



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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CHEMICAL

Valid To: January 31, 2028

Certificate Number: 6206.02

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 noted analytes below:

<u>Analyte</u>	<u>Test Method</u>	<u>Reference Method(s)</u>
Polychlorinated Biphenyls (PCBs) in Oil, Soil and Water by GC/ECD Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Aroclor 1262 Aroclor 1268 Total PCB	TM PCB 004-50	EPA 3510/3540/3580/8082 Modified
Simulated Distillation in Crude Oil by High Temperature Gas Chromatography	TM OIL 001-50	ASTM D7169 Modified

Analyte	Test Method	Reference Method(s)
Acid Herbicides in Soil and Water by HPLC/MSD Bromoxynil Clopyralid Dicamba 2,4-Dichlorophenoxyacetic acid (2,4-D) 2,4-Dichlorophenoxybutyric acid (2,4-DB) Dichloroprop Dinoseb Imazapyr MCPA MCPB Mecoprop (MCP) Picloram 2,4,5-Trichlorophenoxyacetic acid (2,4,5-T) 2,4,5-Trichlorophenoxypropionic acid (2,4,5-TP)	TM PEST 006-50	USGS O-2060-1 Modified EPA 3540/8321 Modified
Alcohols in Soil and Water by GC/FID 1-Butanol 2-Butanol Ethanol Methanol 2-Methyl-1-propanol (Isobutanol) 2-Methyl-2-propanol (tert-Butyl alcohol) 1-Pentanol (Pentanol) 1-Propanol (Propanol) 2-Propanol (Isopropanol)	TM ALC 001-50	EPA 8015 Modified
Volatile Hydrocarbons (VHs) in Soil and Water by Headspace GC/MS/FID Benzene F1: C6-C10 F2: C10-C16 (Water Only) Decane Ethylbenzene Hexane Methyl tert-butyl ether (MTBE) Styrene Toluene Volatile Petroleum Hydrocarbons (VPH) m- & p-Xylenes o-Xylene	TM BTX 005-50	EPA 5021/8260 Modified CCME-CWS-PHCS-TIER 1 Modified B.C Environmental Lab Manual, VOC Soil Modified B.C Environmental Lab Manual, VH Solids Modified B.C Environmental Lab Manual, VOC Water Modified B.C Environmental Lab Manual, VH Water Modified

Analyte	Test Method	Reference Method(s)
Chlorinated Phenolics (PCPs) in Soil and Water by GC/MS 4-Chloro-3-methylphenol 2-Chlorophenol 3-Chlorophenol 4-Chlorophenol 2,3-Dichlorophenol 2,4 & 2,5-Dichlorophenol 2,6-Dichlorophenol 3,4-Dichlorophenol 3,5-Dichlorophenol Pentachlorophenol 2,3,4,5-Tetrachlorophenol 2,3,4,6-Tetrachlorophenol 2,3,5,6-Tetrachlorophenol 2,3,4-Trichlorophenol 2,3,5-Trichlorophenol 2,4,5-Trichlorophenol 3,4,5-Trichlorophenol 2,3,6-Trichlorophenol 2,4,6-Trichlorophenol	TM PCP 003-50	EPA 1653/3510/3650/8041 Modified
Polynuclear Aromatic Hydrocarbons (PAHs) in Soil and Water by GC/MS Acenaphthene Acenaphthylene Acridine Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(j)fluoranthene Benzo(k)fluoranthene Chrysene Dibenzo(a,e)pyrene Dibenzo(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3-c,d)pyrene Naphthalene 1-Methylnaphthalene 2-Methylnaphthalene Phenanthrene Pyrene Quinoline	TM PAH 004-50	EPA 3510/3540/8270 Modified B.C Environmental Lab Manual, PAH Solids Modified B.C Environmental Lab Manual, PAH Water Modified
Alkylated Polynuclear Aromatic Hydrocarbons (alkPAHs) in Soil and Water by GC/MS/MS Acenaphthene Acenaphthylene	TM PAH 005-50	EPA 3510/3540/8270 Modified B.C Environmental Lab Manual, PAH Solids Modified B.C Environmental Lab Manual, PAH Water Modified

<u>Analyte</u>	<u>Test Method</u>	<u>Reference Method(s)</u>
Acridine Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(g,h,i)perylene Benzo(k)fluoranthene Benzo(b,j)fluoranthene Benzo(c)phenanthrene Benzo(e)pyrene Biphenyl C1-Acenaphthenes C1-Benzo(b,j,k)fluoranthenes / Benzo(a)pyrene C1-Biphenyls C1-Benzo(a)anthracenes / Chrysenes C1-Dibenzothiophenes C2-Fluorenes C2-Naphthalenes C2-Phenanthrenes / Anthracenes C2-Fluoranthenes / Pyrenes C3-Benzo(a)anthracenes / Chrysenes C3-Dibenzothiophenes C3-Fluorenes C3-Naphthalenes C3-Phenanthrenes / Anthracenes C3-Fluoranthenes / Pyrenes C4-Benzo(a)anthracenes / Chrysenes C4-Dibenzothiophenes C4-Naphthalenes C4-Phenanthrenes / Anthracenes Chrysene Dibenzo(a,h)anthracene Dibenzothiophene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene Indeno(1,2,3-cd)fluoranthene Naphthalene 1-Methylnaphthalene 2-Methylnaphthalene Perylene Phenanthrene Pyrene Quinoline Retene		

Analyte	Test Method	Reference Method(s)
Carbamates in Soil and Water by HPLC/MSD Aldicarb Bendiocarb Carbaryl Carbofuran Propoxur (Baygon)	TM PEST 007-50	EPA 8318 Modified
Extractable Hydrocarbons in Soil and Water by GC/FID Extractable Petroleum Hydrocarbons (EPH) C10-C19 Extractable Petroleum Hydrocarbons (EPH) C19-C32 F2: C10-C16 F3: C16-C34 F3+: C34+ F4: C34-C50 F4G: Gravimetric Heavy Hydrocarbons F4HTGC: C34+ Hydrocarbons (or >C34) Heavy Extractable Petroleum Hydrocarbons (HEPH) Light Extractable Petroleum Hydrocarbons (LEPH) SASK C11-C22 SASK C23-C60 SASK Total (C11-C60) TEH (C11-C40+)	TM CCME 004-50	CCME-CWS-PHCS-TIER 1 Modified EPA 3510 Modified B.C. Environmental Lab Manual, EPH Solids Modified B.C. Environmental Lab Manual, EPH Water Modified
Glycols in Soil and Water by HPLC/MSD Diethylene glycol Ethylene glycol Propylene glycol Tetraethylene glycol Triethylene glycol	TM GLY 001-50	EPA 8321 Modified
Pesticides in Soil and Water by GC/MSD <u>Neutral Herbicides</u> Alachlor Butylate Chloropropham (CIPC) Diclofop-methyl EPTC (Eptam) Hexazinone Metolachlor Metribuzin Prometon Prometryn Pronamide (Propyzamide)	TM PEST 012-50	EPA 8081 Modified EPA 8141 Modified

<u>Analyte</u>	<u>Test Method</u>	<u>Reference Method(s)</u>
Propazine Triallate Trifluralin <u>Organochlorine Pesticides</u> Aldrin alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) alpha-Chlordane gamma-Chlordane Chlorothalonil 2,4'-DDD 4,4'-DDD 2,4'-DDE 4,4'-DDE 2,4'-DDT 4,4'-DDT Dieldrin Endosulfan I Endosulfan II Endosulfan sulfate Endrin Heptachlor Heptachlor epoxide Hexachlorobenzene Methoxychlor Mirex cis-Permethrin trans-Permethrin Propachlor <u>Organophosphorus Pesticides</u> Azinphos-methyl Chlorpyrifos Diazinon Dimethoate Malathion Parathion Phorate Terbufos		
Sterilant Scan in Soil and Water by HPLC/MSD Atrazine Bromacil Cyanazine Desethylatrazine Desisopropylatrazine Didesalkylatrazine Diuron	TM PEST 004-50	EPA 8321 Modified AENV A119.0/USGS O-2060-1 Modified

<u>Analyte</u>	<u>Test Method</u>	<u>Reference Method(s)</u>
Linuron Metoxuron Simazine Tebuthiuron		
Alkanoamines and Sulfolane in Soil and Water by HPLC/MSD Diethanolamine Diisopropanolamine Ethanolamine Methyl-diethanolamine Sulfolane Triethanolamine	TM SULF 001-50	EPA 8321 Modified
Volatile Hydrocarbons (VHs) in Soil, Waste, and Water by Headspace GC/MS/FID Leachable Benzene Leachable Ethylbenzene Leachable Toluene Leachable Xylenes	TM BTX 005-50 WI TCLP 002-50	EPA 1311/8260 Modified
Volatile Organic Compounds (VOCs) in Soil, Waste, and Water by GC/MS Acetone (2-Propanone) Acetonitrile Acrylonitrile Allyl chloride Benzene Bromobenzene Bromochloromethane Bromodichloromethane Bromoform Bromomethane 1,3-Butadiene 2-Butanone (MEK) n-Butylbenzene sec-Butylbenzene tert-Butylbenzene Carbon disulfide Carbon tetrachloride Chlorobenzene Chlorodibromomethane (Dibromochloromethane) Chloroethane 2-Chloroethyl vinyl ether Chloroform (Trichloromethane) Chloromethane 1,2-Dibromo-3-chloropropane 1,2-Dibromoethane (Ethylene dibromide) Dibromomethane	TM VOC 003-50	EPA 5030/5035/8260 Modified

<u>Analyte</u>	<u>Test Method</u>	<u>Reference Method(s)</u>
cis-1,4-Dichloro-2-butene trans-1,4-Dichloro-2-butene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene (1,1-Dichloroethylene) cis-1,2-Dichloroethene (cis-1,2-Dichloroethylene) trans-1,2-Dichloroethene (trans-1,2-Dichloroethylene) Dichloromethane (Methylene chloride) 1,2-Dichloropropane 1,3-Dichloropropane 2,2-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Ethyl methacrylate Ethylbenzene Hexachlorobutadiene Hexachloroethane Iodomethane Isopropylbenzene p-Isopropyltoluene Methacrylonitrile Methyl methacrylate Methyl tertiary-butyl ether (MTBE) Methylcyclohexane Naphthalene Pentachloroethane Propionitrile Styrene Tetrachloroethene (Tetrachloroethylene) Toluene 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethene (Trichloroethylene) Trichlorofluoromethane 1,2,3-Trichloropropane Vinyl chloride m- & p-Xylenes o-Xylene		

Analyte	Test Method	Reference Method(s)
Glyphosates in Water by HPLC/MSD Glyphosate	TM PEST 011-50	EPA 8321 Modified
Acid-Extractable Organics (Naphthenic Acids) in Water by FTIR Naphthenic Acid	TM NAS 001-50	Scott et al. Chemosphere 73 (2008) 1258-1264/doi:10.1016/j.scitotenv.2010.08.013 Modified
Haloacetic Acids (HAAs) in Water by GC/ECD Bromochloroacetic Acid (BCAA) Dibromoacetic Acid (DBAA) Dichloroacetic Acid (DCAA) Monobromoacetic Acid (MBAA) Monochloroacetic Acid (MCAA) Trichloroacetic Acid (TCAA)	TM HAA 001-50	EPA 552.3
N-Nitrosodimethylamine (NDMA) in Water by GC/MS/MS N-Nitrosodimethylamine (NDMA)	TM NDMA 001-50	EPA 521.1 Modified

Key: **AENV:** Alberta Environment
ASTM: American Society for Testing and Materials
B.C. Environmental Lab Manual: British Columbia Environmental Laboratory Manual
CCME-CWS-PHCS Tier 1: Canadian Council of Ministers of the Environment, Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil - Tier 1
EPA: Environmental Protection Agency
USGS: United States Geological Survey
SciTotEnv: Science of the Total Environment



Accredited Laboratory

A2LA has accredited

ELEMENT MATERIALS TECHNOLOGY CANADA INC.

Calgary, Alberta, 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 2nd day of December 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 6206.02
Valid to January 31, 2028

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