:	35
Monthly Average:	0.00	ppm		Operational Uptime:	95.0

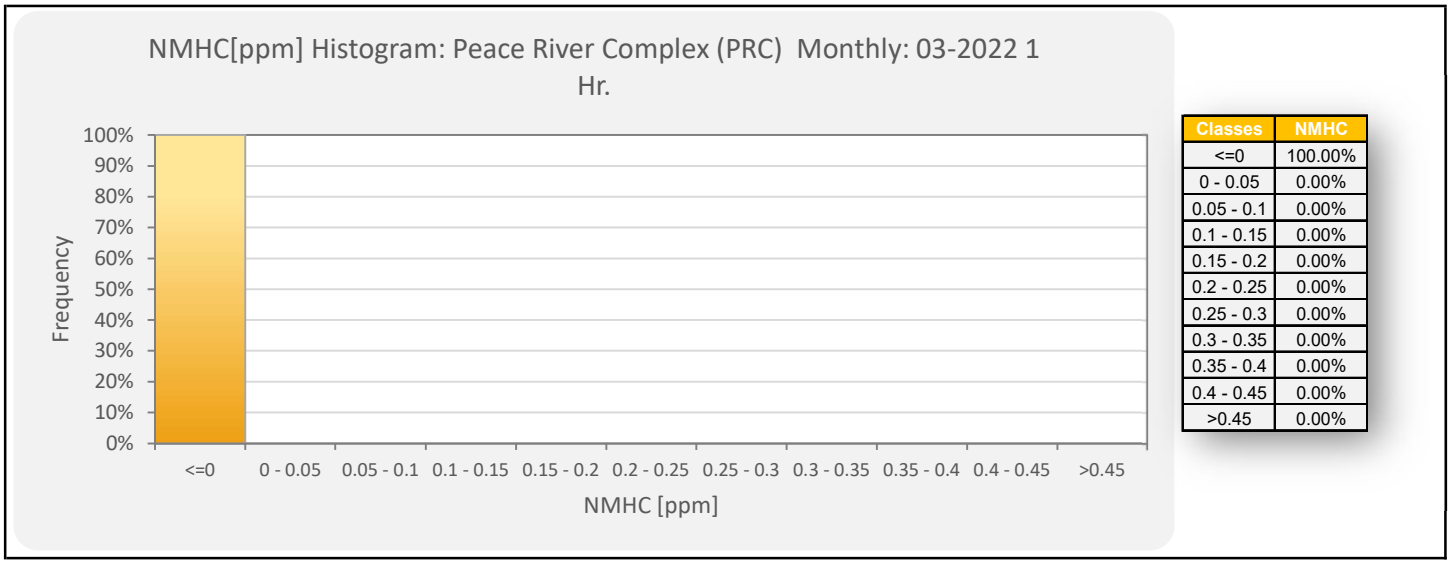
Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00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

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	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 - Peace River Complex Station

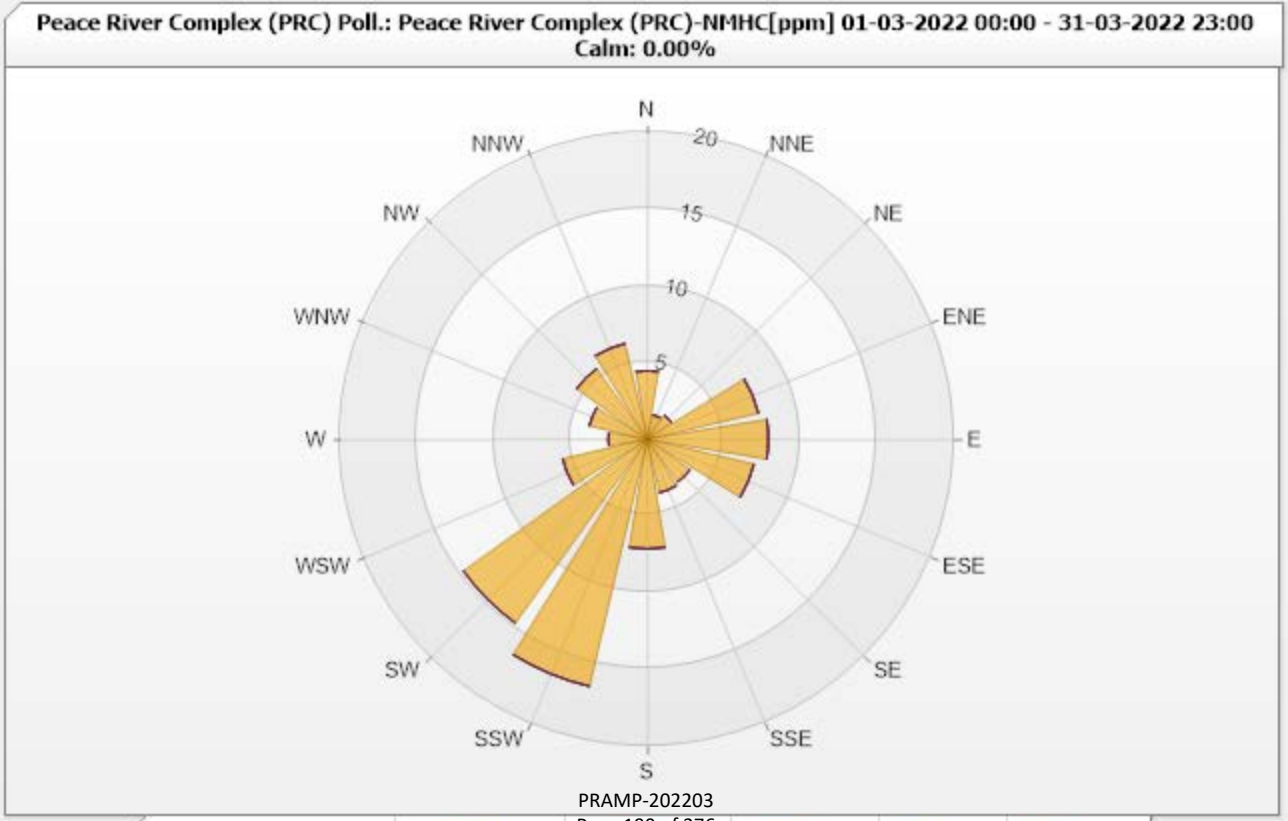




Classes	NMHC
<=0	100.00%
0 - 0.05	0.00%
0.05 - 0.1	0.00%
0.1 - 0.15	0.00%
0.15 - 0.2	0.00%
0.2 - 0.25	0.00%
0.25 - 0.3	0.00%
0.3 - 0.35	0.00%
0.35 - 0.4	0.00%
0.4 - 0.45	0.00%
>0.45	0.00%

Wind: Peace River Complex (PRC) Poll.: Peace River Complex (PRC)-NMHC[ppm] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 90.32% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	4.46	0	0	0	0	4.46
NNE	1.64	0	0	0	0	1.64
NE	1.93	0	0	0	0	1.93
ENE	7.44	0	0	0	0	7.44
E	7.89	0	0	0	0	7.89
ESE	7.14	0	0	0	0	7.14
SE	3.42	0	0	0	0	3.42
SSE	3.57	0	0	0	0	3.57
S	7.14	0	0	0	0	7.14
SSW	16.52	0	0	0	0	16.52
SW	14.73	0	0	0	0	14.73
WSW	5.65	0	0	0	0	5.65
W	2.53	0	0	0	0	2.53
WNW	3.87	0	0	0	0	3.87
NW	5.65	0	0	0	0	5.65
NNW	6.4	0	0	0	0	6.4
Summary	100	0	0	0	0	100


Peace River Complex (PRC) Poll.: Peace River Complex (PRC)-NMHC[ppm] 01-03-2022 00:00 - 31-03-2022 23:00
Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppm)
100 0-0.1
0 0.1-0.3
0 0.3-1
0 1-2
0 >2.0

peace river area monitoring program
pramp

PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex Station - March 2022

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

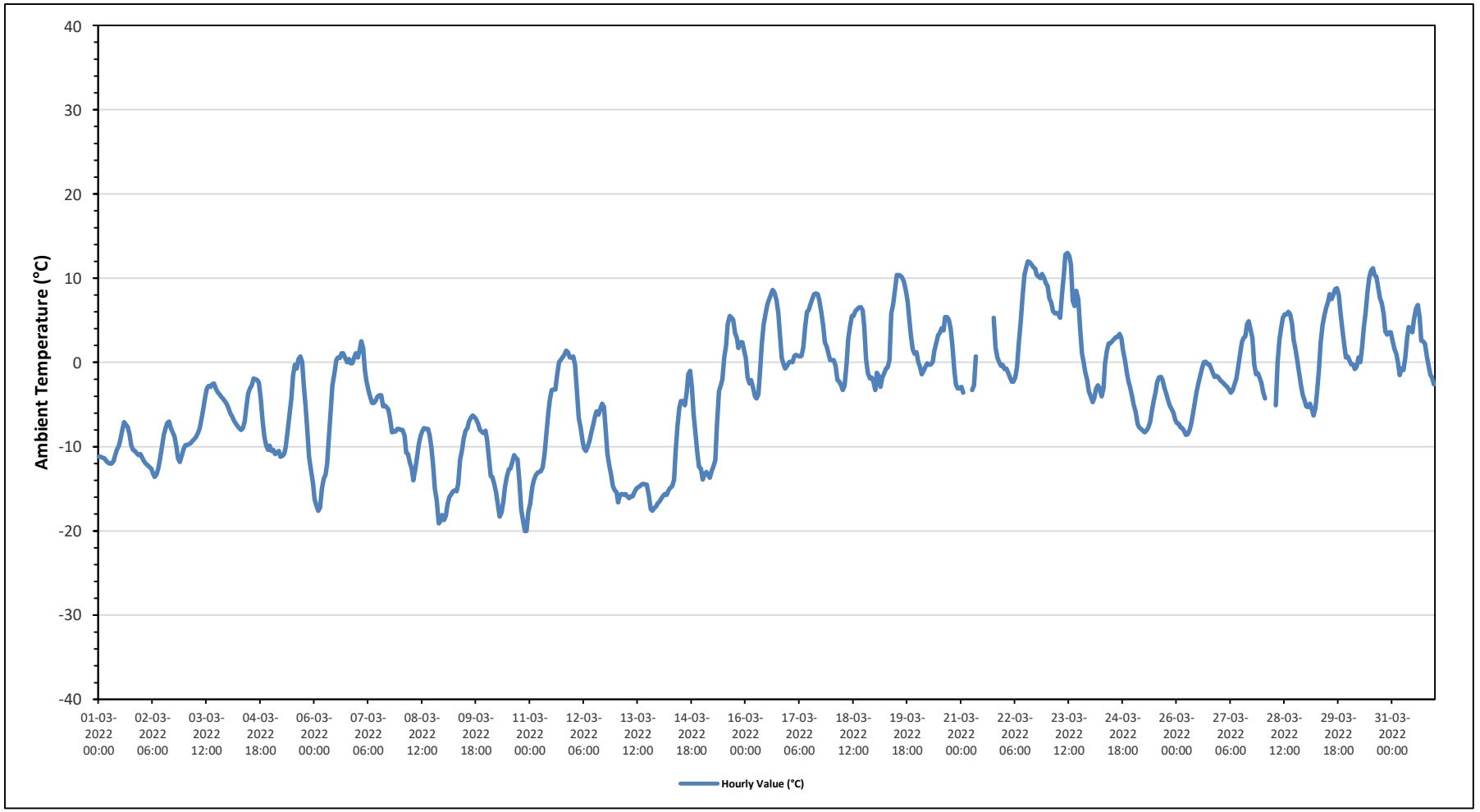
Maximum Hourly Value:	13.0	°C	on March 23 at hour 11	Hours in Service:	744
Maximum Daily Value:	6.2	°C	on March 23	Hours of Data:	726
Minimum Hourly Value:	-20.0	°C	on March 10 at hour 21	Hours of Missing Data:	18
Minimum Daily Value:	-15.8	°C	on March 13	Hours of Calibration:	0
Monthly Average:	-3.5	°C		Operational Uptime:	97.6

Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	-11.2	-11.2	-11.3	-11.4	-11.7	-11.9	-12	-12	-11.7	-11	-10.3	-9.9	-9.1	-8	-7.1	-7.4	-7.7	-8.6	-9.8	-10.4	-10.5	-10.8	-11	-10.9	-12.0	-7.1	-10.3
Mar 2	-11.3	-11.7	-12	-12.2	-12.4	-12.6	-13.2	-13.6	-13.3	-12.6	-11.4	-10	-8.6	-7.8	-7.2	-7	-7.8	-8.3	-8.8	-10	-11.4	-11.8	-11.1	-10.3	-13.6	-7.0	-10.7
Mar 3	-9.8	-9.8	-9.7	-9.6	-9.3	-9.1	-8.8	-8.4	-7.8	-6.8	-5.6	-4.2	-3.1	-2.8	-2.9	-2.6	-2.5	-3.1	-3.5	-3.8	-4.1	-4.3	-4.6	-4.9	-9.8	-2.5	-5.9
Mar 4	-5.4	-6	-6.4	-6.9	-7.2	-7.5	-7.8	-8	-7.8	-7	-5.4	-3.7	-3.1	-2.7	-1.9	-2	-2.1	-2.4	-4.2	-6.9	-8.8	-9.9	-10.4	-9.9	-10.4	-1.9	-6.0
Mar 5	-10.5	-10.4	-10.9	-10.7	-10.5	-11.2	-11.1	-10.9	-10.1	-8	-6.1	-4.2	-1.6	-0.3	-0.7	0.4	0.7	0	-2.7	-5.2	-8.3	-11.2	-12.9	-14.3	-14.3	0.7	-7.1
Mar 6	-16.2	-17	-17.6	-17.2	-15	-13.8	-13.3	-12	-8.7	-5.5	-2.7	-1.2	0.3	0.6	0.5	1.1	1.1	0.5	0	0.4	-0.1	-0.1	0.6	1.1	-17.6	1.1	-5.6
Mar 7	0.6	1.5	2.5	1.7	-1	-2.3	-3.4	-4.2	-4.8	-4.8	-4.5	-4.1	-3.9	-3.9	-5.2	-5.1	-5.3	-5.6	-6.6	-8.3	-8.2	-8.2	-7.9	-7.9	-8.3	2.5	-4.1
Mar 8	-8	-8	-8.7	-10.7	-10.9	-11.9	-12.6	-14	-12.6	-11.1	-9.7	-8.7	-8.1	-7.8	-7.9	-7.9	-8.6	-10.1	-12.4	-15	-16.3	-19.1	-18.8	-18.1	-19.1	-7.8	-11.5
Mar 9	-18.7	-18.2	-16.9	-16	-15.6	-15.3	-15.2	-15.3	-14.4	-11.6	-10.3	-9	-8.1	-7.8	-7	-6.6	-6.3	-6.5	-6.8	-7.3	-8	-8.2	-8.4	-8.1	-18.7	-6.3	-11.1
Mar 10	-9.2	-11.4	-13.5	-13.6	-14.4	-15.4	-16.9	-18.3	-17.8	-16.5	-14.8	-13.6	-12.7	-12.6	-11.8	-11	-11.3	-11.5	-14.2	-17.5	-18.8	**-20**	**-20**	-17.7	**-20.0**	-9.2	-14.8
Mar 11	-16.8	-14.8	-14	-13.4	-13.1	-13	-12.9	-12.4	-10.8	-8.4	-6	-4.4	-3.3	-3.2	-3.2	-1.4	0	0.3	0.6	0.9	1.4	1.2	0.6	0.6	-16.8	1.4	-6.1
Mar 12	0.7	-0.3	-3.4	-6.6	-7.7	-9.2	-10.2	-10.5	-10	-9.3	-8.3	-7.4	-6.4	-5.8	-6.2	-5.5	-4.9	-5.3	-8.2	-10.8	-12.2	-13.3	-14.7	-15.2	-15.2	0.7	-7.9
Mar 13	-15.4	-16.6	-15.7	-15.6	-15.7	-15.6	-15.9	-16.1	-15.9	-15.9	-15.4	-15	-14.8	-14.7	-14.5	-14.4	-14.5	-14.5	-15.8	-17.4	-17.6	-17.3	-17.1	-16.7	-17.6	-14.4	-15.8
Mar 14	-16.5	-16.1	-15.8	-15.6	-15.7	-15.2	-14.9	-14.7	-13.9	-10.5	-7.5	-5.4	-4.6	-4.6	-5.1	-3.6	-1.4	-1	-3	-6	-8.6	-10.9	-12.4	-12.6	-16.5	-1.0	-9.8
Mar 15	-13.9	-13.3	-13	-13.4	-13.7	-12.9	-12.3	-11.6	-7.5	-3.4	-2.7	-2	0.6	2	4.5	5.5	5.3	5.1	3.5	2.9	1.7	2.4	2.4	1.5	-13.9	5.5	-3.4
Mar 16	0.5	-1.8	-2.5	-2.1	-3	-4	-4.3	-3.8	-0.7	2.2	4.5	5.9	6.9	7.5	8.1	8.6	8.3	7.4	5.8	3.3	0.5	-0.2	-0.7	-0.4	-4.3	8.6	1.9
Mar 17	0	0.1	0	0.8	0.9	0.8	0.7	0.8	1.8	4.2	6	6.2	6.9	7.6	8.1	8.2	8.1	7.4	6.1	4.3	2.4	1.9	1	0.3	0.0	8.2	3.5
Mar 18	0.3	0.3	-0.4	-2.1	-2.3	-2.7	-3.3	-2.8	-0.1	2.8	4.3	5.5	5.5	6.1	6.3	6.5	6.6	6.2	4.3	0.4	-1.3	-1.9	-1.8	-2.3	-3.3	6.6	1.4
Mar 19	-3.3	-1.2	-1.6	-2.9	-1.8	-1.3	-0.7	-0.6	0.3	5.8	6.9	8.6	10.4	10.4	10.3	10.1	9.6	8.6	7.3	5	3.1	1.5	1	1.2	-3.3	10.4	3.6
Mar 20	0	-0.6	-1.4	-1	-0.5	-0.1	-0.3	-0.2	0.1	1.4	2.3	3.2	3.5	4.1	3.8	5.4	5.4	5.1	4	1.9	-0.9	-2.6	-3.1	-3.1	-3.1	5.4	1.1
Mar 21	-2.9	-3.6	K	K	K	K	-3.3	-2.7	0.7	K	K	K	K	K	K	K	K	K	5.3	1.8	0.6	0	-0.4	-0.3	-3.6	5.3	-
Mar 22	-0.8	-0.7	-1.2	-1.8	-2.3	-2.3	-1.8	-0.5	2.1	4.9	7.9	10.4	11.2	12	11.9	11.6	11.3	11.1	10.4	10.2	10	10.5	10	9.4	-2.3	12.0	6.0
Mar 23	9.1	7.6	7.1	6.1	5.8	5.9	5.7	5.3	8.1	10.4	12.8	**13**	12.6	11.6	7.3	6.7	8.5	7.5	4.1	1.1	0.1	-1.2	-2.1	-3.4	-3.4	**13.0**	**6.2**
Mar 24	-4.1	-4.7	-4.2	-3.1	-2.7	-3.1	-4	-3.1	-0.1	1.4	2.3	2.3	2.5	2.8	3	3	3.4	2.9	1.5	0.2	-1.2	-2.2	-3	-4	-4.7	3.4	-0.6
Mar 25	-5	-5.8	-7.3	-7.7	-7.9	-8.1	-8.3	-8.1	-7.7	-7	-5.8	-4.6	-3.6	-2.4	-1.8	-1.7	-2.1	-3	-3.7	-4.4	-5.1	-5.6	-6	-6.8	-8.3	-1.7	-5.4
Mar 26	-7.2	-7.3	-7.7	-7.8	-8.2	-8.6	-8.5	-8	-7.3	-6	-4.5	-3.4	-2.4	-1.5	-0.7	0	0.1	-0.2	-0.2	-0.7	-1.3	-1.7	-1.6	-1.8	-8.6	0.1	-4.0
Mar 27	-2.1	-2.3	-2.5	-2.7	-2.9	-3.2	-3.6	-3.3	-2.6	-1.9	-0.7	0.8	2.4	2.9	3.1	4.6	4.9	3.9	2.9	-0.2	-1.4	-1.3	-1.8	-2.4	-3.6	4.9	-0.4
Mar 28	-3.5	-4.3	K	K	K	K	K	-5.1	0	2.7	4.2	5.3	5.7	5.7	6	5.7	4.6	2.7	1.6	0.2	-1.3	-2.7	-3.9	-4.5	-5.1	6.0	1.0
Mar 29	-5.2	-5.3	-4.9	-5.5	-6.3	-5.4	-3.6	-1	2.4	4.4	5.6	6.5	7.2	8.1	7.5	8	8.7	8.8	8	6	4.1	2.3	0.6	0.7	-6.3	8.8	2.2
Mar 30	0.2	-0.2	-0.2	-0.8	-0.5	0.6	0	1.9	4.1	5.9	8.3	10.1	10.9	11.2	10.4	10.2	8.9	7.6	7	5.7	3.7	3.3	3.6	3.6	-0.8	11.2	4.8
Mar 31	2.5	1.6	1	0	-1.5	-0.7	-0.9	0.5	2.9	4.2	3.9	3.6	5.1	6.4	6.8	5.3	2.6	2.5	2.2	0.8	-0.4	-1.5	-1.8	-2.6	-2.6	6.8	1.8
Diurnal Maximum	9.1	7.6	7.1	6.1	5.8	5.9	5.7	5.3	8.1	10.4	12.8	13.0	12.6	12.0	11.9	11.6	11.3	11.1	10.4	10.2	10.0	10.5	10.0	9.4			
Diurnal Average	-5.9	-6.2	-6.6	-7.0	-7.1	-7.2	-7.2	-6.9	-5.3	-3.6	-2.1	-1.0	-0.1	0.4	0.5	0.8	0.8	0.3	-0.8	-2.5	-3.8	-4.6	-5.0	-5.2			

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

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

Timeseries Chart of Hourly Average for AT - Peace River Complex Station



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PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex Station - March 2022

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

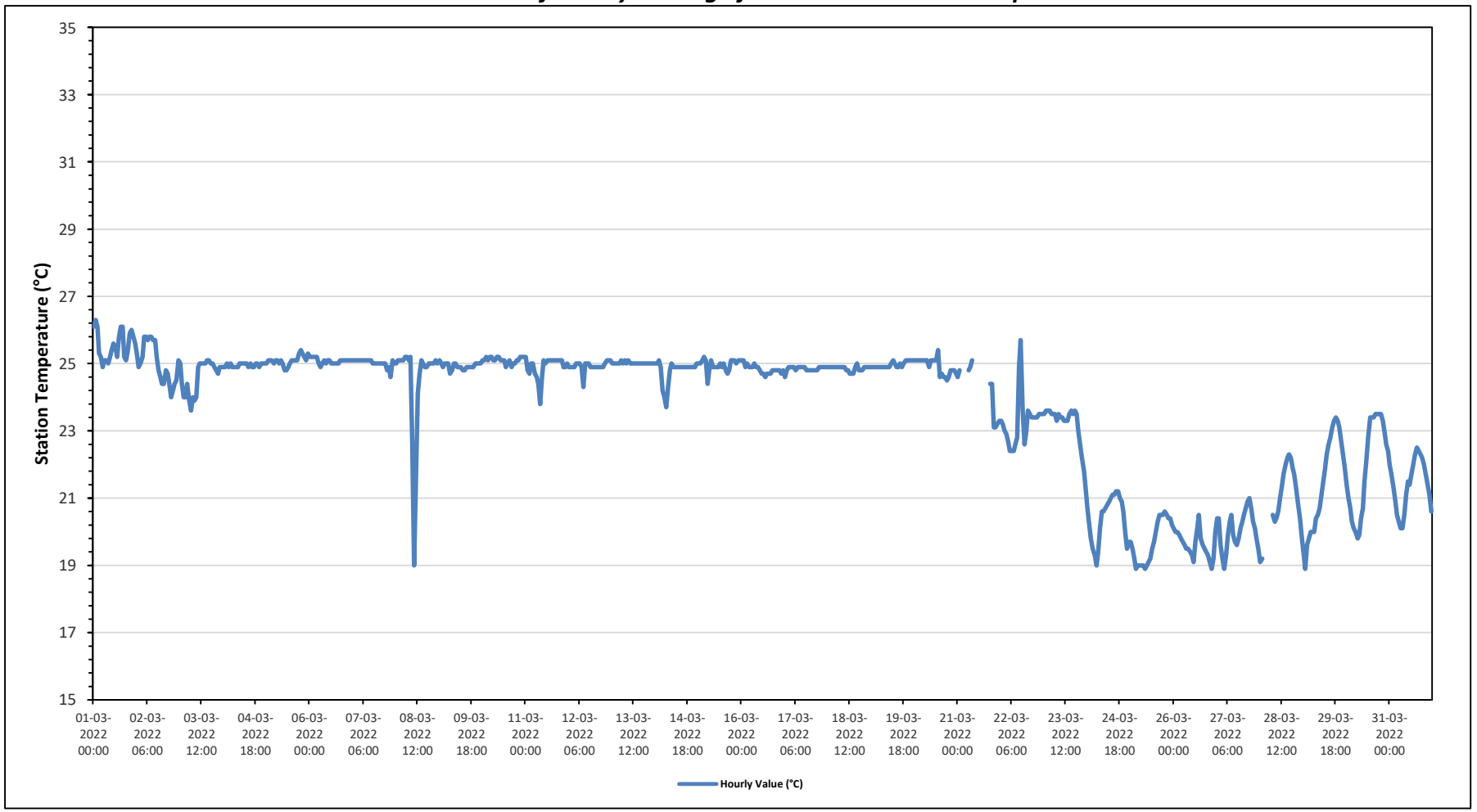
Maximum Hourly Value:	26.3	°C	on March 1 at hour 1	Hours in Service:	744
Maximum Daily Value:	25.5	°C	on March 1	Hours of Data:	726
Minimum Hourly Value:	18.9	°C	on March 25 at hour 3	Hours of Missing Data:	18
Minimum Daily Value:	19.6	°C	on March 26	Hours of Calibration:	0
Monthly Average:	23.7	°C		Operational Uptime:	97.6

Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	26.1	**26.3**	26.1	25.3	25.2	24.9	25.1	25.1	25.0	25.2	25.4	25.6	25.5	25.2	25.8	26.1	26.1	25.2	25.1	25.4	25.9	26.0	25.8	25.6	24.9	**26.3**	**25.5**
Mar 2	25.3	24.9	25.0	25.2	25.8	25.8	25.7	25.8	25.8	25.7	25.7	25.2	24.8	24.6	24.4	24.4	24.8	24.7	24.4	24.0	24.2	24.4	24.5	25.1	24.0	25.8	25.0
Mar 3	25.0	24.4	24.0	24.0	24.4	23.9	23.6	24.0	23.9	24.0	24.9	25.0	25.0	25.0	25.0	25.1	25.1	25.0	25.0	24.9	24.8	24.7	24.9	24.9	23.6	25.1	24.6
Mar 4	24.9	24.9	25.0	24.9	25.0	24.9	24.9	24.9	24.9	25.0	25.0	25.0	25.0	25.0	24.9	25.0	24.9	24.9	25.0	25.0	24.9	25.0	25.0	25.0	24.9	25.0	25.0
Mar 5	25.0	25.1	25.1	25.1	25.0	25.1	25.1	25.0	25.1	25.0	24.8	24.8	24.9	25.0	25.1	25.1	25.1	25.1	25.3	25.4	25.3	25.2	25.1	25.3	24.8	25.4	25.1
Mar 6	25.2	25.2	25.2	25.2	25.2	25.0	24.9	25.0	25.1	25.0	25.1	25.1	25.0	25.0	25.0	25.0	25.0	25.1	25.1	25.1	25.1	25.1	25.1	25.1	24.9	25.2	25.1
Mar 7	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	24.8	24.9	24.6	25.1	25.0	24.6	25.1	25.0
Mar 8	25.0	25.1	25.1	25.1	25.1	25.2	25.2	25.1	25.2	22.6	19.0	21.9	24.1	24.7	25.1	25.0	24.9	24.9	25.0	25.0	25.0	25.0	25.1	25.0	19.0	25.2	24.5
Mar 9	25.1	25.0	24.9	25.0	25.0	25.0	24.7	24.8	25.0	25.0	24.9	24.9	24.9	24.8	24.8	24.9	24.9	24.9	24.9	24.9	25.0	25.0	25.0	25.0	24.7	25.1	24.9
Mar 10	25.1	25.1	25.2	25.1	25.2	25.2	25.1	25.1	25.2	25.2	25.1	25.1	25.1	24.9	25.0	25.1	24.9	25.0	25.0	25.1	25.1	25.2	25.2	25.2	24.9	25.2	25.1
Mar 11	25.2	24.8	24.7	25.0	25.0	24.7	24.6	24.4	23.8	24.6	25.1	25.0	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	24.9	24.9	25.0	23.8	25.2	24.9
Mar 12	24.9	24.9	24.9	24.9	25.0	25.0	25.0	24.9	24.3	25.0	25.0	25.0	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	25.0	25.1	25.1	25.1	24.3	25.1	24.9
Mar 13	25.0	25.0	25.0	25.0	25.0	25.1	25.0	25.1	25.0	25.1	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.1	25.0
Mar 14	25.0	25.0	25.1	24.9	24.2	24.0	23.7	24.3	24.8	25.0	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	25.0	23.7	25.1	24.8
Mar 15	25.0	25.0	25.1	25.2	25.1	24.4	24.8	25.1	24.9	24.9	24.9	24.9	25.0	24.9	25.0	24.8	24.7	24.8	25.1	25.1	25.1	25.0	25.1	25.1	24.4	25.2	25.0
Mar 16	25.1	25.1	24.9	25.0	24.9	24.9	24.9	25.0	24.9	24.9	24.8	24.7	24.7	24.6	24.7	24.7	24.7	24.8	24.8	24.8	24.8	24.8	24.7	24.8	24.6	25.1	24.8
Mar 17	24.6	24.8	24.9	24.9	24.9	24.9	24.8	24.9	24.9	24.9	24.9	24.9	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.9	24.9	24.9	24.9	24.9	24.6	24.9	24.9
Mar 18	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.8	24.8	24.7	24.7	24.7	24.9	25.0	24.8	24.8	24.8	24.9	24.9	24.9	24.9	24.7	25.0	24.9
Mar 19	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	25.0	25.1	25.0	24.9	24.9	25.0	24.9	25.0	25.1	25.1	25.1	25.1	25.1	24.9	25.1	25.0
Mar 20	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	24.9	25.1	25.1	25.1	25.1	25.4	24.6	24.7	24.6	24.6	24.5	24.6	24.8	24.8	24.8	24.7	24.5	25.4	24.9
Mar 21	24.6	24.8	K	K	K	K	24.8	24.9	25.1	K	K	K	K	K	K	K	K	K	24.4	24.4	23.1	23.1	23.2	23.3	23.1	25.1	-
Mar 22	23.3	23.2	23.0	22.9	22.7	22.4	22.4	22.4	22.6	22.8	24.9	25.7	23.6	22.6	23.0	23.6	23.5	23.4	23.4	23.4	23.4	23.5	23.5	23.5	22.4	25.7	23.3
Mar 23	23.5	23.6	23.6	23.6	23.5	23.5	23.5	23.3	23.5	23.4	23.4	23.3	23.3	23.3	23.5	23.6	23.5	23.6	23.5	23.0	22.6	22.2	21.8	21.3	21.3	23.6	23.2
Mar 24	20.7	20.2	19.8	19.5	19.3	19.0	19.4	20.1	20.6	20.6	20.7	20.8	20.9	21.0	21.1	21.1	21.2	21.2	21.0	20.9	20.6	20.0	19.5	19.7	19.0	21.2	20.4
Mar 25	19.7	19.5	19.2	**18.9**	19.0	19.0	19.0	19.0	**18.9**	19.0	19.1	19.2	19.5	19.7	20.0	20.3	20.5	20.5	20.5	20.6	20.5	20.4	20.4	20.2	**18.9**	20.6	19.7
Mar 26	20.1	20.0	20.0	19.9	19.8	19.7	19.6	19.5	19.5	19.4	19.3	19.1	19.7	20.1	20.5	19.8	19.6	19.5	19.4	19.3	19.1	**18.9**	19.2	20.0	**18.9**	20.5	19.6
Mar 27	20.4	20.4	19.6	19.2	**18.9**	19.3	19.9	20.3	20.5	19.9	19.7	19.6	19.8	20.1	20.3	20.5	20.7	20.9	21.0	20.7	20.3	20.1	19.8	19.5	**18.9**	21.0	20.1
Mar 28	19.1	19.2	K	K	K	K	K	20.5	20.3	20.4	20.6	21.0	21.3	21.7	22.0	22.2	22.3	22.2	21.9	21.7	21.3	20.8	20.4	19.9	19.1	22.3	21.0
Mar 29	19.4	**18.9**	19.6	19.8	20.0	20.0	20.0	20.4	20.5	20.7	21.1	21.5	21.9	22.3	22.6	22.8	23.1	23.3	23.4	23.3	23.1	22.7	22.3	21.9	**18.9**	23.4	21.4
Mar 30	21.4	21.0	20.7	20.3	20.1	20.0	19.8	19.9	20.4	20.7	21.5	22.1	22.8	23.4	23.4	23.4	23.5	23.5	23.5	23.5	23.3	23.0	22.6	22.4	19.8	23.5	21.9
Mar 31	22.0	21.7	21.3	20.9	20.5	20.3	20.1	20.1	20.5	21.1	21.5	21.4	21.7	22.0	22.3	22.5	22.4	22.3	22.2	22.0	21.7	21.4	21.1	20.6	20.1	22.5	21.4
Diurnal Maximum	26.1	26.3	26.1	25.3	25.8	25.8	25.7	25.8	25.8	25.7	25.7	25.7	25.5	25.4	25.8	26.1	26.1	25.2	25.3	25.4	25.9	26.0	25.8	25.6			
Diurnal Average	23.7	23.6	23.7	23.6	23.6	23.5	23.5	23.5	23.5	23.5	23.5	23.7	23.8	23.8	23.9	24.0	24.0	24.0	24.0	23.9	23.8	23.7	23.7	23.6			

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

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

Timeseries Chart of Hourly Average for ST - Peace River Complex Station



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PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex Station - March 2022

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

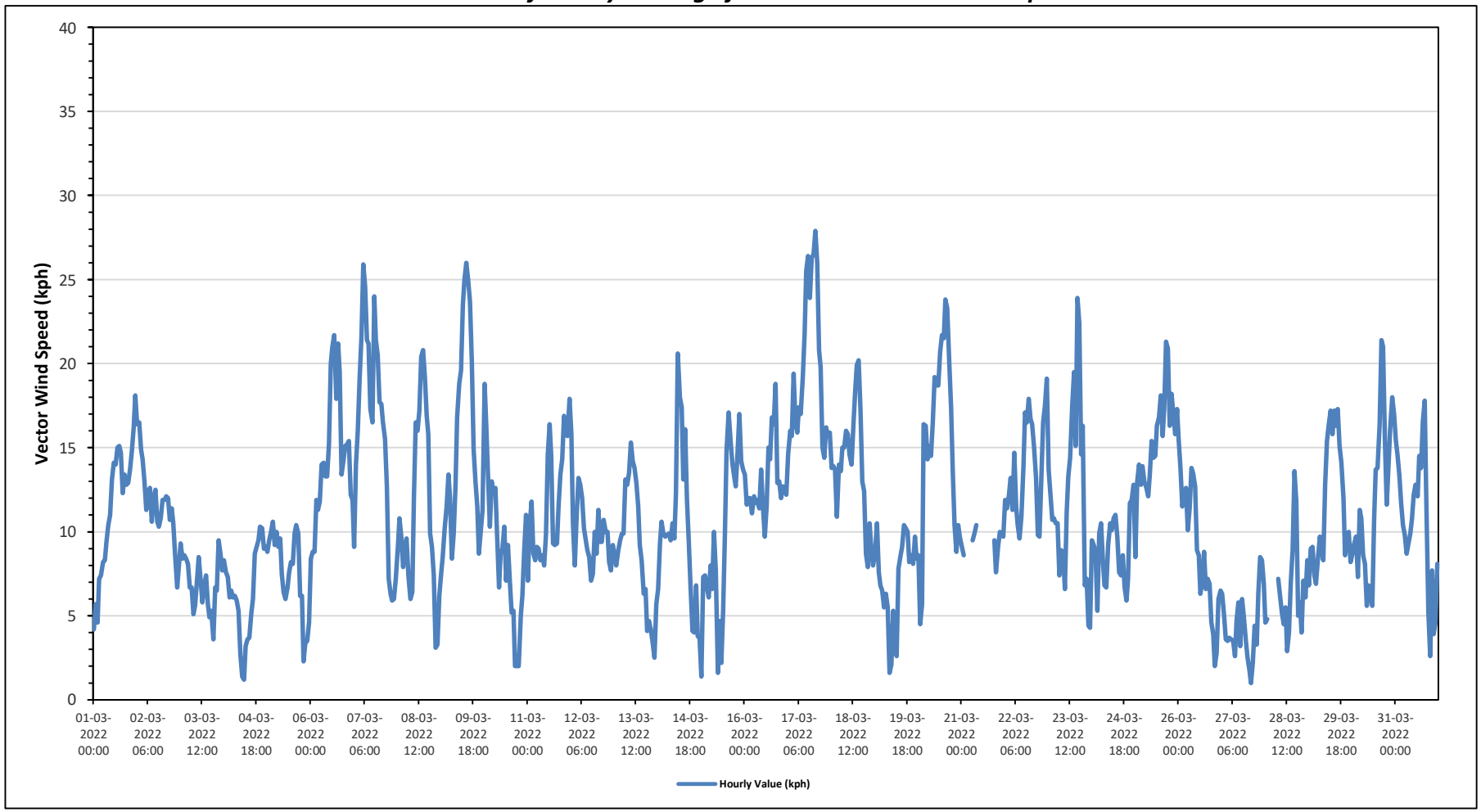
Maximum Hourly Value:	27.9	kph	on March 17 at hour 15	Hours in Service:	744
Maximum Daily Value:	19.4	kph	on March 17	Hours of Data:	726
Minimum Hourly Value:	1.0	kph	on March 27 at hour 16	Hours of Missing Data:	18
Minimum Daily Value:	0.1	kph	on March 28	Hours of Calibration:	0
Monthly Average:	3.4	kph		Operational Uptime:	97.6

Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	4.2	5.7	4.6	7.2	7.4	8.2	8.3	9.4	10.4	11.0	13.1	14.1	14.0	15.0	15.1	14.7	12.3	13.4	12.8	12.9	13.7	14.8	16.2	18.1	4.2	18.1	11.4
Mar 2	16.4	16.5	14.9	14.3	13.0	11.3	12.4	12.6	10.6	12.0	12.5	10.6	10.3	10.8	11.9	11.9	12.1	12.0	10.7	11.4	10.5	8.6	6.7	8.1	6.7	16.5	11.5
Mar 3	9.3	8.4	8.6	8.4	8.1	6.7	6.7	5.1	5.6	7.0	8.5	7.2	5.8	6.8	7.4	5.7	4.9	5.3	3.6	6.7	6.5	9.5	8.7	7.7	3.6	9.5	6.1
Mar 4	8.3	7.6	7.3	6.1	6.5	6.1	6.2	5.9	5.3	2.7	1.4	1.2	3.2	3.6	3.7	5.2	6.0	8.7	9.1	9.5	10.3	10.2	9.0	9.1	1.2	10.3	3.5
Mar 5	8.8	9.5	10.0	10.6	9.2	10.0	9.1	9.6	7.5	6.4	6.0	6.7	7.6	8.2	8.1	9.9	10.4	9.9	6.2	6.2	2.3	3.4	3.5	4.6	2.3	10.6	4.7
Mar 6	8.4	8.8	8.8	11.9	11.3	11.8	14.0	14.1	13.3	13.3	15.2	20.0	21.0	21.7	17.9	21.2	19.5	13.4	14.2	15.1	15.2	15.4	12.2	11.9	8.4	21.7	13.4
Mar 7	9.1	14.0	16.0	19.1	21.6	25.9	24.6	21.4	21.2	17.3	16.5	24.0	21.4	20.5	17.7	17.6	16.5	15.5	12.7	7.2	6.3	5.9	6.0	7.2	5.9	25.9	15.2
Mar 8	9.1	10.8	9.7	7.9	9.1	9.6	7.4	6.0	6.4	11.9	16.5	16.0	17.2	20.4	20.8	19.2	16.9	15.8	9.9	9.1	7.4	3.1	3.3	6.2	3.1	20.8	10.2
Mar 9	7.5	8.5	10.1	11.5	13.4	12.0	8.4	9.9	12.8	16.8	18.8	19.6	23.5	25.0	26.0	25.0	23.7	20.2	14.9	13.0	11.5	8.7	10.0	11.3	7.5	26.0	13.8
Mar 10	18.8	16.4	13.3	10.3	13.0	12.3	12.6	9.6	6.7	8.7	9.0	10.3	7.1	9.2	7.1	5.2	5.3	2.0	2.0	2.0	5.0	6.2	8.9	11.0	2.0	18.8	5.5
Mar 11	7.1	10.2	11.8	8.7	8.3	9.1	9.0	8.3	8.6	8.0	9.8	14.6	16.4	14.5	9.3	9.2	9.3	11.5	13.4	14.3	16.9	15.8	15.7	17.9	7.1	17.9	9.6
Mar 12	15.8	10.5	8.0	10.9	13.2	12.8	12.0	10.2	9.5	8.9	8.5	7.1	7.5	10.0	8.7	11.3	9.4	9.4	10.7	10.0	10.0	8.2	7.7	9.2	7.1	15.8	8.1
Mar 13	8.6	8.0	8.9	9.5	9.9	9.9	13.1	12.8	13.5	15.3	14.2	13.8	12.9	11.5	9.2	8.3	6.3	6.6	4.1	4.7	4.2	3.4	2.5	5.7	2.5	15.3	8.6
Mar 14	6.6	9.3	10.6	9.9	9.7	9.8	9.9	9.5	10.5	9.6	12.3	20.6	18.0	17.4	13.1	16.1	11.9	9.4	7.0	4.1	4.0	6.8	3.8	3.7	3.7	20.6	5.1
Mar 15	1.4	7.3	7.4	6.7	6.1	8.0	6.6	10.0	7.7	1.6	4.7	2.2	5.3	10.0	14.8	17.1	15.5	14.1	13.4	12.7	14.7	17.0	14.2	13.7	1.4	17.1	5.5
Mar 16	13.4	11.6	12.0	12.0	11.1	12.1	11.7	11.9	11.4	13.7	11.7	9.7	11.5	15.0	14.3	16.8	16.4	18.8	12.9	13.0	12.0	12.7	12.6	12.2	9.7	18.8	12.4
Mar 17	14.6	16.0	15.7	19.4	16.5	15.9	17.4	17.0	19.2	21.8	25.5	26.4	23.9	26.3	26.5	**27.9**	26.0	20.8	19.8	15.0	14.4	16.2	15.7	15.9	14.4	**27.9**	**19.4**
Mar 18	13.8	13.9	13.7	10.9	14.0	13.6	15.0	15.0	16.0	15.8	14.6	14.0	16.3	18.4	19.9	20.2	17.3	13.0	12.4	8.7	7.9	10.5	9.0	8.0	7.9	20.2	13.1
Mar 19	8.6	10.5	7.6	6.8	6.5	5.5	6.3	5.5	1.6	2.1	5.3	3.8	2.6	7.8	8.5	9.1	10.4	10.2	10.0	8.2	8.6	8.1	9.7	8.4	1.6	10.5	5.4
Mar 20	8.6	4.5	5.7	16.4	16.3	14.3	15.1	14.5	16.5	19.2	18.7	18.7	20.7	21.7	21.5	23.8	23.3	20.4	17.3	13.7	10.4	8.8	10.4	9.7	4.5	23.8	14.0
Mar 21	9.1	8.6	K	K	K	K	9.5	9.9	10.4	K	K	K	K	K	K	K	K	K	9.5	7.6	9.1	10.0	9.8	9.7	7.6	10.4	-
Mar 22	11.9	11.4	12.1	13.2	11.3	14.7	11.5	10.4	9.6	10.9	13.9	17.1	16.5	17.9	16.7	16.4	15.1	13.2	9.8	9.7	13.1	16.5	17.5	19.1	9.6	19.1	13.5
Mar 23	13.7	12.2	10.7	10.8	10.5	10.5	7.4	8.9	8.8	6.6	11.2	13.3	14.4	17.5	19.5	15.1	23.9	22.4	14.6	16.3	6.8	7.2	4.4	4.3	4.3	23.9	9.0
Mar 24	9.5	9.2	8.8	5.3	9.9	10.5	8.3	6.8	6.7	9.2	10.5	10.1	10.8	11.0	9.7	7.6	7.4	8.6	6.7	5.9	7.2	11.7	11.9	12.8	5.3	12.8	4.3
Mar 25	8.5	13.0	14.0	12.8	13.9	13.0	12.6	12.1	13.4	15.4	14.4	14.5	16.3	16.8	18.1	15.7	17.3	21.3	20.9	16.3	18.2	17.0	15.8	17.3	8.5	21.3	15.2
Mar 26	15.5	13.8	11.5	12.4	12.6	10.1	11.4	13.8	13.5	12.7	8.9	8.6	6.3	7.0	8.8	6.6	7.2	6.9	4.6	3.9	2.0	2.8	6.0	6.5	2.0	15.5	7.9
Mar 27	6.3	5.1	3.6	3.5	3.7	3.6	3.5	2.6	4.7	5.8	3.2	6.0	4.9	3.6	2.5	1.8	**1.0**	2.2	4.4	3.3	6.3	8.5	8.3	6.9	**1.0**	8.5	3.0
Mar 28	4.6	4.8	K	K	K	K	K	7.2	6.2	5.2	4.5	5.5	2.9	4.0	7.0	8.9	13.6	11.8	5.0	5.8	4.0	7.1	6.1	8.3	2.9	13.6	**0.1**
Mar 29	6.8	9.0	9.1	7.4	6.9	8.5	9.7	8.8	8.3	12.8	15.4	16.4	17.2	15.8	17.2	16.3	17.3	15.1	14.1	12.0	8.6	9.4	10.0	8.2	6.8	17.3	11.2
Mar 30	8.6	9.3	9.7	7.3	11.3	10.8	8.6	8.1	5.6	6.8	6.2	5.6	10.8	13.7	13.8	16.4	21.4	21.0	15.5	11.6	14.0	16.1	18.0	17.0	5.6	21.4	10.8
Mar 31	15.4	14.6	13.4	11.7	10.4	9.8	8.7	9.3	9.9	10.7	12.2	12.8	12.1	14.5	13.8	16.6	17.8	11.9	5.2	2.6	7.7	3.9	4.6	8.1	2.6	17.8	7.7
Diurnal Maximum	19	17	16	19	22	26	25	21	21	22	26	26	24	26	27	28	26	22	21	16	18	17	18	19			
Diurnal Average	9.9	10.3	10.3	10.4	10.9	10.9	10.6	10.2	10.0	10.6	11.4	12.4	12.6	13.9	13.6	13.9	13.8	12.8	10.6	9.4	9.3	9.8	9.6	10.3			

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.

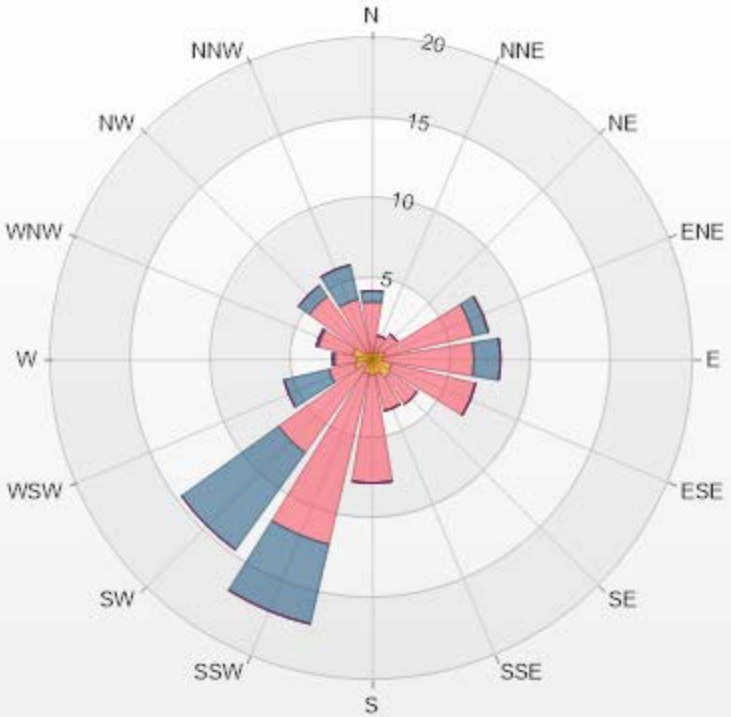
Timeseries Chart of Hourly Average for VWS - Peace River Complex Station



Wind: Peace River Complex (PRC) Monitor: WDS [KPH] Monthly: 03-2022 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.83% Valid Data: 97.58%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	0.41	3.17	0.69	0	0	4.27
NNE	0.41	1.1	0	0	0	1.51
NE	0.55	1.38	0	0	0	1.93
ENE	0.83	5.65	0.96	0	0	7.44
E	0.69	5.65	1.65	0	0	7.99
ESE	1.24	5.37	0	0	0	6.61
SE	1.38	2.07	0	0	0	3.45
SSE	0.96	2.34	0	0	0	3.3
S	0.96	6.75	0	0	0	7.71
SSW	0.96	10.88	5.1	0	0	16.94
SW	0.28	6.89	7.44	0	0	14.61
WSW	1.1	1.65	2.89	0	0	5.64
W	0.96	1.38	0.14	0	0	2.48
WNW	1.24	2.2	0.14	0	0	3.58
NW	0.55	4.27	0.83	0	0	5.65
NNW	0.41	3.44	2.2	0	0	6.05
Summary	12.93	64.19	22.04	0	0	99.16

Peace River Complex (PRC) 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.83% Calm Wind Avg Speed: 1.37(KPH)



% Icon Classes (KPH)	13 1.8-6.0	64 6.0-15.0	22 15.0-29.0	0 29.0-39.0	0 >39.0

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PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex Station - March 2022

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

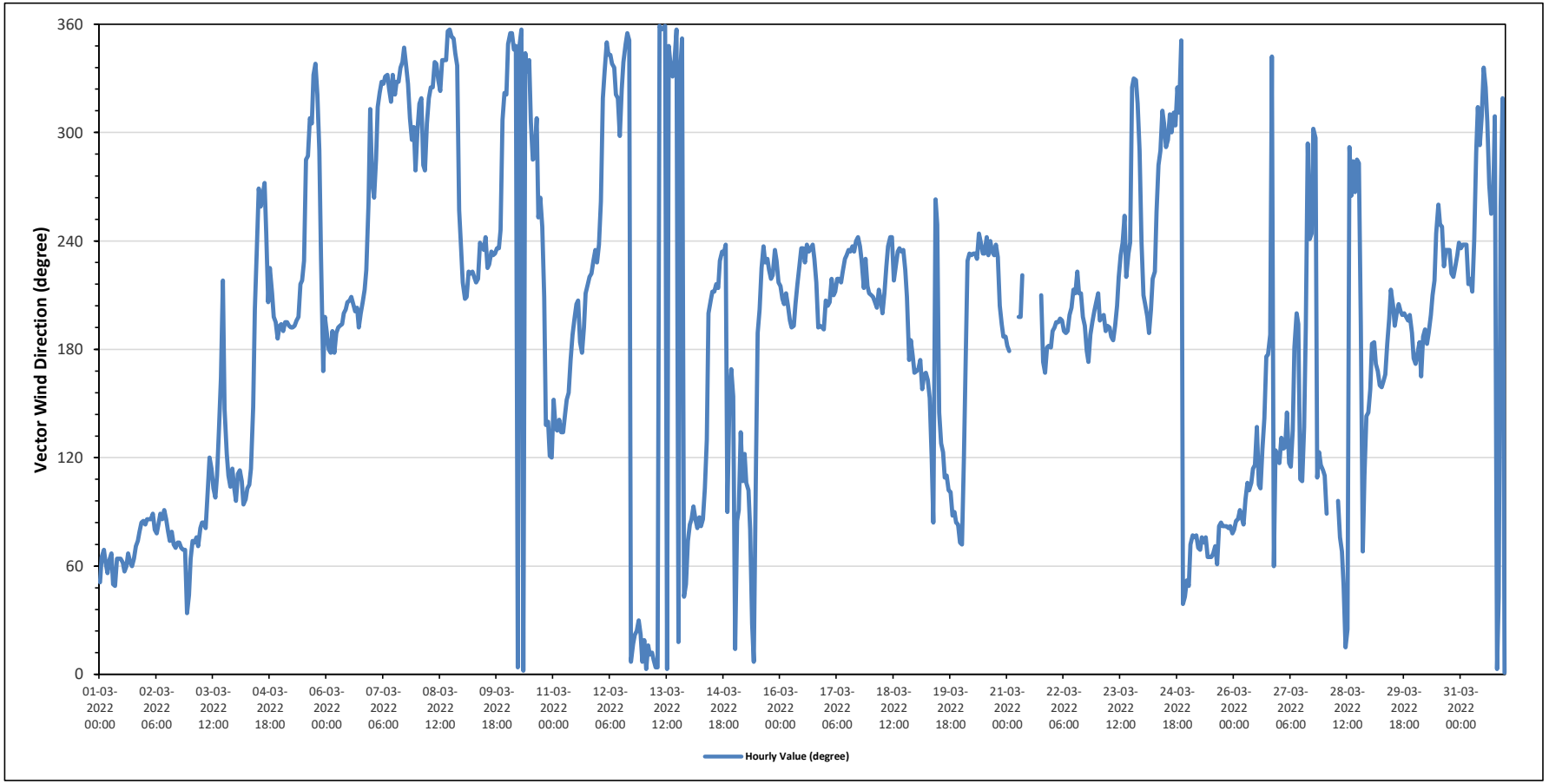
Monthly Average:	214 (SSW) degree	Hours in Service:	744
		Hours of Data:	726
		Hours of Missing Data:	18
		Hours of Calibration:	0
		Operational Uptime:	97.6

Day	Hourly Period Starting at (MST)																								Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant
Mar 1	NE	ENE	ENE	ENE	NE	ENE	ENE	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	66	ENE
Mar 2	E	E	E	E	E	E	ENE	E	E	E	E	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	NE	78	ENE
Mar 3	ENE	ENE	ENE	ENE	ENE	E	E	E	E	ESE	ESE	ESE	ESE	E	ESE	SE	SSE	SW	SE	ESE	ESE	ESE	ESE	ESE	100	E
Mar 4	E	ESE	ESE	ESE	E	E	ESE	ESE	ESE	SE	SSW	SW	W	WSW	W	W	WSW	SSW	SW	SSW	SSW	SSW	S	S	172	S
Mar 5	SSW	S	SSW	SSW	S	S	S	S	SSW	SSW	SW	SW	SW	WNW	WNW	NW	WNW	NNW	NNW	NW	WNW	SW	SSE	SSW	227	SW
Mar 6	S	S	S	S	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SW	W	NW	204	SSW
Mar 7	W	W	WNW	NW	NW	NNW	NW	NNW	NNW	NW	NW	NNW	NW	NNW	NNW	NNW	NNW	NNW	NW	NW	WNW	WNW	W		321	NW
Mar 8	WNW	NW	NW	W	W	WNW	NW	NW	NW	NNW	NNW	NNW	NW	NNW	NNW	NNW	N	N	N	N	NNW	NNW	WSW	SW	330	NNW
Mar 9	SW	SSW	SSW	SW	SW	SW	SW	SW	SW	WSW	SW	SW	WSW	SW	SW	SW	SW	SW	SW	SW	WSW	NW	NW	NW	235	SW
Mar 10	NNW	N	N	NNW	NNW	N	NNW	N	N	NNW	NNW	NNW	NW	WNW	WNW	NW	WSW	W	WSW	SSW	SE	SE	ESE	ESE	345	NNW
Mar 11	SSE	SE	SE	SE	SE	SE	SE	SSE	SSE	S	S	SSW	SSW	SSW	S	S	S	SSW	SW	SW	SW	SW	SW	SW	191	S
Mar 12	SW	W	NW	NNW	N	NNW	NNW	NNW	NNW	NW	NW	WNW	NW	NNW	NNW	N	N	N	NNE	NNE	NNE	NNE	NNE	N	342	NNW
Mar 13	NNE	N	NNE	NNE	NNE	N	N	N	N	N	N	N	N	NNW	NNW	NNW	NNW	N	NNE	NNW	N	NE	NE	ENE	2	N
Mar 14	E	E	E	E	E	E	E	E	ESE	SE	SSW	SSW	SSW	SSW	SW	SSW	SW	SW	SW	SW	E	SSE	SSE	SSE	167	SSE
Mar 15	NNE	E	E	SE	ESE	ESE	ESE	E	E	NNE	N	ESE	S	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	203	SSW
Mar 16	SSW	SSW	SSW	SSW	SSW	SSW	S	S	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	S	S	S	S	215	SSW
Mar 17	SSW	SSW	SSW	SW	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	SW	SW	SSW	SW	SSW	SSW	225	SW
Mar 18	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	WSW	SW	SW	SW	SW	SW	SW	SW	SSW	S	S	S	SSE	218	SW
Mar 19	SSE	SSE	S	SSE	SSE	SSE	SSE	SSE	ESE	E	W	WSW	SE	SE	ESE	ESE	ESE	E	E	E	E	E	E	ENE	126	SE
Mar 20	ENE	ESE	S	SW	SW	SW	SW	SW	SW	WSW	WSW	SW	SW	WSW	SW	WSW	SW	SW	SW	SW	SSW	SSW	S	S	229	SW
Mar 21	S	S	K	K	K	K	SSW	SSW	SW	K	K	K	K	K	K	K	K	K	SSW	S	SSE	S	S	S	-	S
Mar 22	S	S	SSW	SSW	SSW	SSW	S	S	S	SSW	SSW	SSW	SSW	SW	SSW	SSW	SSW	S	S	S	S	SSW	SSW	SSW	199	SSW
Mar 23	SSW	SSW	SSW	SSW	S	S	S	S	S	S	SSW	SW	SW	WSW	WSW	SW	SW	WSW	NW	NNW	NNW	NW	WNW	WSW	230	SW
Mar 24	SSW	SSW	SSW	S	SSW	SW	SW	WSW	W	WNW	NW	WNW	WNW	WNW	NW	WNW	NW	WNW	NW	NW	N	NE	NE	NE	289	WNW
Mar 25	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	E	E	E	E	E	ENE	74	ENE
Mar 26	E	E	E	E	E	E	E	ESE	E	ESE	ESE	ESE	SE	ESE	ESE	SE	SE	S	S	S	NNW	ENE	ESE	ESE	105	ESE
Mar 27	ESE	SE	SE	SE	SE	ESE	ESE	SE	S	SSW	SSW	ESE	ESE	SE	S	WNW	WSW	WSW	WNW	WNW	ESE	ESE	ESE	ESE	134	SE
Mar 28	ESE	E	K	K	K	K	K	E	ENE	ENE	NE	NNE	NNE	WNW	W	WNW	W	WNW	W	S	ENE	ESE	SE	SE	72	ENE
Mar 29	SSE	S	S	S	SSE	SSE	SSE	SSE	SSE	S	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	S	190	S
Mar 30	S	S	S	SSE	S	S	S	S	SSW	SSW	SW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	220	SW
Mar 31	SW	SW	SW	SW	SW	SW	SSW	WSW	WNW	NW	WNW	NW	NNW	NW	NW	W	WSW	W	NW	N	NE	WSW	NW	N	274	W

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

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

Timeseries Chart of Hourly Average for VWD - Peace River Complex Station



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PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex Station - March 2022

Summary of Hourly Averages

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

WIND SPEED

Maximum Hourly Value:	27.9	kph	on March 17 at hour 15	Hours in Service:	744
Maximum Daily Value:	19.4	kph	on March 17	Hours of Data:	726
Minimum Hourly Value:	1.0	kph	on March 27 at hour 16	Hours of Missing Data:	18
Minimum Daily Value:	0.1	kph	on March 28	Hours of Calibration:	0
Monthly Average:	3.4	kph		Operational Uptime:	97.6

WIND DIRECTION

Monthly Average: 214 (SSW) degree

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	4.2	5.7	4.6	7.2	7.4	8.2	8.3	9.4	10.4	11.0	13.1	14.1	14.0	15.0	15.1	14.7	12.3	13.4	12.8	12.9	13.7	14.8	16.2	18.1	4.2	18.1	11.4
	NE	ENE	ENE	ENE	NE	ENE	ENE	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E			
Mar 2	16.4	16.5	14.9	14.3	13.0	11.3	12.4	12.6	10.6	12.0	12.5	10.6	10.3	10.8	11.9	11.9	12.1	12.0	10.7	11.4	10.5	8.6	6.7	8.1	6.7	16.5	11.5
	E	E	E	E	E	E	ENE	E	E	E	E	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	NE			
Mar 3	9.3	8.4	8.6	8.4	8.1	6.7	6.7	5.1	5.6	7.0	8.5	7.2	5.8	6.8	7.4	5.7	4.9	5.3	3.6	6.7	6.5	9.5	8.7	7.7	3.6	9.5	6.1
	ENE	ENE	ENE	ENE	ENE	E	E	E	E	ESE	ESE	ESE	ESE	E	ESE	SE	SSE	SW	SE	ESE	ESE	ESE	ESE	ESE			
Mar 4	8.3	7.6	7.3	6.1	6.5	6.1	6.2	5.9	5.3	2.7	1.4	1.2	3.2	3.6	3.7	5.2	6.0	8.7	9.1	9.5	10.3	10.2	9.0	9.1	1.2	10.3	3.5
	E	ESE	ESE	ESE	E	E	ESE	ESE	ESE	SE	SSW	SW	W	WSW	W	W	WSW	SSW	SW	SSW	SSW	SSW	S	S			
Mar 5	8.8	9.5	10.0	10.6	9.2	10.0	9.1	9.6	7.5	6.4	6.0	6.7	7.6	8.2	8.1	9.9	10.4	9.9	6.2	6.2	2.3	3.4	3.5	4.6	2.3	10.6	4.7
	SSW	S	SSW	SSW	S	S	S	S	SSW	SSW	SW	SW	SW	WNW	WNW	NW	WNW	NNW	NNW	NW	WNW	SW	SSE	SSW			
Mar 6	8.4	8.8	8.8	11.9	11.3	11.8	14.0	14.1	13.3	13.3	15.2	20.0	21.0	21.7	17.9	21.2	19.5	13.4	14.2	15.1	15.2	15.4	12.2	11.9	8.4	21.7	13.4
	S	S	S	S	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SW	W	NW			
Mar 7	9.1	14.0	16.0	19.1	21.6	25.9	24.6	21.4	21.2	17.3	16.5	24.0	21.4	20.5	17.7	17.6	16.5	15.5	12.7	7.2	6.3	5.9	6.0	7.2	5.9	25.9	15.2
	W	W	WNW	NW	NW	NNW	NW	NNW	NNW	NW	NW	NNW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	WNW	WNW	W			
Mar 8	9.1	10.8	9.7	7.9	9.1	9.6	7.4	6.0	6.4	11.9	16.5	16.0	17.2	20.4	20.8	19.2	16.9	15.8	9.9	9.1	7.4	3.1	3.3	6.2	3.1	20.8	10.2
	WNW	NW	NW	W	W	WNW	NW	NW	NW	NNW	NNW	NNW	NW	NNW	NNW	NNW	N	N	N	N	NNW	NNW	WSW	SW			
Mar 9	7.5	8.5	10.1	11.5	13.4	12.0	8.4	9.9	12.8	16.8	18.8	19.6	23.5	25.0	26.0	25.0	23.7	20.2	14.9	13.0	11.5	8.7	10.0	11.3	7.5	26.0	13.8
	SW	SSW	SSW	SW	SW	SW	SW	SW	SW	WSW	SW	SW	WSW	SW	SW	SW	SW	SW	SW	SW	WSW	NW	NW	NW			
Mar 10	18.8	16.4	13.3	10.3	13.0	12.3	12.6	9.6	6.7	8.7	9.0	10.3	7.1	9.2	7.1	5.2	5.3	2.0	2.0	2.0	5.0	6.2	8.9	11.0	2.0	18.8	5.5
	NNW	N	N	NNW	NNW	N	NNW	N	N	NNW	NNW	NNW	NW	WNW	WNW	NW	WSW	W	WSW	SSW	SE	SE	ESE	ESE			
Mar 11	7.1	10.2	11.8	8.7	8.3	9.1	9.0	8.3	8.6	8.0	9.8	14.6	16.4	14.5	9.3	9.2	9.3	11.5	13.4	14.3	16.9	15.8	15.7	17.9	7.1	17.9	9.6
	SSE	SE	SE	SE	SE	SE	SE	SSE	SSE	S	S	SSW	SSW	SSW	S	S	S	SSW	SW	SW	SW	SW	SW	SW			
Mar 12	15.8	10.5	8.0	10.9	13.2	12.8	12.0	10.2	9.5	8.9	8.5	7.1	7.5	10.0	8.7	11.3	9.4	9.4	10.7	10.0	10.0	8.2	7.7	9.2	7.1	15.8	8.1
	SW	W	NW	NNW	N	NNW	NNW	NNW	NNW	NW	NW	WNW	NW	NNW	NNW	N	N	N	NNE	NNE	NNE	NNE	NNE	N			
Mar 13	8.6	8.0	8.9	9.5	9.9	9.9	13.1	12.8	13.5	15.3	14.2	13.8	12.9	11.5	9.2	8.3	6.3	6.6	4.1	4.7	4.2	3.4	2.5	5.7	2.5	15.3	8.6
	NNE	N	NNE	NNE	NNE	N	N	N	N	N	N	N	N	NNW	NNW	NNW	NNW	N	NNE	NNW	N	NE	NE	ENE			
Mar 14	6.6	9.3	10.6	9.9	9.7	9.8	9.9	9.5	10.5	9.6	12.3	20.6	18.0	17.4	13.1	16.1	11.9	9.4	7.0	4.1	4.0	6.8	3.8	3.7	3.7	20.6	5.1
	E	E	E	E	E	E	E	E	ESE	SE	SSW	SSW	SSW	SSW	SW	SSW	SW	SW	SW	SW	E	SSE	SSE	SSE			
Mar 15	1.4	7.3	7.4	6.7	6.1	8.0	6.6	10.0	7.7	1.6	4.7	2.2	5.3	10.0	14.8	17.1	15.5	14.1	13.4	12.7	14.7	17.0	14.2	13.7	1.4	17.1	5.5
	NNE	E	E	SE	ESE	ESE	ESE	E	E	NNE	N	ESE	S	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW			
Mar 16	13.4	11.6	12.0	12.0	11.1	12.1	11.7	11.9	11.4	13.7	11.7	9.7	11.5	15.0	14.3	16.8	16.4	18.8	12.9	13.0	12.0	12.7	12.6	12.2	9.7	18.8	12.4
	SSW	SSW	SSW	SSW	SSW	SSW	S	S	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	S	S	S	S			
Mar 17	14.6	16.0	15.7	19.4	16.5	15.9	17.4	17.0	19.2	21.8	25.5	26.4	23.9	26.3	26.5	**27.9**	26.0	20.8	19.8	15.0	14.4	16.2	15.7	15.9	14.4	**27.9**	**19.4**
	SSW	SSW	SSW	SW	SSW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	SW	SW	SSW	SW	SSW	SSW			
Mar 18	13.8	13.9	13.7	10.9	14.0	13.6	15.0	15.0	16.0	15.8	14.6	14.0	16.3	18.4	19.9	20.2	17.3	13.0	12.4	8.7	7.9	10.5	9.0	8.0	7.9	20.2	13.1
	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	WSW	SW	SW	SW	SW	SW	SW	SW	SSW	S	S	S	SSE			
Mar 19	8.6	10.5	7.6	6.8	6.5	5.5	6.3	5.5	1.6	2.1	5.3	3.8	2.6	7.8	8.5	9.1	10.4	10.2	10.0	8.2	8.6	8.1	9.7	8.4	1.6	10.5	5.4
	SSE	SSE	S	SSE	SSE	SSE	SSE	SSE	ESE	E	W	WSW	SE	SE	ESE	ESE	ESE	E	E	E	E	E	E	ENE			
Mar 20	8.6	4.5	5.7	16.4	16.3	14.3	15.1	14.5	16.5	19.2	18.7	18.7	20.7	21.7	21.5	23.8	23.3	20.4	17.3	13.7	10.4	8.8	10.4	9.7	4.5	23.8	14.0
	ENE	ESE	S	SW	SW	SW	SW	SW	SW	WSW	WSW	SW	SW	WSW	SW	WSW	SW	SW	SW	SW	SSW	SSW	S	S			

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PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex Station - March 2022

Summary of Hourly Averages

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

WIND SPEED

Maximum Hourly Value:	27.9	kph	on March 17 at hour 15	Hours in Service:	744
Maximum Daily Value:	19.4	kph	on March 17	Hours of Data:	726
Minimum Hourly Value:	1.0	kph	on March 27 at hour 16	Hours of Missing Data:	18
Minimum Daily Value:	0.1	kph	on March 28	Hours of Calibration:	0
Monthly Average:	3.4	kph		Operational Uptime:	97.6

WIND DIRECTION

Monthly Average: 214 (SSW) degree

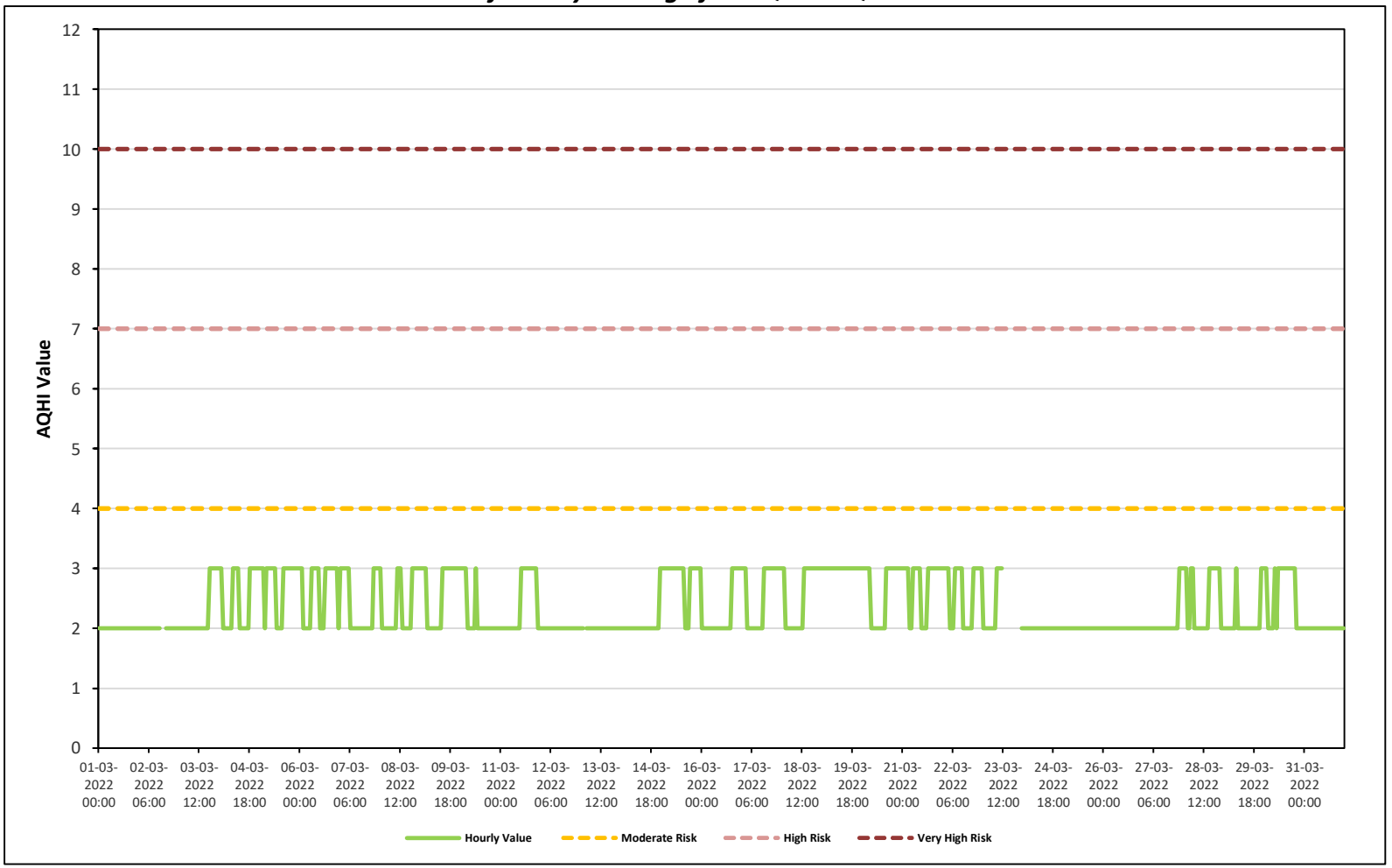
Day	Hourly Period Starting at (MST)																						Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Mar 21	9.1	8.6	K	K	K	K	9.5	9.9	10.4	K	K	K	K	K	K	K	K	K	9.5	7.6	9.1	10.0	9.8	9.7	7.6	10.4	-
	S	S	K	K	K	K	SSW	SSW	SW	K	K	K	K	K	K	K	K	K	SSW	S	SSE	S	S	S			
Mar 22	11.9	11.4	12.1	13.2	11.3	14.7	11.5	10.4	9.6	10.9	13.9	17.1	16.5	17.9	16.7	16.4	15.1	13.2	9.8	9.7	13.1	16.5	17.5	19.1	9.6	19.1	13.5
	S	S	SSW	SSW	SSW	SSW	S	S	S	SSW	SSW	SSW	SSW	SW	SSW	SSW	SSW	S	S	S	S	SSW	SSW	SSW			
Mar 23	13.7	12.2	10.7	10.8	10.5	10.5	7.4	8.9	8.8	6.6	11.2	13.3	14.4	17.5	19.5	15.1	23.9	22.4	14.6	16.3	6.8	7.2	4.4	4.3	4.3	23.9	9.0
	SSW	SSW	SSW	SSW	S	S	S	S	S	S	SSW	SW	SW	WSW	WSW	SW	SW	WSW	NW	NNW	NNW	NW	WNW	WSW			
Mar 24	9.5	9.2	8.8	5.3	9.9	10.5	8.3	6.8	6.7	9.2	10.5	10.1	10.8	11.0	9.7	7.6	7.4	8.6	6.7	5.9	7.2	11.7	11.9	12.8	5.3	12.8	4.3
	SSW	SSW	SSW	S	SSW	SW	SW	WSW	W	WNW	NW	WNW	WNW	WNW	NW	WNW	NW	WNW	NW	NW	N	NE	NE	NE			
Mar 25	8.5	13.0	14.0	12.8	13.9	13.0	12.6	12.1	13.4	15.4	14.4	14.5	16.3	16.8	18.1	15.7	17.3	21.3	20.9	16.3	18.2	17.0	15.8	17.3	8.5	21.3	15.2
	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	E	E	E	E	E	ENE			
Mar 26	15.5	13.8	11.5	12.4	12.6	10.1	11.4	13.8	13.5	12.7	8.9	8.6	6.3	7.0	8.8	6.6	7.2	6.9	4.6	3.9	2.0	2.8	6.0	6.5	2.0	15.5	7.9
	E	E	E	E	E	E	E	ESE	E	ESE	ESE	ESE	SE	ESE	ESE	SE	SE	S	S	S	NNW	ENE	ESE	ESE			
Mar 27	6.3	5.1	3.6	3.5	3.7	3.6	3.5	2.6	4.7	5.8	3.2	6.0	4.9	3.6	2.5	1.8	**1.0**	2.2	4.4	3.3	6.3	8.5	8.3	6.9	**1.0**	8.5	3.0
	ESE	SE	SE	SE	SE	ESE	ESE	SE	S	SSW	SSW	ESE	ESE	SE	S	WNW	WSW	WSW	WNW	WNW	ESE	ESE	ESE	ESE			
Mar 28	4.6	4.8	K	K	K	K	K	7.2	6.2	5.2	4.5	5.5	2.9	4.0	7.0	8.9	13.6	11.8	5.0	5.8	4.0	7.1	6.1	8.3	2.9	13.6	**0.1**
	ESE	E	K	K	K	K	K	E	ENE	ENE	NE	NNE	NNE	WNW	W	WNW	W	WNW	W	S	ENE	ESE	SE	SE			
Mar 29	6.8	9.0	9.1	7.4	6.9	8.5	9.7	8.8	8.3	12.8	15.4	16.4	17.2	15.8	17.2	16.3	17.3	15.1	14.1	12.0	8.6	9.4	10.0	8.2	6.8	17.3	11.2
	SSE	S	S	S	SSE	SSE	SSE	SSE	SSE	S	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	S			
Mar 30	8.6	9.3	9.7	7.3	11.3	10.8	8.6	8.1	5.6	6.8	6.2	5.6	10.8	13.7	13.8	16.4	21.4	21.0	15.5	11.6	14.0	16.1	18.0	17.0	5.6	21.4	10.8
	S	S	S	SSE	S	S	S	S	SSW	SSW	SW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	WSW			
Mar 31	15.4	14.6	13.4	11.7	10.4	9.8	8.7	9.3	9.9	10.7	12.2	12.8	12.1	14.5	13.8	16.6	17.8	11.9	5.2	2.6	7.7	3.9	4.6	8.1	2.6	17.8	7.7
	SW	SW	SW	SW	SW	SW	SSW	WSW	WNW	NW	WNW	NW	NNW	NW	NW	W	WSW	W	NW	N	NE	WSW	NW	N			

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

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

AQHI GRIMSHAW STATION

Timeseries Chart of Hourly Average for AQHI - AQHI - Grimshaw Station



peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

SULPHUR DIOXIDE (SO_2) in ppb

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

Number of 1-Hour Exceedances: 0 Number of 24-Hour Exceedances: 0 30-Day Exceedance: 0

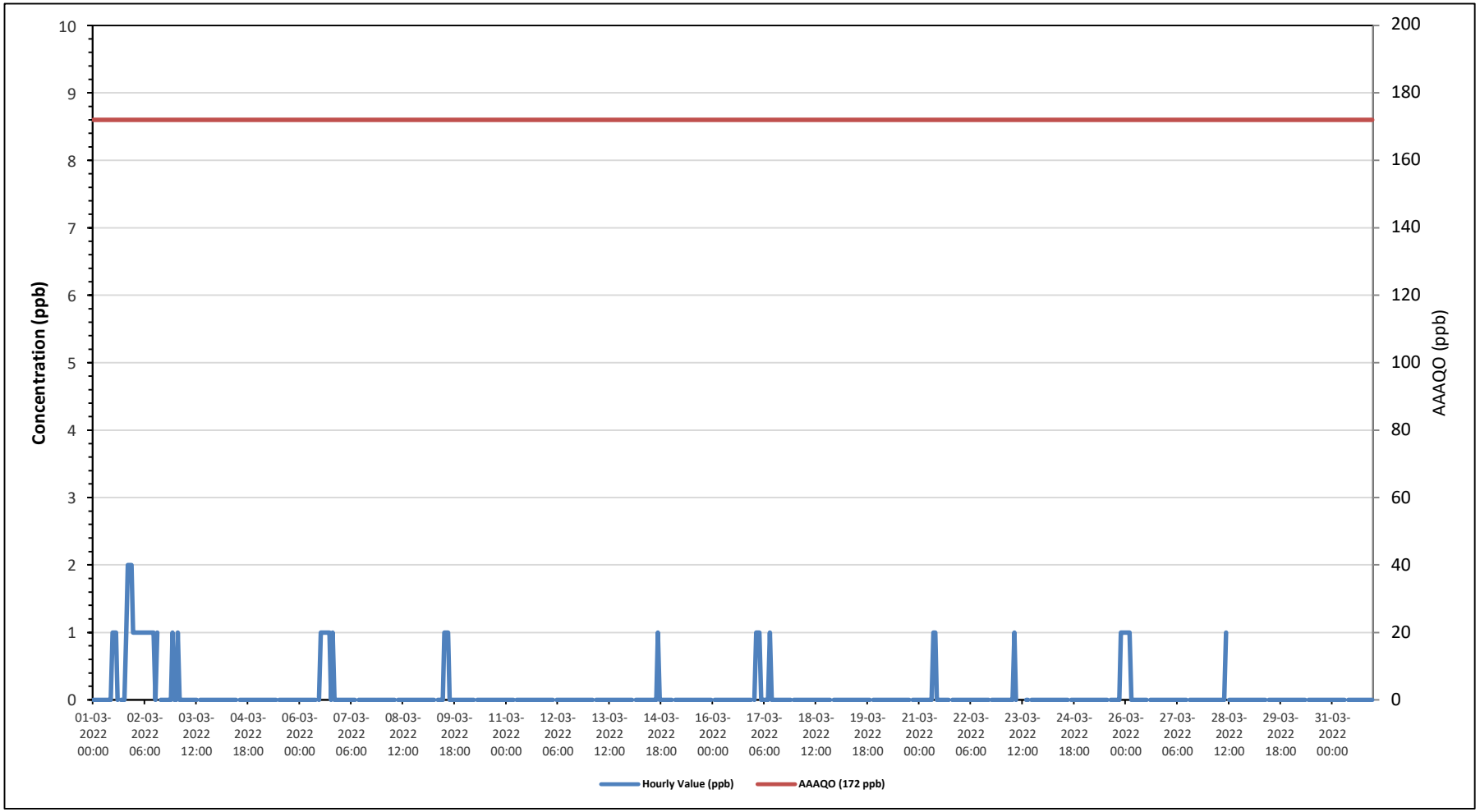
Maximum Hourly Value:	2	ppb	on March 1 at hour 20	Hours in Service:	744
Maximum Daily Value:	0.6	ppb	on March 2	Hours of Data:	707
Minimum Hourly Value:	0	ppb	on March 1 at hour 0	Hours of Missing Data:	0
Minimum Daily Value:	0.0	ppb	on March 4	Hours of Calibration:	37
Monthly Average:	0.1	ppb		Operational Uptime:	100.0

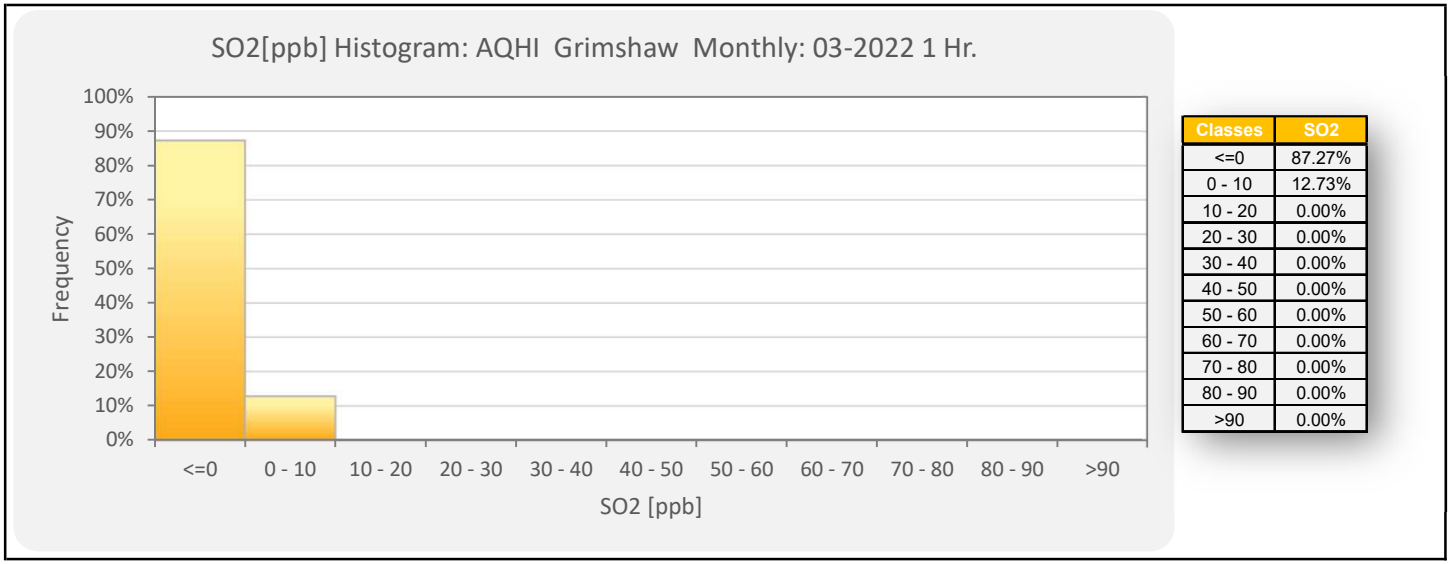
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Mar 1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	S	0	0	0	1	2	2	2	1	0	2	0.5
Mar 2	1	1	1	1	1	1	1	1	1	1	1	1	0	1	S	0	0	0	0	0	0	0	1	0	0	1	0.6
Mar 3	0	1	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	1	0.0
Mar 4	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 5	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 6	0	0	0	0	0	0	0	0	0	0	S	0	1	1	1	1	1	1	0	1	0	0	0	0	0	1	0.3
Mar 7	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 8	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 9	0	0	0	0	0	0	0	S	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0.1
Mar 10	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 11	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 12	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 13	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 14	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.0
Mar 15	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 16	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0.0
Mar 17	0	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	1	0.2
Mar 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0.0
Mar 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0.0
Mar 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0.0
Mar 21	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	S	0	0	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	S	0	0	0	0	0	0	0	0	0.0
Mar 23	0	0	0	0	0	0	0	1	0	C	C	C	C	C	0	0	S	0	0	0	0	0	0	0	0	1	0.1
Mar 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0.0
Mar 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	1	1	1	0	1	0.1
Mar 26	1	1	1	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	1	0.1
Mar 27	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 28	0	0	0	0	0	0	0	0	0	0	1	S	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0
Mar 29	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 30	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mar 31	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Diurnal Maximum	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	2	2	2	1			
Diurnal Average	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1			

C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance	
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance	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 SO2 - AQHI - Grimshaw Station

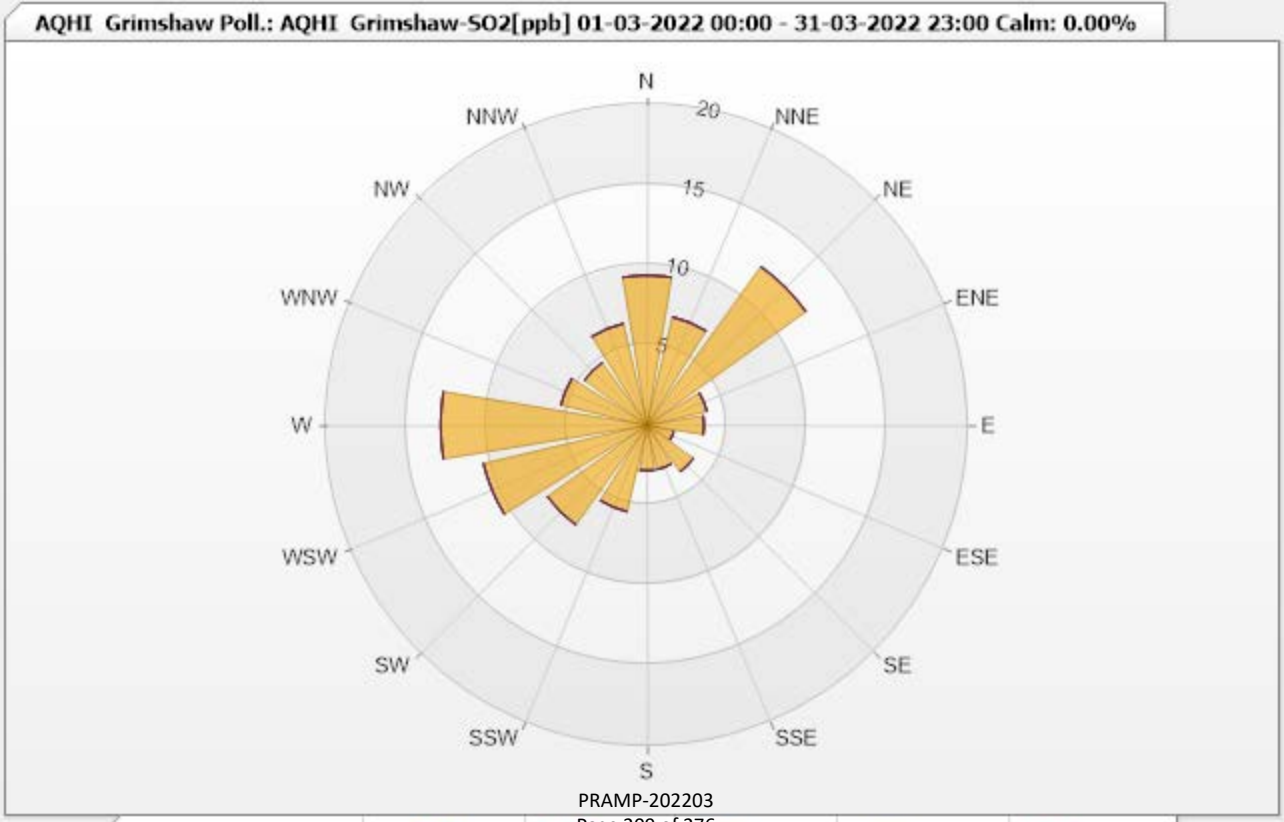




Classes	SO2
<=0	87.27%
0 - 10	12.73%
10 - 20	0.00%
20 - 30	0.00%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Grimshaw Poll.: AQHI Grimshaw-SO2[ppb] Monthly: 03-2022 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	9.34	0	0	0	0	9.34
NNE	6.93	0	0	0	0	6.93
NE	12.16	0	0	0	0	12.16
ENE	3.82	0	0	0	0	3.82
E	3.54	0	0	0	0	3.54
ESE	1.7	0	0	0	0	1.7
SE	3.54	0	0	0	0	3.54
SSE	2.83	0	0	0	0	2.83
S	2.83	0	0	0	0	2.83
SSW	5.52	0	0	0	0	5.52
SW	7.64	0	0	0	0	7.64
WSW	10.47	0	0	0	0	10.47
W	12.87	0	0	0	0	12.87
WNW	5.52	0	0	0	0	5.52
NW	4.81	0	0	0	0	4.81
NNW	6.51	0	0	0	0	6.51
Summary	100	0	0	0	0	100


AQHI Grimshaw Poll.: AQHI Grimshaw-SO2[ppb] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppb)
100 0-10
0 10-50
0 50-100
0 100-172
0 >172.0

peace river area monitoring program
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PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

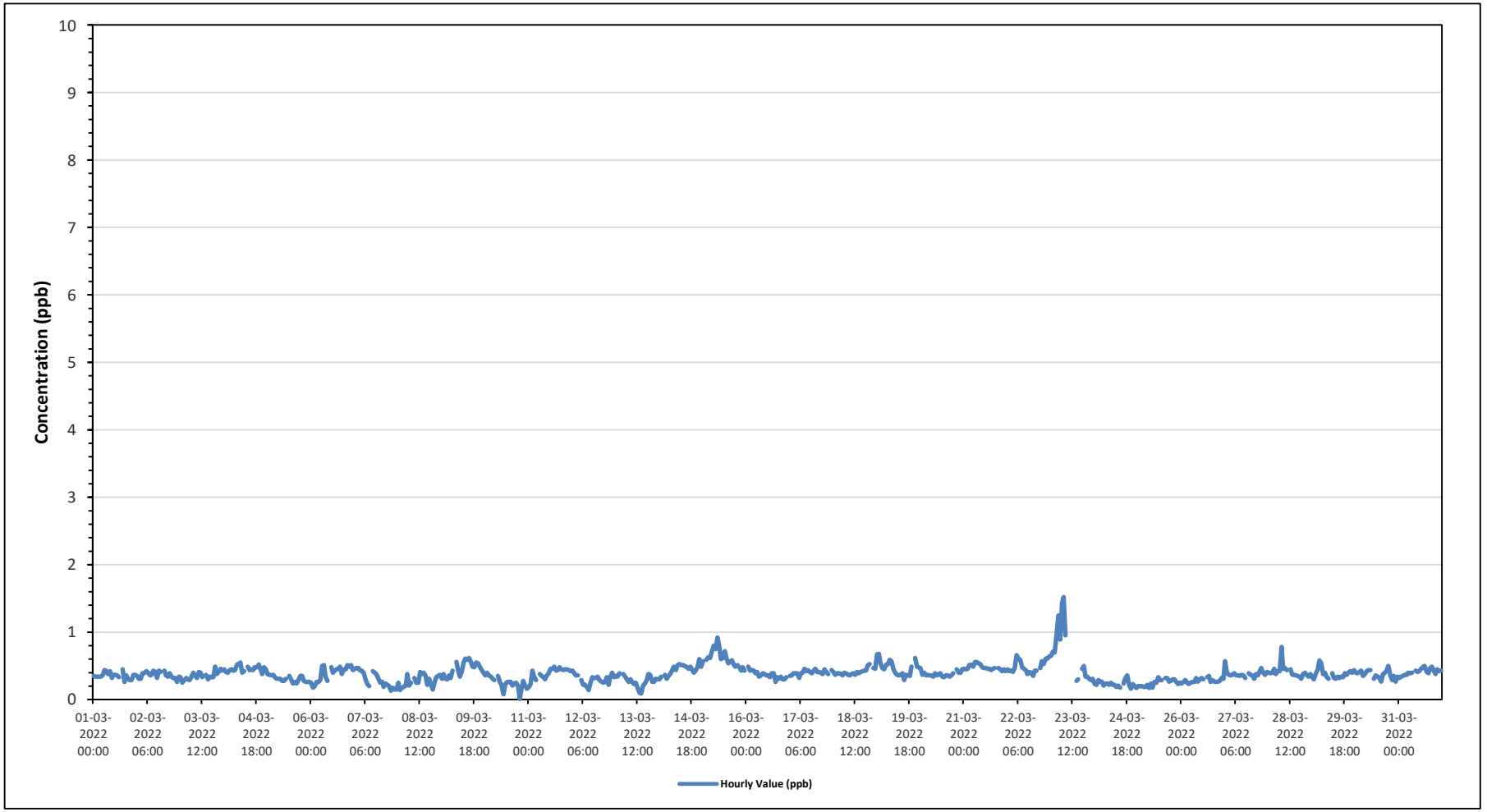
Maximum Hourly Value:	1.52	ppb	on March 23 at hour 7	Hours in Service:	744
Maximum Daily Value:	0.68	ppb	on March 23	Hours of Data:	707
Minimum Hourly Value:	0.01	ppb	on March 10 at hour 19	Hours of Missing Data:	0
Minimum Daily Value:	0.23	ppb	on March 24	Hours of Calibration:	37
Monthly Average:	0.38	ppb		Operational Uptime:	100.0

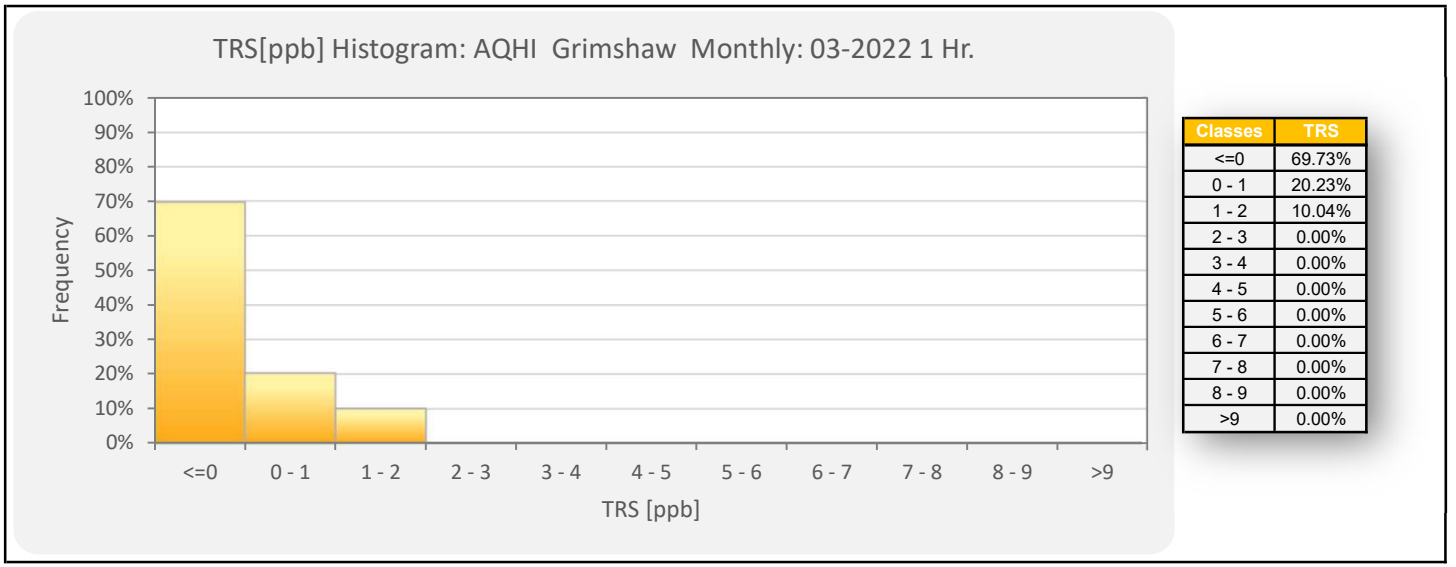
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	0.35	0.34	0.34	0.34	0.34	0.36	0.44	0.43	0.38	0.42	0.32	0.37	0.37	0.36	0.33	S	0.45	0.26	0.36	0.31	0.29	0.29	0.37	0.37	0.26	0.45	0.36
Mar 2	0.35	0.31	0.31	0.39	0.39	0.42	0.4	0.36	0.37	0.43	0.41	0.32	0.43	0.41	S	0.43	0.36	0.34	0.39	0.33	0.32	0.32	0.26	0.34	0.26	0.43	0.36
Mar 3	0.33	0.25	0.29	0.32	0.3	0.29	0.34	0.4	0.35	0.32	0.41	0.4	0.33	S	0.37	0.3	0.34	0.33	0.33	0.49	0.38	0.41	0.46	0.43	0.25	0.49	0.36
Mar 4	0.45	0.41	0.4	0.44	0.45	0.43	0.44	0.52	0.53	0.55	0.4	0.42	S	0.49	0.44	0.45	0.44	0.48	0.48	0.52	0.46	0.38	0.48	0.45	0.38	0.55	0.46
Mar 5	0.38	0.37	0.36	0.37	0.33	0.31	0.31	0.31	0.28	0.28	0.31	S	0.35	0.3	0.24	0.26	0.24	0.29	0.35	0.35	0.28	0.26	0.26	0.26	0.24	0.38	0.31
Mar 6	0.25	0.18	0.2	0.26	0.26	0.29	0.5	0.51	0.34	0.28	S	0.48	0.4	0.43	0.45	0.46	0.49	0.38	0.45	0.45	0.51	0.49	0.51	0.44	0.18	0.51	0.39
Mar 7	0.46	0.47	0.47	0.43	0.43	0.4	0.3	0.23	0.2	S	0.42	0.4	0.38	0.32	0.25	0.27	0.19	0.24	0.22	0.2	0.13	0.18	0.15	0.15	0.13	0.47	0.30
Mar 8	0.25	0.14	0.17	0.19	0.21	0.38	0.21	0.25	S	0.32	0.25	0.25	0.41	0.38	0.4	0.36	0.22	0.31	0.22	0.15	0.26	0.33	0.35	0.37	0.14	0.41	0.28
Mar 9	0.31	0.38	0.31	0.3	0.36	0.32	0.43	S	0.56	0.44	0.34	0.41	0.55	0.61	0.59	0.62	0.56	0.49	0.48	0.55	0.54	0.49	0.44	0.4	0.30	0.62	0.46
Mar 10	0.36	0.4	0.36	0.34	0.31	0.29	S	0.35	0.26	0.22	0.08	0.23	0.26	0.26	0.27	0.21	0.24	0.25	0.2	0.01	0.17	0.28	0.21	0.16	**0.01**	0.40	0.25
Mar 11	0.19	0.23	0.43	0.33	0.29	S	0.38	0.35	0.33	0.3	0.36	0.39	0.46	0.46	0.49	0.43	0.44	0.48	0.45	0.44	0.45	0.45	0.44	0.42	0.19	0.49	0.39
Mar 12	0.43	0.4	0.36	0.36	S	0.29	0.22	0.22	0.19	0.14	0.25	0.33	0.32	0.32	0.34	0.29	0.27	0.25	0.26	0.33	0.22	0.33	0.4	0.33	0.14	0.43	0.30
Mar 13	0.35	0.34	0.39	S	0.38	0.35	0.3	0.26	0.3	0.26	0.23	0.25	0.18	0.1	0.09	0.21	0.24	0.29	0.38	0.37	0.26	0.27	0.31	0.3	0.09	0.39	0.28
Mar 14	0.3	0.34	S	0.37	0.31	0.35	0.38	0.43	0.49	0.44	0.51	0.53	0.51	0.51	0.5	0.49	0.46	0.49	0.45	0.4	0.43	0.48	0.6	0.49	0.30	0.60	0.45
Mar 15	0.57	S	0.59	0.63	0.62	0.72	0.8	0.75	0.92	0.79	0.6	0.62	0.72	0.6	0.54	0.56	0.58	0.52	0.49	0.51	0.48	0.43	0.48	0.43	0.43	0.92	0.61
Mar 16	S	0.49	0.43	0.44	0.43	0.39	0.41	0.34	0.36	0.39	0.38	0.36	0.36	0.33	0.39	0.39	0.26	0.33	0.31	0.34	0.3	0.3	0.33	S	0.26	0.49	0.37
Mar 17	0.35	0.36	0.39	0.39	0.39	0.32	0.39	0.4	0.46	0.42	0.44	0.41	0.39	0.43	0.46	0.41	0.41	0.4	0.38	0.45	0.41	0.38	S	0.44	0.32	0.46	0.40
Mar 18	0.41	0.37	0.39	0.39	0.38	0.36	0.4	0.39	0.37	0.36	0.38	0.39	0.37	0.41	0.39	0.41	0.42	0.43	0.43	0.51	0.53	S	0.47	0.46	0.36	0.53	0.41
Mar 19	0.67	0.68	0.53	0.47	0.45	0.52	0.53	0.59	0.57	0.46	0.4	0.37	0.36	0.37	0.39	0.29	0.37	0.36	0.35	0.49	S	0.62	0.49	0.48	0.29	0.68	0.47
Mar 20	0.47	0.37	0.4	0.36	0.37	0.36	0.36	0.34	0.39	0.36	0.38	0.39	0.34	0.33	0.36	0.36	0.34	0.36	0.39	S	0.45	0.4	0.4	0.45	0.33	0.47	0.38
Mar 21	0.46	0.45	0.46	0.51	0.52	0.49	0.56	0.56	0.54	0.53	0.48	0.47	0.47	0.46	0.46	0.44	0.46	0.47	S	0.47	0.45	0.42	0.45	0.42	0.42	0.56	0.48
Mar 22	0.45	0.42	0.43	0.41	0.47	0.66	0.61	0.59	0.48	0.46	0.44	0.38	0.41	0.4	0.35	0.43	0.43	S	0.47	0.57	0.53	0.61	0.61	0.64	0.35	0.66	0.49
Mar 23	0.65	0.71	0.7	0.97	1.25	0.89	1.43	**1.52**	0.95	C	C	C	C	C	0.28	0.3	S	0.46	0.5	0.34	0.34	0.31	0.29	0.31	0.28	**1.52**	**0.68**
Mar 24	0.23	0.22	0.29	0.27	0.27	0.21	0.24	0.24	0.22	0.25	0.22	0.22	0.19	0.21	0.18	S	0.24	0.32	0.36	0.22	0.16	0.23	0.2	0.17	0.16	0.36	0.23
Mar 25	0.2	0.2	0.2	0.19	0.19	0.22	0.17	0.24	0.18	0.26	0.25	0.33	0.29	0.29	S	0.32	0.32	0.27	0.28	0.3	0.3	0.27	0.23	0.25	0.17	0.33	0.25
Mar 26	0.24	0.26	0.29	0.25	0.23	0.25	0.26	0.26	0.32	0.27	0.3	0.32	0.3	S	0.33	0.35	0.26	0.29	0.27	0.26	0.27	0.28	0.32	0.31	0.23	0.35	0.28
Mar 27	0.57	0.4	0.37	0.36	0.37	0.39	0.36	0.36	0.35	0.37	0.36	0.32	S	0.39	0.37	0.36	0.31	0.38	0.36	0.42	0.47	0.4	0.37	0.41	0.31	0.57	0.38
Mar 28	0.4	0.39	0.4	0.46	0.38	0.42	0.42	0.78	0.46	0.47	0.44	S	0.45	0.37	0.37	0.36	0.35	0.34	0.31	0.38	0.4	0.37	0.34	0.38	0.31	0.78	0.41
Mar 29	0.33	0.3	0.39	0.45	0.58	0.54	0.38	0.4	0.34	0.31	S	0.39	0.32	0.31	0.34	0.32	0.34	0.33	0.39	0.37	0.4	0.42	0.4	0.44	0.30	0.58	0.38
Mar 30	0.4	0.39	0.41	0.43	0.35	0.38	0.42	0.44	0.44	S	0.31	0.36	0.34	0.32	0.27	0.38	0.4	0.42	0.5	0.36	0.29	0.35	0.27	0.34	0.27	0.50	0.37
Mar 31	0.32	0.34	0.35	0.37	0.37	0.4	0.39	0.4	S	0.43	0.41	0.42	0.46	0.48	0.5	0.41	0.39	0.47	0.49	0.43	0.38	0.45	0.42	0.43	0.32	0.50	0.41
Diurnal Maximum	0.67	0.71	0.70	0.97	1.25	0.89	1.43	1.52	0.95	0.79	0.60	0.62	0.72	0.61	0.59	0.62	0.58	0.52	0.50	0.57	0.54	0.62	0.61	0.64			
Diurnal Average	0.38	0.36	0.38	0.39	0.40	0.40	0.43	0.44	0.41	0.38	0.36	0.38	0.38	0.38	0.37	0.37	0.36	0.37	0.38	0.38	0.36	0.37	0.38	0.38			

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 - AQHI - Grimshaw Station

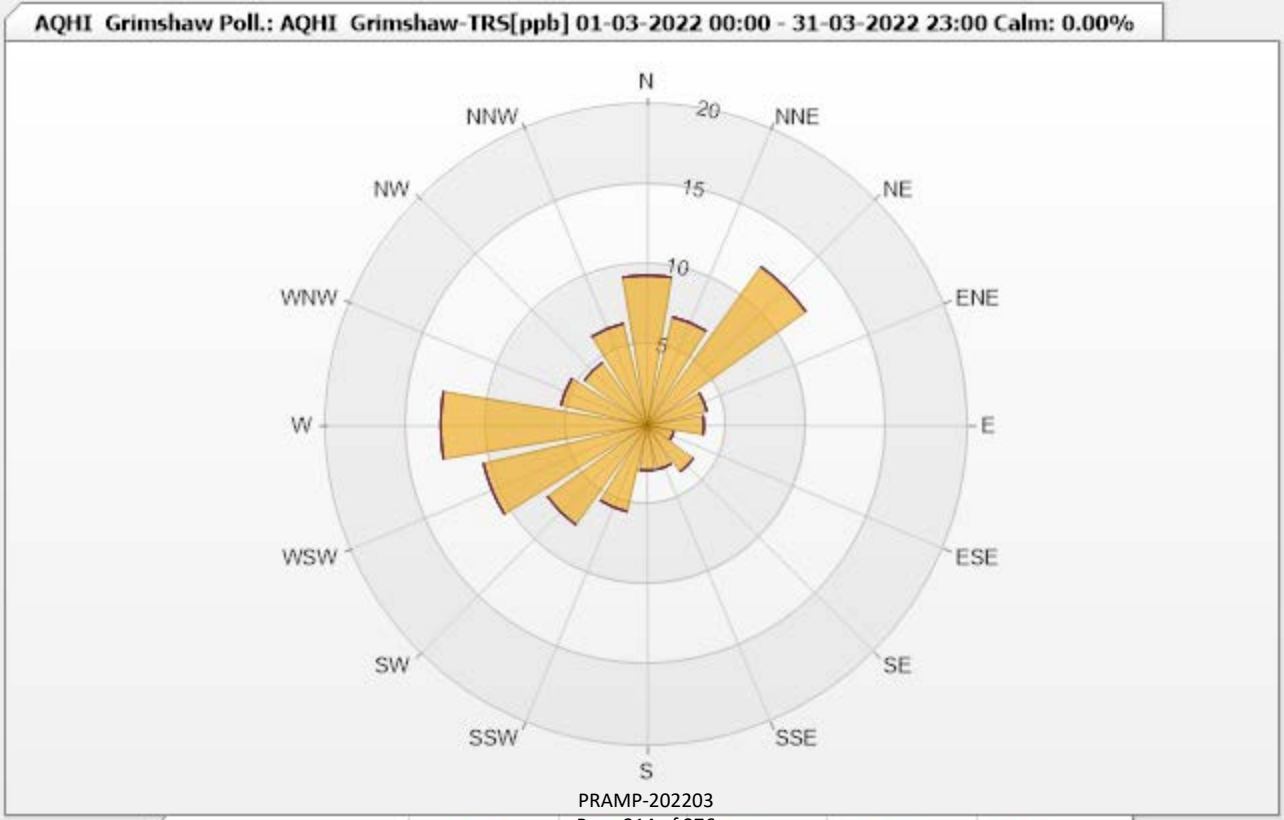




Classes	TRS
<=0	69.73%
0 - 1	20.23%
1 - 2	10.04%
2 - 3	0.00%
3 - 4	0.00%
4 - 5	0.00%
5 - 6	0.00%
6 - 7	0.00%
7 - 8	0.00%
8 - 9	0.00%
>9	0.00%

Wind: AQHI Grimshaw Poll.: AQHI Grimshaw-TRS[ppb] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 95.03% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	9.34	0	0	0	0	9.34
NNE	6.93	0	0	0	0	6.93
NE	12.16	0	0	0	0	12.16
ENE	3.82	0	0	0	0	3.82
E	3.54	0	0	0	0	3.54
ESE	1.7	0	0	0	0	1.7
SE	3.54	0	0	0	0	3.54
SSE	2.83	0	0	0	0	2.83
S	2.83	0	0	0	0	2.83
SSW	5.52	0	0	0	0	5.52
SW	7.64	0	0	0	0	7.64
WSW	10.47	0	0	0	0	10.47
W	12.87	0	0	0	0	12.87
WNW	5.52	0	0	0	0	5.52
NW	4.81	0	0	0	0	4.81
NNW	6.51	0	0	0	0	6.51
Summary	100	0	0	0	0	100


AQHI Grimshaw Poll.: AQHI Grimshaw-TRS[ppb] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppb)
100 0-2
0 2-5
0 5-10
0 10-50
0 >50.0

peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

OXIDES OF NITROGEN (NOx) in ppb

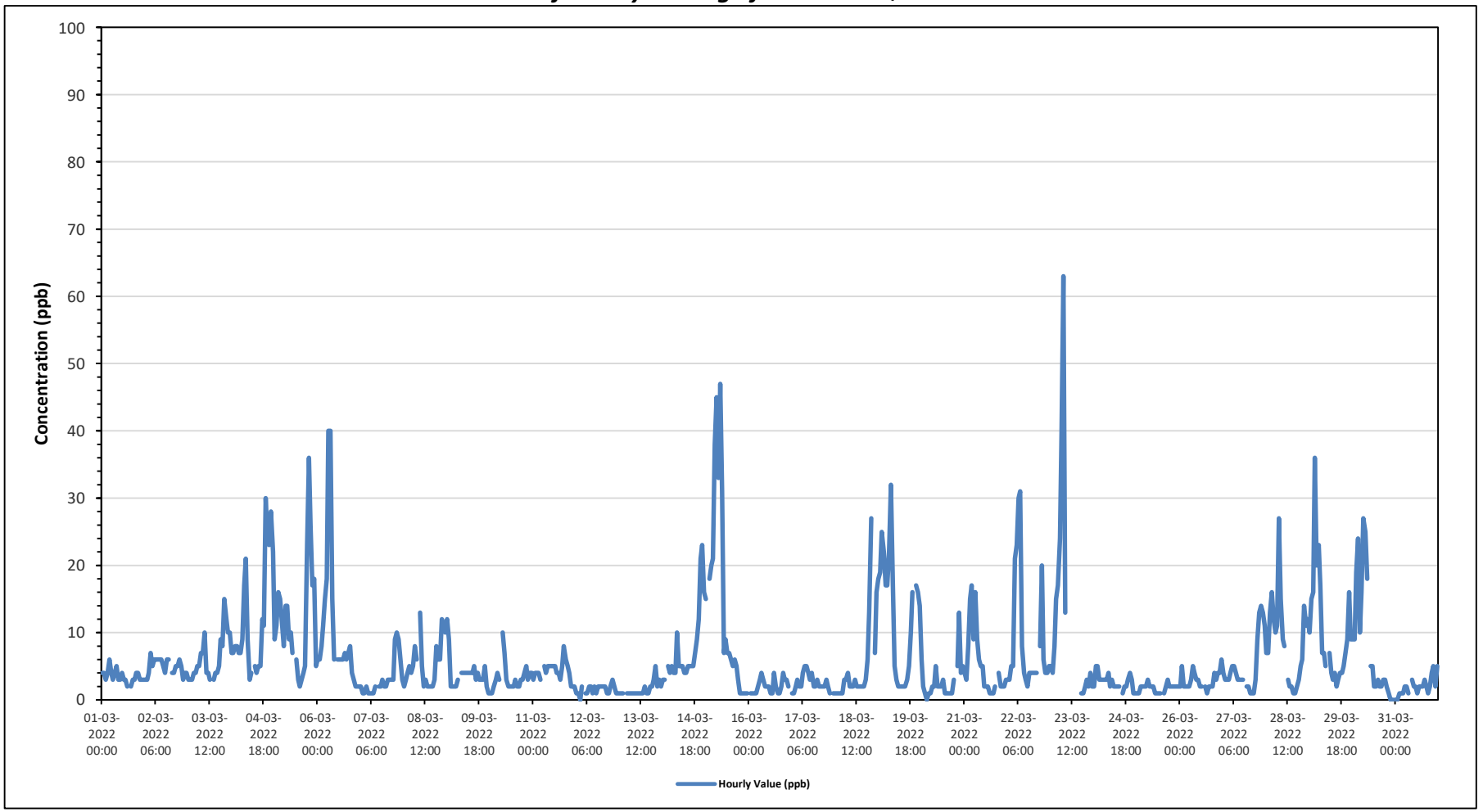
Maximum Hourly Value:	63	ppb	on March 23 at hour 7	Hours in Service:	744
Maximum Daily Value:	14.3	ppb	on March 15	Hours of Data:	705
Minimum Hourly Value:	0	ppb	on March 12 at hour 2	Hours of Missing Data:	0
Minimum Daily Value:	1.5	ppb	on March 12	Hours of Calibration:	39
Monthly Average:	5.9	ppb		Operational Uptime:	100.0

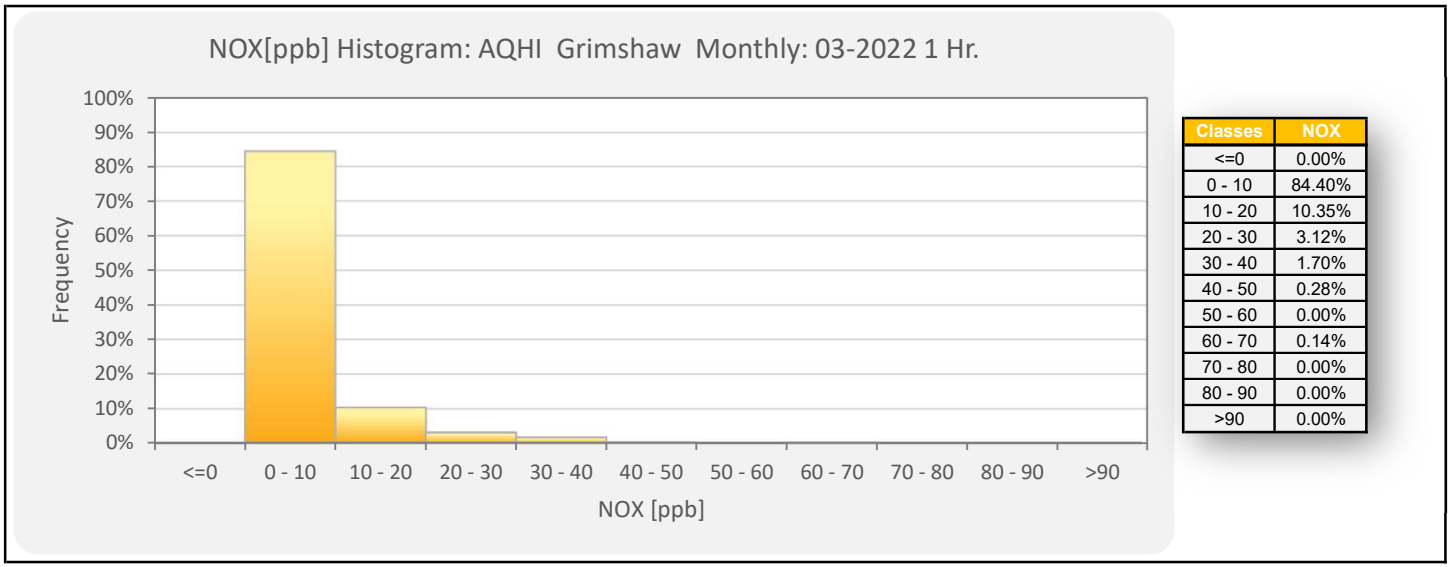
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Mar 1	4	4	3	4	6	4	3	4	5	3	3	4	3	3	2	S	2	3	3	4	4	3	3	3	2	6	3.5
Mar 2	3	3	4	7	5	6	6	6	6	6	5	4	6	6	S	4	4	5	5	6	5	3	4	4	3	7	4.9
Mar 3	3	3	3	4	4	5	5	7	7	10	4	4	3	S	3	4	4	5	9	8	15	12	10	10	3	15	6.2
Mar 4	7	7	8	8	7	7	9	17	21	9	3	4	S	5	4	5	5	12	11	30	24	23	28	22	3	30	12.0
Mar 5	9	11	16	15	12	8	14	14	9	10	7	S	6	3	2	3	4	5	23	36	26	17	18	5	2	36	11.9
Mar 6	6	6	8	11	15	18	40	40	15	6	S	6	6	6	6	7	6	7	8	4	3	2	2	2	2	40	10.0
Mar 7	2	1	1	2	1	1	1	1	2	S	2	2	3	2	2	3	3	3	3	9	10	9	6	3	1	10	3.1
Mar 8	2	3	4	5	4	5	8	6	S	13	5	2	3	2	2	2	2	3	8	6	6	12	11	10	2	13	5.4
Mar 9	12	9	2	2	2	2	3	S	4	4	4	4	4	4	4	5	3	4	3	3	3	5	2	1	1	12	3.9
Mar 10	1	1	2	3	4	3	S	10	7	3	2	2	2	2	3	2	2	3	3	4	5	3	4	4	1	10	3.3
Mar 11	3	4	4	4	3	S	5	4	5	5	5	5	5	4	4	3	5	8	6	5	4	2	2	2	2	8	4.2
Mar 12	1	1	0	2	S	1	1	2	2	1	2	1	2	2	2	2	2	1	1	2	3	2	1	1	0	3	1.5
Mar 13	1	1	1	S	1	1	1	1	1	1	1	1	1	1	2	1	1	2	2	3	5	2	3	2	1	5	1.6
Mar 14	3	3	S	5	4	5	4	4	10	5	5	5	4	4	5	5	5	5	7	9	12	21	23	16	3	23	7.3
Mar 15	15	S	18	20	21	38	45	33	47	31	7	9	7	7	6	5	6	5	3	1	1	1	1	1	1	47	**14.3**
Mar 16	S	1	1	1	1	2	3	4	3	2	2	2	1	1	4	2	1	1	2	4	3	3	2	S	1	4	2.1
Mar 17	1	1	2	3	2	2	4	5	5	4	3	4	2	2	3	2	2	2	2	3	2	1	S	1	1	5	2.5
Mar 18	1	1	1	1	1	3	3	4	2	2	2	3	2	2	2	2	2	3	6	13	27	S	7	16	1	27	4.6
Mar 19	18	19	25	22	17	17	22	32	18	5	3	2	2	2	2	2	3	5	10	16	S	17	16	14	2	32	12.6
Mar 20	6	2	1	0	1	1	2	2	5	2	2	2	3	1	1	1	1	1	3	S	5	13	4	5	0	13	2.8
Mar 21	4	3	8	15	17	9	16	9	6	5	5	2	2	2	1	1	1	2	S	4	2	2	2	3	1	17	5.3
Mar 22	3	3	5	5	21	23	30	31	8	4	3	2	4	4	4	4	4	S	8	20	6	4	4	5	2	31	8.9
Mar 23	5	4	8	15	17	24	40	**63**	13	C	C	C	C	C	C	C	C	1	1	2	3	2	4	2	1	**63**	-
Mar 24	2	5	5	3	3	3	3	3	4	2	3	2	2	2	2	S	1	2	2	3	4	3	1	1	1	5	2.7
Mar 25	1	1	2	2	2	2	3	2	2	2	1	1	1	1	S	1	2	3	2	2	2	2	2	2	1	3	1.8
Mar 26	2	5	2	2	2	2	3	5	4	3	3	2	2	S	2	1	2	2	2	4	3	4	4	6	1	6	2.9
Mar 27	4	3	3	3	4	5	5	4	3	3	3	3	S	2	2	1	1	1	3	9	13	14	13	11	1	14	4.9
Mar 28	7	7	13	16	12	10	11	27	15	9	8	S	3	2	2	1	1	2	3	5	6	14	11	12	1	27	8.6
Mar 29	10	15	16	36	20	23	17	7	7	5	S	7	4	3	4	2	3	4	4	5	7	9	16	9	2	36	10.1
Mar 30	9	9	19	24	10	16	27	25	18	S	5	5	2	2	3	2	2	3	3	2	1	0	0	0	0	27	8.1
Mar 31	0	0	1	1	1	2	2	1	S	3	2	2	1	2	2	2	3	2	1	2	4	5	2	5	0	5	2.0
Diurnal Maximum	18	19	25	36	21	38	45	63	47	31	8	9	7	7	6	7	6	12	23	36	27	23	28	22			
Diurnal Average	4.8	4.5	6.2	8.0	7.3	8.3	11.2	12.4	8.8	5.6	3.6	3.3	3.1	2.8	2.9	2.7	2.8	3.5	4.9	7.5	7.1	7.0	6.9	5.9			

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

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

Timeseries Chart of Hourly Average for NOx - AQHI - Grimshaw Station

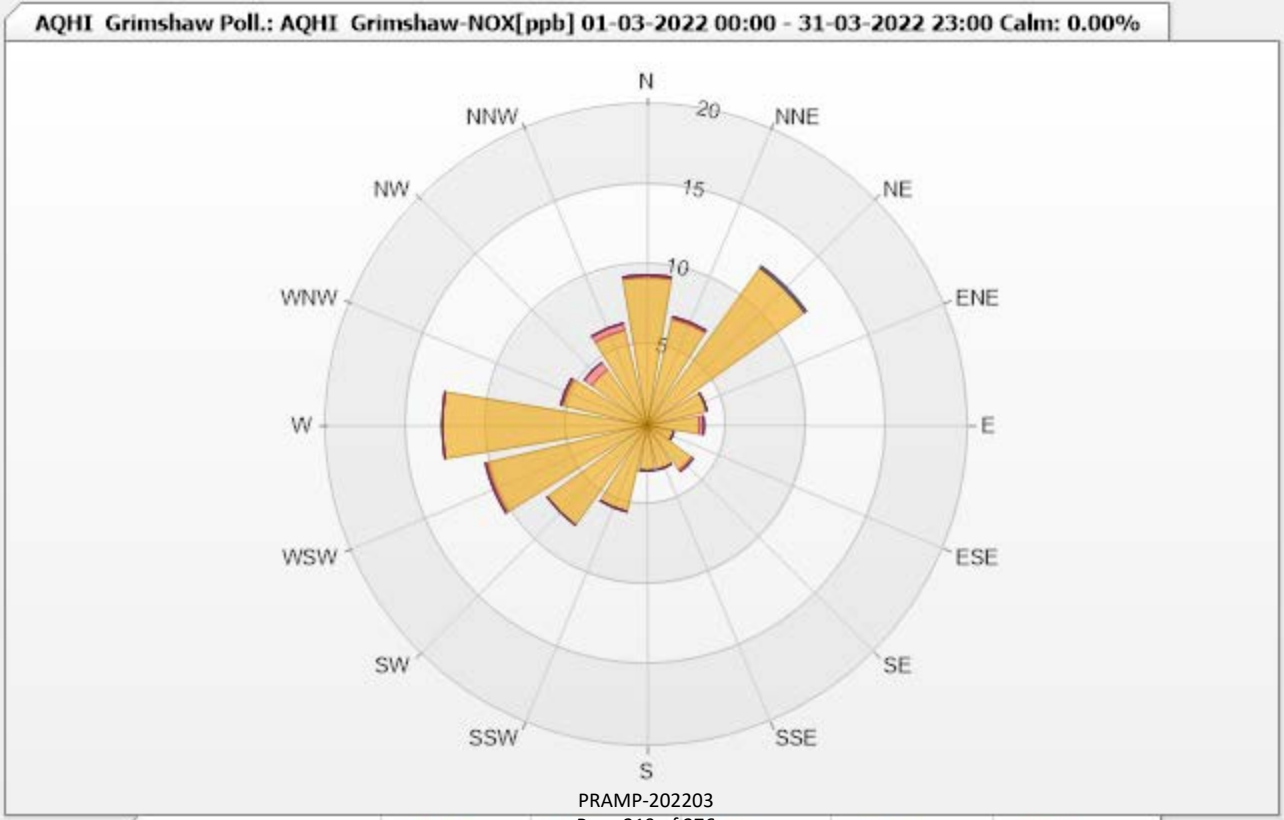




Classes	NOX
<=0	0.00%
0 - 10	84.40%
10 - 20	10.35%
20 - 30	3.12%
30 - 40	1.70%
40 - 50	0.28%
50 - 60	0.00%
60 - 70	0.14%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Grimshaw Poll.: AQHI Grimshaw-NOX[ppb] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 94.76% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	9.22	0.14	0	0	0	9.36
NNE	6.81	0.14	0	0	0	6.95
NE	12.06	0	0.14	0	0	12.2
ENE	3.83	0	0	0	0	3.83
E	3.26	0.28	0	0	0	3.54
ESE	1.7	0	0	0	0	1.7
SE	3.4	0.14	0	0	0	3.54
SSE	2.84	0	0	0	0	2.84
S	2.84	0	0	0	0	2.84
SSW	5.53	0	0	0	0	5.53
SW	7.66	0	0	0	0	7.66
WSW	10.21	0.14	0	0	0	10.35
W	12.77	0	0	0	0	12.77
WNW	5.39	0.14	0	0	0	5.53
NW	4.26	0.57	0	0	0	4.83
NNW	6.1	0.43	0	0	0	6.53
Summary	97.88	1.98	0.14	0	0	100


AQHI Grimshaw Poll.: AQHI Grimshaw-NOX[ppb] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppb)
98 0-30
2 30-50
0 50-76
0 76-159
0 >159.0

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PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

NITRIC OXIDE (NO) in ppb

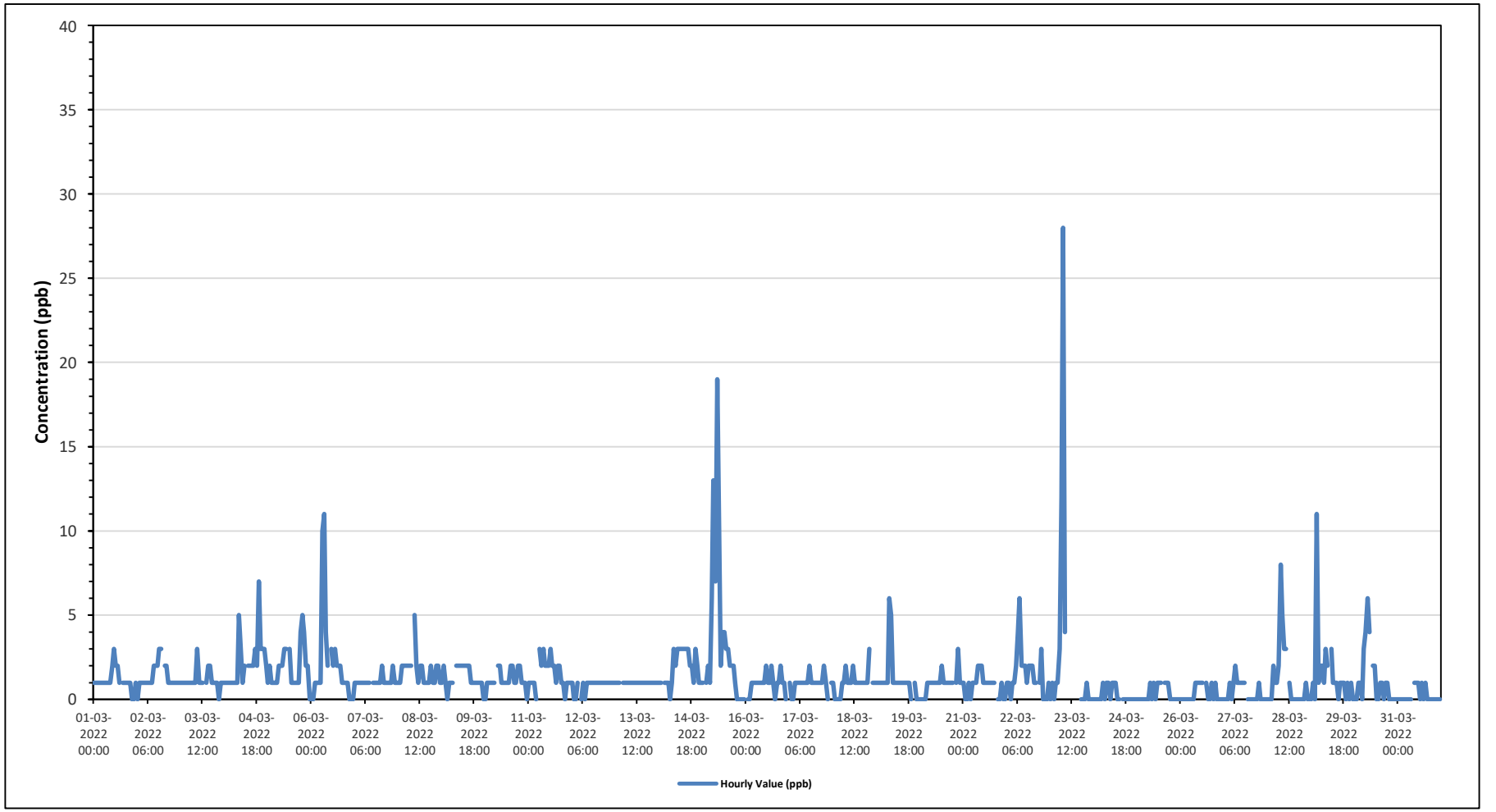
Maximum Hourly Value:	28	ppb	on March 23 at hour 7	Hours in Service:	744
Maximum Daily Value:	3.6	ppb	on March 15	Hours of Data:	705
Minimum Hourly Value:	0	ppb	on March 1 at hour 21	Hours of Missing Data:	0
Minimum Daily Value:	0.2	ppb	on March 31	Hours of Calibration:	39
Monthly Average:	1.3	ppb		Operational Uptime:	100.0

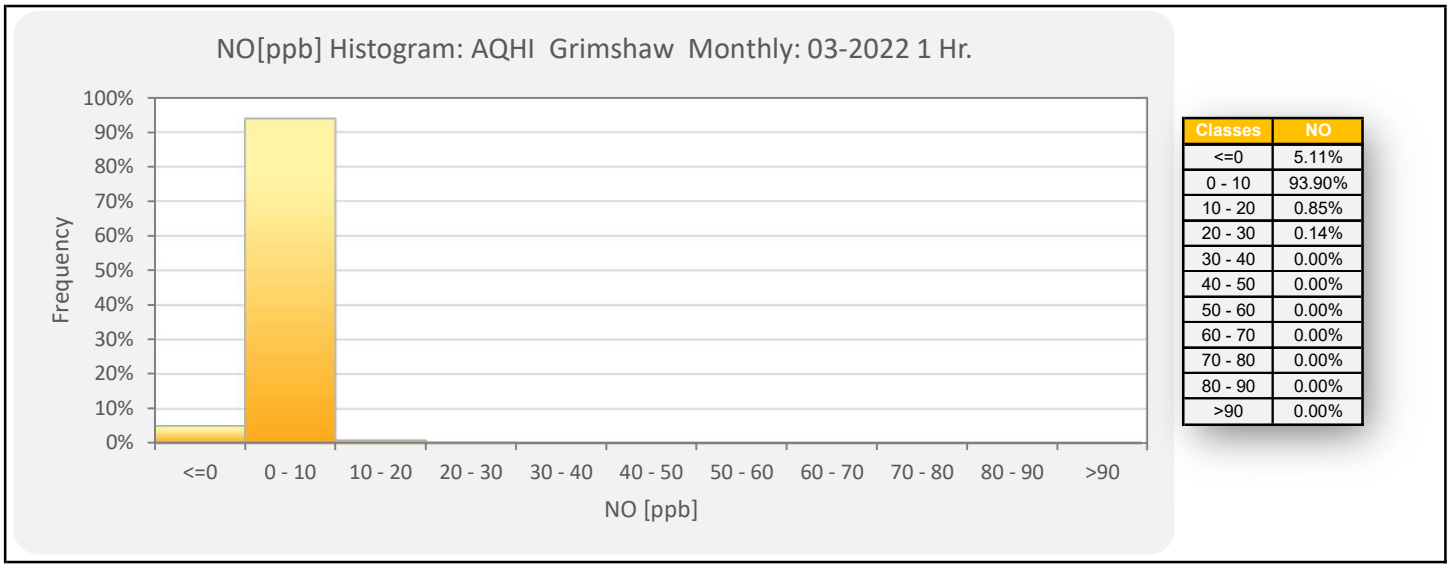
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Mar 1	1	1	1	1	1	1	1	1	1	1	2	3	2	2	1	S	1	1	1	1	1	0	0	1	0	3	1.1
Mar 2	0	1	1	1	1	1	1	1	1	2	2	2	3	3	S	2	2	1	1	1	1	1	1	1	0	3	1.3
Mar 3	1	1	1	1	1	1	1	1	1	3	1	1	1	S	1	2	2	1	1	1	1	0	1	1	0	3	1.1
Mar 4	1	1	1	1	1	1	1	1	5	3	1	2	S	2	2	2	2	3	2	7	3	3	3	2	**1**	7	2.2
Mar 5	1	2	1	1	1	1	2	2	2	3	3	S	3	1	1	1	1	1	4	5	4	2	2	0	0	5	1.9
Mar 6	0	0	1	1	1	1	10	11	4	2	S	3	2	3	2	2	2	1	1	1	1	0	0	0	0	11	2.1
Mar 7	1	1	1	1	1	1	1	1	1	S	1	1	1	1	1	2	1	1	1	1	1	2	1	1	**1**	2	1.1
Mar 8	1	1	2	2	2	2	2	2	S	5	2	1	2	2	1	1	1	1	2	1	1	2	2	1	**1**	5	1.7
Mar 9	1	2	1	0	1	1	1	S	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	0	0	2	1.3
Mar 10	0	1	1	1	1	1	S	2	2	1	1	1	1	1	2	2	1	1	2	2	1	1	1	0	0	2	1.2
Mar 11	1	1	1	1	0	S	3	2	3	2	2	2	3	2	2	1	2	2	1	1	0	1	1	1	0	3	1.5
Mar 12	1	0	0	1	S	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.8
Mar 13	1	1	1	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**1**	1	1.0
Mar 14	1	1	S	1	1	1	0	1	3	2	3	3	3	3	3	3	3	2	2	1	3	2	1	1	0	3	1.9
Mar 15	1	S	1	2	1	6	13	7	19	10	2	4	4	3	3	2	2	2	1	0	0	0	0	0	0	19	**3.6**
Mar 16	S	0	0	1	1	1	1	1	1	1	1	2	1	1	2	1	0	1	1	2	1	1	0	S	0	2	1.0
Mar 17	1	0	0	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	2	1	0	S	1	0	2	1.0
Mar 18	1	0	0	0	0	1	1	2	1	1	1	2	1	1	1	1	1	1	1	1	3	S	1	1	0	3	1.0
Mar 19	1	1	1	1	1	1	1	6	5	1	1	1	1	1	1	1	1	1	1	0	S	1	0	0	0	6	1.3
Mar 20	0	0	0	0	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	S	1	3	1	1	0	3	1.0
Mar 21	1	0	0	1	0	1	1	1	2	2	2	1	1	1	1	1	1	1	S	0	0	1	0	0	0	2	0.8
Mar 22	1	1	0	1	1	2	4	6	2	2	2	1	2	2	2	1	1	S	1	3	0	0	0	1	0	6	1.6
Mar 23	0	1	0	1	1	3	12	**28**	4	C	C	C	C	C	C	C	C	0	0	0	1	0	0	0	0	**28**	-
Mar 24	0	0	0	0	0	1	0	1	1	0	1	1	1	0	0	S	0	0	0	0	0	0	0	0	0	1	0.3
Mar 25	0	0	0	0	0	0	0	1	0	1	0	1	1	1	S	1	1	1	0	0	0	0	0	0	0	1	0.3
Mar 26	0	0	0	0	0	0	0	0	1	1	1	1	1	S	1	0	0	1	0	1	0	0	0	0	0	1	0.3
Mar 27	0	0	0	1	0	1	2	1	1	1	1	1	S	0	0	0	0	0	0	1	0	0	0	0	0	2	0.4
Mar 28	0	0	0	2	1	1	2	8	5	3	3	S	1	0	0	0	0	0	0	0	0	1	0	0	0	8	1.2
Mar 29	0	1	0	11	1	2	2	1	3	2	S	3	1	1	1	0	1	1	1	0	1	0	1	0	0	11	1.5
Mar 30	0	0	1	1	0	3	4	6	4	S	2	2	0	0	1	1	0	1	1	0	0	0	0	0	0	6	1.2
Mar 31	0	0	0	0	0	0	0	0	S	1	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0.2
Diurnal Maximum	1	2	2	11	2	6	13	28	19	10	3	4	4	3	3	3	3	3	4	7	4	3	3	2			
Diurnal Average	0.6	0.6	0.5	1.2	0.7	1.3	2.3	3.2	2.7	2.0	1.5	1.7	1.5	1.4	1.3	1.2	1.0	1.0	1.0	1.2	0.9	0.8	0.6	0.5			

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

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

Timeseries Chart of Hourly Average for NO - AQHI - Grimshaw Station

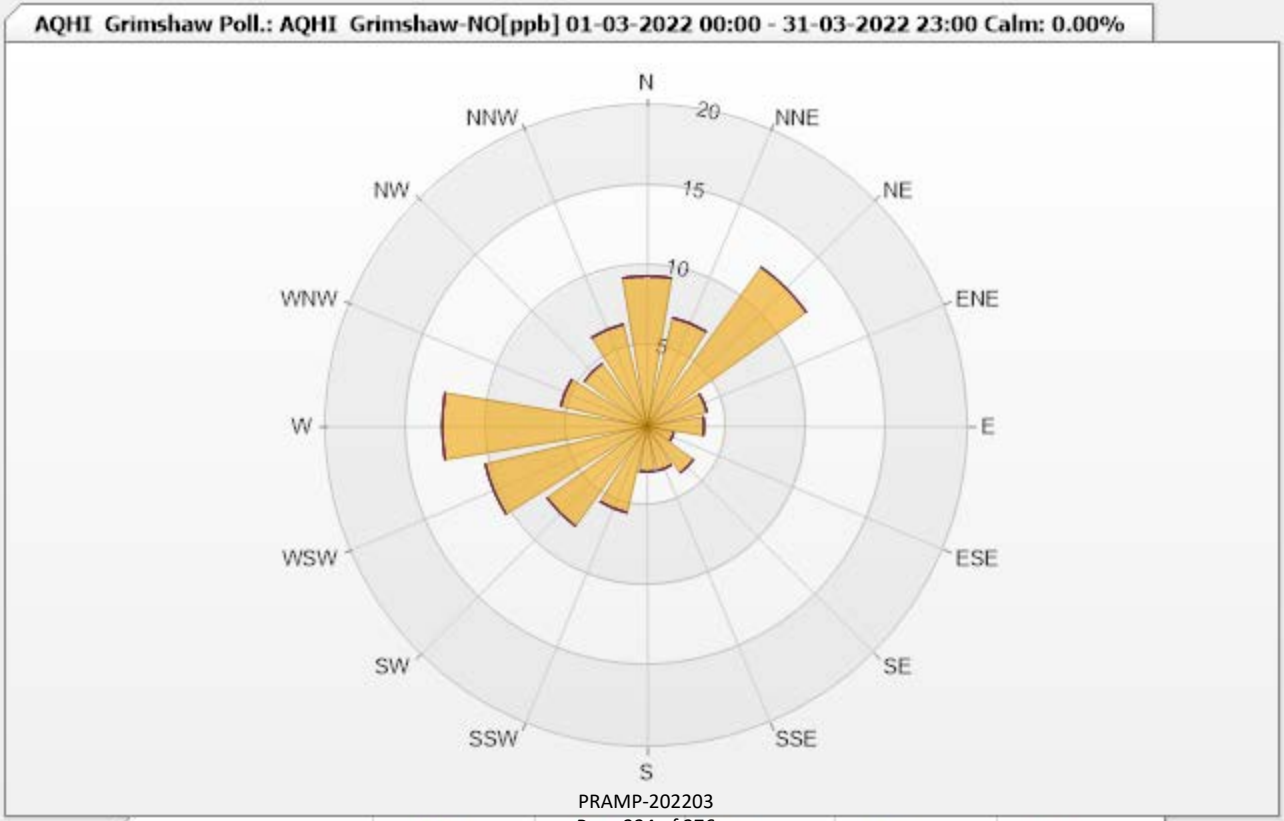




Classes	NO
<=0	5.11%
0 - 10	93.90%
10 - 20	0.85%
20 - 30	0.14%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Grimshaw Poll.: AQHI Grimshaw-NO[ppb] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 94.76% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	9.36	0	0	0	0	9.36
NNE	6.95	0	0	0	0	6.95
NE	12.2	0	0	0	0	12.2
ENE	3.83	0	0	0	0	3.83
E	3.55	0	0	0	0	3.55
ESE	1.7	0	0	0	0	1.7
SE	3.55	0	0	0	0	3.55
SSE	2.84	0	0	0	0	2.84
S	2.84	0	0	0	0	2.84
SSW	5.53	0	0	0	0	5.53
SW	7.66	0	0	0	0	7.66
WSW	10.35	0	0	0	0	10.35
W	12.77	0	0	0	0	12.77
WNW	5.53	0	0	0	0	5.53
NW	4.82	0	0	0	0	4.82
NNW	6.52	0	0	0	0	6.52
Summary	100	0	0	0	0	100


AQHI Grimshaw Poll.: AQHI Grimshaw-NO[ppb] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppb)
100 0-30
0 30-50
0 50-76
0 76-159
0 >159.0

peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

NITROGEN DIOXIDE (NO_2) in ppb

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

Number of 1-Hour Exceedances: 0

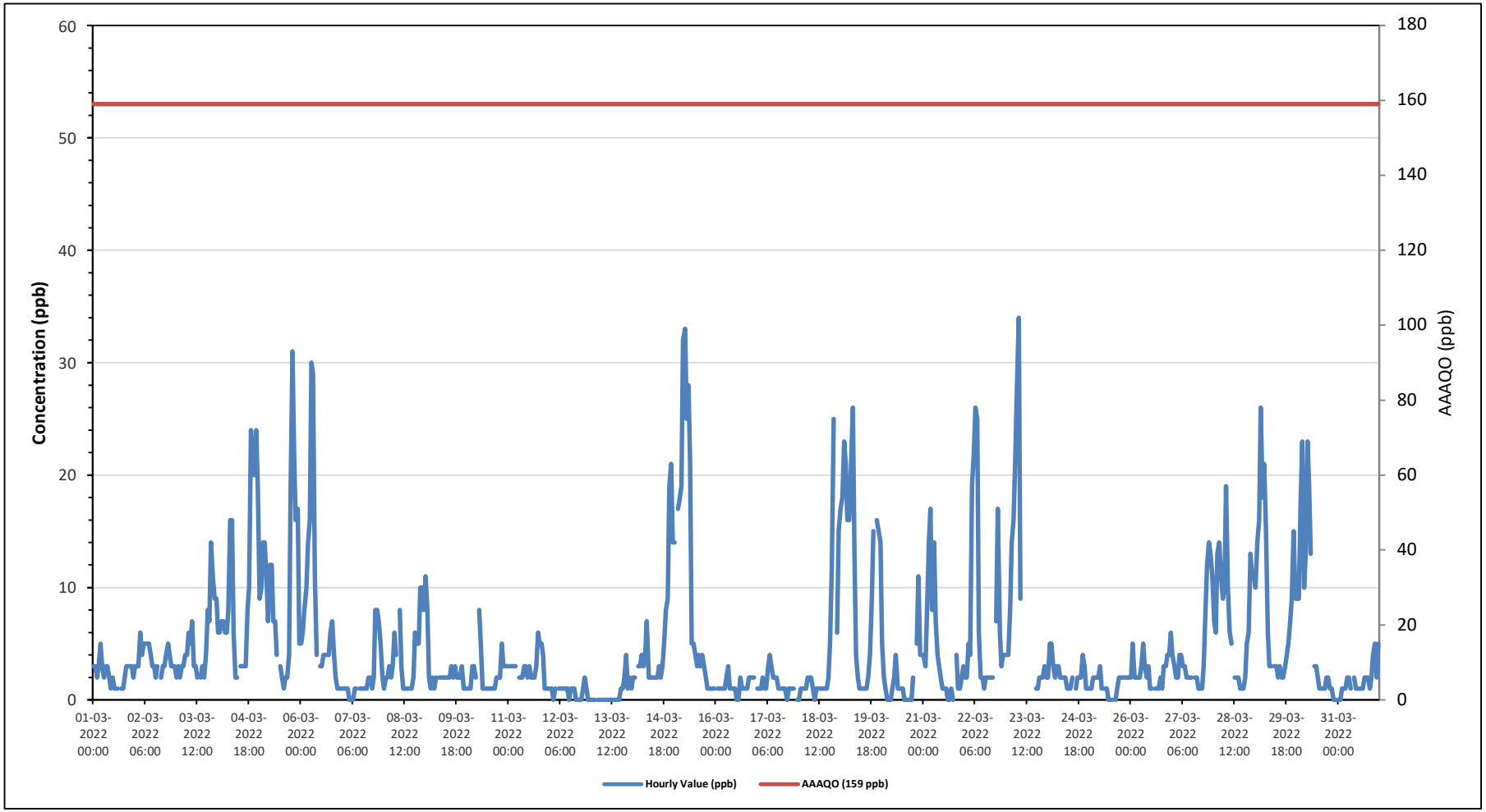
Maximum Hourly Value:	34	ppb	on March 23 at hour 7	Hours in Service:	744
Maximum Daily Value:	11.2	ppb	on March 19	Hours of Data:	705
Minimum Hourly Value:	0	ppb	on March 7 at hour 4	Hours of Missing Data:	0
Minimum Daily Value:	0.5	ppb	on March 13	Hours of Calibration:	39
Monthly Average:	4.6	ppb		Operational Uptime:	100.0

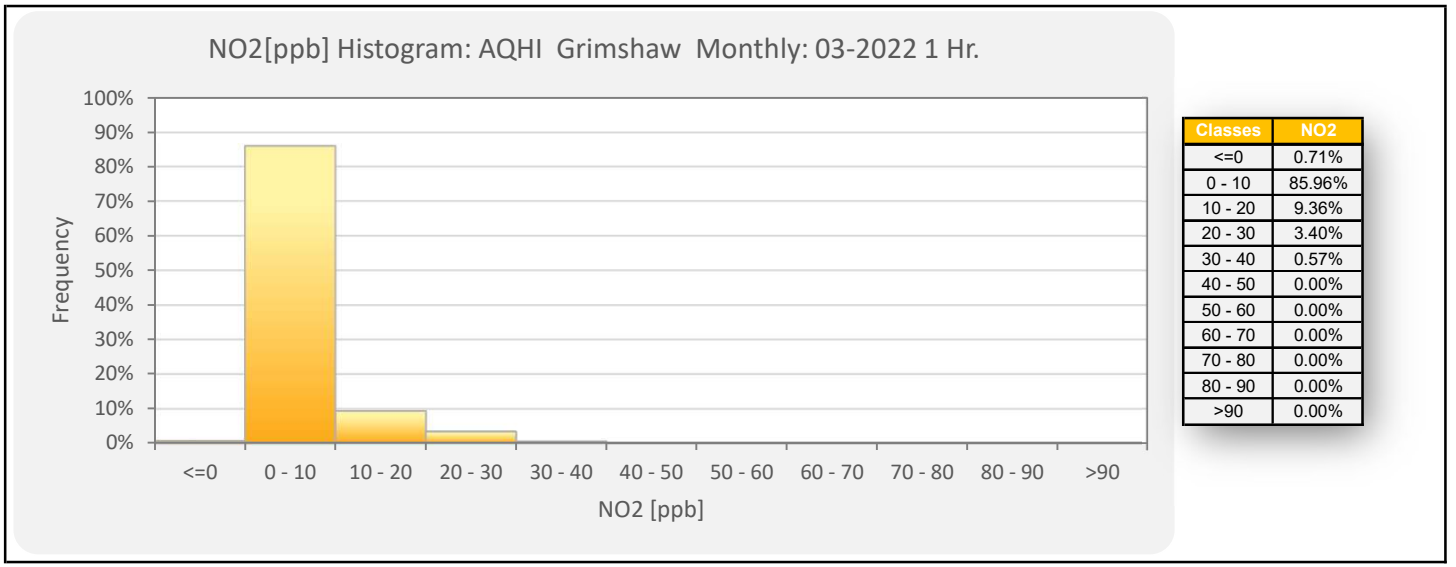
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Mar 1	3	3	2	3	5	3	2	3	3	2	1	2	1	1	1	S	1	1	2	3	3	3	3	2	1	5	2.3
Mar 2	3	3	3	6	4	5	5	5	5	4	3	3	2	3	S	2	3	3	4	5	4	3	3	3	2	6	3.7
Mar 3	2	3	2	3	3	4	4	6	5	7	3	3	2	S	2	3	2	4	8	7	14	11	9	9	2	14	5.0
Mar 4	6	6	7	7	6	6	8	16	16	6	2	2	S	3	3	3	3	8	10	24	21	20	24	19	2	24	9.8
Mar 5	9	10	14	14	11	7	12	12	7	7	4	S	3	2	1	2	2	4	19	31	22	16	17	5	1	31	10.0
Mar 6	5	6	8	10	14	16	30	29	11	4	S	3	3	4	4	4	4	6	7	4	2	1	1	1	1	30	7.7
Mar 7	1	1	1	1	0	0	0	1	1	S	1	1	1	1	1	2	2	1	2	8	8	7	5	2	0	8	2.1
Mar 8	1	2	2	3	2	3	6	4	S	8	3	1	1	1	1	1	1	2	6	5	5	10	10	8	1	10	3.7
Mar 9	11	8	2	1	2	1	2	S	2	2	2	2	2	2	2	3	2	3	2	2	2	3	1	1	1	11	2.6
Mar 10	1	1	1	3	3	2	S	8	5	1	1	1	1	1	1	1	1	2	2	2	5	3	3	3	1	8	2.3
Mar 11	3	3	3	3	3	S	2	2	2	3	3	2	3	2	2	2	3	6	5	5	4	1	1	1	1	6	2.8
Mar 12	1	1	0	1	S	1	1	1	1	1	1	0	1	1	1	0	0	0	0	1	2	1	0	0	0	2	0.7
Mar 13	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	4	1	2	1	0	4	0.5
Mar 14	2	2	S	3	3	4	3	4	7	2	2	2	2	2	2	3	2	3	5	8	9	19	21	14	2	21	5.4
Mar 15	14	S	17	18	19	32	33	25	28	21	5	5	4	3	4	3	4	3	2	1	1	1	1	1	1	33	10.7
Mar 16	S	1	1	1	1	1	2	3	1	1	1	1	0	0	2	1	1	1	1	2	2	2	2	S	0	3	1.3
Mar 17	1	1	1	2	1	1	3	4	3	2	2	2	1	1	1	1	1	0	1	1	1	1	S	0	0	4	1.4
Mar 18	0	1	1	1	1	2	2	2	1	0	1	1	1	1	1	1	1	2	5	12	25	S	6	15	0	25	3.6
Mar 19	17	18	23	21	16	16	21	26	13	4	2	1	1	1	1	1	2	4	9	15	S	16	15	14	1	26	**11.2**
Mar 20	5	2	1	0	0	0	1	2	4	1	1	1	1	0	0	0	0	0	2	S	5	11	4	4	0	11	2.0
Mar 21	4	3	8	14	17	8	14	7	4	3	2	1	1	1	0	0	1	0	S	4	1	1	2	3	0	17	4.3
Mar 22	2	2	5	4	19	22	26	25	6	2	2	1	2	2	2	2	2	S	7	17	6	3	4	4	1	26	7.3
Mar 23	4	4	8	14	16	21	28	**34**	9	C	C	C	C	C	C	C	C	1	1	2	2	2	3	2	1	**34**	-
Mar 24	2	5	5	3	2	3	3	2	2	2	2	1	1	1	2	S	1	2	2	2	4	3	1	1	1	5	2.3
Mar 25	1	1	2	2	2	2	3	1	1	1	1	0	0	0	S	0	1	2	2	2	2	2	2	2	0	3	1.4
Mar 26	2	5	2	2	2	2	3	5	3	2	3	1	1	S	1	1	1	2	1	3	3	4	4	6	1	6	2.6
Mar 27	4	3	2	2	4	4	3	3	2	2	2	2	S	2	2	1	1	1	3	8	12	14	13	11	1	14	4.4
Mar 28	7	6	13	14	11	9	10	19	10	6	5	S	2	2	2	1	1	1	2	5	6	13	11	11	1	19	7.3
Mar 29	10	14	16	26	18	21	15	6	3	3	S	3	3	2	3	2	2	3	4	5	7	9	15	9	2	26	8.7
Mar 30	9	9	17	23	10	13	23	19	13	S	3	3	2	1	1	1	1	2	2	1	1	0	0	0	0	23	6.7
Mar 31	0	0	1	1	1	2	2	1	S	2	1	1	1	1	1	2	2	2	1	2	4	5	2	5	0	5	1.7
Diurnal Maximum	17	18	23	26	19	32	33	34	28	21	5	5	4	4	4	4	4	8	19	31	25	20	24	19			
Diurnal Average	4.3	4.1	5.6	6.9	6.5	7.0	8.9	9.2	5.8	3.5	2.1	1.6	1.5	1.5	1.6	1.5	1.6	2.3	3.9	6.3	6.2	6.2	6.2	5.2			

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

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

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

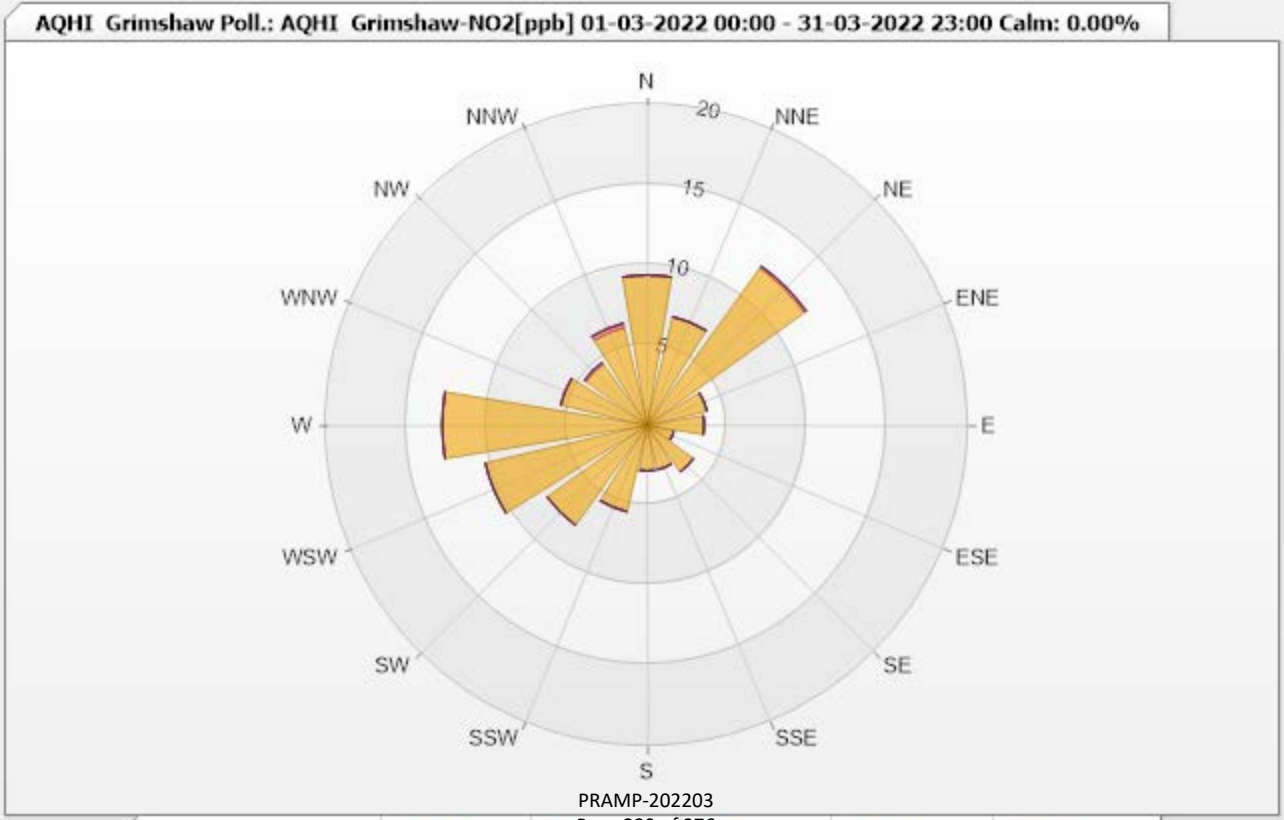

Timeseries Chart of Hourly Average for NO2 - AQHI - Grimshaw Station
Concentration (ppb)
AAAQO (ppb)
0
10
20
30
40
50
60
0
20
40
60
80
100
120
140
160
180
01-03-2022 00:00
02-03-2022 06:00
03-03-2022 12:00
04-03-2022 18:00
06-03-2022 00:00
07-03-2022 06:00
08-03-2022 12:00
09-03-2022 18:00
11-03-2022 00:00
12-03-2022 06:00
13-03-2022 12:00
14-03-2022 18:00
16-03-2022 00:00
17-03-2022 06:00
18-03-2022 12:00
19-03-2022 18:00
21-03-2022 00:00
22-03-2022 06:00
23-03-2022 12:00
24-03-2022 18:00
26-03-2022 00:00
27-03-2022 06:00
28-03-2022 12:00
29-03-2022 18:00
31-03-2022 00:00
Hourly Value (ppb)
AAAQO (159 ppb)



Classes	NO2
<=0	0.71%
0 - 10	85.96%
10 - 20	9.36%
20 - 30	3.40%
30 - 40	0.57%
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 Grimshaw Poll.: AQHI Grimshaw-NO2[ppb] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 94.76% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	9.36	0	0	0	0	9.36
NNE	6.95	0	0	0	0	6.95
NE	12.06	0.14	0	0	0	12.2
ENE	3.83	0	0	0	0	3.83
E	3.55	0	0	0	0	3.55
ESE	1.7	0	0	0	0	1.7
SE	3.55	0	0	0	0	3.55
SSE	2.84	0	0	0	0	2.84
S	2.84	0	0	0	0	2.84
SSW	5.53	0	0	0	0	5.53
SW	7.66	0	0	0	0	7.66
WSW	10.35	0	0	0	0	10.35
W	12.77	0	0	0	0	12.77
WNW	5.53	0	0	0	0	5.53
NW	4.68	0.14	0	0	0	4.82
NNW	6.24	0.28	0	0	0	6.52
Summary	99.44	0.56	0	0	0	100


AQHI Grimshaw Poll.: AQHI Grimshaw-NO2[ppb] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppb)
99 0-30
1 30-50
0 50-76
0 76-159
0 >159.0

peace river area monitoring program
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PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

OZONE (O_3) in ppb

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

Number of 1-Hour Exceedances: 0

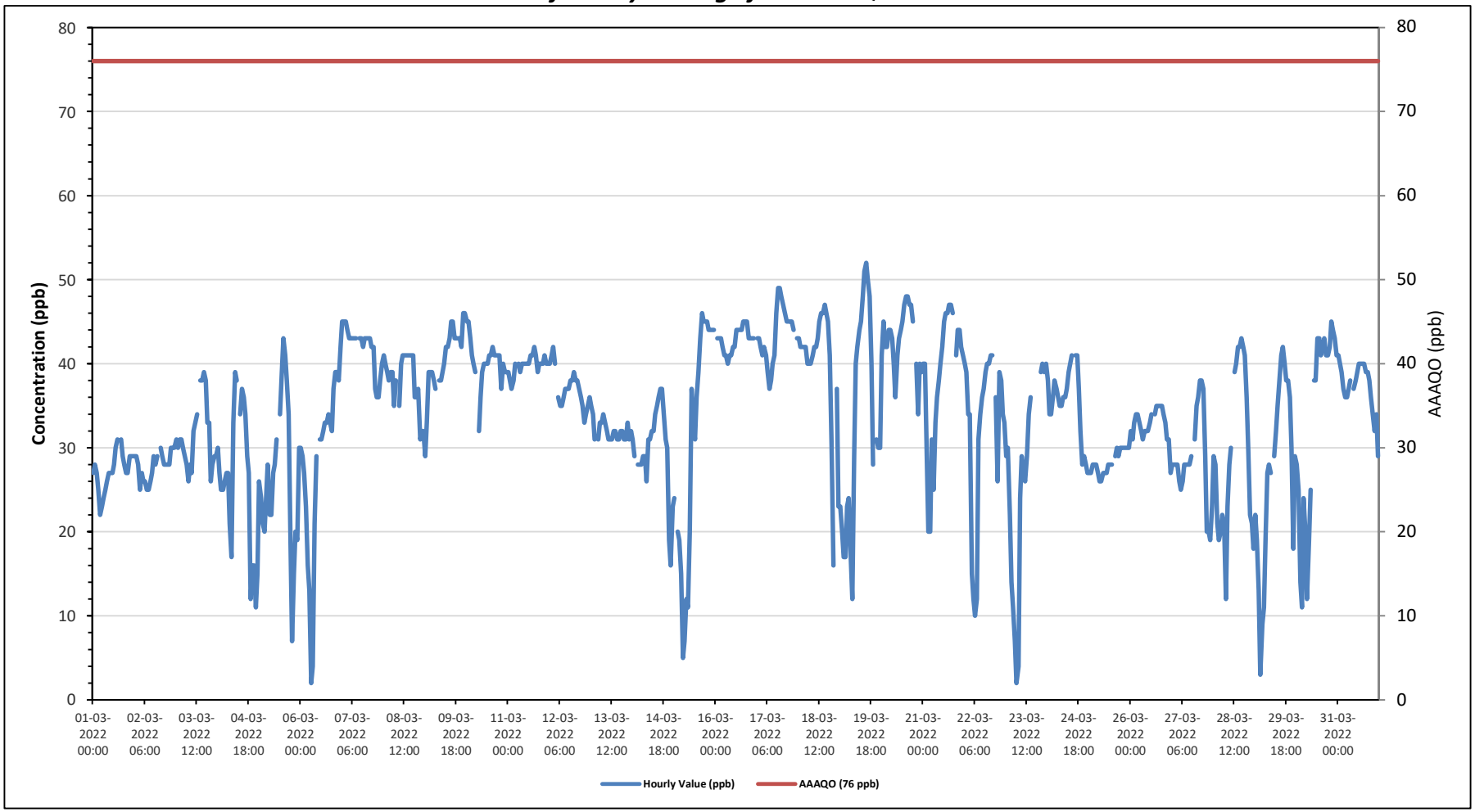
Maximum Hourly Value:	52	ppb	on March 19 at hour 15	Hours in Service:	744
Maximum Daily Value:	43.4	ppb	on March 17	Hours of Data:	708
Minimum Hourly Value:	2	ppb	on March 6 at hour 6	Hours of Missing Data:	0
Minimum Daily Value:	25.4	ppb	on March 23	Hours of Calibration:	36
Monthly Average:	33.8	ppb		Operational Uptime:	100.0

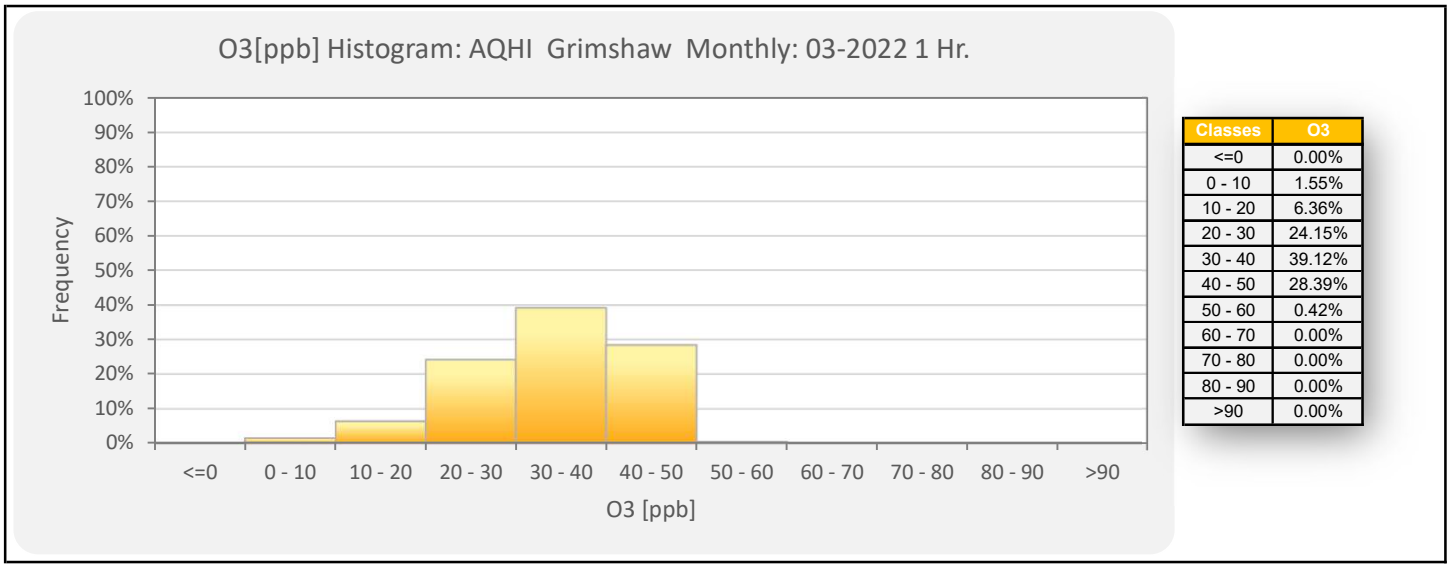
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Mar 1	27	28	27	25	22	23	24	25	26	27	27	27	28	30	31	S	31	29	28	27	27	29	29	29	22.0	31.0	27.2
Mar 2	29	29	28	25	27	26	26	25	25	26	27	29	28	29	S	30	29	28	28	28	28	30	30	30	25.0	30.0	27.8
Mar 3	31	30	31	31	30	29	28	26	28	27	32	33	34	S	38	38	39	38	33	33	26	28	29	29	26.0	39.0	31.3
Mar 4	30	27	25	25	26	27	27	21	17	33	39	38	S	34	37	36	34	29	27	12	16	16	11	15	11.0	39.0	26.2
Mar 5	26	24	21	20	24	28	22	22	27	28	31	S	34	39	43	41	38	34	19	7	15	20	19	30	7.0	43.0	26.6
Mar 6	30	29	27	23	16	13	2	4	21	29	S	31	31	32	33	33	34	33	32	37	39	39	38	42	2.0	42.0	28.2
Mar 7	45	45	45	44	43	43	43	43	43	S	43	43	42	43	43	43	43	42	42	37	36	36	38	40	36.0	45.0	42.0
Mar 8	41	40	39	38	39	39	35	38	S	35	40	41	41	41	41	41	41	41	36	36	37	31	32	32	31.0	41.0	38.0
Mar 9	29	33	39	39	39	38	37	S	38	38	39	40	42	42	43	45	45	43	43	43	43	42	46	46	29.0	46.0	40.5
Mar 10	45	45	43	41	40	39	S	32	36	39	40	40	40	41	41	42	41	41	41	41	37	40	39	39	32.0	45.0	40.1
Mar 11	39	38	37	38	40	S	40	39	40	40	40	40	40	41	41	42	41	39	40	40	40	41	40	40	37.0	42.0	39.8
Mar 12	40	41	42	40	S	36	35	35	36	37	37	37	38	38	39	38	38	37	36	35	33	34	35	36	33.0	42.0	37.1
Mar 13	35	34	31	S	31	33	33	34	33	32	31	31	31	32	32	31	31	32	32	31	31	33	31	32	31.0	35.0	32.0
Mar 14	31	29	S	28	28	28	29	29	26	31	31	32	32	34	35	36	37	37	34	31	30	19	16	23	16.0	37.0	29.8
Mar 15	24	S	20	19	15	5	7	12	11	20	37	33	31	36	39	43	46	45	45	45	44	44	44	44	5.0	46.0	30.8
Mar 16	S	43	43	43	42	41	41	40	41	41	42	42	44	44	44	44	45	45	45	43	43	43	43	S	40.0	45.0	42.8
Mar 17	43	43	42	41	42	41	39	37	38	40	41	46	49	49	48	47	46	45	45	45	45	44	S	43	37.0	49.0	**43.4**
Mar 18	43	42	42	42	42	40	40	40	41	42	42	43	45	46	46	47	46	45	41	30	16	S	37	23	16.0	47.0	40.0
Mar 19	23	20	17	17	23	24	17	12	29	40	42	44	45	48	51	**52**	50	48	40	28	S	31	30	30	12.0	**52.0**	33.1
Mar 20	41	45	42	42	44	44	43	40	36	41	43	44	45	47	48	48	47	47	45	S	40	34	40	39	34.0	48.0	42.8
Mar 21	40	40	29	20	20	31	25	33	36	38	40	42	45	46	46	47	47	46	S	41	44	44	42	41	20.0	47.0	38.4
Mar 22	40	39	34	34	15	12	10	12	31	34	36	37	39	40	40	41	41	S	36	26	39	38	34	33	10.0	41.0	32.2
Mar 23	29	30	22	14	11	7	2	4	24	29	27	26	29	34	36	C	C	C	C	C	39	40	39	40	2.0	40.0	25.4
Mar 24	38	34	34	36	38	37	36	35	35	36	36	37	39	40	41	S	41	41	37	32	28	29	28	27	27.0	41.0	35.4
Mar 25	27	27	28	28	28	27	26	26	27	27	27	28	28	28	S	29	30	29	30	30	30	30	30	30	26.0	30.0	28.3
Mar 26	32	31	33	34	34	33	32	31	32	32	32	33	34	S	34	35	35	35	35	34	33	31	31	27	27.0	35.0	32.7
Mar 27	28	28	28	28	26	25	26	28	28	28	28	29	S	31	35	36	38	38	37	29	20	20	19	23	19.0	38.0	28.5
Mar 28	29	28	21	19	20	22	21	12	23	28	30	S	39	40	42	42	43	42	41	36	30	22	21	18	12.0	43.0	29.1
Mar 29	22	19	13	3	9	11	19	27	28	27	S	29	32	35	38	41	42	40	38	38	36	30	18	29	3.0	42.0	27.1
Mar 30	28	25	14	11	24	20	12	19	25	S	38	38	43	43	41	42	43	41	41	42	45	44	43	41	11.0	45.0	33.2
Mar 31	41	40	39	37	36	36	37	38	S	37	38	39	40	40	40	40	39	39	38	36	34	32	34	29	29.0	41.0	37.3
Diurnal Maximum	45	45	45	44	44	44	43	43	43	42	43	46	49	49	51	52	50	48	45	45	45	44	46	46			
Diurnal Average	33.5	33.5	31.2	29.5	29.1	28.6	27.1	27.3	30.4	33.2	35.7	36.3	37.5	38.7	40.2	40.4	40.0	38.9	36.7	33.6	33.5	33.1	32.2	32.7			

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

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

Timeseries Chart of Hourly Average for O3 - AQHI - Grimshaw Station

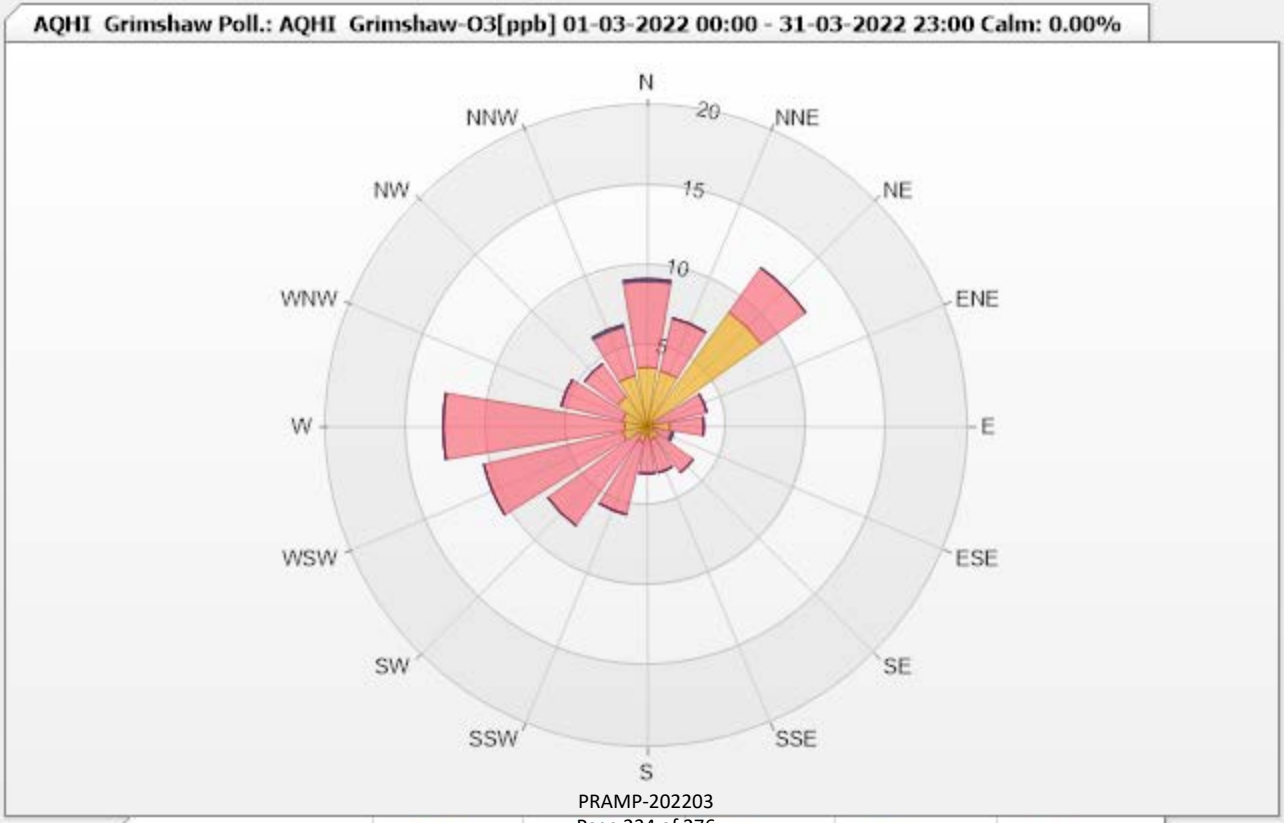




Classes	O3
<=0	0.00%
0 - 10	1.55%
10 - 20	6.36%
20 - 30	24.15%
30 - 40	39.12%
40 - 50	28.39%
50 - 60	0.42%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Grimshaw Poll.: AQHI Grimshaw-O3[ppb] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 95.16% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	3.67	5.37	0.14	0	0	9.18
NNE	3.53	3.39	0	0	0	6.92
NE	8.76	3.39	0	0	0	12.15
ENE	0.42	3.39	0	0	0	3.81
E	1.41	2.12	0	0	0	3.53
ESE	0.42	1.13	0.14	0	0	1.69
SE	0.85	2.68	0	0	0	3.53
SSE	0.85	2.12	0	0	0	2.97
S	0.56	2.4	0	0	0	2.96
SSW	0.99	4.66	0	0	0	5.65
SW	0.56	7.06	0	0	0	7.62
WSW	1.55	8.9	0	0	0	10.45
W	1.41	11.3	0	0	0	12.71
WNW	1.55	3.95	0	0	0	5.5
NW	2.26	2.54	0	0	0	4.8
NNW	3.25	3.11	0.14	0	0	6.5
Summary	32.04	67.51	0.42	0	0	100


AQHI Grimshaw Poll.: AQHI Grimshaw-O3[ppb] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppb)
32 0-30
68 30-50
0 50-76
0 76-159
0 >159.0

PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

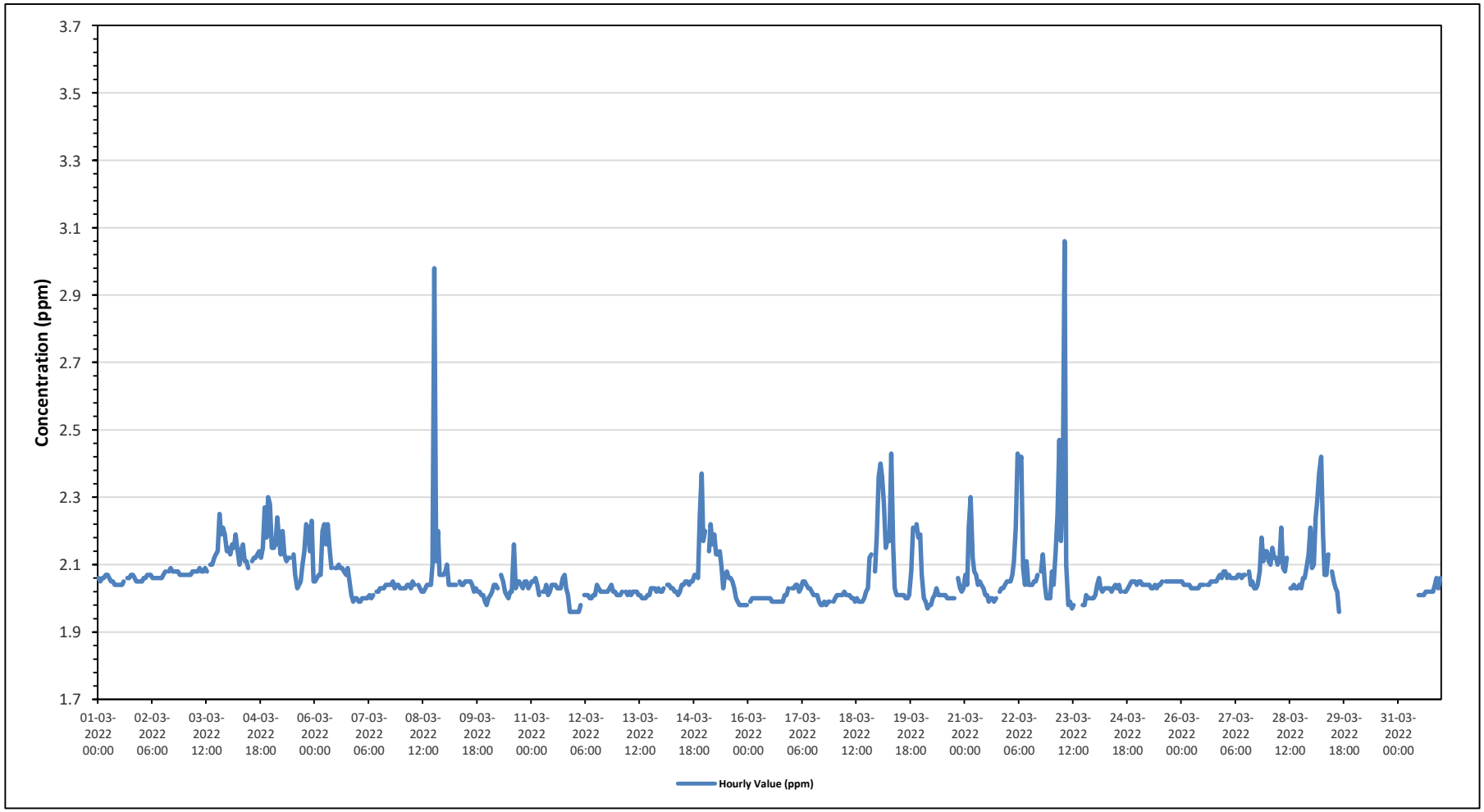
Maximum Hourly Value:	3.06	ppm	on March 23 at hour 7	Hours in Service:	744
Maximum Daily Value:	2.15	ppm	on March 4	Hours of Data:	668
Minimum Hourly Value:	1.96	ppm	on March 11 at hour 21	Hours of Missing Data:	43
Minimum Daily Value:	2.00	ppm	on March 16	Hours of Calibration:	33
Monthly Average:	2.06	ppm		Operational Uptime:	94.2

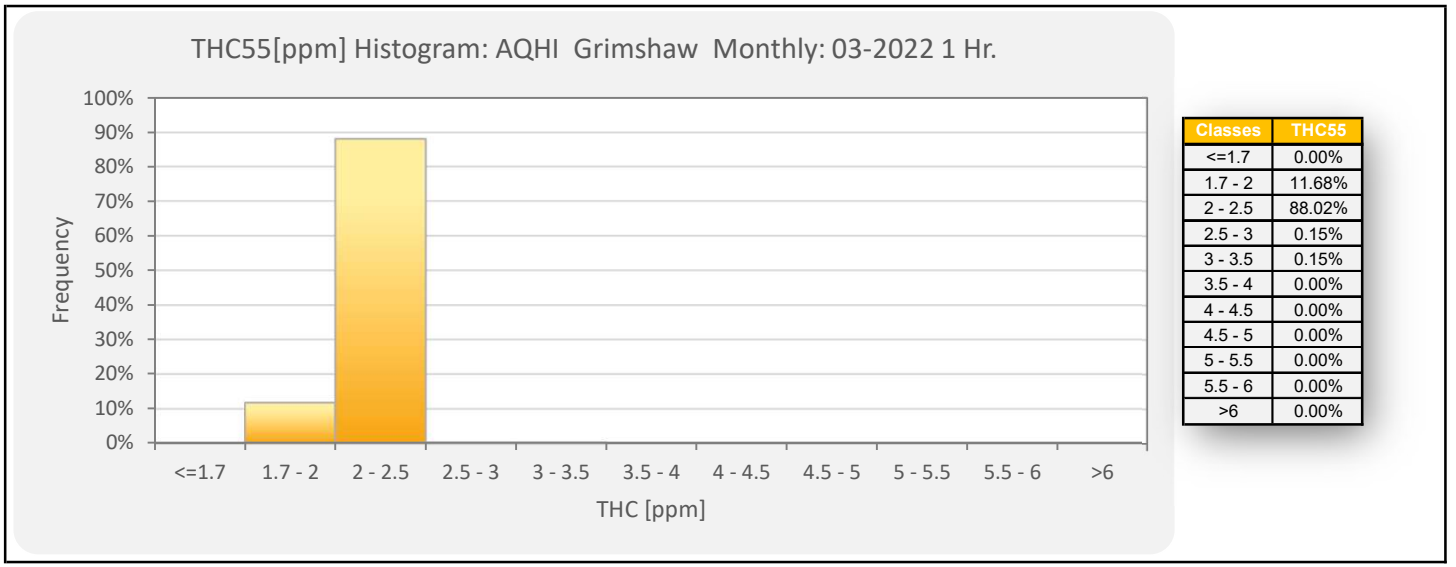
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	2.06	2.05	2.06	2.06	2.07	2.07	2.06	2.05	2.05	2.04	2.04	2.04	2.04	2.04	2.05	S	2.06	2.06	2.07	2.07	2.06	2.05	2.05	2.05	2.04	2.07	2.05
Mar 2	2.05	2.06	2.06	2.07	2.07	2.07	2.06	2.06	2.06	2.06	2.06	2.06	2.07	2.08	S	2.08	2.09	2.08	2.08	2.08	2.08	2.07	2.07	2.07	2.05	2.09	2.07
Mar 3	2.07	2.07	2.07	2.07	2.08	2.08	2.08	2.08	2.09	2.08	2.08	2.09	2.08	S	2.10	2.10	2.12	2.13	2.14	2.25	2.19	2.21	2.19	2.14	2.07	2.25	2.11
Mar 4	2.15	2.13	2.16	2.15	2.19	2.14	2.10	2.14	2.16	2.11	2.11	2.09	S	2.11	2.12	2.12	2.13	2.14	2.12	2.15	2.27	2.18	2.30	2.28	2.09	2.30	**2.15**
Mar 5	2.15	2.15	2.16	2.24	2.17	2.13	2.20	2.13	2.11	2.12	2.12	S	2.13	2.07	2.03	2.04	2.05	2.10	2.14	2.22	2.21	2.14	2.23	2.05	2.03	2.24	2.13
Mar 6	2.05	2.06	2.07	2.07	2.20	2.22	2.16	2.22	2.15	2.09	S	2.09	2.09	2.10	2.09	2.09	2.08	2.07	2.09	2.05	2.01	1.99	2.00	2.00	1.99	2.22	2.09
Mar 7	1.99	1.99	2.00	2.00	2.00	2.00	2.01	2.00	2.01	S	2.02	2.02	2.03	2.03	2.03	2.04	2.04	2.04	2.04	2.05	2.03	2.04	2.04	2.03	1.99	2.05	2.02
Mar 8	2.03	2.03	2.03	2.04	2.04	2.03	2.05	2.04	S	2.04	2.03	2.02	2.02	2.03	2.04	2.04	2.04	2.10	2.98	2.11	2.20	2.07	2.07	2.07	2.02	2.98	2.09
Mar 9	2.08	2.10	2.04	2.04	2.04	2.04	2.04	S	2.05	2.04	2.04	2.05	2.05	2.05	2.05	2.04	2.02	2.03	2.02	2.02	2.01	2.01	1.99	1.98	1.98	2.10	2.04
Mar 10	2.00	2.01	2.02	2.04	2.04	2.03	S	2.07	2.05	2.02	2.01	2.00	2.02	2.02	2.16	2.03	2.05	2.05	2.04	2.03	2.05	2.05	2.03	2.04	2.00	2.16	2.04
Mar 11	2.05	2.05	2.06	2.04	2.01	S	2.02	2.02	2.04	2.01	2.02	2.04	2.04	2.04	2.03	2.03	2.03	2.06	2.07	2.03	2.01	1.96	1.96	1.96	**1.96**	2.07	2.03
Mar 12	1.96	1.96	1.96	1.98	S	2.01	2.01	2.01	2.00	2.00	2.01	2.01	2.04	2.03	2.02	2.02	2.02	2.02	2.02	2.03	2.04	2.02	2.02	2.01	**1.96**	2.04	2.01
Mar 13	2.01	2.01	2.02	S	2.02	2.01	2.02	2.01	2.02	2.02	2.02	2.01	2.01	2.00	2.00	2.00	2.01	2.01	2.03	2.03	2.03	2.02	2.03	2.02	2.00	2.03	2.02
Mar 14	2.02	2.03	S	2.04	2.04	2.03	2.03	2.02	2.02	2.01	2.02	2.04	2.04	2.05	2.05	2.04	2.05	2.05	2.07	2.07	2.06	2.25	2.37	2.17	2.01	2.37	2.07
Mar 15	2.20	S	2.14	2.22	2.16	2.19	2.13	2.13	2.14	2.09	2.03	2.07	2.08	2.06	2.06	2.05	2.03	2.00	1.99	1.98	1.98	1.98	1.98	1.98	1.98	2.22	2.07
Mar 16	S	1.99	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.99	1.99	1.99	1.99	2.01	2.01	2.03	S	1.99	2.03	2.00
Mar 17	2.03	2.03	2.04	2.04	2.02	2.03	2.05	2.05	2.04	2.03	2.03	2.02	2.01	2.01	2.01	1.99	1.98	1.98	1.99	1.98	1.99	1.99	S	1.99	1.98	2.05	2.01
Mar 18	2.00	2.01	2.01	2.01	2.01	2.02	2.01	2.01	2.01	2.00	2.00	1.99	2.00	1.99	1.99	1.99	2.00	2.02	2.03	2.12	2.13	S	2.08	2.19	1.99	2.19	2.03
Mar 19	2.36	2.40	2.36	2.28	2.15	2.18	2.17	2.43	2.16	2.03	2.01	2.01	2.01	2.01	2.01	2.00	2.00	2.01	2.08	2.21	S	2.22	2.18	2.19	2.00	2.43	2.15
Mar 20	2.07	2.00	1.99	1.97	1.98	1.98	2.00	2.01	2.03	2.01	2.01	2.01	2.01	2.01	2.00	2.00	2.00	2.00	2.00	S	2.06	2.03	2.02	2.03	1.97	2.07	2.01
Mar 21	2.07	2.04	2.21	2.30	2.12	2.08	2.07	2.04	2.05	2.04	2.03	2.01	2.01	1.99	2.00	2.00	1.99	2.00	S	2.02	2.03	2.03	2.04	2.05	1.99	2.30	2.05
Mar 22	2.05	2.05	2.07	2.11	2.21	2.43	2.39	2.42	2.09	2.04	2.11	2.04	2.04	2.04	2.05	2.05	2.07	S	2.08	2.13	2.04	2.00	2.00	2.00	2.00	2.43	2.11
Mar 23	2.08	2.04	2.14	2.25	2.47	2.17	2.33	**3.06**	2.10	1.98	1.99	1.97	1.98	C	C	C	C	1.98	1.98	2.01	2.00	2.00	2.00	2.00	1.97	**3.06**	2.13
Mar 24	2.01	2.04	2.06	2.03	2.02	2.03	2.03	2.03	2.03	2.02	2.03	2.04	2.03	2.04	2.02	S	2.02	2.02	2.03	2.04	2.05	2.05	2.05	2.04	2.01	2.06	2.03
Mar 25	2.05	2.05	2.04	2.04	2.04	2.04	2.04	2.03	2.03	2.04	2.03	2.04	2.04	2.05	S	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.03	2.05	2.04
Mar 26	2.05	2.04	2.04	2.04	2.04	2.03	2.03	2.03	2.03	2.03	2.04	2.04	2.04	S	2.04	2.04	2.05	2.05	2.05	2.05	2.06	2.07	2.06	2.08	2.03	2.08	2.04
Mar 27	2.08	2.06	2.07	2.06	2.06	2.06	2.06	2.07	2.07	2.06	2.07	2.07	S	2.08	2.04	2.05	2.03	2.03	2.04	2.08	2.18	2.11	2.14	2.14	2.03	2.18	2.07
Mar 28	2.11	2.10	2.15	2.12	2.12	2.10	2.11	2.21	2.09	2.08	2.12	S	2.03	2.03	2.04	2.03	2.03	2.04	2.03	2.06	2.06	2.09	2.13	2.21	2.03	2.21	2.09
Mar 29	2.09	2.10	2.24	2.29	2.37	2.42	2.19	2.07	2.07	2.13	S	2.08	2.05	2.03	2.02	1.96	X	X	X	X	X	X	X	X	**1.96**	2.42	-
Mar 30	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 31	X	X	X	X	X	X	X	X	NRM	NRM	NRM	2.01	2.01	2.01	2.01	2.02	2.02	2.02	2.02	2.02	2.04	2.06	2.03	2.06	2.01	2.06	-
Diurnal Maximum	2.36	2.40	2.36	2.30	2.47	2.43	2.39	3.06	2.16	2.13	2.12	2.09	2.13	2.11	2.16	2.12	2.13	2.14	2.98	2.25	2.27	2.25	2.37	2.28			
Diurnal Average	2.07	2.06	2.08	2.09	2.10	2.09	2.09	2.12	2.06	2.04	2.04	2.03	2.04	2.04	2.04	2.03	2.04	2.04	2.08	2.07	2.07	2.06	2.08	2.07			

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

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

Timeseries Chart of Hourly Average for THC - AQHI - Grimshaw Station

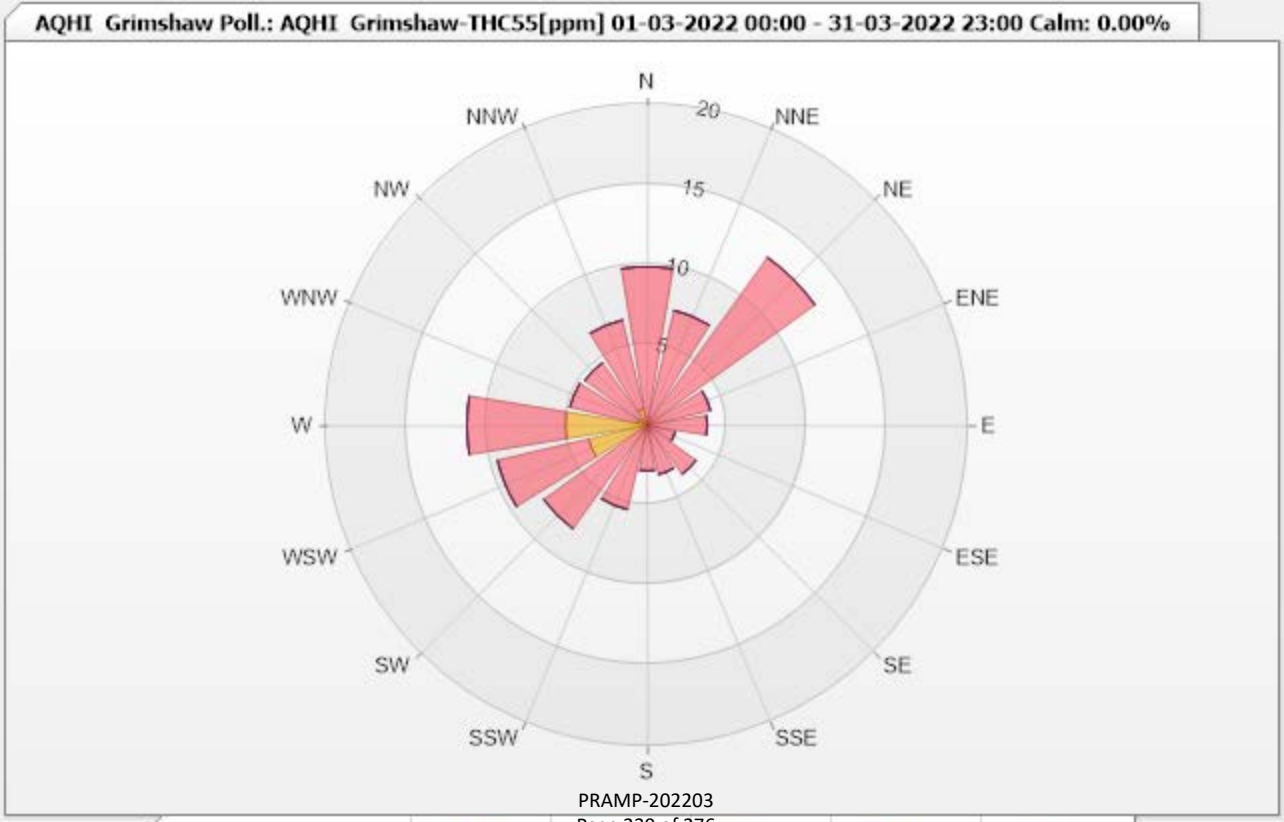




Classes	THC55
<=1.7	0.00%
1.7 - 2	11.68%
2 - 2.5	88.02%
2.5 - 3	0.15%
3 - 3.5	0.15%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: AQHI Grimshaw Poll.: AQHI Grimshaw-THC55[ppm] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 89.78% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	0	9.88	0	0	0	9.88
NNE	0	7.34	0	0	0	7.34
NE	0	12.87	0	0	0	12.87
ENE	0	4.04	0	0	0	4.04
E	0	3.74	0	0	0	3.74
ESE	0	1.8	0	0	0	1.8
SE	0	3.74	0	0	0	3.74
SSE	0.15	2.99	0	0	0	3.14
S	0.3	2.54	0	0	0	2.84
SSW	0.15	5.24	0	0	0	5.39
SW	0	7.93	0	0	0	7.93
WSW	3.74	5.84	0	0	0	9.58
W	5.09	6.14	0	0	0	11.23
WNW	0.6	4.34	0	0	0	4.94
NW	0.3	4.49	0	0	0	4.79
NNW	1.05	5.69	0	0	0	6.74
Summary	11.38	88.61	0	0	0	100


AQHI Grimshaw Poll.: AQHI Grimshaw-THC55[ppm] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppm)
11 0-2
89 2-5
0 5-10
0 10-40
0 >40.0

peace river area monitoring program
pramp

PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

METHANE (CH4) in ppm

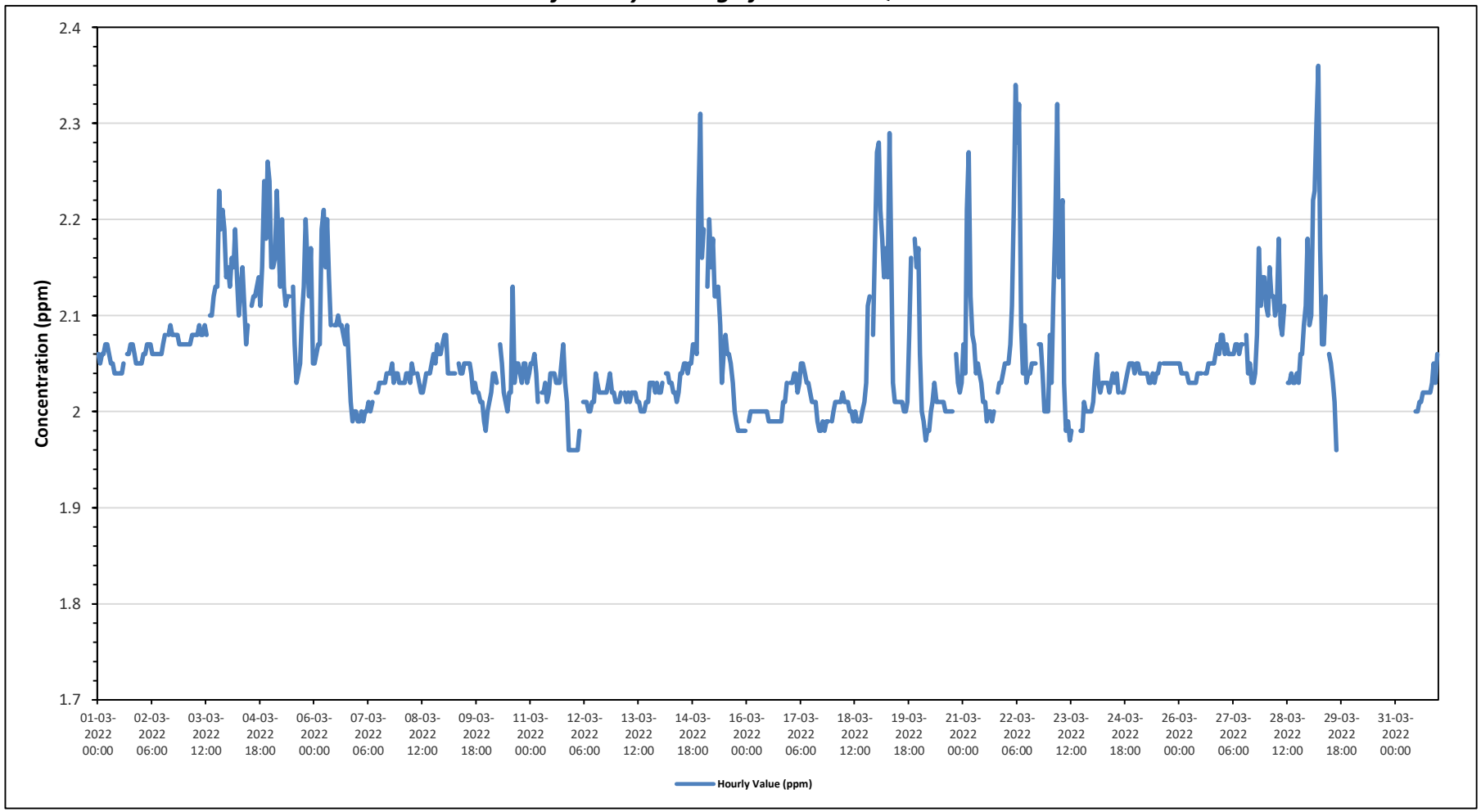
Maximum Hourly Value:	2.36	ppm	on March 29 at hour 5	Hours in Service:	744
Maximum Daily Value:	2.15	ppm	on March 4	Hours of Data:	668
Minimum Hourly Value:	1.96	ppm	on March 30 at hour 21	Hours of Missing Data:	43
Minimum Daily Value:	2.00	ppm	on March 16	Hours of Calibration:	33
Monthly Average:	2.06	ppm		Operational Uptime:	94.2

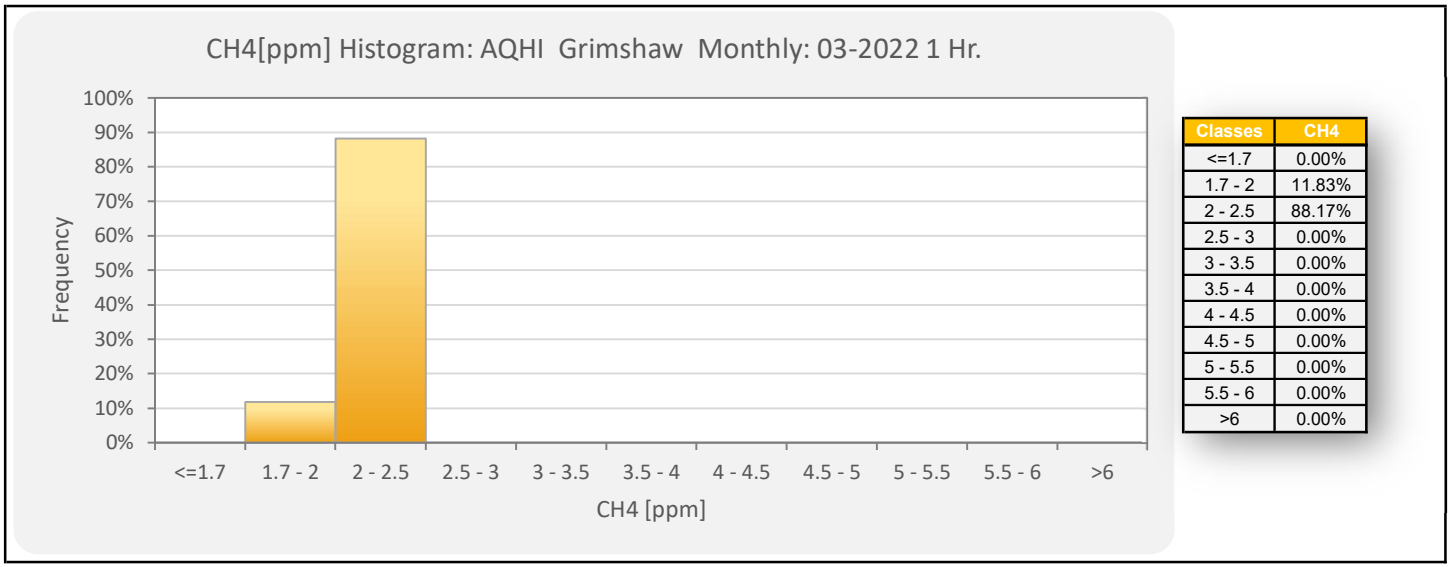
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	2.06	2.05	2.06	2.06	2.07	2.07	2.06	2.05	2.05	2.04	2.04	2.04	2.04	2.04	2.05	S	2.06	2.06	2.07	2.07	2.06	2.05	2.05	2.05	2.04	2.07	2.05
Mar 2	2.05	2.06	2.06	2.07	2.07	2.07	2.06	2.06	2.06	2.06	2.06	2.06	2.07	2.08	S	2.08	2.09	2.08	2.08	2.08	2.08	2.07	2.07	2.07	2.05	2.09	2.07
Mar 3	2.07	2.07	2.07	2.07	2.08	2.08	2.08	2.08	2.09	2.08	2.08	2.09	2.08	S	2.10	2.10	2.12	2.13	2.13	2.23	2.19	2.21	2.19	2.14	2.07	2.23	2.11
Mar 4	2.15	2.13	2.16	2.15	2.19	2.14	2.10	2.13	2.15	2.11	2.07	2.09	S	2.11	2.12	2.12	2.13	2.14	2.11	2.15	2.24	2.18	2.26	2.24	2.07	2.26	**2.15**
Mar 5	2.15	2.15	2.16	2.23	2.17	2.13	2.20	2.13	2.11	2.12	2.12	S	2.13	2.07	2.03	2.04	2.05	2.10	2.13	2.20	2.16	2.12	2.17	2.05	2.03	2.23	2.13
Mar 6	2.05	2.06	2.07	2.07	2.19	2.21	2.15	2.20	2.14	2.09	S	2.09	2.09	2.10	2.09	2.09	2.08	2.07	2.09	2.05	2.01	1.99	2.00	2.00	1.99	2.21	2.09
Mar 7	1.99	1.99	2.00	1.99	2.00	2.00	2.01	2.00	2.01	S	2.02	2.02	2.03	2.03	2.03	2.03	2.04	2.04	2.04	2.05	2.03	2.04	2.04	2.03	1.99	2.05	2.02
Mar 8	2.03	2.03	2.03	2.04	2.04	2.03	2.05	2.04	S	2.04	2.03	2.02	2.02	2.03	2.04	2.04	2.04	2.05	2.06	2.05	2.07	2.06	2.06	2.07	2.02	2.07	2.04
Mar 9	2.08	2.08	2.04	2.04	2.04	2.04	2.04	S	2.05	2.04	2.04	2.05	2.05	2.05	2.05	2.04	2.02	2.03	2.02	2.02	2.01	2.01	1.99	1.98	1.98	2.08	2.04
Mar 10	2.00	2.01	2.02	2.04	2.04	2.03	S	2.07	2.05	2.02	2.01	2.00	2.02	2.02	2.13	2.03	2.05	2.05	2.04	2.03	2.05	2.05	2.03	2.04	2.00	2.13	2.04
Mar 11	2.05	2.05	2.06	2.04	2.01	S	2.02	2.02	2.03	2.01	2.02	2.04	2.04	2.04	2.03	2.03	2.03	2.05	2.07	2.03	2.01	1.96	1.96	1.96	1.96	2.07	2.02
Mar 12	1.96	1.96	1.96	1.98	S	2.01	2.01	2.01	2.00	2.00	2.01	2.01	2.04	2.03	2.02	2.02	2.02	2.02	2.02	2.03	2.04	2.02	2.02	2.01	1.96	2.04	2.01
Mar 13	2.01	2.01	2.02	S	2.02	2.01	2.02	2.01	2.02	2.02	2.02	2.01	2.01	2.00	2.00	2.00	2.01	2.01	2.03	2.03	2.03	2.02	2.03	2.02	2.00	2.03	2.02
Mar 14	2.02	2.03	S	2.04	2.04	2.03	2.03	2.02	2.02	2.01	2.02	2.04	2.04	2.05	2.05	2.04	2.05	2.05	2.07	2.07	2.06	2.22	2.31	2.16	2.01	2.31	2.06
Mar 15	2.19	S	2.13	2.20	2.15	2.18	2.12	2.12	2.13	2.09	2.03	2.06	2.08	2.06	2.06	2.05	2.03	2.00	1.99	1.98	1.98	1.98	1.98	1.98	1.98	2.20	2.07
Mar 16	S	1.99	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	2.01	2.01	2.03	S	1.99	2.03	2.00
Mar 17	2.03	2.03	2.04	2.04	2.02	2.03	2.05	2.05	2.04	2.03	2.03	2.02	2.01	2.01	2.01	1.99	1.98	1.98	1.99	1.98	1.99	1.99	S	1.99	1.98	2.05	2.01
Mar 18	2.00	2.01	2.01	2.01	2.01	2.02	2.01	2.01	2.01	2.00	2.00	1.99	2.00	1.99	1.99	1.99	2.00	2.01	2.03	2.11	2.12	S	2.08	2.17	1.99	2.17	2.02
Mar 19	2.27	2.28	2.21	2.18	2.14	2.17	2.14	2.29	2.15	2.03	2.01	2.01	2.01	2.01	2.01	2.00	2.00	2.01	2.08	2.16	S	2.18	2.15	2.17	2.00	2.29	2.12
Mar 20	2.06	2.00	1.99	1.97	1.98	1.98	2.00	2.01	2.03	2.01	2.01	2.01	2.01	2.01	2.00	2.00	2.00	2.00	2.00	S	2.06	2.03	2.02	2.03	1.97	2.06	2.01
Mar 21	2.07	2.04	2.21	2.27	2.12	2.08	2.07	2.04	2.05	2.04	2.03	2.01	2.01	1.99	2.00	2.00	1.99	2.00	S	2.02	2.03	2.03	2.04	2.05	1.99	2.27	2.05
Mar 22	2.05	2.05	2.07	2.11	2.21	2.34	2.28	2.32	2.09	2.04	2.09	2.03	2.04	2.04	2.05	2.05	2.05	S	2.07	2.07	2.04	2.00	2.00	2.00	2.00	2.34	2.09
Mar 23	2.08	2.03	2.12	2.19	2.32	2.14	2.20	2.22	2.03	1.98	1.99	1.97	1.98	C	C	C	C	1.98	1.98	2.01	2.00	2.00	2.00	2.00	1.97	2.32	2.06
Mar 24	2.01	2.04	2.06	2.03	2.02	2.03	2.03	2.03	2.03	2.02	2.03	2.04	2.03	2.04	2.02	S	2.02	2.02	2.03	2.04	2.05	2.05	2.05	2.04	2.01	2.06	2.03
Mar 25	2.05	2.05	2.04	2.04	2.04	2.04	2.04	2.03	2.03	2.04	2.03	2.04	2.04	2.05	S	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.03	2.05	2.04
Mar 26	2.05	2.04	2.04	2.04	2.04	2.03	2.03	2.03	2.03	2.03	2.04	2.04	2.04	S	2.04	2.04	2.05	2.05	2.05	2.05	2.06	2.07	2.06	2.08	2.03	2.08	2.04
Mar 27	2.08	2.06	2.07	2.06	2.06	2.06	2.06	2.07	2.07	2.06	2.07	2.07	S	2.08	2.04	2.05	2.03	2.03	2.04	2.08	2.17	2.11	2.14	2.14	2.03	2.17	2.07
Mar 28	2.11	2.10	2.15	2.12	2.12	2.10	2.11	2.18	2.09	2.08	2.11	S	2.03	2.03	2.04	2.03	2.03	2.04	2.03	2.06	2.06	2.09	2.11	2.18	2.03	2.18	2.09
Mar 29	2.09	2.10	2.22	2.23	2.30	**2.36**	2.17	2.07	2.07	2.12	S	2.06	2.05	2.03	2.01	1.96	X	X	X	X	X	X	X	X	1.96	**2.36**	-
Mar 30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	**0.00**	0.00	-
Mar 31	X	X	X	X	X	X	X	X	NRM	NRM	NRM	2.00	2.00	2.01	2.01	2.02	2.02	2.02	2.02	2.02	2.03	2.05	2.03	2.06	2.00	2.06	-
Diurnal Maximum	2.27	2.28	2.22	2.27	2.32	2.36	2.28	2.32	2.15	2.12	2.12	2.09	2.13	2.11	2.13	2.12	2.13	2.14	2.13	2.23	2.24	2.22	2.31	2.24			
Diurnal Average	2.06	2.05	2.07	2.08	2.09	2.09	2.08	2.08	2.06	2.04	2.04	2.03	2.04	2.04	2.04	2.03	2.04	2.04	2.05	2.06	2.06	2.06	2.07	2.06			

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

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

Timeseries Chart of Hourly Average for CH4 - AQHI - Grimshaw Station

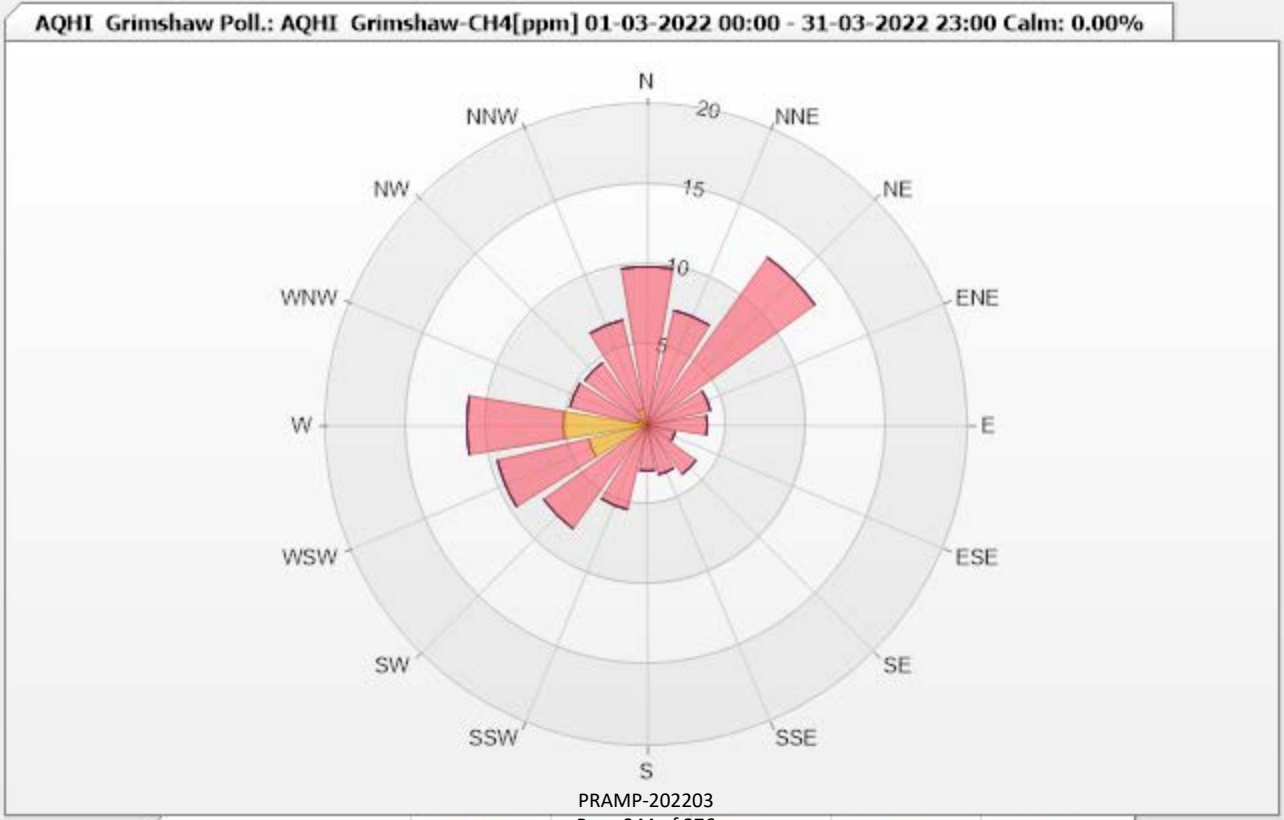




Classes	CH4
<=1.7	0.00%
1.7 - 2	11.83%
2 - 2.5	88.17%
2.5 - 3	0.00%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: AQHI Grimshaw Poll.: AQHI Grimshaw-CH4[ppm] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 89.78% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	0	9.88	0	0	0	9.88
NNE	0	7.34	0	0	0	7.34
NE	0	12.87	0	0	0	12.87
ENE	0	4.04	0	0	0	4.04
E	0	3.74	0	0	0	3.74
ESE	0	1.8	0	0	0	1.8
SE	0	3.74	0	0	0	3.74
SSE	0.15	2.99	0	0	0	3.14
S	0.3	2.54	0	0	0	2.84
SSW	0.15	5.24	0	0	0	5.39
SW	0	7.93	0	0	0	7.93
WSW	3.74	5.84	0	0	0	9.58
W	5.24	5.99	0	0	0	11.23
WNW	0.6	4.34	0	0	0	4.94
NW	0.3	4.49	0	0	0	4.79
NNW	1.05	5.69	0	0	0	6.74
Summary	11.53	88.46	0	0	0	100


AQHI Grimshaw Poll.: AQHI Grimshaw-CH4[ppm] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppm)
12 0-2
88 2-5
0 5-10
0 10-20
0 >20.0

peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

NON-METHANE HYDROCARBONS (NMHC) in ppm

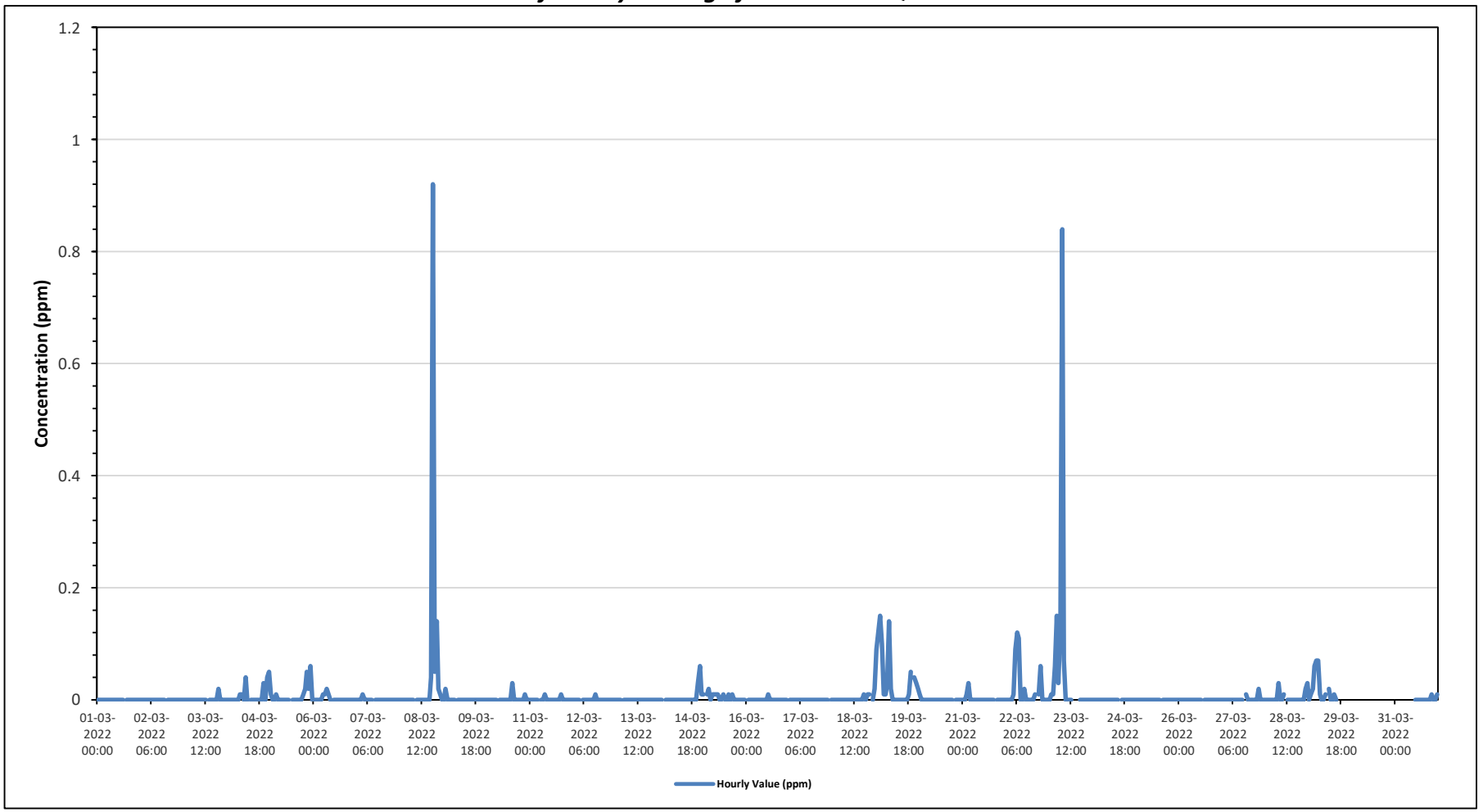
Maximum Hourly Value:	0.92	ppm	on March 8 at hour 18	Hours in Service:	744
Maximum Daily Value:	0.07	ppm	on March 23	Hours of Data:	668
Minimum Hourly Value:	0.00	ppm	on March 1 at hour 0	Hours of Missing Data:	43
Minimum Daily Value:	0.00	ppm	on March 1	Hours of Calibration:	33
Monthly Average:	0.01	ppm		Operational Uptime:	94.2

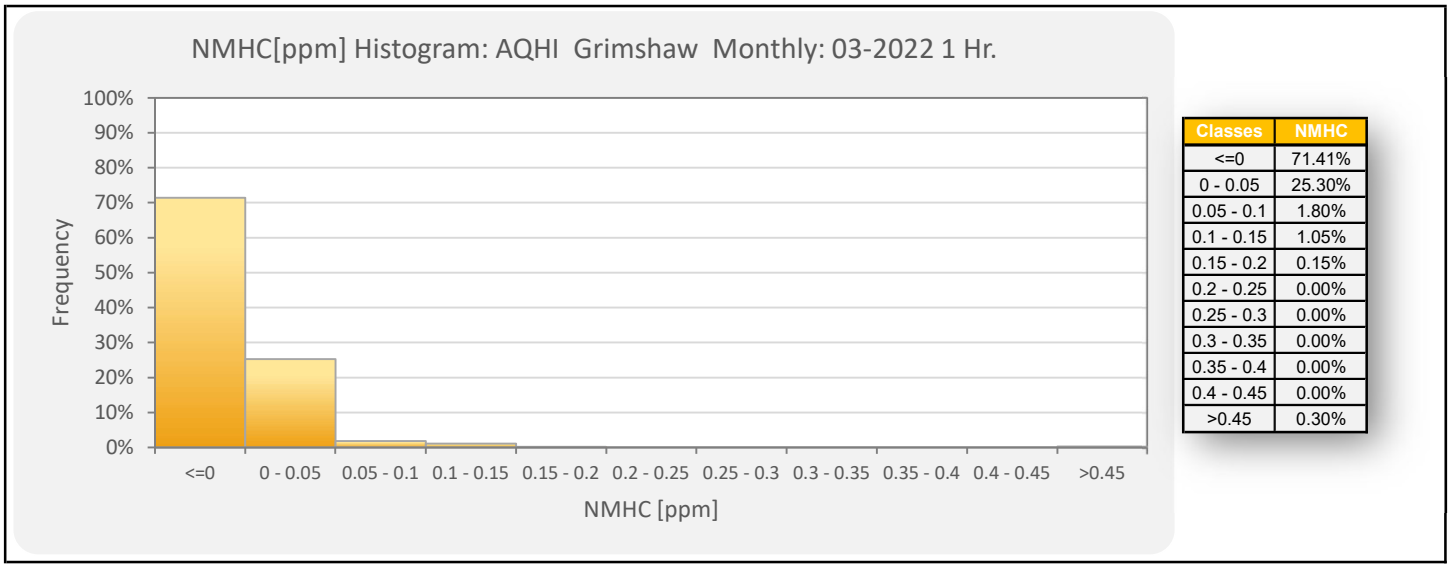
Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar 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	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 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.00
Mar 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.04	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.04	0.05	0.00	0.05	0.01
Mar 5	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.05	0.02	0.06	0.00	0.00	0.06	0.01
Mar 6	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.01	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
Mar 7	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Mar 8	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	0.04	**0.92**	0.05	0.14	0.02	0.01	0.00	0.00	**0.92**	0.05
Mar 9	0.00	0.02	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
Mar 10	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	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.03	0.00
Mar 11	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Mar 12	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Mar 13	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 14	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	0.03	0.06	0.01	0.00	0.06	0.00
Mar 15	0.01	S	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
Mar 16	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.01	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	0.00	0.00	S	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	0.01	0.00	0.01	0.01	S	0.00	0.02	0.00	0.02	0.00
Mar 19	0.09	0.12	0.15	0.10	0.01	0.01	0.03	0.14	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	S	0.04	0.03	0.02	0.00	0.15	0.04
Mar 20	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	S	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Mar 21	0.00	0.00	0.01	0.03	0.00	0.00	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	0.03	0.00
Mar 22	0.00	0.00	0.00	0.00	0.01	0.09	0.12	0.11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.01	S	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.12	0.02
Mar 23	0.00	0.01	0.01	0.06	0.15	0.03	0.14	0.84	0.07	0.00	0.00	0.00	0.00	C	C	C	C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	**0.07**
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	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 25	0.00	0.00	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 26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.01	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 28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	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	0.02	0.03	0.00	0.03	0.00
Mar 29	0.00	0.01	0.02	0.06	0.07	0.07	0.01	0.00	0.00	0.01	S	0.02	0.00	0.00	0.01	0.00	X	X	X	X	X	X	X	X	0.00	0.07	-
Mar 30	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 31	X	X	X	X	X	X	X	X	NRM	NRM	NRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	-
Diurnal Maximum	0.09	0.12	0.15	0.10	0.15	0.09	0.14	0.84	0.07	0.01	0.04	0.02	0.01	0.01	0.03	0.00	0.01	0.04	0.92	0.06	0.14	0.04	0.06	0.05			
Diurnal Average	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.01	0.00	0.01	0.01			

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

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

Timeseries Chart of Hourly Average for NMHC - AQHI - Grimshaw Station

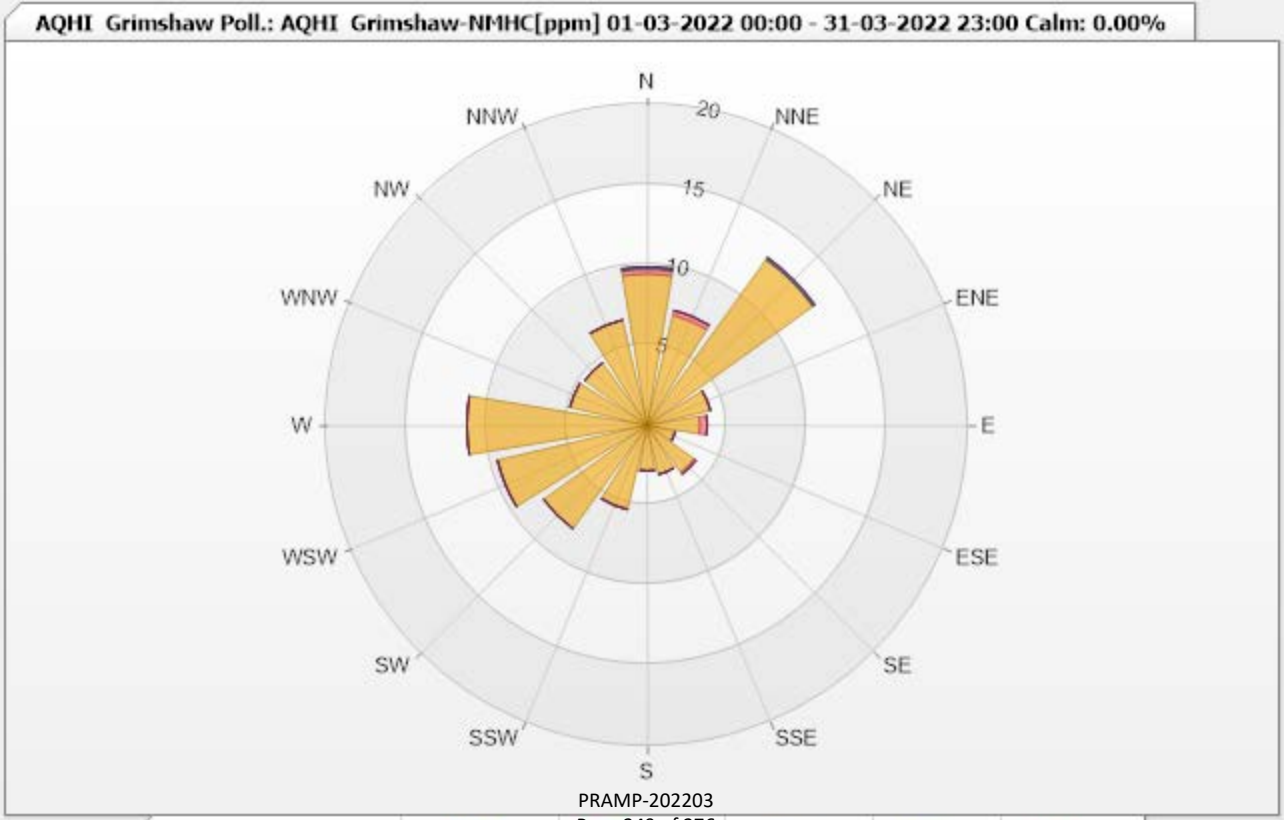




Classes	NMHC
<=0	71.41%
0 - 0.05	25.30%
0.05 - 0.1	1.80%
0.1 - 0.15	1.05%
0.15 - 0.2	0.15%
0.2 - 0.25	0.00%
0.25 - 0.3	0.00%
0.3 - 0.35	0.00%
0.35 - 0.4	0.00%
0.4 - 0.45	0.00%
>0.45	0.30%

Wind: AQHI Grimshaw Poll.: AQHI Grimshaw-NMHC[ppm] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 89.78% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	9.43	0.3	0.15	0	0	9.88
NNE	7.04	0.3	0	0	0	7.34
NE	12.72	0	0.15	0	0	12.87
ENE	4.04	0	0	0	0	4.04
E	3.29	0.45	0	0	0	3.74
ESE	1.8	0	0	0	0	1.8
SE	3.59	0.15	0	0	0	3.74
SSE	3.14	0	0	0	0	3.14
S	2.84	0	0	0	0	2.84
SSW	5.39	0	0	0	0	5.39
SW	7.93	0	0	0	0	7.93
WSW	9.58	0	0	0	0	9.58
W	11.23	0	0	0	0	11.23
WNW	4.94	0	0	0	0	4.94
NW	4.79	0	0	0	0	4.79
NNW	6.74	0	0	0	0	6.74
Summary	98.49	1.2	0.3	0	0	100


AQHI Grimshaw Poll.: AQHI Grimshaw-NMHC[ppm] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% Icon Classes (ppm)
98 0-0.1
1 0.1-0.3
0 0.3-1
0 1-2
0 >2.0

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PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

PARTICULATE MATTER 2.5 ($PM_{2.5}$) in $\mu g/m^3$

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

Number of 1-Hour Exceedances: 0 Number of 24-Hour Exceedances: 0

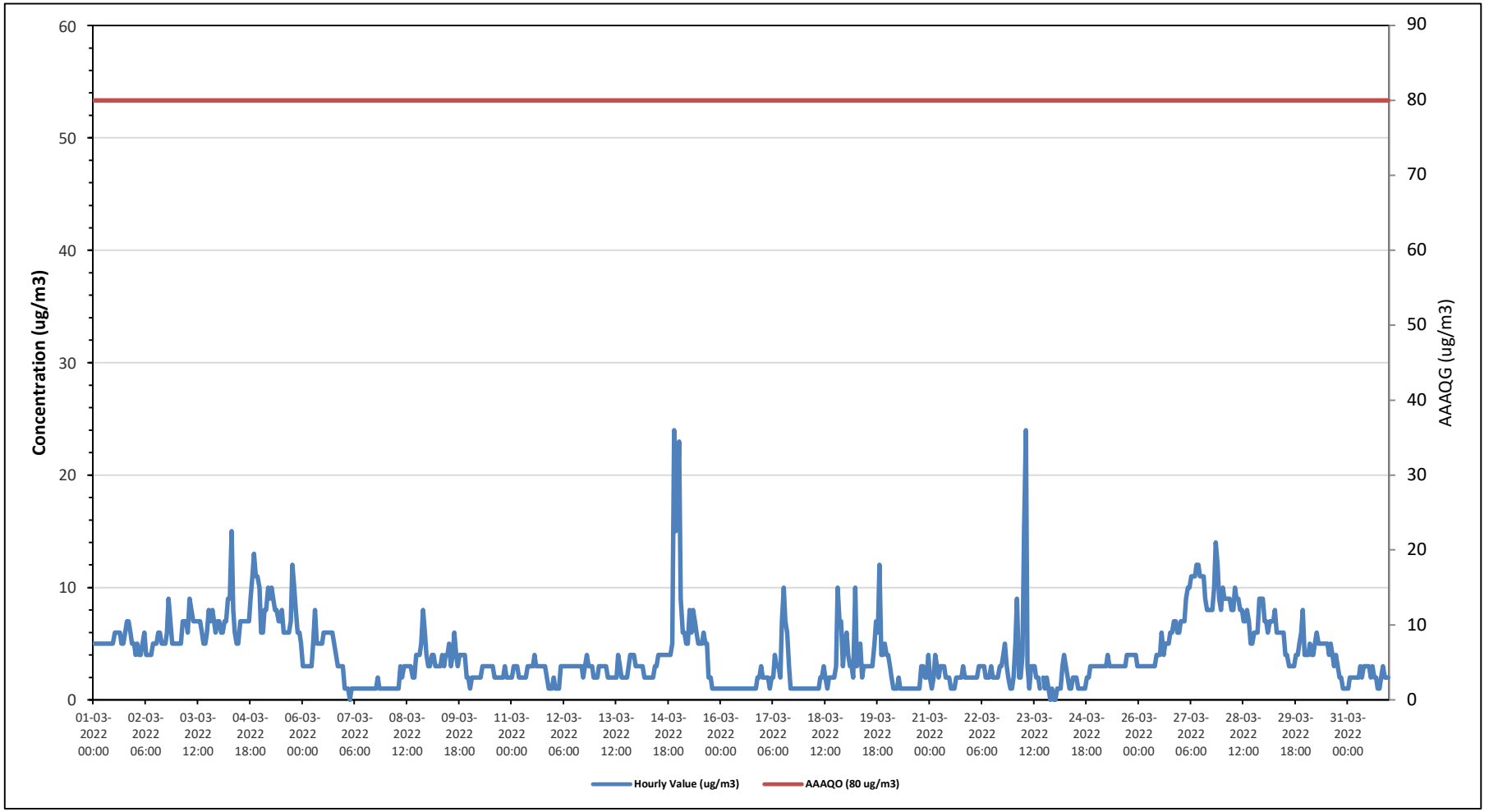
Maximum Hourly Value:	24	$\mu g/m^3$ on March 14 at hour 21	Hours in Service:	744
Maximum Daily Value:	9.8	$\mu g/m^3$ on March 27	Hours of Data:	743
Minimum Hourly Value:	0	$\mu g/m^3$ on March 7 at hour 3	Hours of Missing Data:	0
Minimum Daily Value:	1.0	$\mu g/m^3$ on March 7	Hours of Calibration:	1
Monthly Average:	4.0	$\mu g/m^3$	Operational Uptime:	100.0

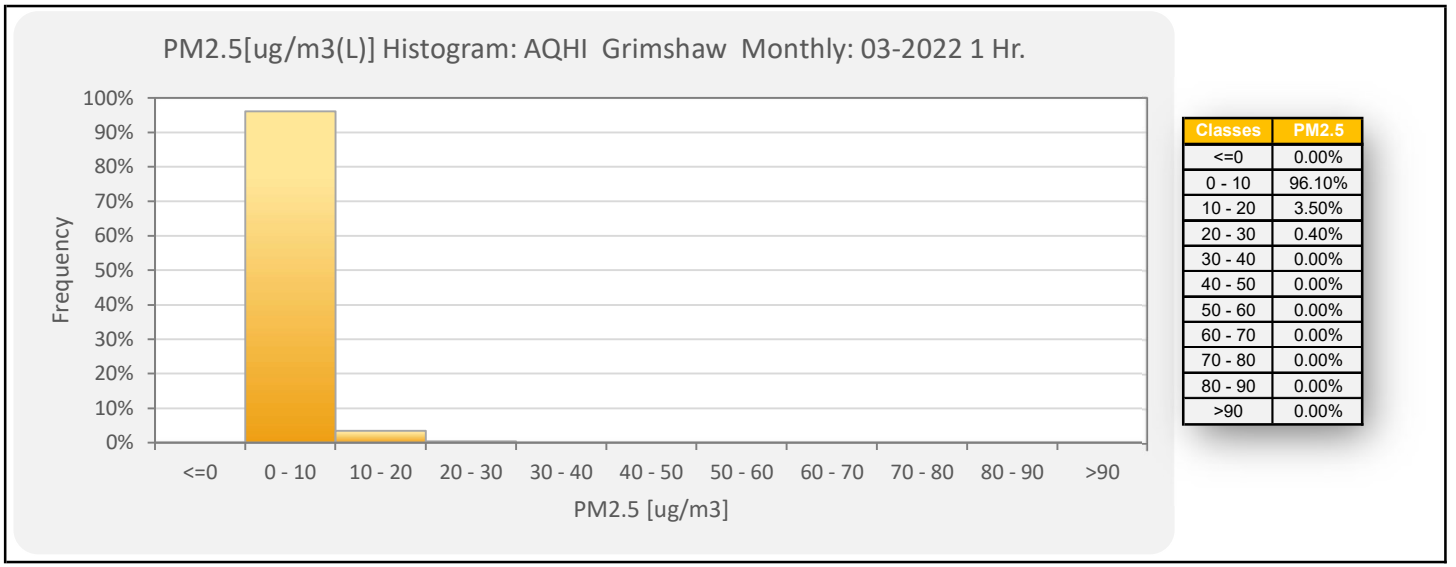
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Mar 1	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	5	5	6	7	7	6	5	5	5	7	5.4
Mar 2	4	5	4	4	5	6	4	4	4	4	5	5	5	6	6	5	5	5	6	9	7	5	5	5	4	9	5.1
Mar 3	5	5	5	7	7	7	6	9	8	7	7	7	7	7	6	5	5	6	8	7	8	7	6	7	5	9	6.6
Mar 4	7	6	6	7	7	9	9	15	8	6	5	5	7	7	7	7	7	7	9	11	13	11	11	10	5	15	8.2
Mar 5	6	6	8	8	10	9	10	9	8	8	7	7	8	6	6	6	6	7	12	10	8	6	6	5	5	12	7.6
Mar 6	3	3	3	3	3	3	5	8	5	5	5	5	6	6	6	6	6	6	5	4	3	3	3	3	3	8	4.5
Mar 7	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	**0**	2	1.0
Mar 8	1	1	1	1	1	1	1	1	3	2	3	3	3	3	3	2	2	4	4	4	5	8	6	4	1	8	2.8
Mar 9	3	3	4	4	3	3	3	3	4	3	4	4	5	3	4	6	4	3	4	4	4	4	2	2	2	6	3.6
Mar 10	1	2	2	2	2	2	2	3	3	3	3	3	3	3	2	2	2	2	2	2	3	2	2	2	1	3	2.3
Mar 11	2	3	3	3	2	2	2	2	2	3	3	3	3	4	3	3	3	3	3	3	2	1	1	1	1	4	2.5
Mar 12	2	1	1	1	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	4	3	3	3	2	1	4	2.7
Mar 13	2	2	3	3	3	3	3	2	2	2	2	2	2	4	3	2	2	2	2	3	4	4	4	3	2	4	2.7
Mar 14	3	3	3	3	2	2	2	2	2	2	3	3	4	4	4	4	4	4	4	4	5	**24**	15	17	2	**24**	5.1
Mar 15	23	9	6	6	5	5	8	6	8	7	6	5	5	5	6	5	5	2	2	1	1	1	1	1	1	23	5.4
Mar 16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	3	1	3	1.2
Mar 17	2	2	2	2	1	2	2	4	3	3	2	7	10	7	6	3	1	1	1	1	1	1	1	1	1	10	2.8
Mar 18	1	1	1	1	1	1	1	1	1	2	2	3	2	1	2	2	2	2	3	10	7	7	3	5	1	10	2.6
Mar 19	6	4	3	3	2	10	3	4	5	2	3	3	3	3	3	3	5	7	6	12	4	4	5	4	2	12	4.5
Mar 20	4	3	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	3	3	2	2	4	1	4	1.7
Mar 21	2	1	2	4	3	2	3	3	3	2	2	2	1	1	1	2	2	2	2	3	2	2	2	2	1	4	2.1
Mar 22	2	2	2	2	3	3	3	3	2	2	2	3	2	2	2	2	3	3	4	5	3	2	1	1	1	5	2.5
Mar 23	2	5	9	2	2	4	15	**24**	3	1	3	3	3	2	2	1	**C**	2	1	2	1	0	1	0	**0**	**24**	3.8
Mar 24	0	1	1	1	3	4	3	2	1	1	2	2	2	1	1	1	1	1	2	2	3	3	3	3	**0**	4	1.8
Mar 25	3	3	3	3	3	3	4	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	3	3	4	3.3
Mar 26	3	3	3	3	3	3	3	3	3	3	4	4	4	6	4	5	5	5	6	6	7	7	6	6	3	7	4.4
Mar 27	7	7	7	9	10	10	11	11	11	12	12	11	11	11	9	8	8	8	8	10	14	12	9	8	7	14	**9.8**
Mar 28	10	9	9	9	9	8	8	10	9	9	8	8	7	7	8	7	5	5	6	6	6	9	9	9	5	10	7.9
Mar 29	7	7	6	7	7	7	8	6	6	6	6	6	4	4	3	3	3	3	4	4	5	6	8	4	3	8	5.4
Mar 30	4	4	5	4	4	5	6	5	5	5	5	5	5	4	5	4	3	4	3	2	2	1	1	1	1	6	3.8
Mar 31	1	2	2	2	2	2	2	3	2	3	3	3	3	2	3	2	2	1	1	2	3	2	2	2	1	3	2.2
Diurnal Maximum	23	9	9	9	10	10	15	24	11	12	12	11	11	11	9	8	8	8	8	12	12	14	24	15	17		
Diurnal Average	4.0	3.5	3.6	3.6	3.7	4.1	4.5	5.1	4.0	3.8	3.9	4.1	4.2	4.0	3.9	3.6	3.5	3.5	4.0	4.8	4.5	4.8	4.2	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	**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 - Grimshaw Station

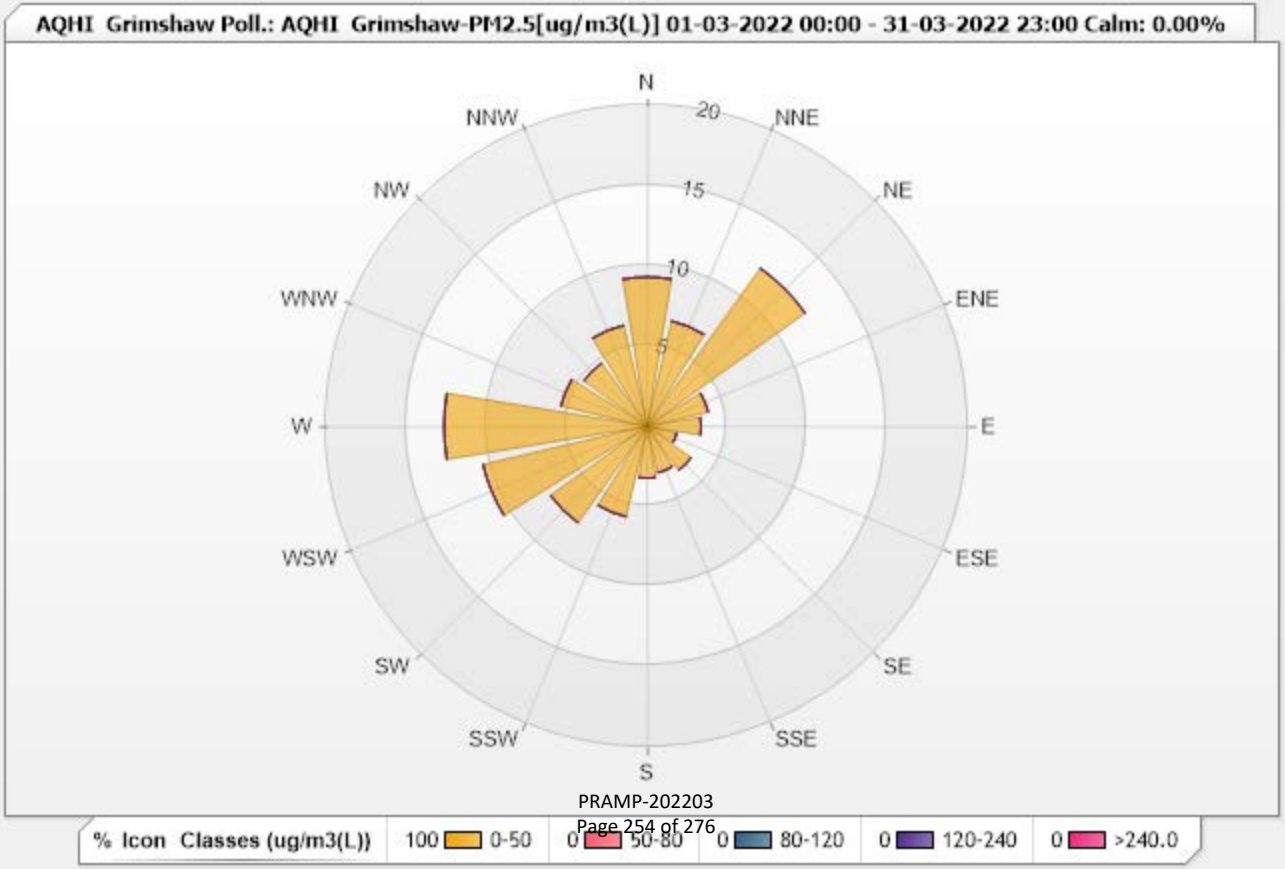




Classes	PM2.5
<=0	0.00%
0 - 10	96.10%
10 - 20	3.50%
20 - 30	0.40%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Grimshaw Poll.: AQHI Grimshaw-PM2.5[ug/m3(L)] Monthly: 03-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
Calm: 0.00% Valid Data: 99.87% Calm Avg: 0.00 [ug/m3(L)]

Direction	0-50	50-80	80-120	120-240	>240.0	Total
N	9.29	0	0	0	0	9.29
NNE	6.73	0	0	0	0	6.73
NE	12.11	0	0	0	0	12.11
ENE	3.9	0	0	0	0	3.9
E	3.36	0	0	0	0	3.36
ESE	1.88	0	0	0	0	1.88
SE	3.36	0	0	0	0	3.36
SSE	2.96	0	0	0	0	2.96
S	3.23	0	0	0	0	3.23
SSW	5.79	0	0	0	0	5.79
SW	7.4	0	0	0	0	7.4
WSW	10.5	0	0	0	0	10.5
W	12.65	0	0	0	0	12.65
WNW	5.52	0	0	0	0	5.52
NW	4.85	0	0	0	0	4.85
NNW	6.46	0	0	0	0	6.46
Summary	100	0	0	0	0	100


AQHI Grimshaw Poll.: AQHI Grimshaw-PM2.5[ug/m3(L)] 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 0.00%
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
20
15
10
5
% 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 - Grimshaw Station - March 2022

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

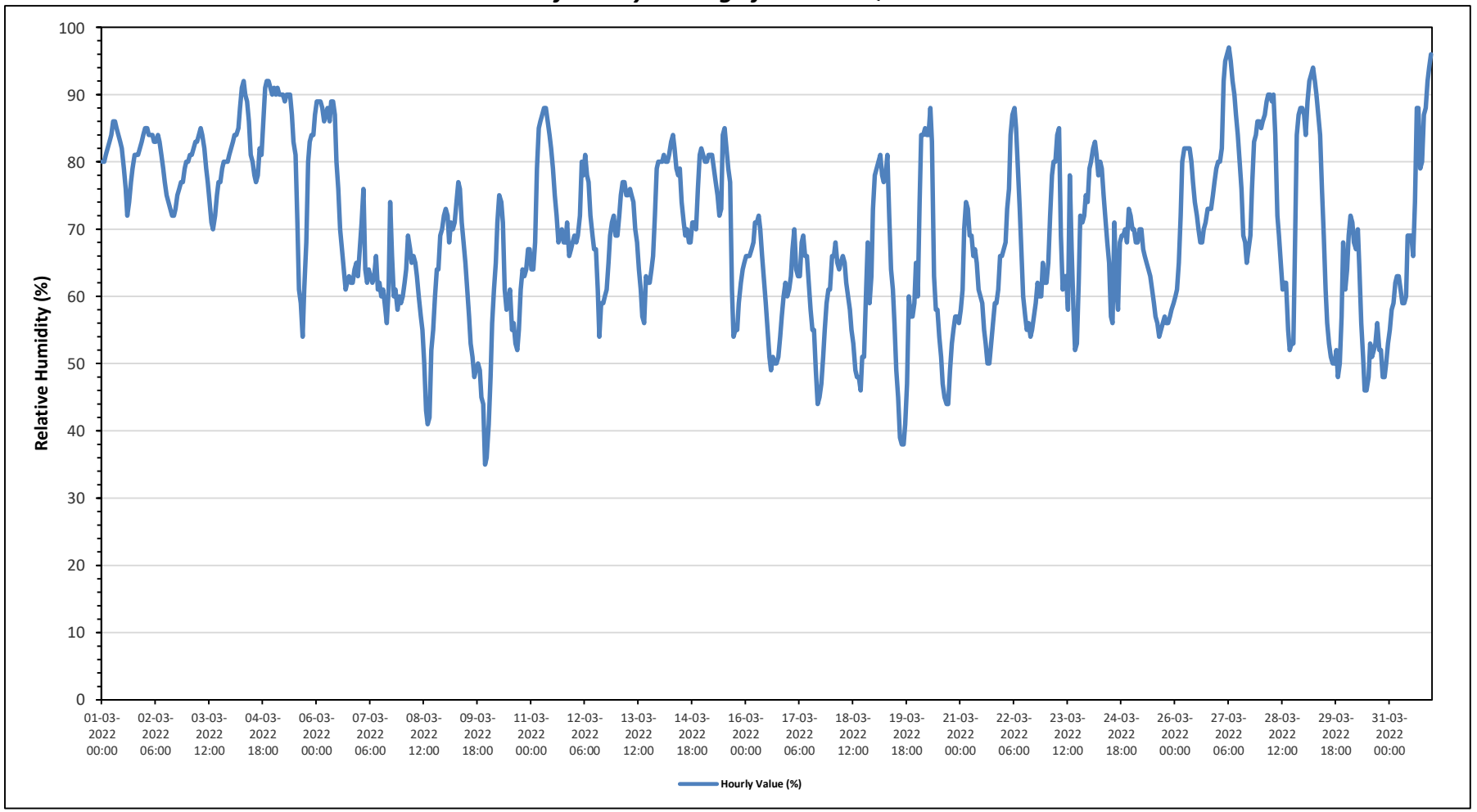
Maximum Hourly Value:	97	%	on March 27 at hour 6	Hours in Service:	744
Maximum Daily Value:	85.5	%	on March 4	Hours of Data:	744
Minimum Hourly Value:	35	%	on March 9 at hour 22	Hours of Missing Data:	0
Minimum Daily Value:	56.7	%	on March 30	Hours of Calibration:	0
Monthly Average:	69.5	%		Operational 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	80	80	81	82	83	84	86	86	85	84	83	82	79	76	72	74	77	79	81	81	81	82	83	84	72	86	81.0
Mar 2	85	85	84	84	84	83	83	84	83	81	79	77	75	74	73	72	72	73	75	76	77	77	79	80	72	85	79.0
Mar 3	80	81	81	82	83	83	84	85	84	82	79	77	74	71	70	72	75	77	77	79	80	80	80	81	70	85	79.0
Mar 4	82	83	84	84	85	88	91	92	90	89	86	81	80	78	77	78	82	81	86	91	92	92	91	90	77	92	**85.5**
Mar 5	91	90	91	90	90	90	89	90	90	90	87	83	81	71	61	59	54	61	68	80	83	84	84	87	54	91	81.0
Mar 6	89	89	89	88	86	87	88	86	89	89	87	80	76	70	67	64	61	62	63	62	62	64	65	63	61	89	76.1
Mar 7	67	71	76	64	62	64	63	62	63	66	61	62	60	61	59	56	61	74	66	60	61	58	60	59	56	76	63.2
Mar 8	60	62	64	69	67	65	66	65	63	60	57	55	50	43	41	42	52	55	60	64	64	69	70	72	41	72	59.8
Mar 9	73	72	68	71	70	71	74	77	76	71	68	65	61	57	53	51	48	49	50	49	45	44	**35**	36	**35**	77	59.8
Mar 10	41	48	56	61	65	71	75	74	71	61	58	59	61	55	56	53	52	55	61	64	63	64	67	67	41	75	60.8
Mar 11	64	64	68	79	85	86	87	88	88	86	84	82	79	75	72	68	69	70	68	68	71	66	67	68	64	88	75.1
Mar 12	69	68	69	72	80	78	81	78	77	72	69	67	67	61	54	59	59	60	61	65	69	71	72	69	54	81	68.6
Mar 13	69	72	75	77	77	75	75	76	75	74	70	68	64	61	57	56	63	62	62	64	66	72	79	80	56	80	69.5
Mar 14	80	80	81	80	80	81	83	84	82	79	78	79	74	71	69	70	68	68	71	71	70	76	81	82	68	84	76.6
Mar 15	81	80	80	81	81	81	79	77	75	72	73	84	85	82	79	77	61	54	55	55	59	62	64	65	54	85	72.6
Mar 16	66	66	66	67	68	71	71	72	70	66	62	59	55	51	49	51	50	50	51	54	57	60	62	60	49	72	60.6
Mar 17	61	63	67	70	64	63	63	68	69	66	66	62	58	55	55	49	44	45	47	51	55	59	61	61	44	70	59.3
Mar 18	66	66	68	65	64	65	66	65	62	60	58	55	53	49	48	48	46	51	51	61	68	59	63	73	46	73	59.6
Mar 19	78	79	80	81	78	77	78	81	72	64	61	56	49	45	39	38	38	41	47	60	57	57	59	65	38	81	61.7
Mar 20	60	74	84	84	85	84	84	88	83	63	58	58	54	51	47	45	44	44	49	53	55	57	57	56	44	88	63.2
Mar 21	58	61	70	74	73	69	69	66	67	65	61	60	59	55	53	50	50	53	56	59	59	61	66	66	50	74	61.7
Mar 22	67	68	73	76	84	87	88	85	79	73	67	60	57	55	56	54	55	57	59	62	60	60	65	62	54	88	67.0
Mar 23	62	65	72	78	80	80	84	85	69	61	63	63	58	78	67	58	52	53	62	72	71	72	75	74	52	85	68.9
Mar 24	79	80	82	83	81	78	80	79	75	71	68	65	57	56	71	61	58	68	69	69	70	68	73	72	56	83	71.4
Mar 25	70	70	68	68	70	70	67	66	65	64	63	61	59	57	56	54	55	56	57	56	56	57	58	59	54	70	61.8
Mar 26	60	61	65	72	80	82	82	82	82	80	77	74	72	70	68	68	70	71	73	73	73	75	77	79	60	82	73.6
Mar 27	80	80	82	92	95	96	**97**	95	92	90	87	84	80	76	69	68	65	67	69	76	83	84	86	86	65	**97**	82.5
Mar 28	85	86	87	89	90	90	89	90	84	72	69	65	61	62	62	55	52	53	53	67	84	87	88	88	52	90	75.3
Mar 29	87	84	89	92	93	94	92	90	87	84	76	69	61	56	53	51	50	50	52	48	50	57	68	61	48	94	70.6
Mar 30	64	69	72	71	68	67	70	64	56	51	46	46	48	53	51	52	53	56	52	52	48	48	50	53	46	72	56.7
Mar 31	55	58	59	62	63	63	61	59	59	60	69	69	69	66	74	88	88	79	80	87	88	92	94	96	55	96	72.4
Diurnal Maximum	91	90	91	92	95	96	97	95	92	90	87	84	85	82	79	88	88	81	86	91	92	92	94	96			
Diurnal Average	71.3	72.7	75.2	77.0	77.9	78.2	78.9	78.7	76.2	72.5	70.0	68.0	65.0	62.6	60.6	59.4	58.8	60.5	62.3	65.5	67.0	68.2	70.3	70.8			

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 RH - AQHI - Grimshaw Station



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PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

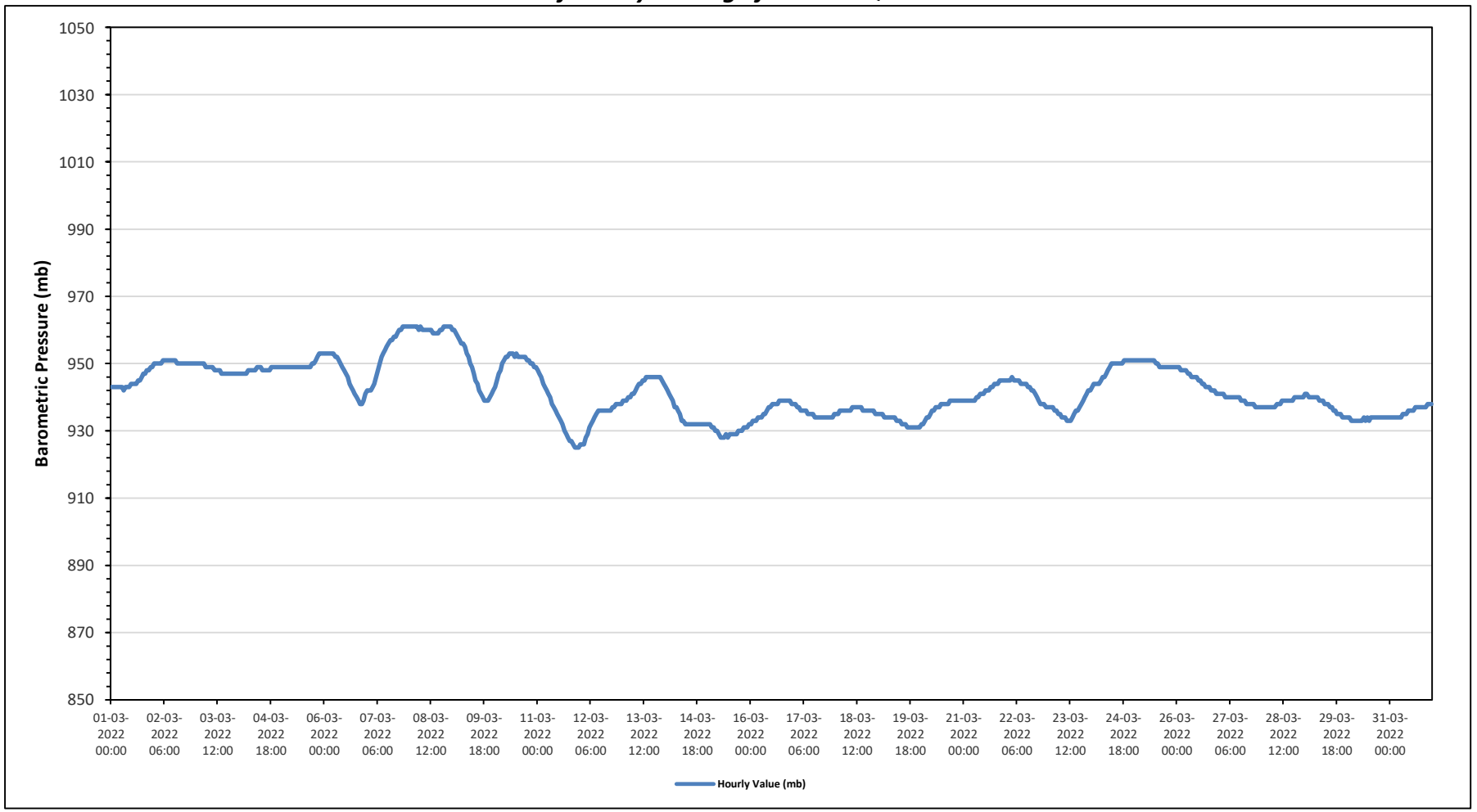
Maximum Hourly Value:	961	mb	on March 7 at hour 20	Hours in Service:	744
Maximum Daily Value:	960	mb	on March 8	Hours of Data:	744
Minimum Hourly Value:	925	mb	on March 11 at hour 21	Hours of Missing Data:	0
Minimum Daily Value:	930	mb	on March 15	Hours of Calibration:	0
Monthly Average:	942	mb		Operational 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	943	943	943	943	943	943	943	942	943	943	943	944	944	944	944	945	945	946	947	947	948	948	949	949	942	949	944.7
Mar 2	950	950	950	950	950	951	951	951	951	951	951	951	951	950	950	950	950	950	950	950	950	950	950	950	950	951	950.3
Mar 3	950	950	950	950	950	949	949	949	949	949	948	948	948	948	947	947	947	947	947	947	947	947	947	947	947	950	948.2
Mar 4	947	947	947	947	947	948	948	948	948	948	949	949	949	948	948	948	948	948	949	949	949	949	949	949	947	949	948.2
Mar 5	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	950	950	951	952	953	953	953	949	953	949.8
Mar 6	953	953	953	953	953	953	952	952	951	950	949	948	947	946	944	943	942	941	940	939	938	938	939	941	938	953	946.6
Mar 7	942	942	942	943	944	946	948	950	952	953	954	955	956	957	957	958	958	959	960	960	**961**	**961**	**961**	**961**	942	**961**	953.3
Mar 8	**961**	**961**	**961**	**961**	**961**	960	**961**	960	960	960	960	960	960	959	959	959	959	960	960	**961**	**961**	**961**	**961**	**961**	959	**961**	**960.3**
Mar 9	960	960	959	958	957	956	956	955	953	952	950	949	947	945	944	942	941	940	939	939	939	940	941	942	939	960	948.5
Mar 10	943	945	947	948	950	951	952	952	953	953	953	952	953	952	952	952	952	952	951	951	950	950	949	949	943	953	950.5
Mar 11	948	947	946	944	943	942	941	940	938	937	936	935	934	933	932	930	929	928	927	927	926	**925**	**925**	**925**	**925**	948	934.9
Mar 12	926	926	926	928	929	931	932	933	934	935	936	936	936	936	936	936	936	936	937	937	938	938	938	938	926	938	933.9
Mar 13	939	939	939	940	940	941	941	942	943	944	944	945	945	946	946	946	946	946	946	946	946	946	945	944	939	946	943.5
Mar 14	943	942	941	940	939	937	937	936	935	933	933	932	932	932	932	932	932	932	932	932	932	932	932	932	932	943	934.7
Mar 15	932	932	931	931	930	930	929	928	928	928	929	928	929	929	929	929	929	930	930	930	931	931	931	932	928	932	929.8
Mar 16	932	933	933	933	934	934	934	935	935	936	937	937	938	938	938	938	939	939	939	939	939	939	939	938	932	939	936.5
Mar 17	938	938	937	937	936	936	936	936	935	935	935	935	934	934	934	934	934	934	934	934	934	934	934	935	934	938	935.1
Mar 18	935	935	936	936	936	936	936	936	936	937	937	937	937	937	937	936	936	936	936	936	936	936	935	935	935	937	936.1
Mar 19	935	935	935	934	934	934	934	934	934	934	933	933	933	932	932	932	931	931	931	931	931	931	931	931	931	935	932.8
Mar 20	932	932	933	934	934	935	936	936	937	937	937	938	938	938	938	938	939	939	939	939	939	939	939	939	932	939	936.9
Mar 21	939	939	939	939	939	939	939	940	940	941	941	941	942	942	942	943	943	944	944	944	945	945	945	945	939	945	941.7
Mar 22	945	945	945	946	945	945	945	945	944	944	944	944	943	943	942	942	941	940	939	938	938	938	937	937	937	946	942.3
Mar 23	937	937	937	936	936	935	935	934	934	934	933	933	933	934	935	936	936	937	938	939	940	941	942	942	933	942	936.4
Mar 24	943	944	944	944	944	945	946	946	947	948	949	950	950	950	950	950	950	950	951	951	951	951	951	951	943	951	948.2
Mar 25	951	951	951	951	951	951	951	951	951	951	951	951	950	950	949	949	949	949	949	949	949	949	949	949	949	951	950.1
Mar 26	949	949	948	948	948	948	947	947	946	946	946	946	945	945	944	944	943	943	943	942	942	942	941	941	941	949	945.1
Mar 27	941	941	941	940	940	940	940	940	940	940	940	940	939	939	939	938	938	938	938	938	937	937	937	937	937	941	939.1
Mar 28	937	937	937	937	937	937	937	937	938	938	938	939	939	939	939	939	939	939	940	940	940	940	940	940	937	940	938.5
Mar 29	941	941	940	940	940	940	940	940	939	939	939	938	938	938	937	937	936	936	935	935	935	934	934	934	934	941	937.8
Mar 30	934	934	933	933	933	933	933	933	933	934	933	934	933	934	934	934	934	934	934	934	934	934	934	934	933	934	933.6
Mar 31	934	934	934	934	934	934	934	935	935	935	936	936	936	936	937	937	937	937	937	937	937	938	938	938	934	938	935.8
Diurnal Maximum	961	961	961	961	961	960	961	960	960	960	960	960	960	959	959	959	959	960	960	961	961	961	961	961			
Diurnal Average	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942	942			

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

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

Timeseries Chart of Hourly Average for BP - AQHI - Grimshaw Station



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PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

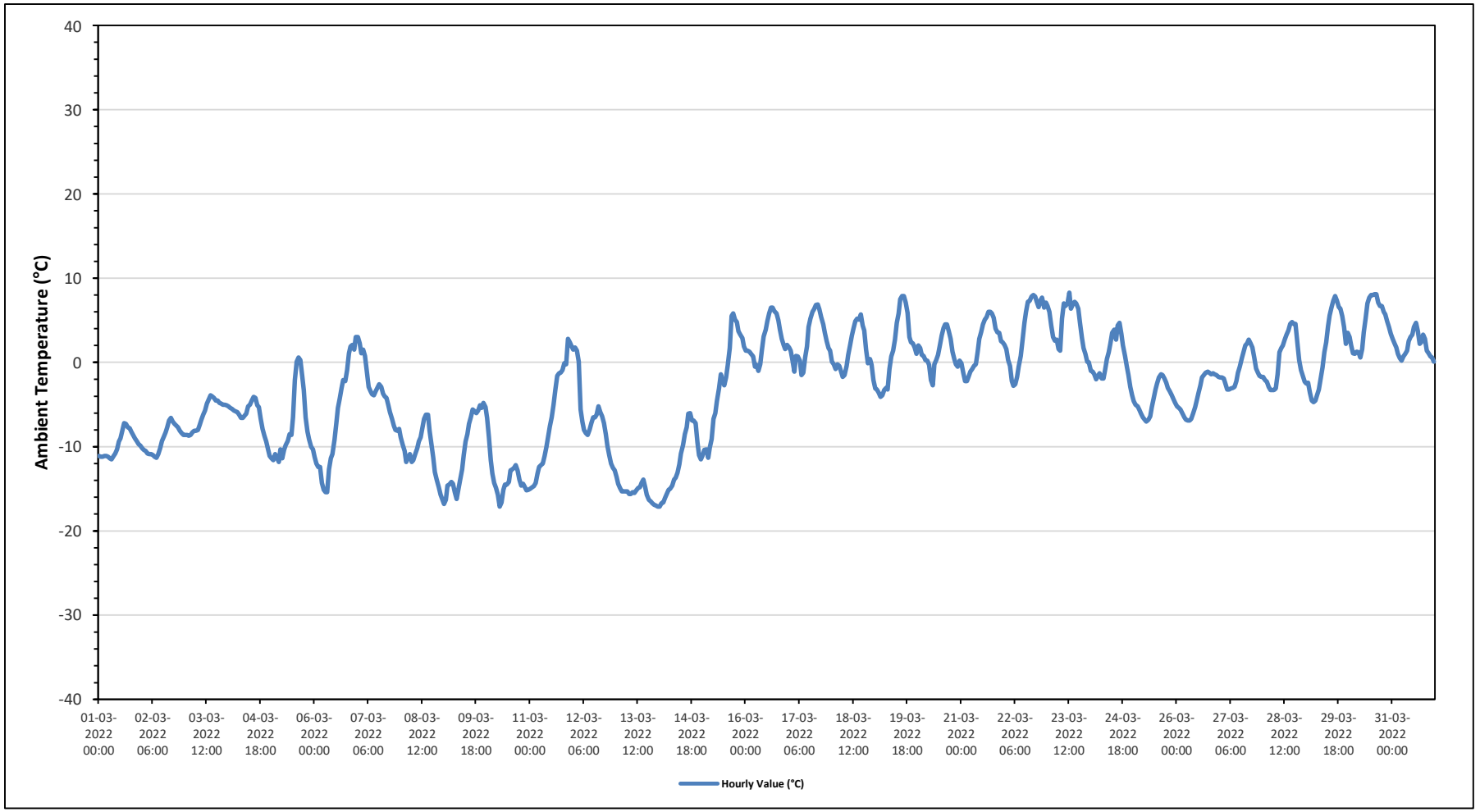
Maximum Hourly Value:	8.3	°C	on March 23 at hour 12	Hours in Service:	744
Maximum Daily Value:	4.7	°C	on March 30	Hours of Data:	744
Minimum Hourly Value:	-17.1	°C	on March 10 at hour 7	Hours of Missing Data:	0
Minimum Daily Value:	-15.4	°C	on March 13	Hours of Calibration:	0
Monthly Average:	-3.5	°C		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	-11.1	-11.2	-11.2	-11.1	-11.1	-11.2	-11.4	-11.5	-11.1	-10.8	-10.3	-9.4	-9	-8.1	-7.2	-7.3	-7.7	-7.8	-8.2	-8.6	-9	-9.4	-9.7	-9.9	-11.5	-7.2	-9.7
Mar 2	-10.2	-10.4	-10.5	-10.8	-10.9	-10.9	-11	-11.2	-11.3	-10.9	-10.2	-9.3	-8.8	-8.3	-7.7	-6.9	-6.6	-7	-7.3	-7.5	-7.7	-8.1	-8.4	-8.6	-11.3	-6.6	-9.2
Mar 3	-8.6	-8.6	-8.7	-8.6	-8.3	-8.1	-8.1	-8	-7.4	-6.8	-6.2	-5.7	-4.9	-4.4	-3.9	-4	-4.2	-4.5	-4.5	-4.8	-4.9	-5	-5	-5.1	-8.7	-3.9	-6.2
Mar 4	-5.2	-5.4	-5.5	-5.7	-5.8	-5.9	-6.2	-6.6	-6.6	-6.3	-6.1	-5.2	-5	-4.5	-4.1	-4.2	-5.1	-5.3	-6.7	-7.9	-8.7	-9.4	-10.3	-11.1	-11.1	-4.1	-6.4
Mar 5	-11.4	-11.6	-10.9	-11.3	-11.8	-10.3	-11.4	-10.4	-9.8	-9.3	-8.5	-8.6	-6.5	-2.1	0.1	0.6	0.3	-1.6	-3.3	-6.5	-8.2	-9.1	-10	-10.3	-11.8	0.6	-7.6
Mar 6	-11.2	-12	-12.4	-12.4	-14.3	-15.1	-15.4	-15.4	-12.7	-11.4	-10.9	-9.2	-7.2	-5.4	-4.3	-3	-2.1	-2.2	-0.9	1.1	1.9	2.1	1.5	3	-15.4	3.0	-7.0
Mar 7	3	2.3	1.1	1.5	0.8	-0.8	-2.9	-3.4	-3.8	-3.9	-3.4	-3	-2.6	-2.9	-3.7	-4	-4.2	-5.1	-5.9	-6.7	-7.5	-8	-8.1	-7.9	-8.1	3.0	-3.3
Mar 8	-8.9	-9.7	-10.5	-11.8	-11.3	-10.9	-11.8	-11.6	-10.8	-10.2	-9.4	-8.9	-7.7	-6.7	-6.2	-6.2	-8.1	-9.7	-11.3	-13	-13.9	-14.8	-15.7	-16.2	-16.2	-6.2	-10.6
Mar 9	-16.8	-16.3	-14.6	-14.5	-14.2	-14.4	-15.4	-16.2	-15.2	-14	-12.7	-11	-9.4	-8.5	-7.3	-6.5	-5.6	-5.8	-6	-5.7	-5.1	-5.4	-4.8	-5.3	-16.8	-4.8	-10.4
Mar 10	-6.6	-8.9	-11.6	-13.2	-14.3	-14.9	-15.7	**-17.1**	-16.6	-15.1	-14.5	-14.5	-14.2	-12.8	-12.7	-12.5	-12.2	-12.8	-13.9	-14.6	-14.4	-14.8	-15.2	-15.1	**-17.1**	-6.6	-13.7
Mar 11	-15	-14.8	-14.7	-14.3	-13.2	-12.4	-12.2	-12	-11.1	-10	-8.7	-7.6	-6.5	-5	-3.2	-1.6	-1.3	-1.2	-0.9	-0.1	-0.2	2.8	2.4	1.9	-15.0	2.8	-6.6
Mar 12	1.5	1.8	1.4	0.1	-5.6	-7.1	-8	-8.4	-8.6	-8	-7.2	-6.5	-6.5	-6.2	-5.2	-5.9	-6.4	-7.2	-8.5	-9.9	-11	-12	-12.5	-12.8	-12.8	1.8	-6.6
Mar 13	-13.6	-14.4	-14.9	-15.3	-15.3	-15.3	-15.3	-15.6	-15.6	-15.4	-15.5	-15.2	-14.9	-14.8	-14.3	-13.9	-14.8	-15.7	-16.3	-16.5	-16.7	-16.9	-17	**-17.1**	**-17.1**	-13.6	-15.4
Mar 14	**-17.1**	-16.7	-16.6	-16.1	-15.6	-15.1	-15	-14.6	-13.9	-13.7	-13.1	-12.1	-10.8	-9.8	-8.5	-7.7	-6.1	-6	-6.9	-6.9	-7.2	-9.5	-11	-11.5	**-17.1**	-6.0	-11.7
Mar 15	-11	-10.4	-10.3	-11.3	-10.1	-9.1	-6.7	-6	-4.6	-3.1	-1.4	-2.1	-2.7	-1.8	-0.4	1.7	5.5	5.8	5.1	4.8	3.7	3.3	2.9	1.9	-11.3	5.8	-2.3
Mar 16	1.4	1.4	1.3	1	0.7	-0.5	-0.3	-1	-0.2	1.4	3.1	3.9	4.9	5.8	6.5	6.5	6.1	5.8	5	3.9	2.8	2.1	1.6	2.1	-1.0	6.5	2.7
Mar 17	1.8	1.4	0.2	-1.1	0.8	0.7	0.2	-1.5	-1.2	0.6	1.9	4.2	5.2	6	6.3	6.8	6.9	6.3	5.4	4.5	3.5	2.5	1.7	1.4	-1.5	6.9	2.7
Mar 18	0.1	-0.2	-0.8	-0.2	-0.4	-1.1	-1.7	-1.5	-0.4	0.9	2	3.2	4	4.9	5.2	5.1	5.7	4.4	3.8	1.5	-0.1	0.4	-0.3	-2.1	-2.1	5.7	1.4
Mar 19	-3.1	-3.2	-3.6	-4.1	-3.9	-3.3	-3	-3.2	-0.8	0.7	1.4	2.7	4.7	5.8	7.5	7.9	7.9	7.1	5.9	3	2.4	2.3	1.8	1	-4.1	7.9	1.4
Mar 20	2	1.7	0.9	0.8	0.3	0.2	-0.3	-2.1	-2.7	-0.2	0.3	0.9	2	3.2	4.1	4.5	4.5	3.7	2.8	1.3	0.4	-0.2	-0.5	0.2	-2.7	4.5	1.2
Mar 21	-0.1	-1.2	-2.2	-2.2	-1.7	-1.1	-0.8	-0.4	-0.2	1.3	2.8	3.6	4.5	5.1	5.4	6	6	5.8	5.3	4	3.6	3.5	2.5	2.4	-2.2	6.0	2.2
Mar 22	2.1	1.6	0.3	-0.4	-2.2	-2.8	-2.6	-1.7	-0.5	0.8	2.7	4.7	6	7.2	7.3	7.8	8	7.8	7.2	6.6	7.4	7.7	6.5	7.1	-2.8	8.0	3.7
Mar 23	6.7	6	4.4	3	2.6	2.7	1.6	1.4	5.2	7	6.7	7	**8.3**	6.4	6.9	7.2	7	6.4	4.6	2.9	1.7	1	0.1	0	0.0	**8.3**	4.5
Mar 24	-1	-1.1	-1.4	-2	-1.6	-1.3	-1.9	-1.9	-0.9	0.4	1.2	2.2	3.5	3.9	2.7	4.4	4.7	3.4	2	0.8	-0.5	-1.5	-2.9	-3.9	-3.9	4.7	0.3
Mar 25	-4.6	-5	-5.2	-5.6	-6.1	-6.5	-6.8	-7	-6.8	-6.4	-5.3	-4.3	-3.2	-2.5	-1.8	-1.4	-1.5	-1.9	-2.4	-3	-3.4	-3.9	-4.4	-4.8	-7.0	-1.4	-4.3
Mar 26	-5.2	-5.4	-5.6	-6	-6.5	-6.8	-6.9	-6.9	-6.7	-6.1	-5.3	-4.5	-3.6	-2.7	-1.8	-1.5	-1.2	-1.1	-1.2	-1.4	-1.3	-1.4	-1.5	-1.7	-6.9	-1.1	-3.8
Mar 27	-1.8	-1.8	-1.9	-2.5	-3.2	-3.2	-3.1	-3	-2.9	-2.2	-1.2	-0.5	0.5	1.2	2	2.3	2.7	2.3	1.8	0.6	-0.7	-1.2	-1.6	-1.7	-3.2	2.7	-0.8
Mar 28	-1.7	-2.1	-2.3	-2.9	-3.3	-3.3	-3.3	-3.1	-1.4	1.2	1.7	2	2.7	3.3	3.8	4.6	4.8	4.6	4.6	2.4	0.3	-0.9	-1.6	-2.3	-3.3	4.8	0.3
Mar 29	-2.5	-2.4	-3.6	-4.5	-4.7	-4.5	-3.9	-3.2	-1.9	-0.6	1.2	2.4	4.3	5.6	6.5	7.3	7.9	7.3	6.6	6.4	5.5	4.2	2.2	3.5	-4.7	7.9	1.6
Mar 30	3	2	1.1	1	1.3	1.2	0.6	1.6	3.6	5.2	7	7.7	8	8	8.1	8.1	7.1	6.7	6.7	6	5.7	4.9	4.2	3.4	0.6	8.1	**4.7**
Mar 31	2.8	2.3	1.8	1	0.5	0.2	0.7	1	1.4	2.5	3	3.3	4.2	4.7	3.7	2.2	2.4	3.3	2.8	1.4	1.1	0.7	0.6	0.1	0.1	4.7	2.0
Diurnal Maximum	6.7	6.0	4.4	3.0	2.6	2.7	1.6	1.6	5.2	7.0	7.0	7.7	8.3	8.0	8.1	8.1	8.0	7.8	7.2	6.6	7.4	7.7	6.5	7.1			
Diurnal Average	-4.6	-4.9	-5.4	-5.8	-6.1	-6.2	-6.4	-6.5	-5.7	-4.6	-3.7	-2.9	-2.0	-1.1	-0.5	-0.1	0.0	-0.5	-1.1	-2.0	-2.6	-3.0	-3.6	-3.9			

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

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

Timeseries Chart of Hourly Average for AT - AQHI - Grimshaw Station



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PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

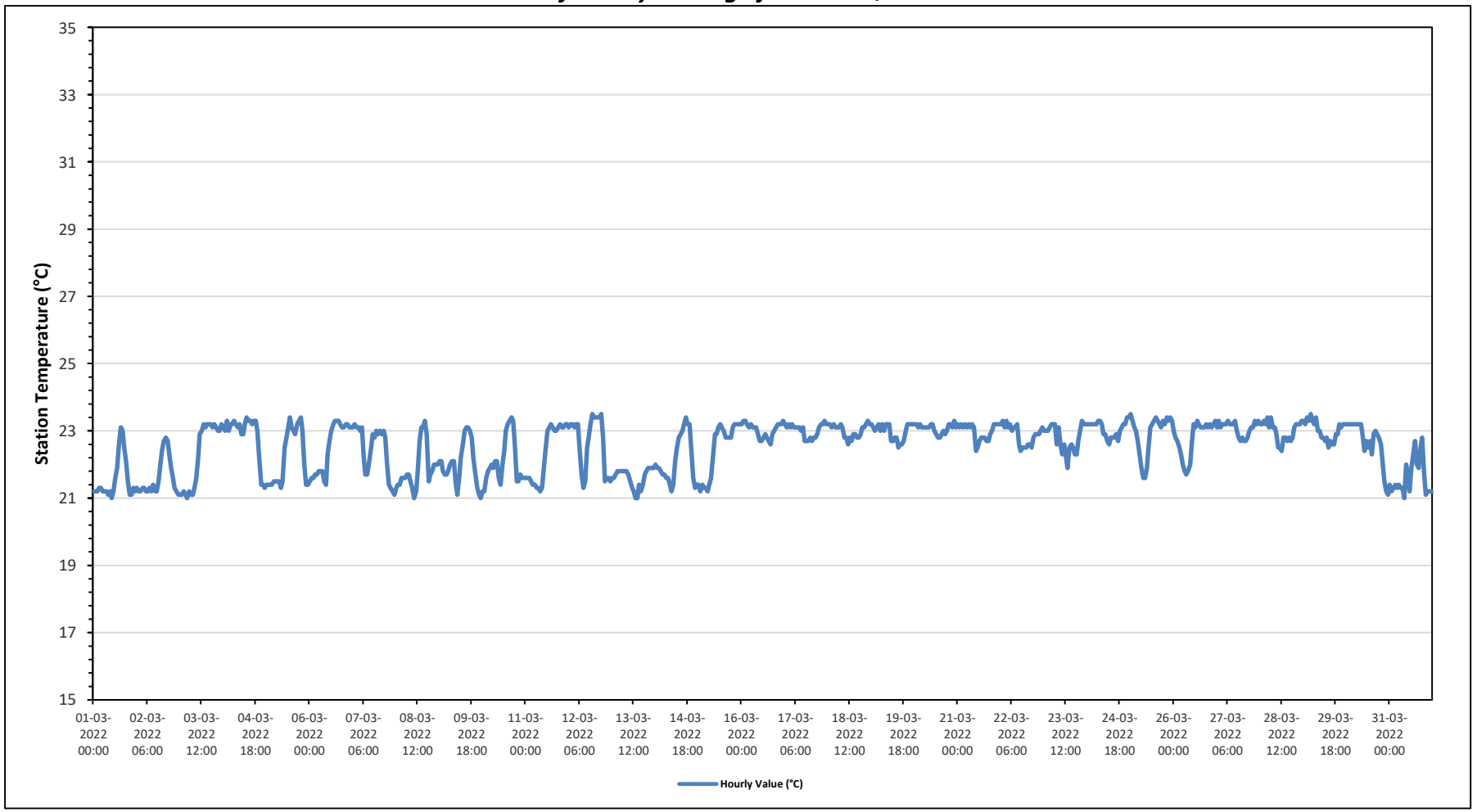
Maximum Hourly Value:	23.5	°C	on March 12 at hour 13	Hours in Service:	744
Maximum Daily Value:	23.1	°C	on March 20	Hours of Data:	744
Minimum Hourly Value:	21.0	°C	on March 1 at hour 10	Hours of Missing Data:	0
Minimum Daily Value:	21.6	°C	on March 1	Hours of Calibration:	0
Monthly Average:	22.5	°C		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																								Daily	Daily	Daily
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Mar 1	21.2	21.2	21.2	21.3	21.3	21.2	21.2	21.2	21.1	21.2	**21.0**	21.2	21.6	21.9	22.6	23.1	23.0	22.5	22.1	21.5	21.1	21.1	21.3	21.2	**21.0**	23.1	21.6
Mar 2	21.3	21.2	21.2	21.3	21.3	21.2	21.2	21.3	21.2	21.4	21.2	21.2	21.5	22.0	22.4	22.7	22.8	22.7	22.3	21.9	21.6	21.3	21.2	21.1	21.1	22.8	21.6
Mar 3	21.1	21.1	21.2	21.1	**21.0**	21.2	21.1	21.1	21.3	21.6	22.2	22.9	23.0	23.2	23.1	23.2	23.2	23.2	23.1	23.2	23.1	23.0	23.0	23.2	**21.0**	23.2	22.3
Mar 4	23.1	23.0	23.3	23.0	23.2	23.2	23.3	23.2	23.1	23.2	22.9	22.9	23.2	23.4	23.3	23.3	23.2	23.3	23.3	23.0	22.2	21.4	21.4	21.3	21.3	23.4	22.9
Mar 5	21.4	21.4	21.4	21.4	21.5	21.5	21.5	21.5	21.3	21.5	22.5	22.8	23.1	23.4	23.1	23.0	22.9	23.2	23.3	23.4	23.0	22.0	21.4	21.4	21.3	23.4	22.2
Mar 6	21.5	21.6	21.6	21.7	21.7	21.8	21.8	21.8	21.5	21.4	22.3	22.7	23.0	23.2	23.3	23.3	23.3	23.2	23.1	23.1	23.2	23.2	23.1	23.1	21.4	23.3	22.5
Mar 7	23.1	23.2	23.1	23.1	23.0	23.1	22.2	21.7	21.7	22.1	22.5	22.9	22.8	23.0	22.9	23.0	22.9	23.0	22.8	22.0	21.4	21.3	21.2	21.1	21.1	23.2	22.5
Mar 8	21.3	21.4	21.4	21.6	21.6	21.6	21.7	21.7	21.5	21.3	**21.0**	21.2	21.8	22.7	23.1	23.1	23.3	22.9	21.5	21.7	21.8	22.0	22.0	22.0	**21.0**	23.3	21.9
Mar 9	22.1	22.1	21.8	21.7	21.7	21.8	22.0	22.1	22.1	21.5	21.1	21.6	22.2	22.6	23.0	23.1	23.1	23.0	22.8	22.2	21.7	21.3	21.1	**21.0**	**21.0**	23.1	22.0
Mar 10	21.2	21.2	21.6	21.8	21.9	22.0	21.9	22.1	22.1	21.6	21.4	22.0	22.4	23.0	23.2	23.3	23.4	23.3	22.5	21.5	21.5	21.7	21.6	21.6	21.2	23.4	22.1
Mar 11	21.6	21.6	21.6	21.5	21.4	21.4	21.3	21.3	21.2	21.3	21.8	22.4	23.0	23.1	23.2	23.1	23.0	23.0	23.1	23.2	23.1	23.1	23.2	23.2	21.2	23.2	22.3
Mar 12	23.1	23.2	23.2	23.1	23.2	23.2	22.4	21.7	21.3	21.5	22.5	22.8	23.2	**23.5**	23.4	23.4	23.4	23.4	**23.5**	22.8	21.5	21.6	21.6	21.5	21.3	**23.5**	22.7
Mar 13	21.6	21.6	21.7	21.8	21.8	21.8	21.8	21.8	21.8	21.7	21.5	21.3	21.2	**21.0**	**21.0**	21.4	21.2	21.4	21.7	21.8	21.9	21.9	21.9	21.9	**21.0**	21.9	21.6
Mar 14	22.0	21.9	21.9	21.8	21.7	21.7	21.6	21.6	21.4	21.2	21.4	22.1	22.5	22.8	22.9	23.0	23.2	23.4	23.2	23.2	22.4	21.6	21.3	21.4	21.2	23.4	22.1
Mar 15	21.4	21.2	21.4	21.3	21.3	21.2	21.4	21.6	22.2	22.9	22.9	23.1	23.2	23.1	23.0	22.8	22.8	22.8	22.8	23.1	23.2	23.2	23.2	23.2	21.2	23.2	22.4
Mar 16	23.2	23.3	23.3	23.2	23.1	23.2	23.1	23.1	23.1	22.9	22.7	22.7	22.8	22.9	22.8	22.7	22.6	22.9	23.0	23.1	23.2	23.2	23.2	23.3	22.6	23.3	23.0
Mar 17	23.2	23.1	23.2	23.1	23.2	23.1	23.1	23.1	23.1	23.0	23.1	22.7	22.7	22.7	22.8	22.7	22.8	22.8	22.9	23.1	23.2	23.2	23.3	23.2	22.7	23.3	23.0
Mar 18	23.2	23.2	23.1	23.2	23.1	23.1	23.1	23.2	23.1	22.8	22.8	22.6	22.8	22.7	22.9	22.9	22.8	22.8	22.9	23.1	23.1	23.2	23.3	23.2	22.6	23.3	23.0
Mar 19	23.2	23.1	23.0	23.1	23.2	23.0	23.2	23.0	23.2	23.2	23.2	22.7	22.7	22.8	22.8	22.5	22.6	22.6	22.7	23.0	23.2	23.2	23.2	23.2	22.5	23.2	23.0
Mar 20	23.2	23.2	23.1	23.2	23.1	23.1	23.1	23.1	23.1	23.2	23.2	23.0	22.9	22.8	22.8	22.9	23.0	22.9	23.0	23.2	23.2	23.1	23.3	23.1	22.8	23.3	**23.1**
Mar 21	23.2	23.1	23.2	23.1	23.2	23.1	23.2	23.1	23.2	23.1	22.4	22.5	22.7	22.8	22.8	22.8	22.7	22.7	22.9	23.0	23.2	23.2	23.2	23.2	22.4	23.2	23.0
Mar 22	23.2	23.3	23.1	23.3	23.1	23.2	23.0	23.1	23.1	23.2	22.6	22.4	22.5	22.5	22.5	22.6	22.6	22.5	22.8	22.9	22.9	22.9	23.0	23.1	22.4	23.3	22.9
Mar 23	23.0	23.0	23.0	23.1	23.2	23.2	23.2	22.6	23.1	22.6	22.3	22.6	22.3	21.9	22.5	22.6	22.5	22.3	22.3	22.7	23.0	23.3	23.2	23.2	21.9	23.3	22.8
Mar 24	23.2	23.2	23.2	23.2	23.2	23.2	23.3	23.3	23.2	22.9	22.9	22.7	22.6	22.8	22.8	22.8	22.9	22.7	23.0	23.1	23.2	23.2	23.4	23.4	22.6	23.4	23.1
Mar 25	**23.5**	23.3	23.1	23.0	22.7	22.3	21.9	21.6	21.6	21.9	22.5	23.1	23.2	23.3	23.4	23.3	23.2	23.1	23.3	23.2	23.4	23.3	23.4	23.3	21.6	**23.5**	22.9
Mar 26	23.0	22.8	22.7	22.5	22.3	22.0	21.8	21.7	21.8	22.0	22.7	23.2	23.1	23.3	23.2	23.1	23.1	23.1	23.2	23.1	23.2	23.1	23.2	23.3	21.7	23.3	22.8
Mar 27	23.1	23.3	23.1	23.2	23.2	23.2	23.3	23.2	23.2	23.2	23.3	23.0	22.8	22.7	22.8	22.7	22.7	22.8	23.0	23.1	23.1	23.3	23.2	23.3	22.7	23.3	**23.1**
Mar 28	23.2	23.2	23.3	23.2	23.4	23.1	23.4	23.1	23.1	22.9	22.5	22.5	22.4	22.8	22.8	22.7	22.8	22.7	22.8	23.1	23.2	23.2	23.2	23.3	22.4	23.4	23.0
Mar 29	23.3	23.2	23.4	23.3	**23.5**	23.3	23.2	23.4	23.0	23.0	22.8	22.8	22.7	22.8	22.5	22.7	22.6	22.6	22.9	22.9	23.2	23.1	23.2	23.2	22.5	**23.5**	23.0
Mar 30	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	22.8	22.4	22.7	22.5	22.7	22.3	22.9	23.0	22.9	22.8	22.6	22.0	21.5	21.2	21.1	21.1	23.2	22.7
Mar 31	21.4	21.2	21.3	21.4	21.3	21.4	21.3	21.3	**21.0**	22.0	21.7	21.2	21.9	22.3	22.7	22.0	21.9	22.5	22.8	21.8	21.1	21.2	21.2	21.2	**21.0**	22.8	21.6
Diurnal Maximum	23.5	23.3	23.4	23.3	23.5	23.3	23.4	23.4	23.2	23.2	23.3	23.2	23.2	23.5	23.4	23.4	23.4	23.4	23.5	23.4	23.4	23.3	23.4	23.4			
Diurnal Average	22.5	22.4	22.4	22.4	22.4	22.4	22.3	22.3	22.3	22.3	22.3	22.4	22.6	22.8	22.8	22.9	22.9	22.8	22.8	22.7	22.6	22.5	22.5	22.4			

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

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

Timeseries Chart of Hourly Average for ST - AQHI - Grimshaw Station



peace river area monitoring program pramp

PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

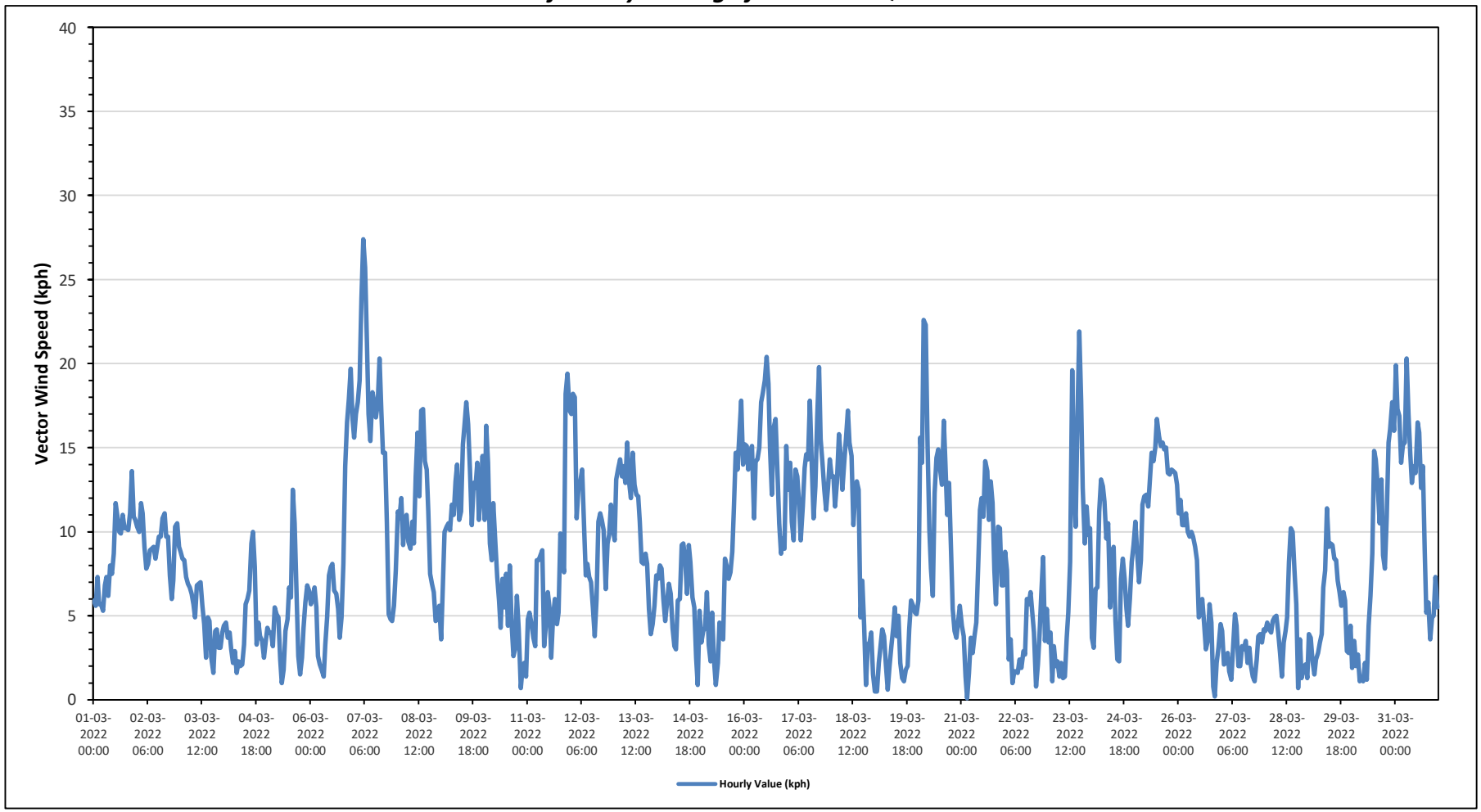
Maximum Hourly Value:	27.4	kph	on March 7 at hour 5	Hours in Service:	744
Maximum Daily Value:	15.6	kph	on March 7	Hours of Data:	744
Minimum Hourly Value:	0.1	kph	on March 21 at hour 3	Hours of Missing Data:	0
Minimum Daily Value:	2.8	kph	on March 27	Hours of Calibration:	0
Monthly Average:	8.4	kph		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	5.9	5.6	7.3	5.7	5.7	5.3	6.8	7.3	6.2	8.0	7.5	8.7	11.7	10.9	10.0	9.9	11.0	10.2	10.2	10.1	11.1	13.6	10.9	10.7	5.3	13.6	8.8
Mar 2	10.3	10.0	11.7	11.1	9.1	7.8	8.1	8.9	9.0	9.1	8.4	9.1	9.7	9.7	10.8	11.1	9.7	9.7	7.4	6.0	7.1	10.3	10.5	9.1	6.0	11.7	9.3
Mar 3	8.8	8.4	8.3	7.3	6.9	6.7	6.3	5.7	4.9	6.8	6.9	7.0	5.6	4.5	2.5	4.9	4.7	2.5	1.6	4.1	4.2	3.1	3.1	4.0	1.6	8.8	5.4
Mar 4	4.4	4.6	3.7	4.0	3.0	2.2	2.9	1.6	2.3	2.0	2.1	3.3	5.7	6.0	6.5	9.3	10.0	7.9	3.3	4.6	3.8	3.5	2.5	3.5	1.6	10.0	4.3
Mar 5	4.3	4.0	4.0	3.2	5.5	5.1	4.9	2.4	1.0	1.8	4.1	4.8	6.7	6.1	12.5	10.5	7.1	2.6	1.5	2.5	4.3	5.8	6.8	6.5	1.0	12.5	4.9
Mar 6	5.7	6.1	6.7	5.5	2.6	2.1	1.8	1.4	3.3	4.9	7.4	7.9	8.1	6.5	6.3	5.4	3.7	4.9	8.1	13.9	16.5	17.9	19.7	16.7	1.4	19.7	7.6
Mar 7	15.6	17.0	17.7	19.0	23.9	**27.4**	25.7	21.2	17.0	15.4	18.3	17.7	16.8	17.6	20.3	17.1	14.7	14.7	10.5	5.1	4.8	4.7	5.6	7.7	4.7	**27.4**	**15.6**
Mar 8	11.2	10.8	12.0	9.2	10.7	11.0	9.4	9.0	10.6	9.3	13.3	15.9	12.1	17.2	17.3	14.2	13.7	11.2	7.5	6.9	6.4	4.7	4.8	5.6	4.7	17.3	10.6
Mar 9	3.6	6.5	10.0	10.3	10.5	10.1	11.6	11.0	13.0	14.0	10.7	11.2	15.2	16.3	17.7	16.4	13.7	10.4	12.9	12.6	14.1	10.7	12.2	14.5	3.6	17.7	12.1
Mar 10	10.7	16.3	14.1	9.3	8.3	11.7	9.3	7.3	5.9	4.3	7.2	5.5	7.5	4.4	8.0	4.5	2.6	3.0	6.2	4.2	0.7	1.8	2.2	1.4	0.7	16.3	6.5
Mar 11	4.8	5.2	4.5	3.7	3.2	8.3	8.3	8.6	8.9	3.2	4.5	6.4	5.4	2.5	4.9	6.0	4.5	5.2	9.9	8.4	7.6	18.2	19.4	17.2	2.5	19.4	7.4
Mar 12	17.0	18.2	18.0	10.8	12.6	13.0	13.7	10.5	7.4	8.1	7.3	7.0	5.5	3.8	6.0	10.6	11.1	10.7	10.1	6.6	9.3	9.8	11.6	10.2	3.8	18.2	10.4
Mar 13	9.5	13.1	13.8	14.3	13.3	13.9	12.9	15.3	13.0	12.0	14.7	12.8	12.2	12.1	10.6	8.2	8.1	8.7	8.1	5.4	3.9	4.5	5.6	7.4	3.9	15.3	10.6
Mar 14	7.2	8.0	7.8	6.0	4.7	5.8	6.9	6.3	4.3	3.2	3.0	5.9	6.0	9.2	9.3	8.4	6.3	9.2	8.2	6.1	5.5	2.5	0.9	5.3	0.9	9.3	6.1
Mar 15	3.4	4.1	4.3	6.4	3.3	2.3	5.2	2.4	0.9	2.2	4.6	4.4	3.6	8.4	8.0	7.2	7.6	8.8	11.4	14.7	13.7	15.8	17.8	14.0	0.9	17.8	7.3
Mar 16	15.2	15.1	13.7	14.7	15.1	10.8	14.2	14.3	15.0	17.7	18.2	19.0	20.4	18.8	14.9	12.2	16.2	16.7	13.7	10.5	8.7	9.6	9.0	15.1	8.7	20.4	14.5
Mar 17	12.5	14.1	10.6	9.5	13.7	13.3	11.9	9.5	11.5	13.8	14.6	14.3	17.8	14.1	10.8	12.7	16.8	19.8	15.5	14.1	12.5	11.3	12.6	14.3	9.5	19.8	13.4
Mar 18	13.3	13.3	11.5	12.9	15.8	14.4	12.5	14.1	15.6	17.2	15.3	14.5	10.4	12.3	13.0	12.5	4.9	7.1	4.4	0.9	3.3	3.4	4.0	1.5	0.9	17.2	10.3
Mar 19	0.5	0.5	2.2	3.1	4.2	3.8	2.1	0.6	2.0	3.2	4.3	5.5	3.8	5.0	2.2	1.3	1.1	1.8	2.0	4.2	5.9	5.6	5.2	5.1	0.5	5.9	3.1
Mar 20	5.9	15.6	14.1	22.6	22.3	15.2	10.1	7.8	6.2	12.3	14.4	14.9	13.7	12.8	16.6	14.1	11.0	12.9	8.7	5.4	4.1	3.7	4.7	5.6	3.7	22.6	11.4
Mar 21	4.4	3.8	1.4	**0.1**	1.6	3.7	2.8	3.8	4.6	7.9	11.3	12.0	10.9	14.2	13.6	10.7	13.0	11.7	7.7	5.7	10.3	10.2	6.8	6.8	**0.1**	14.2	7.5
Mar 22	8.8	7.7	2.4	3.6	1.0	1.7	1.7	1.6	2.4	1.9	2.9	2.7	6.0	5.7	6.4	5.3	4.0	0.8	2.1	3.8	6.3	8.5	3.5	5.4	0.8	8.8	4.0
Mar 23	3.4	4.0	1.1	3.2	2.0	2.3	1.4	2.2	1.3	1.4	3.7	5.2	8.2	19.6	12.6	10.3	16.9	21.9	17.8	12.6	9.3	11.5	9.8	10.2	1.1	21.9	8.0
Mar 24	3.7	3.1	6.6	6.7	11.2	13.1	12.7	11.8	9.6	10.5	5.5	7.3	9.1	4.7	2.4	2.3	7.2	8.4	7.2	5.4	4.4	6.0	8.2	9.2	2.3	13.1	7.3
Mar 25	10.6	8.7	7.0	8.3	11.6	12.1	12.2	11.5	13.0	14.7	14.2	15.0	16.7	15.7	15.1	15.3	14.9	15.0	13.5	13.4	13.7	13.6	13.5	12.8	7.0	16.7	13.0
Mar 26	11.1	11.9	10.4	10.4	11.1	10.0	9.7	10.0	9.7	9.1	8.3	4.9	5.2	6.0	4.6	3.0	3.5	5.7	4.6	0.8	0.2	2.2	3.1	4.5	0.2	11.9	6.7
Mar 27	4.1	2.1	2.2	2.8	1.7	1.2	3.2	5.1	4.4	2.0	2.0	3.2	3.0	3.5	2.2	3.1	2.0	1.4	1.1	2.4	3.8	3.9	3.4	4.2	1.1	5.1	**2.8**
Mar 28	4.1	4.6	4.2	4.0	4.7	4.9	5.0	4.0	2.8	1.4	3.4	4.1	4.9	8.2	10.2	10.0	7.7	5.7	0.7	3.6	1.3	1.9	2.1	1.3	0.7	10.2	4.4
Mar 29	3.9	3.7	2.3	1.5	2.4	2.8	3.4	3.9	6.7	7.7	11.4	9.1	9.3	9.2	8.4	8.3	7.1	6.4	5.6	6.4	5.9	2.9	2.8	4.4	1.5	11.4	5.6
Mar 30	1.9	3.5	2.0	2.7	1.1	1.3	1.1	2.2	1.2	4.4	6.2	8.7	14.8	14.3	12.9	10.5	13.1	8.6	7.8	10.9	15.3	16.1	17.7	16.0	1.1	17.7	8.1
Mar 31	19.9	17.3	16.9	14.1	15.2	15.3	20.3	17.0	14.6	12.9	13.9	13.5	16.5	15.9	12.6	13.9	8.9	5.2	5.8	3.6	4.9	5.0	7.3	5.5	3.6	20.3	12.3
Diurnal Maximum	20	18	18	23	24	27	26	21	17	18	18	19	20	20	20	17	17	22	18	15	17	18	20	17			
Diurnal Average	7.9	8.6	8.1	7.9	8.3	8.3	8.3	7.7	7.4	7.8	8.7	9.1	9.8	10.2	10.0	9.3	8.9	8.7	7.6	6.9	7.2	7.8	8.0	8.2			

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

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

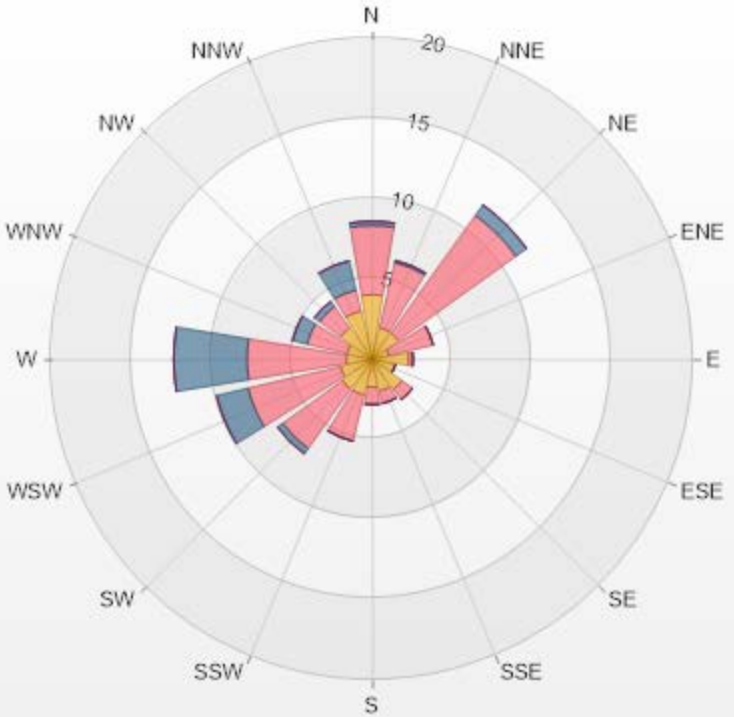
Timeseries Chart of Hourly Average for VWS - AQHI - Grimshaw Station



Wind: AQHI Grimshaw Monitor: WDS [KPH] Monthly: 03-2022 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	4.03	4.3	0.27	0	0	8.6
NNE	2.02	4.17	0.13	0	0	6.32
NE	2.02	9.01	0.81	0	0	11.84
ENE	1.08	2.82	0	0	0	3.9
E	2.28	0.27	0	0	0	2.55
ESE	1.48	0	0	0	0	1.48
SE	2.28	0.81	0	0	0	3.09
SSE	2.02	0.81	0	0	0	2.83
S	1.75	1.08	0	0	0	2.83
SSW	2.28	2.96	0	0	0	5.24
SW	2.28	4.57	0.4	0	0	7.25
WSW	2.02	5.91	2.02	0	0	9.95
W	1.61	6.18	4.57	0	0	12.36
WNW	1.61	2.55	0.94	0	0	5.1
NW	2.42	1.61	0.4	0	0	4.43
NNW	3.09	1.34	1.88	0	0	6.31
Summary	34.27	48.39	11.42	0	0	94.08

AQHI Grimshaw 01-03-2022 00:00 - 31-03-2022 23:00 Calm: 5.91% Calm Wind Avg Speed: 1.17(KPH)



% Icon Classes (KPH)	34 1.8-6.0	48 6.0-15.0	11 15.0-29.0	0 29.0-39.0	0 >39.0

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PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

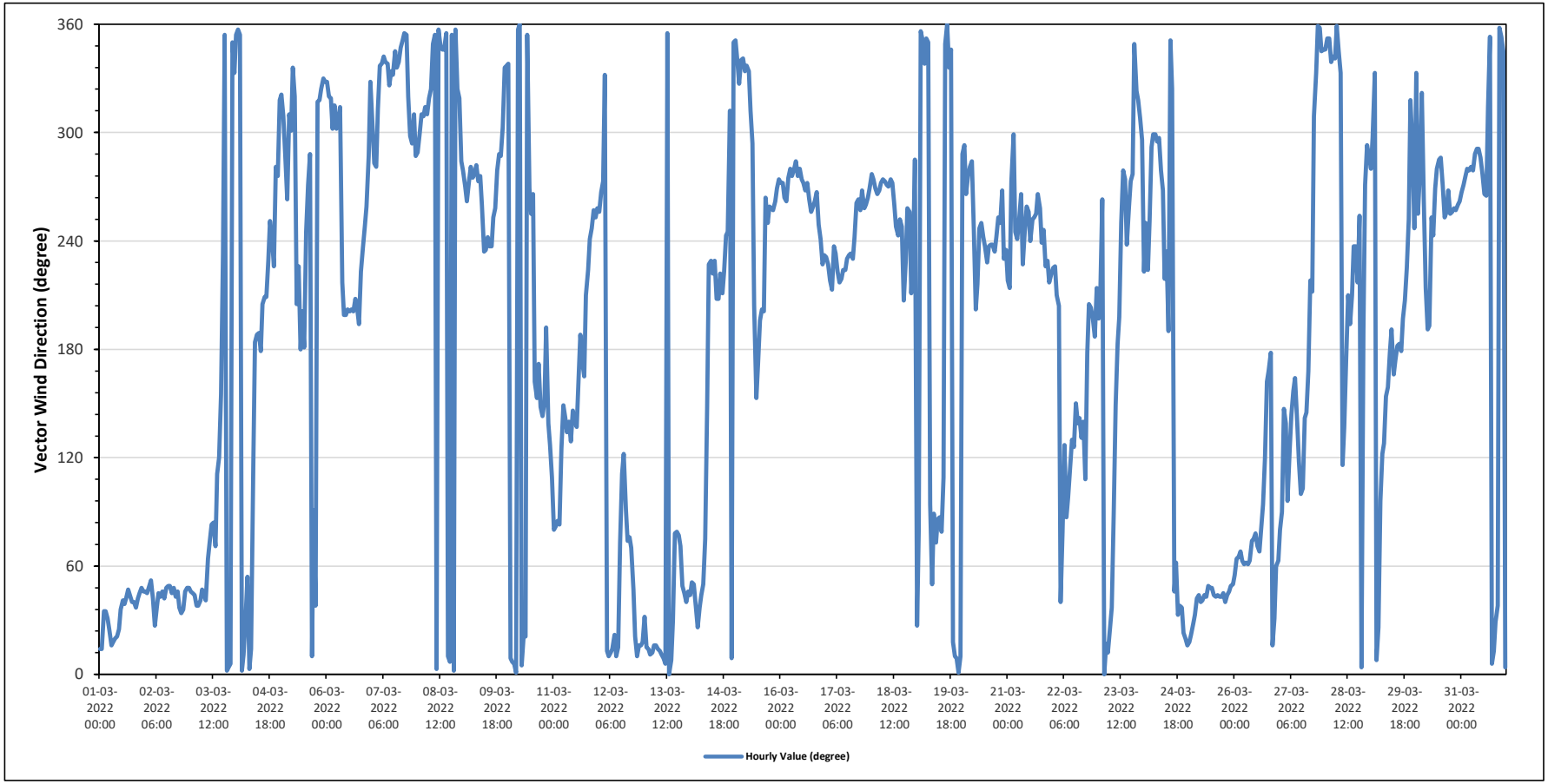
Monthly Average:	308 (NW)	degree	
Hours in Service:	744		
Hours of Data:	744		
Hours of Missing Data:	0		
Hours of Calibration:	0		
Operational Uptime:	100.0		

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	NNE	NNE	NE	NE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	33	NNE
Mar 2	NE	NE	NE	NE	NE	NNE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	44	NE
Mar 3	NE	NE	NE	NE	NE	NE	NE	NE	NE	ENE	ENE	E	E	ENE	ESE	ESE	SSE	SW	N	N	N	N	N	NNW	46	NE
Mar 4	N	N	N	N	NNE	NE	NE	N	NNE	ESE	S	S	S	S	SSW	SSW	SSW	SW	WSW	WSW	SW	W	W	NW	272	W
Mar 5	NW	NW	WNW	W	NW	WNW	NNW	NW	SSW	SW	S	SSW	S	WSW	W	WNW	N	E	NE	NW	NW	NW	NNW	NNW	296	WNW
Mar 6	NNW	NW	NW	WNW	NW	WNW	NW	NW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	WSW	WNW	NNW	253	WSW
Mar 7	NW	W	W	NW	NNW	NNW	NNW	NNW	NNW	NW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NW	WNW	WNW	NW	WNW	326	NW
Mar 8	WNW	WNW	NW	NW	NW	NW	NW	NW	NNW	N	N	N	NNW	NNW	NNW	N	N	N	N	N	N	NW	NW	WNW	335	NNW
Mar 9	W	W	W	W	W	W	W	W	W	W	WSW	SW	SW	WSW	SW	SW	WSW	WSW	W	WNW	WNW	WNW	NNW	NNW	271	W
Mar 10	NNW	N	N	N	N	N	N	N	NNE	NNE	N	W	WSW	W	SSE	SSE	S	SE	SE	SSE	S	SE	SE	ESE	45	NE
Mar 11	E	E	E	E	SE	SSE	SE	SE	SE	SE	SE	SE	SE	SSE	S	S	SSE	SSW	SW	WSW	WSW	WSW	WSW	WSW	161	SSE
Mar 12	WSW	W	W	NNW	NNE	N	NNE	NNE	NNE	N	NNE	ENE	ESE	ESE	E	ENE	ENE	ENE	NE	NNE	N	NNE	NNE	NNE	28	NNE
Mar 13	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	N	N	N	N	N	NNE	ENE	ENE	ENE	ENE	NE	NE	NE	NE	28	NNE
Mar 14	NE	NE	NE	NE	NNE	NE	NE	NE	ENE	SE	SW	SW	SW	SW	SSW	SSW	SW	SSW	SW	WSW	WSW	NW	N	N	277	W
Mar 15	N	NNW	NW	NNW	NNW	NNW	NNW	NNW	NW	WNW	SSW	SSE	S	SSW	SSW	SSW	W	WSW	WSW	WSW	WSW	W	W	W	277	W
Mar 16	W	W	W	W	W	W	W	W	WNW	W	W	W	W	W	W	W	WSW	WSW	W	W	WSW	WSW	SW	SW	265	W
Mar 17	SW	SW	SW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	W	W	WSW	W	WSW	WSW	W	W	239	WSW
Mar 18	W	W	W	W	W	W	W	W	W	W	W	W	WSW	WSW	WSW	WSW	WSW	SSW	SW	WSW	WSW	SSW	SW	WNW	258	WSW
Mar 19	NNE	E	N	N	NNW	N	N	E	NE	E	ENE	E	E	ENE	ESE	NNW	N	NNW	NNW	NNE	N	N	N	N	28	NNE
Mar 20	WNW	WNW	W	W	W	WNW	WSW	SSW	SW	WSW	WSW	WSW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	W	SW	SW	249	WSW
Mar 21	SW	SSW	W	WNW	WSW	WSW	WSW	W	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	SW	SW	SW	SW	246	WSW
Mar 22	SW	SW	SSW	SSW	NE	ENE	SE	E	E	ESE	SE	SE	SSE	SE	SE	SE	SE	ESE	S	SSW	SSW	SSW	S	SSW	154	SSE
Mar 23	SSW	SSW	W	N	NNE	NNE	NNE	NE	E	SSE	S	SSW	WSW	W	W	SW	WSW	W	W	NNW	NW	NW	NW	WNW	287	WNW
Mar 24	SW	WSW	SW	WSW	WNW	WNW	WNW	WNW	WNW	W	W	SW	SW	S	N	NW	NE	ENE	NNE	NE	NE	NNE	NNE	NNE	308	NW
Mar 25	NNE	NNE	NNE	NNE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	41	NE
Mar 26	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	ESE	SSE	SSE	S	NNE	NNE	ENE	ENE	75	ENE
Mar 27	E	E	SE	SE	E	SE	SE	SSE	SSE	SE	ESE	E	ESE	SE	SE	SSE	SW	SSW	NW	NNW	N	N	NNW	NNW	122	ESE
Mar 28	NNW	N	N	NNW	NNW	NNW	N	NNW	NNW	ESE	SE	S	SSW	SSW	SSW	SW	SW	SW	WSW	N	S	W	WNW	WNW	286	WNW
Mar 29	W	WNW	NNW	N	NNE	E	ESE	SE	SSE	SSE	S	S	SSE	S	S	S	S	SSW	SSW	SW	WSW	NW	WNW	WSW	200	SSW
Mar 30	NNW	WSW	W	NW	W	SSW	S	S	WSW	WSW	W	W	WNW	WNW	W	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	W	261	W
Mar 31	W	W	W	W	W	W	W	WNW	WNW	WNW	WNW	W	W	W	NW	N	N	NNE	NNE	NE	N	N	NNW	N	310	NW

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

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

Timeseries Chart of Hourly Average for VWD - AQHI - Grimshaw Station



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PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

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

WIND SPEED

Maximum Hourly Value:	27.4	kph	on March 7 at hour 5	Hours in Service:	744
Maximum Daily Value:	15.6	kph	on March 7	Hours of Data:	744
Minimum Hourly Value:	0.1	kph	on March 21 at hour 3	Hours of Missing Data:	0
Minimum Daily Value:	2.8	kph	on March 27	Hours of Calibration:	0
Monthly Average:	8.4	kph		Operational Uptime:	100

WIND DIRECTION

Monthly Average: 308 (NW) 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	5.9	5.6	7.3	5.7	5.7	5.3	6.8	7.3	6.2	8.0	7.5	8.7	11.7	10.9	10.0	9.9	11.0	10.2	10.2	10.1	11.1	13.6	10.9	10.7	5.3	13.6	8.8
	NNE	NNE	NE	NE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE			
Mar 2	10.3	10.0	11.7	11.1	9.1	7.8	8.1	8.9	9.0	9.1	8.4	9.1	9.7	9.7	10.8	11.1	9.7	9.7	7.4	6.0	7.1	10.3	10.5	9.1	6.0	11.7	9.3
	NE	NE	NE	NE	NE	NNE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE			
Mar 3	8.8	8.4	8.3	7.3	6.9	6.7	6.3	5.7	4.9	6.8	6.9	7.0	5.6	4.5	2.5	4.9	4.7	2.5	1.6	4.1	4.2	3.1	3.1	4.0	1.6	8.8	5.4
	NE	NE	NE	NE	NE	NE	NE	NE	NE	ENE	ENE	E	E	ENE	ESE	ESE	SSE	SW	N	N	N	N	N	NNW			
Mar 4	4.4	4.6	3.7	4.0	3.0	2.2	2.9	1.6	2.3	2.0	2.1	3.3	5.7	6.0	6.5	9.3	10.0	7.9	3.3	4.6	3.8	3.5	2.5	3.5	1.6	10.0	4.3
	N	N	N	N	NNE	NE	NE	N	NNE	ESE	S	S	S	S	SSW	SSW	SSW	SW	WSW	WSW	SW	W	W	NW			
Mar 5	4.3	4.0	4.0	3.2	5.5	5.1	4.9	2.4	1.0	1.8	4.1	4.8	6.7	6.1	12.5	10.5	7.1	2.6	1.5	2.5	4.3	5.8	6.8	6.5	1.0	12.5	4.9
	NW	NW	WNW	W	NW	WNW	NNW	NW	SSW	SW	S	SSW	S	WSW	W	WNW	N	E	NE	NW	NW	NW	NNW	NNW			
Mar 6	5.7	6.1	6.7	5.5	2.6	2.1	1.8	1.4	3.3	4.9	7.4	7.9	8.1	6.5	6.3	5.4	3.7	4.9	8.1	13.9	16.5	17.9	19.7	16.7	1.4	19.7	7.6
	NNW	NW	NW	WNW	NW	WNW	NW	NW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	WSW	WNW	NNW			
Mar 7	15.6	17.0	17.7	19.0	23.9	**27.4**	25.7	21.2	17.0	15.4	18.3	17.7	16.8	17.6	20.3	17.1	14.7	14.7	10.5	5.1	4.8	4.7	5.6	7.7	4.7	**27.4**	**15.6**
	NW	W	W	NW	NNW	NNW	NNW	NNW	NNW	NW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NW	WNW	WNW	NW	WNW			
Mar 8	11.2	10.8	12.0	9.2	10.7	11.0	9.4	9.0	10.6	9.3	13.3	15.9	12.1	17.2	17.3	14.2	13.7	11.2	7.5	6.9	6.4	4.7	4.8	5.6	4.7	17.3	10.6
	WNW	WNW	NW	NW	NW	NW	NW	NW	NNW	N	N	N	NNW	NNW	NNW	N	N	N	N	N	N	NW	NW	WNW			
Mar 9	3.6	6.5	10.0	10.3	10.5	10.1	11.6	11.0	13.0	14.0	10.7	11.2	15.2	16.3	17.7	16.4	13.7	10.4	12.9	12.6	14.1	10.7	12.2	14.5	3.6	17.7	12.1
	W	W	W	W	W	W	W	W	W	W	WSW	SW	SW	WSW	SW	SW	WSW	WSW	W	WNW	WNW	WNW	NNW	NNW			
Mar 10	10.7	16.3	14.1	9.3	8.3	11.7	9.3	7.3	5.9	4.3	7.2	5.5	7.5	4.4	8.0	4.5	2.6	3.0	6.2	4.2	0.7	1.8	2.2	1.4	0.7	16.3	6.5
	NNW	N	N	N	N	N	N	N	NNE	NNE	N	W	WSW	W	SSE	SSE	S	SE	SE	SSE	S	SE	SE	ESE			
Mar 11	4.8	5.2	4.5	3.7	3.2	8.3	8.3	8.6	8.9	3.2	4.5	6.4	5.4	2.5	4.9	6.0	4.5	5.2	9.9	8.4	7.6	18.2	19.4	17.2	2.5	19.4	7.4
	E	E	E	E	SE	SSE	SE	SE	SE	SE	SE	SE	SE	SSE	S	S	SSE	SSW	SW	WSW	WSW	WSW	WSW	WSW			
Mar 12	17.0	18.2	18.0	10.8	12.6	13.0	13.7	10.5	7.4	8.1	7.3	7.0	5.5	3.8	6.0	10.6	11.1	10.7	10.1	6.6	9.3	9.8	11.6	10.2	3.8	18.2	10.4
	WSW	W	W	NNW	NNE	N	NNE	NNE	NNE	N	NNE	ENE	ESE	ESE	E	ENE	ENE	ENE	NE	NNE	N	NNE	NNE	NNE			
Mar 13	9.5	13.1	13.8	14.3	13.3	13.9	12.9	15.3	13.0	12.0	14.7	12.8	12.2	12.1	10.6	8.2	8.1	8.7	8.1	5.4	3.9	4.5	5.6	7.4	3.9	15.3	10.6
	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	N	N	N	N	N	NNE	ENE	ENE	ENE	ENE	NE	NE	NE	NE			
Mar 14	7.2	8.0	7.8	6.0	4.7	5.8	6.9	6.3	4.3	3.2	3.0	5.9	6.0	9.2	9.3	8.4	6.3	9.2	8.2	6.1	5.5	2.5	0.9	5.3	0.9	9.3	6.1
	NE	NE	NE	NE	NNE	NE	NE	NE	ENE	SE	SW	SW	SW	SW	SSW	SSW	SW	SSW	SW	WSW	WSW	NW	N	N			
Mar 15	3.4	4.1	4.3	6.4	3.3	2.3	5.2	2.4	0.9	2.2	4.6	4.4	3.6	8.4	8.0	7.2	7.6	8.8	11.4	14.7	13.7	15.8	17.8	14.0	0.9	17.8	7.3
	N	NNW	NW	NNW	NNW	NNW	NNW	NNW	NW	WNW	SSW	SSE	S	SSW	SSW	SSW	W	WSW	WSW	WSW	WSW	W	W	W			
Mar 16	15.2	15.1	13.7	14.7	15.1	10.8	14.2	14.3	15.0	17.7	18.2	19.0	20.4	18.8	14.9	12.2	16.2	16.7	13.7	10.5	8.7	9.6	9.0	15.1	8.7	20.4	14.5
	W	W	W	W	W	W	W	W	WNW	W	W	W	W	W	W	W	WSW	WSW	W	W	WSW	WSW	SW	SW			
Mar 17	12.5	14.1	10.6	9.5	13.7	13.3	11.9	9.5	11.5	13.8	14.6	14.3	17.8	14.1	10.8	12.7	16.8	19.8	15.5	14.1	12.5	11.3	12.6	14.3	9.5	19.8	13.4
	SW	SW	SW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	W	W	WSW	W	WSW	WSW	W	W			
Mar 18	13.3	13.3	11.5	12.9	15.8	14.4	12.5	14.1	15.6	17.2	15.3	14.5	10.4	12.3	13.0	12.5	4.9	7.1	4.4	0.9	3.3	3.4	4.0	1.5	0.9	17.2	10.3
	W	W	W	W	W	W	W	W	W	W	W	W	WSW	WSW	WSW	WSW	WSW	SSW	SW	WSW	WSW	WSW	SSW	SW	WNW		
Mar 19	0.5	0.5	2.2	3.1	4.2	3.8	2.1	0.6	2.0	3.2	4.3	5.5	3.8	5.0	2.2	1.3	1.1	1.8	2.0	4.2	5.9	5.6	5.2	5.1	0.5	5.9	3.1
	NNE	E	N	N	NNW	N	N	E	NE	E	ENE	E	E	ENE	ESE	NNW	N	NNW	NNW	NNE	N	N	N	N			
Mar 20	5.9	15.6	14.1	22.6	22.3	15.2	10.1	7.8	6.2	12.3	14.4	14.9	13.7	12.8	16.6	14.1	11.0	12.9	8.7	5.4	4.1	3.7	4.7	5.6	3.7	22.6	11.4
	WNW	WNW	W	W	W	WNW	WSW	SSW	SW	WSW	WSW	WSW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	W	SW	SW			

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PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - March 2022

Summary of Hourly Averages

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

WIND SPEED

Maximum Hourly Value:	27.4	kph	on March 7 at hour 5	Hours in Service:	744
Maximum Daily Value:	15.6	kph	on March 7	Hours of Data:	744
Minimum Hourly Value:	0.1	kph	on March 21 at hour 3	Hours of Missing Data:	0
Minimum Daily Value:	2.8	kph	on March 27	Hours of Calibration:	0
Monthly Average:	8.4	kph		Operational Uptime:	100

WIND DIRECTION

Monthly Average: 308 (NW) 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	4.4	3.8	1.4	**0.1**	1.6	3.7	2.8	3.8	4.6	7.9	11.3	12.0	10.9	14.2	13.6	10.7	13.0	11.7	7.7	5.7	10.3	10.2	6.8	6.8	**0.1**	14.2	7.5
	SW	SSW	W	WNW	WSW	WSW	WSW	W	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	SW	SW	SW	SW			
Mar 22	8.8	7.7	2.4	3.6	1.0	1.7	1.7	1.6	2.4	1.9	2.9	2.7	6.0	5.7	6.4	5.3	4.0	0.8	2.1	3.8	6.3	8.5	3.5	5.4	0.8	8.8	4.0
	SW	SW	SSW	SSW	NE	ENE	SE	E	E	ESE	SE	SE	SSE	SE	SE	SE	SE	ESE	S	SSW	SSW	SSW	S	SSW			
Mar 23	3.4	4.0	1.1	3.2	2.0	2.3	1.4	2.2	1.3	1.4	3.7	5.2	8.2	19.6	12.6	10.3	16.9	21.9	17.8	12.6	9.3	11.5	9.8	10.2	1.1	21.9	8.0
	SSW	SSW	W	N	NNE	NNE	NNE	NE	E	SSE	S	SSW	WSW	W	W	SW	WSW	W	W	NNW	NW	NW	NW	WNW			
Mar 24	3.7	3.1	6.6	6.7	11.2	13.1	12.7	11.8	9.6	10.5	5.5	7.3	9.1	4.7	2.4	2.3	7.2	8.4	7.2	5.4	4.4	6.0	8.2	9.2	2.3	13.1	7.3
	SW	WSW	SW	WSW	WNW	WNW	WNW	WNW	WNW	W	W	SW	SW	S	N	NW	NE	ENE	NNE	NE	NE	NNE	NNE	NNE			
Mar 25	10.6	8.7	7.0	8.3	11.6	12.1	12.2	11.5	13.0	14.7	14.2	15.0	16.7	15.7	15.1	15.3	14.9	15.0	13.5	13.4	13.7	13.6	13.5	12.8	7.0	16.7	13.0
	NNE	NNE	NNE	NNE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE			
Mar 26	11.1	11.9	10.4	10.4	11.1	10.0	9.7	10.0	9.7	9.1	8.3	4.9	5.2	6.0	4.6	3.0	3.5	5.7	4.6	0.8	0.2	2.2	3.1	4.5	0.2	11.9	6.7
	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	ESE	SSE	SSE	S	NNE	NNE	ENE	ENE			
Mar 27	4.1	2.1	2.2	2.8	1.7	1.2	3.2	5.1	4.4	2.0	2.0	3.2	3.0	3.5	2.2	3.1	2.0	1.4	1.1	2.4	3.8	3.9	3.4	4.2	1.1	5.1	**2.8**
	E	E	SE	SE	E	SE	SE	SSE	SSE	SE	ESE	E	ESE	SE	SE	SSE	SW	SSW	NW	NNW	N	N	NNW	NNW			
Mar 28	4.1	4.6	4.2	4.0	4.7	4.9	5.0	4.0	2.8	1.4	3.4	4.1	4.9	8.2	10.2	10.0	7.7	5.7	0.7	3.6	1.3	1.9	2.1	1.3	0.7	10.2	4.4
	NNW	N	N	NNW	NNW	NNW	N	NNW	NNW	ESE	SE	S	SSW	SSW	SSW	SW	SW	SW	WSW	N	S	W	WNW	WNW			
Mar 29	3.9	3.7	2.3	1.5	2.4	2.8	3.4	3.9	6.7	7.7	11.4	9.1	9.3	9.2	8.4	8.3	7.1	6.4	5.6	6.4	5.9	2.9	2.8	4.4	1.5	11.4	5.6
	W	WNW	NNW	N	NNE	E	ESE	SE	SSE	SSE	S	S	SSE	S	S	S	S	SSW	SSW	SW	WSW	NW	WNW	WSW			
Mar 30	1.9	3.5	2.0	2.7	1.1	1.3	1.1	2.2	1.2	4.4	6.2	8.7	14.8	14.3	12.9	10.5	13.1	8.6	7.8	10.9	15.3	16.1	17.7	16.0	1.1	17.7	8.1
	NNW	WSW	W	NW	W	SSW	S	S	WSW	WSW	W	W	WNW	WNW	W	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	W			
Mar 31	19.9	17.3	16.9	14.1	15.2	15.3	20.3	17.0	14.6	12.9	13.9	13.5	16.5	15.9	12.6	13.9	8.9	5.2	5.8	3.6	4.9	5.0	7.3	5.5	3.6	20.3	12.3
	W	W	W	W	W	W	W	WNW	WNW	WNW	WNW	W	W	W	NW	N	N	NNE	NNE	NE	N	N	NNW	N			

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

VOC CANISTER SAMPLING RESULTS

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PEACE RIVER AREA MONITORING PROGRAM

842b Site - March 2022

Volatile Organic Compounds (VOCs) Results

Sample Date/Time	2022-03-15 @04:40					
Canister Sample	Non-methane Hydrocarbon					
Canister ID	28953					
Method	**NA-025**		**Method**	**NA-024**	**Method**	**AC-058**
Maximum Reading (ppmv)	**5.0**	**Methane**	**Maximum Reading (ppmv)**	**2.2**	**Hydrogen sulphide**	**Maximum Reading (ppmv)**	**10.7**	**Isobutane**

Parameter	Result (ppmv)	RDL (ppmv)
1-Butene	0	0.16
Acetylene	0	0.12
cis-2-Butene	0	0.06
Ethane	0	0.2
Ethylacetylene	0	0.09
Ethylene	0	0.11
Isobutane	0	0.2
Isobutylene	0	0.2
Methane	**5.0**	0.2
n-Butane	0	0.3
n-Propane	0	0.11
Propylene	0	0.2
Propyne	0	0.2
trans-2-Butene	0	0.14

Parameter	Result (ppbv)	RDL (ppbv)
2,5-Dimethylthiophene	0	0.5
2-Ethylthiophene	0	0.3
2-Methylthiophene	0	0.3
3-Methylthiophene	0	0.5
Butyl mercaptan	0	0.5
Carbon disulphide	0	0.3
Carbonyl sulphide	1.9	0.5
Dimethyl disulphide	0	0.3
Dimethyl sulphide	0	0.3
Ethyl mercaptan	0	0.5
Ethyl sulphide	0	0.5
Hydrogen sulphide	**2.2**	0.5
Isobutyl mercaptan	0	0.5
Isopropyl mercaptan	0	0.5
Methyl mercaptan	0	0.3
Pentyl mercaptan	0	0.6
Propyl mercaptan	0	0.6
tert-Butyl mercaptan	0	0.5
Thiophene	0	0.3

Parameter	Result (ppbv)	RDL (ppbv)
1,1,1-Trichloroethane	0	0.03
1,1,2,2-Tetrachloroethane	0	0.03
1,1,2-Trichloroethane	0	0.03
1,1-Dichloroethane	0	0.03
1,1-Dichloroethylene	0	0.06
1,2,3-Trimethylbenzene	0.09	0.08
1,2,4-Trichlorobenzene	0	1.2
1,2,4-Trimethylbenzene	0	0.08
1,2-Dibromoethane	0	0.03
1,2-Dichlorobenzene	0.06	0.05
1,2-Dichloroethane	0.05	0.02
1,2-Dichloropropane	0	0.02
1,3,5-Trimethylbenzene	0	0.03
1,3-Butadiene	0	0.03
1,3-Dichlorobenzene	0	0.5
1,4-Dichlorobenzene	0	0.6
1,4-Dioxane	0	0.6
1-Butene/Isobutylene	0.59	0.03
1-Hexene/2-Methyl-1-pentene	0	0.03
1-Pentene	0.05	0.02
2,2,4-Trimethylpentane	0	0.02
2,2-Dimethylbutane	0.36	0.02
2,3,4-Trimethylpentane	0.11	0.02
2,3-Dimethylbutane	0.55	0.03
2,3-Dimethylpentane	0.37	0.03
2,4-Dimethylpentane	0.18	0.02
2-Methylheptane	0.06	0.02
2-Methylhexane	0.27	0.02
2-Methylpentane	0.92	0.02
3-Methylheptane	0.11	0.03
3-Methylhexane	0.52	0.03
3-Methylpentane	1.38	0.02
Acetone	4.3	3.7
Acrolein	0.4	0.5
Benzene	0.5	0.02
Benzyl chloride	0	0.6
Bromodichloromethane	0	0.03
Bromoform	0.1	0.03
Bromomethane	0	0.02
Carbon disulfide	0	0.02
Carbon tetrachloride	0.19	0.02
Chlorobenzene	0	0.03
Chloroethane	0	0.03
Chloroform	0.05	0.03
Chloromethane	0.92	0.03
cis-1,2-Dichloroethene	0	0.02
cis-1,3-Dichloropropene	0	0.06
cis-2-Butene	0	0.03
cis-2-Pentene	0	0.03
Cyclohexane	2.34	0.03
Cyclopentane	0.85	0.02
Dibromochloromethane	0.06	0.02
Ethanol	4.2	2.8
Ethyl acetate	0	0.6
Ethylbenzene	0.2	0.02
Freon-11	0.39	0.03
Freon-113	0.19	0.02
Freon-114	0.07	0.03

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PEACE RIVER AREA MONITORING PROGRAM

842b Site - March 2022

Volatile Organic Compounds (VOCs) Results

Sample Date/Time	2022-03-15 @04:40					
Canister Sample	Non-methane Hydrocarbon					
Canister ID	28953					
Method	**NA-025**		**Method**	**NA-024**	**Method**	**AC-058**
Maximum Reading (ppmv)	**5.0**	**Methane**	**Maximum Reading (ppmv)**	**2.2**	**Hydrogen sulphide**	**Maximum Reading (ppmv)**	**10.7**	**Isobutane**

Parameter	Result (ppmv)	RDL (ppmv)

Parameter	Result (ppbv)	RDL (ppbv)

Parameter	Result (ppbv)	RDL (ppbv)
Freon-12	0.79	0.03
Hexachloro-1,3-butadiene	0	0.78
Isobutane	**10.7**	0.03
Isopentane	5.98	0.05
Isoprene	0	0.02
Isopropyl alcohol	0	3.7
Isopropylbenzene	0.08	0.02
m,p-Xylene	0.17	0.05
m-Diethylbenzene	0.41	0.06
m-Ethyltoluene	0.09	0.12
Methyl butyl ketone	0	0.78
Methyl ethyl ketone	0.7	0.5
Methyl isobutyl ketone	0	0.6
Methyl methacrylate	0	0.11
Methyl tert butyl ether	0	0.05
Methylcyclohexane	3.52	0.02
Methylcyclopentane	2.6	0.03
Methylene chloride	0	0.5
n-Butane	6.0	0.05
n-Decane	0	0.09
n-Dodecane	0	0.6
n-Heptane	0.22	0.02
n-Hexane	1.01	0.02
n-Nonane	0.08	0.02
n-Octane	0.13	0.03
n-Pentane	3.14	0.2
n-Propylbenzene	0	0.08
n-Undecane	0	0.8
Naphthalene	0	0.8
o-Ethyltoluene	0.08	0.02
o-Xylene	0.19	0.02
p-Diethylbenzene	0.13	0.06
p-Ethyltoluene	0	0.11
Styrene	0.15	0.06
Tetrachloroethylene	0.09	0.06
Tetrahydrofuran	0	0.6
Toluene	1.75	0.02
trans-1,2-Dichloroethylene	1.89	0.09
trans-1,3-Dichloropropylene	0	0.06
trans-2-Butene	0.39	0.02
trans-2-Pentene	0	0.03
Trichloroethylene	0.04	0.06
Vinyl acetate	0.9	0.6
Vinyl chloride	0	0.03

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PEACE RIVER AREA MONITORING PROGRAM

842b Site - March 2022

Volatile Organic Compounds (VOCs) Results

Sample Date/Time	2022-03-15 @04:40					
Canister Sample	Non-methane Hydrocarbon - BLANK					
Canister ID	28961					
Method	**NA-025**		**Method**	**NA-024**	**Method**	**AC-058**
Maximum Reading (ppmv)	-	-	**Maximum Reading (ppmv)**	-	-	**Maximum Reading (ppmv)**	**0.6 Acetone**

Parameter	Result (ppmv)	RDL (ppmv)
1-Butene	0	0.16
Acetylene	0	0.12
cis-2-Butene	0	0.06
Ethane	0	0.2
Ethylacetylene	0	0.09
Ethylene	0	0.11
Isobutane	0	0.2
Isobutylene	0	0.2
Methane	0	0.2
n-Butane	0	0.3
n-Propane	0	0.11
Propylene	0	0.2
Propyne	0	0.2
trans-2-Butene	0	0.14

Parameter	Result (ppbv)	RDL (ppbv)
2,5-Dimethylthiophene	0	0.5
2-Ethylthiophene	0	0.3
2-Methylthiophene	0	0.3
3-Methylthiophene	0	0.5
Butyl mercaptan	0	0.5
Carbon disulphide	0	0.3
Carbonyl sulphide	0	0.5
Dimethyl disulphide	0	0.3
Dimethyl sulphide	0	0.3
Ethyl mercaptan	0	0.5
Ethyl sulphide	0	0.5
Hydrogen sulphide	0	0.5
Isobutyl mercaptan	0	0.5
Isopropyl mercaptan	0	0.5
Methyl mercaptan	0	0.3
Pentyl mercaptan	0	0.6
Propyl mercaptan	0	0.6
tert-Butyl mercaptan	0	0.5
Thiophene	0	0.3

Parameter	Result (ppbv)	RDL (ppbv)
1,1,1-Trichloroethane	0	0.03
1,1,2,2-Tetrachloroethane	0	0.03
1,1,2-Trichloroethane	0	0.03
1,1-Dichloroethane	0	0.03
1,1-Dichloroethylene	0	0.06
1,2,3-Trimethylbenzene	0	0.08
1,2,4-Trichlorobenzene	0	1.2
1,2,4-Trimethylbenzene	0	0.08
1,2-Dibromoethane	0	0.03
1,2-Dichlorobenzene	0.04	0.05
1,2-Dichloroethane	0	0.02
1,2-Dichloropropane	0	0.02
1,3,5-Trimethylbenzene	0	0.03
1,3-Butadiene	0	0.03
1,3-Dichlorobenzene	0	0.5
1,4-Dichlorobenzene	0	0.6
1,4-Dioxane	0	0.6
1-Butene/Isobutylene	0.44	0.03
1-Hexene/2-Methyl-1-pentene	0	0.03
1-Pentene	0.03	0.02
2,2,4-Trimethylpentane	0.04	0.02
2,2-Dimethylbutane	0.02	0.02
2,3,4-Trimethylpentane	0	0.02
2,3-Dimethylbutane	0	0.03
2,3-Dimethylpentane	0	0.03
2,4-Dimethylpentane	0	0.02
2-Methylheptane	0.04	0.02
2-Methylhexane	0	0.02
2-Methylpentane	0	0.02
3-Methylheptane	0	0.03
3-Methylhexane	0.03	0.03
3-Methylpentane	0.04	0.02
Acetone	0.6	3.7
Acrolein	0	0.5
Benzene	0.12	0.02
Benzyl chloride	0	0.6
Bromodichloromethane	0	0.03
Bromoform	0.07	0.03
Bromomethane	0	0.02
Carbon disulfide	0	0.02
Carbon tetrachloride	0.02	0.02
Chlorobenzene	0	0.03
Chloroethane	0	0.03
Chloroform	0	0.03
Chloromethane	0	0.03
cis-1,2-Dichloroethene	0	0.02
cis-1,3-Dichloropropene	0	0.06
cis-2-Butene	0	0.03
cis-2-Pentene	0	0.03
Cyclohexane	0	0.03
Cyclopentane	0	0.02
Dibromochloromethane	0	0.02
Ethanol	0	2.8
Ethyl acetate	0	0.6
Ethylbenzene	0	0.02
Freon-11	0	0.03
Freon-113	0	0.02
Freon-114	0.03	0.03

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PEACE RIVER AREA MONITORING PROGRAM

842b Site - March 2022

Volatile Organic Compounds (VOCs) Results

Sample Date/Time	2022-03-15 @04:40					
Canister Sample	Non-methane Hydrocarbon - BLANK					
Canister ID	28961					
Method	**NA-025**		**Method**	**NA-024**	**Method**	**AC-058**
Maximum Reading (ppmv)	-	-	**Maximum Reading (ppmv)**	- -	**Maximum Reading (ppmv)**	**0.6 Acetone**

Parameter	Result (ppmv)	RDL (ppmv)	Parameter	Result (ppbv)	RDL (ppbv)	Parameter	Result (ppbv)	RDL (ppbv)
						Freon-12	0	0.03
						Hexachloro-1,3-butadiene	0	0.78
						Isobutane	0.15	0.03
						Isopentane	0.07	0.05
						Isoprene	0	0.02
						Isopropyl alcohol	0.4	3.7
						Isopropylbenzene	0	0.02
						m,p-Xylene	0	0.05
						m-Diethylbenzene	0.08	0.06
						m-Ethyltoluene	0	0.12
						Methyl butyl ketone	0	0.78
						Methyl ethyl ketone	0	0.5
						Methyl isobutyl ketone	0	0.6
						Methyl methacrylate	0	0.11
						Methyl tert butyl ether	0	0.05
						Methylcyclohexane	0	0.02
						Methylcyclopentane	0	0.03
						Methylene chloride	0	0.5
						n-Butane	0.11	0.05
						n-Decane	0	0.09
						n-Dodecane	0	0.6
						n-Heptane	0.09	0.02
						n-Hexane	0.13	0.02
						n-Nonane	0.07	0.02
						n-Octane	0.11	0.03
						n-Pentane	0.07	0.2
						n-Propylbenzene	0	0.08
						n-Undecane	0	0.8
						Naphthalene	0	0.8
						o-Ethyltoluene	0.02	0.02
						o-Xylene	0.03	0.02
						p-Diethylbenzene	0	0.06
						p-Ethyltoluene	0	0.11
						Styrene	0.1	0.06
						Tetrachloroethylene	0.05	0.06
						Tetrahydrofuran	0	0.6
						Toluene	0.06	0.02
						trans-1,2-Dichloroethylene	0	0.09
						trans-1,3-Dichloropropylene	0	0.06
						trans-2-Butene	0.2	0.02
						trans-2-Pentene	0	0.03
						Trichloroethylene	0	0.06
						Vinyl acetate	0	0.6
						Vinyl chloride	0	0.03

END OF REPORT

This page, 276 of 276, ends the March 2022 Monthly Ambient Air Quality Monitoring Report.

Peace River Area Monitoring Program

MARCH 2022

Ambient Air Monitoring Calibration Report

- 842b STATION-

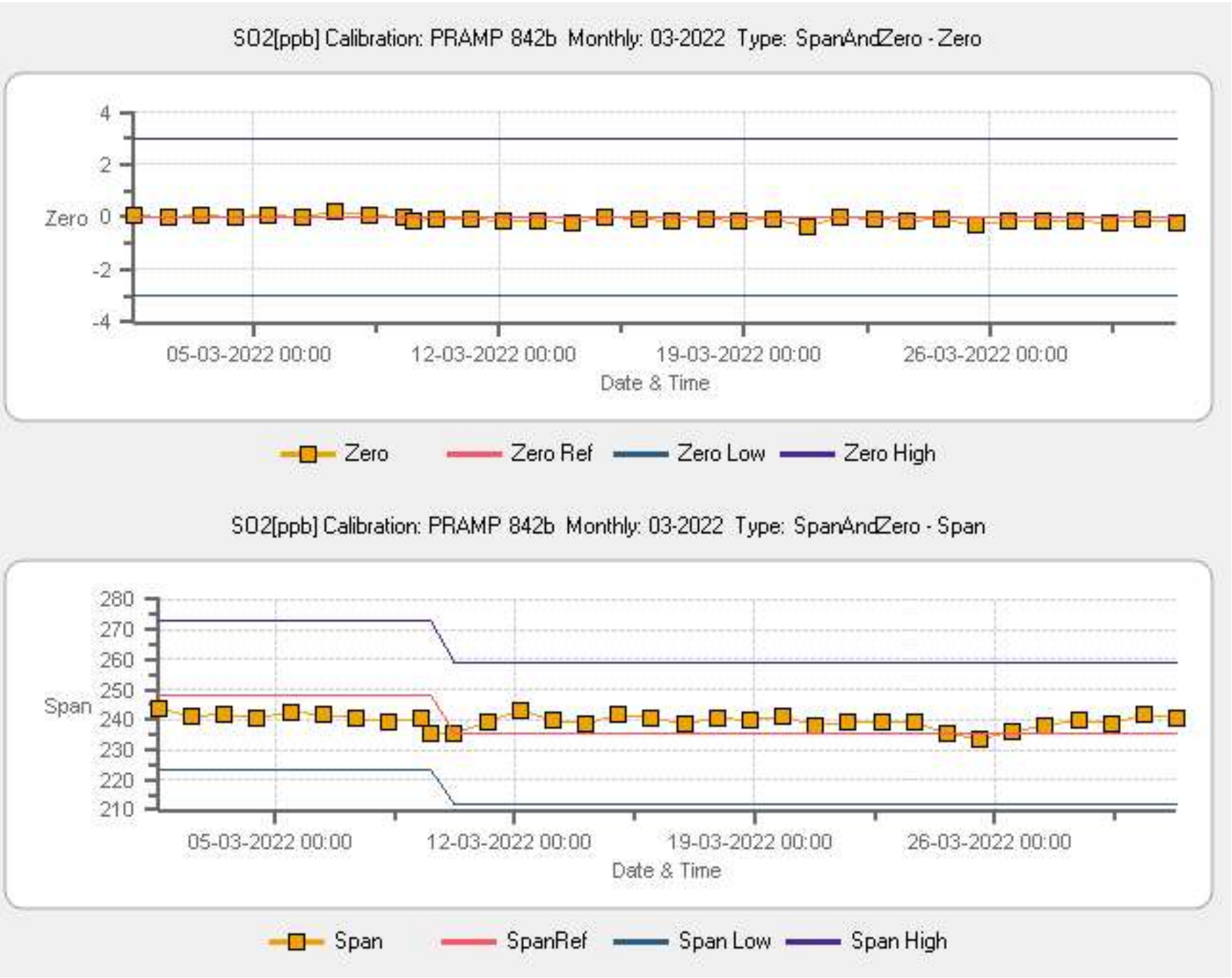
CAL-PRAMP-202203-01561

Operation and Maintenance:
Bureau Veritas Canada

Data Validation and Report:
Bureau Veritas Canada

April 19, 2022

DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS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-4
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12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
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270
260
250
Span 240
230
220
210
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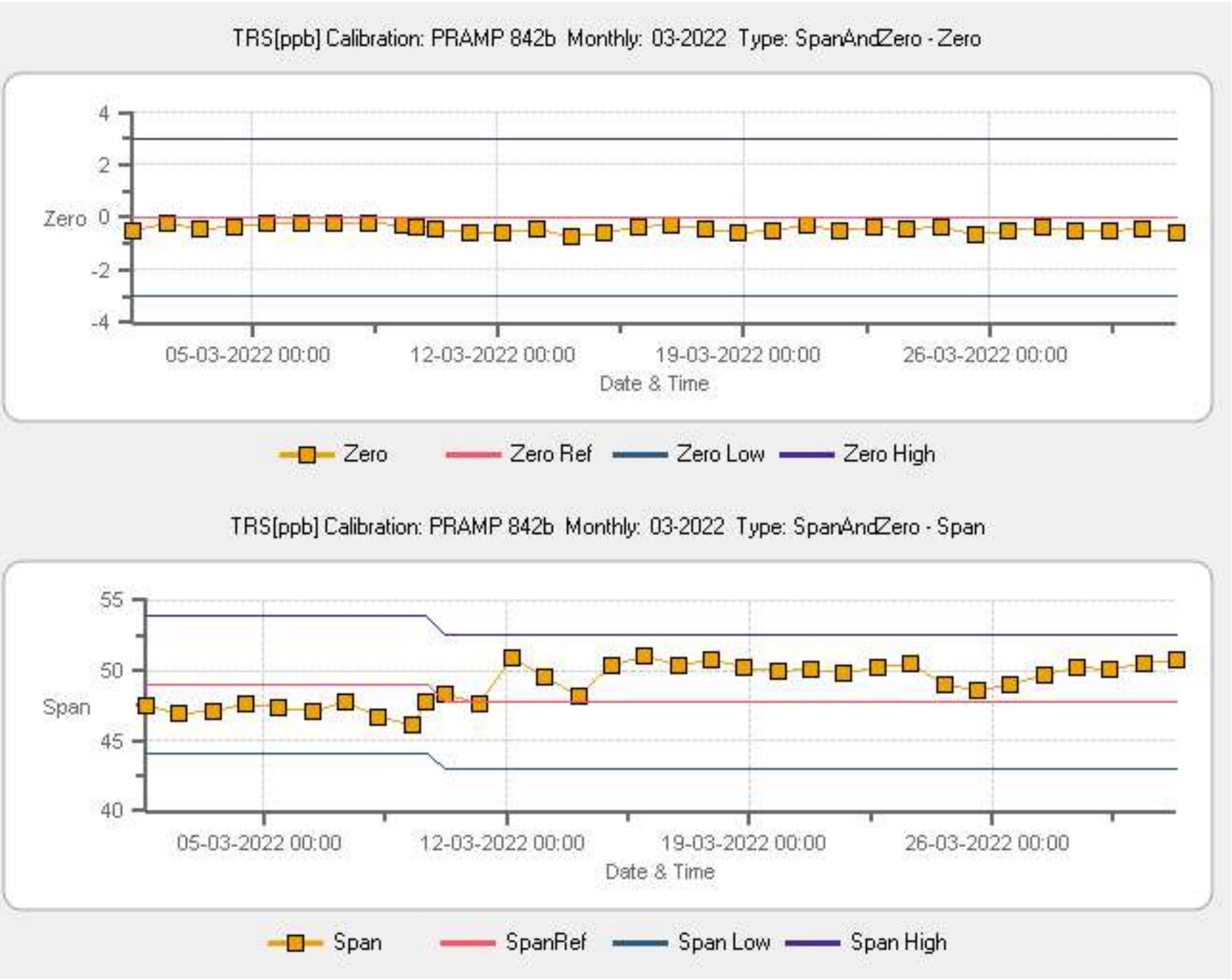
Date & Time
Span
SpanRef
Span Low
Span High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-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
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50
Span
45
40
05-03-2022 00:00
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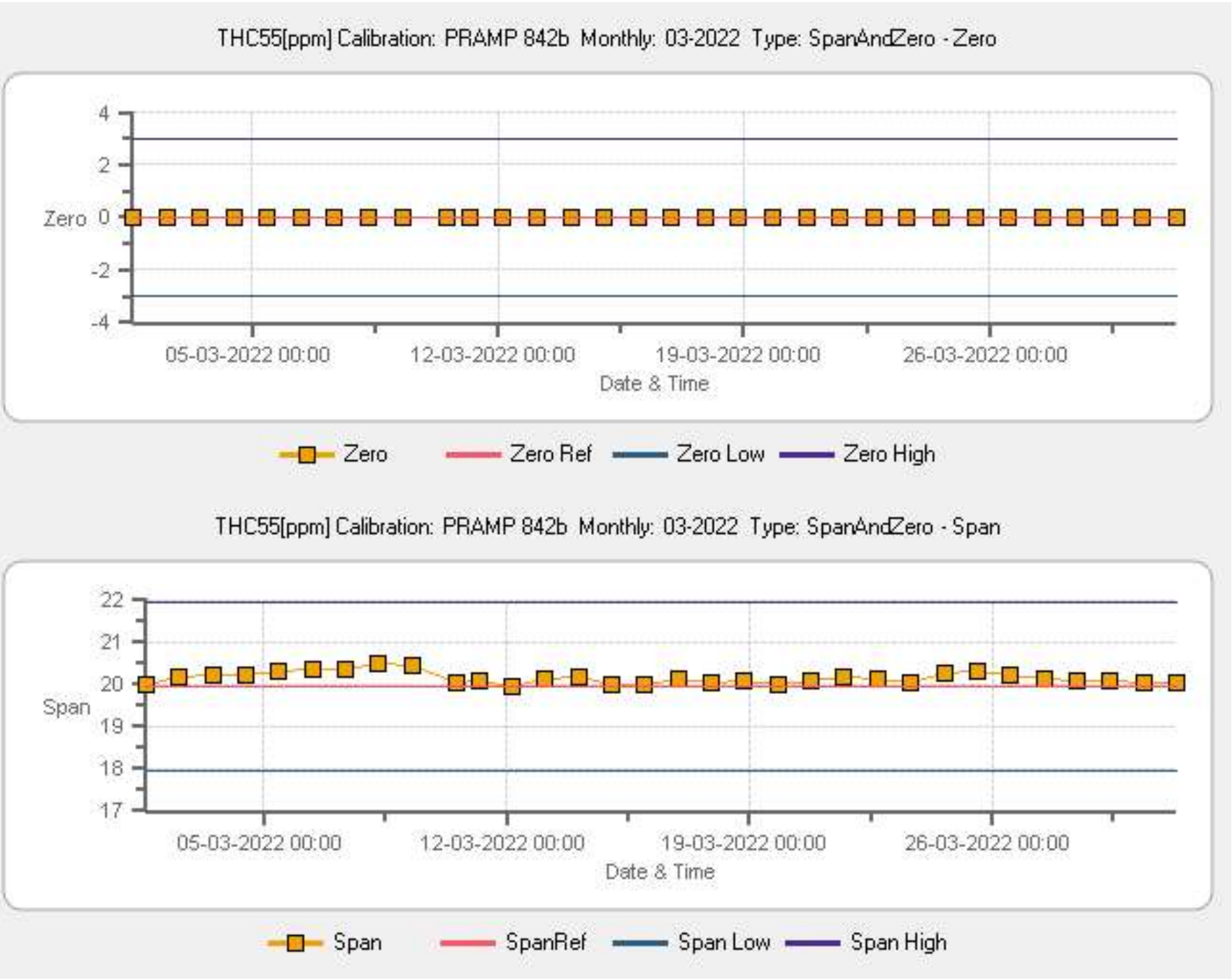
Date & Time
Span
SpanRef
Span Low
Span High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-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
THC55[ppm] Calibration: PRAMP 842b Monthly: 03-2022 Type: SpanAndZero - Span
22
21
20
Span
19
18
17
05-03-2022 00:00
12-03-2022 00:00
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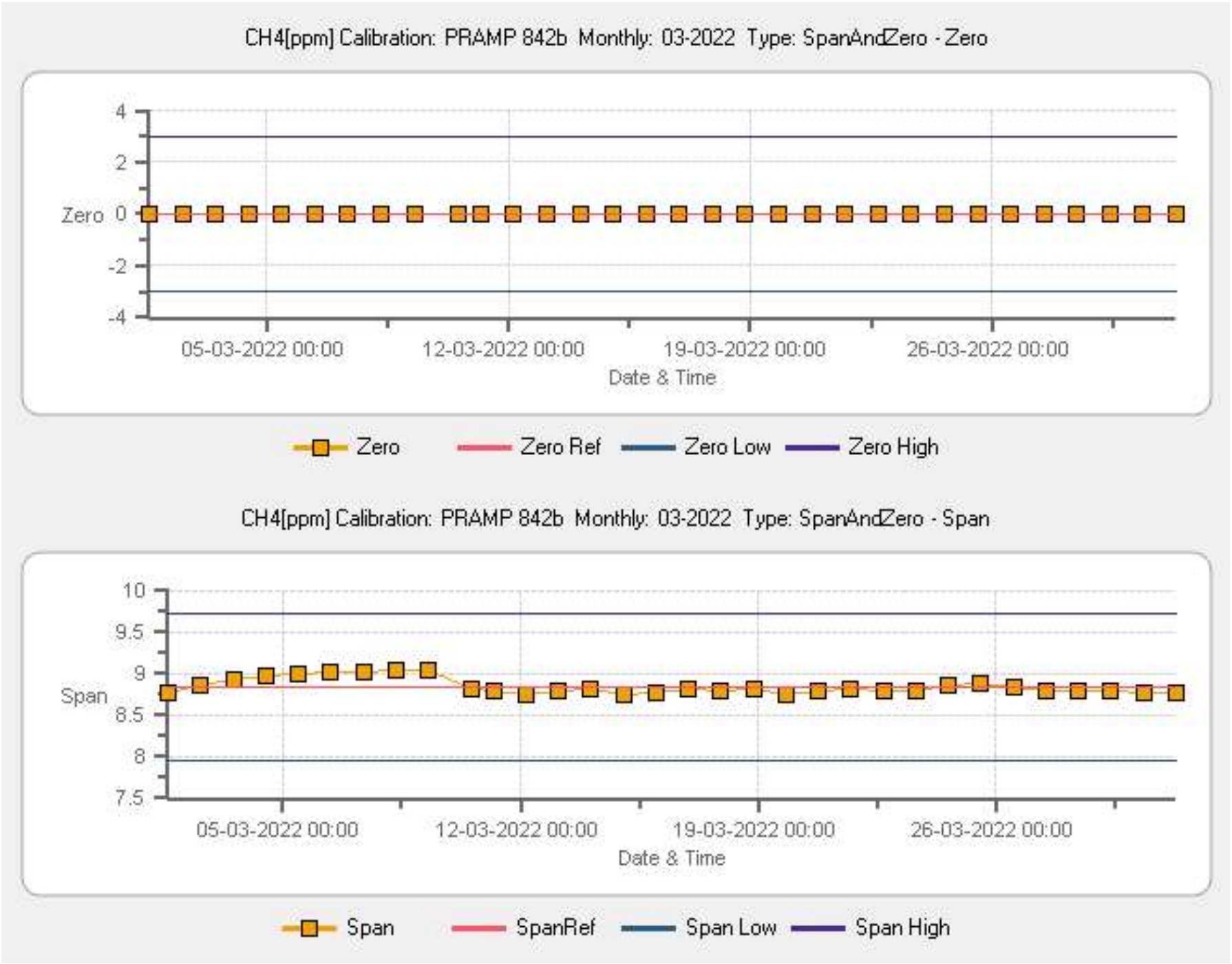
Date & Time
Span
SpanRef
Span Low
Span High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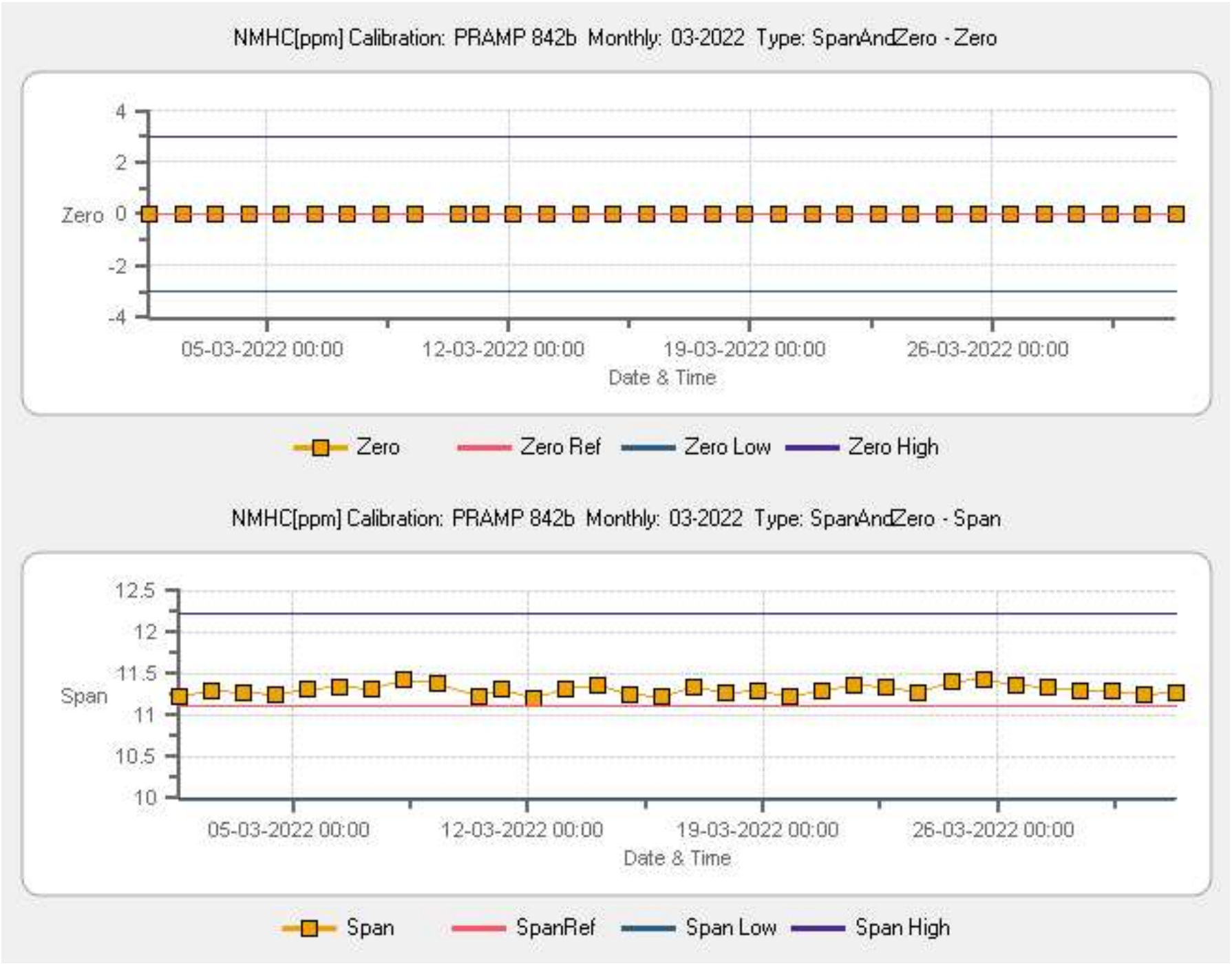
2
Zero 0
-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
CH4[ppm] Calibration: PRAMP 842b Monthly: 03-2022 Type: SpanAndZero - Span
10
9.5
Span 9
8.5
8
7.5
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High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-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
NMHC[ppm] Calibration: PRAMP 842b Monthly: 03-2022 Type: SpanAndZero - Span
12.5
12
11.5
Span
11
10.5
10
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution

DATE:	09-Mar-2022	PREVIOUS CALIBRATION DATE:	17-Feb-2022
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.9
LOCATION:	842b	BAROMETRIC (mBar):	952
PURPOSE	Routine	START TIME (MST):	08:09
PERFORMED BY:	Limin Li	END TIME (MST):	13:10

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	500 ppb
SERIAL #	1200736629	FLOW (mL/min)	426
INITIAL		FINAL	
BKG/OFFSET	8.3	BKG/OFFSET	8.2
COEF/SLOPE	1.108	COEF/SLOPE	1.081
Expected (reference) Value	248.4	Expected (reference) Value	235.2

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Environics	MAKE:	Teledyne
MODEL:	6100	MODEL:	701
ID:	5212	ID:	1105
MFC CALIBRATION DATE:	21-Sep-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0000647	HIGH ID	n/a
CONC (ppm):	51.6	EXPIRY DATE	n/a
CYLINDER (psi):	900	LOW ID	n/a
EXPIRY DATE	24-Feb-2028	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

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

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

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

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
6000		6000	0.00	0.2	0		
5956	44.20	6000	380.12	389.6	380.2	0.976	1.000
5979	20.90	6000	179.74	n/a	180.7	n/a	0.995
5990	10.50	6000	90.30	n/a	90.4	n/a	0.999

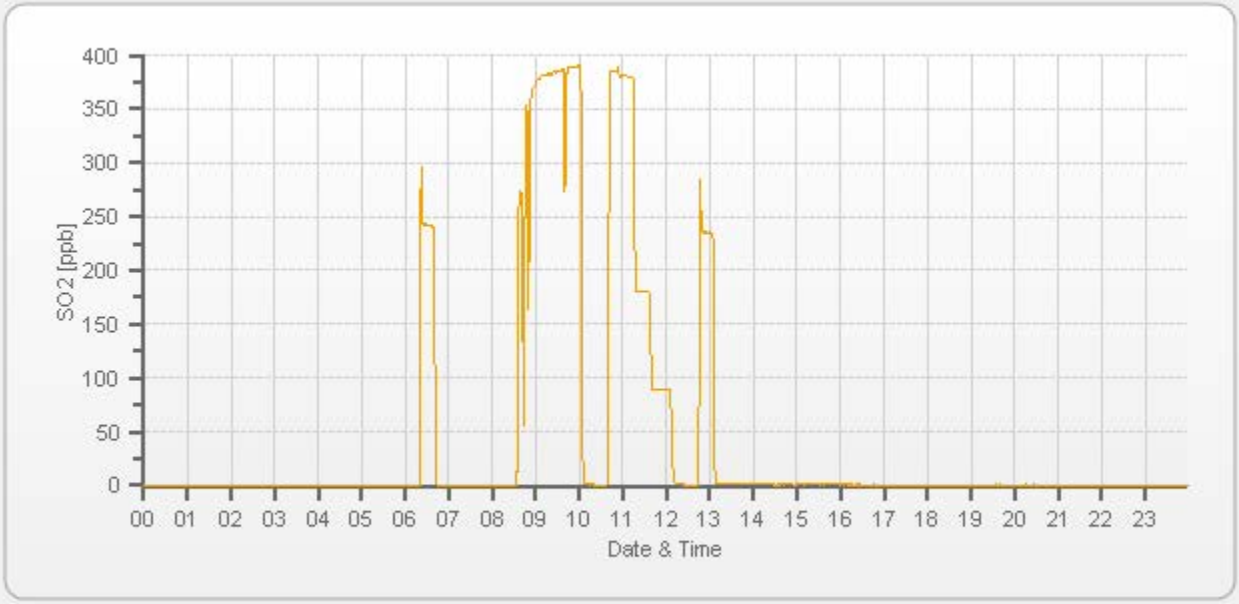
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	0.0%

COMMENTS:

Sample filter changed.
08:34 - 08:50 = Calibration system error. As-found high restarted.

SO2[ppb] Station: PRAMP 842b Daily: 09-03-2022 Type: AVG 1 Min. [1 Min.]



TRS Analyzer Calibration by Dilution

DATE:	09-Mar-2022	PREVIOUS CALIBRATION DATE:	17-Feb-2022
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	21.7
LOCATION:	842b	BAROMETRIC (mBar):	947
PURPOSE	Routine	START TIME (MST):	12:09
PERFORMED BY:	Limin Li	END TIME (MST):	16:48

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	1200736630	FLOW (mL/min)	375
INITIAL		FINAL	
BKG/OFFSET	13.7	BKG/OFFSET	14.2
COEF/SLOPE	0.946	COEF/SLOPE	0.97
Expected (reference) Value	48.97	Expected (reference) Value	47.83

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Environics	MAKE:	API
MODEL:	6100	MODEL:	701
ID:	5212	ID:	1105
MFC CALIBRATION DATE:	21-Sep-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002272	HIGH ID	n/a
CONC (ppm):	10.20	EXPIRY DATE	n/a
CYLINDER (psi):	1750	LOW ID	n/a
EXPIRY DATE	14-Sep-2024	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:	12:30	SO2 Conc (ppb)	380
END TIME:	12:50	Analyzer Response (ppb)	0.3

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
7500		7500	0.00	0	0		
7443	57.35	7500	78.00	76.5	78	1.020	1.000
7472	27.94	7500	38.00	n/a	37.94	n/a	1.002
7486	13.97	7500	19.00	n/a	18.85	n/a	1.008

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	-0.1%

COMMENTS:

TRS Converter CDNOVA CDN #576.

TRS[ppb] Station: PRAMP 842b Daily: 09-03-2022 Type: AVG 1 Min. [1 Min.]

Methane/Non-Methane Analyzer Calibration by Dilution

CALIBRATION:

DATE:	09-Mar-2022	PREVIOUS CALIBRATION DATE:	17-Feb-2022
CLIENT:	PRAMP	TEMPERATURE (°C):	23.9
LOCATION:	842b	BAROMETRIC (mBar):	952
PURPOSE	Removal/Shut-down	START TIME (MST):	08:10
PERFORMED BY:	Limin Li	END TIME (MST):	10:23

ANALYZER:

VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
	Thermo 55i	1501663728	1056
PARAMETER:	CH4	NMHC	THC
RANGE (ppm):	20	20	40
PREVIOUS CF:	1.001	1.000	1.000

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	API	CYLINDER ID:	LL28583		HIGH ID:	n/a
MODEL:	2010	MODEL:	701	CH_4/C_3H_8 (ppm):	608.0	203.0	HIGH EXPIRY:	n/a
ID:	17200415	ID:	1105	CYLINDER (psi):	2000		LOW ID:	n/a
MFC CALIBRATION DATE:	20-Sep-2021	OXIDIZER ID:	111	EXPIRY DATE	18-Aug-2029		LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH4/NMHC)	HIGH	MID	LOW	CH4 EQUIVILANCE	
TARGET	14	7	3.5	C_3H_8 as CH_4	558.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH_4	1166.3

EXPECTED (REFERENCE) VALUE:

INITIAL	CH4	NMHC	THC	FINAL	CH4	NMHC	THC
	8.85	11.12	19.97		n/a	n/a	n/a

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC
3500		3500	0.00	0.00	0.00	0.00	0.00	0.00	n/a	n/a	n/a						
3416	84.00	3500	14.59	13.40	27.99	14.91	13.64	28.55	n/a	n/a	n/a	0.979	0.982	0.980	n/a	n/a	n/a
3458	42.00	3500	7.30	6.70	14.00	7.25	6.71	13.96	n/a	n/a	n/a	1.006	0.998	1.003	n/a	n/a	n/a
3479	21.00	3500	3.65	3.35	7.00	3.57	3.35	6.92	n/a	n/a	n/a	1.022	1.000	1.011	n/a	n/a	n/a

LINEAR REGRESSION ANALYSIS:

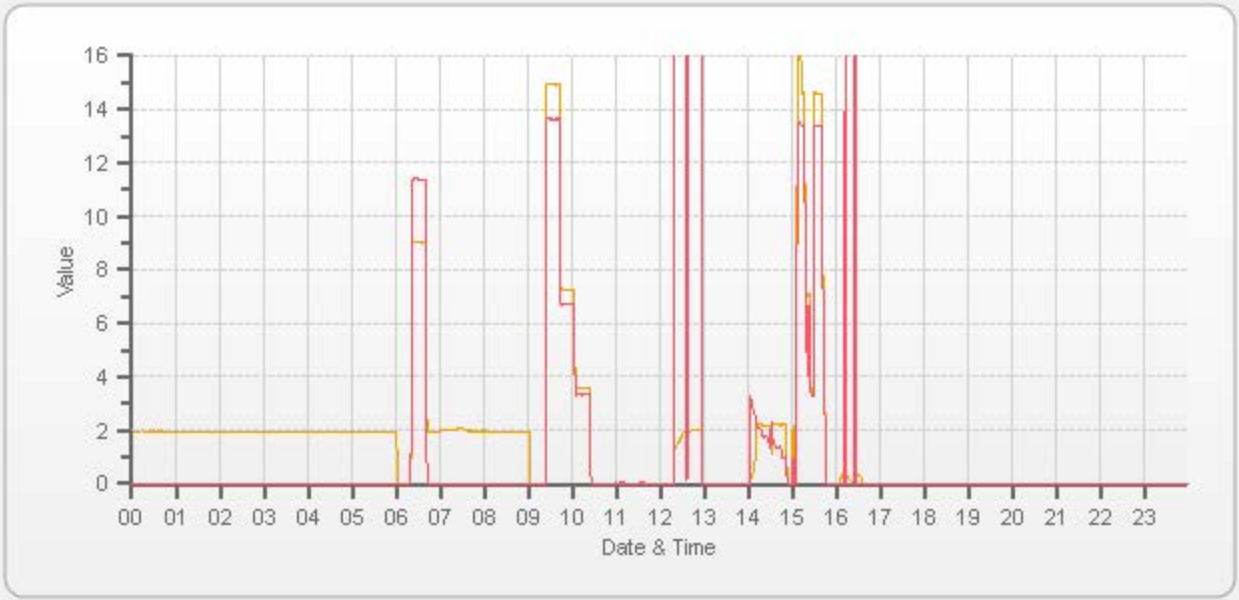
	CORRELATION	SLOPE	INTERCEPT
CH4	1.000	1.024	-0.5%
NMHC	1.000	1.019	-0.2%
THC	1.000	1.021	-0.4%

Comments:

Shutdown for maintenance

Use Zero Chrom? **Yes**

Station: PRAMP 842b Daily: 09-03-2022 Type: AVG 1 Min. [1 Min.]



Methane/Non-Methane Analyzer Calibration by Dilution

CALIBRATION:

DATE:	10-Mar-2022	PREVIOUS CALIBRATION DATE:	n/a
CLIENT:	PRAMP	TEMPERATURE (°C):	23.0
LOCATION:	842b	BAROMETRIC (mBar):	951
PURPOSE	Install/Post-Repair	START TIME (MST):	11:06
PERFORMED BY:	Limin Li	END TIME (MST):	13:21

ANALYZER:

VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
	Thermo 55i	1501663728	1250
PARAMETER:	CH4	NMHC	THC
RANGE (ppm):	20	20	40
PREVIOUS CF:	n/a	n/a	n/a

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	API	CYLINDER ID:	LL28583		HIGH ID:	n/a
MODEL:	2010	MODEL:	701	CH_4/C_3H_8 (ppm):	608.0	203.0	HIGH EXPIRY:	n/a
ID:	17200415	ID:	1105	CYLINDER (psi):	2000		LOW ID:	n/a
MFC CALIBRATION DATE:	20-Sep-2021	OXIDIZER ID:	111	EXPIRY DATE	18-Aug-2029		LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH4/NMHC)	HIGH	MID	LOW	CH4 EQUIVILANCE	
TARGET	14	7	3.5	C_3H_8 as CH_4	558.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH_4	1166.3

EXPECTED (REFERENCE) VALUE:

INITIAL	CH4	NMHC	THC	FINAL	CH4	NMHC	THC
	n/a	n/a	n/a		8.85	11.12	19.97

CALIBRATION:

FLOW RATE (mL/min)			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC
3500		3500	0.00	0.00	0.00	n/a	n/a	n/a	0.00	0.00	0.00						
3416	84.00	3500	14.59	13.40	27.99	n/a	n/a	n/a	14.58	13.42	28.00	n/a	n/a	n/a	1.001	0.998	1.000
3458	42.00	3500	7.30	6.70	14.00	n/a	n/a	n/a	7.15	6.72	13.87	n/a	n/a	n/a	1.020	0.997	1.009
3479	21.00	3500	3.65	3.35	7.00	n/a	n/a	n/a	3.52	3.36	6.88	n/a	n/a	n/a	1.036	0.997	1.017

LINEAR REGRESSION ANALYSIS:

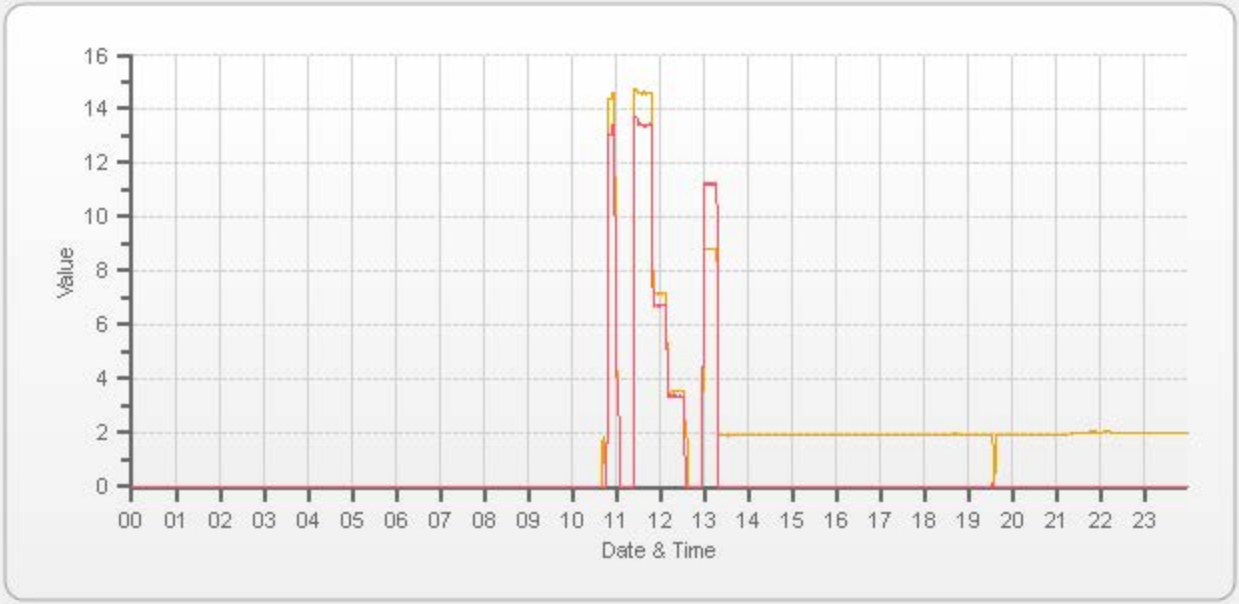
	CORRELATION	SLOPE	INTERCEPT
CH4	1.000	1.001	-0.4%
NMHC	1.000	1.002	0.0%
THC	1.000	1.001	-0.2%

Comments:

Post-repair after actuator/rotor swap.

Use Zero Chrom? **Yes**

Station: PRAMP 842b Daily: 10-03-2022 Type: AVG 1 Min. [1 Min.]



Meteorological System Checklist

Date:	March 9, 2022
Technician:	Limin Li
Station:	PRAMP 842b

Unit:	Make:	Model:	Serial #:
Precipitation Sampler:	RM Young	52202	TB 15878
Temperature Sensor:	Rotronic	HC2A-S3	20370767
Barometric Pressure Sensor:	MetOne	92	Y23362
Relative Humidity Sensor:	Rotronic	HC2A-S3	20370767
Anemometer:	RM Young	05305AQ	174802

PRECIPITATION SENSOR CHECK

Checklist:	Reply:	Comments:
Previous check date:	February 17, 2022	Channel offline =15:12-15:19pm, Audit 10 tip:15:18pm
Is the sensor Level?	yes	
Is the heater operating properly?	yes	
Are the bucket drain holes clean?	yes	
Is the screen on the housing? (screen should be on between July and September	no	
Is the housing clean?	yes	
Is the area around the housing clean and free from obstacles?	yes	

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

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

AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	February 17, 2022
Parameter:	Temperature @ 2 metres
Reference Thermometer ID:	Fisher SCIENTIFIC 170286131 expires August 24, 2022
Reference Temperature (^{o}C):	-6.2
Station - Ambient Temperature (^{o}C):	-6.8
Temperature Difference (^{o}C):	0.6

BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	February 17, 2022	
Reference Barometer ID:	BRUNTON #5490, Expire: Feb 22, 2023	
Reference Pressure - Units/Reading:	millibar	943.5
Station Pressure - Units/Reading:	millibar	942
Pressure Tolerance +/- 15% of error:	802 - 1085	0.16%

RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	February 17, 2022	
Reference Hygrometer ID:	Fisher SCIENTIFIC 170286131 expires August 24, 2022	
Reference Hygrometer % RH- Reading:	50.50	
Station Hygrometer % RH- Reading:	53.00	
RH Tolerance +/- 15% of difference:	42.93 - 58.08	-5.0%

ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	February 17, 2022	Previous check date:	February 17, 2022
Wind Speed Observed (kph):	15~30	Wind Direction Observed:	SW
Wind speed on Data Logger (kph):	23	Wind Direction on Data Logger:	SW
		Wind Direction Pass/Fail?:	Pass

Comments

Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	**Performed By:**	Limin Li
Audit Location:	842b	**Reviewed By:**	Chris Wesson
Audit Date:	July 4, 2021	**Start/End Time (mst):**	12:16/13:43
Calibration Purpose:	routine annual	**Weather Conditions:**	Mainly cloudy with sunny breaks

Wind Sensor Information

Sensor ID Data:		**Sensor Outputs:**	
Sensor Make:	RM Young	**Velocity Voltage Output Range:**	n/a
Sensor Model:	05305AQ	**Velocity Unit Output Range:**	0-200
Serial #:	174802	**Direction Voltage Output Range:**	0-1
Previous Cal/Audit Date:	December 16, 2020	**Direction Unit Output Range:**	0-360

Wind Calibrator Information

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

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

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

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

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	0	355	0.0	0.0	0.0
30	330	29	331	1.0	-1.0	1.0
60	300	58	301	2.0	-1.0	1.5
90	270	88	272	2.0	-2.0	2.0
120	240	118	241	2.0	-1.0	1.5
150	210	149	211	1.0	-1.0	1.0
180	180	179	180	1.0	0.0	0.5
210	150	210	149	0.0	1.0	0.5
240	120	241	119	-1.0	1.0	1.0
270	90	272	88	-2.0	2.0	2.0
300	60	301	58	-1.0	2.0	1.5
330	30	331	29	-1.0	1.0	1.0
355	0	355	0	0.0	0.0	0.0
The audit meets AMD requirements.			**Average Absolute Degrees Difference=**			**1.0**

Comments:

Change 2 speed bearing.

Peace River Area Monitoring Program

MARCH 2022

Ambient Air Monitoring Calibration Report

- 986c STATION-

CAL-PRAMP-202203-01562

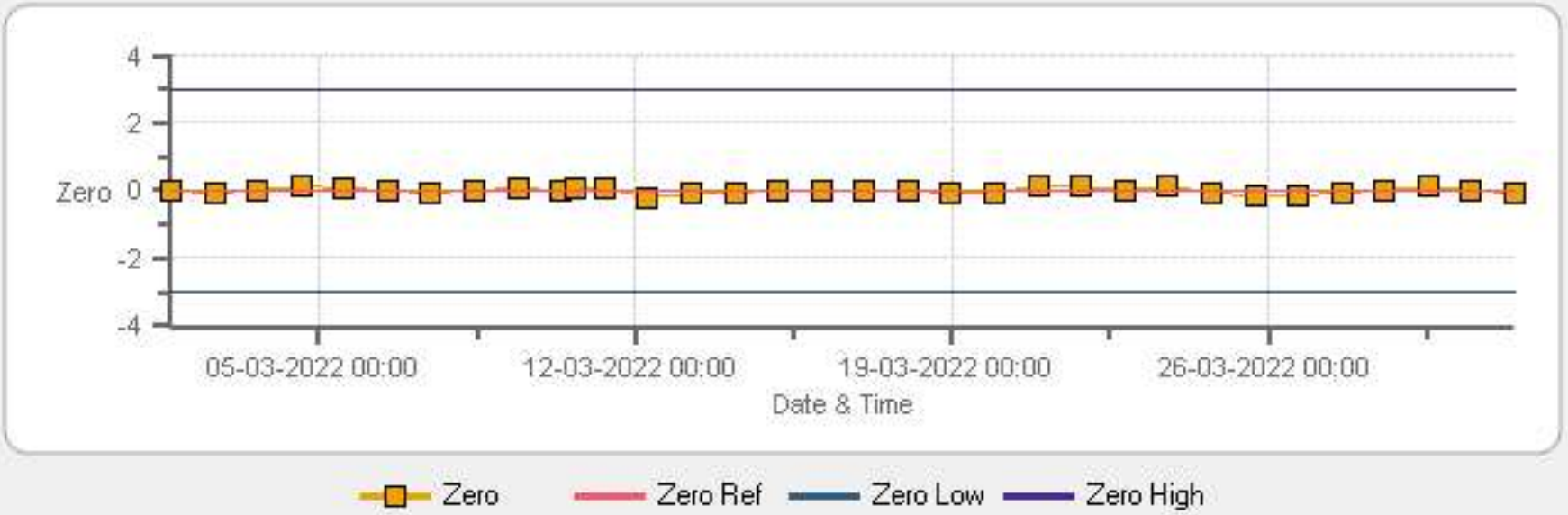
Operation and Maintenance:
Bureau Veritas Canada

Data Validation and Report:
Bureau Veritas Canada

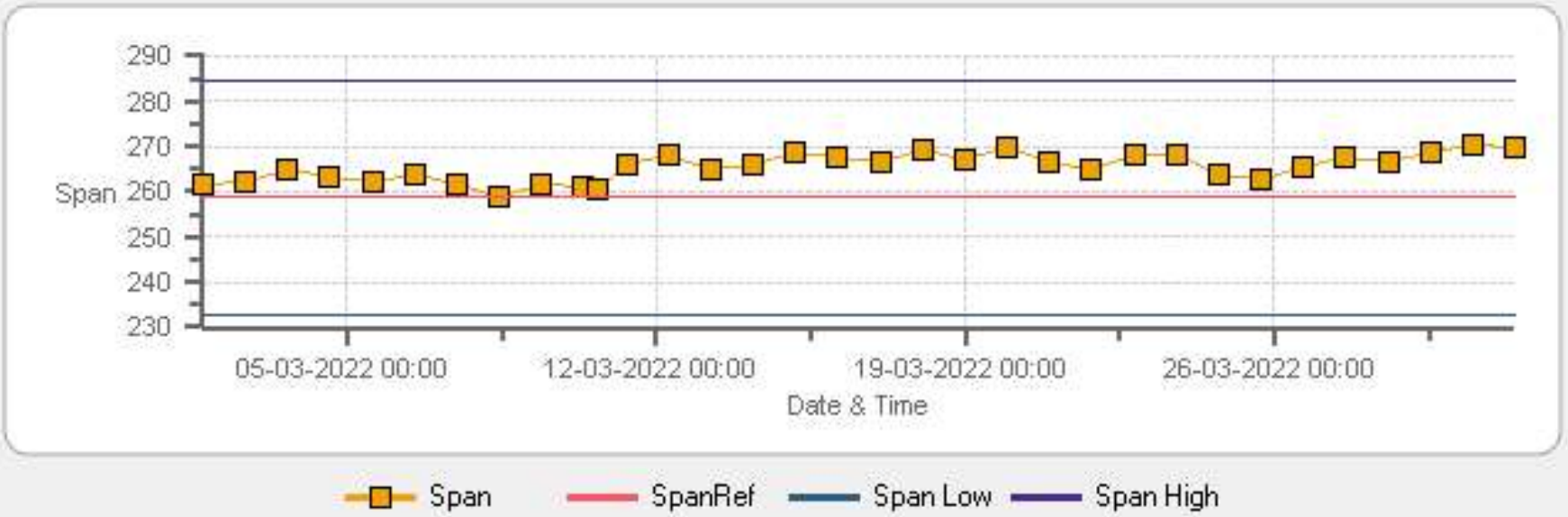
April 19, 2022

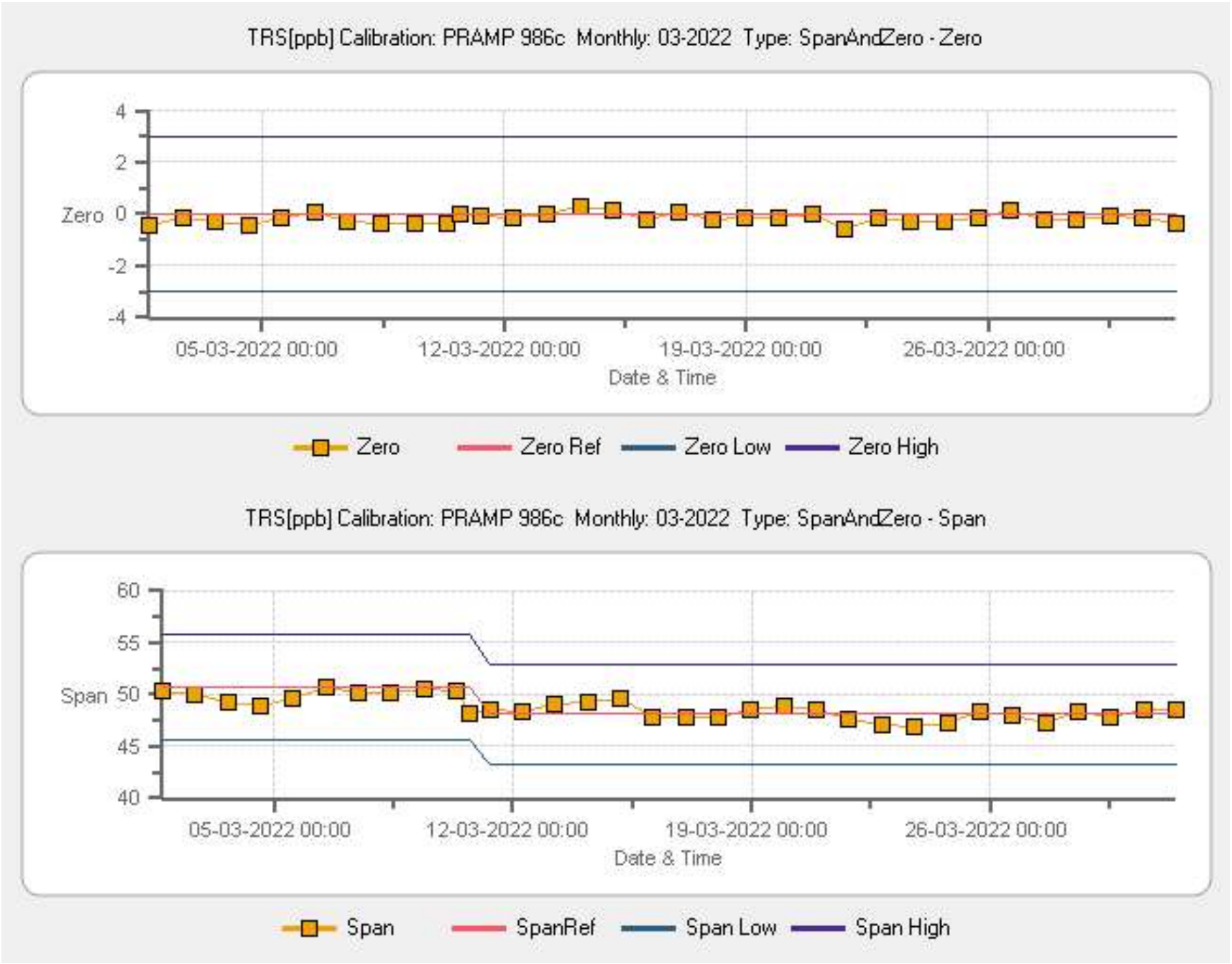
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

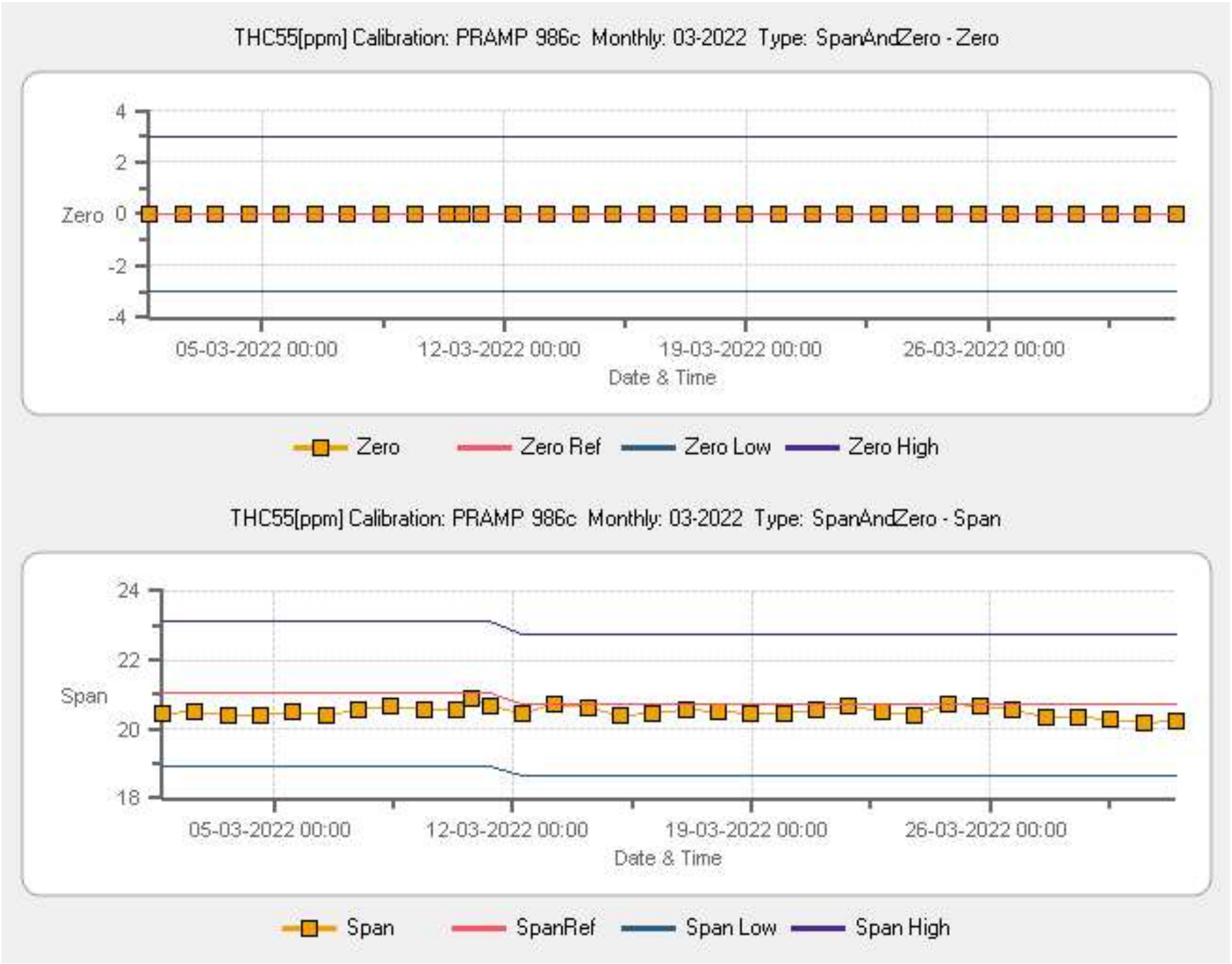
SO2[ppb] Calibration: PRAMP 986c Monthly: 03-2022 Type: SpanAndZero - Zero

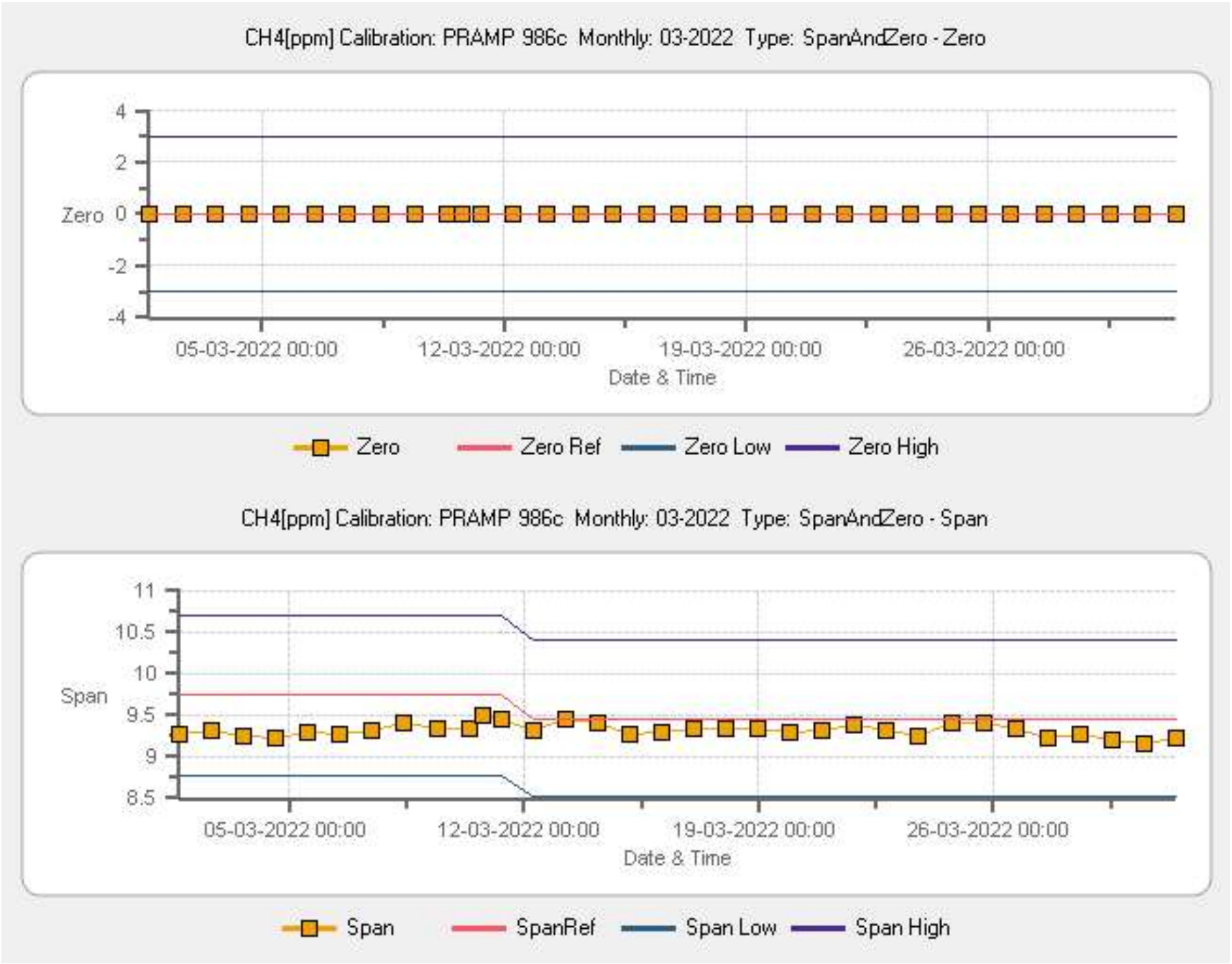


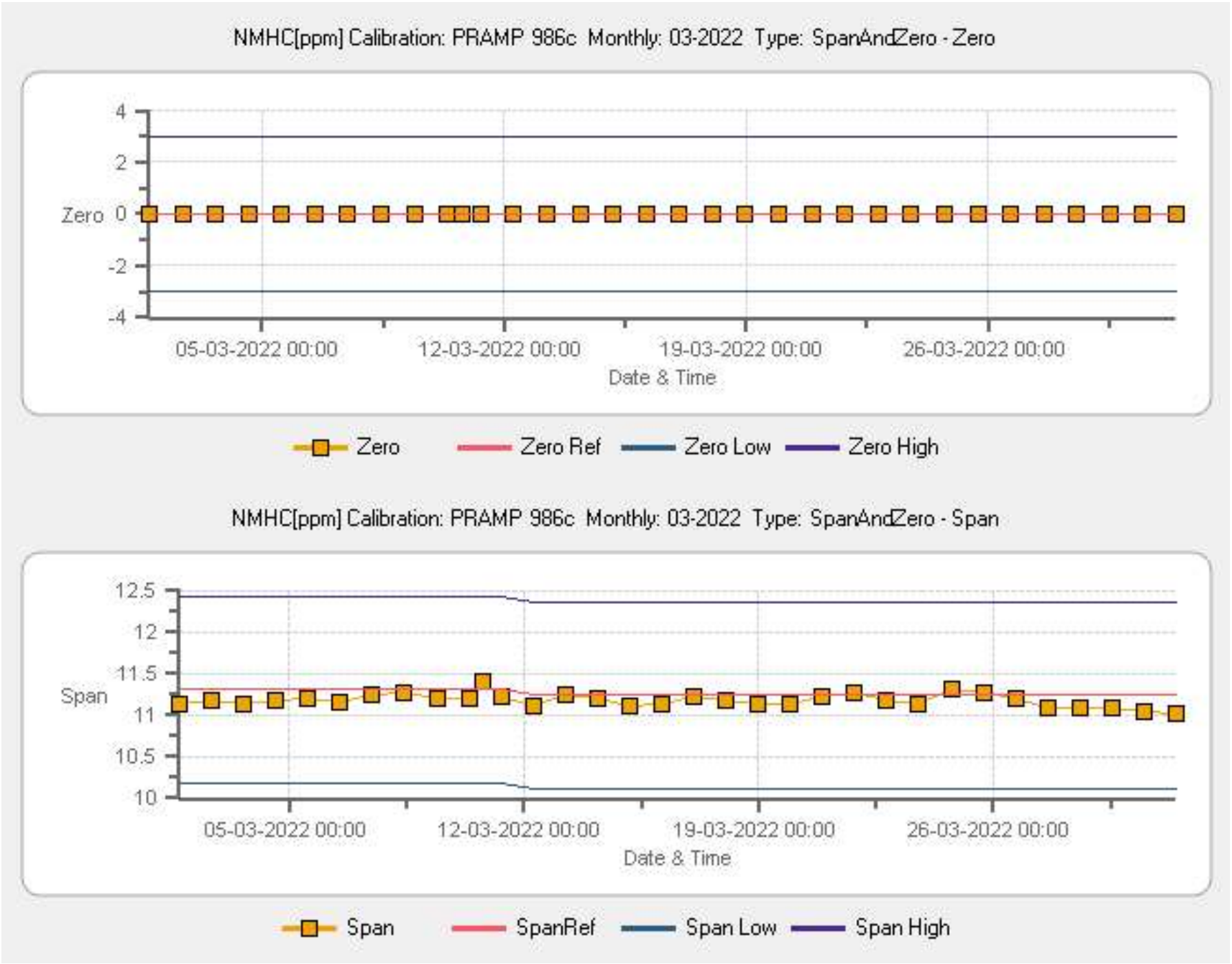
SO2[ppb] Calibration: PRAMP 986c Monthly: 03-2022 Type: SpanAndZero - Span




TRS[ppb] Calibration: PRAMP 986c Monthly: 03-2022 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
TRS[ppb] Calibration: PRAMP 986c Monthly: 03-2022 Type: SpanAndZero - Span
60
55
Span 50
45
40
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High


THC55[ppm] Calibration: PRAMP 986c Monthly: 03-2022 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
THC55[ppm] Calibration: PRAMP 986c Monthly: 03-2022 Type: SpanAndZero - Span
24
22
Span
20
18
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High


CH4[ppm] Calibration: PRAMP 986c Monthly: 03-2022 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
CH4[ppm] Calibration: PRAMP 986c Monthly: 03-2022 Type: SpanAndZero - Span
11
10.5
10
Span
9.5
9
8.5
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High


NMHC[ppm] Calibration: PRAMP 986c Monthly: 03-2022 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
NMHC[ppm] Calibration: PRAMP 986c Monthly: 03-2022 Type: SpanAndZero - Span
12.5
12
11.5
Span
11
10.5
10
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution

DATE:	10-Mar-2022	PREVIOUS CALIBRATION DATE:	03-Feb-2022
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	24.3
LOCATION:	986C	BAROMETRIC (mBar):	952
PURPOSE	Routine	START TIME (MST):	13:31
PERFORMED BY:	Limin Li	END TIME (MST):	16:50

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	500 ppb
SERIAL #	1193585646	FLOW (mL/min)	433
INITIAL		FINAL	
BKG/OFFSET	14.2	BKG/OFFSET	14.2
COEF/SLOPE	1.045	COEF/SLOPE	1.043
Expected (reference) Value	258.7	Expected (reference) Value	258.7

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	API
MODEL:	2010	MODEL:	701
ID:	17200415	ID:	1105
MFC CALIBRATION DATE:	20-Sep-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0000647	HIGH ID	n/a
CONC (ppm):	51.6	EXPIRY DATE	n/a
CYLINDER (psi):	850	LOW ID	n/a
EXPIRY DATE	24-Feb-2028	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

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

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

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

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
6000		6000	0.00	0	0		
5956	44.20	6000	380.12	381.7	380	0.996	1.000
5979	20.90	6000	179.74	n/a	181.7	n/a	0.989
5990	10.50	6000	90.30	n/a	90.1	n/a	1.002

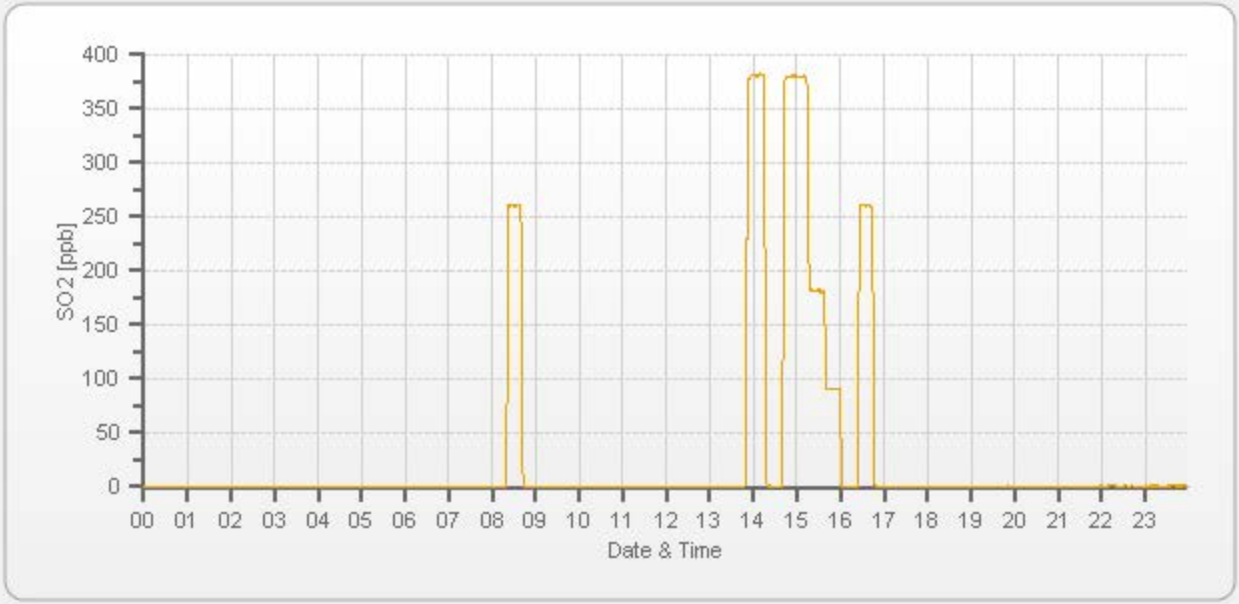
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	0.1%

COMMENTS:

Sample filter changed.

SO2[ppb] Station: PRAMP 986c Daily: 10-03-2022 Type: AVG 1 Min. [1 Min.]



TRS Analyzer Calibration by Dilution

DATE:	10-Mar-2022	PREVIOUS CALIBRATION DATE:	03-Feb-2022
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	24.3
LOCATION:	986C	BAROMETRIC (mBar):	952
PURPOSE	Routine	START TIME (MST):	13:34
PERFORMED BY:	Limin Li	END TIME (MST):	17:56

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	1191833341	FLOW (mL/min)	426
INITIAL		FINAL	
BKG/OFFSET	15.5	BKG/OFFSET	14.4
COEF/SLOPE	1.014	COEF/SLOPE	0.958
Expected (reference) Value	50.77	Expected (reference) Value	48.18

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Environics	MAKE:	API
MODEL:	6100	MODEL:	701
ID:	5212	ID:	1105
MFC CALIBRATION DATE:	21-Sep-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002272	HIGH ID	n/a
CONC (ppm):	10.20	EXPIRY DATE	n/a
CYLINDER (psi):	1800	LOW ID	n/a
EXPIRY DATE	14-Sep-2024	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:	13:57	SO2 Conc (ppb)	380
END TIME:	14:17	Analyzer Response (ppb)	0.1

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
7500		7500	0.00	-0.35	0		
7443	57.35	7500	78.00	81.66	78	0.951	1.000
7472	27.94	7500	38.00	n/a	37.47	n/a	1.014
7486	13.97	7500	19.00	n/a	18.53	n/a	1.025

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	-0.3%

COMMENTS:

Sample filter changed.

TRS[ppb] Station: PRAMP 986c Daily: 10-03-2022 Type: AVG 1 Min. [1 Min.]

Methane/Non-Methane Analyzer Calibration by Dilution

CALIBRATION:

DATE:	10-Mar-2022	PREVIOUS CALIBRATION DATE:	03-Feb-2022
CLIENT:	PRAMP	TEMPERATURE (°C):	23.5
LOCATION:	986C	BAROMETRIC (mBar):	952
PURPOSE	Routine	START TIME (MST):	15:54
PERFORMED BY:	Limin Li	END TIME (MST):	19:23

ANALYZER:

VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
	Thermo 55i	1193585652	1333
PARAMETER:	CH4	NMHC	THC
RANGE (ppm):	20	20	40
PREVIOUS CF:	0.999	1.000	1.000

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	API	CYLINDER ID:	LL28583		HIGH ID:	n/a
MODEL:	2010	MODEL:	701	CH_4/C_3H_8 (ppm):	608.0	203.0	HIGH EXPIRY:	n/a
ID:	17200415	ID:	1105	CYLINDER (psi):	1950		LOW ID:	n/a
MFC CALIBRATION DATE:	20-Sep-2021	OXIDIZER ID:	111	EXPIRY DATE	18-Aug-2029		LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH4/NMHC)	HIGH	MID	LOW	CH4 EQUIVILANCE	
TARGET	14	7	3.5	C_3H_8 as CH_4	558.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH_4	1166.3

EXPECTED (REFERENCE) VALUE:

INITIAL	CH4	NMHC	THC	FINAL	CH4	NMHC	THC
	9.74	11.31	21.04		9.46	11.24	20.70

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC
3500		3500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
3416	84.00	3500	14.59	13.40	27.99	14.21	13.16	27.37	14.60	13.40	28.00	1.027	1.018	1.023	0.999	1.000	1.000
3458	42.00	3500	7.30	6.70	14.00	n/a	n/a	n/a	7.28	6.74	14.02	n/a	n/a	n/a	1.002	0.994	0.998
3479	21.00	3500	3.65	3.35	7.00	n/a	n/a	n/a	3.62	3.41	7.03	n/a	n/a	n/a	1.008	0.982	0.995

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
CH4	1.000	1.001	-0.1%
NMHC	1.000	0.999	0.2%
THC	1.000	1.000	0.0%

Comments:

n/a

Use Zero Chrom? **No**

Station: PRAMP 986c Daily: 10-03-2022 Type: AVG 1 Min. [1 Min.]
Value
0
2
4
6
8
10
12
14
16
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Date & Time
CH4 [ppm]
NMHC [ppm]

Methane/Non-Methane Analyzer Calibration by Dilution

CALIBRATION:

DATE:	11-Mar-2022	PREVIOUS CALIBRATION DATE:	10-Mar-2022
CLIENT:	PRAMP	TEMPERATURE (°C):	23.7
LOCATION:	986C	BAROMETRIC (mBar):	936
PURPOSE	As-Found	START TIME (MST):	10:23
PERFORMED BY:	Limin Li	END TIME (MST):	11:49

ANALYZER:

VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
	Thermo 55i	1193585652	1333
PARAMETER:	CH4	NMHC	THC
RANGE (ppm):	20	20	40
PREVIOUS CF:	0.999	1.000	1.000

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	API	CYLINDER ID:	LL28583		HIGH ID:	n/a
MODEL:	2010	MODEL:	701	CH_4/C_3H_8 (ppm):	608.0	203.0	HIGH EXPIRY:	n/a
ID:	17200415	ID:	1105	CYLINDER (psi):	1850		LOW ID:	n/a
MFC CALIBRATION DATE:	20-Sep-2021	OXIDIZER ID:	111	EXPIRY DATE	18-Aug-2029		LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH4/NMHC)	HIGH	MID	LOW	CH4 EQUIVILANCE	
TARGET	14	7	3.5	C_3H_8 as CH_4	558.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH_4	1166.3

EXPECTED (REFERENCE) VALUE:

INITIAL	CH4	NMHC	THC	FINAL	CH4	NMHC	THC
	9.46	11.24	20.70		9.46	11.24	20.70

CALIBRATION:

FLOW RATE (mL/min)			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC
3500		3500	0.00	0.00	0.00	0.00	0.00	0.00	n/a	n/a	n/a						
3416	84.00	3500	14.59	13.40	27.99	14.39	13.21	27.60	n/a	n/a	n/a	1.014	1.014	1.014	n/a	n/a	n/a
3458	42.00	3500	7.30	6.70	14.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3479	21.00	3500	3.65	3.35	7.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
CH4	n/a	n/a	n/a
NMHC	n/a	n/a	n/a
THC	n/a	n/a	n/a

Comments:

As-found due to apparent high ambient CH4

Use Zero Chrom? **No**

Station: PRAMP 986c Daily: 11-03-2022 Type: AVG 1 Min. [1 Min.]

Methane/Non-Methane Analyzer Calibration by Dilution

CALIBRATION:

DATE:	22-Mar-2022	PREVIOUS CALIBRATION DATE:	10-Mar-2022
CLIENT:	PRAMP	TEMPERATURE (°C):	24.5
LOCATION:	986C	BAROMETRIC (mBar):	941
PURPOSE	As-Found	START TIME (MST):	15:55
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	17:26

ANALYZER:

VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
	Thermo 55i	1193585652	1259.1
PARAMETER:	CH4	NMHC	THC
RANGE (ppm):	20	20	40
PREVIOUS CF:	0.999	1.000	1.000

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	LL28583		HIGH ID:	n/a
MODEL:	2010	MODEL:	M701	CH_4/C_3H_8 (ppm):	608.0	203.0	HIGH EXPIRY:	n/a
ID:	17100415	ID:	5004	CYLINDER (psi):	1810		LOW ID:	n/a
MFC CALIBRATION DATE:	27-Sep-2021	OXIDIZER ID:	Internal	EXPIRY DATE	18-Aug-2029		LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH4/NMHC)	HIGH	MID	LOW	CH4 EQUIVILANCE	
TARGET	14	7	3.5	C_3H_8 as CH_4	558.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH_4	1166.3

EXPECTED (REFERENCE) VALUE:

INITIAL	CH4	NMHC	THC	FINAL	CH4	NMHC	THC
	9.46	11.24	20.70		n/a	n/a	n/a

CALIBRATION:

FLOW RATE (mL/min)			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC
3197		3197	0.00	0.00	0.00	0.00	0.00	0.00	n/a	n/a	n/a						
3120	76.80	3197	14.61	13.41	28.02	15.25	13.98	29.24	n/a	n/a	n/a	0.958	0.959	0.958	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

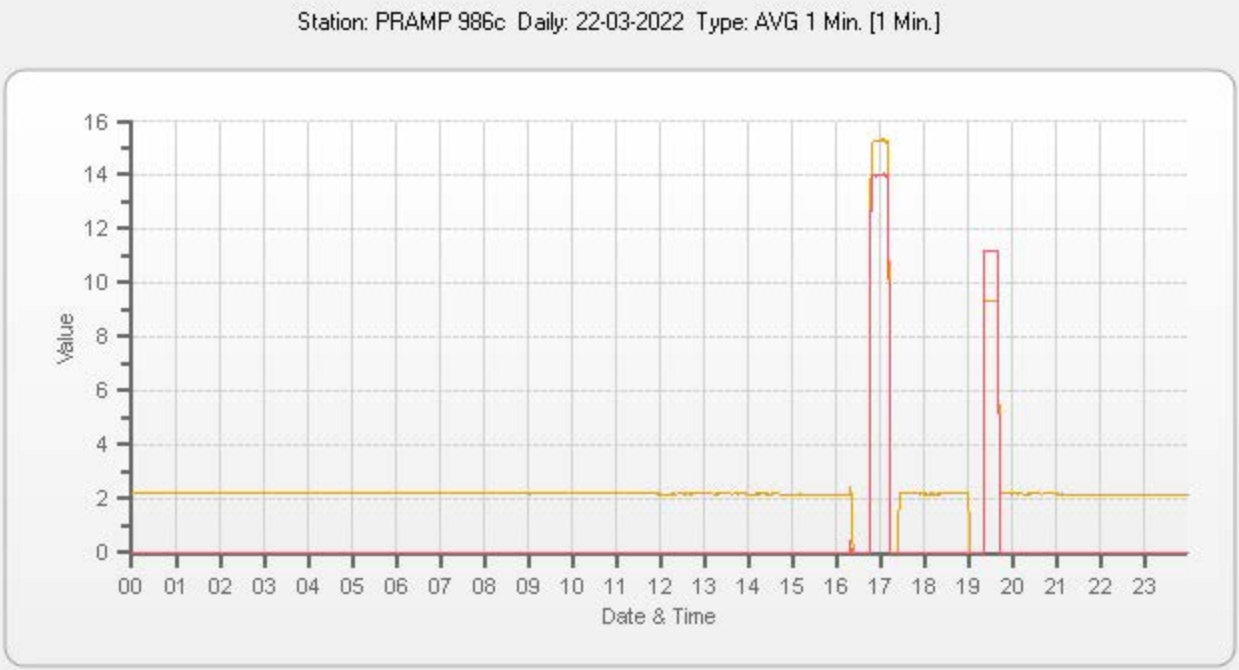
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
CH4	n/a	n/a	n/a
NMHC	n/a	n/a	n/a
THC	n/a	n/a	n/a

Comments:

As-found due to apparent high ambient CH4.
Swapped N2 gas cylinder.

Use Zero Chrom? **No**


Station: PRAMP 986c Daily: 22-03-2022 Type: AVG 1 Min. [1 Min.]
Value
16
14
12
10
8
6
4
2
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Date & Time
CH4 [ppm]
NMHC [ppm]

Meteorological System Checklist

Date:	March 10, 2022
Technician:	Limin Li
Station:	PRAMP 986c

Unit:	Make:	Model:	Serial #:
Precipitation Sampler:	RM Young	52202	TB 16325
Temperature Sensor:	Rotronic	HC2-S3	61116376
Barometric Pressure Sensor:	MetOne	092	Y23358
Relative Humidity Sensor:	Rotronic	HC2-S3	61116376
Anemometer:	RM Young	05305AQ	174795

PRECIPITATION SENSOR CHECK

Checklist:	Reply:	Comments:
Previous check date:	December 7, 2021	Tip test: 14:31-14:32
Is the sensor Level?	yes	
Is the heater operating properly?	yes	
Are the bucket drain holes clean?	no	
Is the screen on the housing? (screen should be on between July and September	no	
Is the housing clean?	yes	
Is the area around the housing clean and free from obstacles?	yes	

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

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

AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	February 3, 2022
Parameter:	Temperature @ 2 metres
Reference Thermometer ID:	Fisher SCIENTIFIC 170286131 expires August 24, 2022
Reference Temperature (^{o}C):	-12.1
Station - Ambient Temperature (^{o}C):	-12.7
Temperature Difference (^{o}C):	0.6

BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	February 3, 2022	
Reference Barometer ID:	BRUNTON #5490, Expire: Feb 22, 2023	
Reference Pressure - Units/Reading:	millibar	952
Station Pressure - Units/Reading:	millibar	951.4
Pressure Tolerance +/- 15% of error:	809 - 1095	0.06%

RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	February 3, 2022	
Reference Hygrometer ID:	Fisher SCIENTIFIC 170286131 expires August 24, 2022	
Reference Hygrometer % RH- Reading:	34.75	
Station Hygrometer % RH- Reading:	33.60	
RH Tolerance +/- 15% of difference:	29.54 - 39.96	3.3%

ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	February 3, 2022	Previous check date:	February 3, 2022
Wind Speed Observed (kph):	5~15	Wind Direction Observed:	NW
Wind speed on Data Logger (kph):	9.4	Wind Direction on Data Logger:	NW
		Wind Direction Pass/Fail?:	Pass

Comments

Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	**Performed By:**	Limin Li
Audit Location:	986C	**Reviewed By:**	Chris Wesson
Audit Date:	July 3, 2021	**Start/End Time (mst):**	15:58 / 17:20
Calibration Purpose:	routine annual	**Weather Conditions:**	Mainly cloudy with sunny breaks

Wind Sensor Information

Sensor ID Data:		**Sensor Outputs:**	
Sensor Make:	RM Young	**Velocity Voltage Output Range:**	n/a
Sensor Model:	05305L	**Velocity Unit Output Range:**	0-180
Serial #:	174795	**Direction Voltage Output Range:**	n/a
Previous Cal/Audit Date:	July 16, 2020	**Direction Unit Output Range:**	0-360

Wind Calibrator Information

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

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

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

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

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	1	354	1.0	1.0	1.0
30	330	30	333	0.0	-3.0	1.5
60	300	59	303	1.0	-3.0	2.0
90	270	88	273	2.0	-3.0	2.5
120	240	118	243	2.0	-3.0	2.5
150	210	147	209	3.0	1.0	2.0
180	180	177	177	3.0	3.0	3.0
210	150	209	147	1.0	3.0	2.0
240	120	242	117	-2.0	3.0	2.5
270	90	273	87	-3.0	3.0	3.0
300	60	303	59	-3.0	1.0	2.0
330	30	333	30	-3.0	0.0	1.5
355	0	354	1	1.0	1.0	1.0
The audit meets AMD requirements.			**Average Absolute Degrees Difference=**			**2.0**

Comments:

Magnetic declination = 15Deg(E)

Peace River Area Monitoring Program

MARCH 2022

Ambient Air Monitoring Calibration Report

- RENO STATION-

CAL-PRAMP-202203-01563

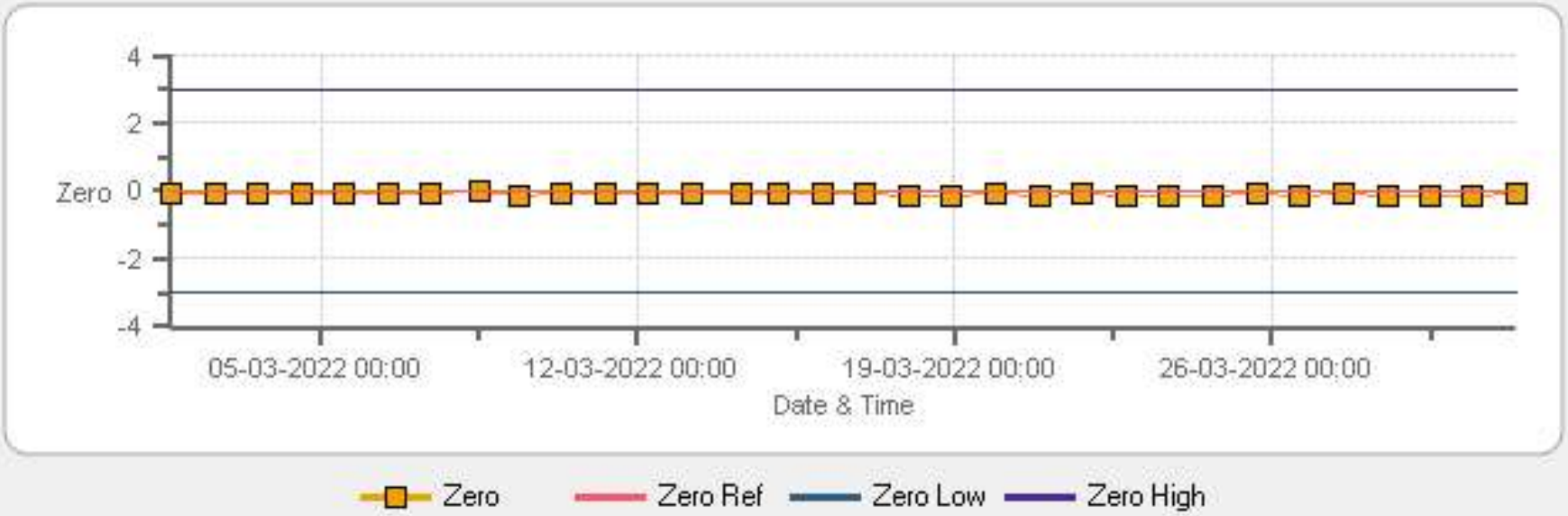
Operation and Maintenance:
Bureau Veritas Canada

Data Validation and Report:
Bureau Veritas Canada

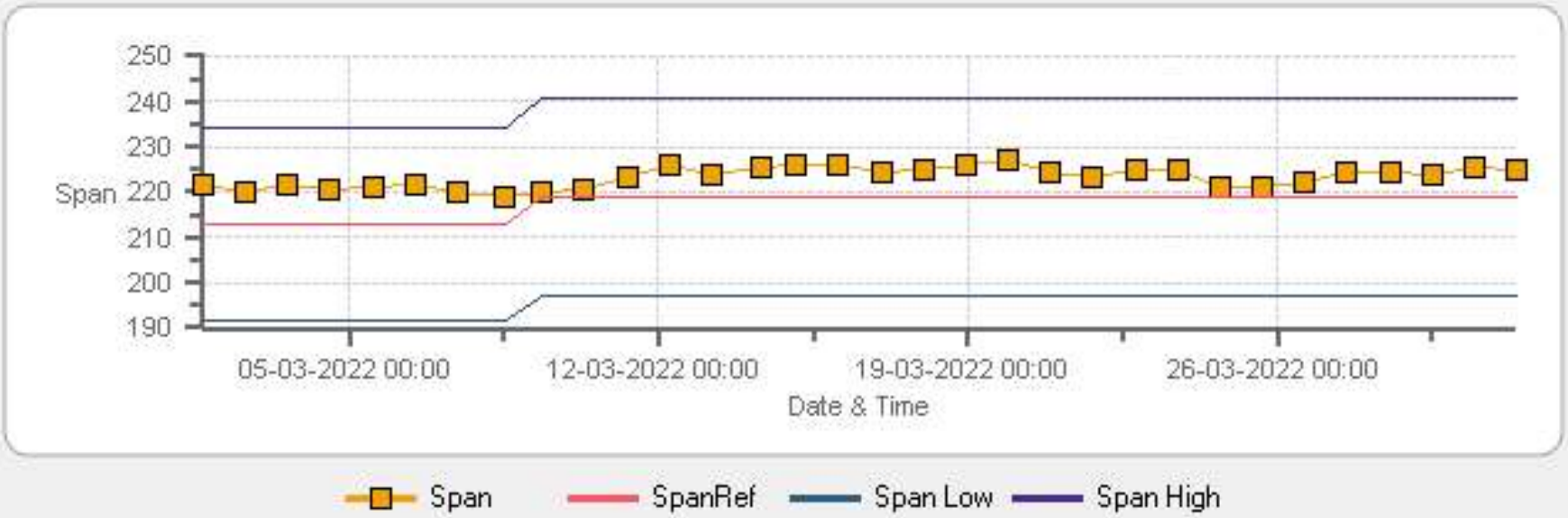
April 19, 2022

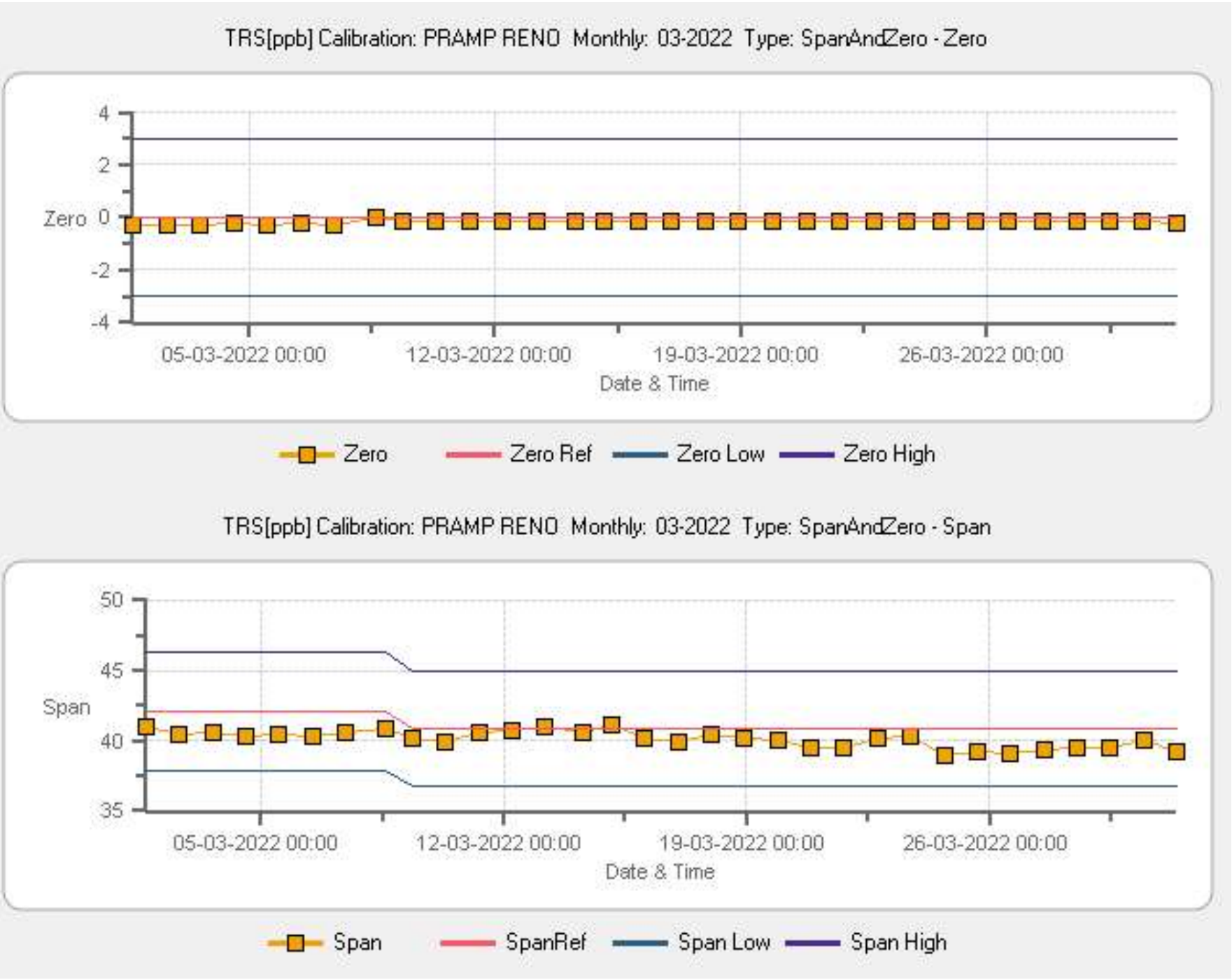
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

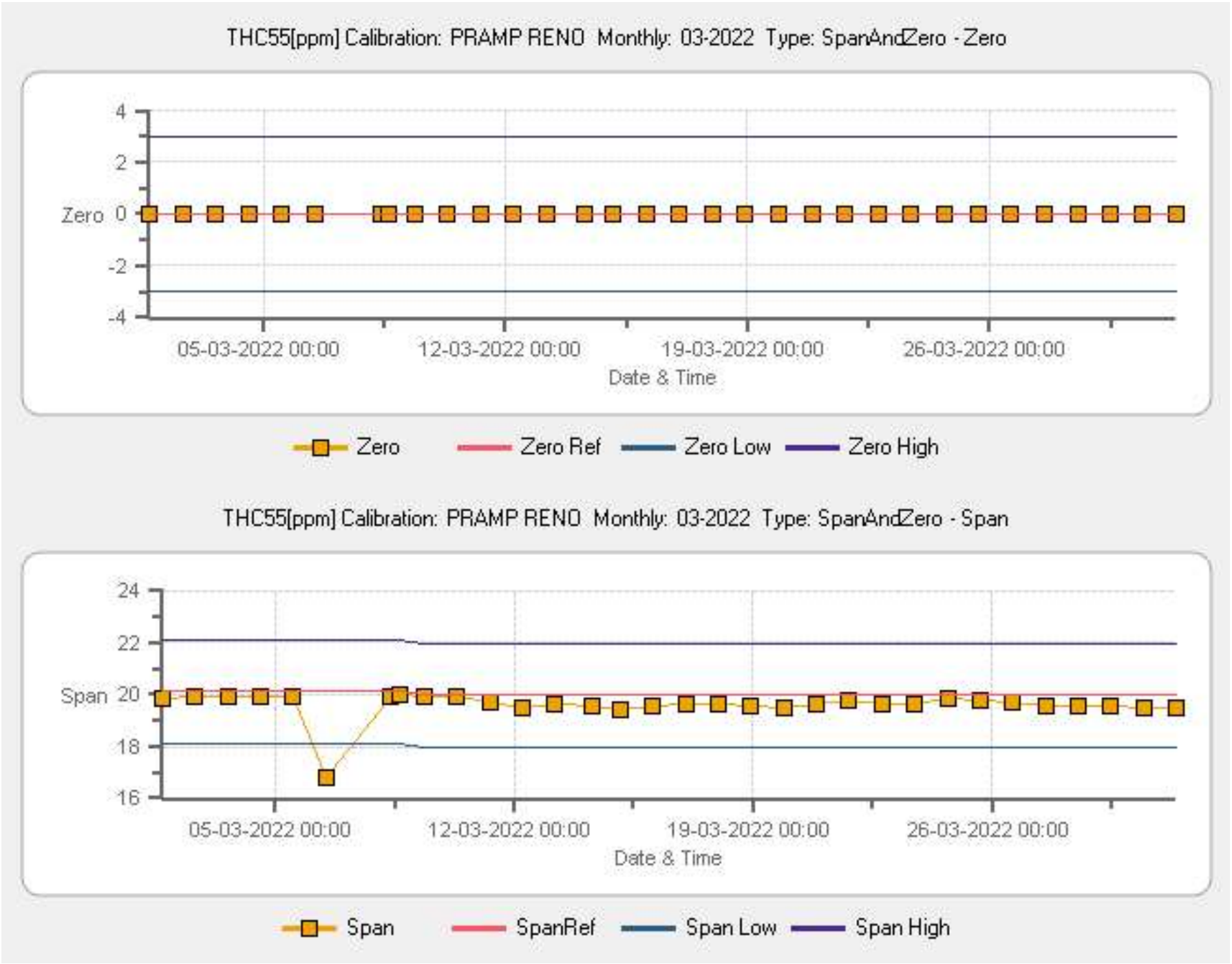
SO2[ppb] Calibration: PRAMP RENO Monthly: 03-2022 Type: SpanAndZero - Zero



SO2[ppb] Calibration: PRAMP RENO Monthly: 03-2022 Type: SpanAndZero - Span

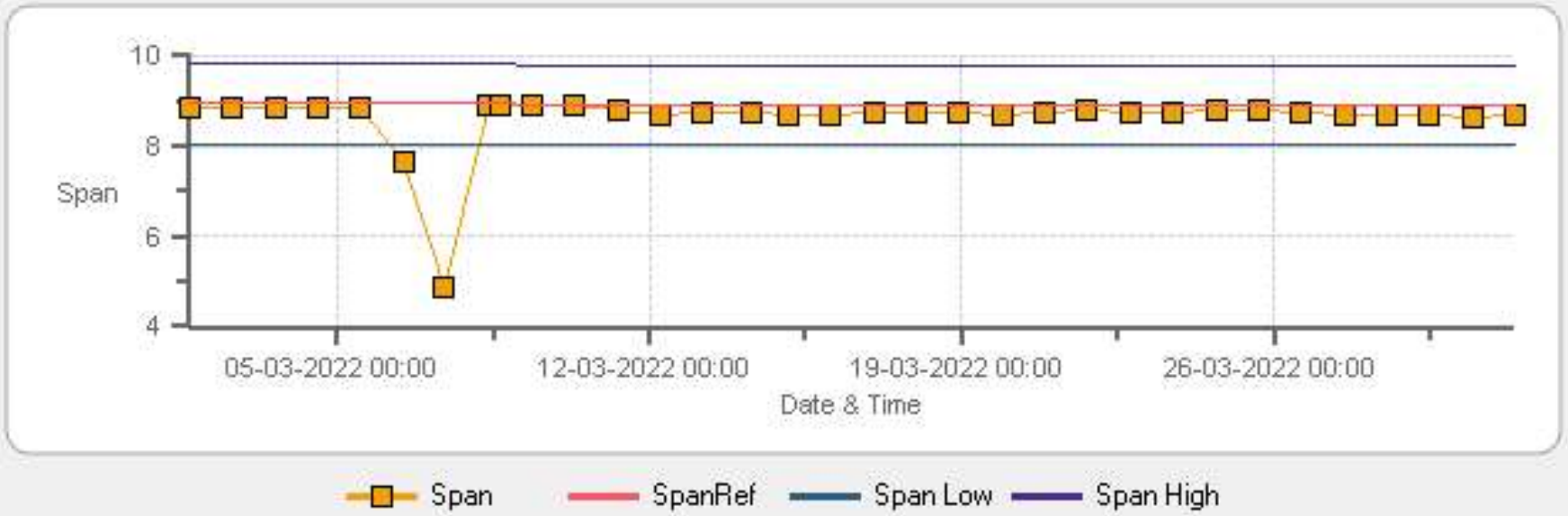



TRS[ppb] Calibration: PRAMP RENO Monthly: 03-2022 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
TRS[ppb] Calibration: PRAMP RENO Monthly: 03-2022 Type: SpanAndZero - Span
50
45
Span
40
35
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High


THC55[ppm] Calibration: PRAMP RENO Monthly: 03-2022 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
THC55[ppm] Calibration: PRAMP RENO Monthly: 03-2022 Type: SpanAndZero - Span
24
22
Span 20
18
16
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High

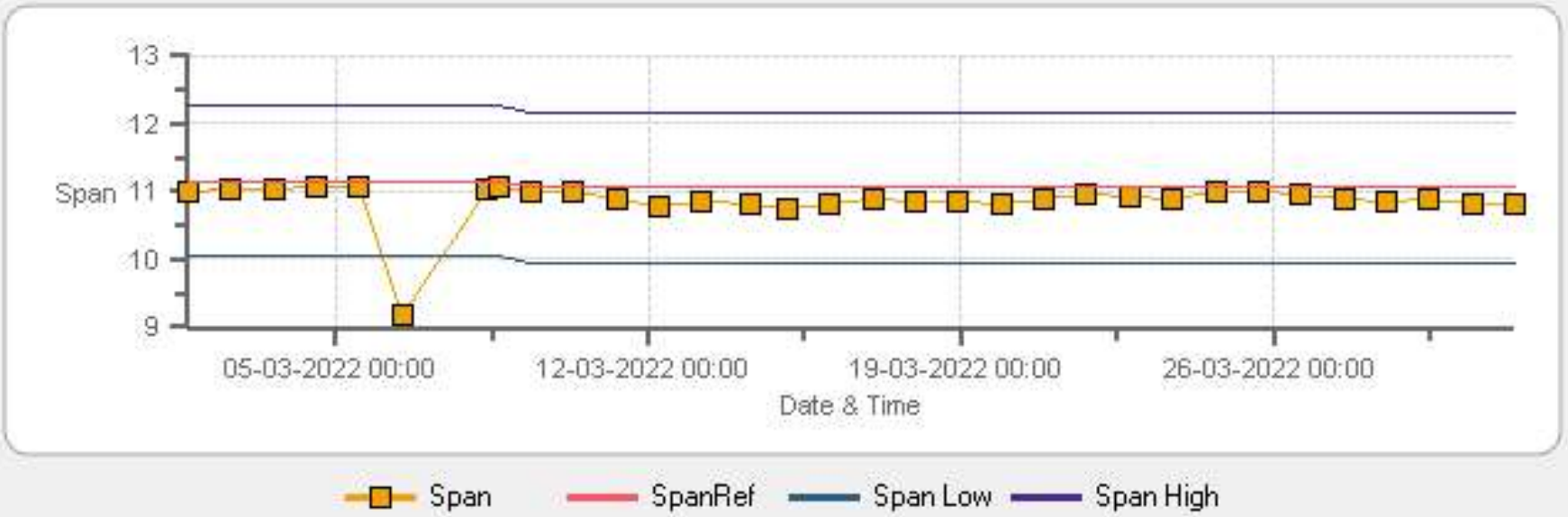
CH4[ppm] Calibration: PRAMP RENO Monthly: 03-2022 Type: SpanAndZero - Zero

CH4[ppm] Calibration: PRAMP RENO Monthly: 03-2022 Type: SpanAndZero - Span



NMHC[ppm] Calibration: PRAMP RENO Monthly: 03-2022 Type: SpanAndZero - Zero

NMHC[ppm] Calibration: PRAMP RENO Monthly: 03-2022 Type: SpanAndZero - Span



MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution

DATE:	08-Mar-2022	PREVIOUS CALIBRATION DATE:	01-Feb-2022
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.001
CLIENT:	PRAMP	TEMPERATURE (°C):	23.3
LOCATION:	Reno	BAROMETRIC (mBar):	955
PURPOSE	Routine	START TIME (MST):	08:49
PERFORMED BY:	Limin Li	END TIME (MST):	12:49

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	500 ppb
SERIAL #	12101910505	FLOW (mL/min)	453
INITIAL		FINAL	
BKG/OFFSET	1.07	BKG/OFFSET	1.06
COEF/SLOPE	0.945	COEF/SLOPE	0.944
Expected (reference) Value	213.2	Expected (reference) Value	213.2

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	701
ID:	17200415	ID:	1105
MFC CALIBRATION DATE:	20-Sep-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0000647	HIGH ID	n/a
CONC (ppm):	51.6	EXPIRY DATE	n/a
CYLINDER (psi):	900	LOW ID	n/a
EXPIRY DATE	24-Feb-2028	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

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

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

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

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
6000		6000	0.00	-0.1	0		
5956	44.20	6000	380.12	382.2	380	0.994	1.000
5979	20.90	6000	179.74	n/a	180.4	n/a	0.996
5990	10.50	6000	90.30	n/a	90.5	n/a	0.998

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	0.0%

COMMENTS:

Change sample filter.
10:33 = calibrator error. Restart adjusted high point.

SO2[ppb] Station: PRAMP RENO Daily: 08-03-2022 Type: AVG 1 Min. [1 Min.]

TRS Analyzer Calibration by Dilution

DATE:	08-Mar-2022	PREVIOUS CALIBRATION DATE:	01-Feb-2022
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.3
LOCATION:	Reno	BAROMETRIC (mBar):	955
PURPOSE	Routine	START TIME (MST):	08:49
PERFORMED BY:	Limin Li	END TIME (MST):	14:29

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	12101910504	FLOW (mL/min)	407
INITIAL		FINAL	
BKG/OFFSET	1.13	BKG/OFFSET	1
COEF/SLOPE	0.934	COEF/SLOPE	0.923
Expected (reference) Value	42.08	Expected (reference) Value	40.88

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Environics	MAKE:	API
MODEL:	6100	MODEL:	701
ID:	5212	ID:	1105
MFC CALIBRATION DATE:	21-Sep-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002272	HIGH ID	n/a
CONC (ppm):	10.20	EXPIRY DATE	n/a
CYLINDER (psi):	1800	LOW ID	n/a
EXPIRY DATE	14-Sep-2024	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:	09:11	SO2 Conc (ppb)	380
END TIME:	09:36	Analyzer Response (ppb)	0.5

CALIBRATION:

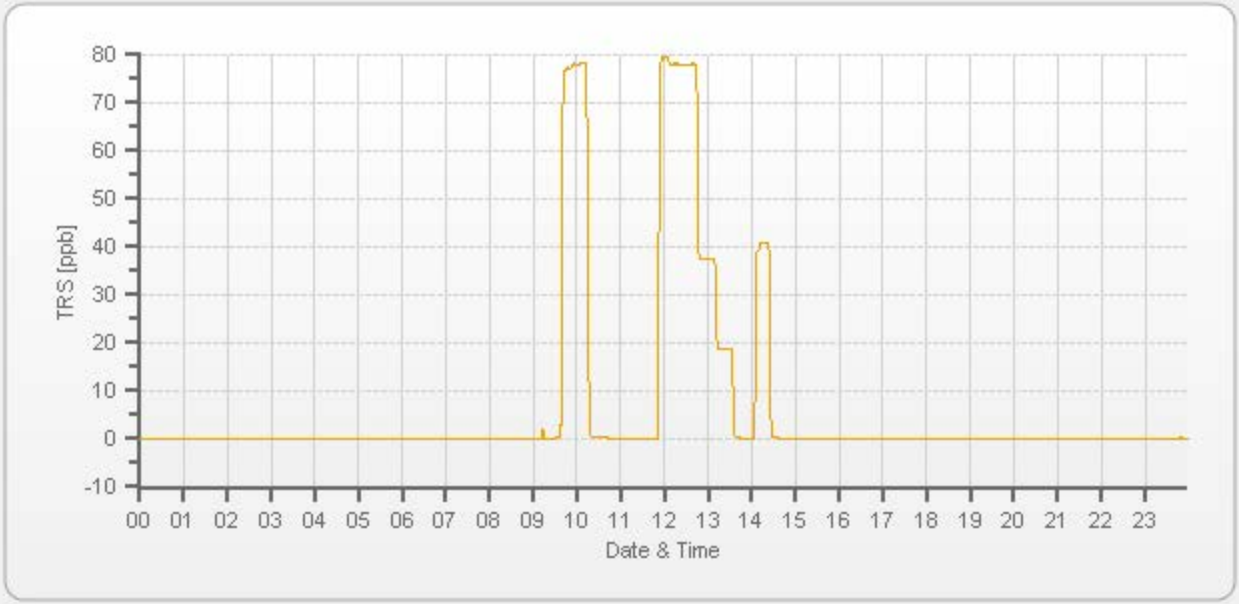
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
7500		7500	0.00	-0.2	0		
7443	57.35	7500	78.00	78.2	78	0.995	1.000
7472	27.94	7500	38.00	n/a	37.45	n/a	1.015
7486	13.97	7500	19.00	n/a	18.71	n/a	1.015

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	-0.2%

COMMENTS:

Converter: CDNova CDN-101 #590


TRS[ppb] Station: PRAMP RENO Daily: 08-03-2022 Type: AVG 1 Min. [1 Min.]
TRS [ppb]
80
70
60
50
40
30
20
10
0
-10
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Date & Time
TRS [ppb]

Methane/Non-Methane Analyzer Calibration by Dilution

CALIBRATION:

DATE:	08-Mar-2022	PREVIOUS CALIBRATION DATE:	01-Feb-2022
CLIENT:	PRAMP	TEMPERATURE (°C):	24.1
LOCATION:	Reno	BAROMETRIC (mBar):	955
PURPOSE	Routine	START TIME (MST):	11:58
PERFORMED BY:	Limin Li	END TIME (MST):	15:07

ANALYZER:

VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
	Thermo 55i	12101910497	1229
PARAMETER:	CH4	NMHC	THC
RANGE (ppm):	20	20	40
PREVIOUS CF:	1.004	1.004	1.004

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	API	CYLINDER ID:	LL28583		HIGH ID:	n/a
MODEL:	2010	MODEL:	701	CH_4/C_3H_8 (ppm):	608.0	203.0	HIGH EXPIRY:	n/a
ID:	17200415	ID:	1105	CYLINDER (psi):	2100		LOW ID:	n/a
MFC CALIBRATION DATE:	20-Sep-2021	OXIDIZER ID:	111	EXPIRY DATE	18-Aug-2029		LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH4/NMHC)	HIGH	MID	LOW	CH4 EQUIVILANCE	
TARGET	14	7	3.5	C_3H_8 as CH_4	558.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH_4	1166.3

EXPECTED (REFERENCE) VALUE:

INITIAL	CH4	NMHC	THC	FINAL	CH4	NMHC	THC
	8.94	11.16	20.11		8.91	11.06	19.97

CALIBRATION:

FLOW RATE (mL/min)			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC
3500		3500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
3416	84.00	3500	14.59	13.40	27.99	14.50	13.36	27.86	14.60	13.40	28.00	1.006	1.003	1.005	0.999	1.000	1.000
3458	42.00	3500	7.30	6.70	14.00	n/a	n/a	n/a	7.25	6.74	13.99	n/a	n/a	n/a	1.006	0.994	1.000
3479	21.00	3500	3.65	3.35	7.00	n/a	n/a	n/a	3.62	3.39	7.01	n/a	n/a	n/a	1.008	0.988	0.998

LINEAR REGRESSION ANALYSIS:

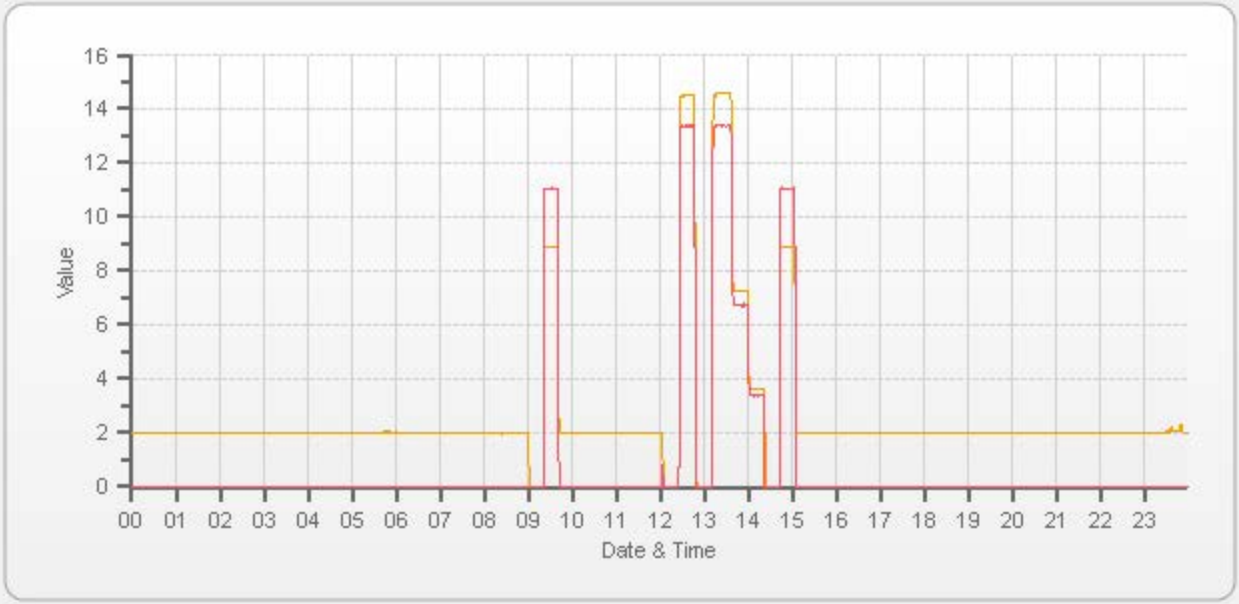
	CORRELATION	SLOPE	INTERCEPT
CH4	1.000	1.001	-0.1%
NMHC	1.000	0.999	0.1%
THC	1.000	1.000	0.0%

Comments:

Sample filter changed. Deionizer:1565 hours.

Use Zero Chrom? **No**

Station: PRAMP RENO Daily: 08-03-2022 Type: AVG 1 Min. [1 Min.]



Meteorological System Checklist

Date:	March 8, 2022
Technician:	Limin Li
Station:	PRAMP Reno

Unit:	Make:	Model:	Serial #:
Precipitation Sampler:	RM Young	52202	TB 15877
Temperature Sensor:	RM Young	43172VC	60837897
Barometric Pressure Sensor:	MetOne	92	K12864
Relative Humidity Sensor:	RM Young	43172VC	60837897
Anemometer:	RM Young	05305VK	149769

PRECIPITATION SENSOR CHECK

Checklist:	Reply:	Comments:
Previous check date:	February 1, 2022	Tiptest = 12:51~12:52
Is the sensor Level?	yes	
Is the heater operating properly?	yes	
Are the bucket drain holes clean?	yes	
Is the screen on the housing? (screen should be on between July and September	no	
Is the housing clean?	yes	
Is the area around the housing clean and free from obstacles?	yes	

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

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

AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	February 1, 2022
Parameter:	Temperature @ 2 metres
Reference Thermometer ID:	Fisher SCIENTIFIC 170286131 expires August 24, 2022
Reference Temperature (^{o}C):	-9.2
Station - Ambient Temperature (^{o}C):	-10.0
Temperature Difference (^{o}C):	0.8

BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	February 1, 2022	
Reference Barometer ID:	BRUNTON #5490, Expire: Feb 22, 2023	
Reference Pressure - Units/Reading:	millibar	955.1
Station Pressure - Units/Reading:	millibar	955.5
Pressure Tolerance +/- 15% of error:	812 - 1098	-0.04%

RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	February 1, 2022	
Reference Hygrometer ID:	Fisher SCIENTIFIC 170286131 expires August 24, 2022	
Reference Hygrometer % RH- Reading:	59.00	
Station Hygrometer % RH- Reading:	51.60	
RH Tolerance +/- 15% of difference:	50.15 - 67.85	12.5%

ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	February 1, 2022	Previous check date:	February 1, 2022
Wind Speed Observed (kph):	10~20	Wind Direction Observed:	N
Wind speed on Data Logger (kph):	16.4	Wind Direction on Data Logger:	N
		Wind Direction Pass/Fail?:	Pass

Comments

Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	**Performed By:**	Limin Li
Audit Location:	Reno	**Reviewed By:**	
Audit Date:	July 5, 2021	**Start/End Time (mst):**	12:46/13:50
Calibration Purpose:	routine annual	**Weather Conditions:**	Mainly sunny

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:	June 17, 2020	**Direction Unit Output Range:**	0-360

Wind Calibrator Information

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

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

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.0	0.0	-
1000	18.4	18.4	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	147.6	147.6	0.999
9000	165.9	166.2	166.2	0.998
10000	184.3	184.8	184.8	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	1	354	1.0	1.0	1.0
30	330	32	329	-2.0	1.0	1.5
60	300	62	300	-2.0	0.0	1.0
90	270	93	270	-3.0	0.0	1.5
120	240	122	240	-2.0	0.0	1.0
150	210	152	211	-2.0	-1.0	1.5
180	180	182	181	-2.0	-1.0	1.5
210	150	212	151	-2.0	-1.0	1.5
240	120	241	121	-1.0	-1.0	1.0
270	90	270	91	0.0	-1.0	0.5
300	60	300	61	0.0	-1.0	0.5
330	30	329	31	1.0	-1.0	1.0
355	0	354	0	1.0	0.0	0.5
The audit meets AMD requirements.			**Average Absolute Degrees Difference=**			**1.1**

Comments:

Bearings replaced. Declination = 15deg East

Peace River Area Monitoring Program

MARCH 2022

Ambient Air Monitoring Calibration Report

- AQHI - GRIMSHAW STATION-

CAL-PRAMP-202203-01689

Operation and Maintenance:
Bureau Veritas Canada

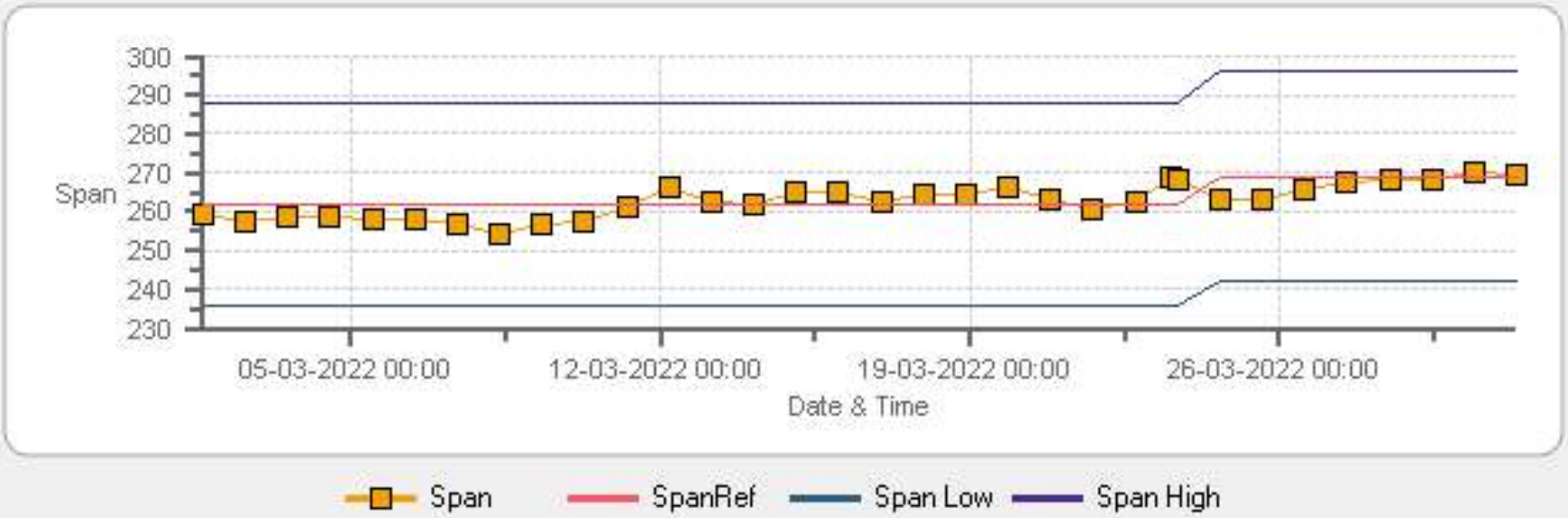
Data Validation and Report:
Bureau Veritas Canada

April 19, 2022

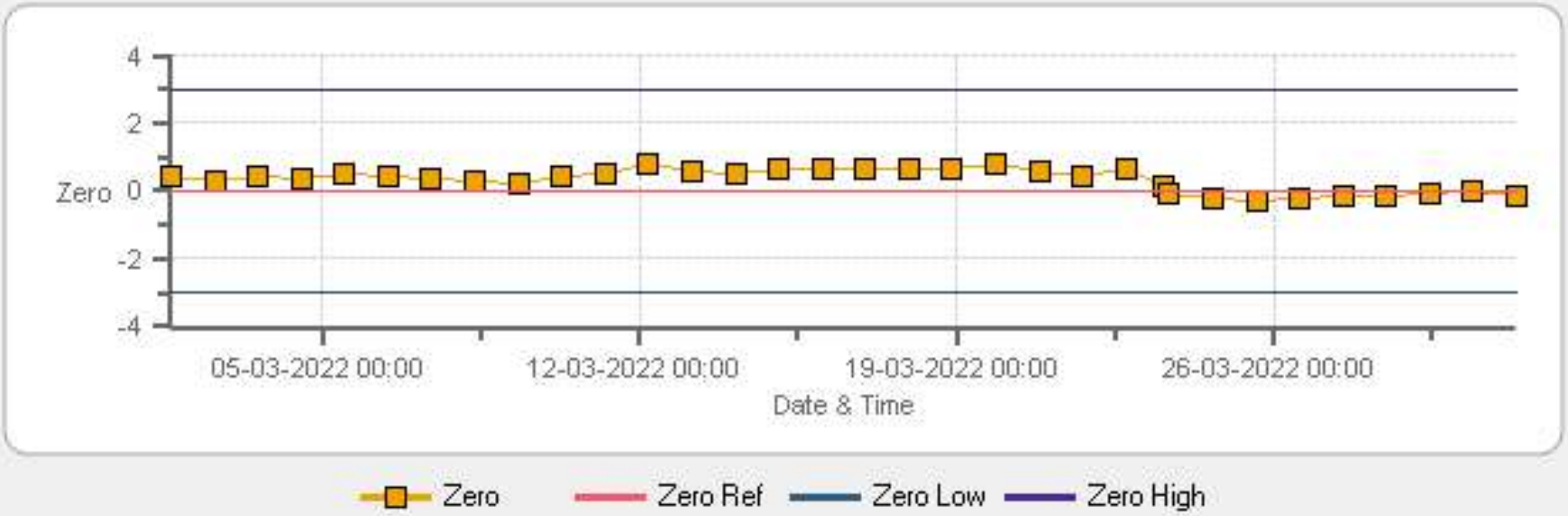
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Zero

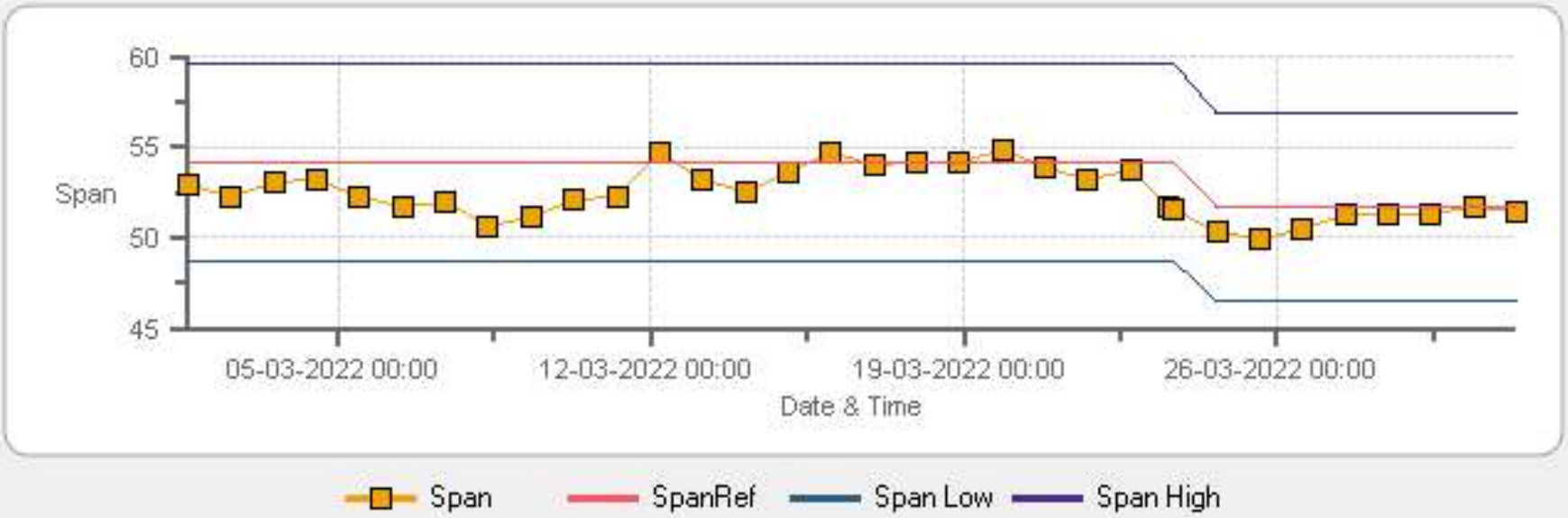
SO2[ppb] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Span



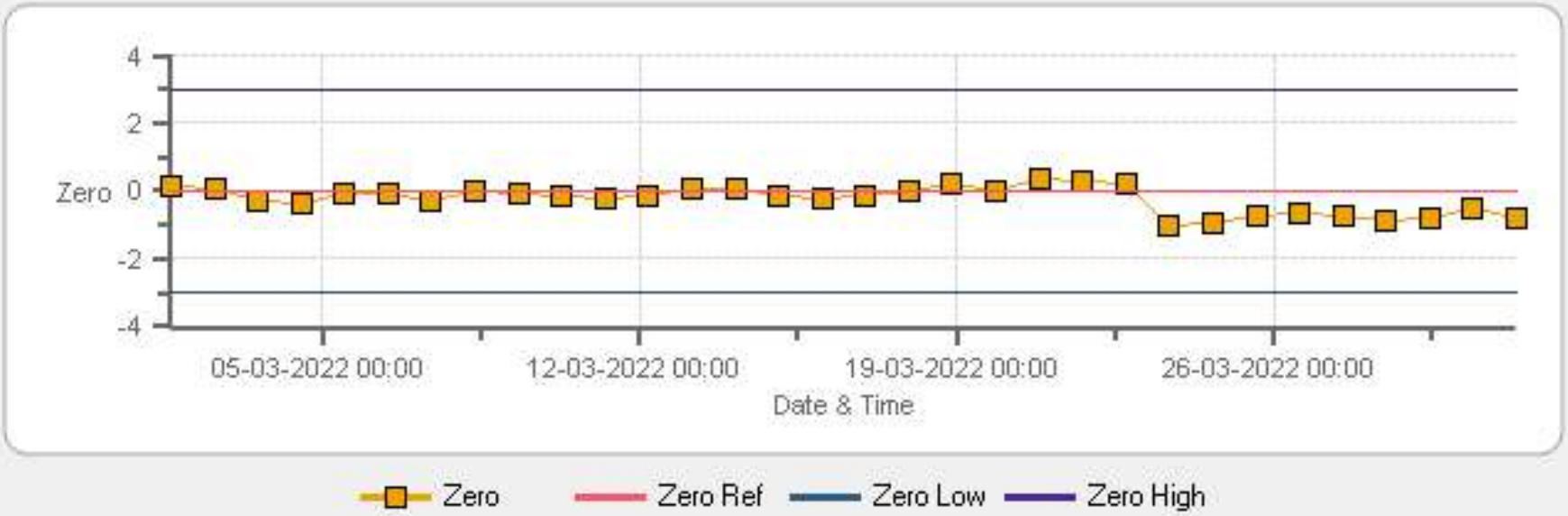
TRS[ppb] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Zero



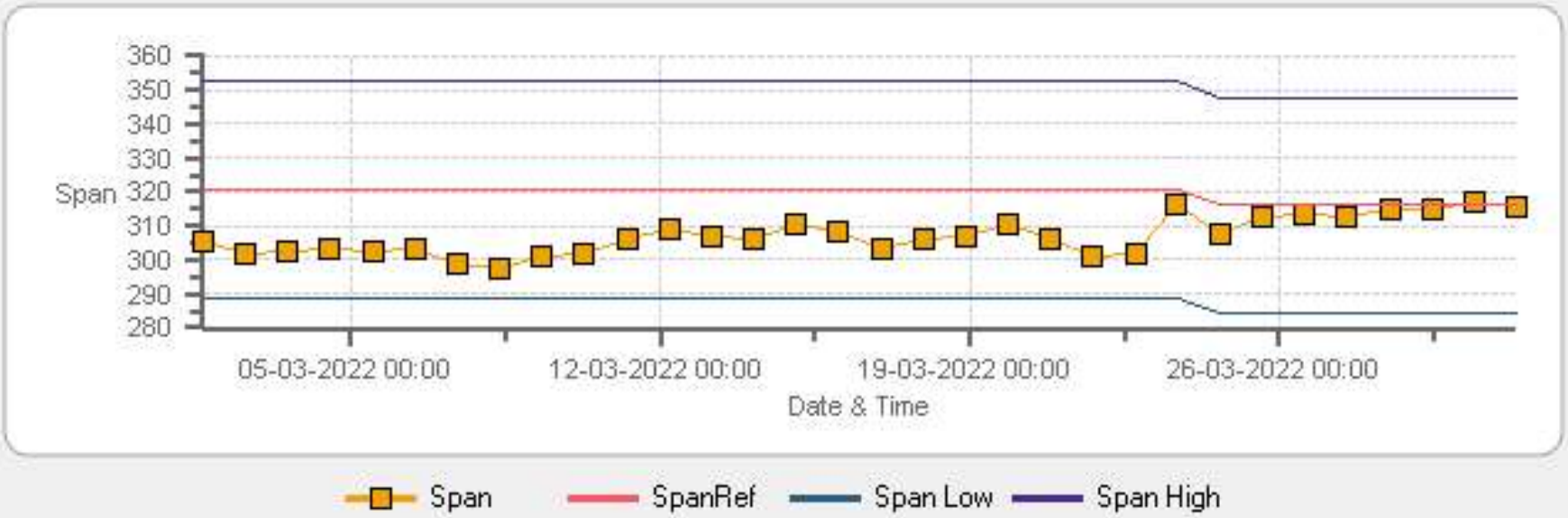
TRS[ppb] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Span



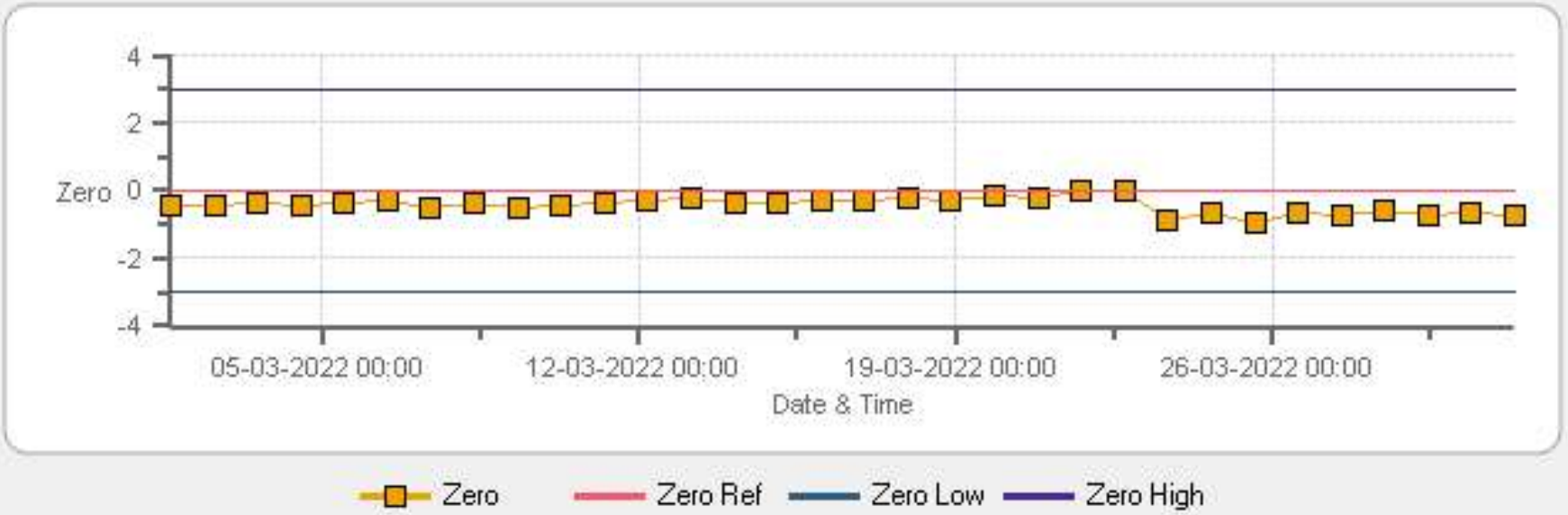
NOX[ppb] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Zero



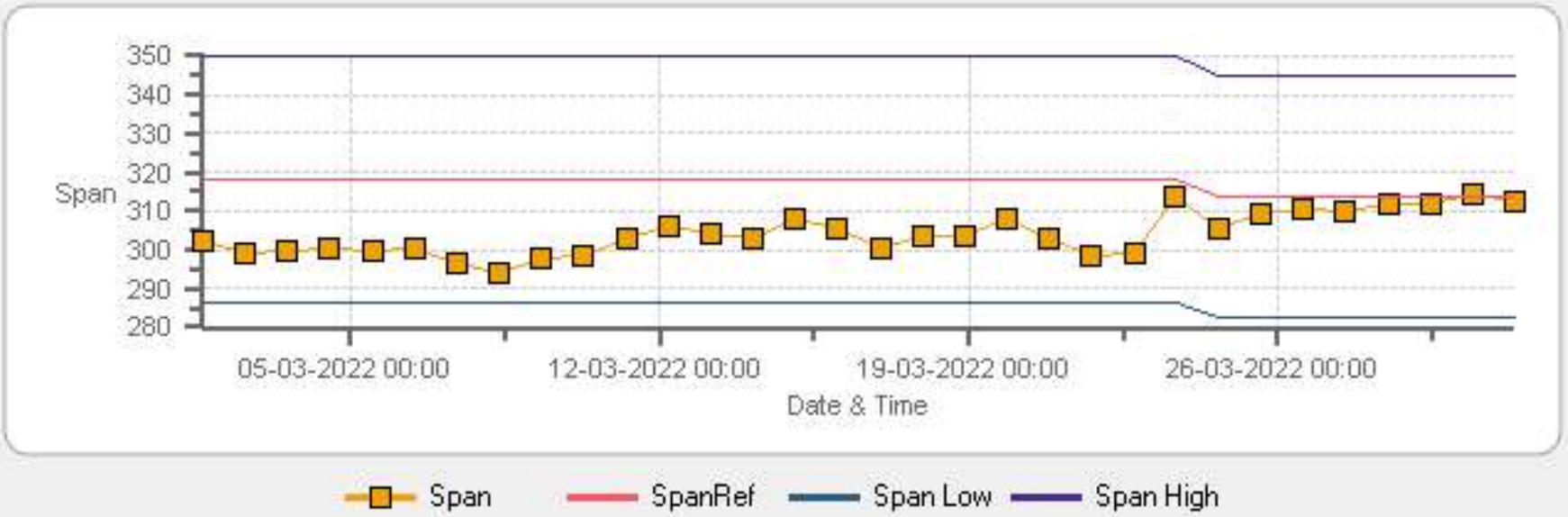
NOX[ppb] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Span



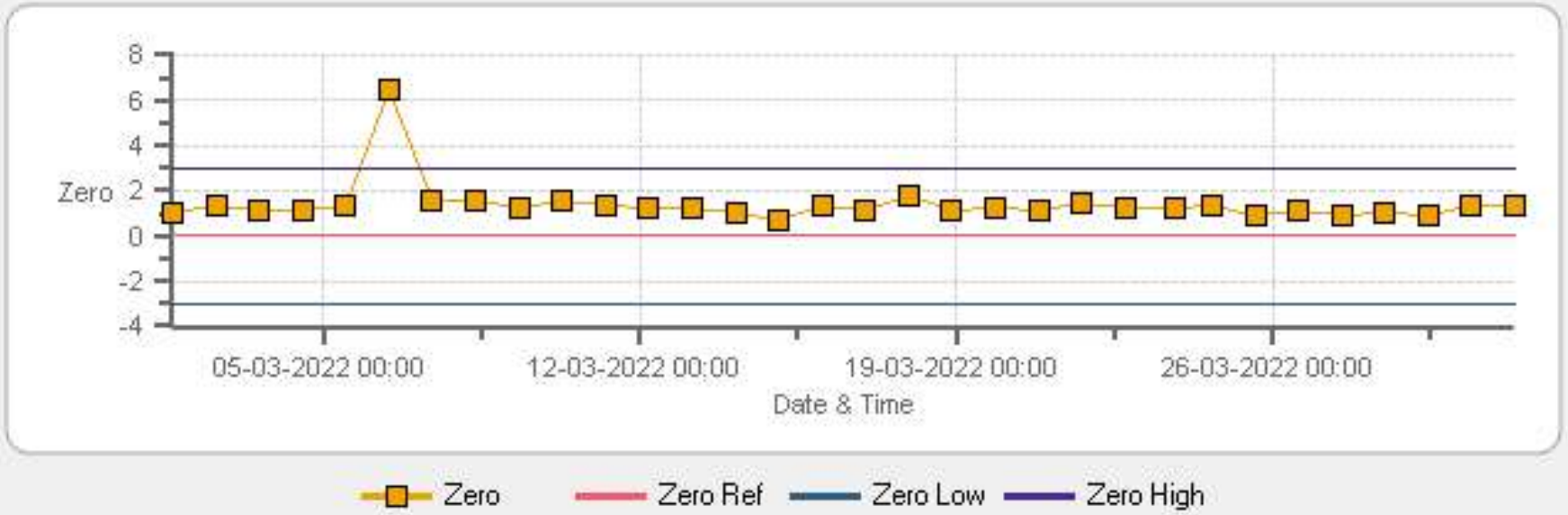
NO2[ppb] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Zero



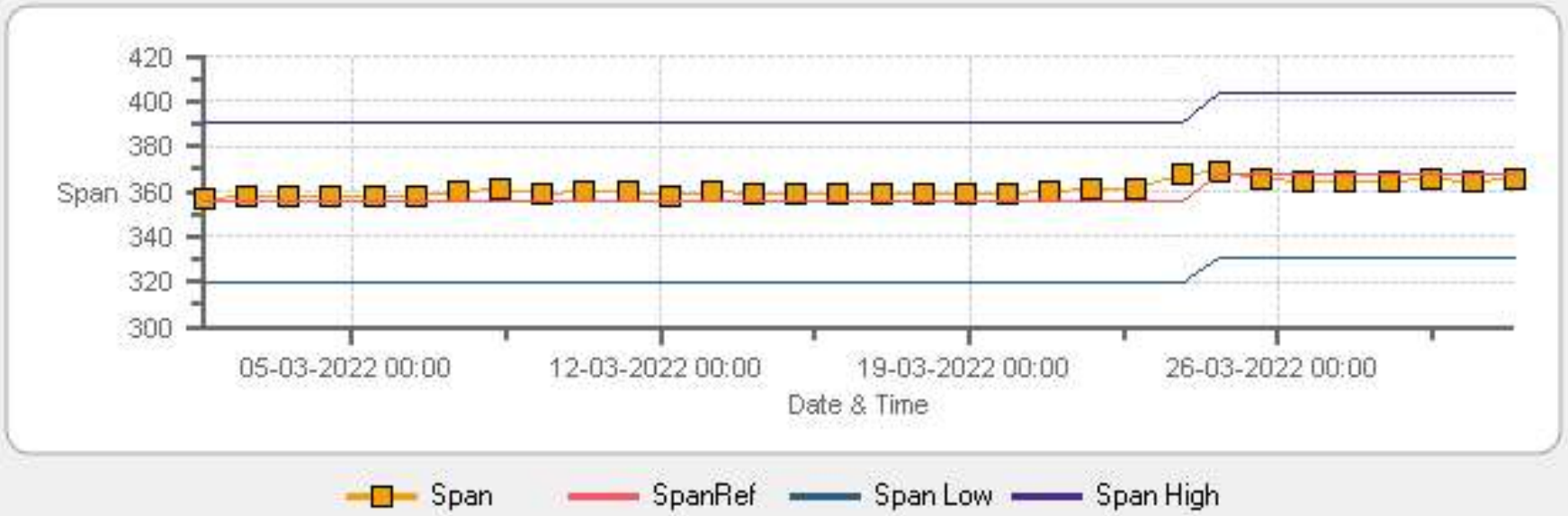
NO2[ppb] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Span

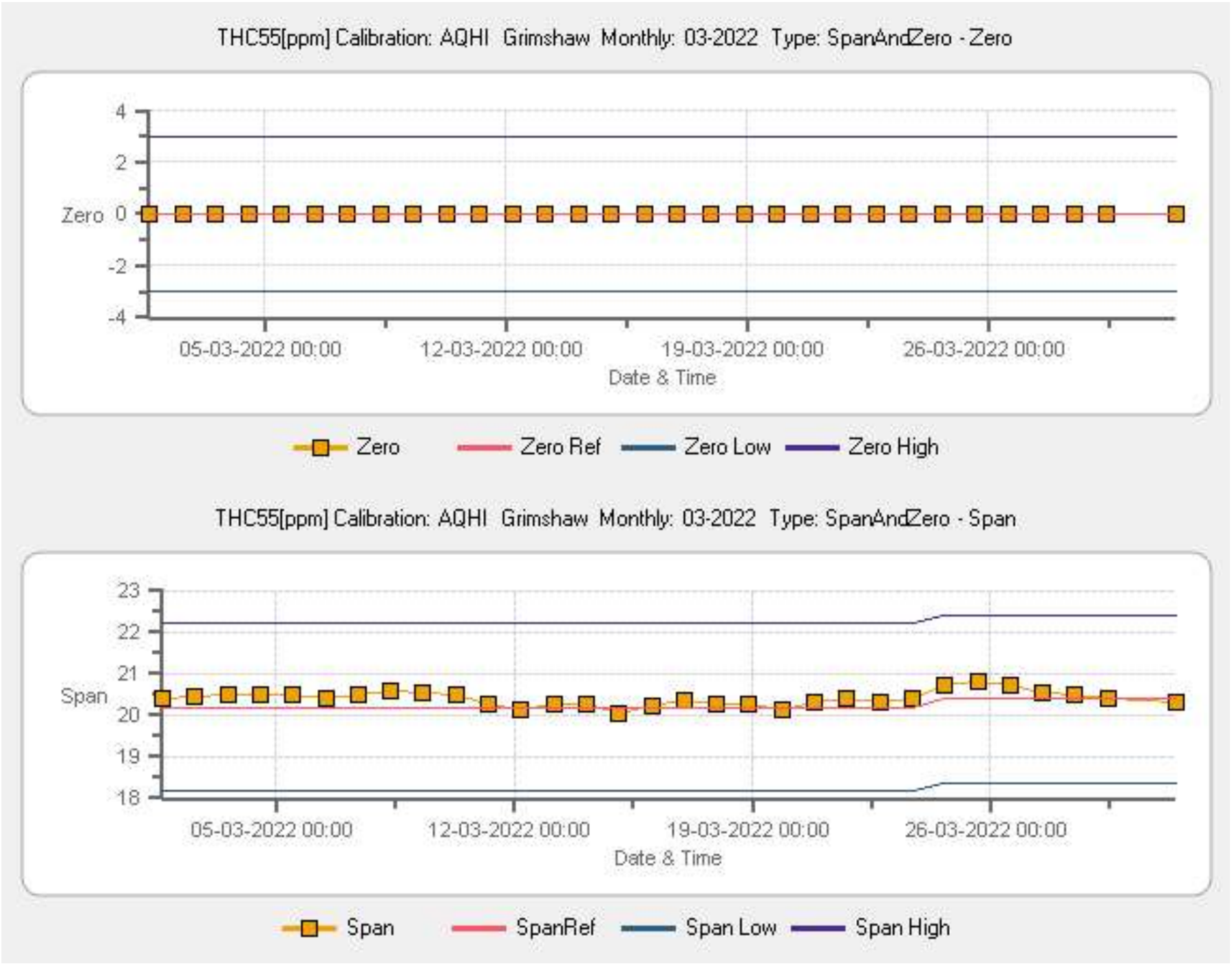


O3[ppb] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Zero



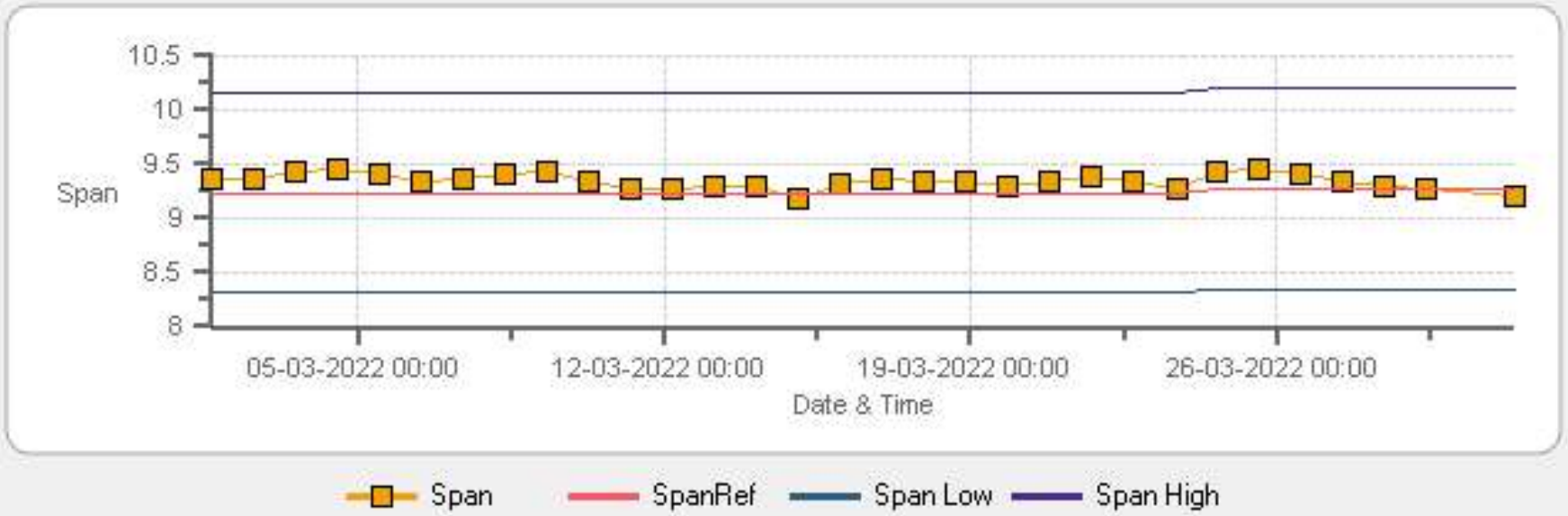
O3[ppb] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Span

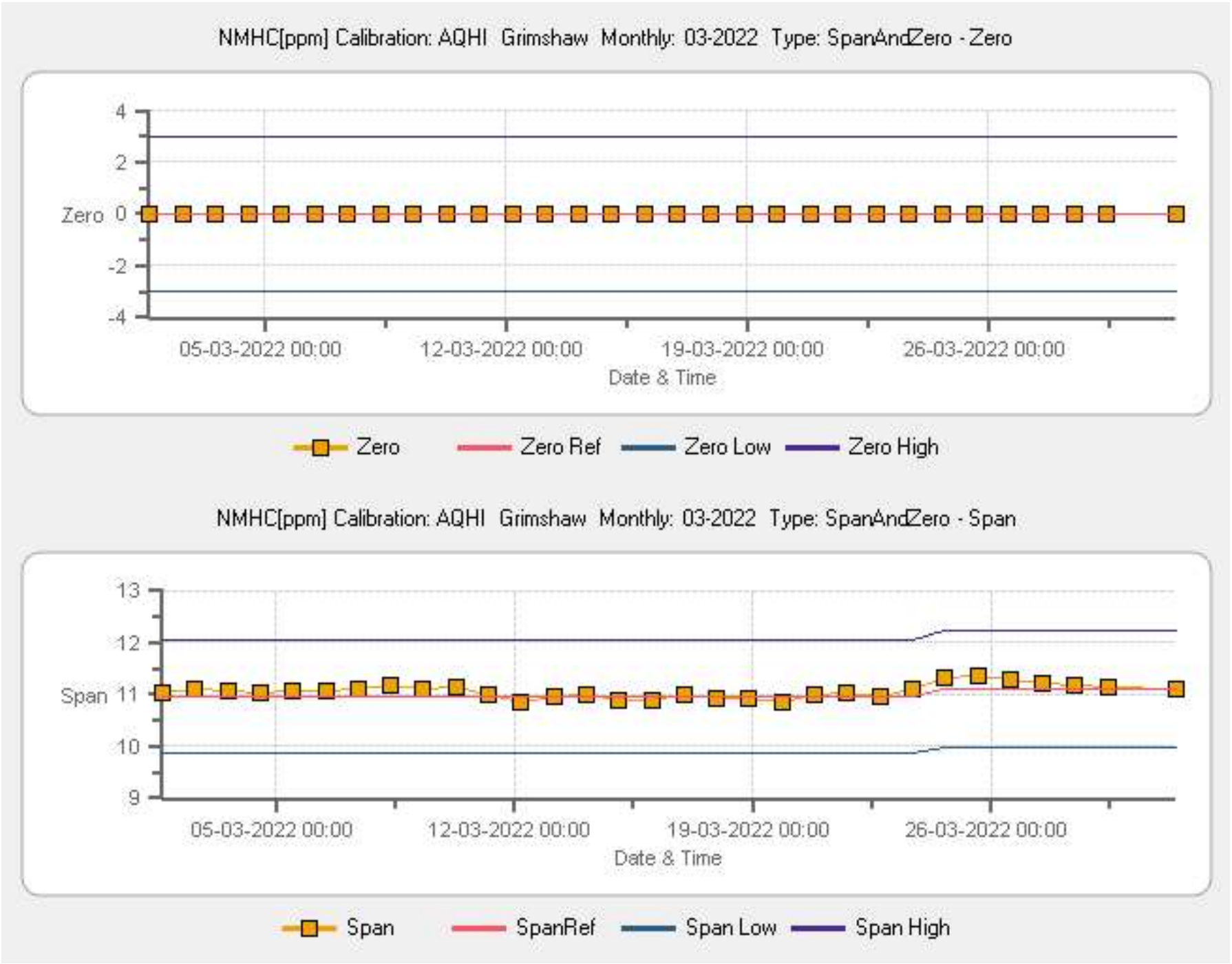



THC55[ppm] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
THC55[ppm] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Span
23
22
21
Span
20
19
18
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High

CH4[ppm] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Zero

CH4[ppm] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Span




NMHC[ppm] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
NMHC[ppm] Calibration: AQHI Grimshaw Monthly: 03-2022 Type: SpanAndZero - Span
13
12
Span 11
10
9
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution

DATE:	23-Mar-2022	PREVIOUS CALIBRATION DATE:	15-Feb-2022
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	22.7
LOCATION:	Grimshaw	BAROMETRIC (mBar):	933
PURPOSE	Routine	START TIME (MST):	08:56
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:38

ANALYZER:

MAKE/MODEL	Teledyne T100	RANGE	500 ppb
SERIAL #	722	FLOW (mL/min)	523
INITIAL		FINAL	
BKG/OFFSET	23.6	BKG/OFFSET	24
COEF/SLOPE	0.926	COEF/SLOPE	0.942
Expected (reference) Value	261.8	Expected (reference) Value	269

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Environics	MAKE:	Teledyne
MODEL:	2000	MODEL:	M701
ID:	1991	ID:	5004
MFC CALIBRATION DATE:	24-Sep-2021	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):	290	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:

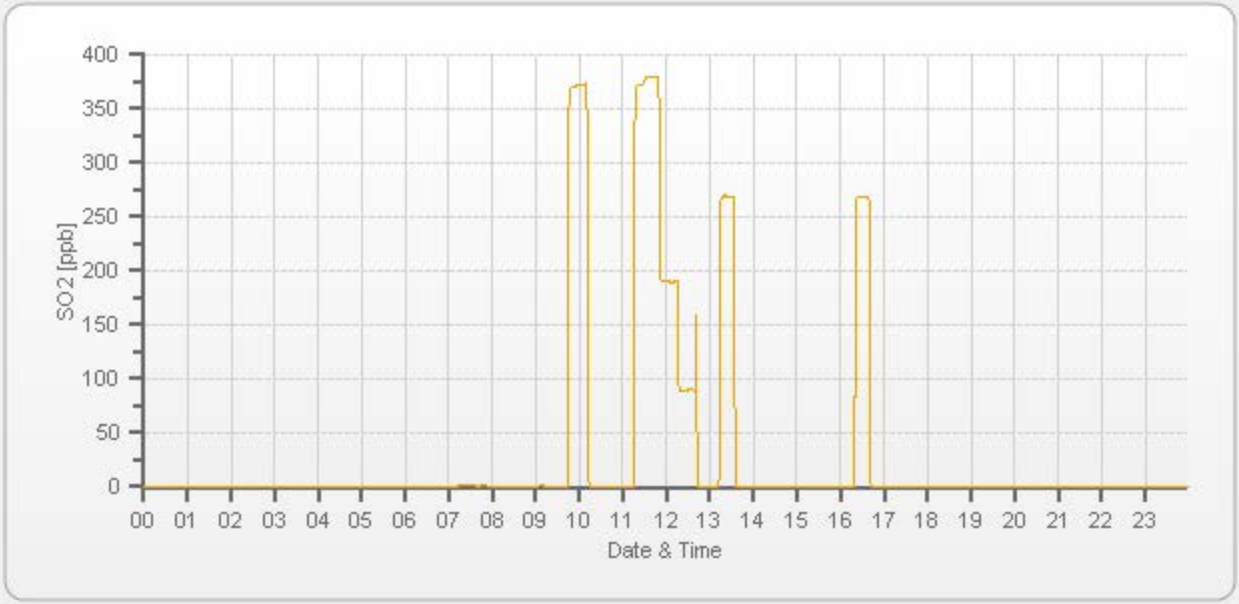
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
4001		4001	0.00	0.3	0		
3940	61.05	4001	379.95	373.5	379.9	1.018	1.000
3970	30.50	4001	189.83	n/a	190	n/a	0.999
3989	14.44	4004	89.82	n/a	89.7	n/a	1.001

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	0.0%

COMMENTS:

Sample filter changed. Monthly calibration - no issues.


SO2[ppb] Station: AQHI Grimshaw Daily: 23-03-2022 Type: AVG 1 Min. [1 Min.]
SO2 [ppb]
400
350
300
250
200
150
100
50
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Date & Time
SO2 [ppb]

TRS Analyzer Calibration by Dilution

DATE:	23-Mar-2022	PREVIOUS CALIBRATION DATE:	16-Feb-2022
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	22.7
LOCATION:	Grimshaw	BAROMETRIC (mBar):	933
PURPOSE	Routine	START TIME (MST):	08:56
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:38

ANALYZER:

MAKE/MODEL	Teledyne T100U	RANGE	100 ppb
SERIAL #	132	FLOW (mL/min)	508
INITIAL		FINAL	
BKG/OFFSET	24.9	BKG/OFFSET	26.4
COEF/SLOPE	1.141	COEF/SLOPE	1.106
Expected (reference) Value	54.14	Expected (reference) Value	51.74

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Environics	MAKE:	Teledyne
MODEL:	2000	MODEL:	M701
ID:	1991	ID:	5004
MFC CALIBRATION DATE:	24-Sep-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002472	HIGH ID	n/a
CONC (ppm):	9.41	EXPIRY DATE	n/a
CYLINDER (psi):	610	LOW ID	n/a
EXPIRY DATE	10-Nov-2023	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

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

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

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

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
4001		4001	0.00	0.61	0		
3967	33.18	4001	78.05	81.01	78.06	0.971	1.000
3984	16.17	4001	38.04	n/a	37.61	n/a	1.011
3996	8.10	4004	19.04	n/a	18.9	n/a	1.007

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	-0.1%

COMMENTS:

TRS Converter CD-NOVA CDN # 530. Sample filter changed. Monthly calibration - no issues.

TRS[ppb] Station: AQHI Grimshaw Daily: 23-03-2022 Type: AVG 1 Min. [1 Min.]

NOx Calibration by Dilution/Gas-Phase Titration

CALIBRATION:

				ANALYZER:			
DATE:	23-Mar-2022	PREVIOUS CALIBRATION DATE:	16-Feb-2022	MAKE/MODEL:	Teledyne T200	PREVIOUS CF.	
CLIENT:	PRAMP	TEMPERATURE (°C):	22.7	SERIAL #:	837	NOx	1.000
LOCATION:	Grimshaw	BAROMETRIC (mBar):	933	FLOW (mL/min)	435	NO	1.000
PURPOSE	Routine	START TIME (MST):	08:56	RANGE (ppb)	500	NO2	0.998
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	16:20	GPT FOR O3?		Yes	

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	LL48147		HIGH ID:	n/a
MODEL:	2010	MODEL:	M701	NO/NOx (PPM):	50.5	50.6	HIGH EXPIRY:	n/a
ID:	17100415	ID:	5004	CYLINDER (psi):	390		LOW ID:	n/a
MFC CALIBRATION DATE:	27-Sep-2021	OXIDIZER ID:	n/a	EXPIRY DATE	20-Aug-2026		LOW EXPIRY:	n/a

CALIBRATION SETTINGS:

INITIAL	NOx	NO	NO2	FINAL	NOx	NO	NO2
BKG/OFFSET:	0	-1.2	n/a	BKG/OFFSET:	1.8	-0.3	n/a
SLOPE/COEF/CE:	1.028	1.03	0.999	SLOPE/COEF/CE:	1.073	1.068	0.999

EXPECTED (REFERENCE) VALUE:

INITIAL	NOx	NO	NO2	FINAL	NOx	NO	NO2
	320.9	2.9	318.0		316.2	2.6	313.6

CALIBRATION PARAMETERS:

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

NO/NOx CALIBRATION:

FLOW RATE (mL/min)			CONCENTRATION (ppb)									CORRECTION FACTOR (CF.)					
			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	NO	NOx	NO2	NO	NOx	NO2	NO	NOx	NO2	NO	NOx	NO2	NO	NOx	NO2
4997		4997	0.0	0.0	0.0	0.2	2.1	1.9	0.0	0.0	0.0						
4958	39.10	4997	395.1	395.9	0.8	378.3	379.6	1.3	395.2	395.9	0.7	1.045	1.049		1.000	1.000	
4980	17.80	4998	179.9	180.2	0.4	n/a	n/a	n/a	179.1	179.1	0.0	n/a	n/a		1.004	1.006	
4988	8.90	4997	89.9	90.1	0.2	n/a	n/a	n/a	90.2	90.0	-0.2	n/a	n/a		0.997	1.001	

GPT CALIBRATION:

Point	CALIBRATOR			INDICATED (ppb)			NO DROP / O3 Conc (ppb)	NO2 GAIN (ppb)	NO2 Corr. FACTOR	CONV. EFFICIENCY
	GAS	TOTAL	O3 SETPOINT	NO	NOx	NO2				
REFERENCE	39.10	4997	0	392.9	394.9	2.0				
AS-FOUND HIGH	39.10	4997	250	134.8	394.7	259.9	258.1	257.9	1.001	99.92%
ADJUSTED HIGH	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	**n/a**	n/a
MID	39.10	4997	147	238.7	394.4	155.7	154.2	153.7	1.003	99.68%
LOW	39.10	4997	48	341.4	394.2	52.7	51.5	50.7	1.016	98.45%
NO2 adjustment not required.									AVERAGE:	99.35%

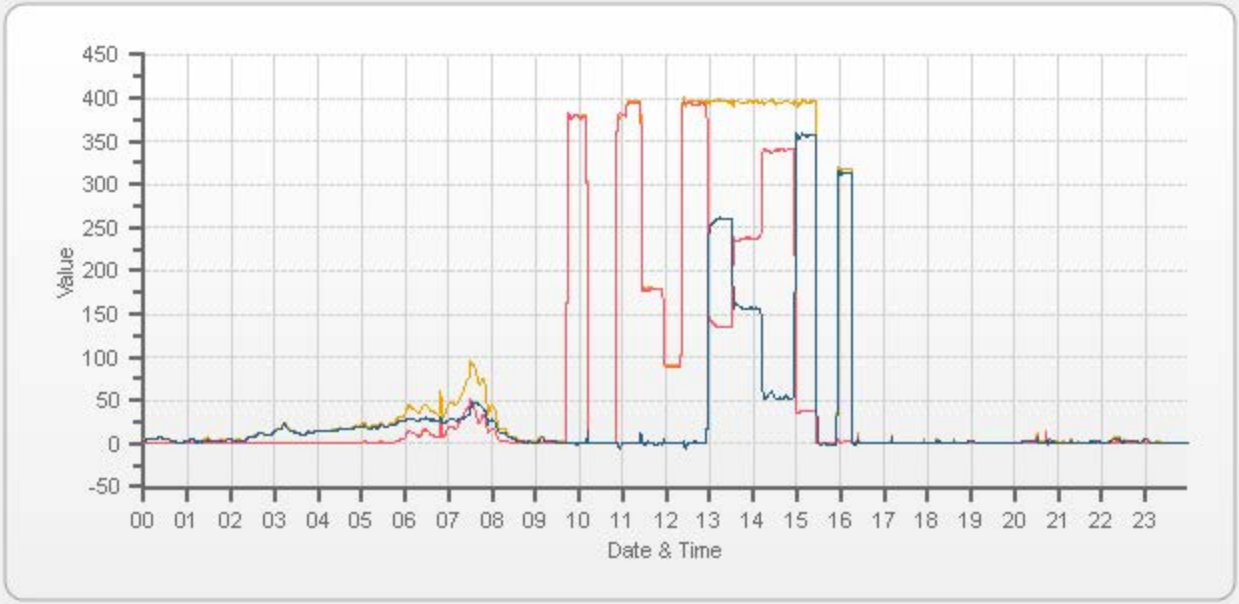
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
NO	1.000	1.000	-0.02%
NOx	1.000	1.000	-0.06%
NO2	1.000	1.003	-0.19%

COMMENTS:

Sample filter changed. Monthly calibration - no issues. Extra O3 SETPOINT = 340; NO DROP/O3 = 355.6

Station: AQHI Grimshaw Daily: 23-03-2022 Type: AVG 1 Min. [1 Min.]



Ozone Calibration by Direct GPT

DATE:	23-Mar-2022	PREVIOUS CALIBRATION DATE:	16-Feb-2022
PARAMETER:	O3	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	22.5
LOCATION:	Grimshaw	BAROMETRIC (mBar):	935
PURPOSE	Routine	START TIME (MST):	15:36
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	20:14

ANALYZER:

MAKE/MODEL	API 400A	RANGE	500 ppb
SERIAL #	445	FLOW (mL/min)	811
INITIAL		FINAL	
BKG/OFFSET	-2.1	BKG/OFFSET	-2.3
COEF/SLOPE	0.977	COEF/SLOPE	0.985
Expected (reference) Value	355.3	Expected (reference) Value	367.4

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	17100415	ID:	5004
MFC CALIBRATION DATE:	27-Sep-2021	OXIDIZER ID:	n/a
	CALIBRATION METHOD:	Direct GPT	
GPT DATE:	23-Mar-2022	GPT END TIME:	15:26

CALIBRATION PARAMETERS:

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

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
4997		4997	0.0	0.6	0.0		
4997		4997	355.6	355.7	355.6	1.001	1.000
4997		4997	154.2	n/a	156.3	n/a	0.987
4997		4997	51.5	n/a	52.6	n/a	0.979

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.999	0.2%

COMMENTS:

Interrupted by daily Zero/Span at 16:00, restart as-found zero.
Sample filter changed.

O3[ppb] Station: AQHI Grimshaw Daily: 23-03-2022 Type: AVG 1 Min. [1 Min.]

Methane/Non-Methane Analyzer Calibration by Dilution

CALIBRATION:

DATE:	23-Mar-2022	PREVIOUS CALIBRATION DATE:	15-Feb-2022
CLIENT:	PRAMP	TEMPERATURE (°C):	20.5
LOCATION:	Grimshaw	BAROMETRIC (mBar):	933
PURPOSE	Routine	START TIME (MST):	13:20
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	17:04

ANALYZER:

VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
	Thermo 55i	1191032505	1134.5
PARAMETER:	CH4	NMHC	THC
RANGE (ppm):	20	20	40
PREVIOUS CF:	1.000	0.997	0.999

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Environics	MAKE:	Teledyne	CYLINDER ID:	LL28583		HIGH ID:	n/a
MODEL:	2000	MODEL:	M701	CH_4/C_3H_8 (ppm):	608.0	203.0	HIGH EXPIRY:	n/a
ID:	1991	ID:	5004	CYLINDER (psi):	1800		LOW ID:	n/a
MFC CALIBRATION DATE:	24-Sep-2021	OXIDIZER ID:	Internal	EXPIRY DATE	18-Aug-2029		LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH4/NMHC)	HIGH	MID	LOW	CH4 EQUIVILANCE	
TARGET	14	7	3.5	C_3H_8 as CH_4	558.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH_4	1166.3

EXPECTED (REFERENCE) VALUE:

INITIAL	CH4	NMHC	THC	FINAL	CH4	NMHC	THC
	9.23	10.97	20.20		9.27	11.11	20.39

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC
3003		3003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
2930	72.02	3002	14.59	13.39	27.98	14.54	13.08	27.64	14.59	13.39	27.97	1.003	1.024	1.012	1.000	1.000	1.000
2968	35.99	3004	7.28	6.69	13.97	n/a	n/a	n/a	7.28	6.68	13.96	n/a	n/a	n/a	1.001	1.001	1.001
2985	17.98	3003	3.64	3.34	6.98	n/a	n/a	n/a	3.63	3.31	6.94	n/a	n/a	n/a	1.003	1.010	1.006

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
CH4	1.000	1.001	0.0%
NMHC	1.000	1.001	-0.1%
THC	1.000	1.000	0.0%

Comments:

Sample filter changed. Monthly calibration - no issues.

Use Zero Chrom? **Yes**

Station: AQHI Grimshaw Daily: 23-03-2022 Type: AVG 1 Min. [1 Min.]

Methane/Non-Methane Analyzer Calibration by Dilution

CALIBRATION:

DATE:	31-Mar-2022	PREVIOUS CALIBRATION DATE:	n/a
CLIENT:	PRAMP	TEMPERATURE (°C):	21.0
LOCATION:	Grimshaw	BAROMETRIC (mBar):	935
PURPOSE	Install/Post-Repair	START TIME (MST):	08:10
PERFORMED BY:	Chris Wesson	END TIME (MST):	10:55

ANALYZER:

VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
	Thermo 55i	1191032505	1121
PARAMETER:	CH4	NMHC	THC
RANGE (ppm):	20	20	40
PREVIOUS CF:	n/a	n/a	n/a

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	LL28583		HIGH ID:	n/a
MODEL:	2010	MODEL:	M701	CH_4/C_3H_8 (ppm):	608.0	203.0	HIGH EXPIRY:	n/a
ID:	58100720	ID:	4568	CYLINDER (psi):	1900		LOW ID:	n/a
MFC CALIBRATION DATE:	15-Mar-2022	OXIDIZER ID:	Internal	EXPIRY DATE	18-Aug-2029		LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH4/NMHC)	HIGH	MID	LOW	CH4 EQUIVILANCE	
TARGET	14	7	3.5	C_3H_8 as CH_4	558.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH_4	1166.3

EXPECTED (REFERENCE) VALUE:

INITIAL	CH4	NMHC	THC	FINAL	CH4	NMHC	THC
	9.27	11.11	20.39		9.21	11.12	20.33

CALIBRATION:

FLOW RATE (mL/min)			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC
2902		2902	0.00	0.00	0.00	n/a	n/a	n/a	0.00	0.00	0.00						
2831	69.60	2901	14.59	13.39	27.98	n/a	n/a	n/a	14.58	13.39	27.97	n/a	n/a	n/a	1.000	1.000	1.000
2865	34.80	2900	7.30	6.70	14.00	n/a	n/a	n/a	7.32	6.69	14.01	n/a	n/a	n/a	0.997	1.001	0.999
2886	17.40	2903	3.64	3.35	6.99	n/a	n/a	n/a	3.71	3.33	7.04	n/a	n/a	n/a	0.982	1.005	0.993

LINEAR REGRESSION ANALYSIS:

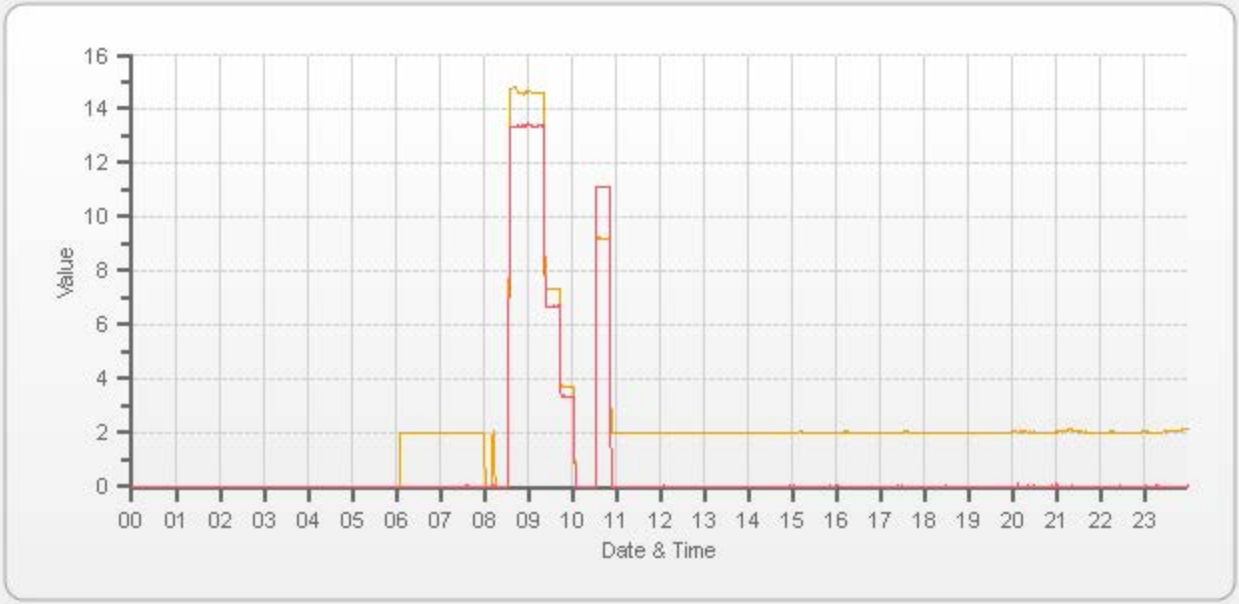
	CORRELATION	SLOPE	INTERCEPT
CH4	1.000	0.998	0.2%
NMHC	1.000	1.000	0.0%
THC	1.000	0.999	0.1%

Comments:

Actuator and rotor replaced

Use Zero Chrom? **Yes**

Station: AQHI Grimshaw Daily: 31-03-2022 Type: AVG 1 Min. [1 Min.]



Teledyne T640 Audit/Calibration

Date/Previous Audit Date:	March 23, 2022	February 16, 2022	**Weather Conditions:**	Cloudy/Overcast	
Company:	PRAMP		**Start Time (mst):**	16:21	
Station:	Grimshaw		**End Time (mst):**	16:57	
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: DeltaCal DC1 S/N201587 / Nov 01, 2022 **Temperature:** DeltaCal DC1 S/N201587 / Nov 01, 2022

Digital Manometer: DeltaCal DC1 S/N201587 / Nov 01, 2022 **Pressure:** DeltaCal DC1 S/N201587 / Nov 01, 2022

DIAGNOSTICS:

Ambient Pressure (mmHg)	701.2	Ambient Temp (°C)	7.9	ASC Heater Duty (%)	0.0
Box Temp (°C)	26.4	Current PMT HV (V)	1536	LED Temp (°C)	34.66
P3 Value	48	PMT Setting (V)	1542	Pump PWM (%)	38
Sample Flow (L/min)	5.00	Sample RH (%RH)	17.6	Sample Temp (°C)	24.4

Item:	**As-found**		**As-left**		**Tolerance**
	Reference	**T640x**	**Reference**	**T640x**	
Zero Test (Leak Check)	PM10	0.0	n/a	0.0	0.0 to 0.2
	PM2.5	0.0	n/a	0.0	
Ambient Pressure (mmHg)	703.0	701.1	n/a	n/a	+/- 10 mm Hg
Ambient Temperature (°C)	7.50	7.9	n/a		+/- 2°C
Sample Flow (L/min)	4.84	5	4.79	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

Comments:

No issues.

Meteorological System Checklist

Date:	March 23, 2022		
Technician:	Ferdinand Roy		
Station:	PRAMP Grimshaw		
Unit:	**Make:**	**Model:**	**Serial #:**
Temperature Sensor:	Vaisala	HMP155	N2910506
Barometric Pressure Sensor:	MetOne	92	A2397
Relative Humidity Sensor:	Vaisala	HMP155	N2910506
Anemometer:	RM Young	05305AQ	174801
AMBIENT TEMPERATURE SENSOR CHECK			
Previous check date:	February 15, 2022		
Parameter:	Temperature @ 2 metres		
Reference Thermometer ID:	F.S. 160348895 expires Sep 4, 2022		
Reference Temperature (^{o}C):	7.4		
Station - Ambient Temperature (^{o}C):	7.1		
Temperature Difference (^{o}C):	0.3		
BAROMETRIC PRESSURE SENSOR CHECK			
Previous check date:	February 15, 2022		
Reference Barometer ID:	Metlabs Deltacal S/N 201587 expires Nov 1, 2022		
Reference Pressure - Units/Reading:	millibar	937.92	
Station Pressure - Units/Reading:	millibar	935.1	
Pressure Tolerance +/- 15% of error:	797 - 1079	0.30%	
RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK			
Previous check date:	February 15, 2022		
Reference Hygrometer ID:	F.S. 160348895 expires Sep 4, 2022		
Reference Hygrometer % RH- Reading:	62.75		
Station Hygrometer % RH- Reading:	67.30		
RH Tolerance +/- 15% of difference:	53.34 - 72.16	-7.3%	

ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK			
WIND SPEED		WIND DIRECTION	
Previous check date:	February 15, 2022	Previous check date:	February 15, 2022
Wind Speed Observed (kph):	10~20	Wind Direction Observed:	W
Wind speed on Data Logger (kph):	12.4	Wind Direction on Data Logger:	W
		Wind Direction Pass/Fail?:	Pass

Comments

No issues

Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	**Performed By:**	Ferdinand Roy
Audit Location:	Cadotte Lake	**Reviewed By:**	Chris Wesson
Audit Date:	July 22, 2021	**Start/End Time (mst):**	12:47-15:52
Calibration Purpose:	routine annual	**Weather Conditions:**	Cloudy/Overcast

Wind Sensor Information

Sensor ID Data:		**Sensor Outputs:**	
Sensor Make:	RM Young	**Velocity Voltage Output Range:**	n/a
Sensor Model:	05305AQ	**Velocity Unit Output Range:**	0-180
Serial #:	174801	**Direction Voltage Output Range:**	n/a
Previous Cal/Audit Date:	June 18, 2020	**Direction Unit Output Range:**	0-360

Wind Calibrator Information

Calibrator I.D. and Expiry Date: RM Young 18802 id# CA03309 expires June 7, 2023

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

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.0	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
			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	27	330	3.5	-0.3	1.9
60	300	56	300	3.9	0.1	2.0
90	270	87	269	3.5	1.1	2.3
120	240	118	238	2.4	2.5	2.5
150	210	149	207	1.5	3.5	2.5
180	180	178	177	1.8	2.8	2.3
210	150	208	148	2.1	2.5	2.3
240	120	239	117	1.1	2.9	2.0
270	90	270	86	-0.1	3.6	1.9
300	60	300	57	0.2	3.5	1.8
330	30	330	27	-0.1	3.0	1.6
355	0	353	0	1.8	0.1	1.0
The audit meets AMD requirements.			**Average Absolute Degrees Difference=**			**1.9**

Comments:

Physical inspection completed - no issues.

Peace River Area Monitoring Program

MARCH 2022

Ambient Air Monitoring Calibration Report

- PEACE RIVER COMPLEX (PRC) STATION-

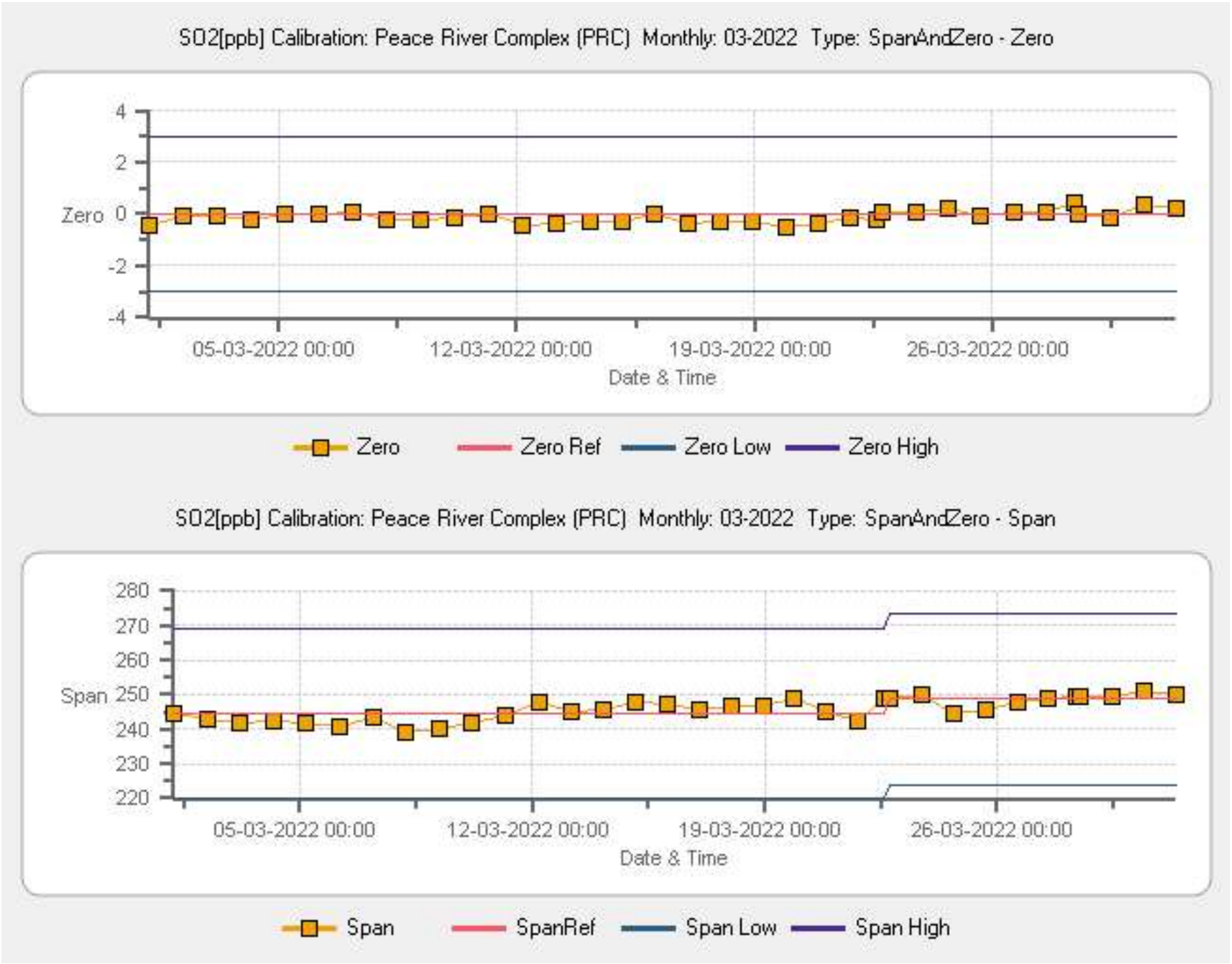
CAL-PRAMP-202203-01698

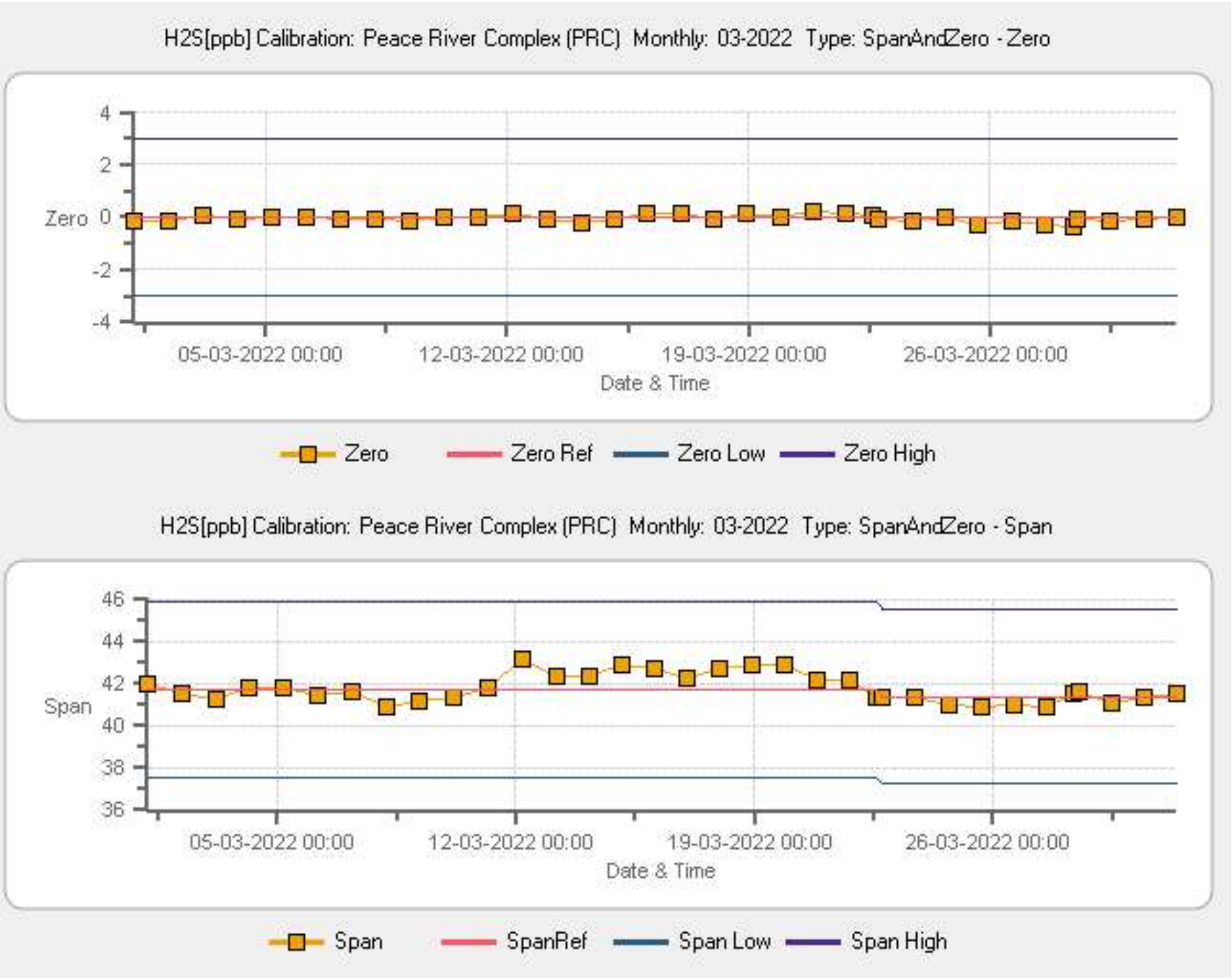
Operation and Maintenance:
Bureau Veritas Canada

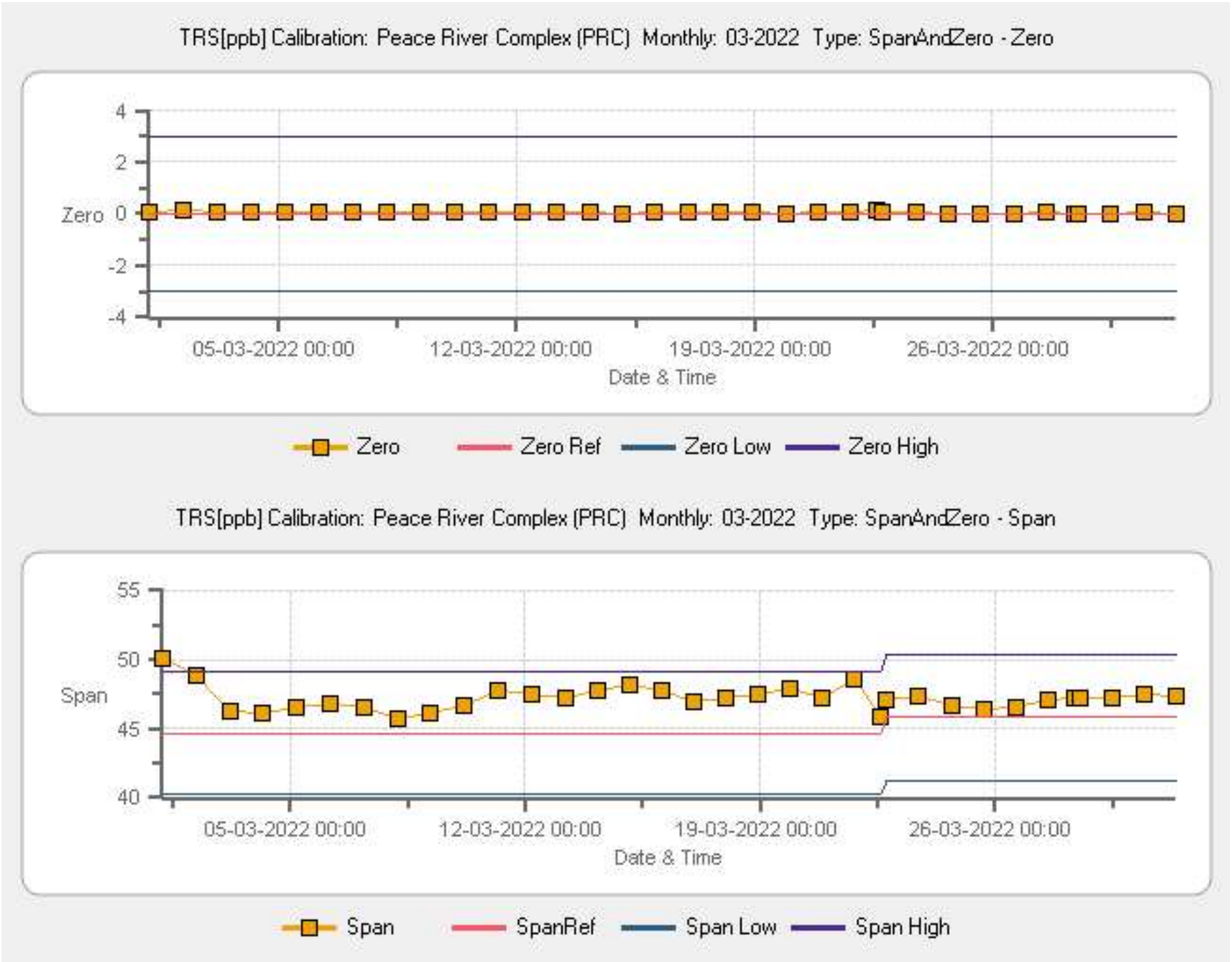
Data Validation and Report:
Bureau Veritas Canada

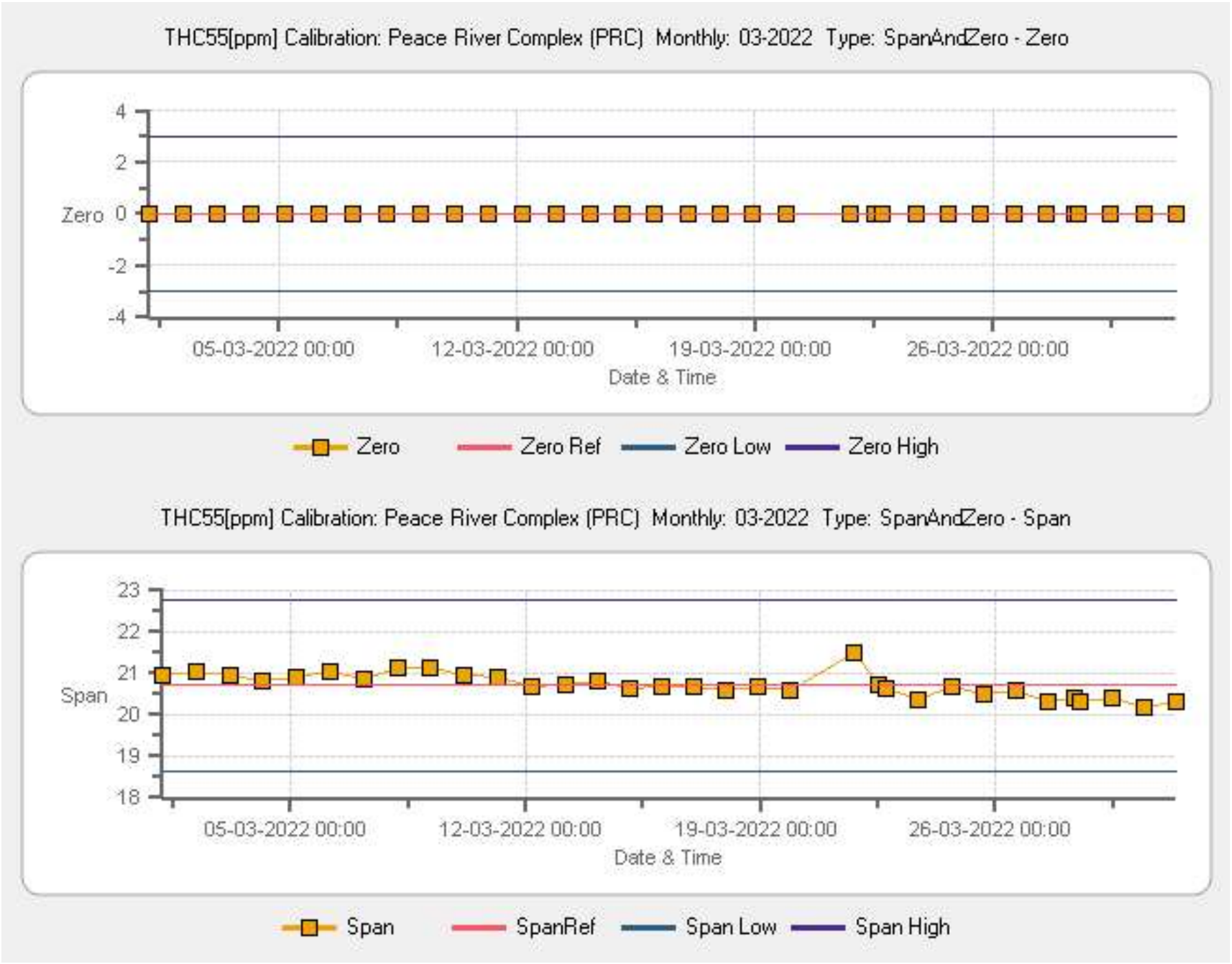
April 19, 2022

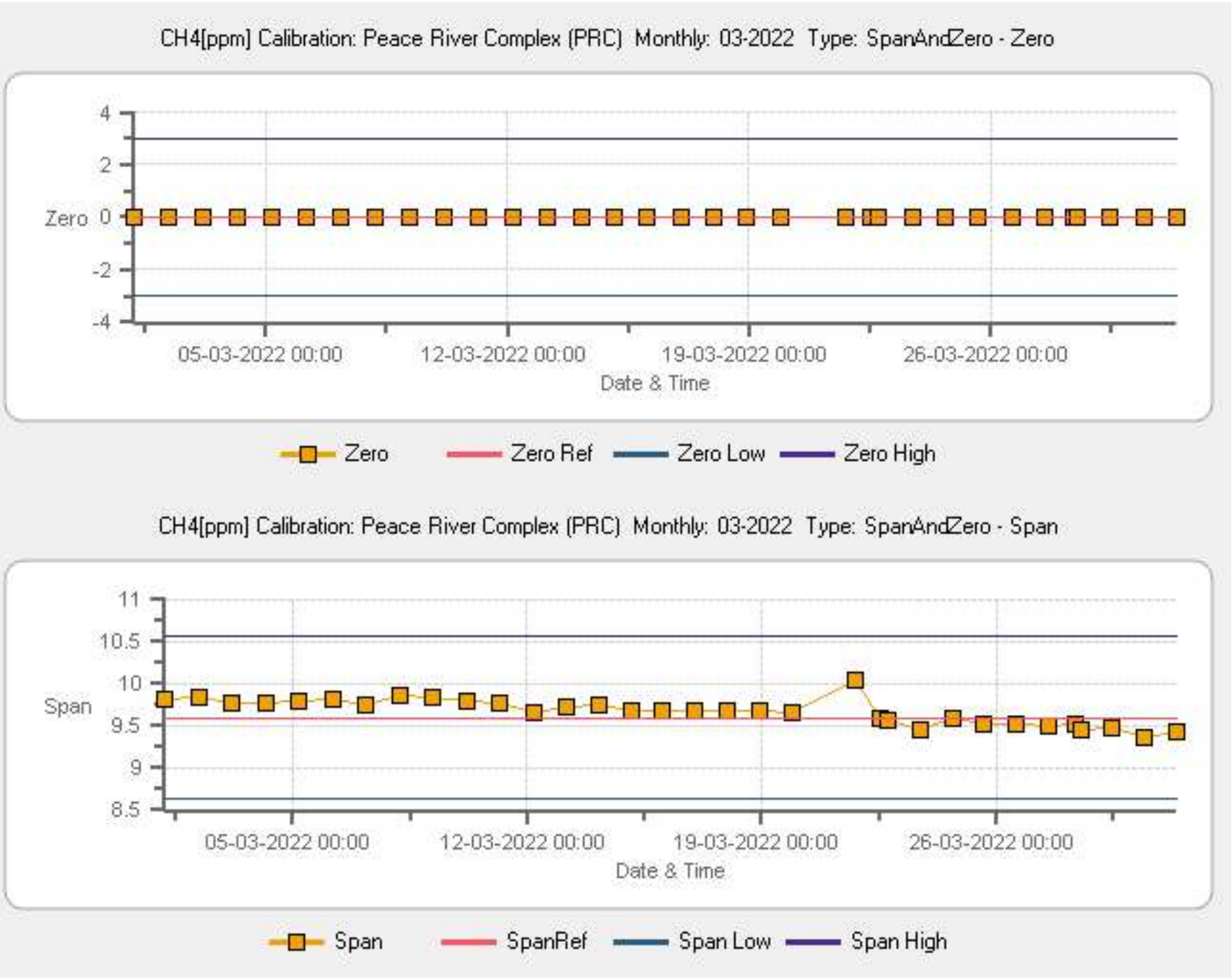
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

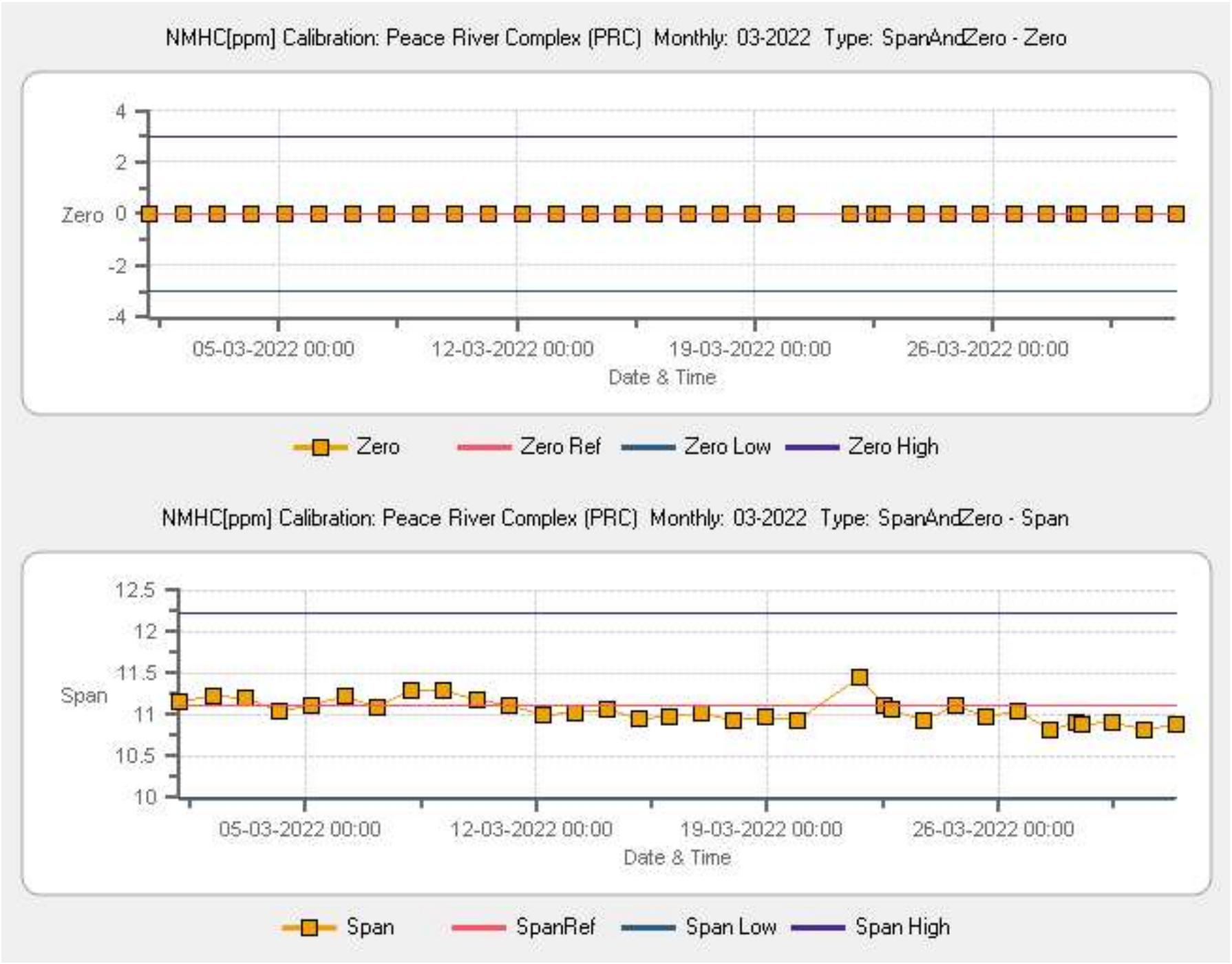

SO2[ppb] Calibration: Peace River Complex (PRC) Monthly: 03-2022 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
SO2[ppb] Calibration: Peace River Complex (PRC) Monthly: 03-2022 Type: SpanAndZero - Span
280
270
260
Span 250
240
230
220
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High


H2S[ppb] Calibration: Peace River Complex (PRC) Monthly: 03-2022 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
H2S[ppb] Calibration: Peace River Complex (PRC) Monthly: 03-2022 Type: SpanAndZero - Span
46
44
42
Span
40
38
36
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High


TRS[ppb] Calibration: Peace River Complex (PRC) Monthly: 03-2022 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
TRS[ppb] Calibration: Peace River Complex (PRC) Monthly: 03-2022 Type: SpanAndZero - Span
55
50
Span
45
40
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High


THC55[ppm] Calibration: Peace River Complex (PRC) Monthly: 03-2022 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
THC55[ppm] Calibration: Peace River Complex (PRC) Monthly: 03-2022 Type: SpanAndZero - Span
23
22
21
Span
20
19
18
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High


CH4[ppm] Calibration: Peace River Complex (PRC) Monthly: 03-2022 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
CH4[ppm] Calibration: Peace River Complex (PRC) Monthly: 03-2022 Type: SpanAndZero - Span
11
10.5
10
Span
9.5
9
8.5
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High


NMHC[ppm] Calibration: Peace River Complex (PRC) Monthly: 03-2022 Type: SpanAndZero - Zero
4
2
Zero 0
-2
-4
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Zero
Zero Ref
Zero Low
Zero High
NMHC[ppm] Calibration: Peace River Complex (PRC) Monthly: 03-2022 Type: SpanAndZero - Span
12.5
12
11.5
Span
11
10.5
10
05-03-2022 00:00
12-03-2022 00:00
19-03-2022 00:00
26-03-2022 00:00
Date & Time
Span
SpanRef
Span Low
Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution

DATE:	22-Mar-2022	PREVIOUS CALIBRATION DATE:	02-Feb-2022
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	22.0
LOCATION:	Peace River Compliance	BAROMETRIC (mBar):	941
PURPOSE	Routine	START TIME (MST):	09:08
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:59

ANALYZER:

MAKE/MODEL	Thermo 43i	RANGE	500 ppb
SERIAL #	1034746225	FLOW (mL/min)	437
INITIAL		FINAL	
BKG/OFFSET	18.7	BKG/OFFSET	18.5
COEF/SLOPE	1.085	COEF/SLOPE	1.1
Expected (reference) Value	244.6	Expected (reference) Value	248.7

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Environics	MAKE:	Teledyne
MODEL:	2000	MODEL:	M701
ID:	1991	ID:	5004
MFC CALIBRATION DATE:	24-Sep-2021	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):	340	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	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
4001		4001	0.00	-0.3	0		
3941	61.06	4002	379.88	375.1	380	1.012	1.000
3972	30.52	4002	189.88	n/a	191.1	n/a	0.994
3986	14.44	4001	89.88	n/a	90.8	n/a	0.990

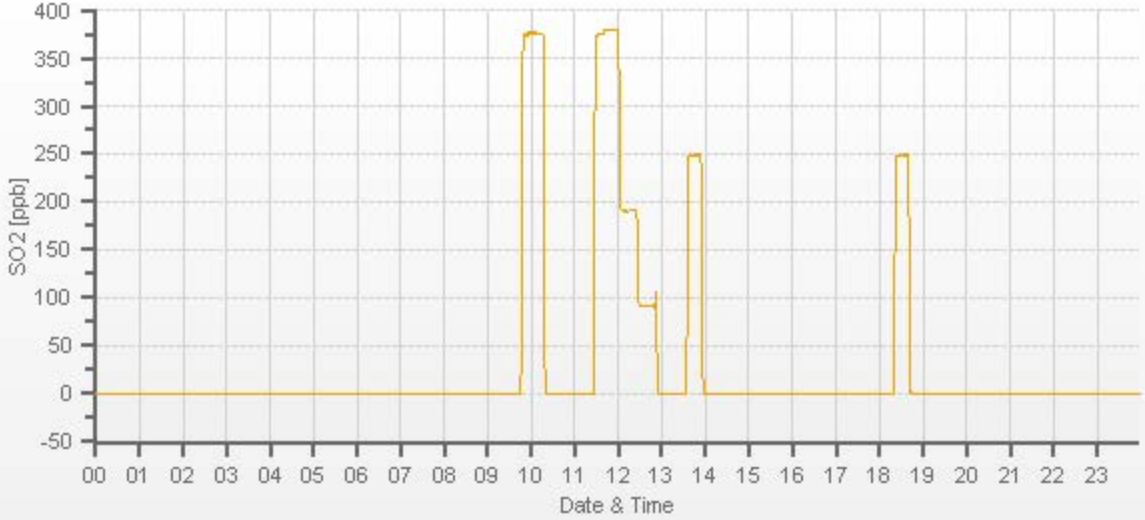
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	0.1%

COMMENTS:

Sample filter changed. Monthly calibration - no issues.

SO2[ppb] Station: CNRL Peace River Complex Daily: 22-03-2022 Type: AVG 1 Min. [1 Min.]



H2S Analyzer Calibration by Dilution

DATE:	22-Mar-2022	PREVIOUS CALIBRATION DATE:	02-Feb-2022
PARAMETER:	H2S	PREVIOUS CORRECTION FACTOR:	0.999
CLIENT:	CNRL	TEMPERATURE (°C):	22.0
LOCATION:	Peace River Compliance	BAROMETRIC (mBar):	941
PURPOSE	Routine	START TIME (MST):	09:08
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	14:00

ANALYZER:

MAKE/MODEL	Thermo 450i	RANGE	100 ppb
SERIAL #	1308857354	FLOW (mL/min)	858
INITIAL		FINAL	
BKG/OFFSET	13.6	BKG/OFFSET	13.6
COEF/SLOPE	1.041	COEF/SLOPE	1.027
Expected (reference) Value	41.7	Expected (reference) Value	41.4

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Environics	MAKE:	Teledyne
MODEL:	2000	MODEL:	M701
ID:	1991	ID:	5004
MFC CALIBRATION DATE:	24-Sep-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002472	HIGH ID	n/a
CONC (ppm):	9.41	EXPIRY DATE	n/a
CYLINDER (psi):	680	LOW ID	n/a
EXPIRY DATE	10-Nov-2023	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

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

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

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

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
4001		4001	0.00	0.2	0		
3969	33.21	4002	78.07	79.7	78.1	0.982	1.000
3986	16.18	4002	38.05	n/a	38	n/a	1.001
3992	8.11	4001	19.08	n/a	19.2	n/a	0.994

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	0.0%

COMMENTS:

Sample filter changed. Monthly calibration - no issues.

H2S[ppb] Station: CNRL Peace River Complex Daily: 22-03-2022 Type: AVG 1 Min. [1 Min.]

TRS Analyzer Calibration by Dilution

DATE:	22-Mar-2022	PREVIOUS CALIBRATION DATE:	02-Feb-2022
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	22.0
LOCATION:	Peace River Compliance	BAROMETRIC (mBar):	941
PURPOSE	Routine	START TIME (MST):	09:08
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	14:27

ANALYZER:

MAKE/MODEL	Thermo 43I-TLE	RANGE	100 ppb
SERIAL #	1162460022	FLOW (mL/min)	430
INITIAL		FINAL	
BKG/OFFSET	2.52	BKG/OFFSET	2.54
COEF/SLOPE	0.991	COEF/SLOPE	0.987
Expected (reference) Value	44.7	Expected (reference) Value	45.82

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Environics	MAKE:	Teledyne
MODEL:	2000	MODEL:	M701
ID:	1991	ID:	5004
MFC CALIBRATION DATE:	24-Sep-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002472	HIGH ID	n/a
CONC (ppm):	9.41	EXPIRY DATE	n/a
CYLINDER (psi):	680	LOW ID	n/a
EXPIRY DATE	10-Nov-2023	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

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

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

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

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
4001		4001	0.00	0	0		
3969	33.21	4002	78.07	77.6	78.1	1.006	1.000
3986	16.18	4002	38.05	n/a	38.13	n/a	0.998
3992	8.11	4001	19.08	n/a	19.13	n/a	0.997

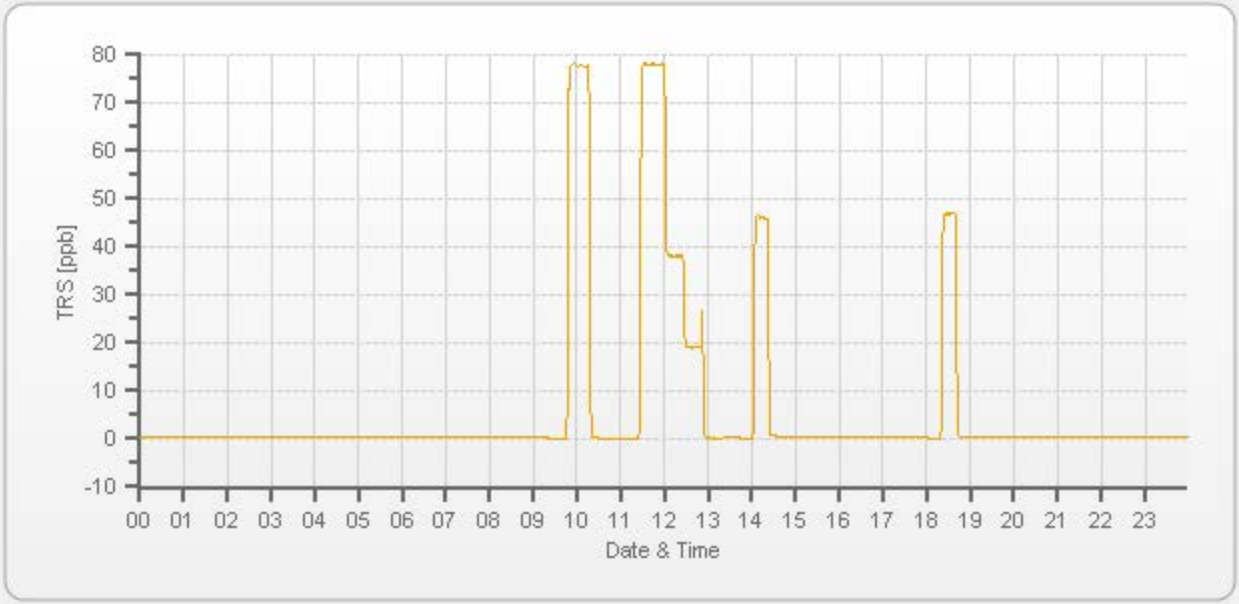
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	0.0%

COMMENTS:

TRS Converter CDNOVA CDN-101 #553. Sample filter changed.

TRS[ppb] Station: CNRL Peace River Complex Daily: 22-03-2022 Type: AVG 1 Min. [1 Min.]



Methane/Non-Methane Analyzer Calibration by Dilution

CALIBRATION:

DATE:	22-Mar-2022	PREVIOUS CALIBRATION DATE:	02-Feb-2022
CLIENT:	CNRL	TEMPERATURE (°C):	22.0
LOCATION:	Peace River Compliance	BAROMETRIC (mBar):	941
PURPOSE	Routine	START TIME (MST):	09:08
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	12:46

ANALYZER:

VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
	Thermo 55i	1022143392	1055
PARAMETER:	CH4	NMHC	THC
RANGE (ppm):	20	20	40
PREVIOUS CF:	0.999	0.998	0.999

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:			FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	LL28583		HIGH ID:	n/a
MODEL:	2010	MODEL:	M701	CH_4/C_3H_8 (ppm):	608.0	203.0	HIGH EXPIRY:	n/a
ID:	17100415	ID:	5004	CYLINDER (psi):	1890		LOW ID:	n/a
MFC CALIBRATION DATE:	27-Sep-2021	OXIDIZER ID:	Internal	EXPIRY DATE	18-Aug-2029		LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH4/NMHC)	HIGH	MID	LOW	CH4 EQUIVILANCE	
TARGET	14	7	3.5	C_3H_8 as CH_4	558.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH_4	1166.3

EXPECTED (REFERENCE) VALUE:

INITIAL	CH4	NMHC	THC	FINAL	CH4	NMHC	THC
	9.60	11.12	20.72		9.60	11.12	20.72

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC	CH4	NMHC	THC
2998		2998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
2926	72.00	2998	14.60	13.41	28.01	14.89	13.67	28.56	14.60	13.39	27.99	0.981	0.981	0.981	1.000	1.001	1.001
2962	36.00	2998	7.30	6.70	14.00	n/a	n/a	n/a	7.33	6.68	14.01	n/a	n/a	n/a	0.996	1.004	1.000
2980	18.00	2998	3.65	3.35	7.00	n/a	n/a	n/a	3.67	3.35	7.02	n/a	n/a	n/a	0.995	1.001	0.997

LINEAR REGRESSION ANALYSIS:

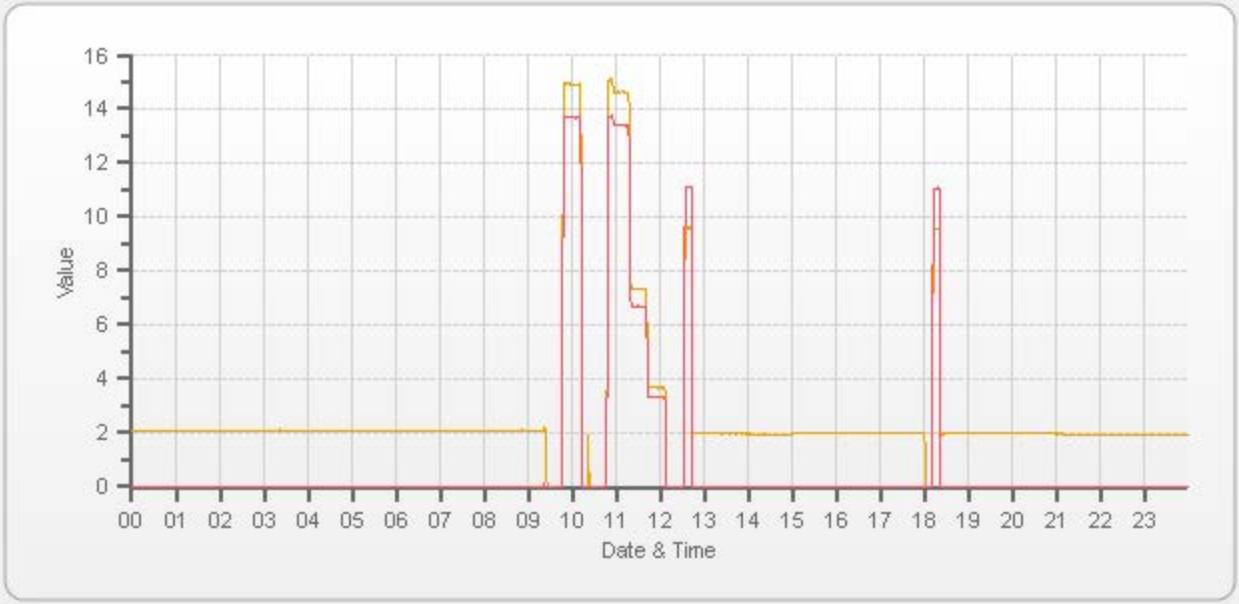
	CORRELATION	SLOPE	INTERCEPT
CH4	1.000	1.000	0.1%
NMHC	1.000	0.999	0.0%
THC	1.000	0.999	0.0%

Comments:

Sample filter changed. Monthly calibration - no issues.

Use Zero Chrom? **No**

Station: CNRL Peace River Complex Daily: 22-03-2022 Type: AVG 1 Min. [1 Min.]



Meteorological Sensor Audit/Calibration

Location Information

Company:	CNRL	**Performed By:**	Ferdinand Roy
Audit Location:	Peace River Compliance	**Reviewed By:**	Chris Wesson
Audit Date:	June 16, 2021	**Start/End Time (mst):**	8:20/10:45
Calibration Purpose:	routine annual	**Weather Conditions:**	Mix of sun and clouds

Wind Sensor Information

Sensor ID Data:		**Sensor Outputs:**	
Sensor Make:	RM Young	**Velocity Voltage Output Range:**	0-1
Sensor Model:	05305VK	**Velocity Unit Output Range:**	0-200
Serial #:	129612	**Direction Voltage Output Range:**	0-1
Previous Cal/Audit Date:	July 14, 2020	**Direction Unit Output Range:**	0-360

Wind Calibrator Information

Calibrator I.D. and Expiry Date: RM Young 18801 id# R9133 expires August 6, 2022

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

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.0	0.0	-
1000	18.4	18.5	18.5	0.996
2000	36.9	36.9	36.9	0.999
3000	55.3	55.4	55.4	0.998
4000	73.7	73.8	73.8	0.999
5000	92.2	92.3	92.3	0.998
6000	110.6	110.8	110.7	0.998
7000	129.0	129.4	129.2	0.998
8000	147.4	147.8	147.8	0.998
9000	165.9	166.4	166.4	0.997
10000	184.3	185.0	184.8	0.997
		The audit meets AMD requirements.	**Average Correction Factor=**	**0.998**

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

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	1	354	1.0	1.0	1.0
30	330	30	329	0.0	1.0	0.5
60	300	61	300	-1.0	0.0	0.5
90	270	92	271	-2.0	-1.0	1.5
120	240	122	241	-2.0	-1.0	1.5
150	210	151	212	-1.0	-2.0	1.5
180	180	181	181	-1.0	-1.0	1.0
210	150	211	152	-1.0	-2.0	1.5
240	120	241	122	-1.0	-2.0	1.5
270	90	271	92	-1.0	-2.0	1.5
300	60	300	62	0.0	-2.0	1.0
330	30	329	31	1.0	-1.0	1.0
355	0	354	1	1.0	1.0	1.0
The audit meets AMD requirements.			**Average Absolute Degrees Difference=**			**1.2**

Comments:

Physical inspection completed - no issues.

Peace River Area Monitoring Program

MARCH 2022

Monthly Ambient Air Quality Monitoring Integrated Sampling Report

PRAMP-202203-INTEGRATED

April 20, 2022

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

April 20, 2022

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

RE: PRAMP –March 2022 Monthly Ambient Air Quality Monitoring Integrated Sampling Report

Enclosed is the March 2022 Monthly Ambient Air Quality Monitoring Integrated Sampling Report for the Peace River Area Monitoring Program's (PRAMP) regional air quality monitoring network. This report summarizes monitoring data for samples collected using integrated methods, including volatile organic compounds (NMHC canister sampling program), hydrogen sulphide, and sulphur dioxide (passive sampling program).

The representative of the Person Responsible for this monitoring program is

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

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

NETWORK STATION SUMMARY

Listing of Integrated Sampling Stations

- 986c Station
- 842b Station
- Reno Station
- Peace River Complex (PRC) Station

Station Name	986c	842b	Reno	PRC
Station ID	1562	1561	1563	1698
Coordinates	56.36980, -116.92500	56.27406, -116.98129	55.86936, -117.05739	56.38257, -116.769283
NMHC Canister (VOCs)	√	√	√	
Intermittent (PACs)	√			
Passives				√

Listing of Passive Sampling Sites

Site ID	Latitude	Longitude
1	56.377841	-116.787142
2	56.378638	-116.780496
3	56.382958	-116.783813
4	56.377044	-116.794220
7	56.384796	-116.780488
8	56.388710	-116.771234
9	56.388943	-116.756205
10	56.388642	-116.797817
11	56.383771	-116.841165
12	56.388962	-116.885263
13	56.390972	-116.822083
14	56.424825	-116.853181

List of Contractors who performed the air monitoring activities

Sampling Program	Monitoring Activities Conducted By	Sample Analysis Conducted By	Data/Report Prepared By	Electronic Submission Conducted By
NMHC Canister (VOCs)	Bureau Veritas	InnoTech Alberta Inc	PRAMP	PRAMP
Intermittent (PACs)	PRAMP	ECCC	AEP	AEP
Passives	PRAMP	Bureau Veritas	PRAMP	PRAMP

Monitoring Notes during the Month of March 2022

- **NMHC Canister Sampling Program - Volatile Organic Compounds (VOCs)**
  - The canister sampling program collects a 1-hour sample of air when the continuously measured non-methane hydrocarbon (NMHC) concentration reaches a specified trigger point. The current trigger point is 0.3 ppm for non-methane hydrocarbons. The trigger point is based on real-time monitoring data that are averaged over a 5-minute period.
  - One canister event was recorded at the 842b station this month.

Station	Parameter	Date	Time	Concentration (ppm)
842b	Non-methane HC	15-Mar	04:40	0.31

- **Passive Polycyclic Aromatic Compounds (PACs) Sampling Program**
  - The PAC sampling program began in December 2019, and is designed to collect a 2-month integrated sample.
  - On February 28, the sample media for January and February 2022 sample period were collected and shipped to ECCC. The sample medias for March and April 2022 were installed at the same time.
- **Passives Sampling Program**
  - There were no exceedances of the AAAQOs for all monitored parameters at any of the passive stations during this month.
  - The passive sample filters were installed at the stations on March 1 and were removed on April 1.
  - The sample media exchange was performed by CNUL contractor this month along with PRAMP's field operations assistant as an observer. PRAMP's field operations assistant will be responsible for the sample media exchange once all the safety program requirements are met.

Revisions to Alberta's Ambient Air Quality Data Warehouse

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

Deviations from Authorized Monitoring Methods

There were no deviations from authorized monitoring methods.

Certification

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

Lily Lin, Technical Program Manager, PRAMP Airshed

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

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

Michael Bisaga, Technical Program Manager, PRAMP Airshed

April 20, 2022

INTEGRATED SAMPLING RESULTS SUMMARY

- **NMHC Canister VOCs analytical results**

Sample Date/Time	2022-03-15 @04:40							
Canister Sample	Non-methane Hydrocarbon							
Canister ID	28953							
Method	NA-025		Method	NA-024		Method	AC-058	
Maximum Reading (ppmv)	5.0	Methane	Maximum Reading (ppmv)	2.2	Hydrogen sulphide	Maximum Reading (ppmv)	10.7	Isobutane

Sample Date/Time	2022-03-15 @04:40							
Canister Sample	Non-methane Hydrocarbon - BLANK							
Canister ID	28961							
Method	NA-025		Method	NA-024		Method	AC-058	
Maximum Reading (ppmv)	0.0	-	Maximum Reading (ppmv)	0.0	-	Maximum Reading (ppmv)	0.6	Acetone

- **Passive analytical results**

	H_2S		**SO_2**	
Minimum (ppb)	0.06	#1	0.2	#14
Maximum (ppb)	0.13	#11	0.4	#2
Average (ppb)	0.09	-	0.31	-

ANALYTICAL SAMPLING RESULTS

NMHC Canisters – VOCs

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PEACE RIVER AREA MONITORING PROGRAM

842b Site - March 2022

Volatile Organic Compounds (VOCs) Results

Sample Date/Time	2022-03-15 @04:40					
Canister Sample	Non-methane Hydrocarbon					
Canister ID	28953					
Method	**NA-025**		**Method**	**NA-024**	**Method**	**AC-058**
Maximum Reading (ppmv)	**5.0**	**Methane**	**Maximum Reading (ppmv)**	**2.2**	**Hydrogen sulphide**	**Maximum Reading (ppmv)**	**10.7**	**Isobutane**

Parameter	Result (ppmv)	RDL (ppmv)
1-Butene	0	0.16
Acetylene	0	0.12
cis-2-Butene	0	0.06
Ethane	0	0.2
Ethylacetylene	0	0.09
Ethylene	0	0.11
Isobutane	0	0.2
Isobutylene	0	0.2
Methane	**5.0**	0.2
n-Butane	0	0.3
n-Propane	0	0.11
Propylene	0	0.2
Propyne	0	0.2
trans-2-Butene	0	0.14

Parameter	Result (ppbv)	RDL (ppbv)
2,5-Dimethylthiophene	0	0.5
2-Ethylthiophene	0	0.3
2-Methylthiophene	0	0.3
3-Methylthiophene	0	0.5
Butyl mercaptan	0	0.5
Carbon disulphide	0	0.3
Carbonyl sulphide	1.9	0.5
Dimethyl disulphide	0	0.3
Dimethyl sulphide	0	0.3
Ethyl mercaptan	0	0.5
Ethyl sulphide	0	0.5
Hydrogen sulphide	**2.2**	0.5
Isobutyl mercaptan	0	0.5
Isopropyl mercaptan	0	0.5
Methyl mercaptan	0	0.3
Pentyl mercaptan	0	0.6
Propyl mercaptan	0	0.6
tert-Butyl mercaptan	0	0.5
Thiophene	0	0.3

Parameter	Result (ppbv)	RDL (ppbv)
1,1,1-Trichloroethane	0	0.03
1,1,2,2-Tetrachloroethane	0	0.03
1,1,2-Trichloroethane	0	0.03
1,1-Dichloroethane	0	0.03
1,1-Dichloroethylene	0	0.06
1,2,3-Trimethylbenzene	0.09	0.08
1,2,4-Trichlorobenzene	0	1.2
1,2,4-Trimethylbenzene	0	0.08
1,2-Dibromoethane	0	0.03
1,2-Dichlorobenzene	0.06	0.05
1,2-Dichloroethane	0.05	0.02
1,2-Dichloropropane	0	0.02
1,3,5-Trimethylbenzene	0	0.03
1,3-Butadiene	0	0.03
1,3-Dichlorobenzene	0	0.5
1,4-Dichlorobenzene	0	0.6
1,4-Dioxane	0	0.6
1-Butene/Isobutylene	0.59	0.03
1-Hexene/2-Methyl-1-pentene	0	0.03
1-Pentene	0.05	0.02
2,2,4-Trimethylpentane	0	0.02
2,2-Dimethylbutane	0.36	0.02
2,3,4-Trimethylpentane	0.11	0.02
2,3-Dimethylbutane	0.55	0.03
2,3-Dimethylpentane	0.37	0.03
2,4-Dimethylpentane	0.18	0.02
2-Methylheptane	0.06	0.02
2-Methylhexane	0.27	0.02
2-Methylpentane	0.92	0.02
3-Methylheptane	0.11	0.03
3-Methylhexane	0.52	0.03
3-Methylpentane	1.38	0.02
Acetone	4.3	3.7
Acrolein	0.4	0.5
Benzene	0.5	0.02
Benzyl chloride	0	0.6
Bromodichloromethane	0	0.03
Bromoform	0.1	0.03
Bromomethane	0	0.02
Carbon disulfide	0	0.02
Carbon tetrachloride	0.19	0.02
Chlorobenzene	0	0.03
Chloroethane	0	0.03
Chloroform	0.05	0.03
Chloromethane	0.92	0.03
cis-1,2-Dichloroethene	0	0.02
cis-1,3-Dichloropropene	0	0.06
cis-2-Butene	0	0.03
cis-2-Pentene	0	0.03
Cyclohexane	2.34	0.03
Cyclopentane	0.85	0.02
Dibromochloromethane	0.06	0.02
Ethanol	4.2	2.8
Ethyl acetate	0	0.6
Ethylbenzene	0.2	0.02
Freon-11	0.39	0.03
Freon-113	0.19	0.02
Freon-114	0.07	0.03

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PEACE RIVER AREA MONITORING PROGRAM

842b Site - March 2022

Volatile Organic Compounds (VOCs) Results

Sample Date/Time	2022-03-15 @04:40					
Canister Sample	Non-methane Hydrocarbon					
Canister ID	28953					
Method	**NA-025**		**Method**	**NA-024**	**Method**	**AC-058**
Maximum Reading (ppmv)	**5.0**	**Methane**	**Maximum Reading (ppmv)**	**2.2**	**Hydrogen sulphide**	**Maximum Reading (ppmv)**	**10.7**	**Isobutane**

Parameter	Result (ppmv)	RDL (ppmv)	Parameter	Result (ppbv)	RDL (ppbv)	Parameter	Result (ppbv)	RDL (ppbv)
						Freon-12	0.79	0.03
						Hexachloro-1,3-butadiene	0	0.78
						Isobutane	**10.7**	0.03
						Isopentane	5.98	0.05
						Isoprene	0	0.02
						Isopropyl alcohol	0	3.7
						Isopropylbenzene	0.08	0.02
						m,p-Xylene	0.17	0.05
						m-Diethylbenzene	0.41	0.06
						m-Ethyltoluene	0.09	0.12
						Methyl butyl ketone	0	0.78
						Methyl ethyl ketone	0.7	0.5
						Methyl isobutyl ketone	0	0.6
						Methyl methacrylate	0	0.11
						Methyl tert butyl ether	0	0.05
						Methylcyclohexane	3.52	0.02
						Methylcyclopentane	2.6	0.03
						Methylene chloride	0	0.5
						n-Butane	6.0	0.05
						n-Decane	0	0.09
						n-Dodecane	0	0.6
						n-Heptane	0.22	0.02
						n-Hexane	1.01	0.02
						n-Nonane	0.08	0.02
						n-Octane	0.13	0.03
						n-Pentane	3.14	0.2
						n-Propylbenzene	0	0.08
						n-Undecane	0	0.8
						Naphthalene	0	0.8
						o-Ethyltoluene	0.08	0.02
						o-Xylene	0.19	0.02
						p-Diethylbenzene	0.13	0.06
						p-Ethyltoluene	0	0.11
						Styrene	0.15	0.06
						Tetrachloroethylene	0.09	0.06
						Tetrahydrofuran	0	0.6
						Toluene	1.75	0.02
						trans-1,2-Dichloroethylene	1.89	0.09
						trans-1,3-Dichloropropylene	0	0.06
						trans-2-Butene	0.39	0.02
						trans-2-Pentene	0	0.03
						Trichloroethylene	0.04	0.06
						Vinyl acetate	0.9	0.6
						Vinyl chloride	0	0.03

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PEACE RIVER AREA MONITORING PROGRAM

842b Site - March 2022

Volatile Organic Compounds (VOCs) Results

Sample Date/Time	2022-03-15 @04:40					
Canister Sample	Non-methane Hydrocarbon - BLANK					
Canister ID	28961					
Method	**NA-025**		**Method**	**NA-024**	**Method**	**AC-058**
Maximum Reading (ppmv)	-	-	**Maximum Reading (ppmv)**	-	-	**Maximum Reading (ppmv)**	**0.6 Acetone**

Parameter	Result (ppmv)	RDL (ppmv)
1-Butene	0	0.16
Acetylene	0	0.12
cis-2-Butene	0	0.06
Ethane	0	0.2
Ethylacetylene	0	0.09
Ethylene	0	0.11
Isobutane	0	0.2
Isobutylene	0	0.2
Methane	0	0.2
n-Butane	0	0.3
n-Propane	0	0.11
Propylene	0	0.2
Propyne	0	0.2
trans-2-Butene	0	0.14

Parameter	Result (ppbv)	RDL (ppbv)
2,5-Dimethylthiophene	0	0.5
2-Ethylthiophene	0	0.3
2-Methylthiophene	0	0.3
3-Methylthiophene	0	0.5
Butyl mercaptan	0	0.5
Carbon disulphide	0	0.3
Carbonyl sulphide	0	0.5
Dimethyl disulphide	0	0.3
Dimethyl sulphide	0	0.3
Ethyl mercaptan	0	0.5
Ethyl sulphide	0	0.5
Hydrogen sulphide	0	0.5
Isobutyl mercaptan	0	0.5
Isopropyl mercaptan	0	0.5
Methyl mercaptan	0	0.3
Pentyl mercaptan	0	0.6
Propyl mercaptan	0	0.6
tert-Butyl mercaptan	0	0.5
Thiophene	0	0.3

Parameter	Result (ppbv)	RDL (ppbv)
1,1,1-Trichloroethane	0	0.03
1,1,2,2-Tetrachloroethane	0	0.03
1,1,2-Trichloroethane	0	0.03
1,1-Dichloroethane	0	0.03
1,1-Dichloroethylene	0	0.06
1,2,3-Trimethylbenzene	0	0.08
1,2,4-Trichlorobenzene	0	1.2
1,2,4-Trimethylbenzene	0	0.08
1,2-Dibromoethane	0	0.03
1,2-Dichlorobenzene	0.04	0.05
1,2-Dichloroethane	0	0.02
1,2-Dichloropropane	0	0.02
1,3,5-Trimethylbenzene	0	0.03
1,3-Butadiene	0	0.03
1,3-Dichlorobenzene	0	0.5
1,4-Dichlorobenzene	0	0.6
1,4-Dioxane	0	0.6
1-Butene/Isobutylene	0.44	0.03
1-Hexene/2-Methyl-1-pentene	0	0.03
1-Pentene	0.03	0.02
2,2,4-Trimethylpentane	0.04	0.02
2,2-Dimethylbutane	0.02	0.02
2,3,4-Trimethylpentane	0	0.02
2,3-Dimethylbutane	0	0.03
2,3-Dimethylpentane	0	0.03
2,4-Dimethylpentane	0	0.02
2-Methylheptane	0.04	0.02
2-Methylhexane	0	0.02
2-Methylpentane	0	0.02
3-Methylheptane	0	0.03
3-Methylhexane	0.03	0.03
3-Methylpentane	0.04	0.02
Acetone	0.6	3.7
Acrolein	0	0.5
Benzene	0.12	0.02
Benzyl chloride	0	0.6
Bromodichloromethane	0	0.03
Bromoform	0.07	0.03
Bromomethane	0	0.02
Carbon disulfide	0	0.02
Carbon tetrachloride	0.02	0.02
Chlorobenzene	0	0.03
Chloroethane	0	0.03
Chloroform	0	0.03
Chloromethane	0	0.03
cis-1,2-Dichloroethene	0	0.02
cis-1,3-Dichloropropene	0	0.06
cis-2-Butene	0	0.03
cis-2-Pentene	0	0.03
Cyclohexane	0	0.03
Cyclopentane	0	0.02
Dibromochloromethane	0	0.02
Ethanol	0	2.8
Ethyl acetate	0	0.6
Ethylbenzene	0	0.02
Freon-11	0	0.03
Freon-113	0	0.02
Freon-114	0.03	0.03

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PEACE RIVER AREA MONITORING PROGRAM

842b Site - March 2022

Volatile Organic Compounds (VOCs) Results

Sample Date/Time	2022-03-15 @04:40					
Canister Sample	Non-methane Hydrocarbon - BLANK					
Canister ID	28961					
Method	**NA-025**		**Method**	**NA-024**	**Method**	**AC-058**
Maximum Reading (ppmv)	-	-	**Maximum Reading (ppmv)**	- -	**Maximum Reading (ppmv)**	**0.6 Acetone**

Parameter	Result (ppmv)	RDL (ppmv)	Parameter	Result (ppbv)	RDL (ppbv)	Parameter	Result (ppbv)	RDL (ppbv)
						Freon-12	0	0.03
						Hexachloro-1,3-butadiene	0	0.78
						Isobutane	0.15	0.03
						Isopentane	0.07	0.05
						Isoprene	0	0.02
						Isopropyl alcohol	0.4	3.7
						Isopropylbenzene	0	0.02
						m,p-Xylene	0	0.05
						m-Diethylbenzene	0.08	0.06
						m-Ethyltoluene	0	0.12
						Methyl butyl ketone	0	0.78
						Methyl ethyl ketone	0	0.5
						Methyl isobutyl ketone	0	0.6
						Methyl methacrylate	0	0.11
						Methyl tert butyl ether	0	0.05
						Methylcyclohexane	0	0.02
						Methylcyclopentane	0	0.03
						Methylene chloride	0	0.5
						n-Butane	0.11	0.05
						n-Decane	0	0.09
						n-Dodecane	0	0.6
						n-Heptane	0.09	0.02
						n-Hexane	0.13	0.02
						n-Nonane	0.07	0.02
						n-Octane	0.11	0.03
						n-Pentane	0.07	0.2
						n-Propylbenzene	0	0.08
						n-Undecane	0	0.8
						Naphthalene	0	0.8
						o-Ethyltoluene	0.02	0.02
						o-Xylene	0.03	0.02
						p-Diethylbenzene	0	0.06
						p-Ethyltoluene	0	0.11
						Styrene	0.1	0.06
						Tetrachloroethylene	0.05	0.06
						Tetrahydrofuran	0	0.6
						Toluene	0.06	0.02
						trans-1,2-Dichloroethylene	0	0.09
						trans-1,3-Dichloropropylene	0	0.06
						trans-2-Butene	0.2	0.02
						trans-2-Pentene	0	0.03
						Trichloroethylene	0	0.06
						Vinyl acetate	0	0.6
						Vinyl chloride	0	0.03

Passives

PEACE RIVER AREA MONITORING PROGRAM

PRC Site - March 2022

Passive Results

	H_2S		SO_2	
Minimum (ppb)	0.06	#1	0.2	#14
Maximum (ppb)	0.13	#11	0.4	#2
Average (ppb)	0.09	-	0.31	-

No.	Calculated Value	Calculated Value
1	0.06	0.3
2	0.08	0.4
3	0.11	0.4
4	0.10	0.3
7	0.08	0.3
8	0.09	0.3
9	0.09	0.3
10	0.11	0.3
11	0.13	0.3
12	0.07	0.3
13	0.09	0.3
14	0.07	0.2
Reportable Detection Limit (RDL)	**0.02**	**0.1**

Note:
N/A

End of Report

Peace River Area Monitoring Program

MARCH 2022

Ambient Air Monitoring

Certified Laboratory Analysis Report

LAB-PRAMP-202203

Operation and Maintenance:
Bureau Veritas Canada

Data Validation and Report:
Peace River Area Monitoring Program

April 21, 2022

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NMHC Canister Analytical Results

InnoTech ALBERTA

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

EAS CANISTER
Sample ID 22030094-001 Priority: Normal

Customer ID: PRAMP
Cust Samp ID: PRAMP_842b-20220315

Date Received- Lab Use Only

RECEIVED
MAR 16 2022
JNP

Client Contact Details:

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

RUSH (Surcharge) ☐

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

InnoTech Contact: Graham Knox Phone: 780-632-8403 Cell: 780-632-1519
Email: Graham.Knox@innotechalberta.ca

Sample ID (PRAMP_station_yyyymmdd) (Find Sample ID from BV's email)	**Canister ID** (Find canister ID from canister tag)	**Sample Description**	**Date/Time Canister Triggered** (Find Date/Time from BV's email)		**Analysis Requested**
			Date (yyyy/mm/dd)	**Time (24 Hr) (MST)**	
(1) PRAMP_842b- 20220315 PRAMP_986c- PRAMP_Reno-	28953	☐ Methane Trigger ☒ NMHC Trigger ☐ Methane Blank ☐ NMHC Blank ☐ Expired Canister – No further analysis is required.	2022/03/15	04:40	* C1C4 Air, VOC Full, RSC Air * Unknowns to be reported * Carbon Isotopic Analysis (if sample is collected from Methane trigger)

Sample Collection:

Collected By Dwayne **(Name) of** _____ **(Company) on** Mar 15/2022 **(Date/Time) (MST).**

InnoTech ALBERTA

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

EAS CANISTER
Sample ID 22030094-002 **Priority:** Normal

Customer ID: PRAMP
Cust Samp ID: PRAMP_842b-Blank

Date Received- Lab Use Only

RECEIVED
MAR 16 2022

Client Contact Details:

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

RUSH (Surcharge) ☐

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

InnoTech Contact: Graham Knox Phone: 780-632-8403 Cell: 780-632-1519
Email: Graham.Knox@innotechalberta.ca

Sample ID (PRAMP_station_yyyymmdd) (Find Sample ID from BV's email)	**Canister ID** (Find canister ID from canister tag)	**Sample Description**	**Date/Time Canister Triggered** (Find Date/Time from BV's email)		**Analysis Requested**
			Date (yyyy/mm/dd)	**Time (24 Hr) (MST)**	
2) PRAMP_842b- Blank	28961	□ Methane Trigger	2022/03/15	04:40	* C1C4 Air, VOC Full, RSC Air
PRAMP_986c-		□ NMHC Trigger			* Unknowns to be reported
PRAMP_Reno-		□ Methane Blank			* Carbon Isotopic Analysis (if sample is collected from Methane trigger)
		☑ NMHC Blank			
		□ Expired Canister – No further analysis is required.			

Sample Collection:

Collected By Dwayne **(Name) of** _____ **(Company) on** Mar 15/2022 **(Date/Time) (MST).**

Sample ID 22030094-001 **Priority:** Normal

Customer ID: PRAMP
Cust Samp ID: PRAMP_842b-20220315

InnoTech ALBERTA

Canister ID: 28953

This cleaned canister meets or exceeds TO-15 Method Specifications

Proofed by: ISQ4 on: JAN 1 2 2022

Evacuated: JAN 1 3 2022 Recertified: FEB 0 8 2022

(Use within: 3 months from evacuation or recertification date)

Laboratory Contact Number: 780-632-8403

Sample ID: _____

Sampled By: _____

Starting Vacuum: -27.3 "Hg

End Vacuum: -3 "Hg "Hg/psig

InnoTech ALBERTA

Canister ID: 28961

This cleaned canister meets or exceeds TO-15 Method Specifications

Proofed by: ISQ4 on: JAN 1 1 2022

Evacuated: JAN 1 2 2022 Recertified: FEB 0 8 2022

(Use within: 3 months from evacuation or recertification date)

Laboratory Contact Number: 780-632-8403

Sample ID: _____

Sampled By: _____

Starting Vacuum: -27.2 "Hg

End Vacuum: -27 "Hg/psig

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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

RESULTS: Karla Reesor 403 807 2995
Peace River Area Monitoring Program Committee

INVOICE: Office Manager

CLIENT SAMPLE ID: PRAMP_842b-20220315

Matrix: Ambient Air

CANISTER ID: 28953

PRIORITY: Normal

DESCRIPTION: NMHC Trigger

DATE SAMPLED: 15-Mar-22 4:40

DATE RECEIVED: 16-Mar-22

REPORT CREATED: 04-Apr-22

REPORT NUMBER: 22030094

VERSION: Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22030094-001	1-Butene	K, T, U	< 0.14	ppmv	0.14	NA-025	17-Mar-22
22030094-001	Acetylene	K, T, U	< 0.12	ppmv	0.12	NA-025	17-Mar-22
22030094-001	n-Butane	K, T, U	< 0.3	ppmv	0.3	NA-025	17-Mar-22
22030094-001	cis-2-Butene	K, T, U	< 0.06	ppmv	0.06	NA-025	17-Mar-22
22030094-001	Ethane	K, T, U	< 0.1	ppmv	0.1	NA-025	17-Mar-22
22030094-001	Ethylacetylene	K, T, U	< 0.09	ppmv	0.09	NA-025	17-Mar-22
22030094-001	Ethylene	K, T, U	< 0.10	ppmv	0.10	NA-025	17-Mar-22
22030094-001	Isobutane	K, T, U	< 0.1	ppmv	0.1	NA-025	17-Mar-22
22030094-001	Isobutylene	K, T, U	< 0.1	ppmv	0.1	NA-025	17-Mar-22
22030094-001	Methane		5.0	ppmv	0.1	NA-025	17-Mar-22
22030094-001	n-Propane	K, T, U	< 0.10	ppmv	0.10	NA-025	17-Mar-22
22030094-001	Propylene	K, T, U	< 0.1	ppmv	0.1	NA-025	17-Mar-22
22030094-001	Propyne	K, T, U	< 0.1	ppmv	0.1	NA-025	17-Mar-22
22030094-001	trans-2-Butene	K, T, U	< 0.13	ppmv	0.13	NA-025	17-Mar-22
22030094-001	2,5-Dimethylthiophene	K, T, U	< 0.4	ppbv	0.4	NA-024	17-Mar-22
22030094-001	2-Ethylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-001	2-Methylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-001	3-Methylthiophene	K, T, U	< 0.4	ppbv	0.4	NA-024	17-Mar-22

Report certified by: Rebecca Dasilva, Account Coordinator On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: April 4, 2022

Inquiries: (780) 632 8455 E-mail: EAS.Results@innotechalberta.ca

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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_842b-20220315	28953	Ambient Air	15-Mar-22 4:40

DESCRIPTION: NMHC Trigger

REPORT NUMBER: 22030094 **REPORT CREATED:** 04-Apr-22 **VERSION:** Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22030094-001	Butyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	17-Mar-22
22030094-001	Carbon disulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-001	Carbonyl sulphide		1.9	ppbv	0.4	NA-024	17-Mar-22
22030094-001	Dimethyl disulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-001	Dimethyl sulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-001	Ethyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	17-Mar-22
22030094-001	Ethyl sulphide	K, T, U	< 0.4	ppbv	0.4	NA-024	17-Mar-22
22030094-001	Hydrogen sulphide		2.2	ppbv	0.4	NA-024	17-Mar-22
22030094-001	Isobutyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	17-Mar-22
22030094-001	Isopropyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	17-Mar-22
22030094-001	Methyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-001	Pentyl mercaptan	K, T, U	< 0.6	ppbv	0.6	NA-024	17-Mar-22
22030094-001	Propyl mercaptan	K, T, U	< 0.6	ppbv	0.6	NA-024	17-Mar-22
22030094-001	tert-Butyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	17-Mar-22
22030094-001	Thiophene/sec-Butyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-001	1,1,1-Trichloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	1,1,2,2-Tetrachloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	1,1,2-Trichloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	1,1-Dichloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	1,1-Dichloroethylene	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	1,2,3-Trimethylbenzene	I	0.09	ppbv	0.07	AC-058	24-Mar-22
22030094-001	1,2,4-Trichlorobenzene	K, T, U	< 0.4	ppbv	0.4	AC-058	24-Mar-22
22030094-001	1,2,4-Trimethylbenzene	K, T, U	< 0.04	ppbv	0.04	AC-058	24-Mar-22
22030094-001	1,2-Dibromoethane	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	1,2-Dichlorobenzene	I	0.06	ppbv	0.04	AC-058	24-Mar-22

Report certified by: Rebecca Dasilva, Account Coordinator On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: April 4, 2022 Inquiries: (780) 632 8455 E-mail: EAS.Results@innotechalberta.ca

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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_842b-20220315	28953	Ambient Air	15-Mar-22 4:40

DESCRIPTION: NMHC Trigger

REPORT NUMBER: 22030094 **REPORT CREATED:** 04-Apr-22 **VERSION:** Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22030094-001	1,2-Dichloroethane	I	0.05	ppbv	0.04	AC-058	24-Mar-22
22030094-001	1,2-Dichloropropane	K, T, U	< 0.04	ppbv	0.04	AC-058	24-Mar-22
22030094-001	1,3,5-Trimethylbenzene	K, T, U	< 0.04	ppbv	0.04	AC-058	24-Mar-22
22030094-001	1,3-Butadiene	K, T, U	< 0.04	ppbv	0.04	AC-058	24-Mar-22
22030094-001	1,3-Dichlorobenzene	K, T, U	< 0.6	ppbv	0.6	AC-058	24-Mar-22
22030094-001	1,4-Dichlorobenzene	K, T, U	< 0.6	ppbv	0.6	AC-058	24-Mar-22
22030094-001	1,4-Dioxane	K, T, U	< 0.7	ppbv	0.7	AC-058	24-Mar-22
22030094-001	1-Butene/Isobutylene		0.59	ppbv	0.09	AC-058	24-Mar-22
22030094-001	1-Hexene/2-Methyl-1-pentene	K, T, U	< 0.10	ppbv	0.10	AC-058	24-Mar-22
22030094-001	1-Pentene	I	0.05	ppbv	0.04	AC-058	24-Mar-22
22030094-001	2,2,4-Trimethylpentane	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	2,2-Dimethylbutane		0.36	ppbv	0.03	AC-058	24-Mar-22
22030094-001	2,3,4-Trimethylpentane	I	0.11	ppbv	0.03	AC-058	24-Mar-22
22030094-001	2,3-Dimethylbutane		0.55	ppbv	0.13	AC-058	24-Mar-22
22030094-001	2,3-Dimethylpentane		0.37	ppbv	0.03	AC-058	24-Mar-22
22030094-001	2,4-Dimethylpentane		0.18	ppbv	0.04	AC-058	24-Mar-22
22030094-001	2-Methylheptane	I	0.06	ppbv	0.03	AC-058	24-Mar-22
22030094-001	2-Methylhexane		0.27	ppbv	0.04	AC-058	24-Mar-22
22030094-001	2-Methylpentane		0.92	ppbv	0.03	AC-058	24-Mar-22
22030094-001	3-Methylheptane	I	0.11	ppbv	0.04	AC-058	24-Mar-22
22030094-001	3-Methylhexane		0.52	ppbv	0.03	AC-058	24-Mar-22
22030094-001	3-Methylpentane		1.38	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Acetone		4.3	ppbv	0.6	AC-058	24-Mar-22
22030094-001	Acrolein	I	0.4	ppbv	0.4	AC-058	24-Mar-22
22030094-001	Benzene		0.50	ppbv	0.04	AC-058	24-Mar-22

Report certified by: Rebecca Dasilva, Account Coordinator On behalf of: A. Prefontaine, Manager, Chemical Testing

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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_842b-20220315	28953	Ambient Air	15-Mar-22 4:40

DESCRIPTION: NMHC Trigger

REPORT NUMBER: 22030094 **REPORT CREATED:** 04-Apr-22 **VERSION:** Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22030094-001	Benzyl chloride	K, T, U	< 0.4	ppbv	0.4	AC-058	24-Mar-22
22030094-001	Bromodichloromethane	K, T, U	< 0.04	ppbv	0.04	AC-058	24-Mar-22
22030094-001	Bromoform	I	0.10	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Bromomethane	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Carbon disulfide	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Carbon tetrachloride		0.19	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Chlorobenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Chloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Chloroform	I	0.05	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Chloromethane		0.92	ppbv	0.06	AC-058	24-Mar-22
22030094-001	cis-1,2-Dichloroethene	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	cis-1,3-Dichloropropene	K, T, U	< 0.04	ppbv	0.04	AC-058	24-Mar-22
22030094-001	cis-2-Butene	K, T, U	< 0.04	ppbv	0.04	AC-058	24-Mar-22
22030094-001	cis-2-Pentene	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Cyclohexane		2.34	ppbv	0.06	AC-058	24-Mar-22
22030094-001	Cyclopentane		0.85	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Dibromochloromethane	I	0.06	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Ethanol		4.2	ppbv	0.7	AC-058	24-Mar-22
22030094-001	Ethyl acetate	K, T, U	< 0.4	ppbv	0.4	AC-058	24-Mar-22
22030094-001	Ethylbenzene	I	0.20	ppbv	0.04	AC-058	24-Mar-22
22030094-001	Freon-11		0.39	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Freon-113		0.19	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Freon-114	I	0.07	ppbv	0.04	AC-058	24-Mar-22
22030094-001	Freon-12		0.79	ppbv	0.04	AC-058	24-Mar-22
22030094-001	Hexachloro-1,3-butadiene	K, T, U	< 0.4	ppbv	0.4	AC-058	24-Mar-22

Report certified by: Rebecca Dasilva, Account Coordinator On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: April 4, 2022 Inquiries: (780) 632 8455 E-mail: EAS.Results@innotechalberta.ca

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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_842b-20220315	28953	Ambient Air	15-Mar-22 4:40

DESCRIPTION: NMHC Trigger

REPORT NUMBER: 22030094 **REPORT CREATED:** 04-Apr-22 **VERSION:** Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22030094-001	Isobutane		10.7	ppbv	0.04	AC-058	24-Mar-22
22030094-001	Isopentane		5.98	ppbv	0.06	AC-058	24-Mar-22
22030094-001	Isoprene	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Isopropyl alcohol	K, T, U	< 0.4	ppbv	0.4	AC-058	24-Mar-22
22030094-001	Isopropylbenzene	I	0.08	ppbv	0.06	AC-058	24-Mar-22
22030094-001	m,p-Xylene	I	0.17	ppbv	0.06	AC-058	24-Mar-22
22030094-001	m-Diethylbenzene		0.41	ppbv	0.03	AC-058	24-Mar-22
22030094-001	m-Ethyltoluene	I	0.09	ppbv	0.04	AC-058	24-Mar-22
22030094-001	Methyl butyl ketone	K, T, U	< 0.6	ppbv	0.6	AC-058	24-Mar-22
22030094-001	Methyl ethyl ketone	I	0.7	ppbv	0.4	AC-058	24-Mar-22
22030094-001	Methyl isobutyl ketone	K, T, U	< 0.4	ppbv	0.4	AC-058	24-Mar-22
22030094-001	Methyl methacrylate	K, T, U	< 0.12	ppbv	0.12	AC-058	24-Mar-22
22030094-001	Methyl tert butyl ether	K, T, U	< 0.04	ppbv	0.04	AC-058	24-Mar-22
22030094-001	Methylcyclohexane		3.52	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Methylcyclopentane		2.60	ppbv	0.07	AC-058	24-Mar-22
22030094-001	Methylene chloride	K, T, U	< 0.4	ppbv	0.4	AC-058	24-Mar-22
22030094-001	n-Butane		6.00	ppbv	0.03	AC-058	24-Mar-22
22030094-001	n-Decane	K, T, U	< 0.09	ppbv	0.09	AC-058	24-Mar-22
22030094-001	n-Dodecane	K, T, U	< 0.4	ppbv	0.4	AC-058	24-Mar-22
22030094-001	n-Heptane	I	0.22	ppbv	0.06	AC-058	24-Mar-22
22030094-001	n-Hexane		1.01	ppbv	0.04	AC-058	24-Mar-22
22030094-001	n-Octane	I	0.13	ppbv	0.03	AC-058	24-Mar-22
22030094-001	n-Pentane		3.14	ppbv	0.06	AC-058	24-Mar-22
22030094-001	n-Propylbenzene	K, T, U	< 0.09	ppbv	0.09	AC-058	24-Mar-22
22030094-001	n-Undecane	K, T, U	< 0.7	ppbv	0.7	AC-058	24-Mar-22

Report certified by: Rebecca Dasilva, Account Coordinator On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: April 4, 2022 Inquiries: (780) 632 8455 E-mail: EAS.Results@innotechalberta.ca

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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_842b-20220315	28953	Ambient Air	15-Mar-22 4:40

DESCRIPTION: NMHC Trigger

REPORT NUMBER: 22030094 **REPORT CREATED:** 04-Apr-22 **VERSION:** Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22030094-001	Naphthalene	K, T, U	< 0.4	ppbv	0.4	AC-058	24-Mar-22
22030094-001	n-Nonane	I	0.08	ppbv	0.06	AC-058	24-Mar-22
22030094-001	o-Ethyltoluene	I	0.08	ppbv	0.03	AC-058	24-Mar-22
22030094-001	o-Xylene	I	0.19	ppbv	0.04	AC-058	24-Mar-22
22030094-001	p-Diethylbenzene	I	0.13	ppbv	0.03	AC-058	24-Mar-22
22030094-001	p-Ethyltoluene	K, T, U	< 0.06	ppbv	0.06	AC-058	24-Mar-22
22030094-001	Styrene	I	0.15	ppbv	0.06	AC-058	24-Mar-22
22030094-001	Tetrachloroethylene	I	0.09	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Tetrahydrofuran	K, T, U	< 0.4	ppbv	0.4	AC-058	24-Mar-22
22030094-001	Toluene		1.75	ppbv	0.04	AC-058	24-Mar-22
22030094-001	trans-1,2-Dichloroethylene		1.89	ppbv	0.09	AC-058	24-Mar-22
22030094-001	trans-1,3-Dichloropropylene	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	trans-2-Butene		0.39	ppbv	0.04	AC-058	24-Mar-22
22030094-001	trans-2-Pentene	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Trichloroethylene	I	0.04	ppbv	0.03	AC-058	24-Mar-22
22030094-001	Vinyl acetate		0.9	ppbv	0.4	AC-058	24-Mar-22
22030094-001	Vinyl chloride	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22

Report certified by: Rebecca Dasilva, Account Coordinator On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: April 4, 2022 Inquiries: (780) 632 8455 E-mail: EAS.Results@innotechalberta.ca

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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_842b-Blank	28961	Ambient Air	15-Mar-22 4:40

DESCRIPTION: NMHC Blank

REPORT NUMBER: 22030094 **REPORT CREATED:** 04-Apr-22 **VERSION:** Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22030094-002	1-Butene	K, T, U	< 0.10	ppmv	0.10	NA-025	17-Mar-22
22030094-002	Acetylene	K, T, U	< 0.08	ppmv	0.08	NA-025	17-Mar-22
22030094-002	n-Butane	K, T, U	< 0.2	ppmv	0.2	NA-025	17-Mar-22
22030094-002	cis-2-Butene	K, T, U	< 0.04	ppmv	0.04	NA-025	17-Mar-22
22030094-002	Ethane	K, T, U	< 0.1	ppmv	0.1	NA-025	17-Mar-22
22030094-002	Ethylacetylene	K, T, U	< 0.06	ppmv	0.06	NA-025	17-Mar-22
22030094-002	Ethylene	K, T, U	< 0.07	ppmv	0.07	NA-025	17-Mar-22
22030094-002	Isobutane	K, T, U	< 0.1	ppmv	0.1	NA-025	17-Mar-22
22030094-002	Isobutylene	K, T, U	< 0.1	ppmv	0.1	NA-025	17-Mar-22
22030094-002	Methane	K, T, U	< 0.1	ppmv	0.1	NA-025	17-Mar-22
22030094-002	n-Propane	K, T, U	< 0.07	ppmv	0.07	NA-025	17-Mar-22
22030094-002	Propylene	K, T, U	< 0.1	ppmv	0.1	NA-025	17-Mar-22
22030094-002	Propyne	K, T, U	< 0.1	ppmv	0.1	NA-025	17-Mar-22
22030094-002	trans-2-Butene	K, T, U	< 0.09	ppmv	0.09	NA-025	17-Mar-22
22030094-002	2,5-Dimethylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-002	2-Ethylthiophene	K, T, U	< 0.2	ppbv	0.2	NA-024	17-Mar-22
22030094-002	2-Methylthiophene	K, T, U	< 0.2	ppbv	0.2	NA-024	17-Mar-22
22030094-002	3-Methylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-002	Butyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-002	Carbon disulphide	K, T, U	< 0.2	ppbv	0.2	NA-024	17-Mar-22
22030094-002	Carbonyl sulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-002	Dimethyl disulphide	K, T, U	< 0.2	ppbv	0.2	NA-024	17-Mar-22
22030094-002	Dimethyl sulphide	K, T, U	< 0.2	ppbv	0.2	NA-024	17-Mar-22
22030094-002	Ethyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-002	Ethyl sulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22

Report certified by: Rebecca Dasilva, Account Coordinator On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: April 4, 2022 Inquiries: (780) 632 8455 E-mail: EAS.Results@innotechalberta.ca

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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_842b-Blank	28961	Ambient Air	15-Mar-22 4:40

DESCRIPTION: NMHC Blank

REPORT NUMBER: 22030094 **REPORT CREATED:** 04-Apr-22 **VERSION:** Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22030094-002	Hydrogen sulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-002	Isobutyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-002	Isopropyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-002	Methyl mercaptan	K, T, U	< 0.2	ppbv	0.2	NA-024	17-Mar-22
22030094-002	Pentyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	17-Mar-22
22030094-002	Propyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	17-Mar-22
22030094-002	tert-Butyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	17-Mar-22
22030094-002	Thiophene/sec-Butyl mercaptan	K, T, U	< 0.2	ppbv	0.2	NA-024	17-Mar-22
22030094-002	1,1,1-Trichloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	1,1,2,2-Tetrachloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	1,1,2-Trichloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	1,1-Dichloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	1,1-Dichloroethylene	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	1,2,3-Trimethylbenzene	K, T, U	< 0.05	ppbv	0.05	AC-058	24-Mar-22
22030094-002	1,2,4-Trichlorobenzene	K, T, U	< 0.3	ppbv	0.3	AC-058	24-Mar-22
22030094-002	1,2,4-Trimethylbenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	1,2-Dibromoethane	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	1,2-Dichlorobenzene	I	0.04	ppbv	0.03	AC-058	24-Mar-22
22030094-002	1,2-Dichloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	1,2-Dichloropropane	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	1,3,5-Trimethylbenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	1,3-Butadiene	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	1,3-Dichlorobenzene	K, T, U	< 0.4	ppbv	0.4	AC-058	24-Mar-22
22030094-002	1,4-Dichlorobenzene	K, T, U	< 0.4	ppbv	0.4	AC-058	24-Mar-22
22030094-002	1,4-Dioxane	K, T, U	< 0.5	ppbv	0.5	AC-058	24-Mar-22

Report certified by: Rebecca Dasilva, Account Coordinator On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: April 4, 2022 Inquiries: (780) 632 8455 E-mail: EAS.Results@innotechalberta.ca

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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_842b-Blank	28961	Ambient Air	15-Mar-22 4:40

DESCRIPTION: NMHC Blank

REPORT NUMBER: 22030094 **REPORT CREATED:** 04-Apr-22 **VERSION:** Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22030094-002	1-Butene/Isobutylene		0.44	ppbv	0.06	AC-058	24-Mar-22
22030094-002	1-Hexene/2-Methyl-1-pentene	K, T, U	< 0.07	ppbv	0.07	AC-058	24-Mar-22
22030094-002	1-Pentene	I	0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	2,2,4-Trimethylpentane	I	0.04	ppbv	0.02	AC-058	24-Mar-22
22030094-002	2,2-Dimethylbutane	I	0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	2,3,4-Trimethylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	2,3-Dimethylbutane	K, T, U	< 0.09	ppbv	0.09	AC-058	24-Mar-22
22030094-002	2,3-Dimethylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	2,4-Dimethylpentane	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	2-Methylheptane	I	0.04	ppbv	0.02	AC-058	24-Mar-22
22030094-002	2-Methylhexane	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	2-Methylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	3-Methylheptane	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	3-Methylhexane	I	0.03	ppbv	0.02	AC-058	24-Mar-22
22030094-002	3-Methylpentane	I	0.04	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Acetone		0.6	ppbv	0.4	AC-058	24-Mar-22
22030094-002	Acrolein	K, T, U	< 0.3	ppbv	0.3	AC-058	24-Mar-22
22030094-002	Benzene	I	0.12	ppbv	0.03	AC-058	24-Mar-22
22030094-002	Benzyl chloride	K, T, U	< 0.3	ppbv	0.3	AC-058	24-Mar-22
22030094-002	Bromodichloromethane	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	Bromoform	I	0.07	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Bromomethane	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Carbon disulfide	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Carbon tetrachloride	I	0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Chlorobenzene	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22

Report certified by: Rebecca Dasilva, Account Coordinator On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: April 4, 2022 Inquiries: (780) 632 8455 E-mail: EAS.Results@innotechalberta.ca

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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_842b-Blank	28961	Ambient Air	15-Mar-22 4:40

DESCRIPTION: NMHC Blank

REPORT NUMBER: 22030094 **REPORT CREATED:** 04-Apr-22 **VERSION:** Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22030094-002	Chloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Chloroform	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Chloromethane	K, T, U	< 0.04	ppbv	0.04	AC-058	24-Mar-22
22030094-002	cis-1,2-Dichloroethene	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	cis-1,3-Dichloropropene	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	cis-2-Butene	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	cis-2-Pentene	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Cyclohexane	K, T, U	< 0.04	ppbv	0.04	AC-058	24-Mar-22
22030094-002	Cyclopentane	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Dibromochloromethane	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Ethanol	K, T, U	< 0.5	ppbv	0.5	AC-058	24-Mar-22
22030094-002	Ethyl acetate	K, T, U	< 0.3	ppbv	0.3	AC-058	24-Mar-22
22030094-002	Ethylbenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	Freon-11	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Freon-113	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Freon-114	I	0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	Freon-12	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	Hexachloro-1,3-butadiene	K, T, U	< 0.3	ppbv	0.3	AC-058	24-Mar-22
22030094-002	Isobutane		0.15	ppbv	0.03	AC-058	24-Mar-22
22030094-002	Isopentane	I	0.07	ppbv	0.04	AC-058	24-Mar-22
22030094-002	Isoprene	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Isopropyl alcohol	I	0.4	ppbv	0.3	AC-058	24-Mar-22
22030094-002	Isopropylbenzene	K, T, U	< 0.04	ppbv	0.04	AC-058	24-Mar-22
22030094-002	m,p-Xylene	K, T, U	< 0.04	ppbv	0.04	AC-058	24-Mar-22
22030094-002	m-Diethylbenzene	I	0.08	ppbv	0.02	AC-058	24-Mar-22

Report certified by: Rebecca Dasilva, Account Coordinator On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: April 4, 2022 Inquiries: (780) 632 8455 E-mail: EAS.Results@innotechalberta.ca

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CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_842b-Blank	28961	Ambient Air	15-Mar-22 4:40

DESCRIPTION: NMHC Blank

REPORT NUMBER: 22030094 **REPORT CREATED:** 04-Apr-22 **VERSION:** Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22030094-002	m-Ethyltoluene	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	Methyl butyl ketone	K, T, U	< 0.4	ppbv	0.4	AC-058	24-Mar-22
22030094-002	Methyl ethyl ketone	K, T, U	< 0.3	ppbv	0.3	AC-058	24-Mar-22
22030094-002	Methyl isobutyl ketone	K, T, U	< 0.3	ppbv	0.3	AC-058	24-Mar-22
22030094-002	Methyl methacrylate	K, T, U	< 0.08	ppbv	0.08	AC-058	24-Mar-22
22030094-002	Methyl tert butyl ether	K, T, U	< 0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	Methylcyclohexane	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Methylcyclopentane	K, T, U	< 0.05	ppbv	0.05	AC-058	24-Mar-22
22030094-002	Methylene chloride	K, T, U	< 0.3	ppbv	0.3	AC-058	24-Mar-22
22030094-002	n-Butane		0.11	ppbv	0.02	AC-058	24-Mar-22
22030094-002	n-Decane	K, T, U	< 0.06	ppbv	0.06	AC-058	24-Mar-22
22030094-002	n-Dodecane	K, T, U	< 0.3	ppbv	0.3	AC-058	24-Mar-22
22030094-002	n-Heptane	I	0.09	ppbv	0.04	AC-058	24-Mar-22
22030094-002	n-Hexane	I	0.13	ppbv	0.03	AC-058	24-Mar-22
22030094-002	n-Octane		0.11	ppbv	0.02	AC-058	24-Mar-22
22030094-002	n-Pentane	I	0.07	ppbv	0.04	AC-058	24-Mar-22
22030094-002	n-Propylbenzene	K, T, U	< 0.06	ppbv	0.06	AC-058	24-Mar-22
22030094-002	n-Undecane	K, T, U	< 0.5	ppbv	0.5	AC-058	24-Mar-22
22030094-002	Naphthalene	K, T, U	< 0.3	ppbv	0.3	AC-058	24-Mar-22
22030094-002	n-Nonane	I	0.07	ppbv	0.04	AC-058	24-Mar-22
22030094-002	o-Ethyltoluene	I	0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	o-Xylene	I	0.03	ppbv	0.03	AC-058	24-Mar-22
22030094-002	p-Diethylbenzene	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	p-Ethyltoluene	K, T, U	< 0.04	ppbv	0.04	AC-058	24-Mar-22
22030094-002	Styrene	I	0.10	ppbv	0.04	AC-058	24-Mar-22

Report certified by: Rebecca Dasilva, Account Coordinator On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: April 4, 2022 Inquiries: (780) 632 8455 E-mail: EAS.Results@innotechalberta.ca

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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_842b-Blank	28961	Ambient Air	15-Mar-22 4:40

DESCRIPTION: NMHC Blank

REPORT NUMBER: 22030094 **REPORT CREATED:** 04-Apr-22 **VERSION:** Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22030094-002	Tetrachloroethylene	I	0.05	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Tetrahydrofuran	K, T, U	< 0.3	ppbv	0.3	AC-058	24-Mar-22
22030094-002	Toluene	I	0.06	ppbv	0.03	AC-058	24-Mar-22
22030094-002	trans-1,2-Dichloroethylene	K, T, U	< 0.06	ppbv	0.06	AC-058	24-Mar-22
22030094-002	trans-1,3-Dichloropropylene	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	trans-2-Butene		0.20	ppbv	0.03	AC-058	24-Mar-22
22030094-002	trans-2-Pentene	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Trichloroethylene	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22
22030094-002	Vinyl acetate	K, T, U	< 0.3	ppbv	0.3	AC-058	24-Mar-22
22030094-002	Vinyl chloride	K, T, U	< 0.02	ppbv	0.02	AC-058	24-Mar-22

Report certified by: Rebecca Dasilva, Account Coordinator On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: April 4, 2022 Inquiries: (780) 632 8455 E-mail: EAS.Results@innotechalberta.ca

Revision History

Order ID	Ver	Date	Reason
22030094	01	04-Apr-22	Report created

Methods

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

Qualifiers

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

Order Comments

22030094

Unknowns to be reported.

Sample Comments

Result Comments

Note:

1. Results relate only to items tested and apply to the sample as received.

2. This report shall not be reproduced, except in full, without the explicit approval of the laboratory.

Passive Sampling Analytical Results

Your Project #: 2022/03/01 - 2022/04/01
Site Location: PEACE RIVER COMPLEX
Work Order# 23154546
Work Order# 23154546
PO # 4900007713
COST CENTER 80072082
Approver Code S779

Attention: Michael Bisaga

Canadian Natural Upgrading Ltd c/o Canadian Natural Resources Ltd
Peace River/Cliffdale
210, 200 CARLETON DR.
ST. ALBERT, AB
CANADA T8N 3Y4

Report Date: 2022/04/20
Report #: R3162454
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C222880
Received: 2022/04/06, 07:28

Sample Matrix: Air
Samples Received: 12

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
H2S Passive Analysis	12	2022/04/08	2022/04/18	PTC SOP-00150	Passive H2S in ATM
SO2 Passive Analysis	12	2022/04/12	2022/04/18	PTC SOP-00149	Passive SO2 in ATM

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Results relate only to the items tested.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Belma Elefante
Customer Service Associate
20 Apr 2022 08:41:55

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

==========

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.
For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C222880
Report Date: 2022/04/20

Canadian Natural Upgrading Ltd c/o Canadian Natural Resources Ltd
Client Project #: 2022/03/01 - 2022/04/01
Site Location: PEACE RIVER COMPLEX
Sampler Initials: BG

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		ARG296	ARG297	ARG298	ARG299	ARG300		ARG301		
Sampling Date		2022/03/01 08:00	2022/03/01 08:00	2022/03/01 08:00	2022/03/01 08:00	2022/03/01 08:00		2022/03/01 08:00		
	UNITS	1	2	3	4	7	QC Batch	8	RDL	QC Batch
Passive Monitoring										
Calculated H2S	ppb	0.06	0.08	0.11	0.10	0.08	A547625	0.09	0.02	A547626
Calculated SO2	ppb	0.3	0.4	0.4	0.3	0.3	A549861	0.3	0.1	A549861
RDL = Reportable Detection Limit										

Bureau Veritas ID		ARG302	ARG303	ARG304	ARG305	ARG306	ARG307		
Sampling Date		2022/03/01 08:00	2022/03/01 08:00	2022/03/01 08:00	2022/03/01 08:00	2022/03/01 08:00	2022/03/01 08:00		
	UNITS	9	10	11	12	13	14	RDL	QC Batch
Passive Monitoring									
Calculated H2S	ppb	0.09	0.11	0.13	0.07	0.09	0.07	0.02	A547626
Calculated SO2	ppb	0.3	0.3	0.3	0.3	0.3	0.2	0.1	A549861
RDL = Reportable Detection Limit									

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Bureau Veritas Job #: C222880
Report Date: 2022/04/20

Canadian Natural Upgrading Ltd c/o Canadian Natural Resources Ltd
Client Project #: 2022/03/01 - 2022/04/01
Site Location: PEACE RIVER COMPLEX
Sampler Initials: BG

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C222880
Report Date: 2022/04/20

Canadian Natural Upgrading Ltd c/o Canadian Natural Resources Ltd
Client Project #: 2022/03/01 - 2022/04/01
Site Location: PEACE RIVER COMPLEX
Sampler Initials: BG

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A547625	KDE	Spiked Blank	Calculated H2S			100	%	90 - 110
A547626	KDE	Spiked Blank	Calculated H2S			100	%	90 - 110
A549861	OZ	Spiked Blank	Calculated SO2			101	%	90 - 110
A549861	OZ	Method Blank	Calculated SO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

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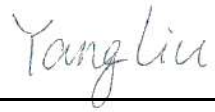
Bureau Veritas Job #: C222880
Report Date: 2022/04/20

Canadian Natural Upgrading Ltd c/o Canadian Natural Resources Ltd
Client Project #: 2022/03/01 - 2022/04/01
Site Location: PEACE RIVER COMPLEX
Sampler Initials: BG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Yang Liu, Analyst II

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End of Report