August 2012

Air Quality Monitoring Dashboard Report

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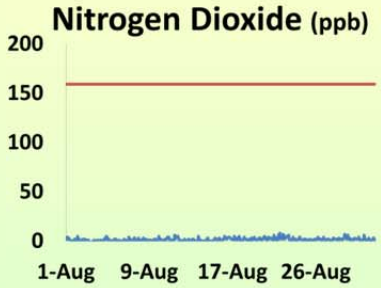
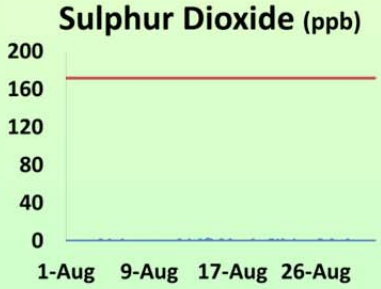
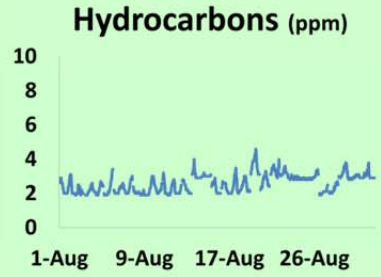
Continuous Monitoring Stations

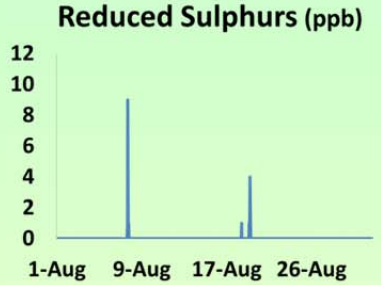
August 2012

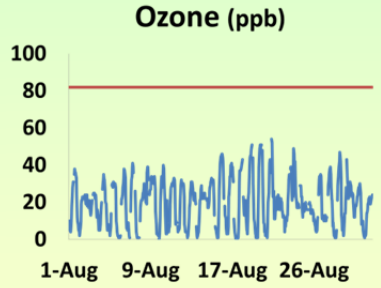
Cold Lake

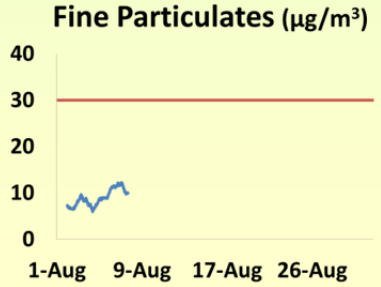




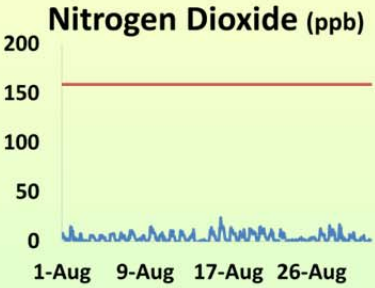


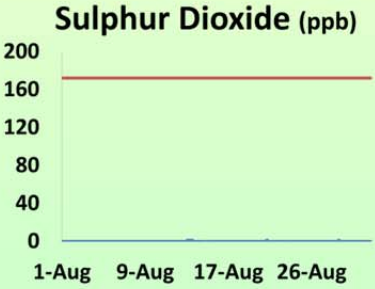


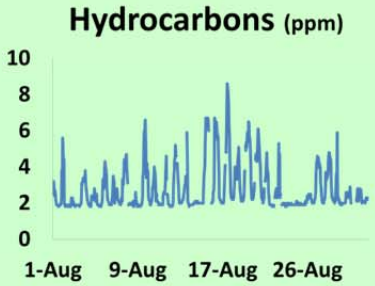


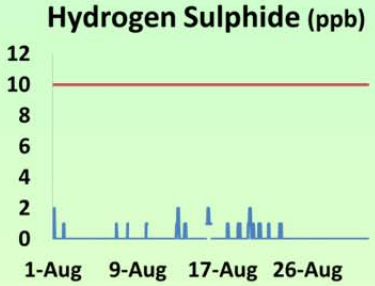


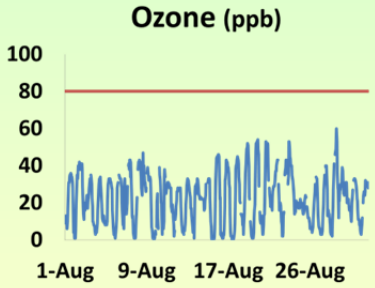
Portable*

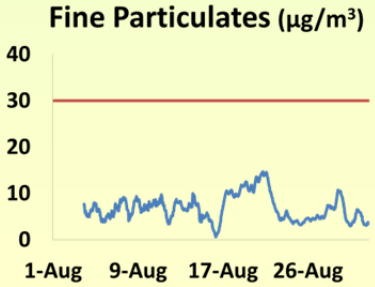




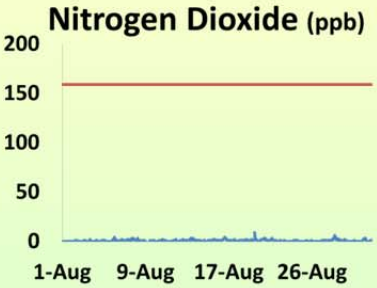


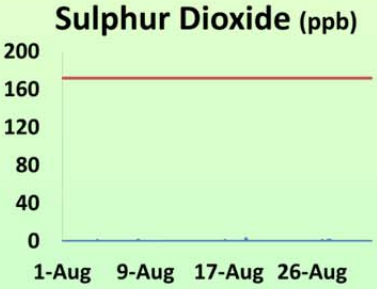


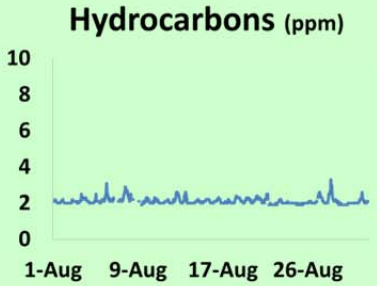


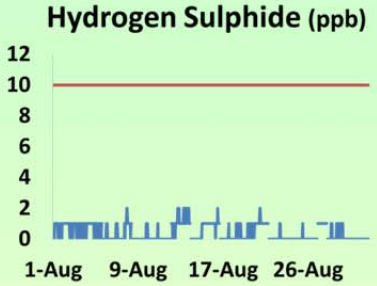


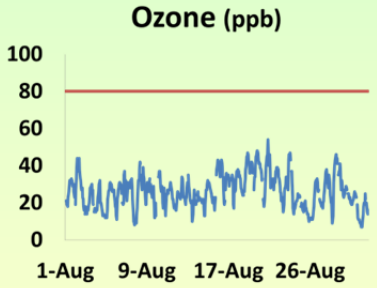
St. Lina

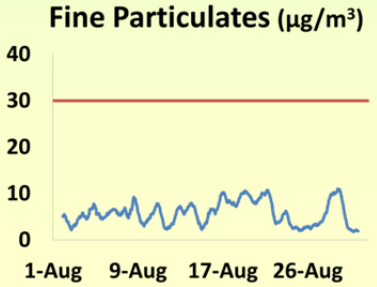




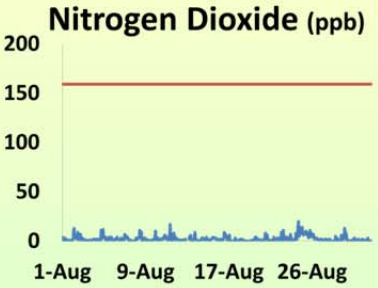


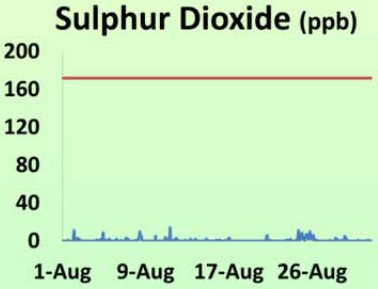


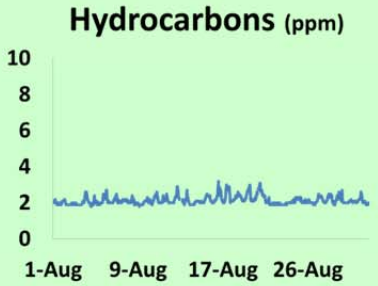


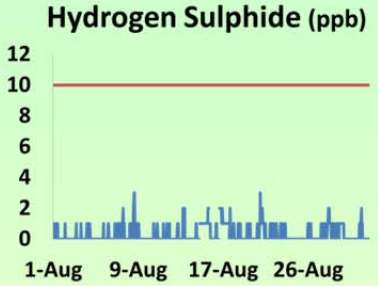


Maskwa









Notable observations for Aug 2012:

- Air quality was rated as "Good" over 90% 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 established for the respective
- An equipment problem identified during a third-party audit at the Cold Lake Station resulted in invalidating particulate matter data. To read more about the problem and how LICA addressed the issue, read the audit report found here.

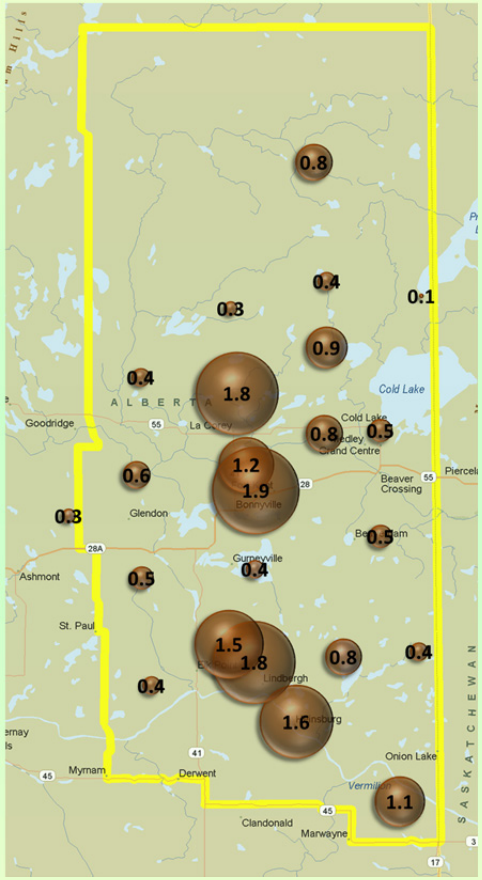
*** Located at the Elk Point Airport.**

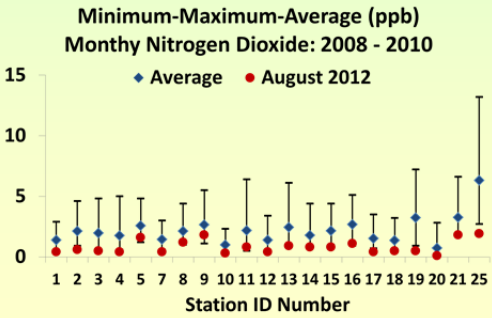
Passive Monitoring Stations

August 2012

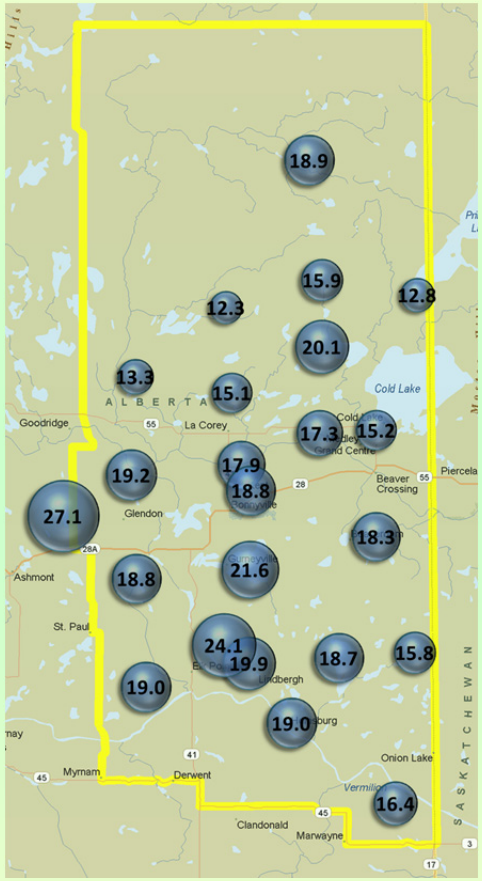
To illustrate the spatial patterns of the parameters monitored in the LICA passive monitoring network, this series of bubble maps present monthly average concentrations in parts per billion (ppb).

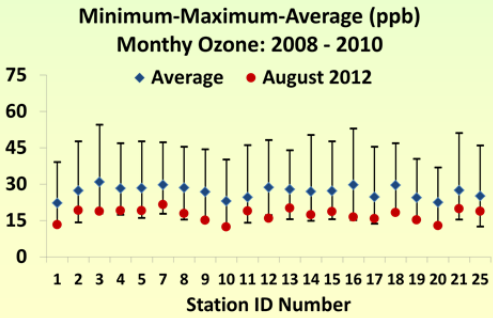
Nitrogen Dioxide



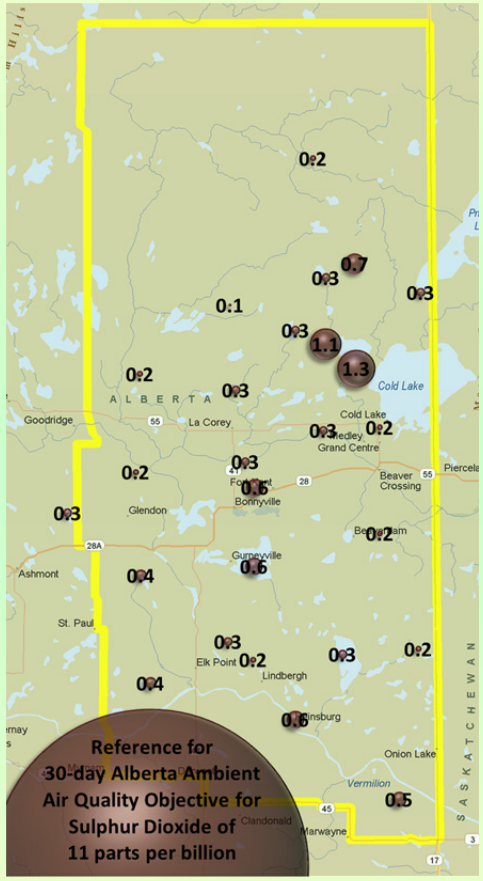


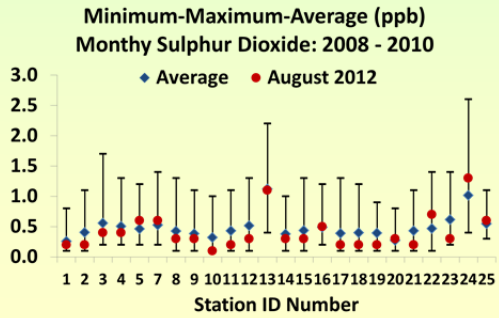
Ozone



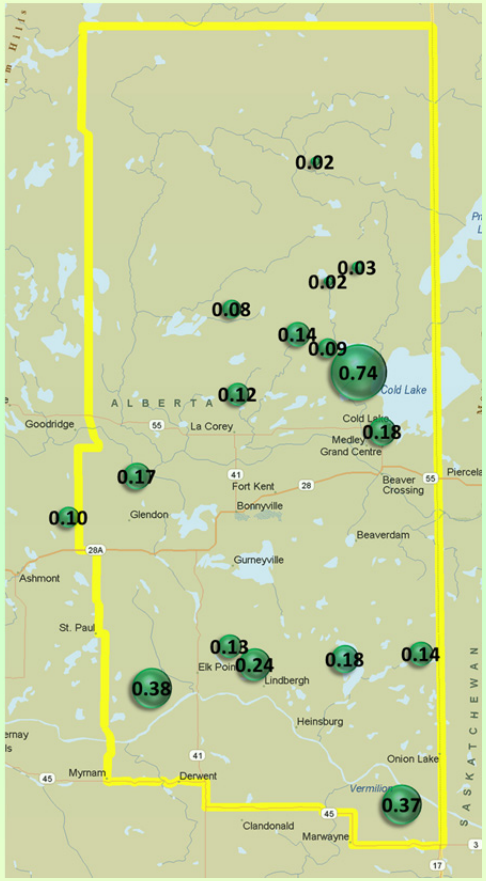


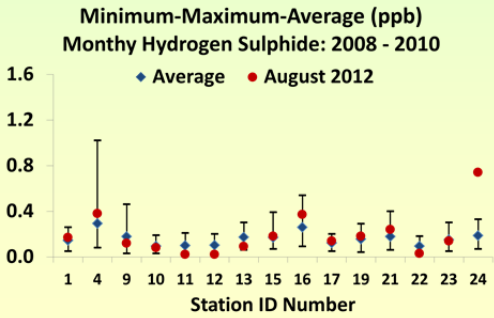
Sulphur Dioxide



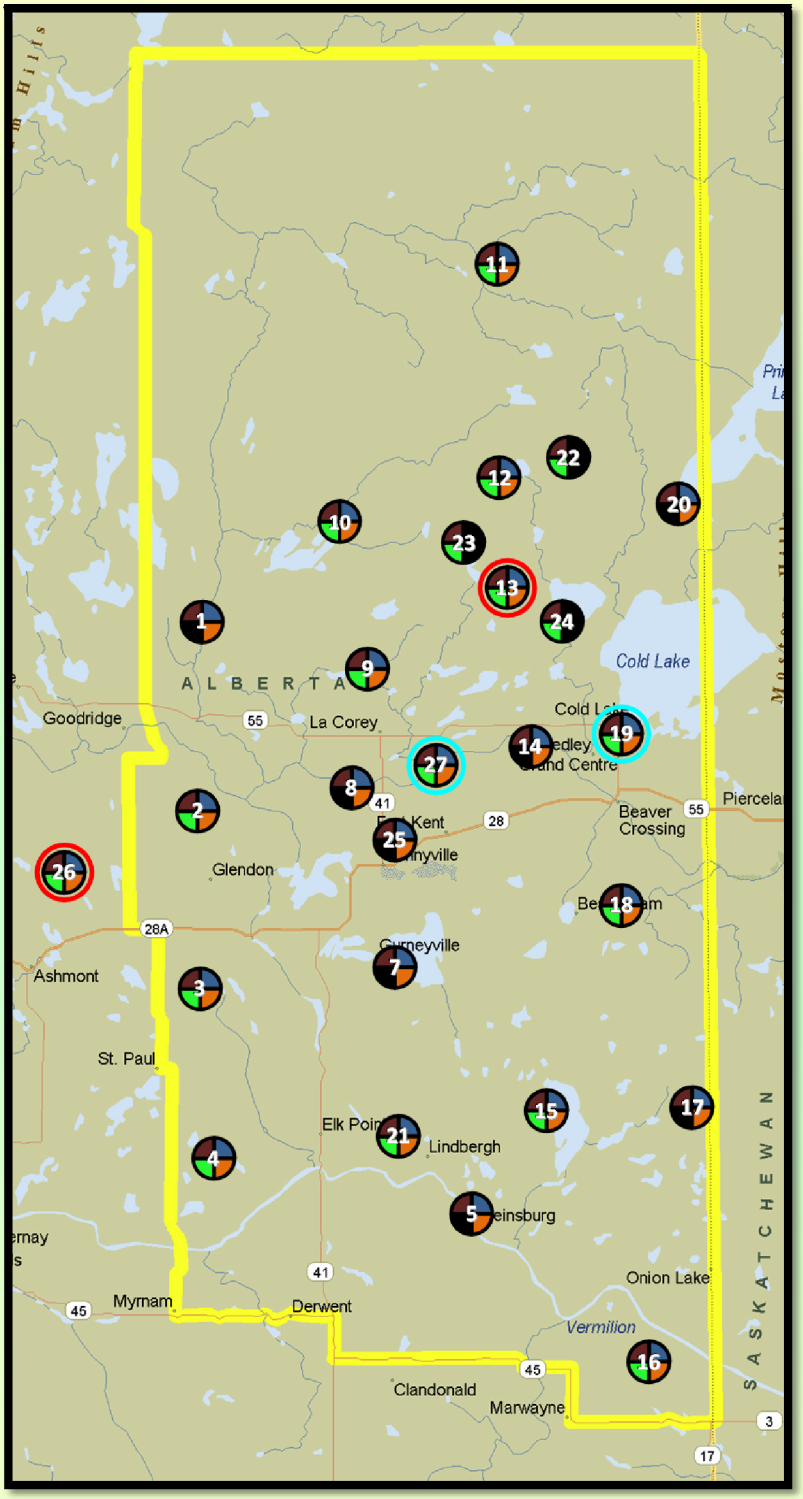


Hydrogen Sulphide





Monitoring Network Map



Understanding the Monitoring Network

The ***passive monitoring stations*** generally follow a 3 x 3 township grid pattern throughout the region and samples are analyzed once per month. The data collected from the passive stations are used for regional air quality pattern recognition and long term trend analyses for ozone, nitrogen dioxide, sulphur dioxide, and hydrogen sulphide.

The ***continuous monitoring stations*** provide up-to-the-minute (nearly instantaneous) measurements of ambient concentrations for several substances. Continuous sampling involves drawing air through an analyzer calibrated to produce an output that is proportional to the ambient concentration.

Legend

Passive Monitor:
Sulphur Dioxide

Passive Monitor:
Ozone

Passive Monitor:
Nitrogen Dioxide

Passive Monitor:
Hydrogen Sulphide

Continuous Monitor:
Sulphur Dioxide, Hydrogen Sulphide, Oxides of Nitrogen, Total Hydrocarbons, Meteorology

Continuous Monitor:
Sulphur Dioxide, Total Reduced Sulphurs, Oxides of Nitrogen, Ozone, Total Hydrocarbons, Particulate Matter, Polycyclic Aromatic Hydrocarbons, Volatile Organic Compounds, Meteorology

Station Identification *(click on station name to view in Google Maps)*

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