



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY CANADA INC.

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CHEMICAL

Valid To: January 31, 2028

Certificate Number: 6206.04

In recognition of the successful completion of the A2LA evaluation process accreditation is granted to this laboratory to perform the following chemical tests identified on the analytes noted below:

**Soil:**

<b><u>Analytes</u></b>	<b><u>Test Method(s)</u></b>	<b><u>Reference Method(s)</u></b>
Barium in Soil by ICP-MS  Extractable Barium	TM DW 007-93	Alberta Environment Soil Remediation Guidelines for Barite (Modified)  B.C. Environmental Lab Manual Soluble Barium by Calcium Chloride Extraction – Prescriptive
BTEX/VPH – Soil, Water and Solids by GC FID/MSD Benzene Ethylbenzene m/p - Xylene Methyl tert butyl ether (MTBE) o - Xylene Styrene Toluene Volatile Hydrocarbons (C6-C10) Volatile Petroleum Hydrocarbons (C6-C10 - BTEX)	TM BTX 005-93	B.C. Environmental Lab Manual, Volatile Hydrocarbons in Solids (Modified)
Extractable Petroleum Hydrocarbons in Soil and Water by GC FID EPH 10-19 EPH 19-32	TM EPH 004-93	BC Environmental Lab Manual, Extractable Petroleum Hydrocarbons in Solids (Modified)
Metals in Solids by ICP-MS Aluminum Antimony Arsenic Barium Beryllium	TM MET 001-93	B.C. Environmental Lab Manual Strong Acid Leachable Metals (SALM) in Soil – Prescriptive

<b>Analytes</b>	<b>Test Method(s)</b>	<b>Reference Method(s)</b>
Metals in Solids by ICP-MS (cont.) Boron Cadmium Chromium Cobalt Copper Iron Lead Lithium Manganese Mercury Molybdenum Nickel Selenium Silver Strontium Thallium Tin Tungsten Uranium Vanadium Zinc Boron, Hot Water Soluble	TM MET 001-93	B.C. Environmental Lab Manual Strong Acid Leachable Metals (SALM) in Soil – Prescriptive  B.C. Environmental Lab Manual Boron, Hot Water Soluble (Prescriptive)
Non-metals in Water Soil and Solids by Spectrophotometer Ammonia Chloride	TM INORG 001-93	HACH Method 10031(Modified)  APHA 4500-Cl E (Modified)
pH and Electrical Conductivity in Extracts EC pH	TM INORG 003-93	B.C. Environmental Lab Manual MSS 4.12, MSS 4.13, MSS 3.11 (Modified)
Polycyclic Aromatic Hydrocarbons in Soil and Water by GC MSD 1-Methylnaphthalene 2-Methylnaphthalene Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (b+j) fluoranthene Benzo (g,h,i) perylene Benzo (j) fluoranthene Benzo (k) fluoranthene Chrysene Dibenzo (a,h) anthracene	TM PAH 004-93	B.C. Environmental Lab Manual, PAH Solids (Modified)

<b>Analytes</b>	<b>Test Method(s)</b>	<b>Reference Method(s)</b>
Polycyclic Aromatic Hydrocarbons in Soil and Water by GC MSD (cont.) Fluoranthene Fluorene Indeno (1,2,3-cd) pyrene Naphthalene Phenanthrene Pyrene Quinoline	TM PAH 004-93	B.C. Environmental Lab Manual, PAH Solids (Modified)
Salinity, pH and EC in Water and in Soil & Waste by Saturated Paste Calcium EC Magnesium Percent Saturation pH Potassium SAR Sodium Sulfate	TM DW 004-93	SSMA Ch 15, B.C. Environmental Lab Manual (Modified)

**Waste:**

<b>Analytes</b>	<b>Test Method(s)</b>	<b>Reference Method(s)</b>
BTEX/VPH – Soil, Water and Solids by GC FID/MSD Benzene Ethylbenzene m/p-xylene o-xylene Toluene	TM BTX 005-93	B.C. Environmental Lab Manual, Volatile Hydrocarbons in Solids (Modified)  EPA 1311 Toxicity Characteristic Leachate Procedure  EPA 1311 Toxicity Characteristic Leachate Procedure (Modified)
Bulk Density and Specific Gravity in Drilling Waste and Soil Bulk Density Specific Gravity	TM DW 001-93	American Society of Agronomy No.9. Method 13-2, AER Directive 050, SSMA 57.1 (Modified)
Flash Point in Liquid and Soil by Pensky-Martens Closed Cup Tester Flash Point	TM LAND 007-93	ASTM D93 (Modified)
Fluoride in Soil and Solid Waste Extract Fluoride	TM LAND 003-93	APHA 4500-F- C
Metals by ICP-MS as prepared by SWEP Arsenic Barium Boron Cadmium Chromium	TM LAND 012-93	Environmental Management Act, Hazardous Waste Regulation Reg 63/88 Modified Leachate Extraction Procedure (Modified)

<b>Analytes</b>	<b>Test Method(s)</b>	<b>Reference Method(s)</b>
Metals by ICP-MS as prepared by SWEP (cont.) Copper Lead Mercury Selenium Silver Uranium Zinc	TM LAND 012-93	Environmental Management Act, Hazardous Waste Regulation Reg 63/88 Modified Leachate Extraction Procedure (Modified)
Metals by ICP-MS as Prepared by TCLP in Liquid, Solid and Waste Samples Antimony Arsenic Barium Beryllium Boron Cadmium Chromium Cobalt Copper Iron Lead Mercury Nickel Selenium Silver Thallium Uranium Vanadium Zinc Zirconium	TM LAND 013-93	EPA 1311 Toxicity Characteristic Leachate Procedure  EPA 1311 Toxicity Characteristic Leachate Procedure (Modified)
Non-metals in Water Soil and Solids by Spectrophotometer Cyanide Nitrate + Nitrite	TM INORG 001-93	HACH Method 8027(Modified)  HACH Method 10020, 8153 (Modified)
Paint Filter Test Free Liquids - Waste	TM LAND 009-93	EPA 9095B (Modified)
pH and Electrical Conductivity in Extracts pH	TM INORG 003-93	MSS 4.12, B.C. Environmental Lab Manual (Modified)
Special Waste Oil Determination by Petroleum Ether Extraction (cont.) Oil and Grease Dried Basis Oil as Received	TM LAND 011-93	B.C. Environmental Lab Manual Determination of Waste Oil Content (Modified)

**Water:**

<b>Analytes</b>	<b>Test Method(s)</b>	<b>Reference Method(s)</b>
BTEX/VPH – Soil, Water and Solids by GC FID/MSD Benzene Ethylbenzene m/p - Xylene Methyl tert butyl Ether (MTBE) o - Xylene Styrene Toluene Volatile Hydrocarbons (C6-C10) Volatile Petroleum Hydrocarbons (C6-C10 - BTEX)	TM BTX 005-93	B.C. Environmental Lab Manual Volatile Hydrocarbons in Water (Modified)
Extractable Petroleum Hydrocarbons in Soil and Water by GC FID EPH 10-19 EPH 19-32	TM EPH 004-93	BC Environmental Lab Manual, Extractable Petroleum Hydrocarbons in Water (Modified)
Non-metals in Water Soil and Solids by Spectrophotometer Ammonia Chloride	TM INORG 001-93	HACH Method 10031 (Modified)  APHA 4500-Cl E (Modified)
pH and Electrical Conductivity in Water and Soil EC pH	TM INORG 003-93	APHA 4500-H+ B (Modified)  APHA 2510 B (Modified)
Polycyclic Aromatic Hydrocarbons in Soil and Water by GC MS 1-Methylnaphthalene 2-Methylnaphthalene Acenaphthalene Acenaphthylene Acridine Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo(b+j) fluoranthene Benzo (g,h,i) perylene Benzo (j) fluoranthene Benzo (k) fluoranthene Chrysene Dibenzo (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3 - cd) pyrene Naphthalene Phenanthrene Pyrene Quinoline	TM PAH 004-93	B.C. Environmental Lab Manual, PAH in Water (Modified)

<b><u>Analytes</u></b>	<b><u>Test Method(s)</u></b>	<b><u>Reference Method(s)</u></b>
Salinity, pH, and EC in Water and in Soil & Waste by Saturated Paste Calcium Hardness Magnesium Potassium SAR Sodium Sulfate	TM DW 004-93	EPA 3005A (Modified)

**Notes:**

**AER:** Alberta Energy Regulator

**APHA:** American Public Health Association (Standard Methods for the Examination of Water & Wastewater)

**ASTM:** American Society for Testing and Materials

**EPA:** Environmental Protection Agency

**MSS:** Manual on Soil Sampling and Methods of Analysis - J.A. McKeague, 1978

**SSMA:** Soil Sampling and Methods of Analysis, Martin R. Carter, 2008



## Accredited Laboratory

A2LA has accredited

**ELEMENT MATERIALS TECHNOLOGY CANADA INC.**

*Fort St. John, British Columbia, CANADA*

for technical competence in the field of

**Chemical Testing**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 3<sup>rd</sup> day of November 2025.

A blue ink signature of Mr. Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 6206.04  
Valid to January 31, 2028

*For the tests to which this accreditation applies, please refer to the laboratory's Chemical Scope of Accreditation.*