



Northern Analytical Laboratory Services (NALS)

Soils Analysis Package

Date: January 2022

Contact Information

Northern Analytical Laboratory Services (NALS); University of Northern British Columbia (UNBC), 3333
University Way, Prince George, BC, Canada V2N 4Z9

Phone: 250-960-5713

E-mail: nals@unbc.ca

Home page: <http://www.unbc.ca/northern-analytical-lab-service>

NALS directions on Google maps at: <https://goo.gl/mun6v1>

Physical Tests	Units
pH ^a	
Electrical Conductivity ^a	µS/cm
Moisture Content	%
Organic Matter Content ^b	%

Anions	Units
Phosphorus ^c	mg/kg
Sulphate ^c	mg/kg
Nitrate ^c	mg/kg
Nitrite ^c	mg/kg

Effective Cation Exchange Capacity ^d	meq/100g
Percent Base Saturation	Units
Aluminum	%
Calcium	%
Magnesium	%
Potassium	%
Sodium	%

Total Metals^e	Units	Reportable Limit^f
Aluminum	mg/kg	10
Boron	mg/kg	1
Calcium	mg/kg	3
Chromium	mg/kg	0.23
Copper	mg/kg	1
Iron	mg/kg	3
Potassium	mg/kg	2
Magnesium	mg/kg	1
Manganese	mg/kg	1
Sodium	mg/kg	1
Phosphorus	mg/kg	8.3
Sulphur	mg/kg	15
Zinc	mg/kg	1

Total Elemental^g	Units	Reportable Limit^f
Total Carbon	%	<1%
Total Nitrogen	%	<1%

Notes:

- a. Water to soil solution 2:1 (highly organic soils 4:1).
- b. Muffle furnace determination according to loss on ignition.
- c. Liquid: Solid 10:1 extraction followed by ion chromatography (modified EPA300.0).
- d. Ammonium acetate extraction.
- e. Block digestion with concentration nitric acid and hydrochloric acid.
- f. Detection limits have the potential to change, and will be updated accordingly.
- g. Combustion by elemental analyzer.
- h. For testing other parameters of your soil samples that are not included in this package, or if you need to discuss your specific analytical needs, please contact NALS.
- i. Please contact NALS regarding sample size required for analysis.

Service Disclaimer

Please be informed that not all the Northern Analytical Lab Services (NALS) testing services are certified by an external body. Its testing packages and any associated analyses are not offered as commercial services. NALS at UNBC is a community resource and has developed its services in order to help local communities who do not have access to other testing facilities in their region. Acceptance of samples for analysis does not guarantee service. At any time NALS may request further sample(s) to be resubmitted on an as-needed basis for completion of any requested services. Any such costs associated with re-sampling are not the responsibility of NALS and are assumed by the client. Data in any report prepared by NALS refers strictly to the supplied sample(s) at the time and place of testing without reference to any other matter. All such data will be regarded as confidential but specific data security requirements are the responsibility of the client. Clients retain responsibility for all oversight of sampling procedures not performed by NALS. NALS is not responsible for losses or damage incurred by use of its services, including but not limited to loss or damage of supplied sample(s). Editing of this report is not permissible and client assumes all responsibility for conveyance of data outside of this report. The results in this report relates only to the items, calibrated or sampled as specified in this report. All revised reports will supersede all prior reports.

Single Sample Pricing for Soils Package.

A. Physical Tests: \$100.00/sample	SLD_PKG_A
B. Total Metals: (13 elements): \$100.00/sample	SLD_PKG_B
C. Anions: \$100.00/sample	SLD_PKG_C
D. Effective Cation Exchange Capacity and Percent Base Saturation: \$100.00/sample	SLD_PKG_D
E. Total Elemental: \$35.00/sample	SLD_PKG_E
F. Full Package: \$300.00/sample	SLD_PKG_F

* All samples are subject to a sample handling/admin fee of 6% or \$5.00 minimum which is not included in the package price.

Ship your sample to:

Attn: Hossein Kazemian, Northern Analytical Laboratory Services (NALS); University of Northern British Columbia (UNBC), 3333 University Way, Prince George, BC, Canada V2N 4Z9

You can also drop your sample at the lab - UNBC Prince George Campus - Room # 4-234