

Air Quality Monitoring DASHBOARD REPORT

January 2015



Continuous Monitoring Stations

January
2015

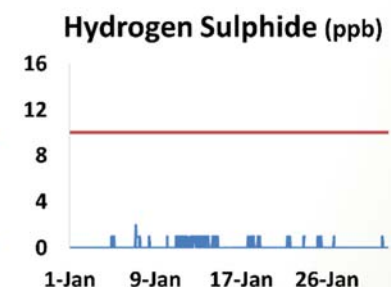
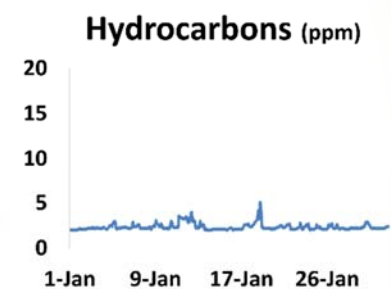
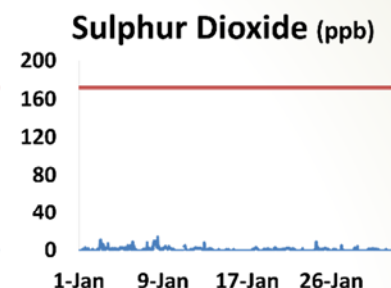
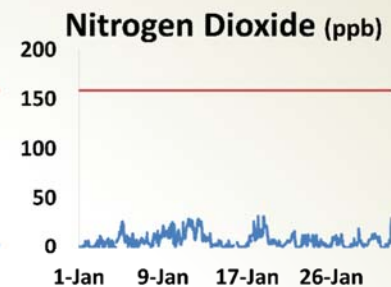
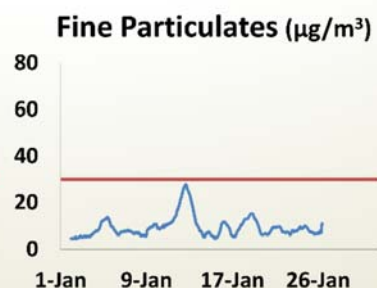
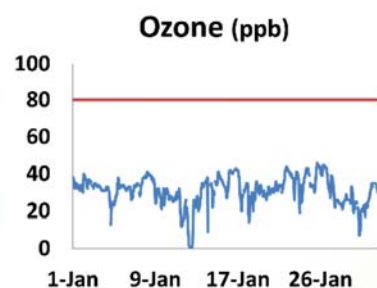
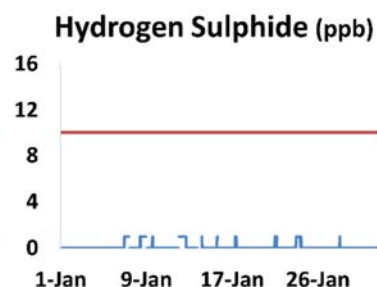
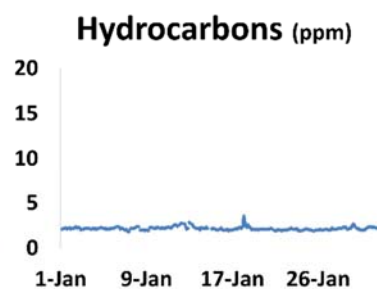
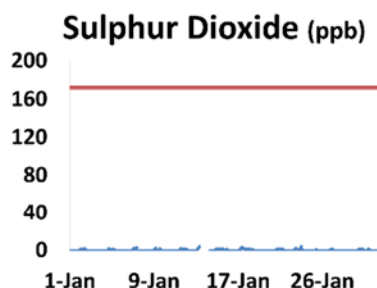
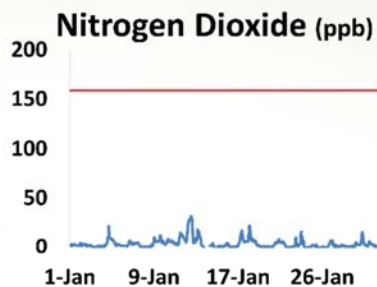
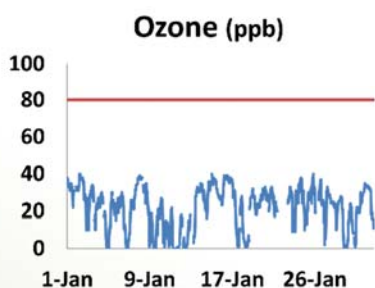
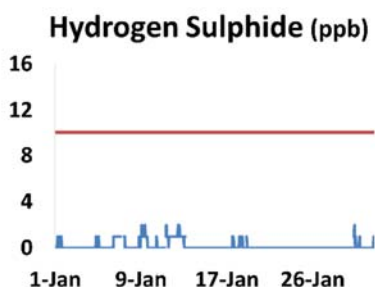
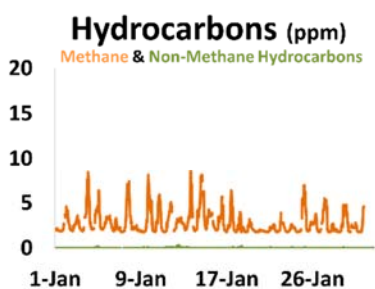
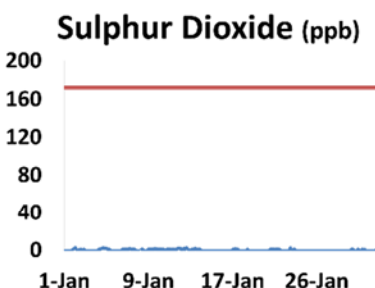
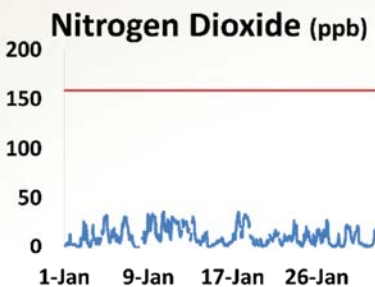
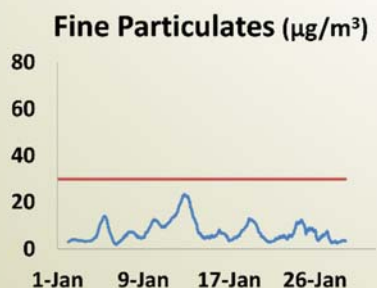
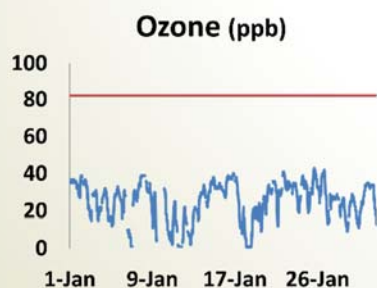
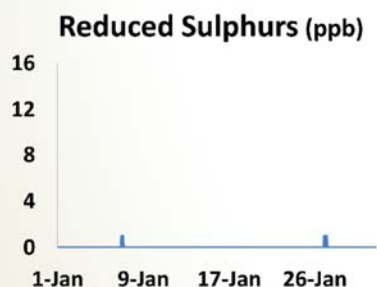
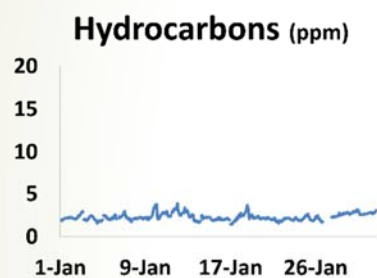
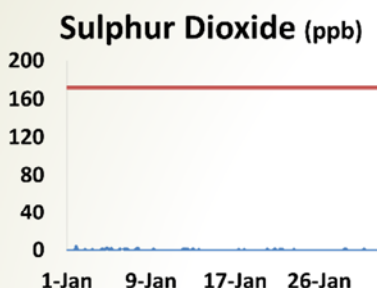
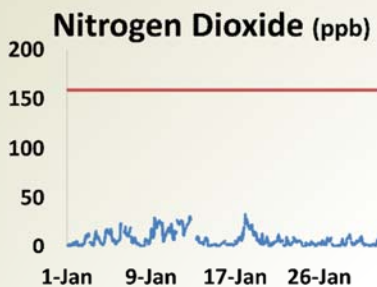


Cold Lake

PAMS (Elk Point)

St. Lina

Maskwa



Notable observations for Jan 2015:

- Air quality was rated as "Low Risk" over 80% of the time at the Cold Lake, St. Lina, and portable monitoring stations.
- In this series of charts, the blue line indicates the pattern of measurements over a one-month period; the red line indicates the applicable Alberta Ambient Air Quality Objective (AAAQO) established for the respective parameter.

Passive Monitoring Stations

January
2015



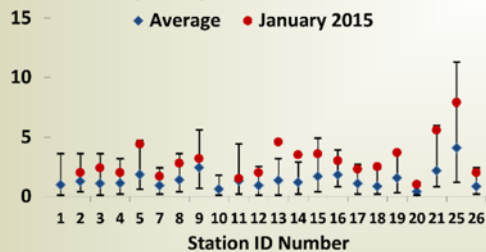
This series of bubble maps present monthly average concentrations in parts per billion (ppb).

Displaying data this way illustrates the spatial patterns of the parameters monitored in the LICA passive monitoring network.

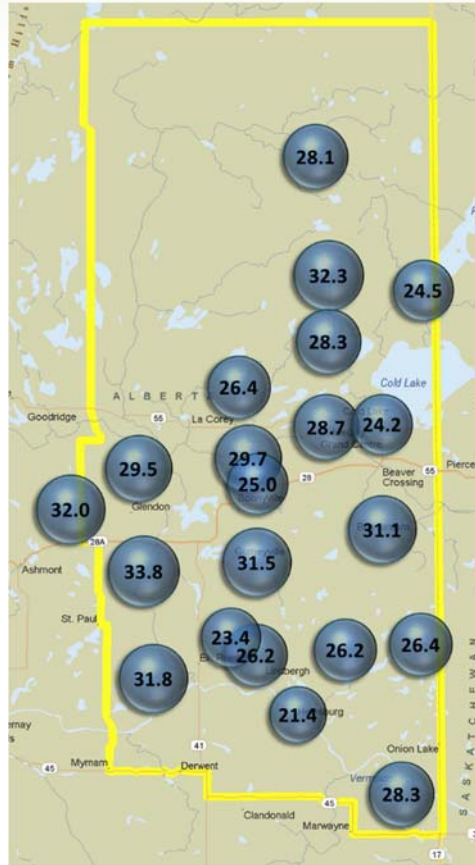
Nitrogen Dioxide



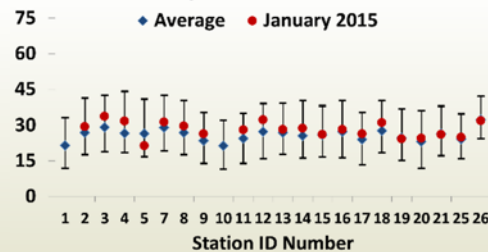
Minimum-Maximum-Average (ppb)
Monthly Nitrogen Dioxide: 2011 - 2014



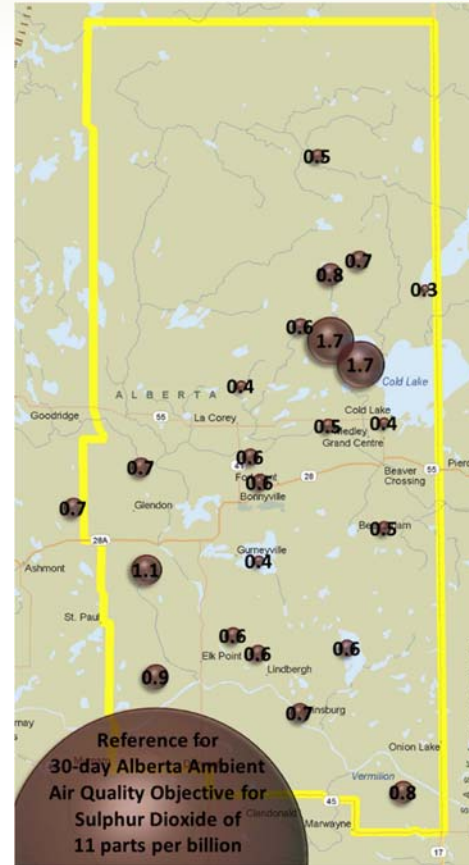
Ozone



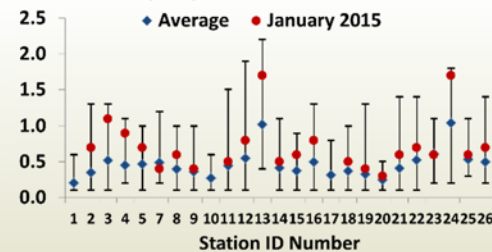
Minimum-Maximum-Average (ppb)
Monthly Ozone: 2011 - 2014



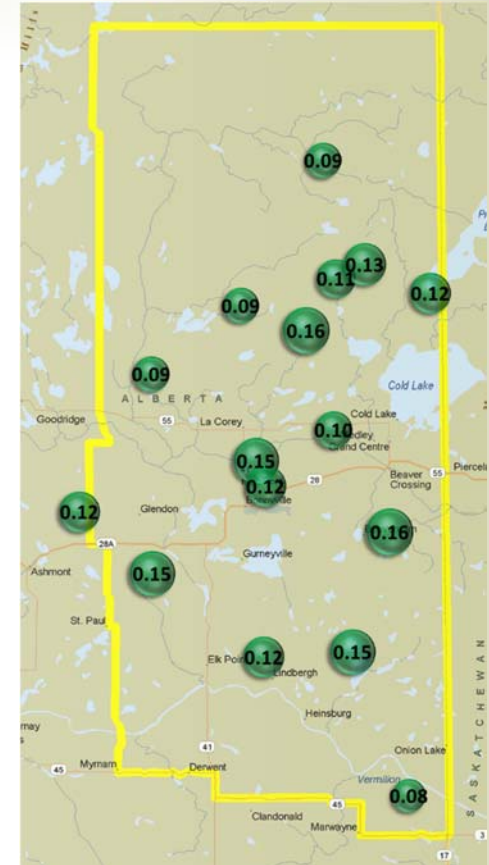
Sulphur Dioxide



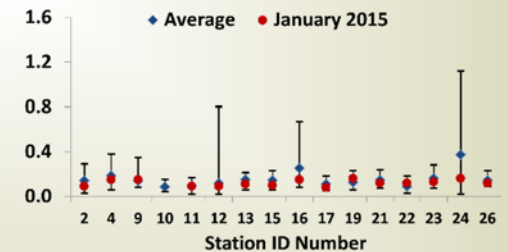
Minimum-Maximum-Average (ppb)
Monthly Sulphur Dioxide: 2011 - 2014



Hydrogen Sulphide

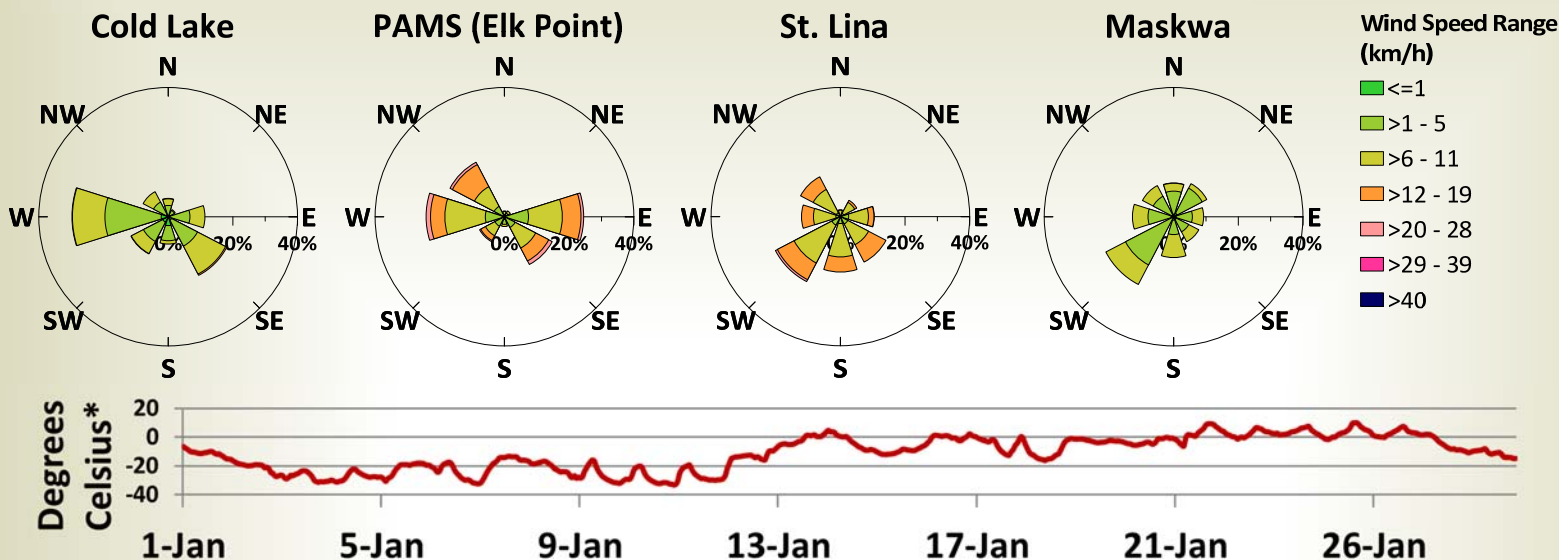


Minimum-Maximum-Average (ppb)
Monthly Hydrogen Sulphide: 2011 - 2014



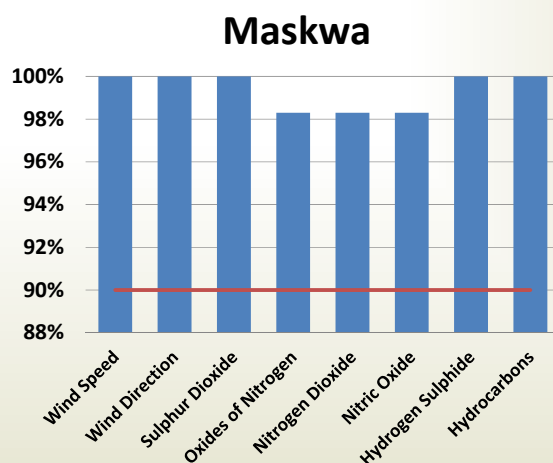
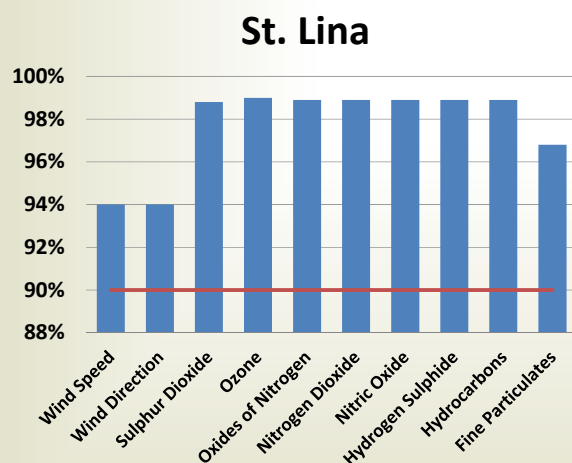
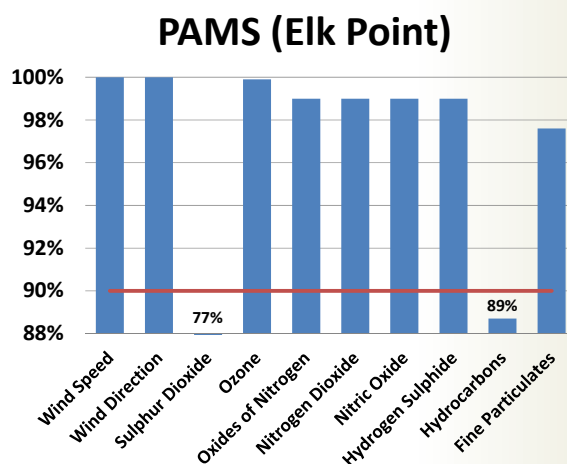
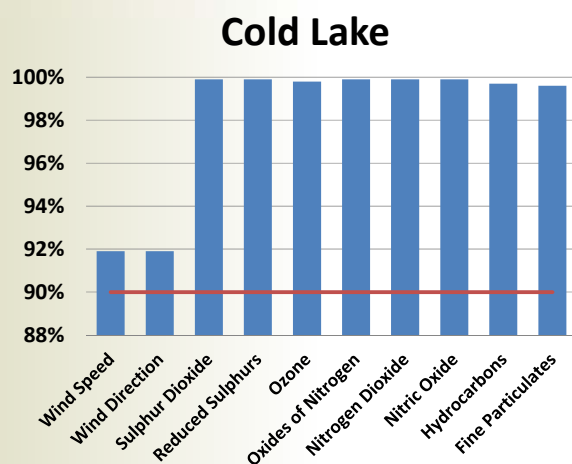
Wind Speed, Wind Direction, Temperature

January
2015



* Temperature in Cold Lake

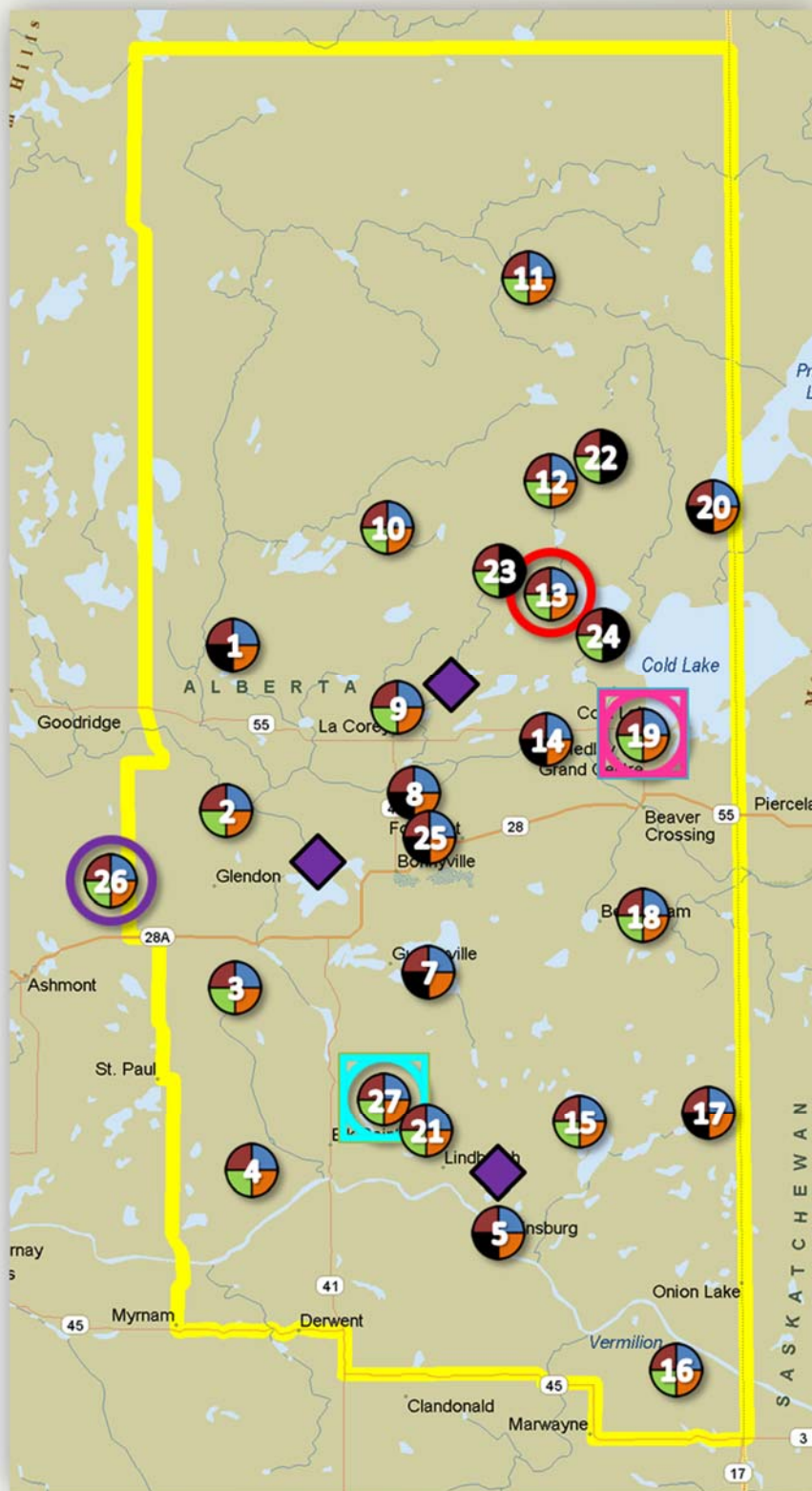
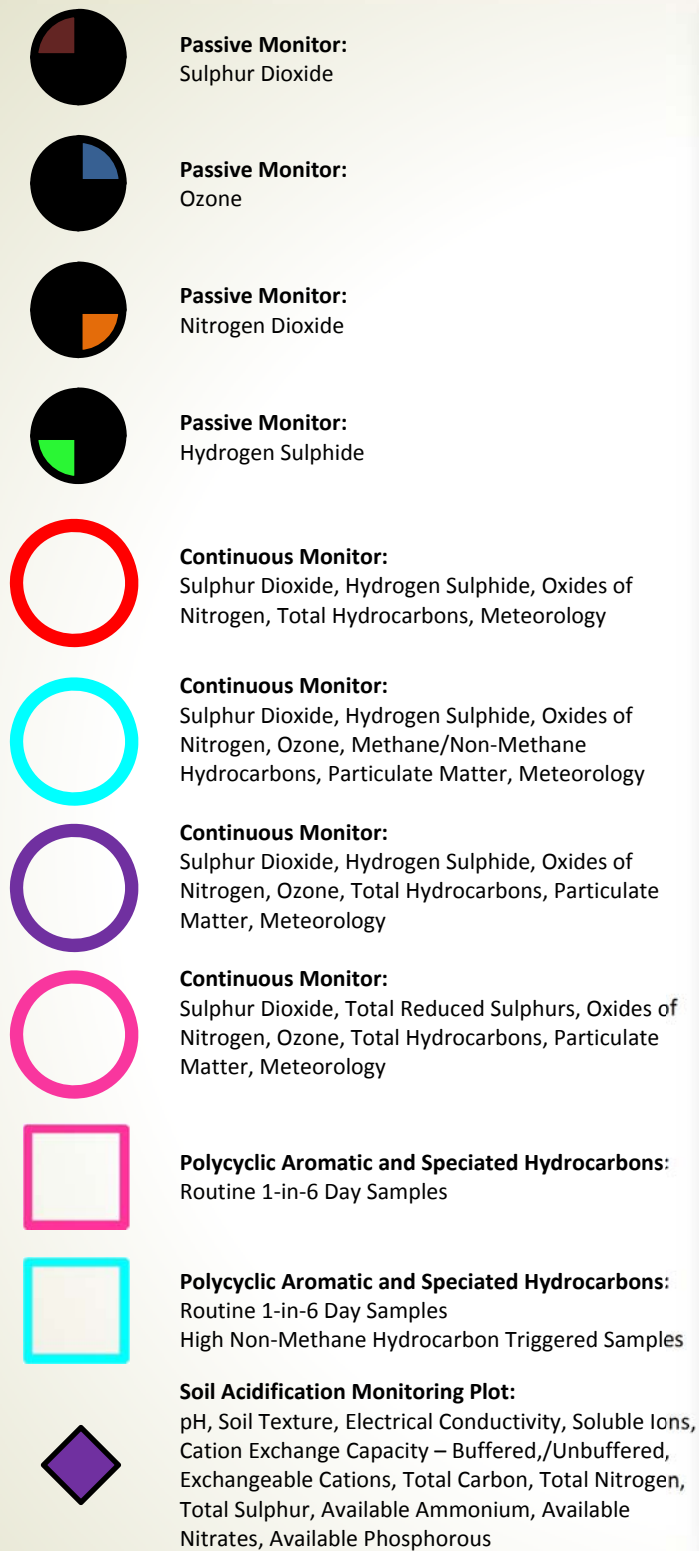
Operational Uptime



Notes on instrument uptime: The Alberta Air Monitoring Directive (1989) requires that real time instrumentation must be operational at least 90% of the time on a monthly basis (indicated by the red line on the above charts). Following a power failure, the PAMS's sulphur dioxide analyzer was unstable and the flame ionization detector (FID) in the hydrocarbon analyzer 'flamed out'. Once servicing of the sulphur dioxide analyzer and relighting of the FID were complete, the analyzers were brought back online however approximately 80 hours of data were invalidated for both instruments due to this the power failure event. Reference #294885.

Regional Monitoring Network Map

January
2015



Station Identification

1 Sand River	9 La Corey	16 Clear Range	23 Mahihkan
2 Therien	10 Wolf Lake	17 Fishing Lake	24 Hilda Lake
3 Flat Lake	11 Foster Creek	18 Beaverdam	25 Town of Bonnyville
4 Lake Eliza	12 Primrose	19 Cold Lake South	26 St. Lina
5 Telegraph Creek	13 Maskwa	20 Medley-Martineau	27 Portable Station
7 Muriel-Kehewin	14 Ardmore	21 Fort George	
8 Dupre	15 Frog Lake	22 Burnt Lake	