



# CALA

Canadian Association for  
Laboratory Accreditation Inc.

## CALA Directory of Laboratories

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**Membership Number:** 2601  
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**Standard:** Conforms with requirements of ISO/IEC 17025  
**Clients Served:**  
**Revised On:** March 26, 2019  
**Valid To:** February 26, 2020

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### Scope of Accreditation

#### Solids

Waste Oil - Solids (176)  
CL-TM-1117; BC MOE LABORATORY MANUAL SECTION D  
GRAVIMETRIC - EXTRACTION  
Waste Oil Content

#### Solids (Inorganic)

Anions - Solids [Soil] (055)  
CL-TM-1024, NA-TM-1001; modified from EPA 300.1 (ANALYSIS) and SOIL SAMPLING & METHODS OF ANALYSIS, CARTER 18 (PREPARATION)  
IC-SATURATED PASTE  
Bromide  
Chloride  
Fluoride  
Nitrate-N  
Nitrite  
Sulphate

#### Solids (Inorganic)

Conductivity - Solids [Soil] (032)  
CL-TM-1024; modified from SOIL SAMPLING & METHODS OF ANALYSIS, CARTER 15  
METER - SAT. PASTE  
Conductivity

#### Solids (Inorganic)

Conductivity - Solids [Soil] (058)  
CL-TM-1023; modified from SOIL SAMPLING & METHODS OF ANALYSIS, CARTER 15  
METER - EXTRACTION  
Conductivity (1:2)  
Conductivity (1:9)

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**Solids (Inorganic)**

Flashpoint - Solids [Ash, Soil] (046)  
CL-TM-1018; modified from ASTM D93  
PENSKE-MARTINS CLOSED CUP  
Flashpoint

**Solids (Inorganic)**

Leachable Metals - Solids (174)  
NA-TM-1002, NA-TM-1700; modified from EPA 1311 (PREPARATION) and EPA 6020A (ANALYSIS)  
ICP/MS - TCLP  
Antimony  
Arsenic  
Barium  
Beryllium  
Boron  
Cadmium  
Calcium  
Chromium  
Cobalt  
Copper  
Iron  
Lead  
Magnesium  
Manganese  
Molybdenum  
Nickel  
Selenium  
Silver  
Strontium  
Thallium  
Tin  
Uranium  
Vanadium  
Zinc

**Solids (Inorganic)**

Mercury - Solids [Soil] (158)  
NA-TM-1005, NA-TP-2012; modified from EPA 21631E  
COLD VAPOUR AA - DIGESTION  
Mercury

**Solids (Inorganic)**

Metals - Solids [Soil] (119)  
NA-TM-1002, NA-TP-2004; modified from EPA 200.2 and EPA 6020A  
ICP/MS - DIGESTION  
Aluminum  
Antimony  
Arsenic  
Barium  
Beryllium  
Bismuth  
Boron  
Cadmium  
Calcium  
Chromium  
Cobalt

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Copper  
Iron  
Lead  
Lithium  
Magnesium  
Manganese  
Molybdenum  
Nickel  
Phosphorus  
Potassium  
Selenium  
Silver  
Sodium  
Strontium  
Thallium  
Tin  
Titanium  
Uranium  
Vanadium  
Zinc  
Zirconium

**Solids (Inorganic)**

Moisture - Solids [Soil] (120)

NA-TM-1200; modified from CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD  
GRAVIMETRIC

Percent Moisture

**Solids (Inorganic)**

Oil and Grease - Solids [Soil] (135)

CL-TM-1109; modified from EPA 9071B  
GRAVIMETRIC

Mineral Oil and Grease  
Total Oil and Grease

**Solids (Inorganic)**

Paint Filter - Solids [Paint, Soil] (065)

CL-TM-1015; modified from EPA 9095B  
FILTRATION

Paint Filter (Free Liquid)

**Solids (Inorganic)**

Particle Size Analysis (PSA) - Solids [Soil] (067)

CL-TM-1014; modified from SOIL SAMPLING & METHODS OF ANALYSIS, CARTER HYDROMETER METHOD  
HYDROMETER

Percent Clay  
Percent Sand  
Percent Silt

**Solids (Inorganic)**

Particle Size Analysis (PSA) - Solids [Soil] (068)

CL-TM-1013; modified from ASTM D422-63  
GRAVIMETRIC - SIEVE

D50 >75um

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**Solids (Inorganic)**

Percent Saturation - Solids [Saturated Paste] (108)  
CL-TM-1024; modified from SOIL SAMPLING & METHODS OF ANALYSIS, CARTER 18  
SATURATED PASTE  
Saturation Percentage

**Solids (Inorganic)**

pH - Solids [Soil] (031)  
CL-TM-1024; modified from CARTER15  
METER - SAT. PASTE  
pH

**Solids (Inorganic)**

pH - Solids [Soil] (057)  
CL-TM-1023; modified from EPA 9045D and SOIL SAMPLING & METHODS OF ANALYSIS, CARTER 16  
METER - EXTRACTION  
pH (1:1)  
pH (1:2)  
pH (1:9)

**Solids (Inorganic)**

pH - Solids [Soil] (173)  
CL-TM-1023; modified from SOIL SAMPLING & METHODS OF ANALYSIS, CARTER 16  
METER CaCl<sub>2</sub> EXTRACTION  
pH (1:2): CaCl<sub>2</sub>  
pH (1:9): CaCl<sub>2</sub>

**Solids (Inorganic)**

Resistivity - Solids [Soil] (164)  
CL-TM-1012; modified from ASTM G57  
RESISTANCE METER  
Resistivity

**Solids (Inorganic)**

Soluble Anions - Solids [Soil] (113)  
CL-TM-1024, CL-TM-1025; modified from SM 4500-CL E and SOIL SAMPLING & METHODS OF ANALYSIS,  
CARTER 18  
COLOR - SATURATED PASTE  
Chloride

**Solids (Inorganic)**

Soluble Barium - Solids [Soil] (132)  
CL-TM-1010, CL-TM-1028; modified from ALBERTA ENVIRONMENT 628 and B.C. ENV. BCL QAAC  
ICP/OES  
Soluble Barium

**Solids (Inorganic)**

Soluble Cations - Solids [Soil] (024)  
CL-TM-1024, CL-TM-1028; modified from EPA 6010D and SOIL SAMPLING & METHODS OF ANALYSIS,  
CARTER 18  
ICP/OES - SATURATED PASTE EXTRACTION  
Boron  
Calcium  
Magnesium  
Potassium  
Sodium  
Sulphur

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**Solids (Inorganic)**

Specific Gravity - Solids (175)  
CL-TM-1007; modified from ASTM D5057  
GRAVIMETRIC  
Specific Gravity

**Solids (Organic)**

Alcohols - Solids [Soil] (072)  
CL-TM-1107; modified from EPA 3550C and EPA 8015D  
GC/FID  
Ethanol  
Isobutanol  
Isopropanol  
Methanol  
n-Butanol  
Pentanol  
sec-Butanol

**Solids (Organic)**

BTEX - Solids [Soil] (038)  
NA-TM-1102, NA-TP-2102; modified from EPA 5021A (ANALYSIS) and EPA 5035A (PREPARATION) and EPA 8260C (ANALYSIS)  
GC/MS - HEADSPACE  
Benzene  
Ethylbenzene  
m/p-xylene  
Methyl t-butyl ether  
o-xylene  
Styrene  
Toluene

**Solids (Organic)**

Cresols and Nitrobenzene (CNB) - Solids [Soil] (142)  
CL-TM-1100; EPA 3570 and EPA 8270  
GC/MS - TUMBLER EXTRACTION  
m,p-Cresol  
Nitrobenzene  
o-Cresol

**Solids (Organic)**

Extractable Petroleum Hydrocarbons (EPH) - Solids [Soil] (144)  
NA-TM-1106, NA-TP-2106; BC MOE LABORATORY MANUAL  
GC/FID - EXTRACTION  
EPH C10-C19  
EPH C10-C19 (sq)  
EPH C19-C32  
EPH C19-C32 (sq)

**Solids (Organic)**

Glycols - Solids [Soil] (070)  
CL-TM-1107; modified from EPA 3550C and EPA 8015D  
GC/FID  
Diethylene glycol  
Ethylene glycol  
Propylene glycol  
Triethylene glycol

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**Solids (Organic)**

Hydrocarbons - Solids [Soil] (048)  
CL-TM-1116; EPA 3570 and EPA 8000  
GC/FID - EXTRACTION  
Hydrocarbons: C11-C60

**Solids (Organic)**

Petroleum Hydrocarbons (PHC) - Solids [Sediment, Soil] (127)  
NA-TM-1100, NA-TP-2100; CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD  
GRAVIMETRIC - TUMBLER  
F4: Gravimetric  
F4G-SG: Gravimetric Heavy Hydrocarbons - Silica

**Solids (Organic)**

Petroleum Hydrocarbons (PHC) - Solids [Soil] (088)  
NA-TM-1102; BC MOE LABORATORY MANUAL and CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD  
GC/FID - HEADSPACE  
F1: C6-C10  
VH: C6-C10

**Solids (Organic)**

Petroleum Hydrocarbons (PHC) - Solids [Soil] (105)  
NA-TM-1100, NA-TP-2100; CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD  
GC/FID - TUMBLER EXTRACTION  
F2: C10-C16  
F3: C16-C34  
F4: C34-C50

**Solids (Organic)**

Polycyclic Aromatic Hydrocarbons (PAH) - Solids [Soil] (147)  
NA-TM-1106; modified from EPA 3570 and EPA 8270D  
GC/MS - HEXANE/ACETONE EXTRACTION  
1-Methylnaphthalene  
2-Methylnaphthalene  
Acenaphthene  
Acenaphthylene  
Anthracene  
Benzo (a) anthracene  
Benzo (a) pyrene  
Benzo(b,i)fluoranthene  
Benzo (g,h,i) perylene  
Benzo (k) fluoranthene  
Chrysene  
Dibenzo (a,h) anthracene  
Fluoranthene  
Fluorene  
Indeno (1,2,3 - cd) pyrene  
Naphthalene  
Perylene  
Phenanthrene  
Pyrene  
Quinoline  
Retene

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## Solids (Organic)

Polycyclic Aromatic Hydrocarbons (PAH) and Alkylated Polycyclic Aromatic Hydrocarbons (PAH) - Solids [Soil] (136)

CL-TM-1106; modified from EPA 3570 and EPA 8270D

GC/MS

1-Methylnaphthalene  
2-Methylnaphthalene  
Acenaphthene  
Acenaphthylene  
Acridine  
Anthracene  
Benzo (a) anthracene  
Benzo (a) pyrene  
Benzo(b,i)fluoranthene  
Benzo(e)pyrene  
Benzo (g,h,i) perylene  
Benzo (k) fluoranthene  
Biphenyl  
C1-Acenaphthenes  
C1-Benz(a)anthracenes/Chrysenes  
C1-Benzofluoranthenes/Benzopyrenes  
C1-Biphenyls  
C1-Dibenzothiophenes  
C1-Fluoranthenes/Pyrenes  
C1-Fluorenes  
C1-Phenanthrenes/Anthracenes  
C2-Benz(a)anthracenes/Chrysenes  
C2-Benzofluoranthenes/Benzopyrenes  
C2-Biphenyls  
C2-Dibenzothiophenes  
C2-Fluoranthenes/Pyrenes  
C2-Fluorenes  
C2-Naphthalenes  
C2-Phenanthrenes/Anthracenes  
C3-Benz(a)anthracenes/Chrysenes  
C3-Dibenzothiophenes  
C3-Fluoranthenes/Pyrenes  
C3-Fluorenes  
C3-Naphthalenes  
C3-Phenanthrenes/Anthracenes  
C4-Benz(a)anthracenes/Chrysenes  
C4-Dibenzothiophenes  
C4-Fluoranthenes/Pyrenes  
C4-Naphthalenes  
C4-Phenanthrenes/Anthracenes  
Carbazole  
Chrysene  
Dibenzo (a,h) anthracene  
Dibenzofuran  
Dibenzothiophene  
Fluoranthene  
Fluorene  
Indeno (1,2,3 - cd) pyrene

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Methylantracenes  
Naphthalene  
Perylene  
Phenanthrene  
Pyrene  
Quinoline  
Retene

**Solids (Organic)**

Solvent Scan - Solids [Soil] (134)  
CL-TM-1114; modified from EPA 8260  
GC/MS - HEADSPACE  
2-Nitropropene  
Acetone (2-Propanone)  
Benzene  
Carbon disulfide  
Cyclohexanone  
Ethyl acetate  
Ethyl ether  
Ethylbenzene  
m/p-xylene  
Methyl Ethyl Ketone  
n-Butyl Alcohol  
o-xylene  
Pyridine  
Toluene

**Solids (Organic)**

Total Extractable Hydrocarbons (TEH) - Solids [Soil] (039)  
CL-TP-2101, NA-TM-1100; CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD  
(ALLOWABLE MODIFICATIONS)  
GC/FID - EXTRACTION  
Total Extractable Hydrocarbons (TEH)

**Solids (Organic)**

Total Volatile Hydrocarbons (TVH) - Solids [Soil] (093)  
NA-TM-1102; modified from BC MOE LABORATORY MANUAL  
GC/FID - HEADSPACE  
Total Volatile Hydrocarbons (TVH): C5-C10

**Solids (Organic)**

Volatile Organic Compounds (VOC) - Solids [Soil] (172)  
NA-TM-1102, NA-TP-2102; modified from EPA 5021A and EPA 5035A and EPA 8260C  
GC/MS - HEADSPACE  
1,1-Dichloroethane  
1,1-Dichloroethylene  
1,1-Dichloropropene  
1,1,1-Trichloroethane  
1,1,1,2-Tetrachloroethane  
1,1,2-Trichloroethane  
1,1,2,2-Tetrachloroethane  
1,2-Dibromo-3-chloropropane (DBCP)  
1,2-Dichlorobenzene  
1,2-Dichloroethane  
1,2-Dichloropropane  
1,2,3-Trichlorobenzene  
1,2,3-Trichloropropane

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1,2,4-Trichlorobenzene  
1,2,4-Trimethylbenzene  
1,3-Dichlorobenzene  
1,3-Dichloropropane  
1,3,5-Trichlorobenzene  
1,3,5-Trimethylbenzene  
1,4-Dichlorobenzene  
2-Chlorotoluene  
2,2-Dichloropropane  
4-Chlorotoluene  
4-Isopropyltoluene  
Benzene  
Bromobenzene  
Bromochloromethane  
Bromodichloromethane  
Bromoform  
Bromomethane  
Carbon Tetrachloride  
Chlorobenzene  
Chlorodibromomethane  
Chloroethane  
Chloroform  
Chloromethane  
cis-1,2-Dichloroethylene  
cis-1,3-Dichloropropene  
Dibromomethane  
Dichlorodifluoromethane  
Dichloromethane  
Ethylbenzene  
Ethylene Dibromide  
Hexachlorobutadiene  
Isopropylbenzene  
m/p-xylene  
n-Butylbenzene  
n-Propylbenzene  
o-xylene  
sec-Butylbenzene  
Styrene  
tert-Butylbenzene  
Tetrachloroethylene  
Toluene  
trans-1,2-Dichloroethylene  
trans-1,3-Dichloropropene  
Trichloroethylene  
Trichlorofluoromethane  
Vinyl chloride

### **Tissue (Organic)**

Polycyclic Aromatic Hydrocarbons (PAH) - Tissue (170)  
CL-TM-1106; modified from EPA 3630C and EPA 8270D  
GC/MS

1-Methylnaphthalene  
2-Methylnaphthalene  
Acenaphthene

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Acridine  
Anthracene  
Benzo(a)anthracene  
Benzo(a)pyrene  
Benzo(b,i)fluoranthene  
Benzo(e)pyrene  
Benzo(g,h,i)perylene  
Benzo(k)fluoranthene  
Biphenyl  
C1-Acenaphthenes  
C1-Benz(a)anthracenes/Chrysenes  
C1-Benzofluoranthenes/Benzopyrenes  
C1-Biphenyls  
C1-Dibenzothiophenes  
C1-Fluoranthenes/Pyrenes  
C1-Fluorenes  
C1-Phenanthrenes/Anthracenes  
C2-Benz(a)anthracenes/Chrysenes  
C2-Benzofluoranthenes/Benzopyrenes  
C2-Biphenyls  
C2-Dibenzothiophenes  
C2-Fluoranthenes/Pyrenes  
C2-Fluorenes  
C2-Naphthalenes  
C2-Phenanthrenes/Anthracenes  
C3-Benz(a)anthracenes/Chrysenes  
C3-Dibenzothiophenes  
C3-Fluoranthenes/Pyrenes  
C3-Fluorenes  
C3-Naphthalenes  
C3-Phenanthrenes/Anthracenes  
C4-Benz(a)anthracenes/Chrysenes  
C4-Dibenzothiophenes  
C4-Fluoranthenes/Pyrenes  
C4-Naphthalenes  
C4-Phenanthrenes/Anthracenes  
Carbazole  
Chrysene  
Dibenzo(a,h)anthracene  
Dibenzofuran  
Dibenzothiopene  
Dibenzothiophene  
Fluoranthene  
Fluorene  
Indeno(1,2,3-cd)pyrene  
Methylanthracenes  
Naphthalene  
Perylene  
Phenanthrene  
Pyrene  
Quinoline  
Retene

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**Waste (Inorganic)**

Leachable Mercury - Waste (159)

NA-TM-1005, NA-TM-1700; EPA 1311 (PREPARATION) and EPA 1631E (ANALYSIS)

COLD VAPOUR AA - TCLP

Mercury

**Waste (Inorganic)**

Leachable Metals - Waste (125)

CL-TM-1028, NA-TM-1700; modified from EPA 1311 (PREPARATION) and EPA 6010 (ANALYSIS)

ICP/OES - TCLP

Antimony

Arsenic

Barium

Beryllium

Boron

Cadmium

Calcium

Chromium

Cobalt

Copper

Iron

Lead

Magnesium

Nickel

Selenium

Silver

Thallium

Uranium

Vanadium

Zinc

Zirconium

**Waste (Organic)**

Leachable BTEX - Waste (124)

CL-TM-1104, NA-TM-1102; modified from EPA 1311 (PREPARATION) and EPA 8260 (ANALYSIS)

GC/MS - HEADSPACE - TCLP

Benzene

Ethylbenzene

m,p-Xylene

o-Xylene

Toluene

**Waste (Organic)**

Volatile Organic Compounds (VOC) - Waste (162)

CL-TM-1104, NA-TM-1102; modified from EPA 1311 (PREPARATION) and EPA 8260 (ANALYSIS)

GC/MS - HEADSPACE - TCLP

1,1-Dichloroethylene

1,2-Dichlorobenzene

1,2-Dichloroethane

1,4-Dichlorobenzene

Benzene

Bromodichloromethane

Bromoform

Carbon tetrachloride

Chlorobenzene

Chloroform

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Dibromochloromethane  
Dichloromethane  
Ethylbenzene  
m,p-Xylene  
Methyl ethyl ketone  
o-Xylene  
Pyridine  
Tetrachloroethylene  
Toluene  
Trichloroethylene  
Vinyl chloride  
Xylenes

**Water (Inorganic)**

Acidity - Water (163)  
CL-TM-1030; modified from SM 2310  
TITRIMETRIC  
Acidity

**Water (Inorganic)**

Alkalinity - Water (007)  
CL-TM-1030; modified from SM 2320 B  
TITRIMETRIC  
Alkalinity (pH 4.5)  
Alkalinity (pH 8.3)

**Water (Inorganic)**

Ammonia - Water (151)  
CL-TM-1020, CL-TM-1034; JOURNAL OF ENVIRONMENTAL MONITORING (2005) SECTION 7, P. 37-42  
FLUORIMETRY  
Ammonia

**Water (Inorganic)**

Anions - Water (001)  
NA-TM-1001; modified from EPA 300.1  
ION CHROMATOGRAPHY  
Bromide  
Chloride  
Fluoride  
Nitrate  
Nitrite  
Sulfate

**Water (Inorganic)**

Biochemical Oxygen Demand (BOD) - Water [Effluent] (052)  
CL-TM-1002; modified from SM 5210 A and SM 5210 B  
D.O. METER  
BOD (5 day)  
CBOD (5 day)

**Water (Inorganic)**

Carbon - Water (010)  
CL-TM-1001; modified from SM 5310 B  
IR - COMBUSTION  
Inorganic Carbon  
Organic Carbon  
Total Carbon

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**Water (Inorganic)**

Chemical Oxygen Demand (COD) - Water (074)  
CL-TM-1011; modified from SM 5220 D  
COLOR  
COD

**Water (Inorganic)**

Colour - Water (103)  
CL-TM-1017; modified from SM 2120 C  
COLORIMETRIC  
True Colour

**Water (Inorganic)**

Conductivity - Water (009)  
CL-TM-1030; modified from EPA 9050 and SM 2510 B  
CONDUCTIVITY METER (AUTOMATED)  
Conductivity (25°C)

**Water (Inorganic)**

Dissolved Metals - Water (022)  
CL-TM-1028, NA-TP-2002; modified from EPA 6010D and SM 3030 B  
ICP/OES - FILTRATION  
Calcium  
Hardness (calculation)  
Iron  
Magnesium  
Manganese  
Potassium  
Silicon  
Sodium  
Sulfur

**Water (Inorganic)**

Dissolved Metals - Water (112)  
NA-TM-1002, NA-TP-2002; modified from EPA 6020A and SM 3030 B  
ICP/MS - FILTRATION  
Aluminum  
Antimony  
Arsenic  
Barium  
Beryllium  
Bismuth  
Boron  
Cadmium  
Calcium  
Cesium  
Chromium  
Cobalt  
Copper  
Hardness (calculation)  
Iron  
Lead  
Lithium  
Magnesium  
Manganese  
Molybdenum  
Nickel

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Phosphorus  
Potassium  
Rubidium  
Selenium  
Silicon  
Silver  
Sodium  
Strontium  
Sulfur  
Tellurium  
Thallium  
Thorium  
Tin  
Titanium  
Tungsten  
Uranium  
Vanadium  
Zinc  
Zirconium

**Water (Inorganic)**

Mercury - Water (155)

NA-TM-1005, NA-TP-2001, NA-TP-2002; modified from EPA 200.2 and EPA 245.1 and SM 3030 B  
CVAA - BrCl DIGESTION

Mercury

**Water (Inorganic)**

Oil and Grease - Water (168)

NA-TM-1107; BC MOE LABORATORY MANUAL SECTION D  
GRAVIMETRIC

Mineral Oil and Grease

Total Oil and Grease

**Water (Inorganic)**

Oxidation Reduction Potential (ORP) - Water (167)

CL-TM-1009; modified from ASTM D1498

MV METER

Oxidation Reduction Potential (ORP)

**Water (Inorganic)**

pH - Water (008)

CL-TM-1030; modified from EPA 9040A and SM 4500-H+  
pH METER (AUTOMATED)

pH

**Water (Inorganic)**

Phosphate - Water (116)

CL-TM-1026; modified from SM 4500-P B and SM 4500-P E  
COLORIMETRIC

Phosphate

**Water (Inorganic)**

Phosphorus - Water (115)

CL-TM-1026; modified from SM 4500-P B and SM 4500-P E  
COLOR - DIGESTION

Total Dissolved Phosphorus

Total Phosphorus

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**Water (Inorganic)**

Solids - Water (003)

CL-TM-1005, NA-TM-1004; modified from SM 2540 C and SM 2540 D and SM 2540 E

GRAVIMETRIC

Total Dissolved Solids

Total Suspended Solids

Volatile Suspended Solids

**Water (Inorganic)**

Total Kjeldahl Nitrogen (TKN) - Water (152)

CL-TM-1021, CL-TM-1022; JOURNAL OF ENV. MON. (2005) SEC. 7, 37-42 and SM 4500-NORG A and SM 4500-NORG B and SM 4500-NORG C and SM 4500-NORG D

FLUORIMETRY

Dissolved Kjeldahl Nitrogen

Total Kjeldahl Nitrogen

**Water (Inorganic)**

Total Metals - Water (110)

NA-TM-1002, NA-TP-2001; modified from EPA 200.2 and EPA 6020A

ICP/MS - DIGESTION

Aluminum

Antimony

Arsenic

Barium

Beryllium

Bismuth

Boron

Cadmium

Calcium

Cesium

Chromium

Cobalt

Copper

Hardness (calculation)

Iron

Lead

Lithium

Magnesium

Manganese

Molybdenum

Nickel

Phosphorus

Potassium

Rubidium

Selenium

Silicon

Silver

Sodium

Strontium

Sulfur

Tellurium

Thallium

Thorium

Tin

Titanium

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Tungsten  
Uranium  
Vanadium  
Zinc  
Zirconium

**Water (Inorganic)**

Total Metals - Water (111)  
CL-TM-1028, NA-TP-2001; modified from EPA 200.2 and EPA 6010D  
ICP/OES - DIGESTION  
Calcium  
Hardness (calculation)  
Iron  
Magnesium  
Manganese  
Potassium  
Silicon  
Sodium  
Sulfur

**Water (Inorganic)**

Turbidity - Water (075)  
CL-TM-1006; modified from SM 2130 B  
NEPHELOMETRY  
Turbidity

**Water (Microbiology)**

Coliforms - Water (095)  
NA-TM-1300; modified from SM 9223 B  
MOST PROBABLE NUMBER (QUANTI-TRAY)  
Escherichia coli (E. coli)  
Total Coliforms

**Water (Microbiology)**

Fecal (Thermotolerant) Coliforms - Water (096)  
CL-TM-1302; modified from SM 9222  
MEMBRANE FILTRATION  
Fecal (Thermotolerant) Coliforms

**Water (Microbiology)**

Heterotrophic Plate Count (HPC) - Water (156)  
NA-TM-1300; modified from SM 9215 E  
MOST PROBABLE NUMBER (QUANTI-TRAY)  
Heterotrophic Plate Count (HPC)

**Water (Microbiology)**

Iron Reducing Bacteria (IRB) - Water (118)  
CL-TM-1303; IRB-BART  
BART  
Iron Related Bacteria (IRB)

**Water (Microbiology)**

Sulfate Reducing Bacteria (SRB) - Water (117)  
CL-TM-1303; SRB-BART  
BART  
Sulphur Reducing Bacteria

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**Water (Organic)**

Alcohols - Water (073)

CL-TM-1107; modified from EPA 3550C and EPA 8015D

GC/FID

Ethanol

Isobutanol

Isopropanol

Methanol

n-Butanol

Pentanol

sec-Butanol

**Water (Organic)**

Alkylated and Nitrogen Polycyclic Aromatic Hydrocarbons (PAH) - Water (154)

CL-TM-1102; modified from EPA 3510C and EPA 8270D

GC/MS

2,4-Dimethylquinoline

4,6,8-Trimethylquinoline

7-Methylquinoline

9-Ethylcarbazole

9-Methylacridine

9-Methylcarbazole

Acridine

Carbazole

Phenanthridine

Quinoline

**Water (Organic)**

BTEX and MTBE and Styrene - Water (150)

NA-TM-1102; modified from EPA 8260C

GC/FID - HEADSPACE

Benzene

Ethylbenzene

m/p-xylene

Methy t-butyl ether (MTBE)

Methyl t-butyl ether

o-xylene

Styrene

Styrene

Toluene

**Water (Organic)**

Cresols and Nitrobenzene (CNB) - Water (169)

CL-TM-1100; EPA 3510C and EPA 8270D

GC/MS - MICROEXTRACTION

m,p-Cresol

Nitrobenzene

o-Cresol

**Water (Organic)**

Extractable Petroleum Hydrocarbons (EPH) - Water (145)

NA-TM-1112; BC MOE LABORATORY MANUAL

GC/FID - EXTRACTION

EPH C10-C19

EPH C10-C19 (sq)

EPH C19-C32

EPH C19-C32 (sq)

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**Water (Organic)**

Glycols - Water (071)

CL-TM-1107; modified from EPA 3550C and EPA 8015D

GC/FID

Diethylene glycol

Ethylene glycol

Propylene glycol

Triethylene glycol

**Water (Organic)**

Methane - Water (092)

CL-TM-1115; EPA REGION 1 METHANE, ETHANE, ETHENE ANALYSIS GUIDANCE REVISION 1, 2002.

GC/FID - EXTRACTION

Methane

**Water (Organic)**

Petroleum Hydrocarbons (PHC) - Water (076)

NA-TM-1112, NA-TP-2100; modified from EPA 3510C and EPA 3511 and EPA 8000

GC/FID - EXTRACTION

F2: C10-C16

F3: C16-C34

F4: C34-C50

Hydrocarbons: C11-C60

**Water (Organic)**

Polycyclic Aromatic Hydrocarbons (PAH) - Water (171)

CL-TP-2112, NA-TM-1112; modified from EPA 3511 and EPA 8270D

GC/MS - MICROEXTRACTION

1-Methylnaphthalene

2-Methylnaphthalene

Acenaphthene

Acenaphthylene

Acridine

Anthracene

Benzo (a) anthracene

Benzo (a) pyrene

Benzo(b,i)fluoranthene

Benzo(e)pyrene

Benzo (g,h,i) perylene

Benzo (k) fluoranthene

Carbazole

Chrysene

Dibenzo (a,h) anthracene

Dibenzofuran

Fluoranthene

Fluorene

Indeno (1,2,3 - cd) pyrene

Methylantracenes

Naphthalene

Perylene

Phenanthrene

Pyrene

Quinoline

Retene

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## Water (Organic)

Polycyclic Aromatic Hydrocarbons (PAH) and Alkylated Polycyclic Aromatic Hydrocarbons (PAH) - Water (137)  
CL-TM-1106; modified from EPA 3510C and EPA 8270D

GC/MS

1-Methylnaphthalene  
2-Methylnaphthalene  
Acenaphthene  
Acenaphthylene  
Acridine  
Anthracene  
Benzo (a) anthracene  
Benzo (a) pyrene  
Benzo(b,i)fluoranthene  
Benzo(e)pyrene  
Benzo (g,h,i) perylene  
Benzo (k) fluoranthene  
Biphenyl  
C1-Acenaphthenes  
C1-Benz(a)anthracenes/Chrysenes  
C1-Benzofluoranthenes/Benzopyrenes  
C1-Biphenyls  
C1-Dibenzothiophenes  
C1-Fluoranthenes/Pyrenes  
C1-Fluorenes  
C1-Phenanthrenes/Anthracenes  
C2-Benz(a)anthracenes/Chrysenes  
C2-Benzofluoranthenes/Benzopyrenes  
C2-Biphenyls  
C2-Dibenzothiophenes  
C2-Fluoranthenes/Pyrenes  
C2-Fluorenes  
C2-Naphthalenes  
C2-Phenanthrenes/Anthracenes  
C3-Benz(a)anthracenes/Chrysenes  
C3-Dibenzothiophenes  
C3-Fluoranthenes/Pyrenes  
C3-Fluorenes  
C3-Naphthalenes  
C3-Phenanthrenes/Anthracenes  
C4- Fluoranthenes/Pyrenes  
C4-Benz(a)anthracenes/Chrysenes  
C4-Dibenzothiophenes  
C4-Naphthalenes  
C4-Phenanthrenes/Anthracenes  
Carbazole  
Chrysene  
Dibenzo (a,h) anthracene  
Dibenzofuran  
Dibenzothiophene  
Fluoranthene  
Fluorene  
Indeno (1,2,3 - cd) pyrene  
Methylantracenes

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Naphthalene  
Perylene  
Phenanthrene  
Pyrene  
Quinoline  
Retene

**Water (Organic)**

Solvent Scan - Water (128)

CL-TM-1104, CL-TM-1114; modified from EPA 1311 (PREPARATION) and EPA 8260 (ANALYSIS)

GC/MS - HEADSPACE TCLP

2-Nitropropane

Acetone (2-Propanone)

Benzene

Carbon disulfide

Cyclohexanone

Ethyl acetate

Ethyl ether

Ethylbenzene

m,p-Xylene

Methyl ethyl ketone

n-Butyl Alcohol

o-Xylene

Pyridine

Toluene

**Water (Organic)**

Total Extractable Hydrocarbons (TEH) - Water (016)

NA-TM-1112; modified from EPA 3511

GC/FID - EXTRACTION

Total Extractable Hydrocarbons (TEH)

**Water (Organic)**

Total Volatile Hydrocarbons (TVH) - Water (094)

NA-TM-1102; modified from CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD

GC/FID - HEADSPACE

Total Volatile Hydrocarbons (TVH)

**Water (Organic)**

Volatile Hydrocarbons (VH) - Water (148)

NA-TM-1102; modified from BC MOE LABORATORY MANUAL and CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD and EPA 5021A

GC/FID - HEADSPACE

F1: C6-C10

Volatile Hydrocarbons (VH): C6-C10

**Water (Organic)**

Volatile Organic Compounds (VOC) - Water (161)

NA-TM-1102; modified from EPA 5021A and EPA 8260

GC/MS - HEADSPACE

1,1-Dichloroethane

1,1-Dichloroethylene

1,1-Dichloropropene

1,1,1-Trichloroethane

1,1,1,2-Tetrachloroethane

1,1,2-Trichloroethane

1,1,2,2-Tetrachloroethane

1,2-Dibromo-3-chloropropane (DBCP)

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1,2-Dichlorobenzene  
1,2-Dichlorobenzene  
1,2-Dichloroethane  
1,2-Dichloroethane  
1,2-Dichloropropane  
1,2-Dichloropropane  
1,2,3-Trichlorobenzene  
1,2,3-Trichloropropane  
1,2,4-Trichlorobenzene  
1,2,4-Trimethylbenzene  
1,3-Dichlorobenzene  
1,3-Dichloropropane  
1,3,5-Trimethylbenzene  
1,4-Dichlorobenzene  
2-Chlorotoluene  
2-Hexanone (MBK)  
2,2-Dichloropropane  
4-Chlorotoluene  
4-Isopropyltoluene  
Acetone (2-Propanone)  
Acrolein  
Acrylonitrile  
Benzene  
Bromobenzene  
Bromochloromethane  
Bromodichloromethane  
Bromoform  
Bromomethane  
Carbon disulfide  
Carbon Tetrachloride  
Chlorobenzene  
Chlorodibromomethane  
Chloroethane  
Chloroform  
Chloromethane  
cis-1,2-Dichloroethylene  
cis-1,3-Dichloropropene  
cis-1,4-Dichloro-2-butene  
Dibromomethane  
Dichlorodifluoromethane  
Dichloromethane  
Ethyl alcohol  
Ethyl methacrylate  
Ethylbenzene  
Ethylene Dibromide  
Hexachlorobutadiene  
Isopropylbenzene  
m/p-xylene  
Methyl ethyl ketone  
Methyl iodide  
Methyl isobutyl ketone  
n-Butylbenzene  
n-Propylbenzene

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Naphthalene  
o-xylene  
sec-Butylbenzene  
Styrene  
tert-Butylbenzene  
Tetrachloroethylene  
Toluene  
trans-1,2-Dichloroethylene  
trans-1,3-Dichloropropene  
trans-1,4-Dichloro-2-butene  
Trichloroethylene  
Trichlorofluoromethane  
Vinyl Chloride

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