

Soil Quality Database

The ministry has over several years collected background soil quality data for selected metals from all of its administrative regions. This data has been used in the adjustment of contaminated site soil quality standards in the Contaminated Sites Regulation, and in the calculation of regional background soil quality estimates for use under the Regulation.

Further information regarding how these background estimates may be used can be found in [Protocol 4, "Determining Background Soil Quality."](#)

The ministry has also undertaken additional background sampling in the Greater Vancouver area, in recognition of the highly active redevelopment of commercial and industrial property there.

What information does the database contain?

The ministry's background soil quality database contains the following information:

- detailed information on background sampling site locations;
- background site and soil descriptions for each site;
- bulk density and particle size analysis;
- detailed analytical chemistry data;
- statistical site summary for metals; and
- references.

In addition, the database provides specific background soil data for each region, including:

- soil sample nitric perchloric digestion analytical results for metals;
- soil sample analytical results for miscellaneous parameters (e.g., pH, conductance, chloride, fluoride, phosphate, sulfate, organic carbon, nitrates, and nitrogen);
- soil sample aqua regia digestion analytical results for metals (including statistical distribution characteristics, particle size and distribution, and organic content);
- soil sample analytical results for organic analyses of pesticides, herbicides, polycyclic aromatic hydrocarbons, and chlorinated phenols; and
- a regional statistical summary for metals.

The database also contains:

- results of statistical tests for equivalency of nitric perchloric and aqua regia regional means for metals; and
- descriptive information relating to the ministry's background soil quality sites.

Table 1 below summarizes the types of information available for each ministry region, including detailed reports produced for the ministry by Soilcon Laboratories Ltd.

Table 1. Types of Regional Background Soil Quality Information Available (# = ministry region number)

File Name	Worksheet name	Description
Metal-#.xls	Nitric-P	soil sample nitric perchloric digestion analytical results for metals
	Misc-#	soil sample analytical results for miscellaneous parameters
	Aqua-Regia	soil sample aqua regia digestion analytical results for metals
	P-size	statistical distribution characteristics
	Texture	soil texture
Organic-#.xls	Original	soil sample analytical results for organic analyses
	PAH	polycyclic aromatic hydrocarbons analyses
	Pest	pesticides and herbicides analyses
	Chloro	chlorinated phenols analyses
t-test-region name.xls		t-test and other statistics for aqua regia results
Region name.doc		background soil quality report by consultant
Metals-stat#.xls		simple statistics for aqua regia results

How do I find the soil quality information I need for a specific ministry region?

Click on the ministry region of interest below:

- [Cariboo](#)
- [Kootenay](#)
- [Lower Mainland](#)
- [Omineca-Peace](#)
- [Skeena](#)
- [Southern Interior](#)
- [Vancouver Island](#)
- [Vancouver](#)

For more information, contact the Land Remediation Section at site@gov.bc.ca