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June 19, 2018

Subject: Monthly Report Submission for the PRAMP Reno AQM station

Peace River Area Monitoring Program Committee (PRAMP) is pleased to submit the ambient air monitoring monthly report for the PRAMP Reno AQM Station in the month of May 2018.

The air monitoring program consists of continuous air monitoring results for Sulphur Dioxide (SO₂), Total Reduced Sulphur (TRS), Total Hydrocarbon (THC), Methane (CH₄), Non-Methane Hydrocarbon (NMHC), Relative Humidity (RH), Barometric Pressure (BP), Ambient Temperature (AmbTPX), Station Temperature (StnTPX), Wind Speed (WS) and Wind Direction (WD). All the air monitoring activities were conducted by Maxxam Analytics.

All data collected in May 2018 was compliant with the requirements outlined in the Air Monitoring Directive (Alberta Environment and Parks, 2016).

The operational time for all meteorological systems were above the 90% requirement.

As the PRAMP Technical Program Managers, we 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. We also verify all air data that are required by the AMD to be electronically submitted to AEP and Alberta's Ambient Air Quality Data Warehouse have been submitted by the time of this report submission.

Should you have any questions, please don't hesitate to contact us.

Respectfully,

Two handwritten signatures in blue ink. The first signature is "Michael Bisaga" and the second is "Lily Lin". They are separated by a forward slash (/).

Michael Bisaga / Lily Lin
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AMBIENT AIR MONITORING MONTHLY DATA REPORT
PEACE RIVER AREA MONITORING PROGRAM COMMITTEE
RENO STATION

JOB #: 196-2018-05-93-C

May 2018

Prepared for:

PEACE RIVER AREA MONITORING PROGRAM COMMITTEE

Attention: LILY LIN

DATE: **June 14, 2018**

Prepared by:

A handwritten signature in blue ink, appearing to read "Wunmi Adekanmbi".

Wunmi Adekanmbi, M.Sc., EPT, PMP
Project Team Lead, Customer Service, Air Services

Reviewed by:

A handwritten signature in black ink, appearing to read "Cheri Sinclair".

Cheri Sinclair, B.Sc.
Supervisor, Customer Service, Air Services

SUMMARY

In May 2018, Maxxam Analytics was contracted to manage the ambient air quality monitoring and maintenance activities at the Reno Station, near Peace River Oil Sands Area 1, Alberta. The monitoring station provides continuous meteorological measurements and air quality data for non-compliance parameters, as requested by the PRAMP Committee.

All data collected this month was compliant with the requirements outlined in the Air Monitoring Directive (Alberta Environment and Parks, 2016).

The operational time for all continuous ambient air analyzers, meteorological systems and data acquisition systems were above the 90% requirement.

SO₂: Six hours of downtime were incurred between May 18 and May 19 due to a biased low drift in span response and the corrective actions performed to address it.

TRS: Two hours of downtime were incurred on May 1 due to an additional zero-span check performed to assess a biased high drift in span response.

THC/CH₄/NMHC: Following a span gas replacement on May 19, an additional zero-span check was conducted to provide a reference for the expected span value, incurring one hour of downtime.

The summary of results is presented on the following pages.

Any deviations or modifications made to the sampling or analytical methods are outlined in Section 1.0, Discussion. On this basis, Maxxam Analytics is issuing this completed report to Peace River Area Monitoring Program Committee, Reno Station.

Should you have any questions concerning the results or if we can be of further assistance, please contact us at 403-219-3661 or toll-free at 1-800-386-7247.

Monthly Continuous Data Summary

Peace River Area Monitoring Program Committee						MAXIMUM VALUES							OPERATIONAL TIME (%)
Reno Station						1-HOUR					24-HOUR		
PARAMETER	OBJECTIVES		EXCEEDANCES		MONTHLY AVERAGE	READING	DAY	HOUR	WIND SPEED (kph)	WIND DIRECTION (sector)	READING	DAY	
	1-hr	24-hr	1-hr	24-hr									
SO ₂ (ppb)	172	48	0	0	0	1	9	9	18.1	ESE	0	1	99.2
TRS (ppb)	-	-	-	-	0.41	0.97	22	5	2.4	SSW	0.53	22	99.7
THC (ppm)	-	-	-	-	1.95	3.76	13	21	1.2	SSW	2.12	13	99.9
CH ₄ (ppm)	-	-	-	-	1.95	3.76	13	21	1.2	SSW	2.12	13	99.9
NMHC (ppm)	-	-	-	-	0.00	0.00	1	0	0.9	W	0.00	1	99.9
RELATIVE HUMIDITY (%)	-	-	-	-	42	90	11	4	3.9	S	64	17	100.0
BAROMETRIC PRESSURE (millibar)	-	-	-	-	938	949	17	9	6.9	E	948	17	100.0
AMBIENT TEMPERATURE (°C)	-	-	-	-	14.5	30.7	23	15	5.9	SE	23.7	23	100.0
STATION TEMPERATURE (°C)	-	-	-	-	21.5	25.2	6	17	7.1	W	23.8	6	100.0
VECTOR WS (kph)	-	-	-	-	2.5	19.6	28	11	-	WSW	11.2	9	100.0
VECTOR WD (sec)	-	-	-	-	232 (SW)	-	-	-	-	-	-	-	100.0

SOUR GAS PROCESSING INDUSTRY
MONTHLY REPORT SUMMARY

Reno Station

Peace River Area Monitoring Program Committee

Plant Name / Location

Company

Licence Number	Report Date	
	YEAR	MONTH
N/A	2018	May

CONTINUOUS AMBIENT MONITORING						
PARAMETER	% TIME OPERATIONAL	ONE - HOUR AVERAGE			24 - HOUR AVERAGE	
		MAXIMUM VALUES		NO. READINGS > REGULATION	MAXIMUM VALUES	NO. READINGS > REGULATION
SO ₂	99.2	0.001 ppm		0	0.000 ppm	0
TRS	99.7	0.001 ppm		-	0.001 ppm	-
THC	99.9	3.76 ppm		-	2.12 ppm	-
CH ₄	99.9	3.76 ppm		-	2.12 ppm	-
NMHC	99.9	0.00 ppm		-	0.00 ppm	-
RH	100.0	90 %		-	64 %	-
BP	100.0	949 mb		-	948 mb	-
Ambient TPX	100.0	30.7 °C		-	23.7 °C	-
Station TPX	100.0	25.2 °C		-	23.8 °C	-
Wind Speed	100.0	19.6 kph		-	11.2 kph	-
Wind Direction	100.0	-		-	-	-

SIGNATURE OF COMPANY REPRESENTATIVE

FOR ALBERTA ENVIRONMENT USE ONLY

Exceedance Summary Report

SO₂ 1-Hour Exceedances

Measured concentrations of sulphur dioxide were below the 1-hour AAAQO of 172 ppb.

SO₂ 24-Hour Exceedances

Measured concentrations of sulphur dioxide were below the 24-hour AAAQO of 48.0 ppb.

In accordance with EPEA and the Substance Release Regulation.

In accordance with A Guide to Release Reporting and the Alberta Ambient Air Quality Objectives and Guidelines Summary.

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1.0 Discussion

This monthly report consists of continuous monitoring results for the following parameters: Sulphur Dioxide (SO₂), Total Reduced Sulphur (TRS), Total Hydrocarbon (THC), Methane (CH₄), Non-Methane Hydrocarbon (NMHC), Relative Humidity (RH), Barometric Pressure (BP), Ambient Temperature (AmbTPX), Station Temperature (StnTPX), Wind Speed (WS) and Wind Direction (WD).

The sample inlet filter for all continuous air analyzers are replaced before the calibration begins. The sample manifold is cleaned during the site visit each month.

Control checks, consisting of a zero and span, are conducted daily on all continuous air monitors. In place of the air sample, zero air (from scrubbed air or gas cylinders) is used for zero checks, and a known concentration of the pollutant being analyzed is used for span checks. These checks are controlled by automatic timers and valves. The total zero span cycle is completed within an hour, the commencement of the zero span cycle is at the beginning of the hour.

Multipoint calibrations are done a minimum of once a month for each continuous air monitor. An additional calibration is required under the following conditions: 1) within three days after the initial start-up and stabilization of a newly installed instrument, 2) prior to shut-down or moving of an instrument which has been working to specification, and 3) when major repair has been done on the instrument.

Time during the first multi-point calibration is not considered downtime (Data is flagged as C). If more than one calibration is performed during the month, the time during the additional calibration is considered as downtime (Data is flagged as C1).

Only one zero/span check is run per day. Time during the zero/span check is not considered as downtime (Data is flagged as S). If an extra zero/span check is performed, the time during the additional check is considered as downtime (Data is flagged as S1).

The AMD requires each instrument and accompanying data recording system to be operational 90% of the time, at a minimum, for each monthly monitoring period.

All sampling, analysis, and QA/QC for this project was performed by Maxxam Analytics and complies with the Alberta Air Monitoring Directive.

Data contained in this monthly report has undergone the verification and validation based on the requirements of the AMD Chapter 6: Ambient Data Quality (December, 2016). The descriptions of the data verification and validation process can be found in Section 5 of this report. Instantaneous data, where applicable, is provided for reference purposes and has not undergone zero correction. The minimum and maximum statistics are highlighted in the data table and are for reference only. The highlighted cells are based on the software's interpretation of the exact position of the minimum or maximum value. The visual presentation of these statistics may not be the obvious choice in a data range due to rounding, truncating or analyzer specifications.

Hourly/minute data have been reviewed based on daily zero/span results and multi-point calibration results. Data may be considered invalid if a zero-corrected span check in excess of +/- 10% of the span concentration (established by the previous multi-point calibration) is encountered and/or significant differences in the calibration factor occurs (greater than 10%).

SULPHUR DIOXIDE (SO₂)

- Operational time for the monitoring period was 99.2%, equivalent to six hours of downtime.
- The routine monthly calibration was performed on May 3.
- The analyzer spanned close to the lower acceptance limit on May 17. A repeat zero-span check conducted on May 18 drifted further outside the limit. This demonstrated that the permeation tube was depleted, prompting a site visit on May 19. Following a successful as-found response check, the permeation tube was replaced and the oven temperature was adjusted. A successful repeat calibration was subsequently completed. Six hours of downtime were recorded due to the additional quality checks.
- The newly-installed permeation tube was allowed time to stabilize and the expected span value was updated on May 22.

TOTAL REDUCED SULPHUR (TRS)

- Operational time for the monitoring period was 99.7%, equivalent to two hours of downtime.
- The analyzer spanned close to the upper acceptance limit on April 30. A repeat zero-span check was performed on May 1 as a quality check. The result was closer to the mean and showed no trending drift. Two hours of downtime were recorded due to the additional quality check.
- The routine monthly calibration was performed on May 3. A new permeation tube was installed during this site visit in order to optimize the oven temperature of the zero-span system. The permeation tube was allowed time to stabilize and the expected span value was updated on May 6.

TOTAL HYDROCARBONS (THC), METHANE (CH₄) and NON-METHANE HYDROCARBONS (NMHC)

- Operational time for the monitoring period was 99.9%, equivalent to one hour of downtime.
- The routine monthly calibration was performed on May 3.
- The span gas cylinder was replaced on May 19. An additional zero-span check was conducted afterwards to provide a reference for the expected span value that would reflect the concentration of the new gas. One hour of downtime was recorded due to the additional quality check.
- The canister sampler is programmed to draw in a whole air sample when the 5-minute average concentration of NMHC is above 0.30 ppm. A representative sample of ambient air is collected over a one-hour period when the canister event is triggered. No canister event was recorded this month. A trigger test was performed during the routine monthly calibration on May 3 to assess the effectiveness of the canister system.

WIND SPEED (WS) and WIND DIRECTION (WD)

- Operational time for the monitoring period was 100%.
- Wind data is reported as vector wind speed and vector wind direction. Wind direction is defined as the direction from which the wind is blowing from and is measured in degrees from true north.

RELATIVE HUMIDITY (RH)

- Operational time for the monitoring period was 100%.

BAROMETRIC PRESSURE (BP)

- Operational time for the monitoring period was 100%.
- A pressure sensor audit was conducted on May 3. The result was satisfactory.

AMBIENT TEMPERATURE (AmbTPX)

- Operational time for the monitoring period was 100%.
- A temperature sensor audit was conducted on May 3. The result was satisfactory.

STATION TEMPERATURE (StnTPX)

- Operational time for the monitoring period was 100%.

2.0 Project Personnel

Karla Reesor was the contact for Peace River Area Monitoring Program Committee and the Maxxam field technicians were Limin Li and Christopher Wesson.

3.0 Plant Monthly Required AMD Summary

All data collected this month was compliant with the requirements outlined in the Air Monitoring Directive (Alberta Environment and Parks, 2016).

The operational time for all continuous ambient air analyzers, meteorological systems and data acquisition systems were above the 90% requirement.

4.0 Calculations and Results

All calculations and reporting of results follow the methods described in the AMD, 2016.

5.0 Methods and Procedures

The following methods and procedures were used to complete the monitoring program:

Maxxam AIR SOP-00001: Methane, Non-Methane Hydrocarbon Analyzer Monitoring

Maxxam AIR SOP-00013: RM Young Wind Monitor Calibration

Maxxam AIR SOP-00209: Ambient Sulphur Monitoring

There were no deviations from the prescribed methods.

The following instruments were used to perform the test program:

Sulphur Dioxide - API 100A UV Fluorescent Analyzer

Total Reduced Sulphur - Thermo 43i - TLE UV Fluorescent Analyzer

Methane, Non-Methane Hydrocarbon - Thermo 55i FID Analyzer

Wind System - RM Young Unit

Relative Humidity - RM Young Unit

Barometric Pressure - Met One Unit

Ambient Temperature - RM Young Unit

Datalogger - ESC 8832

The following steps were used to complete the data verification and validation process:

Level 0 Preliminary Verification

Level 0 data are raw data obtained directly from the data acquisition system (DAS). Under the step of Level 0, these data undergo a certain amount of manual or automated screening and flagging. It included a) identification of periods of missing data; b) verification of time stamps against reference time; c) verification that instrument diagnostics/datalogger flags indicate normal operation; d) comparison of data to upper and lower limits; e) rate of change flagging indicating that data changed too rapidly or not at all; and f) verification that zero, span and multipoint performance checks are within specifications. This level of verification is performed on a daily basis.

Level 1 Primary Validation

Validation actions under the step of Level 1 include a) review of all screening flags assigned during preliminary verification; b) review of all supporting site information and documentation; c) review of operational acceptance limits for each parameter/analyzer; d) review of daily zero/span and monthly calibration results for all gaseous parameters; and e) application of any necessary adjustments to data (e.g. baseline adjustments, below zero adjustments). This level of validation is performed on a monthly basis.

Level 2 Final Validation

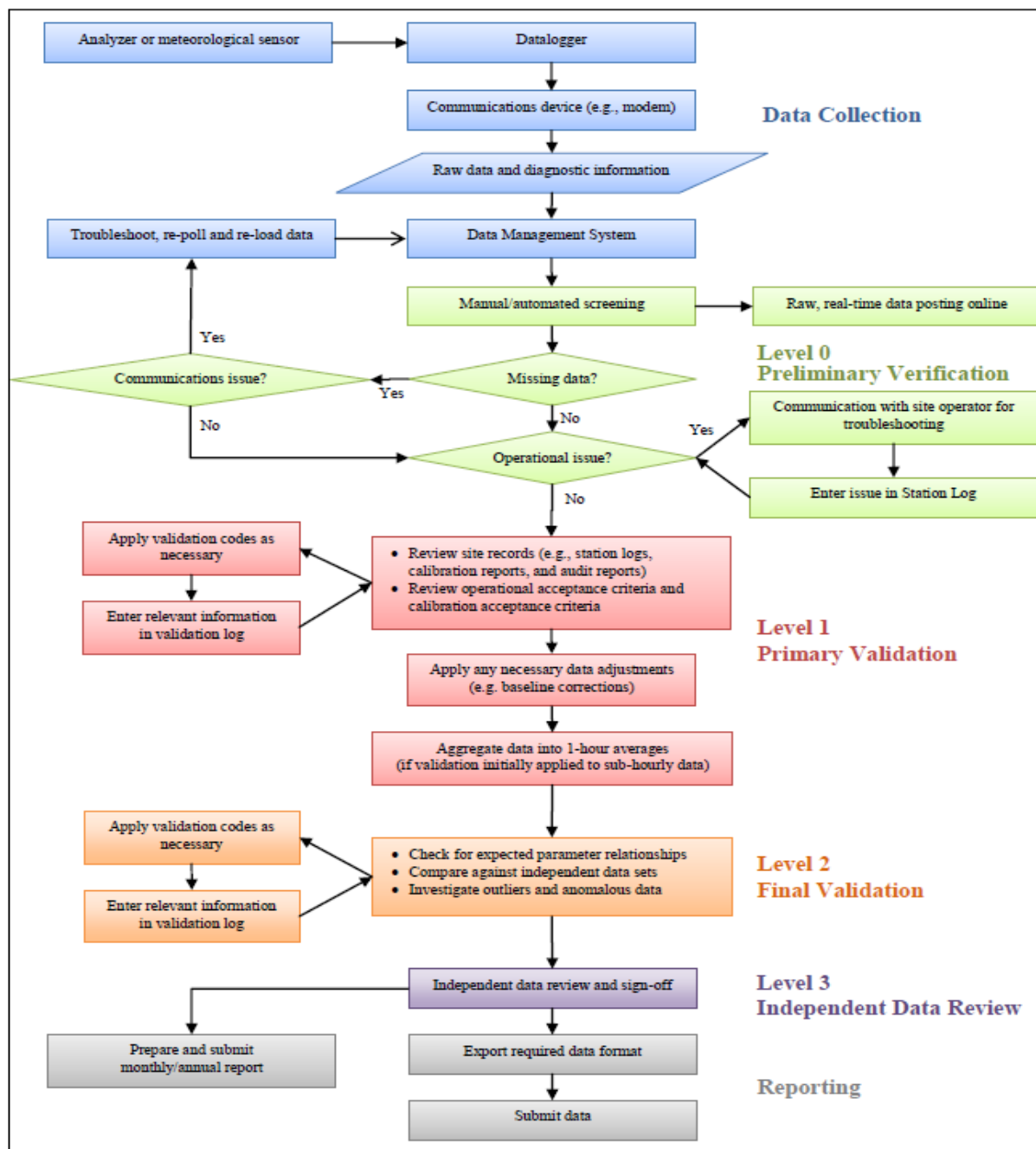
The purpose of Level 2 validation is to verify that there are no inconsistencies among related data, or among regional data measured at nearby sites.

Level 3 Independent Data Review

Level 3 validation is the last step of data review, and it is completed by an individual that is independent of both field operations and primary data validation. A final independent QA review and endorsement is performed during this step before data is submitted to Alberta Environment.

Post-Final Validation

The Post-Final Validation step serves to re-evaluate the data that errors or omissions are discovered and/or suspected after the initial submittal of data. Any data issues or patterns which were not clear on a monthly basis are highlighted during this step. This validation is performed on an annual basis.



Source: Air Monitoring Directive (December 2016), Chapter 6, Ambient Data Quality; Figure 1 Data Collection and Management Process Flow Chart

APPENDIX I
CONTINUOUS MONITORING DATA RESULTS

SULPHUR DIOXIDE

SULPHUR DIOXIDE Hourly Averages (SO₂ ppb)

HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY MIN.	DAILY MAX.	24-HR AVG.	RDGS.
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59				
DAY																												
1	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	24
2	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
3	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	24
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	24
5	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
6	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
7	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
8	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	24
9	0	0	0	0	0	S	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	24
10	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
11	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
12	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
13	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	24
14	S	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	S	0	1	0	24
15	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	24
16	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	24
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	24
18	0	0	0	0	0	0	S1	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	23
19	0	0	0	0	0	0	0	0	0	0	0	C1	C1	C1	C1	C1	0	0	S	0	0	0	0	0	0	0	0	19
20	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	24
21	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	24
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	24
23	0	0	0	0	0	0	1	1	1	1	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	1	0	24
24	0	0	0	0	0	0	1	1	0	1	1	0	0	S	0	0	0	0	0	0	0	0	0	0	0	1	0	24
25	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
26	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
27	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
28	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
29	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	24
30	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
31	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	24
HOURLY MAX	0	0	0	0	0	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	1	1				
HOURLY AVG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

STATUS FLAG CODES

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

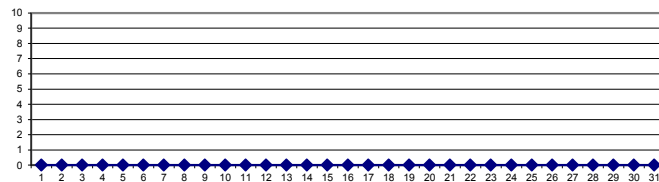
OBJECTIVE LIMIT:

ALBERTA ENVIRONMENT: 1-HR 172 ppb 24-HR 48 ppb

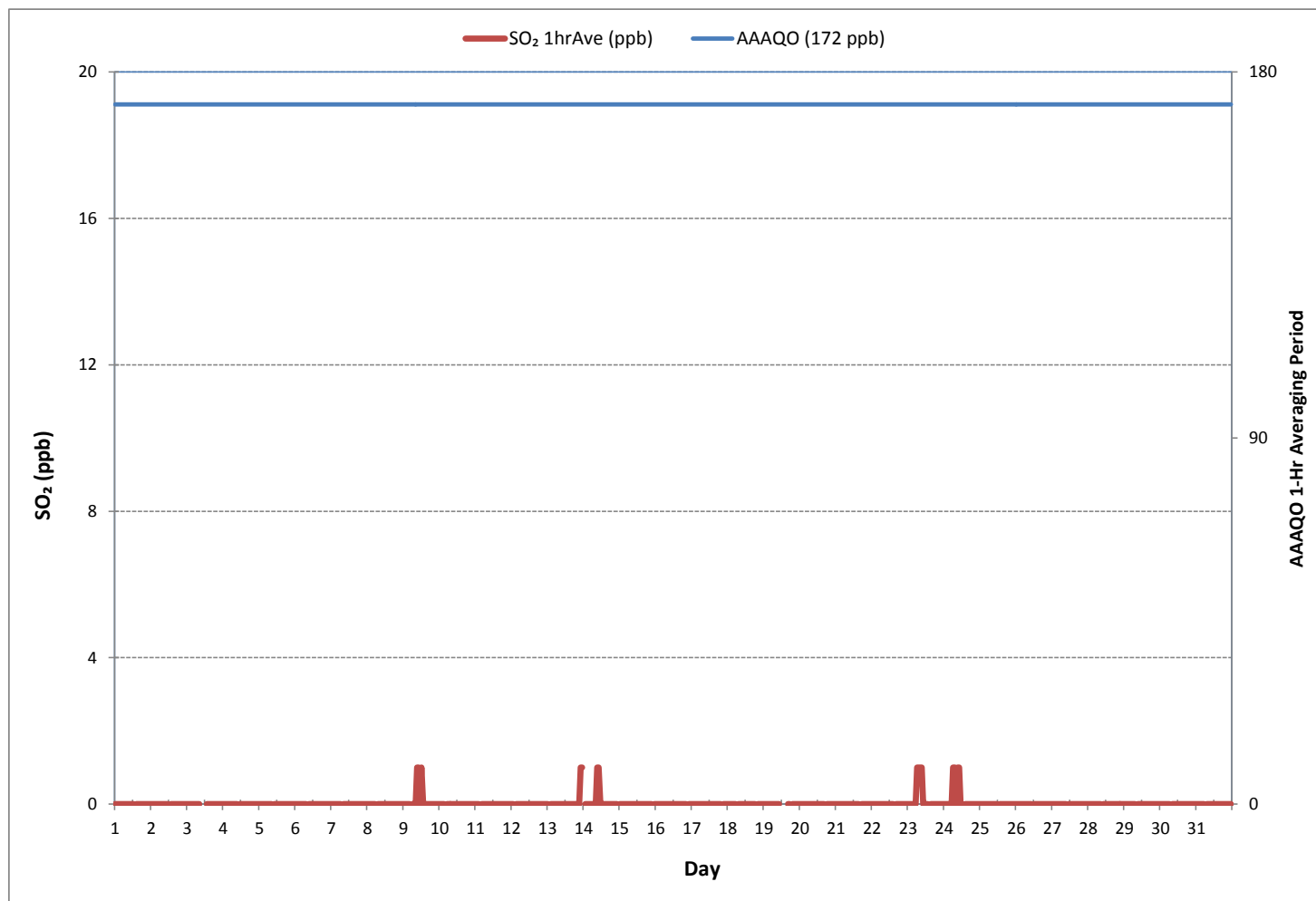
MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDANCES:	0				
NUMBER OF 24-HR EXCEEDANCES:	0				
NUMBER OF NON-ZERO READINGS:	15				
MINIMUM 1-HR AVERAGE:	0 ppb	@ HOUR	0	ON DAY	1
MAXIMUM 1-HR AVERAGE:	1 ppb	@ HOUR	9	ON DAY	9
MAXIMUM 24-HR AVERAGE:	0 ppb			ON DAY	1
IZS CALIBRATION TIME:	31 hrs	OPERATIONAL TIME:	738 hrs		
MONTHLY CALIBRATION TIME:	4 hrs	AMD OPERATION UPTIME:	99.2 %		
STANDARD DEVIATION:	0	MONTHLY AVERAGE:	0 ppb		

24 HR AVERAGES May 2018



SULPHUR DIOXIDE Hourly Averages (SO_2 ppb)



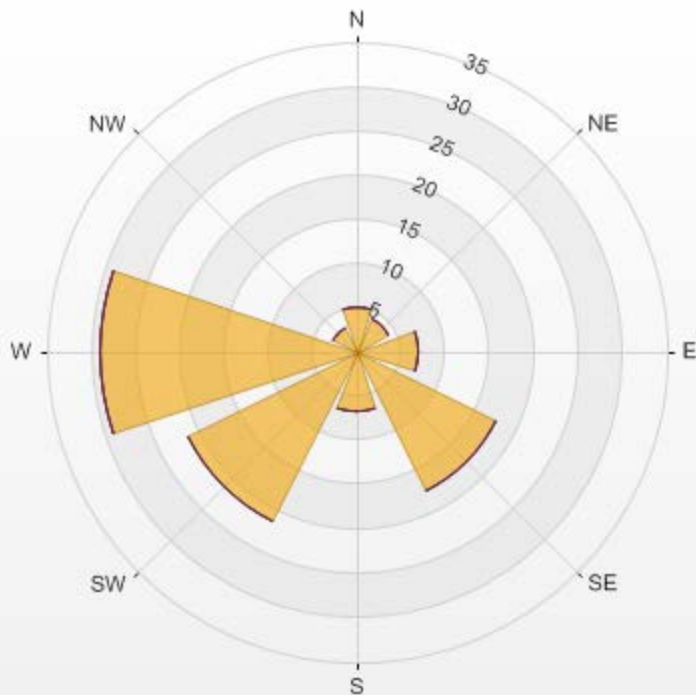
Wind: PRAMP_RENO
Poll.: PRAMP_RENO-SO₂[ppb]
Monthly: 18/05
Type: PollutionRose
Direction: Blowing From (Wind Frequency)
Based On 1 Hr.

Calm: 5.69%

Calm Avg: 0.04 [ppb]

Direction	0-3	3-10	10-85	85-170	>170.0	Total
N	5.1	0.0	0.0	0.0	0.0	5.1
NE	4.1	0.0	0.0	0.0	0.0	4.1
E	7.1	0.0	0.0	0.0	0.0	7.1
SE	17.6	0.0	0.0	0.0	0.0	17.6
S	6.8	0.0	0.0	0.0	0.0	6.8
SW	21.3	0.0	0.0	0.0	0.0	21.3
W	29.0	0.0	0.0	0.0	0.0	29.0
NW	3.1	0.0	0.0	0.0	0.0	3.1
Summary	94.3	0.0	0.0	0.0	0.0	94.3

PRAMP_RENO Poll.: PRAMP_RENO-SO2[ppb] 2018/05/01 00:00 - 2018/05/31 23:00 Calm: 5.69% Calm Poll Avg: 0.04[ppb]



SO2[ppb] Calibration: PRAMP_RENO Monthly: 18/05 Type: Span

Span Meas Span Ref Span Low Span High



TOTAL REDUCED SULPHUR

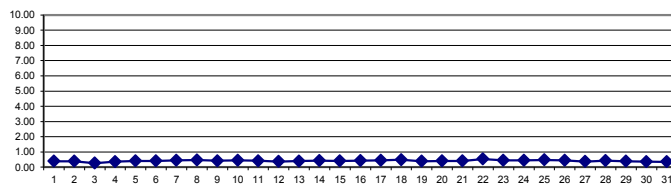
TOTAL REDUCED SULPHUR Hourly Averages (TRS ppb)

HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	DAILY	24-HR	RDGS.	
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59	MIN.	MAX.	AVG.		
DAY																													
1	0.40	0.37	0.36	0.36	0.39	0.38	\$1	\$1	0.39	0.39	0.38	0.38	0.37	\$	0.40	0.37	0.36	0.37	0.36	0.36	0.36	0.43	0.44	0.42	0.36	0.44	0.38	22	
2	0.39	0.39	0.40	0.40	0.39	0.37	0.38	0.37	0.36	0.36	0.36	0.37	\$	0.38	0.40	0.36	0.36	0.32	0.31	0.31	0.28	0.51	0.56	0.58	0.28	0.58	0.39	24	
3	0.48	0.34	0.24	0.21	0.17	0.16	0.16	0.14	0.14	C	C	C	C	0.32	0.28	0.28	0.27	0.27	0.29	0.26	0.30	0.31	0.30	0.31	0.14	0.48	0.26	24	
4	0.34	0.33	0.34	0.31	0.32	0.34	0.35	0.35	0.35	0.36	\$	0.35	0.35	0.34	0.35	0.36	0.37	0.35	0.37	0.37	0.39	0.42	0.36	0.39	0.31	0.42	0.35	24	
5	0.40	0.41	0.39	0.40	0.38	0.41	0.45	0.45	0.43	\$	0.42	0.40	0.40	0.39	0.38	0.39	0.38	0.39	0.41	0.44	0.44	0.41	0.41	0.39	0.38	0.45	0.41	24	
6	0.44	0.49	0.46	0.43	0.46	0.44	0.45	0.43	\$	0.42	0.41	0.37	0.37	0.37	0.37	0.37	0.36	0.37	0.37	0.36	0.38	0.38	0.38	0.40	0.36	0.49	0.40	24	
7	0.43	0.42	0.41	0.41	0.42	0.45	0.51	\$	0.51	0.49	0.45	0.45	0.43	0.41	0.39	0.41	0.41	0.39	0.38	0.39	0.42	0.51	0.53	0.51	0.38	0.53	0.44	24	
8	0.50	0.54	0.47	0.51	0.62	0.49	\$	0.42	0.41	0.37	0.34	0.41	0.54	0.76	0.59	0.48	0.45	0.37	0.38	0.38	0.37	0.39	0.44	0.41	0.34	0.76	0.46	24	
9	0.37	0.39	0.39	0.51	0.72	\$	0.66	0.51	0.44	0.39	0.39	0.38	0.37	0.38	0.37	0.37	0.36	0.35	0.37	0.36	0.35	0.37	0.37	0.39	0.35	0.72	0.42	24	
10	0.41	0.40	0.40	0.41	\$	0.45	0.42	0.47	0.48	0.47	0.47	0.48	0.49	0.47	0.46	0.47	0.44	0.45	0.43	0.43	0.47	0.48	0.48	0.48	0.40	0.49	0.45	24	
11	0.47	0.47	0.50	\$	0.51	0.52	0.44	0.62	0.48	0.47	0.43	0.38	0.36	0.36	0.35	0.34	0.34	0.33	0.33	0.34	0.34	0.38	0.40	0.41	0.33	0.62	0.42	24	
12	0.36	0.38	\$	0.40	0.39	0.40	0.41	0.40	0.41	0.37	0.35	0.35	0.35	0.34	0.35	0.37	0.34	0.36	0.34	0.35	0.36	0.36	0.38	0.40	0.34	0.41	0.37	24	
13	0.43	\$	0.43	0.39	0.43	0.41	0.40	0.41	0.36	0.36	0.34	0.33	0.33	0.33	0.32	0.32	0.33	0.33	0.33	0.33	0.32	0.50	0.69	0.76	0.32	0.76	0.40	24	
14	\$	0.58	0.56	0.52	0.48	0.55	0.61	0.54	0.47	0.40	0.41	0.36	0.34	0.33	0.34	0.34	0.34	0.32	0.34	0.33	0.34	0.34	0.38	\$	0.32	0.61	0.42	24	
15	0.43	0.45	0.51	0.50	0.54	0.46	0.46	0.42	0.40	0.40	0.38	0.38	0.38	0.37	0.36	0.35	0.36	0.36	0.35	0.35	0.38	0.39	\$	0.46	0.35	0.54	0.41	24	
16	0.42	0.40	0.42	0.43	0.41	0.42	0.43	0.42	0.41	0.41	0.40	0.39	0.37	0.37	0.41	0.46	0.54	0.55	0.50	0.44	0.40	\$	0.40	0.42	0.37	0.55	0.43	24	
17	0.49	0.45	0.41	0.47	0.41	0.47	0.48	0.46	0.43	0.39	0.38	0.37	0.38	0.36	0.36	0.36	0.35	0.37	0.37	0.37	0.39	\$	0.47	0.91	0.66	0.35	0.91	0.44	24
18	0.94	0.94	0.64	0.62	0.55	0.79	0.61	0.49	0.40	0.40	0.38	0.36	0.36	0.35	0.35	0.37	0.35	0.35	0.35	\$	0.40	0.38	0.38	0.45	0.35	0.94	0.49	24	
19	0.45	0.46	0.47	0.41	0.38	0.41	0.45	0.50	0.42	0.38	0.37	0.36	0.35	0.36	0.35	0.34	0.34	0.34	\$	0.37	0.36	0.35	0.35	0.37	0.34	0.50	0.39	24	
20	0.38	0.43	0.41	0.40	0.41	0.43	0.43	0.42	0.46	0.43	0.41	0.38	0.37	0.37	0.36	0.35	0.36	0.35	\$	0.41	0.38	0.42	0.50	0.47	0.45	0.35	0.50	0.41	24
21	0.47	0.49	0.51	0.49	0.48	0.49	0.45	0.46	0.40	0.35	0.35	0.33	0.33	0.33	0.31	0.32	\$	0.35	0.34	0.33	0.35	0.38	0.47	0.49	0.31	0.51	0.40	24	
22	0.55	0.58	0.76	0.84	0.78	0.97	0.66	0.50	0.47	0.41	0.38	0.39	0.40	0.41	0.40	\$	0.42	0.40	0.40	0.41	0.42	0.55	0.62	0.47	0.38	0.97	0.53	24	
23	0.49	0.44	0.52	0.55	0.60	0.56	0.48	0.45	0.48	0.43	0.40	0.38	0.38	0.38	\$	0.40	0.38	0.37	0.38	0.39	0.39	0.40	0.41	0.41	0.37	0.60	0.44	24	
24	0.43	0.43	0.44	0.46	0.47	0.49	0.51	0.48	0.49	0.46	0.42	0.40	0.39	\$	0.39	0.42	0.45	0.42	0.41	0.39	0.40	0.45	0.48	0.55	0.39	0.55	0.44	24	
25	0.62	0.56	0.67	0.72	0.64	0.75	0.74	0.49	0.38	0.36	0.34	0.33	\$	0.37	0.34	0.35	0.35	0.34	0.35	0.35	0.38	0.41	0.41	0.75	0.33	0.75	0.48	24	
26	0.52	0.59	0.78	0.59	0.53	0.48	0.50	0.46	0.43	0.39	0.38	\$	0.42	0.38	0.36	0.37	0.36	0.35	0.35	0.36	0.37	0.36	0.38	0.39	0.35	0.78	0.44	24	
27	0.39	0.38	0.38	0.39	0.40	0.39	0.39	0.37	0.35	0.35	\$	0.37	0.37	0.34	0.34	0.34	0.34	0.34	0.33	0.34	0.36	0.35	0.39	0.49	0.33	0.49	0.37	24	
28	0.57	0.79	0.62	0.64	0.62	0.52	0.63	0.44	0.44	\$	0.38	0.35	0.32	0.32	0.30	0.30	0.30	0.31	0.30	0.30	0.31	0.32	0.33	0.36	0.30	0.79	0.42	24	
29	0.40	0.47	0.53	0.58	0.69	0.50	0.53	0.37	\$	0.36	0.33	0.33	0.32	0.31	0.32	0.32	0.31	0.30	0.30	0.32	0.32	0.33	0.32	0.31	0.30	0.69	0.39	24	
30	0.35	0.39	0.38	0.35	0.41	0.47	0.47	\$	0.41	0.35	0.34	0.32	0.32	0.34	0.38	0.34	0.31	0.34	0.33	0.34	0.34	0.34	0.32	0.35	0.31	0.47	0.36	24	
31	0.36	0.35	0.36	0.37	0.39	0.41	\$	0.42	0.37	0.34	0.35	0.33	0.33	0.33	0.33	0.32	0.32	0.32	0.34	0.33	0.33	0.33	0.34	0.36	0.32	0.42	0.35	24	
HOURLY MAX	0.94	0.94	0.78	0.84	0.78	0.97	0.74	0.62	0.51	0.49	0.47	0.48	0.54	0.76	0.59	0.48	0.54	0.55	0.50	0.44	0.47	0.55	0.91	0.76					
HOURLY AVG	0.46	0.47	0.47	0.47	0.48	0.48	0.48	0.44	0.41	0.40	0.38	0.37	0.37	0.37	0.37	0.36	0.37	0.36	0.36	0.36	0.37	0.40	0.44	0.45					

STATUS FLAG CODES

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

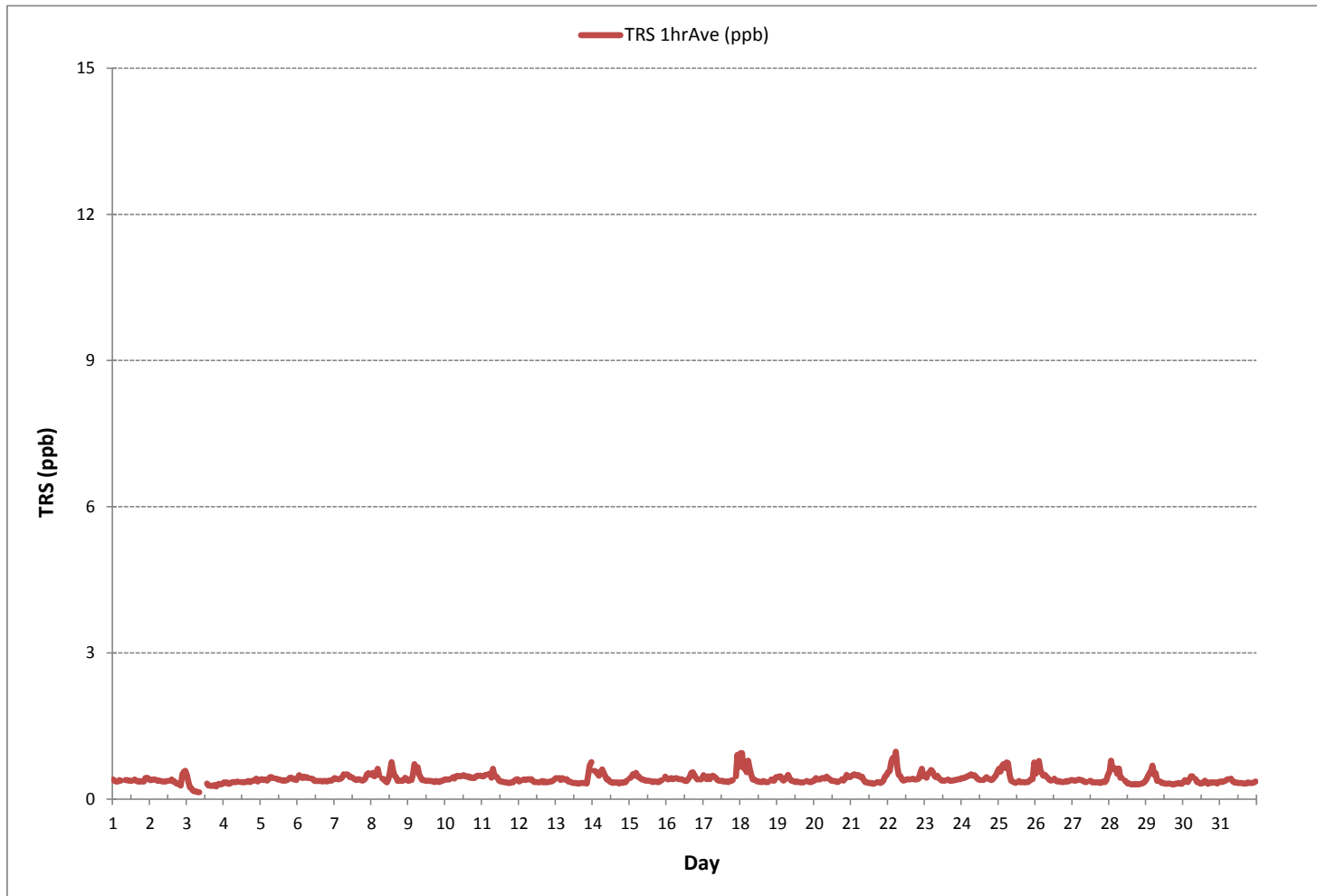
24 HR AVERAGES May 2018



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	707			
MINIMUM 1-HR AVERAGE:	0.14	ppb @ HOUR	7	ON DAY 3
MAXIMUM 1-HR AVERAGE:	0.97	ppb @ HOUR	5	ON DAY 22
MAXIMUM 24-HR AVERAGE:	0.53	ppb		ON DAY 22
IZS CALIBRATION TIME:	31	hrs	OPERATIONAL TIME:	742 hrs
MONTHLY CALIBRATION TIME:	4	hrs	AMD OPERATION UPTIME:	99.7 %
STANDARD DEVIATION:	0.10		MONTHLY AVERAGE:	0.41 ppb

TOTAL REDUCED SULPHUR Hourly Averages (TRS ppb)



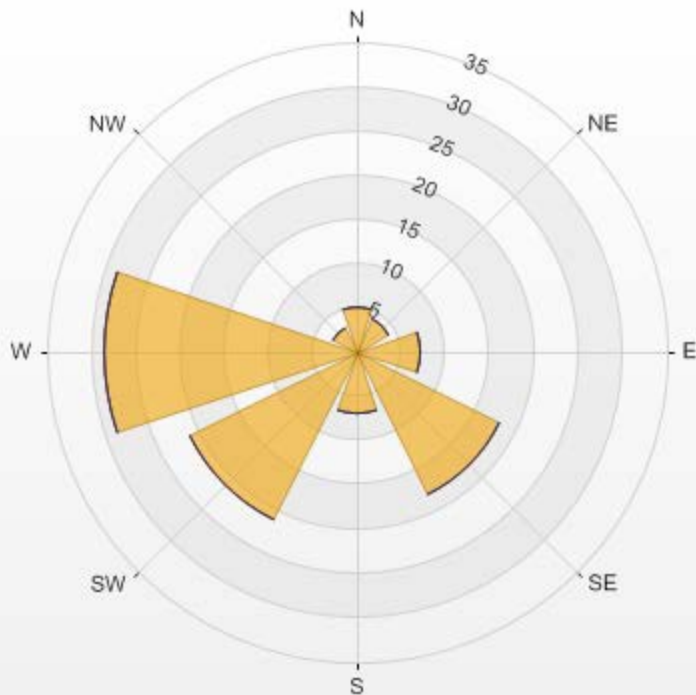
Wind: PRAMP_RENO
Poll.: PRAMP_RENO-TRS[ppb]
Monthly: 18/05
Type: PollutionRose
Direction: Blowing From (Wind Frequency)
Based On 1 Hr.

Calm: 5.66%

Calm Avg: 0.49 [ppb]

Direction	0-1	1-3	3-10	>10.0	Total
N	5.1	0.0	0.0	0.0	5.1
NE	4.1	0.0	0.0	0.0	4.1
E	7.2	0.0	0.0	0.0	7.2
SE	18.1	0.0	0.0	0.0	18.1
S	6.9	0.0	0.0	0.0	6.9
SW	21.2	0.0	0.0	0.0	21.2
W	28.6	0.0	0.0	0.0	28.6
NW	3.1	0.0	0.0	0.0	3.1
Summary	94.3	0.0	0.0	0.0	94.3

PRAMP_RENO Poll.: PRAMP_RENO-TRS[ppb] 2018/05/01 00:00 - 2018/05/31 23:00 Calm: 5.66% Calm Poll Avg: 0.49[ppb]



TRS[ppb] Calibration: PRAMP_RENO Monthly: 18/05 Type: Span

Span Meas Span Ref Span Low Span High



TOTAL HYDROCARBON

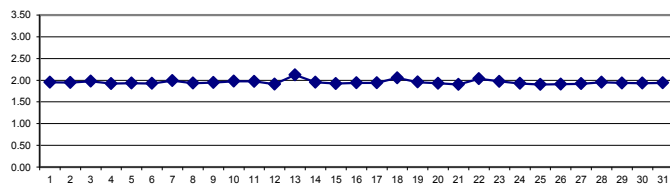
TOTAL HYDROCARBONS Hourly Averages (THC ppm)

HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	DAILY	24-HR	RDGS.	
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59	MIN.	MAX.	AVG.		
DAY																													
1	1.95	1.95	1.95	1.95	1.95	1.95	1.94	1.94	1.93	1.93	1.93	1.93	1.93	S	1.94	1.94	1.94	1.94	1.94	1.94	1.97	2.14	2.01	1.95	1.93	2.14	1.95	24	
2	1.97	1.99	1.94	1.95	1.95	1.94	1.93	1.93	1.93	1.92	1.92	1.92	S	1.92	1.92	1.92	1.92	1.93	1.93	1.92	1.99	2.00	1.94	2.11	1.92	2.11	1.95	24	
3	2.24	2.23	1.95	1.95	1.96	1.97	1.95	1.95	1.94	1.93	1.93	1.93	C	C	C	C	1.94	1.94	1.94	1.94	2.01	1.93	1.93	1.92	1.92	2.24	1.97	24	
4	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	S	1.92	1.91	1.91	1.92	1.92	1.93	1.93	1.92	1.93	1.92	1.92	1.92	1.92	1.91	1.93	1.92	24	
5	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	S	1.93	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.93	1.95	2.02	1.96	1.92	1.92	1.92	2.02	1.93	24	
6	1.92	1.93	1.93	1.93	1.94	1.93	1.93	1.93	S	1.93	1.92	1.91	1.91	1.91	1.92	1.91	1.92	1.92	1.92	1.93	1.94	1.92	1.92	1.93	1.91	1.94	1.92	24	
7	1.95	1.93	1.93	1.93	1.95	1.95	1.94	S	1.95	1.96	1.96	1.96	1.95	1.95	1.95	1.96	1.99	1.94	1.98	1.96	1.96	2.33	2.37	1.94	1.93	2.37	1.99	24	
8	1.93	1.97	1.92	1.92	1.93	1.93	S	1.92	1.91	1.91	1.91	1.92	1.92	1.92	1.93	1.93	1.93	1.94	1.94	1.94	1.95	1.95	1.95	1.94	1.91	1.97	1.93	24	
9	1.94	1.94	1.94	1.94	1.95	S	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.95	1.96	1.95	1.95	1.95	1.95	1.96	1.95	1.94	1.96	1.95	24	
10	1.95	1.98	1.96	1.99	S	1.99	1.96	1.96	1.97	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.99	1.97	1.98	1.99	2.03	1.95	2.03	1.98	24	
11	1.98	2.01	2.10	S	2.25	2.18	1.99	1.98	1.97	1.96	1.95	1.94	1.94	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.91	1.91	2.25	1.97	24	
12	1.91	1.91	S	1.91	1.90	1.91	1.92	1.92	1.92	1.91	1.91	1.91	1.91	1.90	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.91	1.91	1.91	1.90	1.92	1.91	24	
13	1.92	S	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.95	3.76	3.50	3.01	1.92	3.76	2.12	24	
14	S	2.16	2.08	2.13	1.96	1.95	1.94	1.98	1.95	1.94	1.94	1.92	1.91	1.91	1.91	1.91	1.90	1.90	1.90	1.90	1.90	1.91	1.91	S	1.90	2.16	1.95	24	
15	1.91	1.91	1.90	1.91	1.91	1.92	1.92	1.92	1.92	1.92	1.92	1.93	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.94	1.94	S	1.93	1.90	1.94	1.92	24	
16	1.92	1.92	1.93	1.92	1.93	1.92	1.93	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.95	2.00	1.97	1.93	1.94	1.93	S	1.93	1.92	1.92	2.00	1.94	24	
17	1.92	1.93	1.93	1.92	1.92	1.92	1.92	1.93	1.93	1.94	1.94	1.94	1.93	1.93	1.93	1.94	1.93	1.94	1.94	1.94	S	1.96	1.95	2.07	1.92	2.07	1.94	24	
18	2.39	2.56	2.56	2.41	2.16	2.03	1.94	1.94	1.93	1.94	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.94	S	1.99	1.97	1.95	2.00	1.93	2.56	2.05	24	
19	2.01	2.02	2.03	1.97	1.96	2.04	1.98	1.96	1.96	1.95	1.94	1.93	1.92	1.91	S1	1.92	1.92	1.92	S	1.93	1.97	1.93	1.92	1.92	1.91	2.04	1.96	23	
20	1.95	1.99	1.98	1.97	1.94	1.96	1.94	1.92	1.94	1.93	1.92	1.91	1.91	1.91	1.91	1.91	1.91	1.91	S	1.91	1.90	1.90	1.93	1.90	1.90	1.99	1.93	24	
21	1.90	1.91	1.92	1.92	1.92	1.91	1.90	1.91	1.91	1.90	1.90	1.89	1.89	1.89	1.89	1.89	S	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.89	1.92	1.90	24	
22	1.92	1.92	2.41	2.60	2.35	2.29	1.98	1.92	1.91	1.90	1.90	1.90	1.90	1.90	1.90	S	1.90	1.90	1.90	1.90	1.90	2.20	2.31	2.02	1.90	2.60	2.03	24	
23	2.09	2.00	2.05	2.12	2.19	2.18	1.96	1.93	1.95	1.94	1.92	1.91	1.91	1.91	S	1.91	1.91	1.91	1.91	1.91	1.92	1.95	1.92	1.94	1.92	1.91	2.19	1.97	24
24	1.93	1.93	1.93	1.93	1.94	1.97	1.99	1.97	1.94	1.94	1.94	1.93	1.93	S	1.92	1.93	1.90	1.89	1.89	1.89	1.89	1.89	1.89	1.90	1.89	1.99	1.92	24	
25	1.91	1.91	1.92	1.93	1.93	1.93	1.92	1.90	1.89	1.89	1.89	1.89	S	1.88	1.88	1.89	1.88	1.88	1.89	1.89	1.90	1.90	1.89	1.88	1.88	1.93	1.90	24	
26	1.92	1.91	1.90	1.90	1.91	1.91	1.91	1.91	1.91	1.91	1.91	S	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.92	1.90	1.92	1.91	24	
27	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.91	1.92	S	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.90	1.90	1.90	2.08	1.90	2.08	1.92	24	
28	2.20	2.30	2.11	2.01	1.94	1.91	1.90	1.89	1.92	S	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.92	1.89	2.30	1.95	24
29	1.93	1.94	1.94	1.95	1.97	1.95	1.95	S	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.92	1.93	1.93	1.92	1.92	1.92	1.97	1.93	24	
30	1.93	1.93	1.93	1.93	1.95	1.97	1.97	S	1.95	1.93	1.93	1.92	1.92	1.92	1.91	1.92	1.92	1.92	1.92	1.92	1.94	1.94	1.93	1.93	1.94	1.91	1.97	1.93	24
31	1.99	1.95	1.97	1.97	1.97	1.97	S	1.95	1.94	1.93	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.93	1.92	1.92	1.92	1.93	1.93	1.94	1.92	1.99	1.94	24	
HOURLY MAX	2.39	2.56	2.56	2.60	2.35	2.29	1.99	1.98	1.97	1.98	1.98	1.97	1.97	1.97	1.97	1.97	2.00	1.97	1.98	1.99	2.02	3.76	3.50	3.01					
HOURLY AVG	1.98	1.99	1.99	1.99	1.98	1.97	1.94	1.93	1.93	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.92	1.93	1.94	2.02	2.01	1.98					

STATUS FLAG CODES

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

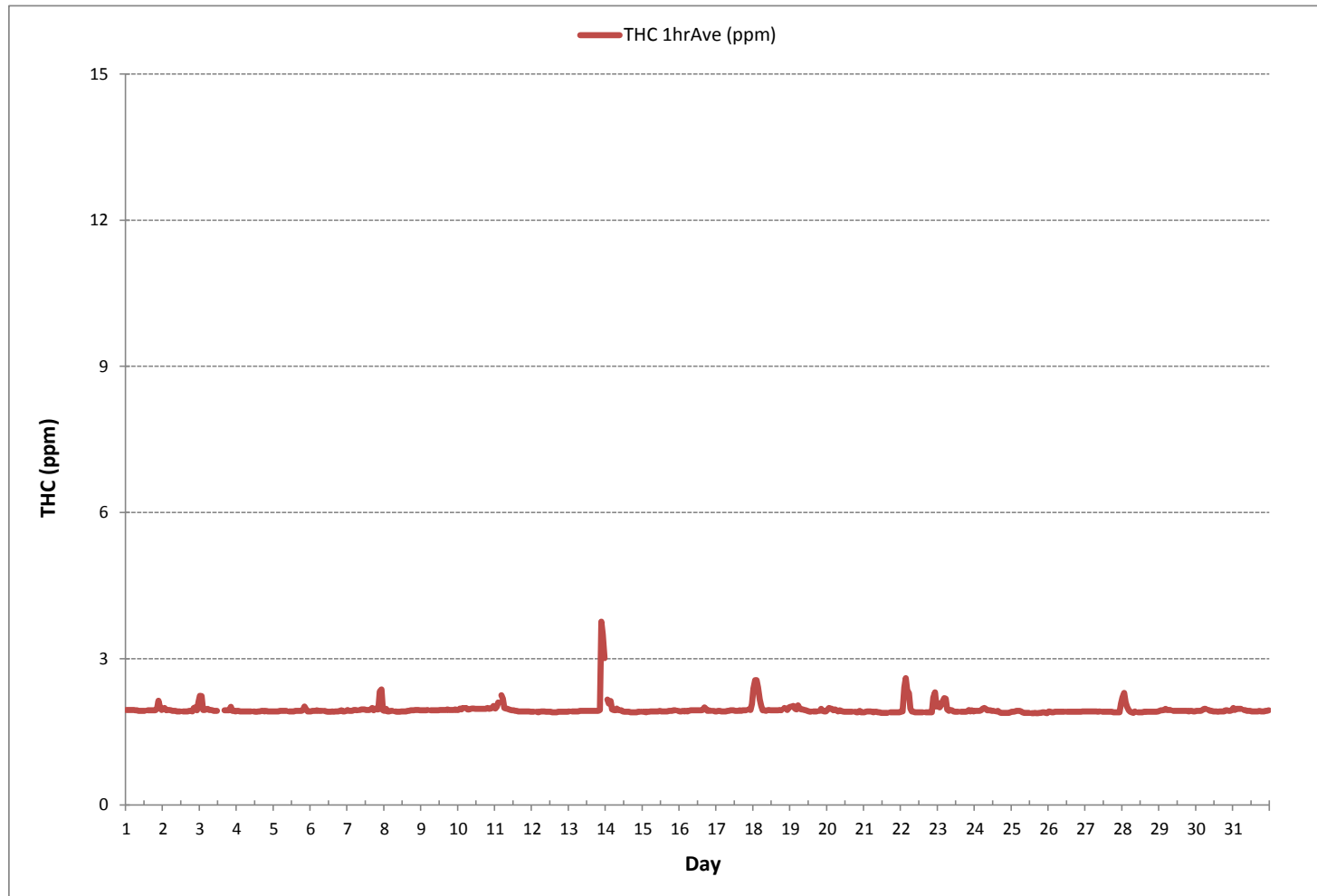
24 HR AVERAGES May 2018



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	708			
MINIMUM 1-HR AVERAGE:	1.88	ppm @ HOUR	13	ON DAY 25
MAXIMUM 1-HR AVERAGE:	3.76	ppm @ HOUR	21	ON DAY 13
MAXIMUM 24-HR AVERAGE:	2.12	ppm		ON DAY 13
IZS CALIBRATION TIME:	31	hrs	OPERATIONAL TIME:	743 hrs
MONTHLY CALIBRATION TIME:	4	hrs	AMD OPERATION UPTIME:	99.9 %
STANDARD DEVIATION:	0.12		MONTHLY AVERAGE:	1.95 ppm

TOTAL HYDROCARBONS Hourly Averages (THC ppm)



Wind: PRAMP_RENO
Poll.: PRAMP_RENO-THC55[ppm]
Monthly: 18/05
Type: PollutionRose
Direction: Blowing From (Wind Frequency)
Based On 1 Hr.

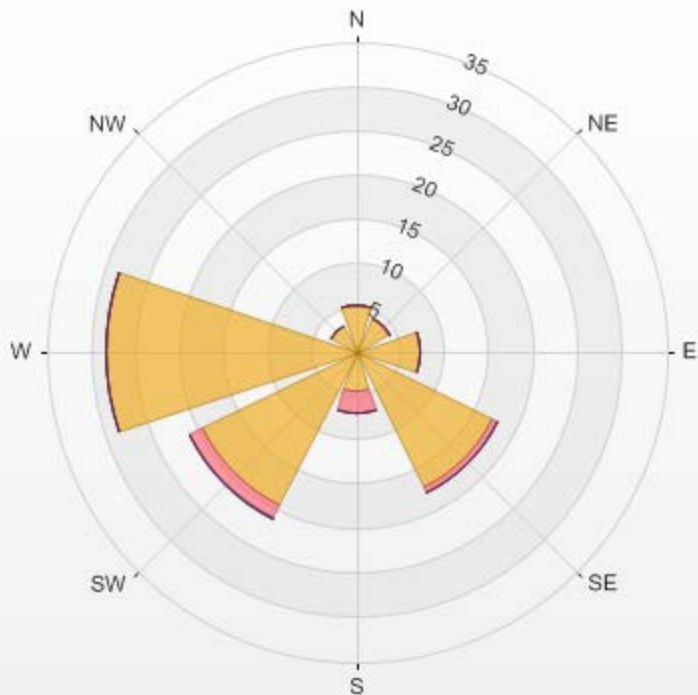
Calm: 5.65%

Calm Avg: 2.13 [ppm]

Direction	0-2	2-3	3-5	5-10	>10.0	Total
N	5.2	0.0	0.0	0.0	0.0	5.2
NE	4.1	0.1	0.0	0.0	0.0	4.2
E	7.2	0.0	0.0	0.0	0.0	7.2
SE	17.2	0.7	0.0	0.0	0.0	17.9
S	4.5	2.4	0.0	0.0	0.0	6.9
SW	19.5	1.6	0.1	0.0	0.0	21.2
W	28.4	0.0	0.0	0.0	0.0	28.4
NW	3.3	0.0	0.0	0.0	0.0	3.3
Summary	89.4	4.8	0.1	0.0	0.0	94.4

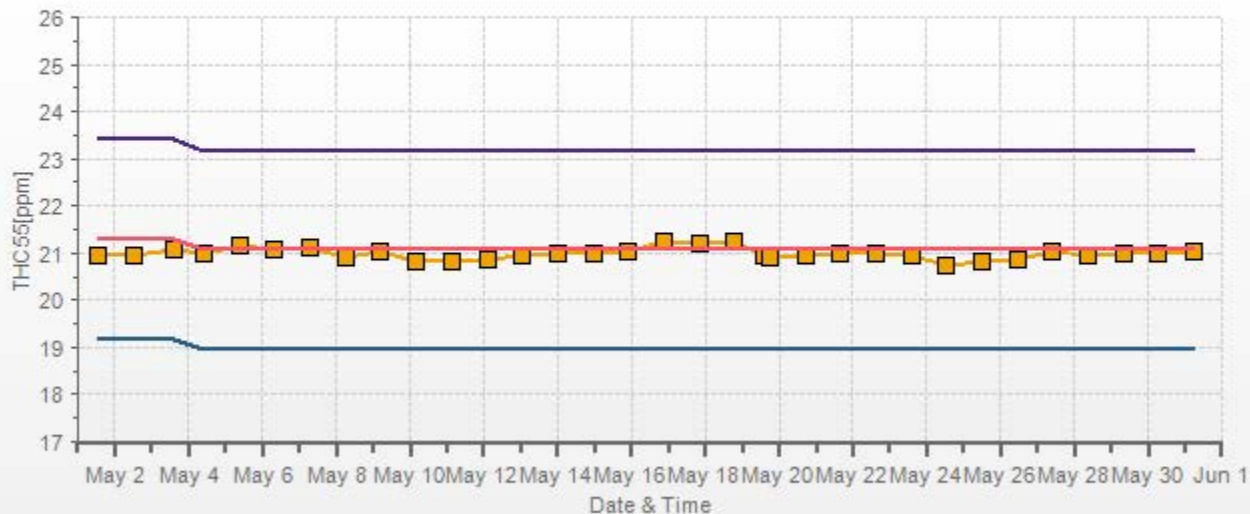
%	Icon	Classes (ppm)
89		0-2
5		2-3
0		3-5
0		5-10
0		>10.0

PRAMP_RENO Poll.: PRAMP_RENO-THC55[ppm] 2018/05/01 00:00 - 2018/05/31 23:00 Calm: 5.65% Calm Poll Avg: 2.13[ppm]



THC55[ppm] Calibration: PRAMP_RENO Monthly: 18/05 Type: Span

Span Meas Span Ref Span Low Span High



METHANE



PEACE RIVER AREA MONITORING PROGRAM COMMITTEE

Reno Station - May 2018

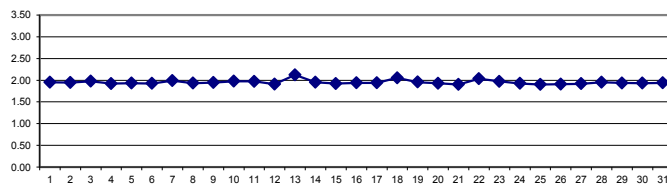
METHANE Hourly Averages (CH₄ ppm)

HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	DAILY	24-HR	RDGS.
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59	MIN.	MAX.	AVG.	
DAY																												
1	1.95	1.95	1.95	1.95	1.95	1.95	1.94	1.94	1.93	1.93	1.93	1.93	1.93	S	1.94	1.94	1.94	1.94	1.94	1.94	1.97	2.14	2.01	1.95	1.93	2.14	1.95	24
2	1.97	1.99	1.94	1.95	1.95	1.94	1.93	1.93	1.93	1.92	1.92	1.92	S	1.92	1.92	1.92	1.92	1.93	1.93	1.92	1.99	2.00	1.94	2.11	1.92	2.11	1.95	24
3	2.24	2.23	1.95	1.95	1.96	1.97	1.95	1.95	1.94	1.93	1.93	1.93	C	C	C	C	1.94	1.94	1.94	1.94	2.01	1.93	1.93	1.92	1.92	2.24	1.97	24
4	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	S	1.92	1.91	1.91	1.92	1.92	1.93	1.93	1.92	1.93	1.92	1.92	1.92	1.92	1.91	1.93	1.92	24
5	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.93	S	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.93	1.95	2.02	1.96	1.92	1.92	1.92	2.02	1.93	24
6	1.92	1.93	1.93	1.93	1.94	1.93	1.93	1.93	S	1.93	1.92	1.91	1.91	1.91	1.92	1.91	1.92	1.92	1.92	1.93	1.94	1.92	1.92	1.93	1.91	1.94	1.92	24
7	1.95	1.93	1.93	1.93	1.95	1.95	1.94	S	1.95	1.96	1.96	1.96	1.95	1.95	1.95	1.96	1.99	1.94	1.98	1.96	1.96	2.33	2.37	1.94	1.93	2.37	1.99	24
8	1.93	1.97	1.92	1.92	1.93	1.93	S	1.92	1.91	1.91	1.91	1.92	1.92	1.92	1.92	1.93	1.93	1.94	1.94	1.94	1.95	1.95	1.95	1.94	1.91	1.97	1.93	24
9	1.94	1.94	1.94	1.94	1.95	S	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.95	1.96	1.95	1.95	1.95	1.95	1.96	1.95	1.94	1.96	1.95	24
10	1.95	1.98	1.96	1.99	S	1.99	1.96	1.96	1.97	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.99	1.97	1.98	1.99	2.03	1.95	2.03	1.98	24
11	1.98	2.01	2.10	S	2.25	2.18	1.98	1.98	1.97	1.96	1.95	1.94	1.93	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.91	1.91	1.91	2.25	1.97	24
12	1.91	1.91	S	1.91	1.90	1.91	1.92	1.92	1.92	1.91	1.91	1.91	1.91	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.90	1.92	1.91	24
13	1.92	S	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.95	3.76	3.50	3.01	1.92	3.76	2.12	24
14	S	2.16	2.08	2.13	1.96	1.95	1.94	1.98	1.95	1.94	1.94	1.92	1.91	1.91	1.91	1.91	1.90	1.90	1.90	1.90	1.90	1.91	1.91	S	1.90	2.16	1.95	24
15	1.91	1.91	1.90	1.91	1.91	1.92	1.92	1.92	1.92	1.92	1.92	1.93	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.94	1.94	S	1.93	1.90	1.94	1.92	24
16	1.92	1.92	1.93	1.92	1.93	1.92	1.93	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.95	2.00	1.97	1.93	1.94	1.93	S	1.93	1.92	1.92	2.00	1.94	24
17	1.92	1.93	1.93	1.92	1.92	1.92	1.92	1.93	1.93	1.94	1.94	1.94	1.93	1.93	1.93	1.94	1.93	1.94	1.94	1.94	S	1.96	1.95	2.07	1.92	2.07	1.94	24
18	2.39	2.56	2.56	2.41	2.16	2.03	1.94	1.94	1.93	1.94	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.94	S	1.99	1.97	1.95	2.00	1.93	2.56	2.05	24
19	2.01	2.02	2.03	1.97	1.96	2.04	1.98	1.96	1.96	1.95	1.94	1.93	1.92	1.91	S1	1.92	1.92	1.92	S	1.93	1.97	1.93	1.92	1.92	1.91	2.04	1.96	23
20	1.95	1.99	1.98	1.97	1.93	1.96	1.94	1.92	1.94	1.93	1.92	1.91	1.91	1.91	1.91	1.91	1.91	S	1.91	1.90	1.90	1.93	1.90	1.90	1.90	1.99	1.93	24
21	1.90	1.91	1.92	1.92	1.92	1.91	1.90	1.91	1.91	1.90	1.90	1.89	1.89	1.89	1.89	S	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.89	1.92	1.90	24
22	1.92	1.92	2.41	2.60	2.35	2.29	1.98	1.92	1.91	1.90	1.90	1.90	1.90	1.90	S	1.90	1.90	1.90	1.90	1.90	1.90	2.20	2.31	2.02	1.90	2.60	2.03	24
23	2.09	2.00	2.05	2.12	2.19	2.18	1.96	1.93	1.95	1.94	1.92	1.91	1.91	1.91	S	1.91	1.91	1.91	1.91	1.92	1.95	1.92	1.94	1.92	1.91	2.19	1.97	24
24	1.93	1.93	1.93	1.93	1.94	1.97	1.99	1.97	1.94	1.94	1.94	1.93	1.93	S	1.92	1.93	1.90	1.89	1.89	1.89	1.89	1.89	1.89	1.90	1.89	1.99	1.92	24
25	1.91	1.91	1.92	1.93	1.93	1.93	1.92	1.90	1.89	1.89	1.89	1.89	S	1.88	1.88	1.89	1.88	1.88	1.89	1.89	1.90	1.90	1.89	1.88	1.88	1.93	1.90	24
26	1.92	1.91	1.90	1.90	1.90	1.91	1.91	1.91	1.91	1.91	1.91	S	1.91	1.91	1.91	1.90	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.92	1.90	1.92	1.91	24
27	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.91	1.91	S	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.90	1.90	1.90	1.90	2.08	1.90	2.08	1.92	24
28	2.20	2.30	2.11	2.01	1.94	1.91	1.90	1.89	1.92	S	1.90	1.90	1.90	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.92	1.89	2.30	1.95	24
29	1.93	1.94	1.94	1.95	1.97	1.95	1.95	S	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.92	1.92	1.93	1.93	1.92	1.92	1.92	1.97	1.93	24
30	1.93	1.93	1.93	1.93	1.95	1.97	1.97	S	1.95	1.93	1.93	1.92	1.92	1.92	1.91	1.92	1.92	1.92	1.92	1.94	1.93	1.93	1.93	1.94	1.91	1.97	1.93	24
31	1.99	1.95	1.97	1.97	1.97	S	1.95	1.94	1.93	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.92	1.93	1.92	1.92	1.92	1.93	1.93	1.94	1.92	1.99	1.94	24
HOURLY MAX	2.39	2.56	2.56	2.60	2.35	2.29	1.99	1.98	1.97	1.98	1.98	1.97	1.97	1.97	1.97	1.97	2.00	1.97	1.98	1.99	2.02	3.76	3.50	3.01				
HOURLY AVG	1.98	1.99	1.99	1.99	1.98	1.97	1.94	1.93	1.93	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.92	1.93	1.94	2.02	2.01	1.98				

STATUS FLAG CODES

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

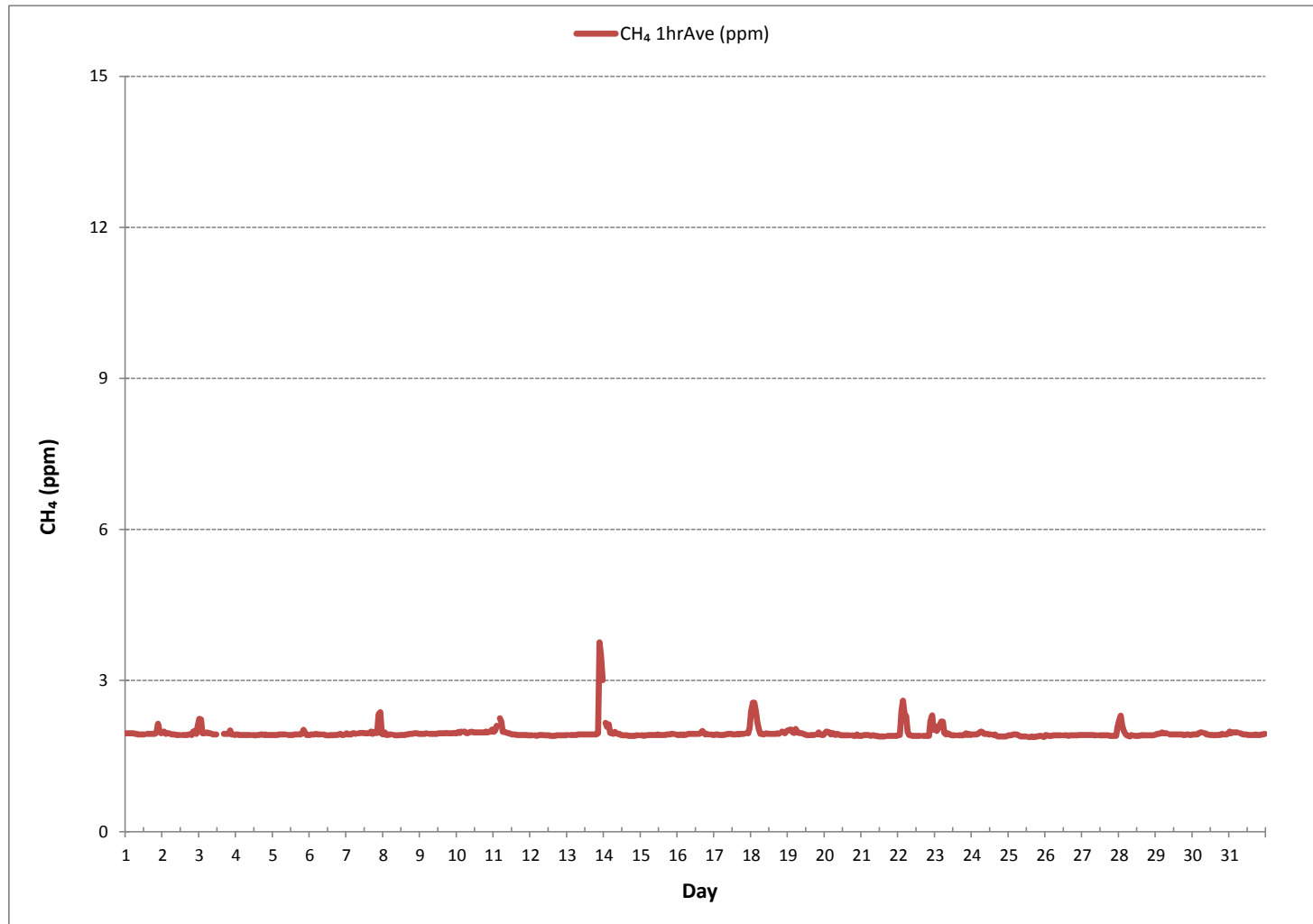
24 HR AVERAGES May 2018



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	708			
MINIMUM 1-HR AVERAGE:	1.88	ppm @ HOUR	13	ON DAY 25
MAXIMUM 1-HR AVERAGE:	3.76	ppm @ HOUR	21	ON DAY 13
MAXIMUM 24-HR AVERAGE:	2.12	ppm		ON DAY 13
IZS CALIBRATION TIME:	31	hrs	OPERATIONAL TIME:	743 hrs
MONTHLY CALIBRATION TIME:	4	hrs	AMD OPERATION UPTIME:	99.9 %
STANDARD DEVIATION:	0.12		MONTHLY AVERAGE:	1.95 ppm

METHANE Hourly Averages (CH₄ ppm)



Wind: PRAMP_RENO
Poll.: PRAMP_RENO-CH₄[ppm]
Monthly: 18/05
Type: PollutionRose
Direction: Blowing From (Wind Frequency)
Based On 1 Hr.

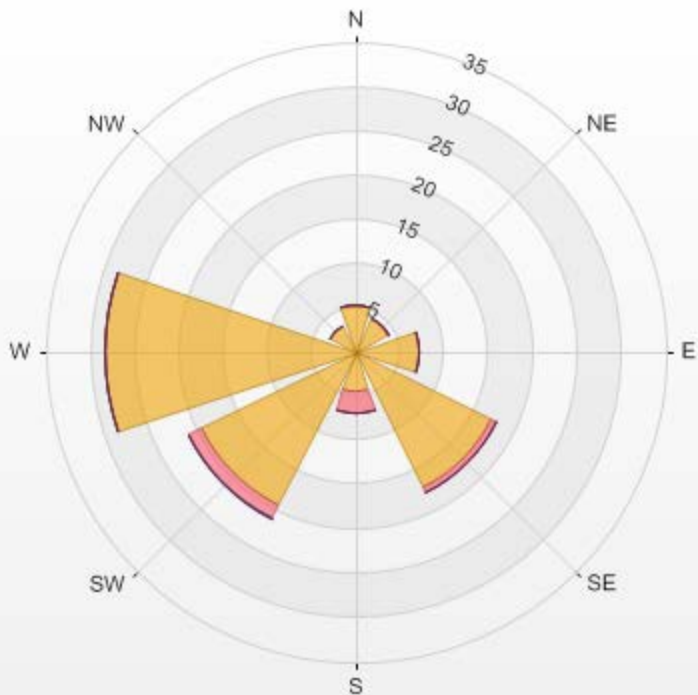
Calm: 5.65%

Calm Avg: 2.13 [ppm]

Direction	0-2	2-3	3-5	5-10	>10.0	Total
N	5.2	0.0	0.0	0.0	0.0	5.2
NE	4.1	0.1	0.0	0.0	0.0	4.2
E	7.2	0.0	0.0	0.0	0.0	7.2
SE	17.2	0.7	0.0	0.0	0.0	17.9
S	4.5	2.4	0.0	0.0	0.0	6.9
SW	19.5	1.6	0.1	0.0	0.0	21.2
W	28.4	0.0	0.0	0.0	0.0	28.4
NW	3.3	0.0	0.0	0.0	0.0	3.3
Summary	89.4	4.8	0.1	0.0	0.0	94.4

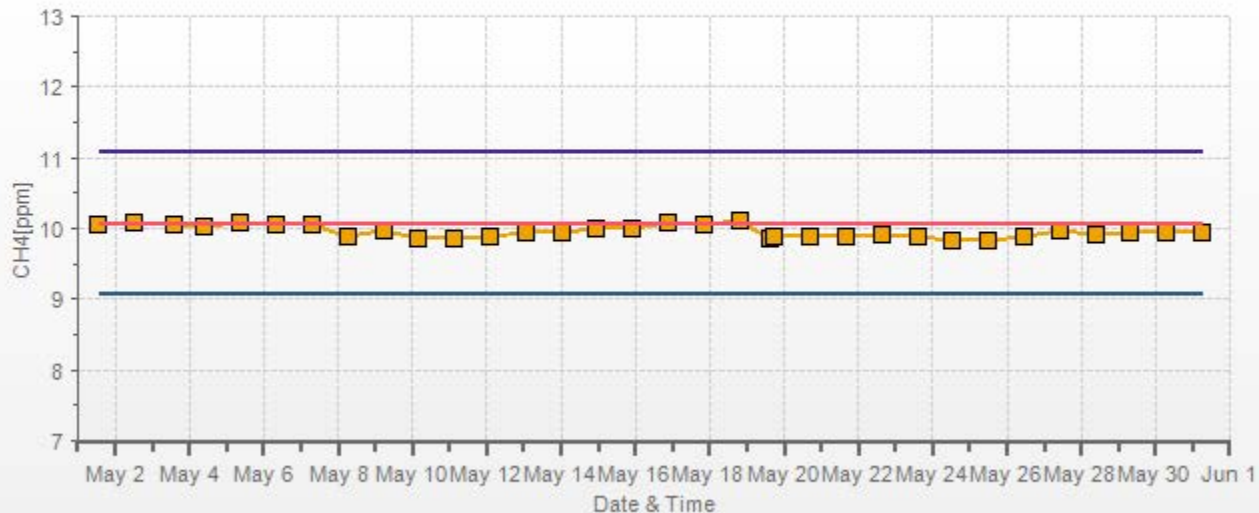
% Icon	Classes (ppm)	89	0-2	5	2-3	0	3-5	0	5-10	0	>10.0

PRAMP_RENO Poll.: PRAMP_RENO-CH4[ppm] 2018/05/01 00:00 - 2018/05/31 23:00 Calm: 5.65% Calm Poll Avg: 2.13[ppm]



CH4[ppm] Calibration: PRAMP_RENO Monthly: 18/05 Type: Span

Span Meas Span Ref Span Low Span High



NON-METHANE HYDROCARBON



PEACE RIVER AREA MONITORING PROGRAM COMMITTEE

Reno Station - May 2018

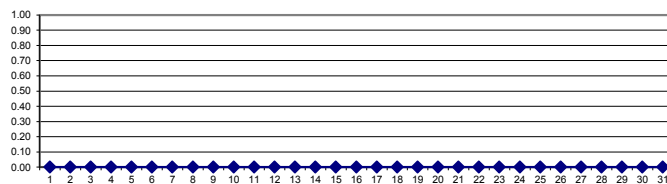
NON-METHANE HYDROCARBONS Hourly Averages (NMHC ppm)

HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	DAILY	24-HR	RDGS.	
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59	MIN.	MAX.	AVG.		
DAY																													
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	24
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
8	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
9	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
10	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
11	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
12	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
13	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
14	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	24
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	S	0.00	0.00	0.00	0.00	24
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	S	0.00	0.00	0.00	0.00	0.00	0.00	24
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
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	S1	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
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	24
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
31	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
HOURLY MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HOURLY AVG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

STATUS FLAG CODES

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

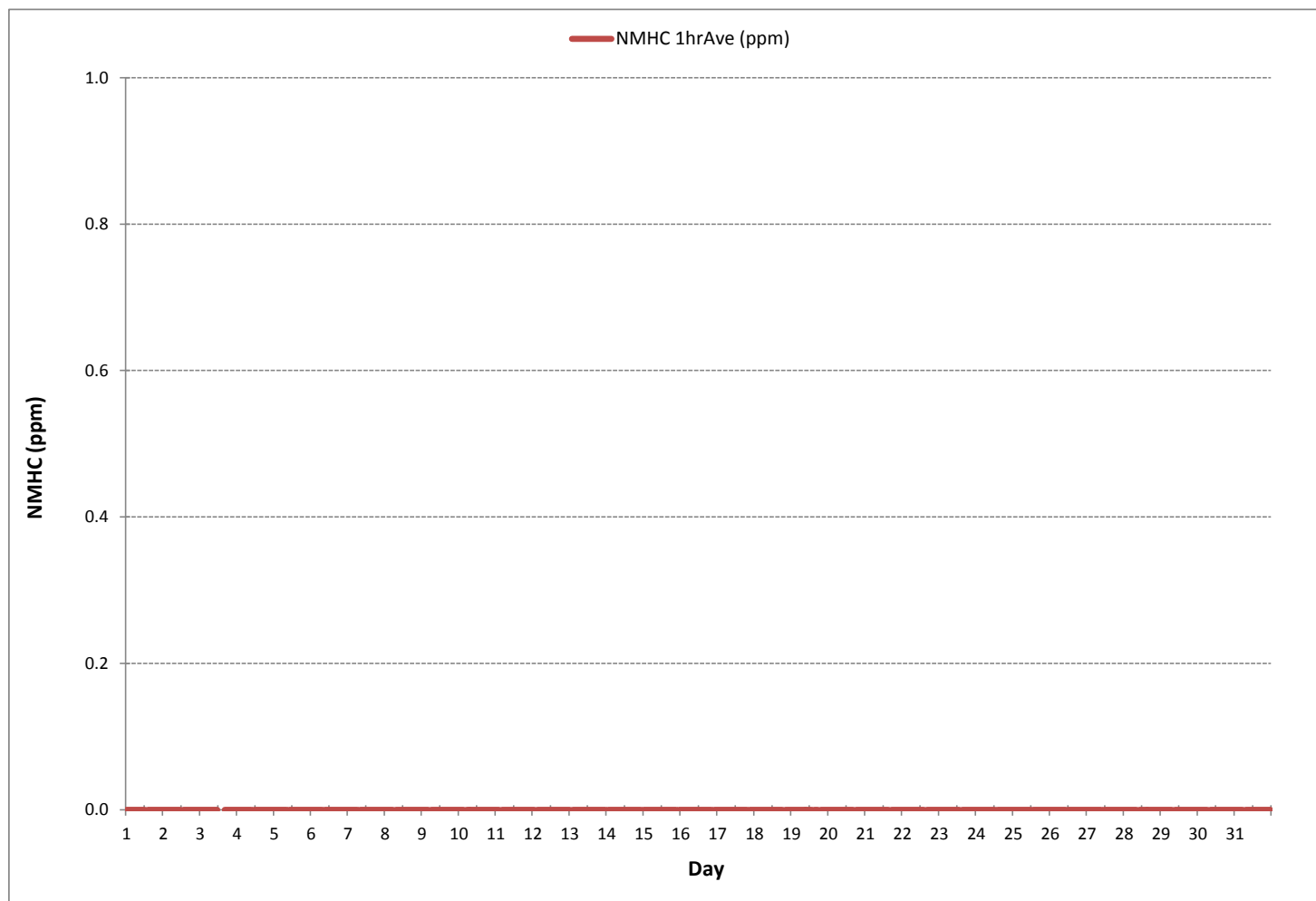
24 HR AVERAGES May 2018



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	0				
MINIMUM 1-HR AVERAGE:	0.00	ppm	@ HOUR	0	ON DAY 1
MAXIMUM 1-HR AVERAGE:	0.00	ppm	@ HOUR	0	ON DAY 1
MAXIMUM 24-HR AVERAGE:	0.00	ppm			ON DAY 1
IZS CALIBRATION TIME:	31	hrs	OPERATIONAL TIME:	743	hrs
MONTHLY CALIBRATION TIME:	4	hrs	AMD OPERATION UPTIME:	99.9	%
STANDARD DEVIATION:	0.00		MONTHLY AVERAGE:	0.00	ppm

NON-METHANE HYDROCARBONS Hourly Averages (NMHC ppm)



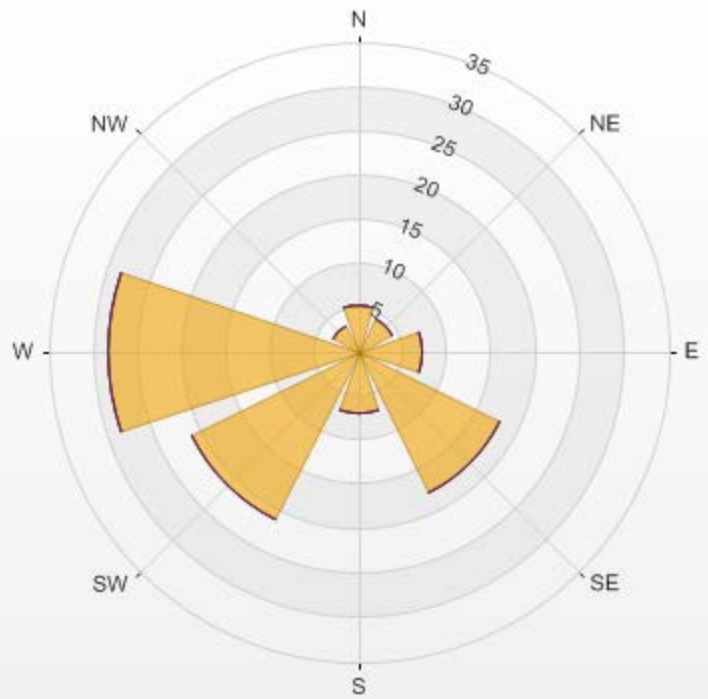
Wind: PRAMP_RENO
Poll.: PRAMP_RENO-NMHC[ppm]
Monthly: 18/05
Type: PollutionRose
Direction: Blowing From (Wind Frequency)
Based On 1 Hr.

Calm: 5.65%

Calm Avg: 0.00 [ppm]

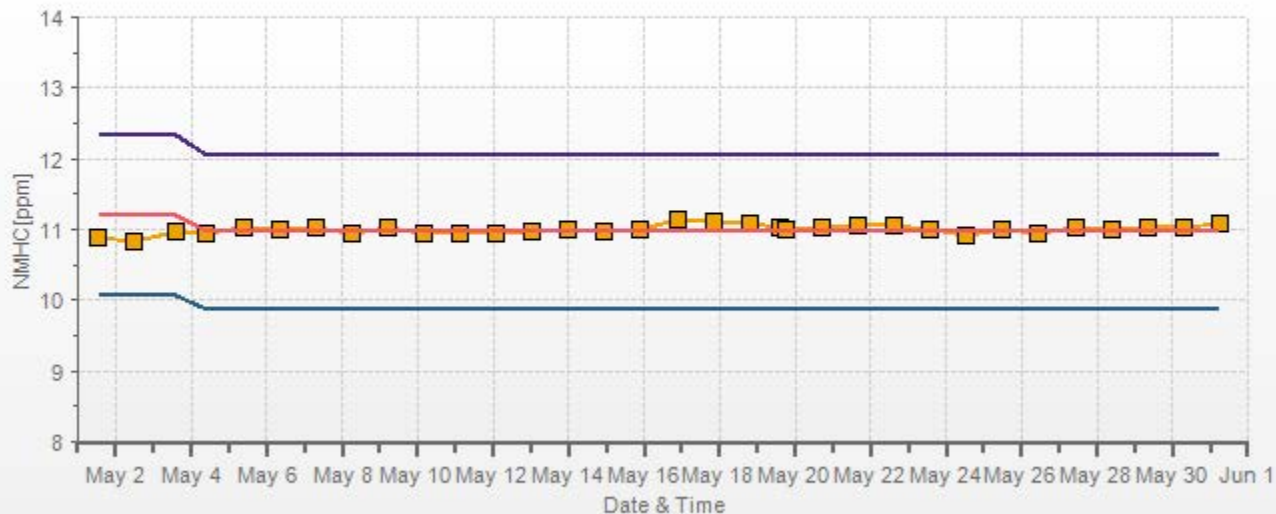
Direction	0-0.1	0.1-0.3	0.3-1	1-2	>2.0	Total
N	5.2	0.0	0.0	0.0	0.0	5.2
NE	4.2	0.0	0.0	0.0	0.0	4.2
E	7.2	0.0	0.0	0.0	0.0	7.2
SE	17.9	0.0	0.0	0.0	0.0	17.9
S	6.9	0.0	0.0	0.0	0.0	6.9
SW	21.2	0.0	0.0	0.0	0.0	21.2
W	28.4	0.0	0.0	0.0	0.0	28.4
NW	3.3	0.0	0.0	0.0	0.0	3.3
Summary	94.4	0.0	0.0	0.0	0.0	94.4

PRAMP_RENO Poll.: PRAMP_RENO-NMHC[ppm] 2018/05/01 00:00 - 2018/05/31 23:00 Calm: 5.65% Calm Poll Avg: 0.00[ppm]



NMHC[ppm] Calibration: PRAMP_RENO Monthly: 18/05 Type: Span

Span Meas Span Ref Span Low Span High



WIND SPEED

WIND SPEED Hourly Averages (WS kph)

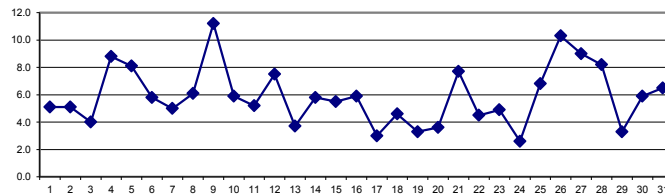
HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY MIN.	DAILY MAX.	24-HR AVG.	RDGS.
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59				
DAY 1	0.9	3.5	4.6	5.0	4.6	5.2	5.6	7.6	7.9	9.2	9.0	8.4	10.2	8.6	8.8	7.3	6.7	5.7	6.4	0.9	0.5	2.6	4.0	4.4	0.5	10.2	5.1	24
2	4.8	5.3	7.7	7.0	6.7	8.0	8.2	12.5	13.1	13.0	14.2	13.3	13.5	17.0	14.1	9.5	4.2	6.5	3.1	8.0	3.1	3.5	3.3	2.6	2.6	17.0	5.1	24
3	3.2	2.6	4.8	3.3	1.1	6.8	8.4	8.5	6.8	6.4	6.5	4.2	5.1	8.4	6.2	5.9	7.1	7.6	4.8	2.6	1.9	5.0	3.6	3.3	1.1	8.5	4.0	24
4	7.0	7.7	6.2	4.8	6.1	7.0	7.0	11.9	11.9	11.8	11.9	12.3	10.8	10.3	11.1	10.5	11.4	9.5	8.5	6.2	5.1	9.7	10.9	8.5	4.8	12.3	8.8	24
5	10.1	11.7	8.0	7.7	6.4	7.1	6.6	8.4	12.6	11.8	12.0	10.6	10.0	10.9	9.6	10.6	9.0	8.9	7.2	4.1	2.1	2.7	4.5	5.0	2.1	12.6	8.1	24
6	6.5	5.9	6.0	5.5	6.7	5.9	6.1	8.0	10.2	7.9	9.1	10.4	9.9	8.6	7.2	7.1	6.4	7.1	4.9	2.6	1.3	3.0	2.9	4.0	1.3	10.4	5.8	24
7	3.9	3.7	2.1	2.7	6.1	7.1	16.0	18.3	16.5	15.8	13.4	10.1	7.6	9.0	7.4	5.3	5.0	6.4	3.9	4.0	1.8	2.3	2.6	6.0	1.8	18.3	5.0	24
8	5.6	5.4	7.0	7.9	10.3	8.7	10.5	6.4	11.1	14.2	13.1	12.0	12.4	13.9	14.8	15.1	14.3	13.4	13.7	13.0	10.1	13.2	12.9	16.0	5.4	16.0	6.1	24
9	15.0	11.0	6.7	8.8	8.7	8.8	12.7	17.6	17.4	18.1	14.4	13.4	14.6	13.6	13.1	10.4	12.2	11.0	10.3	10.2	9.7	8.2	5.7	6.2	5.7	18.1	11.2	24
10	5.6	7.1	5.7	4.9	5.1	5.0	6.1	6.8	8.2	7.6	8.5	8.3	7.9	6.9	6.1	6.1	5.3	4.8	5.6	5.8	5.4	6.0	6.6	7.3	4.8	8.5	5.9	24
11	7.9	6.6	5.8	4.8	3.9	4.8	7.1	6.8	7.6	7.5	9.4	8.2	6.7	6.8	5.4	5.7	6.2	8.4	7.4	5.4	1.8	3.5	5.2	7.9	1.8	9.4	5.2	24
12	9.0	7.1	7.2	7.3	5.3	5.8	7.2	7.1	6.7	5.0	5.0	8.0	10.9	10.4	11.3	11.9	10.7	11.3	10.6	7.6	6.9	7.0	6.7	5.7	5.0	11.9	7.5	24
13	8.3	7.8	4.8	0.8	2.2	2.9	3.7	5.7	8.4	8.9	8.3	7.3	6.5	7.3	6.8	5.9	5.0	6.2	3.9	3.5	0.6	1.2	1.1	2.1	0.6	8.9	3.7	24
14	2.5	2.5	2.8	2.9	3.4	3.5	4.3	6.1	10.2	11.1	9.9	9.8	11.0	8.8	8.4	10.8	10.2	8.6	9.5	6.2	6.5	3.6	2.7	3.4	2.5	11.1	5.8	24
15	3.8	4.0	5.3	5.5	4.7	6.5	5.7	5.6	5.1	4.0	4.9	9.1	8.6	11.1	11.8	11.2	9.2	8.9	9.1	6.9	2.9	4.5	5.8	3.4	2.9	11.8	5.5	24
16	3.9	5.5	7.9	9.7	8.8	7.0	7.5	11.4	11.2	12.8	15.8	14.9	13.2	11.1	1.7	1.8	2.9	1.7	2.4	6.0	8.6	9.5	7.9	2.1	1.7	15.8	5.9	24
17	3.3	5.1	4.8	5.0	6.8	3.1	1.6	3.5	6.6	6.9	5.5	5.6	5.0	4.9	5.6	2.6	3.6	3.8	3.8	1.1	0.8	2.2	2.3	1.8	0.8	6.9	3.0	24
18	0.7	1.1	0.9	2.6	2.3	1.2	2.4	5.0	5.8	5.8	6.8	7.3	6.8	6.8	7.5	7.8	7.4	6.8	6.2	6.6	5.5	6.3	5.9	4.7	0.7	7.8	4.6	24
19	5.4	5.0	3.7	3.9	4.4	3.4	4.7	4.2	3.6	4.1	4.2	4.1	4.2	2.1	2.2	4.5	3.9	4.4	4.7	1.8	0.2	0.7	1.0	4.6	0.2	5.4	3.3	24
20	5.8	3.5	4.4	5.1	5.8	6.2	5.8	5.8	5.3	4.5	4.1	3.4	4.2	1.9	2.0	4.1	2.4	3.1	12.7	10.7	5.8	4.1	5.4	6.0	1.9	12.7	3.6	24
21	6.7	7.0	7.2	6.8	6.6	6.7	6.8	9.7	10.9	10.9	10.4	11.5	10.7	11.9	9.9	8.8	8.2	9.1	8.9	8.4	5.8	3.5	2.6	2.4	2.4	11.9	7.7	24
22	2.8	2.0	1.2	1.9	2.2	2.4	3.9	5.5	7.2	9.7	10.9	7.8	8.6	6.8	6.2	7.7	7.0	6.0	5.9	3.8	0.1	0.3	1.5	2.4	0.1	10.9	4.5	24
23	2.2	3.2	2.0	2.2	1.6	0.7	3.5	3.5	3.6	4.0	6.4	8.6	7.0	7.8	7.7	5.9	6.0	6.0	9.1	7.2	7.5	7.9	7.7	5.3	0.7	9.1	4.9	24
24	5.0	5.8	6.4	5.0	5.4	6.1	8.4	5.7	6.6	5.6	3.9	5.3	5.0	1.5	7.5	12.8	10.3	10.5	7.8	6.9	5.5	3.4	3.6	5.9	1.5	12.8	2.6	24
25	4.4	5.8	3.9	4.4	5.4	2.0	4.0	7.2	8.0	8.8	8.2	8.6	9.3	9.2	10.1	7.4	9.1	8.1	5.8	4.8	1.6	7.2	13.1	8.6	1.6	13.1	6.8	24
26	2.5	3.3	6.6	8.5	7.1	8.0	10.4	14.0	14.7	13.8	13.4	14.6	14.5	13.6	12.6	12.5	12.4	14.3	15.8	10.8	6.6	4.8	10.5	11.1	2.5	15.8	10.3	24
27	11.3	8.1	7.6	6.0	6.5	6.3	9.2	11.3	13.2	12.6	12.6	13.3	12.0	13.8	13.3	13.3	14.1	12.3	9.1	4.3	3.0	3.5	1.2	0.5	0.5	14.1	9.0	24
28	0.9	1.7	1.1	2.7	2.5	2.1	1.4	2.2	1.7	9.4	17.1	19.6	18.7	17.4	19.2	17.6	15.9	10.1	8.6	10.0	8.9	9.9	8.2	7.9	0.9	19.6	8.2	24
29	6.9	6.3	5.2	4.5	2.4	2.5	5.1	6.4	7.7	7.9	7.1	6.0	5.9	4.7	6.2	4.3	4.6	0.7	1.9	2.9	4.9	1.9	0.7	1.0	0.7	7.9	3.3	24
30	2.3	4.0	4.8	4.6	5.0	2.6	4.6	5.7	8.9	10.8	9.3	8.5	9.5	8.0	13.2	13.8	9.8	7.9	7.3	4.4	2.7	5.2	4.9	3.7	2.3	13.8	5.9	24
31	2.6	5.5	4.1	5.2	6.0	5.7	5.9	4.8	5.2	6.3	5.8	8.5	9.1	7.5	8.0	9.2	7.0	6.4	7.3	8.6	7.9	7.7	7.1	5.1	2.6	9.2	6.5	24
HOURLY MAX	15.0	11.7	8.0	9.7	10.3	8.8	16.0	18.3	17.4	18.1	17.1	19.6	18.7	17.4	19.2	17.6	15.9	14.3	15.8	13.0	10.1	13.2	13.1	16.0				
HOURLY AVG	2.0	2.1	2.3	2.3	2.1	2.4	2.7	3.2	2.9	2.5	2.9	3.2	3.6	4.0	3.4	3.5	4.1	3.8	3.4	1.8	1.3	1.8	2.0	2.2				

STATUS FLAG CODES

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

LAST CALIBRATION:	April 5, 2018
DECLINATION :	MAGNETIC DECLINATION 15 DEGREE EAST

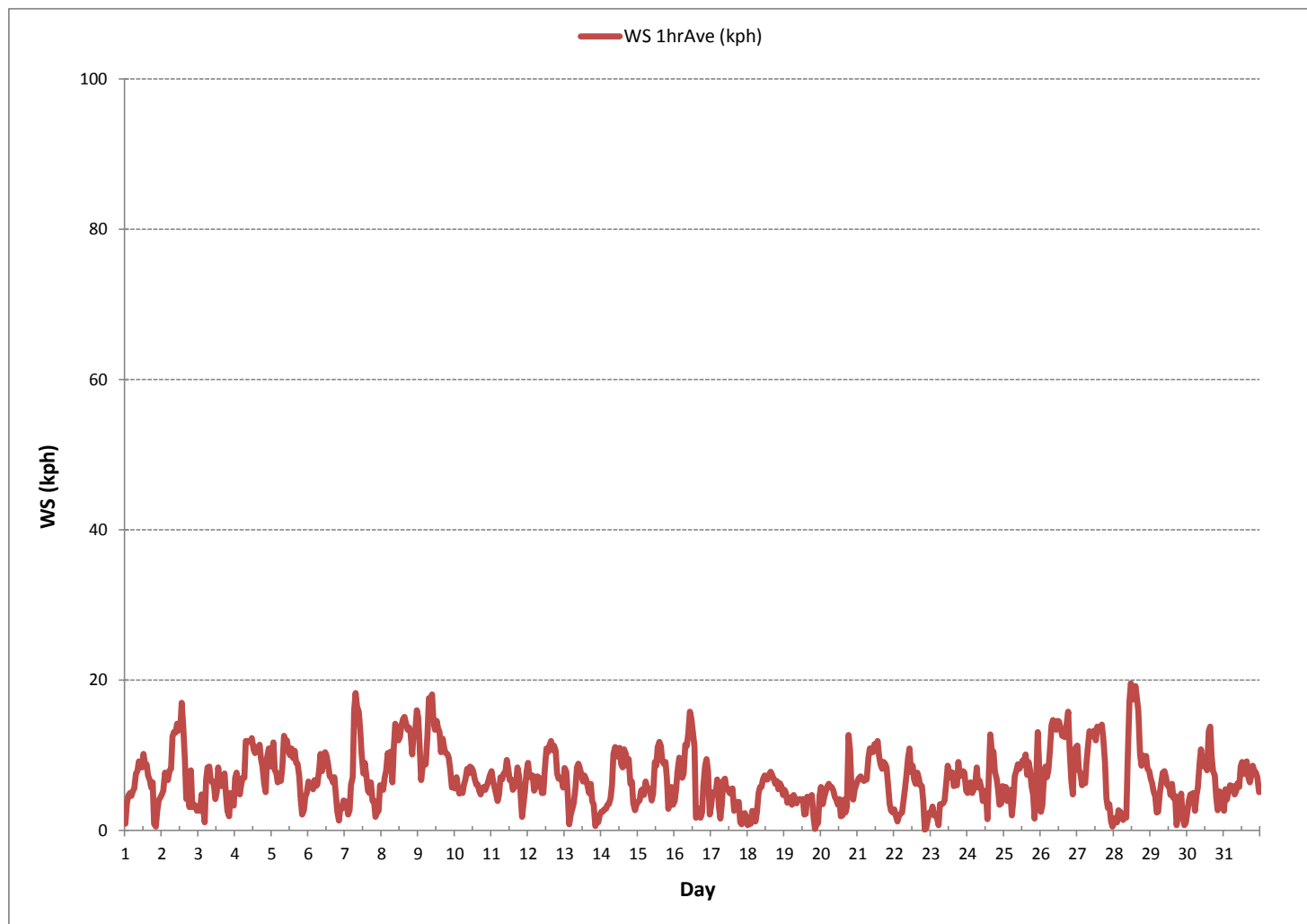
24 HR AVERAGES May 2018



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:		744				
MINIMUM 1-HR AVERAGE	0.1	kph	@ HOUR	20	ON DAY	22
MAXIMUM 1-HR AVERAGE:	19.6	kph	@ HOUR	11	ON DAY	28
MAXIMUM 24-HR AVERAGE:	11.2	kph			ON DAY	9
MONTHLY CALIBRATION TIME:	0	hrs	OPERATIONAL TIME:		744	hrs
			AMD OPERATION UPTIME:		100.0	%
STANDARD DEVIATION:	3.7		MONTHLY AVERAGE:		2.5	kph

WIND SPEED Hourly Averages (WS kph)



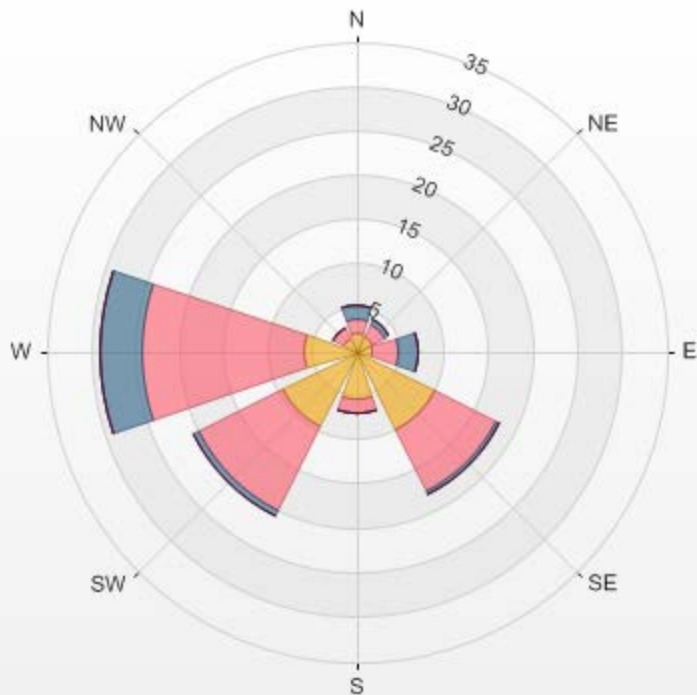
Wind: PRAMP_RENO
 Monitor: WSP [kph]
 Monthly: 18/05
 Type: WindRose
 Direction: Blowing From (Wind Frequency)
 Based On 1 Hr.

Calm: 5.65%

Direction	1.8-6.0	6.0-12.0	12.0-20.0	20.0-29.0	29.0-39.0	>39.0	Total
N	2.2	1.6	1.5	0.0	0.0	0.0	5.2
NE	2.0	1.5	0.7	0.0	0.0	0.0	4.2
E	1.9	2.8	2.3	0.0	0.0	0.0	7.0
SE	10.0	7.7	0.5	0.0	0.0	0.0	18.2
S	5.4	1.6	0.0	0.0	0.0	0.0	7.0
SW	9.4	10.6	0.7	0.0	0.0	0.0	20.7
W	5.9	18.4	4.7	0.0	0.0	0.0	29.0
NW	1.8	1.3	0.0	0.0	0.0	0.0	3.1
Summary	38.5	45.6	10.3	0.0	0.0	0.0	94.3

% Icon	Classes (kph)	38	46	10	0	0	0
	1.8-6.0	6.0-12.0	12.0-20.0	20.0-29.0	29.0-39.0	>39.0	

PRAMP_RENO 2018/05/01 00:00 - 2018/05/31 23:00 Calm: 5.65% Calm Wind Avg Speed: 1.09(kph)



WIND DIRECTION



PEACE RIVER AREA MONITORING PROGRAM COMMITTEE

Reno Station - May 2018

WIND DIRECTION Hourly Averages (WD)

HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-HOUR AVG	24-HR
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59	QUADRANT	RDGS.
DAY																										
1	W	W	WNW	W	W	W	W	WSW	WSW	WSW	W	W	WSW	W	W	WNW	WSW	W	WSW	SW	S	S	S	SSE	WSW	24
2	SSE	S	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	W	W	W	WSW	NNW	NNE	NW	WSW	NW	NNE	SSE	SSE	ENE	SSW	WSW	24
3	SSW	SSW	SW	SW	SW	WSW	W	WSW	W	NW	NNE	NNE	WNW	WSW	WSW	W	WNW	W	W	W	SW	SW	WSW	SSW	W	24
4	SW	WSW	WSW	SW	SW	SW	WSW	WSW	W	W	W	W	W	W	W	W	W	WNW	W	W	WSW	WSW	WSW	WSW	WSW	24
5	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	SW	SW	WSW	SW	WSW	24
6	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	WNW	WNW	WSW	W	W	N	WSW	24
7	N	N	NNE	N	N	NE	E	E	E	E	E	E	E	ESE	ESE	SSE	S	SE	S	SSW	SE	SSW	SSW	SSW	E	24
8	SSW	SSW	SSW	SSW	SW	SW	WSW	W	NNW	N	NNW	NNW	NNW	NNW	N	N	N	NNE	NNE	NNE	NNE	NE	ENE	ENE	N	24
9	ENE	E	E	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	24
10	SE	SE	SE	SE	SE	SE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSE	24
11	SSW	SSW	S	S	S	SSW	SSW	SW	SW	WSW	WSW	W	WNW	W	W	NW	W	W	W	W	SW	SW	SW	SW	WSW	24
12	WSW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WNW	WNW	W	WSW	W	W	W	W	W	W	WNW	W	W	WSW	NW	W	24
13	N	NNE	NNE	NW	W	WSW	WSW	W	NNW	NNW	NNW	N	NNW	NW	NNW	WNW	WNW	WNW	WNW	WSW	SSW	SSW	SSW	SSW	NW	24
14	SSW	S	S	S	S	S	SSW	SW	WSW	WSW	W	W	W	W	W	WSW	WSW	WSW	W	W	W	WSW	SW	SW	WSW	24
15	SW	SW	WSW	SW	SW	WSW	WSW	W	NW	WNW	W	W	W	W	W	W	WNW	WNW	NW	NW	WNW	NNW	N	NNE	W	24
16	NE	NE	N	N	NNE	NNE	NE	ENE	ENE	ENE	ENE	E	ENE	ENE	E	SW	S	SSE	SE	ESE	SE	ESE	ESE	NE	ENE	24
17	ENE	ENE	ENE	ENE	E	NE	N	ENE	ENE	E	ESE	ESE	ESE	ENE	ENE	SE	SSE	SE	SE	SSE	SSW	SW	SSW	SSW	E	24
18	SW	SW	SSW	SSW	SW	ENE	SE	ESE	SE	SSE	SSE	SE	SE	ESE	ESE	SE	ESE	SE	SE	ESE	ESE	SE	SE	SE	SE	24
19	SE	SE	SSE	SSE	SSE	SSE	SE	SE	SSE	E	E	ESE	ESE	SSE	SE	SE	SSE	SSE	SE	SE	ESE	ESE	E	ESE	SE	24
20	SE	SSE	SE	SE	SE	SE	SE	SE	SSE	SE	ESE	SE	SSE	SW	E	ESE	SSW	S	SW	WSW	SW	SSW	SW	SW	S	24
21	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	W	WSW	W	WSW	W	W	W	WSW	WSW	WSW	SW	SW	SW	SW	WSW	24
22	SW	SW	SW	SW	SSW	SSW	SSW	SW	SW	WSW	WSW	WSW	SW	SW	SW	SW	SW	WSW	WSW	SW	SSW	SW	SSE	SSE	SW	24
23	SSE	SSE	S	SW	SW	ESE	SE	SE	SSE	SE	SE	SE	SE	SE	SE	SE	SE	SE	ESE	ESE	ESE	ESE	ESE	SE	SE	24
24	SE	SE	SE	SE	SE	ESE	ESE	SE	SE	SSE	SSE	SE	SE	S	WSW	W	W	W	W	W	WSW	WSW	WSW	SW	SSW	24
25	SW	WSW	WSW	SW	WSW	W	WSW	W	W	WSW	W	W	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	WSW	WSW	SW	WSW	24
26	ESE	SW	SW	WSW	SW	SW	SW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW	24
27	WSW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	WSW	24
28	SW	SW	NW	NNE	NNE	N	WNW	WSW	SSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	W	WSW	WSW	24
29	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	W	W	W	W	W	W	NNW	NW	NE	NW	NE	NE	ENE	NNE	NNE	W	24
30	NNE	NNE	E	NE	N	NNE	NNE	NE	ENE	ENE	E	E	ENE	ENE	ENE	E	ESE	NE	ESE	ESE	ESE	SE	SE	ENE	ENE	24
31	SE	ESE	ESE	ESE	ESE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	ESE	SE	SE	SE	SE	ESE	ESE	SE	SE	SE	24

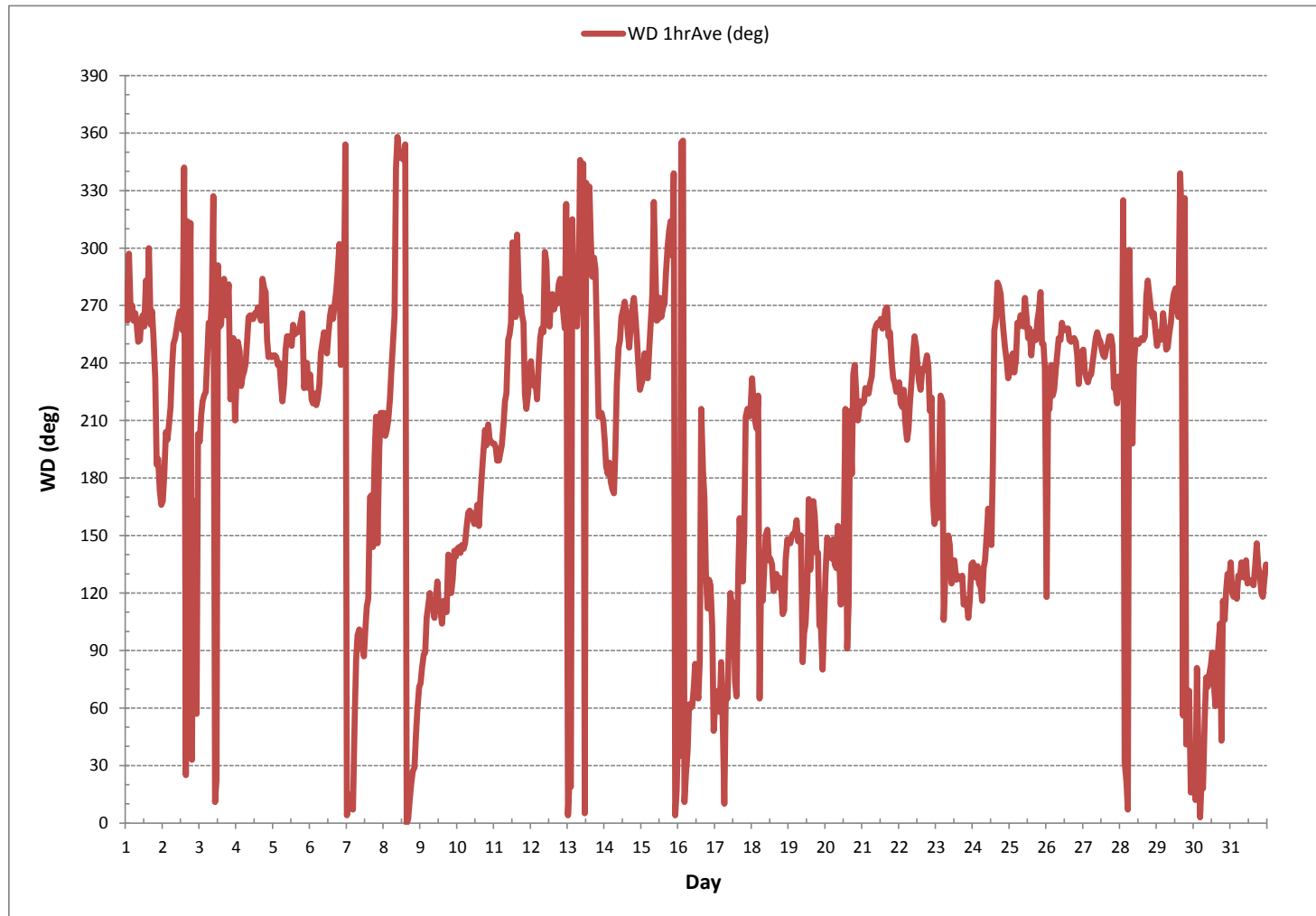
STATUS FLAG CODES

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

LAST CALIBRATION:	April 5, 2018
DECLINATION :	MAGNETIC DECLINATION 15 DEGREE EAST

MONTHLY CALIBRATION TIME:	0	hrs	OPERATIONAL TIME:	744	hrs
STANDARD DEVIATION:	80		AMD OPERATION UPTIME:	100.0	%
			MONTHLY AVERAGE:	232 (SW)	

WIND DIRECTION Hourly Averages (WD)



RELATIVE HUMIDITY

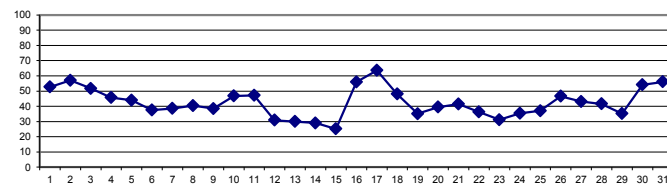
RELATIVE HUMIDITY Hourly Averages (RH %)

HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	DAILY	24-HR	RDGS.
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59	MIN.	MAX.	AVG.	
DAY																												
1	78	80	70	72	74	76	69	66	60	55	45	38	37	32	29	30	29	29	30	39	49	57	62	58	29	80	53	24
2	60	61	52	54	56	55	55	51	47	43	37	35	32	31	64	78	59	48	44	65	83	85	85	88	31	88	57	24
3	89	86	77	72	74	69	58	56	50	49	45	38	37	35	34	33	33	32	34	36	48	47	51	58	32	89	52	24
4	58	59	62	69	70	70	68	61	53	47	38	32	31	29	27	27	25	25	26	29	36	46	51	57	25	70	46	24
5	59	60	64	67	68	70	69	62	51	43	37	33	30	28	25	24	23	22	23	29	39	45	40	43	22	70	44	24
6	45	53	57	59	63	62	57	51	45	38	33	26	23	22	21	20	18	17	18	22	32	37	42	41	17	63	38	24
7	51	54	64	60	55	56	46	41	36	34	29	27	23	22	20	20	22	19	24	32	39	46	50	55	19	64	39	24
8	62	68	72	73	72	68	61	54	37	26	21	21	21	21	21	20	20	19	22	26	33	40	46	46	19	73	40	24
9	48	50	54	58	59	59	54	50	45	38	31	30	30	29	27	24	25	25	26	26	29	33	36	37	24	59	38	24
10	40	40	39	41	42	44	45	48	48	47	47	47	45	42	41	39	38	38	39	45	55	65	72	77	38	77	47	24
11	81	83	84	87	90	88	81	72	61	49	39	30	22	21	19	18	18	17	18	20	29	35	34	35	17	90	47	24
12	39	44	46	49	51	47	43	38	33	27	25	24	23	22	21	21	20	19	18	20	22	25	32	31	18	51	31	24
13	35	38	43	53	55	52	42	33	25	22	19	19	17	17	17	17	17	16	17	19	30	36	38	43	16	55	30	24
14	50	53	51	47	46	49	45	38	29	27	24	19	17	16	15	12	12	12	13	15	19	22	29	36	12	53	29	24
15	33	37	35	37	41	39	37	34	32	30	27	23	19	13	10	10	10	9	11	12	17	22	28	38	9	41	25	24
16	41	39	44	49	49	48	49	44	42	38	32	30	31	32	42	76	81	84	85	79	79	78	82	88	30	88	56	24
17	87	82	82	85	78	85	88	81	73	64	62	53	50	43	40	35	33	34	40	46	61	69	76	81	33	88	64	24
18	84	88	90	90	90	90	77	65	52	39	32	28	25	27	24	23	22	21	20	22	28	33	39	44	20	90	48	24
19	48	51	55	57	58	58	51	43	37	34	28	24	22	18	18	18	16	14	14	19	32	41	47	39	14	58	35	24
20	43	52	49	54	55	54	52	46	43	38	33	27	23	20	18	18	18	18	31	39	47	55	56	57	18	57	39	24
21	58	63	66	66	68	67	65	60	52	45	38	33	29	25	21	20	19	20	22	21	24	31	38	43	19	68	41	24
22	46	51	57	62	64	59	48	41	35	29	26	25	23	21	20	20	20	20	20	22	34	41	44	42	20	64	36	24
23	46	46	51	53	55	57	45	37	31	26	22	19	18	17	19	18	18	17	17	19	24	29	30	34	17	57	31	24
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25	56	59	62	60	57	56	51	42	31	26	20	20	21	24	23	22	20	19	20	21	28	27	38	86	19	86	37	24
26	87	90	89	78	78	72	67	59	48	40	35	31	28	25	23	22	21	20	22	26	31	38	41	47	20	90	47	24
27	50	52	56	61	63	60	54	49	43	40	37	34	33	31	31	30	28	28	31	34	38	41	52	59	28	63	43	24
28	63	68	68	68	68	77	83	80	70	56	37	29	25	21	13	11	10	14	17	20	22	23	26	29	10	83	42	24
29	33	38	45	50	56	50	46	45	42	34	28	24	22	20	19	19	20	20	20	23	31	42	55	63	19	63	35	24
30	66	68	68	67	73	75	71	64	50	42	37	36	34	36	48	35	35	32	44	61	63	63	66	67	32	75	54	24
31	72	74	81	82	84	80	72	66	66	63	56	53	45	36	34	30	33	34	36	40	44	49	55	60	30	84	56	24
HOURLY MAX	89	90	90	90	90	90	88	81	73	64	62	53	50	43	64	78	81	84	85	79	83	85	85	88				
HOURLY AVG	56	59	60	62	63	62	58	52	45	39	34	30	28	26	26	26	26	25	27	31	38	43	48	53				

STATUS FLAG CODES

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

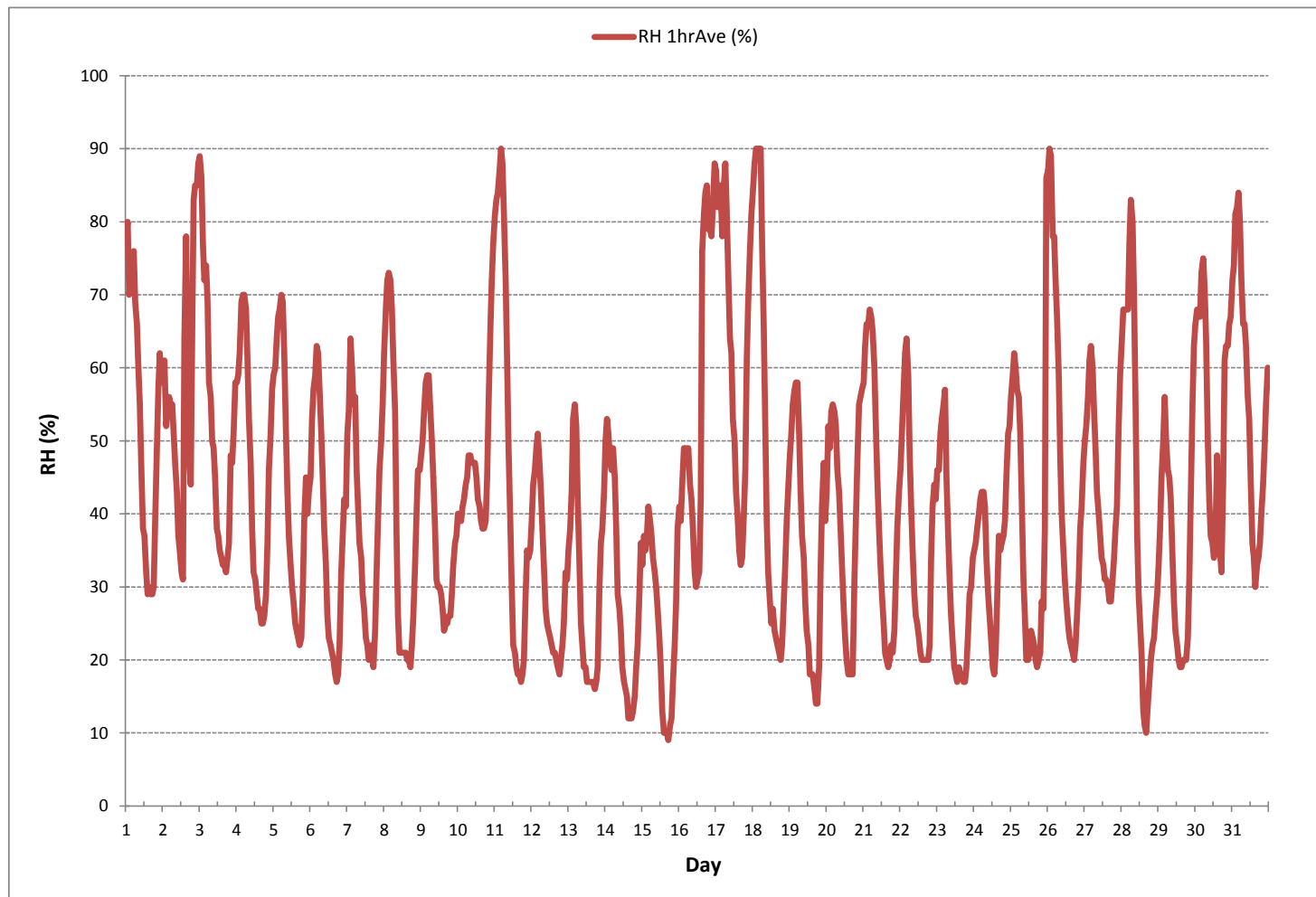
24 HR AVERAGES May 2018



MONTHLY SUMMARY

MINIMUM 1-HR AVERAGE:	9	%	@ HOUR	17	ON DAY	15
MAXIMUM 1-HR AVERAGE:	90	%	@ HOUR	4	ON DAY	11
MAXIMUM 24-HR AVERAGE:	64	%			ON DAY	17
OPERATIONAL TIME:					744	hrs
AMD OPERATION UPTIME:					100.0	%
STANDARD DEVIATION:	19				MONTHLY AVERAGE:	42 %

RELATIVE HUMIDITY Hourly Averages (RH %)



BAROMETRIC PRESSURE



PEACE RIVER AREA MONITORING PROGRAM COMMITTEE

Reno Station - May 2018

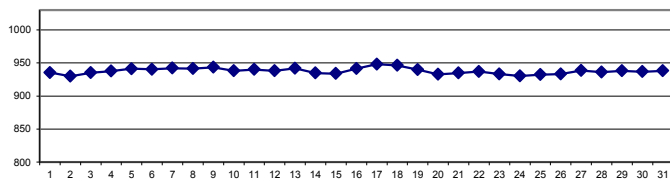
BAROMETRIC PRESSURE Hourly Averages (BP mbar)

HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	DAILY	24-HR	RDGS.	
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59	MIN.	MAX.	AVG.		
DAY																													
1	934	934	934	935	935	936	937	937	937	937	937	937	937	936	936	936	936	935	935	934	934	934	933	933	933	933	937	935	24
2	932	931	930	930	929	929	929	929	929	929	928	928	928	930	931	931	931	931	931	931	931	931	932	931	928	932	930	24	
3	931	932	932	932	933	933	934	935	935	936	936	937	937	937	937	937	937	937	937	936	936	936	936	936	936	931	937	935	24
4	936	936	936	937	937	937	937	938	938	938	938	938	938	938	938	937	937	937	937	938	938	939	939	940	936	940	938	24	
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8	939	939	939	939	938	938	939	939	940	940	941	941	941	942	942	942	943	943	943	944	944	944	945	946	938	946	941	24	
9	946	947	947	947	947	947	947	946	946	945	945	944	944	943	942	941	941	940	940	940	940	939	939	939	939	939	947	943	24
10	939	938	938	938	937	937	938	938	938	938	938	937	938	938	938	937	937	937	938	938	938	939	939	940	937	940	938	24	
11	940	940	940	940	941	941	941	941	942	941	941	941	941	941	940	940	939	939	939	939	939	939	939	939	939	939	942	940	24
12	939	939	938	938	939	939	940	940	940	940	939	939	938	938	937	937	937	936	936	937	937	937	937	938	939	936	940	938	24
13	940	940	941	941	942	942	943	943	944	944	944	944	943	943	942	941	941	941	941	940	940	940	940	940	940	944	942	24	
14	940	939	939	939	938	938	937	937	936	936	936	935	935	934	934	933	932	931	930	931	931	931	931	931	930	940	935	24	
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16	937	937	938	939	939	940	940	940	940	941	941	941	941	941	942	943	944	944	944	944	945	945	946	946	937	946	942	24	
17	946	946	946	947	947	947	948	948	948	949	949	949	949	949	949	949	948	948	948	948	949	949	949	949	946	949	948	24	
18	949	949	949	949	949	949	949	949	948	948	948	947	947	946	945	945	944	944	943	943	943	943	944	944	943	949	946	24	
19	944	943	943	943	943	942	942	942	942	941	941	941	941	940	939	938	938	937	937	936	936	936	936	935	935	944	940	24	
20	935	935	935	934	934	934	933	933	933	933	932	932	932	932	931	931	931	931	931	932	932	932	933	933	931	935	933	24	
21	933	933	934	934	934	934	934	935	935	935	935	935	935	935	935	935	935	935	935	935	935	936	936	937	933	937	935	24	
22	937	937	937	938	938	938	939	939	939	939	938	938	937	937	936	936	936	936	935	935	935	935	935	935	935	939	937	24	
23	935	935	935	935	935	935	935	935	935	935	934	934	933	933	933	932	932	931	931	931	930	931	930	930	930	935	933	24	
24	930	930	930	930	930	930	929	929	929	929	929	929	929	929	929	929	930	931	931	931	932	932	932	932	929	932	930	24	
25	933	933	933	934	934	934	934	934	934	934	934	934	933	933	932	931	931	930	930	929	929	930	931	933	929	934	932	24	
26	932	932	932	933	933	933	933	933	933	933	933	933	933	933	932	933	933	933	934	934	934	935	935	936	932	936	933	24	
27	937	937	938	938	939	939	939	940	940	939	939	939	939	939	939	939	938	938	938	938	938	938	938	937	937	940	938	24	
28	937	937	936	936	936	936	936	936	936	935	935	935	935	935	935	935	935	935	935	936	936	937	938	938	935	938	936	24	
29	938	938	939	939	939	939	939	940	940	939	939	939	938	938	937	937	937	937	937	937	937	937	937	937	937	940	938	24	
30	937	937	937	937	937	937	937	937	937	937	936	936	936	936	936	936	936	936	936	937	937	937	938	938	938	936	938	937	24
31	938	938	938	938	938	938	939	939	939	939	939	939	939	938	938	937	937	937	937	938	938	938	938	938	937	939	938	24	
HOURLY MAX	949	949	949	949	949	949	949	949	948	949	949	949	949	949	949	949	948	948	948	949	949	949	949	949	949				
HOURLY AVG	938	938	938	938	938	938	938	938	939	938	938	938	938	938	937	937	937	937	937	937	937	937	937	937	938				

STATUS FLAG CODES

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

24 HR AVERAGES May 2018



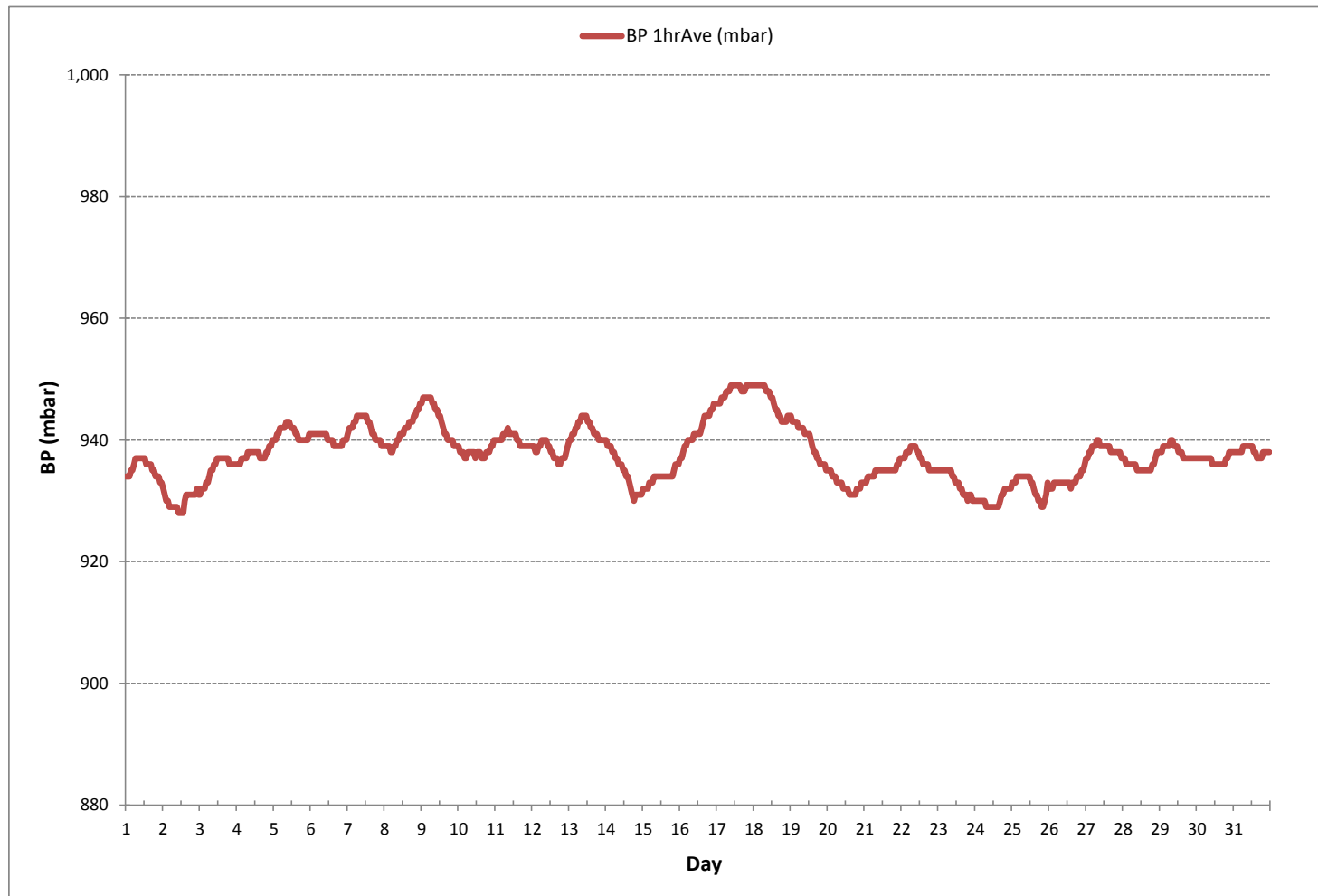
MONTHLY SUMMARY

MINIMUM 1-HR AVERAGE:	928	mbar	@ HOUR	10	ON DAY	2
MAXIMUM 1-HR AVERAGE:	949	mbar	@ HOUR	9	ON DAY	17
MAXIMUM 24-HR AVERAGE:	948	mbar			ON DAY	17

OPERATIONAL TIME:	744	hrs
AMD OPERATION UPTIME:	100.0	%

STANDARD DEVIATION:	5		MONTHLY AVERAGE:	938	mbar
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BAROMETRIC PRESSURE Hourly Averages (BP mbar)



AMBIENT TEMPERATURE

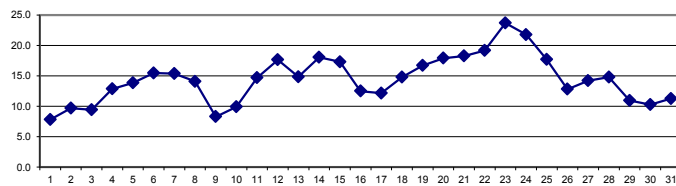
AMBIENT TEMPERATURE Hourly Averages (AmbTPX °C)

HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	DAILY	24-HR	RDGS.
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59	MIN.	MAX.	AVG.	
DAY																												
1	3.2	2.5	4.5	3.9	3.1	2.3	3.8	4.8	6.6	8.3	10.2	11.4	11.6	12.2	12.6	12.3	12.4	12.4	12.2	11.1	8.8	6.2	4.9	5.9	2.3	12.6	7.8	24
2	5.4	5.2	6.8	7.0	6.6	7.3	7.8	9.5	11.8	13.4	15.1	15.6	16.4	16.7	10.1	8.2	11.3	13.0	13.6	10.0	6.6	5.6	5.6	4.3	4.3	16.7	9.7	24
3	3.0	3.1	4.2	3.9	2.6	3.5	6.2	7.6	9.6	10.8	11.4	12.2	12.5	13.2	13.3	13.8	13.9	13.7	13.5	12.8	10.8	11.0	10.5	9.5	2.6	13.9	9.4	24
4	9.8	9.4	8.4	6.3	6.0	5.9	7.0	9.1	11.0	12.6	14.5	15.5	16.4	17.2	18.3	18.1	18.3	18.8	18.3	17.1	15.0	13.2	12.1	10.2	5.9	18.8	12.9	24
5	9.5	9.2	8.1	7.3	6.9	6.3	6.7	9.0	11.6	13.4	15.3	16.8	17.9	18.8	19.6	20.2	20.9	21.2	20.8	19.1	15.3	12.6	13.5	12.6	6.3	21.2	13.9	24
6	12.0	9.7	8.5	8.1	7.4	7.8	9.4	11.5	13.7	16.2	17.7	19.2	20.1	20.8	21.4	22.1	22.7	22.6	22.3	21.0	16.7	14.4	12.8	12.9	7.4	22.7	15.5	24
7	10.2	9.4	7.0	7.8	8.0	8.1	11.4	12.9	14.5	15.8	17.8	18.7	20.3	21.3	22.5	22.5	21.9	21.8	20.3	18.5	16.8	14.7	13.1	13.2	7.0	22.5	15.4	24
8	11.7	10.4	10.0	9.9	9.5	9.9	11.1	13.3	16.0	18.1	19.0	19.5	19.6	19.5	19.4	19.0	18.5	17.7	16.3	14.3	11.5	9.5	7.7	6.7	6.7	19.6	14.1	24
9	5.7	5.1	4.0	3.3	2.9	3.2	3.9	4.6	5.8	7.9	9.7	10.6	11.2	11.9	13.1	14.2	13.8	13.5	12.3	11.1	9.8	8.4	6.8	6.2	2.9	14.2	8.3	24
10	5.5	5.4	5.4	4.4	3.9	4.3	7.3	9.4	10.1	11.4	11.5	11.9	12.9	13.9	14.1	14.8	15.1	15.4	14.8	13.3	10.8	8.4	7.0	6.6	3.9	15.4	9.9	24
11	5.7	5.2	4.8	4.1	2.7	4.6	7.2	9.3	12.0	15.3	18.1	20.4	21.4	22.2	23.1	23.0	23.1	23.5	23.0	21.7	17.8	15.1	14.9	14.7	2.7	23.5	14.7	24
12	14.3	12.6	11.6	10.9	10.1	11.0	12.5	14.4	16.6	18.7	19.9	20.8	22.0	22.6	23.0	23.5	23.7	23.4	22.6	21.2	19.3	17.6	15.6	15.5	10.1	23.7	17.6	24
13	14.5	12.8	10.6	7.6	6.1	6.8	9.9	13.4	15.2	16.0	17.0	17.4	18.3	19.1	19.8	20.4	20.8	20.8	20.7	19.4	15.4	12.7	11.2	9.8	6.1	20.8	14.8	24
14	9.2	8.9	8.9	9.7	10.1	9.8	11.6	14.6	17.6	19.2	20.8	22.4	23.1	23.6	24.4	25.6	25.9	26.1	25.7	24.0	22.0	19.6	16.4	13.8	8.9	26.1	18.0	24
15	13.4	11.7	12.2	11.6	10.2	11.5	13.4	15.4	16.9	18.1	19.5	20.2	21.3	22.3	23.0	23.4	23.2	22.8	22.2	21.1	19.0	16.5	14.9	11.1	10.2	23.4	17.3	24
16	11.3	11.9	10.1	8.6	8.8	9.6	11.0	13.4	14.4	15.6	17.5	17.5	17.7	18.1	16.3	12.2	12.2	11.8	11.3	11.2	10.6	10.1	9.6	9.1	8.6	18.1	12.5	24
17	9.0	9.2	8.9	8.6	9.0	8.4	8.5	9.8	11.5	12.2	12.6	13.7	14.5	15.5	15.8	17.4	17.8	18.0	16.0	15.1	12.3	10.3	9.2	8.1	8.1	18.0	12.1	24
18	7.2	6.2	5.6	5.6	5.7	6.4	9.6	12.6	15.2	17.5	18.8	19.5	19.7	19.8	20.7	20.9	21.3	21.4	20.9	19.9	17.8	15.9	14.2	12.9	5.6	21.4	14.8	24
19	11.9	10.9	9.7	8.8	8.3	8.8	11.4	14.1	15.7	17.3	19.2	20.4	21.6	22.3	23.0	23.7	24.2	24.2	23.4	22.1	17.6	14.7	13.3	14.2	8.3	24.2	16.7	24
20	14.3	12.0	12.5	11.3	11.2	11.7	13.0	15.4	17.4	19.3	21.2	23.2	23.8	24.3	25.1	25.4	25.6	26.1	21.1	18.0	16.0	14.2	13.9	13.7	11.2	26.1	17.9	24
21	13.6	13.2	12.9	12.8	12.2	12.4	13.1	14.3	16.4	18.5	20.6	21.9	22.9	23.8	24.4	24.6	24.8	24.7	23.8	22.8	20.0	16.8	14.5	13.3	12.2	24.8	18.3	24
22	12.3	11.0	9.3	8.0	7.7	10.2	14.5	16.9	18.7	20.5	22.3	23.5	24.5	25.8	26.7	27.0	27.2	27.2	27.0	25.7	21.4	18.4	16.7	17.4	7.7	27.2	19.2	24
23	16.2	16.2	14.7	14.2	13.7	14.4	18.6	21.6	24.3	26.4	28.1	28.9	29.6	30.0	30.1	30.7	30.6	30.3	29.4	27.9	25.7	23.5	22.5	20.6	13.7	30.7	23.7	24
24	19.6	19.0	18.3	17.3	16.6	16.7	17.3	19.7	23.2	25.1	26.9	27.6	28.9	28.9	27.1	25.7	23.3	23.4	22.5	21.8	20.7	19.0	17.7	16.3	16.3	28.9	21.8	24
25	15.1	14.3	12.7	11.7	11.5	12.4	14.5	16.8	18.4	19.0	20.1	20.8	21.1	20.7	21.9	22.1	22.7	22.9	22.4	21.1	17.9	17.7	16.0	10.5	10.5	22.9	17.7	24
26	9.9	9.1	9.3	9.3	7.2	7.4	8.8	10.1	11.9	13.3	14.5	15.3	16.1	17.0	17.8	17.7	17.0	16.8	16.1	14.8	13.3	12.3	11.8	10.5	7.2	17.8	12.8	24
27	9.4	8.4	7.5	6.8	6.7	7.9	10.2	11.7	13.5	14.8	16.2	17.1	18.1	19.1	19.0	19.1	20.1	19.9	19.1	18.2	17.0	16.2	13.6	11.3	6.7	20.1	14.2	24
28	10.3	10.6	10.7	10.8	10.7	10.4	10.8	12.3	14.5	16.6	17.7	18.7	19.3	19.6	20.0	20.2	20.1	19.4	17.6	15.7	14.3	13.0	11.7	10.2	10.2	20.2	14.8	24
29	8.1	6.9	5.6	4.6	3.3	5.2	6.8	8.4	10.2	11.6	12.9	14.0	15.0	15.9	16.4	16.5	16.3	16.2	16.1	15.8	13.4	10.0	7.6	6.2	3.3	16.5	11.0	24
30	5.0	4.8	5.2	5.7	3.7	3.6	5.6	8.4	12.1	13.7	14.4	14.5	15.1	14.8	13.6	15.5	15.3	15.4	12.7	10.9	10.4	9.2	8.6	8.7	3.6	15.5	10.3	24
31	8.0	7.7	6.5	5.7	5.1	6.8	9.1	10.6	10.1	10.6	11.5	12.1	13.8	15.7	16.1	16.4	15.6	16.0	14.6	14.1	12.7	11.3	10.4	9.7	5.1	16.4	11.3	24
HOURLY MAX	19.6	19.0	18.3	17.3	16.6	16.7	18.6	21.6	24.3	26.4	28.1	28.9	29.6	30.0	30.1	30.7	30.6	30.3	29.4	27.9	25.7	23.5	22.5	20.6				
HOURLY AVG	10.1	9.4	8.9	8.2	7.7	8.2	10.1	12.1	14.1	15.7	17.2	18.1	18.9	19.6	19.7	19.9	20.0	20.0	19.1	17.8	15.4	13.5	12.2	11.2				

STATUS FLAG CODES

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

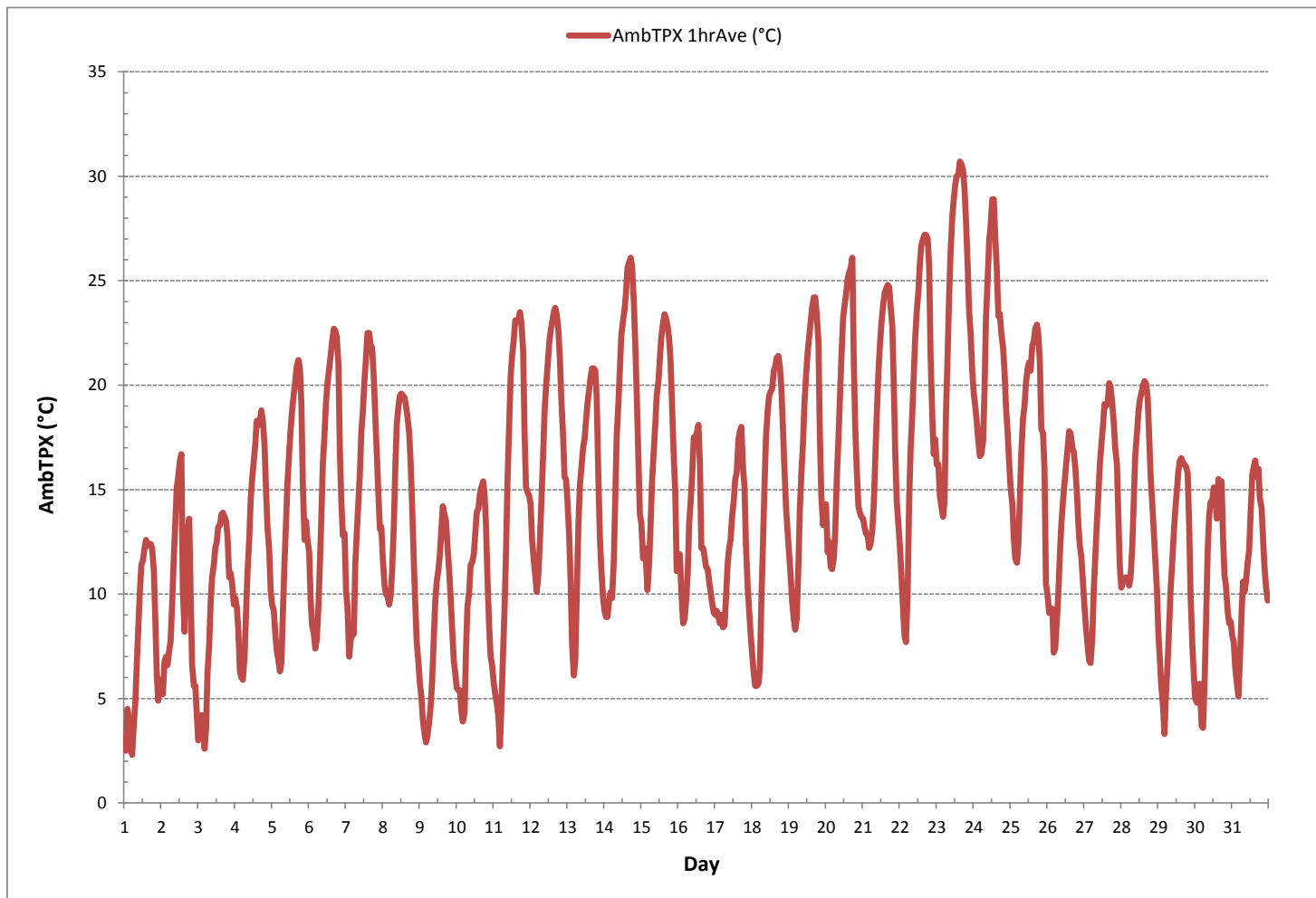
24 HR AVERAGES May 2018



MONTHLY SUMMARY

MINIMUM 1-HR AVERAGE:	2.3	°C	@ HOUR	5	ON DAY	1
MAXIMUM 1-HR AVERAGE:	30.7	°C	@ HOUR	15	ON DAY	23
MAXIMUM 24-HR AVERAGE:	23.7	°C			ON DAY	23
OPERATIONAL TIME:				744	hrs	
AMD OPERATION UPTIME:				100.0	%	
STANDARD DEVIATION:	6.0		MONTHLY AVERAGE:	14.5	°C	

AMBIENT TEMPERATURE Hourly Averages (AmbTPX °C)



STATION TEMPERATURE

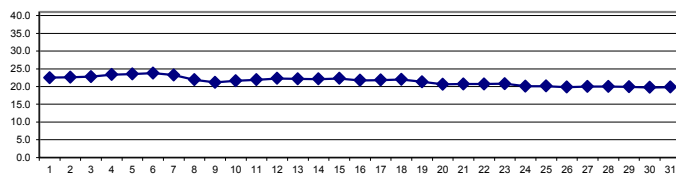
STATION TEMPERATURE Hourly Averages (StnTPX °C)

HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	DAILY	24-HR	RDGS.	
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59	MIN.	MAX.	AVG.		
DAY																													
1	21.8	21.8	21.8	21.7	21.8	21.7	21.8	21.7	21.7	21.7	22.2	23.0	23.1	23.4	23.5	23.6	23.7	23.5	23.6	23.4	23.2	22.2	21.8	21.9	21.7	21.6	23.7	22.5	24
2	21.8	21.8	21.9	21.7	21.8	21.8	21.9	21.6	22.1	23.1	23.3	23.4	23.7	23.8	23.6	23.3	23.4	23.6	23.6	23.2	22.4	21.7	21.7	21.7	21.6	23.8	22.6	24	
3	21.7	21.7	21.7	21.6	21.8	21.6	21.7	21.7	20.6	21.4	23.5	23.9	24.0	23.6	23.7	24.0	24.0	23.9	23.8	23.7	23.4	23.2	23.1	22.9	20.6	24.0	22.8	24	
4	22.8	22.7	22.6	22.4	22.3	22.2	22.2	22.2	22.5	22.9	23.3	23.6	23.8	24.0	24.3	24.4	24.5	24.6	24.7	24.5	24.1	23.7	23.3	23.1	22.2	24.7	23.4	24	
5	22.9	22.6	22.5	22.4	22.4	22.3	22.3	22.4	22.6	23.0	23.4	23.7	24.0	24.2	24.5	24.7	24.9	25.1	24.7	24.8	24.4	23.9	23.6	23.3	22.3	25.1	23.5	24	
6	23.1	22.9	22.7	22.5	22.4	22.3	22.4	22.7	23.0	23.5	23.9	24.2	24.4	24.6	24.7	25.0	25.1	25.2	25.2	25.0	24.6	24.1	23.7	23.4	22.3	25.2	23.8	24	
7	23.1	22.9	22.6	22.5	22.5	22.4	22.6	22.9	23.2	23.5	23.9	24.2	24.4	24.6	24.9	25.0	25.0	23.0	22.9	22.6	22.5	22.3	22.0	21.8	21.8	25.0	23.2	24	
8	21.6	21.3	21.2	21.1	21.0	21.0	21.1	21.3	21.7	22.0	22.2	22.5	22.5	22.7	22.8	22.8	22.9	22.9	22.9	22.6	22.2	21.7	21.4	21.1	21.0	22.9	21.9	24	
9	20.8	20.6	20.5	20.4	20.3	20.4	20.4	20.5	20.6	20.7	21.0	21.3	21.5	21.7	22.0	22.3	22.4	22.3	22.0	21.8	21.6	21.3	21.0	20.8	20.3	22.4	21.2	24	
10	20.7	20.6	20.5	20.4	20.4	20.4	20.5	20.9	21.2	21.5	21.8	22.0	22.1	22.3	22.5	22.7	22.9	22.9	23.0	22.7	22.2	21.8	21.4	21.1	20.4	23.0	21.6	24	
11	20.9	20.7	20.6	20.5	20.4	20.4	20.6	20.9	21.1	21.6	22.1	22.4	22.7	22.7	23.0	23.0	23.0	23.0	23.0	22.8	22.4	22.2	22.0	20.4	20.4	23.0	21.9	24	
12	21.8	21.6	21.5	21.3	21.2	21.2	21.4	21.6	21.9	22.2	22.5	22.6	22.8	22.8	22.9	22.9	23.1	23.0	23.1	23.1	22.8	22.6	22.3	22.1	21.2	23.1	22.3	24	
13	22.0	21.9	21.6	21.2	20.9	20.8	20.9	21.2	21.7	22.0	22.2	22.5	22.6	22.7	22.9	23.0	23.1	23.2	23.1	23.2	22.8	22.3	21.8	21.6	20.8	23.2	22.1	24	
14	21.4	21.2	21.1	21.1	21.1	21.1	21.2	21.4	21.9	22.2	22.5	22.7	22.7	22.8	22.7	22.6	22.6	22.6	22.8	22.8	22.9	22.7	22.5	22.2	21.1	22.9	22.1	24	
15	21.9	21.6	21.5	21.4	21.2	21.2	21.4	21.7	22.0	22.3	22.5	22.7	22.7	22.8	22.9	22.8	23.0	22.9	23.0	23.0	22.8	22.6	22.3	22.0	21.2	23.0	22.3	24	
16	21.7	21.5	21.4	21.2	21.2	21.2	21.2	21.5	21.7	21.9	22.2	22.4	22.5	22.5	22.5	22.2	22.0	21.9	21.8	21.7	21.6	21.5	21.4	21.3	21.2	22.5	21.8	24	
17	21.2	21.2	21.1	21.1	21.1	21.1	21.0	21.1	21.3	21.5	21.6	21.9	22.1	22.4	22.6	22.7	22.9	23.1	23.0	22.7	22.3	21.9	21.6	21.3	21.0	23.1	21.8	24	
18	21.0	20.9	20.7	20.6	20.6	20.6	20.8	21.2	21.6	22.0	22.4	22.5	22.7	22.8	22.8	22.9	23.0	23.0	23.1	23.1	22.9	22.6	22.2	22.0	20.6	23.1	22.0	24	
19	21.7	21.5	21.4	21.2	21.0	21.0	21.2	21.6	21.9	22.2	22.1	21.4	21.0	21.0	21.6	21.3	21.4	21.4	21.6	21.5	21.2	20.6	20.6	20.4	20.4	22.2	21.3	24	
20	20.3	20.1	20.2	20.2	20.2	20.2	20.2	20.5	20.3	20.4	20.5	20.8	20.8	21.0	21.2	21.1	21.2	21.2	21.3	20.9	20.6	20.6	20.5	20.4	20.1	21.3	20.6	24	
21	20.3	20.3	20.3	20.3	20.2	20.2	20.3	20.4	20.3	20.5	20.5	20.5	20.8	21.1	21.1	21.2	21.3	21.3	21.4	21.3	21.1	20.8	20.6	20.5	20.2	21.4	20.7	24	
22	20.4	20.4	20.4	20.2	20.2	20.3	20.3	20.4	20.5	20.6	20.5	20.8	20.8	20.6	21.1	21.0	21.2	21.2	21.3	21.4	21.3	20.9	20.6	20.6	20.2	21.4	20.7	24	
23	20.5	20.4	20.5	20.3	20.3	20.4	20.4	20.6	20.8	20.7	20.6	20.7	20.6	20.9	21.4	21.8	22.1	22.0	21.4	20.6	20.5	20.5	20.6	20.3	22.1	20.8	24		
24	20.5	20.1	19.8	19.8	19.8	19.8	19.7	19.8	20.3	20.3	20.0	19.9	19.8	20.2	20.2	20.2	20.4	20.3	20.3	20.4	20.4	20.4	20.1	19.7	19.7	20.5	20.1	24	
25	19.8	19.7	19.7	19.6	19.6	19.6	19.6	19.6	19.7	20.2	20.6	20.5	20.4	20.4	20.3	20.3	20.3	20.5	20.5	20.7	20.7	20.5	20.2	19.7	19.6	20.7	20.1	24	
26	19.8	19.7	19.7	19.6	19.6	19.6	19.5	19.5	19.6	19.6	19.7	19.5	19.5	19.7	20.3	20.7	20.6	20.4	20.2	19.8	19.8	19.7	19.5	19.5	20.7	19.8	24		
27	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.6	19.6	19.7	19.7	20.0	20.5	20.7	20.6	20.6	20.4	20.5	20.6	20.6	20.2	19.9	19.8	19.8	19.5	20.7	20.0	24
28	19.7	19.6	19.6	19.5	19.6	19.6	19.6	19.6	19.5	19.7	19.5	19.6	20.0	20.5	20.7	20.6	20.5	20.5	20.6	20.7	20.5	19.9	19.8	19.7	19.5	19.5	20.7	20.0	24
29	19.7	19.6	19.5	19.5	19.5	19.6	19.6	19.6	19.6	19.7	19.6	19.6	19.6	20.0	20.6	20.7	20.7	20.7	20.7	20.7	20.2	19.8	19.8	19.7	19.5	20.7	19.9	24	
30	19.7	19.6	19.6	19.6	19.5	19.5	19.5	19.6	19.6	19.6	19.6	19.6	19.7	19.6	19.8	19.8	19.8	19.7	20.1	20.5	20.2	19.9	19.8	19.7	19.7	19.5	20.5	19.7	24
31	19.6	19.6	19.6	19.7	19.5	19.7	19.6	19.6	19.7	19.7	19.7	19.8	19.8	19.7	20.1	20.6	20.5	20.5	20.3	19.9	19.9	19.9	19.7	19.6	19.5	20.6	19.8	24	
HOURLY MAX	23.1	22.9	22.7	22.5	22.5	22.4	22.6	22.9	23.2	23.5	23.9	24.2	24.4	24.6	24.9	25.0	25.1	25.2	25.2	25.0	24.6	24.1	23.7	23.4					
HOURLY AVG	21.1	21.0	20.9	20.8	20.7	20.7	20.8	20.9	21.1	21.3	21.6	21.8	21.9	22.0	22.2	22.2	22.3	22.3	22.3	22.1	21.8	21.5	21.3	21.1					

STATUS FLAG CODES

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

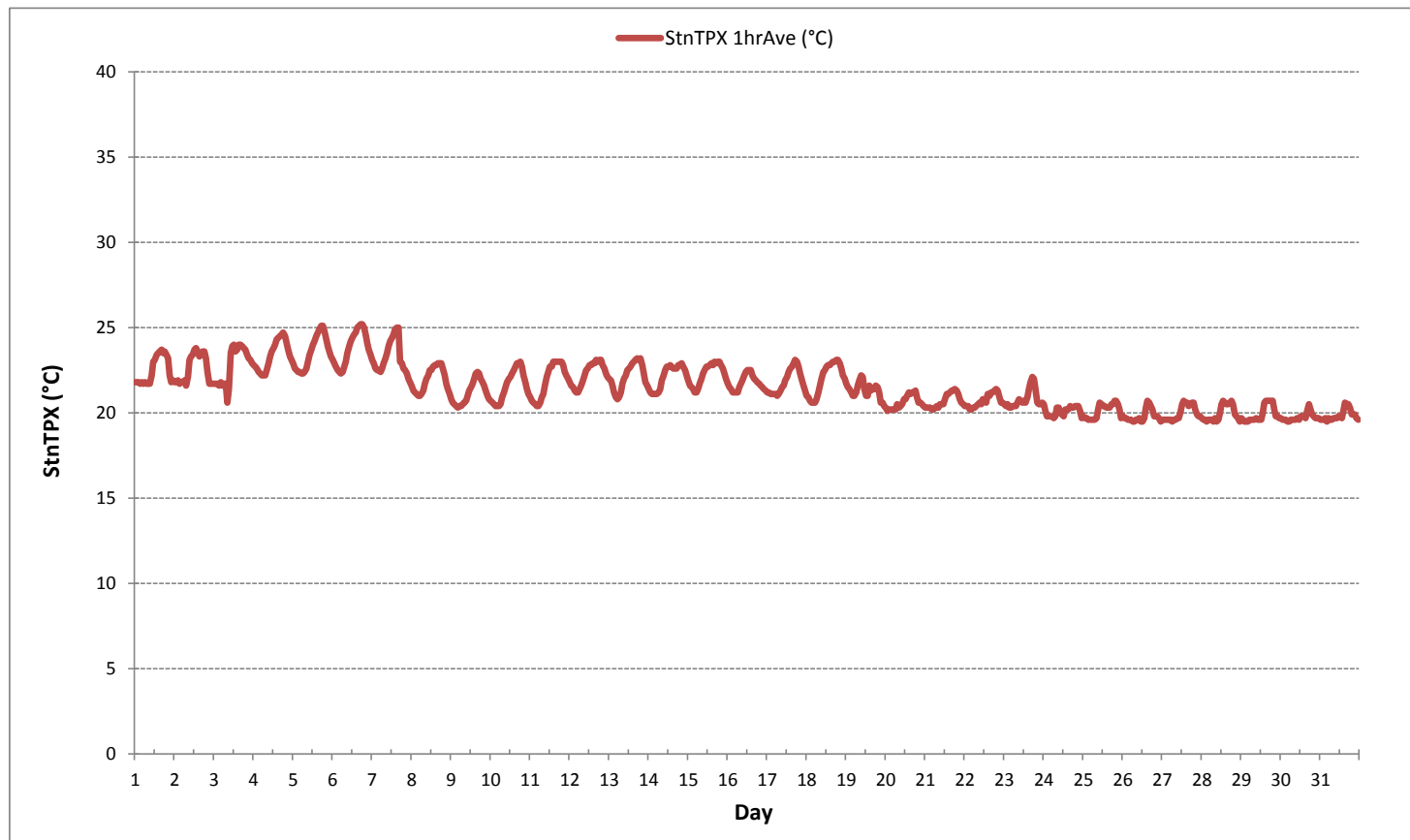
24 HR AVERAGES May 2018



MONTHLY SUMMARY

MINIMUM 1-HR AVERAGE:	19.5	°C	@ HOUR	6	ON DAY	26
MAXIMUM 1-HR AVERAGE:	25.2	°C	@ HOUR	17	ON DAY	6
MAXIMUM 24-HR AVERAGE:	23.8	°C			ON DAY	6
OPERATIONAL TIME:						744 hrs
AMD OPERATION UPTIME:						100.0 %
STANDARD DEVIATION:	1.4					
MONTHLY AVERAGE:						21.5 °C

STATION TEMPERATURE Hourly Averages (StnTPX °C)



APPENDIX II
EQUIPMENT CALIBRATION RESULTS

SULPHUR DIOXIDE



API 100A Sulphur Dioxide Analyzer Calibration

Date:	May 3, 2018	Barometer/B.P./units:	Brunton 05535 expires December 15, 2018	27.62	inHg
Company/Airshed:	PRAMP	Thermometer/Station Temp:	F.S. 160348895 expires March 29, 2019	23.8	°C
Location/Station Name:	RENO	Weather Conditions:	Mainly sunny		
Parameter:	Sulphur Dioxide	Calibration Purpose:	routine monthly		
Start Time 24 hr. (mst):	9:00	Performed By/Reviewer:	Limin Li	Rob Fisher	
End Time 24 hr. (mst):	12:44	Cal Gas Expiry Date:	December 2, 2019		
Calibration Method:	Gas Dilution	Converter Model & s/n (if applicable):	n/a		
Analyzer:					
Serial Number/Owner:	841	Maxxam	Range ppb:	500	
Last Calibration Date:	April 5, 2018		As Found C.F.:	1.004	
Previous C.F.:	1.000		New C.F.:	1.000	

Calibration Standards:	Standard Calibration Points for Ranges		
Low Flow Meter ID/Expiry Date:	Defender Low 156151 expires October 2, 2018	Point	ppb
High Flow Meter ID/Expiry Date:	Defender High 156312 expires December 13, 2018	High	380
Calibrator ID/Expiry Date:	Sabio id# 17200415 expires May 16, 2018	Mid	180
Cal Gas Cylinder I.D. #:	LL119329	Low	90
Cal Gas Conc. (ppm):	50.1		

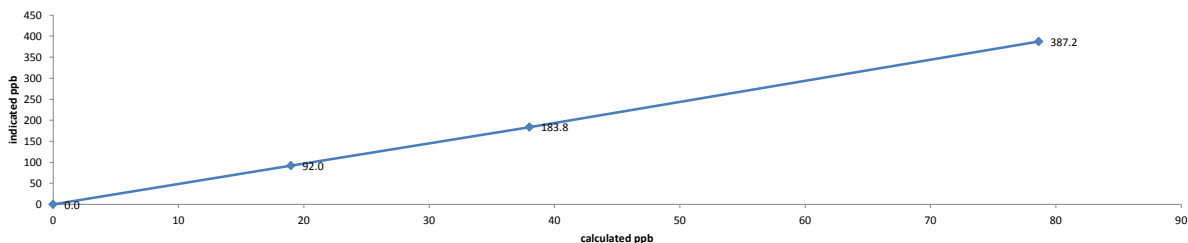
ALL POINTS ARE 15 MINUTES OF STABILITY AS OF SEPTEMBER 23, 2015

Calibrator Flow Rates (cc/min)				Calculated Concentration (ppb):	Indicated Concentration (ppb):	Correction Factors (C.F.):
Point	Diluent	Cal Gas	Total			
as found zero	5873	0.00	5873	0.0	0.4	n/a
as found high	5817	45.30	5862	387.2	386.1	1.004
adjusted zero	5873	0.00	5873	0.0	0.0	n/a
adjusted high	5817	45.30	5862	387.2	387.2	1.000
mid	5877	21.48	5898	182.5	183.8	0.993
low	5888	10.94	5899	92.9	92.0	1.010
calibrator zero	5899	0.00	5899	0.0	-0.3	n/a
Average C.F.:						1.001

Linear Regression/Calibration Results:

Correlation Coefficient =	1.000	LIMITS	> or = 0.995
Slope =	0.999		0.95-1.05
b (Intercept as % of full scale)=	0.02%		± 3% F.S.
% change in C.F. from last cal=	-0.38%		± 10%

API 100A Sulphur Dioxide Analyzer Calibration



As found:		As left:	
Slope:	1.222	Slope:	1.225
Offset:	42.6 MV	Offset:	42.8 MV
Hvps:	763 V	Hvps:	763 V
Dcps:	2560 MV	Dcps:	2560 MV
Rcell Temp:	50.0 °C	Rcell Temp:	50.4 °C
Box Temp:	31.4 °C	Box Temp:	33.0 °C
Pmt Temp:	7.1 °C	Pmt Temp:	7.1 °C
Izs Temp:	45.1 °C	Izs Temp:	45.1 °C
Pres:	24.9 IN-HG-A	Pres:	24.8 IN-HG-A
Samp Fl:	672 CC/M	Samp Fl:	667 CC/M
Pmt:	62.4 MV	Pmt:	65.6 MV
Uv Lamp:	2003 MV	Uv Lamp:	1980 MV
Lamp Ratio:	107.0 %	Lamp Ratio:	105.8 %
Str Lgt:	26.0 PPB	Str Lgt:	26.0 PPB
Drk Pmt:	24.9 MV	Drk Pmt:	24.9 MV
Drk Lmp:	-17.2 MV	Drk Lmp:	-17.2 MV
Expected Value:	313.2	Expected Value:	325.7

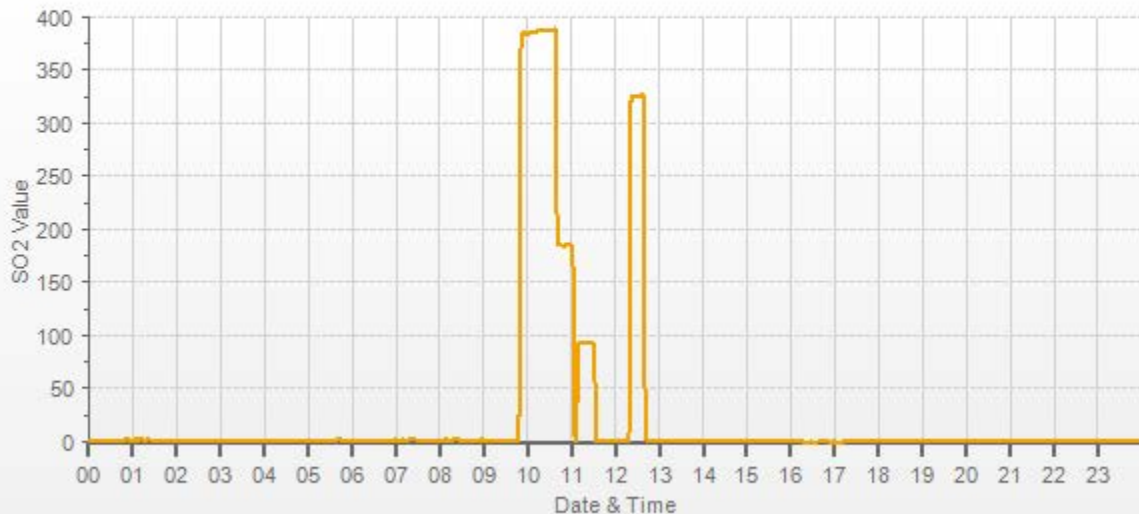
Comments:

The analyzer sample inlet filter was changed.

The manifold blower was found to be working normally.

SO2[ppb] Station: PRAMP_RENO Daily: 18/05/03 Type: AVG 1 Min. [1 Min.]

— SO2[ppb]





API 100A Sulphur Dioxide Analyzer Calibration

Date:	May 19, 2018	Barometer/B.P./units:	Brunton 05490 expires December 11, 2018	938.6	millibars
Company/Airshed:	PRAMP	Thermometer/Station Temp:	Brunton 05490 expires December 11, 2018	22	°C
Location/Station Name:	Reno	Weather Conditions:	Sunny		
Parameter:	Sulphur Dioxide	Calibration Purpose:	repeat		
Start Time 24 hr. (mst):	10:58	Performed By/Reviewer:	Chris Wesson	Rob Fisher	
End Time 24 hr. (mst):	15:32	Cal Gas Expiry Date:	May 18, 2021		
Calibration Method:	Gas Dilution	Converter Model & s/n (if applicable):	n/a		
Analyzer:					
Serial Number/Owner:	841	Maxxam	Range ppb:	500	
Last Calibration Date:	May 3, 2018		As Found C.F.:	0.946	
Previous C.F.:	1.000		New C.F.:	1.000	

Calibration Standards:	Standard Calibration Points for Ranges		
Low Flow Meter ID/Expiry Date:	Defender Low 152020 expires November 22, 2018	Point	ppb
High Flow Meter ID/Expiry Date:	Defender High 148943 expires November 21, 2018	High	380
Calibrator ID/Expiry Date:	API id# 690 expires March 15, 2019	Mid	180
Cal Gas Cylinder I.D. #:	EY0000715	Low	90
Cal Gas Conc. (ppm):	25.5		

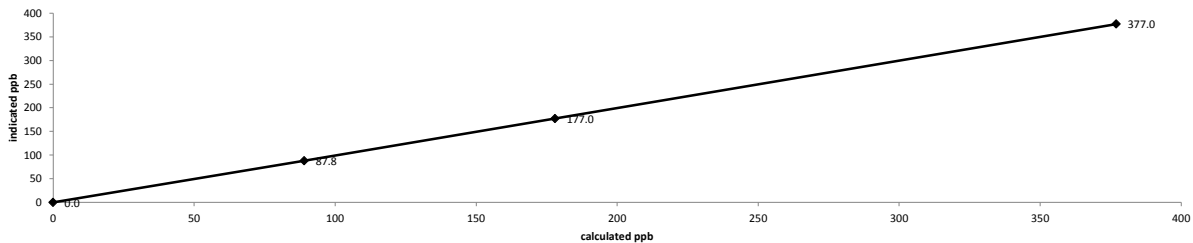
ALL POINTS ARE 15 MINUTES OF STABILITY AS OF SEPTEMBER 23, 2015

Calibrator Flow Rates (cc/min)				Calculated Concentration (ppb):	Indicated Concentration (ppb):	Correction Factors (C.F.):
Point	Diluent	Cal Gas	Total			
as found zero	5022	0.00	5022	0.0	-0.8	n/a
as found high	4935	74.13	5009	377.4	398.0	0.946
adjusted zero	5022	0.00	5022	0.0	0.0	n/a
adjusted high	4954	74.33	5028	377.0	377.0	1.000
mid	4991	35.08	5026	178.0	177.0	1.006
low	5003	17.53	5021	89.0	87.8	1.014
calibrator zero	5022	0.00	5022	0.0	0.2	n/a
Average C.F.:						1.007

Linear Regression/Calibration Results:

Correlation Coefficient =	1.000	LIMITS	> or = 0.995
Slope =	0.999		0.95-1.05
b (Intercept as % of full scale)=	0.14%		± 3% F.S.
% change in C.F. from last cal=	5.37%		± 10%

API 100A Sulphur Dioxide Analyzer Calibration



As found:		As left:	
Slope:	1.225	Slope:	1.071
Offset:	42.8	Offset:	45.1
Hvps:	763	Hvps:	763
Dcps:	2560	Dcps:	2560
Rcell Temp:	50.1	Rcell Temp:	50.1
Box Temp:	31.0	Box Temp:	30.4
Pmt Temp:	7.1	Pmt Temp:	7.1
Izs Temp:	45.2	Izs Temp:	35.1
Pres:	25.0	Pres:	25.0
Samp Fl:	679	Samp Fl:	679
Pmt:	64.4	Pmt:	64.5
Uv Lamp:	2106	Uv Lamp:	2091
Lamp Ratio:	112.9	Lamp Ratio:	103.4
Str Lgt:	26.2	Str Lgt:	24.1
Drk Pmt:	25.0	Drk Pmt:	24.8
Drk Lmp:	-17.1	Drk Lmp:	-17.1
Expected Value:	326.0	Expected Value:	282.0

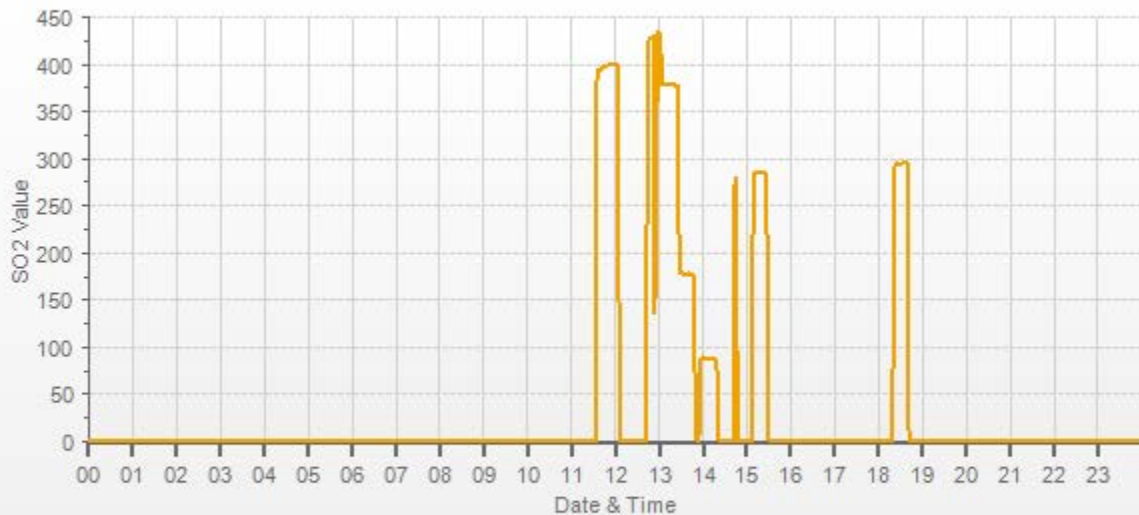
Comments:

The manifold blower was found to be working normally.

The analyzer perm tube was changed, the new expected value will be updated once the perm tube temperature has stabilized.

An As-Found was performed due to a low span drift due to a depleted permeation tube. The permeation tube was replaced and the oven temperature was adjusted. A repeat calibration was performed after the maintenance. The adjusted high point restarted after the flow rates were confirmed at 12:52. The calibrator zero ended at 14:42 after which a span was triggered to check the oven temp.

SO2[ppb] Station: PRAMP_RENO Daily: 18/05/19 Type: AVG 1 Min. [1 Min.]



— SO2[ppb]

TOTAL REDUCED SULPHUR



Thermo 431-TLE Total Reduced Sulphur Analyzer Calibration

Date:	May 3, 2018	Barometer/B.P./units:	Brunton 05535 expires December 15, 2018	27.62	inHg
Company/Airshed:	PRAMP	Thermometer/Station Temp:	F.S. 160348895 expires March 29, 2019	23.8	°C
Location/Station Name:	RENO	Weather Conditions:	Mainly sunny		
Parameter:	Total Reduced Sulphur	Calibration Purpose:	routine monthly		
Start Time 24 hr. (mst):	9:00	Performed By/Reviewer:	Limin Li	Rob Fisher	
End Time 24 hr. (mst):	12:48	Cal Gas Expiry Date:	August 23, 2020		
Calibration Method:	Gas Dilution	Converter Model & s/n (if applicable):	CD NOVA-CDA 101 # 534		
Analyzer:					
Serial Number/Owner:	1162460022 Maxxam	Range ppb:	100		
Last Calibration Date:	April 5, 2018	As Found C.F.:	1.004		
Previous C.F.:	1.000	New C.F.:	1.000		

Calibration Standards:	Standard Calibration Points for Ranges	SO2 Scrubber Check (10 minutes):	
Low Flow Meter ID/Expiry Date:	Defender Low 156151 expires October 2, 2018	Start/End Time 24 hr.:	09:45/09:59
High Flow Meter ID/Expiry Date:	Defender High 156312 expires December 13, 2018	SO2 Analyzer Range:	500
Calibrator ID/Expiry Date:	Enviroconics id# 1991 expires March 15, 2019	Target Concentration (ppb):	380
Cal Gas Cylinder I.D. #:	LL119500	As Found Zero:	0.0
Cal Gas Conc. (ppm):	9.8	Analyzer Response (ppb):	0.0
		Zero Corrected Result (ppb):	0.0

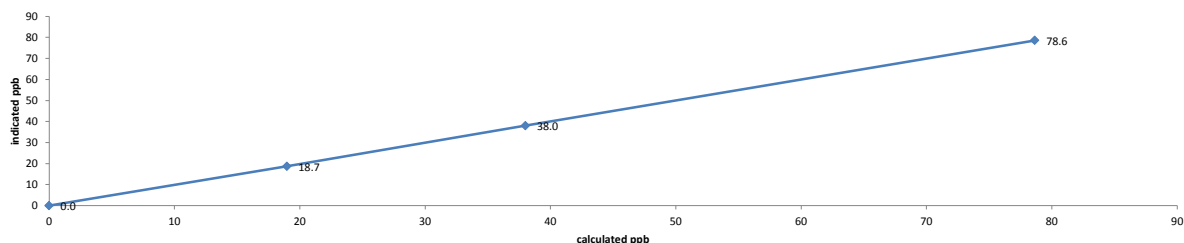
ALL POINTS ARE 15 MINUTES OF STABILITY AS OF SEPTEMBER 23, 2015

Calibrator Flow Rates (cc/min)				Calculated Concentration (ppb):	Indicated Concentration (ppb):	Correction Factors (C.F.):
Point	Diluent	Cal Gas	Total			
as found zero	7479	0.00	7479	0.0	-0.1	n/a
as found high	7419	60.01	7479	78.6	78.2	1.004
adjusted zero	7479	0.00	7479	0.0	0.0	n/a
adjusted high	7419	60.01	7479	78.6	78.6	1.000
mid	7469	29.08	7498	38.0	38.0	1.000
low	7483	14.52	7498	19.0	18.7	1.015
calibrator zero	7498	0.00	7498	0.0	0.1	n/a
Average C.F.:						1.005

Linear Regression/Calibration Results:

Correlation Coefficient =	1.000	LIMITS	> or = 0.995
Slope =	0.999		0.95-1.05
b (Intercept as % of full scale)=	0.11%		± 3% F.S.
% change in C.F. from last cal=	-0.37%		± 10%

Thermo 431-TLE Total Reduced Sulphur Analyzer Calibration



As found:	As left:
Bkg: 2.27	Bkg: 2.11
Coef: 0.942	Coef: 0.944
Pmt: -706.7 V	Pmt: -706.7 V
Flash: 1003 V	Flash: 1003 V
Internal: 31.2 °C	Internal: 33.4 °C
Chamber: 45.2 °C	Chamber: 45.1 °C
Perm Oven Gas: 35.1 °C	Perm Oven Gas: 45.0 °C
Perm Oven Heater: 34.13 °C	Perm Oven Heater: 44.11 °C
Pressure: 639.2 mmHg	Pressure: 637.7 mmHg
Sample Flow: 0.410 L/Min	Sample Flow: 0.411 L/Min
Lamp Intensity: 83 %	Lamp Intensity: 83 %
Converter: 825 °C	Converter: 825 °C
Converter Set: 825 °C	Converter Set: 825 °C
Averaging Time: 120 Sec	Averaging Time: 120 Sec
Expected Value: 66.4	Expected Value: 67.3

Comments:

The analyzer sample inlet filter was changed.

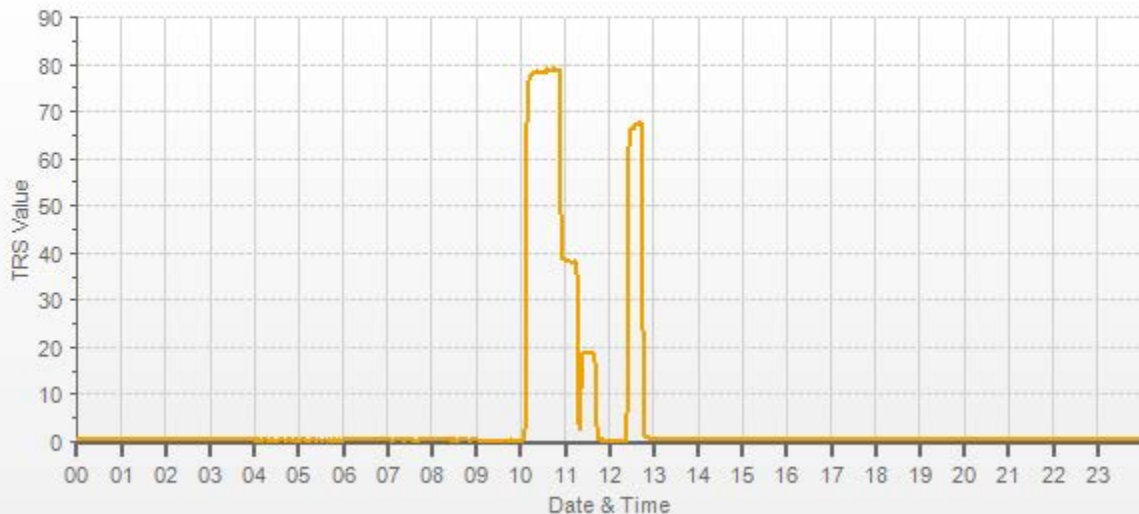
The analyzer cooling fan filter(s) were cleaned.

The manifold blower was found to be working normally.

The permeation tube was changed. The IZS temperature was adjusted to 45 °C. The older permeation tube was a high concentration tube which required a temperature of 35°C.

TRS[ppb] Station: PRAMP_RENO Daily: 18/05/03 Type: AVG 1 Min. [1 Min.]

— TRS[ppb]



TOTAL HYDROCARBON



Thermo 55i Methane/Non-Methane Analyzer Calibration

Date: May 3, 2017		Barometer/B.P./units: Brunton 05535 expires December 15, 2018		27.62	inHg
Company/Airshed: PRAMP		Thermometer/Station Temp: F.S. 160348895 expires March 29, 2019		23.8	°C
Location/Station Name: RENO		Weather Conditions: Mainly sunny			
Parameter: CH ₄ / NMHC / THC		Calibration Purpose: routine monthly			
Start/End Time 24 hr. (mst): 12:01/15:19		Performed By/Reviewer: Limin Li		Rob Fisher	
Calibration Method: Gas Dilution		Cal Gas Expiry Date: October 18, 2025			

Analyzer:		Correction Factors:		
Serial Number/Owner: 1314057759	Maxxam	Previous C.F.:	As Found C.F.:	New C.F.:
Measured Flow: 1254		CH ₄ = 1.001	1.000	1.000
Last Calibration Date: April 5, 2018		NMHC = 1.004	1.009	0.999
Range ppm: 20 CH ₄ /20 NMHC/40 THC		THC = 1.002	1.005	0.999

Calibration Standards:		Standard Calibration Points for Analyzer Range of 20/20/40 ppm			
Low Flow Meter ID/Expiry Date: Defender Low 156151 expires October 2, 2018		Point	CH₄	NMHC	THC
High Flow Meter ID/Expiry Date: Defender High 156312 expires December 13, 2018		High	13.00	13.00	26.00
Calibrator ID/Expiry Date: Envirotronics id# 1991 expires March 15, 2019		Mid	7.00	7.00	14.00
Cal Gas Cylinder I.D. #: LL168404		Low	3.00	3.00	6.00
CH₄ Cylinder Conc.: 597.0	206.0 =C ₃ H ₈ Cylinder Conc.				
CH₄ expressed as C₃H₈: 566.5	1163.5 =total CH ₄ equivalent				

ALL POINTS ARE 15 MINUTES OF STABILITY AS OF SEPTEMBER 23, 2015												
Calibrator Flow Rates (cc/min)				Calculated CH₄ (ppm)	Calculated NMHC (ppm)	Calculated THC (ppm)	Indicated CH₄ (ppm)	Indicated NMHC (ppm)	Indicated THC (ppm)	Correction Factors:		
Point	Diluent	Cal Gas	Total Flow							CH₄	NMHC	THC
as found zero	2493	0.00	2493	0.00	0.00	0.00	0.00	0.00	0.00	n/a	n/a	n/a
as found high	2433	60.05	2493	14.38	13.65	28.03	14.38	13.52	27.90	1.000	1.009	1.005
adjusted zero	2493	0.00	2493	0.00	0.00	0.00	0.00	0.00	0.00	n/a	n/a	n/a
adjusted high	2433	60.05	2493	14.38	13.65	28.03	14.38	13.66	28.04	1.000	0.999	0.999
mid	2464	30.00	2494	7.18	6.81	14.00	7.18	6.83	14.01	1.000	0.998	0.999
low	2477	14.89	2492	3.57	3.38	6.95	3.56	3.38	6.94	1.002	1.001	1.002
calibrator zero	2492	0.00	2492	0.00	0.00	0.00	0.00	0.00	0.00	n/a	n/a	n/a
Average C.F. =										1.001	0.999	1.000

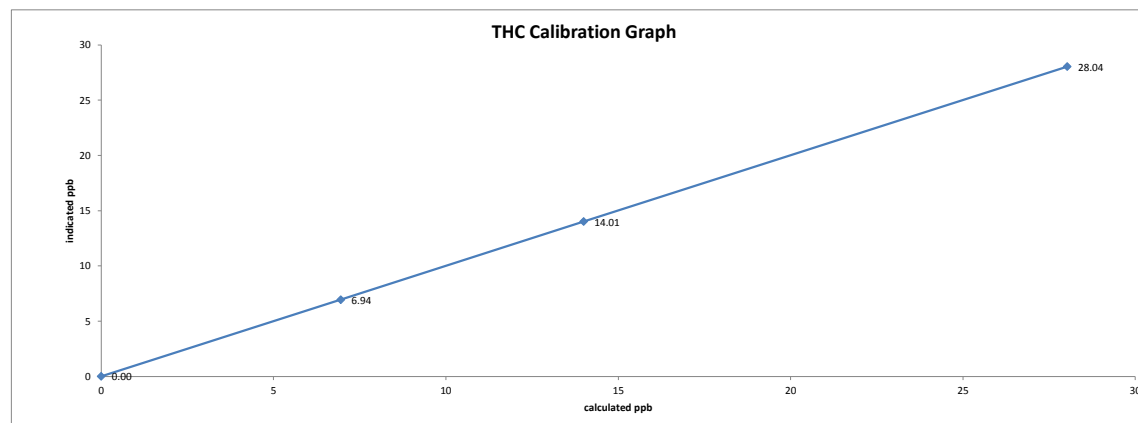
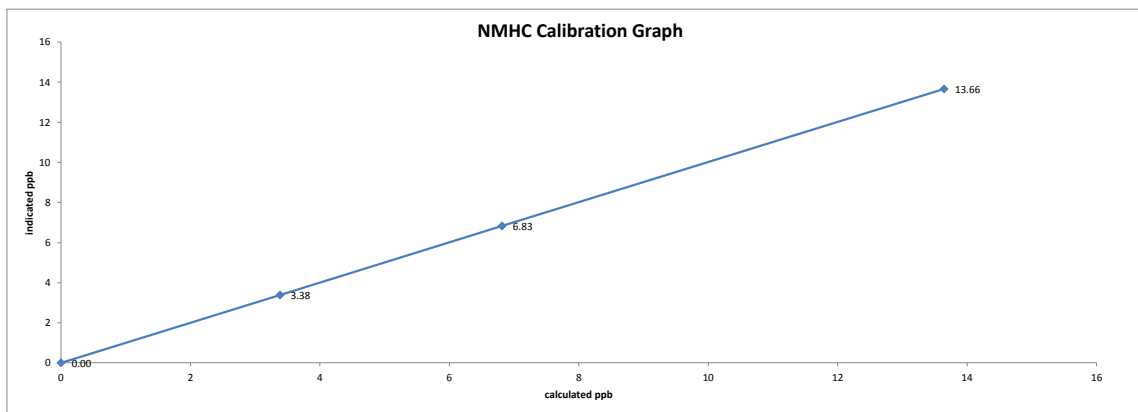
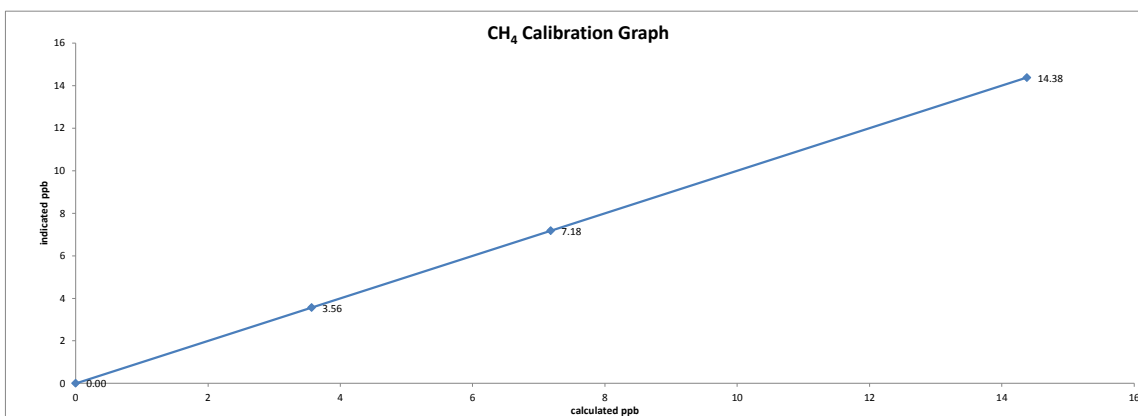
Linear Regression/Calibration Results:				LIMITS	
Correlation Coefficient =	CH ₄	NMHC	THC	> or = 0.995	
Slope =	1.000	1.000	1.000	0.95-1.05	
b (Intercept as % of full scale) =	-0.02%	-0.01%	-0.01%	± 3% F.S.	
% change in C.F. from last cal =	0.10%	-0.53%	-0.25%	± 10%	

As Left Instrument Diagnostics:											
Interface Board Voltages:		Bias Supply: -289.9 V		Calibration History cnt'd:		NM Peak Area: 82048					
Temperatures:		Detector Oven: 175.0 °C		Crucial Settings:		Methane Start: 8					
		Filter: 175.0 °C				Methane End: 16					
		Column Oven: 75.0 °C				Backflush: 18					
		Internal: 34.2 °C				NMHV Start: 26					
Cylinder Pressures/reg.:		Carrier: 1700 50		Run History>1:		NMHC End: 56					
		Fuel: 1200 50				Date: 03May18					
		Span Gas: 700 18				Time: 11:10					
		Zero Air Generator: 48				CH₄ PK HT: 2471					
Internal Pressures:		Carrier: 31.3				CH₄ RT: 11.8					
		Fuel: 41.6				CH₄ Baseline: 2108					
		Air: 25.9				CH₄ LOD: 65					
FID Status:		Status: LIT				CH₄ SD: 21					
		Counts: 35165				CH₄ CONC: 1.94					
		Flame: 405.0 °C				NM PK HT: 0					
		Det Base: 175.0 °C				NM Peak Area: 0					
Flame and Power Stats:		Last Power On: 20DEC2017 15:44				NM CONC: 0.00					
		Flameouts: 2				NM Base Start: 2068					
		Det Oven at Start: 106.8				NM Base End: 2067					
		Col Oven at Start: 59.7				NM LOD: 12					
Calibration History:		Time: 05Apr18 13:46				NM Start IDX: 7					
		Type: SPAN				NM End IDX: 55					
		Status: GOOD				NM Max Slope: 4.4e-01					
		Check/Adjust: ADJUST				NM Min Slope: -4.3e-01					
		CH₄ Span Conc: 13.96				NM PT Count: 0					
		CH₄ SP Ratio: 0.000785		Expected Values:		Previous CH₄: 10.06					
		CH₄ RT: 11.8				Previous NMHC: 11.2					
		CH₄ PK IDX: 19				Previous THC: 21.3					
		CH₄ PK HT: 17777				New CH₄: 10.07					
		NM Span Conc: 13.25				New NMHC: 10.96					
		NM SP Ratio: 0.000161				New THC: 21.06					

Comments:	
The analyzer sample inlet filter was changed.	
No zero adjustment was required/made. As found zero values were copied to adjusted zero values for linearity calculation purposes.	
The analyzer cooling fan filter(s) were cleaned.	
The manifold blower was found to be working normally.	
The canister system was tested.	

Date: May 3, 2017
Company/Airshed: PRAMP
Location/Station Name: RENO

Start/End Time 24 hr. (mst): 12:01/15:19
Calibration Purpose: routine monthly
Calibration Method: Gas Dilution



Station: PRAMP_RENO Daily: 18/05/03 Type: AVG 1 Min. [1 Min.]

CH4[ppm] NMHC[ppm]



WIND SYSTEM



Meteorological Sensor Audit/Calibration

Location Information

Company:	PRAMP	Performed By:	Limin Li
Audit Location:	RENO	Reviewed By:	Rob Fisher
Audit Date:	April 5, 2018	Start/End Time (mst):	16:00/16:30
Calibration Purpose:	routine annual	Weather Conditions:	Mainly sunny

Wind Sensor Information

Sensor ID Data:		Sensor Outputs:	
Sensor Make:	RM Young	Velocity Voltage Output Range:	0-1V
Sensor Model:	5305VK	Velocity Unit Output Range:	0-200 KPH
Serial #:	149769	Direction Voltage Output Range:	0-1 V
Previous Cal/Audit Date:	April 6, 2017	Direction Unit Output Range:	0-360 DEG

Wind Calibrator Information

Calibrator I.D. and Expiry Date: RM Young 18802 id# CA03309 expires September 25, 2018

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

RPM	Wind Speed Generated kph	Clockwise Wind Speed kph	Counter Clockwise Wind Speed kph	Correction Factor
0	0	0.1	0.1	-
1000	18.4	18.4	18.5	0.998
2000	36.9	36.9	36.8	1.001
3000	55.3	55.2	55.2	1.001
4000	73.7	73.7	73.7	1.000
5000	92.2	92.1	92.1	1.001
6000	110.6	110.6	110.6	1.000
7000	129.0	129.0	129.1	1.000
8000	147.4	147.6	147.6	0.999
9000	165.9	166.2	166.2	0.998
10000	184.3	184.7	184.7	0.998
The audit meets AMD requirements.			Average Correction Factor=	1.000

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

Generated Wind Direction 0-360 (Up)	Generated Wind Direction 360-0 (Down)	Indicated Wind Direction 0-360 (Up)	Indicated Wind Direction 360-0 (Down)	Degrees Difference 0-360 (Up)	Degrees Difference 360-0 (Down)	Average Absolute Degrees Difference
0	355	0	353	0.2	1.6	0.9
30	330	30	328	-0.5	2.4	1.4
60	300	61	299	-1.0	0.9	0.9
90	270	91	269	-1.1	1.4	1.2
120	240	120	239	0.4	0.9	0.7
150	210	150	210	-0.1	0.1	0.1
180	180	181	180	-0.6	-0.2	0.4
210	150	210	151	-0.4	-0.9	0.7
240	120	240	120	0.3	-0.4	0.4
270	90	269	91	1.4	-0.5	1.0
300	60	299	61	1.0	-0.8	0.9
330	30	328	30	2.3	0.2	1.3
355	0	353	0	2.5	0.2	1.4
The audit meets AMD requirements.			Average Absolute Degrees Difference=		0.9	

Comments:

METEOROLOGICAL SYSTEMS CHECK



Meteorological System Checklist

Date:	May 3, 2018		
Technician:	Limin Li		
Reviewer:	Rob Fisher		
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
AMBIENT TEMPERATURE SENSOR CHECK			
Previous check date:	April 5, 2018		
Parameter:	Temperature @ 2 metres (1 C tolerance)		
Reference Thermometer ID:	F.S. 160348895 expires March 29, 2019		
Reference Temperature (°C):	10.9		
Station - Ambient Temperature (°C):	11.1		
Temperature Difference (°C):	-0.2		
BAROMETRIC PRESSURE SENSOR CHECK			
Previous check date:	April 5, 2018		
Reference Barometer ID:	Brunton 05535 expires December 15, 2018		
Reference Pressure - Units/Reading:	inHg	27.63	
Station Pressure - Units/Reading:	inHg	27.65	
Pressure Tolerance +/- 15% of error:	23.49 - 31.77	-0.07%	
RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK			
Previous check date:	April 5, 2018		
Reference Hygrometer ID:	F.S. id# 160348895 expires April 8, 2018		
Reference Hygrometer % RH- Reading:	54.00		
Station Hygrometer % RH- Reading:	49.00		
R/H Tolerance +/- 15% of error:	45.90 - 62.10	5.0%	

CALIBRATORS

Company Maxxam		Operator: Micheal Espiritu	
Calibrator:		Flow Measurement Device:	
Make/Model	Sabio 2010	Make/Model	Mesa Defender 530
Serial Number	17200415	Serial Number	L-152019 H-148944
Last Verification Date	May 2016	Temperature (°C)	25.0 C
NO Cylinder S/N	EY0000597	Barometric Pressure	697 mmhg
NO [PPM]	49.0	NOx [PPM]	49.0
Expiry Date	December 2019		

Dilution Flow (sccm)			
Pt. #1	5000	Pt. #2	5000
Pt. #3	5000		
Gas Flow (sccm)			
Pt. #1	80	Pt. #2	40
Pt. #3	20		

Calibrator Flow (sccm)		Calculated Conc.(ppm)		Indicated Conc.(ppm)			% Difference vs Audit Gas	
Dilution	Gas	NO	NOx	NO	NO ₂	NOx	NO	NOx
5028	0.0	0.000	0.000	0.000	0.000	0.000	Limit ± 10%	
4930	78.7	0.783	0.783	0.809	-0.012	0.797	3%	2%
4936	38.6	0.383	0.383	0.396	-0.006	0.390	3%	2%
4935	19.4	0.193	0.193	0.199	-0.003	0.196	3%	2%
Absolute Average Percent Difference							3%	2%

LINEAR REGRESSION ANALYSIS $y=mx+b$ (where x=calculated concentration, y=indicated concentration)

NO	LIMITS	NOx
Correlation= 1.0000	≥ 0.990	Correlation= 1.0000
m (Slope)= 1.0334	0.90-1.10	m (Slope)= 1.0181
b (Intercept % of FS)= -0.0105	± 3% F.S.	b (Intercept % of FS)= -0.0148

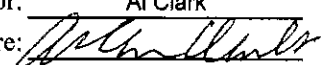
Flow	O ₂ Conc (LC)	NO Decrease	NO	NO ₂	NOX	% Diff. Vs Audit gas	
4930	0.000	0.000	0.806	-0.013	0.795	NO ₂	% Diff. Limit
4930	1.425	0.523	0.283	0.511	0.794	0%	± 10%
4930	0.825	0.278	0.528	0.266	0.795	0%	± 10%
4930	0.386	0.095	0.711	0.085	0.796	3%	± 10%
Absolute Average Percent Difference						1%	± 10%

LINEAR REGRESSION ANALYSIS $y=mx+b$ (where x=calculated concentration, y=indicated concentration)

NO₂	LIMITS
Correlation= 1.0000	≥ 0.995
m (Slope)= 0.9998	0.90-1.10
b (Intercept % of FS)= -1.1702	± 3% F.S.

AENV Standards		NO_x Analyzer	
Audit Calibrator			
Make/Model	Teco 146i	Make/Model	Teco 42i
Serial/AMU Number	AMU 1809	Serial/AMU Number	AMU 1868
SRM Gas Cylinder No.	CAL018101	Last Calibration Date	May 16, 2017
Cylinder Conc. (ppm)	48.79	Full Scale (ppm)	1.0
		Cylinder Gas Expiry Date	March 2019

COMMENTS: Contains 50.4 ppm SO₂.

Auditor: Al Clark
Operator Signature: 

Date: May 16, 2017
Location: McIntyre Center Edmonton

Calibrator Performance Audit

Oxides Of Nitrogen

File No. 2018-559A

Company: <u>Maxxam</u>		Operator: <u>Chris W</u>	
Calibrator:		Flow Measurement Device:	
Make/Model	<u>API 700</u>	Make/Model	<u>Mesa Defender 530</u>
Serial Number	<u>690</u>	Serial Number	<u>L-153351 H-152571</u>
Last Verification Date	<u>March 2016</u>	Temperature (°C)	<u>23.5 C</u>
NO Cylinder S/N	<u>LL108015</u>	Barometric Pressure	<u>695 mmHg</u>
NO [PPM]	<u>52.2</u>	NOx [PPM]	<u>52.3</u>
Expiry Date	<u>Oct 2020</u>		

Dilution Flow (sccm)			
Pt. #1 <u>5000</u>	Pt. #2 <u>5000</u>	Pt. #3 <u>5000</u>	
Gas Flow (sccm)			
Pt. #1 <u>80</u>	Pt. #2 <u>40</u>	Pt. #3 <u>20</u>	

Calibrator Flow (sccm)		Calculated Conc.(ppm)		Indicated Conc.(ppm)			% Difference vs Audit Gas	
Dilution	Gas	NO	NOx	NO	NO ₂	NOx	NO	NOx
5000	0.0	0.000	0.000	0.000	0.000	0.000	Limit ± 10%	
4959	75.0	0.789	0.791	0.793	0.000	0.793	1%	0%
4971	36.5	0.383	0.384	0.384	0.000	0.384	0%	0%
4967	18.2	0.191	0.192	0.191	0.000	0.191	0%	-1%
Absolute Average Percent Difference							0%	0%

LINEAR REGRESSION ANALYSIS				$y=mx+b$ (where x=calculated concentration, y=indicated concentration)			
NO		LIMITS		NOx			
Correlation=	1.0000	≥ 0.990		Correlation=	1.0000		
m (Slope)=	1.0054	0.90-1.10		m (Slope)=	1.0031		
b (Intercept % of FS)=	-0.0583	± 3% F.S.		b (Intercept % of FS)=	-0.0795		

Flow	O ₃ Conc	NO Decrease	NO	NO ₂	NOX	% Diff. Vs Audit gas	
4959	0.000	0.000	0.790	-0.001	0.789	NO ₂	% Diff. Limit
4959	0.500	0.497	0.293	0.493	0.786	-1%	± 10%
4959	0.275	0.273	0.517	0.269	0.787	-1%	± 10%
4959	0.100	0.102	0.688	0.099	0.787	-2%	± 10%
Absolute Average Percent Difference						1%	± 10%

LINEAR REGRESSION ANALYSIS				$y=mx+b$ (where x=calculated concentration, y=indicated concentration)			
NO₂		LIMITS					
Correlation=	1.0000	≥ 0.995					
m (Slope)=	0.9946	0.90-1.10					
b (Intercept % of FS)=	-0.1817	± 3% F.S.					

AENV Standards		NO_x Analyzer	
Audit Calibrator			
Make/Model	<u>Teco 146i</u>	Make/Model	<u>Teco 42i</u>
Serial/AMU Number	<u>AMU 1809</u>	Serial/AMU Number	<u>AMU 1868</u>
SRM Gas Cylinder No.	<u>APEX1170572</u>	Last Calibration Date	<u>March 14, 2018</u>
Cylinder Conc. (ppm)	<u>49.99</u>	Full Scale (ppm)	<u>1.0</u>
		Cylinder Gas Expiry Date	<u>November 2020</u>

COMMENTS: Cylinder contains 47.9 ppm SO₂.

Auditor: Al Clark Date: March 15, 2018

Operator Signature: *Chris W* Location: McIntyre Center Edmonton

Company: Maxxam Operator: Chris W

Calibrator:				Flow Measurement Device:			
Make/Model	<u>Envionics 2000</u>			Make/Model	<u>Mesa Defender 530</u>		
Serial Number	<u>1991</u>			Serial Number	<u>L-153351 H-152571</u>		
Last Verification Date	<u>March 2017</u>			Temperature (°C)	<u>25.0 C</u>		
NO Cylinder S/N	<u>LL108015</u>			Barometric Pressure	<u>695 mmHg</u>		
NO [PPM]	<u>52.2</u>	NOx [PPM]	<u>52.3</u>				
Expiry Date	<u>Oct 2020</u>						

Dilution Flow (sccm)
Pt. #1 5000 Pt. #2 5000 Pt. #3 5000

Gas Flow (sccm)
Pt. #1 80 Pt. #2 40 Pt. #3 20

Calibrator Flow (sccm)		Calculated Conc.(ppm)		Indicated Conc.(ppm)			% Difference vs Audit Gas	
Dilution	Gas	NO	NOx	NO	NO ₂	NOx	NO	NOx
5000	0.0	0.000	0.000	0.000	0.000	0.000	Limit ± 10%	
4988	75.1	0.786	0.787	0.785	-0.002	0.783	0%	-1%
4988	36.5	0.382	0.383	0.382	0.001	0.383	0%	0%
4988	18.3	0.192	0.192	0.190	0.000	0.190	-1%	-1%
Absolute Average Percent Difference							0%	1%

LINEAR REGRESSION ANALYSIS

y=mx+b (where x=calculated concentration, y=indicated concentration)

NO		LIMITS		NOx	
Correlation=	1.0000	≥ 0.990		Correlation=	1.0000
m (Slope)=	0.9996	0.90-1.10		m (Slope)=	0.9956
b (Intercept % of FS)=	-0.0599	± 3% F.S.		b (Intercept % of FS)=	-0.0005

Flow	O ₃ Conc	NO Decrease	NO	NO ₂	NOX	% Diff. Vs Audit gas	
4988	0.000	0.000	0.788	-0.001	0.787	NO ₂	% Diff. Limit
4988	0.350	0.519	0.269	0.512	0.780	-1%	± 10%
4988	0.160	0.231	0.557	0.229	0.786	0%	± 10%
4988	0.070	0.099	0.689	0.097	0.787	-1%	± 10%
Absolute Average Percent Difference						1%	± 10%

LINEAR REGRESSION ANALYSIS

y=mx+b (where x=calculated concentration, y=indicated concentration)

NO₂		LIMITS	
Correlation=	1.0000	≥ 0.995	
m (Slope)=	0.9885	0.90-1.10	
b (Intercept % of FS)=	-0.0567	± 3% F.S.	

AENV Standards		NO_x Analyzer	
Audit Calibrator		Make/Model <u>Teco 42i</u>	
Make/Model	<u>Teco 146i</u>	Serial/AMU Number	<u>AMU 1868</u>
Serial/AMU Number	<u>AMU 1809</u>	Last Calibration Date	<u>March 14, 2018</u>
SRM Gas Cylinder No.	<u>APEX1170572</u>	Full Scale (ppm)	<u>1.0</u>
Cylinder Conc. (ppm)	<u>49.99</u>	Cylinder Gas Expiry Date	<u>November 2020</u>

COMMENTS: Cylinder contains 47.9 ppm SO₂.

Auditor: Al Clark
Operator Signature: *Al Clark*

Date: March 15, 2018
Location: McIntyre Center Edmonton

CALIBRATION GASES



Calibration Gas Audit

Single Component Cylinder Gas

File No. 2015-111CGA

Company: Maxxam Operator's Name: Chris Wesson
Cylinder #: LL119329 Concentration PPM: 50.1 Tolerance(%) 2 Certified By: Air Liquide

Reference Calibrator and Gas:

Make/Model: Thermo146i
Serial Number: 1809
Last Verification Date: February 2, 2016
Gas Type: SO2 Conc. 98.07
Cylinder Number: CAL016625

Flow Measurement Device:

Make/Model: Bios DC-2
Serial Number: Bios D
Temp.°C: 24.5
B.P. 702mmHg

Reference Analyzer:

Make/Model: Thermo 43C Serial/AMU Number: 1623
Instrument Settings: Zero: 8.7 Span: 1.027 Range: 1.0
Last Calibration: Date: 1-Feb-16 C.F. 1.000 Done By: SB

Calibrator Flows (sccm)		Indicated Concentration (PPM)	Gas Flow/ Dilution Flow	Concentration Factor	Cylinder Concentration
Dilution	Gas				
4960	0.0	0.000			
4959	79.09	0.791	0.01595	62.701	49.6
4950	39.44	0.394	0.00797	125.507	49.4
4942	19.44	0.194	0.00393	254.218	49.3
Average Cylinder Concentration:					49.5

Previous Stated Concentration PPM: 50.1

Percent variance from Stated: 1.3

Meets Manufacturer Tolerance. Use manufacturers stated concentration ☒ COMMENTS: SO2/NO blend 50.3ppm NO
<=5% Outside Manufacturer Tolerance. Use manufacturers concentration ☐
> 5% Outside Manufacturer Tolerance. **DO NOT USE** this cylinder ☐

Auditor: Shea Beaton
Operator Signature: [Signature]

Date: February 2, 2016
Location: McIntyre Center Edmonton



Calibration Gas Audit

Single Component Cylinder Gas

File No. 2017-142CGA

Company: Maxxam **Operator's Name:** Raja Abid Ashraf

Cylinder #: EY0000715 **Concentration PPM:** 25.5 **Tolerance(%)** 2 **Certified By:** Praxair

Expiry Date: May 18, 2021

Reference Calibrator and Gas:

Make/Model: R&R MFC 201

Serial Number: AMU 1690

Last Verification Date: July 27, 2017

Gas Type: SO2 **Conc.** 98.07

Cylinder Number: CAL016625

Expiry Date: January 2019

Flow Measurement Device:

Make/Model: Mesa Definer 220

Serial Number: H-133034 L-132702

Temp. °C: 22.0 C

B.P. 700 mmhg

Reference Analyzer:

Make/Model: Teco 43C **Serial/AMU Number:** 1623

Instrument Settings: **Zero:** 9.7 **Span:** 1.023 **Range:** 1.0

Last Calibration: **Date:** July 27/17 **C.F.** 1.000 **Done By:** Al Clark

Calibrator Flows (sccm)		Indicated Concentration (PPM)	Gas Flow/ Dilution Flow	Concentration Factor	Cylinder Concentration
Dilution	Gas				
5000	0.0	0.000	0.01593	62.782	25.3
5010	79.8	0.403	0.01593	62.782	25.3
5011	40.0	0.198	0.00798	125.275	24.8
5010	19.9	0.097	0.00397	251.759	24.4
Average Cylinder Concentration:					24.8

Previous Stated Concentration PPM: 25.5

Percent variance from Stated: 3

Meets Manufacturer Tolerance. Use manufacturers stated concentration ☐ **COMMENTS:** _____

< =5% Outside Manufacturer Tolerance. Use manufacturers concentration ☒ _____

> 5% Outside Manufacturer Tolerance. **DO NOT USE** this cylinder ☐ _____

Auditor: Al Clark

Operator Signature: *Al Clark*

Date: July 27, 2017

Location: McIntyre Center Edmonton



Calibration Gas Audit

Single Component Cylinder Gas

File No. 2017-213CGA

Company: Maxxam **Operator's Name:** C. Wesson
Cylinder #: LL119500 **Concentration PPM:** 9.8 **Tolerance(%)** 2 **Certified By:** Praxair
Expiry Date: August 2020

Reference Calibrator and Gas:

Make/Model: R&R MFC 201
Serial Number: AMU 1690
Last Verification Date: September 22, 2017
Gas Type: H2S **Conc.** 20.43
Cylinder Number: CAL015272
Expiry Date: January 2019

Flow Measurement Device:

Make/Model: Mesa Definer 220
Serial Number: H-133034 L-132702
Temp. °C: 23.5 C
B.P. 705 mmhg

Reference Analyzer:

Make/Model: Teco 450i **Serial/AMU Number:** 1980
Instrument Settings: **Zero:** 22.4 **Span:** 1.091 **Range:** 0.1
Last Calibration: **Date:** Sep 22/17 **C.F.** 1.000 **Done By:** Al Clark

Calibrator Flows (sccm)		Indicated Concentration (PPM)	Gas Flow/ Dilution Flow	Concentration Factor	Cylinder Concentration
Dilution	Gas				
5000	0.0	0.0000			
5114	39.5	0.0734	0.00772	129.468	9.5
5096	18.5	0.0345	0.00363	275.459	9.5
5089	9.5	0.0178	0.00187	535.684	9.5
Average Cylinder Concentration:					9.5

Previous Stated Concentration PPM: 9.8

Percent variance from Stated: 3

Meets Manufacturer Tolerance. Use manufacturers stated concentration ☐ **COMMENTS:** _____
 <=5% Outside Manufacturer Tolerance. Use manufacturers concentration ☒ _____
 > 5% Outside Manufacturer Tolerance. **DO NOT USE** this cylinder ☐ _____

Auditor: Al Clark
Operator Signature: *Al Clark*

Date: September 22, 2017
Location: McIntyre Center Edmonton



Calibration Gas Audit

CH₄ / C₃H₈ Cylinder Gas

File No. 2017-488CGA

Company: Maxxam **Operators name:** Mike
Cylinder #: LL168404 **Conc CH₄ (PPM)** 597/206 **Tolerance (%)** 2 **Certified By:** Praxair
Expiry Date: October 2025

Reference Calibrator and Gas:				Flow Measurement Device:	
Make/Model	<u>R&R MFC 201</u>			Make/Model	<u>Mesa Definer 220</u>
Serial Number	<u>AMU 1690</u>			Serial Number	<u>H-133034 / L-132702</u>
Last Verification Date	<u>December 13, 2017</u>			Temp. °C	<u>23.1 C</u>
Gas Type	<u>CH₄</u>	Conc.	<u>990.4</u>	B.P.	<u>707 mmHg</u>
Cylinder Number	<u>5604875</u>	Expiry Date	<u>July 2021</u>		
Gas Type	<u>C₃H₈</u>	Conc.	<u>246.5</u>		
Cylinder Number	<u>XF003845B</u>	Expiry Date	<u>July 2022</u>		

Reference Analyzer:
Make/Model Teco 55i **Serial/AMU Number:** 2108
Instrument Settings **Zero:** N/A **Span:** N/A **Range:** 20.0
Last Calibration: **Date:** Dec 12/17 **C.F.** 1.000 **Done By:** Al Clark

Calibrator Flows (sccm)		Indicated Conc. (ppm)		Gas Flow/ Dilution Flow	Concentration Factor	Cylinder Concentration	
Dilution	Gas	CH ₄	C ₃ H ₈			CH ₄	C ₃ H ₈
3500	0.0	0.00	0.00				
3618	80.4	13.22	12.69	0.02	45.00	595	208
3547	39.8	6.64	6.42	0.01	89.12	592	208
3560	19.8	3.33	3.23	0.01	179.80	599	211
Average Cylinder Concentration:						595	209

	<u>CH₄</u>	<u>C₃H₈</u>
Previous Stated Concentration PPM:	<u>597</u>	<u>206</u>
Percent variance from Stated:	<u>0</u>	<u>1</u>

Cylinder gas tolerances based on CH₄ only

Meets Manufacturer Tolerance. Use manufacturers stated concentration ☒ **COMMENTS:**
 < =5% Outside Manufacturer Tolerance. Use manufacturers concentration ☐
 > 5% Outside Manufacturer Tolerance. **DO NOT USE** this cylinder ☐

Auditor: Al Clark **Date:** December 13, 2017
Operator Signature: [Signature] **Location:** McIntyre Center Edmonton

APPENDIX III
MAXIMUM INSTANTANEOUS DATA



PEACE RIVER AREA MONITORING PROGRAM COMMITTEE

Reno Station - May 2018

SULPHUR DIOXIDE Instantaneous Maximum (SO₂ ppb)

HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	DAILY	24-HR	RDGS.
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59	MIN.	MAX.	AVG.	
DAY																												
1	0	0	0	0	0	1	1	1	1	1	1	0	1	S	0	1	1	1	0	0	0	1	1	1	0	1	1	24
2	1	0	1	1	1	1	1	1	1	1	1	1	S	1	1	1	1	1	0	0	0	1	1	1	0	1	1	24
3	1	1	0	0	0	1	1	1	1	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	1	0	24
4	0	0	0	0	0	0	0	0	0	1	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	24
5	1	0	0	0	0	0	0	0	0	S	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	24
6	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
7	0	0	0	0	0	0	0	S	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	24
8	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	24
9	0	0	0	0	0	S	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	24
10	0	0	0	0	S	0	1	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	24
11	0	0	0	S	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	2	0	24
12	0	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	24
13	0	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	2	0	24
14	S	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	S	0	1	0	24
15	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	S	0	0	1	0	24
16	0	0	0	0	0	0	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	S	0	0	0	1	0	24
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	0	24
18	1	0	0	1	0	0	S1	S1	0	0	0	0	0	0	0	0	0	0	0	S	0	0	0	0	0	1	0	22
19	0	0	0	0	0	0	0	0	0	0	C1	C1	C1	C1	C1	C1	1	1	S	1	1	1	0	1	0	1	0	18
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	S	1	1	1	1	1	1	1	1	1	24
21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	S	1	1	1	1	1	1	1	1	1	1	1	24
22	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	S	1	0	1	1	1	1	1	1	0	2	1	24
23	1	1	1	1	1	1	2	2	2	2	1	1	1	S	1	1	1	1	1	1	1	2	1	1	1	2	1	24
24	1	1	1	1	1	1	2	2	2	2	2	2	1	S	2	1	1	1	0	1	1	1	1	0	0	2	1	24
25	1	1	1	1	1	1	1	1	1	1	1	1	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	24
26	0	1	1	0	0	0	1	1	1	1	1	S	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	24
27	1	1	0	0	0	1	1	1	1	1	S	1	1	1	1	1	1	1	1	0	0	1	1	1	0	1	1	24
28	1	1	1	1	1	1	1	1	1	S	1	1	1	1	1	1	0	1	1	1	1	0	1	0	0	1	1	24
29	1	1	1	1	0	1	1	1	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	24
30	1	1	1	1	0	1	1	S	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	24
31	1	1	1	1	1	1	S	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0	1	0	1	1	24
HOURLY MAX	1	1	2	2	1	1	2	2	2	2	2	2	1	1	2	1	1	1	1	1	1	2	2	2				
HOURLY AVG	1	0	0	0	0	0	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	1	1	1			

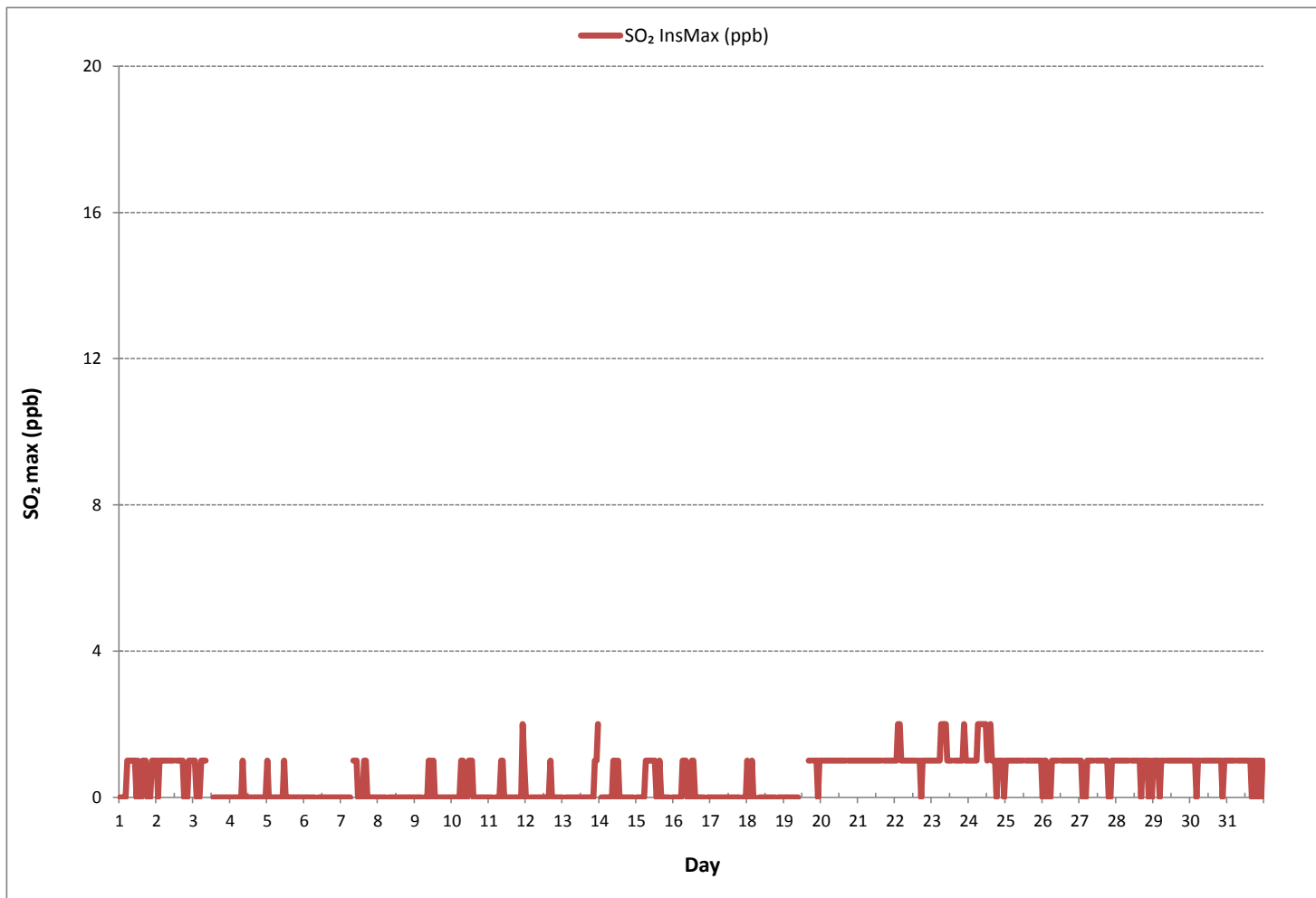
STATUS FLAG CODES

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	341				
MAXIMUM INSTANTANEOUS VALUE:	2	ppb	@ HOUR	22	ON DAY 11
IZS CALIBRATION TIME:	31	hrs	OPERATIONAL TIME:	736	hrs
MONTHLY CALIBRATION TIME:	4	hrs			
STANDARD DEVIATION:	1				

SULPHUR DIOXIDE Instantaneous Maximum (SO₂ ppb)



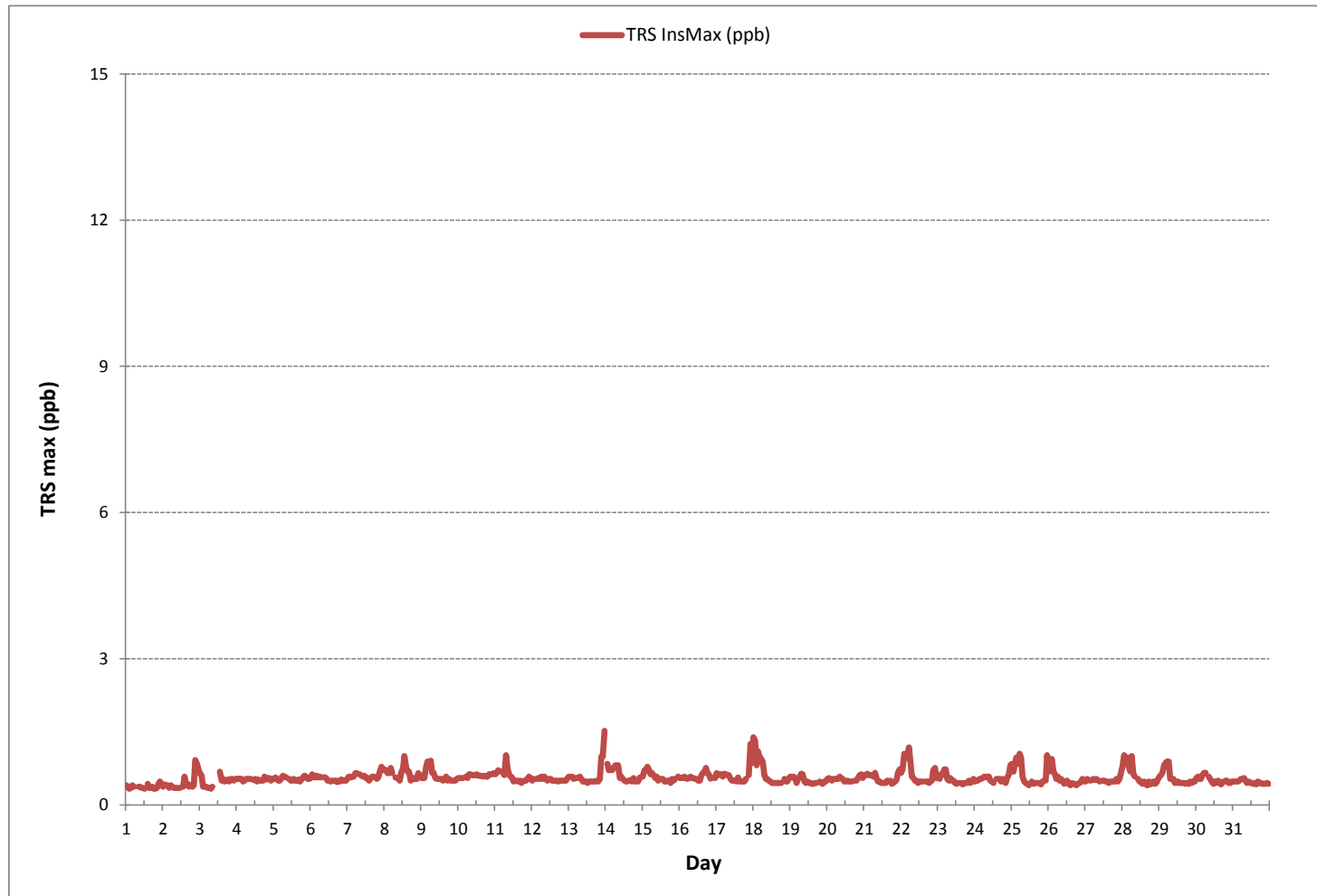


HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	DAILY	24-HR	RDGS.	
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59	MIN.	MAX.	AVG.		
DAY																													
1	0.40	0.37	0.33	0.35	0.40	0.37	S1	S1	0.37	0.37	0.35	0.35	0.33	S	0.43	0.35	0.35	0.37	0.33	0.33	0.35	0.43	0.48	0.42	0.33	0.48	0.37	22	
2	0.37	0.42	0.40	0.40	0.35	0.40	0.37	0.35	0.35	0.35	0.35	0.35	S	0.37	0.58	0.40	0.43	0.37	0.40	0.37	0.40	0.40	0.92	0.84	0.73	0.35	0.92	0.45	24
3	0.65	0.60	0.37	0.37	0.37	0.35	0.35	0.33	0.37	C	C	C	C	0.68	0.50	0.53	0.48	0.50	0.52	0.48	0.53	0.53	0.50	0.53	0.33	0.68	0.48	24	
4	0.54	0.53	0.54	0.53	0.48	0.50	0.53	0.53	0.53	0.53	S	0.51	0.53	0.48	0.52	0.50	0.50	0.50	0.58	0.52	0.55	0.55	0.50	0.53	0.48	0.58	0.52	24	
5	0.53	0.56	0.53	0.50	0.40	0.56	0.60	0.58	0.56	S	0.53	0.50	0.50	0.53	0.50	0.50	0.52	0.48	0.52	0.57	0.60	0.58	0.53	0.53	0.48	0.60	0.54	24	
6	0.55	0.63	0.58	0.56	0.60	0.56	0.58	0.56	S	0.57	0.55	0.50	0.50	0.48	0.50	0.50	0.50	0.47	0.50	0.48	0.52	0.50	0.50	0.50	0.47	0.63	0.53	24	
7	0.55	0.58	0.56	0.58	0.58	0.65	0.65	S	0.63	0.60	0.58	0.60	0.55	0.55	0.50	0.55	0.58	0.58	0.56	0.53	0.56	0.68	0.78	0.71	0.50	0.78	0.60	24	
8	0.73	0.71	0.65	0.65	0.76	0.65	S	0.56	0.55	0.55	0.50	0.68	0.73	1.00	0.78	0.68	0.68	0.50	0.56	0.53	0.53	0.65	0.61	0.50	1.00	0.64	24		
9	0.55	0.55	0.55	0.78	0.89	S	0.91	0.66	0.66	0.55	0.53	0.53	0.53	0.53	0.50	0.51	0.58	0.50	0.53	0.50	0.50	0.50	0.50	0.53	0.50	0.91	0.58	24	
10	0.55	0.55	0.55	0.55	S	0.58	0.55	0.63	0.63	0.61	0.61	0.61	0.63	0.60	0.60	0.60	0.58	0.60	0.58	0.58	0.63	0.63	0.63	0.65	0.55	0.65	0.60	24	
11	0.63	0.66	0.71	S	0.68	0.68	0.61	1.02	0.76	0.63	0.58	0.56	0.48	0.50	0.50	0.48	0.50	0.45	0.48	0.50	0.50	0.53	0.58	0.55	0.45	1.02	0.59	24	
12	0.50	0.53	S	0.53	0.55	0.53	0.58	0.53	0.58	0.53	0.50	0.53	0.53	0.50	0.50	0.50	0.50	0.48	0.50	0.50	0.50	0.50	0.50	0.55	0.48	0.58	0.52	24	
13	0.58	S	0.58	0.53	0.55	0.55	0.55	0.58	0.53	0.48	0.48	0.48	0.45	0.48	0.48	0.48	0.48	0.48	0.50	0.48	0.53	0.99	0.99	1.52	0.45	1.52	0.60	24	
14	S	0.84	0.71	0.73	0.71	0.76	0.81	0.81	0.81	0.55	0.58	0.53	0.50	0.48	0.48	0.50	0.51	0.48	0.55	0.48	0.50	0.48	0.56	S	0.48</				

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

NUMBER OF NON-ZERO READINGS:	707						
MAXIMUM INSTANTANEOUS VALUE:	1.52	ppb	@ HOUR	23	ON DAY	13	
IZS CALIBRATION TIME:	31	hrs	OPERATIONAL TIME:			742	hrs
MONTHLY CALIBRATION TIME:	4	hrs					
STANDARD DEVIATION:	0.14						

TOTAL REDUCED SULPHUR Instantaneous Maximum (TRS ppb)





PEACE RIVER AREA MONITORING PROGRAM COMMITTEE

Reno Station - May 2018

TOTAL HYDROCARBONS Instantaneous Maximum (THC ppm)

HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	DAILY	24-HR	RDGS.	
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59	MIN.	MAX.	AVG.		
DAY																													
1	1.99	1.98	1.98	2.00	2.00	1.98	1.97	1.97	1.96	1.97	1.96	1.96	1.96	S	1.97	1.97	1.97	1.96	1.97	1.97	2.10	2.32	2.19	1.99	1.96	2.32	2.00	24	
2	2.19	2.20	1.98	1.99	1.98	1.97	1.97	1.97	1.96	1.95	1.95	1.94	S	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.95	2.14	2.23	2.01	2.25	1.94	2.25	2.02	24
3	2.53	2.62	1.98	1.96	2.06	2.07	1.97	1.97	1.96	1.95	1.95	1.96	C	C	C	C	1.96	1.96	1.96	1.96	2.19	2.02	1.95	1.95	1.95	2.62	2.05	24	
4	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.95	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	1.94	1.94	1.94	1.94	1.95	1.94	24	
5	1.94	1.94	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	S	1.95	1.95	1.95	1.95	1.95	1.95	1.96	1.96	1.97	2.52	2.44	1.95	1.95	1.94	2.52	2.00	24	
6	1.95	1.95	1.95	1.95	1.99	1.96	1.96	1.95	S	1.96	1.95	1.94	1.94	1.94	1.94	1.94	1.95	1.95	1.96	1.97	1.96	1.96	1.95	1.96	1.94	1.99	1.95	24	
7	2.00	1.96	1.96	1.96	1.98	1.98	1.96	S	1.98	1.98	1.98	1.98	1.98	1.99	1.98	2.02	2.10	2.07	2.19	2.17	2.12	3.19	2.94	1.99	1.96	3.19	2.11	24	
8	1.95	2.27	1.95	1.95	1.95	1.95	S	1.95	1.94	1.93	1.94	1.94	1.94	1.94	1.94	1.95	1.96	1.96	1.96	1.96	1.97	1.97	1.97	1.97	1.93	2.27	1.97	24	
9	1.96	1.97	1.97	1.97	2.00	S	1.98	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.98	1.97	1.98	1.98	1.97	1.99	1.98	1.96	2.00	1.97	24	
10	2.01	2.06	1.99	2.06	S	2.07	2.00	2.02	2.06	2.07	2.02	2.04	2.02	2.00	2.01	2.02	2.03	2.04	2.02	2.11	1.99	2.11	2.08	2.19	1.99	2.19	2.04	24	
11	2.01	2.14	2.26	S	2.53	2.48	2.01	2.01	2.00	1.99	1.98	1.96	1.96	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	2.53	2.03	24	
12	1.93	1.94	S	1.94	1.94	1.95	1.95	1.95	1.95	1.94	1.93	1.93	1.93	1.93	1.93	1.92	1.92	1.93	1.93	1.93	1.94	1.93	1.94	1.94	1.92	1.95	1.94	24	
13	1.95	S	1.95	1.94	2.00	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	2.15	7.83	6.08	3.97	1.94	7.83	2.48	24	
14	S	2.54	2.30	2.47	2.17	2.15	1.96	2.13	1.97	1.96	1.96	1.95	1.93	1.93	1.94	1.93	1.92	1.92	1.93	1.93	1.93	1.93	1.93	1.93	S	1.92	2.54	2.04	24
15	1.93	1.94	1.93	1.94	1.93	1.95	1.95	1.95	1.94	1.94	1.94	1.95	1.94	1.94	1.95	1.94	1.94	1.95	1.95	1.95	1.97	1.97	S	1.95	1.93	1.97	1.95	24	
16	1.96	1.96	1.95	1.96	1.97	1.96	1.96	1.97	1.97	1.97	1.96	1.97	1.96	1.97	1.97	2.01	2.08	2.03	1.98	1.99	1.99	S	1.97	1.95	1.95	2.08	1.98	24	
17	1.96	1.96	1.97	1.96	1.96	1.96	1.95	1.96	1.96	1.97	1.97	1.97	1.96	1.96	1.96	1.98	1.99	1.98	1.97	1.98	S	2.33	2.13	2.48	1.95	2.48	2.01	24	
18	2.89	3.02	3.31	3.49	2.29	2.23	1.98	1.99	1.97	2.00	2.01	1.98	1.98	1.97	1.96	1.98	1.97	2.02	1.96	S	2.05	2.02	1.99	2.07	1.96	3.49	2.22	24	
19	2.07	2.09	2.13	2.10	2.02	2.09	2.06	2.00	2.03	1.97	1.97	1.97	1.97	1.94	S1	S1	1.96	1.99	S	1.98	2.07	1.98	1.97	1.99	1.94	2.13	2.02	22	
20	2.06	2.21	2.05	2.02	1.97	2.02	1.99	1.96	2.02	2.00	1.95	1.95	1.96	1.96	1.95	1.95	1.94	S	1.99	1.93	1.93	2.07	1.94	1.94	1.93	2.21	1.99	24	
21	2.01	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.94	1.93	1.92	1.93	1.92	1.93	1.93	1.93	S	1.94	1.93	1.93	1.93	1.93	1.93	1.94	1.92	2.01	1.94	24	
22	1.96	1.97	2.84	2.84	2.65	2.65	2.15	1.95	1.95	1.94	1.93	1.93	1.93	1.94	1.93	S	1.93	1.93	1.93	1.93	2.02	2.52	3.15	2.16	1.93	3.15	2.18	24	
23	2.22	2.13	2.17	2.28	2.60	2.60	2.04	1.96	1.99	1.98	1.96	1.95	1.98	1.94	S	1.96	1.95	1.98	1.95	1.96	1.98	1.95	1.98	1.96	1.94	2.60	2.06	24	
24	1.96	1.96	1.96	1.99	1.97	2.02	2.03	2.00	2.03	1.97	1.99	1.99	1.96	S	1.95	2.08	1.93	1.91	1.91	1.91	1.91	1.92	1.92	1.93	1.91	2.08	1.97	24	
25	1.93	1.93	1.95	1.95	1.95	1.95	1.97	1.93	1.92	1.92	1.92	1.92	S	1.91	1.91	1.91	1.91	1.92	1.91	1.93	1.93	1.95	1.93	1.91	1.91	1.97	1.93	24	
26	2.00	2.01	2.00	1.92	1.93	1.93	1.93	1.93	1.93	1.93	1.93	S	1.93	1.93	1.93	1.93	1.94	1.94	1.94	1.93	1.93	1.94	1.94	1.96	1.92	2.01	1.94	24	
27	1.95	1.94	1.94	1.96	1.95	1.95	1.94	1.94	1.94	1.94	S	1.94	1.94	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.96	2.36	1.93	2.36	1.96	24	
28	2.50	2.52	2.22	2.11	1.98	1.95	1.93	1.92	2.05	S	1.93	1.92	1.93	1.93	1.93	1.93	1.93	1.93	1.94	1.93	1.93	1.94	1.94	1.94	1.92	2.52	2.01	24	
29	1.96	1.97	1.97	2.02	2.02	1.98	1.97	1.98	S	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.94	1.95	1.95	1.95	1.96	1.94	2.02	1.96	24	
30	1.95	1.95	1.96	1.95	1.98	1.99	1.98	S	1.97	1.96	1.95	1.95	1.94	1.95	1.95	1.94	1.94	1.95	1.95	1.98	1.97	1.96	1.99	1.98	1.94	1.99	1.96	24	
31	2.04	2.00	2.01	2.03	2.06	2.02	S	2.02	1.97	1.97	1.96	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.95	1.95	1.97	1.97	1.96	1.99	1.95	2.06	1.98	24	
HOURLY MAX	2.89	3.02	3.31	3.49	2.65	2.65	2.15	2.13	2.06	2.07	2.02	2.04	2.02	2.00	2.01	2.08	2.10	2.07	2.19	2.17	2.52	7.83	6.08	3.97					
HOURLY AVG	2.06	2.10	2.08	2.09	2.06	2.05	1.98	1.97	1.97	1.96	1.96	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.96	1.96	2.01	2.27	2.18	2.08					

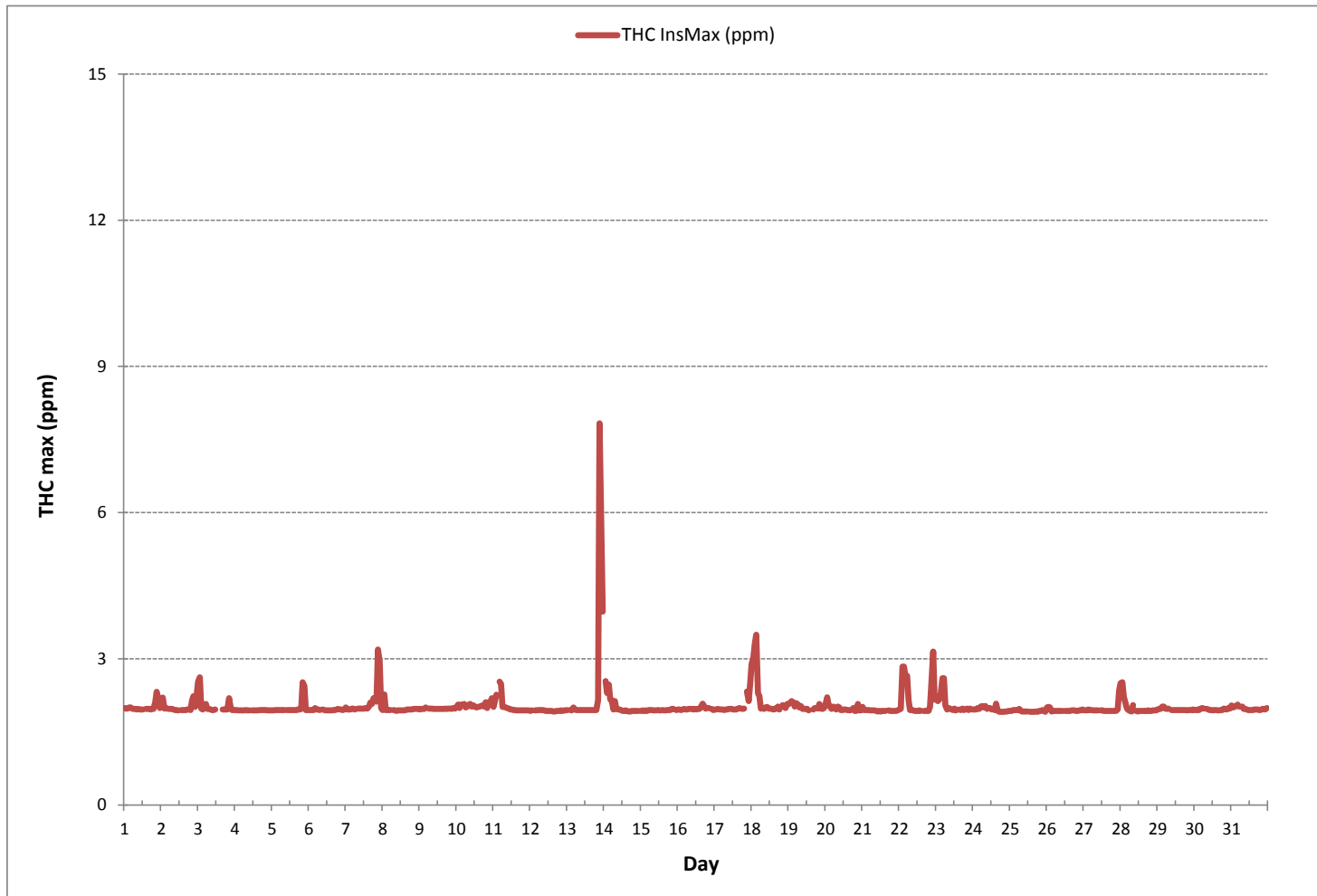
STATUS FLAG CODES

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	707				
MAXIMUM INSTANTANEOUS VALUE:	7.83	ppm	@ HOUR	21	ON DAY 13
IZS CALIBRATION TIME:	31	hrs	OPERATIONAL TIME:	742	hrs
MONTHLY CALIBRATION TIME:	4	hrs			
STANDARD DEVIATION:	0.32				

TOTAL HYDROCARBONS Instantaneous Maximum (THC ppm)





PEACE RIVER AREA MONITORING PROGRAM COMMITTEE

Reno Station - May 2018

METHANE MAX Instantaneous Maximum (CH₄ ppm)

HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	DAILY	24-HR	RDGS.
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59	MIN.	MAX.	AVG.	
DAY																												
1	1.98	1.98	1.97	2.00	1.98	1.98	1.97	1.97	1.96	1.96	1.96	1.96	1.96	S	1.96	1.96	1.96	1.96	1.96	1.96	2.09	2.31	2.18	1.98	1.96	2.31	2.00	24
2	2.18	2.19	1.98	1.98	1.97	1.96	1.97	1.96	1.95	1.94	1.94	1.94	S	1.94	1.94	1.94	1.95	1.95	1.95	1.94	2.13	2.22	2.00	2.24	1.94	2.24	2.01	24
3	2.53	2.61	1.97	1.96	2.05	2.07	1.96	1.96	1.95	1.95	1.95	1.95	C	C	C	C	1.95	1.96	1.96	1.96	2.18	2.00	1.94	1.94	1.94	2.61	2.04	24
4	1.94	1.94	1.93	1.93	1.93	1.94	1.93	1.94	1.93	1.94	S	1.94	1.93	1.93	1.94	1.94	1.95	1.95	1.95	1.95	1.94	1.93	1.93	1.93	1.93	1.95	1.94	24
5	1.94	1.94	1.94	1.94	1.95	1.94	1.94	1.94	1.94	S	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.95	1.97	2.51	2.44	1.94	1.94	1.94	2.51	1.99	24
6	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.95	S	1.95	1.95	1.94	1.93	1.94	1.94	1.94	1.94	1.94	1.95	1.96	1.96	1.95	1.95	1.95	1.93	1.96	1.95	24
7	1.99	1.96	1.95	1.96	1.98	1.98	1.96	S	1.97	1.98	1.98	1.97	1.98	1.98	1.97	2.00	2.09	2.07	2.18	2.16	2.11	3.18	2.93	1.99	1.95	3.18	2.10	24
8	1.95	2.27	1.94	1.94	1.94	1.95	S	1.94	1.93	1.92	1.93	1.93	1.93	1.94	1.94	1.94	1.95	1.95	1.96	1.96	1.96	1.97	1.97	1.96	1.92	2.27	1.96	24
9	1.96	1.96	1.96	1.97	1.99	S	1.97	1.97	1.97	1.96	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.98	1.97	1.98	1.97	1.97	1.99	1.97	1.96	1.99	1.97	24
10	2.01	2.05	1.98	2.04	S	2.06	1.99	2.02	2.05	2.06	2.01	2.03	2.02	1.99	2.00	2.01	2.02	2.02	2.02	2.11	1.99	2.10	2.07	2.19	1.98	2.19	2.04	24
11	2.00	2.13	2.25	S	2.52	2.48	2.01	2.00	1.99	1.99	1.97	1.95	1.95	1.95	1.95	1.94	1.94	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	2.52	2.02	24
12	1.92	1.93	S	1.93	1.93	1.94	1.95	1.94	1.94	1.93	1.92	1.92	1.92	1.92	1.92	1.91	1.91	1.92	1.92	1.92	1.93	1.92	1.93	1.93	1.91	1.95	1.93	24
13	1.94	S	1.94	1.94	2.00	1.95	1.94	1.94	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.94	1.95	1.94	1.94	1.94	2.14	7.82	6.07	3.97	1.94	7.82	2.48	24
14	S	2.53	2.29	2.47	2.17	2.14	1.95	2.12	1.96	1.96	1.95	1.94	1.92	1.92	1.93	1.92	1.91	1.91	1.92	1.92	1.92	1.92	1.92	S	1.91	2.53	2.03	24
15	1.92	1.93	1.92	1.93	1.92	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.96	1.96	S	1.95	1.92	1.96	1.94	24
16	1.96	1.96	1.95	1.95	1.96	1.95	1.95	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	2.01	2.07	2.03	1.97	1.98	1.99	S	1.97	1.95	1.95	2.07	1.97	24
17	1.95	1.95	1.96	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.98	1.98	1.98	1.97	1.97	S	2.32	2.12	2.47	1.95	2.47	2.01	24
18	2.88	3.01	3.30	3.49	2.28	2.22	1.97	1.98	1.96	2.00	2.00	1.97	1.98	1.96	1.96	1.97	1.96	2.01	1.96	S	2.03	2.01	1.98	2.06	1.96	3.49	2.21	24
19	2.06	2.08	2.12	2.09	2.01	2.08	2.05	2.00	2.02	1.96	1.96	1.96	1.96	1.93	S1	S1	1.95	1.98	S	1.97	2.06	1.97	1.96	1.99	1.93	2.12	2.01	22
20	2.04	2.20	2.04	2.02	1.96	2.01	1.98	1.95	2.02	1.99	1.95	1.94	1.95	1.95	1.94	1.95	1.93	S	1.98	1.92	1.92	2.05	1.93	1.93	1.92	2.20	1.98	24
21	2.01	1.94	1.95	1.94	1.95	1.93	1.92	1.93	1.93	1.92	1.91	1.92	1.91	1.92	1.92	1.92	S	1.92	1.92	1.92	1.92	1.92	1.92	1.93	1.91	2.01	1.93	24
22	1.95	1.97	2.83	2.83	2.65	2.64	2.14	1.95	1.94	1.93	1.92	1.92	1.92	1.93	1.92	S	1.92	1.92	1.92	1.92	2.01	2.51	3.15	2.15	1.92	3.15	2.17	24
23	2.21	2.12	2.16	2.27	2.59	2.59	2.04	1.96	1.98	1.98	1.95	1.93	1.97	1.93	S	1.96	1.95	1.97	1.93	1.95	1.97	1.94	1.97	1.95	1.93	2.59	2.06	24
24	1.96	1.95	1.95	1.99	1.97	2.01	2.03	2.00	2.01	1.97	1.98	1.98	1.96	S	1.94	2.07	1.92	1.90	1.90	1.90	1.90	1.91	1.91	1.92	1.90	2.07	1.96	24
25	1.92	1.92	1.95	1.95	1.94	1.95	1.95	1.92	1.91	1.91	1.91	1.91	S	1.90	1.90	1.90	1.90	1.90	1.90	1.92	1.92	1.93	1.92	1.90	1.90	1.95	1.92	24
26	1.99	2.00	1.99	1.91	1.92	1.92	1.92	1.92	1.92	1.92	S	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.94	1.92	1.92	1.93	1.93	1.95	1.91	2.00	1.93	24
27	1.94	1.93	1.93	1.96	1.94	1.94	1.93	1.93	1.93	1.93	S	1.93	1.93	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.95	2.36	1.92	2.36	1.95	24
28	2.49	2.51	2.21	2.10	1.97	1.93	1.92	1.91	2.04	S	1.92	1.91	1.92	1.92	1.92	1.92	1.92	1.92	1.93	1.92	1.92	1.93	1.93	1.93	1.91	2.51	2.00	24
29	1.95	1.96	1.96	2.00	2.00	1.98	1.97	1.97	S	1.95	1.95	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.94	1.93	1.93	1.94	1.94	1.95	1.93	2.00	1.95	24
30	1.95	1.95	1.95	1.95	1.98	1.98	1.98	S	1.96	1.95	1.94	1.94	1.93	1.93	1.93	1.93	1.94	1.94	1.97	1.96	1.96	1.98	1.97	1.93	1.98	1.95	1.95	24
31	2.03	2.00	2.01	2.03	2.05	2.01	S	2.02	1.96	1.97	1.95	1.94	1.94	1.94	1.93	1.95	1.95	1.95	1.94	1.95	1.96	1.96	1.95	1.98	1.93	2.05	1.97	24
HOURLY MAX	2.88	3.01	3.30	3.49	2.65	2.64	2.14	2.12	2.05	2.06	2.01	2.03	2.02	1.99	2.00	2.07	2.09	2.07	2.18	2.16	2.51	7.82	6.07	3.97				
HOURLY AVG	2.05	2.09	2.07	2.08	2.05	2.05	1.97	1.96	1.96	1.96	1.95	1.95	1.95	1.94	1.94	1.95	1.95	1.95	1.95	1.96	2.00	2.26	2.18	2.08				

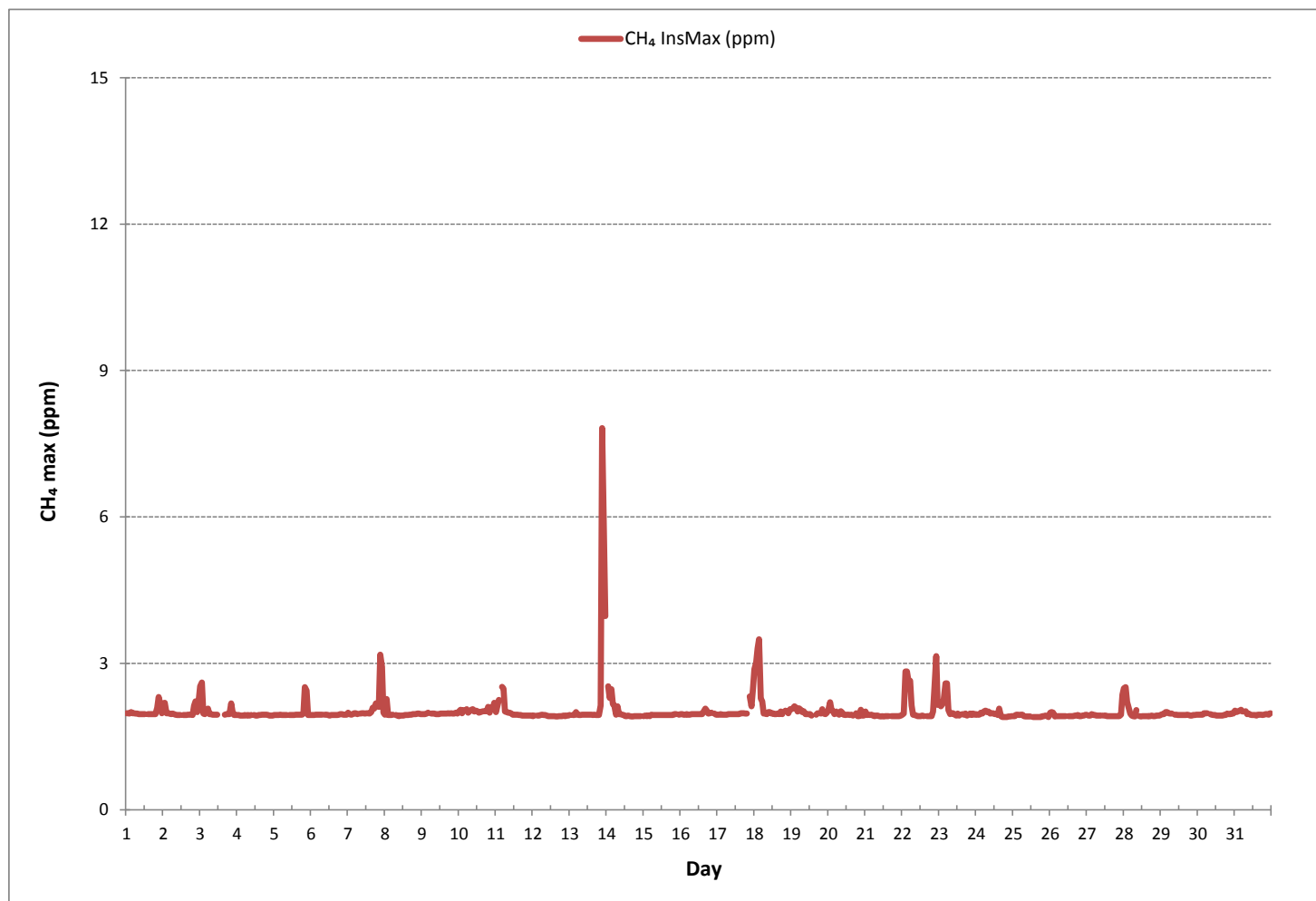
STATUS FLAG CODES

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	707				
MAXIMUM INSTANTANEOUS VALUE:	7.82	ppm	@ HOUR	21	ON DAY 13
IZS CALIBRATION TIME:	31	hrs	OPERATIONAL TIME:	742	hrs
MONTHLY CALIBRATION TIME:	4	hrs			
STANDARD DEVIATION:	0.32				

METHANE MAX Instantaneous Maximum (CH₄ ppm)





PEACE RIVER AREA MONITORING PROGRAM COMMITTEE

Reno Station - May 2018

NON-METHANE HYDROCARBONS Instantaneous Maximum (NMHC ppm)

HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	DAILY	24-HR	RDGS.	
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59	MIN.	MAX.	AVG.		
DAY																													
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	24
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
6	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	24
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
8	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
9	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
10	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
11	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
12	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
13	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.06	0.00	0.00	24
14	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	24
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	S	0.00	0.00	0.00	0.00	0.00	24
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	S	0.00	0.00	0.00	0.00	0.00	0.00	24
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.05	0.00	0.00	0.00	0.05	0.00	0.00	24
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	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
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	S1	S1	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	24
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
25	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	24
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
28	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	24
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
31	0.00	0.00	0.00	0.00	0.00	0.00	S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
HOURLY MAX	0.08	0.00	0.00	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.06	0.00	0.00					
HOURLY AVG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					

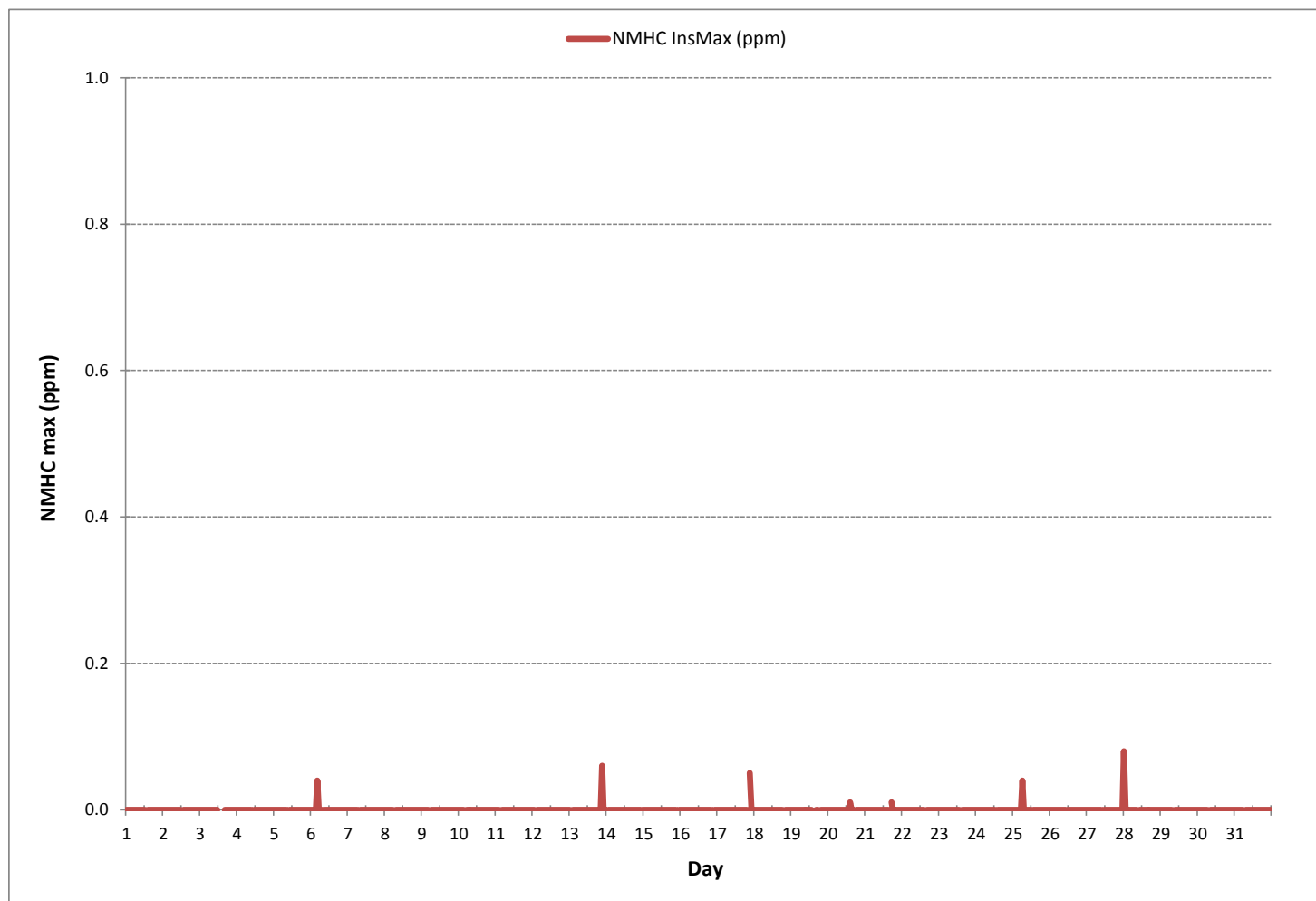
STATUS FLAG CODES

C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	7
MAXIMUM INSTANTANEOUS VALUE:	0.08 ppm @ HOUR 0 ON DAY 28
IZS CALIBRATION TIME:	31 hrs
MONTHLY CALIBRATION TIME:	4 hrs
OPERATIONAL TIME:	742 hrs
STANDARD DEVIATION:	0.00

NON-METHANE HYDROCARBONS Instantaneous Maximum (NMHC ppm)





PEACE RIVER AREA MONITORING PROGRAM COMMITTEE

Reno Station - May 2018

WIND SPEED Instantaneous Maximum (WS kph)

HR START (MST)	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	DAILY	24-HR	RDGS.
HR END (MST)	0:59	1:59	2:59	3:59	4:59	5:59	6:59	7:59	8:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	17:59	18:59	19:59	20:59	21:59	22:59	23:59	MIN.	MAX.	AVG.	
DAY																												
1	5.4	11.3	16.3	12.5	11.5	13.6	16.7	18.1	17.5	23.8	27.2	28.6	25.4	28.2	29.3	26.6	18.4	19.1	20.1	6.0	3.6	5.0	8.0	11.5	3.6	29.3	16.8	24
2	12.3	15.9	17.1	14.4	14.0	18.6	23.4	29.1	30.8	34.4	39.4	40.8	41.3	46.2	63.1	30.2	17.4	21.8	13.7	27.4	9.9	18.3	26.6	6.9	6.9	63.1	25.5	24
3	5.6	7.4	13.8	8.3	7.5	25.9	24.7	20.1	22.8	18.4	20.2	16.0	20.4	20.5	21.3	17.8	21.9	26.0	15.0	11.0	15.0	14.9	12.1	10.8	5.6	26.0	16.6	24
4	24.8	20.8	20.0	13.0	14.3	20.6	18.5	25.8	30.5	35.8	35.7	37.2	29.5	34.8	36.4	33.8	32.0	35.4	26.3	21.8	14.6	29.2	30.5	21.7	13.0	37.2	26.8	24
5	25.3	28.2	22.8	20.8	18.6	19.6	16.0	23.8	30.8	29.0	27.8	33.5	26.6	29.7	28.4	31.1	27.8	23.8	22.0	14.0	6.3	7.4	13.6	12.0	6.3	33.5	22.5	24
6	17.1	14.9	10.6	11.9	14.2	12.9	16.2	20.2	25.0	19.8	24.8	27.5	26.2	28.3	25.9	24.5	20.5	19.7	16.0	9.9	5.1	8.7	8.4	13.1	5.1	28.3	17.6	24
7	10.1	12.1	6.7	12.5	15.8	19.9	44.8	43.7	38.6	32.4	30.4	22.9	22.6	24.0	25.1	18.9	16.2	17.2	28.3	27.6	7.0	5.5	11.4	15.8	5.5	44.8	21.2	24
8	15.4	11.7	19.3	20.9	24.2	24.7	28.7	19.0	33.6	37.2	35.5	32.9	39.7	50.3	44.7	42.7	37.6	34.9	38.6	32.1	31.9	31.2	28.1	36.1	11.7	50.3	31.3	24
9	31.9	27.2	15.8	22.5	21.5	29.1	33.8	39.6	40.3	42.6	33.8	33.0	34.8	32.2	34.7	31.6	27.8	27.2	28.4	27.4	23.9	20.7	16.8	14.9	14.9	42.6	28.8	24
10	14.7	16.4	17.0	13.4	12.2	11.6	21.0	22.8	21.3	24.3	23.2	26.2	25.8	26.9	21.3	28.7	20.7	16.6	16.4	18.5	13.3	14.1	16.2	18.0	11.6	28.7	19.2	24
11	20.3	16.7	17.3	12.5	5.8	15.5	19.4	20.1	19.4	21.4	24.4	23.8	41.0	23.7	19.4	35.1	24.6	30.0	24.6	21.5	6.4	9.0	15.8	22.5	5.8	41.0	20.4	24
12	21.6	15.9	16.4	19.5	14.6	17.6	18.1	16.8	19.2	18.2	19.9	28.1	31.7	32.1	35.2	36.9	35.9	37.1	39.2	29.5	23.1	18.8	15.3	24.4	14.6	39.2	24.4	24
13	20.5	19.2	13.8	8.4	8.1	8.7	12.1	20.3	23.0	20.2	27.4	25.1	24.7	28.8	23.2	24.3	25.7	23.2	14.6	14.3	3.2	2.7	2.7	6.6	2.7	28.8	16.7	24
14	4.3	5.5	4.9	6.9	8.1	10.0	11.2	22.4	25.6	30.1	24.2	31.1	31.4	25.9	25.1	32.7	28.5	28.2	33.8	22.0	19.8	11.5	9.0	7.8	4.3	33.8	19.2	24
15	10.2	8.5	16.8	14.3	12.6	14.7	16.4	18.1	17.3	14.3	22.5	26.2	29.2	37.7	37.2	35.9	30.7	28.0	29.6	30.1	14.8	15.0	16.5	10.7	8.5	37.7	21.1	24
16	11.1	17.1	17.6	23.5	21.0	17.4	22.0	24.9	27.5	27.8	32.6	30.8	28.1	24.0	24.6	16.0	13.5	11.6	6.6	16.7	27.8	26.6	22.6	9.6	6.6	32.6	20.9	24
17	7.3	10.8	11.3	11.7	16.7	9.8	6.8	12.2	14.7	16.6	15.2	14.7	14.7	16.1	20.7	30.0	15.1	18.5	13.3	7.6	5.7	6.9	8.1	4.8	4.8	30.0	12.9	24
18	2.9	4.2	4.0	5.5	5.3	8.6	12.2	16.0	21.6	22.7	24.9	28.8	27.9	28.0	27.9	26.8	28.3	24.8	19.2	20.2	13.6	15.1	18.6	20.1	2.9	28.8	17.8	24
19	20.1	17.4	14.6	12.9	15.9	16.0	15.0	17.7	15.1	11.9	17.0	18.4	20.5	15.7	17.7	19.0	18.0	22.8	18.9	12.7	2.4	5.7	6.4	11.7	2.4	22.8	15.1	24
20	16.3	13.5	15.6	18.7	15.2	21.5	16.8	16.2	18.8	14.4	13.9	15.3	20.4	15.9	12.9	18.6	19.3	16.5	44.2	32.4	16.8	11.9	16.1	19.6	11.9	44.2	18.4	24
21	19.4	22.8	20.2	19.5	16.4	17.6	21.2	26.8	30.3	30.1	29.3	33.7	37.7	34.3	30.6	29.6	31.5	25.0	24.1	26.7	15.6	10.3	8.7	7.5	7.5	37.7	23.7	24
22	7.1	6.0	4.1	6.6	5.6	6.2	15.5	20.2	21.6	27.4	29.8	25.8	27.8	30.1	26.8	26.4	26.4	21.8	18.5	15.5	3.0	2.2	8.5	11.8	2.2	30.1	16.4	24
23	15.2	15.5	10.0	7.7	7.1	10.0	11.3	13.6	14.7	15.6	21.1	27.4	26.6	26.6	24.6	25.4	24.0	18.5	25.7	19.6	18.7	21.1	19.5	16.1	7.1	27.4	18.2	24
24	15.2	16.1	15.8	14.8	14.3	13.9	18.8	17.7	22.6	22.9	14.6	20.5	23.0	16.9	30.5	45.1	41.9	36.1	26.1	23.0	17.8	9.5	10.8	16.2	9.5	45.1	21.0	24
25	10.9	19.3	12.2	11.7	13.3	10.6	14.3	23.6	30.6	27.3	27.9	28.5	28.7	30.6	31.5	25.5	30.4	27.5	19.3	17.4	6.7	31.7	38.7	29.2	6.7	38.7	22.8	24
26	9.3	12.1	22.0	23.9	19.2	21.1	31.4	40.0	43.7	36.2	36.9	42.5	38.9	38.6	40.0	35.7	37.6	43.5	47.9	33.5	23.6	16.9	30.1	29.8	9.3	47.9	31.4	24
27	29.9	23.3	19.2	18.0	17.7	15.9	25.7	29.8	36.4	35.1	36.0	38.2	38.9	37.6	38.3	32.2	40.8	35.5	24.9	15.1	8.6	9.6	7.4	3.3	3.3	40.8	25.7	24
28	4.0	5.0	5.2	8.5	10.8	9.3	11.7	9.7	12.3	32.8	50.4	49.5	52.1	56.1	58.1	50.6	49.6	35.7	33.7	34.7	30.6	34.2	28.0	24.1	4.0	58.1	29.0	24
29	18.2	16.9	13.5	17.0	7.7	11.1	16.1	16.5	25.9	21.6	24.1	25.7	26.1	22.1	23.1	20.4	25.8	12.9	14.7	15.4	16.6	8.6	5.6	10.3	5.6	26.1	17.3	24
30	6.8	10.9	18.2	21.0	11.6	8.9	11.4	20.0	23.1	26.4	25.3	23.8	30.6	33.9	33.7	32.0	27.4	20.1	28.0	18.8	13.2	15.7	14.6	14.1	6.8	33.9	20.4	24
31	9.2	14.3	10.2	16.8	15.3	16.4	16.9	21.1	18.8	19.2	20.4	27.6	28.8	26.4	24.4	26.7	27.4	27.7	23.4	26.1	22.4	20.6	19.8	15.8	9.2	28.8	20.7	24
HOURLY MAX	31.9	28.2	22.8	23.9	24.2	29.1	44.8	43.7	43.7	42.6	50.4	49.5	52.1	56.1	63.1	50.6	49.6	43.5	47.9	34.7	31.9	34.2	38.7	36.1				
HOURLY AVG	14.3	14.7	14.3	14.5	13.4	15.4	19.0	22.1	24.9	25.5	27.0	28.5	29.7	29.7	30.2	29.4	27.2	25.4	24.4	20.9	14.2	14.8	16.0	15.4				

STATUS FLAG CODES

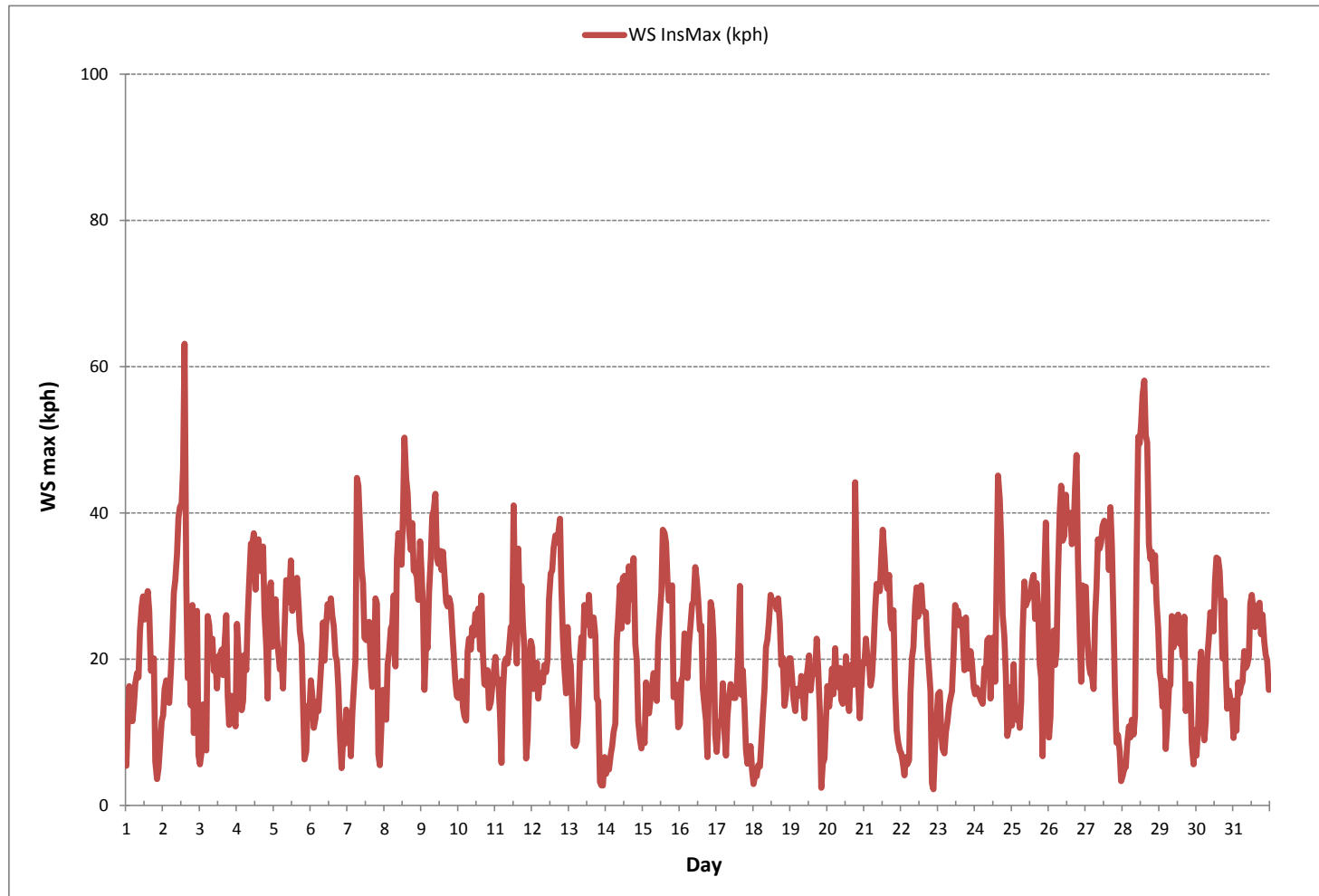
C	- MONTHLY CALIBRATION	Q	- QUALITY ASSURANCE
C1	- REPEAT CALIBRATION	R	- RECOVERY
Y	- MAINTENANCE	X	- MACHINE MALFUNCTION
S	- DAILY ZERO/SPAN CHECK	G	- OUT FOR REPAIR
S1	- REPEAT ZERO/SPAN CHECK	P	- POWER FAILURE

MONTHLY SUMMARY

MAXIMUM INSTANTANEOUS VALUE: 63.1 kph @ HOUR 14 ON DAY 2

OPERATIONAL TIME: 744 hrs

WIND SPEED Instantaneous Maximum (WS kph)

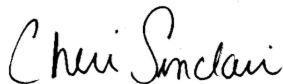


APPENDIX IV
REPORT CERTIFICATION FORM

Report Certification Form

Alberta Airshed (if applicable)	EPA Approval or Code of Practice Registration # (if applicable)
YES	NA
Company Name (if applicable)	Industrial Operation Name (if applicable)
Peace River Area Monitoring Program Committee	Reno Station
Name of the Representative of the Person Responsible	Position / Title of the Representative of the Person Responsible
Mike Bisaga / Lily Lin	Technical Program Managers
Is an External Party Certifying the Report? (If 'Yes', fill in the fields below for the external person.)	
☒ Yes ☐ No	
Name of External Person Certifying the Report	Position / Title of External Person Certifying the Report
Cheri Sinclair	Supervisor, Customer Service, Air Services
Company Name for the External Person Certifying the Report	Identification of Qualifications / Professional Designations of the External Person Certifying the Report
Maxxam Analytics, A Bureau Veritas Group Company	B.Sc.

Maxxam Analytics is the designated contractor conducting monitoring and reporting activities. I certify that the submitted data has been (a) reviewed and validated as per the AMD Chapter 6: Ambient Data Quality. I certify that the submitted report (b) accurately reflects the monitoring results and reporting timeframe and (c) meets the specified analysis, summarization and reporting requirements as per the AMD Chapter 9: Reporting.



Signature of the External Person Certifying the Report

14-Jun-2018

Report Issued Date (dd-mon-yyyy)

APPENDIX V
DATA VALIDATION CERTIFICATION FORM

Validation Certificate Form

Client: Peace River Area Monitoring Program Committee

Project #: 196-2018-05-93-C

Site: Reno Station

Contact: Karla Reesor

Level 0 Preliminary Verification

Chris Sinclair

Date 11-Jun-2018

Level 1 Primary Validation

Chris Sinclair

Date 11-Jun-2018

Level 2 Final Validation

Chris Sinclair

Date 14-Jun-2018

Level 3 Independent Data Review

Chris Sinclair

Date 14-Jun-2018

Post-Final Validation

NA

Date NA

Notes

The Post-Final Validation step serves to re-evaluate the data that errors or omissions are discovered and/or suspected after the initial submittal of data. This validation is performed on an annual basis.