



**Peace River Area Monitoring Program**

**SEPTEMBER 2021**

**Monthly Ambient Air Quality Monitoring Report**

**PRAMP-202109**

**Operation and Maintenance:**

Bureau Veritas Canada

**Data Validation and Report:**

Peace River Area Monitoring Program

October 20, 2021

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## LIST OF ACRONYMS

AAAQOs	Alberta Ambient Air Quality Objectives
AEP	Alberta Environment and Parks
AMD	Air Monitoring Directive
AT	Ambient Temperature
BP	Barometric Pressure
CH <sub>4</sub>	Methane
EPEA	Environmental Protection and Enhancement Act
H <sub>2</sub> 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 <sub>2</sub>	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 20, 2021

**RE: PRAMP – September 2021 Monthly Ambient Air Quality Monitoring Report**

Enclosed is the September 2021 Monthly Ambient Air Quality Monitoring Report for the continuous ambient air quality monitoring stations of the Peace River Area Monitoring Program (PRAMP) regional air quality monitoring network.

The representative of the Person Responsible for this monitoring program is

PRAMP Airshed  
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This report has been prepared, reviewed and submitted by Michael Bisaga & Lily Lin of the PRAMP Airshed.

## NETWORK STATION SUMMARY

### Listing of Continuous Monitoring Stations

The PRAMP continuous ambient air quality monitoring network stations are:

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

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

### Listing of Intermittent Monitoring Stations

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

### Monitoring Notes during the Month of September 2021

#### 986c Station

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.
- All data collected this month were compliant with the requirements outlined in the AMD 2016.
- All parameters met the 90% operational uptime requirement.
- **TRS:** A repeat multi-point calibration was completed on September 10 as a quality assurance check after the analyzer exhibited slow response during the September 8 calibration. The calibration check met all check requirements. Six hours of downtime were recorded due to this additional quality check.
- **Precipitation:**
  - Troubleshooting and maintenance were performed on the precipitation system on September 2. As previous issues traced to the ADAM (analog/digital interface), the ADAM was replaced. The EML ARG100 sensor, s/n: 190114, was removed, and the RM Young 5520 precipitation sensor, s/n: TB16325, was installed and successfully audited on September 2. Two hours of downtime were recorded due to this event.
  - No data were recorded on September 13 between hour 11 and hour 14, likely due to a communication issue. Four hours of downtime were recorded as a result.

### 842b Station

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.
- All data collected this month were compliant with the requirements outlined in the AMD 2016.
- All parameters met the 90% operational uptime requirement.
- **All parameters:** No data were recorded on September 24 between hour 3 and hour 10 due to a datalogger issue. Eight hours of data were lost due to this event. The daily zero-span check was interrupted due to this event as well.
- **THC/CH4/NMHC:** The analyzer failed on September 10 due to a problem with the Hydrogen generator. The issue was corrected and a successful zero-span check was completed on September 10 hour 14. Thirteen hours of downtime were recorded due to this event.

### Reno Station

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

### AQHI – Cadotte Lake 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.
- **All parameters:** Two power outages occurred this month. Eight to Twelve hours of downtime were recorded as a result.
- **TRS:** Three hours of data were lost on September 22 due to a communication issue between datalogger and the analyzer.
- **O3:** The hourly values appeared to be trending low beginning towards the end of day on September 2. A repeat zero-span check was completed on September 3 hour 6 and hour 7 to assess the analyzer's functionality. The result met the check requirements, which confirmed data validity. Two hours of downtime were recorded due to this additional quality check.
- **PM2.5:** The PM unit failed on September 28 due to firmware issues. The equipment was reset remotely, and valid data collection resumed on September 28 hour 7. Five hours of downtime were recorded due to this event.

### VOCs Canister Sampling program

- The canister sampling program collects a 1-hour sample of air when the continuously measured non-methane hydrocarbon (NMHC) concentration reaches a specified trigger point. The current trigger point is 0.3 ppm for non-methane hydrocarbons. The trigger point is based on real-time monitoring data that are averaged over a 5-minute period.

- The canister sample collection systems are in place at Station 986c, 842b, and the Reno Station; a canister sample collection system is not part of the suite of instruments currently deployed at the AQHI-Cadotte Lake Station.
- Sample analysis and analytical results were prepared and provided by InnoTech Alberta.
- No canister events were recorded this month.

## Revisions to Alberta's Ambient Air Quality Data Warehouse

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

## Deviations from Authorized Monitoring Methods

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

## Disclaimer

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

Equipment calibration / maintenance records were provided by Bureau Veritas.

## Certification

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



Lily Lin, Technical Program Manager, PRAMP Airshed

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

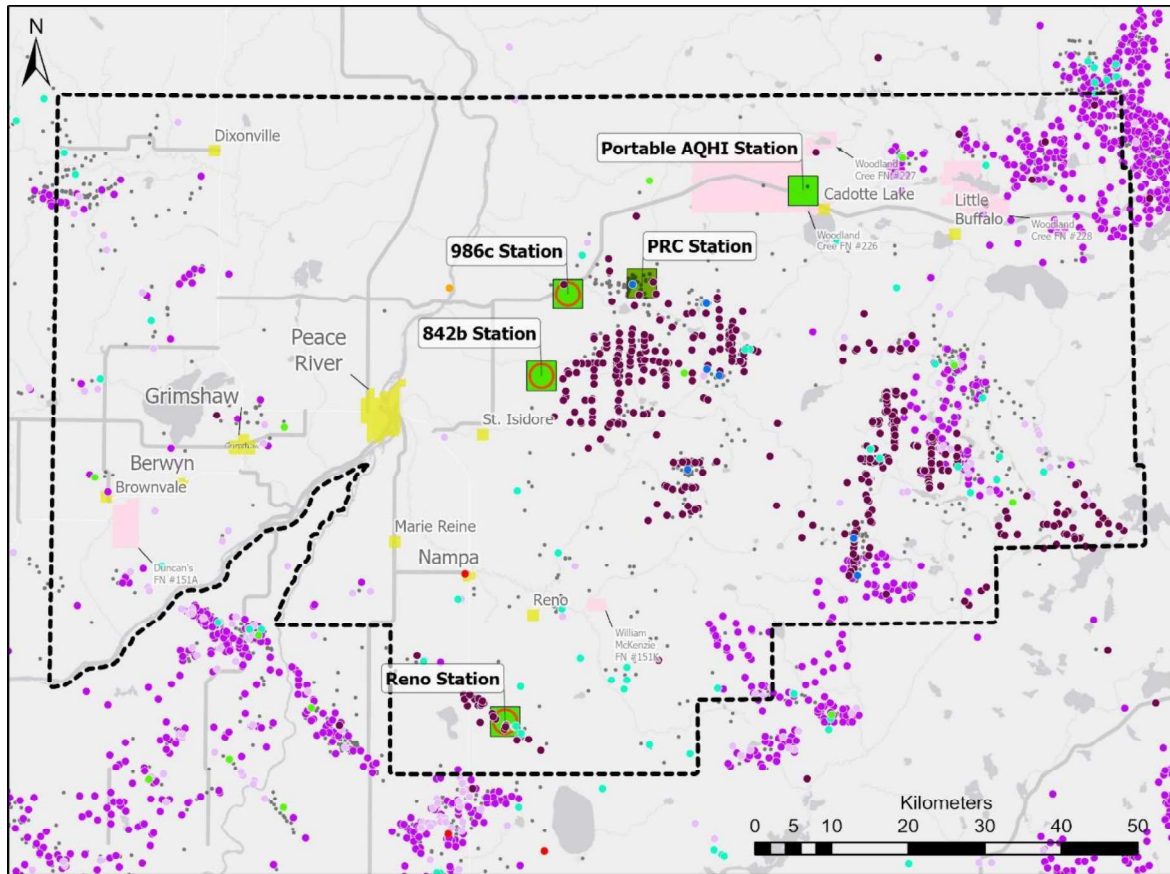
I certify that I have reviewed and verified this report and that the information is complete, accurate and representative of the monitoring results, reporting timeframe and the specified analysis, summarization and reporting requirements. I also certify that at the time of this report's submission, all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



Michael Bisaga, Technical Program Manager, PRAMP Airshed

October 20, 2021

## Map of PRAMP Continuous Monitoring Network



# Peace River Area Monitoring Program



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**Sources:** Esri, © OpenStreetMap contributors, HERE, Garmin, USGS, EPA, NPS, NRCan, Esri, HERE, NPS

## Map Legend

### Monitoring Methods

- Continuous (existing)
- Continuous (planned)
- Triggered Canister (existing)

### Industrial Facilities

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



## CONTINUOUS NETWORK EQUIPMENT AND MONITORING RESULTS SUMMARY

986c Station

**Equipment Operation Summary**

<b>Parameter</b>	<b>Make / Model</b>	<b>Serial Number</b>	
<b>SO2</b>	<b>Thermo / 43iQTL</b>	<b>1193585646</b>	
<ul style="list-style-type: none"> <li>• A successful monthly calibration was performed on September 8.</li> <li>• No operational issues were identified this month.</li> </ul>			
<b>TRS</b>	<b>Thermo / 43iQTL</b>	<b>1191833341</b>	
<ul style="list-style-type: none"> <li>• A successful monthly calibration was performed on September 8.</li> <li>• A repeat multi-point calibration was completed on September 10 as a quality assurance check after the analyzer exhibited slow response during the September 8 calibration. The calibration check met all check requirements. Six hours of downtime were recorded due to this additional quality check.</li> </ul>			
<b>THC/CH4/NMHC</b>	<b>Thermo / 55i</b>	<b>1193585652</b>	
<ul style="list-style-type: none"> <li>• The carrier gas was replaced on September 2.</li> <li>• A successful monthly calibration was performed on September 8.</li> </ul>			
<b>Relative Humidity (RH)</b>	<b>Rotronic / HC2-S3</b>	<b>20357528</b>	
<ul style="list-style-type: none"> <li>• The RH sensor was checked on September 8. The sensor passed the check requirements.</li> <li>• No operational issues were identified this month.</li> </ul>			
<b>Barometric Pressure (BP)</b>	<b>MetOne / 092</b>	<b>Y23358</b>	
<ul style="list-style-type: none"> <li>• The BP sensor was checked on September 8. The sensor passed the check requirements.</li> <li>• No operational issues were identified this month.</li> </ul>			

Parameter	Make / Model	Serial Number	
<b>Ambient Temperature (AT)</b>	<b>Rotronic / HC2-S3</b>	<b>20357528</b>	
<ul style="list-style-type: none"> <li>The temperature sensor was checked on September 8. The sensor passed the check requirements.</li> <li>No operational issues were identified this month.</li> </ul>			
<b>Station Temperature (ST)</b>	<b>Bureau Veritas Canada</b>	<b>N/A</b>	
<ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>			
<b>Precipitation (Precip)</b>	<b>EML ARG100 / RM Young 52202</b>	<b>190114 / TB 16325</b>	
<ul style="list-style-type: none"> <li>Troubleshooting and maintenance were performed on the precipitation system on September 2. As previous issues traced to the ADAM (analog/digital interface), the ADAM was replaced. The EML ARG100 sensor, s/n: 190114, was removed, and the RM Young 5520 precipitation sensor, s/n: TB16325, was installed and successfully audited on September 2. Two hours of downtime were recorded due to this event.</li> <li>The rain gauge was checked on September 8. The sensor passed the check requirements.</li> <li>No data were recorded on September 13 between hour 11 and hour 14, likely due to a communication issue. Four hours of downtime were recorded as a result.</li> </ul>			
<b>Wind Speed/Wind Direction (WS/ WD)</b>	<b>RM Young / 05305L</b>	<b>174795</b>	
<ul style="list-style-type: none"> <li>Wind direction data contained in this report represents where the wind is coming from.</li> <li>The annual wind system calibration was completed on July 3, 2021.</li> <li>The anemometer sensors were checked on September 8. The sensor passed the check requirements.</li> <li>No operational issues were identified this month.</li> </ul>			

### 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 8 at hour 15	7.7	W	0.0	September 17	100.0	94.8
TRS (ppb)	-	-	-	-	-	-	0.16	0.00	1.81	September 27 at hour 20	6.6	SE	0.29	September 27	99.2	94.0
THC (ppm)	-	-	-	-	-	-	2.01	1.92	2.23	September 10 at hour 6	2.5	E	2.10	September 3	100.0	95.1
CH4 (ppm)	-	-	-	-	-	-	2.01	1.92	2.23	September 10 at hour 6	2.5	E	2.10	September 3	100.0	95.1
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.02	September 27 at hour 19	4	E	0.00	September 27	100.0	95.1
RH (%)	-	-	-	-	-	-	74.3	29	100	September 1 at hour 0	15.7	NNW	99.8	September 1	100.0	100.0
BP (millibar)	-	-	-	-	-	-	937	923	949	September 23 at hour 14	14.2	NW	947	September 23	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	11.0	1.9	23.6	September 4 at hour 15	13.8	S	16.5	September 5	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	22.6	21.6	24.5	September 8 at hour 0	3.9	ESE	23.5	September 9	100.0	100.0
Precipitation (mm)*	-	-	-	-	-	-	32.2	0.0	3.4	September 27 at hour 7	14.5	E	15.8	September 1	99.2	99.0
WSV (km/hr)	-	-	-	-	-	-	5.4	0.8	30.9	September 30 at hour 14	30.9	SSW	18.1	September 1	100.0	100.0
WDV (sector)	-	-	-	-	-	-	237 (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 (AAAOs) and/or Alberta Ambient Air Quality Guidelines (AAAQGs) Exceedances at 986c Station

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

842b Station

Equipment Operation Summary

Parameter	Make / Model	Serial Number	
<b>SO2</b>	<b>Thermo / 43iQTL</b>	<b>1200736629</b>	
<ul style="list-style-type: none"> <li>• A successful monthly calibration was performed on September 15.</li> <li>• No operational issues were identified this month.</li> </ul>			
<b>TRS</b>	<b>Thermo 43iQTL</b>	<b>1200736630</b>	
<ul style="list-style-type: none"> <li>• A successful monthly calibration was performed on September 15.</li> <li>• No operational issues were identified this month.</li> </ul>			
<b>THC/CH4/NMHC</b>	<b>Thermo / 55i</b>	<b>1501663728</b>	
<ul style="list-style-type: none"> <li>• The analyzer failed on September 10 due to a problem with the Hydrogen generator. The issue was corrected and a successful zero-span check was completed on September 10 hour 14. Thirteen hours of downtime were recorded due to this event.</li> <li>• A successful monthly calibration was performed on September 15.</li> </ul>			
<b>Relative Humidity (RH)</b>	<b>Rotronic / HC2A-S3</b>	<b>20370767</b>	
<ul style="list-style-type: none"> <li>• The RH sensor was checked on September 15. The sensor passed the check requirements.</li> <li>• No operational issues were identified this month.</li> </ul>			
<b>Barometric Pressure (BP)</b>	<b>MetOne / 092</b>	<b>Y23362</b>	
<ul style="list-style-type: none"> <li>• The BP sensor was checked on September 15. The sensor passed the check requirements.</li> <li>• No operational issues were identified this month.</li> </ul>			
<b>Ambient Temperature (AT)</b>	<b>Rotronic / HC2A-S3</b>	<b>20370767</b>	
<ul style="list-style-type: none"> <li>• The temperature sensor was checked on September 15. The sensor passed the check requirements.</li> <li>• No operational issues were identified this month.</li> </ul>			

Parameter	Make / Model	Serial Number	
Station Temperature (ST)	Bureau Veritas Canada	N/A	
<ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>			
Precipitation (Precip)	RM Young / 52202	TB 15878	
<ul style="list-style-type: none"> <li>The precipitation sensor was checked on September 15. The sensor passed the check requirements.</li> <li>No operational issues were identified this month.</li> </ul>			
Wind Speed/Wind Direction (WS/ WD)	RM Young / 05305AQ	174802	
<ul style="list-style-type: none"> <li>Wind direction data contained in this report represents where the wind is coming from.</li> <li>The annual wind system calibration was completed on July 4, 2021.</li> <li>anemometer sensors were checked on September 15. The sensor passed the check requirements.</li> <li>No operational issues were identified this month.</li> </ul>			

### 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	0	September 1 at hour 0	10.5	NNW	0.0	September 1	98.9	93.9
TRS (ppb)	-	-	-	-	-	-	0.22	0.04	0.80	September 19 at hour 3	4.4	SW	0.44	September 19	98.9	93.9
THC (ppm)	-	-	-	-	-	-	1.87	1.79	2.07	September 18 at hour 3	6	NE	1.99	September 18	97.1	92.3
CH4 (ppm)	-	-	-	-	-	-	1.87	1.79	2.07	September 18 at hour 3	6	NE	1.99	September 18	97.1	92.3
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.00	September 1 at hour 0	10.5	NNW	0.00	September 1	97.1	92.3
RH (%)	-	-	-	-	-	-	68.9	28	100	September 9 at hour 22	0.8	SW	95.7	September 1	98.9	98.9
BP (millibar)	-	-	-	-	-	-	936	922	948	September 23 at hour 13	15.1	WNW	946	September 23	98.9	98.9
Ext. Temp. (°C)	-	-	-	-	-	-	11.2	1.2	23.8	September 4 at hour 14	11.5	S	16.7	September 5	98.9	98.9
Stn. Temp. (°C)	-	-	-	-	-	-	22.7	21.5	24.2	September 15 at hour 10	24.8	WSW	23.5	September 9	98.9	98.9
Precipitation (mm)*	-	-	-	-	-	-	23.3	0.0	2.2	September 27 at hour 6	6.1	ENE	11.3	September 1	98.9	98.9
WSV (km/hr)	-	-	-	-	-	-	5.5	0.0	30.1	September 15 at hour 14	30.1	WNW	16.9	September 5	98.9	98.9
WDV (sector)	-	-	-	-	-	-	236 (SW)	-	-	-	-	-	-	-	98.9	98.9

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	API / 100A	1502	
<ul style="list-style-type: none"> <li>• A successful monthly calibration was performed on September 9.</li> <li>• No operational issues were identified this month.</li> </ul>			
TRS	Thermo / 43i-TLE	1162460022	
<ul style="list-style-type: none"> <li>• A successful monthly calibration was performed on September 9.</li> <li>• No operational issues were identified this month.</li> </ul>			
THC/CH4/NMHC	Thermo / 55i	1505664392	
<ul style="list-style-type: none"> <li>• A successful monthly calibration was performed on September 9.</li> <li>• No operational issues were identified this month.</li> </ul>			
Relative Humidity (RH)	RM Young / 43172VC	60837897	
<ul style="list-style-type: none"> <li>• The RH sensor was checked on September 9. The sensor passed the check requirements.</li> <li>• No operational issues were identified this month.</li> </ul>			
Barometric Pressure (BP)	MetOne / 092	K12864	
<ul style="list-style-type: none"> <li>• The BP sensor was checked on September 9. The sensor passed the check requirements.</li> <li>• No operational issues were identified this month.</li> </ul>			
Ambient Temperature (AT)	RM Young / 43172VC	60837897	
<ul style="list-style-type: none"> <li>• The temperature sensor was checked on September 9. The sensor passed the check requirements.</li> <li>• No operational issues were identified this month.</li> </ul>			



Parameter	Make / Model	Serial Number	
Station Temperature (ST)	Bureau Veritas Canada	N/A	
<ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>			
Precipitation (Precip)	RM Young / 5202	TB15877	
<ul style="list-style-type: none"> <li>The precipitation sensor was checked on September 15. The sensor passed the check requirements.</li> <li>No operational issues were identified this month.</li> </ul>			
Wind Speed/Wind Direction (WS/ WD)	RM Young / 5305VK	149769	
<ul style="list-style-type: none"> <li>Wind direction data contained in this report represents where the wind is coming from.</li> <li>The annual wind system calibration was completed on July 5, 2021.</li> <li>anemometer sensors were checked on September 9. The sensor passed the check requirements.</li> <li>No operational issues were identified this month.</li> </ul>			

### 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 8 at hour 7	4.3	SE	0.0	September 8	100.0	95.0
TRS (ppb)	-	-	-	-	-	-	0.36	0.00	3.83	September 28 at hour 4	2.4	SSW	0.93	September 3	100.0	95.0
THC (ppm)	-	-	-	-	-	-	1.98	1.92	2.17	September 9 at hour 23	0.6	SSW	2.02	September 18	100.0	95.1
CH4 (ppm)	-	-	-	-	-	-	1.98	1.92	2.17	September 9 at hour 23	0.6	SSW	2.02	September 18	100.0	95.1
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.00	September 1 at hour 0	11.2	NNW	0.00	September 1	100.0	95.1
RH (%)	-	-	-	-	-	-	64.9	27	100	September 1 at hour 0	11.2	NNW	97.2	September 1	100.0	100.0
BP (millibar)	-	-	-	-	-	-	935	920	947	September 23 at hour 12	8.7	WSW	945	September 23	100.0	100.0
Ext. Temp. (°C)	-	-	-	-	-	-	11.4	0.7	23.3	September 4 at hour 14	3.5	SE	16.3	September 4	100.0	100.0
Stn. Temp. (°C)	-	-	-	-	-	-	23.4	21.5	24.4	September 17 at hour 23	2.6	SE	24.0	September 1	100.0	100.0
Precipitation (mm)*	-	-	-	-	-	-	17.5	0.0	3.4	September 1 at hour 0	11.2	NNW	10.9	September 1	100.0	100.0
WSV (km/hr)	-	-	-	-	-	-	4.0	0.1	21.8	September 24 at hour 13	21.8	WSW	9.7	September 1	100.0	100.0
WDV (sector)	-	-	-	-	-	-	247 (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 (AAAQOs) and/or Alberta Ambient Air Quality Guidelines (AAAQGs) Exceedances at Reno Station

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

## AQHI – Cadotte Lake Station

### Equipment Operation Summary

Parameter	Make / Model	Serial Number	
<b>SO2</b>	<b>Teledyne / T100</b>	<b>722</b>	
<ul style="list-style-type: none"> <li>• A successful monthly calibration was performed on September 16.</li> <li>• No operational issues were identified this month.</li> </ul>			
<b>TRS</b>	<b>Teledyne T100U</b>	<b>132</b>	
<ul style="list-style-type: none"> <li>• A successful monthly calibration was performed on September 16.</li> <li>• Three hours of data were lost on September 22 due to a communication issue between datalogger and the analyzer.</li> </ul>			
<b>NOx/NO/NO2</b>	<b>Teledyne / T200</b>	<b>837</b>	
<ul style="list-style-type: none"> <li>• A successful monthly calibration was performed on September 16.</li> <li>• No operational issues were identified this month.</li> </ul>			
<b>O3</b>	<b>Teledyne / T400</b>	<b>824</b>	
<ul style="list-style-type: none"> <li>• The hourly values appeared to be trending low beginning towards the end of day on September 2. A repeat zero-span check was completed on September 3 hour 6 and hour 7 to assess the analyzer's functionality. The result met the check requirements, which confirmed data validity. Two hours of downtime were recorded due to this additional quality check.</li> <li>• A successful monthly calibration was performed on September 16.</li> </ul>			
<b>THC/CH4/NMHC</b>	<b>Thermo / 55i</b>	<b>1191032505</b>	
<ul style="list-style-type: none"> <li>• A successful monthly calibration was performed on September 16.</li> <li>• No operational issues were identified this month.</li> </ul>			

Parameter	Make / Model	Serial Number	
<b>PM 2.5</b>	<b>Teledyne / T640</b>	<b>318</b>	
<ul style="list-style-type: none"> <li>• A successful monthly calibration was performed on September 16.</li> <li>• The PM unit failed on September 28 due to firmware issues. The equipment was reset remotely, and valid data collection resumed on September 28 hour 7. Five hours of downtime were recorded due to this event.</li> </ul>			
<b>Relative Humidity (RH)</b>	<b>Vaisala / HMP155</b>	<b>N2910506</b>	
<ul style="list-style-type: none"> <li>• The sensor was checked on September 16. The sensor passed the check requirements.</li> <li>• No operational issues were identified this month.</li> </ul>			
<b>Barometric Pressure (BP)</b>	<b>MetOne / 092</b>	<b>A23927</b>	
<ul style="list-style-type: none"> <li>• The sensor was checked on September 16. The sensor passed the check requirements.</li> <li>• No operational issues were identified this month.</li> </ul>			
<b>Ambient Temperature (AT)</b>	<b>Vaisala / HMP155</b>	<b>N2910506</b>	
<ul style="list-style-type: none"> <li>• The sensor was checked on September 16. The sensor passed the check requirements.</li> <li>• No operational issues were identified this month.</li> </ul>			
<b>Station Temperature (ST)</b>	<b>Bureau Veritas Canada</b>	<b>N/A</b>	
<ul style="list-style-type: none"> <li>• No operational issues were identified this month.</li> </ul>			
<b>Wind Speed/Wind Direction (WS/ WD)</b>	<b>RM Young 05305AQ</b>	<b>174801</b>	
<ul style="list-style-type: none"> <li>• Wind direction data contained in this report represents where the wind is coming from.</li> <li>• The annual wind system calibration was completed on July 22, 2021.</li> <li>• The anemometer sensors were checked on September 16. The sensor passed the check requirements.</li> <li>• No operational issues were identified this month.</li> </ul>			

### Monitored Data Summary for AQHI - Cadotte Lake Station

Parameter	Objectives/Guidelines			Exceedances			Monthly Avg.	Min. 1-hr	Max. 1-hr	Date/Time	VWS (km/hr)	VWD (sector)	Max. 24-hr	Date	Operational Uptime (%)	Valid Data (%)
	1-hr	24-hr	30-day	1-hr	24-hr	30-day										
SO2 (ppb)	172	48	11	0	0	0	0.0	0	0	September 1 at hour 0	6.9	NNW	0.0	September 1	98.3	93.2
TRS (ppb)	-	-	-	-	-	-	0.28	0.00	1.02	September 25 at hour 18	0.3	ENE	0.60	September 22	98.1	92.9
NOx (ppb)	-	-	-	-	-	-	0.7	0	7	September 13 at hour 7	0.6	NE	1.3	September 21	98.5	93.0
NO (ppb)	-	-	-	-	-	-	0.2	0	6	September 13 at hour 7	0.6	NE	0.7	September 28	98.5	93.0
NO2 (ppb)	159	-	-	0	-	-	0.4	0	3	September 7 at hour 18	0.1	NE	1.1	September 21	98.5	93.0
O3 (ppb)	76	-	-	0	-	-	23.9	4	47	September 8 at hour 14	6.9	SE	34.3	September 6	98.2	93.2
THC (ppm)	-	-	-	-	-	-	1.95	1.89	2.06	September 18 at hour 8	0.3	N	2.00	September 18	98.3	93.3
CH4 (ppm)	-	-	-	-	-	-	1.95	1.89	2.06	September 18 at hour 8	0.3	N	2.00	September 18	98.3	93.3
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.03	September 7 at hour 11	6.3	WNW	0.00	September 7	98.3	93.3
PM2.5 (µg/m3)	80	30	-	0	0	-	2.7	0.0	33.0	September 11 at hour 12	6.7	W	5.6	September 4	97.8	97.2
RH (%)	-	-	-	-	-	-	75.7	31	99	September 9 at hour 23	0	WNW	96.0	September 27	98.9	98.9
BP (millibar)	-	-	-	-	-	-	940	927	952	September 23 at hour 13	13.7	WNW	950	September 23	98.9	98.9
Ext. Temp. (°C)	-	-	-	-	-	-	9.8	-3.2	23.3	September 4 at hour 15	5.7	SSE	15.5	September 5	98.9	98.9
Stn. Temp. (°C)	-	-	-	-	-	-	22.8	20.9	24.2	September 5 at hour 17	26.6	WSW	23.4	September 26	98.9	98.9
WSV (km/hr)	-	-	-	-	-	-	3.5	0.0	28.0	September 5 at hour 15	28	WSW	15.0	September 5	98.9	98.9
WDV (sector)	-	-	-	-	-	-	256 (WSW)	-	-	-	-	-	-	-	98.9	98.9

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

### Alberta Ambient Air Quality Objectives (AAQOs) and/or Alberta Ambient Air Quality Guidelines (AAQGs) Exceedances at AQHI - Cadotte Lake Station

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

## TABLES, CHARTS, WIND ROSES AND EQUIPMENT CALIBRATION RECORDS

986c STATION



**PEACE RIVER AREA MONITORING PROGRAM**

**986c Station - September 2021**

**Summary of Hourly Averages**

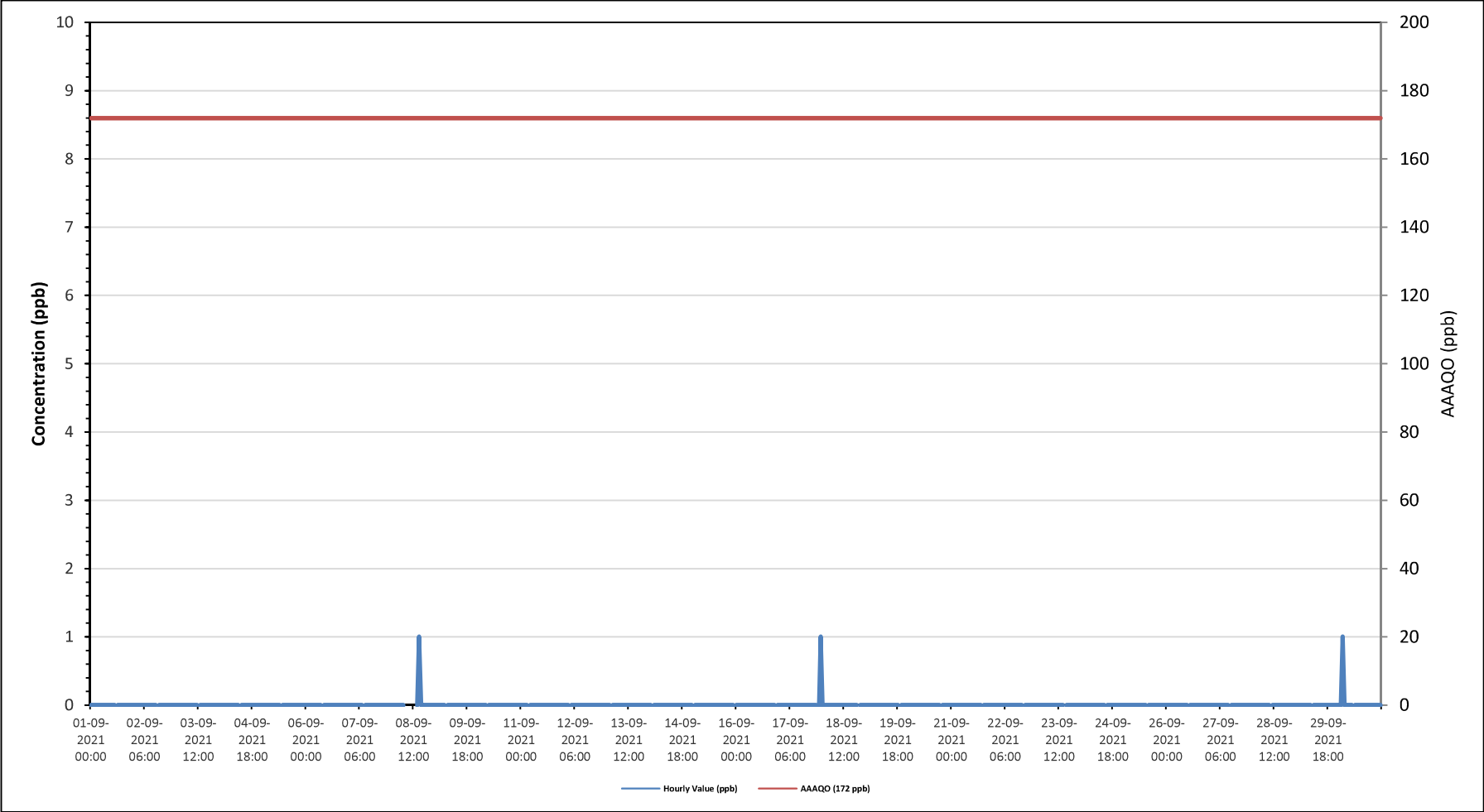
**SULPHUR DIOXIDE (SO<sub>2</sub>) in ppb**

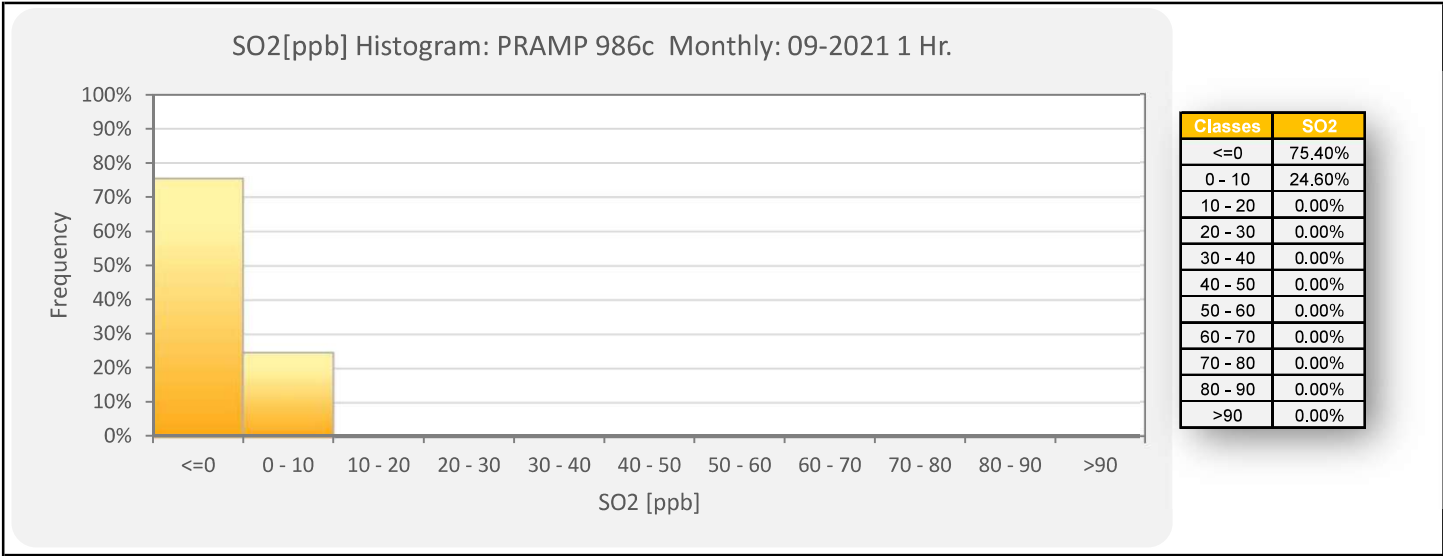
Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb																															
Number of 1-Hour Exceedances: 0					Number of 24-Hour Exceedances: 0					30-Day Exceedance: 0																					
Maximum Hourly Value: 1 ppb on September 8 at hour 15					Hours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

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



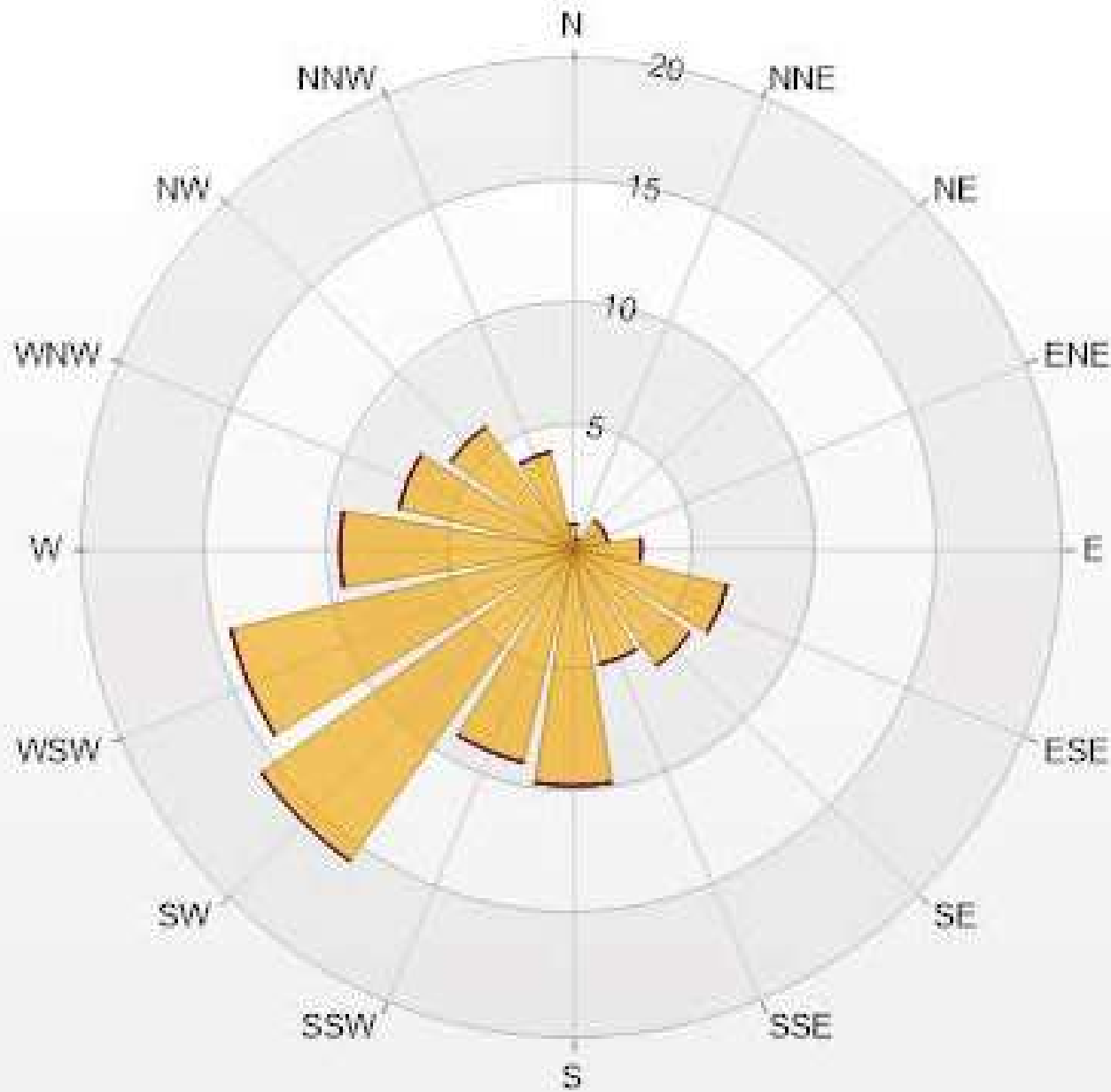
Timeseries Chart of Hourly Average for SO2 - 986c Station





Wind: PRAMP 986c Poll.: PRAMP 986c-SO2[ppb] Monthly: 09-2021 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	1.02	0	0	0	0	1.02
NNE	0.44	0	0	0	0	0.44
NE	1.46	0	0	0	0	1.46
ENE	1.46	0	0	0	0	1.46
E	2.78	0	0	0	0	2.78
ESE	6.44	0	0	0	0	6.44
SE	5.86	0	0	0	0	5.86
SSE	4.83	0	0	0	0	4.83
S	9.66	0	0	0	0	9.66
SSW	8.93	0	0	0	0	8.93
SW	15.67	0	0	0	0	15.67
WSW	14.35	0	0	0	0	14.35
W	9.52	0	0	0	0	9.52
WNW	7.32	0	0	0	0	7.32
NW	6.15	0	0	0	0	6.15
NNW	4.1	0	0	0	0	4.1
Summary	100	0	0	0	0	100





**PEACE RIVER AREA MONITORING PROGRAM**

**986c Station - September 2021**

**Summary of Hourly Averages**

**TOTAL REDUCED SULPHUR (TRS) in ppb**

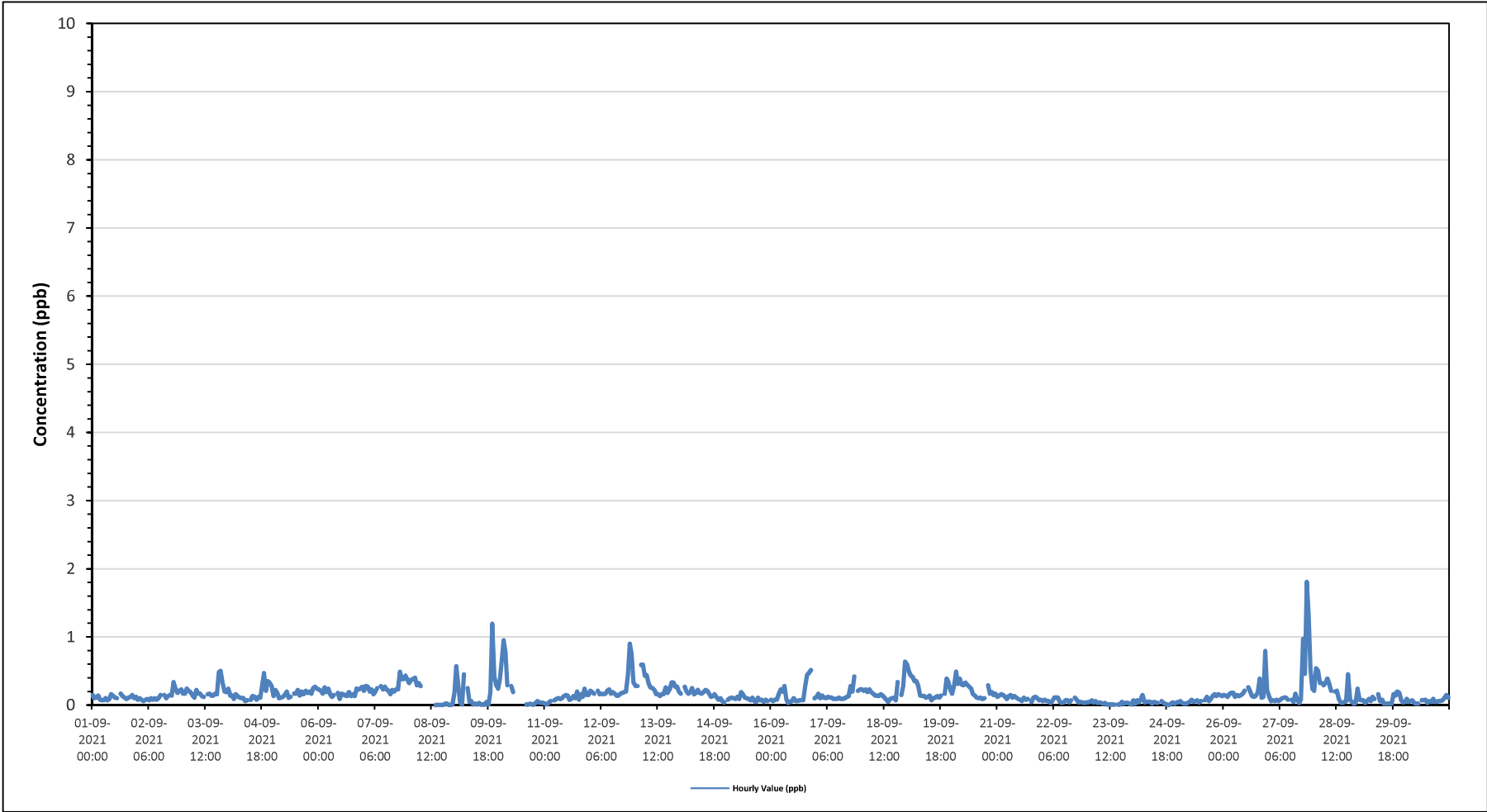
Maximum Hourly Value:	1.81 ppb on September 27 at hour 20	Hours in Service:	720
Maximum Daily Value:	0.29 ppb on September 27	Hours of Data:	677
Minimum Hourly Value:	0.00 ppb on September 8 at hour 14	Hours of Missing Data:	6
Minimum Daily Value:	0.03 ppb on September 23	Hours of Calibration:	37
Monthly Average:	0.16 ppb	Operational Uptime:	99.2

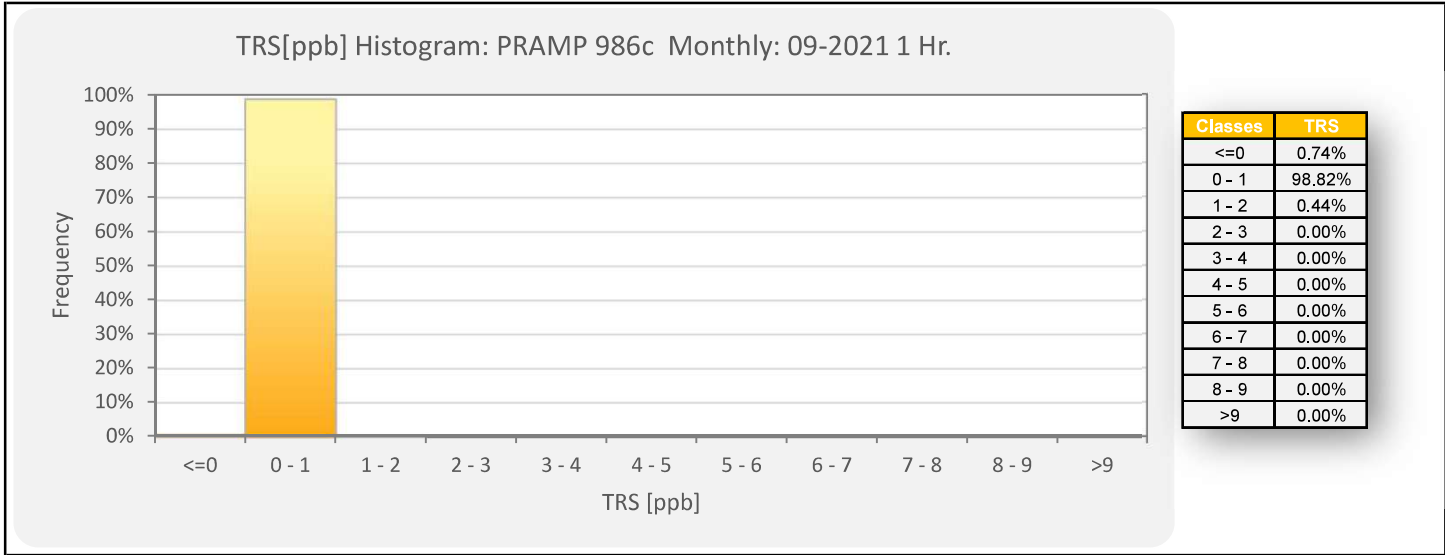
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	0.15	0.1	0.11	0.14	0.08	0.07	0.07	0.1	0.07	0.09	0.16	0.13	0.11	0.1	S	0.17	0.13	0.11	0.09	0.11	0.12	0.15	0.1	0.12	0.07	0.17	0.11
Sep 2	0.08	0.1	0.08	0.06	0.08	0.09	0.07	0.1	0.08	0.1	0.08	0.1	0.15	S	0.15	0.1	0.13	0.15	0.14	0.34	0.24	0.18	0.21	0.23	0.06	0.34	0.13
Sep 3	0.17	0.17	0.24	0.21	0.19	0.14	0.11	0.22	0.17	0.17	0.13	0.12	S	0.16	0.17	0.14	0.14	0.17	0.16	0.48	0.5	0.33	0.2	0.19	0.11	0.50	0.20
Sep 4	0.24	0.14	0.14	0.09	0.16	0.13	0.11	0.1	0.1	0.06	0.07	S	0.08	0.13	0.12	0.08	0.12	0.11	0.29	0.47	0.21	0.35	0.33	0.28	0.06	0.47	0.17
Sep 5	0.13	0.22	0.18	0.1	0.11	0.12	0.15	0.2	0.11	0.12	S	0.17	0.17	0.22	0.14	0.2	0.16	0.21	0.18	0.2	0.17	0.25	0.27	0.24	0.10	0.27	0.17
Sep 6	0.23	0.21	0.17	0.26	0.19	0.24	0.16	0.12	0.15	S	0.18	0.09	0.17	0.16	0.14	0.13	0.19	0.13	0.16	0.13	0.24	0.23	0.24	0.27	0.09	0.27	0.18
Sep 7	0.21	0.28	0.27	0.2	0.23	0.16	0.2	0.25	S	0.28	0.23	0.27	0.23	0.21	0.16	0.22	0.2	0.23	0.23	0.49	0.38	0.38	0.43	0.38	0.16	0.49	0.27
Sep 8	0.32	0.37	0.38	0.4	0.29	0.32	0.28	S	C	C	C	C	C	C	0	0	0	0	0	0.02	0.02	0	0	0.01	0.00	0.40	-
Sep 9	0.18	0.57	0.31	0.05	0.01	0.45	S	0.25	0.05	0.06	0.01	0.02	0.01	0.03	0.01	0.01	0.01	0.05	0.01	0.19	1.19	0.42	0.29	0.24	0.01	1.19	0.19
Sep 10	0.38	0.66	0.95	0.78	0.29	S	0.28	0.19	NRM	NRM	NRM	NRM	NRM	NRM	0.01	0.01	0.01	0.02	0.01	0.01	0.03	0.06	0.04	0.03	0.01	0.95	-
Sep 11	0.02	0.01	0.04	0.06	S	0.07	0.09	0.1	0.09	0.1	0.13	0.15	0.14	0.08	0.09	0.13	0.1	0.2	0.08	0.16	0.12	0.24	0.15	0.15	0.01	0.24	0.11
Sep 12	0.21	0.19	0.17	S	0.21	0.16	0.17	0.16	0.17	0.21	0.23	0.17	0.19	0.17	0.14	0.14	0.17	0.18	0.19	0.2	0.44	0.9	0.75	0.33	0.14	0.90	0.25
Sep 13	0.28	0.28	S	0.59	0.59	0.43	0.44	0.32	0.26	0.25	0.22	0.16	0.16	0.13	0.16	0.16	0.26	0.18	0.23	0.33	0.33	0.27	0.27	0.2	0.13	0.59	0.28
Sep 14	0.17	S	0.27	0.2	0.17	0.19	0.25	0.16	0.18	0.22	0.18	0.17	0.19	0.22	0.21	0.17	0.12	0.13	0.16	0.11	0.08	0.1	0.06	0.04	0.04	0.27	0.16
Sep 15	S	0.08	0.1	0.11	0.1	0.09	0.12	0.09	0.19	0.16	0.11	0.1	0.09	0.07	0.11	0.06	0.05	0.11	0.07	0.08	0.05	0.08	0.06	S	0.05	0.19	0.09
Sep 16	0.08	0.06	0.08	0.08	0.17	0.23	0.2	0.28	0.09	0.03	0.05	0.06	0.1	0.06	0.06	0.07	0.07	0.27	0.44	0.47	0.51	S	0.1	0.1	0.03	0.51	0.16
Sep 17	0.12	0.17	0.1	0.14	0.11	0.1	0.12	0.11	0.11	0.09	0.09	0.09	0.11	0.09	0.09	0.1	0.12	0.13	0.28	0.2	0.42	S	0.21	0.23	0.09	0.42	0.14
Sep 18	0.23	0.21	0.23	0.19	0.23	0.19	0.17	0.14	0.14	0.13	0.16	0.14	0.11	0.08	0.05	0.09	0.1	0.11	0.07	0.34	S	0.15	0.28	0.64	0.05	0.64	0.18
Sep 19	0.59	0.49	0.43	0.41	0.35	0.35	0.28	0.14	0.13	0.13	0.11	0.12	0.14	0.07	0.1	0.11	0.13	0.11	0.14	S	0.17	0.39	0.33	0.23	0.07	0.59	0.24
Sep 20	0.17	0.3	0.49	0.31	0.39	0.3	0.29	0.33	0.3	0.27	0.24	0.16	0.14	0.11	0.1	0.11	0.09	0.1	S	0.29	0.17	0.19	0.15	0.17	0.09	0.49	0.22
Sep 21	0.12	0.14	0.16	0.15	0.12	0.09	0.13	0.15	0.11	0.13	0.11	0.09	0.08	0.06	0.11	0.08	0.09	S	0.05	0.11	0.12	0.1	0.07	0.08	0.05	0.16	0.11
Sep 22	0.06	0.08	0.06	0.06	0.03	0.06	0.11	0.11	0.11	0.05	0.03	0.04	0.07	0.07	0.04	0.07	S	0.11	0.08	0.04	0.05	0.04	0.03	0.04	0.03	0.11	0.06
Sep 23	0.04	0.05	0.07	0.04	0.06	0.03	0.04	0.03	0.02	0.03	0.01	0.01	0.01	0.01	0.01	S	0.01	0.01	0.05	0.02	0.03	0.03	0.02	0.01	0.01	0.07	0.03
Sep 24	0.07	0.02	0.07	0.04	0.08	0.15	0.04	0.05	0.05	0.05	0.02	0.05	0.04	0.03	S	0.06	0.03	0.02	0.01	0	0.02	0.04	0.02	0.04	0.00	0.15	0.04
Sep 25	0.04	0.06	0.03	0.02	0.02	0.03	0.05	0.08	0.05	0.06	0.07	0.04	0.06	S	0.07	0.12	0.06	0.09	0.13	0.16	0.13	0.16	0.15	0.13	0.02	0.16	0.08
Sep 26	0.15	0.14	0.12	0.17	0.18	0.18	0.12	0.15	0.13	0.15	0.17	0.21	S	0.26	0.2	0.13	0.12	0.14	0.19	0.39	0.11	0.12	0.79	0.22	0.11	0.79	0.20
Sep 27	0.13	0.06	0.07	0.06	0.08	0.06	0.08	0.1	0.11	0.11	0.08	S	0.08	0.05	0.17	0.08	0.03	0.09	0.97	0.46	1.81	1.34	0.52	0.24	0.03	1.81	0.29
Sep 28	0.21	0.54	0.5	0.32	0.32	0.29	0.33	0.39	0.31	0.21	S	0.2	0.21	0.09	0.04	0.03	0.05	0.06	0.45	0.08	0.05	0.02	0.03	0.24	0.02	0.54	0.22
Sep 29	0.08	0.07	0.07	0.03	0.06	0.09	0.06	0.12	0.09	S	0.16	0.06	0.08	0.02	0.02	0.02	0.02	0.16	0.14	0.2	0.18	0.07	0.04	0.02	0.20	0.08	
Sep 30	0.05	0.09	0.05	0.06	0.07	0.03	0.02	0.02	S	0.07	0.07	0.08	0.03	0.06	0.05	0.09	0.05	0.05	0.06	0.06	0.07	0.1	0.15	0.11	0.02	0.15	0.06
Diurnal Maximum	0.59	0.66	0.95	0.78	0.59	0.45	0.44	0.39	0.31	0.28	0.24	0.27	0.23	0.26	0.21	0.22	0.26	0.23	0.97	0.49	1.81	1.34	0.79	0.64			
Diurnal Average	0.17	0.20	0.20	0.18	0.17	0.16	0.16	0.13	0.13	0.13	0.12	0.12	0.11	0.11	0.10	0.10	0.10	0.11	0.17	0.21	0.27	0.25	0.21	0.18			

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

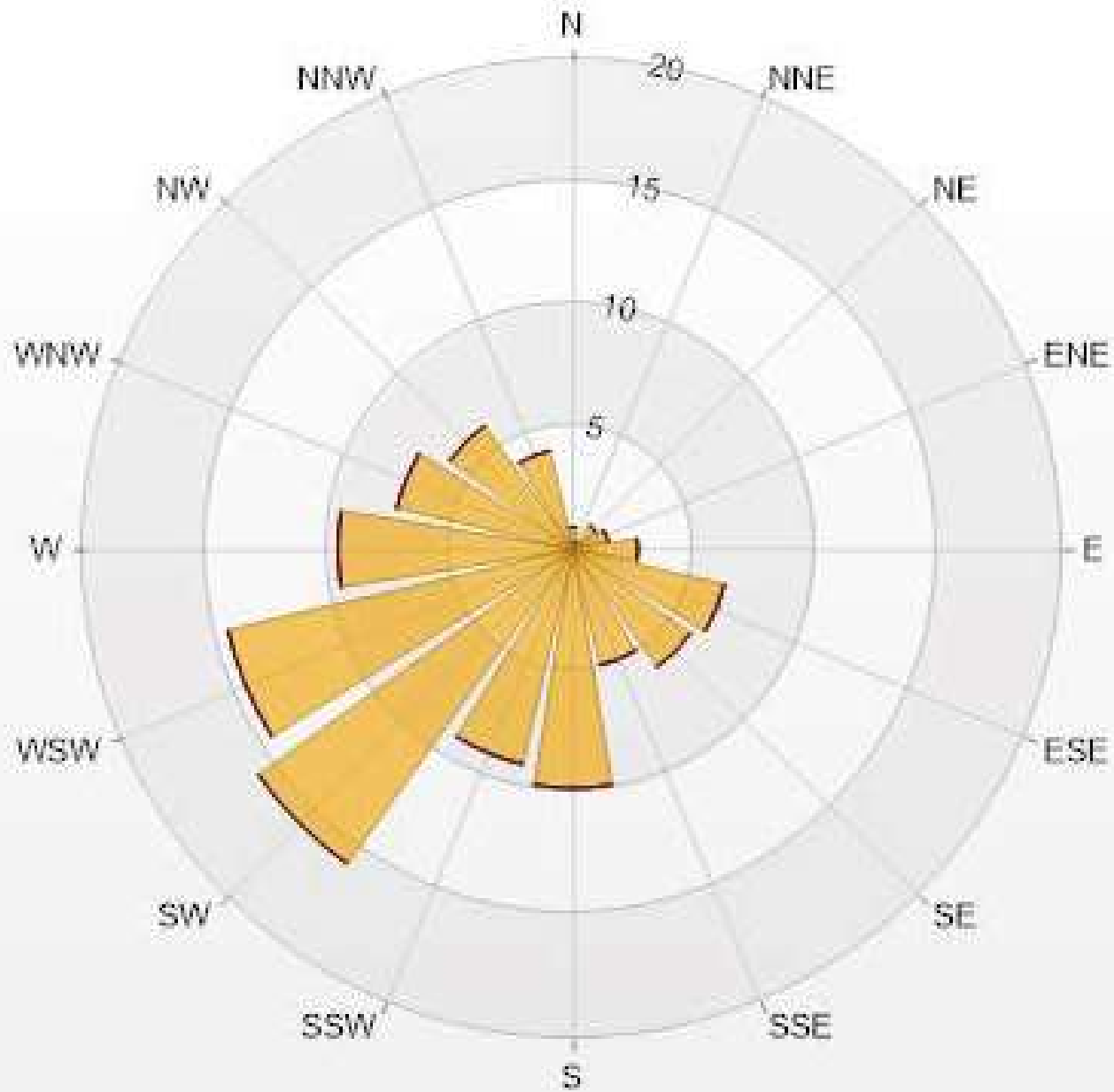




Wind: PRAMP 986c Poll.: PRAMP 986c-TRS[ppb] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 94.03% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	0.89	0	0	0	0	0.89
NNE	0.3	0	0	0	0	0.3
NE	1.18	0	0	0	0	1.18
ENE	1.48	0	0	0	0	1.48
E	2.66	0	0	0	0	2.66
ESE	6.35	0	0	0	0	6.35
SE	5.91	0	0	0	0	5.91
SSE	4.87	0	0	0	0	4.87
S	9.75	0	0	0	0	9.75
SSW	9.01	0	0	0	0	9.01
SW	15.81	0	0	0	0	15.81
WSW	14.48	0	0	0	0	14.48
W	9.6	0	0	0	0	9.6
WNW	7.39	0	0	0	0	7.39
NW	6.2	0	0	0	0	6.2
NNW	4.14	0	0	0	0	4.14
Summary	100	0	0	0	0	100





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



**PEACE RIVER AREA MONITORING PROGRAM**

**986c Station - September 2021**

**Summary of Hourly Averages**

**TOTAL HYDROCARBONS (THC) in ppm**

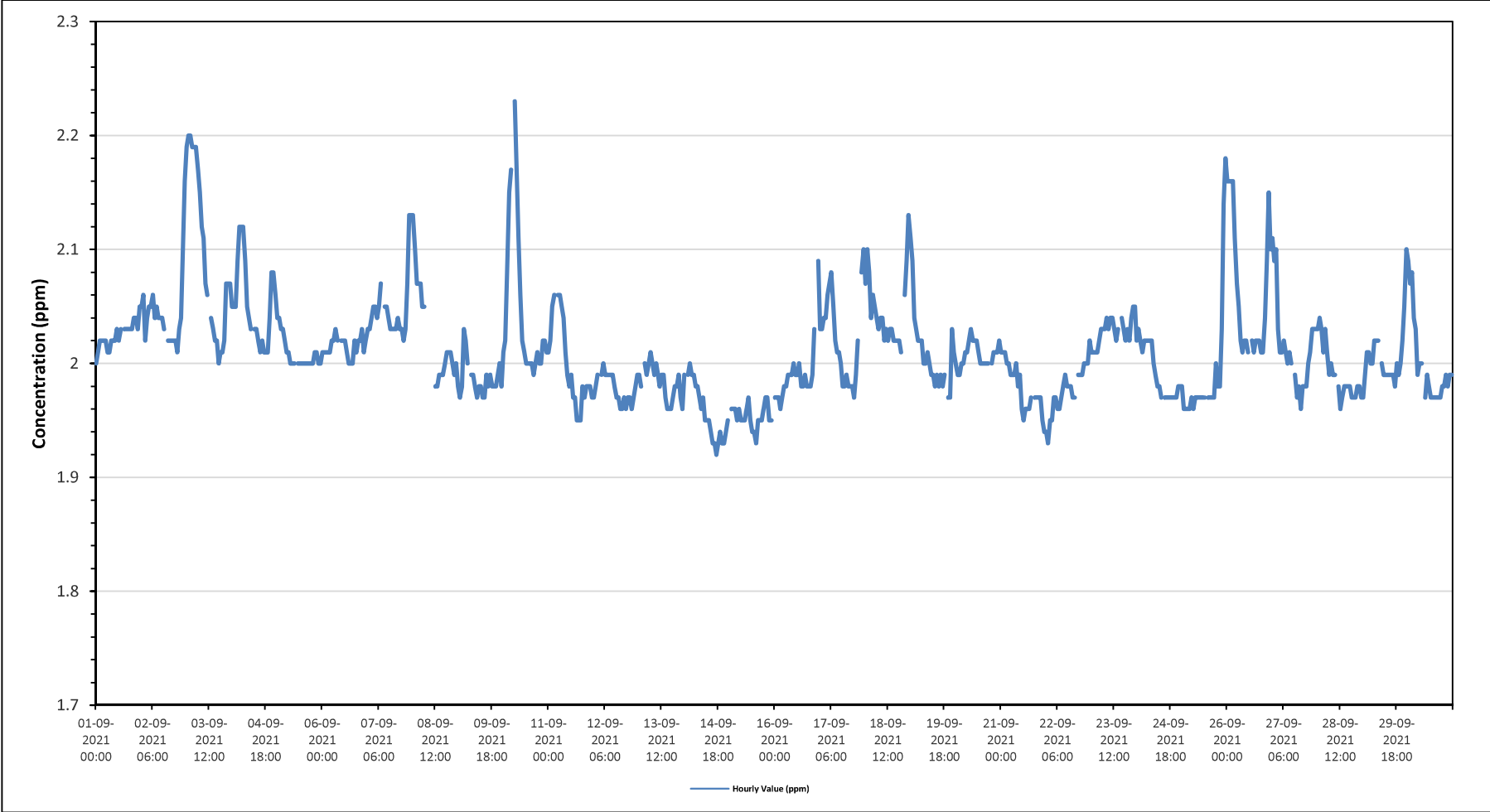
Maximum Hourly Value:	2.23 ppm on September 10 at hour 6	Hours in Service:	720
Maximum Daily Value:	2.10 ppm on September 3	Hours of Data:	685
Minimum Hourly Value:	1.92 ppm on September 14 at hour 17	Hours of Missing Data:	0
Minimum Daily Value:	1.95 ppm on September 15	Hours of Calibration:	35
Monthly Average:	2.01 ppm	Operational Uptime:	100.0

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

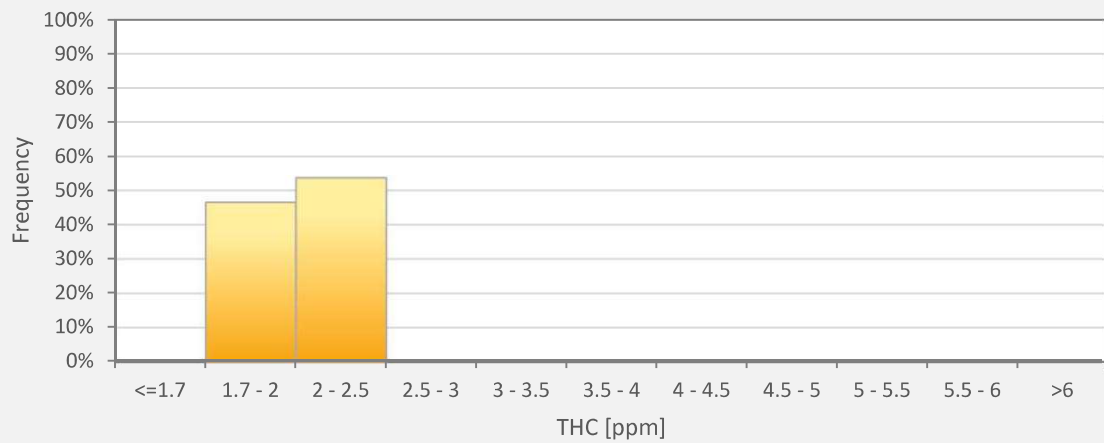
<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	InValid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span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

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

**Timeseries Chart of Hourly Average for THC - 986c Station**



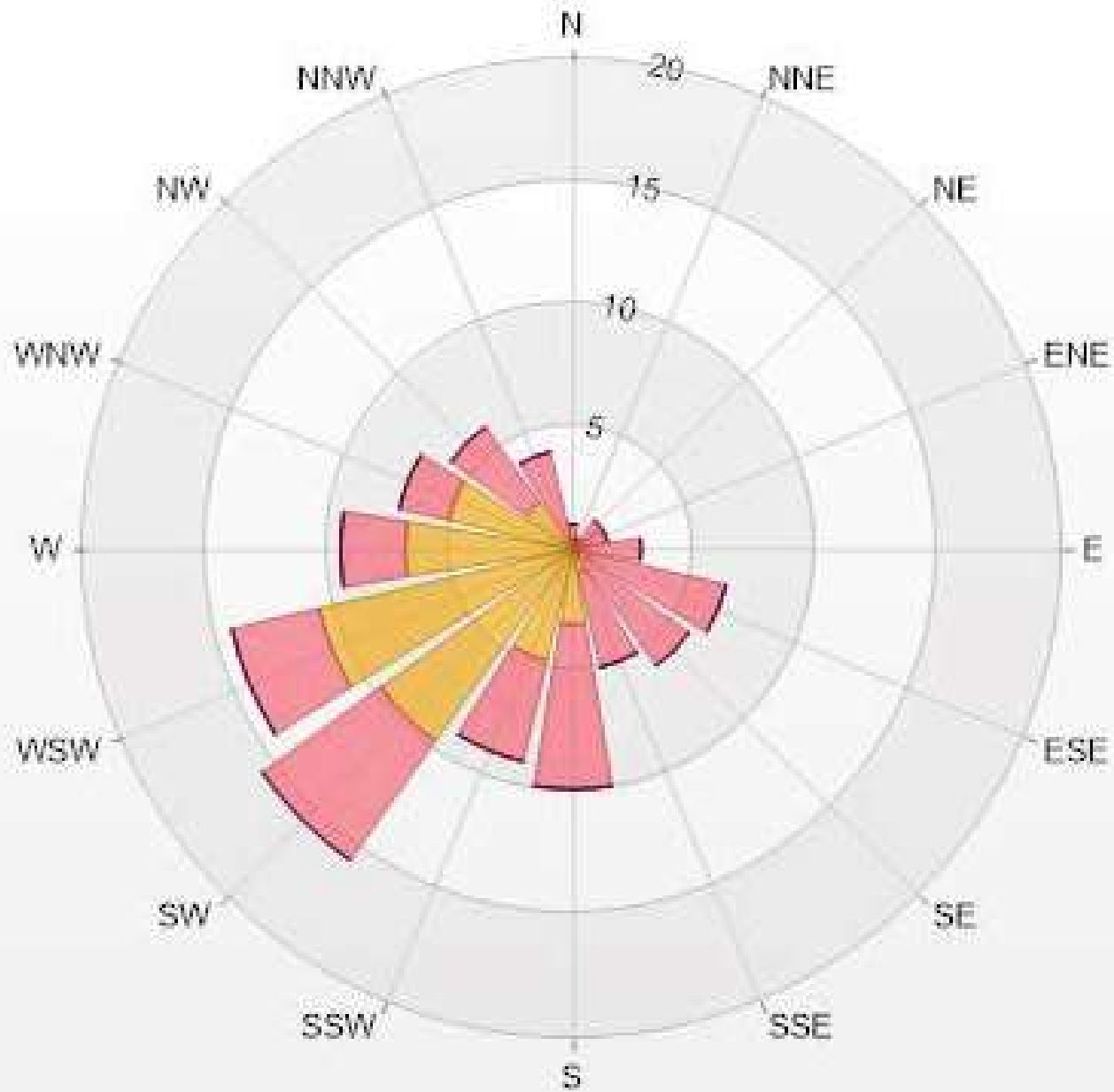
THC55[ppm] Histogram: PRAMP 986c Monthly: 09-2021 1 Hr.



Classes	THC55
<=1.7	0.00%
1.7 - 2	46.42%
2 - 2.5	53.58%
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: 09-2021 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	0.44	0.58	0	0	0	1.02
NNE	0.15	0.29	0	0	0	0.44
NE	0.15	1.31	0	0	0	1.46
ENE	0.29	1.17	0	0	0	1.46
E	0.15	2.63	0	0	0	2.78
ESE	0.73	5.69	0	0	0	6.42
SE	0.29	5.55	0	0	0	5.84
SSE	1.02	3.94	0	0	0	4.96
S	3.07	6.72	0	0	0	9.79
SSW	4.67	4.23	0	0	0	8.9
SW	9.64	5.99	0	0	0	15.63
WSW	10.66	3.65	0	0	0	14.31
W	6.86	2.63	0	0	0	9.49
WNW	5.26	2.04	0	0	0	7.3
NW	2.34	3.8	0	0	0	6.14
NNW	0.44	3.65	0	0	0	4.09
Summary	46.16	53.87	0	0	0	100



% Icon Classes (ppm)    46    0-2    54    2-5    0    5-10    0    10-40    0    >40.0



**PEACE RIVER AREA MONITORING PROGRAM**

**986c Station - September 2021**

**Summary of Hourly Averages**

**METHANE (CH4) in ppm**

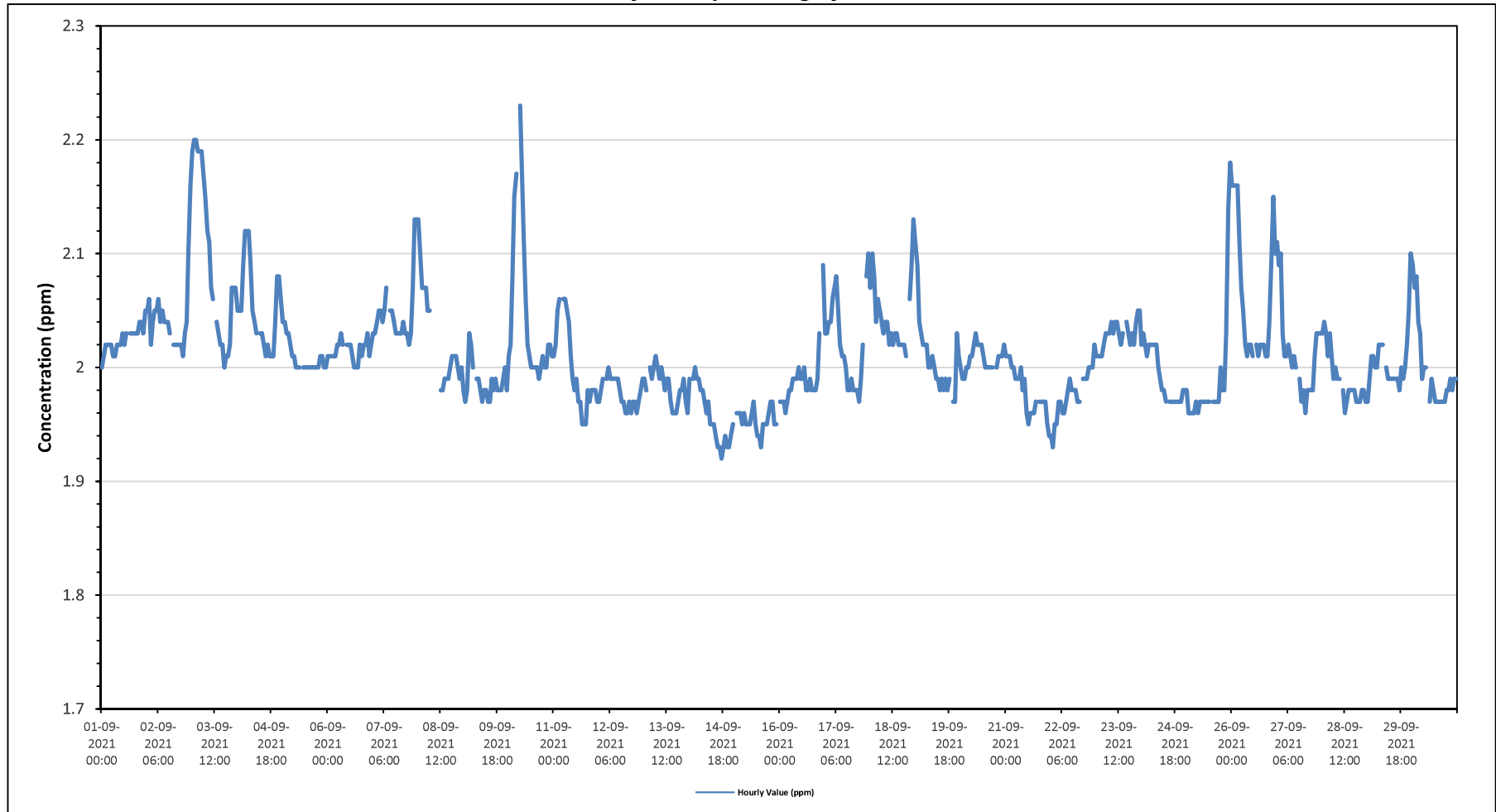
Maximum Hourly Value:	2.23 ppm on September 10 at hour 6	Hours in Service:	720
Maximum Daily Value:	2.10 ppm on September 3	Hours of Data:	685
Minimum Hourly Value:	1.92 ppm on September 14 at hour 17	Hours of Missing Data:	0
Minimum Daily Value:	1.95 ppm on September 15	Hours of Calibration:	35
Monthly Average:	2.01 ppm	Operational Uptime:	100.0

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

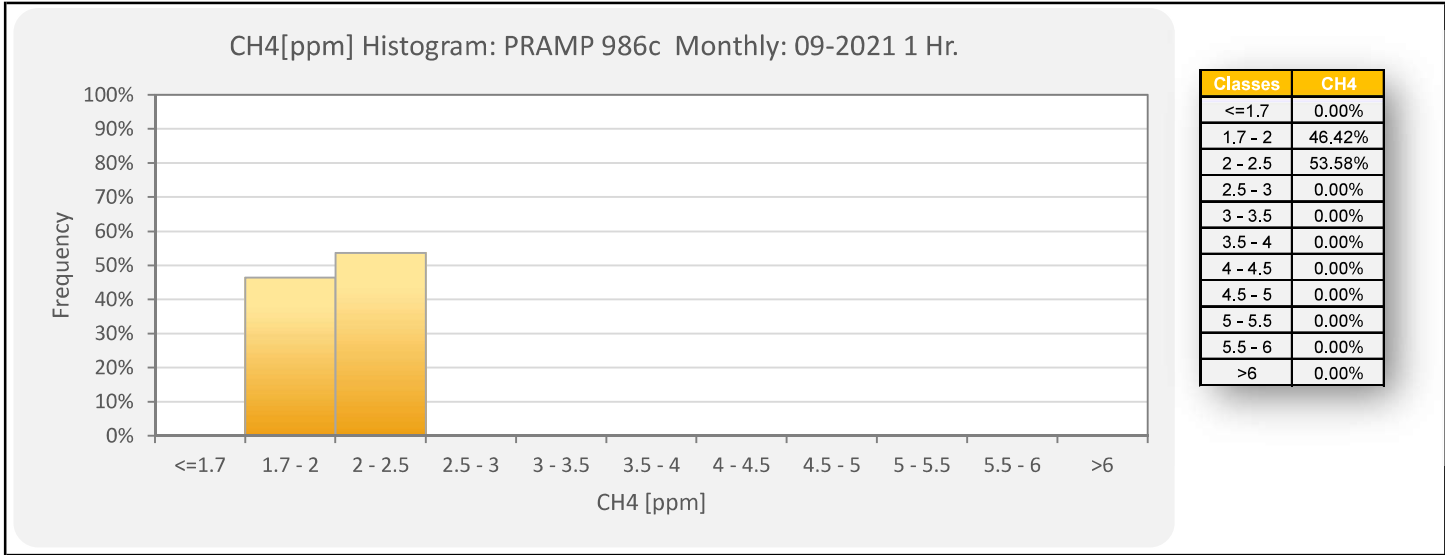
<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	InValid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span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

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

**Timeseries Chart of Hourly Average for CH4 - 986c Station**

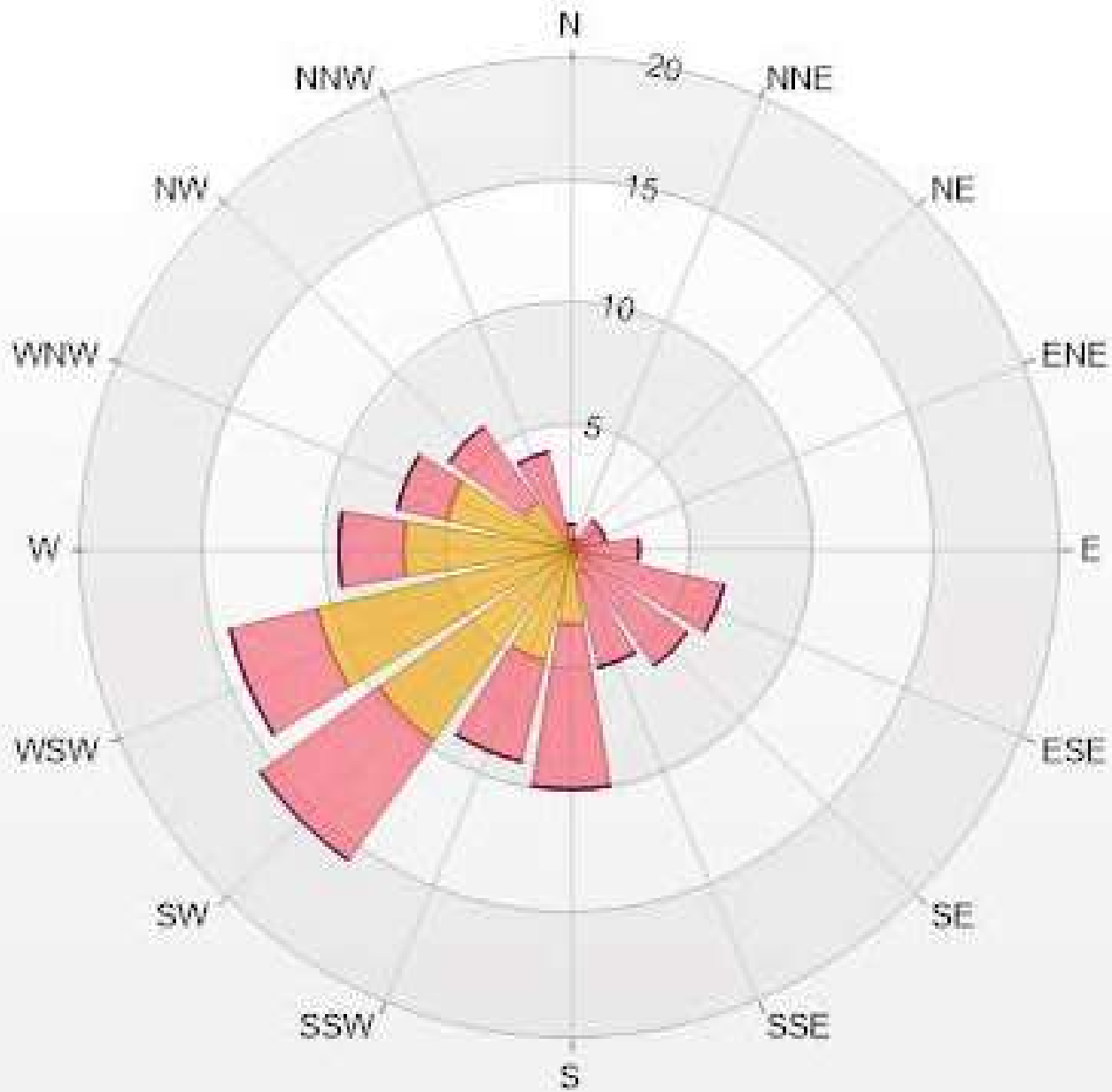






Wind: PRAMP 986c Poll.: PRAMP 986c-CH4[ppm] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 95.14% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	0.44	0.58	0	0	0	1.02
NNE	0.15	0.29	0	0	0	0.44
NE	0.15	1.31	0	0	0	1.46
ENE	0.29	1.17	0	0	0	1.46
E	0.15	2.63	0	0	0	2.78
ESE	0.73	5.69	0	0	0	6.42
SE	0.29	5.55	0	0	0	5.84
SSE	1.02	3.94	0	0	0	4.96
S	3.07	6.72	0	0	0	9.79
SSW	4.67	4.23	0	0	0	8.9
SW	9.64	5.99	0	0	0	15.63
WSW	10.66	3.65	0	0	0	14.31
W	6.86	2.63	0	0	0	9.49
WNW	5.26	2.04	0	0	0	7.3
NW	2.34	3.8	0	0	0	6.14
NNW	0.44	3.65	0	0	0	4.09
Summary	46.16	53.87	0	0	0	100



% Icon Classes (ppm)

46 0-2

54 2-5

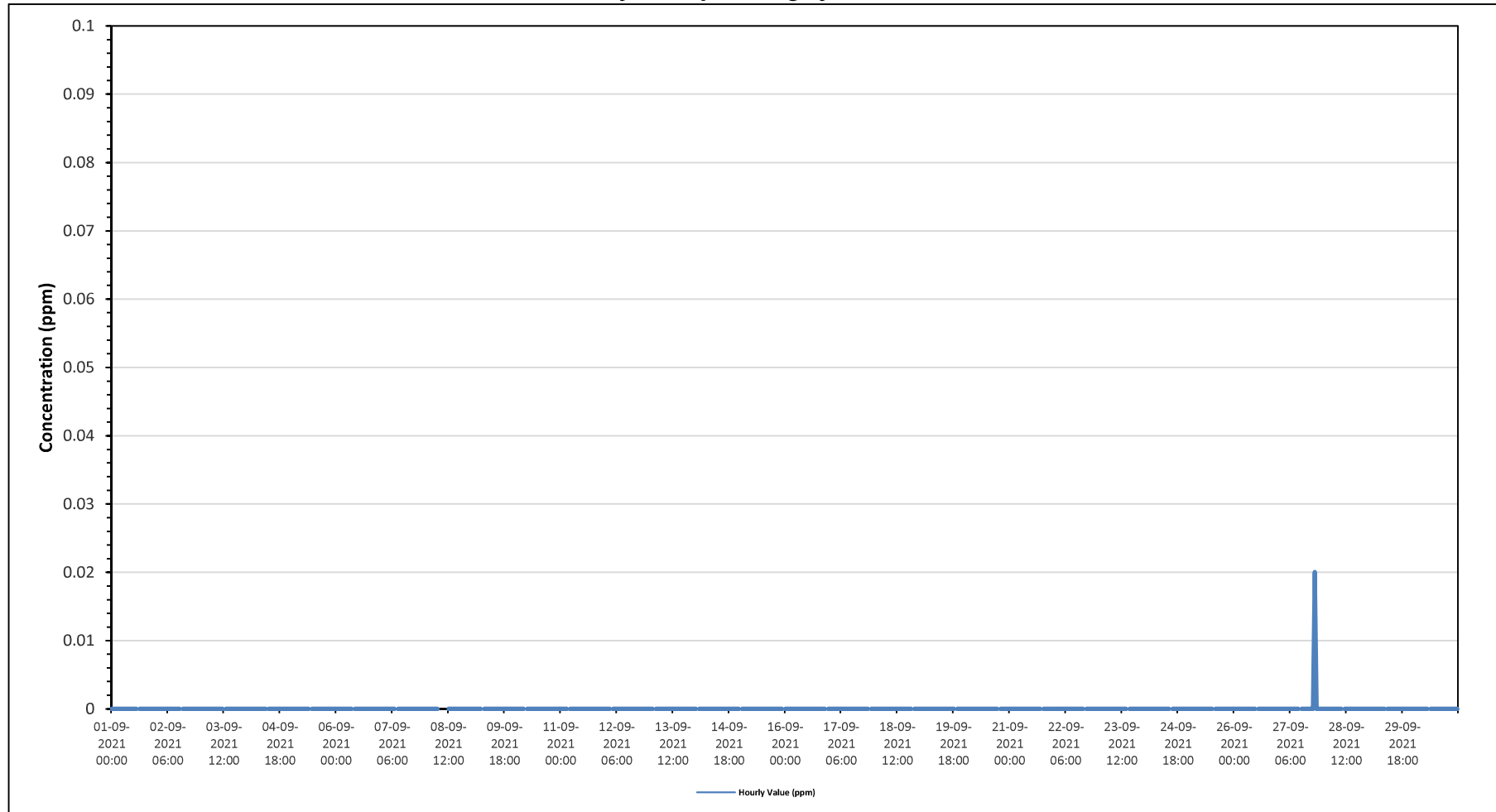
0 5-10

0 10-20

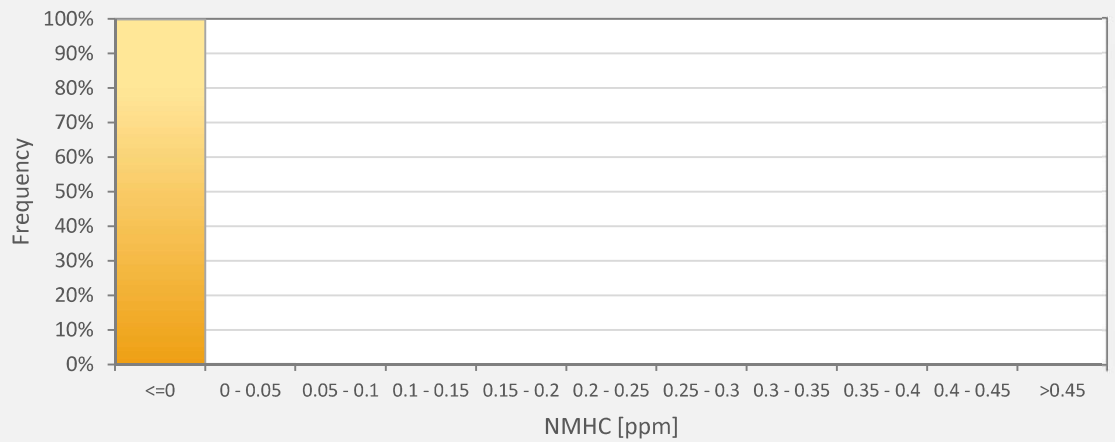
0 >20.0



*Timeseries Chart of Hourly Average for NMHC - 986c Station*



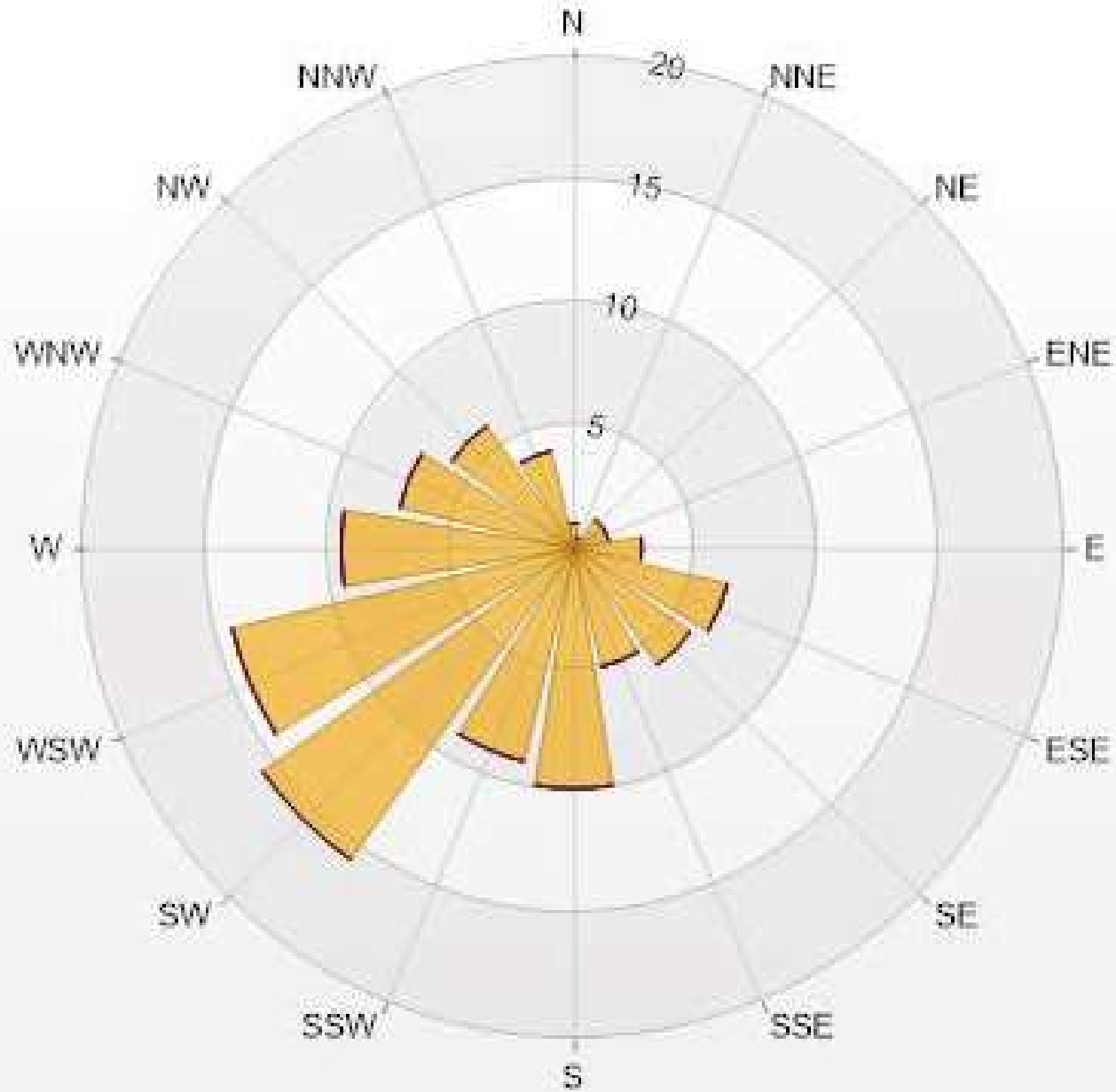
NMHC[ppm] Histogram: PRAMP 986c Monthly: 09-2021 1 Hr.




Classes	NMHC
<=0	99.85%
0 - 0.05	0.15%
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: 09-2021 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	0.3-0.9	0.9-2	>2.0	Total
N	1.02	0	0	0	0	1.02
NNE	0.44	0	0	0	0	0.44
NE	1.46	0	0	0	0	1.46
ENE	1.46	0	0	0	0	1.46
E	2.77	0	0	0	0	2.77
ESE	6.42	0	0	0	0	6.42
SE	5.84	0	0	0	0	5.84
SSE	4.96	0	0	0	0	4.96
S	9.78	0	0	0	0	9.78
SSW	8.91	0	0	0	0	8.91
SW	15.62	0	0	0	0	15.62
WSW	14.31	0	0	0	0	14.31
W	9.49	0	0	0	0	9.49
WNW	7.3	0	0	0	0	7.3
NW	6.13	0	0	0	0	6.13
NNW	4.09	0	0	0	0	4.09
Summary	100	0	0	0	0	100





% Icon Classes (ppm)

100  0-0.1

0  0.1-0.3

0  0.3-0.9

0  0.9-2

0  >2.0





**PEACE RIVER AREA MONITORING PROGRAM**

**986c Station - September 2021**

**Summary of Hourly Averages**

**RELATIVE HUMIDITY (RH) in %**

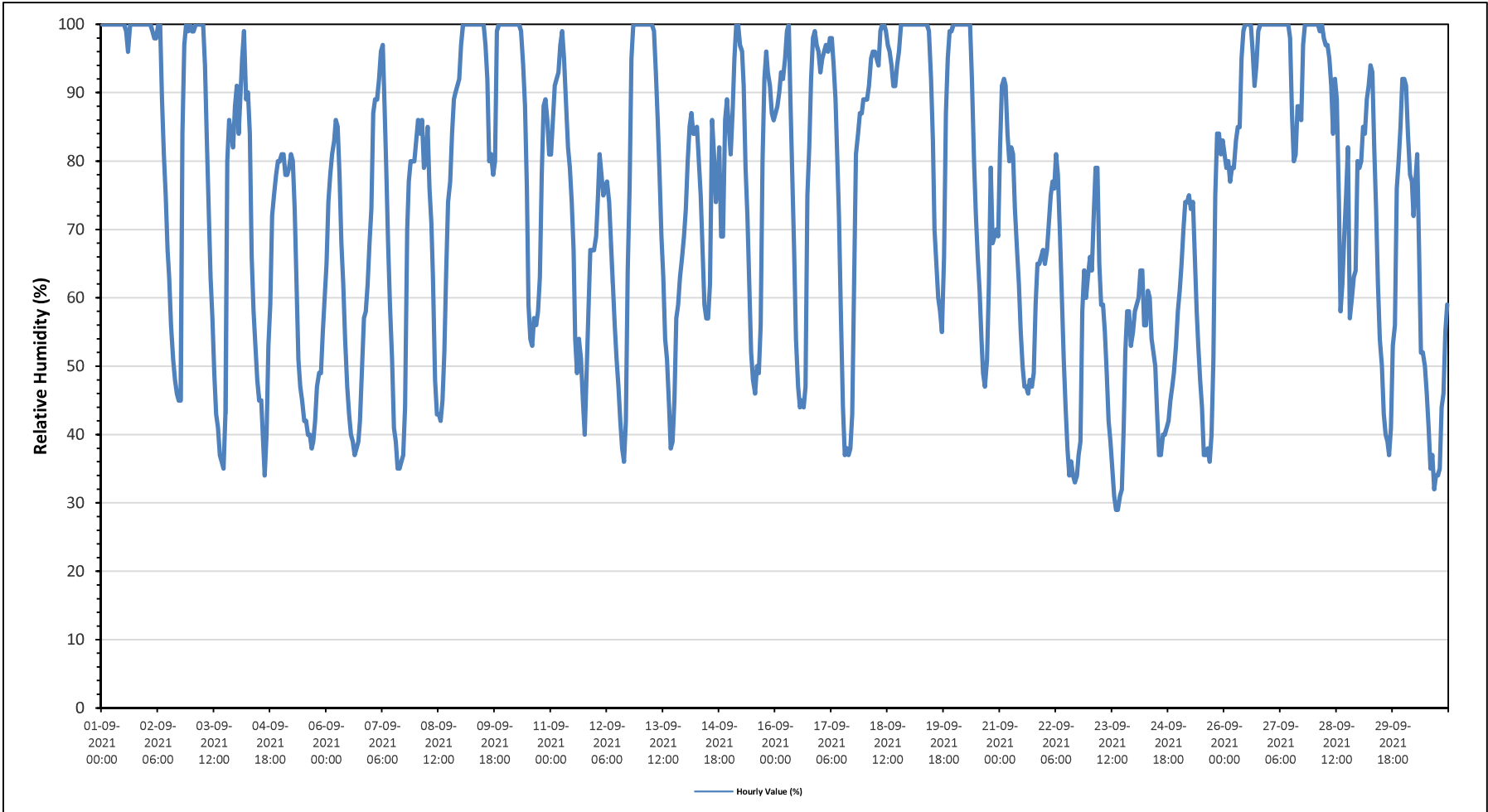
Maximum Hourly Value:	100 %	on September 1 at hour 0	Hours in Service:	720
Maximum Daily Value:	99.8 %	on September 1	Hours of Data:	720
Minimum Hourly Value:	29 %	on September 23 at hour 14	Hours of Missing Data:	0
Minimum Daily Value:	51.1 %	on September 24	Hours of Calibration:	0
Monthly Average:	74.3 %		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	100	100	100	100	100	100	100	100	100	100	100	100	100	99	96	100	100	100	100	100	100	100	100	96	100	99.8		
Sep 2	100	100	100	99	98	98	100	100	89	81	75	67	63	56	51	48	46	45	45	84	97	100	99	100	45	100	80.9	
Sep 3	99	99	100	100	100	100	100	94	83	73	63	57	49	43	41	37	36	35	43	80	86	84	82	88	35	100	73.8	
Sep 4	91	84	89	95	99	89	90	84	66	58	53	48	45	45	39	34	40	53	59	72	75	78	80	80	34	99	68.6	
Sep 5	81	81	78	78	79	81	80	73	62	51	47	45	42	42	40	40	38	39	42	47	49	49	55	60	38	81	57.5	
Sep 6	65	74	78	81	83	86	85	78	68	62	54	47	43	40	39	37	38	39	42	50	57	58	62	68	37	86	59.8	
Sep 7	73	87	89	89	92	96	97	89	79	68	59	51	41	39	35	35	36	37	44	70	77	80	80	80	35	97	67.6	
Sep 8	83	86	84	86	79	80	85	76	71	63	48	43	43	42	45	52	64	74	77	84	89	90	91	92	42	92	72.0	
Sep 9	97	100	100	100	100	100	100	100	100	100	100	100	100	97	92	80	81	78	80	99	100	100	100	100	78	100	96.0	
Sep 10	100	100	100	100	100	100	100	100	100	99	94	88	76	59	54	53	57	56	58	63	78	88	89	86	81	53	100	82.5
Sep 11	81	86	91	92	93	97	99	95	88	82	79	74	67	54	49	54	51	45	40	49	58	67	67	67	40	99	71.9	
Sep 12	69	75	81	78	75	76	77	74	68	62	56	51	47	42	38	36	42	64	76	95	100	100	100	100	36	100	70.1	
Sep 13	100	100	100	100	100	100	100	99	93	86	78	69	63	54	51	44	38	39	45	57	59	63	66	69	38	100	73.9	
Sep 14	73	80	85	87	84	84	85	80	75	67	59	57	57	62	86	81	74	77	82	69	69	86	89	85	57	89	76.4	
Sep 15	81	87	95	100	100	97	96	91	79	72	62	52	48	46	50	49	56	80	92	96	93	91	87	86	46	100	78.6	
Sep 16	87	88	90	93	92	95	99	100	89	78	67	54	47	44	45	44	47	75	82	92	98	99	97	96	44	100	79.1	
Sep 17	93	95	96	97	96	98	98	94	89	80	72	58	44	37	38	37	38	43	62	81	84	87	87	89	37	98	74.7	
Sep 18	89	89	91	95	96	96	95	94	99	100	100	99	97	96	94	91	94	96	100	100	100	100	100	100	89	100	95.9	
Sep 19	100	100	100	100	100	100	100	100	100	100	100	100	99	92	83	70	65	60	58	55	66	87	95	99	99	55	100	88.7
Sep 20	100	100	100	100	100	100	100	100	100	100	92	80	72	66	61	54	49	47	51	62	79	68	69	70	69	47	100	78.7
Sep 21	82	91	92	91	84	80	82	81	73	67	62	55	50	47	47	46	48	47	49	59	65	65	66	67	46	92	66.5	
Sep 22	65	67	71	75	77	76	81	78	69	60	51	44	38	34	36	34	33	34	37	39	58	64	60	63	33	81	56.0	
Sep 23	66	64	72	79	79	65	59	59	55	49	42	39	35	31	29	29	31	32	41	52	58	58	53	55	29	79	51.3	
Sep 24	58	59	60	64	64	56	56	61	60	54	52	50	43	37	37	40	40	41	42	45	47	49	53	58	37	64	51.1	
Sep 25	61	65	70	74	74	75	73	74	66	58	53	48	44	37	37	38	36	40	51	75	84	84	81	83	36	84	61.7	
Sep 26	81	79	80	77	79	79	83	85	85	95	99	100	100	100	100	96	91	94	99	100	100	100	100	100	77	100	91.8	
Sep 27	100	100	100	100	100	100	100	100	100	100	100	98	87	80	81	88	88	86	97	100	100	100	100	100	80	100	96.0	
Sep 28	100	100	100	99	100	98	97	97	95	91	84	92	89	74	58	62	69	75	82	57	60	63	64	80	57	100	82.8	
Sep 29	79	80	85	84	89	91	94	93	82	73	62	54	50	43	40	39	37	41	53	56	76	80	85	92	37	94	69.1	
Sep 30	92	91	84	78	77	72	77	81	67	52	52	50	46	41	35	37	32	34	34	35	44	46	55	59	32	92	57.1	
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	84.9	86.9	88.7	89.7	89.6	88.8	89.6	87.7	81.6	75.6	69.9	64.7	59.5	54.9	53.4	52.5	52.7	56.8	62.8	72.9	77.8	79.9	80.5	82.2				

<b>C</b> Monthly Calibration	<b>S</b> Daily Zero-Span Check	<b>Q</b> Quality Assurance
<b>K</b> Collection Error	<b>N</b> No Data (Machine Not in Service)	<b>Y</b> Routine Maintenance
<b>X</b> InValid Data (Equipment Malfunction /Recovery)	<b>NRM</b> UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	<b>P</b> 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 2021**

**Summary of Hourly Averages**

**BAROMETRIC PRESSURE (BP) in millibar**

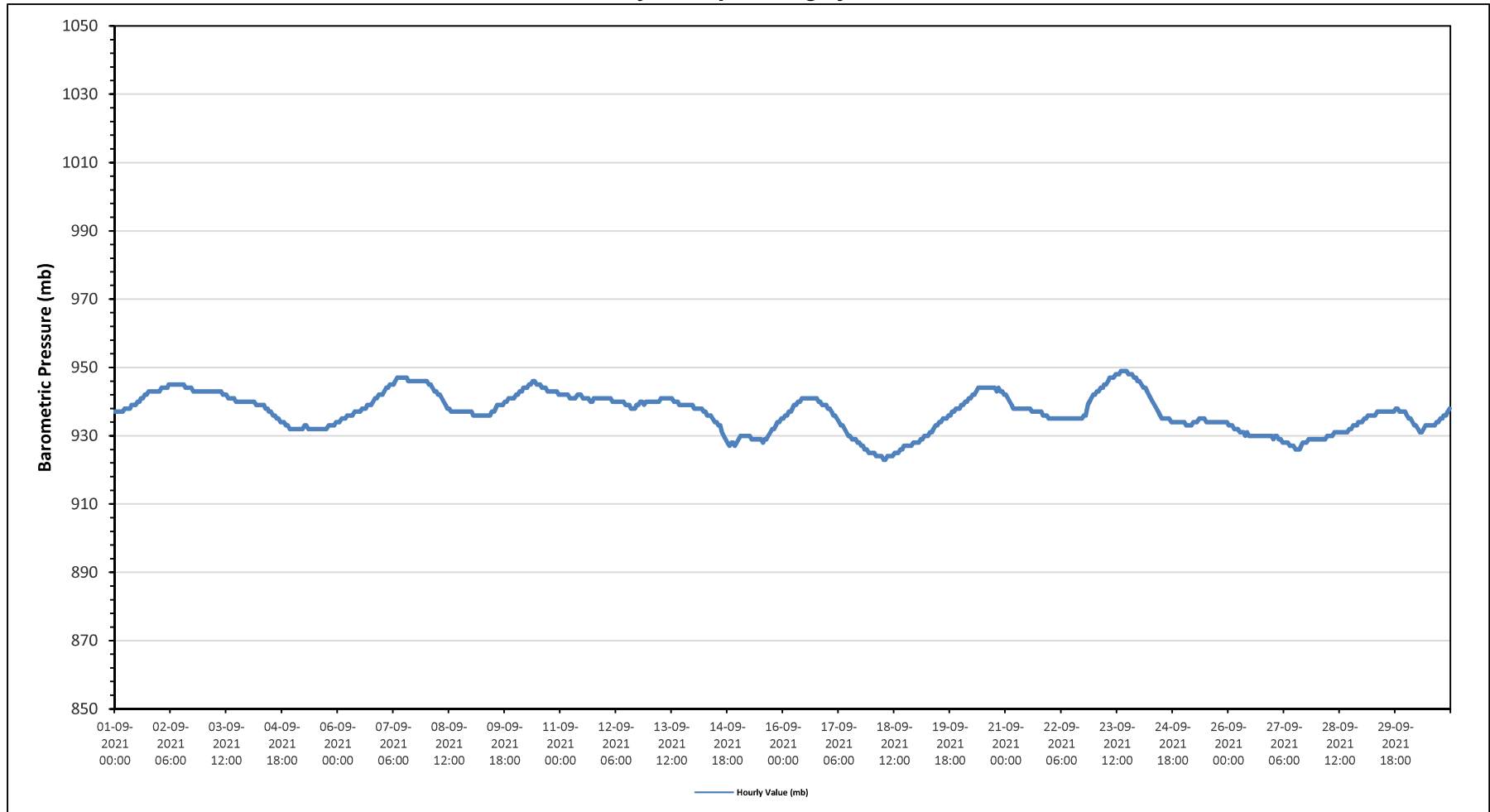
Maximum Hourly Value:	949	mb	on September 23 at hour 14	Hours in Service:	720
Maximum Daily Value:	947	mb	on September 23	Hours of Data:	720
Minimum Hourly Value:	923	mb	on September 18 at hour 6	Hours of Missing Data:	0
Minimum Daily Value:	925	mb	on September 18	Hours of Calibration:	0
Monthly Average:	937	mb		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	937	937	937	937	937	938	938	938	938	939	939	939	940	940	941	941	942	942	943	943	943	943	943	943	937	943	940
Sep 2	943	944	944	944	944	945	945	945	945	945	945	945	945	945	944	944	944	944	943	943	943	943	943	943	943	943	944
Sep 3	943	943	943	943	943	943	943	943	943	943	943	942	942	941	941	941	940	940	940	940	940	940	940	940	940	943	942
Sep 4	940	940	940	940	939	939	939	939	939	938	938	937	937	936	936	935	935	934	934	934	933	933	933	932	932	932	937
Sep 5	932	932	932	932	932	932	933	933	932	932	932	932	932	932	932	932	932	932	932	933	933	933	933	934	932	934	932
Sep 6	934	934	935	935	935	936	936	936	936	937	937	937	937	938	938	939	939	939	940	941	941	941	942	942	934	942	938
Sep 7	942	943	944	944	945	945	945	946	947	947	947	947	947	946	946	946	946	946	946	946	946	946	946	946	942	947	946
Sep 8	946	945	945	944	943	943	942	942	941	940	939	938	938	937	937	937	937	937	937	937	937	937	937	937	937	937	940
Sep 9	937	936	936	936	936	936	936	936	936	936	937	937	937	938	939	939	939	940	940	941	941	941	941	941	936	941	938
Sep 10	942	942	943	943	944	944	944	945	945	946	946	945	945	945	944	944	944	943	943	943	943	943	943	942	942	946	944
Sep 11	942	942	942	942	942	941	941	941	941	942	942	942	941	941	941	940	940	941	941	941	941	941	941	941	940	942	941
Sep 12	941	941	941	941	940	940	940	940	940	940	939	939	939	938	938	938	939	939	940	940	939	940	939	940	938	941	940
Sep 13	940	940	940	940	940	940	941	941	941	941	941	941	941	940	940	940	939	939	939	939	939	939	939	939	939	941	940
Sep 14	938	938	938	938	938	937	937	936	936	936	935	934	934	933	933	931	930	929	928	927	928	928	927	928	927	938	933
Sep 15	929	930	930	930	930	930	929	929	929	929	929	929	929	928	929	929	930	931	932	932	933	934	934	935	928	935	930
Sep 16	935	936	936	937	937	938	939	939	940	940	941	941	941	941	941	941	941	941	941	940	940	939	939	939	935	941	939
Sep 17	938	938	937	936	936	935	934	933	933	932	931	930	930	929	929	929	928	928	927	927	926	926	925	925	925	938	931
Sep 18	925	925	924	924	924	924	923	923	924	924	924	924	925	925	925	926	926	927	927	927	927	927	928	928	923	928	925
Sep 19	928	928	929	929	930	930	930	931	931	932	933	933	934	934	935	935	935	936	936	937	937	938	938	938	928	938	933
Sep 20	939	939	940	940	941	941	942	942	943	944	944	944	944	944	944	944	944	944	944	943	944	943	943	942	939	944	943
Sep 21	942	941	940	939	938	938	938	938	938	938	938	938	938	938	937	937	937	937	937	937	936	936	936	935	935	942	938
Sep 22	935	935	935	935	935	935	935	935	935	935	935	935	935	935	935	935	935	935	936	936	939	940	941	942	935	942	936
Sep 23	942	943	943	944	944	945	945	946	947	947	947	948	948	948	949	949	949	949	948	948	948	947	947	946	942	949	947
Sep 24	946	945	944	944	943	942	941	940	939	938	937	936	935	935	935	935	935	934	934	934	934	934	934	934	934	946	938
Sep 25	934	933	933	933	933	934	934	934	935	935	935	935	934	934	934	934	934	934	934	934	934	934	934	934	933	935	934
Sep 26	933	933	933	932	932	932	931	931	931	930	931	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	931
Sep 27	929	930	930	929	929	928	928	928	928	927	927	927	926	926	926	927	928	928	928	929	929	929	929	929	926	930	928
Sep 28	929	929	929	929	929	930	930	930	930	931	931	931	931	931	931	931	931	932	932	933	933	933	934	934	929	934	931
Sep 29	934	935	935	936	936	936	936	936	937	937	937	937	937	937	937	937	937	938	938	937	937	937	937	937	934	938	937
Sep 30	936	935	935	934	933	933	932	931	931	932	933	933	933	933	933	933	934	934	935	935	936	936	937	938	931	938	934
Diurnal Maximum	946	945	945	944	945	945	945	946	947	947	947	948	948	948	949	949	949	949	948	948	948	947	947	946			
Diurnal Average	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937			

<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	InValid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	<b>P</b>	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 2021**

**Summary of Hourly Averages**

**AMBIENT TEMPERATURE (AT) in Degree Celsius**

Maximum Hourly Value:	23.6 °C	on September 4 at hour 15	Hours in Service:	720
Maximum Daily Value:	16.5 °C	on September 5	Hours of Data:	720
Minimum Hourly Value:	1.9 °C	on September 10 at hour 6	Hours of Missing Data:	0
Minimum Daily Value:	6.7 °C	on September 16	Hours of Calibration:	0
Monthly Average:	11.0 °C		Operational Uptime:	100.0

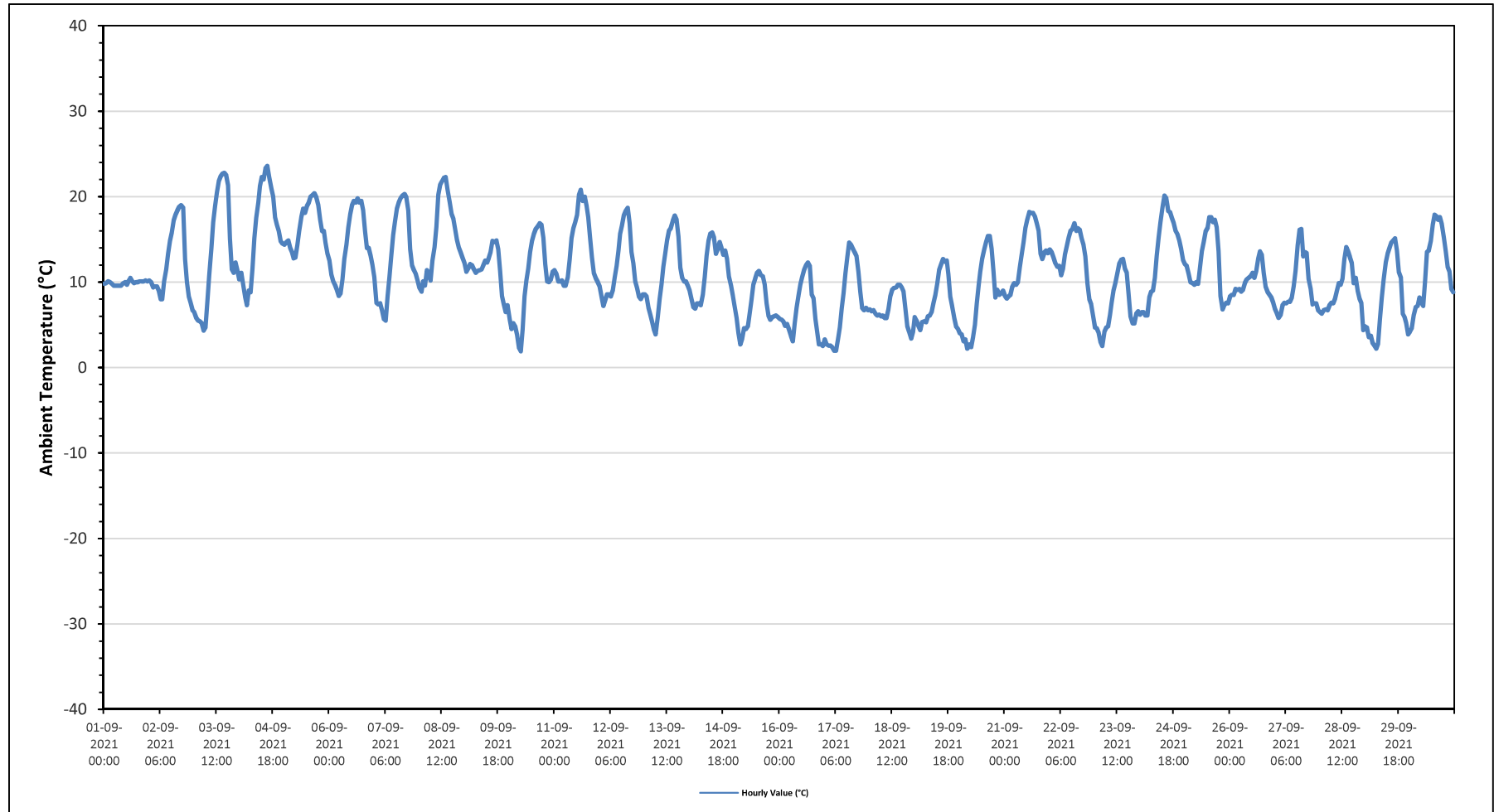
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	9.8	9.9	10.1	10	9.8	9.6	9.6	9.6	9.6	9.6	9.9	10	9.7	10.2	10.5	10.1	9.9	10	10	10.1	10.1	10.1	10.2	10.1	9.6	10.5	9.9
Sep 2	10.2	10	9.4	9.5	9.5	9	8	8	10.1	11.5	13.3	14.8	15.8	17.2	17.9	18.4	18.8	19	18.7	12.7	10	8.3	7.6	6.7	6.7	19.0	12.3
Sep 3	6.5	5.8	5.5	5.4	5.2	4.3	4.7	7.7	10.8	13.9	17	18.9	20.5	21.8	22.4	22.7	22.8	22.5	21.3	15.1	11.5	11.1	12.3	11.4	4.3	22.8	13.4
Sep 4	10.3	11.1	9.7	8.3	7.3	9	8.8	11.6	15.1	17.5	19.3	21.2	22.3	22	23.3	23.6	22.3	21	20	17.6	16.7	16	14.8	14.5	7.3	23.6	16.0
Sep 5	14.4	14.7	14.9	14	13.5	12.8	12.9	14.3	16	17.6	18.6	18.1	18.9	19.3	20	20.2	20.4	19.9	19	17.3	16	16	14.6	13.4	12.8	20.4	16.5
Sep 6	12.5	10.9	10.1	9.7	9.1	8.4	8.7	10.3	12.7	14.4	16.4	17.9	19	19.5	19.3	19.8	19.3	19.5	18.4	16	14	14	13.1	12	8.4	19.8	14.4
Sep 7	10.6	7.6	7.4	7.5	6.7	5.7	5.5	8.3	10.6	13.1	15.5	17.1	18.6	19.3	19.8	20.1	20.3	19.9	18.4	13.9	12	11.4	11	10.2	5.5	20.3	12.9
Sep 8	9.3	8.9	10.1	9.6	11.4	11.1	10.2	12.5	14.1	16.5	20.2	21.4	21.8	22.2	22.3	20.8	19.4	18	17.4	16.1	15	14.1	13.5	12.9	8.9	22.3	15.4
Sep 9	12.2	11.2	11.6	12.1	12	11.5	11.1	11.3	11.4	11.5	12	12.5	12.3	12.8	13.5	14.8	14.7	14.9	13.8	11.3	8.4	7.4	6.5	7.3	6.5	14.9	11.6
Sep 10	5.7	4.5	5.2	4.8	3.8	2.3	1.9	4.5	8.3	10.2	11.6	13.5	14.8	15.6	16.2	16.5	16.9	16.7	15.2	12.1	10.1	10	10.3	11.2	1.9	16.9	10.1
Sep 11	11.4	11	10.1	10.1	10.2	9.6	9.6	10.6	12.6	15.1	16.3	17	17.9	20.2	20.8	19.5	20	18.9	17.6	15.2	12.9	11.1	10.5	10	9.6	20.8	14.1
Sep 12	9.5	8.3	7.2	7.9	8.6	8.6	8.3	9.1	10.6	11.9	13.7	15.6	16.6	17.8	18.3	18.7	16.9	13.5	12.2	10.1	9.3	8.3	8	8.6	7.2	18.7	11.6
Sep 13	8.6	8.3	7	6.2	5.3	4.5	3.9	5.9	8	9.7	11.8	13.3	14.9	16	16.3	17.2	17.8	17.3	15.3	11.7	10.5	10.1	10.1	9.6	3.9	17.8	10.8
Sep 14	9	8	7.1	6.9	7.5	7.5	7.3	8.6	10.6	13.1	14.8	15.7	15.8	15.2	13.3	13.9	14.7	14	13.2	13.7	12.7	10.7	9.6	8.4	6.9	15.8	11.3
Sep 15	7.1	5.8	4	2.7	3.4	4.6	4.5	4.9	6.5	7.9	9.7	10.4	11.1	11.3	10.8	10.7	9.7	7.5	6.1	5.6	5.9	6	6.1	5.9	2.7	11.3	7.0
Sep 16	5.7	5.6	5.4	4.9	5.1	4.5	3.7	3.1	5.2	7	8.4	9.7	10.6	11.4	12	12.3	11.9	8.6	8.1	5.7	4.3	2.7	2.7	2.5	2.5	12.3	6.7
Sep 17	3.3	2.7	2.6	2.6	2.4	2	2	3.3	4.7	6.9	8.7	11	12.9	14.6	14.4	13.9	13.5	13	11.2	8.9	7	6.7	7	6.7	2.0	14.6	7.6
Sep 18	6.8	6.6	6.7	6.3	6.1	6.2	6	6.1	5.8	5.8	6.8	8.3	9.1	9.3	9.4	9.7	9.7	9.4	8.9	6.9	4.9	4.2	3.4	4.2	3.4	9.7	6.9
Sep 19	5.9	5.5	4.9	4.4	5.3	5.4	5.3	6	6.1	6.5	7.6	8.5	9.8	11.4	12.1	12.7	12.4	12.5	10.9	8.3	7.2	5.8	4.8	4.5	4.4	12.7	7.7
Sep 20	4	3.9	3.1	3.3	2.2	2.7	2.4	3.6	5	7.5	9.6	11.2	12.7	13.8	14.7	15.4	15.4	13.9	11.2	8.2	9.1	8.5	8.7	9	2.2	15.4	8.3
Sep 21	8.4	8.1	8.3	8.5	9.4	9.9	9.7	10	11.7	13.2	14.6	16.3	17.3	18.2	18.1	18.1	17.7	16.9	16	13.4	12.7	13.5	13.7	13.4	8.1	18.2	13.2
Sep 22	13.8	13.5	12.9	12.2	11.8	11.9	10.8	11.6	13.2	14.2	15.2	16	16.2	16.9	16	16.3	16.1	15.1	14.4	13	9.8	8	7.4	6.1	6.1	16.9	13.0
Sep 23	4.7	4.6	4.1	3	2.5	4.2	4.7	4.8	6.2	7.6	9	9.9	11.1	12.2	12.6	12.7	11.6	11.1	8.6	6	5.2	5.2	6.3	6.6	2.5	12.7	7.3
Sep 24	6.2	6.5	6.5	6.1	6.1	8.2	8.9	9	10.5	13.1	15.2	17	18.8	20.1	19.8	18.3	18.2	17.5	16.9	16	15.6	14.9	13.9	12.6	6.1	20.1	13.2
Sep 25	12.1	11.9	11	10	9.9	9.7	10	9.8	11.7	13.6	14.7	15.9	16.4	17.6	17.6	17	17.3	16.4	13.6	8.4	6.8	7.3	7.6	7.5	6.8	17.6	12.2
Sep 26	8.3	8.5	8.5	9.2	9.1	9.2	8.9	9.1	9.9	10.3	10.5	10.7	11.1	10.5	11.3	12.7	13.6	13.2	11.1	9.5	8.8	8.5	8.2	7.6	7.6	13.6	9.9
Sep 27	6.9	6.4	5.8	6.2	7.3	7.6	7.5	7.7	7.7	8.2	9.5	11.3	14.3	16.1	16.2	13	13.5	13.4	10.4	9.2	7.4	7.5	7.5	6.7	5.8	16.2	9.5
Sep 28	6.5	6.3	6.7	6.8	6.7	7.3	7.6	7.5	8.1	9	9.9	9.7	10.4	12.7	14.1	13.6	12.9	12.2	9.9	10.5	9	8.1	7.5	4.4	4.4	14.1	9.1
Sep 29	4.8	4.7	3.6	3.7	2.9	2.6	2.2	2.8	5.7	8.2	10.3	12.3	13.3	14	14.6	14.9	15.1	13.7	11.2	10.5	6.3	5.9	5.2	3.9	2.2	15.1	8.0
Sep 30	4.2	4.6	6.1	7.1	7.2	8.2	7.6	7.2	10.1	13.5	13.7	14.9	16.7	17.9	17.7	17.3	17.6	16.8	15.2	13.6	11.8	11.2	9.2	8.8	4.2	17.9	11.6
Diurnal Maximum	14.4	14.7	14.9	14.0	13.5	12.8	12.9	14.3	16.0	17.6	20.2	21.4	22.3	22.2	23.3	23.6	22.8	22.5	21.3	17.6	16.7	16.0	14.8	14.5			
Diurnal Average	8.3	7.8	7.5	7.3	7.2	7.3	7.1	8.0	9.6	11.3	12.8	14.0	15.0	15.9	16.2	16.2	16.0	15.2	13.8	11.6	10.0	9.4	9.0	8.6			

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

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

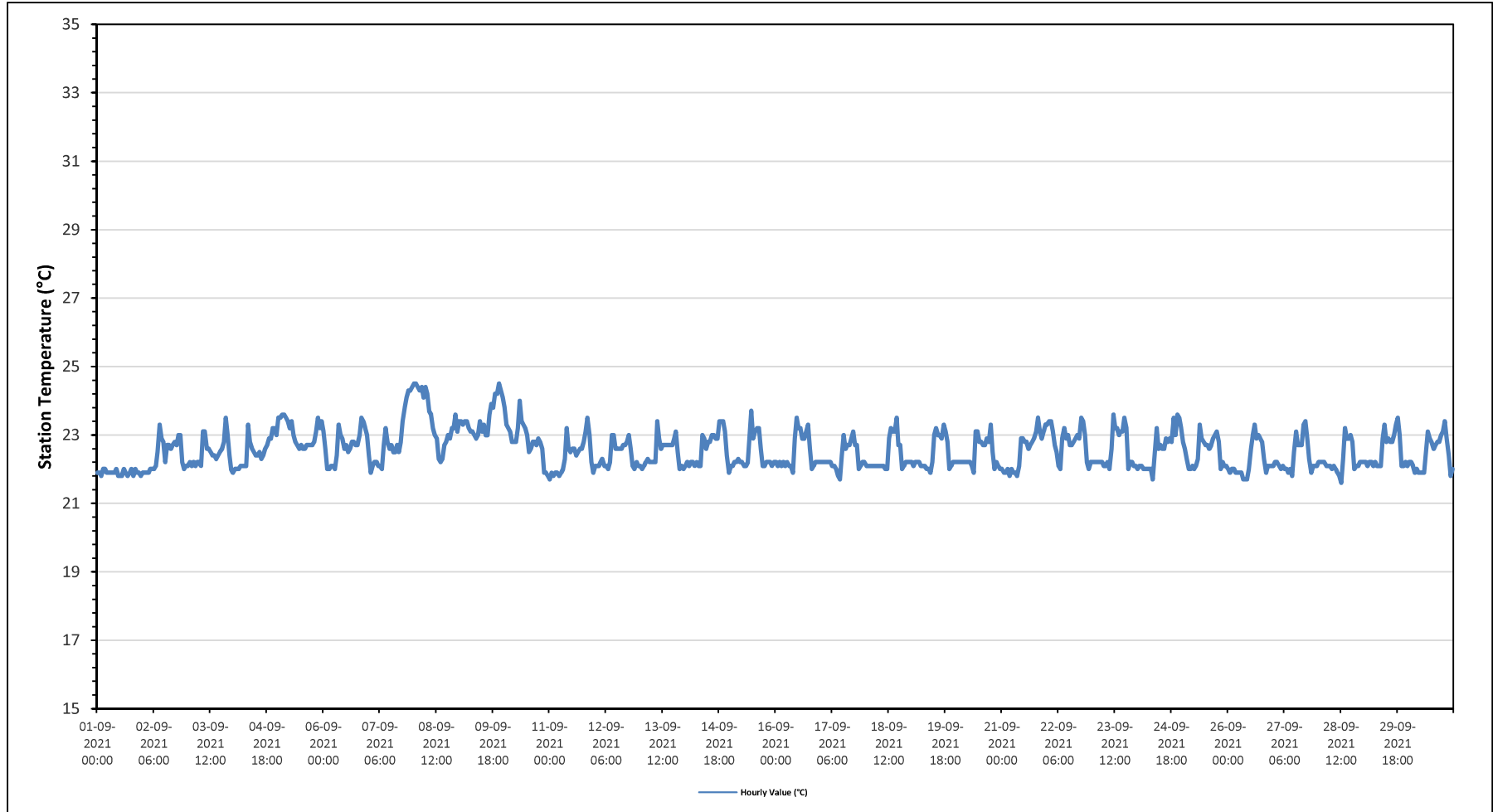
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

**Timeseries Chart of Hourly Average for AT - 986c Station**





**Timeseries Chart of Hourly Average for ST - 986c Station**







**PEACE RIVER AREA MONITORING PROGRAM**

**986c Station - September 2021**

**Summary of Hourly Averages**

**PRECIPITATION in mm**

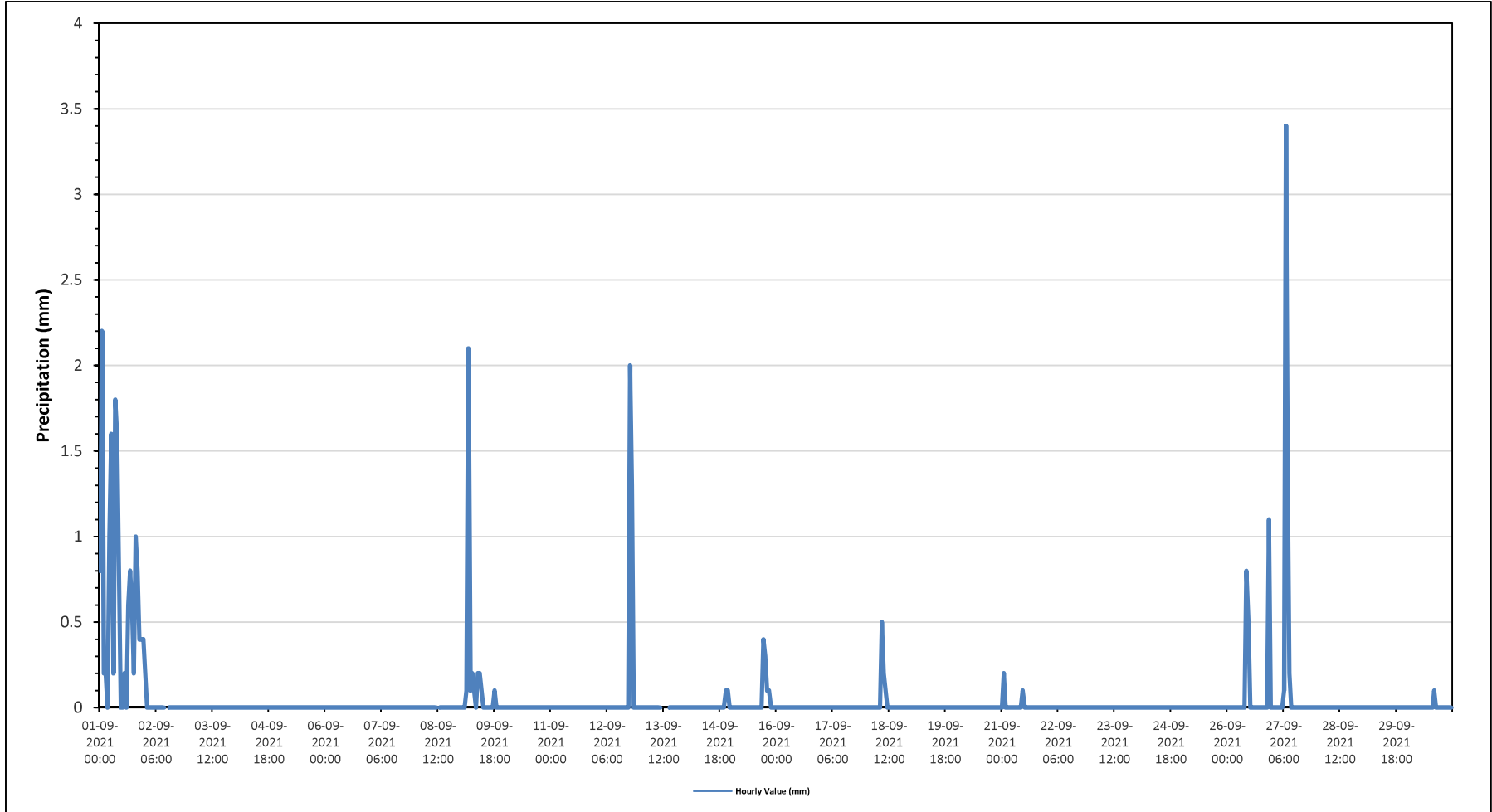
Maximum Hourly Value:	3.4 mm on September 27 at hour 7	Hours in Service:	720
Maximum Daily Value:	15.8 mm on September 1	Hours of Data:	713
Minimum Hourly Value:	0.0 mm on September 1 at hour 4	Hours of Missing Data:	6
Minimum Daily Value:	0.0 mm on September 3	Hours of Calibration:	1
Monthly Total:	32.2 mm	Operational Uptime:	99.2

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	0.8	2.2	0.2	0.2	0	1	1.6	0.2	1.8	1.6	0.8	0	0	0.2	0	0.6	0.8	0.6	0.2	1	0.8	0.4	0.4	0.4	0.0	2.2	15.8	
Sep 2	0.2	0	0	0	0	0	0	0	0	0	0	NRM	NRM	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0.2	
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	
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	
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	
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	
Sep 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	
Sep 8	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 9	0	0	0	0.1	2.1	0.1	0.2	0.1	0	0.2	0.2	0.1	0	0	0	0	0	0	0.1	0	0	0	0	0	0.0	2.1	3.2	
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	
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	
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	2.0	3.3	
Sep 13	0	0	0	0	0	0	0	0	0	0	0	X	X	X	X	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	0.1	0.1	0.0	0.0	0.1	0.2
Sep 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.3	0.1	0.1	0	0	0.0	0.4	0.9	
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	
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	0.0	
Sep 18	0	0	0	0	0	0	0	0	0.5	0.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.5	0.8	
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	
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	0.2	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	0.2	0.3	
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	0.8	0.5	0	0	0	0	0	0	0	0	0	0	0	1.1	0.0	1.1	2.4	
Sep 27	0	0	0	0	0	0	0.1	3.4	1.3	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	3.4	5.0	
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	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	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0.0	0.1	0.1	
Diurnal Maximum	0.8	2.2	0.2	0.2	2.1	1.0	1.6	3.4	1.8	1.6	0.8	0.5	0.0	0.2	0.1	0.6	0.8	0.6	2.0	1.3	0.8	0.4	1.1	0.4				
Diurnal Average	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0				

<b>C</b> Monthly Calibration	<b>S</b> Daily Zero-Span Check	<b>Q</b> Quality Assurance
<b>K</b> Collection Error	<b>N</b> No Data (Machine Not in Service)	<b>Y</b> Routine Maintenance
<b>X</b> InValid Data (Equipment Malfunction /Recovery)	<b>NRM</b> UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	<b>P</b> 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 2021**

**Summary of Hourly Averages**

**VECTOR WIND SPEED (VWS) in km/hr**

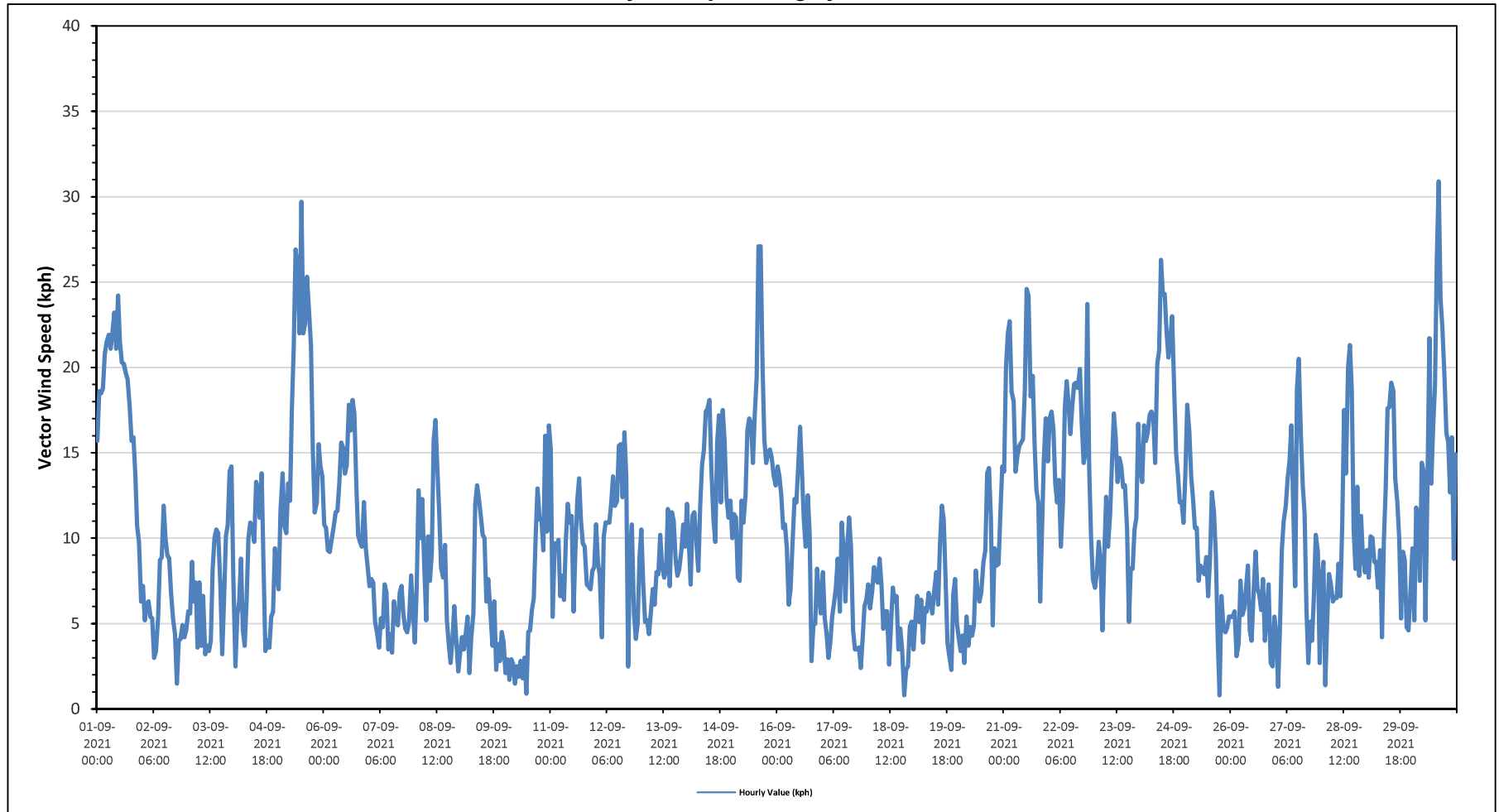
Maximum Hourly Value:	30.9 kph	on September 30 at hour 14	Hours in Service:	720
Maximum Daily Value:	18.1 kph	on September 1	Hours of Data:	720
Minimum Hourly Value:	0.8 kph	on September 18 at hour 19	Hours of Missing Data:	0
Minimum Daily Value:	2.7 kph	on September 26	Hours of Calibration:	0
Monthly Average:	5.4 kph		Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	15.7	18.6	18.5	18.8	20.8	21.5	21.9	21.1	22.1	23.2	21.1	24.2	21.5	20.3	20.2	19.7	19.3	17.7	15.7	15.9	13.8	10.7	9.8	6.3	6.3	24.2	18.1	
Sep 2	7.2	5.2	6.1	6.3	5.4	5.3	3.0	3.4	5.3	8.7	8.9	11.9	10.0	9.0	8.8	6.8	5.2	4.4	1.5	4.0	4.1	4.9	4.2	4.6	1.5	11.9	4.1	
Sep 3	5.7	5.6	8.6	6.3	7.4	3.6	7.4	3.7	6.6	3.2	3.7	3.4	4.0	8.2	10.0	10.5	10.3	7.3	3.2	6.4	10.1	10.8	13.9	14.2	3.2	14.2	5.9	
Sep 4	7.7	2.5	5.5	6.3	8.8	4.6	3.7	6.3	10.0	10.9	10.6	9.8	13.3	12.9	11.2	13.8	8.4	3.4	4.0	3.6	5.4	5.7	9.4	7.9	2.5	13.8	7.1	
Sep 5	7.0	11.6	13.8	10.7	10.3	13.2	12.2	17.6	21.2	26.9	26.0	22.0	29.7	22.0	22.6	25.3	23.5	21.3	15.2	11.5	12.1	15.5	14.2	13.6	7.0	29.7	16.4	
Sep 6	10.8	10.6	9.3	9.2	10.0	10.7	11.5	11.6	13.2	15.6	15.3	13.8	14.3	17.8	16.3	18.1	17.3	13.2	10.2	9.8	9.5	12.1	9.4	8.3	8.3	18.1	12.0	
Sep 7	7.2	7.6	7.4	5.1	4.5	3.6	5.3	4.8	7.3	6.8	3.5	4.4	3.3	6.3	5.1	4.9	6.8	7.2	5.5	4.7	4.5	5.1	7.8	5.7	3.3	7.8	3.8	
Sep 8	3.9	7.1	12.8	10.0	12.3	8.6	5.2	10.1	7.5	9.1	15.7	16.9	14.1	11.5	8.3	7.7	9.6	5.2	3.8	2.7	4.1	6.0	4.1	2.2	2.2	16.9	4.8	
Sep 9	3.3	4.2	3.5	4.4	5.4	2.1	4.2	5.6	12.0	13.1	12.3	11.3	10.2	10.0	6.3	7.6	5.7	3.7	6.3	2.3	3.8	2.8	4.5	3.9	2.1	13.1	4.3	
Sep 10	2.1	2.9	1.7	2.9	2.6	1.5	2.5	1.9	2.8	1.8	3.0	0.9	4.5	4.6	5.8	6.5	10.1	12.9	11.1	11.1	9.3	16.0	10.4	16.6	0.9	16.6	3.5	
Sep 11	15.2	5.4	9.7	9.5	9.9	6.6	7.8	6.4	9.9	12.0	10.9	11.3	5.7	9.3	12.2	13.5	11.0	9.7	9.5	7.3	7.2	7.0	8.1	8.3	5.4	15.2	5.5	
Sep 12	10.8	8.6	7.8	4.2	10.1	10.9	10.9	10.9	12.0	13.6	11.9	12.2	15.4	15.5	12.4	16.2	13.6	2.5	9.2	10.8	5.6	4.1	5.0	8.9	2.5	16.2	7.6	
Sep 13	10.5	7.3	5.1	5.2	4.4	5.7	7.0	6.1	8.0	7.9	10.2	8.4	7.7	8.1	11.7	7.2	11.5	11.0	8.8	7.8	8.2	9.3	10.8	9.5	4.4	11.7	7.5	
Sep 14	12.0	9.8	7.3	11.3	11.5	9.9	8.1	11.9	14.3	15.2	17.4	17.6	18.1	14.1	11.1	9.8	15.6	17.2	12.1	17.5	15.7	12.4	11.2	12.2	7.3	18.1	11.6	
Sep 15	10.0	11.4	11.2	7.7	7.5	12.2	10.9	12.5	16.3	17.0	16.7	14.4	17.3	19.4	27.1	27.1	20.3	15.8	14.4	15.0	15.2	14.7	13.7	13.1	7.5	27.1	13.4	
Sep 16	14.2	13.6	12.5	10.6	10.8	9.4	6.1	7.0	9.9	12.3	12.1	14.3	16.5	13.9	11.1	9.5	12.5	10.3	2.8	4.9	5.0	8.2	6.7	5.6	2.8	16.5	7.3	
Sep 17	8.0	5.3	4.4	3.0	3.9	5.4	6.2	7.1	8.8	5.7	10.9	9.4	6.3	9.5	11.2	9.5	4.6	3.5	3.5	3.6	2.4	4.1	6.0	6.4	2.4	11.2	4.8	
Sep 18	7.3	5.9	6.9	8.3	7.6	7.4	8.8	7.3	4.7	5.7	5.7	2.6	4.9	7.1	6.3	6.6	3.5	4.7	3.5	0.8	2.3	2.5	4.8	5.1	0.8	8.8	3.2	
Sep 19	3.5	5.2	6.6	5.1	6.4	3.9	5.9	5.7	6.8	6.3	5.6	6.9	8.0	6.1	9.7	11.9	11.1	7.6	3.9	3.1	2.3	6.7	7.6	5.0	2.3	11.9	4.8	
Sep 20	4.1	3.4	4.3	2.7	5.4	3.7	4.8	4.3	4.9	8.1	6.9	6.3	6.9	8.6	9.3	13.8	14.1	11.2	4.9	9.4	8.4	8.5	11.5	14.2	2.7	14.2	6.6	
Sep 21	13.9	20.0	22.0	22.7	18.6	18.0	13.9	14.8	15.4	15.6	15.8	18.6	24.6	24.2	18.3	19.5	15.5	12.8	12.1	6.3	10.5	14.7	17.0	14.5	6.3	24.6	13.1	
Sep 22	17.0	17.4	16.4	13.2	12.1	13.4	9.5	12.1	17.6	19.2	17.9	16.1	17.7	19.0	19.1	18.8	19.9	16.7	14.4	15.0	23.7	14.1	10.1	7.6	7.6	23.7	13.9	
Sep 23	7.1	8.0	9.8	8.6	4.6	9.0	12.4	9.5	11.4	14.4	17.3	15.9	13.3	14.7	14.2	13.0	13.1	10.5	5.1	8.2	8.2	10.5	11.2	16.7	4.6	17.3	8.2	
Sep 24	14.2	13.3	16.6	15.7	16.2	17.2	17.4	17.0	14.4	20.2	21.0	26.3	24.3	24.3	22.1	20.6	21.6	23.0	18.6	15.0	13.7	12.1	12.1	10.9	10.9	26.3	15.6	
Sep 25	13.8	17.8	16.2	13.6	12.3	10.6	10.6	7.5	8.4	8.2	7.9	8.9	6.6	8.8	12.7	11.5	9.0	4.1	0.8	6.6	4.7	4.5	4.8	5.4	0.8	17.8	7.3	
Sep 26	5.4	5.4	5.7	3.1	3.8	7.5	5.5	5.9	7.1	8.4	4.6	4.0	7.0	9.2	7.0	6.7	5.8	7.6	4.0	5.5	7.3	2.7	2.5	5.4	2.5	9.2	2.7	
Sep 27	4.4	1.3	4.8	9.3	11.0	11.9	13.5	14.5	16.6	11.8	7.2	18.7	20.5	16.0	13.1	11.4	5.8	2.7	5.1	4.0	6.6	10.2	9.2	2.7	1.3	20.5	5.0	
Sep 28	7.6	8.6	1.4	5.1	7.9	7.3	6.3	6.5	6.5	8.5	6.6	10.8	17.5	13.8	20.0	21.3	18.7	10.5	8.2	13.0	7.8	11.3	8.9	8.0	1.4	21.3	8.6	
Sep 29	9.3	7.7	10.1	10.0	8.6	8.6	7.1	9.3	4.2	9.8	12.9	17.6	17.7	19.1	18.6	13.5	12.1	10.0	5.3	9.2	8.7	4.8	4.6	6.7	4.2	19.1	8.2	
Sep 30	9.4	5.2	11.8	11.4	7.5	14.4	13.9	5.2	12.4	21.7	13.2	16.5	18.9	26.4	30.9	24.0	22.3	19.4	16.2	15.6	12.7	15.9	8.8	14.9	5.2	30.9	11.8	
Diurnal Maximum	17	20	22	23	21	22	22	21	22	27	26	30	26	31	27	24	23	19	18	24	16	17	17					
Diurnal Average	8.9	8.6	9.3	8.7	8.9	8.9	8.8	8.9	10.6	12.0	11.8	12.5	13.3	13.7	13.8	13.5	12.6	10.2	8.0	8.4	8.4	8.9	8.7	8.8				

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

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

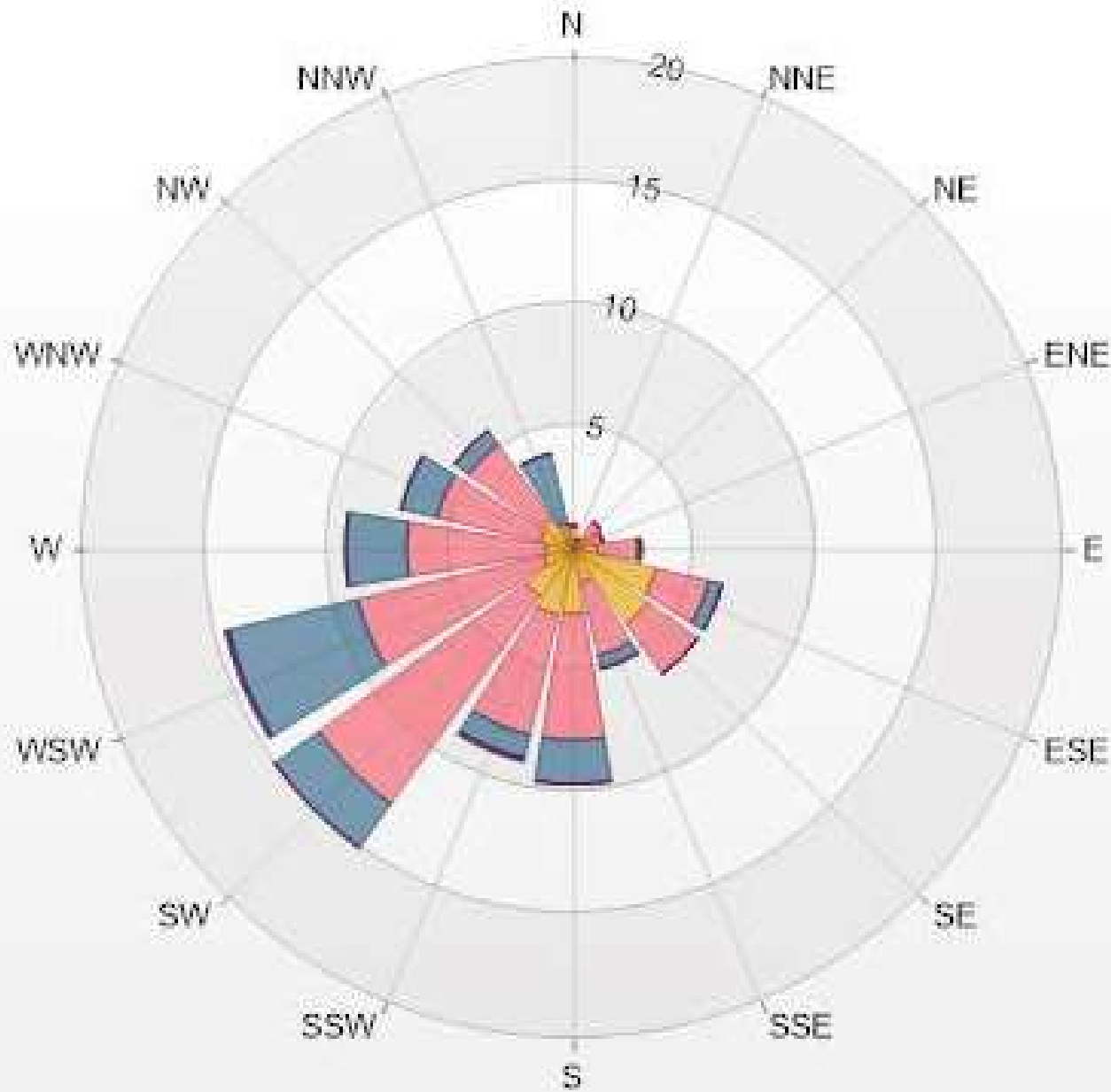
*Timeseries Chart of Hourly Average for VWS - 986c Station*



Wind: PRAMP 986c Monitor: WDS [KPH] Monthly: 09-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.

Calm: 1.11% 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	0	0	0	0	0.97
NNE	0.28	0.14	0	0	0	0.42
NE	0.56	0.83	0	0	0	1.39
ENE	0	1.25	0	0	0	1.25
E	0.97	1.67	0.14	0	0	2.78
ESE	3.47	2.22	0.56	0	0	6.25
SE	3.75	2.5	0	0	0	6.25
SSE	1.39	3.06	0.56	0	0	5.01
S	2.64	5.14	1.81	0	0	9.59
SSW	2.78	5	0.97	0.14	0	8.89
SW	2.36	10.42	2.22	0	0	15
WSW	1.25	7.78	5.42	0.14	0	14.59
W	1.11	5.69	2.5	0	0	9.3
WNW	1.39	4.31	1.53	0	0	7.23
NW	1.53	3.75	0.69	0	0	5.97
NNW	0.42	0.69	2.92	0	0	4.03
Summary	24.87	54.45	19.32	0.28	0	98.92



% Icon Classes (KPH)    25  1.8-6.0    54  6.0-15.0    19  15.0-29.0    0  29.0-39.0    0  >39.0



**PEACE RIVER AREA MONITORING PROGRAM**

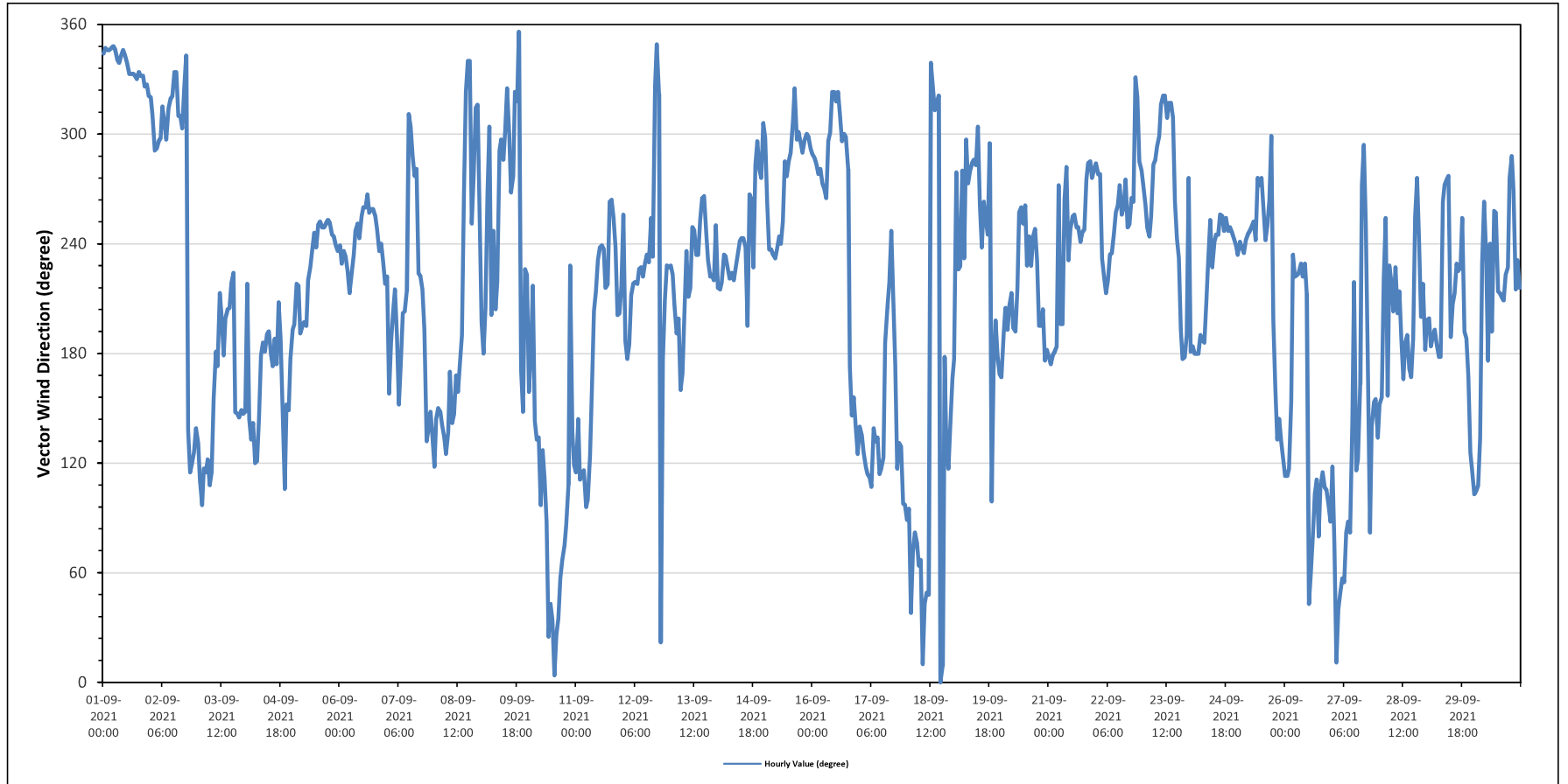
**986c Station - September 2021**

**Summary of Hourly Averages**

**WIND DIRECTION (VWD) in sector**

Monthly Average:		237 (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	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	NW	339	NNW	
Sep 2	NW	NW	WNW	WNW	WNW	WNW	NW	NW	WNW	NW	NW	NNW	NNW	NW	NW	WNW	NW	NNW	SE	ESE	ESE	SE	SE	SE	315	NW	
Sep 3	SE	ESE	E	ESE	ESE	ESE	ESE	ESE	SSE	S	S	SSW	SSW	S	SSW	SSW	SSW	SW	SW	SE	SE	SE	SSE	SE	157	SSE	
Sep 4	SE	SW	SE	SE	SE	ESE	ESE	SE	S	S	S	S	S	S	S	S	S	SSW	S	SSE	ESE	SSE	SSE	S	168	SSE	
Sep 5	S	SSW	SW	SW	S	SSW	SSW	SSW	SW	SW	SW	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	233	SW	
Sep 6	WSW	SW	SW	SW	SW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	245	WSW	
Sep 7	SW	SSE	S	SSW	SSW	S	SSE	S	SSW	SSW	SSW	NW	WNW	WNW	W	W	SW	SW	SSW	S	SE	SE	SE	SE	201	SSW	
Sep 8	ESE	SE	SSE	SE	SE	SE	SE	SE	SSE	SE	SE	SSE	SSE	S	S	W	NW	NNW	NNW	WSW	W	NW	NW	WSW	162	SSE	
Sep 9	SSW	S	SSW	W	WNW	SSW	WSW	SSW	SW	WNW	WNW	WNW	NW	WNW	W	W	NW	NW	N	S	SE	SW	SW	SW	271	W	
Sep 10	SSE	S	SW	SE	SE	SE	E	SE	ESE	E	NNE	NE	NE	N	NNE	NE	ENE	ENE	ENE	E	ESE	SW	SE	ESE	95	E	
Sep 11	ESE	SE	ESE	ESE	ESE	E	E	ESE	SSE	SSW	SSW	SW	SW	WSW	SW	SW	SW	W	W	WSW	SW	SSW	SSW	SW	195	SSW	
Sep 12	WSW	S	S	S	SSW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	SW	WSW	SW	NW	NNW	NW	NNE	S	SSW	SW	SW	232	SW
Sep 13	SW	SW	SSW	S	SSW	SSE	SSE	SSW	SW	SSW	SW	WSW	WSW	SW	SW	WSW	W	W	WSW	SW	SW	SW	SW	WSW	229	SW	
Sep 14	SW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	SW	SSW	W	W	SW	W	WNW	W	W	NW	245	WSW	
Sep 15	WNW	W	SW	SW	SW	SW	WSW	WSW	WSW	WNW	W	WNW	WNW	NW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	282	W	
Sep 16	WNW	WNW	WNW	W	W	W	W	WNW	WNW	NW	NW	NW	NW	NW	WNW	WNW	WNW	W	S	SE	SSE	SE	SE	SE	293	WNW	
Sep 17	SE	SE	SE	ESE	ESE	ESE	ESE	SE	SE	SE	ESE	ESE	ESE	S	SSW	SW	WSW	SSW	S	ESE	SE	SE	E	E	141	SE	
Sep 18	E	E	NE	ENE	E	ENE	ENE	ENE	N	NE	NE	NE	NNW	NNW	NW	NW	NW	N	N	S	SE	ESE	SE	SSE	49	NE	
Sep 19	S	W	SW	SW	W	SW	WNW	W	W	WNW	WNW	W	WNW	W	SW	W	WSW	WSW	WNW	E	S	SSW	S	SSE	253	WSW	
Sep 20	SSE	S	SSW	S	SSW	SSW	SSW	S	SW	WSW	WSW	WSW	W	SW	WSW	SW	WSW	WSW	SSW	SSW	SSW	SSW	S	S	218	SW	
Sep 21	S	S	S	S	S	W	SSW	SSW	W	W	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WNW	WNW	W	W	237	SW	
Sep 22	WNW	W	W	SW	SW	SSW	SW	SW	SW	WSW	WSW	W	W	WSW	WSW	W	WSW	WSW	W	W	NNW	NW	WNW	W	262	W	
Sep 23	W	W	WSW	WSW	WSW	W	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	W	WSW	SW	S	S	S	S	W	280	W	
Sep 24	S	S	S	S	S	S	S	S	S	SSW	SW	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	226	SW	
Sep 25	SW	WSW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	WSW	WSW	WSW	W	WNW	SSW	SSE	SE	SE	SE	ESE	241	WSW	
Sep 26	ESE	ESE	ESE	SSE	SW	SW	SW	SW	SW	SW	SSW	NE	ENE	E	ESE	ESE	E	ESE	ESE	ESE	ESE	E	E	E	130	SE	
Sep 27	ESE	ENE	NNE	NE	NE	ENE	NE	E	E	E	SE	SW	ESE	ESE	SSE	W	WNW	WSW	S	E	SE	SSE	SSE	SE	110	ESE	
Sep 28	SSE	SSE	SW	WSW	SSE	SW	SW	SSW	SW	SSW	SSW	S	SSE	S	S	S	SSE	S	WSW	W	WSW	SSW	SW	S	195	SSW	
Sep 29	SSW	SSW	S	S	S	S	S	S	W	W	W	W	S	S	SSW	SSW	SW	SW	WSW	S	S	SSE	SE	ESE	210	SSW	
Sep 30	ESE	ESE	ESE	SE	SW	W	SW	S	WSW	S	WSW	WSW	SSW	SSW	SSW	SSW	SW	SW	W	WNW	W	SSW	SW	SW	223	SW	
<b>C</b>	Monthly Calibration						<b>S</b>	Daily Zero-Span Check						<b>Q</b>	Quality Assurance												
<b>K</b>	Collection Error						<b>N</b>	No Data (Machine Not in Service)						<b>Y</b>	Routine Maintenance						<b>P</b>	Power Failure					
<b>X</b>	Invalid Data (Machine Malfunction /Recovery)						<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)																			
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.																											
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.																											

**Timeseries Chart of Hourly Average for VWD - 986c Station**







**PEACE RIVER AREA MONITORING PROGRAM**

986c Station - September 2021

Summary of Hourly Averages

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

WIND SPEED																											
Maximum Hourly Value:	30.9	kph	on September 30 at hour 14													Hours in Service:	720										
Maximum Daily Value:	18.1	kph	on September 1													Hours of Data:	720										
Minimum Hourly Value:	0.8	kph	on September 18 at hour 19													Hours of Missing Data:	0										
Minimum Daily Value:	2.7	kph	on September 26													Hours of Calibration:	0										
Monthly Average:	5.4	kph														Operational Uptime:	100										
WIND DIRECTION																											
Monthly Average:	237 (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	15.7	18.6	18.5	18.8	20.8	21.5	21.9	21.1	22.1	23.2	21.1	24.2	21.5	20.3	20.2	19.7	19.3	17.7	15.7	15.9	13.8	10.7	9.8	6.3	6.3	24.2	18.1
Sep 2	7.2	5.2	6.1	6.3	5.4	5.3	3.0	3.4	5.3	8.7	8.9	11.9	10.0	9.0	8.8	6.8	5.2	4.4	1.5	4.0	4.1	4.9	4.2	4.6	1.5	11.9	4.1
Sep 3	5.7	5.6	8.6	6.3	7.4	3.6	7.4	3.7	6.6	3.2	3.7	3.4	4.0	8.2	10.0	10.5	10.3	7.3	3.2	6.4	10.1	10.8	13.9	14.2	3.2	14.2	5.9
Sep 4	7.7	2.5	5.5	6.3	8.8	4.6	3.7	6.3	10.0	10.9	10.6	9.8	13.3	12.9	11.2	13.8	8.4	3.4	4.0	3.6	5.4	5.7	9.4	7.9	2.5	13.8	7.1
Sep 5	7.0	11.6	13.8	10.7	10.3	13.2	12.2	17.6	21.2	26.9	26.0	22.0	29.7	22.0	22.6	25.3	23.5	21.3	15.2	11.5	12.1	15.5	14.2	13.6	7.0	29.7	16.4
Sep 6	10.8	10.6	9.3	9.2	10.0	10.7	11.5	11.6	13.2	15.6	15.3	13.8	14.3	17.8	16.3	18.1	17.3	13.2	10.2	9.8	9.5	12.1	9.4	8.3	8.3	18.1	12.0
Sep 7	7.2	7.6	7.4	5.1	4.5	3.6	5.3	4.8	7.3	6.8	3.5	4.4	3.3	6.3	5.1	4.9	6.8	7.2	5.5	4.7	4.5	5.1	7.8	5.7	3.3	7.8	3.8
Sep 8	3.9	7.1	12.8	10.0	12.3	8.6	5.2	10.1	7.5	9.1	15.7	16.9	14.1	11.5	8.3	7.7	9.6	5.2	3.8	2.7	4.1	6.0	4.1	2.2	2.2	16.9	4.8
Sep 9	3.3	4.2	3.5	4.4	5.4	2.1	4.2	5.6	12.0	13.1	12.3	11.3	10.2	10.0	6.3	7.6	5.7	3.7	6.3	2.3	3.8	2.8	4.5	3.9	2.1	13.1	4.3
Sep 10	2.1	2.9	1.7	2.9	2.6	1.5	2.5	1.9	2.8	1.8	3.0	0.9	4.5	4.6	5.8	6.5	10.1	12.9	11.1	11.1	9.3	16.0	10.4	16.6	0.9	16.6	3.5
Sep 11	15.2	5.4	9.7	9.5	9.9	6.6	7.8	6.4	9.9	12.0	10.9	11.3	5.7	9.3	12.2	13.5	11.0	9.7	9.5	7.3	7.2	7.0	8.1	8.3	5.4	15.2	5.5
Sep 12	10.8	8.6	7.8	4.2	10.1	10.9	10.9	12.0	13.6	11.9	12.2	15.4	15.5	12.4	16.2	13.6	2.5	9.2	10.8	5.6	4.1	5.0	8.9	2.5	16.2	7.6	
Sep 13	10.5	7.3	5.1	5.2	4.4	5.7	7.0	6.1	8.0	7.9	10.2	8.4	7.7	8.1	11.7	7.2	11.5	11.0	8.8	7.8	8.2	9.3	10.8	9.5	4.4	11.7	7.5
Sep 14	12.0	9.8	7.3	11.3	11.5	9.9	8.1	11.9	14.3	15.2	17.4	17.6	18.1	14.1	11.1	9.8	15.6	17.2	12.1	17.5	15.7	12.4	11.2	12.2	7.3	18.1	11.6
Sep 15	10.0	11.4	11.2	7.7	7.5	12.2	10.9	12.5	16.3	17.0	16.7	14.4	17.3	19.4	27.1	20.3	15.8	14.4	15.0	15.2	14.7	13.7	13.1	7.5	27.1	13.4	
Sep 16	14.2	13.6	12.5	10.6	10.8	9.4	6.1	7.0	9.9	12.3	12.1	14.3	16.5	13.9	11.1	9.5	12.5	10.3	2.8	4.9	5.0	8.2	6.7	5.6	2.8	16.5	7.3
Sep 17	8.0	5.3	4.4	3.0	3.9	5.4	6.2	7.1	8.8	5.7	10.9	9.4	6.3	9.5	11.2	9.5	4.6	3.5	3.5	3.6	2.4	4.1	6.0	6.4	2.4	11.2	4.8
Sep 18	7.3	5.9	6.9	8.3	7.6	7.4	8.8	7.3	4.7	5.7	5.7	2.6	4.9	7.1	6.3	6.6	3.5	4.7	3.5	0.8	2.3	2.5	4.8	5.1	0.8	8.8	3.2
Sep 19	3.5	5.2	6.6	5.1	6.4	3.9	5.9	5.7	6.8	6.3	5.6	6.9	8.0	6.1	9.7	11.9	11.1	7.6	3.9	3.1	2.3	6.7	7.6	5.0	2.3	11.9	4.8
Sep 20	4.1	3.4	4.3	2.7	5.4	3.7	4.8	4.3	4.9	8.1	6.9	6.3	6.9	8.6	9.3	13.8	14.1	11.2	4.9	9.4	8.4	8.5	11.5	14.2	2.7	14.2	6.6



**PEACE RIVER AREA MONITORING PROGRAM**

986c Station - September 2021

Summary of Hourly Averages

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

WIND SPEED																															
Maximum Hourly Value:	30.9 kph on September 30 at hour 14																														
Maximum Daily Value:	18.1 kph on September 1																														
Minimum Hourly Value:	0.8 kph on September 18 at hour 19																														
Minimum Daily Value:	2.7 kph on September 26																														
Monthly Average:	5.4 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:	237 (SW) degree																														
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average					
Sep 21	13.9	20.0	22.0	22.7	18.6	18.0	13.9	14.8	15.4	15.6	15.8	18.6	24.6	24.2	18.3	19.5	15.5	12.8	12.1	6.3	10.5	14.7	17.0	14.5	6.3	24.6	13.1				
Sep 22	17.0	17.4	16.4	13.2	12.1	13.4	9.5	12.1	17.6	19.2	17.9	16.1	17.7	19.0	19.1	18.8	19.9	16.7	14.4	15.0	23.7	14.1	10.1	7.6	7.6	23.7	13.9				
Sep 23	7.1	8.0	9.8	8.6	4.6	9.0	12.4	9.5	11.4	14.4	17.3	15.9	13.3	14.7	14.2	13.0	13.1	10.5	5.1	8.2	8.2	10.5	11.2	16.7	4.6	17.3	8.2				
Sep 24	14.2	13.3	16.6	15.7	16.2	17.2	17.4	17.0	14.4	20.2	21.0	26.3	24.3	24.3	22.1	20.6	21.6	23.0	18.6	15.0	13.7	12.1	12.1	10.9	10.9	26.3	15.6				
Sep 25	13.8	17.8	16.2	13.6	12.3	10.6	10.6	7.5	8.4	8.2	7.9	8.9	6.6	8.8	12.7	11.5	9.0	4.1	0.8	6.6	4.7	4.5	4.8	5.4	0.8	17.8	7.3				
Sep 26	5.4	5.4	5.7	3.1	3.8	7.5	5.5	5.9	7.1	8.4	4.6	4.0	7.0	9.2	7.0	6.7	5.8	7.6	4.0	5.5	7.3	2.7	2.5	5.4	2.5	9.2	2.7				
Sep 27	4.4	1.3	4.8	9.3	11.0	11.9	13.5	14.5	16.6	11.8	7.2	18.7	20.5	16.0	13.1	11.4	5.8	2.7	5.1	4.0	6.6	10.2	9.2	2.7	1.3	20.5	5.0				
Sep 28	7.6	8.6	1.4	5.1	7.9	7.3	6.3	6.5	6.5	8.5	6.6	10.8	17.5	13.8	20.0	21.3	18.7	10.5	8.2	13.0	7.8	11.3	8.9	8.0	1.4	21.3	8.6				
Sep 29	9.3	7.7	10.1	10.0	8.6	8.6	7.1	9.3	4.2	9.8	12.9	17.6	17.7	19.1	18.6	13.5	12.1	10.0	5.3	9.2	8.7	4.8	4.6	6.7	4.2	19.1	8.2				
Sep 30	9.4	5.2	11.8	11.4	7.5	14.4	13.9	5.2	12.4	21.7	13.2	16.5	18.9	26.4	30.9	24.0	22.3	19.4	16.2	15.6	12.7	15.9	8.8	14.9	5.2	30.9	11.8				
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance														
K	Collection Error							N	No Data (Machine Not in Service)							Y	Routine Maintenance							P	Power Failure						
X	Invalid Data (Equipment Malfunction/Recovery)							NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)																						
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.																															
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.																															

842b STATION



**PEACE RIVER AREA MONITORING PROGRAM**

**842b Station - September 2021**

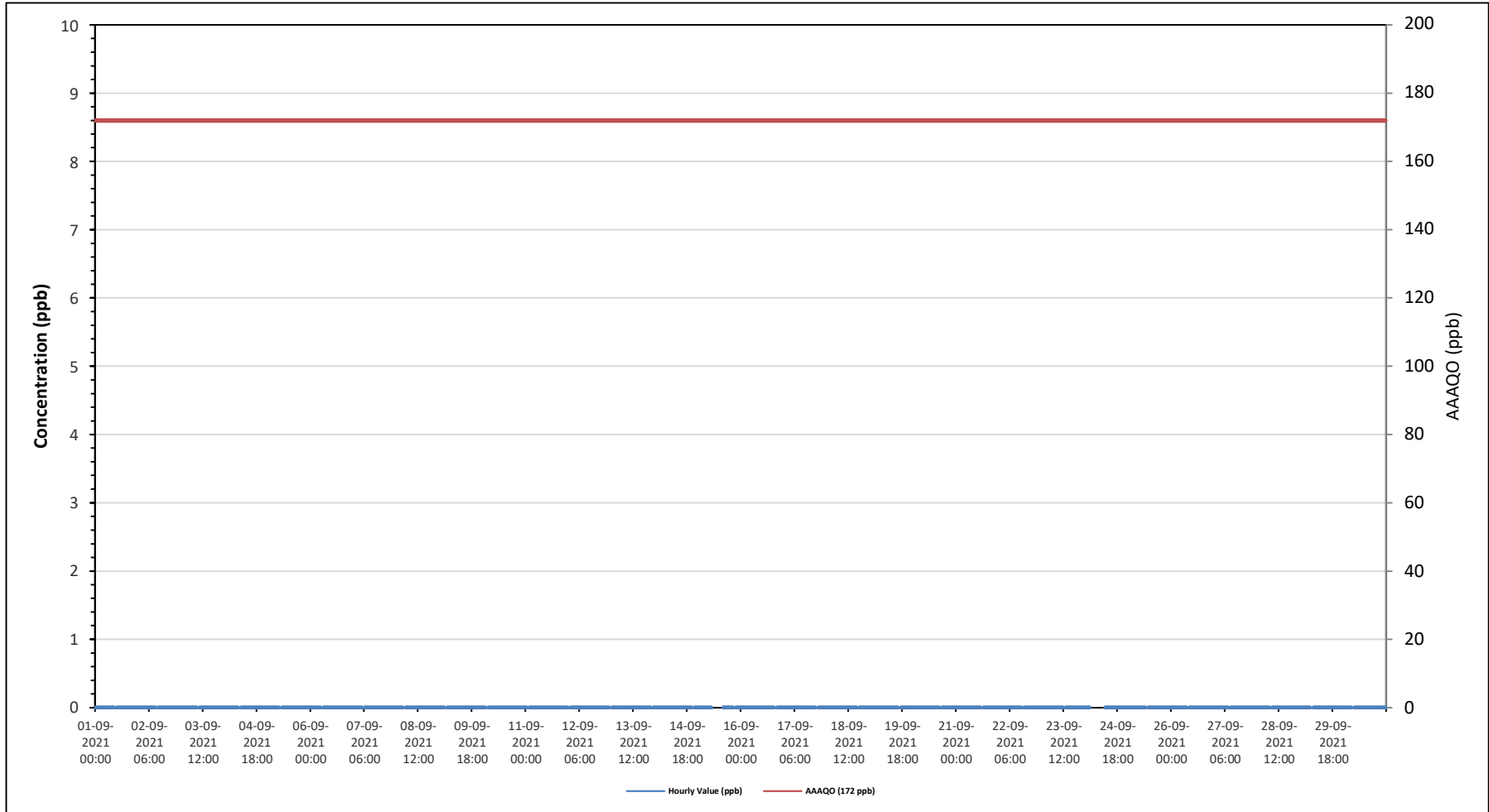
**Summary of Hourly Averages**

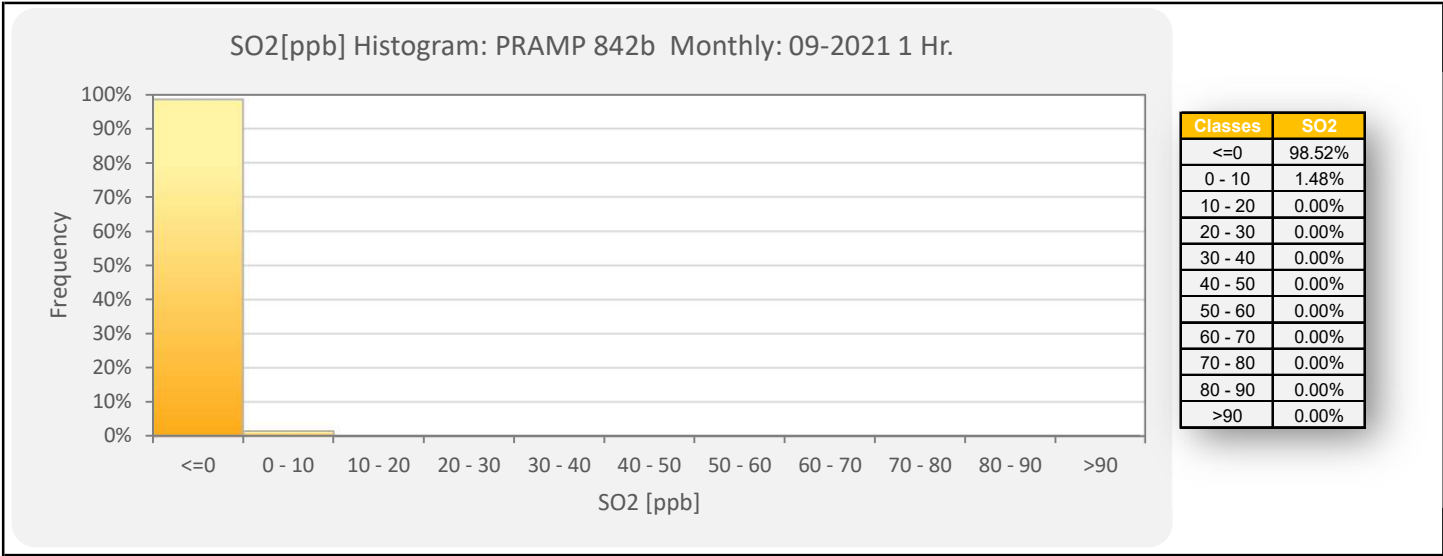
**SULPHUR DIOXIDE (SO<sub>2</sub>) in ppb**

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: 0 ppb on September 1 at hour 0						Hours in Service: 720						Maximum Daily Value: 0.0 ppb on September 1						Hours of Data: 676																	
Minimum Hourly Value: 0 ppb on September 1 at hour 0						Hours of Missing Data: 8						Minimum Daily Value: 0.0 ppb on September 1						Hours of Calibration: 36																	
Monthly Average: 0.0 ppb						Operational Uptime: 98.9																													
Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average								
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23											
Sep 1	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 2	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 3	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 4	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 5	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 6	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 7	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
Sep 8	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 9	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 10	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 11	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 12	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 13	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 14	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 15	0	0	0	0	0	0	0	0	C	C	C	C	C	C	0	0	0	0	0	0	0	S	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							
Sep 17	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 18	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 19	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 20	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							
Sep 21	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	S	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	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
Sep 24	0	0	0	X	X	X	X	X	X	X	X	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	S	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	S	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	S	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	S	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	S	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	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
Diurnal Maximum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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								P	Power Failure							
X	Invalid Data (Equipment Malfunction /Recovery)								NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)																									

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

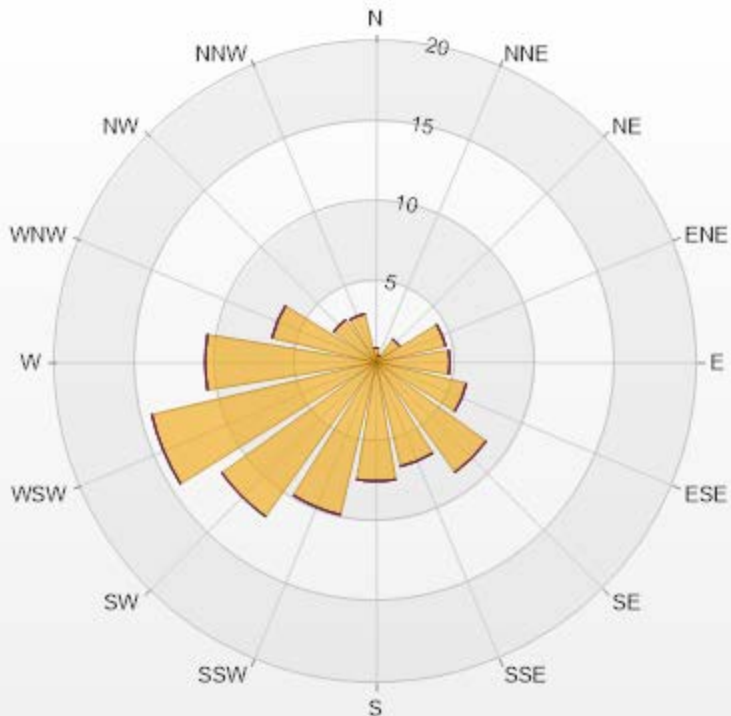
**Timeseries Chart of Hourly Average for SO2 - 842b Station**





Wind: PRAMP 842b Poll.: PRAMP 842b-SO2[ppb] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 93.89% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	0.89	0	0	0	0	0.89
NNE	0.44	0	0	0	0	0.44
NE	1.78	0	0	0	0	1.78
ENE	4.44	0	0	0	0	4.44
E	4.59	0	0	0	0	4.59
ESE	5.77	0	0	0	0	5.77
SE	8.43	0	0	0	0	8.43
SSE	6.66	0	0	0	0	6.66
S	7.4	0	0	0	0	7.4
SSW	9.76	0	0	0	0	9.76
SW	11.83	0	0	0	0	11.83
WSW	14.35	0	0	0	0	14.35
W	10.65	0	0	0	0	10.65
WNW	6.66	0	0	0	0	6.66
NW	3.25	0	0	0	0	3.25
NNW	3.11	0	0	0	0	3.11
Summary	100	0	0	0	0	100



PRAMP-202109

% 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 2021**

**Summary of Hourly Averages**

**TOTAL REDUCED SULPHUR (TRS) in ppb**

Maximum Hourly Value:	0.80 ppb	on September 19 at hour 3	Hours in Service:	720
Maximum Daily Value:	0.44 ppb	on September 19	Hours of Data:	676
Minimum Hourly Value:	0.04 ppb	on September 2 at hour 15	Hours of Missing Data:	8
Minimum Daily Value:	0.09 ppb	on September 2	Hours of Calibration:	36
Monthly Average:	0.22 ppb		Operational Uptime:	98.9

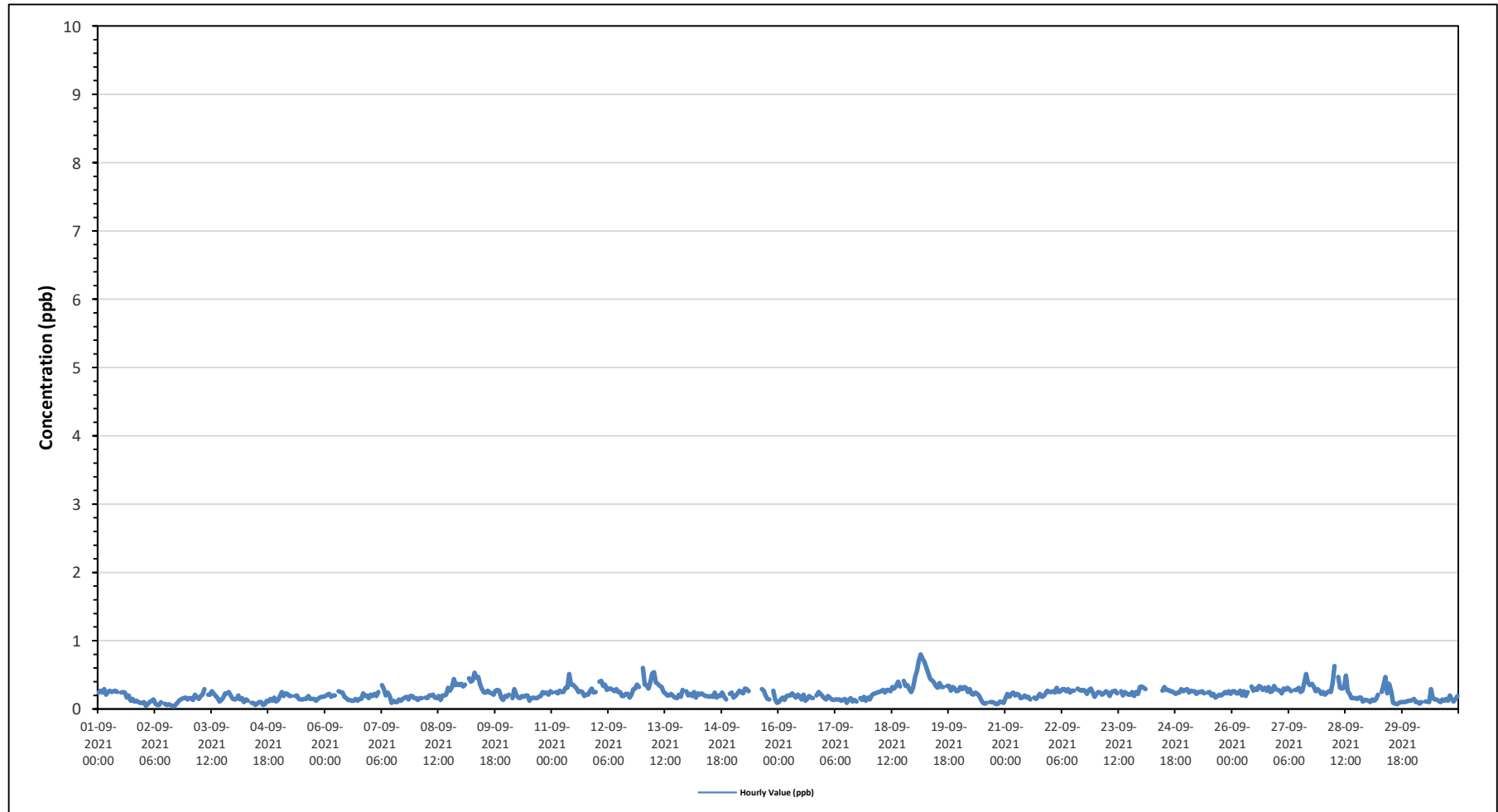
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	0.24	0.27	0.24	0.29	0.21	0.25	0.27	0.25	0.26	0.27	0.25	S	0.24	0.25	0.24	0.17	0.2	0.12	0.15	0.11	0.12	0.1	0.09	0.09	0.09	0.29	0.20	
Sep 2	0.1	0.05	0.07	0.1	0.12	0.14	0.08	0.06	0.06	0.1	S	0.08	0.06	0.07	0.06	0.04	0.04	0.07	0.1	0.13	0.15	0.16	0.17	0.14	0.04	0.17	0.09	
Sep 3	0.16	0.16	0.13	0.21	0.18	0.15	0.19	0.21	0.29	S	0.21	0.21	0.26	0.22	0.19	0.16	0.11	0.13	0.17	0.23	0.23	0.25	0.19	0.15	0.11	0.29	0.19	
Sep 4	0.14	0.15	0.2	0.14	0.16	0.1	0.14	0.12	S	0.09	0.09	0.06	0.08	0.1	0.1	0.06	0.07	0.12	0.11	0.15	0.12	0.17	0.11	0.13	0.06	0.20	0.12	
Sep 5	0.19	0.25	0.19	0.23	0.22	0.19	0.19	S	0.19	0.2	0.15	0.14	0.14	0.15	0.15	0.19	0.15	0.15	0.15	0.12	0.15	0.17	0.18	0.18	0.12	0.25	0.17	
Sep 6	0.19	0.21	0.22	0.18	0.2	0.2	S	0.26	0.25	0.24	0.18	0.16	0.13	0.13	0.12	0.12	0.15	0.12	0.15	0.15	0.23	0.19	0.2	0.16	0.12	0.26	0.18	
Sep 7	0.21	0.19	0.22	0.19	0.25	S	0.35	0.29	0.2	0.24	0.19	0.09	0.12	0.1	0.1	0.14	0.12	0.15	0.17	0.18	0.14	0.19	0.19	0.16	0.09	0.35	0.18	
Sep 8	0.16	0.13	0.16	0.16	S	0.17	0.16	0.2	0.2	0.21	0.17	0.16	0.19	0.13	0.2	0.2	0.21	0.31	0.27	0.32	0.44	0.35	0.37	0.35	0.13	0.44	0.23	
Sep 9	0.37	0.33	0.36	S	0.45	0.4	0.42	0.53	0.46	0.47	0.36	0.29	0.24	0.24	0.27	0.24	0.23	0.21	0.27	0.28	0.27	0.16	0.13	0.19	0.13	0.53	0.31	
Sep 10	0.18	0.21	S	0.16	0.29	0.21	0.17	0.16	0.19	0.18	0.2	0.2	0.12	0.16	0.17	0.16	0.16	0.18	0.19	0.25	0.23	0.24	0.21	0.26	0.12	0.29	0.19	
Sep 11	0.24	S	0.25	0.23	0.27	0.25	0.25	0.31	0.31	0.51	0.36	0.36	0.33	0.3	0.25	0.26	0.25	0.19	0.21	0.21	0.26	0.3	0.24	0.25	0.19	0.51	0.28	
Sep 12	S	0.4	0.41	0.34	0.36	0.28	0.3	0.3	0.28	0.26	0.29	0.25	0.25	0.19	0.19	0.22	0.22	0.17	0.21	0.29	0.3	0.36	0.32	S	0.17	0.41	0.28	
Sep 13	0.6	0.36	0.35	0.3	0.39	0.52	0.54	0.39	0.37	0.34	0.32	0.25	0.23	0.2	0.2	0.22	0.19	0.17	0.16	0.21	0.18	0.28	S	0.26	0.16	0.60	0.31	
Sep 14	0.2	0.22	0.19	0.25	0.17	0.23	0.21	0.23	0.21	0.19	0.19	0.18	0.19	0.18	0.24	0.17	0.2	0.19	0.24	0.18	0.14	S	0.22	0.24	0.14	0.25	0.20	
Sep 15	0.17	0.19	0.22	0.27	0.25	0.23	0.3	0.29	0.26	C	C	C	C	C	C	0.29	0.27	0.2	0.15	0.14	S	0.27	0.14	0.09	0.09	0.30	-	
Sep 16	0.1	0.14	0.17	0.13	0.19	0.2	0.2	0.23	0.2	0.17	0.21	0.19	0.14	0.21	0.12	0.15	0.19	0.17	0.16	S	0.2	0.25	0.22	0.19	0.10	0.25	0.18	
Sep 17	0.16	0.14	0.19	0.17	0.14	0.13	0.14	0.14	0.14	0.12	0.13	0.15	0.09	0.13	0.16	0.11	0.13	0.11	S	0.16	0.13	0.18	0.12	0.17	0.09	0.19	0.14	
Sep 18	0.14	0.2	0.22	0.23	0.24	0.25	0.26	0.28	0.24	0.28	0.28	0.26	0.32	0.3	0.34	0.4	0.33	S	0.41	0.34	0.35	0.29	0.25	0.31	0.14	0.41	0.28	
Sep 19	0.47	0.56	0.71	0.8	0.74	0.69	0.61	0.53	0.44	0.42	0.39	0.34	0.31	0.38	0.32	0.32	S	0.34	0.34	0.27	0.32	0.3	0.26	0.27	0.26	0.80	0.44	
Sep 20	0.32	0.29	0.32	0.31	0.25	0.29	0.22	0.21	0.24	0.22	0.19	0.13	0.09	0.08	0.09	S	0.1	0.1	0.09	0.07	0.08	0.11	0.1	0.09	0.07	0.32	0.17	
Sep 21	0.16	0.22	0.18	0.22	0.24	0.2	0.22	0.21	0.16	0.17	0.2	0.17	0.18	0.14	S	0.17	0.15	0.18	0.22	0.18	0.19	0.23	0.27	0.25	0.14	0.27	0.20	
Sep 22	0.25	0.26	0.24	0.31	0.25	0.26	0.29	0.29	0.26	0.29	0.24	0.27	0.27	S	0.3	0.28	0.27	0.28	0.27	0.22	0.28	0.3	0.24	0.18	0.18	0.31	0.27	
Sep 23	0.22	0.25	0.24	0.21	0.23	0.26	0.24	0.19	0.25	0.26	0.27	0.23	S	0.26	0.2	0.25	0.23	0.21	0.21	0.25	0.19	0.25	0.22	0.32	0.19	0.32	0.24	
Sep 24	0.33	0.31	0.29	X	X	X	X	X	X	X	X	X	0.27	0.32	0.28	0.28	0.26	0.26	0.24	0.22	0.24	0.24	0.29	0.26	0.28	0.22	0.33	-
Sep 25	0.29	0.24	0.27	0.26	0.26	0.22	0.25	0.25	0.26	0.23	S	0.24	0.25	0.2	0.22	0.17	0.19	0.21	0.2	0.22	0.25	0.23	0.26	0.22	0.17	0.29	0.23	
Sep 26	0.26	0.26	0.23	0.23	0.27	0.2	0.26	0.19	0.25	S	0.33	0.27	0.3	0.28	0.34	0.32	0.28	0.31	0.27	0.32	0.25	0.26	0.34	0.29	0.19	0.34	0.27	
Sep 27	0.28	0.27	0.23	0.3	0.28	0.31	0.29	0.26	S	0.28	0.28	0.31	0.25	0.27	0.39	0.51	0.39	0.35	0.37	0.32	0.26	0.29	0.27	0.22	0.22	0.51	0.30	
Sep 28	0.25	0.21	0.24	0.26	0.25	0.38	0.63	S	0.47	0.31	0.3	0.31	0.49	0.26	0.22	0.16	0.16	0.15	0.17	0.17	0.11	0.13	0.13	0.11	0.63	0.26		
Sep 29	0.12	0.1	0.14	0.12	0.15	0.21	S	0.25	0.35	0.47	0.23	0.37	0.26	0.09	0.08	0.07	0.09	0.1	0.1	0.1	0.11	0.12	0.12	0.13	0.07	0.47	0.17	
Sep 30	0.15	0.1	0.1	0.08	0.1	S	0.11	0.11	0.1	0.29	0.16	0.14	0.14	0.12	0.1	0.14	0.12	0.15	0.12	0.2	0.15	0.11	0.15	0.19	0.08	0.29	0.14	
Diurnal Maximum	0.60	0.56	0.71	0.80	0.74	0.69	0.63	0.53	0.47	0.51	0.39	0.37	0.49	0.38	0.39	0.51	0.39	0.35	0.41	0.34	0.44	0.36	0.37	0.35				
Diurnal Average	0.23	0.23	0.24	0.24	0.25	0.26	0.27	0.25	0.26	0.24	0.22	0.21	0.19	0.20	0.21	0.19	0.20	0.21	0.21	0.21	0.22	0.21	0.20					

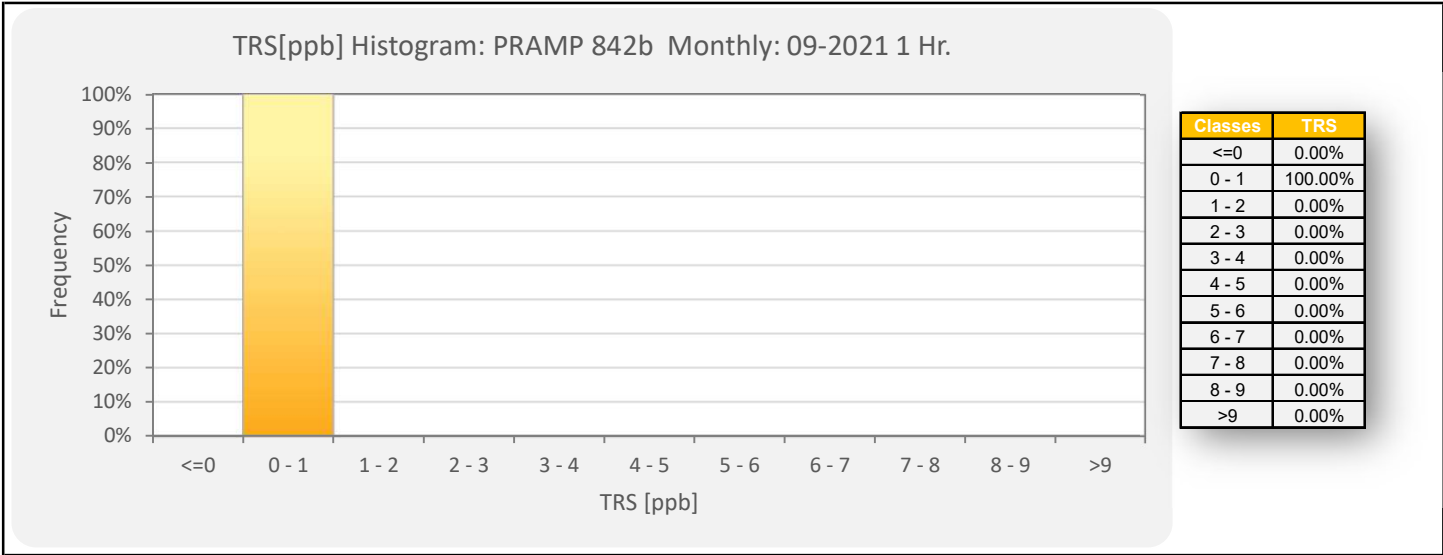
<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	Invalid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span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

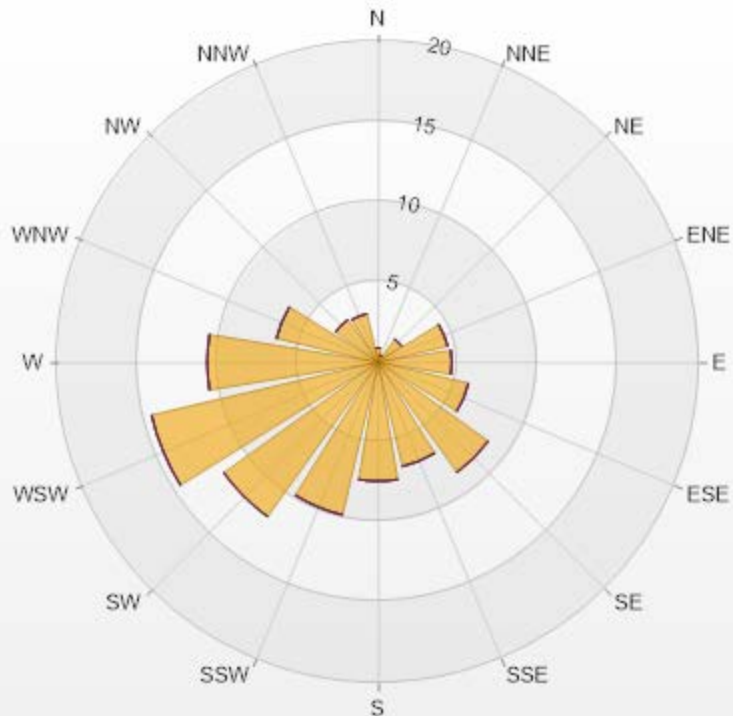
**Timeseries Chart of Hourly Average for TRS - 842b Station**





Wind: PRAMP 842b Poll.: PRAMP 842b-TRS[ppb] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 93.89% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	0.89	0	0	0	0	0.89
NNE	0.44	0	0	0	0	0.44
NE	1.78	0	0	0	0	1.78
ENE	4.44	0	0	0	0	4.44
E	4.59	0	0	0	0	4.59
ESE	5.77	0	0	0	0	5.77
SE	8.43	0	0	0	0	8.43
SSE	6.66	0	0	0	0	6.66
S	7.4	0	0	0	0	7.4
SSW	9.76	0	0	0	0	9.76
SW	11.83	0	0	0	0	11.83
WSW	14.5	0	0	0	0	14.5
W	10.65	0	0	0	0	10.65
WNW	6.51	0	0	0	0	6.51
NW	3.25	0	0	0	0	3.25
NNW	3.11	0	0	0	0	3.11
Summary	100	0	0	0	0	100



PRAMP-202109

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% Icon Classes (ppb)

100 0-2

0 2-5

0 5-10

0 10-50

0 >50.0



**PEACE RIVER AREA MONITORING PROGRAM**

**842b Station - September 2021**

**Summary of Hourly Averages**

**TOTAL HYDROCARBONS (THC) in ppm**

Maximum Hourly Value:	2.07 ppm	on September 18 at hour 3	Hours in Service:	720
Maximum Daily Value:	1.99 ppm	on September 18	Hours of Data:	665
Minimum Hourly Value:	1.79 ppm	on September 14 at hour 14	Hours of Missing Data:	21
Minimum Daily Value:	1.81 ppm	on September 14	Hours of Calibration:	34
Monthly Average:	1.87 ppm		Operational Uptime:	97.1

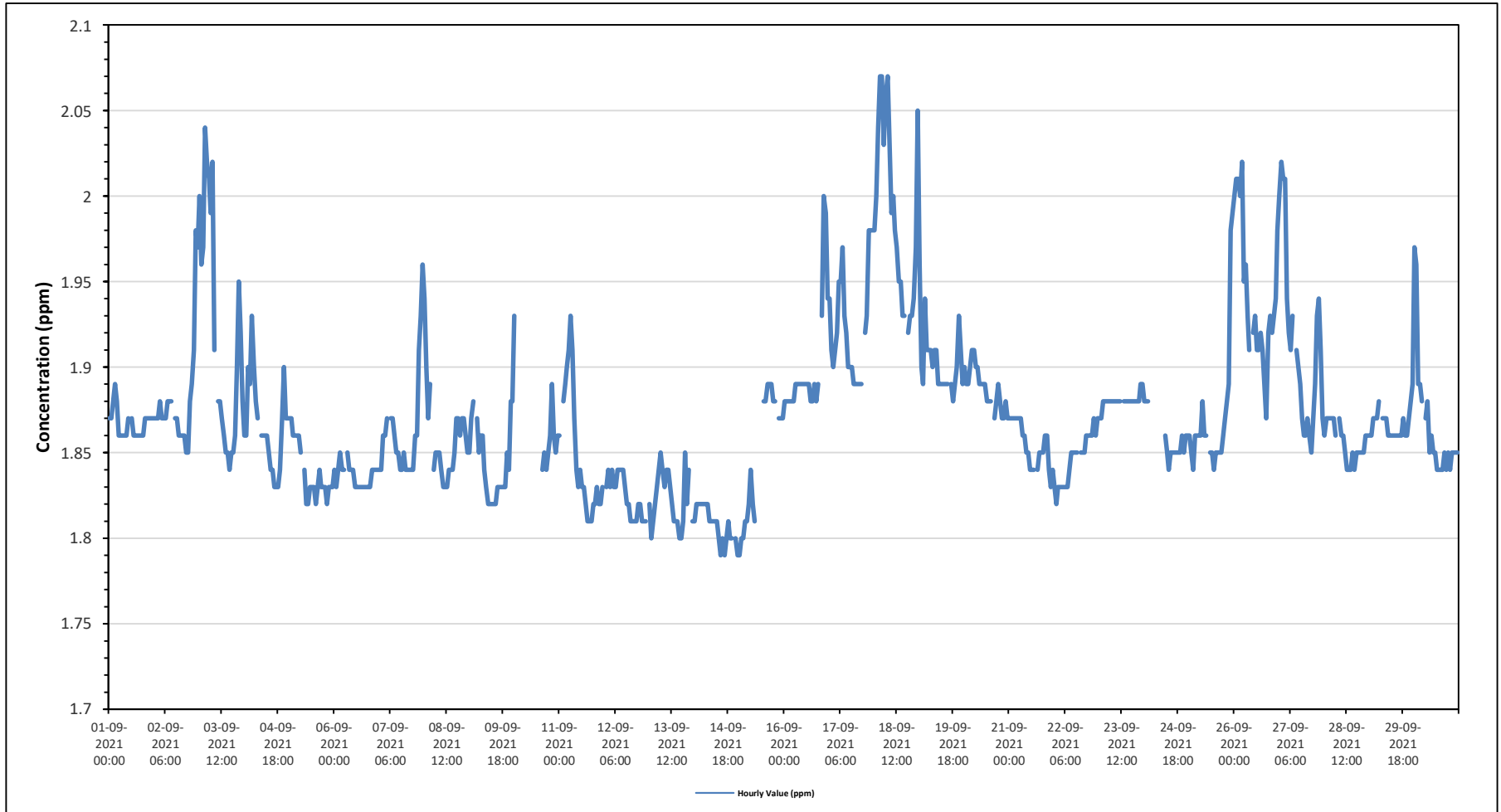
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	1.87	1.87	1.88	1.89	1.88	1.86	1.86	1.86	1.86	1.86	1.87	S	1.87	1.86	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.87	1.87	1.86	1.89	1.87		
Sep 2	1.87	1.87	1.87	1.88	1.87	1.87	1.87	1.88	1.88	1.88	S	1.87	1.87	1.86	1.86	1.86	1.85	1.85	1.88	1.89	1.91	1.98	1.97	1.85	1.98	1.88		
Sep 3	2.00	1.96	1.97	2.04	2.02	2.01	1.99	2.02	1.91	S	1.88	1.88	1.87	1.86	1.85	1.85	1.84	1.85	1.85	1.86	1.90	1.95	1.92	1.88	1.84	2.04	1.92	
Sep 4	1.86	1.86	1.90	1.89	1.93	1.90	1.88	1.87	S	1.86	1.86	1.86	1.86	1.85	1.84	1.84	1.83	1.83	1.83	1.84	1.87	1.90	1.87	1.87	1.83	1.93	1.87	
Sep 5	1.87	1.87	1.86	1.86	1.86	1.86	1.85	S	1.84	1.82	1.82	1.83	1.83	1.82	1.83	1.84	1.83	1.83	1.83	1.83	1.82	1.83	1.83	1.82	1.87	1.84		
Sep 6	1.84	1.83	1.84	1.85	1.84	S	1.85	1.84	S	1.84	1.84	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.84	1.84	1.84	1.84	1.83	1.85	1.84		
Sep 7	1.84	1.84	1.86	1.86	1.87	S	1.87	1.87	1.86	1.85	1.85	1.84	1.84	1.85	1.84	1.84	1.84	1.84	1.84	1.84	1.86	1.86	1.91	1.93	1.96	1.84	1.96	1.86
Sep 8	1.94	1.90	1.87	1.89	S	1.84	1.85	1.85	1.85	1.84	1.83	1.83	1.83	1.84	1.84	1.84	1.85	1.87	1.87	1.86	1.87	1.87	1.86	1.85	1.83	1.94	1.86	
Sep 9	1.85	1.87	1.88	S	1.87	1.85	1.86	1.86	1.84	1.83	1.82	1.82	1.82	1.82	1.83	1.83	1.83	1.83	1.83	1.83	1.85	1.84	1.88	1.88	1.82	1.88	1.84	
Sep 10	1.93	X	X	X	X	X	X	X	X	X	X	X	X	X	S	1.84	1.85	1.84	1.85	1.86	1.89	1.86	1.85	1.86	1.84	1.93	-	
Sep 11	1.86	S	1.88	1.89	1.90	1.91	1.93	1.91	1.87	1.84	1.83	1.84	1.83	1.83	1.82	1.81	1.81	1.81	1.82	1.82	1.83	1.82	1.82	1.83	1.81	1.93	1.85	
Sep 12	S	1.83	1.84	1.83	1.84	1.83	1.83	1.84	1.84	1.84	1.83	1.82	1.82	1.81	1.81	1.81	1.81	1.82	1.82	1.81	1.81	1.81	S	1.81	1.84	1.82		
Sep 13	1.82	1.80	1.81	1.82	1.83	1.84	1.85	1.84	1.83	1.84	1.84	1.83	1.82	1.81	1.81	1.81	1.80	1.80	1.81	1.85	1.82	1.84	S	1.81	1.80	1.85	1.82	
Sep 14	1.81	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.81	1.81	1.81	1.81	1.81	1.80	1.79	1.80	1.79	1.80	1.81	1.80	1.80	S	1.80	1.79	1.79	1.82	1.81	
Sep 15	1.79	1.80	1.80	1.81	1.81	1.82	1.84	1.82	1.81	C	C	C	C	1.88	1.88	1.89	1.89	1.89	1.89	1.89	1.88	S	1.87	1.87	1.87	1.79	1.89	1.85
Sep 16	1.88	1.88	1.88	1.88	1.88	1.88	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.88	1.88	1.88	1.89	1.88	1.89	S	1.93	2.00	1.99	1.94	1.88	2.00	1.90
Sep 17	1.94	1.91	1.90	1.91	1.92	1.95	1.95	1.97	1.93	1.92	1.90	1.90	1.90	1.89	1.89	1.89	1.89	1.89	1.89	S	1.92	1.93	1.98	1.98	1.98	1.89	1.98	1.92
Sep 18	1.98	2.00	2.04	2.07	2.07	2.03	2.06	2.07	2.03	1.99	2.00	1.98	1.97	1.95	1.95	1.93	1.93	S	1.92	1.93	1.93	1.94	1.97	2.05	1.92	2.07	1.99	
Sep 19	1.96	1.90	1.89	1.94	1.91	1.91	1.91	1.90	1.91	1.91	1.89	1.89	1.89	1.89	1.89	1.89	S	1.89	1.88	1.89	1.90	1.93	1.91	1.89	1.88	1.96	1.90	
Sep 20	1.90	1.89	1.89	1.90	1.91	1.91	1.90	1.90	1.89	1.89	1.89	1.88	1.88	1.88	S	1.87	1.88	1.89	1.88	1.87	1.87	1.88	1.87	1.87	1.87	1.91	1.89	
Sep 21	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.86	1.86	1.85	1.85	1.84	1.84	1.84	S	1.84	1.85	1.85	1.85	1.86	1.86	1.84	1.83	1.84	1.83	1.87	1.85	
Sep 22	1.83	1.82	1.83	1.83	1.83	1.83	1.83	1.83	1.84	1.85	1.85	1.85	S	1.85	1.85	1.85	1.85	1.86	1.86	1.86	1.86	1.87	1.86	1.87	1.82	1.87	1.85	
Sep 23	1.87	1.87	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	S	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.87	1.89	1.88	
Sep 24	1.88	1.88	1.88	X	X	X	X	X	X	X	X	X	1.86	1.85	1.84	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.86	1.86	1.84	1.88	-	
Sep 25	1.86	1.85	1.84	1.86	1.86	1.86	1.86	1.88	1.86	1.86	S	1.85	1.85	1.84	1.85	1.85	1.85	1.86	1.87	1.88	1.89	1.98	1.99	1.84	1.99	1.87		
Sep 26	2.00	2.01	2.01	2.00	2.02	1.95	1.96	1.93	1.91	S	1.92	1.93	1.91	1.91	1.92	1.91	1.89	1.87	1.92	1.93	1.92	1.93	1.94	1.98	1.87	2.02	1.94	
Sep 27	2.00	2.02	2.01	2.01	1.94	1.92	1.91	1.93	S	1.91	1.90	1.89	1.87	1.86	1.86	1.87	1.86	1.85	1.87	1.89	1.93	1.94	1.91	1.87	1.85	2.02	1.91	
Sep 28	1.86	1.87	1.87	1.87	1.87	1.87	1.86	S	1.87	1.86	1.86	1.85	1.84	1.84	1.84	1.85	1.84	1.85	1.85	1.85	1.85	1.86	1.86	1.86	1.84	1.87	1.86	
Sep 29	1.86	1.86	1.87	1.87	1.87	S	1.87	1.87	1.87	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.86	1.86	1.87	1.88	1.89	1.86	1.89	1.87		
Sep 30	1.97	1.96	1.89	1.89	1.88	S	1.87	1.88	1.85	1.86	1.85	1.85	1.84	1.84	1.84	1.84	1.85	1.84	1.85	1.84	1.85	1.85	1.85	1.85	1.84	1.97	1.86	
Diurnal Maximum	2.00	2.02	2.04	2.07	2.07	2.03	2.06	2.07	2.03	1.99	2.00	1.98	1.97	1.95	1.95	1.93	1.93	1.89	1.92	1.93	1.93	2.00	1.99	2.05				
Diurnal Average	1.89	1.88	1.88	1.89	1.88	1.89	1.89	1.89	1.87	1.87	1.86	1.86	1.86	1.86	1.85	1.85	1.85	1.85	1.86	1.86	1.87	1.88	1.89	1.89				

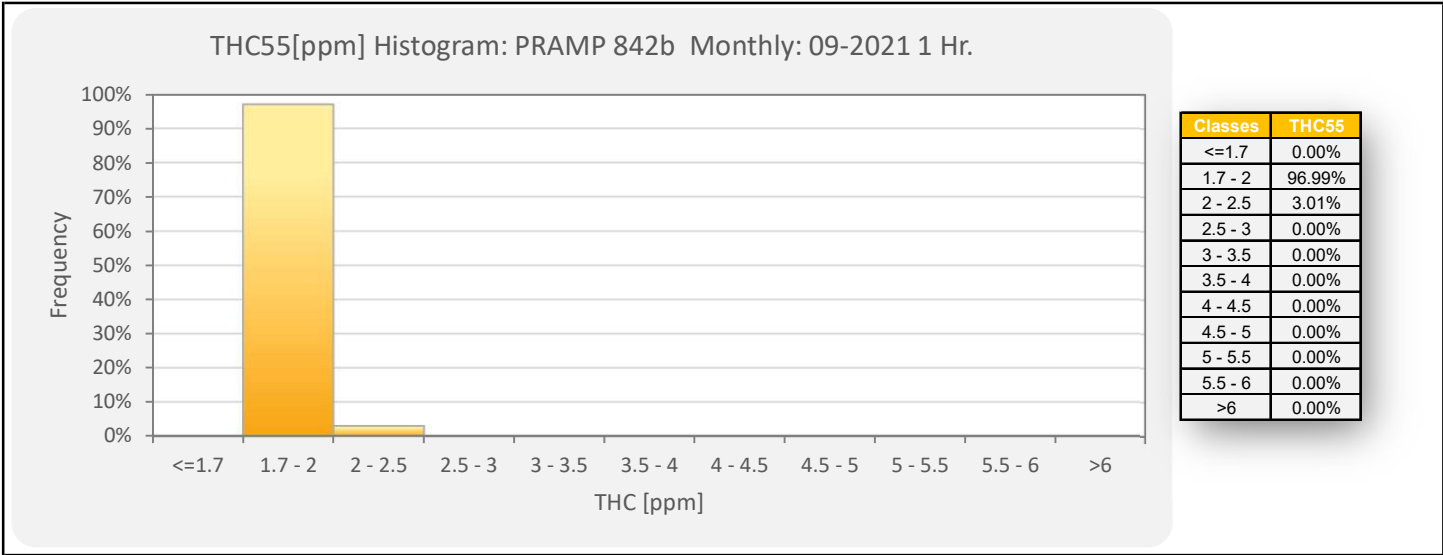
C	Monthly Calibration	S	Daily Zero-Span Check	Q	Quality Assurance
K	Collection Error	N	No Data (Machine Not in Service)	Y	Routine Maintenance
X	Invalid Data (Equipment Malfunction /Recovery)	NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	P	Power Failure

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**

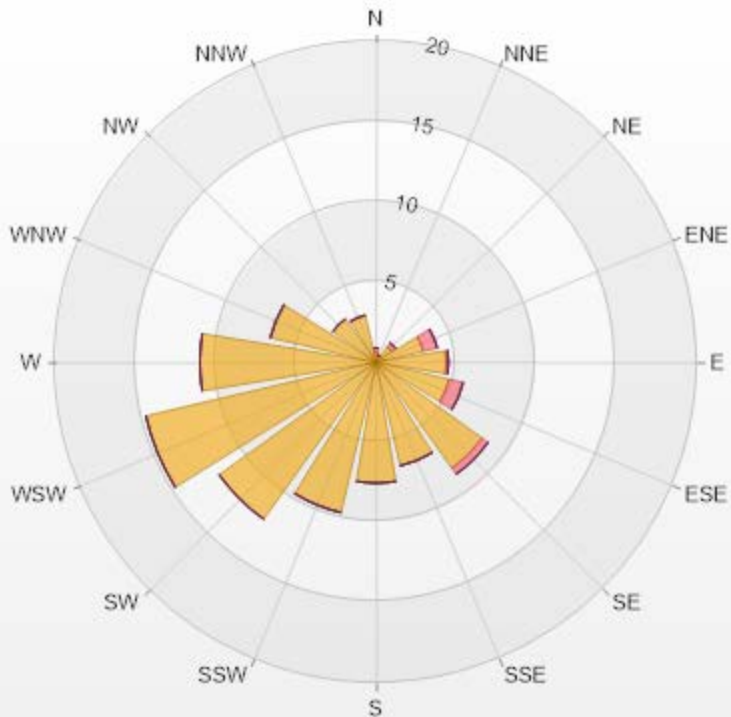






Wind: PRAMP 842b Poll.: PRAMP 842b-THC55[ppm] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 92.36% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	0.6	0.3	0	0	0	0.9
NNE	0.45	0	0	0	0	0.45
NE	1.2	0.3	0	0	0	1.5
ENE	3.01	0.9	0	0	0	3.91
E	4.36	0.15	0	0	0	4.51
ESE	4.66	0.9	0	0	0	5.56
SE	8.12	0.45	0	0	0	8.57
SSE	6.62	0	0	0	0	6.62
S	7.52	0	0	0	0	7.52
SSW	9.62	0	0	0	0	9.62
SW	12.03	0	0	0	0	12.03
WSW	14.74	0	0	0	0	14.74
W	10.98	0	0	0	0	10.98
WNW	6.77	0	0	0	0	6.77
NW	3.31	0	0	0	0	3.31
NNW	3.01	0	0	0	0	3.01
Summary	97	3	0	0	0	100



PRAMP-202109

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% Icon Classes (ppm)

97

0-2

3

2-5

0

5-10

0

10-40

0

>40.0



**PEACE RIVER AREA MONITORING PROGRAM**

**842b Station - September 2021**

**Summary of Hourly Averages**

**METHANE (CH4) in ppm**

Maximum Hourly Value:	2.07 ppm on September 18 at hour 3	Hours in Service:	720
Maximum Daily Value:	1.99 ppm on September 18	Hours of Data:	665
Minimum Hourly Value:	1.79 ppm on September 14 at hour 14	Hours of Missing Data:	21
Minimum Daily Value:	1.81 ppm on September 14	Hours of Calibration:	34
Monthly Average:	1.87 ppm	Operational Uptime:	97.1

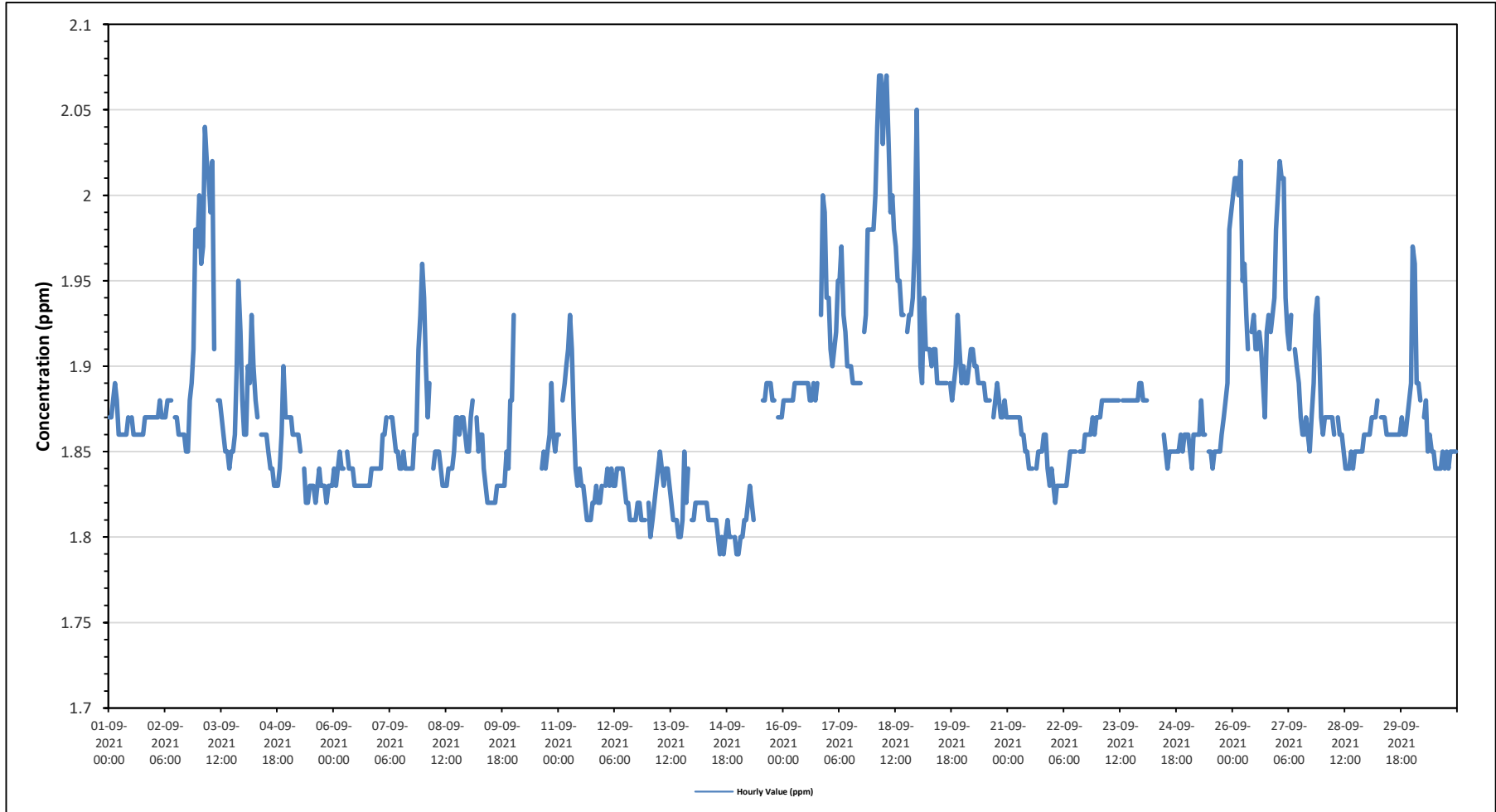
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average						
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23					
Sep 1	1.87	1.87	1.88	1.89	1.88	1.86	1.86	1.86	1.86	1.86	1.87	S	1.87	1.86	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.87	1.87	1.86	1.89	1.87						
Sep 2	1.87	1.87	1.87	1.88	1.87	1.87	1.87	1.88	1.88	1.88	S	1.87	1.87	1.86	1.86	1.86	1.85	1.85	1.88	1.89	1.91	1.98	1.97	1.85	1.98	1.88						
Sep 3	2.00	1.96	1.97	2.04	2.02	2.01	1.99	2.02	1.91	S	1.88	1.88	1.87	1.86	1.85	1.84	1.85	1.85	1.86	1.90	1.95	1.92	1.88	1.84	2.04	1.92						
Sep 4	1.86	1.86	1.90	1.89	1.93	1.90	1.88	1.87	S	1.86	1.86	1.86	1.86	1.85	1.84	1.84	1.83	1.83	1.83	1.84	1.86	1.90	1.87	1.87	1.83	1.93	1.86					
Sep 5	1.87	1.87	1.86	1.86	1.86	1.86	1.85	S	1.84	1.82	1.82	1.83	1.83	1.82	1.83	1.84	1.83	1.83	1.83	1.82	1.83	1.83	1.83	1.82	1.87	1.84						
Sep 6	1.84	1.83	1.84	1.85	1.84	S	1.85	1.84	S	1.84	1.84	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.84	1.84	1.84	1.84	1.83	1.85	1.84						
Sep 7	1.84	1.84	1.86	1.86	1.87	S	1.87	1.87	1.86	1.85	1.85	1.84	1.84	1.85	1.84	1.84	1.84	1.84	1.84	1.84	1.86	1.86	1.91	1.93	1.96	1.84	1.96	1.86				
Sep 8	1.94	1.90	1.87	1.89	S	1.84	1.85	1.85	1.85	1.84	1.83	1.83	1.83	1.84	1.84	1.84	1.84	1.85	1.87	1.87	1.86	1.87	1.87	1.86	1.85	1.83	1.94	1.86				
Sep 9	1.85	1.87	1.88	S	1.87	1.85	1.86	1.86	1.84	1.83	1.82	1.82	1.82	1.82	1.83	1.83	1.83	1.83	1.83	1.83	1.85	1.84	1.88	1.88	1.82	1.88	1.84	1.88				
Sep 10	1.93	X	X	X	X	X	X	X	X	X	X	X	X	X	S	1.84	1.85	1.84	1.85	1.86	1.89	1.86	1.85	1.86	1.84	1.93	-	1.84	1.93	-		
Sep 11	1.86	S	1.88	1.89	1.90	1.91	1.93	1.91	1.87	1.84	1.83	1.84	1.83	1.83	1.82	1.81	1.81	1.81	1.82	1.82	1.83	1.82	1.82	1.81	1.81	1.84	1.82	1.81	1.93	1.85		
Sep 12	S	1.83	1.84	1.83	1.84	1.83	1.83	1.84	1.84	1.84	1.83	1.82	1.82	1.81	1.81	1.81	1.81	1.81	1.82	1.82	1.81	1.81	1.81	S	1.81	1.84	1.82	1.81	1.84	1.82		
Sep 13	1.82	1.80	1.81	1.82	1.83	1.84	1.85	1.84	1.83	1.84	1.84	1.83	1.82	1.81	1.81	1.81	1.80	1.80	1.81	1.85	1.82	1.84	S	1.81	1.80	1.85	1.82	1.81	1.80	1.85	1.82	
Sep 14	1.81	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.81	1.81	1.81	1.81	1.81	1.80	1.79	1.80	1.79	1.80	1.81	1.80	1.80	S	1.80	1.79	1.79	1.82	1.81	1.79	1.82	1.81		
Sep 15	1.79	1.80	1.80	1.81	1.81	1.82	1.83	1.82	1.81	C	C	C	C	1.88	1.88	1.89	1.89	1.89	1.89	1.89	1.89	S	1.87	1.87	1.87	1.79	1.89	1.85	1.79	1.89	1.85	
Sep 16	1.88	1.88	1.88	1.88	1.88	1.88	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.88	1.88	1.88	1.88	1.89	S	S	1.93	2.00	1.99	1.94	1.88	2.00	1.90	1.88	2.00	1.90	
Sep 17	1.94	1.91	1.90	1.91	1.92	1.95	1.95	1.97	1.93	1.92	1.90	1.90	1.90	1.89	1.89	1.89	1.89	1.89	1.89	S	1.92	1.93	1.98	1.98	1.98	1.89	1.98	1.98	1.92	1.89	1.98	1.92
Sep 18	1.98	2.00	2.04	2.07	2.07	2.03	2.06	2.07	2.03	1.99	2.00	1.98	1.97	1.95	1.95	1.93	1.93	S	1.92	1.93	1.93	1.94	1.97	2.05	1.92	2.07	1.99	1.92	2.07	1.99		
Sep 19	1.96	1.90	1.89	1.94	1.91	1.91	1.91	1.90	1.91	1.91	1.89	1.89	1.89	1.89	1.89	1.89	S	1.89	1.88	1.89	1.90	1.93	1.91	1.89	1.88	1.96	1.90	1.88	1.96	1.90		
Sep 20	1.90	1.89	1.89	1.90	1.91	1.91	1.90	1.90	1.89	1.89	1.89	1.88	1.88	1.88	S	1.87	1.88	1.89	1.88	1.87	1.87	1.88	1.87	1.87	1.87	1.91	1.89	1.87	1.91	1.89		
Sep 21	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.86	1.86	1.85	1.85	1.84	1.84	1.84	S	1.84	1.85	1.85	1.85	1.86	1.86	1.84	1.83	1.84	1.83	1.87	1.85	1.83	1.87	1.85		
Sep 22	1.83	1.82	1.83	1.83	1.83	1.83	1.83	1.83	1.84	1.85	1.85	1.85	S	1.85	1.85	1.85	1.85	1.86	1.86	1.86	1.86	1.87	1.86	1.87	1.82	1.87	1.85	1.82	1.87	1.85		
Sep 23	1.87	1.87	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	S	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.89	1.87	1.89	1.88	1.87	1.89	1.88		
Sep 24	1.88	1.88	1.88	X	X	X	X	X	X	X	X	X	1.86	1.85	1.84	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.86	1.86	1.84	1.88	1.88	1.84	1.88	-		
Sep 25	1.86	1.85	1.84	1.86	1.86	1.86	1.86	1.88	1.86	1.86	S	1.85	1.85	1.84	1.85	1.85	1.85	1.86	1.87	1.88	1.89	1.98	1.99	1.84	1.99	1.87	1.84	1.99	1.87			
Sep 26	2.00	2.01	2.01	2.00	2.02	1.95	1.96	1.93	1.91	S	1.92	1.93	1.91	1.91	1.92	1.91	1.89	1.87	1.92	1.93	1.92	1.93	1.94	1.98	1.87	2.02	1.94	1.87	2.02	1.94		
Sep 27	2.00	2.02	2.01	2.01	1.94	1.92	1.91	1.93	S	1.91	1.90	1.89	1.87	1.86	1.86	1.87	1.86	1.85	1.87	1.89	1.93	1.94	1.91	1.87	1.85	2.02	1.91	1.85	2.02	1.91		
Sep 28	1.86	1.87	1.87	1.87	1.87	1.87	1.86	S	1.87	1.86	1.86	1.85	1.84	1.84	1.84	1.85	1.84	1.85	1.85	1.85	1.85	1.85	1.86	1.86	1.84	1.87	1.86	1.84	1.87	1.86		
Sep 29	1.86	1.86	1.87	1.87	1.87	1.88	S	1.87	1.87	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.86	1.86	1.87	1.88	1.89	1.86	1.89	1.87	1.86	1.89	1.87		
Sep 30	1.97	1.96	1.89	1.89	1.88	S	1.87	1.88	1.85	1.86	1.85	1.85	1.84	1.84	1.84	1.84	1.85	1.84	1.85	1.84	1.85	1.85	1.85	1.85	1.84	1.97	1.85	1.84	1.97	1.86		
Diurnal Maximum	2.00	2.02	2.04	2.07	2.07	2.03	2.06	2.07	2.03	1.99	2.00	1.98	1.97	1.95	1.95	1.93	1.93	1.89	1.92	1.93	1.93	2.00	1.99	2.05	1.88	2.07	1.99	1.92	2.05	1.99		
Diurnal Average	1.89	1.88	1.88	1.89	1.88	1.89	1.89	1.89	1.87	1.87	1.86	1.86	1.86	1.86	1.85	1.85	1.85	1.85	1.86	1.86	1.87	1.88	1.89	1.89	1.84	1.97	1.85	1.84	1.97	1.86		

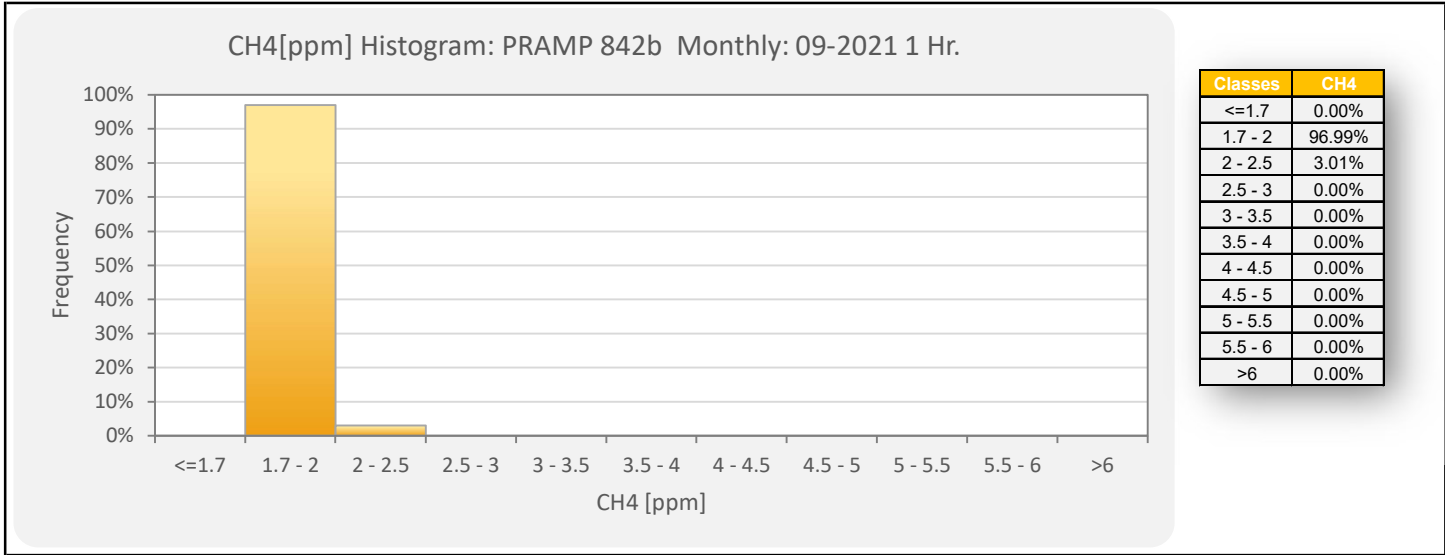
<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	Invalid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span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

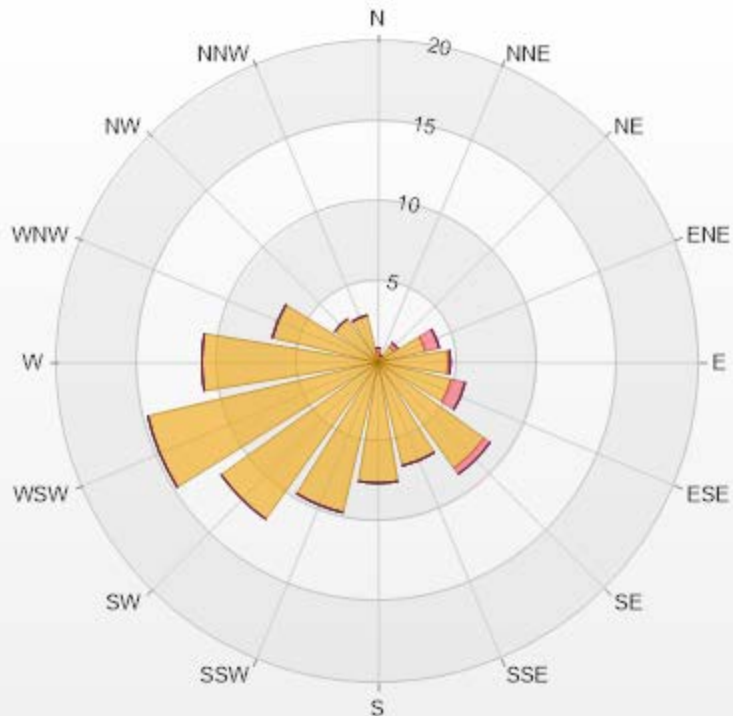
*Timeseries Chart of Hourly Average for CH4 - 842b Station*





Wind: PRAMP 842b Poll.: PRAMP 842b-CH4[ppm] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 92.36% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	0.6	0.3	0	0	0	0.9
NNE	0.45	0	0	0	0	0.45
NE	1.2	0.3	0	0	0	1.5
ENE	3.01	0.9	0	0	0	3.91
E	4.36	0.15	0	0	0	4.51
ESE	4.66	0.9	0	0	0	5.56
SE	8.12	0.45	0	0	0	8.57
SSE	6.62	0	0	0	0	6.62
S	7.52	0	0	0	0	7.52
SSW	9.62	0	0	0	0	9.62
SW	12.03	0	0	0	0	12.03
WSW	14.74	0	0	0	0	14.74
W	10.98	0	0	0	0	10.98
WNW	6.77	0	0	0	0	6.77
NW	3.31	0	0	0	0	3.31
NNW	3.01	0	0	0	0	3.01
Summary	97	3	0	0	0	100



PRAMP-202109

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% Icon Classes (ppm)

97 0-2

3 2-5

0 5-10

0 10-20

0 >20.0



PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2021

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:	665
Minimum Hourly Value:	0.00 ppm	on September 1 at hour 0	Hours of Missing Data:	21
Minimum Daily Value:	0.00 ppm	on September 1	Hours of Calibration:	34
Monthly Average:	0.00 ppm		Operational Uptime:	97.1

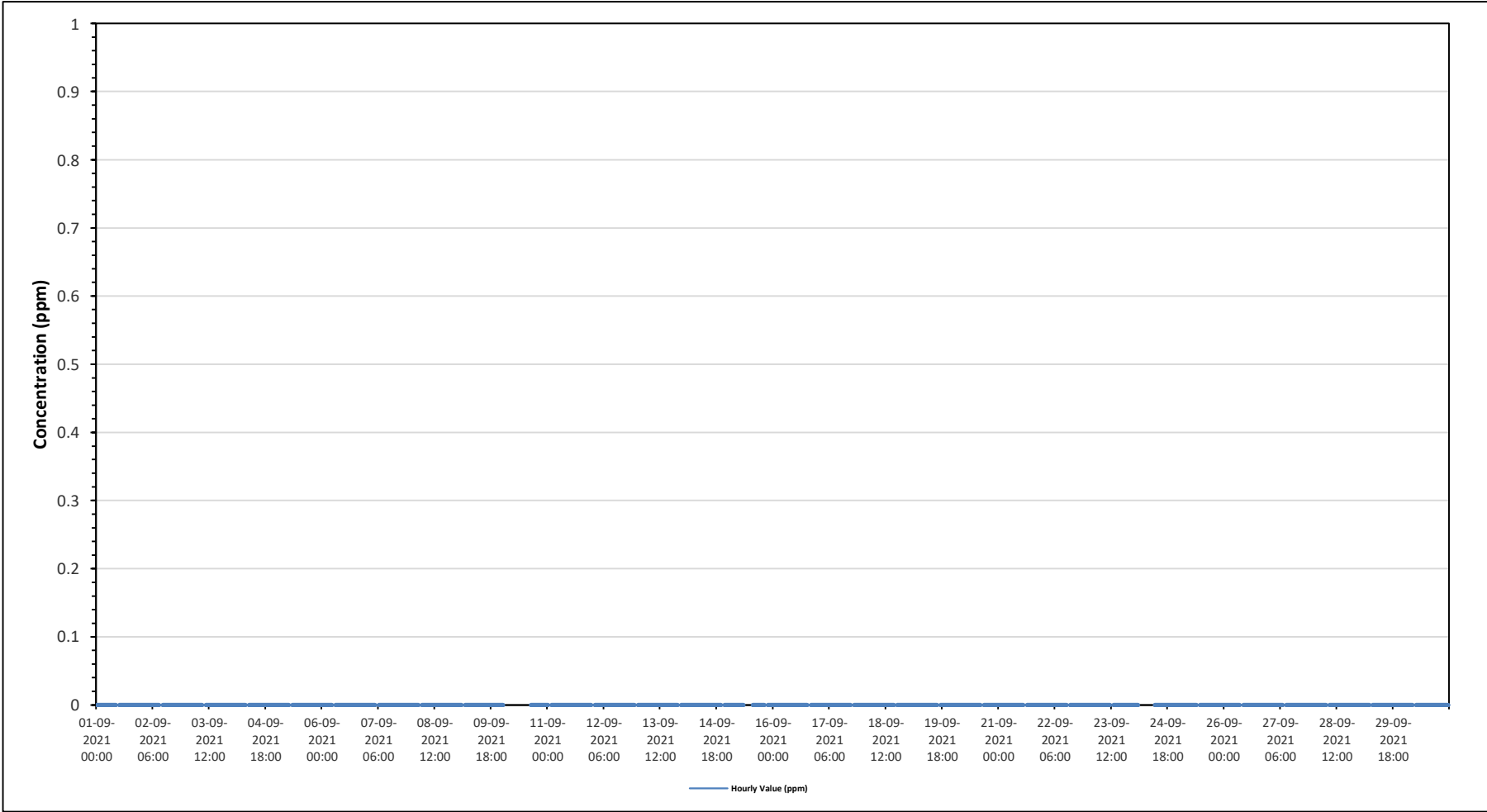
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average							
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23						
Sep 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00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

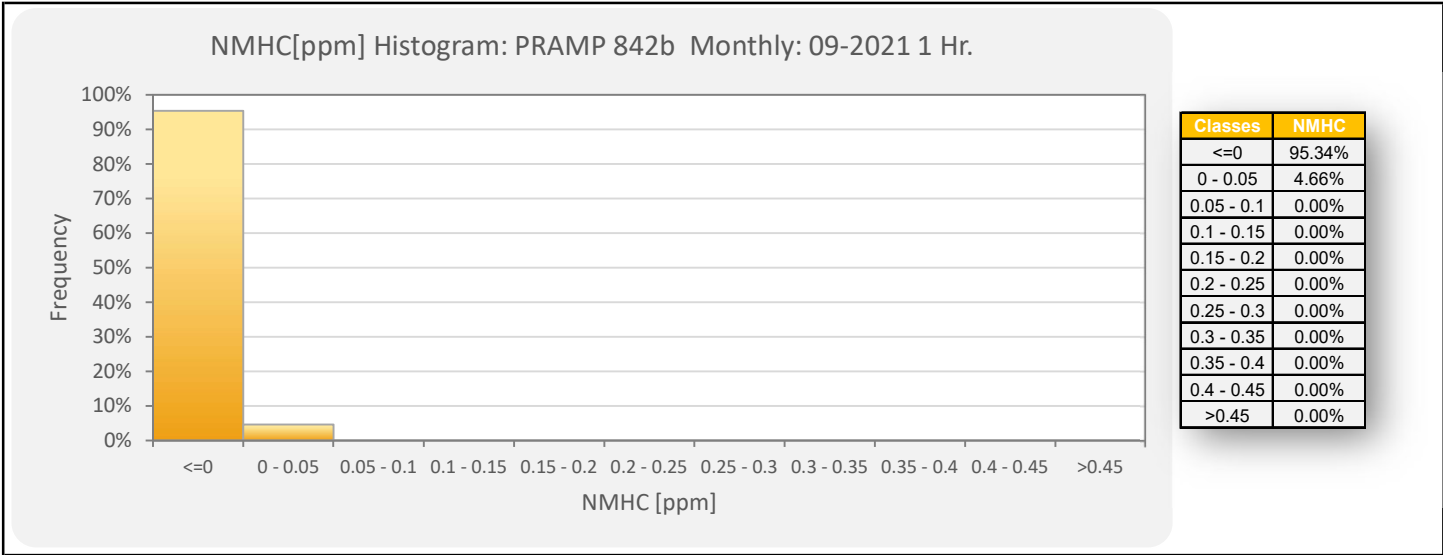
<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	InValid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span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

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



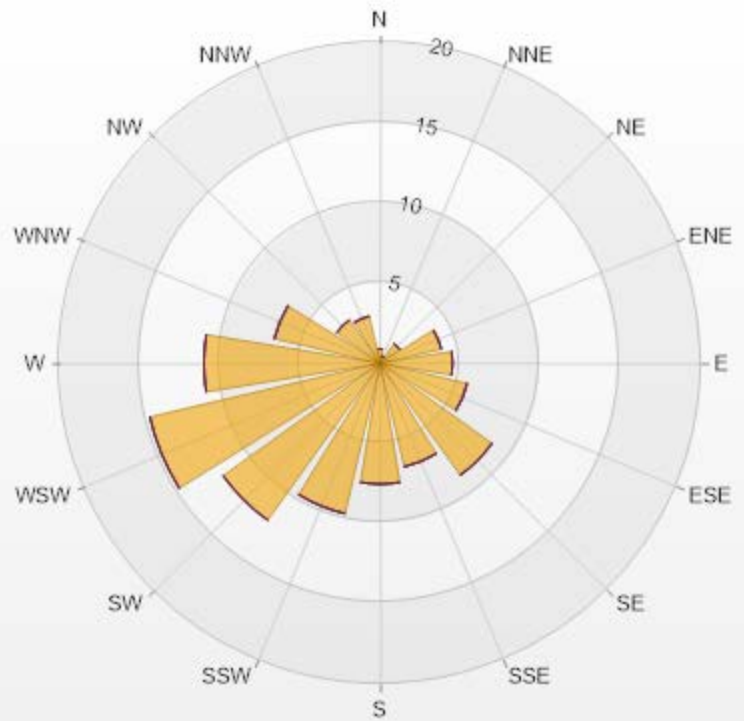
**Timeseries Chart of Hourly Average for NMHC - 842b Station**





Wind: PRAMP 842b Poll.: PRAMP 842b-NMHC[ppm] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 92.36% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-0.9	0.9-2	>2.0	Total
N	0.9	0	0	0	0	0.9
NNE	0.45	0	0	0	0	0.45
NE	1.5	0	0	0	0	1.5
ENE	3.91	0	0	0	0	3.91
E	4.51	0	0	0	0	4.51
ESE	5.56	0	0	0	0	5.56
SE	8.57	0	0	0	0	8.57
SSE	6.62	0	0	0	0	6.62
S	7.52	0	0	0	0	7.52
SSW	9.62	0	0	0	0	9.62
SW	12.03	0	0	0	0	12.03
WSW	14.74	0	0	0	0	14.74
W	10.98	0	0	0	0	10.98
WNW	6.77	0	0	0	0	6.77
NW	3.31	0	0	0	0	3.31
NNW	3.01	0	0	0	0	3.01
Summary	100	0	0	0	0	100



PRAMP-202109

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% Icon Classes (ppm)	100	0-0.1	0	0.1-0.3	0	0.3-0.9	0	0.9-2	0	>2.0



**PEACE RIVER AREA MONITORING PROGRAM**

**842b Station - September 2021**

**Summary of Hourly Averages**

**RELATIVE HUMIDITY (RH) in %**

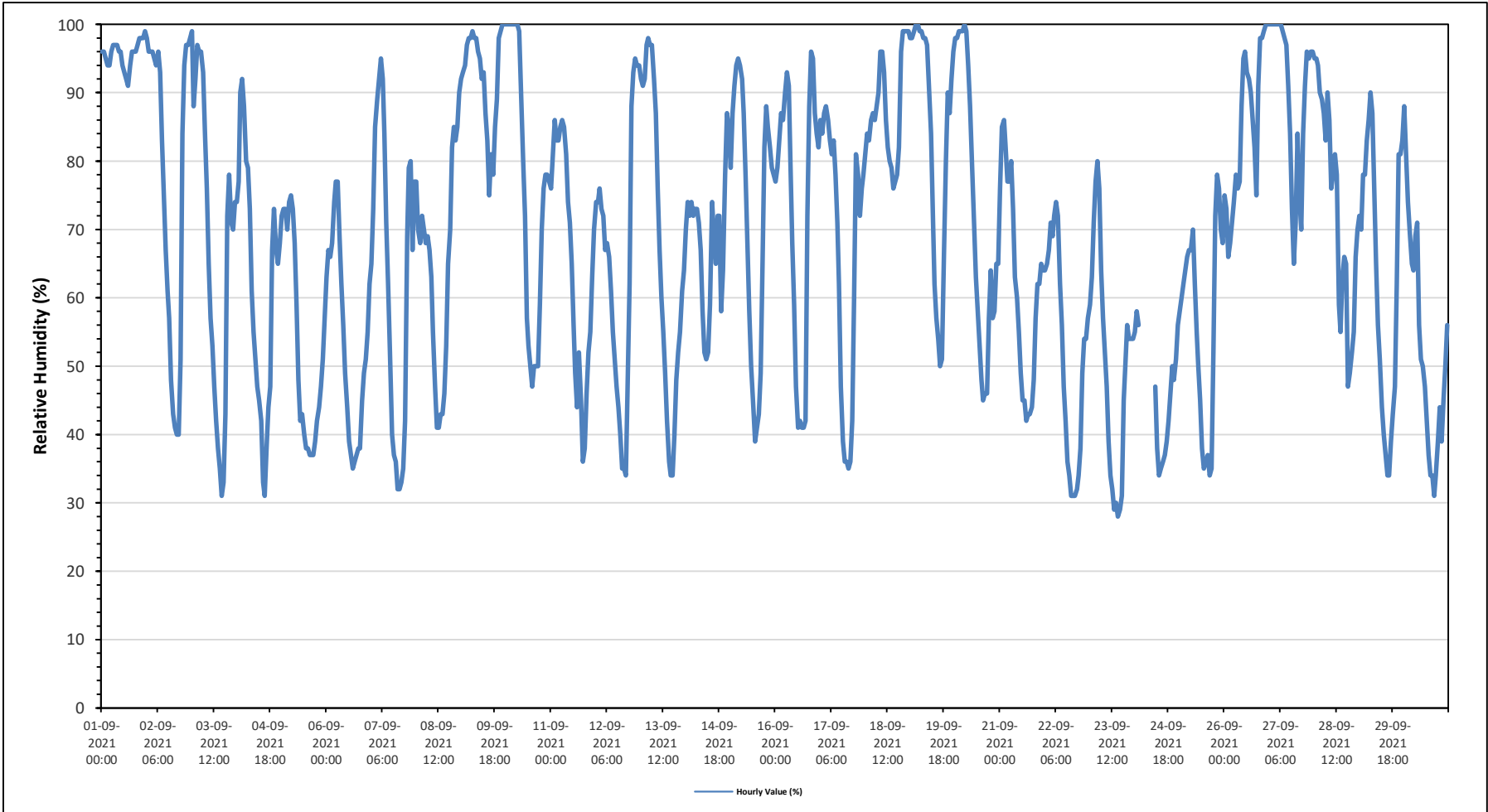
Maximum Hourly Value:	100 %	on September 9 at hour 22	Hours in Service:	720
Maximum Daily Value:	95.7 %	on September 1	Hours of Data:	712
Minimum Hourly Value:	28 %	on September 23 at hour 15	Hours of Missing Data:	8
Minimum Daily Value:	50.5 %	on September 23	Hours of Calibration:	0
Monthly Average:	68.9 %		Operational Uptime:	98.9

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	96	96	95	94	94	96	97	97	97	96	96	94	93	92	91	94	96	96	96	97	98	98	98	99	91	99	95.7
Sep 2	98	96	96	96	95	94	96	93	83	75	67	61	57	48	43	41	40	40	51	84	94	97	97	98	40	98	76.7
Sep 3	99	88	92	97	96	96	93	84	76	65	57	53	47	42	38	35	31	33	43	72	78	71	70	74	31	99	67.9
Sep 4	74	77	90	92	88	80	79	73	61	55	51	47	45	42	33	31	38	44	47	67	73	67	65	68	31	92	62.0
Sep 5	72	73	73	70	74	75	73	68	59	48	42	43	40	38	38	37	37	37	39	42	44	47	51	57	37	75	53.2
Sep 6	63	67	66	68	74	77	77	69	62	56	49	44	39	37	35	36	37	38	38	45	49	51	55	62	35	77	53.9
Sep 7	65	73	85	89	92	95	92	84	71	62	52	40	37	36	32	32	33	35	42	69	79	80	67	77	32	95	63.3
Sep 8	77	70	68	72	70	68	69	67	63	55	47	41	41	43	43	46	53	65	70	82	85	83	85	90	41	90	64.7
Sep 9	92	93	94	97	98	98	99	98	98	96	95	92	93	87	83	75	81	78	85	89	98	99	100	100	75	100	92.4
Sep 10	100	100	100	100	100	100	100	99	90	80	72	57	53	50	47	50	50	50	59	70	76	78	77	77	47	100	76.5
Sep 11	76	81	86	83	83	85	86	85	81	74	71	65	56	49	44	52	45	36	38	46	52	55	63	70	36	86	65.1
Sep 12	74	74	76	73	72	67	68	66	61	55	51	47	44	40	35	35	34	48	62	88	93	95	94	94	34	95	64.4
Sep 13	92	91	92	97	98	97	97	92	87	76	67	60	55	49	42	36	34	34	40	48	52	55	61	64	34	98	67.3
Sep 14	70	74	72	74	72	73	73	71	67	58	52	51	52	59	74	69	65	72	72	58	64	78	87	85	51	87	68.4
Sep 15	79	87	91	94	95	94	92	87	78	68	58	50	45	39	41	43	49	65	82	88	85	82	79	78	39	95	72.9
Sep 16	77	79	83	87	86	90	93	91	80	68	59	47	41	42	41	41	42	72	88	96	95	87	84	82	41	96	73.0
Sep 17	86	84	87	88	86	83	81	83	78	71	62	47	39	36	36	35	36	42	60	81	78	72	76	78	35	88	66.9
Sep 18	81	84	83	86	87	86	88	90	96	96	93	86	82	80	79	76	77	78	82	96	99	99	99	99	76	99	87.6
Sep 19	98	98	99	100	100	99	99	98	98	97	91	84	72	62	57	54	50	51	67	80	90	87	92	96	50	100	84.1
Sep 20	98	98	99	99	99	100	99	94	88	80	71	63	58	53	48	45	46	46	57	64	57	58	65	65	45	100	72.9
Sep 21	76	85	86	82	77	77	80	73	63	60	55	49	45	45	42	43	43	44	48	57	62	62	65	64	42	86	61.8
Sep 22	64	65	67	71	69	72	74	72	62	56	47	42	36	34	31	31	31	32	34	38	49	54	54	57	31	74	51.8
Sep 23	59	63	71	77	80	76	64	57	52	47	39	34	32	29	30	28	29	31	45	50	56	54	54	54	28	80	50.5
Sep 24	55	58	56	X	X	X	X	X	X	X	X	47	38	34	35	36	37	39	42	46	50	48	51	56	34	58	-
Sep 25	58	60	62	64	66	67	67	70	62	55	50	45	38	35	36	37	34	35	52	72	78	76	70	68	34	78	56.5
Sep 26	75	73	66	68	71	74	78	76	77	88	95	96	93	92	90	86	82	75	91	98	98	99	100	100	66	100	85.0
Sep 27	100	100	100	100	100	100	100	99	98	97	91	84	73	65	71	84	75	70	84	91	96	95	96	96	65	100	90.2
Sep 28	95	95	94	90	89	87	83	90	86	76	78	81	78	59	55	63	66	65	47	49	52	55	66	70	47	95	73.7
Sep 29	72	70	78	78	83	86	90	87	76	65	56	51	44	40	37	34	34	39	43	47	62	81	83	83	34	90	63.2
Sep 30	88	81	74	69	65	64	69	71	56	51	50	47	42	37	34	34	31	34	39	44	39	45	50	56	31	88	52.9
Diurnal Maximum	100	100	100	100	100	100	100	99	98	97	96	96	93	92	91	94	96	96	96	98	99	99	100	100			
Diurnal Average	80.3	81.1	82.7	84.8	84.7	84.7	82.2	76.1	69.9	64.3	58.3	53.6	49.8	48.0	48.0	47.9	50.8	58.1	68.5	72.7	73.6	75.1	77.2				

<b>C</b> Monthly Calibration	<b>S</b> Daily Zero-Span Check	<b>Q</b> Quality Assurance
<b>K</b> Collection Error	<b>N</b> No Data (Machine Not in Service)	<b>Y</b> Routine Maintenance
<b>X</b> InValid Data (Equipment Malfunction /Recovery)	<b>NRM</b> UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	<b>P</b> 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 2021**

**Summary of Hourly Averages**

**BAROMETRIC PRESSURE (BP) in millibar**

Maximum Hourly Value:	948	mb	on September 23 at hour 13	Hours in Service:	720
Maximum Daily Value:	946	mb	on September 23	Hours of Data:	712
Minimum Hourly Value:	922	mb	on September 18 at hour 6	Hours of Missing Data:	8
Minimum Daily Value:	924	mb	on September 18	Hours of Calibration:	0
Monthly Average:	936	mb		Operational Uptime:	98.9

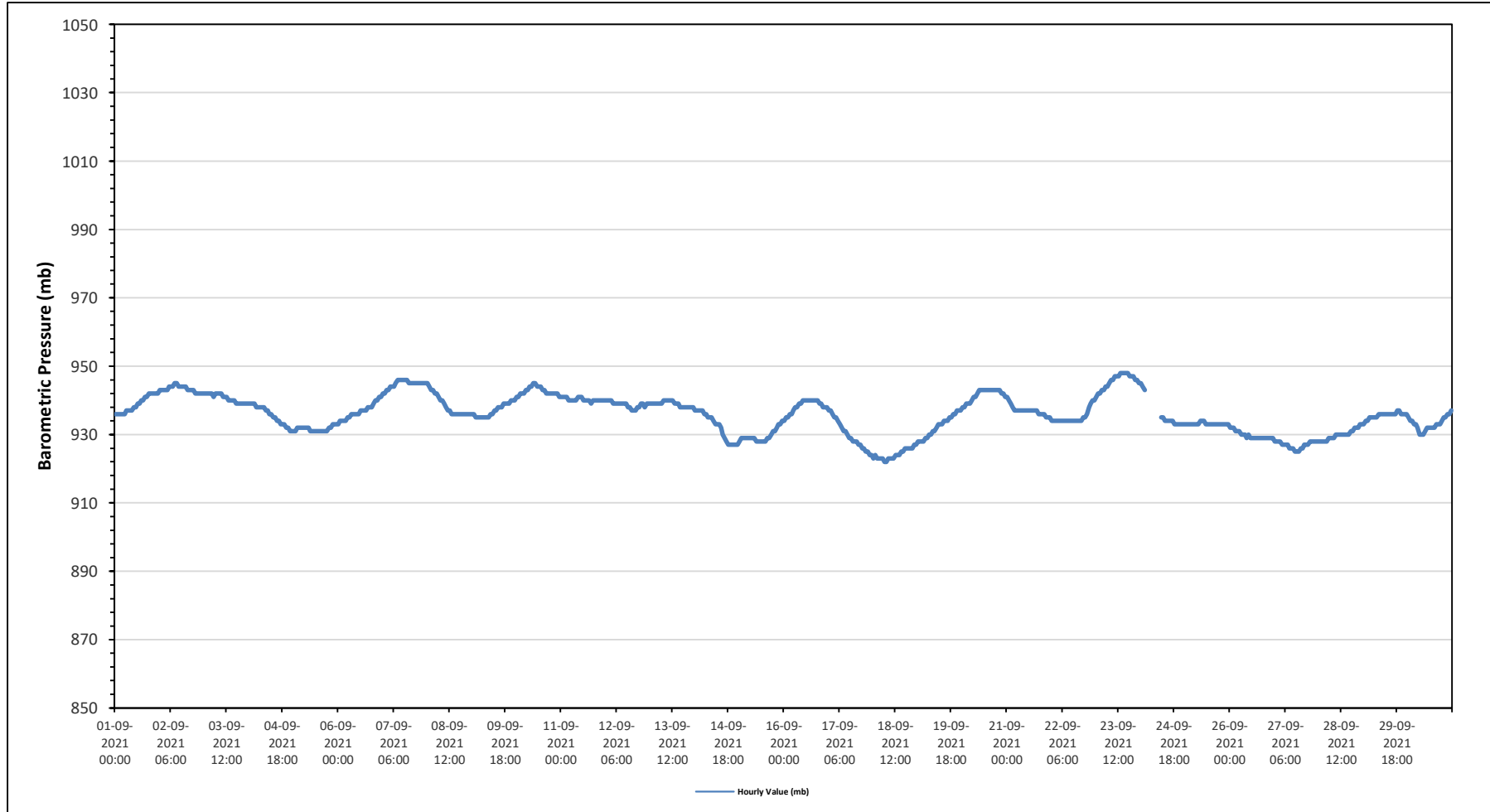
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	936	936	936	936	936	936	937	937	937	937	938	938	939	939	940	940	941	941	942	942	942	942	942	936	942	939	
Sep 2	943	943	943	943	943	944	944	944	945	945	944	944	944	944	944	943	943	943	942	942	942	942	942	942	942	945	943
Sep 3	942	942	942	942	942	941	942	942	942	942	942	941	941	941	940	940	940	939	939	939	939	939	939	939	939	942	941
Sep 4	939	939	939	939	938	938	938	938	938	937	937	936	936	935	935	934	934	933	933	933	932	932	931	931	931	939	936
Sep 5	931	931	932	932	932	932	932	932	932	931	931	931	931	931	931	931	931	931	931	932	932	933	933	933	933	933	932
Sep 6	933	934	934	934	934	935	935	935	936	936	936	936	937	937	937	937	938	938	938	939	940	940	941	941	933	941	937
Sep 7	942	942	943	943	944	944	944	945	946	946	946	946	946	945	945	945	945	945	945	945	945	945	945	945	942	946	945
Sep 8	945	944	943	943	942	942	941	940	940	939	938	937	937	936	936	936	936	936	936	936	936	936	936	936	936	945	939
Sep 9	936	936	935	935	935	935	935	935	935	935	936	936	937	937	938	938	938	939	939	939	940	940	940	940	935	940	937
Sep 10	941	941	942	942	942	943	943	944	944	945	945	944	944	944	943	943	942	942	942	942	942	942	941	941	945	943	
Sep 11	941	941	941	941	940	940	940	940	940	941	941	941	940	940	940	940	939	940	940	940	940	940	940	940	939	941	940
Sep 12	940	940	940	940	939	939	939	939	939	939	939	939	938	938	937	937	938	938	938	939	939	938	939	937	940	939	
Sep 13	939	939	939	939	939	939	939	940	940	940	940	940	940	939	939	938	938	938	938	938	938	938	938	938	938	940	939
Sep 14	937	937	937	937	937	936	936	935	935	935	934	933	933	933	932	930	929	928	927	927	927	927	927	927	927	932	932
Sep 15	928	929	929	929	929	929	929	929	929	928	928	928	928	928	929	929	930	931	931	932	933	933	934	928	934	930	
Sep 16	934	935	935	936	936	937	938	938	939	939	940	940	940	940	940	940	940	939	939	938	938	938	938	934	940	938	
Sep 17	937	937	936	935	935	934	933	932	931	931	930	929	929	928	928	928	927	927	926	926	925	925	924	924	924	937	930
Sep 18	923	924	923	923	923	923	922	922	923	923	923	923	924	924	925	925	926	926	926	926	926	927	927	922	927	924	
Sep 19	928	928	928	928	929	929	930	930	931	931	932	933	933	933	934	934	934	935	935	936	936	937	937	928	937	932	
Sep 20	938	938	939	939	939	940	941	941	942	943	943	943	943	943	943	943	943	943	943	943	942	942	941	938	943	942	
Sep 21	941	940	939	938	937	937	937	937	937	937	937	937	937	937	937	937	937	936	936	936	935	935	935	935	941	937	
Sep 22	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	935	935	936	938	939	940	940	934	940	935	
Sep 23	941	942	942	943	943	944	944	945	946	946	947	947	947	948	948	948	948	948	947	947	946	946	945	941	948	946	
Sep 24	945	944	943	X	X	X	X	X	X	X	935	935	934	934	934	934	934	933	933	933	933	933	933	933	945	-	
Sep 25	933	933	933	933	933	933	933	933	934	934	934	933	933	933	933	933	933	933	933	933	933	933	933	933	934	933	
Sep 26	932	932	932	931	931	931	930	930	929	930	929	929	929	929	929	929	929	929	929	929	929	929	929	929	929	932	930
Sep 27	928	928	928	928	927	927	927	927	926	926	926	925	925	925	926	926	927	927	927	928	928	928	928	925	928	927	
Sep 28	928	928	928	928	928	929	929	929	929	930	930	930	930	930	930	930	930	931	931	932	932	933	933	928	933	930	
Sep 29	933	934	934	935	935	935	935	935	936	936	936	936	936	936	936	936	936	937	937	937	936	936	936	933	937	936	
Sep 30	935	934	934	933	933	932	930	930	930	931	932	932	932	932	932	933	933	933	934	935	935	936	936	930	937	933	
Diurnal Maximum	945	944	943	943	944	944	944	945	946	946	947	947	947	948	948	948	948	948	947	947	946	946	945				
Diurnal Average	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936				

<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	InValid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	<b>P</b>	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 2021**

**Summary of Hourly Averages**

**AMBIENT TEMPERATURE (AT) in Degree Celsius**

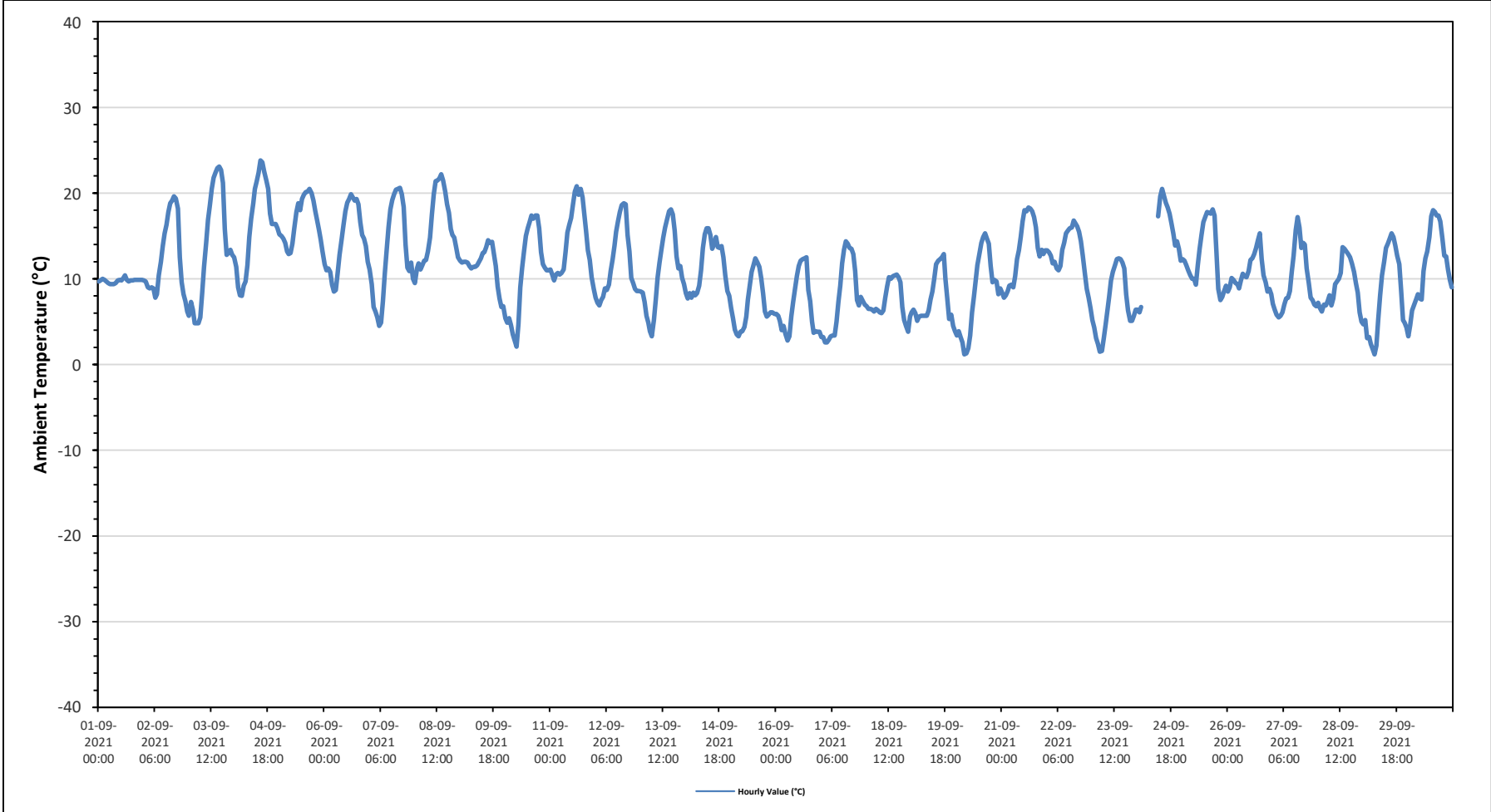
Maximum Hourly Value:	23.8 °C	on September 4 at hour 14	Hours in Service:	720
Maximum Daily Value:	16.7 °C	on September 5	Hours of Data:	712
Minimum Hourly Value:	1.2 °C	on September 20 at hour 4	Hours of Missing Data:	8
Minimum Daily Value:	6.8 °C	on September 16	Hours of Calibration:	0
Monthly Average:	11.2 °C		Operational Uptime:	98.9

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	9.7	9.8	10	9.9	9.7	9.5	9.4	9.4	9.4	9.5	9.8	9.9	9.8	10.1	10.4	9.9	9.7	9.8	9.8	9.9	9.9	9.9	9.9	9.9	9.4	10.4	9.8
Sep 2	9.8	9.7	9	8.9	9	8.9	7.8	8.2	10.4	12	13.8	15.3	16.3	17.8	18.8	19.1	19.6	19.4	18.2	12.5	9.6	8.2	7.4	6.2	6.2	19.6	12.3
Sep 3	5.7	7.3	6.4	4.8	4.8	4.8	5.5	8.3	11.4	14.2	16.9	18.6	20.5	21.8	22.4	22.9	23.1	22.7	21.2	15.8	12.8	13	13.4	12.8	4.8	23.1	13.8
Sep 4	12.5	11.4	9	8.1	8	9.2	9.7	11.6	14.9	17	18.8	20.5	21.4	22.4	23.8	23.6	22.5	21.5	20.5	17.6	16.4	16.4	16.4	15.9	8.0	23.8	16.2
Sep 5	15.2	15	14.7	14.2	13.2	12.9	13	14.1	15.9	17.8	18.8	18	19.3	19.8	20.1	20.2	20.5	20	19.1	17.9	16.8	15.7	14.6	13.2	12.9	20.5	16.7
Sep 6	11.7	11	11.2	10.8	9.3	8.5	8.7	10.7	12.8	14.6	16.3	17.9	18.9	19.3	19.9	19.5	19.1	19.3	18.7	16.6	15.1	14.7	13.8	12	8.5	19.9	14.6
Sep 7	11.1	9.4	6.7	6.2	5.5	4.5	4.9	7.4	10.6	13.3	16	18.1	19.2	19.9	20.4	20.5	20.6	19.9	18.4	14	11.3	10.9	11.9	10	4.5	20.6	12.9
Sep 8	9.5	11.2	11.8	11.1	11.6	12.1	12.2	13.2	14.8	17.5	19.9	21.4	21.5	21.7	22.2	21.5	20.2	18.7	17.7	15.8	15.1	14.8	13.7	12.5	9.5	22.2	15.9
Sep 9	12.1	11.9	12	12	11.9	11.5	11.2	11.4	11.6	12	12.4	13	13.1	13.7	14.5	14.2	14.3	12.9	11.5	9.1	7.7	6.7	6.8	6.7	14.5	11.6	
Sep 10	5.4	4.9	5.4	4.6	3.5	2.8	2.1	4.7	9	11.3	13.2	15	15.9	16.6	17.4	17	17.4	17.4	15.9	13.1	11.7	11.3	11	11	2.1	17.4	10.7
Sep 11	11.1	10.5	9.8	10.5	10.7	10.5	10.7	11.1	13.1	15.4	16.3	17.1	18.7	20.2	20.8	19.8	20.5	19.5	17.7	15.6	13.3	12.2	10.2	8.8	8.8	20.8	14.3
Sep 12	7.8	7.2	6.9	7.5	7.9	8.9	8.7	9.3	11	12.3	13.9	15.5	16.7	17.8	18.6	18.8	18.7	15.1	13.2	10.1	9.5	8.8	8.6	8.6	6.9	18.8	11.7
Sep 13	8.5	8.4	7.3	5.7	4.9	3.9	3.3	5.2	7.6	10.2	11.9	13.4	14.8	16	16.9	17.9	18.1	17.5	15.6	12.6	11.2	11.5	10.1	9.4	3.3	18.1	10.9
Sep 14	8.3	7.7	8.3	7.8	8.4	8.1	8.3	9.2	11	13.6	15.2	15.9	15.9	15.1	13.5	14.1	14.9	13.7	13.6	13.8	12.5	10.4	8.6	8	7.7	15.9	11.5
Sep 15	6.6	5.4	4.1	3.5	3.3	3.8	3.9	4.4	5.6	7.6	9.2	10.8	11.6	12.4	11.9	11.4	10.1	8.3	6.2	5.6	5.8	6.1	6.1	5.9	3.3	12.4	7.1
Sep 16	5.9	5.7	5.1	4	4.5	3.6	2.8	3.3	5.6	7.3	8.8	10.3	11.5	12.1	12.3	12.4	12.5	8.7	7.4	5	3.7	3.9	3.8	3.8	2.8	12.5	6.8
Sep 17	3.2	3.2	2.6	2.6	2.9	3.3	3.4	3.4	5	7.3	9.2	11.8	13.4	14.4	14.1	13.6	13.5	12.9	10.9	7.5	6.9	7.9	7.4	7	2.6	14.4	7.8
Sep 18	6.8	6.5	6.5	6.4	6.2	6.5	6.3	6.1	6	6.3	7.8	9.1	10.2	10	10.3	10.4	10.5	10.2	9.6	6.7	5.2	4.5	3.8	5.6	3.8	10.5	7.4
Sep 19	6.1	6.4	6	5.1	5.6	5.7	5.7	5.7	6.3	7.6	8.5	10	11.7	12.1	12.3	12.5	12.9	10	7.7	5.3	5.8	4.5	3.9	3.9	3.9	12.9	7.6
Sep 20	3.4	3.9	3.2	2.6	1.2	1.3	1.9	3.4	6.1	7.9	9.9	11.6	12.8	14.2	14.9	15.3	14.7	14.1	11.5	9.6	9.9	9.7	8.2	8.9	1.2	15.3	8.3
Sep 21	8.4	7.8	8.1	8.6	9.2	9.3	9	10.3	12.3	13.3	14.9	16.7	18	17.9	18.3	18.2	17.9	17.2	16	13.6	12.6	13.4	12.9	13.3	7.8	18.3	13.2
Sep 22	13.3	13.1	12.7	11.8	12	11.2	11	11.5	13.4	14.2	15.3	15.6	15.9	16	16.8	16.5	16.1	15.5	14.4	12.7	10.6	8.8	7.8	6.6	6.6	16.8	13.0
Sep 23	5.2	4.3	3.1	2.4	1.5	1.6	3.1	4.7	6.4	7.9	9.8	10.8	11.6	12.3	12.4	12.3	11.9	11.2	8.2	6.3	5.1	5.1	5.7	6.4	1.5	12.4	7.1
Sep 24	6.4	6.1	6.7	X	X	X	X	X	X	X	X	17.3	19.6	20.5	19.7	18.9	18.3	17.6	16.5	15.3	13.9	14.4	13.5	12.1	6.1	20.5	-
Sep 25	12.3	12.1	11.6	11	10.4	10	10	9.3	11.6	13.5	15.1	16.6	17.3	17.8	17.7	17.6	18.1	17.4	13.2	8.8	7.5	7.9	8.6	9.2	7.5	18.1	12.7
Sep 26	8.5	9	10.1	9.9	9.5	9.4	8.9	9.8	10.6	10.3	10.2	10.9	12.2	12.4	12.9	13.6	14.5	15.3	12.3	10.4	9.6	8.5	8.8	8.2	8.2	15.3	10.7
Sep 27	7.1	6.4	5.8	5.5	5.7	6.1	7	7.7	7.8	8.6	10.8	12.7	15.7	17.2	16	13.6	14.2	14	11.2	9.5	7.8	7.5	7	6.8	5.5	17.2	9.7
Sep 28	7.2	6.6	6.2	7	6.9	7.4	8.1	6.9	7.7	9.4	9.7	10	10.7	13.7	13.5	13.2	12.9	12.5	11.8	10.8	9.5	8.4	6.1	5	5.0	13.7	9.2
Sep 29	4.7	5.2	3.1	3.2	2.4	1.8	1.2	2.2	5.3	8.1	10.4	12	13.6	14.1	14.7	15.3	14.9	13.9	12.7	11.7	8.6	5.2	4.9	4.3	1.2	15.3	8.1
Sep 30	3.3	4.6	6.3	7	7.6	8.2	7.7	7.6	10.9	12.4	13.2	14.9	17.3	18	17.8	17.4	17.4	16.7	14.7	12.7	12.6	11.1	9.9	9	3.3	18.0	11.6
Diurnal Maximum	15.2	15.0	14.7	14.2	13.2	12.9	13.0	14.1	15.9	17.8	19.9	21.4	21.5	22.4	23.8	23.6	23.1	22.7	21.2	17.9	16.8	16.4	16.4	15.9			
Diurnal Average	8.2	8.1	7.7	7.3	7.1	7.1	7.1	7.9	9.8	11.4	12.9	14.3	15.4	16.2	16.5	16.4	16.3	15.6	14.0	11.7	10.3	9.8	9.2	8.7			

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

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

**Timeseries Chart of Hourly Average for AT - 842b Station**





**PEACE RIVER AREA MONITORING PROGRAM**

**842b Station - September 2021**

**Summary of Hourly Averages**

**STATION TEMPERATURE (ST) in Degree Celsius**

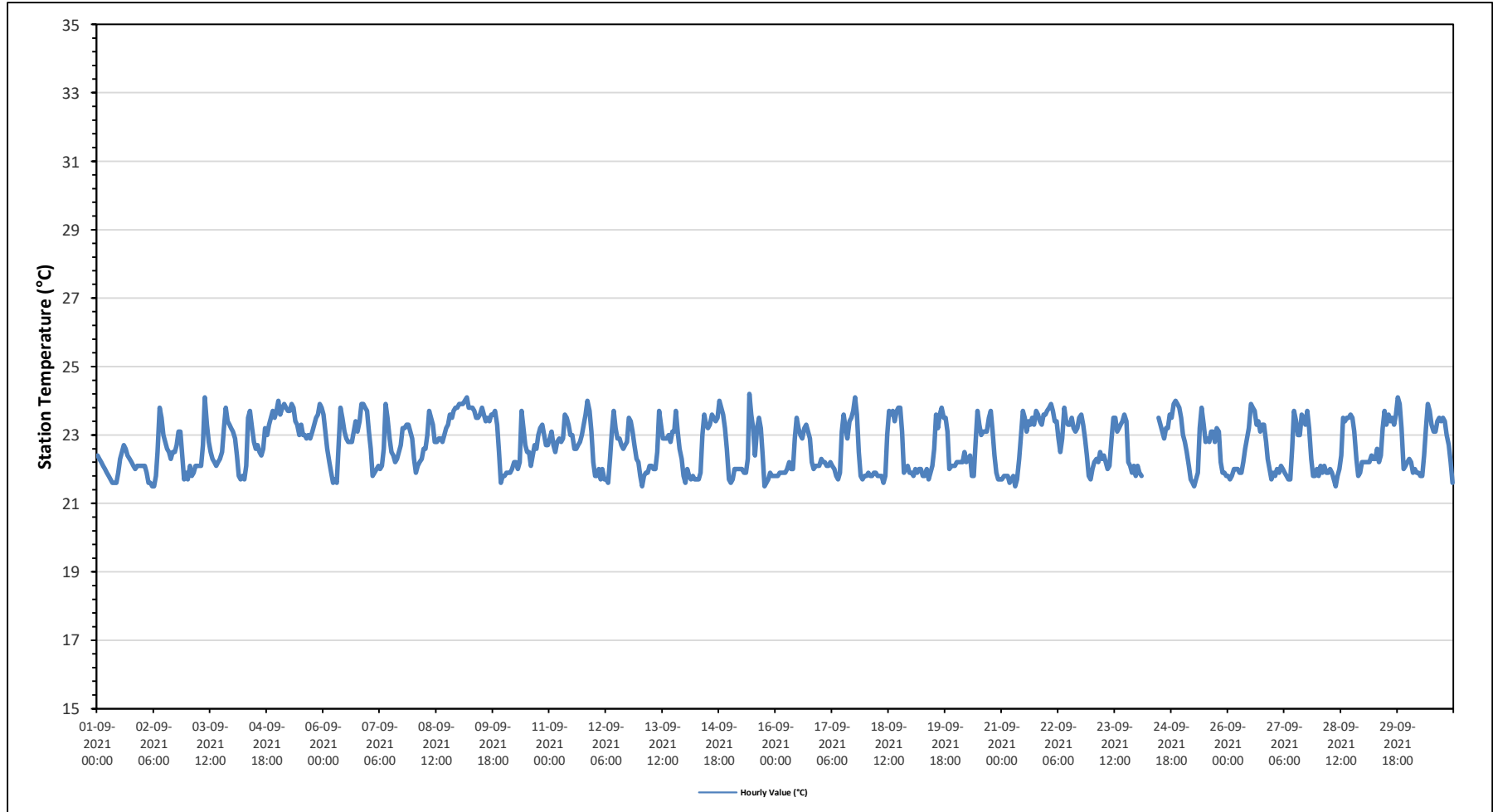
Maximum Hourly Value:	24.2 °C	on September 15 at hour 10	Hours in Service:	720
Maximum Daily Value:	23.5 °C	on September 9	Hours of Data:	712
Minimum Hourly Value:	21.5 °C	on September 2 at hour 5	Hours of Missing Data:	8
Minimum Daily Value:	22.1 °C	on September 1	Hours of Calibration:	0
Monthly Average:	22.7 °C		Operational Uptime:	98.9

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	22.4	22.3	22.2	22.1	22.0	21.9	21.8	21.7	21.6	21.6	21.6	21.9	22.3	22.5	22.7	22.6	22.4	22.3	22.2	22.1	22.0	22.1	22.1	22.1	21.6	22.7	22.1
Sep 2	22.1	22.1	21.9	21.6	21.6	21.5	21.5	21.8	22.5	23.8	23.5	23.0	22.8	22.6	22.5	22.3	22.5	22.5	22.7	23.1	23.1	22.4	21.7	21.9	21.5	23.8	22.4
Sep 3	21.7	22.1	21.8	21.9	22.1	22.1	22.1	22.7	24.1	23.3	22.8	22.5	22.3	22.2	22.1	22.2	22.3	22.5	23.2	23.8	23.4	23.3	23.2	21.7	24.1	22.6	
Sep 4	23.1	22.9	22.4	21.8	21.7	21.8	21.7	22.1	23.5	23.7	23.2	22.8	22.6	22.7	22.5	22.4	22.6	23.2	23.0	23.3	23.5	23.7	23.5	23.7	21.7	23.7	22.8
Sep 5	24.0	23.6	23.8	23.9	23.8	23.7	23.7	23.9	23.8	23.4	23.3	23.0	23.3	23.0	22.9	23.0	22.9	23.1	23.3	23.5	23.6	23.9	23.8	22.9	24.0	23.5	
Sep 6	23.6	23.1	22.6	22.2	21.9	21.6	21.7	21.6	22.7	23.8	23.5	23.1	22.9	22.8	22.8	23.1	23.4	23.1	23.4	23.9	23.9	23.8	23.7	21.6	23.9	23.0	
Sep 7	23.1	22.6	21.8	21.9	22.0	22.1	22.0	22.1	22.6	23.9	23.5	22.9	22.5	22.4	22.2	22.3	22.5	22.7	23.2	23.2	23.3	23.1	22.9	21.8	23.9	22.7	
Sep 8	22.3	21.9	22.1	22.2	22.3	22.6	22.6	23.0	23.7	23.5	23.3	22.8	22.8	22.9	22.9	22.8	23.0	23.2	23.3	23.6	23.5	23.7	23.8	23.8	21.9	23.8	23.0
Sep 9	23.9	23.9	23.9	24.0	24.1	23.8	23.8	23.7	23.5	23.5	23.6	23.8	23.6	23.4	23.5	23.4	23.6	23.6	23.7	23.3	22.5	21.6	21.8	21.6	24.1	23.5	
Sep 10	21.8	21.9	21.9	21.9	22.0	22.2	22.2	22.0	22.2	23.7	23.2	22.7	22.5	22.5	22.1	22.4	22.7	22.6	23.0	23.2	23.3	23.0	22.7	21.8	23.7	22.5	
Sep 11	22.9	23.1	22.7	22.5	22.8	22.9	22.8	22.9	23.6	23.5	23.3	23.0	23.0	22.6	22.7	22.8	23.0	23.3	23.6	24.0	23.7	23.1	22.2	22.2	24.0	23.0	
Sep 12	21.8	21.8	22.0	21.7	22.0	21.7	21.7	21.6	22.3	23.1	23.7	23.2	22.9	22.9	22.7	22.6	22.7	22.8	23.5	23.4	23.1	22.7	22.3	21.6	23.7	22.5	
Sep 13	21.8	21.5	21.8	21.9	21.9	22.1	22.1	22.0	22.0	22.5	23.7	23.3	22.9	22.9	22.9	22.8	23.1	23.1	23.7	23.1	22.6	22.3	21.8	21.5	23.7	22.5	
Sep 14	21.6	22.0	21.8	21.7	21.8	21.7	21.7	21.9	23.0	23.6	23.3	23.2	23.3	23.6	23.5	23.4	23.5	24.0	23.8	23.6	23.2	22.6	21.7	21.6	24.0	22.7	
Sep 15	21.6	21.7	22.0	22.0	22.0	22.0	21.9	21.9	22.3	24.2	23.6	23.2	22.4	23.2	23.5	23.2	22.4	21.5	21.6	21.7	21.9	21.8	21.8	21.5	24.2	22.3	
Sep 16	21.8	21.8	21.9	21.9	21.9	21.9	22.0	22.2	22.0	22.0	22.9	23.5	23.2	23.0	22.9	23.2	23.3	23.1	22.9	22.2	22.0	22.1	22.1	21.8	23.5	22.4	
Sep 17	22.3	22.2	22.2	22.1	22.1	22.2	22.1	22.0	21.8	21.7	21.9	23.1	23.6	23.2	22.9	23.4	23.5	23.7	24.1	23.6	22.5	21.8	21.7	21.8	21.7	24.1	22.6
Sep 18	21.8	21.9	21.8	21.8	21.9	21.9	21.8	21.8	21.6	21.8	23.0	23.7	23.6	23.7	23.4	23.7	23.8	23.8	23.1	21.9	22.0	22.1	21.9	21.6	23.8	22.5	
Sep 19	21.9	21.8	22.0	21.9	22.0	22.0	21.8	21.8	22.0	21.7	21.9	22.1	22.6	23.6	23.2	23.6	23.8	23.5	23.5	23.1	22.0	22.1	22.1	21.7	23.8	22.4	
Sep 20	22.2	22.2	22.2	22.2	22.5	22.2	22.3	22.4	21.8	21.8	22.8	23.7	23.3	23.0	23.1	23.1	23.1	23.5	23.7	23.1	22.4	21.9	21.7	21.7	21.7	23.7	22.6
Sep 21	21.7	21.8	21.8	21.8	21.6	21.7	21.8	21.5	21.7	22.3	23.0	23.7	23.5	23.1	23.4	23.3	23.5	23.3	23.7	23.6	23.4	23.3	23.6	21.5	23.7	22.7	
Sep 22	23.7	23.8	23.9	23.7	23.4	23.4	22.9	22.5	22.9	23.8	23.4	23.3	23.5	23.2	23.1	23.2	23.5	23.6	23.3	22.9	22.4	21.8	21.7	21.7	23.9	23.2	
Sep 23	22.0	22.2	22.3	22.2	22.5	22.3	22.4	22.2	22.0	22.1	22.9	23.5	23.5	23.1	23.2	23.3	23.4	23.6	23.4	22.2	22.1	21.9	21.8	21.8	23.6	22.6	
Sep 24	22.1	21.9	21.8	X	X	X	X	X	X	X	X	23.5	23.3	23.1	22.9	23.2	23.2	23.6	23.5	23.9	24.0	23.9	23.8	23.5	21.8	24.0	-
Sep 25	23.0	22.8	22.5	22.1	21.7	21.6	21.5	21.7	21.9	23.2	23.8	23.3	22.8	22.9	22.8	23.1	23.1	22.8	23.2	23.1	22.2	21.9	21.9	21.8	21.5	23.8	22.5
Sep 26	21.8	21.7	21.8	22.0	22.0	22.0	21.9	21.9	22.2	22.6	22.9	23.2	23.9	23.8	23.7	23.3	23.4	23.1	23.3	23.3	22.8	22.3	22.0	21.7	21.7	23.9	22.6
Sep 27	21.9	21.8	22.0	21.9	22.1	22.0	21.9	21.8	21.7	21.7	22.6	23.7	23.4	23.0	23.0	23.6	23.5	23.3	23.7	23.2	22.3	21.8	21.8	22.0	21.7	23.7	22.5
Sep 28	21.8	22.1	21.9	22.1	21.9	21.9	22.0	21.9	21.7	21.5	21.8	22.0	22.4	23.5	23.4	23.5	23.5	23.6	23.5	23.1	22.3	21.8	21.9	22.2	21.5	23.6	22.4
Sep 29	22.2	22.2	22.2	22.2	22.4	22.3	22.3	22.6	22.2	22.4	23.2	23.7	23.3	23.6	23.4	23.5	23.3	23.6	24.1	23.9	23.2	22.0	22.1	22.2	22.0	24.1	22.8
Sep 30	22.3	22.2	21.9	22.0	21.9	21.9	21.8	21.8	22.4	23.2	23.9	23.7	23.3	23.1	23.1	23.4	23.5	23.4	23.5	23.4	23.0	22.7	22.2	21.6	21.6	23.9	22.7
Diurnal Maximum	24.0	23.9	23.9	24.0	24.1	23.8	23.8	23.9	23.8	24.1	24.2	23.7	23.9	23.8	23.7	23.6	23.8	23.8	24.1	23.9	24.0	23.9	23.8	23.8	23.8	23.8	23.8
Diurnal Average	22.3	22.3	22.2	22.2	22.2	22.2	22.1	22.1	22.4	22.8	23.1	23.1	23.0	23.0	23.0	23.0	23.1	23.2	23.3	23.2	22.9	22.7	22.5	22.4	22.4	22.4	

<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	InValid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	<b>P</b>	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 2021**

**Summary of Hourly Averages**

**PRECIPITATION in mm**

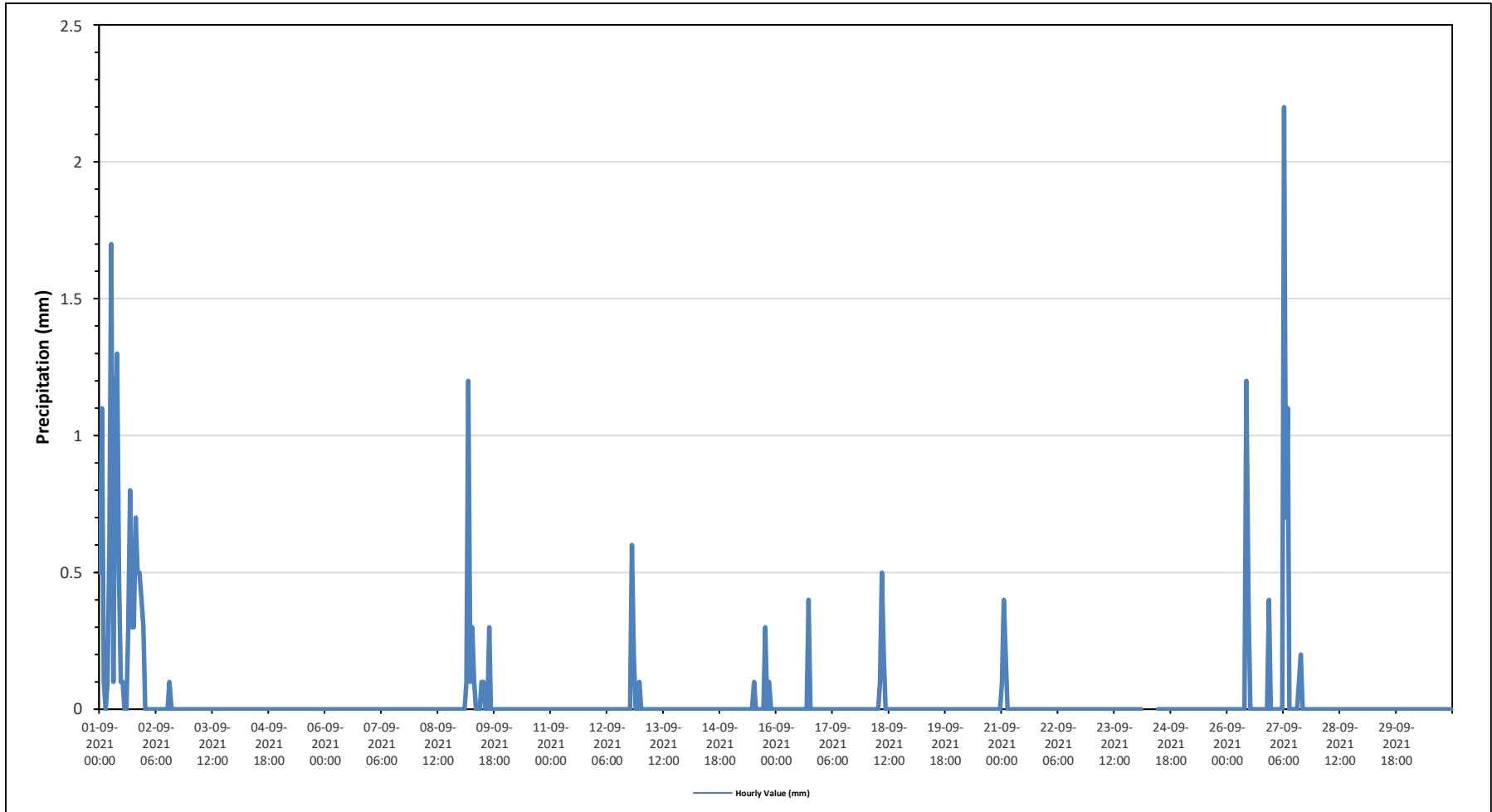
Maximum Hourly Value:	2.2 mm on September 27 at hour 6	Hours in Service:	720
Maximum Daily Value:	11.3 mm on September 1	Hours of Data:	712
Minimum Hourly Value:	0.0 mm on September 1 at hour 3	Hours of Missing Data:	8
Minimum Daily Value:	0.0 mm on September 3	Hours of Calibration:	0
Monthly Total:	23.3 mm	Operational Uptime:	98.9

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	0.5	1.1	0.1	0	0.1	0.6	1.7	0.1	1	1.3	0.5	0.1	0.1	0	0	0.3	0.8	0.3	0.3	0.7	0.5	0.5	0.4	0.3	0.0	1.7	11.3
Sep 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0.0	0.1	0.1
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
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
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
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
Sep 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
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
Sep 9	0	0	0	0.1	1.2	0.1	0.3	0.1	0	0	0	0.1	0.1	0	0	0.3	0	0	0	0	0	0	0	0	0.0	1.2	2.3
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
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
Sep 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0.2	0	0	0.1	0.0	0.6	0.9
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
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
Sep 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0.3	0	0.1	0	0	0.0	0.3	0.5
Sep 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	0.0	0.4	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	0.0
Sep 18	0	0	0	0	0	0	0	0.1	0.5	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.5	0.8
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
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	0.1	0.4	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	0.4	0.7
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	X	X	X	X	X	X	X	X	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	1.2	0.4	0	0	0	0	0	0	0	0	0	0	0.4	0	0.0	1.2	2.0
Sep 27	0	0	0	0	0	0	2.2	0.7	1.1	0	0	0	0	0	0.1	0.2	0	0	0	0	0	0	0	0	0.0	2.2	4.3
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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Diurnal Maximum	0.5	1.1	0.2	0.1	1.2	0.6	2.2	0.7	1.1	1.3	1.2	0.4	0.1	0.1	0.1	0.3	0.8	0.4	0.3	0.7	0.5	0.5	0.4	0.3			
Diurnal Average	0.0	0.1	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0			

<b>C</b> Monthly Calibration	<b>S</b> Daily Zero-Span Check	<b>Q</b> Quality Assurance
<b>K</b> Collection Error	<b>N</b> No Data (Machine Not in Service)	<b>Y</b> Routine Maintenance
<b>X</b> InValid Data (Equipment Malfunction /Recovery)	<b>NRM</b> UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	<b>P</b> 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 2021**

**Summary of Hourly Averages**

**VECTOR WIND SPEED (VWS) in km/hr**

Maximum Hourly Value:	30.1 kph	on September 15 at hour 14	Hours in Service:	720
Maximum Daily Value:	16.9 kph	on September 5	Hours of Data:	712
Minimum Hourly Value:	0.0 kph	on September 10 at hour 2	Hours of Missing Data:	8
Minimum Daily Value:	1.7 kph	on September 18	Hours of Calibration:	0
Monthly Average:	5.5 kph		Operational Uptime:	98.9

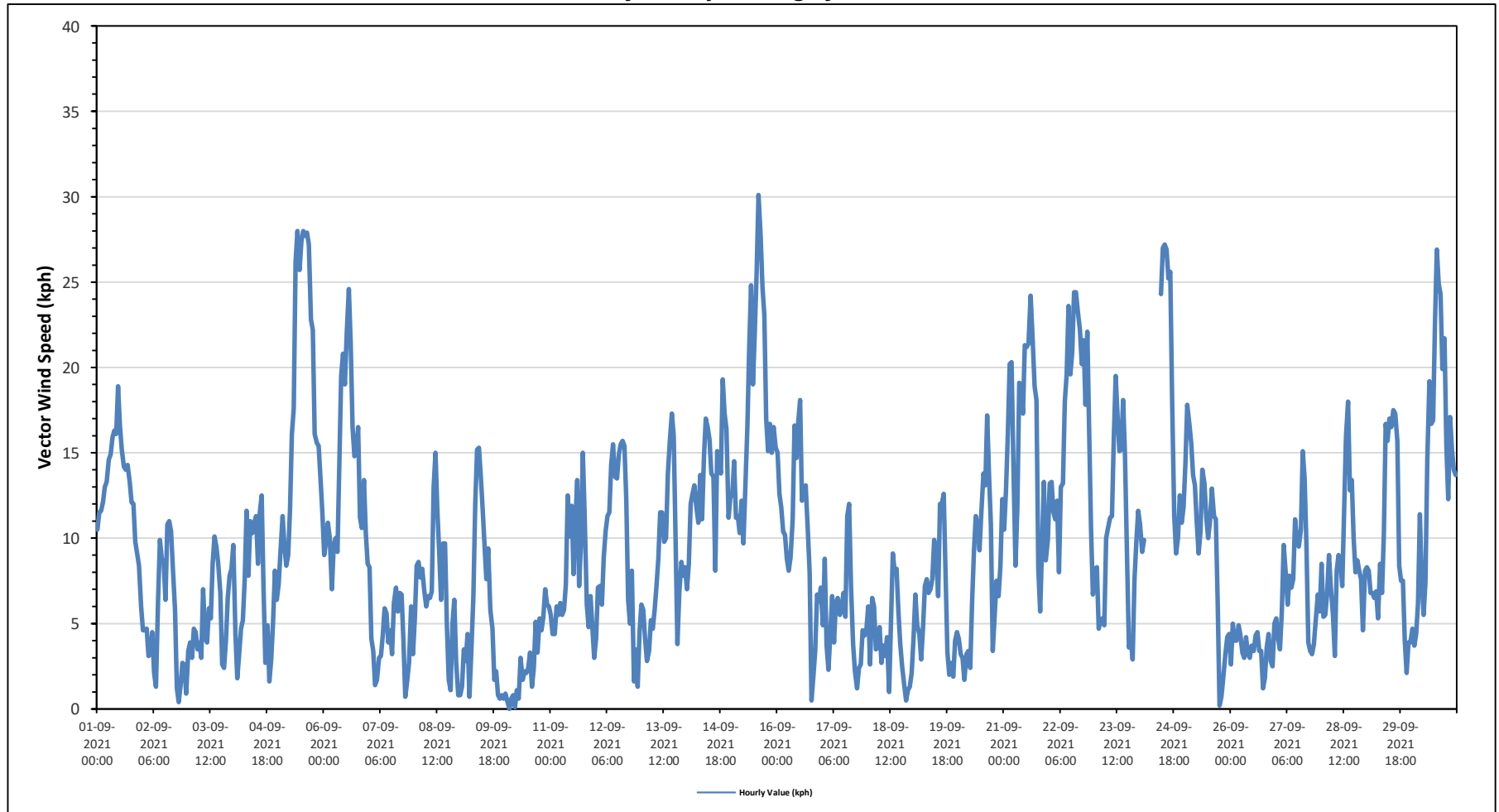
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	10.5	11.5	11.6	12.1	13.0	13.3	14.6	14.9	15.9	16.3	16.1	18.9	16.6	15.2	14.2	14.0	14.3	13.3	12.1	12.0	9.8	9.1	8.4	6.0	6.0	18.9	12.9
Sep 2	4.6	4.6	4.7	3.1	3.2	4.5	2.1	1.3	6.4	9.9	8.8	8.6	6.4	10.8	11.0	10.4	7.9	5.8	1.2	0.4	1.4	2.7	2.6	0.9	0.4	11.0	4.4
Sep 3	3.4	3.9	3.0	4.7	4.5	3.5	3.9	3.0	7.0	4.1	3.9	5.9	5.3	8.5	10.1	9.5	8.5	6.8	2.6	2.4	4.0	6.5	7.8	8.2	2.4	10.1	4.2
Sep 4	9.6	4.4	1.8	3.2	4.7	5.2	7.6	11.6	7.8	11.0	10.3	10.9	11.3	8.5	11.5	12.5	7.1	2.7	4.9	1.6	2.9	5.1	8.1	6.4	1.6	12.5	6.7
Sep 5	7.3	9.2	11.3	9.5	8.4	9.0	11.7	16.1	17.6	26.2	28.0	25.7	27.4	28.0	27.7	27.9	27.2	22.8	22.2	16.1	15.6	15.4	13.5	11.5	7.3	28.0	16.9
Sep 6	9.0	9.8	10.9	10.0	7.0	9.6	10.0	9.2	14.3	19.5	20.8	19.0	22.0	24.6	21.4	16.5	14.8	15.0	16.5	11.2	10.6	13.4	10.3	8.5	7.0	24.6	13.1
Sep 7	8.3	4.1	3.4	1.4	1.7	3.0	3.1	4.3	5.9	5.6	3.9	4.6	3.2	6.2	7.1	5.7	6.8	6.7	4.0	0.7	1.6	2.7	6.0	3.2	0.7	8.3	2.8
Sep 8	5.3	8.4	8.6	7.7	8.2	7.0	6.0	6.6	6.5	6.9	13.0	15.0	11.6	9.2	6.4	9.7	9.7	4.9	1.7	1.1	5.0	6.4	2.7	0.8	0.8	15.0	4.0
Sep 9	0.8	1.3	3.5	2.8	4.4	0.7	3.3	6.6	12.0	15.2	15.3	13.6	11.7	9.6	7.6	9.4	5.8	4.7	1.7	2.2	0.8	0.6	0.8	0.6	0.6	15.3	4.5
Sep 10	0.9	0.4	0.0	0.6	0.8	0.1	1.1	0.6	3.0	1.7	2.2	2.1	2.4	3.3	1.3	2.4	5.1	3.3	5.3	4.6	5.4	7.0	6.1	6.0	0.0	7.0	2.2
Sep 11	5.5	4.4	4.4	6.0	5.5	6.2	5.5	5.8	7.3	12.5	10.1	11.9	7.9	11.0	13.4	7.2	9.7	15.0	11.3	6.1	4.8	6.6	4.8	3.0	3.0	15.0	4.5
Sep 12	4.1	7.1	7.2	6.1	8.9	10.4	11.3	11.5	14.3	15.5	13.6	13.5	14.9	15.5	15.7	15.4	12.3	6.4	5.0	8.1	1.6	3.5	1.3	4.5	1.3	15.7	6.8
Sep 13	6.1	5.8	4.1	2.8	3.4	5.2	4.7	5.8	7.2	8.8	11.5	11.5	9.8	10.0	13.8	15.6	17.3	16.0	10.0	3.8	6.8	8.6	7.8	8.3	2.8	17.3	7.5
Sep 14	7.0	8.5	12.0	12.6	13.1	11.9	10.9	13.7	11.1	14.7	17.0	16.5	15.8	13.8	13.6	8.1	15.1	14.6	13.8	19.3	17.3	16.4	11.2	12.4	7.0	19.3	12.0
Sep 15	12.5	14.5	11.2	11.3	10.3	12.2	9.7	13.3	16.5	21.2	24.8	19.0	22.1	25.6	30.1	27.7	24.7	23.1	17.0	15.1	16.7	15.0	16.5	15.3	9.7	30.1	16.3
Sep 16	15.0	12.6	11.8	10.4	10.2	8.8	8.1	8.9	11.1	16.6	14.7	16.8	18.1	12.2	12.7	13.1	10.5	8.0	0.5	1.9	3.4	6.7	6.3	7.1	0.5	18.1	7.6
Sep 17	4.9	8.8	3.7	2.3	4.4	6.6	3.9	6.2	6.5	5.5	6.0	6.8	5.4	11.3	12.0	7.2	3.8	2.2	1.2	2.4	2.6	4.6	4.3	4.6	1.2	12.0	3.8
Sep 18	6.0	2.6	6.5	6.0	3.5	3.6	4.8	2.7	3.7	3.1	4.2	1.0	5.1	9.1	8.0	8.2	5.7	3.8	2.5	1.4	0.5	1.1	1.3	2.1	0.5	9.1	1.7
Sep 19	4.1	6.7	4.9	4.4	2.9	4.8	7.2	7.6	6.8	7.0	7.6	9.9	9.0	6.6	12.0	12.0	12.6	7.9	3.3	2.0	2.7	1.9	4.0	4.5	1.9	12.6	5.2
Sep 20	4.1	3.2	3.0	1.7	3.2	3.4	2.4	6.2	9.2	11.3	10.7	9.3	11.5	13.8	13.1	17.2	13.7	10.8	3.4	5.4	7.5	6.6	8.4	12.3	1.7	17.2	6.7
Sep 21	10.5	12.8	16.1	20.2	20.3	13.5	8.4	11.9	19.1	19.0	17.3	21.3	21.2	21.4	24.2	21.5	18.9	18.1	8.2	5.7	9.5	13.3	8.7	9.9	5.7	24.2	12.7
Sep 22	13.2	13.3	11.5	11.1	12.2	8.0	13.0	13.2	18.0	19.6	23.6	19.6	20.9	24.4	24.4	23.3	22.2	20.2	21.6	17.8	22.1	16.2	10.5	6.7	6.7	24.4	14.8
Sep 23	8.2	8.3	4.7	5.2	5.3	4.9	10.0	10.6	11.2	11.3	15.9	19.5	17.2	15.1	15.2	18.1	14.9	8.8	3.6	4.1	2.9	7.6	9.8	11.6	2.9	19.5	7.4
Sep 24	10.8	9.2	9.9	X	X	X	X	X	X	X	X	24.3	27.0	27.2	26.9	25.2	25.6	18.1	11.3	9.1	10.0	12.5	10.9	11.8	9.1	27.2	-
Sep 25	14.3	17.8	16.7	15.6	13.7	13.1	10.9	9.1	10.4	14.0	13.2	11.2	10.0	11.0	12.9	11.3	11.1	6.2	0.2	0.7	2.0	3.2	4.2	4.4	0.2	17.8	8.6
Sep 26	2.6	5.0	4.0	4.0	4.9	4.3	3.3	3.0	4.2	3.2	3.0	3.7	3.4	4.3	4.5	3.4	3.4	1.2	1.8	3.6	4.4	2.8	2.5	5.0	1.2	5.0	3.3
Sep 27	5.3	4.1	3.5	5.7	9.6	7.9	6.1	7.8	7.1	7.6	11.1	10.0	9.5	10.5	15.1	13.5	9.5	3.9	3.4	3.2	3.8	5.2	6.7	5.7	3.2	15.1	3.1
Sep 28	8.5	5.4	5.5	6.8	9.0	7.1	5.5	3.1	8.1	9.0	8.6	7.2	11.5	15.9	18.0	12.8	13.4	10.0	8.0	8.7	8.1	7.6	4.6	8.1	3.1	18.0	8.3
Sep 29	8.3	8.1	6.8	6.8	6.5	6.9	5.3	8.5	6.8	10.2	16.7	15.7	17.0	16.5	17.5	17.3	15.7	8.4	7.5	7.5	4.0	2.1	3.9	3.9	2.1	17.5	8.6
Sep 30	4.7	3.7	4.4	6.2	11.4	7.6	5.5	7.4	14.6	19.2	16.7	16.9	22.6	26.9	24.9	24.3	19.9	21.7	15.4	12.3	17.1	15.2	14.0	13.7	3.7	26.9	12.3
Diurnal Maximum	15	18	17	20	20	14	15	16	19	26	28	26	27	28	30	28	27	23	22	19	22	16	17	15			
Diurnal Average	7.2	7.3	7.0	6.9	7.4	7.0	6.9	7.9	10.0	11.9	12.7	13.0	13.3	14.2	14.9	14.0	12.9	10.3	7.4	6.4	6.8	7.5	6.9	6.9			

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

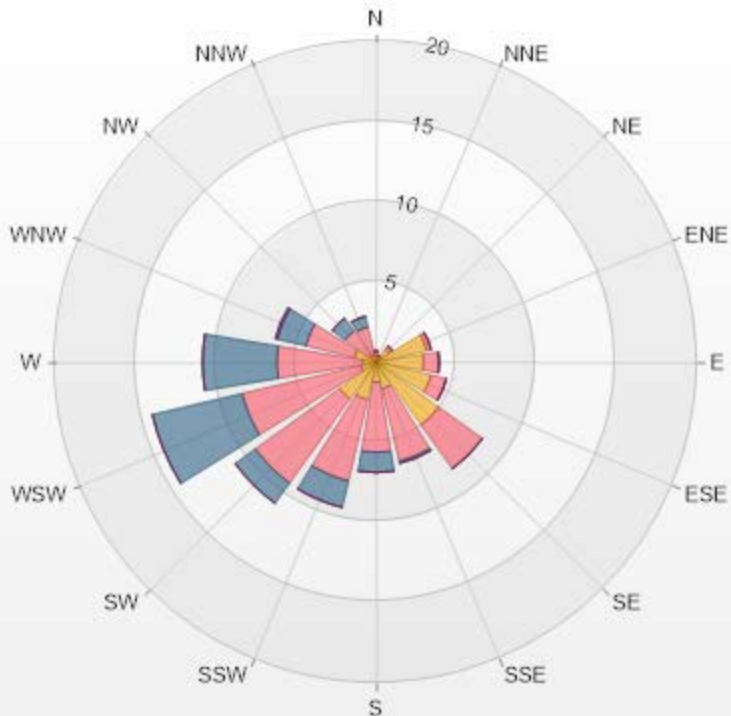
*Timeseries Chart of Hourly Average for VWS - 842b Station*





Wind: PRAMP 842b Monitor: WDS [KPH] Monthly: 09-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 6.18% Valid Data: 98.89%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	0.56	0.14	0	0	0	0.7
NNE	0.14	0.28	0	0	0	0.42
NE	0.98	0.28	0	0	0	1.26
ENE	3.23	0.28	0	0	0	3.51
E	2.95	0.98	0	0	0	3.93
ESE	3.51	0.98	0	0	0	4.49
SE	4.78	3.37	0	0	0	8.15
SSE	1.69	4.63	0.14	0	0	6.46
S	1.26	4.35	1.26	0	0	6.87
SSW	2.39	5.2	1.69	0	0	9.28
SW	2.81	6.46	1.54	0	0	10.81
WSW	0.98	7.58	5.76	0	0	14.32
W	0.84	5.34	4.63	0	0	10.81
WNW	1.4	3.09	1.83	0.14	0	6.46
NW	0.56	1.83	0.98	0	0	3.37
NNW	0.42	1.83	0.7	0	0	2.95
Summary	28.5	46.62	18.53	0.14	0	93.79



PRAMP-202109

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% Icon Classes (KPH)

29  1.8-6.0

47  6.0-15.0

19  15.0-29.0

0  29.0-39.0

0  >39.0



**PEACE RIVER AREA MONITORING PROGRAM**

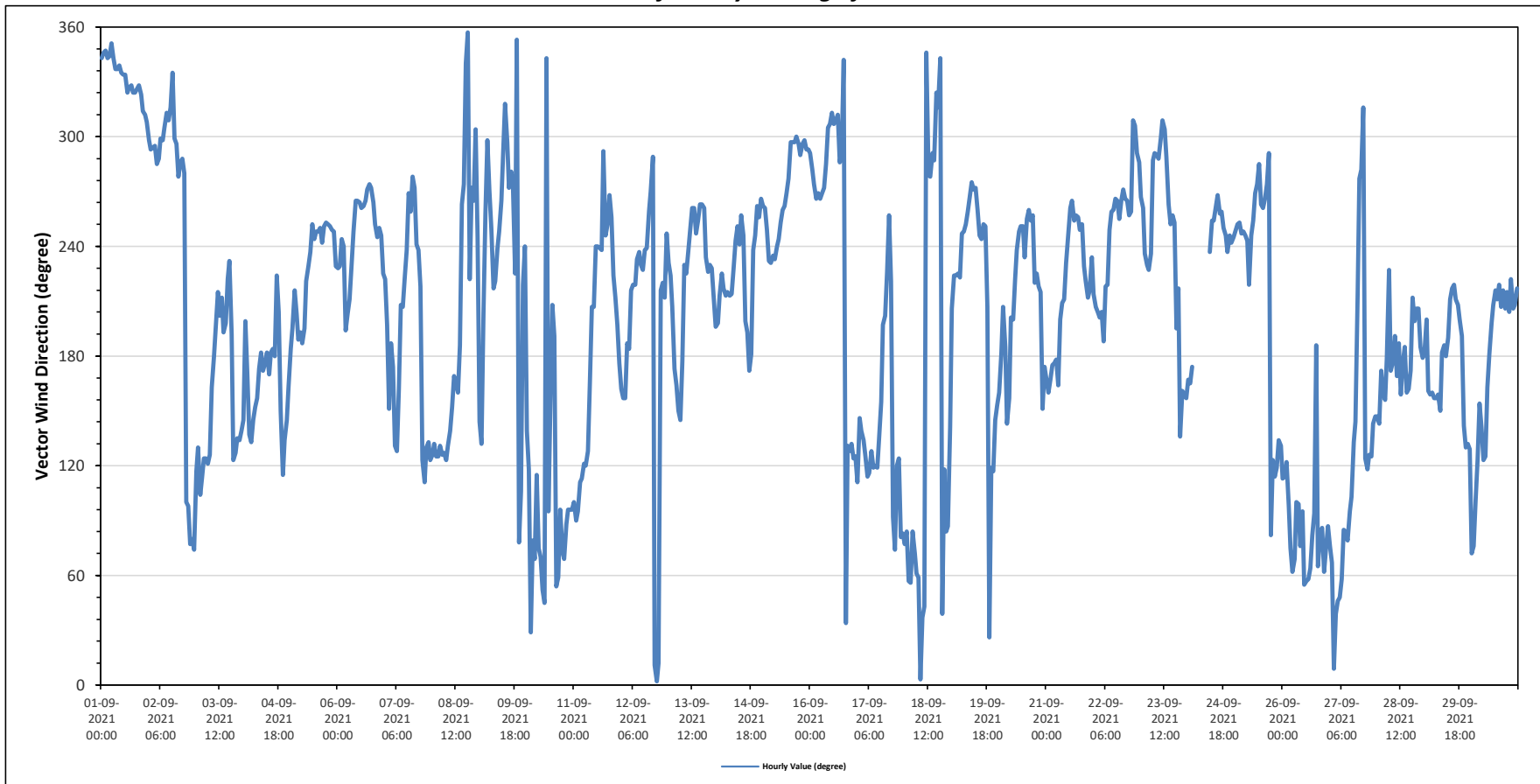
**842b Station - September 2021**

**Summary of Hourly Averages**

**WIND DIRECTION (VWD) in sector**

Monthly Average:		236 (SW) degree										Hours in Service:		720													
												Hours of Data:		712													
												Hours of Missing Data:		8													
												Hours of Calibration:		0													
												Operational Uptime:		98.9													
Day	Hourly Period Starting at (MST)																							Daily Average			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant	
Sep 1	NNW	NNW	NNW	NNW	NNW	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	NNW	NW	NW	NW	NNW	NW	NW	NW	NW	333	NNW	
Sep 2	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NNW	WNW	WNW	W	WNW	WNW	W	E	E	ENE	E	ENE	302	WNW		
Sep 3	ESE	SE	ESE	ESE	ESE	ESE	ESE	SE	SSE	S	SSW	SSW	SSW	SSW	S	SSW	SW	SW	S	ESE	SE	SE	SE	SE	168	SSE	
Sep 4	SE	SSW	SSE	SE	SE	SE	SSE	SSE	S	S	S	S	S	SSE	S	S	S	SW	SSW	SSE	ESE	SE	SE	SSE	168	SSE	
Sep 5	S	SSW	SW	SSW	S	S	S	SSW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	236	SW	
Sep 6	SW	SW	WSW	WSW	SSW	SSW	SSW	SW	WSW	W	W	W	W	W	W	W	W	W	W	WSW	WSW	WSW	WSW	SW	253	WSW	
Sep 7	SW	SSW	SSE	S	S	SE	SE	SSE	SSW	SSW	SW	SW	W	WSW	W	W	WSW	SW	SW	ESE	ESE	SE	SE	ESE	212	SSW	
Sep 8	SE	SE	SE	SE	SE	SE	SE	ESE	SE	SE	SSE	SSE	SSE	SSE	S	W	W	NNW	N	SW	W	W	WNW	WSW	160	SSE	
Sep 9	SE	SE	SSW	WSW	WNW	W	WSW	SW	SW	WSW	WSW	W	WNW	NW	WNW	W	W	SW	N	ENE	ESE	SW	WSW	WSW	261	W	
Sep 10	SE	ESE	NNE	ENE	ENE	ESE	ENE	ENE	NE	NE	NNW	E	SSE	SSW	S	NE	ENE	E	ENE	ENE	E	E	E	E	86	E	
Sep 11	E	E	E	ESE	ESE	ESE	ESE	SE	SSE	SSW	SSW	WSW	WSW	WSW	SW	WNW	WSW	WSW	W	WSW	SW	SSW	SSW	S	215	SSW	
Sep 12	SSE	SSE	SSE	S	S	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	W	WNW	NNE	N	NNE	SW	SW	SSW	WSW	234	SW	
Sep 13	SW	SW	SSW	S	SSE	SSE	SE	S	SW	SW	SW	WSW	W	W	WSW	WSW	W	W	W	SW	SW	SW	SSW	SSW	237	SW	
Sep 14	SSW	SSW	SSW	SW	SW	SSW	SSW	SSW	SSW	SSW	SW	WSW	WSW	WSW	WSW	SSW	S	S	S	SW	WSW	W	WSW	W	227	SW	
Sep 15	W	W	WSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	W	W	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	274	W	
Sep 16	WNW	W	W	W	W	W	W	W	WNW	WNW	NW	NW	NW	NW	WNW	WNW	WNW	NNW	NE	SE	SE	SE	ESE	SE	292	WNW	
Sep 17	ESE	SE	SE	SE	SE	ESE	ESE	SE	ESE	ESE	ESE	SE	SSE	SSW	SSW	SW	WSW	SW	E	ENE	ESE	ESE	E	E	144	SE	
Sep 18	ENE	E	ENE	NE	E	ENE	ENE	ENE	N	NE	NE	NNW	W	W	WNW	WNW	NW	NW	NNW	NE	ESE	E	SE	SE	8	N	
Sep 19	SSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	W	W	W	W	WSW	WSW	WSW	WSW	WSW	SSW	NNE	ESE	ESE	SE	SSE	245	WSW	
Sep 20	SSE	S	SSW	S	SE	SSE	SSW	SSW	SW	SW	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW	SW	SW	SSW	SSE	S	S	228	SW	
Sep 21	SSE	SSE	SSE	S	S	S	SSE	SSW	SSW	SSW	SW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	SW	SW	SSW	SW	SW	221	SW	
Sep 22	SSW	SSW	SSW	SSW	SSW	S	SW	SW	WSW	WSW	WSW	W	W	WSW	W	W	W	W	WSW	WSW	NW	NW	WNW	WNW	255	WSW	
Sep 23	W	W	SW	SW	SW	SW	WNW	WNW	WNW	WNW	WNW	NW	WNW	WNW	W	WSW	WSW	WSW	SSW	SW	SE	SSE	SSE	SSE	265	W	
Sep 24	SSE	SSE	S	X	X	X	X	X	X	X	X	X	SW	WSW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	-	WSW	
Sep 25	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	W	W	WNW	W	W	W	WNW	E	ESE	ESE	SE	SE	SE	SE	253	WSW	
Sep 26	ESE	ESE	ESE	E	ENE	ENE	ENE	E	E	ENE	E	NE	ENE	ENE	ENE	E	E	S	ENE	E	E	ENE	ENE	E	83	E	
Sep 27	ENE	ENE	N	NE	NE	NE	ENE	E	E	ENE	E	ESE	SE	SE	SSW	W	W	NNW	ESE	ESE	SE	SE	SE	SE	101	E	
Sep 28	SE	SE	S	SSE	SSE	S	SW	S	S	SSE	S	SSE	S	SSE	S	SSE	SSE	S	SSW	SSW	SSW	SSW	S	S	177	S	
Sep 29	S	SSW	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	S	S	S	SSW	SW	SW	SSW	SSW	SSW	S	SE	SE	SE	187	S	
Sep 30	ENE	ENE	E	ESE	SSE	SE	ESE	SE	SSE	S	SSW	SSW	SW	SSW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	198	SSW	
<b>C</b>	Monthly Calibration										<b>S</b>	Daily Zero-Span Check										<b>Q</b>	Quality Assurance				
<b>K</b>	Collection Error										<b>N</b>	No Data (Machine Not in Service)										<b>Y</b>	Routine Maintenance		<b>P</b>	Power Failure	
<b>X</b>	Invalid Data (Machine Malfunction /Recovery)										<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)															
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.																											
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.																											

**Timeseries Chart of Hourly Average for VWD - 842b Station**





**PEACE RIVER AREA MONITORING PROGRAM**

842b Station - September 2021

Summary of Hourly Averages

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

WIND SPEED																											
Maximum Hourly Value:	30.1	kph	on September 15 at hour 14													Hours in Service:	720										
Maximum Daily Value:	16.9	kph	on September 5													Hours of Data:	712										
Minimum Hourly Value:	0.0	kph	on September 10 at hour 2													Hours of Missing Data:	8										
Minimum Daily Value:	1.7	kph	on September 18													Hours of Calibration:	0										
Monthly Average:	5.5	kph														Operational Uptime:	98.9										
WIND DIRECTION																											
Monthly Average:	236	(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	10.5	11.5	11.6	12.1	13.0	13.3	14.6	14.9	15.9	16.3	16.1	18.9	16.6	15.2	14.2	14.0	14.3	13.3	12.1	12.0	9.8	9.1	8.4	6.0	6.0	18.9	12.9
Sep 2	NNW	NNW	NNW	NNW	NNW	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	0.4	11.0	4.4
	4.6	4.6	4.7	3.1	3.2	4.5	2.1	1.3	6.4	9.9	8.8	8.6	6.4	10.8	11.0	10.4	7.9	5.8	1.2	0.4	1.4	2.7	2.6	0.9			
Sep 3	WNV	WNV	WNV	WNV	WNV	WNV	WNV	WNV	WNV	WNV	NW	NW	NNW	WNV	WNV	W	WNV	WNV	W	E	E	ENE	E	ENE	2.4	10.1	4.2
	3.4	3.9	3.0	4.7	4.5	3.5	3.9	3.0	7.0	4.1	3.9	5.9	5.3	8.5	10.1	9.5	8.5	6.8	2.6	2.4	4.0	6.5	7.8	8.2			
Sep 4	ESE	SE	ESE	ESE	ESE	ESE	SE	SSE	S	SSE	SSW	SSW	SSW	SSW	S	SSW	SW	SW	S	ESE	SE	SE	SE	SE	1.6	12.5	6.7
	9.6	4.4	1.8	3.2	4.7	5.2	7.6	11.6	7.8	11.0	10.3	10.9	11.3	8.5	11.5	12.5	7.1	2.7	4.9	1.6	2.9	5.1	8.1	6.4			
Sep 5	SE	SSW	SSE	SE	SE	SSE	SSE	S	S	S	S	S	SSE	S	S	S	SW	SSW	SSE	ESE	SE	SE	SSE	SSE	7.3	28.0	16.9
	7.3	9.2	11.3	9.5	8.4	9.0	11.7	16.1	17.6	26.2	28.0	25.7	27.4	28.0	27.7	27.9	27.2	22.8	22.2	16.1	15.6	15.4	13.5	11.5			
Sep 6	S	SSW	SW	SSW	S	S	S	SSW	SW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	7.0	24.6	13.1
	9.0	9.8	10.9	10.0	7.0	9.6	10.0	9.2	14.3	19.5	20.8	19.0	22.0	24.6	21.4	16.5	14.8	15.0	16.5	11.2	10.6	13.4	10.3	8.5			
Sep 7	SW	SW	WSW	WSW	SSW	SSW	SSW	SW	WSW	W	W	W	W	W	W	W	W	W	W	WSW	WSW	WSW	WSW	WSW	0.7	8.3	2.8
	8.3	4.1	3.4	1.4	1.7	3.0	3.1	4.3	5.9	5.6	3.9	4.6	3.2	6.2	7.1	5.7	6.8	6.7	4.0	0.7	1.6	2.7	6.0	3.2			
Sep 8	SW	SSW	SSE	S	S	SE	SE	SSE	SSW	SSW	SW	SW	W	WSW	W	W	WSW	SW	SW	ESE	ESE	SE	SE	ESE	0.8	15.0	4.0
	5.3	8.4	8.6	7.7	8.2	7.0	6.0	6.6	6.5	6.9	13.0	15.0	11.6	9.2	6.4	9.7	9.7	4.9	1.7	1.1	5.0	6.4	2.7	0.8			
Sep 9	SE	SE	SE	SE	SE	SE	SE	ESE	SE	SE	SSE	SSE	SSE	SSE	S	W	W	NNW	N	SW	W	W	WNV	WSW	0.6	15.3	4.5
	0.8	1.3	3.5	2.8	4.4	0.7	3.3	6.6	12.0	15.2	15.3	13.6	11.7	9.6	7.6	9.4	5.8	4.7	1.7	2.2	0.8	0.6	0.8	0.6			
Sep 10	SE	SE	SSW	WSW	WNW	W	WSW	SW	SW	WSW	WSW	W	WNW	NW	WNV	W	W	SW	N	ENE	ESE	SW	WSW	WSW	0.0	7.0	2.2
	0.9	0.4	0.0	0.6	0.8	0.1	1.1	0.6	3.0	1.7	2.2	2.1	2.4	3.3	1.3	2.4	5.1	3.3	5.3	4.6	5.4	7.0	6.1	6.0			
Sep 11	SE	ESE	NNE	ENE	ENE	ESE	ENE	ENE	NE	NE	NNW	E	SSE	SSW	S	NE	ENE	E	ENE	ENE	E	E	E	E	3.0	15.0	4.5
	5.5	4.4	4.4	6.0	5.5	6.2	5.5	5.8	7.3	12.5	10.1	11.9	7.9	11.0	13.4	7.2	9.7	15.0	11.3	6.1	4.8	6.6	4.8	3.0			
Sep 12	E	E	E	ESE	ESE	ESE	ESE	SE	SSE	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	1.3	15.7	6.8
	4.1	7.1	7.2	6.1	8.9	10.4	11.3	11.5	14.3	15.3	13.5	14.9	15.5	15.7	15.4	12.3	6.4	5.0	8.1	1.6	3.5	1.3	4.5				
Sep 13	SSE	SSE	SSE	S	S	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	2.8	17.3	7.5
	6.1	5.8	4.1	2.8	3.4	5.2	4.7	5.8	7.2	8.8	11.5	11.5	9.8	10.0	13.8	15.6	17.3	16.0	10.0	3.8	6.8	8.6	7.8	8.3			
Sep 14	SW	SW	SSW	S	SSE	SSE	SE	S	SW	SW	SW	WSW	W	W	WSW	WSW	W	W	SW	SW	SW	SW	SSW	SSW	7.0	19.3	12.0
	7.0	8.5	12.0	12.6	13.1	11.9	10.9	13.7	11.1	14.7	17.0	16.5	15.8	13.8	13.6	8.1	15.1	14.6	13.8	19.3	17.3	16.4	11.2	12.4			
Sep 15	SSW	SSW	SSW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	9.7	30.1	16.3
	12.5	14.5	11.2	11.3	10.3	12.2	9.7	13.3	16.5	21.2	24.8	19.0	22.1	25.6	30.1	27.7	24.7	23.1	17.0	15.1	16.7	15.0	16.5	15.3			
Sep 16	W	W	WSW	SW	SW	SW	SW	WSW	WSW	WSW	W	W	W	WNV	WNV	WNV	WNV	WNV	WNV	WNV	WNV	WNV	WNV	WNV	0.5	18.1	7.6
	15.0	12.6	11.8	10.4	10.2	8.8	8.1	8.9	11.1	16.6	14.7	16.8	18.1	12.2	12.7	13.1	10.5	8.0	0.5	1.9	3.4	6.7	6.3	7.1			
Sep 17	WNV	W	W	W	W	W	W	W	WNV	WNV	NW	NW	NW	NW	NW	NW	NW	NW	NW	NE	SE	SE	ESE	SE	1.2	12.0	3.8
	4.9	8.8	3.7	2.3	4.4	6.6	3.9	6.2	6.5	5.5	6.0	6.8	5.4	11.3	12.0	7.2	3.8	2.2	1.2	2.4	2.6	4.6	4.3	4.6			
Sep 18	ESE	SE	SE	SE	ESE	ESE	SE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SSE	SSW	SSW	SSW	E	ENE	ESE	ESE	E	E	0.5	9.1	1.7
	6.0	2.6	6.5	6.0	3.5	3.6	4.8	2.7	3.7	3.1	4.2	1.0	5.1	9.1	8.0	8.2	5.7	3.8	2.5	1.4	0.5	1.1	1.3	2.1			
Sep 19	ENE	E	ENE	NE	E	ENE	ENE	NE	NE	NNW	W	W	NNW	W	W	NNW	NNW	NNW	NNW	NE	ESE	E	E	SE	1.9	12.6	5.2
	4.1	6.7	4.9	4.4	2.9	4.8	7.2	7.6	6.8	7.0	7.6	9.9	9.0	6.6	12.0	12.0	12.6	7.9	3.3	2.0	2.7	1.9	4.0	4.5			
Sep 20	SSW	SW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	1.7	17.2	6.7
	4.1	3.2	3.0	1.7	3.2	3.4	2.4	6.2	9.2	11.3	10.7	9.3	11.5	13.8	13.1	17.2	13.7	10.8	3.4	5.4	7.5	6.6	8.4	12.3			
	SSE	S	SSW	S	SE	SSE	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S			



**PEACE RIVER AREA MONITORING PROGRAM**

842b Station - September 2021

Summary of Hourly Averages

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

WIND SPEED																															
Maximum Hourly Value:	30.1 kph	on September 15	at hour 14	Hours in Service:	720																										
Maximum Daily Value:	16.9 kph	on September 5	Hours of Data:		712																										
Minimum Hourly Value:	0.0 kph	on September 10	at hour 2	Hours of Missing Data:	8																										
Minimum Daily Value:	1.7 kph	on September 18	Hours of Calibration:		0																										
Monthly Average:	5.5 kph			Operational Uptime:	98.9																										
WIND DIRECTION																															
Monthly Average:	236 (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	10.5	12.8	16.1	20.2	20.3	13.5	8.4	11.9	19.1	19.0	17.3	21.3	21.2	21.4	24.2	21.5	18.9	18.1	8.2	5.7	9.5	13.3	8.7	9.9	5.7	24.2	12.7				
	SSE	SSE	SSE	S	S	S	SSE	SSW	SSW	SSW	SW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	SW	SW	SSW	SW	SW							
Sep 22	13.2	13.3	11.5	11.1	12.2	8.0	13.0	13.2	18.0	19.6	23.6	19.6	20.9	24.4	24.4	23.3	22.2	20.2	21.6	17.8	22.1	16.2	10.5	6.7	6.7	24.4	14.8				
	SSW	SSW	SSW	SSW	SSW	S	SW	SW	WSW	WSW	WSW	W	W	WSW	W	W	W	WSW	WSW	NW	NW	WNW	WNW								
Sep 23	8.2	8.3	4.7	5.2	5.3	4.9	10.0	10.6	11.2	11.3	15.9	19.5	17.2	15.1	15.2	18.1	14.9	8.8	3.6	4.1	2.9	7.6	9.8	11.6	2.9	19.5	7.4				
	W	W	SW	SW	SW	SW	WNW	WNW	WNW	WNW	NW	WNW	WNW	W	WSW	WSW	WSW	SSW	SW	SE	SSE	SSE	SSE								
Sep 24	10.8	9.2	9.9	X	X	X	X	X	X	X	X	X	X	X	24.3	27.0	27.2	26.9	25.2	25.6	18.1	11.3	9.1	10.0	12.5	10.9	11.8	9.1	27.2	-	
	SSE	SSE	S	X	X	X	X	X	X	X	X	X	X	X	SW	WSW	WSW	W	W	WSW	WSW	WSW	SW	WSW	WSW						
Sep 25	14.3	17.8	16.7	15.6	13.7	13.1	10.9	9.1	10.4	14.0	13.2	11.2	10.0	11.0	12.9	11.3	11.1	6.2	0.2	0.7	2.0	3.2	4.2	4.4	0.2	17.8	8.6				
	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	W	W	WNW	W	W	W	W	WNW	E	ESE	ESE	ESE	SE	SE							
Sep 26	2.6	5.0	4.0	4.0	4.9	4.3	3.3	3.0	4.2	3.2	3.0	3.7	3.4	4.3	4.5	3.4	3.4	1.2	1.8	3.6	4.4	2.8	2.5	5.0	1.2	5.0	3.3				
	ESE	ESE	ESE	E	ENE	ENE	ENE	E	E	ENE	E	NE	ENE	ENE	ENE	E	E	S	ENE	E	ENE	ENE	E								
Sep 27	5.3	4.1	3.5	5.7	9.6	7.9	6.1	7.8	7.1	7.6	11.1	10.0	9.5	10.5	15.1	13.5	9.5	3.9	3.4	3.2	3.8	5.2	6.7	5.7	3.2	15.1	3.1				
	ENE	ENE	N	NE	NE	NE	ENE	E	E	ENE	E	ESE	SE	SE	SSW	W	W	NW	ESE	ESE	SE	SE	SE								
Sep 28	8.5	5.4	5.5	6.8	9.0	7.1	5.5	3.1	8.1	9.0	8.6	7.2	11.5	15.9	18.0	12.8	13.4	10.0	8.0	8.7	8.1	7.6	4.6	8.1	3.1	18.0	8.3				
	SE	SE	S	SSE	SSE	S	SW	S	S	SSE	S	SSE	S	S	SSE	SSE	S	SSW	SSW	SSW	SSW	S	S								
Sep 29	8.3	8.1	6.8	6.8	6.5	6.9	5.3	8.5	6.8	10.2	16.7	15.7	17.0	16.5	17.5	17.3	15.7	8.4	7.5	7.5	4.0	2.1	3.9	3.9	2.1	17.5	8.6				
	S	SSW	SSE	SSE	SSE	SSE	SSE	SSE	S	S	S	S	S	SSW	SW	SW	SSW	SSW	SSW	S	SE	SE	SE								
Sep 30	4.7	3.7	4.4	6.2	11.4	7.6	5.5	7.4	14.6	19.2	16.7	16.9	22.6	26.9	24.9	24.3	19.9	21.7	15.4	12.3	17.1	15.2	14.0	13.7	3.7	26.9	12.3				
	ENE	ENE	E	ESE	SSE	SE	ESE	SE	SSE	S	SSW	SSW	SW	SSW	SW	SSW	SW	SSW	SSW	SSW	SW	SSW	SSW								
<b>C</b>	Monthly Calibration							<b>S</b>	Daily Zero-Span Check							<b>Q</b>	Quality Assurance														
<b>K</b>	Collection Error							<b>N</b>	No Data (Machine Not in Service)							<b>Y</b>	Routine Maintenance							<b>P</b>	Power Failure						
<b>X</b>	Invalid Data (Equipment Malfunction/Recovery)							<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)																						
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.																															
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.																															

## RENO STATION



**PEACE RIVER AREA MONITORING PROGRAM**

**Reno Station - September 2021**

**Summary of Hourly Averages**

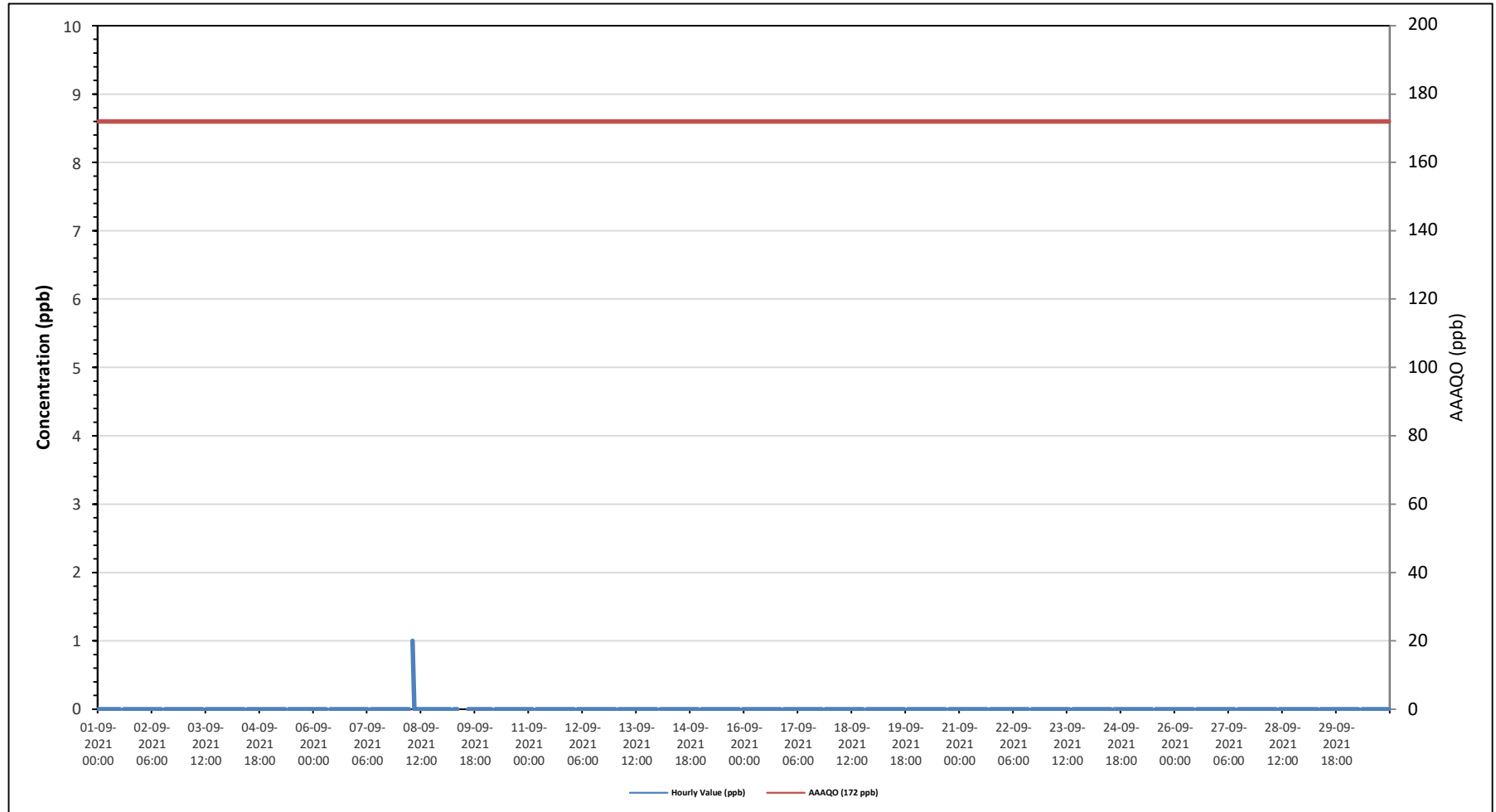
**SULPHUR DIOXIDE (SO<sub>2</sub>) in ppb**

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 8 at hour 7												Hours in Service: 720																			
Maximum Daily Value: 0.0 ppb on September 8												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	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	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	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	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	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	S	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	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	S	1	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	S	S	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sep 10	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sep 11	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	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	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	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 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			
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			
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	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			
Sep 20	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			
Sep 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0			
Sep 22	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 23	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	0			
Sep 24	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	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	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	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	S	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	S	S	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	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Diurnal Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
C	Monthly Calibration							S	Daily Zero-Span Check							Q	Quality Assurance														
K	Collection Error							N	No Data (Machine Not in Service)							Y	Routine Maintenance							P	Power Failure						
X	Invalid Data (Equipment Malfunction /Recovery)							NRM	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)																						

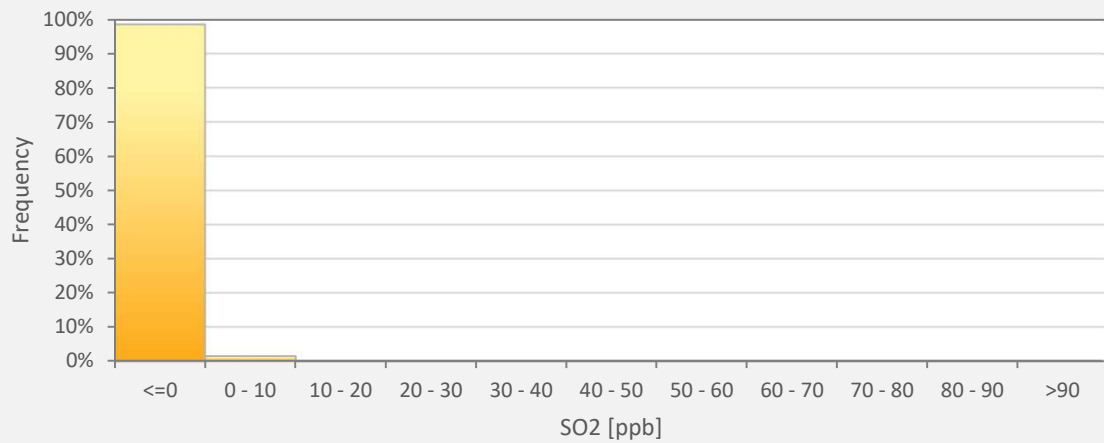
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.  
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



Timeseries Chart of Hourly Average for SO2 - Reno Station



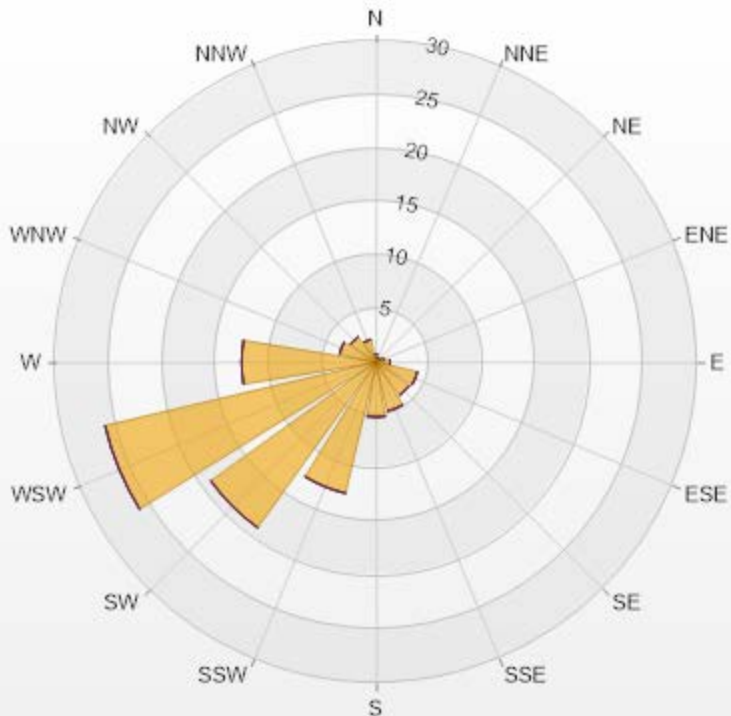
SO2[ppb] Histogram: PRAMP RENO Monthly: 09-2021 1 Hr.



Classes	SO2
<=0	98.54%
0 - 10	1.46%
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: 09-2021 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	0.73	0	0	0	0	0.73
NNE	0.44	0	0	0	0	0.44
NE	0.44	0	0	0	0	0.44
ENE	0.73	0	0	0	0	0.73
E	1.32	0	0	0	0	1.32
ESE	3.95	0	0	0	0	3.95
SE	3.8	0	0	0	0	3.8
SSE	4.68	0	0	0	0	4.68
S	5.12	0	0	0	0	5.12
SSW	12.57	0	0	0	0	12.57
SW	19.01	0	0	0	0	19.01
WSW	26.02	0	0	0	0	26.02
W	12.57	0	0	0	0	12.57
WNW	3.51	0	0	0	0	3.51
NW	2.92	0	0	0	0	2.92
NNW	2.19	0	0	0	0	2.19
Summary	100	0	0	0	0	100



PRAMP-202109

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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 2021**

**Summary of Hourly Averages**

**TOTAL REDUCED SULPHUR (TRS) in ppb**

Maximum Hourly Value:	3.83 ppb	on September 28 at hour 4	Hours in Service:	720
Maximum Daily Value:	0.93 ppb	on September 3	Hours of Data:	684
Minimum Hourly Value:	0.00 ppb	on September 9 at hour 18	Hours of Missing Data:	0
Minimum Daily Value:	0.12 ppb	on September 29	Hours of Calibration:	36
Monthly Average:	0.36 ppb		Operational Uptime:	100.0

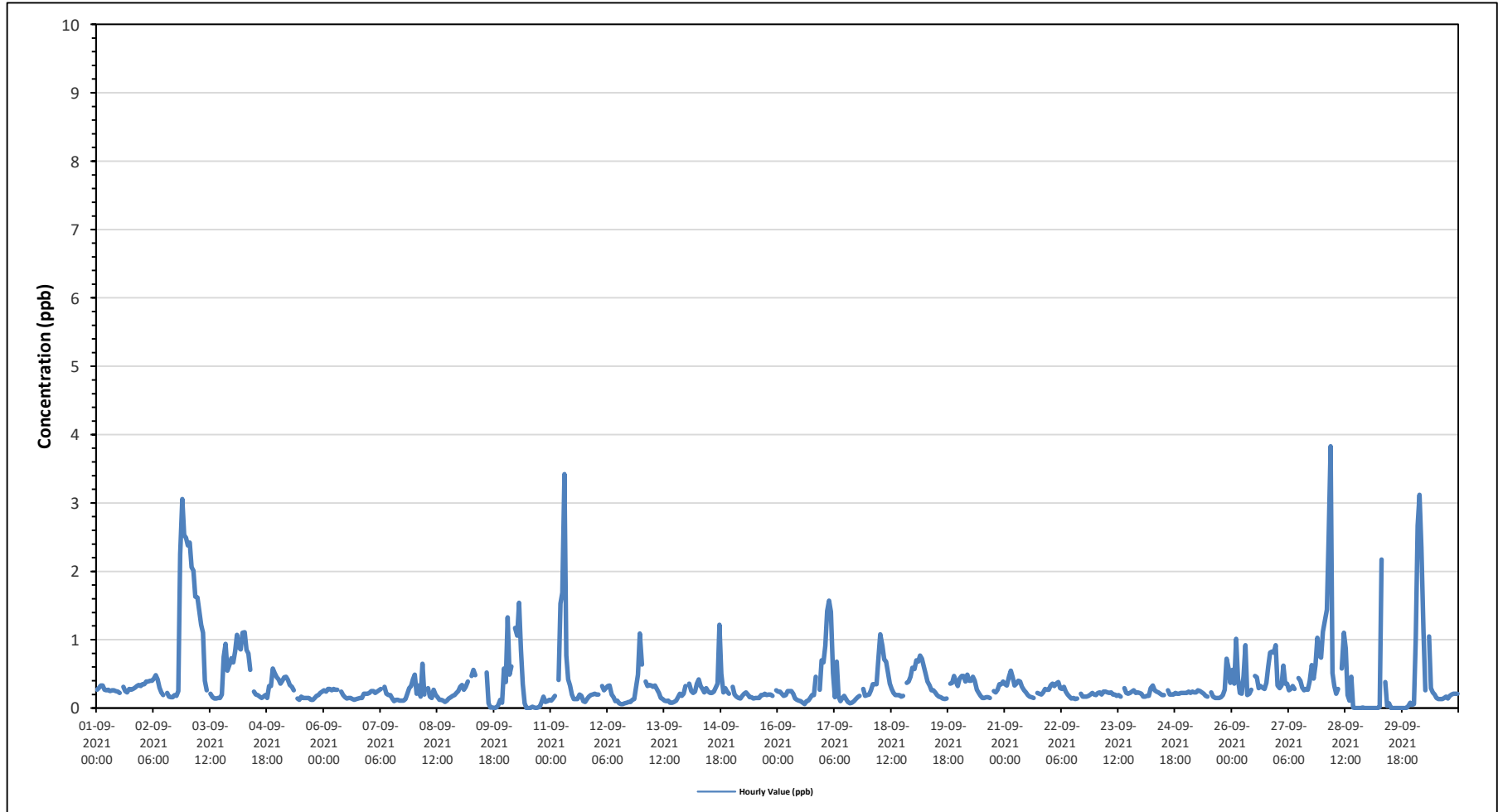
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	0.27	0.29	0.33	0.33	0.27	0.26	0.27	0.25	0.26	0.26	0.25	0.24	0.22	S	0.31	0.25	0.23	0.28	0.27	0.28	0.3	0.32	0.34	0.32	0.22	0.34	0.28	
Sep 2	0.35	0.35	0.39	0.39	0.4	0.4	0.43	0.48	0.42	0.3	0.23	0.19	S	0.22	0.17	0.16	0.16	0.19	0.18	0.25	2.25	3.06	2.53	2.49	0.16	3.06	0.70	
Sep 3	2.38	2.42	2.06	2.01	1.63	1.62	1.42	1.22	1.1	0.4	0.26	S	0.21	0.16	0.14	0.14	0.15	0.15	0.2	0.75	0.94	0.55	0.64	0.73	0.14	2.42	0.93	
Sep 4	0.67	0.83	1.07	0.89	0.86	1.1	1.11	0.85	0.8	0.56	S	0.24	0.2	0.19	0.17	0.15	0.17	0.19	0.15	0.32	0.32	0.58	0.51	0.45	0.15	1.11	0.54	
Sep 5	0.42	0.36	0.4	0.45	0.46	0.41	0.34	0.31	0.26	S	0.14	0.12	0.17	0.15	0.15	0.15	0.15	0.12	0.12	0.15	0.18	0.19	0.22	0.24	0.12	0.46	0.25	
Sep 6	0.26	0.24	0.28	0.28	0.26	0.28	0.27	0.27	S	0.24	0.19	0.16	0.14	0.15	0.15	0.13	0.12	0.13	0.14	0.15	0.15	0.21	0.21	0.21	0.12	0.28	0.20	
Sep 7	0.22	0.25	0.25	0.22	0.24	0.26	0.28	S	0.31	0.21	0.19	0.19	0.14	0.1	0.12	0.12	0.11	0.11	0.11	0.13	0.21	0.29	0.32	0.42	0.10	0.42	0.21	
Sep 8	0.49	0.21	0.33	0.17	0.65	0.2	S	0.29	0.17	0.15	0.27	0.19	0.16	0.12	0.12	0.11	0.09	0.11	0.14	0.16	0.18	0.19	0.22	0.25	0.09	0.65	0.22	
Sep 9	0.31	0.34	0.27	0.31	0.39	S	0.47	0.56	0.48	C	C	C	C	C	C	0.52	0.07	0.01	0.01	0	0.01	0.04	0.12	0.08	0.58	0.00	0.58	0.25
Sep 10	0.38	1.33	0.49	0.61	S	1.17	1.06	1.54	0.86	0.35	0.07	0	0	0	0.02	0.01	0	0.01	0.02	0.09	0.17	0.09	0.1	0.12	0.00	1.54	0.37	
Sep 11	0.11	0.14	0.18	S	0.41	1.53	1.69	3.42	0.77	0.42	0.33	0.2	0.13	0.13	0.13	0.2	0.18	0.1	0.09	0.13	0.17	0.19	0.2	0.21	0.09	3.42	0.48	
Sep 12	0.2	0.2	S	0.32	0.26	0.29	0.32	0.33	0.2	0.16	0.1	0.11	0.07	0.06	0.06	0.07	0.08	0.09	0.09	0.12	0.13	0.31	0.49	1.09	0.06	1.09	0.22	
Sep 13	0.64	S	0.39	0.32	0.34	0.33	0.31	0.33	0.28	0.22	0.15	0.13	0.11	0.1	0.11	0.08	0.08	0.09	0.11	0.16	0.21	0.18	0.21	0.32	0.08	0.64	0.23	
Sep 14	S	0.36	0.25	0.22	0.24	0.36	0.42	0.32	0.28	0.23	0.29	0.24	0.22	0.22	0.24	0.3	0.36	1.22	0.5	0.23	0.29	0.24	0.21	S	0.21	1.22	0.33	
Sep 15	0.31	0.2	0.17	0.15	0.14	0.18	0.21	0.23	0.2	0.16	0.16	0.14	0.15	0.15	0.15	0.19	0.19	0.21	0.19	0.2	0.2	0.18	S	0.26	0.14	0.31	0.19	
Sep 16	0.24	0.24	0.21	0.18	0.19	0.25	0.25	0.25	0.21	0.14	0.12	0.11	0.1	0.08	0.06	0.1	0.11	0.15	0.19	0.19	0.46	S	0.27	0.7	0.06	0.70	0.21	
Sep 17	0.67	0.91	1.42	1.57	1.41	0.51	0.16	0.68	0.17	0.1	0.15	0.18	0.13	0.09	0.07	0.08	0.1	0.13	0.16	0.18	S	0.28	0.18	0.19	0.07	1.57	0.41	
Sep 18	0.2	0.26	0.35	0.35	0.35	0.72	1.08	0.91	0.71	0.68	0.52	0.36	0.28	0.22	0.19	0.19	0.19	0.17	0.18	S	0.37	0.39	0.46	0.59	0.17	1.08	0.42	
Sep 19	0.57	0.7	0.68	0.77	0.72	0.61	0.5	0.39	0.33	0.26	0.26	0.23	0.19	0.17	0.16	0.14	0.13	0.14	S	0.36	0.37	0.47	0.39	0.32	0.13	0.77	0.39	
Sep 20	0.43	0.47	0.47	0.39	0.49	0.4	0.4	0.46	0.4	0.27	0.22	0.18	0.15	0.15	0.16	0.16	0.15	S	0.25	0.23	0.27	0.35	0.35	0.39	0.15	0.49	0.31	
Sep 21	0.35	0.33	0.46	0.55	0.45	0.33	0.36	0.4	0.39	0.31	0.26	0.23	0.19	0.17	0.16	0.15	S	0.22	0.21	0.2	0.23	0.28	0.27	0.27	0.15	0.55	0.29	
Sep 22	0.33	0.36	0.32	0.36	0.38	0.29	0.28	0.31	0.24	0.2	0.17	0.14	0.15	0.13	0.14	S	0.21	0.17	0.17	0.17	0.18	0.2	0.22	0.2	0.13	0.38	0.23	
Sep 23	0.19	0.22	0.23	0.2	0.24	0.24	0.23	0.22	0.23	0.2	0.2	0.18	0.19	0.17	S	0.29	0.22	0.21	0.22	0.24	0.26	0.22	0.23	0.22	0.17	0.29	0.22	
Sep 24	0.21	0.17	0.17	0.18	0.18	0.29	0.33	0.26	0.24	0.23	0.21	0.19	0.19	S	0.26	0.2	0.2	0.2	0.22	0.21	0.21	0.22	0.22	0.22	0.17	0.33	0.22	
Sep 25	0.22	0.24	0.22	0.24	0.23	0.23	0.26	0.25	0.23	0.21	0.18	0.17	S	0.23	0.17	0.15	0.15	0.15	0.16	0.19	0.27	0.72	0.59	0.37	0.15	0.72	0.25	
Sep 26	0.56	0.36	1.01	0.43	0.22	0.21	0.47	0.92	0.19	0.21	0.27	S	0.47	0.45	0.29	0.32	0.3	0.28	0.37	0.61	0.81	0.83	0.81	0.92	0.19	1.01	0.49	
Sep 27	0.33	0.29	0.33	0.62	0.36	0.36	0.26	0.28	0.32	0.28	S	0.44	0.4	0.3	0.26	0.28	0.27	0.39	0.63	0.43	0.63	1.03	0.77	0.74	0.26	1.03	0.43	
Sep 28	1.12	1.27	1.44	2.55	3.83	0.51	0.32	0.21	0.28	S	0.58	1.1	0.87	0.19	0.11	0.46	0.01	0	0	0	0	0	0	0	0.00	3.83	0.65	
Sep 29	0	0	0	0	0	0	0.02	2.17	S	0.38	0.03	0.07	0	0	0	0	0	0	0	0	0	0.03	0.08	0.05	0.00	2.17	0.12	
Sep 30	0.06	1.04	2.67	3.12	2.35	1.12	0.26	S	1.05	0.29	0.23	0.2	0.15	0.13	0.13	0.13	0.15	0.17	0.14	0.18	0.2	0.21	0.21	0.21	0.06	3.12	0.63	
Diurnal Maximum	2.38	2.42	2.67	3.12	3.83	1.62	1.69	3.42	1.10	0.68	0.58	1.10	0.87	0.45	0.52	0.46	0.36	1.22	0.63	0.75	2.25	3.06	2.53	2.49				
Diurnal Average	0.43	0.50	0.58	0.63	0.62	0.50	0.48	0.65	0.41	0.27	0.22	0.22	0.20	0.16	0.16	0.16	0.15	0.19	0.18	0.22	0.34	0.41	0.39	0.45				

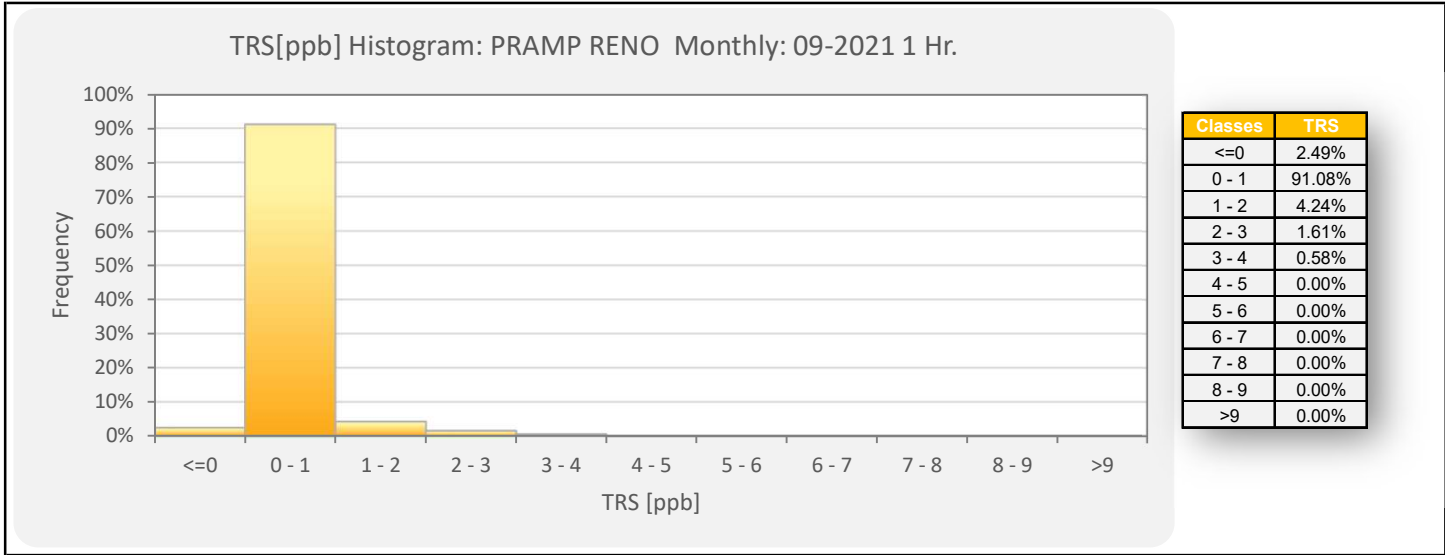
<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	Invalid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span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

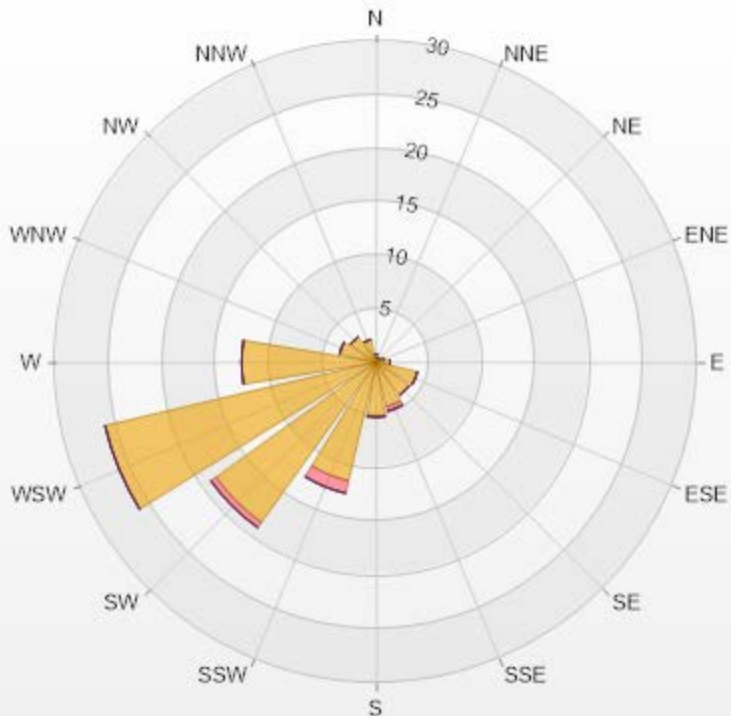




Wind: PRAMP RENO Poll.: PRAMP RENO-TRS[ppb] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 95.00% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	0.73	0	0	0	0	0.73
NNE	0.44	0	0	0	0	0.44
NE	0.44	0	0	0	0	0.44
ENE	0.73	0	0	0	0	0.73
E	1.32	0	0	0	0	1.32
ESE	3.95	0	0	0	0	3.95
SE	3.8	0	0	0	0	3.8
SSE	4.24	0.44	0	0	0	4.68
S	5.12	0	0	0	0	5.12
SSW	11.4	1.17	0	0	0	12.57
SW	18.42	0.58	0	0	0	19
WSW	26.02	0	0	0	0	26.02
W	12.57	0	0	0	0	12.57
WNW	3.51	0	0	0	0	3.51
NW	2.92	0	0	0	0	2.92
NNW	2.19	0	0	0	0	2.19
Summary	97.8	2.19	0	0	0	100





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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**

**Reno Station - September 2021**

**Summary of Hourly Averages**

**TOTAL HYDROCARBONS (THC) in ppm**

Maximum Hourly Value:	2.17 ppm on September 9 at hour 23	Hours in Service:	720
Maximum Daily Value:	2.02 ppm on September 18	Hours of Data:	685
Minimum Hourly Value:	1.92 ppm on September 5 at hour 11	Hours of Missing Data:	0
Minimum Daily Value:	1.94 ppm on September 22	Hours of Calibration:	35
Monthly Average:	1.98 ppm	Operational Uptime:	100.0

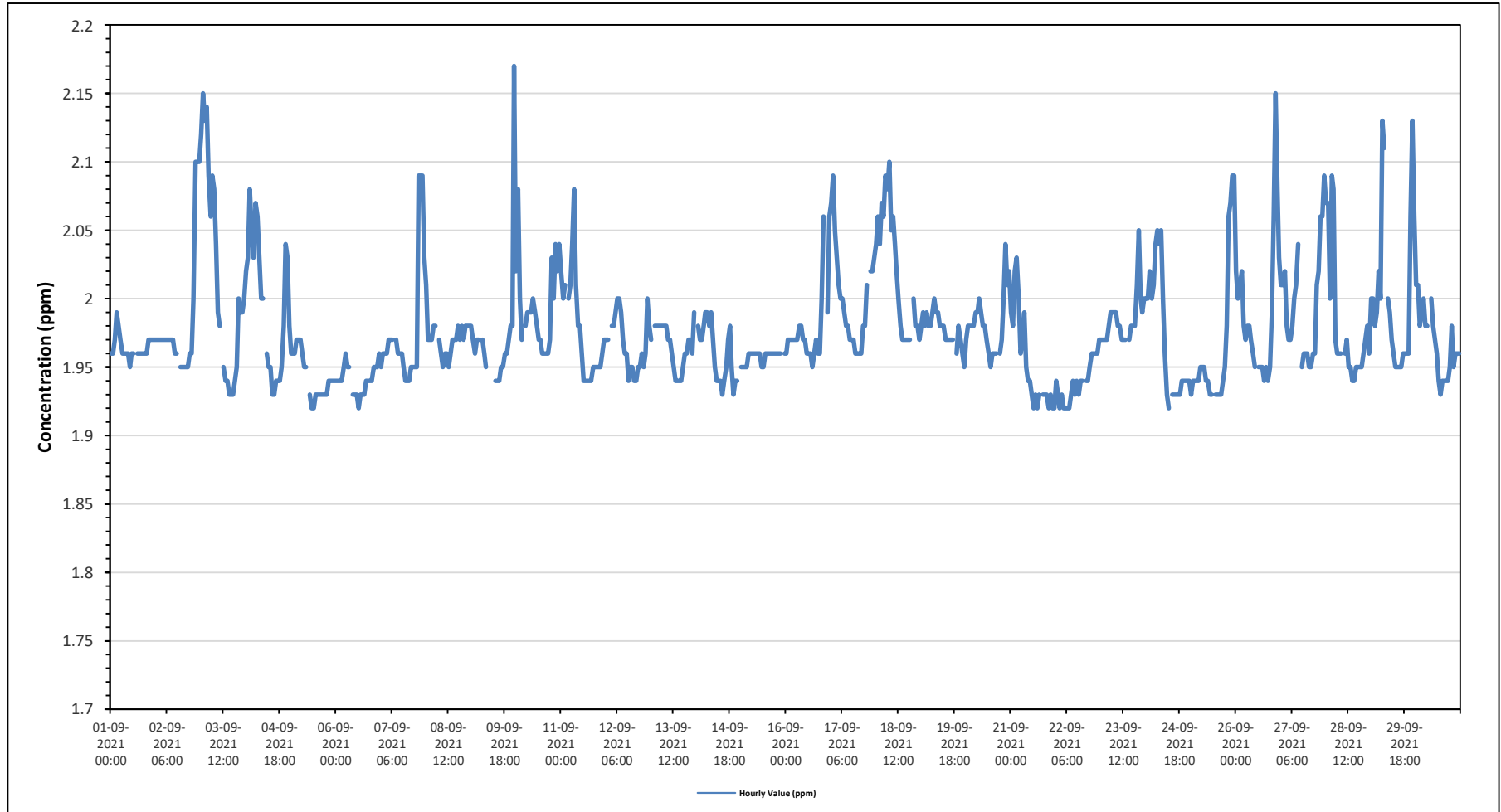
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	1.96	1.96	1.97	1.99	1.98	1.97	1.96	1.96	1.96	1.96	1.95	1.96	1.96	S	1.96	1.96	1.96	1.96	1.96	1.96	1.97	1.97	1.97	1.97	1.95	1.99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

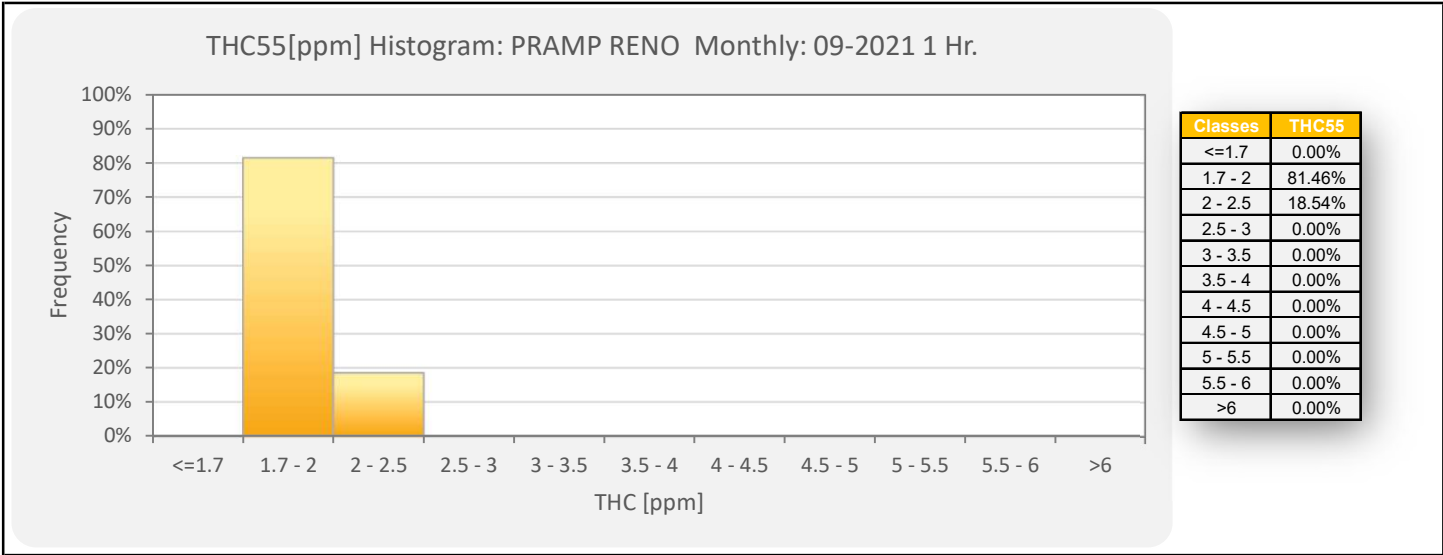
<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	Invalid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span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

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

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

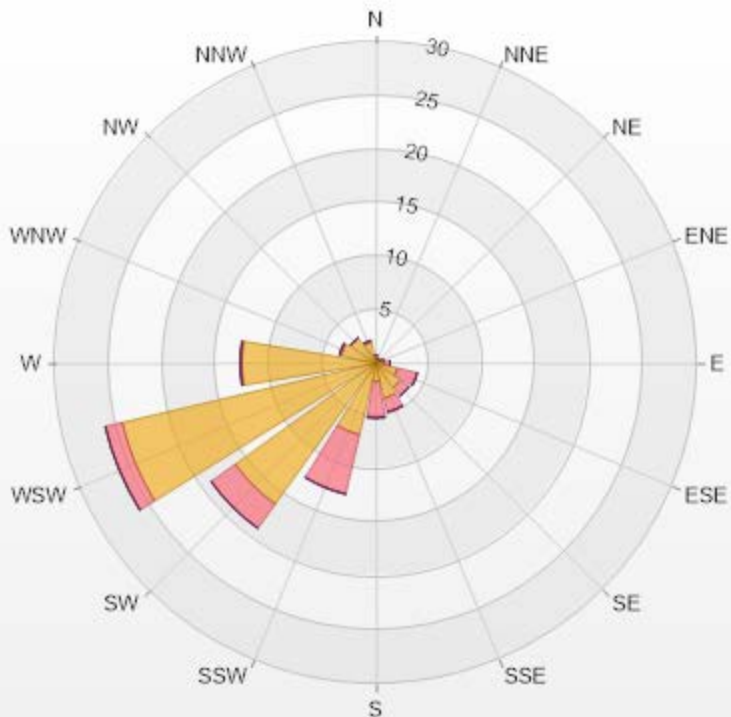
**Timeseries Chart of Hourly Average for THC - Reno Station**





Wind: PRAMP RENO Poll.: PRAMP RENO-THC55[ppm] Monthly: 09-2021 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	0.73	0	0	0	0	0.73
NNE	0.44	0	0	0	0	0.44
NE	0.44	0	0	0	0	0.44
ENE	0.58	0.15	0	0	0	0.73
E	0.73	0.58	0	0	0	1.31
ESE	2.04	1.9	0	0	0	3.94
SE	2.77	1.02	0	0	0	3.79
SSE	3.36	1.31	0	0	0	4.67
S	1.75	3.36	0	0	0	5.11
SSW	6.86	5.69	0	0	0	12.55
SW	16.2	2.77	0	0	0	18.97
WSW	24.38	1.61	0	0	0	25.99
W	12.55	0.15	0	0	0	12.7
WNW	3.36	0.15	0	0	0	3.51
NW	2.92	0	0	0	0	2.92
NNW	2.04	0.15	0	0	0	2.19
Summary	81.15	18.84	0	0	0	100



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% Icon Classes (ppm)	81	0-2	19	2-5	0	5-10	0	10-40	0	>40.0
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**PEACE RIVER AREA MONITORING PROGRAM**

**Reno Station - September 2021**

**Summary of Hourly Averages**

**METHANE (CH4) in ppm**

Maximum Hourly Value:	2.17 ppm on September 9 at hour 23	Hours in Service:	720
Maximum Daily Value:	2.02 ppm on September 18	Hours of Data:	685
Minimum Hourly Value:	1.92 ppm on September 5 at hour 11	Hours of Missing Data:	0
Minimum Daily Value:	1.94 ppm on September 22	Hours of Calibration:	35
Monthly Average:	1.98 ppm	Operational Uptime:	100.0

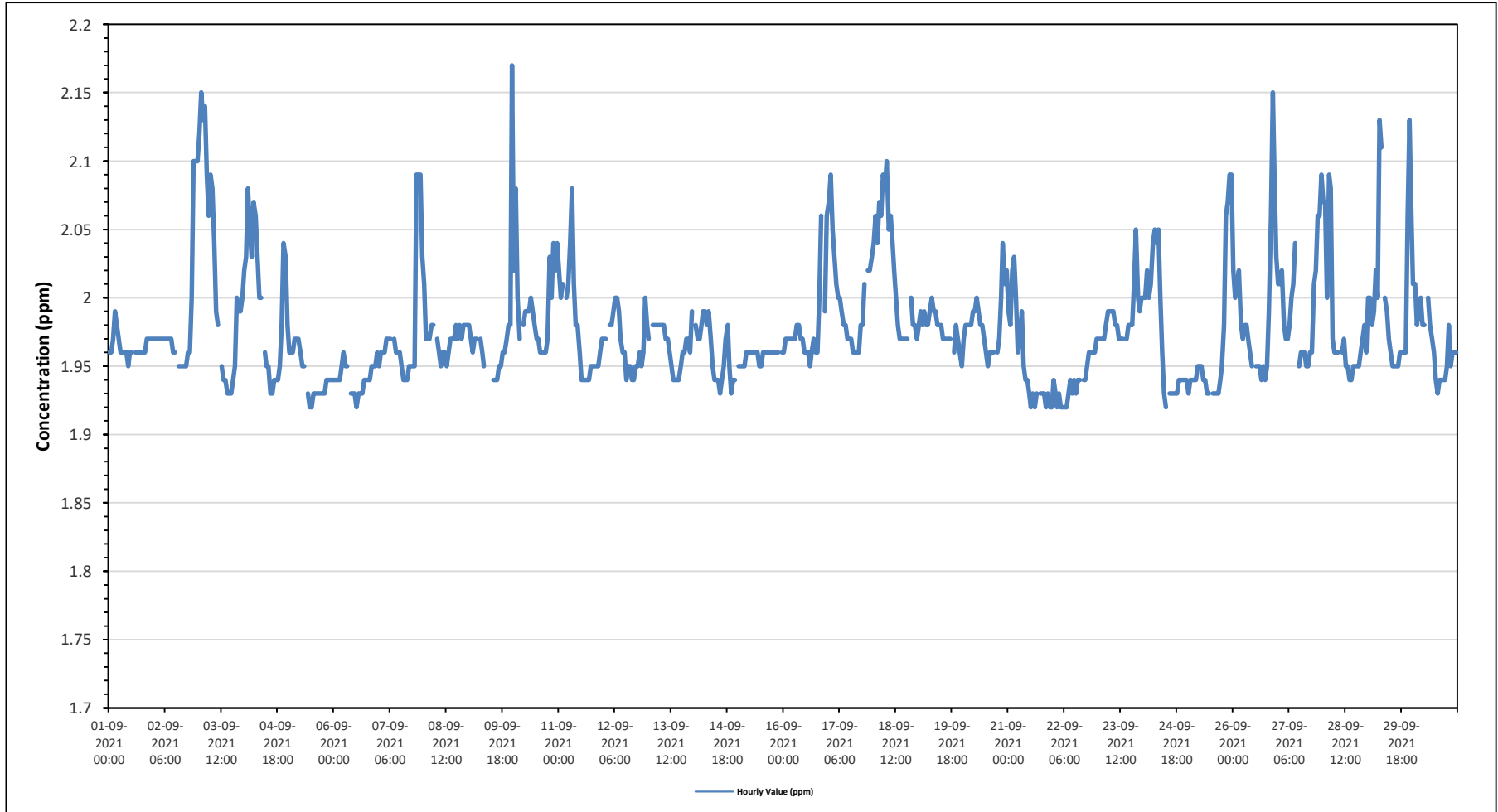
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	1.96	1.96	1.97	1.99	1.98	1.97	1.96	1.96	1.96	1.96	1.95	1.96	1.96	S	1.96	1.96	1.96	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.95	1.99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

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

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

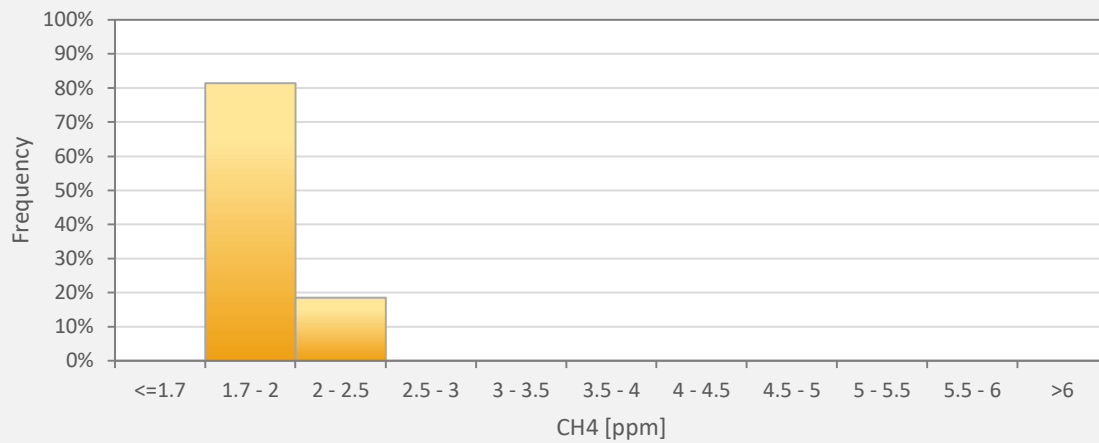
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

**Timeseries Chart of Hourly Average for CH4 - Reno Station**





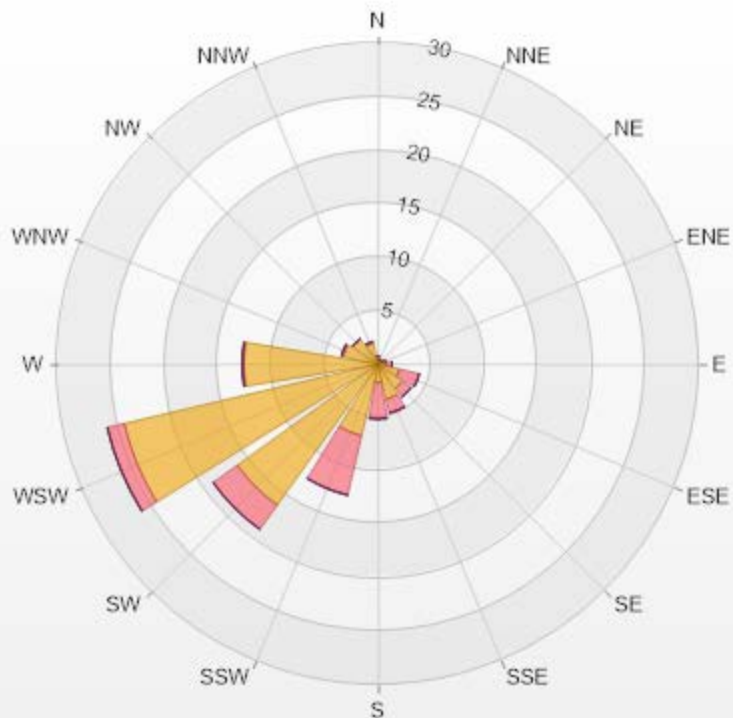
CH4[ppm] Histogram: PRAMP RENO Monthly: 09-2021 1 Hr.



Classes	CH4
<=1.7	0.00%
1.7 - 2	81.46%
2 - 2.5	18.54%
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 RENO Poll.: PRAMP RENO-CH4[ppm] Monthly: 09-2021 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	0.73	0	0	0	0	0.73
NNE	0.44	0	0	0	0	0.44
NE	0.44	0	0	0	0	0.44
ENE	0.58	0.15	0	0	0	0.73
E	0.73	0.58	0	0	0	1.31
ESE	2.04	1.9	0	0	0	3.94
SE	2.77	1.02	0	0	0	3.79
SSE	3.36	1.31	0	0	0	4.67
S	1.75	3.36	0	0	0	5.11
SSW	6.86	5.69	0	0	0	12.55
SW	16.2	2.77	0	0	0	18.97
WSW	24.38	1.61	0	0	0	25.99
W	12.55	0.15	0	0	0	12.7
WNW	3.36	0.15	0	0	0	3.51
NW	2.92	0	0	0	0	2.92
NNW	2.04	0.15	0	0	0	2.19
Summary	81.15	18.84	0	0	0	100



PRAMP-202109


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% Icon Classes (ppm)

81  0-2

19  2-5

0  5-10

0  10-20

0  >20.0



### PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2021

Summary of Hourly Averages

#### NON-METHANE HYDROCARBONS (NMHC) in ppm

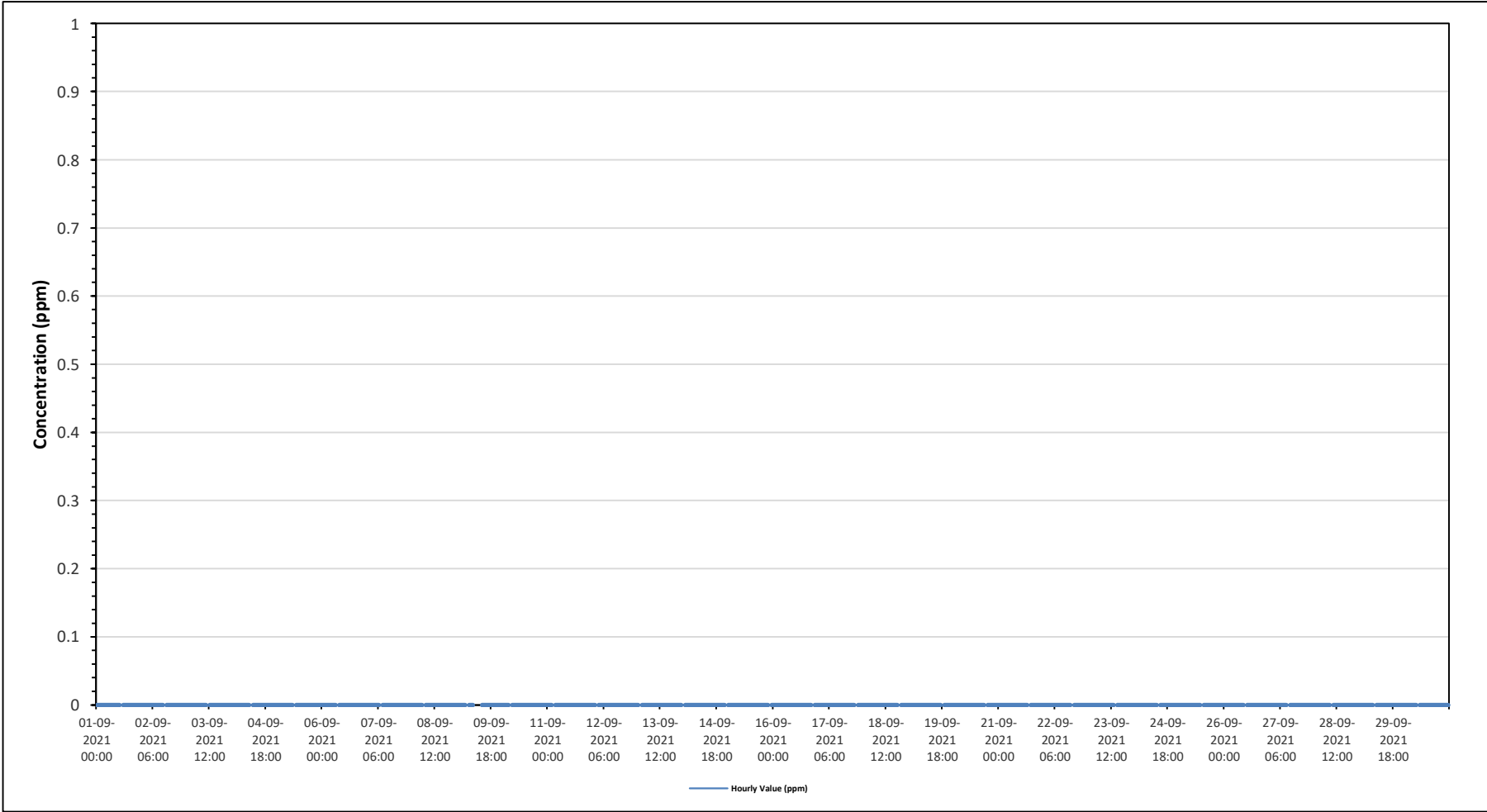
Maximum Hourly Value:	0.00 ppm on September 1 at hour 0	Hours in Service:	720
Maximum Daily Value:	0.00 ppm on September 1	Hours of Data:	685
Minimum Hourly Value:	0.00 ppm on September 1 at hour 0	Hours of Missing Data:	0
Minimum Daily Value:	0.00 ppm on September 1	Hours of Calibration:	35
Monthly Average:	0.00 ppm	Operational Uptime:	100.0

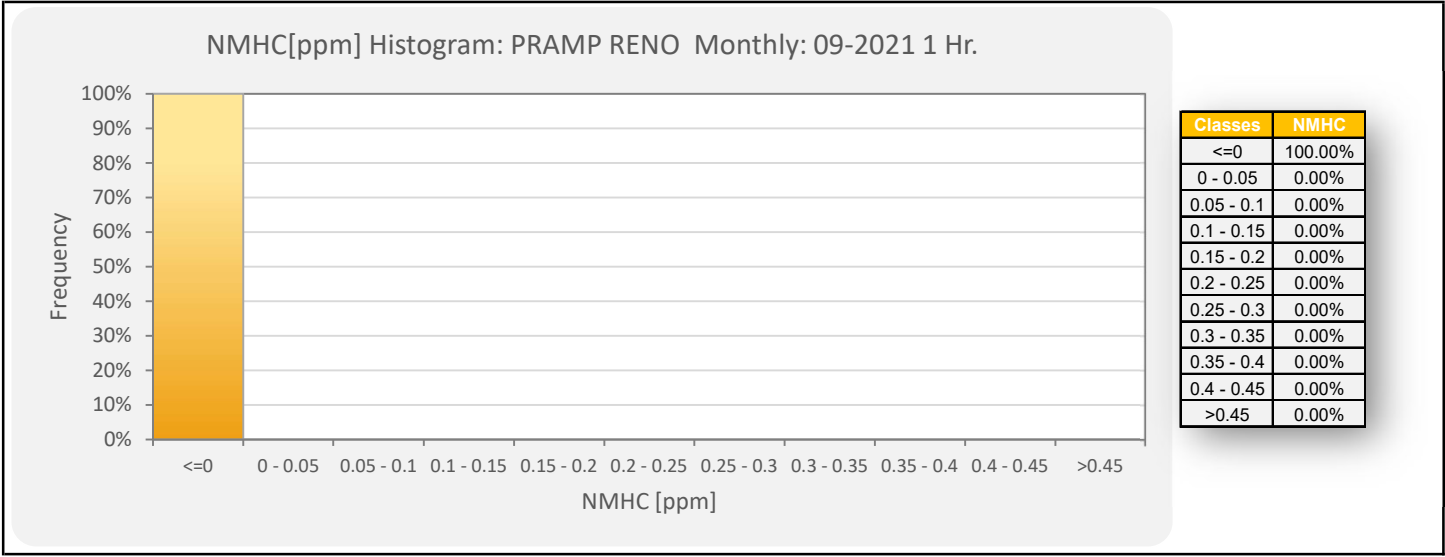
Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average	
Sep 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	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	S	0.00	0.00	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 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	S	0.00	0.00	0.00	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	0.00	S	0.00	0.00	0.00	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	S	S	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	S	0.00	0.00	0.00	C	C	C	C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 10	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 11	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 12	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 13	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 14	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00
Sep 15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	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	S	0.00	0.00	0.00	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
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	S	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	S	0.00	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	S	0.00	0.00	0.00	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	S	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
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	S	0.00	0.00	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	S	0.00	0.00	0.00	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
Sep 27	0.00	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
Sep 29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	S	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	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

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

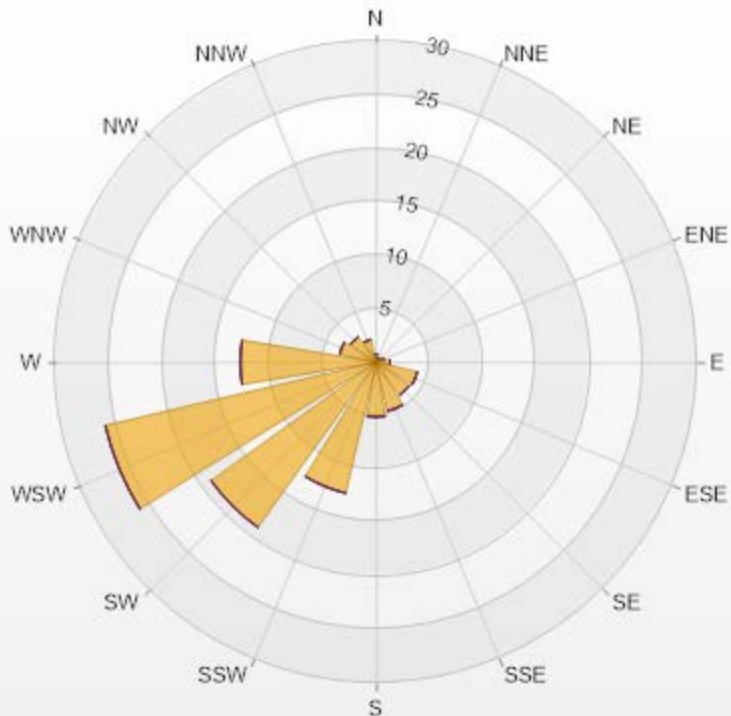
**Timeseries Chart of Hourly Average for NMHC - Reno Station**





Wind: PRAMP RENO Poll.: PRAMP RENO-NMHC[ppm] Monthly: 09-2021 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	0.3-0.9	0.9-2	>2.0	Total
N	0.73	0	0	0	0	0.73
NNE	0.44	0	0	0	0	0.44
NE	0.44	0	0	0	0	0.44
ENE	0.73	0	0	0	0	0.73
E	1.31	0	0	0	0	1.31
ESE	3.94	0	0	0	0	3.94
SE	3.8	0	0	0	0	3.8
SSE	4.67	0	0	0	0	4.67
S	5.11	0	0	0	0	5.11
SSW	12.55	0	0	0	0	12.55
SW	18.98	0	0	0	0	18.98
WSW	25.99	0	0	0	0	25.99
W	12.7	0	0	0	0	12.7
WNW	3.5	0	0	0	0	3.5
NW	2.92	0	0	0	0	2.92
NNW	2.19	0	0	0	0	2.19
Summary	100	0	0	0	0	100




PRAMP-202109

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% Icon Classes (ppm)

100  0-0.1

0  0.1-0.3

0  0.3-0.9

0  0.9-2

0  >2.0





**PEACE RIVER AREA MONITORING PROGRAM**

**Reno Station - September 2021**

**Summary of Hourly Averages**

**RELATIVE HUMIDITY (RH) in %**

Maximum Hourly Value:	100 %	on September 1 at hour 0	Hours in Service:	720
Maximum Daily Value:	97.2 %	on September 1	Hours of Data:	720
Minimum Hourly Value:	27 %	on September 22 at hour 15	Hours of Missing Data:	0
Minimum Daily Value:	45.5 %	on September 24	Hours of Calibration:	0
Monthly Average:	64.9 %		Operational Uptime:	100.0

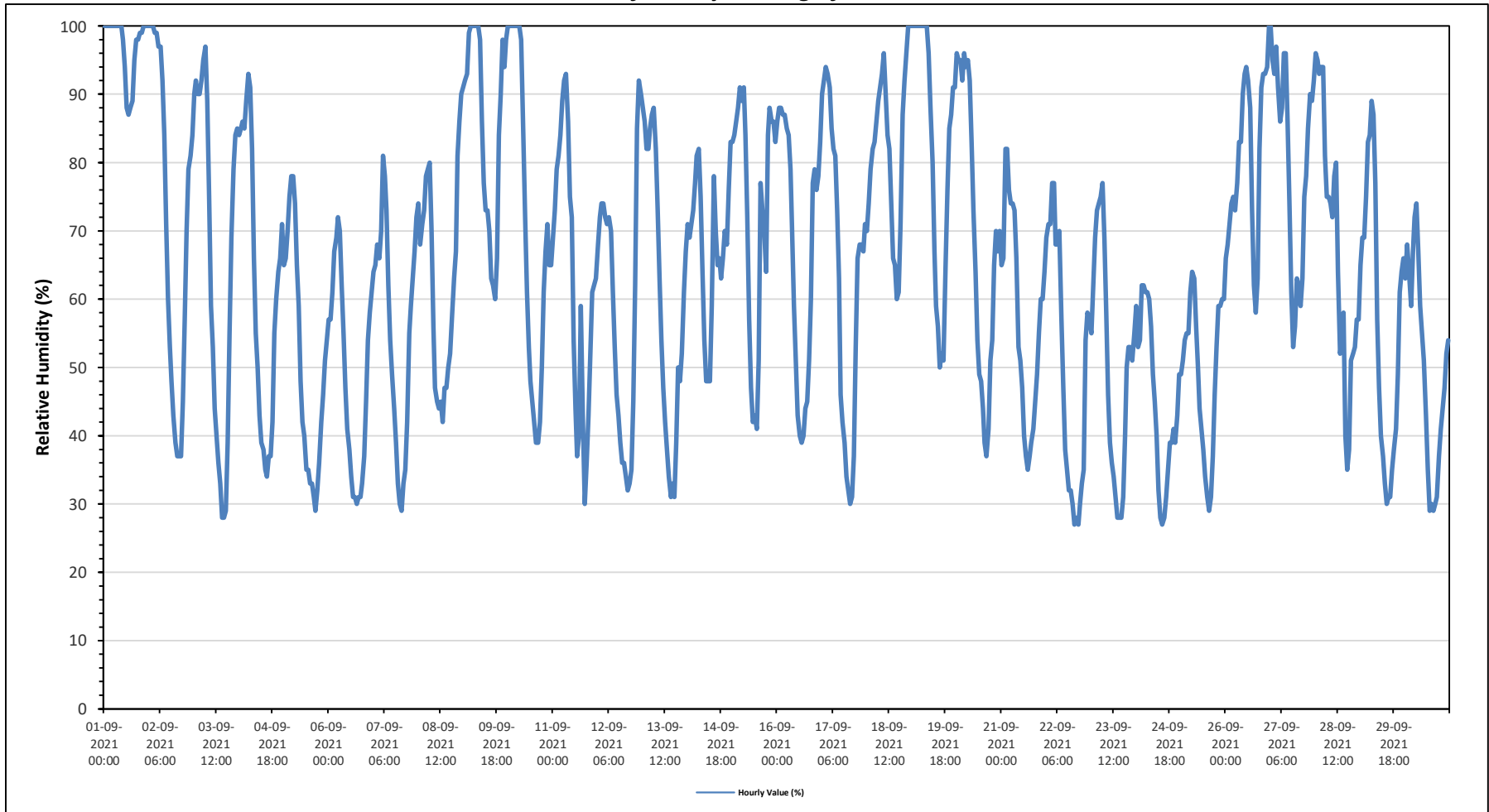
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	100	100	100	100	100	100	100	100	100	100	98	94	88	87	88	89	95	98	98	99	99	100	100	100	87	100	97.2
Sep 2	100	100	100	99	99	97	97	92	84	71	60	53	48	43	39	37	37	45	57	70	79	81	84	37	100	71.2	
Sep 3	90	92	90	90	92	95	97	89	75	59	53	44	40	36	33	28	28	29	39	55	69	79	84	85	28	97	65.5
Sep 4	84	85	86	85	89	93	91	82	66	55	50	43	39	38	35	34	37	37	42	55	60	64	66	71	34	93	62.0
Sep 5	65	66	70	75	78	78	74	65	59	48	42	40	35	35	33	33	31	29	32	36	42	46	51	54	29	78	50.7
Sep 6	57	57	61	67	69	72	70	62	55	47	41	38	34	31	31	30	31	31	33	37	45	54	58	61	30	72	48.8
Sep 7	64	65	68	66	70	81	78	73	62	54	49	44	39	33	30	29	33	35	42	55	59	63	67	72	29	81	55.5
Sep 8	74	68	71	73	78	79	80	70	56	47	45	44	45	42	47	47	50	52	58	63	67	81	86	90	42	90	63.0
Sep 9	91	92	93	99	100	100	100	100	100	98	86	77	73	73	70	63	62	60	66	84	90	98	94	98	60	100	86.1
Sep 10	100	100	100	100	100	100	100	98	86	72	61	53	48	45	42	39	39	42	50	61	67	71	65	65	39	100	71.0
Sep 11	69	73	79	81	84	89	92	93	86	75	72	54	44	37	40	59	42	30	36	43	52	61	62	63	30	93	63.2
Sep 12	68	72	74	74	72	71	72	70	61	53	46	43	39	36	36	34	32	33	35	45	62	85	92	90	32	92	58.1
Sep 13	88	86	82	82	85	87	88	82	73	63	54	47	42	38	34	31	33	31	39	50	48	52	61	67	31	88	60.1
Sep 14	71	69	71	73	77	81	82	75	64	54	48	48	48	59	78	70	65	66	63	66	70	68	76	83	48	83	67.7
Sep 15	83	84	86	88	91	89	91	84	72	57	47	42	43	41	51	77	73	70	64	84	88	86	86	83	41	91	73.3
Sep 16	86	88	88	87	87	85	84	79	70	59	51	43	40	39	40	44	45	51	60	77	79	76	78	83	39	88	67.5
Sep 17	90	92	94	93	91	85	82	81	73	63	46	42	39	34	32	30	31	37	53	66	68	68	67	71	30	94	63.7
Sep 18	70	74	79	82	83	86	89	91	93	96	90	84	82	74	66	65	60	61	71	87	92	96	100	100	60	100	82.1
Sep 19	100	100	100	100	100	100	100	100	100	96	88	80	67	59	56	50	52	51	65	76	85	87	91	91	50	100	83.1
Sep 20	96	95	95	92	96	94	95	92	83	73	64	54	49	48	44	39	37	41	51	54	65	70	67	70	37	96	69.3
Sep 21	65	66	82	82	76	74	74	73	66	53	51	47	40	37	35	37	39	41	45	49	55	60	60	64	35	82	57.1
Sep 22	69	71	71	77	77	68	68	70	57	47	38	35	32	32	30	27	28	27	30	33	35	54	58	57	27	77	49.6
Sep 23	55	62	69	73	74	75	77	69	58	46	39	36	34	31	28	28	28	31	40	50	53	53	51	55	28	77	50.6
Sep 24	59	53	54	62	62	61	61	60	56	49	45	40	32	28	27	28	31	35	39	39	41	39	43	49	27	62	45.5
Sep 25	49	51	54	55	55	61	64	63	56	50	44	41	38	34	31	29	31	37	46	53	59	59	60	60	29	64	49.2
Sep 26	66	68	71	74	75	73	77	83	83	90	93	94	92	88	73	62	58	63	82	91	93	93	94	100	58	100	80.7
Sep 27	100	95	93	97	91	86	88	96	96	86	74	61	53	56	63	62	59	63	75	78	85	90	89	92	53	100	80.3
Sep 28	96	95	93	94	94	81	75	75	74	72	78	80	64	52	54	58	40	35	38	51	52	53	57	57	35	96	67.4
Sep 29	65	69	69	75	83	84	89	87	77	57	47	40	37	33	30	31	31	35	38	41	49	61	64	66	30	89	56.6
Sep 30	63	68	64	59	67	72	74	67	59	55	51	43	35	29	30	29	30	31	37	41	44	47	52	54	29	74	50.0
Diurnal Maximum	100	100	100	100	100	100	100	100	100	100	98	94	88	88	89	95	98	98	99	99	100	100	100	100			
Diurnal Average	77.8	78.5	80.2	81.8	83.2	83.2	83.6	80.7	73.3	64.8	58.4	52.8	48.0	44.9	44.2	44.0	42.9	44.0	50.4	59.2	64.8	69.8	72.0	74.5			

<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	InValid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	<b>P</b>	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 2021**

**Summary of Hourly Averages**

**BAROMETRIC PRESSURE (BP) in millibar**

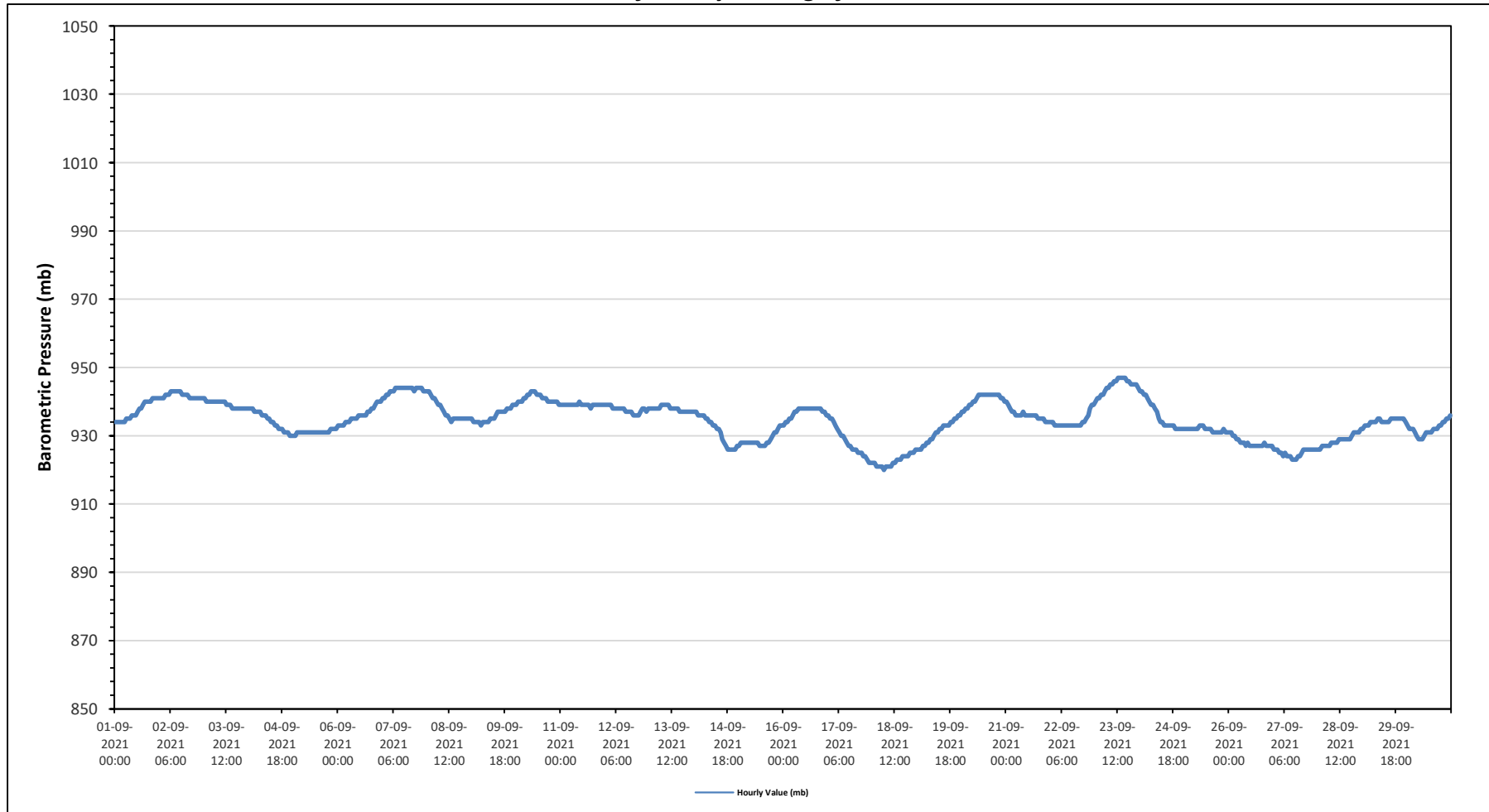
Maximum Hourly Value:	947	mb	on September 23 at hour 12	Hours in Service:	720
Maximum Daily Value:	945	mb	on September 23	Hours of Data:	720
Minimum Hourly Value:	920	mb	on September 18 at hour 6	Hours of Missing Data:	0
Minimum Daily Value:	923	mb	on September 18	Hours of Calibration:	0
Monthly Average:	935	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	934	934	934	934	934	935	935	935	936	936	936	937	938	938	939	940	940	940	940	941	941	941	941	934	941	937
Sep 2	941	941	941	942	942	942	943	943	943	943	943	943	942	942	942	942	941	941	941	941	941	941	941	941	941	941	942
Sep 3	941	940	940	940	940	940	940	940	940	940	940	940	939	939	939	938	938	938	938	938	938	938	938	938	938	938	939
Sep 4	938	938	938	937	937	937	937	936	936	936	935	935	934	934	933	933	932	932	932	931	931	931	930	930	930	938	934
Sep 5	930	930	931	931	931	931	931	931	931	931	931	931	931	931	931	931	931	931	931	931	931	932	932	932	930	932	931
Sep 6	933	933	933	933	934	934	934	934	935	935	935	935	936	936	936	936	937	937	938	938	939	940	940	940	933	940	936
Sep 7	941	941	942	942	943	943	943	944	944	944	944	944	944	944	944	944	944	943	944	944	944	944	943	943	941	944	943
Sep 8	943	943	942	941	941	940	939	939	938	937	936	936	935	934	935	935	935	935	935	935	935	935	935	935	934	943	937
Sep 9	935	934	934	934	934	933	934	934	934	934	935	935	935	936	936	937	937	937	937	938	938	938	939	939	933	939	936
Sep 10	939	940	940	940	941	941	942	942	943	943	943	942	942	942	941	941	941	940	940	940	940	940	939	939	939	943	941
Sep 11	939	939	939	939	939	939	939	939	939	939	940	939	939	939	939	939	938	939	939	939	939	939	939	939	938	940	939
Sep 12	939	939	939	939	938	938	938	938	938	938	938	937	937	937	937	936	936	936	936	937	938	938	937	938	936	939	938
Sep 13	938	938	938	938	938	938	939	939	939	939	939	939	938	938	938	938	938	937	937	937	937	937	937	937	937	937	939
Sep 14	937	937	936	936	936	936	935	935	934	934	933	933	932	932	931	929	928	927	926	926	926	926	926	926	926	937	932
Sep 15	927	928	928	928	928	928	928	928	928	928	928	927	927	927	927	928	928	929	930	931	931	932	933	933	927	933	929
Sep 16	933	934	934	935	935	936	937	937	938	938	938	938	938	938	938	938	938	938	938	938	938	937	937	936	933	938	937
Sep 17	936	935	935	934	933	932	931	930	930	929	928	927	927	926	926	926	925	925	925	924	924	923	922	922	922	936	928
Sep 18	922	922	921	921	921	921	920	921	921	921	921	922	922	923	923	923	924	924	924	924	925	925	925	926	920	926	923
Sep 19	926	926	926	927	927	928	928	929	929	930	931	931	932	932	933	933	933	934	934	935	935	936	936	926	936	931	
Sep 20	937	937	938	938	939	939	940	940	941	942	942	942	942	942	942	942	942	942	942	942	941	941	940	937	942	941	
Sep 21	940	939	938	937	937	936	936	936	936	937	936	936	936	936	936	936	935	935	935	935	934	934	934	934	934	940	936
Sep 22	934	934	933	933	933	933	933	933	933	933	933	933	933	933	933	933	934	934	935	936	938	939	939	933	939	934	
Sep 23	940	941	941	942	942	943	944	944	945	945	946	946	947	947	947	947	946	946	945	945	945	944	944	940	947	945	
Sep 24	943	943	942	942	941	940	939	939	938	937	935	934	934	933	933	933	933	933	933	932	932	932	932	932	932	943	936
Sep 25	932	932	932	932	932	932	932	932	933	933	933	932	932	932	931	931	931	931	931	931	931	932	931	931	931	933	932
Sep 26	931	931	930	930	929	929	928	928	928	927	928	927	927	927	927	927	927	927	927	928	927	927	927	927	927	931	928
Sep 27	926	926	926	925	925	924	925	924	924	924	923	923	923	924	924	925	926	926	926	926	926	926	926	926	923	926	925
Sep 28	926	926	927	927	927	927	928	928	928	928	928	929	929	929	929	929	929	929	930	931	931	931	932	926	932	929	
Sep 29	932	933	933	933	934	934	934	934	935	935	934	934	934	934	935	935	935	935	935	935	935	935	934	932	935	934	
Sep 30	933	932	932	932	931	930	929	929	929	930	931	931	931	931	932	932	932	933	933	934	934	935	935	929	936	932	
Diurnal Maximum	943	943	942	942	943	944	944	945	945	946	946	947	947	947	947	947	946	946	945	945	945	944	944	944	944	944	
Diurnal Average	935	935	935	935	935	935	935	935	935	935	935	935	935	935	935	935	934	934	935	935	935	935	935	935	935	935	935

<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	InValid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	<b>P</b>	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 2021**

**Summary of Hourly Averages**

**AMBIENT TEMPERATURE (AT) in Degree Celsius**

Maximum Hourly Value:	23.3 °C	on September 4 at hour 14	Hours in Service:	720
Maximum Daily Value:	16.3 °C	on September 4	Hours of Data:	720
Minimum Hourly Value:	0.7 °C	on September 29 at hour 6	Hours of Missing Data:	0
Minimum Daily Value:	6.5 °C	on September 15	Hours of Calibration:	0
Monthly Average:	11.4 °C		Operational Uptime:	100.0

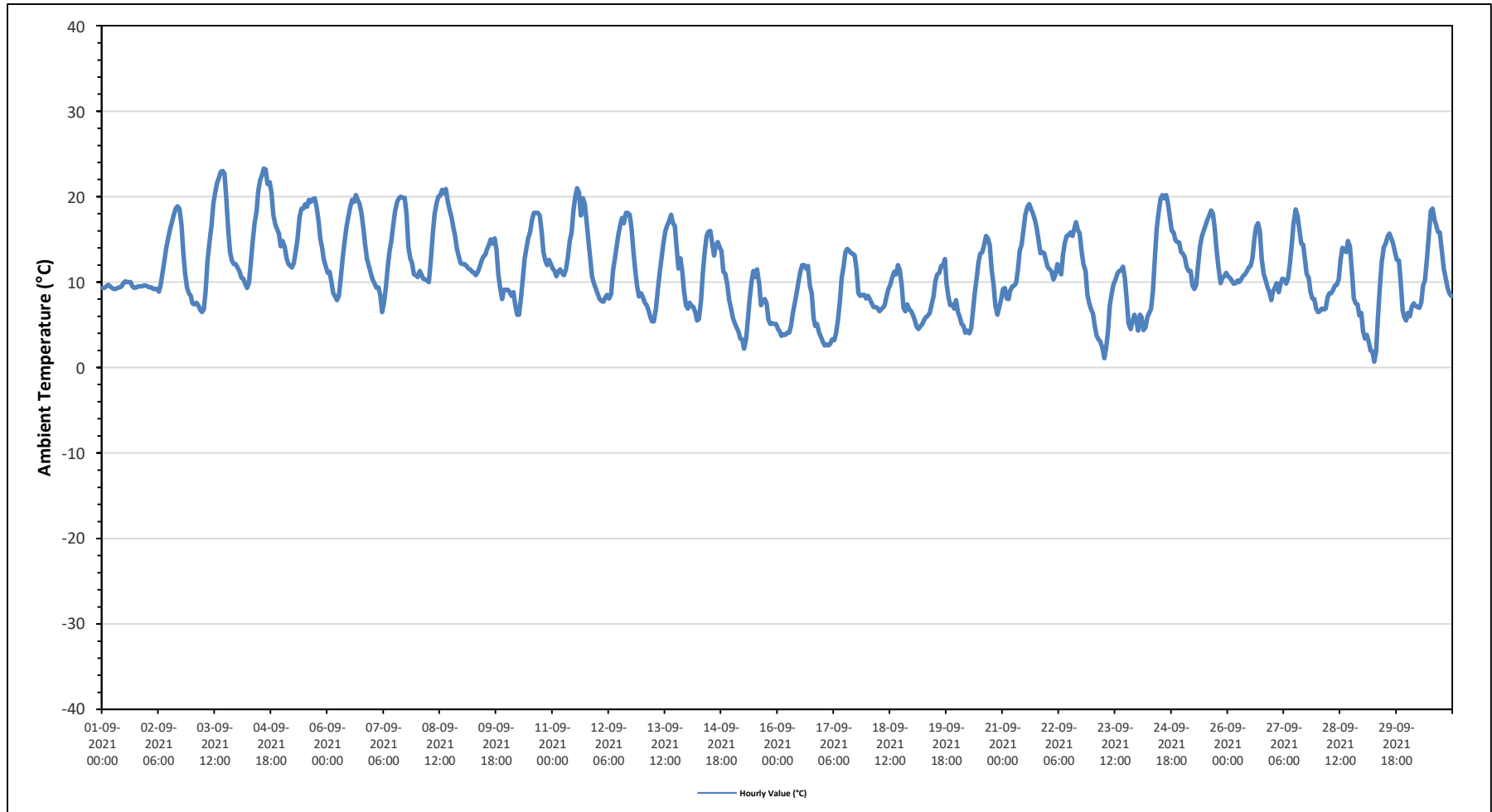
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	9.3	9.3	9.5	9.7	9.5	9.3	9.2	9.2	9.3	9.4	9.5	9.9	10.1	10	10	10	9.5	9.3	9.4	9.5	9.5	9.5	9.6	9.6	9.2	10.1	9.5
Sep 2	9.5	9.4	9.4	9.2	9.2	9.2	8.9	9.6	11	12.6	14.1	15.2	16.2	17	17.9	18.6	18.9	18.6	16.7	13.3	10.9	9.3	8.7	8.4	8.4	18.9	12.6
Sep 3	7.5	7.4	7.6	7.3	6.8	6.5	6.8	9	12.5	14.8	16.6	19.2	20.5	21.6	22.2	22.9	23	22.7	19.7	16.1	13.5	12.5	12.1	12.1	6.5	23.0	14.2
Sep 4	11.7	11.2	10.5	10.4	9.8	9.3	9.9	12.2	14.7	16.8	18.3	20.6	21.9	22.5	23.3	23.2	21.5	21.7	20.5	17.9	16.8	16.2	15.7	14.2	9.3	23.3	16.3
Sep 5	14.8	14.1	12.8	12.1	11.9	11.7	12.2	13.5	15	17.6	18.6	18.6	19.1	18.8	19.6	19.4	19.7	19.8	18.8	17.3	15.1	14	12.7	11.9	11.7	19.8	15.8
Sep 6	11.1	11.2	10	8.7	8.3	7.9	8.4	10.4	12.7	14.9	16.5	17.7	18.8	19.6	19.4	20.2	19.6	19.1	18.1	16.4	14.4	12.7	11.9	11.1	7.9	20.2	14.1
Sep 7	10.3	9.8	9.3	9.4	8.5	6.5	7.6	9.3	11.7	13.6	14.9	16.7	18.3	19.3	19.8	20	19.9	19.9	18	14.1	12.8	12.2	10.9	10.8	6.5	20.0	13.5
Sep 8	10.6	11.3	10.9	10.4	10.3	10.2	10	12.4	15.7	18	19.2	20	20.1	20.8	20.4	20.9	19.4	18.4	17.5	16.3	15.4	13.9	13	12.2	10.0	20.9	15.3
Sep 9	12.1	12.1	11.9	11.6	11.5	11.2	11.1	10.8	11.2	11.8	12.5	13	13.2	13.8	14.3	15	14.5	15.1	13.8	10.9	9.3	8	9.1	9.1	8.0	15.1	12.0
Sep 10	9.1	8.8	8.4	8.8	7.3	6.2	6.2	8.1	10.3	12.7	14	15.2	15.9	17.3	18.1	18.1	18.1	17.8	16	13.5	12.5	12	12.6	12.1	6.2	18.1	12.5
Sep 11	11.6	11.3	10.7	11.2	11.5	11.1	10.8	11.5	12.9	14.8	15.8	18.4	20	21	20.5	17.8	19.8	19.1	17.3	15	12.9	10.7	9.9	9.2	9.2	21.0	14.4
Sep 12	8.6	8	7.8	7.7	8.2	8.5	8.1	8.6	11.3	12.7	14.2	15.5	16.6	17.5	16.9	18.1	18.1	17.9	16.3	13.6	11.4	9.5	8.3	8.7	7.7	18.1	12.2
Sep 13	8.2	7.6	7.3	6.7	5.9	5.4	5.4	6.9	9.1	11.1	12.8	14.5	15.9	16.6	17.1	17.9	16.9	16.6	14	11.6	12.8	11.3	8.9	7.3	5.4	17.9	11.2
Sep 14	6.9	7.6	7.2	7.1	6.5	5.5	5.7	7.9	11.2	13.6	15.4	15.9	16	14.5	13.1	14.3	14.7	14.1	13.6	11.2	11	9.9	7.9	6.9	5.5	16.0	10.7
Sep 15	5.8	5.2	4.7	4.2	3.4	3.3	2.2	3.4	5.8	8	10	11.3	10.6	11.5	9.8	7.3	7.8	8	7.5	5.6	5.1	5.2	5.1	5.1	2.2	11.5	6.5
Sep 16	4.5	4.2	3.7	3.9	3.8	4.1	4.1	4.9	6.4	7.5	8.7	10	11.2	12	12	11.6	11.9	9.6	8.7	5.8	4.9	5.1	4.1	3.6	3.6	12.0	6.9
Sep 17	3	2.6	2.7	2.6	2.8	3.3	3.2	4.1	5.6	7.7	10.5	11.8	13.5	13.9	13.7	13.4	13.3	13.1	11.5	8.7	8.4	8.5	8.5	8.1	2.6	13.9	8.1
Sep 18	8.4	8	7.5	7.1	7.1	7	6.6	6.8	7	7.3	8.3	9.2	9.7	10.5	11.2	10.9	12	11.4	9.7	7	6.6	7.4	6.8	6.6	6.6	12.0	8.3
Sep 19	6.2	5.6	4.8	4.5	4.8	5.1	5.6	5.9	6.1	6.4	7.4	8.3	10.1	10.9	11.1	11.9	12	12.7	9.9	8.3	7.3	7.4	6.9	7.9	4.5	12.7	7.8
Sep 20	6.5	5.9	5.1	4.9	4.1	4.3	4	4.6	6.7	8.9	10.5	12.2	13.3	13.5	14.4	15.4	15.1	14.3	11.5	9.8	7.3	6.2	7.1	8	4.0	15.4	8.9
Sep 21	9.2	9.3	8.1	8	9	9.5	9.6	9.9	11.4	13.7	14.4	16.1	17.9	18.8	19.1	18.5	18	17.3	16.3	14.9	13.4	13.5	13.4	12.5	8.0	19.1	13.4
Sep 22	11.7	11.5	11.2	10.3	10.8	12.1	11.4	10.9	13.2	14.6	15.4	15.5	15.8	15.4	16.3	17	16.1	15.7	13.6	12.1	11.3	8.5	7.5	6.8	6.8	17.0	12.7
Sep 23	6.3	4.8	3.7	3.3	3	2.2	1.1	2.4	4.4	7.2	8.6	9.7	10.3	11	11.3	11.4	11.8	10.5	8	5.2	4.5	5.4	6.2	5.6	1.1	11.8	6.6
Sep 24	4.3	6.2	5.9	4.4	4.7	5.9	6.4	6.9	9	12.7	16.2	18.1	19.8	20.2	19.8	20.2	19.1	17.5	16	15.8	14.9	14.7	14.6	13.5	4.3	20.2	12.8
Sep 25	13.3	12.9	11.8	11.3	11.3	9.6	9.2	9.7	12	14.1	15.3	16	16.7	17.3	17.8	18.4	18	16.2	13.7	11.7	9.9	10.5	10.7	11.1	9.2	18.4	13.3
Sep 26	10.7	10.5	10.2	9.8	9.9	10.2	10	10.3	10.7	10.9	11.2	11.7	11.9	12.8	15	16.5	16.9	15.9	12.7	11	10.2	9.4	8.8	7.9	7.9	16.9	11.5
Sep 27	8.9	9.3	9.9	8.8	9.8	10.4	10.3	9.8	10.4	12.1	14.4	16.9	18.5	17.7	16.1	14.5	14.4	12.9	11	10.5	8.8	8.1	8	6.9	6.9	18.5	11.6
Sep 28	6.5	6.6	6.9	6.8	6.9	8.2	8.7	8.7	9.1	9.6	9.7	10.3	12.6	14	13.8	13.5	14.8	14.2	11.6	8.1	7.5	7.4	6.1	6.4	6.1	14.8	9.5
Sep 29	4.2	3.4	3.8	2.9	2	1.9	0.7	1.9	5.9	9.4	12.3	14.1	14.5	15.3	15.7	15.1	14.5	13.5	12.6	12.5	9.9	6.7	5.9	5.5	0.7	15.7	8.5
Sep 30	6.4	6	7.1	7.5	7.2	7.1	7	7.6	9.6	10.2	12.5	15.6	18.3	18.6	17.3	16.7	15.9	15.8	13.6	11.6	10.5	9.4	8.7	8.4	6.0	18.6	11.2
Diurnal Maximum	14.8	14.1	12.8	12.1	11.9	12.1	12.2	13.5	15.7	18.0	19.2	20.6	21.9	22.5	23.3	23.2	23.0	22.7	20.5	17.9	16.8	16.2	15.7	14.2			
Diurnal Average	8.6	8.4	8.0	7.7	7.5	7.4	7.3	8.2	10.1	11.8	13.3	14.6	15.6	16.1	16.2	16.3	16.2	15.6	13.9	11.8	10.6	9.8	9.3	8.9			

<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	InValid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	<b>P</b>	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 2021**

**Summary of Hourly Averages**

**STATION TEMPERATURE (ST) in Degree Celsius**

Maximum Hourly Value:	24.4 °C	on September 17 at hour 23	Hours in Service:	720
Maximum Daily Value:	24.0 °C	on September 1	Hours of Data:	720
Minimum Hourly Value:	21.5 °C	on September 24 at hour 11	Hours of Missing Data:	0
Minimum Daily Value:	22.9 °C	on September 24	Hours of Calibration:	0
Monthly Average:	23.4 °C		Operational Uptime:	100.0

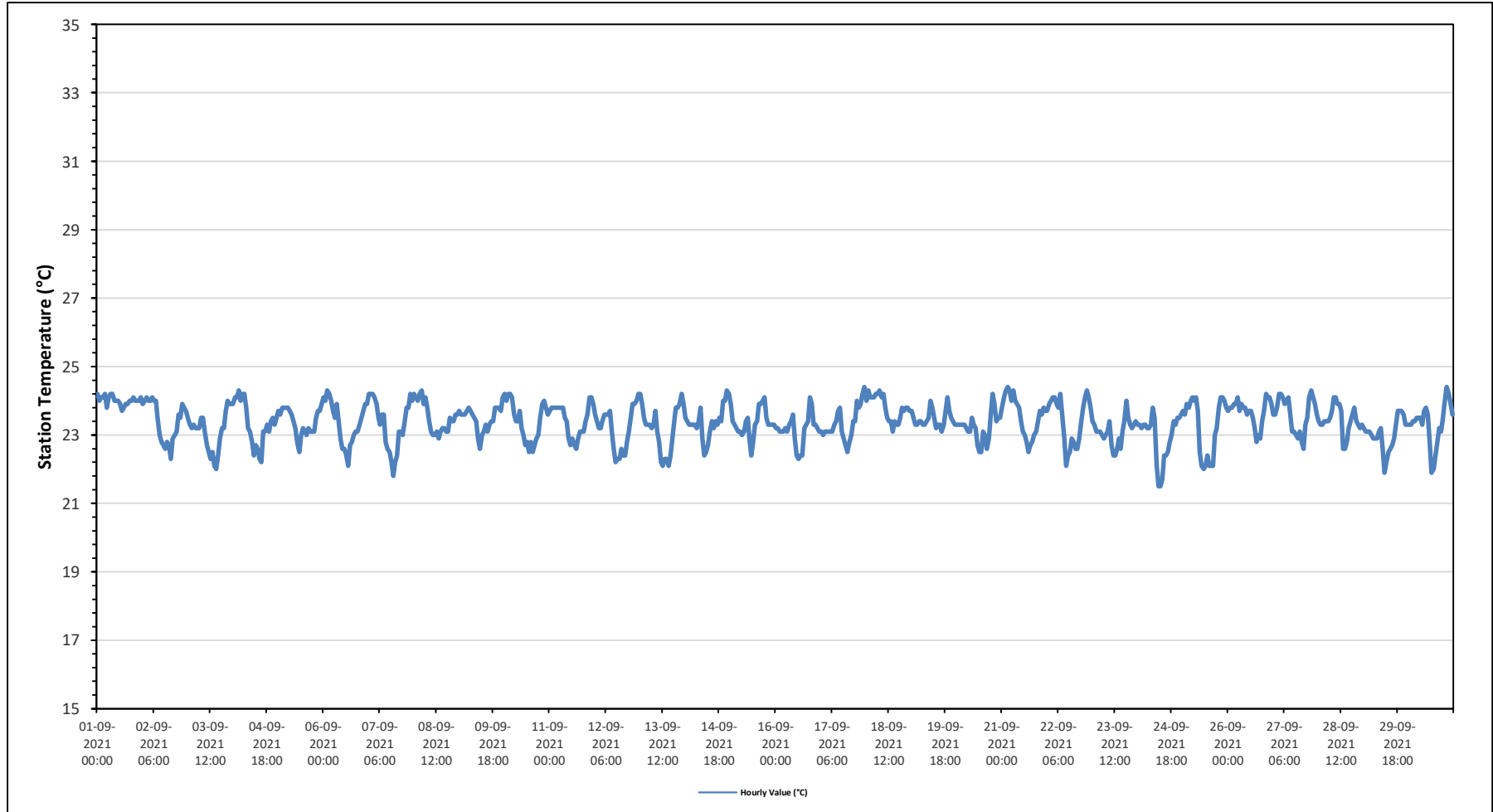
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	24.2	24.0	24.1	24.1	24.2	23.8	24.1	24.2	24.2	24.0	24.0	24.0	23.9	23.7	23.8	23.9	23.9	24.0	24.0	24.1	24.0	24.0	24.0	24.1	23.7	24.2	24.0	
Sep 2	23.9	24.0	24.1	24.0	24.0	24.1	24.0	24.0	23.5	23.0	22.8	22.7	22.6	22.8	22.7	22.3	22.9	23.0	23.1	23.6	23.5	23.9	23.8	23.7	22.3	24.1	23.4	
Sep 3	23.5	23.3	23.2	23.3	23.2	23.2	23.2	23.2	23.5	23.5	23.1	22.7	22.5	22.3	22.5	22.1	22.0	22.4	22.9	23.2	23.2	23.7	24.0	23.9	23.9	22.0	24.0	23.1
Sep 4	23.9	24.1	24.1	24.3	24.0	24.2	24.2	23.8	23.2	23.1	22.8	22.4	22.7	22.6	22.3	22.2	23.1	23.1	23.3	23.1	23.4	23.5	23.3	23.5	22.2	24.3	23.3	
Sep 5	23.7	23.6	23.8	23.8	23.8	23.8	23.7	23.6	23.4	23.2	22.8	22.5	23.0	23.2	23.1	23.0	23.2	23.1	23.1	23.1	23.5	23.7	23.7	23.9	22.5	23.9	23.4	
Sep 6	24.1	24.0	24.3	24.2	24.0	23.7	23.5	23.9	23.4	22.9	22.6	22.6	22.4	22.1	22.7	22.8	23.0	23.1	23.1	23.3	23.5	23.7	23.9	23.9	22.1	24.3	23.4	
Sep 7	24.2	24.2	24.2	24.1	23.9	23.5	23.3	23.6	23.6	22.8	22.6	22.5	22.2	21.8	22.2	22.4	23.1	23.1	23.0	23.4	23.8	23.8	24.2	24.0	21.8	24.2	23.3	
Sep 8	24.2	24.1	24.0	24.2	24.3	23.9	24.1	23.8	23.4	23.1	23.0	23.0	23.1	22.9	23.1	23.2	23.2	23.1	23.1	23.5	23.4	23.4	23.6	23.6	22.9	24.3	23.5	
Sep 9	23.7	23.6	23.6	23.6	23.7	23.8	23.7	23.6	23.5	23.4	22.9	22.6	23.0	23.1	23.3	23.1	23.3	23.4	23.4	23.8	23.8	23.8	23.7	24.1	22.6	24.1	23.5	
Sep 10	24.2	24.0	24.2	24.2	24.1	23.6	23.4	23.4	23.7	23.2	23.0	22.7	22.8	22.5	22.8	22.5	22.7	22.9	23.0	23.5	23.9	24.0	23.8	23.6	22.5	24.2	23.4	
Sep 11	23.7	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.5	23.4	22.9	22.7	22.9	22.7	22.6	22.9	23.1	23.1	23.1	23.4	23.6	24.1	24.1	23.9	22.6	24.1	23.4	
Sep 12	23.6	23.4	23.2	23.2	23.4	23.6	23.6	23.6	23.7	23.1	22.6	22.2	22.3	22.3	22.6	22.4	22.4	22.8	23.1	23.5	23.9	23.9	24.0	24.2	22.2	24.2	23.2	
Sep 13	24.2	23.9	23.5	23.3	23.3	23.3	23.2	23.3	23.7	23.1	22.8	22.2	22.1	22.3	22.3	22.1	22.4	22.9	23.4	23.8	23.8	23.9	24.2	23.9	22.1	24.2	23.2	
Sep 14	23.5	23.4	23.3	23.3	23.3	23.3	23.2	23.4	23.8	22.9	22.4	22.5	22.7	23.1	23.4	23.2	23.4	23.3	23.5	23.4	24.0	24.0	24.3	24.2	22.4	24.3	23.4	
Sep 15	23.9	23.4	23.3	23.2	23.1	23.1	23.0	23.1	23.4	23.5	22.9	22.4	22.8	23.3	23.4	23.9	23.9	24.0	24.1	23.5	23.3	23.3	23.3	23.3	22.4	24.1	23.4	
Sep 16	23.2	23.2	23.1	23.1	23.1	23.2	23.1	23.3	23.4	23.6	22.9	22.4	22.3	22.4	22.4	23.2	23.3	23.4	24.1	23.9	23.3	23.3	23.2	23.1	22.3	24.1	23.1	
Sep 17	23.1	23.0	23.1	23.1	23.1	23.1	23.1	23.3	23.4	23.7	23.8	23.1	22.9	22.7	22.5	22.8	23.0	23.4	23.4	24.0	23.8	23.9	24.2	24.4	22.5	24.4	23.3	
Sep 18	24.0	24.3	24.1	24.1	24.1	24.2	24.2	24.3	24.1	24.2	23.8	23.5	23.4	23.4	23.1	23.4	23.3	23.3	23.5	23.8	23.7	23.8	23.8	23.7	23.1	24.3	23.8	
Sep 19	23.7	23.5	23.3	23.3	23.4	23.4	23.3	23.3	23.4	23.5	24.0	23.8	23.5	23.2	23.3	23.3	23.1	23.3	23.7	24.1	23.7	23.5	23.4	23.3	23.1	24.1	23.5	
Sep 20	23.3	23.3	23.3	23.3	23.3	23.2	23.1	23.1	23.5	23.3	23.2	22.7	22.5	22.5	23.1	23.0	22.6	22.9	23.6	24.2	23.9	23.4	23.5	23.5	22.5	24.2	23.2	
Sep 21	23.8	24.1	24.3	24.4	24.3	24.0	24.3	24.0	23.9	23.8	23.4	23.1	23.0	22.8	22.5	22.7	22.8	23.0	23.1	23.4	23.7	23.6	23.8	23.7	22.5	24.4	23.6	
Sep 22	23.7	23.9	24.0	24.1	24.1	23.9	23.8	24.2	23.6	22.9	22.1	22.4	22.5	22.9	22.8	22.6	22.6	22.9	23.4	23.8	24.1	24.3	24.1	23.8	22.1	24.3	23.4	
Sep 23	23.4	23.3	23.1	23.1	23.1	23.0	22.9	23.0	23.1	23.4	22.7	22.4	22.4	22.6	22.9	22.6	23.1	23.4	24.0	23.5	23.3	23.2	23.3	23.4	22.4	24.0	23.1	
Sep 24	23.3	23.3	23.2	23.3	23.3	23.2	23.2	23.3	23.8	23.5	22.1	21.5	21.5	21.7	22.4	22.4	22.5	22.8	23.0	23.4	23.3	23.5	23.5	23.6	21.5	23.8	22.9	
Sep 25	23.7	23.6	23.9	23.8	24.0	24.1	24.0	24.1	23.7	22.5	22.1	22.0	22.1	22.4	22.1	22.1	22.1	23.0	23.2	23.8	24.1	24.1	24.0	23.8	22.0	24.1	23.3	
Sep 26	23.7	23.8	23.8	23.9	23.9	24.1	23.7	23.9	23.8	23.8	23.6	23.7	23.7	23.5	23.2	22.8	23.0	22.9	23.4	23.7	24.2	24.1	24.1	23.9	22.8	24.2	23.7	
Sep 27	23.6	23.6	23.8	24.2	24.2	24.1	23.9	24.0	24.1	23.6	23.1	23.1	23.0	22.9	23.1	22.8	22.6	23.3	23.5	24.1	24.3	24.1	23.9	23.6	22.6	24.3	23.6	
Sep 28	23.4	23.3	23.3	23.4	23.4	23.4	23.5	23.7	24.1	24.1	23.9	23.9	23.7	22.6	22.6	22.8	23.2	23.4	23.6	23.8	23.4	23.3	23.2	23.3	22.6	24.1	23.4	
Sep 29	23.2	23.1	23.1	23.1	23.0	22.9	22.9	22.9	23.1	23.2	22.6	21.9	22.2	22.5	22.6	22.7	22.9	23.3	23.7	23.7	23.6	23.6	23.3	23.3	21.9	23.7	23.0	
Sep 30	23.3	23.3	23.4	23.4	23.5	23.5	23.5	23.3	23.7	23.8	23.6	22.8	21.9	22.0	22.4	22.8	23.2	23.1	23.5	24.0	24.4	24.2	23.9	23.6	21.9	24.4	23.3	
Diurnal Maximum	24.2	24.3	24.3	24.4	24.3	24.2	24.3	24.3	24.2	24.2	24.0	24.0	23.9	23.7	23.8	23.9	23.9	24.0	24.1	24.2	24.4	24.3	24.3	24.4				
Diurnal Average	23.7	23.6	23.7	23.7	23.7	23.6	23.6	23.6	23.6	23.4	23.0	22.7	22.7	22.7	22.8	22.8	23.0	23.2	23.4	23.6	23.7	23.8	23.8	23.7				

<b>C</b> Monthly Calibration	<b>S</b> Daily Zero-Span Check	<b>Q</b> Quality Assurance
<b>K</b> Collection Error	<b>N</b> No Data (Machine Not in Service)	<b>Y</b> Routine Maintenance
<b>X</b> InValid Data (Equipment Malfunction /Recovery)	<b>NRM</b> UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	<b>P</b> 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 2021**

**Summary of Hourly Averages**

**PRECIPITATION in mm**

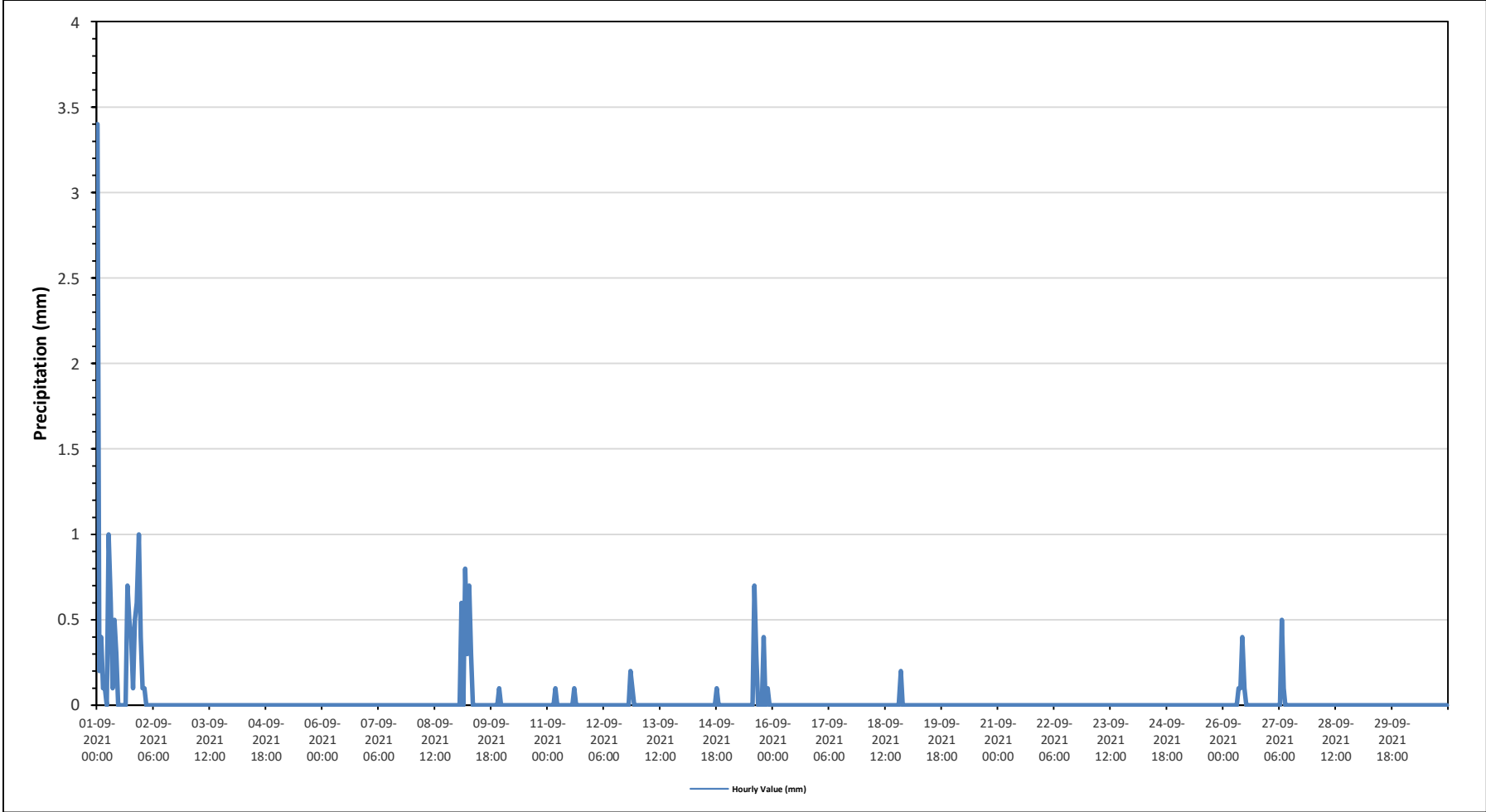
Maximum Hourly Value:	3.4 mm on September 1 at hour 0	Hours in Service:	720
Maximum Daily Value:	10.9 mm on September 1	Hours of Data:	720
Minimum Hourly Value:	0.0 mm on September 1 at hour 5	Hours of Missing Data:	0
Minimum Daily Value:	0.0 mm on September 3	Hours of Calibration:	0
Monthly Total:	17.5 mm	Operational Uptime:	100.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Total	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	3.4	0.2	0.4	0.1	0.1	0	1	0.6	0.1	0.5	0.3	0	0	0	0	0	0.7	0.5	0.4	0.1	0.5	0.6	1	0.4	0.0	3.4	10.9
Sep 2	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	0.2
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
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
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
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
Sep 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
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
Sep 9	0	0	0.6	0	0.8	0.3	0.7	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0.0	0.8	2.8
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
Sep 11	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0.0	0.1	0.2
Sep 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.1	0	0	0.0	0.2	0.3
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
Sep 14	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	0.1	0.1
Sep 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	0.3	0	0	0	0.4	0	0.1	0	0	0.0	0.7	1.5
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
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	0.0
Sep 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0.0	0.2	0.2
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
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	0.1	0.1	0.4	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.4	0.7
Sep 27	0	0	0	0	0	0	0	0.5	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.5	0.6
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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Diurnal Maximum	3.4	0.2	0.6	0.1	0.8	0.3	1.0	0.6	0.1	0.5	0.4	0.1	0.0	0.0	0.7	0.3	0.7	0.5	0.4	0.4	0.5	0.6	1.0	0.4			
Diurnal Average	0.1	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			

<b>C</b> Monthly Calibration	<b>S</b> Daily Zero-Span Check	<b>Q</b> Quality Assurance
<b>K</b> Collection Error	<b>N</b> No Data (Machine Not in Service)	<b>Y</b> Routine Maintenance
<b>X</b> InValid Data (Equipment Malfunction /Recovery)	<b>NRM</b> UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)	<b>P</b> 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 2021**

**Summary of Hourly Averages**

**VECTOR WIND SPEED (VWS) in km/hr**

Maximum Hourly Value:	21.8 kph	on September 24 at hour 13	Hours in Service:	720
Maximum Daily Value:	9.7 kph	on September 1	Hours of Data:	720
Minimum Hourly Value:	0.1 kph	on September 3 at hour 19	Hours of Missing Data:	0
Minimum Daily Value:	0.8 kph	on September 26	Hours of Calibration:	0
Monthly Average:	4.0 kph		Operational Uptime:	100.0

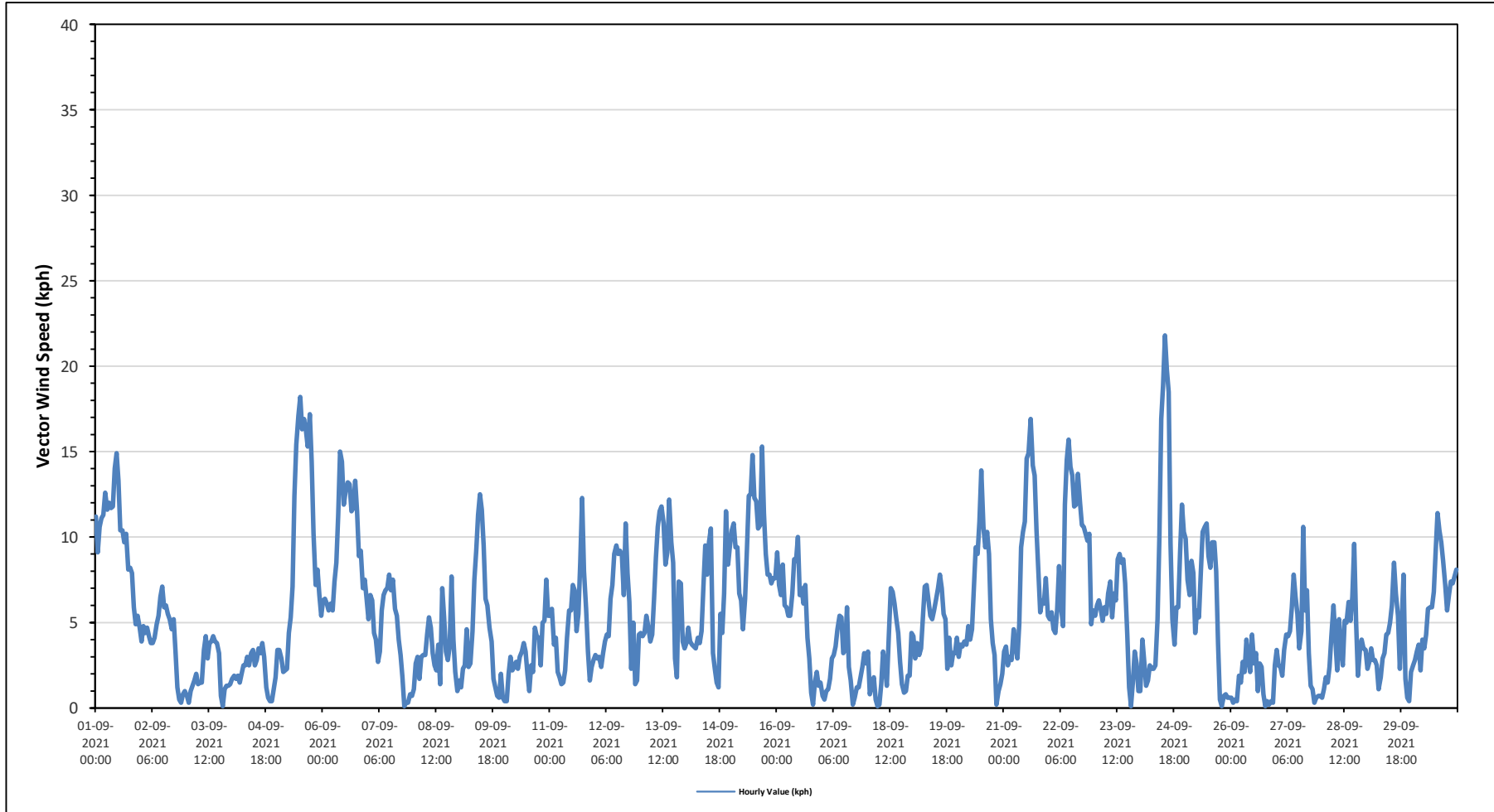
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	11.2	9.1	10.6	11.1	11.3	12.6	11.6	12.0	11.7	11.8	14.0	14.9	13.3	10.4	10.4	9.7	10.2	8.1	8.2	7.9	5.9	4.9	5.4	4.7	4.7	14.9	9.7
Sep 2	3.9	4.8	4.4	4.7	4.2	3.8	3.8	4.1	4.9	5.4	6.5	7.1	5.9	6.0	5.5	5.2	4.6	5.2	3.3	1.2	0.5	0.3	0.8	1.0	0.3	7.1	3.7
Sep 3	0.7	0.3	1.0	1.3	1.6	2.0	1.4	1.5	1.5	3.4	4.2	2.9	3.8	3.9	4.2	3.9	3.8	3.2	0.7	0.1	1.1	1.3	1.3	1.4	0.1	4.2	2.0
Sep 4	1.7	1.9	1.7	1.9	1.5	2.0	2.5	2.5	3.0	2.5	3.2	3.4	2.5	2.8	3.5	3.2	3.8	3.0	1.2	0.6	0.4	0.4	1.1	1.8	0.4	3.8	1.9
Sep 5	3.4	3.4	2.9	2.1	2.2	2.3	4.4	5.3	7.1	12.4	15.4	17.1	18.2	16.3	16.9	16.3	15.3	17.2	14.4	10.2	7.2	8.1	6.6	5.4	2.1	18.2	9.3
Sep 6	6.3	6.4	6.1	5.7	6.1	5.7	7.4	8.5	11.3	15.0	14.4	11.9	12.7	13.2	13.1	11.5	11.7	13.3	11.5	8.9	9.2	7.0	7.5	6.4	5.7	15.0	9.4
Sep 7	5.2	6.6	6.3	4.4	4.0	2.7	3.3	5.7	6.6	6.9	7.0	7.8	6.9	7.5	5.8	5.4	4.0	3.1	1.8	0.1	0.3	0.3	0.8	0.7	0.1	7.8	4.2
Sep 8	1.1	2.6	3.0	1.7	3.0	3.1	3.1	4.3	5.3	4.7	3.2	2.5	2.2	3.7	1.4	7.0	5.3	3.3	2.8	3.6	7.7	4.0	2.1	1.0	1.0	7.7	1.8
Sep 9	1.6	1.2	2.3	2.5	4.6	2.4	2.6	4.5	7.5	9.2	11.3	12.5	11.6	9.5	6.4	6.0	4.7	3.9	1.7	1.2	0.7	0.6	2.0	0.6	0.6	12.5	4.3
Sep 10	0.4	0.4	2.0	3.0	2.2	2.4	2.7	2.3	3.0	3.3	3.8	3.3	2.0	1.0	2.5	2.1	4.7	4.2	4.1	2.5	5.0	5.1	7.5	5.4	0.4	7.5	2.2
Sep 11	5.4	5.8	3.7	4.1	2.1	1.8	1.4	1.5	2.2	4.1	5.7	5.7	7.2	6.9	4.5	5.5	8.5	12.3	8.0	5.8	3.3	1.6	2.4	2.8	1.4	12.3	3.3
Sep 12	3.1	2.9	3.0	2.4	3.2	3.9	4.3	4.2	6.4	7.2	9.0	9.5	9.0	9.2	8.9	6.6	10.8	7.9	6.2	2.3	5.0	1.4	1.6	4.3	1.4	10.8	4.7
Sep 13	4.4	4.2	4.4	5.4	4.7	3.9	4.3	6.4	8.8	10.6	11.5	11.8	10.8	8.4	9.1	12.2	9.7	8.5	2.9	1.8	7.4	7.3	3.9	3.5	1.8	12.2	6.7
Sep 14	3.8	4.7	3.9	3.7	3.6	3.5	4.1	3.8	4.5	7.1	9.5	7.8	9.7	10.5	3.2	2.3	1.5	1.2	5.5	4.4	6.7	11.5	8.4	9.5	1.2	11.5	5.3
Sep 15	10.4	10.8	9.4	9.4	6.7	6.3	4.6	6.4	9.3	12.4	12.5	14.8	12.3	12.1	10.5	10.7	15.3	11.4	9.0	7.8	7.8	7.3	7.6	7.6	4.6	15.3	9.4
Sep 16	9.1	7.2	6.6	8.4	6.0	5.9	5.4	5.4	6.7	8.7	8.6	10.0	6.6	7.0	6.1	7.2	4.1	2.9	0.9	0.2	1.5	2.1	1.3	1.5	0.2	10.0	4.4
Sep 17	0.7	0.5	1.0	1.1	1.7	2.9	3.1	3.6	4.6	5.4	5.3	3.2	3.4	5.9	2.4	1.6	0.2	0.6	1.2	1.2	1.8	2.4	3.2	2.6	0.2	5.9	1.9
Sep 18	3.3	0.8	1.4	1.8	0.5	0.1	0.2	1.4	3.3	2.5	1.3	4.4	7.0	6.8	6.1	5.2	4.4	2.7	1.4	0.9	1.0	1.9	1.9	4.4	0.1	7.0	2.0
Sep 19	4.2	2.9	3.8	3.1	3.5	5.3	7.1	7.2	6.3	5.4	5.2	5.7	6.4	7.0	7.8	7.0	5.5	5.2	2.3	4.1	2.5	3.2	3.2	4.1	2.3	7.8	4.8
Sep 20	3.0	3.7	3.6	3.9	3.7	4.8	4.0	4.6	7.0	9.4	9.0	10.9	13.9	10.6	9.4	10.3	9.0	5.2	3.8	3.1	0.2	1.0	1.4	2.0	0.2	13.9	5.6
Sep 21	3.3	3.6	2.5	3.0	2.8	4.6	3.6	2.9	4.9	9.4	10.3	10.9	14.6	14.9	16.9	14.2	13.6	10.4	8.0	5.6	6.3	6.1	7.6	5.4	2.5	16.9	7.3
Sep 22	5.2	5.6	4.6	4.4	5.8	8.3	6.0	4.8	11.9	14.5	15.7	14.1	13.6	11.8	11.9	13.7	12.0	10.7	10.6	10.2	9.8	10.2	4.9	5.7	4.4	15.7	8.7
Sep 23	5.4	6.0	6.3	5.8	5.1	5.9	5.5	6.7	7.4	5.3	6.7	6.3	8.7	9.0	8.5	8.7	7.3	4.3	1.2	0.1	1.5	3.3	2.6	1.0	0.1	9.0	5.0
Sep 24	1.0	4.0	2.7	1.3	1.6	2.5	2.3	2.3	2.5	5.2	10.0	16.9	18.9	21.8	19.8	18.5	9.6	5.2	3.7	5.9	5.9	9.1	11.9	10.3	1.0	21.8	7.6
Sep 25	9.9	7.5	6.6	8.6	7.9	4.4	5.7	5.3	7.9	10.3	10.6	10.8	8.9	8.2	9.7	9.7	8.0	3.8	0.5	0.1	0.7	0.8	0.6	0.6	0.1	10.8	6.0
Sep 26	0.6	0.3	0.5	0.4	1.9	1.5	2.7	2.1	4.0	2.9	2.1	4.3	2.6	3.2	1.0	2.6	2.4	0.8	0.1	0.4	0.2	0.4	0.3	2.5	0.1	4.3	0.8
Sep 27	3.4	2.5	2.4	1.9	3.4	4.3	4.2	4.5	5.9	7.8	6.5	5.5	3.5	4.5	10.6	5.7	6.9	3.2	1.3	1.1	0.3	0.6	0.7	0.7	0.3	10.6	1.3
Sep 28	0.6	1.1	1.8	1.5	2.4	4.2	6.0	4.0	2.2	5.2	3.4	2.5	5.1	5.0	6.2	5.1	6.5	9.6	5.1	1.9	3.3	4.0	3.5	3.4	0.6	9.6	3.2
Sep 29	2.3	2.7	3.5	2.8	2.5	1.1	1.8	2.9	3.2	4.3	4.4	5.0	6.0	8.5	6.7	5.4	2.3	5.0	7.8	1.7	0.6	0.4	2.1	0.4	8.5	3.2	
Sep 30	2.5	2.8	3.3	3.7	2.2	4.0	3.5	4.3	5.8	5.9	5.9	6.8	9.2	11.4	10.4	9.7	8.6	7.2	5.7	6.6	7.4	7.3	7.7	8.1	2.2	11.4	5.6
Diurnal Maximum	11	11	11	11	11	13	12	12	12	15	16	17	19	22	20	19	15	17	14	10	10	12	12	10			
Diurnal Average	3.9	3.9	3.8	3.8	3.7	4.0	4.1	4.5	5.9	7.2	7.9	8.3	8.5	8.5	8.0	7.8	7.2	6.0	4.4	3.6	3.7	3.8	3.7	3.7			

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

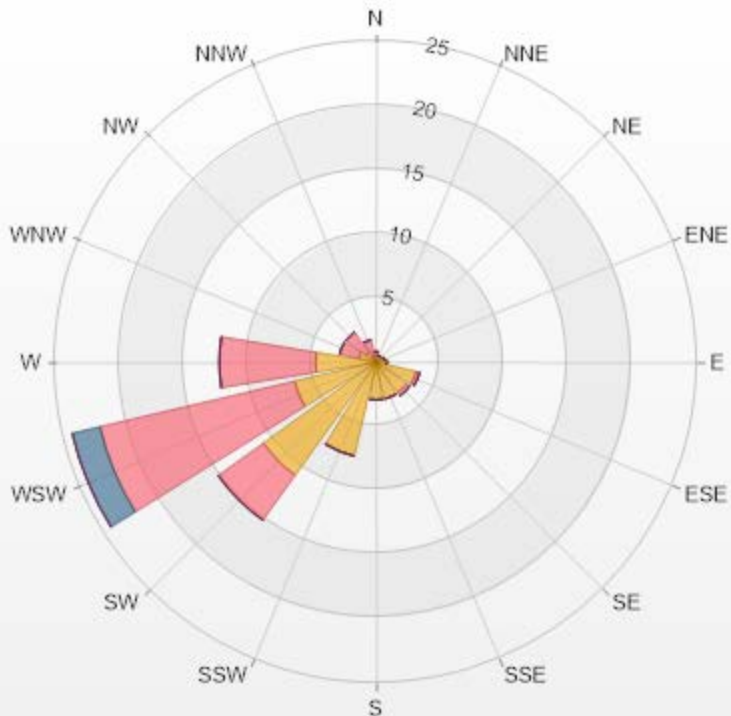
**Timeseries Chart of Hourly Average for VWS - Reno Station**



Wind: PRAMP RENO Monitor: WDS [KPH] Monthly: 09-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.

Calm: 17.22% 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	0.56	0.28	0	0	0	0.84
NNE	0.56	0	0	0	0	0.56
NE	0.56	0	0	0	0	0.56
ENE	0.69	0	0	0	0	0.69
E	0.83	0	0	0	0	0.83
ESE	3.19	0.28	0	0	0	3.47
SE	2.92	0.28	0	0	0	3.2
SSE	2.92	0	0	0	0	2.92
S	2.92	0	0	0	0	2.92
SSW	7.5	0	0	0	0	7.5
SW	10.83	4.31	0	0	0	15.14
WSW	6.53	15.56	2.22	0	0	24.31
W	4.72	7.5	0	0	0	12.22
WNW	1.39	1.53	0	0	0	2.92
NW	0.97	1.94	0	0	0	2.91
NNW	0.28	1.53	0	0	0	1.81
Summary	47.37	33.21	2.22	0	0	82.8



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% Icon Classes (KPH)	47	33	2	0	0
	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0



**PEACE RIVER AREA MONITORING PROGRAM**

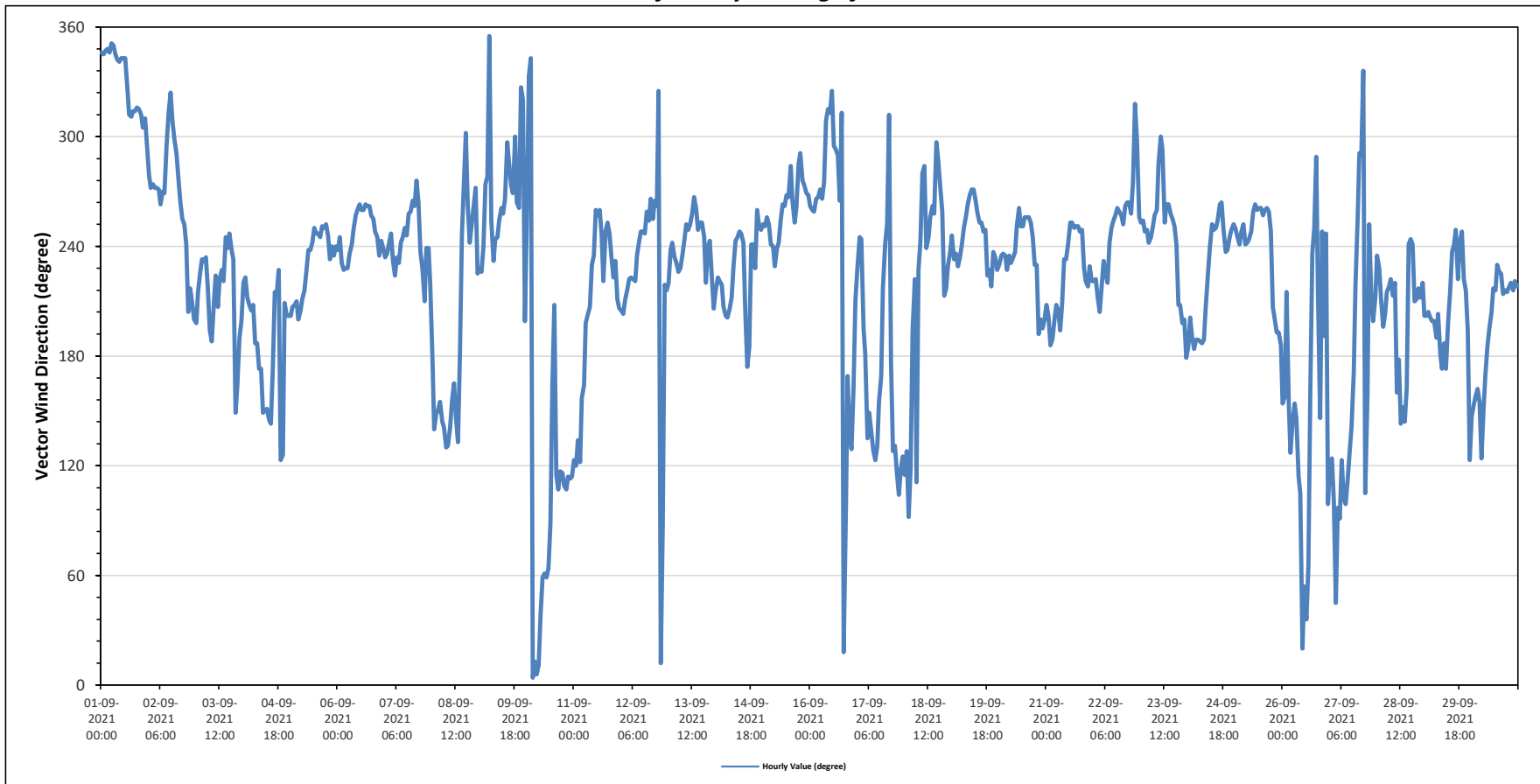
**Reno Station - September 2021**

**Summary of Hourly Averages**

**WIND DIRECTION (VWD) in sector**

Monthly Average:		247 (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	NNW	NNW	NNW	NNW	NNW	N	N	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	NW	WNW	334	NNW	
Sep 2	W	W	W	W	W	W	W	W	W	W	WNW	NW	NW	WNW	WNW	W	W	WSW	WSW	WSW	SSW	SW	SSW	SSW	281	W	
Sep 3	SSW	SSW	SW	SW	SW	SW	SW	SSW	S	SSW	SW	SSW	SW	SW	SW	WSW	WSW	WSW	WSW	SW	SSE	SSE	S	SSW	221	SW	
Sep 4	SW	SW	SSW	SSW	SSW	SSW	S	S	S	S	SSE	SSE	SSE	SE	SE	S	SSW	SSW	SW	ESE	SE	SSW	SSW	SSW	183	S	
Sep 5	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	SW	WSW	240	WSW	
Sep 6	SW	WSW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	W	WSW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	251	WSW	
Sep 7	SW	SW	WSW	WSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	SW	SW	SSW	WSW	WSW	SW	247	WSW	
Sep 8	S	SE	SE	SSE	SSE	SE	SE	SE	SE	SSE	SSE	SE	SE	S	WSW	W	WNW	W	WSW	WSW	W	W	SW	192	S		
Sep 9	SW	SW	WSW	W	W	N	WSW	SW	WSW	WSW	WSW	W	WSW	W	WNW	WNW	W	W	WNW	W	NW	NW	SSW	263	W		
Sep 10	WSW	NNW	NNW	N	NNE	N	NNE	NE	ENE	ENE	ENE	ENE	E	SSE	SSW	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	88	E	
Sep 11	ESE	ESE	SE	ESE	SSE	SSE	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SSW	SSW	226	SW	
Sep 12	SSW	SSW	SSW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	W	NW	NNE	E	SW	SW	SSW	246	WSW	
Sep 13	SW	SW	WSW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	WSW	WSW	SW	WSW	WSW	SW	SSW	245	WSW	
Sep 14	SW	SW	SW	SW	SSW	SSW	SSW	SSW	SSW	SW	WSW	WSW	WSW	WSW	WSW	SSW	S	S	WSW	WSW	SW	WSW	WSW	WSW	235	SW	
Sep 15	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW	W	W	W	W	WNW	W	WSW	W	WNW	WNW	W	W	W	W	261	W	
Sep 16	W	WSW	WSW	W	W	W	W	NW	NW	NW	NW	WNW	WNW	WNW	W	NW	NNE	E	SSE	SE	SSE	SSW	SSW	SSW	285	WNW	
Sep 17	SW	WSW	WSW	SSW	S	SE	SSE	SE	SE	ESE	SE	SSE	SSE	SW	WSW	WSW	NW	S	SE	SE	ESE	ESE	ESE	SE	152	SSE	
Sep 18	ESE	SE	E	ESE	SSW	SW	ESE	SW	WSW	W	WNW	WSW	WSW	WSW	W	WSW	WNW	WNW	W	WSW	SSW	SW	SW	SW	249	WSW	
Sep 19	WSW	SW	SW	SW	SW	WSW	WSW	WSW	W	W	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	SW	249	WSW	
Sep 20	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	S	SSW	SSW	SSW	245	WSW
Sep 21	SSW	SSW	S	S	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	SW	236	SW
Sep 22	SW	SW	SSW	SSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	W	W	WSW	W	NW	WNW	WSW	SSW	254	WSW	
Sep 23	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WNW	WNW	WNW	WSW	W	WSW	WSW	WSW	WSW	WSW	SSW	SSW	SSW	SSW	S	256	WSW	
Sep 24	S	SSW	S	S	S	S	S	S	S	S	SSW	SW	WSW	WSW	WSW	WSW	W	W	WSW	SW	SW	WSW	WSW	WSW	241	WSW	
Sep 25	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	W	WSW	WSW	W	WSW	WSW	WSW	SSW	SSW	S	S	S	253	WSW	
Sep 26	SSE	SSE	SSW	SSE	SE	SE	SSE	SE	ESE	ESE	NNE	NE	NE	ENE	SSE	SW	WSW	WNW	SW	SE	WSW	S	WSW	E	112	ESE	
Sep 27	ESE	ESE	E	NE	E	E	ESE	E	E	ESE	SE	SE	S	SW	WSW	WNW	WNW	NNW	ESE	SSE	WSW	SSW	SSW	SSW	139	SE	
Sep 28	SW	SW	SSW	SSW	SSW	SSW	SW	SSW	SW	SSW	SW	SSE	S	SE	SSE	SE	SE	WSW	WSW	SSW	SSW	SSW	SSW	SSW	205	SSW	
Sep 29	SSW	SSW	SSW	SSW	SSW	SSW	S	SSW	S	S	S	S	SSW	SSW	SW	WSW	WSW	SW	WSW	WSW	SW	SW	SSW	ESE	214	SSW	
Sep 30	SE	SSE	SSE	SSE	SSE	ESE	SSE	SSE	SSE	SSE	SSW	SW	SW	SW	SW	SW	SW	SSW	SW	SW	SW	SW	SW	SW	207	SSW	
<b>C</b>	Monthly Calibration							<b>S</b>	Daily Zero-Span Check							<b>Q</b>	Quality Assurance										
<b>K</b>	Collection Error							<b>N</b>	No Data (Machine Not in Service)							<b>Y</b>	Routine Maintenance							<b>P</b>	Power Failure		
<b>X</b>	Invalid Data (Machine Malfunction /Recovery)							<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)																		
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.																											
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.																											

**Timeseries Chart of Hourly Average for VWD - Reno Station**







**PEACE RIVER AREA MONITORING PROGRAM**

**Reno Station - September 2021**

**Summary of Hourly Averages**

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

WIND SPEED																										
Maximum Hourly Value: 21.8 kph on September 24 at hour 13										Hours in Service: 720																
Maximum Daily Value: 9.7 kph on September 1										Hours of Data: 720																
Minimum Hourly Value: 0.1 kph on September 3 at hour 19										Hours of Missing Data: 0																
Minimum Daily Value: 0.8 kph on September 26										Hours of Calibration: 0																
Monthly Average: 4.0 kph										Operational Uptime: 100																
WIND DIRECTION																										
Monthly Average: 247 (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			
Sep 1	11.2	9.1	10.6	11.1	11.3	12.6	11.6	12.0	11.7	11.8	14.0	14.9	13.3	10.4	10.4	9.7	10.2	8.1	8.2	7.9	5.9	4.9	5.4	4.7	4.7	
	NNW	NNW	NNW	NNW	NNW	N	N	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	WNW	
Sep 2	3.9	4.8	4.4	4.7	4.2	3.8	3.8	4.1	4.9	5.4	6.5	7.1	5.9	6.0	5.5	5.2	4.6	5.2	3.3	1.2	0.5	0.3	0.8	1.0	0.3	
	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	WSW	WSW	WSW	SSW	SSW	SSW	SSW	SSW	
Sep 3	0.7	0.3	1.0	1.3	1.6	2.0	1.4	1.5	1.5	3.4	4.2	2.9	3.8	3.9	4.2	3.9	3.8	3.2	0.7	0.1	1.1	1.3	1.3	1.4	0.1	
	SSW	SSW	SW	SW	SW	SW	SW	SSW	S	SSW	SW	SSW	SW	SW	SW	WSW	WSW	WSW	SW	SW	SSE	SSE	S	SSW	SSW	
Sep 4	1.7	1.9	1.7	1.9	1.5	2.0	2.5	2.5	3.0	2.5	3.2	3.4	2.5	2.8	3.5	3.2	3.8	3.0	1.2	0.6	0.4	0.4	1.1	1.8	0.4	
	SW	SW	SSW	SSW	SSW	SSW	S	S	S	S	SSE	SSE	SSE	SE	SE	S	SSW	SSW	SW	ESE	SE	SSW	SSW	SSW	SSW	
Sep 5	3.4	3.4	2.9	2.1	2.2	2.3	4.4	5.3	7.1	12.4	15.4	17.1	18.2	16.3	16.9	16.3	15.3	17.2	14.4	10.2	7.2	8.1	6.6	5.4	2.1	
	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	SW	WSW	WSW	
Sep 6	6.3	6.4	6.1	5.7	6.1	5.7	7.4	8.5	11.3	15.0	14.4	11.9	12.7	13.2	13.1	11.5	11.7	13.3	11.5	8.9	9.2	7.0	7.5	6.4	5.7	
	SW	WSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	W	WSW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	SW	WSW	SW	WSW	WSW	
Sep 7	5.2	6.6	6.3	4.4	4.0	2.7	3.3	5.7	6.6	6.9	7.0	7.8	6.9	7.5	5.8	5.4	4.0	3.1	1.8	0.1	0.3	0.3	0.8	0.7	0.1	
	SW	SW	WSW	WSW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	SW	SW	SSW	WSW	WSW	WSW	WSW	WSW	
Sep 8	1.1	2.6	3.0	1.7	3.0	3.1	3.1	4.3	5.3	4.7	3.2	2.5	2.2	3.7	1.4	7.0	5.3	3.3	2.8	3.6	7.7	4.0	2.1	1.0	1.0	
	S	SE	SE	SSE	SSE	SE	SE	SE	SE	SE	SSE	SSE	SE	SE	S	WSW	W	W	W	WSW	WSW	W	W	WSW	WSW	
Sep 9	1.6	1.2	2.3	2.5	4.6	2.4	2.6	4.5	7.5	9.2	11.3	12.5	11.6	9.5	6.4	6.0	4.7	3.9	1.7	1.2	0.7	0.6	2.0	0.6	0.6	
	SW	SW	WSW	W	W	N	WSW	SW	WSW	WSW	WSW	W	WSW	W	W	W	W	W	W	W	W	W	W	W	SSW	
Sep 10	0.4	0.4	2.0	3.0	2.2	2.4	2.7	2.3	3.0	3.3	3.8	3.3	2.0	1.0	2.5	2.1	4.7	4.2	4.1	2.5	5.0	5.1	7.5	5.4	0.4	
	WSW	NNW	NNW	N	NNE	N	NNE	NE	ENE	ENE	ENE	ENE	E	SSE	SSW	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	
Sep 11	5.4	5.8	3.7	4.1	2.1	1.8	1.4	1.5	2.2	4.1	5.7	5.7	7.2	6.9	4.5	5.5	8.5	12.3	8.0	5.8	3.3	1.6	2.4	2.8	1.4	
	ESE	ESE	SE	ESE	SSE	SSE	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SSW	SSW	SSW	
Sep 12	3.1	2.9	3.0	2.4	3.2	3.9	4.3	4.2	6.4	7.2	9.0	9.5	9.0	9.2	8.9	6.6	10.8	7.9	6.2	2.3	5.0	1.4	1.6	4.3	1.4	
	SSW	SSW	SSW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	W	W	NW	NNE	E	SW	SW	SSW	
Sep 13	4.4	4.2	4.4	5.4	4.7	3.9	4.3	6.4	8.8	10.6	11.5	11.8	10.8	8.4	9.1	12.2	9.7	8.5	2.9	1.8	7.4	7.3	3.9	3.5	1.8	
	SW	SW	WSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	WSW	WSW	SW	WSW	WSW	SW	SSW	SSW	
Sep 14	3.8	4.7	3.9	3.7	3.6	3.5	4.1	3.8	4.5	7.1	9.5	7.8	9.7	10.5	3.2	2.3	1.5	1.2	5.5	4.4	6.7	11.5	8.4	9.5	1.2	
	SW	SW	SW	SW	SSW	SSW	SSW	SSW	SSW	SW	WSW	WSW	WSW	WSW	WSW	SSW	S	S	WSW	WSW	SW	WSW	WSW	WSW	WSW	
Sep 15	10.4	10.8	9.4	9.4	6.7	6.3	4.6	6.4	9.3	12.4	12.5	14.8	12.3	12.1	10.5	10.7	15.3	11.4	9.0	7.8	7.8	7.3	7.6	7.6	4.6	
	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	W	W	WSW	W	W	W	W	W	W	W	W	
Sep 16	9.1	7.2	6.6	8.4	6.0	5.9	5.4	5.4	6.7	8.7	8.6	10.0	6.6	7.0	6.1	7.2	4.1	2.9	0.9	0.2	1.5	2.1	1.3	1.5	0.2	
	W	WSW	WSW	W	W	W	W	W	NW	NW	NW	NW	NW	NW	NW	NW	W	NW	NNE	E	SSE	SE	SE	SSE	SSW	
Sep 17	0.7	0.5	1.0	1.1	1.7	2.9	3.1	3.6	4.6	5.4	5.3	3.2	3.4	5.9	2.4	1.6	0.2	0.6	1.2	1.2	1.8	2.4	3.2	2.6	0.2	
	SW	WSW	WSW	SSW	S	SSE	SE	ESE	SE	ESE	SE	SSE	SSE	SSW	WSW	NW	S	SE	SE	ESE	ESE	ESE	ESE	SE	SE	
Sep 18	3.3	0.8	1.4	1.8	0.5	0.1	0.2	1.4	3.3	2.5	1.3	4.4	7.0	6.8	6.1	5.2	4.4	2.7	1.4	0.9	1.0	1.9	1.9	4.4	0.1	
	ESE	SE	E	ESE	SSW	SW	ESE	SW	WSW	W	W	W	W	W	W	WSW	W	WSW	W	WSW	WSW	WSW	SW	SW	SW	
Sep 19	4.2	2.9	3.8	3.1	3.5	5.3	7.1	7.2	6.3	5.4	5.2	5.7	6.4	7.0	7.8	7.0	5.5	5.2	2.3	4.1	2.5	3.2	3.2	4.1	2.3	
	WSW	SW	SW	SW	SW	WSW	WSW	WSW	W	W	W	W	W	W	W	WSW	WSW	WSW	WSW	SW	SW	SW	SW	SW	SW	
Sep 20	3.0	3.7	3.6	3.9	3.7	4.8	4.0	4.6	7.0	9.4	9.0	10.9	13.9	10.6	9.4	10.3	9.0	5.2	3.8	3.1	0.2	1.0	1.4	2.0	0.2	
	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	S	SSW	SSW	SSW	



**PEACE RIVER AREA MONITORING PROGRAM**

**Reno Station - September 2021**

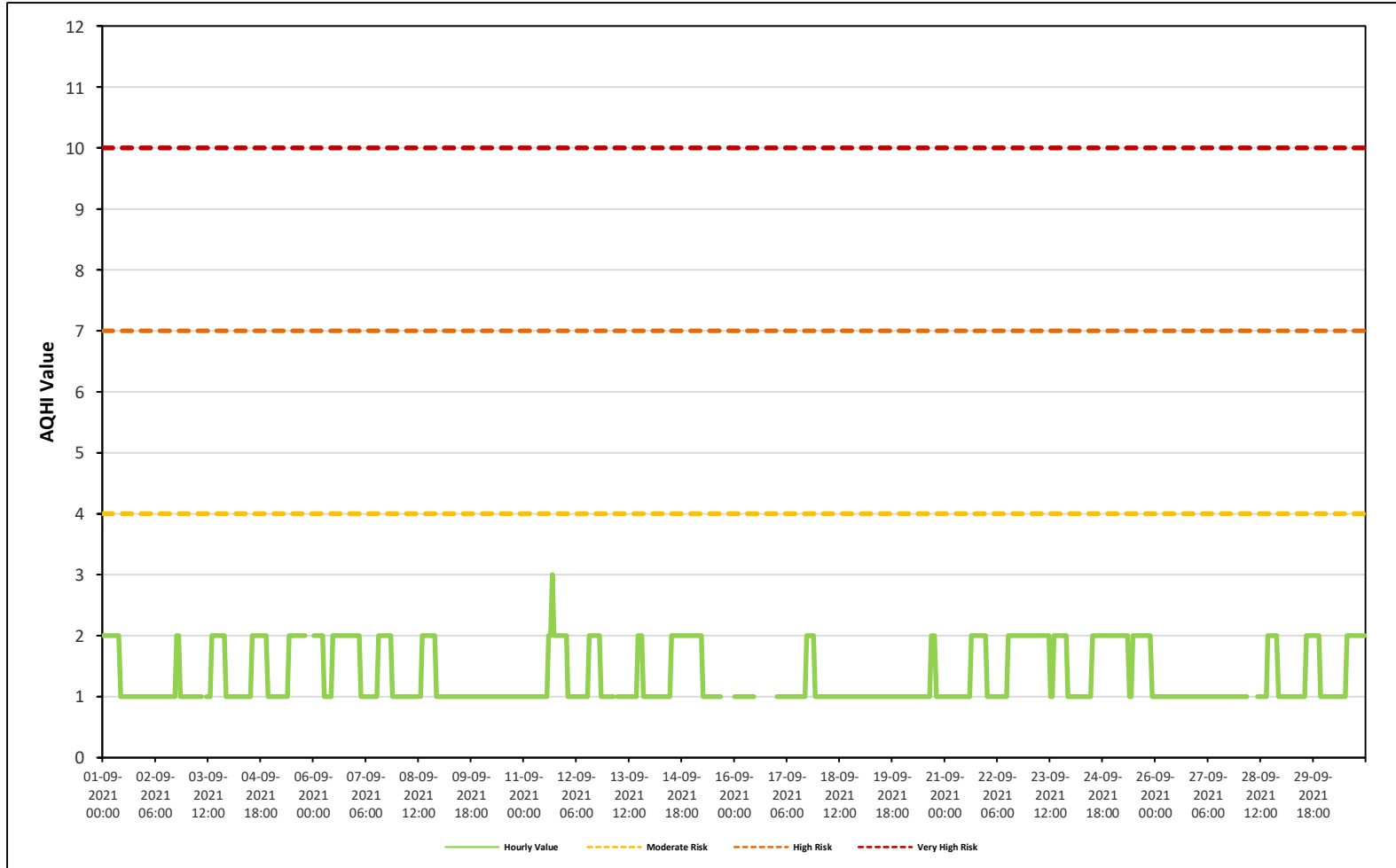
**Summary of Hourly Averages**

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

WIND SPEED																															
Maximum Hourly Value:	21.8	kph	on September 24 at hour 13	Hours in Service:	720																										
Maximum Daily Value:	9.7	kph	on September 1	Hours of Data:	720																										
Minimum Hourly Value:	0.1	kph	on September 3 at hour 19	Hours of Missing Data:	0																										
Minimum Daily Value:	0.8	kph	on September 26	Hours of Calibration:	0																										
Monthly Average:	4.0	kph		Operational Uptime:	100																										
WIND DIRECTION																															
Monthly Average:	247 (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	3.3	3.6	2.5	3.0	2.8	4.6	3.6	2.9	4.9	9.4	10.3	10.9	14.6	14.9	16.9	14.2	13.6	10.4	8.0	5.6	6.3	6.1	7.6	5.4	2.5	16.9	7.3				
	SSW	SSW	S	S	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	SW							
Sep 22	5.2	5.6	4.6	4.4	5.8	8.3	6.0	4.8	11.9	14.5	15.7	14.1	13.6	11.8	11.9	13.7	12.0	10.7	10.6	10.2	9.8	10.2	4.9	5.7	4.4	15.7	8.7				
	SW	SW	SSW	SSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	W	W	W	WSW	W	NW	WNW	WSW							
Sep 23	5.4	6.0	6.3	5.8	5.1	5.9	5.5	6.7	7.4	5.3	6.7	6.3	8.7	9.0	8.5	8.7	7.3	4.3	1.2	0.1	1.5	3.3	2.6	1.0	0.1	9.0	5.0				
	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WNW	WNW	WNW	WSW	W	W	WSW	WSW	WSW	WSW	SSW	SSW	SSW	SSW	S							
Sep 24	1.0	4.0	2.7	1.3	1.6	2.5	2.3	2.3	2.5	5.2	10.0	16.9	18.9	21.8	19.8	18.5	9.6	5.2	3.7	5.9	5.9	9.1	11.9	10.3	1.0	21.8	7.6				
	S	SSW	S	S	S	S	S	S	S	SSW	SW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	SW	SW	WSW	WSW								
Sep 25	9.9	7.5	6.6	8.6	7.9	4.4	5.7	5.3	7.9	10.3	10.6	10.8	8.9	8.2	9.7	9.7	8.0	3.8	0.5	0.1	0.7	0.8	0.6	0.6	0.1	10.8	6.0				
	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	W	W	WSW	WSW	W	WSW	WSW	SSW	SSW	S	S	S							
Sep 26	0.6	0.3	0.5	0.4	1.9	1.5	2.7	2.1	4.0	2.9	2.1	4.3	2.6	3.2	1.0	2.6	2.4	0.8	0.1	0.4	0.2	0.4	0.3	2.5	0.1	4.3	0.8				
	SSE	SSE	SSW	SSE	SE	SE	SSE	ESE	ESE	NNE	NE	NE	ENE	SSE	SW	WSW	WNW	SW	SE	WSW	S	WSW	E								
Sep 27	3.4	2.5	2.4	1.9	3.4	4.3	4.2	4.5	5.9	7.8	6.5	5.5	3.5	4.5	10.6	5.7	6.9	3.2	1.3	1.1	0.3	0.6	0.7	0.7	0.3	10.6	1.3				
	ESE	ESE	E	NE	E	E	ESE	E	E	ESE	SE	SE	S	SW	WSW	WNW	WNW	NNW	ESE	SSE	WSW	SSW	SSW	SSW							
Sep 28	0.6	1.1	1.8	1.5	2.4	4.2	6.0	4.0	2.2	5.2	3.4	2.5	5.1	5.0	6.2	5.1	6.5	9.6	5.1	1.9	3.3	4.0	3.5	3.4	0.6	9.6	3.2				
	SW	SW	SSW	SSW	SSW	SSW	SW	SW	SSW	SW	SSE	S	SSE	SE	SSE	WSW	WSW	WSW	SSW	SSW	SW	SSW	SW	SSW							
Sep 29	2.3	2.7	3.5	2.8	2.8	2.5	1.1	1.8	2.9	3.2	4.3	4.4	5.0	6.0	8.5	6.7	5.4	2.3	5.0	7.8	1.7	0.6	0.4	2.1	0.4	8.5	3.2				
	SSW	SSW	SSW	SSW	SSW	SSW	S	SSW	S	S	S	S	SSW	SSW	SW	WSW	WSW	SW	WSW	SW	SW	SSW	ESE								
Sep 30	2.5	2.8	3.3	3.7	2.2	4.0	3.5	4.3	5.8	5.9	5.9	6.8	9.2	11.4	10.4	9.7	8.6	7.2	5.7	6.6	7.4	7.3	8.1	2.2	11.4	5.6					
	SE	SSE	SSE	SSE	ESE	SSE	SSE	S	SSW	SSW	SW	SW	SW	SW	SW	SSW	SSW	SW	SSW	SW	SW	SW	SW	SW							
<b>C</b>	Monthly Calibration							<b>S</b>	Daily Zero-Span Check							<b>Q</b>	Quality Assurance														
<b>K</b>	Collection Error							<b>N</b>	No Data (Machine Not in Service)							<b>Y</b>	Routine Maintenance							<b>P</b>	Power Failure						
<b>X</b>	Invalid Data (Equipment Malfunction/Recovery)							<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)																						
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.																															
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.																															

## AQHI CADOTTE LAKE STATION

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





**PEACE RIVER AREA MONITORING PROGRAM**

**AQHI - Cadotte Lake Station - September 2021**

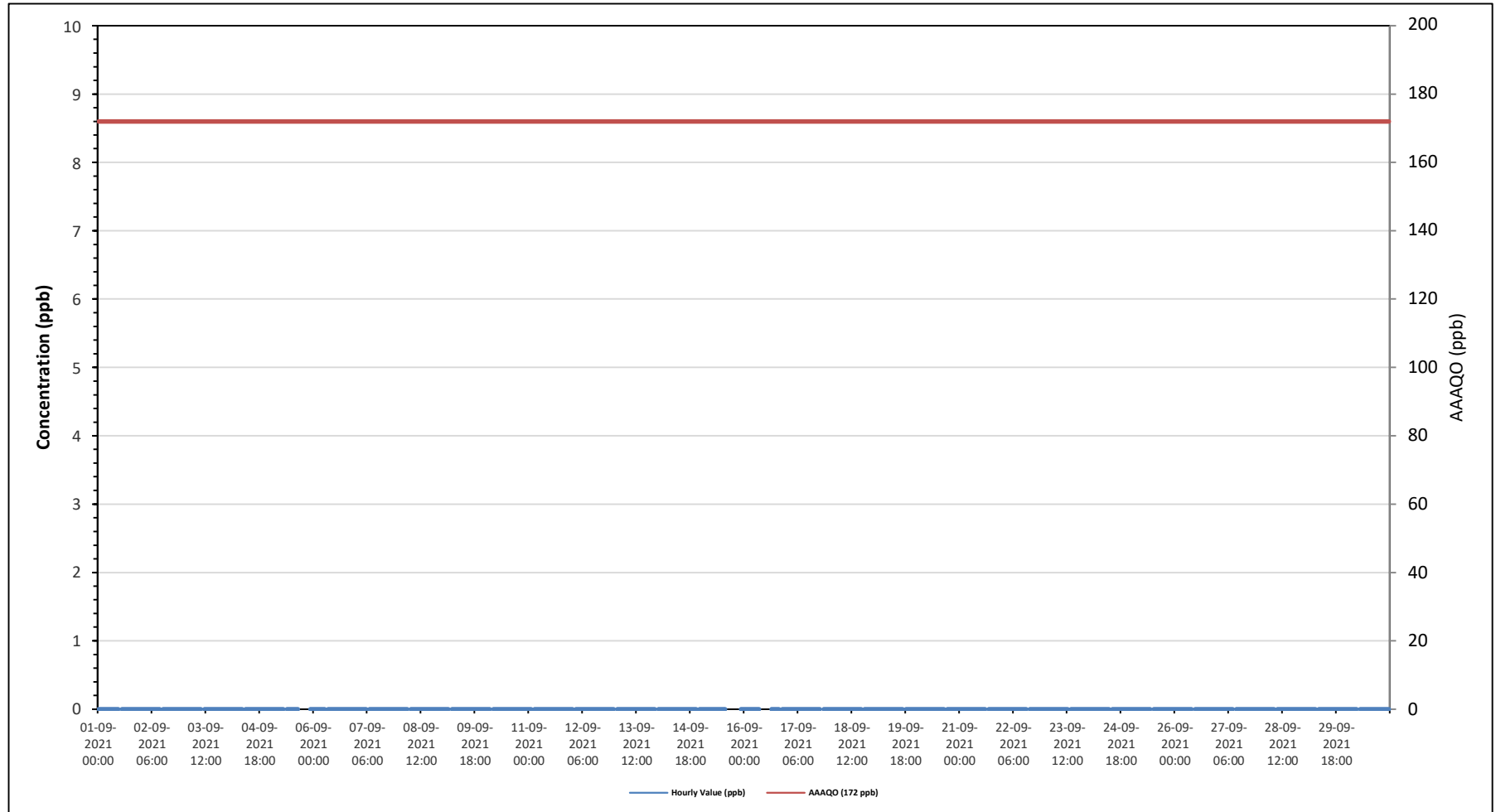
**Summary of Hourly Averages**

**SULPHUR DIOXIDE (SO<sub>2</sub>) in ppb**

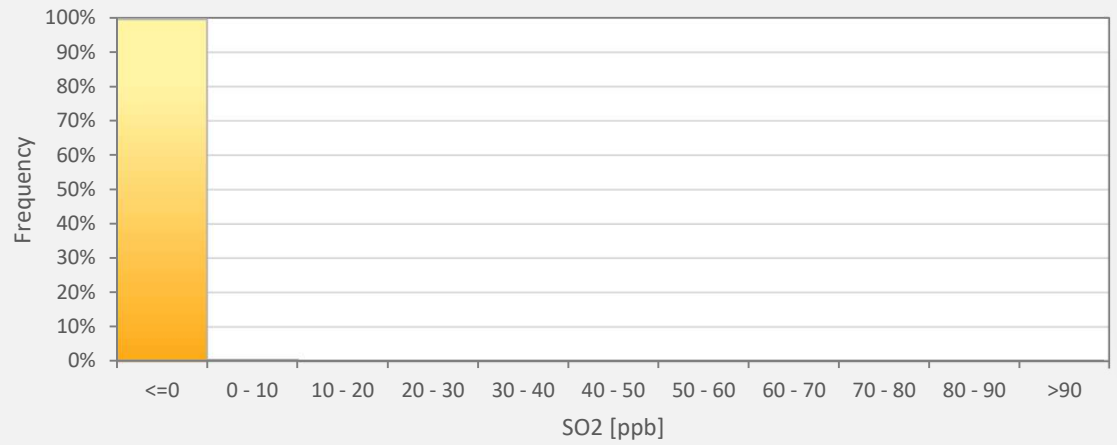
Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb																												
Number of 1-Hour Exceedances: 0						Number of 24-Hour Exceedances: 0						30-Day Exceedance: 0																
Maximum Hourly Value: 0 ppb on September 1 at hour 0						Hours in Service: 720						Maximum Daily Value: 0.0 ppb on September 1						Hours of Data: 671										
Minimum Hourly Value: 0 ppb on September 1 at hour 0						Hours of Missing Data: 12						Minimum Daily Value: 0.0 ppb on September 1						Hours of Calibration: 37										
Monthly Average: 0.0 ppb						Operational Uptime: 98.3																						
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
Sep 1	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 2	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 3	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 4	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 5	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	P	P	P	P	P	P	0	0	0	0	-	
Sep 6	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 7	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 8	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 9	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 10	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 11	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 12	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 13	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 14	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 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P	P	P	P	P	P	0	S	0	0	0	0	-	
Sep 16	0	0	0	0	0	0	0	0	0	C	C	C	C	C	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	S	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	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	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	S	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	S	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	S	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	S	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	S	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	S	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	S	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	S	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	S	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	S	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	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	
Diurnal Maximum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	
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 SO<sub>2</sub> - AQHI - Cadotte Lake Station**



SO2[ppb] Histogram: AQHI Cadotte Lake Monthly: 09-2021 1 Hr.

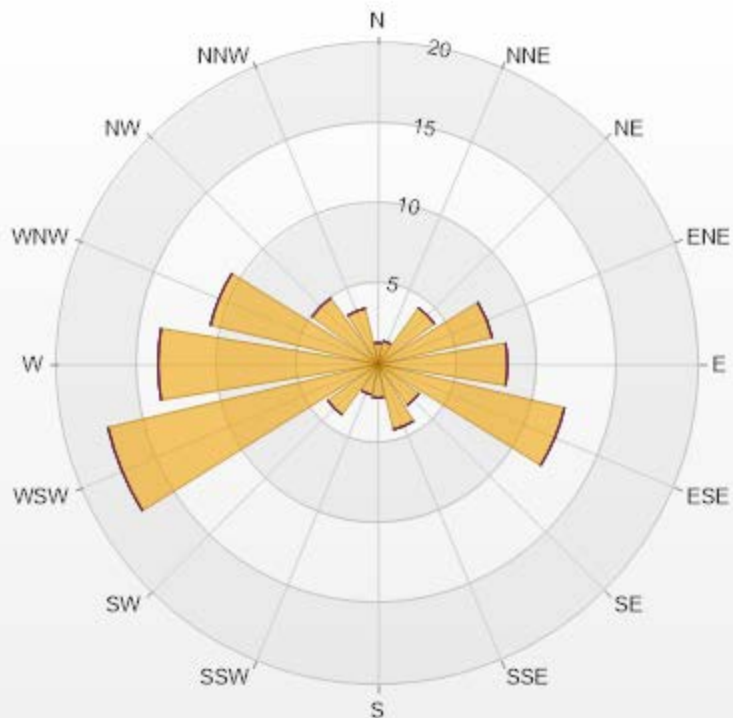


Classes	SO2
<=0	99.55%
0 - 10	0.45%
10 - 20	0.00%
20 - 30	0.00%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-SO2[ppb] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 93.19% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	1.34	0	0	0	0	1.34
NNE	1.49	0	0	0	0	1.49
NE	4.32	0	0	0	0	4.32
ENE	7.3	0	0	0	0	7.3
E	8.05	0	0	0	0	8.05
ESE	11.92	0	0	0	0	11.92
SE	3.13	0	0	0	0	3.13
SSE	4.17	0	0	0	0	4.17
S	2.09	0	0	0	0	2.09
SSW	1.94	0	0	0	0	1.94
SW	3.87	0	0	0	0	3.87
WSW	17.29	0	0	0	0	17.29
W	13.71	0	0	0	0	13.71
WNW	10.73	0	0	0	0	10.73
NW	5.07	0	0	0	0	5.07
NNW	3.58	0	0	0	0	3.58
Summary	100	0	0	0	0	100





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% Icon Classes (ppb)

100 0-10

0 10-50

0 50-100

0 100-172

0 >172.0



**PEACE RIVER AREA MONITORING PROGRAM**

**AQHI - Cadotte Lake Station - September 2021**

**Summary of Hourly Averages**

**TOTAL REDUCED SULPHUR (TRS) in ppb**

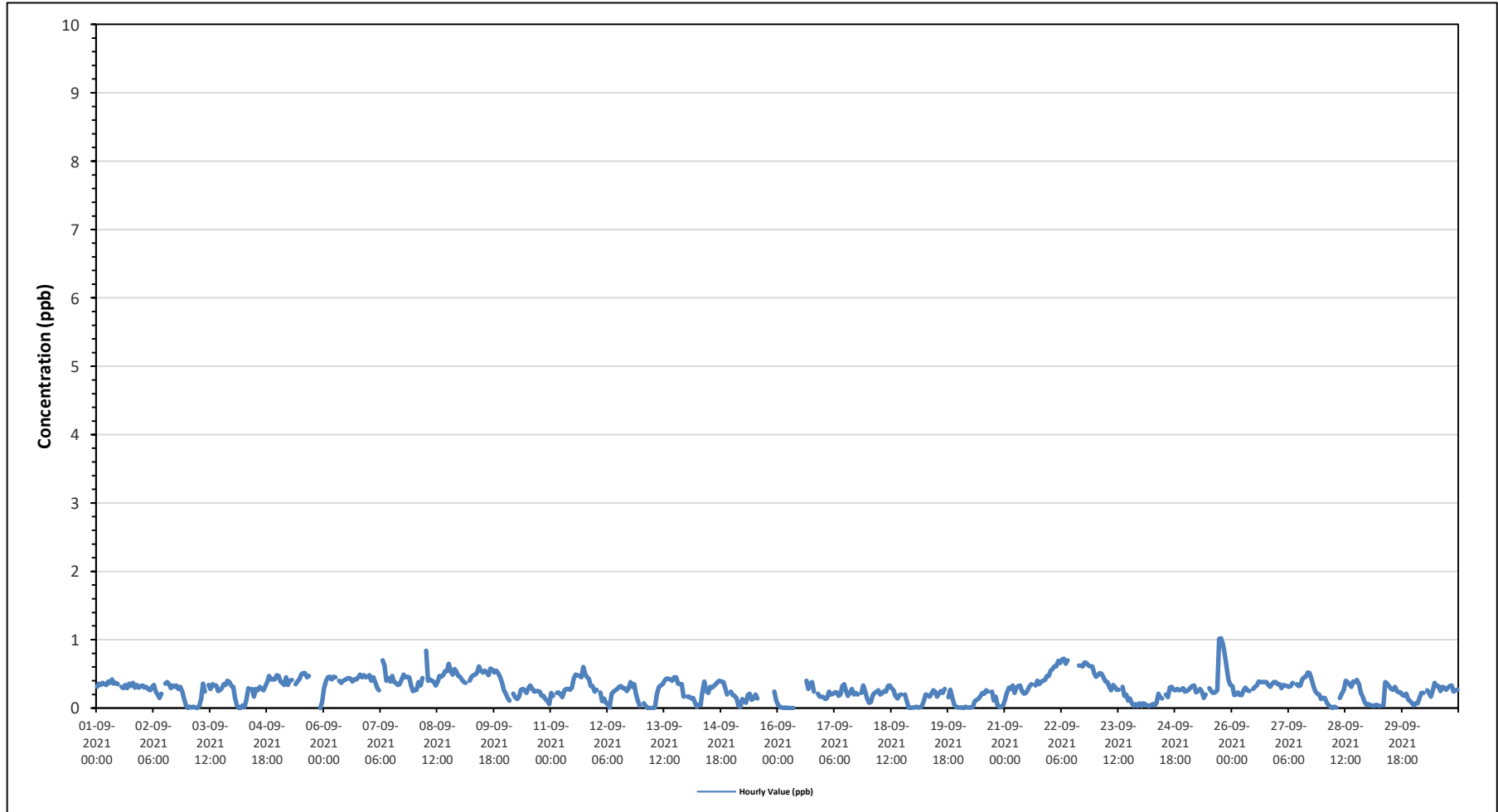
Maximum Hourly Value:	1.02 ppb	on September 25 at hour 18	Hours in Service:	720
Maximum Daily Value:	0.60 ppb	on September 22	Hours of Data:	669
Minimum Hourly Value:	0.00 ppb	on September 3 at hour 0	Hours of Missing Data:	14
Minimum Daily Value:	0.10 ppb	on September 20	Hours of Calibration:	37
Monthly Average:	0.28 ppb		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	0.31	0.36	0.34	0.37	0.35	0.34	0.39	0.37	0.42	0.36	0.37	0.35	S	0.31	0.29	0.34	0.29	0.36	0.32	0.37	0.3	0.34	0.3	0.32	0.29	0.42	0.34
Sep 2	0.33	0.3	0.31	0.28	0.26	0.31	0.34	0.24	0.2	0.15	0.21	S	0.36	0.38	0.35	0.29	0.33	0.31	0.33	0.28	0.31	0.24	0.13	0.04	0.04	0.38	0.27
Sep 3	0	0.02	0.01	0.02	0.01	0	0.03	0.13	0.36	0.24	S	0.34	0.28	0.35	0.33	0.33	0.25	0.26	0.29	0.35	0.34	0.4	0.38	0.32	0.00	0.40	0.22
Sep 4	0.31	0.14	0.04	0	0	0.04	0.02	0.13	0.29	S	0.28	0.17	0.28	0.26	0.31	0.28	0.26	0.32	0.38	0.47	0.42	0.42	0.42	0.48	0.00	0.48	0.25
Sep 5	0.47	0.39	0.37	0.34	0.45	0.34	0.4	0.41	S	0.35	0.39	0.42	0.49	0.51	0.51	0.45	0.47	P	P	P	P	P	0	0.09	0.00	0.51	0.38
Sep 6	0.29	0.4	0.45	0.46	0.42	0.46	0.45	S	0.4	0.37	0.4	0.41	0.43	0.44	0.39	0.42	0.42	0.45	0.49	0.45	0.48	0.45	0.46	0.29	0.49	0.43	
Sep 7	0.48	0.4	0.45	0.38	0.3	0.26	S	0.7	0.62	0.4	0.44	0.39	0.47	0.38	0.37	0.34	0.35	0.41	0.49	0.45	0.46	0.45	0.33	0.25	0.25	0.70	0.42
Sep 8	0.26	0.27	0.38	0.33	0.44	S	0.84	0.4	0.42	0.4	0.39	0.33	0.38	0.47	0.46	0.48	0.54	0.54	0.65	0.53	0.49	0.57	0.53	0.47	0.26	0.84	0.46
Sep 9	0.46	0.41	0.38	0.37	S	0.4	0.46	0.48	0.49	0.52	0.61	0.55	0.52	0.55	0.52	0.48	0.58	0.56	0.52	0.55	0.51	0.45	0.37	0.26	0.26	0.61	0.48
Sep 10	0.21	0.15	0.11	S	0.21	0.16	0.13	0.17	0.27	0.28	0.26	0.22	0.29	0.33	0.28	0.24	0.25	0.25	0.24	0.18	0.18	0.13	0.1	0.06	0.06	0.33	0.20
Sep 11	0.22	0.18	S	0.22	0.23	0.2	0.16	0.26	0.28	0.28	0.27	0.3	0.43	0.49	0.48	0.47	0.45	0.6	0.5	0.45	0.43	0.32	0.32	0.24	0.16	0.60	0.34
Sep 12	0.27	S	0.23	0.1	0.14	0.08	0.06	0.01	0.21	0.24	0.26	0.28	0.31	0.32	0.29	0.29	0.25	0.29	0.38	0.31	0.35	0.2	0.1	0.03	0.01	0.38	0.22
Sep 13	S	0.07	0.03	0	0	0	0	0.01	0.2	0.31	0.33	0.35	0.4	0.43	0.43	0.42	0.4	0.45	0.45	0.36	0.35	0.35	0.17	S	0.00	0.45	0.25
Sep 14	0.17	0.17	0.14	0.15	0.08	0.02	0.05	0.04	0.25	0.39	0.25	0.22	0.31	0.3	0.32	0.35	0.38	0.4	0.39	0.38	0.29	0.2	S	0.24	0.02	0.40	0.24
Sep 15	0.19	0.18	0.15	0.03	0.02	0.13	0.1	0.08	0.19	0.21	0.12	0.14	0.2	0.14	P	P	P	P	P	P	0.3	S	0.24	0.11	0.02	0.30	-
Sep 16	0.05	0.02	0.01	0	0.01	0	0	0	0	C	C	C	C	C	C	0.4	0.28	0.36	0.38	0.24	S	0.21	0.17	0.17	0.00	0.40	-
Sep 17	0.16	0.13	0.15	0.24	0.2	0.21	0.23	0.23	0.18	0.2	0.32	0.35	0.25	0.18	0.22	0.28	0.2	0.22	0.2	S	0.22	0.33	0.25	0.13	0.13	0.35	0.22
Sep 18	0.08	0.09	0.19	0.22	0.24	0.26	0.2	0.22	0.25	0.24	0.32	0.33	0.29	0.26	0.18	0.14	0.19	0.2	S	0.2	0.1	0.01	0	0.01	0.00	0.33	0.18
Sep 19	0.01	0.02	0.01	0.01	0.03	0.1	0.2	0.19	0.17	0.21	0.26	0.24	0.17	0.21	0.25	0.22	0.28	S	0.16	0.27	0.16	0.06	0.02	0.01	0.01	0.28	0.14
Sep 20	0.01	0.01	0	0.02	0.01	0.01	0.01	0.02	0.1	0.12	0.14	0.18	0.22	0.21	0.26	0.24	S	0.24	0.11	0.17	0.04	0.02	0.02	0.04	0.00	0.26	0.10
Sep 21	0.12	0.22	0.3	0.28	0.33	0.22	0.3	0.32	0.33	0.25	0.21	0.22	0.27	0.32	0.35	S	0.33	0.4	0.35	0.39	0.4	0.41	0.47	0.47	0.12	0.47	0.32
Sep 22	0.55	0.57	0.61	0.61	0.69	0.66	0.71	0.72	0.65	0.7	X	X	X	0.04	S	0.62	0.62	0.61	0.67	0.66	0.62	0.61	0.61	0.51	0.04	0.72	0.60
Sep 23	0.46	0.48	0.51	0.5	0.45	0.39	0.38	0.31	0.26	0.34	0.31	0.27	0.27	S	0.31	0.18	0.2	0.11	0.14	0.07	0.03	0.06	0.03	0.07	0.03	0.51	0.27
Sep 24	0.03	0.07	0.06	0.04	0.03	0.04	0.06	0.04	0.08	0.21	0.16	0.14	S	0.2	0.16	0.3	0.31	0.27	0.26	0.28	0.26	0.27	0.29	0.24	0.03	0.31	0.17
Sep 25	0.25	0.27	0.3	0.32	0.33	0.23	0.25	0.28	0.24	0.15	0.2	S	0.29	0.25	0.22	0.23	0.26	1.01	1.02	0.94	0.79	0.6	0.42	0.34	0.15	1.02	0.40
Sep 26	0.32	0.19	0.2	0.23	0.19	0.19	0.26	0.3	0.26	0.25	S	0.28	0.31	0.33	0.39	0.38	0.38	0.38	0.38	0.34	0.31	0.35	0.38	0.38	0.19	0.39	0.30
Sep 27	0.35	0.35	0.29	0.34	0.33	0.32	0.31	0.32	0.37	S	0.35	0.32	0.33	0.42	0.45	0.46	0.52	0.51	0.41	0.31	0.24	0.21	0.2	0.13	0.13	0.52	0.34
Sep 28	0.15	0.15	0.08	0.04	0.02	0	0.02	0.01	S	0.15	0.21	0.27	0.4	0.38	0.35	0.31	0.39	0.38	0.41	0.35	0.22	0.17	0.09	0.05	0.00	0.41	0.20
Sep 29	0.06	0.04	0.04	0.03	0.05	0.04	0.03	S	0.04	0.38	0.36	0.32	0.28	0.27	0.31	0.25	0.23	0.23	0.19	0.18	0.21	0.12	0.1	0.07	0.03	0.38	0.17
Sep 30	0.04	0.07	0.07	0.15	0.22	0.22	S	0.26	0.22	0.17	0.26	0.37	0.32	0.32	0.25	0.31	0.3	0.27	0.3	0.32	0.33	0.24	0.26	0.27	0.04	0.37	0.24
Diurnal Maximum	0.55	0.57	0.61	0.61	0.69	0.66	0.84	0.72	0.65	0.70	0.61	0.55	0.52	0.55	0.52	0.62	0.62	1.01	1.02	0.94	0.79	0.61	0.61	0.51			
Diurnal Average	0.23	0.21	0.21	0.21	0.19	0.23	0.24	0.28	0.29	0.30	0.30	0.33	0.32	0.34	0.34	0.35	0.38	0.37	0.33	0.29	0.25	0.22					

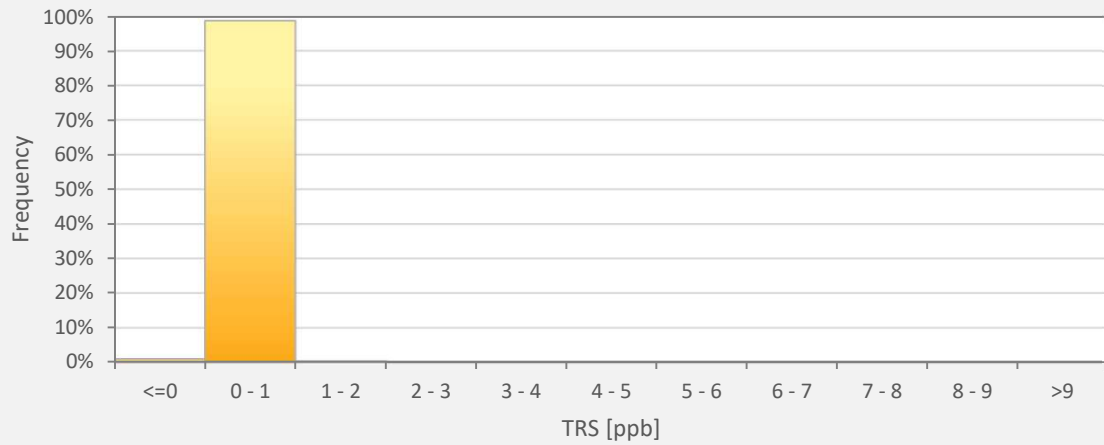
<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	Invalid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span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

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

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



TRS[ppb] Histogram: AQHI Cadotte Lake Monthly: 09-2021 1 Hr.



Classes	TRS
<=0	1.05%
0 - 1	98.65%
1 - 2	0.30%
2 - 3	0.00%
3 - 4	0.00%
4 - 5	0.00%
5 - 6	0.00%
6 - 7	0.00%
7 - 8	0.00%
8 - 9	0.00%
>9	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-TRS[ppb] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 92.92% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	1.35	0	0	0	0	1.35
NNE	1.49	0	0	0	0	1.49
NE	4.33	0	0	0	0	4.33
ENE	7.32	0	0	0	0	7.32
E	8.07	0	0	0	0	8.07
ESE	11.96	0	0	0	0	11.96
SE	3.14	0	0	0	0	3.14
SSE	4.19	0	0	0	0	4.19
S	2.09	0	0	0	0	2.09
SSW	1.94	0	0	0	0	1.94
SW	3.89	0	0	0	0	3.89
WSW	17.04	0	0	0	0	17.04
W	13.75	0	0	0	0	13.75
WNW	10.76	0	0	0	0	10.76
NW	5.08	0	0	0	0	5.08
NNW	3.59	0	0	0	0	3.59
Summary	100	0	0	0	0	100





**PEACE RIVER AREA MONITORING PROGRAM**

**AQHI - Cadotte Lake Station - September 2021**

**Summary of Hourly Averages**

**OXIDES OF NITROGEN (NOx) in ppb**

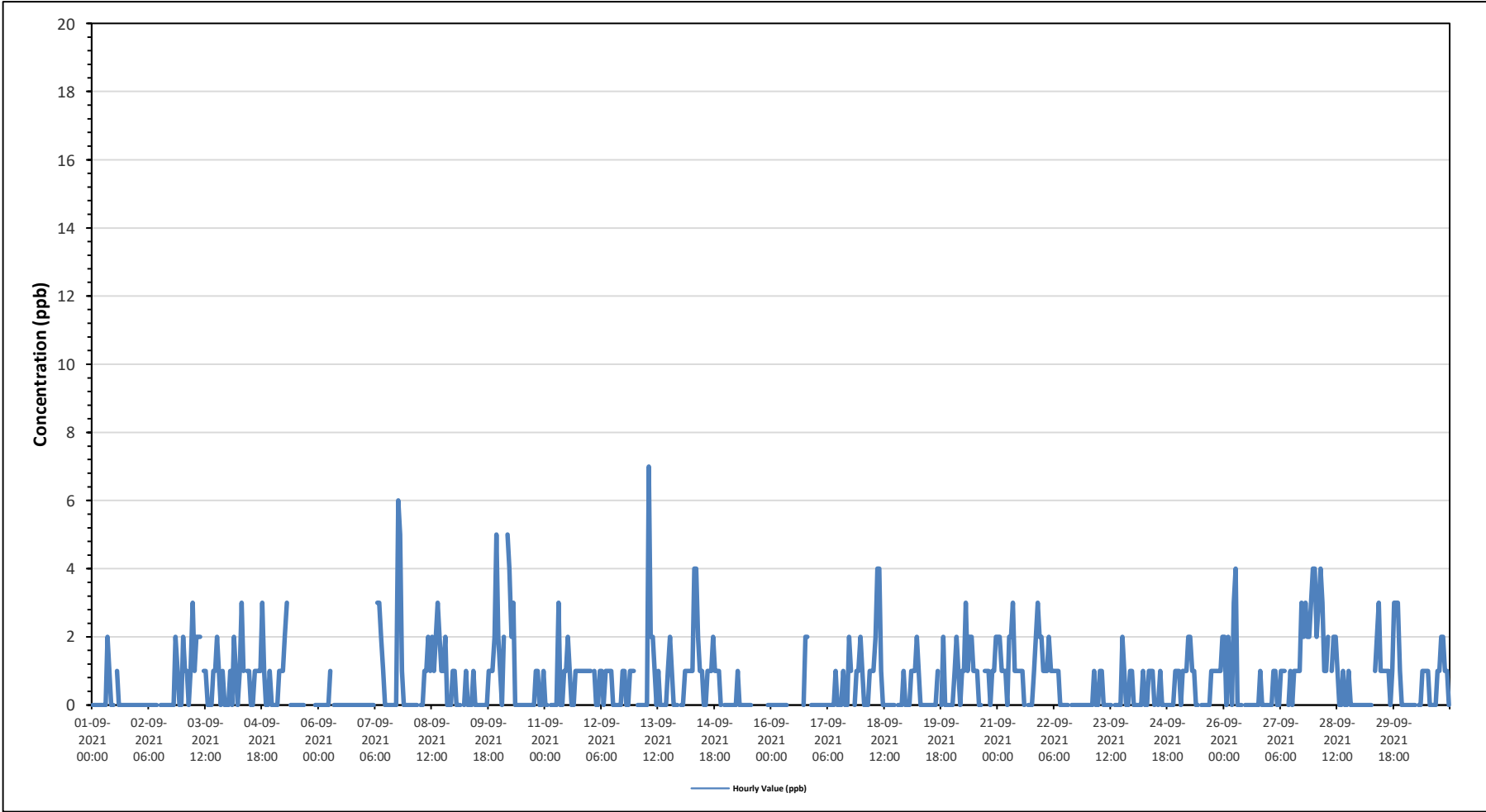
Maximum Hourly Value:	7 ppb on September 13 at hour 7	Hours in Service:	720
Maximum Daily Value:	1.3 ppb on September 21	Hours of Data:	670
Minimum Hourly Value:	0 ppb on September 1 at hour 0	Hours of Missing Data:	11
Minimum Daily Value:	0.0 ppb on September 6	Hours of Calibration:	39
Monthly Average:	0.7 ppb	Operational Uptime:	98.5

Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average									
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23												
Sep 1	0	0	0	0	0	0	0	0	2	1	0	0	S	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.2
Sep 2	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	2	0.1		
Sep 3	2	1	1	0	1	3	1	2	2	2	S	1	1	0	0	0	1	1	2	1	0	1	0	0	0	0	0	0	0	0	0	0	3	1.0		
Sep 4	0	1	0	2	1	0	1	3	1	S	1	1	0	0	1	1	1	1	3	1	0	0	1	0	0	0	0	0	0	0	0	0	3	0.9		
Sep 5	0	0	0	1	1	1	2	3	S	0	0	0	0	0	0	0	0	P	P	P	P	P	0	0	0	0	0	0	0	0	0	0	3	0.4		
Sep 6	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	1	0.0		
Sep 7	0	0	0	0	0	0	S	3	3	2	1	0	0	0	0	0	0	0	6	5	1	0	0	0	0	0	0	0	0	0	0	0	6	0.9		
Sep 8	0	0	0	0	0	S	0	0	1	1	2	1	2	1	2	3	2	1	1	2	0	0	0	1	0	0	0	0	0	0	0	0	3	0.9		
Sep 9	1	0	0	0	S	0	1	0	0	0	1	0	0	0	0	0	0	1	1	1	1	2	5	2	0	0	0	0	0	0	0	5	0.7			
Sep 10	1	0	2	S	5	4	2	3	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	5	0.9			
Sep 11	0	0	S	0	0	0	0	3	0	0	1	1	2	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	3	0.7			
Sep 12	1	S	1	0	0	1	1	0	1	1	1	1	0	0	0	0	0	1	1	0	0	1	1	1	1	1	1	1	0	0	0	1	0.6			
Sep 13	S	0	0	0	0	0	0	7	2	2	1	0	1	0	0	0	0	1	2	1	0	0	0	S	0	0	0	0	0	0	7	0.8				
Sep 14	0	0	1	1	1	1	1	4	4	2	1	1	0	0	1	1	1	2	1	1	1	0	S	0	0	0	0	0	0	0	0	4	1.1			
Sep 15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	P	P	P	P	P	P	P	0	S	0	0	0	0	0	0	0	0	1	-			
Sep 16	0	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	C	0	2	2	S	0	0	0	0	0	0	0	0	0	0	2	-			
Sep 17	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	1	S	0	1	1	2	0	0	0	0	0	0	0	2	0.4			
Sep 18	1	0	0	0	1	1	1	2	4	4	1	0	0	0	0	0	0	0	S	0	0	0	0	1	0	0	0	0	0	0	0	4	0.7			
Sep 19	0	0	1	1	1	2	1	0	0	0	0	0	0	0	0	0	1	S	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0.4			
Sep 20	0	1	2	1	0	1	1	3	1	2	2	1	1	1	0	0	S	1	1	1	0	1	1	2	0	0	0	0	0	0	0	3	1.0			
Sep 21	2	2	1	1	1	0	2	2	3	1	1	1	1	1	0	S	0	0	0	0	0	1	2	3	2	2	2	0	0	0	3	1.3				
Sep 22	1	1	1	2	1	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	2	0.4			
Sep 23	0	0	0	1	0	0	1	1	0	0	0	0	0	0	S	0	0	0	0	2	1	0	0	1	1	1	0	0	0	0	0	2	0.3			
Sep 24	0	0	0	0	0	1	0	0	1	1	1	0	S	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3			
Sep 25	1	0	1	1	1	2	2	1	1	0	0	S	0	0	0	0	0	1	1	1	1	1	1	1	2	0	0	0	0	0	2	0.8				
Sep 26	2	0	2	1	0	3	4	0	0	0	S	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4	0.6			
Sep 27	0	0	1	1	0	0	1	1	1	S	0	1	0	1	1	1	1	3	2	3	2	2	3	4	0	0	0	0	0	0	0	4	1.3			
Sep 28	4	2	3	4	3	1	1	2	S	1	2	2	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	1.2			
Sep 29	0	0	0	0	0	0	0	S	1	2	3	1	1	1	1	1	0	1	3	3	3	1	0	0	0	0	0	0	0	0	0	3	1.0			
Sep 30	0	0	0	0	0	0	S	0	0	1	1	1	1	0	0	0	0	1	1	2	2	1	1	0	0	0	0	0	0	0	0	2	0.5			
Diurnal Maximum	4	2	3	4	5	4	4	7	4	4	3	2	2	1	2	3	2	3	6	5	3	3	5	4												
Diurnal Average	0.6	0.3	0.6	0.6	0.8	0.9	1.5	1.0	0.9	0.8	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.6	1.2	1.1	0.6	0.6	0.7	0.7												

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

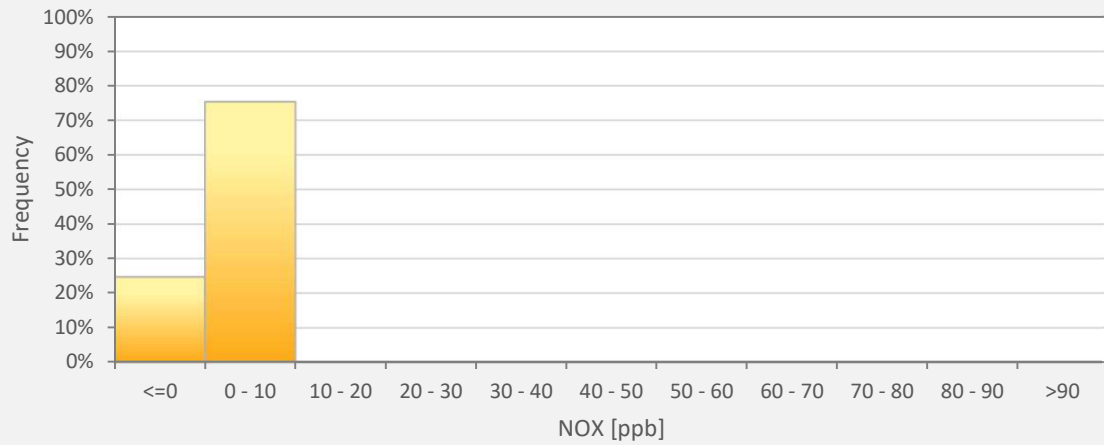
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.  
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

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





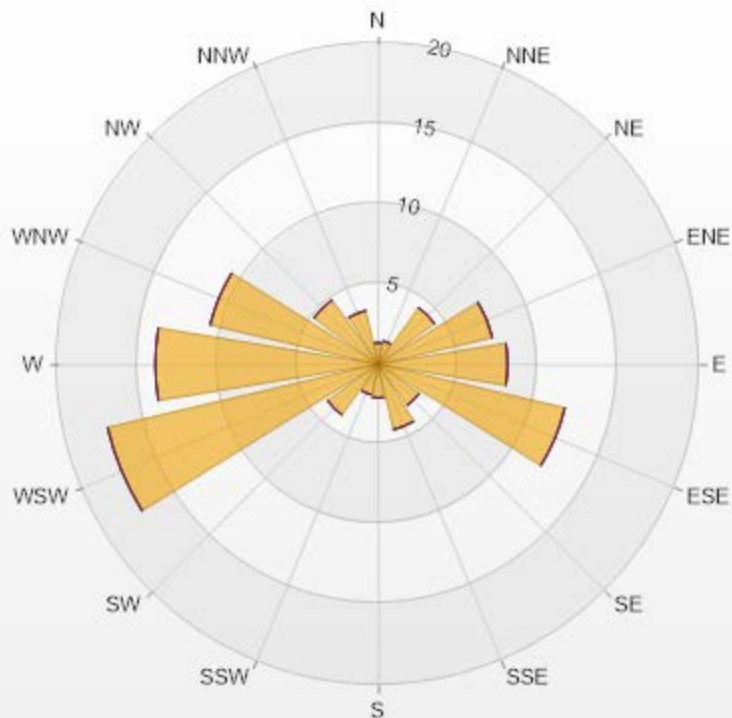
NOX[ppb] Histogram: AQHI Cadotte Lake Monthly: 09-2021 1 Hr.



Classes	NOX
<=0	24.63%
0 - 10	75.37%
10 - 20	0.00%
20 - 30	0.00%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-NOX[ppb] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 93.06% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	1.34	0	0	0	0	1.34
NNE	1.49	0	0	0	0	1.49
NE	4.33	0	0	0	0	4.33
ENE	7.31	0	0	0	0	7.31
E	8.06	0	0	0	0	8.06
ESE	11.94	0	0	0	0	11.94
SE	3.13	0	0	0	0	3.13
SSE	4.18	0	0	0	0	4.18
S	2.09	0	0	0	0	2.09
SSW	1.94	0	0	0	0	1.94
SW	3.88	0	0	0	0	3.88
WSW	17.31	0	0	0	0	17.31
W	13.88	0	0	0	0	13.88
WNW	10.75	0	0	0	0	10.75
NW	4.93	0	0	0	0	4.93
NNW	3.43	0	0	0	0	3.43
Summary	100	0	0	0	0	100



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% Icon Classes (ppb)

100

0-30

0

30-50

0

50-76

0

76-159

0

>159.0



PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - September 2021

Summary of Hourly Averages

NITRIC OXIDE (NO) in ppb

Maximum Hourly Value:	6 ppb	on September 13 at hour 7	Hours in Service:	720
Maximum Daily Value:	0.7 ppb	on September 28	Hours of Data:	670
Minimum Hourly Value:	0 ppb	on September 1 at hour 0	Hours of Missing Data:	11
Minimum Daily Value:	0.0 ppb	on September 5	Hours of Calibration:	39
Monthly Average:	0.2 ppb		Operational Uptime:	98.5

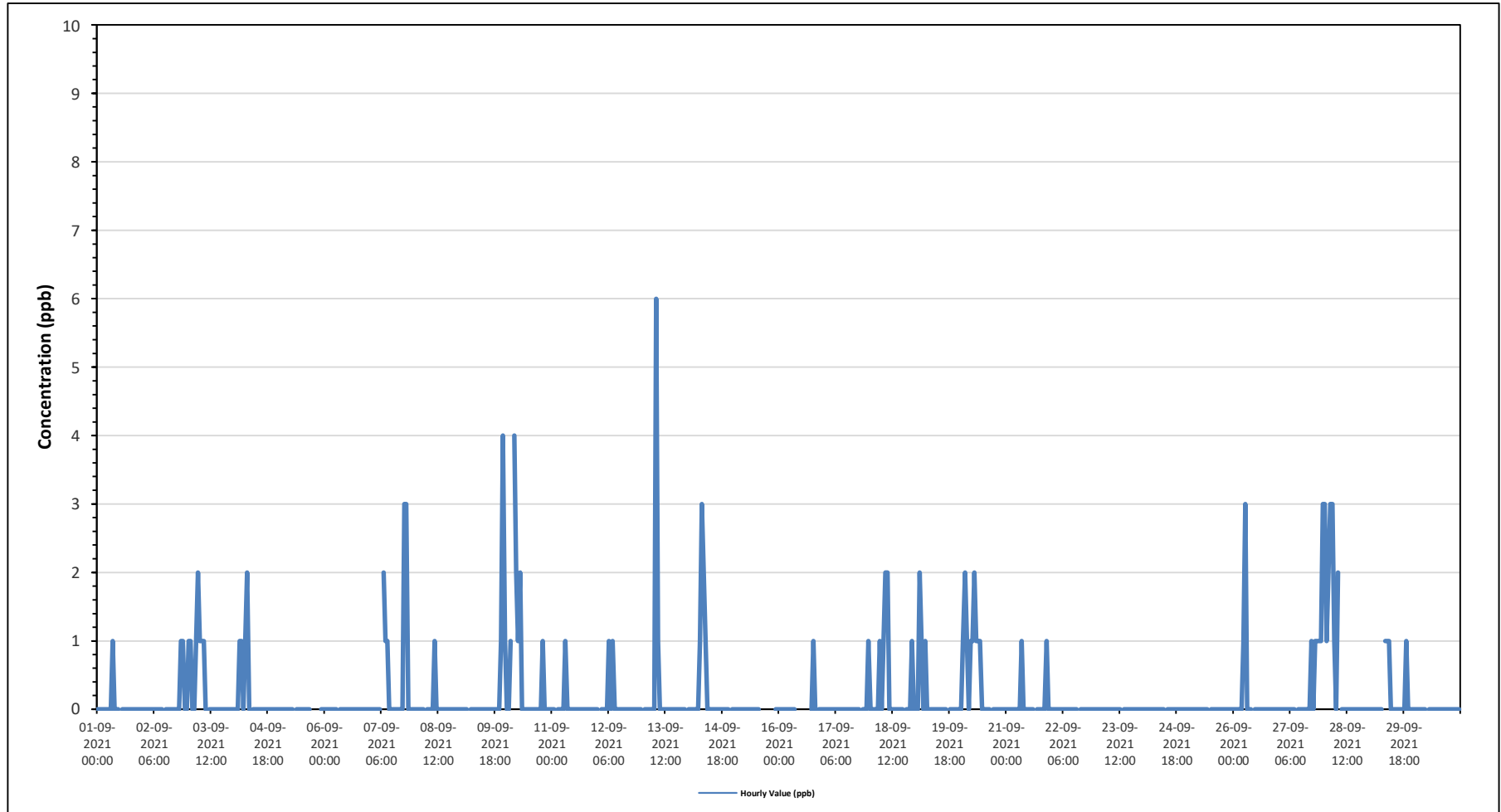
Day	Hourly Period Starting at (MST)																								Daily					
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average			
Sep 1	0	0	0	0	0	0	0	0	1	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0
Sep 2	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0.1	
Sep 3	1	1	0	0	1	2	1	1	1	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.3	
Sep 4	0	0	0	1	1	0	1	2	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.2	
Sep 5	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	P	P	P	P	P	0	0	0	0	0.0	
Sep 6	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 7	0	0	0	0	0	0	S	2	1	1	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	3	0.4	
Sep 8	0	0	0	0	0	S	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	
Sep 9	0	0	0	0	S	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	1	0	0	4	0.3		
Sep 10	0	0	1	S	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4	0.5		
Sep 11	0	0	S	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0		
Sep 12	0	S	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	1	0.1	
Sep 13	S	0	0	0	0	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	6	0.3		
Sep 14	0	0	0	0	0	0	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	3	0.3		
Sep 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P	P	P	P	P	P	P	S	0	0	0	0	0	-		
Sep 16	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	C	C	0	1	0	S	0	0	0	0	0	1	-		
Sep 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	1	0	1	0.0		
Sep 18	0	0	0	0	0	1	0	1	2	2	0	0	0	0	0	0	0	0	0	S	S	0	0	0	1	0	2	0.3		
Sep 19	0	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	S	S	0	0	0	0	0	0	2	0.2	
Sep 20	0	1	2	1	0	1	1	2	1	1	1	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	2	0.5		
Sep 21	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	S	0	0	0	0	0	0	0	1	0	0	1	0.1		
Sep 22	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 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	0.0	
Sep 24	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 25	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 26	0	0	0	0	0	1	3	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.2		
Sep 27	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	1	0	1	1	1	1	3	0	3	0.3		
Sep 28	3	1	2	3	3	1	0	2	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.7		
Sep 29	0	0	0	0	0	0	0	S	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.2		
Sep 30	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	
Diurnal Maximum	3	1	2	3	4	2	3	6	2	2	1	0	0	0	0	0	0	0	1	3	3	1	1	4	3					
Diurnal Average	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.8	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.2	0.2					

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

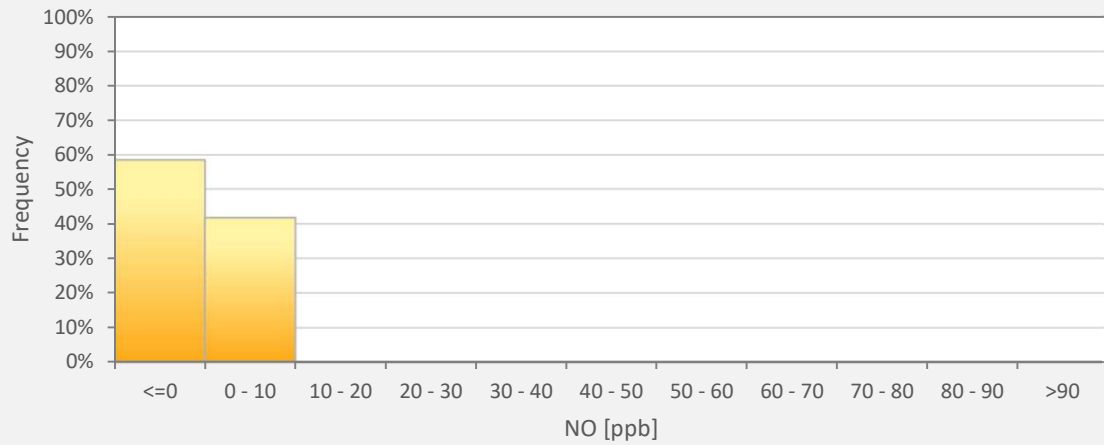
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

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

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



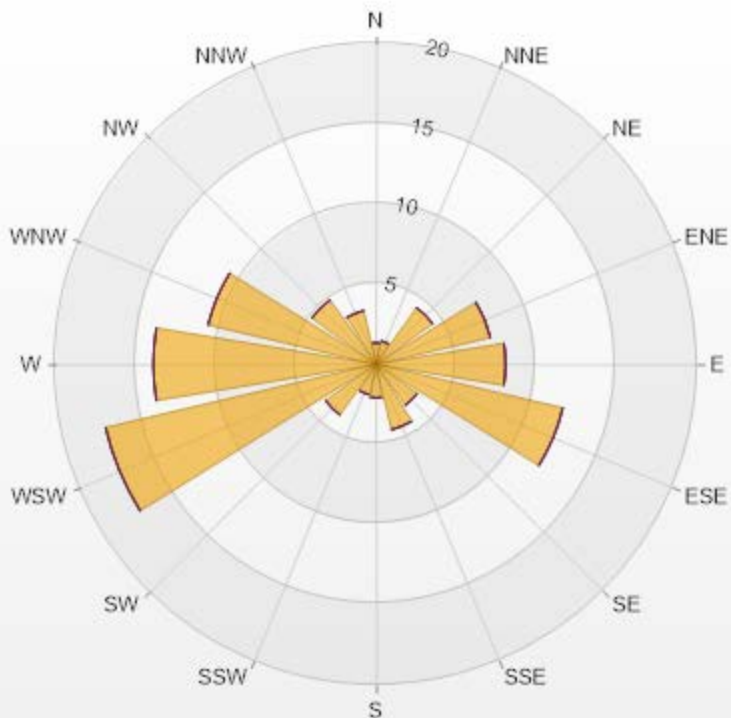
NO[ppb] Histogram: AQHI Cadotte Lake Monthly: 09-2021 1 Hr.



Classes	NO
<=0	58.36%
0 - 10	41.64%
10 - 20	0.00%
20 - 30	0.00%
30 - 40	0.00%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-NO[ppb] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 93.06% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	1.34	0	0	0	0	1.34
NNE	1.49	0	0	0	0	1.49
NE	4.33	0	0	0	0	4.33
ENE	7.31	0	0	0	0	7.31
E	8.06	0	0	0	0	8.06
ESE	11.94	0	0	0	0	11.94
SE	3.13	0	0	0	0	3.13
SSE	4.18	0	0	0	0	4.18
S	2.09	0	0	0	0	2.09
SSW	1.94	0	0	0	0	1.94
SW	3.88	0	0	0	0	3.88
WSW	17.31	0	0	0	0	17.31
W	13.88	0	0	0	0	13.88
WNW	10.75	0	0	0	0	10.75
NW	4.93	0	0	0	0	4.93
NNW	3.43	0	0	0	0	3.43
Summary	100	0	0	0	0	100



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% Icon Classes (ppb)

100  0-30

0  30-50

0  50-76

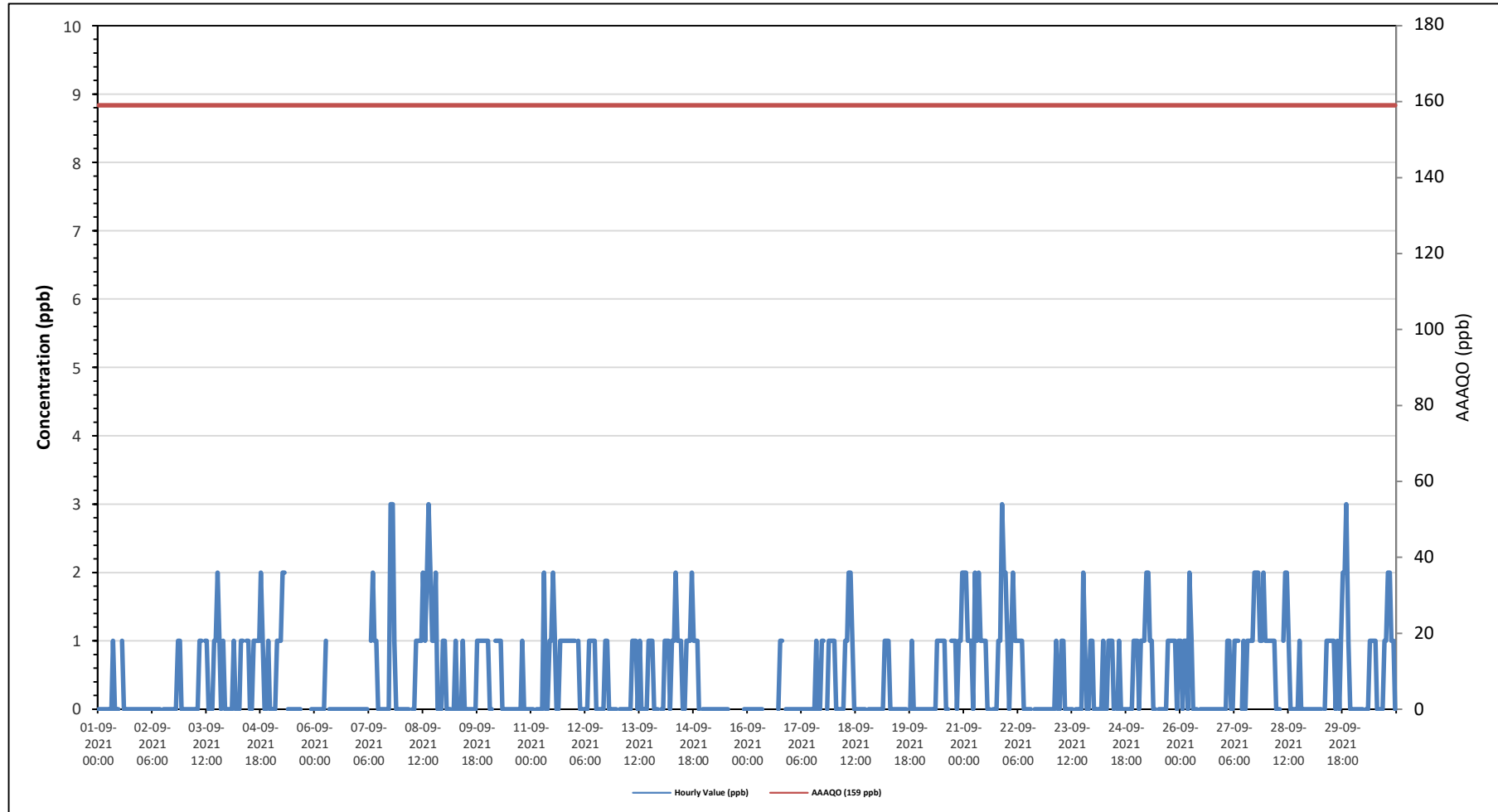
0  76-159

0  >159.0

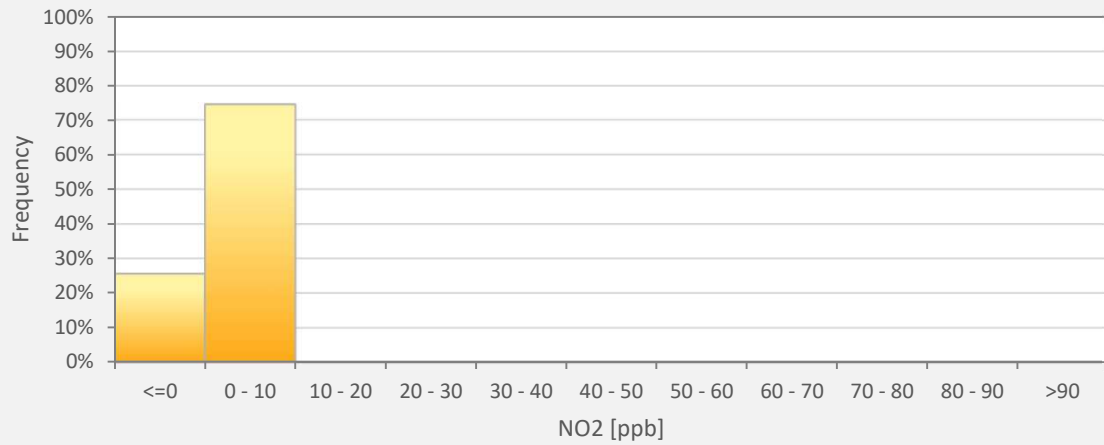




**Timeseries Chart of Hourly Average for NO2 - AQHI - Cadotte Lake Station**



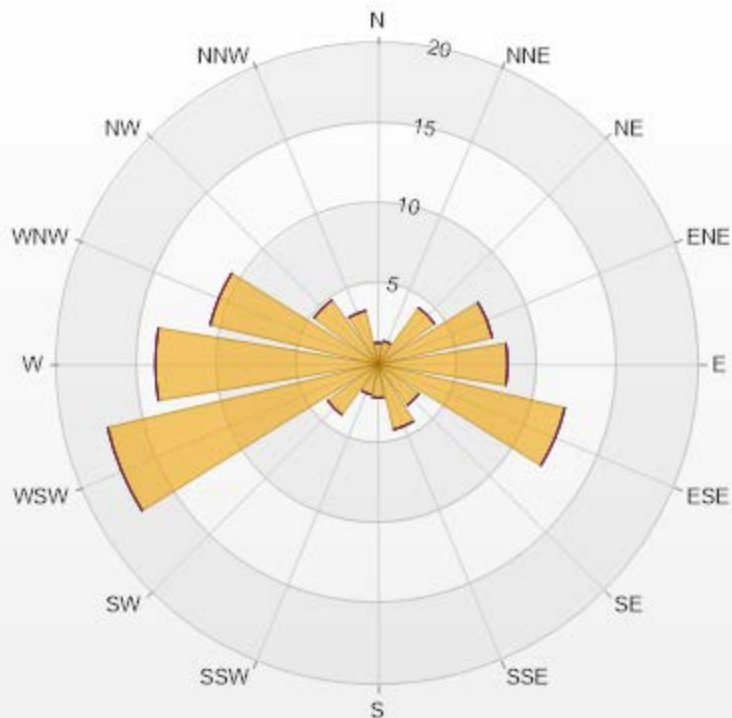
NO2[ppb] Histogram: AQHI Cadotte Lake Monthly: 09-2021 1 Hr.



Classes	NO2
<=0	25.52%
0 - 10	74.48%
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 Cadotte Lake Poll.: AQHI Cadotte Lake-NO2[ppb] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 93.06% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	1.34	0	0	0	0	1.34
NNE	1.49	0	0	0	0	1.49
NE	4.33	0	0	0	0	4.33
ENE	7.31	0	0	0	0	7.31
E	8.06	0	0	0	0	8.06
ESE	11.94	0	0	0	0	11.94
SE	3.13	0	0	0	0	3.13
SSE	4.18	0	0	0	0	4.18
S	2.09	0	0	0	0	2.09
SSW	1.94	0	0	0	0	1.94
SW	3.88	0	0	0	0	3.88
WSW	17.31	0	0	0	0	17.31
W	13.88	0	0	0	0	13.88
WNW	10.75	0	0	0	0	10.75
NW	4.93	0	0	0	0	4.93
NNW	3.43	0	0	0	0	3.43
Summary	100	0	0	0	0	100



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% Icon Classes (ppb)

100

0-30

0

30-50

0

50-76

0

76-159

0

>159.0



**PEACE RIVER AREA MONITORING PROGRAM**

**AQHI - Cadotte Lake Station - September 2021**

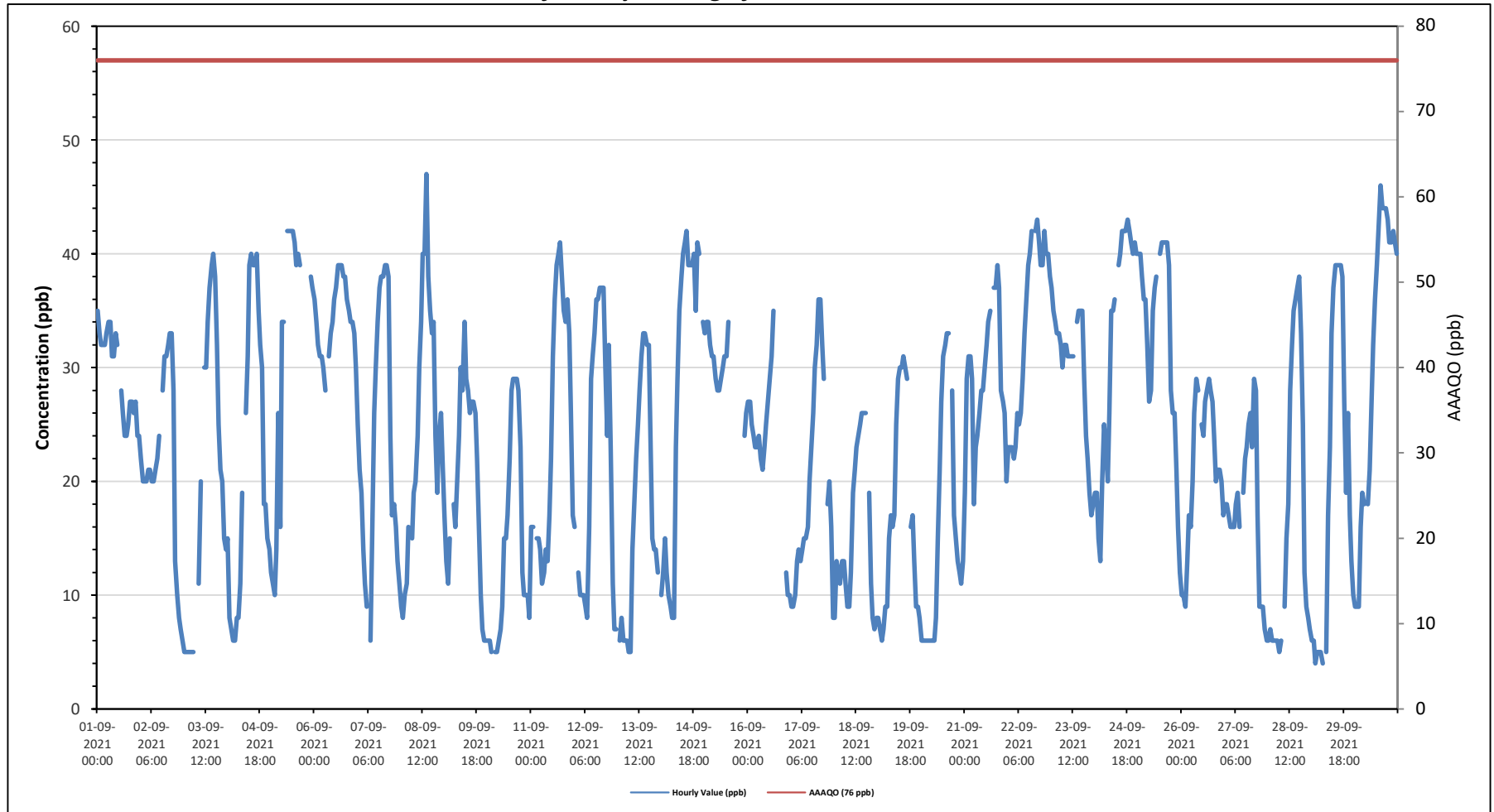
**Summary of Hourly Averages**

**OZONE (O<sub>3</sub>) in ppb**

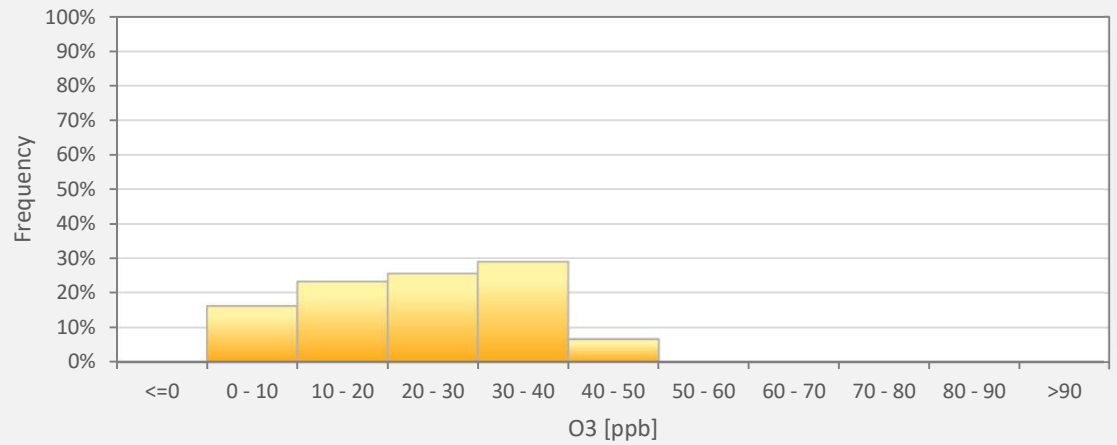
Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 76 ppb																												
Number of 1-Hour Exceedances: 0																												
Maximum Hourly Value: 47 ppb on September 8 at hour 14												Hours in Service: 720																
Maximum Daily Value: 34.3 ppb on September 6												Hours of Data: 671																
Minimum Hourly Value: 4 ppb on September 29 at hour 2												Hours of Missing Data: 13																
Minimum Daily Value: 14.5 ppb on September 10												Hours of Calibration: 36																
Monthly Average: 23.9 ppb												Operational Uptime: 98.2																
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
Sep 1	35	33	32	32	32	33	34	34	31	31	33	32	S	28	26	24	24	25	27	27	26	27	24	24	24	24	35	29.3
Sep 2	22	20	20	20	21	21	20	20	21	22	24	S	28	31	31	32	33	33	28	13	10	8	7	6	6	6	33	21.3
Sep 3	5	5	5	5	5	5	NRM	NRM	11	20	S	30	30	34	37	39	40	38	32	25	21	20	15	14	5	40	20.8	
Sep 4	15	8	7	6	6	8	8	11	19	S	26	31	39	40	39	39	40	35	32	30	18	18	15	14	6	40	21.9	
Sep 5	12	11	10	14	26	16	34	34	S	42	42	42	42	41	39	40	39	P	P	P	P	P	38	37	10	42	31.1	
Sep 6	36	34	32	31	31	30	28	S	31	33	34	36	37	39	39	38	38	36	35	34	34	33	30	28	39	34.3	34.3	
Sep 7	25	21	19	14	11	9	S	6	16	26	30	34	37	38	38	39	39	38	24	17	18	16	13	11	6	39	23.4	
Sep 8	9	8	10	11	16	S	15	19	20	24	30	34	40	40	47	38	35	33	34	24	19	24	26	21	8	47	25.1	
Sep 9	17	13	11	15	S	18	16	20	24	30	28	34	29	28	26	27	27	26	22	16	10	7	6	6	6	34	19.8	
Sep 10	6	6	5	S	5	5	6	7	9	15	15	17	22	28	29	29	29	28	23	12	10	10	10	8	5	29	14.5	
Sep 11	16	16	S	15	15	14	11	12	14	13	17	22	31	36	39	40	41	38	35	34	36	33	26	17	11	41	24.8	
Sep 12	16	S	12	10	10	10	9	8	16	29	31	33	36	36	37	37	37	30	24	32	23	11	7	7	7	37	21.8	
Sep 13	S	6	8	6	6	6	5	5	14	18	22	25	28	31	33	33	32	32	24	15	14	14	12	S	5	33	17.7	
Sep 14	10	12	15	12	10	9	8	8	23	29	35	38	40	41	42	39	39	39	40	35	41	40	S	34	8	42	27.8	
Sep 15	33	34	34	32	31	31	29	28	28	29	30	31	31	34	P	P	P	P	P	P	21	S	24	26	21	34	-	
Sep 16	27	27	25	24	23	23	24	22	21	23	25	27	29	31	35	C	C	C	C	C	S	12	10	10	10	35	23.2	
Sep 17	9	9	10	13	14	13	14	15	15	16	20	23	26	30	32	36	36	32	29	S	18	20	16	8	8	36	19.7	
Sep 18	8	13	12	11	13	13	11	9	9	12	19	21	23	24	25	26	26	26	S	19	11	8	7	8	7	26	15.4	
Sep 19	8	7	6	7	9	9	15	17	16	17	25	29	30	30	31	30	29	S	16	17	13	9	9	8	6	31	16.8	
Sep 20	6	6	6	6	6	6	6	6	8	15	21	27	31	32	33	33	S	28	17	15	13	12	11	13	6	33	15.5	
Sep 21	19	29	31	31	29	18	23	24	26	28	28	30	32	34	35	S	37	37	39	37	28	27	26	20	18	39	29.0	
Sep 22	23	23	23	22	23	26	25	26	29	33	36	39	40	42	S	42	43	41	39	39	42	40	40	38	22	43	33.7	
Sep 23	37	35	34	33	33	32	30	32	32	31	31	31	31	S	34	35	35	35	29	24	22	19	17	18	17	37	30.0	
Sep 24	19	19	15	13	20	25	23	20	26	35	35	36	S	39	40	42	42	42	43	42	41	40	41	40	13	43	32.1	
Sep 25	40	40	38	36	36	32	27	28	35	37	38	S	40	41	41	41	39	28	26	26	21	16	12	12	41	33.0		
Sep 26	10	10	9	13	17	16	20	26	29	28	S	25	24	27	28	29	28	27	24	20	21	21	20	17	9	29	21.3	
Sep 27	18	18	17	16	16	16	18	19	16	S	19	22	23	25	26	23	29	28	17	9	9	9	7	6	6	29	17.7	
Sep 28	6	7	6	6	6	6	5	6	S	9	15	18	28	32	35	36	37	38	33	25	12	9	8	7	5	38	17.0	
Sep 29	6	6	4	5	5	5	4	S	5	17	23	33	37	39	39	39	39	38	27	19	26	17	13	10	4	39	19.8	
Sep 30	9	9	9	16	19	18	S	18	21	27	32	36	39	42	46	44	44	44	43	41	41	42	41	40	9	46	31.3	
Diurnal Maximum	40	40	38	36	36	33	34	34	35	42	42	42	42	42	47	44	44	44	43	42	42	42	41	40				
Diurnal Average	17.3	16.7	16.0	16.4	17.0	16.3	17.3	17.8	20.2	24.6	27.3	29.9	32.3	34.2	35.1	35.2	35.5	34.2	29.4	24.9	22.3	20.3	18.6	17.6				
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 O3 - AQHI - Cadotte Lake Station**



O3[ppb] Histogram: AQHI Cadotte Lake Monthly: 09-2021 1 Hr.

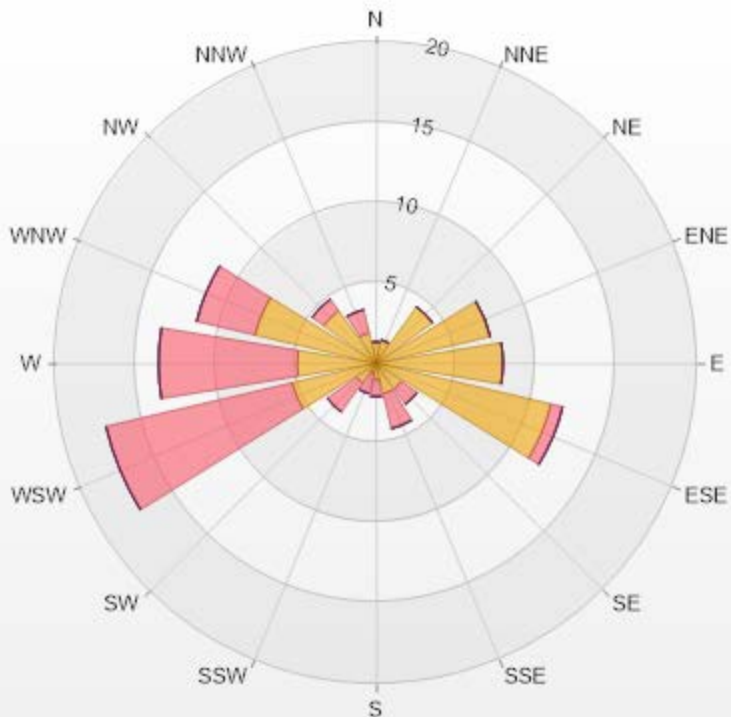


Classes	O3
<=0	0.00%
0 - 10	16.10%
10 - 20	23.10%
20 - 30	25.34%
30 - 40	28.76%
40 - 50	6.71%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%



Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-O3[ppb] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 93.19% Calm Avg: 0.00 [ppb]

Direction	0-30	30-50	50-76	76-159	>159.0	Total
N	1.34	0	0	0	0	1.34
NNE	1.49	0	0	0	0	1.49
NE	4.32	0	0	0	0	4.32
ENE	7.3	0	0	0	0	7.3
E	7.9	0	0	0	0	7.9
ESE	11.18	0.75	0	0	0	11.93
SE	1.94	1.19	0	0	0	3.13
SSE	1.94	2.24	0	0	0	4.18
S	1.04	1.04	0	0	0	2.08
SSW	0.6	1.34	0	0	0	1.94
SW	1.49	2.24	0	0	0	3.73
WSW	5.37	11.92	0	0	0	17.29
W	4.92	8.64	0	0	0	13.56
WNW	7.75	3.73	0	0	0	11.48
NW	4.02	0.89	0	0	0	4.91
NNW	1.94	1.49	0	0	0	3.43
Summary	64.54	35.47	0	0	0	100



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% Icon Classes (ppb)	65	0-30	35	30-50	0	50-76	0	76-159	0	>159.0
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**PEACE RIVER AREA MONITORING PROGRAM**

**AQHI - Cadotte Lake Station - September 2021**

**Summary of Hourly Averages**

**TOTAL HYDROCARBONS (THC) in ppm**

Maximum Hourly Value:	2.06 ppm on September 18 at hour 8	Hours in Service:	720
Maximum Daily Value:	2.00 ppm on September 18	Hours of Data:	672
Minimum Hourly Value:	1.89 ppm on September 4 at hour 16	Hours of Missing Data:	12
Minimum Daily Value:	1.92 ppm on September 16	Hours of Calibration:	36
Monthly Average:	1.95 ppm	Operational Uptime:	98.3

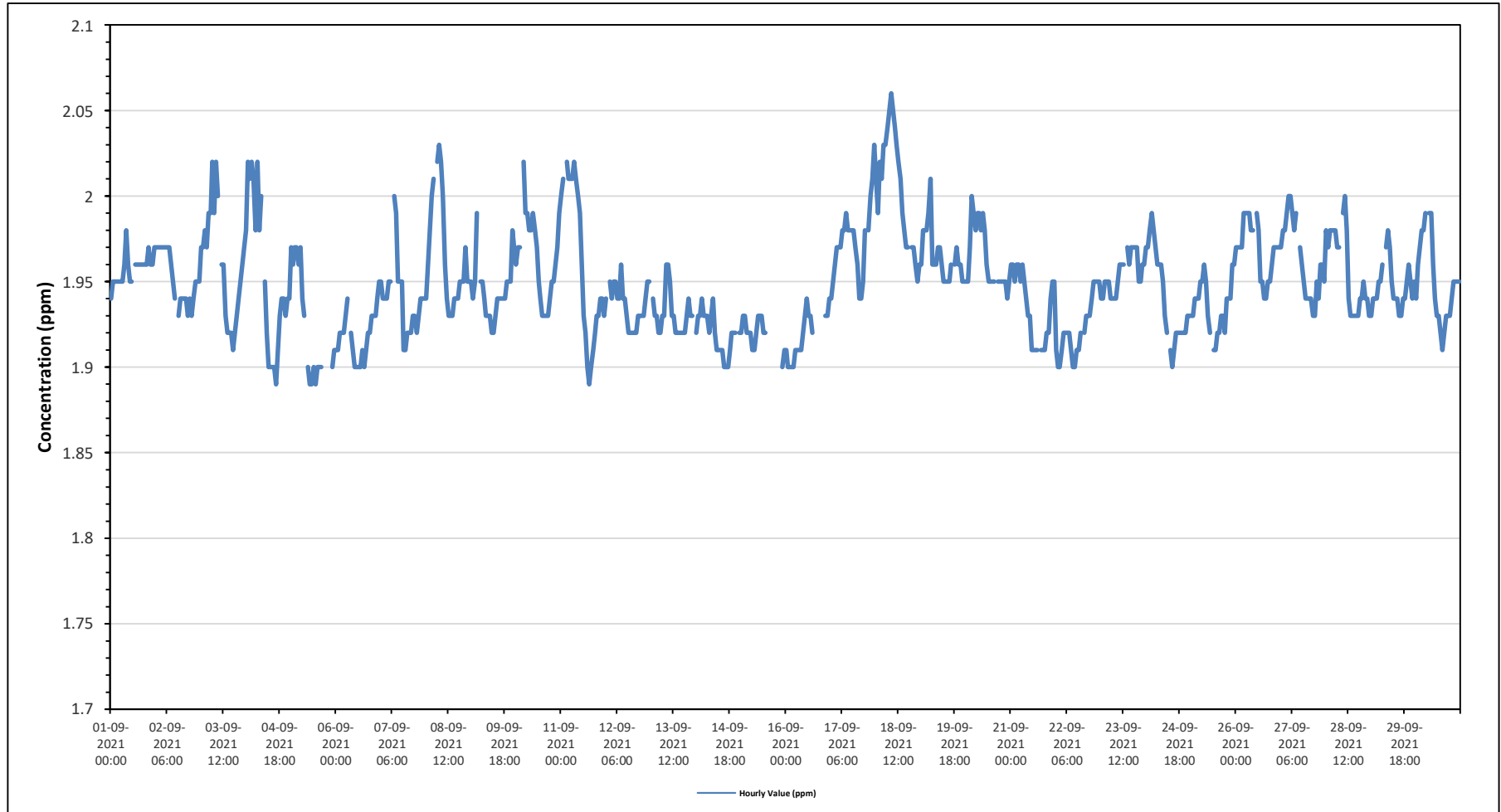
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	1.94	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.98	1.96	1.95	1.95	S	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.97	1.96	1.96	1.97	1.94	1.98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

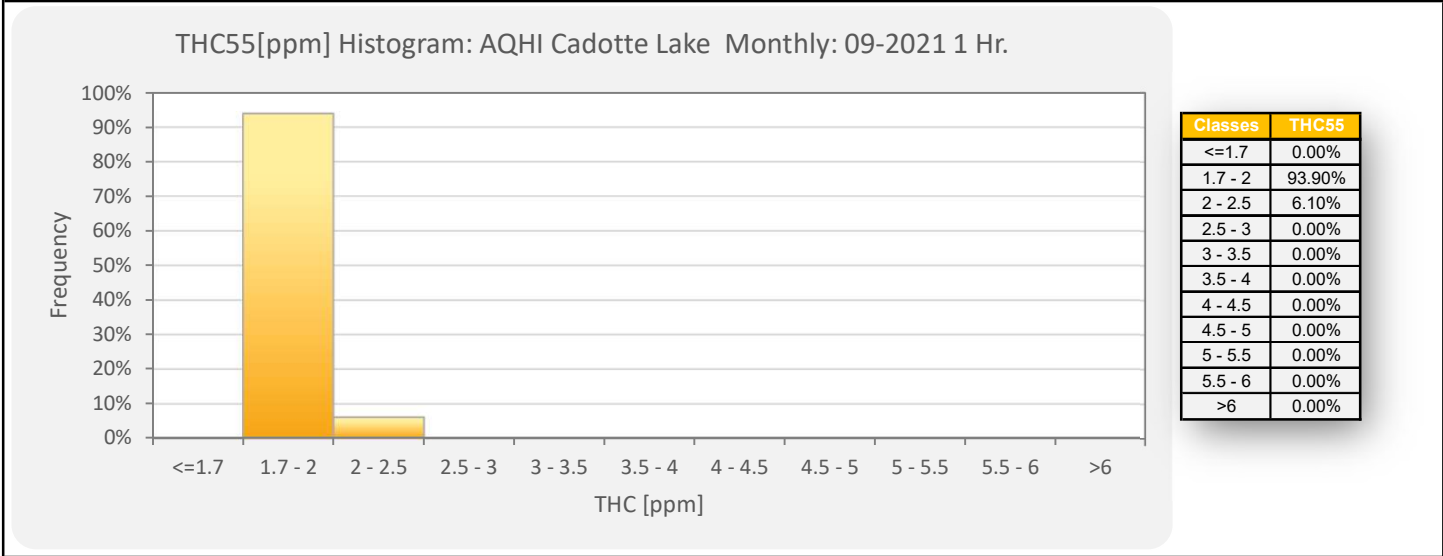
<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	Invalid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span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

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

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

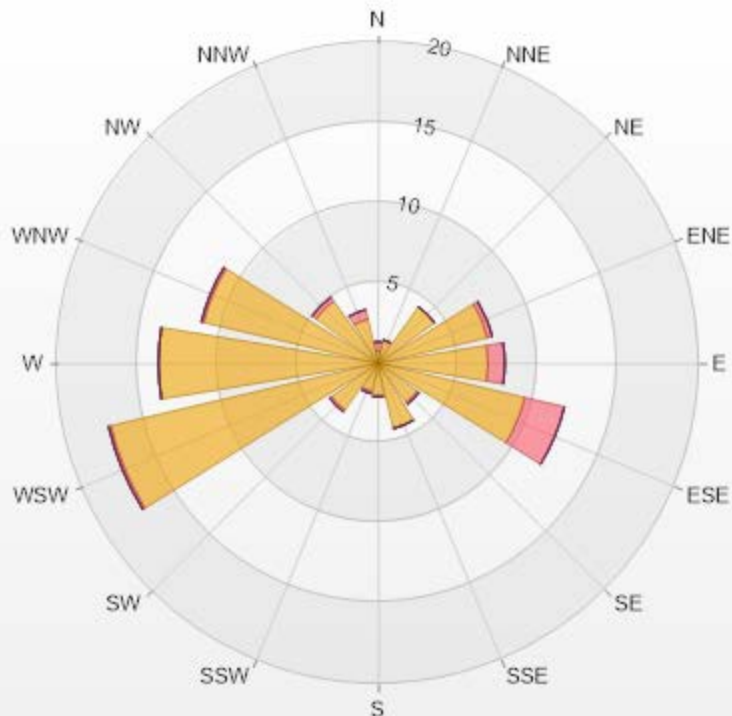
**Timeseries Chart of Hourly Average for THC - AQHI - Cadotte Lake Station**





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-THC55[ppm] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 93.33% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	0.74	0.6	0	0	0	1.34
NNE	1.49	0	0	0	0	1.49
NE	4.32	0	0	0	0	4.32
ENE	6.99	0.3	0	0	0	7.29
E	6.85	1.04	0	0	0	7.89
ESE	9.38	2.53	0	0	0	11.91
SE	2.98	0.15	0	0	0	3.13
SSE	4.17	0	0	0	0	4.17
S	2.08	0	0	0	0	2.08
SSW	1.79	0.15	0	0	0	1.94
SW	3.57	0.15	0	0	0	3.72
WSW	17.11	0.15	0	0	0	17.26
W	13.69	0	0	0	0	13.69
WNW	11.16	0.15	0	0	0	11.31
NW	4.76	0.3	0	0	0	5.06
NNW	2.83	0.6	0	0	0	3.43
Summary	93.91	6.12	0	0	0	100



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% Icon Classes (ppm)	94	6	0	0	0
0-2	94	6	0	0	0
2-5		6			
5-10			0		
10-40				0	
>40.0					0



**PEACE RIVER AREA MONITORING PROGRAM**

**AQHI - Cadotte Lake Station - September 2021**

**Summary of Hourly Averages**

**METHANE (CH4) in ppm**

Maximum Hourly Value:	2.06 ppm on September 18 at hour 8	Hours in Service:	720
Maximum Daily Value:	2.00 ppm on September 18	Hours of Data:	672
Minimum Hourly Value:	1.89 ppm on September 4 at hour 16	Hours of Missing Data:	12
Minimum Daily Value:	1.92 ppm on September 16	Hours of Calibration:	36
Monthly Average:	1.95 ppm	Operational Uptime:	98.3

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

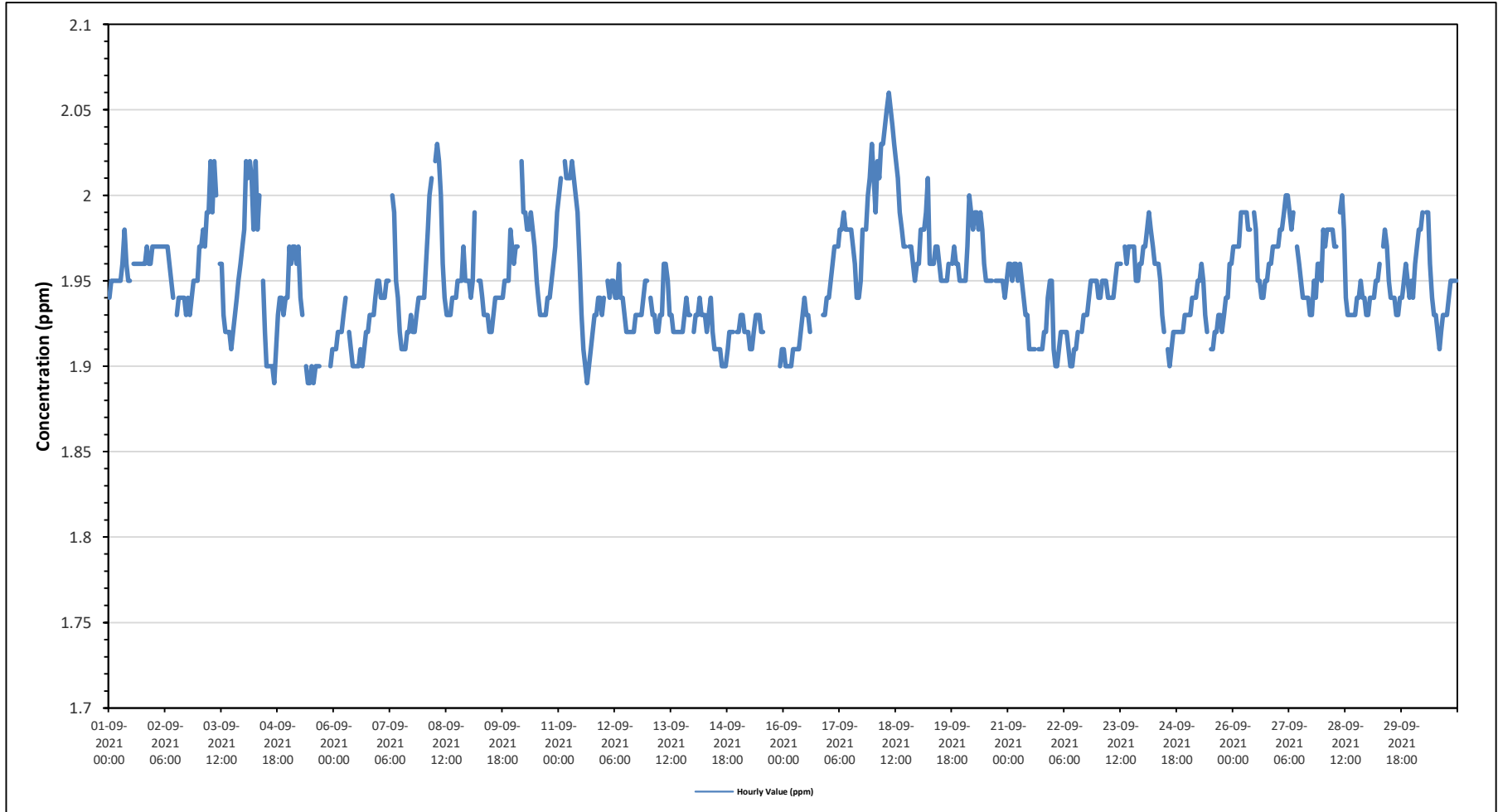
<b>C</b>	Monthly Calibration	<b>S</b>	Daily Zero-Span Check	<b>Q</b>	Quality Assurance
<b>K</b>	Collection Error	<b>N</b>	No Data (Machine Not in Service)	<b>Y</b>	Routine Maintenance
<b>X</b>	Invalid Data (Equipment Malfunction /Recovery)	<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span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

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

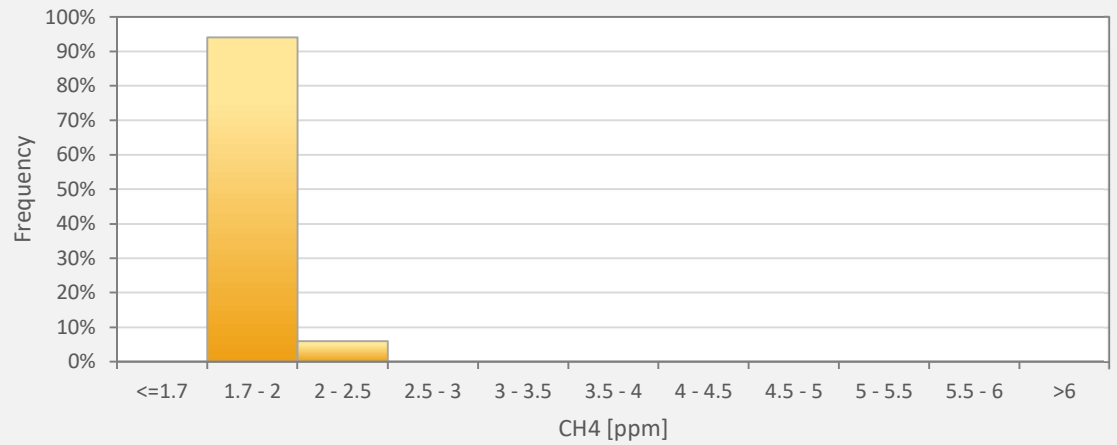
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



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



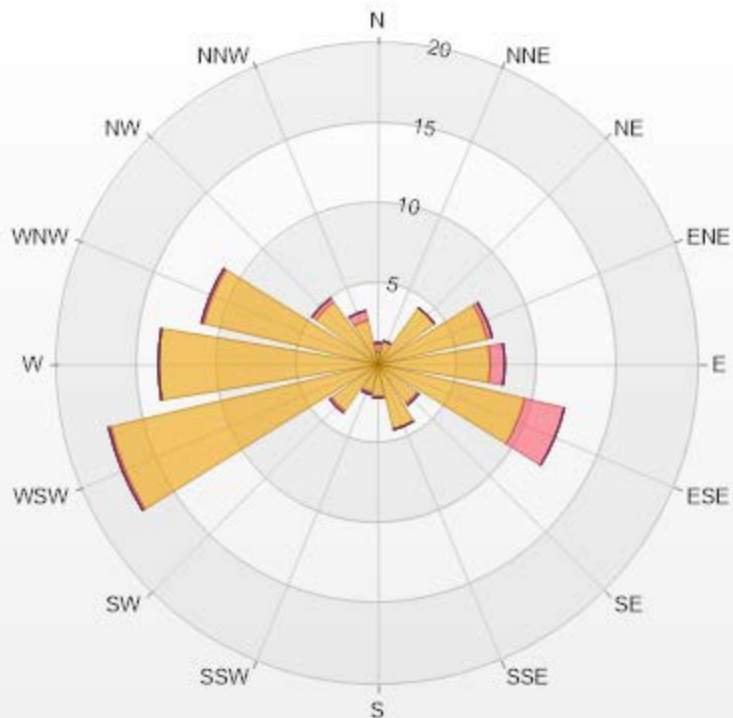
CH4[ppm] Histogram: AQHI Cadotte Lake Monthly: 09-2021 1 Hr.



Classes	CH4
<=1.7	0.00%
1.7 - 2	94.05%
2 - 2.5	5.95%
2.5 - 3	0.00%
3 - 3.5	0.00%
3.5 - 4	0.00%
4 - 4.5	0.00%
4.5 - 5	0.00%
5 - 5.5	0.00%
5.5 - 6	0.00%
>6	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-CH4[ppm] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 93.33% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	0.74	0.6	0	0	0	1.34
NNE	1.49	0	0	0	0	1.49
NE	4.32	0	0	0	0	4.32
ENE	6.99	0.3	0	0	0	7.29
E	6.99	0.89	0	0	0	7.88
ESE	9.38	2.53	0	0	0	11.91
SE	2.98	0.15	0	0	0	3.13
SSE	4.17	0	0	0	0	4.17
S	2.08	0	0	0	0	2.08
SSW	1.79	0.15	0	0	0	1.94
SW	3.57	0.15	0	0	0	3.72
WSW	17.11	0.15	0	0	0	17.26
W	13.69	0	0	0	0	13.69
WNW	11.16	0.15	0	0	0	11.31
NW	4.76	0.3	0	0	0	5.06
NNW	2.83	0.6	0	0	0	3.43
Summary	94.05	5.97	0	0	0	100



PRAMP-202109

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% Icon Classes (ppm)	94	6	0	0	0
0-2	94	6	0	0	0
2-5		6			
5-10			0		
10-20				0	
>20.0					0



**PEACE RIVER AREA MONITORING PROGRAM**

**AQHI - Cadotte Lake Station - September 2021**

**Summary of Hourly Averages**

**NON-METHANE HYDROCARBONS (NMHC) in ppm**

Maximum Hourly Value:	0.03 ppm on September 7 at hour 11	Hours in Service:	720
Maximum Daily Value:	0.00 ppm on September 7	Hours of Data:	672
Minimum Hourly Value:	0.00 ppm on September 1 at hour 0	Hours of Missing Data:	12
Minimum Daily Value:	0.00 ppm on September 1	Hours of Calibration:	36
Monthly Average:	0.00 ppm	Operational Uptime:	98.3

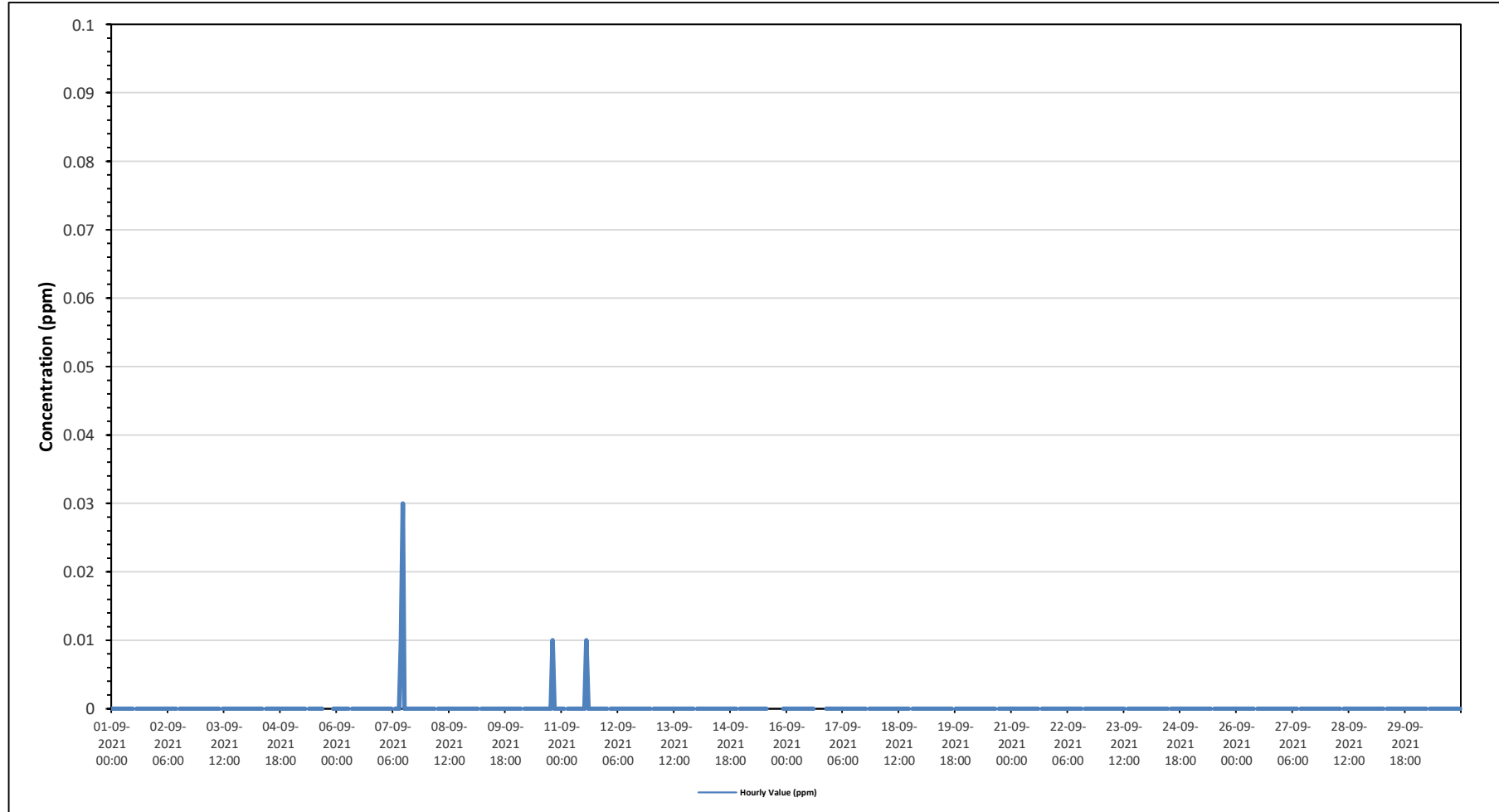
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average											
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23										
Sep 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	P	P	P	P	P	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	S	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00		
Sep 8	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Sep 9	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Sep 10	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	P	P	P	P	P	P	X	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	C	C	C	C	C	C	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	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 19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	S	0.00	0.00	0.00	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 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	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.01	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00		

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

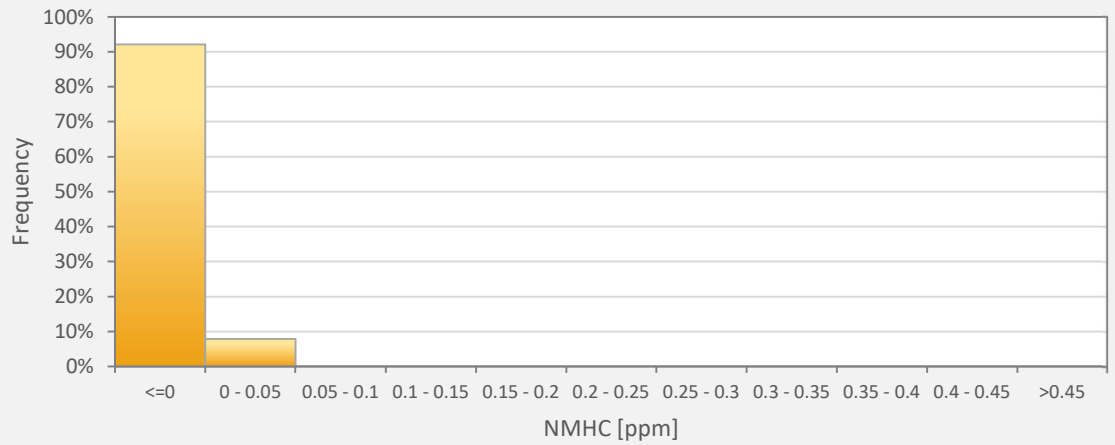
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

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 - AQHI - Cadotte Lake Station*



NMHC[ppm] Histogram: AQHI Cadotte Lake Monthly: 09-2021 1 Hr.

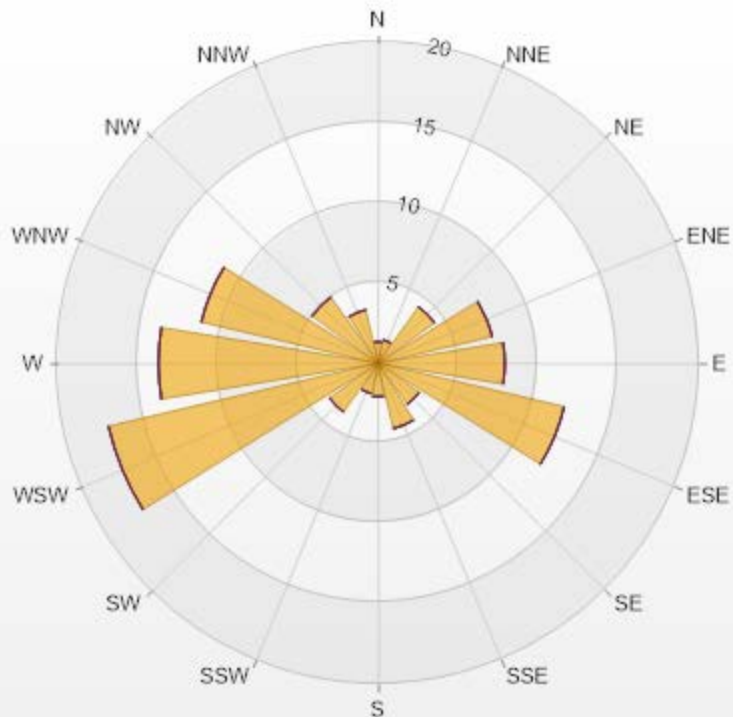


Classes	NMHC
<=0	92.11%
0 - 0.05	7.89%
0.05 - 0.1	0.00%
0.1 - 0.15	0.00%
0.15 - 0.2	0.00%
0.2 - 0.25	0.00%
0.25 - 0.3	0.00%
0.3 - 0.35	0.00%
0.35 - 0.4	0.00%
0.4 - 0.45	0.00%
>0.45	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-NMHC[ppm] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 93.33% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-0.9	0.9-2	>2.0	Total
N	1.34	0	0	0	0	1.34
NNE	1.49	0	0	0	0	1.49
NE	4.32	0	0	0	0	4.32
ENE	7.29	0	0	0	0	7.29
E	7.89	0	0	0	0	7.89
ESE	11.9	0	0	0	0	11.9
SE	3.13	0	0	0	0	3.13
SSE	4.17	0	0	0	0	4.17
S	2.08	0	0	0	0	2.08
SSW	1.93	0	0	0	0	1.93
SW	3.72	0	0	0	0	3.72
WSW	17.26	0	0	0	0	17.26
W	13.69	0	0	0	0	13.69
WNW	11.31	0	0	0	0	11.31
NW	5.06	0	0	0	0	5.06
NNW	3.42	0	0	0	0	3.42
Summary	100	0	0	0	0	100







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% Icon Classes (ppm)

100  0-0.1

0  0.1-0.3

0  0.3-0.9

0  0.9-2

0  >2.0



**PEACE RIVER AREA MONITORING PROGRAM**

**AQHI - Cadotte Lake Station - September 2021**

**Summary of Hourly Averages**

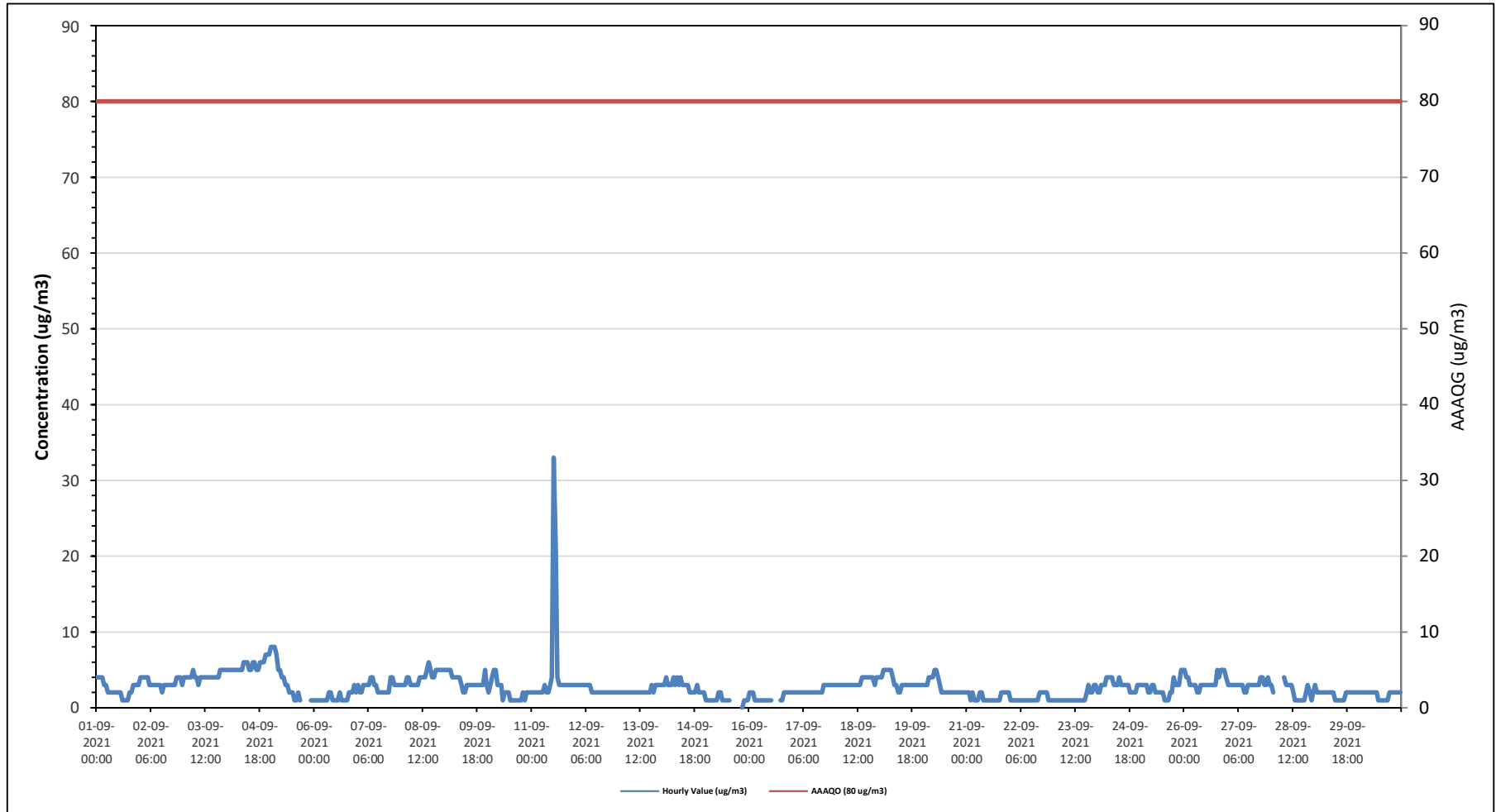
**PARTICULATE MATTER 2.5 (PM<sub>2.5</sub>) in µg/m<sup>3</sup>**

Alberta Ambient Air Quality Guideline (AAAQG): 1-Hour 80 µg/m <sup>3</sup> , Alberta Ambient Air Quality Objective (AAAO): 24-Hour 29 µg/m <sup>3</sup>																													
Number of 1-Hour Exceedances: 0										Number of 24-Hour Exceedances: 0																			
Maximum Hourly Value: 33.0 µg/m <sup>3</sup> on September 11 at hour 12										Hours in Service: 720																			
Maximum Daily Value: 5.6 µg/m <sup>3</sup> on September 4										Hours of Data: 700																			
Minimum Hourly Value: 0.0 µg/m <sup>3</sup> on September 15 at hour 20										Hours of Missing Data: 16																			
Minimum Daily Value: 1.1 µg/m <sup>3</sup> on September 15										Hours of Calibration: 4																			
Monthly Average: 2.7 µg/m <sup>3</sup>										Operational Uptime: 97.8																			
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23					
Sep 1	4	4	4	4	3	3	2	2	2	2	2	2	2	2	1	1	1	1	2	2	3	3	3	3	1.0	4.0	2.4		
Sep 2	4	4	4	4	4	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3	4	4	4	3	2.0	4.0	3.3		
Sep 3	4	4	4	4	4	5	4	4	3	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	3.0	5.0	4.2		
Sep 4	5	5	5	5	5	5	5	5	5	6	6	6	5	5	6	6	5	5	6	6	6	7	7	7	5.0	7.0	5.6		
Sep 5	8	8	8	7	5	5	4	4	3	3	2	2	2	1	1	2	1	<b>P</b>	<b>P</b>	<b>P</b>	<b>P</b>	<b>P</b>	1	1	1.0	8.0	3.6		
Sep 6	1	1	1	1	1	1	1	1	2	2	1	1	1	1	2	1	1	1	1	2	2	2	3	2	1.0	3.0	1.4		
Sep 7	3	2	2	3	3	3	3	4	4	3	3	2	2	2	2	2	2	2	2	4	4	3	3	3	2.0	4.0	2.8		
Sep 8	3	3	3	4	4	3	3	3	3	3	4	4	4	4	5	6	5	4	4	5	5	5	5	5	3.0	6.0	4.0		
Sep 9	5	5	5	5	4	4	4	4	4	3	2	2	3	3	3	3	3	3	3	3	3	3	5	3	2.0	5.0	3.5		
Sep 10	2	3	4	5	5	3	3	1	2	2	2	2	1	1	1	1	1	1	1	2	1	2	2	2	1.0	5.0	2.1		
Sep 11	2	2	2	2	2	2	3	2	2	3	4	<b>33</b>	21	4	3	3	3	3	3	3	3	3	3	3	2.0	<b>33.0</b>	4.7		
Sep 12	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.0	3.0	2.4		
Sep 13	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	3	3	2.0	3.0	2.2		
Sep 14	3	3	4	3	3	3	4	3	4	3	4	3	3	3	3	2	2	2	2	3	2	2	2	2	2.0	4.0	2.8		
Sep 15	1	1	1	1	1	1	1	2	2	1	1	1	1	1	<b>P</b>	<b>P</b>	<b>P</b>	<b>P</b>	<b>P</b>	<b>P</b>	0	1	1	1	0.0	2.0	1.1		
Sep 16	2	2	2	1	1	1	1	1	1	1	1	1	1	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	1	1	2	2	2	2	2	1.0	2.0	1.4		
Sep 17	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	2.0	3.0	2.3		
Sep 18	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	3.0	4.0	3.4		
Sep 19	4	4	5	5	5	5	4	3	3	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	2.0	5.0	3.5		
Sep 20	3	3	3	4	4	4	5	5	4	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.0	5.0	2.8		
Sep 21	2	2	1	2	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	1.0	2.0	1.4		
Sep 22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1.0	2.0	1.2		
Sep 23	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	2	3	3	1.0	3.0	1.4		
Sep 24	2	2	3	3	3	4	4	4	4	3	3	3	4	3	3	3	3	3	2	2	2	2	3	3	2.0	4.0	3.0		
Sep 25	3	3	3	3	2	2	3	3	2	2	2	2	2	1	1	1	2	2	4	3	3	3	5	5	1.0	5.0	2.6		
Sep 26	5	4	4	3	3	3	3	2	2	3	3	3	3	3	3	3	3	3	5	4	5	5	5	4	2.0	5.0	3.5		
Sep 27	3	3	3	3	3	3	3	3	3	2	2	3	3	3	3	3	3	3	4	4	3	3	4	3	2.0	4.0	3.0		
Sep 28	3	2	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	4	3	3	3	3	2	1	1	1	1	1	1	2	3	2	1	2	1.0	4.0	2.1		
Sep 29	3	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2	2	2	2	2	2	2	1.0	3.0	1.8		
Sep 30	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2	2	2	2	2	2	2	1.0	2.0	1.8		
Diurnal Maximum	8	8	8	7	5	5	5	5	5	6	6	6	33	21	6	6	5	5	6	6	6	7	7	7					
Diurnal Average	3.0	2.9	3.0	3.0	2.8	2.8	2.8	2.8	2.6	2.4	2.4	2.3	3.2	2.8	2.4	2.3	2.3	2.4	2.7	2.9	2.8	2.8	3.0	2.9					
<b>C</b>	Monthly Calibration										<b>S</b>	Daily Zero-Span Check										<b>Q</b>	Quality Assurance						
<b>K</b>	Collection Error										<b>N</b>	No Data (Machine Not in Service)										<b>Y</b>	Routine Maintenance			<b>P</b>	Power Failure		
<b>X</b>	Invalid Data (Equipment Malfunction/Recovery)										<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)																	

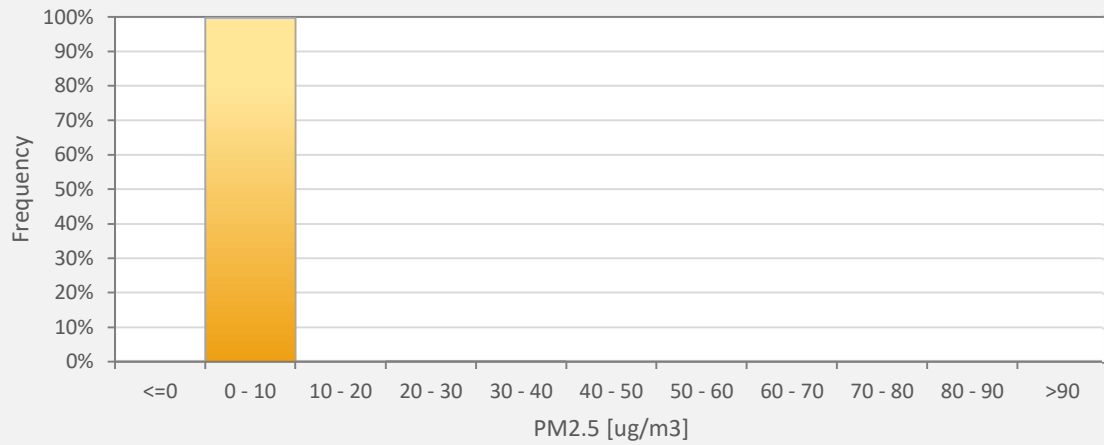
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

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

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



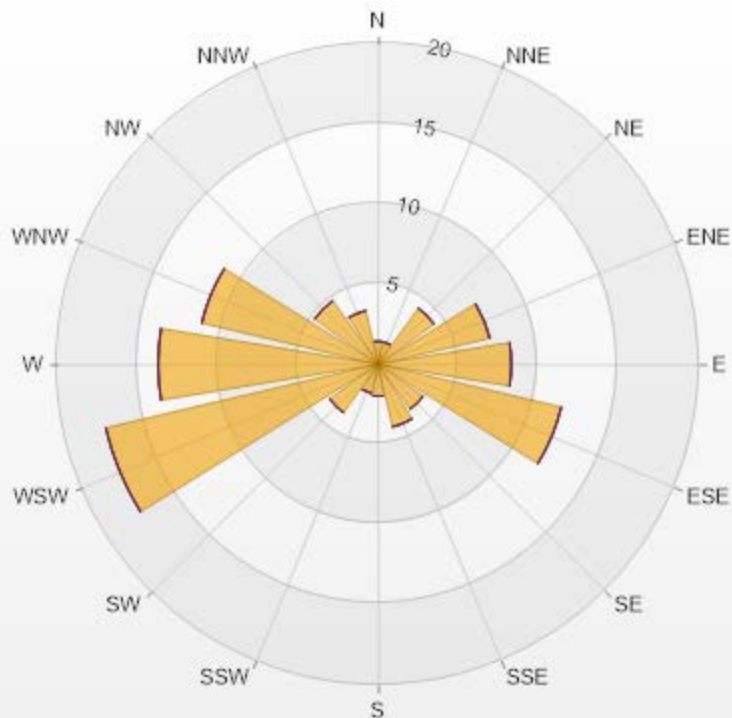
PM2.5[ug/m3(L)] Histogram: AQHI Cadotte Lake Monthly: 09-2021 1 Hr.



Classes	PM2.5
<=0	0.00%
0 - 10	99.71%
10 - 20	0.00%
20 - 30	0.14%
30 - 40	0.14%
40 - 50	0.00%
50 - 60	0.00%
60 - 70	0.00%
70 - 80	0.00%
80 - 90	0.00%
>90	0.00%

Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-PM2.5[ug/m3(L)] Monthly: 09-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 97.22% Calm Avg: 0.00 [ug/m3(L)]

Direction	0-50	50-80	80-120	120-240	>240.0	Total
N	1.43	0	0	0	0	1.43
NNE	1.43	0	0	0	0	1.43
NE	4.29	0	0	0	0	4.29
ENE	7.14	0	0	0	0	7.14
E	8.29	0	0	0	0	8.29
ESE	11.71	0	0	0	0	11.71
SE	3.43	0	0	0	0	3.43
SSE	4	0	0	0	0	4
S	2	0	0	0	0	2
SSW	1.86	0	0	0	0	1.86
SW	3.71	0	0	0	0	3.71
WSW	17.43	0	0	0	0	17.43
W	13.71	0	0	0	0	13.71
WNW	11.29	0	0	0	0	11.29
NW	4.86	0	0	0	0	4.86
NNW	3.43	0	0	0	0	3.43
Summary	100	0	0	0	0	100



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% Icon Classes (ug/m3(L))

100 0-50

0 50-80

0 80-120

0 120-240

0 >240.0



**PEACE RIVER AREA MONITORING PROGRAM**

**AQHI - Cadotte Lake Station - September 2021**

**Summary of Hourly Averages**

**RELATIVE HUMIDITY (RH) in %**

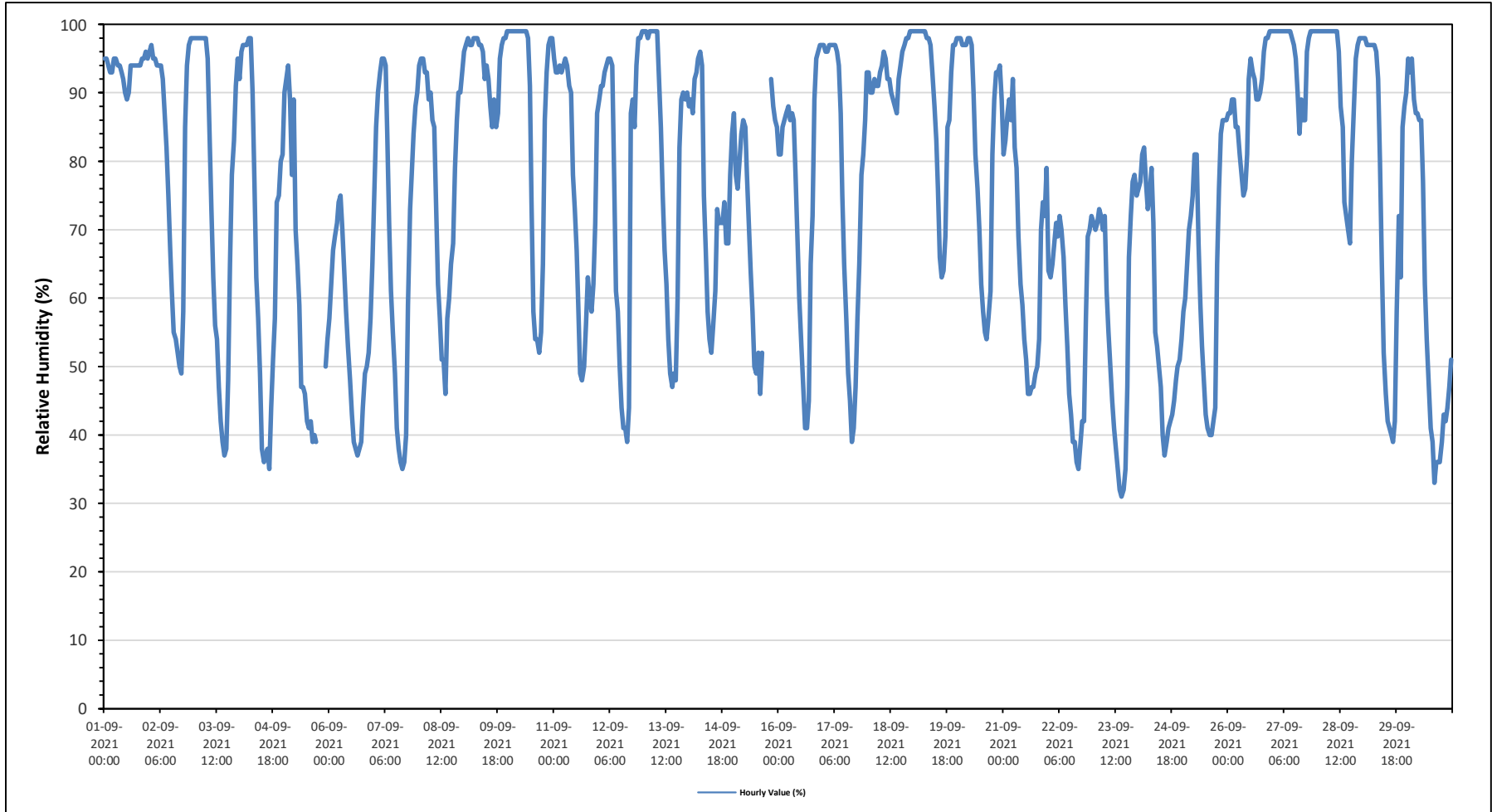
Maximum Hourly Value:	99 %	on September 9 at hour 23	Hours in Service:	720
Maximum Daily Value:	96.0 %	on September 27	Hours of Data:	712
Minimum Hourly Value:	31 %	on September 23 at hour 15	Hours of Missing Data:	8
Minimum Daily Value:	55.0 %	on September 6	Hours of Calibration:	0
Monthly Average:	75.7 %		Operational Uptime:	98.9

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	95	95	94	93	93	95	95	94	94	93	92	90	89	90	94	94	94	94	94	94	95	95	96	95	89	96	93.6	
Sep 2	96	97	95	95	94	94	94	92	87	82	75	67	61	55	54	52	50	49	58	85	94	97	98	98	49	98	80.0	
Sep 3	98	98	98	98	98	98	98	95	84	73	63	56	54	47	42	39	37	38	48	65	78	83	91	95	37	98	73.9	
Sep 4	92	96	97	97	97	98	98	90	77	63	57	49	38	36	37	38	35	44	51	57	74	75	80	81	35	98	69.0	
Sep 5	90	92	94	89	78	89	70	65	59	47	47	46	42	41	42	39	40	39	P	P	P	P	50	54	39	94	60.7	
Sep 6	57	62	67	69	71	74	75	70	64	58	53	48	43	39	38	37	38	39	44	49	50	52	57	65	37	75	55.0	
Sep 7	75	85	90	93	95	95	94	84	71	61	55	49	41	38	36	35	36	40	59	73	78	84	88	90	35	95	68.5	
Sep 8	94	95	95	93	93	89	90	86	85	75	62	57	51	51	46	57	60	65	68	79	86	90	90	93	46	95	77.1	
Sep 9	96	97	98	97	97	98	98	98	97	97	96	92	94	92	88	85	89	85	87	95	97	98	98	99	85	99	94.5	
Sep 10	99	99	99	99	99	99	99	99	99	99	98	91	74	58	54	54	52	55	65	86	93	97	98	98	52	99	86.0	
Sep 11	95	93	93	94	93	94	95	94	91	90	78	73	67	59	49	48	50	56	63	60	58	62	71	87	48	95	75.5	
Sep 12	89	91	91	93	94	95	95	94	78	61	58	50	44	41	39	44	87	89	85	94	98	98	99	39	99	77.0		
Sep 13	99	99	98	99	99	99	99	99	99	92	85	75	67	62	54	49	47	49	48	60	82	89	90	89	90	47	99	80.0
Sep 14	88	89	87	92	93	95	96	94	75	67	58	54	52	56	61	73	71	71	71	74	68	68	78	84	52	96	75.6	
Sep 15	87	78	76	80	84	86	85	78	71	64	58	50	49	52	46	52	P	P	P	P	92	88	86	85	46	92	72.4	
Sep 16	81	81	85	86	87	88	86	87	86	78	69	60	53	47	41	41	45	65	72	89	95	96	97	97	41	97	75.5	
Sep 17	97	96	96	97	97	97	97	96	94	87	75	65	57	49	45	39	41	47	57	65	78	81	86	93	39	97	76.3	
Sep 18	93	90	90	92	91	91	93	94	96	95	92	92	90	89	88	87	92	94	96	97	98	98	99	99	87	99	93.2	
Sep 19	99	99	99	99	99	99	99	98	98	97	93	88	83	76	66	63	64	69	85	86	93	97	97	98	63	99	89.3	
Sep 20	98	98	97	97	97	98	98	97	90	81	76	70	62	58	55	54	57	61	81	89	93	93	94	89	54	98	82.6	
Sep 21	81	83	87	89	86	92	82	79	69	62	59	54	51	46	46	47	47	49	50	54	70	74	72	79	46	92	67.0	
Sep 22	64	63	65	68	71	69	72	70	66	59	53	46	43	39	36	35	39	42	42	57	69	70	72	35	72	56.2		
Sep 23	71	70	71	73	72	70	72	61	55	50	45	41	38	35	32	31	32	35	47	66	72	77	78	75	31	78	57.0	
Sep 24	76	77	81	82	77	73	75	79	71	55	53	50	47	40	37	39	41	42	43	45	48	50	51	54	37	82	57.8	
Sep 25	58	60	65	70	72	75	81	81	68	59	53	48	43	41	40	40	42	44	65	76	84	86	86	86	40	86	63.5	
Sep 26	87	87	89	89	85	85	81	78	75	76	81	92	95	93	92	89	89	90	92	96	98	98	99	99	75	99	89.0	
Sep 27	99	99	99	99	99	99	99	99	99	99	98	97	95	90	84	89	86	86	96	98	99	99	99	99	84	99	96.0	
Sep 28	99	99	99	99	99	99	99	99	99	99	96	88	85	74	72	70	68	80	87	95	97	98	98	68	99	91.5		
Sep 29	98	98	97	97	97	97	96	92	80	65	52	46	42	41	40	39	42	58	72	63	85	88	90	39	98	73.8		
Sep 30	95	93	95	89	87	87	86	86	77	62	54	47	41	39	33	36	36	36	39	43	42	44	47	51	33	95	60.2	
Diurnal Maximum	99	99	99	99	99	99	99	99	99	99	99	97	95	93	94	94	94	96	98	99	99	99	99	99	99	99	99	99
Diurnal Average	88.2	88.6	89.6	90.2	89.8	90.6	89.9	87.7	82.0	75.1	69.7	64.6	59.8	55.9	53.0	53.1	53.8	57.8	66.4	74.6	80.4	83.5	84.3	86.4				

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

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

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







**PEACE RIVER AREA MONITORING PROGRAM**

**AQHI - Cadotte Lake Station - September 2021**

**Summary of Hourly Averages**

**BAROMETRIC PRESSURE (BP) in millibar**

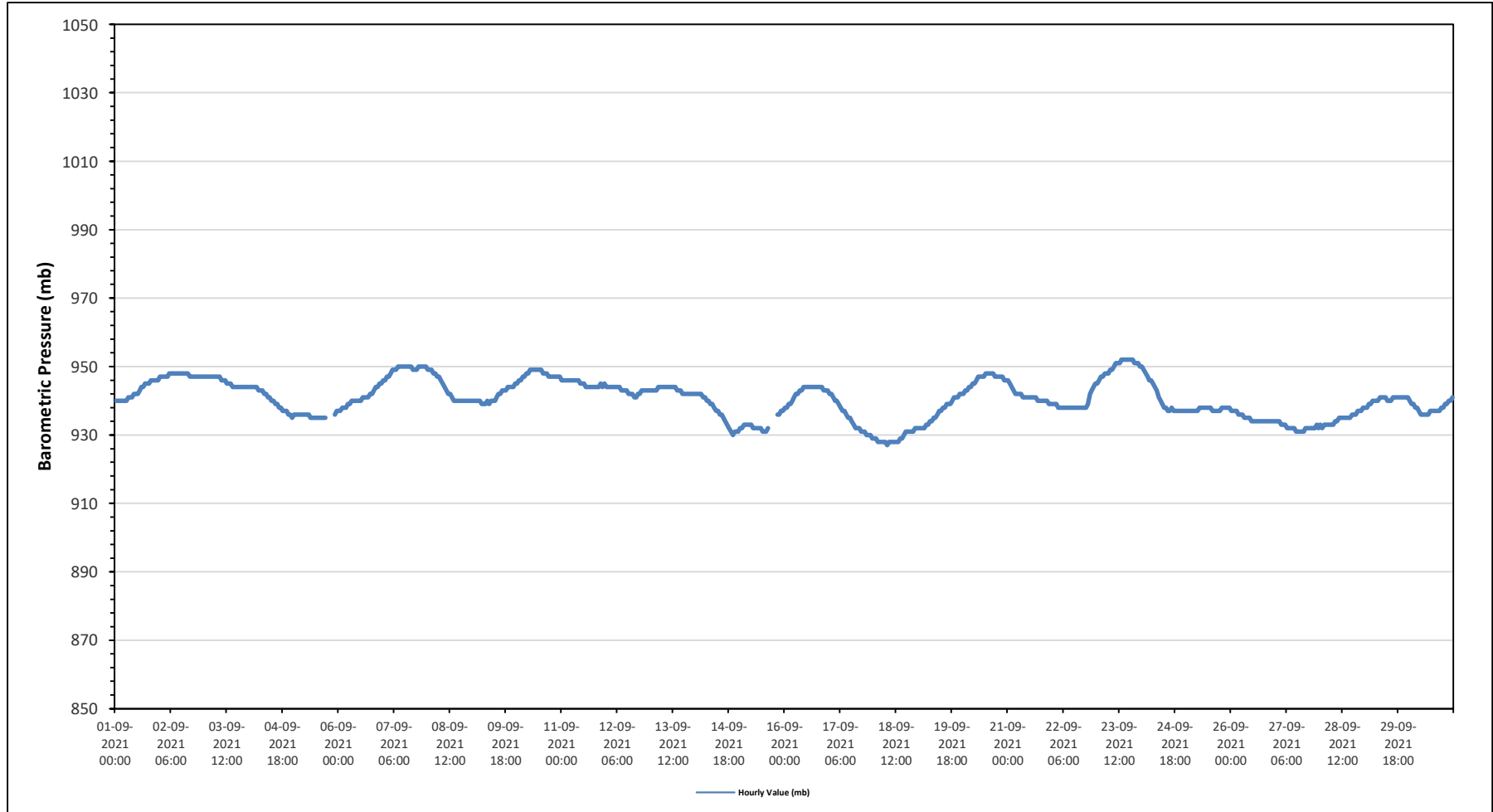
Maximum Hourly Value:	952	mb	on September 23 at hour 13	Hours in Service:	720
Maximum Daily Value:	950	mb	on September 23	Hours of Data:	712
Minimum Hourly Value:	927	mb	on September 18 at hour 7	Hours of Missing Data:	8
Minimum Daily Value:	929	mb	on September 18	Hours of Calibration:	0
Monthly Average:	940	mb		Operational Uptime:	98.9

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	940	940	940	940	940	940	940	941	941	941	942	942	942	943	944	944	945	945	945	946	946	946	946	946	940	946	943
Sep 2	947	947	947	947	947	948	948	948	948	948	948	948	948	948	948	948	947	947	947	947	947	947	947	947	947	947	947
Sep 3	947	947	947	947	947	947	947	947	947	947	946	946	946	945	945	945	944	944	944	944	944	944	944	944	944	944	946
Sep 4	944	944	944	944	944	943	943	943	942	942	941	941	940	940	939	939	938	938	937	937	937	936	936	935	935	944	940
Sep 5	936	936	936	936	936	936	936	936	936	935	935	935	935	935	935	935	935	935	P	P	P	P	936	937	935	937	936
Sep 6	937	937	938	938	938	939	939	940	940	940	940	940	941	941	941	941	942	942	943	943	944	944	945	945	937	945	941
Sep 7	946	946	947	947	948	949	949	949	950	950	950	950	950	950	950	949	949	949	950	950	950	950	950	950	946	950	949
Sep 8	949	949	949	948	948	947	947	946	945	944	943	942	942	941	940	940	940	940	940	940	940	940	940	940	940	949	943
Sep 9	940	940	940	940	940	939	939	939	940	939	940	940	940	941	942	942	943	943	943	944	944	944	944	945	939	945	941
Sep 10	945	946	946	947	947	948	948	949	949	949	949	949	949	949	948	948	948	947	947	947	947	947	947	947	945	949	948
Sep 11	946	946	946	946	946	946	946	946	946	946	945	945	945	944	944	944	944	944	944	944	944	945	944	945	944	946	945
Sep 12	944	944	944	944	944	944	944	944	943	943	943	942	942	942	941	941	942	942	942	943	943	943	943	943	941	944	943
Sep 13	943	943	943	943	944	944	944	944	944	944	944	944	944	943	943	943	942	942	942	942	942	942	942	942	942	944	943
Sep 14	942	942	942	942	941	941	940	940	939	939	938	937	937	936	936	935	934	933	932	931	930	931	931	931	930	942	937
Sep 15	932	932	933	933	933	933	932	932	932	932	932	931	931	931	932	P	P	P	P	936	936	937	937	931	937	933	
Sep 16	938	938	939	939	940	941	942	942	943	943	944	944	944	944	944	944	944	944	944	944	944	943	943	943	938	944	942
Sep 17	942	942	941	940	940	939	938	937	937	936	935	935	934	933	932	932	932	931	931	931	930	930	930	929	929	942	935
Sep 18	929	929	928	928	928	928	928	927	928	928	928	928	928	928	929	929	930	931	931	931	931	931	932	932	927	932	929
Sep 19	932	932	932	932	933	933	934	934	935	935	936	937	937	938	938	939	939	940	941	941	941	942	942	932	942	937	
Sep 20	942	943	943	944	944	945	945	946	947	947	947	948	948	948	948	948	947	947	947	947	947	947	946	946	942	948	946
Sep 21	946	945	944	943	942	942	942	942	941	941	941	941	941	941	941	941	940	940	940	940	940	940	939	939	939	946	941
Sep 22	939	939	939	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	939	942	943	944	945	938	939
Sep 23	945	946	947	947	948	948	948	949	949	950	951	951	951	952	952	952	952	952	952	952	951	951	951	950	945	952	950
Sep 24	950	949	948	947	946	946	945	944	943	941	940	939	938	938	937	937	938	937	937	937	937	937	937	937	937	937	941
Sep 25	937	937	937	937	937	937	937	938	938	938	938	938	938	938	937	937	937	937	937	938	938	938	938	937	938	938	938
Sep 26	937	937	937	937	936	936	936	935	935	935	935	934	934	934	934	934	934	934	934	934	934	934	934	934	934	937	935
Sep 27	934	934	934	933	933	933	932	932	932	932	932	931	931	931	931	931	932	932	932	932	932	932	932	931	934	932	
Sep 28	933	932	933	933	933	933	933	933	934	934	935	935	935	935	935	935	936	936	936	937	937	937	938	932	938	935	
Sep 29	938	938	939	939	940	940	940	941	941	941	941	941	940	940	941	941	941	941	941	941	941	941	941	938	941	940	
Sep 30	940	939	939	938	938	937	936	936	936	936	936	937	937	937	937	937	938	938	939	939	940	940	941	936	941	938	
Diurnal Maximum	950	949	949	948	948	949	949	949	950	950	951	951	951	952	952	952	952	952	952	952	951	951	951	950			
Diurnal Average	941	941	941	941	941	941	941	941	941	940	940	940	940	940	940	940	940	940	940	941	941	941	941				

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





**PEACE RIVER AREA MONITORING PROGRAM**

**AQHI - Cadotte Lake Station - September 2021**

**Summary of Hourly Averages**

**AMBIENT TEMPERATURE (AT) in Degree Celsius**

Maximum Hourly Value:	23.3 °C	on September 4 at hour 15	Hours in Service:	720
Maximum Daily Value:	15.5 °C	on September 5	Hours of Data:	712
Minimum Hourly Value:	-3.2 °C	on September 29 at hour 6	Hours of Missing Data:	8
Minimum Daily Value:	5.5 °C	on September 20	Hours of Calibration:	0
Monthly Average:	9.8 °C		Operational Uptime:	98.9

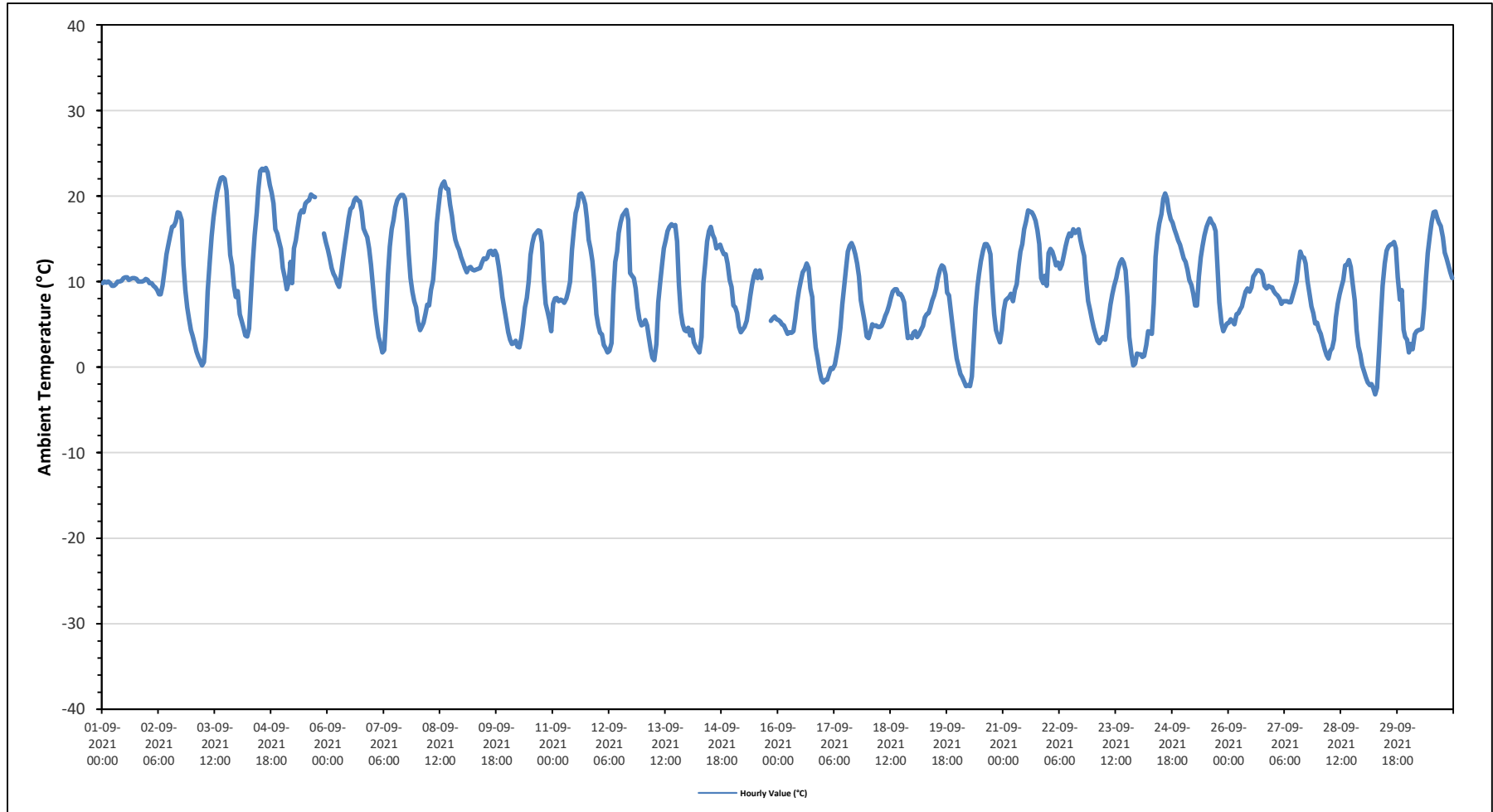
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	9.8	10	9.9	10	9.8	9.5	9.5	9.7	10	10	10.1	10.4	10.5	10.5	10.2	10.3	10.4	10.4	10.3	10	10	10	10.1	10.3	9.5	10.5	10.1
Sep 2	10.2	9.8	9.8	9.5	9.3	9	8.5	8.5	9.5	11.4	13.2	14.3	15.4	16.4	16.5	17	18.1	18	17.2	12	9	7	5.6	4.3	4.3	18.1	11.6
Sep 3	3.7	2.7	1.8	1.2	0.7	0.2	0.6	3.5	8.8	12.4	15.3	17.5	19.1	20.5	21.4	22.1	22.2	22	20.6	16.7	13.1	11.9	9.5	8.2	0.2	22.2	11.5
Sep 4	8.9	6.2	5.4	4.6	3.7	3.6	4.5	8.4	12.3	15.4	18.1	20.8	22.9	23.2	23	23.3	22.8	21.3	20.4	19.1	16.1	15.6	14.7	13.8	3.6	23.3	14.5
Sep 5	11.6	10.4	9.1	9.9	12.3	9.8	13.9	14.8	16.3	17.9	18.3	18.1	19.1	19.4	19.5	20.2	20	19.9	P	P	P	P	15.6	14.6	9.1	20.2	15.5
Sep 6	13.7	12.7	11.6	10.9	10.5	9.8	9.4	10.8	12.5	14.3	15.8	17.4	18.5	18.7	19.5	19.8	19.5	19.4	18.2	16.2	15.7	15.2	13.9	12	9.4	19.8	14.8
Sep 7	9.6	6.8	5	3.5	2.7	1.7	2	5.8	10.8	14.1	16.1	17.2	18.7	19.5	19.9	20.1	20.1	19.7	17	13.3	10.4	8.8	7.7	7	1.7	20.1	11.6
Sep 8	5.3	4.3	4.7	5.2	6.2	7.3	7.2	9	10.2	12.9	16.8	18.9	20.8	21.4	21.7	20.9	20.8	19	17.7	15.9	14.9	14.2	13.7	12.9	4.3	21.7	13.4
Sep 9	12.2	11.6	11.1	11.6	11.7	11.4	11.3	11.4	11.5	11.6	12.2	12.7	12.6	12.8	13.5	13.6	13.1	13.6	13.1	11.8	10.2	8.2	6.9	5.6	5.6	13.6	11.5
Sep 10	4.1	3.2	2.7	2.8	3.1	2.4	2.3	3.4	5	7	8.1	10	13.1	14.5	15.4	15.7	16	15.9	14.5	10.2	7.4	6.5	5.5	4.2	2.3	16.0	8.0
Sep 11	7.4	8	8.1	7.7	7.9	7.8	7.5	8	8.9	10	13.7	16	18	18.8	20.2	20.3	19.8	19	17.4	14.9	13.8	12.4	10	6.2	6.2	20.3	12.6
Sep 12	4.9	4	3.8	2.6	2.2	1.7	1.9	2.8	8.5	12.3	13.5	15.7	16.9	17	18	18.4	17.2	11	10.7	10.4	9.2	7	5.6	4.9	1.7	18.4	9.2
Sep 13	5	5.5	4.9	3.4	2	1.1	0.8	2.7	7.6	9.8	11.9	13.9	14.8	15.9	16.4	16.7	16.5	16.6	14.7	9.6	6.4	5	4.3	4.2	0.8	16.7	8.7
Sep 14	4.6	3.7	4.4	2.9	2.4	2.1	1.7	3.5	9.8	12.1	14.7	15.9	16.4	15.5	15	13.9	14.1	14.3	13.7	13.2	13.2	12.1	10.2	9.4	1.7	16.4	10.0
Sep 15	7.2	7	6.3	4.7	4.1	4.4	4.7	5.4	6.8	8.2	9.6	10.7	11.3	10.4	11.3	10.4	P	P	P	P	5.4	5.7	5.9	5.6	4.1	11.3	7.3
Sep 16	5.5	5.3	5	4.9	4.4	3.9	4.1	4	4.2	5.7	7.6	9	10.1	11.1	11.5	12.1	11.6	9.2	8.2	4.4	2.3	1.1	-0.5	-1.5	-1.5	12.1	6.0
Sep 17	-1.8	-1.5	-1.5	-0.8	-0.1	-0.2	0.3	1.5	2.8	4.6	7.3	9.4	11.5	13.5	14.2	14.5	14	13.2	12.1	10.6	7.8	6.6	5.2	3.6	-1.8	14.5	6.1
Sep 18	3.4	4.1	5	4.8	4.9	4.7	4.7	4.8	5.3	6	6.5	7.2	8.1	8.8	9.1	9.1	8.5	8.6	8.2	7.6	5.3	3.4	3.6	3.4	3.4	9.1	6.0
Sep 19	4	4.2	3.5	3.8	4.3	4.8	5.8	6.2	6.3	7	7.8	8.4	9.2	10.4	11.4	11.9	11.7	10.8	8.7	8.4	6.5	4.4	2.6	1	1.0	11.9	6.8
Sep 20	0.1	-0.8	-1.2	-1.7	-2.2	-2.1	-2.2	-1.1	2.8	6.9	9.4	10.9	12.4	13.6	14.4	14.4	14	13.2	9.4	6.2	4.3	3.5	2.9	4.3	-2.2	14.4	5.5
Sep 21	6.6	7.8	8	8.2	8.6	7.7	9	9.7	11.8	13.5	14.4	16.1	17	18.3	18.2	18.1	17.7	17.1	16	14.4	10.4	9.8	10.7	9.5	6.6	18.3	12.4
Sep 22	13.3	13.8	13.5	12.8	11.9	12.2	11.5	12	13	14.1	15	15.6	15.3	16.1	15.7	15.9	16.1	14.9	13.9	13	9.9	7.7	6.7	5.6	5.6	16.1	12.9
Sep 23	4.6	3.8	3.1	2.8	3.2	3.5	3.2	4.5	5.9	7.3	8.5	9.5	10.4	11.5	12.2	12.6	12.2	11.3	8.2	3.5	1.5	0.2	0.4	1.6	0.2	12.6	6.1
Sep 24	1.5	1.5	1.2	1.3	2.6	4.2	4	3.9	7.4	12.9	15.3	16.8	17.9	19.7	20.3	19.7	18.2	17.3	16.9	16.1	15.5	14.8	14.3	13.5	1.2	20.3	11.5
Sep 25	12.7	12.3	11.4	10.2	9.6	8.6	7.2	7.2	10.6	12.8	14.2	15.4	16.4	16.9	17.4	16.9	16.6	15.9	11.8	7.6	5.2	4.2	4.7	5.1	4.2	17.4	11.3
Sep 26	5.2	5.6	5.3	5	6.2	6.3	6.7	7.1	8	8.8	9.2	8.8	9.3	10.6	10.9	11.3	11.3	11.2	10.8	9.5	9.2	9.5	9.4	9.3	5.0	11.3	8.5
Sep 27	8.9	8.6	8.4	8	7.4	7.7	7.7	7.7	7.6	7.6	8.3	9.1	10	12	13.5	12.9	12.8	12.1	10.1	8.5	7.1	6.3	5.1	5.2	5.1	13.5	8.9
Sep 28	4.4	3.9	3	2.1	1.4	1	1.9	2.2	3.2	5.8	7.4	8.5	9.4	10.2	11.9	12	12.5	11.7	9.8	7.8	4.3	2.4	1.5	0.2	0.2	12.5	5.8
Sep 29	-0.5	-1.2	-1.8	-2.1	-2	-2.5	-3.2	-2.4	1.5	5.7	9.5	12.1	13.6	14.1	14.3	14.4	14.6	13.9	10.5	7.9	9	4.4	3.5	3.2	-3.2	14.6	5.7
Sep 30	1.7	2.7	2.1	3.8	4.2	4.3	4.4	4.5	6.9	10.3	13.3	15.4	17	18.1	18.2	17.5	16.9	16.5	15.2	13.4	12.7	11.9	11.1	10.4	1.7	18.2	10.5
Diurnal Maximum	13.7	13.8	13.5	12.8	12.3	12.2	13.9	14.8	16.3	17.9	18.3	20.8	22.9	23.2	23.0	23.3	22.8	22.0	20.6	19.1	16.1	15.6	15.6	14.6			
Diurnal Average	6.3	5.9	5.5	5.1	5.1	4.9	5.0	6.0	8.2	10.3	12.0	13.4	14.5	15.3	15.8	15.9	15.8	15.1	13.4	11.2	9.2	7.9	7.3	6.6			

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

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

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

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





**PEACE RIVER AREA MONITORING PROGRAM**

**AQHI - Cadotte Lake Station - September 2021**

**Summary of Hourly Averages**

**STATION TEMPERATURE (ST) in Degree Celsius**

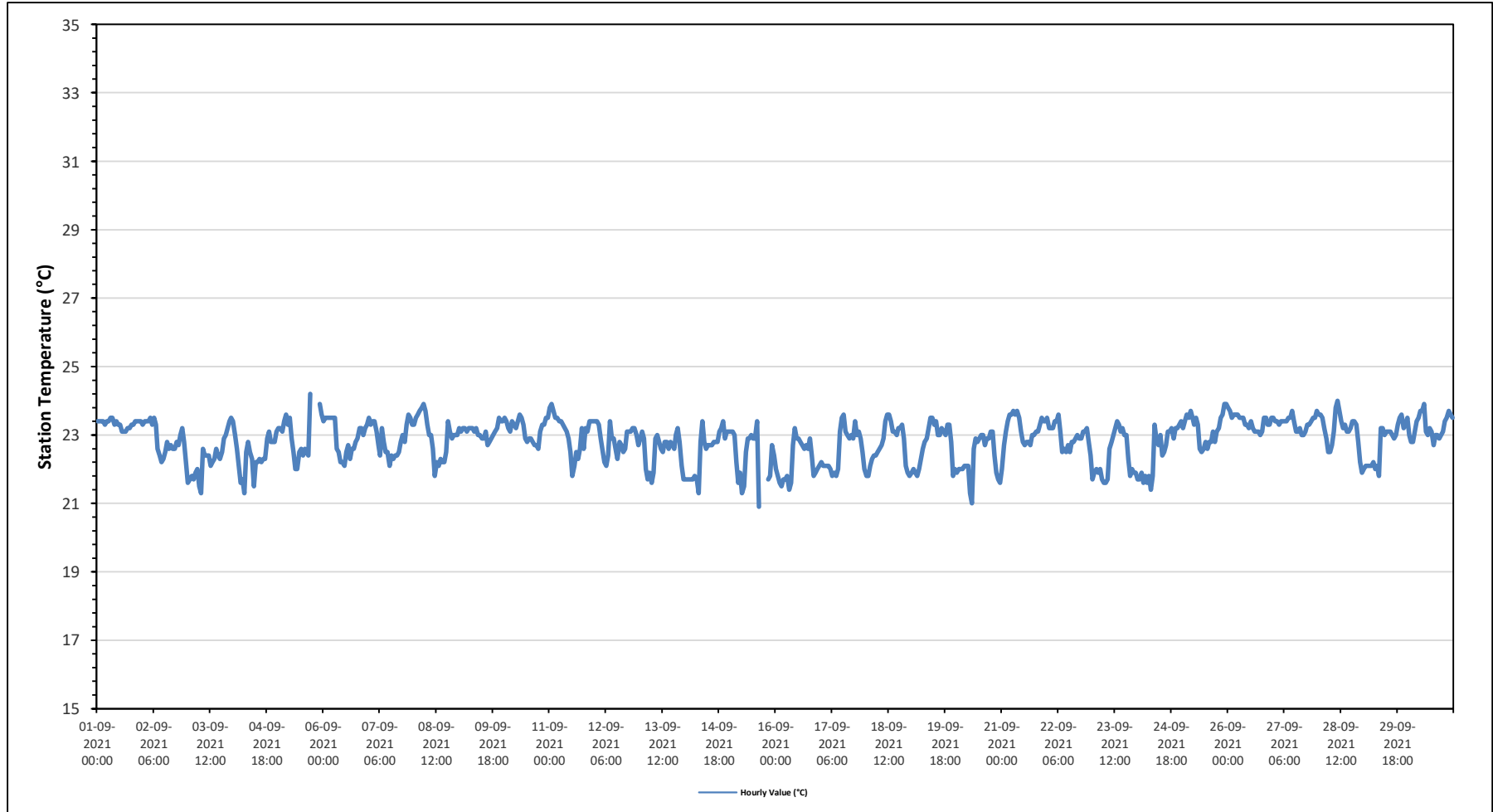
Maximum Hourly Value:	24.2 °C	on September 5 at hour 17	Hours in Service:	720
Maximum Daily Value:	23.4 °C	on September 26	Hours of Data:	712
Minimum Hourly Value:	20.9 °C	on September 15 at hour 15	Hours of Missing Data:	8
Minimum Daily Value:	22.2 °C	on September 16	Hours of Calibration:	0
Monthly Average:	22.8 °C		Operational Uptime:	98.9

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	23.4	23.4	23.4	23.4	23.3	23.4	23.4	23.5	23.5	23.3	23.4	23.3	23.3	23.1	23.1	23.1	23.2	23.2	23.3	23.3	23.4	23.4	23.4	23.4	23.1	23.5	23.3
Sep 2	23.3	23.4	23.4	23.4	23.5	23.3	23.5	23.3	22.6	22.4	22.2	22.3	22.5	22.8	22.6	22.7	22.6	22.6	22.8	22.7	23.0	23.2	22.8	22.2	22.2	22.2	22.9
Sep 3	21.6	21.7	21.8	21.7	21.9	22.0	21.5	21.3	22.6	22.4	22.4	22.4	22.1	22.2	22.3	22.6	22.4	22.3	22.5	22.9	23.0	23.2	23.4	23.5	21.3	23.5	22.3
Sep 4	23.4	23.0	22.6	22.1	21.6	21.7	21.3	22.5	22.8	22.5	22.3	21.5	22.2	22.2	22.3	22.2	22.3	22.3	22.9	23.1	22.8	22.8	22.8	23.1	21.3	23.4	22.4
Sep 5	23.2	23.2	23.1	23.4	23.6	23.3	23.5	22.9	22.5	22.0	22.0	22.5	22.6	22.4	22.6	22.5	22.4	24.2	P	P	P	P	23.9	23.6	22.0	24.2	23.0
Sep 6	23.4	23.5	23.5	23.5	23.5	23.5	23.5	22.6	22.5	22.2	22.2	22.1	22.5	22.7	22.3	22.6	22.6	22.8	22.9	23.2	23.2	23.0	23.2	23.3	22.1	23.5	22.9
Sep 7	23.5	23.3	23.4	23.4	23.1	22.7	22.4	23.2	22.8	22.5	22.5	22.1	22.4	22.3	22.4	22.4	22.5	22.8	23.0	22.8	23.3	23.6	23.5	23.3	22.1	23.6	22.9
Sep 8	23.3	23.5	23.6	23.7	23.8	23.9	23.7	23.3	23.0	23.0	22.6	21.8	22.2	22.1	22.3	22.2	22.2	22.5	23.4	23.1	22.9	23.0	23.0	23.0	21.8	23.9	23.0
Sep 9	23.2	23.1	23.2	23.2	23.1	23.2	23.2	23.2	23.1	23.2	23.0	23.0	22.9	22.9	23.1	22.7	22.8	22.9	23.0	23.1	23.2	23.5	23.4	23.4	22.7	23.5	23.1
Sep 10	23.5	23.4	23.2	23.1	23.4	23.3	23.2	23.4	23.6	23.5	23.3	22.9	22.8	22.9	22.9	22.8	22.7	22.7	22.6	23.1	23.2	23.3	23.5	23.5	22.6	23.6	23.2
Sep 11	23.8	23.9	23.7	23.5	23.5	23.4	23.4	23.3	23.2	23.1	22.9	22.5	21.8	22.1	22.5	22.3	22.6	23.2	22.6	23.2	23.1	23.4	23.4	23.4	21.8	23.9	23.1
Sep 12	23.4	23.4	23.3	22.9	22.6	22.2	22.1	22.4	23.4	22.9	22.9	22.6	22.3	22.8	22.7	22.5	22.6	23.1	23.1	23.1	23.2	23.2	23.0	22.7	22.1	23.4	22.9
Sep 13	22.9	23.1	22.9	22.0	21.7	21.9	21.6	21.9	22.9	23.0	22.8	22.6	22.5	22.8	22.8	22.6	22.8	22.7	22.6	23.0	23.2	22.8	22.1	21.7	21.6	23.2	22.5
Sep 14	21.7	21.7	21.7	21.7	21.7	21.8	21.7	21.3	22.8	23.4	22.8	22.6	22.7	22.7	22.7	22.8	22.8	22.8	23.1	23.2	23.4	22.9	23.1	23.1	21.3	23.4	22.5
Sep 15	23.1	23.1	23.0	22.2	21.6	21.9	21.3	21.5	22.5	22.9	22.9	23.0	22.9	22.9	23.4	20.9	P	P	P	P	21.7	21.8	22.7	22.4	20.9	23.4	22.4
Sep 16	22.0	21.8	21.6	21.5	21.7	21.7	21.8	21.4	21.6	22.7	23.2	22.9	22.9	22.8	22.7	22.6	22.7	22.6	22.9	22.4	21.8	21.9	22.0	22.1	21.4	23.2	22.2
Sep 17	22.2	22.1	22.1	22.1	22.1	22.0	21.8	21.9	21.8	22.0	23.1	23.5	23.6	23.1	23.0	22.9	23.0	22.9	23.4	23.0	23.1	22.9	22.5	22.0	21.8	23.6	22.6
Sep 18	21.8	21.8	22.1	22.3	22.4	22.4	22.5	22.6	22.7	22.9	23.4	23.6	23.6	23.4	23.1	23.1	23.0	23.2	23.2	23.3	22.9	22.1	21.9	21.8	21.8	23.6	22.7
Sep 19	21.9	22.0	21.9	21.8	22.0	22.3	22.6	22.8	22.9	23.2	23.5	23.5	23.3	23.4	23.0	23.0	23.2	23.1	23.0	23.3	23.3	22.8	21.8	22.0	21.8	23.5	22.7
Sep 20	21.9	22.0	22.0	22.0	22.1	22.1	22.1	21.3	21.0	22.6	22.9	22.8	22.9	23.0	23.0	22.7	22.9	22.9	23.1	23.1	22.4	21.9	21.7	21.6	21.0	23.1	22.3
Sep 21	22.0	22.7	23.1	23.4	23.6	23.6	23.7	23.6	23.7	23.5	23.1	22.8	22.7	22.8	22.8	22.7	23.0	23.0	23.1	23.1	23.3	23.5	23.4	23.4	22.0	23.7	23.2
Sep 22	23.5	23.2	23.2	23.2	23.4	23.4	23.6	23.1	22.5	22.6	22.5	22.7	22.5	22.8	22.8	22.9	23.0	22.9	22.9	23.1	23.1	23.2	22.8	22.4	22.4	23.6	23.0
Sep 23	21.7	21.9	22.0	21.9	22.0	21.7	21.6	21.6	21.7	22.6	22.8	23.0	23.2	23.4	23.3	23.1	23.2	23.0	23.0	22.3	21.8	22.0	21.9	21.9	21.6	23.4	22.4
Sep 24	21.7	21.7	21.9	21.6	21.8	21.6	21.8	21.4	21.8	23.3	22.8	22.7	23.0	22.4	22.5	22.7	23.1	23.1	23.2	22.9	23.2	23.2	23.3	23.4	21.4	23.4	22.5
Sep 25	23.2	23.4	23.6	23.5	23.7	23.5	23.3	23.5	23.3	22.6	22.5	22.6	22.8	22.6	22.8	22.8	23.1	22.8	23.1	23.2	23.5	23.6	23.9	23.9	22.5	23.9	23.2
Sep 26	23.8	23.7	23.5	23.6	23.6	23.6	23.5	23.5	23.3	23.3	23.2	23.4	23.2	23.1	23.1	23.1	23.0	23.1	23.1	23.5	23.5	23.3	23.3	23.5	23.0	23.8	23.4
Sep 27	23.5	23.4	23.4	23.3	23.4	23.4	23.4	23.4	23.5	23.5	23.7	23.4	23.1	23.1	23.2	23.0	23.0	23.1	23.3	23.3	23.4	23.5	23.5	23.7	23.0	23.7	23.4
Sep 28	23.6	23.6	23.5	23.2	22.9	22.5	22.5	22.7	23.1	23.8	24.0	23.7	23.4	23.2	23.3	23.1	23.1	23.2	23.4	23.4	23.3	22.8	22.2	21.9	21.9	24.0	23.1
Sep 29	22.0	22.1	22.1	22.1	22.2	22.0	22.1	21.8	23.2	23.2	23.0	23.1	23.1	23.1	23.1	23.0	22.9	23.0	23.3	23.5	23.6	23.2	23.3	23.5	21.8	23.6	22.8
Sep 30	23.0	22.8	22.8	23.1	23.4	23.5	23.7	23.7	23.9	23.1	23.0	23.2	23.1	22.7	23.0	23.0	22.9	23.0	23.1	23.4	23.5	23.7	23.6	23.5	22.7	23.9	23.2
Diurnal Maximum	23.8	23.9	23.7	23.7	23.8	23.9	23.7	23.7	23.9	23.8	24.0	23.7	23.6	23.4	23.4	23.1	23.2	24.2	23.4	23.5	23.6	23.7	23.9	23.9			
Diurnal Average	22.8	22.8	22.7	22.7	22.7	22.6	22.6	22.8	22.9	22.8	22.8	22.8	22.8	22.8	22.7	22.7	22.8	22.9	23.0	23.1	23.0	23.0	22.9	22.9			

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

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

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





**PEACE RIVER AREA MONITORING PROGRAM**

**AQHI - Cadotte Lake Station - September 2021**

**Summary of Hourly Averages**

**VECTOR WIND SPEED (VWS) in km/hr**

Maximum Hourly Value:	28.0 kph	on September 5 at hour 15	Hours in Service:	720
Maximum Daily Value:	15.0 kph	on September 5	Hours of Data:	712
Minimum Hourly Value:	0.0 kph	on September 3 at hour 2	Hours of Missing Data:	8
Minimum Daily Value:	0.6 kph	on September 10	Hours of Calibration:	0
Monthly Average:	3.5 kph		Operational Uptime:	98.9

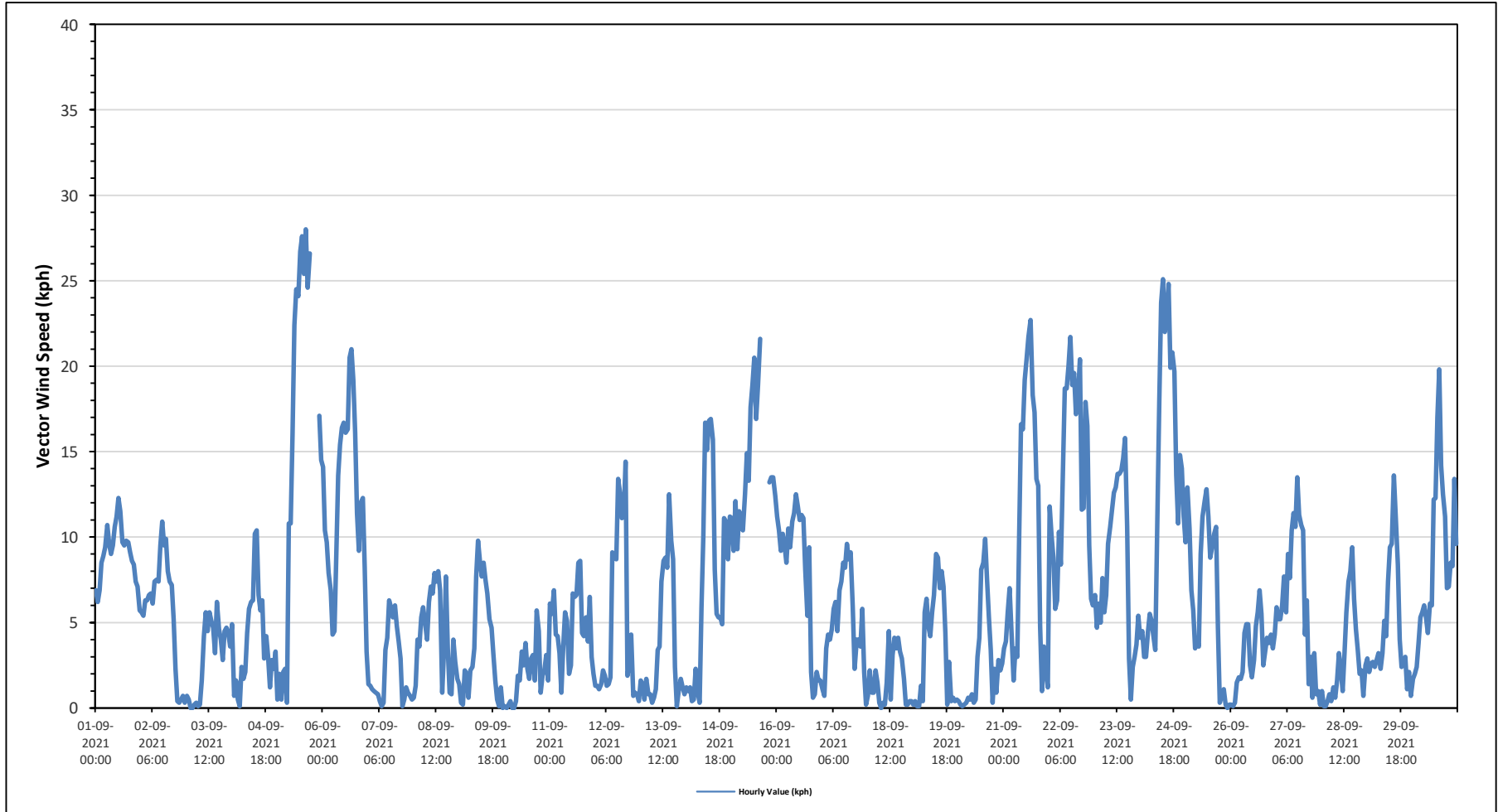
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	6.9	6.2	6.9	8.5	8.9	9.4	10.7	9.6	9.0	9.5	10.6	11.2	12.3	11.5	9.7	9.5	9.8	9.7	9.1	8.6	8.4	7.4	7.1	5.7	5.7	12.3	8.9
Sep 2	5.6	5.4	6.3	6.3	6.6	6.7	6.1	7.4	7.5	7.4	9.5	10.9	9.5	9.9	8.0	7.4	7.2	5.2	2.3	0.4	0.3	0.5	0.7	0.3	0.3	10.9	5.6
Sep 3	0.7	0.5	0.0	0.0	0.2	0.3	0.1	0.2	1.6	4.2	5.6	4.5	5.6	5.1	4.7	3.2	6.2	4.6	4.0	2.8	4.5	4.7	4.4	3.6	0.0	6.2	2.7
Sep 4	4.9	0.7	1.6	0.5	0.1	2.4	1.7	2.1	4.4	5.8	6.2	6.3	10.2	10.4	6.6	5.7	6.3	2.9	4.2	3.0	1.2	2.8	2.3	3.3	0.1	10.4	3.5
Sep 5	0.5	2.0	0.5	2.1	2.3	0.3	10.8	10.8	16.0	22.4	24.5	24.1	26.7	27.6	25.4	28.0	24.6	26.6	P	P	P	P	17.1	14.5	0.3	28.0	15.0
Sep 6	14.1	10.4	9.7	7.9	6.9	4.3	4.5	9.0	13.6	15.4	16.4	16.7	16.1	16.3	20.5	21.0	19.2	16.1	11.4	9.2	12.0	12.3	8.2	3.3	3.3	21.0	12.2
Sep 7	1.4	1.3	1.1	1.0	0.9	0.8	0.4	0.1	0.3	3.4	4.1	6.3	5.9	5.3	6.0	4.8	3.9	2.9	0.1	0.5	1.2	0.9	0.7	0.5	0.1	6.3	1.6
Sep 8	0.6	1.3	4.0	3.6	5.3	5.9	4.9	4.0	6.2	7.1	6.7	7.9	7.4	8.0	6.9	0.9	3.5	7.7	3.5	0.9	0.8	4.0	2.7	1.7	0.6	8.0	2.2
Sep 9	1.4	0.3	0.2	2.2	2.0	0.6	2.2	2.4	3.5	7.7	9.8	8.6	7.7	8.5	7.5	6.7	5.2	4.7	3.1	1.6	0.5	0.1	1.2	0.0	0.0	9.8	3.4
Sep 10	0.1	0.0	0.2	0.4	0.0	0.0	0.4	1.9	1.6	3.3	2.5	3.8	2.3	1.7	2.9	3.1	1.6	5.7	4.5	0.9	1.9	2.2	3.1	1.6	0.0	5.7	0.6
Sep 11	6.1	5.5	6.9	4.3	4.2	3.2	0.9	3.6	5.6	5.1	2.0	2.5	6.7	6.5	6.6	8.5	8.6	4.4	4.2	5.3	3.9	6.5	3.0	2.0	0.9	8.6	2.0
Sep 12	1.3	1.3	1.1	1.4	2.2	1.9	1.3	1.4	1.8	9.1	8.8	8.7	13.4	12.6	11.1	11.2	14.4	1.9	2.6	4.3	0.7	0.9	0.8	0.4	0.4	14.4	3.7
Sep 13	1.6	1.4	0.5	1.7	0.8	0.8	0.3	0.6	1.1	3.4	3.6	7.4	8.6	8.8	8.2	12.5	9.8	8.7	2.4	0.1	1.0	1.7	1.2	0.8	0.1	12.5	2.7
Sep 14	1.2	1.0	1.2	0.4	0.5	2.3	0.9	0.3	5.9	10.1	16.7	15.1	16.8	16.9	15.7	8.1	5.5	5.3	5.3	4.9	11.1	10.9	8.7	11.2	0.3	16.9	6.2
Sep 15	11.1	9.2	12.1	9.3	11.5	10.6	10.4	12.5	14.9	13.3	17.6	18.9	20.5	16.9	18.9	21.6	P	P	P	P	13.2	13.5	13.5	12.4	9.2	21.6	13.9
Sep 16	11.2	10.4	9.2	10.2	9.5	8.5	10.5	9.4	10.9	11.4	12.5	11.8	11.0	11.3	11.1	8.1	5.4	9.4	2.1	0.6	0.8	2.1	1.6	1.6	0.6	12.5	7.2
Sep 17	1.1	0.7	3.5	4.3	4.0	4.6	5.8	6.2	4.5	6.9	7.4	8.5	8.2	9.6	8.7	9.1	5.9	2.3	4.0	4.0	3.6	5.8	2.1	0.2	0.2	9.6	4.6
Sep 18	0.7	2.2	0.9	0.9	2.2	1.5	0.3	0.0	0.3	0.2	1.5	4.5	0.5	3.1	4.1	3.5	4.1	3.3	2.9	1.7	0.2	0.2	0.4	0.4	0.0	4.5	0.6
Sep 19	0.2	0.4	0.1	0.1	1.3	0.4	5.6	6.4	4.8	4.2	5.6	6.6	9.0	8.8	7.0	8.0	7.1	4.4	0.2	2.7	0.4	0.6	0.4	0.5	0.1	9.0	3.1
Sep 20	0.4	0.2	0.1	0.2	0.3	0.6	0.5	0.8	0.3	0.5	3.0	4.1	8.1	8.5	9.9	7.5	5.3	3.4	0.3	2.3	0.9	2.8	2.2	2.6	0.1	9.9	1.7
Sep 21	3.5	3.9	5.6	7.0	4.5	1.6	3.5	3.0	10.0	16.6	16.3	19.2	20.4	21.7	22.7	18.3	17.3	13.4	13.0	4.8	1.0	3.6	2.2	1.2	1.0	22.7	8.3
Sep 22	11.8	10.1	8.8	5.8	6.3	10.3	8.4	13.9	18.7	18.7	20.0	21.7	18.9	19.6	17.2	18.0	20.4	11.6	11.7	17.9	16.5	9.5	6.4	6.0	5.8	21.7	13.2
Sep 23	6.6	4.7	6.1	5.0	7.6	5.6	6.6	9.6	10.6	11.6	12.6	12.9	13.7	13.7	13.9	14.6	15.8	10.6	2.9	0.5	2.4	3.0	3.7	5.4	0.5	15.8	6.9
Sep 24	4.1	4.5	3.0	3.0	4.4	5.5	5.1	4.2	3.4	11.3	17.9	23.7	25.1	22.0	23.0	24.8	19.9	20.8	19.7	13.6	10.8	14.8	14.0	11.2	3.0	25.1	10.0
Sep 25	9.7	12.9	10.5	6.9	5.7	3.5	4.1	3.6	9.0	11.2	12.1	12.8	11.2	8.8	9.4	10.2	10.6	4.7	0.3	0.7	1.1	0.2	0.0	0.2	0.0	12.9	6.4
Sep 26	0.2	0.1	0.3	1.5	1.8	1.7	2.1	4.4	4.9	4.9	2.5	1.8	2.8	4.8	5.6	6.9	5.5	2.5	3.3	4.1	3.8	4.3	3.5	4.3	0.1	6.9	3.1
Sep 27	5.9	5.2	5.2	6.0	7.7	5.6	9.0	7.6	10.4	11.4	10.6	13.5	11.3	10.7	10.4	4.3	6.3	1.4	3.0	0.6	3.2	0.8	1.0	0.2	0.2	13.5	5.6
Sep 28	1.0	0.1	0.1	0.4	0.8	0.4	1.2	0.6	1.6	3.2	2.3	1.0	3.2	5.6	7.4	8.0	9.4	6.4	4.6	3.4	2.0	2.2	0.7	2.5	0.1	9.4	2.3
Sep 29	2.9	2.1	2.6	2.7	2.4	2.8	3.2	2.3	3.2	5.1	4.2	7.4	9.4	9.6	13.6	11.2	8.4	4.0	2.4	2.6	3.0	1.1	2.1	0.7	0.7	13.6	2.0
Sep 30	1.7	2.0	2.4	3.8	5.3	5.6	6.0	5.3	4.4	6.1	6.0	12.2	12.3	17.0	19.8	14.2	12.5	11.2	7.0	7.1	8.5	8.3	13.4	9.6	1.7	19.8	6.0
Diurnal Maximum	14	13	12	10	12	11	11	14	19	22	25	24	27	28	25	28	25	27	20	18	17	15	17	15			
Diurnal Average	4.0	3.5	3.7	3.6	3.9	3.6	4.3	4.8	6.3	8.4	9.3	10.5	11.2	11.4	11.4	10.6	9.6	7.4	4.8	3.9	4.1	4.4	4.3	3.6			

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

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

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

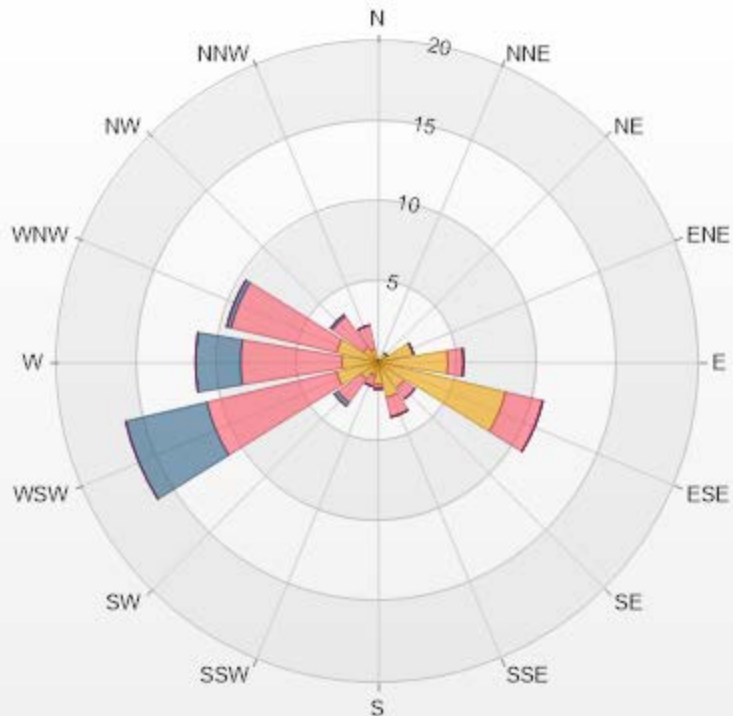
*Timeseries Chart of Hourly Average for VWS - AQHI - Cadotte Lake Station*





Wind: AQHI Cadotte Lake Monitor: WDS [KPH] Monthly: 09-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 24.86% Valid Data: 98.89%

Direction	1.8-6.0	6.0-15.0	15.0-29.0	29.0-39.0	>39.0	Total
N	0.14	0	0	0	0	0.14
NNE	0	0	0	0	0	0
NE	0.7	0	0	0	0	0.7
ENE	2.25	0	0	0	0	2.25
E	4.35	0.98	0	0	0	5.33
ESE	8.15	2.39	0	0	0	10.54
SE	1.97	0.84	0	0	0	2.81
SSE	2.25	1.26	0	0	0	3.51
S	1.4	0.28	0	0	0	1.68
SSW	0.84	0.7	0	0	0	1.54
SW	1.26	1.83	0.28	0	0	3.37
WSW	2.67	8.29	5.2	0	0	16.16
W	2.25	6.32	2.81	0	0	11.38
WNW	2.67	6.74	0.28	0	0	9.69
NW	1.12	2.39	0.14	0	0	3.65
NNW	0.84	1.54	0	0	0	2.38
Summary	32.86	33.56	8.71	0	0	75.13



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% Icon Classes (KPH)	33	1.8-6.0	34	6.0-15.0	9	15.0-29.0	0	29.0-39.0	0	>39.0
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**PEACE RIVER AREA MONITORING PROGRAM**

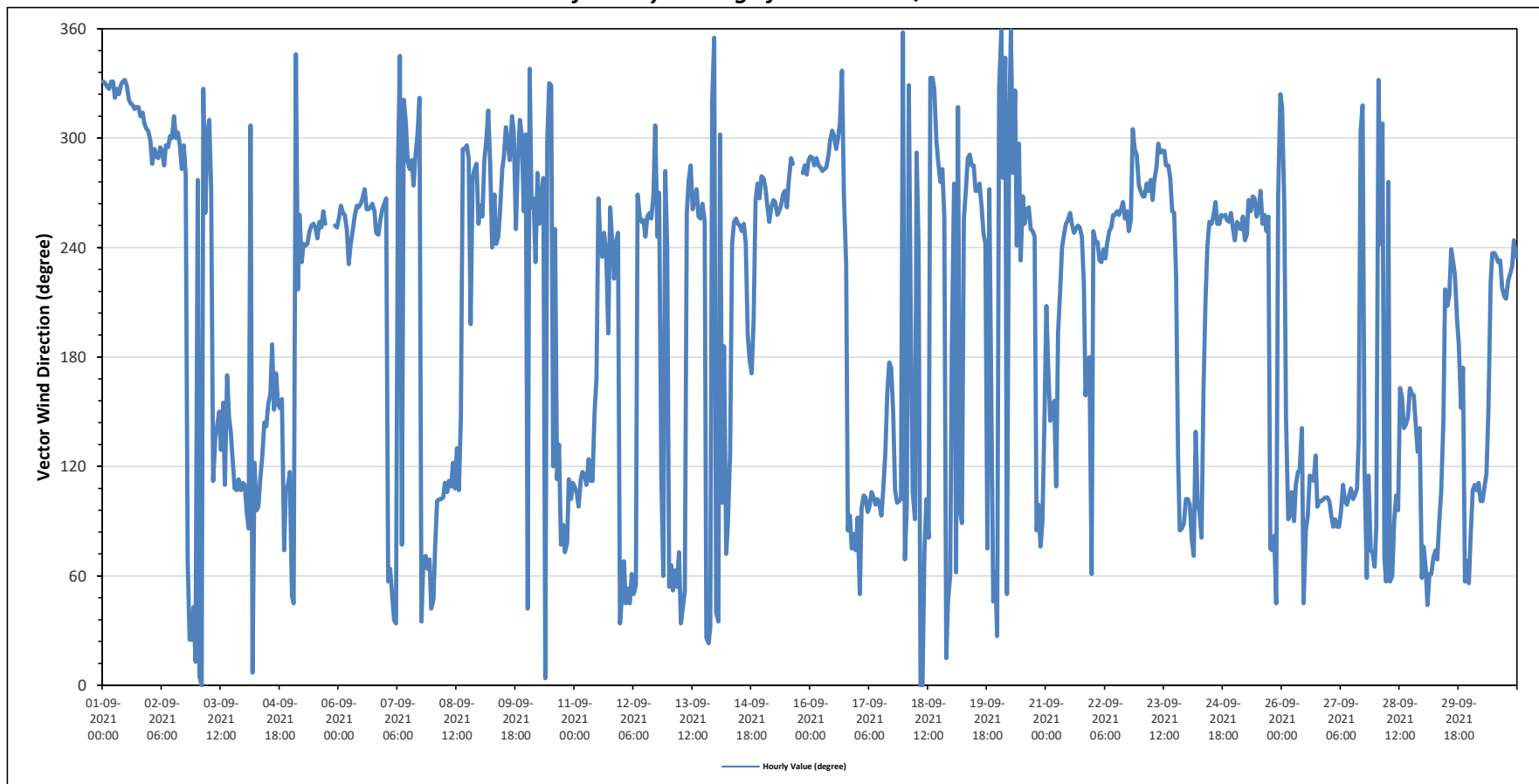
**AQHI - Cadotte Lake Station - September 2021**

**Summary of Hourly Averages**

**WIND DIRECTION (VWD) in sector**

Monthly Average:		256 (WSW) degree													Hours in Service:		720										
															Hours of Data:		712										
															Hours of Missing Data:		8										
															Hours of Calibration:		0										
															Operational Uptime:		98.9										
Day	Hourly Period Starting at (MST)																							Daily Average			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant	
Sep 1	NNW	NNW	NNW	NW	NNW	NNW	NW	NW	NW	NNW	NNW	NNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	322	NW	
Sep 2	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	WNW	WNW	WNW	W	WNW	W	ENE	NNE	NNE	NE	NNE	297	WNW	
Sep 3	W	N	N	NW	WSW	WNW	NW	W	ESE	SE	SE	SSE	SE	SSE	ESE	SSE	SE	SE	ESE	ESE	ESE	ESE	ESE	ESE	130	SE	
Sep 4	ESE	E	E	NW	N	ESE	E	E	ESE	SE	SE	SE	SSE	SSE	S	SSE	S	SSE	SSE	SSE	ENE	ESE	ESE	ESE	142	SE	
Sep 5	NE	NE	NNW	SW	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	251	WSW	
Sep 6	WSW	W	WSW	WSW	WSW	SW	WSW	WSW	WSW	WSW	W	W	W	W	W	W	W	W	W	WSW	WSW	WSW	WSW	W	W	260	WSW
Sep 7	W	ENE	ENE	NE	NE	NE	W	NNW	ENE	NW	NW	WNW	W	WNW	W	WNW	WNW	NW	NE	ENE	ENE	ENE	ENE	NE	304	WNW	
Sep 8	NE	ENE	E	E	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SE	ESE	SE	WNW	WNW	WNW	WNW	SSW	W	W	WNW	WSW	116	ESE	
Sep 9	W	WSW	WNW	WNW	NW	WNW	WSW	W	WSW	WSW	WSW	W	WNW	NW	WNW	WNW	NW	WNW	WSW	WNW	NW	WNW	WSW	WNW	281	W	
Sep 10	NE	NNW	W	W	SW	W	WSW	W	W	N	WNW	NNW	NNW	ESE	WSW	ESE	SE	ENE	E	ENE	ENE	ESE	E	ESE	66	ENE	
Sep 11	ESE	ESE	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SSE	SSE	W	WSW	SW	WSW	SW	S	W	WSW	SW	WSW	WSW	NE	191	S	
Sep 12	NE	ENE	NE	NE	NE	ENE	NE	NE	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	NW	WSW	W	ESE	ENE	W	WSW	262	W	
Sep 13	NE	ENE	NE	ENE	NE	ENE	NE	NE	NE	WSW	W	WNW	W	W	W	WSW	WSW	W	WSW	NNE	NNE	NNE	NW	N	272	W	
Sep 14	NE	NE	WNW	E	S	ENE	E	SE	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	S	S	S	SSW	W	W	W	W	250	WSW	
Sep 15	W	W	W	WSW	W	W	W	WSW	WSW	W	W	W	W	W	W	WNW	WNW	W	W	WSW	WSW	WSW	WSW	W	W	272	W
Sep 16	WNW	WNW	WNW	WNW	WNW	WNW	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NNW	W	SW	E	E	ENE	E	ENE	292	WNW
Sep 17	E	NE	E	ESE	ESE	E	E	ESE	ESE	E	E	E	E	ESE	SE	SSE	S	S	SSE	ESE	E	E	E	N	112	ESE	
Sep 18	ENE	E	NNW	SSW	ESE	E	WNW	WSW	N	N	ENE	E	E	NNW	NNW	NW	WNW	WNW	W	W	WSW	NNE	NE	ENE	341	NNW	
Sep 19	S	W	ENE	NW	E	E	WSW	W	WNW	WNW	WNW	WNW	W	W	W	W	WSW	WSW	ENE	W	SSE	NE	ENE	NNE	271	W	
Sep 20	NW	N	W	NNW	NE	WNW	N	W	NW	WSW	WNW	SW	W	WSW	W	W	WSW	WSW	WSW	E	E	ENE	E	SE	257	WSW	
Sep 21	SSW	S	SE	SE	SSE	ESE	SSW	SSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SSE	S	S	ENE	240	WSW
Sep 22	WSW	WSW	WSW	SW	SW	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	WNW	WNW	WNW	W	257	WSW
Sep 23	W	W	W	W	W	W	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WSW	SW	SE	E	E	E	E	279	W
Sep 24	E	E	E	ENE	SE	E	E	E	SSE	SSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	249	WSW
Sep 25	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	W	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	ENE	ENE	E	NE	W	NW	WSW	257	WSW
Sep 26	NW	W	SE	E	E	ESE	E	ESE	ESE	ESE	SE	NE	E	E	ESE	ESE	ESE	SE	E	E	E	E	ESE	ESE	106	ESE	
Sep 27	E	E	E	E	E	E	E	ESE	E	E	ESE	ESE	E	ESE	ESE	SE	WNW	NW	ESE	ENE	ESE	ENE	ENE	ENE	100	E	
Sep 28	E	NNW	WSW	NW	ENE	ENE	W	ENE	ENE	E	ESE	E	SSE	SSE	SE	SE	SSE	SSE	SSE	SE	SE	SE	SE	ENE	140	SE	
Sep 29	ENE	ENE	NE	ENE	ENE	ENE	ENE	ENE	E	ESE	SE	SW	SSW	SSW	WSW	SW	SW	SSW	S	SSE	S	ENE	ENE	NE	189	S	
Sep 30	E	ESE	ESE	ESE	ESE	E	E	ESE	ESE	SSE	SW	SW	SW	SW	SW	SW	SW	SSW	SSW	SW	SW	WSW	SW	SSW	215	SSW	
<b>C</b>	Monthly Calibration						<b>S</b>	Daily Zero-Span Check						<b>Q</b>	Quality Assurance												
<b>K</b>	Collection Error						<b>N</b>	No Data (Machine Not in Service)						<b>Y</b>	Routine Maintenance												
<b>X</b>	Invalid Data (Machine Malfunction /Recovery)						<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)						<b>P</b>	Power Failure												
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.																											
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.																											

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





**PEACE RIVER AREA MONITORING PROGRAM**

**AQHI - Cadotte Lake Station - September 2021**

**Summary of Hourly Averages**

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

WIND SPEED																											
Maximum Hourly Value:		28.0 kph on September 5 at hour 15														Hours in Service:		720									
Maximum Daily Value:		15.0 kph on September 5														Hours of Data:		712									
Minimum Hourly Value:		0.0 kph on September 3 at hour 2														Hours of Missing Data:		8									
Minimum Daily Value:		0.6 kph on September 10														Hours of Calibration:		0									
Monthly Average:		3.5 kph														Operational Uptime:		98.9									
WIND DIRECTION																											
Monthly Average:		256 (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	6.9	6.2	6.9	8.5	8.9	9.4	10.7	9.6	9.0	9.5	10.6	11.2	12.3	11.5	9.7	9.5	9.8	9.7	9.1	8.6	8.4	7.4	7.1	5.7	5.7	12.3	8.9
Sep 2	5.6	5.4	6.3	6.3	6.6	6.7	6.1	7.4	7.5	7.4	9.5	10.9	9.5	9.9	8.0	7.4	7.2	5.2	2.3	0.4	0.3	0.5	0.7	0.3	0.3	10.9	5.6
Sep 3	0.7	0.5	0.0	0.0	0.2	0.3	0.1	0.2	1.6	4.2	5.6	4.5	5.6	5.1	4.7	3.2	6.2	4.6	4.0	2.8	4.5	4.7	4.4	3.6	0.0	6.2	2.7
Sep 4	4.9	0.7	1.6	0.5	0.1	2.4	1.7	2.1	4.4	5.8	6.2	6.3	10.2	10.4	6.6	5.7	6.3	2.9	4.2	3.0	1.2	2.8	2.3	3.3	0.1	10.4	3.5
Sep 5	0.5	2.0	0.5	2.1	2.3	0.3	10.8	10.8	16.0	22.4	24.5	24.1	26.7	27.6	25.4	28.0	24.6	26.6	P	P	P	P	17.1	14.5	0.3	28.0	15.0
Sep 6	14.1	10.4	9.7	7.9	6.9	4.3	4.5	9.0	13.6	15.4	16.4	16.7	16.1	16.3	20.5	21.0	19.2	16.1	11.4	9.2	12.0	12.3	8.2	3.3	3.3	21.0	12.2
Sep 7	1.4	1.3	1.1	1.0	0.9	0.8	0.4	0.1	0.3	3.4	4.1	6.3	5.9	5.3	6.0	4.8	3.9	2.9	0.1	0.5	1.2	0.9	0.7	0.5	0.1	6.3	1.6
Sep 8	0.6	1.3	4.0	3.6	5.3	5.9	4.9	4.0	6.2	7.1	6.7	7.9	7.4	8.0	6.9	0.9	3.5	7.7	3.5	0.9	0.8	4.0	2.7	1.7	0.6	8.0	2.2
Sep 9	1.4	0.3	0.2	2.2	2.0	0.6	2.2	2.4	3.5	7.7	9.8	8.6	7.7	8.5	7.5	6.7	5.2	4.7	3.1	1.6	0.5	0.1	1.2	0.0	0.0	9.8	3.4
Sep 10	0.1	0.0	0.2	0.4	0.0	0.0	0.4	1.9	1.6	3.3	2.5	3.8	2.3	1.7	2.9	3.1	1.6	5.7	4.5	0.9	1.9	2.2	3.1	1.6	0.0	5.7	0.6
Sep 11	6.1	5.5	6.9	4.3	4.2	3.2	0.9	3.6	5.6	5.1	2.0	2.5	6.7	6.5	6.6	8.5	8.6	4.4	4.2	5.3	3.9	6.5	3.0	2.0	0.9	8.6	2.0
Sep 12	1.3	1.3	1.1	1.4	2.2	1.9	1.3	1.4	1.8	9.1	8.8	8.7	13.4	12.6	11.1	11.2	14.4	1.9	2.6	4.3	0.7	0.9	0.8	0.4	0.4	14.4	3.7
Sep 13	1.6	1.4	0.5	1.7	0.8	0.8	0.3	0.6	1.1	3.4	3.6	7.4	8.6	8.8	8.2	12.5	9.8	8.7	2.4	0.1	1.0	1.7	1.2	0.8	0.1	12.5	2.7
Sep 14	1.2	1.0	1.2	0.4	0.5	2.3	0.9	0.3	5.9	10.1	16.7	15.1	16.8	16.9	15.7	8.1	5.5	5.3	4.9	11.1	10.9	8.7	11.2	0.3	16.9	6.2	
Sep 15	11.1	9.2	12.1	9.3	11.5	10.6	10.4	12.5	14.9	13.3	17.6	18.9	20.5	16.9	18.9	21.6	P	P	P	P	13.2	13.5	13.5	12.4	9.2	21.6	13.9
Sep 16	11.2	10.4	9.2	10.2	9.5	8.5	10.5	9.4	10.9	11.4	12.5	11.8	11.0	11.3	11.1	8.1	5.4	9.4	2.1	0.6	0.8	2.1	1.6	1.6	0.6	12.5	7.2
Sep 17	1.1	0.7	3.5	4.3	4.0	4.6	5.8	6.2	4.5	6.9	7.4	8.5	8.2	9.6	8.7	9.1	5.9	2.3	4.0	4.0	3.6	5.8	2.1	0.2	0.2	9.6	4.6
Sep 18	0.7	2.2	0.9	0.9	2.2	1.5	0.3	0.0	0.3	0.2	1.5	4.5	0.5	3.1	4.1	3.5	4.1	3.3	2.9	1.7	0.2	0.2	0.4	0.4	0.0	4.5	0.6
Sep 19	0.2	0.4	0.1	0.1	1.3	0.4	5.6	6.4	4.8	4.2	5.6	6.6	9.0	8.8	7.0	8.0	7.1	4.4	0.2	2.7	0.4	0.6	0.4	0.5	0.1	9.0	3.1
Sep 20	0.4	0.2	0.1	0.2	0.3	0.6	0.5	0.8	0.3	0.5	3.0	4.1	8.1	8.5	9.9	7.5	5.3	3.4	0.3	2.3	0.9	2.8	2.2	2.6	0.1	9.9	1.7



**PEACE RIVER AREA MONITORING PROGRAM**

**AQHI - Cadotte Lake Station - September 2021**

**Summary of Hourly Averages**

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

WIND SPEED																												
Maximum Hourly Value:	28.0	kph	on September 5 at hour 15	Hours in Service:	720																							
Maximum Daily Value:	15.0	kph	on September 5	Hours of Data:	712																							
Minimum Hourly Value:	0.0	kph	on September 3 at hour 2	Hours of Missing Data:	8																							
Minimum Daily Value:	0.6	kph	on September 10	Hours of Calibration:	0																							
Monthly Average:	3.5	kph		Operational Uptime:	98.9																							
WIND DIRECTION																												
Monthly Average:	256 (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	3.5	3.9	5.6	7.0	4.5	1.6	3.5	3.0	10.0	16.6	16.3	19.2	20.4	21.7	22.7	18.3	17.3	13.4	13.0	4.8	1.0	3.6	2.2	1.2	1.0	22.7	8.3	
	SSW	S	SE	SE	SSE	ESE	SSW	SSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SSE	S	S	ENE				
Sep 22	11.8	10.1	8.8	5.8	6.3	10.3	8.4	13.9	18.7	18.7	20.0	21.7	18.9	19.6	17.2	18.0	20.4	11.6	11.7	17.9	16.5	9.5	6.4	6.0	5.8	21.7	13.2	
	WSW	WSW	WSW	SW	SW	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	WNW	WNW	WNW	W			
Sep 23	6.6	4.7	6.1	5.0	7.6	5.6	6.6	9.6	10.6	11.6	12.6	12.9	13.7	13.7	13.9	14.6	15.8	10.6	2.9	0.5	2.4	3.0	3.7	5.4	0.5	15.8	6.9	
	W	W	W	W	W	W	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WSW	WSW	SW	SE	E	E	E	E				
Sep 24	4.1	4.5	3.0	3.0	4.4	5.5	5.1	4.2	3.4	11.3	17.9	23.7	25.1	22.0	23.0	24.8	19.9	20.8	19.7	13.6	10.8	14.8	14.0	11.2	3.0	25.1	10.0	
	E	E	E	ENE	SE	E	E	E	SSE	SSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW			
Sep 25	9.7	12.9	10.5	6.9	5.7	3.5	4.1	3.6	9.0	11.2	12.1	12.8	11.2	8.8	9.4	10.2	10.6	4.7	0.3	0.7	1.1	0.2	0.0	0.2	0.0	12.9	6.4	
	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	W	W	WSW	WSW	W	WSW	WSW	WSW	WSW	ENE	ENE	E	NE	W	NW				
Sep 26	0.2	0.1	0.3	1.5	1.8	1.7	2.1	4.4	4.9	4.9	2.5	1.8	2.8	4.8	5.6	6.9	5.5	2.5	3.3	4.1	3.8	4.3	3.5	4.3	0.1	6.9	3.1	
	NW	W	SE	E	E	ESE	E	ESE	ESE	ESE	SE	NE	E	E	ESE	ESE	ESE	SE	E	E	E	E	ESE	ESE				
Sep 27	5.9	5.2	5.2	6.0	7.7	5.6	9.0	7.6	10.4	11.4	10.6	13.5	11.3	10.7	10.4	4.3	6.3	1.4	3.0	0.6	3.2	0.8	1.0	0.2	0.2	13.5	5.6	
	E	E	E	E	E	E	E	ESE	E	E	ESE	ESE	E	ESE	ESE	SE	W	WNW	NW	ESE	ENE	ESE	ENE	ENE	ENE			
Sep 28	1.0	0.1	0.1	0.4	0.8	0.4	1.2	0.6	1.6	3.2	2.3	1.0	3.2	5.6	7.4	8.0	9.4	6.4	4.6	3.4	2.0	2.2	0.7	2.5	0.1	9.4	2.3	
	E	NNW	WSW	NW	ENE	ENE	W	ENE	ENE	E	ESE	E	SSE	ESE	SE	SE	SSE	SSE	SSE	SE	SE	SE	SE	ENE	ENE			
Sep 29	2.9	2.1	2.6	2.7	2.4	2.8	3.2	2.3	3.2	5.1	4.2	7.4	9.4	9.6	13.6	11.2	8.4	4.0	2.4	2.6	3.0	1.1	2.1	0.7	0.7	13.6	2.0	
	ENE	ENE	NE	ENE	ENE	ENE	ENE	E	ESE	SE	SW	SSW	SSW	WSW	WSW	SW	SW	SW	S	SSE	S	ENE	ENE	NE				
Sep 30	1.7	2.0	2.4	3.8	5.3	5.6	6.0	5.3	4.4	6.1	6.0	12.2	12.3	17.0	19.8	14.2	12.5	11.2	7.0	7.1	8.5	8.3	13.4	9.6	1.7	19.8	6.0	
	E	ESE	ESE	ESE	E	E	ESE	ESE	ESE	SSE	SW	SW	SW	SW	SW	SW	SW	SSW	SSW	SW	SW	SW	WSW	SW				
<b>C</b>	Monthly Calibration							<b>S</b>	Daily Zero-Span Check							<b>Q</b>	Quality Assurance											
<b>K</b>	Collection Error							<b>N</b>	No Data (Machine Not in Service)							<b>Y</b>	Routine Maintenance							<b>P</b>	Power Failure			
<b>X</b>	Invalid Data (Equipment Malfunction/Recovery)							<b>NRM</b>	UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance)																			
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.																												
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.																												

## END OF REPORT

This page, 225 of 225, ends the September 2021 Monthly Ambient Air Quality Monitoring Report.



**Peace River Area Monitoring Program**

**SEPTEMBER 2021**

**Ambient Air Monitoring Calibration Report**

**- 842b STATION-**

**CAL-PRAMP-202109-01561**

**Operation and Maintenance:**

Bureau Veritas Canada

**Data Validation and Report:**

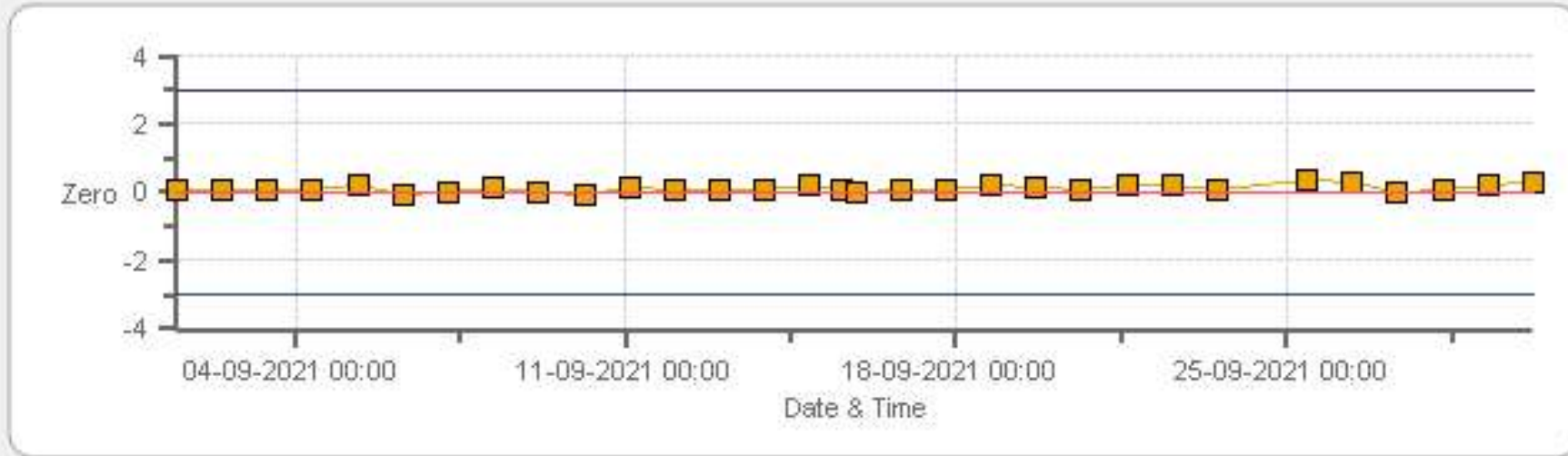
Bureau Veritas Canada

October 20, 2021



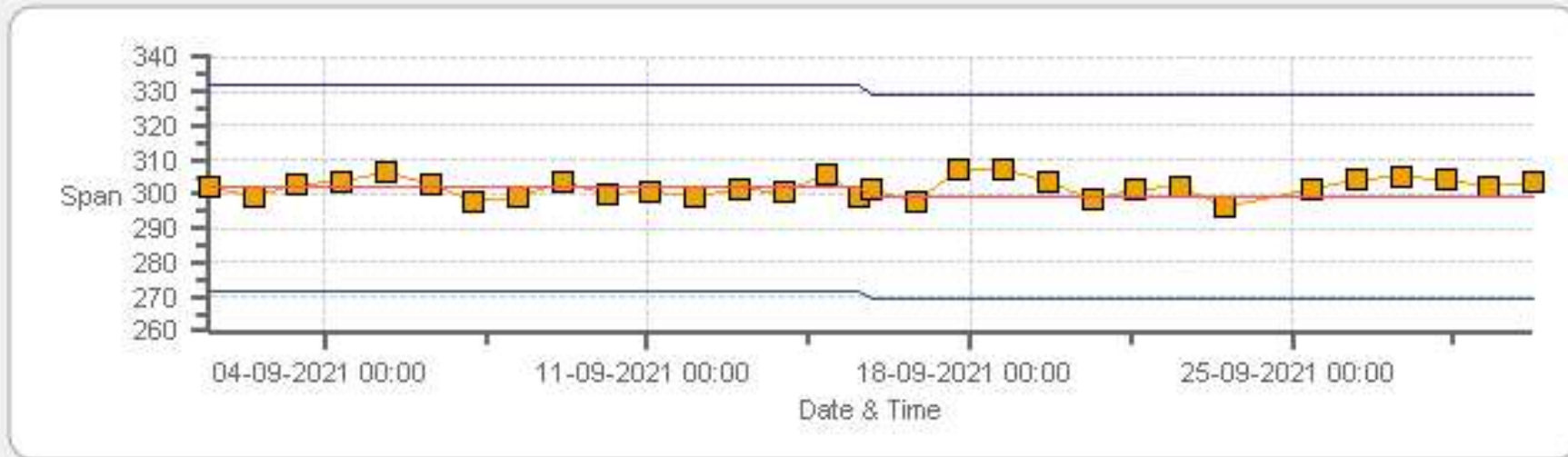
# DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: PRAMP 842b Monthly: 09-2021 Type: SpanAndZero - Zero



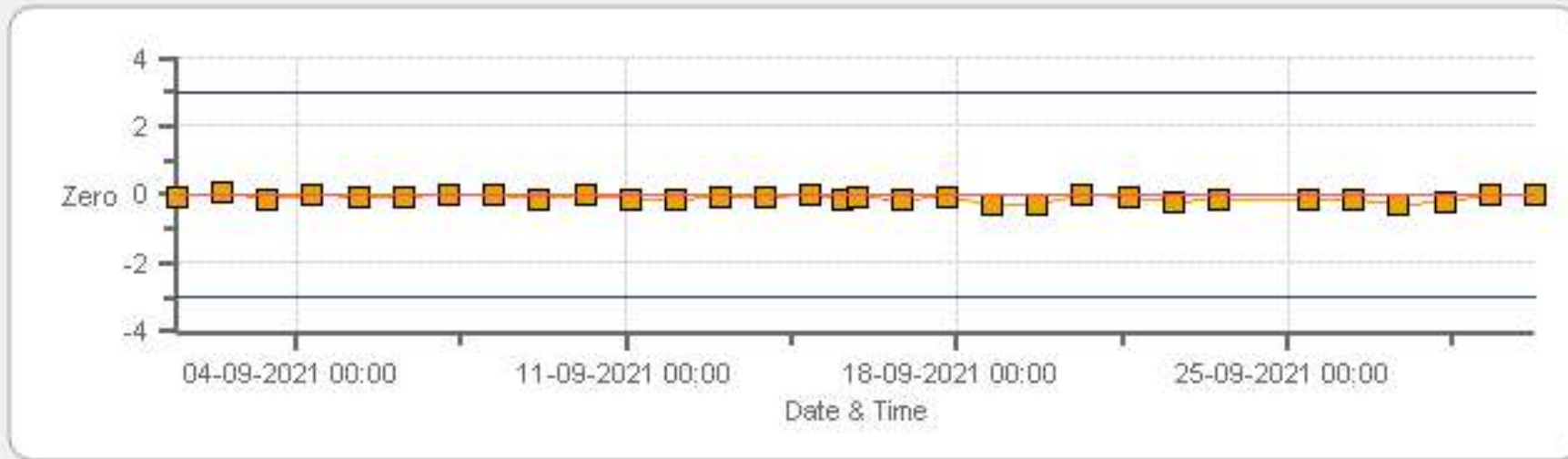
Zero Zero Ref Zero Low Zero High

SO2[ppb] Calibration: PRAMP 842b Monthly: 09-2021 Type: SpanAndZero - Span



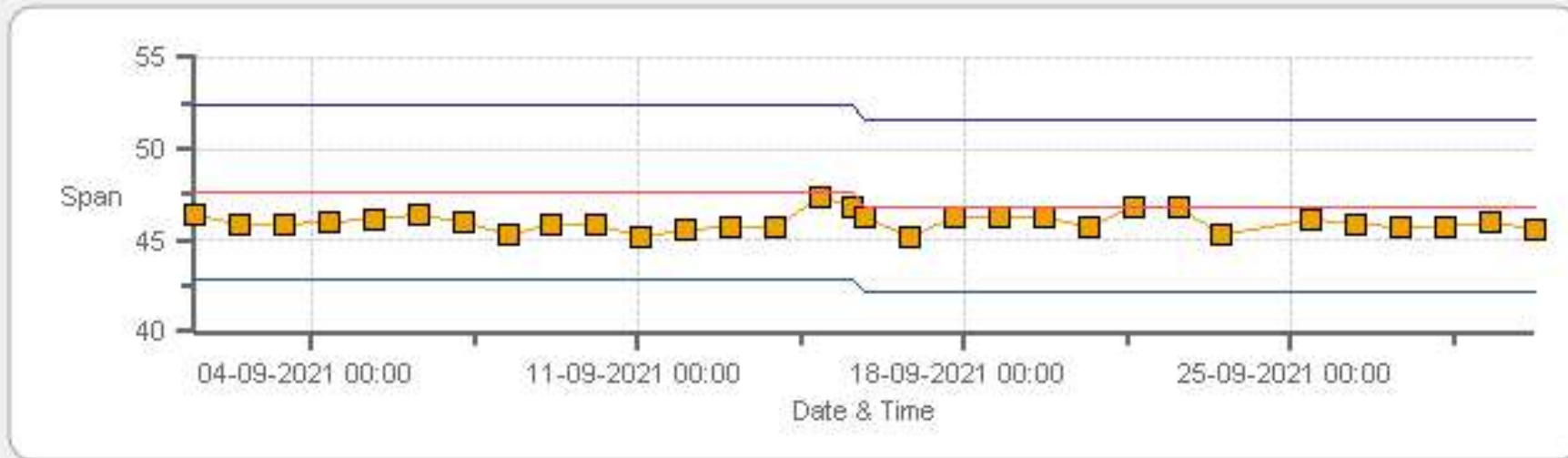
Span SpanRef Span Low Span High

TRS[ppb] Calibration: PRAMP 842b Monthly: 09-2021 Type: SpanAndZero - Zero



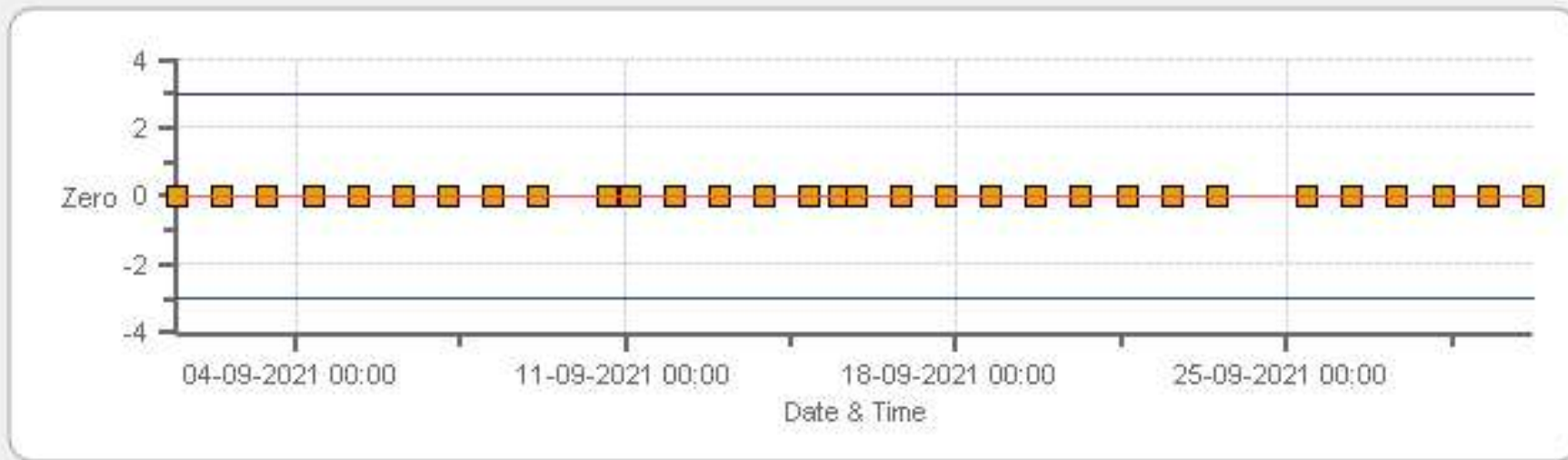
Zero Zero Ref Zero Low Zero High

TRS[ppb] Calibration: PRAMP 842b Monthly: 09-2021 Type: SpanAndZero - Span



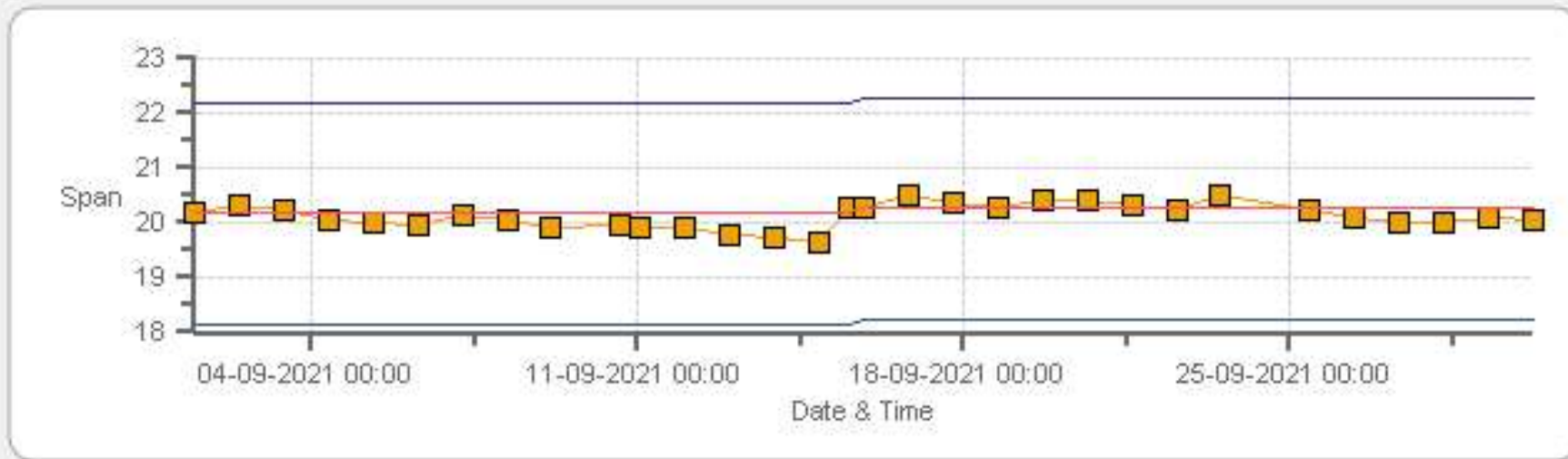
Span Span Ref Span Low Span High

THC55[ppm] Calibration: PRAMP 842b Monthly: 09-2021 Type: SpanAndZero - Zero



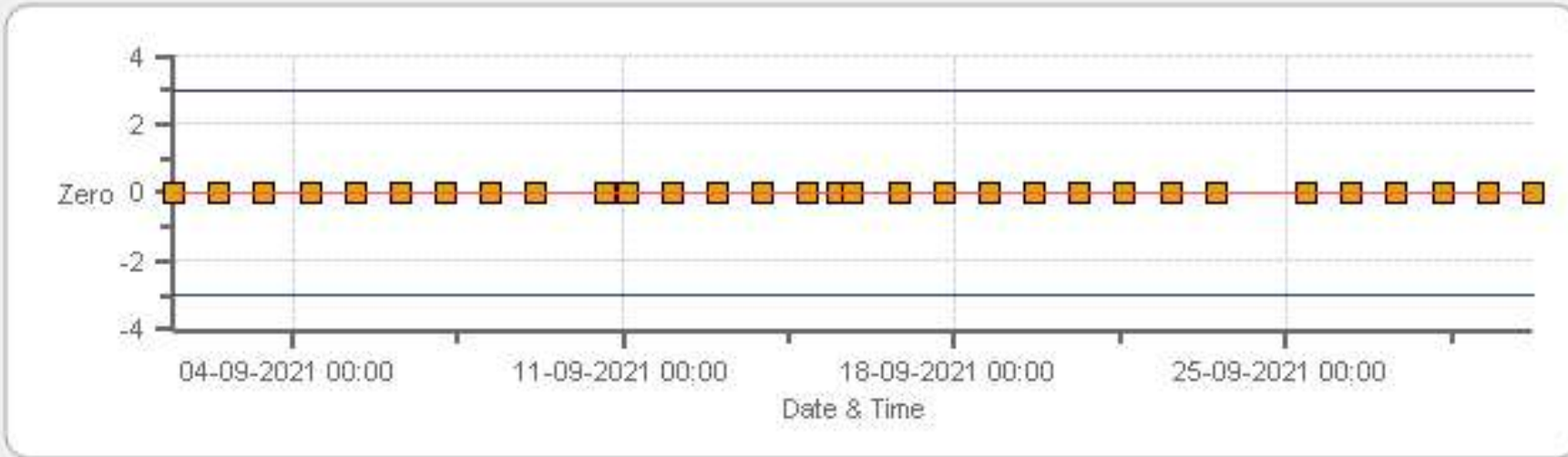
■ Zero    
 — Zero Ref    
 — Zero Low    
 — Zero High

THC55[ppm] Calibration: PRAMP 842b Monthly: 09-2021 Type: SpanAndZero - Span



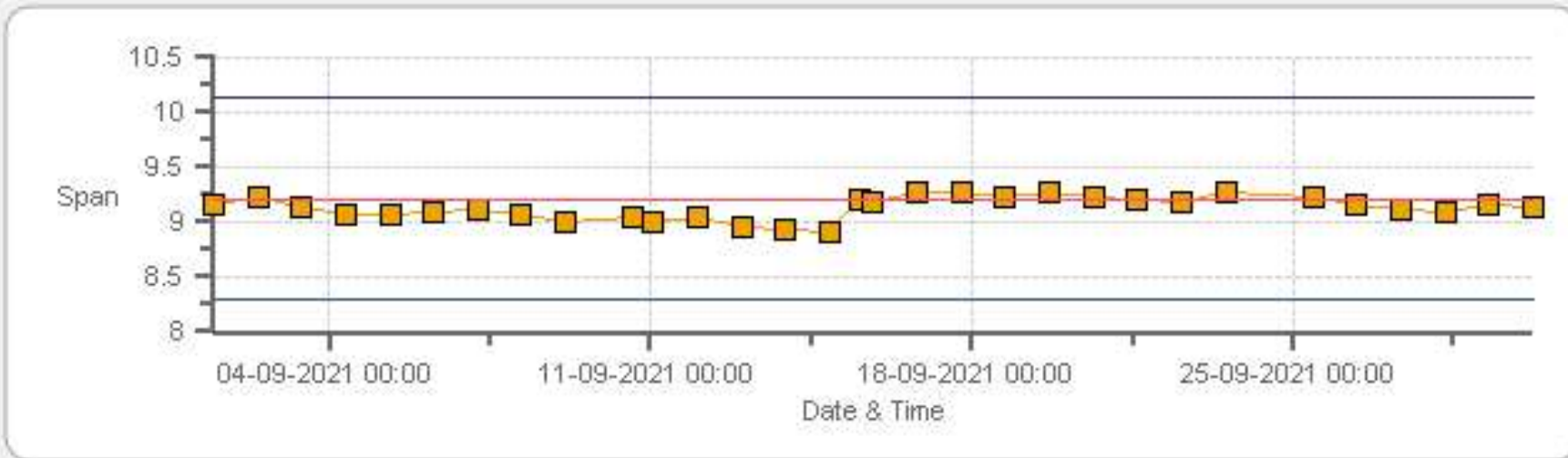
■ Span    
 — SpanRef    
 — Span Low    
 — Span High

CH4[ppm] Calibration: PRAMP 842b Monthly: 09-2021 Type: SpanAndZero - Zero



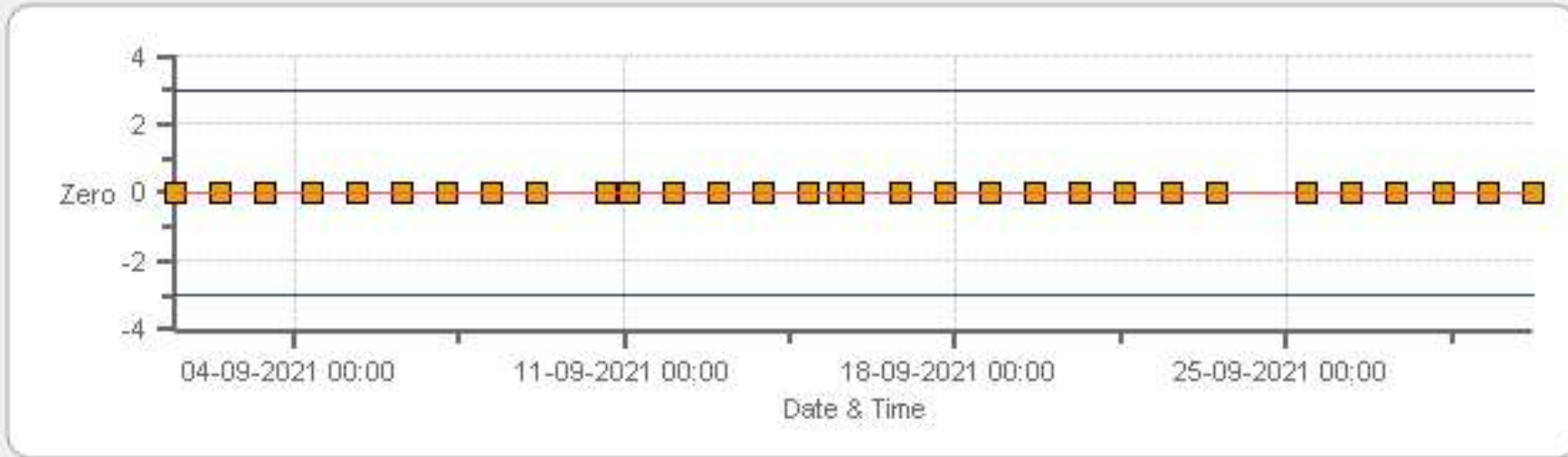
Zero Zero Ref Zero Low Zero High

CH4[ppm] Calibration: PRAMP 842b Monthly: 09-2021 Type: SpanAndZero - Span



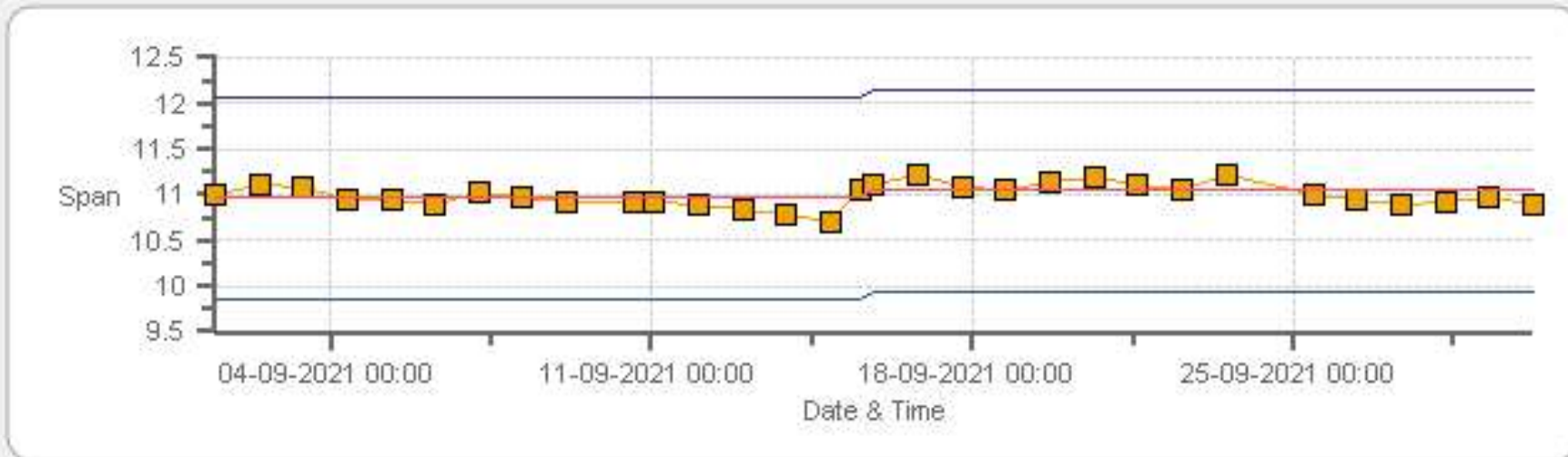
Span Span Ref Span Low Span High

NMHC[ppm] Calibration: PRAMP 842b Monthly: 09-2021 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: PRAMP 842b Monthly: 09-2021 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

# MULTI-POINT CALIBRATION RECORDS



# SO2 Analyzer Calibration by Dilution



DATE:	15-Sep-2021	PREVIOUS CALIBRATION DATE:	05-Aug-2021
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	0.999
CLIENT:	PRAMP	TEMPERATURE (°C):	21.6
LOCATION:	842b	BAROMETRIC (mBar):	928
PURPOSE:	Routine	START TIME (MST):	08:57
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	14:13

## ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	500 ppb
SERIAL #	1200736629	FLOW (mL/min)	421
INITIAL		FINAL	
BKG/OFFSET	7.6	BKG/OFFSET	7.7
COEF/SLOPE	1.097	COEF/SLOPE	1.092
Expected (reference) Value	302	Expected (reference) Value	299.2

## CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	701
ID:	1991	ID:	850
MFC CALIBRATION DATE:	23-Mar-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002357	HIGH ID	n/a
CONC (ppm):	24.90	EXPIRY DATE	n/a
CYLINDER (psi):	1100	LOW ID	n/a
EXPIRY DATE	13-Nov-2024	EXPIRY DATE	n/a

## CALIBRATION PARAMETERS:

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

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

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

## CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4000	<del>        </del>	4000	0.00	0	0	<del>        </del>	<del>        </del>
3941	61.06	4002	379.88	379.9	380	1.000	1.000
3972	30.49	4002	189.71	n/a	190.6	n/a	0.995
3986	14.44	4000	89.88	n/a	88.8	n/a	1.012

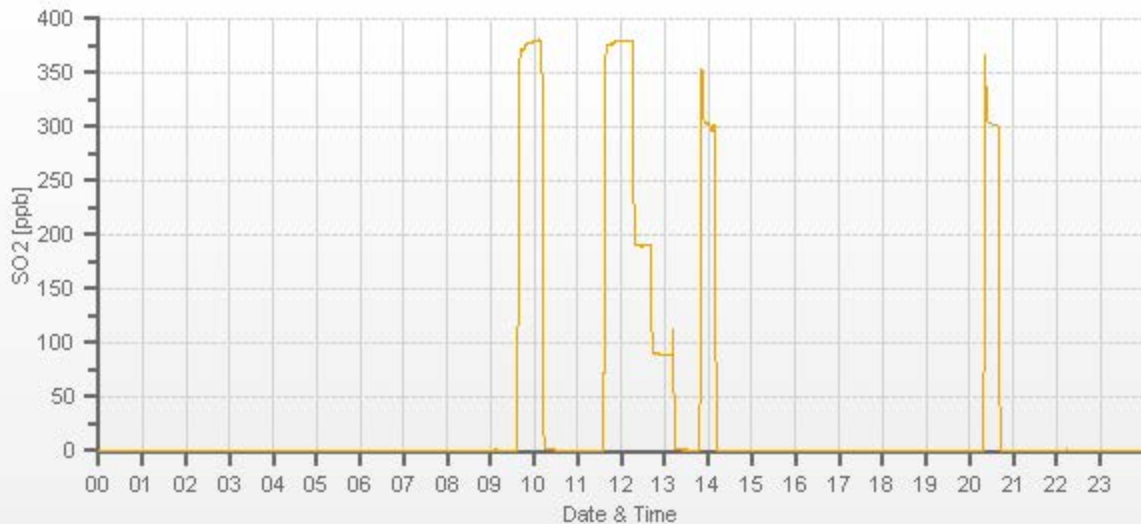
## LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.002	-0.1%

## COMMENTS:

Sample filter changed. Monthly calibration - no issues.





# TRS Analyzer Calibration by Dilution



DATE:	15-Sep-2021	PREVIOUS CALIBRATION DATE:	05-Aug-2021
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	21.6
LOCATION:	842b	BAROMETRIC (mBar):	928
PURPOSE:	Routine	START TIME (MST):	08:57
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	14:19

## ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	1200736630	FLOW (mL/min)	369
INITIAL		FINAL	
BKG/OFFSET	12.3	BKG/OFFSET	12.3
COEF/SLOPE	0.91	COEF/SLOPE	0.9
Expected (reference) Value	47.68	Expected (reference) Value	46.87

## CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	701
ID:	1991	ID:	850
MFC CALIBRATION DATE:	23-Mar-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002472	HIGH ID	n/a
CONC (ppm):	9.41	EXPIRY DATE	n/a
CYLINDER (psi):	1390	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:

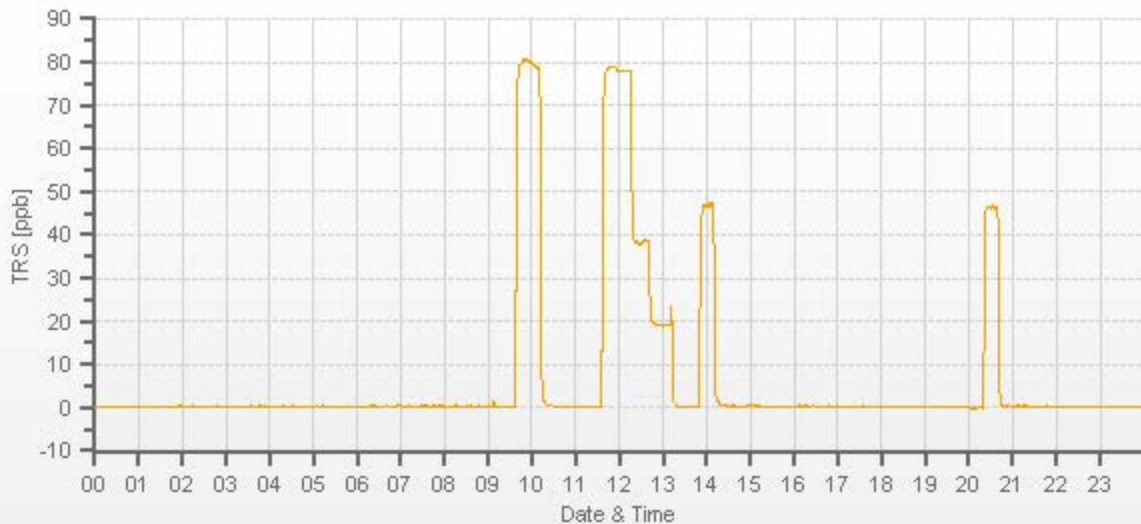
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4000	<del>33.12</del>	4000	0.00	-0.18	0	<del>0.979</del>	<del>1.000</del>
3969	33.12	4002	77.87	79.39	77.89	0.979	1.000
3986	16.16	4002	38.00	n/a	38.63	n/a	0.984
3992	8.09	4000	19.03	n/a	19	n/a	1.001

## LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	0.1%

## COMMENTS:

TRS Converter CDNOVA CDN #576.  
Sample filter changed. Monthly calibration - no issues.



# Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	15-Sep-2021	PREVIOUS CALIBRATION DATE:	05-Aug-2021	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	21.6		Thermo 55i	1501663728	1022.4
LOCATION:	842b	BAROMETRIC (mBar):	928	PARAMETER:	CH4	NMHC	THC
PURPOSE	Routine	START TIME (MST):	08:56	RANGE (ppm):	20	20	40
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:07	PREVIOUS CF:	1.000	0.999	1.000

## CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	API	CYLINDER ID:	LL84567	HIGH ID:	n/a
MODEL:	2010	MODEL:	701	CH <sub>4</sub> /C <sub>3</sub> H <sub>8</sub> (ppm):	591.0   200.0	HIGH EXPIRY:	n/a
ID:	17100415	ID:	850	CYLINDER (psi):	580	LOW ID:	n/a
MFC CALIBRATION DATE:	23-Mar-2021	OXIDIZER ID:	00941	EXPIRY DATE	17-Jul-2027	LOW EXPIRY:	n/a

## CALIBRATION PARAMETERS:

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

## EXPECTED (REFERENCE) VALUE:

INITIAL	CH <sub>4</sub>	NMHC	THC	FINAL	CH <sub>4</sub>	NMHC	THC
	9.21	10.96	20.17		9.21	11.05	20.26

## CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC
2998	<del>X</del>	2998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>
2924	73.60	2998	14.51	13.50	28.01	13.96	13.16	27.12	14.52	13.52	28.04	1.039	1.026	1.033	0.999	0.999	0.999
2960	36.80	2997	7.26	6.75	14.01	n/a	n/a	n/a	7.15	6.67	13.81	n/a	n/a	n/a	1.015	1.013	1.015
2980	18.40	2998	3.63	3.38	7.00	n/a	n/a	n/a	3.53	3.34	6.87	n/a	n/a	n/a	1.028	1.011	1.019

## LINEAR REGRESSION ANALYSIS:

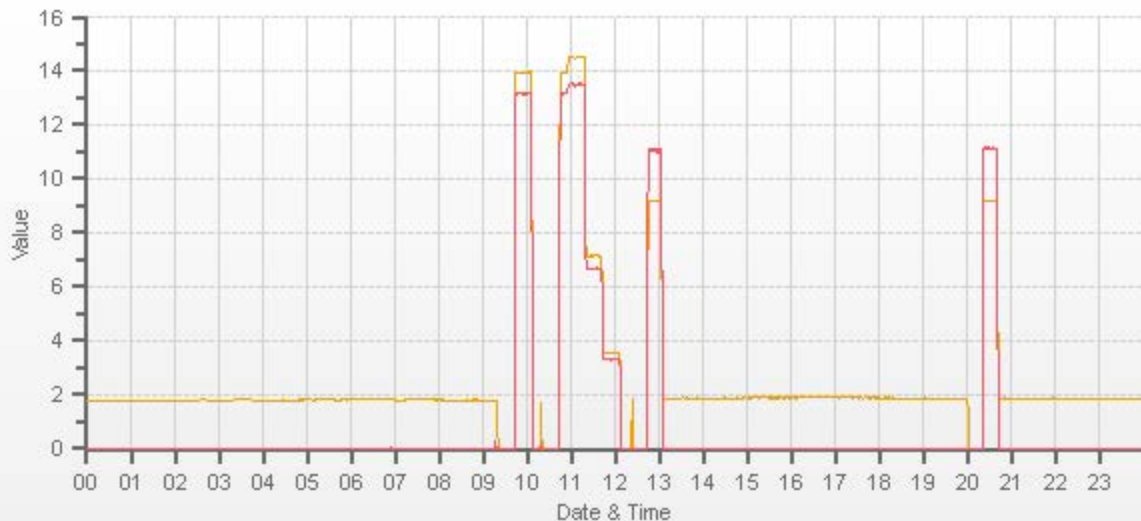
	CORRELATION	SLOPE	INTERCEPT
CH <sub>4</sub>	1.000	1.002	-0.3%
NMHC	1.000	1.002	-0.2%
THC	1.000	1.002	-0.2%

## Comments:

Sample filter changed. Monthly calibration - no issues.

Use Zero Chrom?

No



CAL-PRAMP-202109-01561

# Meteorological System Checklist



Date:	September 15, 2021
Technician:	Ferdinand Roy
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 5, 2021	
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 5 tips are heard. (10 tips = 1 ml)

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

### AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	August 5, 2021
Parameter:	Temperature @ 2 metres
Reference Thermometer ID:	F.S. 160348895 expires Sep 4, 2022
Reference Temperature (°C):	11.4
Station - Ambient Temperature (°C):	11.9
Temperature Difference (°C):	-0.5

### BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	August 5, 2021
Reference Barometer ID:	FS 10528 expires Feb 17, 2022
Reference Pressure - Units/Reading:	millibar 928
Station Pressure - Units/Reading:	millibar 928
Pressure Tolerance +/- 15% of error:	789 - 1067 0.00%

### RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	August 5, 2021
Reference Hygrometer ID:	F.S. 160348895 expires Sep 4, 2022
Reference Hygrometer % RH- Reading:	47.07
Station Hygrometer % RH- Reading:	44.40
RH Tolerance +/- 15% of difference:	40.01 - 54.13 5.7%

### ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	June 2, 2021	Previous check date:	June 2, 2021
Wind Speed Observed (kph):	25~35	Wind Direction Observed:	W
Wind speed on Data Logger (kph):	27.5	Wind Direction on Data Logger:	W
		Wind Direction Pass/Fail?:	Pass

Comments

No issues



# Meteorological Sensor Audit/Calibration

## Location Information

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

## Wind Sensor Information

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

## Wind Calibrator Information

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

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

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

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

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

## Comments:

Change 2 speed bearing.



## Peace River Area Monitoring Program

# SEPTEMBER 2021

## Ambient Air Monitoring Calibration Report

### - 986c STATION-

### CAL-PRAMP-202109-01562

**Operation and Maintenance:**

Bureau Veritas Canada

**Data Validation and Report:**

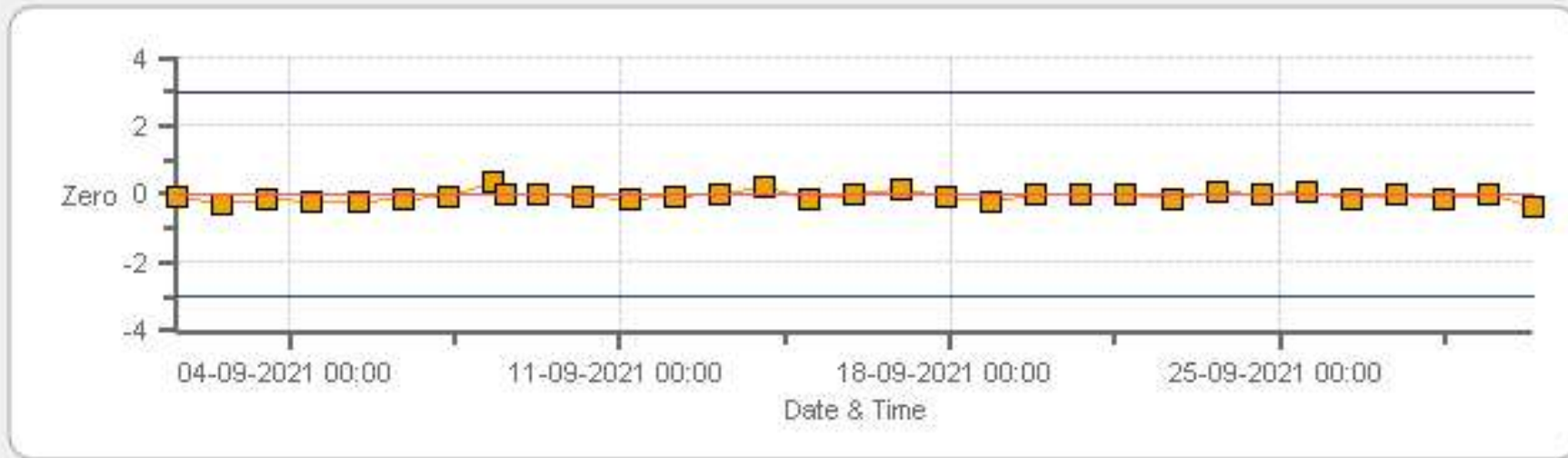
Bureau Veritas Canada

October 20, 2021

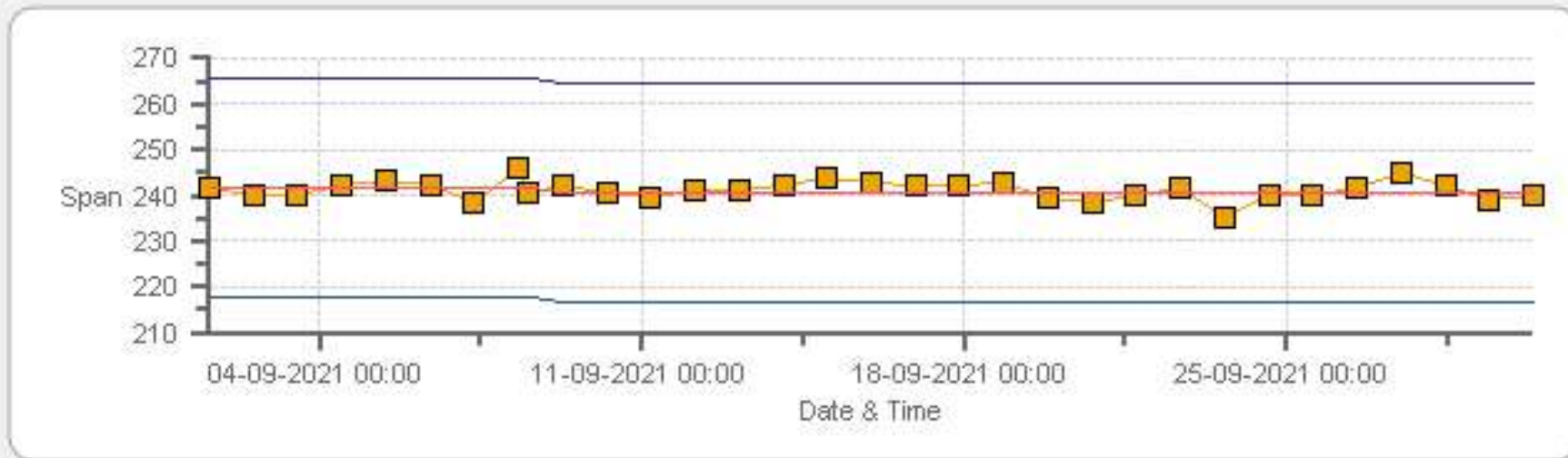


# DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

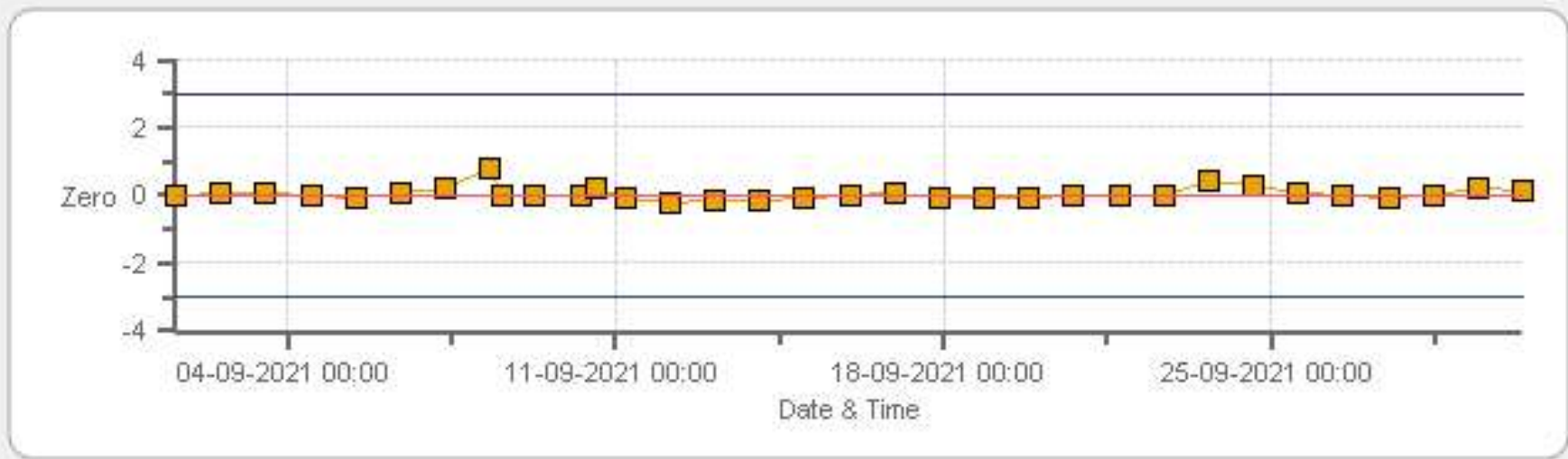
SO2[ppb] Calibration: PRAMP 986c Monthly: 09-2021 Type: SpanAndZero - Zero



SO2[ppb] Calibration: PRAMP 986c Monthly: 09-2021 Type: SpanAndZero - Span

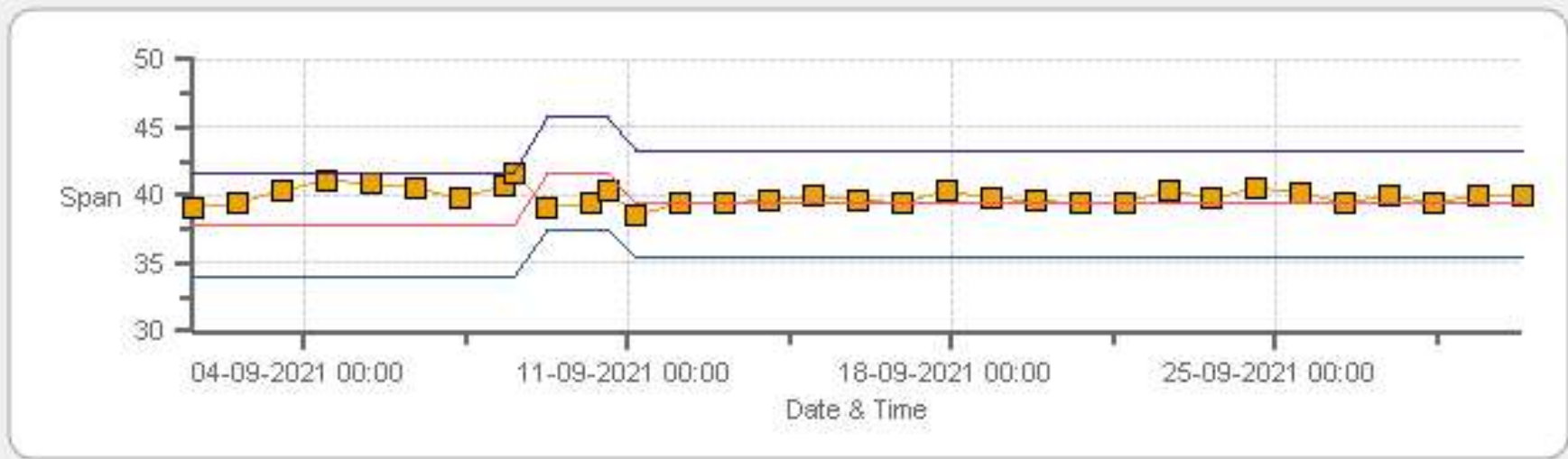


TRS[ppb] Calibration: PRAMP 986c Monthly: 09-2021 Type: SpanAndZero - Zero



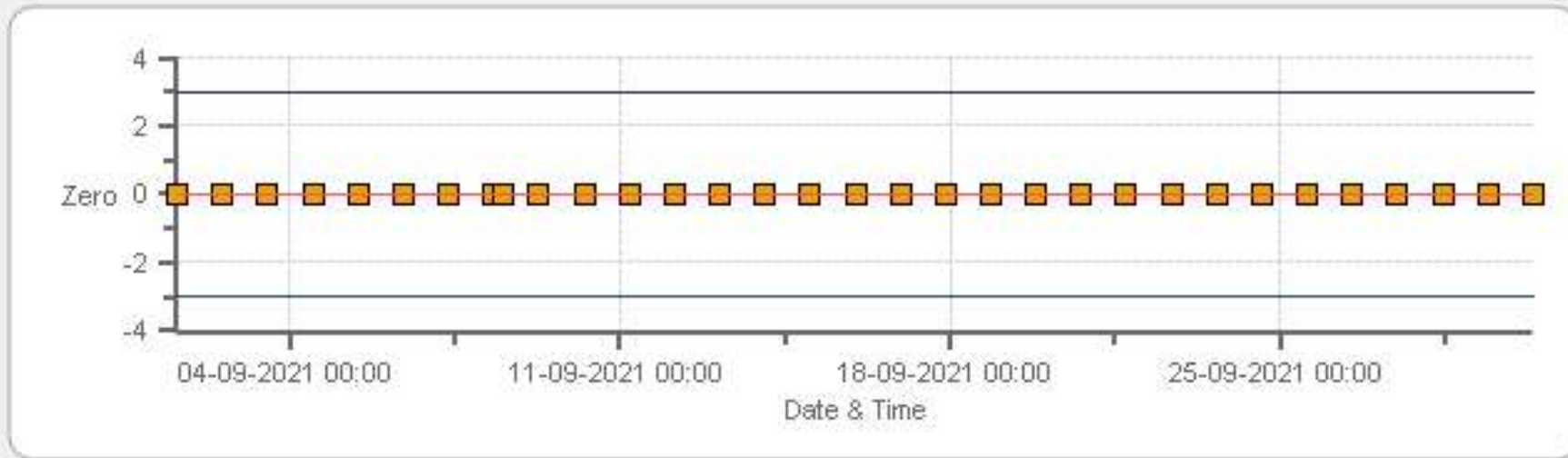
Zero Zero Ref Zero Low Zero High

TRS[ppb] Calibration: PRAMP 986c Monthly: 09-2021 Type: SpanAndZero - Span



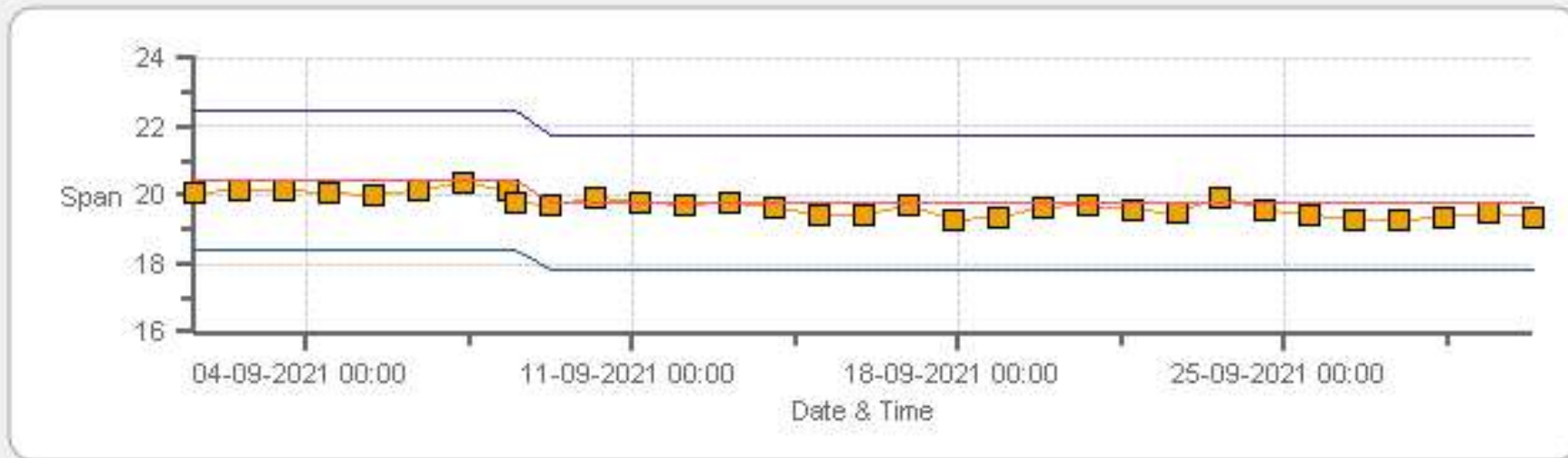
Span SpanRef Span Low Span High

THC55[ppm] Calibration: PRAMP 986c Monthly: 09-2021 Type: SpanAndZero - Zero



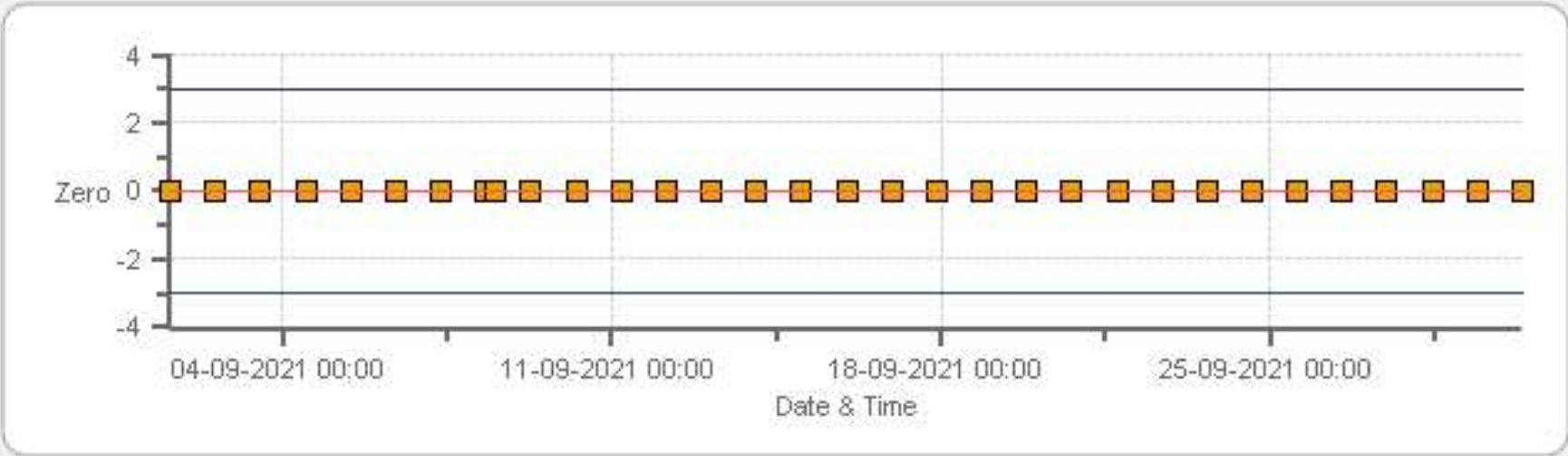
Zero Zero Ref Zero Low Zero High

THC55[ppm] Calibration: PRAMP 986c Monthly: 09-2021 Type: SpanAndZero - Span



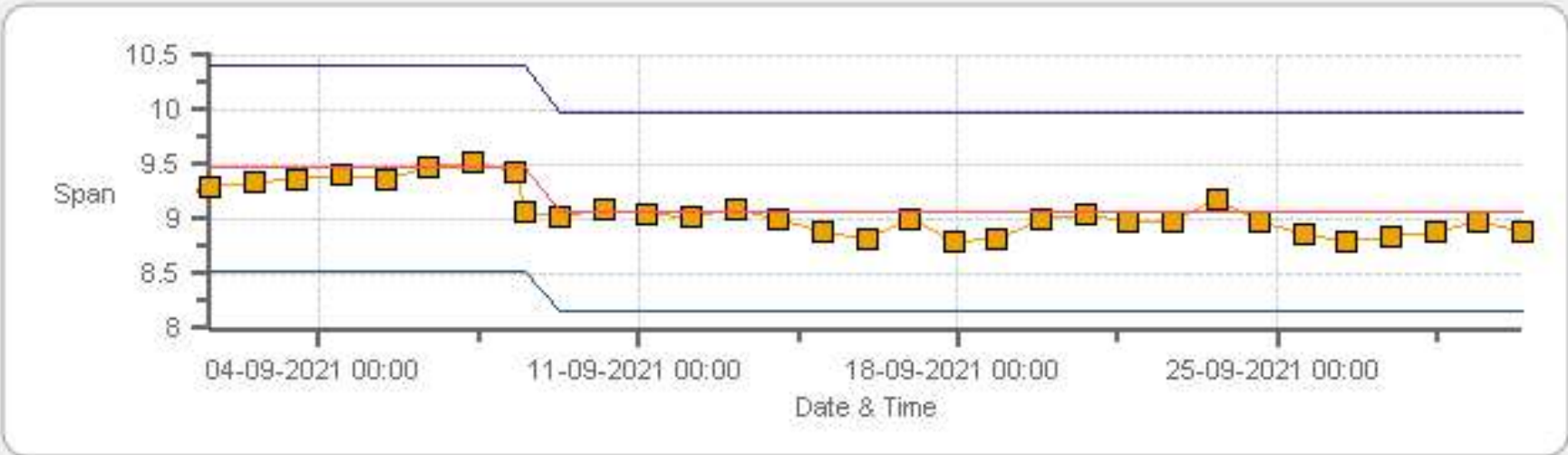
Span SpanRef Span Low Span High

CH4[ppm] Calibration: PRAMP 986c Monthly: 09-2021 Type: SpanAndZero - Zero



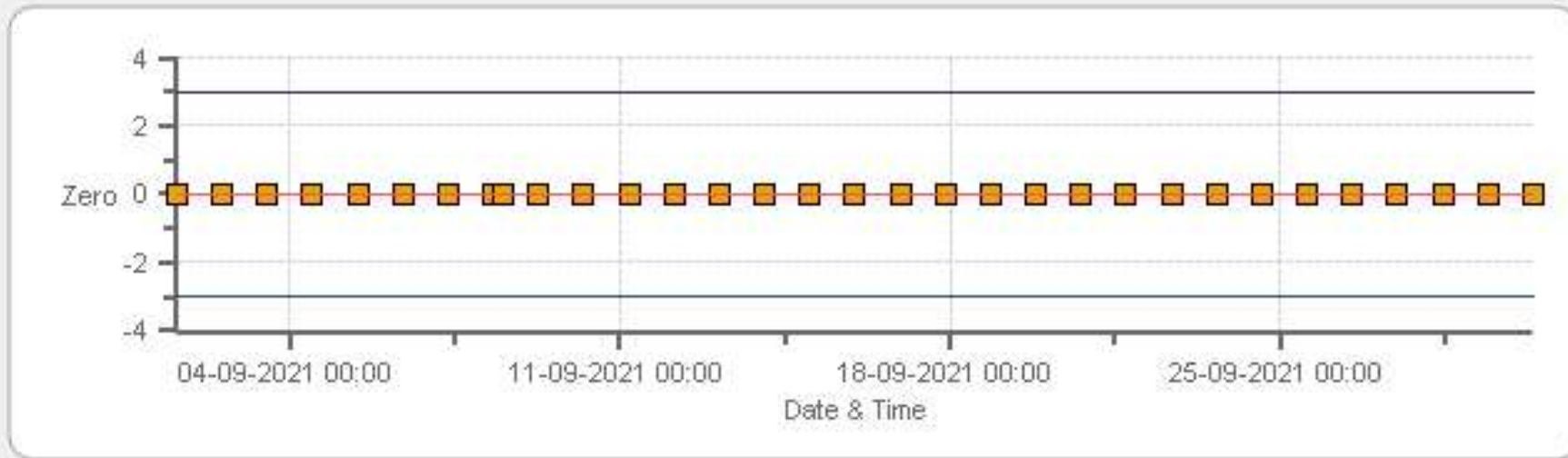
Zero Zero Ref Zero Low Zero High

CH4[ppm] Calibration: PRAMP 986c Monthly: 09-2021 Type: SpanAndZero - Span



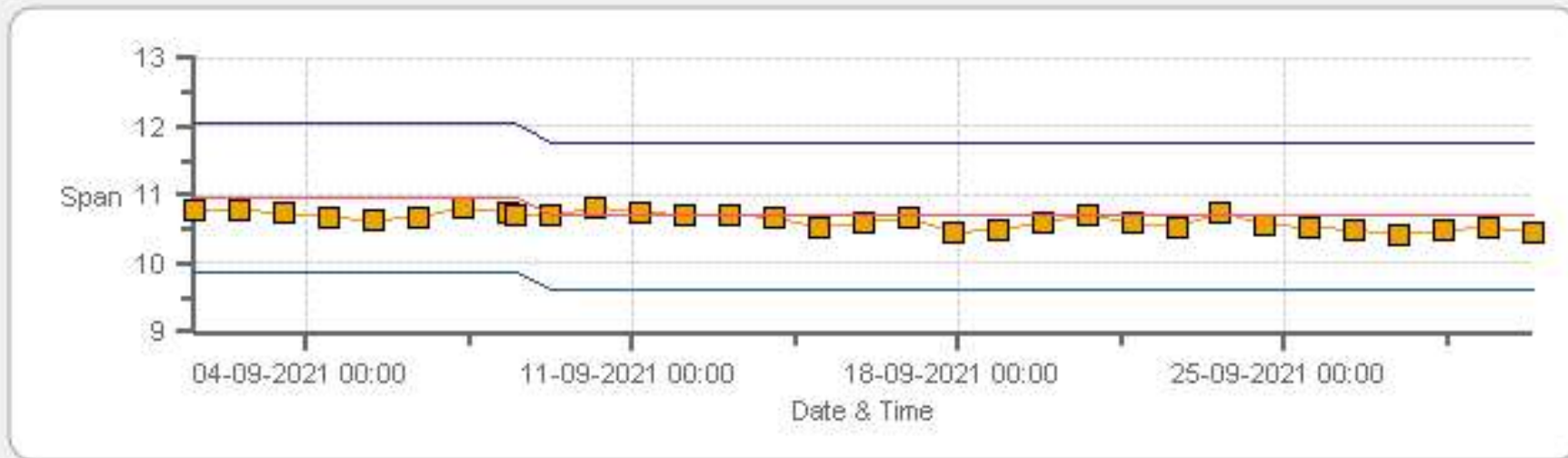
Span Span Ref Span Low Span High

NMHC[ppm] Calibration: PRAMP 986c Monthly: 09-2021 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: PRAMP 986c Monthly: 09-2021 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

# MULTI-POINT CALIBRATION RECORDS



# SO2 Analyzer Calibration by Dilution



DATE:	08-Sep-2021	PREVIOUS CALIBRATION DATE:	04-Aug-2021
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.7
LOCATION:	986C	BAROMETRIC (mBar):	940
PURPOSE:	Routine	START TIME (MST):	08:19
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:17

## ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	500 ppb
SERIAL #	1193585646	FLOW (mL/min)	429
INITIAL		FINAL	
BKG/OFFSET	12.9	BKG/OFFSET	12.9
COEF/SLOPE	1.01	COEF/SLOPE	1.009
Expected (reference) Value	241.7	Expected (reference) Value	240.6

## CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	701
ID:	1991	ID:	850
MFC CALIBRATION DATE:	23-Mar-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002357	HIGH ID	n/a
CONC (ppm):	24.90	EXPIRY DATE	n/a
CYLINDER (psi):	1180	LOW ID	n/a
EXPIRY DATE	13-Nov-2024	EXPIRY DATE	n/a

## CALIBRATION PARAMETERS:

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

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

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

## CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
3999	<del>        </del>	3999	0.00	0.1	0	<del>        </del>	<del>        </del>
3939	61.03	4000	379.88	376.8	380	1.008	1.000
3967	30.48	3998	189.83	n/a	190.1	n/a	0.999
3987	14.40	4001	89.64	n/a	89.6	n/a	1.000

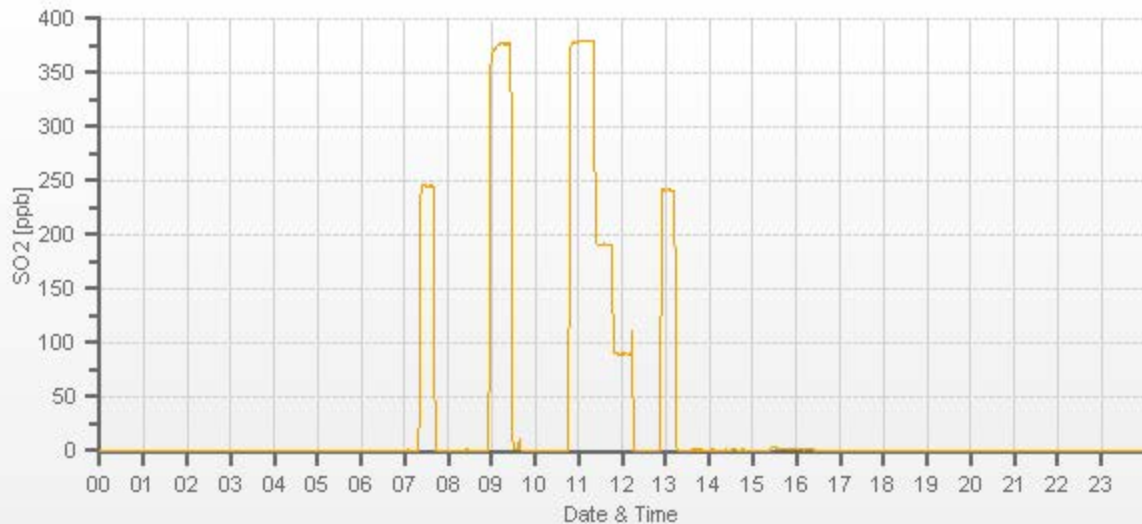
## LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	0.0%

## COMMENTS:

Sample filter changed. Monthly calibration - no issues.  
Analyzer fan filter cleaned.





# TRS Analyzer Calibration by Dilution



DATE:	08-Sep-2021	PREVIOUS CALIBRATION DATE:	19-Aug-2021
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.7
LOCATION:	986C	BAROMETRIC (mBar):	940
PURPOSE:	Routine	START TIME (MST):	08:19
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:17

## ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	1191833341	FLOW (mL/min)	426
INITIAL		FINAL	
BKG/OFFSET	12.6	BKG/OFFSET	12.6
COEF/SLOPE	0.91	COEF/SLOPE	0.896
Expected (reference) Value	37.81	Expected (reference) Value	41.6

## CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	701
ID:	1991	ID:	850
MFC CALIBRATION DATE:	23-Mar-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002472	HIGH ID	n/a
CONC (ppm):	9.41	EXPIRY DATE	n/a
CYLINDER (psi):	1480	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:

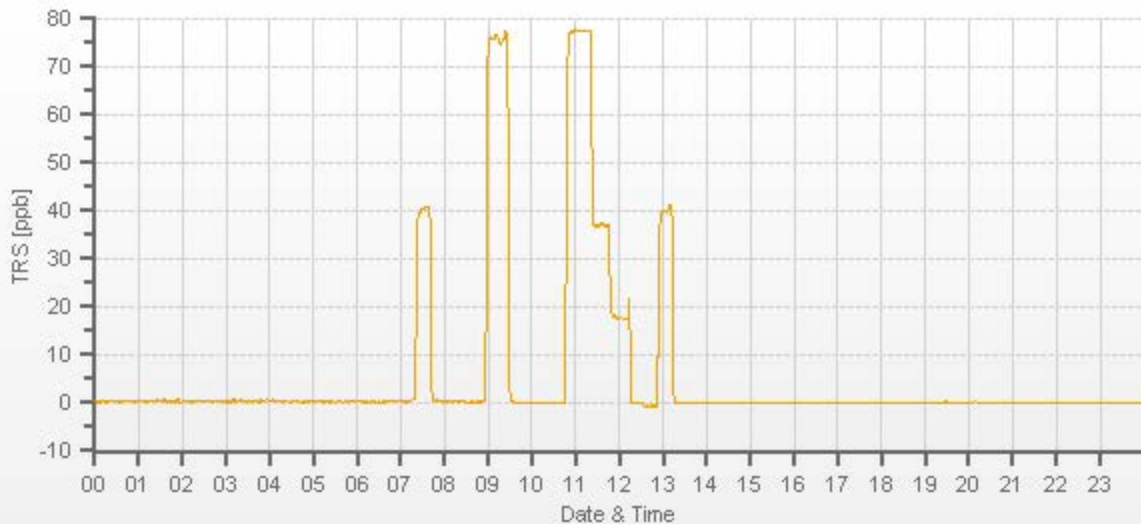
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
3999	<del>33.23</del>	3999	0.00	0.27	0	<del>1.018</del>	<del>1.000</del>
3967	33.23	4000	78.15	77.05	78.17	1.018	1.000
3982	16.17	3998	38.06	n/a	37.62	n/a	1.012
3993	8.09	4001	19.02	n/a	18.18	n/a	1.046

## LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.003	-0.4%

## COMMENTS:

TRS Converter CDNOVA CDN-101 #583.  
 Sample filter changed. Monthly calibration - no issues.  
 Analyzer fan filter cleaned.



# TRS Analyzer Calibration by Dilution



DATE:	10-Sep-2021	PREVIOUS CALIBRATION DATE:	08-Sep-2021
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.9
LOCATION:	986C	BAROMETRIC (mBar):	945
PURPOSE:	Repeat	START TIME (MST):	08:18
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:37

## ANALYZER:

MAKE/MODEL	Thermo 43iQTL	RANGE	100 ppb
SERIAL #	1191833341	FLOW (mL/min)	428
INITIAL		FINAL	
BKG/OFFSET	12.6	BKG/OFFSET	12.4
COEF/SLOPE	0.896	COEF/SLOPE	0.889
Expected (reference) Value	41.6	Expected (reference) Value	39.4

## CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	701
ID:	1991	ID:	850
MFC CALIBRATION DATE:	23-Mar-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002472	HIGH ID	n/a
CONC (ppm):	9.41	EXPIRY DATE	n/a
CYLINDER (psi):	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:	08:45	SO2 Conc (ppb)	380
END TIME:	09:03	Analyzer Response (ppb)	0.1

## CALIBRATION:

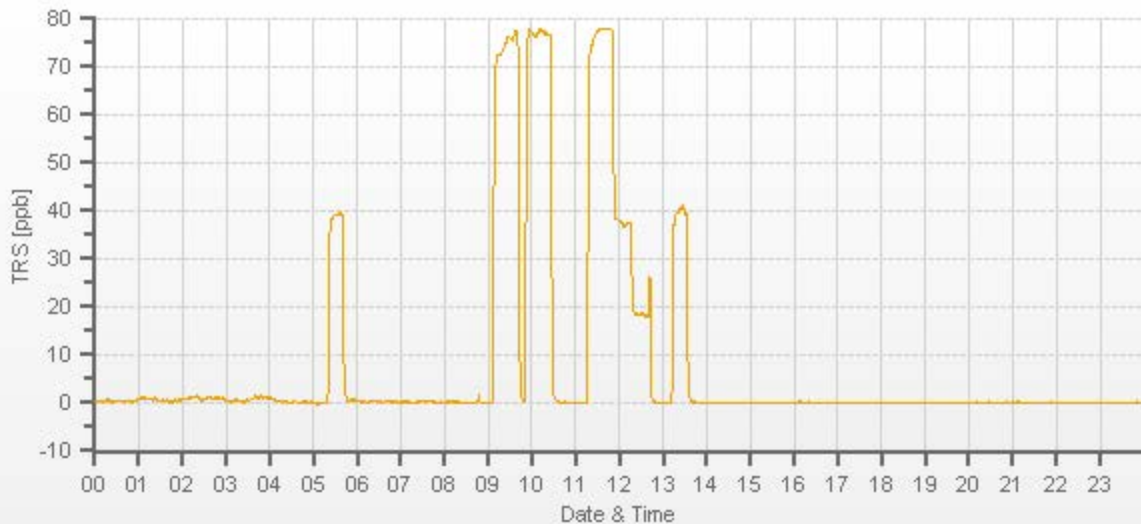
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4001	<del>33.12</del>	4001	0.00	0	0	<del>1.014</del>	<del>1.000</del>
3966	33.12	3999	77.93	76.87	77.94	1.014	1.000
3984	16.17	4000	38.04	n/a	37.62	n/a	1.011
3991	8.09	3999	19.03	n/a	18.34	n/a	1.037

## LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.003	-0.4%

## COMMENTS:

TRS Converter CDNOVA CDN-101 #583. Repeat As-found high due to slow analyzer response.



# Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	08-Sep-2021	PREVIOUS CALIBRATION DATE:	04-Aug-2021	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	23.7		Thermo 55i	1193585652	1265.6
LOCATION:	986C	BAROMETRIC (mBar):	940	PARAMETER:	CH4	NMHC	THC
PURPOSE	Routine	START TIME (MST):	08:19	RANGE (ppm):	20	20	40
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	12:11	PREVIOUS CF:	1.001	0.999	1.000

## CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	API	CYLINDER ID:	LL84567	HIGH ID:	n/a
MODEL:	2010	MODEL:	701	CH <sub>4</sub> /C <sub>3</sub> H <sub>8</sub> (ppm):	591.0   200.0	HIGH EXPIRY:	n/a
ID:	17100415	ID:	850	CYLINDER (psi):	600	LOW ID:	n/a
MFC CALIBRATION DATE:	23-Mar-2021	OXIDIZER ID:	00941	EXPIRY DATE	17-Jul-2027	LOW EXPIRY:	n/a

## CALIBRATION PARAMETERS:

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

## EXPECTED (REFERENCE) VALUE:

INITIAL	CH <sub>4</sub>	NMHC	THC	FINAL	CH <sub>4</sub>	NMHC	THC
	9.47	10.96	20.42		9.07	10.70	19.77

## CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC
3198	<del>X</del>	3198	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>
3122	78.50	3200	14.50	13.49	27.99	14.71	13.29	28.00	14.49	13.49	27.98	0.986	1.015	1.000	1.001	1.000	1.000
3159	39.30	3198	7.26	6.76	14.02	n/a	n/a	n/a	7.23	6.84	14.07	n/a	n/a	n/a	1.005	0.988	0.997
3180	19.60	3200	3.62	3.37	6.99	n/a	n/a	n/a	3.60	3.45	7.06	n/a	n/a	n/a	1.006	0.976	0.990

## LINEAR REGRESSION ANALYSIS:

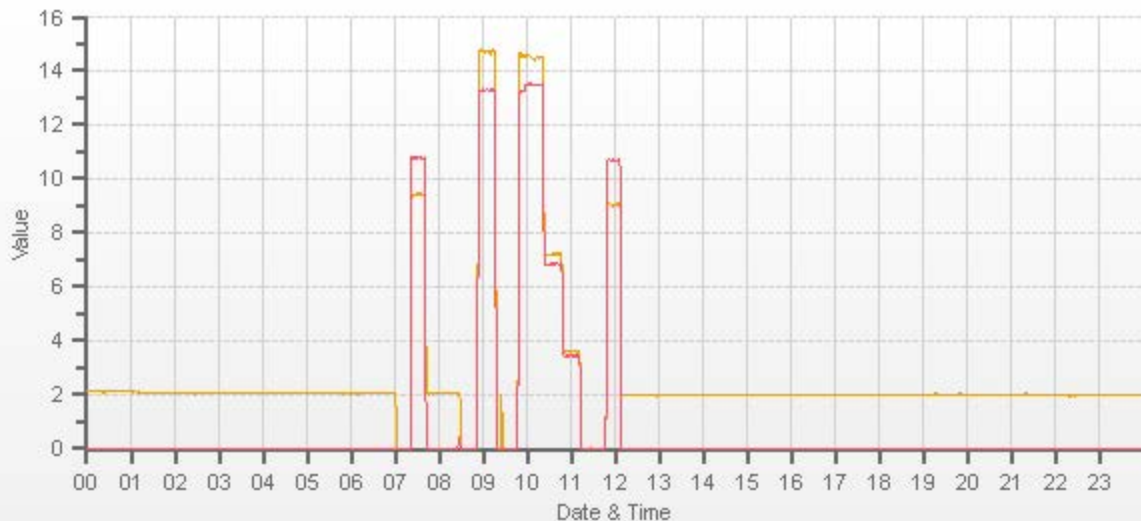
	CORRELATION	SLOPE	INTERCEPT
CH <sub>4</sub>	1.000	1.000	-0.1%
NMHC	1.000	0.998	0.2%
THC	1.000	0.999	0.1%

## Comments:

Sample filter changed. Monthly calibration - no issues.  
Analyzer fan filter cleaned.

Use Zero Chrom?

No



CAL-PRAMP-202109-01562

# Meteorological System Checklist



Date:	September 2, 2021
Technician:	Chris Wesson
Station:	PRAMP 986c

Unit:	Make:	Model:	Serial #:
Precipitation Sampler:	RM Young	52202	TB 16325

### PRECIPITATION SENSOR CHECK

Checklist:	Reply:	Comments:
Previous check date:	August 4, 2021	
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
<b>10</b>	1.0	0.00

Comments

Tested RMY52202. Tipping bucket working OK but not all tips counted by RMY32400.  
 Disconnected EML ARG100 #190114 from ADAM. Reconfigured channel, connected and tested RM Young 52202 #TB16325 via ADAM. No further issues  
 Start at 10:55, end at 12:33 (not all flags correct)



# Meteorological System Checklist



Date:	September 8, 2021
Technician:	Ferdinand Roy
Station:	PRAMP 986c

Unit:	Make:	Model:	Serial #:
Precipitation Sampler:	RM Young	52202	TB 16325
Temperature Sensor:	Rotronic	HC2-S3	20357528
Barometric Pressure Sensor:	MetOne	092	Y23358
Relative Humidity Sensor:	Rotronic	HC2-S3	20357528
Anemometer:	RM Young	05305L	174795

### PRECIPITATION SENSOR CHECK

Checklist:	Reply:	Comments:
Previous check date:	September 2, 2021	
Is the sensor Level?	yes	
Is the heater operating properly?	other - see comments	plugged-in but OFF - high ambient temperature
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
<b>10</b>	1.0	0.00

### AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	August 4, 2021	
Parameter:	Temperature @ 2 metres	
Reference Thermometer ID:	F.S. 160348895 expires Sep 4, 2022	
Reference Temperature (°C):	17.9	
Station - Ambient Temperature (°C):	17.6	
Temperature Difference (°C):	0.3	

### BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	August 4, 2021	
Reference Barometer ID:	FS 10528 expires Feb 17, 2022	
Reference Pressure - Units/Reading:	millibar	939
Station Pressure - Units/Reading:	millibar	939.9
Pressure Tolerance +/- 15% of error:	798 - 1080	-0.10%

### RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	August 4, 2021	
Reference Hygrometer ID:	F.S. 160348895 expires Sep 4, 2022	
Reference Hygrometer % RH- Reading:	51.56	
Station Hygrometer % RH- Reading:	55.00	
RH Tolerance +/- 15% of difference:	43.83 - 59.29	-6.7%

### ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	August 4, 2021	Previous check date:	August 4, 2021
Wind Speed Observed (kph):	10~20	Wind Direction Observed:	SE
Wind speed on Data Logger (kph):	14.6	Wind Direction on Data Logger:	SE
		Wind Direction Pass/Fail?:	Pass

Comments

No issues.



# Meteorological Sensor Audit/Calibration

## Location Information

Company: PRAMP  
 Audit Location: 986C  
 Audit Date: July 3, 2021  
 Calibration Purpose: routine annual

Performed By: Limin Li  
 Reviewed By: Chris Wesson  
 Start/End Time (mst): 15:58 / 17:20  
 Weather Conditions: Mainly cloudy with sunny breaks

## Wind Sensor Information

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

## Wind Calibrator Information

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

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

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

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

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

## Comments:

Magnetic declination = 15Deg(E)



## **Peace River Area Monitoring Program**

# **SEPTEMBER 2021**

## **Ambient Air Monitoring Calibration Report**

### **- RENO STATION-**

### **CAL-PRAMP-202109-01563**

**Operation and Maintenance:**

Bureau Veritas Canada

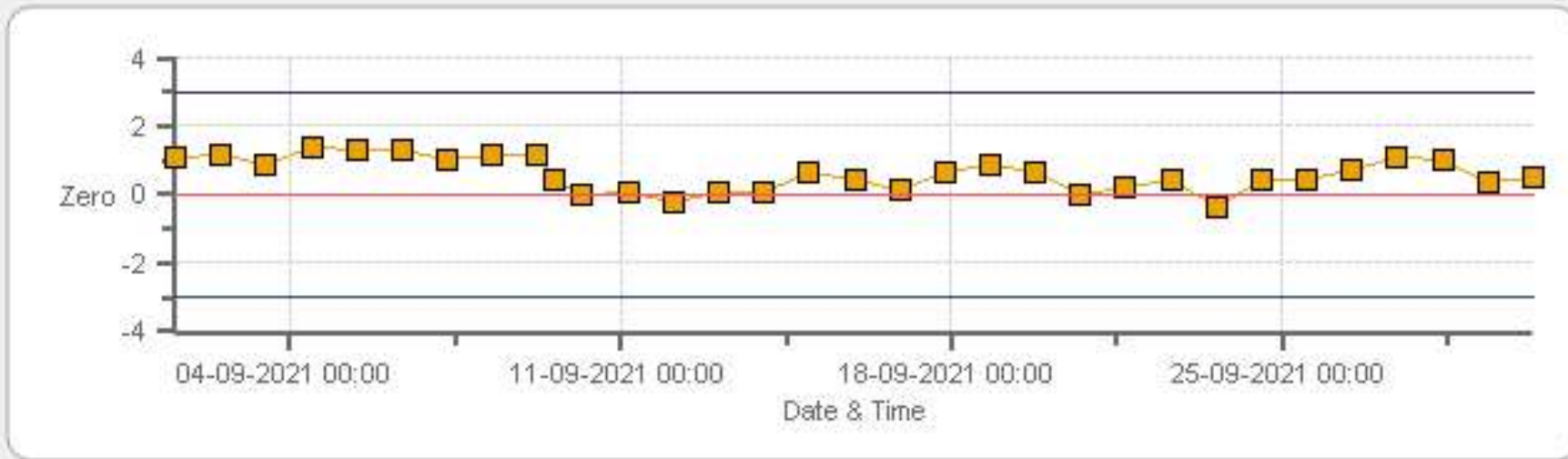
**Data Validation and Report:**

Bureau Veritas Canada

October 20, 2021

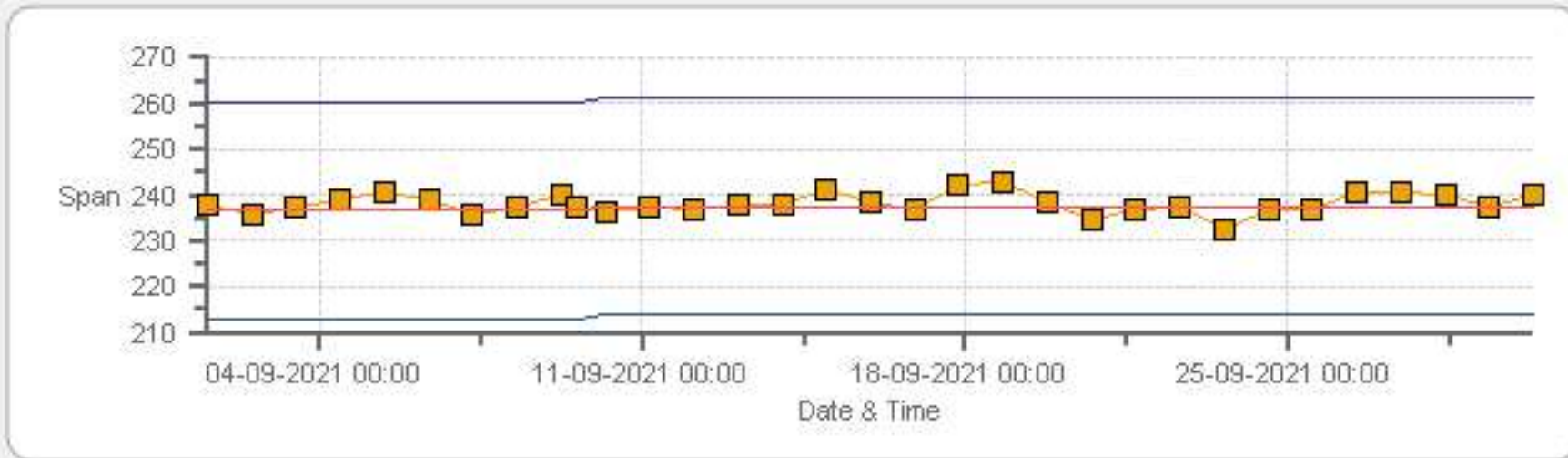
# DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: PRAMP RENO Monthly: 09-2021 Type: SpanAndZero - Zero



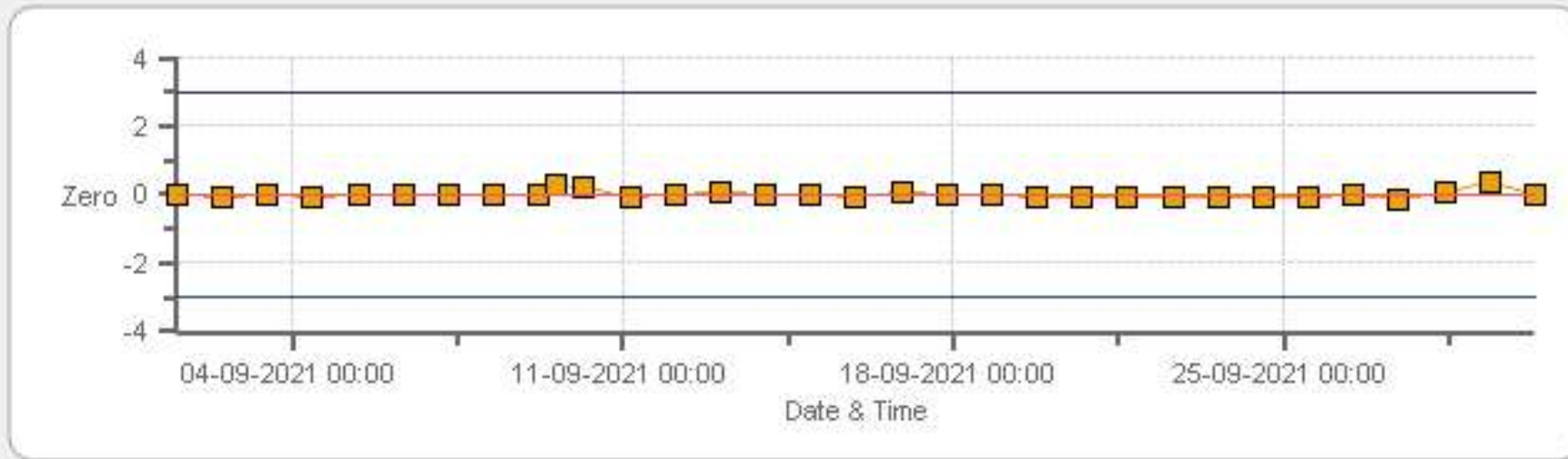
■ Zero    
 — Zero Ref    
 — Zero Low    
 — Zero High

SO2[ppb] Calibration: PRAMP RENO Monthly: 09-2021 Type: SpanAndZero - Span



■ Span    
 — SpanRef    
 — Span Low    
 — Span High

TRS[ppb] Calibration: PRAMP RENO Monthly: 09-2021 Type: SpanAndZero - Zero



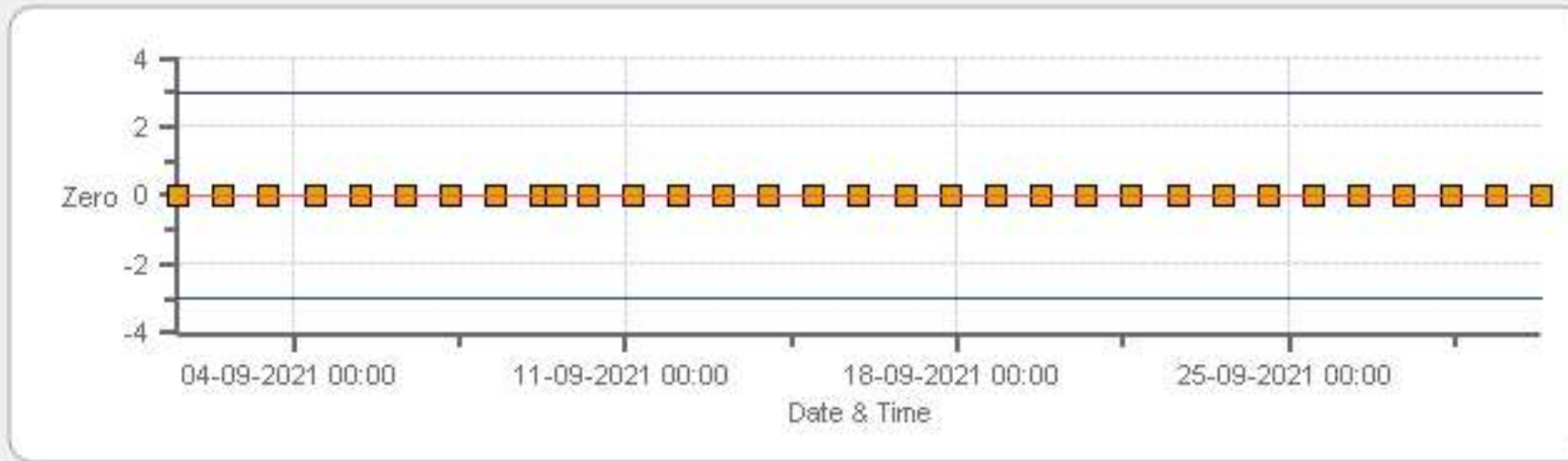
Zero Zero Ref Zero Low Zero High

TRS[ppb] Calibration: PRAMP RENO Monthly: 09-2021 Type: SpanAndZero - Span



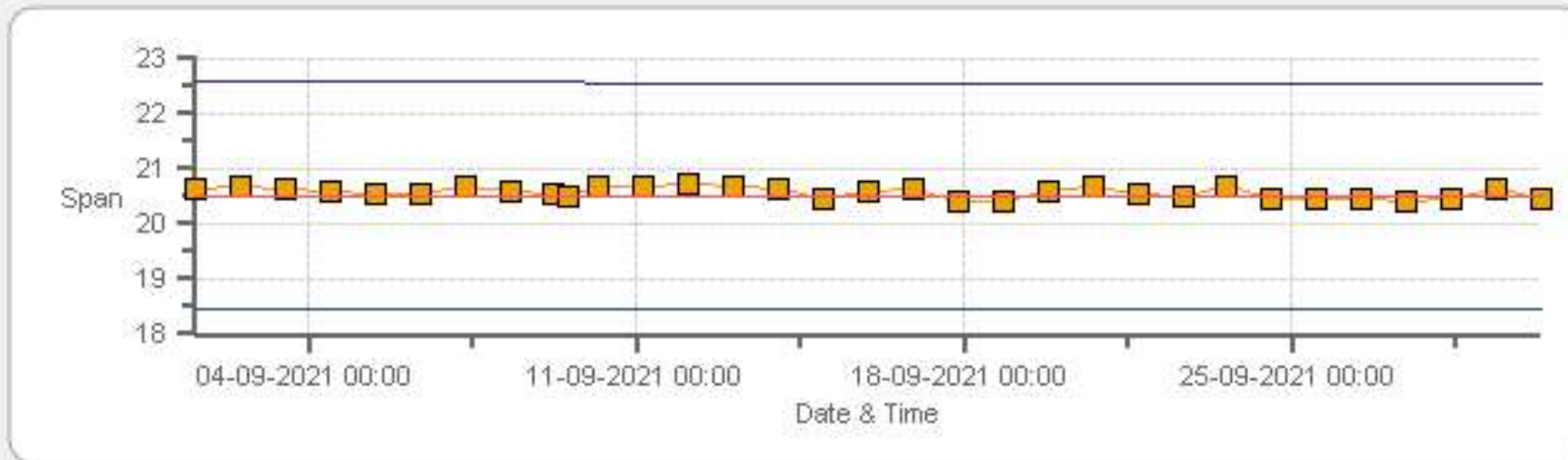
Span Span Ref Span Low Span High

THC55[ppm] Calibration: PRAMP RENO Monthly: 09-2021 Type: SpanAndZero -Zero



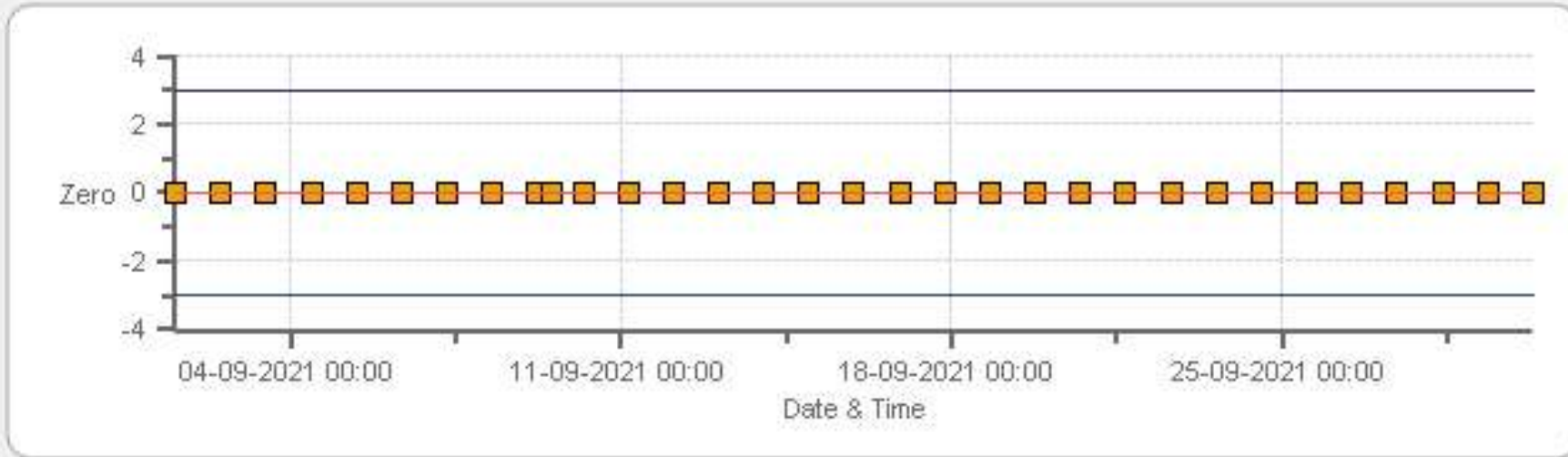
Zero Zero Ref Zero Low Zero High

THC55[ppm] Calibration: PRAMP RENO Monthly: 09-2021 Type: SpanAndZero -Span



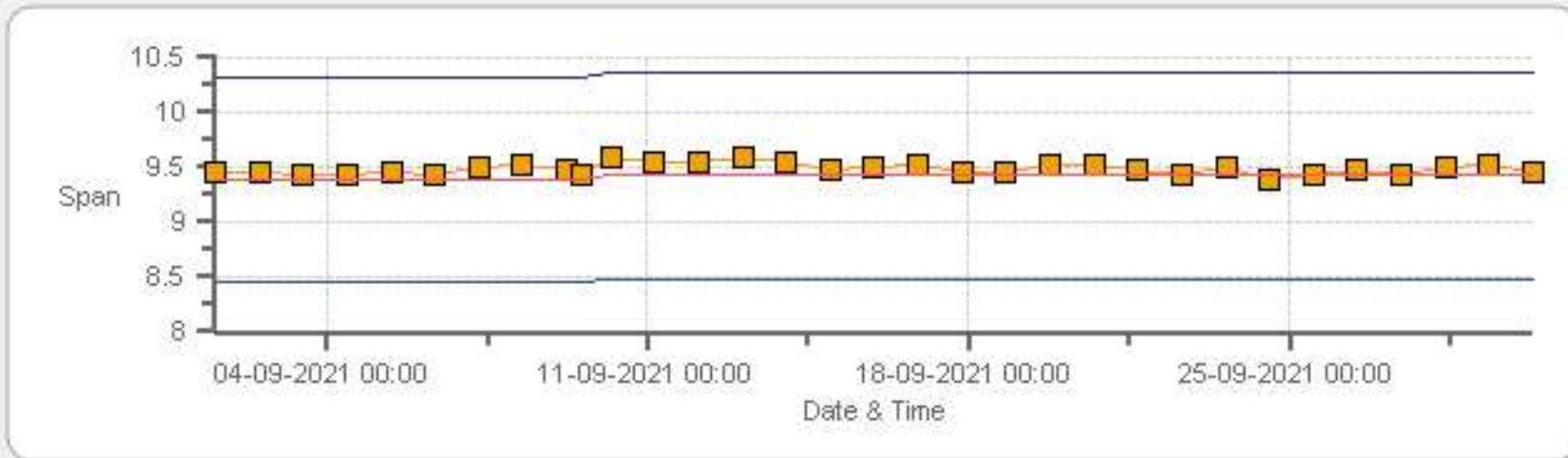
Span Span Ref Span Low Span High

CH4[ppm] Calibration: PRAMP RENO Monthly: 09-2021 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

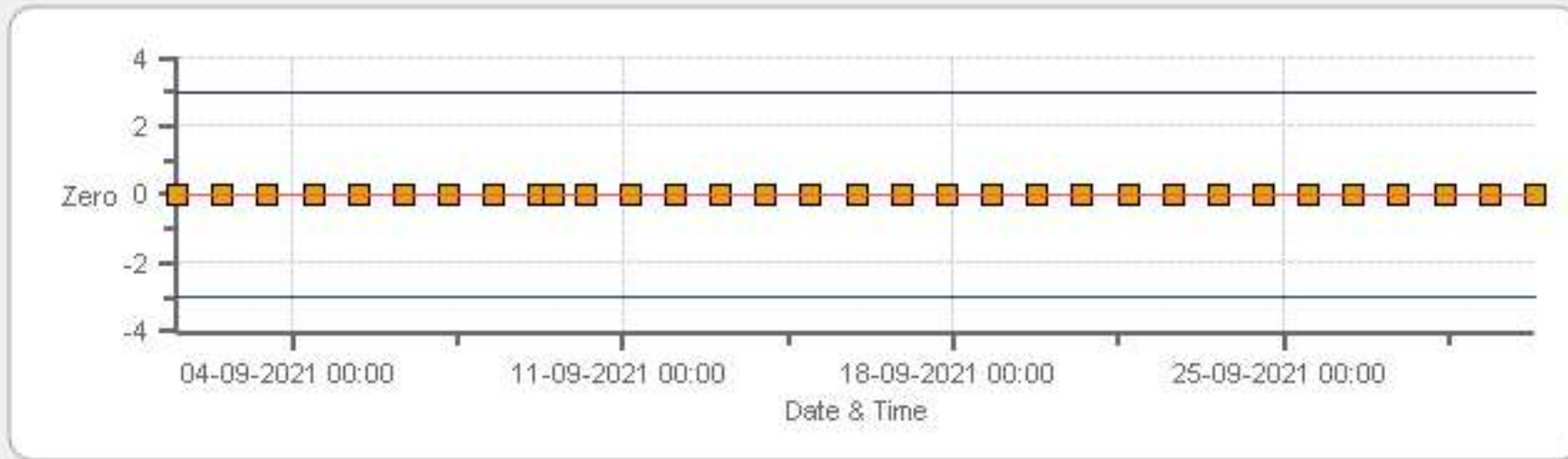
CH4[ppm] Calibration: PRAMP RENO Monthly: 09-2021 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

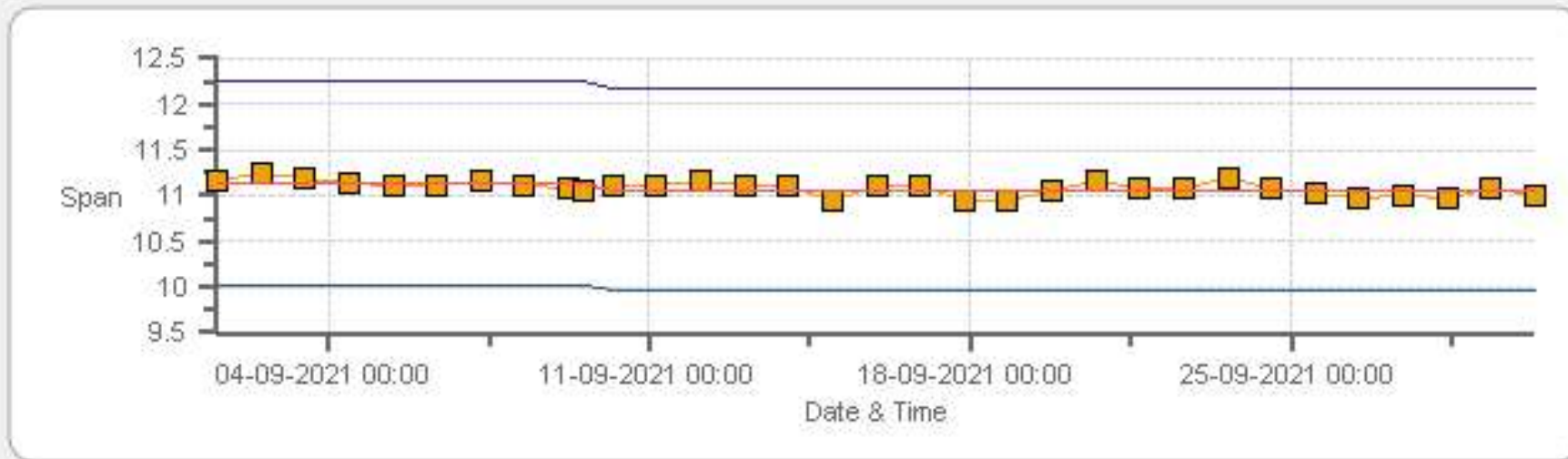


NMHC[ppm] Calibration: PRAMP RENO Monthly: 09-2021 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: PRAMP RENO Monthly: 09-2021 Type: SpanAndZero - Span



Span SpanRef Span Low Span High

# MULTI-POINT CALIBRATION RECORDS

# SO2 Analyzer Calibration by Dilution



DATE:	09-Sep-2021	PREVIOUS CALIBRATION DATE:	20-Aug-2021
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	24.4
LOCATION:	Reno	BAROMETRIC (mBar):	932
PURPOSE:	Routine	START TIME (MST):	08:58
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	14:11

## ANALYZER:

MAKE/MODEL	API 100A	RANGE	500 ppb
SERIAL #	1502	FLOW (mL/min)	651
INITIAL		FINAL	
BKG/OFFSET	84.8	BKG/OFFSET	86.9
COEF/SLOPE	1.048	COEF/SLOPE	1.046
Expected (reference) Value	236.5	Expected (reference) Value	237.3

## CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	701
ID:	1991	ID:	850
MFC CALIBRATION DATE:	23-Mar-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002357	HIGH ID	n/a
CONC (ppm):	24.90	EXPIRY DATE	n/a
CYLINDER (psi):	1200	LOW ID	n/a
EXPIRY DATE	13-Nov-2024	EXPIRY DATE	n/a

## CALIBRATION PARAMETERS:

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

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

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

## CALIBRATION:

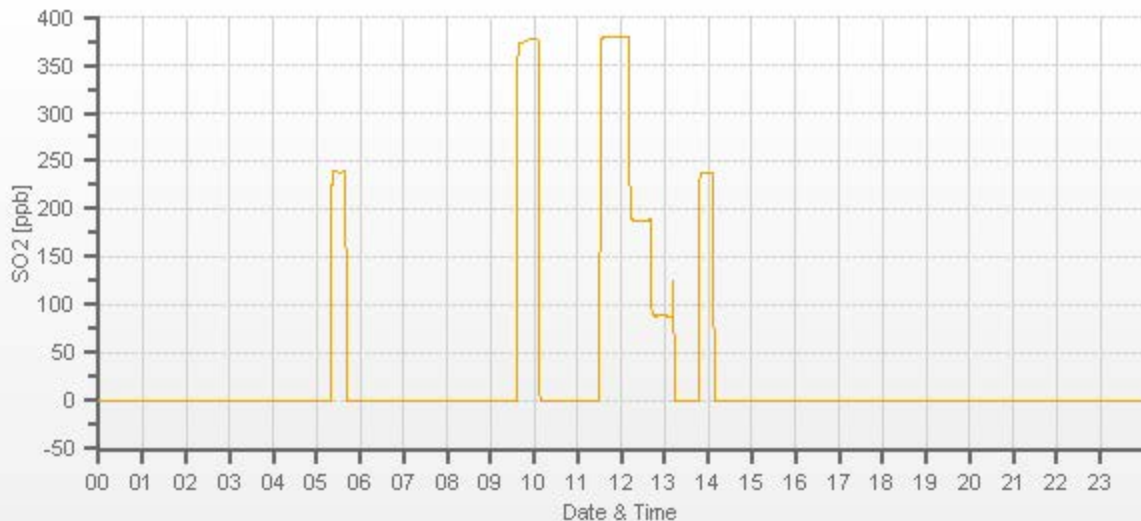
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4001	<del>61.00</del>	4001	0.00	1	0	<del>1.005</del>	<del>1.000</del>
3939	61.00	4000	379.73	378.8	379.7	1.005	1.000
3970	30.50	4000	189.87	n/a	189	n/a	1.005
3986	14.43	4001	89.80	n/a	88.7	n/a	1.012

## LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	-0.1%

## COMMENTS:

Sample filter changed. Monthly calibration - no issues.



# TRS Analyzer Calibration by Dilution



DATE:	09-Sep-2021	PREVIOUS CALIBRATION DATE:	20-Aug-2021
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.001
CLIENT:	PRAMP	TEMPERATURE (°C):	24.4
LOCATION:	Reno	BAROMETRIC (mBar):	932
PURPOSE:	Routine	START TIME (MST):	08:57
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	14:11

## ANALYZER:

MAKE/MODEL	Thermo 43I-TLE	RANGE	100 ppb
SERIAL #	1162460022	FLOW (mL/min)	405
INITIAL		FINAL	
BKG/OFFSET	2.94	BKG/OFFSET	2.98
COEF/SLOPE	0.985	COEF/SLOPE	0.998
Expected (reference) Value	42.6	Expected (reference) Value	43.52

## CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	701
ID:	1991	ID:	850
MFC CALIBRATION DATE:	23-Mar-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002472	HIGH ID	n/a
CONC (ppm):	9.41	EXPIRY DATE	n/a
CYLINDER (psi):	1410	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:

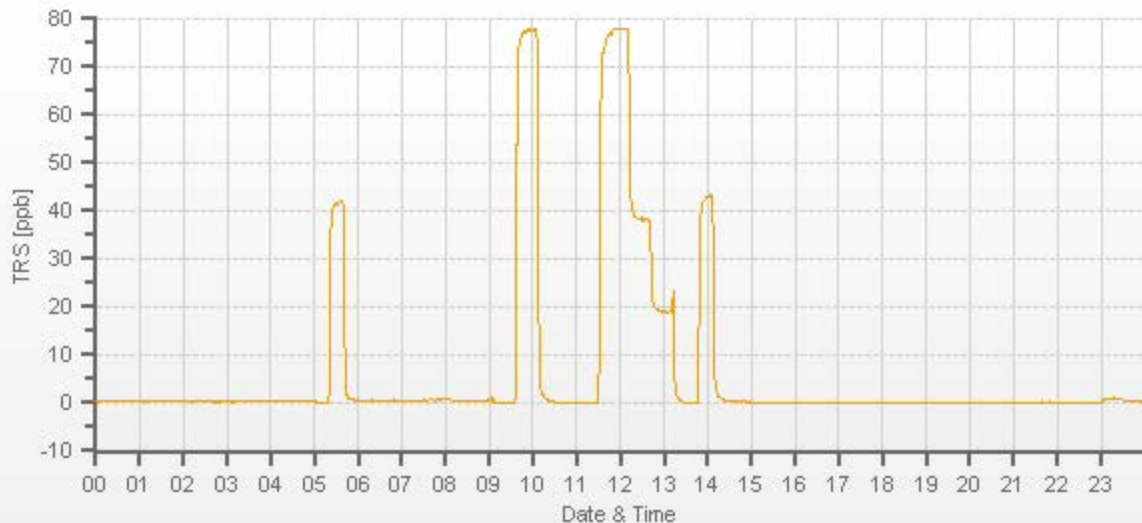
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4001	<del>33.20</del>	4001	0.00	0.01	0	<del>1.001</del>	<del>1.000</del>
3967	33.20	4000	78.10	77.99	78.08	1.001	1.000
3984	16.17	4000	38.03	n/a	38.48	n/a	0.988
3993	8.08	4001	19.01	n/a	19.26	n/a	0.987

## LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.999	0.2%

## COMMENTS:

Sample filter changed.  
 Monthly calibration - no issues.  
 TRS Converter CDNOVA CDN-101 #552  
 Analyzer fan filter cleaned.



# Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	09-Sep-2021	PREVIOUS CALIBRATION DATE:	20-Aug-2021	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	22.8		Thermo 55i	1505664392	1129.1
LOCATION:	Reno	BAROMETRIC (mBar):	932	PARAMETER:	CH4	NMHC	THC
PURPOSE	Routine	START TIME (MST):	09:10	RANGE (ppm):	20	20	40
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	12:59	PREVIOUS CF:	0.999	0.999	0.999

## CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	API	CYLINDER ID:	LL84567	HIGH ID:	n/a
MODEL:	2010	MODEL:	701	CH <sub>4</sub> /C <sub>3</sub> H <sub>8</sub> (ppm):	591.0   200.0	HIGH EXPIRY:	n/a
ID:	17100415	ID:	850	CYLINDER (psi):	600	LOW ID:	n/a
MFC CALIBRATION DATE:	23-Mar-2021	OXIDIZER ID:	00941	EXPIRY DATE	17-Jul-2027	LOW EXPIRY:	n/a

## CALIBRATION PARAMETERS:

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

## EXPECTED (REFERENCE) VALUE:

INITIAL	CH <sub>4</sub>	NMHC	THC	FINAL	CH <sub>4</sub>	NMHC	THC
	9.39	11.13	20.52		9.43	11.06	20.49

## CALIBRATION:

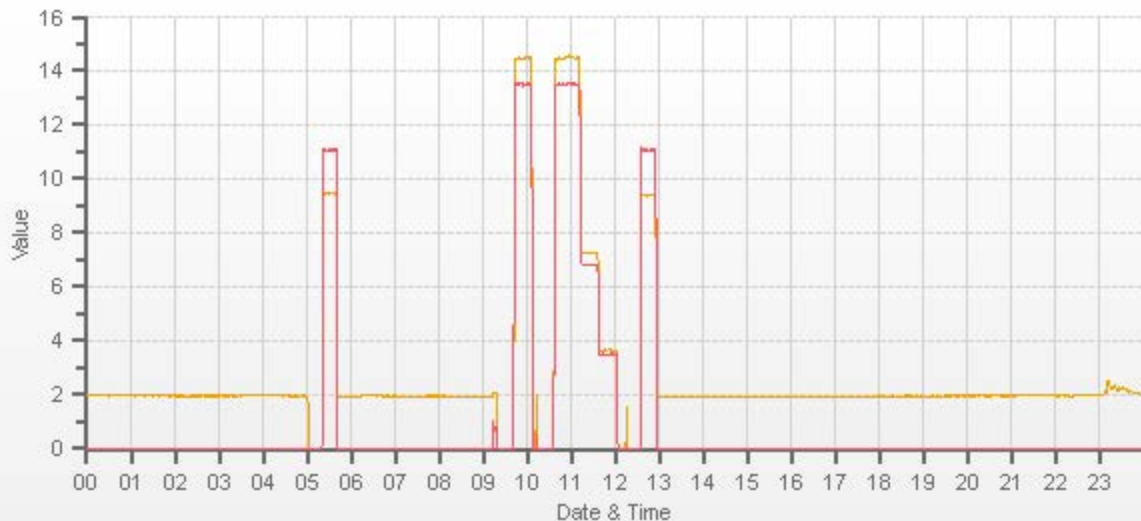
FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC
2999	<del>X</del>	2999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>
2924	73.60	2998	14.51	13.50	28.01	14.50	13.50	28.01	14.48	13.49	27.97	1.001	1.000	1.000	1.002	1.001	1.001
2960	36.80	2997	7.26	6.75	14.01	n/a	n/a	n/a	7.29	6.83	14.12	n/a	n/a	n/a	0.995	0.989	0.992
2980	18.40	2998	3.63	3.38	7.00	n/a	n/a	n/a	3.65	3.51	7.15	n/a	n/a	n/a	0.994	0.962	0.979

## LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
CH <sub>4</sub>	1.000	0.998	0.1%
NMHC	1.000	0.996	0.4%
THC	1.000	0.997	0.2%

## Comments:

Sample filter changed. Monthly calibration - no issues. Analyzer fan filter cleaned.	
Use Zero Chrom?	No



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CH4 [ppm] NMHC [ppm]



# Meteorological System Checklist



Date:	September 9, 2021
Technician:	Ferdinand Roy
Station:	PRAMP Reno

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

### PRECIPITATION SENSOR CHECK

Checklist:	Reply:	Comments:
Previous check date:	August 20, 2021	
Is the heater operating properly?	yes	
Are the bucket drain holes clean?	yes	
Is the housing clean?	yes	
Is the area around the housing clean and free from obstacles?	yes	

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

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

### AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	August 20, 2021
Parameter:	Temperature @ 2 metres
Reference Thermometer ID:	FS 160348895 expires September 4, 2022
Reference Temperature (°C):	13.6
Station - Ambient Temperature (°C):	12.9
Temperature Difference (°C):	0.7

### BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	August 20, 2021
Reference Barometer ID:	FS 10528 expires February 17, 2022
Reference Pressure - Units/Reading:	millibar 932
Station Pressure - Units/Reading:	millibar 934.7
Pressure Tolerance +/- 15% of error:	792 - 1072 -0.29%

### RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	August 20, 2021
Reference Hygrometer ID:	FS 160348895 expires September 4, 2022
Reference Hygrometer % RH- Reading:	79.06
Station Hygrometer % RH- Reading:	82.60
RH Tolerance +/- 15% of difference:	67.20 - 90.92 -4.5%

### ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	August 20, 2021	Previous check date:	August 20, 2021
Wind Speed Observed (kph):	5~10	Wind Direction Observed:	SW
Wind speed on Data Logger (kph):	6.8	Wind Direction on Data Logger:	SW
		Wind Direction Pass/Fail?:	Pass

Comments



# Meteorological Sensor Audit/Calibration

## Location Information

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

## Wind Sensor Information

Sensor ID Data:		Sensor Outputs:	
Sensor Make:	RM Young	Velocity Voltage Output Range:	0-1
Sensor Model:	05305VK	Velocity Unit Output Range:	0-200
Serial #:	149769	Direction Voltage Output Range:	0-1
Previous Cal/Audit Date:	June 17, 2020	Direction Unit Output Range:	0-360

## Wind Calibrator Information

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

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

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.0	0.0	-
1000	18.4	18.4	18.4	1.002
2000	36.9	36.8	36.8	1.002
3000	55.3	55.2	55.2	1.002
4000	73.7	73.6	73.6	1.002
5000	92.2	92.2	92.2	0.999
6000	110.6	110.6	110.6	1.000
7000	129.0	129.2	129.2	0.999
8000	147.4	147.6	147.6	0.999
9000	165.9	166.2	166.2	0.998
10000	184.3	184.8	184.8	0.997
<b>The audit meets AMD requirements.</b>			<b>Average Correction Factor=</b>	<b>1.000</b>

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

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	1	354	1.0	1.0	1.0
30	330	32	329	-2.0	1.0	1.5
60	300	62	300	-2.0	0.0	1.0
90	270	93	270	-3.0	0.0	1.5
120	240	122	240	-2.0	0.0	1.0
150	210	152	211	-2.0	-1.0	1.5
180	180	182	181	-2.0	-1.0	1.5
210	150	212	151	-2.0	-1.0	1.5
240	120	241	121	-1.0	-1.0	1.0
270	90	270	91	0.0	-1.0	0.5
300	60	300	61	0.0	-1.0	0.5
330	30	329	31	1.0	-1.0	1.0
355	0	354	0	1.0	0.0	0.5
<b>The audit meets AMD requirements.</b>				<b>Average Absolute Degrees Difference=</b>		<b>1.1</b>

## Comments:

Bearings replaced. Declination = 15deg East



## Peace River Area Monitoring Program

# SEPTEMBER 2021

## Ambient Air Monitoring Calibration Report

### - AQHI - CADOTTE LAKE STATION-

**CAL-PRAMP-202109-01651**

#### **Operation and Maintenance:**

Bureau Veritas Canada

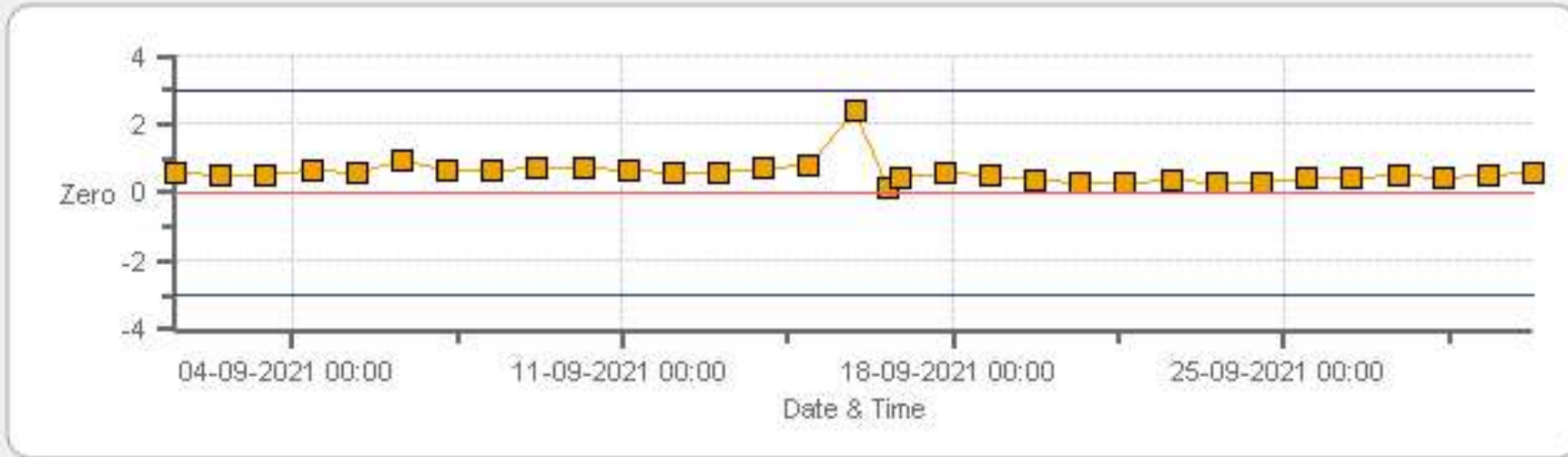
#### **Data Validation and Report:**

Bureau Veritas Canada

October 20, 2021

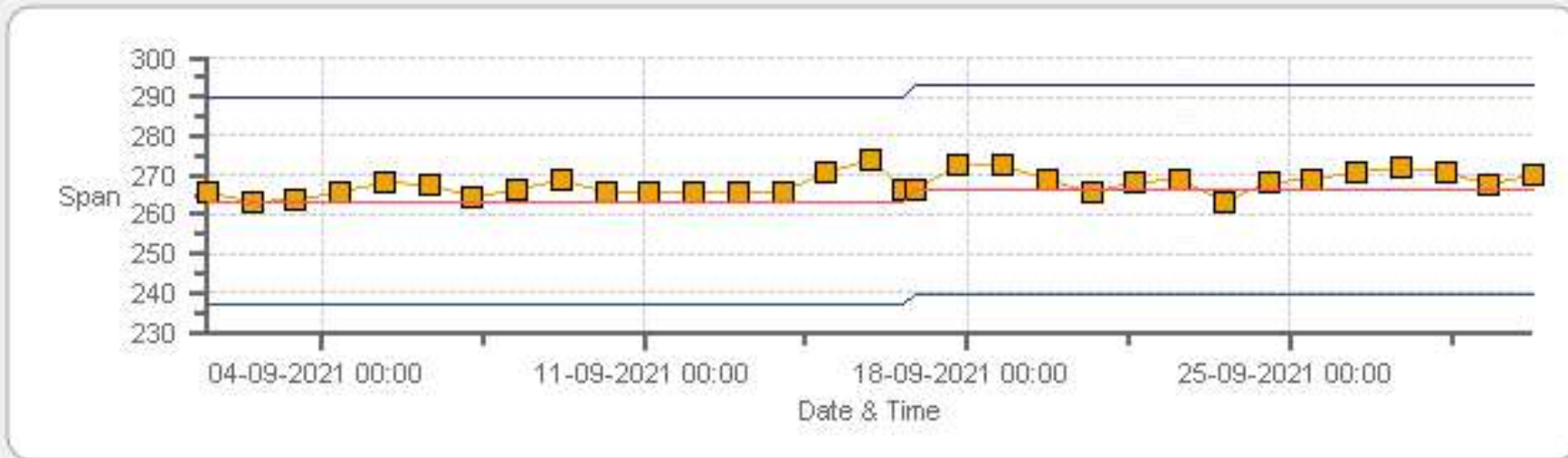
# DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2[ppb] Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Zero



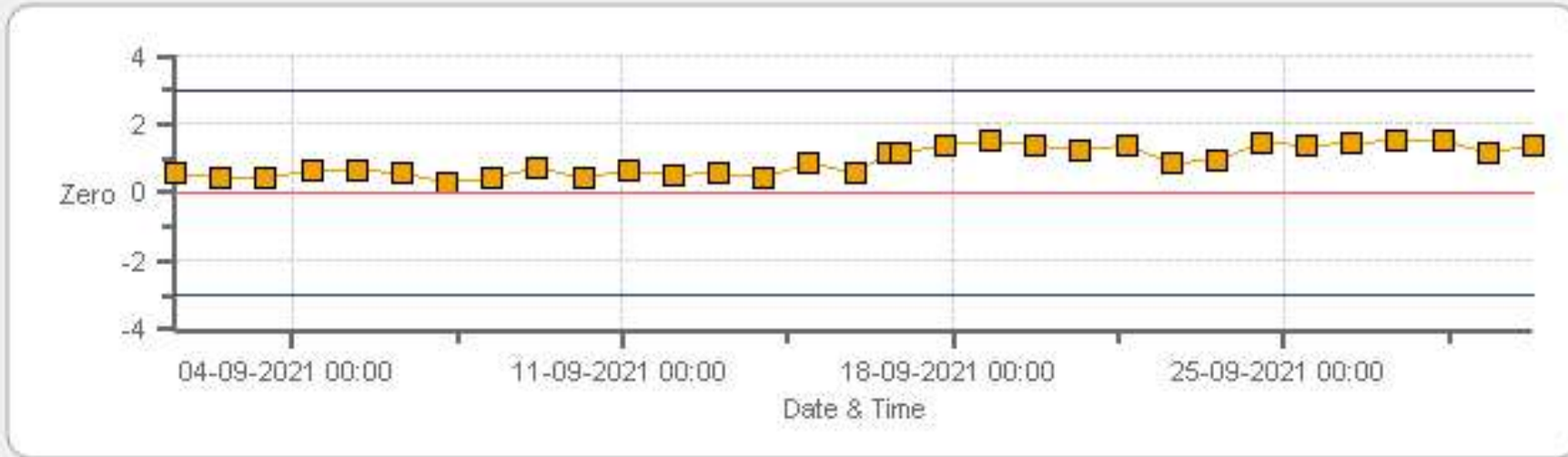
Zero Zero Ref Zero Low Zero High

SO2[ppb] Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Span



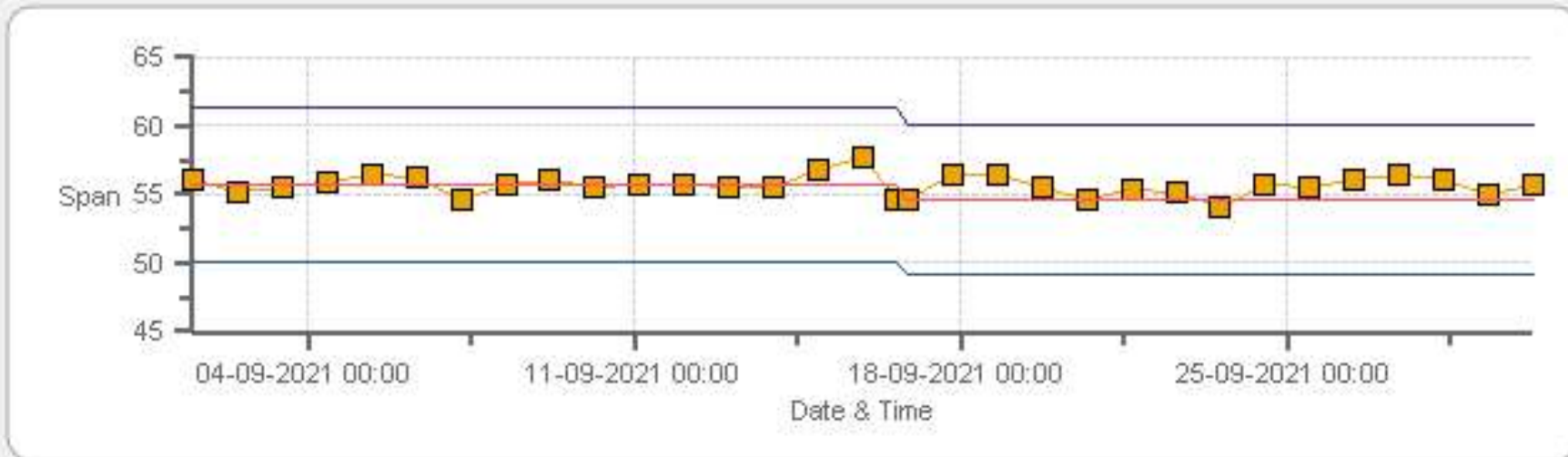
Span SpanRef Span Low Span High

TRS[ppb] Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Zero



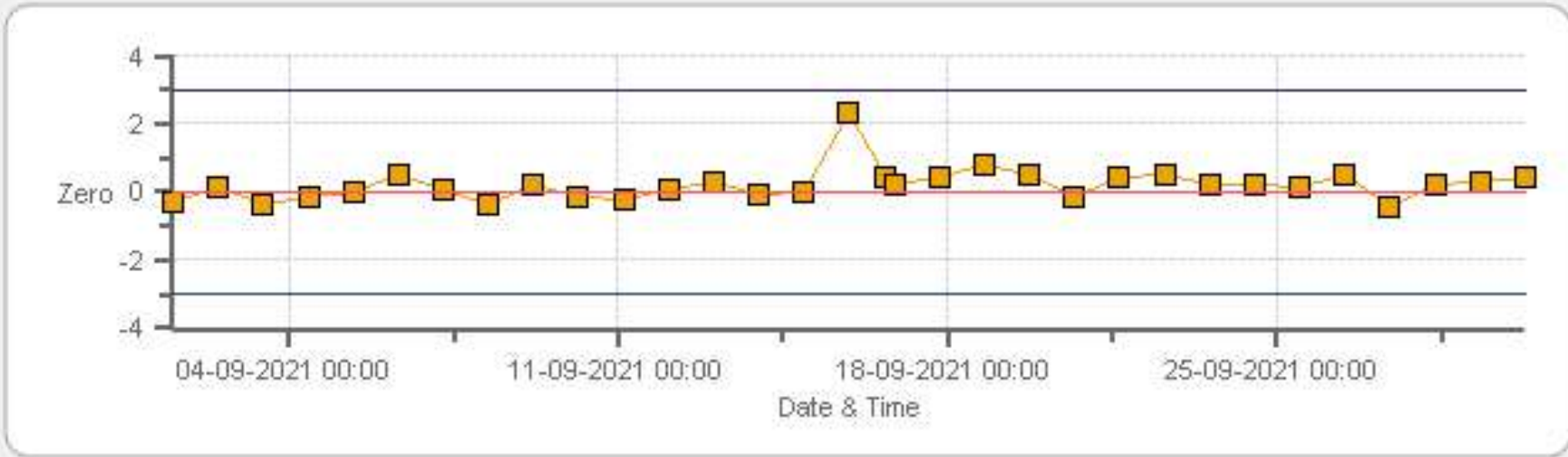
Zero Zero Ref Zero Low Zero High

TRS[ppb] Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Span



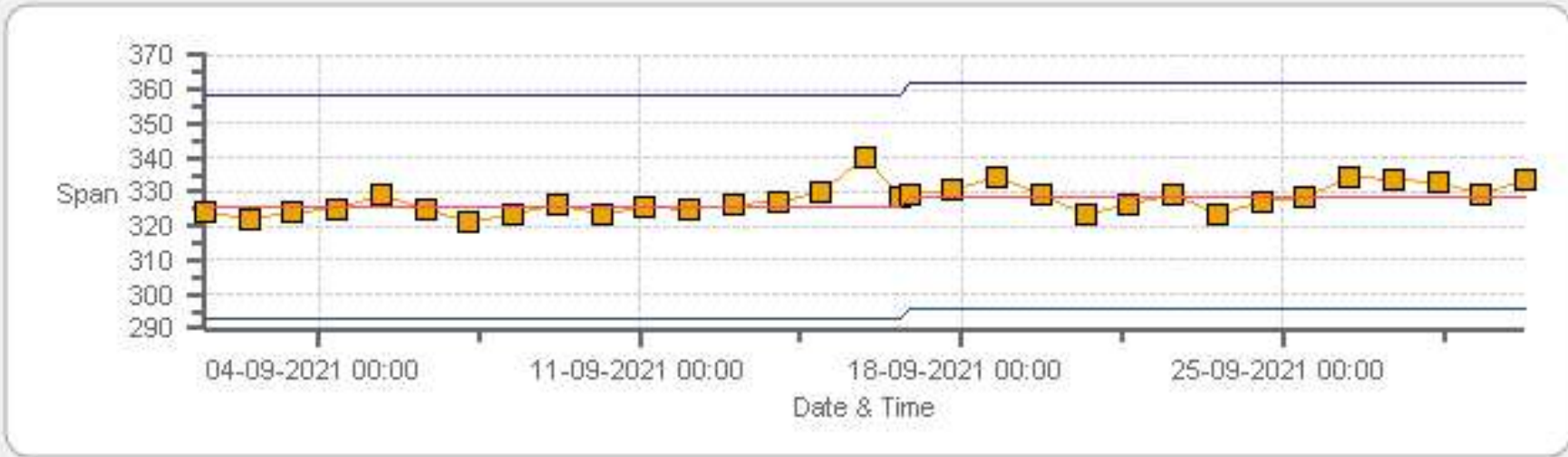
Span SpanRef Span Low Span High

NOX[ppb] Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Zero



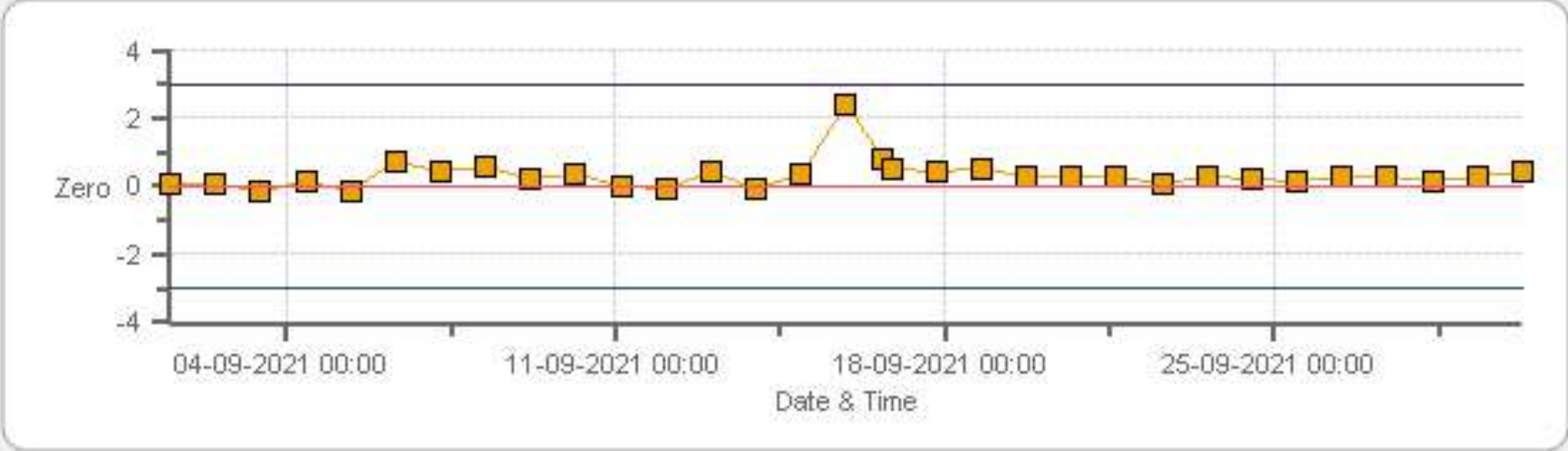
Zero Zero Ref Zero Low Zero High

NOX[ppb] Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Span



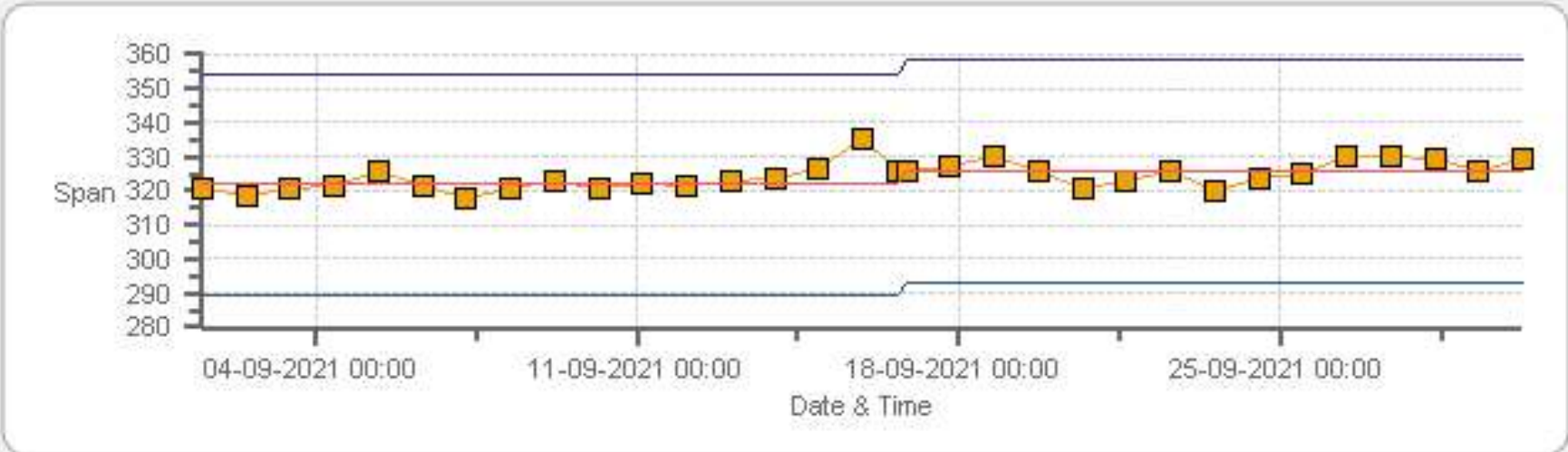
Span SpanRef Span Low Span High

NO2[ppb] Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Zero



■ Zero    
 — Zero Ref    
 — Zero Low    
 — Zero High

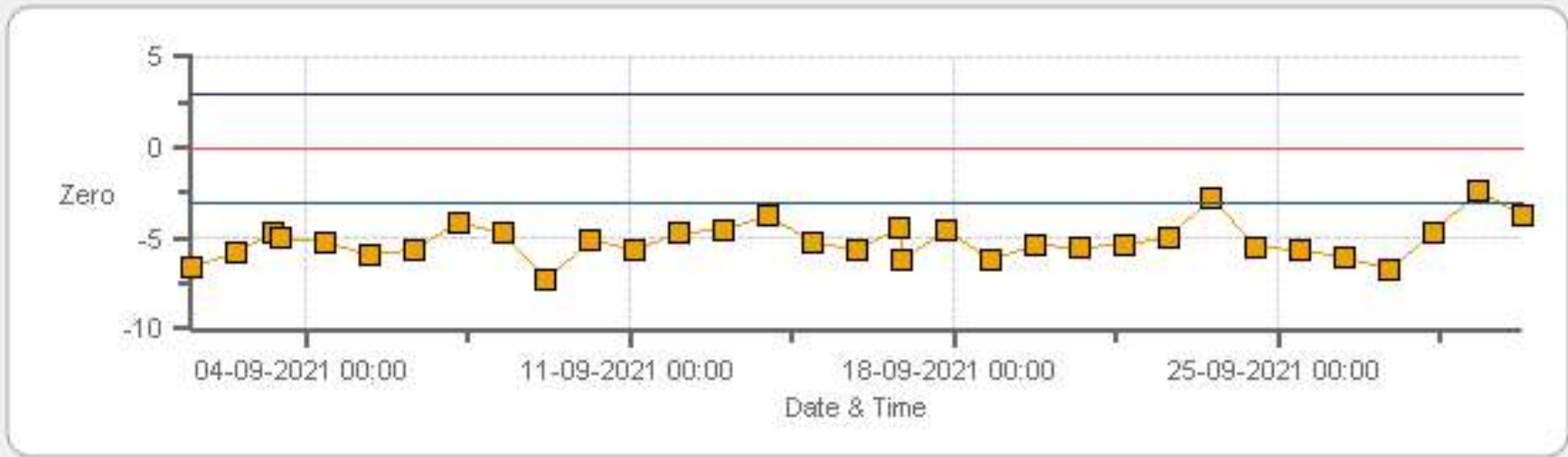
NO2[ppb] Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Span



■ Span    
 — SpanRef    
 — Span Low    
 — Span High



O3[ppb] Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Zero



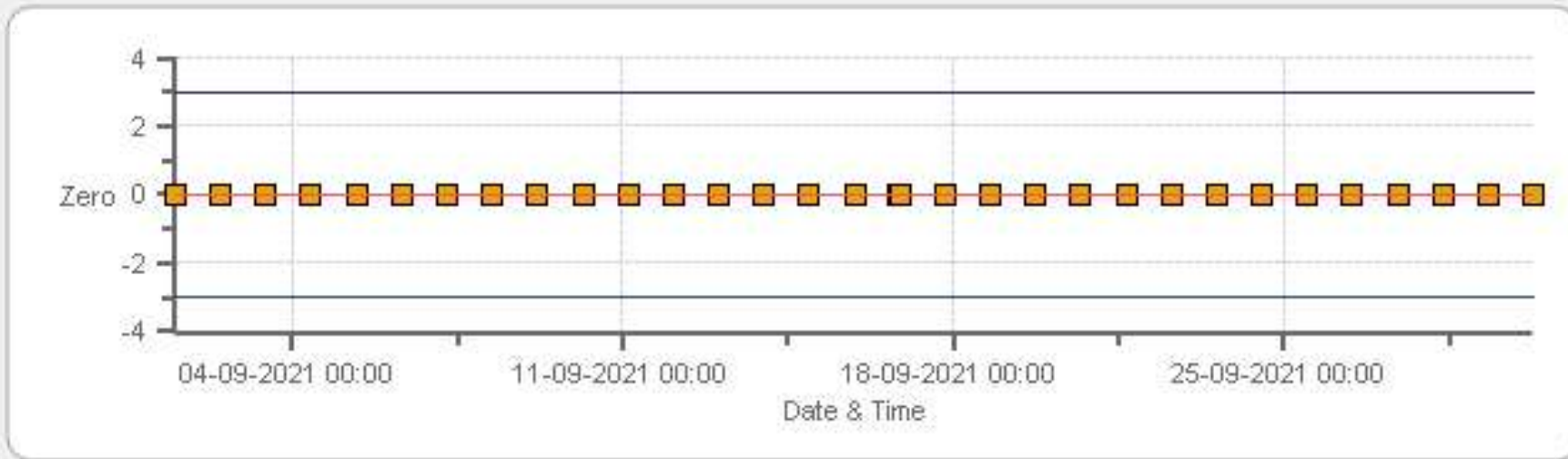
Zero Zero Ref Zero Low Zero High

O3[ppb] Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Span



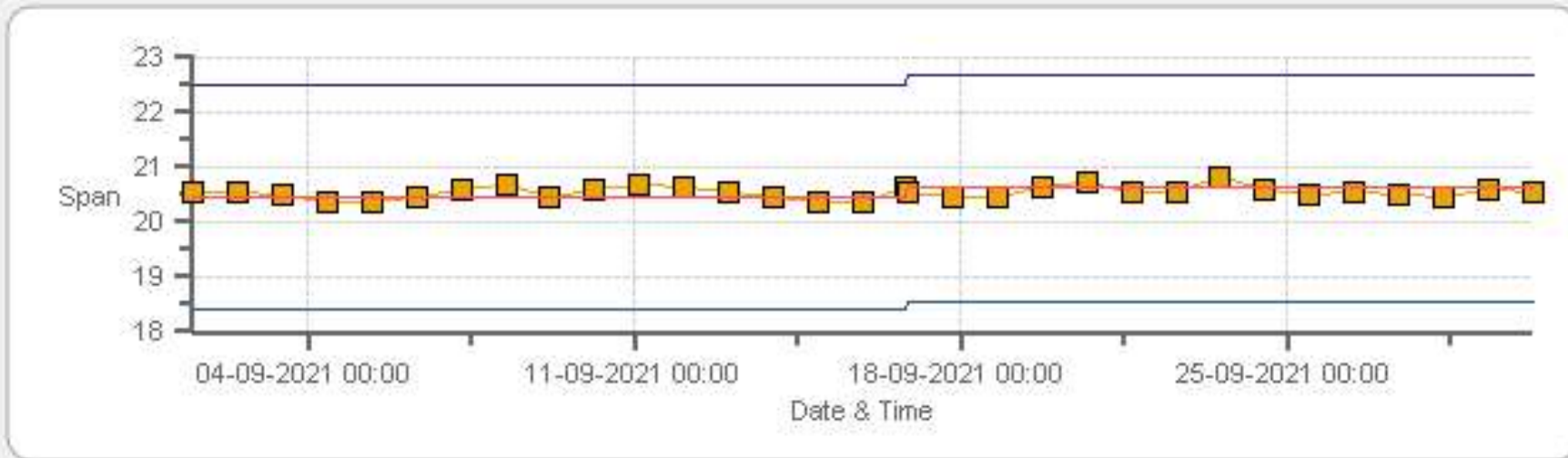
Span SpanRef Span Low Span High

THC55(ppm) Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Zero



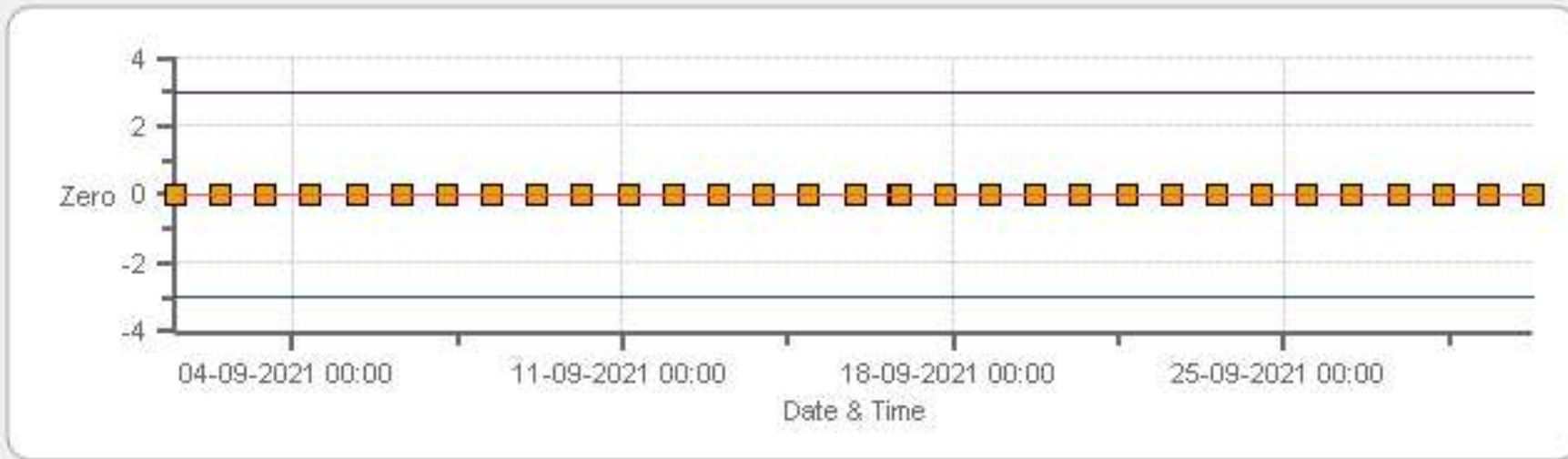
Zero Zero Ref Zero Low Zero High

THC55(ppm) Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Span



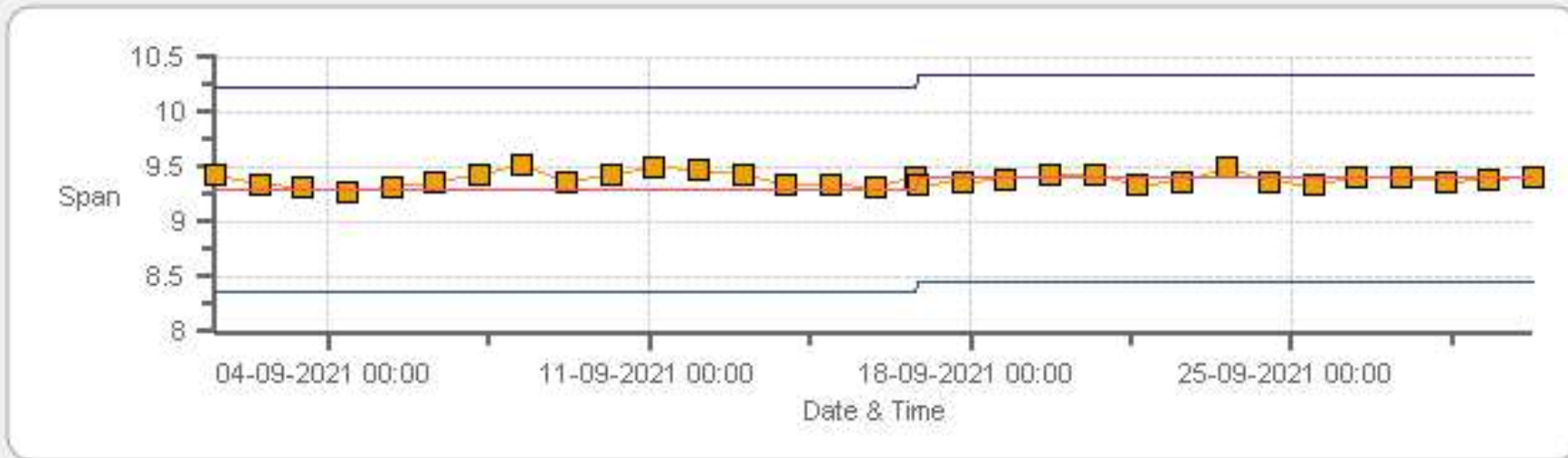
Span Span Ref Span Low Span High

CH4[ppm] Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Zero



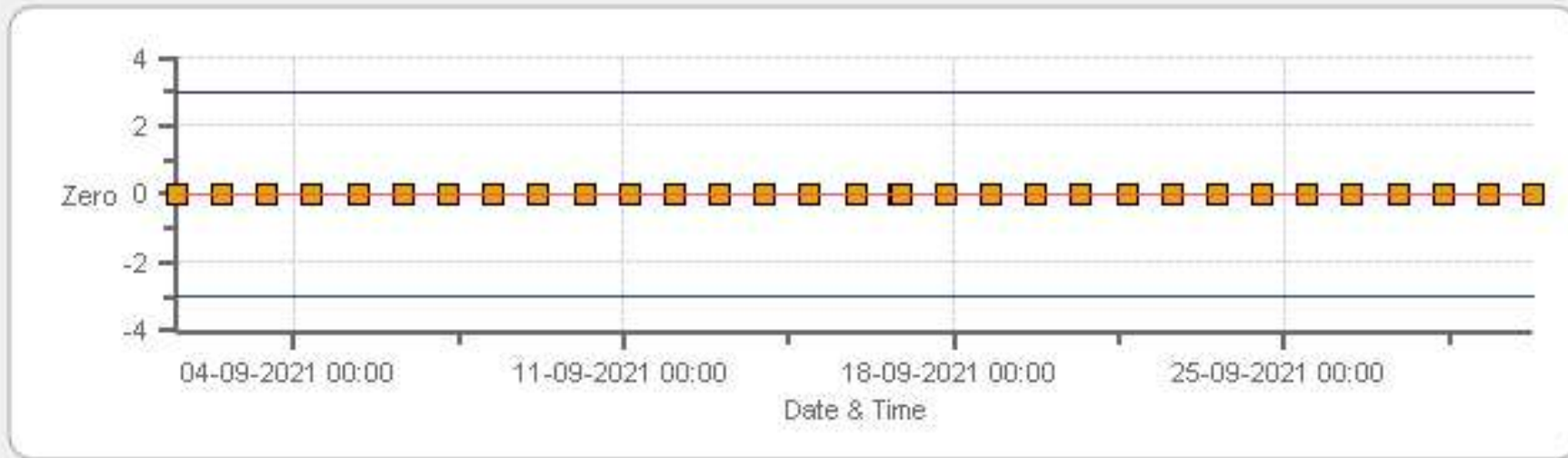
■ Zero    
 — Zero Ref    
 — Zero Low    
 — Zero High

CH4[ppm] Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Span



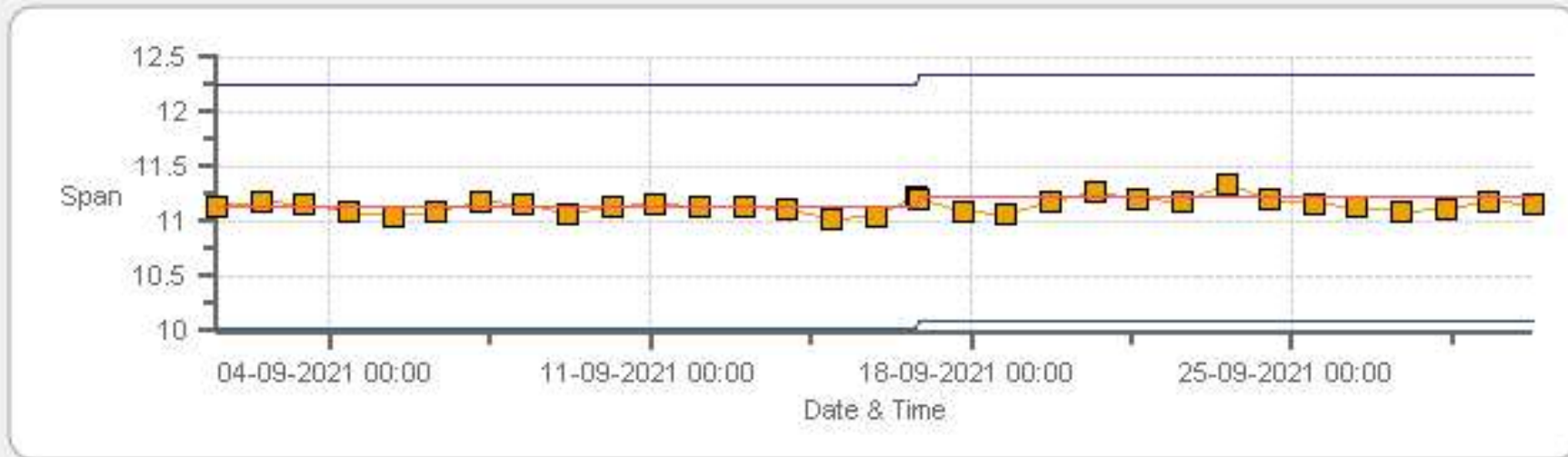
■ Span    
 — SpanRef    
 — Span Low    
 — Span High

NMHC[ppm] Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: AQHI Cadotte Lake Monthly: 09-2021 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

# MULTI-POINT CALIBRATION RECORDS

# SO2 Analyzer Calibration by Dilution



DATE:	16-Sep-2021	PREVIOUS CALIBRATION DATE:	17-Aug-2021
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.1
LOCATION:	Cadotte Lake	BAROMETRIC (mBar):	942
PURPOSE:	Routine	START TIME (MST):	09:18
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	14:58

## ANALYZER:

MAKE/MODEL	Teledyne T100	RANGE	500 ppb
SERIAL #	722	FLOW (mL/min)	535
INITIAL		FINAL	
BKG/OFFSET	21.8	BKG/OFFSET	22.5
COEF/SLOPE	0.921	COEF/SLOPE	0.929
Expected (reference) Value	263.3	Expected (reference) Value	266.3

## CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	701
ID:	1991	ID:	850
MFC CALIBRATION DATE:	23-Mar-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002357	HIGH ID	n/a
CONC (ppm):	24.90	EXPIRY DATE	n/a
CYLINDER (psi):	1050	LOW ID	n/a
EXPIRY DATE	13-Nov-2024	EXPIRY DATE	n/a

## CALIBRATION PARAMETERS:

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

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

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

## CALIBRATION:

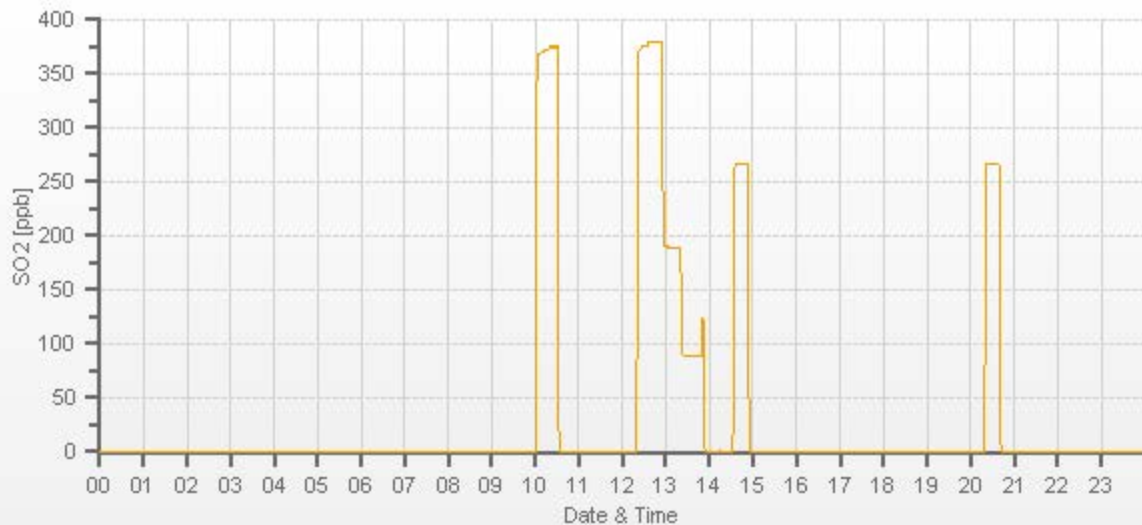
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4000	<del>        </del>	4000	0.00	0.2	0	<del>        </del>	<del>        </del>
3941	61.06	4002	379.87	375.3	379.9	1.013	1.000
3972	30.49	4002	189.72	n/a	188.6	n/a	1.006
3986	14.44	4000	89.89	n/a	89	n/a	1.010

## LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	-0.1%

## COMMENTS:

Sample filter changed. Monthly calibration - no issues.





# TRS Analyzer Calibration by Dilution



DATE:	16-Sep-2021	PREVIOUS CALIBRATION DATE:	17-Aug-2021
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.1
LOCATION:	Cadotte Lake	BAROMETRIC (mBar):	942
PURPOSE:	Routine	START TIME (MST):	09:17
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	14:59

## ANALYZER:

MAKE/MODEL	Teledyne T100U	RANGE	100 ppb
SERIAL #	132	FLOW (mL/min)	504
INITIAL		FINAL	
BKG/OFFSET	25	BKG/OFFSET	23.6
COEF/SLOPE	1.09	COEF/SLOPE	1.071
Expected (reference) Value	55.72	Expected (reference) Value	54.62

## CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	2000	MODEL:	701
ID:	1991	ID:	850
MFC CALIBRATION DATE:	23-Mar-2021	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0002472	HIGH ID	n/a
CONC (ppm):	9.41	EXPIRY DATE	n/a
CYLINDER (psi):	1350	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		
4000	<del>33.23</del>	4000	0.00	0.5	0	<del>0.990</del>	<del>1.000</del>
3969	33.23	4002	78.12	79.42	78.13	0.990	1.000
3986	16.16	4002	38.00	n/a	38.28	n/a	0.993
3992	8.09	4000	19.03	n/a	19.56	n/a	0.973

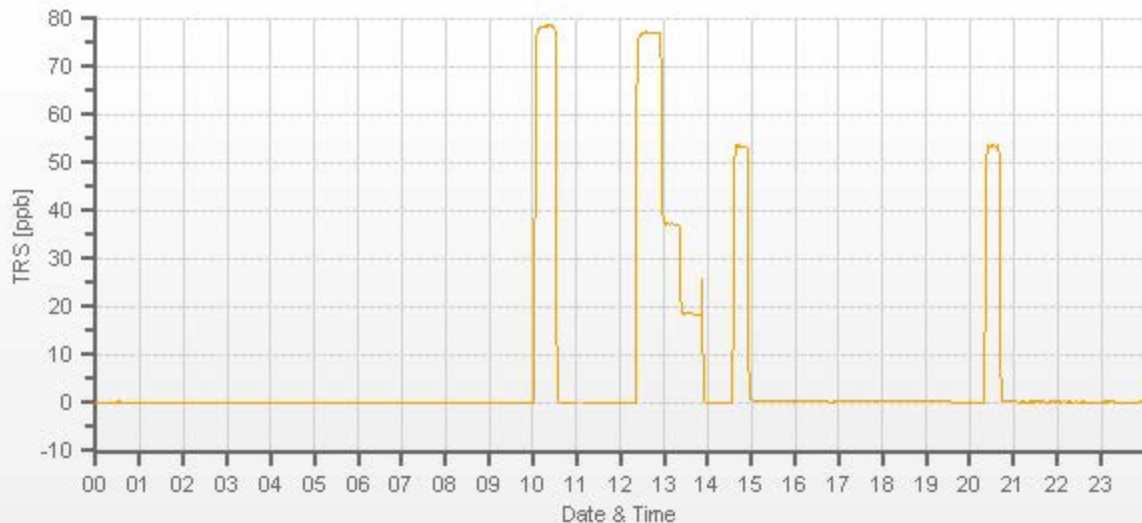
## LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.998	0.3%

## COMMENTS:

Sample filter changed.  
 Reset analyzer at 11:10 due to no reading on datalogger.  
 TRS Converter CD-NOVA CDN # 534.





# NOx Calibration by Dilution/Gas-Phase Titration



CALIBRATION:				ANALYZER:			
DATE:	16-Sep-2021	PREVIOUS CALIBRATION DATE:	17-Aug-2021	MAKE/MODEL:	Teledyne T200	PREVIOUS CF.	
CLIENT:	PRAMP	TEMPERATURE (°C):	23.1	SERIAL #:	837	NOx	1.000
LOCATION:	Cadotte Lake	BAROMETRIC (mBar):	942	FLOW (mL/min)	440	NO	1.000
PURPOSE:	Routine	START TIME (MST):	09:18	RANGE (ppb)	500	NO2	1.000
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	16:26	GPT FOR O3?		Yes	

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	API	CYLINDER ID:	EY0002493	HIGH ID:	n/a
MODEL:	2010	MODEL:	701	NO/NOx (PPM):	50.9   51.1	HIGH EXPIRY:	n/a
ID:	17100415	ID:	850	CYLINDER (psi):	880	LOW ID:	n/a
MFC CALIBRATION DATE:	23-Mar-2021	OXIDIZER ID:	n/a	EXPIRY DATE	13-Nov-2028	LOW EXPIRY:	n/a

CALIBRATION SETTINGS:							
INITIAL	NOx	NO	NO2	FINAL	NOx	NO	NO2
BKG/OFFSET:	0.4	0.2	n/a	BKG/OFFSET:	-0.1	0	n/a
SLOPE/COEF/CE:	1.105	1.101	0.999	SLOPE/COEF/CE:	1.107	1.098	0.999

EXPECTED (REFERENCE) VALUE:							
INITIAL	NOx	NO	NO2	FINAL	NOx	NO	NO2
	325.8	3.9	321.9		328.8	3.1	325.7

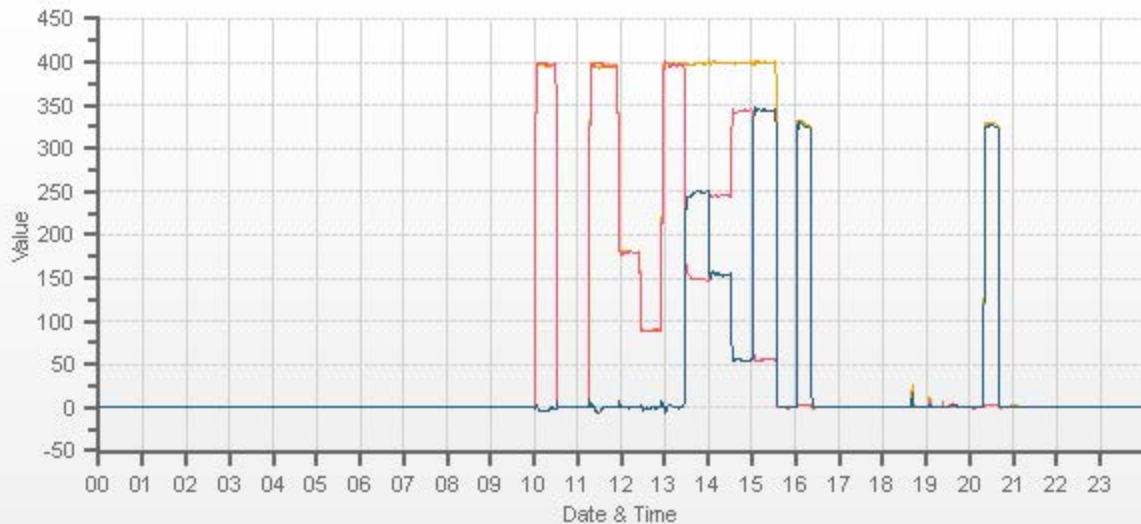
CALIBRATION PARAMETERS:				
POINT	NO TARGET (PPB)	NO2 TARGET (PPB)	NO2 RANGE	O3 POINT
HIGH	395	250	240-275	n/a
MID	180	154	150-157	Mid
LOW	90	54	50-58	Low
EXTRA 1	n/a	340	300-370	High

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
4997	<del>38.80</del>	4997	0.0	0.0	0.0	-0.3	-0.4	-0.1	0.0	0.0	0.0	<del>0.995</del>	<del>0.997</del>	<del>0.998</del>	<del>1.000</del>	<del>1.000</del>	<del>1.000</del>
4958	38.80	4997	395.2	396.8	1.6	397.1	397.4	0.3	395.2	396.7	1.6	0.995	0.997	0.998	1.000	1.000	1.000
4980	17.70	4998	180.3	181.0	0.7	n/a	n/a	n/a	179.7	181.3	1.6	n/a	n/a	n/a	1.003	0.998	0.998
4988	8.80	4997	89.6	90.0	0.4	n/a	n/a	n/a	89.8	91.5	1.6	n/a	n/a	n/a	0.998	0.983	0.983

GPT CALIBRATION:										
Point	CALIBRATOR			INDICATED (ppb)			NO DROP / O3 Conc (ppb)	NO2 GAIN (ppb)	NO2 Corr. FACTOR	CONV. EFFICIENCY
	GAS	TOTAL	O3 SETPOINT	NO	NOx	NO2				
REFERENCE	38.80	4997	0	397.0	398.7	1.7	<del>249.4</del>	<del>249.1</del>	<del>1.001</del>	<del>99.88%</del>
AS-FOUND HIGH	38.80	4997	250	147.6	398.4	250.8	249.4	249.1	1.001	99.88%
ADJUSTED HIGH	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MID	38.80	4997	150	245.8	400.5	154.4	151.2	152.7	0.990	100.99%
LOW	38.80	4997	50	344.3	399.7	55.4	52.7	53.7	0.981	101.90%
NO2 adjustment not required.									AVERAGE:	100.92%

LINEAR REGRESSION ANALYSIS:				COMMENTS:
	CORRELATION	SLOPE	INTERCEPT	
NO	1.000	1.000	-0.01%	
NOx	1.000	0.999	0.14%	
NO2	1.000	0.993	0.35%	

Sample filter changed.  
 Extra O3 SETPOINT = 340; NO DROP/O3 = 341.2.  
 Monthly calibration - no issues.



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— NOX [ppb] — NO [ppb] — NO2 [ppb]

# Ozone Calibration by Direct GPT



DATE:	16-Sep-2021	PREVIOUS CALIBRATION DATE:	17-Aug-2021
PARAMETER:	O3	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.5
LOCATION:	Cadotte Lake	BAROMETRIC (mBar):	943
PURPOSE:	Routine	START TIME (MST):	15:45
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	19:56

## ANALYZER:

MAKE/MODEL	Teledyne T400	RANGE	500 ppb
SERIAL #	824	FLOW (mL/min)	751
INITIAL		FINAL	
BKG/OFFSET	-1.1	BKG/OFFSET	-1.5
COEF/SLOPE	1.035	COEF/SLOPE	1.043
Expected (reference) Value	298.9	Expected (reference) Value	298.9

## CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	API
MODEL:	2010	MODEL:	701
ID:	17100415	ID:	850
MFC CALIBRATION DATE:	23-Mar-2021	OXIDIZER ID:	n/a
CALIBRATION METHOD:		Direct GPT	
GPT DATE:	16-Sep-2021	GPT END TIME:	15:33

## CALIBRATION PARAMETERS:

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

## CALIBRATION:

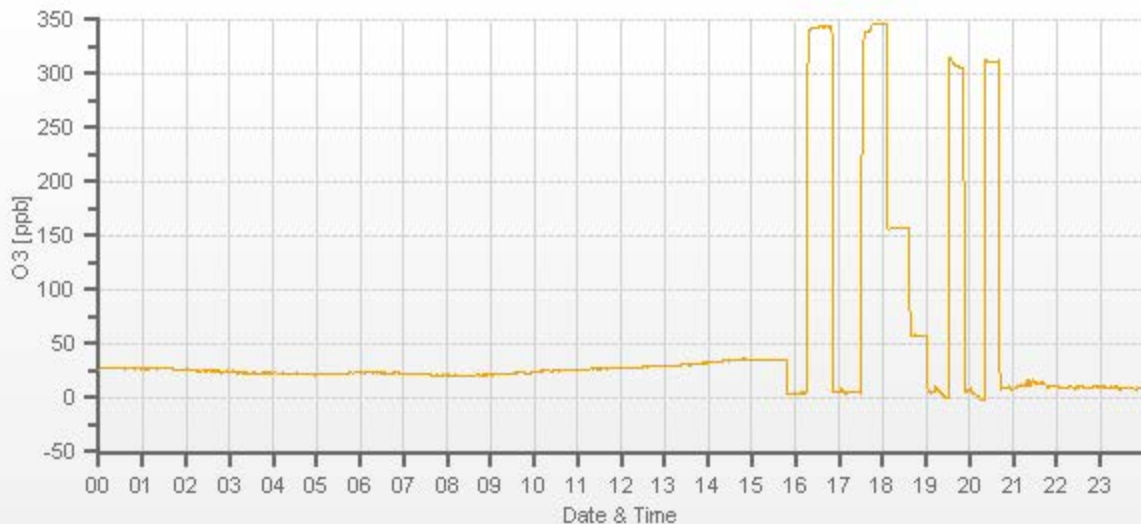
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4997	<del>          </del>	4997	0.0	0.0	0.0	<del>          </del>	<del>          </del>
4997	<del>          </del>	4997	341.2	339.0	341.2	1.006	1.000
4997	<del>          </del>	4997	151.2	n/a	153.0	n/a	0.988
4997	<del>          </del>	4997	52.7	n/a	53.5	n/a	0.985

## LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.999	0.1%

## COMMENTS:

Sample filter changed. Monthly calibration - no issues.



# Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	16-Sep-2021	PREVIOUS CALIBRATION DATE:	17-Aug-2021	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	23.2		Thermo 55i	1191032505	1167.8
LOCATION:	Cadotte Lake	BAROMETRIC (mBar):	943	PARAMETER:	CH4	NMHC	THC
PURPOSE	Routine	START TIME (MST):	15:17	RANGE (ppm):	20	20	40
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	19:25	PREVIOUS CF:	1.000	1.002	1.001

## CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	EnviroNics	MAKE:	API	CYLINDER ID:	LL84567	HIGH ID:	n/a
MODEL:	2000	MODEL:	701	CH <sub>4</sub> /C <sub>3</sub> H <sub>8</sub> (ppm):	591.0   200.0	HIGH EXPIRY:	n/a
ID:	1991	ID:	850	CYLINDER (psi):	550	LOW ID:	n/a
MFC CALIBRATION DATE:	23-Mar-2021	OXIDIZER ID:	00941	EXPIRY DATE	17-Jul-2027	LOW EXPIRY:	n/a

## CALIBRATION PARAMETERS:

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

## EXPECTED (REFERENCE) VALUE:

INITIAL	CH <sub>4</sub>	NMHC	THC	FINAL	CH <sub>4</sub>	NMHC	THC
	9.29	11.14	20.44		9.40	11.22	20.63

## CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC	CH <sub>4</sub>	NMHC	THC
3005	<del>X</del>	3005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>
2927	73.59	3000	14.50	13.49	27.99	14.40	13.43	27.83	14.49	13.49	27.97	1.007	1.005	1.006	1.000	1.000	1.001
2964	36.77	3001	7.24	6.74	13.98	n/a	n/a	n/a	7.25	6.71	13.96	n/a	n/a	n/a	0.999	1.004	1.002
2984	18.37	3003	3.62	3.36	6.98	n/a	n/a	n/a	3.63	3.35	6.98	n/a	n/a	n/a	0.996	1.004	1.000

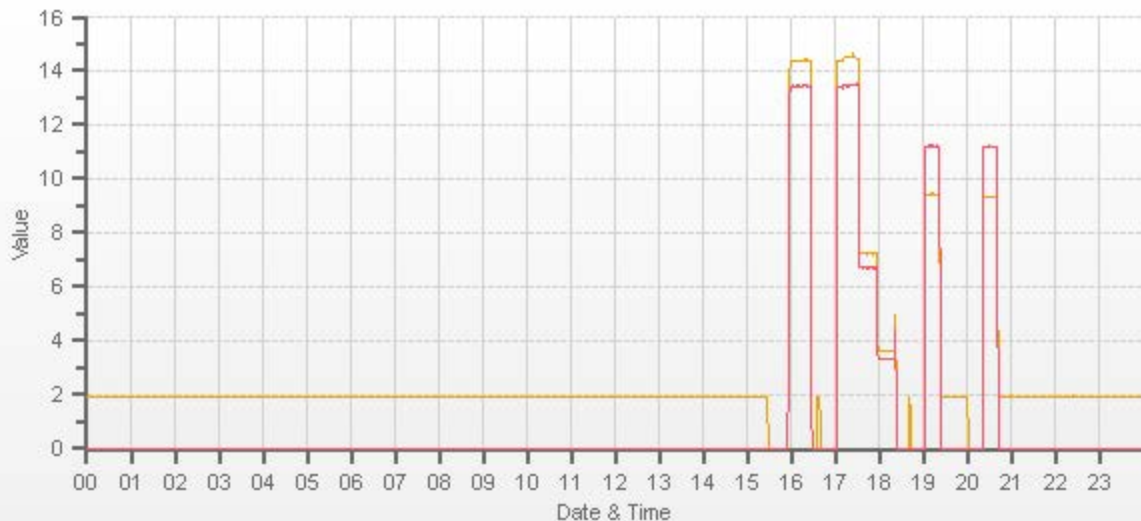
## LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
CH <sub>4</sub>	1.000	0.999	0.0%
NMHC	1.000	1.000	-0.1%
THC	1.000	0.999	0.0%

## Comments:

Sample filter changed. Monthly calibration - no issues.

Use Zero Chrom? **Yes**



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# Teledyne T640 Audit/Calibration

<b>Date/Previous Audit Date:</b>	September 16, 2021	August 19, 2021	<b>Weather Conditions:</b>	Mix of sun and clouds
<b>Company:</b>	PRAMP		<b>Start Time (mst):</b>	13:03
<b>Station:</b>	Cadotte Lake		<b>End Time (mst):</b>	16:39
<b>Parameter:</b>	PM 2.5		<b>Performed By/Reviewer:</b>	Ferdinand Roy      Chris Wesson

<b>Instrument Data:</b>			
<b>Make/Model:</b>	Teledyne T640	<b>Serial Number:</b>	318
<b>Owner:</b>	PRAMP	<b>Alarms (detail in comments):</b>	No

<b>Reference Standards/I.D./Expiry Date:</b>			
<b>Flow Standard:</b> Maxxam ID #3 expires June 29, 2022		<b>Temperature:</b> F.S. 160348895 expires Sep 4, 2022	
<b>Digital Manometer:</b> Dwyer 475 Mark III id# 2 expires Feb 17, 2022		<b>Pressure:</b> F.S. 10528 expires Feb 17, 2022	

<b>DIAGNOSTICS:</b>					
Ambient Pressure (mmHg)	707.3	Ambient Temp (°C)	11.2	ASC Heater Duty (%)	0.0
Box Temp (°C)	26.7	Current PMT HV (V)	1541	LED Temp (°C)	34.79
P3 Value	47	PMT Setting (V)	1547	Pump PWM (%)	39
Sample Flow (L/min)	5.00	Sample RH (%RH)	21.2	Sample Temp (°C)	24.8

Item:	As-found		As-left		Tolerance
	Reference	T640x	Reference	T640x	
Zero Test (Leak Check)	PM10	0.0	0	0.0	0.0 to 0.2
	PM2.5	0.0	0	0.0	
Ambient Pressure (mmHg)	707.3	707.3	707.3	707.4	+/- 10 mm Hg
Ambient Temperature (°C)	11.19	12.4	n/a		+/- 2°C
Sample Flow (L/min)	5.03	4.99	5.14	5.01	+/-5% of T640x (e.g., 4.75 – 5.25 lpm)

<b>Additional Monthly Maintenance :</b>	<b>Completed</b>
Inlet cleaned?	Yes
Sample tubing inspected (inner and outer)?	Yes

<b>Quarterly Audit/Calibration:</b>			
<b>SpanDust™ Standard</b>	<b>Peak at Channel</b>	<b>Lot No:</b>	<b>Expiry:</b>
	10.9	100128-050-033	06-01-2023

Item:	Verification:		Calibration (if needed):		Tolerance
	Reference	T640x	Reference	T640x	
Peak Channel	10.9	11.2	10.9	10.9	± 0.5
PMT Setting (V)	n/a	1547	n/a	1547	n/a
Peak Channel Counts:	n/a	1148	n/a	1152	n/a

<b>Additional Checks and Maintenance:</b>			<b>Completed</b>
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]		No

**Comments:**

Annual Maintenance, Clean Optical Chamber - no issues. DFU to be replaced on next visit.



# Meteorological System Checklist



Date:	September 16, 2021
Technician:	Ferdinand Roy
Station:	PRAMP Cadotte Lake

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

### AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	August 17, 2021
Parameter:	Temperature @ 2 metres
Reference Thermometer ID:	F.S. 160348895 expires Sep 4, 2022
Reference Temperature (°C):	5.9
Station - Ambient Temperature (°C):	6.5
Temperature Difference (°C):	-0.6

### BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	August 17, 2021
Reference Barometer ID:	FS 10528 February 17, 2022
Reference Pressure - Units/Reading:	millibar 942
Station Pressure - Units/Reading:	millibar 943.5
Pressure Tolerance +/- 15% of error:	801 - 1083 -0.16%

### RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	August 17, 2021
Reference Hygrometer ID:	F.S. 160348895 expires Sep 4, 2022
Reference Hygrometer % RH- Reading:	73.18
Station Hygrometer % RH- Reading:	73.50
RH Tolerance +/- 15% of difference:	62.20 - 84.16 -0.4%

### ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	August 17, 2021	Previous check date:	August 17, 2021
Wind Speed Observed (kph):	10~20	Wind Direction Observed:	NW
Wind speed on Data Logger (kph):	12.4	Wind Direction on Data Logger:	NW
		Wind Direction Pass/Fail?:	Pass

Comments

No issues.



# Meteorological Sensor Audit/Calibration

## Location Information

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

## Wind Sensor Information

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

## Wind Calibrator Information

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

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

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

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

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	0	353	0.1	2.0	1.1
30	330	27	330	3.5	-0.3	1.9
60	300	56	300	3.9	0.1	2.0
90	270	87	269	3.5	1.1	2.3
120	240	118	238	2.4	2.5	2.5
150	210	149	207	1.5	3.5	2.5
180	180	178	177	1.8	2.8	2.3
210	150	208	148	2.1	2.5	2.3
240	120	239	117	1.1	2.9	2.0
270	90	270	86	-0.1	3.6	1.9
300	60	300	57	0.2	3.5	1.8
330	30	330	27	-0.1	3.0	1.6
355	0	353	0	1.8	0.1	1.0
The audit meets AMD requirements.				Average Absolute Degrees Difference=		1.9

## Comments:

Physical inspection completed - no issues.