



Peace River Area Monitoring Program

SEPTEMBER 2019

- Monthly Ambient Air Quality Monitoring Report -

- Ambient Air Monthly Calibration Report -

October 25, 2019

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Peace River Area Monitoring Program

SEPTEMBER 2019

Monthly Ambient Air Quality Monitoring Report

PRAMP-201909

Operation and Maintenance:

Bureau Veritas Canada

Data Validation and Report:

Peace River Area Monitoring Program

October 16, 2019

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LIST OF ACRONYMS

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



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October 16, 2019

RE: PRAMP – September 2019 Monthly Ambient Air Quality Monitoring Report

Enclosed is the September 2019 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

Station ID	Station Name	Latitude	Longitude
1562	986c	56.36980	-116.9250
1561	842b	56.27406	-116.98129
1563	Reno	55.86936	-117.05739

Listing of Intermittent Monitoring Stations

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

Monitoring Notes during the Month of September 2019

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.
- Due to a major power outage that occurred this month, the 90% operational uptime requirement was not met. AEP reference # 358685.
- **All parameters:** No data were recorded between September 6 hour 7 and September 9 hour 13 due to a major power outage. Data collected on September 9 hours 14 and 15 for all gas parameters were discarded as the analyzers were recovering from the power failure. Eighty-one hours of data were invalid due to this event.
- **TRS:**
 - Following the shut-down calibration performed on September 18, maintenance was performed on the analyzer and convertor to address drift in daily span response. The analyzer was put offline overnight for stabilization. A successfully post-repair calibration was performed on September 19. Thirty-two hours of downtime were recorded due to this event.
 - Eight hours of data collected on September 19 and September 20 were deemed invalid as less than 75% of valid data in the hour were recorded. Eight hours of downtime was recorded as a result.
- **THC/CH4/NMHC:** Ten hours of data collected on September 5, September 19 and September 20 were deemed invalid as less than 75% of valid data in the hour were recorded. Ten hours of downtime was recorded as a result.
- **Precipitation:** Thirty-six hours of data collected between September 27 and September 30 were invalidated due to a sensor malfunction, which was caused by low ambient air temperature.

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.
- The Daily Zero-Span Test Procedure requirements outline in the AMD 2016 Chapter 7 (Section 4.0) were contravened on September 21 for all gas parameters. The scheduled automated daily zero-span check did not execute on September 21 due to a power failure event. AEP reference number: 359235.
- **All parameters:**
 - A power failure occurred on September 21 between hour 9 and hour 12. Four hours of downtime were recorded as a result.
 - Hourly data collected between September 22 hour 22 and September 23 hour 8 were invalid due to a Windows update. Eleven hours of downtime were recorded due to this event.
- **TRS:** The TRS convertor malfunctioned after the power failure on September 21. The convertor was repaired, and the analyzer was put back online on September 22. Thirty-one hours of data were invalidated due to this event.
- **THC/CH4/NMHC:** Hourly data collected on September 21 hour 13 was invalid as the analyzer was recovering from the power failure. One hour of data was discarded.

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.
- **All parameters:** No data were recorded between September 17 during hours 12 and 13 due to a power outage. Data collected on September 17 hours 14 and 15 for all gas parameters were discarded as the analyzers were recovering from the power failure. Four hours of data were invalid due to this event.

VOCs Canister Sampling program:

- The canister sampling program collects a 1-hour sample of air when the continuously measured methane (CH₄) and/or non-methane hydrocarbon (NMHC) concentration reaches a specified trigger point. The current trigger points are 5.5 ppm for methane and 0.3 ppm for non-methane hydrocarbons and are in place at all stations in the PRAMP network. Both trigger points are based on real-time monitoring data that are averaged over a 5-minute period.
- No canister was collected in September as both the CH₄ and NMHC concentrations were recorded below the trigger points.

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.

At the 986 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

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

Hourly instantaneous maximum data included in this report have not gone through data validation/verification steps and are considered raw data. The intention of including this data set in the report is for reference purposes and should not be used in published documents.

Equipment calibration / maintenance records were provided by Bureau Veritas Canada.

Certification

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



Lily Lin, Environmental Monitoring Program Manager, PRAMP Airshed

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

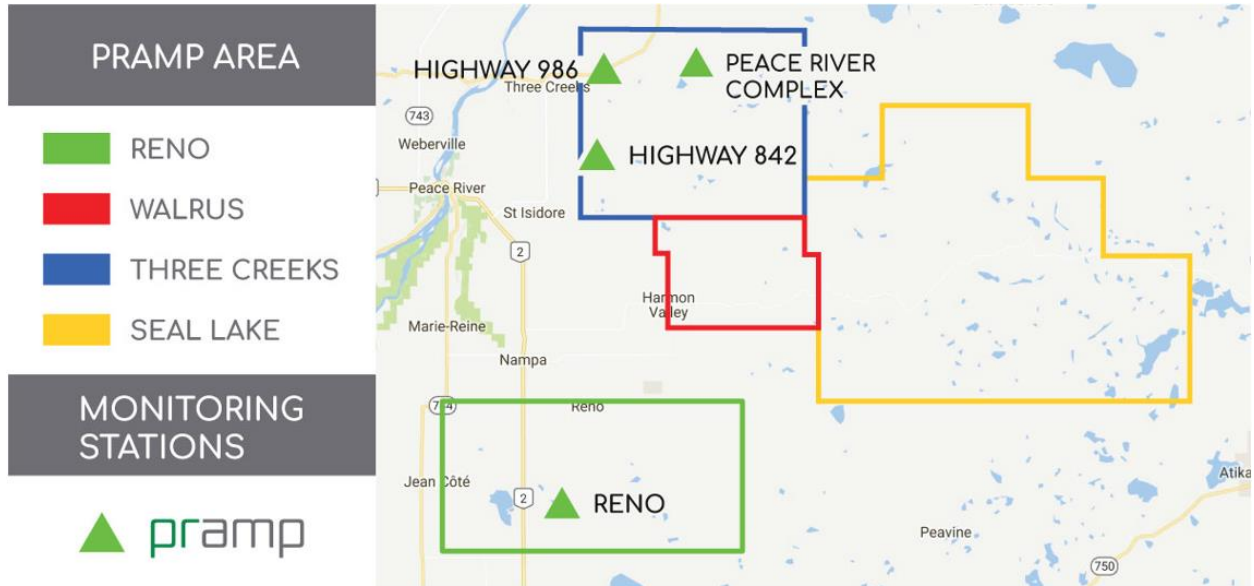
I certify that I have reviewed and verified this report and that the information is complete, accurate and representative of the monitoring results, reporting timeframe and the specified analysis, summarization and reporting requirements. I also certify that at the time of this report's submission, all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

October 16, 2019

Map of PRAMP Continuous Monitoring Network



CONTINUOUS NETWORK EQUIPMENT AND MONITORING RESULTS SUMMARY

986c Station

Equipment Operation Summary

Parameter	Make / Model	Serial Number
SO2	API 100A	1298
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 4. • No data were recorded between September 6 hour 7 and September 9 hour 13 due to a major power outage. Data collected on September 9 hours 14 and 15 were discarded as the analyzers were recovering from the power failure. A total of eighty-one hours of data were invalidated due to this event. 		
TRS	Thermo / 43i-TLE	1152940011
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 4. • No data were recorded between September 6 hour 7 and September 9 hour 13 due to a major power outage. Data collected on September 9 hours 14 and 15 were discarded as the analyzers were recovering from the power failure. A total of eighty-one hours of data were invalidated due to this event. • Following the shut-down calibration performed on September 18, maintenance was performed on the analyzer and convertor to address drift in daily span response. The analyzer was put offline overnight for stabilization. A successfully post-repair calibration was performed on September 19. Thirty-two hours of downtime were recorded due to this event. • Eight hours of data collected on September 19 and September 20 were deemed invalid as less than 75% of valid data in the hour were recorded. Eight hours of downtime was recorded as a result. 		
THC/CH4/NMHC	Thermo / 55i	1022043392
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 4. • No data were recorded between September 6 hour 7 and September 9 hour 13 due to a major power outage. Data collected on September 9 hours 14 and 15 were discarded as the analyzers were recovering from the power failure. A total of eighty-one hours of data were invalidated due to this event. • Ten hours of data collected on September 5, September 19 and September 20 were deemed invalid as less than 75% of valid data in the hour were recorded. Ten hours of downtime was recorded as a result. • Both the hydrogen and nitrogen cylinders were replaced during the monthly routine maintenance on September 4. 		

Parameter	Make / Model	Serial Number	
Relative Humidity (RH)	RM Young / 43182VC	030978	
<ul style="list-style-type: none"> The RH sensor was checked on September 4. The sensor passed the check requirements. No data were recorded between September 6 hour 7 and September 9 hour 13 due to a major power outage. A total of seventy-nine hours of data were invalidated due to this event. 			
Barometric Pressure (BP)	MetOne / 090D	F3845	
<ul style="list-style-type: none"> The BP sensor was checked on September 4. The sensor passed the check requirements. No data were recorded between September 6 hour 7 and September 9 hour 13 due to a major power outage. A total of seventy-nine hours of data were invalidated due to this event. 			
Ambient Temperature (AT)	RM Young 431872VC	030978	
<ul style="list-style-type: none"> The temperature sensor was checked on September 4. The sensor passed the check requirements. No data were recorded between September 6 hour 7 and September 9 hour 13 due to a major power outage. A total of seventy-nine hours of data were invalidated due to this event. 			
Station Temperature (ST)	Maxxam	N/A	
<ul style="list-style-type: none"> No data were recorded between September 6 hour 7 and September 9 hour 13 due to a major power outage. A total of seventy-nine hours of data were invalidated due to this event. 			
Wind Speed/Wind Direction (WS/ WD)	RM Young / 5305VK	129612	
<ul style="list-style-type: none"> Wind direction data contained in this report represents where the wind is coming from. The anemometer sensors were checked on September 4. The sensor passed the check requirements. No data were recorded between September 6 hour 7 and September 9 hour 13 due to a major power outage. A total of seventy-nine hours of data were invalidated due to this event. 			

Parameter	Make / Model	Serial Number
Precipitation	EML / ARG100	190114
<ul style="list-style-type: none"> • The rain gauge sensor was checked on September 4. No issue was identified. • No data were recorded between September 6 hour 7 and September 9 hour 13 due to a major power outage. A total of seventy-nine hours of data were invalidated due to this event. • Thirty-six hours of data collected between September 27 and September 30 were invalidated due to a sensor malfunction, which was caused by low ambient air temperature. 		

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 18 at hour 9	0.8	W	0.1	September 1	88.8	84.3
TRS (ppb)	10	3	-	-	-	-	0.8	0.20	3.34	September 13 at hour 3	5.4	SSE	1.36	September 23	83.2	78.7
THC (ppm)	-	-	-	-	-	-	1.99	1.89	2.27	September 29 at hour 21	13.1	SSE	2.07	September 22	87.4	82.8
CH4 (ppm)	-	-	-	-	-	-	1.99	1.89	2.27	September 29 at hour 21	13.1	SSE	2.07	September 22	87.4	82.8
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.00	September 1 at hour 0	7.8	ESE	0.00	September 1	87.4	82.8
RH (%)	-	-	-	-	-	-	79.7	35	100	September 1 at hour 5	4.5	E	97.7	September 21	89.0	88.9
BP (millibar)	-	-	-	-	-	-	942	931	959	September 28 at hour 9	5.8	N	958	September 22	89.0	88.9
Ext. Temp. (°C)	-	-	-	-	-	-	9.5	-5.5	22.2	September 3 at hour 16	9.9	WSW	15.2	September 29	89.0	88.9
Stn. Temp. (°C)	-	-	-	-	-	-	22.9	20.9	24.8	September 18 at hour 13	4.4	W	23.4	September 29	89.0	88.9
Precipitation (mm)*	-	-	-	-	-	-	58.0	0.0	9.0	September 15 at hour 20	5.5	NNE	19.4	September 9	84.0	83.9
WSV (km/hr)	-	-	-	-	-	-	4.6	0.3	24.4	September 21 at hour 12	24.4	WSW	16.8	September 17	89.0	89.0
WDV (sector)	-	-	-	-	-	-	202 (SSW)	-	-	-	-	-	-	-	89.0	89.0

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

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

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

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

842b Station

Equipment Operation Summary

Parameter	Make / Model	Serial Number	
SO2	Thermo / 43i	835033373	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 12. • A power failure occurred on September 21 between hour 9 and hour 12. Four hours of downtime were recorded as a result. • Hourly data collected between September 22 hour 22 and September 23 hour 8 were invalid due to a Windows update. Eleven hours of downtime were recorded due to this event. 			
TRS	Thermo / 43i-TLE	1162460023	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 12. • A power failure occurred on September 21 between hour 9 and hour 12. Four hours of downtime were recorded as a result. • The TRS convertor malfunctioned after the power failure on September 21. The convertor was repaired, and the analyzer was put back online on September 22. Thirty-one hours of data were invalidated due to this event. • Hourly data collected between September 22 hour 22 and September 23 hour 8 were invalid due to a Windows update. Eleven hours of downtime were recorded due to this event. 			
THC/CH4/NMHC	Thermo / 55i	1505664392	
<ul style="list-style-type: none"> • A successful monthly calibration was performed on September 12. • A power failure occurred on September 21 between hour 9 and hour 12. Four hours of downtime were recorded as a result. • Hourly data collected on September 21 hour 13 was invalid as the analyzer was recovering from the power failure. One hour of data was discarded. • Hourly data collected between September 22 hour 22 and September 23 hour 8 were invalid due to a Windows update. Eleven hours of downtime were recorded due to this event. 			

Parameter	Make / Model	Serial Number
Relative Humidity (RH)	Campbell Scientific / HMP45C	C2608
<ul style="list-style-type: none"> The RH sensor was checked on September 12. The sensor passed the check requirements. A power failure occurred on September 21 between hour 9 and hour 12. Four hours of downtime were recorded as a result. Hourly data collected between September 22 hour 22 and September 23 hour 8 were invalid due to a Windows update. Eleven hours of downtime were recorded due to this event. 		
Barometric Pressure (BP)	MetOne / 92	K12864
<ul style="list-style-type: none"> The BP sensor was checked on September 12. The sensor passed the check requirements. A power failure occurred on September 21 between hour 9 and hour 12. Four hours of downtime were recorded as a result. Hourly data collected between September 22 hour 22 and September 23 hour 8 were invalid due to a Windows update. Eleven hours of downtime were recorded due to this event. 		
Station Temperature (ST)	Maxxam	N/A
<ul style="list-style-type: none"> A power failure occurred on September 21 between hour 9 and hour 12. Four hours of downtime were recorded as a result. Hourly data collected between September 22 hour 22 and September 23 hour 8 were invalid due to a Windows update. Eleven hours of downtime were recorded due to this event. 		
Ambient Temperature (AT)	Campbell Scientific / HMP45C	C2608
<ul style="list-style-type: none"> The temperature sensor was checked on September 12. The sensor passed the check requirements. A power failure occurred on September 21 between hour 9 and hour 12. Four hours of downtime were recorded as a result. Hourly data collected between September 22 hour 22 and September 23 hour 8 were invalid due to a Windows update. Eleven hours of downtime were recorded due to this event. 		
Wind Speed/Wind Direction (WS/ WD)	RM Young / 5305VK	124638
<ul style="list-style-type: none"> Wind direction data contained in this report represents where the wind is coming from. The anemometer sensors were checked on September 12. The sensor passed the check requirements. A power failure occurred on September 21 between hour 9 and hour 12. Four hours of downtime were recorded as a result. Hourly data collected between September 22 hour 22 and September 23 hour 8 were invalid due to a Windows update. Eleven hours of downtime were recorded due to this event. 		

Monitored Data Summary for 842b Station

Parameter	Objectives/Guidelines			Exceedances			Monthly Avg.	Min. 1-hr	Max. 1-hr	Date/Time	VWS (km/hr)	VWD (sector)	Max. 24-hr	Date	Operational Uptime (%)	Valid Data (%)
	1-hr	24-hr	30-day	1-hr	24-hr	30-day										
SO2 (ppb)	172	48	11	0	0	0	0.0	0	1	September 19 at hour 9	17.8	S	0.0	September 1	97.9	93.0
TRS (ppb)	10	3	-	-	-	-	0.4	0.20	0.93	September 4 at hour 6	7.1	S	0.58	September 18	93.6	88.7
THC (ppm)	-	-	-	-	-	-	1.98	1.86	2.28	September 17 at hour 6	1.7	E	2.06	September 22	97.8	92.9
CH4 (ppm)	-	-	-	-	-	-	1.98	1.86	2.28	September 17 at hour 6	1.7	E	2.06	September 22	97.8	92.9
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.00	September 1 at hour 0	3.9	SE	0.00	September 1	97.8	92.9
RH (%)	-	-	-	-	-	-	73.3	34	96	September 17 at hour 5	3.9	ESE	90.3	September 30	97.9	97.9
BP (millibar)	-	-	-	-	-	-	942	930	959	September 29 at hour 8	5.2	SE	957	September 22	97.9	97.9
Ext. Temp. (°C)	-	-	-	-	-	-	9.6	-6.1	22.2	September 3 at hour 15	8.8	SW	15.1	September 28	97.9	97.9
Stn. Temp. (°C)	-	-	-	-	-	-	22.8	21.7	23.8	September 12 at hour 10	14.4	SSW	23.2	September 27	97.9	97.9
WSV (km/hr)	-	-	-	-	-	-	3.0	0.3	26.9	September 21 at hour 15	26.9	WSW	15.2	September 28	97.9	97.9
WDV (sector)	-	-	-	-	-	-	203 (SSW)	-	-	-	-	-	-	-	97.9	97.9

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) 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	841	
<ul style="list-style-type: none"> No data were recorded between September 17 during hours 12 and 13 due to a power outage. Data collected on September 17 hours 14 and 15 were discarded as the analyzers were recovering from the power failure. A total of four hours of data were invalidated due to this event. A successful monthly calibration was performed on September 18. 			
TRS	Thermo / 43i-TLE	1162460022	
<ul style="list-style-type: none"> A successful monthly calibration was performed on September 11. No data were recorded between September 17 during hours 12 and 13 due to a power outage. Data collected on September 17 hours 14 and 15 were discarded as the analyzers were recovering from the power failure. A total of four hours of data were invalidated due to this event. 			
THC/CH4/NMHC	Thermo / 55i	1314057759	
<ul style="list-style-type: none"> A successful monthly calibration was performed on September 11. No data were recorded between September 17 during hours 12 and 13 due to a power outage. Data collected on September 17 hours 14 and 15 were discarded as the analyzers were recovering from the power failure. A total of four hours of data were invalidated due to this event. Both the hydrogen and nitrogen cylinders were replaced following by a zero-span check on September 18. 			
Relative Humidity (RH)	RM Young / 43172VC	60837897	
<ul style="list-style-type: none"> The RH sensor was checked on September 11. The sensor passed the check requirements. No data were recorded between September 17 during hours 12 and 13 due to a power outage. Two hours of data were invalidated due to this event. 			

Parameter	Make / Model	Serial Number	
Barometric Pressure (BP)	MetOne / 92	R12877	
<ul style="list-style-type: none"> The BP sensor was checked on September 11. The sensor passed the check requirements. No data were recorded between September 17 during hours 12 and 13 due to a power outage. Two hours of data were invalidated due to this event 			
Ambient Temperature (AT)	RM Young / 43172VC	60837897	
<ul style="list-style-type: none"> The temperature sensor was checked on September 11. The sensor passed the check requirements. No data were recorded between September 17 during hours 12 and 13 due to a power outage. Two hours of data were invalidated due to this event. 			
Station Temperature (ST)	Maxxam	N/A	
<ul style="list-style-type: none"> No data were recorded between September 17 during hours 12 and 13 due to a power outage. Two hours of data were invalidated due to this event. 			
Wind Speed/Wind Direction (WS/ WD)	RM Young / 5305VK	149769	
<ul style="list-style-type: none"> Wind direction data contained in this report represents where the wind is coming from. The anemometer sensors were checked on September 11. The sensor passed the check requirements. No data were recorded between September 17 during hours 12 and 13 due to a power outage. Two hours of data were invalidated due to this event. 			

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	6	September 11 at hour 13	4.6	SE	0.3	September 1	99.4	94.8
TRS (ppb)	10	3	-	-	-	-	0.5	0.24	4.95	September 17 at hour 5	1.5	SW	1.80	September 10	99.4	94.4
THC (ppm)	-	-	-	-	-	-	1.97	1.87	2.43	September 18 at hour 7	1.5	SW	2.08	September 22	99.3	94.4
CH4 (ppm)	-	-	-	-	-	-	1.97	1.87	2.43	September 18 at hour 7	1.5	SW	2.08	September 22	99.3	94.4
NMHC (ppm)	-	-	-	-	-	-	0.00	0.00	0.04	September 4 at hour 7	1.4	S	0.00	September 1	99.3	94.4
RH (%)	-	-	-	-	-	-	71.0	33	96	September 4 at hour 5	1.9	SSW	90.4	September 21	99.7	99.7
BP (millibar)	-	-	-	-	-	-	938	926	954	September 29 at hour 8	4.8	SE	952	September 22	99.7	99.7
Ext. Temp. (°C)	-	-	-	-	-	-	10.1	-4.0	23.1	September 3 at hour 15	4.3	W	15.9	September 28	99.7	99.7
Stn. Temp. (°C)	-	-	-	-	-	-	23.3	22.3	24.6	September 11 at hour 18	2	SSE	23.6	September 3	99.7	99.7
WSV (km/hr)	-	-	-	-	-	-	1.4	0.0	18.1	September 21 at hour 14	18.1	WSW	9.5	September 17	99.7	99.7
WDV (sector)	-	-	-	-	-	-	219 (SW)	-	-	-	-	-	-	-	99.7	99.7

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

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

Alberta Ambient Air Quality Objectives (AAQOs) Exceedances at Reno 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 2019

Summary of Hourly Averages

SULPHUR DIOXIDE (SO₂) in ppb

Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb
 Number of 1-Hour Exceedences: 0 Number of 24-Hour Exceedences: 0 30-Day Exceedence: 0

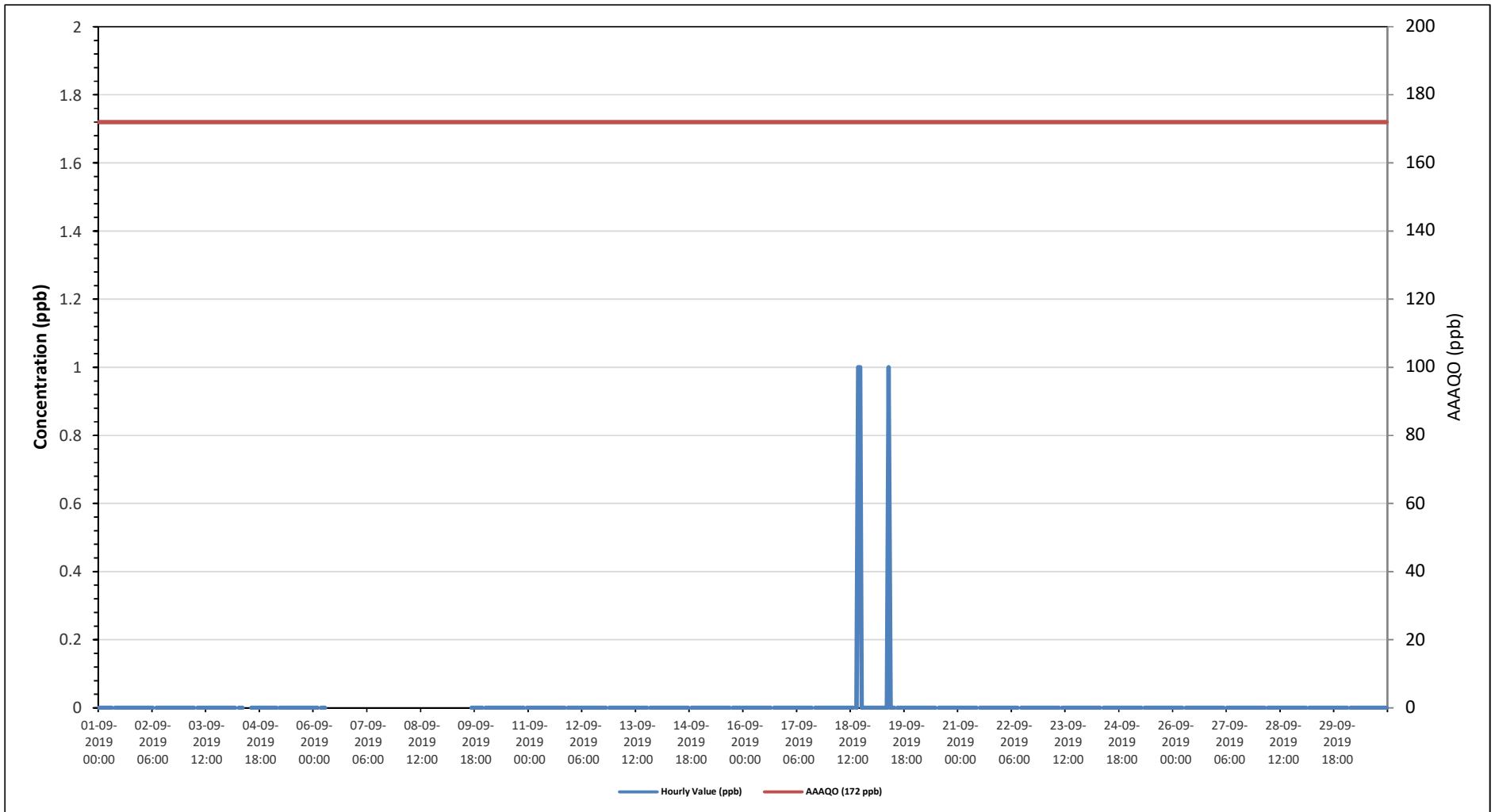
Maximum Hourly Value: 1 ppb on September 18 at hour 9 Hours in Service: 720
 Maximum Daily Value: 0.1 ppb on Hours of Data: 607
 Minimum Hourly Value: 0 ppb on September 1 at hour 0 Hours of Missing Data: 81
 Minimum Daily Value: 0.0 ppb on September 1 Hours of Calibration: 32
 Monthly Average: 0.0 ppb Operational Uptime: 88.8

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	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sep 2	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sep 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	0	0	0	0	0		
Sep 4	0	0	0	0	0	0	S	0	0	0	C	C	C	C	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	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 6	0	0	0	S	0	0	0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	0	0	
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	R	R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	
Sep 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	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	S	0	0	0	0
Sep 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0
Sep 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	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	0	0	0	S	0	0	0
Sep 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	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	0	S	0	0	0
Sep 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0
Sep 23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0
Sep 30	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diurnal Maximum	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
Daiurnal 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	0.0	0.0	0.0	0.0	0.0	0.0	

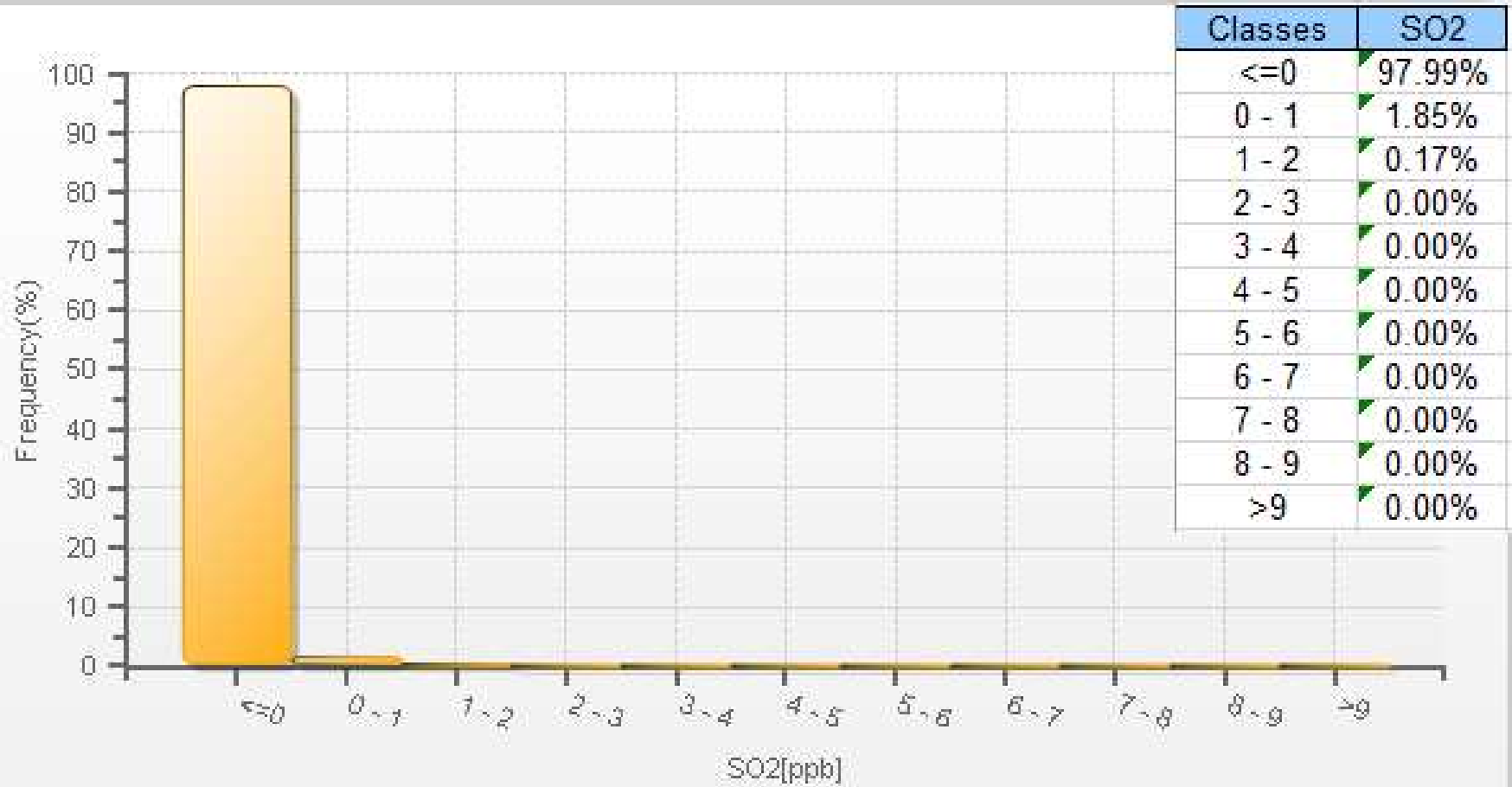
C Calibration S Daily Zero/Span Q Quality Assurance C1 Repeat Calibration S1 Repeat Daily Zero/Span
 G Out for Repair K Collection Error N Not in Service O Operator Error P Power Failure
 R Recovery X Machine Malfunction Y Maintenance T Exceeds Temperature Limits N Not in Service

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

Timeseries Chart of Hourly Average for SO₂ - 986c Station

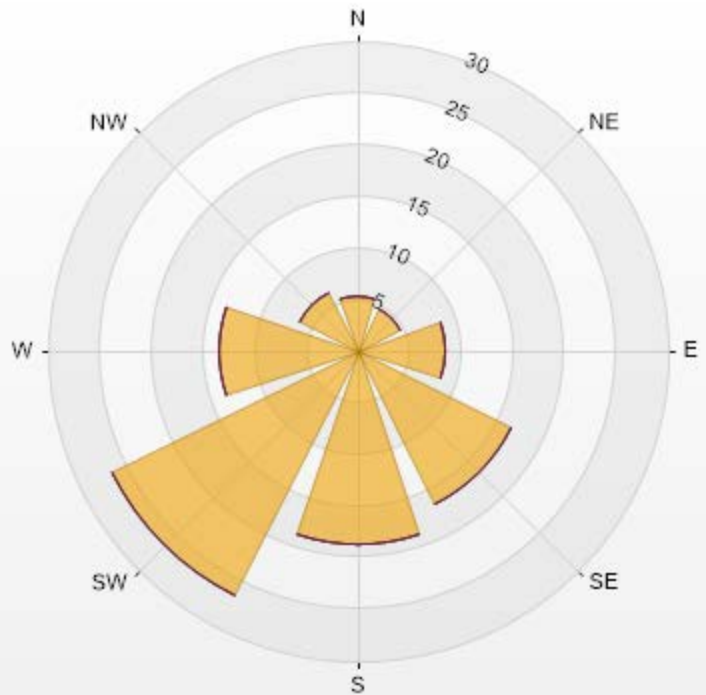


SO2[ppb] Histogram: PRAMP 986c Monthly: 09-2019 1 Hr.



Wind: PRAMP 986c Poll.: PRAMP 986c-SO2[ppb] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 82.22% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	5.24	0	0	0	0	5.24
NE	4.56	0	0	0	0	4.56
E	8.61	0	0	0	0	8.61
SE	16.55	0	0	0	0	16.55
S	18.75	0	0	0	0	18.75
SW	26.52	0	0	0	0	26.52
W	13.51	0	0	0	0	13.51
NW	6.25	0	0	0	0	6.25
Summary	100	0	0	0	0	100



PRAMP-201909

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



PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2019

Summary of Hourly Averages

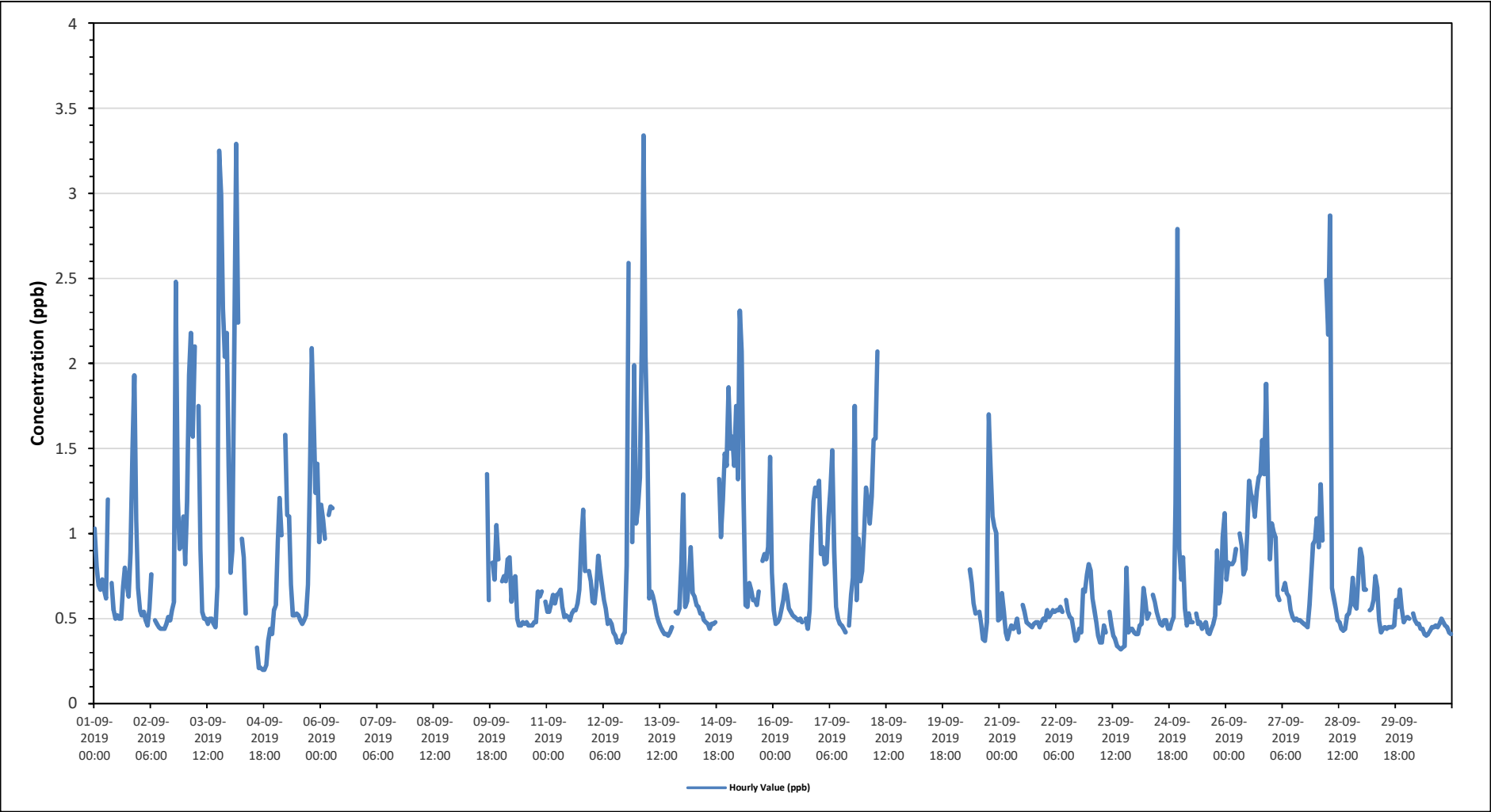
TOTAL REDUCED SULPHUR (TRS) in ppb

Alberta Ambient Air Quality Objectives (AAAQO) for H2S: 1-Hour 10 ppb, 24-Hour 3 ppb																												
Number of 1-Hour Exceedences: 0													Number of 24-Hour Exceedences: 0															
Maximum Hourly Value: 3.34 ppb on September 13 at hour 3													Hours in Service: 720															
Maximum Daily Value: 1.36 ppb on													Hours of Data: 567															
Minimum Hourly Value: 0.20 ppb on September 4 at hour 17													Hours of Missing Data: 121															
Minimum Daily Value: 0.45 ppb on September 23													Hours of Calibration: 32															
Monthly Average: 0.77 ppb													Operational Uptime: 83.2															
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	1.03	0.81	0.7	0.67	0.73	0.67	0.62	1.2	S	0.71	0.55	0.5	0.52	0.5	0.5	0.69	0.8	0.71	0.63	0.89	1.49	1.93	1.08	0.68	0.50	1.93	0.81	
Sep 2	0.55	0.52	0.54	0.49	0.46	0.56	0.76	S	0.49	0.47	0.45	0.44	0.44	0.44	0.47	0.51	0.49	0.55	0.6	2.48	1.21	0.91	0.93	1.1	0.44	2.48	0.69	
Sep 3	0.82	1.19	1.93	2.18	1.57	2.1	S	1.75	0.91	0.54	0.5	0.5	0.47	0.5	0.5	0.47	0.45	0.69	3.25	2.99	2.32	2.04	2.18	1.4	0.45	3.25	1.36	
Sep 4	0.77	0.9	2.08	3.29	2.24	S	0.97	0.86	0.53	C	C	C	C	C	0.33	0.21	0.21	0.2	0.2	0.23	0.37	0.44	0.41	0.55	0.20	3.29	0.82	
Sep 5	0.58	0.95	1.21	0.99	S	1.58	1.11	1.1	0.7	0.52	0.52	0.53	0.52	0.49	0.47	0.49	0.52	0.7	1.29	2.09	1.72	1.24	1.41	0.95	0.47	2.09	0.94	
Sep 6	1.17	1.08	0.97	S	1.11	1.16	1.15	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	0.97	1.17	-
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	R	R	1.35	0.61	S	0.83	0.73	1.05	0.85	S	0.61	1.35	-	
Sep 10	0.72	0.75	0.72	0.85	0.86	0.6	0.73	0.75	0.5	0.46	0.46	0.48	0.47	0.48	0.46	0.46	0.46	0.48	0.48	0.66	0.63	0.66	S	0.6	0.46	0.86	0.60	
Sep 11	0.54	0.54	0.59	0.64	0.59	0.64	0.65	0.67	0.57	0.51	0.52	0.51	0.49	0.53	0.55	0.55	0.59	0.67	0.97	1.14	0.78	S	0.78	0.72	0.49	1.14	0.64	
Sep 12	0.6	0.59	0.69	0.87	0.78	0.69	0.61	0.56	0.47	0.49	0.47	0.42	0.4	0.36	0.37	0.36	0.4	0.42	0.81	2.59	S	0.95	1.99	1.06	0.36	2.59	0.74	
Sep 13	1.15	1.33	2.13	3.34	2.04	1.57	0.62	0.66	0.63	0.58	0.52	0.48	0.45	0.43	0.41	0.41	0.4	0.42	0.45	S	0.54	0.53	0.56	0.83	0.40	3.34	0.89	
Sep 14	1.23	0.57	0.6	0.73	0.92	0.65	0.63	0.58	0.57	0.53	0.53	0.49	0.48	0.47	0.44	0.47	0.47	0.48	S	1.32	0.98	1.2	1.47	1.4	0.44	1.47	0.75	
Sep 15	1.86	1.5	1.57	1.4	1.75	1.32	2.31	2.07	1.2	0.58	0.57	0.71	0.67	0.61	0.61	0.58	0.66	S	0.84	0.88	0.85	0.92	1.45	0.77	0.57	2.31	1.12	
Sep 16	0.55	0.47	0.48	0.5	0.55	0.61	0.7	0.64	0.56	0.54	0.52	0.51	0.5	0.49	0.5	0.48	S	0.5	0.44	0.55	0.93	1.19	1.27	1.22	0.44	1.27	0.64	
Sep 17	1.31	0.88	0.92	0.82	0.83	1.1	1.27	1.49	0.9	0.57	0.5	0.47	0.46	0.44	0.42	S	0.46	0.64	0.74	1.75	0.61	0.97	0.72	0.78	0.42	1.75	0.83	
Sep 18	1.02	1.27	1.19	1.06	1.22	1.55	1.56	2.07	C1	C1	C1	C1	C1	C1	C1	Y	Y	Y	Y	Y	Y	Y	Y	Y	1.02	2.07	-	
Sep 19	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.52	1.68	-
Sep 20	1.12	K	1.07	K	1.05	K	0.82	K	0.79	0.71	0.59	0.53	S	0.54	0.47	0.38	0.37	0.48	1.7	1.4	1.1	1.04	1	0.49	0.37	1.70	0.82	
Sep 21	0.5	0.65	0.54	0.42	0.38	0.43	0.46	0.44	0.45	0.5	0.42	S	0.58	0.54	0.48	0.47	0.46	0.45	0.47	0.48	0.48	0.45	0.48	0.5	0.38	0.65	0.48	
Sep 22	0.49	0.55	0.51	0.53	0.55	0.54	0.55	0.55	0.57	0.54	S	0.61	0.54	0.51	0.5	0.43	0.37	0.38	0.44	0.42	0.67	0.66	0.76	0.82	0.37	0.82	0.54	
Sep 23	0.78	0.62	0.55	0.48	0.4	0.36	0.36	0.46	0.42	S	0.54	0.46	0.4	0.38	0.34	0.33	0.32	0.33	0.34	0.8	0.42	0.44	0.44	0.42	0.32	0.80	0.45	
Sep 24	0.41	0.41	0.46	0.47	0.68	0.61	0.5	0.53	S	0.64	0.6	0.54	0.5	0.47	0.46	0.49	0.49	0.44	0.44	0.48	0.51	1.18	2.79	0.91	0.41	2.79	0.65	
Sep 25	0.73	0.86	0.56	0.46	0.53	0.48	0.48	S	0.53	0.47	0.48	0.44	0.46	0.48	0.42	0.41	0.44	0.47	0.52	0.9	0.59	0.66	0.98	1.12	0.41	1.12	0.59	
Sep 26	0.73	0.83	0.82	0.82	0.84	0.91	S	1	0.93	0.76	0.79	1	1.31	1.23	1.2	1.1	1.25	1.33	1.35	1.55	1.35	1.88	1.28	0.85	0.73	1.88	1.09	
Sep 27	1.06	1.01	0.98	0.64	0.61	S	0.67	0.71	0.65	0.63	0.55	0.51	0.49	0.5	0.49	0.49	0.48	0.47	0.46	0.45	0.58	0.77	0.94	0.96	0.45	1.06	0.66	
Sep 28	1.09	0.92	1.29	0.96	S	2.49	2.17	2.87	0.68	0.62	0.56	0.49	0.48	0.44	0.43	0.44	0.52	0.53	0.59	0.74	0.58	0.56	0.74	0.91	0.43	2.87	0.92	
Sep 29	0.86	0.67	0.67	S	0.55	0.56	0.61	0.75	0.68	0.49	0.42	0.44	0.45	0.44	0.45	0.45	0.45	0.46	0.61	0.57	0.67	0.56	0.48	0.5	0.42	0.86	0.56	
Sep 30	0.51	0.5	S	0.53	0.49	0.47	0.47	0.44	0.44	0.41	0.4	0.41	0.43	0.45	0.45	0.46	0.45	0.47	0.5	0.48	0.46	0.45	0.42	0.41	0.40	0.53	0.46	
Diurnal Maximum	1.86	1.50	2.13	3.34	2.24	2.49	2.31	2.87	1.20	0.76	0.79	1.00	1.31	1.23	1.20	1.10	1.35	1.33	3.25	2.99	2.32	2.04	2.79	1.40				
Daiurnal Average	0.85	0.81	0.95	1.01	0.91	0.94	0.87	1.01	0.64	0.56	0.52	0.52	0.52	0.51	0.49	0.48	0.54	0.54	0.82	1.11	0.89	0.95	1.07	0.83				
C	Calibration			S	Daily Zero/Span						Q	Quality Assurance							C1	Repeat Calibration				S1	Repeat Daily Zero/Span			
G	Out for Repair			K	Collection Error						N	Not in Service							O	Operator Error				P	Power Failure			
R	Recovery			X	Machine Malfunction						Y	Maintenance							T	Exceeds Temperature Limits				N	Not in Service			

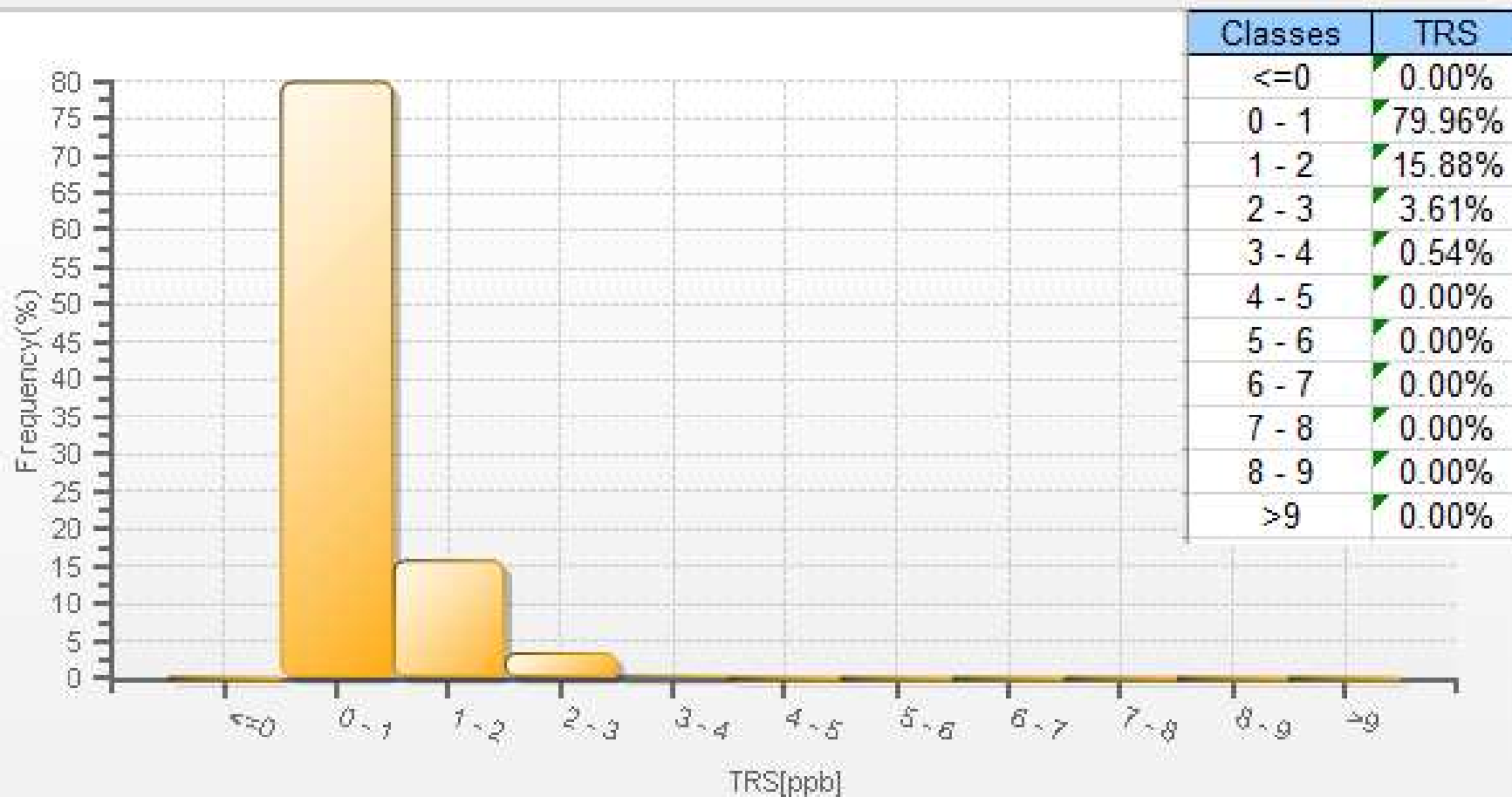
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

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

Timeseries Chart of Hourly Average for TRS - 986c Station

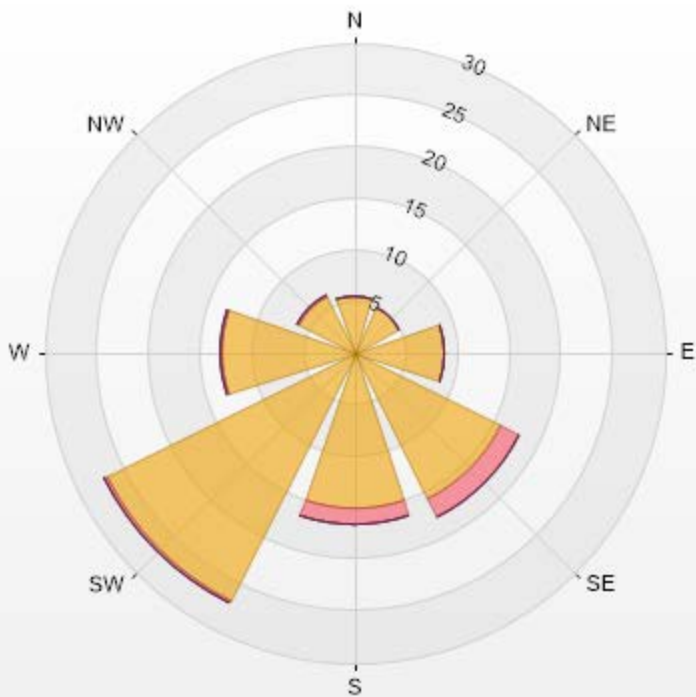


TRS[ppb] Histogram: PRAMP 986c Monthly: 09-2019 1 Hr.



Wind: PRAMP 986c Poll.: PRAMP 986c-TRS[ppb] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 76.67% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	5.43	0	0	0	0	5.43
NE	4.89	0	0	0	0	4.89
E	8.7	0	0	0	0	8.7
SE	15.94	1.81	0	0	0	17.75
S	15.04	1.63	0	0	0	16.67
SW	26.81	0.36	0	0	0	27.17
W	12.86	0.18	0	0	0	13.04
NW	6.16	0.18	0	0	0	6.34
Summary	95.83	4.16	0	0	0	100



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% Icon	Classes (ppb)	96	0-2	4	5-10	0	10-50	0	>50.0



PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2019

Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

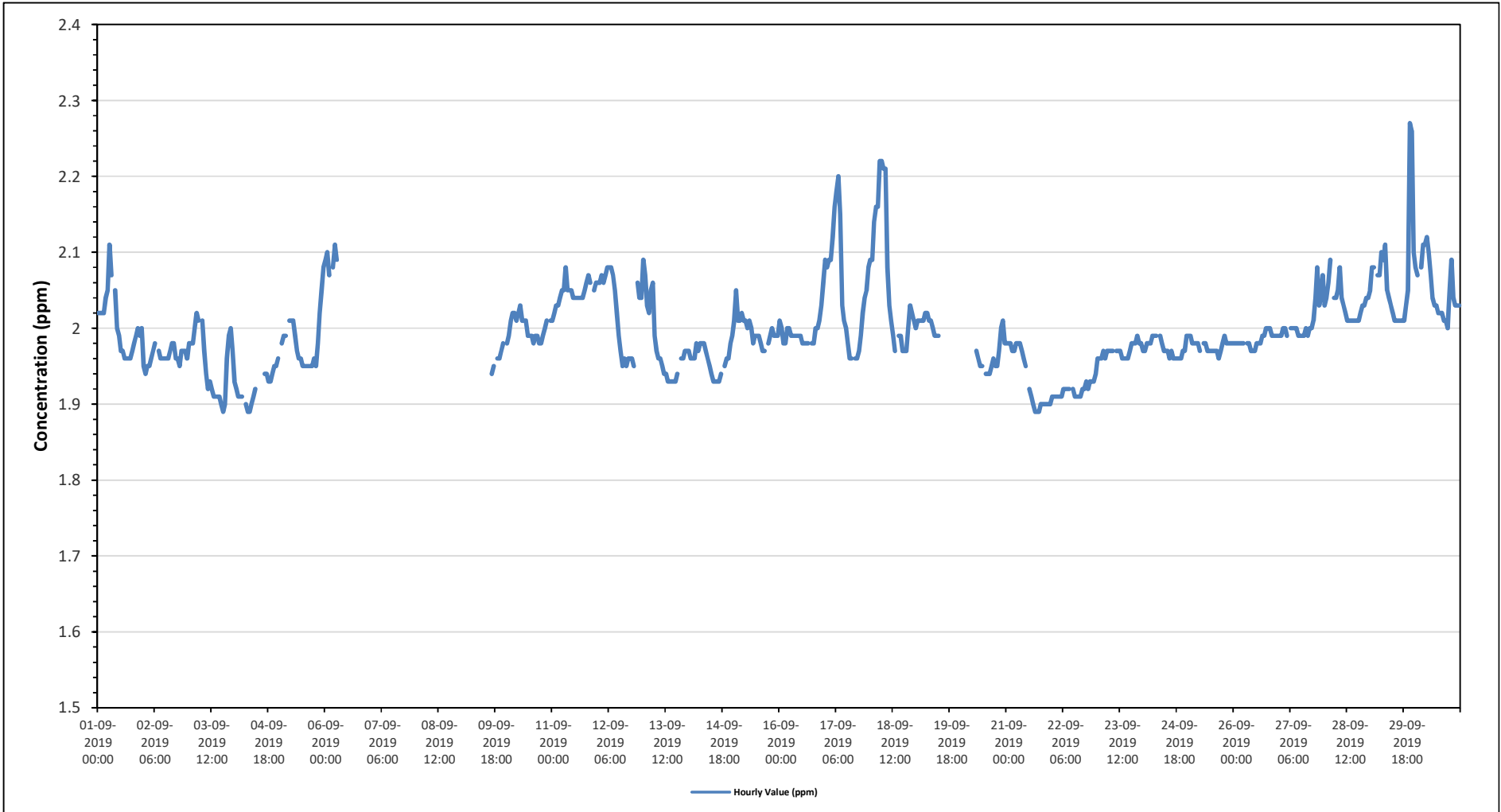
Maximum Hourly Value: 2.27 ppm on September 29 at hour 21	Hours in Service: 720
Maximum Daily Value: 2.07 ppm on	Hours of Data: 596
Minimum Hourly Value: 1.89 ppm on September 3 at hour 18	Hours of Missing Data: 91
Minimum Daily Value: 1.92 ppm on September 22	Hours of Calibration: 33
Monthly Average: 1.99 ppm	Operational Uptime: 87.4

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	2.02	2.02	2.02	2.02	2.04	2.05	2.11	2.07	S	2.05	2.00	1.99	1.97	1.97	1.96	1.96	1.96	1.96	1.97	1.98	1.99	2.00	1.99	2.00	1.96	2.11	2.00	
Sep 2	1.95	1.94	1.95	1.95	1.96	1.97	1.98	S	1.97	1.96	1.96	1.96	1.96	1.96	1.97	1.98	1.98	1.96	1.96	1.95	1.97	1.97	1.97	1.96	1.94	1.98	1.96	
Sep 3	1.98	1.98	1.98	2.00	2.02	2.01	S	2.01	1.97	1.94	1.92	1.93	1.92	1.91	1.91	1.91	1.91	1.90	1.89	1.90	1.96	1.99	2.00	1.97	1.89	2.02	1.95	
Sep 4	1.93	1.92	1.91	1.91	1.91	S	1.90	1.89	1.89	1.90	1.91	1.92	C	C	C	C	1.94	1.94	1.93	1.94	1.95	1.95	1.96	1.89	1.96	1.92		
Sep 5	K	1.98	1.99	1.99	S	2.01	2.01	2.01	1.99	1.97	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.95	1.98	2.02	2.05	2.08	1.95	2.08	1.98	
Sep 6	2.09	2.10	2.07	S	2.08	2.11	2.09	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	2.07	2.11	-	
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	R	R	1.94	1.95	S	1.96	1.96	1.97	1.98	S	1.94	1.98	-	
Sep 10	1.98	1.99	2.01	2.02	2.02	2.01	2.02	2.03	2.01	2.01	2.01	1.99	1.99	1.99	1.98	1.99	1.99	1.98	1.98	1.99	2.00	2.01	S	2.01	1.98	2.03	2.00	
Sep 11	2.01	2.02	2.03	2.03	2.04	2.05	2.05	2.08	2.05	2.05	2.05	2.04	2.04	2.04	2.04	2.04	2.04	2.05	2.06	2.07	2.06	S	2.05	2.06	2.01	2.08	2.05	
Sep 12	2.06	2.06	2.07	2.06	2.07	2.08	2.08	2.08	2.07	2.05	2.02	1.99	1.97	1.95	1.96	1.95	1.96	1.96	1.96	1.95	S	2.06	2.04	2.04	1.95	2.08	2.02	
Sep 13	2.09	2.07	2.03	2.02	2.05	2.06	1.99	1.97	1.96	1.96	1.95	1.94	1.94	1.93	1.93	1.93	1.93	1.93	1.94	S	1.96	1.96	1.97	1.97	1.93	2.09	1.98	
Sep 14	1.97	1.96	1.96	1.96	1.98	1.97	1.98	1.98	1.98	1.97	1.96	1.95	1.94	1.93	1.93	1.93	1.93	1.94	S	1.95	1.96	1.96	1.98	1.99	1.93	1.99	1.96	
Sep 15	2.01	2.05	2.01	2.01	2.02	2.01	2.01	2.00	2.01	2.00	1.98	1.99	1.99	1.98	1.97	1.97	S	1.98	1.98	1.99	2.00	1.99	1.99	1.99	1.97	2.05	2.00	
Sep 16	2.01	2.00	1.98	1.98	2.00	2.00	1.99	1.99	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.98	S	1.98	1.98	2.00	2.00	2.01	2.03	2.06	1.98	2.06	2.00	
Sep 17	2.09	2.08	2.09	2.09	2.12	2.16	2.18	2.20	2.15	2.03	2.01	2.00	1.98	1.96	1.96	S	1.96	1.96	1.97	1.99	2.02	2.04	2.05	2.08	1.96	2.20	2.05	
Sep 18	2.09	2.09	2.14	2.16	2.16	2.22	2.22	2.21	2.21	2.08	2.03	2.01	1.99	1.97	S	1.99	1.99	1.97	1.97	1.97	2.00	2.03	2.02	2.01	1.97	2.22	2.07	
Sep 19	2.00	2.01	2.01	2.01	2.01	2.02	2.02	2.01	2.01	2.00	1.99	1.99	1.99	S	1.95	K	1.94	K	1.94	K	1.95	K	1.95	K	1.94	2.02	1.99	
Sep 20	1.95	K	1.98	K	1.97	K	1.97	K	1.97	1.96	1.95	1.95	S	1.94	1.94	1.94	1.95	1.96	1.95	1.95	1.97	2.00	2.01	1.98	1.94	2.01	1.96	
Sep 21	1.98	1.98	1.98	1.97	1.97	1.98	1.98	1.98	1.97	1.96	1.95	S	1.92	1.91	1.90	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.90	1.89	1.98	1.93	
Sep 22	1.91	1.91	1.91	1.91	1.91	1.91	1.92	1.92	1.92	1.92	S	1.92	1.91	1.91	1.91	1.91	1.91	1.92	1.92	1.93	1.92	1.93	1.93	1.93	1.94	1.91	1.94	1.92
Sep 23	1.96	1.96	1.96	1.97	1.96	1.97	1.97	1.97	1.97	1.97	S	1.97	1.97	1.96	1.96	1.96	1.96	1.97	1.98	1.98	1.98	1.99	1.98	1.98	1.96	1.99	1.97	
Sep 24	1.97	1.97	1.98	1.98	1.98	1.99	1.99	1.99	S	1.99	1.98	1.97	1.97	1.97	1.96	1.97	1.96	1.96	1.96	1.96	1.96	1.97	1.97	1.99	1.96	1.99	1.97	
Sep 25	1.99	1.99	1.98	1.98	1.98	1.98	1.97	S	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.96	1.97	1.98	1.99	1.98	1.98	1.98	1.98	1.96	1.99	1.98	
Sep 26	1.98	1.98	1.98	1.98	1.98	1.98	S	1.98	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.99	1.99	2.00	2.00	2.00	1.99	1.99	1.99	1.99	1.97	2.00	1.98	
Sep 27	1.99	1.99	2.00	2.00	1.99	S	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.99	2.00	1.99	2.00	2.00	2.01	2.04	2.08	2.03	2.04	2.07	1.99	2.08	2.01	
Sep 28	2.03	2.04	2.06	2.09	S	2.04	2.04	2.05	2.08	2.04	2.03	2.02	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.02	2.03	2.03	2.04	2.04	2.01	2.09	2.03	
Sep 29	2.05	2.08	2.08	S	2.07	2.07	2.10	2.09	2.11	2.05	2.04	2.03	2.02	2.01	2.01	2.01	2.01	2.01	2.01	2.03	2.05	2.27	2.26	2.10	2.01	2.27	2.07	
Sep 30	2.08	2.07	S	2.08	2.11	2.12	2.12	2.10	2.07	2.04	2.03	2.03	2.02	2.02	2.02	2.01	2.01	2.01	2.05	2.09	2.04	2.03	2.03	2.03	2.00	2.12	2.05	
Diurnal Maximum	2.09	2.10	2.14	2.16	2.16	2.22	2.22	2.21	2.21	2.08	2.05	2.04	2.04	2.04	2.04	2.04	2.04	2.05	2.06	2.09	2.08	2.27	2.26	2.10				
Diurnal Average	2.01	2.01	2.01	2.01	2.02	2.03	2.03	2.03	2.01	1.99	1.98	1.98	1.97	1.97	1.97	1.97	1.96	1.96	1.97	1.98	1.99	2.00	2.01	2.01				

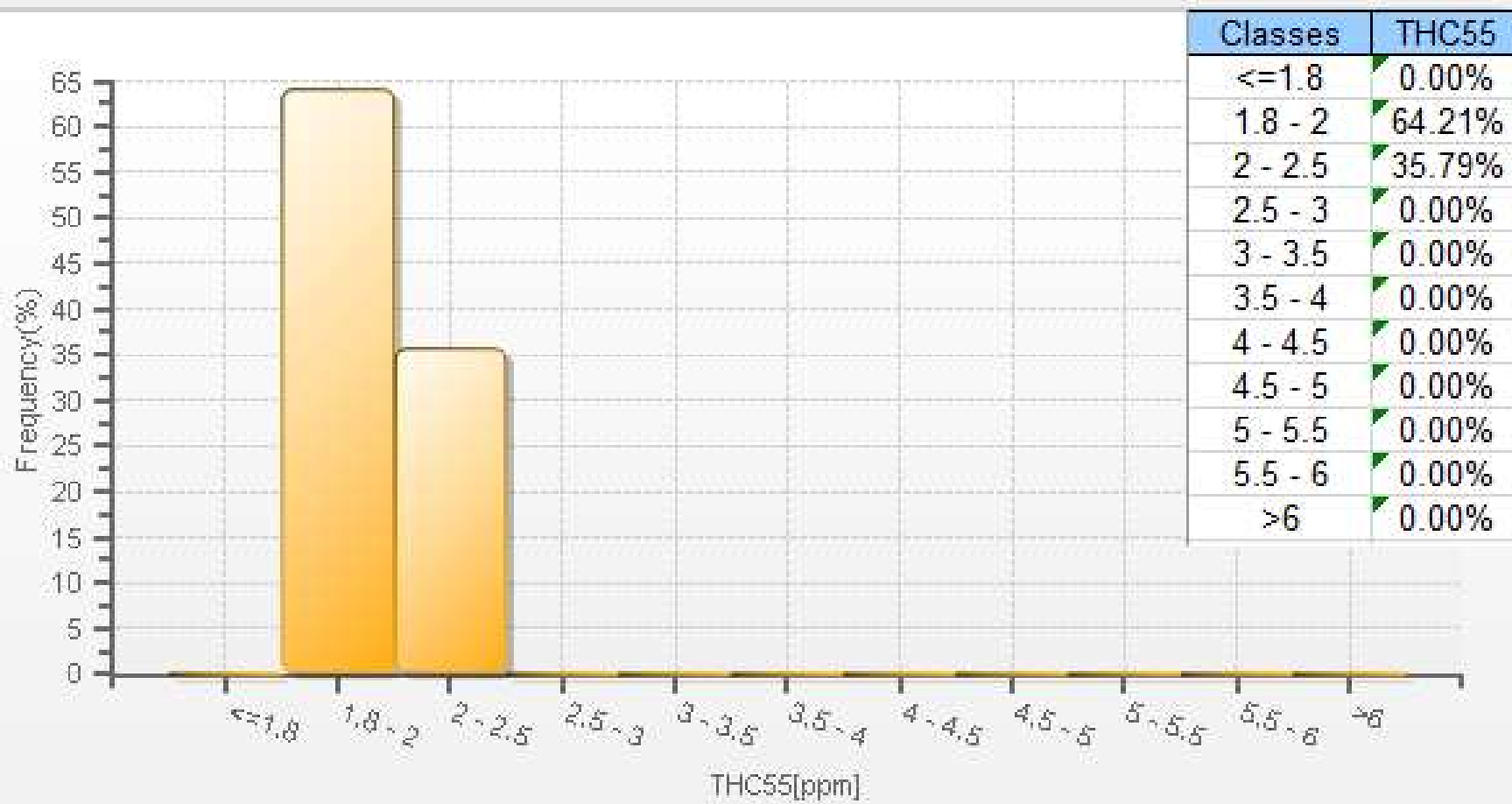
C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

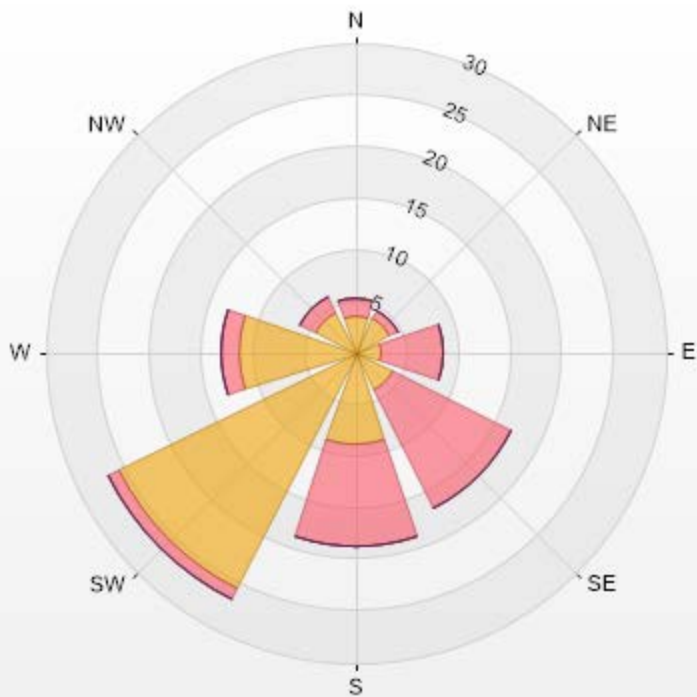


THC55[ppm] Histogram: PRAMP 986c Monthly: 09-2019 1 Hr.



Wind: PRAMP 986c Poll.: PRAMP 986c-THC55[ppm] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 80.97% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	3.6	1.72	0	0	0	5.32
NE	3.77	0.86	0	0	0	4.63
E	2.57	6	0	0	0	8.57
SE	4.12	12.69	0	0	0	16.81
S	8.92	9.78	0	0	0	18.7
SW	25.56	1.2	0	0	0	26.76
W	11.32	1.72	0	0	0	13.04
NW	4.29	1.89	0	0	0	6.18
Summary	64.15	35.86	0	0	0	100



PRAMP-201909

% Icon Classes (ppm)	64	36	18	9	0	0
0-2	64	36	18	9	0	0
2-5	0	0	0	0	0	0
5-10	0	0	0	0	0	0
10-40	0	0	0	0	0	0
>40.0	0	0	0	0	0	0



PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2019

Summary of Hourly Averages

METHANE (CH₄) in ppm

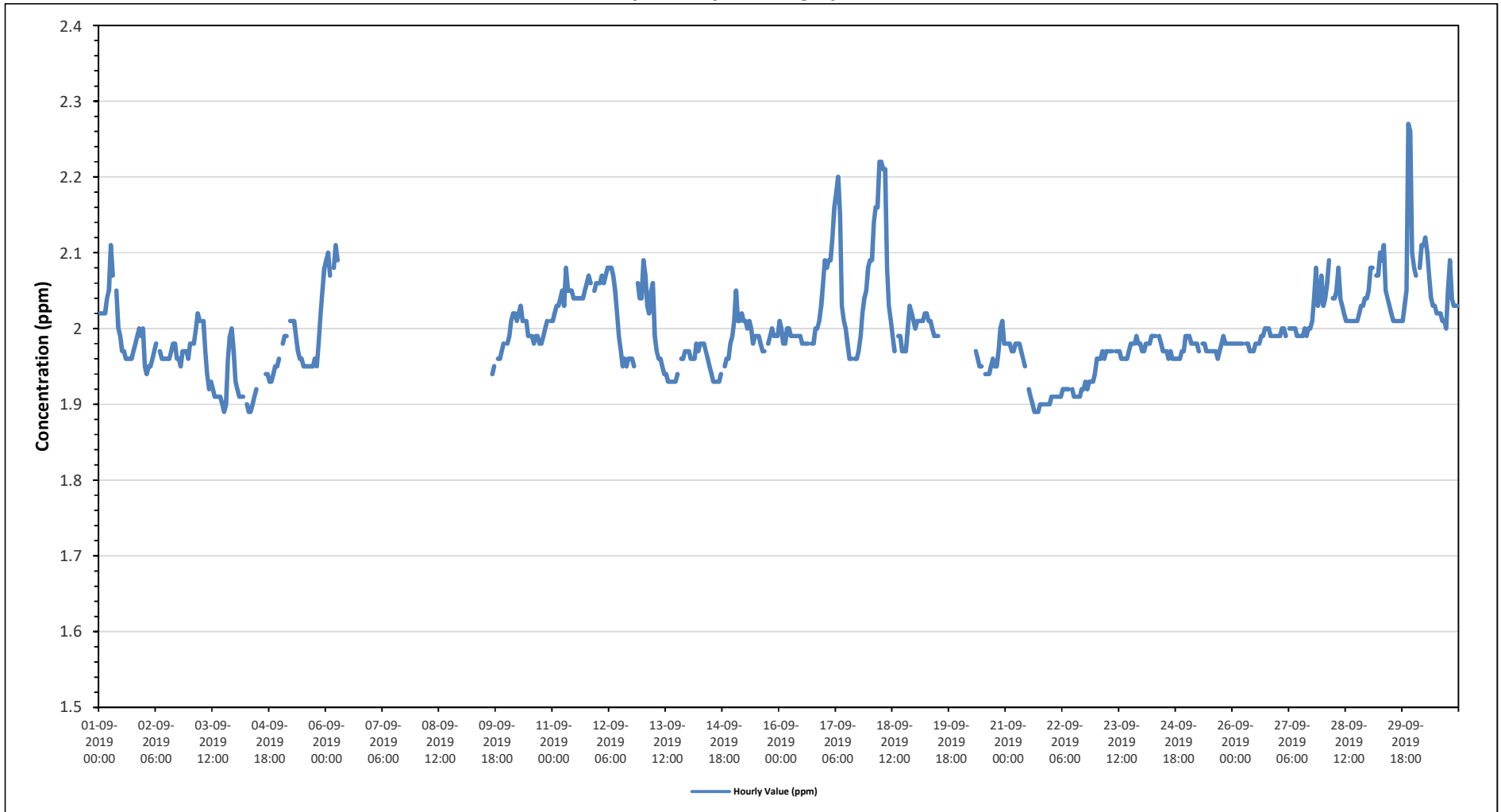
Maximum Hourly Value: 2.27 ppm on September 29 at hour 21	Hours in Service: 720
Maximum Daily Value: 2.07 ppm on	Hours of Data: 596
Minimum Hourly Value: 1.89 ppm on September 3 at hour 18	Hours of Missing Data: 91
Minimum Daily Value: 1.92 ppm on September 22	Hours of Calibration: 33
Monthly Average: 1.99 ppm	Operational Uptime: 87.4

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	2.02	2.02	2.02	2.02	2.04	2.05	2.11	2.07	S	2.05	2.00	1.99	1.97	1.97	1.96	1.96	1.96	1.96	1.97	1.98	1.99	2.00	1.99	2.00	1.96	2.11	2.00	
Sep 2	1.95	1.94	1.95	1.95	1.96	1.97	1.98	S	1.97	1.96	1.96	1.96	1.96	1.96	1.97	1.98	1.98	1.96	1.96	1.95	1.97	1.97	1.97	1.96	1.94	1.98	1.96	
Sep 3	1.98	1.98	1.98	2.00	2.02	2.01	S	2.01	1.97	1.94	1.92	1.93	1.92	1.91	1.91	1.91	1.91	1.90	1.89	1.90	1.96	1.99	2.00	1.97	1.89	2.02	1.95	
Sep 4	1.93	1.92	1.91	1.91	1.91	S	1.90	1.89	1.89	1.90	1.91	1.92	C	C	C	C	1.94	1.94	1.93	1.93	1.94	1.95	1.95	1.96	1.89	1.96	1.92	
Sep 5	K	1.98	1.99	1.99	S	2.01	2.01	2.01	1.99	1.97	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.95	1.98	2.02	2.05	2.08	1.95	2.08	1.98	
Sep 6	2.09	2.10	2.07	S	2.08	2.11	2.09	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	2.07	2.11	-	
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	R	R	1.94	1.95	S	1.96	1.96	1.97	1.98	S	1.94	1.98	-	
Sep 10	1.98	1.99	2.01	2.02	2.02	2.01	2.02	2.03	2.01	2.01	2.01	1.99	1.99	1.99	1.98	1.99	1.99	1.98	1.98	1.99	2.00	2.01	S	2.01	1.98	2.03	2.00	
Sep 11	2.01	2.02	2.03	2.03	2.04	2.05	2.03	2.08	2.05	2.05	2.05	2.04	2.04	2.04	2.04	2.04	2.04	2.05	2.06	2.07	2.06	S	2.05	2.06	2.01	2.08	2.04	
Sep 12	2.06	2.06	2.07	2.06	2.07	2.08	2.08	2.08	2.07	2.05	2.02	1.99	1.97	1.95	1.96	1.95	1.96	1.96	1.96	1.95	S	2.06	2.04	2.04	1.95	2.08	2.02	
Sep 13	2.09	2.07	2.03	2.02	2.05	2.06	1.99	1.97	1.96	1.96	1.95	1.94	1.94	1.93	1.93	1.93	1.93	1.93	1.94	S	1.96	1.96	1.97	1.97	1.93	2.09	1.98	
Sep 14	1.97	1.96	1.96	1.96	1.98	1.97	1.98	1.98	1.98	1.97	1.96	1.95	1.94	1.93	1.93	1.93	1.93	1.94	S	1.95	1.96	1.96	1.98	1.99	1.93	1.99	1.96	
Sep 15	2.01	2.05	2.01	2.01	2.02	2.01	2.01	2.00	2.01	2.00	1.98	1.99	1.99	1.99	1.98	1.97	1.97	S	1.98	1.99	2.00	1.99	1.99	1.99	1.97	2.05	2.00	
Sep 16	2.01	2.00	1.98	1.98	2.00	2.00	1.99	1.99	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.98	S	1.98	1.98	2.00	2.00	2.01	2.03	2.06	1.98	2.06	2.00	
Sep 17	2.09	2.08	2.09	2.09	2.12	2.16	2.18	2.20	2.15	2.03	2.01	2.00	1.98	1.96	1.96	S	1.96	1.96	1.97	1.99	2.02	2.04	2.05	2.08	1.96	2.20	2.05	
Sep 18	2.09	2.09	2.14	2.16	2.16	2.22	2.22	2.21	2.21	2.08	2.03	2.01	1.99	1.97	S	1.99	1.99	1.97	1.97	1.97	2.00	2.03	2.02	2.01	1.97	2.22	2.07	
Sep 19	2.00	2.01	2.01	2.01	2.01	2.02	2.02	2.01	2.01	2.00	1.99	1.99	1.99	S	1.95	K	1.94	K	1.94	K	1.95	K	1.95	K	1.94	2.02	1.99	
Sep 20	1.95	K	1.98	K	1.97	K	1.97	K	1.97	1.96	1.95	1.95	S	1.94	1.94	1.94	1.95	1.96	1.95	1.95	1.97	2.00	2.01	1.98	1.94	2.01	1.96	
Sep 21	1.98	1.98	1.98	1.97	1.97	1.98	1.98	1.98	1.97	1.96	1.95	S	1.92	1.91	1.90	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.90	1.89	1.98	1.93	
Sep 22	1.91	1.91	1.91	1.91	1.91	1.91	1.92	1.92	1.92	1.92	S	1.92	1.91	1.91	1.91	1.91	1.91	1.92	1.92	1.93	1.92	1.93	1.93	1.93	1.94	1.91	1.94	1.92
Sep 23	1.96	1.96	1.96	1.97	1.96	1.97	1.97	1.97	1.97	1.97	S	1.97	1.97	1.96	1.96	1.96	1.96	1.97	1.98	1.98	1.98	1.99	1.98	1.98	1.96	1.99	1.97	
Sep 24	1.97	1.97	1.98	1.98	1.98	1.99	1.99	1.99	S	1.99	1.98	1.97	1.97	1.97	1.96	1.97	1.96	1.96	1.96	1.96	1.96	1.97	1.97	1.99	1.96	1.99	1.97	
Sep 25	1.99	1.99	1.98	1.98	1.98	1.98	1.97	S	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.96	1.97	1.98	1.99	1.98	1.98	1.98	1.98	1.96	1.99	1.98	
Sep 26	1.98	1.98	1.98	1.98	1.98	1.98	S	1.98	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.99	1.99	2.00	2.00	2.00	1.99	1.99	1.99	1.99	1.97	2.00	1.98	
Sep 27	1.99	1.99	2.00	2.00	1.99	S	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.99	2.00	1.99	2.00	2.00	2.01	2.04	2.08	2.03	2.04	2.07	1.99	2.08	2.01	
Sep 28	2.03	2.04	2.06	2.09	S	2.04	2.04	2.05	2.08	2.04	2.03	2.02	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.02	2.03	2.03	2.04	2.04	2.01	2.09	2.03	
Sep 29	2.05	2.08	2.08	S	2.07	2.07	2.10	2.09	2.11	2.05	2.04	2.03	2.02	2.01	2.01	2.01	2.01	2.01	2.01	2.03	2.05	2.27	2.26	2.10	2.01	2.27	2.07	
Sep 30	2.08	2.07	S	2.08	2.11	2.11	2.12	2.10	2.07	2.04	2.03	2.03	2.02	2.02	2.02	2.01	2.01	2.01	2.05	2.09	2.04	2.03	2.03	2.03	2.00	2.12	2.05	
Diurnal Maximum	2.09	2.10	2.14	2.16	2.16	2.22	2.22	2.21	2.21	2.08	2.05	2.04	2.04	2.04	2.04	2.04	2.04	2.05	2.06	2.09	2.08	2.27	2.26	2.10				
Diurnal Average	2.01	2.01	2.01	2.01	2.02	2.03	2.03	2.03	2.01	1.99	1.98	1.98	1.97	1.97	1.97	1.97	1.96	1.96	1.97	1.98	1.99	2.00	2.01	2.01				

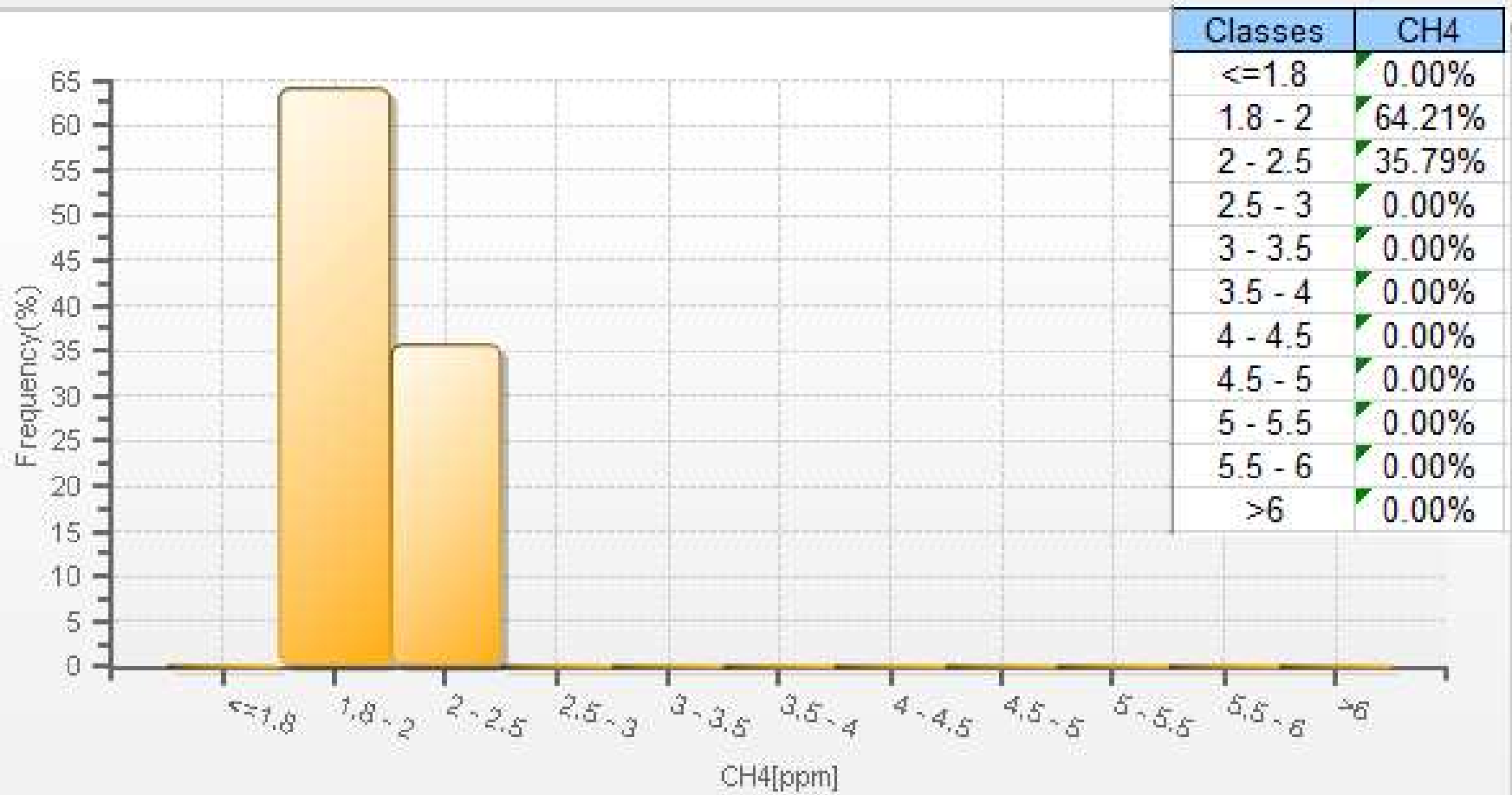
C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Average for CH4 - 986c Station

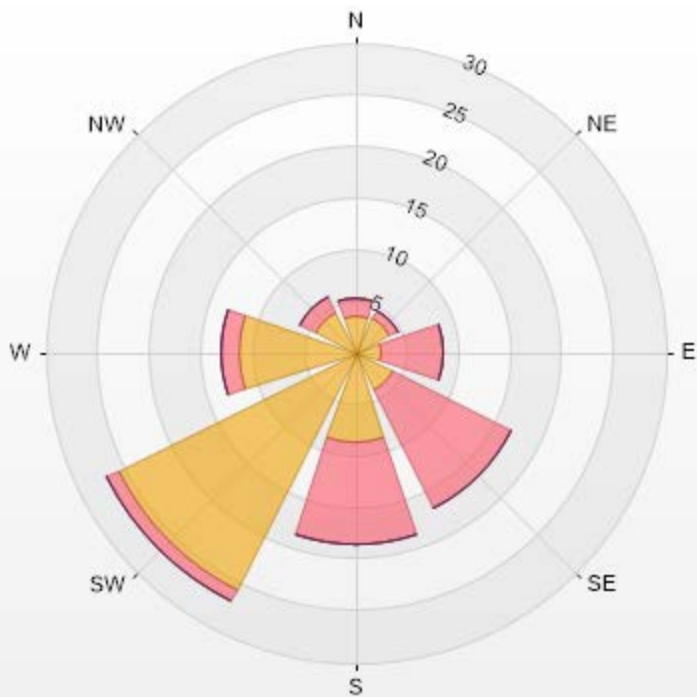


CH4[ppm] Histogram: PRAMP 986c Monthly: 09-2019 1 Hr.



Wind: PRAMP 986c Poll.: PRAMP 986c-CH4[ppm] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 80.97% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	3.6	1.72	0	0	0	5.32
NE	3.77	0.86	0	0	0	4.63
E	2.57	6	0	0	0	8.57
SE	4.12	12.69	0	0	0	16.81
S	8.75	9.78	0	0	0	18.53
SW	25.73	1.2	0	0	0	26.93
W	11.32	1.72	0	0	0	13.04
NW	4.29	1.89	0	0	0	6.18
Summary	64.15	35.86	0	0	0	100



PRAMP-201909

% Icon Classes (ppm)	64	36	18	9	0	0
0-2	64	36	18	9	0	0
2-5	0	36	18	9	0	0
5-10	0	0	18	9	0	0
10-20	0	0	0	9	0	0
>20.0	0	0	0	0	9	0



PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2019

Summary of Hourly Averages

NON-METHANE HYDROCARBONS (NMHC) in ppm

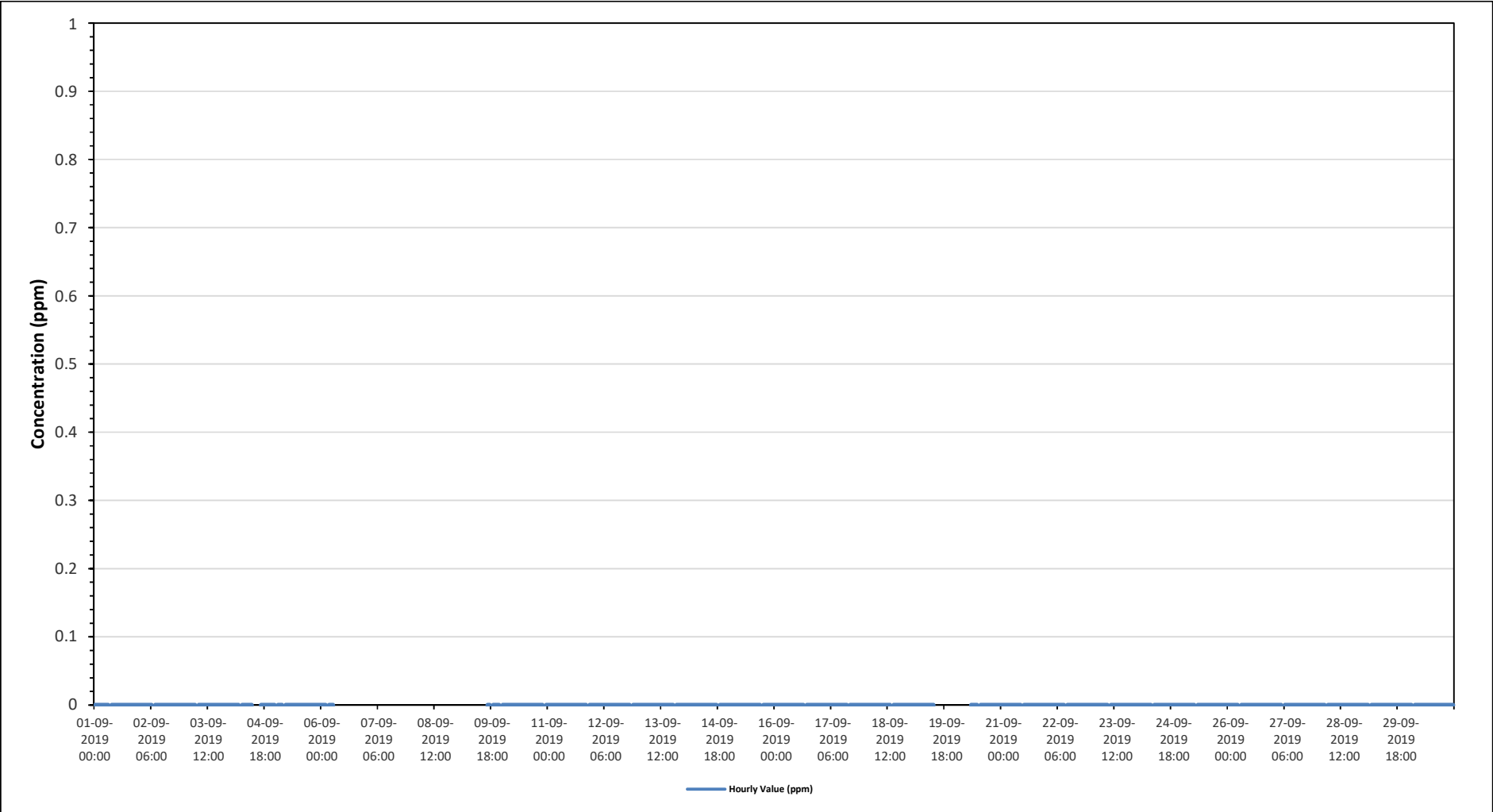
Maximum Hourly Value:	0.00 ppm on September 1 at hour 0	Hours in Service:	720
Maximum Daily Value:	0.00 ppm on	Hours of Data:	596
Minimum Hourly Value:	0.00 ppm on September 1 at hour 0	Hours of Missing Data:	91
Minimum Daily Value:	0.00 ppm on September 1	Hours of Calibration:	33
Monthly Average:	0.00 ppm	Operational Uptime:	87.4

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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	C	C	C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Sep 5	K	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	R	R	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Sep 10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Sep 11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Sep 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Sep 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	S	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Sep 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	S	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	0.00	S	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	S	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	S	0.00	K	0.00	K	0.00	K	0.00	K	0.00	K	0.00	K	0.00	K	0.00	K	0.00	0.00		
Sep 20	0.00	K	0.00	K	0.00	K	0.00	K	0.00	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 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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	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	

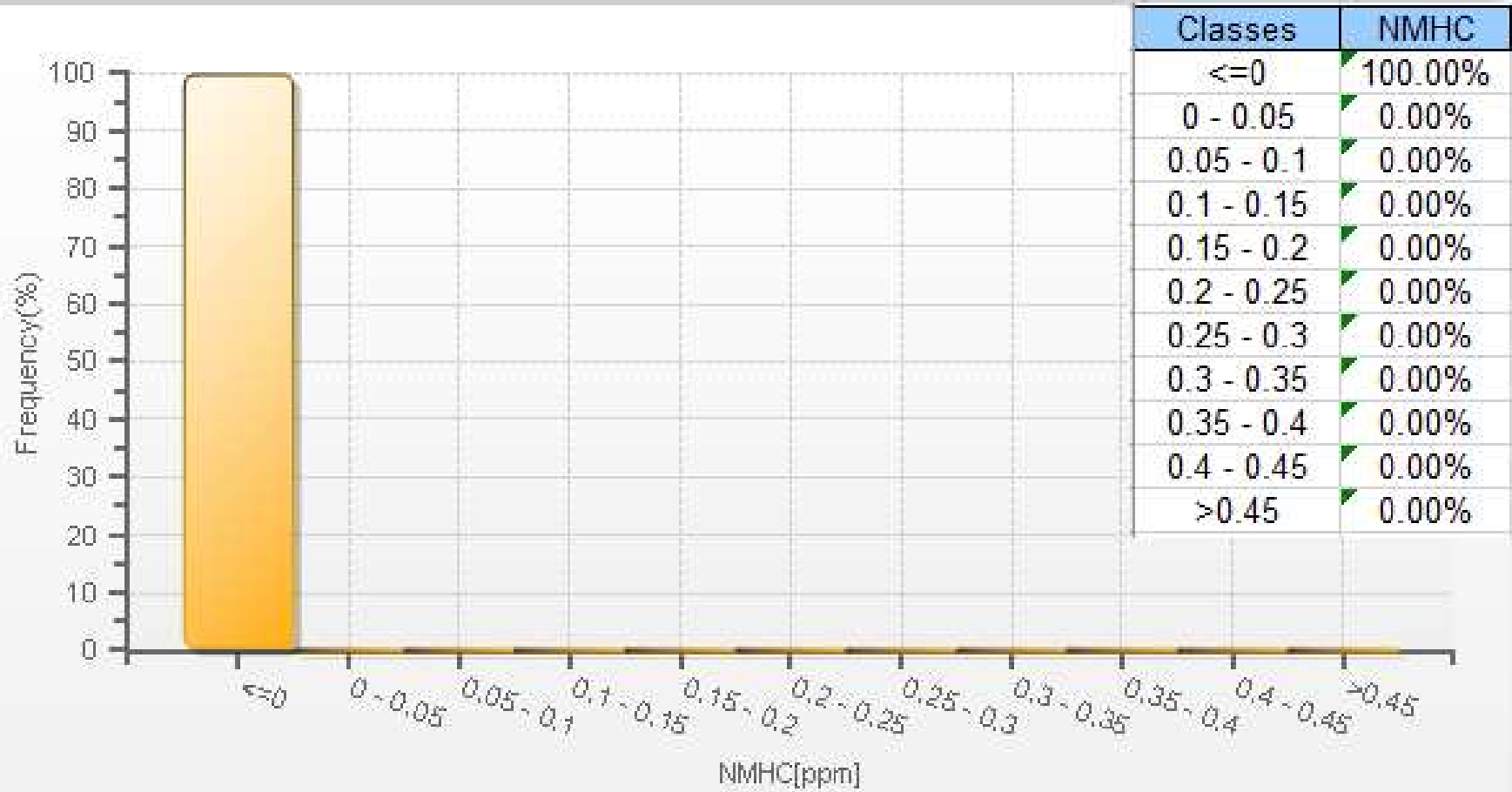
C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Average for NMHC - 986c Station

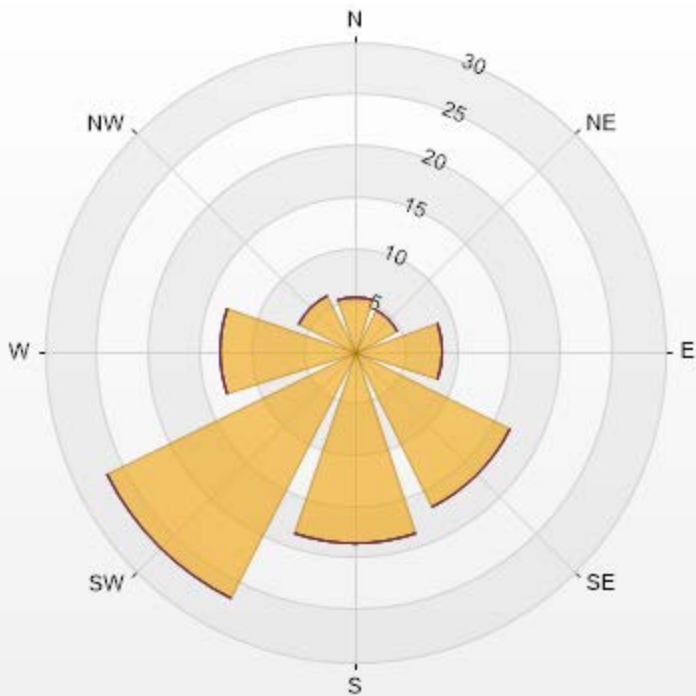


NMHC[ppm] Histogram: PRAMP 986c Monthly: 09-2019 1 Hr.








Wind: PRAMP 986c Poll.: PRAMP 986c-NMHC[ppm] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 80.83% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-0.9	0.9-2	>2.0	Total
N	5.33	0	0	0	0	5.33
NE	4.64	0	0	0	0	4.64
E	8.59	0	0	0	0	8.59
SE	16.84	0	0	0	0	16.84
S	18.56	0	0	0	0	18.56
SW	26.8	0	0	0	0	26.8
W	13.06	0	0	0	0	13.06
NW	6.19	0	0	0	0	6.19
Summary	100	0	0	0	0	100



PRAMP-201909

% Icon Classes (ppm)	100	 0-0.1	0	 0.1-0.3	0	 0.3-0.9	0	 0.9-2	0	 >2.0
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PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2019

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

Maximum Hourly Value:	100 %	on September 1 at hour 5	Hours in Service:	720
Maximum Daily Value:	97.7 %	on	Hours of Data:	641
Minimum Hourly Value:	35 %	on September 24 at hour 13	Hours of Missing Data:	79
Minimum Daily Value:	63.2 %	on September 21	Hours of Calibration:	0
Monthly Average:	79.7 %		Operational Uptime:	89.0

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	99	99	98	97	99	100	100	98	90	76	60	53	45	40	40	54	66	70	70	90	100	100	100	100	40	100	81	
Sep 2	100	100	100	100	100	100	100	100	95	88	81	78	74	70	68	68	68	67	71	86	84	83	86	87	67	100	86	
Sep 3	88	90	96	100	100	100	98	95	83	70	62	57	53	53	54	52	51	58	85	88	88	87	87	83	51	100	78	
Sep 4	96	100	100	100	100	100	100	100	95	94	86	69	59	59	72	84	98	99	100	100	100	100	100	100	59	100	92	
Sep 5	100	100	100	100	100	99	96	96	86	72	66	62	58	50	45	42	42	50	56	85	94	91	89	88	42	100	78	
Sep 6	91	91	88	92	95	96	95	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	88	96	-	
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-	
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-	
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	60	63	66	72	78	82	83	90	92	93	60	93	-	
Sep 10	95	96	98	100	100	100	100	99	93	84	77	68	60	60	60	63	67	65	71	85	89	93	94	93	60	100	84	
Sep 11	92	94	97	99	100	100	100	97	89	83	81	78	78	79	77	80	82	86	91	94	94	97	99	98	77	100	90	
Sep 12	98	99	100	100	100	100	99	96	90	80	71	64	58	52	51	50	52	56	67	92	88	86	90	83	50	100	80	
Sep 13	93	94	98	100	100	100	100	100	97	86	78	71	63	59	52	47	46	51	62	69	76	79	80	84	46	100	79	
Sep 14	89	83	79	84	88	85	87	84	79	72	72	67	59	56	50	53	59	61	70	81	83	89	91	90	50	91	75	
Sep 15	93	95	91	92	97	98	100	99	97	93	90	85	83	84	83	82	84	91	97	100	100	100	100	100	82	100	93	
Sep 16	100	100	100	100	100	100	100	100	100	100	99	95	92	86	79	76	74	71	76	87	98	100	100	100	71	100	93	
Sep 17	100	100	100	100	100	100	100	100	95	81	72	69	59	49	47	43	42	51	71	90	87	94	92	97	42	100	81	
Sep 18	100	100	100	100	100	100	100	100	100	100	93	67	55	46	51	59	62	70	92	91	87	88	92	94	46	100	86	
Sep 19	92	92	92	93	95	96	94	84	77	68	62	58	57	56	61	65	74	73	83	86	86	80	76	85	56	96	79	
Sep 20	85	98	100	100	99	99	97	87	78	69	72	67	59	57	52	49	47	53	75	86	84	82	85	76	47	100	77	
Sep 21	77	85	86	82	77	80	85	82	72	65	59	54	48	43	40	40	41	46	55	53	58	61	63	65	40	86	63	
Sep 22	63	66	70	70	73	72	76	74	67	62	62	57	52	47	43	38	38	40	50	62	89	92	93	96	38	96	65	
Sep 23	93	87	87	84	78	77	83	94	87	74	62	57	54	47	43	46	47	48	54	68	62	68	72	77	43	94	69	
Sep 24	82	87	91	91	93	95	97	95	83	69	59	51	43	35	37	38	42	50	55	57	70	85	95	89	35	97	70	
Sep 25	85	86	82	84	92	97	94	95	90	81	72	67	65	59	59	63	64	70	76	80	80	95	99	100	59	100	81	
Sep 26	100	100	100	100	100	100	100	100	100	97	95	96	99	96	95	98	96	97	98	100	98	92	93	94	92	100	98	
Sep 27	96	95	98	99	98	95	96	97	96	96	91	83	76	71	63	55	56	61	64	67	75	87	87	91	55	99	83	
Sep 28	88	87	93	90	96	98	97	98	92	89	81	67	56	51	47	56	62	58	64	70	72	73	84	86	47	98	77	
Sep 29	90	89	89	87	86	86	88	86	82	65	51	45	42	39	37	37	37	43	58	66	80	82	78	82	37	90	68	
Sep 30	86	86	85	85	86	87	88	86	77	61	50	46	42	41	40	43	42	47	54	61	60	58	55	57	40	88	63	
Diurnal Maximum	100	100	100	100	100	100	100	100	100	100	100	96	99	96	95	98	98	99	100	100	100	100	100	100	100	100	100	100
Daiurnal Average	91.5	92.6	93.3	93.7	94.5	94.8	95.2	93.9	88.1	79.8	73.5	67.6	61.6	57.5	55.6	56.9	59.3	62.8	71.1	80.6	84.0	86.3	87.7	88.4	88.4	88.4	88.4	

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

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



PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2019

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

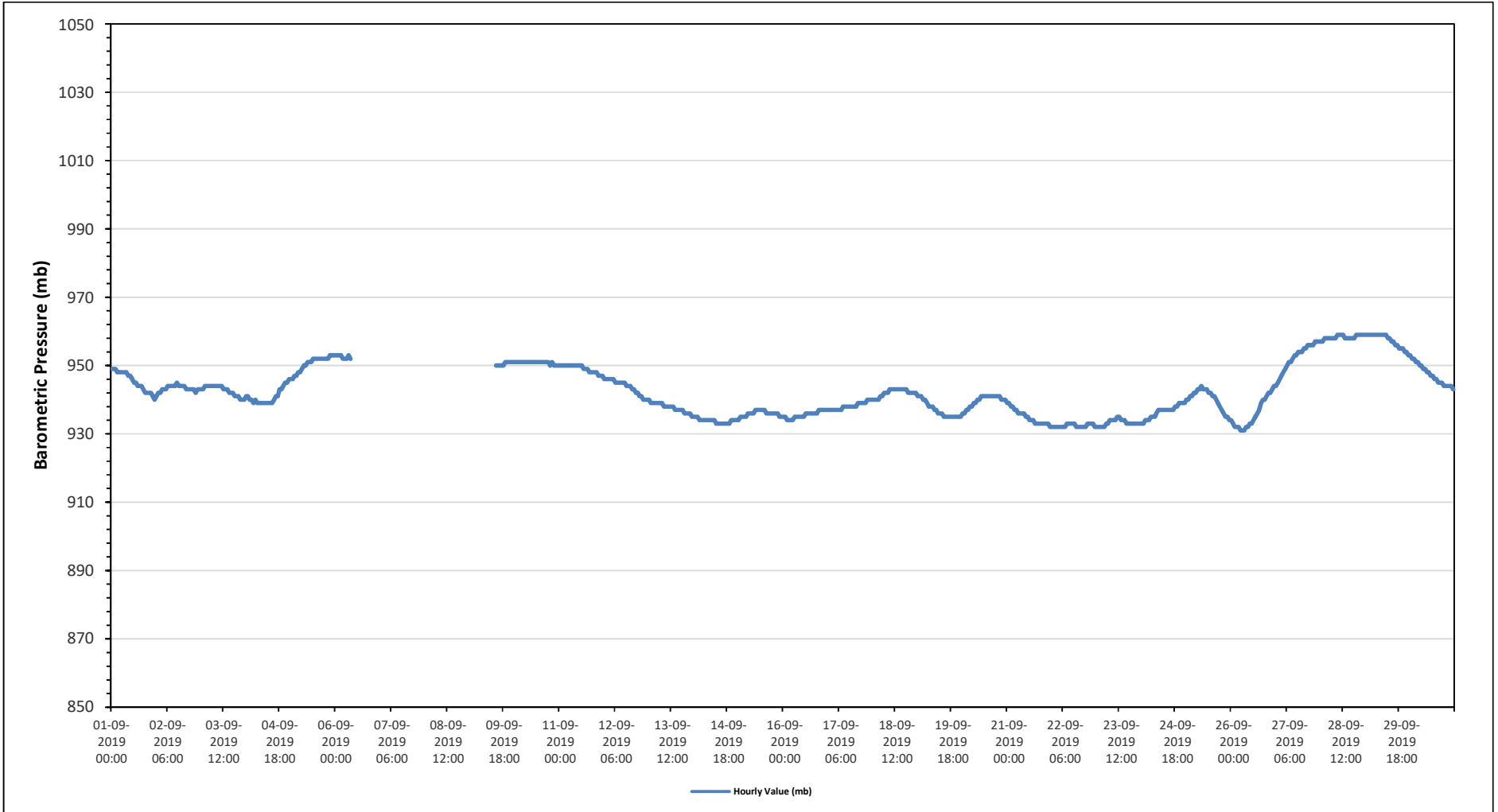
Maximum Hourly Value:	959 mb	on September 28 at hour 9	Hours in Service:	720
Maximum Daily Value:	958 mb	on	Hours of Data:	641
Minimum Hourly Value:	931 mb	on September 26 at hour 5	Hours of Missing Data:	79
Minimum Daily Value:	932 mb	on September 22	Hours of Calibration:	0
Monthly Average:	942 mb		Operational Uptime:	89.0

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	949	949	949	948	948	948	948	948	948	947	947	946	945	945	944	944	944	943	942	942	942	942	941	940	940	941	945
Sep 2	941	942	942	943	943	943	944	944	944	944	944	945	944	944	944	944	943	943	943	943	943	942	943	943	943	943	943
Sep 3	943	943	944	944	944	944	944	944	944	944	944	944	943	943	943	942	942	942	941	941	941	940	940	940	940	944	943
Sep 4	941	941	940	940	939	940	939	939	939	939	939	939	939	939	939	940	941	941	943	943	944	945	945	946	946	946	941
Sep 5	946	946	947	947	948	948	949	950	950	951	951	951	952	952	952	952	952	952	952	952	952	953	953	953	953	953	943
Sep 6	953	953	953	953	952	952	952	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	943
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	943
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	943
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	950	950	950	950	950	951	951	951	951	951	951	951	943
Sep 10	951	951	951	951	951	951	951	951	951	951	951	951	951	951	951	951	951	951	951	951	950	950	950	950	950	950	943
Sep 11	950	950	950	950	950	950	950	950	950	950	950	950	950	949	949	949	948	948	948	948	948	948	947	947	947	947	943
Sep 12	946	946	946	946	946	946	945	945	945	945	945	945	944	944	944	943	943	942	942	941	941	940	940	940	940	940	943
Sep 13	940	939	939	939	939	939	939	939	939	938	938	938	938	938	937	937	937	937	937	937	936	936	936	936	935	935	943
Sep 14	935	935	935	934	934	934	934	934	934	934	934	933	933	933	933	933	933	933	933	933	934	934	934	934	934	934	943
Sep 15	934	935	935	935	935	936	936	936	936	936	937	937	937	937	937	936	936	936	936	936	936	936	935	935	935	935	943
Sep 16	935	935	934	934	934	934	935	935	935	935	935	935	936	936	936	936	936	936	936	937	937	937	937	937	937	937	943
Sep 17	937	937	937	937	937	937	937	937	937	938	938	938	938	938	938	938	939	939	939	939	939	940	940	940	940	940	943
Sep 18	940	940	940	940	941	941	942	942	942	943	943	943	943	943	943	943	943	943	942	942	942	942	942	942	942	942	943
Sep 19	941	941	941	940	940	939	938	938	938	937	937	936	936	936	935	935	935	935	935	935	935	935	935	935	935	935	943
Sep 20	936	936	937	937	938	938	939	939	940	940	941	941	941	941	941	941	941	941	941	941	941	940	940	940	940	940	943
Sep 21	939	939	938	938	937	937	936	936	936	936	935	935	934	934	934	933	933	933	933	933	933	933	933	933	932	932	943
Sep 22	932	932	932	932	932	932	932	932	932	933	933	933	933	933	932	932	932	932	932	932	933	933	933	933	932	932	943
Sep 23	932	932	932	932	932	933	933	934	934	934	934	935	935	934	934	934	933	933	933	933	933	933	933	933	933	933	943
Sep 24	933	933	934	934	934	935	935	935	936	937	937	937	937	937	937	937	937	937	938	938	939	939	939	939	939	939	943
Sep 25	940	940	941	941	942	942	943	943	944	943	943	943	942	942	941	941	940	939	938	937	936	935	934	934	934	934	943
Sep 26	934	933	932	932	932	931	931	931	932	932	933	933	934	935	936	937	939	940	940	941	942	942	943	944	944	944	943
Sep 27	944	945	946	947	948	949	950	951	951	952	953	953	954	954	954	955	955	956	956	956	956	957	957	957	957	957	943
Sep 28	957	957	958	958	958	958	958	958	958	959	959	959	959	958	958	958	958	958	958	959	959	959	959	959	959	959	943
Sep 29	959	959	959	959	959	959	959	959	959	959	959	959	958	958	957	956	956	955	955	955	954	954	954	953	953	953	943
Sep 30	953	952	952	951	951	950	950	949	949	948	948	947	946	946	945	945	945	944	944	944	944	944	944	944	944	944	947
Diurnal Maximum	959	959	959	959	959	959	959	959	959	959	959	959	959	958	958	958	958	958	958	959	959	959	959	959	959	959	947
Daiurnal Average	942	942	942	942	942	942	943	942	942	943	943	943	942	942	942	942	942	942	942	942	942	942	942	942	942	942	947

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 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 2019

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

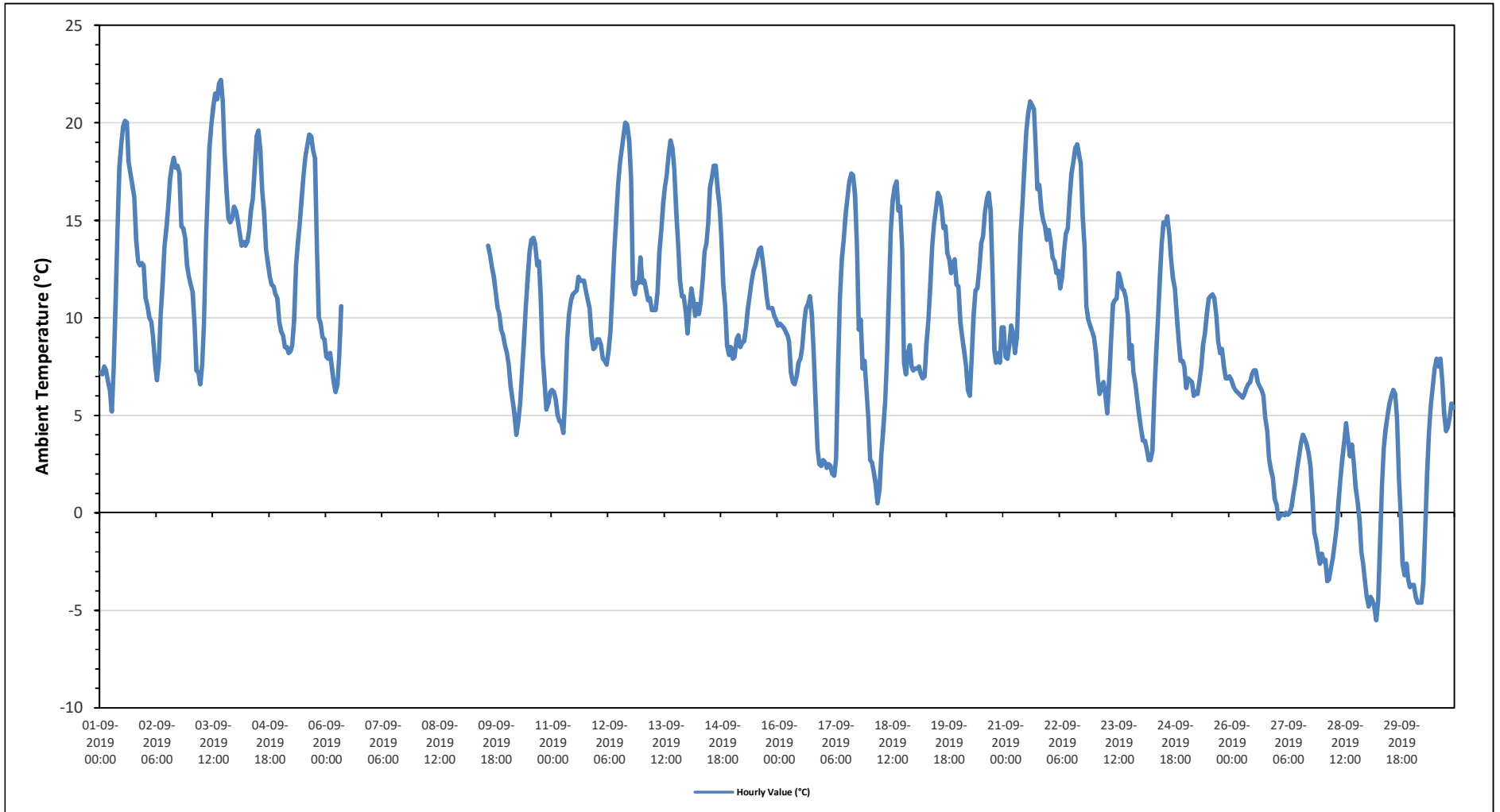
Maximum Hourly Value:	22.2 °C	on September 3 at hour 16	Hours in Service:	720
Maximum Daily Value:	15.2 °C	on	Hours of Data:	641
Minimum Hourly Value:	-5.5 °C	on September 29 at hour 6	Hours of Missing Data:	79
Minimum Daily Value:	-0.2 °C	on September 29	Hours of Calibration:	0
Monthly Average:	9.5 °C		Operational Uptime:	89.0

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	7.2	7.1	7.5	7.3	6.7	6.3	5.2	7.4	10.7	14.5	17.7	18.9	19.8	20.1	20.0	18.0	17.4	16.8	16.2	14.0	12.9	12.7	12.8	12.7	5.2	20.1	12.9	
Sep 2	11.0	10.6	10.0	9.8	9.0	7.6	6.8	7.8	10.2	11.8	13.7	14.6	15.8	17.1	17.8	18.2	17.7	17.8	17.4	14.7	14.6	14.1	12.7	12.1	6.8	18.2	13.0	
Sep 3	11.7	11.3	9.7	7.3	7.2	6.6	7.6	9.7	14.0	16.5	18.7	19.9	20.8	21.5	21.2	22.0	22.2	21.1	18.5	16.6	15.1	14.9	15.1	15.7	6.6	22.2	15.2	
Sep 4	15.5	15.0	14.3	13.7	13.9	13.7	13.9	14.5	15.5	16.1	17.7	19.3	19.6	18.6	16.5	15.4	13.5	12.8	12.1	11.7	11.6	11.2	11.0	9.8	9.8	19.6	14.5	
Sep 5	9.3	9.1	8.5	8.5	8.2	8.3	8.6	9.9	12.7	13.9	14.9	16.2	17.4	18.3	18.9	19.4	19.3	18.6	18.2	13.6	10.0	9.7	9.0	8.9	8.2	19.4	12.9	
Sep 6	8.0	7.9	8.2	7.4	6.7	6.2	6.6	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	6.2	8.2	-	
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	13.7	13.2	12.6	12.1	11.3	10.5	10.2	9.4	9.1	8.6	8.6	13.7	-	-
Sep 10	8.2	7.6	6.5	5.8	5.1	4.0	4.6	5.6	7.1	8.7	10.5	12.0	13.4	14.0	14.1	13.8	12.7	12.9	11.2	8.2	6.8	5.3	5.6	6.2	4.0	14.1	8.7	
Sep 11	6.3	6.2	5.8	5.0	4.7	4.6	4.1	6.1	8.9	10.2	10.9	11.2	11.3	11.4	12.1	11.9	11.9	11.9	11.4	10.9	10.5	9.1	8.4	8.5	4.1	12.1	8.9	
Sep 12	8.9	8.9	8.6	7.9	7.8	7.6	8.3	9.3	11.3	13.4	15.1	16.8	17.9	18.7	19.3	20.0	19.9	19.1	17.2	11.6	11.2	11.8	11.8	13.1	7.6	20.0	13.1	
Sep 13	11.8	11.9	11.4	10.9	11.0	10.4	10.4	10.4	11.3	13.4	14.5	15.9	16.7	17.3	18.4	19.1	18.7	17.6	15.5	13.8	11.9	11.1	11.1	10.3	10.3	19.1	13.5	
Sep 14	9.2	10.5	11.5	10.9	10.1	10.7	10.2	10.8	12.0	13.4	13.8	14.8	16.7	17.2	17.8	17.8	16.6	15.7	14.1	11.7	10.6	8.6	8.1	8.5	8.1	17.8	12.6	
Sep 15	7.9	8.0	8.9	9.1	8.5	8.7	8.8	9.5	10.4	11.1	11.8	12.4	12.7	13.1	13.5	13.6	12.9	12.1	11.1	10.5	10.5	10.5	10.1	9.9	7.9	13.6	10.7	
Sep 16	9.6	9.7	9.6	9.5	9.3	9.1	8.8	7.2	6.7	6.6	7.0	7.7	7.9	8.5	9.8	10.5	10.7	11.1	10.2	8.2	5.7	3.3	2.5	2.4	2.4	11.1	8.0	
Sep 17	2.7	2.6	2.3	2.5	2.4	2.0	1.9	2.8	7.3	11.0	13.0	14.0	15.3	16.2	17.0	17.4	17.3	16.3	13.7	9.4	9.9	7.4	7.8	6.4	1.9	17.4	9.1	
Sep 18	4.8	2.7	2.6	2.1	1.5	0.5	1.2	3.0	4.3	5.7	7.9	11.1	14.4	16.0	16.7	17.0	15.5	15.7	13.5	7.7	7.1	8.2	8.6	7.5	0.5	17.0	8.1	
Sep 19	7.3	7.4	7.4	7.5	7.1	6.9	7.0	8.7	9.9	11.7	13.7	14.8	15.6	16.4	16.2	15.6	14.6	14.7	13.3	13.0	12.3	12.8	13.0	11.7	6.9	16.4	11.6	
Sep 20	11.6	9.8	9.0	8.3	7.5	6.3	6.0	7.9	10.1	11.4	11.5	12.5	13.8	14.2	15.4	16.1	16.4	15.5	12.3	8.3	7.7	8.2	7.7	9.5	6.0	16.4	10.7	
Sep 21	9.5	8.0	7.9	8.6	9.6	9.2	8.2	9.0	11.7	14.3	15.9	17.8	19.6	20.5	21.1	20.9	20.7	18.7	16.6	16.8	15.6	15.0	14.7	14.0	7.9	21.1	14.3	
Sep 22	14.5	13.9	13.1	12.9	12.3	12.4	11.5	12.1	13.4	14.3	14.6	16.1	17.4	18.0	18.7	18.9	18.4	17.9	15.2	13.6	10.6	9.9	9.6	9.3	9.3	18.9	14.1	
Sep 23	9.0	8.2	6.9	6.1	6.5	6.7	6.1	5.1	6.8	8.8	10.7	10.9	11.0	12.3	12.0	11.5	11.4	11.0	10.1	7.9	8.6	7.2	6.6	5.8	5.1	12.3	8.6	
Sep 24	5.0	4.3	3.7	3.7	3.3	2.7	2.7	3.2	6.0	8.2	10.1	12.2	13.8	14.9	14.8	15.2	14.3	13.0	12.0	11.5	10.1	8.8	7.8	7.8	2.7	15.2	8.7	
Sep 25	7.5	6.4	6.9	6.8	6.7	6.0	6.2	6.1	6.8	7.5	8.6	9.2	10.2	11.0	11.1	11.2	11.0	10.1	8.8	8.2	8.4	7.5	6.9	6.9	6.0	11.2	8.2	
Sep 26	7.0	6.8	6.5	6.3	6.2	6.1	6.0	5.9	6.1	6.4	6.6	6.7	7.1	7.3	7.3	6.7	6.5	6.3	6.0	4.9	4.2	2.8	2.2	1.8	1.8	7.3	5.8	
Sep 27	0.7	0.4	-0.3	-0.1	-0.1	-0.1	0.0	-0.1	0.0	0.3	1.0	1.5	2.3	2.9	3.6	4.0	3.8	3.5	3.1	2.4	0.8	-1.0	-1.4	-2.1	-2.1	4.0	1.0	
Sep 28	-2.6	-2.1	-2.5	-2.4	-3.5	-3.4	-2.8	-2.3	-1.5	-0.7	0.6	1.8	2.8	3.7	4.6	3.7	2.9	3.5	2.6	1.3	0.6	-0.3	-2.0	-2.6	-3.5	4.6	0.0	
Sep 29	-3.6	-4.3	-4.8	-4.3	-4.5	-4.8	-5.5	-4.5	-1.6	1.4	3.3	4.3	5.0	5.6	6.0	6.3	6.1	4.9	1.7	-0.2	-2.7	-3.2	-2.6	-3.4	-5.5	6.3	-0.2	
Sep 30	-3.8	-3.7	-3.7	-4.3	-4.6	-4.6	-4.6	-3.6	-0.9	2.0	4.2	5.5	6.5	7.4	7.9	7.5	7.9	6.8	5.1	4.2	4.4	4.9	5.6	5.4	-4.6	7.9	2.1	
Diurnal Maximum	15.5	15.0	14.3	13.7	13.9	13.7	13.9	14.5	15.5	16.5	18.7	19.9	20.8	21.5	21.2	22.0	22.2	21.1	18.5	16.8	15.6	15.0	15.1	15.7				
Daiurnal Average	7.2	6.8	6.5	6.2	5.9	5.5	5.5	6.2	8.0	9.7	11.1	12.2	13.3	13.9	14.3	14.3	13.8	13.2	11.8	9.8	8.9	8.1	7.8	7.6				

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	N	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Average for AT - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2019

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

Maximum Hourly Value:	24.8 °C	on September 18 at hour 13	Hours in Service:	720
Maximum Daily Value:	23.4 °C	on	Hours of Data:	641
Minimum Hourly Value:	20.9 °C	on September 30 at hour 6	Hours of Missing Data:	79
Minimum Daily Value:	21.9 °C	on September 29	Hours of Calibration:	0
Monthly Average:	22.9 °C		Operational Uptime:	89.0

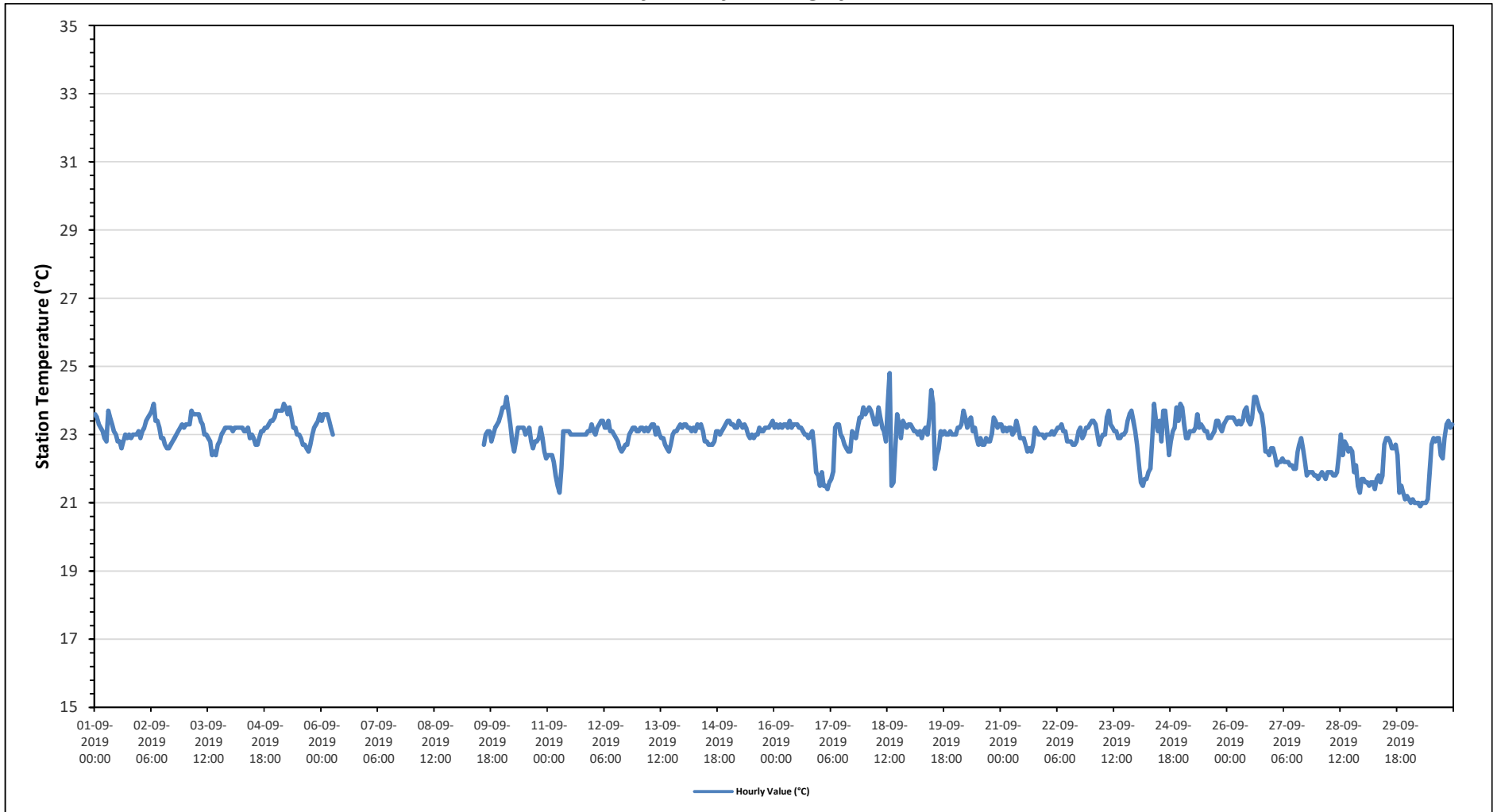
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	23.6	23.5	23.3	23.2	23.1	22.9	22.8	23.7	23.5	23.3	23.1	23.0	22.8	22.8	22.6	22.8	23.0	22.9	23.0	22.9	23.0	23.0	23.0	23.1	22.6	23.7	23.1
Sep 2	22.9	23.1	23.2	23.4	23.5	23.6	23.7	23.9	23.4	23.4	23.2	22.9	22.9	22.7	22.6	22.6	22.7	22.8	22.9	23.0	23.1	23.2	23.3	23.2	22.6	23.9	23.1
Sep 3	23.3	23.3	23.3	23.7	23.6	23.6	23.6	23.6	23.4	23.3	23.0	23.0	22.9	22.8	22.4	22.5	22.4	22.7	22.8	23.0	23.1	23.2	23.2	23.2	22.4	23.7	23.1
Sep 4	23.2	23.1	23.2	23.2	23.2	23.2	23.2	23.2	23.1	23.1	23.2	22.9	23.0	22.9	22.7	22.7	22.9	23.1	23.1	23.2	23.2	23.3	23.4	23.5	22.7	23.5	23.1
Sep 5	23.7	23.7	23.7	23.7	23.9	23.8	23.6	23.8	23.5	23.2	23.2	23.0	23.0	22.9	22.7	22.7	22.6	22.5	22.7	23.0	23.2	23.3	23.4	23.6	22.5	23.9	23.3
Sep 6	23.4	23.6	23.6	23.6	23.4	23.2	23.0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23.0	23.6	-	
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-	
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-	
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	22.7	23.0	23.1	23.1	22.8	23.0	23.2	23.3	23.4	23.6	22.7	23.6	-
Sep 10	23.8	23.8	24.1	23.7	23.3	22.8	22.5	22.8	23.2	23.2	23.2	23.0	23.1	23.2	22.8	22.6	22.8	22.8	22.9	23.2	22.9	22.5	22.3	22.3	22.3	24.1	23.1
Sep 11	22.4	22.4	22.4	22.2	21.8	21.5	21.3	22.0	23.1	23.1	23.1	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.1	23.1	23.3	21.3	23.3	22.7	
Sep 12	23.1	23.0	23.2	23.3	23.4	23.4	23.2	23.2	23.4	23.1	23.1	23.0	22.9	22.8	22.6	22.5	22.6	22.7	22.7	23.0	23.1	23.2	23.2	23.1	22.5	23.4	23.0
Sep 13	23.1	23.2	23.2	23.1	23.2	23.1	23.2	23.3	23.3	23.0	23.2	23.0	22.9	22.9	22.7	22.6	22.5	22.7	23.0	23.1	23.1	23.2	23.3	23.2	22.5	23.3	23.0
Sep 14	23.3	23.3	23.2	23.2	23.1	23.2	23.1	23.3	23.2	23.3	23.1	22.8	22.8	22.7	22.7	22.7	22.8	23.1	23.1	23.0	23.1	23.2	23.3	23.4	22.7	23.4	23.1
Sep 15	23.4	23.3	23.3	23.2	23.2	23.4	23.3	23.3	23.3	23.2	23.0	22.9	23.0	22.9	23.0	23.0	23.2	23.1	23.1	23.2	23.2	23.2	23.3	23.4	22.9	23.4	23.2
Sep 16	23.2	23.3	23.2	23.3	23.2	23.3	23.3	23.2	23.4	23.2	23.3	23.3	23.3	23.2	23.2	23.1	23.0	23.0	22.9	23.0	23.1	22.6	21.9	21.8	21.8	23.4	23.1
Sep 17	21.5	21.9	21.5	21.5	21.4	21.6	21.7	21.9	23.2	23.3	23.3	23.0	22.9	22.7	22.6	22.5	22.5	23.1	23.0	22.9	23.2	23.5	23.5	23.8	21.4	23.8	22.6
Sep 18	23.6	23.7	23.8	23.7	23.5	23.3	23.3	23.8	23.5	23.2	23.1	22.8	23.9	24.8	21.5	21.6	22.6	23.6	23.3	22.9	23.4	23.3	23.2	23.3	21.5	24.8	23.3
Sep 19	23.3	23.2	23.1	23.1	23.0	23.1	22.9	23.1	23.2	23.0	23.5	24.3	23.9	22.0	22.4	22.6	23.1	23.0	23.1	23.0	23.0	23.1	23.0	23.0	22.0	24.3	23.1
Sep 20	23.0	23.2	23.2	23.3	23.7	23.5	23.2	23.4	23.5	23.1	23.2	22.9	22.7	22.9	22.7	22.7	22.9	22.8	22.8	23.0	23.5	23.4	23.2	23.3	22.7	23.7	23.1
Sep 21	23.3	23.1	23.2	23.1	23.2	23.2	23.0	23.1	23.4	23.2	22.9	22.9	22.9	22.7	22.5	22.6	22.5	22.7	23.2	23.1	23.0	23.0	23.0	22.9	22.5	23.4	23.0
Sep 22	23.0	23.0	23.0	23.1	23.0	23.1	23.2	23.2	23.3	23.1	23.1	22.8	22.8	22.8	22.7	22.7	22.8	23.1	23.2	22.9	23.0	23.2	23.2	23.3	22.7	23.3	23.0
Sep 23	23.4	23.4	23.3	23.0	22.7	22.9	23.0	23.0	23.5	23.7	23.3	23.2	23.1	23.1	22.9	22.9	23.0	23.0	23.1	23.4	23.6	23.7	23.4	23.1	22.7	23.7	23.2
Sep 24	22.7	22.1	21.6	21.5	21.7	21.7	21.9	22.0	22.9	23.9	23.4	23.1	23.4	22.8	23.7	23.7	23.1	22.4	22.8	23.1	23.2	23.8	23.4	23.9	21.5	23.9	22.8
Sep 25	23.8	23.3	22.9	22.9	23.1	23.1	23.1	23.2	23.6	23.2	23.3	23.2	23.1	23.1	22.9	22.9	23.0	23.1	23.4	23.4	23.2	23.1	23.3	23.4	22.9	23.8	23.2
Sep 26	23.5	23.5	23.5	23.5	23.4	23.3	23.4	23.3	23.4	23.7	23.8	23.4	23.3	23.5	24.1	24.1	23.9	23.7	23.6	23.2	22.5	22.5	22.4	22.6	22.4	24.1	23.4
Sep 27	22.6	22.4	22.1	22.2	22.2	22.3	22.2	22.2	22.2	22.1	22.1	22.0	22.0	22.5	22.7	22.9	22.6	22.2	21.8	21.9	21.9	21.9	21.8	21.8	21.8	22.9	22.2
Sep 28	21.7	21.8	21.9	21.8	21.7	21.9	21.9	21.9	21.8	21.8	21.9	22.4	23.0	22.4	22.8	22.7	22.5	22.6	22.5	21.9	22.1	21.5	21.3	21.7	21.3	23.0	22.1
Sep 29	21.7	21.6	21.6	21.5	21.6	21.6	21.4	21.7	21.8	21.6	21.8	22.7	22.9	22.8	22.6	22.6	22.7	22.4	21.3	21.5	21.3	21.1	21.2	21.1	22.9	21.9	21.9
Sep 30	21.1	21.0	21.1	21.0	21.0	20.9	21.0	21.0	21.0	21.1	21.9	22.7	22.9	22.8	22.9	22.9	22.4	22.3	22.9	23.3	23.4	23.2	23.3	20.9	23.4	22.0	
Diurnal Maximum	23.8	23.8	24.1	23.7	23.9	23.8	23.7	23.9	23.6	23.9	23.8	24.3	23.9	24.8	24.1	24.1	23.9	23.7	23.6	23.4	23.6	23.8	23.5	23.9			
Daiurnal Average	23.0	23.0	22.9	22.9	22.9	22.8	22.8	22.9	23.1	23.0	23.0	23.0	22.9	22.8	22.8	22.8	22.9	22.9	22.9	23.0	23.0	22.9	23.0				

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

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

Timeseries Chart of Hourly Average for ST - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2019

Summary of Hourly Averages

PRECIPITATION in mm

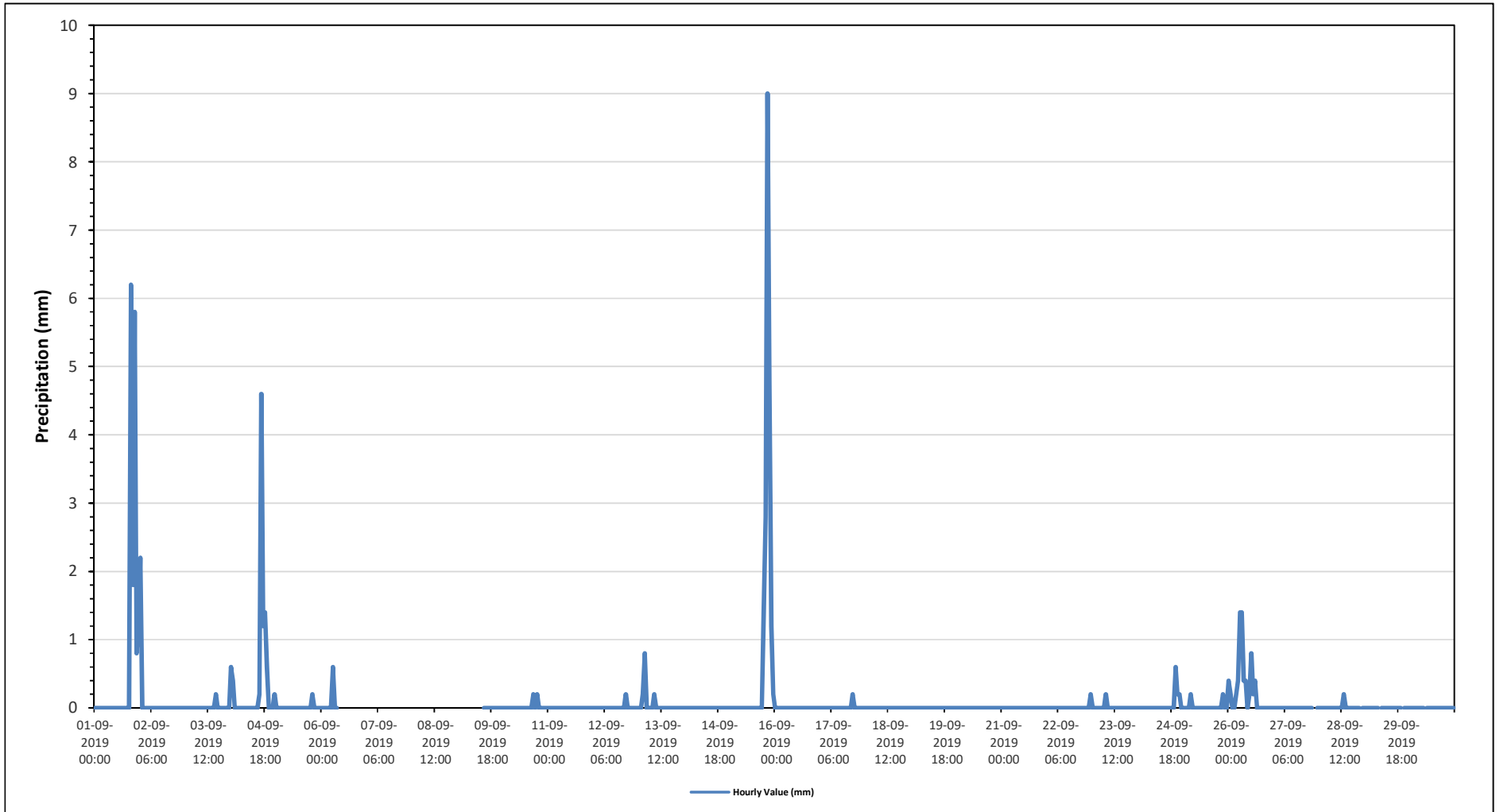
Maximum Hourly Value:	9.0 mm on September 15 at hour 20	Hours in Service:	720
Maximum Daily Value:	19.4 mm on	Hours of Data:	605
Minimum Hourly Value:	0.0 mm on September 1 at hour 0	Hours of Missing Data:	115
Minimum Daily Value:	0.0 mm on September 9	Hours of Calibration:	0
Monthly Total:	58.0 mm	Operational Uptime:	84.0

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Total		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	1.8	5.8	0.8	1.2	0.0	6.2	15.8	
Sep 2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2
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	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Sep 4	0.6	0.4	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	0.2	4.6	1.2	1.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0	4.6	9.2
Sep 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Sep 6	0.0	0.0	0.0	0.0	0.0	0.0	0.6	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	0.0	0.6	0.6
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sep 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4
Sep 11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sep 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Sep 13	0.0	0.0	0.2	0.8	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.2
Sep 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sep 15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.8	9.0	4.8	1.2	0.2	0.0	9.0	19.4	
Sep 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Sep 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sep 19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sep 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sep 21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.2
Sep 23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Sep 24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.2	0.0	0.0	0.0	0.6	1.0	
Sep 25	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.4	0.4
Sep 26	0.4	0.2	0.0	0.0	0.2	0.4	1.4	1.4	0.4	0.4	0.0	0.2	0.8	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	6.4
Sep 27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	K	K	K	0.0	0.0	0.0	0.0
Sep 28	K	K	K	K	K	K	K	K	K	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Sep 29	K	K	K	K	K	K	K	K	K	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	K	K	K	K	0.0	0.0	0.0
Sep 30	K	K	K	K	K	K	K	K	K	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	2.2	0.4	0.2	0.8	0.2	0.4	1.4	1.4	0.4	0.4	0.0	0.2	0.8	0.2	0.4	0.2	4.6	1.2	1.4	6.2	9.0	5.8	1.2	1.2				
Daiurnal Average	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.4	0.4	0.4	0.1	0.1				

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 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 2019

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

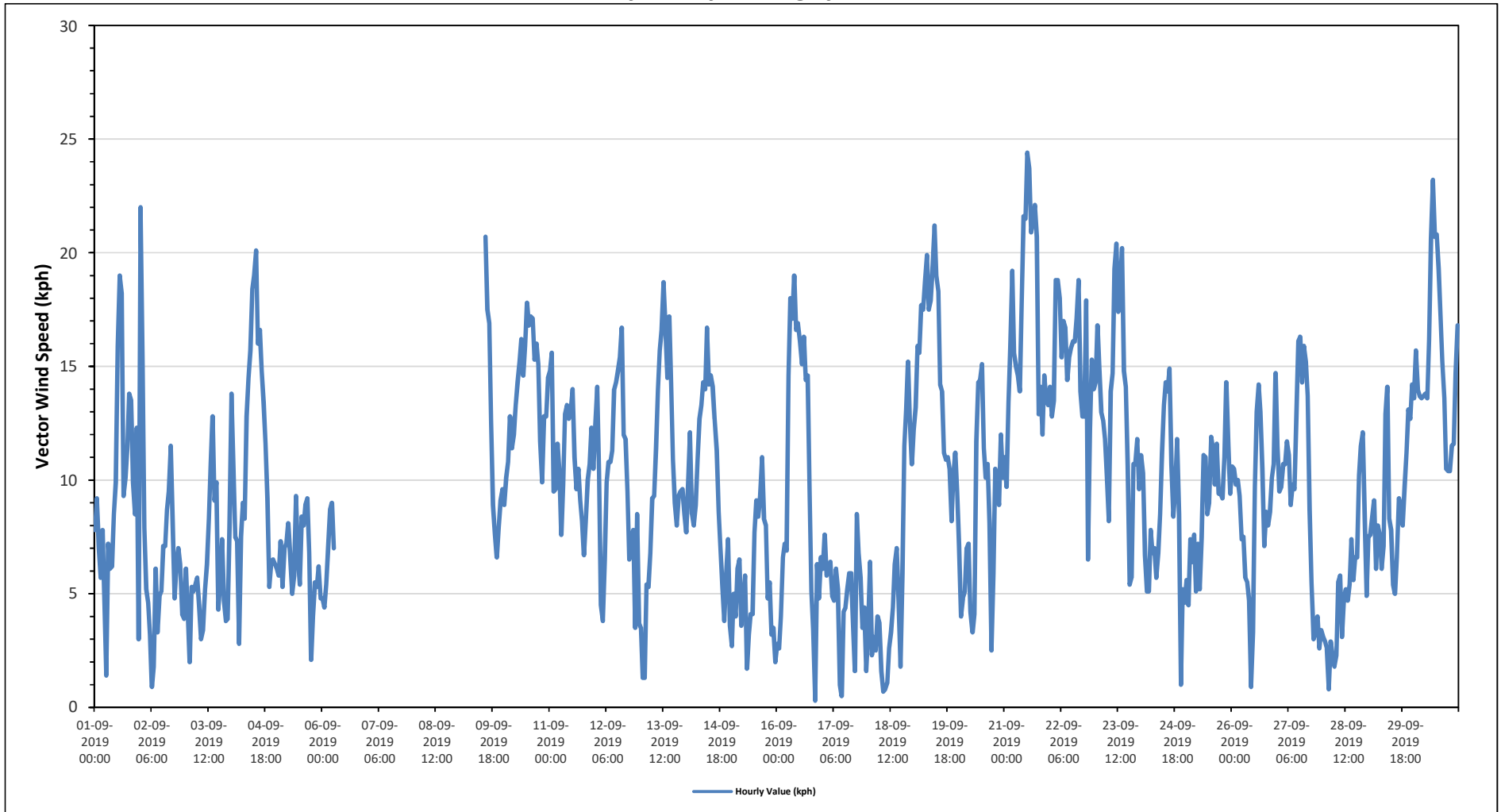
Maximum Hourly Value: 24.4 kph on September 21 at hour 12	Hours in Service: 720
Maximum Daily Value: 16.8 kph on	Hours of Data: 641
Minimum Hourly Value: 0.3 kph on September 16 at hour 20	Hours of Missing Data: 79
Minimum Daily Value: 4.8 kph on September 17	Hours of Calibration: 0
Monthly Average: 4.6 kph	Operational Uptime: 89.0

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	7.8	9.2	7.1	5.7	7.8	4.5	1.4	7.2	6.1	6.2	8.5	9.9	15.9	19	18.2	9.3	10.1	11.4	13.8	13.5	9.9	8.5	12.3	3	1.4	19.0	9.4	
Sep 2	22	15.3	7.9	5.2	4.6	3.2	0.9	1.8	6.1	3.3	4.9	5.1	7.1	7.1	8.7	9.5	11.5	8.1	4.8	6.3	7	6.3	4.1	3.9	0.9	22.0	6.9	
Sep 3	6.1	4.1	2	5.3	5.1	5.4	5.7	4.5	3	3.4	5.2	6.3	8.3	10.7	12.8	9.1	9.9	4.3	5.5	7.4	4.7	3.8	3.9	8.1	2.0	12.8	6.0	
Sep 4	13.8	10.5	7.5	7.3	2.8	7.5	9	8.3	12.8	14.5	15.7	18.4	19	20.1	16	16.6	14.8	13.4	11.6	9.2	5.3	6.4	6.5	6.3	2.8	20.1	11.4	
Sep 5	6.1	5.8	7.3	5.3	7	7.2	8.1	6.6	5	5.8	9.3	6.6	5.4	8.4	8	8.9	9.2	6.8	2.1	4	5.5	5.3	6.2	4.8	2.1	9.3	6.4	
Sep 6	4.8	4.4	5.4	7	8.7	9	7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	4.4	9.0	-	
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20.7	17.5	16.9	12.6	8.9	7.6	6.6	7.9	9.1	9.6	6.6	20.7	-	
Sep 10	8.9	10.1	10.8	12.8	11.4	12	13.3	14.3	15.2	16.2	14.6	15.9	17.8	16.8	17.2	17.1	15.3	16	15.1	11.7	9.9	12.8	12.8	14.5	8.9	17.8	13.9	
Sep 11	14.8	15.6	9.5	9.6	11.6	10.4	7.6	9.8	12.9	13.3	12.7	13.1	14	11	9.6	10.5	9.1	8.2	6.7	8.2	10	10.7	12.3	10.5	6.7	15.6	10.9	
Sep 12	12.4	14.1	10.4	4.5	3.8	6.5	9.9	10.8	10.8	11.3	14	14.3	14.8	15.4	16.7	12	11.8	9.5	6.5	7.5	7.8	3.5	8.5	3.7	3.5	16.7	10.0	
Sep 13	3.5	1.3	1.3	5.4	5.3	6.8	9.2	9.3	11.4	14	15.7	16.6	18.7	16.7	14.5	17.2	14.2	10.9	9	8	9.3	9.5	9.6	8.5	1.3	18.7	10.2	
Sep 14	7.7	10	12.1	8.5	8	8.9	10.9	12.7	13.3	14.3	14	16.7	14.2	14.6	14.1	12.7	11.3	8.6	7	5.4	3.8	5.8	7.4	3.6	3.6	16.7	10.2	
Sep 15	2.7	5	4	6.1	6.5	3.6	4.7	5.8	1.7	3.2	4.1	4.1	7.7	9.1	8.4	9.3	11	8.3	8	4.8	5.5	3.2	3.5	2	1.7	11.0	5.5	
Sep 16	2.8	2.6	4	6.6	7.2	6.9	14.6	18	17.1	19	16.6	16.9	16.1	15.1	16.3	14.4	14.6	9.5	5.1	3.4	0.3	6.3	4.8	6.6	0.3	19.0	10.2	
Sep 17	6.1	7.6	5.8	6	6.4	4.9	4.7	6.1	5.2	1	0.5	4.2	4.4	5.2	5.9	5.9	3.6	1.6	8.5	6.8	5.7	3.5	4.4	1.6	0.5	8.5	4.8	
Sep 18	3.4	6.4	2.3	3.1	2.5	4	3.7	1.6	0.7	0.8	1.1	2.6	3.3	4.4	6.3	7	4.7	1.8	5.9	11.5	13.1	15.2	12.5	10.7	0.7	15.2	5.4	
Sep 19	12.2	13.2	15.9	15.6	17.7	17.5	18.7	19.9	17.5	17.9	19.4	21.2	19	18.3	14.2	13.9	11.2	10.9	11	10.5	8.2	10.2	11.2	9.5	8.2	21.2	14.8	
Sep 20	7.1	4	4.8	5.1	7	7.2	4.2	3.3	4.1	11.7	14.3	14.4	15.1	11.4	10.1	10.7	8.1	2.5	5.9	10.5	9.5	8.9	12	10.1	2.5	15.1	8.4	
Sep 21	11	9.7	13.4	15.9	19.2	15.6	15	14.6	13.9	17.8	21.6	21.5	24.4	23.7	20.9	21.4	22.1	20.7	12.9	14.1	12	14.6	13.5	13.3	9.7	24.4	16.8	
Sep 22	14.1	12.8	13.5	18.8	18.8	18	15.4	17	16.7	14.4	15.4	15.8	16.1	16.1	17.1	18.8	13.9	12.8	12.8	17.9	6.5	12.2	15.3	14	6.5	18.8	15.2	
Sep 23	14.3	16.8	14.9	13	12.6	11.8	10.2	8.2	13.9	14.7	19.3	20.4	17.4	18.7	20.2	14.8	14.1	10.6	5.4	5.7	10.7	10.7	11.8	9.6	5.4	20.4	13.3	
Sep 24	11.1	10.3	6.7	5.1	5.1	7.8	6.8	7	5.7	6.8	8.5	11.2	13.3	14.3	13.9	14.9	10.7	8.4	9.6	11.8	8.5	1	5.2	4.6	1.0	14.9	8.7	
Sep 25	5.6	4.5	7.4	6.4	7.6	5.1	7.2	5.2	7.5	11.1	11	8.5	9	11.9	11.4	9.8	11.6	9.4	9.4	9.2	11	14.3	11.5	9.4	4.5	14.3	9.0	
Sep 26	10.6	10.5	9.8	10	9.3	7.4	7.5	5.7	5.5	4.7	0.9	3.3	9.7	13	14.2	13	10.5	7.1	8.6	8	8.6	10.1	10.7	14.7	0.9	14.7	8.9	
Sep 27	11.5	9.5	9.7	10.7	10.7	11.7	11.1	8.9	9.8	9.6	12.8	16.1	16.3	14.3	15.9	15.2	13.7	8.7	5.5	3	3.3	4	2.6	3.4	2.6	16.3	9.9	
Sep 28	3.1	2.9	2.6	0.8	2.9	2.3	1.8	2.3	5.5	5.8	3.1	4.8	5.2	4.7	5.4	7.4	5.6	6.6	6.6	10.2	11.5	12.1	8.4	4.9	0.8	12.1	5.3	
Sep 29	7.5	7.6	8.4	9.1	6.1	8	7.6	6.1	7.1	12.9	14.1	8.3	7.8	5.4	5	6.6	9.2	8.9	8	9.7	11.2	13.1	12.7	14.2	5.0	14.2	8.9	
Sep 30	13.6	15.7	14	13.7	13.6	13.7	13.8	13.6	16.2	20.6	23.2	20.7	20.8	19.3	17.2	15.2	13.6	10.5	10.4	10.4	11.5	11.6	14.7	16.8	10.4	23.2	15.2	
Diurnal Maximum	22	17	16	19	19	18	19	20	18	21	23	22	24	24	21	21	22	21	15	18	13	15	15	17				
Diurnal Average	9.1	8.9	8.1	8.2	8.5	8.4	8.5	8.8	9.4	10.6	11.6	12.2	13.1	13.3	13.3	12.5	11.6	9.2	8.3	8.8	8.0	8.6	9.2	8.2				

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

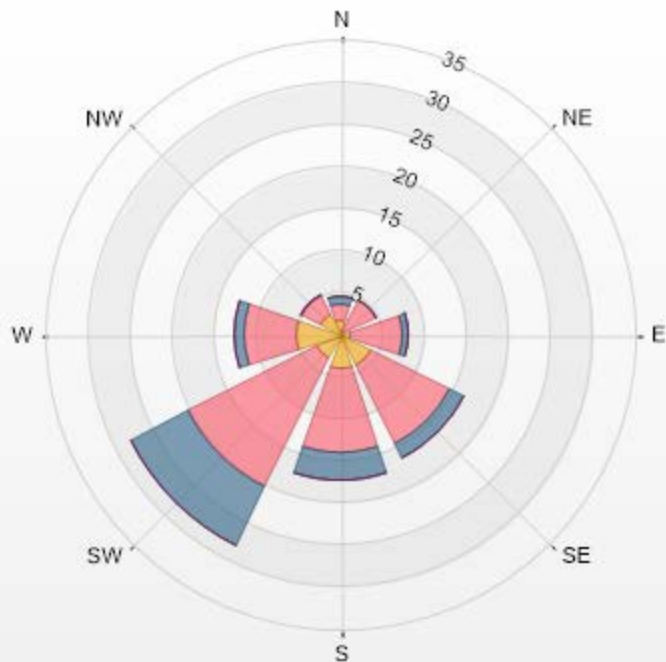
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

Timeseries Chart of Hourly Average for VWS - 986c Station



Wind: PRAMP 986c Poll.: PRAMP 986c-WDS[KPH] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 2.87% Valid Data: 87.08% Calm Avg: 1.20 [KPH]

Direction	0-6	6-15	15-29	29-39	>39.0	Total
N	1.75	1.91	0.96	0	0	4.62
NE	0.48	4.15	0	0	0	4.63
E	1.12	6.22	0.8	0	0	8.14
SE	3.99	10.53	1.91	0	0	16.43
S	3.99	10.05	3.35	0	0	17.39
SW	3.19	17.07	7.66	0	0	27.92
W	5.42	6.06	1.12	0	0	12.6
NW	2.71	2.55	0.16	0	0	5.42
Summary	22.65	58.54	15.96	0	0	97.15



PRAMP-201909

% Icon Classes (KPH)	23	0-6	59	6-15	16	15-29	0	29-39	0	>39.0
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PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2019

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

Monthly Average:	202 (SSW) degree	Hours in Service:	720
		Hours of Data:	641
		Hours of Missing Data:	79
		Hours of Calibration:	0
		Operational Uptime:	89.0

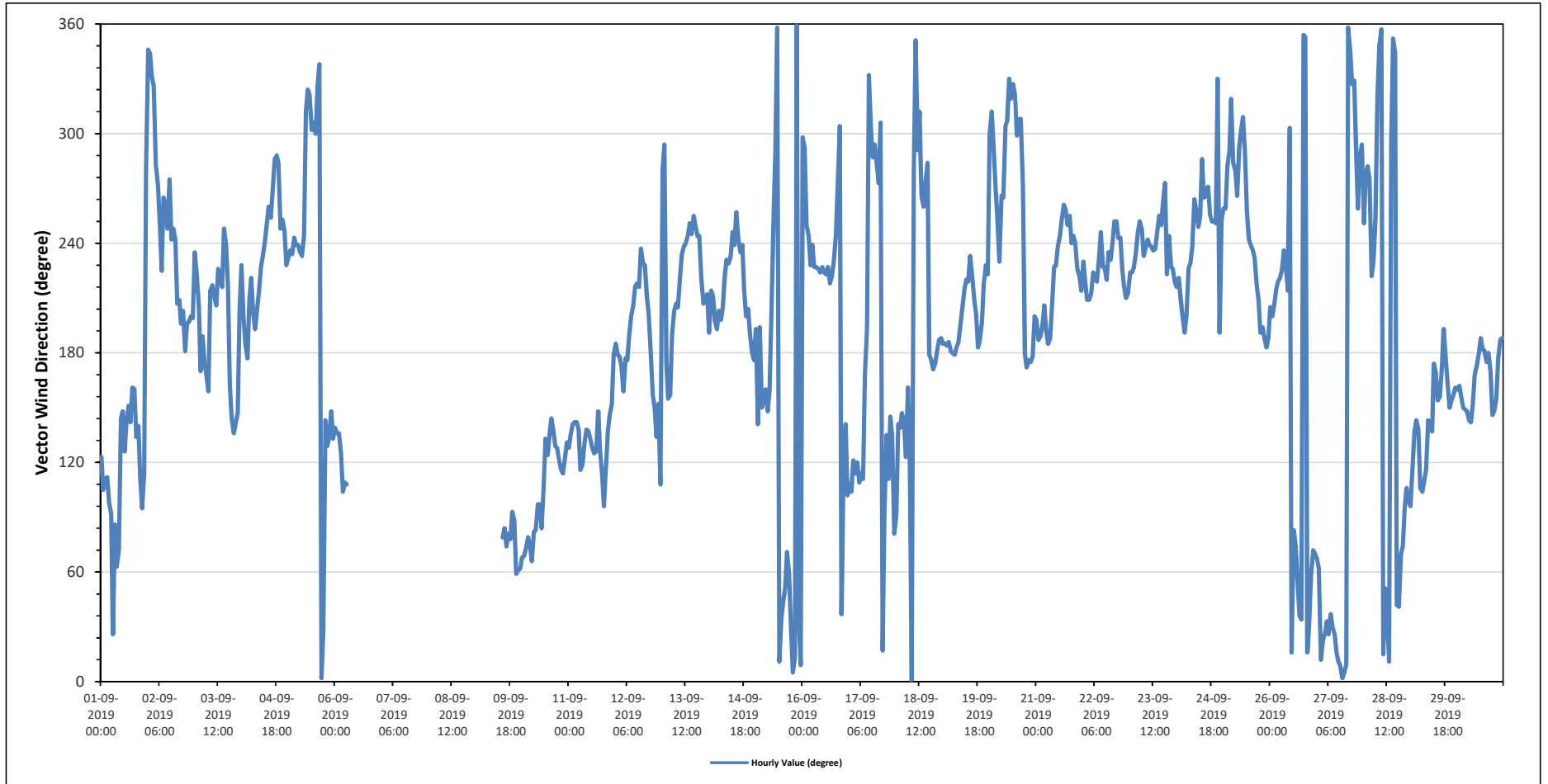
Day	Hourly Period Starting at (MST)																							Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant
Sep 1	ESE	ESE	ESE	ESE	E	E	NNE	E	ENE	ENE	SE	SE	SE	SSE	SE	SSE	SE	SE	ESE	E	ESE	W	126	SE		
Sep 2	NNW	NNW	NNW	NW	W	W	WSW	SW	W	W	WSW	W	WSW	WSW	WSW	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	255	WSW
Sep 3	SW	SW	SSW	SSE	S	S	SSE	SSE	SSW	SW	SSW	SSW	SW	SW	WSW	WSW	SW	SSE	SE	SE	SE	SE	SSW	201	SSW	
Sep 4	SW	SSW	S	S	SSW	SW	SSW	S	SSW	SSW	SW	SW	WSW	WSW	WSW	W	WNW	WNW	WNW	WSW	WSW	WSW	SW	238	SW	
Sep 5	SW	SW	SW	WSW	WSW	WSW	SW	SW	WSW	NW	NW	NW	WNW	NW	WNW	NW	NNW	N	NNE	SE	SE	SE	SE	272	W	
Sep 6	SE	SE	SE	SE	ESE	ESE	ESE	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-
Sep 10	ENE	ENE	ENE	ENE	ENE	ENE	E	E	E	E	ESE	SE	ESE	SE	ESE	SE	ESE	SE	ESE	ESE	ESE	ESE	SE	108	ESE	
Sep 11	SE	SE	SE	SE	SE	SE	ESE	ESE	SE	SE	SE	SE	SE	SE	SE	SE	SE	ESE	E	ESE	SE	SE	SSE	S	134	SE
Sep 12	S	S	S	S	SSE	S	S	S	SSW	SSW	SW	SW	SW	SW	SW	SSW	SSW	S	SSE	SSE	SE	SSE	ESE	197	SSW	
Sep 13	W	WNW	S	SSE	SSE	S	SSW	SSW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SSW	SSW	229	SW	
Sep 14	S	SSW	SSW	SSW	S	SSW	SSW	SSW	SW	SW	SW	WSW	WSW	WSW	WSW	SW	WSW	SSW	SSW	SSW	S	S	S	220	SW	
Sep 15	S	SE	SSW	SSE	SSE	SE	SSE	SSW	WSW	WNW	N	NNE	NE	NE	ENE	ENE	NNE	N	NNE	N	NNE	N	61	ENE		
Sep 16	WNW	WNW	WSW	WSW	SW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	W	WNW	NE	ESE	SE	E	226	SW	
Sep 17	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SSE	SSW	NNW	WNW	WNW	WNW	W	W	NW	NNE	E	SE	ESE	SE	E	121	ESE	
Sep 18	E	SE	SE	SE	SE	ESE	SSE	ESE	N	W	N	WNW	NW	W	WSW	W	WNW	S	S	S	S	S	S	187	S	
Sep 19	S	S	S	S	S	S	S	S	S	SSW	SSW	SW	SW	SW	SW	SW	SSW	S	S	SSW	SW	SW	SW	199	SSW	
Sep 20	WNW	NW	WNW	W	WSW	SW	W	W	WNW	NW	NNW	NW	NW	NW	WNW	NW	NW	W	S	S	S	S	SSW	278	W	
Sep 21	SSW	S	S	SSW	SSW	S	S	S	SSW	SW	SW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SSW	227	SW
Sep 22	SW	SW	SSW	SSW	SSW	SW	SW	SW	SW	WSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SSW	SSW	227	SW
Sep 23	SW	SW	SW	SW	WSW	WSW	WSW	SW	SW	WSW	WSW	SW	SW	SW	WSW	WSW	WSW	W	W	SW	WSW	SW	SW	SW	239	WSW
Sep 24	SW	SW	SSW	SSW	S	SSW	SW	SW	SW	W	WSW	WSW	WNW	W	W	WSW	WSW	WSW	WSW	NNW	S	WSW	S	246	WSW	
Sep 25	WSW	WSW	W	WNW	NW	WNW	W	W	WNW	WNW	NW	WNW	WSW	WSW	WSW	SW	SW	SSW	S	SSW	S	S	S	245	WSW	
Sep 26	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SSW	WNW	NNE	E	ENE	NE	NE	NE	N	N	NNE	NNE	ENE	ENE	ENE	70	ENE
Sep 27	ENE	ENE	NNE	NNE	NNE	NNE	NE	NNE	NNE	NNE	NNE	NNE	N	N	N	N	NNW	NW	NNW	WNW	WSW	WNW	WNW	14	NNE	
Sep 28	WSW	W	W	W	SW	SW	WSW	NW	NNW	N	NNE	NE	NNE	WNW	N	NNW	NE	NE	ENE	E	ESE	E	E	37	NE	
Sep 29	E	ESE	SE	SE	SE	ESE	ESE	ESE	ESE	SE	SE	SE	S	SSE	SSE	SSE	S	S	S	SSE	SSE	SSE	SSE	146	SE	
Sep 30	SSE	SSE	SSE	SSE	SSE	SE	SE	SE	SSE	SSE	S	S	S	S	S	S	SSE	SE	SE	SE	SSE	S	S	167	SSE	

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

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



842b STATION



PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2019

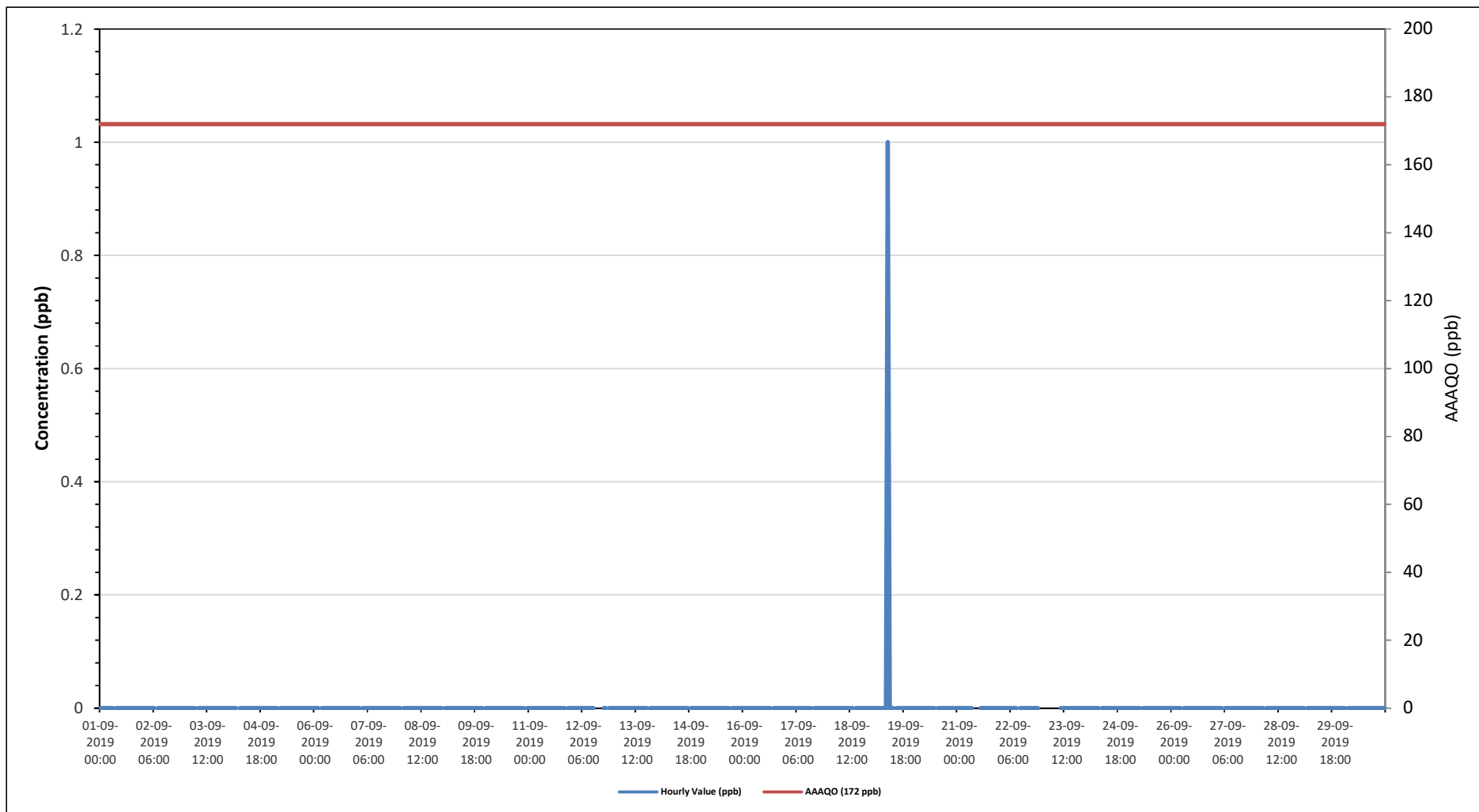
Summary of Hourly Averages

SULPHUR DIOXIDE (SO₂) in ppb

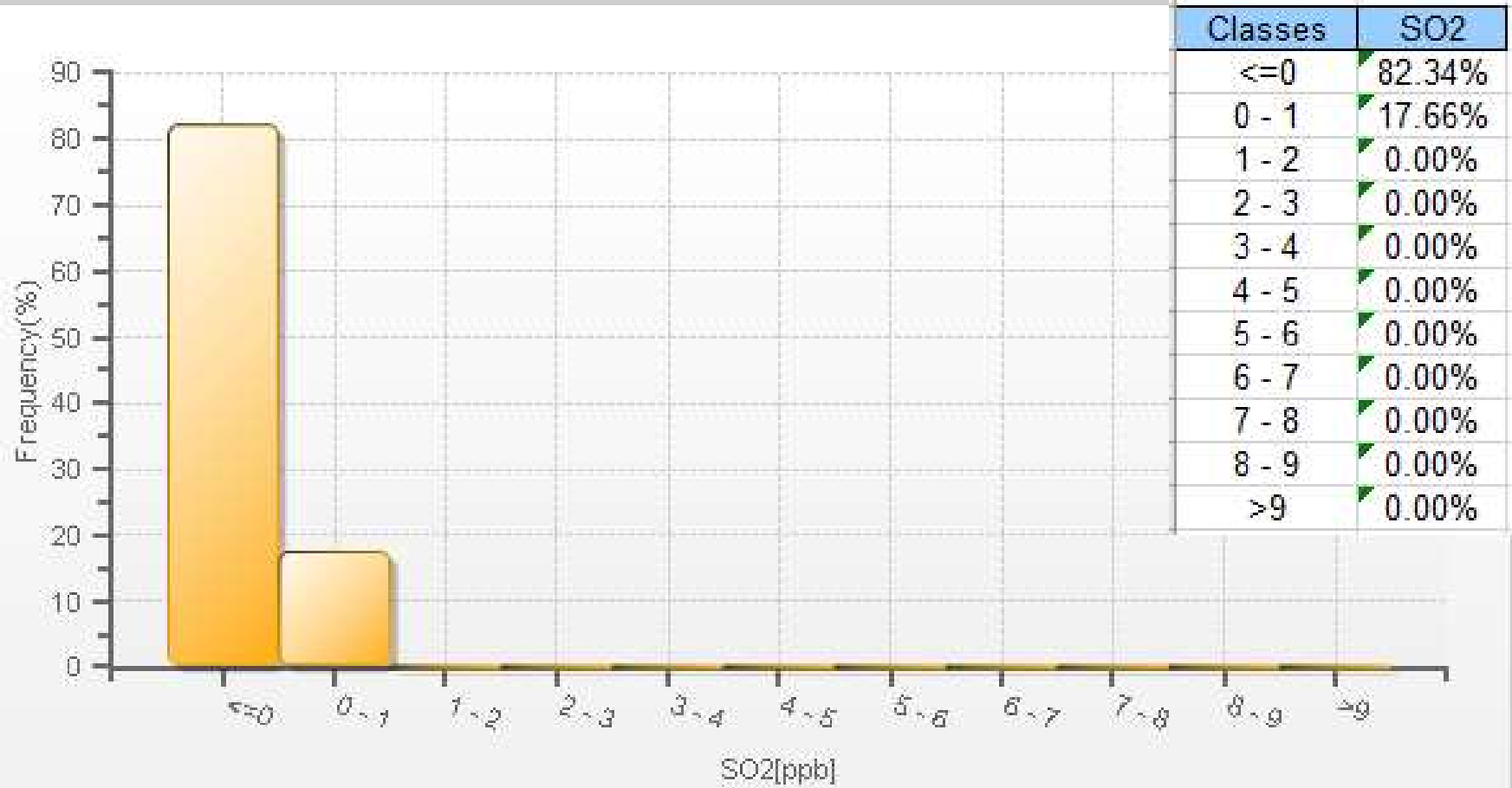
Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb																												
Number of 1-Hour Exceedences: 0					Number of 24-Hour Exceedences: 0					30-Day Exceedence: 0																		
Maximum Hourly Value: 1 ppb on September 19 at hour 9										Hours in Service: 720																		
Maximum Daily Value: 0.0 ppb on										Hours of Data: 670																		
Minimum Hourly Value: 0 ppb on September 1 at hour 0										Hours of Missing Data: 15																		
Minimum Daily Value: 0.0 ppb on September 1										Hours of Calibration: 35																		
Monthly Average: 0.0 ppb										Operational Uptime: 97.9																		
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	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Sep 2	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Sep 3	0	0	0	0	0	0	S	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	S	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Sep 5	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 6	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 7	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 8	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 9	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	0.0
Sep 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	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	S	0	0	0	0	0.0
Sep 12	0	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	C	0	0	S	0	0	0	0	0	0	0.0
Sep 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	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	S	0	0	0	0	0	0	0	0	0.0
Sep 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	S	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	S	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	S	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	S	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	1	0	0	0	0	S	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	S	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	P	P	P	P	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	S	0	0	0	0	0	0	0	0	0	0	0	0	0	K	K	0	0.0
Sep 23	K	K	K	K	K	K	K	K	K	S	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	S	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	S	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	S	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Sep 27	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Sep 28	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 29	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 30	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
Diurnal Maximum	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
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	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span																			
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure																			
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service																			

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

Timeseries Chart of Hourly Average for SO2 - 842b Station

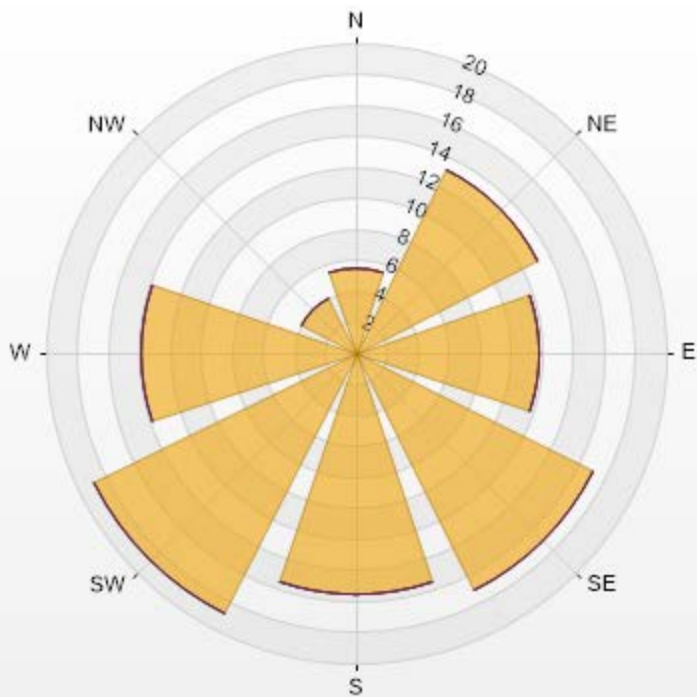


SO2[ppb] Histogram: PRAMP 842b Monthly: 09-2019 1 Hr.



Wind: PRAMP 842b Poll.: PRAMP 842b-SO2[ppb] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 93.04% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	5.54	0	0	0	0	5.54
NE	13.17	0	0	0	0	13.17
E	11.83	0	0	0	0	11.83
SE	17.22	0	0	0	0	17.22
S	15.57	0	0	0	0	15.57
SW	18.86	0	0	0	0	18.86
W	13.92	0	0	0	0	13.92
NW	3.89	0	0	0	0	3.89
Summary	100	0	0	0	0	100



PRAMP-201909

% 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 2019

Summary of Hourly Averages

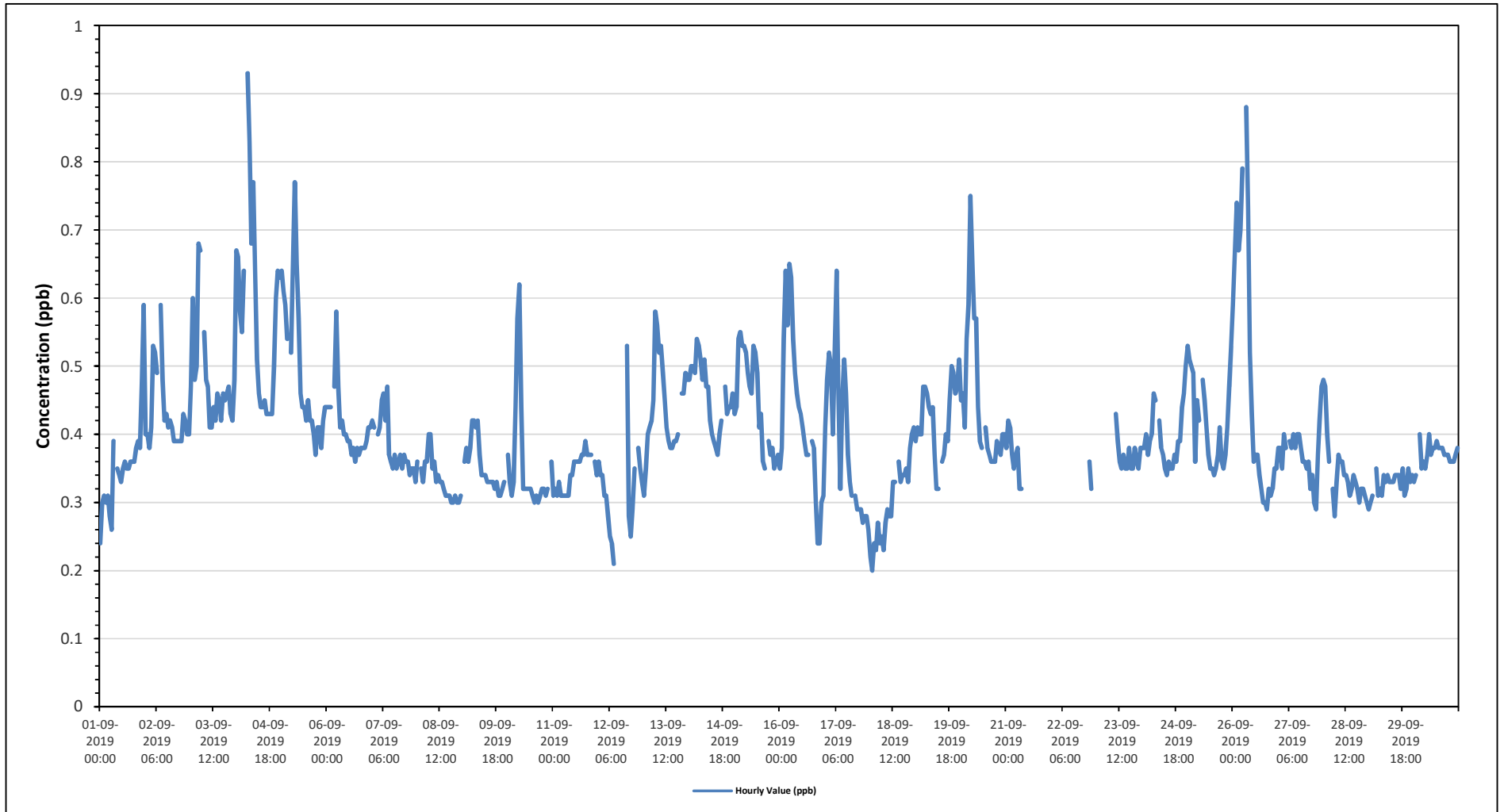
TOTAL REDUCED SULPHUR (TRS) in ppb

Alberta Ambient Air Quality Objectives (AAAQO) for H2S: 1-Hour 10 ppb, 24-Hour 3 ppb																												
Number of 1-Hour Exceedences: 0					Number of 24-Hour Exceedences: 0																							
Maximum Hourly Value: 0.93 ppb on September 4 at hour 6										Hours in Service: 720																		
Maximum Daily Value: 0.58 ppb on										Hours of Data: 639																		
Minimum Hourly Value: 0.20 ppb on September 18 at hour 1										Hours of Missing Data: 46																		
Minimum Daily Value: 0.30 ppb on September 18										Hours of Calibration: 35																		
Monthly Average: 0.40 ppb										Operational Uptime: 93.6																		
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
Sep 1	0.24	0.3	0.31	0.3	0.31	0.28	0.26	0.39	S	0.35	0.34	0.33	0.35	0.36	0.35	0.35	0.36	0.36	0.36	0.38	0.39	0.38	0.48	0.59	0.24	0.59	0.35	
Sep 2	0.4	0.4	0.38	0.41	0.53	0.52	0.49	S	0.59	0.48	0.42	0.43	0.41	0.42	0.41	0.39	0.39	0.39	0.39	0.39	0.43	0.42	0.4	0.4	0.38	0.59	0.43	
Sep 3	0.47	0.6	0.48	0.5	0.68	0.67	S	0.55	0.48	0.47	0.41	0.41	0.44	0.42	0.46	0.45	0.42	0.46	0.45	0.46	0.47	0.43	0.42	0.48	0.41	0.68	0.48	
Sep 4	0.67	0.66	0.58	0.55	0.64	S	0.93	0.83	0.68	0.77	0.64	0.51	0.46	0.44	0.44	0.45	0.43	0.43	0.43	0.43	0.5	0.6	0.64	0.63	0.43	0.93	0.58	
Sep 5	0.64	0.61	0.59	0.54	S	0.52	0.65	0.77	0.65	0.57	0.46	0.44	0.44	0.42	0.45	0.42	0.42	0.4	0.37	0.41	0.41	0.38	0.42	0.44	0.37	0.77	0.50	
Sep 6	0.44	0.44	0.44	S	0.47	0.58	0.47	0.41	0.42	0.4	0.4	0.39	0.39	0.37	0.38	0.36	0.38	0.37	0.38	0.38	0.38	0.39	0.41	0.41	0.36	0.58	0.41	
Sep 7	0.42	0.41	S	0.4	0.41	0.45	0.46	0.42	0.47	0.37	0.36	0.35	0.37	0.35	0.36	0.37	0.35	0.37	0.36	0.36	0.34	0.35	0.35	0.33	0.33	0.47	0.38	
Sep 8	0.36	S	0.35	0.33	0.36	0.36	0.4	0.4	0.35	0.36	0.33	0.34	0.33	0.33	0.32	0.31	0.31	0.31	0.3	0.3	0.31	0.3	0.3	0.31	0.30	0.40	0.33	
Sep 9	S	0.36	0.38	0.36	0.38	0.42	0.42	0.41	0.42	0.37	0.34	0.34	0.34	0.33	0.33	0.33	0.33	0.32	0.33	0.31	0.31	0.32	0.33	S	0.31	0.42	0.35	
Sep 10	0.37	0.33	0.31	0.33	0.44	0.57	0.62	0.44	0.32	0.32	0.32	0.32	0.31	0.3	0.31	0.3	0.31	0.32	0.32	0.31	0.32	0.31	0.32	S	0.36	0.30	0.62	0.36
Sep 11	0.31	0.32	0.31	0.33	0.31	0.31	0.31	0.31	0.31	0.34	0.34	0.36	0.36	0.36	0.36	0.37	0.37	0.39	0.37	0.37	0.37	S	0.36	0.34	0.31	0.39	0.34	
Sep 12	0.36	0.34	0.34	0.31	0.31	0.28	0.25	0.24	0.21	C	C	C	C	C	C	0.53	0.28	0.25	0.29	0.35	S	0.38	0.35	0.33	0.21	0.53	-	
Sep 13	0.31	0.35	0.4	0.41	0.42	0.45	0.58	0.56	0.52	0.53	0.49	0.45	0.41	0.39	0.38	0.38	0.39	0.39	0.4	S	0.46	0.46	0.49	0.48	0.31	0.58	0.44	
Sep 14	0.48	0.5	0.5	0.49	0.54	0.53	0.51	0.48	0.51	0.47	0.47	0.42	0.4	0.39	0.38	0.37	0.4	0.42	S	0.47	0.43	0.44	0.44	0.46	0.37	0.54	0.46	
Sep 15	0.43	0.44	0.54	0.55	0.53	0.53	0.52	0.49	0.47	0.46	0.53	0.52	0.49	0.41	0.43	0.36	0.35	S	S	0.39	0.37	0.38	0.35	0.36	0.37	0.35	0.55	0.45
Sep 16	0.35	0.38	0.54	0.64	0.56	0.65	0.63	0.54	0.49	0.46	0.44	0.43	0.41	0.39	0.37	0.37	S	0.39	0.38	0.3	0.24	0.24	0.3	0.31	0.24	0.65	0.43	
Sep 17	0.41	0.48	0.52	0.5	0.4	0.52	0.64	0.46	0.32	0.45	0.51	0.46	0.37	0.33	0.31	S	0.31	0.29	0.29	0.29	0.27	0.28	0.28	0.26	0.26	0.64	0.39	
Sep 18	0.22	0.2	0.24	0.23	0.27	0.24	0.25	0.23	0.27	0.29	0.28	0.28	0.33	0.33	S	0.36	0.33	0.34	0.34	0.35	0.33	0.38	0.4	0.41	0.20	0.41	0.30	
Sep 19	0.39	0.41	0.4	0.4	0.47	0.47	0.46	0.44	0.43	0.44	0.37	0.32	0.32	0.33	S	0.36	0.37	0.4	0.39	0.45	0.5	0.49	0.46	0.47	0.51	0.32	0.51	0.42
Sep 20	0.45	0.46	0.41	0.54	0.59	0.75	0.65	0.57	0.57	0.44	0.39	0.38	S	0.41	0.38	0.37	0.36	0.36	0.36	0.39	0.38	0.37	0.4	0.4	0.36	0.75	0.45	
Sep 21	0.38	0.42	0.41	0.37	0.35	0.37	0.38	0.32	0.32	P	P	P	P	X	X	X	X	X	X	X	X	X	X	X	X	0.32	0.42	-
Sep 22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Y	Y	Y	0.36	0.32	K	K	0.32	0.36	-
Sep 23	K	K	K	K	K	K	K	K	K	S	0.43	0.39	0.36	0.35	0.37	0.35	0.35	0.38	0.35	0.35	0.38	0.36	0.35	0.38	0.35	0.43	-	
Sep 24	0.38	0.38	0.4	0.37	0.39	0.4	0.46	0.45	S	0.42	0.38	0.37	0.35	0.34	0.36	0.35	0.35	0.37	0.36	0.39	0.39	0.44	0.46	0.5	0.34	0.50	0.39	
Sep 25	0.53	0.51	0.5	0.49	0.36	0.45	0.42	S	0.48	0.45	0.41	0.37	0.35	0.35	0.34	0.35	0.37	0.41	0.36	0.35	0.37	0.41	0.47	0.53	0.34	0.53	0.42	
Sep 26	0.59	0.67	0.74	0.67	0.7	0.79	S	0.88	0.73	0.52	0.43	0.36	0.37	0.37	0.34	0.32	0.3	0.3	0.29	0.32	0.31	0.32	0.35	0.35	0.29	0.88	0.48	
Sep 27	0.38	0.38	0.35	0.4	0.38	S	0.39	0.38	0.4	0.38	0.4	0.4	0.38	0.36	0.36	0.35	0.36	0.32	0.34	0.3	0.29	0.37	0.42	0.47	0.29	0.47	0.37	
Sep 28	0.48	0.47	0.4	0.36	S	0.32	0.28	0.33	0.37	0.36	0.36	0.34	0.34	0.33	0.31	0.32	0.34	0.33	0.32	0.3	0.32	0.32	0.31	0.3	0.28	0.48	0.34	
Sep 29	0.29	0.3	0.31	S	0.35	0.31	0.32	0.31	0.34	0.33	0.34	0.33	0.33	0.33	0.34	0.34	0.34	0.32	0.35	0.31	0.32	0.35	0.33	0.34	0.29	0.35	0.33	
Sep 30	0.33	0.34	S	0.4	0.35	0.36	0.35	0.37	0.4	0.37	0.38	0.38	0.39	0.38	0.38	0.38	0.37	0.37	0.37	0.36	0.36	0.36	0.37	0.38	0.33	0.40	0.37	
Diurnal Maximum	0.67	0.67	0.74	0.67	0.70	0.79	0.93	0.88	0.73	0.77	0.64	0.52	0.49	0.44	0.46	0.53	0.43	0.46	0.45	0.50	0.50	0.60	0.64	0.63				
Daiurnal Average	0.41	0.42	0.43	0.43	0.44	0.47	0.47	0.46	0.44	0.43	0.41	0.39	0.38	0.37	0.37	0.37	0.36	0.36	0.36	0.36	0.37	0.38	0.39	0.41				
C	Calibration				S	Daily Zero/Span				Q	Quality Assurance				C1	Repeat Calibration				S1	Repeat Daily Zero/Span							
G	Out for Repair				K	Collection Error				N	Not in Service				O	Operator Error				P	Power Failure							
R	Recovery				X	Machine Malfunction				Y	Maintenance				T	Exceeds Temperature Limits				N	Not in Service							

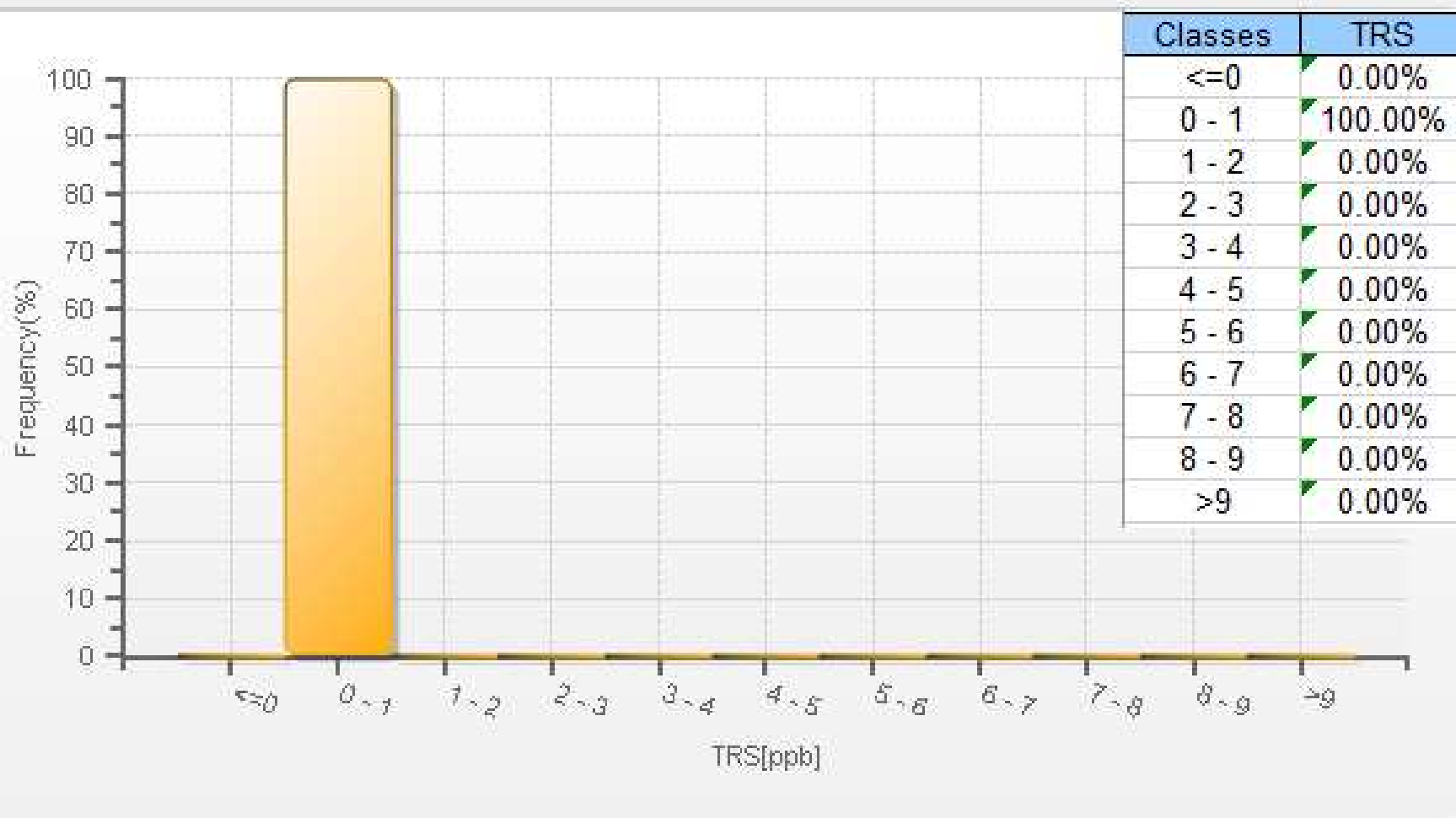
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

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

Timeseries Chart of Hourly Average for TRS - 842b Station

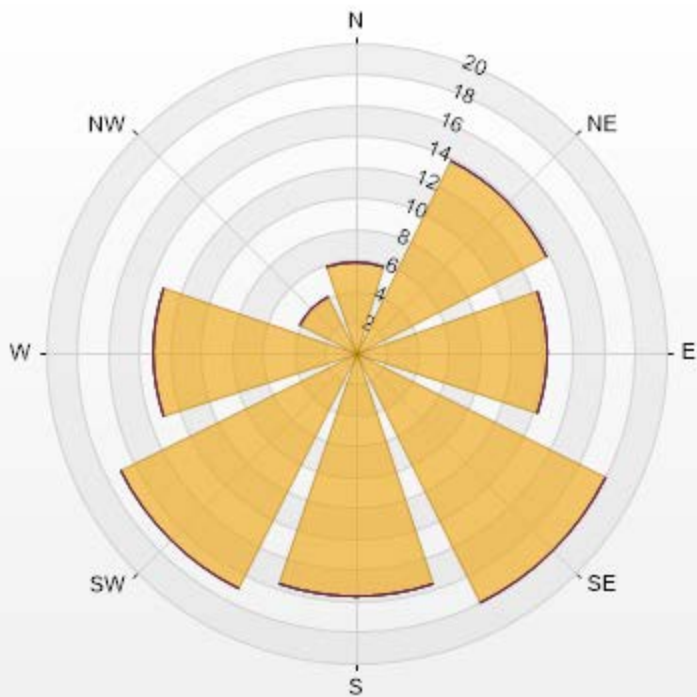


TRS[ppb] Histogram: PRAMP 842b Monthly: 09-2019 1 Hr.



Wind: PRAMP 842b Poll.: PRAMP 842b-TRS[ppb] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 88.58% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	5.82	0	0	0	0	5.82
NE	13.84	0	0	0	0	13.84
E	12.42	0	0	0	0	12.42
SE	18.08	0	0	0	0	18.08
S	15.72	0	0	0	0	15.72
SW	16.98	0	0	0	0	16.98
W	13.05	0	0	0	0	13.05
NW	4.09	0	0	0	0	4.09
Summary	100	0	0	0	0	100



PRAMP-201909



PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2019

Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

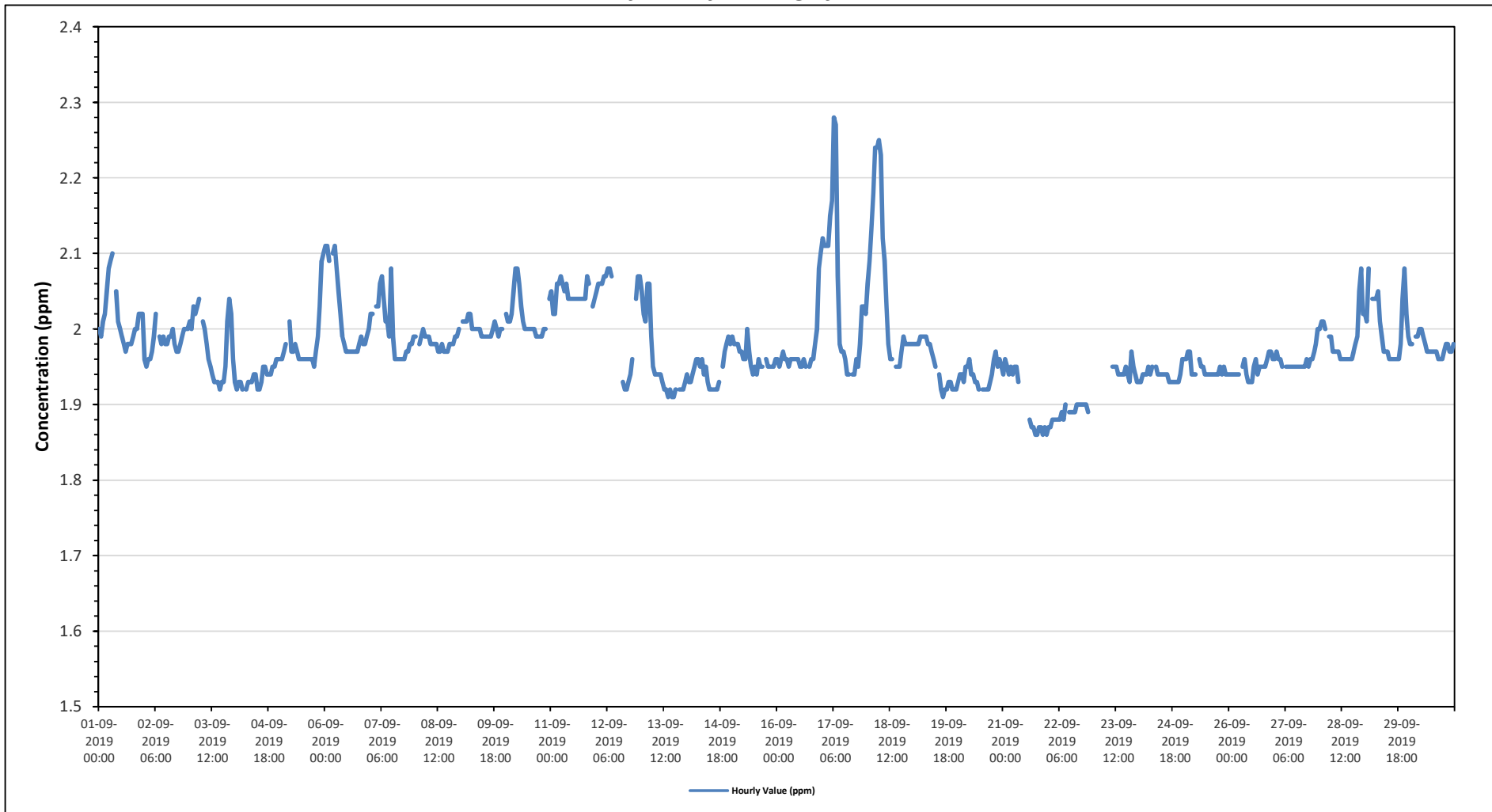
Maximum Hourly Value: 2.28 ppm on September 17 at hour 6	Hours in Service: 720
Maximum Daily Value: 2.06 ppm on	Hours of Data: 669
Minimum Hourly Value: 1.86 ppm on September 21 at hour 0	Hours of Missing Data: 16
Minimum Daily Value: 1.89 ppm on September 22	Hours of Calibration: 35
Monthly Average: 1.98 ppm	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	2.00	1.99	2.01	2.02	2.05	2.08	2.09	2.10	S	2.05	2.01	2.00	1.99	1.98	1.97	1.98	1.98	1.98	1.99	2.00	2.00	2.02	2.02	2.02	1.97	2.10	2.01	
Sep 2	1.96	1.95	1.96	1.96	1.97	1.99	2.02	S	1.99	1.98	1.99	1.98	1.98	1.99	1.99	2.00	1.98	1.97	1.97	1.98	1.99	2.00	2.00	2.00	1.95	2.02	1.98	
Sep 3	2.01	2.00	2.03	2.02	2.03	2.04	S	2.01	2.00	1.98	1.96	1.95	1.94	1.93	1.93	1.93	1.92	1.93	1.93	1.95	2.01	2.04	2.02	1.96	1.92	2.04	1.98	
Sep 4	1.93	1.92	1.93	1.93	1.92	S	1.92	1.93	1.93	1.93	1.94	1.94	1.92	1.92	1.93	1.95	1.95	1.94	1.94	1.94	1.95	1.95	1.96	1.96	1.92	1.96	1.94	
Sep 5	1.96	1.96	1.97	1.98	S	2.01	1.97	1.97	1.98	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.95	1.97	1.99	2.03	2.09	2.10	1.95	2.10	1.98	
Sep 6	2.11	2.11	2.09	S	2.10	2.11	2.08	2.05	2.02	1.99	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.99	1.98	1.98	1.99	2.00	1.97	2.11	2.02	
Sep 7	2.02	2.02	S	2.03	2.03	2.06	2.07	2.04	2.01	2.01	1.99	2.08	1.99	1.96	1.96	1.96	1.96	1.96	1.97	1.97	1.98	1.98	1.98	1.99	1.96	2.08	2.00	
Sep 8	1.99	S	1.98	1.99	2.00	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.97	1.97	1.98	1.97	1.97	1.98	1.98	1.98	1.99	1.99	2.00	1.97	2.00	1.98		
Sep 9	S	2.01	2.01	2.01	2.02	2.02	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.99	1.99	1.99	2.00	2.01	2.00	1.99	2.00	2.00	S	1.99	2.02	2.00		
Sep 10	2.02	2.01	2.01	2.02	2.05	2.08	2.08	2.06	2.03	2.01	2.00	2.00	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.99	2.00	2.00	S	2.04	1.99	2.08	2.02	
Sep 11	2.05	2.02	2.02	2.06	2.06	2.07	2.06	2.05	2.06	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.07	2.06	S	2.03	2.04	2.02	2.07	2.05	
Sep 12	2.05	2.06	2.06	2.06	2.07	2.07	2.08	2.08	2.07	C	C	C	C	C	1.93	1.92	1.92	1.93	1.94	1.96	S	2.04	2.07	2.07	1.92	2.08	2.02	
Sep 13	2.05	2.02	2.01	2.06	2.06	1.99	1.95	1.94	1.94	1.94	1.94	1.93	1.92	1.92	1.91	1.92	1.91	1.92	1.92	S	1.92	1.92	1.92	1.93	1.91	2.06	1.95	
Sep 14	1.94	1.93	1.93	1.94	1.95	1.96	1.96	1.95	1.96	1.94	1.95	1.93	1.92	1.92	1.92	1.92	1.92	1.93	S	1.95	1.97	1.98	1.99	1.98	1.92	1.99	1.95	
Sep 15	1.99	1.98	1.98	1.98	1.97	1.97	1.96	1.96	2.00	1.97	1.95	1.94	1.95	1.94	1.96	1.95	1.95	S	1.96	1.95	1.95	1.95	1.95	1.96	1.94	2.00	1.96	
Sep 16	1.96	1.95	1.96	1.97	1.96	1.96	1.95	1.96	1.96	1.96	1.96	1.96	1.95	1.95	1.96	1.95	S	1.95	1.96	1.96	1.98	2.00	2.08	2.10	1.95	2.10	1.97	
Sep 17	2.12	2.11	2.11	2.11	2.15	2.17	2.28	2.27	2.07	1.98	1.97	1.97	1.96	1.94	1.94	S	1.94	1.94	1.96	1.95	1.98	2.03	2.03	2.02	1.94	2.28	2.04	
Sep 18	2.06	2.09	2.13	2.18	2.24	2.24	2.25	2.23	2.12	2.09	2.03	1.98	1.96	1.96	S	1.95	1.95	1.95	1.97	1.99	1.98	1.98	1.98	1.98	1.95	2.25	2.06	
Sep 19	1.98	1.98	1.98	1.98	1.99	1.99	1.99	1.99	1.98	1.98	1.97	1.96	1.95	S	1.94	1.92	1.91	1.92	1.92	1.93	1.93	1.92	1.92	1.92	1.91	1.99	1.95	
Sep 20	1.93	1.94	1.94	1.93	1.95	1.95	1.96	1.94	1.94	1.93	1.93	1.92	S	1.92	1.92	1.92	1.93	1.94	1.96	1.97	1.95	1.96	1.95	1.92	1.97	1.94	1.94	
Sep 21	1.94	1.96	1.95	1.94	1.95	1.94	1.95	1.95	1.93	P	P	P	P	R	1.88	1.87	1.87	1.86	1.86	1.87	1.87	1.86	1.87	1.86	1.86	1.96	1.90	
Sep 22	1.87	1.87	1.88	1.88	1.88	1.88	1.88	1.89	1.88	1.90	S	1.89	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.90	1.89	K	K	1.87	1.90	1.89	
Sep 23	K	K	K	K	K	K	K	K	K	S	1.95	1.95	1.95	1.94	1.94	1.94	1.94	1.95	1.94	1.93	1.97	1.95	1.94	1.93	1.93	1.97	-	
Sep 24	1.93	1.93	1.94	1.94	1.94	1.95	1.94	1.95	S	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.93	1.93	1.93	1.93	1.93	1.94	1.96	1.93	1.96	1.94	
Sep 25	1.96	1.96	1.97	1.97	1.94	1.94	1.94	S	1.95	1.96	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.94	1.95	1.94	1.94	1.94	1.94	1.95	
Sep 26	1.94	1.94	1.94	1.94	1.94	1.94	S	1.95	1.96	1.94	1.93	1.93	1.93	1.95	1.96	1.94	1.95	1.95	1.95	1.95	1.96	1.97	1.97	1.96	1.93	1.97	1.95	
Sep 27	1.96	1.97	1.96	1.96	1.95	S	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.95	1.96	1.96	1.97	1.98	2.00	1.95	2.00	1.96	
Sep 28	2.00	2.01	2.01	2.00	S	1.99	1.99	1.97	1.97	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.97	1.98	1.99	2.05	2.08	2.02	1.96	2.08	1.99	
Sep 29	2.02	2.01	2.08	S	2.04	2.04	2.04	2.05	2.01	1.99	1.97	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.97	1.98	2.04	2.08	2.02	1.99	1.96	2.08	2.00
Sep 30	1.98	1.98	S	1.99	1.99	2.00	2.00	1.99	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.96	1.96	1.96	1.96	1.97	1.98	1.98	1.97	1.97	1.98	1.96	2.00	1.98
Diurnal Maximum	2.12	2.11	2.13	2.18	2.24	2.24	2.28	2.27	2.12	2.09	2.04	2.08	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.07	2.06	2.08	2.09	2.10				
Diurnal Average	1.99	1.99	1.99	1.99	2.01	2.02	2.01	2.01	1.99	1.98	1.97	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.97	1.98	1.99	1.99				

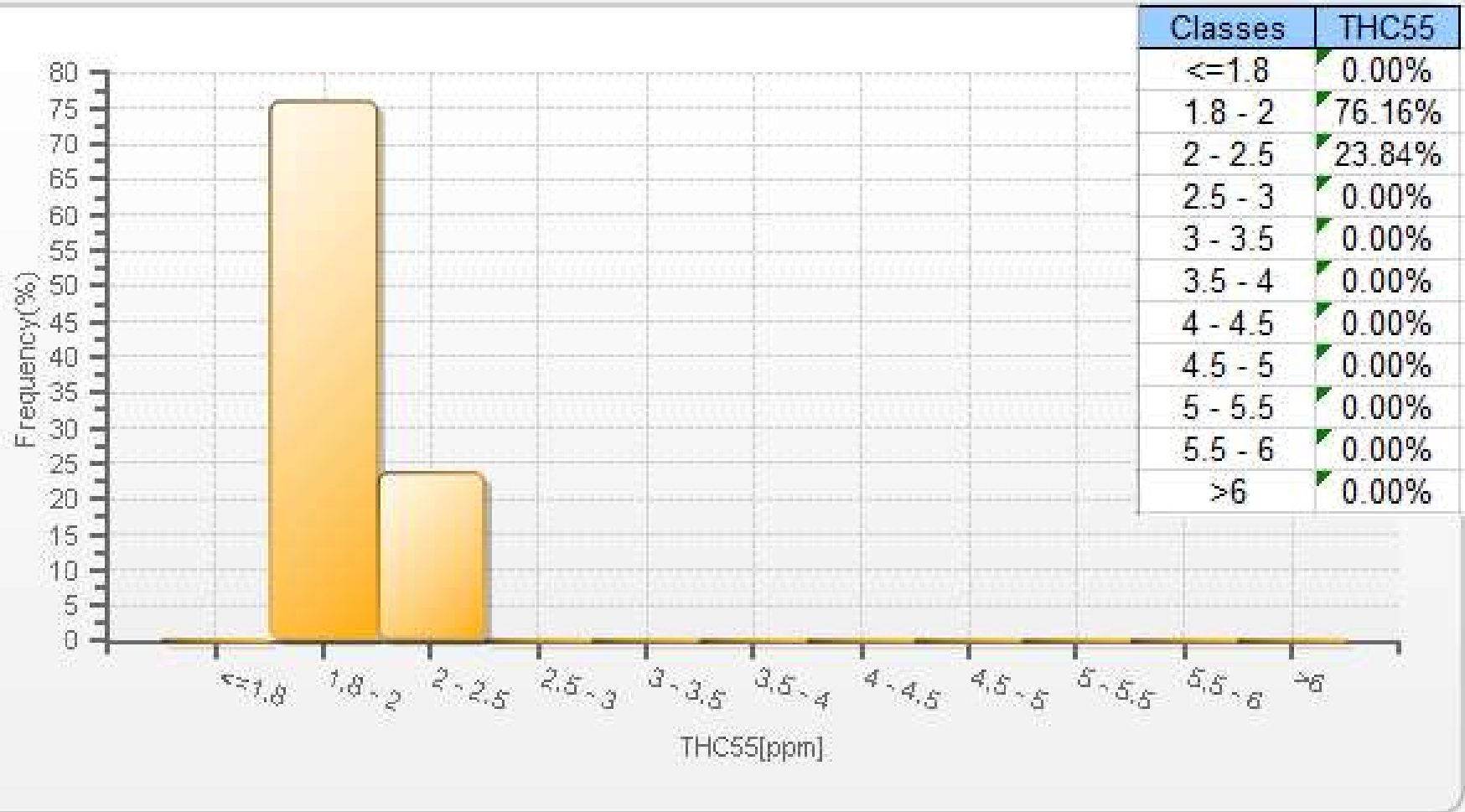
C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Average for THC - 842b Station

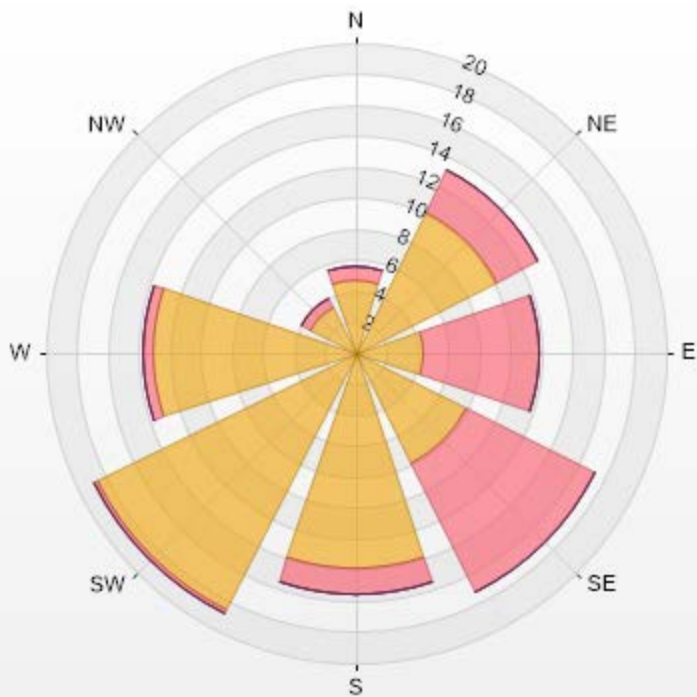


THC55[ppm] Histogram: PRAMP 842b Monthly: 09-2019 1 Hr.



Wind: PRAMP 842b Poll.: PRAMP 842b-THC55[ppm] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 92.90% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	4.65	0.9	0	0	0	5.55
NE	10.19	3	0	0	0	13.19
E	4.35	7.5	0	0	0	11.85
SE	7.95	9.3	0	0	0	17.25
S	13.94	1.65	0	0	0	15.59
SW	18.59	0.3	0	0	0	18.89
W	13.04	0.75	0	0	0	13.79
NW	3.3	0.6	0	0	0	3.9
Summary	76.01	24	0	0	0	100



PRAMP-201909

% Icon Classes (ppm) 76 0-2 24 5-10 0 10-40 0 >40.0



PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2019

Summary of Hourly Averages

METHANE (CH₄) in ppm

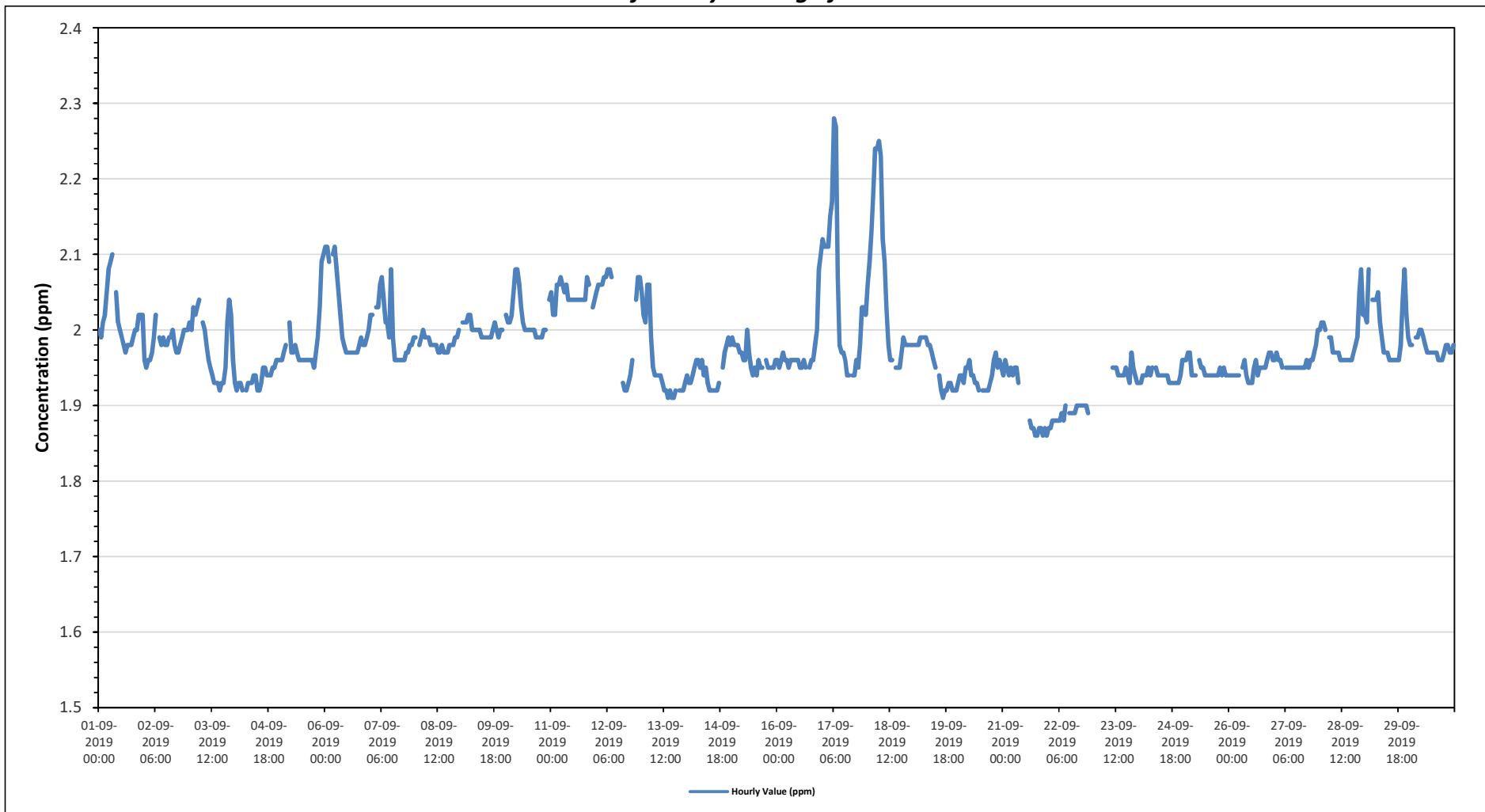
Maximum Hourly Value: 2.28 ppm on September 17 at hour 6	Hours in Service: 720
Maximum Daily Value: 2.06 ppm on	Hours of Data: 669
Minimum Hourly Value: 1.86 ppm on September 21 at hour 17	Hours of Missing Data: 16
Minimum Daily Value: 1.89 ppm on September 22	Hours of Calibration: 35
Monthly Average: 1.98 ppm	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	2.00	1.99	2.01	2.02	2.05	2.08	2.09	2.10	S	2.05	2.01	2.00	1.99	1.98	1.97	1.98	1.98	1.98	1.99	2.00	2.00	2.02	2.02	2.02	1.97	2.10	2.01	
Sep 2	1.96	1.95	1.96	1.96	1.97	1.99	2.02	S	1.99	1.98	1.99	1.98	1.98	1.99	1.99	2.00	1.98	1.97	1.97	1.98	1.99	2.00	2.00	2.00	1.95	2.02	1.98	
Sep 3	2.01	2.00	2.03	2.02	2.03	2.04	S	2.01	2.00	1.98	1.96	1.95	1.94	1.93	1.93	1.93	1.92	1.93	1.93	1.95	2.01	2.04	2.02	1.96	1.92	2.04	1.98	
Sep 4	1.93	1.92	1.93	1.93	1.92	S	1.92	1.93	1.93	1.93	1.94	1.94	1.92	1.92	1.93	1.95	1.95	1.94	1.94	1.94	1.95	1.95	1.96	1.96	1.92	1.96	1.94	
Sep 5	1.96	1.96	1.97	1.98	S	2.01	1.97	1.97	1.98	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.95	1.97	1.99	2.03	2.09	2.10	1.95	2.10	1.98	
Sep 6	2.11	2.11	2.09	S	2.10	2.11	2.08	2.05	2.02	1.99	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.99	1.98	1.98	1.99	2.00	1.97	2.11	2.02	
Sep 7	2.02	2.02	S	2.03	2.03	2.06	2.07	2.04	2.01	2.01	1.99	2.08	1.99	1.96	1.96	1.96	1.96	1.96	1.97	1.97	1.98	1.98	1.98	1.99	1.96	2.08	2.00	
Sep 8	1.99	S	1.98	1.99	2.00	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.97	1.97	1.98	1.97	1.97	1.98	1.98	1.98	1.99	1.99	2.00	1.97	2.00	1.98		
Sep 9	S	2.01	2.01	2.01	2.02	2.02	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.99	1.99	1.99	2.00	2.01	2.00	1.99	2.00	2.00	S	1.99	2.02	2.00		
Sep 10	2.02	2.01	2.01	2.02	2.05	2.08	2.08	2.06	2.03	2.01	2.00	2.00	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.99	2.00	2.00	S	2.04	1.99	2.08	2.02	
Sep 11	2.05	2.02	2.02	2.06	2.06	2.07	2.06	2.05	2.06	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.07	2.06	S	2.03	2.04	2.02	2.07	2.05		
Sep 12	2.05	2.06	2.06	2.06	2.07	2.07	2.08	2.08	2.07	C	C	C	C	C	1.93	1.92	1.92	1.93	1.94	1.96	S	2.04	2.07	2.07	1.92	2.08	2.02	
Sep 13	2.05	2.02	2.01	2.06	2.06	1.99	1.95	1.94	1.94	1.94	1.94	1.93	1.92	1.92	1.91	1.92	1.91	1.92	1.92	S	1.92	1.92	1.92	1.93	1.91	2.06	1.95	
Sep 14	1.94	1.93	1.93	1.94	1.95	1.96	1.96	1.95	1.96	1.94	1.95	1.93	1.92	1.92	1.92	1.92	1.92	1.93	S	1.95	1.97	1.98	1.99	1.98	1.92	1.99	1.95	
Sep 15	1.99	1.98	1.98	1.98	1.97	1.97	1.96	1.96	2.00	1.97	1.95	1.94	1.95	1.94	1.96	1.95	1.95	S	1.96	1.95	1.95	1.95	1.95	1.96	1.94	2.00	1.96	
Sep 16	1.96	1.95	1.96	1.97	1.96	1.96	1.95	1.96	1.96	1.96	1.96	1.96	1.95	1.95	1.96	1.95	S	1.95	1.96	1.96	1.98	2.00	2.08	2.10	1.95	2.10	1.97	
Sep 17	2.12	2.11	2.11	2.11	2.15	2.17	2.28	2.27	2.07	1.98	1.97	1.97	1.96	1.94	1.94	S	1.94	1.94	1.96	1.95	1.98	2.03	2.03	2.02	1.94	2.28	2.04	
Sep 18	2.06	2.09	2.13	2.18	2.24	2.24	2.25	2.23	2.12	2.09	2.03	1.98	1.96	1.96	S	1.95	1.95	1.95	1.97	1.99	1.98	1.98	1.98	1.98	1.95	2.25	2.06	
Sep 19	1.98	1.98	1.98	1.98	1.99	1.99	1.99	1.99	1.98	1.98	1.97	1.96	1.95	S	1.94	1.92	1.91	1.92	1.92	1.93	1.93	1.92	1.92	1.92	1.91	1.99	1.95	
Sep 20	1.93	1.94	1.94	1.93	1.95	1.95	1.96	1.94	1.94	1.93	1.93	1.92	S	1.92	1.92	1.92	1.93	1.94	1.96	1.97	1.95	1.96	1.95	1.92	1.97	1.94	1.94	
Sep 21	1.94	1.96	1.95	1.94	1.95	1.94	1.95	1.95	1.93	P	P	P	P	R	1.88	1.87	1.87	1.86	1.86	1.87	1.87	1.86	1.87	1.86	1.86	1.96	1.90	
Sep 22	1.87	1.87	1.88	1.88	1.88	1.88	1.88	1.89	1.88	1.90	S	1.89	1.89	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.90	1.89	K	K	1.87	1.90	1.89	
Sep 23	K	K	K	K	K	K	K	K	K	S	1.95	1.95	1.95	1.94	1.94	1.94	1.94	1.95	1.94	1.93	1.97	1.95	1.94	1.93	1.93	1.97	-	
Sep 24	1.93	1.93	1.94	1.94	1.94	1.95	1.94	1.95	S	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.93	1.93	1.93	1.93	1.93	1.94	1.96	1.93	1.96	1.94	
Sep 25	1.96	1.96	1.97	1.97	1.94	1.94	1.94	S	1.95	1.96	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.94	1.95	1.94	1.94	1.94	1.97	1.95	
Sep 26	1.94	1.94	1.94	1.94	1.94	1.94	S	1.95	1.96	1.94	1.93	1.93	1.93	1.95	1.96	1.94	1.95	1.95	1.95	1.95	1.96	1.97	1.97	1.96	1.93	1.97	1.95	
Sep 27	1.96	1.97	1.96	1.96	1.95	S	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.95	1.96	1.96	1.97	1.98	2.00	1.95	2.00	1.96	
Sep 28	2.00	2.01	2.01	2.00	S	1.99	1.99	1.97	1.97	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.97	1.98	1.99	2.05	2.08	2.02	1.96	2.08	1.99	
Sep 29	2.02	2.01	2.08	S	2.04	2.04	2.04	2.05	2.01	1.99	1.97	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.97	1.98	2.04	2.08	2.02	1.99	1.96	2.08	2.00
Sep 30	1.98	1.98	S	1.99	1.99	2.00	2.00	1.99	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.96	1.96	1.96	1.96	1.97	1.98	1.98	1.97	1.97	1.98	1.96	2.00	1.98
Diurnal Maximum	2.12	2.11	2.13	2.18	2.24	2.24	2.28	2.27	2.12	2.09	2.04	2.08	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.07	2.06	2.08	2.09	2.10				
Diurnal Average	1.99	1.99	1.99	1.99	2.01	2.02	2.01	2.01	1.99	1.98	1.97	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.96	1.97	1.98	1.99	1.99					

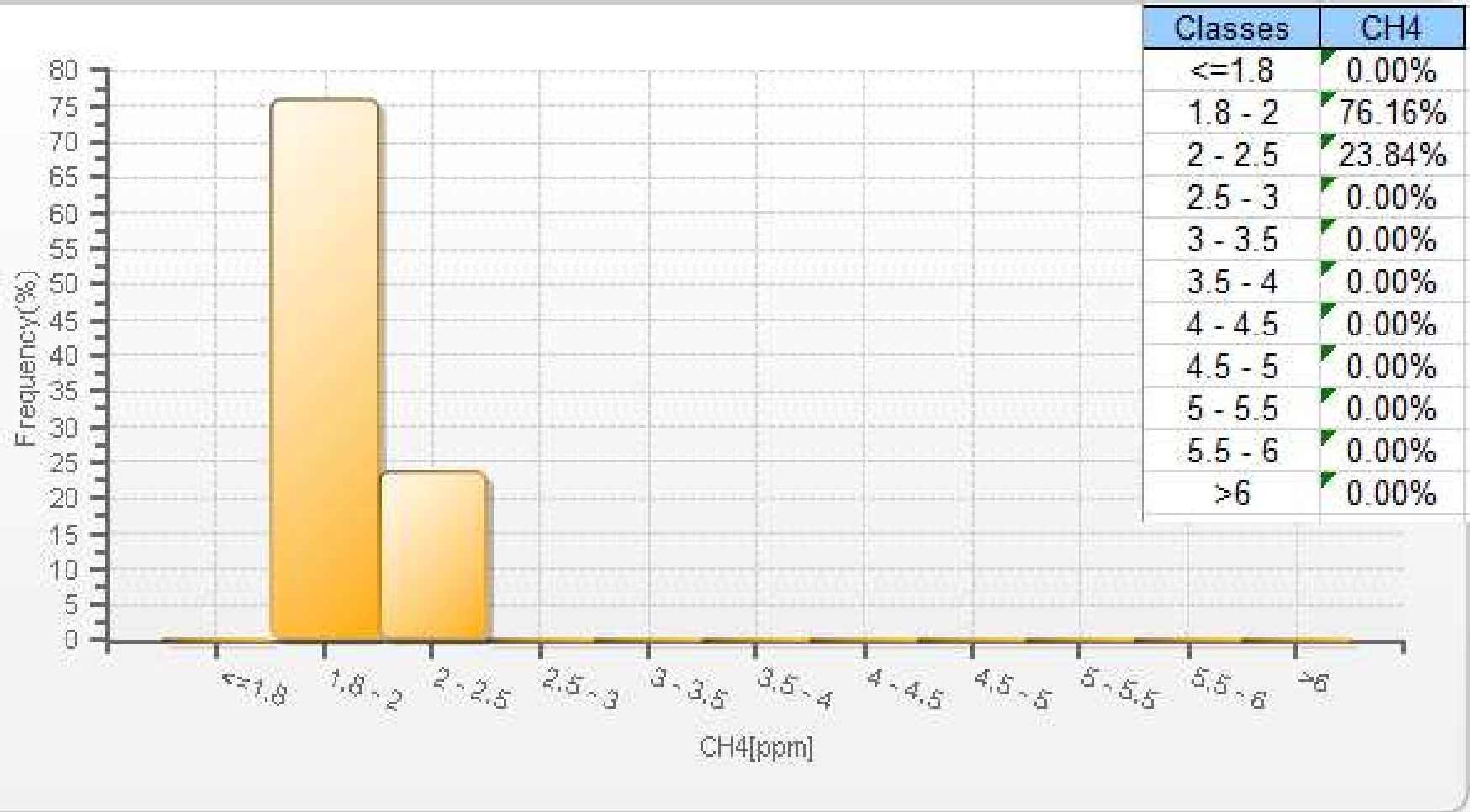
C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Average for CH4 - 842b Station

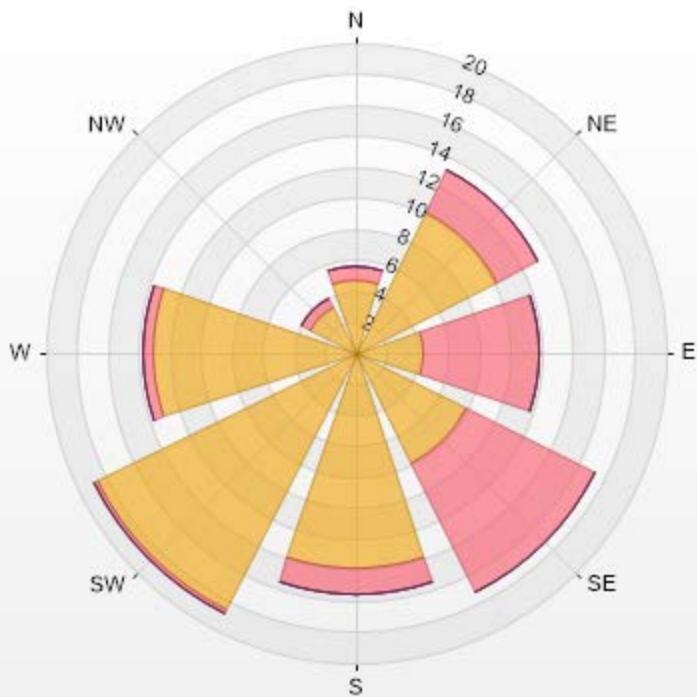


CH4[ppm] Histogram: PRAMP 842b Monthly: 09-2019 1 Hr.



Wind: PRAMP 842b Poll.: PRAMP 842b-CH4[ppm] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 92.90% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	4.65	0.9	0	0	0	5.55
NE	10.19	3	0	0	0	13.19
E	4.35	7.5	0	0	0	11.85
SE	7.95	9.3	0	0	0	17.25
S	13.94	1.65	0	0	0	15.59
SW	18.59	0.3	0	0	0	18.89
W	13.04	0.75	0	0	0	13.79
NW	3.3	0.6	0	0	0	3.9
Summary	76.01	24	0	0	0	100



PRAMP-201909

% Icon Classes (ppm)	76	0-2	24	5-10	0	10-20	0	>20.0



PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2019

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	Hours of Data:	669
Minimum Hourly Value:	0.00 ppm on September 1 at hour 0	Hours of Missing Data:	16
Minimum Daily Value:	0.00 ppm on September 1	Hours of Calibration:	35
Monthly Average:	0.00 ppm	Operational Uptime:	97.8

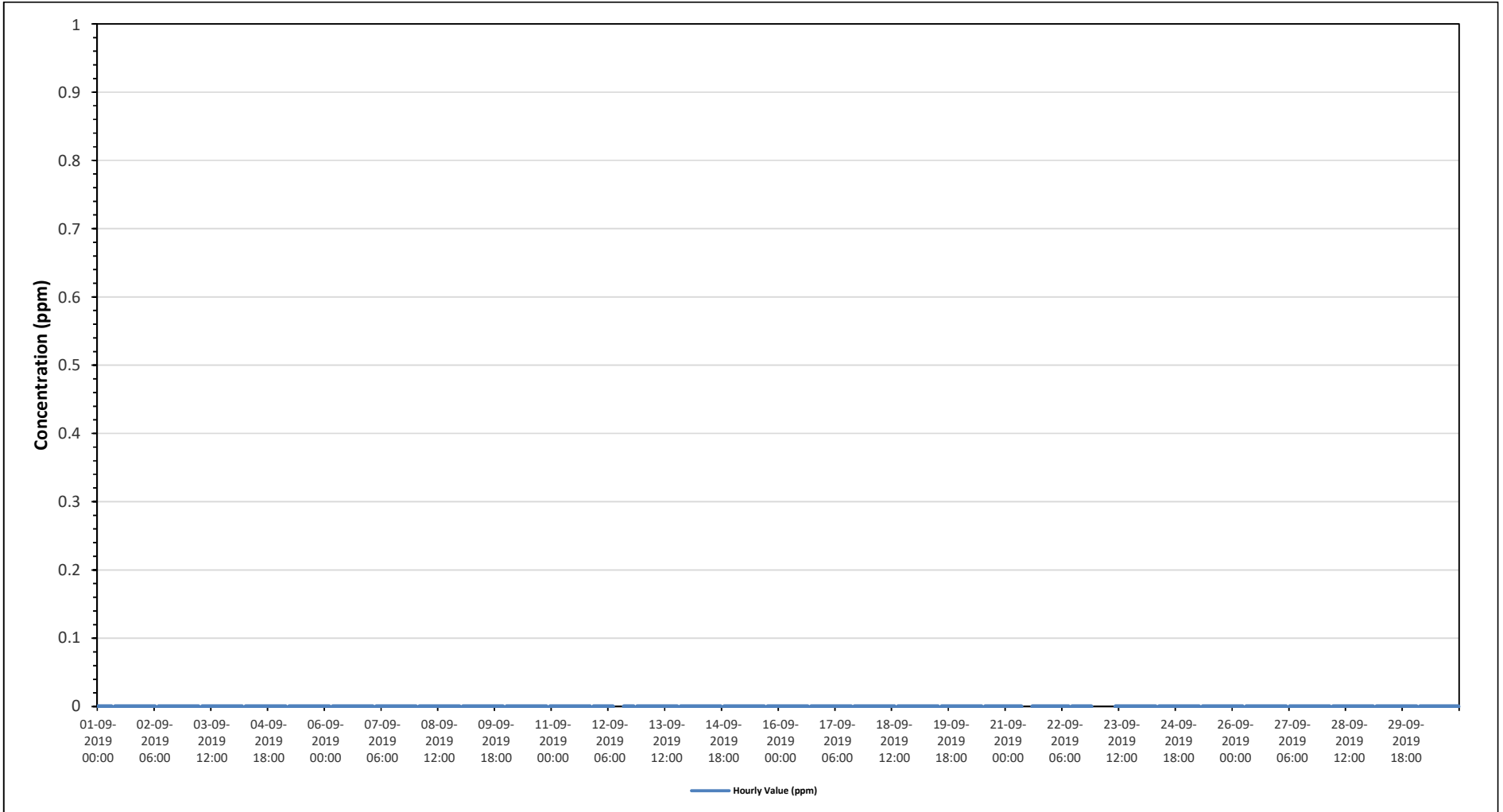
Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00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

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

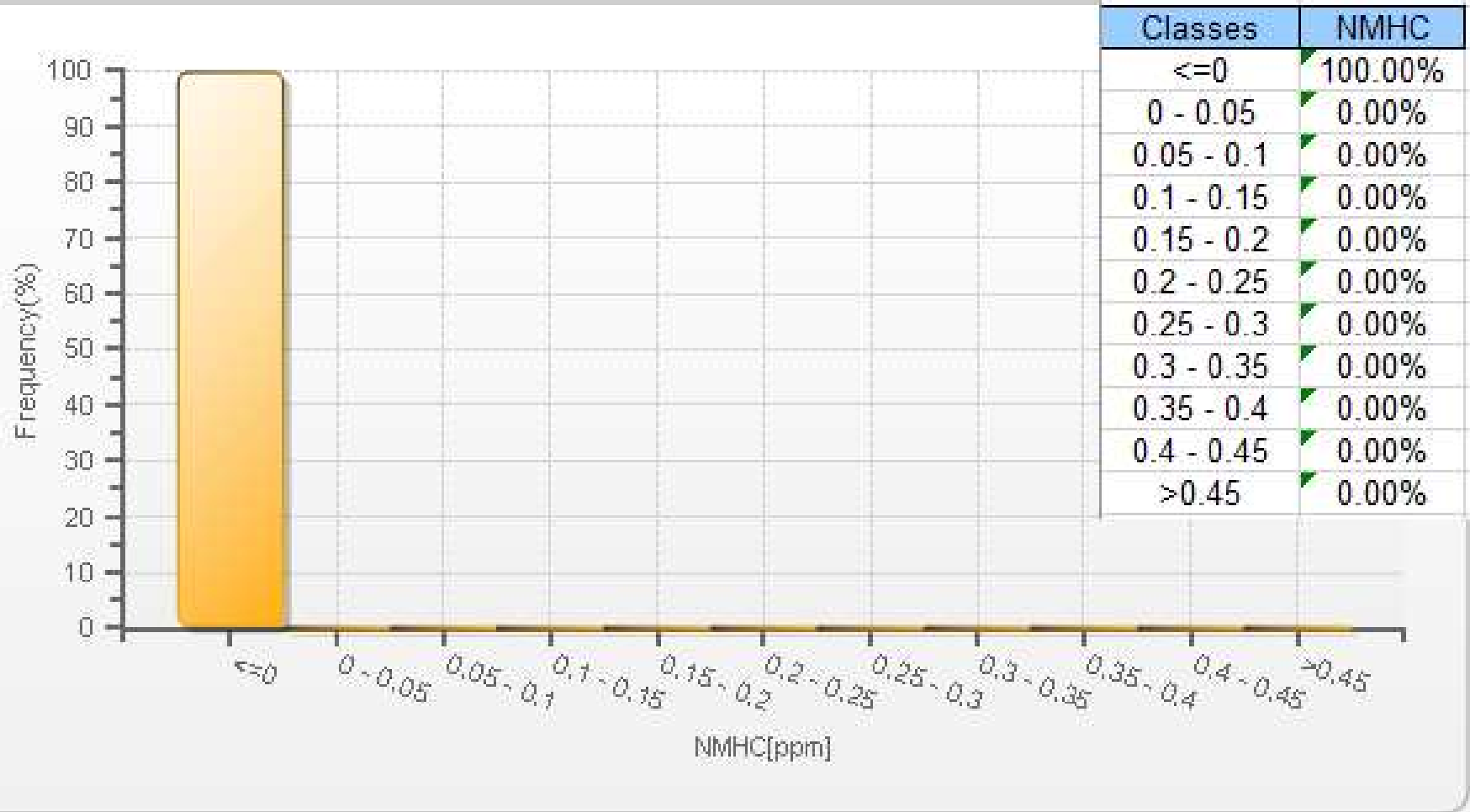
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

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

Timeseries Chart of Hourly Average for NMHC - 842b Station

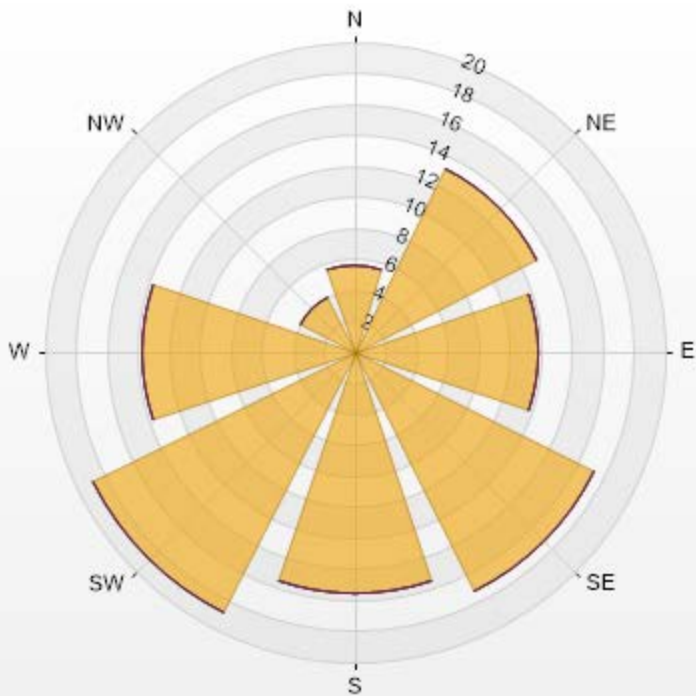


NMHC[ppm] Histogram: PRAMP 842b Monthly: 09-2019 1 Hr.



Wind: PRAMP 842b Poll.: PRAMP 842b-NMHC[ppm] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 92.90% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-0.9	0.9-2	>2.0	Total
N	5.55	0	0	0	0	5.55
NE	13.19	0	0	0	0	13.19
E	11.84	0	0	0	0	11.84
SE	17.24	0	0	0	0	17.24
S	15.59	0	0	0	0	15.59
SW	18.89	0	0	0	0	18.89
W	13.79	0	0	0	0	13.79
NW	3.9	0	0	0	0	3.9
Summary	100	0	0	0	0	100



PRAMP-201909



PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2019

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

Maximum Hourly Value:	96 %	on September 17 at hour 5	Hours in Service:	720
Maximum Daily Value:	90.3 %	on	Hours of Data:	705
Minimum Hourly Value:	34 %	on September 5 at hour 15	Hours of Missing Data:	15
Minimum Daily Value:	57.6 %	on September 30	Hours of Calibration:	0
Monthly Average:	73.3 %		Operational Uptime:	97.9

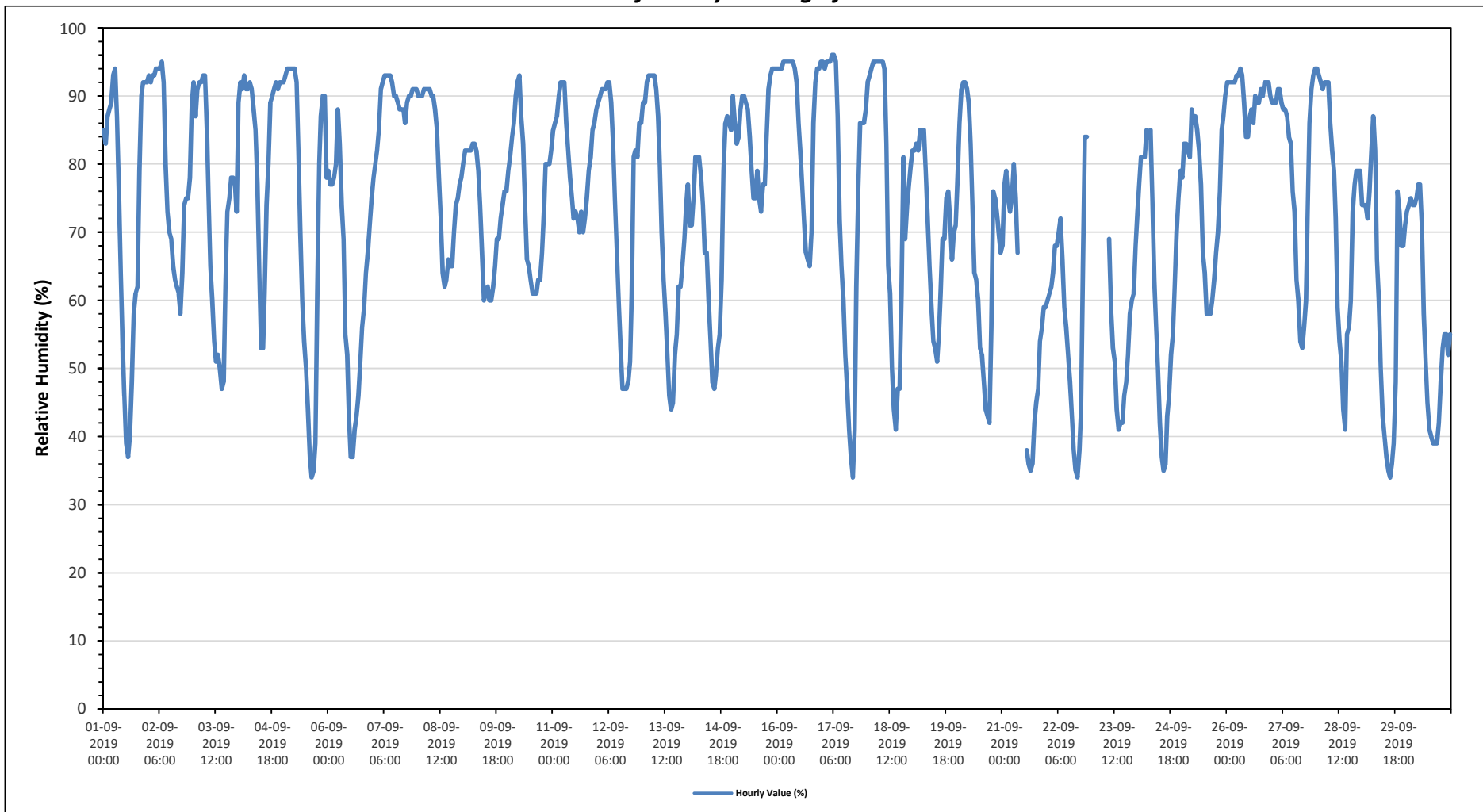
Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Sep 1	85	83	87	88	89	93	94	87	76	64	53	46	39	37	40	48	58	61	62	79	90	92	92	92	37	94	72
Sep 2	93	92	93	93	94	94	94	95	92	80	73	70	69	65	63	62	61	58	64	74	75	75	78	89	58	95	79
Sep 3	92	87	91	92	92	93	93	85	75	65	60	54	51	52	50	47	48	63	73	75	78	78	77	73	47	93	73
Sep 4	89	92	91	93	91	91	92	91	88	85	77	64	53	53	61	74	80	89	90	91	92	91	92	92	53	93	83
Sep 5	92	93	94	94	94	94	94	92	82	70	60	54	50	44	37	34	35	39	61	80	87	90	90	78	34	94	72
Sep 6	79	77	77	78	80	88	83	74	69	55	52	43	37	37	41	43	46	51	56	59	64	67	71	75	37	88	63
Sep 7	78	80	82	85	91	92	93	93	93	92	90	90	89	88	88	88	86	89	90	90	91	91	91	91	78	93	89
Sep 8	90	90	90	91	91	91	91	90	90	88	85	78	72	64	62	63	66	65	65	70	74	75	77	78	62	91	79
Sep 9	80	82	82	82	82	83	83	82	79	74	67	60	61	62	60	60	62	65	69	69	72	74	76	76	60	83	73
Sep 10	79	81	84	86	90	92	93	87	83	74	66	65	63	61	61	63	63	67	73	80	80	80	82	61	93	76	
Sep 11	85	86	87	90	92	92	92	86	82	78	75	72	73	72	70	73	70	72	75	79	81	85	86	88	70	92	81
Sep 12	89	90	91	91	91	92	92	89	83	75	67	60	53	47	47	47	48	51	61	81	82	81	86	86	47	92	74
Sep 13	89	89	92	93	93	93	93	91	87	80	70	63	58	52	46	44	45	52	55	62	62	65	69	74	44	93	72
Sep 14	77	71	71	75	81	81	81	78	74	67	67	60	54	48	47	49	53	55	63	79	86	87	86	85	47	87	70
Sep 15	90	86	83	84	88	90	90	89	88	84	79	75	75	79	75	73	77	77	84	91	93	94	94	94	73	94	85
Sep 16	94	94	94	95	95	95	95	95	95	94	92	86	82	77	72	67	66	65	70	86	92	94	94	95	65	95	87
Sep 17	95	94	95	95	95	96	96	95	87	72	65	60	52	47	41	37	34	41	62	76	86	86	86	88	34	96	74
Sep 18	92	93	94	95	95	95	95	95	94	83	65	61	50	44	41	47	47	61	81	69	74	77	80	41	95	76	
Sep 19	82	82	83	82	85	85	85	79	72	65	59	54	53	51	55	61	69	69	75	76	72	66	70	71	51	85	71
Sep 20	78	86	91	92	92	91	89	83	74	64	63	60	53	52	48	44	43	42	56	76	75	73	70	67	42	92	69
Sep 21	68	77	79	75	73	75	80	75	67	P	P	P	P	38	36	35	36	42	45	47	54	56	59	59	35	80	59
Sep 22	60	61	62	64	68	68	70	72	66	59	56	52	48	44	38	35	34	38	44	65	84	84	K	K	34	84	58
Sep 23	K	K	K	K	K	K	K	K	K	69	59	53	51	44	41	42	42	46	48	52	58	60	61	68	41	69	-
Sep 24	73	77	81	81	81	85	84	85	75	63	56	50	42	37	35	36	43	46	52	55	62	70	75	79	35	85	63
Sep 25	78	83	83	82	81	88	86	87	85	82	77	67	64	58	58	58	60	63	67	70	76	85	87	90	58	90	76
Sep 26	92	92	92	92	92	93	93	94	93	89	84	84	87	88	86	90	89	89	91	90	92	92	92	90	84	94	90
Sep 27	89	89	89	91	91	89	88	88	87	84	83	76	73	63	60	54	53	56	60	73	86	91	93	94	53	94	79
Sep 28	94	93	92	91	92	92	92	86	82	79	72	59	54	51	44	41	55	56	60	73	77	79	79	79	41	94	74
Sep 29	74	74	74	72	76	82	87	82	66	60	50	43	40	37	35	34	36	39	48	76	73	68	68	71	34	87	61
Sep 30	73	74	75	74	74	75	77	77	71	58	51	45	41	40	39	39	39	42	48	53	55	55	52	55	39	77	58
Diurnal Maximum	95	94	95	95	95	96	96	95	95	94	92	90	90	89	88	90	89	89	91	91	93	94	94	95			
Daiurnal Average	83.8	84.4	85.5	86.1	87.2	88.6	88.8	86.3	81.2	74.6	68.7	62.3	58.6	54.6	52.7	52.7	54.9	57.6	64.0	73.4	77.2	78.6	79.6	80.7			

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

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 2019

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

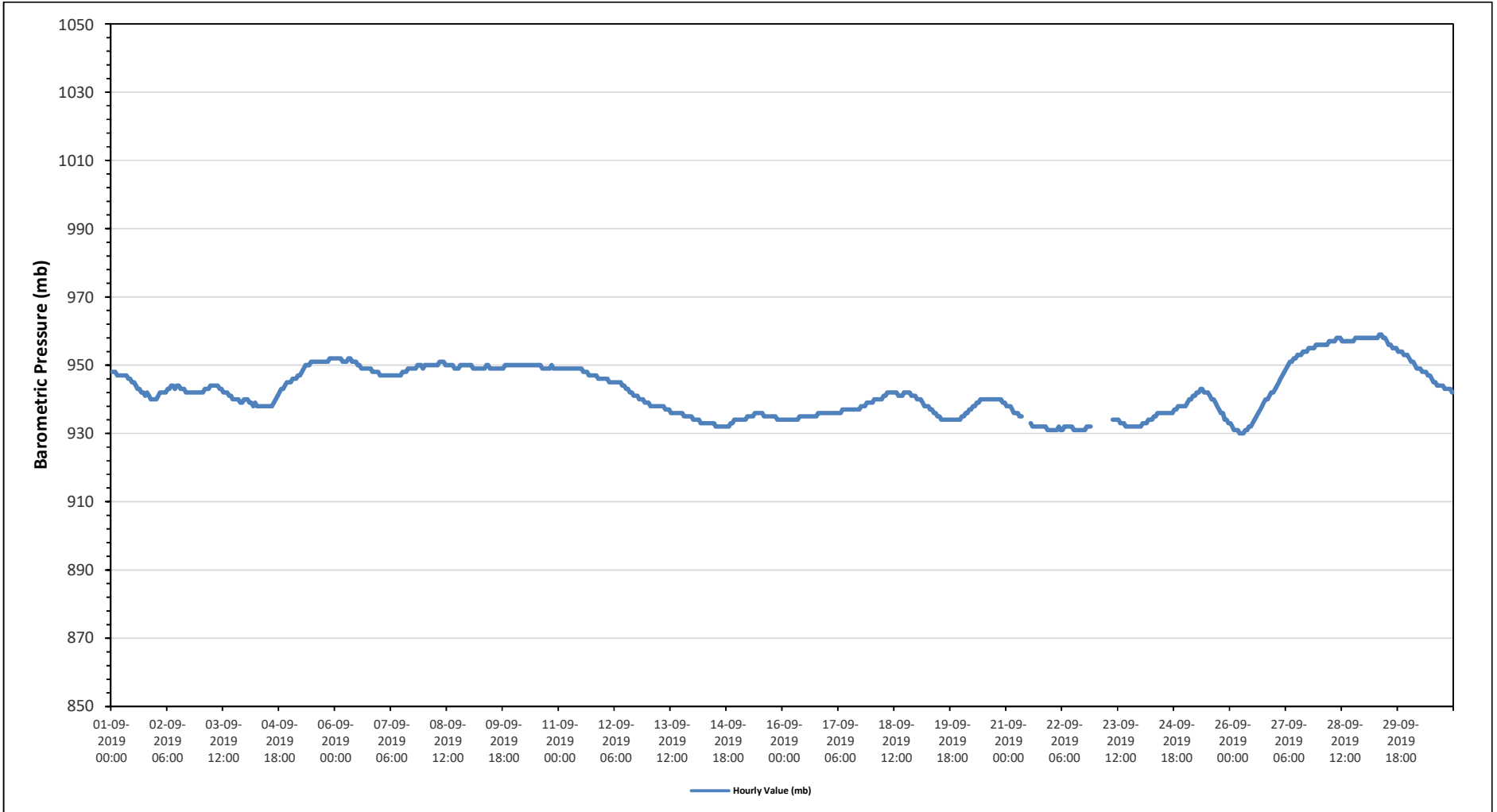
Maximum Hourly Value:	959 mb on September 29 at hour 8	Hours in Service:	720
Maximum Daily Value:	957 mb on	Hours of Data:	705
Minimum Hourly Value:	930 mb on September 26 at hour 5	Hours of Missing Data:	15
Minimum Daily Value:	931 mb on September 22	Hours of Calibration:	0
Monthly Average:	942 mb	Operational Uptime:	97.9

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	948	948	948	947	947	947	947	947	947	946	946	945	945	944	943	943	942	942	941	942	941	940	940	940	940	940	948	944
Sep 2	940	941	942	942	942	942	943	943	944	944	944	944	944	943	943	943	942	942	942	942	942	942	942	942	942	942	944	942
Sep 3	942	942	943	943	943	944	944	944	944	944	943	943	942	942	942	941	941	940	940	940	939	939	940	940	939	944	942	
Sep 4	940	940	939	939	938	939	938	938	938	938	938	938	938	938	938	939	940	941	942	943	943	944	945	945	945	945	945	
Sep 5	945	946	946	946	947	947	948	949	950	950	950	951	951	951	951	951	951	951	951	951	951	952	952	952	952	952	952	
Sep 6	952	952	952	952	951	951	951	952	952	951	951	951	950	950	949	949	949	949	949	949	948	948	948	948	948	948	952	
Sep 7	947	947	947	947	947	947	947	947	947	947	947	947	948	948	948	949	949	949	949	949	949	950	950	950	949	949	948	
Sep 8	950	950	950	950	950	950	950	950	951	951	951	950	950	950	950	949	949	949	949	949	950	950	950	949	949	951	950	
Sep 9	950	950	949	949	949	949	949	949	949	950	950	949	949	949	949	949	949	949	949	950	950	950	950	949	949	950	949	
Sep 10	950	950	950	950	950	950	950	950	950	950	950	950	950	950	949	949	949	949	949	949	950	949	949	949	949	949	950	
Sep 11	949	949	949	949	949	949	949	949	949	949	949	948	948	948	947	947	947	947	947	947	946	946	946	946	946	946	949	
Sep 12	946	946	946	945	945	945	945	945	945	945	944	944	943	943	942	942	941	941	941	940	940	940	939	939	939	946	943	
Sep 13	939	938	938	938	938	938	938	938	938	938	937	937	937	936	936	936	936	936	936	936	935	935	935	935	935	935	939	
Sep 14	934	934	934	934	933	933	933	933	933	933	933	933	932	932	932	932	932	932	932	932	933	933	934	934	934	934	933	
Sep 15	934	934	934	934	934	935	935	935	935	936	936	936	936	936	935	935	935	935	935	935	935	934	934	934	934	934	936	
Sep 16	934	934	934	934	934	934	934	934	934	934	935	935	935	935	935	935	935	935	935	936	936	936	936	936	936	936	935	
Sep 17	936	936	936	936	936	936	936	936	937	937	937	937	937	937	937	937	937	937	938	938	938	939	939	939	939	939	937	
Sep 18	939	940	940	940	940	941	941	942	942	942	942	942	942	942	941	941	942	942	942	942	941	941	941	941	941	942	941	
Sep 19	940	940	940	939	938	938	938	937	937	936	936	935	935	934	934	934	934	934	934	934	934	934	934	934	934	934	940	
Sep 20	935	935	936	936	937	937	938	938	939	939	940	940	940	940	940	940	940	940	940	940	940	940	939	939	939	940	936	
Sep 21	938	938	938	937	936	936	936	935	935	P	P	P	P	933	932	932	932	932	932	932	932	932	931	931	931	938	934	
Sep 22	931	931	931	931	932	931	931	932	932	932	932	931	931	931	931	931	931	931	931	932	932	932	K	K	931	932	931	
Sep 23	K	K	K	K	K	K	K	K	K	934	934	934	934	933	933	933	932	932	932	932	932	932	932	932	932	932	-	
Sep 24	932	933	933	933	934	934	934	935	935	936	936	936	936	936	936	936	936	936	937	937	938	938	938	938	938	938	936	
Sep 25	938	939	940	940	941	941	942	942	943	943	942	942	942	941	940	940	939	938	937	936	936	934	934	933	933	943	939	
Sep 26	933	932	931	931	931	930	930	930	931	931	932	932	933	934	935	936	937	938	939	940	940	941	942	942	942	942	935	
Sep 27	943	944	945	946	947	948	949	950	951	951	952	952	953	953	953	954	954	954	955	955	955	955	956	956	956	956	951	
Sep 28	956	956	956	956	956	957	957	957	957	958	958	958	957	957	957	957	957	957	957	958	958	958	958	958	958	958	957	
Sep 29	958	958	958	958	958	958	958	958	959	959	958	958	957	956	956	955	955	955	954	954	954	953	953	953	953	953	956	
Sep 30	952	951	951	950	949	949	949	948	948	948	947	947	946	945	945	944	944	944	944	943	943	943	943	942	942	942	946	
Diurnal Maximum	958	958	958	958	958	958	958	958	959	959	958	958	957	957	957	957	957	957	957	958	958	958	958	958	958	958	958	
Daiurnal Average	942	943	943	942	942	943	943	943	943	943	943	943	943	942	942	942	942	942	942	942	942	942	942	942	942	942	942	

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 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 2019

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

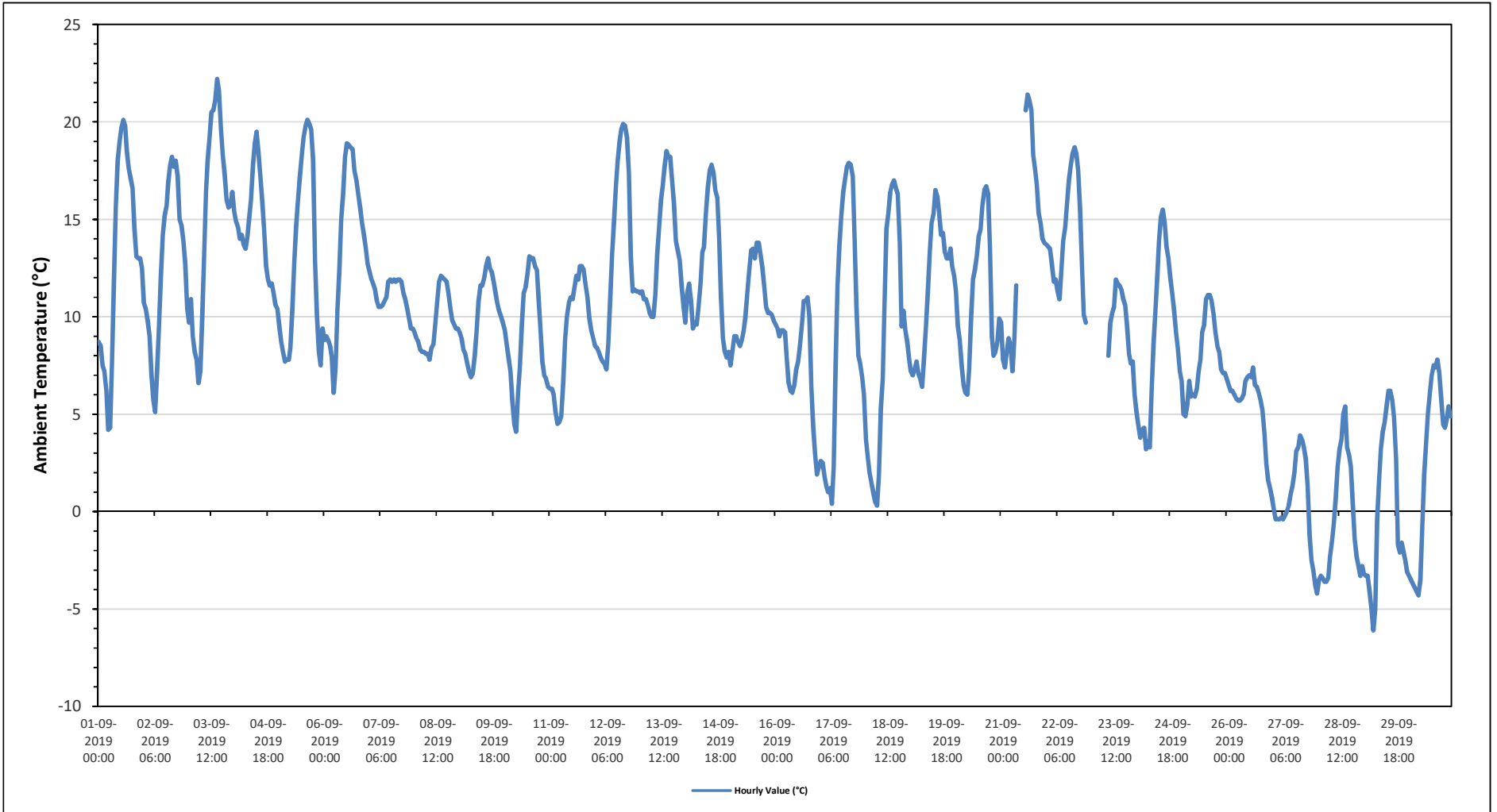
Maximum Hourly Value:	22.2 °C	on September 3 at hour 15	Hours in Service:	720
Maximum Daily Value:	15.1 °C	on	Hours of Data:	705
Minimum Hourly Value:	-6.1 °C	on September 29 at hour 6	Hours of Missing Data:	15
Minimum Daily Value:	-0.4 °C	on September 28	Hours of Calibration:	0
Monthly Average:	9.6 °C		Operational Uptime:	97.9

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	8.7	8.5	7.5	7.2	6.2	4.2	4.3	7.6	11.7	15.6	18.0	19.0	19.7	20.1	19.8	18.5	17.6	17.1	16.6	14.5	13.1	13.0	13.0	12.5	4.2	20.1	13.1	
Sep 2	10.7	10.4	9.8	9.0	7.0	5.7	5.1	7.2	9.5	12.1	14.2	15.2	15.7	16.9	17.8	18.2	17.7	18.0	17.2	15.0	14.7	13.9	12.7	10.4	5.1	18.2	12.7	
Sep 3	9.7	10.9	9.0	8.2	7.8	6.6	7.2	10.1	13.3	16.4	18.0	19.2	20.5	20.6	21.1	22.2	21.6	19.6	18.3	17.3	16.0	15.6	15.7	16.4	6.6	22.2	15.1	
Sep 4	15.4	14.9	14.6	14.0	14.2	13.7	13.5	14.1	15.0	16.0	17.7	18.9	19.5	18.4	17.2	15.9	14.4	12.6	11.9	11.6	11.7	11.2	10.6	10.4	10.4	10.4	19.5	14.5
Sep 5	9.5	8.7	8.2	7.7	7.8	7.8	8.4	10.3	12.7	14.6	16.0	17.2	18.3	19.2	19.8	20.1	19.9	19.6	18.0	12.9	10.1	8.2	7.5	9.4	7.5	20.1	13.0	
Sep 6	8.8	9.0	8.8	8.5	7.9	6.1	7.4	10.3	12.3	15.0	16.3	18.2	18.9	18.8	18.7	18.6	17.5	17.0	16.3	15.6	14.8	14.2	13.5	12.7	6.1	18.9	13.6	
Sep 7	12.3	11.9	11.7	11.4	10.8	10.5	10.5	10.6	10.8	11.0	11.8	11.9	11.8	11.9	11.8	11.9	11.9	11.8	11.2	10.9	10.4	9.9	9.4	9.4	9.4	9.4	12.3	11.1
Sep 8	9.2	8.9	8.7	8.3	8.2	8.2	8.1	8.1	7.8	8.4	8.6	9.6	10.8	11.8	12.1	12.0	11.9	11.8	11.2	10.4	9.8	9.6	9.4	9.4	7.8	12.1	9.7	
Sep 9	9.2	8.9	8.3	8.1	7.6	7.2	6.9	7.1	8.0	9.3	10.8	11.6	11.6	12.0	12.6	13.0	12.5	12.3	11.8	11.2	10.7	10.3	10.0	9.7	6.9	13.0	10.0	
Sep 10	9.3	8.6	7.9	7.2	5.7	4.5	4.1	6.1	7.4	9.5	11.2	11.5	12.2	13.1	13.0	13.0	12.6	12.4	11.0	9.4	7.7	7.0	6.8	6.4	4.1	13.1	9.1	
Sep 11	6.3	6.3	6.0	5.1	4.5	4.6	4.9	6.6	8.8	10.0	10.7	11.0	10.9	11.5	12.1	11.9	12.6	12.6	12.4	11.6	11.0	9.9	9.3	8.9	4.5	12.6	9.1	
Sep 12	8.5	8.4	8.2	7.9	7.7	7.6	7.3	8.6	10.9	13.2	14.9	16.7	18.0	19.0	19.6	19.9	19.8	19.2	17.4	13.1	11.3	11.4	11.3	11.3	7.3	19.9	13.0	
Sep 13	11.2	11.3	10.9	10.9	10.6	10.2	10.0	10.0	11.1	13.2	14.6	16.0	16.7	17.7	18.5	18.2	18.2	17.0	15.8	13.9	13.4	12.9	11.6	10.5	10.0	18.5	13.5	
Sep 14	9.7	11.2	11.7	10.8	9.4	9.7	9.6	10.5	11.7	13.3	13.6	15.3	16.6	17.5	17.8	17.4	16.5	16.1	14.1	11.0	8.9	8.2	7.9	8.2	7.9	17.8	12.4	
Sep 15	7.5	8.2	9.0	9.0	8.7	8.5	8.8	9.3	10.0	11.2	12.3	13.4	13.5	13.0	13.8	13.8	13.2	12.5	11.5	10.5	10.2	10.2	10.1	9.8	7.5	13.8	10.8	
Sep 16	9.6	9.4	9.0	9.3	9.3	9.2	7.9	6.6	6.2	6.1	6.5	7.3	7.7	8.5	9.6	10.8	10.8	11.0	10.0	6.4	4.3	2.9	1.9	2.3	1.9	11.0	7.6	
Sep 17	2.6	2.5	1.8	1.3	1.0	1.2	0.4	2.3	7.5	11.6	13.7	15.2	16.4	17.1	17.7	17.9	17.8	17.2	14.1	10.5	8.0	7.6	6.9	6.0	0.4	17.9	9.1	
Sep 18	3.7	2.8	2.0	1.5	1.0	0.5	0.3	1.9	5.3	6.8	10.7	14.5	15.3	16.4	16.8	17.0	16.6	16.3	13.8	9.5	10.3	9.3	8.7	7.8	0.3	17.0	8.7	
Sep 19	7.2	7.0	7.3	7.7	7.1	6.8	6.4	7.9	9.5	11.3	13.3	14.8	15.3	16.5	16.2	15.3	14.2	14.3	13.3	13.0	13.0	13.5	12.6	12.1	6.4	16.5	11.5	
Sep 20	11.3	9.5	8.8	7.5	6.5	6.1	6.0	7.3	9.9	11.9	12.4	13.1	14.1	14.5	15.7	16.5	16.7	16.3	13.5	9.0	8.0	8.2	8.7	9.9	6.0	16.7	10.9	
Sep 21	9.7	7.8	7.4	8.2	8.9	8.5	7.2	8.9	11.6	P	P	P	P	20.6	21.4	21.1	20.6	18.3	17.6	16.8	15.3	14.8	14.0	13.8	7.2	21.4	13.6	
Sep 22	13.7	13.6	13.5	12.7	11.8	11.9	11.3	10.9	12.4	13.9	14.6	15.8	17.0	17.8	18.4	18.7	18.4	17.5	15.5	12.6	10.1	9.7	K	K	9.7	18.7	14.2	
Sep 23	K	K	K	K	K	K	K	K	K	8.0	9.7	10.2	10.5	11.9	11.7	11.6	11.4	10.9	10.6	9.5	8.1	7.6	7.7	6.0	6.0	11.9	-	
Sep 24	5.1	4.4	3.8	4.2	4.3	3.2	3.6	3.3	6.2	8.6	10.3	12.1	13.9	15.1	15.5	14.9	13.6	13.0	12.0	11.2	10.3	9.2	8.4	7.2	3.2	15.5	8.9	
Sep 25	6.7	5.0	4.9	5.5	6.7	5.9	6.0	5.9	6.3	7.2	7.8	9.2	9.6	10.9	11.1	11.1	10.8	10.1	9.2	8.5	8.2	7.3	7.1	7.1	4.9	11.1	7.8	
Sep 26	6.8	6.5	6.2	6.2	6.0	5.8	5.7	5.7	5.8	6.0	6.7	6.9	7.0	6.9	7.4	6.5	6.4	6.1	5.7	5.2	4.0	2.5	1.6	1.2	1.2	7.4	5.6	
Sep 27	0.7	0.1	-0.4	-0.4	-0.4	-0.3	-0.4	-0.2	0.0	0.3	0.9	1.3	2.0	3.1	3.3	3.9	3.7	3.3	2.7	1.3	-1.2	-2.5	-3.0	-3.8	-3.8	3.9	0.6	
Sep 28	-4.2	-3.5	-3.3	-3.4	-3.6	-3.6	-3.4	-2.3	-1.5	-0.6	0.7	2.3	3.2	3.7	5.0	5.4	3.3	2.9	2.3	0.4	-1.4	-2.3	-2.8	-3.3	-4.2	5.4	-0.4	
Sep 29	-2.8	-3.2	-3.3	-3.3	-4.1	-5.0	-6.1	-5.0	-0.4	1.6	3.2	4.1	4.6	5.4	6.2	6.2	5.7	4.8	2.7	-1.7	-2.1	-1.6	-2.1	-2.5	-6.1	6.2	0.1	
Sep 30	-3.1	-3.3	-3.5	-3.7	-3.9	-4.1	-4.3	-3.5	-0.8	1.9	3.5	5.0	6.1	7.0	7.5	7.4	7.8	7.1	5.8	4.5	4.3	4.7	5.4	4.9	-4.3	7.8	2.2	
Diurnal Maximum	15.4	14.9	14.6	14.0	14.2	13.7	13.5	14.1	15.0	16.4	18.0	19.2	20.5	20.6	21.4	22.2	21.6	19.6	18.3	17.3	16.0	15.6	15.7	16.4				
Daiurnal Average	7.3	7.1	6.7	6.4	6.0	5.6	5.4	6.4	8.2	9.8	11.1	12.3	13.0	13.9	14.3	14.3	13.9	13.3	12.1	10.2	9.1	8.5	8.1	7.7				

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	O1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	N	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 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 2019

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

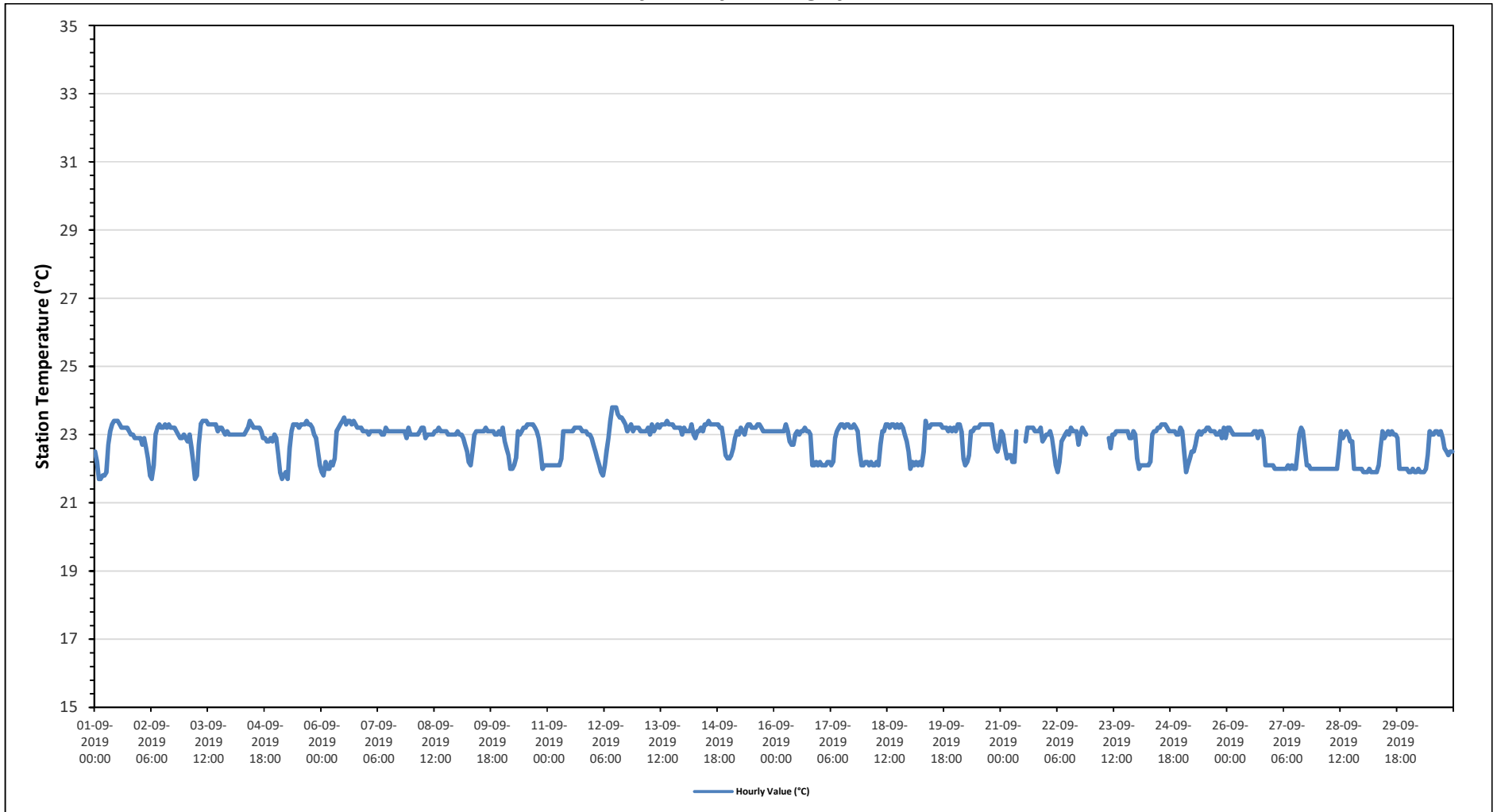
Maximum Hourly Value:	23.8 °C	on September 12 at hour 10	Hours in Service:	720
Maximum Daily Value:	23.2 °C	on	Hours of Data:	705
Minimum Hourly Value:	21.7 °C	on September 1 at hour 2	Hours of Missing Data:	15
Minimum Daily Value:	22.2 °C	on September 27	Hours of Calibration:	0
Monthly Average:	22.8 °C		Operational Uptime:	97.9

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

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 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 2019

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

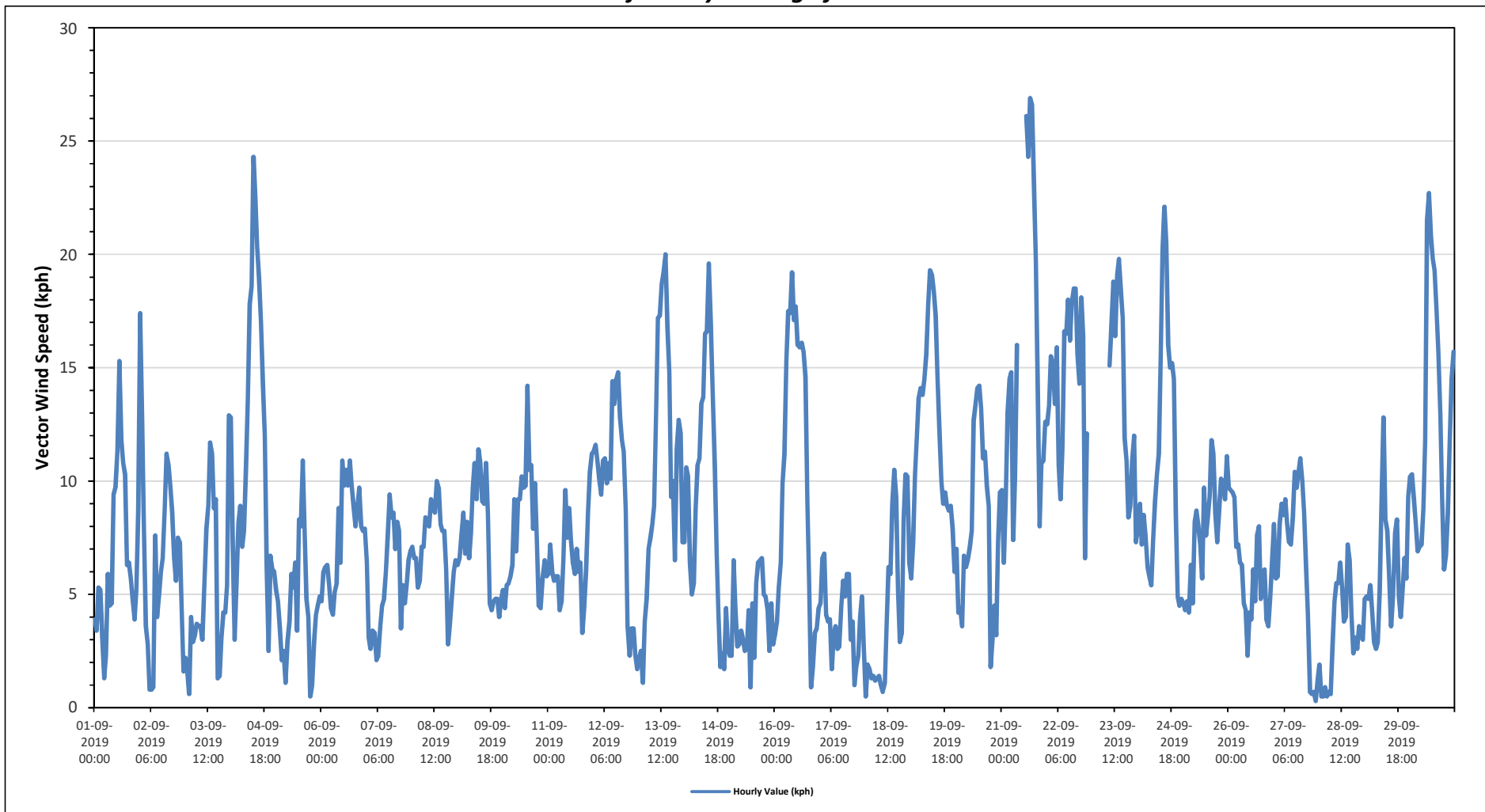
Maximum Hourly Value: 26.9 kph on September 21 at hour 15	Hours in Service: 720
Maximum Daily Value: 15.2 kph on	Hours of Data: 705
Minimum Hourly Value: 0.3 kph on September 27 at hour 22	Hours of Missing Data: 15
Minimum Daily Value: 3.3 kph on September 28	Hours of Calibration: 0
Monthly Average: 3.0 kph	Operational Uptime: 97.9

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Sep 1	3.9	3.4	5.3	5.2	3.1	1.3	2.3	5.9	4.5	4.6	9.4	9.7	11.3	15.3	11.8	10.8	10.3	6.3	6.4	5.7	4.8	3.9	5.2	8.7	1.3	15.3	6.6
Sep 2	17.4	12.7	7.8	3.6	2.8	0.8	0.8	0.9	7.6	4	5	6	6.6	8.8	11.2	10.7	9.8	8.6	6.6	5.6	7.5	7.3	4.3	1.6	0.8	17.4	6.6
Sep 3	2.2	1.6	0.6	4	2.9	3.2	3.7	3.6	3.6	3	5.6	7.9	8.9	11.7	11.2	8.8	9.2	1.3	1.4	3.1	4.2	4.2	5.4	12.9	0.6	12.9	5.2
Sep 4	12.8	7.2	3	5.6	8.2	8.9	7.1	7.8	10.5	13.6	17.8	18.6	24.3	22.5	20.3	18.9	17	14.3	12	6.3	2.5	6.7	6.1	6	2.5	24.3	11.6
Sep 5	5.2	4.7	3.5	2.1	2.5	1.1	2.9	3.8	5.9	5.3	6.4	3.4	8.3	8	10.9	7.9	4.8	4	0.5	1	2.9	4.1	4.5	4.9	0.5	10.9	4.5
Sep 6	4.7	6	6.2	6.3	5.4	4.4	4.1	5.1	5.5	8.8	6.4	10.9	9.8	10.5	9.8	10.9	9.8	8.9	8	8.8	9.7	8	7.8	7.9	4.1	10.9	7.7
Sep 7	6.4	3.1	2.6	3.4	3.3	2.1	2.3	3.6	4.5	4.8	6	7.6	9.4	8.4	8.6	7	8.2	7.8	3.5	5.4	4.6	5.4	6.5	6.9	2.1	9.4	5.5
Sep 8	7.1	6.6	6.6	5.3	5.6	7.1	7.1	8.4	8.3	8	9.2	8.9	8.6	10	9.7	8.1	7.8	7.8	6.1	2.8	3.7	4.9	6	6.5	2.8	10.0	7.1
Sep 9	6.3	6.6	7.6	8.6	6.8	8.2	6.6	7.7	9.7	10.8	9.2	11.4	10.8	9.1	9	10.8	8.5	4.6	4.3	4.7	4.8	4.8	4	4.8	4.0	11.4	7.5
Sep 10	5.2	4.4	5.4	5.5	5.8	6.3	9.2	6.9	9.2	9.2	10.2	9.7	9.8	14.2	10.5	10.7	7.9	9.9	7.4	4.5	4.4	5.7	6.5	5.8	4.4	14.2	7.7
Sep 11	5.9	7.2	6	5.6	5.8	5.8	4.3	4.7	6.6	9.6	7.5	8.8	7.3	6.4	5.9	7	6	6.4	3.3	4.4	6.1	8.6	10.4	11.2	3.3	11.2	6.7
Sep 12	11.3	11.6	10.9	10.1	9.4	10.9	11	9.9	10.8	10.1	14.4	13.4	14.5	14.8	12.8	11.8	11.3	8.7	3.6	2.3	3.5	3.5	2.3	1.7	1.7	14.8	9.4
Sep 13	2.2	2.5	1.1	3.8	4.8	7	7.5	8.1	8.9	13.1	17.2	17.3	18.7	19.2	20	16.8	14.8	9.3	10	6.5	11.4	12.7	12.1	7.3	1.1	20.0	10.5
Sep 14	7.3	10.6	10.2	6.4	5	5.5	8.8	10.7	11	13.4	13.7	16.5	16.6	19.6	17	14	10.7	6.8	4.1	1.8	2.4	1.7	4.4	2.6	1.7	19.6	9.2
Sep 15	2.3	2.3	6.5	4.4	2.7	2.8	3.4	3	2.5	2.6	4.3	0.9	4.6	2.2	5.5	6.4	6.5	6.6	5	4.9	4.3	2.5	4.6	2.8	0.9	6.6	3.9
Sep 16	3.2	3.8	5.3	6.4	9.9	11.2	15.3	17.5	17.4	19.2	17.1	17.7	16	15.9	16.1	15.7	14.6	9.1	5.5	0.9	1.8	3.3	3.5	4.4	0.9	19.2	10.5
Sep 17	4.6	6.6	6.8	4.1	3.8	3.9	1.7	3.2	3.6	2.6	2.7	4.5	5.6	4.9	5.9	5.9	3	3.8	1	1.8	2.3	4	4.9	2.6	1.0	6.8	3.9
Sep 18	0.5	1.9	1.7	1.3	1.4	1.2	1.3	1.4	1	0.7	1.1	3.7	6.2	5.9	9	10.5	9.3	5.1	2.9	3.3	8.3	10.3	10.2	6.4	0.5	10.5	4.4
Sep 19	5.7	7.3	10.3	11.9	13.7	14.1	13.8	14.5	15.6	17.8	19.3	19.1	18.4	17.3	14.5	12.2	10	9	9.5	8.9	8.7	8.9	7.9	6	5.7	19.3	12.3
Sep 20	7	4.2	4.4	3.6	6.7	6.2	6.5	7.1	7.8	12.7	13.4	14.1	14.2	13.2	11	11.3	9.8	8.9	1.8	3	4.5	3.2	7.4	9.5	1.8	14.2	8.0
Sep 21	9.6	6.4	9.1	13	14.5	14.8	7.4	10.2	16	P	P	P	P	26.1	24.3	26.9	26.6	23.1	19.7	14.1	8	10.8	10.9	12.6	6.4	26.9	15.2
Sep 22	12.5	13.3	15.5	15.2	13.4	15.9	10.7	9.2	11.5	16.6	16.5	18	16.2	17.9	18.5	18.5	15.6	14.3	18.1	16.4	6.6	12.1	K	K	6.6	18.5	14.7
Sep 23	K	K	K	K	K	K	K	K	K	15.1	16.9	18.8	16.4	19.1	19.8	18.4	17.2	11.9	10.9	8.4	8.9	10.9	12	7.3	7.3	19.8	-
Sep 24	7.9	9	7.2	8.5	7.6	6.2	5.8	5.4	7.4	9.1	10.3	11.2	15.5	20.2	22.1	20.5	16	15	15.2	14.5	8.6	4.9	4.5	4.8	4.5	22.1	10.7
Sep 25	4.6	4.3	4.7	4.2	6.3	4.6	8.2	8.7	8	7.2	5.7	9.7	7.6	8.4	9.3	11.8	11.2	8.6	7.3	8.7	10.1	10	9.2	11.1	4.2	11.8	7.9
Sep 26	9.7	9.6	9.5	9.3	7.1	7.2	6.4	6.3	4.6	4.3	2.3	4.2	3.9	6.1	4.7	7.6	8	4.8	6	6.1	3.9	3.6	4.8	6.4	2.3	9.7	6.1
Sep 27	8.1	5.7	5.8	8.1	9	8.5	9.2	8.1	7.3	7.2	8.4	10.4	9.7	10.4	11	10	8.6	6.3	4.1	0.7	0.6	0.7	0.3	1.2	0.3	11.0	6.6
Sep 28	1.9	0.5	0.5	0.9	0.5	0.7	0.6	2.8	4.7	5.5	5.5	6.4	5.3	3.8	4	7.2	6.5	4.1	2.4	3.1	2.6	3.6	3.2	3	0.5	7.2	3.3
Sep 29	4.8	4.9	4.8	5.4	4.2	2.9	2.6	2.9	5.2	9.3	12.8	8.3	7.8	5.7	3.6	4.9	7.7	8.3	4.9	4	5.2	6.6	5.7	9.3	2.6	12.8	5.9
Sep 30	10.2	10.3	9.2	8.1	6.9	7.1	7.2	8.8	11.8	21.5	22.7	20.8	19.8	19.3	17.5	15.7	12.9	9.2	6.1	6.7	8.6	11.8	14.5	15.7	6.1	22.7	12.6
Diurnal Maximum	17	13	16	15	15	16	15	18	17	22	23	21	24	26	24	27	27	23	20	16	11	13	15	16			
Diurnal Average	6.6	6.1	6.1	6.2	6.2	6.2	6.1	6.8	8.0	9.3	10.2	11.0	11.5	12.5	12.2	11.9	10.7	8.4	6.6	5.6	5.5	6.3	6.5	6.6			

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

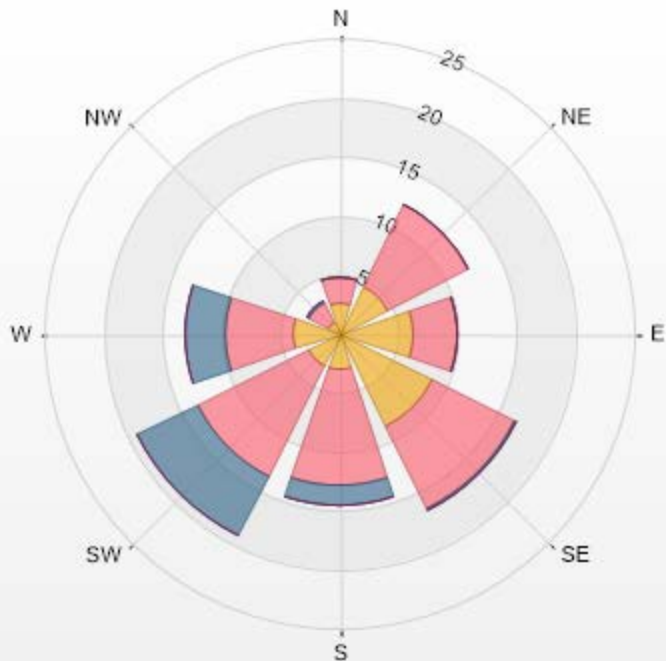
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

Timeseries Chart of Hourly Average for VWS - 842b Station



Wind: PRAMP 842b Poll.: PRAMP 842b-WDS[KPH] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 5.97% Valid Data: 97.91% Calm Avg: 1.05 [KPH]

Direction	0-6	6-15	15-29	29-39	>39.0	Total
N	2.7	2.13	0	0	0	4.83
NE	4.55	7.68	0	0	0	12.23
E	6.26	3.7	0	0	0	9.96
SE	8.82	7.82	0.14	0	0	16.78
S	2.99	9.96	1.71	0	0	14.66
SW	2.99	10.53	5.69	0	0	19.21
W	3.98	5.83	3.41	0	0	13.22
NW	1.14	1.85	0.14	0	0	3.13
Summary	33.43	49.5	11.09	0	0	94.02



PRAMP-201909

% Icon Classes (KPH) 33 0-6 50 15-29 0 29-39 0 >39.0



PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2019

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

Monthly Average:	203 (SSW) degree	Hours in Service:	720
		Hours of Data:	705
		Hours of Missing Data:	15
		Hours of Calibration:	0
		Operational Uptime:	97.9

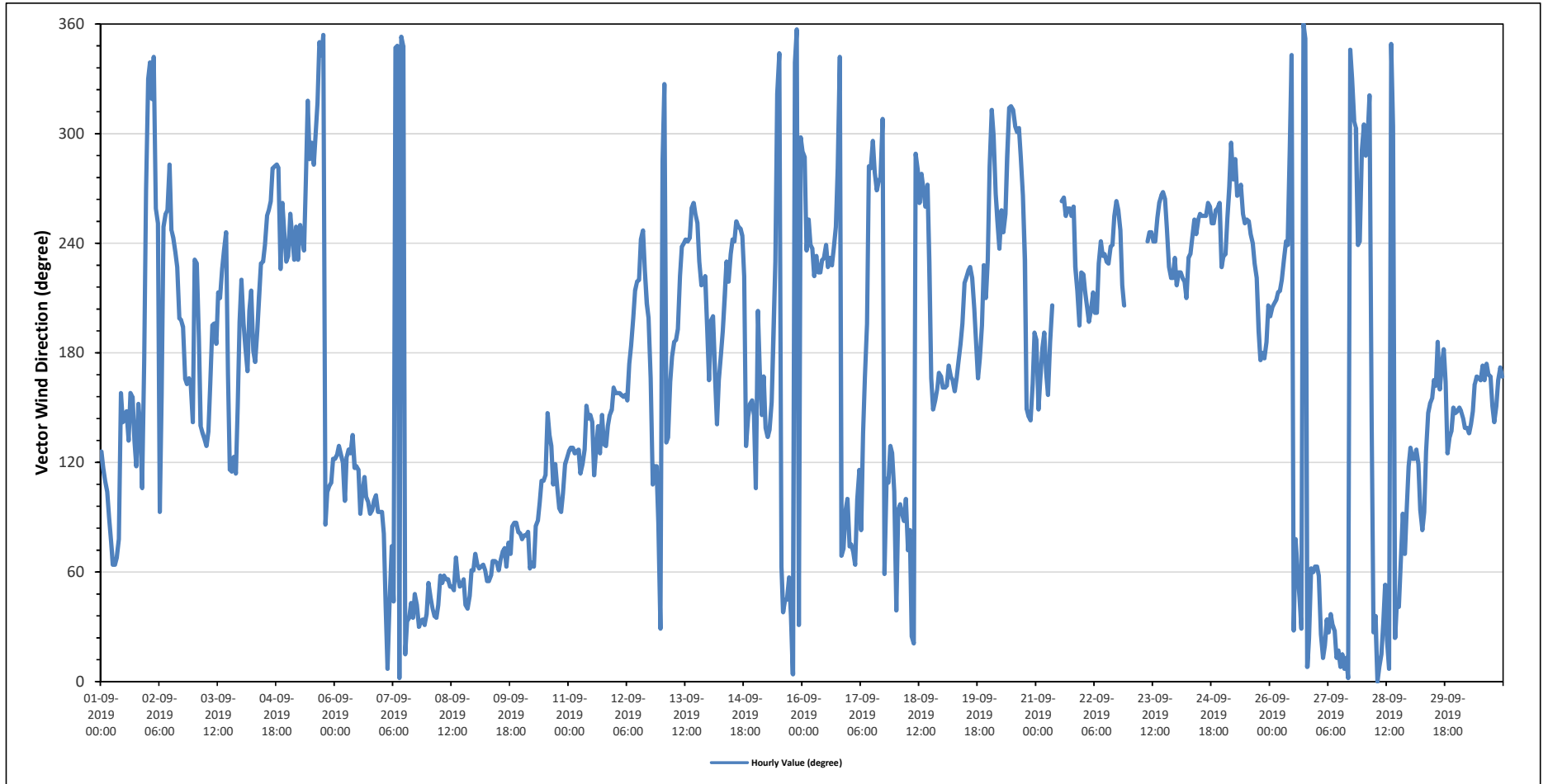
Day	Hourly Period Starting at (MST)																							Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant
Sep 1	SE	ESE	ESE	ESE	E	ENE	ENE	ENE	ENE	ENE	SSE	SE	SE	SE	SE	SSE	SSE	SE	ESE	SSE	ESE	S	W	135	SE	
Sep 2	NNW	NNW	NW	NNW	WSW	WSW	E	SSE	WSW	WSW	WSW	W	WSW	WSW	SW	SW	SSW	SSW	SSW	SSE	SSE	SSE	SSE	SE	243	WSW
Sep 3	SW	SW	S	SE	SE	SE	SE	SE	SSE	SSW	SSW	S	SSW	SSW	SW	SW	WSW	SSE	ESE	ESE	ESE	ESE	SSE	SSW	190	S
Sep 4	SW	SSW	S	SSE	SSW	SSW	S	S	S	SSW	SW	SW	WSW	WSW	WSW	W	W	W	W	W	SW	W	WSW	SW	238	SW
Sep 5	SW	WSW	WSW	SW	WSW	SW	WSW	WSW	SW	W	NW	WNW	WNW	W	WNW	NW	N	NNW	N	E	ESE	ESE	ESE	ESE	281	W
Sep 6	ESE	ESE	SE	ESE	ESE	E	ESE	SE	SE	SE	ESE	ESE	ESE	E	ESE	ESE	E	E	E	E	E	E	E	E	109	ESE
Sep 7	E	E	NE	N	NE	ENE	NE	NNW	NNW	N	N	NNW	NNE	NNE	NE	NE	NE	NE	NE	NE	NNE	NNE	NNE	NE	30	NNE
Sep 8	NE	NE	NE	NE	NE	NE	ENE	NE	ENE	NE	NE	NE	NE	NE	ENE	ENE	NE	NE	NE	NE	NE	NE	ENE	ENE	52	NE
Sep 9	ENE	ENE	ENE	ENE	ENE	ENE	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	E	E	E	67	ENE
Sep 10	ENE	E	E	E	ENE	ENE	ENE	E	E	E	ESE	ESE	ESE	SE	SE	ESE	ESE	ESE	ESE	E	E	ESE	ESE	ESE	104	ESE
Sep 11	SE	SE	SE	SE	SE	SE	ESE	ESE	SE	SSE	SE	SE	SE	ESE	SE	SE	SE	SE	SE	SE	SE	SE	SSE	SSE	136	SE
Sep 12	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	SSW	SSW	SW	SW	WSW	WSW	SW	SSW	SSE	ESE	ESE	ESE	E	NNE	189	S	
Sep 13	WNW	NW	SE	SE	SSE	S	S	S	S	SW	SW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	SW	SW	SW	SW	S	230	SW
Sep 14	SSE	SSW	SSW	SSE	SE	SSE	S	S	SSW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SE	SE	SSE	SSE	SE	217	SW
Sep 15	ESE	SSW	SSE	SE	SSE	SE	SE	SE	SSE	S	SW	NW	NNW	ENE	NE	NE	NE	ENE	NE	N	NNW	N	NNE	WNW	64	ENE
Sep 16	WNW	WNW	SW	WSW	WSW	SW	SW	SW	SW	SW	SW	WSW	SW	SW	SW	SW	WSW	W	NNW	ENE	ENE	E	E	E	233	SW
Sep 17	ENE	ENE	ENE	ENE	E	ESE	E	SE	SSE	SSW	W	W	WNW	W	W	W	W	NW	ENE	ESE	ESE	SE	SE	ESE	103	ESE
Sep 18	NE	E	E	E	E	ENE	E	NNE	NNE	WNW	W	W	W	W	WSW	W	SW	SSE	SSE	SSE	SSE	SSE	SSE	SSE	212	SSW
Sep 19	SSE	SSE	SSE	S	SSE	SSE	SSE	SSE	S	S	SSW	SW	SW	SW	SW	SW	SSW	S	SSE	S	SSW	SW	SSW	SW	192	S
Sep 20	W	NW	WNW	W	WSW	SW	WSW	WSW	WSW	WNW	NW	NW	NW	WNW	WNW	WNW	WNW	W	SW	SSE	SE	SE	SSE	S	279	W
Sep 21	S	SSE	SSE	S	S	SSE	SSE	S	SSW	P	P	P	P	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	229	SW
Sep 22	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	WSW	SW	SW	SW	SW	SW	WSW	WSW	W	WSW	WSW	WSW	WSW	SSW	SSW	228	SW
Sep 23	K	K	K	K	K	K	K	K	K	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	WSW	SW	SW	SW	SW	-	WSW
Sep 24	SW	SW	SW	SW	SW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	W	SW	247	WSW
Sep 25	SW	SW	WSW	W	WNW	W	WNW	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	SW	S	S	S	S	S	S	SSW	235	SW
Sep 26	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	WSW	WNW	NNW	NNE	ENE	ENE	NE	NNE	N	N	N	NNE	ENE	ENE	ENE	225	SW
Sep 27	ENE	ENE	NNE	NNE	NNE	NE	NNE	NE	NNE	NNE	NNE	NNE	N	NNE	N	NNW	NNW	NW	WNW	WSW	WSW	WNW	WNW	19	NNE	
Sep 28	WNW	WNW	WNW	NW	SE	NNE	NE	N	N	NNE	NNE	NE	NNE	N	NNW	WNW	NNE	NE	NE	ENE	E	ENE	E	ESE	26	NNE
Sep 29	SE	ESE	ESE	SE	ESE	E	E	E	SE	SE	SSE	SSE	SSE	SSE	S	SSE	S	S	SSE	SE	SE	SE	SSE	SE	146	SE
Sep 30	SE	SSE	SE	SE	SE	SE	SE	SE	SE	SSE	SSE	SSE	SSE	S	SSE	S	SSE	SSE	SSE	SE	SSE	SSE	SSE	SSE	160	SSE

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

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



RENO STATION



PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2019

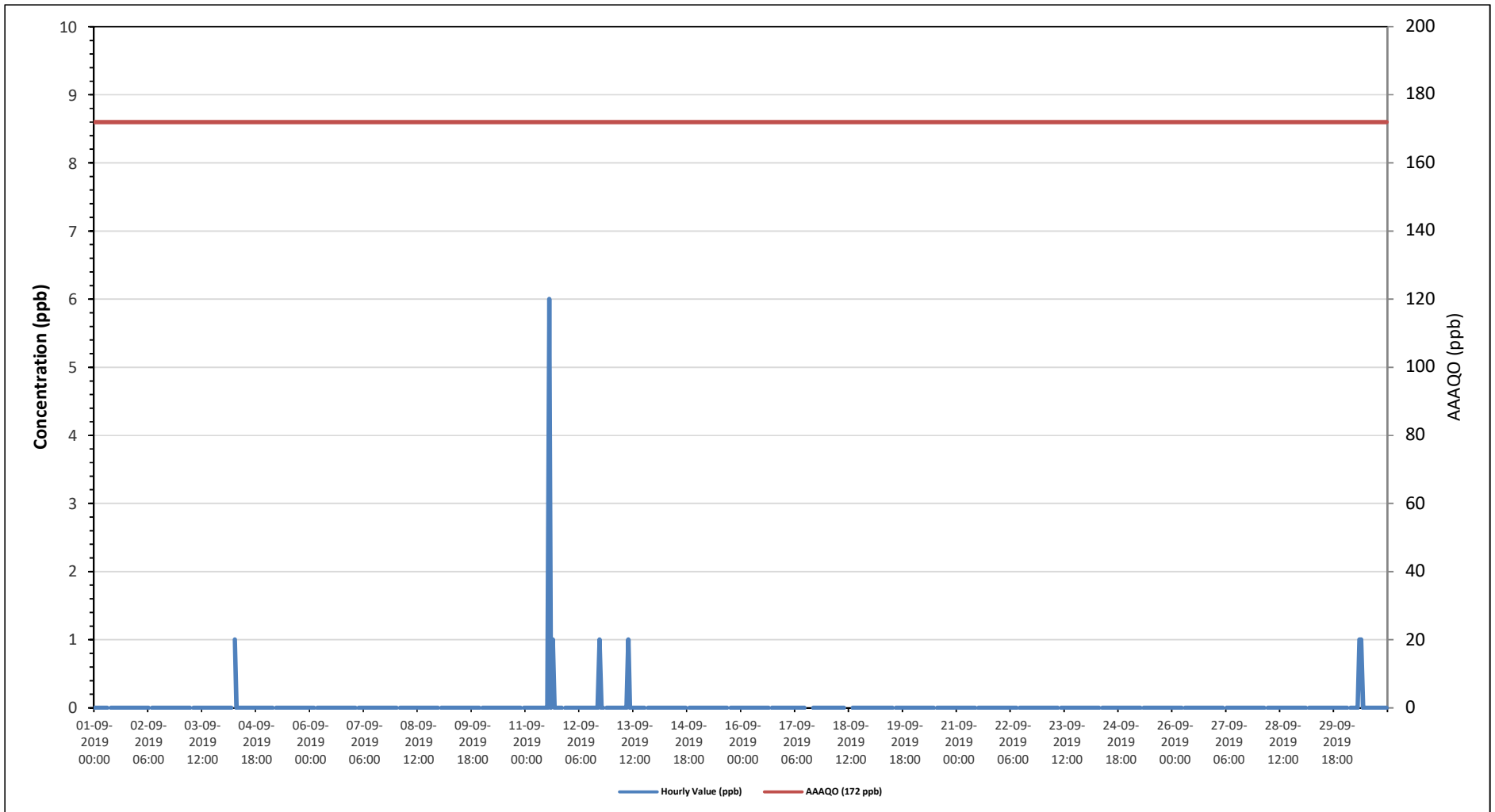
Summary of Hourly Averages

SULPHUR DIOXIDE (SO₂) in ppb

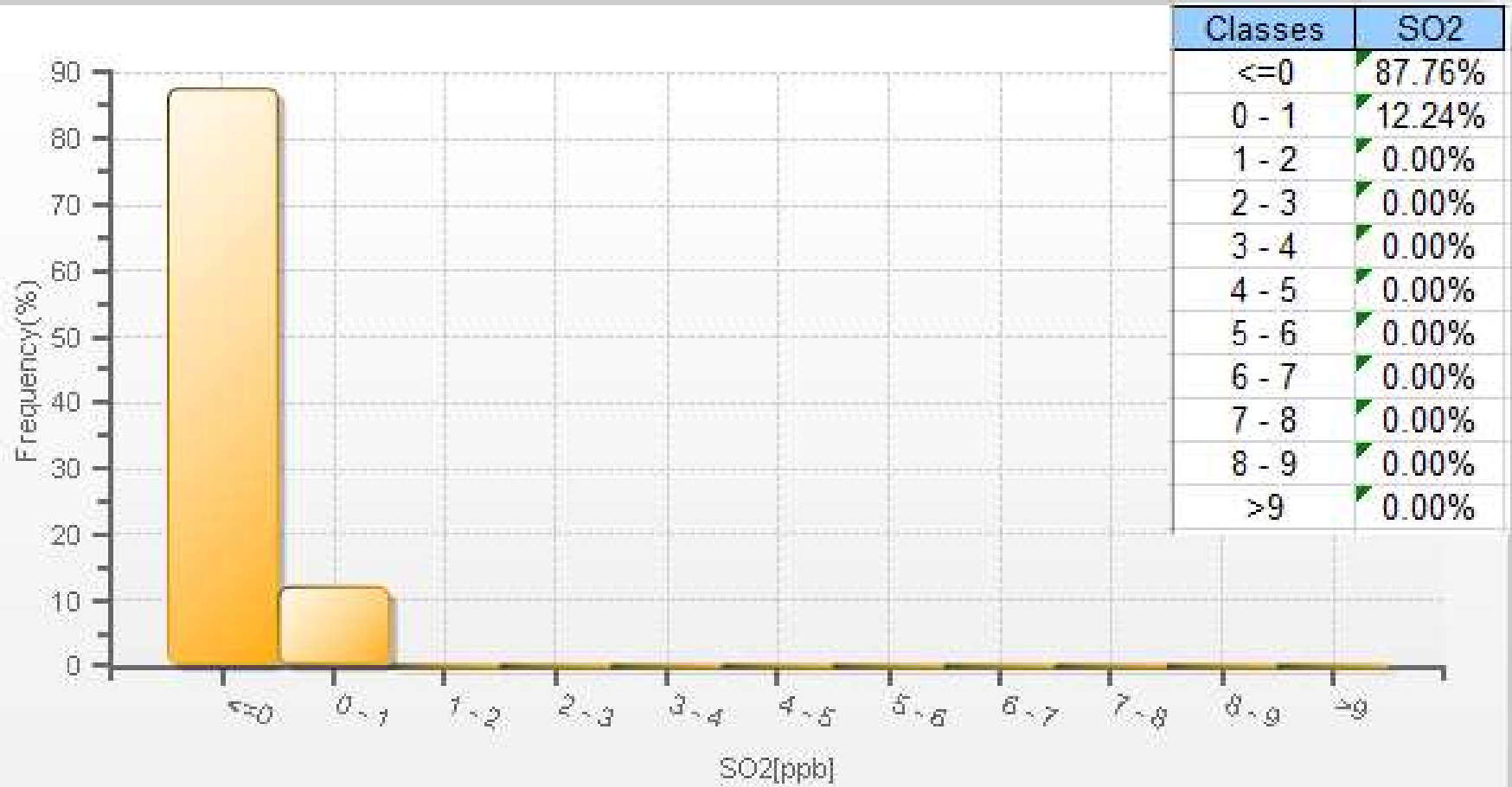
Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb																												
Number of 1-Hour Exceedences: 0					Number of 24-Hour Exceedences: 0					30-Day Exceedence: 0																		
Maximum Hourly Value: 6 ppb on September 11 at hour 13										Hours in Service: 720																		
Maximum Daily Value: 0.3 ppb on										Hours of Data: 683																		
Minimum Hourly Value: 0 ppb on September 1 at hour 0										Hours of Missing Data: 4																		
Minimum Daily Value: 0.0 ppb on September 1										Hours of Calibration: 33																		
Monthly Average: 0.0 ppb										Operational Uptime: 99.4																		
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	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Sep 2	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Sep 3	0	0	0	0	0	0	0	S	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	S	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0
Sep 5	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Sep 6	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 7	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 8	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 9	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0.0
Sep 10	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	0.0
Sep 11	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	0	0	0	0	S	0	0	0	6	0.3
Sep 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	S	0	0	0	0	0	1	0.0
Sep 13	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	1	0.0
Sep 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0.0
Sep 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0.0
Sep 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0.0
Sep 17	0	0	0	0	0	0	0	0	0	0	0	0	P	P	R	R	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	C	C	C	C	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	S	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	S	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	S	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	S	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	S	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	S	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	S	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	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Sep 27	0	0	0	0	0	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 28	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Sep 29	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 30	0	0	S	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1
Diurnal Maximum	0	0	0	0	0	0	1	0	1	1	0	0	0	6	0	1	0	1	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	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span																			
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure																			
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service																			

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

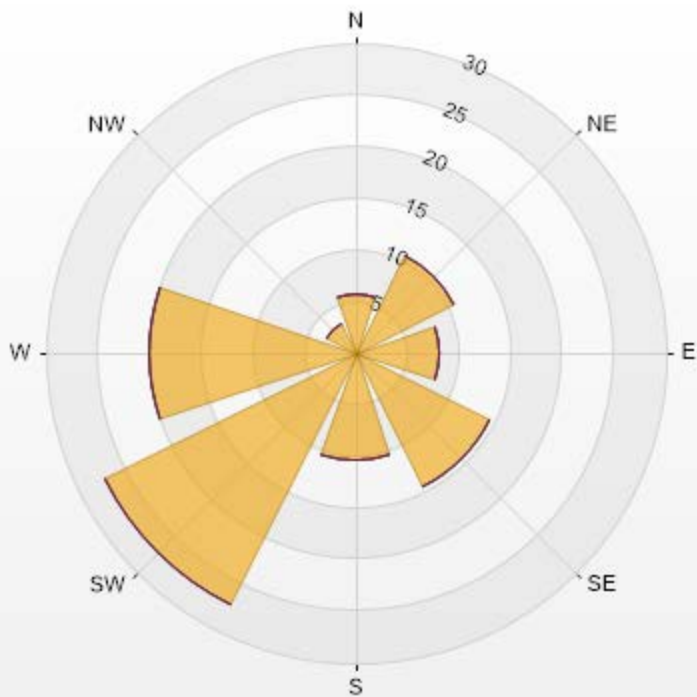


SO2[ppb] Histogram: PRAMP RENO Monthly: 09-2019 1 Hr.



Wind: PRAMP RENO Poll.: PRAMP RENO-SO2[ppb] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.17% Calm Avg: 0.00 [ppb]

Direction	0-10	10-50	50-100	100-172	>172.0	Total
N	5.75	0	0	0	0	5.75
NE	10.62	0	0	0	0	10.62
E	8.11	0	0	0	0	8.11
SE	14.45	0	0	0	0	14.45
S	10.47	0	0	0	0	10.47
SW	27.29	0	0	0	0	27.29
W	20.06	0	0	0	0	20.06
NW	3.24	0	0	0	0	3.24
Summary	100	0	0	0	0	100



PRAMP-201909

% Icon Classes (ppb)

100

0-10

0

10-50

50-100

0

100-172

0

>172.0



PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2019

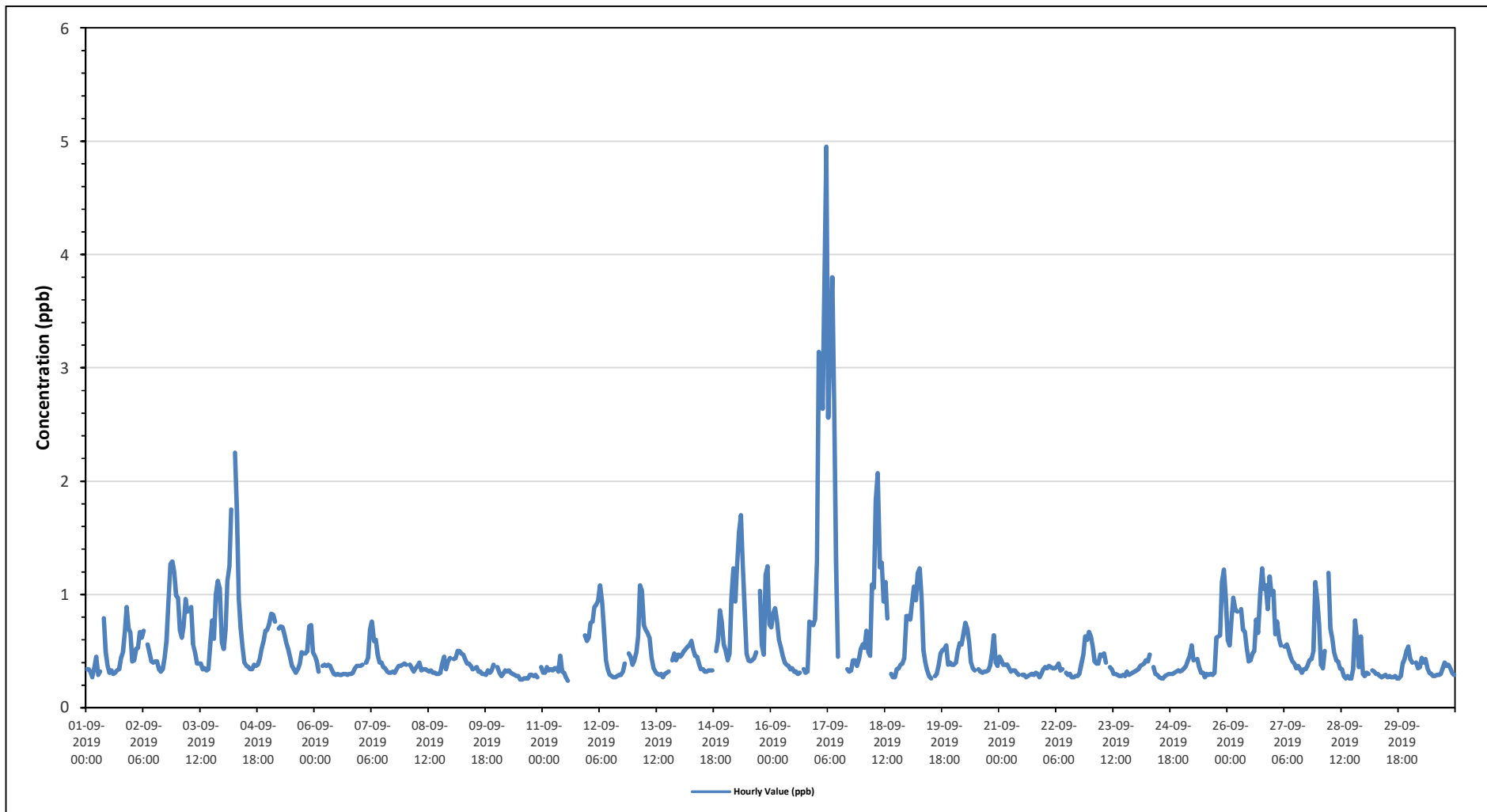
Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

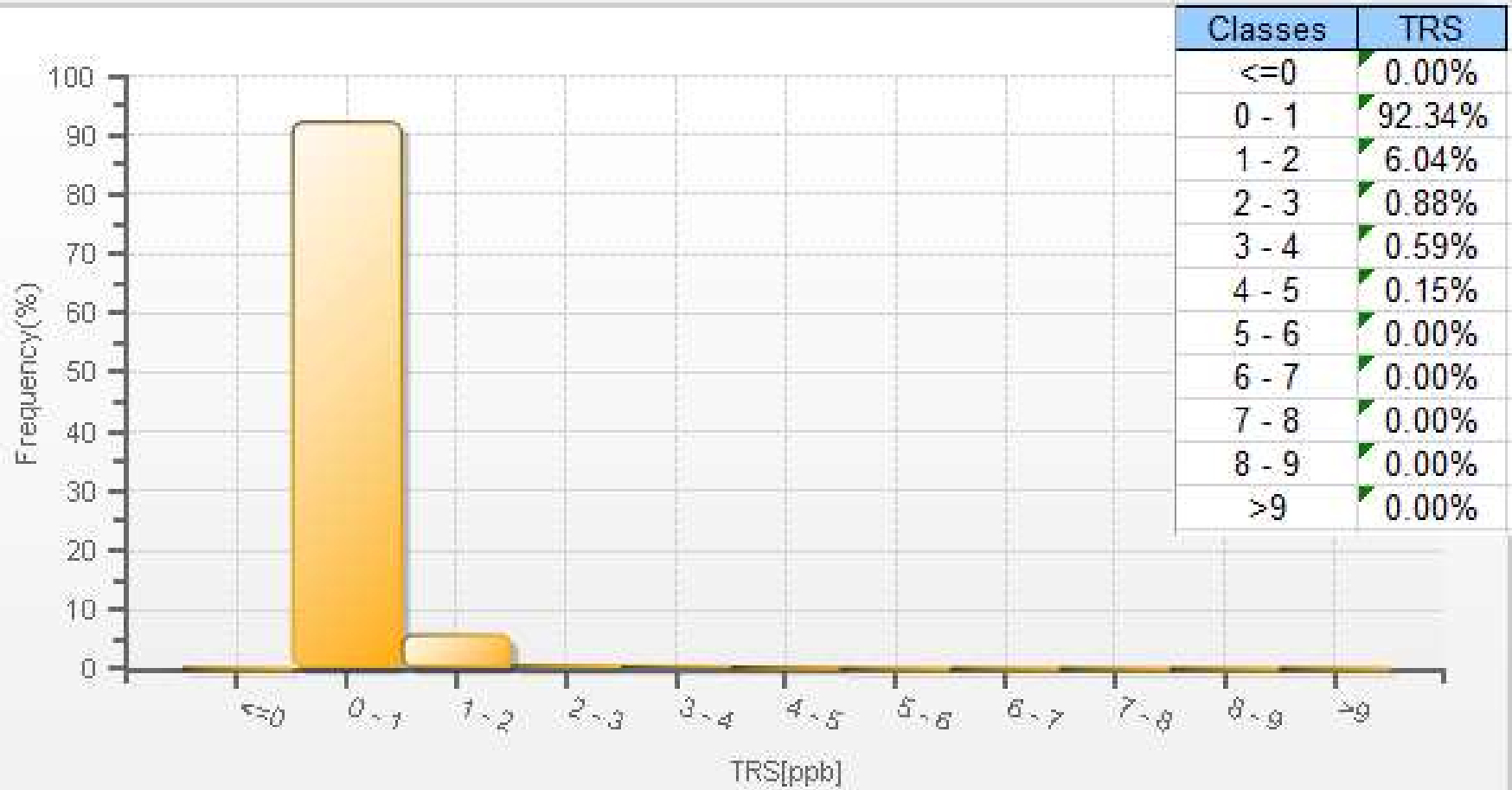
Alberta Ambient Air Quality Objectives (AAAQO) for H2S: 1-Hour 10 ppb, 24-Hour 3 ppb																												
Number of 1-Hour Exceedences: 0					Number of 24-Hour Exceedences: 0																							
Maximum Hourly Value: 4.95 ppb on September 17 at hour 5										Hours in Service: 720																		
Maximum Daily Value: 1.80 ppb on										Hours of Data: 680																		
Minimum Hourly Value: 0.24 ppb on September 11 at hour 13										Hours of Missing Data: 4																		
Minimum Daily Value: 0.29 ppb on September 10										Hours of Calibration: 36																		
Monthly Average: 0.53 ppb										Operational Uptime: 99.4																		
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	0.34	0.34	0.32	0.27	0.36	0.45	0.29	0.32	S	0.79	0.49	0.37	0.31	0.33	0.3	0.31	0.33	0.34	0.44	0.49	0.67	0.89	0.7	0.66	0.27	0.89	0.44	
Sep 2	0.41	0.42	0.52	0.53	0.67	0.62	0.68	S	0.56	0.49	0.41	0.4	0.41	0.41	0.34	0.32	0.34	0.44	0.59	0.93	1.27	1.29	1.2	0.99	0.32	1.29	0.62	
Sep 3	0.97	0.69	0.62	0.72	0.96	0.85	S	0.89	0.56	0.48	0.39	0.39	0.39	0.34	0.35	0.33	0.34	0.57	0.77	0.61	1	1.12	1.06	0.58	0.33	1.12	0.65	
Sep 4	0.52	0.69	1.12	1.25	1.75	S	2.25	1.74	0.96	0.7	0.53	0.4	0.37	0.36	0.34	0.34	0.38	0.37	0.38	0.43	0.52	0.59	0.68	0.69	0.34	2.25	0.75	
Sep 5	0.74	0.83	0.82	0.76	S	0.7	0.72	0.71	0.65	0.57	0.52	0.44	0.37	0.34	0.31	0.34	0.39	0.49	0.48	0.48	0.5	0.72	0.73	0.49	0.31	0.83	0.57	
Sep 6	0.46	0.41	0.32	S	0.37	0.38	0.37	0.38	0.37	0.33	0.3	0.29	0.3	0.29	0.29	0.3	0.3	0.29	0.3	0.3	0.31	0.35	0.37	0.37	0.29	0.46	0.34	
Sep 7	0.37	0.38	S	0.4	0.44	0.69	0.76	0.59	0.6	0.47	0.4	0.4	0.36	0.35	0.32	0.31	0.31	0.32	0.31	0.34	0.37	0.37	0.38	0.39	0.31	0.76	0.42	
Sep 8	0.38	S	0.38	0.35	0.32	0.35	0.37	0.4	0.33	0.34	0.34	0.33	0.32	0.33	0.31	0.31	0.3	0.3	0.31	0.39	0.45	0.34	0.41	0.44	0.30	0.45	0.35	
Sep 9	S	0.43	0.44	0.5	0.5	0.48	0.47	0.43	0.39	0.39	0.37	0.34	0.35	0.36	0.32	0.32	0.3	0.3	0.29	0.33	0.31	0.33	0.38	S	0.29	0.50	0.38	
Sep 10	0.36	0.31	0.28	0.3	0.33	0.32	0.33	0.31	0.3	0.29	0.28	0.28	0.25	0.25	0.26	0.26	0.26	0.29	0.29	0.28	0.29	0.27	S	0.36	0.25	0.36	0.29	
Sep 11	0.31	0.31	0.36	0.33	0.34	0.33	0.35	0.35	0.32	0.46	0.32	0.31	0.27	0.24	C	C	C	C	C	C	C	0.5	S	0.64	0.59	0.24	0.64	-
Sep 12	0.62	0.75	0.76	0.89	0.91	0.95	1.08	0.93	0.67	0.42	0.34	0.29	0.28	0.27	0.27	0.28	0.29	0.29	0.29	0.32	0.39	S	0.48	0.45	0.38	0.27	1.08	0.54
Sep 13	0.42	0.49	0.63	1.08	1.03	0.73	0.69	0.66	0.62	0.44	0.35	0.32	0.3	0.29	0.3	0.27	0.3	0.31	0.32	S	0.42	0.48	0.42	0.47	0.27	1.08	0.49	
Sep 14	0.45	0.47	0.5	0.52	0.54	0.55	0.59	0.51	0.46	0.45	0.39	0.34	0.34	0.32	0.32	0.33	0.33	0.33	S	0.5	0.6	0.86	0.76	0.56	0.32	0.86	0.48	
Sep 15	0.51	0.42	0.48	0.97	1.23	0.94	1.27	1.55	1.7	1.27	0.87	0.48	0.42	0.41	0.42	0.44	0.49	S	1.03	0.56	0.47	1.17	1.25	0.74	0.41	1.70	0.83	
Sep 16	0.71	0.83	0.88	0.77	0.6	0.53	0.46	0.4	0.38	0.37	0.34	0.35	0.32	0.32	0.3	0.31	S	0.34	0.31	0.32	0.76	0.75	0.73	0.78	0.30	0.88	0.52	
Sep 17	1.29	3.14	2.99	2.64	3.84	4.95	2.56	3.25	3.8	2.68	1.28	0.45	P	P	R	R	0.34	0.32	0.33	0.42	0.42	0.37	0.43	0.52	0.32	4.95	1.80	
Sep 18	0.56	0.53	0.68	0.49	0.46	1.09	1.06	1.83	2.07	1.24	1.28	0.94	1.11	0.79	S	0.3	0.27	0.27	0.34	0.35	0.38	0.39	0.44	0.81	0.27	2.07	0.77	
Sep 19	0.81	0.78	0.94	1.07	0.95	1.19	1.23	0.98	0.51	0.4	0.33	0.28	0.26	S	0.28	0.3	0.38	0.48	0.51	0.52	0.55	0.38	0.4	0.38	0.26	1.23	0.60	
Sep 20	0.38	0.4	0.5	0.57	0.56	0.65	0.75	0.7	0.58	0.4	0.35	0.33	S	0.34	0.32	0.31	0.32	0.32	0.33	0.37	0.48	0.64	0.4	0.37	0.31	0.75	0.45	
Sep 21	0.45	0.42	0.38	0.38	0.38	0.35	0.32	0.33	0.33	0.31	0.29	S	0.29	0.29	0.27	0.28	0.29	0.3	0.29	0.31	0.3	0.27	0.3	0.34	0.27	0.45	0.32	
Sep 22	0.36	0.35	0.37	0.36	0.35	0.35	0.36	0.39	0.33	0.34	S	0.31	0.29	0.3	0.27	0.27	0.28	0.28	0.28	0.3	0.38	0.47	0.63	0.6	0.67	0.27	0.67	0.37
Sep 23	0.63	0.54	0.41	0.39	0.39	0.47	0.46	0.48	0.4	S	0.36	0.34	0.3	0.3	0.29	0.28	0.28	0.29	0.28	0.32	0.29	0.3	0.31	0.32	0.28	0.63	0.37	
Sep 24	0.33	0.34	0.37	0.38	0.39	0.42	0.41	0.47	S	0.36	0.3	0.29	0.27	0.26	0.26	0.28	0.29	0.3	0.3	0.3	0.31	0.32	0.33	0.32	0.26	0.47	0.33	
Sep 25	0.33	0.35	0.37	0.42	0.46	0.55	0.42	S	0.43	0.36	0.31	0.31	0.27	0.3	0.29	0.3	0.29	0.31	0.62	0.63	0.64	1.11	1.22	0.96	0.27	1.22	0.49	
Sep 26	0.6	0.55	0.78	0.97	0.86	0.85	S	0.87	0.69	0.67	0.53	0.41	0.42	0.48	0.5	0.78	0.66	1.01	1.23	1.05	1.08	0.87	1.16	1	0.41	1.23	0.78	
Sep 27	1.03	0.65	0.76	0.61	0.55	S	0.54	0.56	0.51	0.45	0.41	0.39	0.35	0.37	0.34	0.31	0.34	0.34	0.37	0.42	0.43	0.5	1.11	0.95	0.31	1.11	0.53	
Sep 28	0.74	0.38	0.35	0.5	S	1.19	0.7	0.61	0.49	0.42	0.41	0.35	0.34	0.28	0.26	0.28	0.26	0.26	0.35	0.77	0.6	0.36	0.63	0.3	0.26	1.19	0.47	
Sep 29	0.28	0.31	0.3	S	0.33	0.32	0.3	0.3	0.28	0.27	0.28	0.29	0.27	0.28	0.27	0.27	0.28	0.26	0.26	0.28	0.39	0.43	0.5	0.54	0.26	0.54	0.32	
Sep 30	0.43	0.4	S	0.4	0.35	0.36	0.44	0.4	0.43	0.35	0.31	0.3	0.28	0.28	0.29	0.29	0.3	0.35	0.4	0.37	0.38	0.35	0.31	0.29	0.28	0.44	0.35	
Diurnal Maximum	1.29	3.14	2.99	2.64	3.84	4.95	2.56	3.25	3.80	2.68	1.28	0.94	1.11	0.79	0.50	0.78	0.66	1.01	1.23	1.05	1.27	1.29	1.25	1.00				
Diurnal Average	0.54	0.58	0.63	0.67	0.72	0.77	0.72	0.76	0.70	0.57	0.45	0.37	0.35	0.34	0.31	0.32	0.33	0.36	0.43	0.46	0.52	0.58	0.63	0.56				
C	Calibration				S	Daily Zero/Span				Q	Quality Assurance				C1	Repeat Calibration				S1	Repeat Daily Zero/Span							
G	Out for Repair				K	Collection Error				N	Not in Service				O	Operator Error				P	Power Failure							
R	Recovery				X	Machine Malfunction				Y	Maintenance				T	Exceeds Temperature Limits				N	Not in Service							

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

Timeseries Chart of Hourly Average for TRS - Reno Station

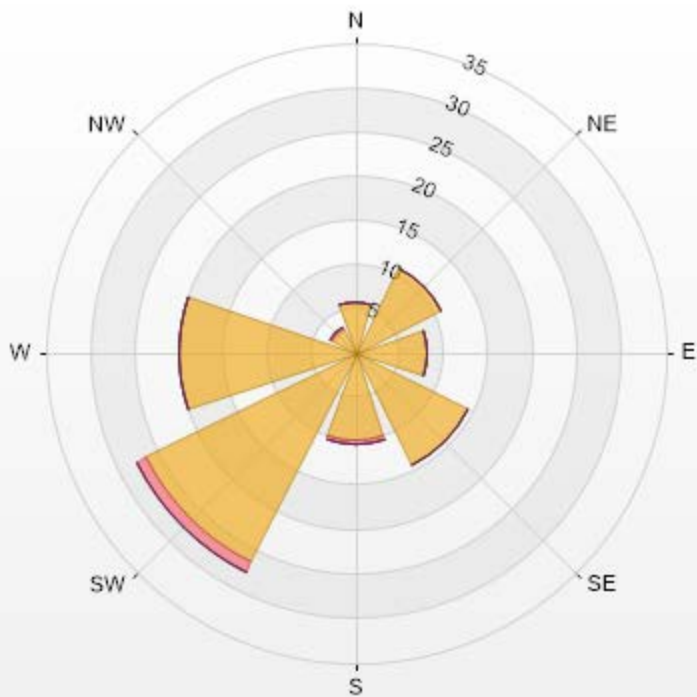


TRS[ppb] Histogram: PRAMP RENO Monthly: 09-2019 1 Hr.



Wind: PRAMP RENO Poll.: PRAMP RENO-TRS[ppb] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 94.31% Calm Avg: 0.00 [ppb]

Direction	0-2	2-5	5-10	10-50	>50.0	Total
N	5.74	0	0	0	0	5.74
NE	10.75	0	0	0	0	10.75
E	8.1	0	0	0	0	8.1
SE	14.14	0	0	0	0	14.14
S	10.01	0.29	0	0	0	10.3
SW	26.51	1.18	0	0	0	27.69
W	20.03	0	0	0	0	20.03
NW	3.09	0.15	0	0	0	3.24
Summary	98.37	1.62	0	0	0	100



PRAMP-201909

% Icon Classes (ppb)	98	0-2	2	5-10	0	10-50	0	>50.0
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PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2019

Summary of Hourly Averages

TOTAL HYDROCARBONS (THC) in ppm

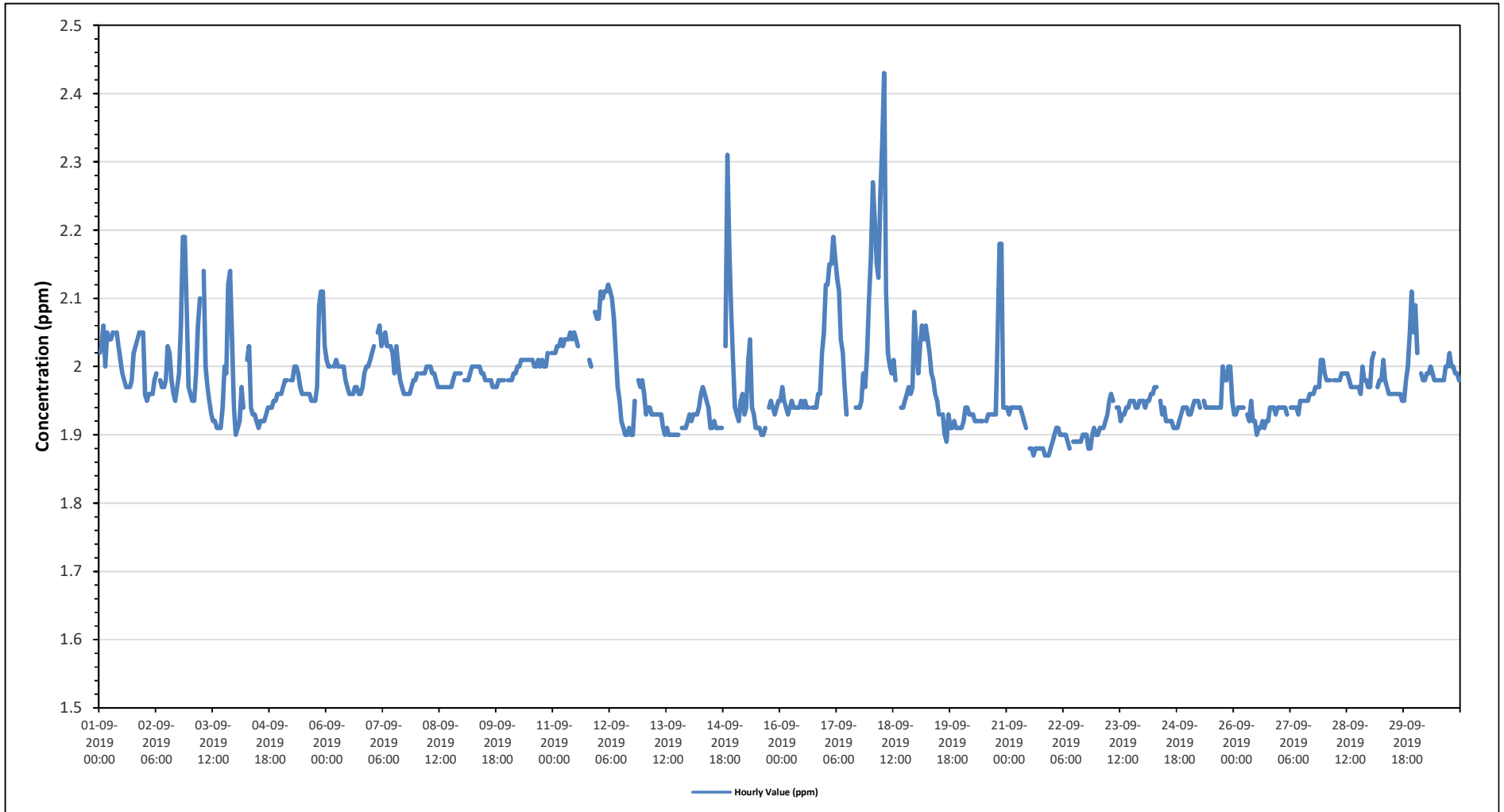
Maximum Hourly Value:	2.43 ppm on September 18 at hour 7	Hours in Service:	720
Maximum Daily Value:	2.08 ppm on	Hours of Data:	680
Minimum Hourly Value:	1.87 ppm on September 21 at hour 20	Hours of Missing Data:	5
Minimum Daily Value:	1.90 ppm on September 22	Hours of Calibration:	35
Monthly Average:	1.97 ppm	Operational Uptime:	99.3

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23		
Sep 1	2.02	2.03	2.06	2.00	2.05	2.04	2.04	2.05	S	2.05	2.03	2.01	1.99	1.98	1.97	1.97	1.97	1.98	2.02	2.03	2.04	2.05	2.05	2.05	1.97	2.06	2.02		
Sep 2	1.96	1.95	1.96	1.96	1.96	1.98	1.99	S	1.98	1.97	1.97	1.98	2.03	2.02	1.98	1.96	1.95	1.97	1.99	2.06	2.19	2.19	2.09	1.97	1.95	2.19	2.00		
Sep 3	1.96	1.95	1.95	1.99	2.06	2.10	S	2.14	2.00	1.97	1.95	1.93	1.92	1.92	1.91	1.91	1.91	1.94	2.00	1.99	2.12	2.14	2.04	1.94	1.91	2.14	1.99		
Sep 4	1.90	1.91	1.92	1.97	1.94	S	2.01	2.03	1.94	1.93	1.93	1.92	1.91	1.92	1.92	1.92	1.93	1.94	1.94	1.94	1.95	1.95	1.96	1.96	1.90	2.03	1.94		
Sep 5	1.96	1.97	1.98	1.98	S	1.98	1.98	2.00	2.00	1.99	1.97	1.96	1.96	1.96	1.96	1.96	1.95	1.95	1.95	1.97	2.09	2.11	2.11	2.03	1.95	2.11	1.99		
Sep 6	2.01	2.00	2.00	S	2.00	2.01	2.00	2.00	2.00	2.00	1.98	1.97	1.96	1.96	1.96	1.97	1.97	1.96	1.96	1.97	1.99	2.00	2.00	2.01	1.96	2.01	1.99		
Sep 7	2.02	2.03	S	2.05	2.06	2.03	2.04	2.05	2.03	2.03	2.03	2.02	1.99	2.03	2.00	1.98	1.97	1.96	1.96	1.96	1.97	1.98	1.98	1.98	1.96	2.06	2.01		
Sep 8	1.99	S	1.99	1.99	1.99	2.00	2.00	2.00	2.00	1.99	1.99	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.99	1.99	1.99	1.99	1.97	2.00	1.98		
Sep 9	S	1.98	1.98	1.98	1.99	2.00	2.00	2.00	2.00	2.00	1.99	1.99	1.98	1.98	1.98	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.98	S	1.97	2.00	1.98		
Sep 10	1.98	1.98	1.98	1.99	1.99	2.00	2.00	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.00	2.00	2.01	2.00	2.00	2.00	S	2.02	1.98	2.02	2.00	2.00		
Sep 11	2.02	2.02	2.03	2.03	2.04	2.03	2.04	2.04	2.04	2.05	2.04	2.05	2.04	2.03	C	C	C	C	C	2.01	2.00	2.02	S	2.08	2.07	2.00	2.08	2.04	
Sep 12	2.07	2.11	2.10	2.11	2.11	2.12	2.11	2.10	2.07	2.02	1.97	1.95	1.92	1.91	1.90	1.90	1.91	1.90	1.90	1.90	1.90	S	1.91	1.91	1.91	1.92	1.90	2.12	2.00
Sep 13	1.96	1.93	1.94	1.94	1.93	1.93	1.93	1.93	1.93	1.93	1.91	1.90	1.91	1.90	1.90	1.90	1.90	1.90	1.90	S	1.91	1.91	1.91	1.92	1.90	1.96	1.92	1.90	
Sep 14	1.93	1.92	1.93	1.93	1.93	1.94	1.96	1.97	1.96	1.95	1.94	1.91	1.91	1.92	1.91	1.91	1.91	1.91	S	2.03	2.31	2.17	2.08	2.01	1.91	2.31	1.97		
Sep 15	1.94	1.93	1.92	1.95	1.96	1.93	1.94	2.01	2.04	1.94	1.93	1.91	1.91	1.91	1.90	1.90	1.91	S	1.94	1.95	1.94	1.93	1.94	1.95	1.90	2.04	1.94		
Sep 16	1.95	1.97	1.95	1.94	1.93	1.94	1.95	1.94	1.94	1.94	1.94	1.95	1.94	1.95	1.94	1.94	S	1.94	1.94	1.94	1.96	1.96	2.02	2.05	1.93	2.05	1.95		
Sep 17	2.12	2.12	2.15	2.15	2.19	2.16	2.13	2.11	2.04	2.02	1.97	1.93	P	P	R	R	1.94	1.94	1.94	1.95	1.99	1.97	2.02	2.10	1.93	2.19	2.05		
Sep 18	2.16	2.27	2.22	2.15	2.13	2.25	2.33	2.43	2.11	2.02	2.00	1.99	2.01	1.98	Y	S	1.94	1.94	1.95	1.96	1.97	1.96	1.97	2.08	1.94	2.43	2.08		
Sep 19	2.03	1.99	2.03	2.06	2.04	2.06	2.04	2.02	1.99	1.98	1.96	1.95	1.93	S	1.93	1.90	1.89	1.93	1.91	1.91	1.92	1.91	1.91	1.91	1.89	2.06	1.97		
Sep 20	1.91	1.92	1.94	1.94	1.93	1.93	1.93	1.92	1.92	1.92	1.92	1.92	S	1.92	1.93	1.93	1.93	1.93	1.93	2.05	2.18	2.18	1.94	1.94	1.91	2.18	1.95		
Sep 21	1.94	1.93	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.92	1.91	S	1.88	1.88	1.87	1.88	1.88	1.88	1.88	1.87	1.87	1.87	1.88	1.87	1.87	1.88	1.90		
Sep 22	1.89	1.90	1.91	1.91	1.90	1.90	1.90	1.90	1.89	1.88	S	1.89	1.89	1.89	1.89	1.89	1.90	1.90	1.90	1.88	1.88	1.90	1.91	1.90	1.88	1.91	1.90		
Sep 23	1.90	1.91	1.91	1.91	1.92	1.93	1.95	1.96	1.95	S	1.94	1.94	1.94	1.92	1.93	1.93	1.94	1.94	1.95	1.95	1.94	1.94	1.95	1.95	1.90	1.96	1.94		
Sep 24	1.95	1.94	1.95	1.95	1.96	1.96	1.97	1.97	S	1.95	1.93	1.94	1.92	1.92	1.92	1.92	1.92	1.91	1.91	1.91	1.92	1.93	1.94	1.94	1.91	1.97	1.94		
Sep 25	1.93	1.93	1.94	1.95	1.95	1.95	1.94	S	1.93	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	2.00	1.98	1.98	2.00	2.00	1.95	1.93	2.00	1.95		
Sep 26	1.93	1.93	1.94	1.94	1.94	1.94	1.94	S	1.94	1.93	1.92	1.95	1.92	1.92	1.90	1.91	1.91	1.92	1.92	1.94	1.94	1.93	1.94	1.94	1.90	1.95	1.93		
Sep 27	1.94	1.94	1.94	1.94	1.93	S	1.94	1.94	1.94	1.94	1.93	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.97	1.97	1.97	2.01	1.93	2.01	1.95		
Sep 28	1.99	1.98	1.98	1.98	S	1.98	1.98	1.98	1.98	1.99	1.99	1.99	1.99	1.99	1.98	1.97	1.97	1.97	1.97	1.96	2.00	1.98	1.98	1.97	1.96	2.00	1.98		
Sep 29	1.97	2.01	2.02	S	1.97	1.98	1.98	2.01	1.98	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.95	1.95	1.98	2.00	2.05	2.11	2.05	1.95	2.11	2.11	1.99		
Sep 30	2.09	2.02	S	1.99	1.98	1.98	1.99	1.99	2.00	1.99	1.98	1.98	1.98	1.98	1.98	2.00	2.00	2.02	2.00	2.00	1.99	1.99	1.98	1.98	1.98	2.09	2.00		
Diurnal Maximum	2.16	2.27	2.22	2.15	2.19	2.25	2.33	2.43	2.11	2.05	2.04	2.05	2.04	2.03	2.00	2.00	2.01	2.00	2.02	2.06	2.31	2.19	2.11	2.10					
Diurnal Average	1.98	1.98	1.98	1.99	1.99	2.00	2.00	2.01	1.98	1.97	1.96	1.96	1.95	1.95	1.94	1.94	1.94	1.94	1.95	1.97	2.00	2.00	1.99	1.98					

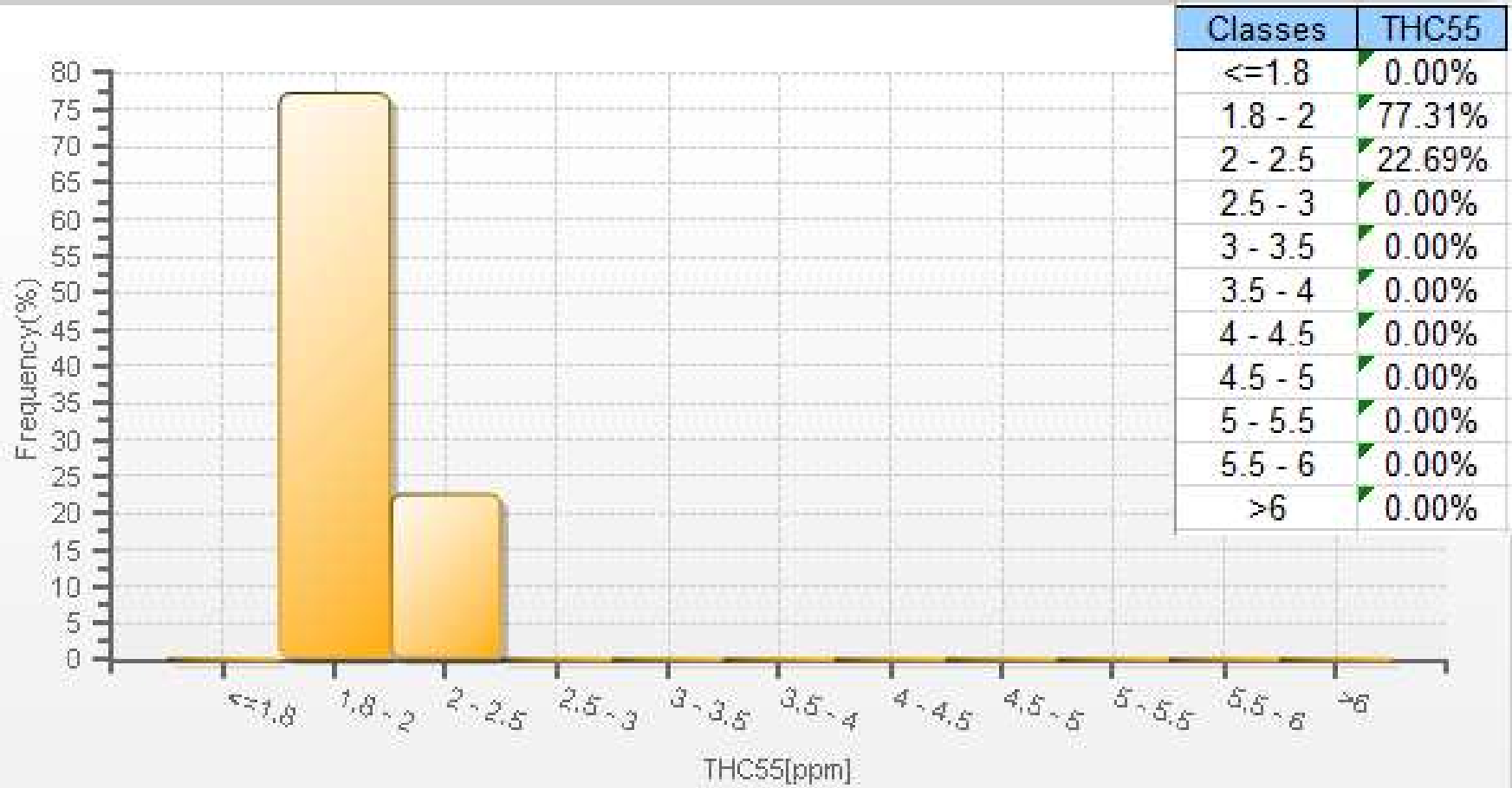
C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Average for THC - Reno Station

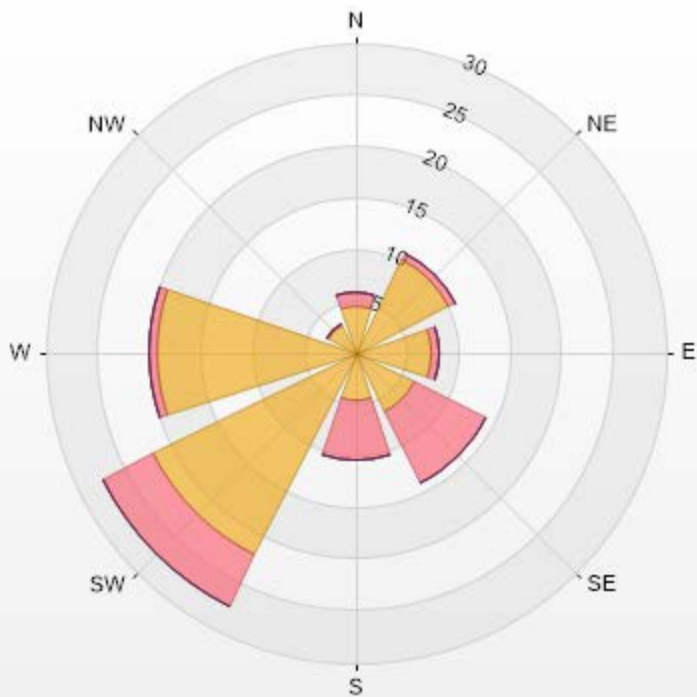


THC55[ppm] Histogram: PRAMP RENO Monthly: 09-2019 1 Hr.



Wind: PRAMP RENO Poll.: PRAMP RENO-THC55[ppm] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 93.06% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-40	>40.0	Total
N	4.63	1.19	0	0	0	5.82
NE	10.15	0.6	0	0	0	10.75
E	7.31	0.75	0	0	0	8.06
SE	6.42	7.76	0	0	0	14.18
S	4.63	5.82	0	0	0	10.45
SW	21.94	5.52	0	0	0	27.46
W	19.25	0.75	0	0	0	20
NW	2.99	0.3	0	0	0	3.29
Summary	77.32	22.69	0	0	0	100



PRAMP-201909

% Icon Classes (ppm)	77	25	120	205	186	0	0
0-2	77	25	120	205	186	0	0
5-10							
10-40							
>40.0							



PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2019

Summary of Hourly Averages

METHANE (CH4) in ppm

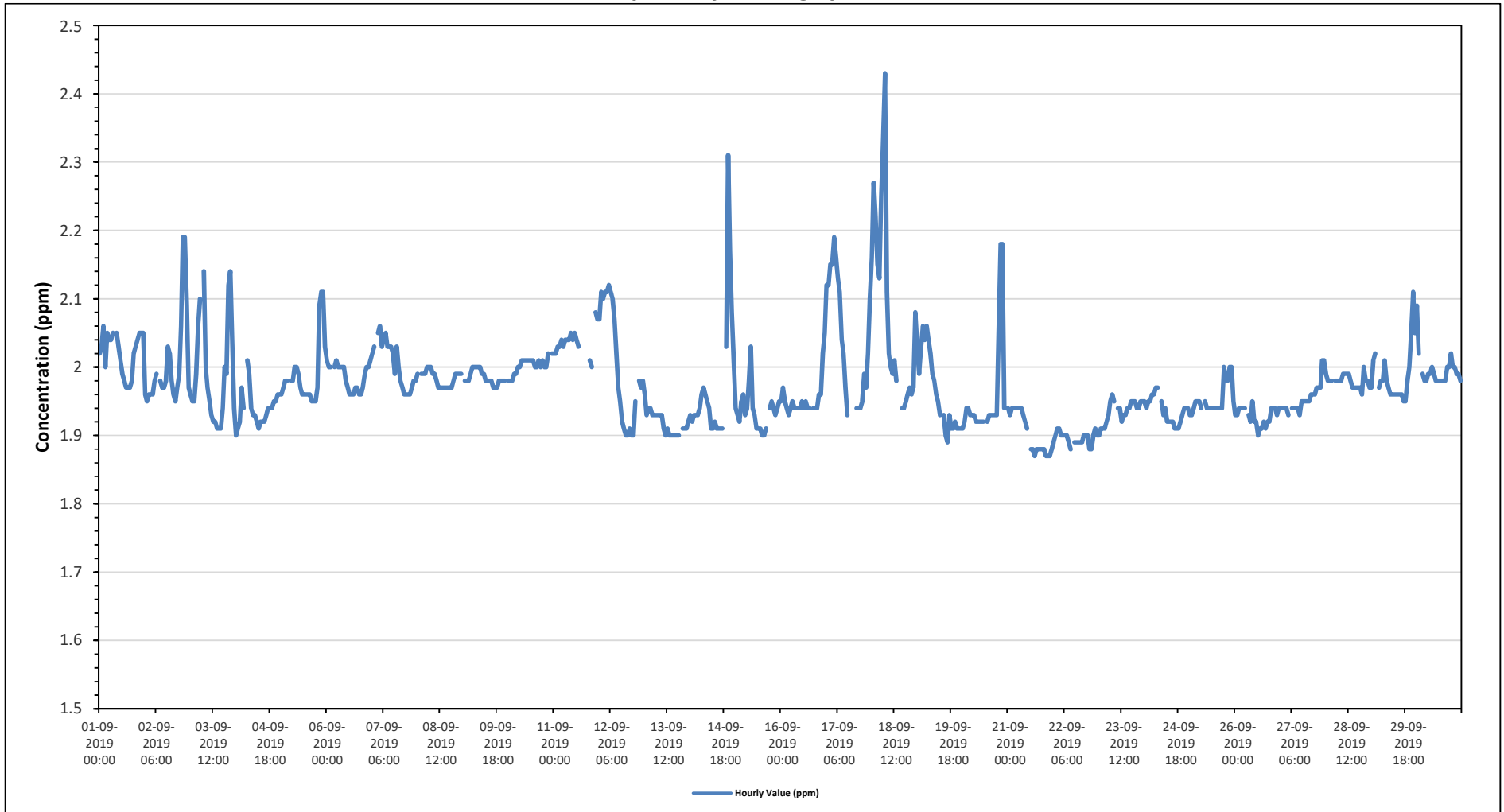
Maximum Hourly Value: 2.43 ppm on September 18 at hour 7	Hours in Service: 720
Maximum Daily Value: 2.08 ppm on	Hours of Data: 680
Minimum Hourly Value: 1.87 ppm on September 21 at hour 20	Hours of Missing Data: 5
Minimum Daily Value: 1.90 ppm on September 22	Hours of Calibration: 35
Monthly Average: 1.97 ppm	Operational Uptime: 99.3

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	2.02	2.03	2.06	2.00	2.05	2.04	2.04	2.05	S	2.05	2.03	2.01	1.99	1.98	1.97	1.97	1.97	1.98	2.02	2.03	2.04	2.05	2.05	2.05	1.97	2.06	2.02	
Sep 2	1.96	1.95	1.96	1.96	1.96	1.98	1.99	S	1.98	1.97	1.97	1.98	2.03	2.02	1.98	1.96	1.95	1.97	1.99	2.06	2.19	2.19	2.09	1.97	1.95	2.19	2.00	
Sep 3	1.96	1.95	1.95	1.99	2.06	2.10	S	2.14	2.00	1.97	1.95	1.93	1.92	1.92	1.91	1.91	1.91	1.94	2.00	1.99	2.12	2.14	2.04	1.94	1.91	2.14	1.99	
Sep 4	1.90	1.91	1.92	1.97	1.94	S	2.01	1.99	1.94	1.93	1.93	1.92	1.91	1.92	1.92	1.92	1.93	1.94	1.94	1.94	1.95	1.95	1.96	1.96	1.90	2.01	1.94	
Sep 5	1.96	1.97	1.98	1.98	S	1.98	1.98	2.00	2.00	1.99	1.97	1.96	1.96	1.96	1.96	1.96	1.95	1.95	1.95	1.97	2.09	2.11	2.11	2.03	1.95	2.11	1.99	
Sep 6	2.01	2.00	2.00	S	2.00	2.01	2.00	2.00	2.00	2.00	1.98	1.97	1.96	1.96	1.96	1.97	1.97	1.96	1.96	1.97	1.99	2.00	2.00	2.01	1.96	2.01	1.99	
Sep 7	2.02	2.03	S	2.05	2.06	2.03	2.04	2.05	2.03	2.03	2.03	2.02	1.99	2.03	2.00	1.98	1.97	1.96	1.96	1.96	1.97	1.98	1.98	1.98	1.96	2.06	2.01	
Sep 8	1.99	S	1.99	1.99	1.99	2.00	2.00	2.00	2.00	1.99	1.99	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.99	1.99	1.99	1.99	1.97	2.00	1.98	
Sep 9	S	1.98	1.98	1.98	1.99	2.00	2.00	2.00	2.00	2.00	1.99	1.99	1.98	1.98	1.98	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.98	S	1.97	2.00	1.98	
Sep 10	1.98	1.98	1.98	1.99	1.99	2.00	2.00	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.00	2.00	2.01	2.00	2.00	2.02	S	2.02	1.98	2.02	2.00	2.00	
Sep 11	2.02	2.02	2.03	2.03	2.04	2.03	2.04	2.04	2.04	2.05	2.04	2.05	2.04	2.03	C	C	C	C	C	2.01	2.00	2.00	S	2.08	2.07	2.00	2.08	2.04
Sep 12	2.07	2.11	2.10	2.11	2.11	2.12	2.11	2.10	2.07	2.02	1.97	1.95	1.92	1.91	1.90	1.90	1.91	1.90	1.90	1.95	S	1.98	1.97	1.98	1.90	2.12	2.00	
Sep 13	1.96	1.93	1.94	1.94	1.93	1.93	1.93	1.93	1.93	1.93	1.91	1.90	1.91	1.90	1.90	1.90	1.90	1.90	1.90	S	1.91	1.91	1.91	1.92	1.90	1.96	1.92	
Sep 14	1.93	1.92	1.93	1.93	1.93	1.94	1.96	1.97	1.96	1.95	1.94	1.91	1.91	1.92	1.91	1.91	1.91	1.91	S	2.03	2.31	2.17	2.08	2.01	1.91	2.31	1.97	
Sep 15	1.94	1.93	1.92	1.95	1.96	1.93	1.94	1.98	2.03	1.94	1.93	1.91	1.91	1.91	1.90	1.90	1.91	S	1.94	1.95	1.94	1.93	1.94	1.95	1.90	2.03	1.94	
Sep 16	1.95	1.97	1.95	1.94	1.93	1.94	1.95	1.94	1.94	1.94	1.94	1.95	1.94	1.95	1.94	1.94	S	1.94	1.94	1.94	1.96	1.96	2.02	2.05	1.93	2.05	1.95	
Sep 17	2.12	2.12	2.15	2.15	2.19	2.16	2.13	2.11	2.04	2.02	1.97	1.93	P	P	R	R	1.94	1.94	1.94	1.95	1.99	1.97	2.02	2.10	1.93	2.19	2.05	
Sep 18	2.16	2.27	2.22	2.15	2.13	2.25	2.33	2.43	2.11	2.02	2.00	1.99	2.01	1.98	Y	S	1.94	1.94	1.95	1.96	1.97	1.96	1.97	2.08	1.94	2.43	2.08	
Sep 19	2.03	1.99	2.03	2.06	2.04	2.06	2.04	2.02	1.99	1.98	1.96	1.95	1.93	S	1.93	1.90	1.89	1.93	1.91	1.91	1.92	1.91	1.91	1.91	1.89	2.06	1.97	
Sep 20	1.91	1.92	1.94	1.94	1.93	1.93	1.93	1.92	1.92	1.92	1.92	1.92	S	1.92	1.93	1.93	1.93	1.93	1.93	2.05	2.18	2.18	1.94	1.94	1.91	2.18	1.95	
Sep 21	1.94	1.93	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.92	1.91	S	1.88	1.88	1.87	1.88	1.88	1.88	1.88	1.87	1.87	1.87	1.88	1.87	1.87	1.88	1.90	
Sep 22	1.89	1.90	1.91	1.91	1.90	1.90	1.90	1.90	1.89	1.88	S	1.89	1.89	1.89	1.89	1.89	1.90	1.90	1.90	1.88	1.88	1.90	1.91	1.90	1.88	1.91	1.90	
Sep 23	1.90	1.91	1.91	1.91	1.92	1.93	1.95	1.96	1.95	S	1.94	1.94	1.94	1.92	1.93	1.93	1.94	1.94	1.95	1.95	1.94	1.94	1.95	1.95	1.90	1.96	1.94	
Sep 24	1.95	1.94	1.95	1.95	1.96	1.96	1.97	1.97	S	1.95	1.93	1.94	1.92	1.92	1.92	1.92	1.92	1.91	1.91	1.91	1.92	1.93	1.94	1.94	1.91	1.97	1.94	
Sep 25	1.93	1.93	1.94	1.95	1.95	1.95	1.94	S	1.93	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	2.00	1.98	1.98	2.00	2.00	1.95	1.93	2.00	1.95	
Sep 26	1.93	1.93	1.94	1.94	1.94	1.94	1.94	S	1.94	1.93	1.92	1.95	1.92	1.92	1.90	1.91	1.91	1.92	1.92	1.94	1.94	1.93	1.94	1.94	1.90	1.95	1.93	
Sep 27	1.94	1.94	1.94	1.94	1.93	S	1.94	1.94	1.94	1.94	1.93	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.97	1.97	1.97	2.01	1.93	2.01	1.95	
Sep 28	1.99	1.98	1.98	1.98	S	1.98	1.98	1.98	1.98	1.99	1.99	1.99	1.99	1.98	1.97	1.97	1.97	1.97	1.97	1.96	2.00	1.98	1.98	1.97	1.96	2.00	1.98	
Sep 29	1.97	2.01	2.02	S	1.97	1.98	1.98	2.01	1.98	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.95	1.95	1.98	2.00	2.05	2.11	2.05	1.95	2.11	1.99	1.99	
Sep 30	2.09	2.02	S	1.99	1.98	1.98	1.99	1.99	2.00	1.99	1.98	1.98	1.98	1.98	1.98	2.00	2.00	2.02	2.00	2.00	1.99	1.99	1.98	1.98	1.98	2.09	2.00	
Diurnal Maximum	2.16	2.27	2.22	2.15	2.19	2.25	2.33	2.43	2.11	2.05	2.04	2.05	2.04	2.03	2.00	2.00	2.01	2.00	2.02	2.06	2.31	2.19	2.11	2.10				
Diurnal Average	1.98	1.98	1.98	1.99	1.99	2.00	2.00	2.01	1.98	1.97	1.96	1.96	1.95	1.95	1.94	1.94	1.94	1.94	1.95	1.97	2.00	2.00	1.99	1.98				

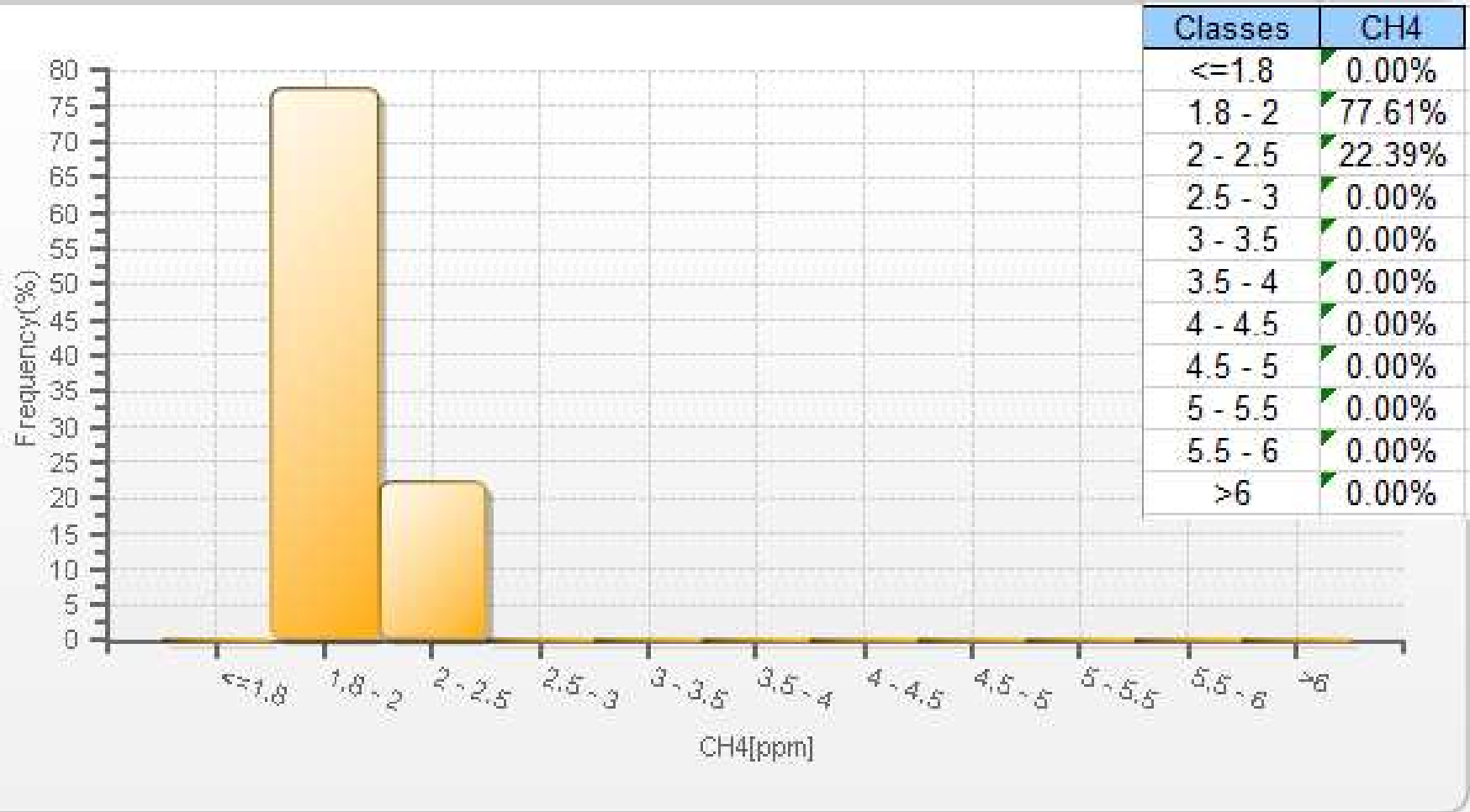
C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

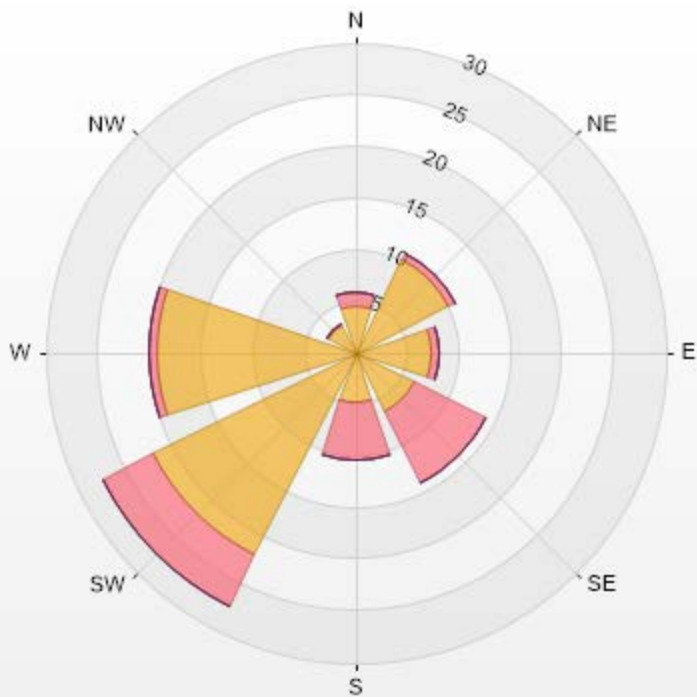


CH4[ppm] Histogram: PRAMP RENO Monthly: 09-2019 1 Hr.



Wind: PRAMP RENO Poll.: PRAMP RENO-CH4[ppm] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 93.06% Calm Avg: 0.00 [ppm]

Direction	0-2	2-5	5-10	10-20	>20.0	Total
N	4.63	1.19	0	0	0	5.82
NE	10.15	0.6	0	0	0	10.75
E	7.31	0.75	0	0	0	8.06
SE	6.42	7.76	0	0	0	14.18
S	4.93	5.52	0	0	0	10.45
SW	21.94	5.52	0	0	0	27.46
W	19.25	0.75	0	0	0	20
NW	2.99	0.3	0	0	0	3.29
Summary	77.62	22.39	0	0	0	100



PRAMP-201909

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



PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2019

Summary of Hourly Averages

NON-METHANE HYDROCARBONS (NMHC) in ppm

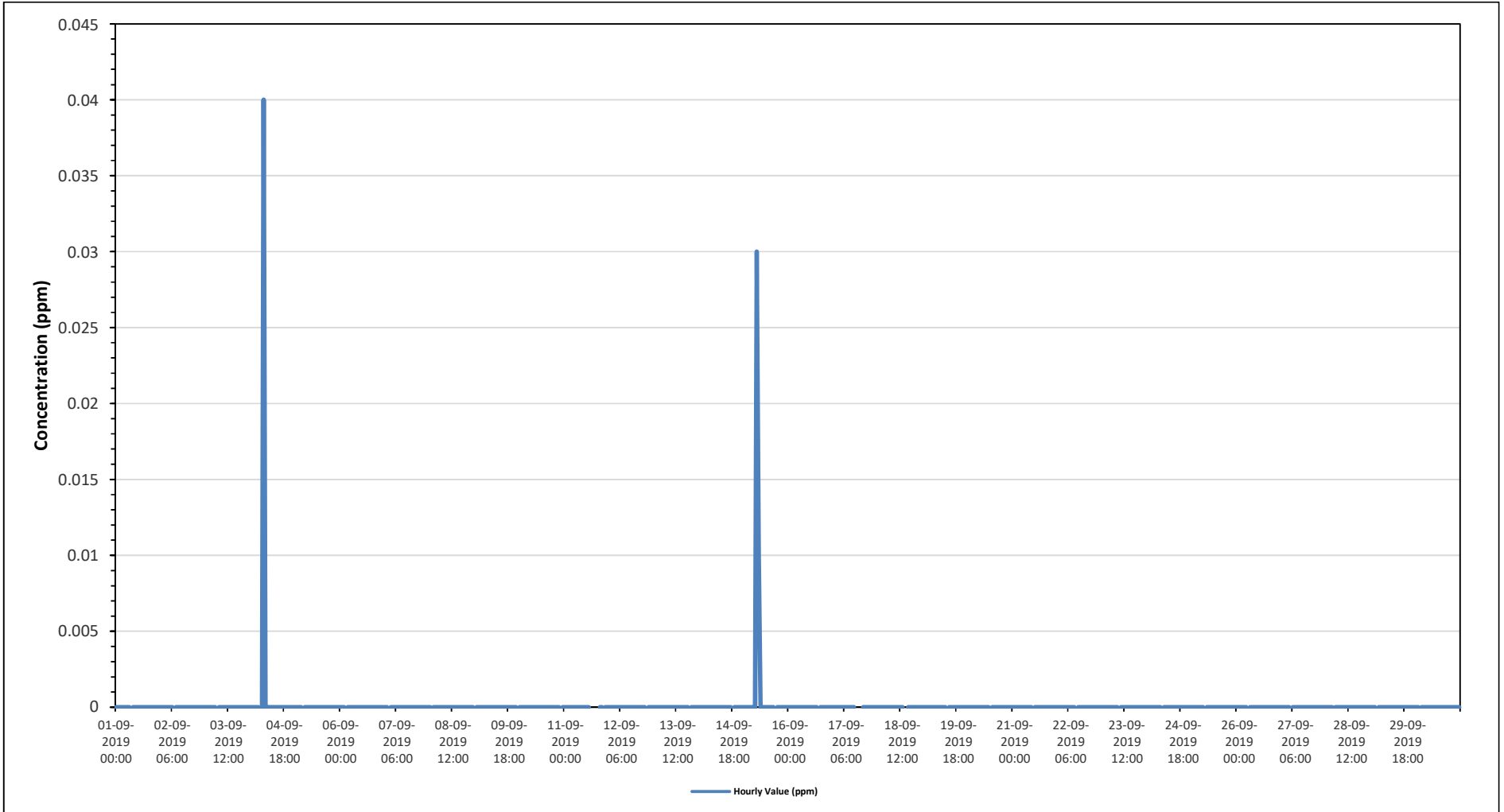
Maximum Hourly Value:	0.04 ppm on September 4 at hour 7	Hours in Service:	720
Maximum Daily Value:	0.00 ppm on	Hours of Data:	680
Minimum Hourly Value:	0.00 ppm on September 1 at hour 0	Hours of Missing Data:	5
Minimum Daily Value:	0.00 ppm on September 1	Hours of Calibration:	35
Monthly Average:	0.00 ppm	Operational Uptime:	99.3

Day	Hourly Period Starting at (MST)																								Daily Minimum	Daily Maximum	Daily Average						
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23									
Sep 1	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	C	C	C	C	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sep 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	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	P	P	R	R	0.00	0.00	0.00	0.00	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 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	Y	S	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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
Sep 23	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 24	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 25	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
Sep 26	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 27	0.00	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
Sep 28	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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

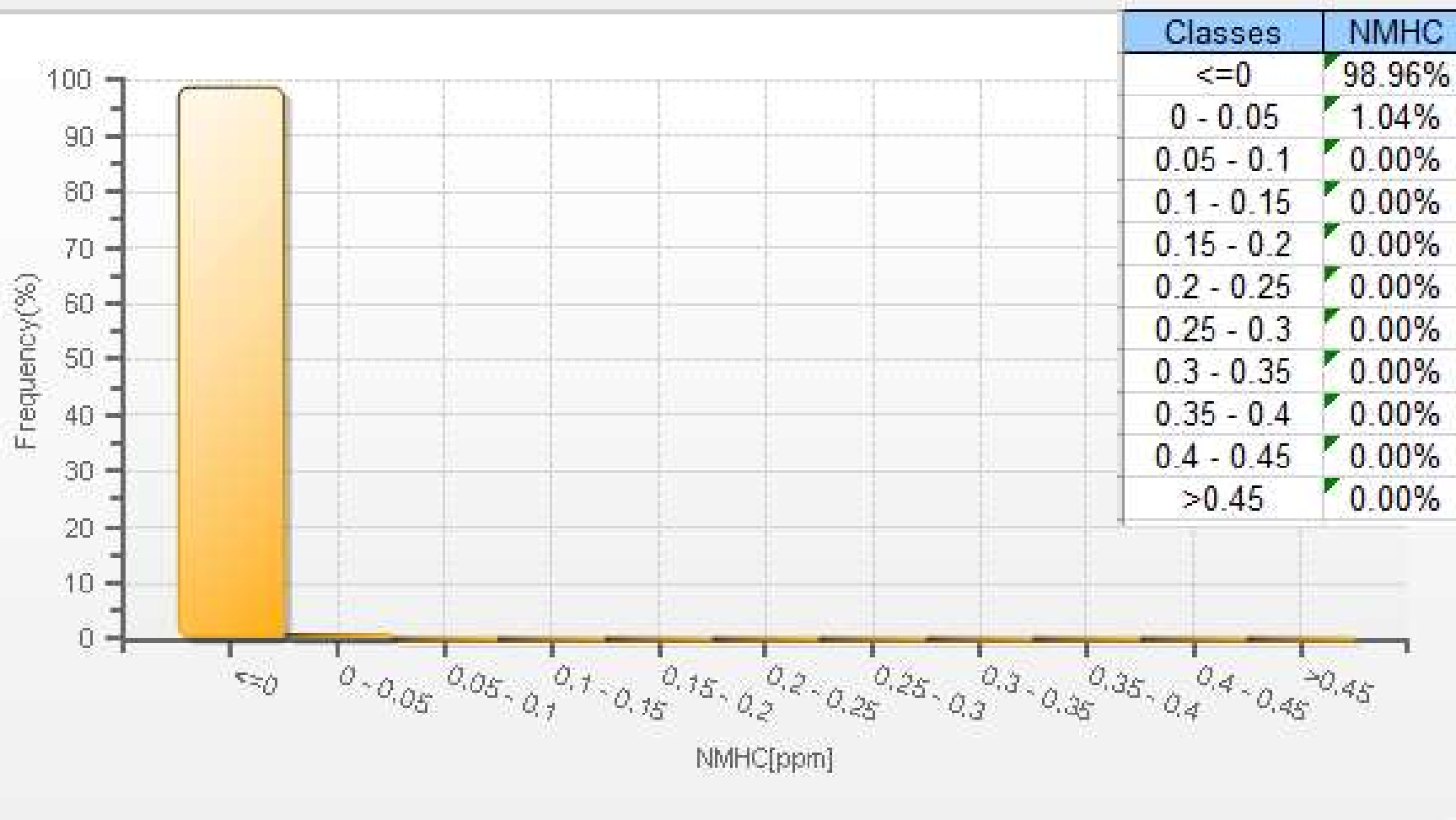
C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Average for NMHC - Reno Station

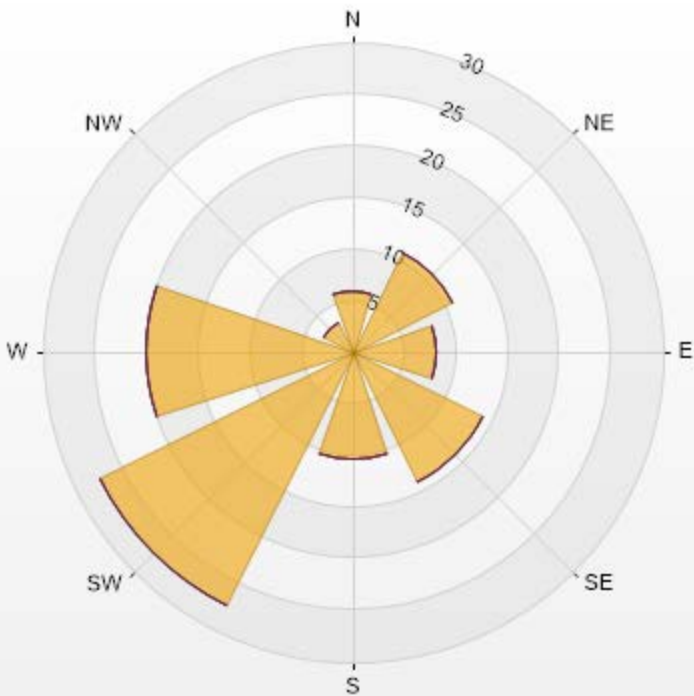


NMHC[ppm] Histogram: PRAMP RENO Monthly: 09-2019 1 Hr.



Wind: PRAMP RENO Poll.: PRAMP RENO-NMHC[ppm] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 0.00% Valid Data: 93.06% Calm Avg: 0.00 [ppm]

Direction	0-0.1	0.1-0.3	0.3-0.9	0.9-2	>2.0	Total
N	5.82	0	0	0	0	5.82
NE	10.75	0	0	0	0	10.75
E	8.06	0	0	0	0	8.06
SE	14.18	0	0	0	0	14.18
S	10.45	0	0	0	0	10.45
SW	27.46	0	0	0	0	27.46
W	20	0	0	0	0	20
NW	3.28	0	0	0	0	3.28
Summary	100	0	0	0	0	100



PRAMP-201909

% Icon Classes (ppm)	100	0-0.1	0-1.0	0-1.0	0.3-0.9	0	0.9-2	0	>2.0



PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2019

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

Maximum Hourly Value:	96 %	on September 4 at hour 5	Hours in Service:	720
Maximum Daily Value:	90.4 %	on	Hours of Data:	718
Minimum Hourly Value:	33 %	on September 21 at hour 13	Hours of Missing Data:	2
Minimum Daily Value:	52.4 %	on September 21	Hours of Calibration:	0
Monthly Average:	71.0 %		Operational Uptime:	99.7

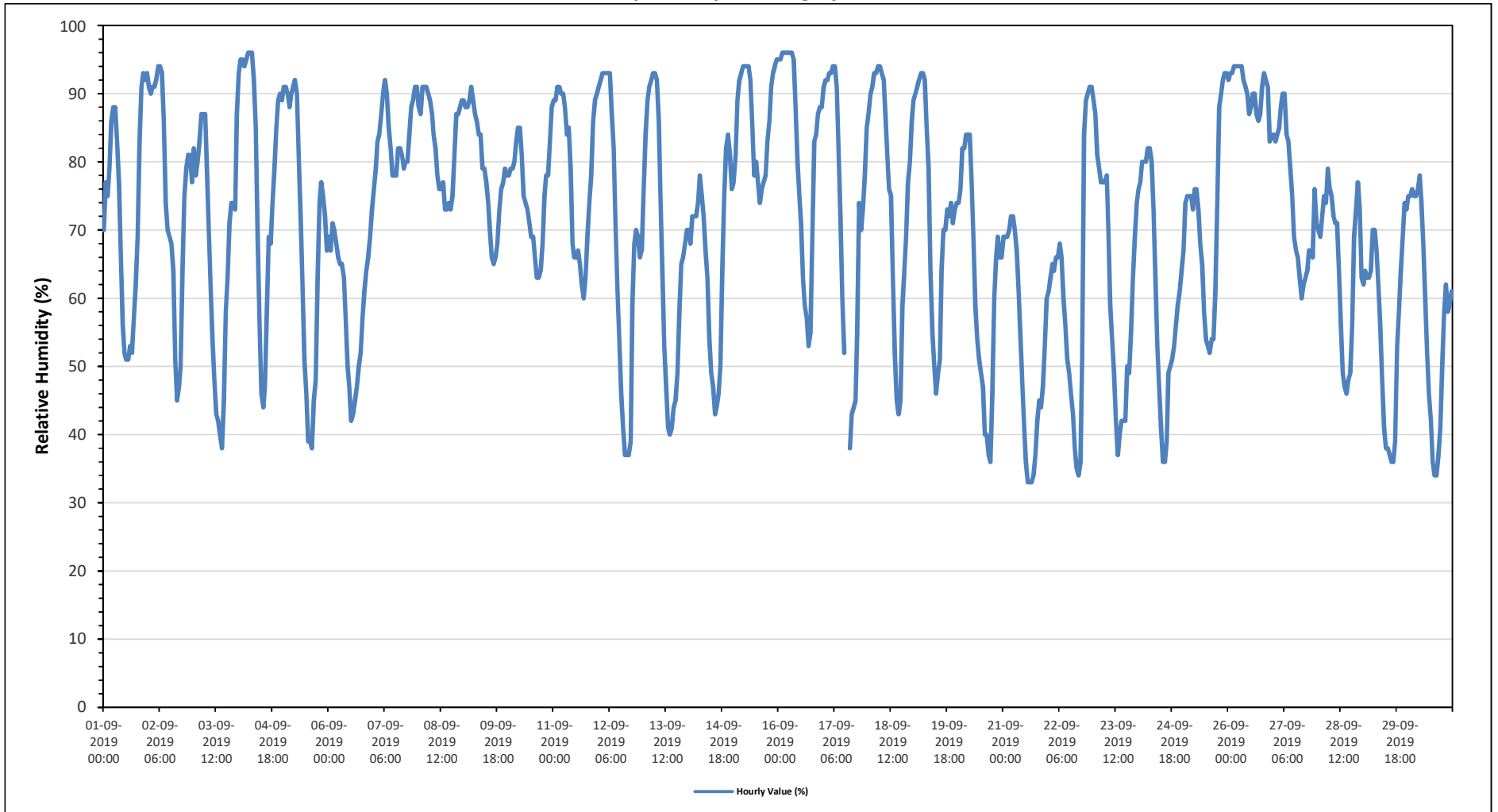
Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average
Sep 1	70	77	75	79	86	88	88	83	77	66	56	52	51	51	53	52	57	62	69	83	91	93	92	93	51	93	73
Sep 2	91	90	91	91	92	94	94	93	86	74	70	69	68	64	51	45	47	50	64	75	79	81	81	77	45	94	76
Sep 3	82	78	80	83	87	87	87	78	70	62	54	48	43	42	40	38	45	58	63	71	74	74	73	87	38	87	67
Sep 4	93	95	95	94	95	96	96	96	92	85	69	56	46	44	47	58	69	68	74	79	85	89	90	89	44	96	79
Sep 5	91	91	90	88	90	91	92	90	81	72	62	51	46	39	39	38	45	48	63	74	77	75	72	67	38	92	70
Sep 6	69	67	71	70	68	66	65	65	63	57	50	47	42	43	45	47	50	52	57	61	64	66	69	73	42	73	59
Sep 7	76	79	83	84	87	90	92	90	85	82	78	78	78	82	82	81	79	80	80	84	88	89	91	91	76	92	84
Sep 8	88	87	91	91	91	90	89	87	84	82	78	76	76	77	73	73	74	73	75	81	87	87	88	89	73	91	83
Sep 9	89	88	88	89	91	89	87	86	84	84	79	79	77	74	70	66	65	66	68	73	76	77	79	78	65	91	79
Sep 10	78	79	79	80	83	85	85	81	75	74	73	71	69	69	66	63	63	64	68	75	78	78	83	88	63	88	75
Sep 11	89	89	91	91	90	88	84	85	79	68	66	66	67	65	62	60	63	69	74	78	86	89	90	90	60	91	78
Sep 12	91	92	93	93	93	93	93	87	82	71	61	54	46	41	37	37	37	39	59	68	70	69	66	67	37	93	68
Sep 13	76	84	89	91	92	93	93	92	86	75	64	53	47	41	40	41	44	45	49	58	65	66	68	70	40	93	68
Sep 14	70	68	72	72	72	74	78	75	72	67	63	54	49	47	43	44	46	50	64	75	82	84	81	76	43	84	66
Sep 15	77	81	89	92	93	94	94	94	94	92	85	78	80	77	74	76	77	78	83	86	91	93	94	95	74	95	86
Sep 16	95	95	96	96	96	96	96	96	95	88	80	75	71	63	59	57	53	55	69	83	84	87	88	88	53	96	82
Sep 17	91	92	92	93	93	94	94	91	82	72	60	52	P	P	38	43	44	45	55	74	70	73	78	85	38	94	73
Sep 18	87	90	91	93	93	94	94	93	92	87	81	76	75	63	52	45	43	45	59	64	69	77	80	86	43	94	76
Sep 19	89	90	91	92	93	93	92	85	79	64	55	50	46	49	51	64	70	70	73	72	74	71	73	74	46	93	73
Sep 20	74	76	82	82	84	84	84	77	69	59	54	51	49	47	40	40	37	36	46	60	66	69	66	66	36	84	62
Sep 21	69	69	69	70	72	72	70	67	61	54	47	41	36	33	33	33	34	37	42	45	44	47	53	60	33	72	52
Sep 22	61	63	65	64	66	66	68	66	60	56	51	49	46	43	38	35	34	36	51	84	89	90	91	91	34	91	61
Sep 23	89	87	81	79	77	77	77	78	69	59	54	49	42	37	40	42	42	42	50	49	55	63	69	74	37	89	62
Sep 24	76	77	80	80	80	82	82	80	73	63	53	47	41	36	36	39	49	50	51	53	56	59	61	64	36	82	61
Sep 25	67	74	75	75	75	73	76	76	73	68	65	58	54	53	52	54	54	61	74	88	90	92	93	93	52	93	71
Sep 26	92	93	93	94	94	94	94	94	92	91	90	87	88	90	90	87	86	87	91	93	92	91	83	84	83	94	90
Sep 27	84	83	84	85	88	90	90	84	83	79	75	69	67	66	63	60	62	63	64	67	67	66	76	71	60	90	74
Sep 28	70	69	72	75	74	79	76	75	72	71	71	64	56	49	47	46	48	49	56	69	73	77	73	63	46	79	66
Sep 29	62	64	63	63	64	70	70	67	62	56	48	41	38	38	37	36	36	39	53	58	64	69	74	73	36	74	56
Sep 30	75	75	76	75	75	76	78	74	68	60	52	46	42	36	34	34	37	41	50	58	62	58	59	61	34	78	58
Diurnal Maximum	95	95	96	96	96	96	96	96	95	92	90	87	88	90	90	87	86	87	91	93	92	93	94	95			
Daiurnal Average	80.4	81.4	82.9	83.5	84.5	85.3	85.4	82.8	78.2	71.6	64.9	59.6	56.4	53.8	51.2	51.2	52.9	55.1	63.0	71.1	74.7	76.5	77.8	78.8			

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

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 2019

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

Maximum Hourly Value:	954 mb on September 29 at hour 8	Hours in Service:	720
Maximum Daily Value:	952 mb on	Hours of Data:	718
Minimum Hourly Value:	926 mb on September 26 at hour 4	Hours of Missing Data:	2
Minimum Daily Value:	928 mb on September 22	Hours of Calibration:	0
Monthly Average:	938 mb	Operational Uptime:	99.7

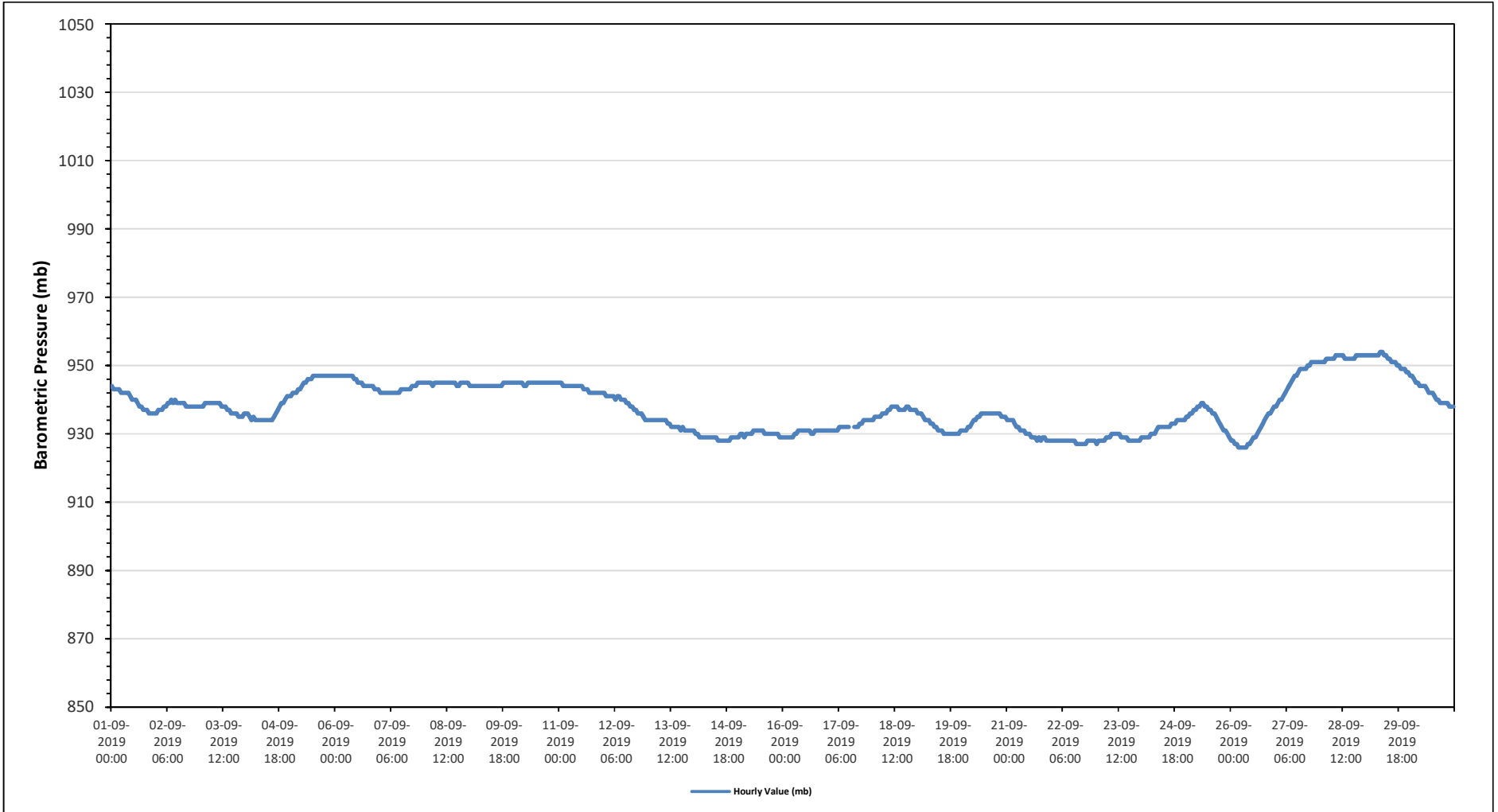
Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average		
Sep 1	944	943	943	943	943	942	942	942	942	942	941	940	940	940	939	938	938	937	937	937	936	936	936	936	936	936	936	944	940
Sep 2	936	937	937	937	938	938	939	939	940	939	940	939	939	939	939	939	938	938	938	938	938	938	938	938	938	938	938	940	938
Sep 3	938	938	939	939	939	939	939	939	939	939	939	938	938	938	937	937	936	936	936	936	936	935	935	935	936	935	939	938	
Sep 4	936	936	935	934	935	934	934	934	934	934	934	934	934	934	934	935	936	937	938	939	939	940	941	941	941	941	941	941	936
Sep 5	941	942	942	942	943	943	944	945	945	946	946	946	947	947	947	947	947	947	947	947	947	947	947	947	947	947	947	947	945
Sep 6	947	947	947	947	947	947	947	947	947	947	946	946	945	945	945	944	944	944	944	944	944	944	943	943	943	943	943	943	945
Sep 7	942	942	942	942	942	942	942	942	942	942	943	943	943	943	943	943	943	944	944	944	944	944	945	945	945	945	945	945	943
Sep 8	945	945	945	945	944	945	945	945	945	945	945	945	945	945	945	945	944	944	944	944	944	945	945	945	945	945	945	945	945
Sep 9	944	944	944	944	944	944	944	944	944	944	944	944	944	944	944	944	944	944	945	945	945	945	945	945	945	945	945	945	944
Sep 10	945	945	945	945	945	944	944	945	945	945	945	945	945	945	945	945	945	945	945	945	945	945	945	945	945	945	945	945	945
Sep 11	945	945	944	944	944	944	944	944	944	944	944	944	944	943	943	943	942	942	942	942	942	942	942	942	942	942	942	942	943
Sep 12	942	941	941	941	941	941	940	941	941	940	940	940	939	939	938	938	937	937	936	936	936	935	934	934	934	934	934	934	939
Sep 13	934	934	934	934	934	934	934	934	934	934	933	933	932	932	932	932	932	931	932	931	931	931	931	931	931	931	931	931	933
Sep 14	931	930	930	929	929	929	929	929	929	929	929	929	929	928	928	928	928	928	928	928	928	929	929	929	929	929	929	929	929
Sep 15	929	930	930	929	930	930	930	930	930	931	931	931	931	931	930	930	930	930	930	930	930	930	930	929	929	929	929	931	930
Sep 16	929	929	929	929	929	929	930	930	931	931	931	931	931	931	931	930	930	931	931	931	931	931	931	931	931	931	931	931	930
Sep 17	931	931	931	931	931	931	932	932	932	932	932	932	P	P	932	932	932	933	933	934	934	934	934	934	934	934	934	934	932
Sep 18	934	935	935	935	935	936	936	936	937	937	938	938	938	937	937	937	937	937	938	938	937	937	937	937	937	937	937	937	937
Sep 19	936	936	936	935	934	934	934	933	933	932	932	931	931	931	930	930	930	930	930	930	930	930	930	931	931	931	931	931	932
Sep 20	931	931	931	932	932	933	934	934	935	935	936	936	936	936	936	936	936	936	936	936	936	936	936	935	935	935	935	935	935
Sep 21	934	934	934	934	933	932	932	931	931	930	930	930	929	929	929	928	929	928	928	928	929	929	928	928	928	928	928	928	928
Sep 22	928	928	928	928	928	928	928	928	928	928	928	928	927	927	927	927	927	927	927	927	928	928	928	928	928	928	928	928	928
Sep 23	927	928	928	928	928	929	929	929	930	930	930	930	930	929	929	929	929	928	928	928	928	928	928	928	928	928	928	928	929
Sep 24	929	929	929	929	929	930	930	930	931	932	932	932	932	932	932	932	933	933	933	934	934	934	934	934	934	934	934	934	932
Sep 25	935	935	936	936	937	937	938	938	939	939	938	938	937	937	936	935	934	933	932	931	931	930	929	929	929	929	929	929	935
Sep 26	928	928	927	927	926	926	926	926	926	927	927	928	929	929	930	931	932	933	934	935	936	936	937	938	938	938	938	938	930
Sep 27	938	939	940	940	941	942	943	944	945	946	947	947	948	949	949	949	949	950	950	951	951	951	951	951	951	951	951	951	946
Sep 28	951	951	951	952	952	952	952	952	953	953	953	953	953	953	952	952	952	952	952	953	953	953	953	953	953	953	953	953	952
Sep 29	953	953	953	953	953	953	953	953	954	954	953	953	952	952	951	951	951	950	950	949	949	949	948	948	948	948	948	948	952
Sep 30	947	947	946	945	945	944	944	944	944	943	942	942	942	941	940	940	939	939	939	939	939	938	938	938	938	938	938	938	942
Diurnal Maximum	953	953	953	953	953	953	953	953	954	954	953	953	953	952	952	952	952	952	952	953	953	953	953	953	953	953	953	953	953
Daiurnal Average	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938	938

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	N	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

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 2019

Summary of Hourly Averages

AMBIENT TEMPERATURE (AT) in Degree Celsius

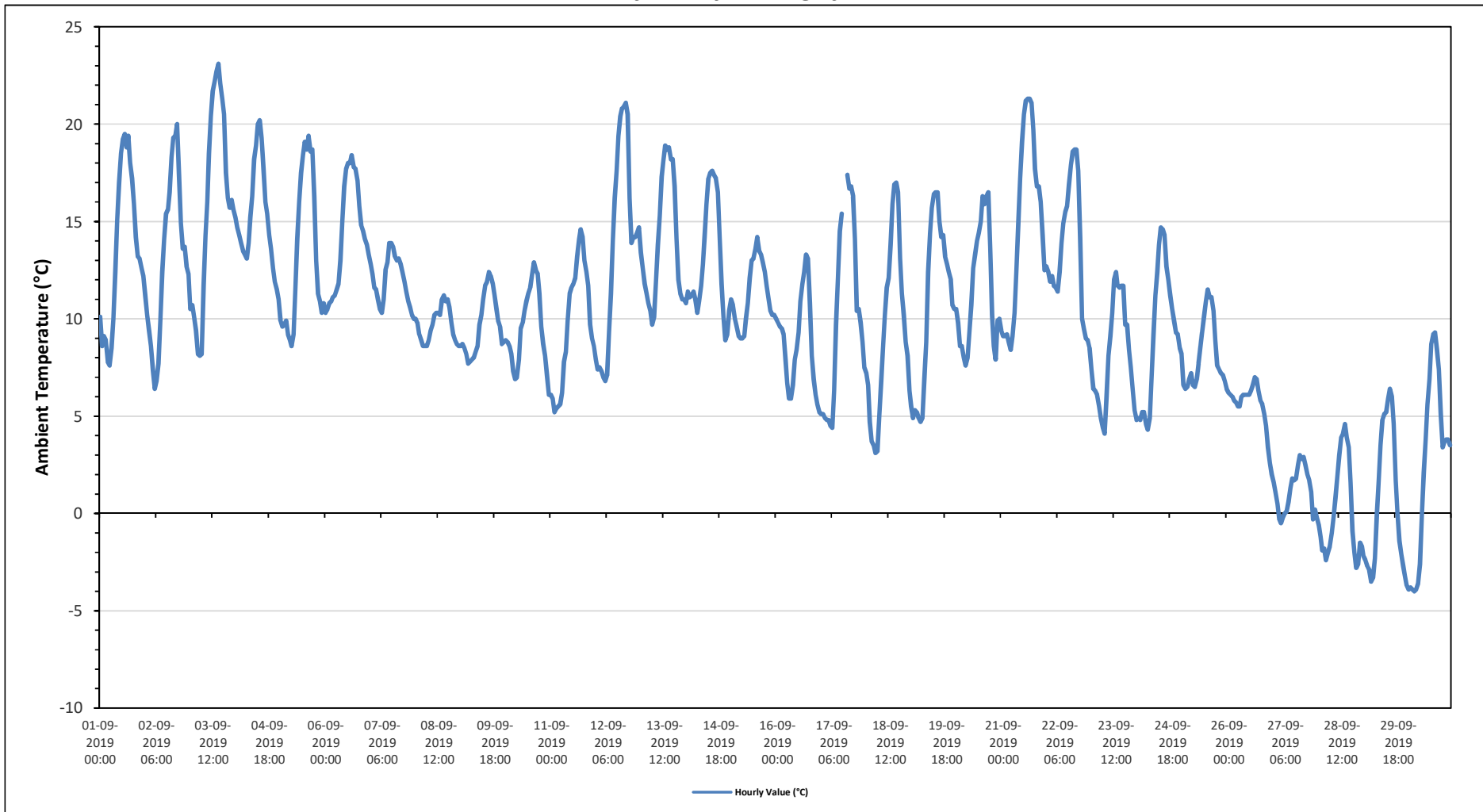
Maximum Hourly Value:	23.1 °C	on September 3 at hour 15	Hours in Service:	720
Maximum Daily Value:	15.9 °C	on	Hours of Data:	718
Minimum Hourly Value:	-4.0 °C	on September 30 at hour 4	Hours of Missing Data:	2
Minimum Daily Value:	0.2 °C	on September 28	Hours of Calibration:	0
Monthly Average:	10.1 °C		Operational Uptime:	99.7

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	10.1	8.6	9.1	8.9	7.8	7.6	8.5	10.0	12.4	15.1	17.0	18.5	19.2	19.5	18.8	19.4	18.0	17.2	15.9	14.2	13.2	13.1	12.6	12.2	7.6	19.5	13.6
Sep 2	11.2	10.2	9.4	8.6	7.4	6.4	6.8	7.7	9.9	12.4	14.1	15.4	15.6	16.5	18.3	19.3	19.4	20.0	17.4	14.9	13.6	13.7	12.7	12.3	6.4	20.0	13.1
Sep 3	10.5	10.7	10.1	9.4	8.2	8.1	8.2	11.7	14.3	16.0	18.5	20.4	21.7	22.2	22.7	23.1	22.1	21.3	20.5	17.5	16.2	15.7	16.1	15.6	8.1	23.1	15.9
Sep 4	15.2	14.7	14.3	13.9	13.5	13.3	13.1	13.9	15.2	16.3	18.2	18.9	20.0	20.2	19.3	17.7	16.0	15.4	14.3	13.6	12.6	11.9	11.5	11.0	11.0	20.2	15.2
Sep 5	9.9	9.6	9.7	9.9	9.2	8.9	8.6	9.2	11.5	14.1	16.0	17.5	18.4	19.1	18.7	19.4	18.6	18.7	16.3	13.0	11.3	10.9	10.3	10.8	8.6	19.4	13.3
Sep 6	10.3	10.5	10.8	10.9	11.1	11.2	11.5	11.8	13.0	15.0	16.8	17.7	18.0	18.0	18.4	17.8	17.7	17.1	15.8	14.8	14.5	14.1	13.8	13.3	10.3	18.4	14.3
Sep 7	12.8	12.3	11.6	11.5	11.0	10.5	10.3	11.0	12.5	12.9	13.9	13.9	13.7	13.2	13.0	13.1	12.8	12.4	11.9	11.4	10.9	10.6	10.2	10.0	10.0	13.9	12.0
Sep 8	10.0	9.8	9.2	8.9	8.6	8.6	8.6	8.9	9.4	9.7	10.2	10.3	10.3	10.2	11.0	11.2	10.9	11.0	10.6	9.8	9.2	8.9	8.7	8.6	8.6	11.2	9.7
Sep 9	8.6	8.7	8.5	8.2	7.7	7.8	7.9	8.0	8.3	8.6	9.7	10.2	11.0	11.7	11.9	12.4	12.2	11.8	11.2	10.5	9.9	9.6	8.7	8.8	7.7	12.4	9.7
Sep 10	8.9	8.8	8.6	8.2	7.3	6.9	7.0	7.9	9.5	9.8	10.4	10.9	11.3	11.6	12.3	12.9	12.5	12.3	11.3	9.6	8.7	8.1	7.1	6.1	6.1	12.9	9.5
Sep 11	6.1	5.9	5.2	5.4	5.5	5.6	6.2	7.8	8.3	9.9	11.3	11.6	11.8	12.1	13.2	14.1	14.6	14.2	13.0	12.4	11.7	9.7	9.0	8.6	5.2	14.6	9.7
Sep 12	7.9	7.4	7.5	7.3	7.0	6.8	7.1	9.3	11.3	14.0	16.2	17.6	19.4	20.4	20.8	20.9	21.1	20.5	16.2	13.9	14.2	14.2	14.4	14.7	6.8	21.1	13.8
Sep 13	13.4	12.6	11.8	11.3	10.8	10.4	9.7	10.1	11.9	13.8	15.3	17.3	18.1	18.9	18.7	18.8	18.2	18.2	16.8	14.1	12.0	11.3	11.0	11.0	9.7	18.9	14.0
Sep 14	10.8	11.4	11.1	11.2	11.4	11.0	10.3	10.9	11.7	12.8	14.2	15.9	17.2	17.5	17.6	17.4	17.2	16.5	14.2	11.8	10.1	8.9	9.2	10.4	8.9	17.6	12.9
Sep 15	11.0	10.7	10.0	9.6	9.1	9.0	9.0	9.1	10.0	10.8	12.1	13.0	13.1	13.6	14.2	13.5	13.3	12.9	12.4	11.7	11.0	10.4	10.2	10.2	9.0	14.2	11.2
Sep 16	10.0	9.8	9.6	9.5	9.2	7.9	6.7	5.9	5.9	6.6	7.9	8.4	9.3	10.9	11.8	12.4	13.3	13.1	10.8	8.1	6.9	6.1	5.6	5.2	5.2	13.3	8.8
Sep 17	5.1	5.1	4.9	4.8	4.8	4.5	4.4	6.3	9.7	12.1	14.5	15.4	P	P	17.4	16.7	16.8	16.3	14.1	10.4	10.5	9.8	8.8	7.5	4.4	17.4	10.0
Sep 18	7.2	6.6	4.7	3.7	3.5	3.1	3.2	5.0	6.8	8.6	10.2	11.6	12.1	13.8	15.9	16.9	17.0	16.5	13.1	11.3	10.2	8.8	8.1	6.3	3.1	17.0	9.3
Sep 19	5.5	4.9	5.3	5.2	4.9	4.7	4.9	6.9	8.8	12.4	14.4	15.7	16.4	16.5	16.5	15.0	14.2	14.3	13.2	12.8	12.4	12.0	10.7	10.5	4.7	16.5	10.8
Sep 20	10.5	9.8	8.6	8.6	8.0	7.6	8.0	9.3	10.7	12.6	13.3	14.0	14.4	15.0	16.3	15.9	16.3	16.5	13.7	10.2	8.6	7.9	9.9	10.0	7.6	16.5	11.5
Sep 21	9.4	9.1	9.1	9.2	8.8	8.4	9.1	10.3	12.4	14.8	17.2	19.1	20.5	21.2	21.3	21.3	21.1	19.7	17.7	16.8	16.8	16.0	14.3	12.5	8.4	21.3	14.8
Sep 22	12.7	12.4	11.9	12.2	11.7	11.6	11.4	12.4	13.9	14.9	15.5	15.8	16.9	17.9	18.6	18.7	18.7	17.6	14.2	10.0	9.5	9.0	8.9	8.5	8.5	18.7	13.5
Sep 23	7.4	6.4	6.3	6.1	5.5	4.9	4.4	4.1	6.0	8.1	9.1	10.3	12.0	12.4	11.7	11.6	11.7	11.7	9.7	9.7	8.4	7.5	6.3	5.3	4.1	12.4	8.2
Sep 24	4.8	4.9	4.8	5.2	5.2	4.6	4.3	4.9	7.0	9.2	11.2	12.4	13.8	14.7	14.6	14.3	12.7	12.0	11.2	10.5	9.9	9.3	9.2	8.5	4.3	14.7	9.1
Sep 25	8.2	6.6	6.4	6.5	6.9	7.2	6.6	6.5	6.9	7.7	8.5	9.3	10.1	10.9	11.5	11.1	11.1	10.4	8.9	7.6	7.4	7.2	7.1	6.8	6.4	11.5	8.2
Sep 26	6.4	6.2	6.1	6.0	5.8	5.7	5.5	5.5	6.0	6.1	6.1	6.1	6.1	6.3	6.6	7.0	6.9	6.3	5.8	5.6	5.1	4.5	3.4	2.6	2.6	7.0	5.7
Sep 27	2.0	1.6	1.1	0.5	-0.3	-0.5	-0.2	0.0	0.1	0.6	1.3	1.8	1.7	1.8	2.5	3.0	2.8	2.9	2.5	2.0	1.7	1.1	-0.3	0.2	-0.5	3.0	1.2
Sep 28	-0.2	-0.6	-1.2	-1.9	-1.8	-2.4	-2.0	-1.7	-1.0	-0.2	0.8	1.9	3.0	3.9	4.1	4.6	3.9	3.4	1.6	-0.9	-2.0	-2.8	-2.6	-1.5	-2.8	4.6	0.2
Sep 29	-1.7	-2.2	-2.4	-2.7	-2.9	-3.5	-3.3	-2.3	-0.1	1.7	3.5	4.8	5.1	5.2	5.9	6.4	6.0	4.6	1.7	0.0	-1.4	-2.1	-2.7	-3.2	-3.5	6.4	0.6
Sep 30	-3.7	-3.9	-3.8	-3.9	-4.0	-3.9	-3.6	-2.6	-0.1	2.1	3.8	5.6	6.9	8.7	9.2	9.3	8.4	7.4	5.1	3.4	3.7	3.8	3.8	3.5	-4.0	9.3	2.3
Diurnal Maximum	15.2	14.7	14.3	13.9	13.5	13.3	13.1	13.9	15.2	16.3	18.5	20.4	21.7	22.2	22.7	23.1	22.1	21.3	20.5	17.5	16.8	16.0	16.1	15.6			
Daiurnal Average	8.0	7.6	7.3	7.1	6.7	6.4	6.4	7.3	8.7	10.3	11.7	12.7	13.3	13.9	14.4	14.5	14.2	13.7	12.0	10.4	9.6	9.0	8.5	8.2			

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	N	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 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 2019

Summary of Hourly Averages

STATION TEMPERATURE (ST) in Degree Celsius

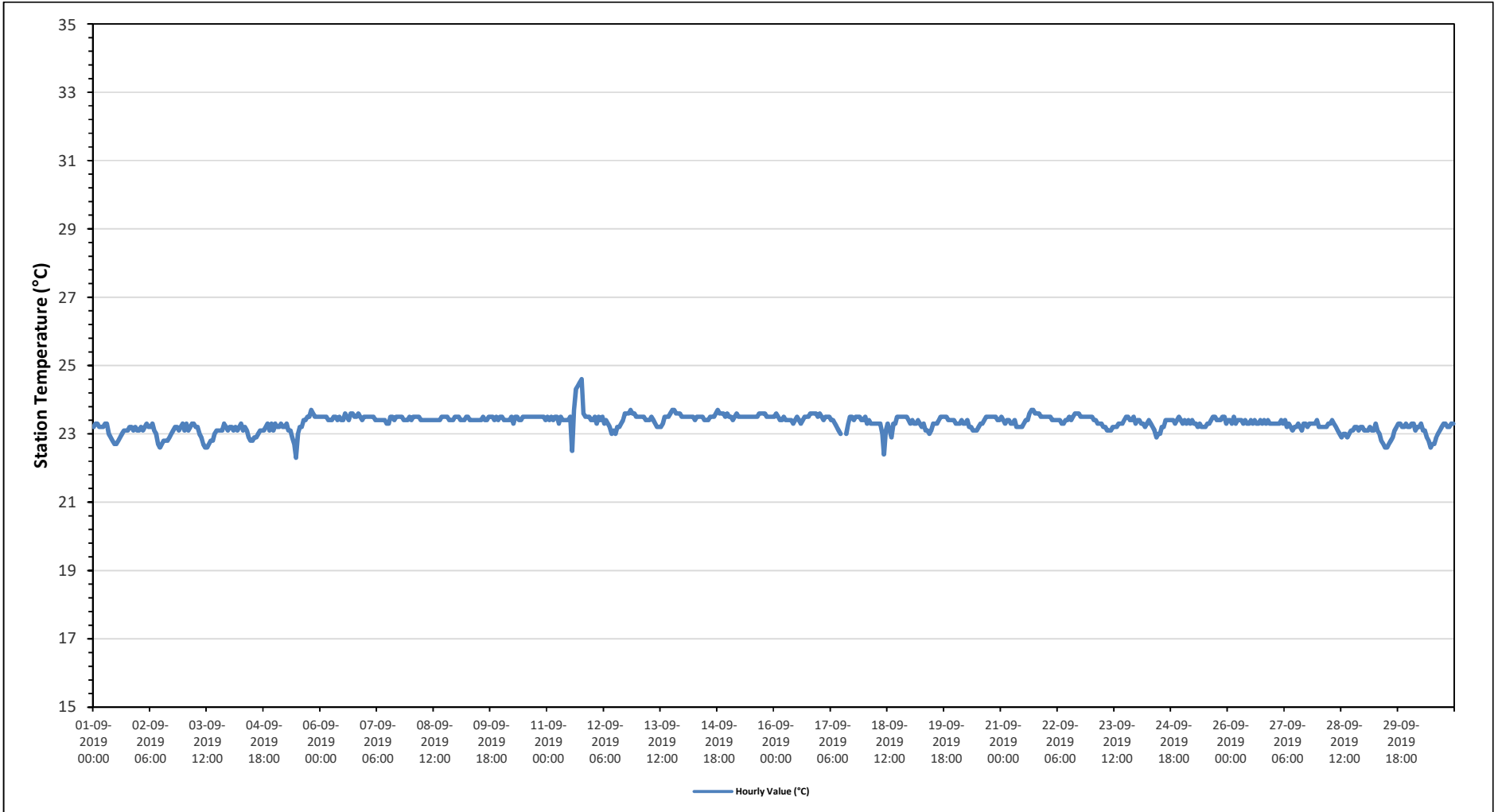
Maximum Hourly Value:	24.6 °C	on September 11 at hour 18	Hours in Service:	720
Maximum Daily Value:	23.6 °C	on	Hours of Data:	718
Minimum Hourly Value:	22.3 °C	on September 5 at hour 11	Hours of Missing Data:	2
Minimum Daily Value:	23.0 °C	on September 3	Hours of Calibration:	0
Monthly Average:	23.3 °C		Operational Uptime:	99.7

Day	Hourly Period Starting at (MST)																							Daily	Daily	Daily		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Minimum	Maximum	Average	
Sep 1	23.2	23.3	23.3	23.2	23.2	23.2	23.3	23.3	23.0	22.9	22.8	22.7	22.7	22.8	22.9	23.0	23.1	23.1	23.1	23.2	23.2	23.1	23.2	23.1	22.7	23.3	23.1	
Sep 2	23.1	23.2	23.1	23.2	23.3	23.2	23.2	23.3	23.1	23.0	22.7	22.6	22.7	22.8	22.8	22.8	22.9	23.0	23.1	23.2	23.2	23.1	23.2	23.3	22.6	23.3	23.0	
Sep 3	23.1	23.3	23.1	23.2	23.3	23.3	23.2	23.2	23.0	22.9	22.7	22.6	22.6	22.7	22.8	22.8	23.0	23.1	23.1	23.1	23.1	23.1	23.3	23.2	23.1	22.6	23.3	23.0
Sep 4	23.2	23.2	23.1	23.2	23.1	23.2	23.3	23.1	23.2	23.1	22.9	22.8	22.8	22.9	22.9	23.0	23.1	23.1	23.1	23.2	23.3	23.1	23.3	23.1	22.8	23.3	23.1	
Sep 5	23.3	23.2	23.2	23.3	23.2	23.2	23.3	23.1	23.1	22.9	22.7	22.3	23.0	23.2	23.2	23.4	23.4	23.5	23.5	23.7	23.6	23.5	23.5	23.5	22.3	23.7	23.2	
Sep 6	23.5	23.5	23.5	23.5	23.4	23.4	23.4	23.5	23.5	23.4	23.5	23.4	23.4	23.6	23.5	23.4	23.6	23.6	23.5	23.5	23.6	23.5	23.4	23.5	23.4	23.6	23.5	
Sep 7	23.5	23.5	23.5	23.5	23.5	23.4	23.4	23.4	23.4	23.4	23.4	23.3	23.3	23.5	23.5	23.4	23.5	23.5	23.5	23.5	23.5	23.4	23.4	23.4	23.3	23.5	23.4	
Sep 8	23.4	23.5	23.5	23.5	23.5	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.5	23.5	23.5	23.5	23.5	23.4	23.4	23.4	23.5	23.4	23.4	
Sep 9	23.5	23.5	23.4	23.4	23.4	23.5	23.5	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.5	23.4	23.4	23.5	23.5	23.5	23.4	23.5	23.4	23.5	23.4	
Sep 10	23.5	23.4	23.4	23.4	23.4	23.5	23.3	23.5	23.5	23.4	23.4	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.4	23.3	23.5	23.5	
Sep 11	23.5	23.4	23.5	23.4	23.5	23.5	23.3	23.5	23.4	23.4	23.4	23.4	23.4	23.5	23.5	23.4	24.4	24.5	24.6	23.6	23.5	23.5	23.5	23.4	22.5	24.6	23.6	
Sep 12	23.4	23.5	23.3	23.5	23.4	23.5	23.3	23.4	23.3	23.2	23.0	23.1	23.0	23.2	23.2	23.3	23.4	23.6	23.6	23.6	23.6	23.7	23.6	23.6	23.0	23.7	23.4	
Sep 13	23.5	23.5	23.5	23.5	23.4	23.4	23.4	23.5	23.4	23.3	23.2	23.2	23.2	23.3	23.5	23.5	23.5	23.6	23.7	23.7	23.6	23.6	23.6	23.5	23.2	23.7	23.5	
Sep 14	23.5	23.5	23.5	23.5	23.5	23.5	23.4	23.5	23.5	23.5	23.5	23.5	23.4	23.4	23.5	23.5	23.5	23.6	23.7	23.6	23.6	23.6	23.5	23.6	23.4	23.7	23.5	
Sep 15	23.5	23.5	23.4	23.5	23.6	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.6	23.6	23.6	23.6	23.6	23.5	23.5	23.5	23.4	23.6	23.5	
Sep 16	23.5	23.6	23.5	23.4	23.4	23.5	23.4	23.4	23.4	23.4	23.3	23.4	23.5	23.4	23.3	23.4	23.5	23.5	23.5	23.5	23.6	23.6	23.6	23.5	23.3	23.6	23.5	
Sep 17	23.6	23.5	23.4	23.5	23.5	23.5	23.4	23.4	23.3	23.2	23.1	23.0	P	P	23.0	23.3	23.5	23.5	23.4	23.5	23.5	23.5	23.4	23.4	23.0	23.6	23.4	
Sep 18	23.5	23.3	23.4	23.3	23.3	23.3	23.3	23.3	23.3	23.0	22.4	23.1	23.3	23.1	22.9	23.3	23.3	23.5	23.5	23.5	23.5	23.5	23.5	23.4	22.4	23.5	23.3	
Sep 19	23.3	23.4	23.3	23.3	23.4	23.3	23.2	23.3	23.1	23.1	23.0	23.1	23.3	23.3	23.3	23.4	23.5	23.5	23.5	23.5	23.5	23.4	23.4	23.4	23.0	23.5	23.3	
Sep 20	23.3	23.3	23.3	23.4	23.3	23.3	23.4	23.2	23.2	23.1	23.1	23.1	23.2	23.3	23.3	23.4	23.5	23.5	23.5	23.5	23.5	23.5	23.4	23.4	23.1	23.5	23.3	
Sep 21	23.5	23.4	23.3	23.4	23.4	23.3	23.3	23.4	23.2	23.2	23.2	23.2	23.3	23.4	23.4	23.6	23.7	23.7	23.6	23.6	23.6	23.5	23.5	23.5	23.2	23.7	23.4	
Sep 22	23.5	23.5	23.5	23.4	23.4	23.4	23.4	23.4	23.3	23.3	23.4	23.4	23.5	23.4	23.5	23.6	23.6	23.6	23.5	23.5	23.5	23.5	23.5	23.5	23.3	23.6	23.5	
Sep 23	23.5	23.4	23.4	23.3	23.3	23.3	23.2	23.2	23.1	23.1	23.1	23.2	23.2	23.2	23.3	23.3	23.3	23.4	23.5	23.5	23.4	23.4	23.5	23.3	23.1	23.5	23.3	
Sep 24	23.4	23.4	23.3	23.3	23.2	23.3	23.4	23.3	23.2	23.1	22.9	23.0	23.0	23.2	23.2	23.4	23.4	23.4	23.4	23.4	23.4	23.3	23.4	23.5	22.9	23.5	23.3	
Sep 25	23.3	23.4	23.3	23.4	23.3	23.4	23.3	23.2	23.3	23.2	23.2	23.2	23.3	23.3	23.4	23.5	23.5	23.4	23.4	23.4	23.4	23.5	23.5	23.3	23.2	23.5	23.3	
Sep 26	23.4	23.4	23.3	23.5	23.3	23.4	23.4	23.4	23.3	23.4	23.3	23.3	23.4	23.3	23.4	23.3	23.3	23.4	23.3	23.4	23.3	23.4	23.3	23.3	23.3	23.3	23.4	
Sep 27	23.3	23.3	23.3	23.3	23.4	23.3	23.4	23.2	23.3	23.2	23.1	23.2	23.2	23.3	23.2	23.1	23.3	23.3	23.2	23.3	23.3	23.3	23.3	23.4	23.1	23.4	23.3	
Sep 28	23.2	23.2	23.2	23.2	23.2	23.3	23.3	23.4	23.3	23.2	23.1	23.0	22.9	23.0	23.0	22.9	23.0	23.1	23.1	23.2	23.2	23.2	23.1	23.2	22.9	23.4	23.1	
Sep 29	23.1	23.1	23.1	23.2	23.1	23.1	23.3	23.1	23.0	22.8	22.7	22.6	22.6	22.7	22.8	22.9	23.1	23.2	23.3	23.3	23.2	23.2	23.3	23.2	22.6	23.3	23.0	
Sep 30	23.2	23.3	23.3	23.1	23.2	23.2	23.3	23.1	23.1	22.9	22.8	22.6	22.7	22.7	22.9	23.0	23.1	23.2	23.3	23.3	23.2	23.2	23.3	22.6	23.3	23.1		
Diurnal Maximum	23.6	23.6	23.5	23.5	23.6	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.6	23.7	24.3	24.4	24.5	24.6	23.7	23.7	23.6	23.6	23.6				
Daiurnal Average	23.4	23.4	23.3	23.4	23.3	23.4	23.3	23.3	23.3	23.2	23.1	23.1	23.2	23.2	23.2	23.3	23.4	23.5	23.5	23.5	23.4	23.4	23.4	23.4				

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.
 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 2019

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

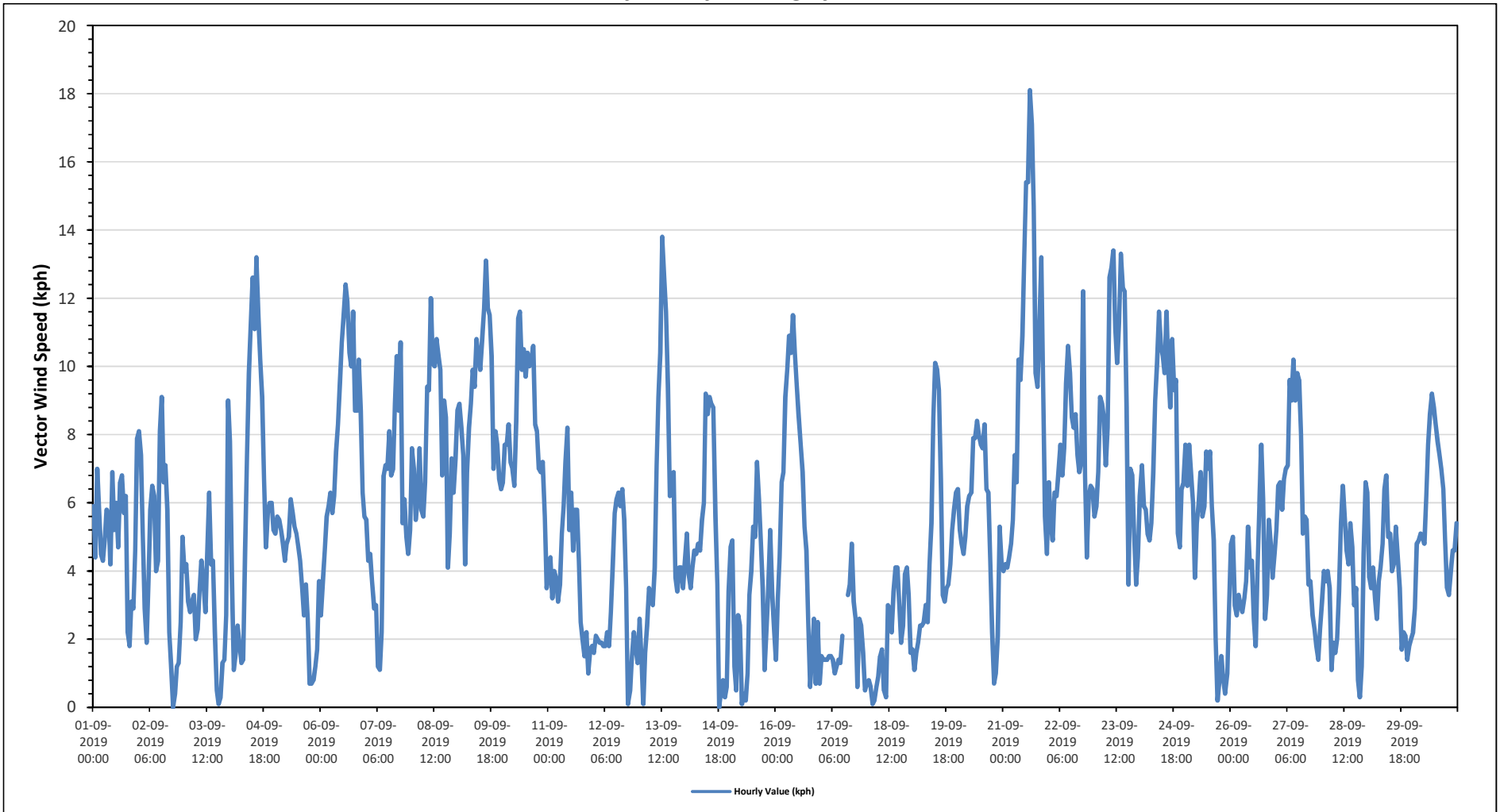
Maximum Hourly Value: 18.1 kph on September 21 at hour 14	Hours in Service: 720
Maximum Daily Value: 9.5 kph on	Hours of Data: 718
Minimum Hourly Value: 0.0 kph on September 2 at hour 18	Hours of Missing Data: 2
Minimum Daily Value: 1.9 kph on September 17	Hours of Calibration: 0
Monthly Average: 1.4 kph	Operational Uptime: 99.7

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	5.9	4.4	7	5.8	4.5	4.3	4.9	5.8	5.6	4.2	6.9	5.2	6	4.7	6.6	6.8	5.7	6.2	2.2	1.8	3.1	2.9	4.6	7.9	1.8	7.9	5.1
Sep 2	8.1	7.4	5	2.9	1.9	3.6	5.8	6.5	6.2	4	4.3	8.1	9.1	6.6	7.1	5.8	2.2	1.2	0	0.4	1.2	1.3	2.5	5	0.0	9.1	4.4
Sep 3	4	4.2	3.1	2.8	3.1	3.3	2	2.3	3.4	4.3	3.6	2.8	4.7	6.3	4.2	4.3	2.2	0.5	0.1	0.3	1.3	1.4	2.7	9	0.1	9.0	3.2
Sep 4	7.8	3.8	1.1	1.6	2.4	1.9	1.3	1.4	4.6	7.4	9.8	11.3	12.6	11.1	13.2	11.5	10.2	9.1	6.7	4.7	5.7	6	6	5.2	1.1	13.2	6.5
Sep 5	5.1	5.6	5.5	5.2	4.8	4.3	4.8	5	6.1	5.7	5.3	5.1	4.7	4.3	3.5	2.7	3.6	2.6	0.7	0.7	0.8	1.2	1.7	3.7	0.7	6.1	3.9
Sep 6	2.7	3.7	4.6	5.6	5.9	6.3	5.7	6.2	7.5	8.3	9.5	10.7	11.5	12.4	11.9	10.4	10	11.6	8.7	8.7	10.2	8.7	6.3	5.6	2.7	12.4	8.0
Sep 7	5.5	4.3	4.5	3.7	2.9	3	1.2	1.1	2.2	6.8	7.1	7	8.1	6.8	7	8.9	10.3	8.7	10.7	5.4	6.1	5	4.5	5.2	1.1	10.7	5.7
Sep 8	7.6	7	5.5	6.1	7.6	5.8	5.6	6.6	9.4	9.3	12	10.1	10	10.8	10.3	9.9	6.8	9	8.5	4.1	5.1	7.3	6.3	7.3	4.1	12.0	7.8
Sep 9	8.7	8.9	8.2	7.4	4.2	6.9	8.2	8.9	9.9	9.4	10.8	10.3	9.9	10.8	11.7	13.1	11.7	11.5	10.3	7	8.1	7.7	6.7	6.4	4.2	13.1	9.0
Sep 10	6.6	7.7	7.7	8.3	7.2	7	6.5	8.4	11.4	11.6	9.9	10.5	9.7	10.4	10	10.2	10.6	8.3	8.1	7	6.9	7.2	5.6	3.5	3.5	11.6	8.3
Sep 11	4	4.4	3.2	4	3.8	3.1	3.6	5.1	5.9	7.2	8.2	5.2	6.3	4.6	5.8	5.8	4.3	2.5	2	1.5	2.2	1	1.7	1.8	1.0	8.2	4.1
Sep 12	1.6	2.1	2	1.9	1.9	1.8	1.8	2.2	1.8	2.8	4.2	5.7	6.1	6.3	5.9	6.4	5.5	3.5	0.1	0.5	1.5	2.2	1.7	1.3	0.1	6.4	3.0
Sep 13	2.6	1.5	0.1	1.6	2.4	3.5	3.3	3	4.1	7.1	9.1	10.4	13.8	12.6	11.6	9.4	6.2	6.4	6.9	3.8	3.4	4.1	4.1	3.5	0.1	13.8	5.6
Sep 14	4.3	5.1	3.9	3.5	4.1	4.6	4.5	4.8	4.6	5.5	6	9.2	8.6	9.1	8.9	8.8	5.6	3.6	0	0.5	0.8	0.3	0.6	3.4	0.0	9.2	4.6
Sep 15	4.7	4.9	1.2	0.5	2.7	2.4	0.1	0.4	0.2	1	3.3	4	5.3	5	7.2	6.1	4.9	3.5	1.1	2.2	3.5	5.2	3.4	2.3	0.1	7.2	3.1
Sep 16	1.4	3.2	4.4	6.6	6.9	9.1	9.9	10.9	10.4	11.5	10.4	9.5	8.6	7.7	6.9	5.3	4.6	2.4	0.6	1.5	2.6	0.7	2.5	0.7	0.6	11.5	5.8
Sep 17	1.5	1.4	1.4	1.4	1.5	1.5	1.4	1	1.2	1.4	1.3	2.1	P	P	3.3	3.6	4.8	3.1	2.6	0.6	2.6	2.4	1.6	0.5	0.5	4.8	1.9
Sep 18	0.7	0.8	0.6	0.1	0.2	0.6	0.9	1.5	1.7	0.5	0.3	3	2.9	2.2	3.4	4.1	4.1	3	1.9	2.4	3.9	4.1	3.3	1.6	0.1	4.1	2.0
Sep 19	1.7	1.1	1.6	1.9	2.4	2.4	2.5	3	2.5	4.2	5.4	8.5	10.1	9.9	9.3	6.7	3.3	3.1	3.5	3.6	4.2	5.2	5.8	6.3	1.1	10.1	4.5
Sep 20	6.4	5.2	4.8	4.5	5	5.9	6.2	6.3	7.9	7.9	8.4	8	7.7	7.6	8.3	6.4	6.3	4.3	2.2	0.7	1	2.1	5.3	4.2	0.7	8.4	5.5
Sep 21	4	4.2	4.1	4.4	4.8	5.5	7.4	6.6	10.2	9.6	10.9	13.3	15.4	15.4	18.1	17.1	14.7	9.8	9.4	11.2	13.2	9.5	5.6	4.5	4.0	18.1	9.5
Sep 22	6.6	5.4	4.9	6.3	6.2	6.9	7.7	6.8	7.6	9.5	10.6	9.8	8.5	8.2	8.6	7.4	6.9	7.2	12.2	6.8	4.4	6.2	6.5	6.4	4.4	12.2	7.4
Sep 23	5.6	5.9	6.9	9.1	8.9	8.5	7.1	8.2	12.6	12.9	13.4	11.1	10.1	11.3	13.3	12.3	12.2	8.8	3.6	7	6.8	5.1	3.6	4.4	3.6	13.4	8.7
Sep 24	6.2	7.1	5.9	5.8	5.1	4.9	5.4	6.9	9	10.1	11.6	10.6	10.3	9.8	11.6	9.8	8.8	10.8	9.3	9.6	5.1	4.7	6.4	6.6	4.7	11.6	8.0
Sep 25	7.7	6.5	7.7	6.8	6	3.8	5.4	6	6.9	5.6	5.9	7.5	7	7.5	5.9	4.9	2	0.2	0.8	1.5	0.8	0.4	1	3	0.2	7.7	4.6
Sep 26	4.8	5	3	2.7	3.3	3	2.8	3.2	3.7	5.3	4.1	4.3	2.6	1.8	4.1	5.9	7.7	6.1	2.6	3.3	5.5	4.8	3.8	4.5	1.8	7.7	4.1
Sep 27	5.2	6.5	6.6	5.8	6.7	7	7.1	9.6	9	10.2	9	9.8	9.6	8	5.1	5.6	5.5	3.6	3.7	2.7	2.3	1.8	1.4	2.3	1.4	10.2	6.0
Sep 28	3.1	4	3.7	4	3.5	1.1	1.9	1.6	2	3.4	5.4	6.5	5.6	4.6	4.2	5.4	4.7	3	3.5	0.8	0.3	1.2	4.5	6.6	0.3	6.6	3.5
Sep 29	6.3	3.8	3.5	4.1	3.2	2.6	3.7	4.1	4.8	6.4	6.8	5	5.1	4	4.2	5.3	4.4	3.5	1.7	2.2	2.1	1.4	1.8	2	1.4	6.8	3.8
Sep 30	2.2	2.9	4.8	4.9	5.1	5	4.8	6.2	7.7	8.6	9.2	8.8	8.3	7.8	7.4	7	6.4	4.9	3.5	3.3	4	4.6	4.6	5.4	2.2	9.2	5.7
Diurnal Maximum	9	9	8	9	9	9	10	11	13	13	13	13	15	15	18	17	15	12	12	11	13	10	7	9			
Diurnal Average	4.8	4.6	4.2	4.3	4.3	4.3	4.5	5.0	6.0	6.7	7.4	7.8	8.2	7.8	8.0	7.6	6.5	5.4	4.2	3.5	4.0	3.9	3.9	4.3			

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

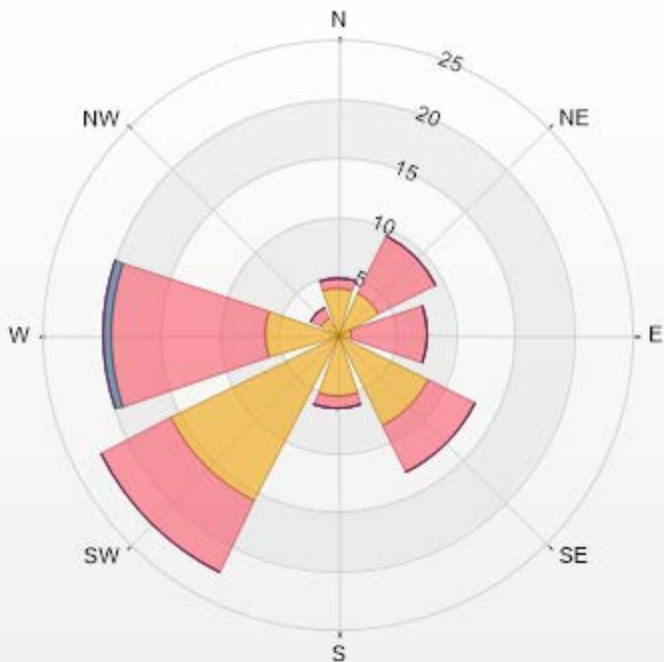
Timeseries Chart of Hourly Average for VWS - Reno Station



Wind: PRAMP RENO Poll.: PRAMP RENO-WDS[KPH] Monthly: 09-2019 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.
 Calm: 13.69% Valid Data: 99.44% Calm Avg: 1.01 [KPH]

Direction	0-6	6-15	15-29	29-39	>39.0	Total
N	3.91	0.98	0	0	0	4.89
NE	3.91	5.45	0	0	0	9.36
E	1.26	6.42	0	0	0	7.68
SE	8.66	4.47	0	0	0	13.13
S	5.17	1.12	0	0	0	6.29
SW	15.78	6.7	0	0	0	22.48
W	6.15	13.13	0.56	0	0	19.84
NW	1.54	1.12	0	0	0	2.66
Summary	46.38	39.39	0.56	0	0	86.33

PRAMP RENO Poll.: PRAMP RENO-WDS[KPH] 01-09-2019 00:00 - 30-09-2019 23:00 Calm: 13.69% Calm Poll
 Avg: 1.01[KPH]



PRAMP-201909

% Icon Classes (KPH) 46 39 0 0 0
 0-6 7-14 15-29 29-39 >39.0



PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2019

Summary of Hourly Averages

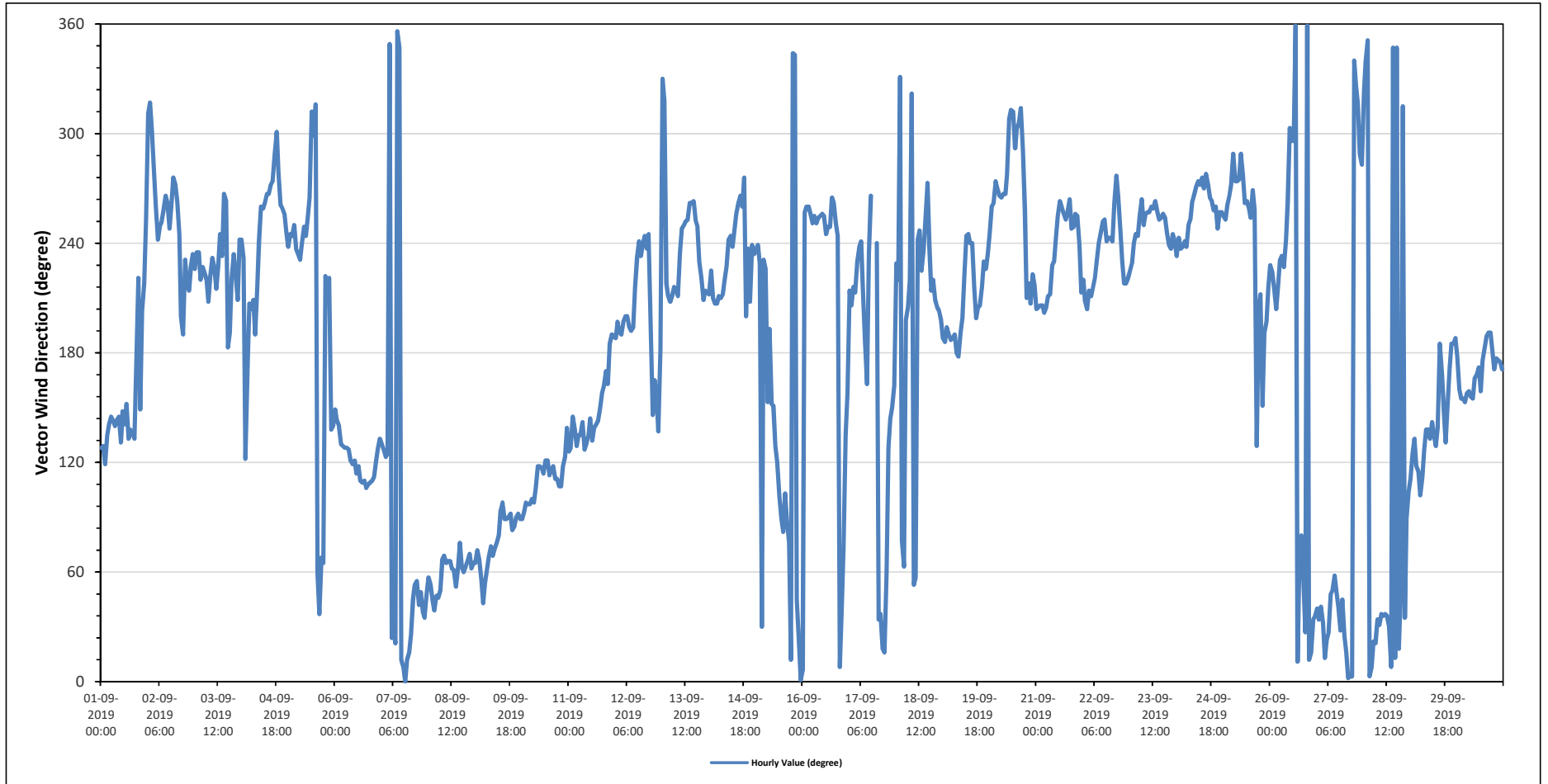
WIND DIRECTION (VWD) in sector

Monthly Average:		219 (SW) degree										Hours in Service: 720										Daily Average				
												Hours of Data: 718										Degree				
												Hours of Missing Data: 2										Quadrant				
												Hours of Calibration: 0														
												Operational Uptime: 99.7														
Day	Hourly Period Starting at (MST)																							Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Degree	Quadrant
Sep 1	SE	SE	ESE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SSE	SE	SE	SE	SE	S	SW	SSE	SSW	SW	WSW	147	SE	
Sep 2	NW	NW	WNW	W	WSW	WSW	WSW	WSW	W	W	WSW	W	W	W	W	WSW	SSW	S	SW	SW	SSW	SW	SW	265	W	
Sep 3	SW	SW	SW	SW	SW	SW	SW	SSW	SW	SW	SSW	SW	WSW	SW	W	W	S	S	SW	SW	SSW	SSW	WSW	232	SW	
Sep 4	WSW	SW	ESE	SSE	SSW	SSW	SSW	S	SW	WSW	WSW	W	W	W	W	W	WNW	WNW	W	W	WSW	WSW	WSW	260	WSW	
Sep 5	SW	WSW	WSW	WSW	SW	SW	SW	WSW	WSW	WSW	WSW	W	NW	WNW	NW	ENE	NE	ENE	ENE	SW	SW	SW	SE	SE	251	WSW
Sep 6	SSE	SE	SE	SE	SE	SE	SE	SE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SE	SE	118	ESE
Sep 7	SE	SE	ESE	SE	NNW	NNE	NNE	NNE	N	NNW	NNE	N	N	NNE	NNE	NE	NE	NE	NE	NE	NE	NE	NE	NE	37	NE
Sep 8	ENE	NE	NE	NE	NE	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	60	ENE
Sep 9	ENE	ENE	ENE	NE	NE	NE	ENE	ENE	ENE	ENE	ENE	E	E	E	E	E	E	E	E	E	E	E	E	E	79	ENE
Sep 10	E	E	E	E	E	E	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	111	ESE
Sep 11	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SSE	SSE	SSE	SSE	SSE	S	S	S	S	140	SE
Sep 12	S	SSW	S	S	SSW	SSW	SSW	SSW	S	SSW	SW	SW	WSW	SW	WSW	SW	WSW	SSW	SE	SSE	SSE	SE	S	S	218	SW
Sep 13	NNW	NW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	244	WSW
Sep 14	SSW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	WSW	SW	WSW	WSW	W	W	WSW	W	SSW	SW	SSW	WSW	SW	235	SW
Sep 15	SW	WSW	SW	NNE	SW	SW	SSE	S	SSE	SSE	SE	ESE	E	E	ESE	E	ENE	NNE	NNW	NNW	NE	NNE	N	N	88	E
Sep 16	N	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	N	NE	ENE	SE	SSE	255	WSW
Sep 17	SSW	SSW	SW	SSW	SW	SW	WSW	SSW	S	SSE	SW	W	P	P	WSW	NE	NE	NNE	NNE	ENE	SE	SE	SSE	SSE	193	S
Sep 18	SW	SW	NNW	ENE	ENE	SSW	SSW	SW	NW	NE	ENE	WSW	WSW	SW	WSW	W	WSW	SSW	SW	SSW	SSW	SSW	SSW	SSW	232	SW
Sep 19	S	S	SSW	S	S	S	S	S	S	S	SSW	SW	WSW	WSW	WSW	WSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	220	SW
Sep 20	WSW	WSW	W	W	W	W	W	W	W	W	NW	NW	NW	WNW	WNW	NW	NW	WNW	WSW	SSW	SW	SSW	SW	SW	279	W
Sep 21	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	WSW	WSW	W	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	SSW	244	WSW
Sep 22	SW	SSW	SSW	SSW	SSW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	SW	SW	SW	SW	SW	SW	237	SW
Sep 23	SW	SW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	252	WSW
Sep 24	SW	WSW	SW	SW	WSW	SW	WSW	WSW	W	W	W	W	W	W	W	W	W	W	W	WSW	WSW	WSW	WSW	WSW	261	W
Sep 25	WSW	WSW	W	W	W	WNW	W	W	W	WNW	W	W	W	WSW	WSW	W	WSW	SE	SSW	SSE	S	SSW	SW	SW	263	W
Sep 26	SW	SW	SSW	SSW	SW	SW	SW	WSW	W	WNW	WNW	WNW	N	NNE	ENE	E	NE	NNE	N	NNE	NNE	NE	NE	NE	331	NNW
Sep 27	NE	NE	NE	NNE	NNE	NNE	NNE	NE	NE	ENE	NE	NE	NNE	NE	NNE	N	N	N	NNW	NW	NW	WNW	W	W	30	NNE
Sep 28	NW	NNW	N	N	N	NNE	NNE	NE	NNE	NE	NE	NE	NNE	N	NNW	NNE	NNW	NNE	NE	NW	NE	E	ESE	ESE	23	NNE
Sep 29	ESE	SE	SE	ESE	ESE	E	ESE	SE	SE	SE	SE	SE	SE	SE	SE	S	SSE	SSE	SE	SSE	S	S	S	S	138	SE
Sep 30	S	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	SSE	S	S	S	S	S	S	S	S	S	S	170	SSE
C	Calibration				S	Daily Zero/Span				Q	Quality Assurance				C1	Repeat Calibration				S1	Repeat Daily Zero/Span					
G	Out for Repair				K	Collection Error				N	Not in Service				O	Operator Error				P	Power Failure					
R	Recovery				X	Machine Malfunction				Y	Maintenance				T	Exceeds Temperature Limits				N	Not in Service					

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

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



REFERENCE DOCUMENTS

HOURLY INSTANTANEOUS DATA

986c STATION



PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2019

Summary of Hourly Instantaneous Maximums

SULPHUR DIOXIDE (SO₂) in ppb

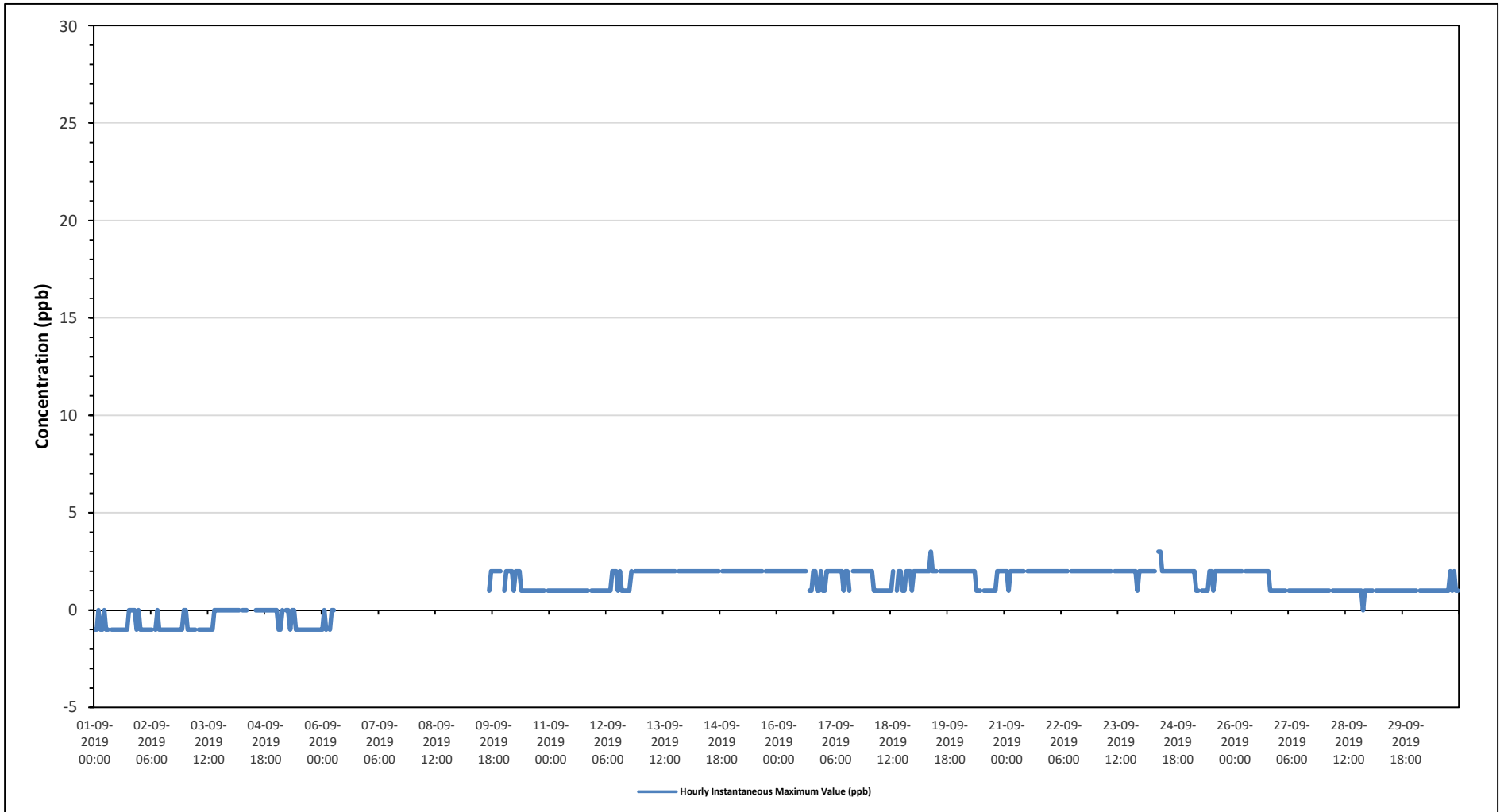
Maximum Hourly Value: 3 ppb on September 19 at hour 9	Hours in Service: 720
Maximum Daily Value: 2.1 ppb on September 24	Hours of Data: 607
Minimum Hourly Value: -1 ppb on September 1 at hour 0	Hours of Missing Data: 81
Minimum Daily Value: -0.9 ppb on September 2	Hours of Calibration: 32
Monthly Average: 1.2 ppb	Operational Uptime: 88.8

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	-1	-1	0	-1	-1	0	-1	-1	S	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	-1	0	-1	0	-0.7	
Sep 2	-1	-1	-1	-1	-1	-1	-1	S	-1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	0	-0.9	
Sep 3	0	-1	-1	-1	-1	-1	S	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-0.6	
Sep 4	0	0	0	0	0	S	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	
Sep 5	0	-1	-1	0	S	0	0	-1	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-0.7	
Sep 6	-1	0	-1	S	-1	0	0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	R	R	1	2	2	2	2	2	2	2	S	1	2	-
Sep 10	1	2	2	2	2	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	S	1	1	2	1.3
Sep 11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	S	1	1	1	1.0
Sep 12	1	1	1	1	1	1	1	1	1	2	2	2	1	2	1	1	1	1	1	2	S	2	2	2	2	2	2	1.3
Sep 13	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	S	2	2	2	2	2	2	2	2.0
Sep 14	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	S	2	2	2	2	2	2	2	2	2.0
Sep 15	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	S	2	2	2	2	2	2	2	2	2	2.0
Sep 16	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	S	1	1	2	2	1	1	2	1	2	1	1.8
Sep 17	1	1	2	2	2	2	2	2	2	2	2	1	2	2	1	S	2	2	2	2	2	2	2	2	2	2	2	1.8
Sep 18	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	S	1	2	2	1	1	2	2	2	1	2	2	1.4
Sep 19	2	2	2	2	2	2	2	2	2	2	3	2	2	2	S	2	2	2	2	2	2	2	2	2	2	2	2	2.0
Sep 20	2	2	2	2	2	2	2	2	2	1	1	1	S	1	1	1	1	1	1	1	1	2	2	2	2	2	2	1.6
Sep 21	2	2	1	2	2	2	2	2	2	2	2	S	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.0
Sep 22	2	2	2	2	2	2	2	2	2	2	2	S	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.0
Sep 23	2	2	2	2	2	2	2	2	2	2	S	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2.0
Sep 24	2	2	2	2	2	2	2	2	2	S	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.1
Sep 25	2	2	2	2	2	1	1	S	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1.7
Sep 26	2	2	2	2	2	2	S	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	2	1.8
Sep 27	1	1	1	1	1	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0
Sep 28	1	1	1	1	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1.0
Sep 29	1	1	1	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0
Sep 30	1	1	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1.1
Diurnal Maximum	2	2	2	2	2	2	2	2	2	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Diurnal Average	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.2	1.1	1.2	1.2	1.0	1.1	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.2	1.3	1.3	1.2	1.3

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	O	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for SO2 - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2019

Summary of Hourly Instantaneous Maximums

TOTAL REDUCED SULPHUR (TRS) in ppb

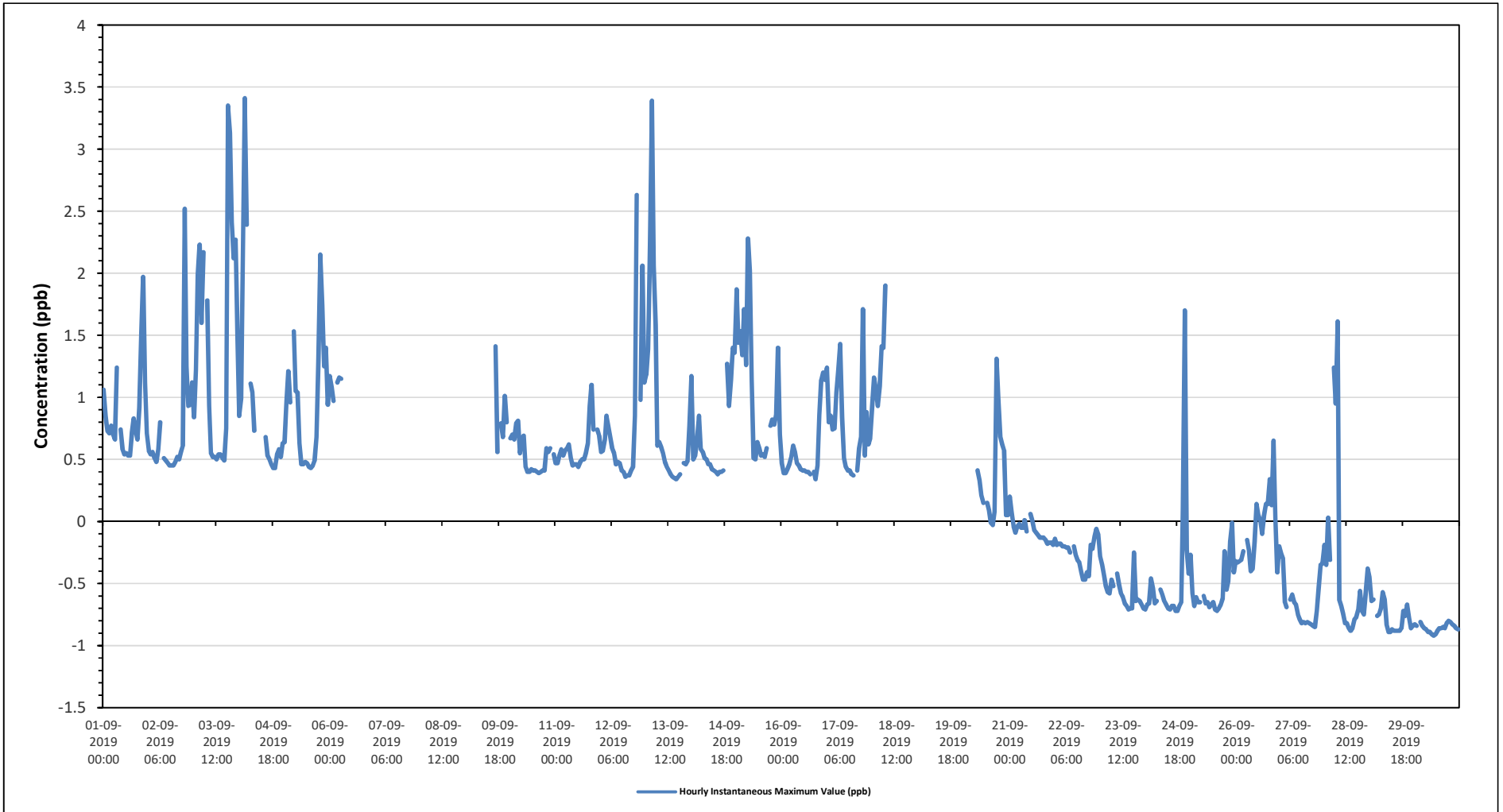
Maximum Hourly Value:	3.41 ppb on September 4 at hour 3	Hours in Service:	720
Maximum Daily Value:	1.41 ppb on September 3	Hours of Data:	567
Minimum Hourly Value:	-0.92 ppb on September 30 at hour 10	Hours of Missing Data:	121
Minimum Daily Value:	-0.86 ppb on September 30	Hours of Calibration:	32
Monthly Average:	0.30 ppb	Operational Uptime:	83.2

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	1.06	0.85	0.73	0.71	0.77	0.7	0.66	1.24	S	0.74	0.58	0.54	0.55	0.53	0.53	0.72	0.83	0.74	0.66	0.92	1.52	1.97	1.12	0.71	0.53	1.97	0.84	
Sep 2	0.57	0.54	0.56	0.51	0.48	0.58	0.8	S	0.51	0.49	0.47	0.45	0.45	0.45	0.48	0.52	0.5	0.56	0.61	2.52	1.25	0.93	0.94	1.12	0.45	2.52	0.71	
Sep 3	0.84	1.22	1.99	2.23	1.6	2.17	S	1.78	0.93	0.55	0.52	0.52	0.5	0.54	0.54	0.51	0.49	0.75	3.35	3.13	2.41	2.12	2.27	1.49	0.49	3.35	1.41	
Sep 4	0.85	0.99	2.21	3.41	2.39	S	1.11	1.04	0.73	C	C	C	C	C	0.68	0.53	0.5	0.46	0.43	0.54	0.58	0.52	0.63	0.43	3.41	1.00		
Sep 5	0.64	0.97	1.21	0.96	S	1.53	1.05	1.04	0.63	0.46	0.46	0.48	0.47	0.44	0.43	0.45	0.49	0.68	1.29	2.15	1.74	1.25	1.4	0.94	0.43	2.15	0.92	
Sep 6	1.17	1.08	0.97	S	1.12	1.16	1.15	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	0.97	1.17	-	
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	R	R	1.41	0.56	S	0.79	0.68	1.01	0.8	S	0.56	1.41	-	
Sep 10	0.67	0.7	0.66	0.79	0.81	0.55	0.67	0.69	0.44	0.4	0.4	0.42	0.41	0.41	0.4	0.39	0.4	0.41	0.41	0.59	0.56	0.59	S	0.54	0.39	0.81	0.54	
Sep 11	0.47	0.47	0.53	0.58	0.53	0.57	0.59	0.62	0.51	0.45	0.46	0.46	0.44	0.48	0.5	0.5	0.55	0.63	0.93	1.1	0.74	S	0.74	0.69	0.44	1.10	0.59	
Sep 12	0.56	0.57	0.66	0.85	0.76	0.68	0.59	0.55	0.46	0.48	0.47	0.41	0.4	0.36	0.37	0.37	0.41	0.44	0.85	2.63	S	0.98	2.06	1.12	0.36	2.63	0.74	
Sep 13	1.18	1.39	2.23	3.39	2.06	1.58	0.61	0.64	0.6	0.55	0.48	0.44	0.41	0.38	0.36	0.35	0.34	0.36	0.38	S	0.47	0.46	0.49	0.77	0.34	3.39	0.87	
Sep 14	1.17	0.5	0.53	0.66	0.85	0.58	0.56	0.51	0.5	0.46	0.46	0.42	0.41	0.4	0.38	0.4	0.4	0.41	S	1.27	0.93	1.14	1.4	1.36	0.38	1.40	0.68	
Sep 15	1.87	1.44	1.53	1.34	1.71	1.26	2.28	2.02	1.15	0.51	0.5	0.64	0.59	0.53	0.54	0.52	0.59	S	0.77	0.82	0.78	0.86	1.4	0.7	0.50	2.28	1.06	
Sep 16	0.47	0.39	0.39	0.42	0.46	0.52	0.61	0.56	0.47	0.45	0.42	0.41	0.41	0.4	0.4	0.38	S	0.4	0.34	0.45	0.86	1.14	1.2	1.14	0.34	1.20	0.55	
Sep 17	1.24	0.8	0.85	0.74	0.75	1.04	1.21	1.43	0.84	0.51	0.44	0.41	0.41	0.38	0.37	S	0.41	0.59	0.68	1.71	0.53	0.88	0.62	0.67	0.37	1.71	0.76	
Sep 18	0.92	1.16	1.06	0.93	1.09	1.41	1.4	1.9	C1	C1	C1	C1	C1	C1	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.92	1.90	-	
Sep 19	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.10	1.28	-	
Sep 20	0.72	K	0.67	K	0.65	K	0.43	K	0.41	0.33	0.21	0.15	S	0.15	0.09	-0.01	-0.03	0.08	1.31	0.99	0.68	0.62	0.57	0.05	-0.03	1.31	0.42	
Sep 21	0.05	0.2	0.08	-0.04	-0.09	-0.04	-0.02	-0.05	-0.05	0.01	-0.08	S	0.06	0.01	-0.07	-0.09	-0.11	-0.13	-0.13	-0.13	-0.15	-0.18	-0.17	-0.17	-0.18	0.20	-0.06	
Sep 22	-0.19	-0.14	-0.19	-0.18	-0.18	-0.2	-0.2	-0.21	-0.21	-0.25	S	-0.2	-0.27	-0.31	-0.33	-0.41	-0.47	-0.47	-0.41	-0.44	-0.19	-0.22	-0.12	-0.06	-0.47	-0.06	-0.25	
Sep 23	-0.11	-0.28	-0.35	-0.43	-0.52	-0.57	-0.58	-0.47	-0.52	S	-0.42	-0.51	-0.58	-0.61	-0.66	-0.68	-0.71	-0.7	-0.7	-0.25	-0.64	-0.63	-0.64	-0.67	-0.71	-0.11	-0.53	
Sep 24	-0.7	-0.71	-0.67	-0.66	-0.46	-0.54	-0.66	-0.64	S	-0.55	-0.59	-0.64	-0.67	-0.7	-0.71	-0.68	-0.68	-0.72	-0.72	-0.68	-0.65	0.09	1.7	-0.23	-0.72	1.70	-0.50	
Sep 25	-0.42	-0.27	-0.58	-0.68	-0.61	-0.65	-0.65	S	-0.6	-0.66	-0.65	-0.69	-0.67	-0.65	-0.71	-0.72	-0.7	-0.67	-0.62	-0.24	-0.55	-0.48	-0.16	-0.01	-0.72	-0.01	-0.55	
Sep 26	-0.41	-0.32	-0.33	-0.32	-0.31	-0.24	S	-0.15	-0.23	-0.4	-0.38	-0.16	0.14	0.05	0.01	-0.1	0.05	0.14	0.14	0.34	0.13	0.65	0.03	-0.41	-0.41	0.65	-0.09	
Sep 27	-0.2	-0.26	-0.3	-0.65	-0.69	S	-0.63	-0.59	-0.65	-0.67	-0.75	-0.79	-0.82	-0.81	-0.82	-0.81	-0.82	-0.83	-0.84	-0.85	-0.72	-0.53	-0.35	-0.34	-0.85	-0.20	-0.64	
Sep 28	-0.19	-0.35	0.03	-0.31	S	1.24	0.95	1.61	-0.63	-0.68	-0.74	-0.82	-0.82	-0.86	-0.88	-0.86	-0.79	-0.77	-0.71	-0.56	-0.72	-0.75	-0.57	-0.38	-0.88	1.61	-0.37	
Sep 29	-0.45	-0.64	-0.63	S	-0.76	-0.75	-0.7	-0.57	-0.63	-0.83	-0.89	-0.89	-0.87	-0.88	-0.88	-0.88	-0.88	-0.86	-0.72	-0.76	-0.67	-0.78	-0.86	-0.84	-0.89	-0.45	-0.77	
Sep 30	-0.83	-0.84	S	-0.81	-0.81	-0.86	-0.87	-0.87	-0.89	-0.89	-0.91	-0.92	-0.91	-0.88	-0.86	-0.86	-0.85	-0.86	-0.82	-0.8	-0.81	-0.83	-0.84	-0.86	-0.87	-0.92	-0.80	-0.86
Diurnal Maximum	1.87	1.44	2.23	3.41	2.39	2.17	2.28	2.02	1.15	0.74	0.58	0.64	0.59	0.54	0.68	0.72	1.41	0.75	3.35	3.13	2.41	2.12	2.27	1.49				
Diurnal Average	0.42	0.38	0.55	0.58	0.48	0.51	0.43	0.55	0.17	0.07	0.02	0.01	0.00	-0.01	0.01	-0.02	0.06	0.05	0.32	0.63	0.40	0.45	0.58	0.33				

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for TRS - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2019

Summary of Hourly Instantaneous Maximums

TOTAL HYDROCARBONS (THC) in ppm

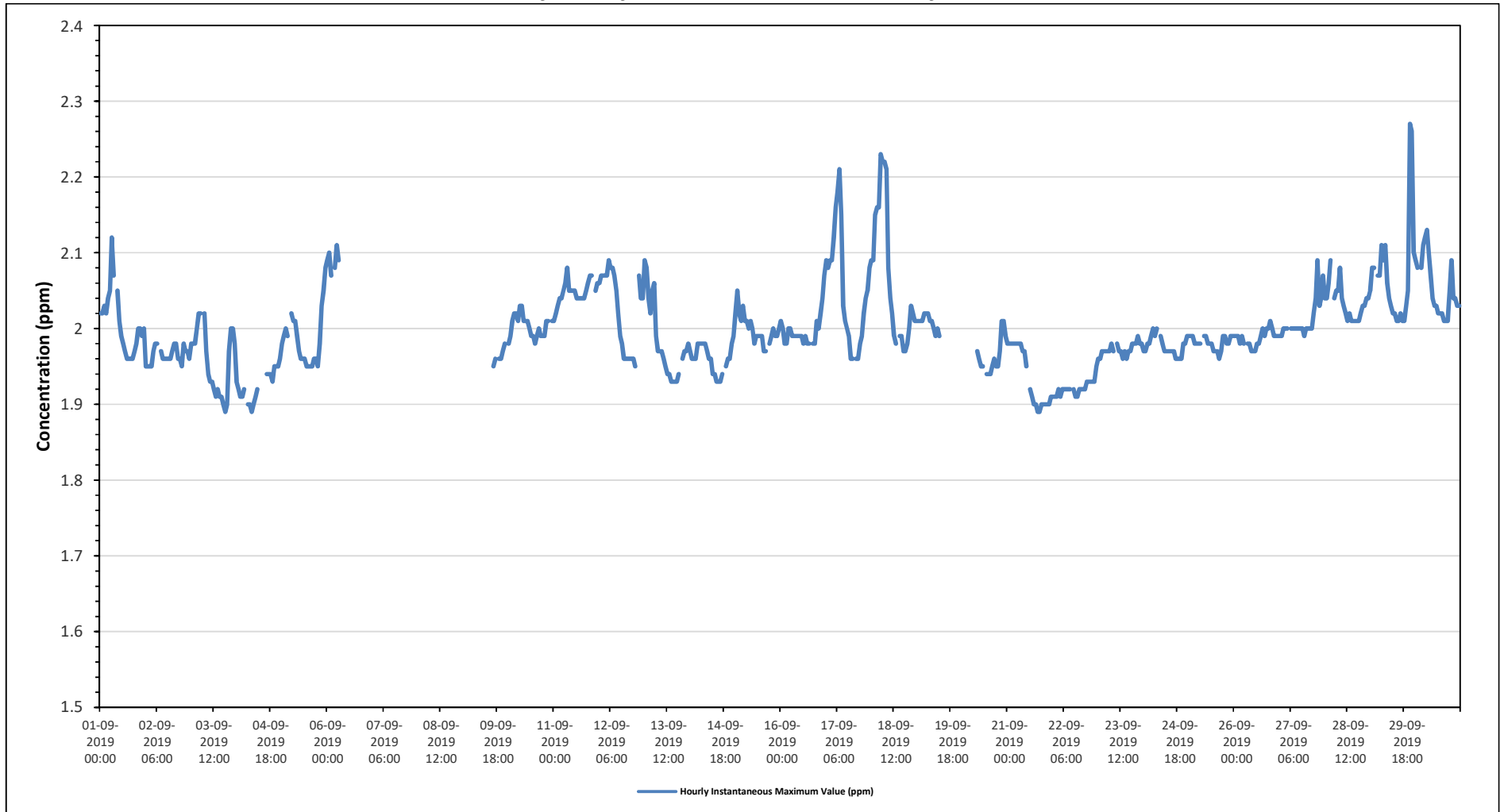
Maximum Hourly Value: 2.27 ppm on September 29 at hour 21	Hours in Service: 720
Maximum Daily Value: 2.07 ppm on September 18	Hours of Data: 596
Minimum Hourly Value: 1.89 ppm on September 3 at hour 18	Hours of Missing Data: 91
Minimum Daily Value: 1.92 ppm on September 22	Hours of Calibration: 33
Monthly Average: 2.00 ppm	Operational Uptime: 87.4

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	2.02	2.02	2.03	2.02	2.04	2.05	2.12	2.07	S	2.05	2.01	1.99	1.98	1.97	1.96	1.96	1.96	1.96	1.97	1.98	2.00	2.00	1.99	2.00	1.96	2.12	2.01
Sep 2	1.95	1.95	1.95	1.95	1.97	1.98	1.98	S	1.97	1.96	1.96	1.96	1.96	1.96	1.97	1.98	1.98	1.96	1.96	1.95	1.98	1.97	1.97	1.96	1.95	1.98	1.96
Sep 3	1.98	1.98	1.98	2.00	2.02	2.02	S	2.02	1.97	1.94	1.93	1.93	1.92	1.91	1.92	1.91	1.91	1.90	1.89	1.90	1.97	2.00	2.00	1.98	1.89	2.02	1.96
Sep 4	1.93	1.92	1.91	1.91	1.92	S	1.90	1.90	1.89	1.90	1.91	1.92	C	C	C	C	1.94	1.94	1.93	1.95	1.95	1.95	1.96	1.89	1.96	1.92	
Sep 5	K	1.99	2.00	1.99	S	2.02	2.01	2.01	1.99	1.97	1.96	1.96	1.96	1.95	1.95	1.95	1.95	1.96	1.96	1.95	1.98	2.03	2.05	2.08	1.95	2.08	1.99
Sep 6	2.09	2.10	2.07	S	2.08	2.11	2.09	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	2.07	2.11	-
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	R	R	1.95	1.96	S	1.96	1.96	1.97	1.98	S	1.95	1.98	-
Sep 10	1.98	1.99	2.01	2.02	2.02	2.01	2.03	2.03	2.01	2.01	2.01	2.00	1.99	1.99	1.98	1.99	2.00	1.99	1.99	1.99	2.01	2.01	S	2.01	1.98	2.03	2.00
Sep 11	2.01	2.02	2.03	2.04	2.04	2.05	2.06	2.08	2.05	2.05	2.05	2.04	2.04	2.04	2.04	2.04	2.04	2.05	2.06	2.07	2.07	S	2.05	2.06	2.01	2.08	2.05
Sep 12	2.06	2.07	2.07	2.07	2.07	2.09	2.08	2.08	2.07	2.05	2.02	1.99	1.98	1.96	1.96	1.96	1.96	1.96	1.96	1.95	S	2.07	2.04	2.04	1.95	2.09	2.02
Sep 13	2.09	2.08	2.04	2.02	2.05	2.06	1.99	1.97	1.97	1.97	1.96	1.95	1.94	1.94	1.93	1.93	1.93	1.93	1.94	S	1.96	1.97	1.97	1.98	1.93	2.09	1.98
Sep 14	1.97	1.96	1.96	1.96	1.98	1.98	1.98	1.98	1.98	1.97	1.96	1.96	1.94	1.94	1.93	1.93	1.93	1.94	S	1.95	1.96	1.96	1.98	1.99	1.93	1.99	1.96
Sep 15	2.02	2.05	2.02	2.01	2.03	2.01	2.01	2.00	2.01	2.00	1.98	1.99	1.99	1.99	1.97	1.97	S	1.98	1.98	1.99	2.00	1.99	1.99	2.00	1.97	2.05	2.00
Sep 16	2.01	2.00	1.98	1.98	2.00	2.00	1.99	1.99	1.99	1.99	1.99	1.99	1.98	1.99	1.98	1.98	S	1.98	1.98	2.01	2.00	2.02	2.04	2.07	1.98	2.07	2.00
Sep 17	2.09	2.08	2.09	2.09	2.12	2.16	2.18	2.21	2.15	2.03	2.01	2.00	1.99	1.96	1.96	S	1.96	1.96	1.98	1.99	2.02	2.04	2.05	2.08	1.96	2.21	2.05
Sep 18	2.09	2.09	2.15	2.16	2.16	2.23	2.22	2.22	2.21	2.08	2.04	2.02	1.99	1.98	S	1.99	1.99	1.97	1.97	1.98	2.00	2.03	2.02	2.01	1.97	2.23	2.07
Sep 19	2.01	2.01	2.01	2.01	2.02	2.02	2.02	2.01	2.01	2.00	1.99	2.00	1.99	S	1.96	K	1.94	K	1.94	K	1.96	K	1.95	K	1.94	2.02	1.99
Sep 20	1.96	K	1.98	K	1.97	K	1.97	K	1.97	1.96	1.95	1.95	S	1.94	1.94	1.94	1.95	1.96	1.95	1.95	1.97	2.01	2.01	1.99	1.94	2.01	1.96
Sep 21	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.97	1.97	1.95	S	1.92	1.91	1.90	1.90	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.91	1.89	1.98	1.94
Sep 22	1.91	1.91	1.91	1.92	1.91	1.92	1.92	1.92	1.92	1.92	S	1.92	1.91	1.91	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.93	1.95	1.91	1.95	1.92
Sep 23	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.98	1.97	S	1.98	1.97	1.97	1.96	1.97	1.96	1.97	1.97	1.98	1.98	1.98	1.99	1.98	1.98	1.96	1.99	1.97
Sep 24	1.97	1.97	1.98	1.98	1.99	2.00	1.99	2.00	S	1.99	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.96	1.96	1.96	1.98	1.98	1.99	1.99	1.96	2.00	1.98
Sep 25	1.99	1.99	1.99	1.98	1.98	1.98	S	1.99	1.99	1.98	1.98	1.97	1.97	1.97	1.97	1.96	1.97	1.99	1.99	1.98	1.98	1.99	1.99	1.99	1.96	1.99	1.98
Sep 26	1.99	1.99	1.99	1.98	1.99	1.98	S	1.98	1.98	1.97	1.97	1.97	1.98	1.98	1.99	2.00	1.99	2.00	2.00	2.01	2.00	1.99	1.99	1.99	1.97	2.01	1.99
Sep 27	1.99	1.99	2.00	2.00	2.00	S	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.99	2.00	2.00	2.00	2.00	2.02	2.04	2.09	2.03	2.04	2.07	1.99	2.09	2.01
Sep 28	2.04	2.04	2.06	2.09	S	2.04	2.05	2.05	2.08	2.04	2.03	2.02	2.01	2.02	2.01	2.01	2.01	2.01	2.01	2.02	2.03	2.03	2.04	2.04	2.01	2.09	2.03
Sep 29	2.05	2.08	2.08	S	2.07	2.07	2.11	2.09	2.11	2.06	2.04	2.03	2.02	2.02	2.01	2.01	2.02	2.01	2.01	2.03	2.05	2.27	2.26	2.10	2.01	2.27	2.07
Sep 30	2.09	2.08	S	2.08	2.11	2.12	2.13	2.10	2.07	2.04	2.03	2.03	2.02	2.02	2.02	2.01	2.01	2.01	2.05	2.09	2.04	2.04	2.03	2.03	2.01	2.13	2.05
Diurnal Maximum	2.09	2.10	2.15	2.16	2.16	2.23	2.22	2.22	2.21	2.08	2.05	2.05	2.04	2.04	2.04	2.04	2.04	2.05	2.06	2.09	2.09	2.27	2.26	2.10	2.01	2.13	2.05
Diurnal Average	2.01	2.01	2.01	2.01	2.02	2.04	2.03	2.03	2.01	2.00	1.99	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.98	1.99	2.01	2.01	2.01	2.01	2.01	2.01	2.01

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for THC - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2019

Summary of Hourly Instantaneous Maximums

METHANE (CH4) in ppm

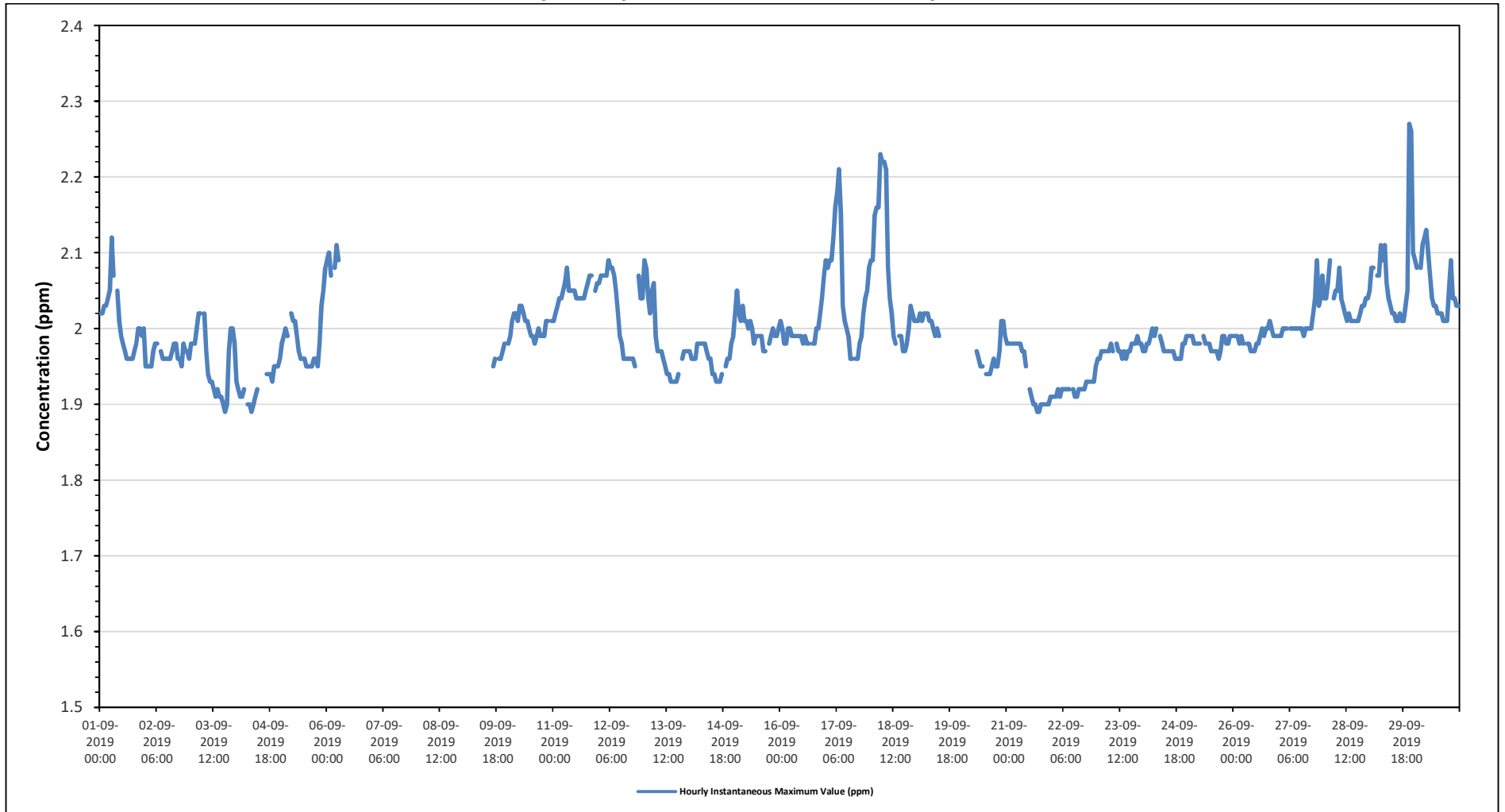
Maximum Hourly Value: 2.27 ppm on September 29 at hour 21	Hours in Service: 720
Maximum Daily Value: 2.07 ppm on September 18	Hours of Data: 597
Minimum Hourly Value: 1.89 ppm on September 3 at hour 18	Hours of Missing Data: 91
Minimum Daily Value: 1.92 ppm on September 22	Hours of Calibration: 33
Monthly Average: 2.00 ppm	Operational Uptime: 87.5

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	2.02	2.02	2.03	2.03	2.04	2.05	2.12	2.07	S	2.05	2.01	1.99	1.98	1.97	1.96	1.96	1.96	1.96	1.97	1.98	2.00	2.00	1.99	2.00	1.96	2.12	2.01
Sep 2	1.95	1.95	1.95	1.95	1.97	1.98	1.98	S	1.97	1.96	1.96	1.96	1.96	1.96	1.97	1.98	1.98	1.96	1.96	1.95	1.98	1.97	1.97	1.96	1.95	1.98	1.96
Sep 3	1.98	1.98	1.98	2.00	2.02	2.02	S	2.02	1.97	1.94	1.93	1.93	1.92	1.91	1.92	1.91	1.91	1.90	1.89	1.90	1.97	2.00	2.00	1.98	1.89	2.02	1.96
Sep 4	1.93	1.92	1.91	1.91	1.92	S	1.90	1.90	1.89	1.90	1.91	1.92	C	C	C	C	1.94	1.94	1.93	1.95	1.95	1.95	1.96	1.89	1.96	1.92	
Sep 5	K	1.99	2.00	1.99	S	2.02	2.01	2.01	1.99	1.97	1.96	1.96	1.96	1.95	1.95	1.95	1.95	1.96	1.96	1.95	1.98	2.03	2.05	2.08	1.95	2.08	1.99
Sep 6	2.09	2.10	2.07	S	2.08	2.11	2.09	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	2.07	2.11	-
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	R	R	1.95	1.96	S	1.96	1.96	1.97	1.98	S	1.95	1.98	-
Sep 10	1.98	1.99	2.01	2.02	2.02	2.01	2.03	2.03	2.02	2.01	2.01	2.00	1.99	1.99	1.98	1.99	2.00	1.99	1.99	1.99	2.01	2.01	S	2.01	1.98	2.03	2.00
Sep 11	2.01	2.02	2.03	2.04	2.04	2.05	2.06	2.08	2.05	2.05	2.05	2.04	2.04	2.04	2.04	2.04	2.05	2.06	2.07	2.07	S	2.05	2.06	2.01	2.08	2.05	
Sep 12	2.06	2.07	2.07	2.07	2.07	2.09	2.08	2.08	2.07	2.05	2.02	1.99	1.98	1.96	1.96	1.96	1.96	1.96	1.96	1.95	S	2.07	2.04	2.04	1.95	2.09	2.02
Sep 13	2.09	2.08	2.04	2.02	2.05	2.06	1.99	1.97	1.97	1.97	1.96	1.95	1.94	1.94	1.93	1.93	1.93	1.93	1.94	S	1.96	1.97	1.97	1.97	1.93	2.09	1.98
Sep 14	1.97	1.96	1.96	1.96	1.98	1.98	1.98	1.98	1.98	1.97	1.96	1.96	1.94	1.94	1.93	1.93	1.93	1.94	S	1.95	1.96	1.96	1.98	1.99	1.93	1.99	1.96
Sep 15	2.02	2.05	2.02	2.01	2.03	2.01	2.01	2.00	2.01	2.00	1.98	1.99	1.99	1.99	1.97	1.97	S	1.98	1.98	1.99	2.00	1.99	1.99	2.00	1.97	2.05	2.00
Sep 16	2.01	2.00	1.98	1.98	2.00	2.00	1.99	1.99	1.99	1.99	1.99	1.99	1.98	1.99	1.98	1.98	S	1.98	1.98	2.00	2.00	2.02	2.04	2.07	1.98	2.07	2.00
Sep 17	2.09	2.08	2.09	2.09	2.12	2.16	2.18	2.21	2.15	2.03	2.01	2.00	1.99	1.96	1.96	S	1.96	1.96	1.98	1.99	2.02	2.04	2.05	2.08	1.96	2.21	2.05
Sep 18	2.09	2.09	2.15	2.16	2.16	2.23	2.22	2.22	2.21	2.08	2.04	2.02	1.99	1.98	S	1.99	1.99	1.97	1.97	1.98	2.00	2.03	2.02	2.01	1.97	2.23	2.07
Sep 19	2.01	2.01	2.02	2.01	2.02	2.02	2.02	2.01	2.01	2.00	1.99	2.00	1.99	S	1.96	K	1.94	K	1.94	K	1.96	K	1.95	K	1.94	2.02	1.99
Sep 20	1.96	K	1.99	K	1.97	K	1.97	K	1.97	1.96	1.95	1.95	S	1.94	1.94	1.94	1.95	1.96	1.95	1.95	1.97	2.01	2.01	1.99	1.94	2.01	1.96
Sep 21	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.97	1.97	1.95	S	1.92	1.91	1.90	1.90	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.91	1.89	1.98	1.94
Sep 22	1.91	1.91	1.91	1.92	1.91	1.92	1.92	1.92	1.92	1.92	S	1.92	1.91	1.91	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.93	1.95	1.91	1.95	1.92
Sep 23	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.98	1.97	S	1.98	1.97	1.97	1.96	1.97	1.96	1.97	1.97	1.98	1.98	1.98	1.99	1.98	1.98	1.96	1.99	1.97
Sep 24	1.97	1.97	1.98	1.98	1.99	2.00	1.99	2.00	S	1.99	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.96	1.96	1.96	1.98	1.98	1.99	1.96	2.00	1.98	
Sep 25	1.99	1.99	1.99	1.98	1.98	1.98	S	1.99	1.98	1.98	1.98	1.97	1.97	1.97	1.97	1.96	1.97	1.99	1.99	1.98	1.98	1.99	1.99	1.96	1.99	1.98	
Sep 26	1.99	1.99	1.99	1.98	1.99	1.98	S	1.98	1.98	1.97	1.97	1.97	1.98	1.98	1.99	2.00	1.99	2.00	2.00	2.01	2.00	1.99	1.99	1.97	2.01	1.99	
Sep 27	1.99	1.99	2.00	2.00	2.00	S	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.99	2.00	2.00	2.00	2.00	2.02	2.04	2.09	2.03	2.04	2.07	1.99	2.09	2.01
Sep 28	2.04	2.04	2.06	2.09	S	2.04	2.05	2.05	2.08	2.04	2.03	2.02	2.01	2.02	2.01	2.01	2.01	2.01	2.01	2.02	2.03	2.03	2.04	2.04	2.01	2.09	2.03
Sep 29	2.05	2.08	2.08	S	2.07	2.07	2.11	2.09	2.11	2.06	2.04	2.03	2.02	2.02	2.01	2.01	2.02	2.01	2.01	2.03	2.05	2.27	2.26	2.10	2.01	2.27	2.07
Sep 30	2.09	2.08	S	2.08	2.11	2.12	2.13	2.10	2.07	2.04	2.03	2.03	2.02	2.02	2.02	2.01	2.01	2.01	2.05	2.09	2.04	2.04	2.03	2.03	2.01	2.13	2.05
Diurnal Maximum	2.09	2.10	2.15	2.16	2.16	2.23	2.22	2.22	2.21	2.08	2.05	2.05	2.04	2.04	2.04	2.04	2.04	2.05	2.06	2.09	2.09	2.27	2.26	2.10			
Diurnal Average	2.01	2.01	2.01	2.01	2.02	2.04	2.03	2.03	2.01	2.00	1.99	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.98	1.99	2.01	2.01	2.01				

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for CH4 - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2019

Summary of Hourly Instantaneous Maximums

NON-METHANE HYDROCARBONS (NMHC) in ppm

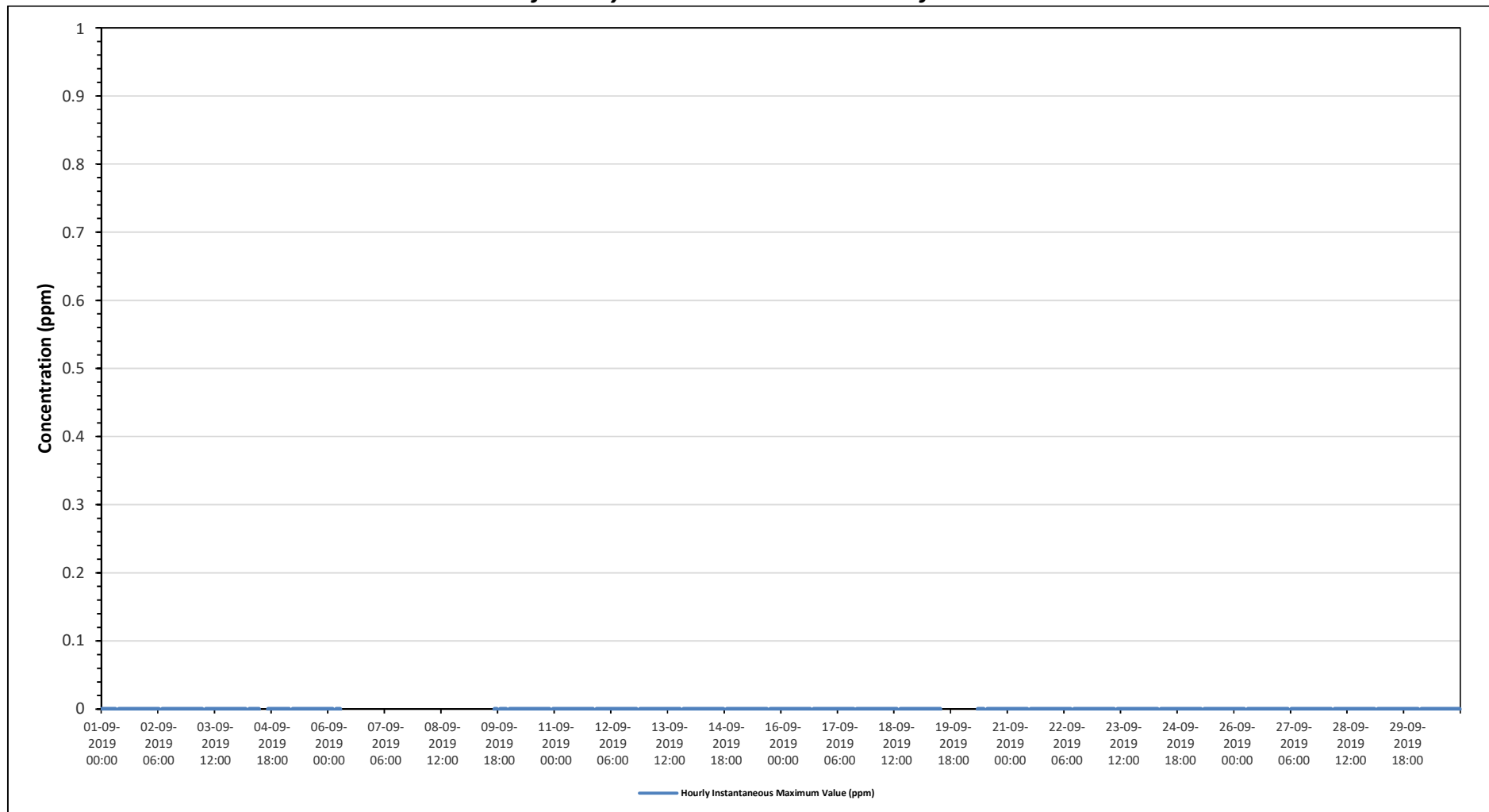
Maximum Hourly Value: 0.00 ppm on September 1 at hour 0	Hours in Service: 720
Maximum Daily Value: 0.00 ppm on September 1	Hours of Data: 597
Minimum Hourly Value: 0.00 ppm on September 1 at hour 0	Hours of Missing Data: 91
Minimum Daily Value: 0.00 ppm on September 1	Hours of Calibration: 33
Monthly Average: 0.00 ppm	Operational Uptime: 87.5

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	0.00	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	
Sep 2	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		
Sep 3	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 4	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	C	C	C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Sep 5	K	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	0.00	0.00	
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	R	R	0.00	0.00	S	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 10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sep 11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sep 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sep 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	S	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sep 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	S	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	0.00	S	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	S	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	S	0.00	K	0.00	K	0.00	K	0.00	K	0.00	K	0.00	K	0.00	K	0.00	0.00	0.00		
Sep 20	0.00	K	0.00	K	0.00	K	0.00	K	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	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	

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for NMHC - 986c Station





PEACE RIVER AREA MONITORING PROGRAM

986c Station - September 2019

Summary of Hourly Instantaneous Maximums

WIND SPEED (WS) in km/hr

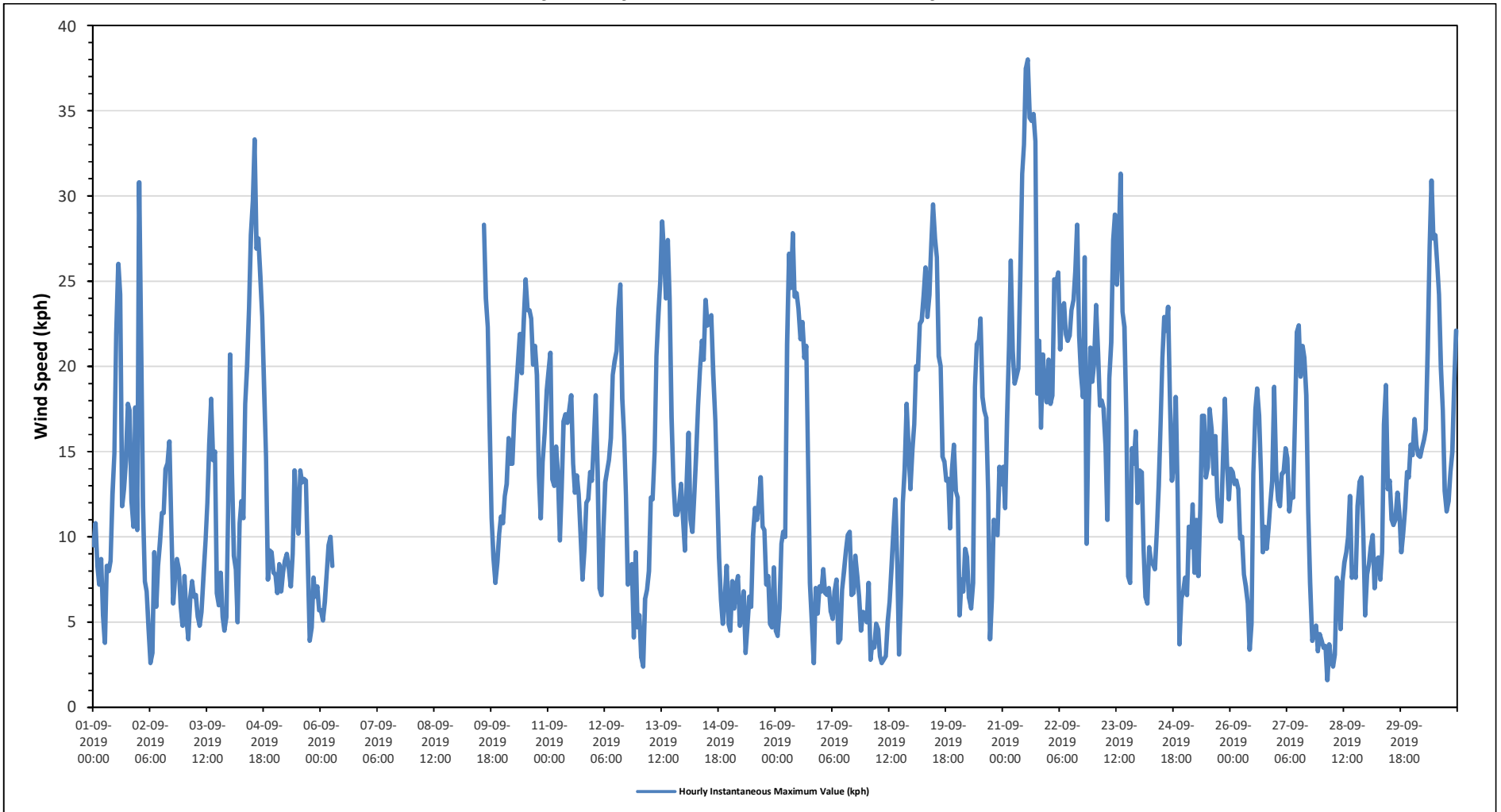
Maximum Hourly Value:	38.0 kph on September 21 at hour 13	Hours in Service:	720
Maximum Daily Value:	24.4 kph on September 21	Hours of Data:	641
Minimum Hourly Value:	1.6 kph on September 28 at hour 3	Hours of Missing Data:	79
Minimum Daily Value:	6.9 kph on September 17	Hours of Calibration:	0
Monthly Average:	13.5 kph	Operational Uptime:	89.0

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	9.5	10.8	8.3	7.2	8.7	5.4	3.8	8.3	8.0	8.6	12.5	14.9	21.9	26.0	24.2	11.8	12.8	14.5	17.8	17.4	12.1	10.6	17.6	10.4	3.8	26.0	12.6	
Sep 2	30.8	22.0	11.8	7.4	6.8	4.7	2.6	3.2	9.1	5.9	8.3	9.7	11.4	11.4	14.0	14.3	15.6	10.8	6.1	7.6	8.7	8.1	5.9	4.8	2.6	30.8	10.0	
Sep 3	7.7	5.3	4.0	6.4	7.4	6.5	6.6	5.3	4.8	5.6	7.9	9.8	12.0	15.4	18.1	14.5	15.0	6.7	6.0	7.9	5.3	4.5	5.3	11.8	4.0	18.1	8.3	
Sep 4	20.7	13.8	8.9	8.1	5.0	10.8	12.1	11.1	17.8	20.0	23.4	27.7	29.7	33.3	26.9	27.5	25.3	22.9	18.7	14.7	7.5	9.2	9.1	7.9	5.0	33.3	17.2	
Sep 5	7.8	6.7	8.4	6.8	7.9	8.6	9.0	8.1	7.1	9.0	13.9	11.3	10.2	13.9	13.2	13.4	13.3	8.7	3.9	4.7	7.6	6.5	7.1	5.7	3.9	13.9	8.9	
Sep 6	5.7	5.1	6.2	7.9	9.5	10.0	8.3	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	5.1	10.0	-	
Sep 7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-
Sep 8	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-
Sep 9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	28.3	24.0	22.3	16.5	11.1	8.8	7.3	8.5	10.2	11.2	7.3	28.3	-	
Sep 10	10.8	12.4	13.1	15.8	14.3	14.3	17.2	18.7	20.3	21.9	19.6	22.6	25.1	23.3	23.3	22.8	20.1	21.2	19.5	13.6	11.1	14.4	16.1	18.6	10.8	25.1	17.9	
Sep 11	19.7	20.8	13.4	13.0	15.3	13.6	9.8	12.8	16.8	17.2	16.7	17.5	18.3	14.3	12.6	13.6	12.5	10.2	7.5	9.3	12.0	12.2	13.8	13.3	7.5	20.8	14.0	
Sep 12	15.8	18.3	13.8	7.0	6.6	10.3	13.2	13.9	14.5	15.8	19.5	20.3	20.9	23.4	24.8	18.1	15.9	12.4	7.2	7.8	8.4	4.1	9.1	4.7	4.1	24.8	13.6	
Sep 13	5.4	2.9	2.4	6.4	6.9	8.0	12.3	12.2	15.0	20.6	23.0	25.0	28.5	26.6	24.0	27.4	24.0	17.0	13.2	11.3	11.3	11.8	13.1	11.2	2.4	28.5	15.0	
Sep 14	9.2	13.3	16.1	11.0	10.3	12.4	14.9	17.7	19.7	21.5	20.4	23.9	22.4	22.7	23.0	19.6	16.8	12.9	8.8	6.3	4.9	6.5	8.3	4.9	4.9	23.9	14.5	
Sep 15	4.5	7.4	5.8	7.1	7.7	4.8	5.6	6.8	3.2	4.7	6.5	5.9	10.1	11.7	11.0	12.1	13.5	10.6	10.4	7.2	7.7	4.9	4.7	8.2	3.2	13.5	7.6	
Sep 16	4.5	4.2	5.8	9.6	10.3	10.0	21.3	26.6	24.6	27.8	24.1	24.3	23.4	21.6	22.6	20.5	21.2	14.4	7.3	4.9	2.6	7.0	5.5	7.1	2.6	27.8	14.6	
Sep 17	6.8	8.1	6.7	6.6	7.0	5.6	5.2	6.8	7.5	3.8	4.0	6.9	8.0	9.2	10.1	10.3	6.6	6.7	8.9	7.7	6.5	4.5	5.6	5.5	3.8	10.3	6.9	
Sep 18	5.0	7.3	2.8	3.8	3.5	4.9	4.6	3.0	2.6	2.8	3.0	5.0	6.2	8.2	10.4	12.2	8.5	3.1	6.6	12.0	14.0	17.8	15.2	12.8	2.6	17.8	7.3	
Sep 19	15.1	16.6	20.0	19.8	22.5	22.7	24.2	25.8	22.9	24.2	27.2	29.5	27.5	26.4	20.6	20.0	14.7	14.4	13.3	13.4	10.5	13.9	15.4	12.7	10.5	29.5	19.7	
Sep 20	12.3	5.4	7.5	6.8	9.3	8.8	6.4	5.8	7.3	18.8	21.3	21.5	22.8	18.2	17.4	17.0	12.6	4.0	6.4	11.0	10.3	10.1	14.1	13.1	4.0	22.8	12.0	
Sep 21	14.1	11.7	16.9	21.2	26.2	20.9	19.0	19.4	19.9	25.3	31.3	33.0	37.5	38.0	34.6	34.4	34.8	33.2	18.4	21.5	16.4	20.7	18.8	17.9	11.7	38.0	24.4	
Sep 22	20.4	17.8	18.3	25.1	25.0	25.5	21.0	23.3	23.7	21.9	21.5	21.8	23.3	23.9	25.6	28.3	21.8	19.6	18.2	26.4	9.6	17.0	21.1	19.1	9.6	28.3	21.6	
Sep 23	20.3	23.6	20.8	17.7	18.0	17.5	15.3	11.0	19.3	21.4	27.4	28.9	24.8	27.2	31.3	23.2	22.3	17.0	7.7	7.3	15.2	14.3	16.2	12.0	7.3	31.3	19.2	
Sep 24	13.9	13.8	9.2	6.5	6.1	9.4	8.5	8.4	8.1	10.3	13.0	16.7	20.5	22.9	22.1	23.5	17.8	13.3	14.3	18.2	12.6	3.7	6.4	6.8	3.7	23.5	12.8	
Sep 25	7.6	6.6	10.6	9.4	11.9	7.9	11.0	7.7	11.6	17.1	17.1	13.5	14.1	17.5	16.3	13.7	15.9	12.3	11.2	10.9	14.4	18.1	14.4	12.2	6.6	18.1	12.6	
Sep 26	14.0	13.8	13.1	13.3	12.8	9.9	10.0	7.8	7.1	6.1	3.4	4.9	13.7	17.5	18.7	17.1	13.8	9.1	10.6	9.3	10.5	12.0	13.3	18.8	3.4	18.8	11.7	
Sep 27	13.9	12.2	11.8	13.7	13.8	15.2	14.6	11.5	12.5	12.3	16.9	22.0	22.4	19.4	21.2	20.5	18.3	11.5	7.3	3.9	4.4	4.8	3.3	4.3	3.3	22.4	13.0	
Sep 28	3.9	3.5	3.6	1.6	3.7	2.8	2.4	3.1	7.6	7.3	4.6	7.4	8.5	9.1	10.0	12.4	7.6	8.2	7.6	11.8	13.2	13.5	10.2	5.4	1.6	13.5	7.0	
Sep 29	7.8	8.4	9.4	10.1	7.0	8.6	8.8	7.5	9.1	16.6	18.9	12.8	13.3	11.0	10.7	11.0	12.6	11.4	9.1	10.2	11.7	13.8	13.5	15.4	7.0	18.9	11.2	
Sep 30	14.8	16.9	15.4	14.8	14.7	15.2	15.7	16.3	21.0	27.0	30.9	27.5	27.7	26.0	24.2	19.9	17.4	12.7	11.5	12.1	13.8	15.0	19.1	22.1	11.5	30.9	18.8	
Diurnal Maximum	30.8	23.6	20.8	25.1	26.2	25.5	24.2	26.6	24.6	27.8	31.3	33.0	37.5	38.0	34.6	34.4	34.8	33.2	19.5	26.4	16.4	20.7	21.1	22.1				
Diurnal Average	11.9	11.4	10.5	10.5	11.0	10.9	11.2	11.6	13.1	15.1	16.8	17.9	19.4	19.9	20.0	18.6	16.8	13.2	10.7	11.0	10.0	10.6	11.6	11.0				

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for WS - 986c Station



842b STATION



PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2019

Summary of Hourly Instantaneous Maximums

SULPHUR DIOXIDE (SO₂) in ppb

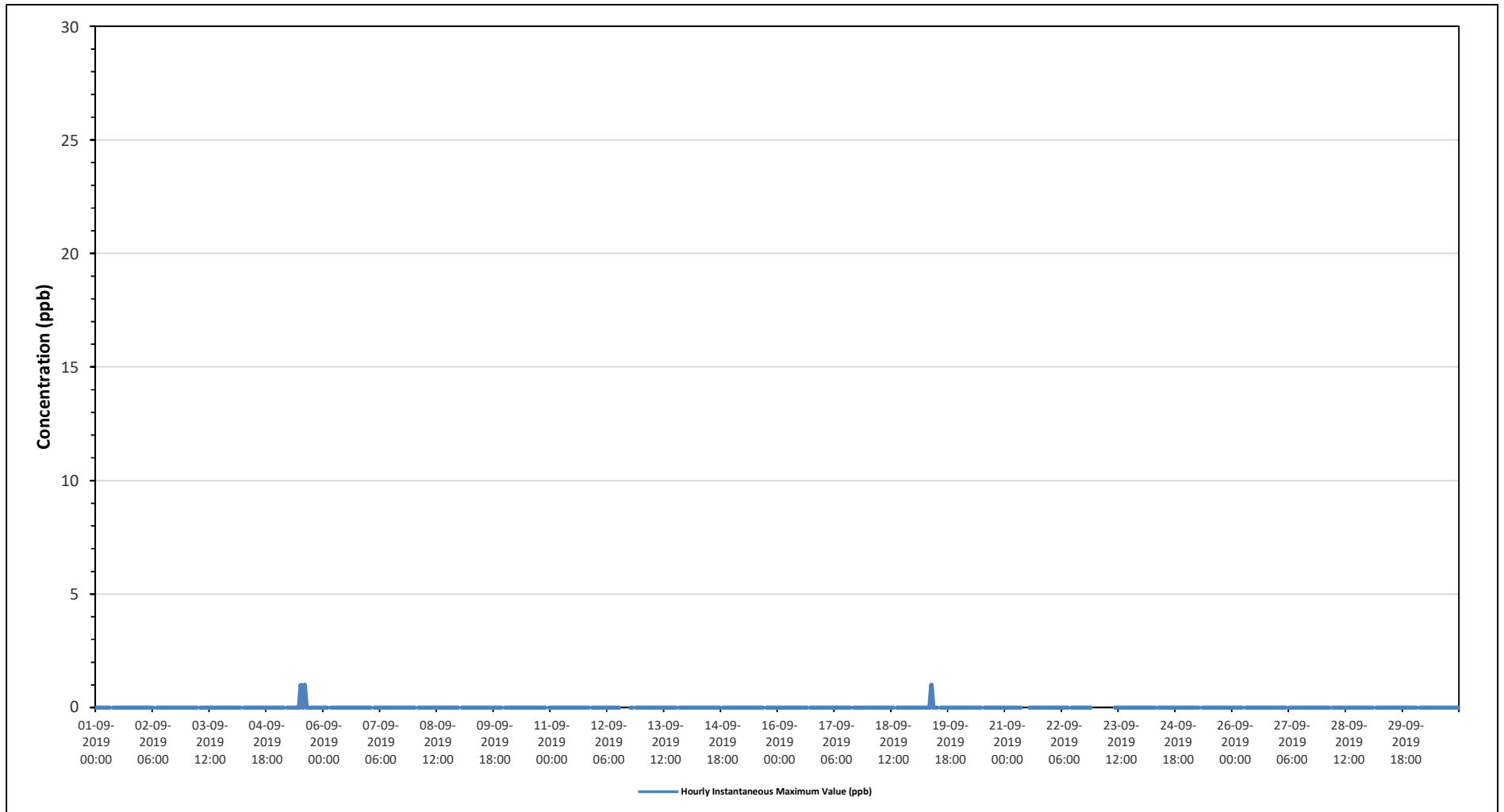
Maximum Hourly Value:	1 ppb on September 5 at hour 12	Hours in Service:	720
Maximum Daily Value:	0.1 ppb on September 5	Hours of Data:	670
Minimum Hourly Value:	0 ppb on September 1 at hour 0	Hours of Missing Data:	15
Minimum Daily Value:	0.0 ppb on September 1	Hours of Calibration:	35
Monthly Average:	0.0 ppb	Operational Uptime:	97.9

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

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for SO2 - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2019

Summary of Hourly Instantaneous Maximums

TOTAL REDUCED SULPHUR (TRS) in ppb

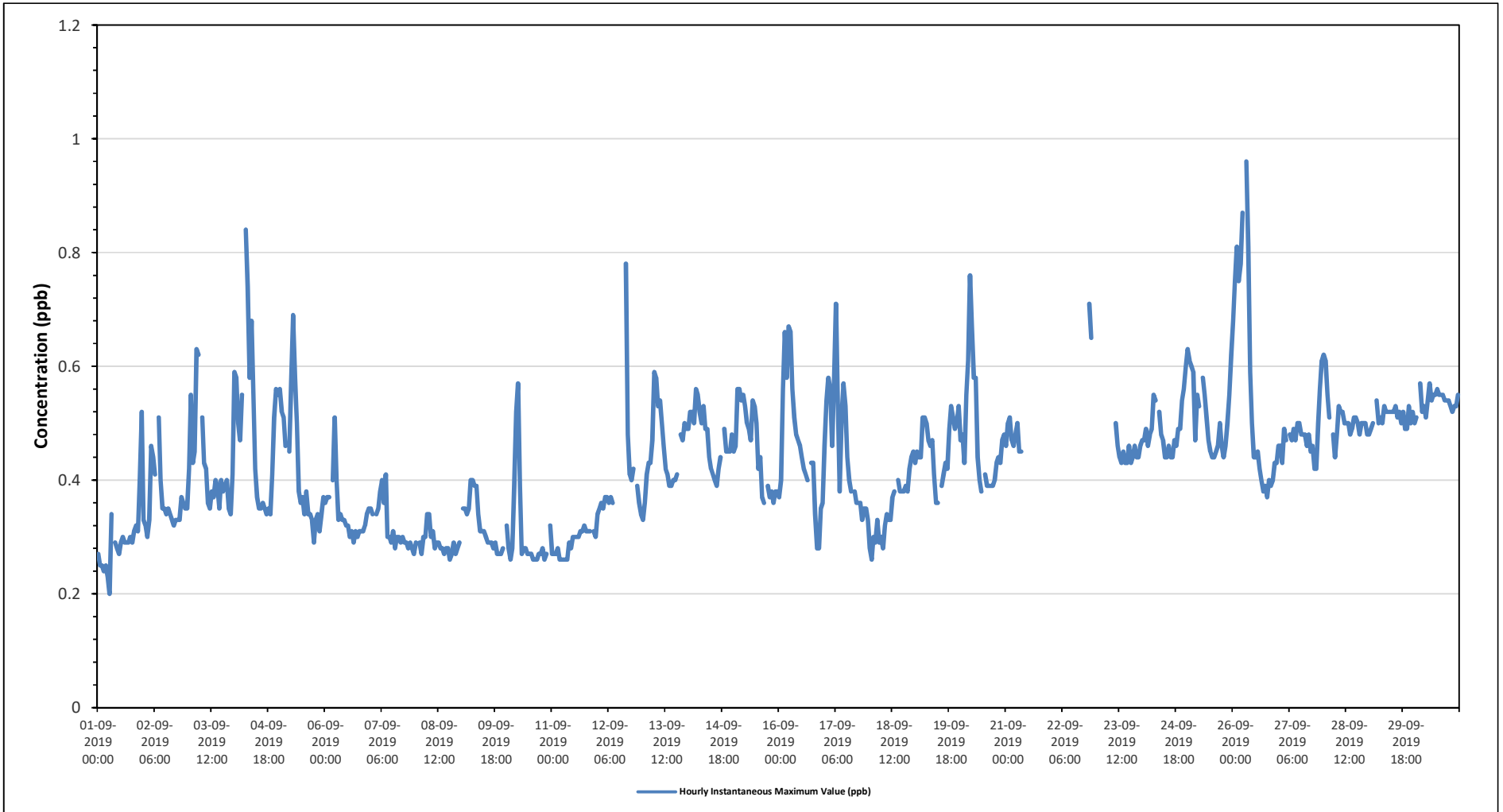
Maximum Hourly Value:	0.96 ppb on September 26 at hour 7	Hours in Service:	720
Maximum Daily Value:	0.56 ppb on September 26	Hours of Data:	649
Minimum Hourly Value:	0.20 ppb on September 1 at hour 6	Hours of Missing Data:	46
Minimum Daily Value:	0.29 ppb on September 11	Hours of Calibration:	35
Monthly Average:	0.43 ppb	Operational Uptime:	95.0

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	0.25	0.25	0.24	0.25	0.23	0.2	0.34	S	0.29	0.28	0.27	0.29	0.3	0.29	0.29	0.29	0.3	0.29	0.31	0.32	0.31	0.4	0.52	0.20	0.52	0.29	
Sep 2	0.33	0.32	0.3	0.33	0.46	0.44	0.41	S	0.51	0.4	0.35	0.35	0.34	0.35	0.34	0.33	0.32	0.33	0.33	0.33	0.37	0.36	0.35	0.35	0.30	0.51	0.36	
Sep 3	0.42	0.55	0.43	0.45	0.63	0.62	S	0.51	0.43	0.42	0.36	0.35	0.38	0.37	0.4	0.39	0.35	0.4	0.38	0.39	0.4	0.35	0.34	0.41	0.34	0.63	0.42	
Sep 4	0.59	0.58	0.5	0.47	0.55	S	0.84	0.74	0.58	0.68	0.55	0.42	0.37	0.35	0.35	0.36	0.35	0.34	0.35	0.34	0.41	0.51	0.56	0.55	0.34	0.84	0.49	
Sep 5	0.56	0.52	0.51	0.46	S	0.45	0.57	0.69	0.58	0.5	0.38	0.36	0.37	0.34	0.38	0.34	0.34	0.33	0.29	0.33	0.34	0.31	0.34	0.37	0.29	0.69	0.42	
Sep 6	0.36	0.37	0.37	S	0.4	0.51	0.4	0.33	0.34	0.33	0.33	0.32	0.32	0.3	0.31	0.29	0.31	0.3	0.31	0.31	0.31	0.32	0.34	0.35	0.29	0.51	0.34	
Sep 7	0.35	0.34	S	0.34	0.35	0.38	0.4	0.36	0.41	0.3	0.3	0.29	0.31	0.28	0.3	0.3	0.29	0.3	0.29	0.29	0.28	0.29	0.28	0.27	0.27	0.41	0.32	
Sep 8	0.29	S	0.29	0.27	0.3	0.3	0.34	0.34	0.3	0.31	0.28	0.29	0.29	0.28	0.28	0.27	0.28	0.28	0.26	0.27	0.29	0.27	0.28	0.29	0.26	0.34	0.29	
Sep 9	S	0.35	0.35	0.34	0.35	0.4	0.4	0.39	0.39	0.34	0.31	0.31	0.31	0.3	0.29	0.29	0.29	0.28	0.29	0.27	0.27	0.27	0.28	S	0.27	0.40	0.32	
Sep 10	0.32	0.28	0.26	0.28	0.39	0.52	0.57	0.39	0.27	0.28	0.28	0.27	0.27	0.26	0.26	0.26	0.27	0.27	0.28	0.26	0.27	S	S	0.32	0.26	0.57	0.31	
Sep 11	0.27	0.27	0.27	0.28	0.26	0.26	0.26	0.26	0.26	0.29	0.28	0.3	0.3	0.3	0.31	0.31	0.32	0.31	0.31	0.31	S	S	0.31	0.3	0.26	0.32	0.29	
Sep 12	0.34	0.35	0.36	0.35	0.37	0.37	0.36	0.37	0.36	C	C	C	C	C	C	C	0.78	0.48	0.41	0.4	0.42	S	0.39	0.36	0.34	0.34	0.78	-
Sep 13	0.33	0.36	0.41	0.43	0.43	0.47	0.59	0.58	0.53	0.54	0.5	0.46	0.42	0.41	0.39	0.39	0.4	0.4	0.41	S	0.48	0.47	0.5	0.49	0.33	0.59	0.45	
Sep 14	0.49	0.52	0.52	0.5	0.56	0.55	0.52	0.5	0.53	0.49	0.49	0.44	0.42	0.41	0.4	0.39	0.42	0.44	S	0.49	0.45	0.45	0.45	0.48	0.39	0.56	0.47	
Sep 15	0.45	0.46	0.56	0.56	0.56	0.54	0.55	0.53	0.5	0.49	0.47	0.54	0.53	0.5	0.42	0.44	0.37	0.36	S	0.39	0.37	0.38	0.36	0.38	0.38	0.36	0.56	0.46
Sep 16	0.37	0.4	0.56	0.66	0.58	0.67	0.66	0.56	0.51	0.48	0.47	0.46	0.44	0.42	0.41	0.4	S	0.43	0.43	0.34	0.28	0.28	0.35	0.36	0.28	0.67	0.46	
Sep 17	0.46	0.54	0.58	0.56	0.46	0.58	0.71	0.53	0.38	0.51	0.57	0.53	0.44	0.4	0.38	S	0.38	0.36	0.36	0.36	0.33	0.35	0.35	0.33	0.33	0.71	0.45	
Sep 18	0.28	0.26	0.3	0.29	0.33	0.29	0.3	0.28	0.32	0.34	0.33	0.33	0.37	0.38	S	0.4	0.38	0.38	0.38	0.39	0.38	0.42	0.44	0.45	0.26	0.45	0.35	
Sep 19	0.43	0.45	0.44	0.44	0.51	0.51	0.5	0.47	0.46	0.47	0.41	0.36	0.36	S	0.39	0.41	0.43	0.42	0.49	0.53	0.51	0.49	0.5	0.53	0.36	0.53	0.46	
Sep 20	0.47	0.48	0.43	0.55	0.61	0.76	0.67	0.58	0.58	0.44	0.4	0.38	S	0.41	0.39	0.39	0.39	0.39	0.39	0.4	0.43	0.44	0.43	0.47	0.38	0.76	0.48	
Sep 21	0.46	0.5	0.51	0.47	0.46	0.48	0.5	0.45	0.45	P	P	P	P	X	X	X	X	X	X	X	X	X	X	X	0.45	0.51	0.48	
Sep 22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0.65	0.71	-	
Sep 23	K	K	K	K	K	K	K	K	K	S	0.5	0.46	0.44	0.43	0.45	0.43	0.43	0.46	0.43	0.44	0.46	0.44	0.44	0.46	0.43	0.50	-	
Sep 24	0.47	0.47	0.49	0.46	0.48	0.49	0.55	0.54	S	0.52	0.48	0.47	0.44	0.44	0.46	0.44	0.44	0.47	0.46	0.49	0.49	0.54	0.56	0.6	0.44	0.60	0.49	
Sep 25	0.63	0.61	0.6	0.59	0.47	0.55	0.53	S	0.58	0.55	0.51	0.47	0.45	0.44	0.44	0.45	0.46	0.5	0.46	0.44	0.46	0.5	0.55	0.62	0.44	0.63	0.52	
Sep 26	0.68	0.75	0.81	0.75	0.78	0.87	S	0.96	0.81	0.59	0.5	0.44	0.44	0.45	0.42	0.4	0.38	0.39	0.37	0.4	0.39	0.4	0.43	0.43	0.37	0.96	0.56	
Sep 27	0.46	0.46	0.43	0.49	0.47	S	0.48	0.47	0.49	0.47	0.5	0.5	0.48	0.48	0.48	0.46	0.48	0.45	0.46	0.42	0.42	0.5	0.56	0.61	0.42	0.61	0.48	
Sep 28	0.62	0.61	0.55	0.51	S	0.48	0.44	0.48	0.53	0.52	0.52	0.5	0.5	0.5	0.48	0.49	0.51	0.51	0.5	0.48	0.5	0.5	0.5	0.48	0.44	0.62	0.51	
Sep 29	0.48	0.49	0.5	S	0.54	0.5	0.51	0.5	0.53	0.52	0.52	0.52	0.52	0.52	0.53	0.51	0.52	0.5	0.52	0.49	0.49	0.53	0.5	0.52	0.48	0.54	0.51	
Sep 30	0.5	0.51	S	0.57	0.52	0.53	0.51	0.54	0.57	0.54	0.55	0.55	0.56	0.55	0.55	0.55	0.54	0.54	0.53	0.52	0.53	0.53	0.53	0.55	0.50	0.57	0.54	
Diurnal Maximum	0.68	0.75	0.81	0.75	0.78	0.87	0.84	0.96	0.81	0.68	0.57	0.55	0.56	0.55	0.55	0.78	0.54	0.54	0.54	0.53	0.71	0.65	0.56	0.62				
Diurnal Average	0.43	0.45	0.45	0.45	0.46	0.49	0.49	0.49	0.47	0.45	0.43	0.40	0.40	0.39	0.39	0.40	0.38	0.39	0.38	0.39	0.40	0.41	0.42	0.44				

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for TRS - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2019

Summary of Hourly Instantaneous Maximums

TOTAL HYDROCARBONS (THC) in ppm

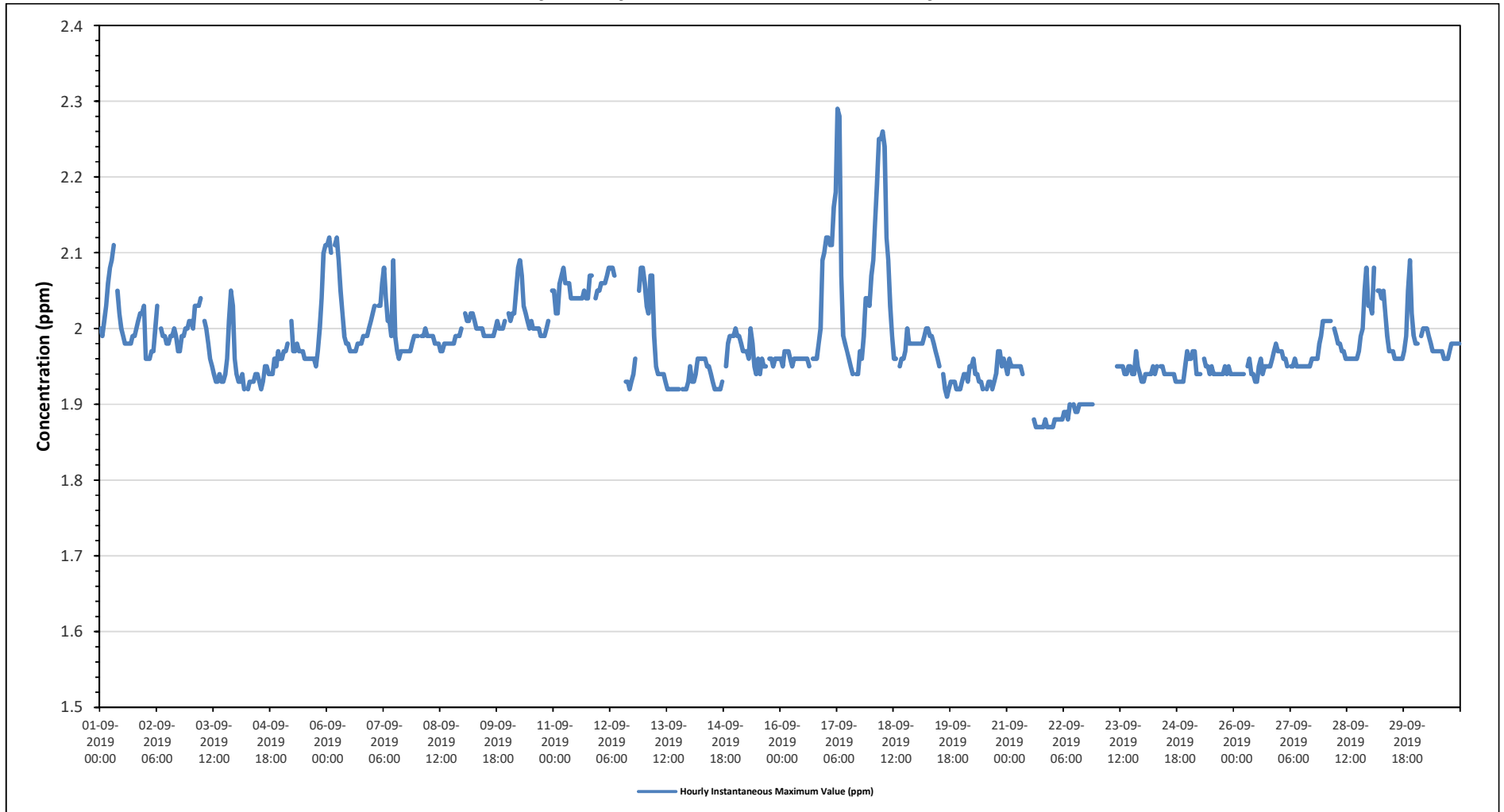
Maximum Hourly Value: 2.29 ppm on September 17 at hour 6	Hours in Service: 720
Maximum Daily Value: 2.06 ppm on September 18	Hours of Data: 669
Minimum Hourly Value: 1.87 ppm on September 21 at hour 0	Hours of Missing Data: 16
Minimum Daily Value: 1.89 ppm on September 22	Hours of Calibration: 35
Monthly Average: 1.98 ppm	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	2.00	1.99	2.01	2.03	2.06	2.08	2.09	2.11	S	2.05	2.02	2.00	1.99	1.98	1.98	1.98	1.99	1.99	2.00	2.01	2.02	2.02	2.03	1.98	2.11	2.02		
Sep 2	1.96	1.96	1.96	1.97	1.97	2.00	2.03	S	2.00	1.99	1.99	1.98	1.98	1.99	1.99	2.00	1.99	1.97	1.97	1.99	1.99	2.00	2.00	2.01	1.96	2.03	1.99	
Sep 3	2.01	2.00	2.03	2.03	2.04	2.04	S	2.01	2.00	1.98	1.96	1.95	1.94	1.93	1.93	1.94	1.93	1.93	1.94	1.96	2.01	2.05	2.03	1.96	1.93	2.05	1.98	
Sep 4	1.94	1.93	1.93	1.94	1.92	S	1.92	1.93	1.93	1.93	1.94	1.94	1.93	1.92	1.93	1.95	1.95	1.94	1.94	1.94	1.96	1.95	1.97	1.96	1.92	1.97	1.94	
Sep 5	1.96	1.97	1.97	1.98	S	2.01	1.97	1.97	1.98	1.97	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.95	1.97	2.00	2.04	2.10	2.11	1.95	2.11	1.98	
Sep 6	2.11	2.12	2.10	S	2.11	2.12	2.09	2.05	2.02	1.99	1.98	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.99	1.99	1.99	2.00	2.01	1.97	2.12	2.02		
Sep 7	2.02	2.03	S	2.03	2.03	2.06	2.08	2.04	2.01	2.01	1.99	2.09	1.99	1.97	1.96	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.99	1.99	1.96	2.09	2.00	
Sep 8	1.99	S	1.99	1.99	2.00	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.97	1.97	1.98	1.98	1.98	1.98	1.98	1.99	1.99	1.99	2.00	1.97	2.00	1.99		
Sep 9	S	2.02	2.01	2.01	2.02	2.02	2.01	2.00	2.00	2.00	1.99	1.99	1.99	1.99	1.99	1.99	2.00	2.01	2.00	2.00	2.00	2.01	S	1.99	2.02	2.00		
Sep 10	2.02	2.01	2.02	2.02	2.05	2.08	2.09	2.07	2.03	2.02	2.01	2.00	2.01	2.00	2.00	2.00	1.99	1.99	1.99	2.00	2.01	S	2.05	1.99	2.09	2.02		
Sep 11	2.05	2.02	2.02	2.06	2.07	2.08	2.06	2.06	2.06	2.04	2.04	2.04	2.04	2.04	2.04	2.05	2.04	2.04	2.07	2.07	S	2.04	2.05	2.02	2.08	2.05		
Sep 12	2.05	2.06	2.06	2.06	2.07	2.08	2.08	2.08	2.07	C	C	C	C	C	1.93	1.93	1.92	1.93	1.94	1.96	S	2.05	2.08	2.08	1.92	2.08	2.02	
Sep 13	2.06	2.03	2.02	2.07	2.07	1.99	1.95	1.94	1.94	1.94	1.94	1.93	1.92	1.92	1.92	1.92	1.92	1.92	1.92	S	1.92	1.92	1.92	1.93	1.92	2.07	1.96	
Sep 14	1.95	1.93	1.93	1.94	1.96	1.96	1.96	1.96	1.96	1.95	1.95	1.94	1.93	1.92	1.92	1.92	1.92	1.92	S	1.95	1.98	1.99	1.99	1.99	1.92	1.99	1.95	
Sep 15	2.00	1.99	1.99	1.98	1.97	1.97	1.97	1.96	2.00	1.98	1.95	1.94	1.96	1.94	1.96	1.95	1.95	S	1.96	1.96	1.95	1.96	1.96	1.96	1.94	2.00	1.97	
Sep 16	1.96	1.95	1.97	1.97	1.97	1.96	1.95	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.95	S	1.96	1.96	1.96	1.98	2.00	2.09	2.10	1.95	2.10	1.97	
Sep 17	2.12	2.12	2.11	2.11	2.16	2.18	2.29	2.28	2.07	1.99	1.98	1.97	1.96	1.95	1.94	S	1.94	1.94	1.97	1.96	1.99	2.04	2.04	2.03	1.94	2.29	2.05	
Sep 18	2.07	2.09	2.14	2.19	2.25	2.25	2.26	2.24	2.12	2.09	2.03	1.99	1.96	1.96	S	1.95	1.96	1.96	1.97	2.00	1.98	1.98	1.98	1.98	1.95	2.26	2.06	
Sep 19	1.98	1.98	1.98	1.98	1.99	2.00	2.00	1.99	1.99	1.98	1.97	1.96	1.95	S	1.94	1.92	1.91	1.92	1.93	1.93	1.93	1.92	1.92	1.92	1.91	2.00	1.96	
Sep 20	1.93	1.94	1.94	1.93	1.95	1.95	1.96	1.94	1.94	1.93	1.93	1.92	S	1.92	1.93	1.93	1.92	1.93	1.94	1.97	1.97	1.95	1.96	1.95	1.92	1.97	1.94	
Sep 21	1.94	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.94	P	P	P	P	R	1.88	1.87	1.87	1.87	1.87	1.87	1.88	1.87	1.87	1.87	1.87	1.96	1.91	
Sep 22	1.87	1.88	1.88	1.88	1.88	1.88	1.89	1.88	1.90	S	S	1.90	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	K	K	1.87	1.90	1.89
Sep 23	K	K	K	K	K	K	K	K	K	S	1.95	1.95	1.95	1.95	1.94	1.94	1.95	1.95	1.94	1.94	1.97	1.95	1.94	1.93	1.93	1.97	-	
Sep 24	1.93	1.94	1.94	1.94	1.94	1.95	1.94	1.95	S	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.93	1.93	1.93	1.93	1.95	1.95	1.97	1.93	1.97	1.94
Sep 25	1.96	1.96	1.97	1.97	1.94	1.94	1.94	S	1.95	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.94	1.95	1.94	1.94	1.94	1.94	1.95	
Sep 26	1.94	1.94	1.94	1.94	1.94	1.94	S	1.95	1.96	1.94	1.94	1.93	1.93	1.95	1.96	1.94	1.95	1.95	1.95	1.95	1.96	1.97	1.98	1.97	1.93	1.98	1.95	
Sep 27	1.97	1.97	1.96	1.96	1.95	S	1.95	1.95	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.96	1.96	1.98	1.99	2.01	1.95	2.01	1.96
Sep 28	2.01	2.01	2.01	2.01	S	2.00	1.99	1.98	1.98	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.97	1.99	2.00	2.05	2.08	2.03	1.96	2.08	1.99	
Sep 29	2.03	2.02	2.08	S	2.05	2.05	2.04	2.05	2.02	1.99	1.97	1.97	1.97	1.96	1.96	1.96	1.96	1.97	1.99	2.05	2.09	2.02	1.99	1.96	2.09	2.01	2.01	
Sep 30	1.98	1.98	S	1.99	2.00	2.00	2.00	1.99	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.96	1.96	1.96	1.97	1.98	1.98	1.98	1.98	1.98	1.96	2.00	1.98	
Diurnal Maximum	2.12	2.12	2.14	2.19	2.25	2.25	2.29	2.28	2.12	2.09	2.04	2.09	2.04	2.04	2.04	2.04	2.05	2.04	2.04	2.07	2.07	2.09	2.10	2.11				
Diurnal Average	1.99	1.99	2.00	2.00	2.01	2.02	2.02	2.01	1.99	1.98	1.97	1.97	1.96	1.96	1.95	1.95	1.95	1.96	1.97	1.97	1.98	1.99	1.99					

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for THC - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2019

Summary of Hourly Instantaneous Maximums

METHANE (CH4) in ppm

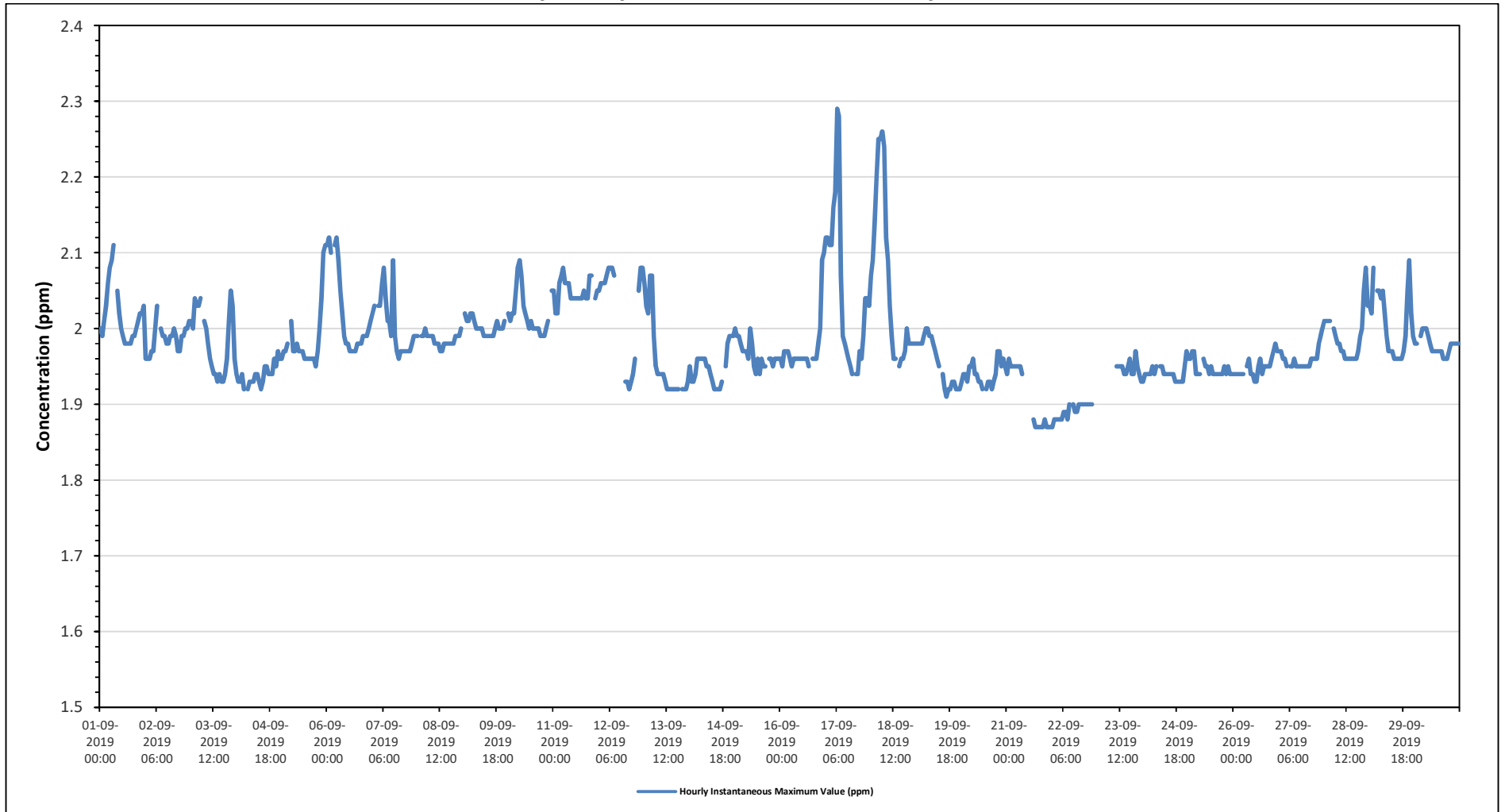
Maximum Hourly Value:	2.29 ppm on September 17 at hour 6	Hours in Service:	720
Maximum Daily Value:	2.06 ppm on September 18	Hours of Data:	669
Minimum Hourly Value:	1.87 ppm on September 21 at hour 15	Hours of Missing Data:	16
Minimum Daily Value:	1.89 ppm on September 22	Hours of Calibration:	35
Monthly Average:	1.98 ppm	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	2.00	1.99	2.01	2.03	2.06	2.08	2.09	2.11	S	2.05	2.02	2.00	1.99	1.98	1.98	1.98	1.98	1.99	1.99	2.00	2.01	2.02	2.02	2.03	1.98	2.11	2.02	
Sep 2	1.96	1.96	1.96	1.97	1.97	2.00	2.03	S	2.00	1.99	1.99	1.98	1.98	1.99	1.99	2.00	1.99	1.97	1.97	1.99	1.99	2.00	2.00	2.01	1.96	2.03	1.99	
Sep 3	2.01	2.00	2.04	2.03	2.03	2.04	S	2.01	2.00	1.98	1.96	1.95	1.94	1.94	1.93	1.94	1.93	1.93	1.94	1.96	2.01	2.05	2.03	1.96	1.93	2.05	1.98	
Sep 4	1.94	1.93	1.93	1.94	1.92	S	1.92	1.93	1.93	1.93	1.94	1.94	1.93	1.92	1.93	1.95	1.95	1.94	1.94	1.94	1.96	1.95	1.97	1.96	1.92	1.97	1.94	
Sep 5	1.96	1.97	1.97	1.98	S	2.01	1.97	1.97	1.98	1.97	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.95	1.97	2.00	2.04	2.10	2.11	1.95	2.11	1.98	
Sep 6	2.11	2.12	2.10	S	2.11	2.12	2.09	2.05	2.02	1.99	1.98	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.99	1.99	1.99	2.00	2.01	2.01	1.97	2.12	2.02	
Sep 7	2.02	2.03	S	2.03	2.03	2.06	2.08	2.04	2.01	2.01	1.99	2.09	1.99	1.97	1.96	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.99	1.99	1.96	2.09	2.00	
Sep 8	1.99	S	1.99	1.99	2.00	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.97	1.97	1.98	1.98	1.98	1.98	1.98	1.99	1.99	1.99	2.00	2.00	1.97	2.00	1.99	
Sep 9	S	2.02	2.01	2.01	2.02	2.02	2.01	2.00	2.00	2.00	1.99	1.99	1.99	1.99	1.99	1.99	2.00	2.01	2.00	2.00	2.00	2.01	S	2.01	1.99	2.02	2.00	
Sep 10	2.02	2.01	2.02	2.02	2.05	2.08	2.09	2.07	2.03	2.02	2.01	2.00	2.01	2.00	2.00	2.00	1.99	1.99	1.99	1.99	2.00	2.01	S	2.05	1.99	2.09	2.02	
Sep 11	2.05	2.02	2.02	2.06	2.07	2.08	2.06	2.06	2.06	2.04	2.04	2.04	2.04	2.04	2.04	2.05	2.04	2.04	2.07	2.07	S	2.04	2.05	2.02	2.08	2.05		
Sep 12	2.05	2.06	2.06	2.06	2.07	2.08	2.08	2.08	2.07	C	C	C	C	C	1.93	1.93	1.92	1.93	1.94	1.96	S	2.05	2.08	2.08	1.92	2.08	2.02	
Sep 13	2.06	2.03	2.02	2.07	2.07	1.99	1.95	1.94	1.94	1.94	1.94	1.93	1.92	1.92	1.92	1.92	1.92	1.92	1.92	S	1.92	1.92	1.92	1.93	1.92	2.07	1.96	
Sep 14	1.95	1.93	1.93	1.94	1.96	1.96	1.96	1.96	1.96	1.95	1.95	1.94	1.93	1.92	1.92	1.92	1.92	1.92	S	1.95	1.98	1.99	1.99	1.99	1.92	1.99	1.95	
Sep 15	2.00	1.99	1.99	1.98	1.97	1.97	1.97	1.96	2.00	1.98	1.95	1.94	1.96	1.94	1.96	1.95	1.95	S	1.96	1.96	1.95	1.96	1.96	1.96	1.94	2.00	1.97	
Sep 16	1.96	1.95	1.97	1.97	1.97	1.96	1.95	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.95	S	1.96	1.96	1.96	1.98	2.00	2.09	2.10	1.95	2.10	1.97	
Sep 17	2.12	2.12	2.11	2.11	2.16	2.18	2.29	2.28	2.07	1.99	1.98	1.97	1.96	1.95	1.94	S	1.94	1.94	1.97	1.96	1.99	2.04	2.04	2.03	1.94	2.29	2.05	
Sep 18	2.07	2.09	2.14	2.20	2.25	2.25	2.26	2.24	2.12	2.09	2.03	1.99	1.96	1.96	S	1.95	1.96	1.96	1.97	2.00	1.98	1.98	1.98	1.98	1.95	2.26	2.06	
Sep 19	1.98	1.98	1.98	1.98	1.99	2.00	2.00	1.99	1.99	1.98	1.97	1.96	1.95	S	1.94	1.92	1.91	1.92	1.92	1.93	1.93	1.92	1.92	1.92	1.91	2.00	1.96	
Sep 20	1.93	1.94	1.94	1.93	1.95	1.95	1.96	1.94	1.94	1.93	1.93	1.92	S	1.92	1.93	1.93	1.92	1.93	1.94	1.97	1.97	1.95	1.96	1.95	1.92	1.97	1.94	
Sep 21	1.94	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.94	P	P	P	P	R	1.88	1.87	1.87	1.87	1.87	1.87	1.88	1.87	1.87	1.87	1.87	1.96	1.91	
Sep 22	1.87	1.88	1.88	1.88	1.88	1.88	1.89	1.89	1.88	1.90	S	1.90	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	K	K	1.87	1.90	1.89
Sep 23	K	K	K	K	K	K	K	K	K	S	1.95	1.95	1.95	1.95	1.94	1.94	1.95	1.96	1.94	1.94	1.97	1.95	1.94	1.93	1.93	1.97	-	
Sep 24	1.93	1.94	1.94	1.94	1.94	1.95	1.94	1.95	S	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.93	1.93	1.93	1.93	1.95	1.95	1.97	1.93	1.97	1.94
Sep 25	1.96	1.96	1.97	1.97	1.94	1.94	1.94	1.94	S	1.96	1.95	1.95	1.94	1.95	1.94	1.94	1.94	1.94	1.94	1.95	1.94	1.95	1.94	1.94	1.94	1.94	1.97	1.95
Sep 26	1.94	1.94	1.94	1.94	1.94	1.94	S	1.95	1.96	1.94	1.94	1.93	1.93	1.95	1.96	1.94	1.95	1.95	1.95	1.95	1.96	1.97	1.98	1.97	1.93	1.98	1.95	
Sep 27	1.97	1.97	1.96	1.96	1.95	S	1.95	1.95	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.96	1.96	1.98	1.99	2.00	1.95	2.00	1.96
Sep 28	2.01	2.01	2.01	2.01	S	2.00	1.99	1.98	1.98	1.97	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.97	1.99	2.00	2.05	2.08	2.03	1.96	2.08	1.99	
Sep 29	2.03	2.02	2.08	S	2.05	2.05	2.04	2.05	2.02	1.99	1.97	1.97	1.97	1.96	1.96	1.96	1.96	1.97	1.99	2.05	2.09	2.02	1.99	1.96	2.09	2.01	2.01	
Sep 30	1.98	1.98	S	1.99	2.00	2.00	2.00	1.99	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.96	1.96	1.96	1.97	1.98	1.98	1.98	1.98	1.98	1.96	2.00	1.98	
Diurnal Maximum	2.12	2.12	2.14	2.20	2.25	2.25	2.29	2.28	2.12	2.09	2.04	2.09	2.04	2.04	2.04	2.04	2.05	2.04	2.04	2.07	2.07	2.09	2.10	2.11				
Diurnal Average	1.99	1.99	2.00	2.00	2.01	2.02	2.02	2.01	1.99	1.98	1.97	1.97	1.96	1.96	1.95	1.95	1.95	1.96	1.97	1.97	1.98	1.99	1.99	1.99				

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for CH4 - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2019

Summary of Hourly Instantaneous Maximums

NON-METHANE HYDROCARBONS (NMHC) in ppm

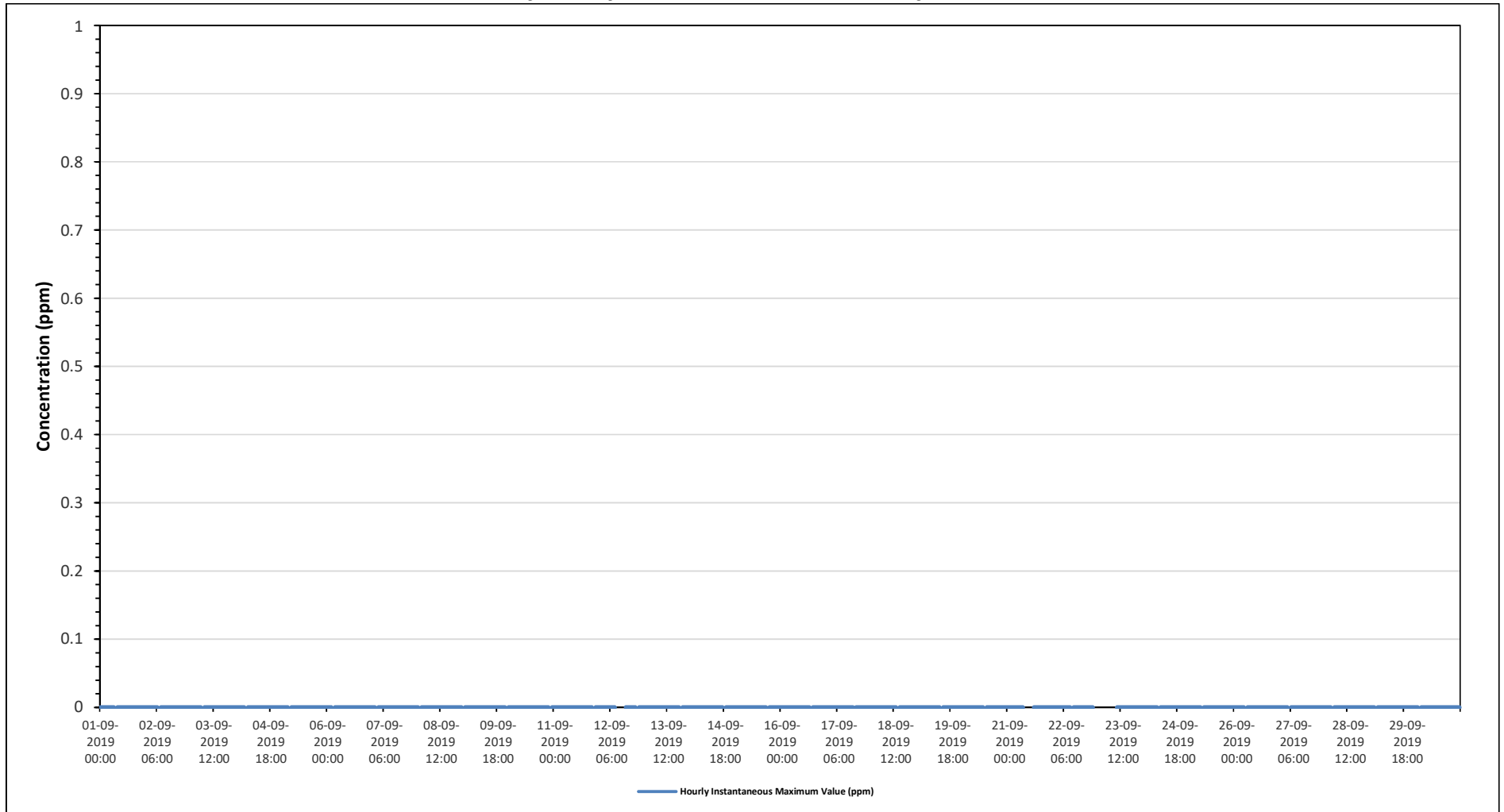
Maximum Hourly Value:	0.00 ppm	on September 1 at hour 0	Hours in Service:	720
Maximum Daily Value:	0.00 ppm	on September 1	Hours of Data:	669
Minimum Hourly Value:	0.00 ppm	on September 1 at hour 0	Hours of Missing Data:	16
Minimum Daily Value:	0.00 ppm	on September 1	Hours of Calibration:	35
Monthly Average:	0.00 ppm		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	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 2	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 3	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00
Sep 10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00
Sep 11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00
Sep 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C	C	C	C	C	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep 14	0.00	0.00	0.00	0.00	0.00	0.00	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 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	S	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	S	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	S	0.00	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 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	S	0.00	0.00	0.00	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	S	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	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	P	P	P	P	R	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	K	K	0.00	0.00
Sep 23	K	K	K	K	K	K	K	K	K	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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
Diurnal Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for NMHC - 842b Station





PEACE RIVER AREA MONITORING PROGRAM

842b Station - September 2019

Summary of Hourly Instantaneous Maximums

WIND SPEED (WS) in km/hr

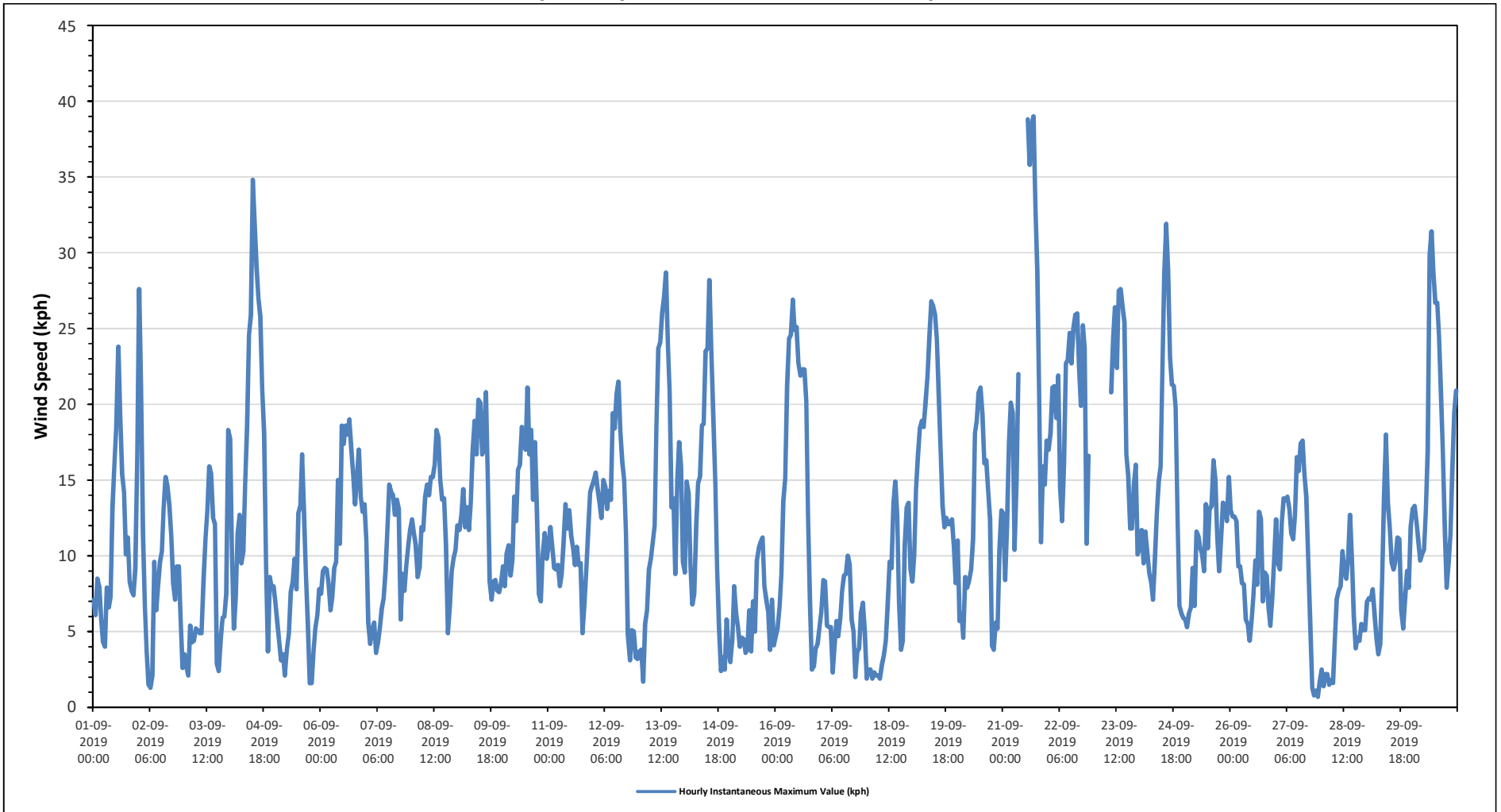
Maximum Hourly Value:	39.0 kph on September 21 at hour 16	Hours in Service:	720
Maximum Daily Value:	21.6 kph on September 21	Hours of Data:	705
Minimum Hourly Value:	0.7 kph on September 27 at hour 22	Hours of Missing Data:	15
Minimum Daily Value:	5.6 kph on September 28	Hours of Calibration:	0
Monthly Average:	11.9 kph	Operational Uptime:	97.9

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	7.1	6.1	8.5	8.0	5.8	4.3	4.0	7.9	6.6	7.3	13.2	16.0	18.4	23.8	19.3	15.4	14.2	10.1	11.2	8.3	7.7	7.4	9.2	16.5	4.0	23.8	10.7
Sep 2	27.6	21.2	11.5	6.7	3.7	1.5	1.3	2.1	9.6	6.4	8.0	9.6	10.3	13.2	15.2	14.6	13.3	11.3	8.2	7.1	9.3	9.3	5.7	2.6	1.3	27.6	9.6
Sep 3	3.5	2.7	2.1	5.4	4.3	4.4	5.2	5.1	4.9	4.9	8.6	11.2	13.0	15.9	15.4	12.5	12.1	2.9	2.4	4.5	5.9	6.0	7.5	18.3	2.1	18.3	7.4
Sep 4	17.7	10.0	5.2	7.3	11.5	12.7	9.5	10.3	14.8	18.6	24.6	25.9	34.8	32.1	29.1	27.0	25.8	21.0	18.1	9.5	3.7	8.6	7.9	8.0	3.7	34.8	16.4
Sep 5	6.9	5.6	4.3	3.1	3.5	2.1	3.8	4.9	7.6	8.3	9.8	7.8	12.8	13.3	16.7	12.8	8.8	5.6	1.6	1.6	3.7	5.2	6.1	7.8	1.6	16.7	6.8
Sep 6	7.5	9.0	9.2	9.1	8.2	6.4	7.3	9.2	9.6	15.0	10.8	18.6	17.4	18.6	18.0	19.0	17.1	15.4	13.4	15.2	17.0	13.9	12.9	13.4	6.4	19.0	13.0
Sep 7	11.0	5.6	4.2	5.1	5.6	3.6	4.3	5.2	6.5	7.2	9.0	11.8	14.7	14.2	14.0	12.7	13.7	13.1	5.8	8.8	7.7	9.3	10.7	11.7	3.6	14.7	9.0
Sep 8	12.4	11.5	10.7	8.6	9.2	11.9	11.7	13.9	14.7	14.0	15.2	15.2	16.0	18.3	17.8	15.0	13.7	13.8	10.7	4.9	6.7	9.0	9.8	10.4	4.9	18.3	12.3
Sep 9	12.0	11.7	12.7	14.4	11.9	13.2	11.7	13.5	16.9	18.9	16.7	20.3	20.1	16.7	17.0	20.8	15.2	8.3	7.1	8.3	8.4	7.7	7.6	8.2	7.1	20.8	13.3
Sep 10	9.3	8.0	10.2	10.7	8.7	9.7	13.9	12.3	15.7	16.0	18.5	17.5	17.0	21.1	16.7	18.3	13.7	17.5	12.9	7.5	7.0	10.1	11.5	9.8	7.0	21.1	13.1
Sep 11	10.6	11.9	10.6	9.2	9.1	9.4	8.0	8.8	10.9	13.4	11.8	13.0	11.3	10.5	9.4	10.6	9.4	9.5	4.9	6.9	9.1	11.7	14.2	14.6	4.9	14.6	10.4
Sep 12	15.0	15.5	14.4	13.5	12.5	15.0	14.6	13.1	14.3	13.7	19.4	18.4	20.7	21.5	18.2	16.2	15.0	11.5	4.8	3.1	5.1	5.0	3.3	3.2	3.1	21.5	12.8
Sep 13	3.7	3.8	1.7	5.5	6.4	9.1	9.8	10.8	12.0	18.6	23.7	24.1	26.0	27.1	28.7	24.0	20.8	13.2	13.8	8.8	15.0	17.5	15.9	9.6	1.7	28.7	14.6
Sep 14	8.9	14.9	14.1	9.3	6.8	7.5	11.9	14.8	15.2	18.6	18.7	23.5	23.7	28.2	23.6	19.4	14.7	9.1	5.3	2.4	3.3	2.5	5.8	3.7	2.4	28.2	12.7
Sep 15	3.0	4.5	8.0	6.2	5.3	4.0	4.6	4.5	3.6	3.8	6.4	3.7	7.0	5.0	9.7	10.5	10.9	11.2	8.0	7.1	6.3	3.8	7.1	4.1	3.0	11.2	6.2
Sep 16	4.7	5.2	6.7	8.8	13.6	15.1	21.2	24.3	24.6	26.9	24.9	25.1	22.7	21.9	22.3	22.3	20.2	12.5	7.0	2.5	2.7	3.9	4.2	5.3	2.5	26.9	14.5
Sep 17	6.3	8.4	8.3	5.4	5.3	5.3	2.3	4.2	5.7	4.7	5.9	7.7	8.7	8.8	10.0	9.4	5.8	5.0	2.0	3.7	3.9	6.3	6.9	4.9	2.0	10.0	6.0
Sep 18	1.9	2.5	2.5	1.9	2.3	2.1	2.1	1.9	2.8	3.4	4.4	6.8	9.6	9.2	13.5	14.9	12.7	6.9	3.8	4.4	10.6	13.2	13.5	9.1	1.9	14.9	6.5
Sep 19	8.3	10.1	14.4	16.6	18.4	18.9	18.5	20.1	21.8	24.4	26.8	26.5	25.9	24.3	20.6	16.9	13.3	11.9	12.5	12.1	12.1	12.4	10.6	8.2	8.2	26.8	16.9
Sep 20	11.0	5.7	6.2	4.6	8.6	7.9	8.3	9.1	11.1	18.1	18.9	20.8	21.1	19.3	16.1	16.3	14.3	12.4	4.1	3.8	5.6	5.2	10.4	13.0	3.8	21.1	11.3
Sep 21	12.8	8.4	12.2	17.6	20.1	19.4	10.4	14.9	22.0	P	P	P	P	38.8	35.8	38.4	39.0	33.1	28.8	20.3	10.9	15.9	14.7	17.6	8.4	39.0	21.6
Sep 22	17.0	18.1	21.1	21.2	19.1	21.9	14.5	12.3	16.1	22.7	22.9	24.7	22.7	25.0	25.9	26.0	22.3	19.9	25.2	23.7	10.8	16.6	K	K	10.8	26.0	20.4
Sep 23	K	K	K	K	K	K	K	K	K	20.8	24.4	26.4	22.4	27.5	27.6	26.5	25.4	16.7	15.3	11.8	11.8	14.6	16.0	10.1	10.1	27.6	-
Sep 24	10.5	11.7	9.5	11.6	10.2	8.9	8.2	7.1	9.8	12.8	14.9	15.9	22.3	28.6	31.9	28.7	23.1	21.3	21.2	19.8	12.2	6.7	6.2	5.9	5.9	31.9	15.0
Sep 25	5.8	5.3	6.2	6.6	9.2	6.7	11.6	11.3	10.5	10.1	9.0	13.4	10.5	13.1	13.3	16.3	15.0	11.2	9.0	11.1	13.5	13.4	12.3	15.2	5.3	16.3	10.8
Sep 26	13.0	12.6	12.6	12.3	9.3	9.3	8.2	8.1	5.8	5.5	4.4	5.7	7.3	9.7	8.1	12.9	12.4	7.0	8.9	8.7	6.5	5.4	7.3	9.8	4.4	13.0	8.8
Sep 27	12.4	9.5	9.1	12.2	13.8	13.7	13.9	13.1	11.5	11.1	12.7	16.5	15.6	17.4	17.6	15.4	13.9	9.8	5.8	1.3	0.8	1.1	0.7	1.7	0.7	17.6	10.4
Sep 28	2.5	1.4	2.2	2.2	1.5	1.8	1.6	4.5	7.2	7.7	8.0	10.3	9.0	8.5	9.8	12.7	9.9	6.0	3.9	4.6	4.4	5.5	5.1	5.1	1.4	12.7	5.6
Sep 29	7.0	7.2	7.1	7.8	6.1	4.5	3.5	4.2	8.4	13.8	18.0	13.5	11.9	9.6	9.1	9.6	11.2	11.1	6.4	5.2	7.2	9.0	7.9	11.9	3.5	18.0	8.8
Sep 30	13.1	13.2	12.3	11.0	9.7	10.1	10.4	12.9	16.9	29.9	31.4	28.7	26.7	26.7	24.5	20.8	16.9	12.0	7.9	9.5	11.4	15.7	19.5	20.9	7.9	31.4	17.2
Diurnal Maximum	27.6	21.2	21.1	21.2	20.1	21.9	21.2	24.3	24.6	29.9	31.4	28.7	34.8	38.8	35.8	38.4	39.0	33.1	28.8	23.7	17.0	17.5	19.5	20.9			
Diurnal Average	9.7	9.0	8.9	9.0	9.0	9.0	8.8	9.8	11.6	13.7	15.2	16.5	17.2	18.9	18.5	17.9	15.8	12.3	9.7	8.2	8.0	9.1	9.3	9.7			

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for WS - 842b Station



RENO STATION



PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2019

Summary of Hourly Instantaneous Maximums

SULPHUR DIOXIDE (SO₂) in ppb

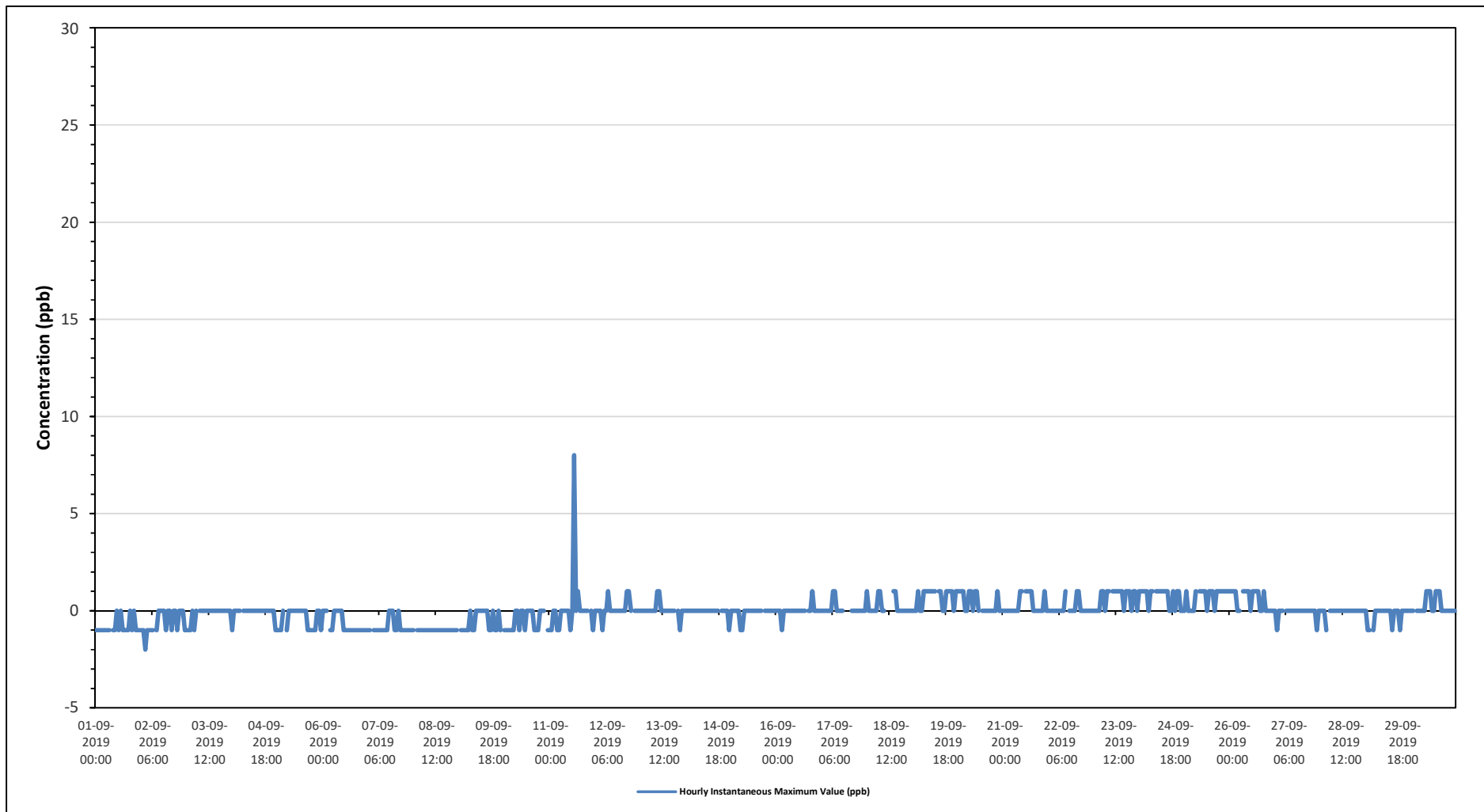
Maximum Hourly Value:	8 ppb	on September 11 at hour 13	Hours in Service:	720
Maximum Daily Value:	0.7 ppb	on September 24	Hours of Data:	683
Minimum Hourly Value:	-2 ppb	on September 2 at hour 2	Hours of Missing Data:	4
Minimum Daily Value:	-1.0 ppb	on September 8	Hours of Calibration:	33
Monthly Average:	0.0 ppb		Operational Uptime:	99.4

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

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	O	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	P	Operator Error	N	Not in Service
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for SO2 - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2019

Summary of Hourly Instantaneous Maximums

TOTAL REDUCED SULPHUR (TRS) in ppb

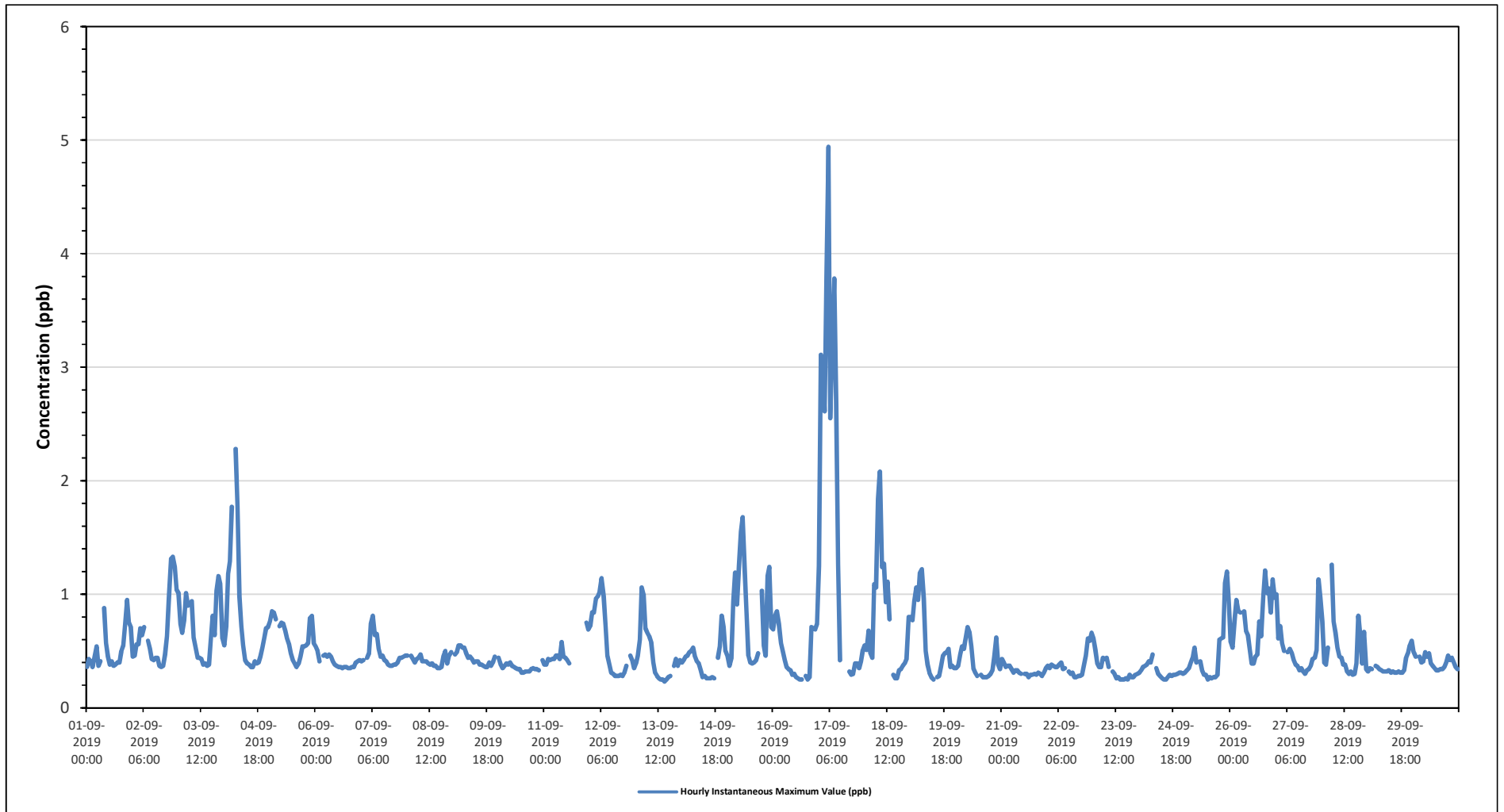
Maximum Hourly Value:	4.94 ppb on September 17 at hour 5	Hours in Service:	720
Maximum Daily Value:	1.78 ppb on September 17	Hours of Data:	680
Minimum Hourly Value:	0.23 ppb on September 13 at hour 15	Hours of Missing Data:	4
Minimum Daily Value:	0.32 ppb on September 24	Hours of Calibration:	36
Monthly Average:	0.54 ppb	Operational Uptime:	99.4

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	0.36	0.43	0.41	0.36	0.45	0.54	0.37	0.41	S	0.88	0.57	0.45	0.38	0.41	0.37	0.38	0.4	0.4	0.5	0.55	0.73	0.95	0.75	0.71	0.36	0.95	0.51
Sep 2	0.45	0.46	0.56	0.56	0.7	0.64	0.71	S	0.59	0.52	0.43	0.42	0.44	0.44	0.37	0.36	0.37	0.47	0.63	0.96	1.31	1.33	1.24	1.04	0.36	1.33	0.65
Sep 3	1.01	0.74	0.66	0.77	1.01	0.9	S	0.94	0.62	0.53	0.44	0.43	0.38	0.39	0.37	0.38	0.61	0.81	0.64	1.03	1.16	1.09	0.61	0.37	1.16	0.69	
Sep 4	0.55	0.72	1.18	1.29	1.77	S	2.28	1.77	0.98	0.72	0.55	0.42	0.39	0.38	0.36	0.36	0.41	0.39	0.4	0.45	0.53	0.61	0.7	0.71	0.36	2.28	0.78
Sep 5	0.76	0.85	0.84	0.78	S	0.72	0.75	0.74	0.68	0.61	0.56	0.48	0.42	0.39	0.36	0.39	0.45	0.54	0.54	0.55	0.57	0.79	0.81	0.57	0.36	0.85	0.62
Sep 6	0.54	0.5	0.41	S	0.46	0.47	0.45	0.47	0.45	0.41	0.38	0.37	0.36	0.36	0.35	0.36	0.36	0.35	0.35	0.36	0.36	0.4	0.41	0.42	0.35	0.54	0.41
Sep 7	0.41	0.42	S	0.44	0.48	0.74	0.81	0.64	0.65	0.52	0.45	0.46	0.42	0.41	0.38	0.37	0.37	0.38	0.38	0.4	0.44	0.44	0.45	0.46	0.37	0.81	0.47
Sep 8	0.46	S	0.46	0.43	0.4	0.43	0.44	0.47	0.41	0.41	0.41	0.39	0.38	0.39	0.37	0.37	0.35	0.35	0.36	0.45	0.5	0.39	0.46	0.49	0.35	0.50	0.42
Sep 9	S	0.47	0.49	0.55	0.55	0.53	0.53	0.48	0.44	0.45	0.43	0.4	0.41	0.41	0.38	0.38	0.37	0.36	0.36	0.4	0.37	0.4	0.45	S	0.36	0.55	0.44
Sep 10	0.44	0.38	0.35	0.37	0.39	0.38	0.4	0.37	0.36	0.35	0.34	0.34	0.31	0.31	0.32	0.32	0.32	0.34	0.35	0.34	0.34	0.33	S	0.42	0.31	0.44	0.36
Sep 11	0.38	0.38	0.43	0.42	0.43	0.43	0.46	0.46	0.43	0.58	0.45	0.44	0.42	0.39	C	C	C	C	C	C	C	S	0.75	0.69	0.38	0.75	-
Sep 12	0.72	0.84	0.84	0.96	0.98	1.02	1.14	0.98	0.72	0.46	0.38	0.31	0.3	0.28	0.28	0.28	0.29	0.28	0.31	0.37	S	0.46	0.42	0.35	0.28	1.14	0.56
Sep 13	0.39	0.46	0.6	1.06	1	0.7	0.66	0.63	0.58	0.4	0.31	0.28	0.26	0.25	0.25	0.23	0.25	0.27	0.28	S	0.37	0.43	0.37	0.42	0.23	1.06	0.45
Sep 14	0.4	0.42	0.45	0.46	0.49	0.5	0.53	0.45	0.41	0.39	0.33	0.27	0.28	0.26	0.26	0.26	0.27	0.26	S	0.44	0.54	0.81	0.71	0.5	0.26	0.81	0.42
Sep 15	0.46	0.37	0.44	0.94	1.19	0.91	1.25	1.55	1.68	1.24	0.85	0.46	0.4	0.39	0.4	0.42	0.48	S	1.03	0.55	0.46	1.16	1.24	0.71	0.37	1.68	0.81
Sep 16	0.69	0.81	0.85	0.74	0.57	0.5	0.42	0.36	0.34	0.33	0.29	0.3	0.27	0.26	0.25	0.25	S	0.28	0.25	0.27	0.71	0.7	0.69	0.74	0.25	0.85	0.47
Sep 17	1.25	3.11	2.97	2.61	3.81	4.94	2.55	3.24	3.78	2.67	1.26	0.42	P	P	R	R	0.32	0.29	0.3	0.39	0.39	0.35	0.41	0.51	0.29	4.94	1.78
Sep 18	0.55	0.51	0.68	0.48	0.44	1.09	1.06	1.84	2.08	1.24	1.27	0.93	1.11	0.78	S	0.29	0.26	0.26	0.33	0.34	0.37	0.39	0.43	0.8	0.26	2.08	0.76
Sep 19	0.8	0.77	0.94	1.06	0.95	1.19	1.22	0.96	0.5	0.38	0.31	0.27	0.25	S	0.27	0.28	0.36	0.46	0.48	0.49	0.52	0.36	0.37	0.35	0.25	1.22	0.59
Sep 20	0.35	0.37	0.47	0.54	0.52	0.62	0.71	0.66	0.54	0.35	0.31	0.28	S	0.29	0.27	0.27	0.27	0.28	0.3	0.33	0.45	0.62	0.38	0.34	0.27	0.71	0.41
Sep 21	0.43	0.4	0.36	0.37	0.37	0.34	0.31	0.33	0.33	0.31	0.3	S	0.3	0.3	0.27	0.29	0.29	0.3	0.29	0.31	0.3	0.28	0.31	0.35	0.27	0.43	0.32
Sep 22	0.37	0.35	0.38	0.37	0.36	0.36	0.38	0.4	0.34	0.35	S	0.32	0.3	0.31	0.27	0.27	0.28	0.28	0.29	0.37	0.46	0.61	0.59	0.66	0.27	0.66	0.38
Sep 23	0.61	0.51	0.39	0.36	0.36	0.44	0.43	0.44	0.36	S	0.32	0.3	0.26	0.27	0.25	0.25	0.25	0.26	0.25	0.29	0.27	0.27	0.29	0.3	0.25	0.61	0.34
Sep 24	0.31	0.33	0.36	0.37	0.38	0.41	0.4	0.47	S	0.35	0.3	0.28	0.26	0.25	0.25	0.27	0.29	0.28	0.29	0.29	0.3	0.31	0.31	0.3	0.25	0.47	0.32
Sep 25	0.31	0.33	0.35	0.4	0.44	0.53	0.4	S	0.41	0.33	0.29	0.29	0.25	0.27	0.26	0.27	0.27	0.29	0.6	0.61	0.62	1.1	1.2	0.94	0.25	1.20	0.47
Sep 26	0.58	0.53	0.76	0.95	0.85	0.84	S	0.85	0.68	0.64	0.51	0.39	0.39	0.45	0.47	0.76	0.63	0.98	1.21	1.01	1.05	0.84	1.13	0.97	0.39	1.21	0.76
Sep 27	1	0.61	0.72	0.57	0.5	S	0.49	0.52	0.48	0.42	0.38	0.37	0.33	0.35	0.32	0.3	0.33	0.34	0.37	0.43	0.44	0.51	1.13	0.97	0.30	1.13	0.52
Sep 28	0.76	0.4	0.38	0.53	S	1.26	0.76	0.66	0.53	0.45	0.44	0.38	0.38	0.32	0.3	0.32	0.29	0.3	0.39	0.81	0.64	0.39	0.67	0.34	0.29	1.26	0.51
Sep 29	0.32	0.35	0.34	S	0.37	0.36	0.34	0.33	0.32	0.32	0.32	0.33	0.31	0.32	0.31	0.31	0.32	0.31	0.31	0.33	0.44	0.48	0.55	0.59	0.31	0.59	0.36
Sep 30	0.49	0.45	S	0.45	0.4	0.41	0.49	0.45	0.48	0.39	0.37	0.35	0.33	0.33	0.34	0.34	0.36	0.4	0.46	0.42	0.44	0.4	0.36	0.34	0.33	0.49	0.40
Diurnal Maximum	1.25	3.11	2.97	2.61	3.81	4.94	2.55	3.24	3.78	2.67	1.27	0.93	1.11	0.78	0.47	0.76	0.63	0.98	1.21	1.01	1.31	1.33	1.24	1.04			
Diurnal Average	0.56	0.60	0.65	0.69	0.74	0.79	0.74	0.78	0.72	0.59	0.47	0.38	0.37	0.36	0.32	0.33	0.34	0.37	0.44	0.47	0.54	0.60	0.64	0.57			

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for TRS - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2019

Summary of Hourly Instantaneous Maximums

TOTAL HYDROCARBONS (THC) in ppm

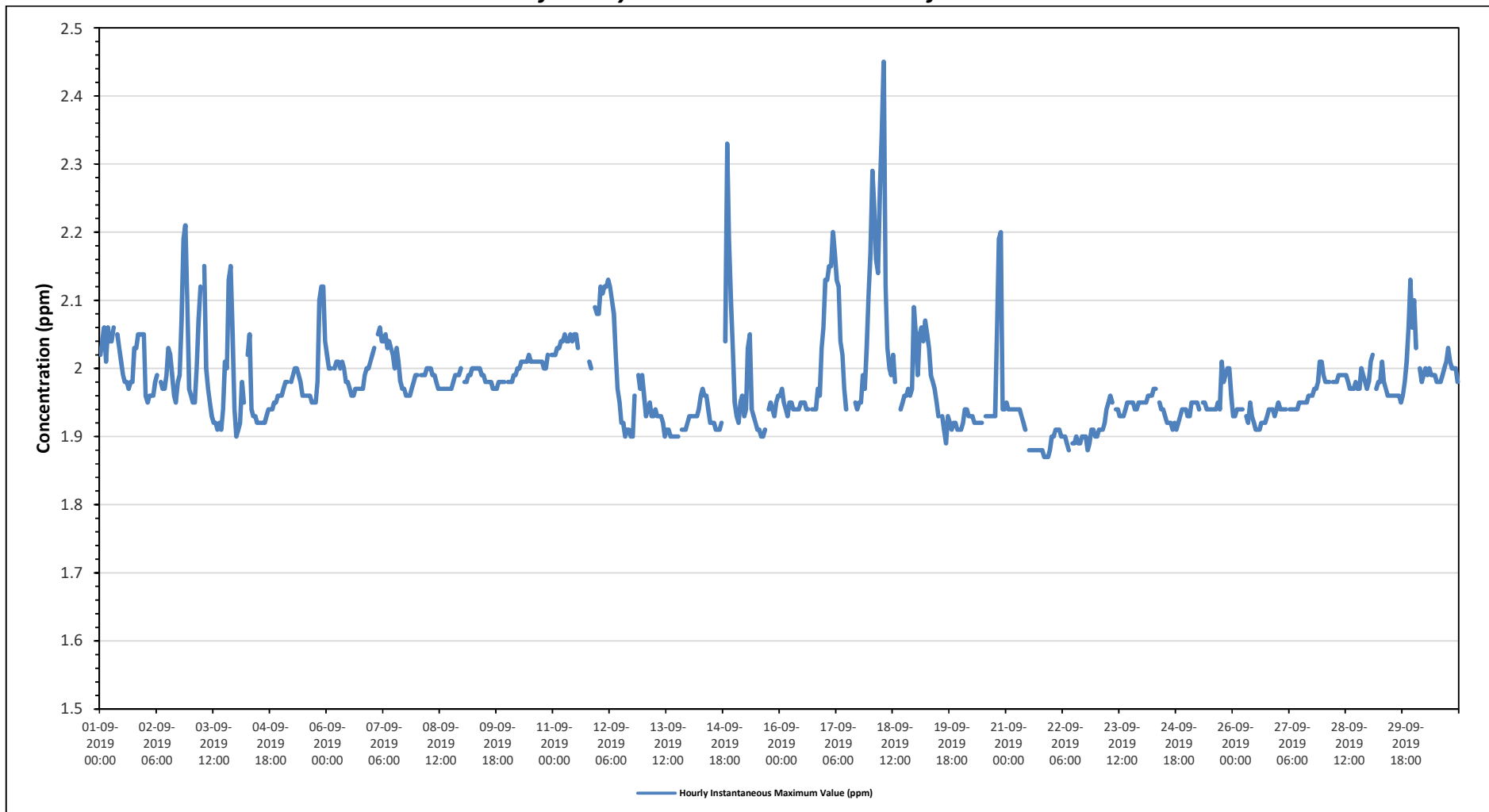
Maximum Hourly Value:	2.45 ppm on September 18 at hour 7	Hours in Service:	720
Maximum Daily Value:	2.09 ppm on September 18	Hours of Data:	680
Minimum Hourly Value:	1.87 ppm on September 21 at hour 20	Hours of Missing Data:	5
Minimum Daily Value:	1.90 ppm on September 22	Hours of Calibration:	35
Monthly Average:	1.98 ppm	Operational Uptime:	99.3

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
Sep 1	2.02	2.04	2.06	2.01	2.06	2.04	2.04	2.06	S	2.05	2.03	2.01	1.99	1.98	1.98	1.97	1.98	1.98	2.03	2.03	2.05	2.05	2.05	2.05	1.97	2.06	2.02	
Sep 2	1.96	1.95	1.96	1.96	1.96	1.98	1.99	S	1.98	1.97	1.97	1.99	2.03	2.02	1.99	1.96	1.95	1.98	1.99	2.07	2.19	2.21	2.10	1.97	1.95	2.21	2.01	
Sep 3	1.96	1.95	1.95	2.00	2.07	2.12	S	2.15	2.00	1.97	1.95	1.93	1.92	1.92	1.91	1.92	1.91	1.94	2.01	2.00	2.13	2.15	2.05	1.94	1.91	2.15	1.99	
Sep 4	1.90	1.91	1.92	1.98	1.95	S	2.02	2.05	1.94	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.93	1.94	1.94	1.94	1.95	1.95	1.96	1.96	1.90	2.05	1.94	
Sep 5	1.96	1.97	1.98	1.98	S	1.98	1.99	2.00	2.00	1.99	1.98	1.96	1.96	1.96	1.96	1.96	1.95	1.95	1.95	1.98	2.10	2.12	2.12	2.04	1.95	2.12	1.99	
Sep 6	2.02	2.00	2.00	S	2.00	2.01	2.01	2.00	2.01	2.00	1.98	1.98	1.97	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.99	2.00	2.00	2.01	1.96	2.02	1.99	
Sep 7	2.02	2.03	S	2.05	2.06	2.04	2.04	2.05	2.03	2.04	2.03	2.02	2.00	2.03	2.01	1.98	1.97	1.97	1.96	1.96	1.96	1.97	1.98	1.99	1.96	2.06	2.01	
Sep 8	1.99	S	1.99	1.99	1.99	2.00	2.00	2.00	1.99	1.99	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.99	1.99	2.00	1.97	2.00	1.98		
Sep 9	S	1.98	1.98	1.99	1.99	2.00	2.00	2.00	2.00	2.00	1.99	1.99	1.98	1.98	1.98	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.98	S	1.97	2.00	1.99	
Sep 10	1.98	1.98	1.98	1.99	1.99	2.00	2.00	2.01	2.01	2.01	2.01	2.02	2.01	2.01	2.01	2.01	2.01	2.01	2.00	2.00	2.02	S	2.02	1.98	2.02	2.00		
Sep 11	2.02	2.02	2.03	2.03	2.04	2.04	2.05	2.04	2.04	2.05	2.04	2.05	2.05	2.03	C	C	C	C	C	2.01	2.00	2.00	S	2.09	2.08	2.04		
Sep 12	2.08	2.12	2.11	2.12	2.12	2.13	2.12	2.10	2.08	2.02	1.97	1.95	1.92	1.92	1.90	1.91	1.91	1.90	1.90	1.90	1.90	S	1.91	1.91	1.91	1.92	1.90	
Sep 13	1.96	1.93	1.94	1.95	1.93	1.93	1.94	1.93	1.93	1.93	1.92	1.90	1.91	1.91	1.90	1.90	1.90	1.90	1.90	1.90	S	1.91	1.91	1.91	1.92	1.90		
Sep 14	1.93	1.93	1.93	1.93	1.93	1.94	1.96	1.97	1.96	1.96	1.94	1.92	1.92	1.92	1.91	1.91	1.91	1.91	1.92	S	2.04	2.33	2.19	2.10	2.03	1.91	2.33	1.98
Sep 15	1.95	1.93	1.92	1.95	1.96	1.93	1.94	2.03	2.05	1.94	1.93	1.92	1.91	1.91	1.90	1.90	1.91	S	1.94	1.95	1.94	1.93	1.95	1.96	1.90	2.05	1.94	
Sep 16	1.96	1.97	1.95	1.94	1.93	1.95	1.95	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.94	1.94	S	1.94	1.94	1.94	1.97	1.96	2.03	2.06	1.93	2.06	1.96	
Sep 17	2.13	2.13	2.15	2.15	2.20	2.17	2.13	2.12	2.04	2.02	1.97	1.94	P	P	R	R	1.95	1.94	1.95	1.95	1.99	1.97	2.03	2.11	1.94	2.20	2.05	
Sep 18	2.17	2.29	2.24	2.16	2.14	2.26	2.35	2.45	2.12	2.03	2.00	1.99	2.02	1.98	Y	S	1.94	1.95	1.96	1.96	1.97	1.96	1.97	2.09	1.94	2.45	2.09	
Sep 19	2.05	1.99	2.05	2.06	2.04	2.07	2.05	2.03	1.99	1.98	1.97	1.95	1.93	S	1.93	1.91	1.89	1.93	1.92	1.91	1.92	1.92	1.91	1.91	1.89	2.07	1.97	
Sep 20	1.91	1.92	1.94	1.94	1.93	1.93	1.93	1.92	1.92	1.92	1.92	1.92	S	1.93	1.93	1.93	1.93	1.93	1.93	2.06	2.19	2.20	1.94	1.94	1.91	2.20	1.96	
Sep 21	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.92	1.91	S	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.87	1.87	1.87	1.88	1.87	1.87	1.88	1.91	
Sep 22	1.90	1.90	1.91	1.91	1.91	1.90	1.90	1.90	1.89	1.88	S	1.89	1.89	1.90	1.89	1.89	1.90	1.90	1.90	1.88	1.89	1.91	1.91	1.91	1.90	1.88	1.91	1.90
Sep 23	1.90	1.91	1.91	1.91	1.92	1.94	1.95	1.96	1.95	S	1.94	1.94	1.93	1.93	1.93	1.94	1.95	1.95	1.95	1.95	1.94	1.94	1.95	1.95	1.90	1.96	1.94	
Sep 24	1.95	1.95	1.95	1.96	1.96	1.96	1.97	1.97	S	1.95	1.94	1.94	1.93	1.92	1.92	1.92	1.91	1.92	1.91	1.92	1.93	1.94	1.94	1.94	1.91	1.97	1.94	
Sep 25	1.93	1.93	1.95	1.95	1.95	1.95	1.94	S	1.93	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.95	1.94	2.01	1.98	1.99	2.00	2.00	1.96	1.93	2.01	1.96	
Sep 26	1.93	1.93	1.94	1.94	1.94	1.94	1.94	S	1.94	1.92	1.92	1.95	1.93	1.92	1.91	1.91	1.91	1.92	1.92	1.93	1.94	1.94	1.93	1.94	1.91	1.95	1.93	
Sep 27	1.95	1.94	1.94	1.94	1.94	S	1.94	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.97	1.97	1.98	2.01	2.01	1.94	2.01	1.96	
Sep 28	1.99	1.98	1.98	1.98	S	1.98	1.98	1.98	1.99	1.99	1.99	1.99	1.99	1.99	1.98	1.97	1.97	1.97	1.98	1.97	1.97	2.00	1.99	1.98	1.97	1.97	2.00	1.98
Sep 29	1.98	2.01	2.02	S	1.97	1.98	1.98	2.01	1.98	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.95	1.96	1.98	2.01	2.06	2.13	2.06	1.95	2.13	1.99	1.99	
Sep 30	2.10	2.03	S	2.00	1.98	1.99	2.00	1.99	2.00	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.99	2.00	2.01	2.03	2.01	2.00	2.00	1.98	1.98	2.10	2.00	
Diurnal Maximum	2.17	2.29	2.24	2.16	2.20	2.26	2.35	2.45	2.12	2.05	2.04	2.05	2.05	2.03	2.01	2.01	2.01	2.01	2.03	2.07	2.33	2.21	2.13	2.11				
Diurnal Average	1.98	1.98	1.99	1.99	1.99	2.00	2.00	2.02	1.99	1.98	1.97	1.96	1.95	1.95	1.94	1.94	1.94	1.95	1.96	1.97	2.00	2.00	1.99	1.99				

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for THC - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2019

Summary of Hourly Instantaneous Maximums

METHANE (CH4) in ppm

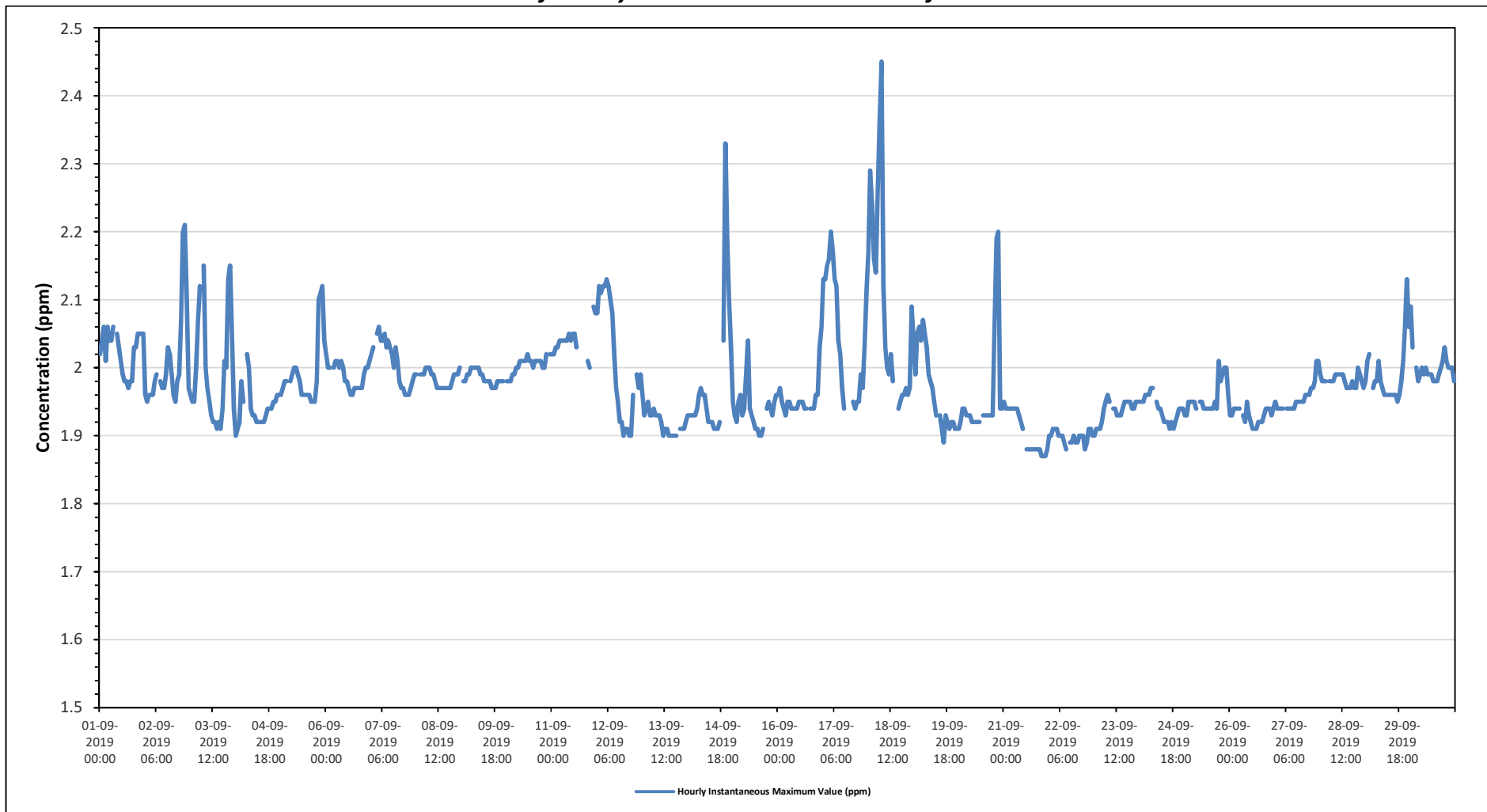
Maximum Hourly Value:	2.45 ppm on September 18 at hour 7	Hours in Service:	720
Maximum Daily Value:	2.09 ppm on September 18	Hours of Data:	680
Minimum Hourly Value:	1.87 ppm on September 21 at hour 20	Hours of Missing Data:	5
Minimum Daily Value:	1.90 ppm on September 22	Hours of Calibration:	35
Monthly Average:	1.98 ppm	Operational Uptime:	99.3

Day	Hourly Period Starting at (MST)																							Daily Minimum	Daily Maximum	Daily Average	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23
Sep 1	2.02	2.04	2.06	2.01	2.06	2.04	2.04	2.06	S	2.05	2.03	2.01	1.99	1.98	1.98	1.97	1.98	1.98	2.03	2.03	2.05	2.05	2.05	2.05	1.97	2.06	2.02
Sep 2	1.96	1.95	1.96	1.96	1.96	1.98	1.99	S	1.98	1.97	1.97	1.99	2.03	2.02	1.99	1.96	1.95	1.98	1.99	2.07	2.20	2.21	2.10	1.97	1.95	2.21	2.01
Sep 3	1.96	1.95	1.95	2.00	2.07	2.12	S	2.15	2.00	1.97	1.95	1.93	1.92	1.92	1.91	1.92	1.91	1.94	2.01	2.00	2.13	2.15	2.05	1.94	1.91	2.15	1.99
Sep 4	1.90	1.91	1.92	1.98	1.95	S	2.02	2.00	1.94	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.93	1.94	1.94	1.94	1.95	1.95	1.96	1.96	1.90	2.02	1.94
Sep 5	1.96	1.97	1.98	1.98	S	1.98	1.99	2.00	2.00	1.99	1.98	1.96	1.96	1.96	1.96	1.96	1.95	1.95	1.95	1.98	2.10	2.11	2.12	2.04	1.95	2.12	1.99
Sep 6	2.02	2.00	2.00	S	2.00	2.01	2.01	2.00	2.01	2.00	1.98	1.98	1.97	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.99	2.00	2.00	2.01	1.96	2.02	1.99
Sep 7	2.02	2.03	S	2.05	2.06	2.04	2.04	2.05	2.03	2.04	2.03	2.02	2.00	2.03	2.01	1.98	1.97	1.97	1.96	1.96	1.96	1.97	1.98	1.99	1.96	2.06	2.01
Sep 8	1.99	S	1.99	1.99	1.99	2.00	2.00	2.00	1.99	1.99	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.99	1.99	1.99	2.00	1.97	2.00	1.98
Sep 9	S	1.98	1.98	1.99	1.99	2.00	2.00	2.00	2.00	2.00	1.99	1.99	1.98	1.98	1.98	1.98	1.97	1.97	1.97	1.98	1.98	1.98	1.98	S	1.97	2.00	1.99
Sep 10	1.98	1.98	1.98	1.99	1.99	2.00	2.00	2.01	2.01	2.01	2.01	2.02	2.01	2.01	2.00	2.01	2.01	2.01	2.00	2.00	2.00	2.02	S	2.02	1.98	2.02	2.00
Sep 11	2.02	2.02	2.03	2.03	2.04	2.04	2.04	2.04	2.04	2.05	2.04	2.05	2.05	2.03	C	C	C	C	C	2.01	2.00	2.00	S	2.09	2.08	2.04	
Sep 12	2.08	2.12	2.11	2.12	2.12	2.13	2.12	2.10	2.08	2.02	1.97	1.95	1.92	1.92	1.90	1.91	1.91	1.90	1.90	1.96	S	1.99	1.97	1.99	1.90	2.13	2.01
Sep 13	1.96	1.93	1.94	1.95	1.93	1.93	1.94	1.93	1.93	1.93	1.92	1.90	1.91	1.91	1.90	1.90	1.90	1.90	1.90	S	1.91	1.91	1.91	1.92	1.90	1.96	1.92
Sep 14	1.93	1.93	1.93	1.93	1.93	1.94	1.96	1.97	1.96	1.96	1.94	1.92	1.92	1.92	1.91	1.91	1.91	1.92	S	2.04	2.33	2.19	2.10	2.03	1.91	2.33	1.98
Sep 15	1.95	1.93	1.92	1.95	1.96	1.93	1.94	1.99	2.04	1.94	1.93	1.92	1.91	1.91	1.90	1.90	1.91	S	1.94	1.95	1.94	1.93	1.95	1.96	1.90	2.04	1.94
Sep 16	1.96	1.97	1.95	1.94	1.93	1.95	1.95	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.94	1.94	S	1.94	1.94	1.94	1.96	1.96	2.03	2.06	1.93	2.06	1.96
Sep 17	2.13	2.13	2.15	2.16	2.20	2.17	2.13	2.12	2.04	2.02	1.97	1.94	P	P	R	R	1.95	1.94	1.95	1.95	1.99	1.97	2.03	2.11	1.94	2.20	2.05
Sep 18	2.17	2.29	2.24	2.16	2.14	2.26	2.36	2.45	2.12	2.03	2.00	1.99	2.02	1.98	Y	S	1.94	1.95	1.96	1.96	1.97	1.96	1.97	2.09	1.94	2.45	2.09
Sep 19	2.04	1.99	2.05	2.06	2.04	2.07	2.05	2.03	1.99	1.98	1.97	1.95	1.93	S	1.93	1.91	1.89	1.93	1.92	1.91	1.92	1.92	1.91	1.91	1.89	2.07	1.97
Sep 20	1.91	1.92	1.94	1.94	1.93	1.93	1.93	1.92	1.92	1.92	1.92	1.92	S	1.93	1.93	1.93	1.93	1.93	1.93	2.06	2.19	2.20	1.94	1.94	1.91	2.20	1.96
Sep 21	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.93	1.92	1.91	S	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.87	1.87	1.87	1.88	1.87	1.95	1.91	1.91
Sep 22	1.90	1.90	1.91	1.91	1.91	1.90	1.90	1.90	1.89	1.88	S	1.89	1.89	1.90	1.89	1.89	1.90	1.90	1.90	1.88	1.89	1.91	1.91	1.91	1.90	1.91	1.90
Sep 23	1.90	1.91	1.91	1.91	1.92	1.94	1.95	1.96	1.95	S	1.94	1.94	1.94	1.93	1.93	1.94	1.95	1.95	1.95	1.95	1.94	1.94	1.95	1.95	1.90	1.96	1.94
Sep 24	1.95	1.95	1.95	1.96	1.96	1.96	1.96	1.97	1.97	S	1.95	1.94	1.94	1.93	1.92	1.92	1.92	1.91	1.92	1.91	1.92	1.93	1.94	1.94	1.91	1.97	1.94
Sep 25	1.93	1.93	1.95	1.95	1.95	1.95	1.94	S	1.93	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.95	1.94	2.01	1.98	1.99	2.00	2.00	1.96	1.93	2.01	1.96
Sep 26	1.93	1.93	1.94	1.94	1.94	1.94	S	1.94	1.93	1.92	1.95	1.93	1.92	1.91	1.91	1.91	1.92	1.92	1.92	1.93	1.94	1.94	1.93	1.94	1.91	1.95	1.93
Sep 27	1.95	1.94	1.94	1.94	1.94	S	1.94	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.97	1.97	1.98	2.01	2.01	1.94	2.01	1.96
Sep 28	1.99	1.98	1.98	1.98	S	1.98	1.98	1.98	1.99	1.99	1.99	1.99	1.99	1.99	1.98	1.97	1.97	1.97	1.98	1.97	1.97	2.00	1.99	1.98	1.97	2.00	1.98
Sep 29	1.98	2.01	2.02	S	1.97	1.98	1.98	2.01	1.98	1.97	1.96	1.96	1.96	1.96	1.96	1.96	1.95	1.96	1.98	2.01	2.06	2.13	2.06	1.95	2.13	1.99	1.99
Sep 30	2.09	2.03	S	2.00	1.98	1.99	2.00	1.99	2.00	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.99	2.00	2.01	2.03	2.01	2.00	2.00	1.98	1.98	2.09	2.00
Diurnal Maximum	2.17	2.29	2.24	2.16	2.20	2.26	2.36	2.45	2.12	2.05	2.04	2.05	2.05	2.03	2.01	2.01	2.01	2.01	2.03	2.07	2.33	2.21	2.13	2.11			
Daiurnal Average	1.98	1.98	1.99	1.99	1.99	2.00	2.00	2.01	1.98	1.98	1.97	1.96	1.95	1.95	1.94	1.94	1.94	1.95	1.96	1.97	2.00	2.00	1.99	1.99			

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for CH4 - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2019

Summary of Hourly Instantaneous Maximums

NON-METHANE HYDROCARBONS (NMHC) in ppm

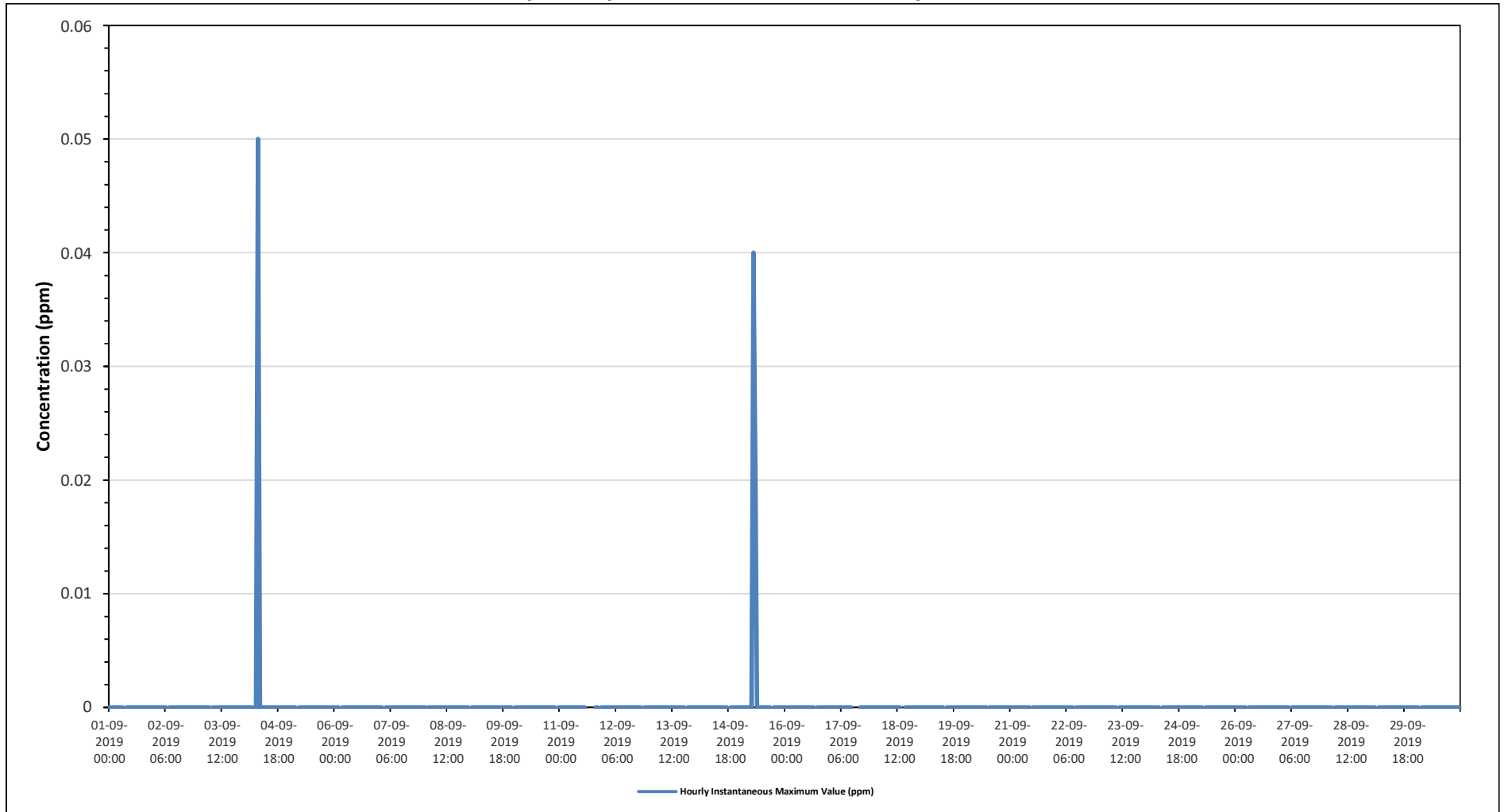
Summary statistics table: Maximum Hourly Value: 0.05 ppm on September 4 at hour 7, Hours in Service: 720, Maximum Daily Value: 0.00 ppm on September 15, Hours of Data: 680, Minimum Hourly Value: 0.00 ppm on September 1 at hour 0, Hours of Missing Data: 5, Minimum Daily Value: 0.00 ppm on September 1, Hours of Calibration: 35, Monthly Average: 0.00 ppm, Operational Uptime: 99.3

Main data table with 26 columns (Day, Hourly Period Starting at (MST) 0-23, Daily Minimum, Maximum, Average) and 30 rows (Sep 1-30). Includes a legend table for error codes C, G, R, S, Q, N, O, P, X, Y, T, S1, N.

Legend table for error codes: C Calibration, G Out for Repair, R Recovery, S Daily Zero/Span, Q Quality Assurance, N Not in Service, O Operator Error, P Power Failure, X Machine Malfunction, Y Maintenance, T Exceeds Temperature Limits, S1 Repeat Daily Zero/Span, N Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for NMHC - Reno Station





PEACE RIVER AREA MONITORING PROGRAM

Reno Station - September 2019

Summary of Hourly Instantaneous Maximums

WIND SPEED (WS) in km/hr

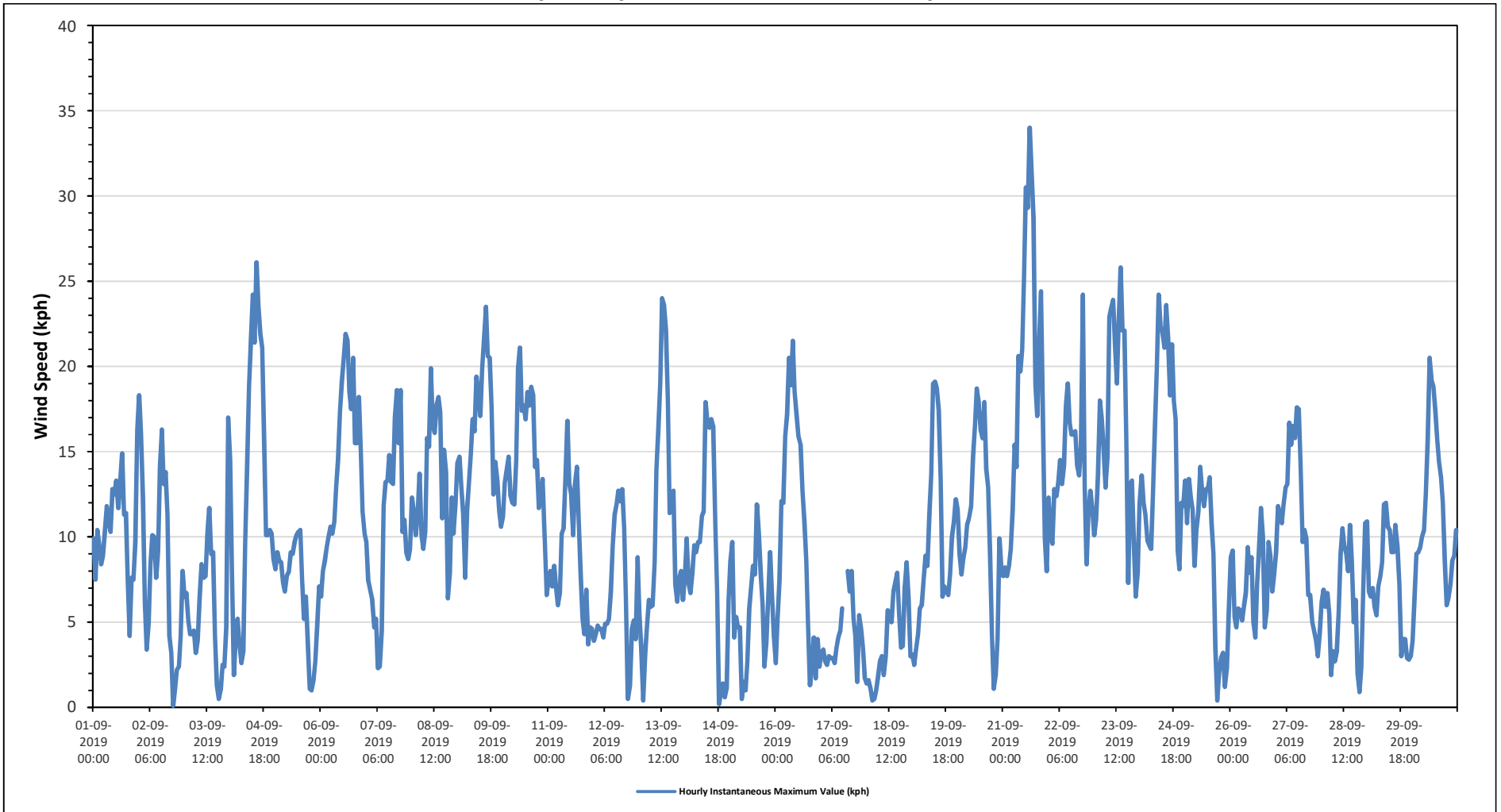
Maximum Hourly Value:	34.0 kph on September 21 at hour 14	Hours in Service:	720
Maximum Daily Value:	18.3 kph on September 21	Hours of Data:	718
Minimum Hourly Value:	0.1 kph on September 2 at hour 18	Hours of Missing Data:	2
Minimum Daily Value:	3.9 kph on September 18	Hours of Calibration:	0
Monthly Average:	10.3 kph	Operational Uptime:	99.7

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	9.9	7.5	10.4	9.6	8.4	8.9	10.3	11.8	10.9	10.3	12.8	12.5	13.3	11.7	13.3	14.9	11.3	11.4	7.2	4.2	7.6	7.5	9.7	16.3	4.2	16.3	10.5
Sep 2	18.3	16.0	12.2	6.1	3.4	4.9	8.4	10.1	10.0	7.6	9.1	14.1	16.3	13.1	13.8	11.3	4.2	3.2	0.1	1.1	2.2	2.4	4.2	8.0	0.1	18.3	8.3
Sep 3	6.5	6.7	5.1	4.3	4.3	4.5	3.2	3.9	6.4	8.4	7.6	7.7	10.2	11.7	9.0	9.1	4.2	1.3	0.5	1.0	2.5	2.4	4.7	17.0	0.5	17.0	5.9
Sep 4	14.5	7.8	1.9	4.2	5.2	3.6	2.6	3.3	9.7	14.1	18.8	21.5	24.2	21.4	26.1	23.6	21.9	21.1	15.7	10.1	10.1	10.4	10.2	8.7	1.9	26.1	12.9
Sep 5	8.1	9.1	8.6	8.5	7.3	6.8	7.7	8.0	9.1	9.0	9.7	10.1	10.3	10.4	7.5	5.2	6.5	3.8	1.1	1.0	1.6	2.7	4.8	7.1	1.0	10.4	6.8
Sep 6	6.5	8.0	8.6	9.4	10.0	10.6	10.2	10.9	12.9	14.5	17.3	19.1	20.5	21.9	21.5	18.5	17.5	20.5	15.5	15.5	18.2	15.1	11.5	10.2	6.5	21.9	14.4
Sep 7	9.7	7.4	6.9	6.4	4.7	5.2	2.3	2.4	4.5	11.8	13.2	13.3	14.8	13.2	13.1	17.0	18.6	15.5	18.6	10.3	11.0	9.1	8.7	9.3	2.3	18.6	10.3
Sep 8	12.3	11.5	10.1	11.4	13.7	10.1	9.3	10.3	15.8	15.3	19.9	16.5	16.1	17.7	18.2	17.3	11.1	15.1	13.8	6.4	7.9	12.3	10.2	11.9	6.4	19.9	13.1
Sep 9	14.3	14.7	12.9	11.3	7.6	11.6	13.2	14.8	16.9	16.2	19.4	18.4	17.1	19.9	21.6	23.5	20.6	20.5	17.6	12.5	14.4	13.3	11.5	10.6	7.6	23.5	15.6
Sep 10	11.2	13.2	13.9	14.7	12.4	12.0	11.9	14.5	19.9	21.1	17.4	17.7	16.9	18.5	17.7	18.8	18.3	14.1	14.5	11.7	12.3	13.4	10.0	6.6	6.6	21.1	14.7
Sep 11	7.4	8.0	7.1	8.3	7.0	6.0	6.7	10.2	10.5	13.6	16.8	13.1	12.5	10.1	13.1	14.1	11.0	7.9	5.2	4.3	6.9	3.7	4.7	4.6	3.7	16.8	8.9
Sep 12	3.9	4.3	4.8	4.6	4.6	4.1	4.9	4.9	5.2	6.8	9.5	11.3	11.9	12.7	12.1	12.8	10.5	6.2	0.5	1.3	4.6	5.1	4.0	8.8	0.5	12.8	6.6
Sep 13	5.5	3.4	0.4	3.1	4.8	6.3	5.9	6.0	8.5	14.0	16.3	19.0	24.0	23.6	22.1	18.0	11.4	11.9	12.7	7.2	6.2	7.6	8.0	6.3	0.4	24.0	10.5
Sep 14	7.7	9.9	7.3	6.7	7.9	9.5	9.1	9.7	9.7	11.2	11.5	17.9	16.7	16.4	16.9	16.5	10.6	6.8	0.2	0.9	1.4	0.6	1.1	6.3	0.2	17.9	8.9
Sep 15	8.6	9.7	4.1	5.3	4.7	4.7	0.5	1.5	1.0	2.7	5.8	7.1	8.3	7.8	11.9	10.3	7.9	6.0	2.4	3.8	6.4	9.1	6.6	4.2	0.5	11.9	5.9
Sep 16	2.6	5.2	7.5	12.1	12.0	15.9	17.2	20.5	18.9	21.5	18.5	17.2	15.9	15.4	12.7	10.9	8.6	4.8	1.3	2.4	4.1	1.7	4.0	2.4	1.3	21.5	10.6
Sep 17	3.2	3.4	2.7	2.5	3.0	2.9	2.9	2.6	3.5	4.1	4.5	5.8	P	P	8.0	6.8	8.0	5.2	4.2	1.5	5.4	4.6	3.5	1.7	1.5	8.0	4.1
Sep 18	1.4	1.6	1.1	0.4	0.5	1.0	1.8	2.7	3.0	1.9	3.0	5.7	5.5	5.0	6.8	7.3	7.9	5.6	3.5	3.6	7.0	8.5	6.4	3.0	0.4	8.5	3.9
Sep 19	3.1	2.5	3.4	4.3	5.8	6.0	7.5	8.9	8.3	11.3	13.7	19.0	19.1	18.7	17.4	13.4	6.5	7.1	6.8	6.6	7.8	10.0	10.9	12.2	2.5	19.1	9.6
Sep 20	11.6	9.0	7.8	8.7	9.4	10.7	11.1	11.8	14.7	16.5	18.7	17.9	16.3	15.8	17.9	14.0	12.9	9.0	4.2	1.1	1.9	4.0	9.9	8.2	1.1	18.7	11.0
Sep 21	7.7	8.2	7.7	8.3	9.3	11.6	15.4	14.1	20.6	19.7	21.0	25.1	30.5	29.3	34.0	31.5	28.7	18.9	17.1	21.6	24.4	17.0	9.9	8.0	7.7	34.0	18.3
Sep 22	12.3	10.1	9.6	12.8	12.4	13.2	14.5	13.1	14.2	17.7	19.0	16.7	16.0	16.0	16.2	14.2	13.6	15.3	24.2	13.0	8.4	11.5	12.7	11.7	8.4	24.2	14.1
Sep 23	10.1	11.0	13.7	18.0	17.0	15.2	12.9	14.7	22.9	23.4	23.9	21.3	19.0	22.7	25.8	22.1	22.1	15.6	7.3	13.1	13.3	9.7	6.5	7.9	6.5	25.8	16.2
Sep 24	12.0	13.6	12.0	11.3	9.8	9.5	9.3	12.6	16.4	19.9	24.2	22.3	22.0	21.1	23.6	21.6	18.3	21.3	18.0	16.9	9.2	8.1	12.0	11.8	8.1	24.2	15.7
Sep 25	13.3	10.8	13.4	12.3	11.6	8.3	10.4	11.5	14.1	12.6	11.8	12.8	13.5	10.8	9.0	3.5	0.4	2.1	2.9	3.2	1.2	2.3	5.7	0.4	14.1	8.8	
Sep 26	8.8	9.2	5.3	4.7	5.8	5.7	5.1	5.9	6.7	9.4	7.9	8.8	5.0	4.1	7.3	9.3	11.7	10.0	4.7	5.7	9.7	8.9	6.8	7.8	4.1	11.7	7.3
Sep 27	9.1	11.8	11.4	10.8	11.9	12.9	13.1	16.7	15.4	16.5	15.8	17.6	17.5	14.2	9.7	10.4	9.9	6.6	6.6	5.0	4.5	3.9	3.0	4.4	3.0	17.6	10.8
Sep 28	6.2	6.9	5.9	6.7	5.5	1.9	3.3	2.7	3.3	5.6	9.0	10.5	9.5	9.0	8.0	10.7	8.5	5.0	6.3	2.0	0.9	2.3	7.1	10.8	0.9	10.8	6.2
Sep 29	10.9	6.8	6.5	7.0	5.9	5.4	7.1	7.7	8.5	11.9	12.0	10.6	10.4	9.1	9.1	10.7	9.4	7.2	3.0	4.0	4.0	2.9	2.8	3.0	2.8	12.0	7.3
Sep 30	3.9	6.4	9.0	9.1	9.4	10.0	10.4	12.5	15.7	20.5	19.2	18.8	17.4	15.7	14.4	13.5	12.0	8.7	6.0	6.4	7.2	8.6	8.9	10.4	3.9	20.5	11.4
Diurnal Maximum	18.3	16.0	13.9	18.0	17.0	15.9	17.2	20.5	22.9	23.4	24.2	25.1	30.5	29.3	34.0	31.5	28.7	21.3	24.2	21.6	24.4	17.0	12.7	17.0			
Diurnal Average	8.7	8.5	7.7	8.1	7.8	8.0	8.3	9.3	11.2	13.0	14.2	15.0	15.5	15.2	15.3	14.5	12.2	10.2	8.0	6.6	7.5	7.3	7.2	8.2			

C	Calibration	S	Daily Zero/Span	Q	Quality Assurance	C1	Repeat Calibration	S1	Repeat Daily Zero/Span
G	Out for Repair	K	Collection Error	N	Not in Service	O	Operator Error	P	Power Failure
R	Recovery	X	Machine Malfunction	Y	Maintenance	T	Exceeds Temperature Limits	N	Not in Service

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

Timeseries Chart of Hourly Instantaneous Maximum for WS - Reno Station



END OF REPORT

This report, 186 of 186, ends the September 2019 Monthly Ambient Air Quality Monitoring Report.



Peace River Area Monitoring Program

SEPTEMBER 2019

Ambient Air Monitoring Calibration Report

- 842b STATION-

CAL-PRAMP-201909-01561

Operation and Maintenance:

Bureau Veritas Canada

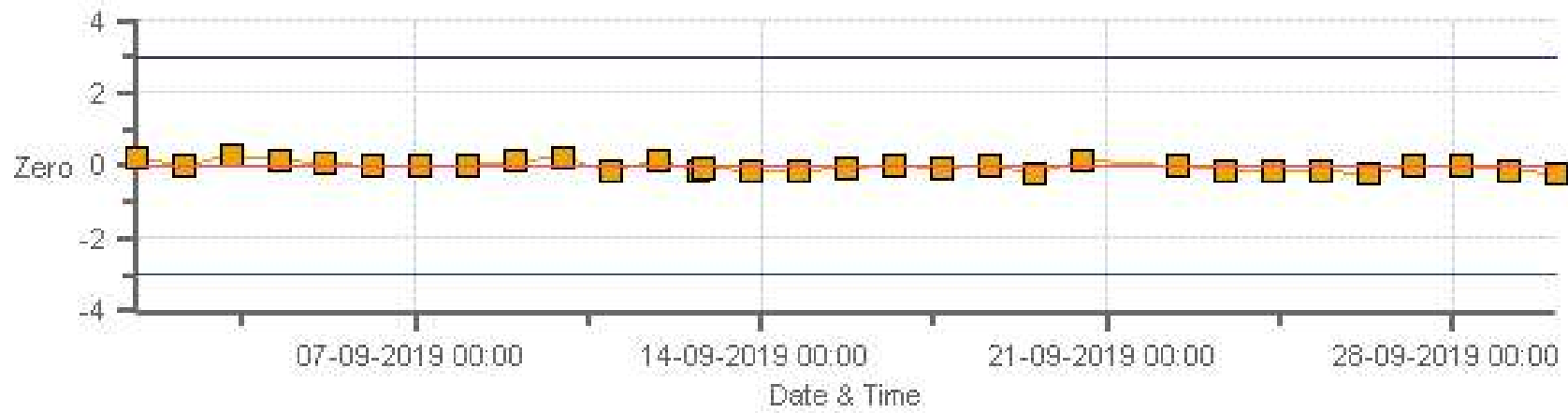
Data Validation and Report:

Bureau Veritas Canada

October 16, 2019

DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2 [ppb] Calibration: PRAMP 842b Monthly: 09-2019 Type: Zero



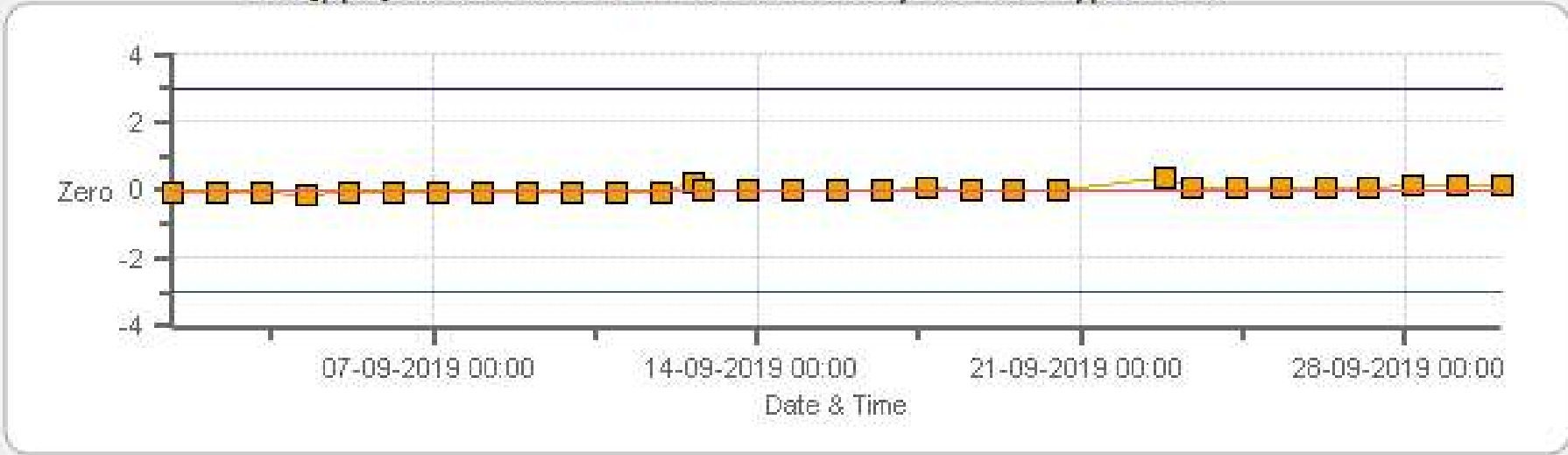
Zero Zero Ref Zero Low Zero High

SO2 [ppb] Calibration: PRAMP 842b Monthly: 09-2019 Type: Span



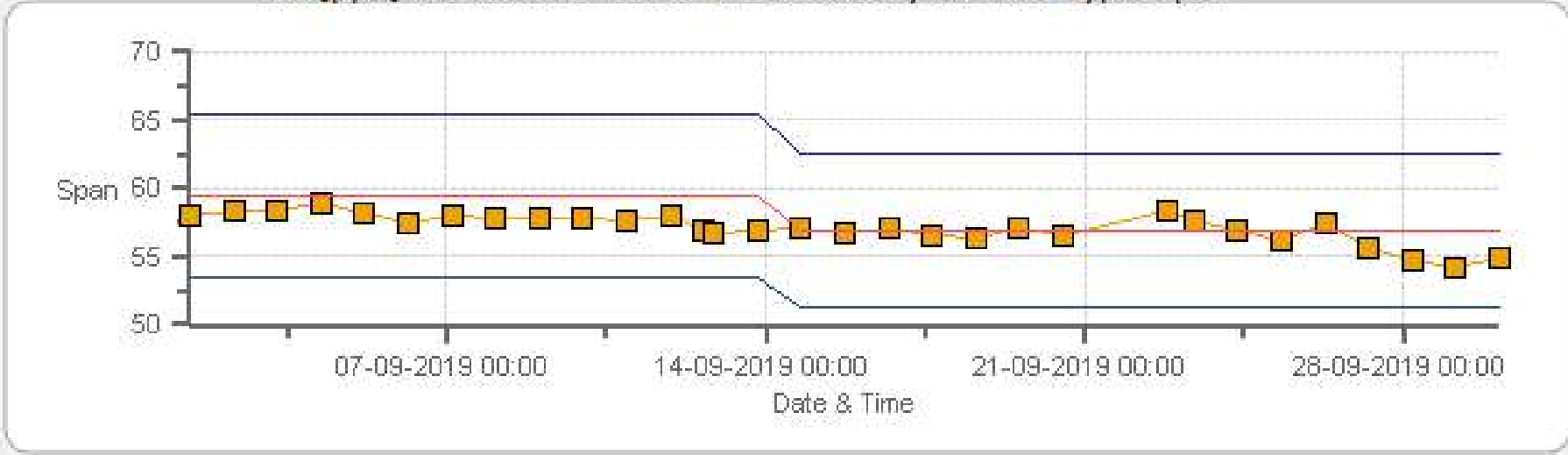
Span SpanRef Span Low Span High

TRS [ppb] Calibration: PRAMP 842b Monthly: 09-2019 Type: Zero



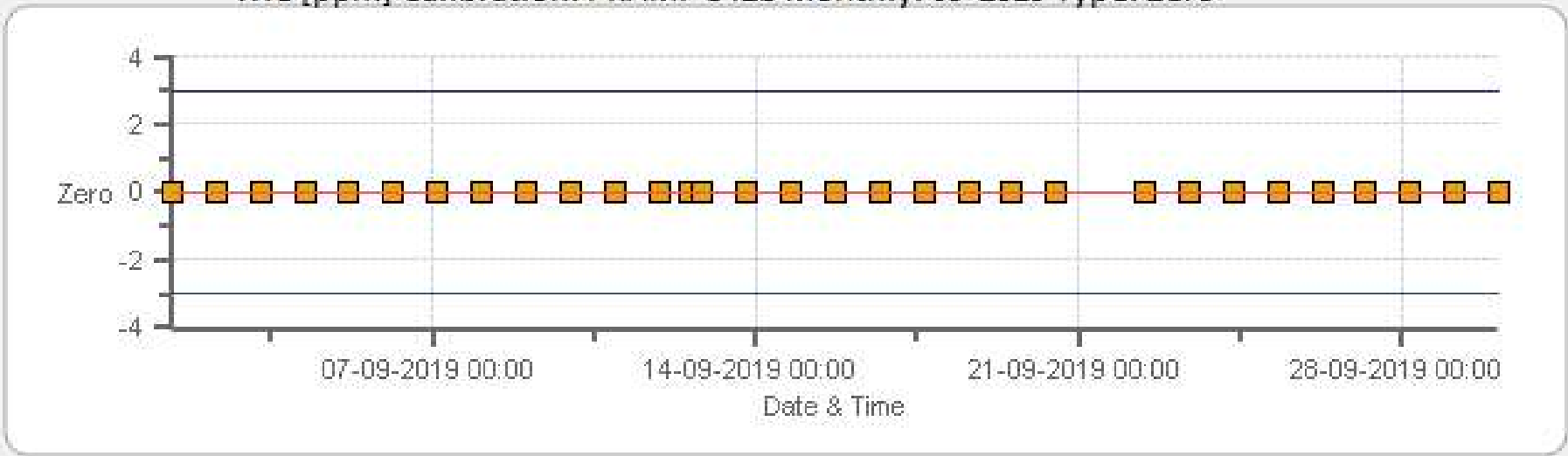
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TRS [ppb] Calibration: PRAMP 842b Monthly: 09-2019 Type: Span



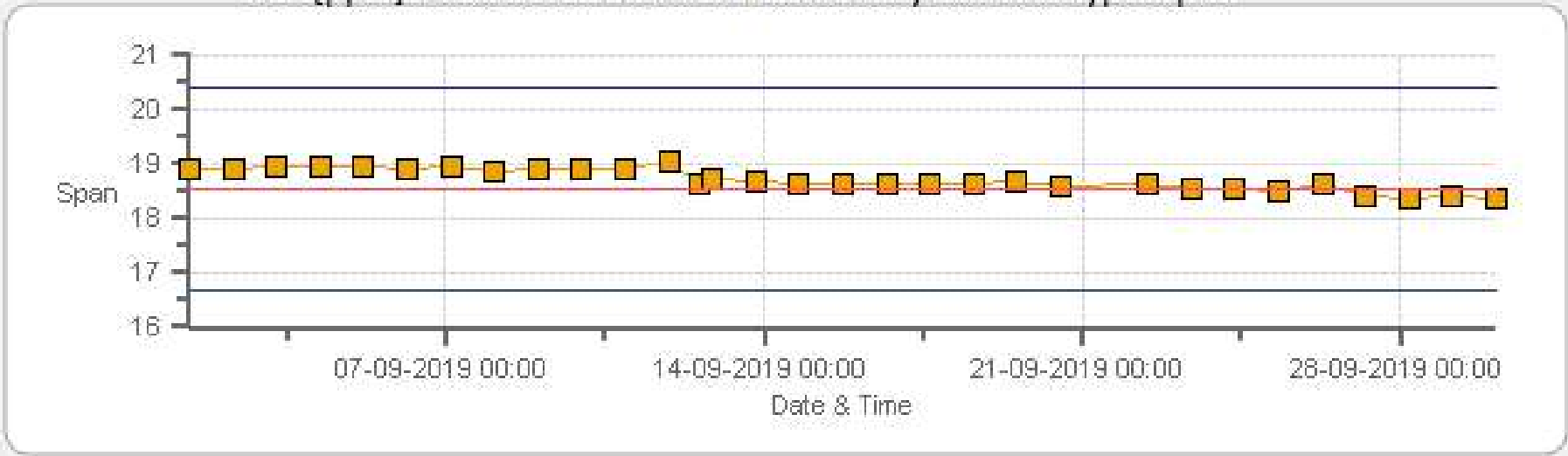
Span Span Ref Span Low Span High

THC [ppm] Calibration: PRAMP 842b Monthly: 09-2019 Type: Zero



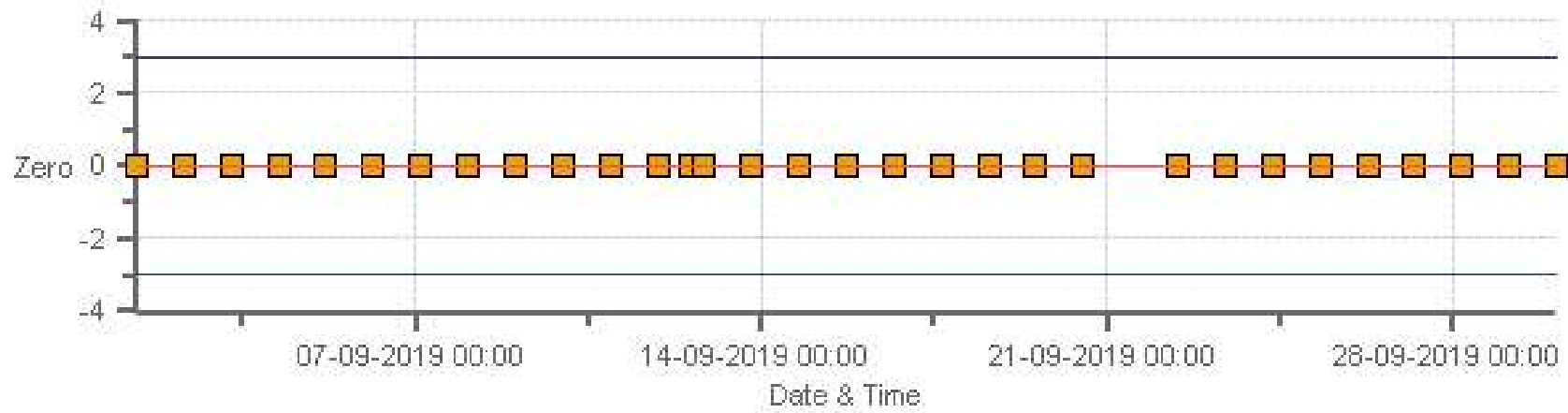
Zero Zero Ref Zero Low Zero High

THC [ppm] Calibration: PRAMP 842b Monthly: 09-2019 Type: Span



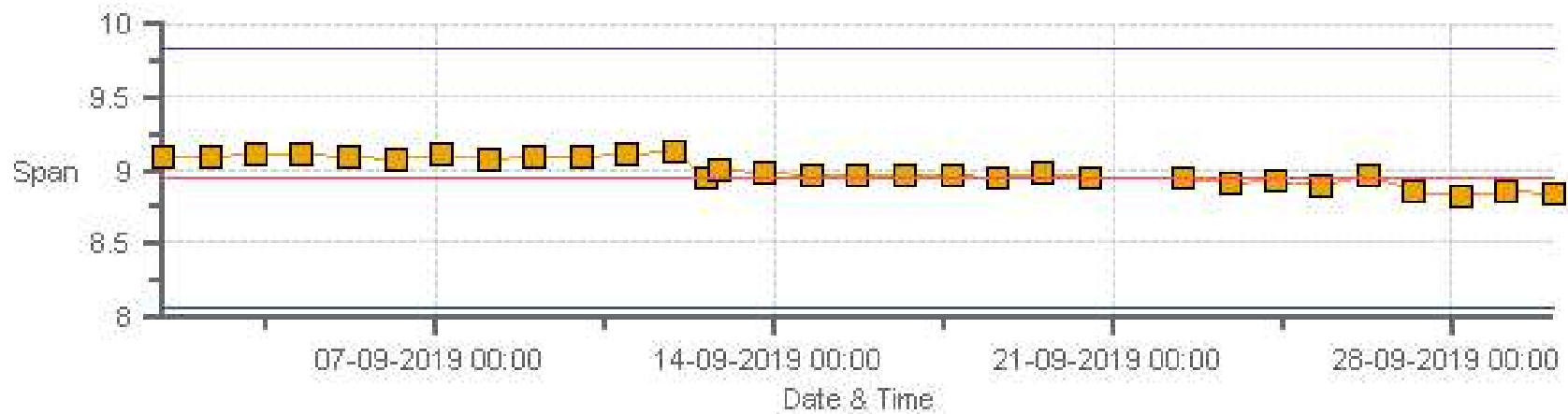
Span Span Ref Span Low Span High

CH4 [ppm] Calibration: PRAMP 842b Monthly: 09-2019 Type: Zero



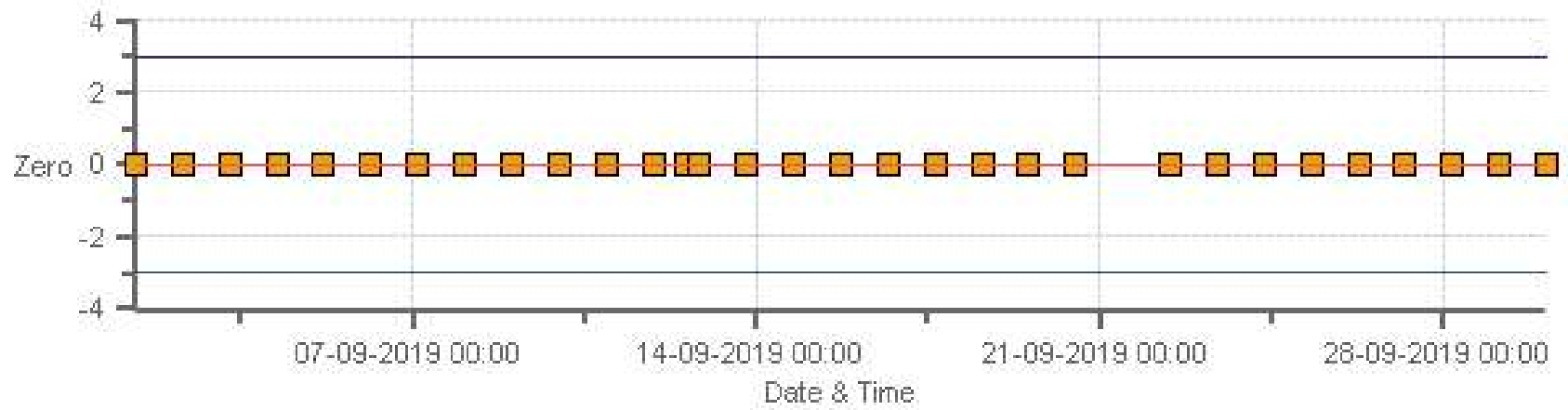
Zero Zero Ref Zero Low Zero High

CH4 [ppm] Calibration: PRAMP 842b Monthly: 09-2019 Type: Span



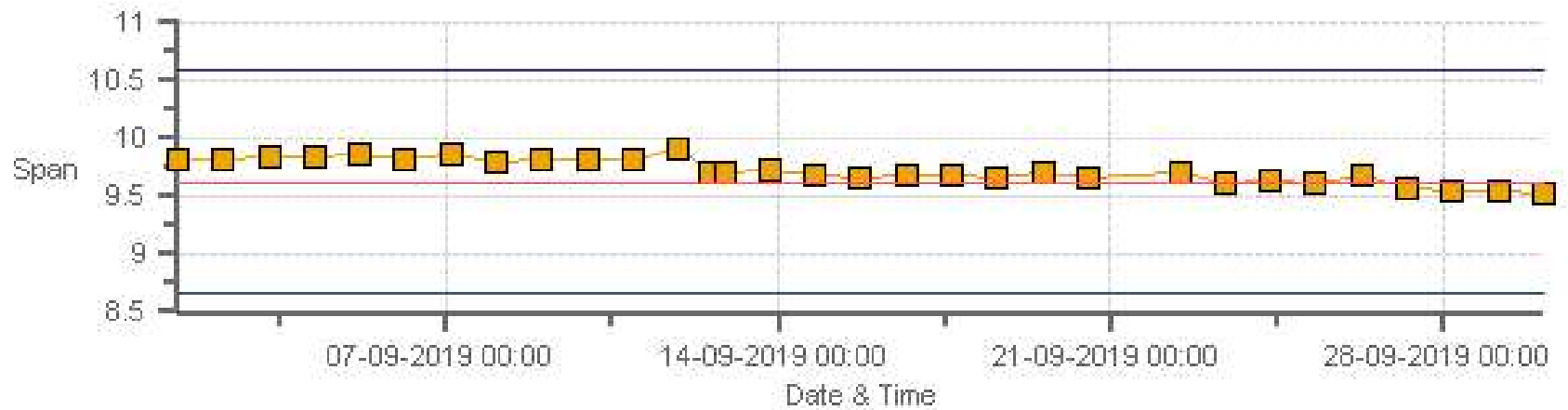
Span SpanRef Span Low Span High

NMHC [ppm] Calibration: PRAMP 842b Monthly: 09-2019 Type: Zero



Zero Zero Ref Zero Low Zero High

NMHC [ppm] Calibration: PRAMP 842b Monthly: 09-2019 Type: Span



Span SpanRef Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	12-Sep-2019	PREVIOUS CALIBRATION DATE:	08-Aug-2019
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	0.999
CLIENT:	PRAMP	TEMPERATURE (°C):	23.7
LOCATION:	842b	BAROMETRIC (mBar):	941
PURPOSE:	Routine	START TIME (MST):	12:47
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	17:55

ANALYZER:

MAKE/MODEL	Thermo 43i	RANGE	500 ppb
SERIAL #	835033373	FLOW (mL/min)	420
INITIAL		FINAL	
BKG/OFFSET	14.7	BKG/OFFSET	14.6
COEF/SLOPE	1.025	COEF/SLOPE	1,004
Expected (reference) Value	252	Expected (reference) Value	252

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	6100	MODEL:	T701
ID:	5212	ID:	74
MFC CALIBRATION DATE:	19-Jul-2019	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0000597	HIGH ID	n/a
CONC (ppm):	50.40	EXPIRY DATE	n/a
CYLINDER (psi):	350	LOW ID	n/a
EXPIRY DATE	08-Dec-2019	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		
5995	45.20	5995	0.00	0.2	0	0.978	1.000
5951	45.20	5996	379.92	388.7	380	0.978	1.000
5977	21.40	5999	179.83	n/a	180	n/a	0.999
5986	10.69	5997	89.87	n/a	89.7	n/a	1.002

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.000	0.0%

COMMENTS:

Sample filter changed. Operator error at 14:58, high point restarted at 15:02.

TRS Analyzer Calibration by Dilution



DATE:	12-Sep-2019	PREVIOUS CALIBRATION DATE:	08-Aug-2019
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	0.999
CLIENT:	PRAMP	TEMPERATURE (°C):	23.7
LOCATION:	842b	BAROMETRIC (mBar):	941
PURPOSE:	Routine	START TIME (MST):	09:15
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	15:02

ANALYZER:

MAKE/MODEL	Thermo 43I-TLE	RANGE	100 ppb
SERIAL #	1162460023	FLOW (mL/min)	407
INITIAL		FINAL	
BKG/OFFSET	2.98	BKG/OFFSET	2.79
COEF/SLOPE	0.928	COEF/SLOPE	0.892
Expected (reference) Value	59.45	Expected (reference) Value	56.92

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	6100	MODEL:	T701
ID:	4760	ID:	74
MFC CALIBRATION DATE:	18-Jul-2019	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL119420	HIGH ID	n/a
CONC (ppm):	10.20	EXPIRY DATE	n/a
CYLINDER (psi):	390	LOW ID	n/a
EXPIRY DATE	16-May-2020	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

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

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

START TIME:	09:56	SO2 Conc (ppb)	380
END TIME:	10:14	Analyzer Response (ppb)	0.0

CALIBRATION:

FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
7487	57.21	7487	0.00	-0.11	0	0.953	1.000
7430	57.21	7487	77.93	81.66	77.9	0.953	1.000
7460	27.85	7488	37.94	n/a	37.17	n/a	1.021
7473	13.93	7487	18.98	n/a	18.27	n/a	1.039

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.002	-0.4%

COMMENTS:

Sample filter changed.

Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	12-Sep-2019	PREVIOUS CALIBRATION DATE:	08-Aug-2019	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	23.7		Thermo 55i	1505664392	1245
LOCATION:	842b	BAROMETRIC (mBar):	941	PARAMETER:	CH4	NMHC	THC
PURPOSE	Routine	START TIME (MST):	09:14	RANGE (ppm):	20	20	40
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	13:48	PREVIOUS CF:	1.001	0.999	1.000

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	EnviroNics	MAKE:	API	CYLINDER ID:	LL43221	HIGH ID:	n/a
MODEL:	6100	MODEL:	T701	CH ₄ /C ₃ H ₈ (ppm):	595.0 206.0	HIGH EXPIRY:	n/a
ID:	5212	ID:	74	CYLINDER (psi):	1490	LOW ID:	n/a
MFC CALIBRATION DATE:	19-Jul-2019	OXIDIZER ID:	Internal	EXPIRY DATE	18-Oct-2025	LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH ₄ /NMHC)	HIGH	MID	LOW	CH ₄ EQUIVILANCE		
TARGET	14	7	3.5	C ₃ H ₈ as CH ₄		566.5
RANGE	12 - 16	6 - 8	2 - 4	THC as CH ₄		1161.5

EXPECTED (REFERENCE) VALUE:

INITIAL	CH ₄	NMHC	THC	FINAL	CH ₄	NMHC	THC
	8.94	9.62	18.56		8.94	9.62	18.56

CALIBRATION:

FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC
3146	X	3146	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	X	X	X	X	X	X
3078	70.48	3148	13.32	12.68	26.00	13.53	12.98	26.50	13.34	12.66	26.00	0.985	0.977	0.981	0.999	1.002	1.000
3110	37.93	3148	7.17	6.83	13.99	n/a	n/a	n/a	7.17	6.90	14.05	n/a	n/a	n/a	1.000	0.989	0.996
3131	16.25	3148	3.07	2.92	5.99	n/a	n/a	n/a	3.08	3.04	6.12	n/a	n/a	n/a	0.997	0.962	0.979

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
CH ₄	1.000	1.001	0.0%
NMHC	1.000	1.000	0.3%
THC	1.000	0.998	0.2%

COMMENTS:

Sample filter changed.

Meteorological System Checklist



Date:	September 12, 2019
Technician:	Ferdinand Roy
Reviewer:	Wunmi Adekanmbi
Station:	PRAMP 842b

Unit:	Make:	Model:	Serial #:
Temperature Sensor:	Campbell Scientific	HMP45C	C2608
Barometric Pressure Sensor:	MetOne	92	K12864
Relative Humidity Sensor:	Campbell Scientific	HMP45C	C2608
Anemometer:	RM Young	05305VK	124638

AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	August 8, 2019
Parameter:	Temperature @ 2 metres
Reference Thermometer ID:	F.S. 160459244 expires Jun 19, 2020
Reference Temperature (°C):	14.9
Station - Ambient Temperature (°C):	14.9
Temperature Difference (°C):	0.0

BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	August 8, 2019		
Reference Barometer ID:	F.S. 10528 expires January 23, 2020		
Reference Pressure - Units/Reading:	millibar		942
Station Pressure - Units/Reading:	millibar		944.5
Pressure Tolerance +/- 15% of error:	801 - 1083		-0.27%

RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	August 8, 2019		
Reference Hygrometer ID:	F.S. 160459244 expires Jun 19, 2020		
Reference Hygrometer % RH- Reading:	71.66		
Station Hygrometer % RH- Reading:	69.00		
RH Tolerance +/- 15% of difference:	60.91 - 82.41		3.7%

ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	August 8, 2019	Previous check date:	August 8, 2019
Wind Speed Observed (kph):	10-20	Wind Direction Observed:	SW
Wind speed on Data Logger (kph):	16	Wind Direction on Data Logger:	SW
		Wind Direction Pass/Fail?:	Pass

Comments



Peace River Area Monitoring Program

SEPTEMBER 2019

Ambient Air Monitoring Calibration Report

- 986c STATION-

CAL-PRAMP-201909-01562

Operation and Maintenance:

Bureau Veritas Canada

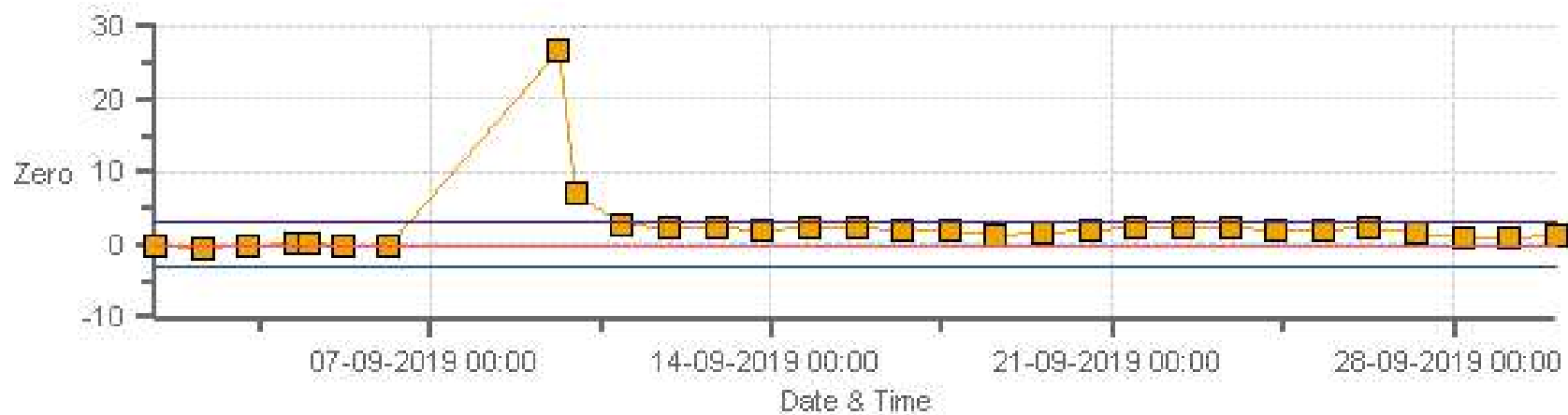
Data Validation and Report:

Bureau Veritas Canada

October 16, 2019

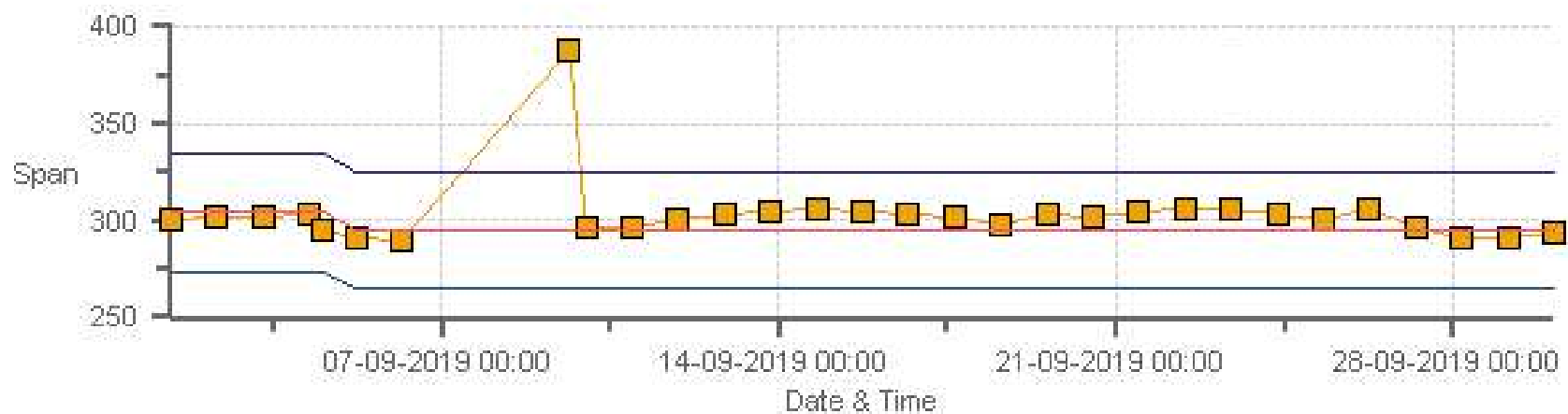
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2 [ppb] Calibration: PRAMP 986c Monthly: 09-2019 Type: Zero



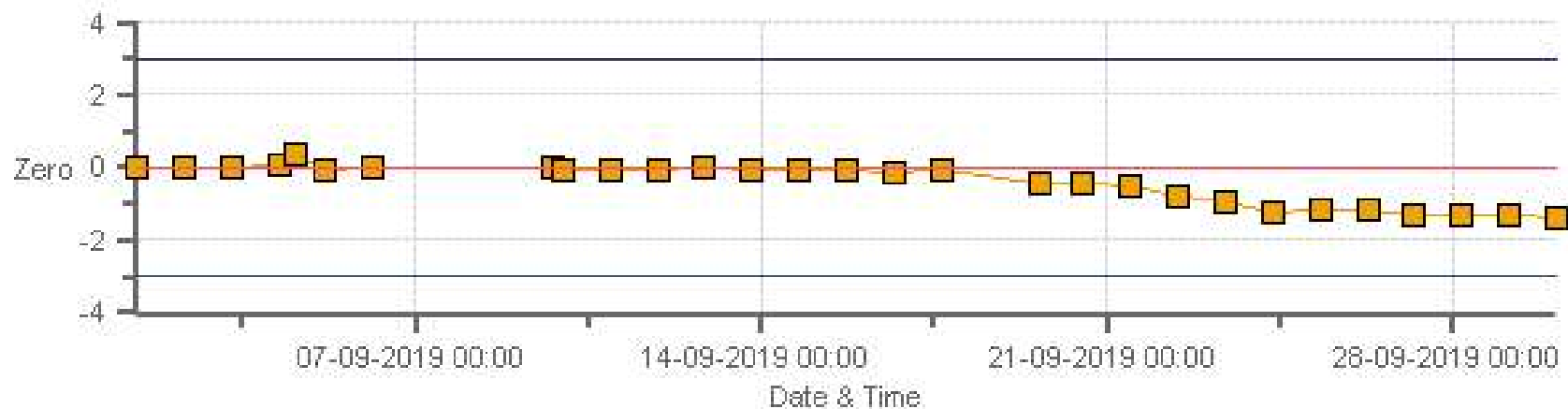
Zero Zero Ref Zero Low Zero High

SO2 [ppb] Calibration: PRAMP 986c Monthly: 09-2019 Type: Span



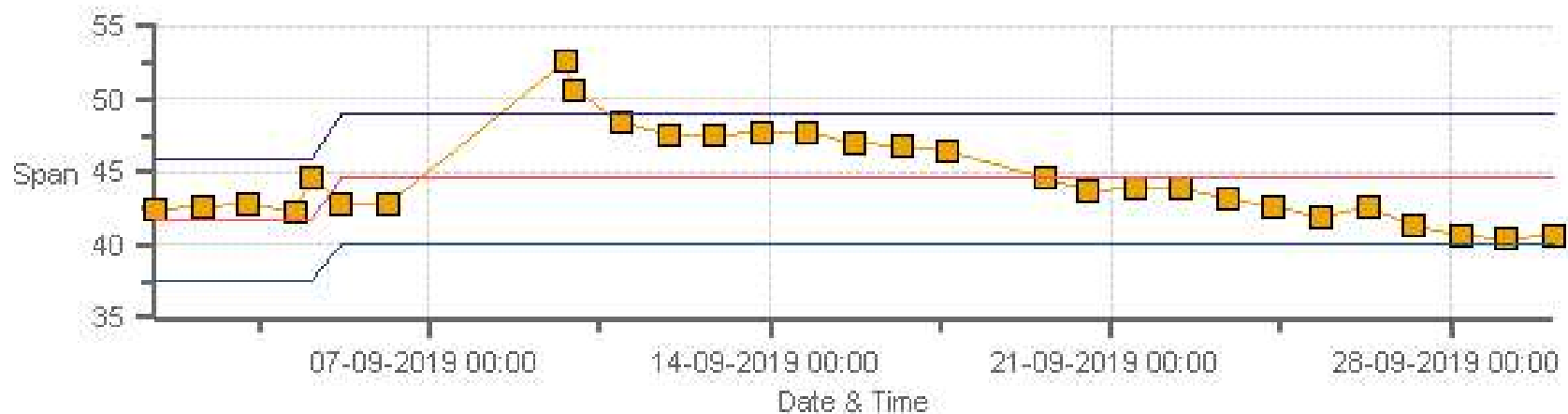
Span Span Ref Span Low Span High

TRS [ppb] Calibration: PRAMP 986c Monthly: 09-2019 Type: Zero



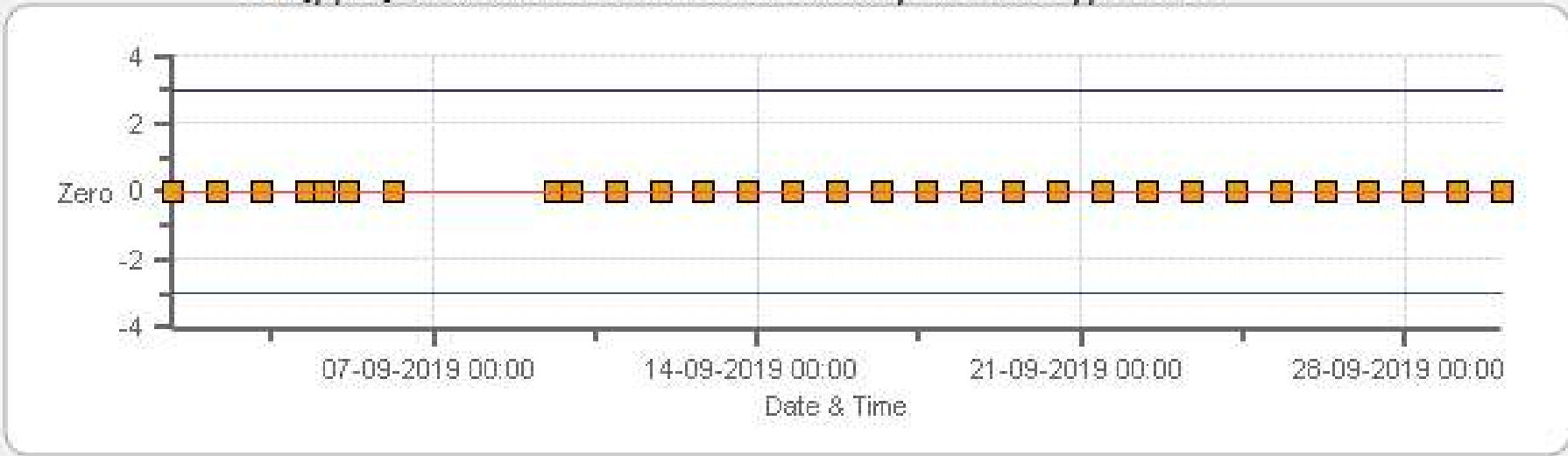
Zero Zero Ref Zero Low Zero High

TRS [ppb] Calibration: PRAMP 986c Monthly: 09-2019 Type: Span



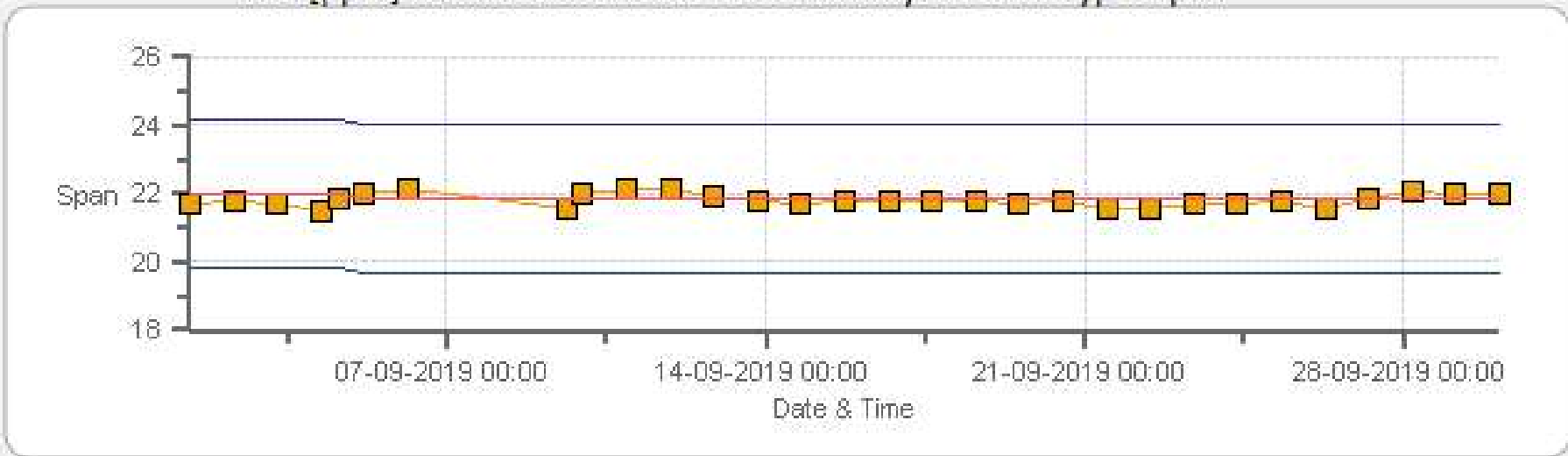
Span SpanRef Span Low Span High

THC [ppm] Calibration: PRAMP 986c Monthly: 09-2019 Type: Zero



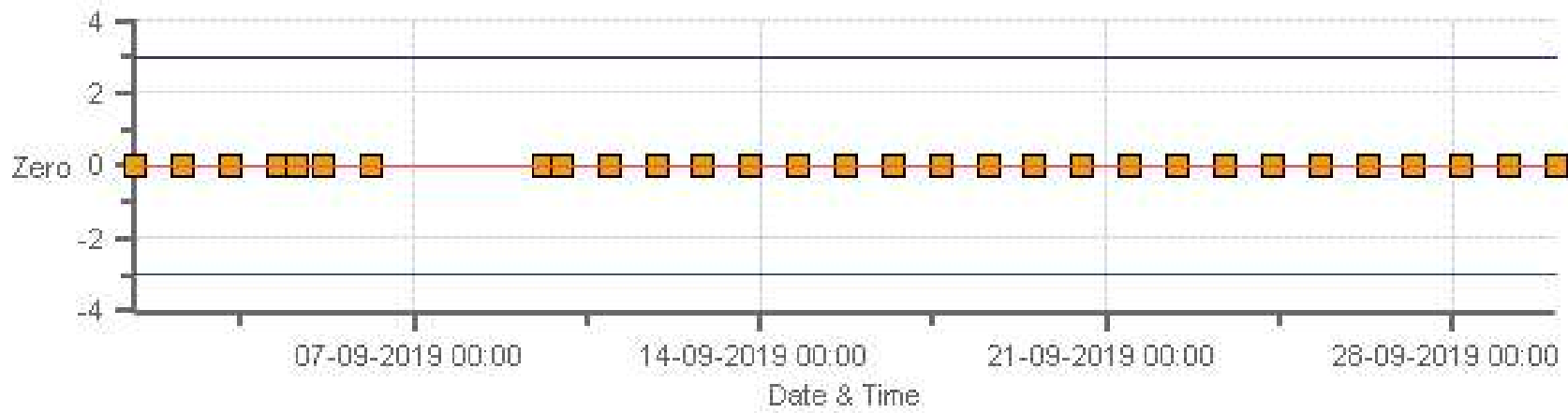
Zero Zero Ref Zero Low Zero High

THC [ppm] Calibration: PRAMP 986c Monthly: 09-2019 Type: Span



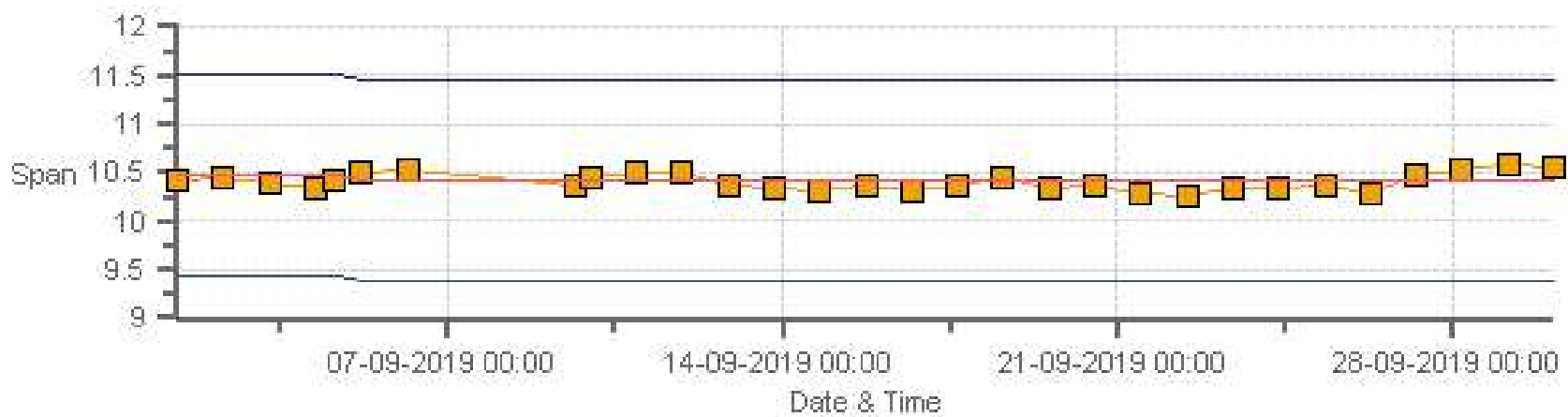
Span SpanRef Span Low Span High

CH4 [ppm] Calibration: PRAMP 986c Monthly: 09-2019 Type: Zero



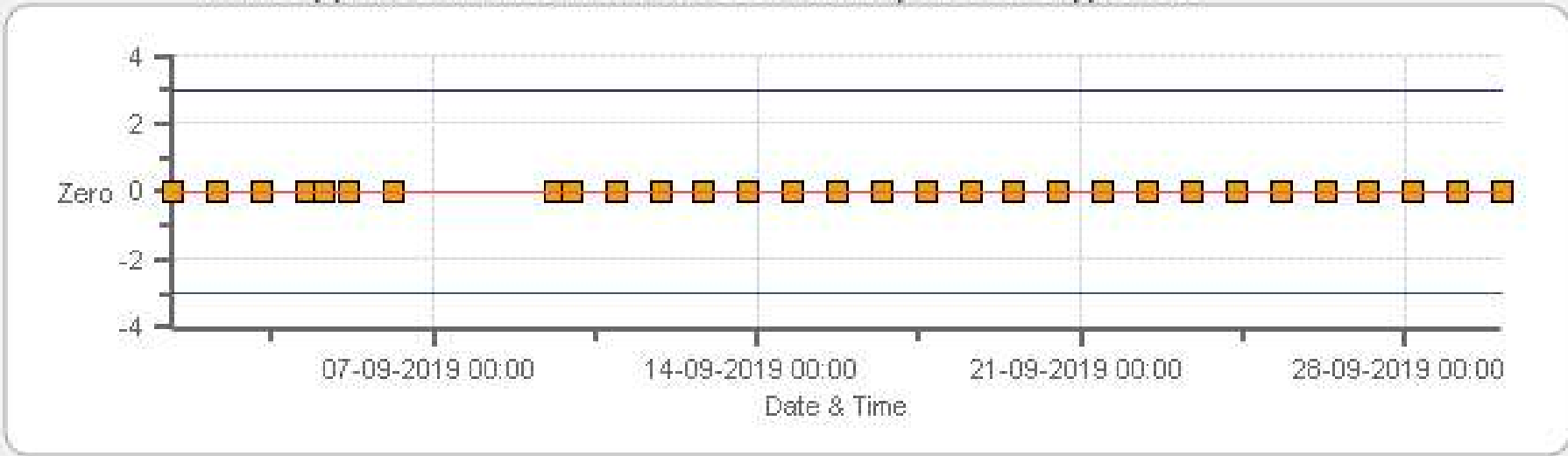
Zero Zero Ref Zero Low Zero High

CH4 [ppm] Calibration: PRAMP 986c Monthly: 09-2019 Type: Span



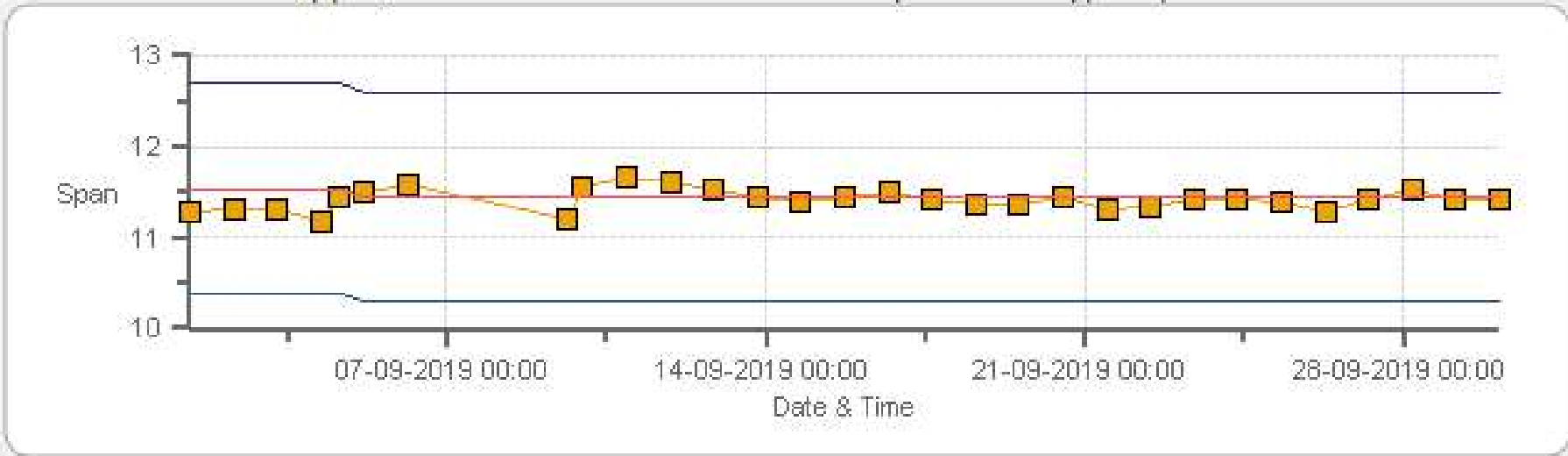
Span SpanRef Span Low Span High

NMHC [ppm] Calibration: PRAMP 986c Monthly: 09-2019 Type: Zero



Zero Zero Ref Zero Low Zero High

NMHC [ppm] Calibration: PRAMP 986c Monthly: 09-2019 Type: Span



Span Span Ref Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	04-Sep-2019	PREVIOUS CALIBRATION DATE:	01-Aug-2019
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.001
CLIENT:	PRAMP	TEMPERATURE (°C):	21.8
LOCATION:	986C	BAROMETRIC (mBar):	939
PURPOSE:	Routine	START TIME (MST):	08:52
PERFORMED BY:	Chris Wesson	END TIME (MST):	12:31

ANALYZER:

MAKE/MODEL	API 100A	RANGE	500 ppb
SERIAL #	1298	FLOW (mL/min)	615
INITIAL		FINAL	
BKG/OFFSET	93.1	BKG/OFFSET	92.7
COEF/SLOPE	0.901	COEF/SLOPE	0.88
Expected (reference) Value	304	Expected (reference) Value	295

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	T701
ID:	26801218	ID:	134
MFC CALIBRATION DATE:	19-Jun-2019	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL48147	HIGH ID	n/a
CONC (ppm):	49.50	EXPIRY DATE	n/a
CYLINDER (psi):	1700	LOW ID	n/a
EXPIRY DATE	20-Aug-2026	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		
4012	30.70	4012	0.00	-0.2	0	0.983	1.000
3982	30.70	4013	378.68	385	378.7	0.983	1.000
3998	14.50	4012	178.90	n/a	178	n/a	1.005
4005	7.30	4012	90.07	n/a	89	n/a	1.012

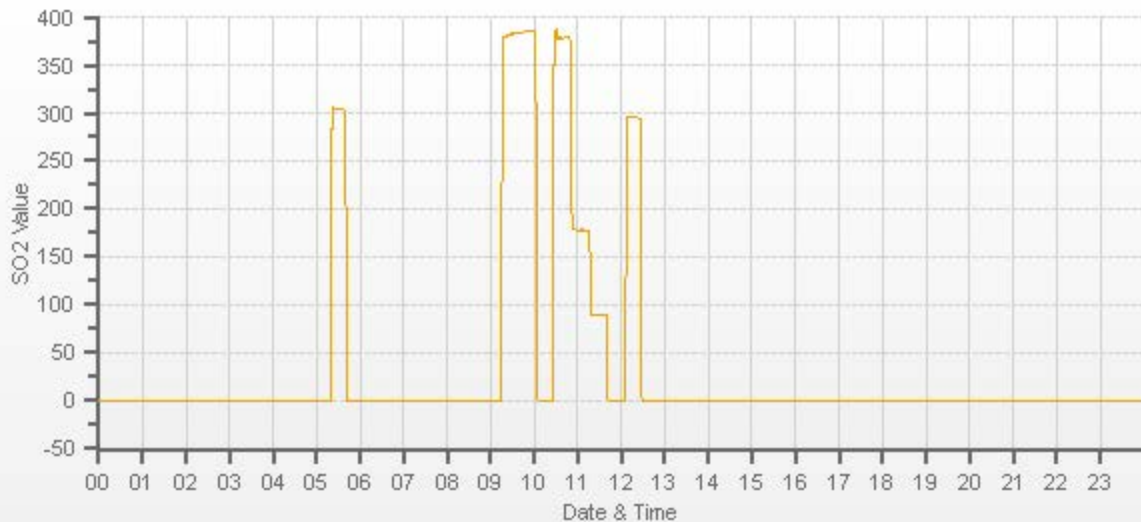
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	-0.1%

COMMENTS:

Sample Filter changed

SO2[ppb] Station: PRAMP 986c Daily: 04-09-2019 Type: AVG 1 Min. [1 Min.]



CAL-PRAMP-201909-01562

TRS Analyzer Calibration by Dilution



DATE:	04-Sep-2019	PREVIOUS CALIBRATION DATE:	02-Aug-2019
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	21.8
LOCATION:	986C	BAROMETRIC (mBar):	939
PURPOSE:	Routine	START TIME (MST):	08:52
PERFORMED BY:	Chris Wesson	END TIME (MST):	13:38

ANALYZER:

MAKE/MODEL	Thermo 43I-TLE	RANGE	100 ppb
SERIAL #	1152940011	FLOW (mL/min)	476
INITIAL		FINAL	
BKG/OFFSET	1.9	BKG/OFFSET	1.99
COEF/SLOPE	0.956	COEF/SLOPE	0.971
Expected (reference) Value	41.73	Expected (reference) Value	44.57

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	Teledyne
MODEL:	2000	MODEL:	T701
ID:	1991	ID:	134
MFC CALIBRATION DATE:	17-May-2019	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL119432	HIGH ID	n/a
CONC (ppm):	10.3	EXPIRY DATE	n/a
CYLINDER (psi):	300	LOW ID	n/a
EXPIRY DATE	07-Nov-2020	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

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

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

START TIME:	09:23	SO2 Conc (ppb)	380
END TIME:	09:38	Analyzer Response (ppb)	0.0

CALIBRATION:

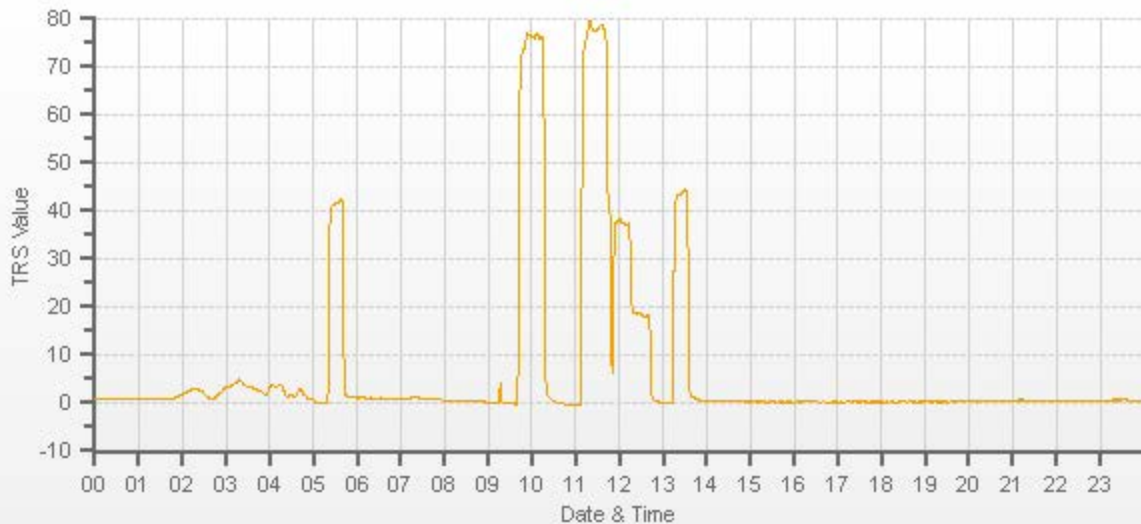
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4000	30.36	4000	0.00	0.07	0	1.021	1.000
3970	30.36	4001	78.02	76.5	78	1.021	1.000
3988	14.81	4002	38.04	n/a	37.67	n/a	1.010
3995	7.40	4003	19.01	n/a	18.65	n/a	1.019

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	-0.2%

COMMENTS:

11:48-11:51 = User error. Mid-point restarted.
Sample filter changed



TRS Analyzer Calibration by Dilution



DATE:	18-Sep-2019	PREVIOUS CALIBRATION DATE:	04-Sep-2019
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.8
LOCATION:	986C	BAROMETRIC (mBar):	942
PURPOSE:	Removal/Shut-down	START TIME (MST):	08:00
PERFORMED BY:	Chris Wesson	END TIME (MST):	13:56

ANALYZER:

MAKE/MODEL	Thermo 43I-TLE	RANGE	100 ppb
SERIAL #	1152940011	FLOW (mL/min)	477
INITIAL		FINAL	
BKG/OFFSET	1.98	BKG/OFFSET	n/a
COEF/SLOPE	0.971	COEF/SLOPE	n/a
Expected (reference) Value	44.57	Expected (reference) Value	n/a

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	Teledyne
MODEL:	2000	MODEL:	T701
ID:	1991	ID:	134
MFC CALIBRATION DATE:	17-May-2019	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL119432	HIGH ID	n/a
CONC (ppm):	10.3	EXPIRY DATE	n/a
CYLINDER (psi):	300	LOW ID	n/a
EXPIRY DATE	07-Nov-2020	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:

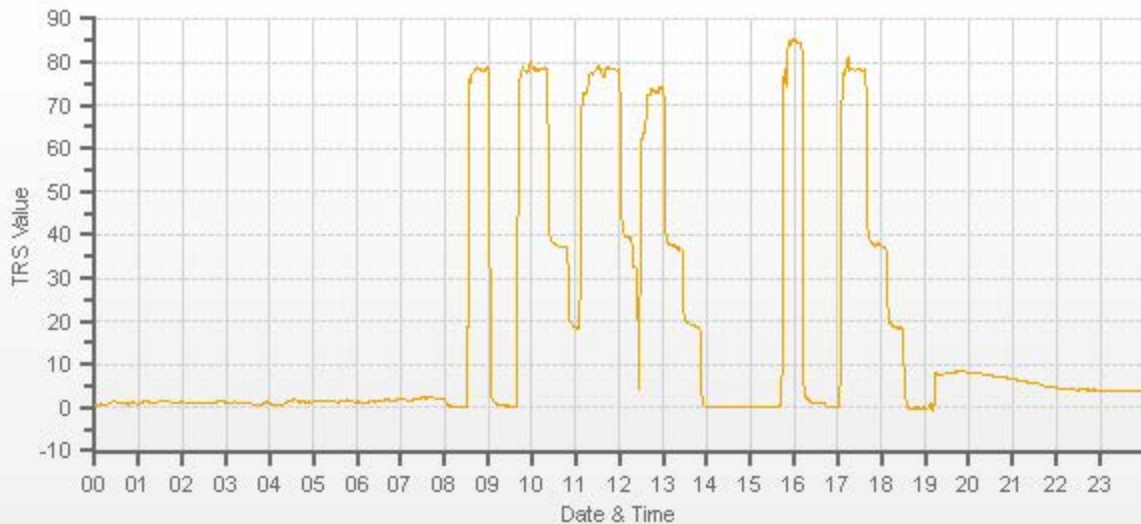
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4000	30.37	4000	0.00	-0.05	n/a	1.063	n/a
3969	30.37	4000	78.05	73.37	n/a	1.063	n/a
3987	14.79	4001	38.00	36.8	n/a	1.031	n/a
3992	7.40	3999	19.02	18.8	n/a	1.009	n/a

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	0.938	0.6%

COMMENTS:

Commenced as repeat calibration due to span drift following power fail.
 11:06 - 12:21. Adjusted upscale points unacceptable due to unstable/non-linear response. Analyzer reset and upscale points completed as shut-down instead (12:28-13:56).



TRS Analyzer Calibration by Dilution



DATE:	19-Sep-2019	PREVIOUS CALIBRATION DATE:	n/a
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	n/a
CLIENT:	PRAMP	TEMPERATURE (°C):	24.2
LOCATION:	986C	BAROMETRIC (mBar):	936
PURPOSE:	Install/Post-Repair	START TIME (MST):	12:03
PERFORMED BY:	Chris Wesson	END TIME (MST):	15:17

ANALYZER:

MAKE/MODEL	Thermo 43I-TLE	RANGE	100 ppb
SERIAL #	1152940011	FLOW (mL/min)	478
INITIAL		FINAL	
BKG/OFFSET	3.21	BKG/OFFSET	3.57
COEF/SLOPE	0.946	COEF/SLOPE	0.929
Expected (reference) Value	n/a	Expected (reference) Value	44.62

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	Teledyne
MODEL:	2000	MODEL:	T701
ID:	1991	ID:	134
MFC CALIBRATION DATE:	17-May-2019	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL119432	HIGH ID	n/a
CONC (ppm):	10.3	EXPIRY DATE	n/a
CYLINDER (psi):	300	LOW ID	n/a
EXPIRY DATE	07-Nov-2020	EXPIRY DATE	n/a

CALIBRATION PARAMETERS:

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

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

START TIME:	12:48	SO2 Conc (ppb)	380
END TIME:	13:03	Analyzer Response (ppb)	0.0

CALIBRATION:

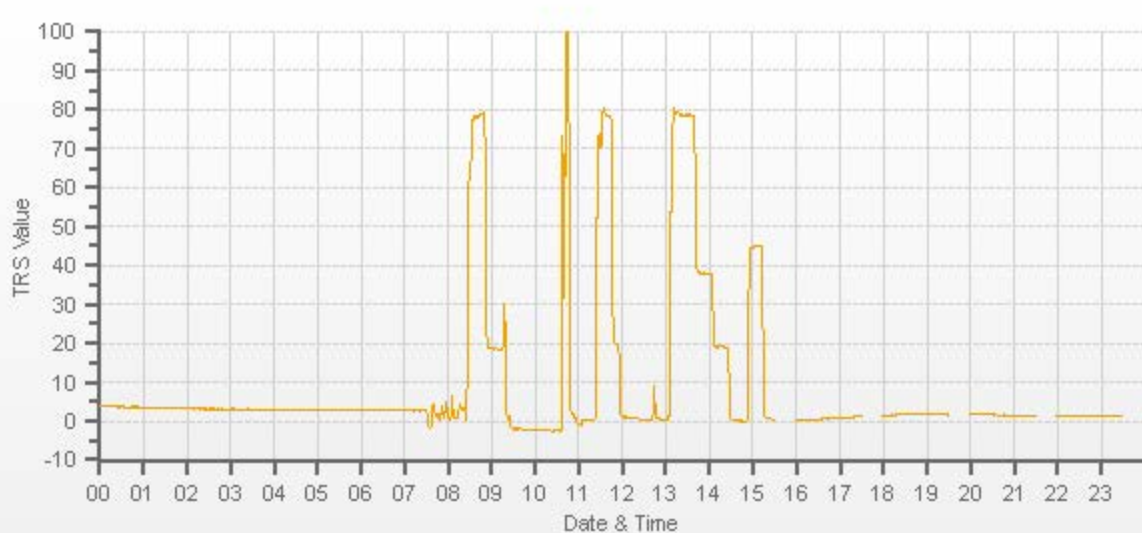
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
4000	30.36	4000	0.00	n/a	0	n/a	1.000
3968	30.36	3998	78.06	n/a	78.1	n/a	1.000
3985	14.81	4000	38.06	n/a	37.56	n/a	1.013
3995	7.42	4003	19.05	n/a	18.56	n/a	1.026

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.002	-0.3%

COMMENTS:

Post-repair calibration following maintenance on TRS Converter (CDN-101 #679) and analyzer.



Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	04-Sep-2019	PREVIOUS CALIBRATION DATE:	01-Aug-2019	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	22.5		Thermo 55i	1022043392	955
LOCATION:	986C	BAROMETRIC (mBar):	938	PARAMETER:	CH4	NMHC	THC
PURPOSE	Routine	START TIME (MST):	11:46	RANGE (ppm):	20	20	40
PERFORMED BY:	Chris Wesson	END TIME (MST):	15:33	PREVIOUS CF:	1.001	1.000	1.000

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	Sabio	MAKE:	Teledyne	CYLINDER ID:	LL107207	HIGH ID:	n/a
MODEL:	2010	MODEL:	T701	CH ₄ /C ₃ H ₈ (ppm):	600.0 207.0	HIGH EXPIRY:	n/a
ID:	26801218	ID:	134	CYLINDER (psi):	1050	LOW ID:	n/a
MFC CALIBRATION DATE:	19-Jun-2019	OXIDIZER ID:	Internal	EXPIRY DATE	18-Oct-2025	LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH ₄ /NMHC)	HIGH	MID	LOW	CH ₄ EQUIVILANCE		
TARGET	14	7	3.5	C ₃ H ₈ as CH ₄		569.3
RANGE	12 - 16	6 - 8	2 - 4	THC as CH ₄		1169.3

EXPECTED (REFERENCE) VALUE:

INITIAL	CH ₄	NMHC	THC	FINAL	CH ₄	NMHC	THC
	10.47	11.54	22.00		10.42	11.44	21.86

CALIBRATION:

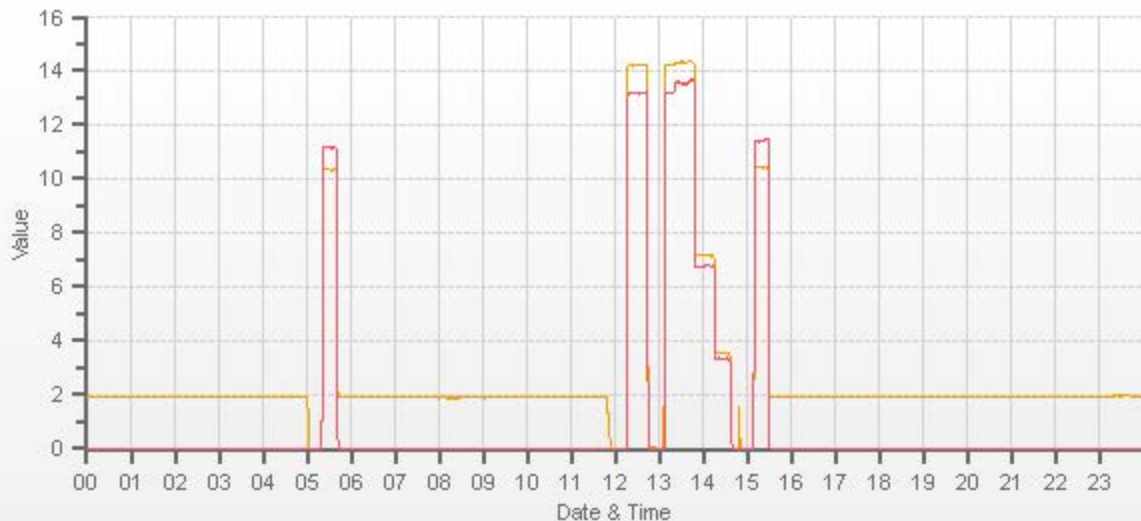
FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC
3111	X	3111	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	X	X	X	X	X	X
3038	74.20	3112	14.31	13.57	27.88	14.21	13.17	27.38	14.33	13.57	27.90	1.007	1.031	1.018	0.998	1.000	0.999
3076	37.10	3113	7.15	6.78	13.93	n/a	n/a	n/a	7.15	6.80	13.96	n/a	n/a	n/a	1.000	0.998	0.998
3093	18.60	3112	3.59	3.40	6.99	n/a	n/a	n/a	3.56	3.36	6.92	n/a	n/a	n/a	1.007	1.013	1.010

LINEAR REGRESSION ANALYSIS:

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

COMMENTS:

Sample Filter Changed



CAL-PRAMP-201909-01562

Page 18 of 19
CH4[ppm] NMHC[ppm]

Meteorological System Checklist



Date:	September 4, 2019
Technician:	Chris Wesson
Reviewer:	Wunmi Adekanmbi
Station:	PRAMP 986C

Unit:	Make:	Model:	Serial #:
Precipitation Sampler:	EML	ARG100	190114
Temperature Sensor:	RM Young	43182VC	030978
Barometric Pressure Sensor:	MetOne	090D	F3845
Relative Humidity Sensor:	RM Young	43182VC	030978
Anemometer:	RM Young	05305VK	129612

PRECIPITATION SENSOR CHECK

Checklist:	Reply:	Comments:
Previous check date:	August 1, 2019	
Is the sensor Level?	yes	
Are the bucket drain holes clean?	Yes	
Is the housing clean?	yes	
Is the area around the housing clean and free from obstacles?	yes	

AMBIENT TEMPERATURE SENSOR CHECK

Previous check date:	August 1, 2019
Parameter:	Temperature @ 2 metres
Reference Thermometer ID:	FS 181341226
Reference Temperature (°C):	19.1
Station - Ambient Temperature (°C):	19.0
Temperature Difference (°C):	0.1

BAROMETRIC PRESSURE SENSOR CHECK

Previous check date:	August 1, 2019
Reference Barometer ID:	Brunton 05490
Reference Pressure - Units/Reading:	millibar 936.9
Station Pressure - Units/Reading:	millibar 938.8
Pressure Tolerance +/- 15% of error:	796 - 1077 -0.20%

RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK

Previous check date:	August 1, 2019
Reference Hygrometer ID:	FS 181341226
Reference Hygrometer % RH- Reading:	77.50
Station Hygrometer % RH- Reading:	77.00
RH Tolerance +/- 15% of difference:	65.88 - 89.13 0.6%

ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK

WIND SPEED		WIND DIRECTION	
Previous check date:	August 1, 2019	Previous check date:	August 1, 2019
Wind Speed Observed (kph):	15-25	Wind Direction Observed:	SW
Wind speed on Data Logger (kph):	21	Wind Direction on Data Logger:	SW
		Wind Direction Pass/Fail?:	Pass

Comments



Peace River Area Monitoring Program

SEPTEMBER 2019
Ambient Air Monitoring Calibration Report
- RENO STATION-
CAL-PRAMP-201909-01563

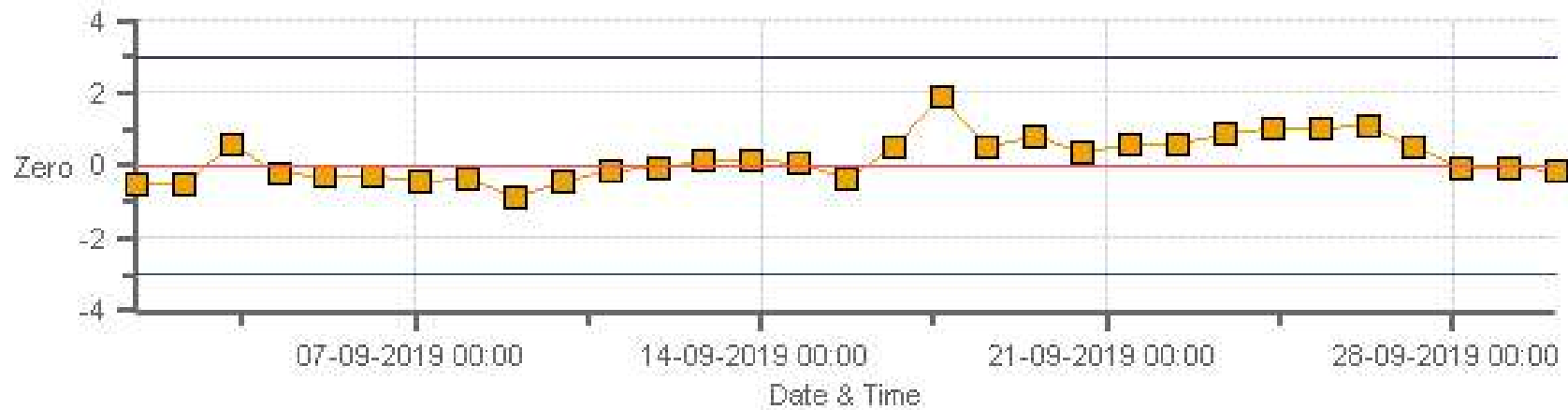
Operation and Maintenance:
Bureau Veritas Canada

Data Validation and Report:
Bureau Veritas Canada

October 16, 2019

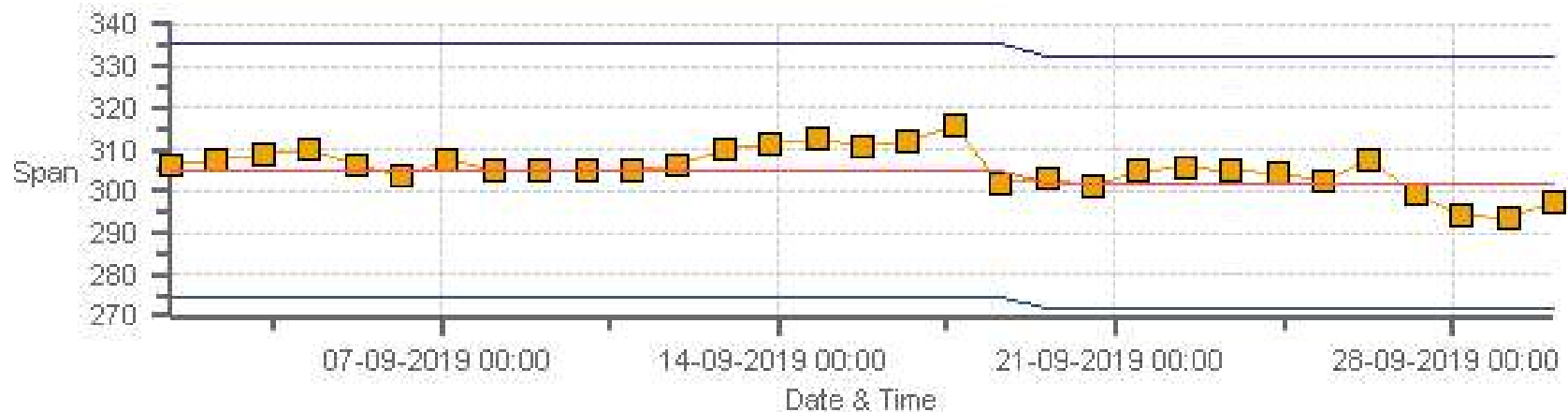
DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS

SO2 [ppb] Calibration: PRAMP Reno Monthly: 09-2019 Type: Zero



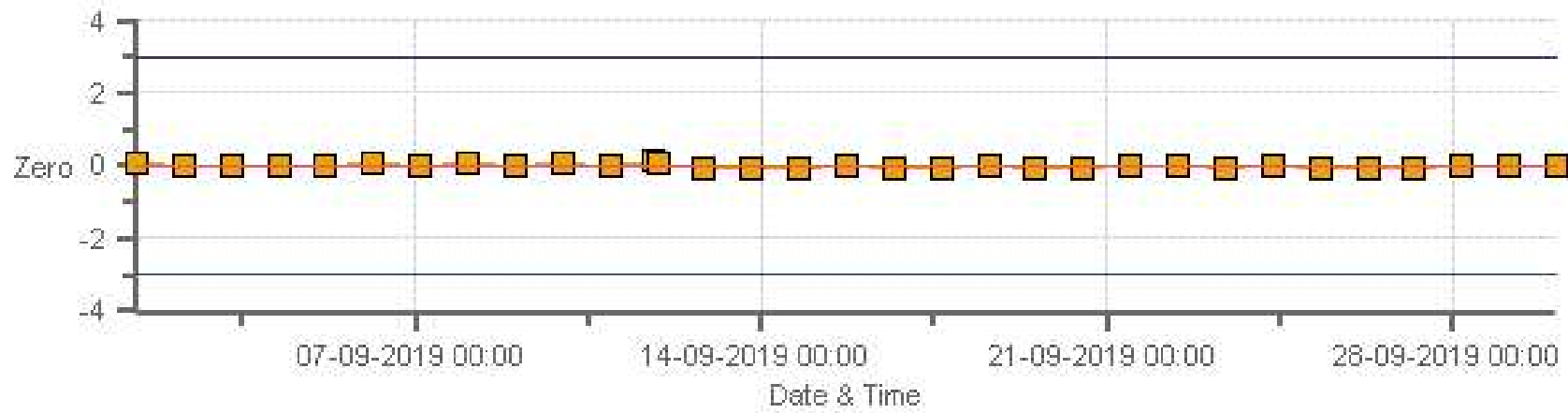
Zero Zero Ref Zero Low Zero High

SO2 [ppb] Calibration: PRAMP Reno Monthly: 09-2019 Type: Span



Span SpanRef Span Low Span High

TRS [ppb] Calibration: PRAMP Reno Monthly: 09-2019 Type: Zero



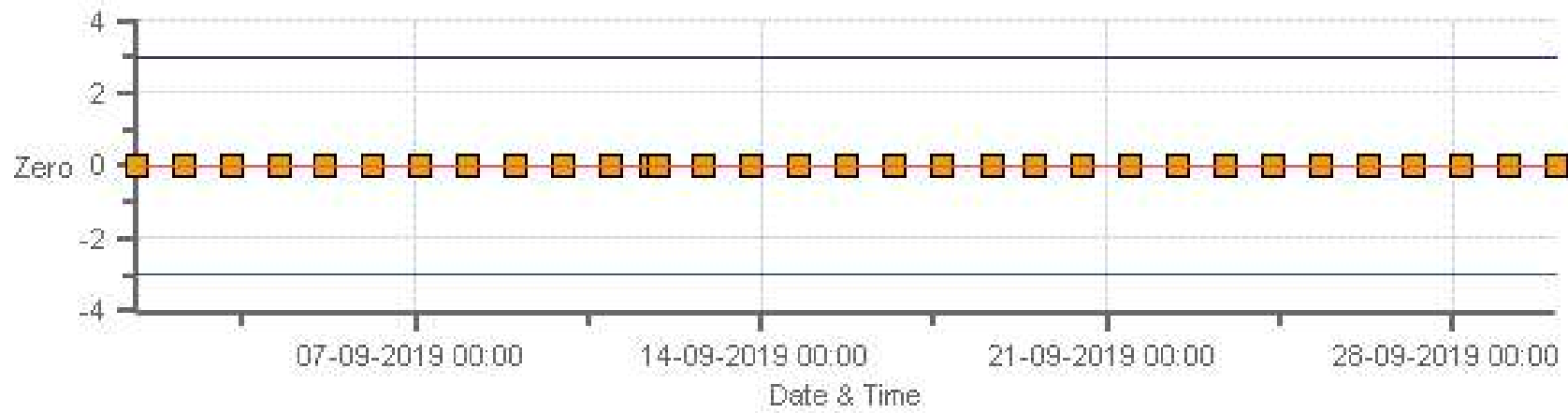
Zero Zero Ref Zero Low Zero High

TRS [ppb] Calibration: PRAMP Reno Monthly: 09-2019 Type: Span



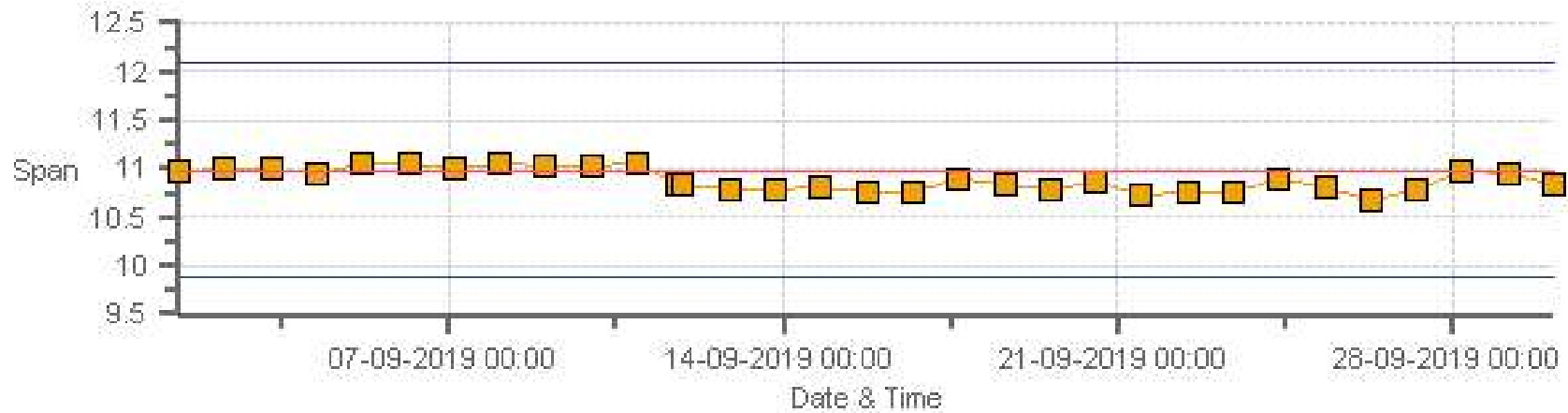
Span Span Ref Span Low Span High

CH4 [ppm] Calibration: PRAMP Reno Monthly: 09-2019 Type: Zero



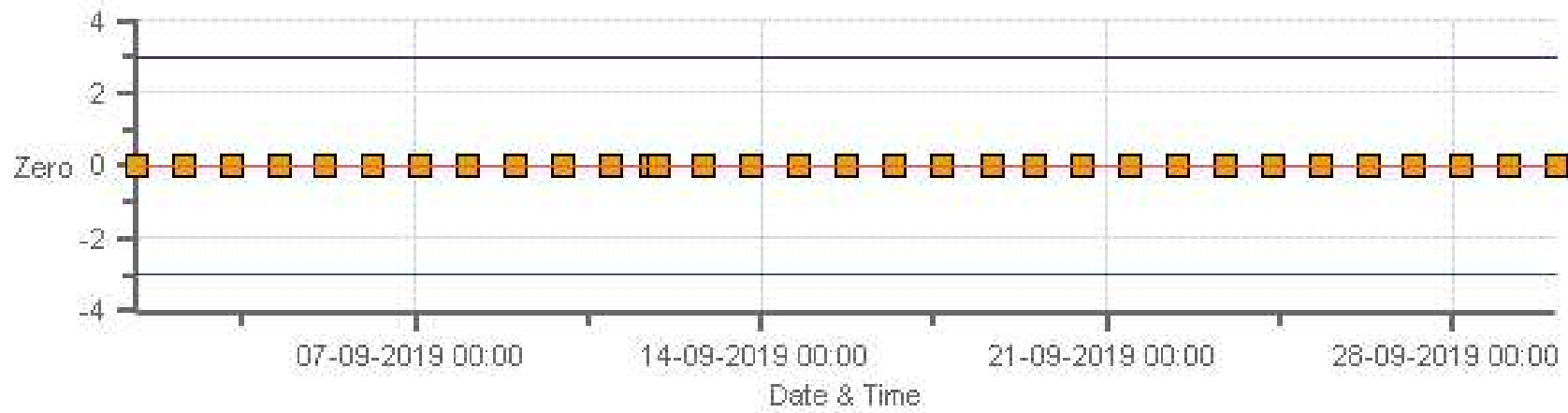
Zero Zero Ref Zero Low Zero High

CH4 [ppm] Calibration: PRAMP Reno Monthly: 09-2019 Type: Span



Span SpanRef Span Low Span High

NMHC [ppm] Calibration: PRAMP Reno Monthly: 09-2019 Type: Zero



Zero Zero Ref Zero Low Zero High

NMHC [ppm] Calibration: PRAMP Reno Monthly: 09-2019 Type: Span



Span Span Ref Span Low Span High

MULTI-POINT CALIBRATION RECORDS

SO2 Analyzer Calibration by Dilution



DATE:	18-Sep-2019	PREVIOUS CALIBRATION DATE:	21-Aug-2019
PARAMETER:	SO2	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.0
LOCATION:	Reno	BAROMETRIC (mBar):	930
PURPOSE:	Routine	START TIME (MST):	10:37
PERFORMED BY:	Moe Haddadi	END TIME (MST):	14:07

ANALYZER:

MAKE/MODEL	API 100A	RANGE	500 ppb
SERIAL #	841	FLOW (mL/min)	654
INITIAL		FINAL	
BKG/OFFSET	55	BKG/OFFSET	54.3
COEF/SLOPE	1.085	COEF/SLOPE	1.068
Expected (reference) Value	304.9	Expected (reference) Value	301.9

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	Sabio	MAKE:	Teledyne
MODEL:	2010	MODEL:	T701
ID:	17100415	ID:	133
MFC CALIBRATION DATE:	30-Apr-2019	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	EY0000597	HIGH ID	n/a
CONC (ppm):	50.40	EXPIRY DATE	n/a
CYLINDER (psi):	200	LOW ID	n/a
EXPIRY DATE	08-Dec-2019	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		
4996	37.70	4996	0.00	-0.1	0	0.985	1.000
4960	37.70	4998	380.17	386	380.2	0.985	1.000
4980	17.80	4998	179.50	n/a	178.8	n/a	1.004
4989	8.90	4998	89.75	n/a	89	n/a	1.008

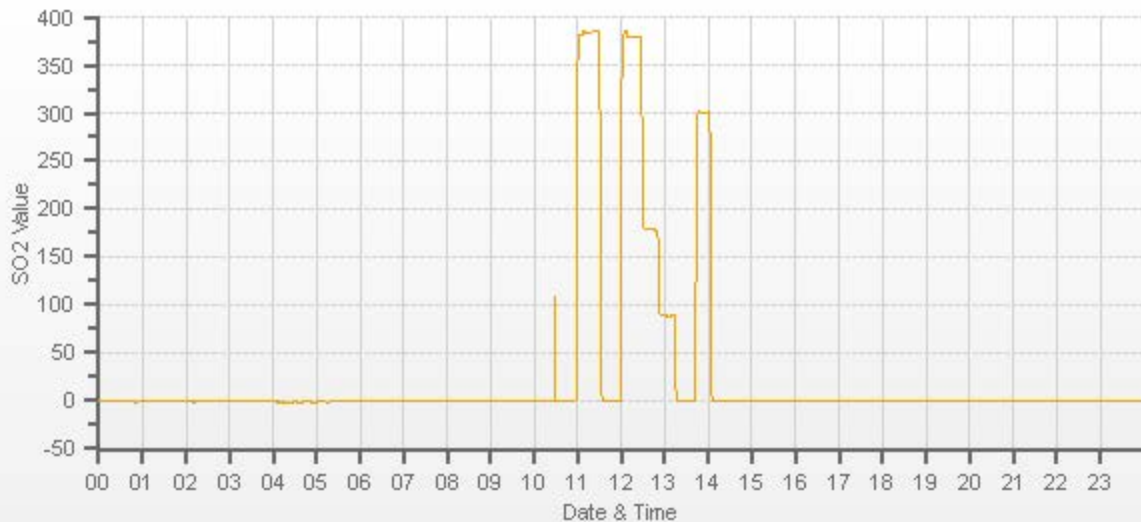
LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.001	-0.1%

COMMENTS:

n/a

SO2[ppb] Station: PRAMP RENO Daily: 18-09-2019 Type: AVG 1 Min. [1 Min.]



CAL-PRAMP-201909-01563

TRS Analyzer Calibration by Dilution



DATE:	11-Sep-2019	PREVIOUS CALIBRATION DATE:	21-Aug-2019
PARAMETER:	TRS	PREVIOUS CORRECTION FACTOR:	1.000
CLIENT:	PRAMP	TEMPERATURE (°C):	23.8
LOCATION:	Reno	BAROMETRIC (mBar):	942
PURPOSE:	Routine	START TIME (MST):	14:18
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	19:53

ANALYZER:

MAKE/MODEL	Thermo 43I-TLE	RANGE	100 ppb
SERIAL #	1162460022	FLOW (mL/min)	408
INITIAL		FINAL	
BKG/OFFSET	2.23	BKG/OFFSET	2.26
COEF/SLOPE	0.982	COEF/SLOPE	0.967
Expected (reference) Value	39.82	Expected (reference) Value	39.82

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:	
MAKE:	EnviroNics	MAKE:	API
MODEL:	6100	MODEL:	T701
ID:	4760	ID:	74
MFC CALIBRATION DATE:	18-Jul-2019	OXIDIZER ID:	n/a
CALIBRATION GAS:		FLOWMETERS (if applicable):	
CYLINDER ID:	LL119420	HIGH ID	n/a
CONC (ppm):	10.20	EXPIRY DATE	n/a
CYLINDER (psi):	400	LOW ID	n/a
EXPIRY DATE	16-May-2020	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:	14:56	SO2 Conc (ppb)	380
END TIME:	15:11	Analyzer Response (ppb)	-0.1

CALIBRATION:

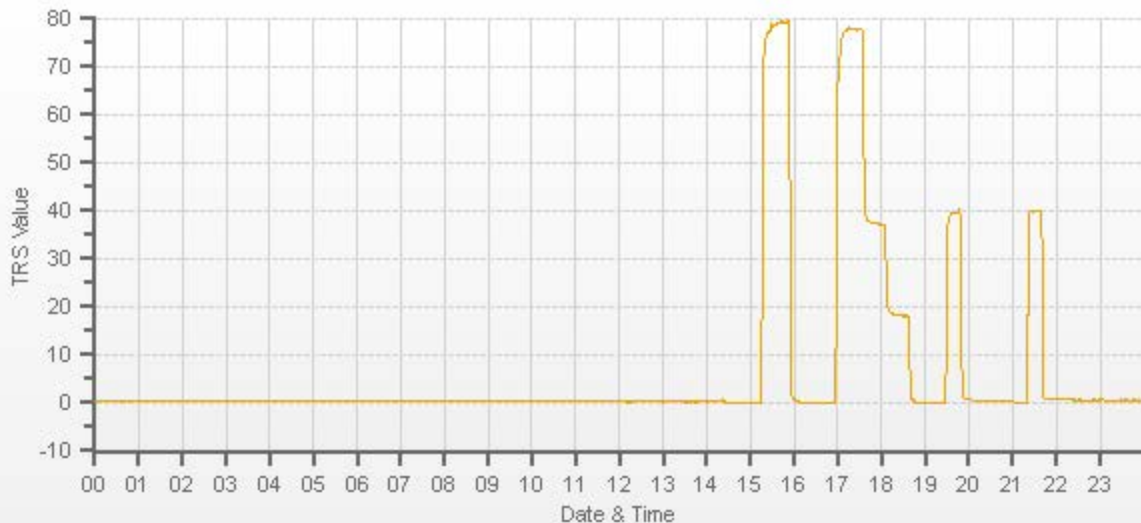
FLOW RATES (mL/min)			CONCENTRATION (ppb)			CORRECTION FACTOR	
DILUENT	GAS	TOTAL	ACTUAL	INDICATED		Initial	Final
				Initial	Final		
7486	57.21	7486	0.00	0.04	0	0.981	1.001
7430	57.21	7487	77.93	79.52	77.87	0.981	1.001
7460	27.86	7488	37.95	n/a	37.31	n/a	1.017
7475	13.94	7489	18.99	n/a	18.26	n/a	1.040

LINEAR REGRESSION ANALYSIS:

	CORRELATION	SLOPE	INTERCEPT
VALUE	1.000	1.002	-0.4%

COMMENTS:

Sample inlet filter changed.



Methane/Non-Methane Analyzer Calibration by Dilution



CALIBRATION:				ANALYZER:			
DATE:	11-Sep-2019	PREVIOUS CALIBRATION DATE:	August 21, 2019	VALUE	MAKE/MODEL	SERIAL	FLOW (mL/min)
CLIENT:	PRAMP	TEMPERATURE (°C):	23.8		Thermo 55i	1314057759	1166.5
LOCATION:	Reno	BAROMETRIC (mBar):	942	PARAMETER:	CH4	NMHC	THC
PURPOSE	Routine	START TIME (MST):	14:18	RANGE (ppm):	20	20	40
PERFORMED BY:	Ferdinand Roy	END TIME (MST):	19:00	PREVIOUS CF:	0.995	0.999	0.997

CALIBRATION SYSTEM:

CALIBRATOR:		ZERO AIR:		CALIBRATION GAS:		FLOWMETERS (if applicable):	
MAKE:	EnviroNics	MAKE:	API	CYLINDER ID:	LL43221	HIGH ID:	n/a
MODEL:	6100	MODEL:	T701	CH ₄ /C ₃ H ₈ (ppm):	595.0 206.0	HIGH EXPIRY:	n/a
ID:	5212	ID:	74	CYLINDER (psi):	1500	LOW ID:	n/a
MFC CALIBRATION DATE:	19-Jul-2019	OXIDIZER ID:	n/a	EXPIRY DATE	18-Oct-2025	LOW EXPIRY:	n/a

CALIBRATION PARAMETERS:

POINT (CH ₄ /NMHC)	HIGH	MID	LOW	CH ₄ EQUIVILANCE		
TARGET	14	7	3.5	C ₃ H ₈ as CH ₄		566.5
RANGE	12 - 16	6 - 8	2 - 4	THC as CH ₄		1161.5

EXPECTED (REFERENCE) VALUE:

INITIAL	CH ₄	NMHC	THC	FINAL	CH ₄	NMHC	THC
	10.98	11.33	22.31		10.98	11.33	22.31

CALIBRATION:

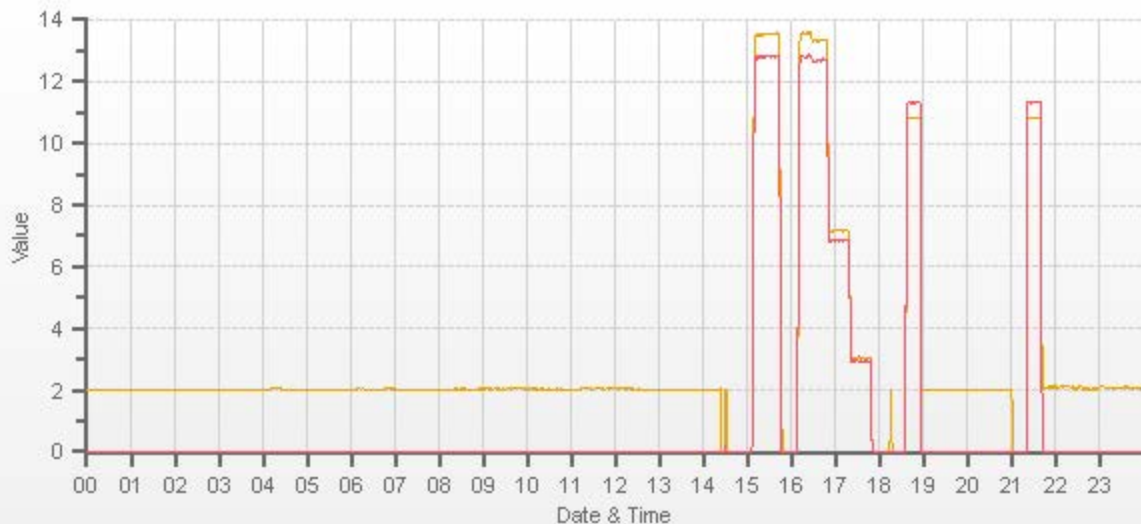
FLOW RATE			CONCENTRATION (PPM)									CORRECTION FACTOR (CF.)					
(mL/min)			CALCULATED			INITIAL INDICATED			FINAL INDICATED			INITIAL			FINAL		
DILUENT	GAS	TOTAL	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC	CH ₄	NMHC	THC
3144	X	3144	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	X	X	X	X	X	X
3078	70.47	3148	13.32	12.68	26.00	13.54	12.83	26.37	13.31	12.68	26.00	0.984	0.988	0.986	1.001	1.000	1.000
3110	37.92	3148	7.17	6.83	13.99	n/a	n/a	n/a	7.18	6.87	14.05	n/a	n/a	n/a	0.998	0.994	0.996
3131	16.25	3148	3.07	2.92	5.99	n/a	n/a	n/a	3.06	2.95	6.01	n/a	n/a	n/a	1.004	0.991	0.997

LINEAR REGRESSION ANALYSIS:

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

COMMENTS:

As-found zero commenced at 14:30. Sample inlet filter changed.



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CH4[ppm] NMHC[ppm]

Meteorological System Checklist



Date:	September 11, 2019		
Technician:	Ferdinand Roy		
Reviewer:	Wunmi Adekanmbi		
Station:	PRAMP Reno		
Unit:	Make:	Model:	Serial #:
Temperature Sensor:	RM Young	43172VC	60837897
Barometric Pressure Sensor:	MetOne	92	R12877
Relative Humidity Sensor:	RM Young	43172VC	60837897
Anemometer:	RM Young	05305VK	149769
AMBIENT TEMPERATURE SENSOR CHECK			
Previous check date:			
Parameter:	Temperature @ 2 metres		
Reference Thermometer ID:	F.S. 160459244 expires Jun 19, 2020		
Reference Temperature (°C):	14.2		
Station - Ambient Temperature (°C):	13.9		
Temperature Difference (°C):	0.3		
BAROMETRIC PRESSURE SENSOR CHECK			
Previous check date:			
Reference Barometer ID:	F.S. 10528 expires January 23, 2020		
Reference Pressure - Units/Reading:	millibar	942	
Station Pressure - Units/Reading:	millibar	942.9	
Pressure Tolerance +/- 15% of error:	801 - 1083	-0.10%	
RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK			
Previous check date:			
Reference Hygrometer ID:	F.S. 160459244 expires Jun 19, 2020		
Reference Hygrometer % RH- Reading:	57.40		
Station Hygrometer % RH- Reading:	60.10		
RH Tolerance +/- 15% of difference:	48.79 - 66.01	-4.7%	
ANEMOMETER - WIND SPEED & WIND DIRECTION SENSOR CHECK			
WIND SPEED		WIND DIRECTION	
Previous check date:	August 21, 2019	Previous check date:	August 21, 2019
Wind Speed Observed (kph):	5-10	Wind Direction Observed:	S
Wind speed on Data Logger (kph):	8.6	Wind Direction on Data Logger:	S
		Wind Direction Pass/Fail?:	Pass
Comments			