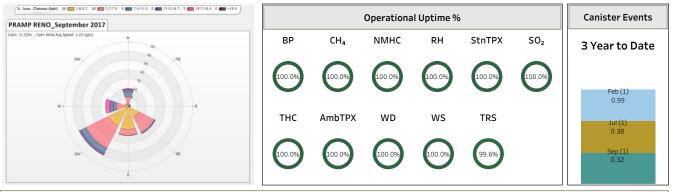
Peace River Area Monitoring Program Committee - RENO Station September 2017 Monthly Report Summary

• All data has been baseline corrected. Data may be subject to change after Level 3 data review.

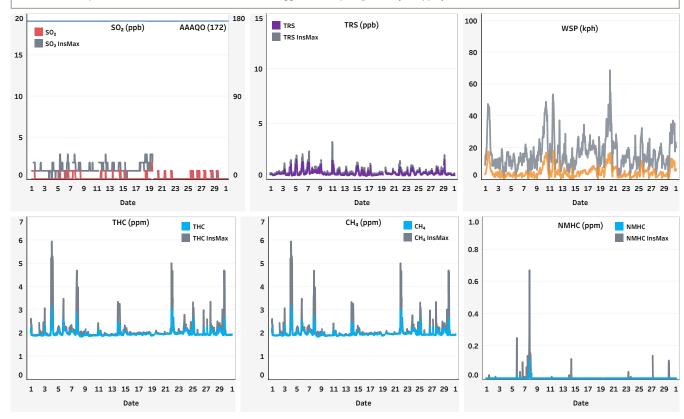
• All compliance parameters were within the Alberta Ambient Air Quality Objectives (AAAQO, 2017).

• 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 - Reno | SO2 | ppb | 0 | 100.0% | 2 | Sep 19 Hr9 | 6.4 | 348 (NNW) | 0 | 0 | Sep 1 | 0 |
| | TRS | ppb | 0.51 | 99.6% | 1.74 | Sep 5 Hr6 | 2.5 | 200 (SSW) | - | 0.76 | Sep 7 | - |
| | THC | ppm | 1.98 | 100.0% | 3.18 | Sep 4 Hr4 | 1.9 | 208 (SSW) | - | 2.14 | Sep 4 | - |
| | CH_4 | ppm | 1.98 | 100.0% | 3.18 | Sep 4 Hr4 | 1.9 | 208 (SSW) | - | 2.14 | Sep 4 | - |
| | NMHC | ppm | 0.00 | 100.0% | 0.12 | Sep 7 Hr20 | 0.7 | 230 (SW) | - | 0.01 | Sep 7 | - |
| | WS | kph | 2.0 | 100.0% | 18.3 | Sep 11 Hr18 | 18.3 | 253 (WSW) | - | 11.6 | Sep 20 | - |
| Reno | WD | degree | 226 (SW) | 100.0% | - | - | - | - | - | - | - | - |
| | RH | % | 68 | 100.0% | 94 | Sep 2 Hr21 | 3.0 | 210 (SSW) | - | 90 | Sep 19 | - |
| | BP | mbar | 938 | 100.0% | 954 | Sep 4 Hr6 | 2.3 | 205 (SSW) | - | 952 | Sep 4 | - |
| | AmbTPX | °C | 11.4 | 100.0% | 28.9 | Sep 6 Hr15 | 2.6 | 170 (SSE) | - | 18.8 | Sep 7 | - |
| | StnTPX | °C | 21.2 | 100.0% | 22.9 | Sep 19 Hr12 | 5.6 | 355 (N) | - | 21.4 | Sep 2 | - |



Operational Summary_TRS: Uptime was 99.6%, equivalent to 3 hrs downtime. The monthly calibration was performed on Sept 19. The first attempt was aborted due to an operator transcription error that yielded incorrect adjustments. The analyzer was reset to the as-found state and the second calibration attempt was successful. NMHC: Canister event triggered on Sept 7 @ 20:00 (0.32 ppm).



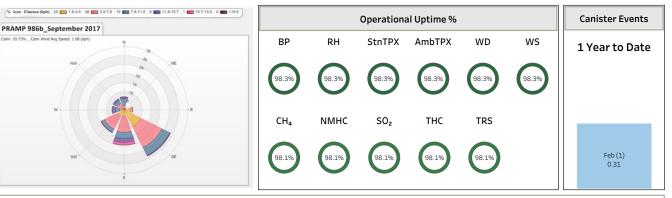
Peace River Area Monitoring Program Committee - 986b Station September 2017 Monthly Report Summary

• All data has been baseline corrected. Data may be subject to change after Level 3 data review.

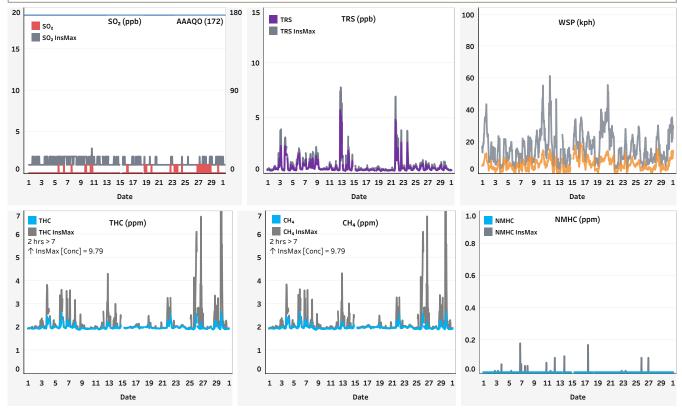
• All compliance parameters were within the Alberta Ambient Air Quality Objectives (AAAQO, 2017).

• 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 | SO2 | ppb | 0 | 98.1% | 1 | Sep 5 Hr13 | 5.5 | 210 (SSW) | 0 | 1 | Sep 27 | 0 |
| | TRS | ppb | 0.51 | 98.1% | 5.71 | Sep 12 Hr21 | 0.9 | 27 (NNE) | - | 1.22 | Sep 13 | - |
| | THC | ppm | 1.99 | 98.1% | 2.64 | Sep 6 Hr1 | 1.6 | 101(E) | - | 2.13 | Sep 6 | - |
| | CH_4 | ppm | 1.99 | 98.1% | 2.64 | Sep 6 Hr1 | 1.6 | 101(E) | - | 2.13 | Sep 6 | - |
| | NMHC | ppm | 0.00 | 98.1% | 0.00 | Sep 1 Hr0 | 4.9 | 215 (SSW) | - | 0.00 | Sep 1 | - |
| | WS | kph | 2.1 | 98.3% | 19.5 | Sep 16 Hr11 | 19.5 | 165 (SSE) | - | 11.8 | Sep 16 | - |
| 5000 | WD | degree | 185 (S) | 98.3% | - | - | - | - | - | - | - | - |
| | RH | % | 71 | 98.3% | 98 | Sep 3 Hr0 | 3.6 | 228 (SW) | - | 84 | Sep 2 | - |
| | BP | mbar | 941 | 98.3% | 958 | Sep 4 Hr6 | 1.3 | 114 (ESE) | - | 956 | Sep 4 | - |
| | AmbTPX | °C | 11.6 | 98.3% | 29.8 | Sep 6 Hr16 | 7.0 | 177 (S) | - | 18.1 | Sep 7 | - |
| | StnTPX | °C | 21.4 | 98.3% | 25.8 | Sep 15 Hr7 | 9.3 | 136 (SE) | - | 22.5 | Sep 15 | - |



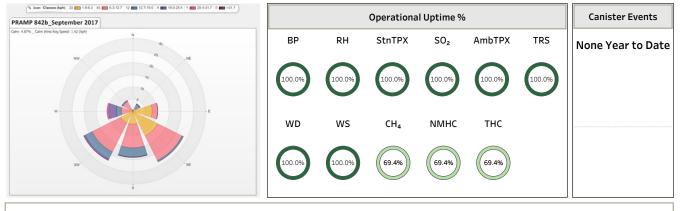
Operational Summary_All Parameters: 12 hrs of downtime were recorded due to 2 power failures on Sept 13 and 15. **All Gas Parameters:** Uptime was 98.1%, equivalent to 14 hrs of downtime. The analyzers were in recovery mode for 1 hr following the power failure on Sept 13. **SO₂/TRS:** The zero/span check did not execute properly following the Sept 15 power failure, as the analyzers were still stabilizing. An additional span verification was triggered at hr 20:00, resulting in 1 hr of downtime. **THC/CH₄/NMHC:** A zero/span check was triggered on Sept 15, following the power failure. The span check extended into hr 08:00, resulting in 1 hr of downtime.



Peace River Area Monitoring Program Committee - 842b Station September 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). • Excluding THC/CH₄/NMHC (69.4%, AEP #329861), 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 - 842b | SO ₂ | ppb | 0 | 100.0% | 1 | Sep 7 Hr9 | 14.2 | 200 (SSW) | 0 | 0 | Sep 1 | 0 |
| | TRS | ppb | 0.18 | 100.0% | 0.73 | Sep 8 Hr7 | 6.5 | 286 (WNW) | - | 0.32 | Sep 8 | - |
| | THC | ppm | 1.99 | 69.4% | 2.27 | Sep 29 Hr23 | 3.1 | 82 (E) | - | 2.06 | Sep 4 | - |
| | CH₄ | ppm | 1.99 | 69.4% | 2.27 | Sep 29 Hr23 | 3.1 | 82 (E) | - | 2.06 | Sep 4 | - |
| | NMHC | ppm | 0.00 | 69.4% | 0.00 | Sep 1 Hr0 | 8.9 | 180 (S) | - | 0.00 | Sep 1 | - |
| | WS | kph | 3.4 | 100.0% | 31.6 | Sep 11 Hr16 | 31.6 | 257 (WSW) | - | 17.4 | Sep 10 | - |
| | WD | degree | 205 (SSW) | 100.0% | - | - | - | - | - | - | - | - |
| | RH | % | 70 | 100.0% | 96 | Sep 2 Hr22 | 5.0 | 167 (SSE) | - | 86 | Sep 19 | - |
| | BP | mbar | 942 | 100.0% | 958 | Sep 4 Hr5 | 2.0 | 90 (E) | - | 956 | Sep 4 | - |
| | AmbTPX | °C | 11.1 | 100.0% | 29.0 | Sep 6 Hr16 | 5.9 | 203 (SSW) | - | 18.8 | Sep 7 | - |
| | StnTPX | °C | 21.9 | 100.0% | 25.8 | Sep 27 Hr16 | 9.4 | 254 (WSW) | - | 22.8 | Sep 26 | - |



Operational Summary_THC/CH₄/NMHC: Uptime was 69.4% = 220 hrs downtime. The analyzer malfunctioned on Sept 15 and required off-site repair. A replacement analyzer was installed on Sept 16. The analyzer was brought back on-line on Sept 18 following column conditioning and post-repair calibration activities (83 hrs downtime). On Sept 20, a shut-down calibration, maintenance and post-repair calibration were performed to address unstable span responses for methane (15 hrs downtime). In response to low concentration alarms on Sept 26, a shut-down calibration was attempted on Sept 27, but failed. The analyzer was replaced with the newly repaired analyzer, originally removed on Sept 15. Data was invalidated to the point when a decline in concentrations was identified (122 hrs downtime, AEP # 329861).

