



Hydrocarbon and Salt-Impacted Sites

As one of Canada's most complete analytical chemistry laboratories, SRC Environmental Analytical Laboratories offers environmental test services and expertise in organics, inorganics and radiochemistry.

Our team of chemists and technologists are available to provide fast and reliable solutions to analytical problems. We can also provide information on how to prepare and handle samples and supply sample containers and preservatives free of charge.

› Salinity Package

Drilling operations can lead to contaminated soils with high concentrations of salts that hinder vegetation growth. Our salinity package can help assess the extent of any such impacts. Related parameters can be added to the package to assess the Cation Exchange Capacity (CEC) and various nutrient concentrations to provide an indication of the overall soil fertility.

- ▶ Basic Salinity Package I
 - Includes pH, Conductivity (Electrical Conductivity (EC) or Specific Conductivity), Sodium Absorption Ratio (SAR), % Saturation, Calcium, Magnesium, Sodium, Potassium, Sulfate, Chloride, Theoretical Gypsum Rate (TGR)
- ▶ Additional Parameters
 - Includes CEC, Available Phosphorous, Nitrates, Ammonia, Total Nitrogen, Available Sulfur, Alkalinity (Carbonate and Bicarbonate)

› Total Petroleum Hydrocarbons by Canada Wide Standard (CWS)

The Canadian Council of Ministers of the Environment (CCME) CWS has been the accepted method for determining petroleum hydrocarbons in Canada for many years. SRC Environmental Analytical Laboratories has been accredited for this method since its inception. This robust, prescriptive method provides results for:

- ▶ Benzene, Toluene, Ethylbenzene, Xylene (BTEX) and Petroleum Fractions F1, F2, F3, F4 and if necessary, F4G.

Sample collection for the volatile fractions should be done with specialized samplers, such as Terra Core samplers, with the sample stored in a vial of methanol preservative.

› Metals in Soil

Trace metals in soil can give information about the suitability of different soils for various purposes. Concentration limits for several different metals are listed in the *CCME Soil Quality Guidelines for the Protection of Environmental and Human Health*.

- ▶ Includes Aluminum, Antimony, Arsenic, Boron, Barium, Beryllium, Calcium, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Phosphorous, Potassium, Selenium, Sodium, Silver, Strontium, Thallium, Tin, Titanium, Uranium, Vanadium, Zinc
- ▶ Boron can also be determined from a *Hot Water Soluble* extract or a *Saturated Paste* extract, which may be more suitable for certain applications.

› Class II Landfill Package

Most landfills require material analysis before accepting wastes for disposal. Common parameters required in Saskatchewan are covered in our Class II Landfill Package.

- ▶ Includes Leachable Benzene, Toluene, Ethylbenzene, Xylene (BTEX), Leachable Metals, pH, Flashpoint, Paint Filter Liquids test

› Our Advantage

Reliable Service

- ▶ Direct contact with experts and lab supervisors
- ▶ Fast turnaround time

No Hidden Fees

- ▶ No extra costs for sampling supplies
- ▶ No extra costs for sample handling, storage or disposal

Quality at Every Stage

- ▶ Technical experts with decades of experience
- ▶ Comprehensive Quality Control and Quality Assurance Program
- ▶ Accredited by CALA to ISO/IEC 17025