



Peace River Area Monitoring Program

SEPTEMBER 2022

Monthly Ambient Air Quality Monitoring Report

PRAMP-202209

Operation and Maintenance:

Bureau Veritas Canada

Data Validation and Report:

Peace River Area Monitoring Program

October 21, 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
CH ₄	Methane
EPEA	Environmental Protection and Enhancement Act
H ₂ S	Hydrogen Sulphide
kph	kilometers per hour
mb	millibar
mm	millimeter
NMHC	Non-Methane Hydrocarbons
ppb	parts per billion
ppm	parts per million
PRAMP	Peace River Area Monitoring Program
RH	Relative Humidity
SO ₂	Sulphur Dioxide
ST	Station Temperature
THC	Total Hydrocarbons
TRS	Total Reduced Sulphur
VWD	Vector Wind Direction
VWS	Vector Wind Speed
WD	Wind Direction
WS	Wind Speed
°C	Degrees Celsius



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October 21, 2022

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

Enclosed is the September 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 September 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, except precipitation (37.4%).
- **Precipitation:** The precipitation gauge was found to have a loose connection with the datalogger during the September 19 site visit. The connection was fixed on September 19 hour 18. Data

collected before September 19 were compared with other near-by stations and deemed invalid. Data were discarded back to the time the last valid system check, which was August 5 hour 9. Six hundred thirty-nine hours and four hundred fifty hours of data were discarded in August and September, respectively.

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.
- **THC/CH4/NMHC:** Following a successful shut-down calibration on the Thermo 55i analyzer, s/n: 1193585652, on September 6, the analyzer was removed. The Thermo 55i analyzer, s/n: 12208316589, was installed. The analyzer was put offline overnight to stabilize, and a successful installation calibration was completed on September 7. Fourteen hours of downtime were recorded due to this event. This analyzer swap was to address the concern of unexpected high CH4 concentrations continuing being recorded from the analyzer.

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.
- No major operational issues were recorded this month.

PRC Station

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

AQHI – Grimshaw Station

- All data collected this month were compliant with the requirements outlined in the AMD 2016.
- All parameters met the 90% operational uptime requirement.
- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) and /or Alberta Ambient Air Quality Guidelines (AAAQGs) where applicable, except PM2.5. Twenty-two 1-hour and three 24-hour PM2.5 exceedances were recorded this month and were caused by smoke being transported into the area from wildfires burning in British Columbia.

Date	Time (MST)	Parameter	Average Period	AAAQOs / AAAQGs (µg/m3)	Concentration (µg/m3)	Wind speed (km/hr)	Wind Direction	Reference #
Sep 4	7	PM2.5	1-Hour	80	139	7.7	320°(NW)	403913
Sep 4	8	PM2.5	1-Hour	80	302	3.5	310°(NW)	403913
Sep 4	9	PM2.5	1-Hour	80	286	1.0	265°(W)	403913

Sep 4	10	PM2.5	1-Hour	80	199	5.9	249°(WSW)	403913
Sep 4	17	PM2.5	1-Hour	80	97	22.7	221°(SW)	403913
Sep 4	-	PM2.5	24-Hour	29	62.0	11.8	275°(W)	403913
Sep 10	10	PM2.5	1-Hour	80	98	14.4	294°(WNW)	404189
Sep 10	11	PM2.5	1-Hour	80	111	13.1	295°(WNW)	404189
Sep 10	12	PM2.5	1-Hour	80	81	12.1	292°(WNW)	404189
Sep 10	13	PM2.5	1-Hour	80	92	13.1	291°(WNW)	404189
Sep 10	14	PM2.5	1-Hour	80	92	12.7	284°(WNW)	404189
Sep 10	17	PM2.5	1-Hour	80	86	2.6	331°(NNW)	404189
Sep 10	18	PM2.5	1-Hour	80	91	0.1	335°(NNW)	404189
Sep 10	19	PM2.5	1-Hour	80	107	2.1	331°(NNW)	404189
Sep 10	20	PM2.5	1-Hour	80	107	3.1	335°(NNW)	404189
Sep 10	21	PM2.5	1-Hour	80	104	4.4	329°(NNW)	404189
Sep 10	22	PM2.5	1-Hour	80	84	6.1	345°(NNW)	404189
Sep 10	-	PM2.5	24-Hour	29	59.5	8.8	286°(WNW)	404189
Sep 16	13	PM2.5	1-Hour	80	90	12.4	196°(SSW)	404497
Sep 16	14	PM2.5	1-Hour	80	123	9.7	242°(WSW)	404497
Sep 16	15	PM2.5	1-Hour	80	102	9.0	288°(WNW)	404497
Sep 16	16	PM2.5	1-Hour	80	84	11.1	298°(WNW)	404497
Sep 16	17	PM2.5	1-Hour	80	96	8.3	287°(WNW)	404497
Sep 16	18	PM2.5	1-Hour	80	95	8.2	303°(WNW)	404497
Sep 16	-	PM2.5	24-Hour	29	47.2	5.7	255°(WSW)	404497

- No major operational issues were recorded 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 both the PRC station and the AQHI-Grimshaw station.

- Sample analysis and analytical results were prepared and provided by InnoTech Alberta.
- Two NMHC canister events were recorded at the Reno station this month.

Station	Parameter	Date	Time	Concentration (ppm)
Reno	Non-methane HC	10-Sep	20:30	0.34
Reno	Non-methane HC	30-Sep	19:20	0.35

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.

The precipitation data collected at the 986 station in August was revised due to an equipment error which was identified during the September site visit. The purpose of collecting precipitation data at the PRAMP stations is for near-by residents to use during farming seasons. Data are not required to be submitted to the Alberta’s Ambient Air Quality Data Warehouse. As a result, no submission for the revised data is needed.

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

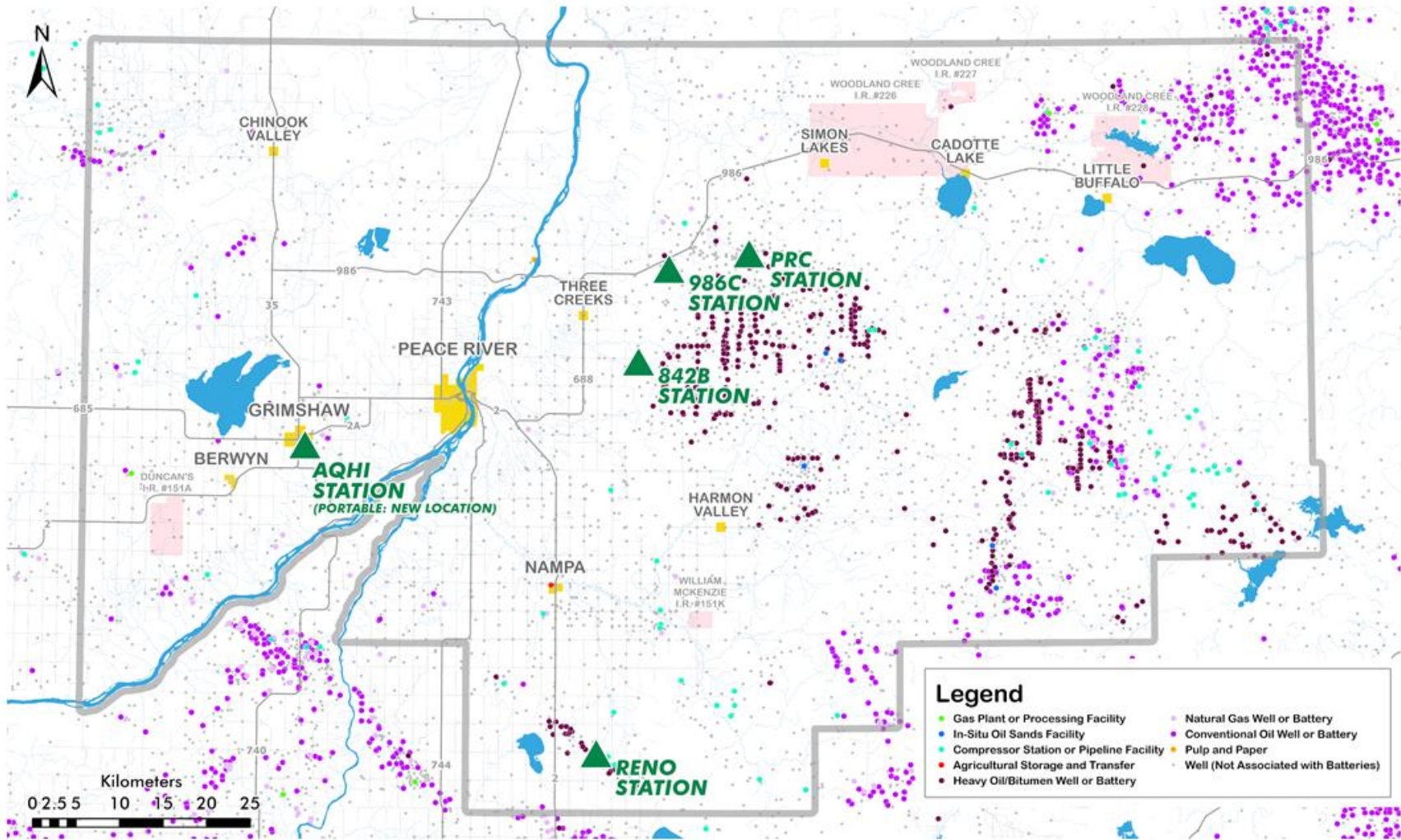
I certify that I have reviewed and verified this report and that the information is complete, accurate and representative of the monitoring results, reporting timeframe and the specified analysis, summarization and reporting requirements. I also certify that at the time of this report's submission, all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



Michael Bisaga, Technical Program Manager, PRAMP Airshed

October 21, 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	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 20. • No operational issues were identified this month. 			
TRS	Thermo / 43iQTL	1191833341	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 20. • No operational issues were identified this month. 			
THC/CH4/NMHC	Thermo / 55i	1433563261	
<ul style="list-style-type: none"> • Multiple bad injections were recorded on September 14 between hour 8 and hour 16. Minute data were reviewed, and data that were recorded below 1.7ppm were deemed invalid and discarded. Hourly data were re-averaged afterwards. Hourly data are discarded if the data completeness criteria is not met; 75% valid 1-minute data in an hour is the minimum. No hourly data were invalidated as a result. • A successful monthly calibration was performed on September 20. 			
Relative Humidity (RH)	Rotronic / HC2-S3	20357528	
<ul style="list-style-type: none"> • The RH sensor was checked on September 20. The sensor passed the check requirements. • No operational issues were identified this month. 			
Barometric Pressure (BP)	MetOne / 092	Y23358	
<ul style="list-style-type: none"> • The BP sensor was checked on September 20. The sensor passed the check requirements. • No operational issues were identified this month. 			

Parameter	Make / Model	Serial Number	
Ambient Temperature (AT)	Rotronic / HC2-S3	20357528	
<ul style="list-style-type: none"> The AT sensor was checked on September 20. The sensor passed the check requirements. No operational issues were identified this month. 			
Station Temperature (ST)	COMET	18961918	
<ul style="list-style-type: none"> No operational issues were identified this month. 			
Precipitation (Precip)	RM Young / 52202	TB 16325	
<ul style="list-style-type: none"> The precipitation gauge was found to have a loose connection with the datalogger during the September 19 sit visit. The connection was fixed on September 19 hour 18. Data collected before September 19 were compared with other near-by stations and deemed invalid. Data were discarded back to the time the last valid system check, which was August 5 hour 9. Six hundred thirty-nine hours and four hundred fifty hours of data were discarded in August and September, respectively. The precipitation gauge was checked on September 20. The sensor passed the check requirements. 			
Wind Speed/Wind Direction (WS/ WD)	RM Young / 05305AQ	180340	
<ul style="list-style-type: none"> Wind direction data contained in this report represents where the wind is coming from. The annual wind system calibration was completed on August 5, 2022. The anemometer sensors were checked on September 20. Both the wind speed sensor and wind direction 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	0.0	0	1	September 2 at hour 8	7.5	S	0.2	September 28	100.0	94.8
TRS (ppb)	-	-	-	-	-	-	0.57	0.07	3.62	September 18 at hour 22	3.4	NW	1.23	September 18	100.0	94.8
THC (ppm)	-	-	-	-	-	-	2.03	1.93	2.45	September 4 at hour 2	3	NE	2.11	September 4	100.0	95.1
CH4 (ppm)	-	-	-	-	-	-	2.03	1.93	2.45	September 4 at hour 2	3	NE	2.11	September 4	100.0	95.1
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.00	September 1 at hour 0	14.5	WNW	0.00	September 1	100.0	95.1
RH (%)	-	-	-	-	-	-	67.8	27	99	September 18 at hour 6	4.3	SW	97.2	September 17	100.0	100.0
BP (millibar)	-	-	-	-	-	-	941	928	949	September 8 at hour 22	4.4	WSW	949	September 30	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	12.4	-1.8	28.7	September 3 at hour 16	5.6	S	19.2	September 3	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	23.3	21.8	24.3	September 20 at hour 9	10	SSW	23.7	September 20	100.0	100.0
Precipitation (mm)*	-	-	-	-	-	-	1.8	0.0	0.5	September 29 at hour 8	16.3	ENE	1.8	September 29	37.4	37.4
WSV (km/hr)	-	-	-	-	-	-	4.2	0.3	25.6	September 23 at hour 14	25.6	WSW	14.8	September 23	100.0	100.0
WDV (sector)	-	-	-	-	-	-	212 (SSW)	-	-	-	-	-	-	-	100.0	100.0

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

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

Alberta Ambient Air Quality Objectives (AAQOs) and/or Alberta Ambient Air Quality Guidelines (AAQGs) Exceedances at 986c Station

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

842b Station

Equipment Operation Summary

Parameter	Make / Model	Serial Number
SO2	Thermo / 43iQTL	1200736629
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 7. • No operational issues were identified this month. 		
TRS	Thermo 43iQTL	1200736630
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 7. • The analyzer failed the daily span check on September 10 and September 13 and started showing check unstable results on September 18. A repeat zero-span check was completed on September 11 hour 6, September 14 hour 6, September 23 hour 6 and September 24 hour 6. The analyzer passed the check requirements each time. Four hours of downtime were recorded due to the additional quality checks. • In order to correct the unstable span check result issue, a successful shut-down calibration was completed on September 25 before scrubber material renewal. The analyzer was left offline overnight to stabilize. A successful post-repair calibration was completed on September 26. Twenty hours of downtime were recorded due to this event. 		
THC/CH4/NMHC	Thermo / 55i	1193585652 / 12208316589
<ul style="list-style-type: none"> • Following a successful shut-down calibration on the Thermo 55i analyzer, s/n: 1193585652, on September 6, the analyzer was removed. The Thermo 55i analyzer, s/n: 12208316589, was installed. The analyzer was put offline overnight to stabilize, and a successful installation calibration was completed on September 7. Fourteen hours of downtime were recorded due to this event. • CH4 baseline shifted up after the analyzer, s/n: 1193585652, was installed in August. The analyzer had a history of recording higher than expected CH4 concentrations. Maintenance was completed and the analyzer passed bench testing at the BV shop before it was redeployed to the field. The elevated baseline issue was corrected after the analyzer was removed on September 6. Because the analyzer, s/n: 1193585652, passed the shut-down calibration requirements, data were considered valid. However, data will be reviewed and may be revised after analyzer diagnostic results become available. 		

Parameter	Make / Model	Serial Number	
Relative Humidity (RH)	Rotronic / HC2A-S3	20370767	
<ul style="list-style-type: none"> The RH sensor was checked on September 7. The sensor passed the check requirements. No operational issues were identified this month. 			
Barometric Pressure (BP)	MetOne / 092	Y23362	
<ul style="list-style-type: none"> The BP sensor was checked on September 7. The sensor passed the check requirements. No operational issues were identified this month. 			
Ambient Temperature (AT)	Rotronic / HC2A-S3	20370767	
<ul style="list-style-type: none"> The temperature sensor was checked on September 7. The sensor passed the check requirements. No operational issues were identified this month. 			
Station Temperature (ST)	COMET	20790297	
<ul style="list-style-type: none"> No operational issues were identified this month. 			
Precipitation (Precip)	RM Young / 52202	TB 15878	
<ul style="list-style-type: none"> The precipitation gauge was checked on September 7. The sensor passed the check requirements. No operational issues were identified this month. 			
Wind Speed/Wind Direction (WS/ WD)	RM Young / 05305AQ	174802	
<ul style="list-style-type: none"> Wind direction data contained in this report represents where the wind is coming from. The annual wind system calibration was completed on August 3, 2022. The anemometer sensors were checked on September 7. Both the wind speed sensor and wind direction 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	0.0	0	1	September 28 at hour 11	9.3	SW	0.1	September 28	100.0	95.1
TRS (ppb)	-	-	-	-	-	-	0.70	0.32	4.59	September 18 at hour 22	1.3	SW	1.65	September 18	100.0	95.1
THC (ppm)	-	-	-	-	-	-	2.09	1.94	2.51	September 4 at hour 1	0.8	NE	2.25	September 4	98.1	93.2
CH4 (ppm)	-	-	-	-	-	-	2.09	1.94	2.51	September 4 at hour 1	0.8	NE	2.25	September 4	98.1	93.2
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.03	September 3 at hour 18	0.2	S	0.00	September 3	98.1	93.2
RH (%)	-	-	-	-	-	-	69.4	26	100	September 8 at hour 3	2.4	WNW	99.3	September 17	100.0	100.0
BP (millibar)	-	-	-	-	-	-	940	927	948	September 8 at hour 21	2.6	WNW	948	September 30	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	12.8	-0.5	29.6	September 3 at hour 15	3.2	SSW	19.1	September 3	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	22.3	20.7	23.6	September 6 at hour 21	3.3	SE	22.8	September 27	100.0	100.0
Precipitation (mm)*	-	-	-	-	-	-	24.9	0.0	3.4	September 17 at hour 4	2.3	NNE	18.5	September 17	100.0	99.9
WSV (km/hr)	-	-	-	-	-	-	3.6	0.2	29.4	September 23 at hour 14	29.4	W	17.1	September 23	100.0	100.0
WDV (sector)	-	-	-	-	-	-	225 (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	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 22. • No operational issues were identified this month. 			
TRS	Thermo 43iQTL	12101910504	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 22. • No operational issues were identified this month. 			
THC/CH4/NMHC	Thermo / 55i	12101910497	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 22. • No operational issues were identified this month. 			
Relative Humidity (RH)	Rotronic / HC2-S3	61116376	
<ul style="list-style-type: none"> • The RH sensor was checked on September 22. The sensor passed the check requirements. • No operational issues were identified this month. 			
Barometric Pressure (BP)	MetOne / 092	K12864	
<ul style="list-style-type: none"> • The BP sensor was checked on September 22. The sensor passed the check requirements. • No operational issues were identified this month. 			
Ambient Temperature (AT)	Rotronic / HC2-S3	61116376	
<ul style="list-style-type: none"> • The AT sensor was checked on September 22. The sensor passed the check requirements. • No operational issues were identified this month. 			

Parameter	Make / Model	Serial Number	
Station Temperature (ST)	Bureau Veritas Canada	N/A	
<ul style="list-style-type: none"> No operational issues were identified this month. 			
Precipitation (Precip)	RM Young / 5202	TB15877	
<ul style="list-style-type: none"> The precipitation gauge was checked on September 22. The sensor passed the check requirements. No operational issues were identified this month. 			
Wind Speed/Wind Direction (WS/ WD)	RM Young / 5305VK	149769	
<ul style="list-style-type: none"> Wind direction data contained in this report represents where the wind is coming from. The annual wind system calibration was completed on August 3, 2022. The anemometer sensors were checked on September 22. Both the wind speed sensor and wind direction sensor passed the check requirements. No operational issues were identified this month. 			

Monitored Data Summary for Reno Station

Parameter	Objectives/Guidelines			Exceedances			Monthly Avg.	Min. 1-hr	Max. 1-hr	Date/Time	VWS (km/hr)	VWD (sector)	Max. 24-hr	Date	Operational Uptime (%)	Valid Data (%)
	1-hr	24-hr	30-day	1-hr	24-hr	30-day										
SO2 (ppb)	172	48	11	0	0	0	0.0	0	1	September 4 at hour 7	2.8	NNW	0.3	September 10	100.0	95.0
TRS (ppb)	-	-	-	-	-	-	0.26	0.00	3.03	September 28 at hour 6	2	SSW	0.56	September 14	100.0	95.0
THC (ppm)	-	-	-	-	-	-	2.02	1.91	2.62	September 28 at hour 21	1.4	N	2.11	September 14	100.0	95.1
CH4 (ppm)	-	-	-	-	-	-	2.02	1.91	2.61	September 28 at hour 21	1.4	N	2.11	September 14	100.0	95.1
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.06	September 10 at hour 20	1.7	SSW	0.01	September 10	100.0	95.1
RH (%)	-	-	-	-	-	-	59.9	19	98	September 18 at hour 2	3.3	NW	93.4	September 17	100.0	100.0
BP (millibar)	-	-	-	-	-	-	939	926	947	September 8 at hour 22	3.1	W	946	September 30	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	13.3	0.0	29.4	September 3 at hour 16	2.4	NW	20.8	September 3	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	21.9	17.9	24.2	September 22 at hour 1	1	SSW	23.0	September 17	100.0	100.0
Precipitation (mm)*	-	-	-	-	-	-	11.4	0.0	3.5	September 17 at hour 11	5.3	WSW	10.4	September 17	100.0	99.9
WSV (km/hr)	-	-	-	-	-	-	2.8	0.0	19.1	September 23 at hour 14	19.1	WSW	12.1	September 23	100.0	100.0
WDV (sector)	-	-	-	-	-	-	248 (WSW)	-	-	-	-	-	-	-	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 (AAAOs) 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	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 21. • No operational issues were recorded this month. 			
H2S	Thermo 450i	1308857354	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 21. • No operational issues were recorded this month. 			
TRS	Thermo 450i	1034746224	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 21. • No operational issues were recorded this month. 			
THC/CH4/NMHC	Thermo / 55i	1022143392	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 21. • No operational issues were recorded this month. 			
Relative Humidity (RH)	Rotronic C2-S3	20558318	
<ul style="list-style-type: none"> • The RH sensor was checked on September 21. The sensor passed the check requirements. • No operational issues were recorded this month. 			
Ambient Temperature (AT)	Rotronic C2-S3	20558318	
<ul style="list-style-type: none"> • The AT sensor was checked on September 21. The sensor passed the check requirements. • No operational issues were recorded this month. 			

Parameter	Make / Model	Serial Number	
Barometric Pressure (BP)	MetOne 092	B19577	
<ul style="list-style-type: none"> • The BP sensor was checked on September 21. The sensor passed the check requirements. • No operational issues were recorded this month. 			
Station Temperature (ST)	Canadian Natural	N/A	
<ul style="list-style-type: none"> • No operational issues were recorded this month. 			
Wind Speed/Wind Direction (WS/ WD)	RM Young / 05305VK	129612	
<ul style="list-style-type: none"> • Wind direction data contained in this report represents where the wind is coming from. • The annual wind system calibration was completed on August 17, 2022. • The anemometer sensors were check on September 21. Both the wind speed sensor and wind direction sensor passed the check requirements. • No operational issues were recorded this month. 			

Monitored Data Summary for Peace River Complex (PRC) Station

Parameter	Objectives/Guidelines			Exceedances			Monthly Avg.	Min. 1-hr	Max. 1-hr	Date/Time	VWS (km/hr)	VWD (sector)	Max. 24-hr	Date	Operational Uptime (%)	Valid Data (%)
	1-hr	24-hr	30-day	1-hr	24-hr	30-day										
SO2 (ppb)	172	48	11	0	0	0	0.0	0	1	September 2 at hour 0	10.1	S	0.4	September 27	100.0	95.0
H2S (ppb)	10	3	-	0	0	-	0.0	0	1	September 2 at hour 3	12.6	S	0.2	September 2	100.0	95.0
TRS (ppb)	-	-	-	-	-	-	0.0	0	1	September 2 at hour 3	12.6	S	0.3	September 28	100.0	95.0
THC (ppm)	-	-	-	-	-	-	2.05	1.94	2.33	September 4 at hour 2	4.5	NNE	2.11	September 4	100.0	95.0
CH4 (ppm)	-	-	-	-	-	-	2.05	1.94	2.33	September 4 at hour 2	4.5	NNE	2.11	September 4	100.0	95.0
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.00	September 1 at hour 0	18.9	W	0.00	September 1	100.0	95.0
RH (%)	-	-	-	-	-	-	67.4	26	100	September 8 at hour 5	8.9	SSW	97.8	September 17	100.0	100.0
BP (millibar)	-	-	-	-	-	-	942	929	950	September 9 at hour 0	6.2	SW	950	September 30	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	12.2	-2.0	29.2	September 3 at hour 16	1.9	WNN	19.7	September 3	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	22.4	19.9	25.4	September 5 at hour 13	31.5	WSW	23.2	September 24	100.0	100.0
WSV (km/hr)	-	-	-	-	-	-	5.6	0.9	34.5	September 23 at hour 14	34.5	WSW	20.1	September 23	100.0	100.0
WDV (sector)	-	-	-	-	-	-	216 (SW)	-	-	-	-	-	-	-	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 Peace River Complex (PRC) 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	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 7. • No operational issues were identified this month. 			
TRS	Teledyne / T100U	132	
<ul style="list-style-type: none"> • The analyzer spanned close to the upper acceptable limit on September 2. A repeat zero-span check was initiated to assess the span response. The check results showed an improvement. However, the analyzer failed the daily span check on September 5 and 6. A repeat zero-span check results showed a similar drift. A successful monthly calibration was completed on September 7 to correct the drift. As the analyzer passed the multi-point calibration requirements, data collected prior to September 7 were considered valid. Three hours of downtime were recorded due to the additional quality check. • The analyzer showed a span check failure on both September 8 and 9 as the expected span value was not updated after September 7's calibration. The value was updated on September 10. Data quality was not affected by this error. 			
NOx/NO/NO2	Teledyne / T200	837	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 8. • No operational issues were identified this month. 			
O3	Teledyne / T400	824	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 8. • No operational issues were identified this month. 			
THC/CH4/NMHC	Thermo / 55i	1191032505	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 7. • No operational issues were identified this month. 			

Parameter	Make / Model	Serial Number	
PM2.5	Teledyne / T640	318	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 22. • No operational issues were identified this month. 			
Relative Humidity (RH)	Vaisala / HMP155	N2910506	
<ul style="list-style-type: none"> • The RH sensor was checked on September 8. The sensor passed the check requirements. • No operational issues were identified this month. 			
Barometric Pressure (BP)	MetOne / 092	A2397	
<ul style="list-style-type: none"> • The BP sensor was checked on September 8. The sensor passed the check requirements. • No operational issues were identified this month. 			
Ambient Temperature (AT)	Vaisala / HMP155	N2910506	
<ul style="list-style-type: none"> • The AT sensor was checked on September 8. The sensor passed the check requirements. • No operational issues were identified this month. 			
Station Temperature (ST)	COMET	N/A	
<ul style="list-style-type: none"> • No operational issues were identified this month. 			
Wind Speed/Wind Direction (WS/ WD)	RM Young / 05305AQ	174801	
<ul style="list-style-type: none"> • Wind direction data contained in this report represents where the wind is coming from. • The last annual wind system calibration was completed on July 12, 2022. • The anemometer sensors were checked on September 8. Both the wind speed sensor and wind direction 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	4	September 12 at hour 9	5.2	ENE	0.6	September 28	100.0	95.0
TRS (ppb)	-	-	-	-	-	-	0.44	0.02	3.20	September 13 at hour 0	4.1	E	0.82	September 30	99.6	94.6
NOx (ppb)	-	-	-	-	-	-	4.4	0	60	September 28 at hour 6	1	SW	9.7	September 21	100.0	94.8
NO (ppb)	-	-	-	-	-	-	0.9	0	36	September 28 at hour 6	1	SW	2.7	September 28	100.0	94.8
NO2 (ppb)	159	-	-	0	-	-	3.5	0	24	September 28 at hour 6	1	SW	7.3	September 21	100.0	94.8
O3 (ppb)	76	-	-	0	-	-	24.6	2.9	53.5	September 4 at hour 17	22.7	SW	34.9	September 23	100.0	95.0
THC (ppm)	-	-	-	-	-	-	2.02	1.93	2.47	September 30 at hour 19	3.7	N	2.11	September 30	100.0	95.1
CH4 (ppm)	-	-	-	-	-	-	2.01	1.93	2.46	September 1 at hour 22	3	SSW	2.08	September 30	100.0	95.1
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.25	September 30 at hour 19	3.7	N	0.03	September 30	100.0	95.1
PM2.5 (µg/m3)	80	30	-	22	3	-	14.3	1.0	302.0	September 4 at hour 8	3.5	NW	62.0	September 4	100.0	99.7
RH (%)	-	-	-	-	-	-	59.9	19	100	September 30 at hour 6	1.4	SSE	93.1	September 17	100.0	100.0
BP (millibar)	-	-	-	-	-	-	941	928	950	September 8 at hour 21	6.5	NW	949	September 30	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	13.6	1.9	29.7	September 3 at hour 15	8.8	WNW	19.8	September 3	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	22.4	20.9	23.9	September 27 at hour 17	8.9	WSW	22.6	September 20	100.0	100.0
WSV (km/hr)	-	-	-	-	-	-	8.9	0.1	31.8	September 23 at hour 14	31.8	W	19.0	September 23	100.0	100.0
WDV (sector)	-	-	-	-	-	-	276 (W)	-	-	-	-	-	-	-	100.0	100.0

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

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

The following exceedances of AAAQOs were observed at the AQHI - Grimshaw Station.

Date	Time (MST)	Parameter	Average Period	AAAOs	Concentration	Wind speed	Wind Direction	Reference #
September 4	7	PM2.5	1-Hour	80 µg/m3	139 µg/m3	7.7 km/hr	320° (NW)	403913
September 4	8	PM2.5	1-Hour	80 µg/m3	302 µg/m3	3.5 km/hr	310° (NW)	403913
September 4	9	PM2.5	1-Hour	80 µg/m3	286 µg/m3	1.0 km/hr	265° (W)	403913
September 4	10	PM2.5	1-Hour	80 µg/m3	199 µg/m3	5.9 km/hr	249° (WSW)	403913
September 4	17	PM2.5	1-Hour	80 µg/m3	97 µg/m3	22.7 km/hr	221° (SW)	403913
September 4	-	PM2.5	24-Hour	29 µg/m3	62.0 µg/m3	11.8 km/hr	275° (W)	403913
September 10	10	PM2.5	1-Hour	80 µg/m3	98 µg/m3	14.4 km/hr	294° (WNW)	404189
September 10	11	PM2.5	1-Hour	80 µg/m3	111 µg/m3	13.1 km/hr	295° (WNW)	404189
September 10	12	PM2.5	1-Hour	80 µg/m3	81 µg/m3	12.1 km/hr	292° (WNW)	404189
September 10	13	PM2.5	1-Hour	80 µg/m3	92 µg/m3	13.1 km/hr	291° (WNW)	404189
September 10	14	PM2.5	1-Hour	80 µg/m3	92 µg/m3	12.7 km/hr	284° (WNW)	404189
September 10	17	PM2.5	1-Hour	80 µg/m3	86 µg/m3	2.6 km/hr	331° (NNW)	404189
September 10	18	PM2.5	1-Hour	80 µg/m3	91 µg/m3	0.1 km/hr	335° (NNW)	404189
September 10	19	PM2.5	1-Hour	80 µg/m3	107 µg/m3	2.1 km/hr	331° (NNW)	404189
September 10	20	PM2.5	1-Hour	80 µg/m3	107 µg/m3	3.1 km/hr	335° (NNW)	404189
September 10	21	PM2.5	1-Hour	80 µg/m3	104 µg/m3	4.4 km/hr	329° (NNW)	404189
September 10	22	PM2.5	1-Hour	80 µg/m3	84 µg/m3	6.1 km/hr	345° (NNW)	404189
September 10	-	PM2.5	24-Hour	29 µg/m3	59.5 µg/m3	8.8 km/hr	286° (WNW)	404189
September 16	13	PM2.5	1-Hour	80 µg/m3	90 µg/m3	12.4 km/hr	196° (SSW)	404497
September 16	14	PM2.5	1-Hour	80 µg/m3	123 µg/m3	9.7 km/hr	242° (WSW)	404497
September 16	15	PM2.5	1-Hour	80 µg/m3	102 µg/m3	9.0 km/hr	288° (WNW)	404497
September 16	16	PM2.5	1-Hour	80 µg/m3	84 µg/m3	11.1 km/hr	298° (WNW)	404497
September 16	17	PM2.5	1-Hour	80 µg/m3	96 µg/m3	8.3 km/hr	287° (WNW)	404497
September 16	18	PM2.5	1-Hour	80 µg/m3	95 µg/m3	8.2 km/hr	303° (WNW)	404497
September 16	-	PM2.5	24-Hour	29 µg/m3	47.2 µg/m3	5.7 km/hr	255° (WSW)	404497

The exceedances of the PM2.5 guideline and objective recorded this month were due to BC wildfire smoke.

TABLES, CHARTS, WIND ROSES AND EQUIPMENT CALIBRATION RECORDS

986c STATION



PEACE RIVER AREA MONITORING PROGRAM

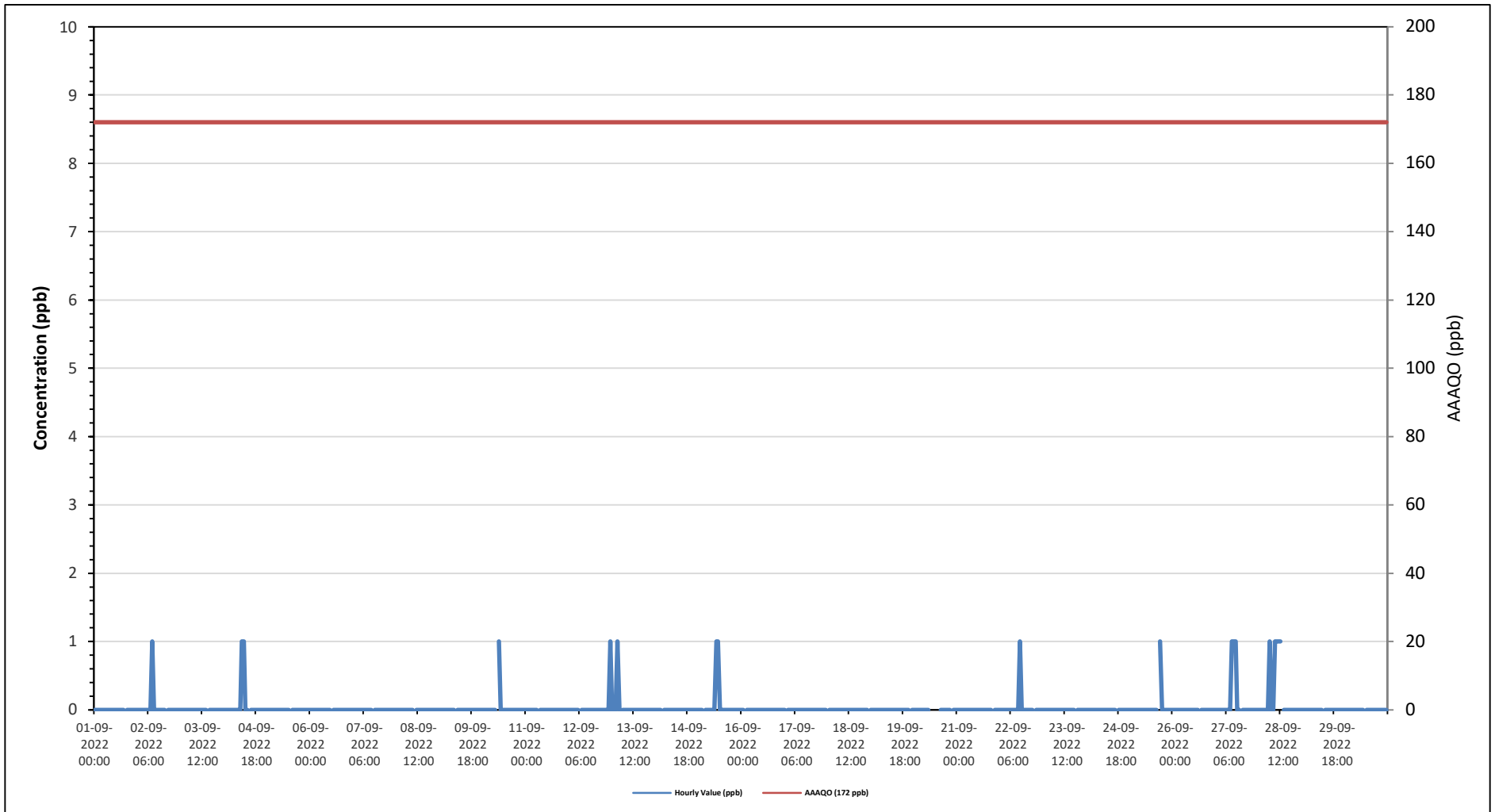
986c Station - September 2022

Summary of Hourly Averages

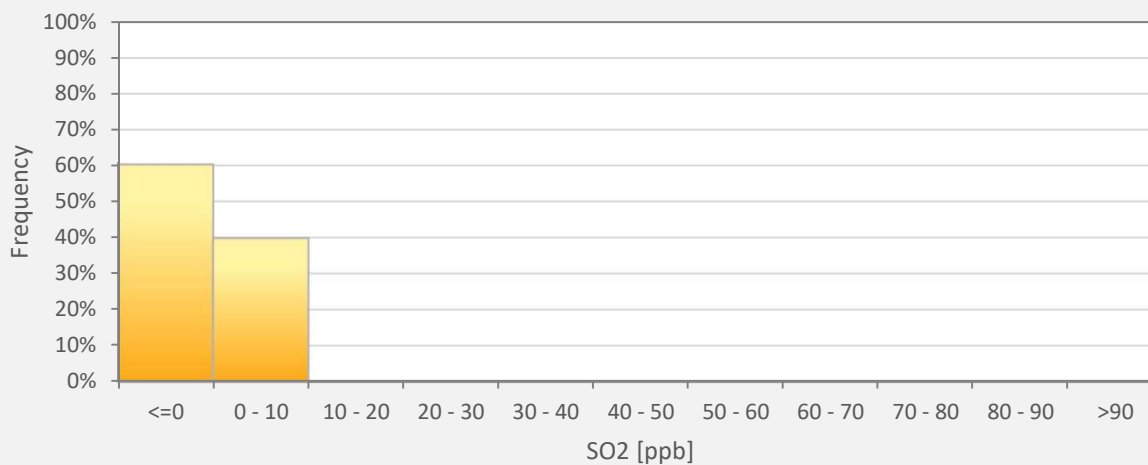
SULPHUR DIOXIDE (SO₂) in ppb

Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb																												
Number of 1-Hour Exceedances: 0						Number of 24-Hour Exceedances: 0						30-Day Exceedance: 0																
Maximum Hourly Value: 1 ppb on September 2 at hour 8						Hours in Service: 720																						
Maximum Daily Value: 0.2 ppb on September 28						Hours of Data: 683																						
Minimum Hourly Value: 0 ppb on September 1 at hour 0						Hours of Missing Data: 0																						
Minimum Daily Value: 0.0 ppb on September 1						Hours of Calibration: 37																						
Monthly Average: 0.0 ppb						Operational Uptime: 100.0																						
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
Sep 1	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
Sep 2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0
Sep 3	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
Sep 4	0	0	0	0	0	0	0	0	0	0	1	1	0	0	S	S	0	0	0	0	0	0	0	0	0	0	0	0
Sep 5	0	0	0	0	0	0	0	0	0	0	0	0	S	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 6	0	0	0	0	0	0	0	0	0	0	0	S	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 7	0	0	0	0	0	0	0	0	0	0	0	S	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 8	0	0	0	0	0	0	0	0	0	S	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 9	0	0	0	0	0	0	0	0	0	S	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 10	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	0	0	0
Sep 11	0	0	0	0	0	0	0	S	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 12	0	0	0	0	0	0	S	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Sep 13	0	0	0	1	0	S	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 14	0	0	0	0	S	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 15	0	0	0	S	S	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 16	0	0	S	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
Sep 17	0	S	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
Sep 18	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	S	0
Sep 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	S	0	0	0
Sep 20	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	0	0	0	0	0	0	S	0	0	0	0	0	-
Sep 21	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
Sep 22	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	0	0	0
Sep 23	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
Sep 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
Sep 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	1	0	0	0	0	0	0	0	0	0	0
Sep 26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	S	0	0	0	0	0	0	0	0	0	0	0
Sep 27	0	0	0	0	0	0	0	0	1	1	1	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 28	0	0	0	0	0	0	1	0	0	1	1	1	1	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 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
Sep 30	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
Diurnal Maximum	0	0	0	1	0	0	1	0	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	1			
Diurnal Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C	Monthly Calibration										S	Daily Zero-Span Check						Q	Quality Assurance									
K	Collection Error										N	No Data (Machine Not in Service)						Y	Routine Maintenance									
X	InValid Data (Equipment Malfunction /Recovery)										NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)						P	Power Failure									
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.																												
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.																												

Timeseries Chart of Hourly Average for SO2 - 986c Station



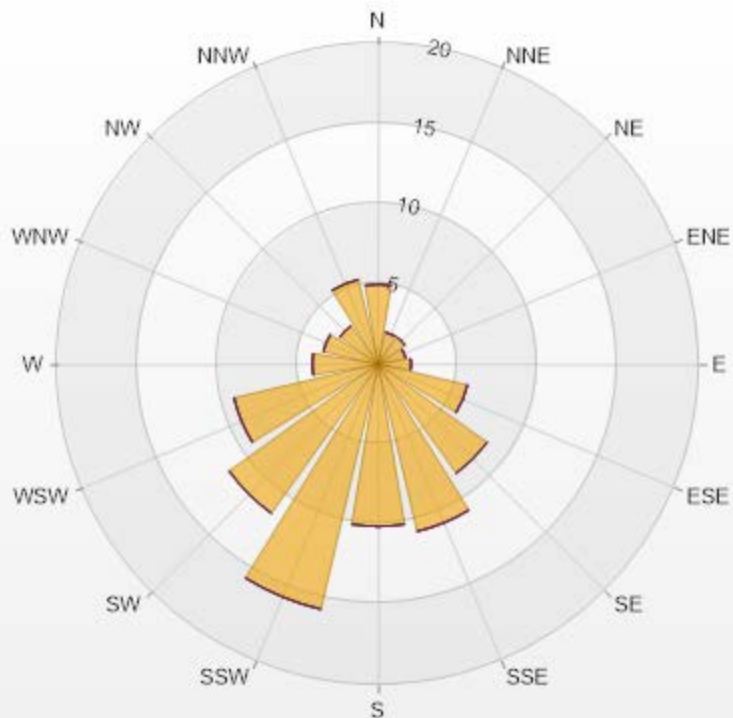
SO2[ppb] Histogram: PRAMP 986c Monthly: 09-2022 1 Hr.



Classes	SO2
<=0	60.18%
0 - 10	39.82%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.86% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	4.98	0	0	0	0	4.98
NNE	2.05	0	0	0	0	2.05
NE	2.05	0	0	0	0	2.05
ENE	1.76	0	0	0	0	1.76
E	2.05	0	0	0	0	2.05
ESE	5.71	0	0	0	0	5.71
SE	8.35	0	0	0	0	8.35
SSE	10.69	0	0	0	0	10.69
S	10.1	0	0	0	0	10.1
SSW	15.67	0	0	0	0	15.67
SW	11.42	0	0	0	0	11.42
WSW	9.22	0	0	0	0	9.22
W	4.1	0	0	0	0	4.1
WNW	3.51	0	0	0	0	3.51
NW	2.93	0	0	0	0	2.93
NNW	5.42	0	0	0	0	5.42
Summary	100	0	0	0	0	100



PRAMP-202209

% Icon Classes (ppb)

100 0-10

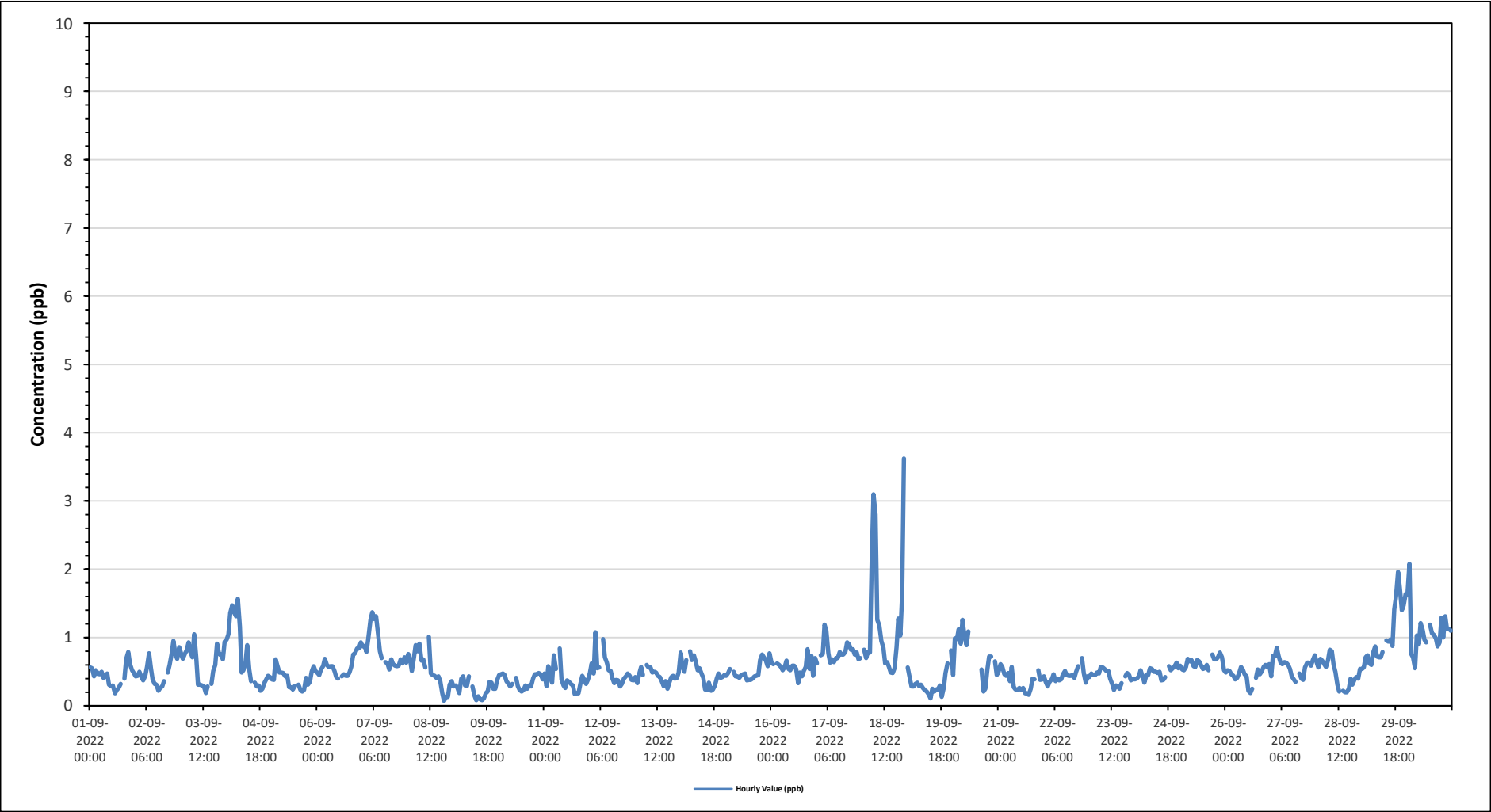
0 10-50

0 50-100

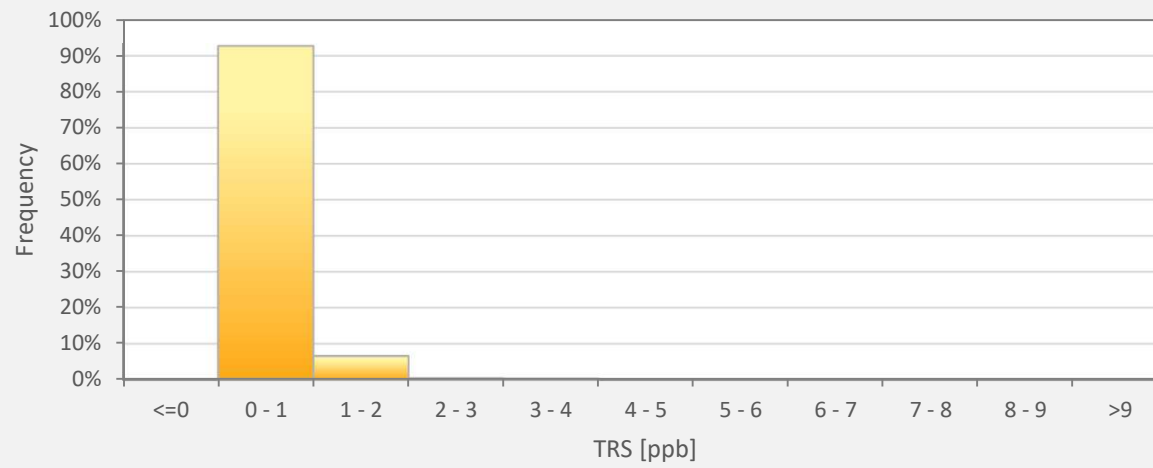
0 100-172

0 >172.0

Timeseries Chart of Hourly Average for TRS - 986c Station



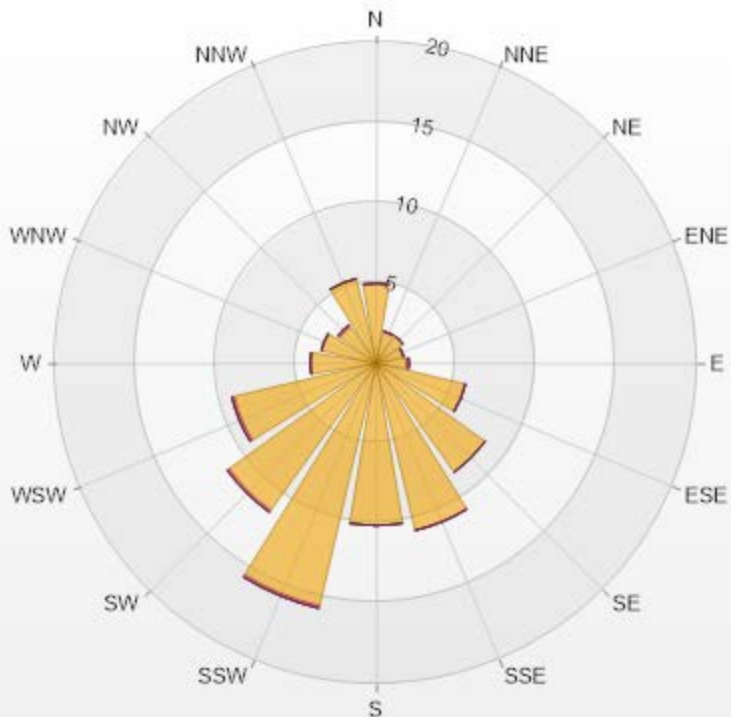
TRS[ppb] Histogram: PRAMP 986c Monthly: 09-2022 1 Hr.



Classes	TRS
<=0	0.00%
0 - 1	92.68%
1 - 2	6.59%
2 - 3	0.44%
3 - 4	0.29%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.86% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	4.98	0	0	0	0	4.98
NNE	2.05	0	0	0	0	2.05
NE	2.05	0	0	0	0	2.05
ENE	1.76	0	0	0	0	1.76
E	1.9	0.15	0	0	0	2.05
ESE	5.71	0	0	0	0	5.71
SE	8.35	0	0	0	0	8.35
SSE	10.69	0	0	0	0	10.69
S	10.1	0	0	0	0	10.1
SSW	15.52	0.15	0	0	0	15.67
SW	11.27	0.15	0	0	0	11.42
WSW	9.08	0.15	0	0	0	9.23
W	4.1	0	0	0	0	4.1
WNW	3.51	0	0	0	0	3.51
NW	2.78	0.15	0	0	0	2.93
NNW	5.42	0	0	0	0	5.42
Summary	99.27	0.75	0	0	0	100



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% Icon Classes (ppb)

99 ■ 0-2

1 ■ 2-5

0 ■ 5-10

0 ■ 10-50

0 ■ >50.0



PEACE RIVER AREA MONITORING PROGRAM

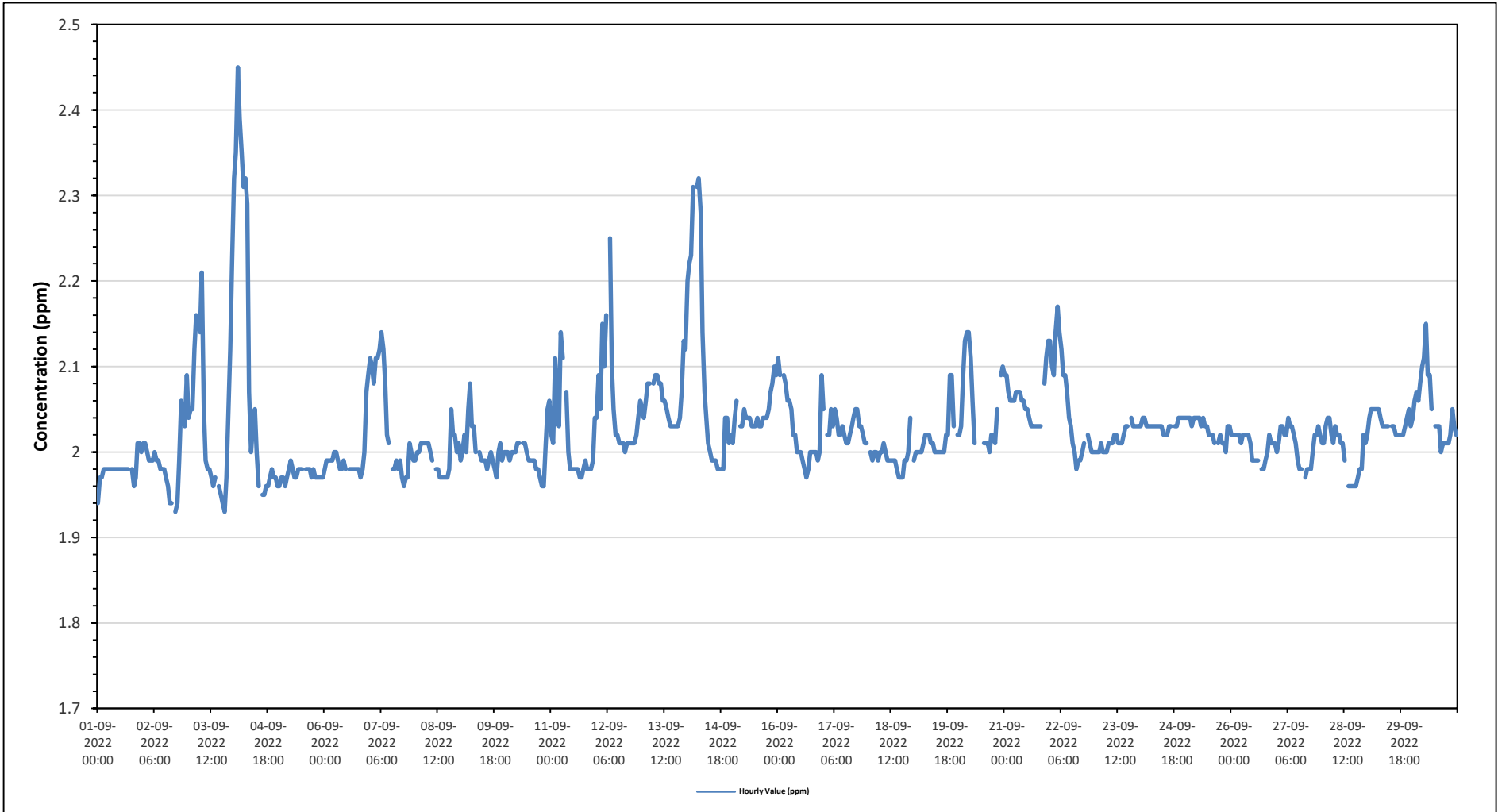
986c Station - September 2022

Summary of Hourly Averages

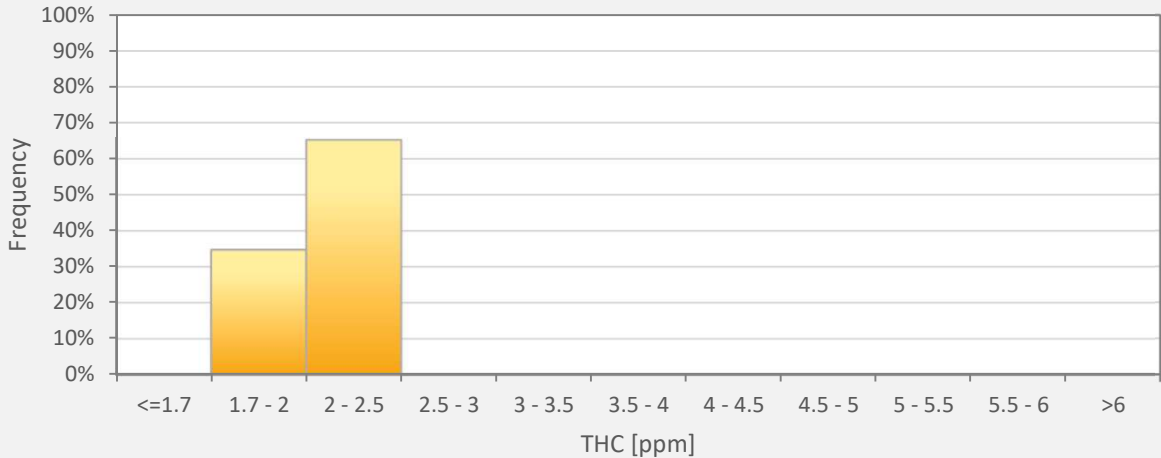
TOTAL HYDROCARBONS (THC) in ppm

Maximum Hourly Value:	2.45 ppm	on September 4 at hour 2	Hours in Service:	720																								
Maximum Daily Value:	2.11 ppm	on September 4	Hours of Data:	685																								
Minimum Hourly Value:	1.93 ppm	on September 2 at hour 17	Hours of Missing Data:	0																								
Minimum Daily Value:	1.97 ppm	on September 5	Hours of Calibration:	35																								
Monthly Average:	2.03 ppm		Operational Uptime:	100.0																								
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
Sep 1	1.94	1.97	1.97	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	S	1.98	1.96	1.97	2.01	2.01	2.00	1.94	2.01	1.98	
Sep 2	2.01	2.01	2.00	1.99	1.99	1.99	2.00	1.99	1.99	1.98	1.98	1.98	1.97	1.96	1.94	1.94	S	1.93	1.94	1.99	2.06	2.04	2.03	2.09	1.93	2.09	1.99	
Sep 3	2.04	2.05	2.05	2.12	2.16	2.15	2.14	2.21	2.05	1.99	1.98	1.98	1.97	1.96	1.97	S	1.96	1.95	1.94	1.93	1.97	2.05	2.12	2.22	1.93	2.22	2.04	
Sep 4	2.32	2.35	2.45	2.39	2.35	2.31	2.32	2.29	2.07	2.00	2.03	2.05	2.00	1.96	S	1.95	1.95	1.96	1.96	1.97	1.98	1.97	1.97	1.96	1.95	2.45	2.11	
Sep 5	1.96	1.97	1.97	1.96	1.97	1.98	1.99	1.98	1.97	1.97	1.98	1.98	1.98	S	1.98	1.98	1.98	1.97	1.98	1.97	1.97	1.97	1.97	1.97	1.96	1.99	1.97	
Sep 6	1.98	1.99	1.99	1.99	1.99	2.00	2.00	1.99	1.98	1.98	1.99	1.98	S	1.98	1.98	1.98	1.98	1.98	1.98	1.97	1.98	2.00	2.07	2.09	1.97	2.09	1.99	
Sep 7	2.11	2.10	2.08	2.11	2.11	2.12	2.14	2.12	2.08	2.02	2.01	S	1.98	1.98	1.99	1.98	1.99	1.97	1.96	1.97	2.01	2.00	1.99	1.96	2.14	2.03		
Sep 8	1.99	2.00	2.00	2.01	2.01	2.01	2.01	2.01	2.00	1.99	S	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.98	2.05	2.02	2.02	2.00	2.01	1.97	2.05	2.00	
Sep 9	1.99	2.00	2.02	2.00	2.05	2.08	2.03	2.03	2.00	S	2.00	1.99	1.99	1.99	1.98	1.99	2.00	1.99	1.98	1.97	2.00	2.01	1.99	2.00	1.97	2.08	2.00	
Sep 10	2.00	2.00	1.99	2.00	2.00	2.00	2.01	2.01	S	2.01	2.01	2.00	1.99	1.99	1.99	1.98	1.98	1.97	1.96	1.96	2.01	2.05	2.06	1.96	2.06	2.00		
Sep 11	2.02	2.01	2.11	2.07	2.03	2.14	2.11	S	2.07	2.00	1.98	1.98	1.98	1.98	1.98	1.97	1.97	1.98	1.99	1.98	1.98	1.99	2.04	1.97	2.14	2.01		
Sep 12	2.04	2.09	2.05	2.15	2.10	2.16	S	2.25	2.10	2.05	2.02	2.02	2.01	2.01	2.01	2.00	2.01	2.01	2.01	2.01	2.01	2.02	2.04	2.06	2.00	2.25	2.05	
Sep 13	2.05	2.04	2.06	2.08	2.08	S	2.08	2.09	2.09	2.08	2.08	2.06	2.06	2.05	2.04	2.03	2.03	2.03	2.03	2.03	2.03	2.04	2.07	2.13	2.12	2.03	2.13	2.06
Sep 14	2.20	2.22	2.23	2.31	S	2.31	2.32	2.28	2.14	2.07	2.04	2.01	2.00	1.99	1.99	1.98	1.98	1.98	1.98	1.98	2.04	2.01	2.02	2.09	1.98	2.32	2.09	
Sep 15	2.01	2.04	2.06	S	2.03	2.03	2.05	2.04	2.04	2.04	2.03	2.03	2.03	2.04	2.03	2.03	2.04	2.04	2.04	2.05	2.07	2.08	2.10	2.09	2.01	2.10	2.05	
Sep 16	2.11	2.09	S	2.09	2.08	2.06	2.06	2.05	2.02	2.02	2.00	2.00	2.00	1.99	1.98	1.97	1.98	2.00	2.00	2.00	2.00	1.99	2.00	2.09	1.97	2.11	2.03	
Sep 17	2.05	S	2.02	2.02	2.05	2.03	2.05	2.04	2.02	2.02	2.03	2.02	2.01	2.01	2.02	2.03	2.04	2.05	2.05	2.03	2.03	2.02	2.01	2.01	2.01	2.05	2.03	
Sep 18	S	2.00	1.99	2.00	2.00	1.99	2.00	2.00	2.01	2.00	1.99	1.99	1.99	1.99	1.99	1.98	1.97	1.97	1.99	1.99	2.00	2.04	S	1.97	2.04	1.99		
Sep 19	1.99	2.00	2.00	2.00	2.00	2.01	2.02	2.02	2.02	2.02	2.01	2.01	2.00	2.00	2.00	2.00	2.00	2.02	2.02	2.09	2.09	2.03	S	2.02	1.99	2.09	2.02	
Sep 20	2.02	2.03	2.09	2.13	2.14	2.14	2.11	2.06	2.01	C	C	C	C	2.01	2.01	2.01	2.00	2.02	2.02	2.01	2.05	S	2.09	2.10	2.00	2.14	2.06	
Sep 21	2.09	2.09	2.07	2.06	2.06	2.06	2.07	2.07	2.07	2.06	2.06	2.05	2.05	2.04	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.08	2.11	2.13	2.03	2.13	2.06	
Sep 22	2.13	2.10	2.09	2.14	2.17	2.14	2.12	2.09	2.09	2.07	2.04	2.03	2.01	2.00	1.98	1.99	1.99	2.00	2.01	S	2.02	2.01	2.00	2.00	1.98	2.17	2.05	
Sep 23	2.00	2.00	2.00	2.01	2.00	2.00	2.00	2.01	2.01	2.01	2.02	2.02	2.01	2.01	2.01	2.02	2.03	2.03	S	2.04	2.03	2.03	2.03	2.03	2.00	2.04	2.02	
Sep 24	2.03	2.04	2.04	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.02	2.02	2.02	2.02	2.03	2.03	S	2.03	2.03	2.04	2.04	2.04	2.02	2.04	2.03	
Sep 25	2.04	2.04	2.04	2.03	2.04	2.04	2.04	2.04	2.03	2.04	2.03	2.03	2.02	2.02	2.02	2.01	S	2.01	2.02	2.01	2.01	2.00	2.03	2.03	2.00	2.04	2.03	
Sep 26	2.02	2.02	2.02	2.02	2.02	2.01	2.02	2.02	2.02	2.02	2.01	1.99	1.99	1.99	1.99	S	1.98	1.98	1.99	2.00	2.02	2.01	2.01	2.01	1.98	2.02	2.01	
Sep 27	2.00	2.01	2.03	2.03	2.02	2.02	2.04	2.03	2.03	2.02	2.01	1.99	1.98	1.98	S	1.97	1.98	1.98	1.98	2.00	2.02	2.02	2.03	2.02	1.97	2.04	2.01	
Sep 28	2.01	2.01	2.03	2.04	2.04	2.02	2.01	2.03	2.02	2.02	2.01	2.01	1.99	S	1.96	1.96	1.96	1.96	1.96	1.97	1.98	1.98	2.02	2.01	1.96	2.04	2.00	
Sep 29	2.02	2.04	2.05	2.05	2.05	2.05	2.05	2.04	2.03	2.03	2.03	2.03	S	2.03	2.03	2.02	2.02	2.02	2.02	2.02	2.03	2.04	2.05	2.03	2.02	2.05	2.03	
Sep 30	2.04	2.06	2.07	2.06	2.08	2.10	2.11	2.15	2.09	2.09	2.05	S	2.03	2.03	2.03	2.00	2.01	2.01	2.01	2.01	2.02	2.05	2.03	2.02	2.00	2.15	2.05	
Diurnal Maximum	2.32	2.35	2.45	2.39	2.35	2.31	2.32	2.29	2.14	2.09	2.08	2.06	2.06	2.05	2.04	2.03	2.04	2.05	2.05	2.09	2.09	2.08	2.13	2.22				
Diurnal Average	2.04	2.05	2.05	2.06	2.06	2.07	2.07	2.07	2.04	2.02	2.02	2.01	2.00	2.00	2.00	1.99	1.99	1.99	1.99	2.00	2.01	2.02	2.03	2.04				
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



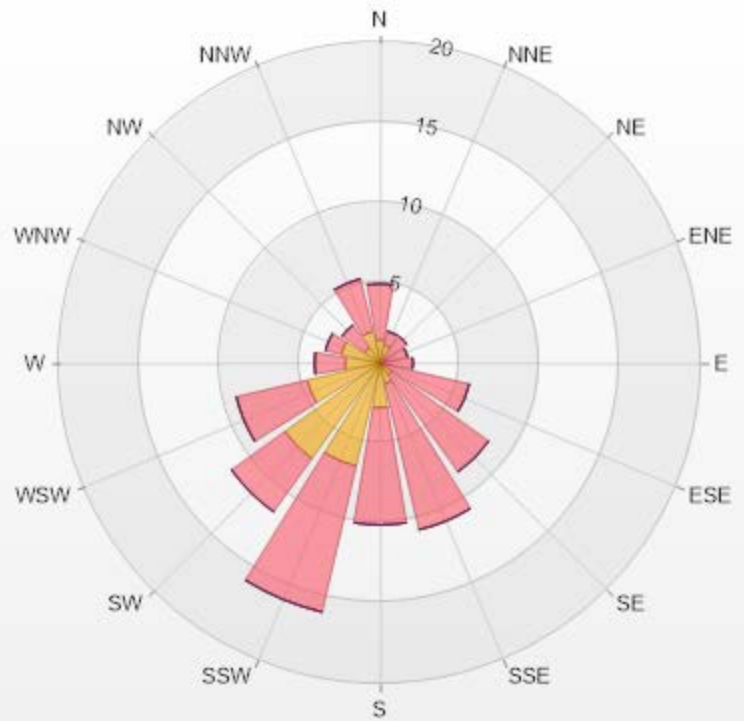
THC55[ppm] Histogram: PRAMP 986c Monthly: 09-2022 1 Hr.



Classes	THC55
<=1.7	0.00%
1.7 - 2	34.74%
2 - 2.5	65.26%
2.5 - 3	0.00%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: PRAMP 986c Poll.: PRAMP 986c-THC55[ppm] Monthly: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.14% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	1.46	3.5	0	0	0	4.96
NNE	1.17	0.88	0	0	0	2.05
NE	0.29	1.75	0	0	0	2.04
ENE	0.29	1.46	0	0	0	1.75
E	0	2.04	0	0	0	2.04
ESE	0.15	5.55	0	0	0	5.7
SE	0.88	7.45	0	0	0	8.33
SSE	1.31	9.34	0	0	0	10.65
S	2.77	7.3	0	0	0	10.07
SSW	6.57	9.34	0	0	0	15.91
SW	7.3	4.09	0	0	0	11.39
WSW	4.67	4.53	0	0	0	9.2
W	2.19	1.9	0	0	0	4.09
WNW	2.48	1.02	0	0	0	3.5
NW	1.17	1.75	0	0	0	2.92
NNW	2.04	3.36	0	0	0	5.4
Summary	34.74	65.26	0	0	0	100



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% Icon Classes (ppm)	35	0-2	65	2-5	0	5-10	0	10-40	0	>40.0



PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2022

Summary of Hourly Averages

METHANE (CH4) in ppm

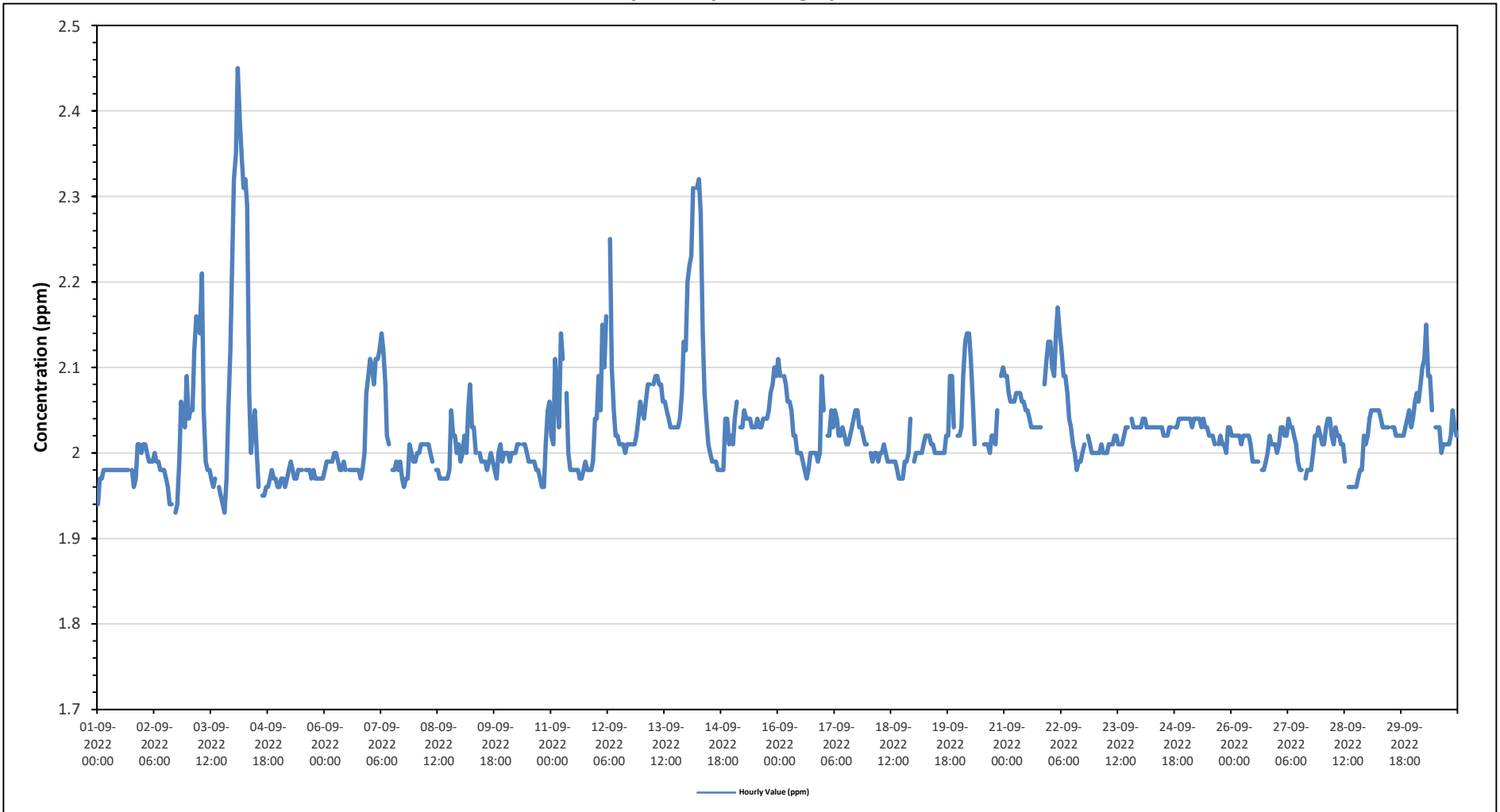
Summary statistics table including Maximum Hourly Value, Maximum Daily Value, Minimum Hourly Value, Minimum Daily Value, Monthly Average, Hours in Service, Hours of Data, Hours of Missing Data, Hours of Calibration, and Operational Uptime.

Main data table showing hourly methane concentrations from Sep 1 to Sep 30, with columns for Day, Hourly Period (0-23 MST), and summary statistics (Daily Minimum, Maximum, Average).

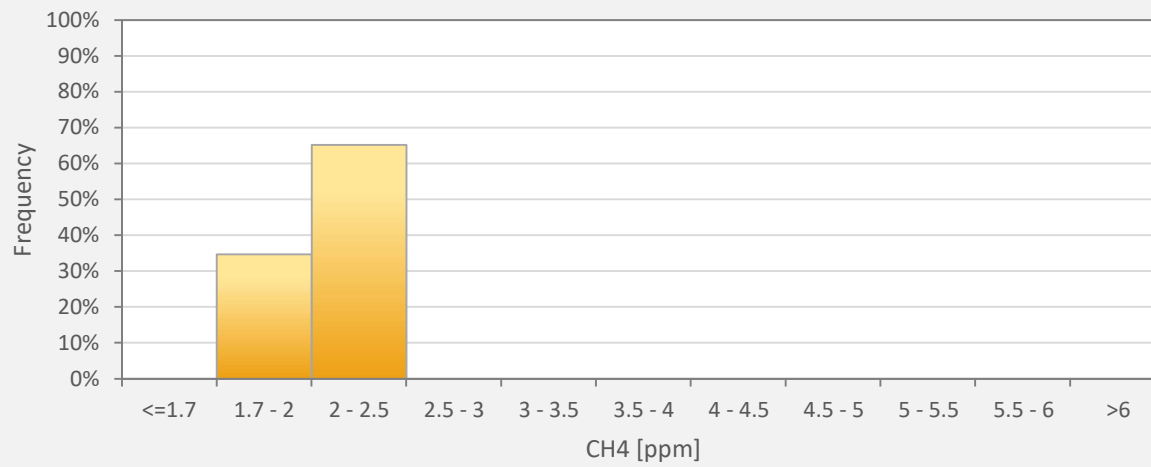
Legend table defining error codes: C (Monthly Calibration), K (Collection Error), X (Invalid Data), S (Daily Zero-Span Check), N (No Data), NRM (UnitMaint), Q (Quality Assurance), Y (Routine Maintenance), and P (Power Failure).

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

Timeseries Chart of Hourly Average for CH4 - 986c Station



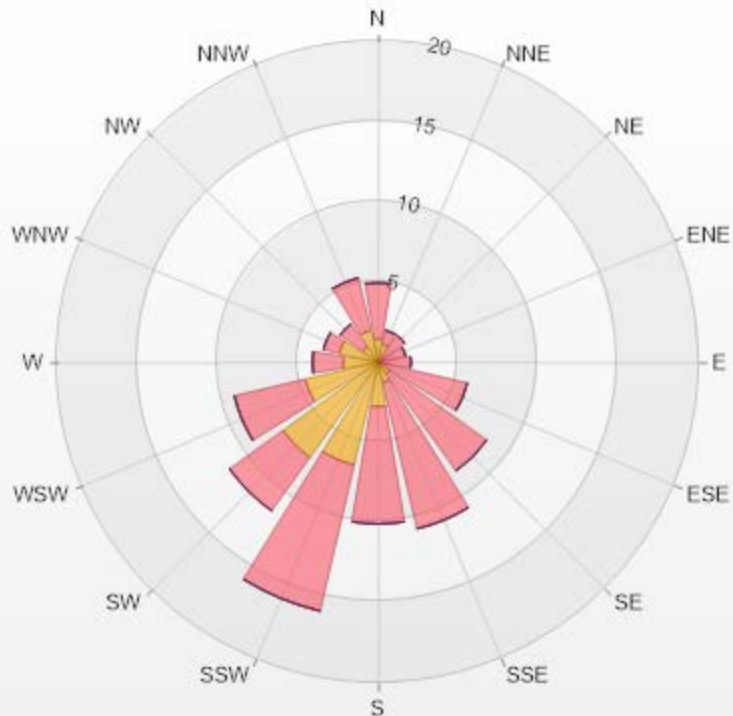
CH4[ppm] Histogram: PRAMP 986c Monthly: 09-2022 1 Hr.



Classes	CH4
<=1.7	0.00%
1.7 - 2	34.74%
2 - 2.5	65.26%
2.5 - 3	0.00%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: PRAMP 986c Poll.: PRAMP 986c-CH4[ppm] Monthly: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.14% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	1.46	3.5	0	0	0	4.96
NNE	1.17	0.88	0	0	0	2.05
NE	0.29	1.75	0	0	0	2.04
ENE	0.29	1.46	0	0	0	1.75
E	0	2.04	0	0	0	2.04
ESE	0.15	5.55	0	0	0	5.7
SE	0.88	7.45	0	0	0	8.33
SSE	1.31	9.34	0	0	0	10.65
S	2.77	7.3	0	0	0	10.07
SSW	6.57	9.34	0	0	0	15.91
SW	7.3	4.09	0	0	0	11.39
WSW	4.67	4.53	0	0	0	9.2
W	2.19	1.9	0	0	0	4.09
WNW	2.48	1.02	0	0	0	3.5
NW	1.17	1.75	0	0	0	2.92
NNW	2.04	3.36	0	0	0	5.4
Summary	34.74	65.26	0	0	0	100



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% Icon Classes (ppm)

35

0-2

65

2-5

0

5-10

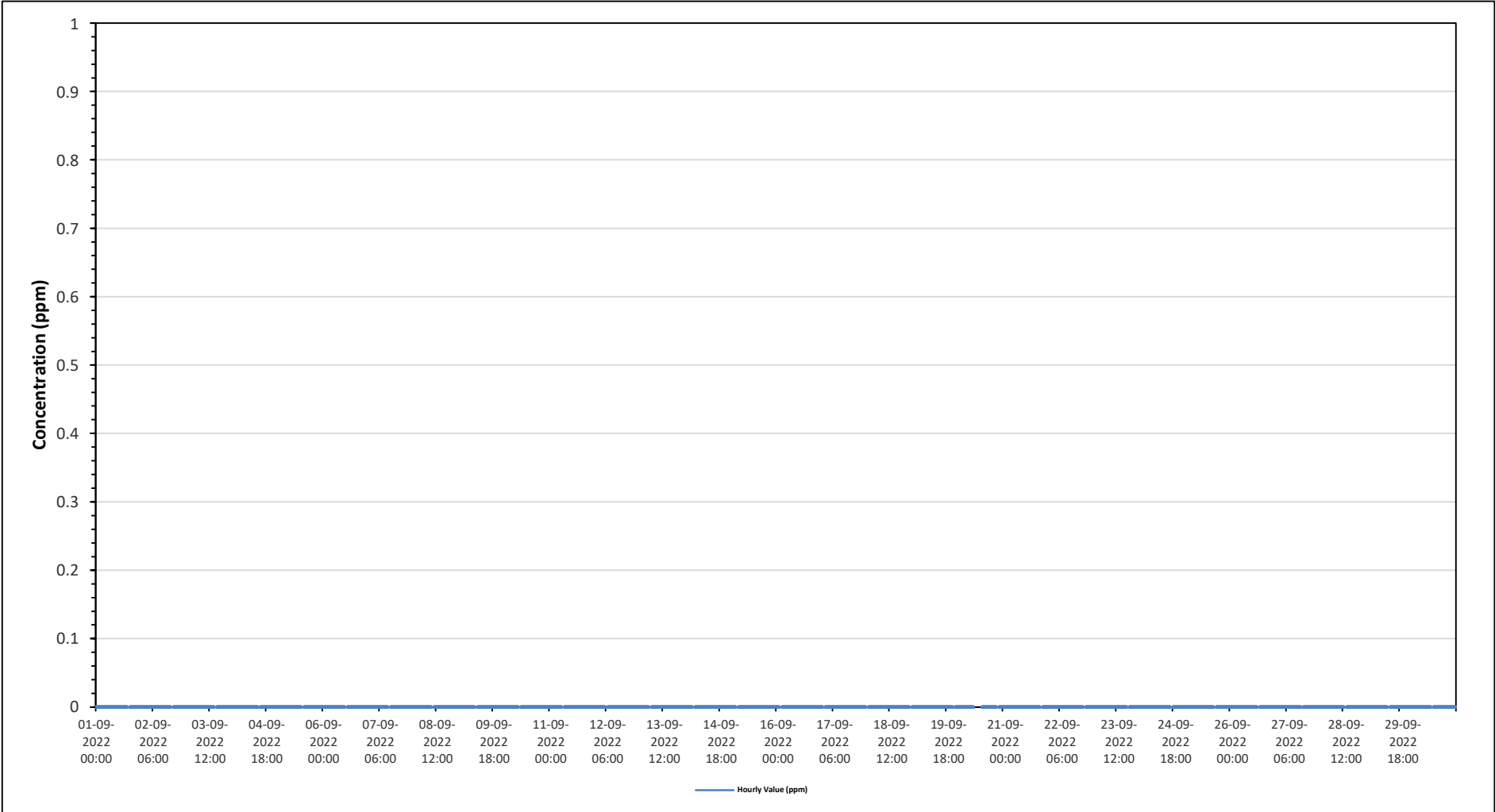
0

10-20

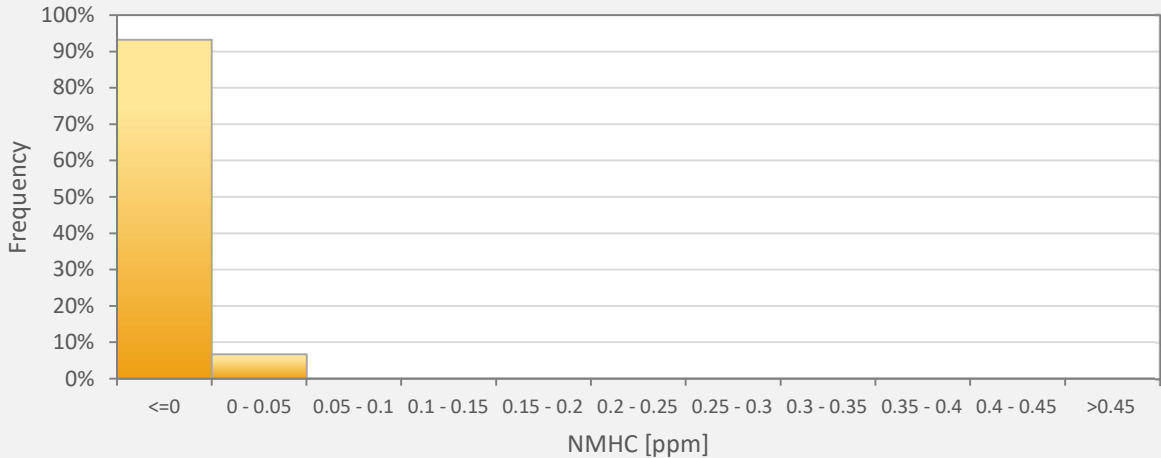
0

>20.0

Timeseries Chart of Hourly Average for NMHC - 986c Station



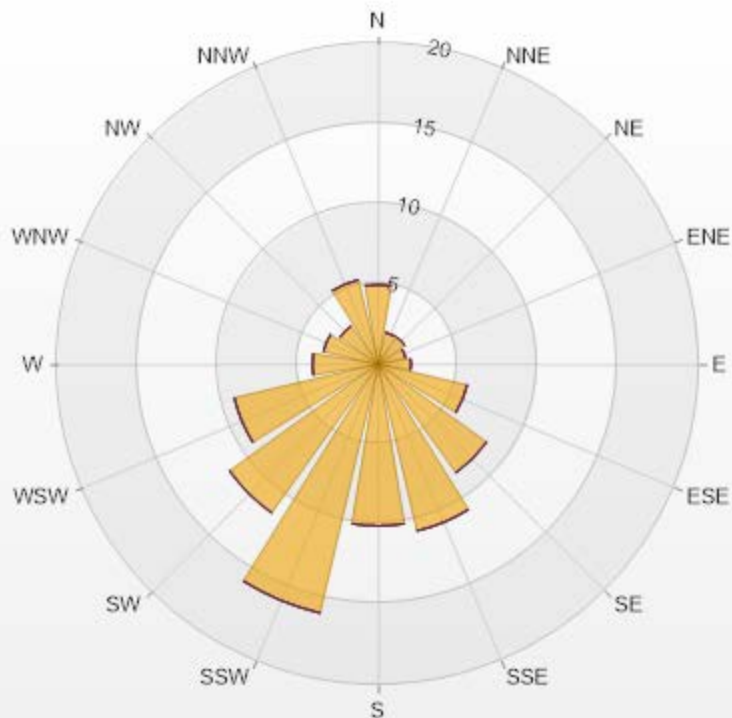
NMHC[ppm] Histogram: PRAMP 986c Monthly: 09-2022 1 Hr.



Classes	NMHC
<=0	93.28%
0 - 0.05	6.72%
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 986c Poll.: PRAMP 986c-NMHC[ppm] Monthly: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.14% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	4.96	0	0	0	0	4.96
NNE	2.04	0	0	0	0	2.04
NE	2.04	0	0	0	0	2.04
ENE	1.75	0	0	0	0	1.75
E	2.04	0	0	0	0	2.04
ESE	5.69	0	0	0	0	5.69
SE	8.32	0	0	0	0	8.32
SSE	10.66	0	0	0	0	10.66
S	10.07	0	0	0	0	10.07
SSW	15.91	0	0	0	0	15.91
SW	11.39	0	0	0	0	11.39
WSW	9.2	0	0	0	0	9.2
W	4.09	0	0	0	0	4.09
WNW	3.5	0	0	0	0	3.5
NW	2.92	0	0	0	0	2.92
NNW	5.4	0	0	0	0	5.4
Summary	100	0	0	0	0	100



PRAMP-202209

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% 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

986c Station - September 2022

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

Maximum Hourly Value:	99 %	on September 18 at hour 6	Hours in Service:	720
Maximum Daily Value:	97.2 %	on September 17	Hours of Data:	720
Minimum Hourly Value:	27 %	on September 10 at hour 16	Hours of Missing Data:	0
Minimum Daily Value:	45.0 %	on September 23	Hours of Calibration:	0
Monthly Average:	67.8 %		Operational Uptime:	100.0

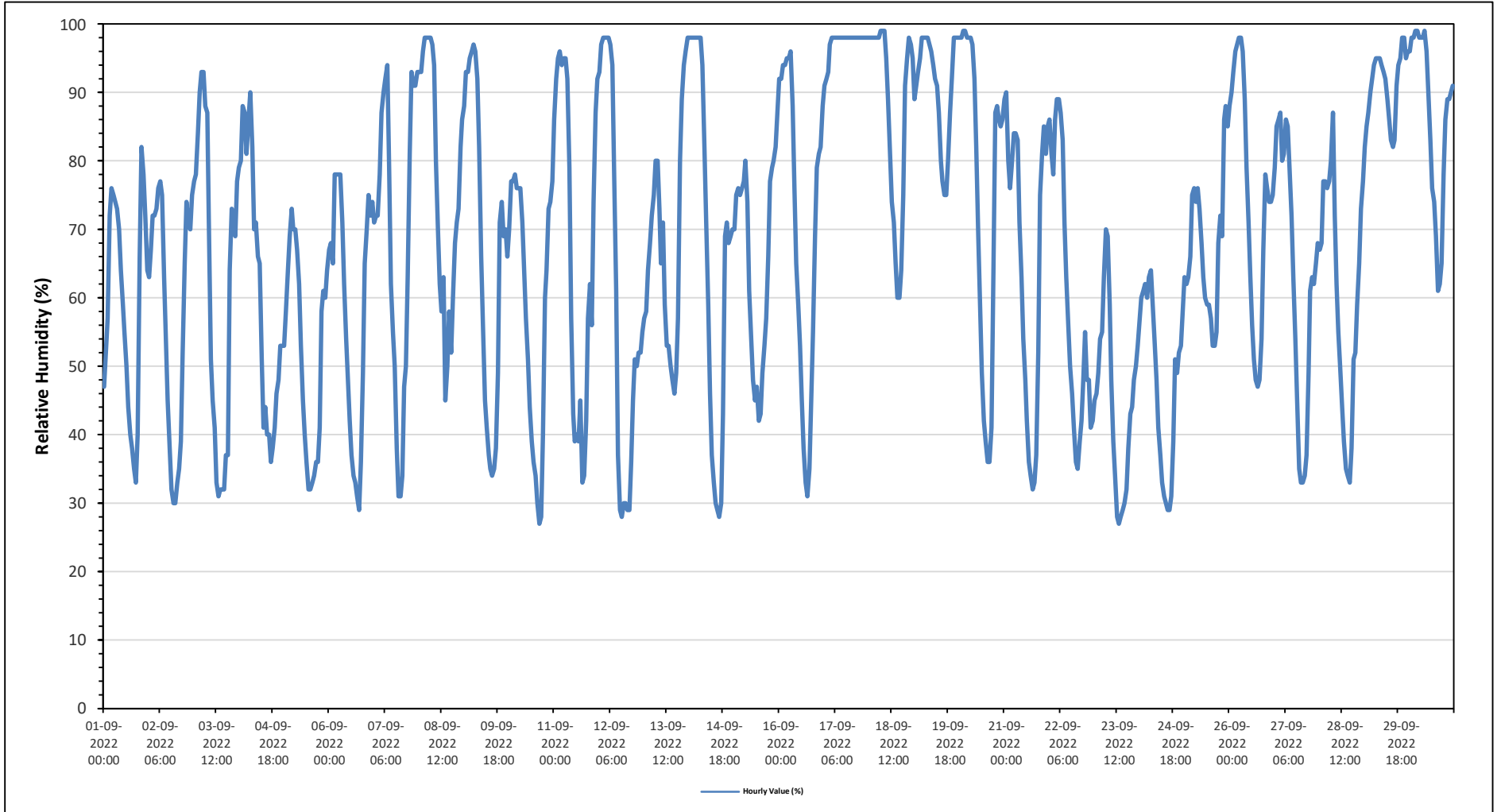
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
Sep 1	47	52	57	72	76	75	74	73	70	64	59	55	50	44	40	38	35	33	40	66	82	78	72	64	33	82	59.0	
Sep 2	63	67	72	72	73	76	77	75	63	54	45	38	32	30	30	33	35	39	52	65	74	71	70	75	30	77	57.5	
Sep 3	77	78	84	90	93	93	88	87	71	51	45	41	33	31	32	32	32	37	37	64	73	71	69	77	31	93	61.9	
Sep 4	79	80	88	87	81	86	90	82	70	71	66	65	51	41	44	40	40	36	38	41	46	48	53	53	36	90	61.5	
Sep 5	53	58	64	69	73	70	70	67	62	53	45	40	36	32	32	33	34	36	36	41	58	61	60	64	32	73	52.0	
Sep 6	67	68	65	78	78	78	78	71	62	54	48	42	37	34	33	31	29	36	49	65	70	75	72	74	29	78	58.1	
Sep 7	71	72	72	78	87	90	92	94	79	62	55	50	38	31	31	34	47	50	63	81	93	91	91	93	31	94	68.5	
Sep 8	93	93	96	98	98	98	98	97	94	80	70	62	58	63	45	50	58	52	60	68	71	73	82	86	45	98	76.8	
Sep 9	88	93	93	95	96	97	96	92	82	66	56	45	41	37	35	34	35	38	49	71	74	69	70	66	34	97	67.4	
Sep 10	70	77	77	78	76	76	76	71	64	57	51	44	39	36	34	30	27	28	40	60	64	73	74	77	27	78	58.3	
Sep 11	86	92	95	96	94	95	95	92	79	57	43	39	40	39	45	33	34	42	57	62	56	74	87	92	33	96	67.7	
Sep 12	93	97	98	98	98	98	97	94	78	61	37	29	28	30	30	29	29	36	45	51	50	52	52	55	28	98	61.0	
Sep 13	57	58	64	68	72	75	80	80	73	65	71	59	53	53	50	48	46	49	57	80	89	94	96	98	46	98	68.1	
Sep 14	98	98	98	98	98	98	98	94	82	71	59	46	37	33	30	29	28	30	43	69	71	68	69	70	28	98	67.3	
Sep 15	70	75	76	75	76	77	80	74	61	54	48	45	47	42	43	49	53	57	66	77	79	80	82	87	42	87	65.5	
Sep 16	92	92	94	94	95	95	96	88	76	65	59	53	45	38	33	31	35	45	55	69	79	81	82	88	31	96	70.0	
Sep 17	91	92	93	97	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	91	98	97.2	
Sep 18	98	98	98	98	98	98	99	99	99	95	89	81	74	71	65	60	60	64	75	91	95	98	97	95	60	99	87.3	
Sep 19	89	91	93	95	98	98	98	98	98	97	96	94	92	91	87	80	77	75	80	87	92	98	98	98	75	98	90.7	
Sep 20	98	98	99	99	98	98	98	97	92	82	69	59	49	42	39	36	36	41	62	87	88	86	85	86	36	99	76.0	
Sep 21	89	90	80	76	80	84	84	83	71	63	54	48	42	36	34	32	33	37	52	75	81	85	81	85	32	90	65.6	
Sep 22	86	81	78	86	89	89	87	83	71	63	56	50	46	41	36	35	39	42	48	55	48	48	41	42	35	89	60.0	
Sep 23	45	46	49	54	55	63	70	69	59	48	39	34	28	27	28	29	30	32	38	43	44	48	50	53	27	70	45.0	
Sep 24	57	60	61	62	60	63	64	59	54	48	41	37	33	31	30	29	29	31	39	51	49	52	53	58	29	64	48.0	
Sep 25	63	62	63	66	75	76	74	76	73	68	63	60	59	59	57	53	53	55	68	72	69	86	88	85	53	88	67.6	
Sep 26	88	90	93	96	97	98	98	96	89	79	71	63	56	51	48	47	48	54	67	78	76	74	74	75	47	98	75.3	
Sep 27	79	85	86	87	80	81	86	85	79	72	63	54	45	35	33	33	34	37	49	61	63	62	65	68	33	87	63.4	
Sep 28	67	68	77	77	76	77	80	87	72	62	55	50	44	39	35	34	33	38	51	52	59	65	73	77	33	87	60.3	
Sep 29	82	85	87	90	92	94	95	95	95	94	93	92	89	86	83	82	83	91	94	95	98	98	95	96	82	98	91.0	
Sep 30	96	98	98	99	99	98	98	98	98	99	96	90	83	76	74	69	61	62	65	78	86	89	89	90	91	61	99	86.8
Diurnal Maximum	98	98	99	99	99	98	99	99	99	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98
Diurnal Average	77.7	79.8	81.6	84.3	85.3	86.4	87.1	85.1	77.1	68.3	61.1	55.1	49.8	46.4	44.1	42.7	43.7	46.8	56.2	68.7	72.6	74.9	75.6	77.5				

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

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

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

Timeseries Chart of Hourly Average for RH - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2022

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

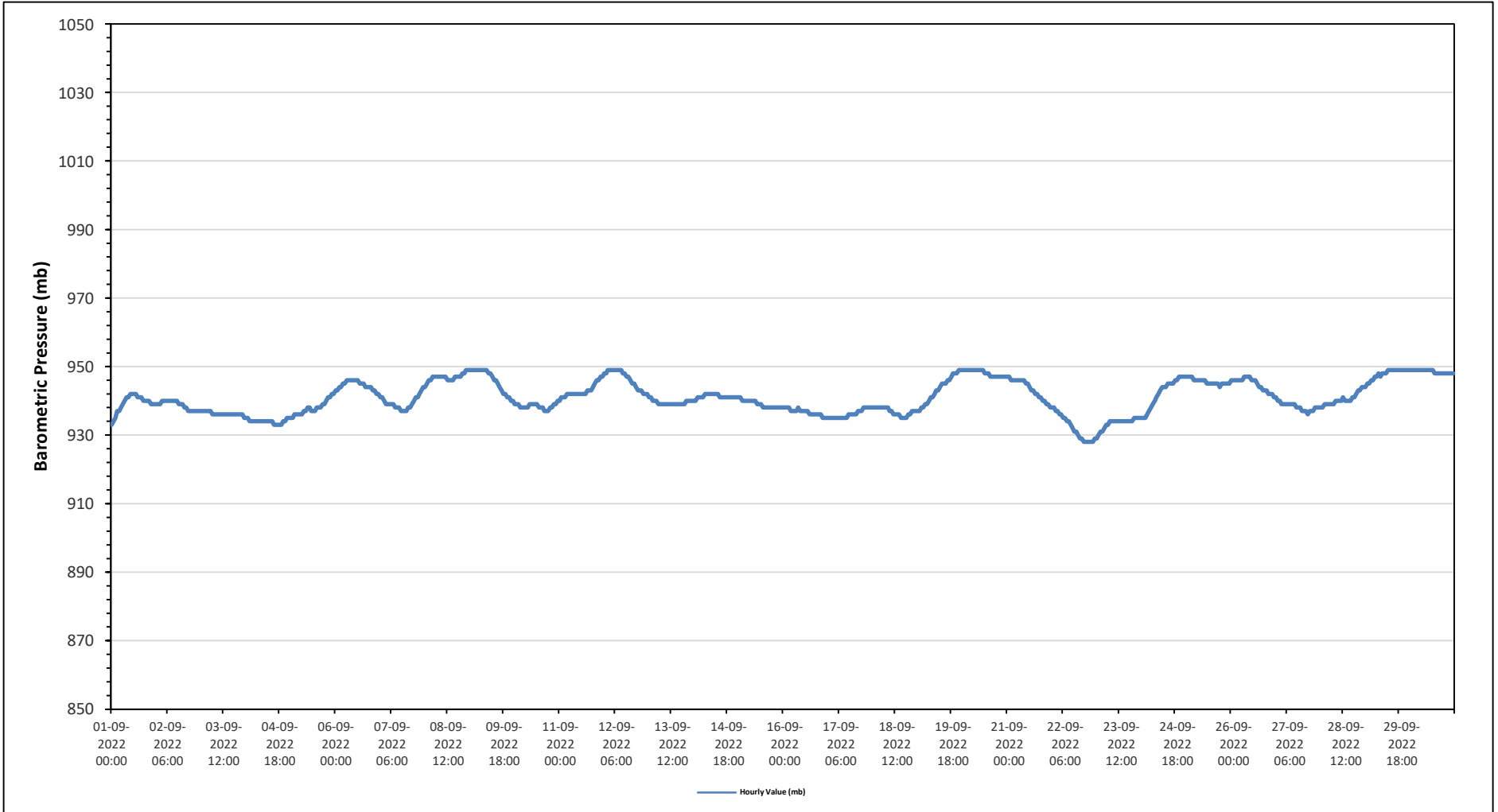
Maximum Hourly Value:	949 mb	on September 8 at hour 22	Hours in Service:	720
Maximum Daily Value:	949 mb	on September 30	Hours of Data:	720
Minimum Hourly Value:	928 mb	on September 22 at hour 17	Hours of Missing Data:	0
Minimum Daily Value:	932 mb	on September 22	Hours of Calibration:	0
Monthly Average:	941 mb		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	933	934	935	937	937	938	939	940	941	941	942	942	942	942	941	941	941	940	940	940	939	939	939	933	942	939	
Sep 2	939	939	939	940	940	940	940	940	940	940	940	940	939	939	939	938	938	937	937	937	937	937	937	937	940	939	
Sep 3	937	937	937	937	937	937	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	935	937	936		
Sep 4	935	935	934	934	934	934	934	934	934	934	934	934	934	934	934	933	933	933	933	933	933	934	935	935	933	934	
Sep 5	935	935	936	936	936	936	936	936	937	937	938	938	937	937	937	938	938	938	939	939	940	941	941	942	942	938	
Sep 6	943	943	944	944	945	945	946	946	946	946	946	946	946	945	945	945	944	944	944	944	943	943	942	942	944	944	
Sep 7	941	941	940	939	939	939	939	939	938	938	938	937	937	937	937	938	938	939	940	941	941	942	943	944	937	944	939
Sep 8	944	945	946	946	947	947	947	947	947	947	947	946	946	946	946	946	947	947	947	947	948	948	949	949	944	949	947
Sep 9	949	949	949	949	949	949	949	949	949	949	949	948	948	947	946	946	945	944	943	942	942	941	941	940	940	940	946
Sep 10	939	939	939	938	938	938	938	938	939	939	939	939	939	938	938	938	937	937	937	938	938	939	939	940	937	940	938
Sep 11	940	941	941	941	942	942	942	942	942	942	942	942	942	942	943	943	943	943	944	945	946	946	947	947	940	947	943
Sep 12	948	948	949	949	949	949	949	949	949	949	948	948	947	947	946	945	945	944	943	943	943	942	942	942	942	949	946
Sep 13	941	941	940	940	940	939	939	939	939	939	939	939	939	939	939	939	939	939	939	939	940	940	940	940	939	941	939
Sep 14	940	940	941	941	941	941	942	942	942	942	942	942	942	941	941	941	941	941	941	941	941	941	941	941	940	942	941
Sep 15	941	941	940	940	940	940	940	940	940	940	939	939	938	938	938	938	938	938	938	938	938	938	938	938	938	941	939
Sep 16	938	938	938	938	937	937	937	937	938	937	937	937	937	937	936	936	936	936	936	936	936	936	935	935	935	938	937
Sep 17	935	935	935	935	935	935	935	935	935	935	935	936	936	936	936	936	937	937	937	938	938	938	938	938	935	938	936
Sep 18	938	938	938	938	938	938	938	938	938	937	937	936	936	936	935	935	935	935	935	936	936	937	937	937	935	938	937
Sep 19	937	937	938	938	939	939	940	941	941	942	943	944	945	945	945	946	946	947	948	948	948	949	949	937	949	943	
Sep 20	949	949	949	949	949	949	949	949	949	949	949	949	949	948	948	948	947	947	947	947	947	947	947	947	947	949	948
Sep 21	947	947	946	946	946	946	946	946	946	946	945	945	944	943	943	942	942	941	941	940	940	939	939	938	938	947	944
Sep 22	938	938	937	937	936	936	935	935	934	934	933	932	931	930	929	929	928	928	928	928	928	928	929	928	928	938	932
Sep 23	929	930	931	931	932	933	933	934	934	934	934	934	934	934	934	934	934	934	934	934	935	935	935	935	929	935	933
Sep 24	935	935	935	936	937	938	939	940	941	942	943	944	944	944	945	945	945	945	946	946	947	947	947	947	935	947	942
Sep 25	947	947	947	947	946	946	946	946	946	946	946	946	945	945	945	945	945	945	944	945	945	945	945	944	947	946	
Sep 26	946	946	946	946	946	946	946	946	947	947	947	946	946	946	945	944	944	943	943	943	942	942	942	941	941	947	945
Sep 27	941	940	940	939	939	939	939	939	939	939	939	939	938	938	938	937	937	937	936	937	937	937	938	938	936	941	938
Sep 28	938	938	939	939	939	939	939	939	939	940	940	940	941	940	940	940	941	941	942	943	943	944	944	938	944	940	
Sep 29	944	945	945	946	946	947	947	948	947	948	948	948	949	949	949	949	949	949	949	949	949	949	949	944	949	948	
Sep 30	949	949	949	949	949	949	949	949	949	949	949	949	949	948	948	948	948	948	948	948	948	948	948	948	948	949	949
Diurnal Maximum	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949	949
Diurnal Average	941	941	941	941	941	941	941	941	941	942	941	941	941	941	941	941	941	940	940	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
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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

Timeseries Chart of Hourly Average for BP - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2022

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

Maximum Hourly Value:	28.7 °C	on September 3 at hour 16	Hours in Service:	720
Maximum Daily Value:	19.2 °C	on September 3	Hours of Data:	720
Minimum Hourly Value:	-1.8 °C	on September 12 at hour 5	Hours of Missing Data:	0
Minimum Daily Value:	6.6 °C	on September 20	Hours of Calibration:	0
Monthly Average:	12.4 °C		Operational Uptime:	100.0

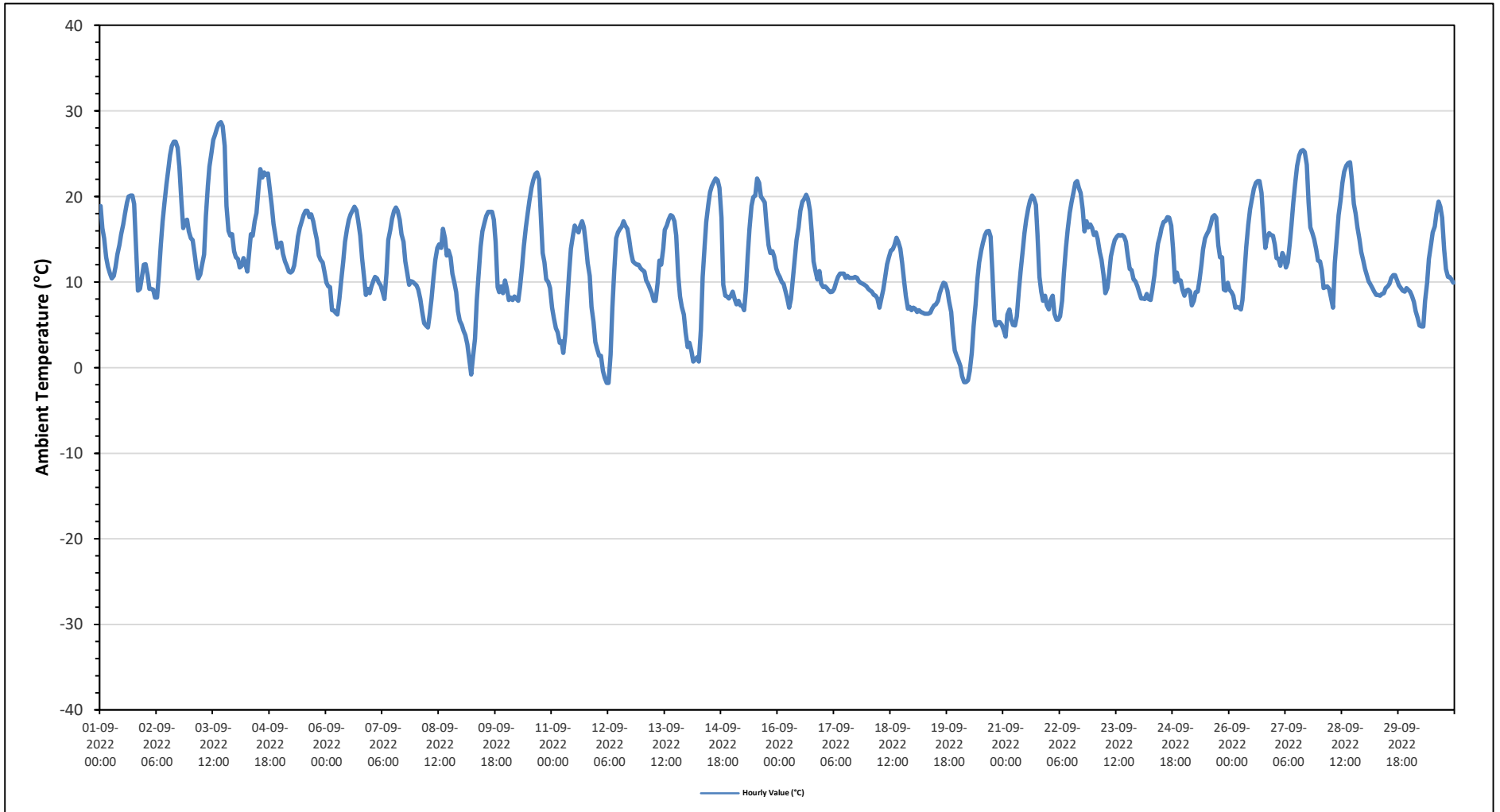
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	18.9	16.3	15.1	12.9	11.8	11	10.4	10.7	11.8	13.2	14.3	15.6	16.7	18	19.3	20	20.1	20.1	19.1	13.7	9	9.2	10.5	12	9.0	20.1	14.6
Sep 2	12.1	10.8	9.2	9.2	9.1	8.2	8.2	10.8	14.4	17.1	19.2	21.4	23.1	24.8	25.9	26.4	26.4	25.7	23.4	19.3	16.3	17.1	17.3	15.9	8.2	26.4	17.1
Sep 3	15.1	14.9	13.2	11.6	10.4	10.9	12	13.2	17.7	21.3	23.5	25.1	26.6	27.2	28	28.5	28.7	28.2	25.9	18.9	16	15.4	15.6	13.6	10.4	28.7	19.2
Sep 4	12.9	12.7	11.7	11.9	12.8	12	11.2	13.4	15.6	15.4	17.1	18.1	21	23.2	22.2	22.8	22.5	22.7	20.9	18.9	16.8	15.3	14	14.5	11.2	23.2	16.7
Sep 5	14.6	13.3	12.4	11.9	11.2	11.1	11.3	11.9	13.5	15.3	16.3	17.1	17.8	18.3	18.3	17.6	17.9	17.1	16	15	13.1	12.6	12.3	11.2	11.1	18.3	14.5
Sep 6	9.9	9.5	9.4	6.7	6.7	6.4	6.2	8.1	10.2	12.4	14.7	16.2	17.3	17.9	18.4	18.8	18.4	17.1	15.4	12.8	10.8	8.5	9.2	8.7	6.2	18.8	12.1
Sep 7	9.5	10.2	10.6	10.4	9.9	9.6	8.8	8	11	14.9	16.1	17.4	18.3	18.7	18.3	17.3	15.6	14.7	12.4	11	9.7	10.1	10	9.8	8.0	18.7	12.6
Sep 8	9.6	9.1	8	6.6	5.2	4.9	4.7	6.2	8	10.6	12.6	14	14.4	14	16.2	15.1	13.1	13.7	12.9	11	9.9	8.8	6.6	5.5	4.7	16.2	10.0
Sep 9	5	4.3	3.8	2.7	1.1	-0.8	1.2	3.4	7.9	11.2	14.1	15.9	16.9	17.7	18.2	18.2	18.2	17.3	14.7	9.4	8.8	9.5	8.7	10.2	-0.8	18.2	9.9
Sep 10	9.3	7.9	8.2	7.9	8.3	8.1	7.8	9.4	11.8	14.2	16.4	18	19.5	21	21.9	22.6	22.8	22	18.2	13.4	12.3	10.3	10	9.3	7.8	22.8	13.8
Sep 11	7	5.8	4.6	4.1	2.9	3.1	1.7	3.9	7.3	11.1	13.9	15.4	16.6	16.1	15.8	16.6	17.1	16.4	14.4	12.2	10.7	7.1	5.3	3	1.7	17.1	9.7
Sep 12	2.2	1.4	1.4	-0.4	-1.2	-1.8	-1.8	1.5	7	11.1	15.1	15.8	16.2	16.5	17.1	16.6	16.2	15	13.5	12.4	12.2	12	12	11.6	-1.8	17.1	9.2
Sep 13	11.4	11.2	10.2	9.8	9.2	8.7	7.8	7.8	9.9	12.5	12	13.9	16.1	16.6	17.3	17.8	17.7	17.1	15.4	10.7	8.3	7.1	6.2	4.1	4.1	17.8	11.6
Sep 14	2.4	2.9	1.9	0.7	0.9	1.2	0.7	4.4	10.6	14.3	17	19	20.5	21.2	21.7	22.1	21.9	21	17.5	9.7	8.4	8.3	8.1	8.4	0.7	22.1	11.0
Sep 15	8.9	8	7.4	7.8	7.3	7.2	6.7	9.1	13	16.2	18.9	19.9	20.1	22.1	21.6	20	19.7	19.3	16.7	14.3	13.4	13.6	13	11.6	6.7	22.1	14.0
Sep 16	11	10.6	10	9.8	8.9	8	7	8	10.5	12.7	14.9	16.4	18.3	19.4	19.7	20.2	19.7	18.3	15.7	12.4	11.2	10.3	11.3	9.8	7.0	20.2	13.1
Sep 17	9.4	9.5	9.3	9	8.8	8.9	9.2	10	10.6	11	11	11	10.5	10.7	10.5	10.5	10.5	10.6	10.5	10.1	9.9	9.8	9.7	9.5	8.8	11.0	10.0
Sep 18	9.2	9	8.9	8.5	8.4	8.1	7	8	9.1	10.5	12.1	12.9	13.7	13.8	14.3	15.2	14.7	13.9	12.3	10.1	8.3	6.9	7.1	6.7	6.7	15.2	10.4
Sep 19	7	6.9	6.5	6.7	6.5	6.4	6.3	6.3	6.3	6.4	6.9	7.3	7.4	7.8	8.7	9.4	9.9	9.8	9	7.7	6.5	3.9	2	1.4	1.4	9.9	6.8
Sep 20	0.8	0.2	-1	-1.7	-1.7	-1.5	-0.4	1.7	4.8	7.4	10.3	12.3	13.7	14.6	15.5	15.9	16	15.3	11.1	5.6	4.9	5.3	5.3	5	-1.7	16.0	6.6
Sep 21	4.4	3.6	6.2	6.8	5.6	5	4.9	6	9	11.3	13.6	15.7	17.3	18.6	19.5	20.1	19.8	19	15.7	10.6	8.9	7.8	8.4	7.3	3.6	20.1	11.0
Sep 22	6.8	7.9	8.4	6.3	5.6	5.6	6	7.8	11	14	16.1	18.1	19.3	20.5	21.6	21.8	21	20.4	18.5	15.9	17.1	16.4	16.7	16.3	5.6	21.8	14.1
Sep 23	15.5	15.8	15	13.5	12.6	10.8	8.7	9.3	11	13	14.1	14.9	15.3	15.5	15.4	15.5	15.3	14.7	13.1	11.5	11.4	10.3	10.1	9.5	8.7	15.8	13.0
Sep 24	8.8	8.1	8.1	8	8.6	8	7.9	9.1	10.8	12.9	14.5	15.4	16.3	17	17.1	17.6	17.5	16.6	14	10	11.1	10.2	10.2	9.1	7.9	17.6	12.0
Sep 25	8.4	9	9.1	8.9	7.3	7.8	8.8	8.9	10.2	12.1	13.8	15.1	15.6	16	16.7	17.6	17.8	17.5	14.3	12.9	12.9	9.1	9	9.9	7.3	17.8	12.0
Sep 26	9.1	8.8	8.4	7	7.1	7	6.8	7.9	11.1	14.1	16.7	18.5	19.8	20.9	21.6	21.8	21.8	20.4	17.2	14	15.2	15.7	15.5	15.4	6.8	21.8	14.2
Sep 27	14.4	12.8	12.7	11.9	13.4	13	11.7	12.3	14.5	16.8	19.3	21.7	23.6	24.8	25.3	25.4	25.2	23.7	19.3	16.4	15.7	15	13.8	12.5	11.7	25.4	17.3
Sep 28	12.4	11.4	9.3	9.4	9.5	9.2	8.2	7	12.2	15.2	17.8	19.6	21.6	22.9	23.6	23.9	24	22	19.1	18	16.4	15	13.5	12.5	7.0	24.0	15.6
Sep 29	11.5	10.8	10.1	9.7	9.3	8.9	8.5	8.5	8.4	8.6	8.7	9.3	9.5	9.8	10.5	10.8	10.8	10.2	9.6	9.3	9	8.9	9.3	9.1	8.4	11.5	9.5
Sep 30	8.9	8.4	7.7	6.6	5.8	4.9	4.8	4.8	7.8	9.9	12.7	14.3	15.8	16.5	18.1	19.4	18.8	17.5	13.8	11.5	10.6	10.6	10.3	9.9	4.8	19.4	11.2
Diurnal Maximum	18.9	16.3	15.1	13.5	13.4	13.0	12.0	13.4	17.7	21.3	23.5	25.1	26.6	27.2	28.0	28.5	28.7	28.2	25.9	19.3	17.1	17.1	17.3	16.3			
Diurnal Average	9.5	9.0	8.5	7.8	7.4	7.0	6.7	7.9	10.6	12.9	14.8	16.2	17.3	18.1	18.6	18.9	18.6	17.9	15.7	12.6	11.5	10.7	10.4	9.8			

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

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

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

Timeseries Chart of Hourly Average for AT - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

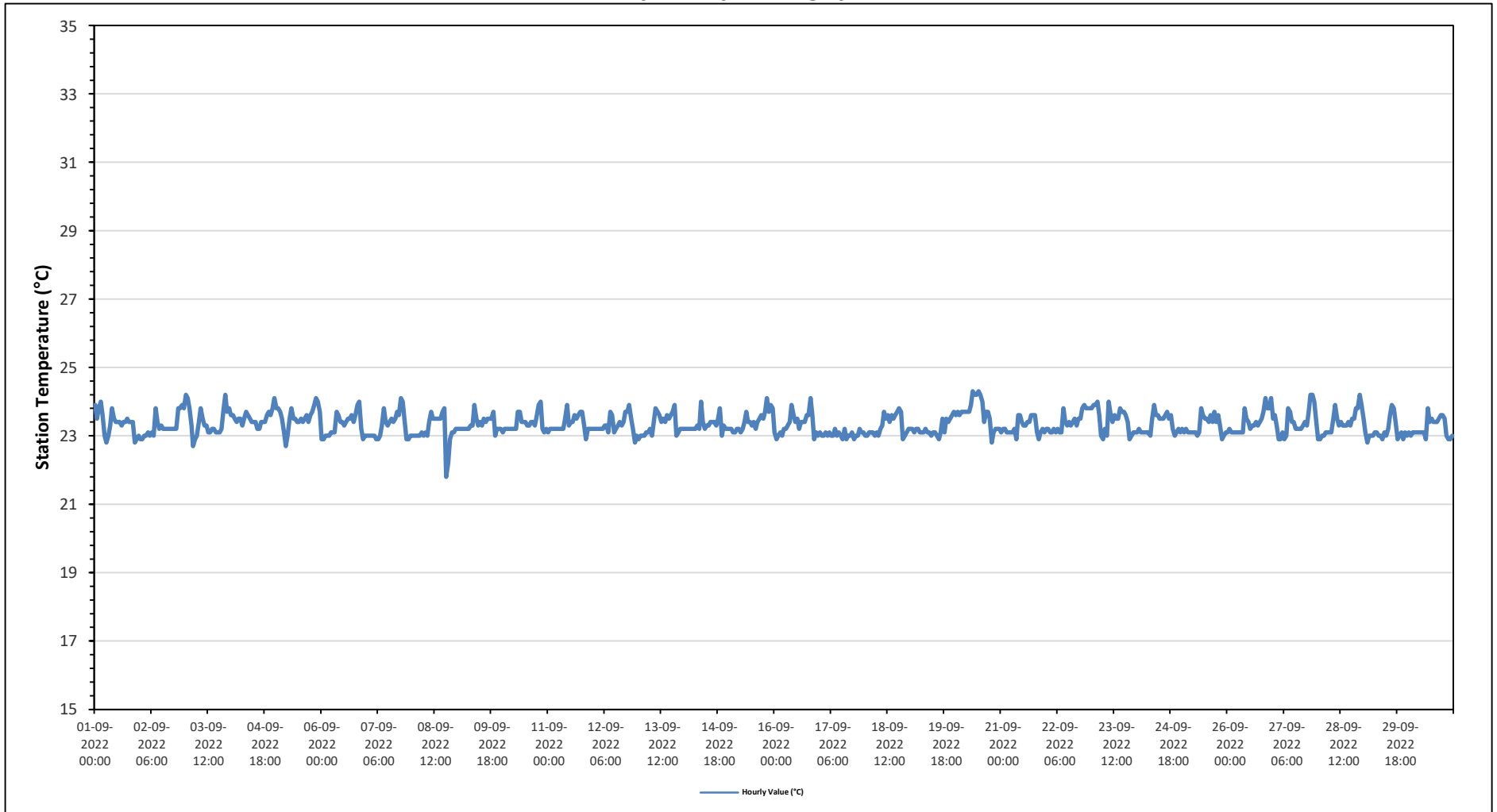
986c Station - September 2022

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

Maximum Hourly Value:	24.3	°C	on September 20 at hour 9	Hours in Service:	720																							
Maximum Daily Value:	23.7	°C	on September 20	Hours of Data:	720																							
Minimum Hourly Value:	21.8	°C	on September 8 at hour 18	Hours of Missing Data:	0																							
Minimum Daily Value:	23.0	°C	on September 17	Hours of Calibration:	0																							
Monthly Average:	23.3	°C		Operational Uptime:	100.0																							
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
Sep 1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	22.8	24.0	23.4	
Sep 2	22.9	22.9	23.0	23.0	23.1	23.0	23.1	23.0	23.8	23.4	23.2	23.3	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.8	23.8	23.9	23.8	22.9	23.9	23.3	
Sep 3	24.2	24.1	23.8	23.3	22.7	22.9	23.0	23.4	23.8	23.5	23.3	23.3	23.1	23.1	23.2	23.2	23.1	23.1	23.1	23.2	23.7	24.2	23.7	23.8	22.7	24.2	23.4	
Sep 4	23.6	23.6	23.5	23.4	23.5	23.5	23.3	23.5	23.7	23.6	23.5	23.4	23.4	23.4	23.2	23.2	23.4	23.4	23.4	23.6	23.7	23.6	23.8	24.1	23.2	24.1	23.5	
Sep 5	23.8	23.8	23.7	23.5	23.1	22.7	23.0	23.5	23.8	23.5	23.5	23.4	23.4	23.5	23.4	23.5	23.6	23.4	23.6	23.7	23.9	24.1	24.0	23.7	22.7	24.1	23.5	
Sep 6	22.9	22.9	23.0	23.0	23.0	23.1	23.1	23.1	23.7	23.6	23.4	23.4	23.3	23.4	23.5	23.5	23.6	23.4	23.6	23.9	24.0	23.2	22.9	23.0	22.9	24.0	23.3	
Sep 7	23.0	23.0	23.0	23.0	23.0	22.9	22.9	23.0	23.3	23.8	23.4	23.3	23.4	23.5	23.4	23.5	23.7	23.6	24.1	24.0	23.4	22.9	22.9	23.0	22.9	24.1	23.3	
Sep 8	23.0	23.0	23.0	23.0	23.0	23.1	23.0	23.1	23.0	23.4	23.7	23.5	23.5	23.5	23.5	23.7	23.8	21.8	22.2	22.9	23.1	23.1	23.2	22.9	24.1	23.3		
Sep 9	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.3	23.3	23.9	23.5	23.3	23.4	23.3	23.5	23.4	23.5	23.5	23.5	23.7	23.0	23.2	23.2	23.2	23.0	23.9	23.3	
Sep 10	23.1	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.7	23.7	23.4	23.4	23.3	23.3	23.4	23.4	23.3	23.6	23.9	24.0	23.2	23.1	23.2	22.9	24.0	23.4		
Sep 11	23.1	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.5	23.9	23.3	23.4	23.4	23.6	23.5	23.6	23.7	23.7	23.3	22.9	23.2	23.2	22.9	23.9	23.3		
Sep 12	23.2	23.2	23.2	23.2	23.2	23.2	23.3	23.3	23.1	23.7	23.6	23.1	23.2	23.3	23.4	23.3	23.4	23.7	23.7	23.9	23.5	23.2	22.8	23.0	22.8	23.9	23.3	
Sep 13	22.9	23.0	23.0	23.0	23.1	23.1	23.2	23.0	23.4	23.8	23.7	23.6	23.4	23.5	23.4	23.6	23.5	23.6	23.7	23.9	23.0	23.1	23.2	23.2	22.9	23.9	23.3	
Sep 14	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.3	23.2	24.0	23.4	23.2	23.3	23.3	23.4	23.4	23.4	23.3	23.5	23.8	23.0	23.3	23.2	23.2	23.0	24.0	23.3	
Sep 15	23.2	23.2	23.1	23.1	23.2	23.2	23.1	23.2	23.4	23.7	23.4	23.4	23.3	23.4	23.2	23.4	23.5	23.6	23.5	23.7	24.1	23.7	23.9	23.8	23.1	24.1	23.4	
Sep 16	23.1	22.9	23.0	23.1	23.0	23.2	23.2	23.3	23.4	23.9	23.6	23.4	23.5	23.2	23.4	23.4	23.4	23.6	23.6	24.1	23.6	22.9	23.1	23.0	22.9	24.1	23.3	
Sep 17	23.1	23.0	23.0	23.1	23.0	23.1	23.0	23.0	23.2	23.0	23.1	23.0	22.9	23.2	22.9	23.0	23.0	23.1	22.9	23.0	23.2	23.1	23.1	22.9	23.2	23.0	23.0	
Sep 18	23.0	23.0	23.1	23.1	23.1	23.0	23.1	23.0	23.2	23.3	23.7	23.5	23.6	23.4	23.6	23.5	23.6	23.7	23.8	23.7	22.9	23.0	23.1	23.2	22.9	23.8	23.3	
Sep 19	23.2	23.2	23.1	23.2	23.2	23.1	23.1	23.1	23.2	23.1	23.1	23.0	23.1	23.1	23.0	22.9	23.1	23.5	23.1	23.5	23.4	23.5	23.6	23.7	22.9	23.7	23.2	
Sep 20	23.6	23.7	23.6	23.7	23.7	23.7	23.7	23.7	23.9	24.3	24.2	24.2	24.3	24.2	24.0	23.4	23.7	23.7	23.5	22.8	23.1	23.2	23.2	22.8	24.3	23.7		
Sep 21	23.1	23.2	23.2	23.1	23.1	23.1	23.1	23.2	22.9	23.6	23.6	23.4	23.3	23.3	23.4	23.4	23.6	23.6	23.6	23.1	22.9	23.1	23.2	22.9	23.6	23.3		
Sep 22	23.2	23.2	23.1	23.1	23.2	23.1	23.2	23.1	23.1	23.8	23.4	23.3	23.4	23.3	23.4	23.5	23.3	23.5	23.5	23.8	23.9	23.8	23.8	23.8	23.1	23.9	23.4	
Sep 23	23.8	23.9	23.9	24.0	23.6	23.0	22.9	23.2	23.0	24.0	23.6	23.4	23.6	23.5	23.5	23.8	23.7	23.7	23.6	23.4	22.9	23.0	23.1	22.9	24.0	23.5		
Sep 24	23.1	23.2	23.1	23.1	23.1	23.1	23.1	23.0	23.5	23.9	23.6	23.6	23.5	23.5	23.6	23.7	23.5	23.6	23.2	23.0	23.1	23.2	23.1	23.0	23.9	23.3		
Sep 25	23.2	23.1	23.2	23.1	23.1	23.1	23.1	23.1	23.0	23.1	23.8	23.6	23.5	23.5	23.4	23.6	23.4	23.7	23.4	23.6	23.3	22.9	23.0	23.1	22.9	23.8	23.3	
Sep 26	23.1	23.2	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.8	23.5	23.4	23.2	23.3	23.3	23.4	23.3	23.4	23.5	23.7	24.1	23.8	23.8	24.1	23.1	24.1	23.4	
Sep 27	23.5	23.6	23.3	22.9	22.9	23.1	22.9	23.0	23.8	23.7	23.4	23.4	23.2	23.2	23.2	23.2	23.3	23.4	23.3	23.7	24.2	24.2	24.0	23.4	22.9	24.2	23.4	
Sep 28	22.9	22.9	23.0	23.0	23.1	23.1	23.1	23.1	23.5	23.9	23.5	23.3	23.4	23.3	23.3	23.4	23.3	23.5	23.5	23.8	23.8	24.2	23.9	22.9	24.2	23.4		
Sep 29	23.5	23.1	22.8	23.0	23.0	23.0	23.1	23.1	23.0	23.0	22.9	23.1	23.0	23.2	23.6	23.9	23.8	23.4	22.9	23.0	23.1	22.9	23.1	23.0	22.8	23.9	23.1	
Sep 30	23.1	23.0	23.1	23.1	23.1	23.1	23.1	23.1	23.1	22.9	23.8	23.4	23.4	23.4	23.4	23.4	23.5	23.6	23.6	23.5	23.0	22.9	22.9	23.0	22.9	23.8	23.2	
Diurnal Maximum	24.2	24.1	23.9	24.0	23.7	23.7	23.7	23.7	23.9	24.3	24.2	24.2	24.3	24.2	24.0	23.9	23.8	23.8	24.1	24.1	24.2	24.2	24.1					
Diurnal Average	23.3	23.2	23.2	23.2	23.2	23.1	23.1	23.2	23.2	23.4	23.6	23.5	23.4	23.4	23.4	23.4	23.5	23.5	23.4	23.5	23.4	23.3	23.3					
C	Monthly Calibration										S	Daily Zero-Span Check							Q	Quality Assurance								
K	Collection Error										N	No Data (Machine Not in Service)							Y	Routine Maintenance								
X	Invalid Data (Equipment Malfunction /Recovery)										NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)														P	Power Failure	
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.																												
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.																												

Timeseries Chart of Hourly Average for ST - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2022

Summary of Hourly Averages

PRECIPITATION in mm

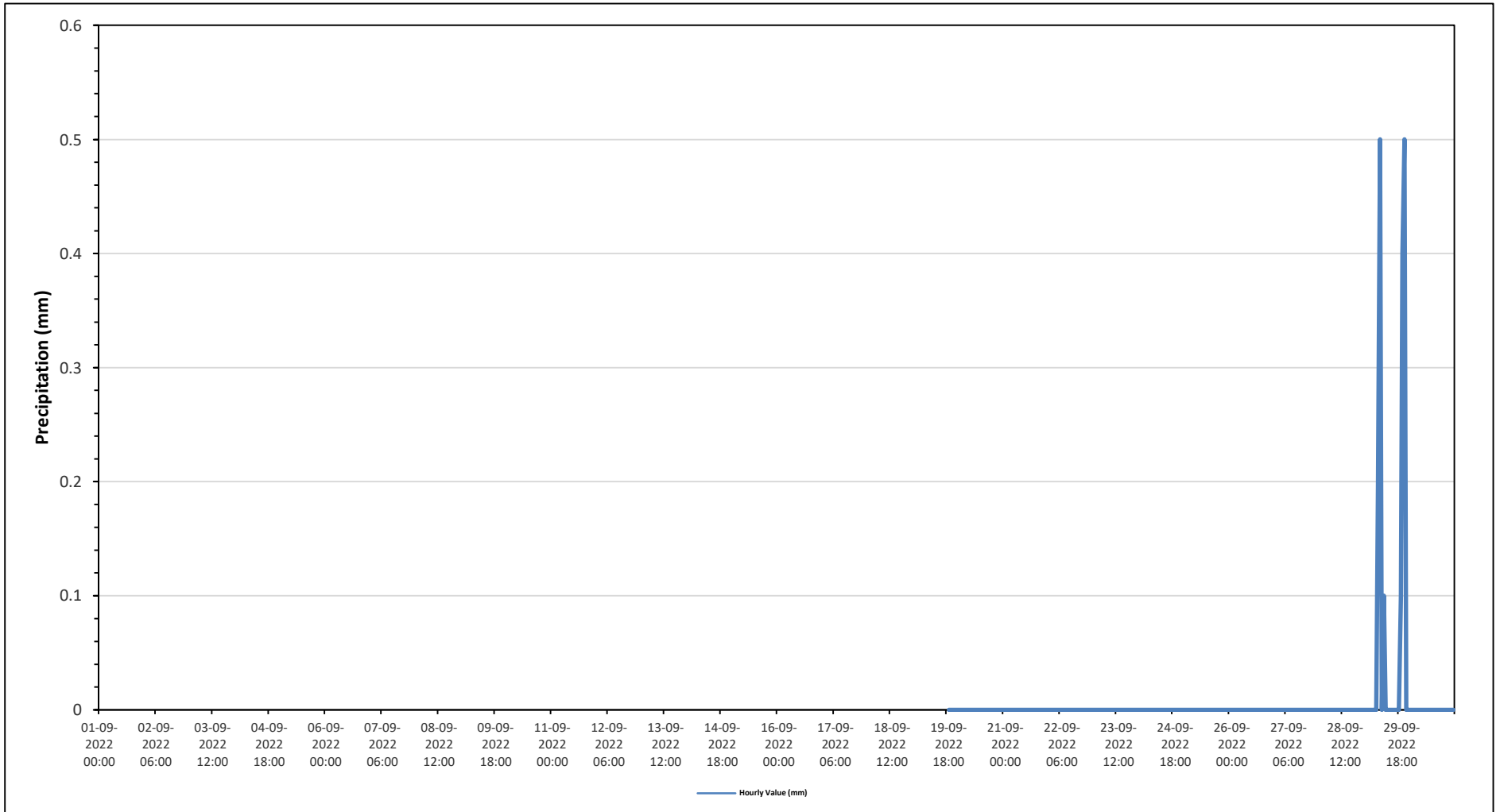
Maximum Hourly Value:	0.5 mm on September 29 at hour 8	Hours in Service:	720
Maximum Daily Value:	1.8 mm on September 29	Hours of Data:	269
Minimum Hourly Value:	0.0 mm on September 19 at hour 19	Hours of Missing Data:	451
Minimum Daily Value:	0.0 mm on September 19	Hours of Calibration:	0
Monthly Total:	1.8 mm	Operational Uptime:	37.4

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Total		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
Sep 2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Sep 19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	NRM	0	0	0	0	0	0.0	0.0	0.0
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 29	0	0	0	0	0	0	0	0	0.2	0.5	0	0.1	0	0	0	0	0	0	0	0	0.1	0.4	0.5	0	0.0	0.5	1.8	
Sep 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	
Diurnal Maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.5	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
X InValid Data (Equipment Malfunction /Recovery)	NRM UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P Power Failure

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

Timeseries Chart of Hourly Average for Precipitation - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2022

Summary of Hourly Averages

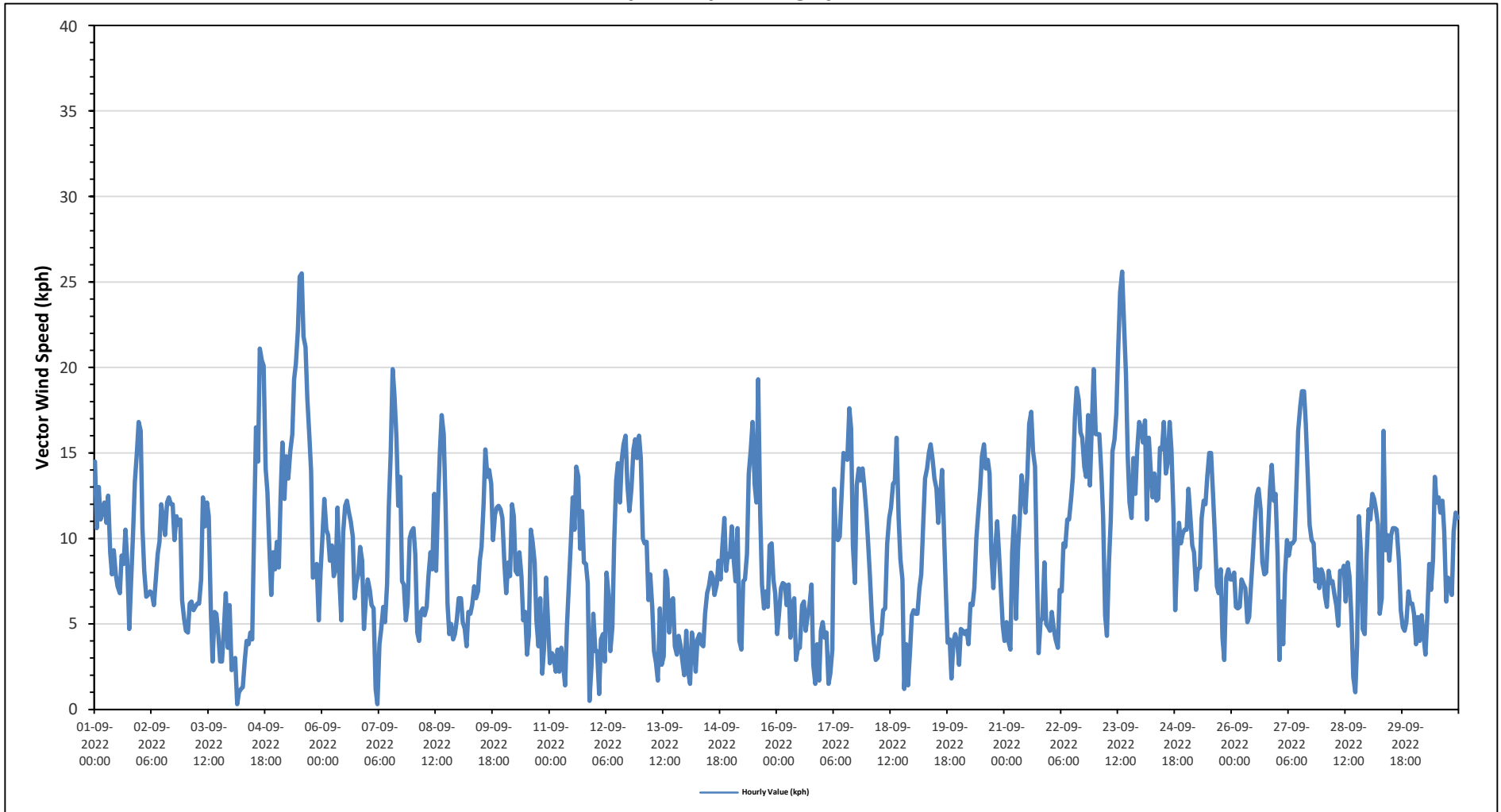
VECTOR WIND SPEED (VWS) in km/hr

Maximum Hourly Value:	25.6 kph	on September 23 at hour 14	Hours in Service:	720
Maximum Daily Value:	14.8 kph	on September 23	Hours of Data:	720
Minimum Hourly Value:	0.3 kph	on September 4 at hour 3	Hours of Missing Data:	0
Minimum Daily Value:	1.9 kph	on September 16	Hours of Calibration:	0
Monthly Average:	4.2 kph		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average																	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23																
Sep 1	14.5	10.6	13.0	11.1	11.6	12.1	10.9	12.5	9.2	7.9	9.3	7.9	7.2	6.8	9.0	8.5	10.5	8.7	4.7	7.4	10.3	13.3	15.0	16.8	4.7	16.8	6.4																
Sep 2	16.3	10.6	8.1	6.6	6.7	6.9	6.8	6.1	7.5	9.1	9.8	12.0	11.1	10.2	12.1	12.4	12.0	12.0	9.9	11.3	10.8	11.1	6.4	5.3	5.3	16.3	8.7																
Sep 3	4.6	4.5	6.2	6.3	5.8	6.0	6.2	6.2	7.6	12.4	10.7	12.1	11.3	5.9	2.8	5.7	5.6	4.3	2.8	2.8	4.8	6.8	3.6	6.1	2.8	12.4	4.6																
Sep 4	2.3	2.9	3.0	0.3	1.0	1.2	1.3	2.9	4.0	3.8	4.5	4.1	10.9	16.5	14.5	21.1	20.4	20.1	14.1	12.7	9.7	6.7	9.2	8.2	0.3	21.1	7.1																
Sep 5	9.8	8.3	12.5	15.6	12.3	14.8	13.5	15.1	16.1	19.3	20.2	22.2	25.3	25.5	21.8	21.2	18.2	16.0	13.9	7.7	7.8	8.5	5.2	8.0	5.2	25.5	13.8																
Sep 6	10.2	12.3	10.5	10.2	8.7	9.6	7.8	8.2	11.8	7.4	5.2	10.3	11.9	12.2	11.5	11.0	10.1	6.5	7.5	7.9	9.5	8.7	4.7	6.6	4.7	12.3	8.0																
Sep 7	7.6	7.0	6.1	5.9	1.2	0.3	3.8	4.7	6.0	5.1	7.3	11.9	14.8	19.9	18.4	15.9	11.9	13.6	7.5	7.3	5.2	6.2	10.0	10.4	0.3	19.9	4.8																
Sep 8	10.6	9.1	4.5	4.0	5.7	5.9	5.5	6.0	7.8	9.2	8.2	12.6	8.1	11.8	15.1	17.2	16.1	12.1	6.2	4.4	5.0	4.1	4.4	5.3	4.0	17.2	5.9																
Sep 9	6.5	6.5	5.1	4.7	3.7	5.7	5.6	6.1	7.2	6.5	6.9	8.7	9.5	12.0	15.2	13.6	14.0	13.2	9.9	11.4	11.8	11.9	11.7	11.2	3.7	15.2	8.3																
Sep 10	8.5	6.8	8.6	7.8	12.0	11.3	8.1	7.9	9.2	7.8	5.2	5.7	3.2	4.3	10.5	9.8	8.6	5.2	3.7	6.5	2.1	3.6	7.7	5.0	2.1	12.0	4.9																
Sep 11	2.7	3.3	3.1	2.2	3.5	2.2	3.6	2.6	1.4	4.8	7.4	9.6	12.4	10.5	14.2	13.6	9.4	11.6	8.6	8.5	7.4	0.5	2.6	5.6	0.5	14.2	5.0																
Sep 12	3.4	3.4	0.9	4.1	4.4	2.8	8.0	6.7	3.4	4.8	9.7	13.4	14.4	12.1	14.6	15.5	16.0	13.2	11.6	12.9	15.2	15.8	14.7	16.0	0.9	16.0	9.6																
Sep 13	14.7	10.0	9.7	9.8	6.4	7.9	6.0	3.4	2.7	1.7	5.9	2.6	3.1	8.1	7.6	4.5	6.3	6.5	3.7	3.2	4.3	3.7	2.8	2.0	1.7	14.7	2.6																
Sep 14	4.6	2.2	1.5	4.5	3.7	2.2	4.1	4.4	3.8	3.7	5.6	6.8	7.2	8.0	7.8	6.7	7.3	8.7	7.6	9.5	11.2	8.1	9.1	8.9	1.5	11.2	5.0																
Sep 15	10.7	8.7	7.5	10.6	4.0	3.5	7.5	7.6	9.1	13.8	15.2	16.8	13.2	12.1	19.3	11.5	7.3	5.9	6.9	6.0	9.6	9.7	7.6	6.8	3.5	19.3	8.5																
Sep 16	4.4	5.6	7.1	7.4	7.3	6.1	7.3	4.2	6.1	6.5	2.9	3.6	3.6	6.1	6.3	4.6	5.5	6.1	7.3	2.6	1.5	3.8	1.7	4.6	1.5	7.4	1.9																
Sep 17	5.1	4.2	4.5	1.5	2.1	3.5	12.9	10.1	9.9	10.1	12.7	15.0	14.8	14.6	17.6	16.4	9.6	7.4	13.1	14.1	13.4	14.1	13.0	11.5	1.5	17.6	9.2																
Sep 18	9.7	7.8	5.3	3.9	2.9	3.0	4.3	4.4	5.8	5.9	9.7	11.2	11.8	13.2	13.3	15.9	11.2	8.8	7.6	1.2	3.8	1.4	3.4	5.5	1.2	15.9	5.0																
Sep 19	5.8	5.6	5.6	7.1	7.9	10.9	13.5	14.1	15.0	15.5	14.6	13.5	12.9	10.9	12.5	14.0	10.7	6.9	3.9	4.1	1.8	4.0	4.4	3.9	1.8	15.5	8.2																
Sep 20	2.6	4.7	4.6	4.4	4.6	3.8	6.2	6.1	7.1	10.0	11.4	12.9	14.8	15.5	14.1	14.6	13.8	9.2	7.1	9.3	11.0	9.2	6.9	4.9	2.6	15.5	7.9																
Sep 21	4.0	5.1	4.0	3.5	9.2	11.3	5.3	9.3	11.2	13.7	12.6	11.5	13.8	16.7	17.4	15.1	14.2	8.5	3.3	5.2	5.3	8.6	5.0	4.8	3.3	17.4	8.5																
Sep 22	4.6	5.7	4.7	4.1	3.6	7.0	6.9	9.7	9.5	11.1	11.1	12.3	13.6	17.1	18.8	18.1	16.2	15.9	14.2	13.6	17.2	13.1	16.8	19.9	3.6	19.9	10.8																
Sep 23	16.1	16.1	16.1	13.9	11.3	5.5	4.3	8.6	11.0	15.1	15.8	17.3	21.3	24.4	25.6	22.7	19.6	14.8	12.1	11.2	14.7	12.6	15.1	16.8	4.3	25.6	14.8																
Sep 24	16.5	15.6	16.9	11.1	15.9	14.1	12.4	13.8	12.2	12.3	15.3	15.2	16.8	13.8	14.4	16.8	15.2	11.5	5.8	8.7	10.9	9.7	10.3	10.5	5.8	16.9	11.8																
Sep 25	10.5	12.9	11.4	9.6	9.2	7.0	8.2	8.3	11.2	12.2	12.0	13.6	15.0	15.0	12.5	10.2	7.2	6.8	8.2	4.2	2.9	7.7	8.2	7.6	2.9	15.0	8.6																
Sep 26	7.6	8.0	6.0	5.9	6.0	7.6	7.3	7.1	5.1	5.4	7.2	9.1	10.9	12.5	12.9	11.7	8.6	7.9	8.0	10.2	12.9	14.3	12.2	12.6	5.1	14.3	8.5																
Sep 27	9.0	2.9	6.3	3.8	7.9	9.9	9.0	9.7	9.7	9.9	13.0	16.3	17.7	18.6	18.6	16.7	13.6	10.8	9.9	9.7	7.5	8.2	7.1	8.2	2.9	18.6	9.6																
Sep 28	7.9	6.6	6.0	8.1	7.4	7.5	6.7	6.1	4.9	8.1	8.0	8.4	6.3	8.6	7.8	5.2	1.9	1.0	3.8	11.3	9.2	4.7	4.4	8.8	1.0	11.3	2.6																
Sep 29	11.7	11.1	12.6	12.3	11.7	10.8	5.6	6.5	16.3	9.3	10.2	8.7	10.2	10.6	10.5	8.6	5.8	4.8	4.6	5.1	6.9	6.2	6.2	6.2	4.6	16.3	6.9																
Sep 30	5.6	3.8	5.4	4.0	5.5	4.4	3.2	5.3	8.5	7.0	8.8	13.6	12.1	12.4	11.5	12.2	10.4	6.3	7.7	7.2	6.7	10.4	11.5	11.2	3.2	13.6	6.6																
Diurnal Maximum	17	16	17	16	16	15	14	15	16	19	20	22	25	26	26	23	20	20	14	14	17	16	17	20																			
Diurnal Average	8.3	7.4	7.2	6.8	6.8	6.8	7.1	7.5	8.3	9.0	9.9	11.3	12.0	12.9	13.6	13.1	11.3	9.5	7.8	7.9	8.3	8.2	8.0	8.6																			
C	Monthly Calibration										S	Daily Zero-Span Check										Q	Quality Assurance																				
K	Collection Error										N	No Data (Machine Not in Service)										Y	Routine Maintenance										P	Power Failure									
X	InValid Data (Equipment Malfunction /Recovery)										NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)																															

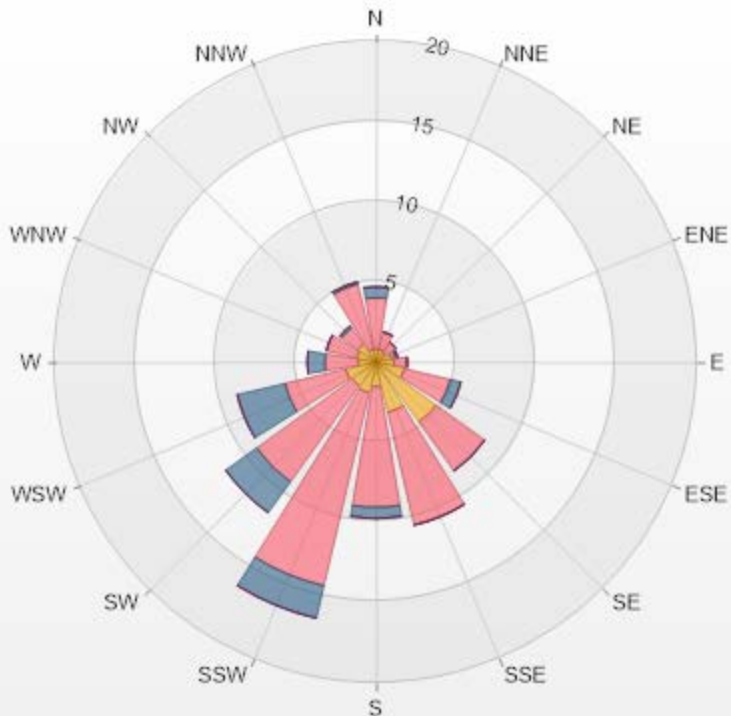
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

Timeseries Chart of Hourly Average for VWS - 986c Station



Wind: PRAMP 986c Monitor: WDS [KPH] Monthly: 09-2022 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 2.36% 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	0.83	3.19	0.69	0	0	4.71
NNE	0.83	1.11	0	0	0	1.94
NE	0.69	0.83	0	0	0	1.52
ENE	0.97	0.28	0.14	0	0	1.39
E	1.11	0.83	0	0	0	1.94
ESE	1.81	2.92	0.69	0	0	5.42
SE	4.58	3.75	0	0	0	8.33
SSE	3.19	7.22	0	0	0	10.41
S	1.53	7.5	0.69	0	0	9.72
SSW	1.94	12.36	2.08	0	0	16.38
SW	1.81	7.36	2.36	0	0	11.53
WSW	1.94	3.89	3.06	0	0	8.89
W	1.11	2.08	1.11	0	0	4.3
WNW	1.25	1.94	0	0	0	3.19
NW	1.39	1.25	0.14	0	0	2.78
NNW	0.83	4.17	0.14	0	0	5.14
Summary	25.81	60.68	11.1	0	0	97.59



PRAMP-202209

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% Icon Classes (KPH)

26

1.8-6.0

61

6.0-15.0

11

15.0-29.0

0

29.0-39.0

0

>39.0



PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2022

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

Monthly Average: 212 (SSW) degree	Hours in Service: 720
	Hours of Data: 720
	Hours of Missing Data: 0
	Hours of Calibration: 0
	Operational Uptime: 100.0

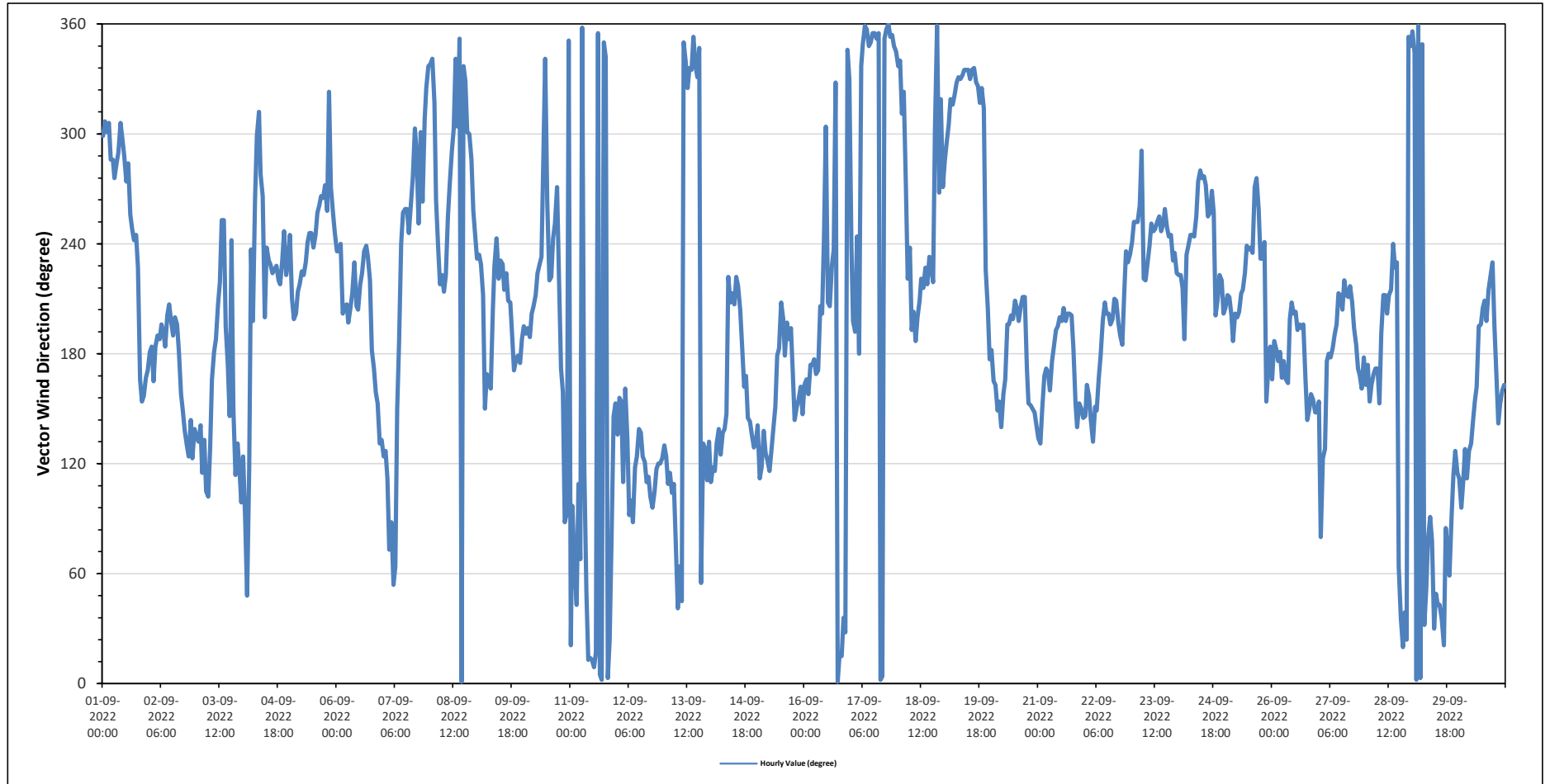
Day	Hourly Period Starting at (MST)																							Daily Average			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant	
Sep 1	WNW	NW	WNW	NW	WNW	WNW	W	WNW	WNW	NW	WNW	WNW	W	WNW	WSW	WSW	WSW	WSW	SW	SSE	SSE	SSE	SSE	S	261	W	
Sep 2	S	S	SSE	S	S	S	SSW	S	S	SSW	SSW	SSW	S	SSW	SSW	S	SSE	SSE	SE	SE	ESE	SE	ESE	SE	173	S	
Sep 3	SE	SE	SE	ESE	SE	ESE	E	SE	SSE	S	S	SSW	SW	WSW	WSW	SSW	S	SE	WSW	SSE	ESE	SE	ESE	E	161	SSE	
Sep 4	ESE	E	NE	ESE	SW	SSW	W	WNW	NW	W	W	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	SW	SW	230	SW	
Sep 5	WSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	WSW	WSW	WSW	SW	WSW	WSW	W	W	W	W	WSW	NW	W	WSW	WSW	243	WSW	
Sep 6	SW	SW	WSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SSW	SSW	SW	SW	SW	WSW	SW	SW	S	S	SSE	SSE	SE	SE	209	SSW	
Sep 7	ESE	SE	ESE	ENE	E	NE	ENE	SSE	S	WSW	WSW	WSW	WSW	W	W	WNW	WNW	WSW	WNW	W	NW	NW	NNW	269	W		
Sep 8	NNW	NNW	NW	W	SW	SW	SW	SSW	SW	WSW	W	WNW	WNW	NNW	WNW	N	N	NNW	NNW	WNW	WNW	WNW	WSW	WSW	303	WNW	
Sep 9	SW	SW	SW	SSW	SSE	SSE	SSE	SSE	SSW	SW	WSW	SW	SW	SW	SSW	SW	SSW	SSW	S	S	S	S	S	S	203	SSW	
Sep 10	SSW	S	SSW	S	SSW	SSW	SSW	SSW	SW	SW	WNW	NNW	W	SW	SW	WSW	WSW	W	SW	S	SSE	E	E	N	217	SW	
Sep 11	NNE	E	ENE	NE	ESE	ENE	N	ESE	NE	NNE	NNE	NNE	N	NNE	N	N	N	N	NNW	N	NNE	ENE	SE	SSE	15	NNE	
Sep 12	SE	SSE	SSE	ESE	SSE	SE	E	E	E	ESE	ESE	SE	SE	ESE	ESE	ESE	E	E	ESE	ESE	ESE	ESE	ESE	ESE	118	ESE	
Sep 13	SE	ESE	ESE	ESE	ESE	ESE	ENE	NE	ENE	NE	N	NNW	NW	NNW	NNW	N	NNW	NNW	NNW	NE	SE	SE	ESE	SE	71	ENE	
Sep 14	ESE	ESE	ESE	SE	SE	SE	SE	SE	SE	SW	SSW	SSW	SSW	SW	SW	SSW	S	SSE	SSE	SE	SE	SE	SE	SE	164	SSE	
Sep 15	SE	ESE	ESE	SE	SE	ESE	ESE	SE	SE	SSE	S	SSW	SSW	S	SSW	S	SSW	SSE	SE	SSE	SSE	SSE	SE	SE	162	SSE	
Sep 16	SSE	SSE	SSE	S	S	S	SSE	S	SSW	SSW	WSW	WNW	SSW	SSW	SW	SW	NNW	N	NNE	NNE	NE	NNW	NNW	198	SSW		
Sep 17	SW	SSW	S	WSW	S	NNW	NNW	N	N	NNW	N	N	N	N	N	N	N	N	N	N	N	N	NNW	NNW	352	N	
Sep 18	NNW	NNW	NW	NW	W	SW	SW	S	SSW	S	SSW	SSW	SW	SW	SW	SW	SW	SW	WNW	N	W	NW	W	235	SW		
Sep 19	WNW	WNW	WNW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	NW	SW	SSW	S	324	NW		
Sep 20	S	SSE	SSE	SSE	SSE	SE	SSE	SSE	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSE	SSE	SSE	SE	SE	184	S	
Sep 21	SE	SE	SSE	SSE	S	SSE	SSE	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSE	SE	SSE	SSE	SE	183	S	
Sep 22	SE	SSE	SSE	SE	SE	SSE	SSE	SSE	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	S	SSW	SW	SW	SW	SW	199	SSW	
Sep 23	WSW	WSW	WSW	WSW	W	WNW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	246	WSW
Sep 24	SW	SW	SW	S	SW	WSW	WSW	WSW	WSW	W	W	W	W	W	WSW	WSW	W	WSW	SSW	SSW	SW	SW	SSW	243	WSW		
Sep 25	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	SSW	SW	WSW	SW	SW	SW	W	W	WSW	SW	SW	WSW	SSE	S	S	219	SW	
Sep 26	SSE	S	S	S	S	SSE	S	SSE	SSE	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSE	SE	SSE	SSE	SSE	SE	SE	175	S	
Sep 27	SSE	E	ESE	SE	S	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	S	SSE	SSE	S	193	S		
Sep 28	SSE	S	SSE	SSE	SSE	S	S	SSE	S	SSW	SSW	SSW	SSW	SSW	SSW	WSW	SW	SW	ENE	NE	NNE	NE	N	NNW	186	S	
Sep 29	N	NNW	N	N	N	NNW	NNE	NE	ENE	E	ENE	NNE	NE	NE	NE	NE	NNE	E	ENE	ENE	E	ESE	SE	ESE	41	NE	
Sep 30	ESE	E	ESE	SE	ESE	SE	SE	S	SSE	SSE	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SSW	S	SE	SSE	SSE	175	S		

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

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

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

Timeseries Chart of Hourly Average for VWD - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2022

Summary of Hourly Averages

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

WIND SPEED																											
Maximum Hourly Value: 25.6 kph on September 23 at hour 14													Hours in Service: 720														
Maximum Daily Value: 14.8 kph on September 23													Hours of Data: 720														
Minimum Hourly Value: 0.3 kph on September 4 at hour 3													Hours of Missing Data: 0														
Minimum Daily Value: 1.9 kph on September 16													Hours of Calibration: 0														
Monthly Average: 4.2 kph													Operational Uptime: 100														
WIND DIRECTION																											
Monthly Average: 212 (SSW) degree																											
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	14.5	10.6	13.0	11.1	11.6	12.1	10.9	12.5	9.2	7.9	9.3	7.9	7.2	6.8	9.0	8.5	10.5	8.7	4.7	7.4	10.3	13.3	15.0	16.8	4.7	16.8	6.4
Sep 2	16.3	10.6	8.1	6.6	6.7	6.9	6.8	6.1	7.5	9.1	9.8	12.0	11.1	10.2	12.1	12.4	12.0	12.0	9.9	11.3	10.8	11.1	6.4	5.3	5.3	16.3	8.7
Sep 3	4.6	4.5	6.2	6.3	5.8	6.0	6.2	6.2	7.6	12.4	10.7	12.1	11.3	5.9	2.8	5.7	5.6	4.3	2.8	2.8	4.8	6.8	3.6	6.1	2.8	12.4	4.6
Sep 4	2.3	2.9	3.0	0.3	1.0	1.2	1.3	2.9	4.0	3.8	4.5	4.1	10.9	16.5	14.5	21.1	20.4	20.1	14.1	12.7	9.7	6.7	9.2	8.2	0.3	21.1	7.1
Sep 5	9.8	8.3	12.5	15.6	12.3	14.8	13.5	15.1	16.1	19.3	20.2	22.2	25.3	25.5	21.8	21.2	18.2	16.0	13.9	7.7	7.8	8.5	5.2	8.0	5.2	25.5	13.8
Sep 6	10.2	12.3	10.5	10.2	8.7	9.6	7.8	8.2	11.8	7.4	5.2	10.3	11.9	12.2	11.5	11.0	10.1	6.5	7.5	7.9	9.5	8.7	4.7	6.6	4.7	12.3	8.0
Sep 7	7.6	7.0	6.1	5.9	1.2	0.3	3.8	4.7	6.0	5.1	7.3	11.9	14.8	19.9	18.4	15.9	11.9	13.6	7.5	7.3	5.2	6.2	10.0	10.4	0.3	19.9	4.8
Sep 8	10.6	9.1	4.5	4.0	5.7	5.9	5.5	6.0	7.8	9.2	8.2	12.6	8.1	11.8	15.1	17.2	16.1	12.1	6.2	4.4	5.0	4.1	4.4	5.3	4.0	17.2	5.9
Sep 9	6.5	6.5	5.1	4.7	3.7	5.7	5.6	6.1	7.2	6.5	6.9	8.7	9.5	12.0	15.2	13.6	14.0	13.2	9.9	11.4	11.8	11.9	11.7	11.2	3.7	15.2	8.3
Sep 10	8.5	6.8	8.6	7.8	12.0	11.3	8.1	7.9	9.2	7.8	5.7	3.2	4.3	10.5	9.8	8.6	5.2	3.7	6.5	2.1	3.6	7.7	5.0	2.1	12.0	4.9	
Sep 11	2.7	3.3	3.1	2.2	3.5	2.2	3.6	2.6	1.4	4.8	7.4	9.6	12.4	10.5	14.2	13.6	9.4	11.6	8.6	8.5	7.4	0.5	2.6	5.6	0.5	14.2	5.0
Sep 12	3.4	3.4	0.9	4.1	4.4	2.8	8.0	6.7	3.4	4.8	9.7	13.4	14.4	12.1	14.6	15.5	16.0	13.2	11.6	12.9	15.2	15.8	14.7	16.0	0.9	16.0	9.6
Sep 13	14.7	10.0	9.7	9.8	6.4	7.9	6.0	3.4	2.7	1.7	5.9	2.6	3.1	8.1	7.6	4.5	6.3	6.5	3.7	3.2	4.3	3.7	2.8	2.0	1.7	14.7	2.6
Sep 14	4.6	2.2	1.5	4.5	3.7	2.2	4.1	4.4	3.8	3.7	5.6	6.8	7.2	8.0	7.8	6.7	7.3	8.7	7.6	9.5	11.2	8.1	9.1	8.9	1.5	11.2	5.0
Sep 15	10.7	8.7	7.5	10.6	4.0	3.5	7.5	7.6	9.1	13.8	15.2	16.8	13.2	12.1	19.3	11.5	7.3	5.9	6.9	6.0	9.6	9.7	7.6	6.8	3.5	19.3	8.5
Sep 16	4.4	5.6	7.1	7.4	7.3	6.1	7.3	4.2	6.1	6.5	2.9	3.6	3.6	6.1	6.3	4.6	5.5	6.1	7.3	2.6	1.5	3.8	1.7	4.6	1.5	7.4	1.9
Sep 17	5.1	4.2	4.5	1.5	2.1	3.5	12.9	10.1	9.9	10.1	12.7	15.0	14.8	14.6	17.6	16.4	9.6	7.4	13.1	14.1	13.4	14.1	13.0	11.5	1.5	17.6	9.2
Sep 18	9.7	7.8	5.3	3.9	2.9	3.0	4.3	4.4	5.8	5.9	9.7	11.2	11.8	13.2	13.3	15.9	11.2	8.8	7.6	1.2	3.8	1.4	3.4	5.5	1.2	15.9	5.0
Sep 19	5.8	5.6	5.6	7.1	7.9	10.9	13.5	14.1	15.0	15.5	14.6	13.5	12.9	10.9	12.5	14.0	10.7	6.9	3.9	4.1	1.8	4.0	4.4	3.9	1.8	15.5	8.2
Sep 20	2.6	4.7	4.6	4.4	4.6	3.8	6.2	6.1	7.1	10.0	11.4	12.9	14.8	15.5	14.1	14.6	13.8	9.2	7.1	9.3	11.0	9.2	6.9	4.9	2.6	15.5	7.9



PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2022

Summary of Hourly Averages

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

WIND SPEED																											
Maximum Hourly Value:	25.6	kph	on September 23	at hour 14	Hours in Service:	720																					
Maximum Daily Value:	14.8	kph	on September 23	Hours of Data:	720																						
Minimum Hourly Value:	0.3	kph	on September 4	at hour 3	Hours of Missing Data:	0																					
Minimum Daily Value:	1.9	kph	on September 16	Hours of Calibration:	0																						
Monthly Average:	4.2	kph				Operational Uptime:	100																				
WIND DIRECTION																											
Monthly Average:	212	(SSW)	degree																								
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Sep 21	4.0	5.1	4.0	3.5	9.2	11.3	5.3	9.3	11.2	13.7	12.6	11.5	13.8	16.7	17.4	15.1	14.2	8.5	3.3	5.2	5.3	8.6	5.0	4.8	3.3	17.4	8.5
	SE	SE	SSE	SSE	S	SSE	SSE	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSE	SE	SSE	SSE	SE			
Sep 22	4.6	5.7	4.7	4.1	3.6	7.0	6.9	9.7	9.5	11.1	11.1	12.3	13.6	17.1	18.8	18.1	16.2	15.9	14.2	13.6	17.2	13.1	16.8	19.9	3.6	19.9	10.8
	SE	SSE	SSE	SE	SE	SSE	SSE	SSE	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	S	SSW	SW	SW	SW			
Sep 23	16.1	16.1	16.1	13.9	11.3	5.5	4.3	8.6	11.0	15.1	15.8	17.3	21.3	24.4	25.6	22.7	19.6	14.8	12.1	11.2	14.7	12.6	15.1	16.8	4.3	25.6	14.8
	WSW	WSW	WSW	WSW	W	WNW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW			
Sep 24	16.5	15.6	16.9	11.1	15.9	14.1	12.4	13.8	12.2	12.3	15.3	15.2	16.8	13.8	14.4	16.8	15.2	11.5	5.8	8.7	10.9	9.7	10.3	10.5	5.8	16.9	11.8
	SW	SW	SW	S	SW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	WSW	WSW	W	WSW	SSW	SSW	SW	SW	SSW			
Sep 25	10.5	12.9	11.4	9.6	9.2	7.0	8.2	8.3	11.2	12.2	12.0	13.6	15.0	15.0	12.5	10.2	7.2	6.8	8.2	4.2	2.9	7.7	8.2	7.6	2.9	15.0	8.6
	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	SSW	SW	WSW	SW	SW	SW	W	W	WSW	SW	SW	WSW	SSE	S	S			
Sep 26	7.6	8.0	6.0	5.9	6.0	7.6	7.3	7.1	5.1	5.4	7.2	9.1	10.9	12.5	12.9	11.7	8.6	7.9	8.0	10.2	12.9	14.3	12.2	12.6	5.1	14.3	8.5
	SSE	S	S	S	S	SSE	S	SSE	SSE	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSE	SE	SSE	SSE	SE	SE	SE			
Sep 27	9.0	2.9	6.3	3.8	7.9	9.9	9.0	9.7	9.9	13.0	16.3	17.7	18.6	18.6	16.7	13.6	10.8	9.9	9.7	7.5	8.2	7.1	8.2	2.9	18.6	9.6	
	SSE	E	ESE	SE	S	S	S	S	S	SSW	SSW	SSW	SSW	SW	SSW	SSW	SW	SSW	SSW	S	S	SSE	SSE	S			
Sep 28	7.9	6.6	6.0	8.1	7.4	7.5	6.7	6.1	4.9	8.1	8.0	8.4	6.3	8.6	7.8	5.2	1.9	1.0	3.8	11.3	9.2	4.7	4.4	8.8	1.0	11.3	2.6
	SSE	S	SSE	SSE	SSE	S	S	SSE	S	SSW	SSW	SSW	SSW	SSW	WSW	SW	ENE	NE	NNE	NE	NNE	N	NNW	NNW			
Sep 29	11.7	11.1	12.6	12.3	11.7	10.8	5.6	6.5	16.3	9.3	10.2	8.7	10.2	10.6	10.6	10.5	8.6	5.8	4.8	4.6	5.1	6.9	6.2	6.2	4.6	16.3	6.9
	N	NNW	N	N	N	NNW	NNE	NE	ENE	E	ENE	NNE	NE	NE	NE	NNE	E	ENE	ENE	E	ESE	SE	ESE	ESE			
Sep 30	5.6	3.8	5.4	4.0	5.5	4.4	3.2	5.3	8.5	7.0	8.8	13.6	12.1	12.4	11.5	12.2	10.4	6.3	7.7	7.2	6.7	10.4	11.5	11.2	3.2	13.6	6.6
	ESE	E	ESE	SE	ESE	SE	SE	SE	SSE	SSE	SSW	SSW	SSW	SSW	SSW	SSW	SW	SSW	S	SE	SSE	SSE	SSE	SSE			
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance										
K	Collection Error							N	No Data (Machine Not in Service)							Y	Routine Maintenance										
X	Invalid Data (Equipment Malfunction/Recovery)							NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)							P	Power Failure										
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.																											
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.																											

842b STATION



PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2022

Summary of Hourly Averages

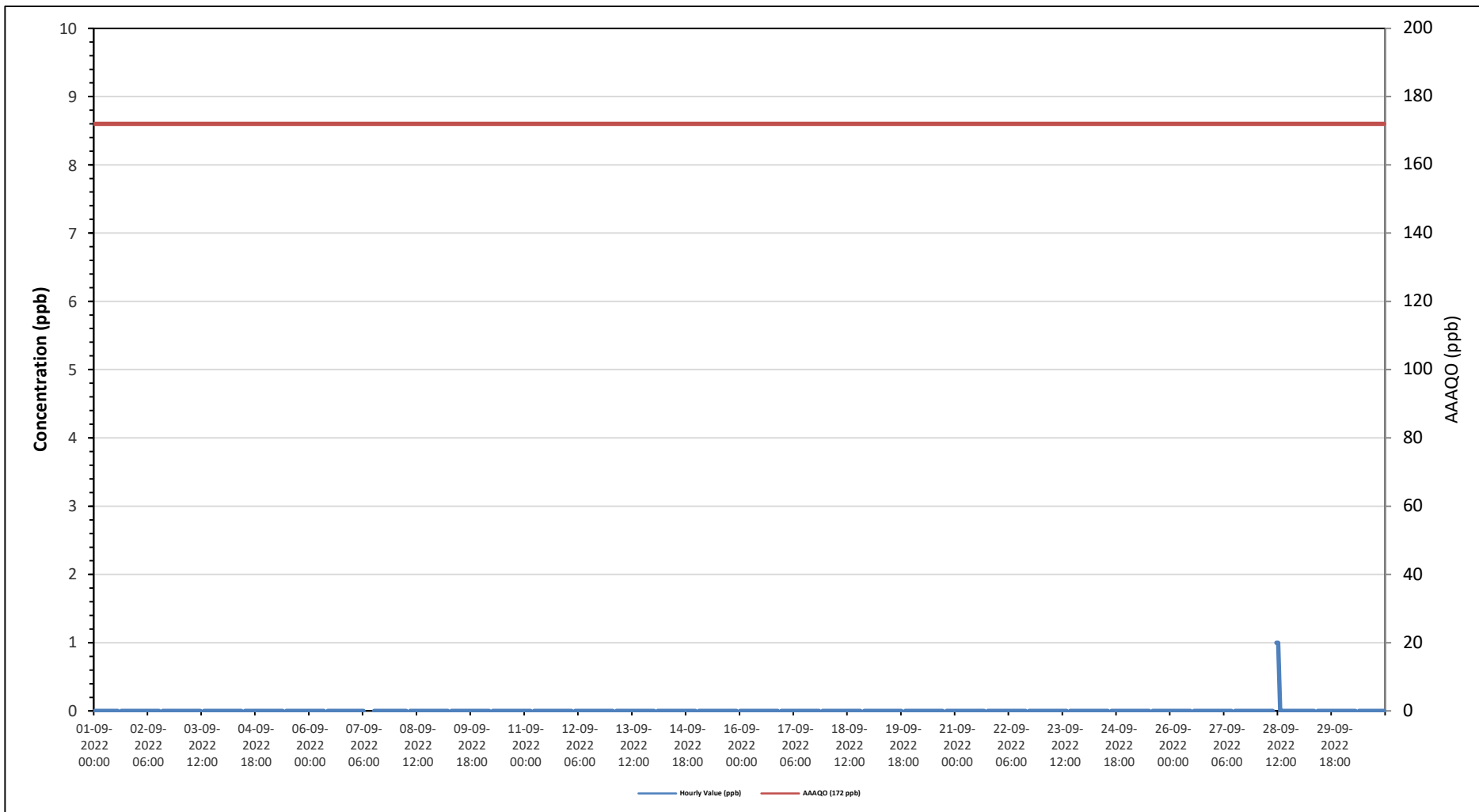
SULPHUR DIOXIDE (SO₂) in ppb

Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb																												
Number of 1-Hour Exceedances: 0					Number of 24-Hour Exceedances: 0					30-Day Exceedance: 0																		
Maximum Hourly Value: 1 ppb on September 28 at hour 11										Hours in Service: 720																		
Maximum Daily Value: 0.1 ppb on September 28										Hours of Data: 685																		
Minimum Hourly Value: 0 ppb on September 1 at hour 0										Hours of Missing Data: 0																		
Minimum Daily Value: 0.0 ppb on September 1										Hours of Calibration: 35																		
Monthly Average: 0.0 ppb										Operational Uptime: 100.0																		
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
Sep 1	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	0.0
Sep 2	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	0.0
Sep 3	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	0.0
Sep 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	0.0
Sep 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	0.0
Sep 6	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	0.0
Sep 7	0	0	0	0	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Sep 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	0.0
Sep 9	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	0.0
Sep 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	0.0
Sep 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	0.0
Sep 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	0.0
Sep 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	0.0
Sep 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	0.0
Sep 15	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	S	0	0.0
Sep 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	S	0	0	0.0
Sep 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	S	0	0	0.0
Sep 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	0.0
Sep 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	0.0
Sep 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	0.0
Sep 21	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	0.0
Sep 22	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	0.0
Sep 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	0.0
Sep 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	0.0
Sep 25	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	0.0
Sep 26	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	0.0
Sep 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	0.0
Sep 28	0	0	0	0	0	0	0	0	0	0	S	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1
Sep 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	0.0
Sep 30	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	0.0
Diurnal Maximum	0	0	0	0	0	0	0	0	0	0	0	1	1	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	0.0	0.0	0.0	0.0

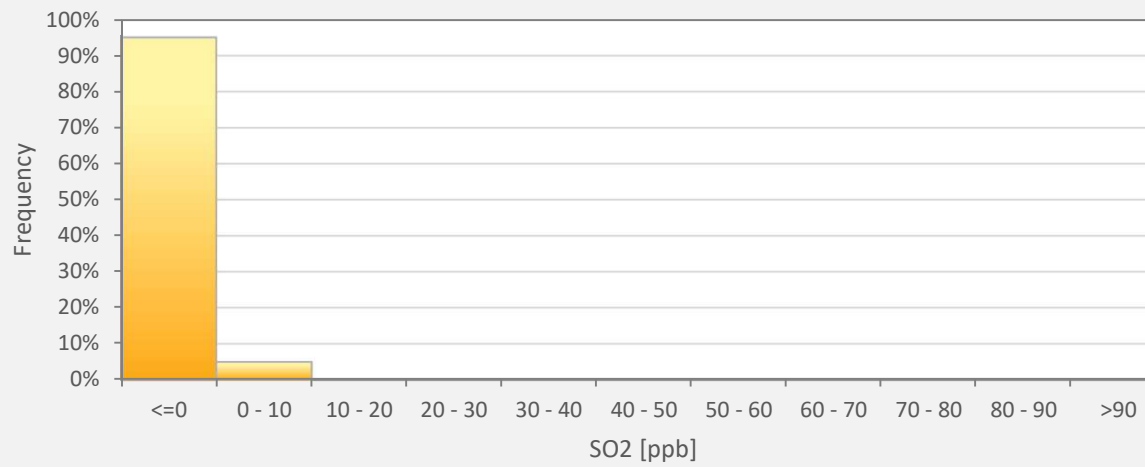
C Monthly Calibration	S Daily Zero-Span Check	Q Quality Assurance
K Collection Error	N No Data (Machine Not in Service)	Y Routine Maintenance
X InValid Data (Equipment Malfunction /Recovery)	NRM UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P Power Failure

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

Timeseries Chart of Hourly Average for SO2 - 842b Station



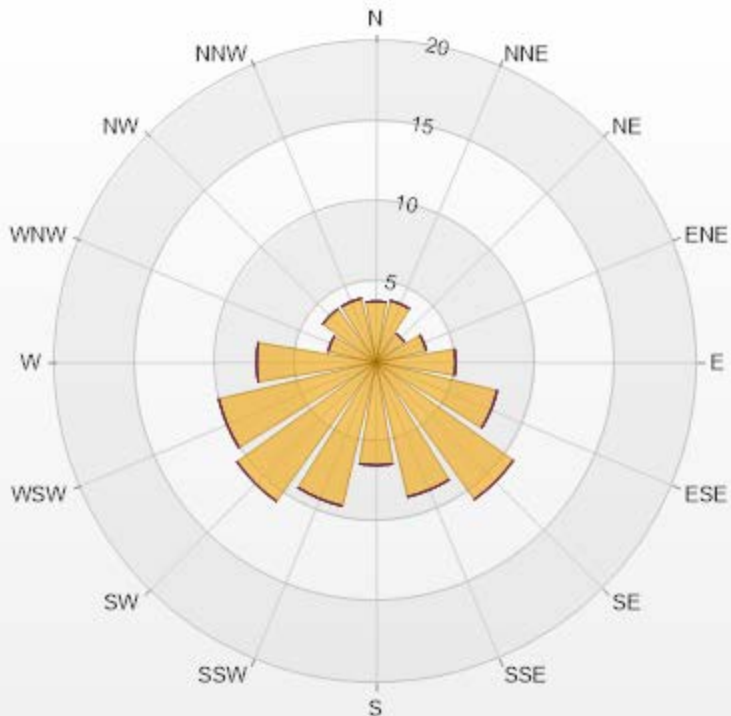
SO2[ppb] Histogram: PRAMP RENO Monthly: 08-2022 1 Hr.



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

Wind: PRAMP 842b Poll.: PRAMP 842b-SO2[ppb] Monthly: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.14% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	3.8	0	0	0	0	3.8
NNE	3.94	0	0	0	0	3.94
NE	2.19	0	0	0	0	2.19
ENE	3.21	0	0	0	0	3.21
E	4.96	0	0	0	0	4.96
ESE	7.74	0	0	0	0	7.74
SE	10.51	0	0	0	0	10.51
SSE	8.61	0	0	0	0	8.61
S	6.42	0	0	0	0	6.42
SSW	9.2	0	0	0	0	9.2
SW	10.66	0	0	0	0	10.66
WSW	10.07	0	0	0	0	10.07
W	7.45	0	0	0	0	7.45
WNW	3.07	0	0	0	0	3.07
NW	4.09	0	0	0	0	4.09
NNW	4.09	0	0	0	0	4.09
Summary	100	0	0	0	0	100



PRAMP-202209

% Icon Classes (ppb)

100 0-10

0 10-50

0 50-100

0 100-172

0 >172.0



PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2022

Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

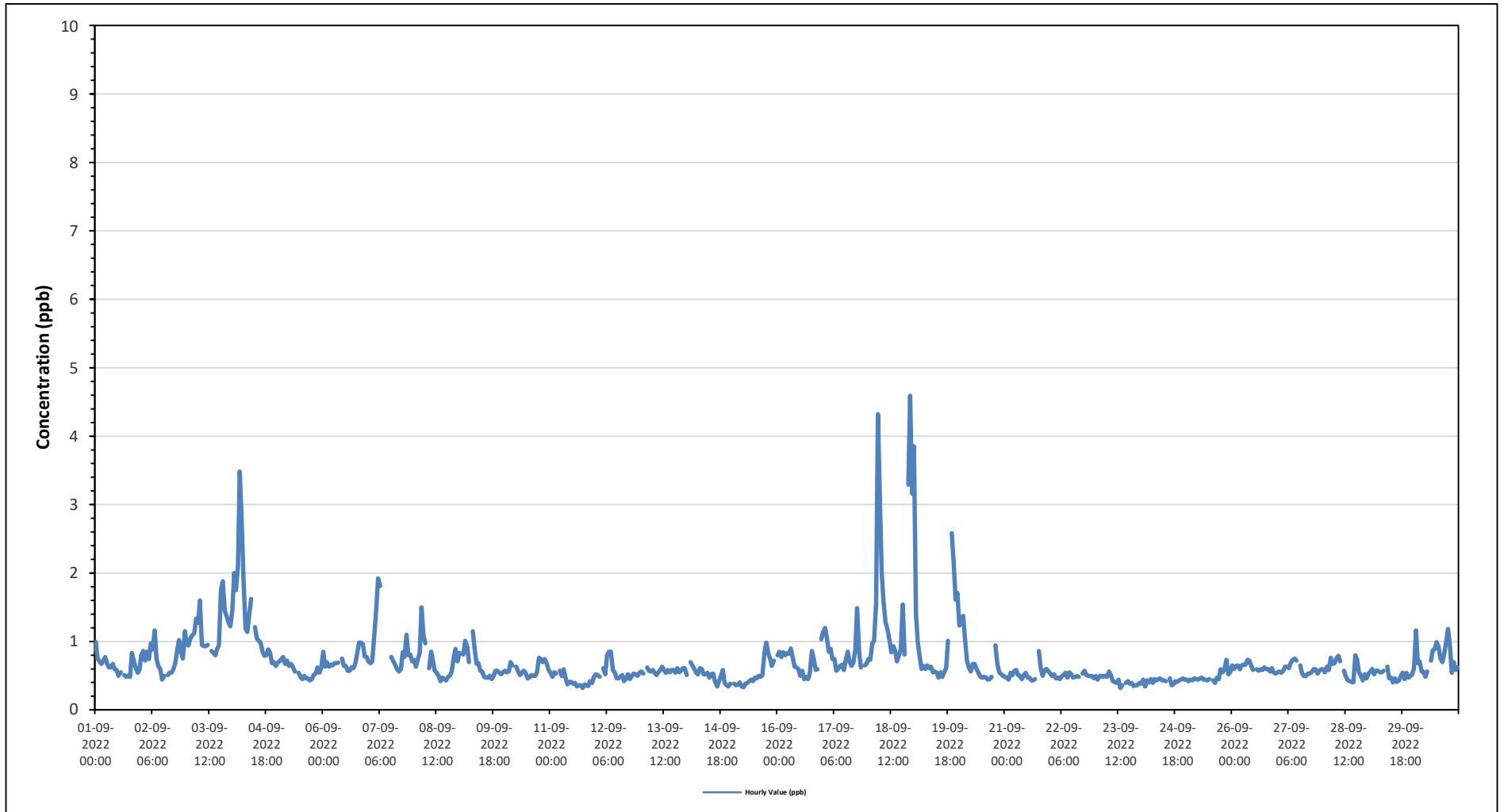
Maximum Hourly Value:	4.59 ppb on September 18 at hour 22	Hours in Service:	720
Maximum Daily Value:	1.65 ppb on September 18	Hours of Data:	685
Minimum Hourly Value:	0.32 ppb on September 11 at hour 17	Hours of Missing Data:	0
Minimum Daily Value:	0.42 ppb on September 24	Hours of Calibration:	35
Monthly Average:	0.70 ppb	Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23		
Sep 1	0.99	0.75	0.71	0.67	0.72	0.77	0.67	0.62	0.62	0.67	0.59	0.58	0.5	0.55	S	0.51	0.48	0.5	0.48	0.83	0.71	0.62	0.54	0.58	0.48	0.99	0.64		
Sep 2	0.8	0.86	0.72	0.85	0.74	0.97	0.88	1.16	0.75	0.64	0.59	0.44	0.5	S	0.51	0.54	0.54	0.6	0.68	0.88	1.02	0.84	0.75	1.15	0.44	1.16	0.76		
Sep 3	0.95	0.94	1.05	1.09	1.12	1.33	1.27	1.6	0.95	0.93	0.93	0.95	S	0.86	0.83	0.8	0.89	0.94	1.75	1.88	1.45	1.37	1.27	1.22	0.80	1.88	1.15		
Sep 4	1.46	2	1.75	2.1	3.48	2.73	1.89	1.19	1.14	1.38	1.62	S	1.21	1.05	1.01	0.98	0.85	0.79	0.8	0.88	0.84	0.68	0.7	0.64	0.64	3.48	1.36		
Sep 5	0.69	0.71	0.74	0.77	0.67	0.72	0.64	0.67	0.62	0.56	S	0.54	0.48	0.45	0.5	0.46	0.46	0.43	0.45	0.51	0.53	0.62	0.54	0.62	0.43	0.77	0.58		
Sep 6	0.85	0.63	0.7	0.63	0.66	0.65	0.68	0.68	0.69	S	0.75	0.64	0.64	0.57	0.57	0.62	0.61	0.67	0.81	0.98	0.98	0.96	0.78	0.77	0.57	0.98	0.72		
Sep 7	0.71	0.68	0.71	1.04	1.49	1.92	1.81	C	C	C	C	C	C	0.77	0.71	0.66	0.59	0.56	0.59	0.84	0.77	1.1	0.8	0.81	0.71	0.56	1.92	0.91	
Sep 8	0.73	0.63	0.73	0.83	1.5	1.08	0.97	S	C	C	C	C	C	0.57	0.54	0.5	0.42	0.47	0.45	0.43	0.48	0.5	0.56	0.76	0.89	0.71	0.42	1.50	0.69
Sep 9	0.83	0.82	0.81	1.01	0.93	0.7	S	1.15	0.87	0.67	0.68	0.57	0.56	0.48	0.47	0.47	0.5	0.45	0.49	0.57	0.57	0.54	0.52	0.55	0.45	1.15	0.66		
Sep 10	0.57	0.55	0.56	0.7	0.65	S	0.63	0.56	0.51	0.55	0.57	0.54	0.46	0.47	0.51	0.5	0.5	0.55	0.76	0.74	0.7	0.74	0.68	0.58	0.46	0.76	0.59		
Sep 11	0.54	0.48	0.55	0.53	S	0.57	0.49	0.59	0.46	0.37	0.41	0.41	0.38	0.39	0.34	0.36	0.36	0.32	0.37	0.36	0.35	0.42	0.39	0.48	0.32	0.59	0.43		
Sep 12	0.52	0.51	0.48	S	0.61	0.52	0.8	0.85	0.85	0.58	0.55	0.46	0.46	0.48	0.51	0.42	0.46	0.52	0.45	0.5	0.53	0.52	0.5	0.54	0.42	0.85	0.55		
Sep 13	0.56	0.53	S	0.62	0.57	0.56	0.58	0.54	0.51	0.55	0.58	0.63	0.58	0.54	0.58	0.55	0.58	0.58	0.54	0.61	0.55	0.57	0.61	0.61	0.51	0.63	0.57		
Sep 14	0.51	S	0.7	0.65	0.6	0.54	0.52	0.61	0.6	0.52	0.52	0.54	0.47	0.52	0.53	0.42	0.34	0.42	0.5	0.58	0.39	0.36	0.34	0.38	0.34	0.70	0.50		
Sep 15	S	0.38	0.36	0.37	0.4	0.34	0.33	0.38	0.39	0.42	0.44	0.42	0.47	0.46	0.5	0.48	0.51	0.83	0.98	0.83	0.75	0.64	0.72	S	0.33	0.98	0.52		
Sep 16	0.8	0.85	0.77	0.84	0.8	0.83	0.82	0.9	0.77	0.63	0.62	0.59	0.5	0.57	0.45	0.48	0.45	0.54	0.86	0.75	0.58	0.59	S	1.03	0.45	1.03	0.70		
Sep 17	1.14	1.2	1.05	0.85	0.89	0.74	0.74	0.57	0.6	0.64	0.66	0.58	0.74	0.85	0.71	0.64	0.68	0.88	1.49	0.85	0.62	S	0.65	0.67	0.57	1.49	0.80		
Sep 18	0.74	0.73	0.97	1.01	1.56	4.32	3.22	2.01	1.59	1.28	1.17	1.01	0.84	0.93	0.86	0.71	0.8	0.88	1.54	0.81	S	3.29	4.59	3.16	0.71	4.59	1.65		
Sep 19	3.85	1.4	0.99	0.77	0.6	0.64	0.6	0.65	0.61	0.63	0.55	0.56	0.54	0.47	0.55	0.48	0.55	0.61	1.01	S	2.58	2.12	1.61	1.71	0.47	3.85	1.05		
Sep 20	1.23	1.32	1.37	1.04	0.72	0.62	0.56	0.67	0.67	0.59	0.54	0.48	0.47	0.48	0.47	0.44	0.45	0.48	S	0.94	0.66	0.55	0.52	0.5	0.44	1.37	0.69		
Sep 21	0.48	0.47	0.44	0.54	0.51	0.57	0.58	0.51	0.5	0.45	0.51	0.54	0.47	0.47	0.43	0.43	S	0.86	0.6	0.5	0.58	0.6	0.56	0.43	0.86	0.52			
Sep 22	0.53	0.49	0.52	0.46	0.47	0.45	0.49	0.51	0.54	0.47	0.55	0.52	0.47	0.48	0.49	0.48	S	0.53	0.57	0.51	0.5	0.49	0.49	0.46	0.45	0.57	0.50		
Sep 23	0.49	0.44	0.49	0.5	0.48	0.5	0.48	0.56	0.51	0.42	0.41	0.39	0.44	0.32	0.36	S	0.39	0.42	0.38	0.39	0.35	0.36	0.36	0.39	0.32	0.56	0.43		
Sep 24	0.38	0.44	0.34	0.43	0.4	0.45	0.39	0.45	0.43	0.45	0.46	0.43	0.43	0.42	S	0.46	0.36	0.37	0.42	0.41	0.43	0.44	0.46	0.44	0.34	0.46	0.42		
Sep 25	0.44	0.42	0.44	0.43	0.46	0.45	0.44	0.46	0.47	0.44	0.44	0.43	0.45	S	0.43	0.39	0.47	0.45	0.59	0.55	0.58	0.73	0.52	0.56	0.39	0.73	0.48		
Sep 26	0.65	0.6	0.64	0.65	0.59	0.65	0.66	0.66	0.66	0.73	0.72	0.65	0.58	S	0.59	0.57	0.59	0.58	0.62	0.6	0.6	0.56	0.61	0.54	0.53	0.53	0.73	0.62	
Sep 27	0.55	0.56	0.54	0.57	0.63	0.63	0.61	0.69	0.73	0.75	0.72	S	0.65	0.53	0.49	0.49	0.53	0.53	0.55	0.59	0.59	0.53	0.57	0.59	0.49	0.75	0.59		
Sep 28	0.59	0.55	0.63	0.58	0.76	0.67	0.68	0.75	0.79	0.71	S	0.57	0.49	0.43	0.42	0.41	0.4	0.8	0.73	0.55	0.5	0.43	0.52	0.46	0.40	0.80	0.58		
Sep 29	0.53	0.56	0.6	0.52	0.57	0.57	0.55	0.55	0.57	S	0.63	0.46	0.47	0.4	0.46	0.41	0.43	0.49	0.54	0.45	0.54	0.47	0.49	0.52	0.40	0.63	0.51		
Sep 30	0.61	1.16	0.68	0.71	0.56	0.56	0.48	0.56	S	0.72	0.87	0.89	0.99	0.92	0.75	0.7	0.82	1	1.18	0.96	0.54	0.7	0.58	0.62	0.48	1.18	0.76		
Diurnal Maximum	3.85	2.00	1.75	2.10	3.48	4.32	3.22	2.01	1.59	1.38	1.62	1.01	1.21	1.05	1.01	0.98	0.89	1.00	1.75	1.88	2.58	3.29	4.59	3.16					
Diurnal Average	0.82	0.75	0.73	0.75	0.83	0.90	0.81	0.75	0.68	0.65	0.66	0.57	0.57	0.57	0.55	0.53	0.53	0.59	0.75	0.70	0.71	0.77	0.78	0.75					

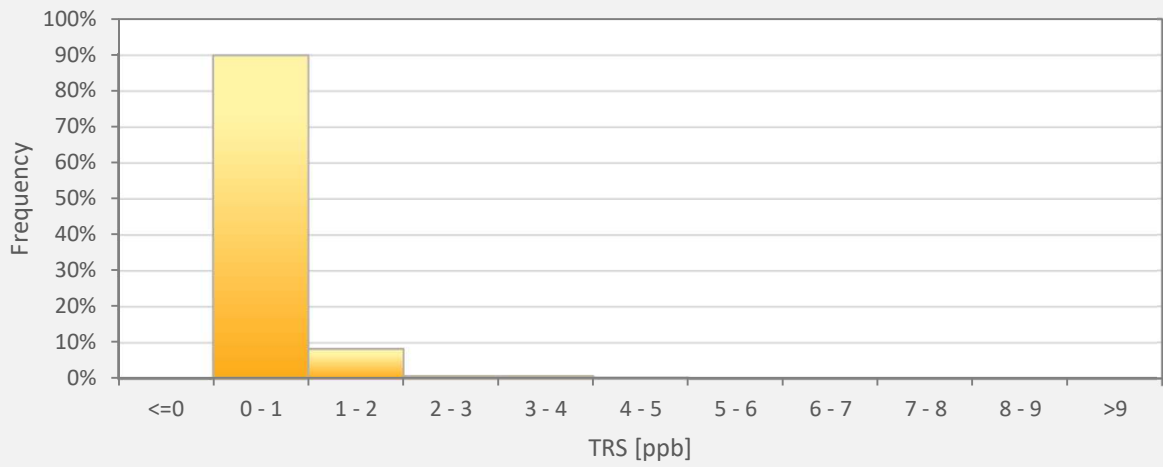
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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

Timeseries Chart of Hourly Average for TRS - 842b Station



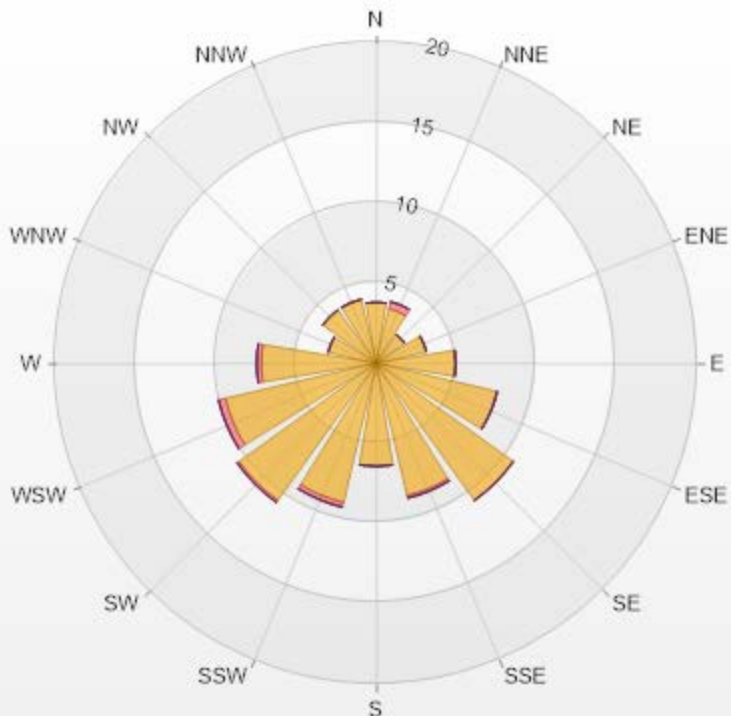
TRS[ppb] Histogram: PRAMP 842b Monthly: 09-2022 1 Hr.



Classes	TRS
<=0	0.00%
0 - 1	89.93%
1 - 2	8.32%
2 - 3	0.73%
3 - 4	0.73%
4 - 5	0.29%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.14% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	3.8	0	0	0	0	3.8
NNE	3.5	0.44	0	0	0	3.94
NE	2.19	0	0	0	0	2.19
ENE	3.21	0	0	0	0	3.21
E	4.96	0	0	0	0	4.96
ESE	7.74	0	0	0	0	7.74
SE	10.51	0	0	0	0	10.51
SSE	8.47	0.15	0	0	0	8.62
S	6.42	0	0	0	0	6.42
SSW	8.91	0.29	0	0	0	9.2
SW	10.51	0.15	0	0	0	10.66
WSW	9.64	0.44	0	0	0	10.08
W	7.15	0.29	0	0	0	7.44
WNW	3.07	0	0	0	0	3.07
NW	4.09	0	0	0	0	4.09
NNW	4.09	0	0	0	0	4.09
Summary	98.26	1.76	0	0	0	100



PRAMP-202209

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% Icon Classes (ppb)

98	0-2	2	2-5	0	5-10	0	10-50	0	>50.0
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PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2022

Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

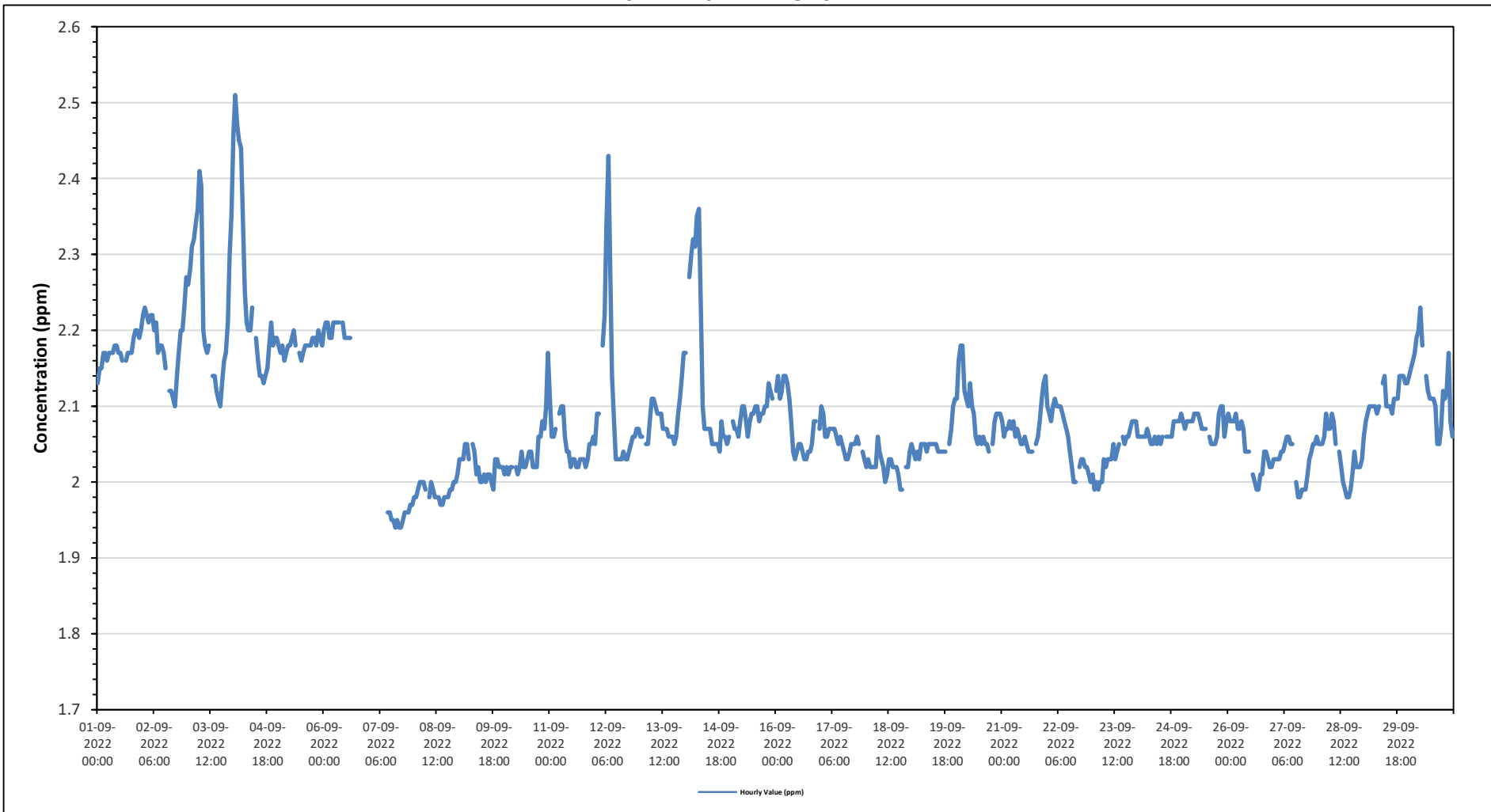
Maximum Hourly Value:	2.51 ppm on September 4 at hour 1	Hours in Service:	720
Maximum Daily Value:	2.25 ppm on September 4	Hours of Data:	671
Minimum Hourly Value:	1.94 ppm on September 7 at hour 14	Hours of Missing Data:	14
Minimum Daily Value:	1.99 ppm on September 8	Hours of Calibration:	35
Monthly Average:	2.09 ppm	Operational Uptime:	98.1

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	2.13	2.15	2.15	2.17	2.17	2.16	2.17	2.17	2.17	2.18	2.18	2.17	2.17	2.16	S	2.16	2.17	2.17	2.17	2.19	2.20	2.20	2.19	2.20	2.13	2.20	2.17	
Sep 2	2.22	2.23	2.22	2.21	2.22	2.22	2.20	2.21	2.17	2.18	2.18	2.17	2.15	S	2.12	2.12	2.11	2.10	2.14	2.17	2.20	2.20	2.23	2.27	2.10	2.27	2.18	
Sep 3	2.26	2.28	2.31	2.32	2.34	2.36	2.41	2.39	2.20	2.18	2.17	2.18	S	2.14	2.14	2.12	2.11	2.10	2.13	2.16	2.17	2.21	2.30	2.35	2.10	2.41	2.23	
Sep 4	2.46	2.51	2.47	2.45	2.44	2.35	2.25	2.21	2.20	2.20	2.23	S	2.19	2.16	2.14	2.14	2.13	2.14	2.15	2.18	2.21	2.18	2.19	2.19	2.13	2.51	2.25	
Sep 5	2.18	2.17	2.18	2.16	2.17	2.18	2.18	2.19	2.20	2.18	S	2.17	2.16	2.17	2.18	2.18	2.18	2.18	2.19	2.19	2.18	2.20	2.19	2.18	2.16	2.20	2.18	
Sep 6	2.20	2.21	2.21	2.19	2.19	2.21	2.21	2.21	2.21	S	2.21	2.19	2.19	2.19	2.19	C	C	NRM	NRM	NRM	NRM	NRM	NRM	NRM	2.19	2.21	-	
Sep 7	NRM	NRM	NRM	NRM	NRM	NRM	NRM	C	C	C	1.96	1.96	1.95	1.95	1.94	1.95	1.94	1.94	1.95	1.96	1.96	1.96	1.97	1.97	1.94	1.97	-	
Sep 8	1.98	1.98	1.99	2.00	2.00	2.00	1.99	S	1.98	2.00	1.99	1.98	1.98	1.98	1.97	1.97	1.98	1.98	1.98	1.99	1.99	2.00	2.00	2.01	1.97	2.01	1.99	
Sep 9	2.03	2.03	2.03	2.05	2.05	2.03	S	2.05	2.04	2.01	2.02	2.00	2.00	2.01	2.00	2.01	2.01	2.00	1.99	2.03	2.03	2.02	2.02	2.02	1.99	2.05	2.02	
Sep 10	2.01	2.02	2.01	2.02	2.02	S	2.02	2.01	2.02	2.04	2.02	2.02	2.03	2.04	2.04	2.02	2.02	2.02	2.06	2.06	2.08	2.07	2.10	2.17	2.01	2.17	2.04	
Sep 11	2.11	2.06	2.06	2.07	S	2.09	2.10	2.10	2.06	2.04	2.04	2.02	2.03	2.03	2.02	2.02	2.03	2.03	2.02	2.03	2.05	2.05	2.06	2.02	2.02	2.11	2.05	
Sep 12	2.05	2.09	2.09	S	2.18	2.22	2.34	2.43	2.28	2.14	2.08	2.03	2.03	2.03	2.03	2.04	2.03	2.03	2.04	2.05	2.06	2.06	2.07	2.07	2.03	2.43	2.11	
Sep 13	2.06	2.06	S	2.05	2.05	2.08	2.11	2.11	2.10	2.09	2.09	2.09	2.07	2.07	2.07	2.06	2.06	2.06	2.05	2.06	2.09	2.11	2.14	2.17	2.05	2.17	2.08	
Sep 14	2.17	S	2.27	2.30	2.32	2.31	2.35	2.36	2.24	2.10	2.07	2.07	2.07	2.07	2.05	2.05	2.05	2.04	2.08	2.06	2.06	2.05	2.06	2.04	2.04	2.36	2.14	
Sep 15	S	2.08	2.07	2.07	2.06	2.08	2.10	2.10	2.08	2.06	2.08	2.07	2.09	2.09	2.10	2.10	2.08	2.09	2.09	2.10	2.10	2.13	2.12	2.11	S	2.06	2.13	2.09
Sep 16	2.12	2.14	2.11	2.12	2.14	2.14	2.13	2.11	2.08	2.04	2.03	2.04	2.05	2.05	2.04	2.03	2.03	2.04	2.04	2.05	2.08	2.08	S	2.07	2.03	2.14	2.08	
Sep 17	2.10	2.09	2.06	2.06	2.07	2.07	2.07	2.07	2.06	2.05	2.06	2.05	2.04	2.03	2.03	2.04	2.05	2.05	2.05	2.06	2.05	S	2.04	2.03	2.03	2.10	2.06	
Sep 18	2.02	2.03	2.02	2.02	2.02	2.02	2.06	2.04	2.03	2.02	2.00	2.01	2.03	2.03	2.02	2.02	2.02	2.01	1.99	1.99	S	2.02	2.02	2.04	1.99	2.06	2.02	
Sep 19	2.05	2.04	2.03	2.04	2.03	2.05	2.05	2.05	2.04	2.05	2.05	2.05	2.05	2.05	2.04	2.04	2.04	2.04	2.04	S	2.05	2.07	2.10	2.11	2.03	2.11	2.05	
Sep 20	2.11	2.16	2.18	2.18	2.12	2.11	2.10	2.13	2.10	2.09	2.06	2.05	2.06	2.05	2.06	2.05	2.05	2.04	S	2.05	2.08	2.09	2.09	2.09	2.04	2.18	2.09	
Sep 21	2.08	2.06	2.07	2.07	2.08	2.07	2.08	2.06	2.07	2.06	2.05	2.05	2.06	2.05	2.04	2.04	2.04	S	2.05	2.06	2.08	2.11	2.13	2.14	2.04	2.14	2.07	
Sep 22	2.10	2.09	2.08	2.10	2.11	2.10	2.10	2.10	2.09	2.08	2.07	2.06	2.04	2.02	2.00	2.00	S	2.02	2.03	2.03	2.02	2.02	2.01	2.00	2.00	2.11	2.06	
Sep 23	2.01	1.99	2.00	1.99	2.00	2.00	2.03	2.02	2.03	2.03	2.03	2.05	2.03	2.04	2.05	S	2.06	2.05	2.06	2.06	2.07	2.08	2.08	2.08	1.99	2.08	2.04	
Sep 24	2.06	2.06	2.06	2.06	2.06	2.07	2.06	2.05	2.05	2.06	2.05	2.06	2.05	2.06	S	2.06	2.06	2.06	2.06	2.08	2.08	2.08	2.08	2.09	2.05	2.09	2.06	
Sep 25	2.08	2.07	2.08	2.08	2.08	2.08	2.09	2.09	2.09	2.08	2.07	2.07	S	2.06	2.05	2.05	2.05	2.06	2.09	2.10	2.10	2.06	2.08	2.05	2.10	2.08	2.08	
Sep 26	2.09	2.08	2.08	2.08	2.09	2.07	2.07	2.08	2.07	2.04	2.04	2.04	S	2.01	2.00	1.99	1.99	2.01	2.01	2.04	2.04	2.03	2.02	2.02	1.99	2.09	2.04	
Sep 27	2.03	2.03	2.03	2.03	2.04	2.04	2.05	2.06	2.06	2.05	2.05	S	2.00	1.98	1.98	1.99	1.99	1.99	2.01	2.03	2.04	2.05	2.05	2.06	1.98	2.06	2.03	
Sep 28	2.05	2.05	2.05	2.06	2.09	2.07	2.07	2.09	2.08	2.05	S	2.04	2.02	2.00	1.99	1.98	1.98	1.99	2.01	2.04	2.02	2.02	2.02	2.03	1.98	2.09	2.03	
Sep 29	2.06	2.08	2.09	2.10	2.10	2.10	2.10	2.09	2.10	S	2.13	2.14	2.10	2.10	2.10	2.10	2.10	2.11	2.11	2.11	2.14	2.14	2.13	2.13	2.06	2.14	2.11	
Sep 30	2.14	2.15	2.16	2.17	2.19	2.20	2.23	2.18	S	2.14	2.12	2.11	2.11	2.11	2.10	2.09	2.05	2.05	2.07	2.12	2.11	2.12	2.17	2.08	2.06	2.05	2.23	2.13
Diurnal Maximum	2.46	2.51	2.47	2.45	2.44	2.36	2.41	2.43	2.28	2.20	2.23	2.19	2.19	2.19	2.19	2.18	2.18	2.18	2.19	2.19	2.21	2.21	2.30	2.35				
Diurnal Average	2.11	2.11	2.11	2.12	2.12	2.12	2.13	2.13	2.10	2.08	2.08	2.07	2.07	2.06	2.05	2.05	2.05	2.05	2.06	2.07	2.08	2.09	2.09	2.10				

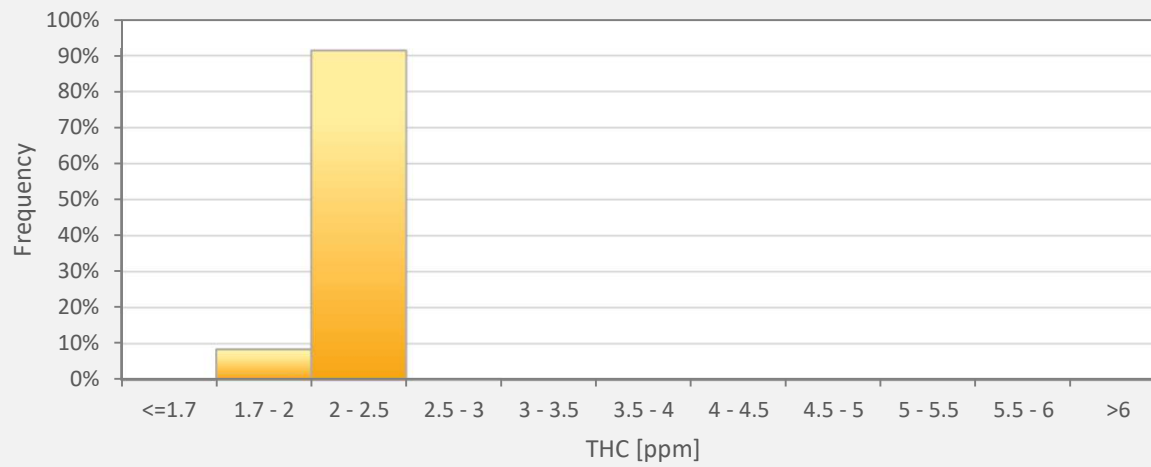
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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

Timeseries Chart of Hourly Average for THC - 842b Station



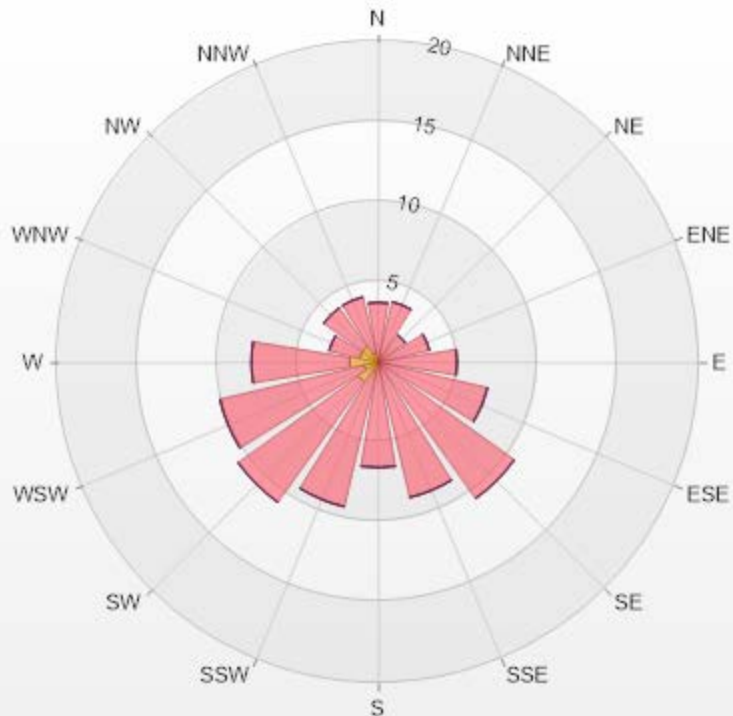
THC55[ppm] Histogram: PRAMP 842b Monthly: 09-2022 1 Hr.



Classes	THC55
<=1.7	0.00%
1.7 - 2	8.49%
2 - 2.5	91.36%
2.5 - 3	0.15%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: PRAMP 842b Poll.: PRAMP 842b-THC55[ppm] Monthly: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 93.19% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	0.15	3.58	0	0	0	3.73
NNE	0	3.87	0	0	0	3.87
NE	0	2.09	0	0	0	2.09
ENE	0	3.28	0	0	0	3.28
E	0	4.92	0	0	0	4.92
ESE	0	7	0	0	0	7
SE	0	10.43	0	0	0	10.43
SSE	0.15	8.49	0	0	0	8.64
S	0.3	6.26	0	0	0	6.56
SSW	0.6	8.64	0	0	0	9.24
SW	1.49	9.24	0	0	0	10.73
WSW	0.89	9.24	0	0	0	10.13
W	1.79	6.11	0	0	0	7.9
WNW	1.19	1.94	0	0	0	3.13
NW	1.19	2.98	0	0	0	4.17
NNW	0.6	3.58	0	0	0	4.18
Summary	8.35	91.65	0	0	0	100



PRAMP-202209

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% Icon Classes (ppm)

8

0-2

92

2-5

0

5-10

0

10-40

0

>40.0



PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2022

Summary of Hourly Averages

METHANE (CH₄) in ppm

Maximum Hourly Value:	2.51 ppm on September 4 at hour 1	Hours in Service:	720
Maximum Daily Value:	2.25 ppm on September 4	Hours of Data:	671
Minimum Hourly Value:	1.94 ppm on September 7 at hour 14	Hours of Missing Data:	14
Minimum Daily Value:	1.99 ppm on September 8	Hours of Calibration:	35
Monthly Average:	2.09 ppm	Operational Uptime:	98.1

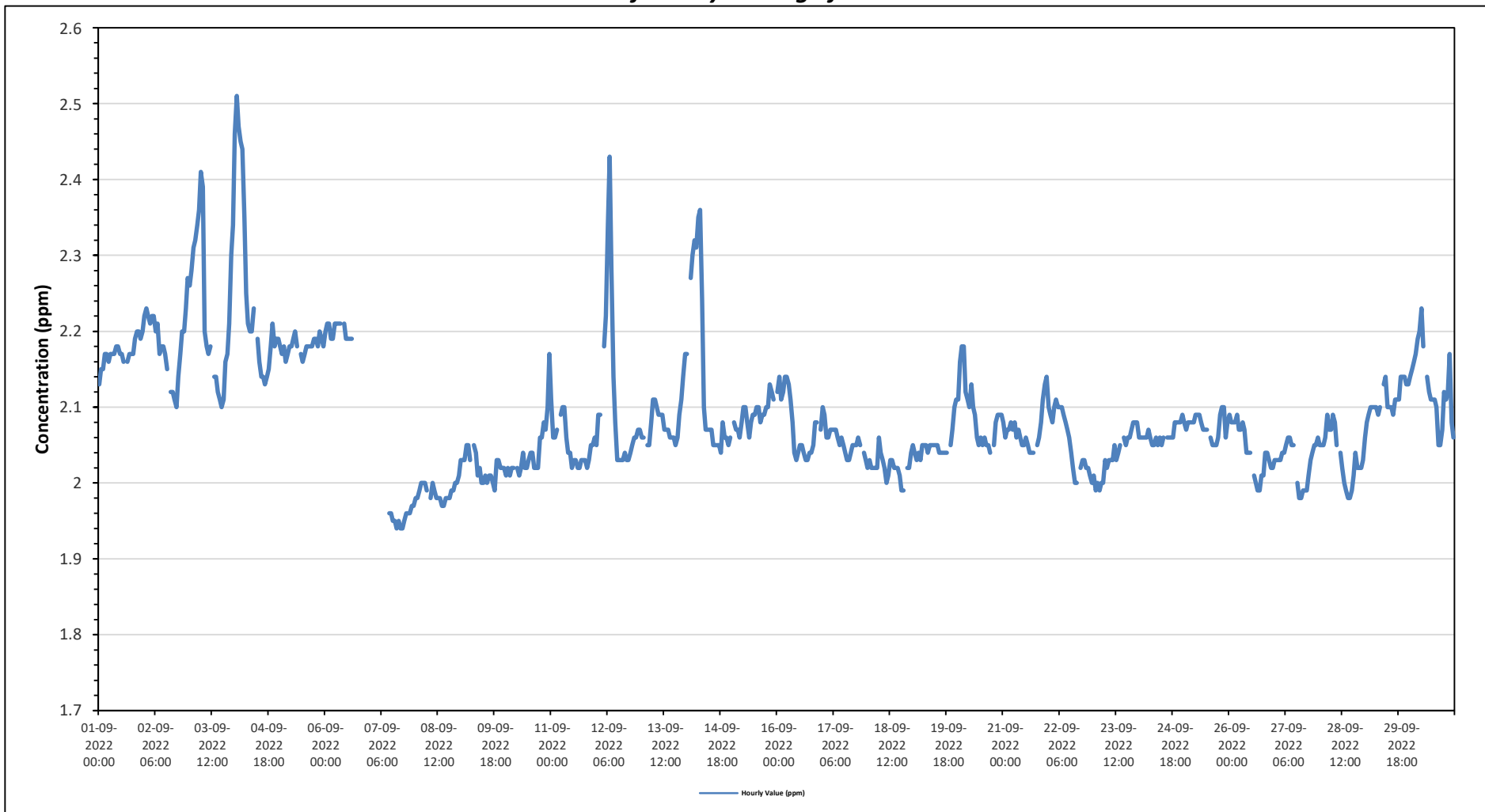
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	2.13	2.15	2.15	2.17	2.17	2.16	2.17	2.17	2.17	2.18	2.18	2.17	2.17	2.16	S	2.16	2.17	2.17	2.17	2.19	2.20	2.20	2.19	2.20	2.13	2.20	2.17	
Sep 2	2.22	2.23	2.22	2.21	2.22	2.22	2.20	2.21	2.17	2.18	2.18	2.17	2.15	S	2.12	2.12	2.11	2.10	2.14	2.17	2.20	2.20	2.23	2.27	2.10	2.27	2.18	
Sep 3	2.26	2.28	2.31	2.32	2.34	2.36	2.41	2.39	2.20	2.18	2.17	2.18	S	2.14	2.14	2.12	2.11	2.10	2.11	2.16	2.17	2.21	2.30	2.34	2.10	2.41	2.23	
Sep 4	2.46	2.51	2.47	2.45	2.44	2.35	2.25	2.21	2.20	2.20	2.23	S	2.19	2.16	2.14	2.14	2.13	2.14	2.15	2.18	2.21	2.18	2.19	2.19	2.13	2.51	2.25	
Sep 5	2.18	2.17	2.18	2.16	2.17	2.18	2.18	2.19	2.20	2.18	S	2.17	2.16	2.17	2.18	2.18	2.18	2.18	2.19	2.19	2.18	2.20	2.19	2.18	2.16	2.20	2.18	
Sep 6	2.20	2.21	2.21	2.19	2.19	2.21	2.21	2.21	2.21	S	2.21	2.19	2.19	2.19	2.19	C	C	NRM	NRM	NRM	NRM	NRM	NRM	NRM	2.19	2.21	-	
Sep 7	NRM	NRM	NRM	NRM	NRM	NRM	NRM	C	C	C	1.96	1.96	1.95	1.95	1.94	1.95	1.94	1.94	1.95	1.96	1.96	1.96	1.97	1.97	1.94	1.97	-	
Sep 8	1.98	1.98	1.99	2.00	2.00	2.00	1.99	S	1.98	2.00	1.99	1.98	1.98	1.98	1.97	1.97	1.98	1.98	1.98	1.99	1.99	2.00	2.00	2.01	1.97	2.01	1.99	
Sep 9	2.03	2.03	2.03	2.05	2.05	2.03	S	2.05	2.04	2.01	2.02	2.00	2.00	2.01	2.00	2.01	2.01	2.00	1.99	2.03	2.03	2.02	2.02	2.02	1.99	2.05	2.02	
Sep 10	2.01	2.02	2.01	2.02	2.02	S	2.02	2.01	2.02	2.04	2.02	2.02	2.03	2.04	2.04	2.02	2.02	2.02	2.06	2.06	2.08	2.07	2.10	2.17	2.01	2.17	2.04	
Sep 11	2.11	2.06	2.06	2.07	S	2.09	2.10	2.10	2.06	2.04	2.04	2.02	2.03	2.03	2.02	2.02	2.03	2.03	2.02	2.03	2.05	2.05	2.06	2.02	2.02	2.11	2.05	
Sep 12	2.05	2.09	2.09	S	2.18	2.22	2.34	2.43	2.28	2.14	2.08	2.03	2.03	2.03	2.03	2.04	2.03	2.03	2.04	2.05	2.06	2.06	2.07	2.07	2.03	2.43	2.11	
Sep 13	2.06	2.06	S	2.05	2.05	2.08	2.11	2.11	2.10	2.09	2.09	2.09	2.07	2.07	2.07	2.06	2.06	2.06	2.05	2.06	2.09	2.11	2.14	2.17	2.05	2.17	2.08	
Sep 14	2.17	S	2.27	2.30	2.32	2.31	2.35	2.36	2.24	2.10	2.07	2.07	2.07	2.07	2.05	2.05	2.05	2.04	2.04	2.08	2.06	2.06	2.05	2.06	2.04	2.36	2.14	
Sep 15	S	2.08	2.07	2.07	2.06	2.08	2.10	2.10	2.08	2.06	2.08	2.07	2.09	2.09	2.10	2.10	2.08	2.09	2.09	2.10	2.10	2.13	2.12	2.11	S	2.06	2.13	2.09
Sep 16	2.12	2.14	2.11	2.12	2.14	2.14	2.13	2.11	2.08	2.04	2.03	2.04	2.05	2.05	2.04	2.03	2.03	2.04	2.04	2.05	2.08	2.08	S	2.07	2.03	2.14	2.08	
Sep 17	2.10	2.09	2.06	2.06	2.07	2.07	2.07	2.07	2.06	2.05	2.06	2.05	2.04	2.03	2.03	2.04	2.05	2.05	2.05	2.06	2.05	S	2.04	2.03	2.03	2.10	2.06	
Sep 18	2.02	2.03	2.02	2.02	2.02	2.02	2.06	2.04	2.03	2.02	2.00	2.01	2.03	2.03	2.02	2.02	2.02	2.01	1.99	1.99	S	2.02	2.02	2.04	1.99	2.06	2.02	
Sep 19	2.05	2.04	2.03	2.04	2.03	2.05	2.05	2.05	2.04	2.05	2.05	2.05	2.05	2.05	2.04	2.04	2.04	2.04	2.04	2.04	S	2.05	2.07	2.10	2.11	2.03	2.11	2.05
Sep 20	2.11	2.16	2.18	2.18	2.12	2.11	2.10	2.13	2.10	2.09	2.06	2.05	2.06	2.05	2.06	2.05	2.05	2.04	S	2.05	2.08	2.09	2.09	2.09	2.04	2.18	2.09	
Sep 21	2.08	2.06	2.07	2.07	2.08	2.07	2.08	2.06	2.07	2.06	2.05	2.05	2.06	2.05	2.04	2.04	2.04	S	2.05	2.06	2.08	2.11	2.13	2.14	2.04	2.14	2.07	
Sep 22	2.10	2.09	2.08	2.10	2.11	2.10	2.10	2.10	2.09	2.08	2.07	2.06	2.04	2.02	2.00	2.00	S	2.02	2.03	2.03	2.02	2.02	2.01	2.00	2.00	2.11	2.06	
Sep 23	2.01	1.99	2.00	1.99	2.00	2.00	2.03	2.02	2.03	2.03	2.03	2.05	2.03	2.04	2.05	S	2.06	2.05	2.06	2.06	2.07	2.08	2.08	2.08	1.99	2.08	2.04	
Sep 24	2.06	2.06	2.06	2.06	2.06	2.07	2.06	2.05	2.05	2.06	2.05	2.06	2.05	2.06	S	2.06	2.06	2.06	2.06	2.08	2.08	2.08	2.08	2.09	2.05	2.09	2.06	
Sep 25	2.08	2.07	2.08	2.08	2.08	2.08	2.09	2.09	2.08	2.07	2.08	2.07	2.07	S	2.06	2.05	2.05	2.05	2.06	2.09	2.10	2.10	2.06	2.08	2.05	2.10	2.08	
Sep 26	2.09	2.08	2.08	2.08	2.09	2.07	2.07	2.08	2.07	2.04	2.04	2.04	S	2.01	2.00	1.99	1.99	2.01	2.01	2.04	2.04	2.03	2.02	2.02	1.99	2.09	2.04	
Sep 27	2.03	2.03	2.03	2.03	2.04	2.04	2.05	2.06	2.06	2.05	2.05	S	2.00	1.98	1.98	1.99	1.99	1.99	2.01	2.03	2.04	2.05	2.05	2.06	1.98	2.06	2.03	
Sep 28	2.05	2.05	2.05	2.06	2.09	2.07	2.07	2.09	2.08	2.05	S	2.04	2.02	2.00	1.99	1.98	1.98	1.99	2.01	2.04	2.02	2.02	2.02	2.03	1.98	2.09	2.03	
Sep 29	2.06	2.08	2.09	2.10	2.10	2.10	2.10	2.09	2.10	S	2.13	2.14	2.10	2.10	2.10	2.10	2.09	2.11	2.11	2.11	2.14	2.14	2.13	2.13	2.06	2.14	2.11	
Sep 30	2.14	2.15	2.16	2.17	2.19	2.20	2.23	2.18	S	2.14	2.12	2.11	2.11	2.11	2.10	2.05	2.05	2.07	2.12	2.11	2.12	2.17	2.08	2.06	2.05	2.23	2.13	
Diurnal Maximum	2.46	2.51	2.47	2.45	2.44	2.36	2.41	2.43	2.28	2.20	2.23	2.19	2.19	2.19	2.19	2.18	2.18	2.18	2.19	2.19	2.21	2.21	2.30	2.34				
Diurnal Average	2.11	2.11	2.11	2.12	2.12	2.12	2.13	2.13	2.10	2.08	2.08	2.07	2.07	2.06	2.05	2.05	2.05	2.05	2.06	2.07	2.08	2.09	2.09	2.10				

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

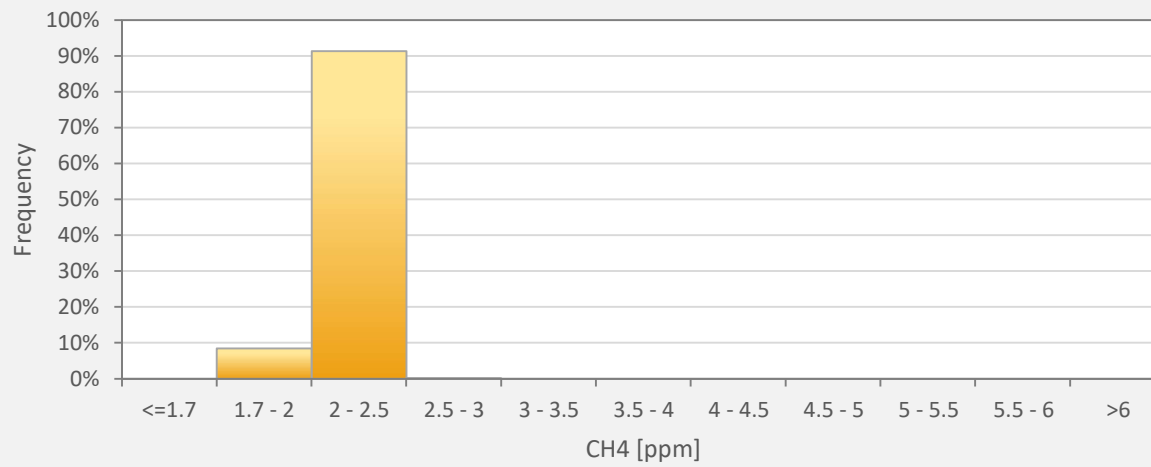
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

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

Timeseries Chart of Hourly Average for CH4 - 842b Station



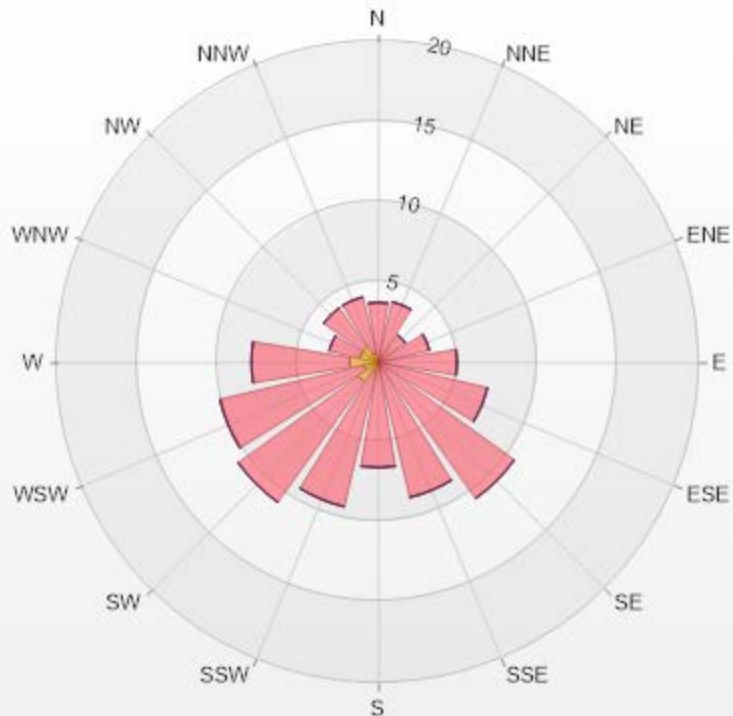
CH4[ppm] Histogram: PRAMP 842b Monthly: 09-2022 1 Hr.



Classes	CH4
<=1.7	0.00%
1.7 - 2	8.49%
2 - 2.5	91.36%
2.5 - 3	0.15%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: PRAMP 842b Poll.: PRAMP 842b-CH4[ppm] Monthly: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 93.19% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	0.15	3.58	0	0	0	3.73
NNE	0	3.87	0	0	0	3.87
NE	0	2.09	0	0	0	2.09
ENE	0	3.28	0	0	0	3.28
E	0	4.92	0	0	0	4.92
ESE	0	7	0	0	0	7
SE	0	10.43	0	0	0	10.43
SSE	0.15	8.49	0	0	0	8.64
S	0.3	6.26	0	0	0	6.56
SSW	0.6	8.64	0	0	0	9.24
SW	1.49	9.24	0	0	0	10.73
WSW	0.89	9.24	0	0	0	10.13
W	1.79	6.11	0	0	0	7.9
WNW	1.19	1.94	0	0	0	3.13
NW	1.19	2.98	0	0	0	4.17
NNW	0.6	3.58	0	0	0	4.18
Summary	8.35	91.65	0	0	0	100



PRAMP-202209

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% Icon Classes (ppm)

8

0-2

92

2-5

0

5-10

0

10-20

0

>20.0



PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2022

Summary of Hourly Averages

NON-METHANE HYDROCARBONS (NMHC) in ppm

Maximum Hourly Value:	0.03 ppm on September 3 at hour 18	Hours in Service:	720
Maximum Daily Value:	0.00 ppm on September 3	Hours of Data:	671
Minimum Hourly Value:	0.00 ppm on September 1 at hour 0	Hours of Missing Data:	14
Minimum Daily Value:	0.00 ppm on September 1	Hours of Calibration:	35
Monthly Average:	0.00 ppm	Operational Uptime:	98.1

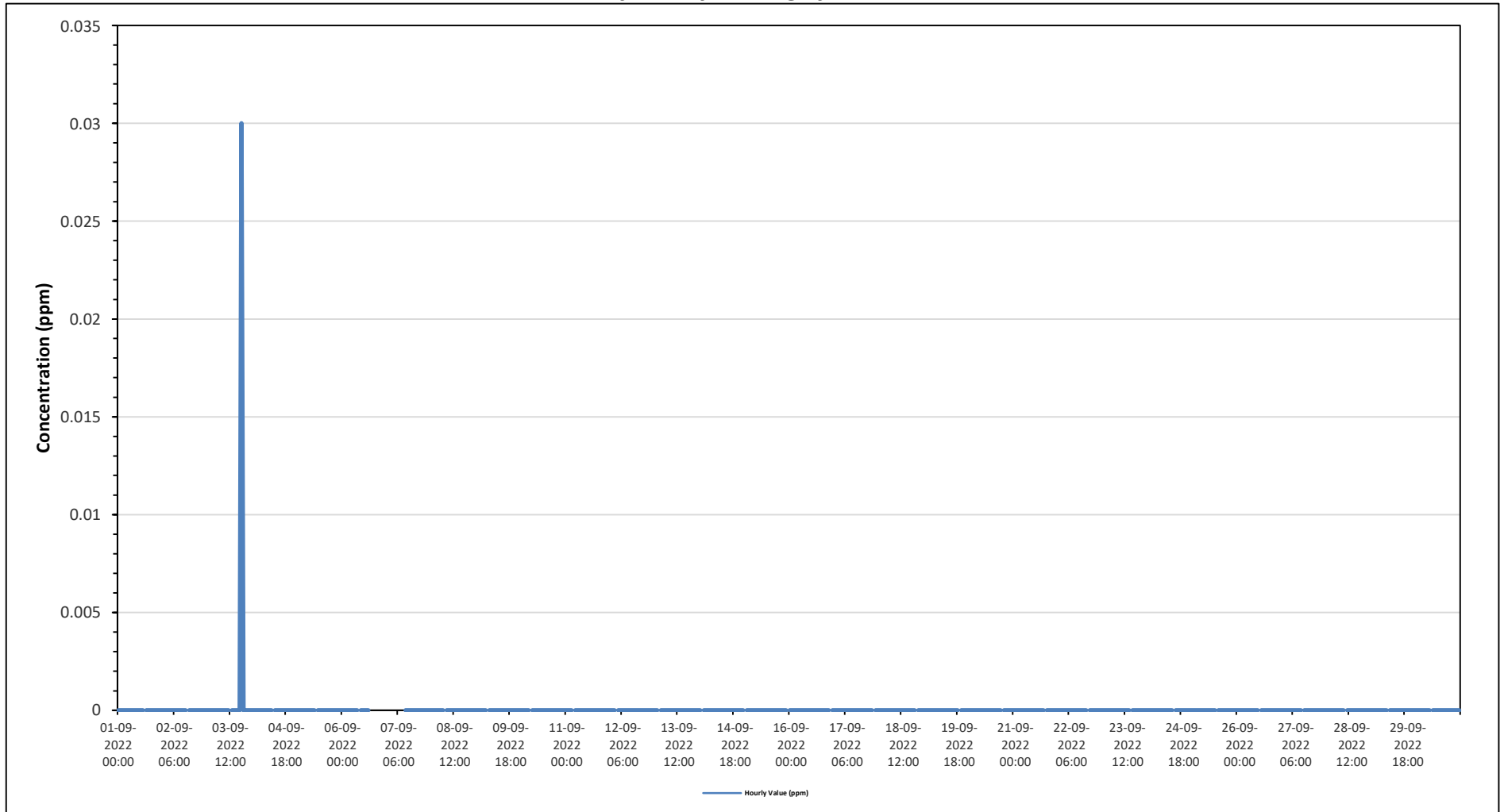
Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average		
Sep 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 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	0.00	0.00
Sep 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	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 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	0.00	0.00
Sep 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 7	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 9	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 10	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 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	0.00	0.00
Sep 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	0.00	0.00
Sep 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	0.00	0.00
Sep 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	0.00	0.00
Sep 15	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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
Sep 16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00
Sep 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	0.00	0.00	0.00	S	0.00	0.00	0.00
Sep 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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 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	0.00	0.00
Sep 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	0.00	0.00
Sep 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	0.00	0.00
Sep 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	0.00	0.00
Sep 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	0.00	0.00
Sep 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	0.00	0.00
Sep 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	0.00	0.00
Sep 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	0.00	0.00
Sep 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	0.00	0.00
Sep 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	0.00	0.00
Sep 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	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	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Diurnal Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

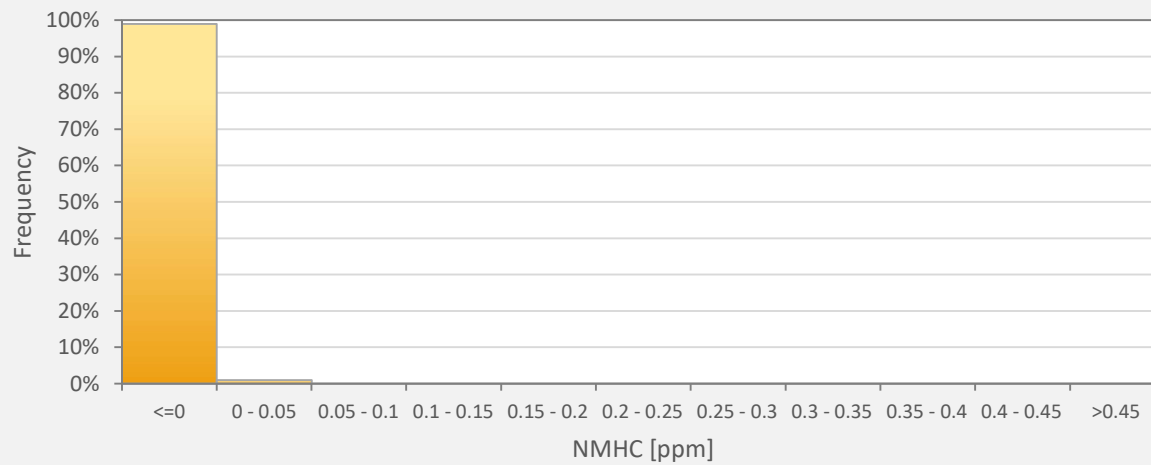
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

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

Timeseries Chart of Hourly Average for NMHC - 842b Station



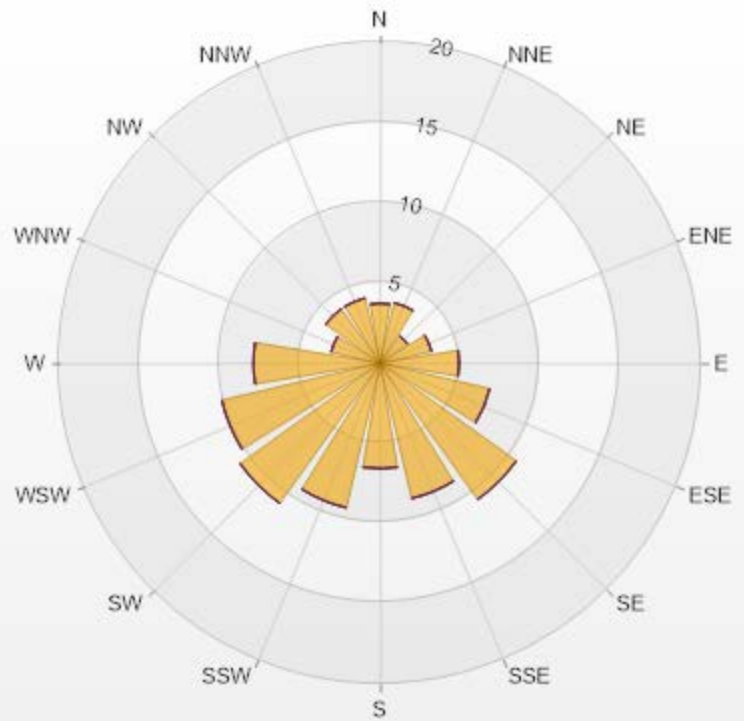
NMHC[ppm] Histogram: PRAMP 842b Monthly: 09-2022 1 Hr.



Classes	NMHC
<=0	98.96%
0 - 0.05	1.04%
0.05 - 0.1	0.00%
0.1 - 0.15	0.00%
0.15 - 0.2	0.00%
0.2 - 0.25	0.00%
0.25 - 0.3	0.00%
0.3 - 0.35	0.00%
0.35 - 0.4	0.00%
0.4 - 0.45	0.00%
>0.45	0.00%

Wind: PRAMP 842b Poll.: PRAMP 842b-NMHC[ppm] Monthly: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 93.19% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	3.73	0	0	0	0	3.73
NNE	3.87	0	0	0	0	3.87
NE	2.09	0	0	0	0	2.09
ENE	3.28	0	0	0	0	3.28
E	4.92	0	0	0	0	4.92
ESE	7	0	0	0	0	7
SE	10.43	0	0	0	0	10.43
SSE	8.64	0	0	0	0	8.64
S	6.56	0	0	0	0	6.56
SSW	9.24	0	0	0	0	9.24
SW	10.73	0	0	0	0	10.73
WSW	10.13	0	0	0	0	10.13
W	7.9	0	0	0	0	7.9
WNW	3.13	0	0	0	0	3.13
NW	4.17	0	0	0	0	4.17
NNW	4.17	0	0	0	0	4.17
Summary	100	0	0	0	0	100



PRAMP-202209



PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2022

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

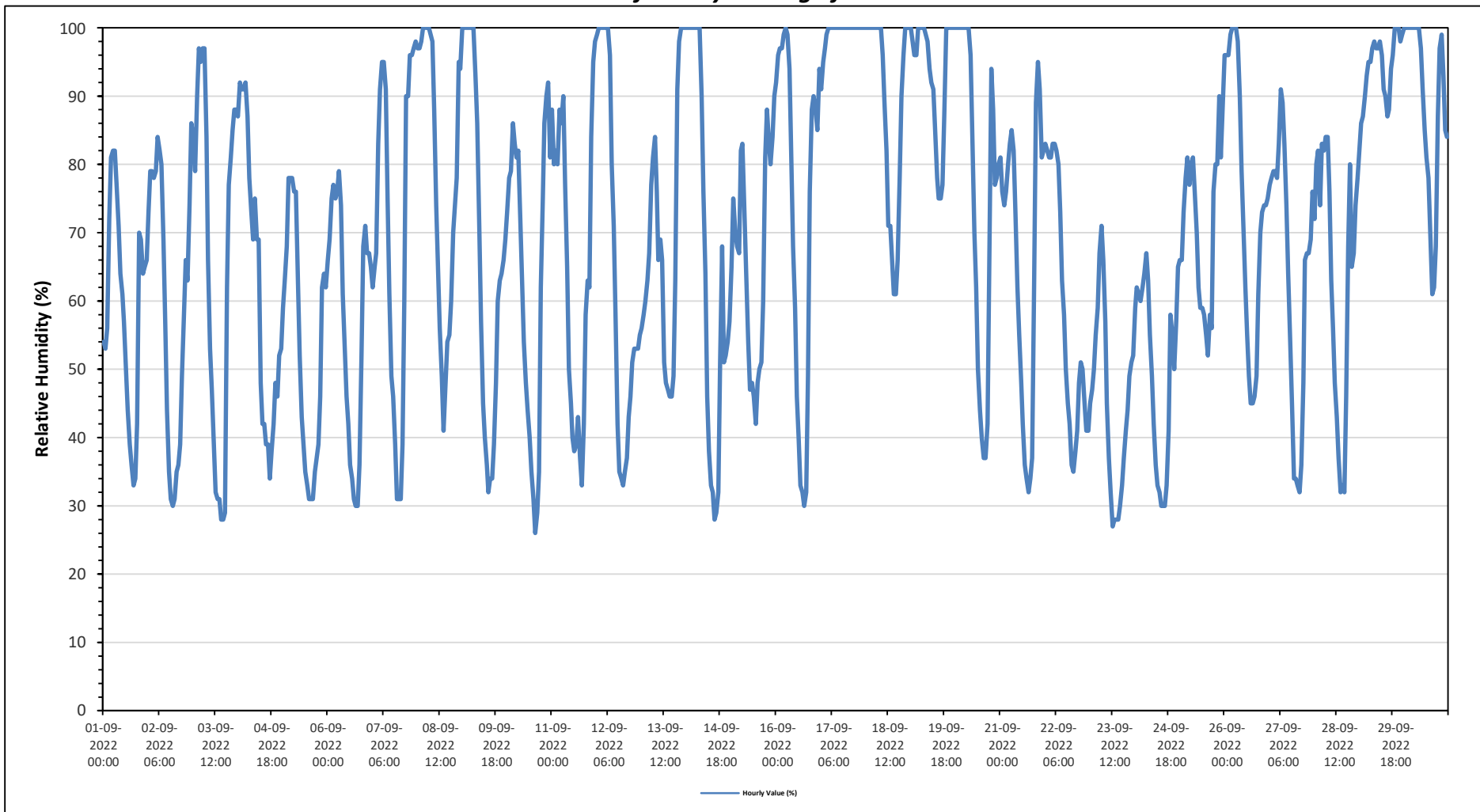
Maximum Hourly Value:	100 %	on September 8 at hour 3	Hours in Service:	720
Maximum Daily Value:	99.3 %	on September 17	Hours of Data:	720
Minimum Hourly Value:	26 %	on September 10 at hour 15	Hours of Missing Data:	0
Minimum Daily Value:	45.0 %	on September 23	Hours of Calibration:	0
Monthly Average:	69.4 %		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	54	53	56	72	81	82	82	77	71	64	61	57	50	44	39	36	33	34	42	70	69	64	65	66	33	82	59.3	
Sep 2	73	79	79	78	79	84	82	80	69	57	44	35	31	30	31	35	36	39	49	58	66	63	74	86	30	86	59.9	
Sep 3	84	79	90	97	95	97	97	84	66	53	47	39	32	31	31	28	28	29	62	77	81	85	88	88	28	97	66.2	
Sep 4	87	92	91	91	92	87	78	73	69	75	69	69	48	42	42	39	39	34	38	42	48	46	52	53	34	92	62.3	
Sep 5	59	63	68	78	78	78	76	76	63	52	43	39	35	33	31	31	31	35	37	39	46	62	64	62	31	78	53.3	
Sep 6	66	69	75	77	75	76	79	74	61	53	46	42	36	34	31	30	30	36	52	68	71	67	67	65	30	79	57.5	
Sep 7	62	65	67	83	91	95	95	91	75	61	49	46	39	31	31	31	39	60	90	90	96	96	97	98	31	98	69.9	
Sep 8	97	97	98	100	100	100	100	99	98	88	74	65	56	49	41	48	54	55	60	70	74	78	95	94	41	100	78.8	
Sep 9	100	100	100	100	100	100	100	93	86	71	57	45	40	36	32	34	34	39	48	60	63	64	66	69	32	100	68.2	
Sep 10	73	78	79	86	83	81	82	72	63	54	48	44	40	35	31	26	29	35	62	75	86	90	92	81	26	92	63.5	
Sep 11	88	80	82	80	88	86	90	77	65	50	45	40	38	39	43	37	33	42	58	63	62	84	95	98	33	98	65.1	
Sep 12	99	100	100	100	100	100	100	96	80	71	58	42	35	34	33	35	37	43	46	51	53	53	53	55	33	100	65.6	
Sep 13	56	58	60	63	67	77	81	84	76	66	69	66	51	48	47	46	46	49	63	91	98	100	100	100	46	100	69.3	
Sep 14	100	100	100	100	100	100	100	100	90	76	64	46	38	33	32	28	29	32	51	68	51	52	54	57	28	100	66.7	
Sep 15	65	75	70	68	67	82	83	73	64	54	47	48	46	42	48	50	51	60	81	88	83	80	84	90	42	90	66.6	
Sep 16	92	96	97	97	99	100	99	94	81	68	59	46	40	33	32	30	32	49	76	88	90	88	85	94	30	100	73.5	
Sep 17	91	95	97	99	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	91	100	99.3	
Sep 18	100	100	100	100	100	100	100	100	100	96	89	82	71	71	66	61	61	66	78	90	96	100	100	100	61	100	88.6	
Sep 19	100	98	96	96	100	100	100	100	99	98	94	92	91	85	78	75	75	77	87	100	100	100	100	100	75	100	93.4	
Sep 20	100	100	100	100	100	100	100	100	96	84	70	62	50	44	40	37	37	42	66	94	88	77	78	80	37	100	76.9	
Sep 21	81	76	74	76	80	83	85	82	73	62	55	48	42	36	34	32	34	37	63	89	95	91	81	82	32	95	66.3	
Sep 22	83	82	81	81	83	83	82	80	73	63	58	50	45	42	36	35	38	41	48	51	50	45	41	41	35	83	58.8	
Sep 23	45	47	50	55	59	67	71	66	57	45	37	32	27	28	28	28	30	33	37	41	44	49	51	52	27	71	45.0	
Sep 24	59	62	61	60	62	64	67	63	55	49	42	36	33	32	30	30	30	33	41	58	55	50	57	65	30	67	49.8	
Sep 25	66	66	73	78	81	77	80	81	76	70	62	59	58	55	52	58	56	76	80	80	90	81	89	52	90	71.0		
Sep 26	96	96	96	99	100	100	100	98	90	79	70	62	55	49	45	45	46	49	61	70	73	74	74	75	45	100	75.1	
Sep 27	77	78	79	79	78	83	91	89	83	74	64	54	45	34	34	33	32	36	48	66	67	67	69	76	32	91	64.0	
Sep 28	72	80	82	74	83	82	84	84	76	63	56	48	43	37	32	33	32	46	68	80	65	67	74	78	32	84	64.1	
Sep 29	82	86	87	90	93	95	95	97	98	97	97	97	91	90	87	88	94	96	100	100	100	98	99	82	100	93.9		
Sep 30	100	100	100	100	100	100	100	100	100	97	91	85	81	78	70	61	62	68	87	97	99	93	85	84	61	100	89.1	
Diurnal Maximum	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Diurnal Average	80.2	81.7	82.9	85.2	87.1	88.6	89.3	86.1	78.4	69.7	62.2	55.9	49.8	46.0	43.8	42.4	43.5	48.3	62.4	73.8	75.0	75.8	77.3	79.2				

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

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

Timeseries Chart of Hourly Average for RH - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2022

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

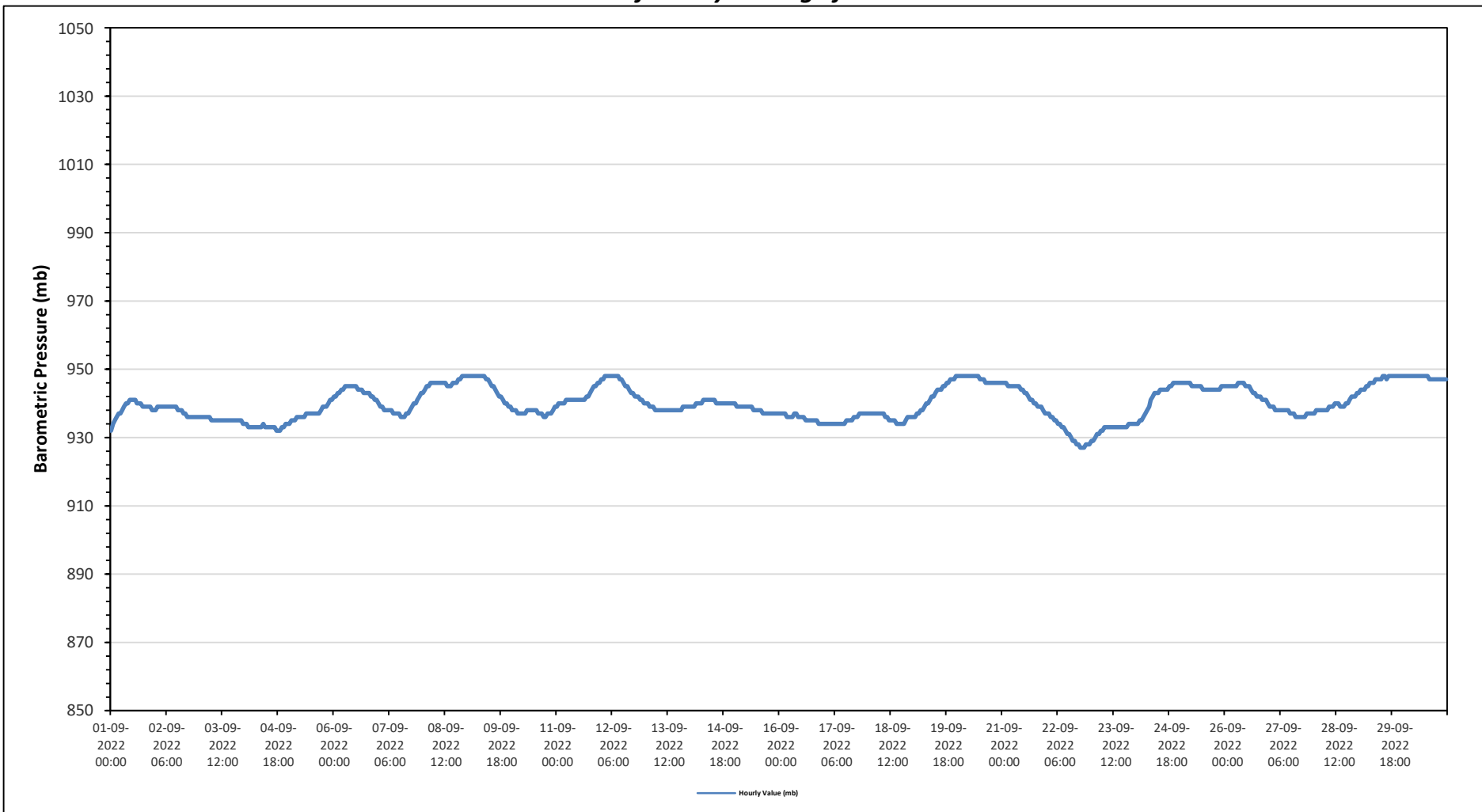
Maximum Hourly Value:	948 mb	on September 8 at hour 21	Hours in Service:	720
Maximum Daily Value:	948 mb	on September 30	Hours of Data:	720
Minimum Hourly Value:	927 mb	on September 22 at hour 18	Hours of Missing Data:	0
Minimum Daily Value:	931 mb	on September 22	Hours of Calibration:	0
Monthly Average:	940 mb		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	932	934	935	936	937	937	938	939	940	940	941	941	941	941	940	940	940	939	939	939	939	939	938	938	932	941	938	
Sep 2	938	939	939	939	939	939	939	939	939	939	939	939	938	938	938	937	937	936	936	936	936	936	936	936	936	936	939	938
Sep 3	936	936	936	936	936	936	935	935	935	935	935	935	935	935	935	935	935	935	935	935	935	935	934	934	934	936	935	
Sep 4	934	934	933	933	933	933	933	933	933	933	934	933	933	933	933	933	932	932	932	932	933	933	934	934	932	934	933	
Sep 5	934	935	935	935	936	936	936	936	936	937	937	937	937	937	937	937	937	938	939	939	939	940	941	941	934	941	937	
Sep 6	942	942	943	943	944	944	945	945	945	945	945	945	944	944	944	943	943	943	943	942	942	941	941	941	941	945	943	
Sep 7	940	939	939	938	938	938	938	938	937	937	937	936	936	936	936	937	937	938	939	940	940	941	942	943	936	943	938	
Sep 8	943	944	945	945	946	946	946	946	946	946	946	946	945	945	945	946	946	946	946	947	947	948	948	948	943	948	946	
Sep 9	948	948	948	948	948	948	948	948	948	948	947	947	946	945	945	944	943	942	942	941	940	940	939	939	939	948	945	
Sep 10	938	938	938	937	937	937	937	937	938	938	938	938	938	938	937	937	936	936	937	937	937	938	939	936	939	937	937	
Sep 11	939	940	940	940	940	941	941	941	941	941	941	941	941	941	941	942	942	943	944	945	945	946	946	939	946	942	942	
Sep 12	947	947	948	948	948	948	948	948	948	948	947	947	946	945	945	944	943	943	942	942	942	941	941	940	940	948	945	
Sep 13	940	940	939	939	939	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	939	939	939	939	938	940	938	
Sep 14	939	939	939	940	940	940	940	941	941	941	941	941	941	941	940	940	940	940	940	940	940	940	940	940	939	941	940	
Sep 15	940	939	939	939	939	939	939	939	939	939	938	938	938	938	938	937	937	937	937	937	937	937	937	937	937	937	938	
Sep 16	937	937	937	937	936	936	936	936	936	937	937	936	936	936	935	935	935	935	935	935	935	935	934	934	934	934	936	
Sep 17	934	934	934	934	934	934	934	934	934	934	934	934	935	935	935	935	936	936	936	937	937	937	937	937	934	937	935	
Sep 18	937	937	937	937	937	937	937	937	937	936	936	935	935	935	934	934	934	934	934	935	936	936	936	936	934	937	936	
Sep 19	936	936	937	937	938	938	939	940	940	941	942	942	943	944	944	944	945	945	946	946	947	947	947	948	936	948	942	
Sep 20	948	948	948	948	948	948	948	948	948	948	948	948	947	947	947	946	946	946	946	946	946	946	946	946	946	948	947	
Sep 21	946	946	946	945	945	945	945	945	945	945	944	944	943	943	942	941	941	940	940	939	939	939	938	937	937	946	943	
Sep 22	937	937	936	936	935	935	934	934	933	933	932	931	931	930	929	929	928	928	927	927	927	928	928	928	927	937	931	
Sep 23	929	929	930	931	931	932	932	933	933	933	933	933	933	933	933	933	933	933	933	933	934	934	934	934	929	934	932	
Sep 24	934	934	935	935	936	937	938	939	941	942	943	943	943	944	944	944	944	944	945	945	946	946	946	946	934	946	941	
Sep 25	946	946	946	946	946	946	945	945	945	945	945	945	944	944	944	944	944	944	944	944	944	945	945	944	946	945	945	
Sep 26	945	945	945	945	945	945	945	946	946	946	946	945	945	945	944	943	943	942	942	942	941	941	941	940	940	946	944	
Sep 27	939	939	939	938	938	938	938	938	938	938	938	937	937	937	936	936	936	936	936	936	937	937	937	937	936	939	937	
Sep 28	937	938	938	938	938	938	938	938	939	939	939	940	940	940	939	939	939	940	940	941	942	942	942	943	937	943	939	
Sep 29	943	944	944	944	945	945	946	946	947	947	947	947	948	948	947	948	948	948	948	948	948	948	948	948	943	948	947	
Sep 30	948	948	948	948	948	948	948	948	948	948	948	948	948	948	947	947	947	947	947	947	947	947	947	947	947	948	948	
Diurnal Maximum	948	948	948	948	948	948	948	948	948	948	948	948	948	948	948	947	948	948	948	948	948	948	948	948	948	948	948	
Diurnal Average	940	940	940	940	940	940	940	940	940	941	941	940	940	940	940	940	940	939	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
X InValid Data (Equipment Malfunction /Recovery)	NRM UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P Power Failure

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

Timeseries Chart of Hourly Average for BP - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2022

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

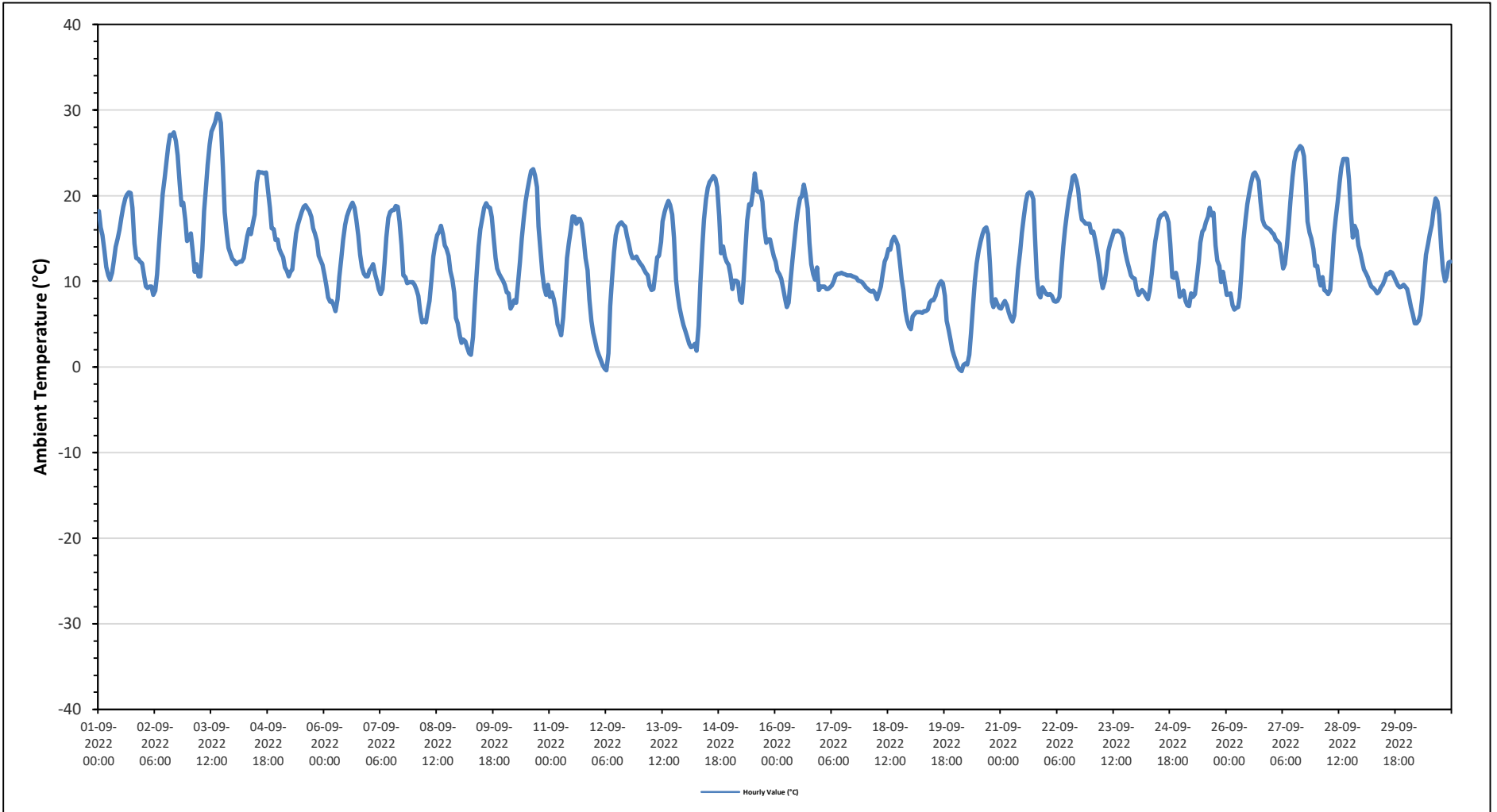
Maximum Hourly Value:	29.6 °C	on September 3 at hour 15	Hours in Service:	720
Maximum Daily Value:	19.1 °C	on September 3	Hours of Data:	720
Minimum Hourly Value:	-0.5 °C	on September 20 at hour 3	Hours of Missing Data:	0
Minimum Daily Value:	6.5 °C	on September 19	Hours of Calibration:	0
Monthly Average:	12.8 °C		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	18.2	16.3	15.4	13.5	11.7	10.7	10.2	11	12.4	14	15	16	17.5	18.7	19.7	20.1	20.4	20.3	18.6	14.4	12.7	12.6	12.3	12.1	10.2	20.4	15.2
Sep 2	10.8	9.4	9.2	9.4	9.4	8.4	8.9	10.8	14.4	17.4	20.2	22.1	24	25.8	27.1	27	27.4	26.4	24.7	21.4	18.9	19.2	17.2	14.7	8.4	27.4	17.7
Sep 3	15	15.6	13.3	11.1	12	10.6	10.6	13.7	18.2	21.2	23.6	26	27.5	28	28.6	29.6	29.5	28.5	23.3	18.1	15.6	13.9	13.3	12.6	10.6	29.6	19.1
Sep 4	12.4	12	12.2	12.3	12.3	12.7	14.1	15.3	16.1	15.5	16.8	17.8	21.5	22.8	22.7	22.7	22.6	22.7	20.7	18.6	16.2	16.1	14.8	14.9	12.0	22.8	16.9
Sep 5	13.8	13.3	12.8	11.6	11.2	10.6	11.1	11.4	13.7	15.6	16.6	17.4	18.1	18.7	18.9	18.5	18.2	17.5	16.2	15.6	14.7	13	12.4	11.9	10.6	18.9	14.7
Sep 6	10.7	9.5	8.1	7.6	7.7	7.2	6.5	7.9	10.5	12.7	14.8	16.6	17.6	18.2	18.8	19.2	18.6	17.2	15.3	13.1	11.7	10.9	10.6	10.6	6.5	19.2	12.6
Sep 7	11.3	11.6	12	10.8	10.1	9.1	8.5	9.1	12.1	15.1	17.4	18.1	18.3	18.3	18.8	18.7	17	14.2	10.7	10.5	9.8	9.9	9.9	9.9	8.5	18.8	13.0
Sep 8	9.6	9.1	8.3	6.5	5.2	5.4	5.2	6.6	7.7	10.3	12.9	14.4	15.4	15.8	16.5	15.5	14.2	13.8	13	11.2	10.2	8.7	5.7	5.1	5.1	16.5	10.3
Sep 9	3.7	2.8	3.2	3	2.3	1.6	1.4	3.5	7.3	11.1	14.1	16.1	17.4	18.6	19.1	18.7	18.6	17.5	15.2	12.7	11.5	10.9	10.5	10.1	1.4	19.1	10.5
Sep 10	9.6	8.7	8.6	6.8	7.2	7.8	7.5	9.7	12.3	15	17.4	19.3	20.6	21.9	22.9	23.1	22.4	21	16.4	13.5	11	9.3	8.4	9.6	6.8	23.1	13.8
Sep 11	8.2	8.7	7.9	6.8	5	4.4	3.7	5.8	8.9	12.7	14.4	16	17.6	17.5	16.7	17.3	17.3	16.7	14.8	12.7	11.3	7.9	5.4	4	3.7	17.6	10.9
Sep 12	3.1	2	1.4	0.8	0.2	-0.2	-0.4	1.6	7.1	10.2	13.4	15.4	16.4	16.7	16.9	16.6	16.4	15.3	14.4	13.3	12.7	12.7	12.9	12.4	-0.4	16.9	9.6
Sep 13	12.1	11.8	11.4	11	10.7	9.5	9	9.1	11	12.8	13	14.6	17	18.1	18.8	19.4	18.9	17.8	15.1	10.2	8.3	6.9	5.8	4.9	4.9	19.4	12.4
Sep 14	4.2	3.5	2.7	2.3	2.4	2.7	1.9	4.8	9.9	14.3	17.2	19.6	20.9	21.6	21.9	22.3	22	21	17.6	13.3	14.1	12.9	12.3	11.9	1.9	22.3	12.4
Sep 15	10.8	9.1	10.1	10.1	9.9	7.8	7.5	10.2	13.7	17.1	19	18.9	20.5	22.6	20.6	20.4	20.5	19.3	16.3	14.5	14.9	14.9	13.9	12.9	7.5	22.6	14.8
Sep 16	12.3	11.2	10.8	10.3	9.1	8	7	7.5	10.2	12.4	14.5	16.8	18.4	19.7	19.9	21.3	20.2	18.5	14.5	12	10.8	10.2	11.6	9	7.0	21.3	13.2
Sep 17	9.4	9.4	9.4	9.1	9.1	9.3	9.5	10	10.7	10.9	10.9	11	10.9	10.8	10.7	10.7	10.6	10.5	10.4	10.1	10	9.9	9.6	9.1	11.0	10.2	10.2
Sep 18	9.3	9.1	8.9	8.8	8.9	8.6	7.9	8.6	9.4	10.8	12.3	12.8	13.8	13.7	14.7	15.2	14.8	14.2	12.5	10.2	8.9	6.5	5.4	4.7	4.7	15.2	10.4
Sep 19	4.4	5.9	6.2	6.4	6.4	6.4	6.3	6.5	6.5	6.7	7.5	7.8	7.8	8.3	9.1	9.7	10	9.8	8.3	5.4	4.3	3.2	2	1.3	1.3	10.0	6.5
Sep 20	0.6	0	-0.3	-0.5	0.2	0.4	0.3	1.4	4	7.3	10.1	12.1	13.6	14.6	15.5	16.1	16.3	15.5	12.2	7.6	7	7.9	7.4	6.9	-0.5	16.3	7.3
Sep 21	6.8	7.4	7.7	7.2	6.4	5.8	5.3	6	8.8	11.4	13.4	15.7	17.4	19.2	20.2	20.4	20.3	19.6	15.5	10.4	8.5	8.1	9.3	8.9	5.3	20.4	11.7
Sep 22	8.5	8.4	8.5	8.3	7.7	7.6	7.7	8.2	11.1	14.1	16.2	18.1	19.6	20.8	22.2	22.4	21.8	20.8	18.5	17.2	17	16.7	16.7	16.7	7.6	22.4	14.8
Sep 23	15.7	15.8	14.9	13.5	12.2	10.3	9.2	10	11.4	13.5	14.5	15.1	15.9	15.8	15.9	15.8	15.6	15	13.5	12.4	11.6	10.7	10.4	10.3	9.2	15.9	13.3
Sep 24	9.1	8.4	8.7	9	8.7	8.3	7.9	8.9	10.9	12.9	14.7	16.1	17.2	17.7	17.8	18	17.7	16.9	14.3	10.5	10.4	11	9.9	8.2	7.9	18.0	12.2
Sep 25	8.5	8.9	7.7	7.2	7.1	8.6	8.2	8.5	10.2	12.3	14.5	15.8	16.1	16.9	17.5	18.6	17.7	18	14.2	12.4	11.8	9.9	11.1	9.8	7.1	18.6	12.1
Sep 26	8.4	8.5	8.6	7.2	6.7	6.9	7	8.1	11.5	14.9	17.2	19	20.4	21.5	22.5	22.7	22.3	21.7	19.3	17.2	16.6	16.3	16.2	16	6.7	22.7	14.9
Sep 27	15.7	15.5	14.9	14.7	14.4	13.2	11.5	12	14.2	16.7	19.5	22.2	24	25.1	25.4	25.8	25.6	24.6	21.4	17	15.7	15	13.8	11.8	11.5	25.8	17.9
Sep 28	11.8	10.3	9.5	10.5	9	8.8	8.5	9	11.6	15.4	17.4	19.4	21.5	23.3	24.3	24.3	24.3	21.9	17.9	15.1	16.5	15.9	14.2	13.3	8.5	24.3	15.6
Sep 29	12.3	11.4	11	10.5	9.9	9.4	9.2	9	8.6	8.8	9.3	9.6	10.2	10.9	10.8	11.1	11	10.5	10	9.5	9.3	9.4	9.6	9.4	8.6	12.3	10.0
Sep 30	9.1	8.2	7	6.2	5.1	5.1	5.4	6.1	8	10.7	13.1	14.3	15.5	16.6	18.3	19.7	19.3	17.8	13.9	11.3	10	10.5	12.2	12.3	5.1	19.7	11.5
Diurnal Maximum	18.2	16.3	15.4	14.7	14.4	13.2	14.1	15.3	18.2	21.2	23.6	26.0	27.5	28.0	28.6	29.6	29.5	28.5	24.7	21.4	18.9	19.2	17.2	16.7			
Diurnal Average	9.8	9.4	9.0	8.4	7.9	7.5	7.2	8.3	10.7	13.1	15.0	16.5	17.8	18.6	19.1	19.4	19.1	18.2	15.6	13.1	12.1	11.4	10.8	10.2			
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 - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2022

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

Maximum Hourly Value:	23.6 °C	on September 6 at hour 21	Hours in Service:	720
Maximum Daily Value:	22.8 °C	on September 27	Hours of Data:	720
Minimum Hourly Value:	20.7 °C	on September 3 at hour 15	Hours of Missing Data:	0
Minimum Daily Value:	21.8 °C	on September 2	Hours of Calibration:	0
Monthly Average:	22.3 °C		Operational Uptime:	100.0

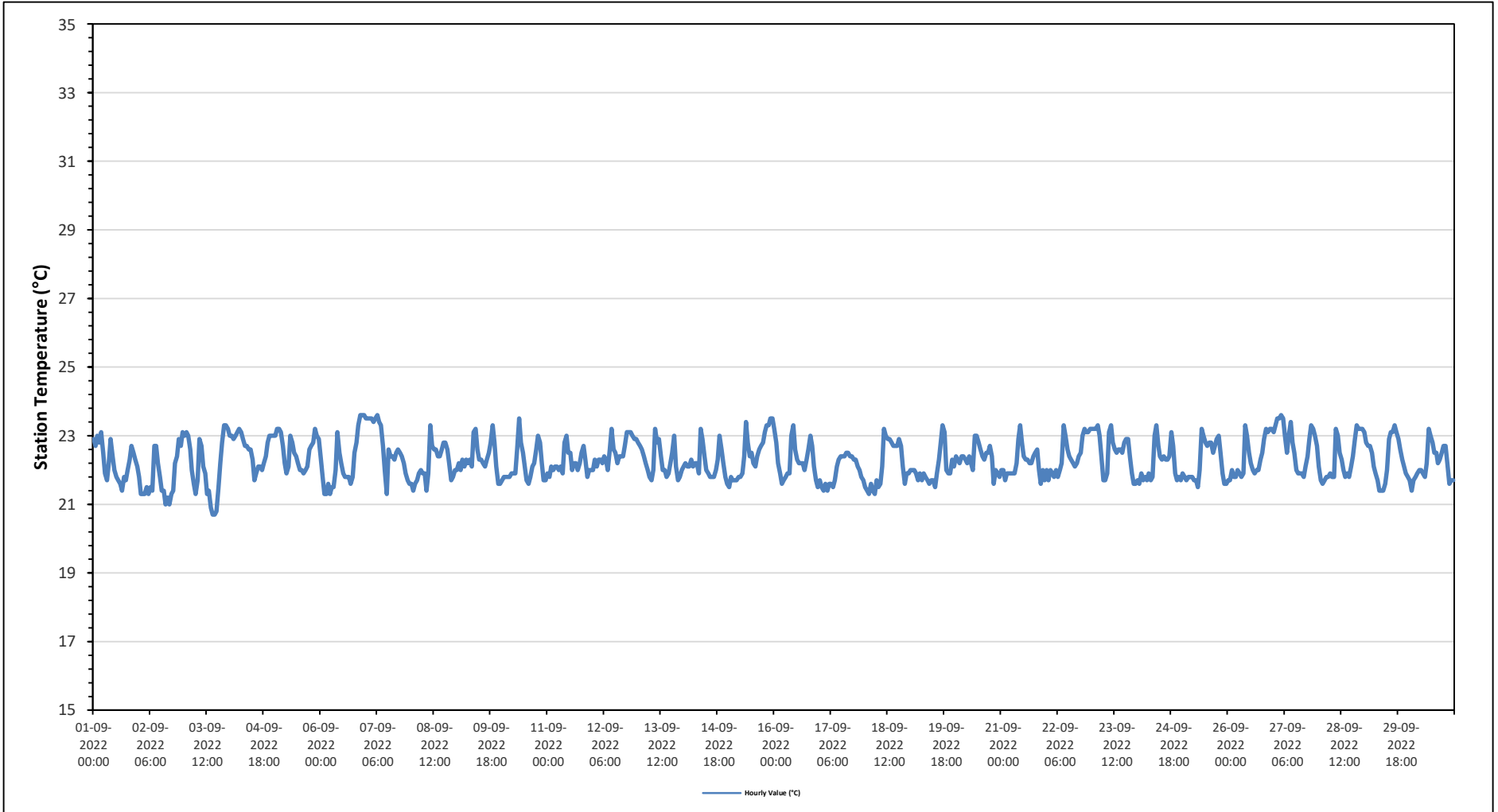
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	22.9	22.7	23.0	22.8	23.1	22.5	21.9	21.7	22.2	22.9	22.4	22.0	21.8	21.7	21.6	21.4	21.8	21.7	22.0	22.3	22.7	22.5	22.3	22.1	21.4	23.1	22.3
Sep 2	21.8	21.3	21.3	21.3	21.5	21.3	21.5	21.4	22.7	22.7	22.2	21.8	21.4	21.4	21.0	21.2	21.0	21.3	21.4	22.2	22.4	22.9	22.7	23.1	21.0	23.1	21.8
Sep 3	23.0	23.1	23.0	22.6	22.0	21.6	21.3	21.7	22.9	22.7	22.1	21.9	21.3	21.4	20.9	20.7	20.7	20.8	21.5	22.2	22.8	23.3	23.3	23.2	20.7	23.3	22.1
Sep 4	23.0	23.0	22.9	23.0	23.1	23.2	23.1	22.9	22.7	22.7	22.6	22.6	22.3	21.7	21.9	22.1	22.1	22.0	22.2	22.4	22.8	23.0	23.0	23.0	21.7	23.2	22.6
Sep 5	23.0	23.2	23.2	23.1	22.7	22.2	21.9	22.1	23.0	22.8	22.5	22.4	22.2	22.0	22.0	21.9	22.0	22.1	22.6	22.7	22.8	23.2	23.0	22.9	21.9	23.2	22.6
Sep 6	22.4	21.8	21.3	21.3	21.6	21.3	21.5	21.5	22.0	23.1	22.5	22.2	21.9	21.8	21.8	21.8	21.6	21.8	22.5	22.8	23.3	23.6	23.6	23.6	21.3	23.6	22.2
Sep 7	23.5	23.5	23.5	23.5	23.4	23.5	23.6	23.4	23.3	22.7	22.0	21.3	22.6	22.4	22.4	22.3	22.5	22.6	22.5	22.4	22.2	21.9	21.7	21.6	21.3	23.6	22.7
Sep 8	21.6	21.4	21.6	21.7	21.9	22.0	21.9	21.9	21.4	21.9	23.3	22.7	22.6	22.6	22.4	22.4	22.6	22.8	22.8	22.6	22.2	21.7	21.8	22.0	21.4	23.3	22.2
Sep 9	22.0	22.2	22.0	22.3	22.1	22.3	22.2	22.3	22.1	23.1	23.2	22.6	22.3	22.3	22.2	22.1	22.3	22.5	22.8	23.3	22.8	22.1	21.6	21.6	21.6	23.3	22.3
Sep 10	21.7	21.8	21.8	21.8	21.8	21.9	21.9	21.9	22.6	23.5	22.8	22.5	22.1	21.7	21.6	21.8	22.1	22.2	22.6	23.0	22.8	22.2	21.7	21.7	21.6	23.5	22.1
Sep 11	21.9	21.8	22.1	22.0	22.1	22.1	22.0	22.1	21.9	22.8	23.0	22.5	22.5	22.0	22.2	22.2	22.0	22.2	22.5	22.7	22.3	21.8	22.0	22.0	21.8	23.0	22.2
Sep 12	22.0	22.3	22.1	22.3	22.3	22.2	22.4	22.3	22.0	22.6	23.2	22.6	22.5	22.2	22.4	22.4	22.4	22.7	23.1	23.1	23.1	23.0	22.9	22.9	22.0	23.2	22.5
Sep 13	22.8	22.7	22.6	22.4	22.2	22.0	21.8	21.7	22.0	23.2	22.8	22.9	22.4	22.0	22.0	21.8	21.9	22.2	22.5	23.0	22.1	21.7	21.8	22.0	21.7	23.2	22.3
Sep 14	22.1	22.2	22.1	22.1	22.3	22.1	22.2	22.2	21.9	23.2	22.9	22.4	22.0	21.9	21.8	21.8	22.0	22.3	23.0	22.6	22.2	21.8	21.6	21.6	21.6	23.2	22.2
Sep 15	21.5	21.8	21.7	21.7	21.7	21.8	21.8	21.9	22.4	23.4	22.8	22.4	22.5	22.2	22.1	22.4	22.6	22.7	22.8	23.1	23.3	23.3	23.5	23.5	21.5	23.5	22.5
Sep 16	23.2	22.8	22.2	21.9	21.6	21.7	21.8	21.9	21.9	23.0	23.3	22.6	22.3	22.2	22.2	22.2	22.0	22.3	22.6	23.0	22.7	22.1	21.7	21.5	21.5	23.3	22.3
Sep 17	21.7	21.5	21.4	21.6	21.4	21.6	21.6	21.5	21.7	22.1	22.3	22.4	22.4	22.5	22.5	22.4	22.4	22.3	22.3	22.1	22.0	21.8	21.7	21.4	22.5	22.0	22.0
Sep 18	21.5	21.4	21.3	21.6	21.4	21.3	21.7	21.5	21.6	22.1	23.2	23.0	22.9	22.9	22.8	22.7	22.7	22.9	22.7	22.1	21.6	21.9	21.9	21.3	23.2	22.1	22.1
Sep 19	22.0	22.0	22.0	21.9	21.7	21.9	21.7	21.9	21.8	21.7	21.6	21.7	21.5	21.9	22.3	22.8	23.3	23.1	22.0	21.9	21.9	22.3	22.1	21.5	21.5	23.3	22.0
Sep 20	22.4	22.3	22.2	22.4	22.4	22.3	22.2	22.4	22.2	22.0	23.0	23.0	22.8	22.6	22.4	22.3	22.5	22.5	22.7	22.4	21.6	22.0	21.9	21.8	21.6	23.0	22.3
Sep 21	22.0	22.0	21.7	21.9	21.9	21.9	21.9	21.9	22.2	22.9	23.3	22.8	22.4	22.3	22.3	22.2	22.2	22.4	22.5	22.6	22.0	21.6	22.0	21.7	21.6	23.3	22.2
Sep 22	22.0	21.7	22.0	21.9	21.8	22.0	21.8	22.0	22.2	23.3	23.0	22.6	22.4	22.3	22.2	22.1	22.2	22.4	22.5	23.0	23.2	23.1	23.1	23.2	21.7	23.3	22.4
Sep 23	23.2	23.2	23.2	23.3	23.0	22.4	21.7	21.7	21.9	23.1	23.3	22.8	22.6	22.5	22.6	22.6	22.5	22.8	22.9	22.9	22.4	21.9	21.6	21.6	21.6	23.3	22.6
Sep 24	21.7	21.6	21.9	21.7	21.8	21.7	21.9	21.7	21.8	23.0	23.3	22.7	22.4	22.3	22.4	22.3	22.3	22.4	23.1	22.7	21.9	21.7	21.8	21.7	21.6	23.3	22.2
Sep 25	21.9	21.8	21.7	21.8	21.8	21.8	21.7	21.7	21.5	22.0	23.2	23.0	22.8	22.7	22.8	22.5	22.7	22.9	23.0	22.5	21.9	21.6	21.6	21.5	21.5	23.2	22.2
Sep 26	21.7	21.7	22.0	21.8	21.8	22.0	21.9	21.8	21.9	23.3	23.0	22.5	22.2	22.0	21.9	22.0	22.0	22.3	22.5	22.9	23.2	23.1	23.2	23.2	21.7	23.3	22.3
Sep 27	23.1	23.3	23.5	23.5	23.6	23.5	23.0	22.5	23.0	23.4	22.8	22.5	22.0	21.9	21.9	21.9	21.8	22.1	22.4	22.9	23.3	23.2	23.0	22.7	21.8	23.6	22.8
Sep 28	22.1	21.7	21.6	21.7	21.8	21.8	21.9	21.8	21.8	23.2	23.0	22.5	22.3	22.0	21.8	21.9	21.8	22.1	22.4	22.9	23.3	23.2	23.2	23.2	21.6	23.3	22.3
Sep 29	23.1	22.8	22.7	22.7	22.5	22.1	21.9	21.7	21.4	21.4	21.6	22.0	22.9	23.1	23.1	23.3	23.1	22.9	22.6	22.3	22.1	21.9	21.8	21.4	21.4	23.3	22.4
Sep 30	21.7	21.4	21.7	21.8	21.9	22.0	22.0	21.9	21.8	22.2	23.2	23.0	22.8	22.5	22.2	22.3	22.5	22.7	22.7	22.2	21.6	21.7	21.7	21.4	21.4	23.2	22.2
Diurnal Maximum	23.5	23.5	23.5	23.5	23.6	23.5	23.6	23.4	23.3	23.5	23.3	23.0	22.9	22.9	23.1	23.1	23.3	23.3	23.1	23.3	23.6	23.6	23.6	23.6	23.6	23.6	23.6
Diurnal Average	22.3	22.2	22.2	22.2	22.1	22.1	22.0	22.0	22.1	22.7	22.8	22.5	22.3	22.1	22.1	22.1	22.2	22.3	22.6	22.7	22.6	22.4	22.3	22.3	22.3	22.3	22.3

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

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

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

Timeseries Chart of Hourly Average for ST - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2022

Summary of Hourly Averages

PRECIPITATION in mm

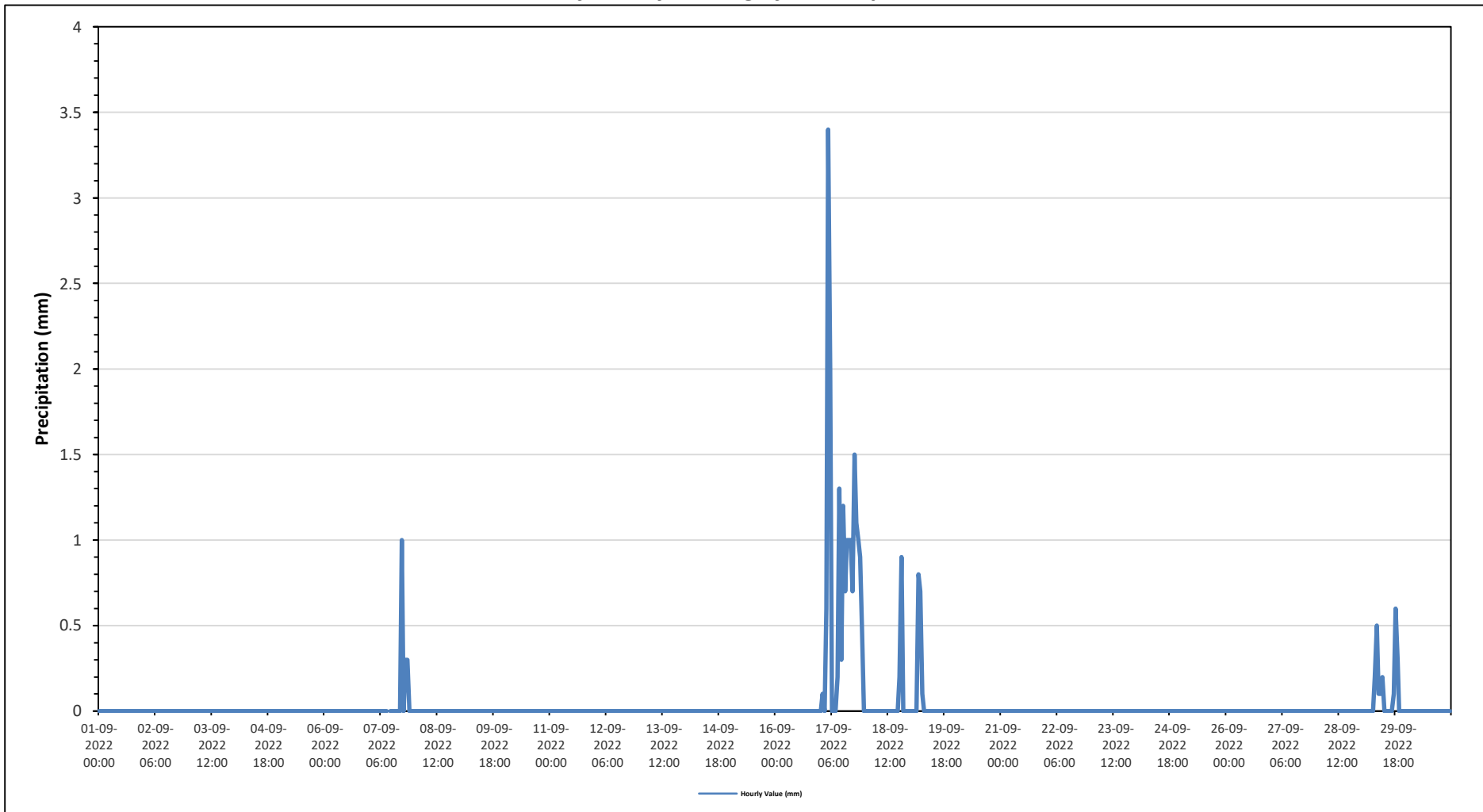
Maximum Hourly Value:	3.4 mm on September 17 at hour 4	Hours in Service:	720
Maximum Daily Value:	18.5 mm on September 17	Hours of Data:	719
Minimum Hourly Value:	0.0 mm on September 1 at hour 0	Hours of Missing Data:	0
Minimum Daily Value:	0.0 mm on September 1	Hours of Calibration:	1
Monthly Total:	24.9 mm	Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Total	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
Sep 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 7	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	1.0	1.6
Sep 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 17	0	0.1	0	0.6	3.4	2	0	0	0	0.2	1.3	0.3	1.2	0.7	1	1	1	0.7	1.5	1.1	1	0.9	0.5	0	0.0	3.4	18.5	
Sep 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9	0	0	0	0	0.0	0.9	1.1	
Sep 19	0	0	0	0	0.8	0.7	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.8	1.6	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 29	0	0	0	0	0	0	0	0.2	0.5	0.1	0.1	0.2	0	0	0	0	0	0.1	0.6	0.3	0	0	0	0	0.0	0.6	2.1	
Sep 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	
Diurnal Maximum	0.0	0.1	0.0	0.6	3.4	2.0	0.1	0.2	0.5	0.2	1.3	0.3	1.2	0.7	1.0	1.0	1.0	1.0	1.5	1.1	1.0	0.9	0.5	0.0				
Diurnal Average	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0				

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

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

Timeseries Chart of Hourly Average for Precipitation - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2022

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

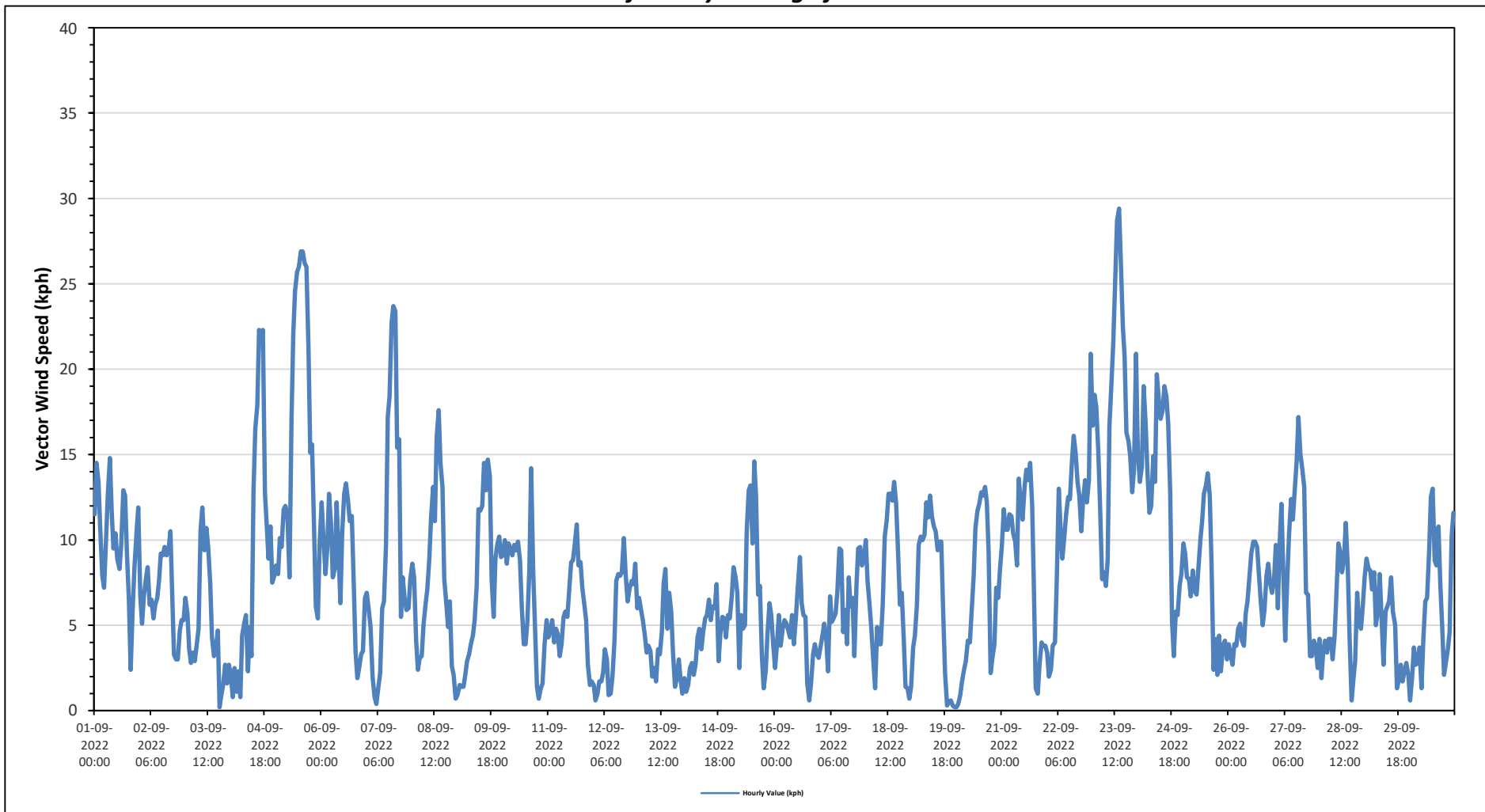
Maximum Hourly Value:	29.4 kph	on September 23 at hour 14	Hours in Service:	720
Maximum Daily Value:	17.1 kph	on September 23	Hours of Data:	720
Minimum Hourly Value:	0.2 kph	on September 3 at hour 18	Hours of Missing Data:	0
Minimum Daily Value:	1.7 kph	on September 28	Hours of Calibration:	0
Monthly Average:	3.6 kph		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Sep 1	11.5	14.5	13.4	10.6	7.9	7.2	10.1	12.7	14.8	11.7	9.5	10.4	8.9	8.3	9.8	12.9	12.6	9.3	6.5	2.4	6.0	8.4	10.4	11.9	2.4	14.8	6.6
Sep 2	6.7	5.1	6.7	7.7	8.4	6.2	6.5	5.4	6.2	6.6	7.6	9.2	9.1	9.6	9.1	9.4	10.5	6.8	3.3	3.0	3.0	4.7	5.3	5.3	3.0	10.5	5.9
Sep 3	6.6	5.7	3.6	2.8	3.4	2.9	3.9	4.8	10.6	11.9	9.4	10.7	9.6	7.5	4.3	3.2	3.6	4.7	0.2	0.9	1.6	2.7	1.6	2.7	0.2	11.9	3.1
Sep 4	2.0	0.8	2.5	1.1	2.3	0.8	4.4	5.1	5.6	2.3	4.9	3.2	12.9	16.5	17.9	22.3	21.7	22.3	12.8	10.9	8.9	10.8	7.5	7.9	0.8	22.3	7.1
Sep 5	8.5	8.0	10.1	9.6	11.8	12.0	11.4	7.8	17.1	22.1	24.6	25.7	26.0	26.9	26.9	26.2	26.0	21.2	15.1	15.6	10.7	6.1	5.4	9.8	5.4	26.9	14.9
Sep 6	12.2	10.1	8.0	9.5	12.7	10.9	7.8	8.3	12.2	9.2	6.3	10.4	12.7	13.3	12.3	11.1	11.4	7.8	3.4	1.9	2.5	3.3	3.5	6.6	1.9	13.3	7.5
Sep 7	6.9	5.9	4.9	2.0	0.8	0.4	1.4	2.2	6.0	6.4	9.7	17.2	18.4	22.7	23.7	23.4	15.4	15.9	5.5	7.8	6.5	5.9	6.0	7.7	0.4	23.7	6.8
Sep 8	8.6	7.8	4.1	2.4	3.1	3.2	5.0	6.2	7.1	8.9	11.3	13.1	11.1	16.0	17.6	14.5	13.1	7.7	6.3	4.9	6.4	2.6	2.1	0.7	0.7	17.6	6.1
Sep 9	0.9	1.5	1.4	1.4	2.1	2.9	3.3	3.9	4.4	5.3	7.3	11.8	11.7	12.0	14.5	12.9	14.7	13.7	7.7	5.5	8.9	9.7	10.2	9.0	0.9	14.7	5.8
Sep 10	9.1	10.0	8.6	9.8	9.4	9.1	9.7	9.4	9.9	8.8	6.1	3.9	3.9	5.2	8.3	14.2	8.2	5.0	1.4	0.7	1.3	1.6	3.9	5.3	0.7	14.2	4.2
Sep 11	4.3	4.7	5.3	4.0	4.8	4.5	3.2	3.9	5.5	5.8	5.5	7.0	8.7	8.8	9.7	10.9	8.5	8.7	7.2	6.2	5.3	2.7	1.5	1.7	1.5	10.9	5.3
Sep 12	1.5	0.6	1.0	1.7	1.7	2.2	3.6	3.0	0.9	1.0	2.0	4.1	7.6	8.0	7.9	8.1	10.1	8.0	6.4	7.2	7.6	7.4	8.6	6.0	0.6	10.1	4.7
Sep 13	6.6	5.9	5.3	4.4	3.4	3.8	3.5	2.0	2.5	1.7	3.6	3.3	4.6	7.4	8.3	4.8	6.9	5.8	3.4	1.4	1.9	3.0	1.8	1.0	1.0	8.3	1.8
Sep 14	1.9	1.1	1.5	2.5	2.8	2.1	2.7	4.3	4.8	3.6	4.6	5.4	5.6	6.5	5.3	6.1	6.0	7.4	2.9	4.5	5.5	5.4	4.3	5.6	1.1	7.4	3.5
Sep 15	5.4	6.7	8.4	7.8	6.9	2.5	5.6	4.8	5.0	10.5	12.9	13.2	9.8	14.6	12.5	6.8	7.3	3.2	1.3	2.3	4.5	6.3	5.6	4.0	1.3	14.6	6.0
Sep 16	2.5	3.8	5.6	3.8	4.8	5.3	5.1	4.7	4.3	5.6	3.9	5.4	7.1	9.0	6.3	5.6	5.5	1.6	0.6	1.6	3.3	3.9	3.3	3.1	0.6	9.0	2.0
Sep 17	3.7	4.4	5.1	4.2	2.3	6.7	5.2	5.4	5.7	7.0	9.5	9.4	4.6	5.9	3.9	7.8	6.1	6.6	3.2	7.2	9.5	9.6	8.5	8.9	2.3	9.6	5.1
Sep 18	10.0	7.6	6.2	4.8	2.9	1.3	4.9	3.9	3.9	6.2	10.2	11.2	12.7	12.7	12.3	13.4	12.1	9.5	6.2	6.9	4.2	1.4	1.3	0.7	0.7	13.4	5.0
Sep 19	1.4	3.7	4.4	6.2	9.7	10.2	10.0	10.3	12.2	11.3	12.6	11.4	10.8	10.5	9.4	9.9	9.9	5.6	2.2	0.3	0.5	0.6	0.3	0.2	0.2	12.6	6.6
Sep 20	0.2	0.4	0.9	1.7	2.4	2.9	4.1	4.0	5.8	7.9	10.7	11.7	12.1	12.8	12.6	13.1	12.2	9.3	2.2	3.1	3.9	7.2	6.6	8.3	0.2	13.1	5.5
Sep 21	9.6	11.8	10.6	10.6	11.5	11.4	10.4	9.9	8.5	13.6	12.2	11.2	13.1	14.1	13.5	14.5	12.0	7.0	1.3	1.0	2.7	4.0	3.8	3.8	1.0	14.5	8.4
Sep 22	3.4	2.0	2.4	3.8	4.0	7.6	13.0	10.7	8.9	10.2	11.5	12.5	12.4	14.6	16.1	15.0	13.4	12.6	10.5	12.3	13.5	12.2	13.5	20.9	2.0	20.9	9.1
Sep 23	16.7	18.5	17.8	15.2	12.0	7.7	8.1	7.3	8.8	16.7	19.2	21.5	25.3	28.7	29.4	26.3	22.5	20.7	16.3	15.8	14.9	12.8	14.1	20.9	7.3	29.4	17.1
Sep 24	15.2	13.4	14.3	19.0	16.8	14.0	11.6	12.0	14.9	13.4	19.7	18.2	17.1	17.6	19.0	18.4	16.8	12.7	5.3	3.2	5.8	5.6	7.3	8.0	3.2	19.7	12.1
Sep 25	9.8	9.2	7.8	7.7	6.7	8.2	7.0	6.8	8.3	10.0	11.1	12.7	13.2	13.9	12.6	8.6	2.4	4.2	2.1	4.4	2.3	3.8	4.1	3.0	2.1	13.9	6.0
Sep 26	3.9	3.2	2.7	3.9	3.8	4.8	5.1	4.1	3.8	5.7	6.4	7.9	9.2	9.9	9.9	9.6	8.0	6.3	5.0	5.9	7.9	8.6	7.4	6.9	2.7	9.9	5.3
Sep 27	7.7	9.7	6.0	9.8	12.1	7.8	4.1	7.7	10.3	12.4	11.2	12.8	14.6	17.2	15.0	14.2	13.1	6.9	6.8	3.2	3.2	4.1	3.8	2.5	2.5	17.2	7.6
Sep 28	4.2	1.9	3.5	4.1	3.4	4.2	4.2	3.0	4.4	6.8	9.8	9.3	8.1	8.8	11.0	8.4	4.3	0.6	1.8	2.9	6.9	5.2	4.8	6.1	0.6	11.0	1.7
Sep 29	7.9	8.9	8.3	8.2	7.1	8.1	5.0	5.9	8.0	5.2	2.7	5.8	6.1	6.4	7.8	5.8	5.0	1.3	1.8	2.7	1.7	2.3	2.8	2.1	1.3	8.9	4.7
Sep 30	0.6	2.0	3.7	2.7	2.8	3.7	1.3	4.1	6.4	6.6	9.3	12.5	13.0	8.8	8.5	10.8	7.5	4.8	2.1	2.9	3.6	4.6	10.2	11.6	0.6	13.0	4.4
Diurnal Maximum	17	19	18	19	17	14	13	13	17	22	25	26	26	29	29	26	26	22	16	16	15	13	14	21			
Diurnal Average	6.3	6.3	6.1	6.1	6.1	5.8	6.0	6.1	6.1	7.6	8.5	9.5	10.7	11.3	12.5	12.5	12.3	10.9	8.6	5.0	5.0	5.5	5.6	6.4			

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

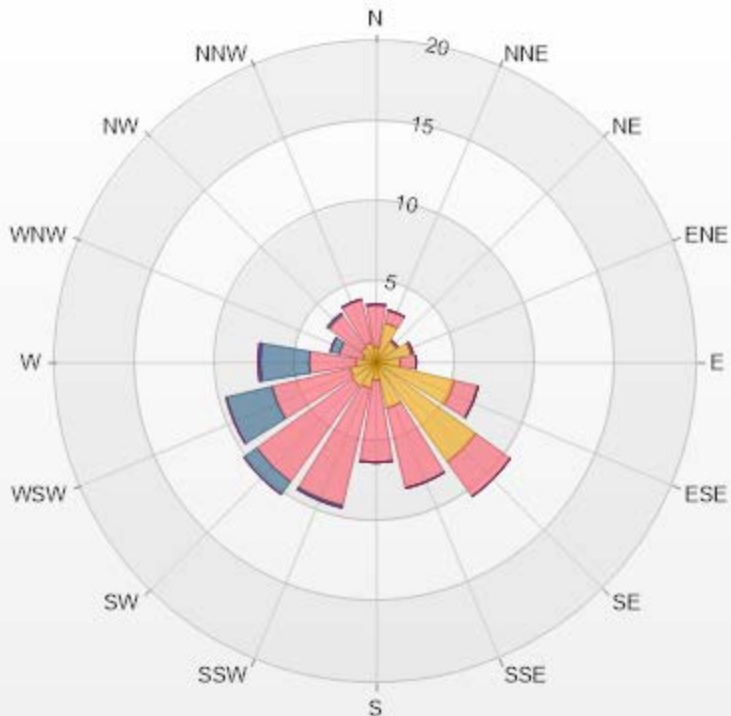
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

Timeseries Chart of Hourly Average for VWS - 842b Station








Wind: PRAMP 842b Monitor: WDS [KPH] Monthly: 09-2022 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 8.33% 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	0.97	2.64	0	0	0	3.61
NNE	2.5	0.83	0	0	0	3.33
NE	1.53	0.14	0	0	0	1.67
ENE	2.22	0.14	0	0	0	2.36
E	1.53	0.97	0	0	0	2.5
ESE	5	1.53	0	0	0	6.53
SE	7.64	2.64	0	0	0	10.28
SSE	2.92	5.14	0	0	0	8.06
S	1.11	5.14	0	0	0	6.25
SSW	1.67	7.5	0.14	0	0	9.31
SW	1.81	7.36	0.97	0	0	10.14
WSW	1.67	5	2.92	0	0	9.59
W	1.25	2.92	3.06	0.14	0	7.37
WNW	0.83	1.53	0.56	0	0	2.92
NW	1.11	2.5	0.14	0	0	3.75
NNW	1.25	2.78	0	0	0	4.03
Summary	35.01	48.76	7.79	0.14	0	91.7



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% Icon Classes (KPH)	35	 1.8-6.0	49	 6.0-15.0	8	 15.0-29.0	0	 29.0-39.0	0	 >39.0
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PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2022

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

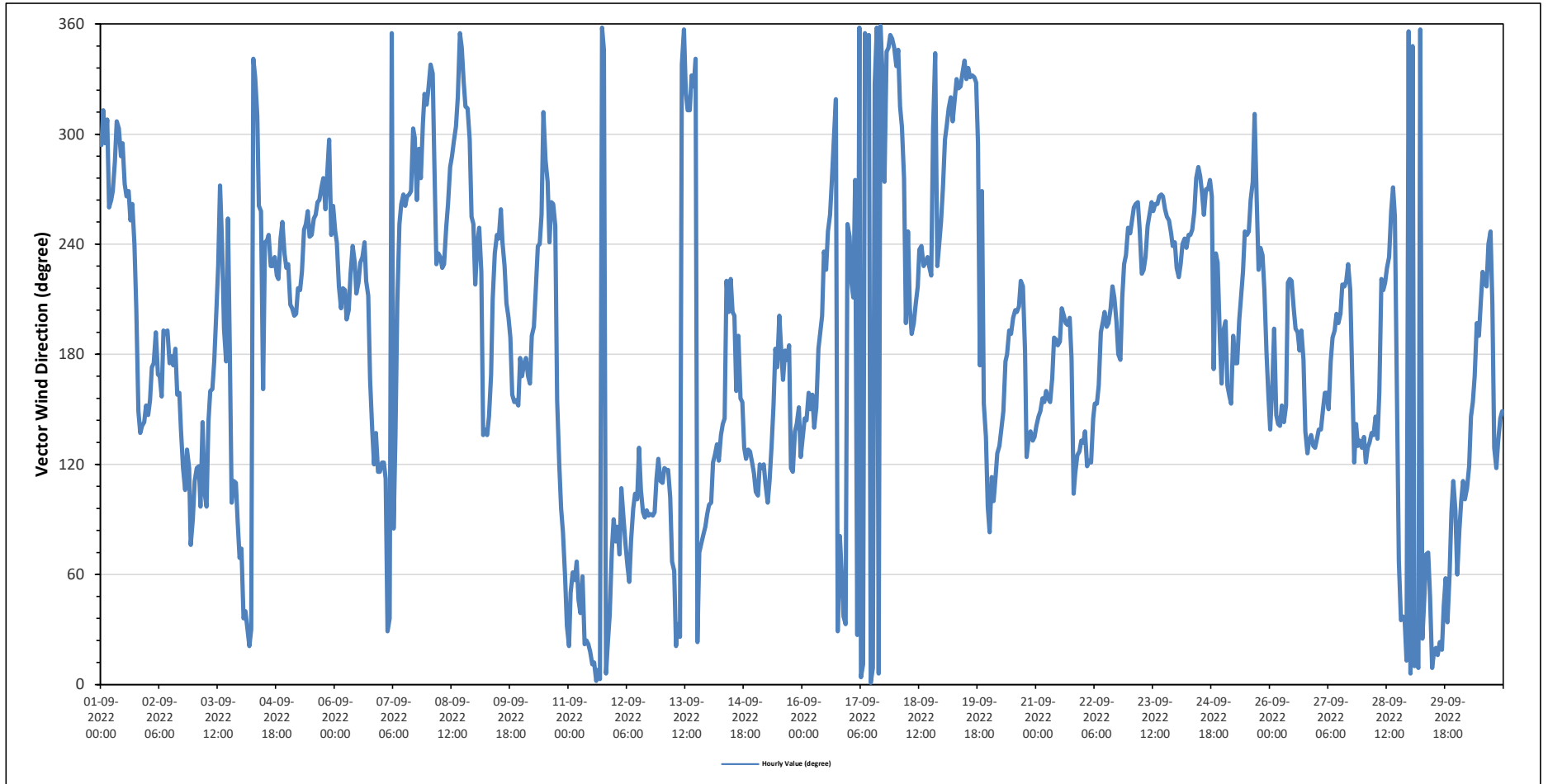
Monthly Average:	225 (SW) degree	Hours in Service:	720
		Hours of Data:	720
		Hours of Missing Data:	0
		Hours of Calibration:	0
		Operational Uptime:	100.0

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
Sep 1	WNW	NW	WNW	NW	WSW	W	W	WNW	NW	WNW	WNW	WNW	W	W	W	WSW	W	WSW	SSW	SSE	SE	SE	SE	SSE	271	W
Sep 2	SE	SSE	S	S	S	SSE	SSE	SSE	S	S	S	S	S	S	SSE	SSE	SE	ESE	ESE	SE	ESE	ENE	E	163	SSE	
Sep 3	ESE	ESE	ESE	E	SE	ESE	E	SE	SSE	SSE	S	SSW	SW	W	WSW	SSW	S	WSW	S	E	ESE	ESE	E	166	SSE	
Sep 4	ENE	NE	NE	NNE	NNE	NNE	NNW	NNW	NW	W	WSW	SSE	WSW	WSW	WSW	SW	SW	SW	SW	SW	WSW	WSW	SW	SW	240	WSW
Sep 5	SW	SSW	SSW	SSW	SSW	SW	SSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	WSW	W	WNW	WSW	W	249	WSW
Sep 6	WSW	WSW	SW	SSW	SW	SSW	SSW	SSW	SW	WSW	SW	SSW	SW	SW	WSW	SW	SSW	SSE	SE	ESE	SE	ESE	ESE	217	SW	
Sep 7	ESE	ESE	ESE	NNE	NE	N	E	SE	SSW	WSW	W	W	W	W	W	WNW	WNW	W	WNW	W	NW	NW	NW	273	W	
Sep 8	NW	NNW	NNW	WNW	SW	SW	SW	SW	SW	WSW	W	W	WNW	WNW	WNW	NW	N	NNW	NNW	NW	NW	WNW	WSW	WSW	297	WNW
Sep 9	SW	WSW	WSW	SW	SE	SE	SE	SE	SSE	SSW	SW	WSW	WSW	WSW	SW	SSW	SSW	S	SSE	SSE	SSE	SSE	S	204	SSW	
Sep 10	SSE	S	S	SSE	SSE	S	SSW	SSW	WSW	WSW	NW	WNW	W	WSW	W	W	WSW	SSE	ESE	E	E	ENE	NNE	216	SW	
Sep 11	NNE	NE	ENE	ENE	ENE	NE	NE	ENE	NNE	NNE	NNE	NNE	NNE	NNE	N	N	N	N	NNW	N	NNE	NE	ENE	E	21	NNE
Sep 12	ENE	E	ENE	ESE	E	ENE	ENE	NE	ENE	E	ESE	E	SE	ESE	E	E	E	E	E	E	ESE	ESE	ESE	99	E	
Sep 13	ESE	ESE	ESE	ESE	E	ENE	ENE	NNE	NNE	NNE	NNW	N	NW	NW	NNE	NW	NNW	NNE	ENE	ENE	NW	E	E	26	NNE	
Sep 14	E	E	ESE	SE	SE	ESE	SE	SE	SE	SW	SSW	SW	SSW	SSW	SSE	S	SSE	SSE	SE	ESE	SE	SE	ESE	ESE	155	SSE
Sep 15	ESE	ESE	ESE	ESE	ESE	ESE	E	ESE	SE	SSE	S	S	SSW	S	SSE	S	S	S	ESE	ESE	SE	SE	SSE	ESE	151	SSE
Sep 16	SE	SE	SE	SSE	SSE	SSE	SE	SSE	S	S	SSW	SW	WSW	WSW	W	WNW	NW	NNE	E	ENE	NE	NNE	WSW	197	SSW	
Sep 17	WSW	SW	SSW	W	NNE	N	N	NNE	N	NNW	N	N	N	NW	N	N	N	NNW	W	NNW	NNW	N	N	NNW	346	NNW
Sep 18	NNW	NNW	NW	WNW	W	SSW	WSW	SSW	S	SSW	SSW	SW	SW	WSW	SW	SW	SW	SW	WNW	NNW	NNW	SW	SW	WSW	244	WSW
Sep 19	W	WNW	WNW	NW	NW	NW	NW	NNW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	WNW	S	W	SSE	SE	E	325	NW
Sep 20	E	ESE	E	ESE	SE	SE	SE	SSE	S	S	S	S	SSW	SSW	SSW	SSW	SW	SW	S	ESE	SE	SE	SE	SE	182	S
Sep 21	SE	SE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	S	ESE	ESE	SE	SE	SE	172	S
Sep 22	SE	SE	ESE	ESE	ESE	SE	SSE	SSE	SSE	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	S	SSW	SW	SW	WSW	196	SSW
Sep 23	WSW	WSW	WSW	W	W	WSW	SW	SW	SW	WSW	WSW	W	WSW	W	W	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	256	WSW
Sep 24	SW	SW	SW	WSW	WSW	SW	WSW	WSW	WSW	W	W	W	W	WSW	W	W	W	W	S	SW	SW	S	SSE	251	WSW	
Sep 25	S	SSW	SSE	SSE	SSE	S	S	S	SSW	SSW	SW	WSW	WSW	W	W	NW	W	SW	SW	SW	SSW	S	SSE	216	SW	
Sep 26	SE	SSE	SSW	SE	SE	SE	SSE	SE	SSE	SW	SW	SW	SSW	SSW	S	S	S	SE	SE	SE	SE	SE	SE	SE	169	SSE
Sep 27	SE	SE	SE	SSE	SSE	SSE	SSE	S	S	S	SSW	SSW	SSW	SW	SW	SW	SSW	S	ESE	SE	SE	SE	SE	SE	185	S
Sep 28	SE	ESE	SE	SE	SE	SE	SE	SE	SSE	SW	SSW	SW	SW	SW	WSW	W	WSW	SSE	ENE	NE	NE	NE	NNE	N	208	SSW
Sep 29	N	NNW	N	NNE	N	N	NNE	NE	ENE	ENE	NE	N	NNE	NNE	NNE	NNE	NNE	NE	ENE	NE	ENE	E	ESE	E	25	NNE
Sep 30	ENE	E	E	ESE	E	ESE	ESE	SE	SSE	SSE	SSW	S	SSW	SW	SW	SW	WSW	SSW	SE	ESE	SE	SE	SSE	179	S	

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

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

Timeseries Chart of Hourly Average for VWD - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2022

Summary of Hourly Averages

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

WIND SPEED																												
Maximum Hourly Value:	29.4 kph on September 23 at hour 14															Hours in Service:	720											
Maximum Daily Value:	17.1 kph on September 23															Hours of Data:	720											
Minimum Hourly Value:	0.2 kph on September 3 at hour 18															Hours of Missing Data:	0											
Minimum Daily Value:	1.7 kph on September 28															Hours of Calibration:	0											
Monthly Average:	3.6 kph															Operational Uptime:	100											
WIND DIRECTION																												
Monthly Average:	225 (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				
Sep 1	11.5	14.5	13.4	10.6	7.9	7.2	10.1	12.7	14.8	11.7	9.5	10.4	8.9	8.3	9.8	12.9	12.6	9.3	6.5	2.4	6.0	8.4	10.4	11.9	2.4	14.8	6.6	
	WNW	NW	WNW	NW	WSW	W	W	WNW	NW	WNW	WNW	WNW	W	W	W	WSW	W	WSW	SSW	SSE	SE	SE	SE	SSE				
Sep 2	6.7	5.1	6.7	7.7	8.4	6.2	6.5	5.4	6.2	6.6	7.6	9.2	9.1	9.6	6.1	9.4	10.5	6.8	3.3	3.0	3.0	4.7	5.3	5.3	3.0	10.5	5.9	
	SE	SSE	S	S	S	SSE	SSE	SSE	S	S	S	S	S	S	SSE	SSE	SE	ESE	ESE	SE	ESE	ENE	E	E				
Sep 3	6.6	5.7	3.6	2.8	3.4	2.9	3.9	4.8	10.6	11.9	9.4	10.7	9.6	7.5	4.3	3.2	3.6	4.7	0.2	0.9	1.6	2.7	1.6	2.7	0.2	11.9	3.1	
	ESE	ESE	ESE	E	SE	ESE	E	SE	SSE	SSE	S	SSW	SW	W	WSW	SSW	S	WSW	S	E	ESE	ESE	E	ENE				
Sep 4	2.0	0.8	2.5	1.1	2.3	0.8	4.4	5.1	5.6	2.3	4.9	3.2	12.9	16.5	17.9	22.3	21.7	22.3	12.8	10.9	8.9	10.8	7.5	7.9	0.8	22.3	7.1	
	ENE	NE	NE	NNE	NNE	NNE	NNW	NNW	NW	W	WSW	SSE	WSW	WSW	WSW	SW	SW	SW	SW	SW	WSW	WSW	SW	SW				
Sep 5	8.5	8.0	10.1	9.6	11.8	12.0	11.4	7.8	17.1	22.1	24.6	25.7	26.0	26.9	26.2	26.0	21.2	15.1	15.6	10.7	6.1	5.4	9.8	5.4	26.9	14.9		
	SW	SSW	SSW	SSW	SSW	SW	SSW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	W	W	W	WSW	W	WNW	W	WSW	W				
Sep 6	12.2	10.1	8.0	9.5	12.7	10.9	7.8	8.3	12.2	9.2	6.3	10.4	12.7	13.3	12.3	11.1	11.4	7.8	3.4	1.9	2.5	3.3	3.5	6.6	1.9	13.3	7.5	
	WSW	WSW	SW	SSW	SW	SSW	SSW	SSW	SW	SSW	SSW	SSW	SSW	SW	SSW	SW	WSW	SW	SSW	SSE	SE	ESE	SE	ESE				
Sep 7	6.9	5.9	4.9	2.0	0.8	0.4	1.4	2.2	6.0	6.4	9.7	17.2	18.4	22.7	23.7	23.4	15.4	15.9	5.5	7.8	6.5	5.9	6.0	7.7	0.4	23.7	6.8	
	ESE	ESE	ESE	NNE	NE	N	E	SE	SSW	WSW	W	W	W	W	W	W	WNW	WNW	W	WNW	W	NW	NW	NW				
Sep 8	8.6	7.8	4.1	2.4	3.1	3.2	5.0	6.2	7.1	8.9	11.3	13.1	11.1	16.0	17.6	14.5	13.1	7.7	6.3	4.9	6.4	2.6	2.1	0.7	0.7	17.6	6.1	
	NW	NNW	NNW	WNW	SW	SW	SW	SW	SW	WSW	W	W	WNW	WNW	WNW	NW	N	NNW	NNW	NW	NW	WNW	WSW	WSW				
Sep 9	0.9	1.5	1.4	1.4	2.1	2.9	3.3	3.9	4.4	5.3	7.3	11.8	11.7	12.0	14.5	12.9	14.7	13.7	7.7	5.5	8.9	9.7	10.2	9.0	0.9	14.7	5.8	
	SW	WSW	WSW	SW	SE	SE	SE	SE	SSE	SSW	SW	WSW	WSW	WSW	WSW	SW	SSW	SSW	S	SSE	SSE	SSE	SSE	S				
Sep 10	9.1	10.0	8.6	9.8	9.4	9.1	9.7	9.4	9.9	8.8	6.1	3.9	3.9	5.2	8.3	14.2	8.2	5.0	1.4	0.7	1.3	1.6	3.9	5.3	0.7	14.2	4.2	
	SSE	S	S	SSE	SSE	S	SSW	SSW	WSW	WSW	WSW	NW	WNW	W	WSW	W	W	WSW	SSE	ESE	E	E	ENE	NNE				
Sep 11	4.3	4.7	5.3	4.0	4.8	4.5	3.2	3.9	5.5	5.8	5.5	7.0	8.7	8.8	9.7	10.9	8.5	8.7	7.2	6.2	5.3	2.7	1.5	1.7	1.5	10.9	5.3	
	NNE	NE	ENE	ENE	ENE	NE	ENE	ENE	NNE	NNE	NNE	NNE	NNE	N	N	N	N	N	NNW	N	NNE	NE	ENE	E				
Sep 12	1.5	0.6	1.0	1.7	1.7	2.2	3.6	3.0	0.9	1.0	2.0	4.1	7.6	8.0	7.9	8.1	10.1	8.0	6.4	7.2	7.6	7.4	8.6	6.0	0.6	10.1	4.7	
	ENE	E	ENE	ESE	E	ENE	ENE	NE	ENE	E	ESE	E	SE	ESE	E	E	E	E	E	E	E	ESE	ESE	ESE				
Sep 13	6.6	5.9	5.3	4.4	3.4	3.8	3.5	2.0	2.5	1.7	3.6	3.3	4.6	7.4	8.3	4.8	6.9	5.8	3.4	1.4	1.9	3.0	1.8	1.0	1.0	8.3	1.8	
	ESE	ESE	ESE	ESE	E	ENE	ENE	NNE	NNE	NNW	N	NW	NW	NW	NW	NNW	NW	NNW	NNE	ENE	ENE	E	E	E				
Sep 14	1.9	1.1	1.5	2.5	2.8	2.1	2.7	4.3	4.8	3.6	4.6	5.4	5.6	6.5	5.3	6.1	6.0	7.4	2.9	4.5	5.5	5.4	4.3	5.6	1.1	7.4	3.5	
	E	E	ESE	SE	SE	ESE	SE	SE	SE	SW	SSW	SW	SSW	SSW	SSE	S	SSE	SSE	SE	ESE	SE	SE	ESE	ESE				
Sep 15	5.4	6.7	8.4	7.8	6.9	2.5	5.6	4.8	5.0	10.5	12.9	13.2	9.8	14.6	12.5	6.8	7.3	3.2	1.3	2.3	4.5	6.3	5.6	4.0	1.3	14.6	6.0	
	ESE	ESE	ESE	ESE	ESE	E	ESE	SE	SSE	S	S	SSW	S	SSE	S	S	S	S	ESE	ESE	SE	SE	SSE	ESE				
Sep 16	2.5	3.8	5.6	3.8	4.8	5.3	5.1	4.7	4.3	5.6	3.9	5.4	7.1	9.0	6.3	5.6	5.5	1.6	0.6	1.6	3.3	3.9	3.3	3.1	0.6	9.0	2.0	
	SE	SE	SE	SSE	SSE	SE	SSE	S	S	SSW	SW	WSW	WSW	WSW	W	WNW	NW	NNE	E	ENE	NE	NNE	WSW	WSW				
Sep 17	3.7	4.4	5.1	4.2	2.3	6.7	5.2	5.4	5.7	7.0	9.5	9.4	4.6	5.9	3.9	7.8	6.1	6.6	3.2	7.2	9.5	9.6	8.5	8.9	2.3	9.6	5.1	
	WSW	SW	SSW	W	NNE	N	N	NNE	N	NNW	N	N	NW	N	N	N	N	NNW	W	NNW	NNW	N	N	NNW				
Sep 18	10.0	7.6	6.2	4.8	2.9	1.3	4.9	3.9	3.9	6.2	10.2	11.2	12.7	12.7	12.3	13.4	12.1	9.5	6.2	6.9	4.2	1.4	1.3	0.7	0.7	13.4	5.0	
	NNW	NNW	NW	WNW	W	SSW	WSW	SSW	S	SSW	SSW	SW	WSW	WSW	SW	WSW	SW	SW	SW	WNW	NNW	SW	SW	WSW				
Sep 19	1.4	3.7	4.4	6.2	9.7	10.2	10.0	10.3	12.2	11.3	12.6	11.4	10.8	10.5	9.4	9.9	9.9	5.6	2.2	0.3	0.5	0.6	0.3	0.2	0.2	12.6	6.6	
	W	WNW	WNW	NW	NW	NW	NW	NNW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	WNW	S	W	SSE	SE	E				
Sep 20	0.2	0.4	0.9	1.7	2.4	2.9	4.1	4.0	5.8	7.9	10.7	11.7	11.7	12.1	12.8	12.6	13.1	12.2	9.3	2.2	3.1	3.9	7.2	6.6	8.3	0.2	13.1	5.5
	E	ESE	E	ESE	SE	SE	SE	SSE	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSE	SE	SE	SE	SE				



PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2022

Summary of Hourly Averages

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

WIND SPEED																															
Maximum Hourly Value:	29.4 kph on September 23 at hour 14																														
Maximum Daily Value:	17.1 kph on September 23																														
Minimum Hourly Value:	0.2 kph on September 3 at hour 18																														
Minimum Daily Value:	1.7 kph on September 28																														
Monthly Average:	3.6 kph																														
Hours in Service:	720																														
Hours of Data:	720																														
Hours of Missing Data:	0																														
Hours of Calibration:	0																														
Operational Uptime:	100																														
WIND DIRECTION																															
Monthly Average:	225 (SW) degree																														
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average					
Sep 21	9.6	11.8	10.6	10.6	11.5	11.4	10.4	9.9	8.5	13.6	12.2	11.2	13.1	14.1	13.5	14.5	12.0	7.0	1.3	1.0	2.7	4.0	3.8	3.8	1.0	14.5	8.4				
Sep 22	SE	SE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	S	S	SSW	SSW	SSW	SSW	SSW	S	ESE	ESE	SE	SE	SE	2.0	20.9	9.1				
Sep 23	3.4	2.0	2.4	3.8	4.0	7.6	13.0	10.7	8.9	10.2	11.5	12.5	12.4	14.6	16.1	15.0	13.4	12.6	10.5	12.3	13.5	12.2	13.5	20.9	7.3	29.4	17.1				
Sep 24	SE	SE	ESE	ESE	ESE	SE	SSE	SSE	S	SSW	SSW	SSW	SSW	SSW	SW	SSW	SSW	SSW	S	S	SSW	SW	SW	WSW	3.2	19.7	12.1				
Sep 25	16.7	18.5	17.8	15.2	12.0	7.7	8.1	7.3	8.8	16.7	19.2	21.5	25.3	28.7	29.4	26.3	22.5	20.7	16.3	15.8	14.9	12.8	14.1	20.9	2.1	13.9	6.0				
Sep 26	WSW	WSW	WSW	W	W	WSW	SW	SW	SW	WSW	WSW	W	WSW	W	W	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	2.7	9.9	5.3				
Sep 27	15.2	13.4	14.3	19.0	16.8	14.0	11.6	12.0	14.9	13.4	19.7	18.2	17.1	17.6	19.0	18.4	16.8	12.7	5.3	3.2	5.8	5.6	7.3	8.0	2.5	17.2	7.6				
Sep 28	SW	SW	SW	WSW	WSW	SW	WSW	WSW	WSW	WSW	W	W	W	W	WSW	W	W	W	S	SW	SW	S	SSE	0.6	11.0	1.7					
Sep 29	9.8	9.2	7.8	7.7	6.7	8.2	7.0	6.8	8.3	10.0	11.1	12.7	13.2	13.9	12.6	8.6	2.4	4.2	2.1	4.4	2.3	3.8	4.1	3.0	1.3	8.9	4.7				
Sep 30	S	SSW	SSE	SSE	SSE	S	S	S	SSW	SSW	SW	WSW	WSW	WSW	W	W	NW	W	SW	SW	SW	SSW	S	SSE	0.6	13.0	4.4				
Sep 30	3.9	3.2	2.7	3.9	3.8	4.8	5.1	4.1	3.8	5.7	6.4	7.9	9.2	9.9	9.9	9.6	8.0	6.3	5.0	5.9	7.9	8.6	7.4	6.9	0.6	11.0	1.7				
Sep 30	SE	SSE	SSW	SE	SE	SE	SSE	SE	SSW	SSW	SW	SW	SSW	SSW	S	S	S	S	SE	SE	SE	SE	SE	SE	1.3	8.9	4.7				
Sep 30	7.7	9.7	6.0	9.8	12.1	7.8	4.1	7.7	10.3	12.4	11.2	12.8	14.6	17.2	15.0	14.2	13.1	6.9	6.8	3.2	3.2	4.1	3.8	2.5	0.6	13.0	4.4				
Sep 30	SE	SE	SE	SSE	SSE	SSE	SSE	S	S	S	SSW	SSW	SSW	SW	SW	SW	SW	SSW	S	ESE	SE	SE	SE	SE	0.6	13.0	4.4				
Sep 30	4.2	1.9	3.5	4.1	3.4	4.2	4.2	3.0	4.4	6.8	9.8	9.3	8.1	8.8	11.0	8.4	4.3	0.6	1.8	2.9	6.9	5.2	4.8	6.1	0.6	11.0	1.7				
Sep 30	SE	ESE	SE	SE	SE	SE	SE	SE	SSE	SW	SSW	SW	SW	WSW	W	WSW	SSE	ENE	NE	NE	NE	NNE	N	N	1.3	8.9	4.7				
Sep 30	7.9	8.9	8.3	8.2	7.1	8.1	5.0	5.9	8.0	5.2	2.7	5.8	6.1	6.4	7.8	5.8	5.0	1.3	1.8	2.7	1.7	2.3	2.8	2.1	0.6	13.0	4.4				
Sep 30	N	NNW	N	NNE	N	N	NNE	NE	ENE	ENE	NE	N	NNE	NNE	NNE	NNE	NNE	NE	ENE	NE	ENE	E	ESE	E	0.6	13.0	4.4				
Sep 30	0.6	2.0	3.7	2.7	2.8	3.7	1.3	4.1	6.4	6.6	9.3	12.5	13.0	8.8	8.5	10.8	7.5	4.8	2.1	2.9	3.6	4.6	10.2	11.6	0.6	13.0	4.4				
Sep 30	ENE	E	E	ESE	E	ESE	ESE	SE	SSE	SSE	S	SSW	SW	SW	SW	SW	WSW	SSW	SE	ESE	SE	SE	SSE	0.6	13.0	4.4					
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	Unit/Maint (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

Reno Station - September 2022

Summary of Hourly Averages

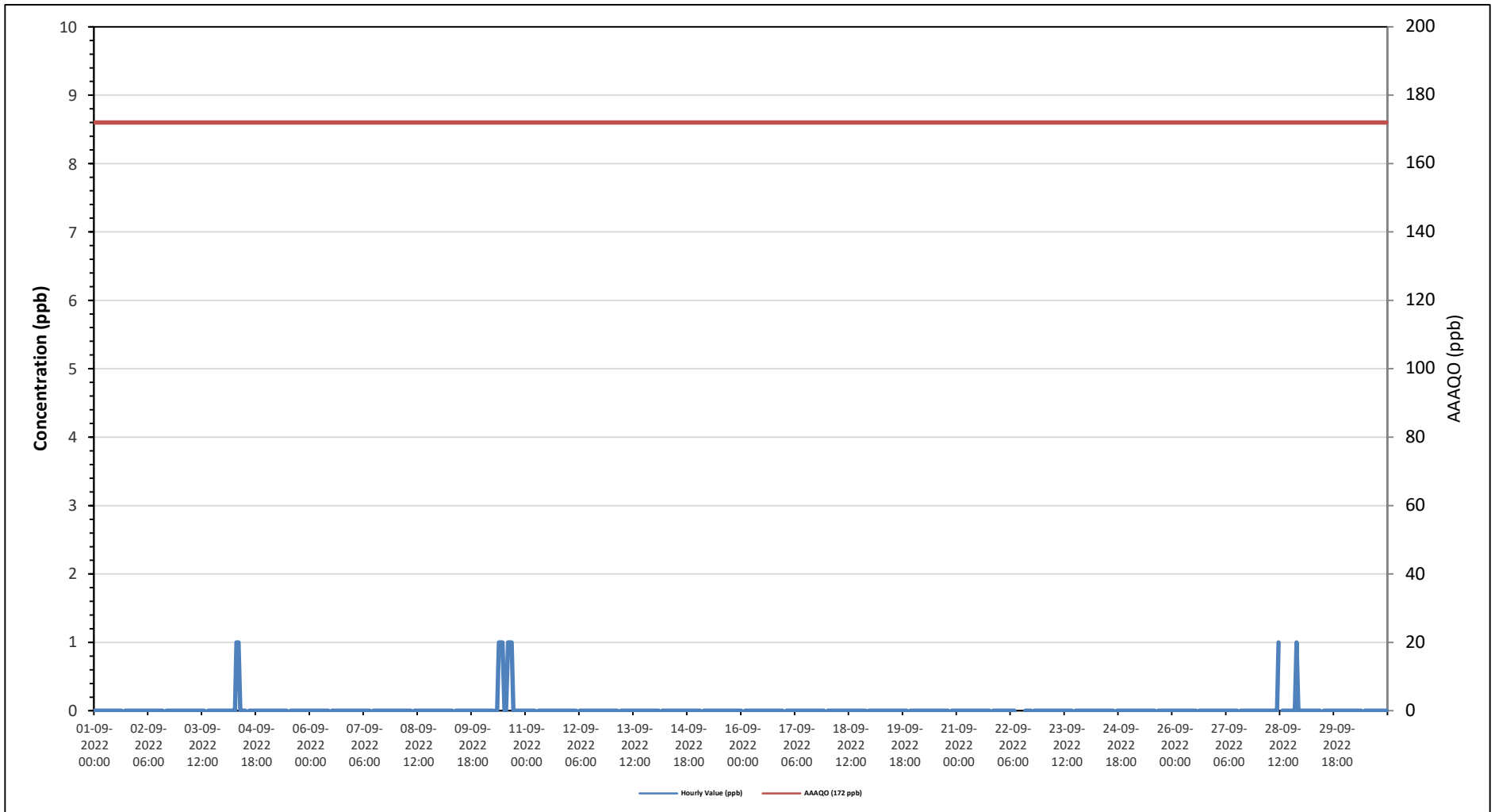
SULPHUR DIOXIDE (SO₂) in ppb

Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb																																									
Number of 1-Hour Exceedances: 0					Number of 24-Hour Exceedances: 0					30-Day Exceedance: 0																															
Maximum Hourly Value: 1 ppb on September 4 at hour 7										Hours in Service: 720																															
Maximum Daily Value: 0.3 ppb on September 10										Hours of Data: 684																															
Minimum Hourly Value: 0 ppb on September 1 at hour 0										Hours of Missing Data: 0																															
Minimum Daily Value: 0.0 ppb on September 1										Hours of Calibration: 36																															
Monthly Average: 0.0 ppb										Operational Uptime: 100.0																															
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23																	
Sep 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 2	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	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 3	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	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 4	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 5	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	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 6	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	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 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	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 8	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	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 9	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	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 10	0	0	0	0	0	0	0	S	0	1	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 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	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 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	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 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	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 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	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 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	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 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	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 17	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 22	0	0	0	0	0	0	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 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	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 25	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	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 26	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	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 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	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 28	0	0	0	0	0	0	0	0	0	0	0	0	1	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 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	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 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	0	0	0	0	0	0	0	0	0	0	0	0	0
Diurnal Maximum	0	0	0	0	0	0	0	1	1	1	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diurnal Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

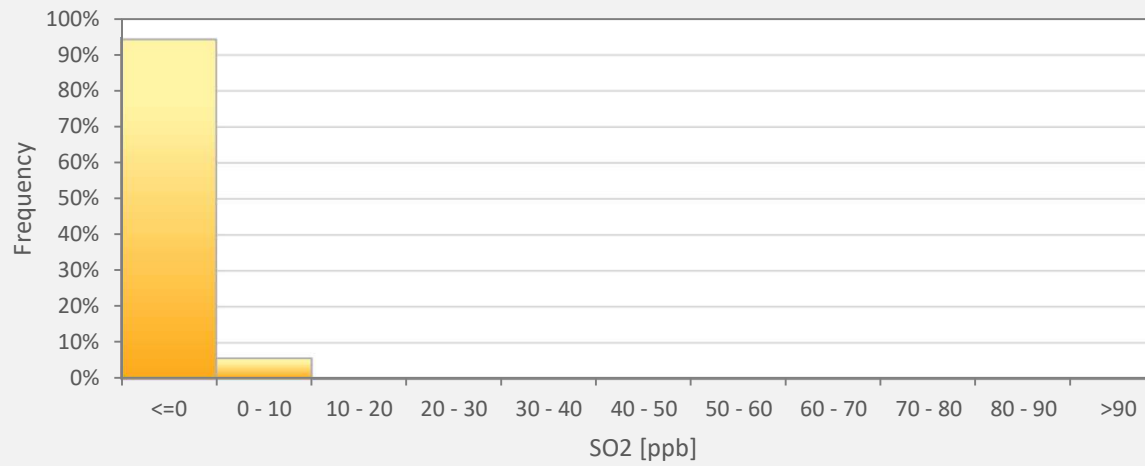
C Monthly Calibration	S Daily Zero-Span Check	Q Quality Assurance	Y Routine Maintenance	P Power Failure
K Collection Error	N No Data (Machine Not in Service)			
X InValid Data (Equipment Malfunction /Recovery)	NRM UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)			

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



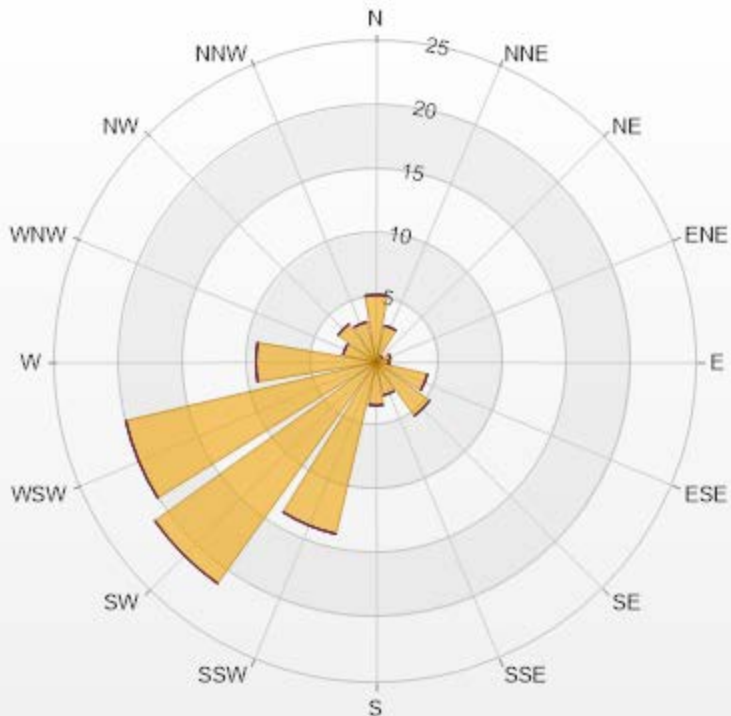
SO2[ppb] Histogram: PRAMP RENO Monthly: 09-2022 1 Hr.



Classes	SO2
<=0	94.30%
0 - 10	5.70%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.00% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	5.26	0	0	0	0	5.26
NNE	2.92	0	0	0	0	2.92
NE	0.58	0	0	0	0	0.58
ENE	1.17	0	0	0	0	1.17
E	1.02	0	0	0	0	1.02
ESE	4.09	0	0	0	0	4.09
SE	5.12	0	0	0	0	5.12
SSE	2.63	0	0	0	0	2.63
S	3.36	0	0	0	0	3.36
SSW	13.74	0	0	0	0	13.74
SW	21.2	0	0	0	0	21.2
WSW	20.03	0	0	0	0	20.03
W	9.36	0	0	0	0	9.36
WNW	2.63	0	0	0	0	2.63
NW	3.65	0	0	0	0	3.65
NNW	3.22	0	0	0	0	3.22
Summary	100	0	0	0	0	100



PRAMP-202209

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% Icon Classes (ppb)

100 0-10

0 10-50

0 50-100

0 100-172

0 >172.0



PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2022

Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

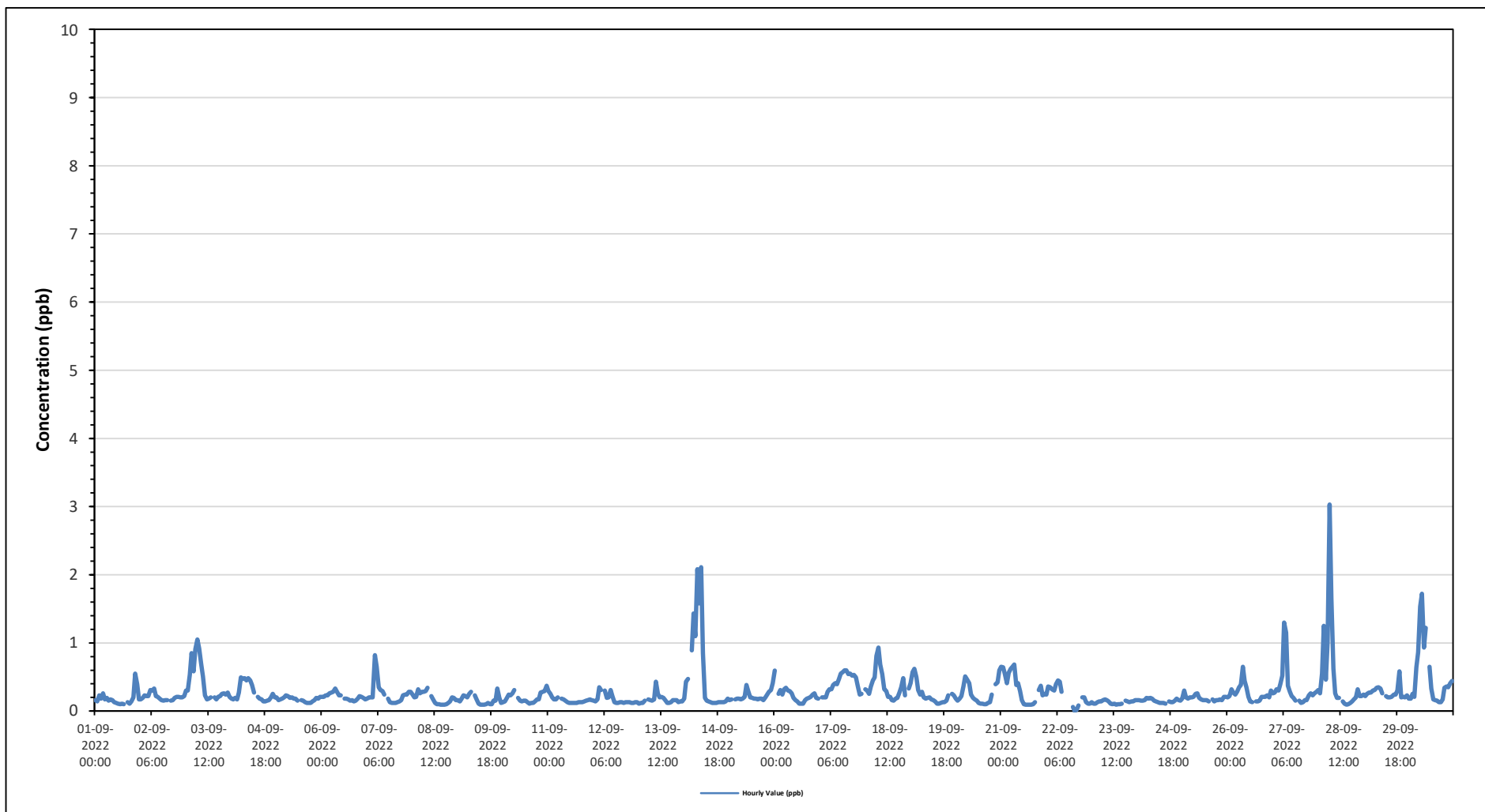
Maximum Hourly Value:	3.03 ppb	on September 28 at hour 6	Hours in Service:	720
Maximum Daily Value:	0.56 ppb	on September 14	Hours of Data:	684
Minimum Hourly Value:	0.00 ppb	on September 22 at hour 15	Hours of Missing Data:	0
Minimum Daily Value:	0.13 ppb	on September 23	Hours of Calibration:	36
Monthly Average:	0.26 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
Sep 1	0.16	0.14	0.23	0.18	0.26	0.17	0.19	0.15	0.17	0.16	0.13	0.12	0.11	0.1	0.11	0.1	S	0.13	0.11	0.14	0.2	0.55	0.39	0.17	0.10	0.55	0.18
Sep 2	0.17	0.19	0.23	0.22	0.22	0.31	0.3	0.33	0.22	0.21	0.18	0.16	0.15	0.16	0.16	S	0.15	0.16	0.19	0.21	0.21	0.2	0.2	0.22	0.15	0.33	0.21
Sep 3	0.3	0.3	0.53	0.85	0.58	0.91	1.05	0.92	0.69	0.51	0.23	0.17	0.18	0.2	S	0.2	0.17	0.21	0.22	0.25	0.26	0.24	0.27	0.21	0.17	1.05	0.41
Sep 4	0.18	0.17	0.19	0.17	0.27	0.49	0.47	0.48	0.45	0.48	0.45	0.38	0.27	S	0.21	0.18	0.17	0.14	0.14	0.15	0.16	0.2	0.25	0.2	0.14	0.49	0.27
Sep 5	0.2	0.16	0.17	0.18	0.2	0.23	0.22	0.19	0.2	0.18	0.18	0.15	S	0.16	0.15	0.13	0.12	0.12	0.12	0.14	0.16	0.19	0.18	0.21	0.12	0.23	0.17
Sep 6	0.21	0.21	0.23	0.23	0.26	0.27	0.28	0.33	0.28	0.23	0.23	S	0.18	0.18	0.17	0.15	0.16	0.14	0.15	0.18	0.22	0.21	0.19	0.17	0.14	0.33	0.21
Sep 7	0.18	0.2	0.2	0.2	0.82	0.65	0.35	0.31	0.29	0.24	S	0.18	0.13	0.12	0.12	0.12	0.13	0.14	0.16	0.23	0.24	0.24	0.28	0.28	0.12	0.82	0.25
Sep 8	0.24	0.2	0.21	0.32	0.26	0.28	0.28	0.29	0.34	S	0.22	0.17	0.12	0.1	0.1	0.09	0.09	0.09	0.1	0.12	0.14	0.2	0.19	0.16	0.09	0.34	0.19
Sep 9	0.16	0.14	0.18	0.23	0.22	0.2	0.25	0.28	S	0.23	0.17	0.11	0.09	0.09	0.09	0.1	0.12	0.1	0.1	0.15	0.15	0.33	0.19	0.12	0.09	0.33	0.17
Sep 10	0.13	0.14	0.19	0.24	0.23	0.26	0.31	S	0.19	0.15	0.14	0.15	0.15	0.13	0.11	0.12	0.12	0.14	0.17	0.17	0.27	0.28	0.29	0.37	0.11	0.37	0.19
Sep 11	0.29	0.25	0.2	0.17	0.17	0.2	S	0.18	0.17	0.15	0.13	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.15	0.16	0.17	0.16	0.12	0.29	0.16
Sep 12	0.15	0.14	0.17	0.35	0.31	S	0.3	0.19	0.2	0.31	0.22	0.13	0.12	0.12	0.13	0.13	0.12	0.13	0.13	0.13	0.12	0.12	0.13	0.13	0.12	0.35	0.17
Sep 13	0.11	0.12	0.12	0.15	S	0.17	0.16	0.15	0.17	0.43	0.25	0.2	0.21	0.19	0.16	0.12	0.12	0.13	0.16	0.16	0.16	0.13	0.14	0.14	0.11	0.43	0.17
Sep 14	0.18	0.43	0.47	S	0.89	1.43	1.1	2.08	1.58	2.11	0.85	0.19	0.15	0.14	0.13	0.12	0.12	0.13	0.13	0.13	0.13	0.14	0.18	0.12	2.11	0.56	
Sep 15	0.16	0.17	S	0.17	0.18	0.18	0.17	0.18	0.21	0.38	0.28	0.2	0.19	0.18	0.18	0.17	0.18	0.18	0.16	0.2	0.24	0.28	0.31	0.41	0.16	0.41	0.22
Sep 16	0.59	S	0.25	0.31	0.24	0.32	0.34	0.3	0.29	0.26	0.19	0.16	0.14	0.11	0.11	0.11	0.16	0.18	0.19	0.21	0.24	0.26	0.19	0.18	0.11	0.59	0.23
Sep 17	S	0.2	0.2	0.2	0.28	0.32	0.32	0.38	0.41	0.39	0.47	0.55	0.57	0.6	0.6	0.54	0.55	0.52	0.53	0.49	0.37	0.24	0.25	S	0.20	0.60	0.41
Sep 18	0.32	0.3	0.25	0.36	0.45	0.49	0.81	0.93	0.68	0.54	0.32	0.29	0.21	0.21	0.16	0.15	0.18	0.19	0.27	0.35	0.48	0.23	S	0.33	0.15	0.93	0.37
Sep 19	0.41	0.57	0.62	0.5	0.31	0.24	0.28	0.2	0.18	0.19	0.2	0.17	0.16	0.14	0.11	0.11	0.12	0.13	0.13	0.15	0.23	S	0.25	0.23	0.11	0.62	0.24
Sep 20	0.18	0.15	0.18	0.22	0.36	0.51	0.46	0.41	0.24	0.19	0.17	0.15	0.12	0.11	0.11	0.1	0.1	0.12	0.13	0.24	S	0.39	0.42	0.6	0.10	0.60	0.25
Sep 21	0.65	0.64	0.54	0.41	0.56	0.62	0.65	0.68	0.38	0.41	0.29	0.16	0.1	0.09	0.09	0.09	0.09	0.1	0.13	S	0.31	0.37	0.23	0.25	0.09	0.68	0.34
Sep 22	0.24	0.36	0.35	0.32	0.3	0.39	0.45	0.43	0.28	C	C	C	C	C	C	0	0.02	0.08	S	0.2	0.2	0.13	0.11	0.11	0.00	0.45	0.22
Sep 23	0.13	0.11	0.11	0.13	0.14	0.14	0.16	0.17	0.16	0.14	0.11	0.1	0.11	0.09	0.1	0.1	0.11	S	0.15	0.14	0.13	0.14	0.14	0.16	0.09	0.17	0.13
Sep 24	0.16	0.16	0.15	0.15	0.16	0.19	0.18	0.19	0.18	0.15	0.14	0.13	0.12	0.12	0.12	0.11	S	0.14	0.13	0.13	0.15	0.18	0.16	0.15	0.11	0.19	0.15
Sep 25	0.18	0.3	0.2	0.18	0.2	0.2	0.21	0.25	0.26	0.19	0.17	0.16	0.16	0.16	0.14	S	0.17	0.14	0.16	0.16	0.17	0.16	0.21	0.21	0.14	0.30	0.19
Sep 26	0.2	0.22	0.32	0.27	0.24	0.28	0.35	0.38	0.65	0.44	0.35	0.21	0.14	0.13	S	0.14	0.14	0.15	0.21	0.21	0.21	0.23	0.2	0.3	0.13	0.65	0.26
Sep 27	0.26	0.27	0.32	0.3	0.39	0.52	1.3	1.15	0.37	0.28	0.22	0.19	0.15	S	0.15	0.12	0.13	0.16	0.16	0.23	0.26	0.23	0.26	0.28	0.12	1.30	0.33
Sep 28	0.31	0.26	0.55	1.25	0.46	1.01	3.03	1.65	0.62	0.26	0.19	0.19	S	0.14	0.11	0.09	0.1	0.12	0.14	0.17	0.2	0.32	0.22	0.22	0.09	3.03	0.50
Sep 29	0.24	0.22	0.25	0.27	0.27	0.3	0.31	0.34	0.35	0.33	0.26	S	0.22	0.2	0.2	0.21	0.24	0.24	0.3	0.58	0.2	0.21	0.2	0.23	0.20	0.58	0.27
Sep 30	0.18	0.18	0.25	0.21	0.64	0.86	1.53	1.72	0.93	1.22	S	0.65	0.33	0.17	0.16	0.15	0.13	0.13	0.17	0.34	0.36	0.35	0.41	0.44	0.13	1.72	0.50
Diurnal Maximum	0.65	0.64	0.62	1.25	0.89	1.43	3.03	2.08	1.58	2.11	0.85	0.65	0.57	0.60	0.60	0.54	0.55	0.52	0.53	0.58	0.48	0.55	0.42	0.60			
Diurnal Average	0.24	0.24	0.27	0.30	0.34	0.42	0.55	0.53	0.38	0.38	0.25	0.21	0.17	0.16	0.15	0.14	0.15	0.15	0.17	0.21	0.22	0.24	0.23	0.24			

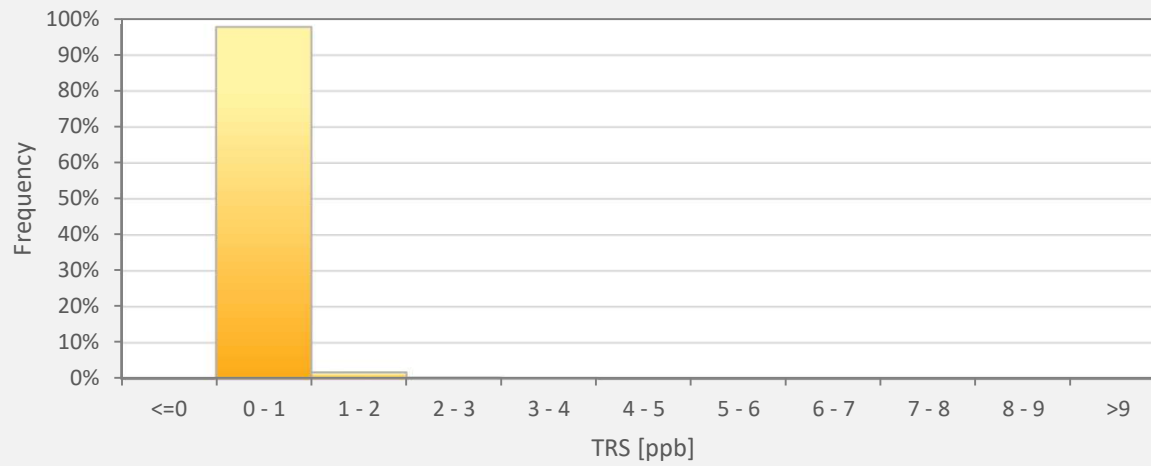
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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

Timeseries Chart of Hourly Average for TRS - Reno Station



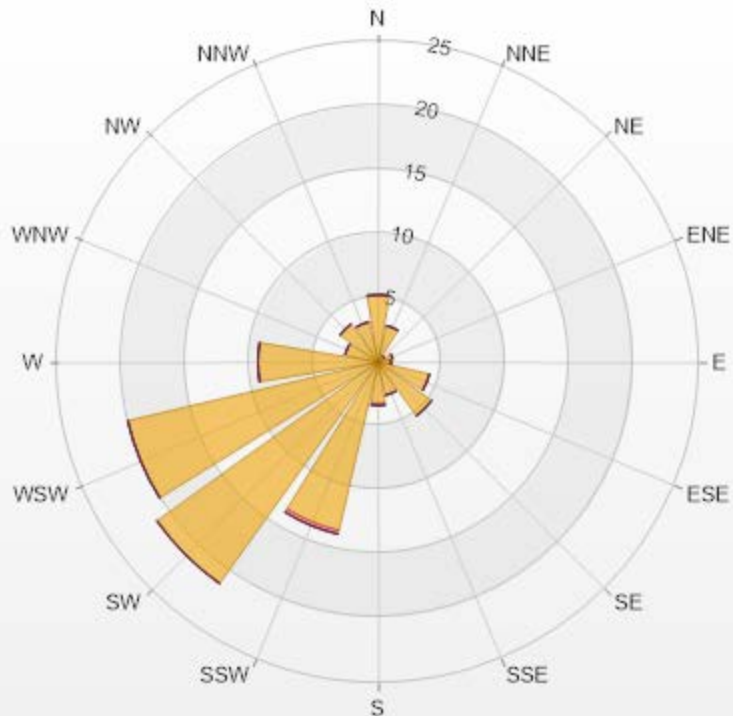
TRS[ppb] Histogram: PRAMP RENO Monthly: 09-2022 1 Hr.



Classes	TRS
<=0	0.00%
0 - 1	97.81%
1 - 2	1.75%
2 - 3	0.29%
3 - 4	0.15%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.00% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	5.26	0	0	0	0	5.26
NNE	2.92	0	0	0	0	2.92
NE	0.58	0	0	0	0	0.58
ENE	1.17	0	0	0	0	1.17
E	1.02	0	0	0	0	1.02
ESE	4.09	0	0	0	0	4.09
SE	5.12	0	0	0	0	5.12
SSE	2.63	0	0	0	0	2.63
S	3.22	0.15	0	0	0	3.37
SSW	13.45	0.29	0	0	0	13.74
SW	21.2	0	0	0	0	21.2
WSW	20.03	0	0	0	0	20.03
W	9.36	0	0	0	0	9.36
WNW	2.63	0	0	0	0	2.63
NW	3.65	0	0	0	0	3.65
NNW	3.22	0	0	0	0	3.22
Summary	100	0.44	0	0	0	100



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% Icon Classes (ppb)

100 0-2

0 2-5

0 5-10

0 10-50

0 >50.0



PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2022

Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

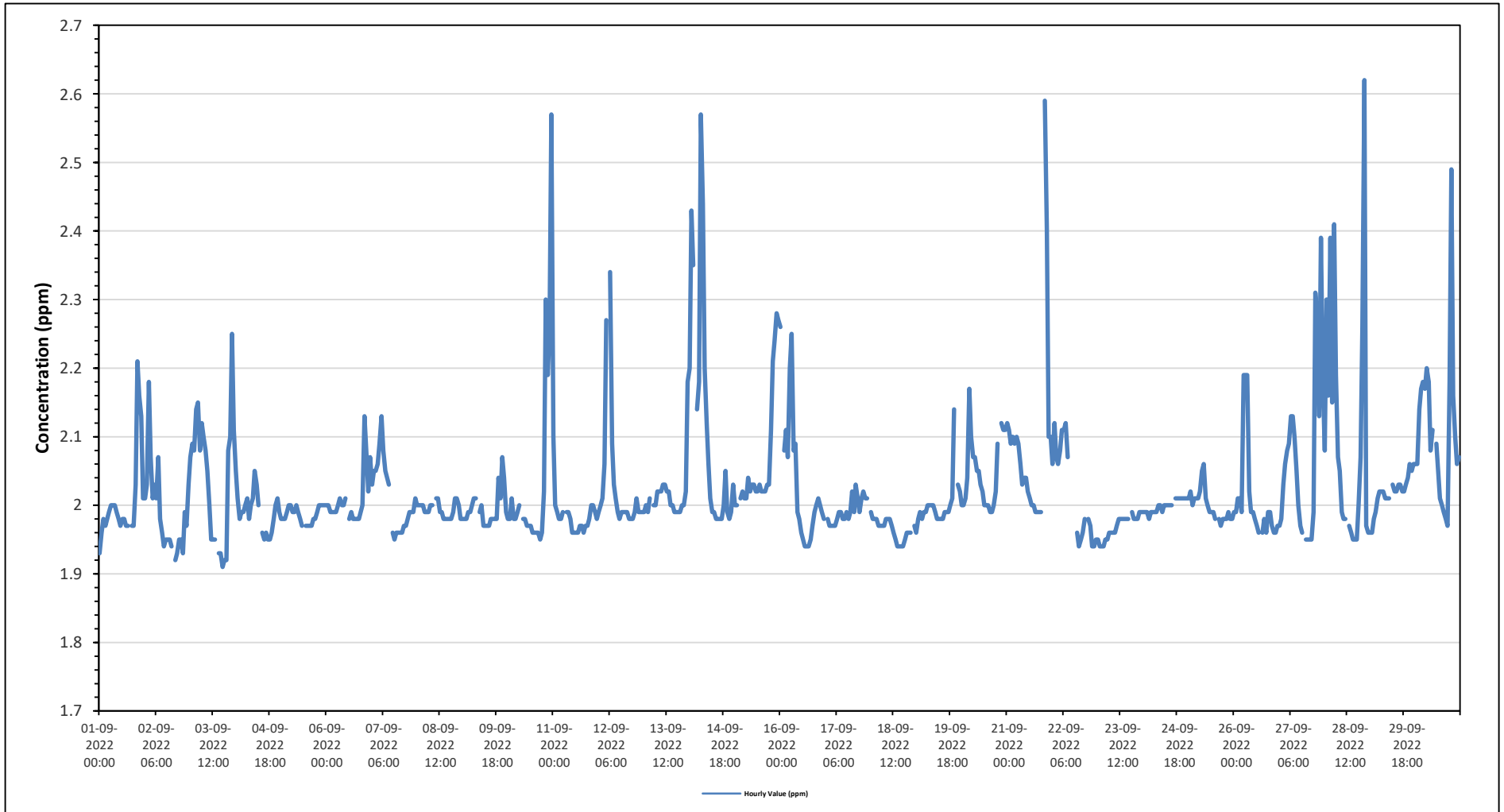
Maximum Hourly Value:	2.62 ppm on September 28 at hour 21	Hours in Service:	720
Maximum Daily Value:	2.11 ppm on September 14	Hours of Data:	685
Minimum Hourly Value:	1.91 ppm on September 3 at hour 17	Hours of Missing Data:	0
Minimum Daily Value:	1.96 ppm on September 18	Hours of Calibration:	35
Monthly Average:	2.02 ppm	Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	1.93	1.96	1.98	1.97	1.98	1.99	2.00	2.00	2.00	1.99	1.98	1.97	1.98	1.98	1.97	1.97	S	1.97	1.97	2.03	2.21	2.16	2.13	2.01	1.93	2.21	2.01	
Sep 2	2.01	2.03	2.18	2.07	2.01	2.03	2.01	2.07	1.98	1.96	1.94	1.95	1.95	1.95	1.94	S	1.92	1.93	1.95	1.95	1.93	1.99	1.97	2.03	1.92	2.18	1.99	
Sep 3	2.07	2.09	2.08	2.14	2.15	2.08	2.12	2.10	2.08	2.05	2.00	1.95	1.95	1.95	S	1.93	1.93	1.91	1.92	1.92	2.08	2.10	2.25	2.11	1.91	2.25	2.04	
Sep 4	2.05	2.01	1.98	1.99	1.99	2.00	2.01	1.98	2.00	2.01	2.05	2.03	2.00	S	1.96	1.95	1.96	1.95	1.95	1.96	1.98	2.00	2.01	1.99	1.95	2.05	1.99	
Sep 5	1.98	1.98	1.98	1.99	2.00	2.00	1.99	1.99	2.00	1.99	1.98	1.97	S	1.97	1.97	1.97	1.97	1.98	1.98	1.99	2.00	2.00	2.00	2.00	1.97	2.00	1.99	
Sep 6	2.00	2.00	1.99	1.99	1.99	1.99	2.00	2.01	2.00	2.00	2.01	S	1.98	1.99	1.98	1.98	1.98	1.98	1.99	2.00	2.13	2.08	2.02	2.07	1.98	2.13	2.01	
Sep 7	2.03	2.05	2.05	2.06	2.09	2.13	2.08	2.05	2.04	2.03	S	1.96	1.95	1.96	1.96	1.96	1.96	1.97	1.97	1.98	1.99	1.99	2.01	1.95	2.13	2.01		
Sep 8	2.00	2.00	2.00	2.00	1.99	1.99	1.99	2.00	2.00	S	2.01	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.99	2.01	2.01	2.00	1.98	1.98	2.01	1.99	
Sep 9	1.98	1.98	1.98	1.99	1.99	2.00	2.01	2.01	S	1.99	2.00	1.97	1.97	1.97	1.97	1.98	1.98	1.98	1.98	2.04	2.01	2.07	2.04	1.99	1.97	2.07	1.99	
Sep 10	1.98	1.98	2.01	1.98	1.98	1.99	2.00	S	1.98	1.98	1.97	1.97	1.97	1.96	1.96	1.96	1.95	1.96	1.95	1.96	2.02	2.30	2.19	2.26	2.57	1.95	2.57	2.04
Sep 11	2.10	2.00	1.99	1.98	1.98	1.99	S	1.99	1.99	1.98	1.96	1.96	1.96	1.96	1.97	1.97	1.96	1.97	1.98	2.00	2.00	1.99	1.98	1.96	2.10	1.98		
Sep 12	1.99	2.00	2.01	2.06	2.27	S	2.34	2.09	2.03	2.01	1.99	1.98	1.99	1.99	1.99	1.99	1.99	1.98	1.98	1.99	2.01	1.99	1.99	1.99	1.98	2.34	2.03	
Sep 13	1.99	2.00	1.99	2.01	S	2.00	2.00	2.02	2.02	2.02	2.02	2.03	2.03	2.02	2.02	2.00	2.00	1.99	1.99	1.99	1.99	2.00	2.00	2.02	2.18	1.99	2.18	2.01
Sep 14	2.20	2.43	2.35	S	2.14	2.18	2.57	2.44	2.20	2.12	2.06	2.01	1.99	1.99	1.98	1.98	1.98	1.98	2.00	2.05	1.99	1.98	1.99	2.03	1.98	2.57	2.11	
Sep 15	2.00	2.00	S	2.01	2.02	2.01	2.01	2.04	2.02	2.03	2.03	2.02	2.02	2.03	2.02	2.02	2.02	2.03	2.03	2.11	2.21	2.24	2.28	2.27	2.00	2.28	2.06	
Sep 16	2.26	S	2.08	2.11	2.07	2.20	2.25	2.08	2.09	1.99	1.98	1.96	1.95	1.94	1.94	1.94	1.95	1.97	1.99	2.00	2.01	2.00	1.99	1.98	1.94	2.26	2.03	
Sep 17	S	1.98	1.97	1.97	1.97	1.97	1.98	1.99	1.99	1.98	1.98	1.99	1.98	1.99	2.02	1.99	2.03	2.01	1.99	2.01	2.02	2.01	2.01	S	1.97	2.03	1.99	
Sep 18	1.99	1.98	1.98	1.98	1.97	1.97	1.97	1.97	1.98	1.98	1.97	1.96	1.95	1.94	1.94	1.94	1.94	1.95	1.96	1.96	1.96	S	1.97	1.94	1.99	1.96	1.96	
Sep 19	1.96	1.98	1.99	1.98	1.99	1.99	2.00	2.00	2.00	2.00	1.99	1.98	1.98	1.98	1.98	1.99	1.99	1.99	2.00	2.01	2.14	S	2.03	2.02	1.96	2.14	2.00	
Sep 20	2.00	2.00	2.01	2.04	2.17	2.10	2.07	2.07	2.05	2.05	2.03	2.02	2.00	2.00	2.00	1.99	1.99	2.00	2.02	2.09	S	2.12	2.11	2.11	1.99	2.17	2.05	
Sep 21	2.12	2.11	2.09	2.10	2.09	2.10	2.09	2.06	2.03	2.04	2.04	2.02	2.01	2.00	2.00	1.99	1.99	1.99	1.99	S	2.59	2.40	2.10	2.10	1.99	2.59	2.09	
Sep 22	2.06	2.12	2.07	2.06	2.08	2.11	2.11	2.12	2.07	C	C	C	C	1.96	1.94	1.95	1.96	1.98	S	S	1.97	1.94	1.94	1.95	1.94	2.12	2.02	
Sep 23	1.95	1.94	1.94	1.94	1.95	1.95	1.96	1.96	1.96	1.96	1.97	1.98	1.98	1.98	1.98	1.98	1.98	1.98	S	1.99	1.98	1.98	1.98	1.99	1.99	1.94	1.99	1.97
Sep 24	1.99	1.99	1.99	1.98	1.99	1.99	1.99	1.99	2.00	2.00	1.99	2.00	2.00	2.00	2.00	2.00	S	2.01	2.01	2.01	2.01	2.01	2.01	2.01	1.98	2.01	2.00	
Sep 25	2.01	2.02	2.00	2.01	2.01	2.01	2.02	2.05	2.06	2.01	2.00	1.99	1.99	1.98	S	1.98	1.97	1.98	1.98	1.98	1.99	1.98	1.98	1.98	1.97	2.06	2.00	
Sep 26	1.99	1.99	2.01	2.01	1.99	2.19	2.19	2.19	2.02	1.99	1.99	1.98	1.97	1.96	S	1.96	1.98	1.96	1.99	1.99	1.97	1.96	1.96	1.97	1.96	2.19	2.01	
Sep 27	1.97	1.98	2.03	2.06	2.08	2.09	2.13	2.13	2.10	2.05	2.00	1.97	1.96	S	1.95	1.95	1.95	1.95	1.99	2.31	2.27	2.13	2.39	2.19	1.95	2.39	2.07	
Sep 28	2.08	2.30	2.16	2.39	2.15	2.41	2.19	2.07	2.05	1.99	1.98	1.98	S	1.97	1.96	1.95	1.95	1.95	2.00	2.07	2.26	2.62	1.97	1.96	1.95	2.62	2.10	
Sep 29	1.96	1.96	1.98	1.99	2.01	2.02	2.02	2.02	2.01	2.01	S	2.03	2.02	2.02	2.03	2.03	2.02	2.02	2.03	2.04	2.06	2.05	2.06	1.96	2.06	2.02	2.02	
Sep 30	2.06	2.06	2.14	2.17	2.18	2.17	2.20	2.18	2.08	2.11	S	2.09	2.05	2.01	2.00	1.99	1.98	1.97	2.18	2.49	2.16	2.10	2.06	2.07	1.97	2.49	2.11	
Diurnal Maximum	2.26	2.43	2.35	2.39	2.27	2.41	2.57	2.44	2.20	2.12	2.06	2.09	2.05	2.03	2.02	2.03	2.03	2.03	2.18	2.49	2.59	2.62	2.39	2.57				
Diurnal Average	2.02	2.03	2.03	2.04	2.04	2.06	2.08	2.06	2.03	2.01	2.00	1.99	1.98	1.98	1.98	1.97	1.97	1.97	1.99	2.03	2.08	2.07	2.05	2.05				

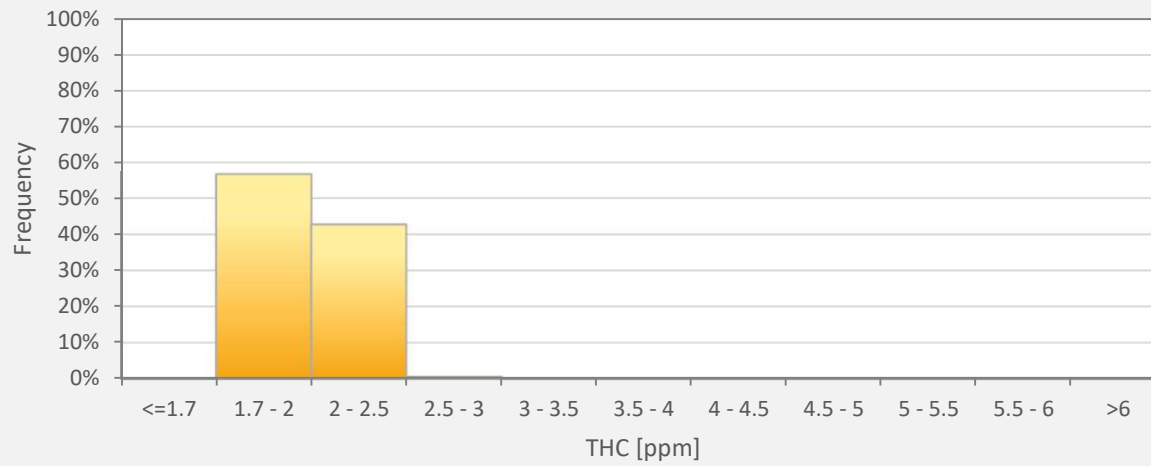
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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

Timeseries Chart of Hourly Average for THC - Reno Station



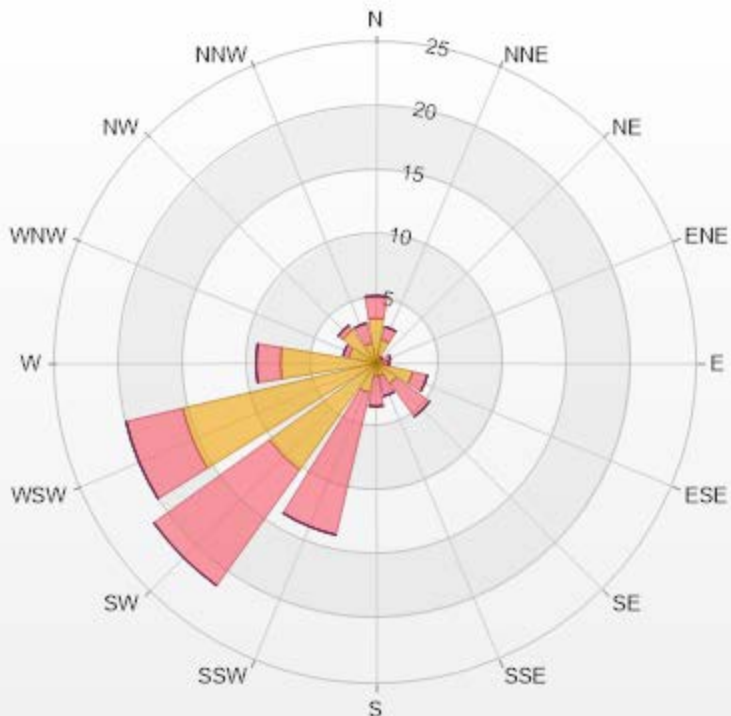
THC55[ppm] Histogram: PRAMP RENO Monthly: 09-2022 1 Hr.



Classes	THC55
<=1.7	0.00%
1.7 - 2	56.64%
2 - 2.5	42.77%
2.5 - 3	0.58%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.14% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	3.5	1.75	0	0	0	5.25
NNE	1.9	1.02	0	0	0	2.92
NE	0.44	0.15	0	0	0	0.59
ENE	0.44	0.73	0	0	0	1.17
E	0.58	0.44	0	0	0	1.02
ESE	2.92	1.17	0	0	0	4.09
SE	1.9	3.21	0	0	0	5.11
SSE	1.02	1.61	0	0	0	2.63
S	1.02	2.34	0	0	0	3.36
SSW	2.34	11.39	0	0	0	13.73
SW	10.22	11.09	0	0	0	21.31
WSW	15.47	4.53	0	0	0	20
W	7.45	1.9	0	0	0	9.35
WNW	2.19	0.44	0	0	0	2.63
NW	3.21	0.44	0	0	0	3.65
NNW	1.61	1.61	0	0	0	3.22
Summary	56.21	43.82	0	0	0	100



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% Icon Classes (ppm)	56	0-2	44	2-5	0	5-10	0	10-40	0	>40.0
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PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2022

Summary of Hourly Averages

METHANE (CH₄) in ppm

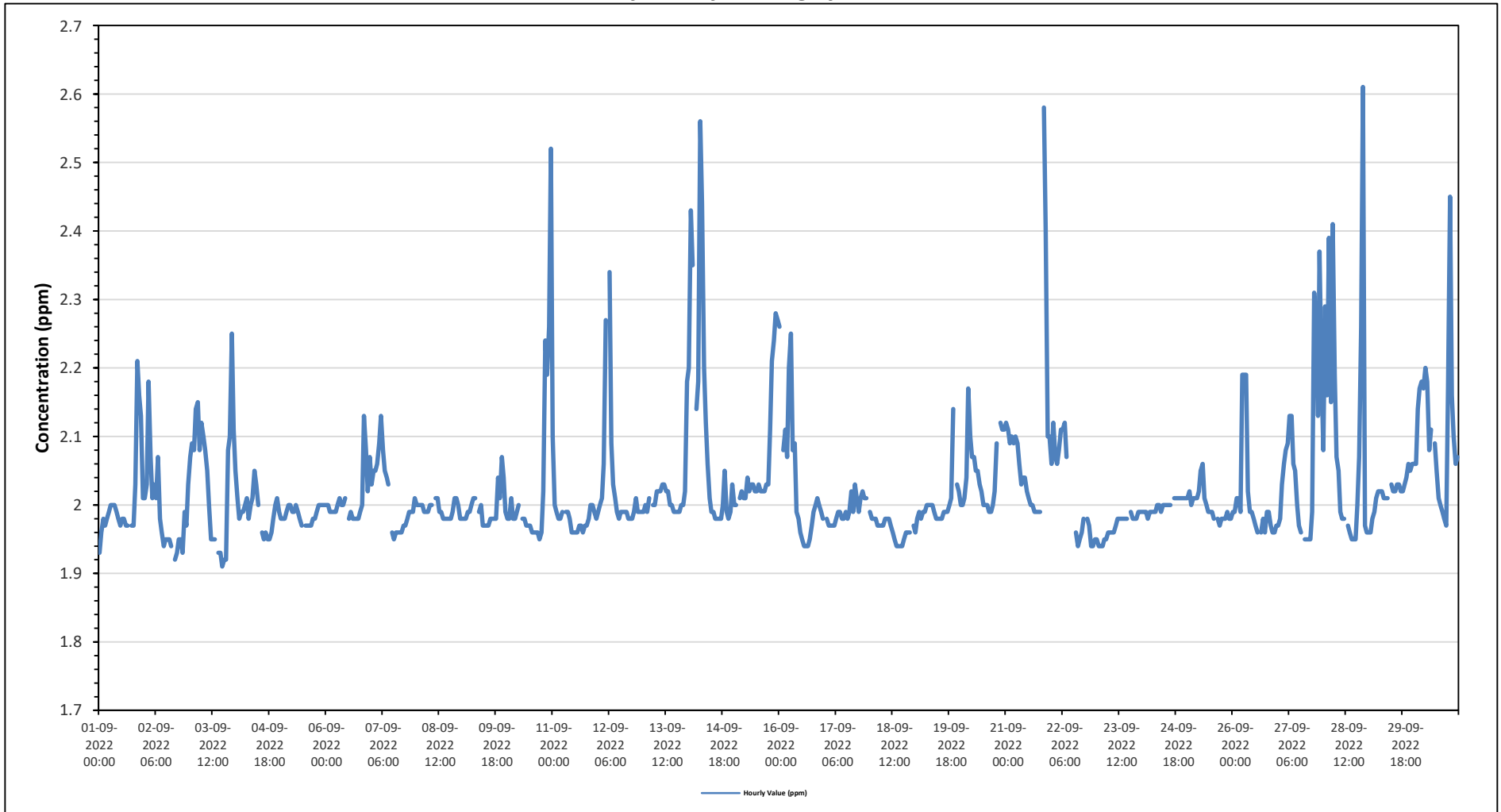
Maximum Hourly Value:	2.61 ppm on September 28 at hour 21	Hours in Service:	720
Maximum Daily Value:	2.11 ppm on September 14	Hours of Data:	685
Minimum Hourly Value:	1.91 ppm on September 3 at hour 17	Hours of Missing Data:	0
Minimum Daily Value:	1.96 ppm on September 18	Hours of Calibration:	35
Monthly Average:	2.02 ppm	Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average						
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23					
Sep 1	1.93	1.96	1.98	1.97	1.98	1.99	2.00	2.00	2.00	1.99	1.98	1.97	1.98	1.98	1.97	1.97	S	1.97	1.97	2.03	2.21	2.16	2.13	2.01	1.93	2.21	2.01					
Sep 2	2.01	2.03	2.18	2.07	2.01	2.03	2.01	2.07	1.98	1.96	1.94	1.95	1.95	1.95	1.94	S	1.92	1.93	1.95	1.95	1.93	1.99	1.97	2.03	1.92	2.18	1.99					
Sep 3	2.07	2.09	2.08	2.14	2.15	2.08	2.12	2.10	2.08	2.05	2.00	1.95	1.95	1.95	S	1.93	1.93	1.91	1.92	1.92	2.08	2.10	2.25	2.11	1.91	2.25	2.04					
Sep 4	2.05	2.01	1.98	1.99	1.99	2.00	2.01	1.98	2.00	2.01	2.05	2.03	2.00	S	1.96	1.95	1.96	1.95	1.95	1.96	1.98	2.00	2.01	1.99	1.95	2.05	1.99					
Sep 5	1.98	1.98	1.98	1.99	2.00	2.00	1.99	1.99	2.00	1.99	1.98	1.97	S	1.97	1.97	1.97	1.97	1.98	1.98	1.99	2.00	2.00	2.00	2.00	1.97	2.00	1.99					
Sep 6	2.00	2.00	1.99	1.99	1.99	1.99	2.00	2.01	2.00	2.00	2.01	S	1.98	1.99	1.98	1.98	1.98	1.98	1.99	2.00	2.13	2.08	2.02	2.07	1.98	2.13	2.01					
Sep 7	2.03	2.05	2.05	2.06	2.09	2.13	2.08	2.05	2.04	2.03	S	1.96	1.95	1.96	1.96	1.96	1.96	1.97	1.97	1.98	1.99	1.99	2.01	1.95	2.13	2.01						
Sep 8	2.00	2.00	2.00	2.00	1.99	1.99	1.99	2.00	2.00	S	2.01	1.91	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.99	2.01	2.01	2.00	1.98	1.98	2.01	1.99					
Sep 9	1.98	1.98	1.98	1.99	1.99	2.00	2.01	2.01	S	1.99	2.00	1.97	1.97	1.97	1.97	1.98	1.98	1.98	1.98	2.04	2.01	2.07	2.04	1.99	1.97	2.07	1.99					
Sep 10	1.98	1.98	2.01	1.98	1.98	1.99	2.00	S	1.98	1.98	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.95	1.96	2.02	2.24	2.19	2.26	2.52	1.95	2.52	2.03					
Sep 11	2.10	2.00	1.99	1.98	1.98	1.99	S	1.99	1.99	1.98	1.96	1.96	1.96	1.96	1.97	1.97	1.96	1.97	1.98	2.00	2.00	1.99	1.98	1.96	2.10	1.98						
Sep 12	1.99	2.00	2.01	2.06	2.27	S	2.34	2.09	2.03	2.01	1.99	1.98	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.99	2.01	1.99	1.99	1.99	1.98	2.34	2.03					
Sep 13	1.99	2.00	1.99	2.01	S	2.00	2.00	2.02	2.02	2.02	2.02	2.03	2.03	2.02	2.02	2.00	2.00	1.99	1.99	1.99	1.99	2.00	2.00	2.02	2.18	1.99	2.18	2.01				
Sep 14	2.20	2.43	2.35	S	2.14	2.18	2.56	2.44	2.20	2.12	2.06	2.01	1.99	1.99	1.98	1.98	1.98	1.98	2.00	2.05	1.99	1.98	1.99	2.03	1.98	2.56	2.11					
Sep 15	2.00	2.00	S	2.01	2.02	2.01	2.01	2.04	2.02	2.03	2.03	2.02	2.02	2.03	2.02	2.02	2.02	2.03	2.03	2.11	2.21	2.24	2.28	2.27	2.00	2.28	2.06					
Sep 16	2.26	S	2.08	2.11	2.07	2.20	2.25	2.08	2.09	1.99	1.98	1.96	1.95	1.94	1.94	1.94	1.95	1.97	1.99	2.00	2.01	2.00	1.99	1.98	1.94	2.26	2.03					
Sep 17	S	1.98	1.97	1.97	1.97	1.97	1.98	1.99	1.99	1.98	1.98	1.99	1.98	1.99	2.02	1.99	2.03	2.01	1.99	2.01	2.02	2.01	2.01	S	1.97	2.03	1.99					
Sep 18	1.99	1.98	1.98	1.98	1.97	1.97	1.97	1.97	1.98	1.98	1.97	1.96	1.95	1.94	1.94	1.94	1.94	1.95	1.96	1.96	1.96	S	1.97	1.94	1.99	1.96	1.96					
Sep 19	1.96	1.98	1.99	1.98	1.99	1.99	2.00	2.00	2.00	2.00	1.99	1.98	1.98	1.98	1.98	1.99	1.99	1.99	2.00	2.01	2.14	S	2.03	2.02	1.96	2.14	2.00					
Sep 20	2.00	2.00	2.01	2.04	2.17	2.10	2.07	2.07	2.05	2.05	2.03	2.02	2.00	2.00	2.00	1.99	1.99	2.00	2.02	2.09	S	2.12	2.11	2.11	1.99	2.17	2.05					
Sep 21	2.12	2.11	2.09	2.10	2.09	2.10	2.09	2.06	2.03	2.04	2.04	2.02	2.01	2.00	2.00	1.99	1.99	1.99	1.99	S	2.58	2.40	2.10	2.10	1.99	2.58	2.09					
Sep 22	2.06	2.12	2.07	2.06	2.08	2.11	2.11	2.12	2.07	C	C	C	C	1.96	1.94	1.95	1.96	1.98	S	S	1.97	1.94	1.94	1.95	1.94	2.12	2.02					
Sep 23	1.95	1.94	1.94	1.94	1.95	1.95	1.96	1.96	1.96	1.96	1.97	1.98	1.98	1.98	1.98	1.98	1.98	1.98	S	1.99	1.98	1.98	1.98	1.99	1.94	1.99	1.97					
Sep 24	1.99	1.99	1.99	1.98	1.99	1.99	1.99	1.99	2.00	2.00	1.99	2.00	2.00	2.00	2.00	2.00	2.00	S	2.01	2.01	2.01	2.01	2.01	2.01	1.98	2.01	2.00					
Sep 25	2.01	2.02	2.00	2.01	2.01	2.01	2.02	2.05	2.06	2.01	2.00	1.99	1.99	1.98	S	1.98	1.97	1.98	1.98	1.98	1.99	1.98	1.98	1.98	1.97	2.06	2.00					
Sep 26	1.99	1.99	2.01	2.01	1.99	2.19	2.19	2.19	2.02	1.99	1.99	1.98	1.97	1.96	S	1.96	1.98	1.96	1.99	1.99	1.97	1.96	1.96	1.97	1.96	2.19	2.01					
Sep 27	1.97	1.98	2.03	2.06	2.08	2.09	2.13	2.13	2.06	2.05	2.00	1.97	1.96	S	1.95	1.95	1.95	1.95	1.99	2.31	2.27	2.13	2.37	2.19	1.95	2.37	2.07					
Sep 28	2.08	2.29	2.16	2.39	2.15	2.41	2.19	2.07	2.05	1.99	1.98	1.98	S	1.97	1.96	1.95	1.95	1.95	2.00	2.07	2.26	2.61	1.97	1.96	1.95	2.61	2.10					
Sep 29	1.96	1.96	1.98	1.99	2.01	2.02	2.02	2.02	2.01	2.01	S	2.03	2.02	2.02	2.03	2.03	2.02	2.02	2.03	2.04	2.06	2.05	2.06	1.96	2.06	2.02	2.02					
Sep 30	2.06	2.06	2.14	2.17	2.18	2.17	2.20	2.18	2.08	2.11	S	2.09	2.05	2.01	2.00	1.99	1.98	1.97	2.17	2.45	2.16	2.10	2.06	2.07	1.97	2.45	2.11					
Diurnal Maximum	2.26	2.43	2.35	2.39	2.27	2.41	2.56	2.44	2.20	2.12	2.06	2.09	2.05	2.03	2.02	2.03	2.03	2.03	2.17	2.45	2.58	2.61	2.37	2.52								
Diurnal Average	2.02	2.03	2.03	2.04	2.04	2.06	2.08	2.06	2.03	2.01	2.00	1.99	1.98	1.98	1.98	1.97	1.97	1.97	1.99	2.03	2.07	2.07	2.05	2.05								
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)																				

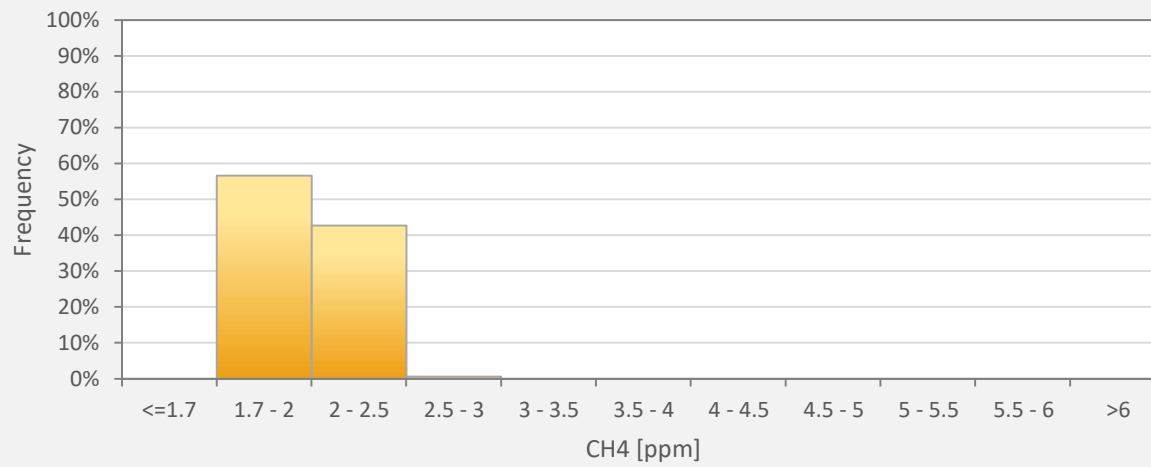
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

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



CH4[ppm] Histogram: PRAMP RENO Monthly: 09-2022 1 Hr.



Classes	CH4
<=1.7	0.00%
1.7 - 2	56.64%
2 - 2.5	42.77%
2.5 - 3	0.58%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.14% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	3.5	1.75	0	0	0	5.25
NNE	1.9	1.02	0	0	0	2.92
NE	0.44	0.15	0	0	0	0.59
ENE	0.44	0.73	0	0	0	1.17
E	0.58	0.44	0	0	0	1.02
ESE	2.92	1.17	0	0	0	4.09
SE	1.9	3.21	0	0	0	5.11
SSE	1.02	1.61	0	0	0	2.63
S	1.02	2.34	0	0	0	3.36
SSW	2.34	11.39	0	0	0	13.73
SW	10.22	11.09	0	0	0	21.31
WSW	15.47	4.53	0	0	0	20
W	7.45	1.9	0	0	0	9.35
WNW	2.19	0.44	0	0	0	2.63
NW	3.21	0.44	0	0	0	3.65
NNW	1.61	1.61	0	0	0	3.22
Summary	56.21	43.82	0	0	0	100



PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2022

Summary of Hourly Averages

NON-METHANE HYDROCARBONS (NMHC) in ppm

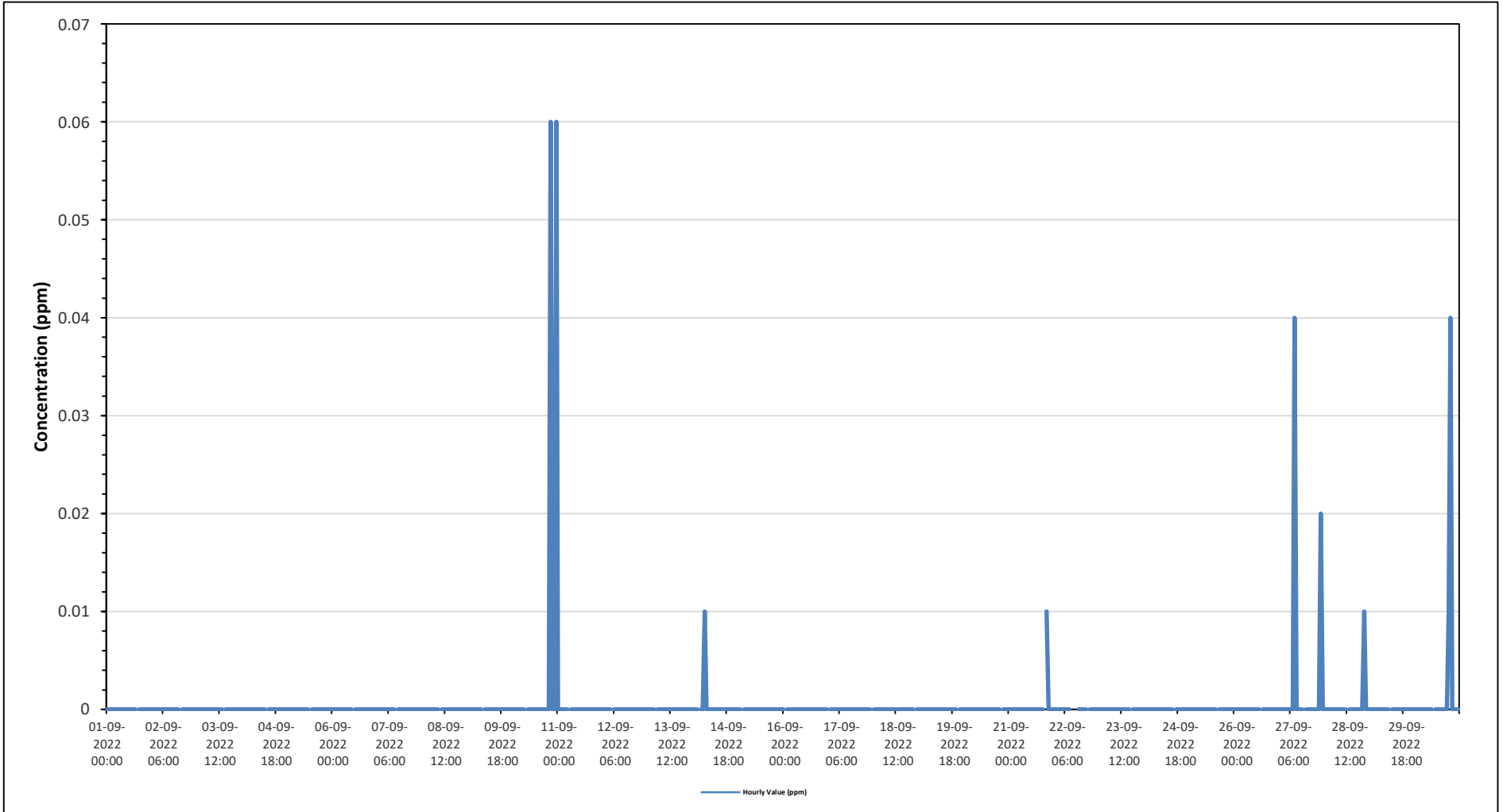
Summary statistics table including Maximum Hourly Value, Maximum Daily Value, Minimum Hourly Value, Minimum Daily Value, Monthly Average, Hours in Service, Hours of Data, Hours of Missing Data, Hours of Calibration, and Operational Uptime.

Main data table with columns for Day (Sep 1-30), Hourly Period (0-23 MST), and Daily Minimum/Maximum/Average values. Includes status indicators like 'S' for calibration and 'C' for collection errors.

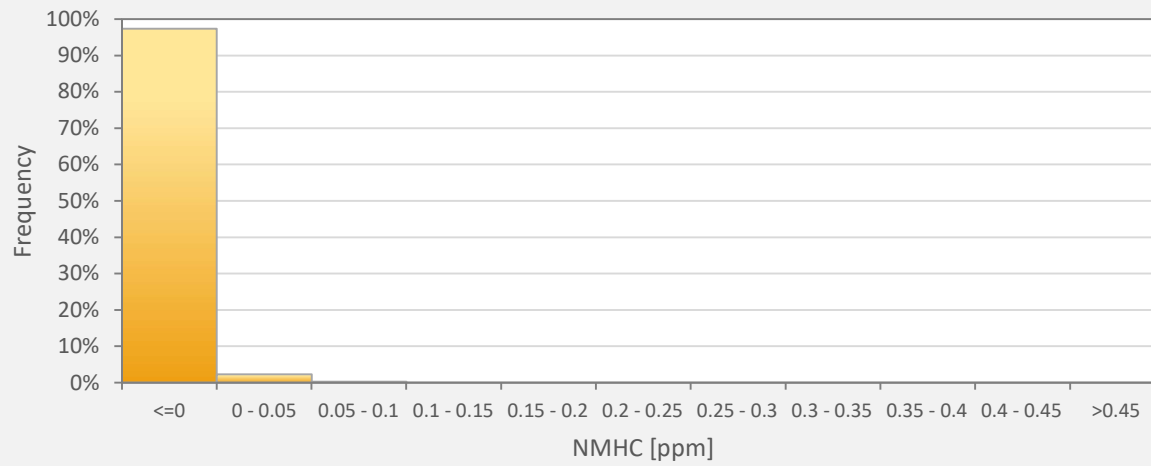
Legend table defining status codes: C (Monthly Calibration), K (Collection Error), X (Invalid Data), S (Daily Zero-Span Check), N (No Data), NRM (UnitMaint), Q (Quality Assurance), Y (Routine Maintenance), P (Power Failure).

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

Timeseries Chart of Hourly Average for NMHC - Reno Station



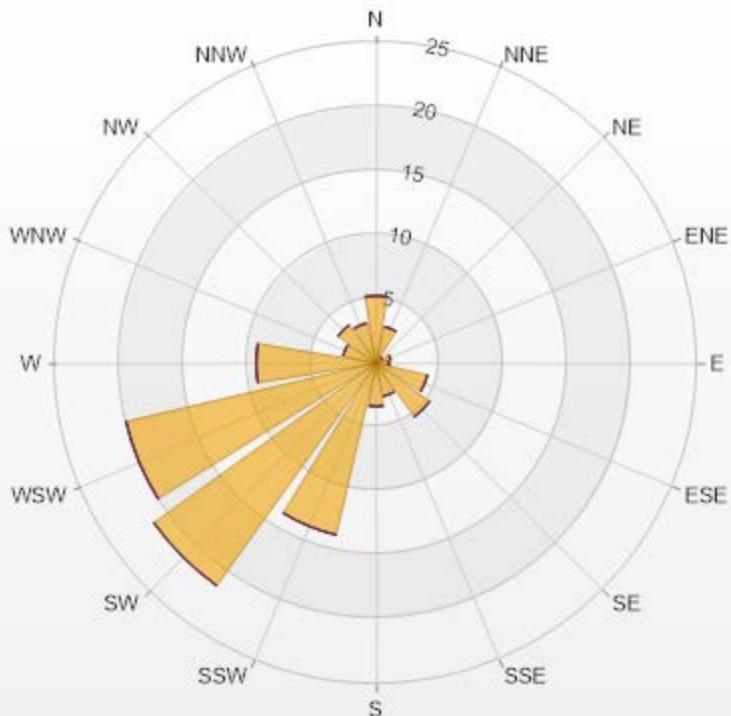
NMHC[ppm] Histogram: PRAMP RENO Monthly: 09-2022 1 Hr.



Classes	NMHC
<=0	97.37%
0 - 0.05	2.34%
0.05 - 0.1	0.29%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.14% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	5.26	0	0	0	0	5.26
NNE	2.92	0	0	0	0	2.92
NE	0.58	0	0	0	0	0.58
ENE	1.17	0	0	0	0	1.17
E	1.02	0	0	0	0	1.02
ESE	4.09	0	0	0	0	4.09
SE	5.11	0	0	0	0	5.11
SSE	2.63	0	0	0	0	2.63
S	3.36	0	0	0	0	3.36
SSW	13.72	0	0	0	0	13.72
SW	21.31	0	0	0	0	21.31
WSW	20	0	0	0	0	20
W	9.34	0	0	0	0	9.34
WNW	2.63	0	0	0	0	2.63
NW	3.65	0	0	0	0	3.65
NNW	3.21	0	0	0	0	3.21
Summary	100	0	0	0	0	100



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% 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

Reno Station - September 2022

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

Maximum Hourly Value:	98 %	on September 18 at hour 2	Hours in Service:	720
Maximum Daily Value:	93.4 %	on September 17	Hours of Data:	720
Minimum Hourly Value:	19 %	on September 3 at hour 14	Hours of Missing Data:	0
Minimum Daily Value:	42.8 %	on September 23	Hours of Calibration:	0
Monthly Average:	59.9 %		Operational Uptime:	100.0

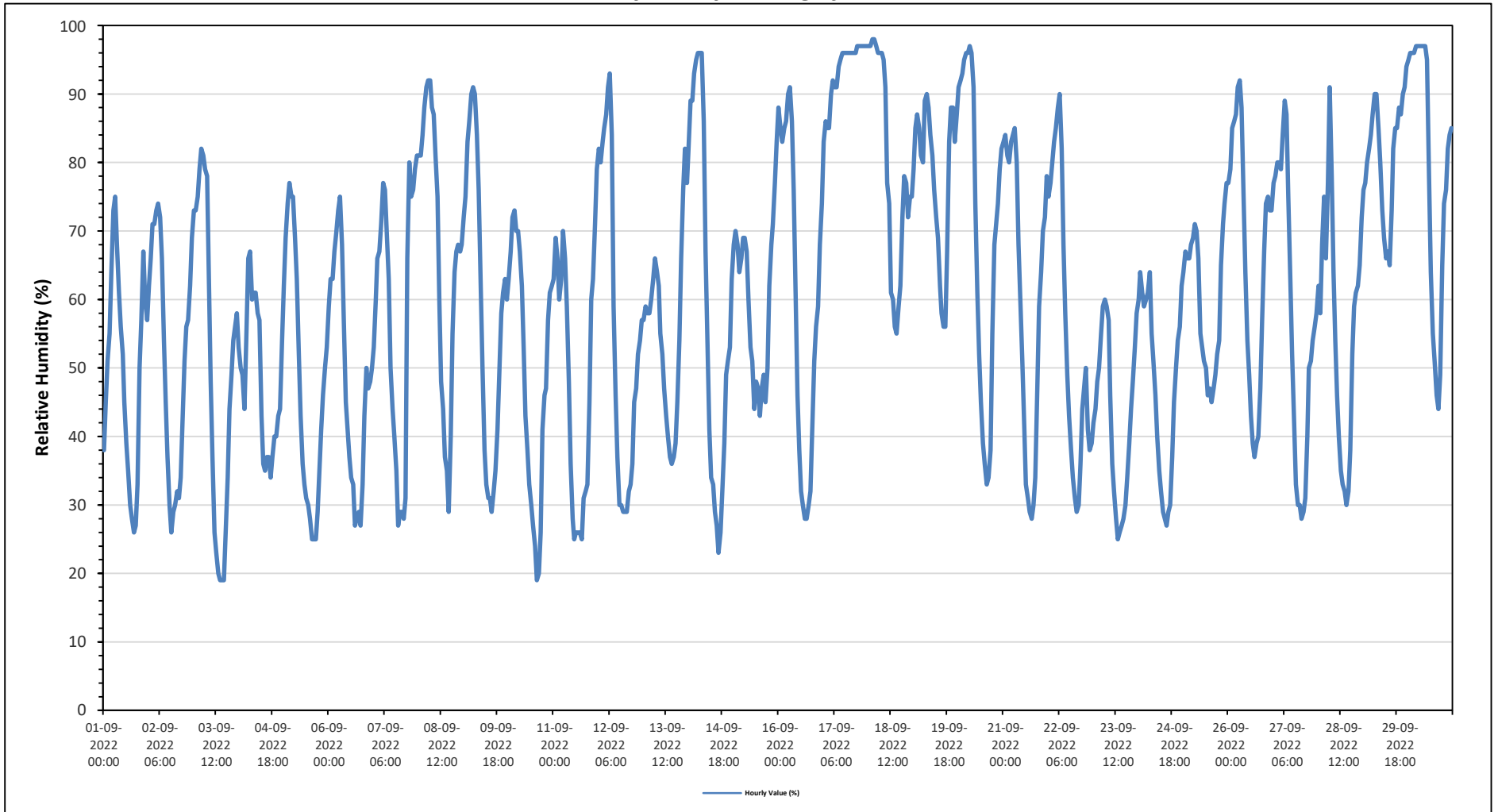
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	38	45	51	55	64	73	75	68	61	56	52	45	39	35	30	28	26	27	33	50	57	67	60	57	26	75	49.7	
Sep 2	62	66	71	71	73	74	72	66	54	45	37	30	26	29	30	32	31	34	42	51	56	57	62	69	26	74	51.7	
Sep 3	73	73	75	79	82	81	79	78	65	48	37	26	23	20	19	19	19	26	34	44	49	54	56	58	19	82	50.7	
Sep 4	53	50	49	44	54	66	67	60	61	61	58	57	43	36	35	37	37	34	37	40	40	43	44	54	34	67	48.3	
Sep 5	62	69	74	77	75	75	69	63	52	43	36	33	31	30	28	25	25	25	29	35	41	46	50	53	25	77	47.8	
Sep 6	59	63	63	67	70	73	75	68	57	45	41	37	34	33	27	28	29	27	33	43	50	47	48	50	27	75	48.6	
Sep 7	53	60	66	67	71	77	76	69	63	50	44	40	35	27	29	29	28	31	66	80	75	76	79	81	27	81	57.2	
Sep 8	81	81	84	88	91	92	92	88	87	81	75	60	48	44	37	35	29	40	55	64	67	68	67	68	29	92	67.6	
Sep 9	72	75	83	86	90	91	90	84	76	62	50	38	33	31	31	29	32	35	41	49	58	61	63	60	29	91	59.2	
Sep 10	63	67	72	73	70	70	67	62	53	43	38	33	30	27	24	19	20	26	41	46	47	57	61	62	19	73	48.8	
Sep 11	63	69	66	60	63	70	66	59	48	36	28	25	26	26	26	25	31	32	33	45	60	63	71	79	25	79	48.8	
Sep 12	82	80	83	85	87	91	93	84	59	46	37	30	30	29	29	29	32	33	36	45	47	52	54	57	29	93	55.4	
Sep 13	57	59	58	58	60	63	66	64	62	55	52	47	43	40	37	36	37	39	45	54	66	76	82	77	36	82	55.5	
Sep 14	82	89	89	93	95	96	96	96	86	67	53	41	34	33	29	27	23	26	32	39	49	51	53	63	23	96	60.1	
Sep 15	68	70	68	64	66	69	69	67	60	53	51	44	48	47	43	47	49	45	50	62	68	71	77	83	43	83	60.0	
Sep 16	88	85	83	85	86	90	91	86	76	62	46	38	32	30	28	28	30	32	41	51	56	59	68	74	28	91	60.2	
Sep 17	83	86	85	85	90	92	91	91	94	95	96	96	96	96	96	96	96	96	97	97	97	97	97	97	83	97	93.4	
Sep 18	97	97	98	98	97	96	96	96	95	91	77	74	61	60	56	55	59	62	72	78	77	72	75	75	55	98	79.8	
Sep 19	79	85	87	85	81	80	89	90	88	84	81	76	72	69	62	58	56	56	67	83	88	88	83	87	56	90	78.1	
Sep 20	91	92	93	95	96	96	97	96	91	74	61	52	45	39	36	33	34	38	55	68	71	74	79	82	33	97	70.3	
Sep 21	83	84	81	80	83	84	85	80	68	59	51	41	33	31	29	28	30	34	47	59	64	70	72	78	28	85	60.6	
Sep 22	75	77	80	83	85	88	90	82	68	58	49	43	38	34	31	29	30	36	44	47	50	41	38	39	29	90	55.6	
Sep 23	42	44	48	50	55	59	60	59	57	46	36	32	28	25	26	27	28	30	34	39	44	48	53	58	25	60	42.8	
Sep 24	60	64	61	59	60	61	64	55	51	46	40	35	32	29	28	27	29	30	37	45	50	54	56	62	27	64	47.3	
Sep 25	64	67	66	66	68	69	71	70	66	55	53	51	50	46	47	45	47	49	52	54	65	71	74	77	45	77	60.1	
Sep 26	77	79	85	86	87	91	92	88	75	64	54	49	43	39	37	39	40	47	57	67	74	75	73	73	37	92	66.3	
Sep 27	77	78	80	80	79	84	89	87	75	63	52	42	33	30	30	28	29	31	40	50	51	54	56	58	28	89	57.3	
Sep 28	62	58	68	75	66	77	91	78	64	54	46	40	35	33	32	30	32	38	52	59	61	62	65	72	30	91	56.3	
Sep 29	76	77	80	82	84	87	90	90	85	80	73	69	66	67	65	73	82	85	85	88	87	90	91	94	65	94	81.1	
Sep 30	95	96	96	96	97	97	97	97	97	97	95	78	64	55	51	46	44	49	65	74	76	82	84	85	44	97	79.7	
Diurnal Maximum	97	97	98	98	97	97	97	97	97	97	96	96	96	96	96	96	96	96	97	97	97	97	97	97	97	97	97	97
Diurnal Average	70.6	72.8	74.8	75.7	77.5	80.4	81.5	77.4	69.8	60.6	53.3	46.7	41.7	39.0	36.9	36.2	37.1	39.8	48.4	56.9	61.4	64.2	66.4	69.4				

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

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

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

Timeseries Chart of Hourly Average for RH - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2022

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

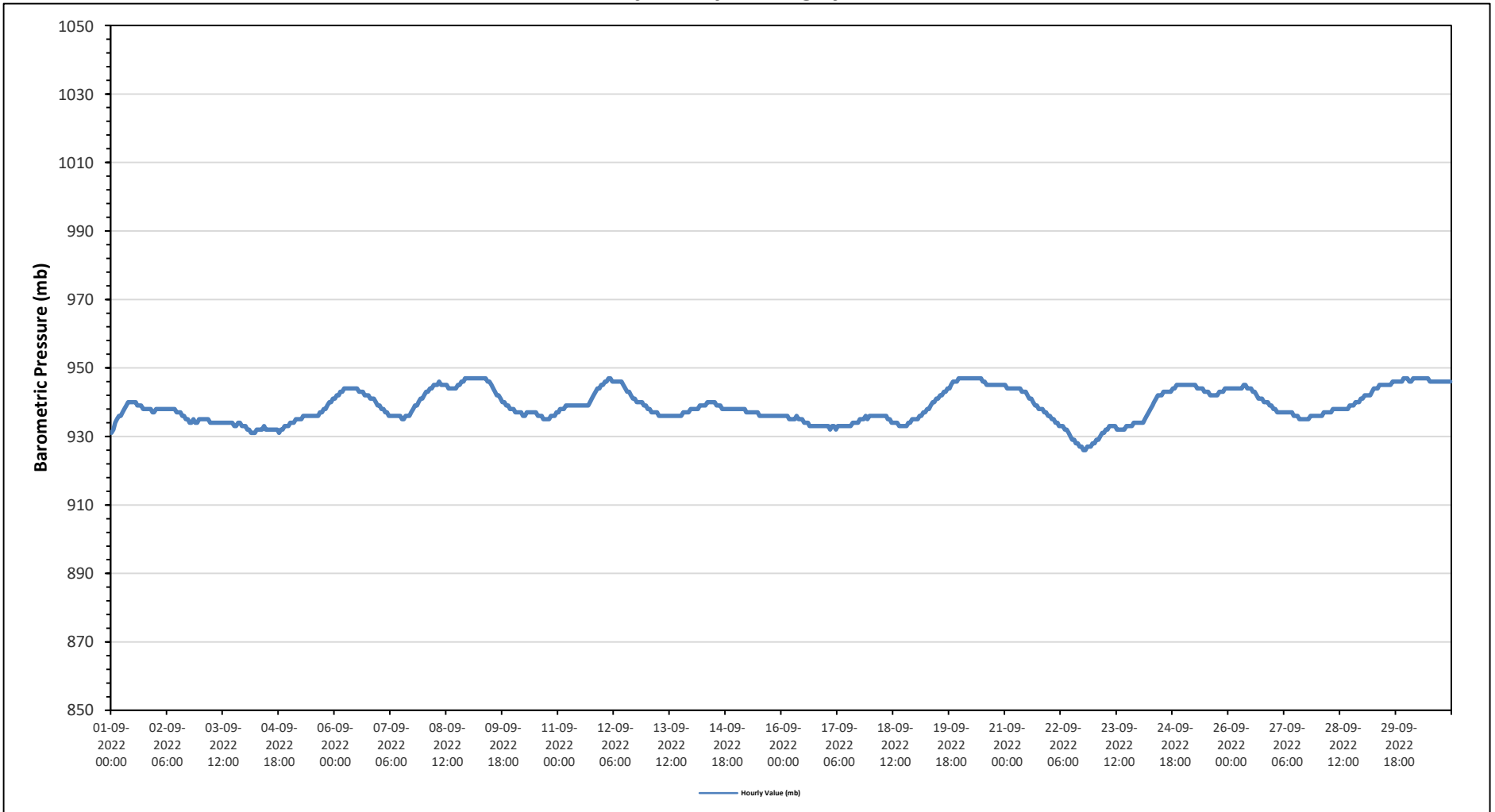
Maximum Hourly Value:	947	mb	on September 8 at hour 22	Hours in Service:	720
Maximum Daily Value:	946	mb	on September 30	Hours of Data:	720
Minimum Hourly Value:	926	mb	on September 22 at hour 18	Hours of Missing Data:	0
Minimum Daily Value:	930	mb	on September 22	Hours of Calibration:	0
Monthly Average:	939	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
Sep 1	931	932	934	935	936	936	937	938	939	940	940	940	940	940	939	939	939	938	938	938	938	938	937	937	931	940	937
Sep 2	938	938	938	938	938	938	938	938	938	938	938	937	937	937	936	936	935	935	934	934	935	934	934	935	934	938	937
Sep 3	935	935	935	935	935	934	934	934	934	934	934	934	934	934	934	934	934	934	933	933	934	933	933	933	933	935	934
Sep 4	933	932	932	931	931	931	932	932	932	932	933	932	932	932	932	932	932	932	931	932	932	933	933	933	931	933	932
Sep 5	934	934	934	935	935	935	935	936	936	936	936	936	936	936	936	936	937	937	938	938	939	940	940	941	934	941	937
Sep 6	941	942	942	943	943	944	944	944	944	944	944	944	944	943	943	943	942	942	942	941	941	941	940	939	939	944	943
Sep 7	939	938	938	937	937	936	936	936	936	936	936	935	935	935	936	936	936	937	938	939	939	940	941	941	935	941	937
Sep 8	942	943	943	944	944	945	945	945	945	945	944	944	944	944	944	944	944	944	945	945	946	946	947	947	942	947	945
Sep 9	947	947	947	947	947	947	947	947	947	947	946	946	945	944	943	942	942	941	940	940	939	939	938	938	938	947	944
Sep 10	938	937	937	937	937	936	936	937	937	937	937	937	937	936	936	936	935	935	935	935	936	936	936	937	935	938	936
Sep 11	937	938	938	938	939	939	939	939	939	939	939	939	939	939	939	939	940	941	942	943	944	944	945	937	945	940	
Sep 12	945	946	946	947	947	946	946	946	946	946	946	945	944	943	943	942	941	941	940	940	940	939	939	939	939	947	944
Sep 13	938	938	937	937	937	937	936	936	936	936	936	936	936	936	936	936	936	936	936	937	937	937	937	938	936	938	937
Sep 14	938	938	938	938	939	939	939	939	940	940	940	940	939	939	939	938	938	938	938	938	938	938	938	938	938	940	939
Sep 15	938	938	938	938	938	937	937	937	937	937	937	937	936	936	936	936	936	936	936	936	936	936	936	936	936	936	937
Sep 16	936	936	936	936	935	935	935	935	936	935	935	935	934	934	934	933	933	933	933	933	933	933	933	933	933	936	934
Sep 17	933	933	932	933	933	932	933	933	933	933	933	933	933	933	934	934	934	934	935	935	935	936	935	936	932	936	934
Sep 18	936	936	936	936	936	936	936	936	936	935	935	934	934	934	934	933	933	933	933	933	934	934	935	935	933	936	935
Sep 19	935	935	936	936	937	937	938	938	939	940	940	941	941	942	942	943	943	944	944	945	946	946	946	947	935	947	941
Sep 20	947	947	947	947	947	947	947	947	947	947	947	947	946	946	945	945	945	945	945	945	945	945	945	945	945	947	946
Sep 21	945	944	944	944	944	944	944	944	944	943	943	943	942	941	941	940	939	939	938	938	938	937	937	936	936	945	941
Sep 22	936	935	935	934	934	933	933	933	932	932	931	930	929	929	928	928	927	927	926	926	927	927	928	928	926	936	930
Sep 23	928	929	929	930	931	931	932	932	933	933	933	933	932	932	932	932	932	933	933	933	933	934	934	934	928	934	932
Sep 24	934	934	934	935	936	937	938	939	940	941	942	942	942	943	943	943	943	943	944	944	945	945	945	945	934	945	941
Sep 25	945	945	945	945	945	945	945	944	944	944	943	943	943	942	942	942	942	942	943	943	943	944	944	944	942	945	944
Sep 26	944	944	944	944	944	944	944	944	945	945	944	944	944	943	943	942	941	941	940	940	940	939	939	939	939	945	943
Sep 27	938	938	937	937	937	937	937	937	937	937	937	936	936	936	935	935	935	935	935	935	935	936	936	936	935	938	936
Sep 28	936	936	936	937	937	937	937	937	937	938	938	938	938	938	938	938	938	939	939	939	940	940	940	941	936	941	938
Sep 29	941	942	942	942	943	944	944	944	944	945	945	945	945	945	945	946	946	946	946	946	946	946	947	947	941	947	945
Sep 30	947	946	946	947	947	947	947	947	947	947	947	946	946	946	946	946	946	946	946	946	946	946	946	946	946	947	946
Diurnal Maximum	947	947	947	947	947	947	947	947	947	947	947	946	946	946	946	946	946	946	946	946	946	947	947				
Diurnal Average	939	939	939	939	939	939	939	939	939	939	939	939	939	939	938	938	938	938	938	938	939	939	939				

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

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

Timeseries Chart of Hourly Average for BP - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2022

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

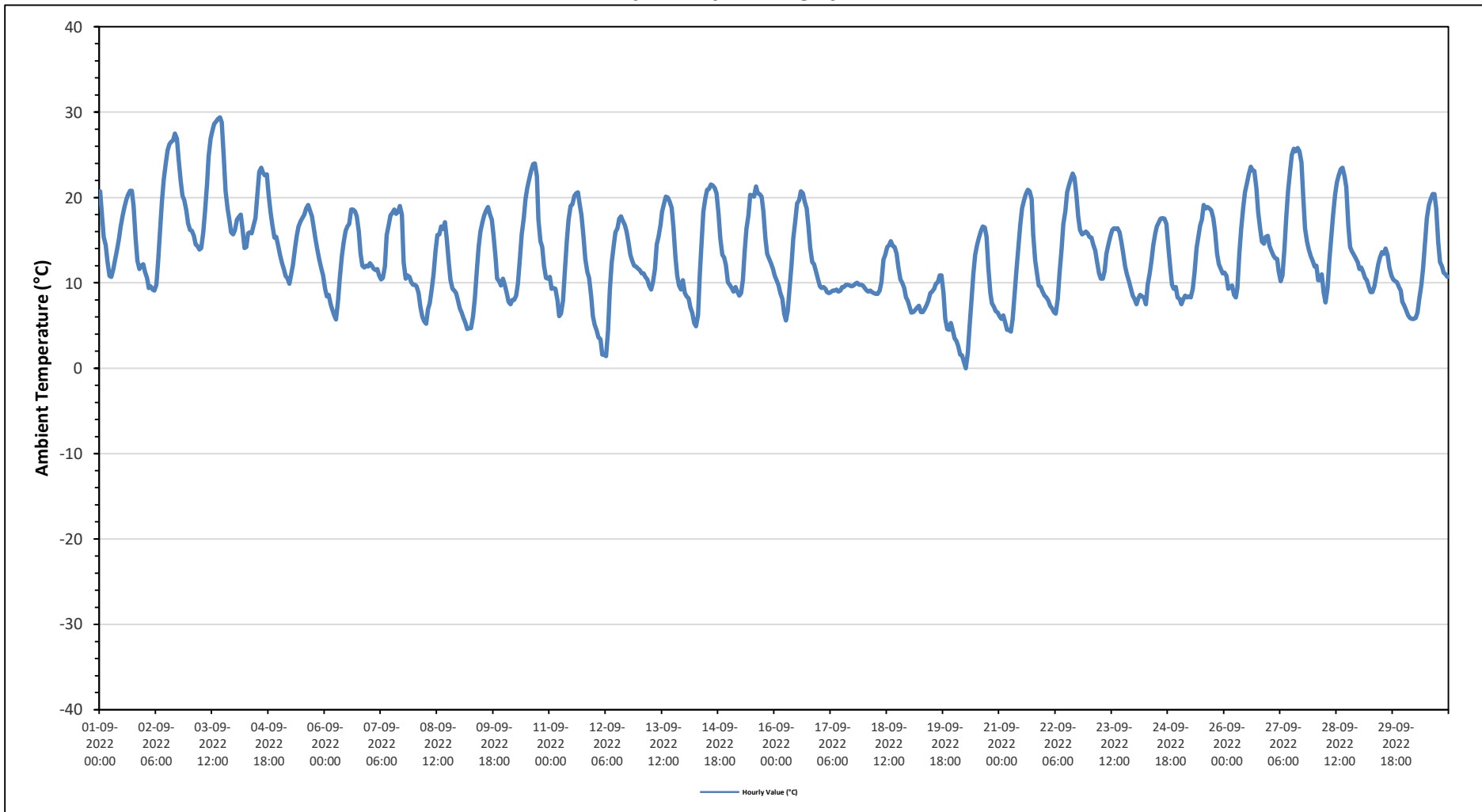
Maximum Hourly Value:	29.4 °C	on September 3 at hour 16	Hours in Service:	720
Maximum Daily Value:	20.8 °C	on September 3	Hours of Data:	720
Minimum Hourly Value:	0.0 °C	on September 20 at hour 6	Hours of Missing Data:	0
Minimum Daily Value:	7.5 °C	on September 19	Hours of Calibration:	0
Monthly Average:	13.3 °C		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	20.7	18	15.4	14.4	12.5	10.8	10.7	11.6	12.7	13.8	15.1	16.6	17.9	18.9	19.8	20.3	20.8	20.8	19	15.2	12.6	11.6	12	12.2	10.7	20.8	15.6
Sep 2	11.3	10.6	9.4	9.6	9.2	9.1	9.8	12.6	16.4	19.6	22.1	24	25.5	26.2	26.5	26.7	27.5	26.9	24.4	21.9	20.2	19.7	18.5	17	9.1	27.5	18.5
Sep 3	16.2	16.1	15.5	14.5	14.3	13.9	14.1	15.9	18.4	21.6	24.8	26.9	27.8	28.6	28.9	29.2	29.4	28.8	24.7	20.8	18.7	17.4	15.9	15.7	13.9	29.4	20.8
Sep 4	16.2	17.4	17.7	18	16.3	14.1	14.2	15.8	15.9	15.8	16.8	17.6	20.5	23	23.5	22.9	22.6	22.7	20.3	18.2	16.7	15.3	15.4	14.3	14.1	23.5	18.0
Sep 5	13.3	12.4	11.6	10.8	10.5	9.9	11	12.1	14	15.5	16.6	17.2	17.6	18	18.7	19.1	18.5	17.8	16.5	15.1	13.8	12.7	11.7	10.9	9.9	19.1	14.4
Sep 6	9.3	8.4	8.6	7.5	6.9	6.2	5.7	7.9	10.6	13.1	14.7	16.1	16.6	16.9	18.6	18.6	18.4	17.8	16	13.4	12	11.8	12	11.9	5.7	18.6	12.5
Sep 7	12.3	12	11.7	11.5	11.6	10.9	10.4	10.6	11.9	15.6	16.8	17.9	18.2	18.6	18.1	18.3	19	18	12.4	10.5	10.9	10.7	10.1	9.8	9.8	19.0	13.7
Sep 8	9.8	9.6	8.8	7.2	6	5.5	5.2	6.9	7.6	9.3	11	13.8	15.6	15.7	16.6	16.3	17.1	15.2	12.4	10.3	9.3	9.1	8.8	8	5.2	17.1	10.6
Sep 9	7	6.5	5.9	5.3	4.6	4.7	4.7	6.1	8.2	11.5	14.2	16	17.1	17.9	18.5	18.9	18	17.4	15.5	12.9	10.5	10.2	9.7	10.5	4.6	18.9	11.3
Sep 10	9.8	8.8	7.8	7.5	8	8	8.5	9.9	12.9	15.7	17.5	19.8	21.1	22.2	23.1	23.9	24	22.5	17.4	14.9	14.2	12	10.6	10.5	7.5	24.0	14.6
Sep 11	10.7	9.3	9.4	9.3	8	6.1	6.4	7.9	11.2	14.9	17.4	19	19.2	20.2	20.5	20.6	19.2	17.9	15.4	12.8	11.3	10.6	8.5	6.1	6.1	20.6	13.0
Sep 12	5.1	4.4	3.6	3.4	1.6	1.6	1.4	4.5	9.2	12.3	14.3	15.9	16.4	17.5	17.8	17.3	16.8	16	14.8	13.3	12.6	12	11.9	11.7	1.4	17.8	10.6
Sep 13	11.5	11.1	11.1	10.7	10.4	9.7	9.2	10.1	11.6	14.5	15.4	16.8	18.3	19.3	20.1	20	19.5	18.8	16.5	13	10.8	9.7	9.2	10.3	9.2	20.1	13.7
Sep 14	8.8	8.4	8.2	7.1	6.5	5.3	4.9	6.2	11	15.2	18.3	19.9	20.9	21	21.5	21.4	21.1	20.5	18.1	15.2	13.3	13	12.1	10.1	4.9	21.5	13.7
Sep 15	9.8	9.4	9	9.5	9	8.5	8.8	10.3	13.6	16.3	17.9	20.3	20.2	20.1	21.3	20.5	20.4	20.1	18.4	15.2	13.4	12.8	12.3	11.6	8.5	21.3	14.5
Sep 16	10.8	10.3	9.7	8.8	8.1	6.4	5.6	6.7	9.6	12.1	15.2	17.3	19.3	19.7	20.7	20.5	19.5	18.7	16.6	14.1	12.4	12.2	11.3	10.5	5.6	20.7	13.2
Sep 17	9.6	9.4	9.5	9.3	8.9	8.8	8.9	9.1	9.1	9.2	9	9.1	9.5	9.5	9.8	9.8	9.7	9.6	9.7	9.9	10	9.8	9.8	9.7	8.8	10.0	9.4
Sep 18	9.4	9.1	9	9.1	8.9	8.8	8.7	9.1	10.1	12.7	13.3	14.2	14.4	14.9	14.3	14.2	13.4	11.8	10.4	10	9.4	8.3	7.9	7.9	7.9	14.9	10.8
Sep 19	7.2	6.5	6.6	6.8	7.1	7.3	6.6	6.6	6.9	7.4	7.9	8.8	9	9.3	9.9	10.1	10.9	10.9	8.8	5.8	4.6	4.5	5.3	4.5	4.5	10.9	7.5
Sep 20	3.5	3.2	2.6	1.6	1.5	0.7	0	1.8	4.9	8.2	11.1	13.3	14.5	15.3	16.1	16.6	16.5	15.4	11.8	8.8	7.6	7.2	6.7	6.5	0.0	16.6	8.1
Sep 21	6.1	5.8	6.2	5.3	4.5	4.5	4.3	5.8	8.8	11.5	14.3	16.8	18.7	19.7	20.4	20.9	20.7	19.8	15.7	12.6	11.1	9.7	9.5	9	4.3	20.9	11.7
Sep 22	8.5	8.3	7.9	7.3	7	6.6	6.4	8.1	11.1	13.9	16.9	18.4	20.6	21.5	22.2	22.8	22.3	20.5	17.7	16.2	15.7	15.8	16	15.8	6.4	22.8	14.5
Sep 23	15.4	15.3	14.5	13.8	12.5	11.1	10.5	10.5	11.4	13.4	14.5	15.4	16.2	16.4	16.3	16.4	15.9	14.8	13.5	11.9	11	10.2	9.4	8.5	8.5	16.4	13.3
Sep 24	8.1	7.5	8.2	8.6	8.4	8.3	7.5	9.8	11.1	12.6	14.4	15.8	16.6	17.1	17.5	17.6	17.5	16.9	14.4	11.8	9.8	9.3	9.5	8.3	7.5	17.6	11.9
Sep 25	8.1	7.5	8.1	8.5	8.3	8.4	8.3	9.3	11.2	14.1	15.2	16.7	17.4	19.1	18.7	18.9	18.7	18.5	17.6	16	13.4	12.2	11.7	11.1	7.5	19.1	13.2
Sep 26	11.2	10.8	9.3	9.5	9.7	8.6	8.3	9.4	13.5	16.3	18.8	20.6	21.7	22.7	23.6	23.2	23.1	21.1	18.3	16.3	14.8	14.6	15.4	15.5	8.3	23.6	15.7
Sep 27	14.3	13.8	13.2	12.9	12.8	11.4	10.2	10.9	14.1	17.7	20.7	23.1	25	25.7	25.4	25.8	25.4	24.1	20.1	16.4	14.8	13.9	13.1	12.6	10.2	25.8	17.4
Sep 28	11.9	12	10.3	10.3	11	8.8	7.7	9.4	12.6	15.5	18	20.4	21.8	22.6	23.3	23.5	22.5	21.2	16.7	14.2	13.7	13.3	12.9	12.4	7.7	23.5	15.3
Sep 29	11.6	11.8	11.3	10.6	10.3	9.6	8.9	8.9	9.6	10.8	12.2	13	13.6	13.4	14	13.3	11.8	10.9	10.4	10.2	10.1	9.5	9.1	7.8	7.8	14.0	10.9
Sep 30	7.3	6.8	6.2	5.9	5.8	5.8	5.9	6.5	8.1	9.7	11.7	14.8	17.6	19.1	19.8	20.4	20.4	18.7	14.7	12.4	11.9	11.2	11	10.7	5.8	20.4	11.8
Diurnal Maximum	20.7	18.0	17.7	18.0	16.3	14.1	14.2	15.9	18.4	21.6	24.8	26.9	27.8	28.6	28.9	29.2	29.4	28.8	24.7	21.9	20.2	19.7	18.5	17.0			
Diurnal Average	10.5	10.0	9.5	9.2	8.7	8.0	7.8	9.0	11.2	13.6	15.5	17.2	18.3	19.0	19.5	19.6	19.4	18.5	16.0	13.7	12.4	11.7	11.3	10.7			

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

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

Timeseries Chart of Hourly Average for AT - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2022

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

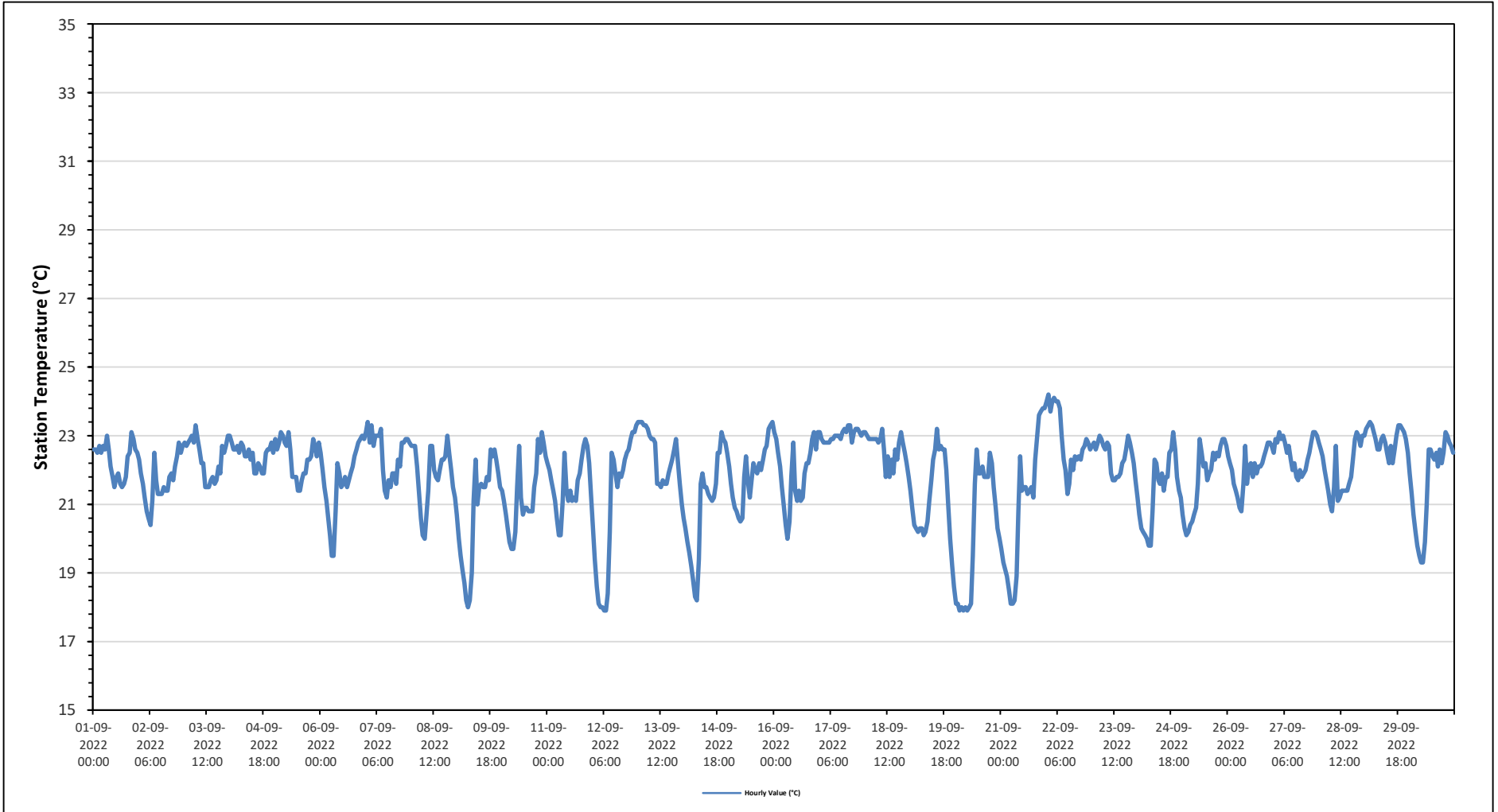
Maximum Hourly Value:	24.2 °C	on September 22 at hour 1	Hours in Service:	720
Maximum Daily Value:	23.0 °C	on September 17	Hours of Data:	720
Minimum Hourly Value:	17.9 °C	on September 12 at hour 6	Hours of Missing Data:	0
Minimum Daily Value:	20.2 °C	on September 20	Hours of Calibration:	0
Monthly Average:	21.9 °C		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	22.6	22.6	22.5	22.7	22.5	22.7	22.6	23.0	22.6	22.1	21.8	21.5	21.8	21.9	21.6	21.5	21.6	21.8	22.4	22.5	23.1	22.9	22.6	22.5	21.5	23.1	22.3
Sep 2	22.3	21.9	21.6	21.2	20.8	20.6	20.4	21.1	22.5	21.7	21.3	21.3	21.3	21.5	21.4	21.4	21.8	21.9	21.7	22.1	22.4	22.8	22.5	22.7	20.4	22.8	21.7
Sep 3	22.8	22.7	22.8	22.9	23.0	22.8	23.3	22.9	22.6	22.2	22.2	21.5	21.5	21.5	21.7	21.8	21.6	21.7	22.1	21.9	22.7	22.5	22.7	23.0	21.5	23.3	22.4
Sep 4	23.0	22.8	22.6	22.6	22.7	22.5	22.8	22.7	22.4	22.4	22.6	22.3	22.5	21.9	21.9	22.2	22.1	21.9	21.9	22.5	22.6	22.6	22.8	22.5	21.9	23.0	22.5
Sep 5	22.9	22.6	22.8	23.1	23.0	22.8	22.7	23.1	22.6	21.8	21.8	21.8	21.4	21.4	21.7	21.9	21.9	22.3	22.3	22.4	22.9	22.7	22.4	22.8	21.4	23.1	22.4
Sep 6	22.5	22.0	21.5	21.1	20.6	20.1	19.5	19.5	20.8	22.2	21.9	21.5	21.6	21.8	21.5	21.7	21.9	22.1	22.4	22.6	22.8	22.9	23.0	22.9	19.5	23.0	21.7
Sep 7	23.1	23.4	22.8	23.3	22.7	23.0	23.0	23.0	23.2	22.0	21.4	21.2	21.7	21.5	21.9	21.9	21.6	22.3	22.1	22.8	22.8	22.9	22.9	22.8	21.2	23.4	22.5
Sep 8	22.7	22.7	22.7	22.1	21.4	20.6	20.1	20.0	20.7	21.4	22.7	22.7	22.0	21.8	21.7	22.0	22.3	22.3	22.4	23.0	22.5	22.0	21.5	21.2	20.0	23.0	21.9
Sep 9	20.7	20.0	19.5	19.1	18.7	18.2	18.0	18.2	19.0	21.1	22.3	21.0	21.5	21.6	21.5	21.5	21.8	21.7	22.6	22.4	22.6	22.3	21.9	21.5	18.0	22.6	20.8
Sep 10	21.4	21.1	20.7	20.3	19.9	19.7	19.7	20.2	21.5	22.7	21.2	20.7	20.9	20.8	20.8	20.8	21.5	21.9	22.9	22.5	23.1	22.8	22.4	19.7	23.1	21.3	
Sep 11	22.2	22.0	21.7	21.4	21.1	20.6	20.1	20.1	21.1	22.5	21.4	21.1	21.4	21.1	21.2	21.1	21.7	21.9	22.3	22.7	22.9	22.7	22.2	21.3	20.1	22.9	21.6
Sep 12	20.3	19.4	18.6	18.1	18.0	18.0	17.9	17.9	18.4	20.2	22.5	22.3	21.9	21.5	21.9	21.8	22.0	22.3	22.5	22.6	22.9	23.1	23.1	23.3	17.9	23.3	20.9
Sep 13	23.4	23.4	23.4	23.3	23.3	23.2	23.0	22.9	22.9	22.8	21.6	21.6	21.5	21.7	21.6	21.6	21.9	22.1	22.3	22.6	22.9	22.2	21.6	21.0	21.0	23.4	22.4
Sep 14	20.6	20.3	19.9	19.6	19.2	18.8	18.3	18.2	19.4	21.6	21.9	21.5	21.5	21.3	21.2	21.1	21.2	21.6	22.5	22.5	23.1	22.9	22.8	22.5	18.2	23.1	21.0
Sep 15	22.1	21.6	21.2	20.9	20.8	20.6	20.5	20.6	21.8	22.4	21.7	21.2	21.7	22.2	22.0	21.9	22.2	22.0	22.3	22.6	22.7	23.2	23.3	23.4	20.5	23.4	21.9
Sep 16	23.1	22.9	22.5	22.1	21.5	21.0	20.4	20.0	20.5	21.8	22.8	21.4	21.1	21.4	21.1	21.2	21.9	22.2	22.2	22.5	22.9	23.1	22.6	23.1	20.0	23.1	21.9
Sep 17	23.1	22.9	22.8	22.8	22.8	22.8	22.9	22.9	23.0	23.0	23.0	22.9	23.1	23.2	23.1	23.3	23.3	22.8	23.1	23.2	23.2	23.1	23.0	23.1	22.8	23.3	23.0
Sep 18	23.1	23.0	22.9	22.9	22.9	22.9	22.9	22.8	22.9	23.2	22.6	21.8	22.4	21.8	22.3	21.9	22.6	22.3	22.8	23.1	22.8	22.5	22.2	21.8	21.8	23.2	22.6
Sep 19	21.4	20.9	20.4	20.3	20.2	20.3	20.3	20.1	20.2	20.5	21.1	21.7	22.3	22.6	23.2	22.6	22.7	22.6	22.6	22.0	20.9	20.0	19.2	18.6	18.6	23.2	21.1
Sep 20	18.1	18.1	17.9	18.0	17.9	18.0	17.9	18.0	18.1	19.5	21.6	22.6	21.9	21.9	22.1	21.8	21.8	21.8	22.5	22.2	21.5	20.9	20.3	20.0	17.9	22.6	20.2
Sep 21	19.7	19.3	19.1	18.9	18.5	18.1	18.1	18.2	18.9	20.8	22.4	21.4	21.5	21.5	21.3	21.4	21.5	21.2	22.3	23.0	23.6	23.7	23.8	23.8	18.1	23.8	20.9
Sep 22	24.0	24.2	23.7	24.0	24.1	24.0	24.0	23.8	23.0	22.3	22.0	21.3	21.6	22.3	22.0	22.4	22.3	22.4	22.3	22.6	22.7	22.9	22.8	22.6	21.3	24.2	22.9
Sep 23	22.7	22.8	22.6	22.8	23.0	22.9	22.7	22.6	22.8	22.7	21.9	21.7	21.7	21.8	21.8	21.9	22.2	22.3	22.6	23.0	22.8	22.5	22.2	21.7	21.7	23.0	22.4
Sep 24	21.2	20.7	20.3	20.2	20.1	20.0	19.8	19.8	20.8	22.3	22.2	21.7	21.6	21.9	21.4	21.8	21.8	22.5	22.6	23.1	22.6	21.8	21.4	21.2	19.8	23.1	21.4
Sep 25	20.7	20.3	20.1	20.2	20.4	20.5	20.7	20.9	21.6	22.9	22.5	22.1	22.2	21.7	21.9	22.0	22.5	22.3	22.5	22.4	22.7	22.9	22.9	22.7	20.1	22.9	21.7
Sep 26	22.4	22.2	22.0	21.6	21.4	21.2	20.9	20.8	21.6	22.7	21.6	22.1	22.2	21.8	22.2	21.9	22.1	22.1	22.2	22.4	22.6	22.8	22.8	22.7	20.8	22.8	22.0
Sep 27	22.5	22.9	22.8	23.1	22.9	23.0	22.8	22.5	22.7	22.3	22.0	22.2	21.8	21.7	22.0	21.8	21.9	22.0	22.3	22.5	22.8	23.1	23.1	23.0	21.7	23.1	22.5
Sep 28	22.8	22.6	22.4	22.0	21.7	21.4	21.0	20.8	21.5	22.7	21.1	21.2	21.4	21.4	21.4	21.4	21.6	21.8	22.3	22.9	23.1	23.0	22.7	23.0	20.8	23.1	22.0
Sep 29	23.0	23.2	23.3	23.4	23.3	23.1	22.9	22.6	22.6	22.9	23.0	22.8	22.5	22.2	22.7	22.2	22.6	23.0	23.3	23.3	23.2	23.1	22.9	22.5	22.2	23.4	22.9
Sep 30	21.9	21.3	20.7	20.2	19.8	19.5	19.3	19.3	19.9	21.0	22.6	22.6	22.4	22.3	22.5	22.1	22.6	22.2	22.5	23.1	23.0	22.8	22.7	22.5	19.3	23.1	21.6
Diurnal Maximum	24.0	24.2	23.7	24.0	24.1	24.0	24.0	23.8	23.2	23.2	23.0	22.9	23.1	23.2	23.2	23.3	23.3	23.0	23.3	23.3	23.6	23.7	23.8	23.8			
Diurnal Average	22.1	21.9	21.6	21.5	21.3	21.1	21.0	21.0	21.0	21.4	22.0	21.8	21.8	21.8	21.8	21.8	22.0	22.1	22.4	22.6	22.7	22.6	22.4	22.3			

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

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

Timeseries Chart of Hourly Average for ST - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2022

Summary of Hourly Averages

PRECIPITATION in mm

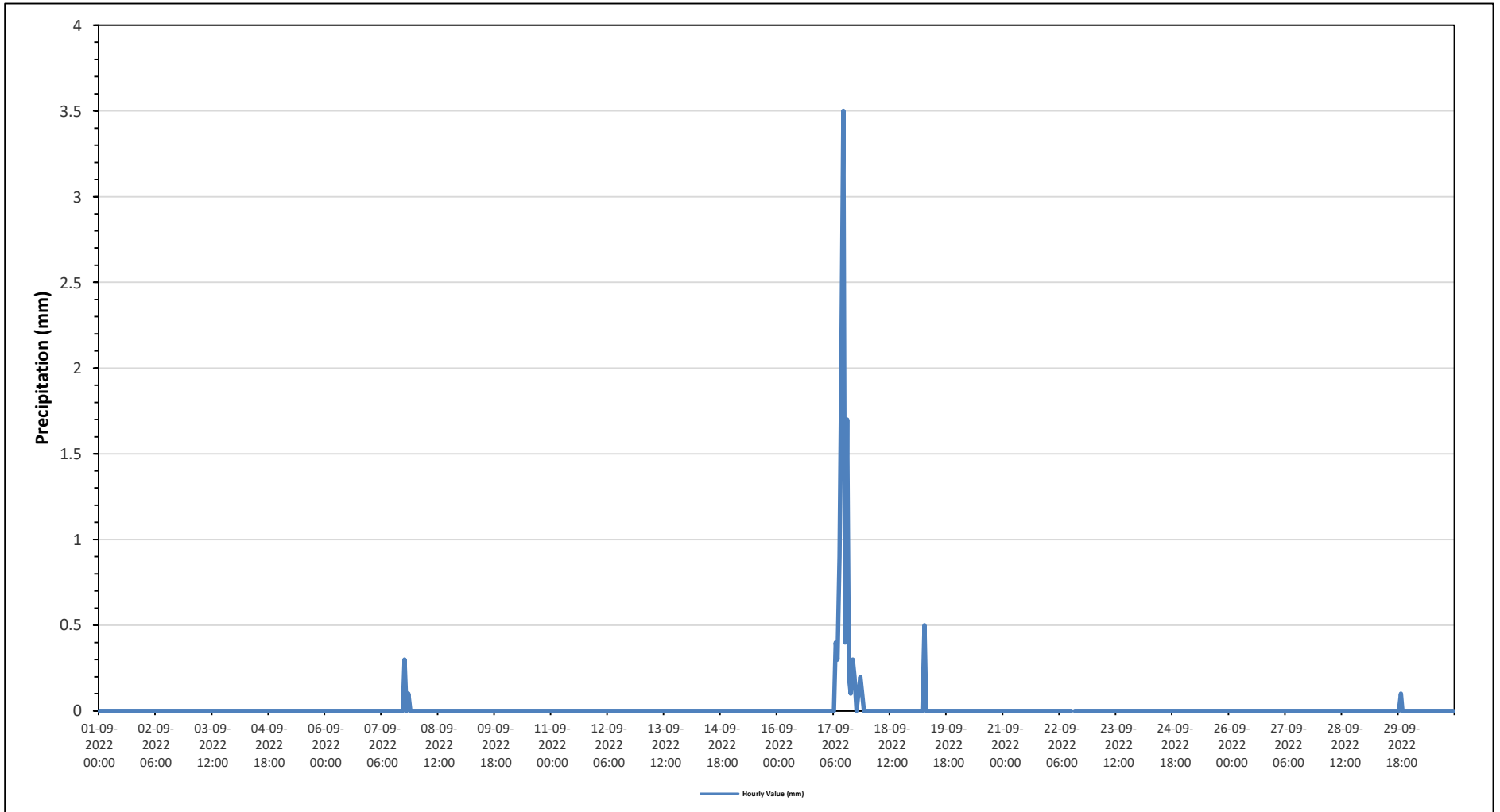
Maximum Hourly Value:	3.5 mm on September 17 at hour 11	Hours in Service:	720
Maximum Daily Value:	10.4 mm on September 17	Hours of Data:	719
Minimum Hourly Value:	0.0 mm on September 1 at hour 0	Hours of Missing Data:	0
Minimum Daily Value:	0.0 mm on September 1	Hours of Calibration:	1
Monthly Total:	11.4 mm	Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Total	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
Sep 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0	0.1	0	0	0	0.0	0.3	0.4
Sep 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 17	0	0	0	0	0	0	0	0	0.4	0.3	0.9	2	3.5	0.4	1.7	0.2	0.1	0.3	0.2	0	0.1	0.2	0.1	0	0	0.0	3.5	10.4
Sep 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 19	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.5	0.5
Sep 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 22	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Sep 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0.0	0.1	0.1
Sep 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Diurnal Maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.4	0.3	0.9	2.0	3.5	0.4	1.7	0.2	0.1	0.3	0.2	0.3	0.1	0.2	0.1	0.0	0.0				
Diurnal Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				

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

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

Timeseries Chart of Hourly Average for Precipitation - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2022

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

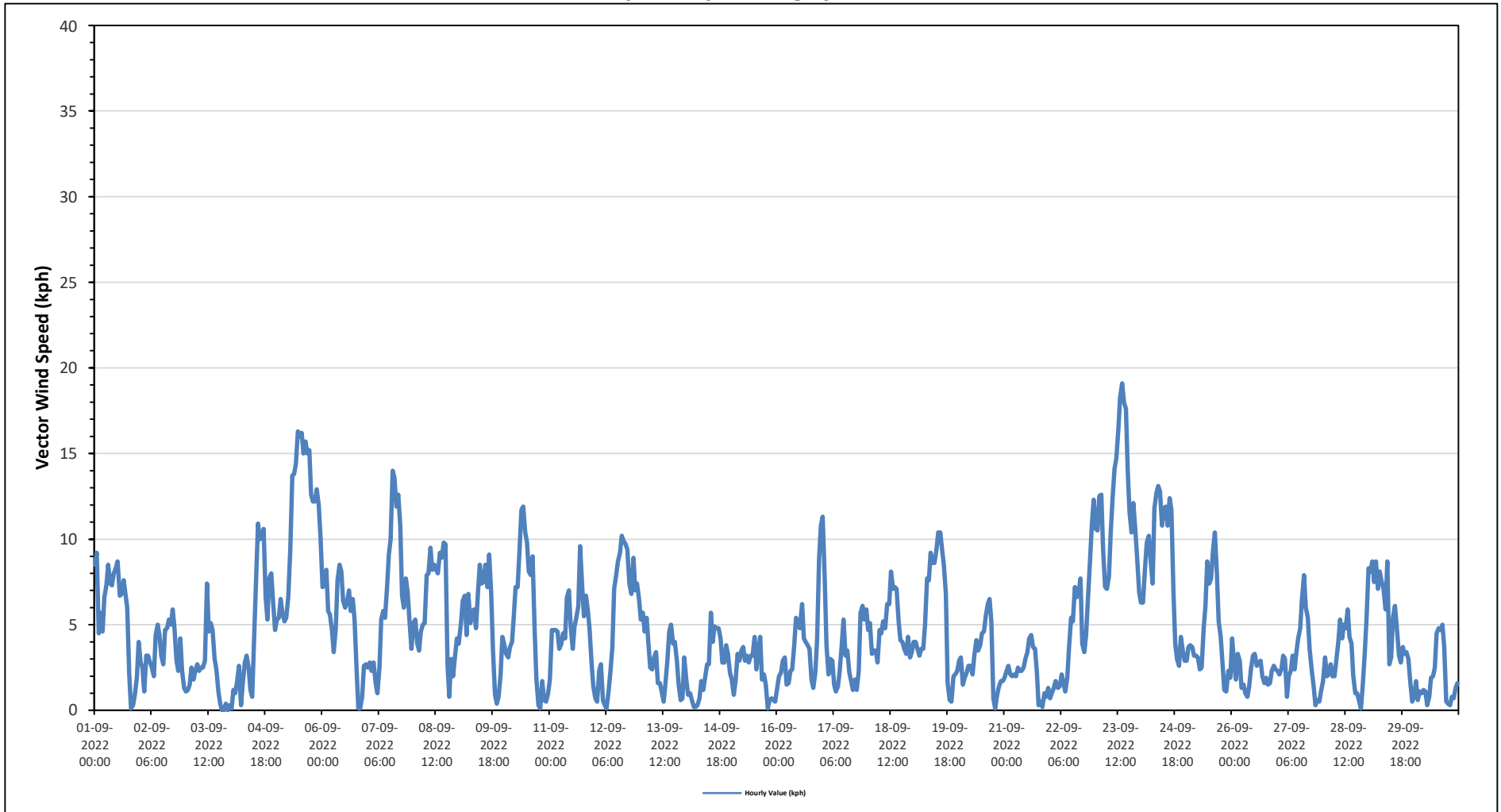
Maximum Hourly Value:	19.1 kph on September 23 at hour 14	Hours in Service:	720
Maximum Daily Value:	12.1 kph on September 23	Hours of Data:	720
Minimum Hourly Value:	0.0 kph on September 3 at hour 19	Hours of Missing Data:	0
Minimum Daily Value:	1.1 kph on September 13	Hours of Calibration:	0
Monthly Average:	2.8 kph	Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	8.5	9.2	4.5	5.7	4.6	6.6	7.3	8.5	7.4	7.3	8.0	8.3	8.7	6.7	6.8	7.6	6.8	6.0	2.1	0.1	0.3	0.9	1.9	4.0	0.1	9.2	5.1
Sep 2	2.8	2.5	1.1	3.2	3.2	2.8	2.5	2.0	4.4	5.0	4.4	3.2	2.7	4.7	4.8	5.3	5.0	5.9	4.8	2.9	2.3	4.2	2.3	1.3	1.1	5.9	2.6
Sep 3	1.1	1.2	1.5	2.5	1.8	2.3	2.7	2.3	2.5	2.5	2.9	7.4	4.6	5.1	4.7	3.0	2.4	1.1	0.4	0.0	0.0	0.4	0.0	0.3	0.0	7.4	1.4
Sep 4	0.1	1.2	1.0	1.7	2.6	0.3	1.6	2.8	3.2	2.5	1.2	0.8	4.4	7.5	10.9	10.0	10.1	10.6	6.6	5.3	7.7	8.0	6.4	4.7	0.1	10.9	4.0
Sep 5	5.3	5.4	6.5	5.7	5.2	5.4	6.6	9.4	13.7	13.8	14.4	16.3	16.0	16.2	15.0	15.7	15.0	15.2	12.6	12.2	12.2	12.9	12.0	10.1	5.2	16.3	11.2
Sep 6	7.2	7.3	8.2	5.8	5.6	4.7	3.4	4.8	7.6	8.5	8.1	6.4	6.0	6.3	7.0	5.8	6.5	5.3	2.4	0.1	0.1	0.8	2.6	2.7	0.1	8.5	4.7
Sep 7	2.5	2.8	2.3	2.8	1.6	1.0	2.5	5.3	5.8	5.4	7.2	9.1	10.0	14.0	13.6	11.9	12.6	10.8	6.7	6.0	7.7	6.9	5.1	3.6	1.0	14.0	5.6
Sep 8	5.1	5.3	3.9	3.5	4.6	5.0	5.1	7.9	8.0	9.5	8.2	8.5	8.2	8.0	9.2	8.9	9.8	9.7	2.7	0.8	3.0	2.0	3.1	4.2	0.8	9.8	4.8
Sep 9	3.9	5.1	6.4	6.7	4.4	6.8	5.1	5.8	5.9	4.8	6.9	8.5	7.4	7.5	8.5	7.2	9.1	6.8	3.5	0.9	0.4	0.8	2.1	4.3	0.4	9.1	5.2
Sep 10	3.8	3.3	3.1	3.7	4.0	5.5	7.2	7.2	9.2	11.7	11.9	10.4	9.8	8.1	7.9	9.0	4.7	1.8	0.3	0.1	1.7	0.6	0.5	1.0	0.1	11.9	4.8
Sep 11	1.8	4.7	4.7	4.7	4.6	3.6	3.9	4.5	4.2	6.6	7.0	4.9	3.6	4.9	5.4	6.1	9.6	7.3	5.5	6.7	5.9	4.8	2.8	1.4	1.4	9.6	4.6
Sep 12	0.7	0.5	2.3	2.7	0.6	0.3	0.1	1.1	2.2	3.7	7.1	7.9	8.7	9.2	10.2	9.9	9.7	9.4	7.4	6.8	8.9	7.0	7.4	6.5	0.1	10.2	4.8
Sep 13	5.3	5.7	4.6	5.4	3.9	2.5	2.4	3.1	3.4	1.6	1.6	1.1	0.5	1.6	2.8	4.6	5.0	3.9	4.0	2.9	1.5	0.6	0.7	3.1	0.5	5.7	1.1
Sep 14	1.8	0.9	1.0	0.6	0.2	0.2	0.3	0.7	1.7	1.2	1.9	2.7	2.7	4.7	5.0	4.9	4.8	4.8	4.2	2.8	2.8	3.8	3.3	2.2	0.2	5.7	2.0
Sep 15	1.8	0.9	1.7	3.3	2.9	3.5	3.7	2.9	3.2	2.8	3.2	3.2	4.3	2.4	3.5	4.3	1.8	2.1	1.5	0.1	0.6	0.7	0.6	0.5	0.1	4.3	2.1
Sep 16	1.3	2.0	2.2	2.9	3.1	1.5	1.6	2.3	2.4	3.8	5.4	5.1	4.8	6.2	4.2	4.0	3.8	3.6	1.8	1.3	2.2	4.1	8.9	10.8	1.3	10.8	3.2
Sep 17	11.3	7.7	3.8	2.1	3.0	2.9	1.5	1.1	1.4	2.3	3.8	5.3	3.2	3.5	2.2	1.7	1.2	1.8	1.2	2.3	5.7	6.1	5.3	5.9	1.1	11.3	2.3
Sep 18	4.7	5.1	3.3	3.5	3.5	2.8	4.7	4.5	5.2	4.8	6.2	6.2	8.1	7.1	7.2	7.1	5.2	4.1	4.0	3.6	3.3	4.3	3.1	3.4	2.8	8.1	4.1
Sep 19	4.0	4.0	3.6	3.2	3.6	3.6	5.0	7.7	7.6	9.2	8.6	8.6	9.4	10.4	10.4	9.4	8.5	6.8	1.6	0.6	0.5	2.0	2.1	2.3	0.5	10.4	4.7
Sep 20	2.9	3.1	1.5	1.9	2.2	2.6	2.6	2.1	3.2	4.1	3.5	3.8	4.5	4.6	5.5	6.2	6.5	5.2	0.7	0.1	0.9	1.4	1.7	1.7	0.1	6.5	2.9
Sep 21	1.9	2.3	2.6	2.1	2.0	2.1	2.0	2.5	2.3	2.3	2.5	3.0	3.4	4.2	4.4	3.7	3.6	2.3	0.3	0.5	0.2	1.0	0.8	1.3	0.2	4.4	2.1
Sep 22	0.7	1.0	1.3	1.7	1.3	1.4	2.1	1.6	1.1	1.9	3.7	5.4	5.2	7.2	6.6	6.9	7.7	3.9	3.4	4.4	6.7	8.6	10.9	12.3	0.7	12.3	4.3
Sep 23	10.6	10.5	12.5	12.6	9.4	7.2	7.1	7.8	10.4	12.3	14.1	14.7	16.4	18.3	19.1	18.0	17.6	14.0	11.6	10.4	12.1	10.5	8.9	6.9	6.9	19.1	12.1
Sep 24	6.3	6.3	8.3	9.8	10.2	8.8	7.4	11.8	12.7	13.1	12.8	10.8	11.8	11.9	10.8	12.4	11.7	6.9	3.9	3.0	2.6	4.3	3.5	2.9	2.6	13.1	8.2
Sep 25	2.9	3.7	3.8	3.7	3.2	3.2	3.1	2.4	2.5	4.8	6.1	8.7	7.4	7.7	9.4	10.4	8.0	5.2	4.3	2.8	1.2	1.1	2.3	1.9	1.1	10.4	4.2
Sep 26	4.2	2.7	1.8	3.3	2.9	1.3	1.5	1.0	0.8	1.4	2.4	3.2	3.3	2.6	2.8	2.9	2.0	1.6	1.9	1.5	1.6	2.3	2.6	2.4	0.8	4.2	1.9
Sep 27	2.3	2.1	2.4	3.2	3.0	0.8	2.0	2.3	3.2	2.4	3.4	4.2	4.8	6.5	7.9	6.0	5.4	3.6	2.4	1.4	0.3	0.6	0.5	1.2	0.3	7.9	2.8
Sep 28	1.7	3.1	2.0	2.1	2.7	2.0	2.0	2.9	4.0	5.3	4.2	5.0	4.8	5.9	4.3	3.9	2.0	1.0	1.0	0.6	0.1	1.4	3.3	5.3	0.1	5.9	2.0
Sep 29	8.3	8.1	8.7	7.5	8.7	7.1	8.1	7.5	7.1	5.9	8.7	2.7	3.1	5.4	6.1	4.9	3.2	2.8	3.7	3.3	3.4	3.0	1.7	0.5	0.5	8.7	4.5
Sep 30	0.8	1.7	0.6	1.1	1.0	1.2	1.1	0.3	0.8	1.9	2.0	2.5	4.5	4.8	4.7	5.0	3.7	0.5	0.4	0.3	0.8	0.7	1.3	1.6	0.3	5.0	1.5
Diurnal Maximum	11	11	13	13	10	9	8	12	14	14	14	16	16	18	19	18	18	15	13	12	12	13	12	12			
Diurnal Average	3.9	4.0	3.7	4.0	3.7	3.3	3.5	4.2	4.9	5.4	6.0	6.3	6.4	7.1	7.3	7.2	6.8	5.5	3.6	2.8	3.2	3.5	3.6	3.7			

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

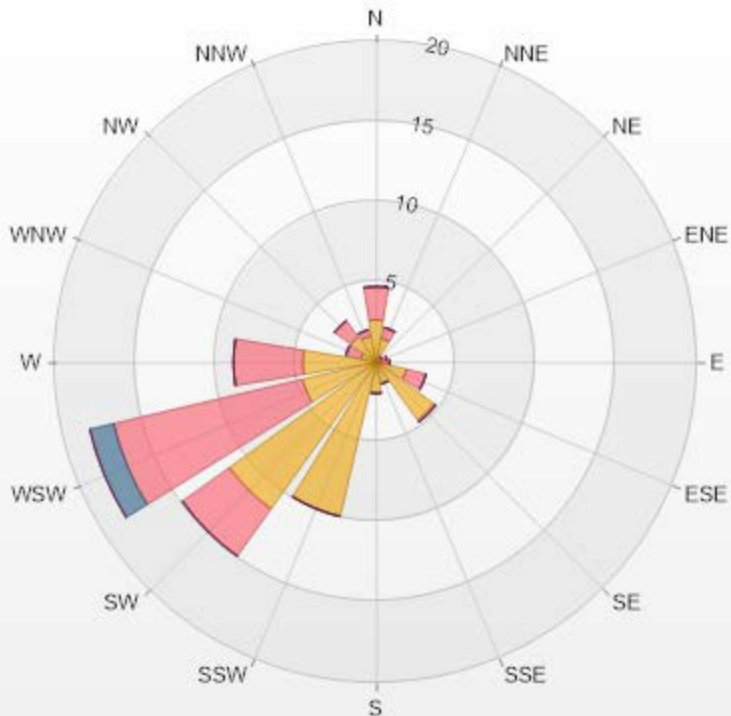
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

Timeseries Chart of Hourly Average for VWS - Reno Station



Wind: PRAMP RENO Monitor: WDS [KPH] Monthly: 09-2022 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 20.83% Valid Data: 100.00%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	2.64	2.08	0	0	0	4.72
NNE	1.53	0.69	0	0	0	2.22
NE	0.28	0.14	0	0	0	0.42
ENE	0.28	0.42	0	0	0	0.7
E	0.28	0.56	0	0	0	0.84
ESE	1.94	1.25	0	0	0	3.19
SE	4.44	0.14	0	0	0	4.58
SSE	1.39	0	0	0	0	1.39
S	1.94	0	0	0	0	1.94
SSW	9.86	0	0	0	0	9.86
SW	11.25	3.61	0	0	0	14.86
WSW	4.72	12.08	1.53	0	0	18.33
W	4.58	4.31	0	0	0	8.89
WNW	0.97	0.97	0	0	0	1.94
NW	1.94	1.25	0	0	0	3.19
NNW	1.67	0.42	0	0	0	2.09
Summary	49.71	27.92	1.53	0	0	79.16



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% Icon Classes (KPH)	50	1.8-6.0	28	6.0-15.0	2	15.0-29.0	0	29.0-39.0	0	>39.0
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PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2022

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

Monthly Average:	248 (WSW) degree	Hours in Service:	720
		Hours of Data:	720
		Hours of Missing Data:	0
		Hours of Calibration:	0
		Operational Uptime:	100.0

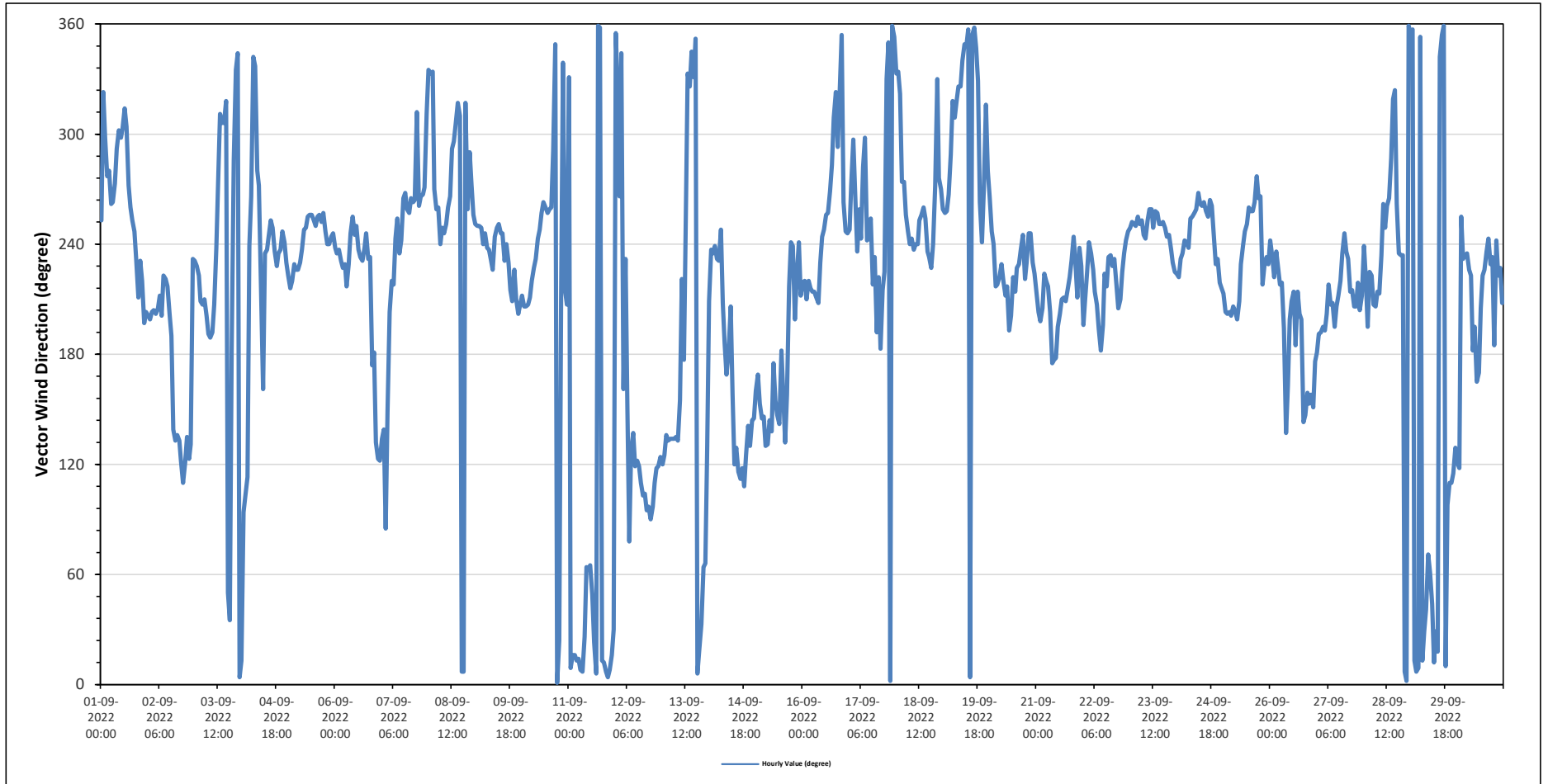
Day	Hourly Period Starting at (MST)																							Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant
Sep 1	WSW	NW	WNW	W	W	W	W	W	WNW	WNW	WNW	WNW	NW	WNW	W	WSW	WSW	WSW	SW	SSW	SW	SSW	SSW	SSW	279	W
Sep 2	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	S	SE	SE	SE	SE	SE	ESE	ESE	ESE	SE	ESE	SE	SW	168	SSE	
Sep 3	SW	SW	SW	SSW	SSW	SSW	SSW	S	S	S	SSW	SW	W	NW	NW	NW	NE	NE	S	WNW	NNW	NNW	N	248	WSW	
Sep 4	NNE	E	ESE	ESE	WSW	W	NNW	NNW	W	W	SW	SSE	SW	SW	WSW	WSW	SW	SW	SW	WSW	WSW	WSW	WSW	243	WSW	
Sep 5	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	246	WSW	
Sep 6	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	WSW	SW	S	S	SE	ESE	ESE	235	SW	
Sep 7	SE	SE	E	SSE	SSW	SSW	SSW	SSW	WSW	WSW	SW	WSW	W	W	WSW	WSW	W	W	NW	W	W	W	NW	259	WSW	
Sep 8	NNW	NNW	NNW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WNW	WNW	NW	NW	NW	N	N	NW	WSW	WNW	W	WSW	287	WNW
Sep 9	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	SW	SSW	SSW	SW	SSW	SSW	239	WSW	
Sep 10	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WNW	NNW	N	NNE	SSW	NNW	SSW	246	WSW	
Sep 11	NNW	N	NNE	NNE	NNE	NNE	N	N	NNE	ENE	ENE	ENE	NE	NNE	N	N	N	NNE	NNE	N	N	N	NNE	18	NNE	
Sep 12	N	NW	W	NNW	SSE	SW	SSE	ENE	SE	SE	ESE	ESE	ESE	ESE	ESE	E	E	E	E	ESE	ESE	ESE	ESE	109	ESE	
Sep 13	ESE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SSE	SW	S	WSW	NNW	NW	NNW	NNW	N	N	NNE	ENE	ENE	SE	100	E
Sep 14	SSW	SW	SW	WSW	SW	SW	WSW	SSW	S	SSE	S	SSW	SSE	ESE	SE	ESE	ESE	ESE	ESE	SE	SE	SE	SE	140	SE	
Sep 15	SSE	SSE	SSE	SE	SE	SE	SE	SE	SE	S	SSE	SE	SE	S	SSE	SE	SSE	SW	WSW	WSW	SSW	SW	WSW	154	SSE	
Sep 16	SW	SW	SSW	SW	SW	SSW	SSW	SSW	SSW	SW	WSW	WSW	WSW	WSW	W	W	NW	NW	WNW	NW	N	W	WSW	252	WSW	
Sep 17	WSW	W	WNW	W	SW	WSW	WSW	W	WNW	WSW	WSW	WSW	SW	SW	S	SW	S	SSW	SW	NNW	N	N	N	275	W	
Sep 18	NNW	NNW	NW	W	W	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	WSW	W	NNW	W	W	260	WSW	
Sep 19	WSW	WSW	WSW	W	WNW	NW	NW	NW	NW	NW	NNW	NNW	N	N	N	N	NNW	NNW	W	WSW	W	NW	W	331	NNW	
Sep 20	W	WSW	WSW	SW	SW	SW	SW	SW	SSW	SW	S	SSW	SW	SSW	SW	SW	SW	WSW	SW	SW	WSW	WSW	SW	226	SW	
Sep 21	SSW	SSW	SSW	SSW	SW	SW	SW	SSW	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SW	WSW	SW	SSW	SW	SW	206	SSW	
Sep 22	SSW	SSW	SW	WSW	SW	SW	SSW	SSW	SSW	S	SSW	SW	SW	SW	SW	SW	SW	SSW	SSW	SW	SW	WSW	WSW	228	SW	
Sep 23	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	250	WSW	
Sep 24	SW	SW	SW	SW	WSW	WSW	SW	WSW	WSW	WSW	WSW	W	W	W	W	WSW	WSW	W	W	WSW	SW	SW	SW	250	WSW	
Sep 25	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	241	WSW	
Sep 26	WSW	SW	SW	SW	SW	SW	SW	SSW	SE	SSE	SSW	SSW	SSW	S	SSW	SSW	SSW	SE	SE	SSE	SSE	SSE	S	199	SSW	
Sep 27	S	S	S	SSW	S	SSW	SW	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	217	SW	
Sep 28	WSW	SW	SSW	SW	SW	SSW	SSW	SSW	SSW	SW	W	WSW	W	W	WNW	NW	NW	W	SW	SW	N	N	N	258	WSW	
Sep 29	N	N	NNE	N	N	N	NNE	NNE	NE	ENE	ENE	NE	NNE	NNE	NNE	NNW	N	N	N	E	ESE	ESE	ESE	23	NNE	
Sep 30	ESE	ESE	WSW	SW	SW	SW	SW	SW	S	SSW	SSE	SSE	SSW	SW	SW	SW	WSW	SW	SW	S	WSW	SW	SSW	215	SSW	

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

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

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

Timeseries Chart of Hourly Average for VWD - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2022

Summary of Hourly Averages

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

WIND SPEED																											
Maximum Hourly Value:	19.1	kph	on September 23 at hour 14																	Hours in Service:	720						
Maximum Daily Value:	12.1	kph	on September 23																	Hours of Data:	720						
Minimum Hourly Value:	0.0	kph	on September 3 at hour 19																	Hours of Missing Data:	0						
Minimum Daily Value:	1.1	kph	on September 13																	Hours of Calibration:	0						
Monthly Average:	2.8	kph																		Operational Uptime:	100						
WIND DIRECTION																											
Monthly Average:	248 (WSW) degree																										
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Sep 1	8.5	9.2	4.5	5.7	4.6	6.6	7.3	8.5	7.4	7.3	8.0	8.3	8.7	6.7	6.8	7.6	6.8	6.0	2.1	0.1	0.3	0.9	1.9	4.0	0.1	9.2	5.1
	WSW	NW	WNW	W	W	W	W	W	WNW	WNW	WNW	WNW	NW	WNW	W	WSW	WSW	WSW	SW	SSW	SW	SW	SSW	SSW			
Sep 2	2.8	2.5	1.1	3.2	3.2	2.8	2.5	2.0	4.4	5.0	4.4	3.2	2.7	4.7	4.8	5.3	5.0	5.9	4.8	2.9	2.3	4.2	2.3	1.3	1.1	5.9	2.6
	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SSW	S	SE	SE	SE	SE	ESE	ESE	SE	ESE	SE	SW	SW			
Sep 3	1.1	1.2	1.5	2.5	1.8	2.3	2.7	2.3	2.5	2.5	2.9	7.4	4.6	5.1	4.7	3.0	2.4	1.1	0.4	0.0	0.0	0.4	0.0	0.3	0.0	7.4	1.4
	SW	SW	SW	SSW	SSW	SSW	SSW	S	S	S	SSW	SW	W	NW	NW	NW	NE	NE	S	WNW	NNW	NNW	N	N			
Sep 4	0.1	1.2	1.0	1.7	2.6	0.3	1.6	2.8	3.2	2.5	1.2	0.8	4.4	7.5	10.9	10.0	10.1	10.6	6.6	5.3	7.7	8.0	6.4	4.7	0.1	10.9	4.0
	NNE	E	ESE	ESE	WSW	W	NNW	NNW	W	W	SW	SSE	SW	SW	WSW	WSW	WSW	SW	SW	SW	SW	WSW	WSW	SW			
Sep 5	5.3	5.4	6.5	5.7	5.2	5.4	6.6	9.4	13.7	13.8	14.4	16.3	16.0	16.2	15.0	15.7	15.0	15.2	12.6	12.2	12.2	12.9	12.0	10.1	5.2	16.3	11.2
	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW			
Sep 6	7.2	7.3	8.2	5.8	5.6	4.7	3.4	4.8	7.6	8.5	8.1	6.4	6.0	6.3	7.0	5.8	6.5	5.3	2.4	0.1	0.1	0.8	2.6	2.7	0.1	8.5	4.7
	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	SW	SW	S	S	SE	ESE	ESE			
Sep 7	2.5	2.8	2.3	2.8	1.6	1.0	2.5	5.3	5.8	5.4	7.2	9.1	10.0	14.0	13.6	11.9	12.6	10.8	6.7	6.0	7.7	6.9	5.1	3.6	1.0	14.0	5.6
	SE	SE	E	SSE	SSW	SW	SW	WSW	WSW	SW	WSW	W	W	WSW	WSW	W	W	NW	W	W	W	W	W	NW			
Sep 8	5.1	5.3	3.9	3.5	4.6	5.0	5.1	7.9	8.0	9.5	8.2	8.5	8.2	8.0	9.2	8.9	9.8	9.7	2.7	0.8	3.0	2.0	3.1	4.2	0.8	9.8	4.8
	NNW	NNW	NNW	W	WSW	WSW	WSW	WSW	WSW	WSW	W	NNW	NNW	NW	NW	NW	N	N	NW	WSW	WNW	W	WSW	WSW			
Sep 9	3.9	5.1	6.4	6.7	4.4	6.8	5.1	5.8	5.9	4.8	6.9	8.5	7.4	7.5	8.5	7.2	9.1	6.8	3.5	0.9	0.4	0.8	2.1	4.3	0.4	9.1	5.2
	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	SW	WSW	SW	SSW	SSW	SW	SSW	SSW	SSW			
Sep 10	3.8	3.3	3.1	3.7	4.0	5.5	7.2	7.2	9.2	11.7	11.9	10.4	9.8	8.1	7.9	9.0	4.7	1.8	0.3	0.1	1.7	0.6	0.5	1.0	0.1	11.9	4.8
	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WNW	NNW	N	NNE	SSW	NNW	SSW	SSW			
Sep 11	1.8	4.7	4.7	4.7	4.6	3.6	3.9	4.5	4.2	6.6	7.0	4.9	3.6	4.9	5.4	6.1	9.6	7.3	5.5	6.7	5.9	4.8	2.8	1.4	1.4	9.6	4.6
	NNW	N	NNE	NNE	NNE	NNE	N	N	NNE	ENE	ENE	ENE	N	N	N	NNE	NNE	N	N	N	NNE	NNE	NNE	NNE			
Sep 12	0.7	0.5	2.3	2.7	0.6	0.3	0.1	1.1	2.2	3.7	7.1	7.9	8.7	9.2	10.2	9.9	9.7	9.4	7.4	6.8	8.9	7.0	7.4	6.5	0.1	10.2	4.8
	N	NW	W	NNW	SSE	SW	SSE	ENE	SE	SE	ESE	ESE	ESE	ESE	ESE	ESE	E	E	E	E	ESE	ESE	ESE	ESE			
Sep 13	5.3	5.7	4.6	5.4	3.9	2.5	2.4	3.1	3.4	1.6	1.6	1.1	0.5	1.6	2.8	4.6	5.0	3.9	4.0	2.9	1.5	0.6	0.7	3.1	0.5	5.7	1.1
	ESE	SE	SE	SE	SE	SE	SE	SE	SE	SSE	SW	S	WSW	NNW	NW	NNW	NNW	N	N	NNE	NNE	ENE	ENE	SE			
Sep 14	1.8	0.9	1.0	0.6	0.2	0.2	0.3	0.7	1.7	1.2	1.9	2.7	2.7	5.7	4.0	4.9	4.8	4.8	4.2	2.8	2.8	3.8	3.3	2.2	0.2	5.7	2.0
	SSW	SW	SW	WSW	SW	SW	WSW	SSW	S	SSE	S	SSW	SSE	ESE	SE	ESE	ESE	ESE	ESE	SE	SE	SE	SE	SE			
Sep 15	1.8	0.9	1.7	3.3	2.9	3.5	3.7	2.9	3.2	2.8	3.2	3.2	4.3	2.4	3.5	4.3	1.8	2.1	1.5	0.1	0.6	0.7	0.6	0.5	0.1	4.3	2.1
	SSE	SSE	SSE	SE	SE	SE	SE	SE	S	SSE	SE	SE	S	SSE	SE	SSE	SE	SSW	WSW	WSW	SSW	SW	WSW	SSW			
Sep 16	1.3	2.0	2.2	2.9	3.1	1.5	1.6	2.3	2.4	3.8	5.4	5.1	4.8	6.2	4.2	4.0	3.8	3.6	1.8	1.3	2.2	4.1	8.9	10.8	1.3	10.8	3.2
	SW	SW	SSW	SW	SW	SSW	SSW	SSW	SSW	SSW	WSW	WSW	WSW	WSW	W	W	NW	NW	WNW	NW	N	W	WSW	WSW			
Sep 17	11.3	7.7	3.8	2.1	3.0	2.9	1.5	1.1	1.4	2.3	3.8	5.3	3.2	3.5	2.2	1.7	1.2	1.8	1.2	2.3	5.7	6.1	5.3	5.9	1.1	11.3	2.3
	WSW	W	WNW	W	SW	WSW	WSW	W	WNW	WSW	WSW	WSW	SW	SW	S	SW	S	SSW	WSW	NNW	N	N	N	N			
Sep 18	4.7	5.1	3.3	3.5	3.5	2.8	4.7	4.5	5.2	4.8	6.2	6.2	8.1	7.1	7.2	7.1	5.2	4.1	4.0	3.6	3.3	4.3	3.1	3.4	2.8	8.1	4.1
	NNW	NNW	NW	W	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	WSW	W	NNW	W	W			
Sep 19	4.0	4.0	3.6	3.2	3.6	3.6	5.0	7.7	7.6	9.2	8.6	8.6	9.4	10.4	9.4	8.5	6.8	1.6	0.6	0.5	2.0	2.1	2.3	0.5	10.4	4.7	
	WSW	WSW	WSW	W	WNW	NW	NW	NW	NW	NW	NNW	NNW	NNW	N	N	N	NNW	NNW	W	WSW	W	NW	W	W			
Sep 20	2.9	3.1	1.5	1.9	2.2	2.6	2.6	2.1	3.2	4.1	3.5	3.8	4.5	4.6	5.5	6.2	6.5	5.2	0.7	0.1	0.9	1.4	1.7	1.7	0.1	6.5	2.9
	W	WSW	WSW	SW	SW	SW	SW	SSW	SW	S	SSW	SW	SSW	SW	SW	SW	WSW	SW	SW	WSW	WSW	SW	SW	SW			



PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2022

Summary of Hourly Averages

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

WIND SPEED																												
Maximum Hourly Value:	19.1	kph	on September 23 at hour 14	Hours in Service:	720																							
Maximum Daily Value:	12.1	kph	on September 23	Hours of Data:	720																							
Minimum Hourly Value:	0.0	kph	on September 3 at hour 19	Hours of Missing Data:	0																							
Minimum Daily Value:	1.1	kph	on September 13	Hours of Calibration:	0																							
Monthly Average:	2.8	kph		Operational Uptime:	100																							
WIND DIRECTION																												
Monthly Average:	248 (WSW degree)																											
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
Sep 21	1.9	2.3	2.6	2.1	2.0	2.1	2.0	2.5	2.3	2.3	2.5	3.0	3.4	4.2	4.4	3.7	3.6	2.3	0.3	0.5	0.2	1.0	0.8	1.3	0.2	4.4	2.1	
	SSW	SSW	SSW	SSW	SW	SW	SW	SSW	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	SW	SSW	SW	SW				
Sep 22	0.7	1.0	1.3	1.7	1.3	1.4	2.1	1.6	1.1	1.9	3.7	5.4	5.2	7.2	6.6	6.9	7.7	3.9	3.4	4.4	6.7	8.6	10.9	12.3	0.7	12.3	4.3	
	SSW	SSW	SW	WSW	SW	SW	SSW	SSW	S	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SSW	SW	SW	WSW	WSW				
Sep 23	10.6	10.5	12.5	12.6	9.4	7.2	7.1	7.8	10.4	12.3	14.1	14.7	16.4	18.3	19.1	18.0	17.6	14.0	11.6	10.4	12.1	10.5	8.9	6.9	6.9	19.1	12.1	
	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW			
Sep 24	6.3	6.3	8.3	9.8	10.2	8.8	7.4	11.8	12.7	13.1	12.8	10.8	11.8	11.9	10.8	12.4	11.7	6.9	3.9	3.0	2.6	4.3	3.5	2.9	2.6	13.1	8.2	
	SW	SW	SW	WSW	WSW	SW	WSW	WSW	WSW	WSW	W	W	W	W	W	WSW	WSW	W	W	WSW	SW	SW	SW	SW				
Sep 25	2.9	3.7	3.8	3.7	3.2	3.2	3.1	2.4	2.5	4.8	6.1	8.7	7.4	7.7	9.4	10.4	8.0	5.2	4.3	2.8	1.2	1.1	2.3	1.9	1.1	10.4	4.2	
	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	SW	SW	SW	SW				
Sep 26	4.2	2.7	1.8	3.3	2.9	1.3	1.5	1.0	0.8	1.4	2.4	3.2	3.3	2.6	2.8	2.9	2.0	1.6	1.9	1.5	1.6	2.3	2.6	2.4	0.8	4.2	1.9	
	WSW	SW	SW	SW	SW	SW	SW	SSW	SE	SSE	SSW	SSW	SSW	S	SSW	SSW	SSW	SE	SE	SSE	SSE	SSE	SSE	S				
Sep 27	2.3	2.1	2.4	3.2	3.0	0.8	2.0	2.3	3.2	2.4	3.4	4.2	4.8	6.5	7.9	6.0	5.4	3.6	2.4	1.4	0.3	0.6	0.5	1.2	0.3	7.9	2.8	
	S	S	S	SSW	S	SSW	SW	SSW	SSW	SSW	SSW	SW	SW	WSW	SW	SW	SSW	SSW	SSW	SSW	SSW	SW	SSW	SSW				
Sep 28	1.7	3.1	2.0	2.1	2.7	2.0	2.0	2.9	4.0	5.3	4.2	5.0	4.8	5.9	4.3	3.9	2.0	1.0	1.0	0.6	0.1	1.4	3.3	5.3	0.1	5.9	2.0	
	WSW	SW	SSW	SW	SW	SSW	SSW	SSW	SSW	SW	W	WSW	W	W	WNW	NW	NW	W	SW	SW	N	N	N	N				
Sep 29	8.3	8.1	8.7	7.5	8.7	7.1	8.1	7.5	7.1	5.9	8.7	2.7	3.1	5.4	6.1	4.9	3.2	2.8	3.7	3.3	3.4	3.0	1.7	0.5	0.5	8.7	4.5	
	N	N	NNE	N	N	N	NNE	NNE	NE	ENE	ENE	ENE	NE	NNE	NNE	NNE	N	N	N	E	ESE	ESE	ESE	SE				
Sep 30	0.8	1.7	0.6	1.1	1.0	1.2	1.1	0.3	0.8	1.9	2.0	2.5	4.5	4.8	4.7	5.0	3.7	0.5	0.4	0.3	0.8	0.7	1.3	1.6	0.3	5.0	1.5	
	ESE	ESE	WSW	SW	SW	SW	SW	S	SSW	SSE	SSE	SSW	SW	SW	SW	WSW	SW	S	WSW	SW	SW	SW	SSW	SSW				
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance											
K	Collection Error							N	No Data (Machine Not in Service)							Y	Routine Maintenance							P	Power Failure			
X	Invalid Data (Equipment Malfunction/Recovery)							NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)																			
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.																												
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.																												

PRC STATION



PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex (PRC) Station - September 2022

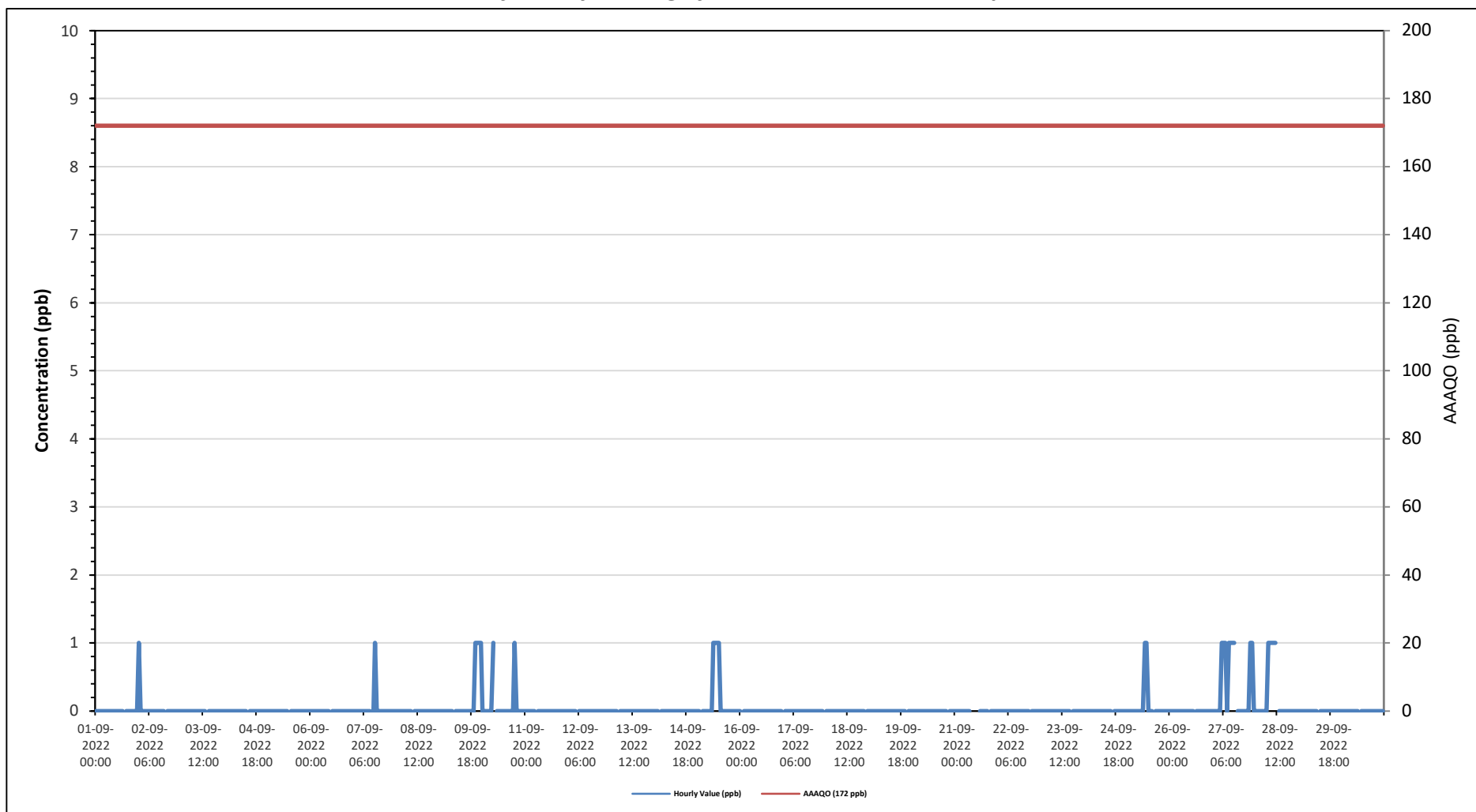
Summary of Hourly Averages

SULPHUR DIOXIDE (SO₂) in ppb

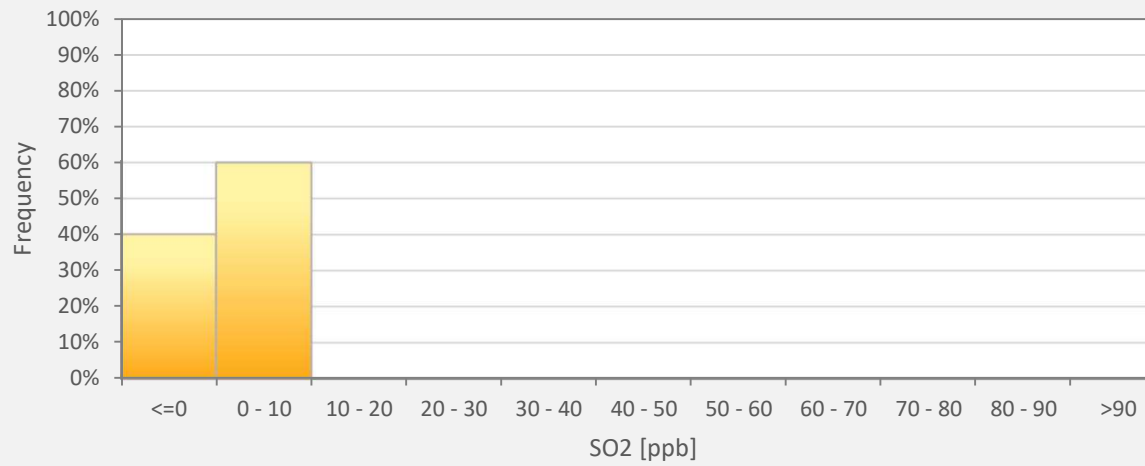
Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb																											
Number of 1-Hour Exceedances: 0					Number of 24-Hour Exceedances: 0					30-Day Exceedance: 0																	
Maximum Hourly Value: 1 ppb on September 2 at hour 0					Hours in Service: 720																						
Maximum Daily Value: 0.4 ppb on September 27					Hours of Data: 684																						
Minimum Hourly Value: 0 ppb on September 1 at hour 0					Hours of Missing Data: 0																						
Minimum Daily Value: 0.0 ppb on September 1					Hours of Calibration: 36																						
Monthly Average: 0.0 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
Sep 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0
Sep 2	1	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
Sep 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
Sep 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
Sep 5	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
Sep 6	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
Sep 7	0	0	0	0	0	0	0	0	0	0	S	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 8	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
Sep 9	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0.2
Sep 10	0	0	0	0	0	0	1	S	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.1
Sep 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
Sep 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
Sep 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
Sep 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
Sep 15	0	0	S	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2
Sep 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
Sep 17	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0.0
Sep 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0.0
Sep 19	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
Sep 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
Sep 21	0	0	0	0	0	0	0	0	0	C	C	C	C	C	0	0	0	0	0	0	S	0	0	0	0	0	0.0
Sep 22	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
Sep 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
Sep 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
Sep 25	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0.1
Sep 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
Sep 27	0	0	0	0	1	1	1	0	1	1	1	1	S	0	0	0	0	0	0	0	0	1	1	0	0	0	0.4
Sep 28	0	0	0	0	0	0	1	1	1	1	1	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2
Sep 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
Sep 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
Diurnal Maximum	1	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	1	0	1	1	1	1	1	0	
Diurnal Average	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	
C	Monthly Calibration										S	Daily Zero-Span Check					Q	Quality Assurance									
K	Collection Error										N	No Data (Machine Not in Service)					Y	Routine Maintenance									
X	InValid Data (Equipment Malfunction /Recovery)										NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)					P	Power Failure									

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

Timeseries Chart of Hourly Average for SO₂ - Peace River Complex (PRC) Station



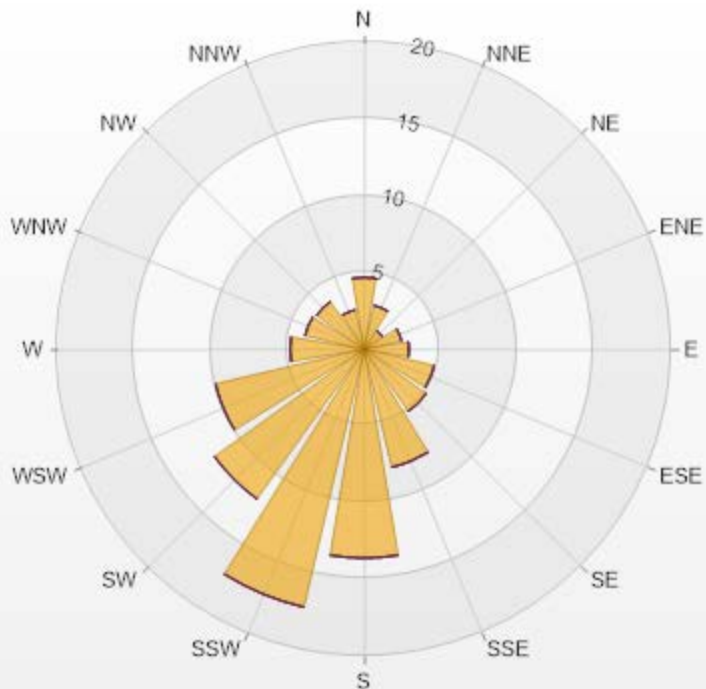
SO2[ppb] Histogram: Peace River Complex [PRC] Monthly: 09-2022 1 Hr.



Classes	SO2
<=0	40.06%
0 - 10	59.94%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.00% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	4.68	0	0	0	0	4.68
NNE	2.92	0	0	0	0	2.92
NE	1.46	0	0	0	0	1.46
ENE	2.49	0	0	0	0	2.49
E	2.92	0	0	0	0	2.92
ESE	4.68	0	0	0	0	4.68
SE	4.97	0	0	0	0	4.97
SSE	7.89	0	0	0	0	7.89
S	13.6	0	0	0	0	13.6
SSW	17.25	0	0	0	0	17.25
SW	11.99	0	0	0	0	11.99
WSW	9.94	0	0	0	0	9.94
W	4.82	0	0	0	0	4.82
WNW	3.95	0	0	0	0	3.95
NW	3.8	0	0	0	0	3.8
NNW	2.63	0	0	0	0	2.63
Summary	100	0	0	0	0	100



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% Icon Classes (ppb)

100 0-10

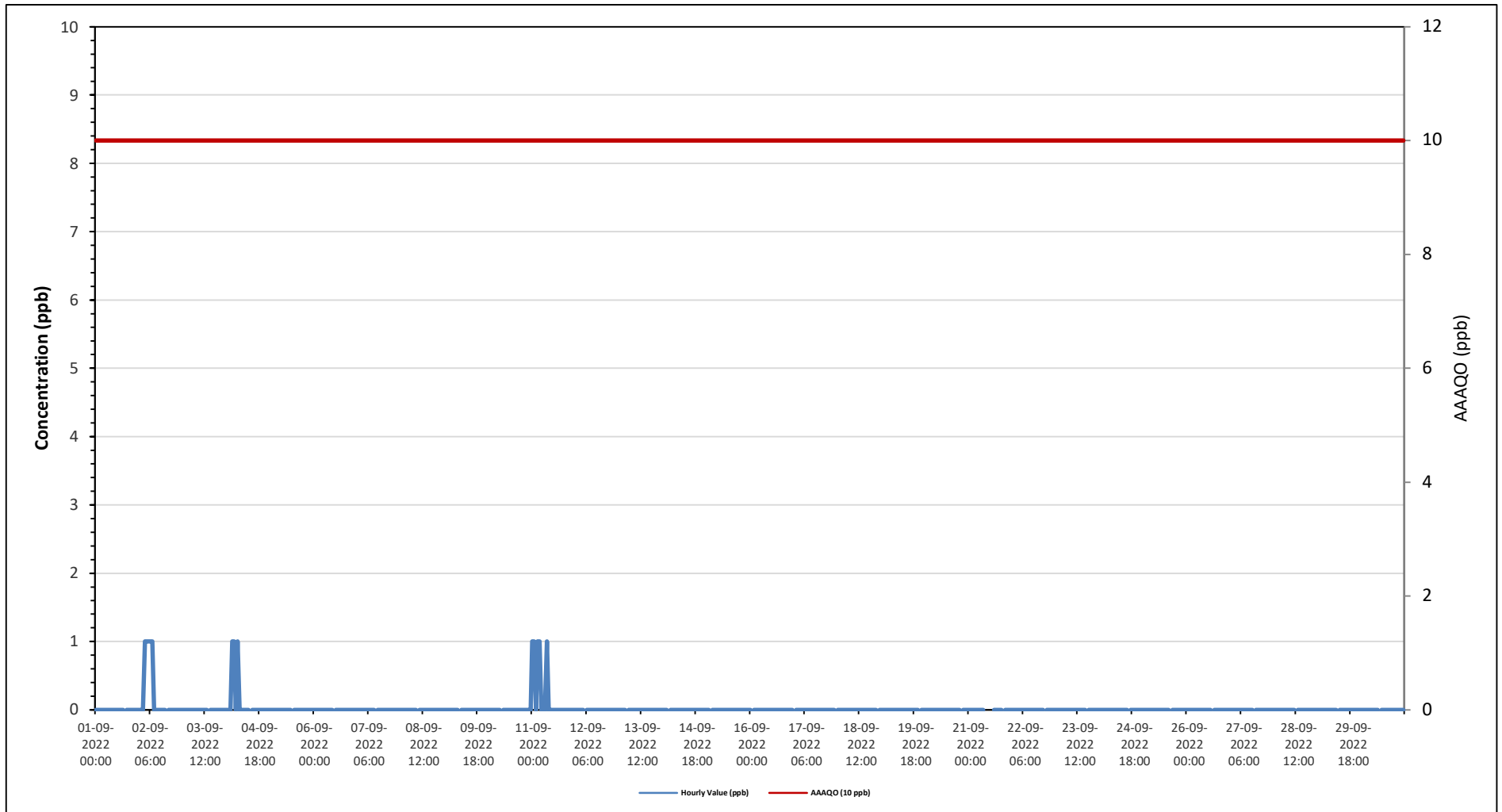
0 10-50

0 50-100

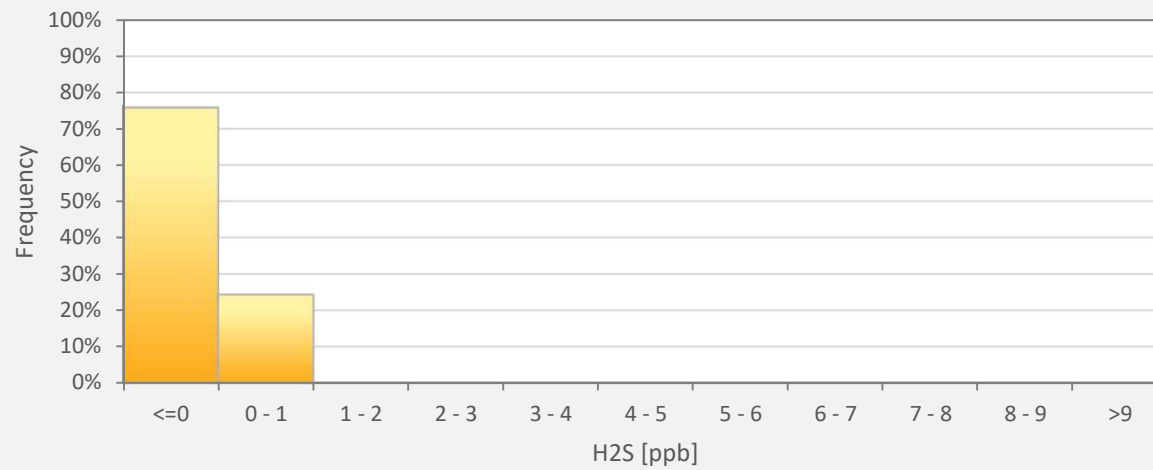
0 100-172

0 >172.0

Timeseries Chart of Hourly Average for H2S - Peace River Complex (PRC) Station



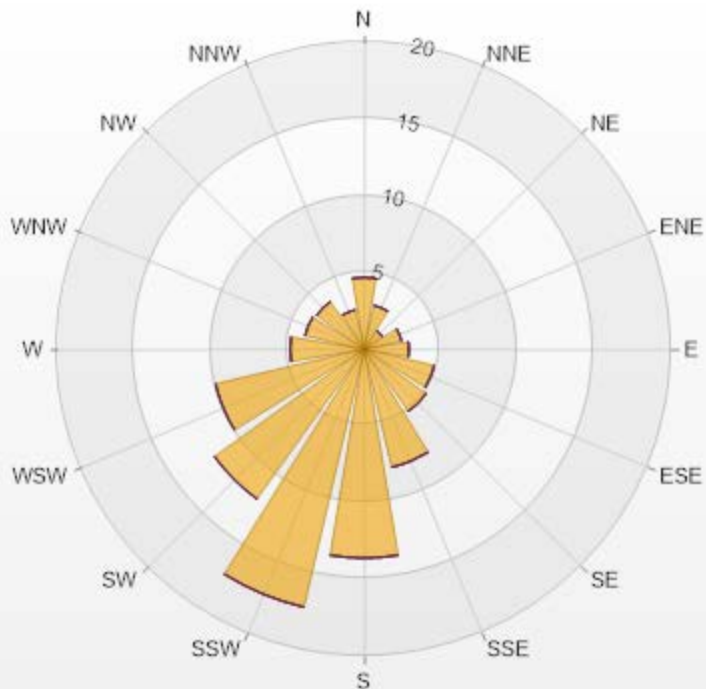
H2S[ppb] Histogram: Peace River Complex [PRC] Monthly: 09-2022 1 Hr.



Classes	H2S
<=0	75.73%
0 - 1	24.27%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.00% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	4.68	0	0	0	0	4.68
NNE	2.92	0	0	0	0	2.92
NE	1.46	0	0	0	0	1.46
ENE	2.49	0	0	0	0	2.49
E	2.92	0	0	0	0	2.92
ESE	4.68	0	0	0	0	4.68
SE	4.97	0	0	0	0	4.97
SSE	7.89	0	0	0	0	7.89
S	13.6	0	0	0	0	13.6
SSW	17.25	0	0	0	0	17.25
SW	11.99	0	0	0	0	11.99
WSW	9.94	0	0	0	0	9.94
W	4.82	0	0	0	0	4.82
WNW	3.95	0	0	0	0	3.95
NW	3.8	0	0	0	0	3.8
NNW	2.63	0	0	0	0	2.63
Summary	100	0	0	0	0	100



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% Icon Classes (ppb)

100 0-2

0 2-5

0 5-10

0 10-50

0 >50.0



PEACE RIVER AREA MONITORING PROGRAM
Peace River Complex (PRC) Station - September 2022
Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

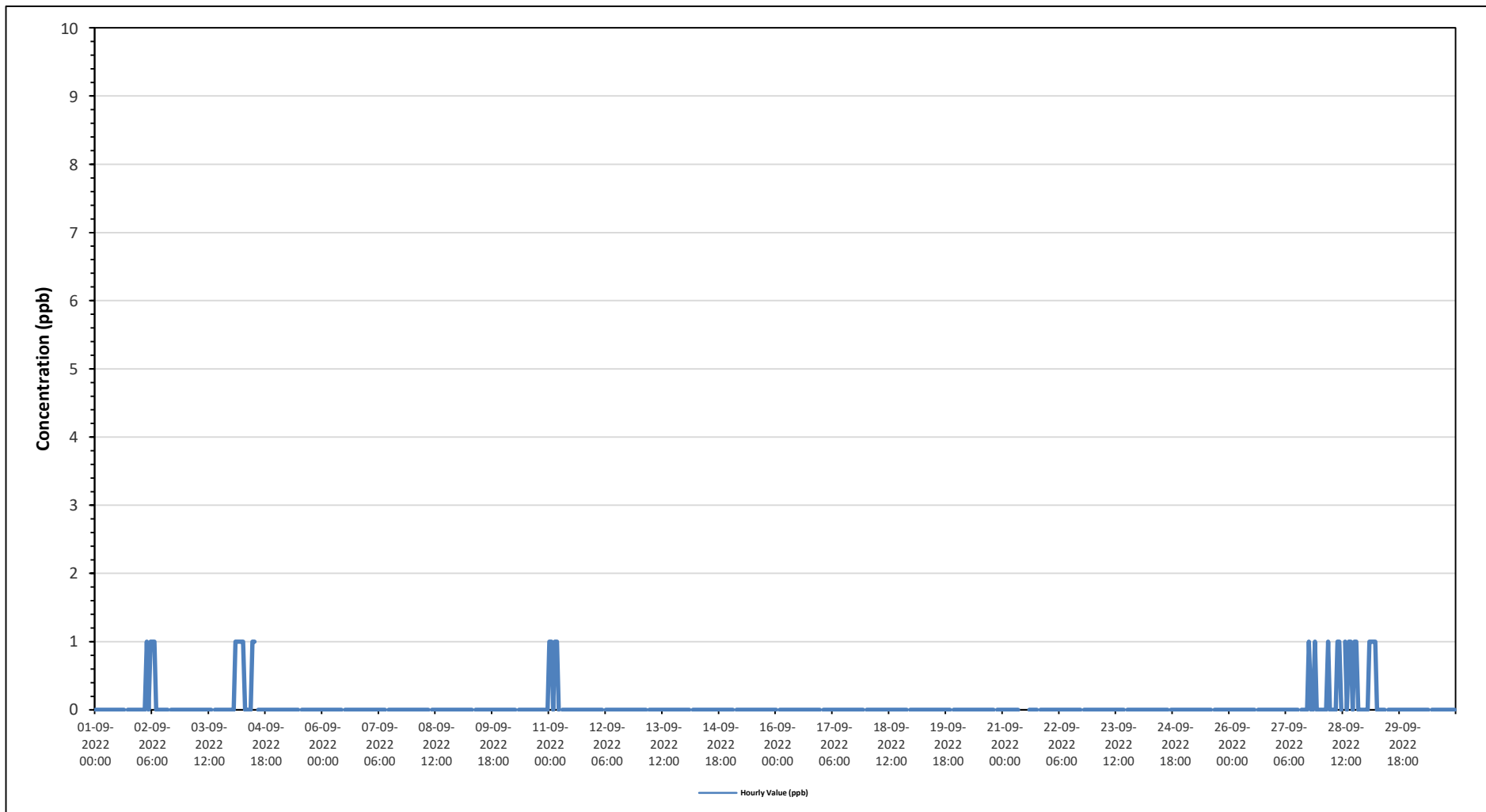
Maximum Hourly Value:	1 ppb on September 2 at hour 3	Hours in Service:	720
Maximum Daily Value:	0.3 ppb on September 28	Hours of Data:	684
Minimum Hourly Value:	0 ppb on September 1 at hour 0	Hours of Missing Data:	0
Minimum Daily Value:	0.0 ppb on September 1	Hours of Calibration:	36
Monthly Average:	0 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			
Sep 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Sep 2	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0.2
Sep 3	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	0	0.0
Sep 4	0	0	1	1	1	1	0	0	0	0	0	1	1	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3
Sep 5	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	0.0	
Sep 6	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	0.0	
Sep 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	0.0	
Sep 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	0.0	
Sep 9	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	0.0	
Sep 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	0.0	
Sep 11	1	1	0	1	1	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	
Sep 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	0.0	
Sep 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	0.0	
Sep 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	0.0	
Sep 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	0.0	
Sep 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	0.0	
Sep 17	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	S	0	0.0	
Sep 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	
Sep 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	S	0	0	0	0.0	
Sep 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	0.0	
Sep 21	0	0	0	0	0	0	0	0	C	C	C	C	C	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0.0	
Sep 22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	S	0	0	0	0	0	0	0	0	0.0	
Sep 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	0.0	
Sep 24	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	0.0	
Sep 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	0.0	
Sep 26	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	0.0	
Sep 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	1	0	0	1	0	0	0	0	0	0.1	
Sep 28	0	0	0	0	1	0	0	0	0	1	1	0	S	1	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0.3	
Sep 29	0	0	1	1	1	1	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	
Sep 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	0.0	
Diurnal Maximum	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00		
Diurnal Average	0.03	0.03	0.07	0.14	0.14	0.10	0.07	0.03	0.00	0.04	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.00	0.04	0.00	0.07	0.03	0.00	0.03	0.00	0.00	0.00	0.00		

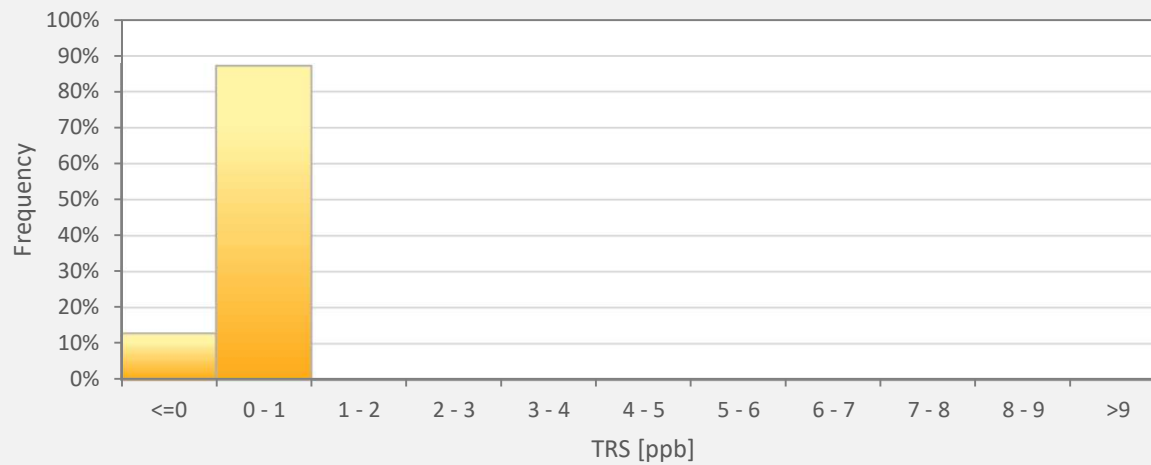
C Monthly Calibration	S Daily Zero-Span Check	Q Quality Assurance
K Collection Error	N No Data (Machine Not in Service)	Y Routine Maintenance
X InValid Data (Equipment Malfunction /Recovery)	NRM UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P Power Failure

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

Timeseries Chart of Hourly Average for TRS - Peace River Complex (PRC) Station



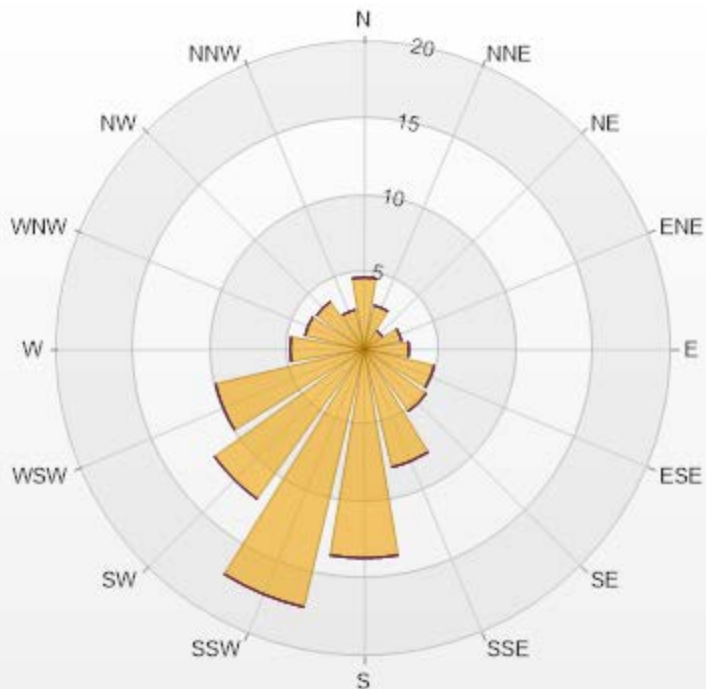
TRS[ppb] Histogram: Peace River Complex [PRC] Monthly: 09-2022 1 Hr.



Classes	TRS
<=0	12.87%
0 - 1	87.13%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.00% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	4.68	0	0	0	0	4.68
NNE	2.92	0	0	0	0	2.92
NE	1.46	0	0	0	0	1.46
ENE	2.49	0	0	0	0	2.49
E	2.92	0	0	0	0	2.92
ESE	4.68	0	0	0	0	4.68
SE	4.97	0	0	0	0	4.97
SSE	7.89	0	0	0	0	7.89
S	13.6	0	0	0	0	13.6
SSW	17.25	0	0	0	0	17.25
SW	11.99	0	0	0	0	11.99
WSW	9.94	0	0	0	0	9.94
W	4.82	0	0	0	0	4.82
WNW	3.95	0	0	0	0	3.95
NW	3.8	0	0	0	0	3.8
NNW	2.63	0	0	0	0	2.63
Summary	100	0	0	0	0	100



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% Icon Classes (ppb)

100 0-2

0 2-5

0 5-10

0 10-50

0 >50.0



PEACE RIVER AREA MONITORING PROGRAM
Peace River Complex (PRC) Station - September 2022
Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

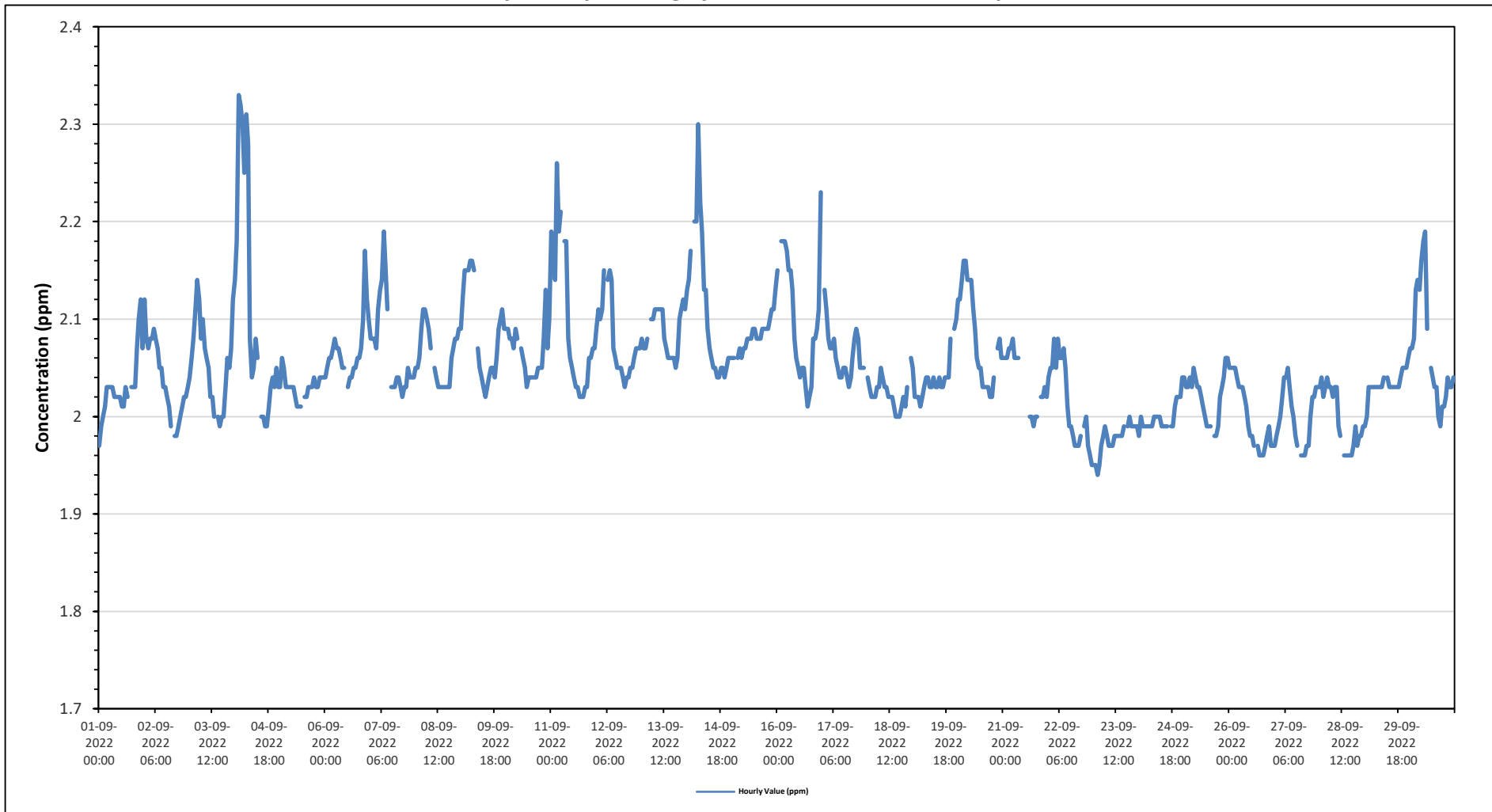
Maximum Hourly Value:	2.33 ppm on September 4 at hour 2	Hours in Service:	720
Maximum Daily Value:	2.11 ppm on September 4	Hours of Data:	684
Minimum Hourly Value:	1.94 ppm on September 23 at hour 2	Hours of Missing Data:	0
Minimum Daily Value:	1.98 ppm on September 23	Hours of Calibration:	36
Monthly Average:	2.05 ppm	Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	1.97	1.99	2.00	2.01	2.03	2.03	2.03	2.03	2.02	2.02	2.02	2.02	2.01	2.01	2.03	2.02	S	2.03	2.03	2.03	2.07	2.10	2.12	2.07	1.97	2.12	2.03
Sep 2	2.12	2.08	2.07	2.08	2.08	2.09	2.08	2.07	2.05	2.05	2.03	2.03	2.02	2.01	1.99	S	1.98	1.98	1.99	2.00	2.01	2.02	2.02	2.03	1.98	2.12	2.04
Sep 3	2.04	2.06	2.08	2.11	2.14	2.12	2.08	2.10	2.07	2.06	2.05	2.02	2.02	2.00	S	2.00	1.99	2.00	2.00	2.03	2.06	2.05	2.07	2.12	1.99	2.14	2.06
Sep 4	2.14	2.18	2.33	2.32	2.30	2.25	2.31	2.28	2.08	2.04	2.05	2.08	2.06	S	2.00	2.00	1.99	1.99	2.01	2.03	2.04	2.03	2.05	2.03	1.99	2.33	2.11
Sep 5	2.03	2.06	2.05	2.03	2.03	2.03	2.03	2.03	2.02	2.01	2.01	2.01	S	2.02	2.02	2.03	2.03	2.03	2.04	2.03	2.03	2.04	2.04	2.04	2.01	2.06	2.03
Sep 6	2.04	2.05	2.06	2.06	2.07	2.08	2.07	2.07	2.06	2.05	2.05	S	2.03	2.04	2.04	2.05	2.05	2.06	2.06	2.07	2.10	2.17	2.12	2.10	2.03	2.17	2.07
Sep 7	2.08	2.08	2.08	2.07	2.11	2.13	2.14	2.19	2.15	2.11	S	2.03	2.03	2.03	2.04	2.04	2.03	2.02	2.03	2.03	2.05	2.04	2.04	2.04	2.02	2.19	2.07
Sep 8	2.05	2.05	2.06	2.09	2.11	2.11	2.10	2.09	2.07	S	2.05	2.04	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.06	2.07	2.08	2.08	2.09	2.03	2.11	2.06
Sep 9	2.09	2.12	2.15	2.15	2.15	2.16	2.16	2.15	S	2.07	2.05	2.04	2.03	2.02	2.03	2.04	2.05	2.05	2.04	2.06	2.09	2.10	2.11	2.09	2.02	2.16	2.09
Sep 10	2.09	2.09	2.08	2.08	2.07	2.09	2.08	S	2.07	2.06	2.05	2.03	2.04	2.04	2.04	2.04	2.05	2.05	2.05	2.08	2.13	2.07	2.10	2.03	2.13	2.07	
Sep 11	2.19	2.17	2.14	2.26	2.19	2.21	S	2.18	2.18	2.08	2.06	2.05	2.04	2.03	2.03	2.02	2.02	2.03	2.03	2.06	2.06	2.07	2.07	2.02	2.26	2.10	
Sep 12	2.09	2.11	2.10	2.11	2.15	S	2.14	2.15	2.14	2.07	2.06	2.05	2.05	2.05	2.04	2.03	2.04	2.04	2.05	2.05	2.06	2.07	2.07	2.07	2.03	2.15	2.08
Sep 13	2.08	2.07	2.07	2.08	S	2.10	2.10	2.11	2.11	2.11	2.11	2.11	2.08	2.07	2.06	2.06	2.06	2.06	2.05	2.06	2.10	2.11	2.12	2.11	2.05	2.12	2.09
Sep 14	2.13	2.14	2.17	S	2.20	2.20	2.30	2.22	2.19	2.13	2.13	2.09	2.07	2.06	2.05	2.05	2.04	2.04	2.05	2.04	2.05	2.06	2.06	2.04	2.04	2.30	2.11
Sep 15	2.06	2.06	S	2.06	2.07	2.06	2.07	2.07	2.08	2.08	2.08	2.08	2.09	2.09	2.08	2.08	2.08	2.09	2.09	2.09	2.10	2.11	2.11	2.13	2.06	2.13	2.08
Sep 16	2.15	S	2.18	2.18	2.18	2.17	2.15	2.15	2.13	2.08	2.06	2.05	2.04	2.05	2.05	2.03	2.01	2.02	2.03	2.08	2.08	2.09	2.11	2.23	2.01	2.23	2.10
Sep 17	S	2.13	2.11	2.08	2.07	2.07	2.08	2.06	2.05	2.04	2.04	2.05	2.05	2.04	2.03	2.04	2.06	2.08	2.09	2.08	2.05	2.05	S	2.03	2.13	2.06	
Sep 18	2.04	2.03	2.02	2.02	2.02	2.03	2.03	2.05	2.04	2.03	2.03	2.02	2.02	2.02	2.01	2.00	2.00	2.00	2.01	2.02	2.01	2.03	S	2.06	2.00	2.06	2.02
Sep 19	2.05	2.02	2.02	2.02	2.01	2.02	2.03	2.04	2.04	2.03	2.03	2.04	2.03	2.03	2.04	2.03	2.03	2.04	2.04	2.04	2.08	S	2.09	2.10	2.01	2.10	2.04
Sep 20	2.12	2.12	2.14	2.16	2.16	2.14	2.14	2.14	2.11	2.09	2.06	2.05	2.05	2.03	2.03	2.03	2.03	2.02	2.02	2.04	S	2.07	2.08	2.06	2.02	2.16	2.08
Sep 21	2.06	2.06	2.06	2.07	2.07	2.08	2.06	2.06	2.06	C	C	C	C	C	2.00	2.00	1.99	2.00	2.00	S	2.02	2.02	2.03	2.02	1.99	2.08	2.04
Sep 22	2.04	2.05	2.05	2.08	2.05	2.08	2.06	2.06	2.07	2.05	2.01	1.99	1.99	1.98	1.97	1.97	1.97	1.98	S	S	1.99	2.00	1.97	1.96	1.95	2.08	2.01
Sep 23	1.95	1.95	1.94	1.95	1.97	1.98	1.99	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.98	1.98	1.99	S	1.99	1.99	2.00	1.99	1.99	1.99	1.94	2.00	1.98
Sep 24	1.98	2.00	1.99	1.99	1.99	1.99	1.99	1.99	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.99	S	1.99	1.99	2.01	2.02	2.02	2.02	2.04	1.98	2.04	2.00
Sep 25	2.04	2.03	2.03	2.04	2.03	2.05	2.04	2.03	2.03	2.03	2.02	2.01	1.99	1.98	1.99	S	1.98	1.98	1.99	2.02	2.03	2.04	2.06	2.06	1.98	2.06	2.02
Sep 26	2.05	2.05	2.05	2.05	2.04	2.03	2.03	2.03	2.02	2.01	1.99	1.98	1.98	1.97	S	1.97	1.96	1.96	1.96	1.97	1.98	1.99	1.97	1.97	1.96	2.05	2.00
Sep 27	1.97	1.98	1.99	2.00	2.02	2.04	2.04	2.05	2.03	2.01	2.00	1.98	1.97	S	1.96	1.96	1.96	1.97	1.97	2.00	2.02	2.02	2.03	2.03	1.96	2.05	2.00
Sep 28	2.03	2.04	2.02	2.03	2.04	2.03	2.03	2.02	2.03	2.03	1.99	1.98	S	1.96	1.96	1.96	1.96	1.96	1.97	1.99	1.97	1.98	1.98	1.99	1.96	2.04	2.00
Sep 29	1.99	2.00	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.04	S	2.04	2.03	2.03	2.03	2.03	2.03	2.04	2.05	2.05	2.05	2.06	1.99	2.06	2.03	2.03
Sep 30	2.07	2.07	2.08	2.13	2.14	2.13	2.16	2.18	2.19	2.09	S	2.05	2.04	2.03	2.03	2.00	1.99	2.01	2.01	2.02	2.04	2.03	2.03	2.04	1.99	2.19	2.07
Diurnal Maximum	2.19	2.18	2.33	2.32	2.30	2.25	2.31	2.28	2.19	2.13	2.13	2.11	2.09	2.08	2.08	2.08	2.09	2.09	2.09	2.09	2.10	2.17	2.12	2.23			
Diurnal Average	2.06	2.06	2.07	2.08	2.09	2.09	2.09	2.09	2.07	2.05	2.04	2.03	2.03	2.02	2.02	2.02	2.02	2.01	2.02	2.02	2.03	2.04	2.05	2.06	2.06		

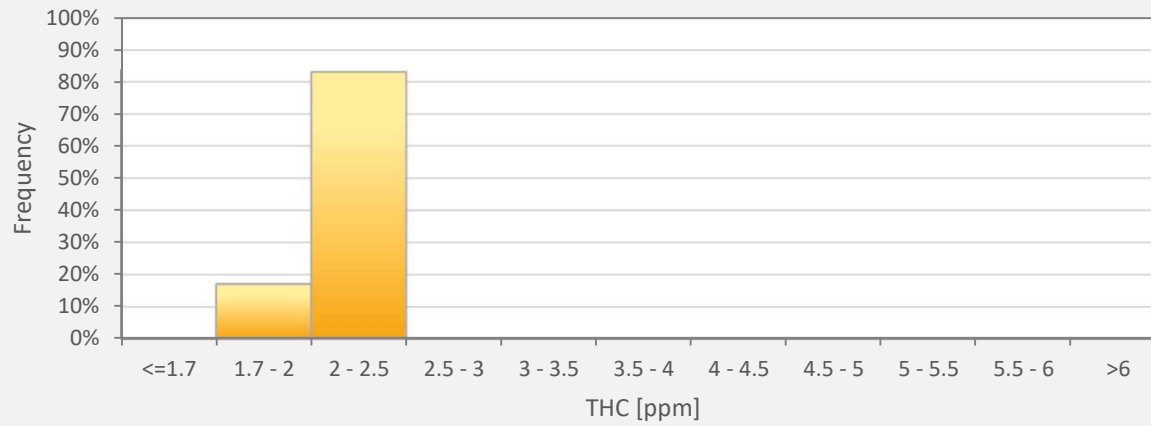
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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

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



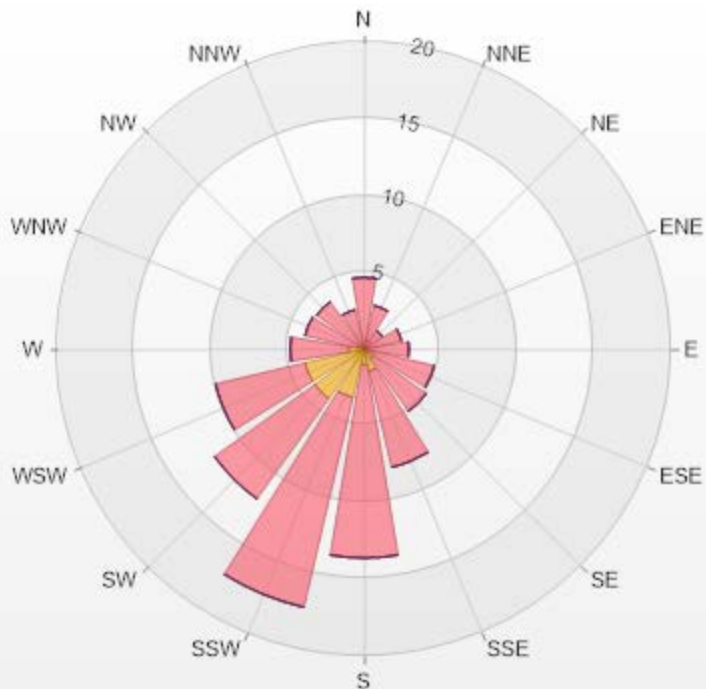
THC55[ppm] Histogram: Peace River Complex [PRC] Monthly: 09-2022 1
Hr.



Classes	THC55
<=1.7	0.00%
1.7 - 2	16.96%
2 - 2.5	83.04%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.00% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	0.29	4.39	0	0	0	4.68
NNE	0.58	2.34	0	0	0	2.92
NE	0	1.46	0	0	0	1.46
ENE	0	2.49	0	0	0	2.49
E	0	2.92	0	0	0	2.92
ESE	0.15	4.53	0	0	0	4.68
SE	0.73	4.24	0	0	0	4.97
SSE	1.46	6.43	0	0	0	7.89
S	1.02	12.57	0	0	0	13.59
SSW	3.22	14.04	0	0	0	17.26
SW	3.95	8.04	0	0	0	11.99
WSW	3.95	5.99	0	0	0	9.94
W	1.02	3.8	0	0	0	4.82
WNW	0.44	3.51	0	0	0	3.95
NW	0	3.8	0	0	0	3.8
NNW	0.15	2.49	0	0	0	2.64
Summary	16.96	83.04	0	0	0	100



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% Icon Classes (ppm)	17	0-2	83	2-5	0	5-10	0	10-40	0	>40.0
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PEACE RIVER AREA MONITORING PROGRAM
Peace River Complex (PRC) Station - September 2022
Summary of Hourly Averages

METHANE (CH₄) in ppm

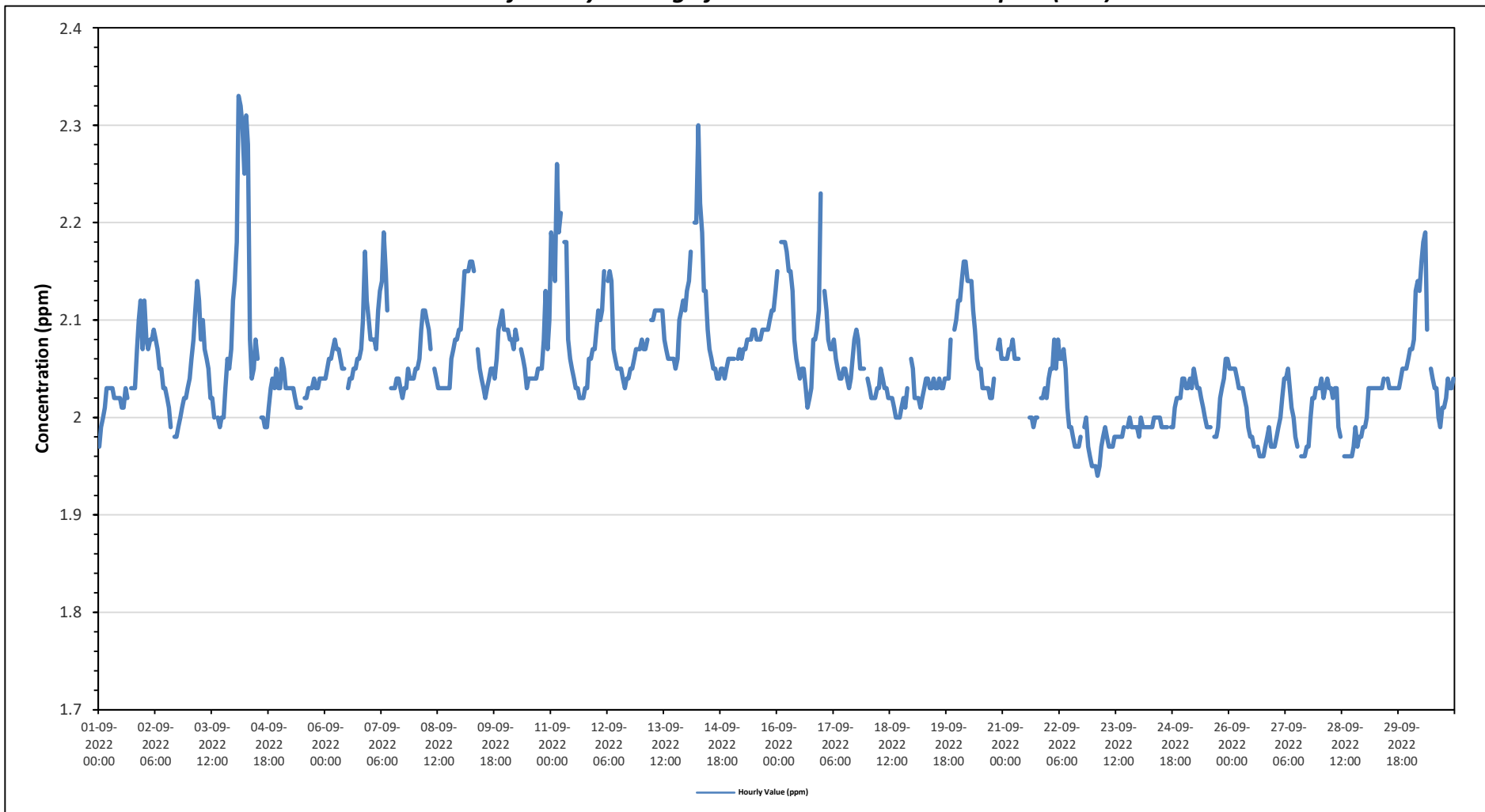
Maximum Hourly Value:	2.33 ppm on September 4 at hour 2	Hours in Service:	720
Maximum Daily Value:	2.11 ppm on September 4	Hours of Data:	684
Minimum Hourly Value:	1.94 ppm on September 23 at hour 2	Hours of Missing Data:	0
Minimum Daily Value:	1.98 ppm on September 23	Hours of Calibration:	36
Monthly Average:	2.05 ppm	Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	1.97	1.99	2.00	2.01	2.03	2.03	2.03	2.03	2.02	2.02	2.02	2.02	2.01	2.01	2.03	2.02	S	2.03	2.03	2.03	2.07	2.10	2.12	2.07	1.97	2.12	2.03	
Sep 2	2.12	2.08	2.07	2.08	2.08	2.09	2.08	2.07	2.05	2.05	2.03	2.03	2.02	2.01	1.99	S	1.98	1.98	1.99	2.00	2.01	2.02	2.02	2.03	1.98	2.12	2.04	
Sep 3	2.04	2.06	2.08	2.11	2.14	2.12	2.08	2.10	2.07	2.06	2.05	2.02	2.02	2.00	S	2.00	1.99	2.00	2.00	2.03	2.06	2.05	2.07	2.12	1.99	2.14	2.06	
Sep 4	2.14	2.18	2.33	2.32	2.30	2.25	2.31	2.28	2.08	2.04	2.05	2.08	2.06	S	2.00	2.00	1.99	1.99	2.01	2.03	2.04	2.03	2.05	2.03	1.99	2.33	2.11	
Sep 5	2.03	2.06	2.05	2.03	2.03	2.03	2.03	2.03	2.02	2.01	2.01	2.01	S	2.02	2.02	2.03	2.03	2.03	2.04	2.03	2.03	2.04	2.04	2.04	2.01	2.06	2.03	
Sep 6	2.04	2.05	2.06	2.06	2.07	2.08	2.07	2.07	2.06	2.05	2.05	S	2.03	2.04	2.04	2.05	2.05	2.06	2.06	2.07	2.10	2.17	2.12	2.10	2.03	2.17	2.07	
Sep 7	2.08	2.08	2.08	2.07	2.11	2.13	2.14	2.19	2.15	2.11	S	2.03	2.03	2.03	2.04	2.04	2.03	2.02	2.03	2.03	2.05	2.04	2.04	2.04	2.02	2.19	2.07	
Sep 8	2.05	2.05	2.06	2.09	2.11	2.11	2.10	2.09	2.07	S	2.05	2.04	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.06	2.07	2.08	2.08	2.09	2.03	2.11	2.06	
Sep 9	2.09	2.12	2.15	2.15	2.15	2.16	2.16	2.15	S	2.07	2.05	2.04	2.03	2.02	2.03	2.04	2.05	2.05	2.04	2.06	2.09	2.10	2.11	2.09	2.02	2.16	2.09	
Sep 10	2.09	2.09	2.08	2.08	2.07	2.09	2.08	S	2.07	2.06	2.05	2.03	2.04	2.04	2.04	2.04	2.05	2.05	2.05	2.08	2.13	2.07	2.10	2.03	2.13	2.07		
Sep 11	2.19	2.17	2.14	2.26	2.19	2.21	S	2.18	2.18	2.08	2.06	2.05	2.04	2.03	2.03	2.02	2.02	2.03	2.03	2.06	2.06	2.07	2.07	2.02	2.26	2.10		
Sep 12	2.09	2.11	2.10	2.11	2.15	S	2.14	2.15	2.14	2.07	2.06	2.05	2.05	2.05	2.04	2.03	2.04	2.04	2.05	2.05	2.06	2.07	2.07	2.07	2.03	2.15	2.08	
Sep 13	2.08	2.07	2.07	2.08	S	2.10	2.10	2.11	2.11	2.11	2.11	2.11	2.11	2.08	2.07	2.06	2.06	2.06	2.06	2.05	2.06	2.10	2.11	2.12	2.11	2.05	2.12	2.09
Sep 14	2.13	2.14	2.17	S	2.20	2.20	2.30	2.22	2.19	2.13	2.13	2.09	2.07	2.06	2.05	2.05	2.04	2.04	2.05	2.05	2.04	2.05	2.06	2.06	2.04	2.30	2.11	
Sep 15	2.06	2.06	S	2.06	2.07	2.06	2.07	2.07	2.08	2.08	2.08	2.08	2.09	2.09	2.08	2.08	2.08	2.09	2.09	2.09	2.10	2.11	2.11	2.13	2.06	2.13	2.08	
Sep 16	2.15	S	2.18	2.18	2.18	2.17	2.15	2.15	2.13	2.08	2.06	2.05	2.04	2.05	2.05	2.03	2.01	2.02	2.03	2.08	2.08	2.09	2.11	2.23	2.01	2.23	2.10	
Sep 17	S	2.13	2.11	2.08	2.07	2.07	2.08	2.06	2.05	2.04	2.04	2.05	2.05	2.04	2.03	2.04	2.06	2.08	2.09	2.08	2.05	2.05	S	2.03	2.13	2.06		
Sep 18	2.04	2.03	2.02	2.02	2.02	2.03	2.03	2.05	2.04	2.03	2.03	2.02	2.02	2.02	2.01	2.00	2.00	2.00	2.01	2.02	2.01	2.03	S	2.06	2.00	2.06	2.02	
Sep 19	2.05	2.02	2.02	2.02	2.01	2.02	2.03	2.04	2.04	2.03	2.03	2.04	2.03	2.03	2.04	2.03	2.03	2.04	2.04	2.04	2.08	S	2.09	2.10	2.01	2.10	2.04	
Sep 20	2.12	2.12	2.14	2.16	2.16	2.14	2.14	2.14	2.11	2.09	2.06	2.05	2.05	2.03	2.03	2.03	2.03	2.02	2.02	2.04	S	2.07	2.08	2.06	2.02	2.16	2.08	
Sep 21	2.06	2.06	2.06	2.07	2.07	2.08	2.06	2.06	2.06	C	C	C	C	C	2.00	2.00	1.99	2.00	2.00	S	2.02	2.02	2.03	2.02	1.99	2.08	2.04	
Sep 22	2.04	2.05	2.05	2.08	2.05	2.08	2.06	2.06	2.07	2.05	2.01	1.99	1.99	1.98	1.97	1.97	1.97	1.98	S	1.99	2.00	1.97	1.96	1.95	1.95	2.08	2.01	
Sep 23	1.95	1.95	1.94	1.95	1.97	1.98	1.99	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.98	1.98	1.99	S	1.99	2.00	1.99	1.99	1.99	1.99	1.94	2.00	1.98	
Sep 24	1.98	2.00	1.99	1.99	1.99	1.99	1.99	1.99	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.99	S	1.99	1.99	2.01	2.02	2.02	2.02	2.04	1.98	2.04	2.00	
Sep 25	2.04	2.03	2.03	2.04	2.03	2.05	2.04	2.03	2.03	2.03	2.02	2.01	1.99	1.98	1.99	S	1.98	1.98	1.99	2.02	2.03	2.04	2.06	2.06	1.98	2.06	2.02	
Sep 26	2.05	2.05	2.05	2.05	2.04	2.03	2.03	2.03	2.02	2.01	1.99	1.98	1.98	1.97	S	1.97	1.96	1.96	1.96	1.97	1.98	1.99	1.97	1.97	1.96	2.05	2.00	
Sep 27	1.97	1.98	1.99	2.00	2.02	2.04	2.04	2.05	2.03	2.01	2.00	1.98	1.97	S	1.96	1.96	1.96	1.97	1.97	2.00	2.02	2.02	2.03	2.03	1.96	2.05	2.00	
Sep 28	2.03	2.04	2.02	2.03	2.04	2.03	2.03	2.02	2.03	2.03	1.99	1.98	S	1.96	1.96	1.96	1.96	1.96	1.97	1.99	1.97	1.98	1.98	1.99	1.96	2.04	2.00	
Sep 29	1.99	2.00	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.04	S	2.04	2.03	2.03	2.03	2.03	2.03	2.03	2.04	2.05	2.05	2.05	2.06	1.99	2.06	2.03	
Sep 30	2.07	2.07	2.08	2.13	2.14	2.13	2.16	2.18	2.19	2.09	S	2.05	2.04	2.03	2.03	2.00	1.99	2.01	2.01	2.02	2.04	2.03	2.03	2.04	1.99	2.19	2.07	
Diurnal Maximum	2.19	2.18	2.33	2.32	2.30	2.25	2.31	2.28	2.19	2.13	2.13	2.11	2.09	2.08	2.08	2.08	2.09	2.09	2.09	2.09	2.10	2.17	2.12	2.23				
Diurnal Average	2.06	2.06	2.07	2.08	2.09	2.09	2.09	2.09	2.07	2.05	2.04	2.03	2.03	2.02	2.02	2.02	2.02	2.01	2.02	2.02	2.03	2.04	2.05	2.06	2.06			

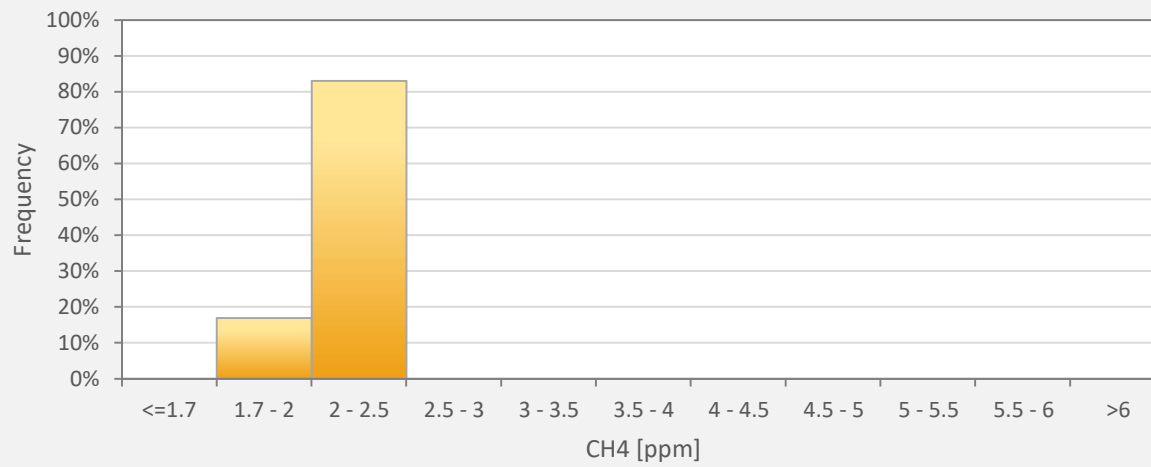
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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

Timeseries Chart of Hourly Average for CH4 - Peace River Complex (PRC) Station



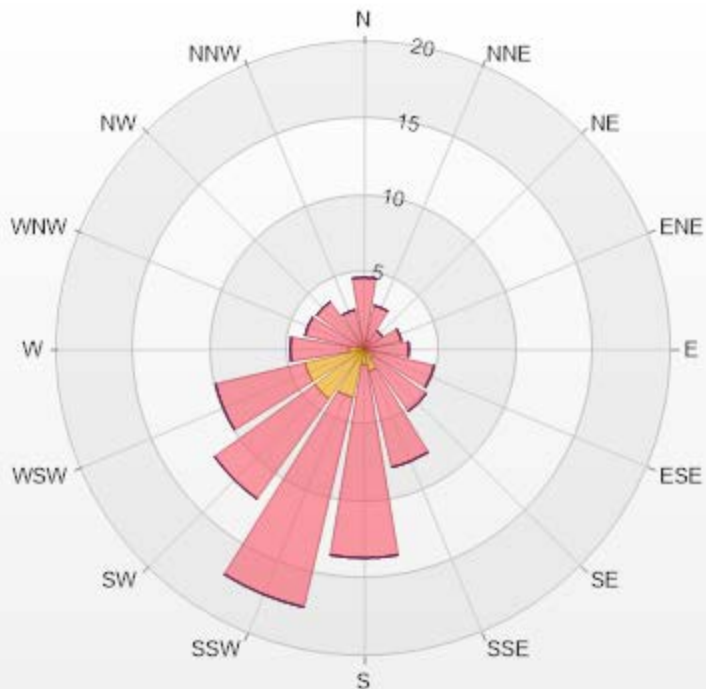
CH4[ppm] Histogram: Peace River Complex [PRC] Monthly: 09-2022 1 Hr.



Classes	CH4
<=1.7	0.00%
1.7 - 2	16.96%
2 - 2.5	83.04%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.00% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	0.29	4.39	0	0	0	4.68
NNE	0.58	2.34	0	0	0	2.92
NE	0	1.46	0	0	0	1.46
ENE	0	2.49	0	0	0	2.49
E	0	2.92	0	0	0	2.92
ESE	0.15	4.53	0	0	0	4.68
SE	0.73	4.24	0	0	0	4.97
SSE	1.46	6.43	0	0	0	7.89
S	1.02	12.57	0	0	0	13.59
SSW	3.22	14.04	0	0	0	17.26
SW	3.95	8.04	0	0	0	11.99
WSW	3.95	5.99	0	0	0	9.94
W	1.02	3.8	0	0	0	4.82
WNW	0.44	3.51	0	0	0	3.95
NW	0	3.8	0	0	0	3.8
NNW	0.15	2.49	0	0	0	2.64
Summary	16.96	83.04	0	0	0	100



PRAMP-202209

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% Icon Classes (ppm)	17	0-2	83	2-5	0	5-10	0	10-20	0	>20.0
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PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex (PRC) Station - September 2022
Summary of Hourly Averages

NON-METHANE HYDROCARBONS (NMHC) in ppm

Maximum Hourly Value:	0.00 ppm on September 1 at hour 0	Hours in Service:	720
Maximum Daily Value:	0.00 ppm on September 1	Hours of Data:	684
Minimum Hourly Value:	0.00 ppm on September 1 at hour 0	Hours of Missing Data:	0
Minimum Daily Value:	0.00 ppm on September 1	Hours of Calibration:	36
Monthly Average:	0.00 ppm	Operational Uptime:	100.0

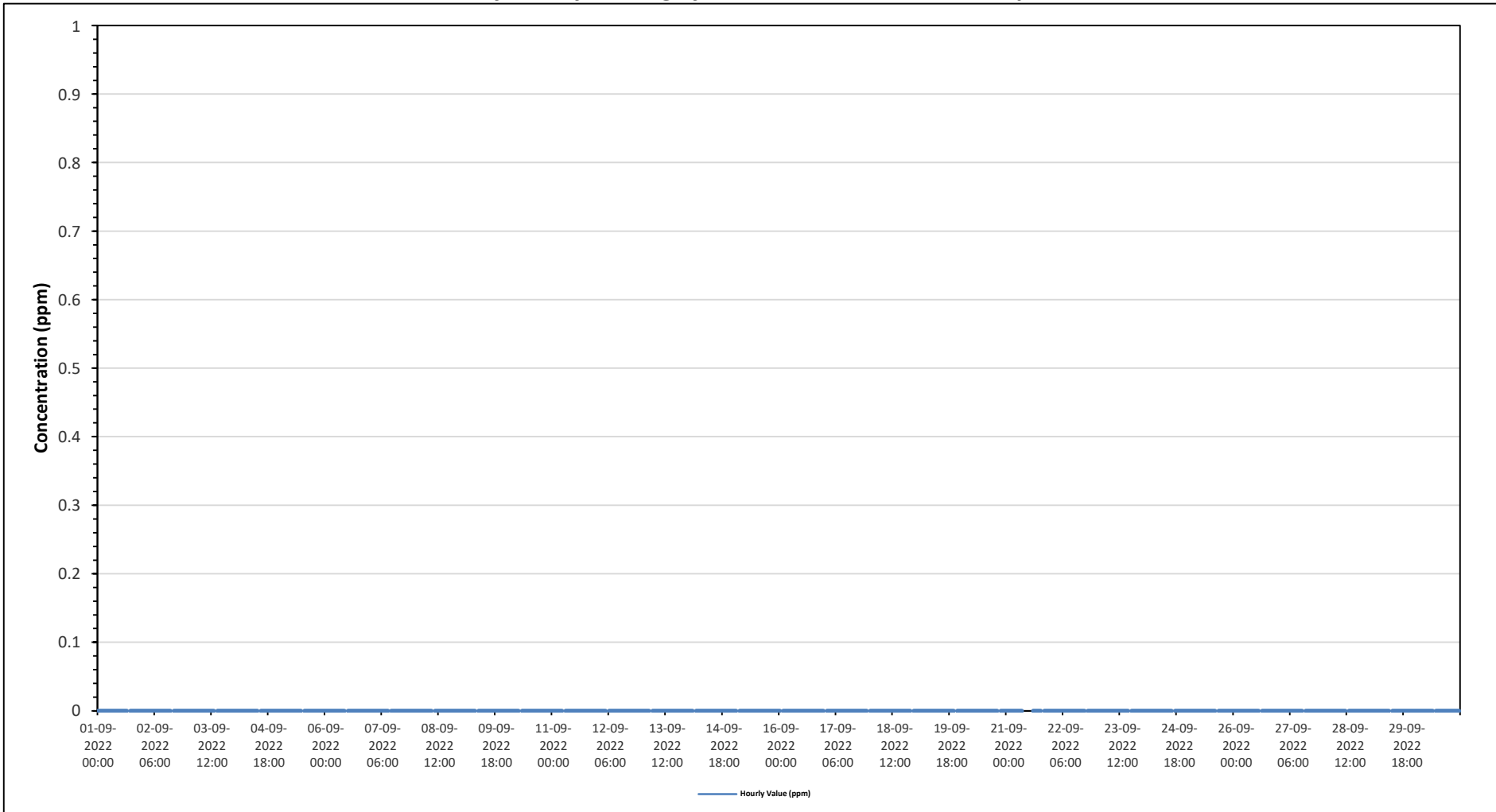
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22			
Sep 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sep 2	0.00	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	
Sep 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	
Sep 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	
Sep 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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sep 6	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	
Sep 7	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	
Sep 8	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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	S	0.00	0.00	
Sep 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	
Sep 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	
Sep 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	
Sep 21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	C	C	C	C	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	
Sep 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	0.00	S	0.00	0.00	0.00	0.00	0.00	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	
Sep 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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sep 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	
Sep 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	
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	0.00	
Diurnal Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

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)				

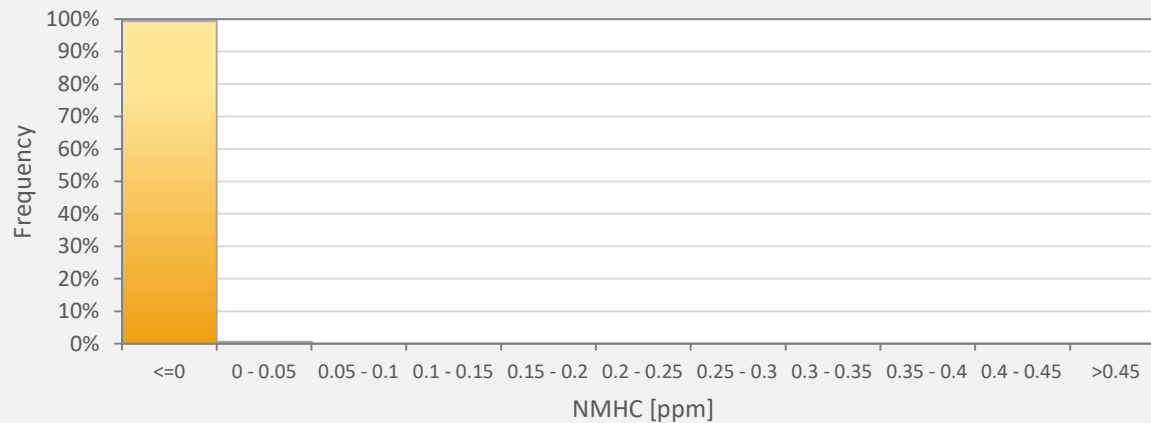
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

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 (PRC) Station



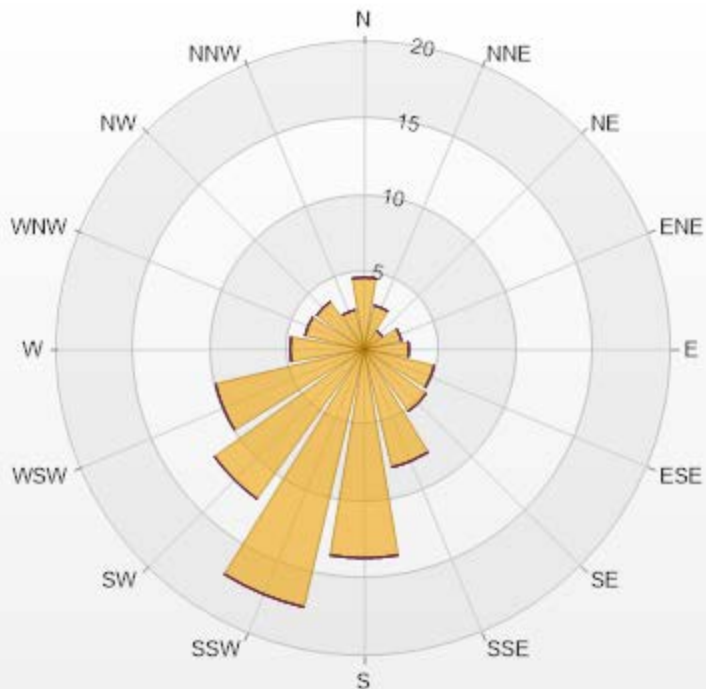
NMHC[ppm] Histogram: Peace River Complex [PRC] Monthly: 09-2022 1 Hr.



Classes	NMHC
<=0	99.42%
0 - 0.05	0.58%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.00% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	4.68	0	0	0	0	4.68
NNE	2.92	0	0	0	0	2.92
NE	1.46	0	0	0	0	1.46
ENE	2.49	0	0	0	0	2.49
E	2.92	0	0	0	0	2.92
ESE	4.68	0	0	0	0	4.68
SE	4.97	0	0	0	0	4.97
SSE	7.89	0	0	0	0	7.89
S	13.6	0	0	0	0	13.6
SSW	17.25	0	0	0	0	17.25
SW	11.99	0	0	0	0	11.99
WSW	9.94	0	0	0	0	9.94
W	4.82	0	0	0	0	4.82
WNW	3.95	0	0	0	0	3.95
NW	3.8	0	0	0	0	3.8
NNW	2.63	0	0	0	0	2.63
Summary	100	0	0	0	0	100



PRAMP-202209

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% 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
Peace River Complex (PRC) Station - September 2022
Summary of Hourly Averages
RELATIVE HUMIDITY (RH) in %

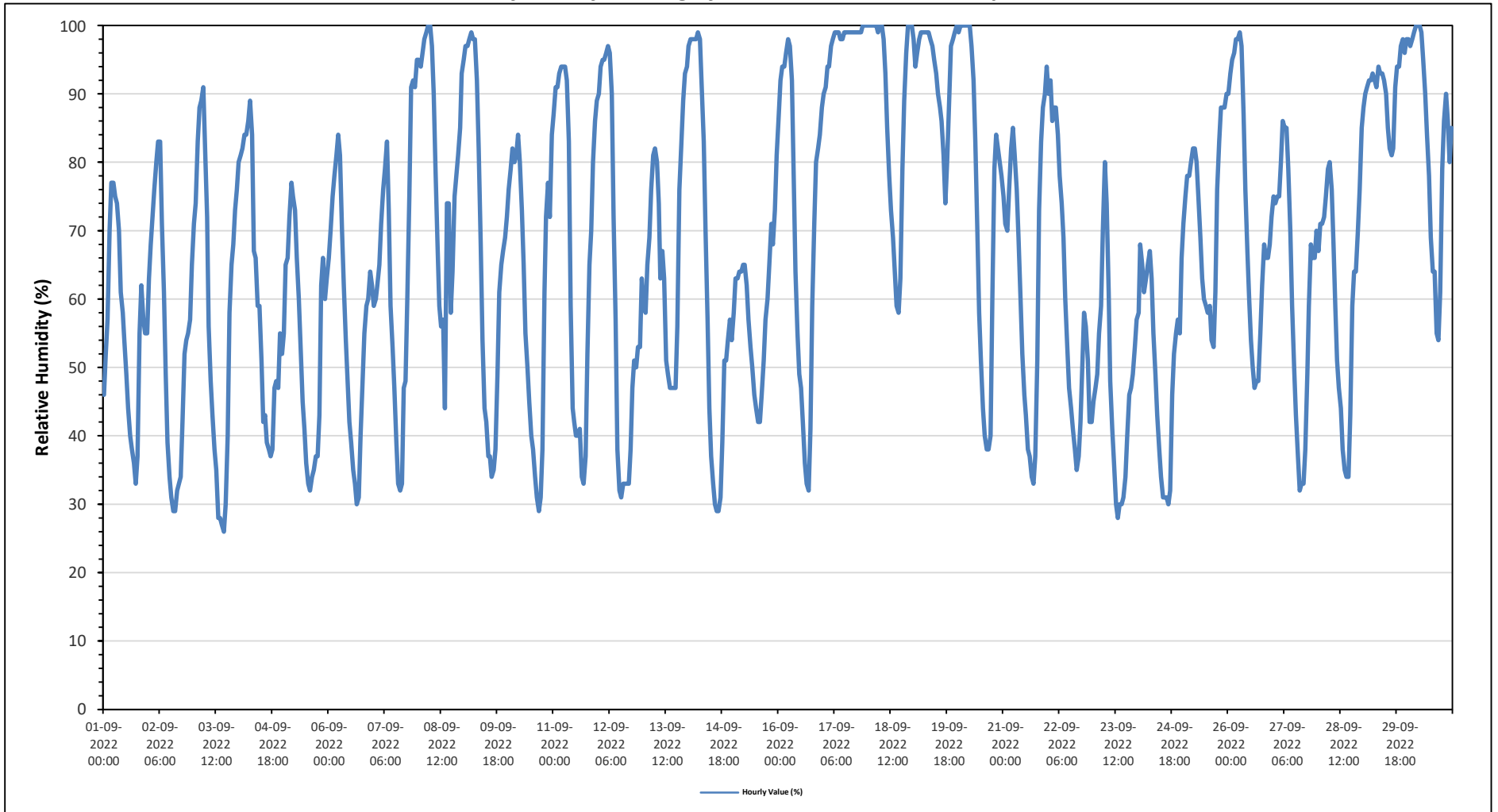
Maximum Hourly Value:	100 %	on September 8 at hour 5	Hours in Service:	720
Maximum Daily Value:	97.8 %	on September 17	Hours of Data:	720
Minimum Hourly Value:	26 %	on September 3 at hour 16	Hours of Missing Data:	0
Minimum Daily Value:	47.5 %	on September 23	Hours of Calibration:	0
Monthly Average:	67.4 %		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	46	52	57	70	77	77	75	74	70	61	58	54	49	44	40	38	36	33	37	55	62	57	55	55	33	77	55.5
Sep 2	63	68	72	76	80	83	83	71	61	49	39	34	31	29	29	32	33	34	42	52	54	55	57	65	29	83	53.8
Sep 3	71	74	83	88	89	91	82	72	56	48	43	38	35	28	28	27	26	30	40	58	65	68	73	76	26	91	57.9
Sep 4	80	81	82	84	84	86	89	84	67	66	59	59	51	42	43	39	38	37	38	47	48	47	55	52	37	89	60.8
Sep 5	55	65	66	72	77	75	73	66	60	53	45	41	36	33	32	34	35	37	37	43	62	66	60	63	32	77	53.6
Sep 6	66	70	75	78	81	84	81	70	62	54	48	42	39	35	33	30	31	40	48	55	59	60	64	62	30	84	57.0
Sep 7	59	60	62	65	71	76	79	83	73	59	53	47	39	33	32	33	47	48	60	75	91	92	91	95	32	95	63.5
Sep 8	95	94	96	98	99	100	100	97	90	79	68	59	56	57	44	74	74	58	64	75	78	81	85	93	44	100	79.8
Sep 9	95	97	97	98	99	98	98	92	82	68	54	44	42	37	37	34	35	38	49	61	65	67	69	72	34	99	67.8
Sep 10	76	79	82	80	81	84	80	73	65	55	50	45	40	38	34	31	29	31	38	61	72	77	72	84	29	84	60.7
Sep 11	87	91	91	93	94	94	94	92	83	59	44	42	40	40	41	34	33	37	52	65	70	80	86	89	33	94	68.0
Sep 12	90	94	95	95	96	97	96	90	72	57	38	32	31	33	33	33	33	38	47	51	50	53	53	63	31	97	61.3
Sep 13	59	58	65	69	76	81	82	80	74	63	67	63	51	49	47	47	47	47	56	76	82	89	93	94	47	94	67.3
Sep 14	97	98	98	98	98	99	98	91	83	70	57	44	37	33	30	29	29	31	39	51	51	54	57	54	29	99	63.6
Sep 15	58	63	63	64	64	65	65	62	57	53	50	46	44	42	42	46	51	57	60	65	71	68	73	81	42	81	58.8
Sep 16	86	92	94	94	96	98	97	92	78	64	55	49	47	42	36	33	32	41	59	71	80	82	84	88	32	98	70.4
Sep 17	90	91	94	94	97	98	99	99	99	98	99	99	99	99	99	99	99	99	99	99	99	100	100	100	90	100	97.8
Sep 18	100	100	100	100	100	99	100	100	98	93	85	78	73	69	64	59	58	63	79	89	96	100	100	100	58	100	87.6
Sep 19	98	94	96	98	99	99	99	99	99	98	97	95	93	90	88	86	81	74	80	89	97	98	99	100	74	100	93.6
Sep 20	99	100	100	100	100	100	100	97	92	83	70	58	51	44	40	38	38	40	60	79	84	82	80	78	38	100	75.5
Sep 21	75	71	70	76	82	85	81	76	69	60	52	46	43	38	37	34	33	37	51	73	83	88	90	94	33	94	64.3
Sep 22	90	92	86	88	88	84	78	74	69	60	53	47	44	41	38	35	37	42	50	58	56	51	42	42	35	92	60.2
Sep 23	45	47	49	55	59	70	80	74	61	48	41	36	30	28	30	30	31	34	40	46	47	49	53	57	28	80	47.5
Sep 24	58	68	65	61	63	65	67	63	55	49	43	38	34	31	31	31	30	32	46	52	55	57	55	66	30	68	50.6
Sep 25	71	75	78	78	80	82	82	80	75	69	63	60	59	58	59	54	53	61	76	83	88	88	88	90	53	90	72.9
Sep 26	90	93	95	96	98	98	99	97	87	76	67	60	54	50	47	48	48	55	62	68	66	66	68	72	47	99	73.3
Sep 27	75	74	75	75	80	86	85	85	79	70	59	50	43	37	32	33	33	38	49	59	68	66	66	70	32	86	62.0
Sep 28	67	71	71	72	75	79	80	76	68	59	51	47	44	38	35	34	34	43	59	64	64	70	76	85	34	85	60.9
Sep 29	88	90	91	92	92	93	92	91	94	93	93	92	90	85	82	81	82	91	94	94	97	98	96	98	81	98	91.2
Sep 30	98	97	98	99	100	100	100	99	95	90	84	78	69	64	64	55	54	61	79	86	90	86	80	85	54	100	83.8
Diurnal Maximum	100	100	100	100	100	100	100	100	99	98	98	99	99	99	99	99	99	99	99	99	99	100	100	100			
Diurnal Average	77.6	80.0	81.5	83.5	85.8	87.5	87.1	83.3	75.8	66.8	59.5	54.1	49.8	46.2	44.2	43.7	44.0	46.9	56.3	66.7	71.7	73.2	74.0	77.4			

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

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

Timeseries Chart of Hourly Average for RH - Peace River Complex (PRC) Station





PEACE RIVER AREA MONITORING PROGRAM
Peace River Complex (PRC) Station - September 2022
Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

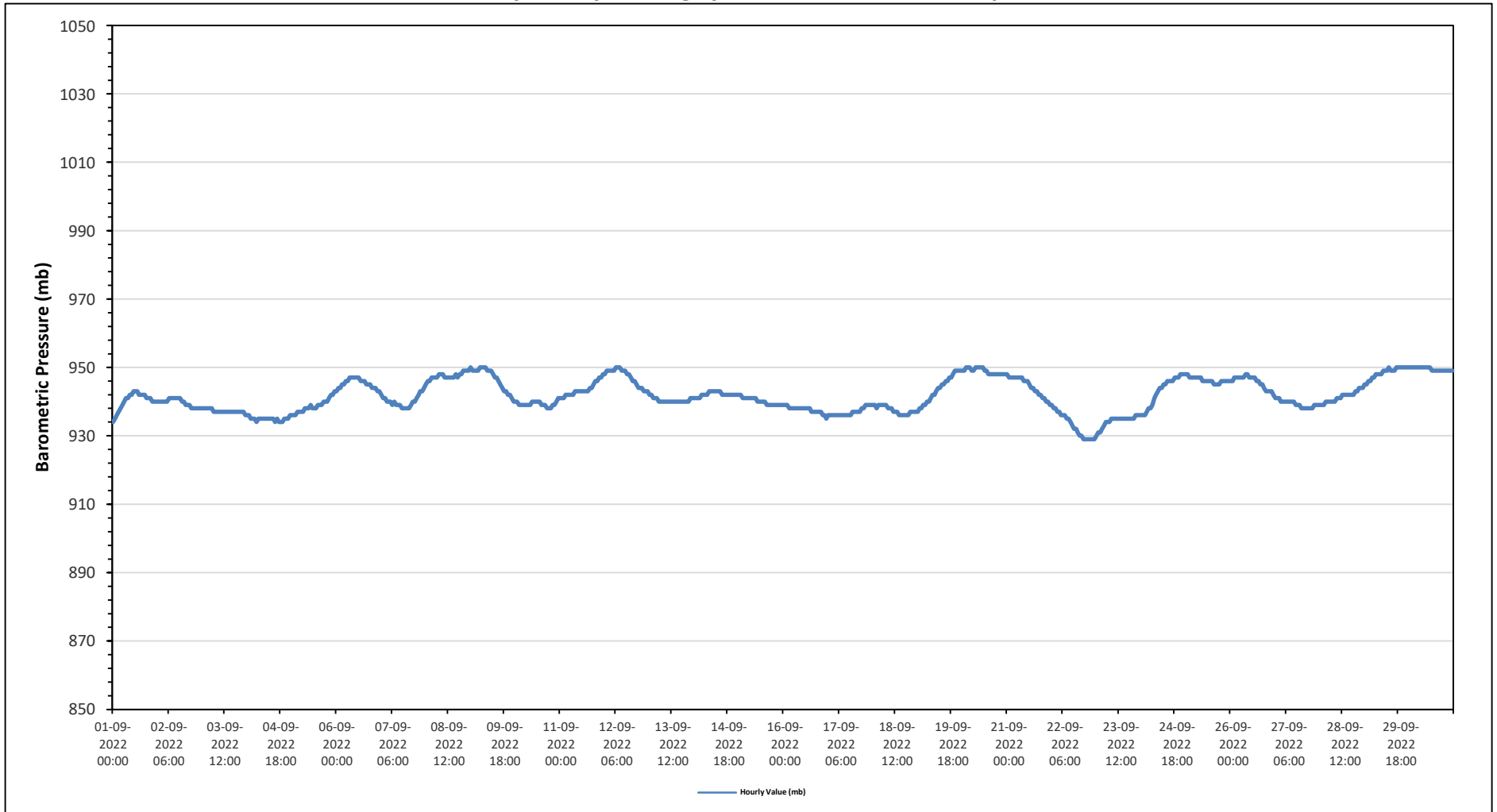
Maximum Hourly Value:	950 mb on September 9 at hour 0	Hours in Service:	720
Maximum Daily Value:	950 mb on September 30	Hours of Data:	720
Minimum Hourly Value:	929 mb on September 22 at hour 17	Hours of Missing Data:	0
Minimum Daily Value:	933 mb on September 22	Hours of Calibration:	0
Monthly Average:	942 mb	Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	934	935	936	937	938	939	940	941	941	942	942	943	943	943	942	942	942	942	941	941	940	940	940	934	943	940	
Sep 2	940	940	940	940	940	940	941	941	941	941	941	941	941	940	940	939	939	939	938	938	938	938	938	938	941	940	
Sep 3	938	938	938	938	938	938	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	936	936	938	937	
Sep 4	936	936	935	935	935	934	935	935	935	935	935	935	935	935	935	934	935	934	934	934	934	935	935	936	934	936	935
Sep 5	936	936	936	937	937	937	937	938	938	938	939	938	938	938	939	939	939	940	940	940	941	942	942	943	936	943	939
Sep 6	943	944	944	945	945	946	946	947	947	947	947	947	946	946	946	945	945	945	944	944	944	943	943	943	947	945	
Sep 7	942	941	941	940	940	940	939	940	939	939	939	938	938	938	938	939	940	940	941	942	943	943	944	938	944	940	
Sep 8	945	946	946	947	947	947	947	948	948	948	947	947	947	947	947	948	947	948	948	949	949	949	949	945	949	947	
Sep 9	950	949	949	949	949	950	950	950	950	949	949	949	948	947	947	946	945	944	943	943	942	942	941	940	940	950	947
Sep 10	940	940	939	939	939	939	939	939	939	940	940	940	940	939	939	939	938	938	938	939	939	940	941	938	941	939	
Sep 11	941	941	941	942	942	942	942	942	943	943	943	943	943	943	943	944	944	945	946	946	947	947	948	941	948	944	
Sep 12	948	949	949	949	949	949	950	950	950	949	949	949	948	948	947	946	946	945	944	944	944	943	943	943	943	950	947
Sep 13	942	942	941	941	941	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	941	941	940	942	940	
Sep 14	941	941	941	941	942	942	942	942	943	943	943	943	943	943	943	942	942	942	942	942	942	942	942	942	942	942	942
Sep 15	942	942	941	941	941	941	941	941	941	941	940	940	940	940	940	939	939	939	939	939	939	939	939	939	939	942	940
Sep 16	939	939	939	938	938	938	938	938	938	938	938	938	938	938	938	937	937	937	937	937	937	937	936	936	935	938	938
Sep 17	936	936	936	936	936	936	936	936	936	936	936	936	936	937	937	937	937	937	938	938	939	939	939	939	939	939	937
Sep 18	939	939	938	939	939	939	939	939	938	938	938	937	937	937	936	936	936	936	936	936	937	937	937	936	939	938	938
Sep 19	937	938	938	939	939	940	940	941	942	942	943	944	944	945	945	946	946	947	947	948	949	949	949	937	949	944	
Sep 20	949	949	950	950	950	949	949	950	950	950	950	950	949	949	948	948	948	948	948	948	948	948	948	948	948	950	949
Sep 21	948	947	947	947	947	947	947	947	947	946	946	946	945	944	944	943	943	942	942	941	941	940	939	939	948	944	
Sep 22	939	938	938	937	937	936	936	936	935	935	934	933	932	932	931	930	929	929	929	929	929	929	929	929	929	933	933
Sep 23	930	931	931	932	933	934	934	934	935	935	935	935	935	935	935	935	935	935	935	935	935	936	936	936	936	934	934
Sep 24	936	936	936	937	938	938	939	941	942	943	944	944	945	945	946	946	946	946	947	947	947	948	948	948	948	948	943
Sep 25	948	948	947	947	947	947	947	947	947	946	946	946	946	946	945	945	945	945	945	946	946	946	946	945	948	946	
Sep 26	946	946	947	947	947	947	947	947	947	948	948	947	947	947	946	946	945	945	944	943	943	943	942	942	948	946	
Sep 27	941	941	941	940	940	940	940	940	940	940	940	939	939	939	938	938	938	938	938	938	938	938	939	939	939	941	939
Sep 28	939	939	939	940	940	940	940	940	941	941	941	941	942	942	942	942	942	942	942	943	943	944	944	939	944	941	
Sep 29	945	945	946	946	947	947	948	948	948	948	949	949	950	949	949	949	950	950	950	950	950	950	950	945	950	948	
Sep 30	950	950	950	950	950	950	950	950	950	950	950	950	949	949	949	949	949	949	949	949	949	949	949	949	950	950	950
Diurnal Maximum	950	950	950	950	950	950	950	950	950	950	950	949	950	949	949	949	950	950	950	950	950	950	950	950	950	950	950
Diurnal Average	941	941	941	942	942	942	942	942	942	942	942	942	942	942	941	942	941	941	941	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
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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

Timeseries Chart of Hourly Average for BP - Peace River Complex (PRC) Station





PEACE RIVER AREA MONITORING PROGRAM
Peace River Complex (PRC) Station - September 2022
Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

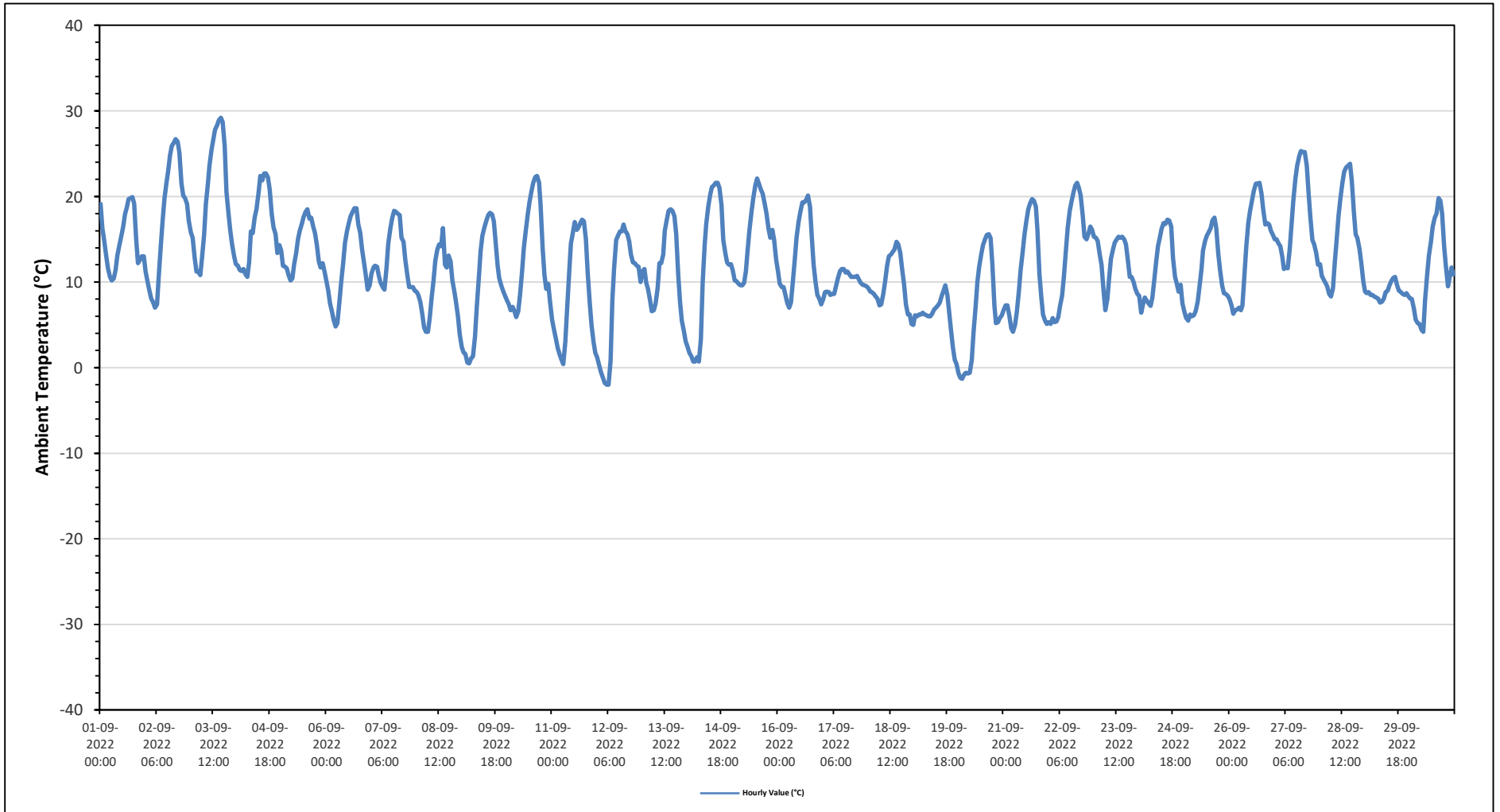
Maximum Hourly Value:	29.2 °C	on September 3 at hour 16	Hours in Service:	720
Maximum Daily Value:	19.7 °C	on September 3	Hours of Data:	720
Minimum Hourly Value:	-2.0 °C	on September 12 at hour 5	Hours of Missing Data:	0
Minimum Daily Value:	6.0 °C	on September 19	Hours of Calibration:	0
Monthly Average:	12.2 °C		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	19.1	16.3	14.9	13.1	11.6	10.6	10.2	10.4	11.4	13.1	14.3	15.3	16.5	17.9	18.8	19.7	19.8	19.9	19.2	15	12.2	12.6	13	13	10.2	19.9	14.9
Sep 2	11.2	10	9	8.1	7.6	7	7.4	10.8	14.3	17.2	19.7	21.6	23	24.8	25.9	26.3	26.7	26.4	25.1	21.5	20.1	19.8	19.1	17.1	7.0	26.7	17.5
Sep 3	15.8	15.2	12.8	11.2	11.2	10.8	12.9	15.5	19.1	21.5	23.6	25.4	26.6	27.8	28.3	28.9	29.2	28.7	25.9	20.5	18	16	14.4	13	10.8	29.2	19.7
Sep 4	12.1	11.9	11.4	11.3	11.5	10.9	10.6	12.3	15.9	15.7	17.6	18.5	20.4	22.4	21.9	22.7	22.7	22.2	20.8	17.9	16.4	15.6	13.4	14.3	10.6	22.7	16.3
Sep 5	13.7	11.9	11.8	11.6	10.7	10.2	10.4	12.1	13.4	15	16	16.8	17.6	18.2	18.5	17.4	17.5	16.5	15.7	14.4	12.4	11.7	12.2	11.3	10.2	18.5	14.0
Sep 6	10.1	9	7.5	6.5	5.6	4.8	5.2	7.7	10	12.3	14.6	16	16.9	17.7	18.2	18.6	18.6	16.8	15.7	13.8	12.4	10.7	9.1	9.6	4.8	18.6	12.0
Sep 7	11	11.7	11.9	11.8	10.7	9.9	9.4	9.1	11.6	14.5	16.2	17.4	18.3	18.2	18	17.8	15.2	14.7	12.6	10.8	9.4	9.4	9.4	9	9.0	18.3	12.8
Sep 8	8.9	8.5	7.7	6.4	4.7	4.2	4.2	5.8	8	10.2	12.5	13.8	14.4	14.2	16.3	12	11.7	13.1	12.4	10.2	8.9	7.5	6	3.9	3.9	16.3	9.4
Sep 9	2.4	1.8	1.6	0.6	0.5	1.1	1.3	3.6	7.1	10.5	13.6	15.4	16.4	17.1	17.8	18.1	17.9	17.1	14.7	11.9	10.5	9.6	9	8.4	0.5	18.1	9.5
Sep 10	7.9	7.4	6.7	7.1	6.6	5.9	6.6	8.5	11.2	14	16.1	17.8	19.3	20.6	21.6	22.3	22.4	21.6	18.9	13.9	10.8	9.2	9.8	7.7	5.9	22.4	13.1
Sep 11	5.6	4.5	3.4	2.3	1.5	0.9	0.4	3	6.8	11	14.5	15.8	17	16.1	16.4	16.9	17.3	17.1	15	11.1	7.6	5	3	1.7	0.4	17.3	8.9
Sep 12	1.2	0.3	-0.5	-1.2	-1.8	-2	-2	0.8	7.9	11.7	14.9	15.4	15.9	15.9	16.7	16	15.6	14.8	13.2	12.3	12.2	11.9	11.8	10	-2.0	16.7	8.8
Sep 13	11.2	11.5	9.9	9.2	7.9	6.6	6.7	7.5	9.3	12.2	12.2	13.2	16	17.3	18.3	18.5	18.3	17.7	15.6	10.8	7.7	5.5	4.3	3.1	3.1	18.5	11.3
Sep 14	2.4	1.7	1.3	0.7	0.7	1.2	0.7	3.3	9.9	14.4	16.8	18.8	20.1	21.1	21.3	21.6	21.6	21	19	14.9	13.4	12.3	12	12.1	0.7	21.6	11.8
Sep 15	11.4	10.2	10.1	9.8	9.6	9.6	9.9	11.3	13.8	16.1	18.2	19.8	21.3	22.1	21.4	20.8	20.3	19.1	18	16.2	15.2	16.1	14.9	12.6	9.6	22.1	15.3
Sep 16	11.3	9.8	9.4	9.4	8.4	7.5	7	7.6	10.2	12.6	15.2	17	18.2	19.3	19.3	19.6	20.1	18.8	15.3	12.1	9.9	8.5	8	7.4	7.0	20.1	12.6
Sep 17	8	8.8	8.9	8.8	8.5	8.6	8.6	9.6	10.5	11.3	11.5	11.5	11.1	11.2	10.9	10.6	10.6	10.7	10.3	9.9	9.7	9.6	9.5	8.0	11.5	10.0	
Sep 18	9.3	8.9	8.8	8.6	8.3	8.1	7.3	7.4	8.6	10	11.9	13	13.2	13.5	13.8	14.7	14.4	13.4	11.5	9.7	7.4	6.2	6.2	5.1	5.1	14.7	10.0
Sep 19	5	6.1	6	6.2	6.2	6.4	6.2	6.1	6	6.3	6.8	7	7.3	7.6	8.4	9	9.6	8.5	6.5	4.2	2.3	0.9	0.4	0.4	0.4	9.6	6.0
Sep 20	-0.7	-1.2	-1.3	-0.8	-0.6	-0.7	-0.6	0.9	4.2	7.1	10	11.8	13.2	14.3	15	15.5	15.6	15.1	12	7.2	5.2	5.3	5.8	6.1	-1.3	15.6	6.6
Sep 21	6.7	7.3	7.3	6	4.6	4.2	5	6.5	8.9	11.4	13.5	15.5	17	18.5	19.2	19.7	19.5	18.8	16.1	10.9	8.3	6.2	5.5	5.1	4.2	19.7	10.9
Sep 22	5.3	5.1	5.8	5.3	5.4	5.9	7.2	8.4	10.6	13.7	16.3	18.3	19.4	20.5	21.3	21.6	21	20.1	17.8	15.3	15	15.6	16.5	16.1	5.1	21.6	13.6
Sep 23	15.3	15.2	14.8	13.2	12	9	6.7	8	10.5	12.7	13.8	14.6	15	15.3	15.2	15.3	15	14.4	12.7	10.6	10.6	10	9.2	8.6	6.7	15.3	12.4
Sep 24	8.4	6.4	7.4	8.2	7.8	7.5	7.2	8.2	10.4	12.4	14.2	15.3	16.2	16.9	16.8	17.3	17.2	16.5	12.8	10.6	9.8	8.9	9.7	7.5	6.4	17.3	11.4
Sep 25	6.5	5.8	5.5	6.2	6	6.1	6.6	7.7	9.4	11.5	13.7	14.8	15.4	15.8	16.3	17.2	17.5	16.3	13.3	11.4	9.6	8.7	8.6	8.4	5.5	17.5	10.8
Sep 26	8	7.3	6.3	6.7	6.8	7	6.7	7.3	10.9	14.1	16.9	18.3	19.6	20.7	21.5	21.5	21.6	20.3	18.4	16.7	16.9	16.7	16	15.5	6.3	21.6	14.2
Sep 27	15	15	14.5	14.2	12.9	11.5	11.7	11.6	13.9	16.7	19.5	22	23.6	24.7	25.3	25.2	25.2	23.6	20.4	17.6	14.9	14.4	13.4	12	11.5	25.3	17.5
Sep 28	12.1	10.7	10.3	9.9	9.5	8.6	8.3	9.3	12.3	15.2	17.8	20	21.6	22.9	23.4	23.6	23.8	21.8	18.2	15.6	15.1	13.9	12.3	10.1	8.3	23.8	15.3
Sep 29	8.9	8.7	8.8	8.5	8.5	8.3	8.2	8.1	7.6	7.7	8.1	8.8	9	9.6	10.1	10.5	10.6	9.6	9	8.8	8.6	8.5	8.7	8.4	7.6	10.6	8.8
Sep 30	8.1	8	6.9	5.6	5.2	5.1	4.4	4.2	7.9	10.8	13.1	14.7	16.5	17.5	18	19.8	19.5	18	14.1	11.8	9.5	10.4	11.7	10.9	4.2	19.8	11.3
Diurnal Maximum	19.1	16.3	14.9	14.2	12.9	11.5	12.9	15.5	19.1	21.5	23.6	25.4	26.6	27.8	28.3	28.9	29.2	28.7	25.9	21.5	20.1	19.8	19.1	17.1			
Diurnal Average	9.0	8.5	8.0	7.5	6.9	6.5	6.5	7.8	10.4	12.8	14.8	16.1	17.2	18.0	18.4	18.6	18.5	17.8	15.8	13.0	11.4	10.6	10.1	9.3			

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

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

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





PEACE RIVER AREA MONITORING PROGRAM
Peace River Complex (PRC) Station - September 2022
Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

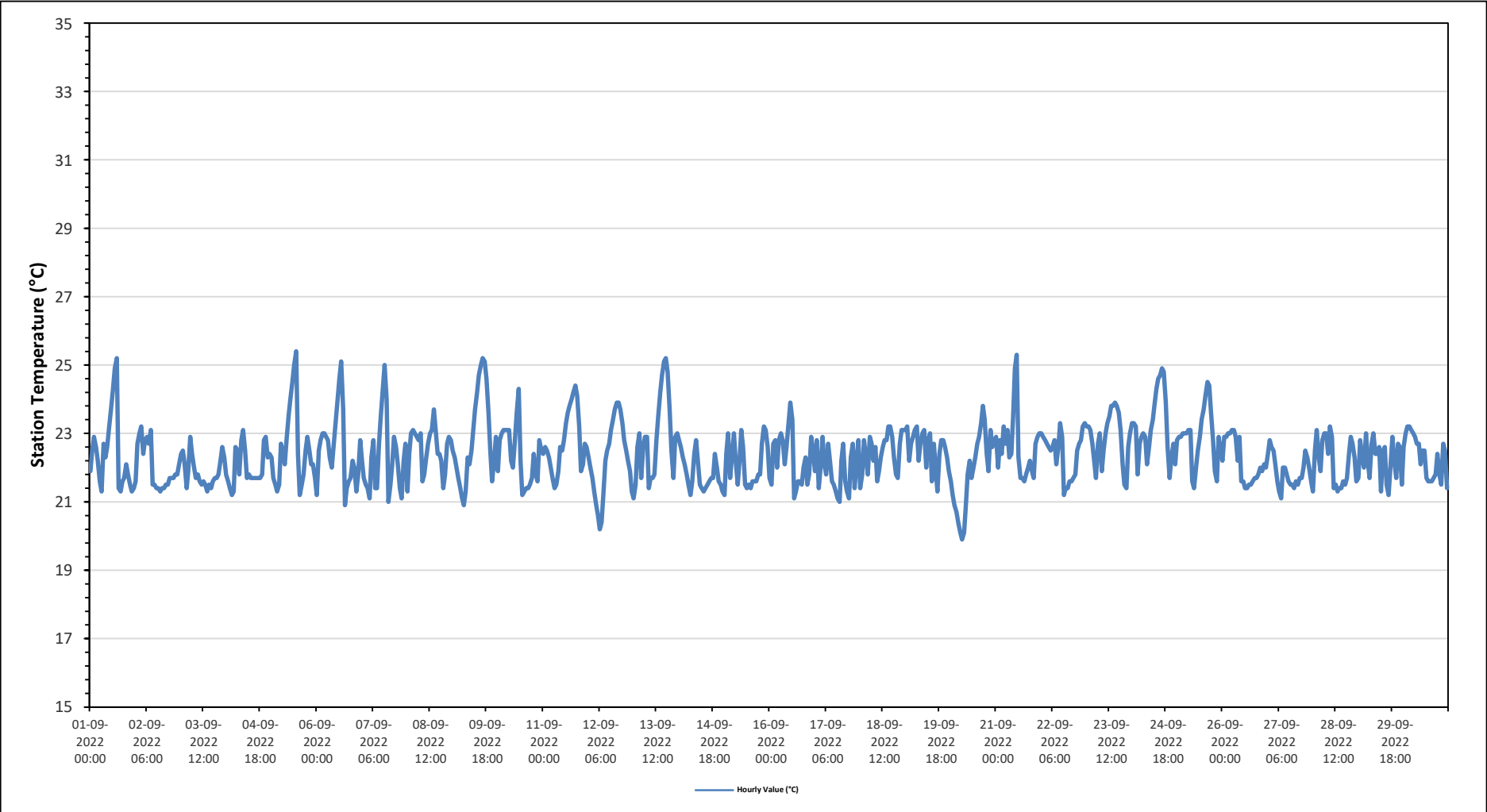
Maximum Hourly Value:	25.4 °C	on September 5 at hour 13	Hours in Service:	720
Maximum Daily Value:	23.2 °C	on September 24	Hours of Data:	720
Minimum Hourly Value:	19.9 °C	on September 20 at hour 6	Hours of Missing Data:	0
Minimum Daily Value:	21.8 °C	on September 14	Hours of Calibration:	0
Monthly Average:	22.4 °C		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	21.9	22.5	22.9	22.6	22.2	21.6	21.3	22.7	22.3	22.6	23.2	23.7	24.3	24.9	25.2	21.4	21.3	21.6	21.7	22.1	21.8	21.5	21.3	21.4	21.3	25.2	22.4	
Sep 2	21.6	22.7	23.0	23.2	22.4	22.8	22.9	22.7	23.1	21.5	21.5	21.4	21.4	21.3	21.4	21.4	21.5	21.5	21.7	21.7	21.7	21.8	21.8	22.1	21.3	23.2	22.0	
Sep 3	22.4	22.5	22.1	21.4	21.9	22.9	22.4	22.0	21.7	21.8	21.6	21.5	21.6	21.5	21.3	21.5	21.4	21.6	21.7	21.7	21.8	22.2	22.6	22.3	21.3	22.9	21.9	
Sep 4	21.8	21.6	21.4	21.2	21.3	22.6	22.5	21.8	22.8	23.1	22.5	21.7	21.8	21.7	21.7	21.7	21.7	21.7	21.7	21.8	22.8	22.9	22.3	22.4	21.2	23.1	22.0	
Sep 5	22.3	21.7	21.5	21.3	21.5	22.7	22.5	22.1	22.8	23.5	24.0	24.5	25.0	25.4	22.4	21.2	21.5	21.8	22.5	22.9	22.5	22.1	22.1	21.7	21.2	25.4	22.6	
Sep 6	21.2	22.5	22.8	23.0	23.0	22.9	22.8	22.3	22.0	22.6	23.3	23.9	24.6	25.1	23.7	20.9	21.4	21.6	21.7	22.2	22.0	21.3	21.8	22.8	20.9	25.1	22.6	
Sep 7	22.2	21.7	21.5	21.4	21.1	22.3	22.8	21.4	21.4	21.4	22.7	23.5	24.3	25.0	24.0	21.0	21.5	22.1	22.9	22.6	22.1	21.4	21.1	22.2	22.7	21.0	25.0	22.3
Sep 8	21.3	22.4	23.0	23.1	23.0	22.9	22.8	23.0	21.6	21.8	23.3	22.7	23.0	23.1	23.7	23.1	22.4	22.4	22.2	21.4	21.8	22.7	22.9	22.8	21.3	23.7	22.6	
Sep 9	22.5	22.3	22.0	21.7	21.4	21.1	20.9	21.3	22.3	22.1	22.5	23.1	23.7	24.2	24.7	25.0	25.2	25.1	24.6	23.6	22.5	21.6	22.2	22.9	20.9	25.2	22.9	
Sep 10	21.9	22.8	23.0	23.1	23.1	23.1	23.1	22.2	22.0	22.8	23.6	24.3	22.2	21.2	21.3	21.4	21.4	21.5	21.7	22.4	21.8	21.6	22.8	22.5	21.2	24.3	22.4	
Sep 11	22.4	22.6	22.5	22.3	22.0	21.7	21.4	21.5	21.9	22.6	22.5	22.8	23.3	23.6	23.8	24.0	24.2	24.4	24.1	23.2	21.9	22.1	22.7	22.6	21.4	24.4	22.8	
Sep 12	22.3	22.0	21.7	21.3	20.9	20.6	20.2	20.4	21.2	22.2	22.5	22.7	23.1	23.4	23.7	23.9	23.9	23.7	23.3	22.8	22.5	22.2	21.9	21.3	20.2	23.9	22.2	
Sep 13	21.1	21.5	22.6	23.0	21.7	22.6	22.9	22.9	21.4	21.7	21.7	21.8	22.8	23.5	24.2	24.7	25.1	25.2	24.8	23.7	22.5	21.7	22.9	23.0	21.1	25.2	22.9	
Sep 14	22.8	22.6	22.3	22.1	21.8	21.5	21.2	21.6	22.4	22.8	22.2	21.5	21.4	21.3	21.4	21.5	21.6	21.7	21.7	22.4	22.0	21.6	21.5	21.3	21.2	22.8	21.8	
Sep 15	21.2	22.4	23.0	21.7	22.3	23.0	22.2	21.5	22.2	23.1	22.6	21.5	21.4	21.5	21.4	21.6	21.6	21.6	21.8	21.8	22.7	23.2	23.1	22.6	21.2	23.2	22.1	
Sep 16	21.7	21.5	22.7	22.8	22.0	22.8	23.0	22.8	22.1	22.6	23.3	23.9	23.4	21.1	21.3	21.6	21.6	21.5	22.0	22.3	21.5	21.8	22.9	22.5	21.1	23.9	22.3	
Sep 17	21.9	22.8	21.4	22.0	22.9	22.1	21.8	22.7	22.2	21.6	21.5	21.3	21.1	21.0	22.2	22.7	21.6	21.3	21.1	22.3	22.7	21.4	22.1	22.8	21.0	22.9	21.9	
Sep 18	21.4	21.8	22.8	22.3	21.8	22.9	22.7	22.2	22.6	21.6	21.9	22.3	22.6	22.8	22.8	23.2	22.9	23.2	22.9	23.3	21.8	21.7	22.7	23.1	21.4	23.2	22.4	
Sep 19	23.1	23.2	22.2	22.7	22.9	23.1	23.2	22.2	22.7	23.0	23.1	22.0	22.8	23.0	21.6	22.7	22.0	21.3	22.4	22.8	22.8	22.6	22.3	21.9	21.3	23.2	22.6	
Sep 20	21.6	21.2	20.9	20.7	20.4	20.1	19.9	20.1	20.9	21.8	22.2	21.7	22.0	22.3	22.7	22.9	23.3	23.8	23.4	22.4	21.9	23.1	22.6	22.8	19.9	23.8	21.9	
Sep 21	22.9	22.0	22.8	22.4	23.2	22.7	23.1	22.3	22.4	23.5	24.9	25.3	22.3	21.7	21.7	21.6	21.8	22.0	22.2	21.9	21.7	22.7	22.9	23.0	21.6	25.3	22.6	
Sep 22	23.0	22.9	22.8	22.7	22.6	22.5	22.6	22.8	22.1	22.6	23.3	22.9	21.2	21.4	21.4	21.6	21.6	21.7	21.8	22.5	22.7	22.8	23.2	23.3	21.2	23.3	22.4	
Sep 23	23.2	23.2	23.1	22.7	22.2	21.7	22.7	23.0	21.9	22.5	23.0	23.3	23.5	23.8	23.8	23.9	23.8	23.6	23.1	22.1	21.5	21.4	22.6	23.0	21.4	23.9	22.9	
Sep 24	23.3	23.3	23.2	21.8	22.7	22.9	23.0	22.9	22.1	22.6	23.1	23.4	23.8	24.3	24.6	24.7	24.9	24.8	23.9	22.6	21.7	22.3	22.7	22.1	21.7	24.9	23.2	
Sep 25	22.8	22.9	22.9	23.0	23.0	23.0	23.1	23.1	21.6	21.4	22.0	22.5	22.9	23.4	23.7	24.1	24.5	24.4	23.6	22.8	21.9	21.6	22.9	22.5	21.4	24.5	22.9	
Sep 26	22.2	22.9	22.9	23.0	23.0	23.1	23.1	22.9	22.2	22.9	21.6	21.6	21.4	21.4	21.5	21.5	21.6	21.7	21.7	21.8	22.0	21.9	22.1	22.0	21.4	23.1	22.2	
Sep 27	22.4	22.8	22.6	22.5	22.1	21.6	21.3	21.1	22.0	22.0	21.8	21.6	21.5	21.5	21.4	21.6	21.5	21.7	21.7	22.0	22.5	22.3	22.0	21.6	21.1	22.8	21.9	
Sep 28	21.3	22.5	23.1	22.3	21.9	22.8	23.0	23.0	22.4	23.2	22.9	21.4	21.5	21.3	21.4	21.4	21.6	21.5	21.7	22.4	22.9	22.7	22.3	21.6	21.3	23.2	22.2	
Sep 29	21.7	22.8	22.3	22.0	23.0	22.2	21.7	22.7	23.0	22.4	22.4	22.6	21.3	22.5	22.6	21.5	21.2	22.0	22.9	22.2	21.7	22.7	22.6	21.5	21.2	23.0	22.2	
Sep 30	22.6	23.0	23.2	23.2	23.1	23.0	22.9	22.7	22.7	22.1	22.5	22.5	21.7	21.6	21.6	21.6	21.7	21.8	22.4	21.8	21.5	22.7	22.5	21.4	21.4	23.2	22.3	
Diurnal Maximum	23.3	23.3	23.2	23.2	23.2	23.1	23.2	23.1	23.1	23.5	24.9	25.3	25.0	25.4	25.2	25.0	25.2	25.2	24.8	23.7	22.9	23.2	23.2	23.3				
Diurnal Average	22.1	22.4	22.5	22.3	22.2	22.4	22.3	22.2	22.1	22.4	22.6	22.7	22.6	22.5	22.4	22.4	22.5	22.5	22.3	22.1	22.1	22.4	22.3					

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

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

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





PEACE RIVER AREA MONITORING PROGRAM
Peace River Complex (PRC) Station - September 2022
Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

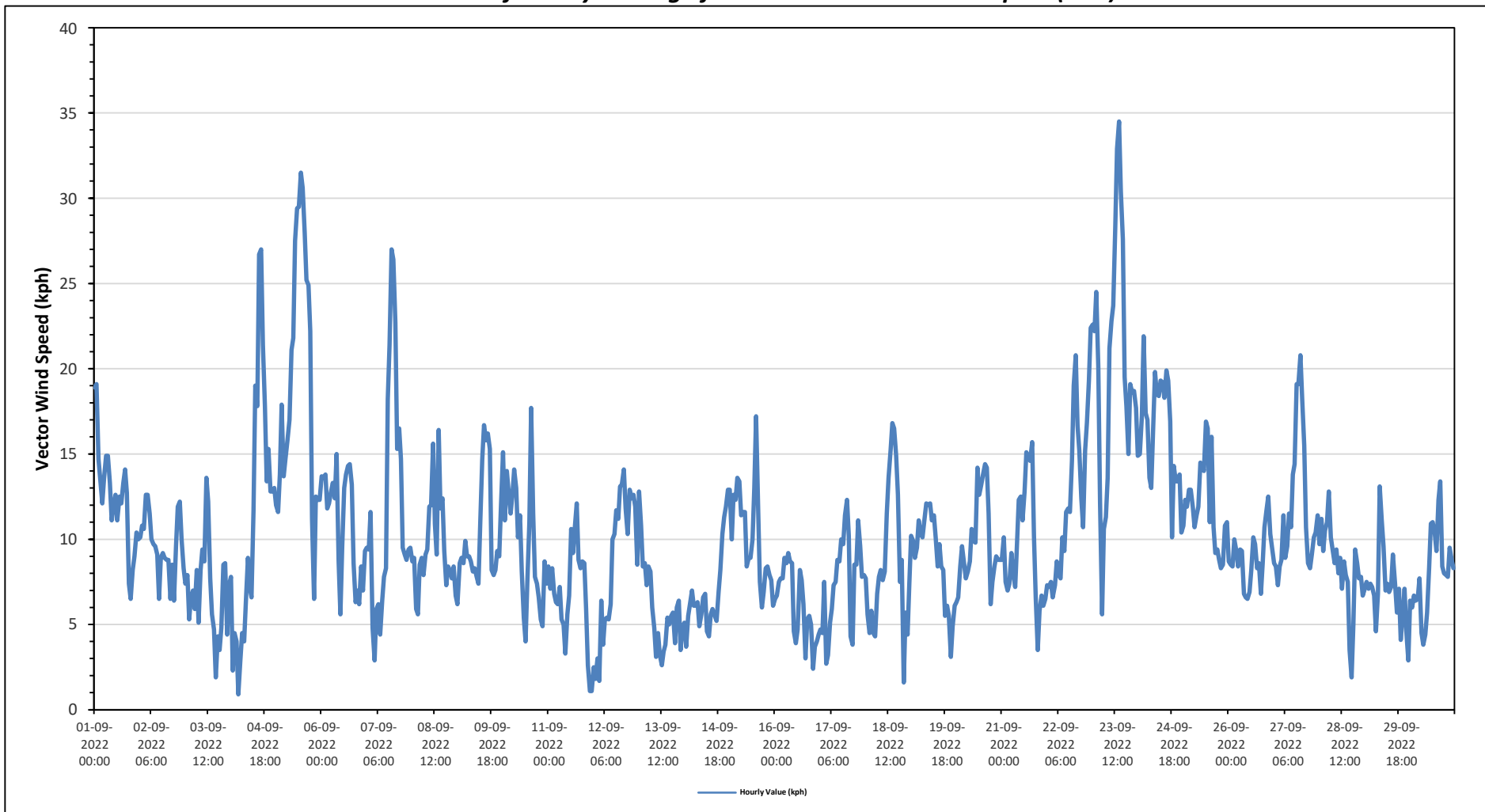
Maximum Hourly Value:	34.5 kph	on September 23 at hour 14	Hours in Service:	720
Maximum Daily Value:	20.1 kph	on September 23	Hours of Data:	720
Minimum Hourly Value:	0.9 kph	on September 4 at hour 4	Hours of Missing Data:	0
Minimum Daily Value:	3.1 kph	on September 16	Hours of Calibration:	0
Monthly Average:	5.6 kph		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	18.9	19.1	14.7	13.5	12.1	13.6	14.9	14.9	13.3	11.1	11.9	12.6	11.1	12.5	12.1	13.3	14.1	12.7	7.4	6.5	8.2	9.0	10.4	10.0	6.5	19.1	10.0	
Sep 2	10.1	10.8	10.6	12.6	12.6	11.5	10.0	9.7	9.6	9.1	6.5	8.9	9.2	8.9	8.8	8.8	6.5	8.5	6.4	9.6	11.9	12.2	10.0	8.3	6.4	12.6	8.1	
Sep 3	7.4	7.9	5.3	6.6	7.0	5.9	8.2	5.1	8.2	9.4	8.7	13.6	12.2	7.7	5.6	4.7	1.9	4.3	3.5	4.8	8.5	8.6	4.4	7.3	1.9	13.6	4.5	
Sep 4	7.8	2.3	4.5	4.0	0.9	2.9	4.5	4.0	6.4	8.9	7.2	6.6	11.7	19.0	17.8	26.7	27.0	21.4	17.8	13.4	15.3	12.8	12.8	13.0	0.9	27.0	9.1	
Sep 5	12.0	11.6	13.8	17.9	13.7	14.7	15.8	17.0	21.1	21.8	27.5	29.4	29.5	31.5	30.6	28.0	25.2	24.9	22.2	11.2	6.5	12.5	12.3	12.3	6.5	31.5	18.2	
Sep 6	13.7	13.6	13.8	11.8	12.1	12.8	13.3	12.4	15.0	8.7	5.6	9.5	13.0	13.8	14.3	14.4	13.2	8.6	6.3	7.0	6.2	8.4	7.0	9.3	5.6	15.0	10.0	
Sep 7	9.5	9.4	11.6	4.8	2.9	5.9	6.2	4.4	6.4	7.8	8.3	18.2	21.4	27.0	26.4	22.7	15.3	16.5	14.7	9.5	9.1	8.8	9.4	9.5	2.9	27.0	7.3	
Sep 8	8.7	8.9	5.9	5.6	8.5	8.9	7.9	9.1	9.4	11.9	12.0	15.6	10.9	9.1	16.4	11.8	12.4	9.3	7.3	8.4	8.2	7.7	8.4	6.7	5.6	16.4	7.3	
Sep 9	6.2	8.6	8.9	8.6	9.9	9.0	9.0	8.7	8.1	8.3	7.8	7.4	10.9	14.7	16.7	15.8	16.2	15.3	8.2	7.9	8.2	9.3	9.0	12.0	6.2	16.7	9.4	
Sep 10	15.1	11.1	14.0	12.8	11.5	12.6	14.1	13.0	10.1	11.4	8.1	5.4	4.0	7.5	11.0	17.7	11.5	7.8	7.4	6.6	5.3	4.9	8.7	7.4	4.0	17.7	7.5	
Sep 11	8.4	7.1	8.3	6.8	6.3	6.2	7.2	5.3	5.0	3.3	5.6	6.7	10.6	9.2	10.6	12.1	8.8	8.3	8.7	8.6	5.9	2.6	1.1	1.1	1.1	1.1	12.1	6.3
Sep 12	2.5	1.8	3.0	1.7	6.4	3.8	5.3	5.4	5.3	6.2	10.0	10.3	11.7	11.2	13.1	13.2	14.1	11.8	10.3	12.9	12.4	12.6	11.9	8.5	1.7	14.1	7.8	
Sep 13	12.8	10.8	8.4	8.6	7.3	8.4	8.1	6.0	4.8	3.1	4.5	3.2	2.6	3.4	3.8	5.4	5.0	5.5	5.7	3.9	6.0	6.4	3.5	4.8	2.6	12.8	3.6	
Sep 14	5.1	3.7	5.5	6.2	7.0	6.1	6.1	6.3	4.9	5.6	6.6	6.8	4.6	4.3	5.6	5.9	5.5	5.2	6.9	8.2	10.3	11.3	11.9	12.9	3.7	12.9	6.0	
Sep 15	12.9	10.0	12.6	12.3	13.6	13.4	11.4	11.6	11.6	8.4	8.9	8.9	10.0	13.0	17.2	11.9	7.5	6.0	6.9	8.3	8.4	7.9	7.6	6.1	6.0	17.2	9.3	
Sep 16	6.5	6.7	7.5	7.7	7.7	8.9	8.6	9.2	8.7	8.6	4.6	3.9	4.7	8.2	7.6	6.2	3.0	5.3	5.5	5.0	2.4	3.7	4.0	4.4	2.4	9.2	3.1	
Sep 17	4.7	4.5	7.5	2.7	3.2	5.1	5.9	7.3	7.5	8.8	8.7	10.0	9.7	11.4	12.3	10.2	4.3	3.8	8.5	8.5	11.1	9.6	7.8	7.9	2.7	12.3	5.8	
Sep 18	7.7	5.6	4.5	5.8	4.5	4.3	6.8	7.8	8.2	7.6	8.1	11.5	13.6	15.2	16.8	16.5	14.9	12.6	7.5	8.8	1.6	5.7	4.4	7.4	1.6	16.8	7.1	
Sep 19	10.2	9.9	8.9	9.5	11.1	10.3	10.1	11.2	12.1	12.0	12.1	11.1	11.4	10.1	8.4	9.7	8.4	8.2	5.5	6.1	5.5	3.1	4.9	6.1	3.1	12.1	8.1	
Sep 20	6.3	6.6	8.4	9.6	8.6	7.7	8.1	8.7	10.6	9.9	9.8	14.2	12.6	13.2	13.8	14.4	14.2	11.5	6.2	7.5	8.4	9.0	8.8	8.8	6.2	14.4	9.3	
Sep 21	8.8	10.1	7.5	7.0	7.4	9.2	8.0	7.2	9.7	12.3	12.5	11.1	12.8	15.1	14.8	14.6	15.7	10.2	6.6	3.5	5.8	6.7	6.1	6.5	3.5	15.7	9.1	
Sep 22	7.3	7.2	7.5	6.6	7.3	8.7	7.9	7.7	10.1	9.3	11.6	11.8	11.6	14.6	19.0	20.8	16.7	15.2	12.4	10.7	15.2	16.8	19.3	22.4	6.6	22.4	11.5	
Sep 23	22.6	22.2	24.5	20.1	12.1	5.6	10.6	11.3	13.6	21.2	22.8	23.7	28.3	32.9	34.5	30.4	27.6	19.5	17.8	15.0	19.1	18.6	18.7	17.7	5.6	34.5	20.1	
Sep 24	14.9	15.0	17.2	21.9	17.4	17.0	13.6	13.0	16.7	19.8	18.5	18.4	19.3	19.2	18.3	19.9	19.3	16.9	10.1	14.3	13.4	13.4	13.8	10.4	10.1	21.9	15.3	
Sep 25	10.8	12.3	11.9	12.9	12.9	11.9	10.7	11.4	11.9	14.5	14.3	14.0	16.9	16.5	11.0	16.0	10.7	9.2	9.4	8.8	8.3	8.5	10.8	11.0	8.3	16.9	11.0	
Sep 26	8.7	8.5	8.4	10.0	9.3	8.4	9.4	9.3	6.8	6.6	6.5	6.9	8.2	10.1	9.7	8.3	8.6	6.8	8.6	10.7	11.7	12.5	10.3	9.5	6.5	12.5	8.2	
Sep 27	8.6	8.4	7.3	8.4	8.8	11.4	8.9	9.6	11.5	10.7	13.8	14.4	19.1	19.1	20.8	18.2	15.5	10.7	8.6	8.3	9.1	10.1	10.4	11.4	7.3	20.8	11.1	
Sep 28	9.7	11.2	9.3	10.5	11.0	12.8	10.1	9.4	8.6	9.4	8.0	8.9	7.1	8.7	7.9	7.5	3.5	1.9	5.0	9.4	8.6	7.7	7.8	6.7	1.9	12.8	4.0	
Sep 29	7.1	7.5	7.1	7.4	7.2	6.7	4.6	6.8	13.1	11.1	9.6	7.0	7.4	6.9	7.2	9.1	7.3	5.7	7.1	4.1	5.4	7.1	4.6	2.9	2.9	13.1	5.8	
Sep 30	6.4	6.0	6.7	6.4	6.5	7.7	4.5	3.8	4.4	5.7	8.3	10.9	11.0	10.4	9.3	12.3	13.4	8.4	8.0	7.9	7.8	9.5	8.8	8.3	3.8	13.4	6.1	
Diurnal Maximum	23	22	25	22	17	17	16	17	21	22	28	29	30	33	35	30	28	25	22	15	19	19	19	22				
Diurnal Average	9.7	9.3	9.5	9.3	8.9	9.0	9.0	8.9	9.8	10.1	10.3	11.4	12.2	13.5	14.0	14.2	12.2	10.4	8.9	8.5	8.8	9.2	9.0	9.0				

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

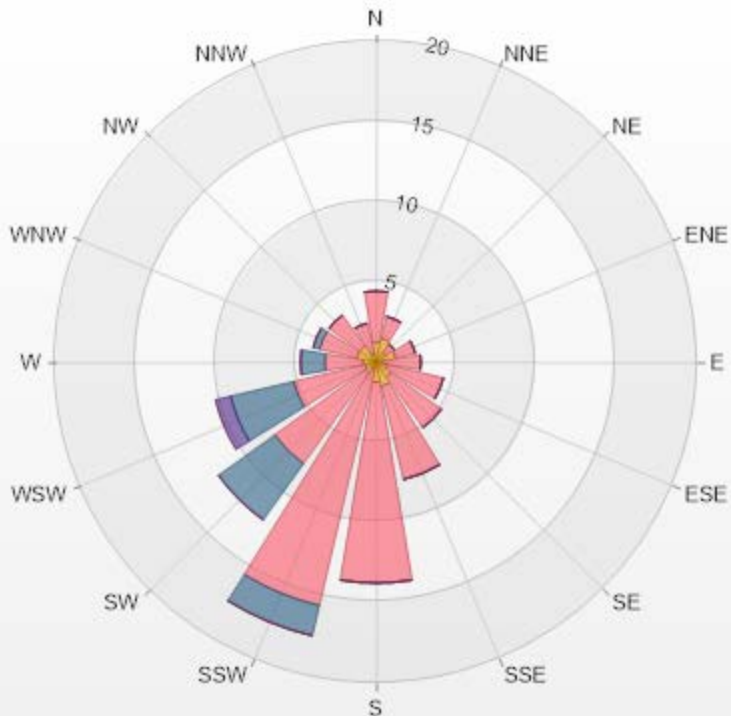
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

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



Wind: Peace River Complex [PRC] Monitor: WDS [KPH] Monthly: 09-2022 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.69% Valid Data: 100.00%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	1.25	3.19	0	0	0	4.44
NNE	1.53	1.39	0	0	0	2.92
NE	0.69	0.69	0	0	0	1.38
ENE	1.25	1.25	0	0	0	2.5
E	0.42	2.36	0	0	0	2.78
ESE	0.69	3.61	0	0	0	4.3
SE	1.11	3.89	0	0	0	5
SSE	1.53	5.97	0	0	0	7.5
S	1.25	12.5	0	0	0	13.75
SSW	0.42	15.14	1.94	0	0	17.5
SW	0.83	6.94	4.31	0	0	12.08
WSW	0.69	4.58	4.03	0.97	0	10.27
W	0.83	2.36	1.53	0	0	4.72
WNW	1.25	2.36	0.42	0	0	4.03
NW	1.25	2.36	0	0	0	3.61
NNW	0.56	1.94	0	0	0	2.5
Summary	15.55	70.53	12.23	0.97	0	99.28



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% Icon Classes (KPH)	16	71	12	1	0
1.8-6.0					
6.0-15.0					
15.0-29.0					
29.0-39.0					
>39.0					



PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex (PRC) Station - September 2022

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

Monthly Average: 216 (SW) degree	Hours in Service: 720
	Hours of Data: 720
	Hours of Missing Data: 0
	Hours of Calibration: 0
	Operational Uptime: 100.0

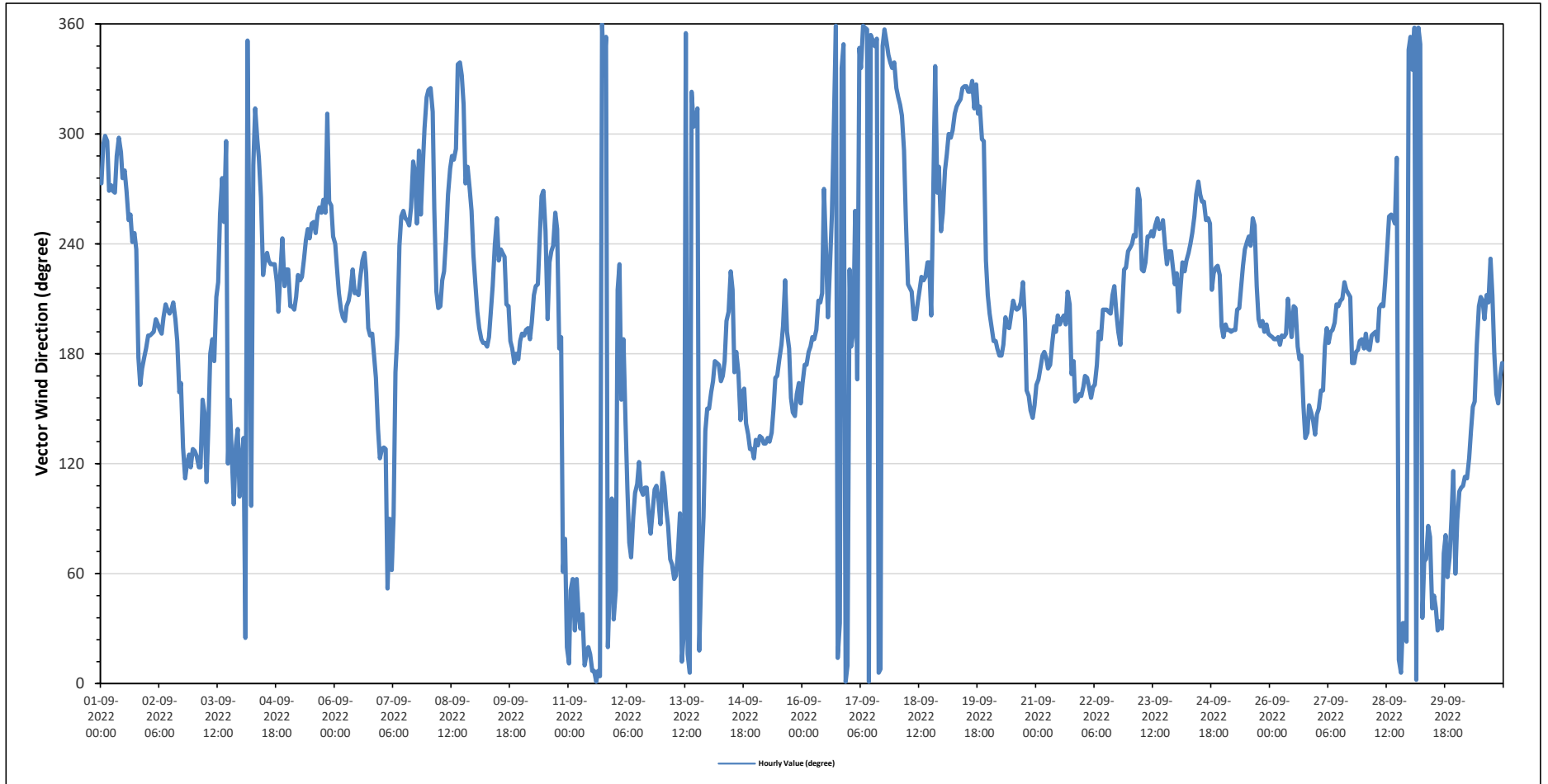
Day	Hourly Period Starting at (MST)																							Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant
Sep 1	W	WNW	WNW	WNW	W	W	W	W	WNW	WNW	WNW	W	W	W	WSW	WSW	WSW	WSW	SW	S	SSE	S	S	S	263	W
Sep 2	S	S	S	S	SSW	SSW	S	S	SSW	SSW	SSW	SSW	SSW	SSW	S	SSE	SSE	SE	ESE	ESE	SE	ESE	SE	177	S	
Sep 3	SE	ESE	ESE	ESE	SSE	SE	ESE	SE	S	S	S	SSW	SW	WSW	W	WSW	WNW	ESE	SSE	SE	E	SE	SE	E	159	SSE
Sep 4	ESE	SE	NNE	N	WSW	E	W	NW	WNW	WNW	W	SW	SW	SW	SW	SW	SW	SW	SSW	SW	WSW	SW	SW	232	SW	
Sep 5	SW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	NW	W	W	WSW	243	WSW
Sep 6	WSW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SSW	S	S	S	SSE	SE	ESE	209	SSW
Sep 7	SE	SE	SE	NE	E	ENE	E	SSE	S	WSW	WSW	WSW	WSW	WSW	WSW	WNW	W	WSW	WNW	WSW	WNW	WNW	NW	256	WSW	
Sep 8	NW	NW	NW	WSW	SSW	SSW	SSW	SW	SW	WSW	W	W	WNW	WNW	WNW	NNW	NNW	NNW	NW	W	W	W	WSW	SW	278	W
Sep 9	SW	SSW	SSW	S	S	S	S	S	SSW	SW	WSW	WSW	SW	SW	SW	SW	SSW	SSW	S	S	S	S	S	206	SSW	
Sep 10	S	S	S	SSW	S	SSW	SSW	SW	SW	WSW	W	W	WSW	SSW	SW	SW	WSW	WSW	WSW	S	S	ENE	ENE	NNE	214	SSW
Sep 11	NNE	NE	ENE	NNE	ENE	NE	NNE	NE	N	NNE	NNE	NNE	N	N	N	N	N	NNW	N	NNE	NE	E	NE	17	NNE	
Sep 12	NE	SSW	SW	SSE	S	SE	ESE	ENE	ENE	E	ESE	ESE	ESE	ESE	ESE	E	E	E	ESE	ESE	E	E	E	104	ESE	
Sep 13	ESE	ESE	E	E	ENE	ENE	ENE	ENE	ENE	E	NNE	NNE	N	NNE	N	NW	WNW	NW	NNW	ENE	E	SE	SSE	65	ENE	
Sep 14	SSE	SSE	SSE	S	S	S	SSE	SSE	S	SSW	SSW	SW	SSW	SSE	S	SSE	SE	SSE	SSE	SE	SE	SE	SE	ESE	160	SSE
Sep 15	SE	SE	SE	SE	SE	SE	SE	SE	SE	SSE	SSE	SSE	S	S	SSW	SW	S	SSE	SE	SE	SSE	SSE	SSE	155	SSE	
Sep 16	SSE	S	S	S	S	S	S	S	SSW	SSW	SSW	W	SW	SSW	SW	WSW	WNW	N	NNE	NNE	NNW	NNW	N	N	207	SSW
Sep 17	SW	S	S	WSW	SSE	NNW	NNW	N	N	N	N	N	N	NNW	N	N	N	NNW	N	N	NNW	NNW	NNW	NNW	347	NNW
Sep 18	NW	NW	NW	NW	WNW	WSW	SW	SW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SSW	W	NNW	W	W	WSW	234	SW
Sep 19	WSW	W	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	NW	NW	NW	NW	WNW	WNW	SW	SSW	307	NW
Sep 20	SSW	SSW	S	S	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SSW	SSE	SSE	SSE	SSE	190	S
Sep 21	SSE	SSE	S	S	S	S	S	S	S	SSW	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSE	S	SSE	SSE	SSE	SSE	186	S
Sep 22	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SW	SSW	S	S	SSW	SW	SW	SW	200	SSW
Sep 23	SW	WSW	WSW	WSW	W	W	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	SW	243	WSW
Sep 24	SW	SSW	SW	SW	SW	SW	SW	WSW	WSW	WSW	W	W	W	W	WSW	WSW	WSW	WSW	SSW	SW	SW	SW	SSW	241	WSW	
Sep 25	S	SSW	S	S	S	S	S	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	SW	SSW	SSW	S	SSW	S	213	SSW	
Sep 26	S	S	S	S	S	S	S	S	S	SSW	SSW	S	SSW	SSW	S	S	S	SSE	SE	SE	SSE	SE	SE	SE	176	S
Sep 27	SE	SSE	SSE	SSE	S	SSW	S	S	S	SSW	SSW	SSW	SSW	SSW	SW	SSW	SSW	SSW	S	S	S	S	S	195	SSW	
Sep 28	S	S	S	S	S	S	S	S	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	WSW	WNW	NNE	N	NNE	NNE	NNW	211	SSW	
Sep 29	N	NNW	N	N	N	NNW	NE	ENE	ENE	E	E	NE	NE	NE	NNE	NE	NNE	ENE	E	ENE	ENE	E	ESE	ENE	45	NE
Sep 30	E	ESE	ESE	ESE	ESE	ESE	ESE	S	SSE	SSE	S	SSW	SSW	SSW	SSW	SSW	SSW	SW	SSW	S	SSE	SSE	S	174	S	

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

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

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

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





PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex (PRC) Station - September 2022

Summary of Hourly Averages

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

WIND SPEED																											
Maximum Hourly Value:	34.5	kph	on September 23 at hour 14															Hours in Service:	720								
Maximum Daily Value:	20.1	kph	on September 23															Hours of Data:	720								
Minimum Hourly Value:	0.9	kph	on September 4 at hour 4															Hours of Missing Data:	0								
Minimum Daily Value:	3.1	kph	on September 16															Hours of Calibration:	0								
Monthly Average:	5.6	kph																Operational Uptime:	100								
WIND DIRECTION																											
Monthly Average:	216	(SW)	degree																								
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
Sep 1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	6.5	19.1	10.0
Sep 2	18.9	19.1	14.7	13.5	12.1	13.6	14.9	14.9	13.3	11.1	11.9	12.6	11.1	12.5	12.1	13.3	14.1	12.7	7.4	6.5	8.2	9.0	10.4	10.0	6.4	12.6	8.1
Sep 3	10.1	10.8	10.6	12.6	12.6	11.5	10.0	9.7	9.6	9.1	6.5	8.9	9.2	8.9	8.8	8.8	6.5	8.5	6.4	9.6	11.9	12.2	10.0	8.3	1.9	13.6	4.5
Sep 4	7.4	7.9	5.3	6.6	7.0	5.9	8.2	5.1	8.2	9.4	8.7	13.6	12.2	7.7	5.6	4.7	1.9	4.3	3.5	4.8	8.5	8.6	4.4	7.3	0.9	27.0	9.1
Sep 5	SE	ESE	ESE	ESE	SSE	SE	ESE	SE	S	S	SSW	SW	WSW	W	WSW	WNW	ESE	SSE	SE	E	SE	SE	E	6.5	31.5	18.2	
Sep 6	7.8	2.3	4.5	4.0	0.9	2.9	4.5	4.0	6.4	8.9	7.2	6.6	11.7	19.0	17.8	26.7	27.0	21.4	17.8	13.4	15.3	12.8	13.0	2.9	27.0	7.3	
Sep 7	ESE	SE	NNE	N	WSW	E	W	NW	WNW	WNW	W	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SW	WSW	SW	SW	6.5	15.0	10.0
Sep 8	12.0	11.6	13.8	17.9	13.7	14.7	15.8	17.0	21.1	21.8	27.5	29.4	29.5	31.5	30.6	28.0	25.2	24.9	22.2	11.2	6.5	12.5	12.3	5.6	15.0	10.0	
Sep 9	SW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	W	W	WSW	SW	2.9	27.0	7.3
Sep 10	13.7	13.6	13.8	11.8	12.1	12.8	13.3	12.4	15.0	8.7	5.6	9.5	13.0	13.8	14.3	14.4	13.2	8.6	6.3	7.0	6.2	8.4	7.0	9.3	6.2	16.7	9.4
Sep 11	WSW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SSW	SSW	SSW	SW	SW	SSW	S	S	SSE	SE	ESE	ESE	4.0	17.7	7.5	
Sep 12	9.5	9.4	11.6	4.8	2.9	5.9	6.2	4.4	6.4	7.8	8.3	18.2	21.4	27.0	26.4	22.7	15.3	16.5	14.7	9.5	9.1	8.8	9.4	9.5	4.0	17.7	7.5
Sep 13	SE	SE	SE	NE	E	ENE	E	SSE	S	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WNW	W	WSW	WNW	WSW	WNW	WNW	NW	6.2	16.7	9.4
Sep 14	8.7	8.9	5.9	5.6	8.5	8.9	7.9	9.1	9.4	11.9	12.0	15.6	10.9	9.1	16.4	11.8	12.4	9.3	7.3	8.4	8.2	7.7	8.4	6.7	6.2	16.7	9.4
Sep 15	NW	NW	NW	WSW	SSW	SSW	SSW	SW	SW	WSW	W	W	WNW	WNW	WNW	NNW	NNW	NNW	NW	W	W	W	WSW	SW	4.0	17.7	7.5
Sep 16	6.2	8.6	8.9	8.6	9.9	9.0	9.0	8.7	8.1	8.3	7.8	7.4	10.9	14.7	16.7	15.8	16.2	15.3	8.2	7.9	8.2	9.3	9.0	12.0	4.0	17.7	7.5
Sep 17	SW	SSW	SSW	S	S	S	S	S	SSW	SW	WSW	WSW	SW	SW	SW	SW	SSW	SSW	S	S	S	S	S	S	2.9	27.0	7.3
Sep 18	15.1	11.1	14.0	12.8	11.5	12.6	14.1	13.0	10.1	11.4	8.1	5.4	4.0	7.5	11.0	17.7	11.5	7.8	7.4	6.6	5.3	4.9	8.7	7.4	6.2	16.7	9.4
Sep 19	S	S	S	SSW	S	SSW	SSW	SW	SW	WSW	W	W	WSW	SSW	SW	SW	WSW	WSW	WSW	S	S	ENE	ENE	NNE	4.0	17.7	7.5
Sep 20	8.4	7.1	8.3	6.8	6.3	6.2	7.2	5.3	5.0	3.3	5.6	6.7	10.6	9.2	10.6	12.1	8.8	8.3	8.7	8.6	5.9	2.6	1.1	1.1	1.1	12.1	6.3
Sep 21	NNE	NE	ENE	NNE	ENE	NE	NNE	NE	N	NNE	NNE	N	N	N	N	N	N	NNW	N	NNE	NE	E	NE	N	1.7	14.1	7.8
Sep 22	2.5	1.8	3.0	1.7	6.4	3.8	5.3	5.4	5.3	6.2	10.0	10.3	11.7	11.2	13.1	13.2	14.1	11.8	10.3	12.9	12.4	12.6	11.9	8.5	2.9	27.0	7.3
Sep 23	NE	SSW	SW	SSE	S	SE	ESE	ENE	ENE	E	ESE	ESE	ESE	ESE	ESE	ESE	E	E	E	ESE	ESE	E	E	6.2	16.7	9.4	
Sep 24	12.8	10.8	8.4	8.6	7.3	8.4	8.1	6.0	4.8	3.1	4.5	3.2	2.6	3.4	3.8	5.4	5.0	5.5	5.7	3.9	6.0	6.4	3.5	4.8	2.6	12.8	3.6
Sep 25	ESE	ESE	E	E	ENE	ENE	ENE	ENE	E	NNE	NNE	N	NNE	N	NW	WNW	NW	NW	NNE	ENE	E	SE	SSE	3.7	12.9	6.0	
Sep 26	5.1	3.7	5.5	6.2	7.0	6.1	6.1	6.3	4.9	5.6	6.6	6.8	4.6	4.3	5.6	5.9	5.5	5.2	6.9	8.2	10.3	11.3	11.9	12.9	6.0	17.2	9.3
Sep 27	SSE	SSE	SSE	S	S	S	SSE	SSE	S	SSW	SSW	SW	SSW	SSE	S	SSE	SE	SSE	SSE	SE	SE	SE	SE	ESE	6.0	17.2	9.3
Sep 28	12.9	10.0	12.6	12.3	13.6	13.4	11.4	11.6	11.6	8.4	8.9	8.9	10.0	13.0	17.2	11.9	7.5	6.0	6.9	8.3	8.4	7.9	7.6	6.1	2.4	9.2	3.1
Sep 29	SE	SE	SE	SE	SE	SE	SE	SE	SE	SSE	SSE	S	S	SSW	SW	S	SSE	SE	SE	SSE	SSE	SSE	SSE	2.4	9.2	3.1	
Sep 30	6.5	6.7	7.5	7.7	7.7	8.9	8.6	9.2	8.7	8.6	4.6	3.9	4.7	8.2	7.6	6.2	3.0	5.3	5.5	5.0	2.4	3.7	4.0	4.4	2.7	12.3	5.8
Sep 1	SSE	S	S	S	S	S	S	S	SSW	SSW	SSW	W	SW	SSW	SW	WSW	WNW	N	NNE	NNW	NNW	N	N	N	2.7	12.3	5.8
Sep 2	4.7	4.5	7.5	2.7	3.2	5.1	5.9	7.3	7.5	8.8	8.7	10.0	9.7	11.4	12.3	10.2	4.3	3.8	8.5	8.5	11.1	9.6	7.8	7.9	1.6	16.8	7.1
Sep 3	SW	S	S	WSW	SSE	NNW	NNW	N	N	N	N	N	NNW	N	N	NNW	N	N	NNW	N	NNW	NNW	NNW	NNW	3.1	12.1	8.1
Sep 4	7.7	5.6	4.5	5.8	4.5	4.3	6.8	7.8	8.2	7.6	8.1	11.5	13.6	15.2	16.8	16.5	14.9	12.6	7.5	8.8	1.6	5.7	4.4	7.4	1.6	16.8	7.1
Sep 5	NW	NW	NW	NW	WNW	WSW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SSW	W	NNW	W	W	WSW	3.1	12.1	8.1
Sep 6	10.2	9.9	8.9	9.5	11.1	10.3	10.1	11.2	12.1	12.0	12.1	11.1	11.4	10.1	8.4	9.7	8.4	8.2	5.5	6.1	5.5	3.1	4.9	6.1	6.2	14.4	9.3
Sep 7	WSW	W	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	NW	NW	NW	NW	WNW	WNW	SW	SSW	6.2	14.4	9.3
Sep 8	6.3	6.6	8.4	9.6	8.6	7.7	8.1	8.7	10.6	9.9	9.8	14.2	12.6	13.2	13.8	14.4	14.2	11.5	6.2	7.5	8.4	9.0	8.8	8.8	6.2	14.4	9.3
Sep 9	SSW	SSW	S	S	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSE	SSE	SSE	SE	SSE			



PEACE RIVER AREA MONITORING PROGRAM

Peace River Complex (PRC) Station - September 2022

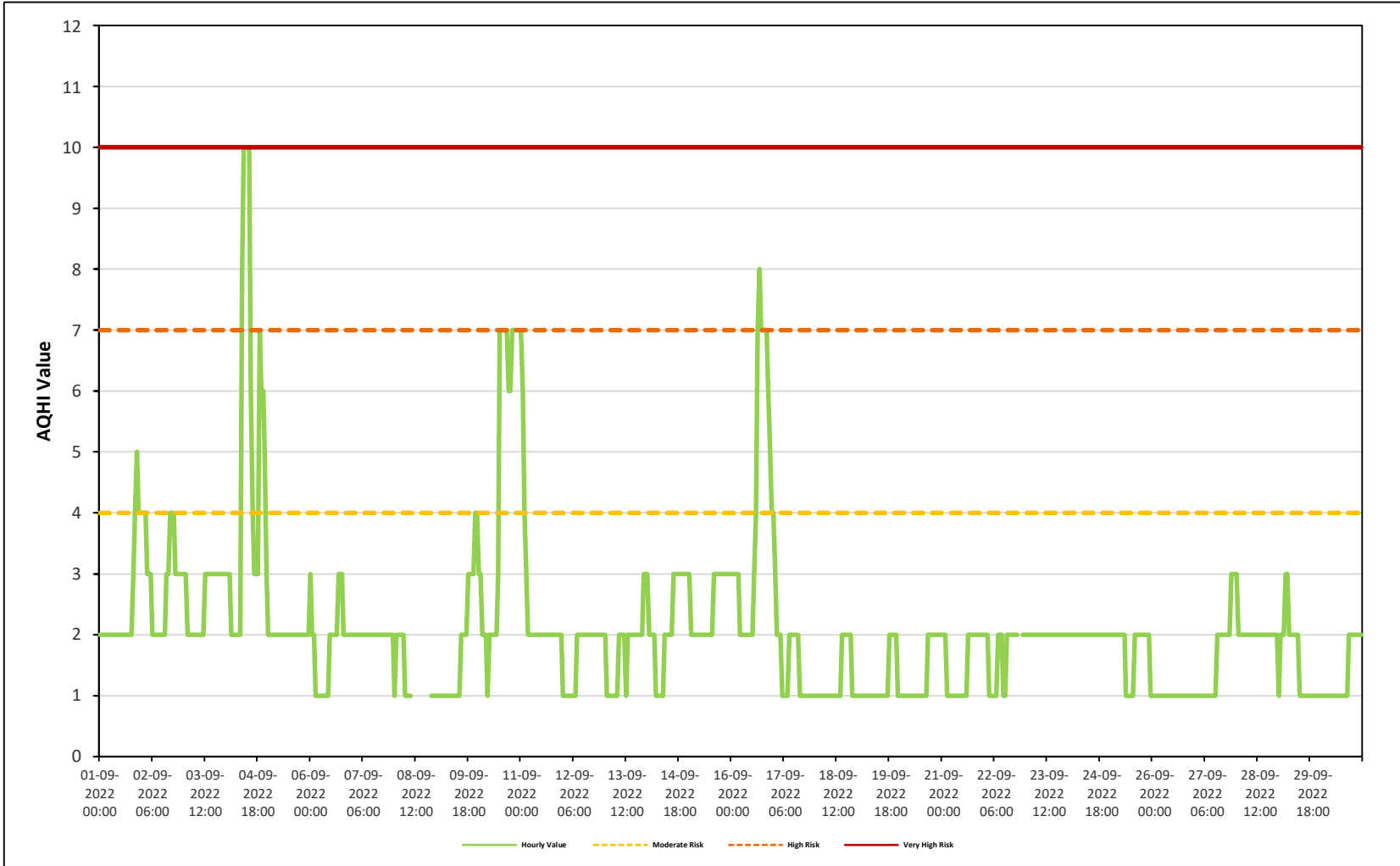
Summary of Hourly Averages

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

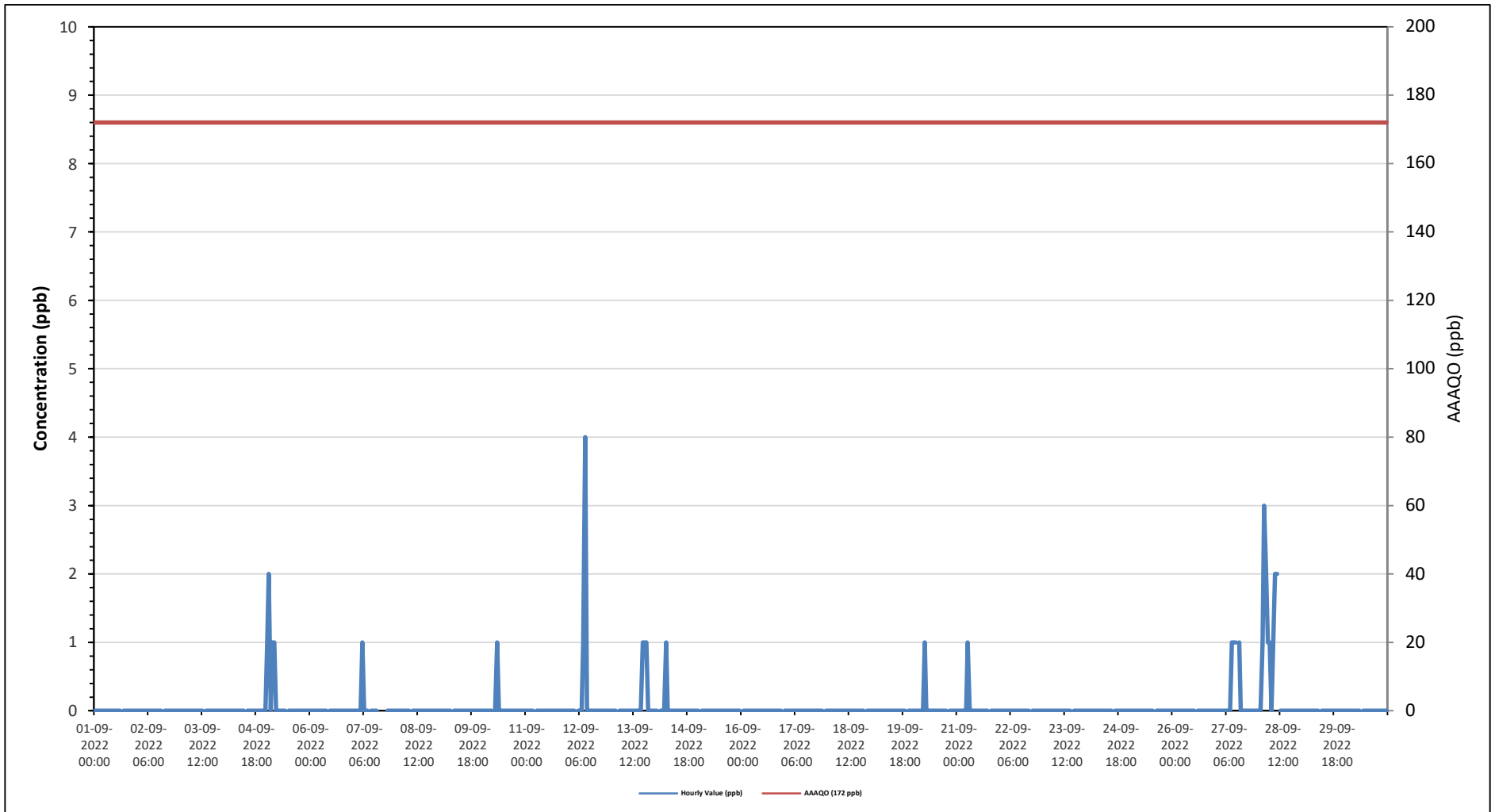
WIND SPEED																											
Maximum Hourly Value:	34.5	kph	on September 23 at hour 14												Hours in Service:	720											
Maximum Daily Value:	20.1	kph	on September 23												Hours of Data:	720											
Minimum Hourly Value:	0.9	kph	on September 4 at hour 4												Hours of Missing Data:	0											
Minimum Daily Value:	3.1	kph	on September 16												Hours of Calibration:	0											
Monthly Average:	5.6	kph													Operational Uptime:	100											
WIND DIRECTION																											
Monthly Average:	216 (SW) degree																										
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
Sep 21	8.8	10.1	7.5	7.0	7.4	9.2	8.0	7.2	9.7	12.3	12.5	11.1	12.8	15.1	14.8	14.6	15.7	10.2	6.6	3.5	5.8	6.7	6.1	6.5	3.5	15.7	9.1
	SSE	SSE	S	S	S	S	S	S	S	SSW	S	SSW	SSW	SSW	SSW	SSW	SSW	SSE	S	SSE	SSE	SSE	SSE				
Sep 22	7.3	7.2	7.5	6.6	7.3	8.7	7.9	7.7	10.1	9.3	11.6	11.8	11.6	14.6	19.0	20.8	16.7	15.2	12.4	10.7	15.2	16.8	19.3	22.4	6.6	22.4	11.5
	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	S	SSW	SW	SW	SW				
Sep 23	22.6	22.2	24.5	20.1	12.1	5.6	10.6	11.3	13.6	21.2	22.8	23.7	28.3	32.9	34.5	30.4	27.6	19.5	17.8	15.0	19.1	18.6	18.7	17.7	5.6	34.5	20.1
	SW	WSW	WSW	WSW	W	W	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW			
Sep 24	14.9	15.0	17.2	21.9	17.4	17.0	13.6	13.0	16.7	19.8	18.5	18.4	19.3	19.2	18.3	19.9	19.3	16.9	10.1	14.3	13.4	13.4	13.8	10.4	10.1	21.9	15.3
	SW	SSW	SW	SW	SW	SW	WSW	WSW	WSW	W	W	W	W	W	WSW	WSW	WSW	SSW	SW	SW	SW	SW	SW	SSW			
Sep 25	10.8	12.3	11.9	12.9	12.9	11.9	10.7	11.4	11.9	14.5	14.3	14.0	16.9	16.5	11.0	16.0	10.7	9.2	9.4	8.8	8.3	8.5	10.8	11.0	8.3	16.9	11.0
	S	SSW	S	S	S	S	S	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	SW	SSW	SSW	SSW	S	SSW	S			
Sep 26	8.7	8.5	8.4	10.0	9.3	8.4	9.4	9.3	6.8	6.6	6.5	6.9	8.2	10.1	9.7	8.3	8.6	6.8	8.6	10.7	11.7	12.5	10.3	9.5	6.5	12.5	8.2
	S	S	S	S	S	S	S	S	S	SSW	SSW	S	SSW	SSW	S	S	S	SSE	SE	SE	SSE	SE	SE	SE			
Sep 27	8.6	8.4	7.3	8.4	8.8	11.4	8.9	9.6	11.5	10.7	13.8	14.4	19.1	19.1	20.8	18.2	15.5	10.7	8.6	8.3	9.1	10.1	10.4	11.4	7.3	20.8	11.1
	SE	SSE	SSE	SSE	S	SSW	S	S	S	SSW	SSW	SSW	SSW	SSW	SW	SSW	SSW	SSW	S	S	S	S	S	S			
Sep 28	9.7	11.2	9.3	10.5	11.0	12.8	10.1	9.4	8.6	9.4	8.0	8.9	7.1	8.7	7.9	7.5	3.5	1.9	5.0	9.4	8.6	7.7	7.8	6.7	1.9	12.8	4.0
	S	S	S	S	S	S	S	S	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	WNW	NNE	N	NNE	NNE	NNE	NNW	NNW			
Sep 29	7.1	7.5	7.1	7.4	7.2	6.7	4.6	6.8	13.1	11.1	9.6	7.0	7.4	6.9	7.2	9.1	7.3	5.7	7.1	4.1	5.4	7.1	4.6	2.9	2.9	13.1	5.8
	N	NNW	N	N	N	NNW	NE	ENE	ENE	E	E	NE	NE	NE	NNE	NE	NNE	ENE	E	ENE	ENE	E	ESE	ENE			
Sep 30	6.4	6.0	6.7	6.4	6.5	7.7	4.5	3.8	4.4	5.7	8.3	10.9	11.0	10.4	9.3	12.3	13.4	8.4	8.0	7.9	7.8	9.5	8.8	8.3	3.8	13.4	6.1
	E	ESE	ESE	ESE	ESE	ESE	ESE	SE	SSE	SSE	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSE	SSE	SSE	S				
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance										
K	Collection Error							N	No Data (Machine Not in Service)							Y	Routine Maintenance							P	Power Failure		
X	Invalid Data (Equipment Malfunction/Recovery)							NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)																		
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.																											
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.																											

AQHI GRIMSHAW STATION

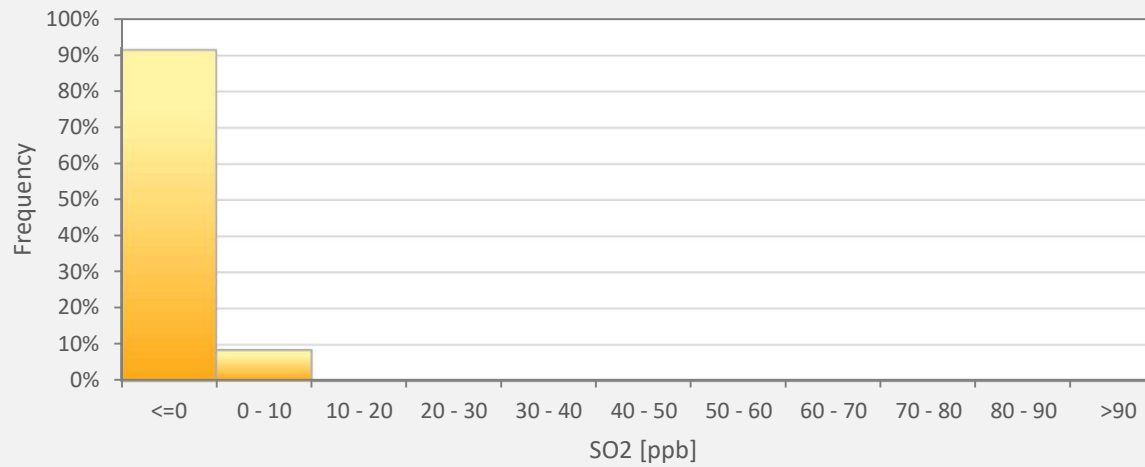
Timeseries Chart of Hourly Average for AQHI - AQHI - Grimshaw Station



Timeseries Chart of Hourly Average for SO2 - AQHI - Grimshaw Station



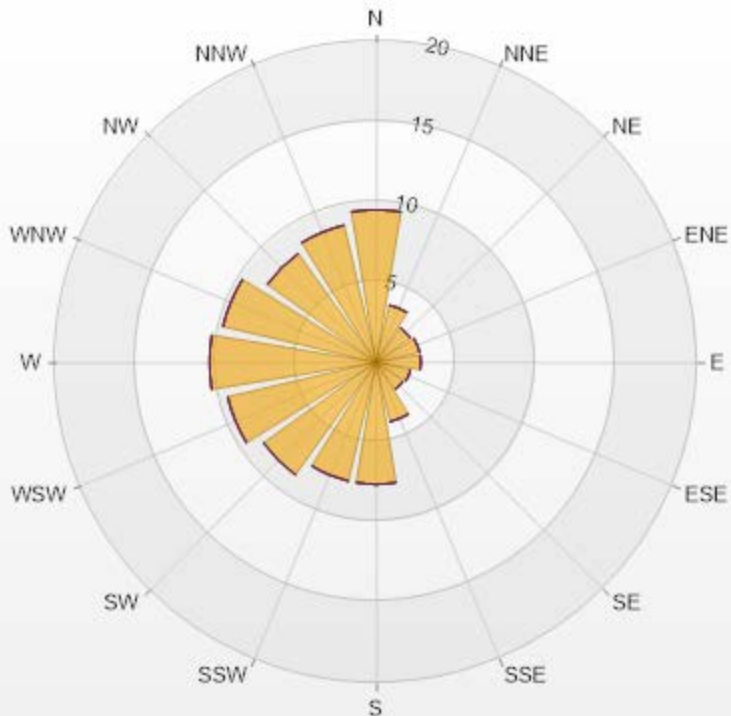
SO2[ppb] Histogram: AQHI Grimshaw Monthly: 09-2022 1 Hr.



Classes	SO2
<=0	91.52%
0 - 10	8.48%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.00% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	9.5	0	0	0	0	9.5
NNE	3.65	0	0	0	0	3.65
NE	2.63	0	0	0	0	2.63
ENE	2.78	0	0	0	0	2.78
E	2.78	0	0	0	0	2.78
ESE	2.19	0	0	0	0	2.19
SE	2.05	0	0	0	0	2.05
SSE	3.8	0	0	0	0	3.8
S	7.6	0	0	0	0	7.6
SSW	7.6	0	0	0	0	7.6
SW	8.63	0	0	0	0	8.63
WSW	9.5	0	0	0	0	9.5
W	10.38	0	0	0	0	10.38
WNW	9.8	0	0	0	0	9.8
NW	8.33	0	0	0	0	8.33
NNW	8.77	0	0	0	0	8.77
Summary	100	0	0	0	0	100



PRAMP-202209

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% Icon Classes (ppb)

100 0-10

0 10-50

0 50-100

0 100-172

0 >172.0



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - September 2022

Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

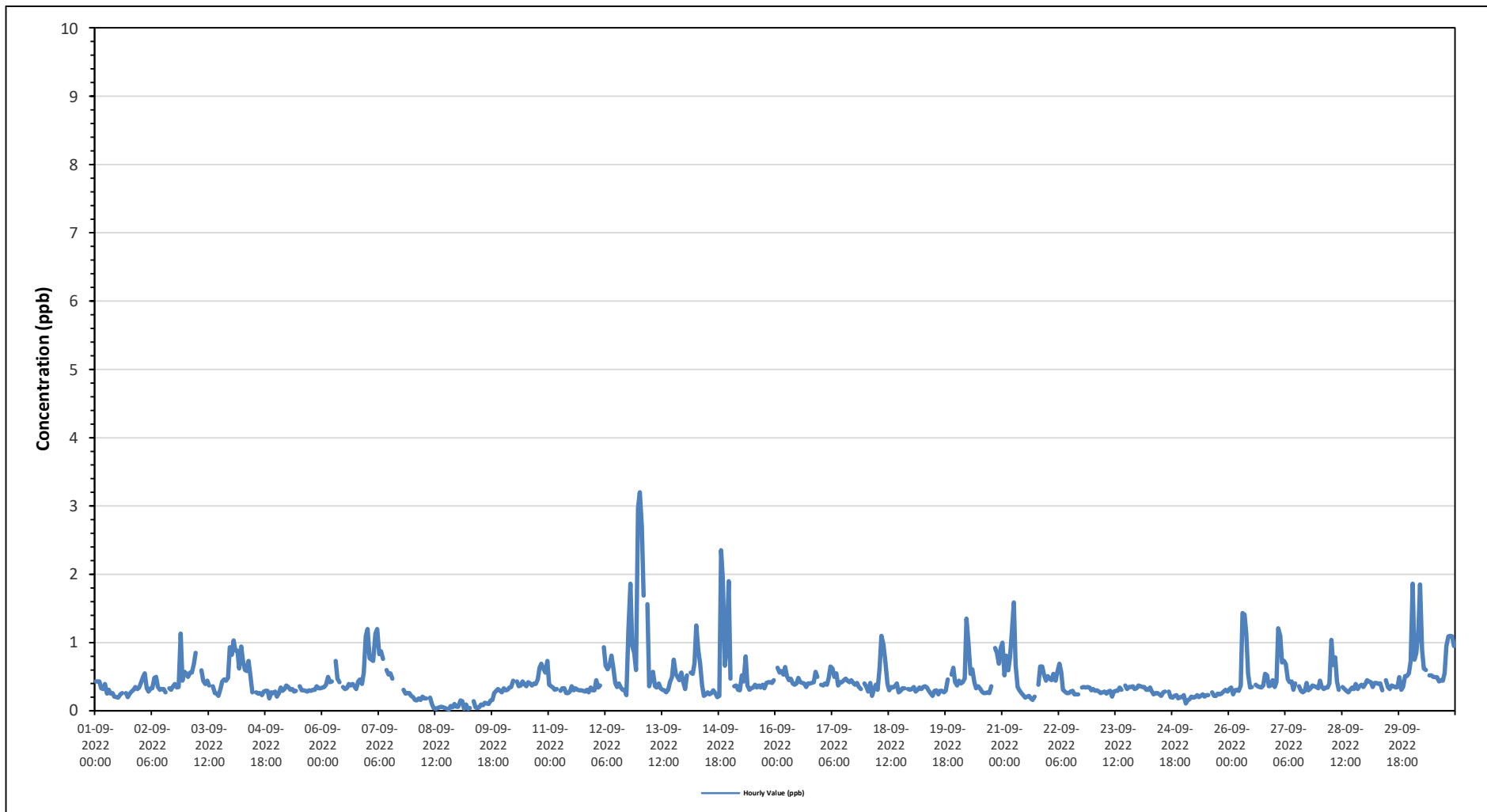
Maximum Hourly Value:	3.20 ppb on September 13 at hour 0	Hours in Service:	720
Maximum Daily Value:	0.82 ppb on September 30	Hours of Data:	681
Minimum Hourly Value:	0.02 ppb on September 8 at hour 19	Hours of Missing Data:	3
Minimum Daily Value:	0.10 ppb on September 8	Hours of Calibration:	36
Monthly Average:	0.44 ppb	Operational Uptime:	99.6

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	0.43	0.43	0.43	0.33	0.32	0.39	0.25	0.31	0.25	0.26	0.21	0.2	0.19	0.24	0.26	S	0.26	0.2	0.25	0.28	0.31	0.35	0.32	0.34	0.19	0.43	0.30	
Sep 2	0.41	0.49	0.55	0.33	0.28	0.33	0.33	0.48	0.5	0.35	0.31	0.32	0.32	0.27	S	0.33	0.31	0.36	0.39	0.34	0.35	1.13	0.44	0.57	0.27	1.13	0.41	
Sep 3	0.55	0.5	0.56	0.56	0.68	0.85	NRM	NRM	0.59	0.44	0.39	0.44	0.37	S	0.36	0.26	0.25	0.22	0.32	0.43	0.46	0.44	0.48	0.93	0.22	0.93	0.48	
Sep 4	0.82	1.03	0.88	0.88	0.62	0.94	0.73	0.6	0.58	0.73	0.49	0.27	S	0.27	0.25	0.26	0.23	0.28	0.29	0.29	0.18	0.27	0.26	0.28	0.18	1.03	0.50	
Sep 5	0.21	0.26	0.34	0.29	0.32	0.37	0.35	0.31	0.32	0.28	0.29	S	0.36	0.3	0.3	0.29	0.28	0.3	0.29	0.31	0.31	0.36	0.33	0.33	0.21	0.37	0.31	
Sep 6	0.34	0.35	0.38	0.5	0.42	0.43	NRM	0.73	0.47	0.42	S	0.35	0.32	0.33	0.39	0.37	0.39	0.36	0.32	0.43	0.46	0.39	0.56	1.1	0.32	1.10	0.45	
Sep 7	1.2	0.77	0.75	0.73	1.13	1.2	0.83	0.87	0.76	S	0.6	0.53	0.55	0.47	S	C	C	C	C	C	0.31	0.25	0.26	0.26	0.22	0.22	1.20	0.65
Sep 8	0.2	0.16	0.15	0.18	0.16	0.21	0.18	0.18	S	0.19	0.1	0.04	0.03	0.04	0.05	0.06	0.05	0.04	0.03	0.02	0.07	0.05	0.1	0.06	0.02	0.21	0.10	
Sep 9	0.06	0.15	0.14	0.03	0.09	0.03	0.04	S	0.14	0.05	0.04	0.05	0.09	0.08	0.12	0.11	0.1	0.15	0.16	0.26	0.29	0.32	0.29	0.27	0.03	0.32	0.13	
Sep 10	0.33	0.3	0.31	0.34	0.35	0.44	S	0.43	0.36	0.37	0.43	0.39	0.36	0.42	0.4	0.37	0.4	0.39	0.46	0.63	0.69	0.62	0.56	0.73	0.30	0.73	0.44	
Sep 11	0.38	0.36	0.34	0.31	0.32	S	0.29	0.33	0.33	0.26	0.26	0.28	0.36	0.3	0.33	0.31	0.3	0.3	0.29	0.28	0.31	0.27	0.34	0.3	0.26	0.38	0.31	
Sep 12	0.3	0.45	0.34	0.37	S	0.93	0.66	0.61	0.66	0.81	0.64	0.41	0.35	0.4	0.34	0.31	0.31	0.23	1.18	1.86	0.95	0.85	0.6	2.97	0.23	2.97	0.72	
Sep 13	3.2	2.7	1.69	S	1.56	0.36	0.48	0.57	0.36	0.34	0.4	0.33	0.31	0.3	0.27	0.31	0.42	0.49	0.75	0.54	0.49	0.45	0.56	0.43	0.27	3.20	0.75	
Sep 14	0.32	0.52	S	0.56	0.54	0.7	1.25	0.88	0.7	0.37	0.22	0.24	0.27	0.24	0.26	0.3	0.25	0.2	0.22	2.35	1.92	0.66	0.92	1.9	0.20	2.35	0.69	
Sep 15	0.47	S	0.36	0.37	0.31	0.3	0.52	0.43	0.8	0.37	0.31	0.33	0.34	0.38	0.34	0.37	0.34	0.38	0.33	0.41	0.42	0.42	0.41	0.45	0.30	0.80	0.40	
Sep 16	S	0.63	0.56	0.58	0.53	0.64	0.51	0.45	0.47	0.4	0.38	0.4	0.48	0.42	0.41	0.4	0.35	0.4	0.4	0.41	0.42	0.57	0.5	S	0.35	0.64	0.47	
Sep 17	0.38	0.37	0.4	0.38	0.48	0.65	0.62	0.5	0.55	0.37	0.42	0.42	0.45	0.47	0.44	0.42	0.45	0.41	0.38	0.41	0.35	0.32	S	0.4	0.32	0.65	0.44	
Sep 18	0.35	0.28	0.41	0.22	0.32	0.38	0.31	0.63	1.1	0.97	0.71	0.39	0.3	0.35	0.34	0.36	0.4	0.27	0.29	0.33	0.33	S	0.32	0.31	0.22	1.10	0.42	
Sep 19	0.32	0.35	0.28	0.31	0.34	0.32	0.35	0.36	0.34	0.29	0.25	0.22	0.29	0.3	0.24	0.29	0.29	0.27	0.29	0.46	S	0.53	0.63	0.42	0.22	0.63	0.34	
Sep 20	0.37	0.44	0.4	0.42	0.47	1.35	0.98	0.54	0.61	0.42	0.33	0.36	0.33	0.28	0.26	0.26	0.27	0.26	0.36	S	0.92	0.85	0.69	0.92	0.26	1.35	0.53	
Sep 21	1	0.52	0.81	0.59	0.79	1.2	1.59	0.67	0.35	0.3	0.26	0.23	0.19	0.21	0.22	0.18	0.16	0.21	S	0.38	0.65	0.65	0.53	0.44	0.16	1.59	0.53	
Sep 22	0.51	0.47	0.45	0.54	0.44	0.57	0.69	0.57	0.31	0.28	0.26	0.26	0.28	0.29	0.24	0.24	0.24	S	0.34	0.35	0.34	0.35	0.34	0.3	0.24	0.69	0.38	
Sep 23	0.32	0.29	0.3	0.28	0.26	0.27	0.28	0.25	0.28	0.29	0.21	0.28	0.29	0.29	0.34	0.31	S	0.37	0.32	0.35	0.35	0.36	0.32	0.33	0.21	0.37	0.30	
Sep 24	0.37	0.36	0.35	0.35	0.31	0.31	0.34	0.28	0.24	0.26	0.26	0.24	0.22	0.27	0.28	S	0.28	0.2	0.19	0.22	0.23	0.18	0.2	0.2	0.18	0.37	0.27	
Sep 25	0.23	0.11	0.15	0.17	0.21	0.19	0.2	0.23	0.2	0.22	0.24	0.21	0.23	0.23	S	0.27	0.22	0.22	0.25	0.24	0.25	0.28	0.31	0.28	0.11	0.31	0.22	
Sep 26	0.32	0.34	0.24	0.3	0.31	0.29	0.37	1.43	1.41	1.12	0.54	0.34	0.35	S	0.38	0.36	0.35	0.34	0.37	0.54	0.52	0.36	0.37	0.45	0.24	1.43	0.50	
Sep 27	0.35	0.42	1.21	1.1	0.71	0.73	0.68	0.46	0.42	0.43	0.31	0.4	S	0.36	0.29	0.27	0.29	0.41	0.3	0.33	0.37	0.36	0.35	0.33	0.27	1.21	0.47	
Sep 28	0.44	0.35	0.32	0.34	0.34	0.4	1.04	0.67	0.78	0.43	0.31	S	0.35	0.32	0.29	0.27	0.31	0.34	0.32	0.39	0.32	0.36	0.38	0.35	0.27	1.04	0.41	
Sep 29	0.39	0.45	0.43	0.42	0.35	0.41	0.41	0.39	0.4	0.3	S	0.45	0.35	0.32	0.37	0.36	0.34	0.35	0.49	0.31	0.35	0.51	0.51	0.55	0.30	0.55	0.40	
Sep 30	0.73	1.86	0.75	0.84	1.13	1.85	0.89	0.62	0.6	S	0.52	0.52	0.5	0.49	0.49	0.43	0.45	0.44	0.55	0.95	1.09	1.1	1.09	0.95	0.43	1.86	0.82	
Diurnal Maximum	3.20	2.70	1.69	1.10	1.56	1.85	1.59	1.43	1.41	1.12	0.71	0.53	0.55	0.49	0.49	0.43	0.45	0.49	1.18	2.35	1.92	1.13	1.09	2.97				
Diurnal Average	0.53	0.54	0.49	0.44	0.49	0.59	0.56	0.53	0.51	0.40	0.35	0.32	0.32	0.31	0.31	0.30	0.30	0.30	0.36	0.50	0.48	0.47	0.45	0.59				

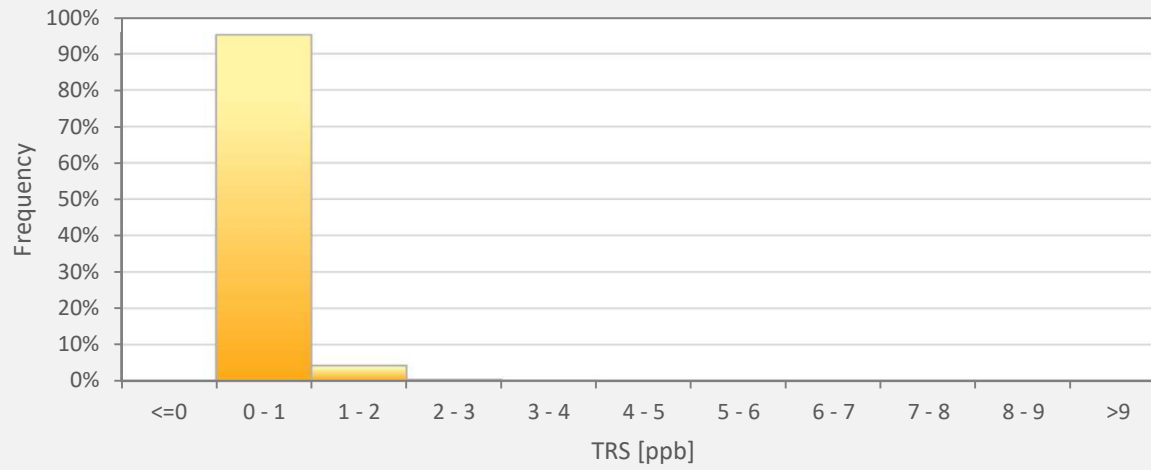
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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

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



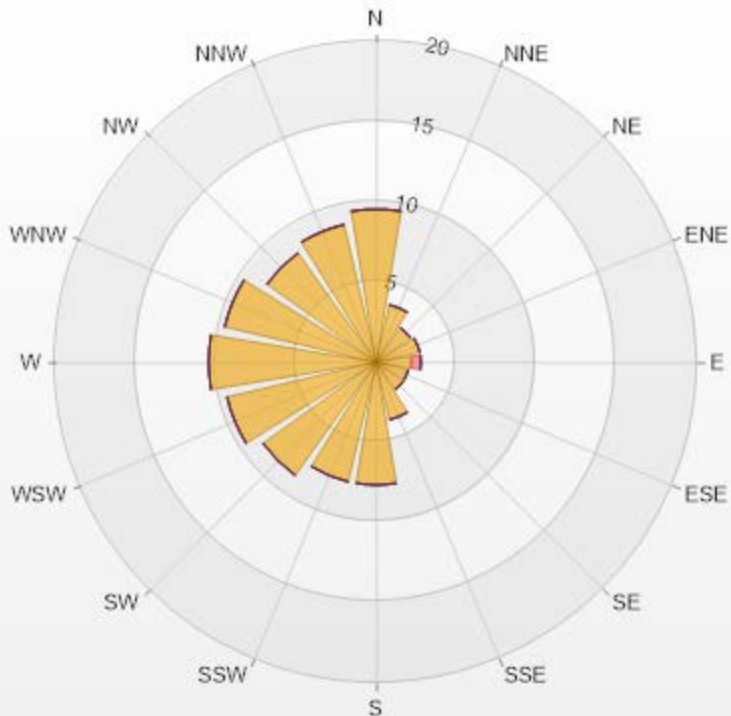
TRS[ppb] Histogram: AQHI Grimshaw Monthly: 09-2022 1 Hr.



Classes	TRS
<=0	0.00%
0 - 1	95.15%
1 - 2	4.26%
2 - 3	0.44%
3 - 4	0.15%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.58% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	9.54	0	0	0	0	9.54
NNE	3.67	0	0	0	0	3.67
NE	2.64	0	0	0	0	2.64
ENE	2.79	0	0	0	0	2.79
E	2.2	0.59	0	0	0	2.79
ESE	2.06	0	0	0	0	2.06
SE	2.06	0	0	0	0	2.06
SSE	3.67	0	0	0	0	3.67
S	7.64	0	0	0	0	7.64
SSW	7.64	0	0	0	0	7.64
SW	8.66	0	0	0	0	8.66
WSW	9.54	0	0	0	0	9.54
W	10.43	0	0	0	0	10.43
WNW	9.69	0	0	0	0	9.69
NW	8.37	0	0	0	0	8.37
NNW	8.81	0	0	0	0	8.81
Summary	99.41	0.59	0	0	0	100



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% Icon Classes (ppb)

99 0-2

1 2-5

0 5-10

0 10-50

0 >50.0



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - September 2022

Summary of Hourly Averages

OXIDES OF NITROGEN (NOx) in ppb

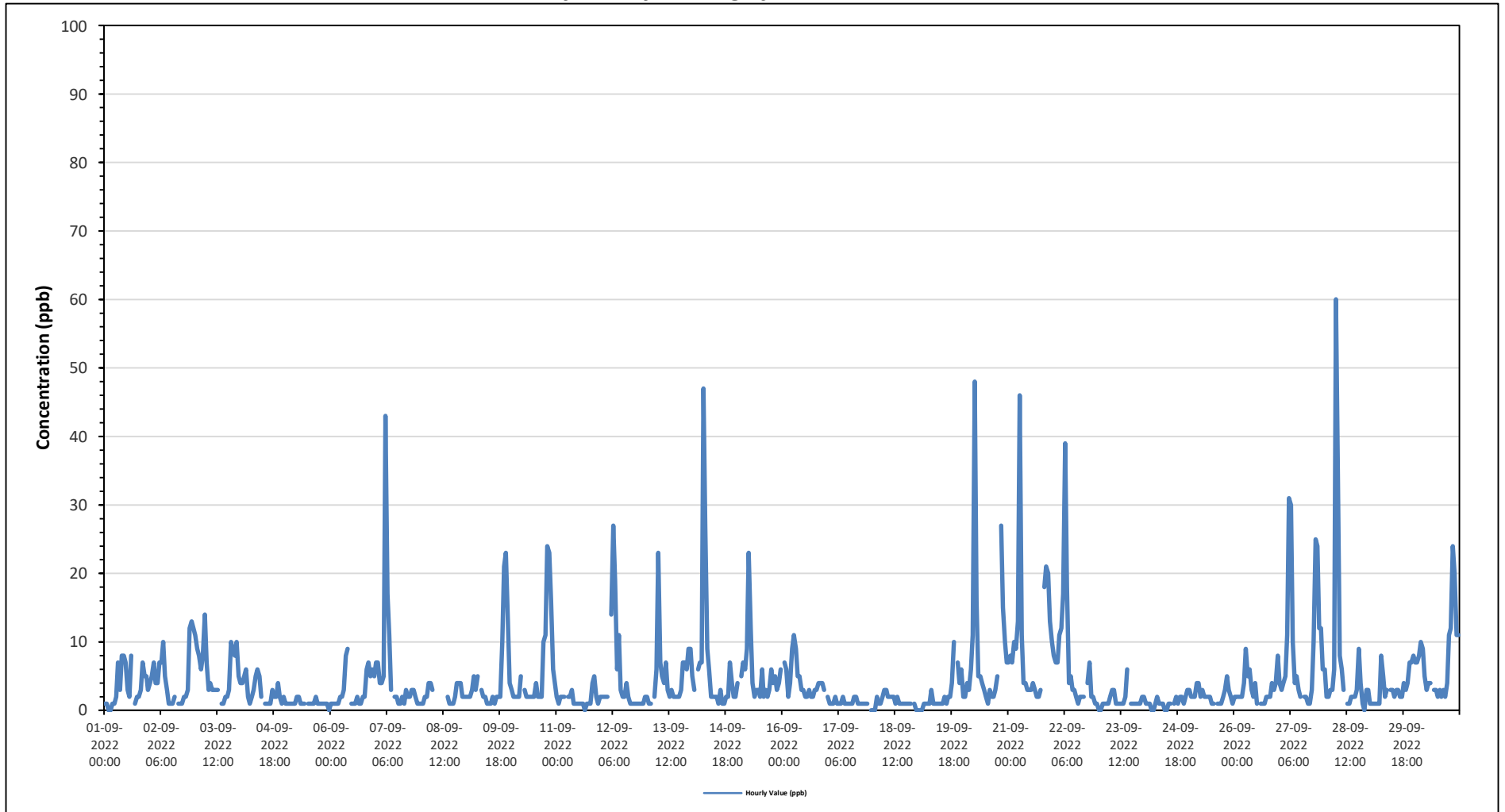
Maximum Hourly Value:	60 ppb on September 28 at hour 6	Hours in Service:	720
Maximum Daily Value:	9.7 ppb on September 21	Hours of Data:	683
Minimum Hourly Value:	0 ppb on September 1 at hour 2	Hours of Missing Data:	0
Minimum Daily Value:	1.1 ppb on September 5	Hours of Calibration:	37
Monthly Average:	4.4 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
Sep 1	1	1	0	0	1	1	2	7	3	8	8	7	3	2	8	S	1	2	2	3	7	5	5	3	0	8	3.5
Sep 2	4	5	7	4	4	7	7	10	5	3	1	1	1	2	S	1	1	1	2	2	3	12	13	12	1	13	4.7
Sep 3	11	9	8	6	8	14	7	3	4	3	3	3	3	S	1	1	2	2	3	10	9	8	10	5	1	14	5.8
Sep 4	4	4	5	6	2	1	2	3	5	6	5	2	S	1	1	1	1	3	2	2	4	2	1	2	1	6	2.8
Sep 5	1	1	1	1	1	1	2	2	1	1	1	S	1	1	1	1	2	1	1	1	1	1	1	0	0	2	1.1
Sep 6	1	1	1	1	1	2	2	3	8	9	S	1	1	1	2	1	1	2	2	6	7	5	6	5	1	9	3.0
Sep 7	7	7	4	4	5	43	17	11	3	S	2	2	1	1	2	1	3	2	2	3	3	2	1	1	1	43	5.5
Sep 8	1	1	2	2	4	4	3	C	C	C	C	C	C	C	2	1	1	1	2	4	4	4	2	2	1	4	-
Sep 9	2	2	2	3	5	3	5	S	3	2	2	1	1	1	2	1	2	2	2	10	21	23	13	4	1	23	4.9
Sep 10	3	2	2	2	2	5	S	3	2	2	2	2	2	4	2	2	2	10	11	24	23	16	6	4	2	24	5.8
Sep 11	2	1	2	2	2	S	2	2	3	1	1	1	1	1	1	0	1	1	1	4	5	2	1	2	0	5	1.7
Sep 12	2	2	2	2	S	14	27	19	6	11	3	2	2	4	2	1	1	1	1	1	1	1	1	2	1	27	4.7
Sep 13	2	1	1	S	2	6	23	7	5	4	7	3	2	3	2	2	2	2	3	7	7	6	9	9	1	23	5.0
Sep 14	5	3	S	6	7	7	47	27	9	6	2	2	2	2	1	3	1	1	2	2	7	4	2	2	1	47	6.5
Sep 15	4	S	5	7	6	9	23	12	4	2	3	3	2	6	2	3	2	3	6	4	5	3	4	6	2	23	5.4
Sep 16	S	7	6	2	4	9	11	9	5	5	3	3	2	2	3	2	2	3	3	4	4	4	3	S	2	11	4.4
Sep 17	2	1	1	1	2	1	1	1	2	1	1	1	1	1	2	2	1	1	1	1	1	1	S	0	0	2	1.2
Sep 18	0	0	2	1	1	2	3	3	2	2	2	2	1	2	1	1	1	1	1	1	1	S	1	0	0	3	1.3
Sep 19	0	0	0	1	1	1	1	3	1	1	1	1	1	1	2	1	2	2	4	10	S	7	4	6	0	10	2.2
Sep 20	2	2	4	3	6	11	48	16	5	5	4	3	2	1	3	2	2	3	5	S	27	15	10	7	1	48	8.1
Sep 21	7	8	7	10	9	13	46	11	4	4	3	3	3	4	3	2	2	3	S	18	21	20	13	10	2	46	9.7
Sep 22	8	7	7	11	12	17	39	18	4	5	3	3	2	1	2	2	2	S	4	7	2	2	1	1	1	39	7.0
Sep 23	0	0	1	1	1	1	2	3	3	1	1	1	1	1	2	6	S	1	4	1	1	1	1	2	0	6	1.4
Sep 24	2	1	1	1	0	0	1	2	1	1	0	0	1	1	S	1	2	1	2	2	1	2	3	0	3	1.2	
Sep 25	3	2	2	2	4	4	2	3	2	2	2	1	1	S	1	1	1	2	3	5	3	2	1	1	5	2.2	
Sep 26	2	2	2	2	2	4	9	5	6	3	2	4	1	S	1	1	1	2	2	2	4	3	4	8	1	9	3.1
Sep 27	4	3	4	5	11	31	30	10	4	5	3	2	S	2	2	1	1	3	10	25	24	12	12	6	1	31	9.1
Sep 28	6	2	2	3	3	6	60	33	8	6	3	S	1	1	2	2	2	3	9	4	1	0	3	3	0	60	7.1
Sep 29	1	1	1	1	1	1	8	5	2	3	S	3	3	2	3	3	2	2	4	3	4	7	7	8	1	8	3.3
Sep 30	7	7	8	10	9	5	3	4	4	S	3	3	2	3	2	3	2	4	11	12	24	20	11	11	2	24	7.3
Diurnal Maximum	11	9	8	11	12	43	60	33	9	11	8	7	3	6	8	6	3	10	11	25	27	23	13	12			
Diurnal Average	3.2	2.9	3.1	3.4	4.0	7.7	14.9	8.4	3.9	3.8	2.7	2.3	1.6	1.9	2.1	1.7	1.6	2.2	3.4	6.1	7.9	6.6	5.1	4.3			

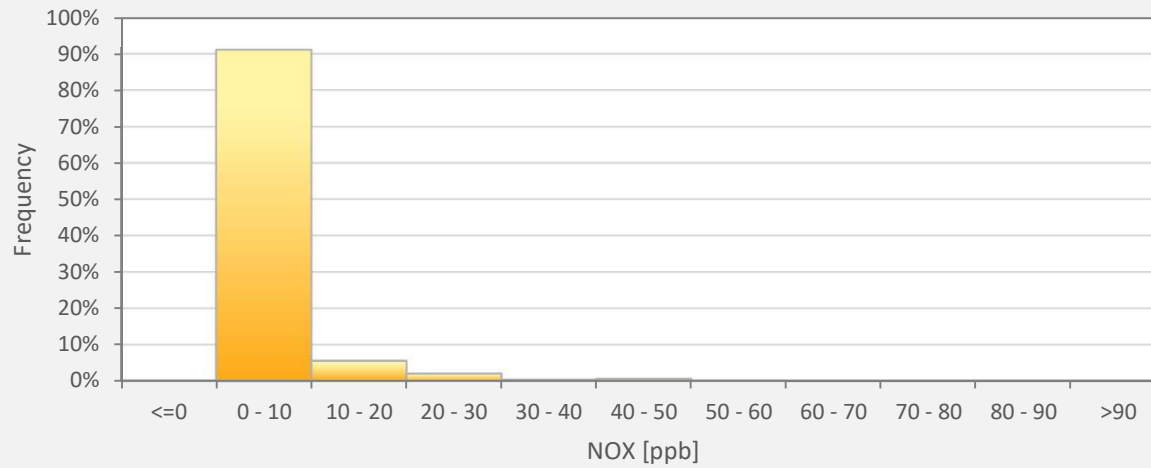
C Monthly Calibration	S Daily Zero-Span Check	Q Quality Assurance
K Collection Error	N No Data (Machine Not in Service)	Y Routine Maintenance
X InValid Data (Equipment Malfunction /Recovery)	NRM UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P Power Failure

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

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



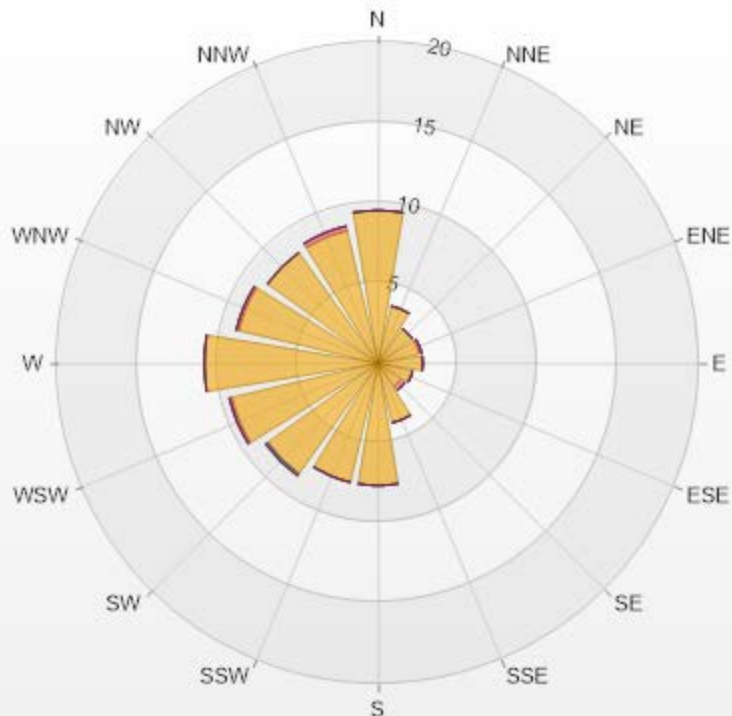
NOX[ppb] Histogram: AQHI Grimshaw Monthly: 09-2022 1 Hr.



Classes	NOX
<=0	0.15%
0 - 10	91.07%
10 - 20	5.56%
20 - 30	2.05%
30 - 40	0.44%
40 - 50	0.59%
50 - 60	0.15%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Grimshaw Poll.: AQHI Grimshaw-NOX[ppb] Monthly: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.86% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	9.52	0	0	0	0	9.52
NNE	3.66	0	0	0	0	3.66
NE	2.64	0	0	0	0	2.64
ENE	2.64	0.15	0	0	0	2.79
E	2.78	0	0	0	0	2.78
ESE	2.2	0	0	0	0	2.2
SE	1.76	0.29	0	0	0	2.05
SSE	3.81	0	0	0	0	3.81
S	7.61	0	0	0	0	7.61
SSW	7.61	0	0	0	0	7.61
SW	8.49	0	0.15	0	0	8.64
WSW	9.37	0.15	0	0	0	9.52
W	10.83	0	0	0	0	10.83
WNW	8.93	0.15	0	0	0	9.08
NW	8.49	0	0	0	0	8.49
NNW	8.49	0.29	0	0	0	8.78
Summary	98.83	1.03	0.15	0	0	100



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% Icon Classes (ppb)	99	0-30	1	30-50	0	50-76	0	76-159	0	>159.0



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - September 2022

Summary of Hourly Averages

NITRIC OXIDE (NO) in ppb

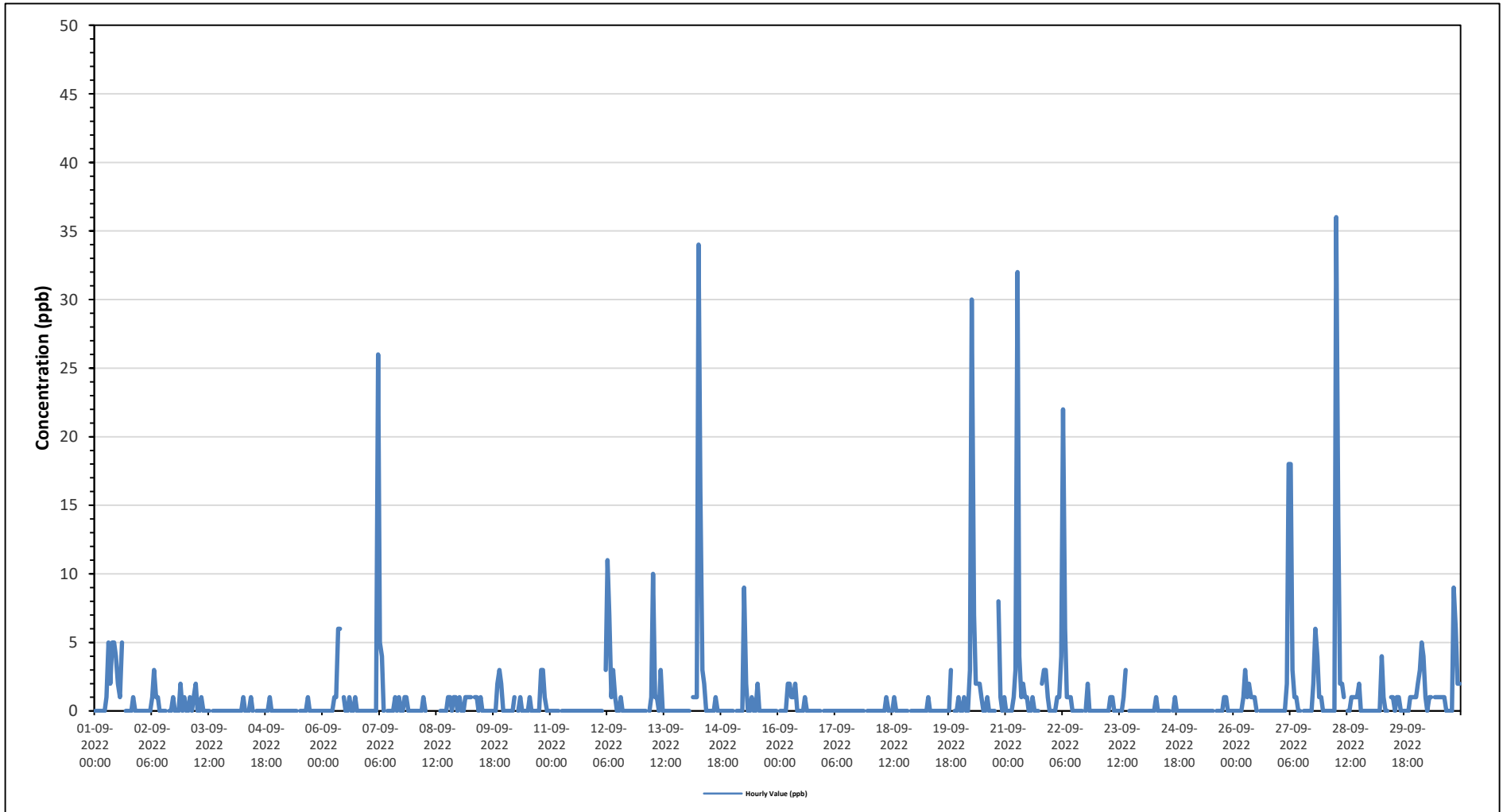
Maximum Hourly Value:	36 ppb on September 28 at hour 6	Hours in Service:	720
Maximum Daily Value:	2.7 ppb on September 28	Hours of Data:	683
Minimum Hourly Value:	0 ppb on September 1 at hour 0	Hours of Missing Data:	0
Minimum Daily Value:	0.0 ppb on September 11	Hours of Calibration:	37
Monthly Average:	0.9 ppb	Operational Uptime:	100.0

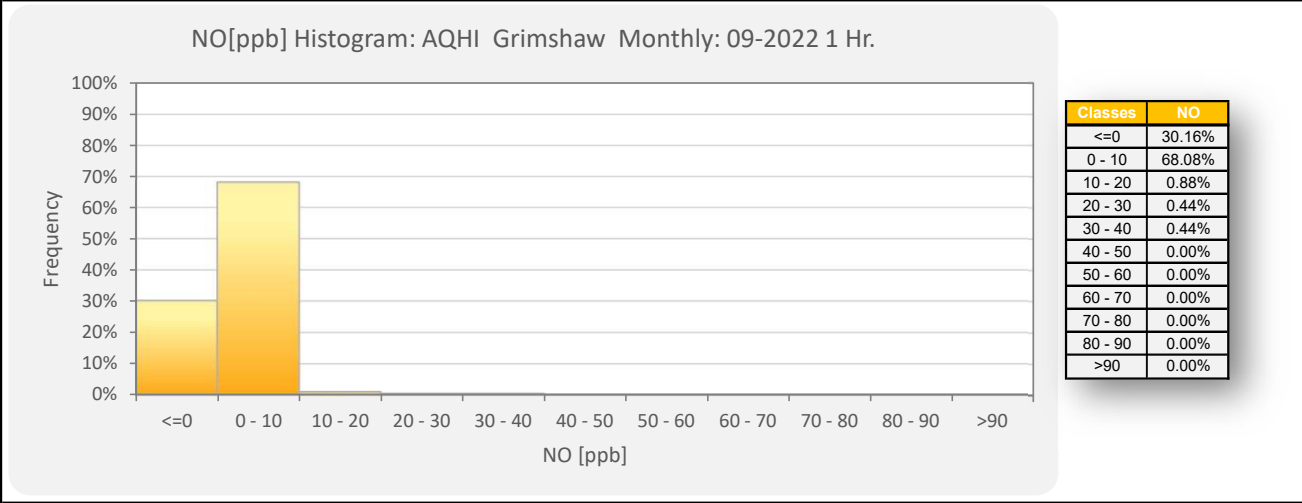
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	0	0	0	0	0	0	1	5	2	5	5	4	2	1	5	S	0	0	0	0	1	0	0	0	0	0	5	1.3
Sep 2	0	0	0	0	0	0	1	3	1	1	0	0	0	0	S	0	0	1	0	0	0	2	0	1	0	3	0.4	
Sep 3	0	0	1	0	1	2	0	0	1	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	2	0.2	
Sep 4	0	0	0	0	0	0	1	0	0	0	1	0	S	0	0	0	0	0	0	0	1	0	0	0	0	1	0.1	
Sep 5	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.0	
Sep 6	0	0	0	0	0	0	1	1	6	6	S	1	0	0	1	0	0	1	0	0	0	0	0	0	0	6	0.7	
Sep 7	0	0	0	0	0	26	5	4	0	S	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	26	1.7	
Sep 8	0	0	0	0	0	1	0	C	C	C	C	C	C	C	C	0	0	0	0	1	1	0	1	1	0	1	-	
Sep 9	1	0	0	1	1	1	1	S	1	1	0	1	0	0	0	0	0	0	0	0	2	3	2	0	0	3	0.7	
Sep 10	0	0	0	0	0	1	S	0	1	0	0	0	0	1	0	0	0	0	0	3	3	1	0	0	0	3	0.4	
Sep 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	
Sep 12	0	0	0	0	S	3	11	7	1	3	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	11	1.2	
Sep 13	0	0	0	S	0	1	10	1	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0.7	
Sep 14	0	0	S	1	1	1	34	16	3	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	34	2.6	
Sep 15	0	S	0	0	0	0	9	2	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	9	0.6	
Sep 16	S	0	0	0	0	2	2	1	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0.4	
Sep 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	
Sep 18	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	S	0	0	1	0.1	
Sep 19	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	S	0	0	1	3	0.2	
Sep 20	0	0	1	0	0	3	30	7	2	2	2	1	0	0	1	0	0	0	0	S	8	1	0	1	0	30	2.6	
Sep 21	0	0	0	0	1	3	32	4	1	2	1	1	0	0	1	0	0	0	S	2	3	3	1	0	0	32	2.4	
Sep 22	0	0	0	1	1	4	22	6	1	1	0	0	0	0	0	0	S	0	2	0	0	0	0	0	0	22	1.7	
Sep 23	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	3	S	0	0	0	0	0	0	0	0	3	0.3	
Sep 24	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	S	0	1	0	0	0	0	0	0	0	1	0.1	
Sep 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	1	1	0	0	0	0	1	0.1	
Sep 26	0	0	0	0	0	1	3	1	2	1	1	1	0	S	0	0	0	0	0	0	0	0	0	0	0	3	0.4	
Sep 27	0	0	0	0	2	18	18	3	1	1	0	0	S	0	0	0	0	0	2	6	4	1	1	0	0	18	2.5	
Sep 28	0	0	0	0	0	0	36	14	2	2	1	S	0	0	1	1	1	1	2	0	0	0	0	0	0	36	2.7	
Sep 29	0	0	0	0	0	0	4	1	0	0	S	1	1	0	1	1	0	0	0	0	1	1	1	1	0	4	0.5	
Sep 30	1	2	3	5	4	1	0	1	1	S	1	1	1	1	1	1	0	0	0	0	9	6	2	2	0	9	1.9	
Diurnal Maximum	1	2	3	5	4	26	36	16	6	6	5	4	2	2	5	3	1	1	2	6	9	6	2	2				
Diurnal Average	0.1	0.1	0.2	0.3	0.4	2.3	7.6	2.9	1.0	1.1	0.7	0.4	0.1	0.3	0.5	0.3	0.1	0.1	0.2	0.7	1.1	0.7	0.3	0.2				

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

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

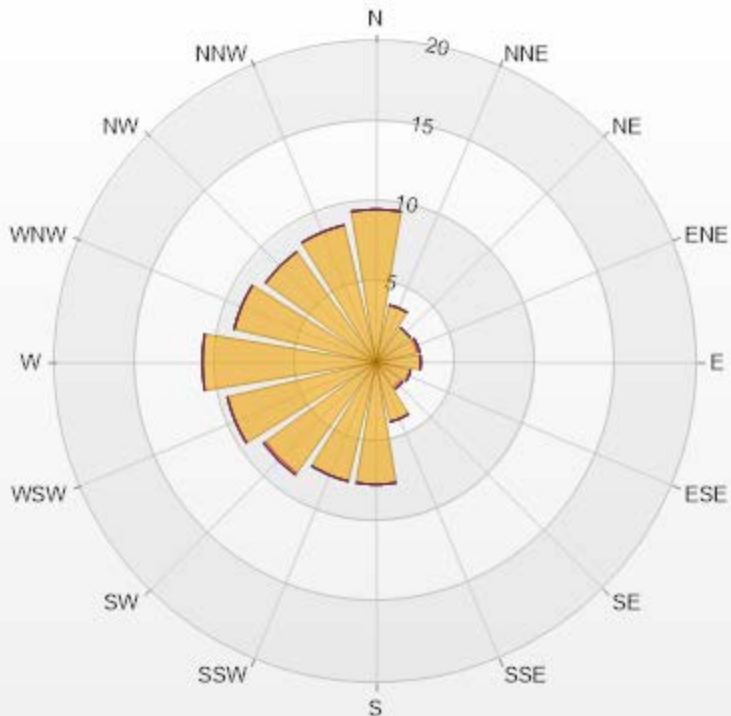
Timeseries Chart of Hourly Average for NO - AQHI - Grimshaw Station





Wind: AQHI Grimshaw Poll.: AQHI Grimshaw-NO[ppb] Monthly: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.86% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	9.52	0	0	0	0	9.52
NNE	3.66	0	0	0	0	3.66
NE	2.64	0	0	0	0	2.64
ENE	2.64	0.15	0	0	0	2.79
E	2.78	0	0	0	0	2.78
ESE	2.2	0	0	0	0	2.2
SE	1.9	0.15	0	0	0	2.05
SSE	3.81	0	0	0	0	3.81
S	7.61	0	0	0	0	7.61
SSW	7.61	0	0	0	0	7.61
SW	8.49	0.15	0	0	0	8.64
WSW	9.52	0	0	0	0	9.52
W	10.83	0	0	0	0	10.83
WNW	9.08	0	0	0	0	9.08
NW	8.49	0	0	0	0	8.49
NNW	8.78	0	0	0	0	8.78
Summary	100	0.45	0	0	0	100



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% Icon Classes (ppb)

100

0-30

0

30-50

0

50-76

0

76-159

0

>159.0



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - September 2022

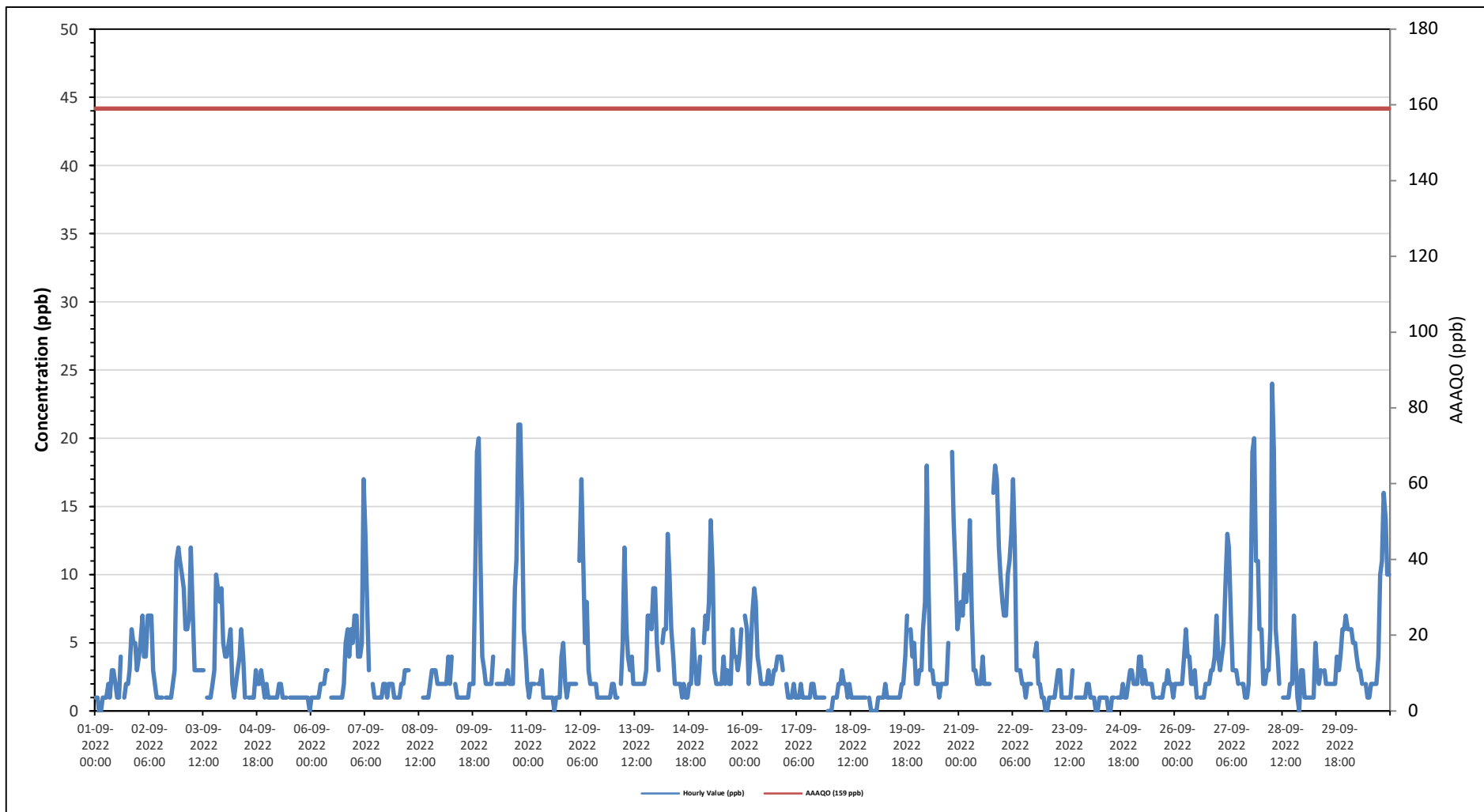
Summary of Hourly Averages

NITROGEN DIOXIDE (NO₂) in ppb

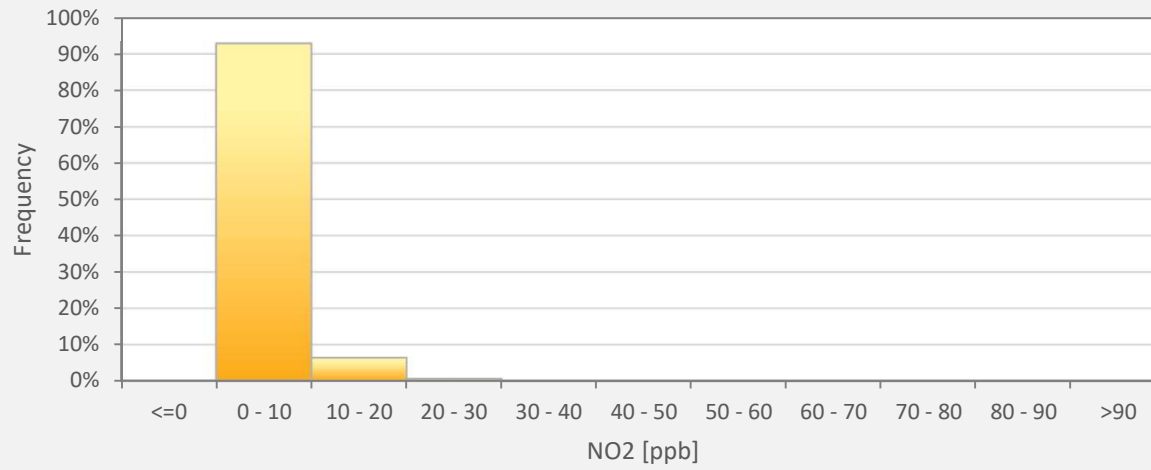
Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 159 ppb																											
Number of 1-Hour Exceedances: 0																											
Maximum Hourly Value: 24 ppb on September 28 at hour 6												Hours in Service: 720															
Maximum Daily Value: 7.3 ppb on September 21												Hours of Data: 683															
Minimum Hourly Value: 0 ppb on September 1 at hour 2												Hours of Missing Data: 0															
Minimum Daily Value: 1.0 ppb on September 5												Hours of Calibration: 37															
Monthly Average: 3.5 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			
Sep 1	1	1	0	0	1	1	1	2	1	3	3	2	1	1	4	S	1	2	2	3	6	5	5	3	0	6	2.1
Sep 2	4	5	7	4	4	7	7	7	3	2	1	1	1	1	S	1	1	1	1	2	3	11	12	11	1	12	4.2
Sep 3	10	9	6	6	7	12	7	3	3	3	3	3	S	1	1	1	2	3	10	9	8	9	5	1	12	5.4	
Sep 4	4	4	5	6	2	1	2	3	4	6	4	1	S	1	1	1	1	3	2	2	3	2	1	2	1	6	2.7
Sep 5	1	1	1	1	1	1	2	2	1	1	1	S	1	1	1	1	1	1	1	1	1	1	1	0	0	2	1.0
Sep 6	1	1	1	1	1	2	2	2	3	3	S	1	1	1	1	1	1	1	2	5	6	4	6	5	1	6	2.3
Sep 7	7	7	4	4	5	17	13	7	3	S	2	1	1	1	1	1	2	2	1	2	2	2	1	1	1	17	3.8
Sep 8	1	1	2	2	3	3	3	C	C	C	C	C	C	C	1	1	1	1	2	3	3	3	2	2	1	3	-
Sep 9	2	2	2	2	4	2	4	S	2	1	1	1	1	1	1	1	2	2	2	10	19	20	11	4	1	20	4.2
Sep 10	3	2	2	2	2	4	S	2	2	2	2	2	2	3	2	2	2	9	11	21	21	15	6	4	2	21	5.3
Sep 11	2	1	2	2	2	S	2	2	3	1	1	1	1	1	0	1	1	1	1	4	5	2	1	2	0	5	1.7
Sep 12	2	2	2	2	S	11	17	12	5	8	3	2	2	2	2	1	1	1	1	1	1	1	1	2	1	17	3.6
Sep 13	2	1	1	S	2	5	12	6	4	3	4	2	2	2	2	2	2	3	7	7	7	6	9	9	1	12	4.1
Sep 14	5	3	S	5	6	6	13	10	6	4	2	2	2	2	1	2	1	1	2	2	6	4	2	2	1	13	3.9
Sep 15	4	S	5	7	6	8	14	10	3	2	2	2	2	4	2	3	2	2	6	4	4	3	4	6	2	14	4.6
Sep 16	S	7	6	2	4	7	9	8	4	3	2	2	2	2	3	2	2	3	3	4	4	4	3	S	2	9	3.9
Sep 17	2	1	1	1	2	1	1	1	2	1	1	1	1	1	2	2	1	1	1	1	1	1	S	0	0	2	1.2
Sep 18	0	0	1	1	1	2	2	3	2	2	1	2	1	1	1	1	1	1	1	1	1	S	1	0	0	3	1.2
Sep 19	0	0	0	1	1	1	1	2	1	1	1	1	1	1	1	1	2	2	4	7	S	6	4	5	0	7	1.9
Sep 20	2	2	3	3	6	8	18	9	3	3	2	2	2	1	2	2	2	2	5	S	19	14	10	6	1	19	5.5
Sep 21	7	8	7	10	8	10	14	7	3	3	2	2	2	4	2	2	2	2	S	16	18	17	12	10	2	18	7.3
Sep 22	8	7	7	10	11	13	17	12	3	3	3	2	2	1	2	2	2	S	4	5	2	2	1	1	1	17	5.2
Sep 23	0	0	1	1	1	1	2	3	3	1	1	1	1	1	1	3	S	1	1	1	1	1	1	2	0	3	1.3
Sep 24	2	1	1	1	0	0	1	1	1	1	1	0	0	1	1	S	1	1	1	2	1	1	2	3	0	3	1.0
Sep 25	3	2	2	2	4	4	2	3	2	2	2	2	1	1	S	1	1	1	2	2	3	2	2	1	1	4	2.0
Sep 26	2	2	2	2	2	4	6	4	4	2	2	3	1	S	2	1	1	1	2	2	3	3	4	7	1	7	2.7
Sep 27	4	3	4	5	9	13	12	7	3	3	3	2	S	2	1	1	1	2	8	19	20	11	11	6	1	20	6.6
Sep 28	6	2	2	3	3	6	24	19	6	4	2	S	1	1	1	1	2	2	7	4	1	0	3	3	0	24	4.5
Sep 29	1	1	1	1	1	1	5	3	2	3	S	3	2	2	2	2	2	2	4	3	4	6	6	7	1	7	2.8
Sep 30	6	6	6	5	5	4	3	3	2	S	2	1	1	2	2	2	2	4	10	11	16	14	10	10	1	16	5.5
Diurnal Maximum	10	9	7	10	11	17	24	19	6	8	4	3	3	4	4	3	2	9	11	21	21	20	12	11			
Diurnal Average	3.2	2.8	2.9	3.2	3.6	5.3	7.4	5.5	2.9	2.6	2.0	1.7	1.4	1.6	1.6	1.5	1.4	2.0	3.2	5.3	6.6	5.8	4.9	4.1			
C Monthly Calibration											S Daily Zero-Span Check											Q Quality Assurance					
K Collection Error											N No Data (Machine Not in Service)											Y Routine Maintenance					
X InValid Data (Equipment Malfunction /Recovery)											NRM UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)											P Power Failure					

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

Timeseries Chart of Hourly Average for NO2 - AQHI - Grimshaw Station



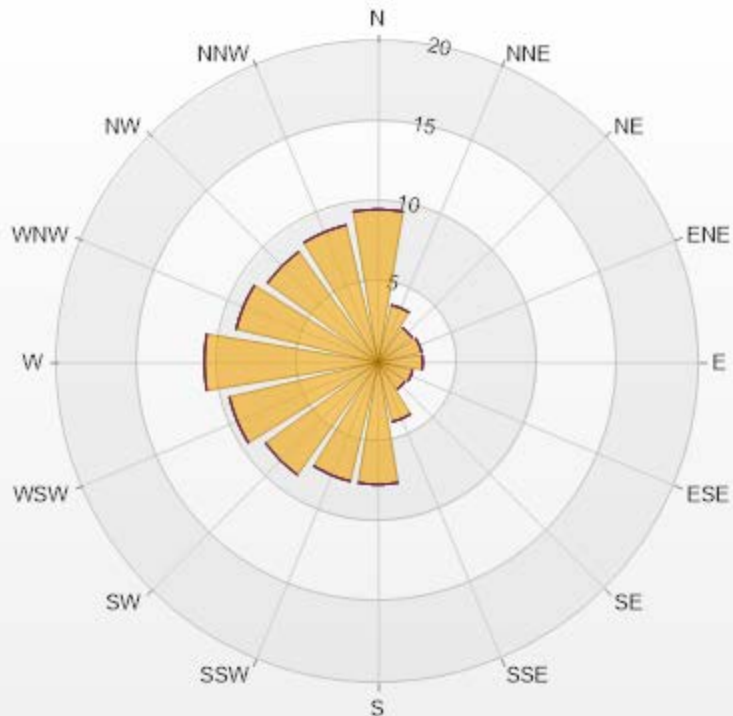
NO2[ppb] Histogram: AQHI Grimshaw Monthly: 09-2022 1 Hr.



Classes	NO2
<=0	0.15%
0 - 10	92.83%
10 - 20	6.44%
20 - 30	0.59%
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-NO2[ppb] Monthly: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.86% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	9.52	0	0	0	0	9.52
NNE	3.66	0	0	0	0	3.66
NE	2.64	0	0	0	0	2.64
ENE	2.78	0	0	0	0	2.78
E	2.78	0	0	0	0	2.78
ESE	2.2	0	0	0	0	2.2
SE	2.05	0	0	0	0	2.05
SSE	3.81	0	0	0	0	3.81
S	7.61	0	0	0	0	7.61
SSW	7.61	0	0	0	0	7.61
SW	8.64	0	0	0	0	8.64
WSW	9.52	0	0	0	0	9.52
W	10.83	0	0	0	0	10.83
WNW	9.08	0	0	0	0	9.08
NW	8.49	0	0	0	0	8.49
NNW	8.78	0	0	0	0	8.78
Summary	100	0	0	0	0	100



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PEACE RIVER AREA MONITORING PROGRAM

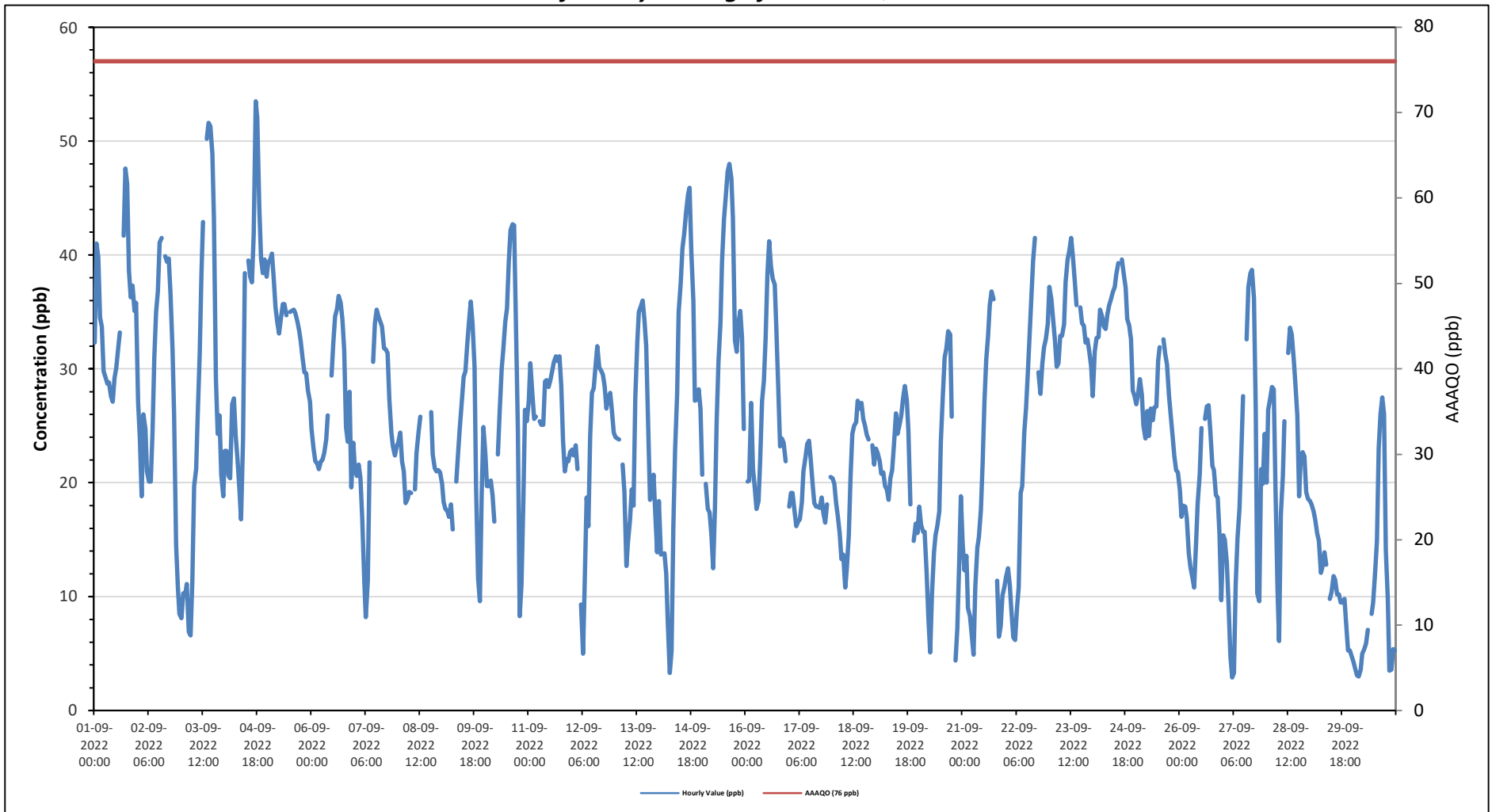
AQHI - Grimshaw Station - September 2022

Summary of Hourly Averages

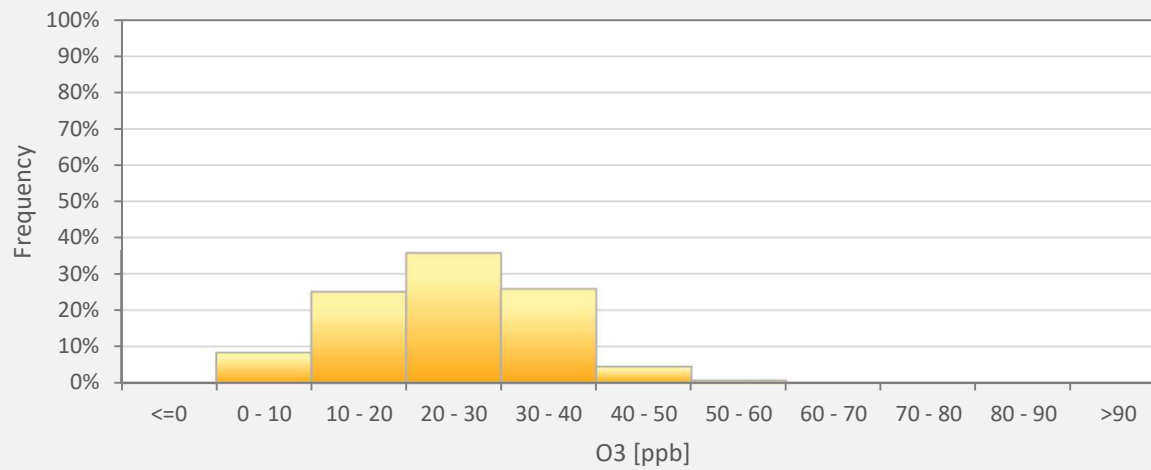
OZONE (O₃) in ppb

Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 76 ppb																																					
Number of 1-Hour Exceedances: 0																																					
Maximum Hourly Value: 54 ppb on September 4 at hour 17													Hours in Service: 720																								
Maximum Daily Value: 34.9 ppb on September 23													Hours of Data: 684																								
Minimum Hourly Value: 3 ppb on September 27 at hour 5													Hours of Missing Data: 0																								
Minimum Daily Value: 10.0 ppb on September 30													Hours of Calibration: 36																								
Monthly Average: 24.6 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										
Sep 1	32.3	41	39.8	34.5	33.7	29.8	29.3	28.7	28.8	27.6	27.1	29.2	30.1	31.9	33.2	S	41.7	47.6	46.2	38.6	36.3	37.3	35.1	35.8	27.1	47.6	34.6										
Sep 2	27.1	23.9	18.8	26	24.7	21	20.1	20.1	24.5	31	35	36.8	41.1	41.5	S	39.9	39.4	39.7	36.5	31.6	26	14.5	10.8	8.5	8.5	41.5	27.8										
Sep 3	8.1	10.3	10.2	11.1	6.9	6.6	11.4	19.7	21.2	25.8	31.3	38.4	42.9	S	50.2	51.6	51.3	48.9	43.3	29.1	24.3	25.9	20.7	18.8	6.6	51.6	26.4										
Sep 4	22.8	22.8	20.6	20.4	26.9	27.4	24.1	22.1	19.3	16.8	23.8	38.4	S	39.5	38.1	37.6	41.8	53.5	52	44.2	39.7	38.4	39.6	38.1	16.8	53.5	32.5										
Sep 5	39.3	39.6	40.1	37.9	35.4	34.1	33.1	34.4	35.7	35.7	34.7	S	35	35.1	35.2	34.9	34.2	33.4	32.5	30.9	29.7	29.6	28.1	27.1	27.1	40.1	34.2										
Sep 6	24.7	23	21.9	21.7	21.2	21.9	22	22.6	23.8	25.9	S	29.4	32.3	34.6	35.3	36.4	35.8	34.3	31.6	24.9	23.6	28	19.6	23.5	19.6	36.4	26.9										
Sep 7	21.2	20.6	21.6	20.4	16.9	11.5	8.2	11.4	21.8	S	30.6	34	35.2	34.6	34.1	33.7	31.8	31.7	31.4	27.3	24.4	23.2	22.4	23.2	8.2	35.2	24.8										
Sep 8	23.5	24.4	21.9	21	18.2	18.6	19.2	19.1	S	19.4	22.6	24.4	25.8	C	C	C	C	C	26.2	22.5	21.3	21	21.1	20.9	18.2	26.2	21.7										
Sep 9	19.9	18.3	17.7	17.5	17	18.1	15.9	S	20.1	22.9	24.9	27.2	29.3	29.8	32.1	34.1	35.9	34	30.2	19.6	11.6	9.6	18.9	24.9	9.6	35.9	23.0										
Sep 10	22.4	19.7	19.7	20.2	18.9	16.6	S	22.5	26.2	30	31.6	34.1	35.3	39.4	42.2	42.7	42.6	33	24.5	8.3	11	17.9	26.4	25.4	8.3	42.7	26.5										
Sep 11	27.2	30.5	27.8	25.6	25.8	S	25.4	25.1	25.1	28.9	29	28.4	29	29.8	30.6	31.1	30.7	31.1	28.5	23.7	21	22.1	21.9	22.7	21.0	31.1	27.0										
Sep 12	22.9	22.4	23.3	21.2	S	9.3	5	10.8	18.7	16.2	24.1	27.9	28.3	30.2	32	30.1	29.9	29.5	28.5	26.5	27.4	27.9	26.5	24.4	5.0	32.0	23.6										
Sep 13	24	23.9	23.8	S	21.6	19.2	12.7	14.8	16.7	19.4	18	27.5	32.4	35	35.5	36	34.3	32	25.7	18.5	19	20.7	17.2	13.9	12.7	36.0	23.6										
Sep 14	18.4	13.7	S	13.8	12	7.8	3.3	5.2	16.1	22.9	27.8	35	37.5	40.6	41.9	43.7	45.3	45.9	40.2	36	27.2	27.3	28.2	26.5	3.3	45.9	26.8										
Sep 15	20.7	S	19.9	17.7	17.4	15.5	12.5	17.7	25.5	30.6	34.1	39.4	43.2	45.2	47.3	48	46.7	43.2	32.5	31.5	34.1	35.1	32.7	24.7	12.5	48.0	31.1										
Sep 16	S	20.1	20.2	27	21.3	19.6	17.7	18.4	21.7	27.2	28.9	32.7	38.3	41.2	39	37.9	37.4	33.7	28.2	23.2	23.9	23.5	21.9	S	17.7	41.2	27.4										
Sep 17	17.9	19.1	19.1	17.5	16.2	16.6	16.8	18.3	21	22.2	23.4	23.7	22	19.7	18.2	17.9	17.8	18.7	17.3	16.5	18.1	S	20.5	16.2	23.7	19.0											
Sep 18	20.4	19.9	18.2	17	15.6	13.3	13.7	10.8	12.4	15.4	20.6	24.3	25	25.3	27.2	26.5	27	25.6	25	24.2	23.8	S	23.3	21.6	10.8	27.2	20.7										
Sep 19	23	22.6	21.9	20.8	20.9	19.7	19.4	18.5	20.4	21.1	23.3	26.1	24.3	25.1	25.9	27.4	28.5	27.2	24.6	18.1	S	14.9	16.4	15.6	14.9	28.5	22.0										
Sep 20	17.9	16.3	15.7	15.7	12.1	8.1	5.1	10.2	13.9	15.4	16.2	17.5	23.6	27.7	31	31.8	33.3	33	25.8	S	4.4	7.2	12.6	18.8	4.4	33.3	18.0										
Sep 21	14.7	12.3	13.6	9	8.3	6.6	4.9	10.9	14.3	15.2	17.6	21.8	27.1	30.8	32.8	35.6	36.8	36.1	S	11.4	6.5	7.4	10.1	10.9	4.9	36.8	17.2										
Sep 22	11.7	12.5	11	8.9	6.4	6.2	8.9	10.8	19.1	19.7	24.4	26.5	29.6	32.9	36.7	39.5	41.5	S	29.7	27.8	30.4	31.9	32.6	34	6.2	41.5	23.2										
Sep 23	37.2	36.1	34.3	32.5	30.2	30.5	32.9	32.9	33.9	37.6	39.6	40.4	41.5	39.8	37.5	35.6	S	35.4	34	33.8	32.3	32.6	31.6	30.2	30.2	41.5	34.9										
Sep 24	27.6	31.5	32.7	32.8	35.2	34.6	33.7	33.5	34.8	35.6	36.1	36.7	37.2	38.3	39.3	S	39.6	38.4	37.1	34.4	33.8	32.6	28.1	27.6	27.6	39.6	34.4										
Sep 25	26.9	27.8	29.1	27.7	25	23.9	26.3	24.1	26.5	25.5	26.6	26.7	30.7	31.9	S	32.6	31.3	30.4	27.6	26.1	24.1	22.3	21.1	20.9	20.9	32.6	26.7										
Sep 26	19.3	17	18	17.9	16.9	13.8	12.5	11.7	10.8	14.9	18.2	20.7	24.8	S	25.6	26.7	26.8	24.5	21.5	21.1	18.9	18.7	15.5	9.7	9.7	26.8	18.5										
Sep 27	15.4	15	13	9.2	4.8	2.9	3.3	11.1	15.1	17.8	21.9	27.6	S	32.6	37.2	38.4	38.7	36.2	26.4	10.3	9.6	21.2	19.9	24.3	2.9	38.7	19.6										
Sep 28	20	26.4	27.4	28.4	28.2	19.3	10.5	6.1	17.2	20.6	25.4	S	31.4	33.6	33	30.8	28.8	25.9	18.8	22.4	22.7	22.3	19.2	18.6	6.1	33.6	23.3										
Sep 29	18.4	18.1	17.5	16.7	15.6	14.9	12.1	12.6	13.9	12.8	S	9.8	10.4	11.8	11.5	10.2	10.2	9.5	9.5	9.8	7.8	5.3	5.3	4.8	4.8	18.4	11.7										
Sep 30	4.3	3.7	3.1	3	3.6	5	5.4	5.9	7.1	S	8.5	9.5	12.2	14.9	23.1	26	27.5	26	14.1	9.7	3.5	3.6	5.4	5.3	3.0	27.5	10.0										
Diurnal Maximum	39	41	40	38	35	35	34	34	36	38	40	40	43	45	50	52	51	54	52	44	40	38	40	38													
Diurnal Average	21.7	21.8	21.4	20.5	19.2	17.0	16.0	17.6	20.9	23.4	25.9	28.4	30.6	32.3	33.5	34.0	34.5	33.5	29.3	24.2	21.9	22.1	21.8	21.4													
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 O3 - AQHI - Grimshaw Station



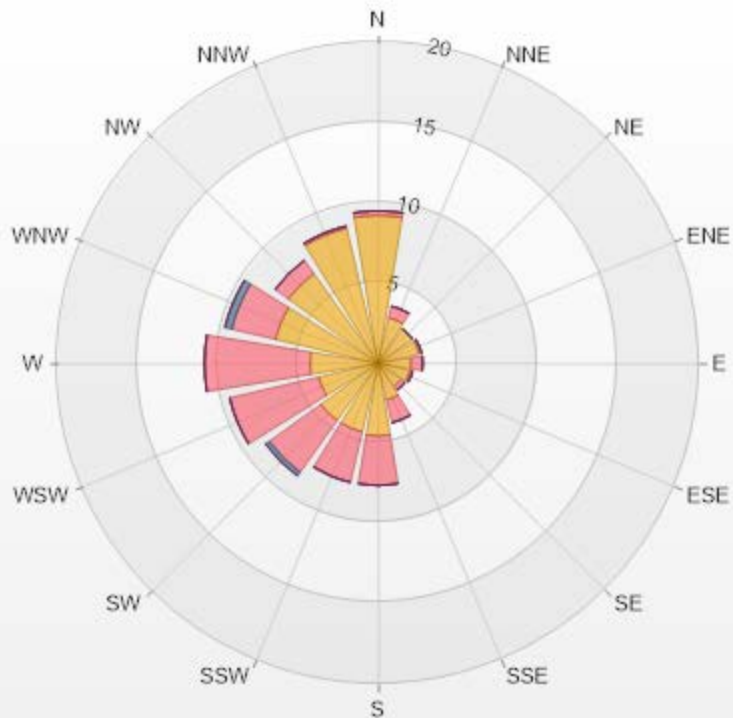
O3[ppb] Histogram: AQHI Grimshaw Monthly: 09-2022 1 Hr.



Classes	O3
<=0	0.00%
0 - 10	8.33%
10 - 20	25.00%
20 - 30	35.67%
30 - 40	25.73%
40 - 50	4.53%
50 - 60	0.73%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Grimshaw Poll.: AQHI Grimshaw-O3[ppb] Monthly: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.00% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	9.21	0.29	0	0	0	9.5
NNE	2.92	0.73	0	0	0	3.65
NE	2.63	0	0	0	0	2.63
ENE	2.63	0.15	0	0	0	2.78
E	2.05	0.73	0	0	0	2.78
ESE	2.05	0.15	0	0	0	2.2
SE	1.75	0.29	0	0	0	2.04
SSE	2.34	1.46	0	0	0	3.8
S	4.53	3.07	0	0	0	7.6
SSW	4.39	3.22	0	0	0	7.61
SW	4.39	3.95	0.29	0	0	8.63
WSW	3.8	5.7	0	0	0	9.5
W	4.24	6.58	0	0	0	10.82
WNW	6.58	2.78	0.44	0	0	9.8
NW	6.87	1.02	0	0	0	7.89
NNW	8.63	0.15	0	0	0	8.78
Summary	69.01	30.27	0.73	0	0	100



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% Icon Classes (ppb)

69

0-30

30

30-50

1

50-76

0

76-159

0

>159.0



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - September 2022

Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

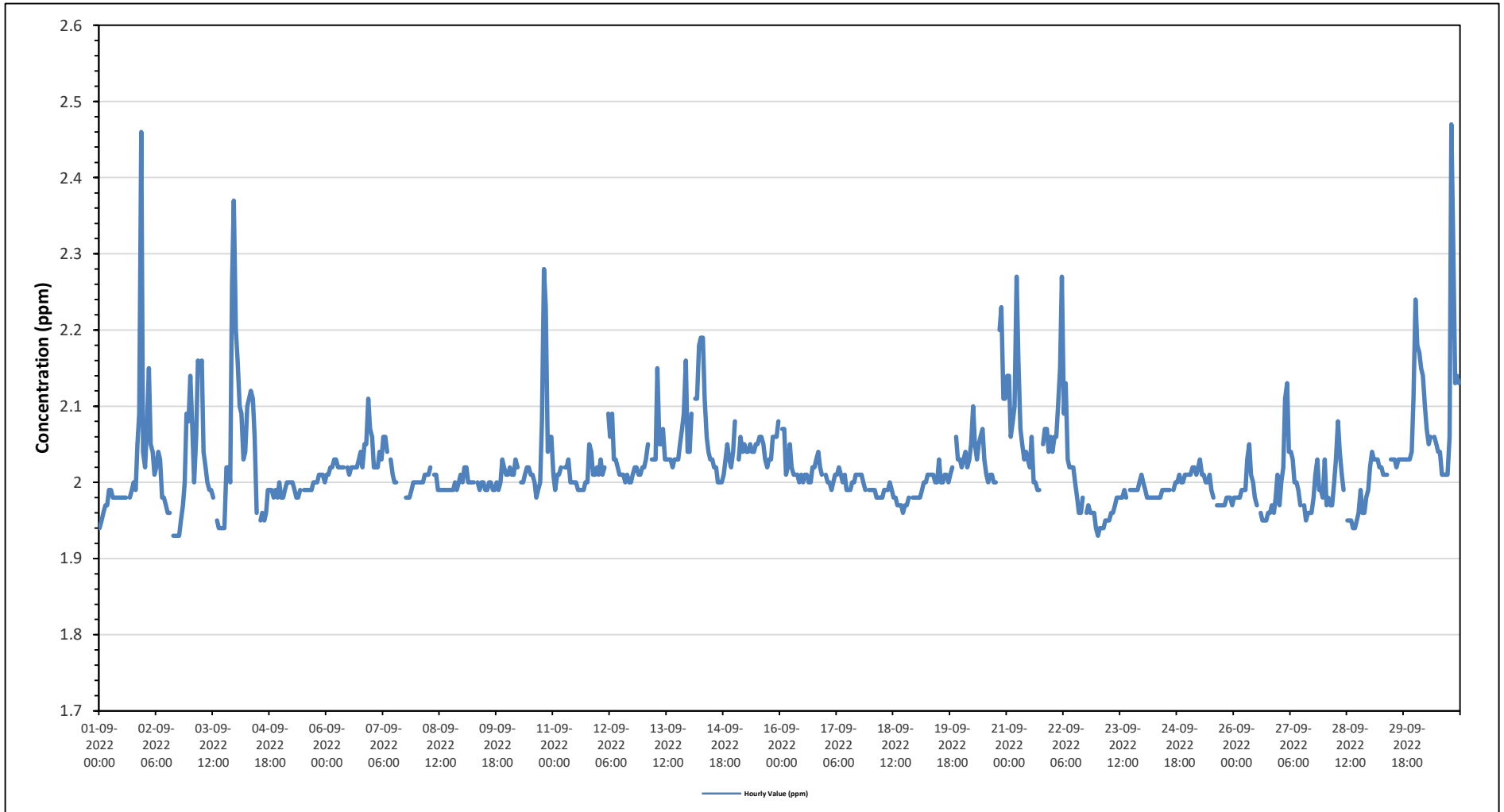
Maximum Hourly Value: 2.47 ppm on September 30 at hour 19	Hours in Service: 720
Maximum Daily Value: 2.11 ppm on September 30	Hours of Data: 685
Minimum Hourly Value: 1.93 ppm on September 2 at hour 15	Hours of Missing Data: 0
Minimum Daily Value: 1.97 ppm on September 23	Hours of Calibration: 35
Monthly Average: 2.02 ppm	Operational Uptime: 100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	1.94	1.95	1.96	1.97	1.97	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.98	1.98	S	1.98	1.99	2.00	1.99	2.05	2.09	2.46	2.04	1.94	2.46	2.01	
Sep 2	2.02	2.07	2.15	2.05	2.04	2.01	2.02	2.04	2.03	1.98	1.98	1.97	1.96	1.96	S	1.93	1.93	1.93	1.93	1.95	1.97	2.00	2.09	2.08	1.93	2.15	2.00
Sep 3	2.14	2.07	2.00	2.06	2.16	2.15	2.16	2.04	2.02	2.00	1.99	1.99	1.98	S	1.95	1.94	1.94	1.94	1.94	2.02	2.02	2.00	2.26	2.37	1.94	2.37	2.05
Sep 4	2.20	2.16	2.10	2.09	2.03	2.04	2.10	2.11	2.12	2.11	2.06	1.96	S	1.95	1.96	1.95	1.96	1.99	1.99	1.99	1.98	1.99	1.98	2.00	1.95	2.20	2.04
Sep 5	1.98	1.98	1.99	2.00	2.00	2.00	2.00	1.99	1.98	1.98	1.99	S	1.99	1.99	1.99	1.99	2.00	2.00	2.00	2.01	2.01	2.01	2.00	1.98	2.01	1.99	
Sep 6	2.01	2.01	2.02	2.02	2.03	2.03	2.02	2.02	2.02	2.02	S	2.02	2.01	2.02	2.02	2.02	2.02	2.03	2.04	2.02	2.05	2.05	2.11	2.07	2.01	2.11	2.03
Sep 7	2.06	2.02	2.02	2.02	2.04	2.03	2.06	2.06	2.04	S	2.03	2.01	2.00	2.00	C	C	C	C	1.98	1.98	1.99	2.00	2.00	1.98	2.06	2.02	
Sep 8	2.00	2.00	2.00	2.00	2.01	2.01	2.01	2.02	S	2.01	2.01	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	2.00	2.00	2.01	1.99	1.99	2.02	2.00
Sep 9	2.00	2.02	2.02	2.00	2.00	2.00	2.00	S	2.00	1.99	2.00	2.00	1.99	1.99	2.00	2.00	1.99	1.99	2.00	1.99	2.00	2.03	2.02	2.01	1.99	2.03	2.00
Sep 10	2.01	2.02	2.01	2.01	2.03	2.02	S	2.00	2.00	2.01	2.02	2.02	2.01	2.01	2.00	1.98	1.99	2.00	2.08	2.28	2.23	2.04	2.06	2.06	1.98	2.28	2.04
Sep 11	2.01	1.99	2.01	2.01	2.02	S	2.02	2.02	2.03	2.00	2.00	2.00	2.00	1.99	1.99	1.99	2.00	2.00	2.05	2.04	2.01	2.01	2.02	1.99	2.05	2.01	
Sep 12	2.01	2.03	2.01	2.02	S	2.09	2.06	2.09	2.03	2.03	2.02	2.01	2.01	2.01	2.00	2.01	2.00	2.00	2.01	2.02	2.02	2.01	2.01	2.02	2.00	2.09	2.02
Sep 13	2.02	2.03	2.05	S	2.03	2.03	2.03	2.15	2.05	2.05	2.07	2.03	2.03	2.03	2.03	2.02	2.03	2.03	2.05	2.07	2.09	2.16	2.04	2.02	2.16	2.05	
Sep 14	2.04	2.09	S	2.11	2.11	2.18	2.19	2.19	2.11	2.06	2.04	2.03	2.03	2.02	2.02	2.00	2.00	2.00	2.01	2.03	2.05	2.03	2.02	2.04	2.00	2.19	2.06
Sep 15	2.08	S	2.03	2.06	2.04	2.05	2.04	2.04	2.05	2.04	2.04	2.05	2.05	2.06	2.06	2.05	2.03	2.02	2.03	2.03	2.06	2.06	2.06	2.08	2.02	2.08	2.05
Sep 16	S	2.07	2.07	2.01	2.02	2.05	2.02	2.01	2.01	2.01	2.00	2.01	2.00	2.01	2.01	2.00	2.00	2.02	2.02	2.03	2.04	2.02	2.01	S	2.00	2.07	2.02
Sep 17	2.01	2.00	2.00	1.99	2.00	2.01	2.01	2.02	2.01	2.00	2.01	1.99	1.99	1.99	2.00	2.00	2.01	2.01	2.01	2.01	2.00	1.99	S	1.99	1.99	2.02	2.00
Sep 18	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.99	1.99	2.00	1.99	1.98	1.98	1.97	1.97	1.97	1.96	1.97	1.97	1.98	S	1.98	1.98	1.96	2.00	1.98	1.98
Sep 19	1.98	1.98	1.98	1.99	2.00	2.00	2.01	2.01	2.01	2.01	2.00	2.00	2.03	2.00	2.00	2.01	2.01	2.00	2.01	2.02	S	2.06	2.03	2.03	1.98	2.06	2.01
Sep 20	2.02	2.03	2.04	2.02	2.03	2.05	2.10	2.05	2.03	2.05	2.06	2.07	2.03	2.01	2.00	2.01	2.01	2.00	2.00	S	2.20	2.23	2.11	2.11	2.00	2.23	2.05
Sep 21	2.14	2.14	2.06	2.08	2.10	2.27	2.16	2.07	2.05	2.03	2.04	2.03	2.02	2.06	2.00	2.00	1.99	1.99	S	2.05	2.07	2.07	2.04	2.06	1.99	2.27	2.07
Sep 22	2.04	2.06	2.06	2.10	2.15	2.27	2.09	2.13	2.03	2.02	2.02	2.00	1.98	1.96	1.96	1.98	S	1.96	1.97	1.96	1.96	1.96	1.94	1.94	1.94	2.27	2.03
Sep 23	1.93	1.94	1.94	1.94	1.95	1.95	1.95	1.96	1.96	1.97	1.98	1.98	1.98	1.99	1.98	S	1.99	1.99	1.99	1.99	1.99	2.00	2.01	1.93	2.01	1.97	
Sep 24	2.00	1.99	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.99	1.99	1.99	1.99	1.99	S	1.99	2.00	2.00	2.01	2.00	2.01	2.01	1.98	2.01	1.99	
Sep 25	2.01	2.01	2.02	2.02	2.01	2.02	2.03	2.01	2.01	2.00	2.01	1.99	1.98	S	1.97	1.97	1.97	1.97	1.97	1.98	1.98	1.98	1.97	1.97	1.97	2.03	1.99
Sep 26	1.98	1.98	1.98	1.98	1.99	1.99	1.99	2.03	2.05	2.01	2.00	1.98	1.97	S	1.96	1.95	1.95	1.95	1.96	1.96	1.97	1.96	1.98	2.01	1.95	2.05	1.98
Sep 27	1.97	2.00	2.02	2.11	2.13	2.04	2.04	2.03	2.00	2.00	1.99	1.97	S	1.97	1.95	1.96	1.96	1.96	1.98	2.01	2.03	1.99	1.99	1.98	1.95	2.13	2.00
Sep 28	2.03	1.97	1.98	1.97	1.97	2.00	2.03	2.08	2.04	2.01	1.99	S	1.95	1.95	1.95	1.94	1.94	1.95	1.96	1.99	1.96	1.96	1.98	1.99	1.94	2.08	1.98
Sep 29	2.02	2.04	2.03	2.03	2.03	2.02	2.01	2.01	2.01	S	2.03	2.03	2.03	2.02	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.04	2.11	2.01	2.11	2.03	
Sep 30	2.24	2.18	2.17	2.15	2.14	2.10	2.07	2.05	2.06	S	2.06	2.05	2.04	2.04	2.01	2.01	2.01	2.06	2.47	2.32	2.13	2.14	2.13	2.01	2.47	2.11	
Diurnal Maximum	2.24	2.18	2.17	2.15	2.16	2.27	2.19	2.19	2.12	2.11	2.07	2.07	2.05	2.06	2.06	2.05	2.03	2.03	2.08	2.47	2.32	2.23	2.46	2.37			
Diurnal Average	2.03	2.03	2.02	2.03	2.03	2.05	2.04	2.04	2.04	2.02	2.01	2.01	2.00	2.00	1.99	1.99	1.99	1.99	2.00	2.03	2.04	2.03	2.05	2.04			

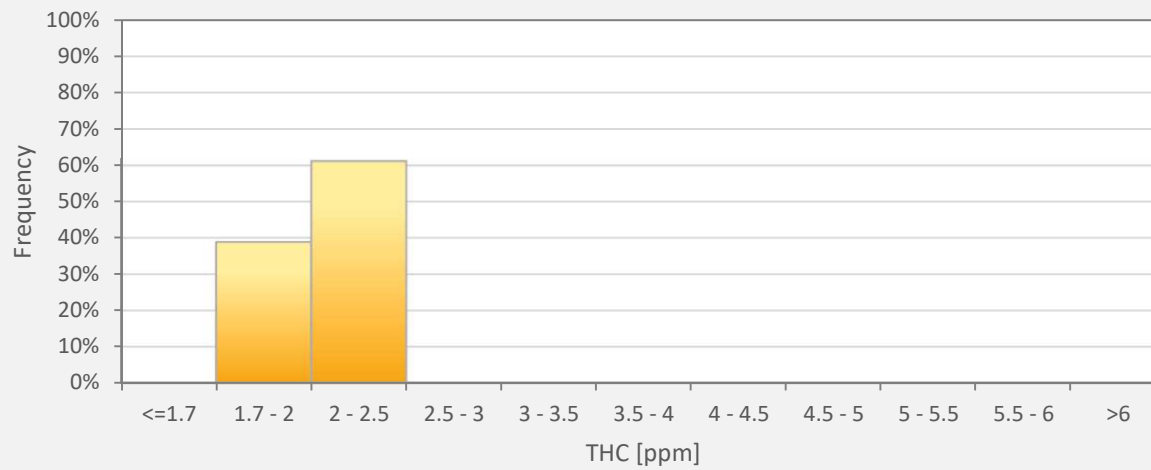
C Monthly Calibration	S Daily Zero-Span Check	Q Quality Assurance
K Collection Error	N No Data (Machine Not in Service)	Y Routine Maintenance
X InValid Data (Equipment Malfunction /Recovery)	NRM UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P Power Failure

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

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



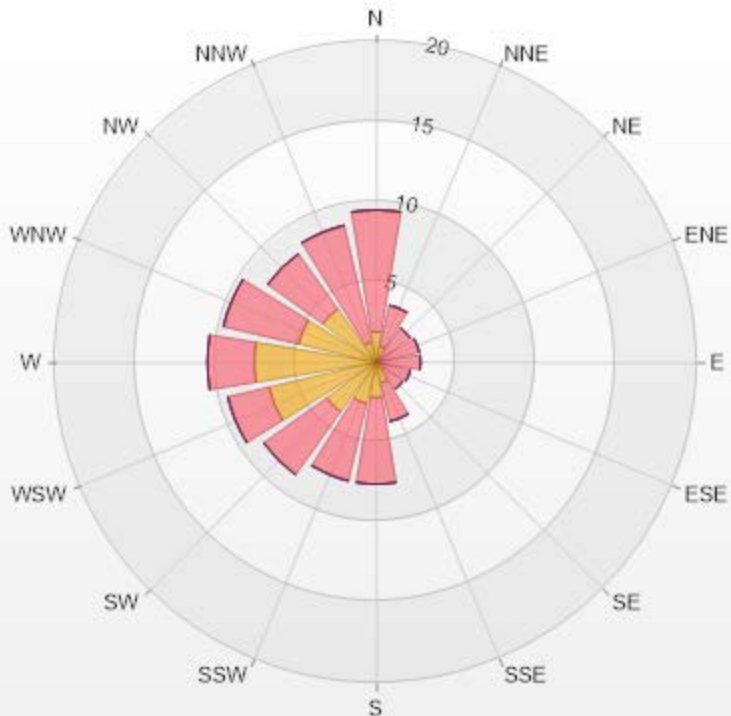
THC55[ppm] Histogram: AQHI Grimshaw Monthly: 09-2022 1 Hr.



Classes	THC55
<=1.7	0.00%
1.7 - 2	38.83%
2 - 2.5	61.17%
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-THC55[ppm] Monthly: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.14% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	1.9	7.59	0	0	0	9.49
NNE	1.02	2.63	0	0	0	3.65
NE	0.29	2.34	0	0	0	2.63
ENE	0	2.77	0	0	0	2.77
E	0	2.77	0	0	0	2.77
ESE	0.29	1.9	0	0	0	2.19
SE	0.58	1.46	0	0	0	2.04
SSE	1.31	2.48	0	0	0	3.79
S	2.19	5.4	0	0	0	7.59
SSW	2.63	4.96	0	0	0	7.59
SW	3.8	4.82	0	0	0	8.62
WSW	6.86	2.63	0	0	0	9.49
W	7.59	2.92	0	0	0	10.51
WNW	4.96	4.82	0	0	0	9.78
NW	4.09	4.23	0	0	0	8.32
NNW	1.31	7.45	0	0	0	8.76
Summary	38.82	61.17	0	0	0	100



PRAMP-202209

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% Icon Classes (ppm)	39	0-2	61	2-5	0	5-10	0	10-40	0	>40.0
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PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - September 2022

Summary of Hourly Averages

METHANE (CH4) in ppm

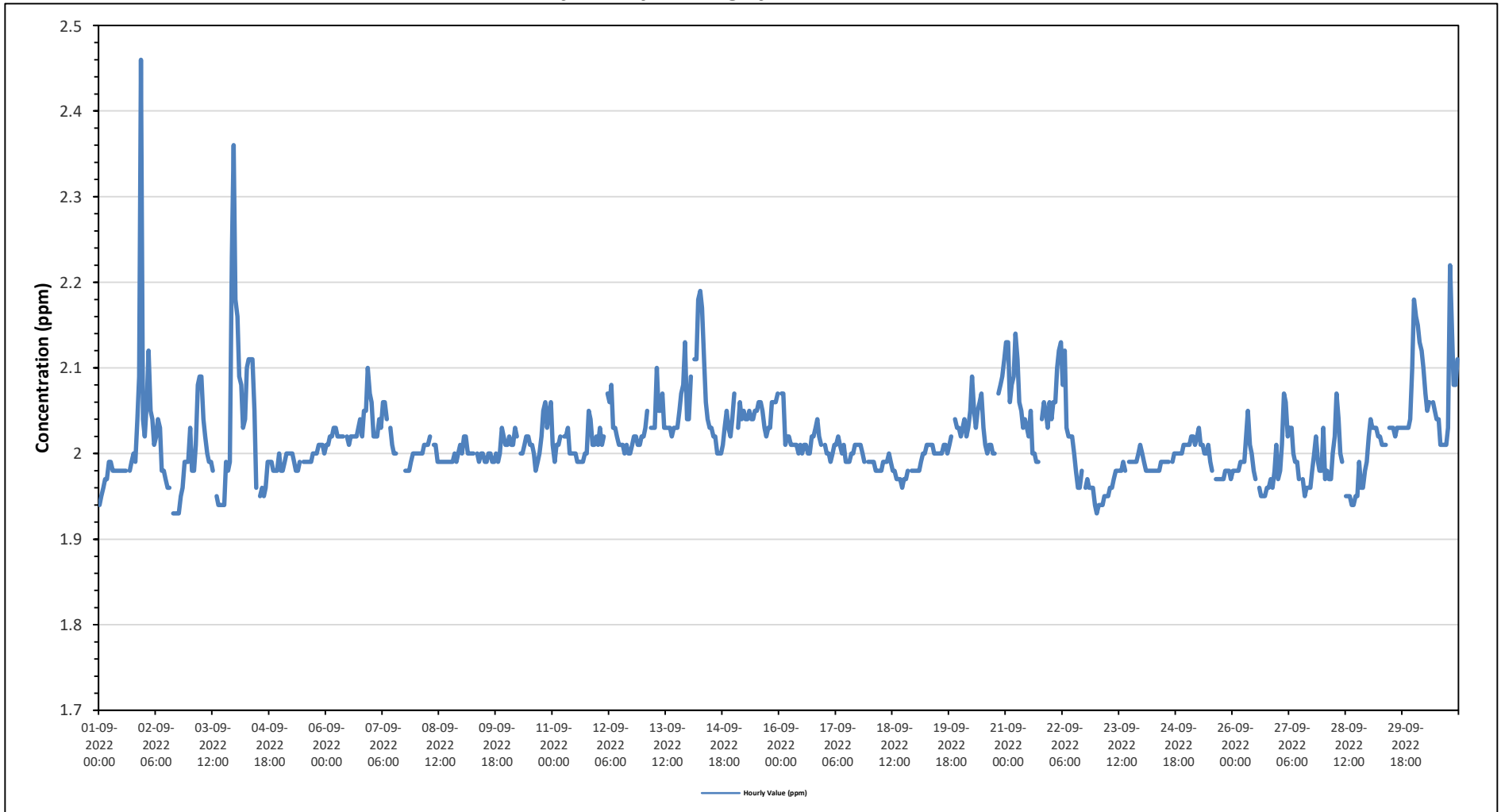
Maximum Hourly Value: 2.46 ppm on September 1 at hour 22	Hours in Service: 720
Maximum Daily Value: 2.08 ppm on September 30	Hours of Data: 685
Minimum Hourly Value: 1.93 ppm on September 2 at hour 15	Hours of Missing Data: 0
Minimum Daily Value: 1.97 ppm on September 23	Hours of Calibration: 35
Monthly Average: 2.01 ppm	Operational Uptime: 100.0

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Sep 1	1.94	1.95	1.96	1.97	1.97	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.98	1.98	S	1.98	1.99	2.00	1.99	2.04	2.09	2.46	2.04	1.94	2.46	2.01	
Sep 2	2.02	2.06	2.12	2.05	2.04	2.01	2.02	2.04	2.03	1.98	1.98	1.97	1.96	1.96	S	1.93	1.93	1.93	1.93	1.95	1.96	1.99	1.99	1.99	1.93	2.12	1.99
Sep 3	2.03	1.98	1.98	2.01	2.08	2.09	2.09	2.04	2.02	2.00	1.99	1.99	1.98	S	1.95	1.94	1.94	1.94	1.99	1.98	1.99	2.23	2.36	1.94	2.36	2.02	
Sep 4	2.18	2.16	2.09	2.08	2.03	2.04	2.10	2.11	2.11	2.11	2.05	1.96	S	1.95	1.96	1.95	1.96	1.99	1.99	1.98	1.98	1.98	2.00	1.95	2.18	2.03	
Sep 5	1.98	1.98	1.99	2.00	2.00	2.00	2.00	1.99	1.98	1.98	1.99	S	1.99	1.99	1.99	1.99	2.00	2.00	2.00	2.01	2.01	2.01	2.00	1.98	2.01	1.99	
Sep 6	2.01	2.01	2.02	2.02	2.03	2.03	2.02	2.02	2.02	2.02	S	2.02	2.01	2.02	2.02	2.02	2.02	2.03	2.04	2.02	2.05	2.05	2.10	2.07	2.01	2.10	2.03
Sep 7	2.06	2.02	2.02	2.02	2.04	2.03	2.06	2.06	2.04	S	2.03	2.01	2.00	2.00	C	C	C	C	1.98	1.98	1.99	2.00	2.00	1.98	2.06	2.02	
Sep 8	2.00	2.00	2.00	2.00	2.01	2.01	2.01	2.02	S	2.01	2.01	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	2.00	2.01	2.01	1.99	2.02	2.00	
Sep 9	2.00	2.02	2.02	2.00	2.00	2.00	2.00	S	2.00	1.99	2.00	2.00	1.99	1.99	2.00	2.00	1.99	1.99	2.00	1.99	2.00	2.03	2.02	2.01	1.99	2.03	2.00
Sep 10	2.01	2.02	2.01	2.01	2.03	2.02	S	2.00	2.00	2.01	2.02	2.02	2.01	2.01	2.00	1.98	1.99	2.00	2.02	2.05	2.06	2.03	2.05	2.06	1.98	2.06	2.02
Sep 11	2.01	1.99	2.01	2.01	2.02	S	2.02	2.02	2.03	2.00	2.00	2.00	2.00	1.99	1.99	1.99	2.00	2.00	2.05	2.04	2.01	2.01	2.02	1.99	2.05	2.01	
Sep 12	2.01	2.03	2.01	2.02	S	2.07	2.06	2.08	2.03	2.03	2.02	2.01	2.01	2.01	2.00	2.01	2.00	2.00	2.01	2.02	2.02	2.01	2.01	2.02	2.00	2.08	2.02
Sep 13	2.02	2.03	2.05	S	2.03	2.03	2.03	2.10	2.05	2.05	2.07	2.03	2.03	2.03	2.03	2.02	2.03	2.03	2.05	2.07	2.08	2.13	2.04	2.02	2.13	2.05	
Sep 14	2.04	2.09	S	2.11	2.11	2.18	2.19	2.17	2.11	2.06	2.04	2.03	2.03	2.02	2.02	2.00	2.00	2.01	2.03	2.05	2.03	2.02	2.04	2.00	2.19	2.06	
Sep 15	2.07	S	2.03	2.06	2.04	2.05	2.04	2.04	2.05	2.04	2.04	2.05	2.05	2.06	2.06	2.05	2.03	2.02	2.03	2.03	2.06	2.06	2.07	2.02	2.07	2.05	
Sep 16	S	2.07	2.07	2.01	2.02	2.02	2.01	2.01	2.01	2.01	2.00	2.01	2.00	2.01	2.01	2.00	2.00	2.02	2.02	2.03	2.04	2.02	2.01	S	2.00	2.07	2.02
Sep 17	2.01	2.00	2.00	1.99	2.00	2.01	2.01	2.02	2.01	2.00	2.01	1.99	1.99	1.99	2.00	2.01	2.01	2.01	2.01	2.01	2.00	1.99	S	1.99	1.99	2.02	2.00
Sep 18	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.99	1.99	2.00	1.99	1.98	1.98	1.97	1.97	1.97	1.96	1.97	1.97	1.98	S	1.98	1.98	1.96	2.00	1.98	
Sep 19	1.98	1.98	1.98	1.99	2.00	2.00	2.01	2.01	2.01	2.01	2.00	2.00	2.00	2.00	2.01	2.01	2.00	2.01	2.02	S	2.04	2.03	2.03	1.98	2.04	2.01	
Sep 20	2.02	2.03	2.04	2.02	2.03	2.05	2.09	2.05	2.03	2.05	2.06	2.07	2.03	2.01	2.00	2.01	2.01	2.00	2.00	S	2.07	2.08	2.09	2.11	2.00	2.11	2.04
Sep 21	2.13	2.13	2.06	2.08	2.09	2.14	2.11	2.06	2.05	2.03	2.04	2.03	2.02	2.05	2.00	2.00	1.99	1.99	S	2.04	2.06	2.05	2.03	2.06	1.99	2.14	2.05
Sep 22	2.04	2.06	2.06	2.10	2.12	2.13	2.08	2.12	2.03	2.02	2.02	2.00	1.98	1.96	1.96	1.98	S	1.96	1.97	1.96	1.96	1.96	1.94	1.94	2.13	2.02	
Sep 23	1.93	1.94	1.94	1.94	1.95	1.95	1.95	1.96	1.96	1.97	1.98	1.98	1.98	1.99	1.98	S	1.99	1.99	1.99	1.99	1.99	2.00	2.01	1.93	2.01	1.97	
Sep 24	2.00	1.99	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.99	1.99	1.99	1.99	S	1.99	2.00	2.00	2.00	2.00	2.01	2.01	1.98	2.01	1.98	2.01	1.99
Sep 25	2.01	2.01	2.02	2.02	2.01	2.02	2.03	2.01	2.01	2.00	2.01	1.99	1.98	S	1.97	1.97	1.97	1.97	1.97	1.98	1.98	1.98	1.97	1.97	2.03	1.99	
Sep 26	1.98	1.98	1.98	1.98	1.99	1.99	1.99	2.02	2.05	2.01	2.00	1.98	1.97	S	1.96	1.95	1.95	1.95	1.96	1.96	1.97	1.96	1.98	2.01	1.95	2.05	1.98
Sep 27	1.97	1.98	2.01	2.07	2.06	2.02	2.03	2.03	2.00	1.99	1.99	1.97	S	1.97	1.95	1.96	1.96	1.96	1.98	2.00	2.02	1.99	1.98	1.98	1.95	2.07	1.99
Sep 28	2.03	1.97	1.98	1.97	1.97	2.00	2.02	2.07	2.04	2.00	1.99	S	1.95	1.95	1.95	1.94	1.94	1.95	1.95	1.99	1.96	1.96	1.98	1.99	1.94	2.07	1.98
Sep 29	2.02	2.04	2.03	2.03	2.03	2.02	2.02	2.01	2.01	2.01	S	2.03	2.03	2.03	2.02	2.03	2.03	2.03	2.03	2.03	2.03	2.04	2.10	2.01	2.10	2.03	
Sep 30	2.18	2.16	2.15	2.13	2.12	2.10	2.07	2.05	2.06	S	2.06	2.05	2.04	2.04	2.01	2.01	2.01	2.03	2.22	2.15	2.08	2.08	2.11	2.01	2.22	2.08	
Diurnal Maximum	2.18	2.16	2.15	2.13	2.12	2.18	2.19	2.17	2.11	2.11	2.07	2.07	2.05	2.06	2.06	2.05	2.03	2.03	2.04	2.22	2.15	2.09	2.46	2.36			
Diurnal Average	2.02	2.02	2.02	2.02	2.03	2.03	2.03	2.04	2.02	2.01	2.01	2.01	2.00	2.00	1.99	1.99	1.99	1.99	1.99	2.01	2.02	2.02	2.04	2.04			

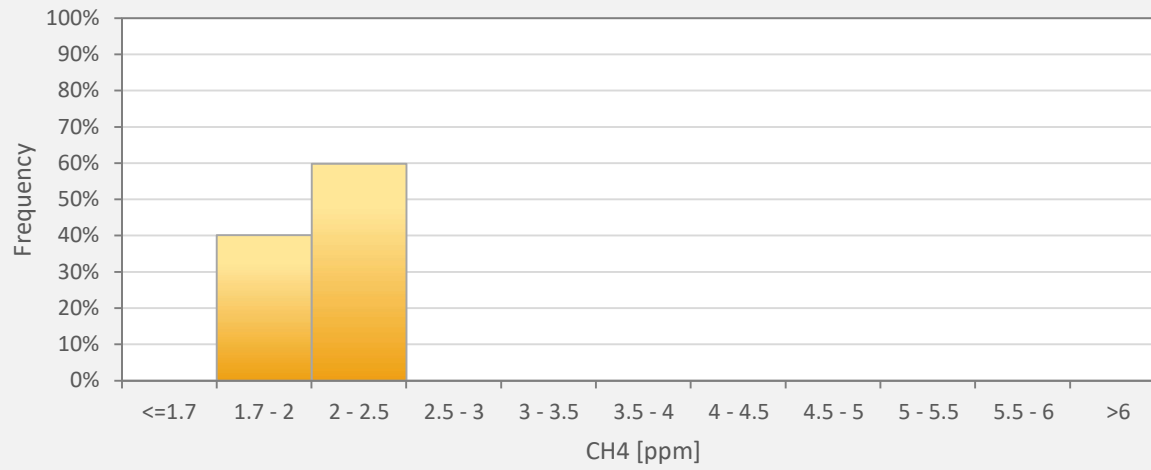
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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

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



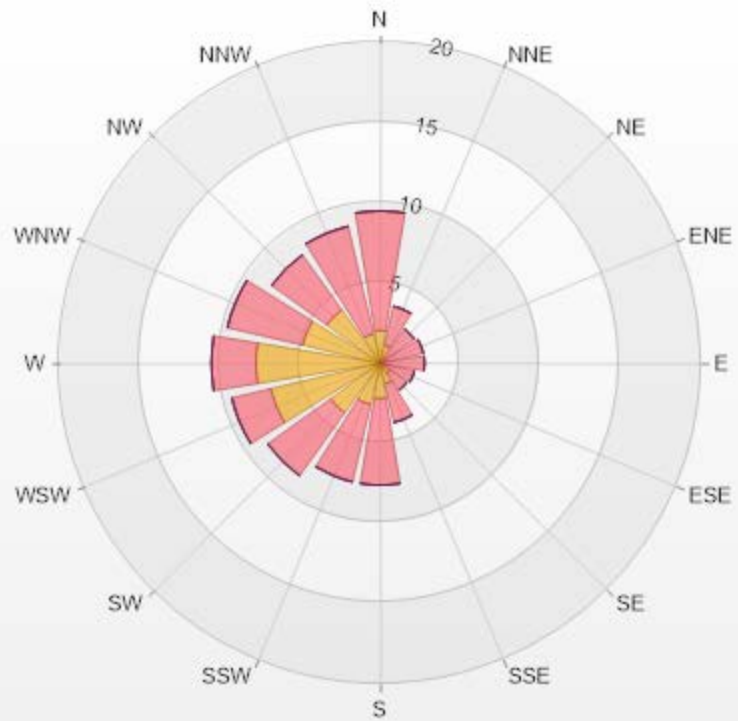
CH4[ppm] Histogram: AQHI Grimshaw Monthly: 09-2022 1 Hr.



Classes	CH4
<=1.7	0.00%
1.7 - 2	40.15%
2 - 2.5	59.85%
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: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.14% Calm Avg: 0.00 [ppm]

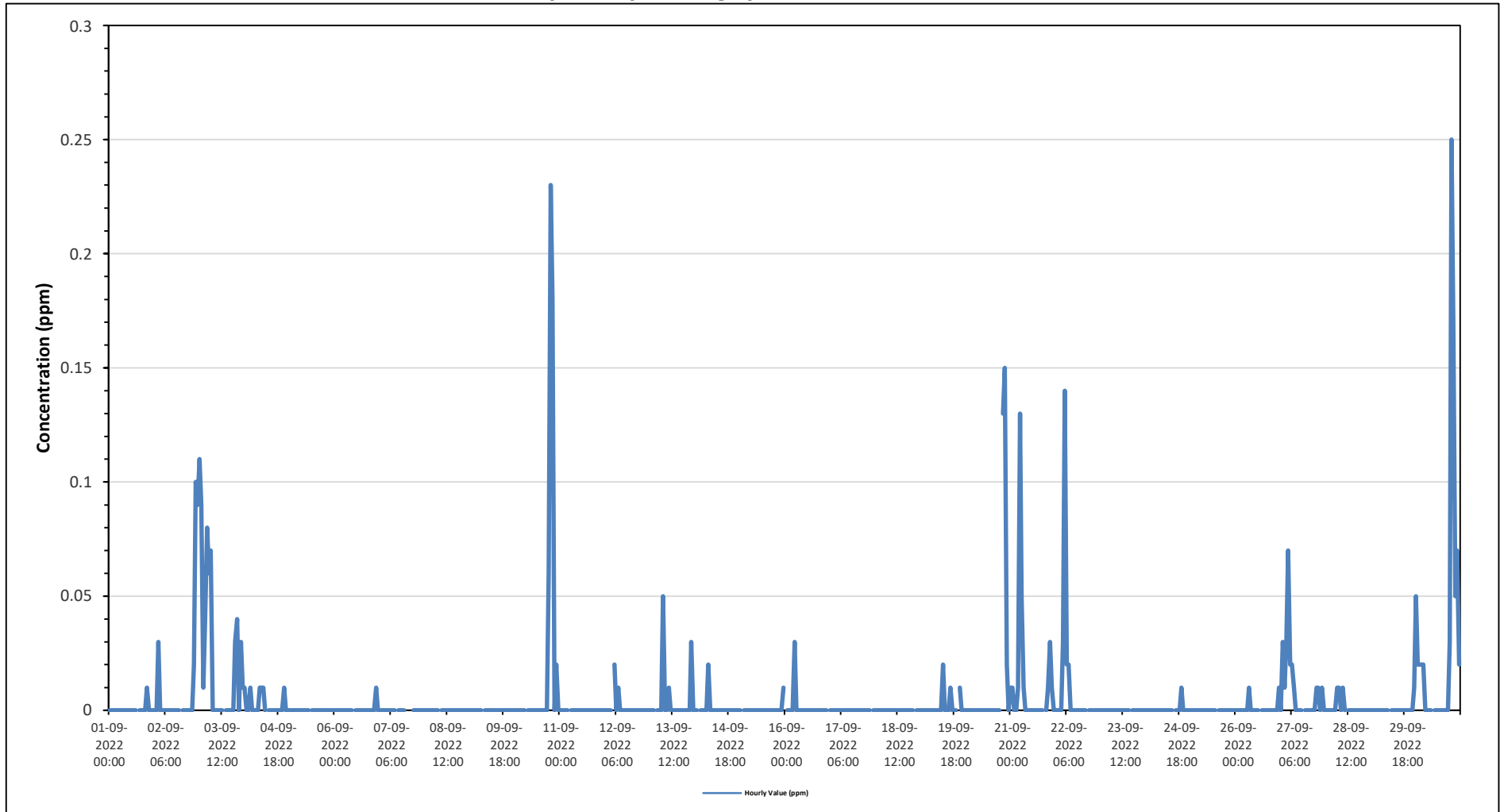
Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	2.04	7.45	0	0	0	9.49
NNE	1.17	2.48	0	0	0	3.65
NE	0.29	2.34	0	0	0	2.63
ENE	0	2.77	0	0	0	2.77
E	0	2.77	0	0	0	2.77
ESE	0.29	1.9	0	0	0	2.19
SE	0.73	1.31	0	0	0	2.04
SSE	1.31	2.48	0	0	0	3.79
S	2.19	5.4	0	0	0	7.59
SSW	2.63	4.96	0	0	0	7.59
SW	3.8	4.82	0	0	0	8.62
WSW	7.01	2.48	0	0	0	9.49
W	7.74	2.77	0	0	0	10.51
WNW	4.96	4.82	0	0	0	9.78
NW	4.09	4.23	0	0	0	8.32
NNW	1.9	6.86	0	0	0	8.76
Summary	40.15	59.84	0	0	0	100



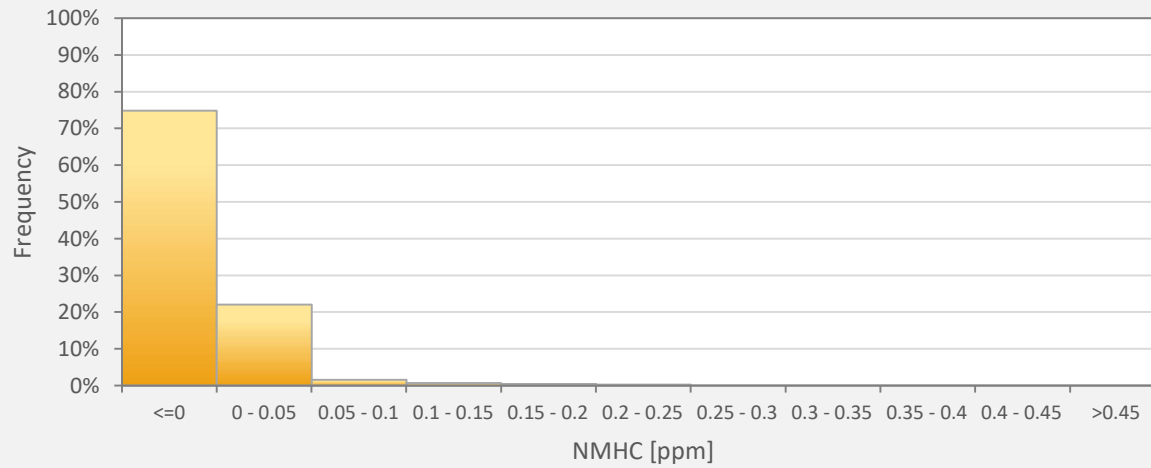
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% Icon Classes (ppm)	40	60	0	0	0
	0-2	2-5	5-10	10-20	>20.0

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



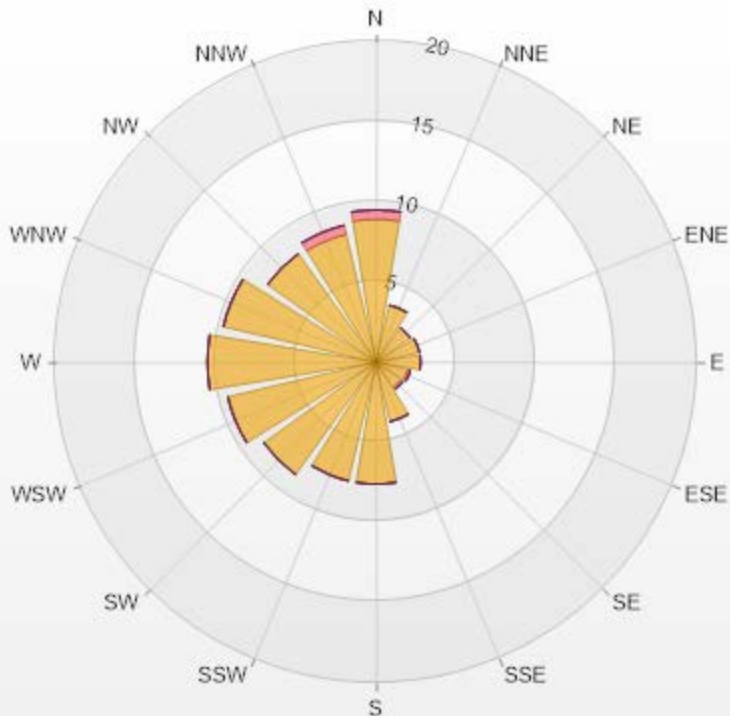
NMHC[ppm] Histogram: AQHI Grimshaw Monthly: 09-2022 1 Hr.



Classes	NMHC
<=0	74.89%
0 - 0.05	22.04%
0.05 - 0.1	1.61%
0.1 - 0.15	0.73%
0.15 - 0.2	0.44%
0.2 - 0.25	0.29%
0.25 - 0.3	0.00%
0.3 - 0.35	0.00%
0.35 - 0.4	0.00%
0.4 - 0.45	0.00%
>0.45	0.00%

Wind: AQHI Grimshaw Poll.: AQHI Grimshaw-NMHC[ppm] Monthly: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 95.14% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	8.91	0.58	0	0	0	9.49
NNE	3.65	0	0	0	0	3.65
NE	2.63	0	0	0	0	2.63
ENE	2.77	0	0	0	0	2.77
E	2.77	0	0	0	0	2.77
ESE	2.04	0.15	0	0	0	2.19
SE	1.9	0.15	0	0	0	2.05
SSE	3.8	0	0	0	0	3.8
S	7.59	0	0	0	0	7.59
SSW	7.59	0	0	0	0	7.59
SW	8.61	0	0	0	0	8.61
WSW	9.49	0	0	0	0	9.49
W	10.51	0	0	0	0	10.51
WNW	9.78	0	0	0	0	9.78
NW	8.32	0	0	0	0	8.32
NNW	8.18	0.58	0	0	0	8.76
Summary	98.54	1.46	0	0	0	100



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% Icon Classes (ppm)

99 0-0.1

1 0.1-0.3

0 0.3-1

0 1-2

0 >2.0



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - September 2022

Summary of Hourly Averages

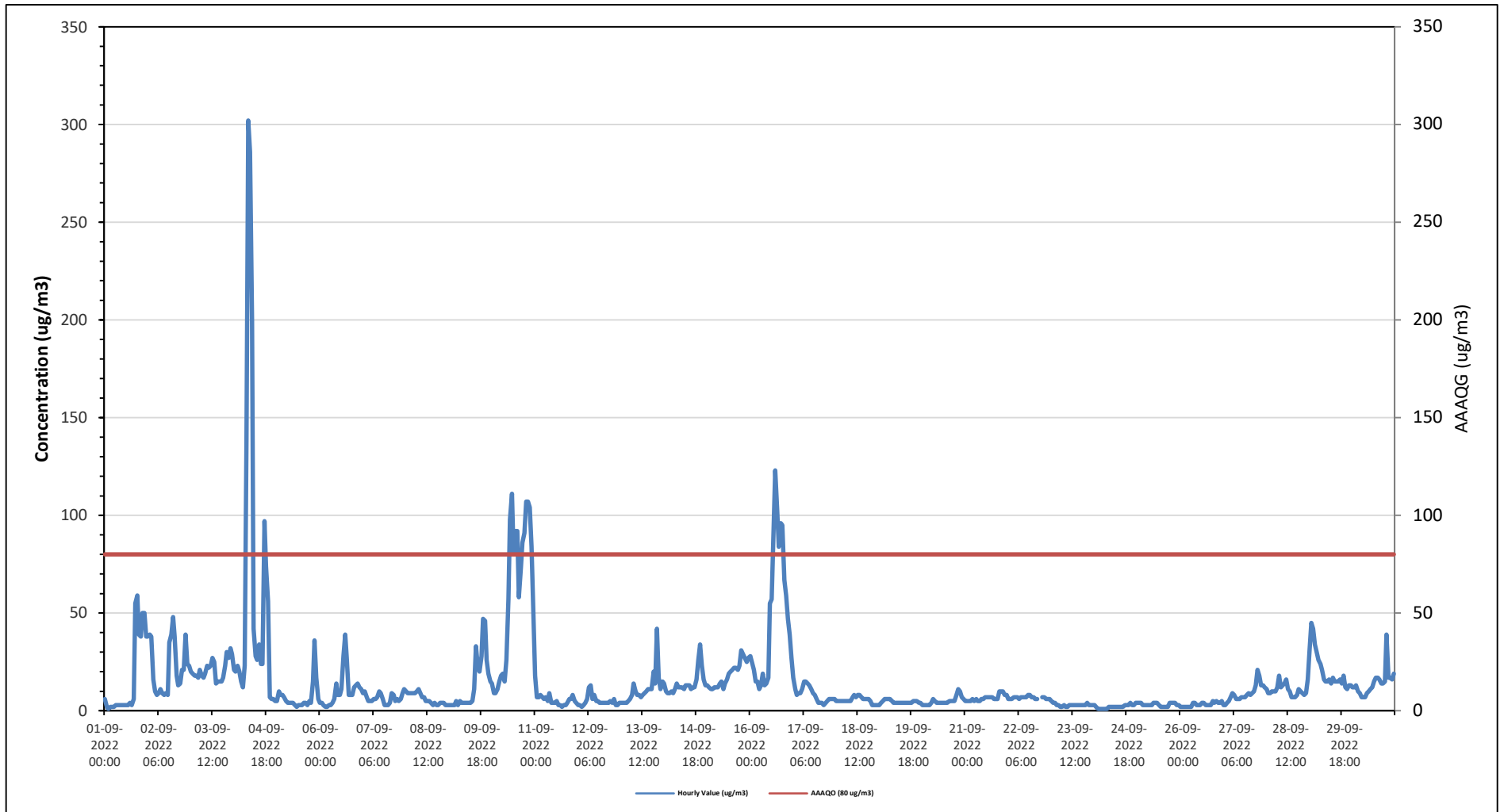
PARTICULATE MATTER 2.5 (PM_{2.5}) in µg/m³

Alberta Ambient Air Quality Guideline (AAAQG): 1-Hour 80 µg/m ³ , Alberta Ambient Air Quality Objective (AAAO): 24-Hour 29 µg/m ³																												
Number of 1-Hour Exceedances: 22					Number of 24-Hour Exceedances: 3																							
Maximum Hourly Value: ##### µg/m ³ on September 4 at hour 8										Hours in Service: 720																		
Maximum Daily Value: 62.0 µg/m ³ on September 4										Hours of Data: 718																		
Minimum Hourly Value: 1.0 µg/m ³ on September 1 at hour 2										Hours of Missing Data: 0																		
Minimum Daily Value: 2.2 µg/m ³ on September 24										Hours of Calibration: 2																		
Monthly Average: 14.3 µg/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				
Sep 1	6	2	1	2	2	2	3	3	3	3	3	3	3	3	4	3	6	55	59	39	38	50	50	38	1	59	15.9	
Sep 2	38	39	38	16	10	8	9	11	9	8	9	8	35	39	48	38	18	13	14	21	21	39	24	23	8	48	22.3	
Sep 3	20	19	18	18	17	21	18	17	19	23	22	23	27	25	14	15	15	15	17	23	30	27	32	29	14	32	21.0	
Sep 4	21	20	23	20	15	12	23	139	302	286	199	42	28	26	34	24	24	97	74	56	7	6	6	5	5	302	62.0	
Sep 5	5	10	8	8	7	5	4	4	4	4	3	2	3	3	3	4	4	3	5	4	15	36	17	6	2	36	7.0	
Sep 6	4	4	3	2	2	3	3	4	6	14	8	8	11	28	39	27	8	8	8	12	13	14	12	11	2	39	10.5	
Sep 7	9	10	7	5	5	5	6	6	7	10	9	6	3	3	3	4	9	8	5	6	5	6	9	11	3	11	6.5	
Sep 8	10	9	9	9	9	9	10	11	9	7	7	5	5	3	4	3	4	3	3	4	4	4	3	3	3	3	11	6.2
Sep 9	3	3	3	3	5	3	5	4	4	4	4	4	4	5	11	33	23	20	28	47	46	26	19	15	3	47	13.4	
Sep 10	14	9	9	11	15	18	19	15	26	57	98	111	81	92	92	58	73	86	91	107	107	104	84	51	9	111	59.5	
Sep 11	18	7	7	8	7	6	7	5	9	4	4	4	5	3	3	2	3	3	4	6	6	8	5	4	2	18	5.8	
Sep 12	3	3	2	3	4	6	12	13	6	8	5	5	4	4	4	4	4	4	5	4	6	3	3	4	2	13	5.0	
Sep 13	4	4	4	4	5	6	8	14	10	8	8	7	8	9	10	11	11	11	20	14	42	17	11	15	4	42	10.9	
Sep 14	14	10	9	9	10	9	11	14	12	12	12	11	13	13	13	11	12	12	16	26	34	23	16	13	9	34	14.0	
Sep 15	13	12	11	11	12	12	12	14	15	11	14	16	19	20	21	22	22	21	23	31	29	27	25	27	11	31	18.3	
Sep 16	28	25	21	15	15	11	13	19	13	14	17	55	57	90	123	102	84	96	95	67	59	47	39	27	11	123	47.2	
Sep 17	17	11	8	9	9	11	15	15	14	13	11	9	8	6	4	4	4	3	4	5	6	6	6	6	3	17	8.5	
Sep 18	5	5	5	5	5	5	5	5	5	7	8	7	8	8	7	6	6	6	6	5	3	3	3	3	3	8	5.5	
Sep 19	3	4	5	6	6	6	6	5	4	4	4	4	4	4	4	4	4	4	4	5	5	4	4	4	3	6	4.5	
Sep 20	3	3	3	3	3	4	6	5	4	4	4	4	4	4	4	5	5	5	5	8	11	10	7	6	3	11	5.0	
Sep 21	5	5	5	5	6	5	6	5	5	6	6	7	7	7	7	7	6	6	6	10	10	10	8	8	5	10	6.6	
Sep 22	6	6	6	7	7	7	6	7	7	7	8	7	7	7	6	6	6	6	7	7	6	6	6	6	6	6	8	6.7
Sep 23	5	4	4	3	3	2	2	3	2	2	3	3	3	3	3	3	3	3	3	3	4	3	3	3	2	5	3.0	
Sep 24	3	2	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	4	3	4	1	4	2.2	
Sep 25	4	4	4	3	3	3	3	3	3	4	4	4	3	2	2	2	2	2	4	4	4	4	3	3	2	4	3.2	
Sep 26	2	2	2	2	2	2	2	4	4	3	3	3	4	4	3	3	3	3	5	4	5	4	4	5	2	5	3.3	
Sep 27	3	3	4	5	7	9	8	6	6	6	7	7	7	8	9	8	9	10	13	21	18	13	13	12	3	21	8.8	
Sep 28	11	9	9	10	10	10	12	18	12	13	14	16	11	10	7	7	7	8	11	10	9	8	9	16	7	18	10.7	
Sep 29	31	45	42	34	30	26	24	21	16	15	15	16	14	17	15	15	15	16	14	18	12	11	13	13	11	45	20.3	
Sep 30	12	12	13	10	9	7	7	7	9	10	11	12	15	17	17	16	14	14	15	39	17	17	16	19	7	39	14.0	
Diurnal Maximum	38	45	42	34	30	26	24	139	302	286	199	111	81	92	123	102	84	97	95	107	107	104	84	51				
Diurnal Average	10.7	10.0	9.5	8.2	8.0	7.8	8.9	13.3	18.2	19.0	17.4	13.7	13.5	15.6	17.2	15.0	13.5	18.6	19.3	20.3	19.2	18.0	15.1	13.0				
C Monthly Calibration								S Daily Zero-Span Check								Q Quality Assurance												
K Collection Error								N No Data (Machine Not in Service)								Y Routine Maintenance												
X InValid Data (Equipment Malfunction /Recovery)								NRM UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)								P Power Failure												

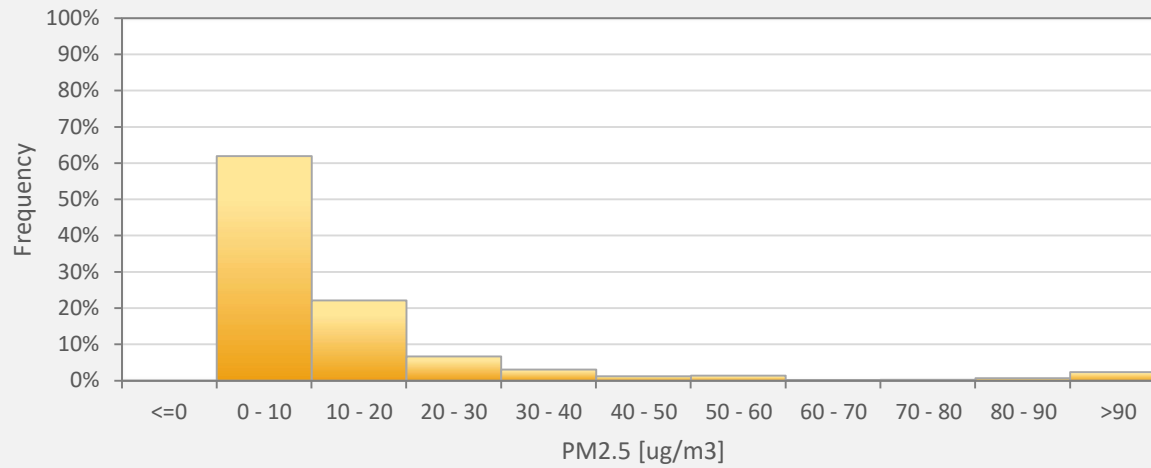
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

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

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



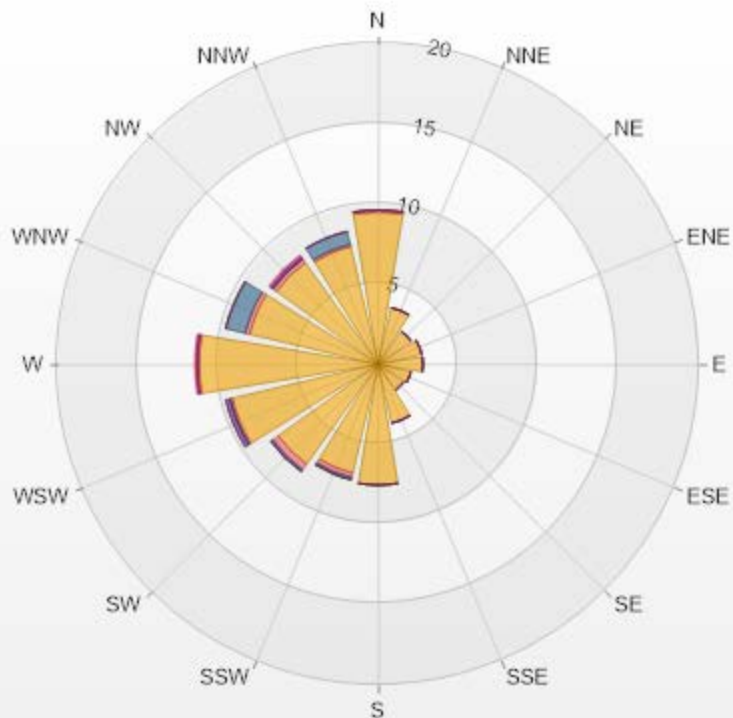
PM2.5[ug/m3(L)] Histogram: AQHI Grimshaw Monthly: 09-2022 1 Hr.



Classes	PM2.5
<=0	0.00%
0 - 10	61.98%
10 - 20	22.14%
20 - 30	6.69%
30 - 40	3.06%
40 - 50	1.25%
50 - 60	1.39%
60 - 70	0.14%
70 - 80	0.28%
80 - 90	0.70%
>90	2.37%

Wind: AQHI Grimshaw Poll.: AQHI Grimshaw-PM2.5[ug/m3(L)] Monthly: 09-2022 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 99.72% Calm Avg: 0.00 [ug/m3(L)]

Direction	0-50	50-80	80-120	120-240	>240.0	Total
N	9.47	0.14	0	0	0	9.61
NNE	3.62	0	0	0	0	3.62
NE	2.51	0	0	0	0	2.51
ENE	2.79	0	0	0	0	2.79
E	2.79	0	0	0	0	2.79
ESE	2.09	0	0	0	0	2.09
SE	1.95	0	0	0	0	1.95
SSE	3.76	0	0	0	0	3.76
S	7.52	0	0	0	0	7.52
SSW	6.96	0.28	0.14	0	0	7.38
SW	7.66	0.42	0.14	0	0	8.22
WSW	9.33	0.14	0	0.28	0	9.75
W	11.14	0.14	0	0	0.14	11.42
WNW	8.22	0.28	1.25	0	0	9.75
NW	7.8	0.28	0	0.14	0.14	8.36
NNW	7.52	0.14	0.84	0	0	8.5
Summary	95.13	1.82	2.37	0.42	0.28	100



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% Icon Classes (ug/m3(L))	95	0-50	2	50-80	2	80-120	0	120-240	0	>240.0
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PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - September 2022

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

Maximum Hourly Value:	100 %	on September 30 at hour 6	Hours in Service:	720
Maximum Daily Value:	93.1 %	on September 17	Hours of Data:	720
Minimum Hourly Value:	19 %	on September 3 at hour 15	Hours of Missing Data:	0
Minimum Daily Value:	41.8 %	on September 23	Hours of Calibration:	0
Monthly Average:	59.9 %		Operational Uptime:	100.0

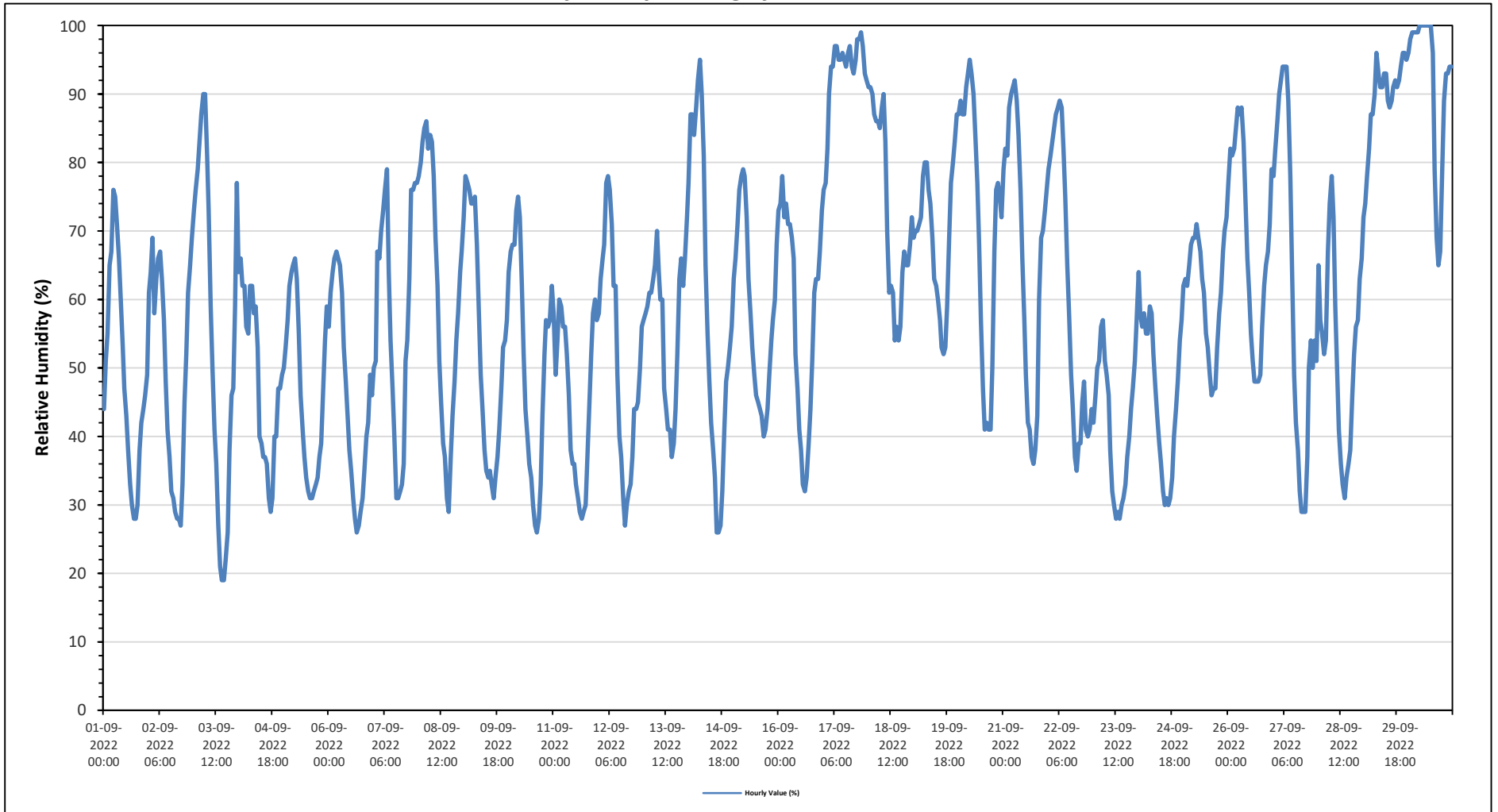
Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Sep 1	44	51	55	65	67	76	75	71	66	60	53	47	43	38	33	30	28	28	30	38	42	44	46	49	28	76	49.1
Sep 2	61	64	69	58	63	66	67	63	57	48	41	37	32	31	29	28	28	27	33	45	52	61	65	69	27	69	49.8
Sep 3	73	76	79	83	87	90	90	81	73	59	50	41	36	27	21	19	19	22	26	38	46	47	59	77	19	90	55.0
Sep 4	64	66	62	62	56	55	62	62	58	59	53	40	39	37	37	36	31	29	31	40	40	47	47	49	29	66	48.4
Sep 5	50	53	57	62	64	65	66	63	55	46	41	37	34	32	31	31	32	33	34	37	39	46	54	59	31	66	46.7
Sep 6	56	61	64	66	67	66	65	61	53	48	43	38	35	31	28	26	27	29	31	35	40	42	49	46	26	67	46.1
Sep 7	50	51	67	66	70	73	76	79	64	54	47	40	31	31	32	33	36	51	54	63	76	76	77	77	31	79	57.3
Sep 8	78	80	83	85	86	82	84	83	78	69	62	51	45	39	37	31	29	37	43	48	54	58	64	67	29	86	61.4
Sep 9	72	78	77	76	74	74	75	68	59	49	44	38	35	34	35	33	31	34	37	41	47	53	54	57	31	78	53.1
Sep 10	64	67	68	68	73	75	72	62	52	44	40	36	34	30	27	26	28	33	43	52	57	56	57	62	26	75	51.1
Sep 11	58	49	54	60	59	56	56	52	46	38	36	36	33	31	29	28	29	30	37	45	52	58	60	57	28	60	45.4
Sep 12	58	63	66	68	77	78	76	71	62	62	49	40	37	31	27	30	32	33	37	44	44	45	50	56	27	78	51.5
Sep 13	57	58	59	61	61	63	65	70	64	60	60	47	44	41	41	37	39	44	52	63	66	62	66	72	37	72	56.3
Sep 14	77	87	87	84	88	92	95	90	81	65	55	48	42	38	34	26	26	27	32	41	48	50	53	56	26	95	59.3
Sep 15	63	66	71	76	78	79	78	72	63	58	53	49	46	45	44	43	40	41	44	49	54	57	60	68	40	79	58.2
Sep 16	73	74	78	72	74	71	71	69	66	52	47	41	38	33	32	34	39	44	51	61	63	63	67	73	32	78	57.8
Sep 17	76	77	82	90	94	94	97	97	95	95	96	95	94	96	97	94	93	95	98	98	99	97	93	92	76	99	93.1
Sep 18	91	91	90	87	86	86	85	88	90	83	70	61	62	61	54	56	54	56	64	67	65	65	68	72	54	91	73.0
Sep 19	69	70	70	71	72	78	80	80	76	74	69	63	62	60	57	53	52	53	59	69	77	80	83	87	52	87	69.3
Sep 20	87	89	87	87	91	93	95	93	90	84	77	68	57	47	41	42	41	41	50	67	76	77	75	72	41	95	72.0
Sep 21	79	82	81	88	90	91	92	89	84	76	66	57	49	42	41	37	36	38	43	60	69	70	73	76	36	92	67.0
Sep 22	79	81	83	85	87	88	89	88	82	75	65	58	49	44	37	35	39	39	45	48	41	40	41	44	35	89	60.9
Sep 23	42	46	50	51	56	57	51	49	46	38	32	30	28	29	28	30	31	33	37	40	44	47	51	57	28	57	41.8
Sep 24	64	58	56	58	55	55	59	58	52	47	43	39	36	32	30	31	30	31	34	40	44	48	54	57	30	64	46.3
Sep 25	62	63	62	65	68	69	69	71	69	67	63	61	55	53	49	46	47	47	53	58	61	67	70	72	46	72	61.1
Sep 26	77	82	81	82	85	88	87	88	83	75	66	61	55	51	48	48	48	49	56	62	65	67	71	79	48	88	68.9
Sep 27	78	82	86	90	92	94	94	94	89	78	64	49	42	38	32	29	29	29	37	50	54	50	54	51	29	94	61.9
Sep 28	65	57	55	52	54	67	74	78	72	59	50	41	36	33	31	34	36	38	46	52	56	57	63	66	31	78	53.0
Sep 29	72	74	78	82	87	87	90	96	93	91	93	93	89	88	89	91	92	91	92	94	96	96	95	72	96	96	89.2
Sep 30	96	98	99	99	99	99	100	100	100	100	100	100	100	100	96	79	69	65	67	79	89	93	94	94	65	100	92.0
Diurnal Maximum	96	98	99	99	99	99	100	100	100	100	100	100	100	96	97	94	93	95	98	98	99	97	96	95			
Diurnal Average	67.8	69.8	71.9	73.3	75.3	76.9	77.8	76.2	70.6	63.8	57.5	51.4	47.4	44.0	41.0	39.5	39.5	41.7	46.9	54.4	58.6	60.6	63.8	66.9			

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

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

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

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





PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - September 2022

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

Maximum Hourly Value:	950 mb	on September 8 at hour 21	Hours in Service:	720
Maximum Daily Value:	949 mb	on September 30	Hours of Data:	720
Minimum Hourly Value:	928 mb	on September 22 at hour 18	Hours of Missing Data:	0
Minimum Daily Value:	933 mb	on September 22	Hours of Calibration:	0
Monthly Average:	941 mb		Operational Uptime:	100.0

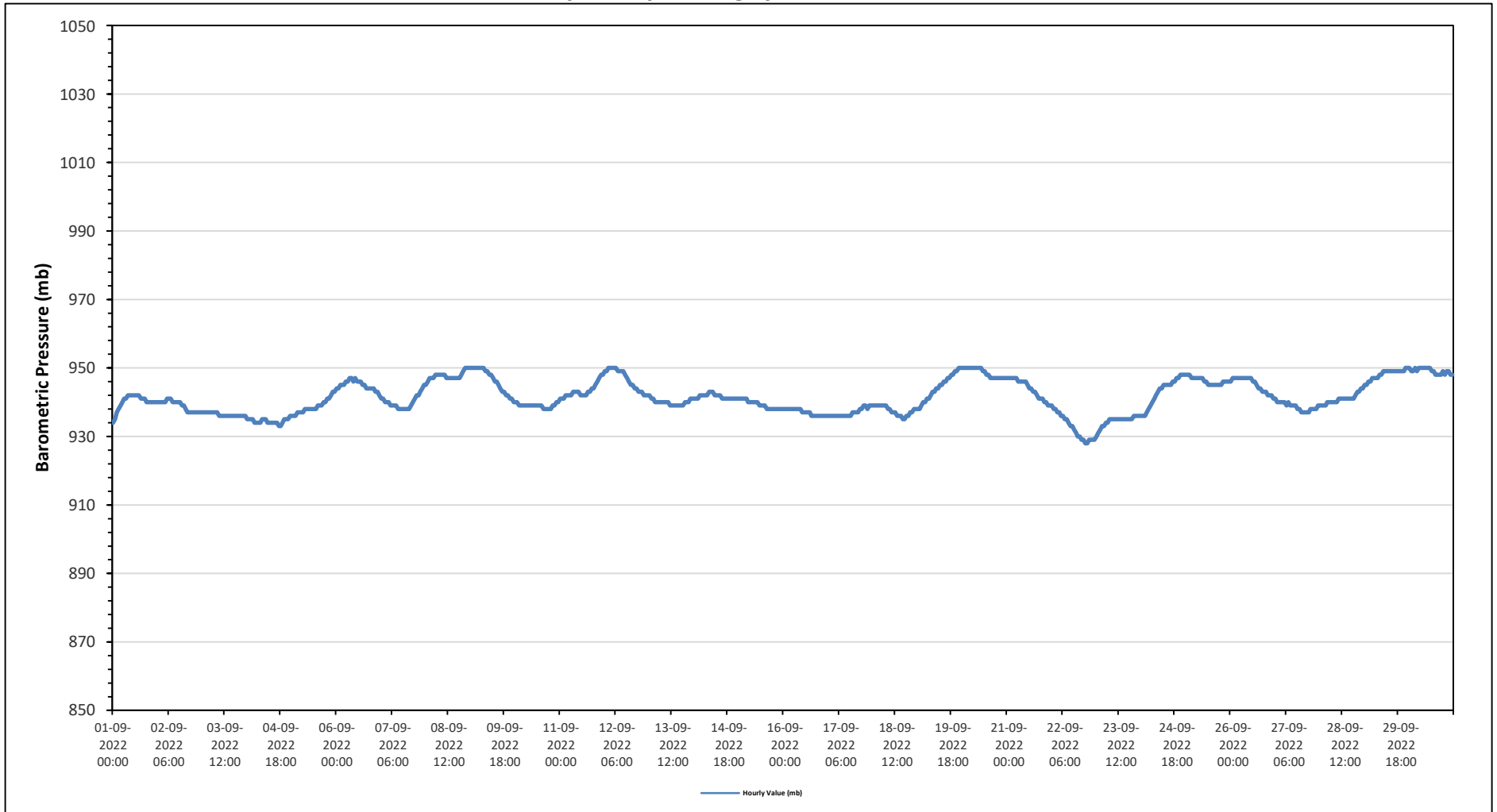
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
Sep 1	934	935	937	938	939	940	941	941	942	942	942	942	942	942	941	941	941	940	940	940	940	940	940	940	934	942	940	
Sep 2	940	940	940	940	940	941	941	941	940	940	940	940	940	939	939	938	937	937	937	937	937	937	937	937	937	937	941	939
Sep 3	937	937	937	937	937	937	937	937	937	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	937	936
Sep 4	935	935	935	935	934	934	934	934	935	935	935	934	934	934	934	934	933	933	933	934	935	935	935	936	933	936	934	
Sep 5	936	936	936	937	937	937	937	938	938	938	938	938	938	938	939	939	939	940	940	941	941	942	943	943	936	943	939	
Sep 6	944	944	945	945	945	946	946	947	947	946	946	946	946	945	945	944	944	944	944	944	943	943	942	942	947	945	945	
Sep 7	941	941	940	940	940	939	939	939	938	938	938	938	938	938	938	939	940	941	942	942	943	944	945	938	945	940	940	
Sep 8	945	946	947	947	947	948	948	948	948	948	947	947	947	947	947	947	947	947	948	949	950	950	950	945	950	948	948	
Sep 9	950	950	950	950	950	950	950	950	949	949	948	948	947	946	946	945	944	943	943	942	942	941	941	940	940	950	946	
Sep 10	940	940	939	939	939	939	939	939	939	939	939	939	939	939	938	938	938	938	938	939	939	940	940	938	940	939	940	
Sep 11	941	941	941	942	942	942	942	943	943	943	943	942	942	942	943	943	944	944	945	946	947	948	948	941	948	943	943	
Sep 12	949	949	950	950	950	950	950	949	949	949	949	948	947	946	945	945	944	944	943	943	943	942	942	942	942	950	947	
Sep 13	942	941	941	940	940	940	940	940	940	940	940	939	939	939	939	939	939	939	939	940	940	940	941	941	939	942	940	
Sep 14	941	941	941	942	942	942	942	943	943	943	942	942	942	942	941	941	941	941	941	941	941	941	941	941	941	941	942	942
Sep 15	941	941	941	941	941	940	940	940	940	940	940	939	939	939	938	938	938	938	938	938	938	938	938	938	938	938	941	939
Sep 16	938	938	938	938	938	938	938	938	938	938	937	937	937	937	937	936	936	936	936	936	936	936	936	936	936	936	938	937
Sep 17	936	936	936	936	936	936	936	936	936	936	936	936	936	937	937	937	937	938	938	939	939	938	939	939	936	939	937	
Sep 18	939	939	939	939	939	939	939	939	938	938	937	937	937	936	936	935	935	935	936	936	937	937	938	938	935	939	937	
Sep 19	938	938	939	940	940	941	941	942	943	943	944	944	945	945	946	946	947	947	948	948	949	949	950	950	938	950	944	
Sep 20	950	950	950	950	950	950	950	950	950	950	950	949	949	948	948	947	947	947	947	947	947	947	947	947	947	950	949	
Sep 21	947	947	947	947	947	947	946	946	946	946	946	945	944	944	943	943	942	941	941	941	940	940	939	939	939	947	944	
Sep 22	939	938	938	937	937	936	936	935	935	934	933	933	932	931	930	930	929	929	928	928	929	929	929	929	928	939	933	
Sep 23	930	931	932	933	933	934	934	935	935	935	935	935	935	935	935	935	935	935	935	935	936	936	936	936	930	936	934	
Sep 24	936	936	936	937	938	939	940	941	942	943	944	944	945	945	945	945	946	946	947	947	948	948	948	936	948	943	943	
Sep 25	948	948	948	947	947	947	947	947	947	947	946	946	945	945	945	945	945	945	945	946	946	946	946	945	948	946	946	
Sep 26	946	947	947	947	947	947	947	947	947	947	947	947	946	946	945	944	944	943	943	943	942	942	942	941	941	947	945	
Sep 27	941	940	940	940	940	940	939	940	939	939	939	939	939	938	938	937	937	937	937	937	938	938	938	937	937	941	939	
Sep 28	939	939	939	939	940	940	940	940	940	941	941	941	941	941	941	941	941	941	941	942	943	943	944	944	939	944	941	
Sep 29	945	945	946	946	947	947	947	947	948	948	949	949	949	949	949	949	949	949	949	949	949	949	950	950	945	950	948	
Sep 30	950	949	949	950	949	950	950	950	950	950	950	949	949	948	948	948	948	948	949	948	948	948	948	948	948	950	949	
Diurnal Maximum	950	950	950	950	950	950	950	950	950	950	950	949	949	949	949	949	949	949	949	949	949	950	950	950				
Diurnal Average	941	941	941	942	942	942	942	942	942	942	942	941	941	941	941	941	941	941	941	941	941	941	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
X	InValid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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

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

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





PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - September 2022

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

Maximum Hourly Value:	29.7 °C	on September 3 at hour 15	Hours in Service:	720
Maximum Daily Value:	19.8 °C	on September 3	Hours of Data:	720
Minimum Hourly Value:	1.9 °C	on September 20 at hour 6	Hours of Missing Data:	0
Minimum Daily Value:	8.6 °C	on September 20	Hours of Calibration:	0
Monthly Average:	13.6 °C		Operational Uptime:	100.0

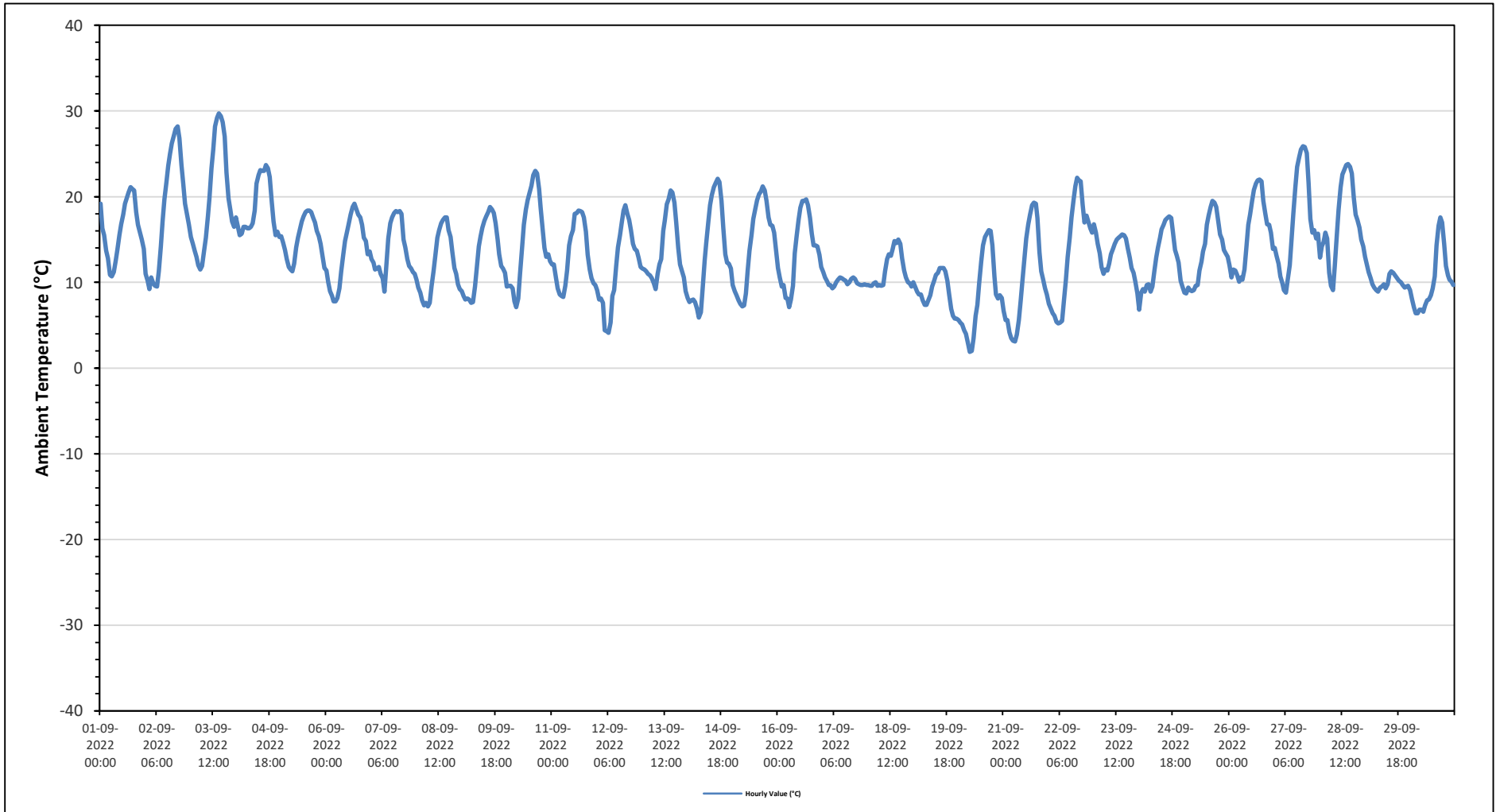
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	19.2	16.3	15.5	13.7	12.8	10.9	10.7	11.2	12.4	13.8	15.5	16.8	17.9	19.2	19.9	20.5	21.1	20.9	20.7	18.2	16.7	15.8	15	13.9	10.7	21.1	16.2
Sep 2	11	10.2	9.2	10.6	9.9	9.6	9.5	11.3	14.2	17.2	19.7	21.7	23.6	25	26.2	27.1	27.9	28.2	26.8	23.7	21.5	19.2	17.9	16.8	9.2	28.2	18.3
Sep 3	15.3	14.6	13.7	13	12	11.5	11.9	13.7	15.2	17.7	19.8	23.3	25.5	28.2	29.2	29.7	29.4	28.7	27	22.8	19.8	18.5	17.1	16.5	11.5	29.7	19.8
Sep 4	17.6	16.5	15.5	15.7	16.5	16.5	16.3	16.3	16.5	16.9	18.4	21.5	22.5	23.1	23	23	23.7	23.3	22.3	19.4	17.1	15.5	15.9	15.3	15.3	23.7	18.7
Sep 5	15.4	14.7	13.8	12.7	11.8	11.5	11.3	12.2	14.1	15.2	16.1	17.1	17.7	18.2	18.4	18.4	18.2	17.5	17	16	15.4	14.5	13	11.7	11.3	18.4	15.1
Sep 6	11.4	10	9	8.4	7.8	7.8	8.2	9.3	11.3	13.2	14.8	15.9	16.9	17.9	18.8	19.2	18.5	17.9	17.6	16.7	15.2	14.8	13.3	13.6	7.8	19.2	13.6
Sep 7	12.7	12.3	11.5	11.6	11.8	11	10.5	8.9	12.2	15.1	16.9	17.6	18.1	18.3	18.2	18.3	18	15	14.1	12.7	11.9	11.6	11.2	11	8.9	18.3	13.8
Sep 8	10.3	9.4	8.8	7.9	7.3	7.6	7.2	7.6	9.5	11.3	13.1	15.2	16.1	16.9	17.3	17.6	17.6	16.1	15.3	13.5	11.7	11	9.8	9.2	7.2	17.6	12.0
Sep 9	9	8.4	8	8.1	8	7.6	7.7	9.5	11.7	14.2	15.4	16.4	17.2	17.7	18.2	18.8	18.5	18.1	16.9	15	13.3	11.9	11.6	11.1	7.6	18.8	13.0
Sep 10	9.5	9.6	9.6	9.3	7.8	7.1	8.1	11	14	16.7	18.5	19.6	20.4	21.3	22.5	23	22.7	20.9	18.7	16.2	14	13	13.3	12.5	7.1	23.0	15.0
Sep 11	12.1	12.1	10.6	9.3	8.6	8.4	8.3	9.6	11.4	14.3	15.4	16.1	18	18.1	18.4	18.3	18.2	17.6	15.9	13.2	11.5	10.5	9.9	9.7	8.3	18.4	13.1
Sep 12	9.1	8	8.1	7.6	4.4	4.3	4.1	5.3	8.4	9.1	11.9	14.1	15.5	17	18.4	19	18	17.3	16.1	14.5	13.9	13.7	12.9	11.8	4.1	19.0	11.8
Sep 13	11.6	11.5	11.3	11	10.8	10.5	9.9	9.2	11	12.1	12.7	16	17.2	19.1	19.7	20.7	20.5	19.3	17	14	12.1	11.4	10.6	9	9.0	20.7	13.7
Sep 14	8.2	7.7	7.9	8	7.7	6.9	5.9	6.5	9.3	12.6	14.6	17	19	20.2	21.1	21.6	22.1	21.7	19.5	16.4	13.3	12.3	12.2	11.6	5.9	22.1	13.5
Sep 15	9.7	9	8.5	7.9	7.5	7.2	7.3	8.7	11.4	13.7	15.5	17.4	18.6	19.6	20.3	20.6	21.2	20.7	19.5	17.6	16.7	16.6	15.8	13.6	7.2	21.2	14.4
Sep 16	11.7	10.6	9.5	9.7	8.2	8.1	7.1	8	9.6	13.4	15.3	17.3	18.7	19.5	19.5	19.7	19	17.5	15.7	14.3	14.3	14.2	13.2	11.8	7.1	19.7	13.6
Sep 17	11.2	10.6	10.2	9.7	9.7	9.3	9.5	10	10.3	10.6	10.5	10.3	10.2	9.8	10	10.4	10.6	10.4	9.9	9.8	9.7	9.7	9.8	9.7	9.3	11.2	10.1
Sep 18	9.7	9.6	9.6	9.9	10	9.6	9.7	9.6	9.7	11.3	12.7	13.3	13.1	13.9	14.8	14.6	15	14.5	12.8	11.4	10.6	10	9.9	9.5	9.5	15.0	11.5
Sep 19	10	9.5	8.9	8.6	8.6	7.9	7.4	7.4	7.9	8.5	9.5	10.2	10.9	11.1	11.7	11.7	11.3	10.2	8.6	6.9	6.1	5.8	5.8	5.8	5.8	11.7	9.0
Sep 20	5.6	5.3	5.1	4.4	4	2.9	1.9	2	3.5	6.1	7.4	9.9	12.4	14.3	15.3	15.7	16.1	16	14.3	10.7	8.6	8.1	8.5	8.2	1.9	16.1	8.6
Sep 21	6.7	5.6	5.6	4.2	3.5	3.2	3.1	3.9	5.6	7.8	10.5	12.8	15.1	16.8	17.9	19	19.3	19.2	17.5	13.5	11.3	10.4	9.3	8.6	3.1	19.3	10.4
Sep 22	7.5	7	6.4	6.1	5.4	5.2	5.3	5.5	7.8	10.3	13	15.2	17.6	19.6	21.2	22.2	21.9	21.8	19	17	17.8	17.1	16.3	15.8	5.2	22.2	13.4
Sep 23	16.8	15.8	14.5	13.4	11.8	11	11.5	11.4	12.2	13.3	13.9	14.5	15	15.2	15.4	15.6	15.5	15.1	14	12.9	11.7	11.1	10.1	8.7	8.7	16.8	13.4
Sep 24	6.8	8.8	9.2	8.9	9.7	9.8	8.9	9.5	11.4	12.9	14.1	15.2	16.2	16.7	17.3	17.5	17.7	17.5	15.8	13.8	13.1	12.3	10.2	9.5	6.8	17.7	12.6
Sep 25	8.8	8.7	9.4	9.1	9	9.1	9.6	9.7	11.4	12.4	13.6	14.5	16.7	17.8	18.8	19.5	19.3	18.8	17.1	15.6	15	13.8	13.4	13	8.7	19.5	13.5
Sep 26	12	10.6	11.5	11.4	10.9	10.1	10.6	10.3	11.5	13.9	16.7	17.9	19.5	20.8	21.5	21.9	22	21.8	19.5	18	16.8	16.7	15.8	13.9	10.1	22.0	15.7
Sep 27	14	13.1	12.2	10.7	9.9	9.1	8.8	10.3	12	15	18	21.1	23.5	24.6	25.5	25.9	25.8	25.1	21.6	17.4	15.8	16.1	15.1	15.7	8.8	25.9	16.9
Sep 28	12.9	14.2	14.7	15.8	15.1	11.1	9.6	9.1	11.9	15.5	18.5	21.1	22.6	23.1	23.7	23.8	23.5	22.7	19.8	17.9	17.3	16.4	15	14.2	9.1	23.8	17.1
Sep 29	13	12.1	11.2	10.5	9.8	9.4	9.1	8.9	9.4	9.5	9.8	9.3	9.8	11	11.3	11.1	10.8	10.5	10.2	10	9.7	9.4	9.5	9.6	8.9	13.0	10.2
Sep 30	9.1	8.1	7.1	6.4	6.4	6.8	6.8	6.6	7.3	7.9	8	8.5	9.3	10.7	14.3	16.6	17.6	17	14.5	11.9	10.8	10.3	10.1	9.7	6.4	17.6	10.1
Diurnal Maximum	19.2	16.5	15.5	15.8	16.5	16.5	16.3	16.3	16.5	17.7	19.8	23.3	25.5	28.2	29.2	29.7	29.4	28.7	27.0	23.7	21.5	19.2	17.9	16.8			
Diurnal Average	11.3	10.7	10.2	9.8	9.2	8.7	8.5	9.1	10.8	12.7	14.3	15.9	17.2	18.2	18.9	19.4	19.4	18.7	17.2	15.1	13.8	13.1	12.4	11.7			

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

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

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

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





PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - September 2022

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

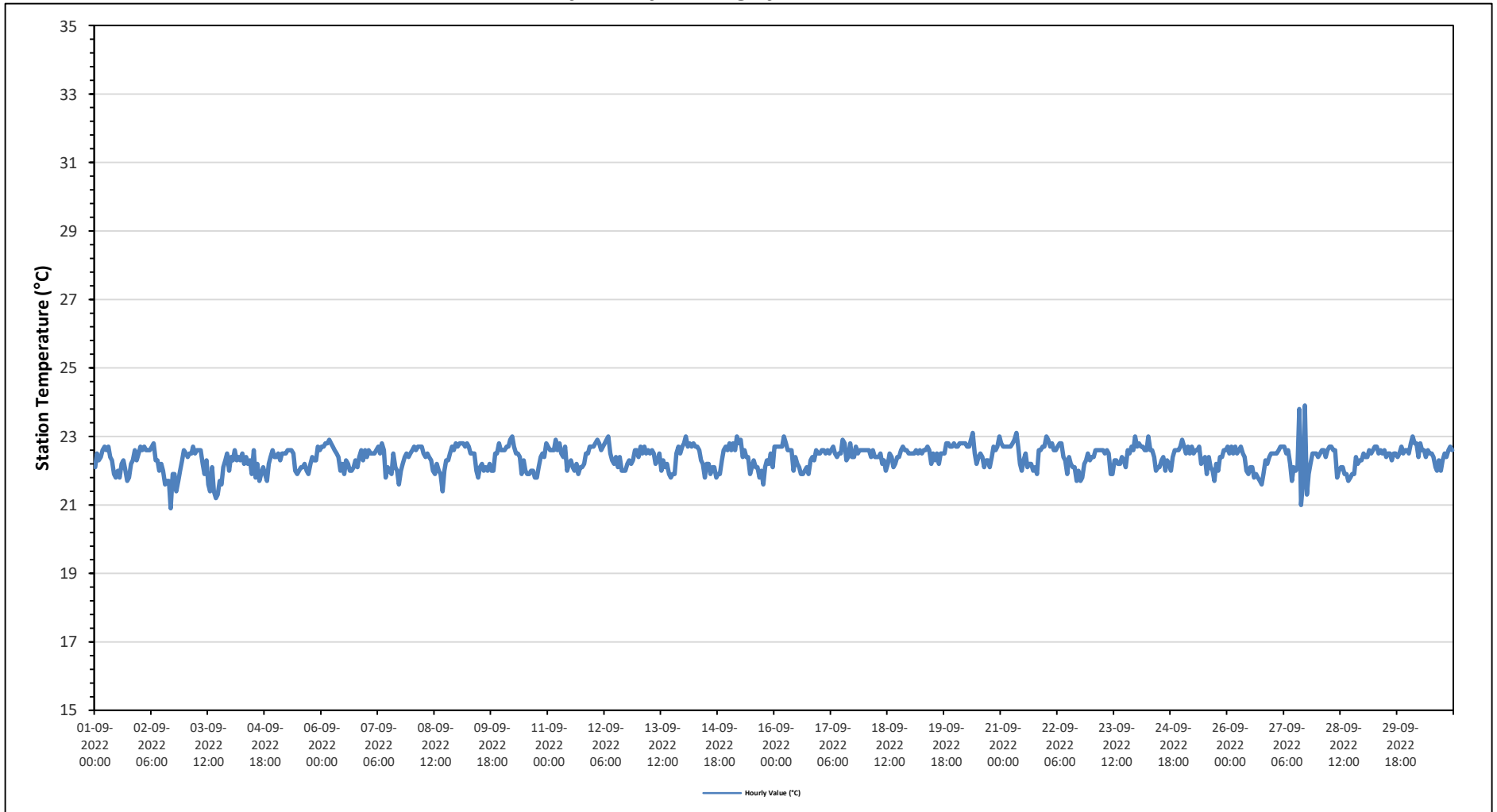
Maximum Hourly Value:	23.9 °C	on September 27 at hour 17	Hours in Service:	720
Maximum Daily Value:	22.6 °C	on September 20	Hours of Data:	720
Minimum Hourly Value:	20.9 °C	on September 2 at hour 16	Hours of Missing Data:	0
Minimum Daily Value:	22.1 °C	on September 3	Hours of Calibration:	0
Monthly Average:	22.4 °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	
Sep 1	22.1	22.5	22.3	22.4	22.6	22.7	22.6	22.7	22.4	22.3	21.9	21.8	22.0	21.8	22.2	22.3	22.0	21.7	21.8	22.2	22.3	22.6	22.3	22.5	21.7	22.7	22.3	
Sep 2	22.7	22.6	22.7	22.6	22.6	22.6	22.7	22.8	22.3	22.3	22.0	22.2	22.0	21.6	21.7	21.7	20.9	21.9	21.9	21.4	21.7	22.0	22.3	22.6	20.9	22.8	22.2	
Sep 3	22.5	22.4	22.5	22.5	22.7	22.5	22.6	22.6	22.2	22.2	21.9	22.3	21.6	21.4	22.1	21.4	21.2	21.3	21.7	21.6	22.1	22.3	22.5	22.0	21.2	22.7	22.1	
Sep 4	22.4	22.3	22.6	22.3	22.4	22.3	22.5	22.2	22.4	22.2	22.3	21.9	22.6	21.8	22.2	21.7	21.9	22.1	21.9	21.7	22.2	22.4	22.6	22.4	21.7	22.6	22.2	
Sep 5	22.4	22.5	22.3	22.5	22.5	22.5	22.6	22.6	22.6	22.5	22.0	21.9	22.0	22.1	22.1	22.2	22.0	21.9	22.2	22.4	22.3	22.3	22.7	22.6	21.9	22.7	22.3	
Sep 6	22.7	22.7	22.8	22.8	22.9	22.8	22.7	22.6	22.5	22.4	22.0	22.2	21.9	22.3	22.2	22.0	22.0	22.1	22.3	22.1	22.4	22.6	22.3	22.6	21.9	22.9	22.4	
Sep 7	22.4	22.6	22.5	22.5	22.5	22.6	22.7	22.5	22.8	22.6	21.8	22.1	22.0	21.9	22.5	22.1	22.0	21.6	22.0	22.2	22.4	22.5	22.4	22.5	21.6	22.8	22.3	
Sep 8	22.6	22.7	22.6	22.7	22.7	22.7	22.5	22.4	22.5	22.4	22.3	22.0	21.9	22.2	22.0	21.9	21.4	22.0	22.3	22.3	22.5	22.7	22.6	22.8	21.4	22.8	22.4	
Sep 9	22.7	22.8	22.8	22.8	22.7	22.8	22.7	22.5	22.5	22.5	22.0	21.8	22.1	22.2	22.0	22.1	22.0	22.2	22.0	22.0	22.5	22.5	22.8	22.6	21.8	22.8	22.4	
Sep 10	22.6	22.6	22.7	22.7	22.9	23.0	22.7	22.5	22.5	22.4	21.9	22.3	22.0	21.9	21.9	22.0	22.0	21.8	21.8	22.1	22.4	22.5	22.4	22.8	21.8	23.0	22.4	
Sep 11	22.7	22.6	22.6	22.6	22.9	22.6	22.8	22.5	22.4	22.7	22.0	22.2	22.3	22.1	22.0	22.2	21.9	22.1	22.1	22.2	22.5	22.5	22.7	22.7	21.9	22.9	22.4	
Sep 12	22.7	22.8	22.9	22.8	22.6	22.7	22.8	22.9	23.0	22.5	22.3	22.2	22.4	22.1	22.4	22.0	22.0	22.0	22.2	22.3	22.2	22.3	22.6	22.6	22.0	23.0	22.5	
Sep 13	22.4	22.7	22.5	22.7	22.5	22.6	22.5	22.6	22.5	22.2	22.3	22.5	22.0	22.3	22.1	22.2	21.9	21.8	21.9	21.9	22.5	22.7	22.5	22.7	21.8	22.7	22.4	
Sep 14	22.8	23.0	22.7	22.8	22.7	22.8	22.7	22.7	22.6	22.3	22.2	21.8	22.2	22.2	21.9	22.1	22.1	21.8	21.9	21.9	22.3	22.6	22.7	22.6	21.8	23.0	22.4	
Sep 15	22.8	22.6	22.8	22.6	23.0	22.8	22.9	22.4	22.6	22.4	22.4	21.9	22.1	22.3	22.1	22.1	21.8	22.0	21.6	22.1	22.3	22.2	22.5	22.1	21.6	23.0	22.4	
Sep 16	22.7	22.7	22.7	22.7	22.7	23.0	22.8	22.6	22.6	22.6	22.0	22.4	22.2	22.1	21.9	21.9	22.0	22.1	21.9	22.3	22.4	22.3	22.6	22.5	21.9	23.0	22.4	
Sep 17	22.5	22.6	22.6	22.5	22.6	22.5	22.6	22.7	22.5	22.4	22.5	22.5	22.9	22.8	22.3	22.4	22.8	22.4	22.4	22.7	22.5	22.6	22.6	22.6	22.3	22.9	22.6	
Sep 18	22.6	22.6	22.6	22.4	22.6	22.4	22.4	22.4	22.5	22.2	22.3	22.0	22.2	22.5	22.4	22.1	22.2	22.4	22.4	22.6	22.7	22.6	22.6	22.5	22.0	22.7	22.4	
Sep 19	22.5	22.5	22.5	22.6	22.5	22.6	22.5	22.6	22.6	22.6	22.7	22.6	22.2	22.5	22.3	22.5	22.2	22.5	22.5	22.5	22.8	22.8	22.7	22.7	22.8	22.2	22.8	22.6
Sep 20	22.7	22.7	22.8	22.8	22.8	22.8	22.7	22.7	22.9	23.1	22.5	22.2	22.4	22.5	22.4	22.1	22.3	22.3	22.1	22.4	22.7	22.6	22.7	23.0	22.1	23.1	22.6	
Sep 21	22.8	22.7	22.7	22.7	22.7	22.7	22.8	22.9	23.1	22.7	22.2	22.0	22.3	22.5	22.1	22.2	22.2	22.0	22.1	21.9	22.6	22.6	22.7	22.7	21.9	23.1	22.5	
Sep 22	23.0	22.9	22.7	22.8	22.6	22.6	22.7	22.8	22.8	22.4	22.3	21.9	22.4	22.2	22.1	22.1	21.7	22.0	21.7	21.8	22.2	22.3	22.5	22.3	21.7	23.0	22.4	
Sep 23	22.4	22.4	22.6	22.6	22.6	22.6	22.6	22.5	22.6	22.5	21.9	21.9	22.3	22.3	22.2	22.2	22.4	22.3	22.1	22.6	22.5	22.7	22.6	23.0	21.9	23.0	22.4	
Sep 24	22.7	22.8	22.7	22.7	22.6	22.6	23.0	22.6	22.6	22.4	22.0	22.1	22.1	22.3	22.4	22.0	22.3	22.2	22.0	22.4	22.6	22.6	22.7	22.0	23.0	22.5	22.5	
Sep 25	22.9	22.7	22.5	22.7	22.5	22.7	22.5	22.6	22.6	22.7	22.2	22.3	22.4	21.9	22.4	22.1	22.0	21.7	22.2	22.0	22.4	22.6	22.6	22.6	21.7	22.9	22.4	
Sep 26	22.7	22.5	22.7	22.5	22.7	22.5	22.6	22.7	22.5	22.4	22.0	21.9	22.1	22.1	21.8	21.9	21.8	21.7	21.6	21.9	22.3	22.2	22.4	22.5	21.6	22.7	22.3	
Sep 27	22.5	22.5	22.5	22.6	22.7	22.7	22.7	22.5	22.6	22.2	21.7	22.1	22.0	22.1	23.8	21.0	21.7	23.9	21.3	21.9	22.2	22.5	22.5	22.5	21.0	23.9	22.4	
Sep 28	22.4	22.5	22.6	22.6	22.4	22.6	22.7	22.7	22.6	22.6	21.8	22.0	22.1	22.1	21.9	21.9	21.7	21.8	21.9	21.9	22.4	22.2	22.3	22.3	21.7	22.7	22.3	
Sep 29	22.5	22.4	22.4	22.6	22.5	22.6	22.7	22.7	22.5	22.6	22.5	22.6	22.4	22.5	22.5	22.3	22.5	22.5	22.4	22.5	22.7	22.5	22.6	22.6	22.3	22.7	22.5	
Sep 30	22.5	22.8	23.0	22.8	22.8	22.4	22.8	22.6	22.6	22.4	22.6	22.5	22.5	22.4	22.1	22.0	22.3	22.0	22.3	22.5	22.4	22.6	22.7	22.6	22.0	23.0	22.5	
Diurnal Maximum	23.0	23.0	23.0	22.8	23.0	23.0	23.0	22.9	23.1	23.1	22.6	22.6	22.9	22.8	23.8	22.4	22.8	23.9	22.5	22.8	22.8	22.7	22.8	23.0				
Diurnal Average	22.6	22.6	22.6	22.6	22.7	22.6	22.7	22.6	22.6	22.5	22.1	22.1	22.2	22.2	22.2	22.0	22.0	22.1	22.0	22.2	22.4	22.5	22.6	22.6				

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

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

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





PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - September 2022

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

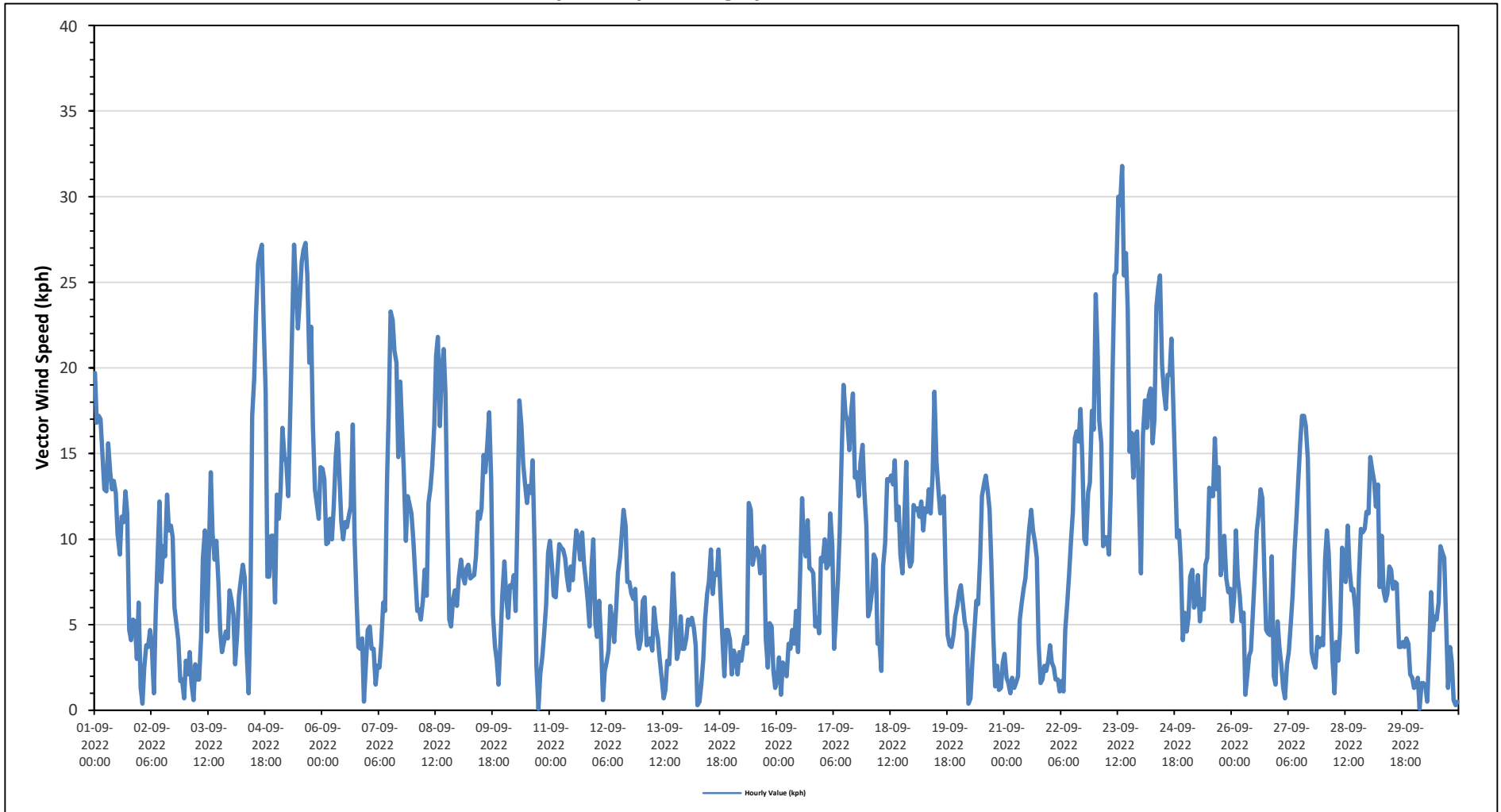
Maximum Hourly Value:	31.8 kph	on September 23 at hour 14	Hours in Service:	720
Maximum Daily Value:	19.0 kph	on September 23	Hours of Data:	720
Minimum Hourly Value:	0.1 kph	on September 10 at hour 18	Hours of Missing Data:	0
Minimum Daily Value:	3.5 kph	on September 30	Hours of Calibration:	0
Monthly Average:	8.9 kph		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	19.7	16.8	17.2	17.0	14.8	12.9	12.8	15.6	13.9	12.9	13.4	12.7	10.3	9.1	11.3	11.0	12.8	11.5	4.7	4.1	5.3	5.2	3.0	6.3	3.0	19.7	11.4
Sep 2	1.3	0.4	2.5	3.8	3.7	4.7	3.7	1.0	5.6	9.1	12.2	7.5	9.6	9.0	12.6	10.5	10.8	10.1	6.0	5.0	4.1	1.7	1.8	0.7	0.4	12.6	5.7
Sep 3	2.9	2.1	3.4	1.6	0.6	2.7	1.8	1.8	4.3	8.9	10.5	4.6	8.9	13.9	10.3	8.8	9.9	7.5	4.7	3.4	4.0	4.6	4.2	7.0	0.6	13.9	5.5
Sep 4	6.4	5.6	2.7	4.5	6.7	7.7	8.5	7.7	3.5	1.0	5.9	17.2	19.4	23.1	26.1	26.7	27.2	22.7	18.6	7.8	7.8	10.2	10.2	6.3	1.0	27.2	11.8
Sep 5	12.6	11.2	12.9	16.5	14.8	14.5	12.5	17.5	22.8	27.2	24.9	22.3	23.9	26.2	26.9	27.3	25.4	20.3	22.4	16.6	12.9	12.1	11.2	14.2	11.2	27.3	18.7
Sep 6	14.1	13.5	9.7	9.8	11.2	10.0	11.9	14.8	16.2	13.5	11.0	10.0	11.0	10.7	11.4	11.9	16.7	10.1	6.4	3.7	3.6	4.2	0.5	2.8	0.5	16.7	9.9
Sep 7	4.7	4.9	3.6	3.6	1.5	2.6	2.5	3.9	6.3	5.8	13.5	17.7	23.3	22.8	21.0	20.3	14.8	19.2	16.5	13.9	9.9	12.5	12.0	11.5	1.5	23.3	11.2
Sep 8	9.8	7.9	5.8	5.9	5.3	6.4	8.2	6.7	12.1	13.0	14.3	16.7	20.7	21.8	16.6	19.8	21.1	18.5	10.7	5.3	4.9	6.5	7.0	6.1	4.9	21.8	11.3
Sep 9	7.7	8.8	7.9	7.4	8.3	8.5	7.7	7.8	7.9	9.0	11.6	11.2	11.8	14.9	13.9	15.6	17.4	13.4	5.6	3.7	2.9	1.5	4.2	6.8	1.5	17.4	9.0
Sep 10	8.7	6.6	5.4	7.3	7.2	7.9	5.8	11.7	18.1	16.6	14.4	13.1	12.1	13.1	12.7	14.6	9.4	2.6	0.1	2.1	3.1	4.4	6.1	9.2	0.1	18.1	8.8
Sep 11	9.9	8.5	6.7	6.6	8.2	9.7	9.5	9.4	8.9	7.8	7.0	8.4	7.6	9.2	10.5	10.0	8.8	10.4	8.6	7.5	6.4	4.9	8.4	10.0	4.9	10.5	8.5
Sep 12	5.1	4.3	6.4	4.2	0.6	2.3	2.8	3.5	6.1	5.2	4.0	6.0	8.0	8.9	10.3	11.7	10.8	7.5	7.5	6.8	6.5	7.1	4.5	3.6	0.6	11.7	6.0
Sep 13	4.1	6.4	6.6	3.8	3.9	4.2	3.5	6.0	4.8	4.2	2.9	1.9	0.7	1.2	2.9	2.7	4.9	8.0	5.8	3.0	3.5	5.5	3.6	3.6	0.7	8.0	4.1
Sep 14	4.2	5.3	5.0	5.4	4.8	3.8	0.3	0.5	1.5	3.0	5.3	6.8	7.5	9.4	6.8	8.0	7.9	9.4	6.6	4.3	2.0	4.7	4.7	4.1	0.3	9.4	5.1
Sep 15	2.1	3.5	3.1	2.1	3.4	2.9	3.7	4.3	3.9	12.1	11.7	8.5	9.1	9.5	9.3	8.0	8.6	9.6	4.2	2.5	5.1	4.9	2.3	1.3	1.3	12.1	5.7
Sep 16	1.8	3.1	0.9	2.8	2.4	2.0	3.9	3.6	4.7	3.9	5.8	3.4	7.3	12.4	9.7	9.0	11.1	8.3	8.2	8.0	4.9	5.4	4.5	8.9	0.9	12.4	5.7
Sep 17	8.7	10.0	8.3	8.5	11.5	9.6	3.6	5.4	7.6	10.4	15.1	19.0	17.3	16.9	15.2	17.4	18.5	13.6	13.9	12.5	14.5	15.5	12.8	10.8	3.6	19.0	12.4
Sep 18	5.5	5.9	6.9	9.1	8.8	3.9	3.9	2.3	8.4	9.8	13.5	13.4	13.7	13.2	14.6	11.1	11.9	9.1	8.0	10.9	14.5	9.3	8.4	8.7	2.3	14.6	9.4
Sep 19	12.0	11.7	11.8	11.3	12.2	10.5	11.8	11.6	12.9	11.5	13.8	18.6	14.5	13.0	11.5	12.2	12.5	7.3	4.4	3.8	3.7	4.4	5.5	6.1	3.7	18.6	10.4
Sep 20	6.9	7.3	6.2	5.2	4.6	0.4	0.7	3.0	4.6	6.4	6.2	8.9	12.5	13.2	13.7	12.8	11.7	8.6	4.3	1.4	2.6	1.2	1.3	2.8	0.4	13.7	6.1
Sep 21	3.3	1.9	1.6	1.0	1.9	1.3	1.6	2.0	5.3	6.2	7.1	7.7	9.3	10.6	11.7	10.5	9.8	8.9	3.9	1.6	1.8	2.6	2.3	2.9	1.0	11.7	4.9
Sep 22	3.8	2.8	2.5	1.8	1.8	1.1	1.7	1.1	4.7	6.3	7.9	10.0	11.6	15.9	16.3	15.7	17.6	14.8	10.0	9.7	12.7	13.3	17.5	16.4	1.1	17.6	9.0
Sep 23	24.3	21.1	16.9	15.6	9.6	10.1	10.1	9.1	12.8	19.5	25.4	25.6	30.0	29.5	31.8	25.4	26.7	23.4	15.1	16.2	13.6	16.1	16.3	11.9	9.1	31.8	19.0
Sep 24	8.0	16.1	18.1	16.5	18.4	18.8	15.6	17.0	23.6	24.7	25.4	20.2	18.7	17.6	19.6	19.6	21.7	17.5	13.9	10.1	10.5	8.6	4.1	5.7	4.1	25.4	16.3
Sep 25	4.6	5.4	7.8	8.2	6.0	6.3	7.9	5.2	6.5	5.9	8.5	8.9	13.0	12.5	12.5	15.9	12.9	14.2	7.9	8.6	10.2	7.7	6.9	7.1	4.6	15.9	8.8
Sep 26	5.2	6.6	10.5	7.8	6.7	5.2	5.7	0.9	2.1	3.2	3.5	5.8	7.9	10.5	11.4	12.9	12.4	8.0	4.7	4.5	4.4	9.0	2.0	1.5	0.9	12.9	6.4
Sep 27	5.2	3.7	2.6	1.3	0.7	2.7	3.4	5.1	6.7	9.4	11.2	13.3	15.6	17.2	17.2	16.6	14.7	8.9	3.4	2.8	2.5	4.3	3.7	4.2	0.7	17.2	7.4
Sep 28	3.8	8.8	10.5	9.2	5.8	3.0	1.0	4.0	2.9	4.6	9.5	8.1	7.5	10.8	8.3	7.0	7.1	5.9	3.4	7.7	10.6	10.4	10.6	11.6	1.0	11.6	7.2
Sep 29	11.5	14.8	14.0	13.4	11.9	13.2	7.2	10.2	7.0	6.4	6.8	8.4	8.2	7.1	7.5	7.4	3.7	4.0	3.7	4.2	3.9	2.1	1.9	1.9	1.9	14.8	7.6
Sep 30	1.3	1.4	1.9	0.1	1.6	1.6	1.4	0.5	3.5	6.9	4.7	5.5	5.3	6.3	9.6	9.2	8.9	4.9	1.3	3.7	2.8	0.6	0.3	0.5	0.1	9.6	3.5
Diurnal Maximum	24	21	18	17	18	19	16	18	24	27	25	26	30	30	32	27	27	23	22	17	15	16	18	16			
Diurnal Average	7.3	7.5	7.3	7.0	6.6	6.4	5.8	6.4	8.3	9.5	10.9	11.4	12.5	13.7	13.8	13.7	13.6	11.3	7.8	6.5	6.5	6.7	6.1	6.5			

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

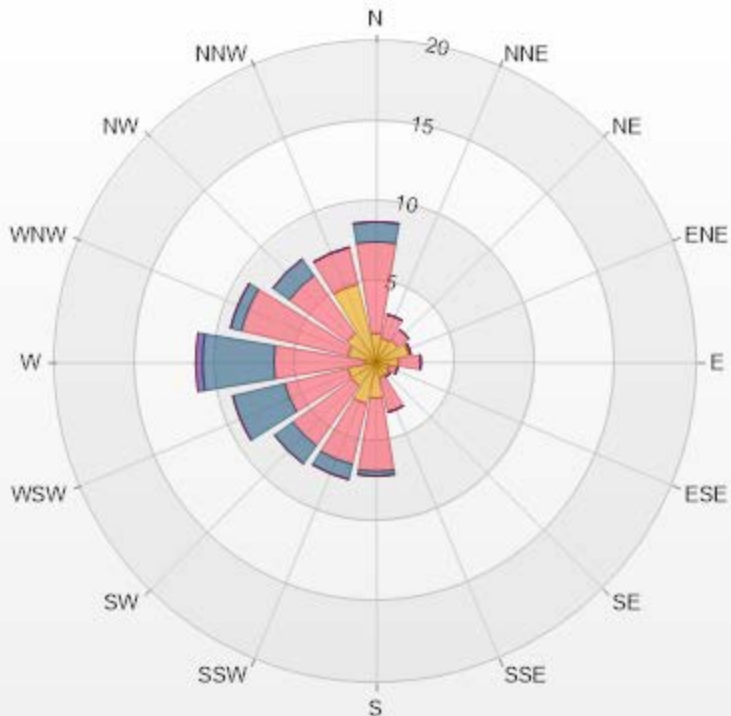
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

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



Wind: AQHI Grimshaw Monitor: WDS [KPH] Monthly: 09-2022 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 7.64% Valid Data: 100.00%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	1.81	5.69	1.25	0	0	8.75
NNE	1.53	1.53	0	0	0	3.06
NE	1.67	0.83	0	0	0	2.5
ENE	2.08	0.14	0	0	0	2.22
E	1.39	1.39	0	0	0	2.78
ESE	0.83	0.56	0	0	0	1.39
SE	0.97	0.14	0	0	0	1.11
SSE	0.97	2.22	0	0	0	3.19
S	2.22	4.58	0.28	0	0	7.08
SSW	2.64	3.89	0.97	0	0	7.5
SW	1.81	4.58	1.39	0	0	7.78
WSW	1.81	4.03	3.33	0	0	9.17
W	0.69	5.69	4.44	0.42	0	11.24
WNW	1.81	6.81	0.69	0	0	9.31
NW	2.22	4.44	1.25	0	0	7.91
NNW	5	2.36	0	0	0	7.36
Summary	29.45	48.88	13.6	0.42	0	92.35



PRAMP-202209

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% Icon Classes (KPH)

29

1.8-6.0

49

6.0-15.0

14

15.0-29.0

0

29.0-39.0

0

>39.0



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - September 2022

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

Monthly Average:	276 (W) degree	Hours in Service:	720
		Hours of Data:	720
		Hours of Missing Data:	0
		Hours of Calibration:	0
		Operational Uptime:	100.0

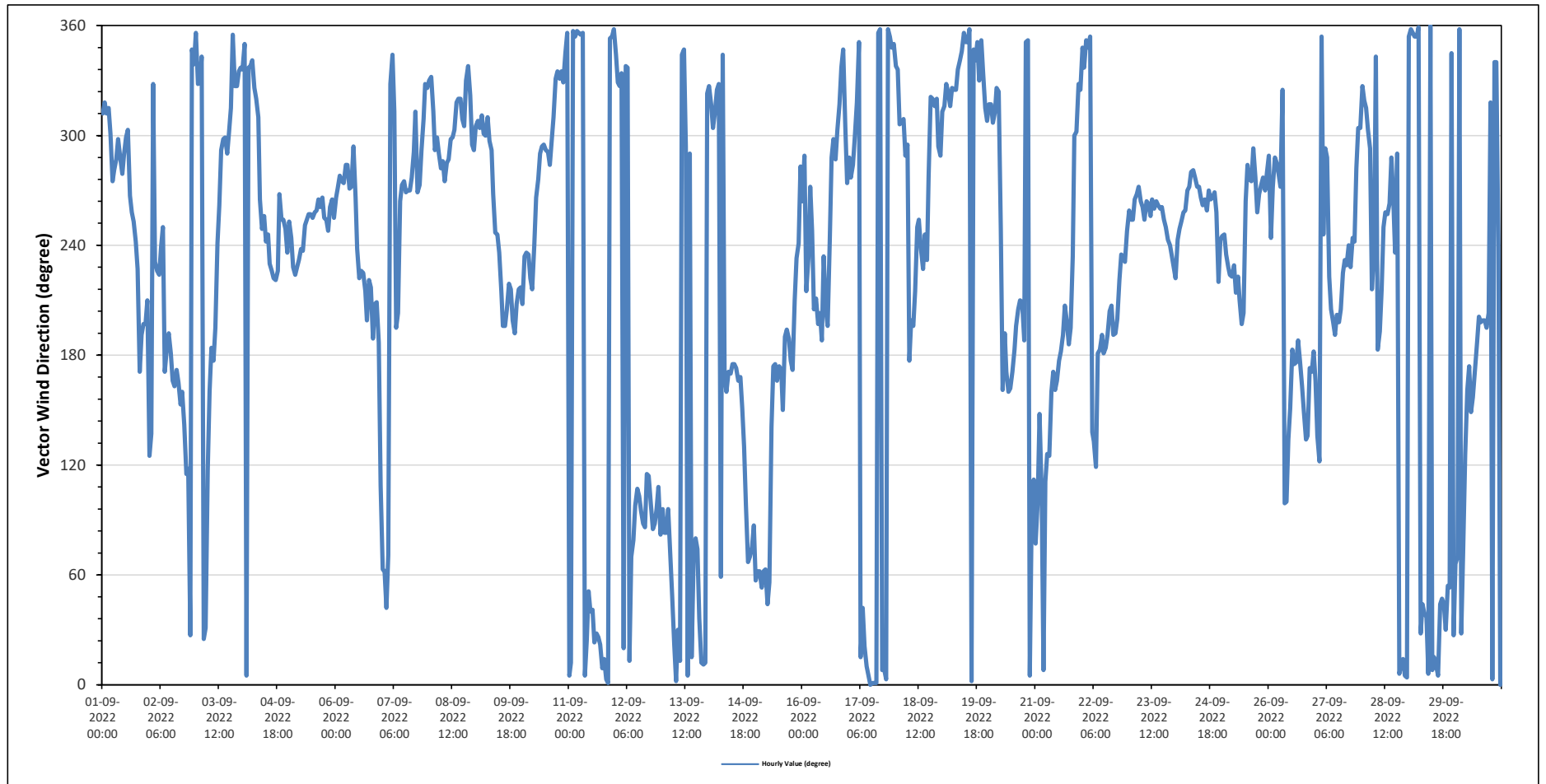
Day	Hourly Period Starting at (MST)																							Daily Average			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant	
Sep 1	NW	NW	NW	NW	WNW	W	W	WNW	WNW	WNW	W	WNW	WNW	WNW	W	WSW	WSW	WSW	SW	S	S	SSW	SSW	SSW	269	W	
Sep 2	SE	SE	NNW	SW	SW	SW	WSW	WSW	S	S	S	S	SSE	SSE	S	SSE	SSE	SSE	SE	ESE	ESE	NNE	NNW	NNW	176	S	
Sep 3	N	NNW	NNW	NNW	NNE	NNE	ESE	SSE	S	S	SSW	WSW	W	WNW	WNW	WNW	WNW	WNW	N	NW	NW	NNW	NNW	NNW	313	NW	
Sep 4	NNW	N	N	NNW	NNW	NNW	NW	NW	NW	W	WSW	WSW	WSW	WSW	SW	SW	SW	SW	W	WSW	WSW	WSW	SW	SW	275	W	
Sep 5	WSW	WSW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	WSW	WSW	WSW	W	W	WSW	WSW	250	WSW	
Sep 6	W	W	W	W	W	WNW	WNW	W	W	WNW	W	SW	SW	SW	SW	SSW	SSW	SW	SW	S	SSW	SSW	S	ESE	241	WSW	
Sep 7	ENE	ENE	NE	ENE	NNW	NNW	SSW	SSW	W	W	W	W	W	W	W	W	WNW	NW	W	WNW	NW	NNW	NW	NW	298	WNW	
Sep 8	NNW	NNW	NW	WNW	WNW	WNW	W	WNW	W	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	WNW	NNW	NNW	NW	WNW	WNW	305	WNW	
Sep 9	WNW	NW	WNW	NW	WNW	WNW	NW	WNW	WNW	W	WSW	WSW	SW	SSW	SSW	SSW	SSW	SW	SW	SSW	S	SSW	SW	SW	249	WSW	
Sep 10	SSW	SW	SW	SW	SW	SW	WSW	W	W	WNW	WNW	WNW	WNW	WNW	NW	NNW	NW	NNW	NNW	NNW	NNW	NNW	NNW	N	286	WNW	
Sep 11	N	NNE	N	N	N	N	N	N	N	NNE	NE	NE	NE	NNE	NNE	NNE	NNE	N	NNE	N	N	N	N	N	11	NNE	
Sep 12	NNW	NNW	NW	NNW	NNE	NNW	NNW	NNE	ENE	ENE	E	ESE	ESE	E	E	ESE	ESE	E	E	E	E	E	ESE	E	66	ENE	
Sep 13	E	E	E	E	ENE	NE	NNE	N	NNE	NNE	NNW	NNW	N	WNW	NNE	ENE	E	ENE	NE	NNE	NNE	NNE	NNE	NW	29	NNE	
Sep 14	NW	NW	WNW	NW	NW	NNW	ENE	NNW	SSE	SSE	S	SSE	S	S	S	SSE	SSE	SSE	SE	E	ENE	ENE	ENE	E	129	SE	
Sep 15	ENE	ENE	ENE	NE	ENE	ENE	NE	NE	SE	S	S	SSE	S	S	SSE	S	SSW	S	S	S	SSW	SW	WSW	W	151	SSE	
Sep 16	W	WNW	SSW	SW	W	WSW	SSW	SSW	SSW	S	SW	SSW	SSW	WSW	WNW	WNW	WNW	WNW	NW	NNW	NNW	NNW	WNW	W	255	WSW	
Sep 17	WNW	W	WNW	WNW	NW	N	NNE	NE	NNE	N	N	N	N	N	N	N	N	N	N	N	N	N	NNW	N	351	N	
Sep 18	NNW	NNW	NW	NW	NW	WNW	WNW	S	SSW	SSW	SSW	WSW	WSW	SW	SW	WSW	SW	W	NW	NW	NW	NW	WNW	WNW	276	W	
Sep 19	NW	NW	NNW	NW	NW	NW	NW	NW	NNW	NNW	N	N	N	N	N	NNW	NNW	N	NNW	N	NNW	N	NNW	NW	336	NNW	
Sep 20	NW	NW	NW	NW	NW	NW	WSW	SSE	S	S	SSE	SSE	S	S	SSW	SSW	SSW	SSW	S	N	N	N	ESE	ESE	219	SW	
Sep 21	ENE	E	SE	ESE	N	ESE	SE	SE	SSE	S	SSE	SSE	S	S	S	SSW	SSW	S	SSW	SW	WNW	WNW	NNW	NW	167	SSE	
Sep 22	NNW	NNW	N	NNW	N	SE	SE	ESE	S	S	S	S	S	S	SSW	SSW	S	S	SSW	SW	SW	SW	SW	WSW	205	SSW	
Sep 23	WSW	WSW	WSW	W	W	W	W	W	WSW	W	W	WSW	W	WSW	W	W	WSW	W	WSW	WSW	WSW	WSW	WSW	SW	SW	257	WSW
Sep 24	SW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	W	W	W	W	W	WSW	W	W	W	W	WSW	SW	WSW	261	W	
Sep 25	WSW	WSW	SW	SW	SW	SW	SSW	SW	SSW	SSW	SSW	SSW	W	WNW	W	WNW	W	WSW	W	W	W	W	W	W	249	WSW	
Sep 26	WNW	WSW	W	WNW	WNW	W	W	NW	E	E	SE	SSE	S	S	S	S	SSE	SSE	SE	SE	S	S	S	S	188	S	
Sep 27	SSE	SE	ESE	N	WSW	WNW	WNW	SW	SSW	SSW	S	SSW	SSW	SSW	SW	SW	WSW	SW	WSW	SW	WSW	W	WNW	WNW	230	SW	
Sep 28	NW	NW	NW	WNW	WNW	SW	SW	NNW	S	S	SW	WSW	WSW	W	WNW	W	SW	WNW	N	NNE	NNE	N	N	N	287	WNW	
Sep 29	N	N	N	N	N	N	NNE	NE	NE	NE	N	N	N	NNE	NNE	N	NE	NE	NE	NNE	NE	NE	NNW	NNE	19	NNE	
Sep 30	ENE	ENE	N	NNE	ENE	SE	SSE	S	SSE	SSE	S	S	SSW	SSW	SSW	SSW	SSW	SSW	NW	N	NNW	NNW	WSW	N	165	SSE	

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

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

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

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





PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - September 2022

Summary of Hourly Averages

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

WIND SPEED																											
Maximum Hourly Value:	31.8	kph	on September 23 at hour 14	Hours in Service:	720																						
Maximum Daily Value:	19.0	kph	on September 23	Hours of Data:	720																						
Minimum Hourly Value:	0.1	kph	on September 10 at hour 18	Hours of Missing Data:	0																						
Minimum Daily Value:	3.5	kph	on September 30	Hours of Calibration:	0																						
Monthly Average:	8.9	kph		Operational Uptime:	100																						
WIND DIRECTION																											
Monthly Average:	276	(W)	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			
Sep 1	19.7	16.8	17.2	17.0	14.8	12.9	12.8	15.6	13.9	12.9	13.4	12.7	10.3	9.1	11.3	11.0	12.8	11.5	4.7	4.1	5.3	5.2	3.0	6.3	3.0	19.7	11.4
Sep 2	1.3	0.4	2.5	3.8	3.7	4.7	3.7	1.0	5.6	9.1	12.2	7.5	9.6	9.0	12.6	10.5	10.8	10.1	6.0	5.0	4.1	1.7	1.8	0.7	0.4	12.6	5.7
Sep 3	2.9	2.1	3.4	1.6	0.6	2.7	1.8	1.8	4.3	8.9	10.5	4.6	8.9	13.9	10.3	8.8	9.9	7.5	4.7	3.4	4.0	4.6	4.2	7.0	0.6	13.9	5.5
Sep 4	6.4	5.6	2.7	4.5	6.7	7.7	8.5	7.7	3.5	1.0	5.9	17.2	19.4	23.1	26.1	26.7	27.2	22.7	18.6	7.8	7.8	10.2	10.2	6.3	1.0	27.2	11.8
Sep 5	12.6	11.2	12.9	16.5	14.8	14.5	12.5	17.5	22.8	27.2	24.9	22.3	23.9	26.2	26.9	27.3	25.4	20.3	22.4	16.6	12.9	12.1	11.2	14.2	11.2	27.3	18.7
Sep 6	14.1	13.5	9.7	9.8	11.2	10.0	11.9	14.8	16.2	13.5	11.0	10.0	11.0	10.7	11.4	11.9	16.7	10.1	6.4	3.7	3.6	4.2	0.5	2.8	0.5	16.7	9.9
Sep 7	4.7	4.9	3.6	3.6	1.5	2.6	2.5	3.9	6.3	5.8	13.5	17.7	23.3	22.8	21.0	20.3	14.8	19.2	16.5	13.9	9.9	12.5	12.0	11.5	1.5	23.3	11.2
Sep 8	9.8	7.9	5.8	5.9	5.3	6.4	8.2	6.7	12.1	13.0	14.3	16.7	20.7	21.8	16.6	19.8	21.1	18.5	10.7	5.3	4.9	6.5	7.0	6.1	4.9	21.8	11.3
Sep 9	7.7	8.8	7.9	7.4	8.3	8.5	7.7	7.8	7.9	9.0	11.6	11.2	11.8	14.9	13.9	15.6	17.4	13.4	5.6	3.7	2.9	1.5	4.2	6.8	1.5	17.4	9.0
Sep 10	8.7	6.6	5.4	7.3	7.2	7.9	5.8	11.7	18.1	16.6	14.4	13.1	12.1	13.1	12.7	14.6	9.4	2.6	0.1	2.1	3.1	4.4	6.1	9.2	0.1	18.1	8.8
Sep 11	9.9	8.5	6.7	6.6	8.2	9.7	9.5	9.4	8.9	7.8	7.0	8.4	7.6	9.2	10.5	10.0	8.8	10.4	8.6	7.5	6.4	4.9	8.4	10.0	4.9	10.5	8.5
Sep 12	5.1	4.3	6.4	4.2	0.6	2.3	2.8	3.5	6.1	5.2	4.0	6.0	8.0	8.9	10.3	11.7	10.8	7.5	7.5	6.8	6.5	7.1	4.5	3.6	0.6	11.7	6.0
Sep 13	4.1	6.4	6.6	3.8	3.9	4.2	3.5	6.0	4.8	4.2	2.9	1.9	0.7	1.2	2.9	2.7	4.9	8.0	5.8	3.0	3.5	5.5	3.6	3.6	0.7	8.0	4.1
Sep 14	4.2	5.3	5.0	5.4	4.8	3.8	0.3	0.5	1.5	3.0	5.3	6.8	7.5	9.4	6.8	8.0	7.9	9.4	6.6	4.3	2.0	4.7	4.7	4.1	0.3	9.4	5.1
Sep 15	2.1	3.5	3.1	2.1	3.4	2.9	3.7	4.3	3.9	12.1	11.7	8.5	9.1	9.5	9.3	8.0	8.6	9.6	4.2	2.5	5.1	4.9	2.3	1.3	1.3	12.1	5.7
Sep 16	1.8	3.1	0.9	2.8	2.4	2.0	3.9	3.6	4.7	3.9	5.8	3.4	7.3	12.4	9.7	9.0	11.1	8.3	8.2	8.0	4.9	5.4	4.5	8.9	0.9	12.4	5.7
Sep 17	8.7	10.0	8.3	8.5	11.5	9.6	3.6	5.4	7.6	10.4	15.1	19.0	17.3	16.9	15.2	17.4	18.5	13.6	13.9	12.5	14.5	15.5	12.8	10.8	3.6	19.0	12.4
Sep 18	5.5	5.9	6.9	9.1	8.8	3.9	3.9	2.3	8.4	9.8	13.5	13.4	13.7	13.2	14.6	11.1	11.9	9.1	8.0	10.9	14.5	9.3	8.4	8.7	2.3	14.6	9.4
Sep 19	12.0	11.7	11.8	11.3	12.2	10.5	11.8	11.6	12.9	11.5	13.8	18.6	14.5	13.0	11.5	12.2	12.5	7.3	4.4	3.8	3.7	4.4	5.5	6.1	3.7	18.6	10.4
Sep 20	6.9	7.3	6.2	5.2	4.6	0.4	0.7	3.0	4.6	6.4	6.2	8.9	12.5	13.2	13.7	12.8	11.7	8.6	4.3	1.4	2.6	1.2	1.3	2.8	0.4	13.7	6.1



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Grimshaw Station - September 2022

Summary of Hourly Averages

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

WIND SPEED																																			
Maximum Hourly Value:	31.8 kph on September 23 at hour 14																																		
Maximum Daily Value:	19.0 kph on September 23																																		
Minimum Hourly Value:	0.1 kph on September 10 at hour 18																																		
Minimum Daily Value:	3.5 kph on September 30																																		
Monthly Average:	8.9 kph																																		
Hours in Service:	720																																		
Hours of Data:	720																																		
Hours of Missing Data:	0																																		
Hours of Calibration:	0																																		
Operational Uptime:	100																																		
WIND DIRECTION																																			
Monthly Average:	276 (W) degree																																		
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average									
Sep 21	3.3	1.9	1.6	1.0	1.9	1.3	1.6	2.0	5.3	6.2	7.1	7.7	9.3	10.6	11.7	10.5	9.8	8.9	3.9	1.6	1.8	2.6	2.3	2.9	1.0	11.7	4.9								
Sep 22	ENE	E	SE	ESE	N	ESE	SE	SE	SSE	S	SSE	SSE	S	S	S	SSW	SSW	S	SSW	SW	WNW	WNW	NNW	NW	1.1	17.6	9.0								
Sep 23	3.8	2.8	2.5	1.8	1.8	1.1	1.7	1.1	4.7	6.3	7.9	10.0	11.6	15.9	16.3	15.7	17.6	14.8	10.0	9.7	12.7	13.3	17.5	16.4	9.1	31.8	19.0								
Sep 24	NNW	NNW	N	NNW	N	SE	SE	ESE	S	S	S	S	S	S	SSW	SSW	S	S	SSW	SW	SW	SW	SW	WSW	4.1	25.4	16.3								
Sep 25	24.3	21.1	16.9	15.6	9.6	10.1	10.1	9.1	12.8	19.5	25.4	25.6	30.0	29.5	31.8	25.4	26.7	23.4	15.1	16.2	13.6	16.1	16.3	11.9	4.1	25.4	16.3								
Sep 26	WSW	WSW	WSW	W	W	W	W	W	WSW	W	W	WSW	W	W	WSW	W	W	WSW	W	WSW	WSW	WSW	WSW	SW	4.6	15.9	8.8								
Sep 27	8.0	16.1	18.1	16.5	18.4	18.8	15.6	17.0	23.6	24.7	25.4	20.2	18.7	17.6	19.6	19.6	21.7	17.5	13.9	10.1	10.5	8.6	4.1	5.7	4.1	25.4	16.3								
Sep 28	SW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	W	W	W	W	W	WSW	W	W	W	W	WSW	SW	WSW	4.6	15.9	8.8								
Sep 29	4.6	5.4	7.8	8.2	6.0	6.3	7.9	5.2	6.5	5.9	8.5	8.9	13.0	12.5	12.5	15.9	12.9	14.2	7.9	8.6	10.2	7.7	6.9	7.1	4.6	15.9	8.8								
Sep 30	WSW	WSW	SW	SW	SW	SW	SSW	SW	SSW	SSW	SSW	W	WNW	W	W	WNW	W	WSW	W	WSW	W	W	W	W	0.9	12.9	6.4								
Sep 21	5.2	6.6	10.5	7.8	6.7	5.2	5.7	0.9	2.1	3.2	3.5	5.8	7.9	10.5	11.4	12.9	12.4	8.0	4.7	4.5	4.4	9.0	2.0	1.5	0.9	12.9	6.4								
Sep 22	WNW	WSW	W	WNW	WNW	W	NW	E	E	SE	SSE	S	S	S	S	S	SSE	SSE	SE	SE	S	S	S	0.7	17.2	7.4									
Sep 23	5.2	3.7	2.6	1.3	0.7	2.7	3.4	5.1	6.7	9.4	11.2	13.3	15.6	17.2	17.2	16.6	14.7	8.9	3.4	2.8	2.5	4.3	3.7	4.2	0.7	17.2	7.4								
Sep 24	SSE	SE	ESE	N	WSW	WNW	WNW	SW	SSW	SSW	S	SSW	SSW	SSW	SW	SW	SW	WSW	SW	WSW	WSW	W	WNW	WNW	1.0	11.6	7.2								
Sep 25	3.8	8.8	10.5	9.2	5.8	3.0	1.0	4.0	2.9	4.6	9.5	8.1	7.5	10.8	8.3	7.0	7.1	5.9	3.4	7.7	10.6	10.4	10.6	11.6	1.0	11.6	7.2								
Sep 26	NW	NW	NW	WNW	WNW	SW	SW	NNW	S	S	SW	WSW	WSW	WSW	W	WNW	W	SW	WNW	N	NNE	NNE	N	N	1.9	14.8	7.6								
Sep 27	11.5	14.8	14.0	13.4	11.9	13.2	7.2	10.2	7.0	6.4	6.8	8.4	8.2	7.1	7.5	7.4	3.7	3.7	4.0	3.7	4.2	3.9	2.1	1.9	1.9	14.8	7.6								
Sep 28	N	N	N	N	N	N	NNE	NE	NE	NE	N	N	N	NNE	NNE	N	NE	NE	NE	NNE	NE	NE	NNW	NNE	1.9	14.8	7.6								
Sep 29	1.3	1.4	1.9	0.1	1.6	1.6	1.4	0.5	3.5	6.9	4.7	5.5	5.3	6.3	9.6	9.2	8.9	4.9	1.3	3.7	2.8	0.6	0.3	0.5	0.1	9.6	3.5								
Sep 30	ENE	ENE	N	NNE	ENE	SE	SSE	S	SSE	SSE	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	NNW	NNW	NNW	WSW	N	0.1	9.6	3.5								
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	Unit/Maint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)																									
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.																																			
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.																																			

END OF REPORT

This page, 277 of 277, ends the September 2022 Monthly Ambient Air Quality Monitoring Report.



Peace River Area Monitoring Program

SEPTEMBER 2022

Ambient Air Monitoring Calibration Report

- 842b STATION-

CAL-PRAMP-202209-01561

Operation and Maintenance:

Bureau Veritas Canada

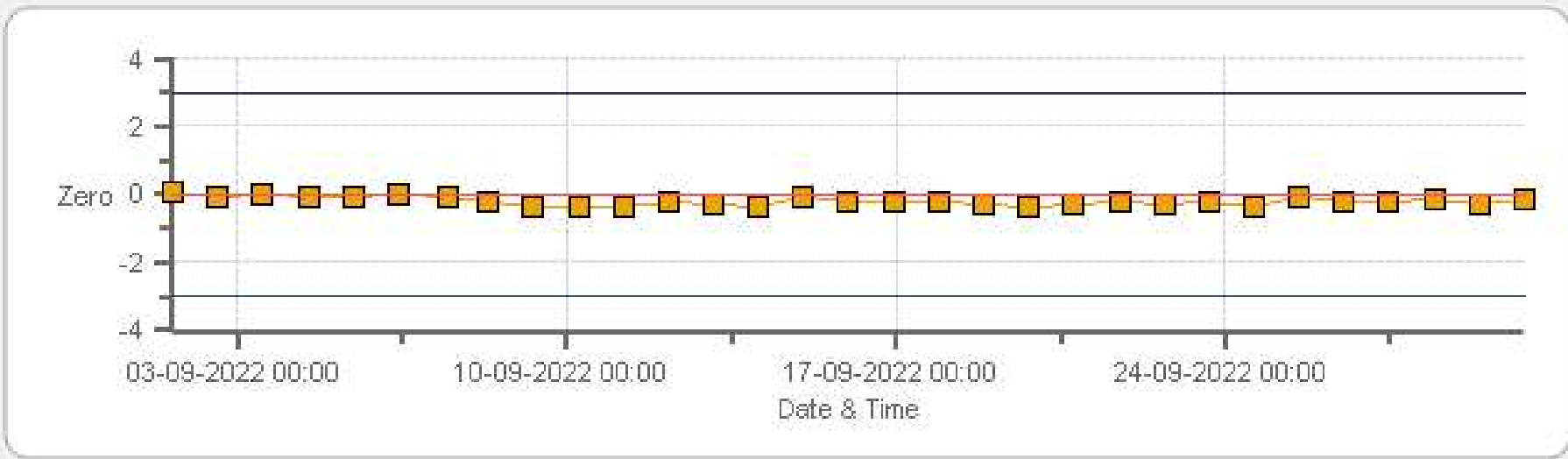
Data Validation and Report:

Bureau Veritas Canada

October 20, 2022

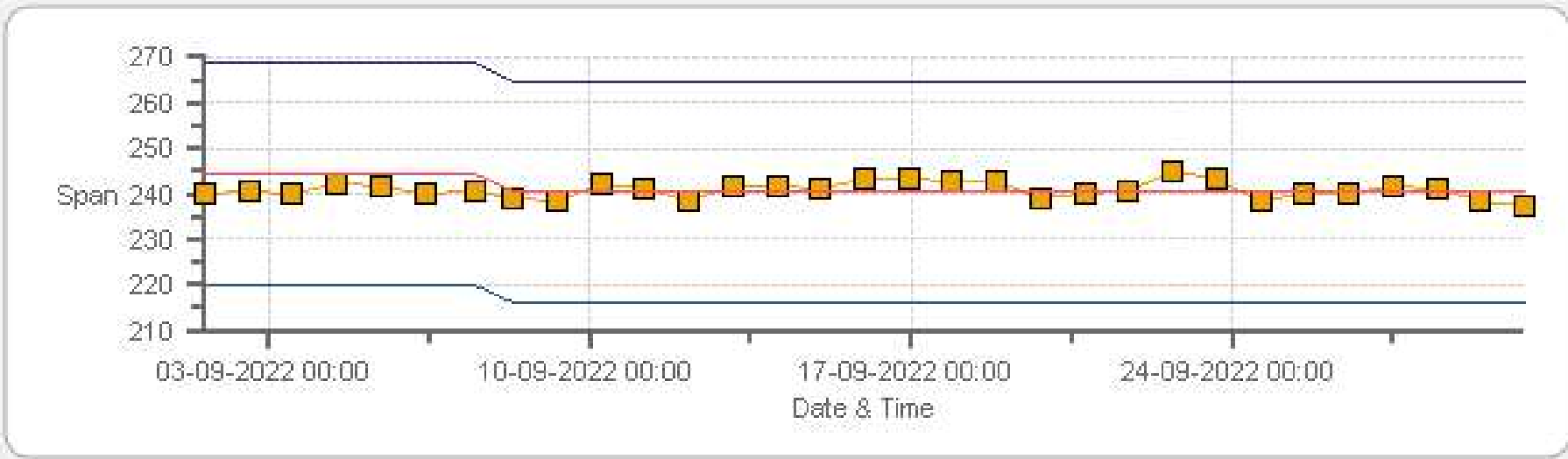
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: PRAMP 842b Monthly: 09-2022 Type: SpanAndZero - Zero



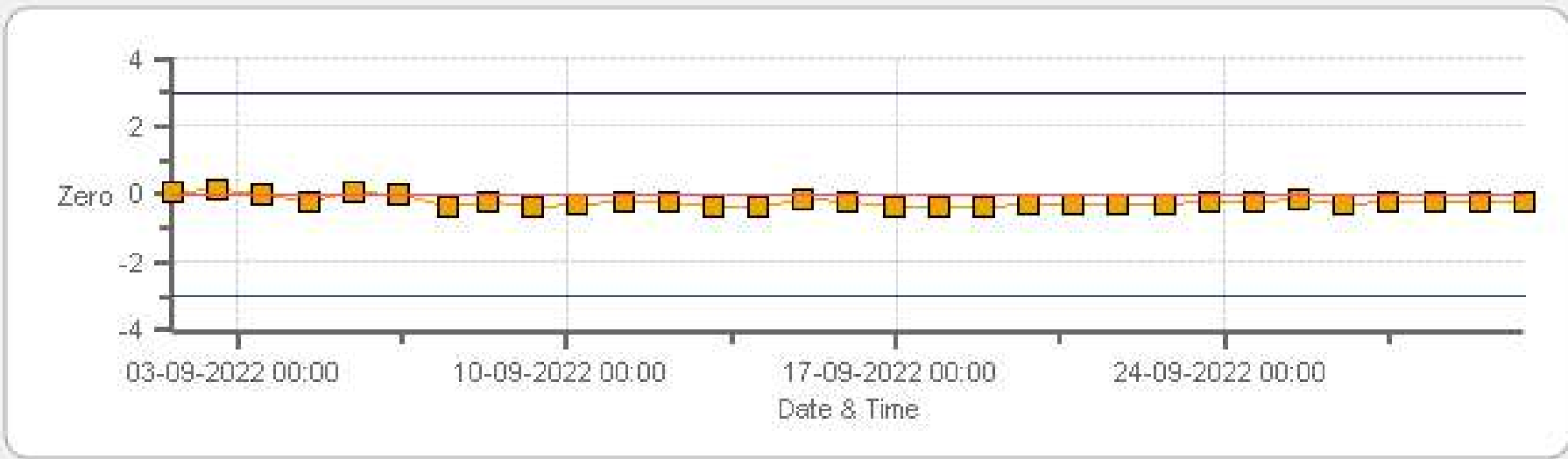
Zero Zero Ref Zero Low Zero High

SO2[ppb] Calibration: PRAMP 842b Monthly: 09-2022 Type: SpanAndZero - Span



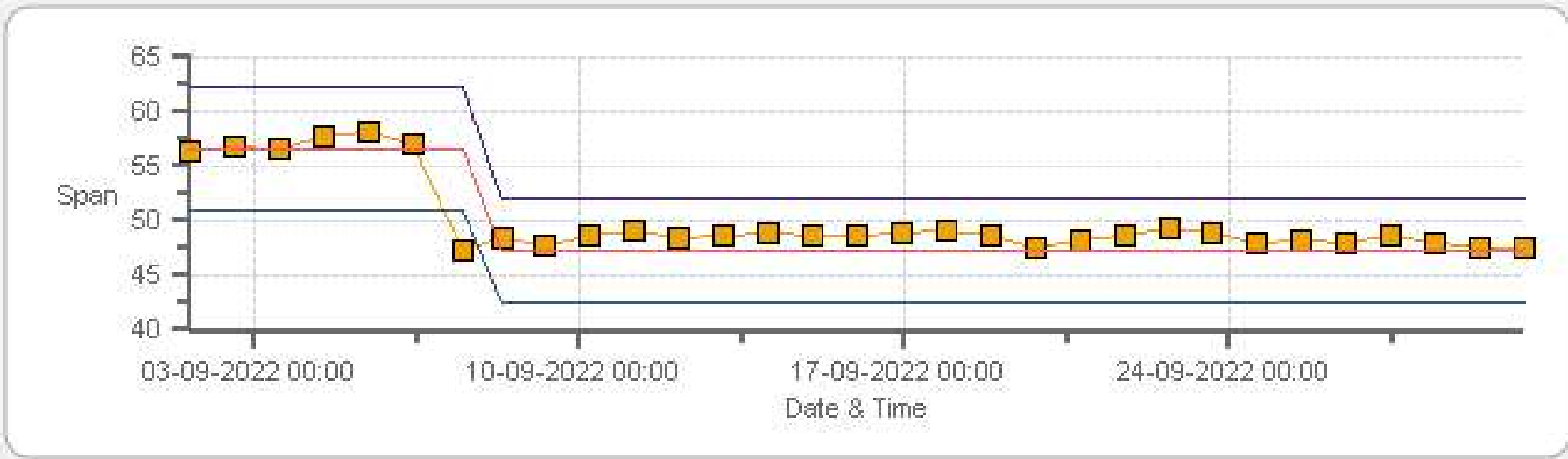
Span Span Ref Span Low Span High

TRS(ppb) Calibration: PRAMP 842b Monthly: 09-2022 Type: SpanAndZero - Zero



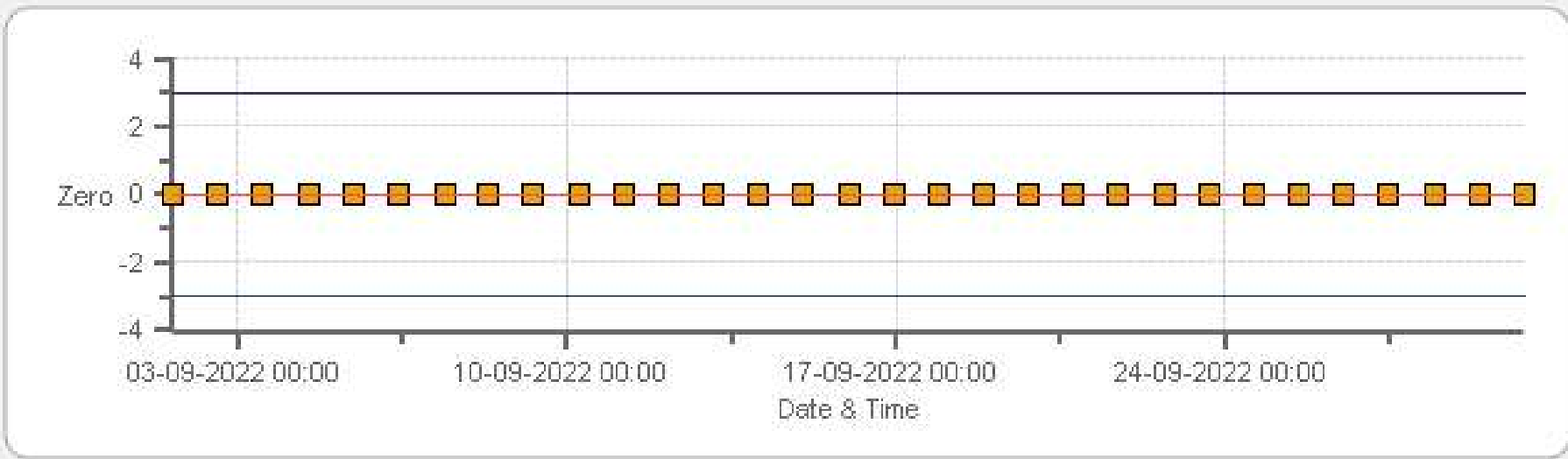
Zero Zero Ref Zero Low Zero High

TRS(ppb) Calibration: PRAMP 842b Monthly: 09-2022 Type: SpanAndZero - Span



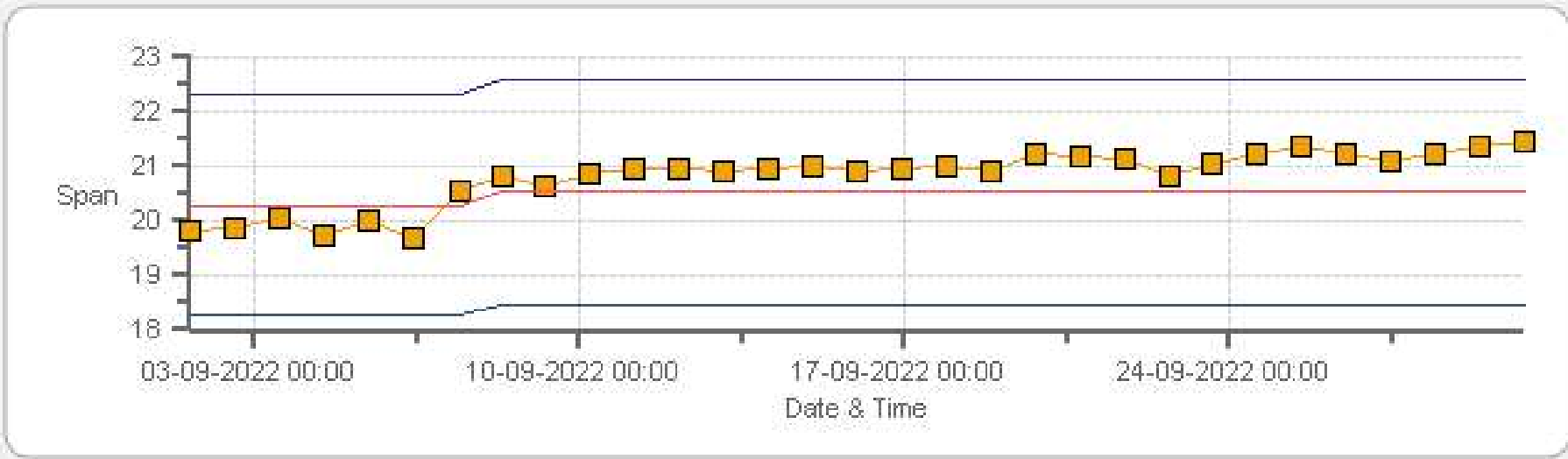
Span Span Ref Span Low Span High

THC55[ppm] Calibration: PRAMP 842b Monthly: 09-2022 Type: SpanAndZero - Zero



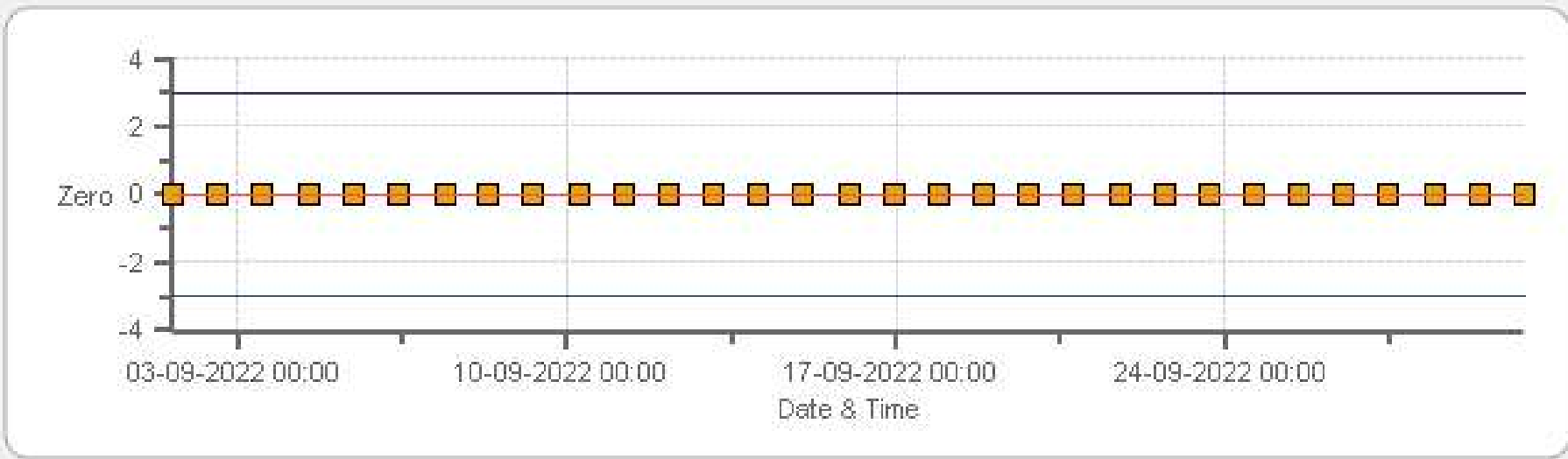
Zero Zero Ref Zero Low Zero High

THC55[ppm] Calibration: PRAMP 842b Monthly: 09-2022 Type: SpanAndZero - Span



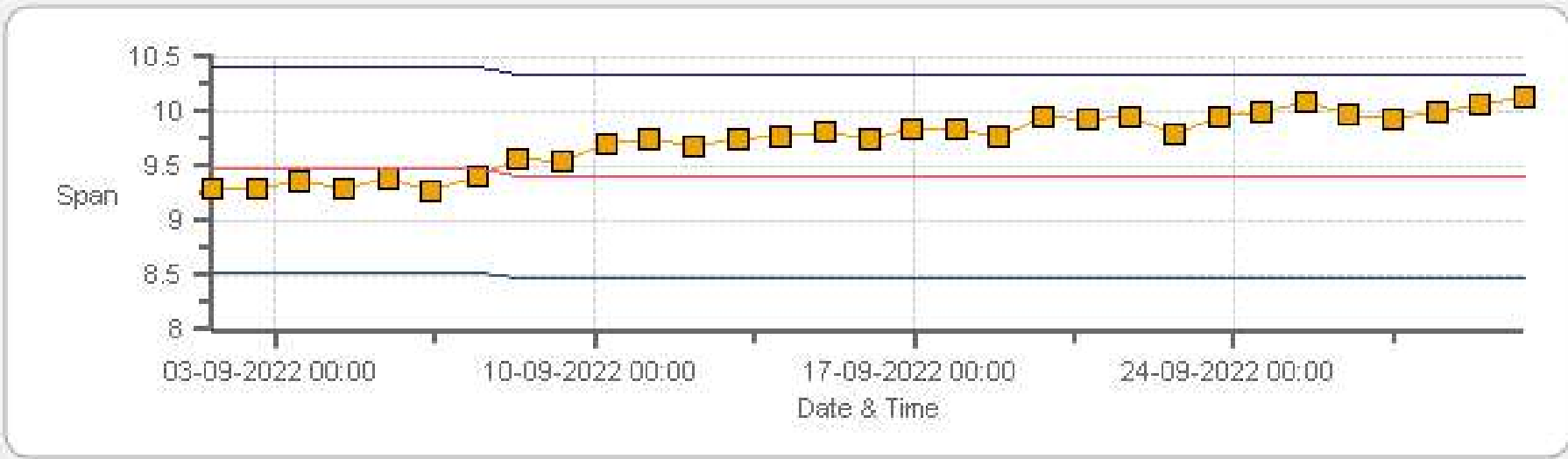
Span Span Ref Span Low Span High

CH4[ppm] Calibration: PRAMP 842b Monthly: 09-2022 Type: SpanAndZero - Zero



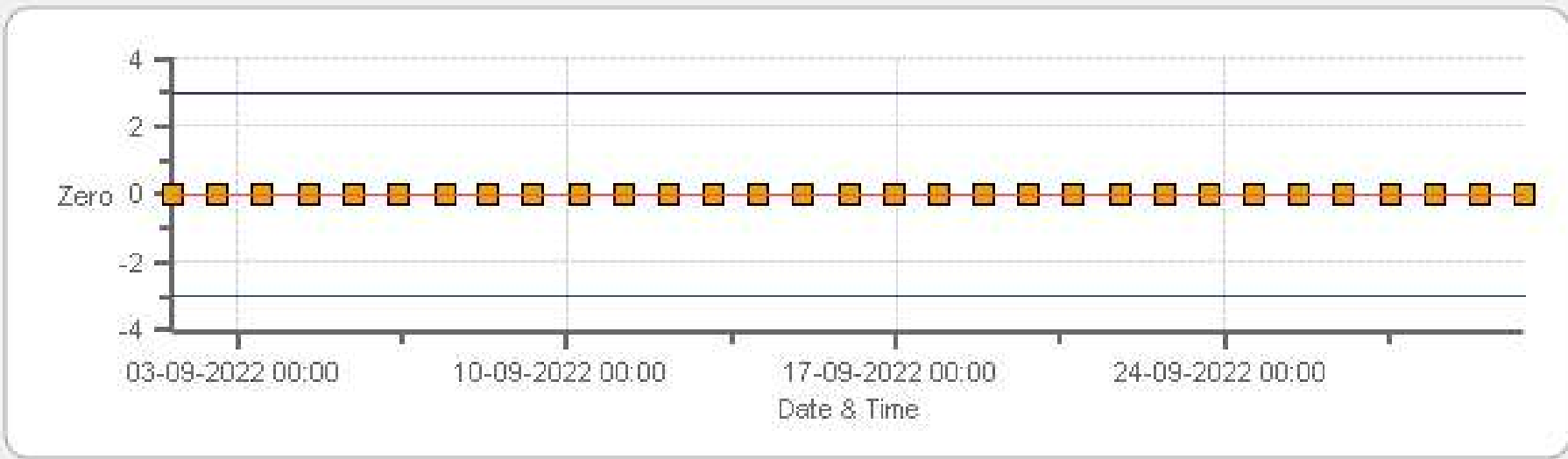
Zero Zero Ref Zero Low Zero High

CH4[ppm] Calibration: PRAMP 842b Monthly: 09-2022 Type: SpanAndZero - Span



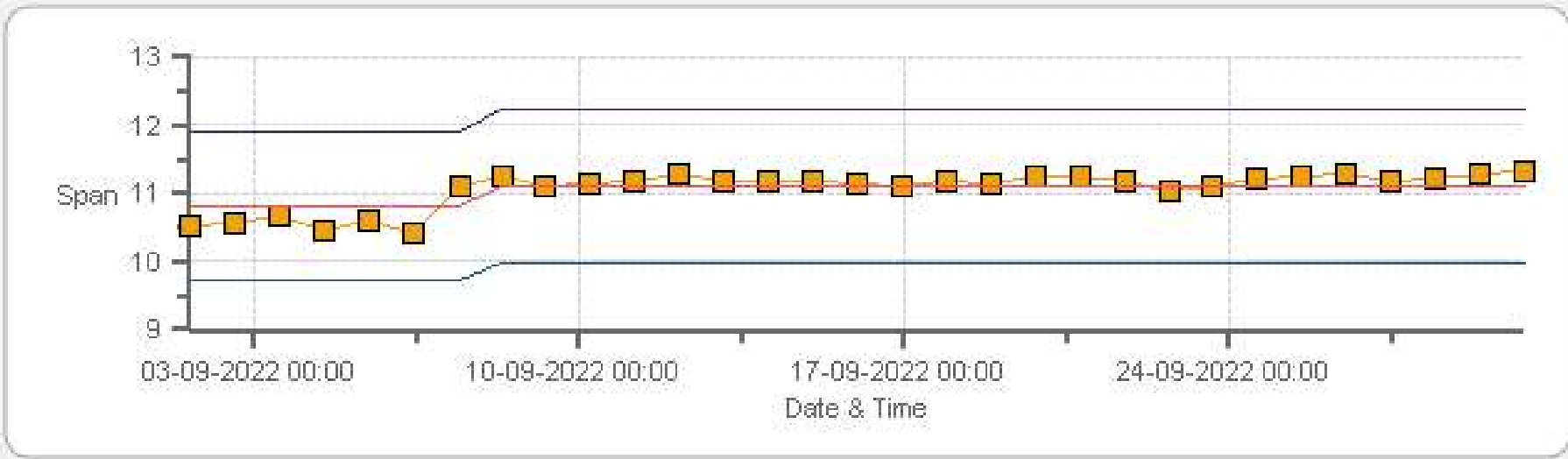
Span Span Ref Span Low Span High

NMHC[ppm] Calibration: PRAMP 842b Monthly: 09-2022 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: PRAMP 842b Monthly: 09-2022 Type: SpanAndZero - Span



Span SpanRef Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	07-Sep-2022	PREVIOUS CALIBRATION DATE:	03-Aug-2022
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	22.9
LOCATION:	842b	BAROMETRIC (mBar):	938
PURPOSE:	Routine	START TIME (MST):	07:11
PERFORMED BY:	Chris Wesson	END TIME (MST):	11:47

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	500 ppb
SERIAL #	1200736629	FLOW (mL/min)	423
INITIAL		FINAL	
BKG/OFFSET	8	BKG/OFFSET	8.4
COEF/SLOPE	1.093	COEF/SLOPE	1.1
Expected (reference) Value	244.5	Expected (reference) Value	240.3

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	58100720	ID:	4568
MFC CALIBRATION DATE:	15-Mar-2022	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0001923	HIGH ID	n/a
CONC (ppm):	25.10	EXPIRY DATE	n/a
CYLINDER (psi):	1850	LOW ID	n/a
EXPIRY DATE	02-Nov-2025	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

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

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

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

CALIBRATION:

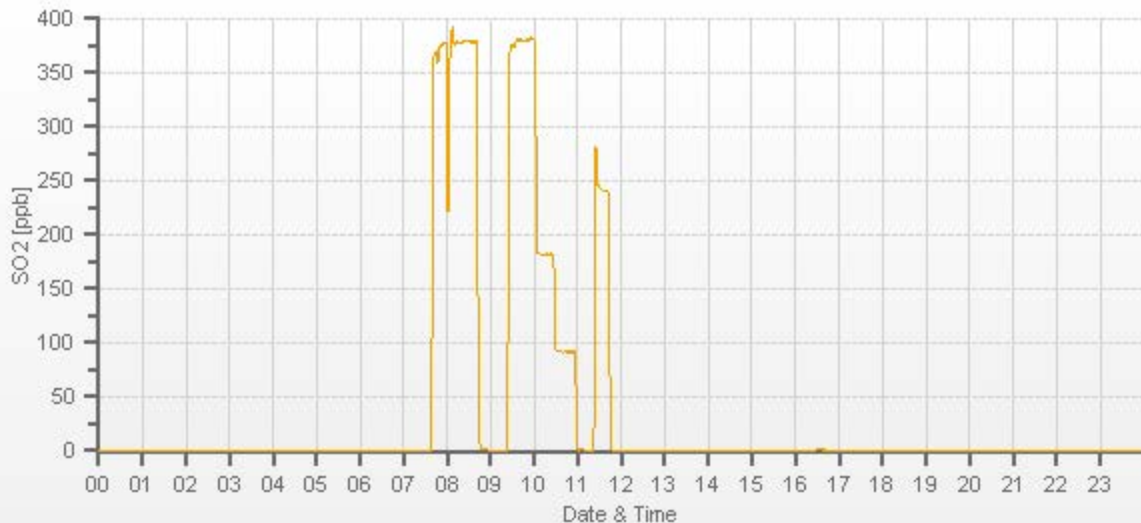
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
3751	 	3751	0.00	0	0	 	
3694	56.80	3751	380.08	379.2	381.7	1.002	0.996
3724	26.90	3751	180.00	n/a	182.3	n/a	0.987
3738	13.40	3751	89.67	n/a	91.5	n/a	0.980

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.003	0.2%

COMMENTS:

<p>Sample filter changed. 07:45 = changes to H2S flow affecting stability. As-found restarted at 08:09 08:00 Daily ZS</p>



TRS Analyzer Calibration by Dilution



DATE:	07-Sep-2022	PREVIOUS CALIBRATION DATE:	26-Aug-2022
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	22.9
LOCATION:	842b	BAROMETRIC (mBar):	938
PURPOSE:	Routine	START TIME (MST):	07:11
PERFORMED BY:	Chris Wesson	END TIME (MST):	11:47

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	1200736630	FLOW (mL/min)	372
INITIAL		FINAL	
BKG/OFFSET	15.9	BKG/OFFSET	14
COEF/SLOPE	1.106	COEF/SLOPE	0.953
Expected (reference) Value	56.59	Expected (reference) Value	47.26

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	58100720	ID:	4568
MFC CALIBRATION DATE:	15-Mar-2022	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002519	HIGH ID	n/a
CONC (ppm):	9.41	EXPIRY DATE	n/a
CYLINDER (psi):	1400	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:	07:51	SO2 Conc (ppb)	380
END TIME:	08:06	Analyzer Response (ppb)	0.0

CALIBRATION:

FLOW RATES			CONCENTRATION (ppb)			CORRECTION FACTOR	
(mL/min)			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
3751	31.10	3751	0.00	0.26	0	0.911	0.999
3720	31.10	3751	78.02	85.94	78.11	0.911	0.999
3736	15.10	3751	37.88	n/a	37.83	n/a	1.001
3743	7.60	3751	19.07	n/a	18.36	n/a	1.038

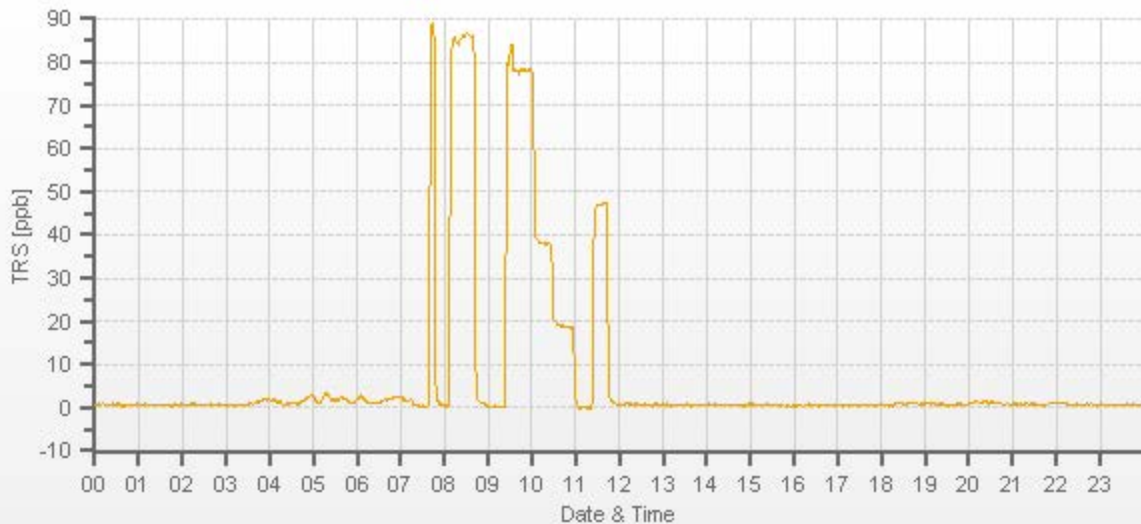
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.004	-0.3%

COMMENTS:

TRS Converter CDNOVA CDN #583
 Sample filter changed.
 07:45-H2S cal gas stopped due to high response (seperated SO2 scrubber check)

TRS[ppb] Station: PRAMP 842b Daily: 07-09-2022 Type: AVG 1 Min. [1 Min.]



CAL-PRAMP-202209-01561

Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	06-Sep-2022	PREVIOUS CALIBRATION DATE:	18-Aug-2022	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	21.1		Thermo 55i	1193585652	1261
LOCATION:	842b	BAROMETRIC (mBar):	944	PARAMETER:	CH4	NMHC	THC
PURPOSE	Removal/Shut-down	START TIME (MST):	15:46	RANGE (ppm):	20	20	40
PERFORMED BY:	Chris Wesson	END TIME (MST):	17:26	PREVIOUS CF:	0.996	0.998	0.997

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 ₃ H ₈ (ppm):	608.0 203.0	HIGH EXPIRY:	n/a
ID:	26701218	ID:	4568	CYLINDER (psi):	1200	LOW ID:	n/a
MFC CALIBRATION DATE:	10-Mar-2022	OXIDIZER ID:	Internal	EXPIRY DATE	18-Aug-2029	LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH ₄ /NMHC)	HIGH	MID	LOW	CH ₄ EQUIVILANCE	
TARGET	14	7	3.5	C ₃ H ₈ as CH ₄	558.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH ₄	1166.3

EXPECTED (REFERENCE) VALUE:

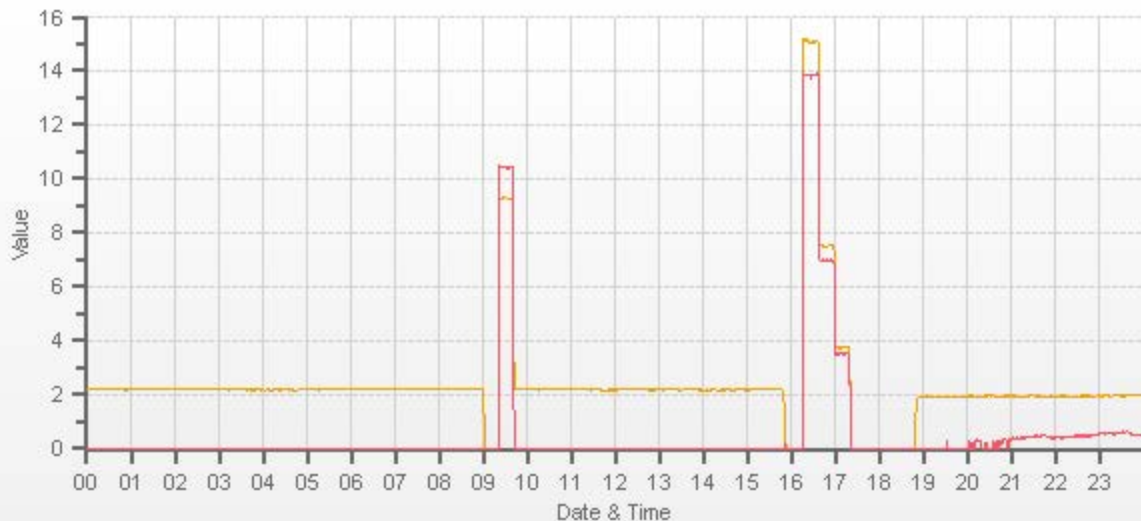
INITIAL	CH ₄	NMHC	THC	FINAL	CH ₄	NMHC	THC
	9.47	10.82	20.29		n/a	n/a	n/a

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC
3249	X	3249	0.00	0.00	0.00	0.00	0.00	0.00	n/a	n/a	n/a	X	X	X	X	X	X
3171	78.00	3249	14.60	13.40	28.00	15.07	13.84	28.91	n/a	n/a	n/a	0.969	0.968	0.968	n/a	n/a	n/a
3209	39.00	3248	7.30	6.70	14.00	7.53	6.97	14.51	n/a	n/a	n/a	0.970	0.962	0.965	n/a	n/a	n/a
3230	19.50	3249	3.65	3.35	7.00	3.78	3.50	7.28	n/a	n/a	n/a	0.965	0.957	0.961	n/a	n/a	n/a

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT	Comments:
CH ₄	1.000	1.032	0.0%	removal for analyzer swap. No issues
NMHC	1.000	1.032	0.1%	
THC	1.000	1.032	0.1%	
				Use Zero Chrom? No



CAL-PRAMP-202209-01561

Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	07-Sep-2022	PREVIOUS CALIBRATION DATE:	n/a	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	22.9		Thermo 55i	12208316589	1140
LOCATION:	842b	BAROMETRIC (mBar):	938	PARAMETER:	CH4	NMHC	THC
PURPOSE:	Install/Post-Repair	START TIME (MST):	07:18	RANGE (ppm):	20	20	40
PERFORMED BY:	Chris Wesson	END TIME (MST):	10:08	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 ₃ H ₈ (ppm):	608.0 203.0	HIGH EXPIRY:	n/a
ID:	26701218	ID:	4568	CYLINDER (psi):	1200	LOW ID:	n/a
MFC CALIBRATION DATE:	10-Mar-2022	OXIDIZER ID:	Internal	EXPIRY DATE:	18-Aug-2029	LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH ₄ /NMHC)	HIGH	MID	LOW	CH ₄ EQUIVILANCE	
TARGET	14	7	3.5	C ₃ H ₈ as CH ₄	558.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH ₄	1166.3

EXPECTED (REFERENCE) VALUE:

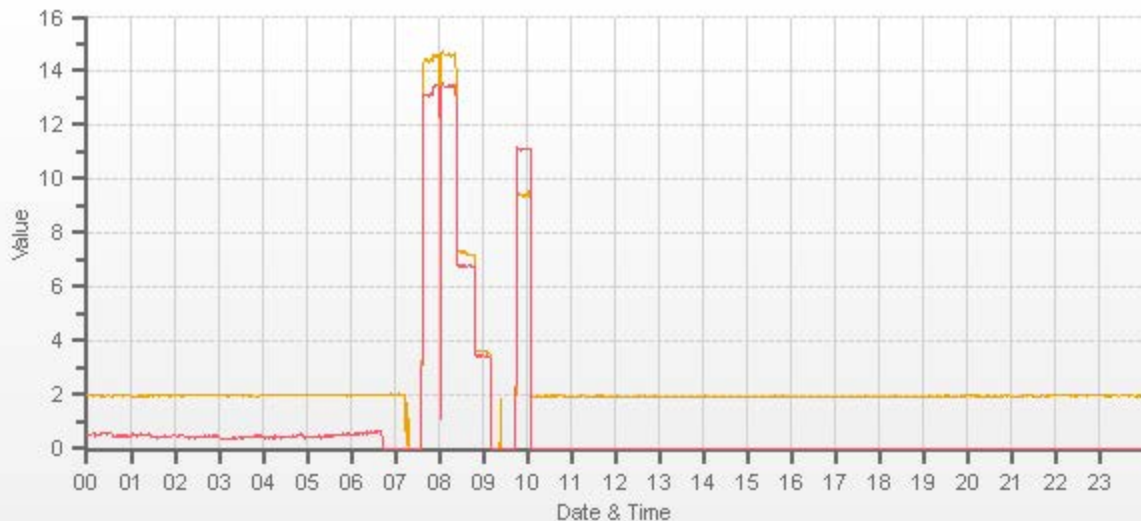
INITIAL	CH ₄	NMHC	THC	FINAL	CH ₄	NMHC	THC
	9.47	10.82	20.29		9.41	11.11	20.53

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC
3249	78.00	3249	0.00	0.00	0.00	n/a	n/a	n/a	0.00	0.00	0.00	n/a	n/a	n/a	n/a	n/a	n/a
3172	78.00	3250	14.59	13.40	27.99	n/a	n/a	n/a	14.57	13.46	28.02	n/a	n/a	n/a	1.002	0.995	0.999
3209	39.00	3248	7.30	6.70	14.00	n/a	n/a	n/a	7.19	6.79	13.98	n/a	n/a	n/a	1.015	0.987	1.002
3231	19.50	3250	3.65	3.35	7.00	n/a	n/a	n/a	3.60	3.44	7.04	n/a	n/a	n/a	1.013	0.974	0.994

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT	Comments:
CH ₄	1.000	0.999	-0.2%	Sample filter changed 08:00 = Daily ZS, Adjusted high restarted
NMHC	1.000	1.003	0.2%	
THC	1.000	1.000	0.0%	
Use Zero Chrom?				No



CAL-PRAMP-202209-01561

Meteorological System Checklist



Date:	September 7, 2022
Technician:	Chris Wesson
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:	August 3, 2022	Channel offline = 09:48 - 10:45
Is the sensor Level?	yes	
Is the heater operating properly?	yes	
Are the bucket drain holes clean?	yes	Cleaned bucket and drain hole
Is the screen on the housing? (screen should be on between July and September)	yes	
Is the housing clean?	yes	
Is the area around the housing clean and free from obstacles?	yes	

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

# of Tips	Data Logger Response (ml):	Manual Specification = +/- 0.1 ml
10	10.0	0.00

AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	August 3, 2022
Parameter:	Temperature @ 2 metres
Reference Thermometer ID:	F.S. 170286131 expires August 24, 2022
Reference Temperature (°C):	14.5
Station - Ambient Temperature (°C):	14.3
Temperature Difference (°C):	0.2

BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	August 3, 2022	
Reference Barometer ID:	BRUNTON #05535, Expire: Feb 27, 2023	
Reference Pressure - Units/Reading:	millibar	927.7
Station Pressure - Units/Reading:	millibar	927.5
Pressure Tolerance +/- 15% of error:	789 - 1067	0.02%

RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	August 3, 2022	
Reference Hygrometer ID:	F.S. 170286131 expires August 24, 2022	
Reference Hygrometer % RH- Reading:	61.30	
Station Hygrometer % RH- Reading:	63.00	
RH Tolerance +/- 15% of difference:	52.11 - 70.50	-2.8%

ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	August 3, 2022	Previous check date:	August 3, 2022
Wind Speed Observed (kph):	5~10	Wind Direction Observed:	W
Wind speed on Data Logger (kph):	8.7	Wind Direction on Data Logger:	W
		Wind Direction Pass/Fail?:	Pass

Comments



Meteorological Sensor Audit/Calibration

Location Information

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

Wind Sensor Information

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

Wind Calibrator Information

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

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

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

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

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

Comments:

Physical inspection completed. No issues.



Peace River Area Monitoring Program

SEPTEMBER 2022

Ambient Air Monitoring Calibration Report

- 986c STATION-

CAL-PRAMP-202209-01562

Operation and Maintenance:

Bureau Veritas Canada

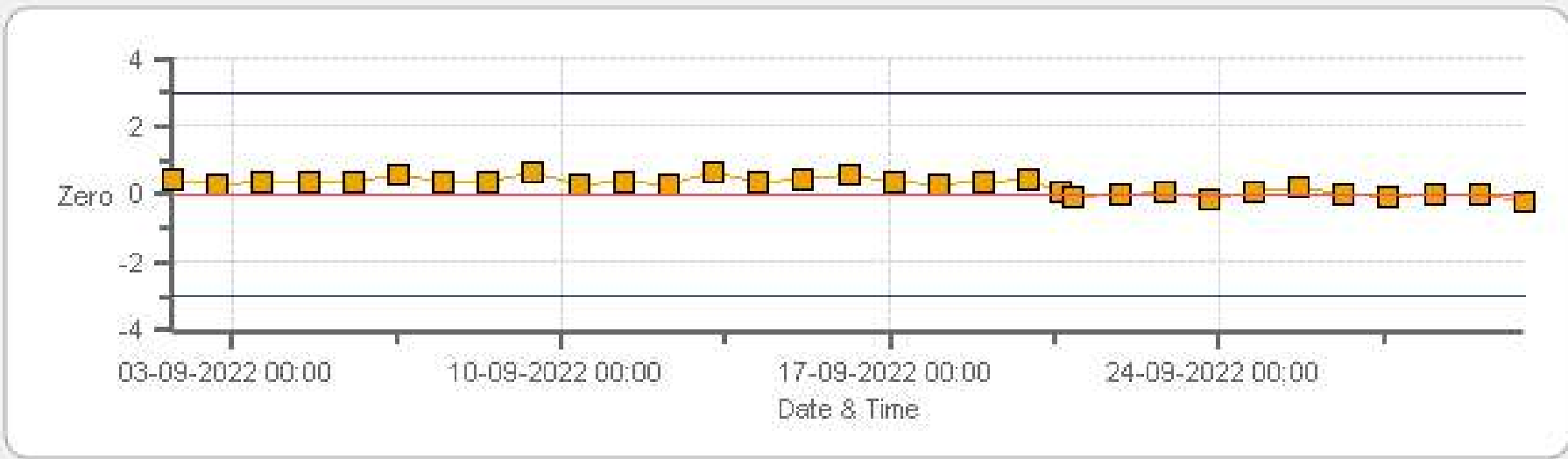
Data Validation and Report:

Bureau Veritas Canada

October 20, 2022

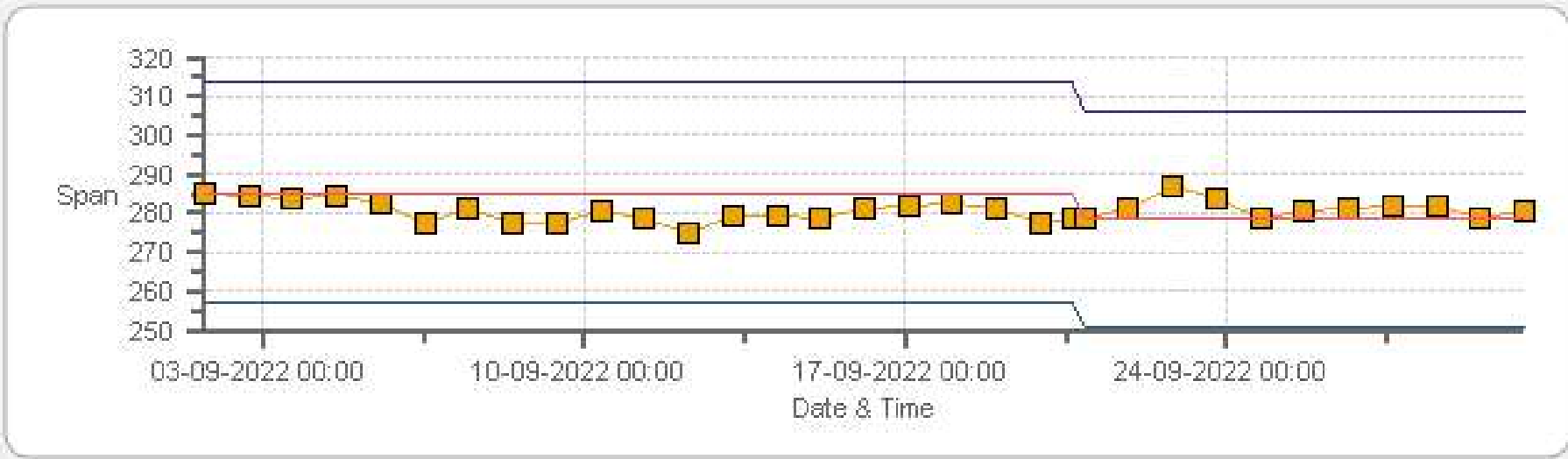
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: PRAMP 986c Monthly: 09-2022 Type: SpanAndZero - Zero



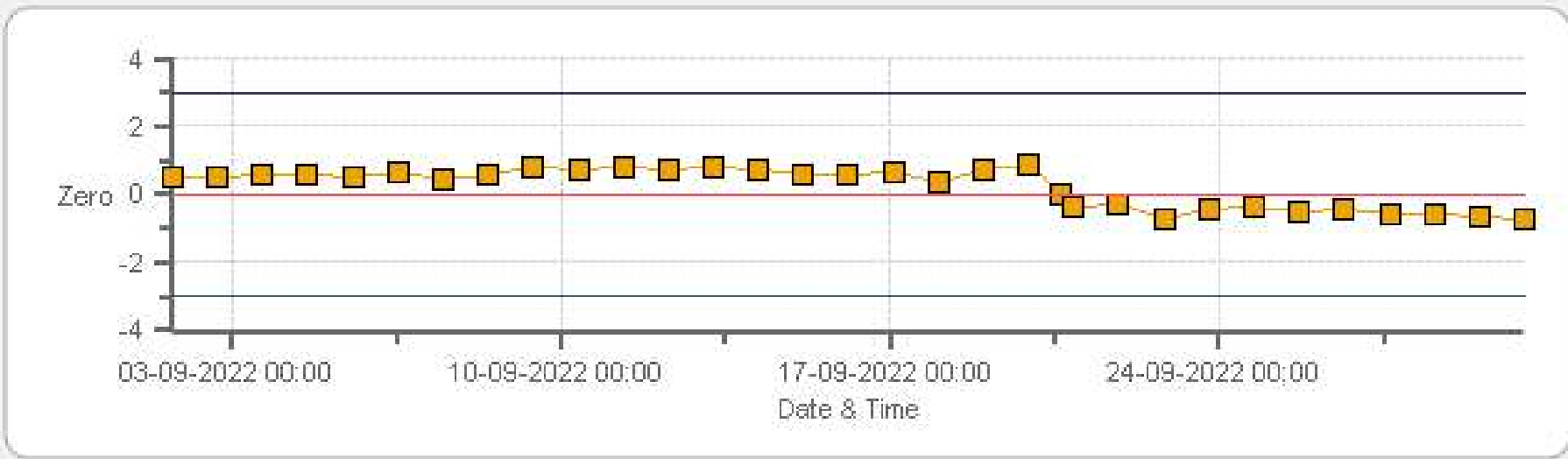
Zero Zero Ref Zero Low Zero High

SO2[ppb] Calibration: PRAMP 986c Monthly: 09-2022 Type: SpanAndZero - Span



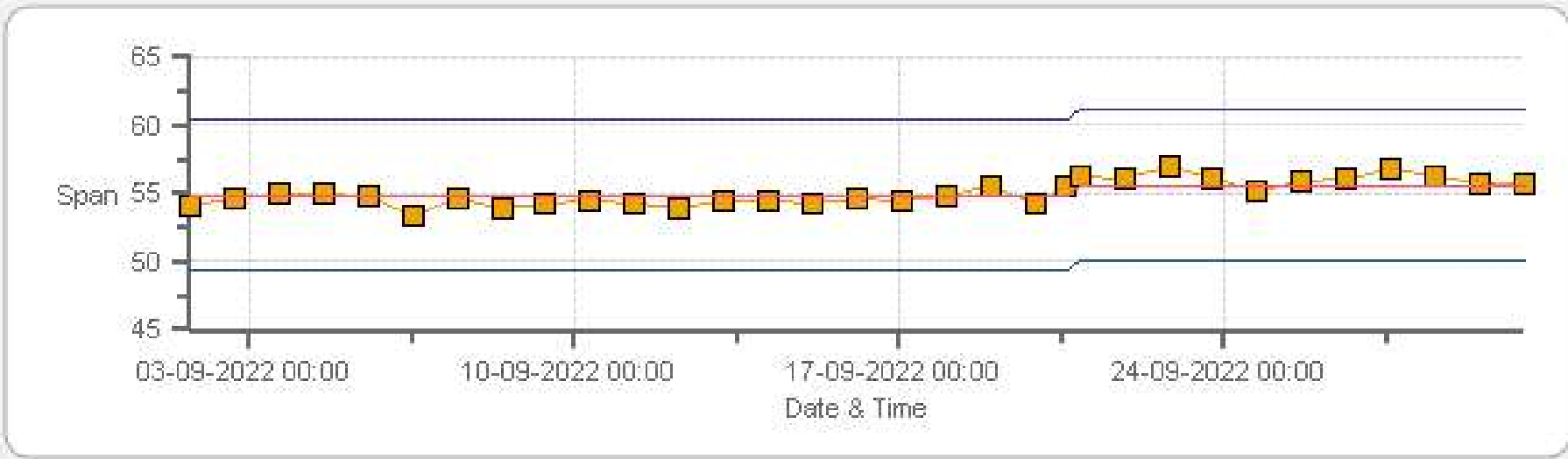
Span Span Ref Span Low Span High

TRS(ppb) Calibration: PRAMP 986c Monthly: 09-2022 Type: SpanAndZero - Zero



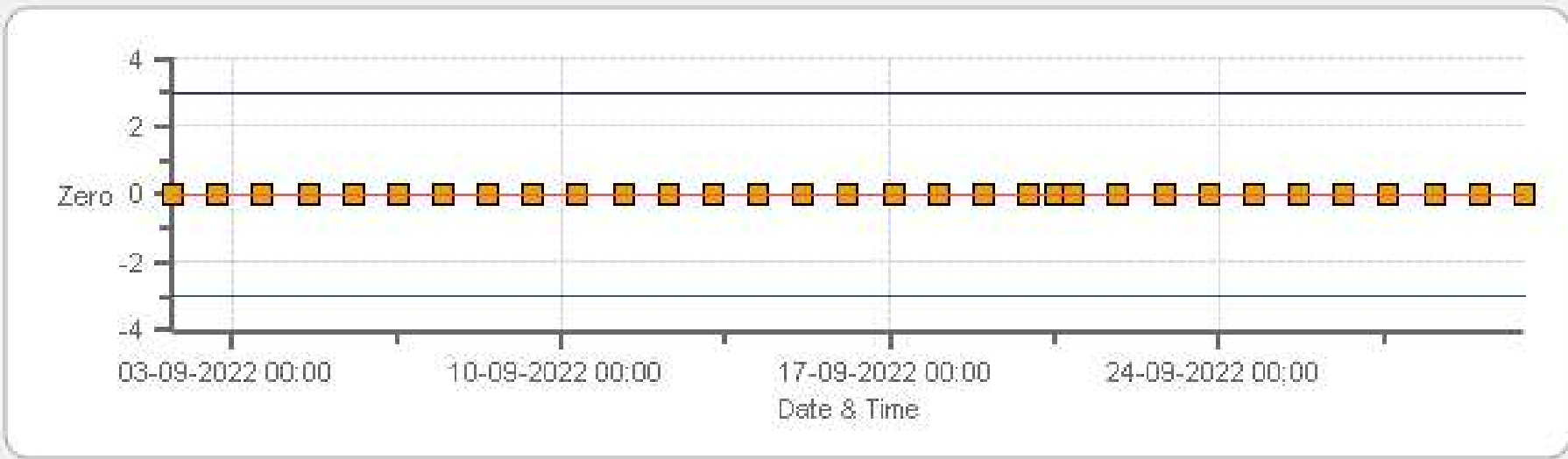
Zero Zero Ref Zero Low Zero High

TRS(ppb) Calibration: PRAMP 986c Monthly: 09-2022 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

THC55[ppm] Calibration: PRAMP 986c Monthly: 09-2022 Type: SpanAndZero - Zero



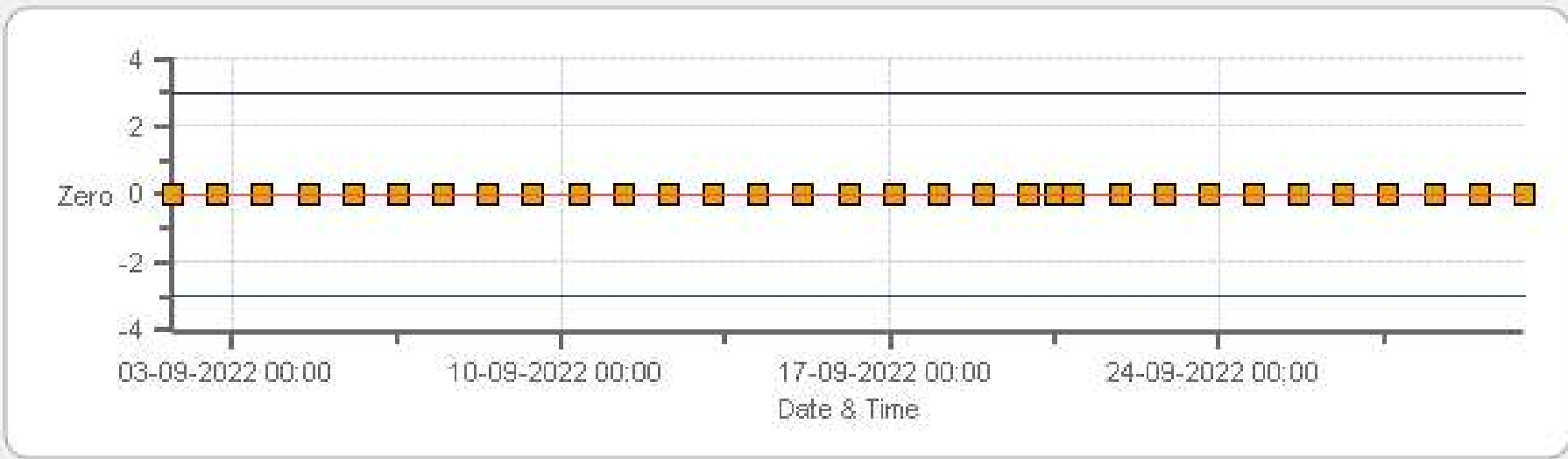
Zero Zero Ref Zero Low Zero High

THC55[ppm] Calibration: PRAMP 986c Monthly: 09-2022 Type: SpanAndZero - Span



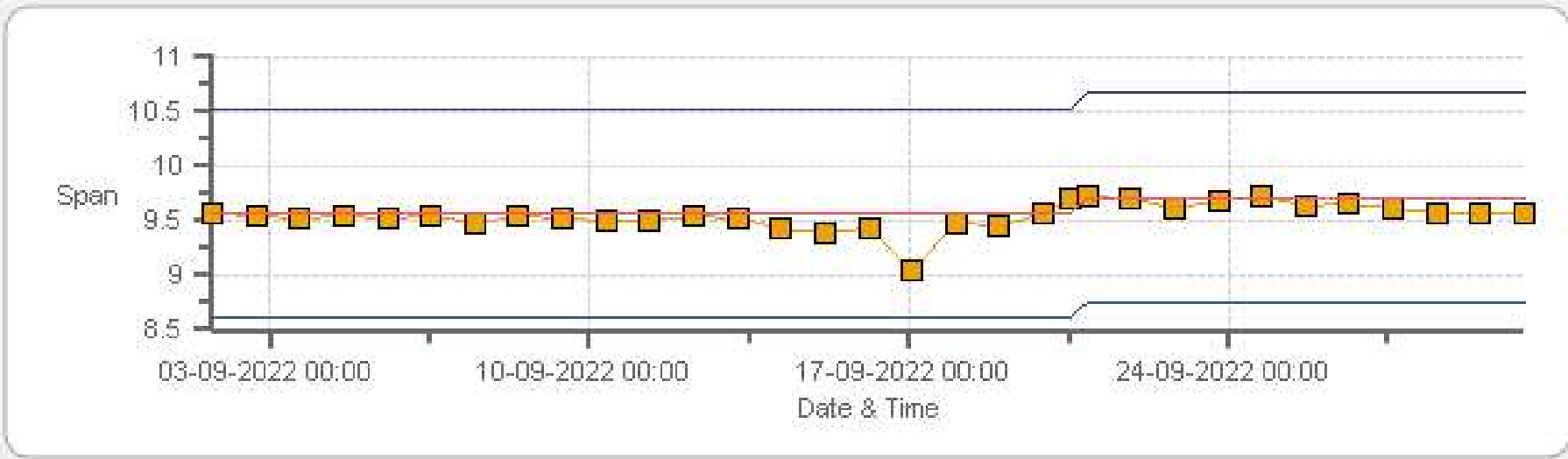
Span Span Ref Span Low Span High

CH4[ppm] Calibration: PRAMP 986c Monthly: 09-2022 Type: SpanAndZero - Zero



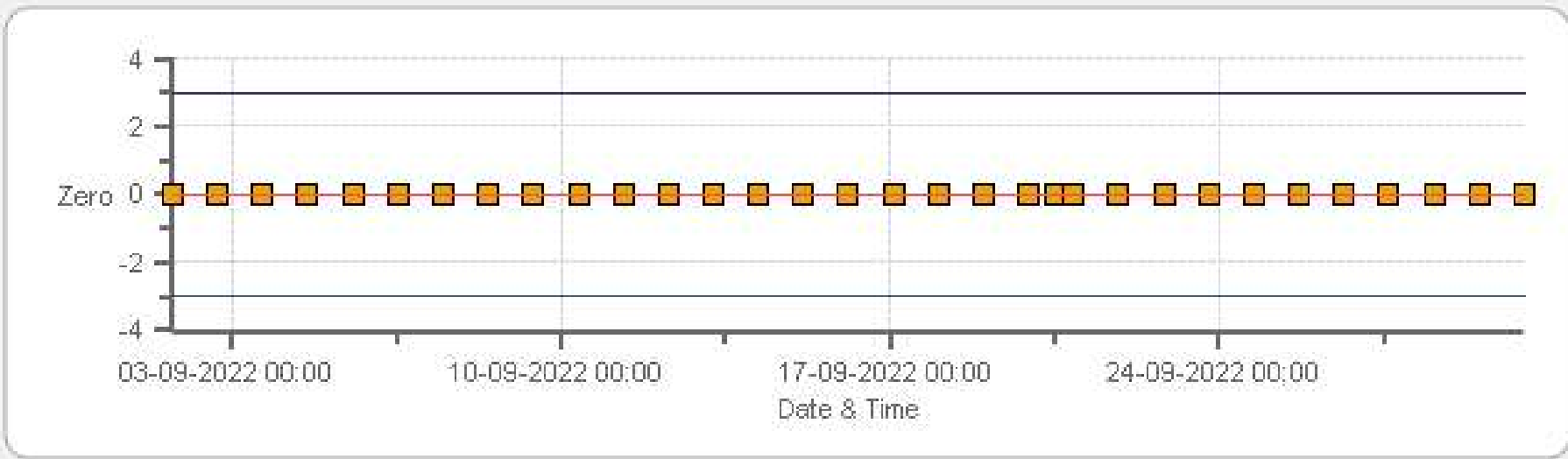
Zero Zero Ref Zero Low Zero High

CH4[ppm] Calibration: PRAMP 986c Monthly: 09-2022 Type: SpanAndZero - Span



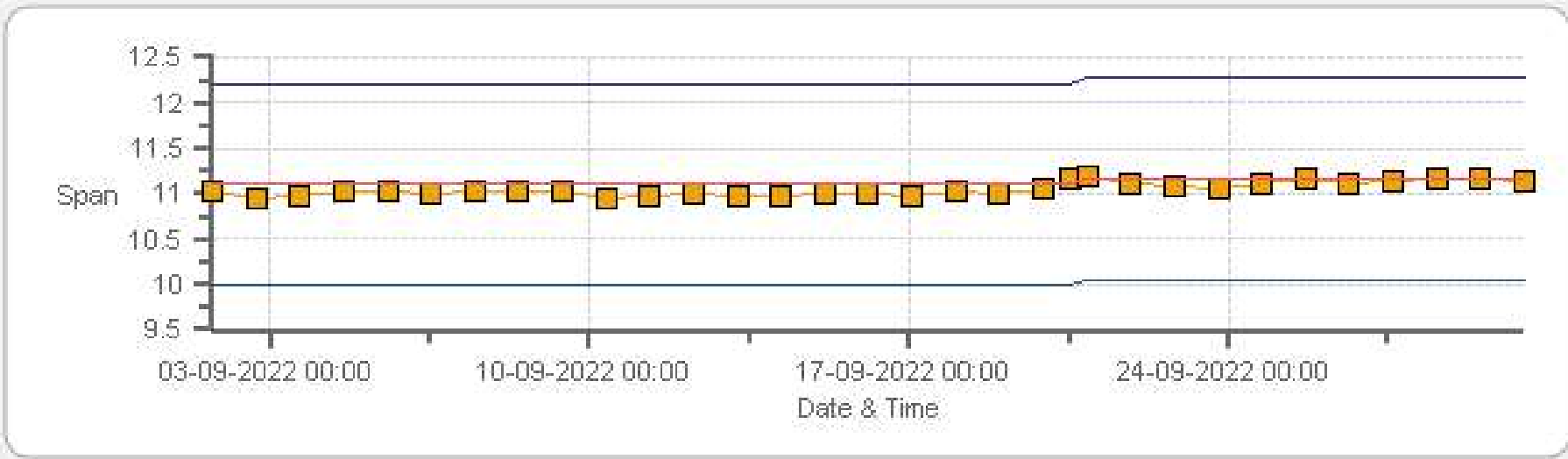
Span Span Ref Span Low Span High

NMHC[ppm] Calibration: PRAMP 986c Monthly: 09-2022 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: PRAMP 986c Monthly: 09-2022 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	20-Sep-2022	PREVIOUS CALIBRATION DATE:	04-Aug-2022
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	24.6
LOCATION:	986C	BAROMETRIC (mBar):	949
PURPOSE:	Routine	START TIME (MST):	08:48
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	15:03

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	500 ppb
SERIAL #	1193585646	FLOW (mL/min)	431
INITIAL		FINAL	
BKG/OFFSET	14.4	BKG/OFFSET	15.1
COEF/SLOPE	1.028	COEF/SLOPE	1.037
Expected (reference) Value	285.3	Expected (reference) Value	278.4

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	M701
ID:	1991	ID:	916
MFC CALIBRATION DATE:	02-Sep-2022	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL107286	HIGH ID	n/a
CONC (ppm):	25.10	EXPIRY DATE	n/a
CYLINDER (psi):	1400	LOW ID	n/a
EXPIRY DATE	02-Nov-2025	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

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

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

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

CALIBRATION:

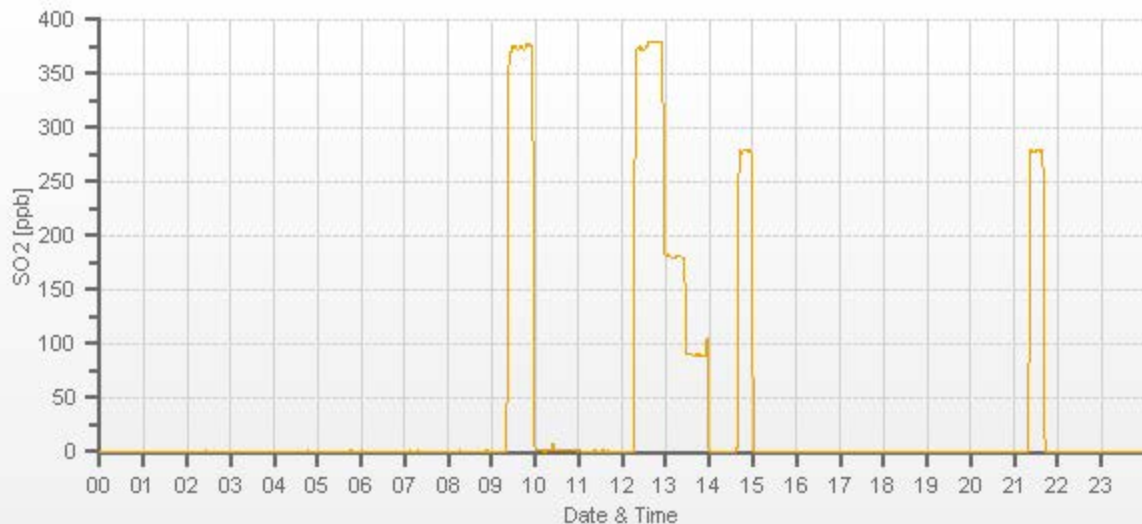
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4001	 	4001	0.00	0.5	0	 	
3941	60.55	4002	379.76	376.3	379.7	1.011	1.000
3972	28.68	4000	179.97	n/a	180.4	n/a	0.998
3984	14.33	3998	89.95	n/a	89.3	n/a	1.007

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	0.0%

COMMENTS:

Sample filter changed.
 Zero adjust delayed due to TRS as-found high repeat (runs in parallel with TRS).
 Monthly calibration - passed.



TRS Analyzer Calibration by Dilution



DATE:	20-Sep-2022	PREVIOUS CALIBRATION DATE:	04-Aug-2022
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	24.6
LOCATION:	986C	BAROMETRIC (mBar):	949
PURPOSE:	Routine	START TIME (MST):	08:48
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	15:03

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	1191833341	FLOW (mL/min)	428
INITIAL		FINAL	
BKG/OFFSET	12.8	BKG/OFFSET	14.7
COEF/SLOPE	0.92	COEF/SLOPE	0.971
Expected (reference) Value	54.9	Expected (reference) Value	55.63

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	M701
ID:	1991	ID:	916
MFC CALIBRATION DATE:	02-Sep-2022	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):	290	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:

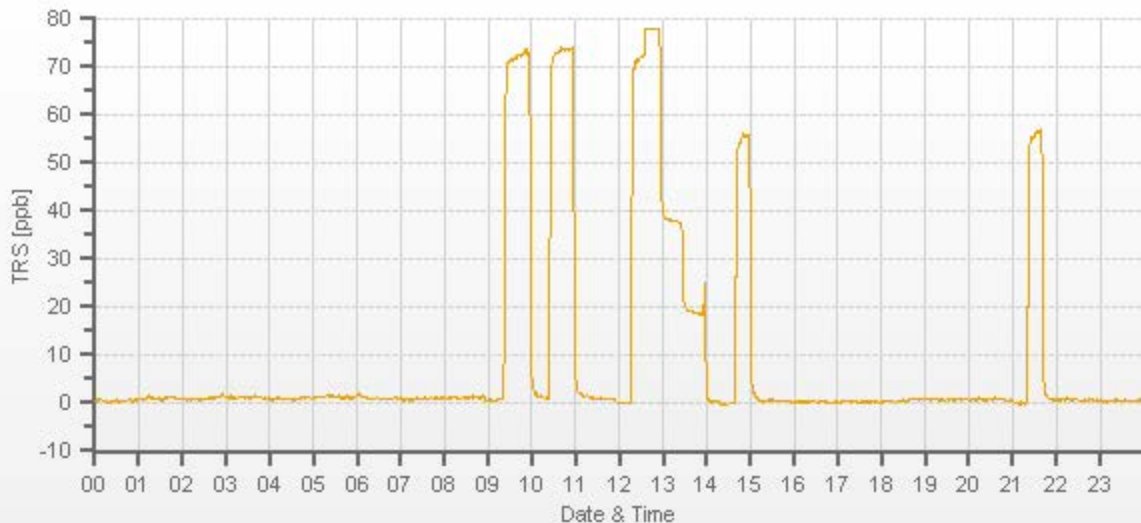
FLOW RATES			CONCENTRATION (ppb)			CORRECTION FACTOR	
(mL/min)			ACTUAL	INDICATED		Initial	Final
DILUENT	GAS	TOTAL		Initial	Final		
4001	33.20	4001	0.00	1.05	0	1.072	1.000
3969	33.20	4002	78.07	73.87	78.09	1.072	1.000
3984	16.16	4000	38.01	n/a	37.7	n/a	1.008
3990	8.09	3998	19.05	n/a	18.43	n/a	1.034

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.003	-0.3%

COMMENTS:

TRS Converter CDNOVA CDN-101 #552.
 TRS as-found high repeat at 10:23 to confirm result. 2nd attempt OK.
 Sample filter changed.
 Monthly calibration - passed.



Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	20-Sep-2022	PREVIOUS CALIBRATION DATE:	04-Aug-2022	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	24.6		Thermo 55i	1433563261	1174.3
LOCATION:	986C	BAROMETRIC (mBar):	949	PARAMETER:	CH4	NMHC	THC
PURPOSE	Routine	START TIME (MST):	08:48	RANGE (ppm):	20	20	40
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	12:49	PREVIOUS CF:	1.000	0.998	0.999

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	API	CYLINDER ID:	LL28583	HIGH ID:	n/a
MODEL:	2010	MODEL:	M701	CH ₄ /C ₃ H ₈ (ppm):	608.0 203.0	HIGH EXPIRY:	n/a
ID:	17100415	ID:	916	CYLINDER (psi):	1000	LOW ID:	n/a
MFC CALIBRATION DATE:	02-Sep-2022	OXIDIZER ID:	Internal	EXPIRY DATE	18-Aug-2029	LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH ₄ /NMHC)	HIGH	MID	LOW	CH ₄ EQUIVILANCE	
TARGET	14	7	3.5	C ₃ H ₈ as CH ₄	558.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH ₄	1166.3

EXPECTED (REFERENCE) VALUE:

INITIAL	CH ₄	NMHC	THC	FINAL	CH ₄	NMHC	THC
	9.56	11.10	20.66		9.71	11.16	20.88

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC
2998	X	2998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	X	X	X	X	X	X
2927	72.00	2999	14.60	13.40	28.00	14.34	13.27	27.61	14.63	13.44	28.08	1.018	1.010	1.014	0.998	0.997	0.997
2964	36.00	3000	7.30	6.70	14.00	n/a	n/a	n/a	7.37	6.80	14.18	n/a	n/a	n/a	0.990	0.985	0.987
2980	18.00	2998	3.65	3.35	7.00	n/a	n/a	n/a	3.69	3.27	6.97	n/a	n/a	n/a	0.989	1.025	1.005

LINEAR REGRESSION ANALYSIS:

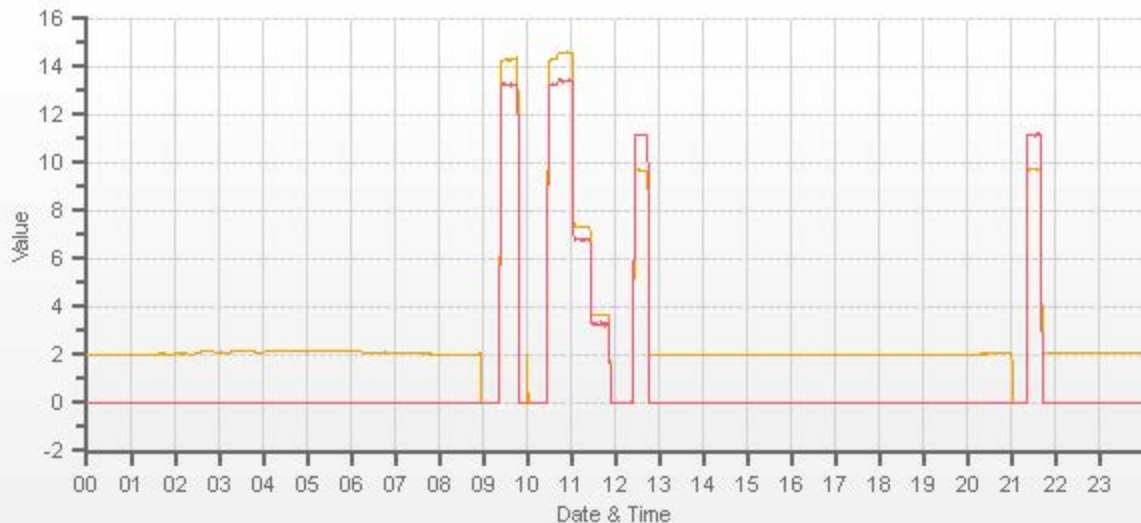
	CORRELATION	SLOPE	INTERCEPT
CH ₄	1.000	1.002	0.1%
NMHC	1.000	1.006	-0.1%
THC	1.000	1.004	0.0%

Comments:

Sample filter changed. Monthly calibration - no issues.

Use Zero Chrom?

No



CAL-PRAMP-202209-01562

Meteorological System Checklist



Date:	September 20, 2022
Technician:	Ferdinand Roy
Station:	PRAMP 986c

Unit:	Make:	Model:	Serial #:
Precipitation Sampler:	RM Young	52202	TB 16325
Temperature Sensor:	Rotronic	HC2A-S3	20357528
Barometric Pressure Sensor:	MetOne	092	Y23358
Relative Humidity Sensor:	Rotronic	HC2A-S3	20357528
Anemometer:	RM Young	05305AQ	180340

PRECIPITATION SENSOR CHECK

Checklist:	Reply:	Comments:
Previous check date:	August 5, 2022	Tip test: 14:12pm-14:14pm. Offline time:14:02pm-14:14pm.
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)	yes	
Is the housing clean?	yes	
Is the area around the housing clean and free from obstacles?	yes	

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

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

AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	August 5, 2022
Parameter:	Temperature @ 2 metres
Reference Thermometer ID:	Fisher SCIENTIFIC 160459244 expires June 14, 2023
Reference Temperature (°C):	13.8
Station - Ambient Temperature (°C):	13.0
Temperature Difference (°C):	0.8

BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	August 5, 2022	
Reference Barometer ID:	F.S. 10528, Expire: July 29, 2023	
Reference Pressure - Units/Reading:	millibar	948
Station Pressure - Units/Reading:	millibar	948.6
Pressure Tolerance +/- 15% of error:	806 - 1090	-0.06%

RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	August 5, 2022	
Reference Hygrometer ID:	Fisher SCIENTIFIC 160459244 expires June 14, 2023	
Reference Hygrometer % RH- Reading:	47.33	
Station Hygrometer % RH- Reading:	49.80	
RH Tolerance +/- 15% of difference:	40.23 - 54.43	-5.2%

ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	August 5, 2022	Previous check date:	August 5, 2022
Wind Speed Observed (kph):	10~20	Wind Direction Observed:	SW
Wind speed on Data Logger (kph):	16	Wind Direction on Data Logger:	SW
		Wind Direction Pass/Fail?:	Pass

Comments

No issues.



Meteorological Sensor Audit/Calibration

Location Information

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

Wind Sensor Information

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

Wind Calibrator Information

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

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

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

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

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

Comments:

Magnetic declination = 15Deg(E)



Peace River Area Monitoring Program

SEPTEMBER 2022

Ambient Air Monitoring Calibration Report

- RENO STATION-

CAL-PRAMP-202209-01563

Operation and Maintenance:

Bureau Veritas Canada

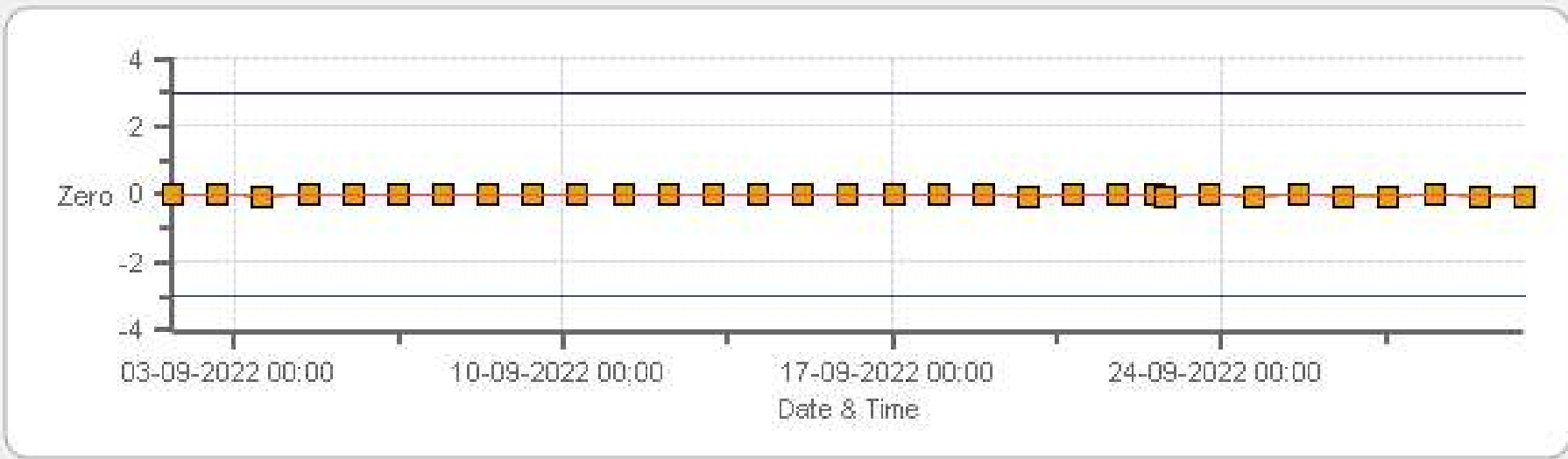
Data Validation and Report:

Bureau Veritas Canada

October 20, 2022

DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: PRAMP RENO Monthly: 09-2022 Type: SpanAndZero - Zero



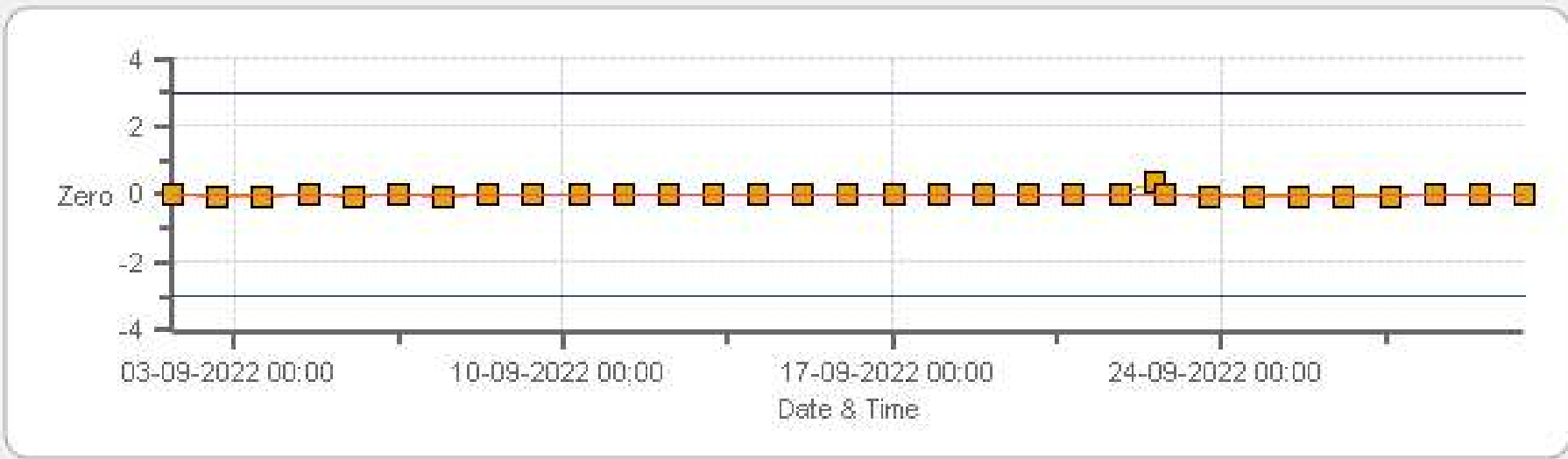
Zero Zero Ref Zero Low Zero High

SO2[ppb] Calibration: PRAMP RENO Monthly: 09-2022 Type: SpanAndZero - Span

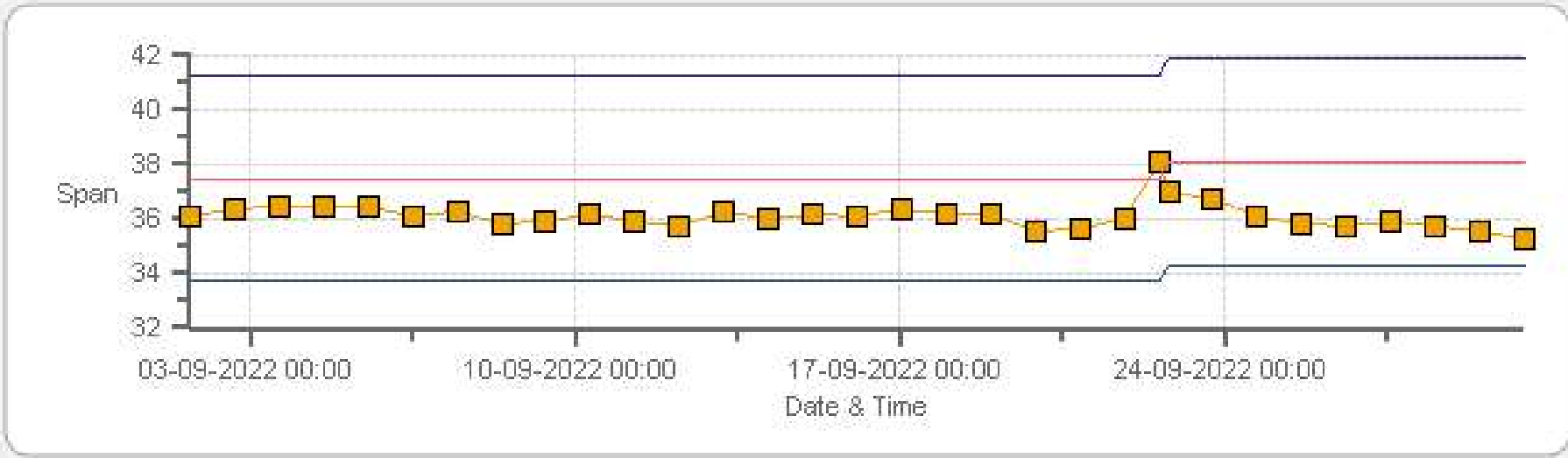


Span Span Ref Span Low Span High

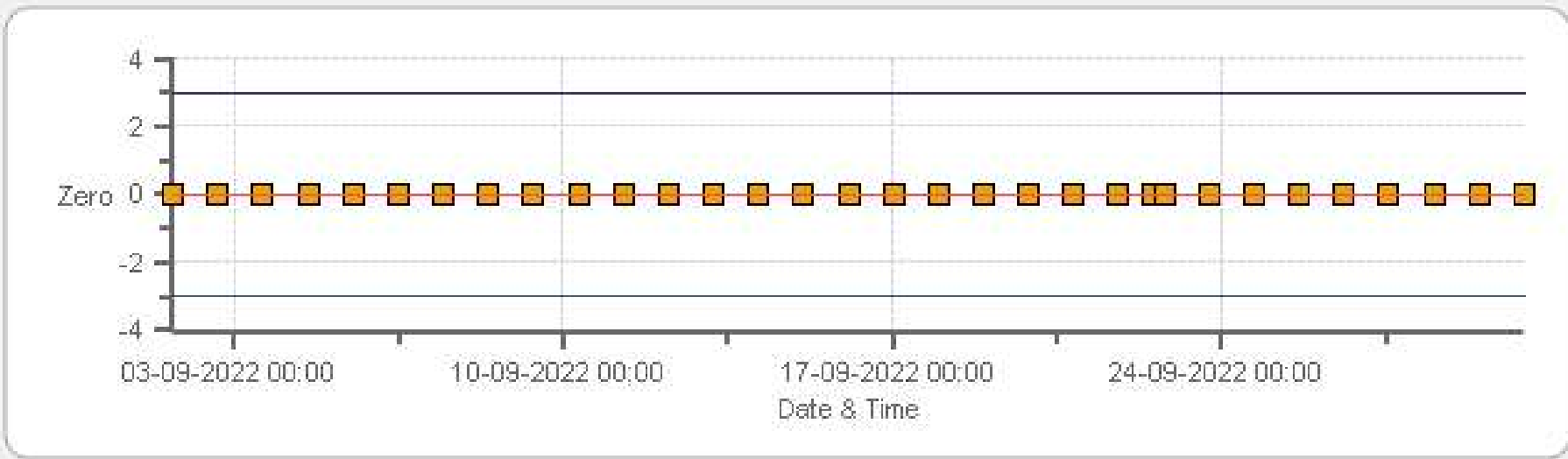
TRS[ppb] Calibration: PRAMP RENO Monthly: 09-2022 Type: SpanAndZero - Zero



TRS[ppb] Calibration: PRAMP RENO Monthly: 09-2022 Type: SpanAndZero - Span

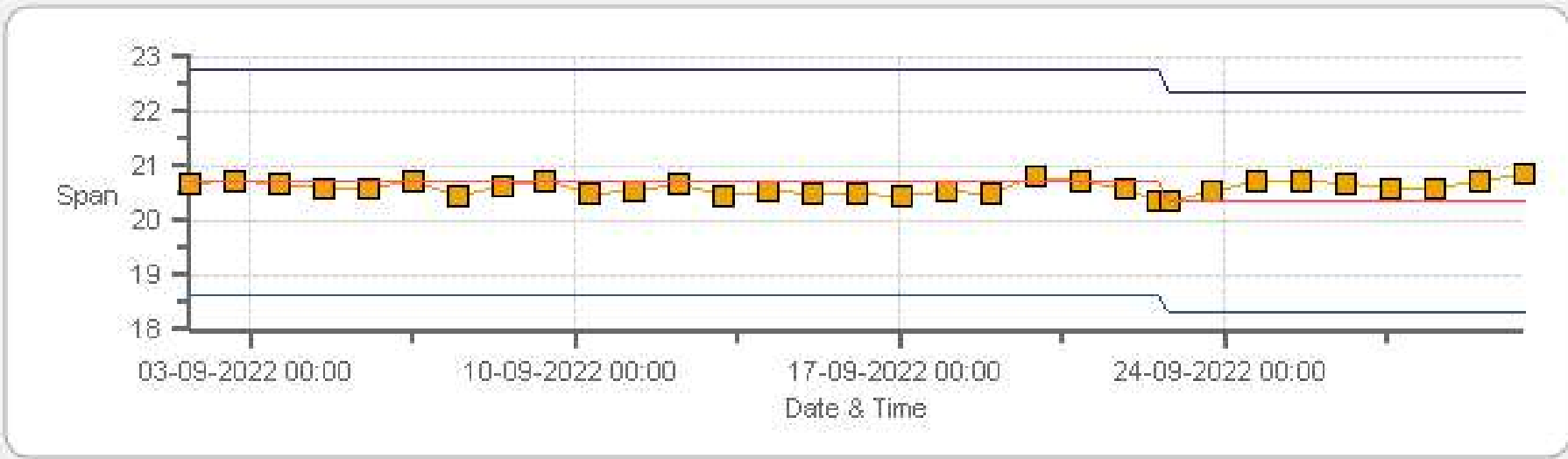


THC55[ppm] Calibration: PRAMP RENO Monthly: 09-2022 Type: SpanAndZero - Zero



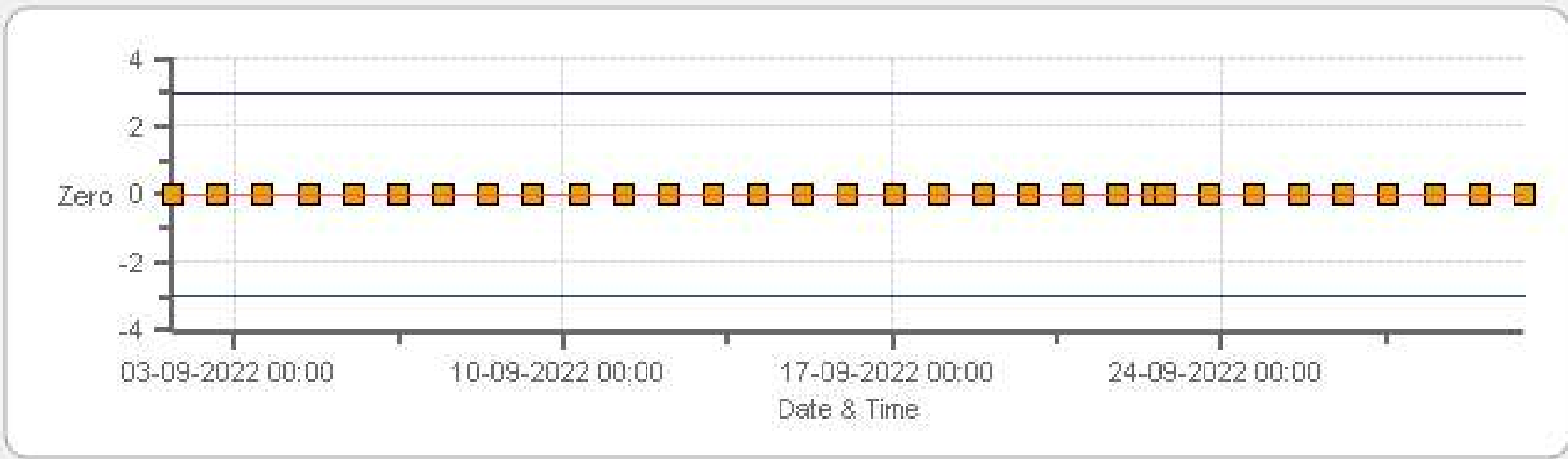
Zero Zero Ref Zero Low Zero High

THC55[ppm] Calibration: PRAMP RENO Monthly: 09-2022 Type: SpanAndZero - Span



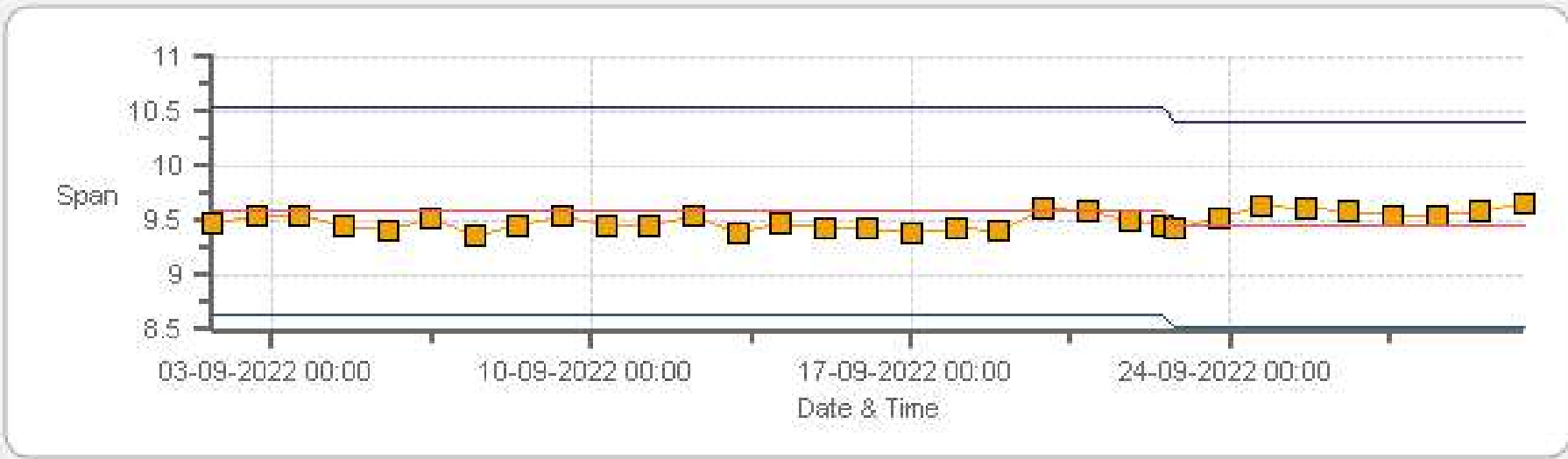
Span Span Ref Span Low Span High

CH4[ppm] Calibration: PRAMP RENO Monthly: 09-2022 Type: SpanAndZero - Zero



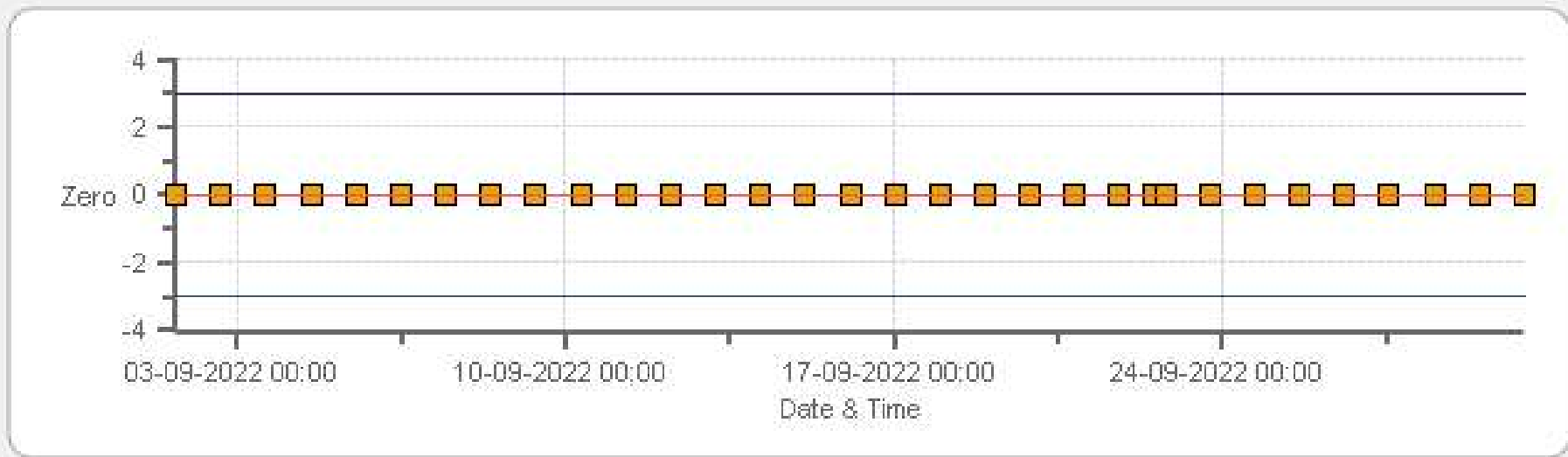
Zero Zero Ref Zero Low Zero High

CH4[ppm] Calibration: PRAMP RENO Monthly: 09-2022 Type: SpanAndZero - Span



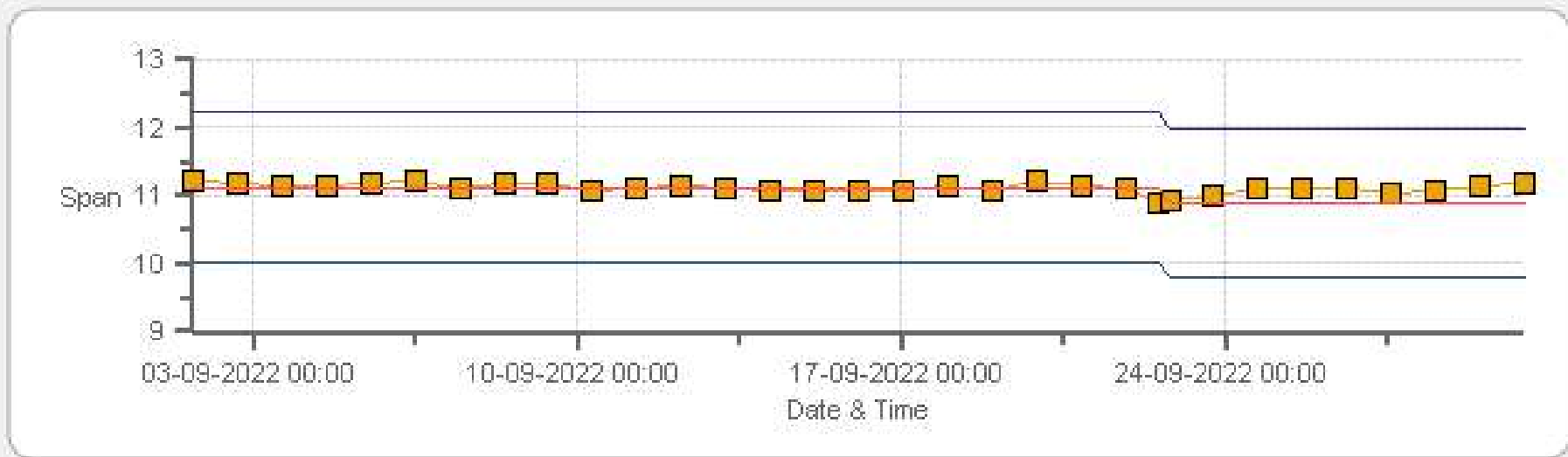
Span Span Ref Span Low Span High

NMHC[ppm] Calibration: PRAMP RENO Monthly: 09-2022 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: PRAMP RENO Monthly: 09-2022 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	22-Sep-2022	PREVIOUS CALIBRATION DATE:	03-Aug-2022
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.6
LOCATION:	Reno	BAROMETRIC (mBar):	929
PURPOSE:	Routine	START TIME (MST):	08:52
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:41

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	500 ppb
SERIAL #	12101910505	FLOW (mL/min)	441
INITIAL		FINAL	
BKG/OFFSET	0.95	BKG/OFFSET	0.97
COEF/SLOPE	0.921	COEF/SLOPE	0.918
Expected (reference) Value	221.8	Expected (reference) Value	224.8

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	M701
ID:	1991	ID:	916
MFC CALIBRATION DATE:	02-Sep-2022	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL107286	HIGH ID	n/a
CONC (ppm):	25.10	EXPIRY DATE	n/a
CYLINDER (psi):	1400	LOW ID	n/a
EXPIRY DATE	02-Nov-2025	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

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

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

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

CALIBRATION:

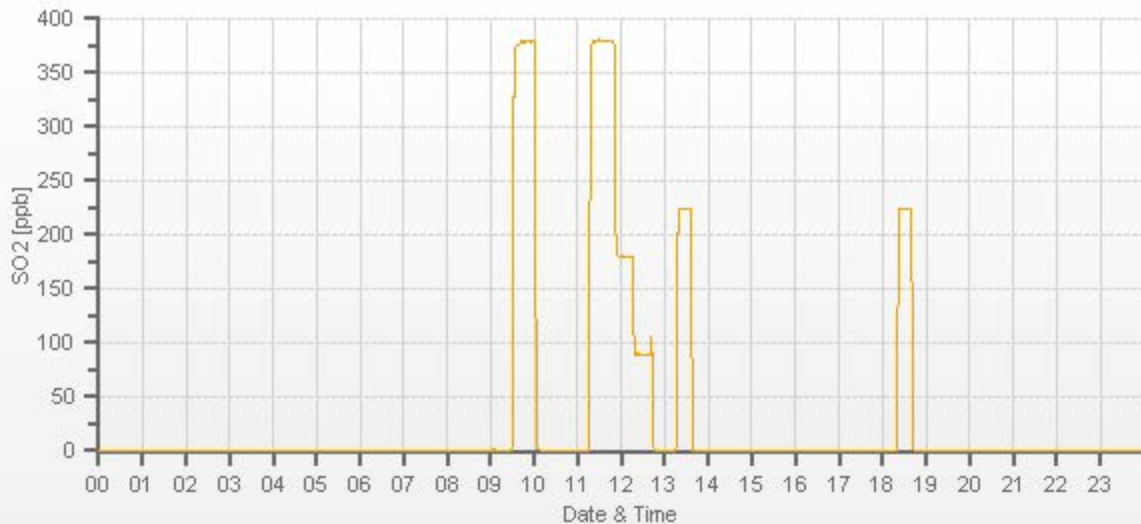
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4001	60.55	4001	0.00	0	0	1.002	1.000
3939	60.55	3999	380.00	379.1	380	1.002	1.000
3972	28.63	4000	179.62	n/a	180	n/a	0.998
3986	14.30	4001	89.72	n/a	89	n/a	1.008

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	0.0%

COMMENTS:

Sample filter changed. Monthly calibration - no issues.



TRS Analyzer Calibration by Dilution



DATE:	22-Sep-2022	PREVIOUS CALIBRATION DATE:	03-Aug-2022
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.6
LOCATION:	Reno	BAROMETRIC (mBar):	929
PURPOSE:	Routine	START TIME (MST):	08:52
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:41

ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	12101910504	FLOW (mL/min)	398
INITIAL		FINAL	
BKG/OFFSET	0.84	BKG/OFFSET	0.85
COEF/SLOPE	0.897	COEF/SLOPE	0.897
Expected (reference) Value	37.48	Expected (reference) Value	38.11

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	M701
ID:	1991	ID:	916
MFC CALIBRATION DATE:	02-Sep-2022	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):	280	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:

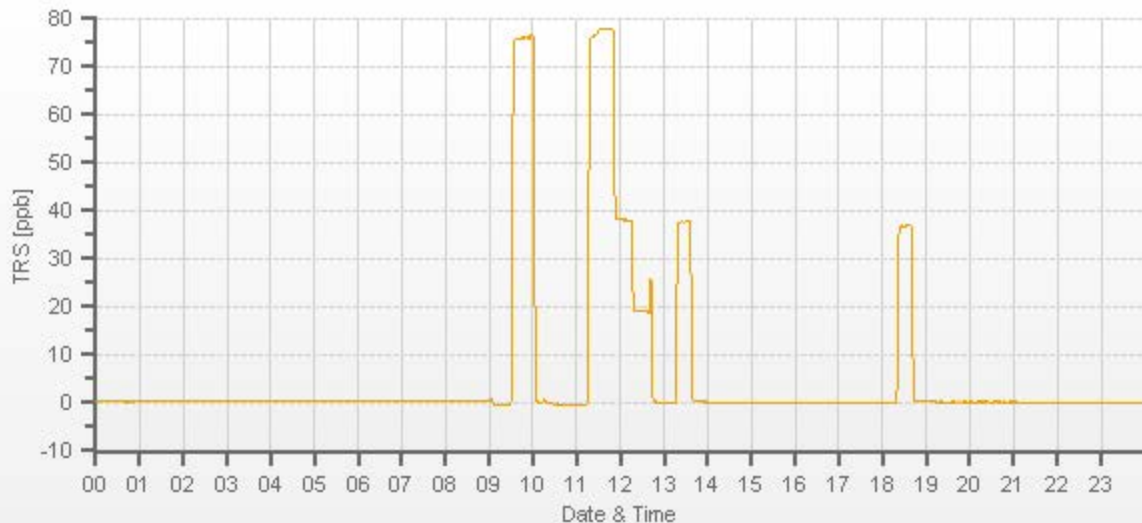
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4001	33.19	4001	0.00	-0.04	0	1.017	1.000
3966	33.19	3999	78.09	76.72	78.08	1.017	1.000
3984	16.17	4000	38.04	n/a	38.27	n/a	0.994
3992	8.09	4001	19.04	n/a	19.46	n/a	0.978

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.998	0.2%

COMMENTS:

TRS Converter CDNOVA CDN-101 #590. Sample filter changed. Monthly calibration - no issues.



Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	22-Sep-2022	PREVIOUS CALIBRATION DATE:	03-Aug-2022	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	23.6		Thermo 55i	12101910497	1126.5
LOCATION:	Reno	BAROMETRIC (mBar):	929	PARAMETER:	CH4	NMHC	THC
PURPOSE:	Routine	START TIME (MST):	08:52	RANGE (ppm):	20	20	40
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	12:58	PREVIOUS CF:	1.000	0.998	0.999

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	API	CYLINDER ID:	LL28583	HIGH ID:	n/a
MODEL:	2010	MODEL:	M701	CH ₄ /C ₃ H ₈ (ppm):	608.0 203.0	HIGH EXPIRY:	n/a
ID:	17100415	ID:	916	CYLINDER (psi):	990	LOW ID:	n/a
MFC CALIBRATION DATE:	02-Sep-2022	OXIDIZER ID:	Internal	EXPIRY DATE:	18-Aug-2029	LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH ₄ /NMHC)	HIGH	MID	LOW	CH ₄ EQUIVILANCE	
TARGET	14	7	3.5	C ₃ H ₈ as CH ₄	558.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH ₄	1166.3

EXPECTED (REFERENCE) VALUE:

INITIAL	CH ₄	NMHC	THC	FINAL	CH ₄	NMHC	THC
	9.59	11.12	20.71		9.46	10.89	20.35

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC
2999	X	2999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	X	X	X	X	X	X
2927	72.00	2999	14.60	13.40	28.00	14.54	13.32	27.86	14.59	13.39	27.98	1.004	1.006	1.005	1.000	1.001	1.001
2963	36.00	2999	7.30	6.70	14.00	n/a	n/a	n/a	7.26	6.73	14.00	n/a	n/a	n/a	1.005	0.996	1.000
2980	18.00	2998	3.65	3.35	7.00	n/a	n/a	n/a	3.63	3.41	7.04	n/a	n/a	n/a	1.006	0.983	0.995

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
CH ₄	1.000	1.000	-0.1%
NMHC	1.000	0.998	0.2%
THC	1.000	0.999	0.0%

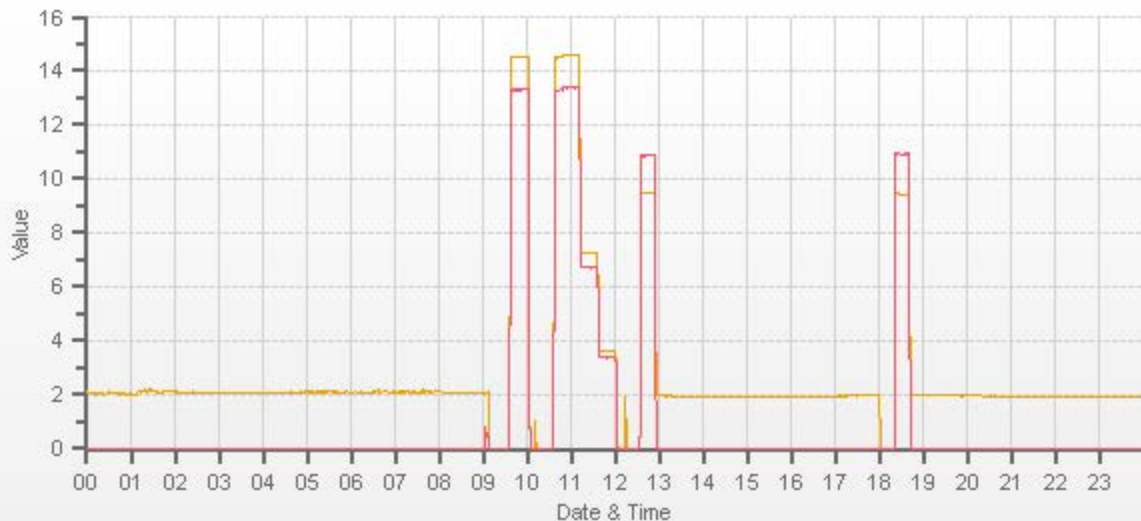
Comments:

Sample filter changed. Monthly calibration - no issues.

Use Zero Chrom?

No

Station: PRAMP RENO Daily: 22-09-2022 Type: AVG 1 Min. [1 Min.]



CAL-PRAMP-202209-01563

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

Meteorological System Checklist



Date:	September 22, 2022
Technician:	Ferdinand Roy
Station:	PRAMP Reno

Unit:	Make:	Model:	Serial #:
Precipitation Sampler:	RM Young	52202	TB 15877
Temperature Sensor:	Rotronic	HC2-S3	61116376
Barometric Pressure Sensor:	MetOne	92	K12864
Relative Humidity Sensor:	Rotronic	HC2-S3	61116376
Anemometer:	RM Young	05305VK	149769

PRECIPITATION SENSOR CHECK

Checklist:	Reply:	Comments:
Previous check date:	August 3, 2022	Channel offline time:12:59-14:00am.
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)	yes	
Is the housing clean?	yes	
Is the area around the housing clean and free from obstacles?	yes	

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

# of Tips	Data Logger Response (ml):	Manual Specification = +/- 0.1 ml
10	0.90	0.10

AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	August 3, 2022
Parameter:	Temperature @ 2 metres
Reference Thermometer ID:	Fisher SCIENTIFIC 160459244 expires June 14, 2023
Reference Temperature (°C):	22.0
Station - Ambient Temperature (°C):	20.8
Temperature Difference (°C):	1.2

BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	August 3, 2022	
Reference Barometer ID:	F.S. #10528, Expire: July 29, 2023	
Reference Pressure - Units/Reading:	millibar	928
Station Pressure - Units/Reading:	millibar	929.9
Pressure Tolerance +/- 15% of error:	789 - 1067	-0.20%

RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	August 3, 2022	
Reference Hygrometer ID:	Fisher SCIENTIFIC 160459244 expires June 14, 2023	
Reference Hygrometer % RH- Reading:	38.94	
Station Hygrometer % RH- Reading:	35.70	
RH Tolerance +/- 15% of difference:	33.10 - 44.78	8.3%

ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	August 3, 2022	Previous check date:	August 3, 2022
Wind Speed Observed (kph):	5~10	Wind Direction Observed:	SW
Wind speed on Data Logger (kph):	6.4	Wind Direction on Data Logger:	SW
		Wind Direction Pass/Fail?:	Pass

Comments

No issues



Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	Performed By:	Limin Li
Audit Location:	Reno	Reviewed By:	Chris Wesson
Audit Date:	August 3, 2022	Start/End Time (mst):	10:08/11:30
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:	July 5, 2021	Direction Unit Output Range:	0-360

Wind Calibrator Information

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

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

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.0	0.0	-
1000	18.4	18.4	18.4	1.002
2000	36.9	36.8	36.8	1.002
3000	55.3	55.2	55.2	1.002
4000	73.7	73.6	73.6	1.002
5000	92.2	92.2	92.2	0.999
6000	110.6	110.6	110.6	1.000
7000	129.0	129.2	129.2	0.999
8000	147.4	147.8	147.8	0.998
9000	165.9	166.4	166.4	0.997
10000	184.3	185.0	185.0	0.996
The audit meets AMD requirements.			Average Correction Factor=	0.999

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	63	300	-3.0	0.0	1.5
90	270	93	270	-3.0	0.0	1.5
120	240	121	240	-1.0	0.0	0.5
150	210	151	211	-1.0	-1.0	1.0
180	180	181	181	-1.0	-1.0	1.0
210	150	211	152	-1.0	-2.0	1.5
240	120	240	122	0.0	-2.0	1.0
270	90	269	92	1.0	-2.0	1.5
300	60	299	62	1.0	-2.0	1.5
330	30	328	32	2.0	-2.0	2.0
355	0	354	1	1.0	1.0	1.0
The audit meets AMD requirements.				Average Absolute Degrees Difference=		1.3

Comments:

Declination = 15 deg East



Peace River Area Monitoring Program

SEPTEMBER 2022

Ambient Air Monitoring Calibration Report

- AQHI - GRIMSHAW STATION-

CAL-PRAMP-202209-01689

Operation and Maintenance:

Bureau Veritas Canada

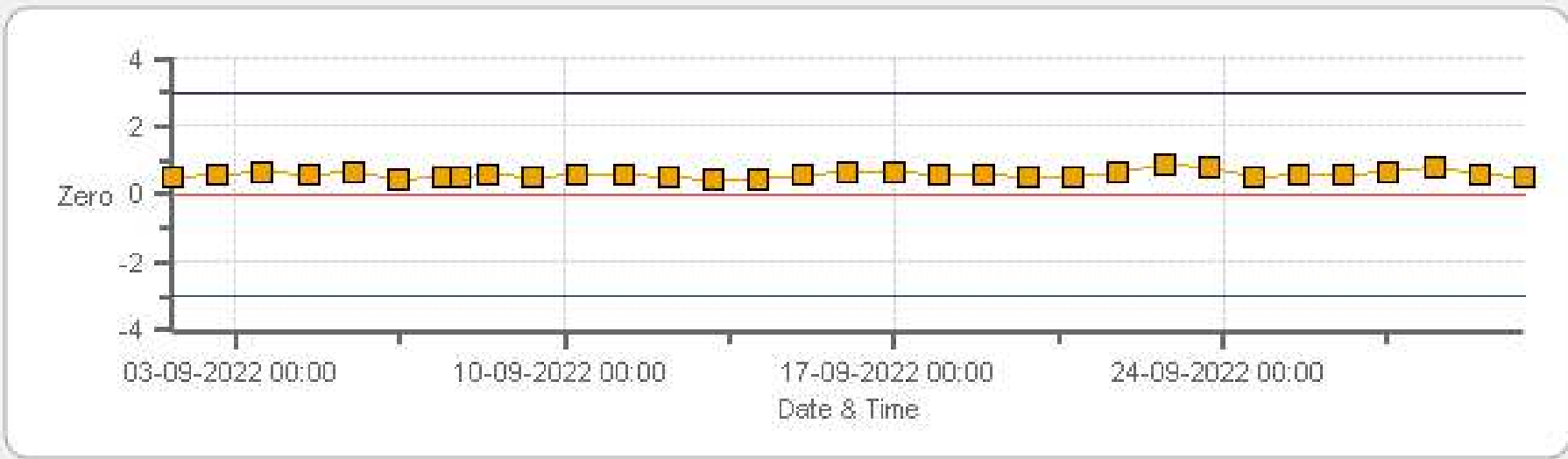
Data Validation and Report:

Bureau Veritas Canada

October 20, 2022

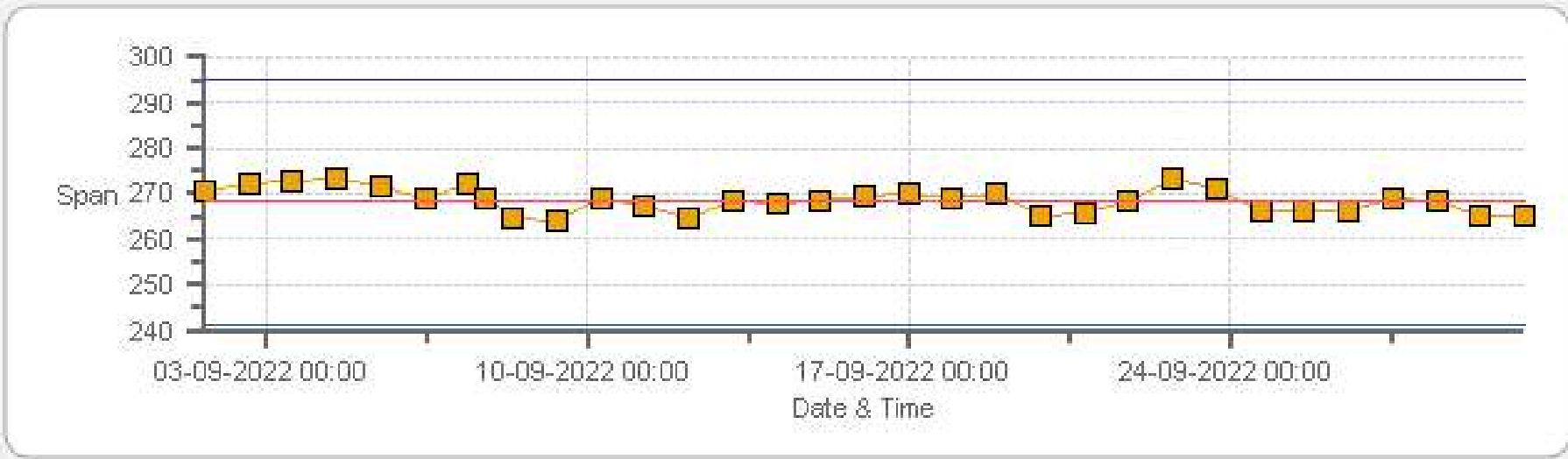
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Zero



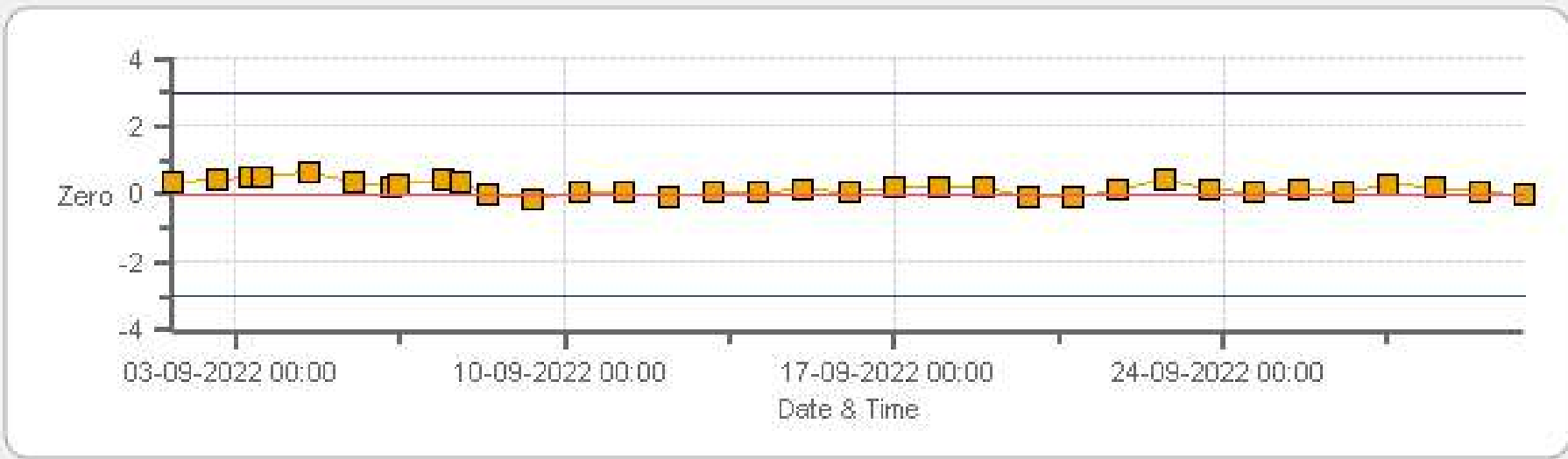
Zero Zero Ref Zero Low Zero High

SO2[ppb] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Span



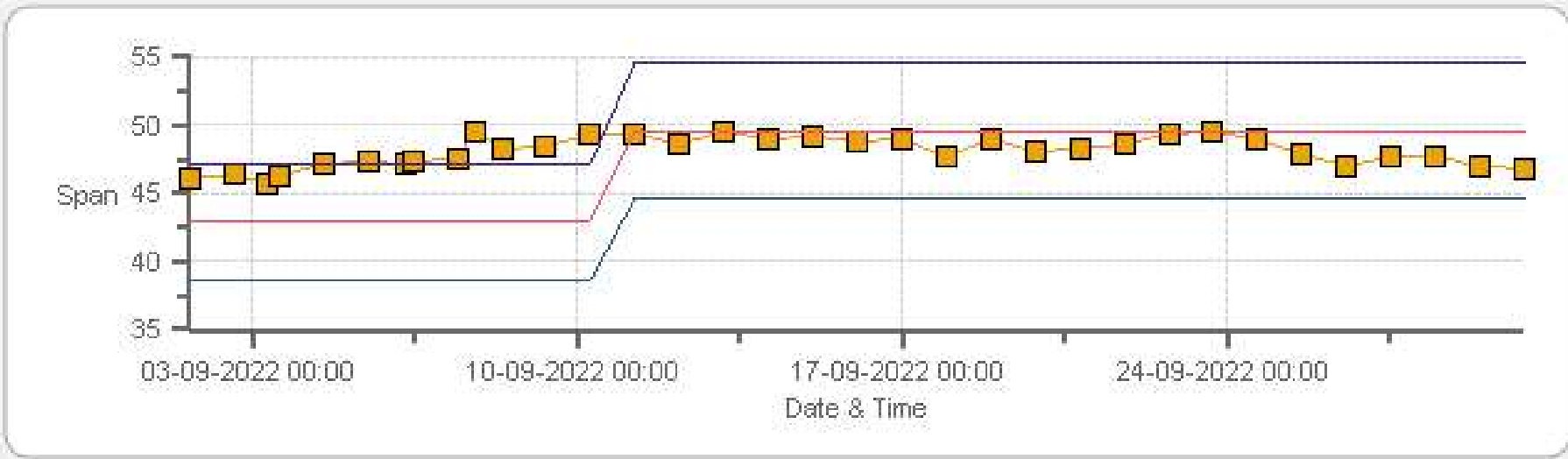
Span SpanRef Span Low Span High

TRS[ppb] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Zero



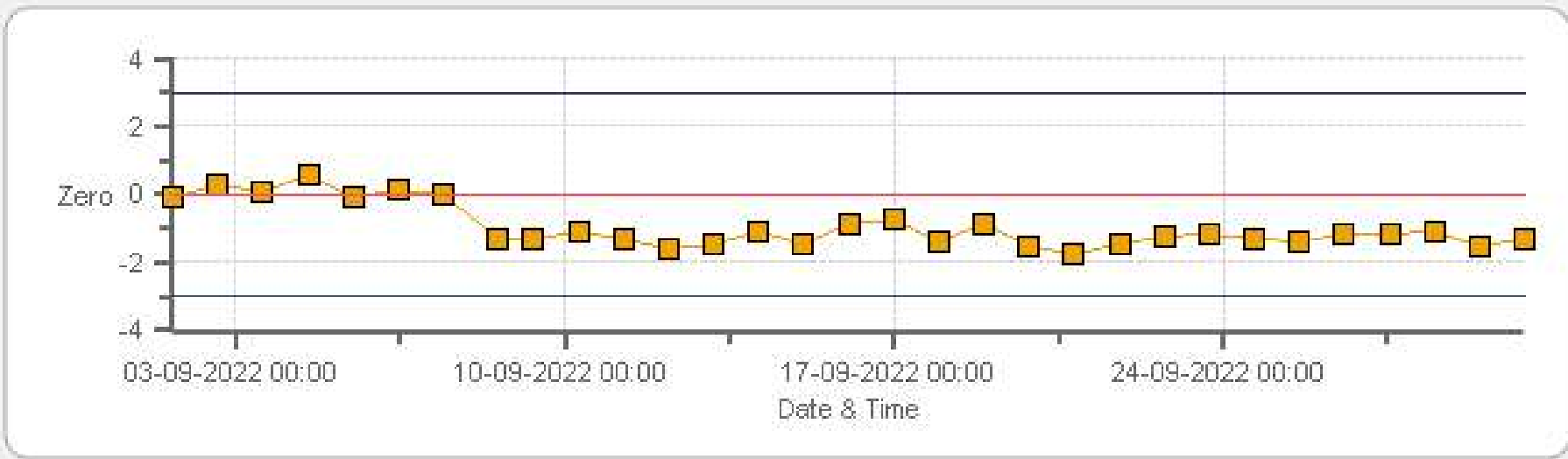
Zero Zero Ref Zero Low Zero High

TRS[ppb] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Span

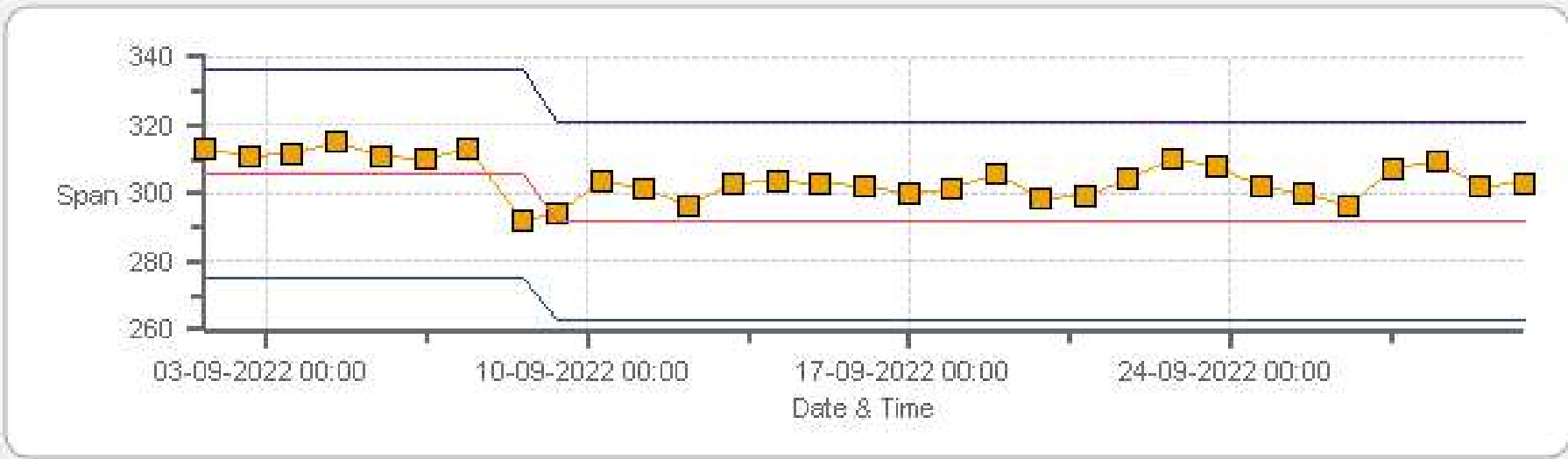


Span Span Ref Span Low Span High

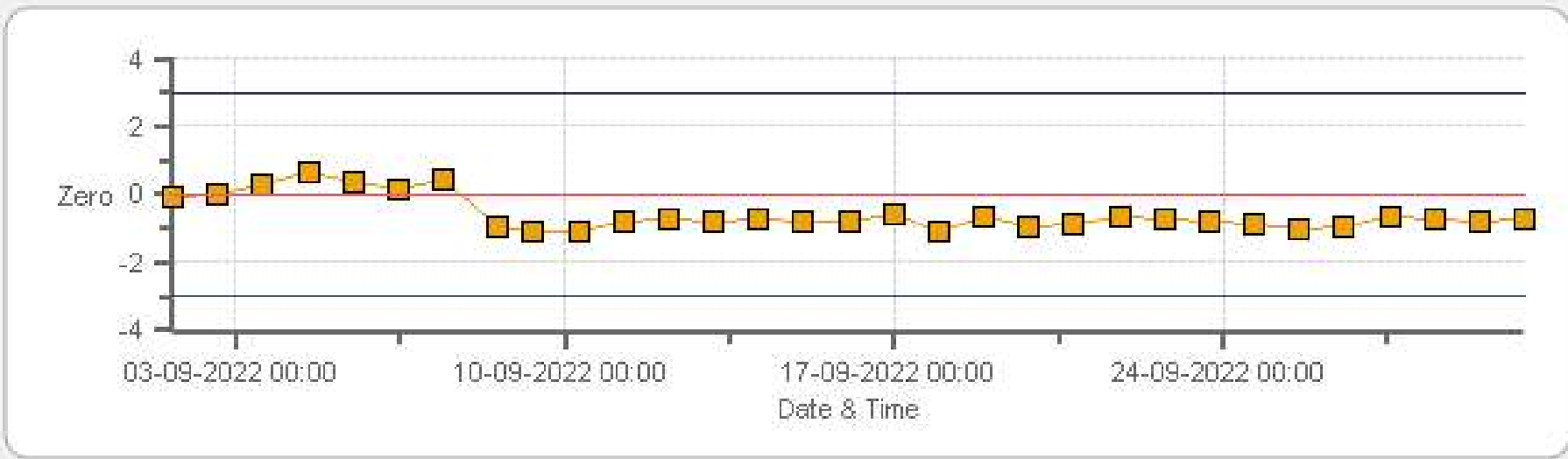
NOX[ppb] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Zero



NOX[ppb] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Span

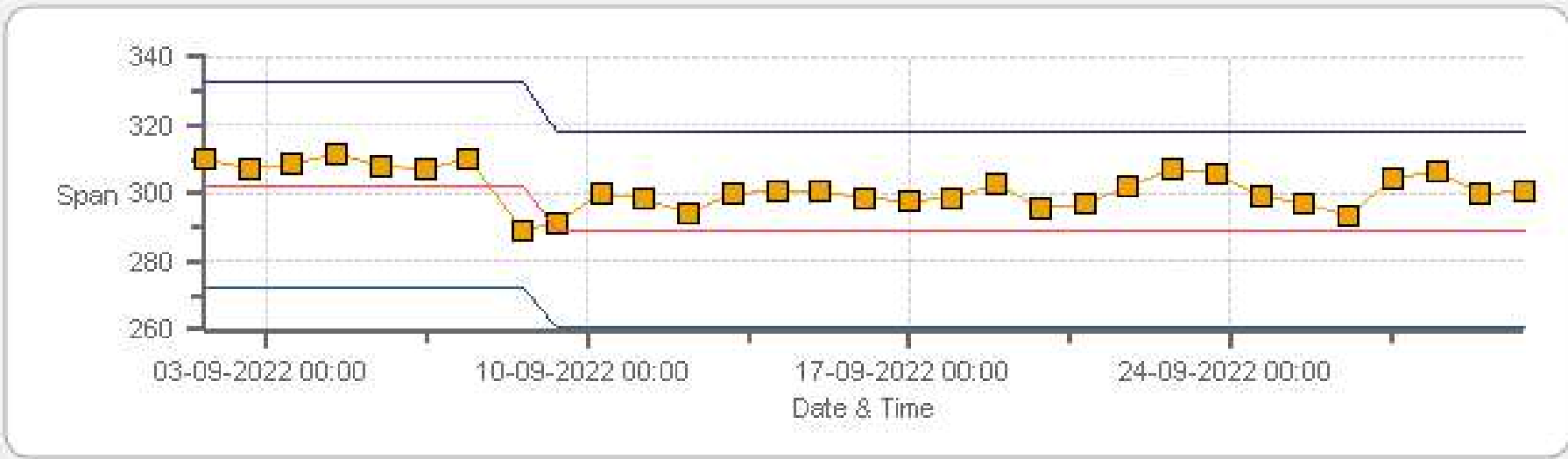


NO2[ppb] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Zero



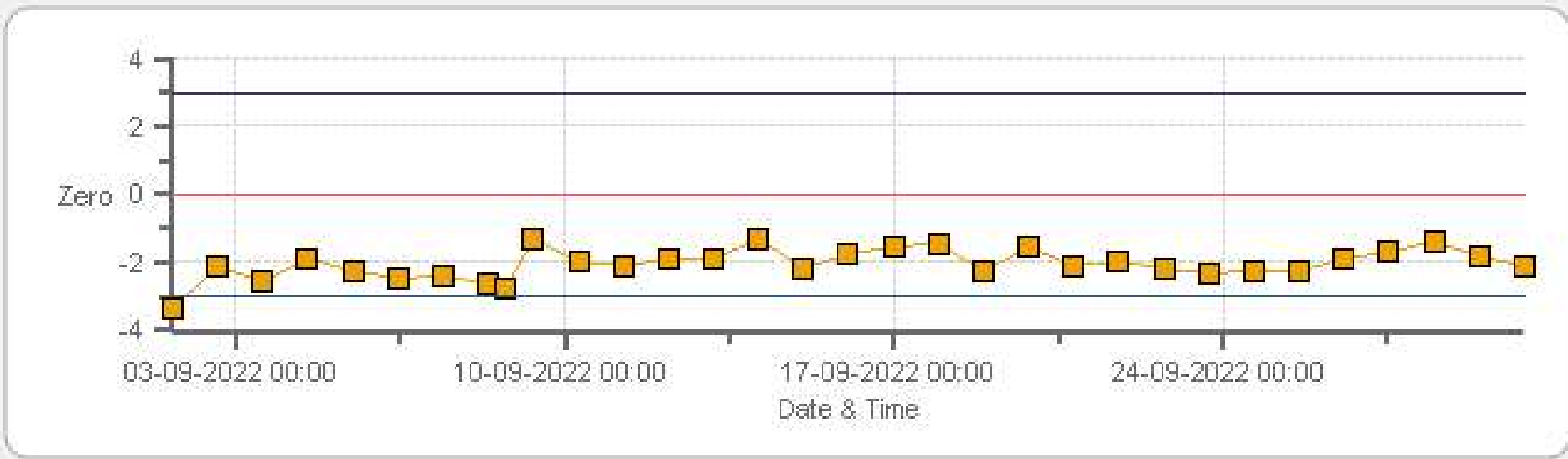
Zero Zero Ref Zero Low Zero High

NO2[ppb] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Span



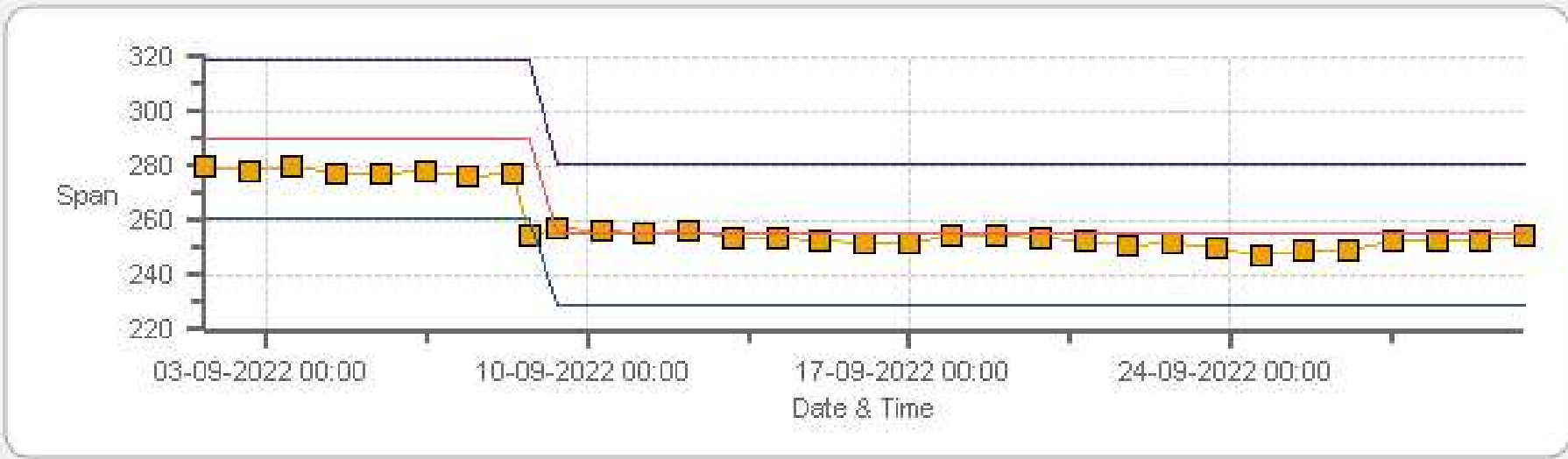
Span SpanRef Span Low Span High

O3[ppb] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Zero



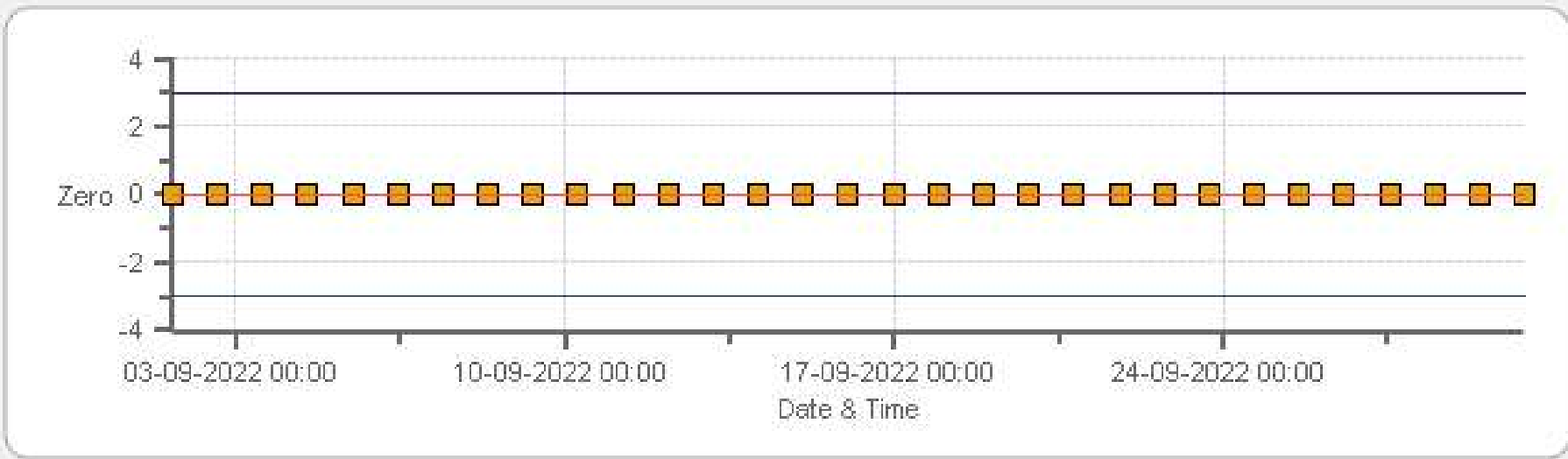
Zero Zero Ref Zero Low Zero High

O3[ppb] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Span



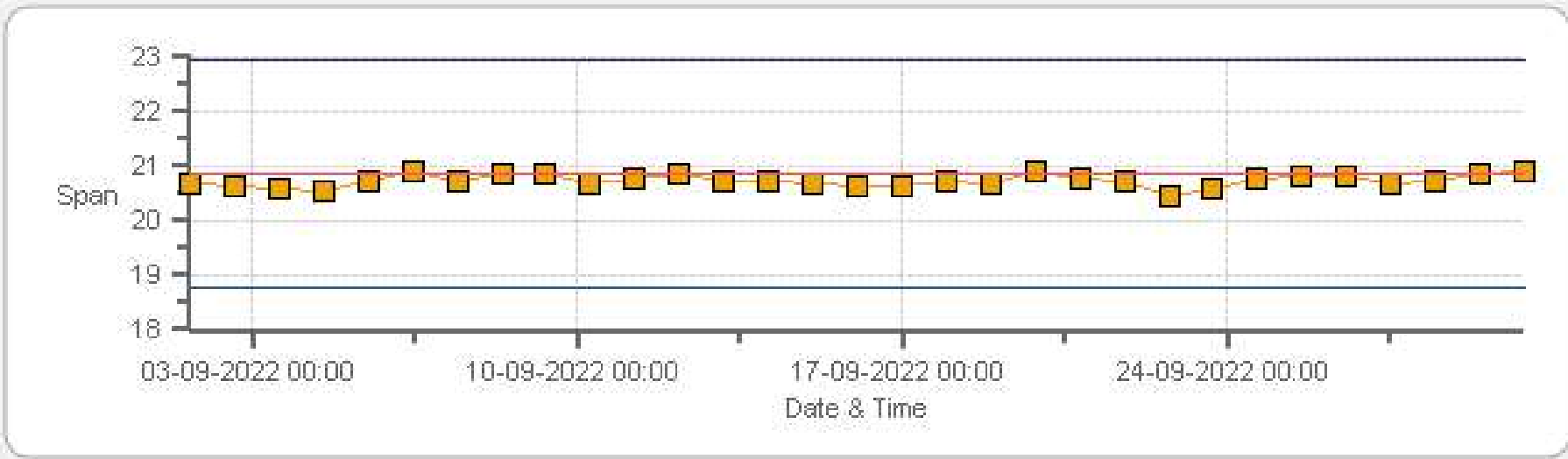
Span SpanRef Span Low Span High

THC55[ppm] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Zero



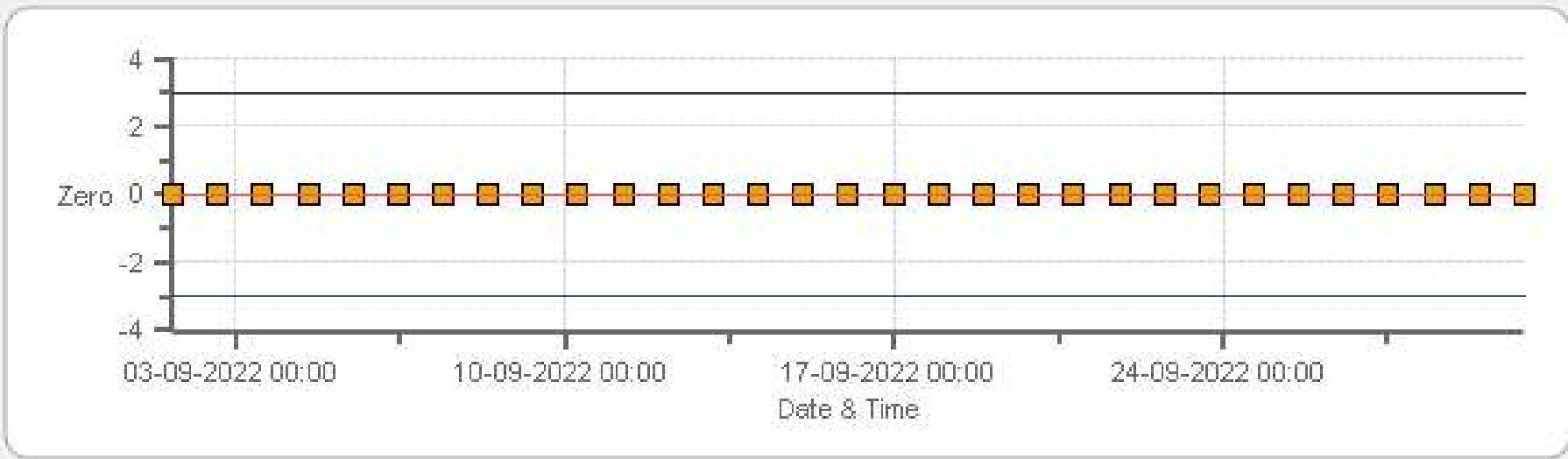
Zero Zero Ref Zero Low Zero High

THC55[ppm] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Span



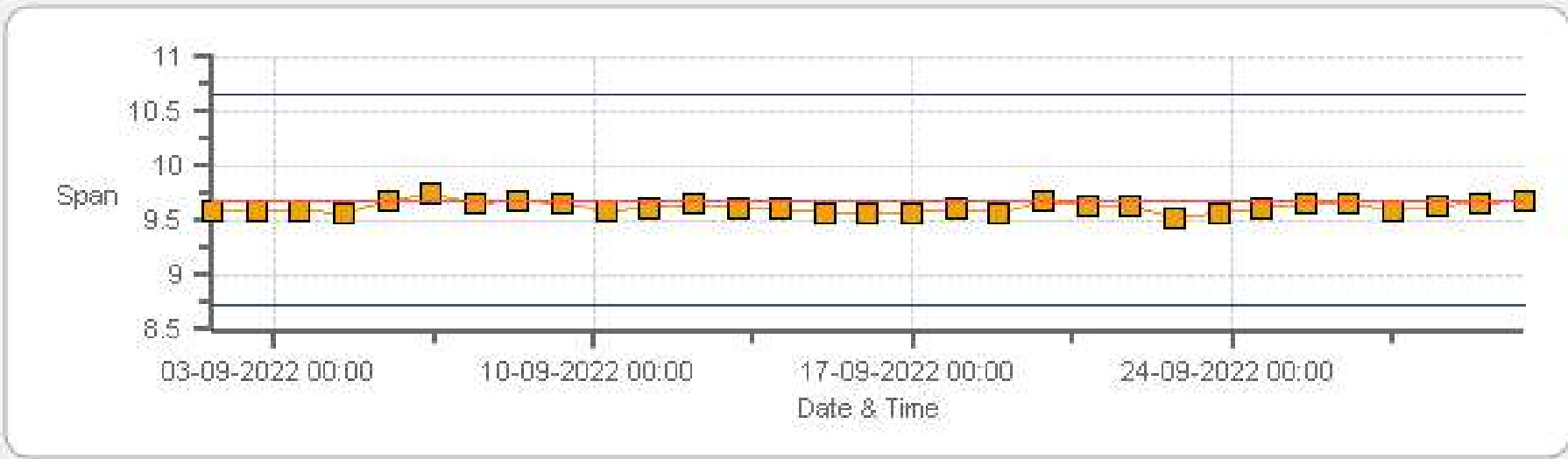
Span Span Ref Span Low Span High

CH4[ppm] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Zero



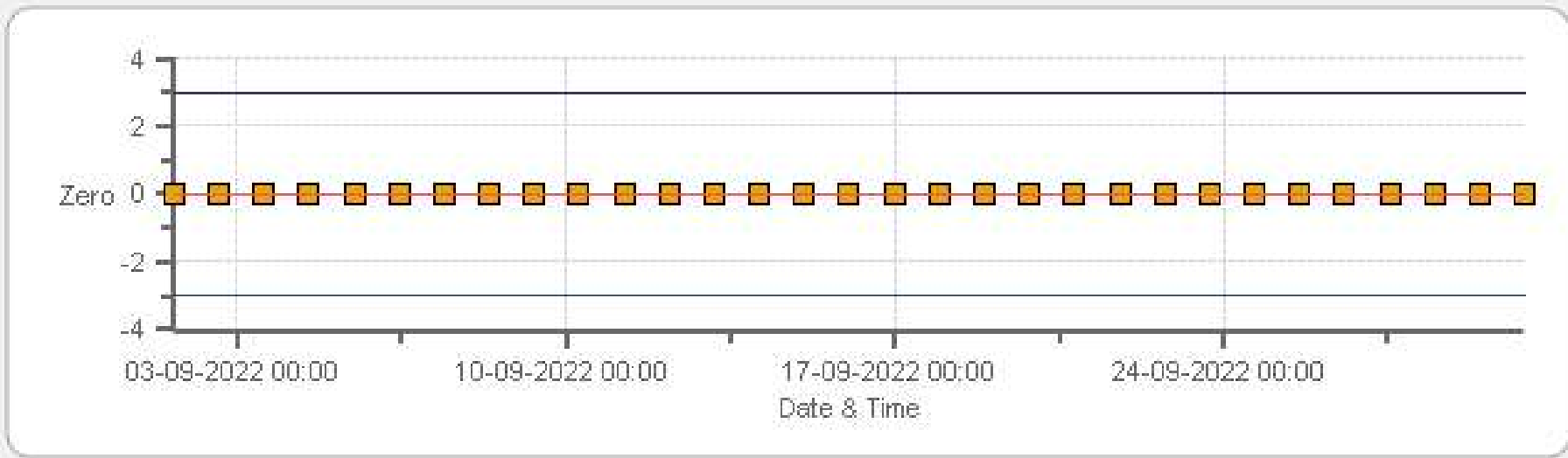
Zero Zero Ref Zero Low Zero High

CH4[ppm] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Span



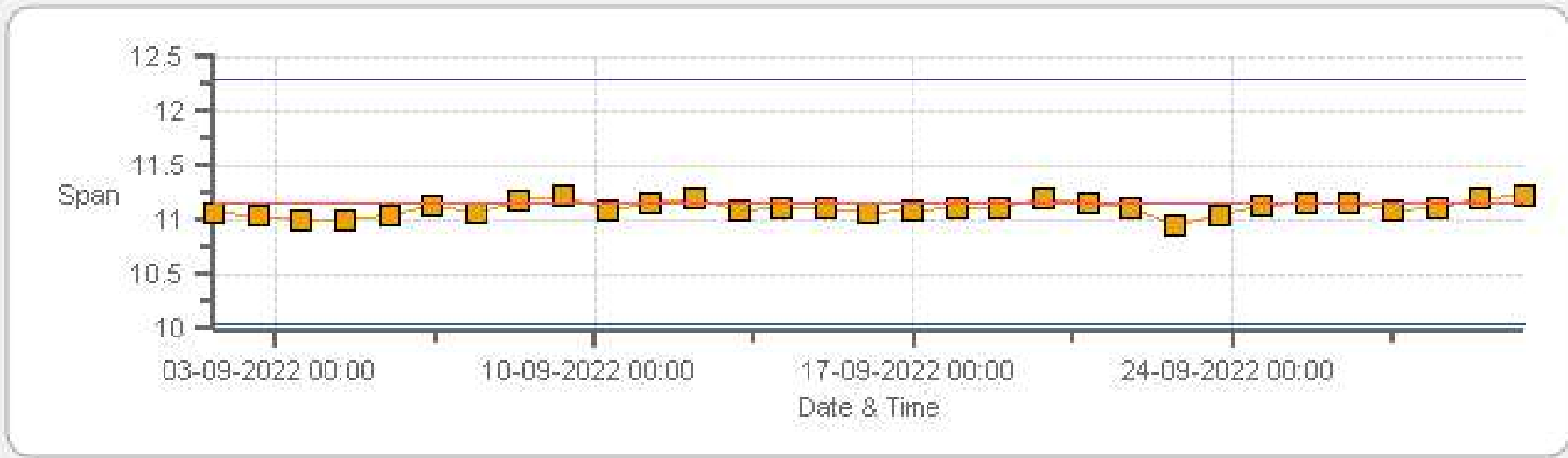
Span Span Ref Span Low Span High

NMHC[ppm] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: AQHI Grimshaw Monthly: 09-2022 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	07-Sep-2022	PREVIOUS CALIBRATION DATE:	09-Aug-2022
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	20.4
LOCATION:	Grimshaw	BAROMETRIC (mBar):	928
PURPOSE:	Routine	START TIME (MST):	14:21
PERFORMED BY:	Chris Wesson	END TIME (MST):	18:44

ANALYZER:

MAKE/MODEL	Teledyne T100	RANGE	500 ppb
SERIAL #	722	FLOW (mL/min)	523
INITIAL		FINAL	
BKG/OFFSET	26.6	BKG/OFFSET	26.6
COEF/SLOPE	0.933	COEF/SLOPE	0.925
Expected (reference) Value	268.1	Expected (reference) Value	268.7

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	58100720	ID:	4568
MFC CALIBRATION DATE:	15-Mar-2022	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0001923	HIGH ID	n/a
CONC (ppm):	25.1	EXPIRY DATE	n/a
CYLINDER (psi):	1900	LOW ID	n/a
EXPIRY DATE	02-Nov-2025	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

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

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

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

CALIBRATION:

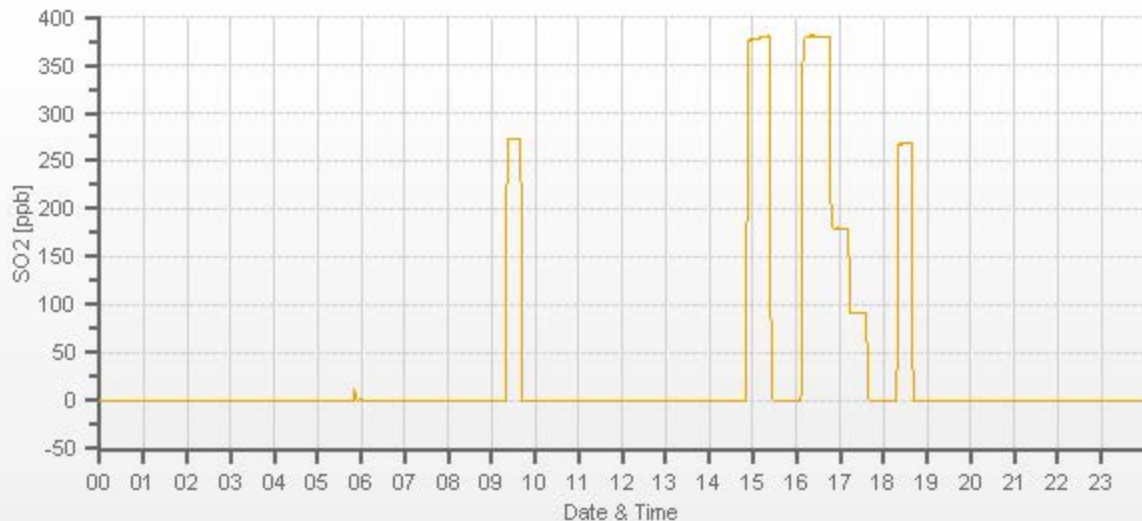
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
3748	56.80	3748	0.00	0.4	0	1.000	1.000
3694	56.80	3751	380.08	380.4	380.1	1.000	1.000
3723	26.90	3750	180.05	n/a	180.5	n/a	0.998
3737	13.40	3750	89.69	n/a	91.3	n/a	0.982

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.999	0.1%

COMMENTS:

Sample filter changed.



TRS Analyzer Calibration by Dilution



DATE:	07-Sep-2022	PREVIOUS CALIBRATION DATE:	09-Aug-2022
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	20.4
LOCATION:	Grimshaw	BAROMETRIC (mBar):	938
PURPOSE:	Routine	START TIME (MST):	14:21
PERFORMED BY:	Chris Wesson	END TIME (MST):	18:44

ANALYZER:

MAKE/MODEL	Teledyne T100U	RANGE	100 ppb
SERIAL #	132	FLOW (mL/min)	511
INITIAL		FINAL	
BKG/OFFSET	27.8	BKG/OFFSET	28.3
COEF/SLOPE	1.146	COEF/SLOPE	1.18
Expected (reference) Value	42.96	Expected (reference) Value	49.6

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	58100720	ID:	4568
MFC CALIBRATION DATE:	15-Mar-2022	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002519	HIGH ID	n/a
CONC (ppm):	9.41	EXPIRY DATE	n/a
CYLINDER (psi):	1300	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:

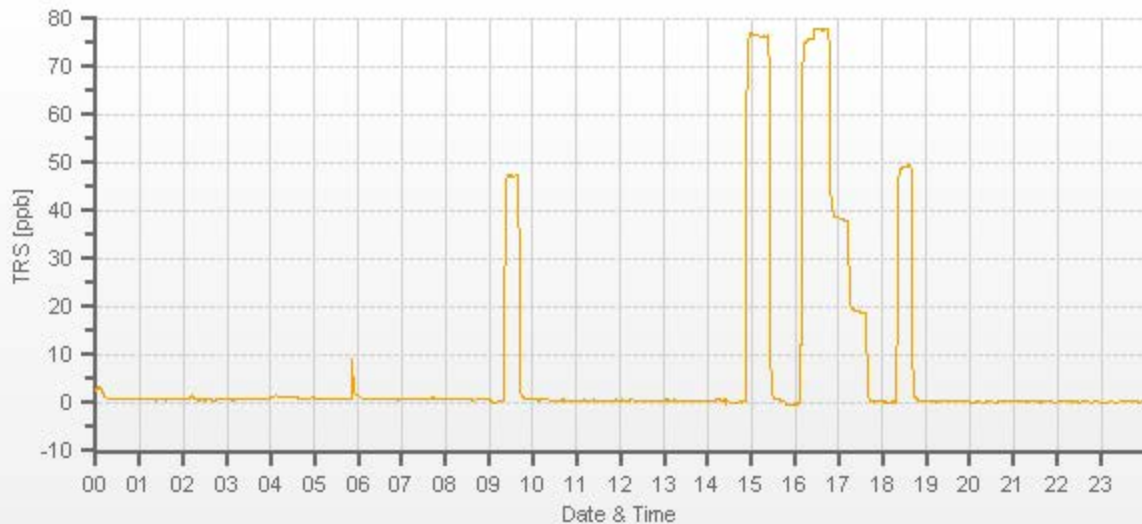
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
3748	31.10	3748	0.00	0.4	0	1.024	1.000
3720	31.10	3751	78.02	76.6	78.03	1.024	1.000
3735	15.10	3750	37.89	n/a	38.26	n/a	0.990
3742	7.60	3750	19.07	n/a	19.03	n/a	1.002

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	0.1%

COMMENTS:

Converter, CDNova CDN-101 #530



NOx Calibration by Dilution/Gas-Phase Titration



CALIBRATION:				ANALYZER:			
DATE:	08-Sep-2022	PREVIOUS CALIBRATION DATE:	10-Aug-2022	MAKE/MODEL:	Teledyne T200	PREVIOUS CF.	
CLIENT:	PRAMP	TEMPERATURE (°C):	23.5	SERIAL #:	837	NOx	0.999
LOCATION:	Grimshaw	BAROMETRIC (mBar):	948	FLOW (mL/min)	446	NO	0.999
PURPOSE:	Routine	START TIME (MST):	07:46	RANGE (ppb)	500	NO2	0.996
PERFORMED BY:	Chris Wesson	END TIME (MST):	14:03	GPT FOR O3?		Yes	

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	SABIO	MAKE:	Teledyne	CYLINDER ID:	EY 0001013	HIGH ID:	n/a
MODEL:	2010	MODEL:	M701	NO/NOx (PPM):	49.2 49.4	HIGH EXPIRY:	n/a
ID:	26701218	ID:	4568	CYLINDER (psi):	1900	LOW ID:	n/a
MFC CALIBRATION DATE:	10-Mar-2022	OXIDIZER ID:	n/a	EXPIRY DATE	11-Nov-2029	LOW EXPIRY:	n/a

CALIBRATION SETTINGS:							
INITIAL	NOx	NO	NO2	FINAL	NOx	NO	NO2
BKG/OFFSET:	-0.1	-0.3	n/a	BKG/OFFSET:	2.3	0.3	n/a
SLOPE/COEF/CE:	1.117	1.122	0.99	SLOPE/COEF/CE:	1.08	1.079	0.99

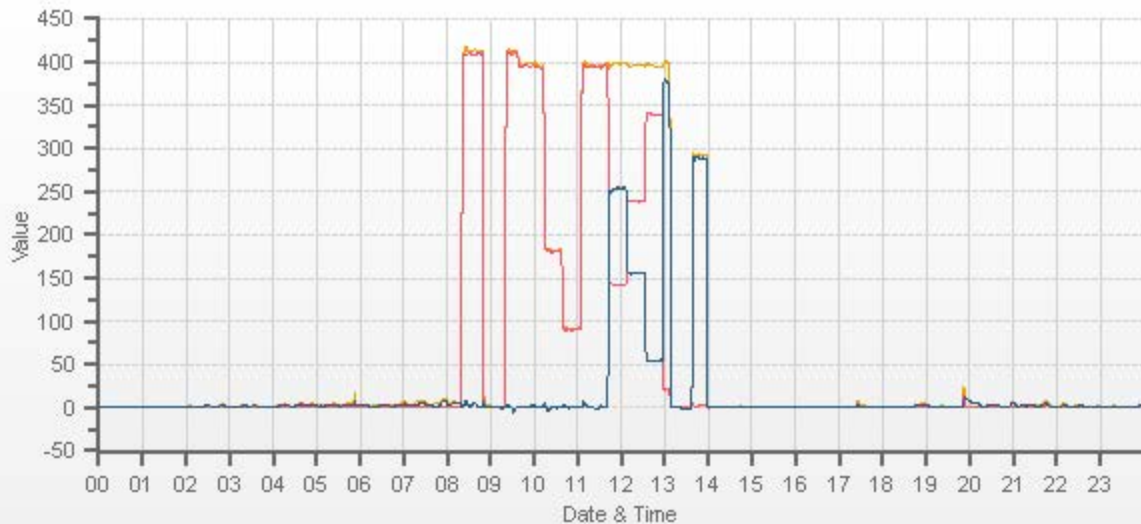
EXPECTED (REFERENCE) VALUE:							
INITIAL	NOx	NO	NO2	FINAL	NOx	NO	NO2
	306.1	3.7	302.4		291.9	2.6	289.3

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

FLOW RATE			CONCENTRATION (ppb)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	NO	NOx	NO2	NO	NOx	NO2	NO	NOx	NO2	NO	NOx	NO2	NO	NOx	NO2
4999	40.10	4999	0.0	0.0	0.0	0.1	4.7	4.6	0.0	0.0	0.0	0.963	0.973	0.996	1.001	1.003	0.989
4959	40.10	4999	394.7	396.3	1.6	409.8	412.1	2.3	394.1	394.9	0.8	0.963	0.973	0.996	1.001	1.003	0.989
4981	18.30	4999	180.1	180.8	0.7	n/a	n/a	n/a	180.9	180.7	-0.2	n/a	n/a	0.996	1.001	n/a	n/a
4989	9.10	4998	89.6	89.9	0.4	n/a	n/a	n/a	90.9	90.9	0.1	n/a	n/a	0.985	0.989	n/a	n/a

GPT CALIBRATION:										
Point	CALIBRATOR			INDICATED (ppb)			NO DROP / O3 Conc (ppb)	NO2 GAIN (ppb)	NO2 Corr. FACTOR	CONV. EFFICIENCY
	GAS	TOTAL	O3 SETPOINT	NO	NOx	NO2				
REFERENCE	40.10	4999	0	395.8	396.2	0.5	253.4	253.9	0.998	100.20%
AS-FOUND HIGH	40.10	4999	250	142.4	396.8	254.4	253.4	253.9	0.998	100.20%
ADJUSTED HIGH	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MID	40.10	4999	155	239.7	395.8	156.1	156.1	155.6	1.003	99.68%
LOW	40.10	4999	55	338.6	393.6	55.1	57.2	54.6	1.048	95.45%
NO2 adjustment not required.									AVERAGE:	98.44%

LINEAR REGRESSION ANALYSIS:				COMMENTS: Extra GPT point for O3: Setpoint = 360, NO drop (O3) = 374.6
	CORRELATION	SLOPE	INTERCEPT	
NO	1.000	0.997	0.16%	
NOx	1.000	0.996	0.12%	
NO2	1.000	1.016	-0.67%	



CAL-PRAMP-202209-01689

Ozone Calibration by Direct GPT



DATE:	08-Sep-2022	PREVIOUS CALIBRATION DATE:	10-Aug-2022
PARAMETER:	O3	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	22.0
LOCATION:	Grimshaw	BAROMETRIC (mBar):	947
PURPOSE:	Routine	START TIME (MST):	13:15
PERFORMED BY:	Chris Wesson	END TIME (MST):	17:21

ANALYZER:

MAKE/MODEL	Teledyne T400	RANGE	500 ppb
SERIAL #	824	FLOW (mL/min)	770
INITIAL		FINAL	
BKG/OFFSET	-1	BKG/OFFSET	-1.6
COEF/SLOPE	1.078	COEF/SLOPE	1.011
Expected (reference) Value	290.2	Expected (reference) Value	255

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	SABIO	MAKE:	Teledyne
MODEL:	2010	MODEL:	M701
ID:	26701218	ID:	4568
MFC CALIBRATION DATE:	10-Mar-2022	OXIDIZER ID:	n/a
CALIBRATION METHOD:		Direct GPT	
GPT DATE:	08-Sep-2022	GPT END TIME:	13:10

CALIBRATION PARAMETERS:

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

CALIBRATION:

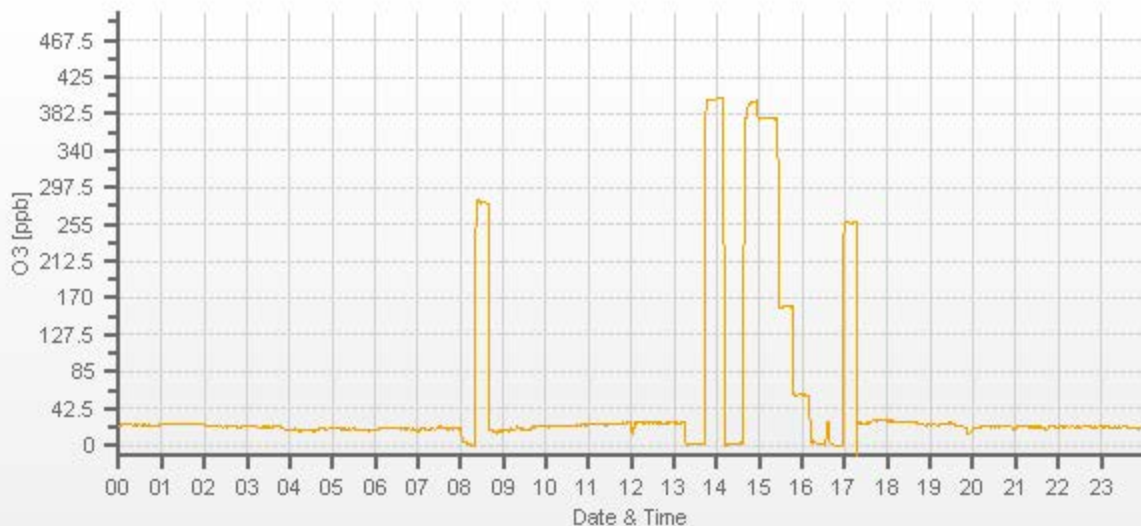
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4999	 	4999	0.0	-0.8	0.0	 	
4999	 	4999	374.6	398.5	374.5	0.938	1.000
4999	 	4999	156.1	n/a	157.8	n/a	0.989
4999	 	4999	57.2	n/a	55.7	n/a	1.027

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.002	0.0%

COMMENTS:

No major issues
16:34 post-cal ZS interrupted. Restarted.



Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	07-Sep-2022	PREVIOUS CALIBRATION DATE:	09-Aug-2022	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	20.4		Thermo 55i	1191032505	1142
LOCATION:	Grimshaw	BAROMETRIC (mBar):	938	PARAMETER:	CH4	NMHC	THC
PURPOSE	Routine	START TIME (MST):	14:21	RANGE (ppm):	20	20	40
PERFORMED BY:	Chris Wesson	END TIME (MST):	17:53	PREVIOUS CF:	1.000	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 ₃ H ₈ (ppm):	608.0 203.0	HIGH EXPIRY:	n/a
ID:	58100720	ID:	4568	CYLINDER (psi):	1400	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 (CH ₄ /NMHC)	HIGH	MID	LOW	CH ₄ EQUIVILANCE	
TARGET	14	7	3.5	C ₃ H ₈ as CH ₄	558.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH ₄	1166.3

EXPECTED (REFERENCE) VALUE:

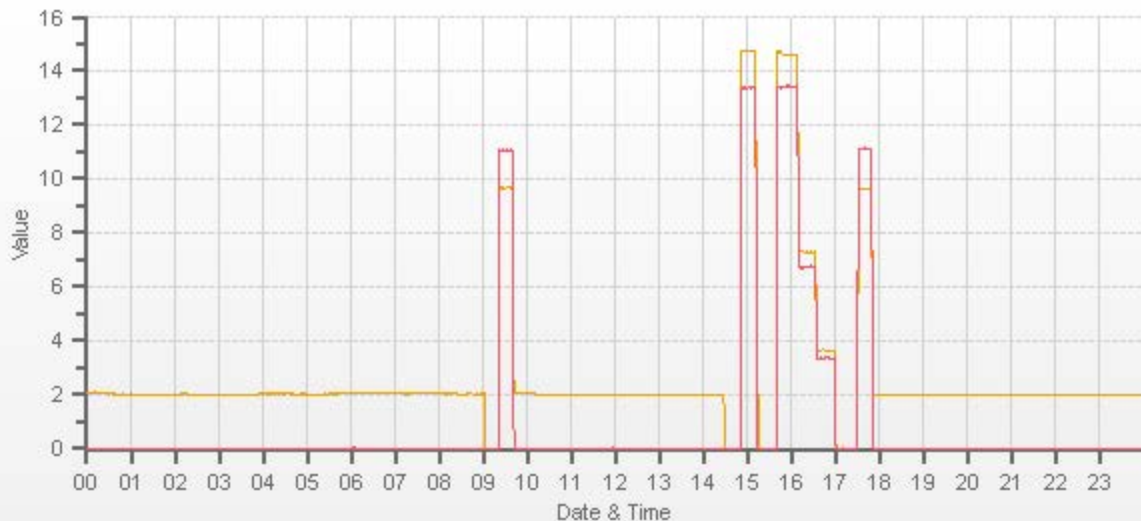
INITIAL	CH ₄	NMHC	THC	FINAL	CH ₄	NMHC	THC
	9.72	11.31	21.03		9.72	11.31	21.03

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC
3249	X	3249	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	X	X	X	X	X	X
3172	78.00	3250	14.59	13.40	27.99	14.74	13.39	28.13	14.58	13.41	28.00	0.990	1.001	0.995	1.001	0.999	1.000
3209	39.00	3248	7.30	6.70	14.00	n/a	n/a	n/a	7.29	6.75	14.04	n/a	n/a	n/a	1.001	0.993	0.997
3231	19.50	3250	3.65	3.35	7.00	n/a	n/a	n/a	3.66	3.36	7.02	n/a	n/a	n/a	0.997	0.997	0.997

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT	Comments:	
CH ₄	1.000	0.999	0.0%	No issues	
NMHC	1.000	1.001	0.1%		
THC	1.000	1.000	0.0%		
				Use Zero Chrom?	Yes



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CH4 [ppm] NMHC [ppm]



Teledyne T640 Audit/Calibration

Date/Previous Audit Date:	September 22, 2022	August 10, 2022	Weather Conditions:	Mix of sun and clouds	
Company:	PRAMP		Start Time (mst):	16:53	
Station:	Grimshaw		End Time (mst):	18:53	
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/N201588 / Nov 01, 2022		Temperature: DeltaCal DC1 S/N201588 / Nov 01, 2022			
Digital Manometer: DeltaCal DC1 S/N201588 / Nov 01, 2022		Pressure: DeltaCal DC1 S/N201588 / Nov 01, 2022			
DIAGNOSTICS:					
Ambient Pressure (mmHg)	696.3	Ambient Temp (°C)	22.3	ASC Heater Duty (%)	0.0
Box Temp (°C)	26.7	Current PMT HV (V)	1537	LED Temp (°C)	35.00
P3 Value	50	PMT Setting (V)	1542	Pump PWM (%)	36
Sample Flow (L/min)	5.02	Sample RH (%RH)	33.9	Sample Temp (°C)	24.9
Item:	As-found		As-left		Tolerance
	Reference	T640x	Reference	T640x	
Zero Test (Leak Check)	PM10	0.0	0	0.0	0.0 to 0.2
	PM2.5	0.0	0	0.0	
Ambient Pressure (mmHg)	698.0	696.2	697.5	695.7	+/- 10 mm Hg
Ambient Temperature (°C)	21.90	22.2	n/a		+/- 2°C
Sample Flow (L/min)	4.92	4.98	4.95	4.98	+/-5% of T640x (e.g., 4.75 – 5.25 lpm)
Additional Monthly Maintenance :					Completed
				Inlet cleaned?	Yes
				Sample tubing inspected (inner and outer)?	Yes
Quarterly Audit/Calibration:					
SpanDust™ Standard	Peak at Channel		Lot No:		Expiry:
	10.9		100128-050-033		06-01-2023
Item:	Verification:		Calibration (if needed):		Tolerance
	Reference	T640x	Reference	T640x	
Peak Channel	10.9	10.7	10.9	11.1	± 0.5
PMT Setting (V)	n/a	1542	n/a	1542	n/a
Peak Channel Counts:	n/a	1340	n/a	2591	n/a
Additional Checks and Maintenance:					Completed
Every 6 Months	1. Clean Optical Chamber				Yes
	2. Clean RH Sensor				Yes
	3. Clean Temp Sensor				Yes
Every 12 months <small>(or if valve or pump PWM value approaches 80%)</small>	1. New internal Disposable Filter Unit (DFU) [inside front panel]				Yes
Comments:					
No issues.					

Meteorological System Checklist



Date:	September 8, 2022
Technician:	Chris Wesson
Station:	PRAMP Grimshaw

Unit:	Make:	Model:	Serial #:
Temperature Sensor:	Vaisala	HMP155	N2910506
Barometric Pressure Sensor:	MetOne	92	A2397
Relative Humidity Sensor:	Vaisala	HMP155	N2910506
Anemometer:	RM Young	05305AQ	174801

AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	August 10, 2022
Parameter:	Temperature @ 2 metres
Reference Thermometer ID:	F.S. 170286131 expires August 24, 2022
Reference Temperature (°C):	16.0
Station - Ambient Temperature (°C):	15.9
Temperature Difference (°C):	0.1

BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	August 10, 2022		
Reference Barometer ID:	BRUNTON #05535, Expire: Feb 22, 2023		
Reference Pressure - Units/Reading:	millibar	947.5	
Station Pressure - Units/Reading:	millibar	947.6	
Pressure Tolerance +/- 15% of error:	805 - 1090	-0.01%	

RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	August 10, 2022		
Reference Hygrometer ID:	F.S. 170286131 expires August 24, 2022		
Reference Hygrometer % RH- Reading:	44.40		
Station Hygrometer % RH- Reading:	45.60		
RH Tolerance +/- 15% of difference:	37.74 - 51.06	-2.7%	

ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	August 10, 2022	Previous check date:	August 10, 2022
Wind Speed Observed (kph):	10~20	Wind Direction Observed:	W
Wind speed on Data Logger (kph):	18	Wind Direction on Data Logger:	W
		Wind Direction Pass/Fail?:	Pass

Comments

No issues



Meteorological Sensor Audit/Calibration

Location Information

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

Wind Sensor Information

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

Wind Calibrator Information

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

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

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

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

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

Comments:

Output via RMY32400 serial interface



Peace River Area Monitoring Program

SEPTEMBER 2022

Ambient Air Monitoring Calibration Report

- PEACE RIVER COMPLEX (PRC) STATION-

CAL-PRAMP-202209-01698

Operation and Maintenance:

Bureau Veritas Canada

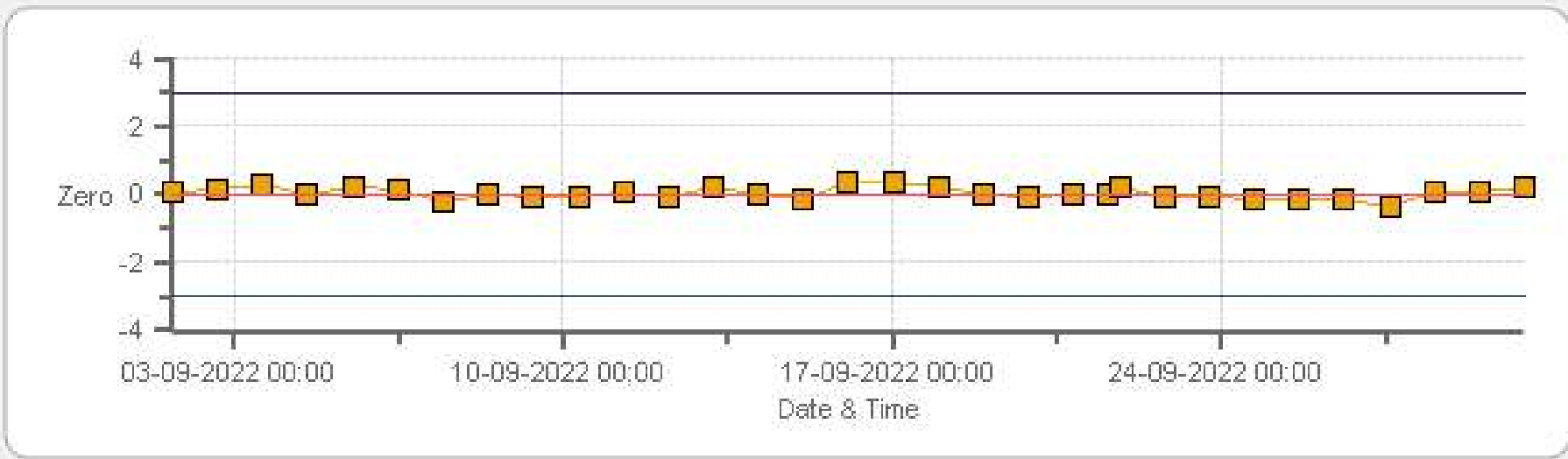
Data Validation and Report:

Bureau Veritas Canada

October 20, 2022

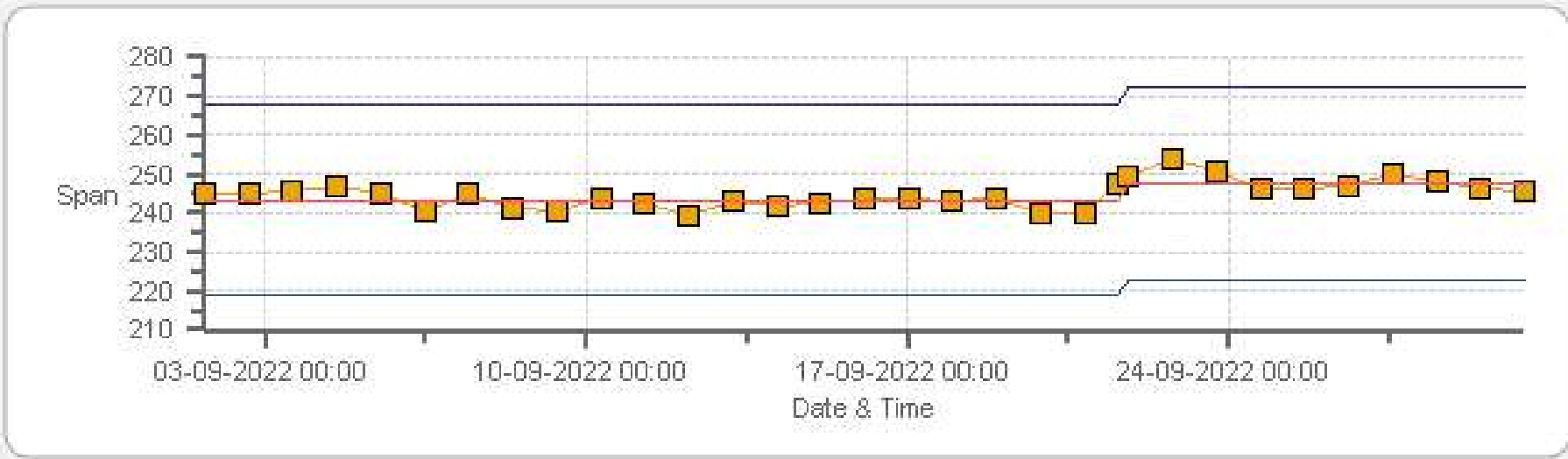
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: Peace River Complex [PRC] Monthly: 09-2022 Type: SpanAndZero - Zero



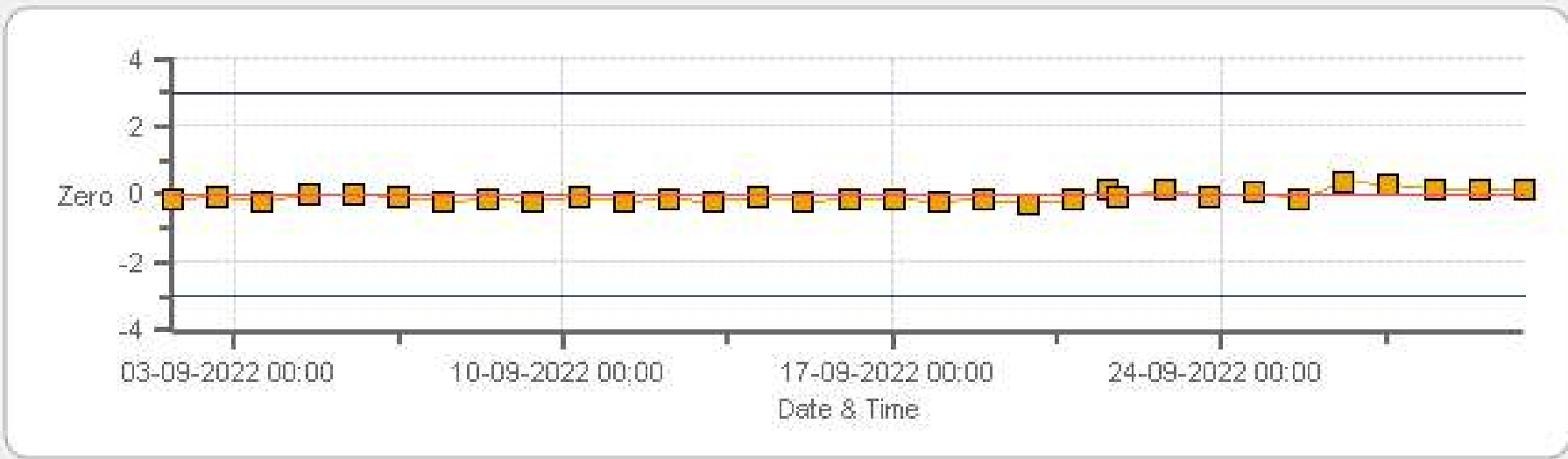
■ Zero
 — Zero Ref
 — Zero Low
 — Zero High

SO2[ppb] Calibration: Peace River Complex [PRC] Monthly: 09-2022 Type: SpanAndZero - Span



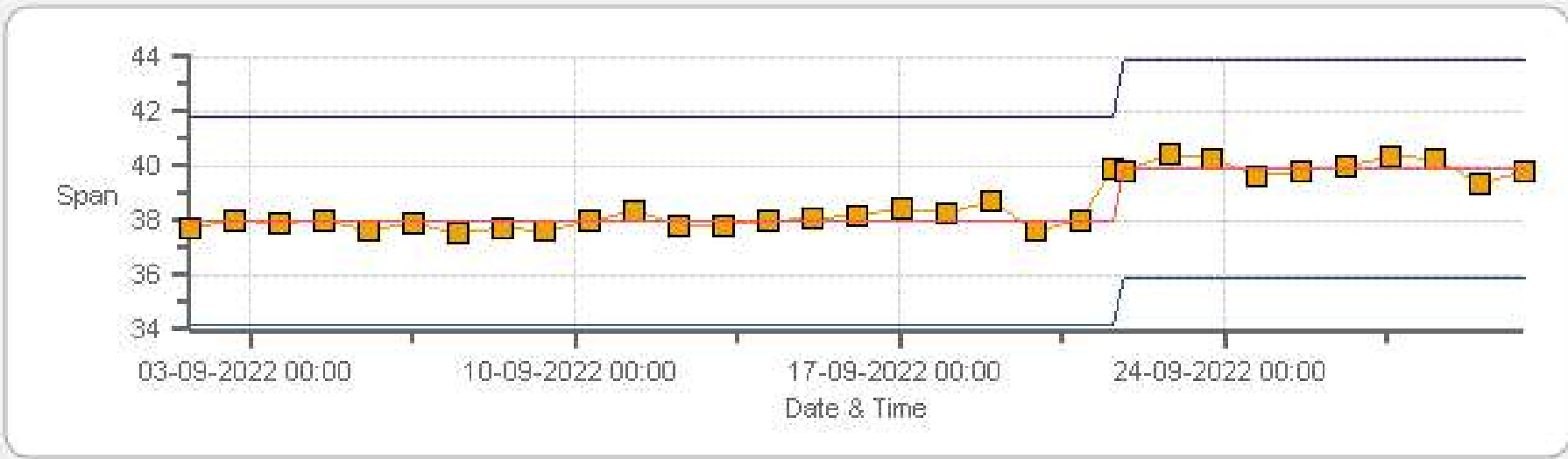
■ Span
 — SpanRef
 — Span Low
 — Span High

H2S[ppb] Calibration: Peace River Complex [PRC] Monthly: 09-2022 Type: SpanAndZero - Zero



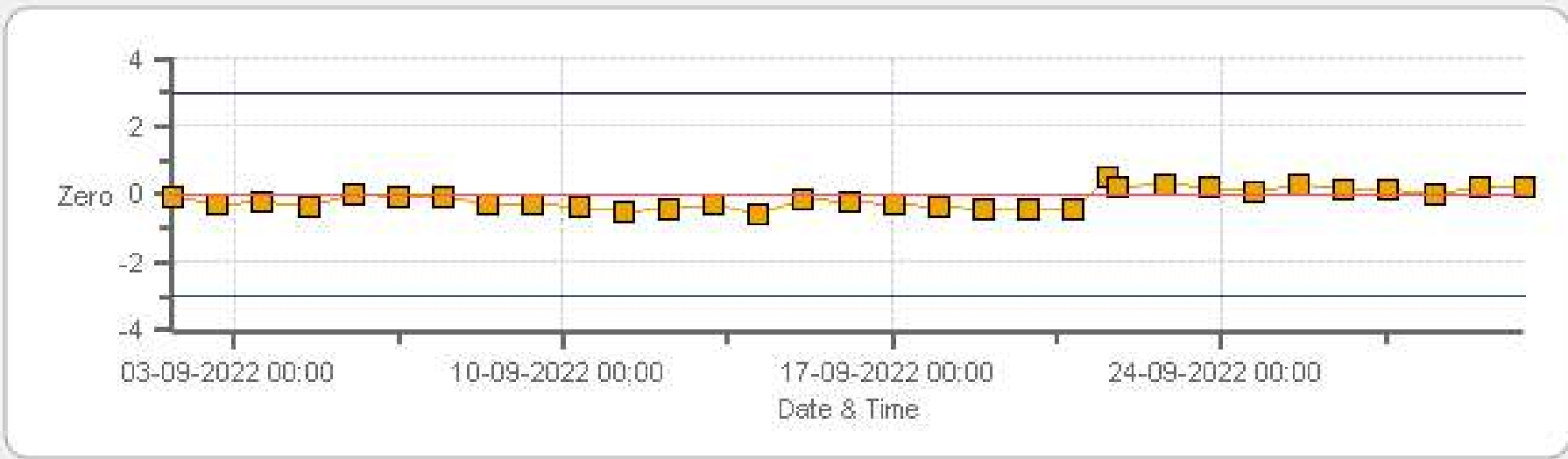
■ Zero
 — Zero Ref
 — Zero Low
 — Zero High

H2S[ppb] Calibration: Peace River Complex [PRC] Monthly: 09-2022 Type: SpanAndZero - Span

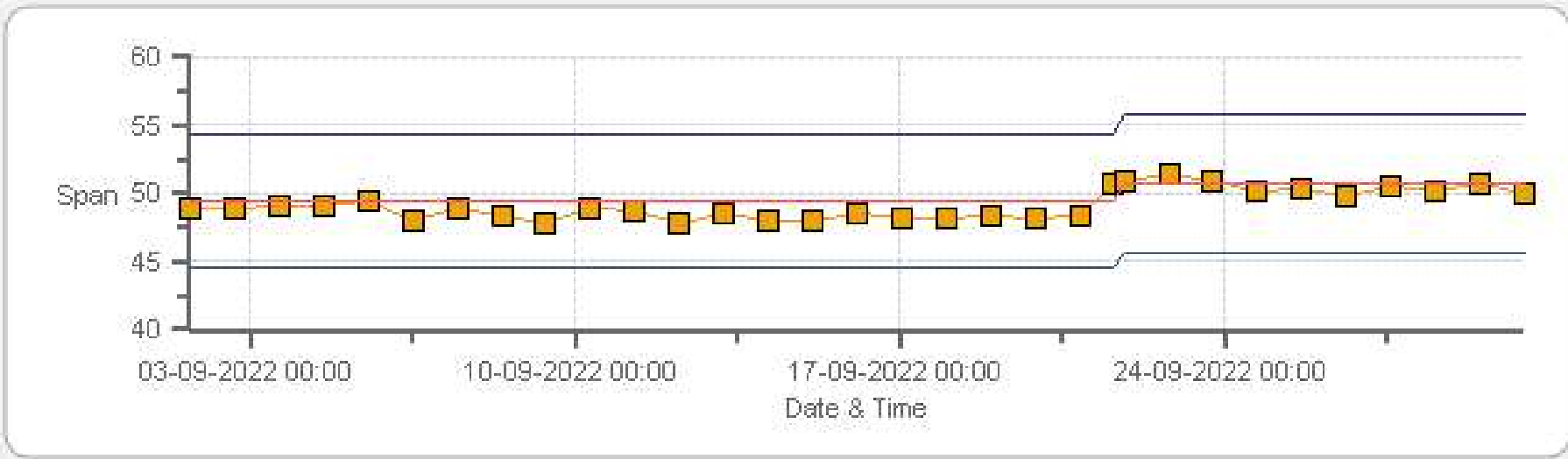


■ Span
 — SpanRef
 — Span Low
 — Span High

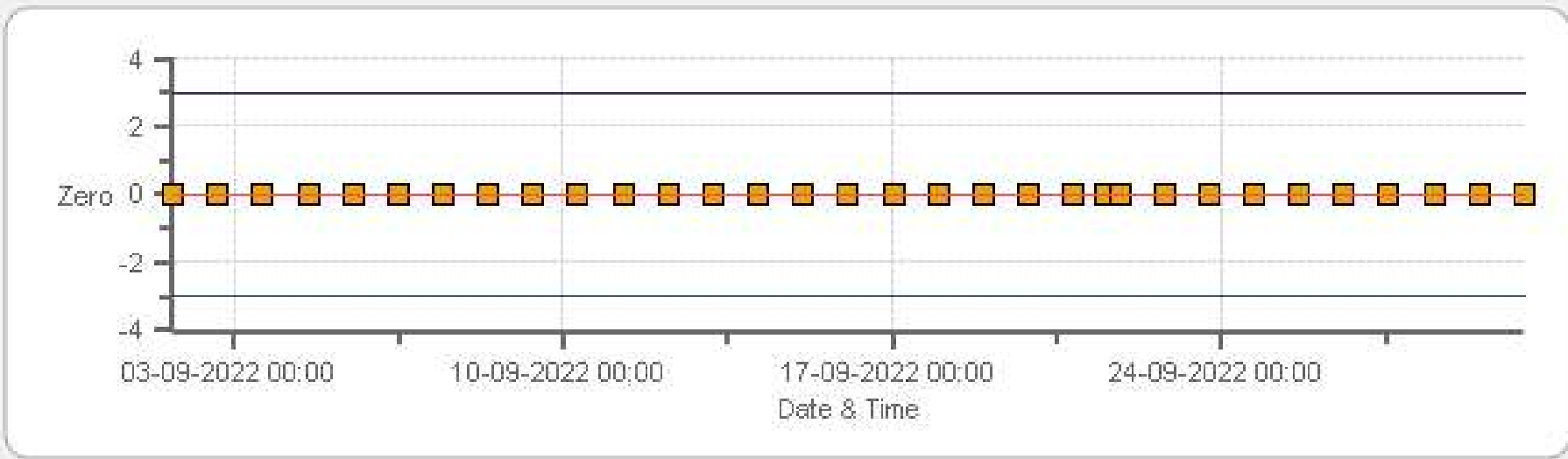
TRS[ppb] Calibration: Peace River Complex [PRC] Monthly: 09-2022 Type: SpanAndZero - Zero



TRS[ppb] Calibration: Peace River Complex [PRC] Monthly: 09-2022 Type: SpanAndZero - Span

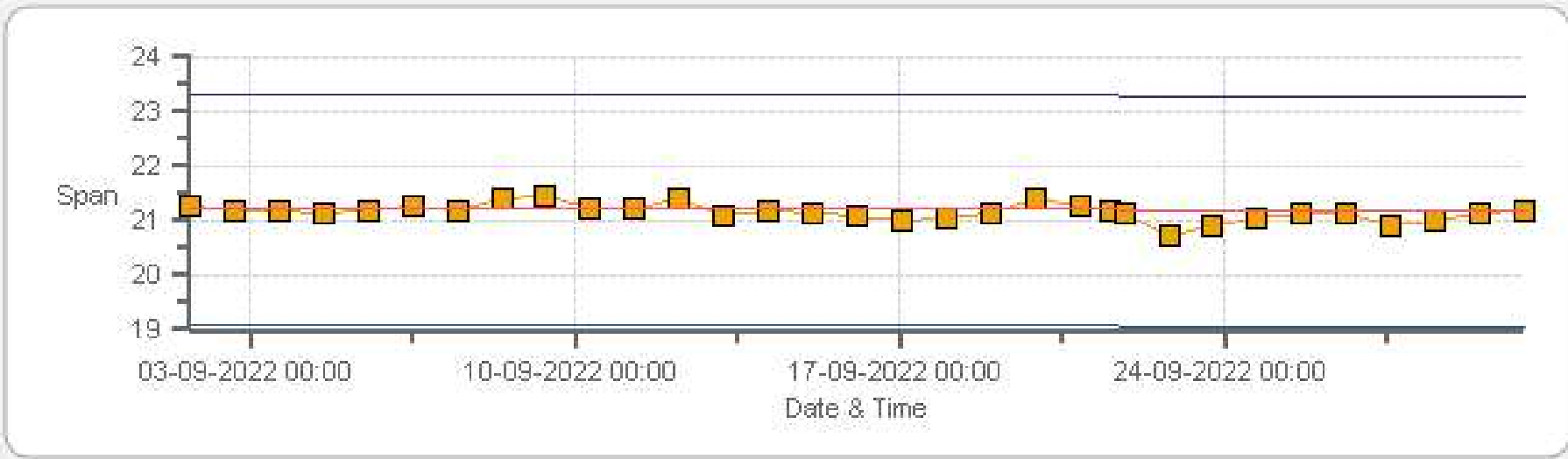


THC55(ppm) Calibration: Peace River Complex [PRC] Monthly: 09-2022 Type: SpanAndZero - Zero



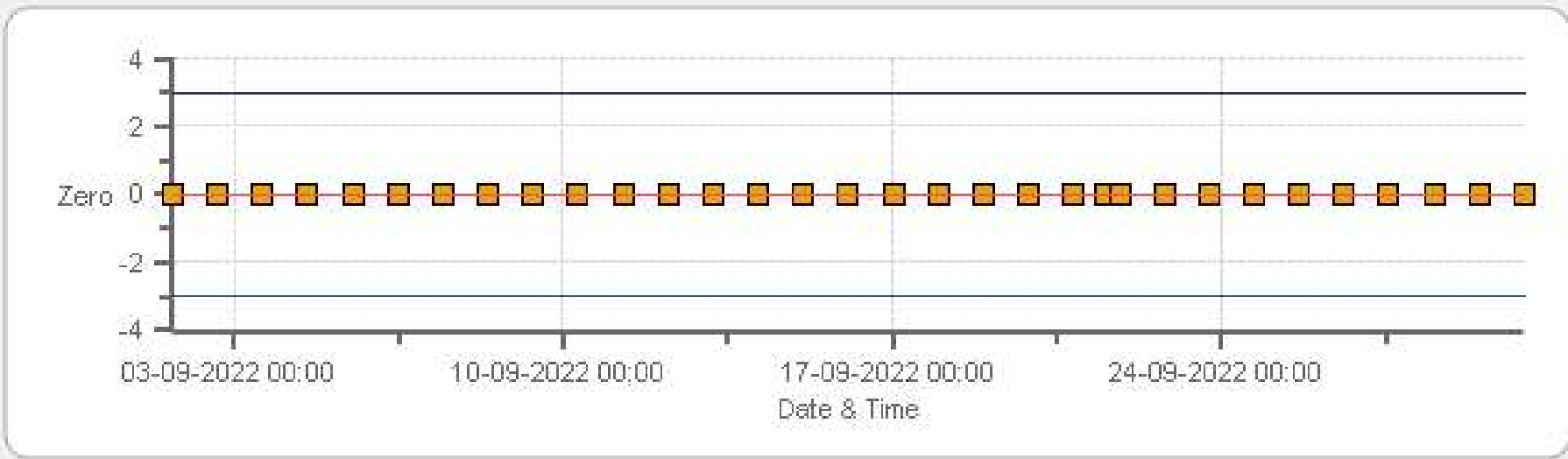
Zero Zero Ref Zero Low Zero High

THC55(ppm) Calibration: Peace River Complex [PRC] Monthly: 09-2022 Type: SpanAndZero - Span



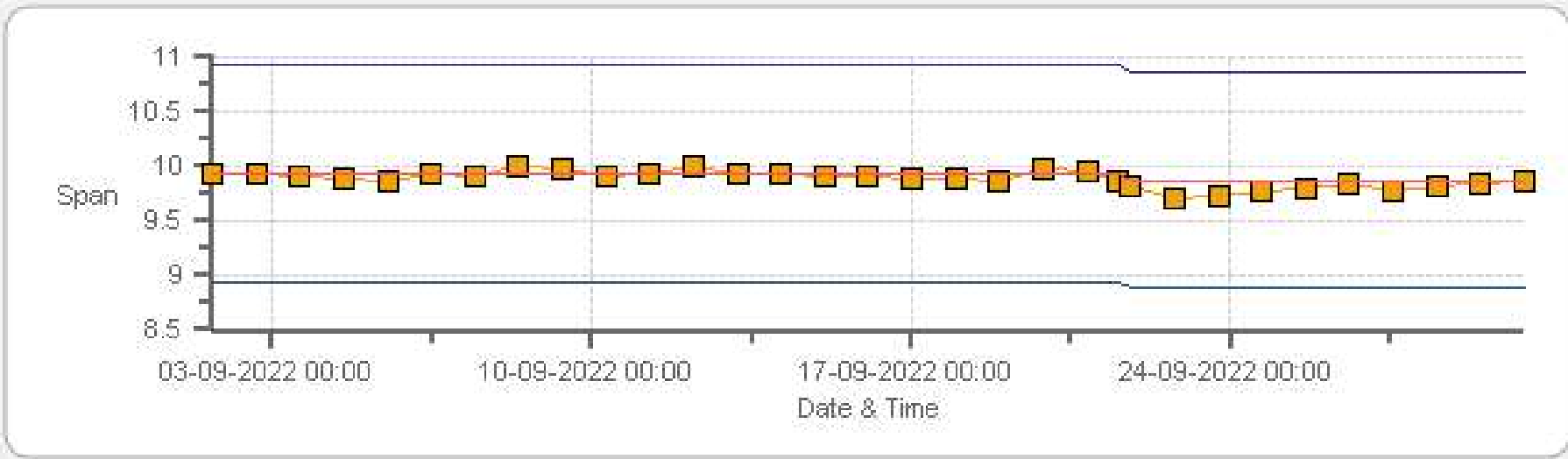
Span SpanRef Span Low Span High

CH4[ppm] Calibration: Peace River Complex [PRC] Monthly: 09-2022 Type: SpanAndZero - Zero



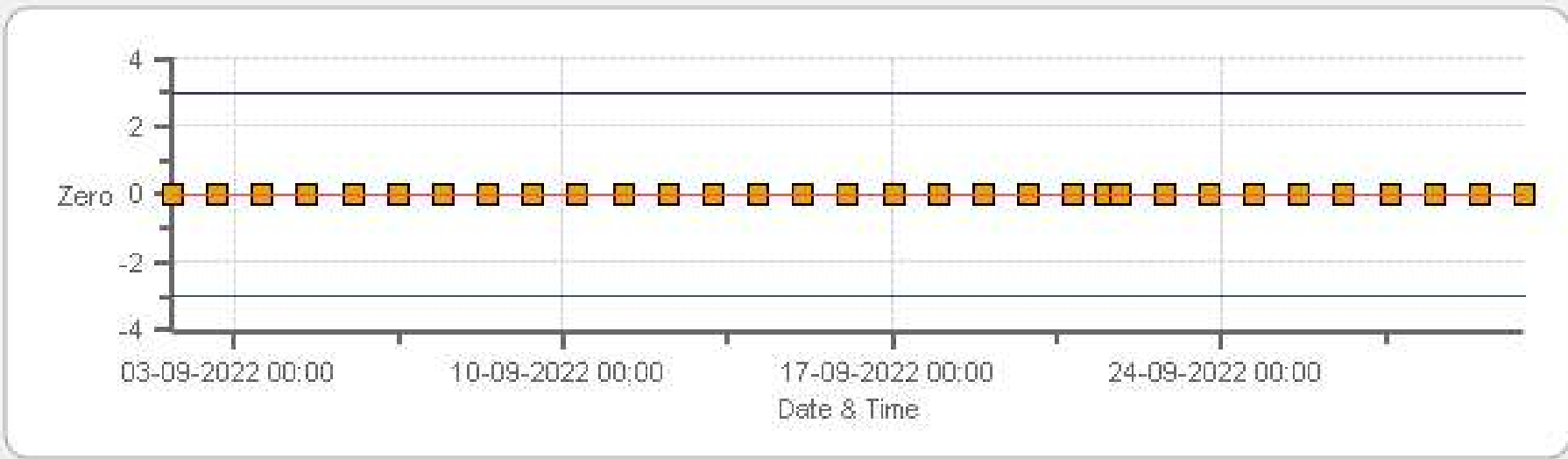
Zero Zero Ref Zero Low Zero High

CH4[ppm] Calibration: Peace River Complex [PRC] Monthly: 09-2022 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

NMHC[ppm] Calibration: Peace River Complex [PRC] Monthly: 09-2022 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: Peace River Complex [PRC] Monthly: 09-2022 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	21-Sep-2022	PREVIOUS CALIBRATION DATE:	16-Aug-2022
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	22.6
LOCATION:	Peace River Compliance	BAROMETRIC (mBar):	942
PURPOSE:	Routine	START TIME (MST):	08:47
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:59

ANALYZER:

MAKE/MODEL	Thermo 43i	RANGE	500 ppb
SERIAL #	1034746225	FLOW (mL/min)	431
INITIAL		FINAL	
BKG/OFFSET	17.7	BKG/OFFSET	18.4
COEF/SLOPE	1.045	COEF/SLOPE	1.072
Expected (reference) Value	243.4	Expected (reference) Value	247.6

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	M701
ID:	1991	ID:	916
MFC CALIBRATION DATE:	02-Sep-2022	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL107286	HIGH ID	n/a
CONC (ppm):	25.10	EXPIRY DATE	n/a
CYLINDER (psi):	1490	LOW ID	n/a
EXPIRY DATE	02-Nov-2025	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

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

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

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

CALIBRATION:

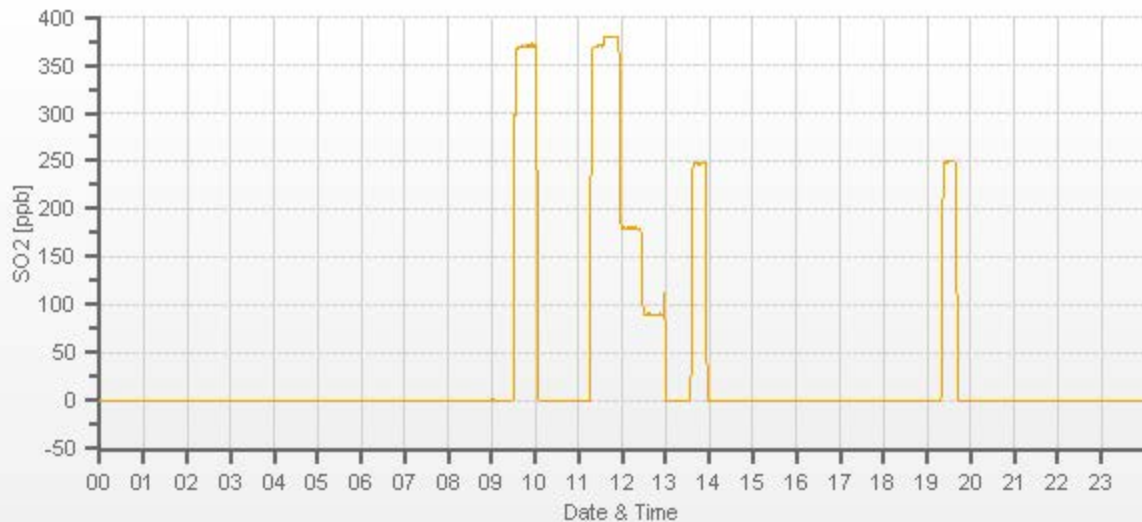
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4001	 	4001	0.00	0.2	0	 	
3941	60.55	4002	379.76	370.8	380	1.025	0.999
3974	28.66	4003	179.68	n/a	180.2	n/a	0.997
3986	14.33	4001	89.90	n/a	89.8	n/a	1.001

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	0.0%

COMMENTS:

Sample filter changed.
Monthly calibration and filter changed - passed.



H2S Analyzer Calibration by Dilution



DATE:	21-Sep-2022	PREVIOUS CALIBRATION DATE:	16-Aug-2022
PARAMETER:	H2S	PREVIOUS CORRECTION FACTOR:	1.001
CLIENT:	PRAMP	TEMPERATURE (°C):	22.6
LOCATION:	Peace River Compliance	BAROMETRIC (mBar):	942
PURPOSE:	Routine	START TIME (MST):	08:47
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:59

ANALYZER:

MAKE/MODEL	Thermo 450i	RANGE	100 ppb
SERIAL #	1308857354	FLOW (mL/min)	847
INITIAL		FINAL	
BKG/OFFSET	13.7	BKG/OFFSET	14.1
COEF/SLOPE	1.015	COEF/SLOPE	1.046
Expected (reference) Value	38	Expected (reference) Value	39.9

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	M701
ID:	1991	ID:	916
MFC CALIBRATION DATE:	02-Sep-2022	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):	290	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:

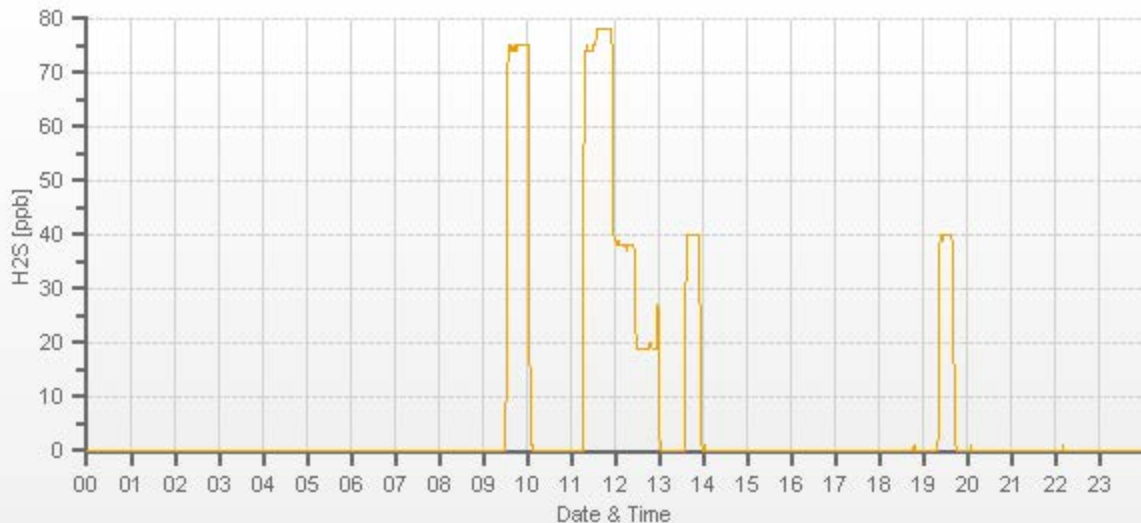
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4001	33.18	4001	0.00	-0.2	0	1.033	1.000
3969	33.18	4002	78.01	75.3	78	1.033	1.000
3987	16.17	4003	38.02	n/a	38.4	n/a	0.990
3992	8.09	4001	19.04	n/a	19.6	n/a	0.971

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.998	0.3%

COMMENTS:

Sample filter changed. Monthly calibration - passed.



TRS Analyzer Calibration by Dilution



DATE:	21-Sep-2022	PREVIOUS CALIBRATION DATE:	16-Aug-2022
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.001
CLIENT:	PRAMP	TEMPERATURE (°C):	22.6
LOCATION:	Peace River Compliance	BAROMETRIC (mBar):	942
PURPOSE:	Routine	START TIME (MST):	08:47
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:59

ANALYZER:

MAKE/MODEL	Thermo 450i	RANGE	100 ppb
SERIAL #	1034746224	FLOW (mL/min)	722
INITIAL		FINAL	
BKG/OFFSET	23.1	BKG/OFFSET	23.5
COEF/SLOPE	0.99	COEF/SLOPE	1.026
Expected (reference) Value	49.47	Expected (reference) Value	50.77

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	M701
ID:	1991	ID:	916
MFC CALIBRATION DATE:	02-Sep-2022	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):	290	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:

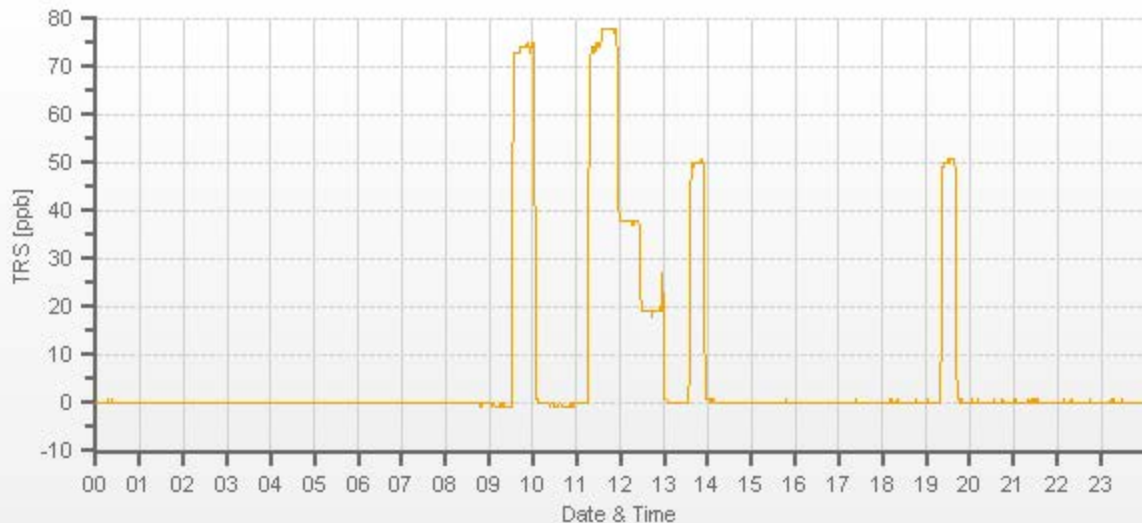
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4001	33.18	4001	0.00	-0.4	0	1.045	1.001
3969	33.18	4002	78.01	74.25	77.97	1.045	1.001
3987	16.17	4003	38.02	n/a	38.27	n/a	0.993
3992	8.09	4001	19.04	n/a	19.36	n/a	0.983

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.998	0.2%

COMMENTS:

TRS Converter CDNOVA CDN-101 #506. Sample filter changed. Monthly calibration - passed.



Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	21-Sep-2022	PREVIOUS CALIBRATION DATE:	16-Aug-2022	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	22.6		Thermo 55i	1022143392	1112.3
LOCATION:	Peace River Compliance	BAROMETRIC (mBar):	942	PARAMETER:	CH4	NMHC	THC
PURPOSE	Routine	START TIME (MST):	08:47	RANGE (ppm):	20	20	40
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:13	PREVIOUS CF:	0.998	0.999	0.999

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	API	CYLINDER ID:	LL28583	HIGH ID:	n/a
MODEL:	2010	MODEL:	M701	CH ₄ /C ₃ H ₈ (ppm):	608.0 203.0	HIGH EXPIRY:	n/a
ID:	17140015	ID:	916	CYLINDER (psi):	1010	LOW ID:	n/a
MFC CALIBRATION DATE:	02-Sep-2022	OXIDIZER ID:	Internal	EXPIRY DATE	18-Aug-2029	LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH ₄ /NMHC)	HIGH	MID	LOW	CH ₄ EQUIVILANCE	
TARGET	14	7	3.5	C ₃ H ₈ as CH ₄	558.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH ₄	1166.3

EXPECTED (REFERENCE) VALUE:

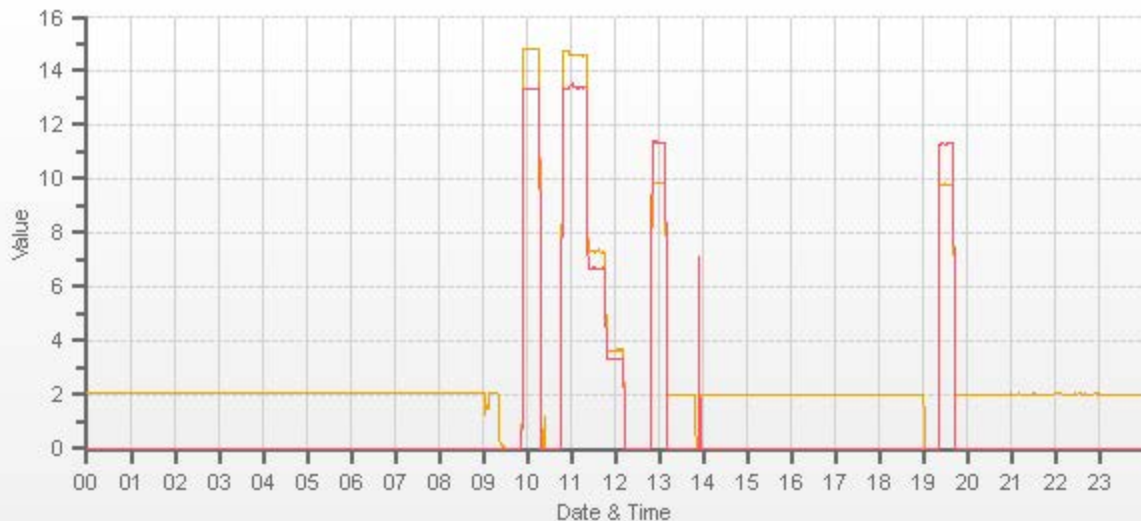
INITIAL	CH ₄	NMHC	THC	FINAL	CH ₄	NMHC	THC
	9.93	11.28	21.10		9.87	11.30	21.17

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC
2998	X	2998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	X	X	X	X	X	X
2928	72.00	3000	14.59	13.40	27.99	14.82	13.37	28.19	14.57	13.38	27.96	0.985	1.002	0.993	1.002	1.001	1.001
2964	36.00	3000	7.30	6.70	14.00	n/a	n/a	n/a	7.29	6.69	13.99	n/a	n/a	n/a	1.001	1.001	1.000
2981	18.00	2999	3.65	3.35	7.00	n/a	n/a	n/a	3.67	3.33	7.00	n/a	n/a	n/a	0.994	1.006	1.000

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT	Comments:
CH ₄	1.000	0.998	0.1%	Stopped HC as-found zero at 9:07 as zero air (HC scrubber) not yet at temp. Restarted as-found zero at 9:20. Sample filter changed. Monthly calibration - passed.
NMHC	1.000	0.999	0.0%	
THC	1.000	0.999	0.0%	
Use Zero Chrom?				No



CAL-PRAMP-202209-01698

Meteorological System Checklist



Date:	September 21, 2022
Technician:	Ferdinand Roy
Station:	Peace River Compliance

Unit:	Make:	Model:	Serial #:
Temperature Sensor:	Rotronic	HC2-S3	20558318
Barometric Pressure Sensor:	MetOne	092	B19577
Relative Humidity Sensor:	Rotronic	HC2-S3	20558318
Anemometer:	RM Young	05305VK	129612

AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	August 16, 2022
Parameter:	Temperature @ 2 metres
Reference Thermometer ID:	Fisher #160459244 expires June 14, 2023
Reference Temperature (°C):	16.7
Station - Ambient Temperature (°C):	17.2
Temperature Difference (°C):	-0.5

BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	August 16, 2022
Reference Barometer ID:	FS 10528, Expire: July 29, 2023
Reference Pressure - Units/Reading:	millibar 941
Station Pressure - Units/Reading:	millibar 945
Pressure Tolerance +/- 15% of error:	800 - 1082 -0.43%

RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	August 16, 2022
Reference Hygrometer ID:	Fisher #160459244 expires June 14, 2023
Reference Hygrometer % RH- Reading:	43.30
Station Hygrometer % RH- Reading:	43.50
RH Tolerance +/- 15% of difference:	36.81 - 49.80 -0.5%

ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	August 16, 2022	Previous check date:	August 16, 2022
Wind Speed Observed (kph):	10~20	Wind Direction Observed:	SW
Wind speed on Data Logger (kph):	18.2	Wind Direction on Data Logger:	SW
		Wind Direction Pass/Fail?:	Pass

Comments

No issues.



Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	Performed By:	Ferdinand Roy
Audit Location:	Peace River Compliance	Reviewed By:	Chris Wesson
Audit Date:	August 17, 2022	Start/End Time (mst):	8:15/9:20
Calibration Purpose:	routine annual	Weather Conditions:	Mainly clear

Wind Sensor Information

Sensor ID Data:		Sensor Outputs:	
Sensor Make:	RM Young	Velocity Voltage Output Range:	0-1
Sensor Model:	05305VK	Velocity Unit Output Range:	0-200
Serial #:	129612	Direction Voltage Output Range:	0-1
Previous Cal/Audit Date:	June 16, 2021	Direction Unit Output Range:	0-360

Wind Calibrator Information

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

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

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.1	0.1	-
1000	18.4	18.5	18.5	0.996
2000	36.9	36.9	37.0	0.998
3000	55.3	55.4	55.4	0.998
4000	73.7	73.9	73.9	0.998
5000	92.2	92.4	92.4	0.997
6000	110.6	110.9	110.9	0.997
7000	129.0	129.5	129.5	0.996
8000	147.4	148.0	148.0	0.996
9000	165.9	166.6	166.6	0.996
10000	184.3	185.1	185.2	0.995
The audit meets AMD requirements.			Average Correction Factor=	0.997

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

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	1	354	1.0	1.0	1.0
30	330	29	329	1.0	1.0	1.0
60	300	59	300	1.0	0.0	0.5
90	270	89	271	1.0	-1.0	1.0
120	240	119	241	1.0	-1.0	1.0
150	210	151	212	-1.0	-2.0	1.5
180	180	181	181	-1.0	-1.0	1.0
210	150	211	151	-1.0	-1.0	1.0
240	120	241	120	-1.0	0.0	0.5
270	90	271	89	-1.0	1.0	1.0
300	60	300	59	0.0	1.0	0.5
330	30	329	29	1.0	1.0	1.0
355	0	354	1	1.0	1.0	1.0
The audit meets AMD requirements.				Average Absolute Degrees Difference=		0.9

Comments:

Physical inspection completed - no issues.

List of SOPs

MONITOR	SOP
SULPHUR DIOXIDE (SO₂)	Bureau Veritas EMS SOP-00209: Ambient Sulphur Monitoring
HYDROGEN SULPHIDE (H₂S)	Bureau Veritas EMS SOP-00209: Ambient Sulphur Monitoring
TOTAL REDUCED SULPHUR (TRS)	Bureau Veritas EMS SOP-00209: Ambient Sulphur Monitoring
TOTAL HYDROCARBONS (THC), METHANE (CH₄), NON-METHANE(NMHC)	Bureau Veritas EMS SOP-00001: Methane, Non-Methane Hydrocarbon Analyzer Monitoring
OXIDES OF NITROGEN (NO_x), NITRIC OXIDE (NO) & NITROGEN DIOXIDE (NO₂)	Bureau Veritas EMS SOP-00213: Ambient NO/NO₂/NO_x Monitoring
OZONE (O₃)	Bureau Veritas EMS SOP-00212: Ambient O₃ Monitoring
PARTICULATE MATTER < 2.5 MICRONS (PM_{2.5})	Bureau Veritas EMS SOP-00015: Teledyne API PM Monitor Model T640
WIND SPEED (WS) & WIND DIRECTION (WD)	Bureau Veritas EMS SOP-00013: RM Young Wind Monitor Calibration



Peace River Area Monitoring Program

SEPTEMBER 2022

Monthly Ambient Air Quality Monitoring Integrated Sampling Report

PRAMP-202209-INTEGRATED

October 21, 2022

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October 21, 2022

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

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

Enclosed is the September 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 Varsity Drive NW
Calgary, AB, T3A 0Z9
Phone #: 780-226-7068 / 587-225-2248
E-mail: pramptech@prampairshed.ca

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

NETWORK STATION SUMMARY

Listing of Integrated Sampling Stations

- 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)	√	√	√	
Passives: 2-Month exposure (PACs)	√			
Passives: 1-Month Exposure (H ₂ S, SO ₂)				√

Listing of Passives: 1-Month Exposure Sampling Sites

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

List of Contractors who performed the air monitoring activities

Sampling Program	Monitoring Activities Conducted By	Sample Analysis Conducted By	Data/Report Prepared By	Electronic Submission Conducted By
NMHC Canister (VOCs)	Bureau Veritas	InnoTech Alberta Inc	PRAMP	PRAMP
Passives: PACs	PRAMP	ECCC	AEP	AEP
Passives: H ₂ S, SO ₂	PRAMP	Bureau Veritas	PRAMP	PRAMP

Monitoring Notes during the Month of September 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.
- Two NMHC canister events were recorded at the Reno station this month.

Station	Parameter	Date	Time	Concentration (ppm)
Reno	Non-methane HC	10-Sep	20:30	0.34
Reno	Non-methane HC	30-Sep	19:20	0.35

- **Passive Polycyclic Aromatic Compounds (PACs) Sampling Program**

- The PAC sampling program began in December 2019, and is designed to collect a 2-month integrated sample.
- The sample media for sampling period of September and October were installed on September 1. The sample media were collected in late October or early November.

- **Passives H₂S, SO₂ Sampling Program**

- There were no exceedances of the AAQOs for all monitored parameters at any of the passive stations during this month.
- The passive sample filters were installed at the stations on September 1 and were removed on September 30.

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

October 21, 2022

INTEGRATED SAMPLING RESULTS SUMMARY

- NMHC Canister VOCs analytical results**

Sample Date/Time	2022-09-10 @20:30							
Canister Sample	Non-methane Hydrocarbon							
Canister ID	32230							
Method	NA-025		Method	NA-024		Method	AC-058	
Maximum Reading (ppmv)	3.2	Methane	Maximum Reading (ppmv)	0.8	Carbonyl sulphide	Maximum Reading (ppmv)	84.5	trans-1,2-Dichloroethy

Sample Date/Time	2022-09-10 @20:30							
Canister Sample	Non-methane Hydrocarbon - BLANK							
Canister ID	28955							
Method	NA-025		Method	NA-024		Method	AC-058	
Maximum Reading (ppmv)	-	-	Maximum Reading (ppmv)	-	-	Maximum Reading (ppmv)	5.05 n-Butane	

Sample Date/Time	2022-09-30 @19:20							
Canister Sample	Non-methane Hydrocarbon							
Canister ID	32184							
Method	NA-025		Method	NA-024		Method	AC-058	
Maximum Reading (ppmv)	2.1	Methane	Maximum Reading (ppmv)	2	Hydrogen sulphide	Maximum Reading (ppmv)	34	trans-1,2-Dichloroethy

Sample Date/Time	2022-09-30 @19:20							
Canister Sample	Non-methane Hydrocarbon - BLANK							
Canister ID	28896							
Method	NA-025		Method	NA-024		Method	AC-058	
Maximum Reading (ppmv)	-	-	Maximum Reading (ppmv)	-	-	Maximum Reading (ppmv)	2.74 n-Butane	

- **Passive analytical results**

	H ₂ S		SO ₂	
Minimum (ppb)	0.09	#9	<0.1	#9
Maximum (ppb)	0.31	#13	0.4	#3
Average (ppb)	0.19	-	0.16	-

ANALYTICAL SAMPLING RESULTS

NMHC Canisters – VOCs

PEACE RIVER AREA MONITORING PROGRAM
Reno Site - September 2022
Volatile Organic Compounds (VOCs) Results

Sample Date/Time Canister Sample Canister ID		2022-09-10 @20:30 Non-methane Hydrocarbon 32230						
Method		NA-025		Method NA-024		Method AC-058		
Maximum Reading (ppmv)		3.2	Methane	Maximum Reading (ppmv) 0.8 Carbonyl sulphide		Maximum Reading (ppmv) 84.5 trans-1,2-Dichloroethyl		
Parameter	Result (ppmv)	RDL (ppmv)	Parameter	Result (ppbv)	RDL (ppbv)	Parameter	Result (ppbv)	RDL (ppbv)
1-Butene	0	0.16	2,5-Dimethylthiophene	0	0.5	1,1,1-Trichloroethane	0	0.03
Acetylene	0	0.12	2-Ethylthiophene	0	0.3	1,1,2,2-Tetrachloroethane	0	0.03
cis-2-Butene	0	0.06	2-Methylthiophene	0	0.3	1,1,2-Trichloroethane	0	0.03
Ethane	0	0.2	3-Methylthiophene	0	0.5	1,1-Dichloroethane	0	0.03
Ethylacetylene	0	0.09	Butyl mercaptan	0	0.5	1,1-Dichloroethylene	0	0.06
Ethylene	0	0.11	Carbon disulphide	0	0.3	1,2,3-Trimethylbenzene	0.13	0.08
Isobutane	0	0.2	Carbonyl sulphide	0.8	0.5	1,2,4-Trichlorobenzene	0	1.2
Isobutylene	0	0.2	Dimethyl disulphide	0	0.3	1,2,4-Trimethylbenzene	0.51	0.08
Methane	3.2	0.2	Dimethyl sulphide	0	0.3	1,2-Dibromoethane	0.03	0.03
n-Butane	0	0.3	Ethyl mercaptan	0	0.5	1,2-Dichlorobenzene	0.06	0.05
n-Propane	0	0.11	Ethyl sulphide	0	0.5	1,2-Dichloroethane	0	0.02
Propylene	0	0.2	Hydrogen sulphide	0	0.5	1,2-Dichloropropane	0	0.02
Propyne	0	0.2	Isobutyl mercaptan	0	0.5	1,3,5-Trimethylbenzene	0.14	0.03
trans-2-Butene	0	0.14	Isopropyl mercaptan	0	0.5	1,3-Butadiene	0.05	0.03
			Methyl mercaptan	0	0.3	1,3-Dichlorobenzene	0	0.5
			Pentyl mercaptan	0	0.6	1,4-Dichlorobenzene	0	0.6
			Propyl mercaptan	0	0.6	1,4-Dioxane	2.1	0.6
			tert-Butyl mercaptan	0	0.5	1-Butene/Isobutylene	1.69	0.03
			Thiophene	0	0.3	1-Hexene/2-Methyl-1-pentene	0	0.03
						1-Pentene	0.12	0.02
						2,2,4-Trimethylpentane	0	0.02
						2,2-Dimethylbutane	0	0.02
						2,3,4-Trimethylpentane	0	0.02
						2,3-Dimethylbutane	0	0.03
						2,3-Dimethylpentane	0.05	0.03
						2,4-Dimethylpentane	0	0.02
						2-Methylheptane	0	0.02
						2-Methylhexane	0.13	0.02
						2-Methylpentane	0.1	0.02
						3-Methylheptane	0	0.03
						3-Methylhexane	0.07	0.03
						3-Methylpentane	0.12	0.02
						Acetone	12.3	3.7
						Acrolein	1.4	0.5
						Benzene	0.19	0.02
						Benzyl chloride	0	0.6
						Bromodichloromethane	0	0.03
						Bromoform	0	0.03
						Bromomethane	0.1	0.02
						Carbon disulfide	0.03	0.02
						Carbon tetrachloride	0.08	0.02
						Chlorobenzene	0.04	0.03
						Chloroethane	0.04	0.03
						Chloroform	0	0.03
						Chloromethane	0.47	0.03
						cis-1,2-Dichloroethene	0.18	0.02
						cis-1,3-Dichloropropene	0	0.06
						cis-2-Butene	0.05	0.03
						cis-2-Pentene	0	0.03
						Cyclohexane	0.17	0.03
						Cyclopentane	0.79	0.02
						Dibromochloromethane	0	0.02
						Ethanol	7.2	2.8
						Ethyl acetate	0	0.6
						Ethylbenzene	0.09	0.02
						Freon-11	0.25	0.03
						Freon-113	0.05	0.02
						Freon-114	0	0.03



PEACE RIVER AREA MONITORING PROGRAM
 Reno Site - September 2022
 Volatile Organic Compounds (VOCs) Results

Sample Date/Time Canister Sample Canister ID		2022-09-10 @20:30 Non-methane Hydrocarbon 32230									
Method		NA-025		Method		NA-024		Method		AC-058	
Maximum Reading (ppmv)		3.2		Maximum Reading (ppmv)		0.8		Maximum Reading (ppmv)		84.5	
		Methane				Carbonyl sulphide				trans-1,2-Dichloroethyl	
Parameter	Result (ppmv)	RDL (ppmv)	Parameter	Result (ppbv)	RDL (ppbv)	Parameter	Result (ppbv)	RDL (ppbv)	Parameter	Result (ppbv)	RDL (ppbv)
						Freon-12	0.39	0.03			
						Hexachloro-1,3-butadiene	0	0.78			
						Isobutane	0.5	0.03			
						Isopentane	1.32	0.05			
						Isoprene	1.27	0.02			
						Isopropyl alcohol	1.4	3.7			
						Isopropylbenzene	0.11	0.02			
						m,p-Xylene	0.23	0.05			
						m-Diethylbenzene	0	0.06			
						m-Ethyltoluene	0.1	0.12			
						Methyl butyl ketone	2.3	0.78			
						Methyl ethyl ketone	0.9	0.5			
						Methyl isobutyl ketone	0	0.6			
						Methyl methacrylate	0	0.11			
						Methyl tert butyl ether	0	0.05			
						Methylcyclohexane	0.13	0.02			
						Methylcyclopentane	0.16	0.03			
						Methylene chloride	0	0.5			
						n-Butane	2.5	0.05			
						n-Decane	0	0.09			
						n-Dodecane	0	0.6			
						n-Heptane	0	0.02			
						n-Hexane	0.08	0.02			
						n-Nonane	0	0.02			
						n-Octane	0	0.03			
						n-Pentane	0.57	0.2			
						n-Propylbenzene	0.1	0.08			
						n-Undecane	0	0.8			
						Naphthalene	0	0.8			
						o-Ethyltoluene	0.12	0.02			
						o-Xylene	0.11	0.02			
						p-Diethylbenzene	0.08	0.06			
						p-Ethyltoluene	0.43	0.11			
						Styrene	0.3	0.06			
						Tetrachloroethylene	0	0.06			
						Tetrahydrofuran	0	0.6			
						Toluene	0.41	0.02			
						trans-1,2-Dichloroethylene	84.5	0.09			
						trans-1,3-Dichloropropylene	0	0.06			
						trans-2-Butene	0.14	0.02			
						trans-2-Pentene	0	0.03			
						Trichloroethylene	0.12	0.06			
						Vinyl acetate	0	0.6			
						Vinyl chloride	0	0.03			



PEACE RIVER AREA MONITORING PROGRAM

Reno Site - September 2022

Volatile Organic Compounds (VOCs) Results

Sample Date/Time Canister Sample Canister ID		2022-09-10 @20:30 Non-methane Hydrocarbon - BLANK 28955						
Method	NA-025	Method	NA-024	Method	AC-058			
Maximum Reading (ppmv)	-	-	Maximum Reading (ppmv)	-	-	Maximum Reading (ppmv)	5.05 n-Butane	
Parameter	Result (ppmv)	RDL (ppmv)	Parameter	Result (ppbv)	RDL (ppbv)	Parameter	Result (ppbv)	RDL (ppbv)
1-Butene	0	0.16	2,5-Dimethylthiophene	0	0.5	1,1,1-Trichloroethane	0	0.03
Acetylene	0	0.12	2-Ethylthiophene	0	0.3	1,1,2,2-Tetrachloroethane	0	0.03
cis-2-Butene	0	0.06	2-Methylthiophene	0	0.3	1,1,2-Trichloroethane	0	0.03
Ethane	0	0.2	3-Methylthiophene	0	0.5	1,1-Dichloroethane	0	0.03
Ethylacetylene	0	0.09	Butyl mercaptan	0	0.5	1,1-Dichloroethylene	0	0.06
Ethylene	0	0.11	Carbon disulphide	0	0.3	1,2,3-Trimethylbenzene	0	0.08
Isobutane	0	0.2	Carbonyl sulphide	0	0.5	1,2,4-Trichlorobenzene	0	1.2
Isobutylene	0	0.2	Dimethyl disulphide	0	0.3	1,2,4-Trimethylbenzene	0	0.08
Methane	0	0.2	Dimethyl sulphide	0	0.3	1,2-Dibromoethane	0	0.03
n-Butane	0	0.3	Ethyl mercaptan	0	0.5	1,2-Dichlorobenzene	0	0.05
n-Propane	0	0.11	Ethyl sulphide	0	0.5	1,2-Dichloroethane	0	0.02
Propylene	0	0.2	Hydrogen sulphide	0	0.5	1,2-Dichloropropane	0	0.02
Propyne	0	0.2	Isobutyl mercaptan	0	0.5	1,3,5-Trimethylbenzene	0	0.03
trans-2-Butene	0	0.14	Isopropyl mercaptan	0	0.5	1,3-Butadiene	0	0.03
			Methyl mercaptan	0	0.3	1,3-Dichlorobenzene	0	0.5
			Pentyl mercaptan	0	0.6	1,4-Dichlorobenzene	0	0.6
			Propyl mercaptan	0	0.6	1,4-Dioxane	0	0.6
			tert-Butyl mercaptan	0	0.5	1-Butene/Isobutylene	2.09	0.03
			Thiophene	0	0.3	1-Hexene/2-Methyl-1-pentene	0	0.03
						1-Pentene	0	0.02
						2,2,4-Trimethylpentane	0	0.02
						2,2-Dimethylbutane	0	0.02
						2,3,4-Trimethylpentane	0	0.02
						2,3-Dimethylbutane	0	0.03
						2,3-Dimethylpentane	0	0.03
						2,4-Dimethylpentane	0	0.02
						2-Methylheptane	0	0.02
						2-Methylhexane	0	0.02
						2-Methylpentane	0	0.02
						3-Methylheptane	0	0.03
						3-Methylhexane	0	0.03
						3-Methylpentane	0	0.02
						Acetone	0	3.7
						Acrolein	0	0.5
						Benzene	0	0.02
						Benzyl chloride	0	0.6
						Bromodichloromethane	0	0.03
						Bromoform	0	0.03
						Bromomethane	0	0.02
						Carbon disulfide	0	0.02
						Carbon tetrachloride	0	0.02
						Chlorobenzene	0	0.03
						Chloroethane	0	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	0.15	0.03
						cis-2-Pentene	0	0.03
						Cyclohexane	0	0.03
						Cyclopentane	0.07	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	0.03



PEACE RIVER AREA MONITORING PROGRAM

Reno Site - September 2022

Volatile Organic Compounds (VOCs) Results

Sample Date/Time Canister Sample Canister ID		2022-09-10 @20:30 Non-methane Hydrocarbon - BLANK 28955											
Method		NA-025		Method		NA-024		Method		AC-058			
Maximum Reading (ppmv)		-		-		-		-		Maximum Reading (ppmv)		5.05 n-Butane	
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		0.13		0.03	
								Isopentane		0.44		0.05	
								Isoprene		0		0.02	
								Isopropyl alcohol		0		3.7	
								Isopropylbenzene		0		0.02	
								m,p-Xylene		0		0.05	
								m-Diethylbenzene		0		0.06	
								m-Ethyltoluene		0		0.12	
								Methyl butyl ketone		0		0.78	
								Methyl ethyl ketone		0		0.5	
								Methyl isobutyl ketone		0		0.6	
								Methyl methacrylate		0		0.11	
								Methyl tert butyl ether		0		0.05	
								Methylcyclohexane		0		0.02	
								Methylcyclopentane		0		0.03	
								Methylene chloride		0		0.5	
								n-Butane		5.05		0.05	
								n-Decane		0		0.09	
								n-Dodecane		0		0.6	
								n-Heptane		0		0.02	
								n-Hexane		0		0.02	
								n-Nonane		0		0.02	
								n-Octane		0		0.03	
								n-Pentane		0.72		0.2	
								n-Propylbenzene		0		0.08	
								n-Undecane		0		0.8	
								Naphthalene		0		0.8	
								o-Ethyltoluene		0		0.02	
								o-Xylene		0		0.02	
								p-Diethylbenzene		0		0.06	
								p-Ethyltoluene		0		0.11	
								Styrene		0		0.06	
								Tetrachloroethylene		0		0.06	
								Tetrahydrofuran		0		0.6	
								Toluene		0		0.02	
								trans-1,2-Dichloroethylene		0		0.09	
								trans-1,3-Dichloropropylene		0		0.06	
								trans-2-Butene		0.37		0.02	
								trans-2-Pentene		0		0.03	
								Trichloroethylene		0		0.06	
								Vinyl acetate		0		0.6	
								Vinyl chloride		0		0.03	

PEACE RIVER AREA MONITORING PROGRAM
Reno Site - September 2022
Volatile Organic Compounds (VOCs) Results

Sample Date/Time Canister Sample Canister ID	2022-09-30 @19:20 Non-methane Hydrocarbon 32184							
Method	NA-025		Method	NA-024		Method	AC-058	
Maximum Reading (ppmv)	2.1	Methane	Maximum Reading (ppmv)	2	Hydrogen sulphide	Maximum Reading (ppmv)	34	trans-1,2-Dichloroethyl
Parameter	Result (ppmv)	RDL (ppmv)	Parameter	Result (ppbv)	RDL (ppbv)	Parameter	Result (ppbv)	RDL (ppbv)
1-Butene	0	0.16	2,5-Dimethylthiophene	0	0.5	1,1,1-Trichloroethane	0	0.03
Acetylene	0	0.12	2-Ethylthiophene	0	0.3	1,1,2,2-Tetrachloroethane	0	0.03
cis-2-Butene	0	0.06	2-Methylthiophene	0	0.3	1,1,2-Trichloroethane	0	0.03
Ethane	0	0.2	3-Methylthiophene	0	0.5	1,1-Dichloroethane	0	0.03
Ethylacetylene	0	0.09	Butyl mercaptan	0	0.5	1,1-Dichloroethylene	0	0.06
Ethylene	0	0.11	Carbon disulphide	0	0.3	1,2,3-Trimethylbenzene	0	0.08
Isobutane	0	0.2	Carbonyl sulphide	0	0.5	1,2,4-Trichlorobenzene	0	1.2
Isobutylene	0	0.2	Dimethyl disulphide	0	0.3	1,2,4-Trimethylbenzene	0.09	0.08
Methane	2.1	0.2	Dimethyl sulphide	0	0.3	1,2-Dibromoethane	0	0.03
n-Butane	0	0.3	Ethyl mercaptan	0	0.5	1,2-Dichlorobenzene	0.06	0.05
n-Propane	0	0.11	Ethyl sulphide	0	0.5	1,2-Dichloroethane	0	0.02
Propylene	0	0.2	Hydrogen sulphide	2.0	0.5	1,2-Dichloropropane	0	0.02
Propyne	0	0.2	Isobutyl mercaptan	0	0.5	1,3,5-Trimethylbenzene	0	0.03
trans-2-Butene	0	0.14	Isopropyl mercaptan	0	0.5	1,3-Butadiene	0	0.03
			Methyl mercaptan	0	0.3	1,3-Dichlorobenzene	0	0.5
			Pentyl mercaptan	0	0.6	1,4-Dichlorobenzene	0	0.6
			Propyl mercaptan	0	0.6	1,4-Dioxane	0	0.6
			tert-Butyl mercaptan	0	0.5	1-Butene/Isobutylene	0.93	0.03
			Thiophene	0	0.3	1-Hexene/2-Methyl-1-pentene	0	0.03
						1-Pentene	0.15	0.02
						2,2,4-Trimethylpentane	0	0.02
						2,2-Dimethylbutane	0	0.02
						2,3,4-Trimethylpentane	0	0.02
						2,3-Dimethylbutane	0	0.03
						2,3-Dimethylpentane	0.04	0.03
						2,4-Dimethylpentane	0	0.02
						2-Methylheptane	0	0.02
						2-Methylhexane	0.04	0.02
						2-Methylpentane	0	0.02
						3-Methylheptane	0	0.03
						3-Methylhexane	0.04	0.03
						3-Methylpentane	0.08	0.02
						Acetone	4	3.7
						Acrolein	0.5	0.5
						Benzene	0	0.02
						Benzyl chloride	0	0.6
						Bromodichloromethane	0	0.03
						Bromoform	0	0.03
						Bromomethane	0	0.02
						Carbon disulfide	0	0.02
						Carbon tetrachloride	0.08	0.02
						Chlorobenzene	0	0.03
						Chloroethane	0	0.03
						Chloroform	0	0.03
						Chloromethane	0.67	0.03
						cis-1,2-Dichloroethene	0.07	0.02
						cis-1,3-Dichloropropene	0	0.06
						cis-2-Butene	0	0.03
						cis-2-Pentene	0	0.03
						Cyclohexane	0.1	0.03
						Cyclopentane	0.39	0.02
						Dibromochloromethane	0	0.02
						Ethanol	3.5	2.8
						Ethyl acetate	0	0.6
						Ethylbenzene	0	0.02
						Freon-11	0.18	0.03
						Freon-113	0	0.02
						Freon-114	0	0.03



PEACE RIVER AREA MONITORING PROGRAM
 Reno Site - September 2022
 Volatile Organic Compounds (VOCs) Results

Sample Date/Time Canister Sample Canister ID	2022-09-30 @19:20 Non-methane Hydrocarbon 32184							
Method	NA-025		Method	NA-024		Method	AC-058	
Maximum Reading (ppmv)	2.1	Methane	Maximum Reading (ppmv)	2	Hydrogen sulphide	Maximum Reading (ppmv)	34	trans-1,2-Dichloroethyl
Parameter	Result (ppmv)	RDL (ppmv)	Parameter	Result (ppbv)	RDL (ppbv)	Parameter	Result (ppbv)	RDL (ppbv)
						Freon-12	0.19	0.03
						Hexachloro-1,3-butadiene	0	0.78
						Isobutane	0.95	0.03
						Isopentane	0.53	0.05
						Isoprene	0.16	0.02
						Isopropyl alcohol	2	3.7
						Isopropylbenzene	0	0.02
						m,p-Xylene	0.1	0.05
						m-Diethylbenzene	0	0.06
						m-Ethyltoluene	0	0.12
						Methyl butyl ketone	0	0.78
						Methyl ethyl ketone	0	0.5
						Methyl isobutyl ketone	0	0.6
						Methyl methacrylate	0	0.11
						Methyl tert butyl ether	0	0.05
						Methylcyclohexane	0.09	0.02
						Methylcyclopentane	0.1	0.03
						Methylene chloride	0	0.5
						n-Butane	1.9	0.05
						n-Decane	0	0.09
						n-Dodecane	0	0.6
						n-Heptane	0	0.02
						n-Hexane	0.06	0.02
						n-Nonane	0	0.02
						n-Octane	0.03	0.03
						n-Pentane	0.5	0.2
						n-Propylbenzene	0	0.08
						n-Undecane	0	0.8
						Naphthalene	0	0.8
						o-Ethyltoluene	0.03	0.02
						o-Xylene	0	0.02
						p-Diethylbenzene	0	0.06
						p-Ethyltoluene	0	0.11
						Styrene	0.08	0.06
						Tetrachloroethylene	0	0.06
						Tetrahydrofuran	0	0.6
						Toluene	0.21	0.02
						trans-1,2-Dichloroethylene	34	0.09
						trans-1,3-Dichloropropylene	0	0.06
						trans-2-Butene	0.11	0.02
						trans-2-Pentene	0	0.03
						Trichloroethylene	0	0.06
						Vinyl acetate	0	0.6
						Vinyl chloride	0	0.03



PEACE RIVER AREA MONITORING PROGRAM

Reno Site - September 2022

Volatile Organic Compounds (VOCs) Results

Sample Date/Time Canister Sample Canister ID		2022-09-30 @19:20 Non-methane Hydrocarbon - BLANK 28896						
Method	NA-025	Method	NA-024	Method	AC-058			
Maximum Reading (ppmv)	-	-	Maximum Reading (ppmv)	-	-	Maximum Reading (ppmv)	2.74 n-Butane	
Parameter	Result (ppmv)	RDL (ppmv)	Parameter	Result (ppbv)	RDL (ppbv)	Parameter	Result (ppbv)	RDL (ppbv)
1-Butene	0	0.16	2,5-Dimethylthiophene	0	0.5	1,1,1-Trichloroethane	0	0.03
Acetylene	0	0.12	2-Ethylthiophene	0	0.3	1,1,2,2-Tetrachloroethane	0	0.03
cis-2-Butene	0	0.06	2-Methylthiophene	0	0.3	1,1,2-Trichloroethane	0	0.03
Ethane	0	0.2	3-Methylthiophene	0	0.5	1,1-Dichloroethane	0	0.03
Ethylacetylene	0	0.09	Butyl mercaptan	0	0.5	1,1-Dichloroethylene	0	0.06
Ethylene	0	0.11	Carbon disulphide	0	0.3	1,2,3-Trimethylbenzene	0	0.08
Isobutane	0	0.2	Carbonyl sulphide	0	0.5	1,2,4-Trichlorobenzene	0	1.2
Isobutylene	0	0.2	Dimethyl disulphide	0	0.3	1,2,4-Trimethylbenzene	0	0.08
Methane	0	0.2	Dimethyl sulphide	0	0.3	1,2-Dibromoethane	0	0.03
n-Butane	0	0.3	Ethyl mercaptan	0	0.5	1,2-Dichlorobenzene	0.03	0.05
n-Propane	0	0.11	Ethyl sulphide	0	0.5	1,2-Dichloroethane	0	0.02
Propylene	0	0.2	Hydrogen sulphide	0	0.5	1,2-Dichloropropane	0	0.02
Propyne	0	0.2	Isobutyl mercaptan	0	0.5	1,3,5-Trimethylbenzene	0	0.03
trans-2-Butene	0	0.14	Isopropyl mercaptan	0	0.5	1,3-Butadiene	0	0.03
			Methyl mercaptan	0	0.3	1,3-Dichlorobenzene	0	0.5
			Pentyl mercaptan	0	0.6	1,4-Dichlorobenzene	0	0.6
			Propyl mercaptan	0	0.6	1,4-Dioxane	0	0.6
			tert-Butyl mercaptan	0	0.5	1-Butene/Isobutylene	1.3	0.03
			Thiophene	0	0.3	1-Hexene/2-Methyl-1-pentene	0	0.03
						1-Pentene	0	0.02
						2,2,4-Trimethylpentane	0	0.02
						2,2-Dimethylbutane	0	0.02
						2,3,4-Trimethylpentane	0	0.02
						2,3-Dimethylbutane	0	0.03
						2,3-Dimethylpentane	0	0.03
						2,4-Dimethylpentane	0	0.02
						2-Methylheptane	0	0.02
						2-Methylhexane	0	0.02
						2-Methylpentane	0	0.02
						3-Methylheptane	0	0.03
						3-Methylhexane	0.02	0.03
						3-Methylpentane	0	0.02
						Acetone	0	3.7
						Acrolein	0	0.5
						Benzene	0	0.02
						Benzyl chloride	0	0.6
						Bromodichloromethane	0	0.03
						Bromoform	0	0.03
						Bromomethane	0	0.02
						Carbon disulfide	0	0.02
						Carbon tetrachloride	0	0.02
						Chlorobenzene	0	0.03
						Chloroethane	0	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	0.1	0.03
						cis-2-Pentene	0	0.03
						Cyclohexane	0	0.03
						Cyclopentane	0.08	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	0.03



PEACE RIVER AREA MONITORING PROGRAM

Reno Site - September 2022

Volatile Organic Compounds (VOCs) Results

Sample Date/Time Canister Sample Canister ID		2022-09-30 @19:20 Non-methane Hydrocarbon - BLANK 28896									
Method		NA-025		Method		NA-024		Method		AC-058	
Maximum Reading (ppmv)		-		-		-		Maximum Reading (ppmv)		2.74 n-Butane	
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		0.37 0.03	
								Isopentane		0.37 0.05	
								Isoprene		0 0.02	
								Isopropyl alcohol		0 3.7	
								Isopropylbenzene		0 0.02	
								m,p-Xylene		0 0.05	
								m-Diethylbenzene		0 0.06	
								m-Ethyltoluene		0 0.12	
								Methyl butyl ketone		0 0.78	
								Methyl ethyl ketone		0 0.5	
								Methyl isobutyl ketone		0 0.6	
								Methyl methacrylate		0 0.11	
								Methyl tert butyl ether		0 0.05	
								Methylcyclohexane		0 0.02	
								Methylcyclopentane		0 0.03	
								Methylene chloride		0 0.5	
								n-Butane		2.74 0.05	
								n-Decane		0 0.09	
								n-Dodecane		0 0.6	
								n-Heptane		0 0.02	
								n-Hexane		0 0.02	
								n-Nonane		0 0.02	
								n-Octane		0 0.03	
								n-Pentane		0.58 0.2	
								n-Propylbenzene		0 0.08	
								n-Undecane		0 0.8	
								Naphthalene		0 0.8	
								o-Ethyltoluene		0 0.02	
								o-Xylene		0 0.02	
								p-Diethylbenzene		0 0.06	
								p-Ethyltoluene		0 0.11	
								Styrene		0.04 0.06	
								Tetrachloroethylene		0 0.06	
								Tetrahydrofuran		0 0.6	
								Toluene		0 0.02	
								trans-1,2-Dichloroethylene		0 0.09	
								trans-1,3-Dichloropropylene		0 0.06	
								trans-2-Butene		0.24 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 - September 2022

Passive Results

	H₂S		SO₂	
Minimum (ppb)	0.09	#9	<0.1	#9
Maximum (ppb)	0.31	#13	0.4	#3
Average (ppb)	0.19	-	0.16	-
No.	Calculated Value		Calculated Value	
1	0.29		0.1	
2	0.13		0.2	
3	0.22		0.4	
4	0.29		0.1	
7	0.14		0.1	
8	0.13		0.1	
9	0.09		<0.1	
10	0.20		0.1	
11	0.23		0.2	
12	0.09		0.1	
13	0.31		0.3	
14	0.14		0.1	
Reportable Detection Limit (RDL)	0.02		0.1	

End of Report



Peace River Area Monitoring Program

SEPTEMBER 2022

Ambient Air Monitoring

Certified Laboratory Analysis Report

LAB-PRAMP-202209

Operation and Maintenance:

Bureau Veritas Canada

Data Validation and Report:

Peace River Area Monitoring Program

October 20, 2022

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NMHC Canister Analytical Results



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

EAS CANISTER
 CHAIN OF CUSTODY FORM

Sample ID: 22090129-001 Priority: Normal



Customer ID: PRAMP
 Cust Samp ID: PRAMP_Reno-20220910

Date Received- Lab Use Only
RECEIVED
SEP 14 2022

Client Contact Details:		RUSH (Surcharge) <input type="checkbox"/>
Contact:	<u>Karla Ressor, Michael Bisaga/ Lily Lin</u>	Invoice Instructions:
Company:	<u>PRAMP Airshed</u>	Send to: officemanager@prampairshed.ca, karla@prampairshed.ca, pramptech@prampairshed.ca Attention: PRAMP Office Manager
PO#:	<input type="checkbox"/> 842b Station <input type="checkbox"/> 986c Station <input type="checkbox"/> Reno Station	Any correspondence related to canister analysis, send the information to karla@prampairshed.ca and pramptech@prampairshed.ca
Address:	<input type="checkbox"/> 842b (Lat. 56.27406N, Long. 116.98129W) <input type="checkbox"/> 986c (Lat. 56.36988N, Long. 116.925636W) <input type="checkbox"/> Reno (Lat. 55.86936N, Long. 117.05739W)	InnoTech Contact: <u>Graham Knox</u> Phone: <u>780-632-8403</u> Cell: <u>780-632-1519</u> Email: <u>Graham.Knox@innotechalberta.ca</u>
Telephone:	<u>403-8072995, 780-2667068/587-2252248</u>	
Email:	<u>karla@prampairshed.ca, pramptech@prampairshed.ca</u>	

Sample ID (PRAMP_station_yyyymmdd) <small>(Find Sample ID from BV's email)</small>	Canister ID <small>(Find canister ID from canister tag)</small>	Sample Description	Date/Time Canister Triggered <small>(Find Date/Time from BV's email)</small>		Analysis Requested
			Date (yyyy/mm/dd)	Time (24 Hr) (MST)	
PRAMP_842b- _____		<input type="checkbox"/> Methane Trigger	202209/10	20:30	* C1C4 Air, VOC Full, RSC Air * Unknowns to be reported * Carbon Isotopic Analysis (if sample is collected from Methane trigger)
PRAMP_986c- _____		<input checked="" type="checkbox"/> NMHC Trigger			
PRAMP_Reno- <u>20220910</u>	<u>32230</u>	<input type="checkbox"/> Methane Blank			
		<input type="checkbox"/> NMHC Blank			
		<input type="checkbox"/> Expired Canister – No further analysis is required.			

Sample Collection:
 Collected By Dwayne (Name) of _____ (Company) on SEP 11/2022 (Date/Time) (MST).

{00004818;6}

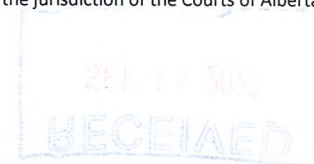
TERMS AND CONDITIONS

The attached document entitled "Chain of Custody Form" is subject to the following Terms and Conditions, unless otherwise specified on the Quotation. InnoTech Alberta's commencement of the Services shall be deemed acceptance of the terms and conditions by the Client.

1. Any proposal contained herein is prepared for the consideration of the Client only. Its contents may not be used or disclosed to any other party without prior written consent of the INNOTECH ALBERTA INC. (hereinafter referred to as "InnoTech Alberta").
2. InnoTech Alberta will perform the Services in accordance with normal professional standards.
3. The delivery time for performance of the Services (as set out on the front page of this Quotation) is approximate and may be changed by InnoTech Alberta giving written notice to the Client.
4. InnoTech Alberta will exercise due care and proficiency in testing items submitted by a Client. InnoTech Alberta shall not, however, be liable to the Client for any damage or loss caused to the item being tested or for any damage, loss or expense caused by any delay in carrying out the test, including any damage, loss or expense resulting from InnoTech Alberta's negligence. InnoTech Alberta shall not be responsible for any damage, which is a natural or necessary result of any testing procedure.
5. For the purposes of this Quotation, Intellectual Property means all information, data, artistic and literary works, concepts, designs, processes, software, algorithms and inventions, including, without limitation, those that could be the subject of patent, copyright, industrial design, trade secret or other forms of protection. Intellectual Property which was owned by either InnoTech Alberta or the Client prior to the signing of this Agreement remains the property of that party. Nothing in this Agreement shall operate as a license, permission or grant of any other rights to either InnoTech Alberta's or the Client's Intellectual Property.
6. All data, reports and other information relating to the Services shall be treated by InnoTech Alberta as the confidential property of the Client, and InnoTech Alberta will use reasonable efforts to ensure that its employees, contractors and agents will not disclose the same to any other person, firm or corporation during the term of this Agreement and for a period of five (5) years after the date of termination of the Agreement. The obligation of confidentiality set out herein shall not apply to any information that was in InnoTech Alberta's possession prior to receipt from the Client or which is or becomes part of the public domain through no act or failure on the part of InnoTech Alberta. The obligation of confidentiality set out in this Section shall not prevent the disclosure of information to any level of government having jurisdiction to make lawful demand therefor, or required to be disclosed by any applicable law. Any records required to be maintained by InnoTech Alberta pursuant to this Agreement are subject to the protection and access provisions of the Freedom of Information and Protection of Privacy Act (Alberta).
7. The reported results of any InnoTech Alberta tests or evaluations performed on samples or items provided by the Client shall be interpreted as being specific to the sample or item tested. InnoTech Alberta makes no representation that any similar or related untested samples or items would produce the same results.
8. The Client shall not use InnoTech Alberta's name in any advertising material, sale offer, news releases, public statements or announcements, whether written or oral relating to the Services or the results thereof, without the prior written consent of InnoTech Alberta.
9. Records, test data, reports and samples, except where shipped to the Client after completion of the work shall be retained by InnoTech Alberta according to InnoTech Alberta's approved Records Retention and Disposition Schedule.
10. Prices quoted are in Canadian Dollars unless otherwise stated in writing and are exclusive of any provincial, municipal, sales, use or goods and services tax.
11. Prices quoted do not include shipping, insurance or cost of consumables. The Client shall be responsible for all costs incurred by InnoTech Alberta in collecting any item for testing and returning the item to the Client after testing and shall be responsible for all necessary incidental costs incurred by InnoTech Alberta in providing the Services. InnoTech Alberta will not be responsible for any damage or loss to items during shipping and it is the responsibility of the Client to arrange and pay for any insurance it deems necessary.
12. Any test samples or other materials supplied by the Client to InnoTech Alberta may, at InnoTech Alberta's Option, be returned by InnoTech Alberta to the Client. The Client shall:
 - (a) be responsible for all costs associated with the handling, transportation and disposal of such materials;
 - (b) reimburse InnoTech Alberta for any costs incurred by InnoTech Alberta associated with the handling, transportation and disposal of such materials; and
 - (c) indemnify and hold InnoTech Alberta harmless from any and all claims, damages or actions associated with

the handling, transportation and disposal of such materials.

13. The Client shall pay all invoices rendered by InnoTech Alberta to the Client within thirty (30) days from the date of invoice, without deduction or set-off.
14. If the Client fails to pay any amount under this Agreement, such unpaid amount shall bear interest at a rate per month equal to one (1%) percent (or 12.6825% per annum) with interest on overdue interest at the same rate.
15. InnoTech Alberta makes no representation, warranties or conditions, either expressed or implied, statutory or otherwise and does not warrant the quality, state, merchantability or fitness for any purpose of any goods or products to be delivered pursuant to this Agreement. The Client accepts the results of these Services or items tested as is, and acknowledges that any use or interpretation of the information contained is at the Client's own risk.
16. In no event shall InnoTech Alberta be liable for any indirect or consequential damage or loss suffered by the Client, including loss of anticipated profits.
17. The Client shall indemnify and hold harmless InnoTech Alberta from any and all claims, demands, actions and costs (including legal costs on a solicitor-client basis) that may arise out of:
 - (a) any dangerous defect or content in the item being tested, whether apparent or not, which dangerous defect or content was not disclosed in writing to InnoTech Alberta by the Client at the time the item was submitted for testing;
 - (b) differences between those items actually tested and items previously or subsequently produced which are purported to be identical to the item tested; or
 - (c) any use of the tested item or any item incorporating the tested item, whether by the Client or a third party following its return to the Client the hold harmless shall survive this Agreement.
18. The Client shall, at its own expense and without limiting its liabilities herein, be responsible for insuring its operation in an amount not less than \$2,000,000 inclusive per occurrence, insuring against bodily injury, and property damage including loss of use thereof. Further, the Client is responsible for insuring all owned property directly or indirectly related to this Agreement and InnoTech Alberta shall have no liability for any loss or damage to such property.
19. InnoTech Alberta shall maintain the following insurance: (i) commercial general liability insurance (including cross liability, severability of interests, non-owned automobile liability) in the amount of two million dollars (\$2,000,000.00) per occurrence, and; (ii) professional liability and errors and omissions insurance in the amount of one million dollars (\$1,000,000.00) per claim, and two million dollars (\$2,000,000.00) in the aggregate. In addition, InnoTech Alberta shall maintain all workers' compensation coverage required by applicable laws. Notwithstanding the foregoing, InnoTech Alberta reserves the right to supplement or add insurance coverage from time to time as may be required in its sole discretion. InnoTech Alberta may provide certificates of insurance for coverages outlined in (i) and (ii) above.
20. The Client agrees to comply with all InnoTech Alberta Safety & Security regulations in effect while on InnoTech Alberta premises.
21. This Agreement represents the entire agreement between the parties and shall supersede all prior agreements relative to this transaction.
22. If a party's performance of any of its obligations under this Agreement (excepting only an obligation to pay) is delayed, rendered impossible or impractical, or prevented in whole or in part due to circumstances beyond its reasonable control, including but not limited to acts of God, war, terrorism, labour disputes, pandemics or epidemics, global health emergencies, or governmental action, that party will not be in breach of this Agreement due to the delay or failure in performance occasioned by such event..
23. InnoTech Alberta may assign this Quotation to an "affiliated" (as that term is defined at Section 2 of the Business Corporations Act (Alberta)) or successor entity on written notice to the Client.
24. This Quotation and rights and parties thereto shall be governed by and construed according to the laws of the Province of Alberta. The parties hereby submit to the jurisdiction of the Courts of 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: 22090129-002 Priority: Normal



Customer ID: PRAMP
 Cust Samp ID: PRAMP_Reno-Blank

Date Received- Lab Use Only
RECEIVED
SEP 14 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) <small>(Find Sample ID from BV's email)</small>	Canister ID <small>(Find canister ID from canister tag)</small>	Sample Description	Date/Time Canister Triggered <small>(Find Date/Time from BV's email)</small>		Analysis Requested
			Date (yyyy/mm/dd)	Time (24 Hr) (MST)	
PRAMP_842b- _____		<input type="checkbox"/> Methane Trigger	2022/09/10	20:30	* C1C4 Air, VOC Full, RSC Air * Unknowns to be reported * Carbon Isotopic Analysis (if sample is collected from Methane trigger)
PRAMP_986c- _____		<input type="checkbox"/> NMHC Trigger			
PRAMP_Reno- <u>BLANK</u>	<u>28955</u>	<input type="checkbox"/> Methane Blank			
		<input checked="" type="checkbox"/> NMHC Blank			
		<input type="checkbox"/> Expired Canister – No further analysis is required.			

Sample Collection:

Collected By DWYNNE (Name) of _____ (Company) on SEP 11/2022 (Date/Time) (MST).

{00004818;6}

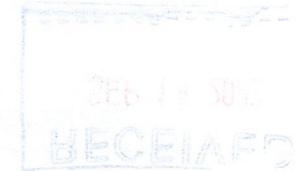
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Canister ID: 32230

This cleaned canister meets or exceeds TO-15 Method Specifications

Proofed by: ISQ4 on: JUN 07 2022

Evacuated: JUL 11 2022 Recertified: _____

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

Laboratory Contact Number: 780-632-8403

Sample ID: PRAMP_RENO-202091

Sampled By: [Signature]

Starting Vacuum: -27.3"Hg

End Vacuum: -3 ~~5~~"Hg/psig



Canister ID: 28955

This cleaned canister meets or exceeds TO-15 Method Specifications

Proofed by: ISQ4 on: JUN 07 2022

Evacuated: JUL 11 2022 Recertified: _____

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

Laboratory Contact Number: 780-632-8403

Sample ID: PRAMP_RENO-Blank

Sampled By: _____

Starting Vacuum: -27.2"Hg

End Pressure: _____"Hg/psig

Sample ID: 22090129-001 Priority: Normal



Customer ID: PRAMP
Cust Samp ID: PRAMP_Reno-20220910



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

ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

<p>RESULTS: Karla Reesor 403 807 2995 Peace River Area Monitoring Program Committee</p> <p>INVOICE: Office Manager</p>	<p style="text-align: center;">CLIENT SAMPLE ID PRAMP_Reno-20220910</p> <p>MATRIX: Ambient Air</p> <p>CANISTER ID: 32230</p> <p>PRIORITY: Normal</p> <p>DESCRIPTION: NMHC Trigger</p> <p>DATE SAMPLED: 10-Sep-22 20:30 DATE RECEIVED: 14-Sep-22</p> <p>REPORT CREATED: 03-Oct-22 REPORT NUMBER: 22090129</p> <p style="text-align: right;">VERSION: Version 01</p>
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Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
22090129-001	1-Butene	K, T, U	< 0.14 ppmv	0.14	NA-025	14-Sep-22
22090129-001	Acetylene	K, T, U	< 0.12 ppmv	0.12	NA-025	14-Sep-22
22090129-001	n-Butane	K, T, U	< 0.3 ppmv	0.3	NA-025	14-Sep-22
22090129-001	cis-2-Butene	K, T, U	< 0.06 ppmv	0.06	NA-025	14-Sep-22
22090129-001	Ethane	K, T, U	< 0.1 ppmv	0.1	NA-025	14-Sep-22
22090129-001	Ethylacetylene	K, T, U	< 0.09 ppmv	0.09	NA-025	14-Sep-22
22090129-001	Ethylene	K, T, U	< 0.10 ppmv	0.10	NA-025	14-Sep-22
22090129-001	Isobutane	K, T, U	< 0.1 ppmv	0.1	NA-025	14-Sep-22
22090129-001	Isobutylene	K, T, U	< 0.1 ppmv	0.1	NA-025	14-Sep-22
22090129-001	Methane		3.2 ppmv	0.1	NA-025	14-Sep-22
22090129-001	n-Propane	K, T, U	< 0.10 ppmv	0.10	NA-025	14-Sep-22
22090129-001	Propylene	K, T, U	< 0.1 ppmv	0.1	NA-025	14-Sep-22
22090129-001	Propyne	K, T, U	< 0.1 ppmv	0.1	NA-025	14-Sep-22
22090129-001	trans-2-Butene	K, T, U	< 0.13 ppmv	0.13	NA-025	14-Sep-22
22090129-001	2,5-Dimethylthiophene	K, T, U	< 0.3 ppbv	0.3	NA-024	14-Sep-22
22090129-001	2-Ethylthiophene	K, T, U	< 0.2 ppbv	0.2	NA-024	14-Sep-22
22090129-001	2-Methylthiophene	K, T, U	< 0.2 ppbv	0.2	NA-024	14-Sep-22
22090129-001	3-Methylthiophene	K, T, U	< 0.3 ppbv	0.3	NA-024	14-Sep-22

Report certified by: Rebecca Dasilva, Account Coordinator On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 3, 2022 Inquiries: (780) 632 8455 E-mail: EAS.Results@innotechalberta.ca

LAB-PRAMP-202209

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-20220910	32230	Ambient Air	10-Sep-22 20:30
DESCRIPTION:	NMHC Trigger		
REPORT NUMBER:	REPORT CREATED:	VERSION:	Version 01
22090129	03-Oct-22		

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
22090129-001	Butyl mercaptan	K, T, U	< 0.3 ppbv	0.3	NA-024	14-Sep-22
22090129-001	Carbon disulphide	K, T, U	< 0.2 ppbv	0.2	NA-024	14-Sep-22
22090129-001	Carbonyl sulphide		0.8 ppbv	0.3	NA-024	14-Sep-22
22090129-001	Dimethyl disulphide	K, T, U	< 0.2 ppbv	0.2	NA-024	14-Sep-22
22090129-001	Dimethyl sulphide	K, T, U	< 0.2 ppbv	0.2	NA-024	14-Sep-22
22090129-001	Ethyl mercaptan	K, T, U	< 0.3 ppbv	0.3	NA-024	14-Sep-22
22090129-001	Ethyl sulphide	K, T, U	< 0.3 ppbv	0.3	NA-024	14-Sep-22
22090129-001	Hydrogen sulphide	K, T, U	< 0.3 ppbv	0.3	NA-024	14-Sep-22
22090129-001	Isobutyl mercaptan	K, T, U	< 0.3 ppbv	0.3	NA-024	14-Sep-22
22090129-001	Isopropyl mercaptan	K, T, U	< 0.3 ppbv	0.3	NA-024	14-Sep-22
22090129-001	Methyl mercaptan	K, T, U	< 0.2 ppbv	0.2	NA-024	14-Sep-22
22090129-001	Pentyl mercaptan	K, T, U	< 0.4 ppbv	0.4	NA-024	14-Sep-22
22090129-001	Propyl mercaptan	K, T, U	< 0.4 ppbv	0.4	NA-024	14-Sep-22
22090129-001	tert-Butyl mercaptan	K, T, U	< 0.3 ppbv	0.3	NA-024	14-Sep-22
22090129-001	Thiophene/sec-Butyl mercaptan	K, T, U	< 0.2 ppbv	0.2	NA-024	14-Sep-22
22090129-001	1,1,1-Trichloroethane	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-001	1,1,2,2-Tetrachloroethane	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-001	1,1,2-Trichloroethane	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-001	1,1-Dichloroethane	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-001	1,1-Dichloroethylene	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-001	1,2,3-Trimethylbenzene	I	0.13 ppbv	0.07	AC-058	16-Sep-22
22090129-001	1,2,4-Trichlorobenzene	K, T, U	< 0.4 ppbv	0.4	AC-058	16-Sep-22
22090129-001	1,2,4-Trimethylbenzene		0.51 ppbv	0.04	AC-058	16-Sep-22
22090129-001	1,2-Dibromoethane	I	0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-001	1,2-Dichlorobenzene	I	0.06 ppbv	0.04	AC-058	16-Sep-22

Report certified by: Graham Knox, Admin. & Ops. Supervisor

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 3, 2022

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_Reno-20220910	32230	Ambient Air	10-Sep-22	20:30
DESCRIPTION:	NMHC Trigger			
REPORT NUMBER:	REPORT CREATED:	VERSION:	Version 01	
22090129	03-Oct-22			

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22090129-001	1,2-Dichloroethane	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22
22090129-001	1,2-Dichloropropane	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22
22090129-001	1,3,5-Trimethylbenzene	I	0.14	ppbv	0.04	AC-058	16-Sep-22
22090129-001	1,3-Butadiene	I	0.05	ppbv	0.04	AC-058	16-Sep-22
22090129-001	1,3-Dichlorobenzene	K, T, U	< 0.6	ppbv	0.6	AC-058	16-Sep-22
22090129-001	1,4-Dichlorobenzene	K, T, U	< 0.6	ppbv	0.6	AC-058	16-Sep-22
22090129-001	1,4-Dioxane		2.1	ppbv	0.7	AC-058	16-Sep-22
22090129-001	1-Butene/Isobutylene		1.69	ppbv	0.09	AC-058	16-Sep-22
22090129-001	1-Hexene/2-Methyl-1-pentene	K, T, U	< 0.10	ppbv	0.10	AC-058	16-Sep-22
22090129-001	1-Pentene	I	0.12	ppbv	0.04	AC-058	16-Sep-22
22090129-001	2,2,4-Trimethylpentane	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-001	2,2-Dimethylbutane	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-001	2,3,4-Trimethylpentane	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-001	2,3-Dimethylbutane	K, T, U	< 0.13	ppbv	0.13	AC-058	16-Sep-22
22090129-001	2,3-Dimethylpentane	I	0.05	ppbv	0.03	AC-058	16-Sep-22
22090129-001	2,4-Dimethylpentane	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22
22090129-001	2-Methylheptane	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-001	2-Methylhexane	I	0.13	ppbv	0.04	AC-058	16-Sep-22
22090129-001	2-Methylpentane	I	0.10	ppbv	0.03	AC-058	16-Sep-22
22090129-001	3-Methylheptane	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22
22090129-001	3-Methylhexane	I	0.07	ppbv	0.03	AC-058	16-Sep-22
22090129-001	3-Methylpentane	I	0.12	ppbv	0.03	AC-058	16-Sep-22
22090129-001	Acetone		12.3	ppbv	0.6	AC-058	16-Sep-22
22090129-001	Acrolein		1.4	ppbv	0.4	AC-058	16-Sep-22
22090129-001	Benzene	I	0.19	ppbv	0.04	AC-058	16-Sep-22

Report certified by: Graham Knox, Admin. & Ops. Supervisor

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 3, 2022

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_Reno-20220910	32230	Ambient Air	10-Sep-22	20:30
DESCRIPTION:	NMHC Trigger			
REPORT NUMBER:	22090129	REPORT CREATED:	03-Oct-22	VERSION: Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22090129-001	Benzyl chloride	K, T, U	< 0.4	ppbv	0.4	AC-058	16-Sep-22
22090129-001	Bromodichloromethane	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22
22090129-001	Bromoform	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-001	Bromomethane	I	0.10	ppbv	0.03	AC-058	16-Sep-22
22090129-001	Carbon disulfide	I	0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-001	Carbon tetrachloride	I	0.08	ppbv	0.03	AC-058	16-Sep-22
22090129-001	Chlorobenzene	I	0.04	ppbv	0.03	AC-058	16-Sep-22
22090129-001	Chloroethane	I	0.04	ppbv	0.03	AC-058	16-Sep-22
22090129-001	Chloroform	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-001	Chloromethane		0.47	ppbv	0.06	AC-058	16-Sep-22
22090129-001	cis-1,2-Dichloroethene		0.18	ppbv	0.03	AC-058	16-Sep-22
22090129-001	cis-1,3-Dichloropropene	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22
22090129-001	cis-2-Butene	I	0.05	ppbv	0.04	AC-058	16-Sep-22
22090129-001	cis-2-Pentene	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-001	Cyclohexane	I	0.17	ppbv	0.06	AC-058	16-Sep-22
22090129-001	Cyclopentane		0.79	ppbv	0.03	AC-058	16-Sep-22
22090129-001	Dibromochloromethane	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-001	Ethanol		7.2	ppbv	0.7	AC-058	16-Sep-22
22090129-001	Ethyl acetate	K, T, U	< 0.4	ppbv	0.4	AC-058	16-Sep-22
22090129-001	Ethylbenzene	I	0.09	ppbv	0.04	AC-058	16-Sep-22
22090129-001	Freon-11		0.25	ppbv	0.03	AC-058	16-Sep-22
22090129-001	Freon-113	I	0.05	ppbv	0.03	AC-058	16-Sep-22
22090129-001	Freon-114	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22
22090129-001	Freon-12		0.39	ppbv	0.04	AC-058	16-Sep-22
22090129-001	Hexachloro-1,3-butadiene	K, T, U	< 0.4	ppbv	0.4	AC-058	16-Sep-22

Report certified by: Graham Knox, Admin. & Ops. Supervisor

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 3, 2022

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-20220910	32230	Ambient Air	10-Sep-22 20:30
DESCRIPTION:	NMHC Trigger		
REPORT NUMBER:	REPORT CREATED:	VERSION:	Version 01
22090129	03-Oct-22		

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22090129-001	Isobutane		0.50	ppbv	0.04	AC-058	16-Sep-22
22090129-001	Isopentane		1.32	ppbv	0.06	AC-058	16-Sep-22
22090129-001	Isoprene		1.27	ppbv	0.03	AC-058	16-Sep-22
22090129-001	Isopropyl alcohol		1.4	ppbv	0.4	AC-058	16-Sep-22
22090129-001	Isopropylbenzene	I	0.11	ppbv	0.06	AC-058	16-Sep-22
22090129-001	m,p-Xylene	I	0.23	ppbv	0.06	AC-058	16-Sep-22
22090129-001	m-Diethylbenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-001	m-Ethyltoluene	I	0.10	ppbv	0.04	AC-058	16-Sep-22
22090129-001	Methyl butyl ketone		2.3	ppbv	0.6	AC-058	16-Sep-22
22090129-001	Methyl ethyl ketone		0.9	ppbv	0.4	AC-058	16-Sep-22
22090129-001	Methyl isobutyl ketone	K, T, U	< 0.4	ppbv	0.4	AC-058	16-Sep-22
22090129-001	Methyl methacrylate	K, T, U	< 0.12	ppbv	0.12	AC-058	16-Sep-22
22090129-001	Methyl tert butyl ether	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22
22090129-001	Methylcyclohexane	I	0.13	ppbv	0.03	AC-058	16-Sep-22
22090129-001	Methylcyclopentane		0.16	ppbv	0.07	AC-058	16-Sep-22
22090129-001	Methylene chloride	K, T, U	< 0.4	ppbv	0.4	AC-058	16-Sep-22
22090129-001	n-Butane		2.49	ppbv	0.03	AC-058	16-Sep-22
22090129-001	n-Decane	K, T, U	< 0.09	ppbv	0.09	AC-058	16-Sep-22
22090129-001	n-Dodecane	K, T, U	< 0.4	ppbv	0.4	AC-058	16-Sep-22
22090129-001	n-Heptane	K, T, U	< 0.06	ppbv	0.06	AC-058	16-Sep-22
22090129-001	n-Hexane	I	0.08	ppbv	0.04	AC-058	16-Sep-22
22090129-001	n-Octane	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-001	n-Pentane		0.57	ppbv	0.06	AC-058	16-Sep-22
22090129-001	n-Propylbenzene	I	0.10	ppbv	0.09	AC-058	16-Sep-22
22090129-001	n-Undecane	K, T, U	< 0.7	ppbv	0.7	AC-058	16-Sep-22

Report certified by: Graham Knox, Admin. & Ops. Supervisor

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 3, 2022

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_Reno-20220910	32230	Ambient Air	10-Sep-22	20:30
DESCRIPTION:	NMHC Trigger			
REPORT NUMBER:	22090129	REPORT CREATED:	03-Oct-22	VERSION: Version 01

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
22090129-001	Naphthalene	K, T, U	< 0.4 ppbv	0.4	AC-058	16-Sep-22
22090129-001	n-Nonane	K, T, U	< 0.06 ppbv	0.06	AC-058	16-Sep-22
22090129-001	o-Ethyltoluene	I	0.12 ppbv	0.03	AC-058	16-Sep-22
22090129-001	o-Xylene	I	0.11 ppbv	0.04	AC-058	16-Sep-22
22090129-001	p-Diethylbenzene	I	0.08 ppbv	0.03	AC-058	16-Sep-22
22090129-001	p-Ethyltoluene		0.43 ppbv	0.06	AC-058	16-Sep-22
22090129-001	Styrene		0.30 ppbv	0.06	AC-058	16-Sep-22
22090129-001	Tetrachloroethylene	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-001	Tetrahydrofuran	K, T, U	< 0.4 ppbv	0.4	AC-058	16-Sep-22
22090129-001	Toluene		0.41 ppbv	0.04	AC-058	16-Sep-22
22090129-001	trans-1,2-Dichloroethylene		84.5 ppbv	0.52	AC-058	16-Sep-22
22090129-001	trans-1,3-Dichloropropylene	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-001	trans-2-Butene	I	0.14 ppbv	0.04	AC-058	16-Sep-22
22090129-001	trans-2-Pentene	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-001	Trichloroethylene	I	0.12 ppbv	0.03	AC-058	16-Sep-22
22090129-001	Vinyl acetate	K, T, U	< 0.4 ppbv	0.4	AC-058	16-Sep-22
22090129-001	Vinyl chloride	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22

Report certified by: Graham Knox, Admin. & Ops. Supervisor

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 3, 2022

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_Reno-Blank	28955	Ambient Air	10-Sep-22	20:30
DESCRIPTION:	NMHC Blank			
REPORT NUMBER:	REPORT CREATED:	VERSION:		Version 01
22090129	03-Oct-22			

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22090129-002	1-Butene	K, T, U	< 0.10	ppmv	0.10	NA-025	14-Sep-22
22090129-002	Acetylene	K, T, U	< 0.08	ppmv	0.08	NA-025	14-Sep-22
22090129-002	n-Butane	K, T, U	< 0.2	ppmv	0.2	NA-025	14-Sep-22
22090129-002	cis-2-Butene	K, T, U	< 0.04	ppmv	0.04	NA-025	14-Sep-22
22090129-002	Ethane	K, T, U	< 0.1	ppmv	0.1	NA-025	14-Sep-22
22090129-002	Ethylacetylene	K, T, U	< 0.06	ppmv	0.06	NA-025	14-Sep-22
22090129-002	Ethylene	K, T, U	< 0.07	ppmv	0.07	NA-025	14-Sep-22
22090129-002	Isobutane	K, T, U	< 0.1	ppmv	0.1	NA-025	14-Sep-22
22090129-002	Isobutylene	K, T, U	< 0.1	ppmv	0.1	NA-025	14-Sep-22
22090129-002	Methane	K, T, U	< 0.1	ppmv	0.1	NA-025	14-Sep-22
22090129-002	n-Propane	K, T, U	< 0.07	ppmv	0.07	NA-025	14-Sep-22
22090129-002	Propylene	K, T, U	< 0.1	ppmv	0.1	NA-025	14-Sep-22
22090129-002	Propyne	K, T, U	< 0.1	ppmv	0.1	NA-025	14-Sep-22
22090129-002	trans-2-Butene	K, T, U	< 0.09	ppmv	0.09	NA-025	14-Sep-22
22090129-002	2,5-Dimethylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	14-Sep-22
22090129-002	2-Ethylthiophene	K, T, U	< 0.2	ppbv	0.2	NA-024	14-Sep-22
22090129-002	2-Methylthiophene	K, T, U	< 0.2	ppbv	0.2	NA-024	14-Sep-22
22090129-002	3-Methylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	14-Sep-22
22090129-002	Butyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	14-Sep-22
22090129-002	Carbon disulphide	K, T, U	< 0.2	ppbv	0.2	NA-024	14-Sep-22
22090129-002	Carbonyl sulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	14-Sep-22
22090129-002	Dimethyl disulphide	K, T, U	< 0.2	ppbv	0.2	NA-024	14-Sep-22
22090129-002	Dimethyl sulphide	K, T, U	< 0.2	ppbv	0.2	NA-024	14-Sep-22
22090129-002	Ethyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	14-Sep-22
22090129-002	Ethyl sulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	14-Sep-22

Report certified by: Rebecca Dasilva, Account Coordinator

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 3, 2022

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-Blank	28955	Ambient Air	10-Sep-22 20:30
DESCRIPTION:	NMHC Blank		
REPORT NUMBER:	REPORT CREATED:	VERSION:	Version 01
22090129	03-Oct-22		

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
22090129-002	Hydrogen sulphide	K, T, U	< 0.3 ppbv	0.3	NA-024	14-Sep-22
22090129-002	Isobutyl mercaptan	K, T, U	< 0.3 ppbv	0.3	NA-024	14-Sep-22
22090129-002	Isopropyl mercaptan	K, T, U	< 0.3 ppbv	0.3	NA-024	14-Sep-22
22090129-002	Methyl mercaptan	K, T, U	< 0.2 ppbv	0.2	NA-024	14-Sep-22
22090129-002	Pentyl mercaptan	K, T, U	< 0.4 ppbv	0.4	NA-024	14-Sep-22
22090129-002	Propyl mercaptan	K, T, U	< 0.4 ppbv	0.4	NA-024	14-Sep-22
22090129-002	tert-Butyl mercaptan	K, T, U	< 0.3 ppbv	0.3	NA-024	14-Sep-22
22090129-002	Thiophene/sec-Butyl mercaptan	K, T, U	< 0.2 ppbv	0.2	NA-024	14-Sep-22
22090129-002	1,1,1-Trichloroethane	K, T, U	< 0.02 ppbv	0.02	AC-058	16-Sep-22
22090129-002	1,1,2,2-Tetrachloroethane	K, T, U	< 0.02 ppbv	0.02	AC-058	16-Sep-22
22090129-002	1,1,2-Trichloroethane	K, T, U	< 0.02 ppbv	0.02	AC-058	16-Sep-22
22090129-002	1,1-Dichloroethane	K, T, U	< 0.02 ppbv	0.02	AC-058	16-Sep-22
22090129-002	1,1-Dichloroethylene	K, T, U	< 0.02 ppbv	0.02	AC-058	16-Sep-22
22090129-002	1,2,3-Trimethylbenzene	K, T, U	< 0.05 ppbv	0.05	AC-058	16-Sep-22
22090129-002	1,2,4-Trichlorobenzene	K, T, U	< 0.3 ppbv	0.3	AC-058	16-Sep-22
22090129-002	1,2,4-Trimethylbenzene	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-002	1,2-Dibromoethane	K, T, U	< 0.02 ppbv	0.02	AC-058	16-Sep-22
22090129-002	1,2-Dichlorobenzene	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-002	1,2-Dichloroethane	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-002	1,2-Dichloropropane	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-002	1,3,5-Trimethylbenzene	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-002	1,3-Butadiene	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-002	1,3-Dichlorobenzene	K, T, U	< 0.4 ppbv	0.4	AC-058	16-Sep-22
22090129-002	1,4-Dichlorobenzene	K, T, U	< 0.4 ppbv	0.4	AC-058	16-Sep-22
22090129-002	1,4-Dioxane	K, T, U	< 0.5 ppbv	0.5	AC-058	16-Sep-22

Report certified by: Graham Knox, Admin. & Ops. Supervisor

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 3, 2022

Inquiries: (780) 632 8455

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CLIENT SAMPLE ID	PRAMP_Reno-Blank	CANISTER ID	28955	Matrix	Ambient Air	DATE SAMPLED	10-Sep-22 20:30
DESCRIPTION:	NMHC Blank						
REPORT NUMBER:	22090129	REPORT CREATED:	03-Oct-22	VERSION:	Version 01		

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22090129-002	1-Butene/Isobutylene		2.09	ppbv	0.06	AC-058	16-Sep-22
22090129-002	1-Hexene/2-Methyl-1-pentene	K, T, U	< 0.07	ppbv	0.07	AC-058	16-Sep-22
22090129-002	1-Pentene	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-002	2,2,4-Trimethylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	2,2-Dimethylbutane	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	2,3,4-Trimethylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	2,3-Dimethylbutane	K, T, U	< 0.09	ppbv	0.09	AC-058	16-Sep-22
22090129-002	2,3-Dimethylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	2,4-Dimethylpentane	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-002	2-Methylheptane	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	2-Methylhexane	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-002	2-Methylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	3-Methylheptane	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-002	3-Methylhexane	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	3-Methylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	Acetone	K, T, U	< 0.4	ppbv	0.4	AC-058	16-Sep-22
22090129-002	Acrolein	K, T, U	< 0.3	ppbv	0.3	AC-058	16-Sep-22
22090129-002	Benzene	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-002	Benzyl chloride	K, T, U	< 0.3	ppbv	0.3	AC-058	16-Sep-22
22090129-002	Bromodichloromethane	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-002	Bromoform	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	Bromomethane	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	Carbon disulfide	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	Carbon tetrachloride	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	Chlorobenzene	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22

Report certified by: Graham Knox, Admin. & Ops. Supervisor

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 3, 2022

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_Reno-Blank	28955	Ambient Air	10-Sep-22	20:30
DESCRIPTION:	NMHC Blank			
REPORT NUMBER:	22090129	REPORT CREATED:	03-Oct-22	VERSION: Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22090129-002	Chloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	Chloroform	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	Chloromethane	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22
22090129-002	cis-1,2-Dichloroethene	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	cis-1,3-Dichloropropene	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-002	cis-2-Butene		0.15	ppbv	0.03	AC-058	16-Sep-22
22090129-002	cis-2-Pentene	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	Cyclohexane	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22
22090129-002	Cyclopentane	I	0.07	ppbv	0.02	AC-058	16-Sep-22
22090129-002	Dibromochloromethane	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	Ethanol	K, T, U	< 0.5	ppbv	0.5	AC-058	16-Sep-22
22090129-002	Ethyl acetate	K, T, U	< 0.3	ppbv	0.3	AC-058	16-Sep-22
22090129-002	Ethylbenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-002	Freon-11	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	Freon-113	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	Freon-114	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-002	Freon-12	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-002	Hexachloro-1,3-butadiene	K, T, U	< 0.3	ppbv	0.3	AC-058	16-Sep-22
22090129-002	Isobutane		0.13	ppbv	0.03	AC-058	16-Sep-22
22090129-002	Isopentane		0.44	ppbv	0.04	AC-058	16-Sep-22
22090129-002	Isoprene	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	Isopropyl alcohol	K, T, U	< 0.3	ppbv	0.3	AC-058	16-Sep-22
22090129-002	Isopropylbenzene	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22
22090129-002	m,p-Xylene	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22
22090129-002	m-Diethylbenzene	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22

Report certified by: Graham Knox, Admin. & Ops. Supervisor

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 3, 2022

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_Reno-Blank	28955	Ambient Air	10-Sep-22	20:30
DESCRIPTION:	NMHC Blank			
REPORT NUMBER:	22090129	REPORT CREATED:	03-Oct-22	VERSION: Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22090129-002	m-Ethyltoluene	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-002	Methyl butyl ketone	K, T, U	< 0.4	ppbv	0.4	AC-058	16-Sep-22
22090129-002	Methyl ethyl ketone	K, T, U	< 0.3	ppbv	0.3	AC-058	16-Sep-22
22090129-002	Methyl isobutyl ketone	K, T, U	< 0.3	ppbv	0.3	AC-058	16-Sep-22
22090129-002	Methyl methacrylate	K, T, U	< 0.08	ppbv	0.08	AC-058	16-Sep-22
22090129-002	Methyl tert butyl ether	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-002	Methylcyclohexane	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	Methylcyclopentane	K, T, U	< 0.05	ppbv	0.05	AC-058	16-Sep-22
22090129-002	Methylene chloride	K, T, U	< 0.3	ppbv	0.3	AC-058	16-Sep-22
22090129-002	n-Butane		5.05	ppbv	0.02	AC-058	16-Sep-22
22090129-002	n-Decane	K, T, U	< 0.06	ppbv	0.06	AC-058	16-Sep-22
22090129-002	n-Dodecane	K, T, U	< 0.3	ppbv	0.3	AC-058	16-Sep-22
22090129-002	n-Heptane	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22
22090129-002	n-Hexane	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-002	n-Octane	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	n-Pentane		0.72	ppbv	0.04	AC-058	16-Sep-22
22090129-002	n-Propylbenzene	K, T, U	< 0.06	ppbv	0.06	AC-058	16-Sep-22
22090129-002	n-Undecane	K, T, U	< 0.5	ppbv	0.5	AC-058	16-Sep-22
22090129-002	Naphthalene	K, T, U	< 0.3	ppbv	0.3	AC-058	16-Sep-22
22090129-002	n-Nonane	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22
22090129-002	o-Ethyltoluene	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	o-Xylene	K, T, U	< 0.03	ppbv	0.03	AC-058	16-Sep-22
22090129-002	p-Diethylbenzene	K, T, U	< 0.02	ppbv	0.02	AC-058	16-Sep-22
22090129-002	p-Ethyltoluene	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22
22090129-002	Styrene	K, T, U	< 0.04	ppbv	0.04	AC-058	16-Sep-22

Report certified by: Graham Knox, Admin. & Ops. Supervisor

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 3, 2022

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca



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 Vegreville, Alberta
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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_Reno-Blank	28955	Ambient Air	10-Sep-22	20:30
DESCRIPTION:	NMHC Blank			
REPORT NUMBER:	22090129	REPORT CREATED:	03-Oct-22	VERSION: Version 01

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
22090129-002	Tetrachloroethylene	K, T, U	< 0.02 ppbv	0.02	AC-058	16-Sep-22
22090129-002	Tetrahydrofuran	K, T, U	< 0.3 ppbv	0.3	AC-058	16-Sep-22
22090129-002	Toluene	K, T, U	< 0.03 ppbv	0.03	AC-058	16-Sep-22
22090129-002	trans-1,2-Dichloroethylene	K, T, U	< 0.06 ppbv	0.06	AC-058	16-Sep-22
22090129-002	trans-1,3-Dichloropropylene	K, T, U	< 0.02 ppbv	0.02	AC-058	16-Sep-22
22090129-002	trans-2-Butene		0.37 ppbv	0.03	AC-058	16-Sep-22
22090129-002	trans-2-Pentene	K, T, U	< 0.02 ppbv	0.02	AC-058	16-Sep-22
22090129-002	Trichloroethylene	K, T, U	< 0.02 ppbv	0.02	AC-058	16-Sep-22
22090129-002	Vinyl acetate	K, T, U	< 0.3 ppbv	0.3	AC-058	16-Sep-22
22090129-002	Vinyl chloride	K, T, U	< 0.02 ppbv	0.02	AC-058	16-Sep-22

Report certified by: Graham Knox, Admin. & Ops. Supervisor

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 3, 2022

LAB-PRAMP-202209

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca



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Canada T9C 1T4
(780) 632-8211

ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

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Revision History

Order ID	Ver	Date	Reason
22090129	01	03-Oct-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



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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

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Order Comments

22090129

Unknowns to be reported. Send invoice to pramptech@prampairshed.ca



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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

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Sample Comments



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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

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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.*



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

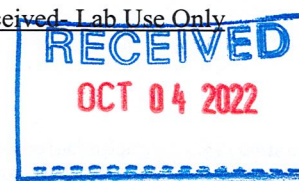
EAS CANISTER

Sample ID: 22100034-001 Priority: Normal



Customer ID: PRAMP
 Cust Samp ID: PRAMP_Reno-2022-0930

Date Received - Lab Use Only



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)	
PRAMP_842b- _____ PRAMP_986c- _____ PRAMP_Reno- <u>20220930E</u>	<u>32194</u>	<input type="checkbox"/> Methane Trigger <input checked="" type="checkbox"/> NMHC Trigger <input type="checkbox"/> Methane Blank <input type="checkbox"/> NMHC Blank <input type="checkbox"/> Expired Canister – No further analysis is required.	<u>2022/09/30</u>	<u>19:25</u>	* 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 Oct 13/2022 (Date/Time) (MST). 13:27



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

**EAS CANISTER
 CUSTODY FORM**

Sample ID: 22100034-002 Priority: Normal



Customer ID: PRAMP
 Cust Samp ID: PRAMP_Reno-Blank

Date Received- Lab Use Only



Client Contact Details: Contact: <u>Karla Ressor, Michael Bisaga/ Lily Lin</u> Company: <u>PRAMP Airshed</u> PO#: <input type="checkbox"/> 842b Station <input type="checkbox"/> 986c Station <input type="checkbox"/> Reno Station Address: <input type="checkbox"/> 842b (Lat. 56.27406N, Long. 116.98129W) <input type="checkbox"/> 986c (Lat. 56.36988N, Long. 116.925636W) <input type="checkbox"/> Reno (Lat. 55.86936N, Long. 117.05739W) Telephone: <u>403-8072995, 780-2667068/587-2252248</u> Email: <u>karla@prampairshed.ca, pramptech@prampairshed.ca</u>	RUSH (Surcharge) <input type="checkbox"/> 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 <hr/> InnoTech Contact: <u>Graham Knox</u> Phone: <u>780-632-8403</u> Cell: <u>780-632-1519</u> Email: <u>Graham.Knox@innotechalberta.ca</u>
---	--

Sample ID (PRAMP_station_yyyyymmdd) (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)	
PRAMP_842b- _____	29896	<input type="checkbox"/> Methane Trigger			* C1C4 Air, VOC Full, RSC Air * Unknowns to be reported * Carbon Isotopic Analysis (if sample is collected from Methane trigger)
PRAMP_986c- _____		<input type="checkbox"/> NMHC Trigger			
PRAMP_Reno- <u>Blank</u>		<input type="checkbox"/> Methane Blank <input checked="" type="checkbox"/> NMHC Blank <input type="checkbox"/> Expired Canister – No further analysis is required.			

Sample Collection:
 Collected By Dwayne (Name) of _____ (Company) on Oct 1/2022/13127 (Date/Time) (MST).



Canister ID: 321810

This cleaned canister meets or exceeds TO-15 Method Specifications

Proofed by: _____ on: MAY 09 2022

Evacuated: JUL 21 2022 Recertified: _____

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

Laboratory Contact Number: 780-632-8403

Sample ID: PRAMP_Reno-20220930
(NMHL)

Sampled By: Dwayne

Starting Vacuum: -27.2 "Hg

End Vacuum: -2 "Hg/psig JMP



Canister ID: 28896

This cleaned canister meets or exceeds TO-15 Method Specifications

Proofed by: ISQ3 on: JUN 08 2022

Evacuated: JUL 21 2022 Recertified: _____

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

Laboratory Contact Number: 780-632-8403

Sample ID: PRAMP_Reno-Blank

Sampled By: _____

Starting Vacuum: -27.1 "Hg

End Pressure: -27 "Hg/psig JMP

Sample ID: 22100034-001 Priority: Normal



Customer ID: PRAMP

Cust Samp ID: PRAMP_Reno-2022-0930



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Vegreville, Alberta
Canada T9C 1T4
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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

<p>RESULTS: Karla Reesor 403 807 2995 Peace River Area Monitoring Program Committee</p> <p>INVOICE: Office Manager</p>	<p style="text-align: center;">CLIENT SAMPLE ID PRAMP_Reno-2022-0930</p> <p>MATRIX: Ambient Air</p> <p>CANISTER ID: 32184 PRIORITY: Normal DESCRIPTION: NMHC Trigger</p> <p>DATE SAMPLED: 30-Sep-22 19:25 DATE RECEIVED: 04-Oct-22 REPORT CREATED: 17-Oct-22 REPORT NUMBER: 22100034 VERSION: Version 01</p>
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Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22100034-001	1-Butene	K, T, U	< 0.15	ppmv	0.15	NA-025	06-Oct-22
22100034-001	Acetylene	K, T, U	< 0.12	ppmv	0.12	NA-025	06-Oct-22
22100034-001	n-Butane	K, T, U	< 0.3	ppmv	0.3	NA-025	06-Oct-22
22100034-001	cis-2-Butene	K, T, U	< 0.06	ppmv	0.06	NA-025	06-Oct-22
22100034-001	Ethane	K, T, U	< 0.1	ppmv	0.1	NA-025	06-Oct-22
22100034-001	Ethylacetylene	K, T, U	< 0.09	ppmv	0.09	NA-025	06-Oct-22
22100034-001	Ethylene	K, T, U	< 0.10	ppmv	0.10	NA-025	06-Oct-22
22100034-001	Isobutane	K, T, U	< 0.1	ppmv	0.1	NA-025	06-Oct-22
22100034-001	Isobutylene	K, T, U	< 0.1	ppmv	0.1	NA-025	06-Oct-22
22100034-001	Methane		2.1	ppmv	0.1	NA-025	06-Oct-22
22100034-001	n-Propane	K, T, U	< 0.10	ppmv	0.10	NA-025	06-Oct-22
22100034-001	Propylene	K, T, U	< 0.1	ppmv	0.1	NA-025	06-Oct-22
22100034-001	Propyne	K, T, U	< 0.1	ppmv	0.1	NA-025	06-Oct-22
22100034-001	trans-2-Butene	K, T, U	< 0.13	ppmv	0.13	NA-025	06-Oct-22
22100034-001	2,5-Dimethylthiophene	K, T, U	< 0.4	ppbv	0.4	NA-024	06-Oct-22
22100034-001	2-Ethylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	06-Oct-22
22100034-001	2-Methylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	06-Oct-22
22100034-001	3-Methylthiophene	K, T, U	< 0.4	ppbv	0.4	NA-024	06-Oct-22

Report certified by: Rebecca Dasilva, Account Coordinator On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 17, 2022 Inquiries: (780) 632 8455 E-mail: EAS.Results@innotechalberta.ca

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CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-2022-0930	32184	Ambient Air	30-Sep-22 19:25
DESCRIPTION:	NMHC Trigger		
REPORT NUMBER:	REPORT CREATED:	VERSION:	Version 01
22100034	17-Oct-22		

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
22100034-001	Butyl mercaptan	K, T, U	< 0.4 ppbv	0.4	NA-024	06-Oct-22
22100034-001	Carbon disulphide	K, T, U	< 0.3 ppbv	0.3	NA-024	06-Oct-22
22100034-001	Carbonyl sulphide	K, T, U	< 0.4 ppbv	0.4	NA-024	06-Oct-22
22100034-001	Dimethyl disulphide	K, T, U	< 0.3 ppbv	0.3	NA-024	06-Oct-22
22100034-001	Dimethyl sulphide	K, T, U	< 0.3 ppbv	0.3	NA-024	06-Oct-22
22100034-001	Ethyl mercaptan	K, T, U	< 0.4 ppbv	0.4	NA-024	06-Oct-22
22100034-001	Ethyl sulphide	K, T, U	< 0.4 ppbv	0.4	NA-024	06-Oct-22
22100034-001	Hydrogen sulphide		2.0 ppbv	0.4	NA-024	06-Oct-22
22100034-001	Isobutyl mercaptan	K, T, U	< 0.4 ppbv	0.4	NA-024	06-Oct-22
22100034-001	Isopropyl mercaptan	K, T, U	< 0.4 ppbv	0.4	NA-024	06-Oct-22
22100034-001	Methyl mercaptan	K, T, U	< 0.3 ppbv	0.3	NA-024	06-Oct-22
22100034-001	Pentyl mercaptan	K, T, U	< 0.6 ppbv	0.6	NA-024	06-Oct-22
22100034-001	Propyl mercaptan	K, T, U	< 0.6 ppbv	0.6	NA-024	06-Oct-22
22100034-001	tert-Butyl mercaptan	K, T, U	< 0.4 ppbv	0.4	NA-024	06-Oct-22
22100034-001	Thiophene/sec-Butyl mercaptan	K, T, U	< 0.3 ppbv	0.3	NA-024	06-Oct-22
22100034-001	1,1,1-Trichloroethane	K, T, U	< 0.03 ppbv	0.03	AC-058	07-Oct-22
22100034-001	1,1,2,2-Tetrachloroethane	K, T, U	< 0.03 ppbv	0.03	AC-058	07-Oct-22
22100034-001	1,1,2-Trichloroethane	K, T, U	< 0.03 ppbv	0.03	AC-058	07-Oct-22
22100034-001	1,1-Dichloroethane	K, T, U	< 0.03 ppbv	0.03	AC-058	07-Oct-22
22100034-001	1,1-Dichloroethylene	K, T, U	< 0.03 ppbv	0.03	AC-058	07-Oct-22
22100034-001	1,2,3-Trimethylbenzene	K, T, U	< 0.07 ppbv	0.07	AC-058	07-Oct-22
22100034-001	1,2,4-Trichlorobenzene	K, T, U	< 0.4 ppbv	0.4	AC-058	07-Oct-22
22100034-001	1,2,4-Trimethylbenzene	I	0.09 ppbv	0.04	AC-058	07-Oct-22
22100034-001	1,2-Dibromoethane	K, T, U	< 0.03 ppbv	0.03	AC-058	07-Oct-22
22100034-001	1,2-Dichlorobenzene	I	0.06 ppbv	0.04	AC-058	07-Oct-22

Report certified by: Rebecca Dasilva, Account Coordinator

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 17, 2022

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-2022-0930	32184	Ambient Air	30-Sep-22 19:25
DESCRIPTION:	NMHC Trigger		
REPORT NUMBER:	REPORT CREATED:	VERSION:	Version 01
22100034	17-Oct-22		

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22100034-001	1,2-Dichloroethane	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-001	1,2-Dichloropropane	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-001	1,3,5-Trimethylbenzene	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-001	1,3-Butadiene	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-001	1,3-Dichlorobenzene	K, T, U	< 0.6	ppbv	0.6	AC-058	07-Oct-22
22100034-001	1,4-Dichlorobenzene	K, T, U	< 0.6	ppbv	0.6	AC-058	07-Oct-22
22100034-001	1,4-Dioxane	K, T, U	< 0.7	ppbv	0.7	AC-058	07-Oct-22
22100034-001	1-Butene/Isobutylene		0.93	ppbv	0.09	AC-058	07-Oct-22
22100034-001	1-Hexene/2-Methyl-1-pentene	K, T, U	< 0.10	ppbv	0.10	AC-058	07-Oct-22
22100034-001	1-Pentene		0.15	ppbv	0.04	AC-058	07-Oct-22
22100034-001	2,2,4-Trimethylpentane	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	2,2-Dimethylbutane	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	2,3,4-Trimethylpentane	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	2,3-Dimethylbutane	K, T, U	< 0.13	ppbv	0.13	AC-058	07-Oct-22
22100034-001	2,3-Dimethylpentane	I	0.04	ppbv	0.03	AC-058	07-Oct-22
22100034-001	2,4-Dimethylpentane	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-001	2-Methylheptane	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	2-Methylhexane	I	0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-001	2-Methylpentane	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	3-Methylheptane	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-001	3-Methylhexane	I	0.04	ppbv	0.03	AC-058	07-Oct-22
22100034-001	3-Methylpentane	I	0.08	ppbv	0.03	AC-058	07-Oct-22
22100034-001	Acetone		4.0	ppbv	0.6	AC-058	07-Oct-22
22100034-001	Acrolein	I	0.5	ppbv	0.4	AC-058	07-Oct-22
22100034-001	Benzene	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22

Report certified by: Rebecca Dasilva, Account Coordinator

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 17, 2022

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CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-2022-0930	32184	Ambient Air	30-Sep-22 19:25
DESCRIPTION:	NMHC Trigger		
REPORT NUMBER:	REPORT CREATED:	VERSION:	Version 01
22100034	17-Oct-22		

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22100034-001	Benzyl chloride	K, T, U	< 0.4	ppbv	0.4	AC-058	07-Oct-22
22100034-001	Bromodichloromethane	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-001	Bromoform	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	Bromomethane	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	Carbon disulfide	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	Carbon tetrachloride	I	0.08	ppbv	0.03	AC-058	07-Oct-22
22100034-001	Chlorobenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	Chloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	Chloroform	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	Chloromethane		0.67	ppbv	0.06	AC-058	07-Oct-22
22100034-001	cis-1,2-Dichloroethene	I	0.07	ppbv	0.03	AC-058	07-Oct-22
22100034-001	cis-1,3-Dichloropropene	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-001	cis-2-Butene	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-001	cis-2-Pentene	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	Cyclohexane	I	0.10	ppbv	0.06	AC-058	07-Oct-22
22100034-001	Cyclopentane		0.39	ppbv	0.03	AC-058	07-Oct-22
22100034-001	Dibromochloromethane	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	Ethanol		3.5	ppbv	0.7	AC-058	07-Oct-22
22100034-001	Ethyl acetate	K, T, U	< 0.4	ppbv	0.4	AC-058	07-Oct-22
22100034-001	Ethylbenzene	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-001	Freon-11		0.18	ppbv	0.03	AC-058	07-Oct-22
22100034-001	Freon-113	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	Freon-114	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-001	Freon-12		0.19	ppbv	0.04	AC-058	07-Oct-22
22100034-001	Hexachloro-1,3-butadiene	K, T, U	< 0.4	ppbv	0.4	AC-058	07-Oct-22

Report certified by: Rebecca Dasilva, Account Coordinator

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 17, 2022

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CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-2022-0930	32184	Ambient Air	30-Sep-22 19:25
DESCRIPTION:	NMHC Trigger		
REPORT NUMBER:	REPORT CREATED:	VERSION:	Version 01
22100034	17-Oct-22		

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22100034-001	Isobutane		0.95	ppbv	0.04	AC-058	07-Oct-22
22100034-001	Isopentane		0.53	ppbv	0.06	AC-058	07-Oct-22
22100034-001	Isoprene		0.16	ppbv	0.03	AC-058	07-Oct-22
22100034-001	Isopropyl alcohol		2.0	ppbv	0.4	AC-058	07-Oct-22
22100034-001	Isopropylbenzene	K, T, U	< 0.06	ppbv	0.06	AC-058	07-Oct-22
22100034-001	m,p-Xylene	I	0.10	ppbv	0.06	AC-058	07-Oct-22
22100034-001	m-Diethylbenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	m-Ethyltoluene	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-001	Methyl butyl ketone	K, T, U	< 0.6	ppbv	0.6	AC-058	07-Oct-22
22100034-001	Methyl ethyl ketone	K, T, U	< 0.4	ppbv	0.4	AC-058	07-Oct-22
22100034-001	Methyl isobutyl ketone	K, T, U	< 0.4	ppbv	0.4	AC-058	07-Oct-22
22100034-001	Methyl methacrylate	K, T, U	< 0.12	ppbv	0.12	AC-058	07-Oct-22
22100034-001	Methyl tert butyl ether	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-001	Methylcyclohexane	I	0.09	ppbv	0.03	AC-058	07-Oct-22
22100034-001	Methylcyclopentane	I	0.10	ppbv	0.07	AC-058	07-Oct-22
22100034-001	Methylene chloride	K, T, U	< 0.4	ppbv	0.4	AC-058	07-Oct-22
22100034-001	n-Butane		1.90	ppbv	0.03	AC-058	07-Oct-22
22100034-001	n-Decane	K, T, U	< 0.09	ppbv	0.09	AC-058	07-Oct-22
22100034-001	n-Dodecane	K, T, U	< 0.4	ppbv	0.4	AC-058	07-Oct-22
22100034-001	n-Heptane	K, T, U	< 0.06	ppbv	0.06	AC-058	07-Oct-22
22100034-001	n-Hexane	I	0.06	ppbv	0.04	AC-058	07-Oct-22
22100034-001	n-Octane	I	0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-001	n-Pentane		0.50	ppbv	0.06	AC-058	07-Oct-22
22100034-001	n-Propylbenzene	K, T, U	< 0.09	ppbv	0.09	AC-058	07-Oct-22
22100034-001	n-Undecane	K, T, U	< 0.7	ppbv	0.7	AC-058	07-Oct-22

Report certified by: Rebecca Dasilva, Account Coordinator

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 17, 2022

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CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-2022-0930	32184	Ambient Air	30-Sep-22 19:25
DESCRIPTION:	NMHC Trigger		
REPORT NUMBER:	REPORT CREATED:	VERSION:	Version 01
22100034	17-Oct-22		

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
22100034-001	Naphthalene	K, T, U	< 0.4 ppbv	0.4	AC-058	07-Oct-22
22100034-001	n-Nonane	K, T, U	< 0.06 ppbv	0.06	AC-058	07-Oct-22
22100034-001	o-Ethyltoluene	I	0.03 ppbv	0.03	AC-058	07-Oct-22
22100034-001	o-Xylene	K, T, U	< 0.04 ppbv	0.04	AC-058	07-Oct-22
22100034-001	p-Diethylbenzene	K, T, U	< 0.03 ppbv	0.03	AC-058	07-Oct-22
22100034-001	p-Ethyltoluene	K, T, U	< 0.06 ppbv	0.06	AC-058	07-Oct-22
22100034-001	Styrene	I	0.08 ppbv	0.06	AC-058	07-Oct-22
22100034-001	Tetrachloroethylene	K, T, U	< 0.03 ppbv	0.03	AC-058	07-Oct-22
22100034-001	Tetrahydrofuran	K, T, U	< 0.4 ppbv	0.4	AC-058	07-Oct-22
22100034-001	Toluene	I	0.21 ppbv	0.04	AC-058	07-Oct-22
22100034-001	trans-1,2-Dichloroethylene		34.0 ppbv	0.09	AC-058	07-Oct-22
22100034-001	trans-1,3-Dichloropropylene	K, T, U	< 0.03 ppbv	0.03	AC-058	07-Oct-22
22100034-001	trans-2-Butene	I	0.11 ppbv	0.04	AC-058	07-Oct-22
22100034-001	trans-2-Pentene	K, T, U	< 0.03 ppbv	0.03	AC-058	07-Oct-22
22100034-001	Trichloroethylene	K, T, U	< 0.03 ppbv	0.03	AC-058	07-Oct-22
22100034-001	Vinyl acetate	K, T, U	< 0.4 ppbv	0.4	AC-058	07-Oct-22
22100034-001	Vinyl chloride	K, T, U	< 0.03 ppbv	0.03	AC-058	07-Oct-22

Report certified by: Rebecca Dasilva, Account Coordinator

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 17, 2022

Inquiries: (780) 632 8455

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CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-Blank	28896	Ambient Air	30-Sep-22 19:25
DESCRIPTION:	NMHC Trigger - Blank		
REPORT NUMBER:	REPORT CREATED:	VERSION:	Version 01
22100034	17-Oct-22		

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22100034-002	1-Butene	K, T, U	< 0.10	ppmv	0.10	NA-025	06-Oct-22
22100034-002	Acetylene	K, T, U	< 0.08	ppmv	0.08	NA-025	06-Oct-22
22100034-002	n-Butane	K, T, U	< 0.2	ppmv	0.2	NA-025	06-Oct-22
22100034-002	cis-2-Butene	K, T, U	< 0.04	ppmv	0.04	NA-025	06-Oct-22
22100034-002	Ethane	K, T, U	< 0.1	ppmv	0.1	NA-025	06-Oct-22
22100034-002	Ethylacetylene	K, T, U	< 0.06	ppmv	0.06	NA-025	06-Oct-22
22100034-002	Ethylene	K, T, U	< 0.07	ppmv	0.07	NA-025	06-Oct-22
22100034-002	Isobutane	K, T, U	< 0.1	ppmv	0.1	NA-025	06-Oct-22
22100034-002	Isobutylene	K, T, U	< 0.1	ppmv	0.1	NA-025	06-Oct-22
22100034-002	Methane	K, T, U	< 0.1	ppmv	0.1	NA-025	06-Oct-22
22100034-002	n-Propane	K, T, U	< 0.07	ppmv	0.07	NA-025	06-Oct-22
22100034-002	Propylene	K, T, U	< 0.1	ppmv	0.1	NA-025	06-Oct-22
22100034-002	Propyne	K, T, U	< 0.1	ppmv	0.1	NA-025	06-Oct-22
22100034-002	trans-2-Butene	K, T, U	< 0.09	ppmv	0.09	NA-025	06-Oct-22
22100034-002	2,5-Dimethylthiophene	K, T, U	< 0.4	ppbv	0.4	NA-024	06-Oct-22
22100034-002	2-Ethylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	06-Oct-22
22100034-002	2-Methylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	06-Oct-22
22100034-002	3-Methylthiophene	K, T, U	< 0.4	ppbv	0.4	NA-024	06-Oct-22
22100034-002	Butyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	06-Oct-22
22100034-002	Carbon disulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	06-Oct-22
22100034-002	Carbonyl sulphide	K, T, U	< 0.4	ppbv	0.4	NA-024	06-Oct-22
22100034-002	Dimethyl disulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	06-Oct-22
22100034-002	Dimethyl sulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	06-Oct-22
22100034-002	Ethyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	06-Oct-22
22100034-002	Ethyl sulphide	K, T, U	< 0.4	ppbv	0.4	NA-024	06-Oct-22

Report certified by: Rebecca Dasilva, Account Coordinator

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 17, 2022

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CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-Blank	28896	Ambient Air	30-Sep-22 19:25
DESCRIPTION:	NMHC Trigger - Blank		
REPORT NUMBER:	22100034	REPORT CREATED:	17-Oct-22
		VERSION:	Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22100034-002	Hydrogen sulphide	K, T, U	< 0.4	ppbv	0.4	NA-024	06-Oct-22
22100034-002	Isobutyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	06-Oct-22
22100034-002	Isopropyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	06-Oct-22
22100034-002	Methyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	06-Oct-22
22100034-002	Pentyl mercaptan	K, T, U	< 0.6	ppbv	0.6	NA-024	06-Oct-22
22100034-002	Propyl mercaptan	K, T, U	< 0.6	ppbv	0.6	NA-024	06-Oct-22
22100034-002	tert-Butyl mercaptan	K, T, U	< 0.4	ppbv	0.4	NA-024	06-Oct-22
22100034-002	Thiophene/sec-Butyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	06-Oct-22
22100034-002	1,1,1-Trichloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	1,1,2,2-Tetrachloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	1,1,2-Trichloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	1,1-Dichloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	1,1-Dichloroethylene	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	1,2,3-Trimethylbenzene	K, T, U	< 0.05	ppbv	0.05	AC-058	07-Oct-22
22100034-002	1,2,4-Trichlorobenzene	K, T, U	< 0.3	ppbv	0.3	AC-058	07-Oct-22
22100034-002	1,2,4-Trimethylbenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	1,2-Dibromoethane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	1,2-Dichlorobenzene	I	0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	1,2-Dichloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	1,2-Dichloropropane	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	1,3,5-Trimethylbenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	1,3-Butadiene	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	1,3-Dichlorobenzene	K, T, U	< 0.4	ppbv	0.4	AC-058	07-Oct-22
22100034-002	1,4-Dichlorobenzene	K, T, U	< 0.4	ppbv	0.4	AC-058	07-Oct-22
22100034-002	1,4-Dioxane	K, T, U	< 0.5	ppbv	0.5	AC-058	07-Oct-22

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On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 17, 2022

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CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-Blank	28896	Ambient Air	30-Sep-22 19:25
DESCRIPTION:	NMHC Trigger - Blank		
REPORT NUMBER:	22100034	REPORT CREATED:	17-Oct-22
		VERSION:	Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22100034-002	1-Butene/Isobutylene		1.30	ppbv	0.06	AC-058	07-Oct-22
22100034-002	1-Hexene/2-Methyl-1-pentene	K, T, U	< 0.07	ppbv	0.07	AC-058	07-Oct-22
22100034-002	1-Pentene	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	2,2,4-Trimethylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	2,2-Dimethylbutane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	2,3,4-Trimethylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	2,3-Dimethylbutane	K, T, U	< 0.09	ppbv	0.09	AC-058	07-Oct-22
22100034-002	2,3-Dimethylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	2,4-Dimethylpentane	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	2-Methylheptane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	2-Methylhexane	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	2-Methylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	3-Methylheptane	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	3-Methylhexane	I	0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	3-Methylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	Acetone	K, T, U	< 0.4	ppbv	0.4	AC-058	07-Oct-22
22100034-002	Acrolein	K, T, U	< 0.3	ppbv	0.3	AC-058	07-Oct-22
22100034-002	Benzene	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	Benzyl chloride	K, T, U	< 0.3	ppbv	0.3	AC-058	07-Oct-22
22100034-002	Bromodichloromethane	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	Bromoform	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	Bromomethane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	Carbon disulfide	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	Carbon tetrachloride	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	Chlorobenzene	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22

Report certified by: Rebecca Dasilva, Account Coordinator

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 17, 2022

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REPORT NUMBER:	22100034	REPORT CREATED:	17-Oct-22
		VERSION:	Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22100034-002	Chloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	Chloroform	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	Chloromethane	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-002	cis-1,2-Dichloroethene	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	cis-1,3-Dichloropropene	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	cis-2-Butene		0.10	ppbv	0.03	AC-058	07-Oct-22
22100034-002	cis-2-Pentene	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	Cyclohexane	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-002	Cyclopentane	I	0.08	ppbv	0.02	AC-058	07-Oct-22
22100034-002	Dibromochloromethane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	Ethanol	K, T, U	< 0.5	ppbv	0.5	AC-058	07-Oct-22
22100034-002	Ethyl acetate	K, T, U	< 0.3	ppbv	0.3	AC-058	07-Oct-22
22100034-002	Ethylbenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	Freon-11	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	Freon-113	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	Freon-114	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	Freon-12	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	Hexachloro-1,3-butadiene	K, T, U	< 0.3	ppbv	0.3	AC-058	07-Oct-22
22100034-002	Isobutane		0.37	ppbv	0.03	AC-058	07-Oct-22
22100034-002	Isopentane		0.37	ppbv	0.04	AC-058	07-Oct-22
22100034-002	Isoprene	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	Isopropyl alcohol	K, T, U	< 0.3	ppbv	0.3	AC-058	07-Oct-22
22100034-002	Isopropylbenzene	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-002	m,p-Xylene	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-002	m-Diethylbenzene	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22

Report certified by: Rebecca Dasilva, Account Coordinator

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 17, 2022

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-Blank	28896	Ambient Air	30-Sep-22 19:25
DESCRIPTION:	NMHC Trigger - Blank		
REPORT NUMBER:	22100034	REPORT CREATED:	17-Oct-22
		VERSION:	Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
22100034-002	m-Ethyltoluene	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	Methyl butyl ketone	K, T, U	< 0.4	ppbv	0.4	AC-058	07-Oct-22
22100034-002	Methyl ethyl ketone	K, T, U	< 0.3	ppbv	0.3	AC-058	07-Oct-22
22100034-002	Methyl isobutyl ketone	K, T, U	< 0.3	ppbv	0.3	AC-058	07-Oct-22
22100034-002	Methyl methacrylate	K, T, U	< 0.08	ppbv	0.08	AC-058	07-Oct-22
22100034-002	Methyl tert butyl ether	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	Methylcyclohexane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	Methylcyclopentane	K, T, U	< 0.05	ppbv	0.05	AC-058	07-Oct-22
22100034-002	Methylene chloride	K, T, U	< 0.3	ppbv	0.3	AC-058	07-Oct-22
22100034-002	n-Butane		2.74	ppbv	0.02	AC-058	07-Oct-22
22100034-002	n-Decane	K, T, U	< 0.06	ppbv	0.06	AC-058	07-Oct-22
22100034-002	n-Dodecane	K, T, U	< 0.3	ppbv	0.3	AC-058	07-Oct-22
22100034-002	n-Heptane	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-002	n-Hexane	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	n-Octane	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	n-Pentane		0.58	ppbv	0.04	AC-058	07-Oct-22
22100034-002	n-Propylbenzene	K, T, U	< 0.06	ppbv	0.06	AC-058	07-Oct-22
22100034-002	n-Undecane	K, T, U	< 0.5	ppbv	0.5	AC-058	07-Oct-22
22100034-002	Naphthalene	K, T, U	< 0.3	ppbv	0.3	AC-058	07-Oct-22
22100034-002	n-Nonane	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-002	o-Ethyltoluene	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	o-Xylene	K, T, U	< 0.03	ppbv	0.03	AC-058	07-Oct-22
22100034-002	p-Diethylbenzene	K, T, U	< 0.02	ppbv	0.02	AC-058	07-Oct-22
22100034-002	p-Ethyltoluene	K, T, U	< 0.04	ppbv	0.04	AC-058	07-Oct-22
22100034-002	Styrene	I	0.04	ppbv	0.04	AC-058	07-Oct-22

Report certified by: Rebecca Dasilva, Account Coordinator

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 17, 2022

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-Blank	28896	Ambient Air	30-Sep-22 19:25
DESCRIPTION:	NMHC Trigger - Blank		
REPORT NUMBER:	22100034	REPORT CREATED:	17-Oct-22
		VERSION:	Version 01

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
22100034-002	Tetrachloroethylene	K, T, U	< 0.02 ppbv	0.02	AC-058	07-Oct-22
22100034-002	Tetrahydrofuran	K, T, U	< 0.3 ppbv	0.3	AC-058	07-Oct-22
22100034-002	Toluene	K, T, U	< 0.03 ppbv	0.03	AC-058	07-Oct-22
22100034-002	trans-1,2-Dichloroethylene	K, T, U	< 0.06 ppbv	0.06	AC-058	07-Oct-22
22100034-002	trans-1,3-Dichloropropylene	K, T, U	< 0.02 ppbv	0.02	AC-058	07-Oct-22
22100034-002	trans-2-Butene		0.24 ppbv	0.03	AC-058	07-Oct-22
22100034-002	trans-2-Pentene	K, T, U	< 0.02 ppbv	0.02	AC-058	07-Oct-22
22100034-002	Trichloroethylene	K, T, U	< 0.02 ppbv	0.02	AC-058	07-Oct-22
22100034-002	Vinyl acetate	K, T, U	< 0.3 ppbv	0.3	AC-058	07-Oct-22
22100034-002	Vinyl chloride	K, T, U	< 0.02 ppbv	0.02	AC-058	07-Oct-22

Report certified by: Rebecca Dasilva, Account Coordinator

On behalf of: A. Prefontaine, Manager, Chemical Testing

Date: October 17, 2022

LAB-PRAMP-202209

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca



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Canada T9C 1T4
(780) 632-8211

ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

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Revision History

Order ID	Ver	Date	Reason
22100034	01	17-Oct-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



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Canada T9C 1T4
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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

Page 16 of 18

Order Comments

22100034

Send results to pramptech@prampairshed.ca



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Canada T9C 1T4
(780) 632-8211

ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

Page 17 of 18

Sample Comments



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ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

Page 18 of 18

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



Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Maxxam Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Page ___ of ___

Invoice To
Company Name _____
Contact Name _____
Address _____
Postal Code _____
Phone/Fax# Ph _____ Fax _____

Report To
Name & Email Address

Service Requested
 RUSH
 (Please contact for TAT)
 REGULAR

Company Name
Peace River
Project Name/LSD
Peace River

ANALYTICAL INFORMATION

Analysis Required

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) PM/TSP Only	SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall
1	01/09/22	8:00am	30/9/2022			X	X										
2						X	X										
3						X	X										
4						X	X										
7						X	X										
8						X	X										
9						X	X										
10						X	X										
11						X	X										
12						X	X										
13						X	X										
14		9:30				X	X										
Blank						X	X										
Blank						X	X										

Notes/Comments: Client 12521 / Scenario 18009

JS 22-10-05
POB/SD

Sampled By _____ Phone/Email _____ Received By _____ Date/Time _____ Project # _____
 Date Shipped _____ Signature _____ PO# _____



Your Project #: 2022/09/01 - 2022/09/30
Site Location: PEACE RIVER COMPLEX

Attention: Michael and Lily

Peace River Area Monitoring Program Committee
Three Creeks
Suite 91, 305 –
4625 Varsity Drive NW
Calgary, AB
CANADA T3A0Z9

Report Date: 2022/10/17
Report #: R3248893
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C278131

Received: 2022/10/05, 08:30

Sample Matrix: Air
Samples Received: 12

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
H2S Passive Analysis	12	2022/10/14	2022/10/17	PTC SOP-00150	Passive H2S in ATM
SO2 Passive Analysis	12	2022/10/07	2022/10/17	PTC SOP-00149	Passive SO2 in ATM

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Belma Elefante
Customer Service Associate
18 Oct 2022 08:06:23

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

Bureau Veritas Job #: C278131
Report Date: 2022/10/17

Peace River Area Monitoring Program Committee
Client Project #: 2022/09/01 - 2022/09/30
Site Location: PEACE RIVER COMPLEX
Sampler Initials: BG

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		BDT259	BDT260	BDT261	BDT262	BDT263	BDT264	BDT265		
Sampling Date		2022/09/01 08:00	2022/09/01 08:00	2022/09/01 08:00	2022/09/01 08:00	2022/09/01 08:00	2022/09/01 08:00	2022/09/01 08:00		
	UNITS	1	2	3	4	7	8	9	RDL	QC Batch
Passive Monitoring										
Calculated H2S	ppb	0.29	0.13	0.22	0.29	0.14	0.13	0.09	0.02	A756944
Calculated SO2	ppb	0.1	0.2	0.4	0.1	0.1	0.1	<0.1 (1)	0.1	A747751
RDL = Reportable Detection Limit (1) V7										

Bureau Veritas ID		BDT266	BDT267	BDT268	BDT269	BDT270		
Sampling Date		2022/09/01 08:00	2022/09/01 08:00	2022/09/01 08:00	2022/09/01 08:00	2022/09/01 08:00		
	UNITS	10	11	12	13	14	RDL	QC Batch
Passive Monitoring								
Calculated H2S	ppb	0.20	0.23	0.09	0.31	0.14	0.02	A756944
Calculated SO2	ppb	0.1	0.2	0.1	0.3	0.1	0.1	A747751
RDL = Reportable Detection Limit								



**BUREAU
VERITAS**

Bureau Veritas Job #: C278131
Report Date: 2022/10/17

Peace River Area Monitoring Program Committee
Client Project #: 2022/09/01 - 2022/09/30
Site Location: PEACE RIVER COMPLEX
Sampler Initials: BG

GENERAL COMMENTS

Results relate only to the items tested.



BUREAU
VERITAS

Bureau Veritas Job #: C278131
Report Date: 2022/10/17

Peace River Area Monitoring Program Committee
Client Project #: 2022/09/01 - 2022/09/30
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	
A747751	OZ	Spiked Blank	Calculated SO2			100	%	90 - 110	
A747751	OZ	Method Blank	Calculated SO2		<0.1		ppb		
A756944	YYA	Spiked Blank	Calculated H2S			101	%	90 - 110	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.



BUREAU
VERITAS

Bureau Veritas Job #: C278131
Report Date: 2022/10/17

Peace River Area Monitoring Program Committee
Client Project #: 2022/09/01 - 2022/09/30
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