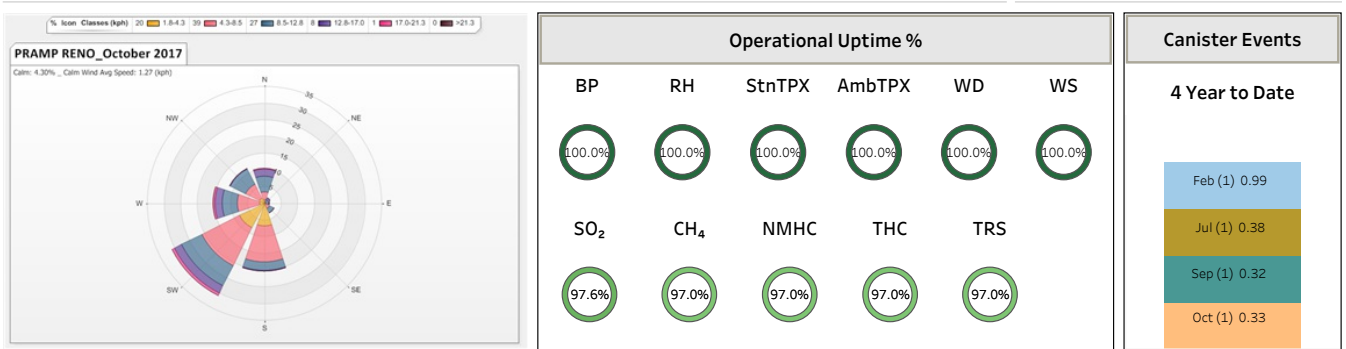


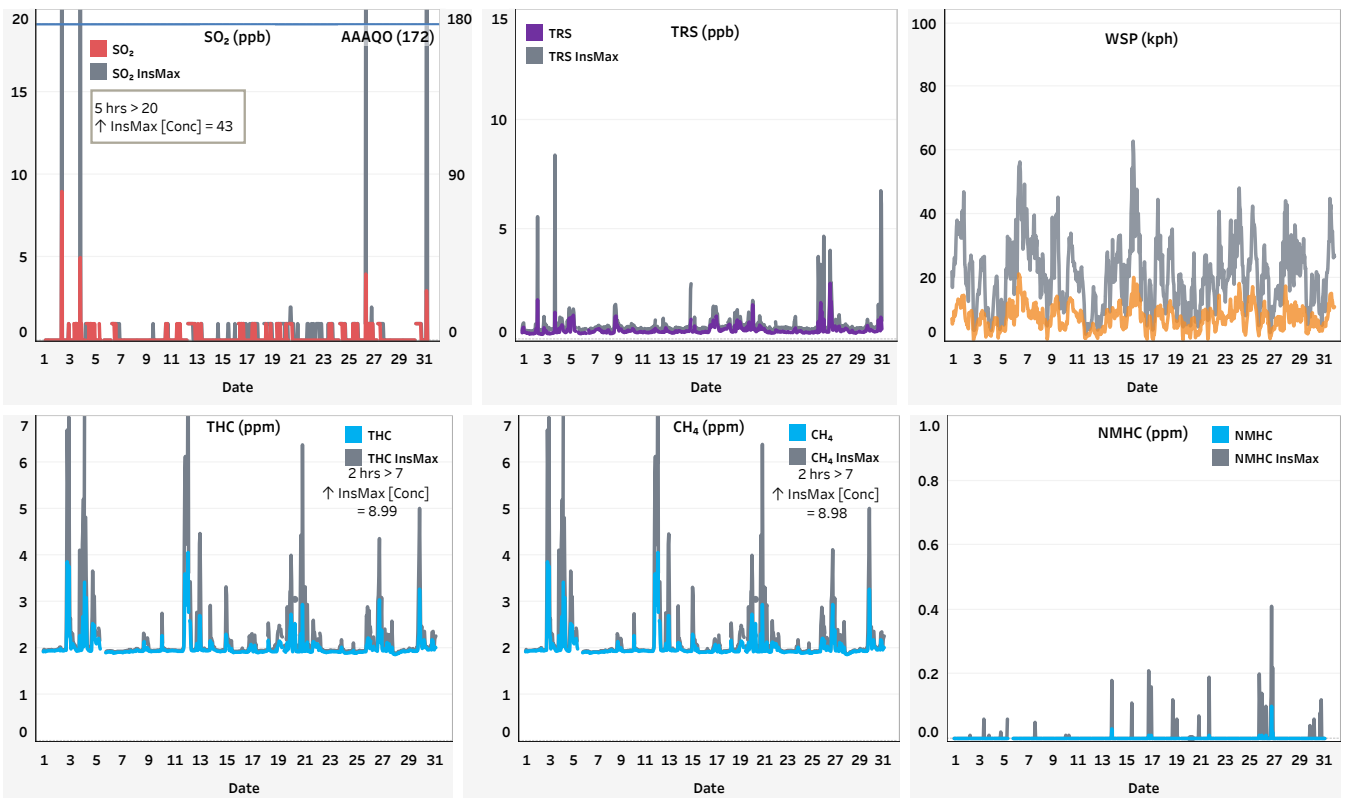
Peace River Area Monitoring Program Committee - RENO Station October 2017 Monthly Report Summary

- All data has been baseline corrected. Data may be subject to change after Level 3 data review.
- All compliance parameters were within the Alberta Ambient Air Quality Objectives (AAAQO, 2017).
- The operational time for all continuous ambient air analyzers, meteorological systems and data acquisition systems were above 90%.

Station	Pollutant	Unit	AVG [Conc]	Uptime	Hourly Max [Conc]	Max Date	WS	WD	# Hrs >172 AAAQO	24-Hr Max [Conc]	24-Hr Avg Max Date	# Days >48 AAAQO
RENO	SO ₂	ppb	0	97.6%	9	Oct 2 Hr7	4.6	272 (W)	0	1	Oct 2	0
	TRS	ppb	0.43	97.0%	2.56	Oct 26 Hr20	1.9	190 (S)	-	0.81	Oct 26	-
	THC	ppm	2.02	97.0%	4.06	Oct 12 Hr3	1.9	219 (SW)	-	2.32	Oct 4	-
	CH ₄	ppm	2.02	97.0%	4.06	Oct 12 Hr3	1.9	219 (SW)	-	2.32	Oct 4	-
	NMHC	ppm	0.00	97.0%	0.10	Oct 26 Hr20	1.9	190 (S)	-	0.01	Oct 26	-
	WS	kph	3.6	100.0%	21.2	Oct 6 Hr10	21.2	249 (WSW)	-	12.8	Oct 6	-
	WD	degree	251 (WSW)	100.0%	-	-	-	-	-	-	-	-
	RH	%	66	100.0%	94	Oct 25 Hr7	15.4	22 (NNE)	-	89	Oct 17	-
	BP	mbar	936	100.0%	955	Oct 2 Hr8	4.0	281 (W)	-	953	Oct 2	-
	AmbTPX	°C	3.5	100.0%	21.8	Oct 5 Hr15	10.4	239 (WSW)	-	12.6	Oct 5	-
	StnTPX	°C	20.2	100.0%	23.0	Oct 5 Hr16	13.3	247 (WSW)	-	21.2	Oct 5	-



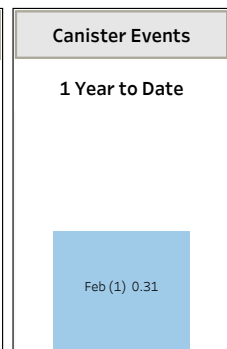
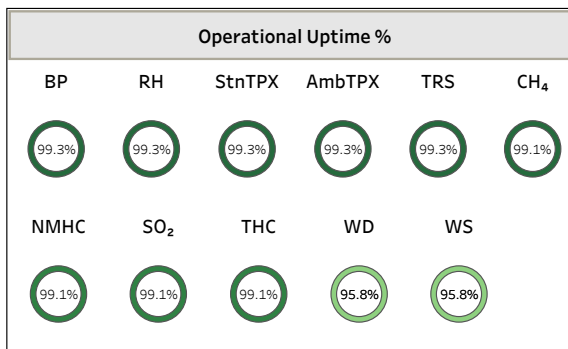
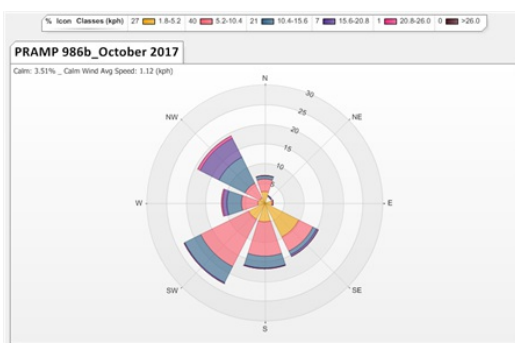
Operational Summary - All Gas Analyzers: The sample manifold blower failed on Oct 31 @ 06:00. Data was discarded for the remainder of the day (-18 hrs). **SO₂:** Uptime was 97.6% = 18 hrs downtime. **TRS:** Uptime was 97.0% = 22 hrs downtime. 1st attempt at monthly calibration on Oct 5 was aborted due to an operator error (-4 hrs). The analyzer was restored to as-found settings and calibration was completed on Oct 6. **THC/CH₄/NMHC:** Uptime was 97.0% = 22 hrs downtime. Sample pump was replaced on Oct 5 (-2 hrs). Repeat span verification on Oct 19 following span gas replacement (-2 hrs). Canister event triggered on Oct 26 @ hr 20:00 (0.33 ppm).



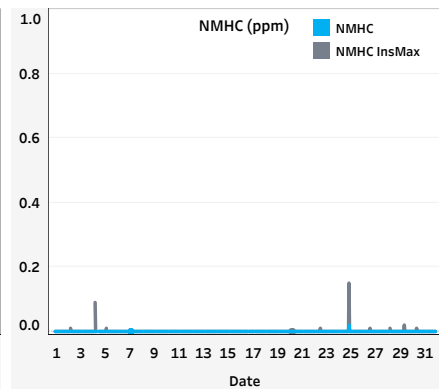
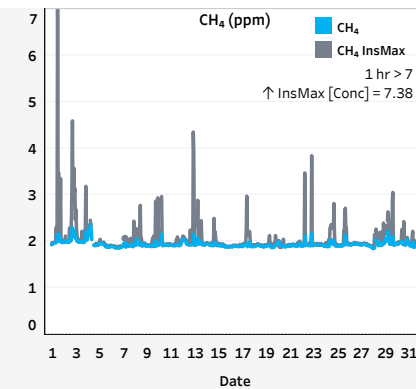
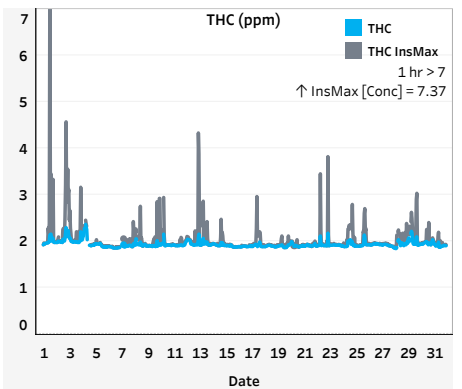
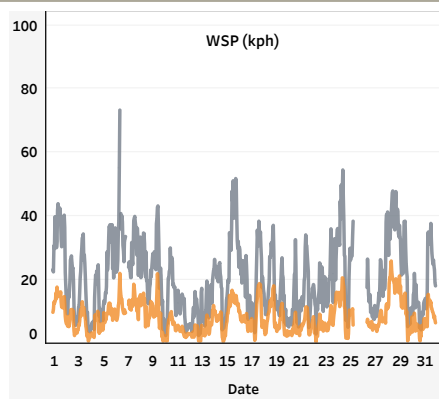
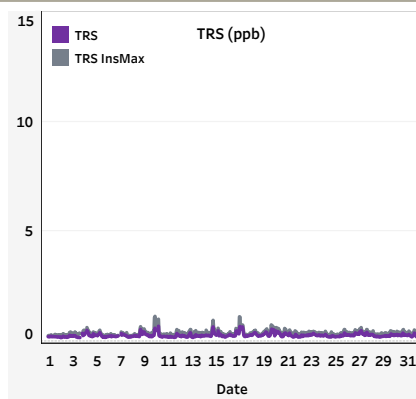
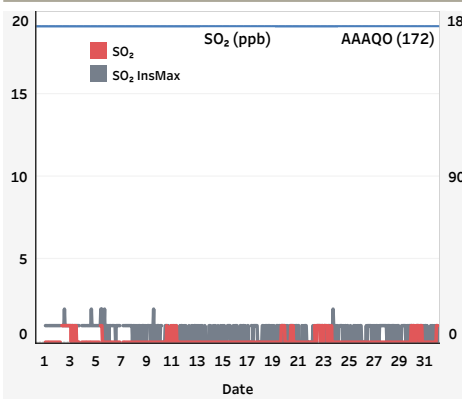
Peace River Area Monitoring Program Committee - 986b Station October 2017 Monthly Report Summary

- All data has been baseline corrected. Data may be subject to change after Level 3 data review.
- All compliance parameters were within the Alberta Ambient Air Quality Objectives (AAAQO, 2017).
- The operational time for all continuous ambient air analyzers, meteorological systems and data acquisition systems were above 90%.

Station	Pollutant	Unit	AVG [Conc]	Uptime	Hourly Max [Conc]	Max Date	WS	WD	# Hrs >172 AAAQO	24-Hr Max [Conc]	24-Hr Avg Max Date	# Days >48 AAAQO
PRAMP - 986b	SO ₂	ppb	0	99.1%	1	Oct 2 Hr7	5.3	320 (NW)	0	1	Oct 2	0
	TRS	ppb	0.29	99.3%	0.70	Oct 10 Hr6	0.8	328 (NNW)	-	0.38	Oct 17	-
	THC	ppm	1.93	99.1%	2.36	Oct 4 Hr6	3.1	116 (ESE)	-	2.05	Oct 2	-
	CH ₄	ppm	1.93	99.1%	2.36	Oct 4 Hr6	3.1	116 (ESE)	-	2.05	Oct 2	-
	NMHC	ppm	0.00	99.1%	0.02	Oct 24 Hr22	3.0	67 (ENE)	-	0.00	Oct 1	-
	WS	kph	3.4	95.8%	25.9	Oct 28 Hr9	25.9	311 (NW)	-	16.7	Oct 28	-
	WD	degree	258 (WSW)	95.8%	-	-	-	-	-	-	-	-
	RH	%	72	99.3%	100	Oct 25 Hr2	9.9	58 (ENE)	-	92	Oct 25	-
	BP	mbar	939	99.3%	959	Oct 2 Hr9	7.5	337 (NNW)	-	957	Oct 2	-
	AmbTPX	°C	3.6	99.3%	21.5	Oct 5 Hr15	12.4	250 (WSW)	-	13.5	Oct 5	-
	StnTPX	°C	22.1	99.3%	24.3	Oct 29 Hr23	4.0	189 (S)	-	23.3	Oct 31	-



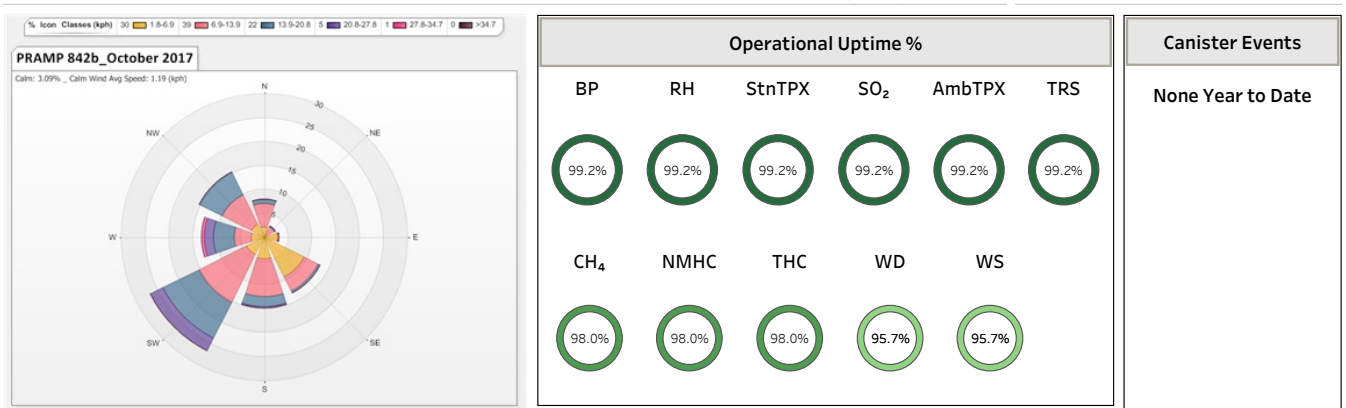
Operational Summary - All Parameters: Data was lost due to a power failure between Oct 6 - 7 (-5 hrs). **SO₂:** Uptime was 99.1% = 7 hrs downtime. A repeat span verification was performed on Oct 2 to assess a high span drift (-1 hr). Perm tube was replaced during monthly calibration on Oct 3. Another repeat span verification was conducted on Oct 4 in order to update the expected value (-1 hr). **TRS/RH/BP/TEMP:** Uptime was 99.3% = 5 hrs downtime. **THC/CH₄/NMHC:** Uptime was 99.1% = 7 hrs downtime. Data was discarded on Oct 7 hr 03:00 as the analyzer was in recovery mode following the power failure (-1 hr). A repeat span verification was completed following the replacement of the carrier gas on Oct 16 (-1 hr). **Wind:** Uptime was 95.8% = 31 hrs downtime. Due to poor weather, anomalous data recorded between Oct 25 - 26 was deemed suspect and discarded (-26 hrs).



Peace River Area Monitoring Program Committee - 842b Station October 2017 Monthly Report Summary

- All data has been baseline corrected. Data may be subject to change after Level 3 data review.
- All compliance parameters were within the Alberta Ambient Air Quality Objectives (AAAQO, 2017).
- The operational time for all continuous ambient air analyzers, meteorological systems and data acquisition systems were above 90%.
- **THC/CH₄/NMHC**: Monthly calibration as-found high point did not meet 15 min. stability requirement due to sporadic, poor injections. AEP ref # 332164.

Station	Pollutant	Unit	AVG [Conc]	Uptime	Hourly Max [Conc]	Max Date	WS	WD	# Hrs >172 AAAQO	24-Hr Max [Conc]	24-Hr Avg Max Date	# Days >48 AAAQO
PRAMP - 842b	SO ₂	ppb	0	99.2%	1	Oct 5 Hr9	13.0	214 (SSW)	0	0	Oct 1	0
	TRS	ppb	0.16	99.2%	0.36	Oct 15 Hr6	10.3	172 (S)	-	0.20	Oct 27	-
	THC	ppm	1.97	98.0%	2.23	Oct 4 Hr6	3.3	129 (SE)	-	2.05	Oct 4	-
	CH ₄	ppm	1.97	98.0%	2.23	Oct 4 Hr6	3.3	129 (SE)	-	2.05	Oct 4	-
	NMHC	ppm	0.00	98.0%	0.00	Oct 1 Hr0	7.8	312 (NW)	-	0.00	Oct 1	-
	WS	kph	5.3	95.7%	34.6	Oct 6 Hr10	34.6	254 (WSW)	-	20.0	Oct 6	-
	WD	degree	247 (WSW)	95.7%	-	-	-	-	-	-	-	-
	RH	%	71	99.2%	96	Oct 13 Hr8	4.6	260 (WSW)	-	91	Oct 17	-
	BP	mbar	940	99.2%	960	Oct 2 Hr9	8.6	337 (NNW)	-	958	Oct 2	-
	AmbTPX	°C	3.1	99.2%	20.6	Oct 5 Hr16	20.0	253 (WSW)	-	12.5	Oct 5	-
	StnTPX	°C	20.6	99.2%	23.1	Oct 5 Hr19	11.9	242 (WSW)	-	22.1	Oct 5	-



Operational Summary - All Parameters: Data was lost due to a power failure between Oct 6 - 7 (-6 hrs). **SO₂/TRS/RH/BP/TEMP:** Uptime was 99.2% = 6 hrs downtime. **THC/CH₄/NMHC:** Uptime was 98.0% = 15 hrs downtime. Sporadic instances of CH₄ ≤ 1.80 ppm were discarded in the minute data and hourly averages were recalculated (poor injections, low in frequency and short durations). An exception, on Oct 4 where poor injections were higher in frequency and longer in duration, resulted in 7 hrs of rejected data. The fuel gas was replenished and the zero air pressure was adjusted to address this (-2 hrs). During monthly calibration, as-found high point did not stabilize within 15 minutes, due to injection issue (AEP # 332164). **Wind:** Uptime was 95.7% = 32 hrs downtime. Due to poor weather, anomalous data recorded between Oct 25 - 26 was deemed suspect and discarded (-26 hrs).

