

Appendix D:
Subcontract Laboratory Accreditation



CALA

Canadian Association for
Laboratory Accreditation Inc.

CALA Directory of Laboratories

Membership Number: 2644

Laboratory Name: Caduceon Environmental Laboratories (Ottawa)

Parent Institution: Caduceon Enterprises Inc.

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Standard: Conforms with requirements of ISO/IEC 17025

Clients Served:

Revised On: November 1, 2017

Valid To: August 16, 2019

Scope of Accreditation

Air (Inorganic)

Metals - Air Filter (012)

D-ICP-02; modified from SM 3120 B

ICP - DIGESTION

Cadmium

Copper

Lead

Zinc

Air (Inorganic)

Total Suspended Particulates - Air Filter (018)

A-TSP-01; modified from MOEE E3288A

GRAVIMETRIC

Total Suspended Particulates

Dustfall

Dustfall - Dustfall (020)

A-DF-01; modified from MOEE DF-E3043A

FILTRATION - GRAVIMETRIC

Insoluble Dustfall

Total Dustfall

Fluoride Candles

Fluoride - Candles (019)

A-FISE-01; modified from MOEE FSIE-1983D

DIGESTION - ISE

Fluoride

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Soil/Solid Biosolids

Inorganic Ammonia - Soil, Solid Biosolids (105)

A-NH3-01; modified from MOEE RNDNP - E3364/SDNP-E3366

AUTO COLOR

Total Ammonia

Soil/Solid Biosolids

Inorganic Nitrogen - Soil, Solid Biosolids (106)

A-TKN-01; modified from MOE NPSED E3116

AUTO COLOR - DIGESTION

Total Kjeldahl Nitrogen (TKN)

Soil/Solid Biosolids

Inorganic Phosphorus - Soil, Solid Biosolids (107)

A-TP-01; modified from MOE NPSED E3116

AUTO COLOR - DIGESTION

Total Phosphorus

Solids (Inorganic)

Anions - Soils, Biosolids (069)

A-IC-01; modified from SM 4110 C

ION CHROMATOGRAPHY - EXTRACTION

Chloride

Nitrate

Nitrite

Sulphate

Solids (Inorganic)

Boron (Hot Water Soluble) - Soil (098)

D-ICP-02; MOE-LSB E3470

ICP/AES - EXTRACTION

Boron

Solids (Inorganic)

Conductivity - Soil, Sediments (099)

A-COND-03; modified from SM 2510 B and MOECC-LSB E 3530

CONDUCTIVITY METER - EXTRACTION

Conductivity

Solids (Inorganic)

Extractable Anions - Leachate [100% SOLID SAMPLES ONLY] (090)

A-IC-01; EPA 1311 (LEACH) and modified from SM 4110 C (ANALYSIS)

ION CHROMATOGRAPHY - TCLP

Nitrate

Nitrite

Solids (Inorganic)

Extractable Metals - Leachate [100% SOLID SAMPLES ONLY] (091)

D-ICP-01; EPA 1311 (LEACH) and modified from EPA SM 3120 B (ANALYSIS)

ICP/AES - TCLP

Arsenic

Barium

Beryllium

Boron

Cadmium

Chromium

Lead

Nickel

Silver

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Zinc

Solids (Inorganic)

Extractable Metals - Leachate [100% SOLID SAMPLES ONLY] (092)

D-ICPMS-01; EPA 1311 (LEACH) and modified from EPA 200.8 (ANALYSIS)

ICP/MS - TCLP

Antimony

Arsenic

Selenium

Uranium

Solids (Inorganic)

Extractable Metals - Leachate [100% SOLID SAMPLES ONLY] (093)

D-HG-02; EPA 1311 (LEACH) and modified from SM 3112B (ANALYSIS)

COLD VAPOUR AA - TCLP

Mercury

Solids (Inorganic)

Flashpoint - Soil, Solid Waste (096)

C-FPCC-01; modified from ASTM D93

CLOSED CUP FLASH POINT TESTER

Flashpoint

Solids (Inorganic)

Hexavalent Chromium - Soil (094)

D-CRVI-02; modified from EPA 3060A and EPA 7196A

COLORIMETRIC - MANUAL

Chromium VI

Solids (Inorganic)

Mercury - Soil, Solid Biosolids (017)

D-HG-01; modified from EPA 7471A

COLD VAPOUR AA - DIGESTION

Mercury

Solids (Inorganic)

Metals - Soil, Solid Biosolids (015)

D-ICP-02; modified from EPA 6010

ICP/OES - DIGESTION

Aluminum

Antimony

Arsenic

Barium

Beryllium

Boron

Cadmium

Calcium

Chromium

Cobalt

Copper

Iron

Lead

Magnesium

Manganese

Molybdenum

Nickel

Potassium

Silver

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Sodium
Strontium
Tin
Titanium
Tungsten
Vanadium
Zinc

Solids (Inorganic)

pH - Soil, Sediment, Solid Sludge (100)

A-pH-03; modified from SM 4500 H and MOECC-LSB E 3530

pH METER - EXTRACTION

pH

Solids (Inorganic)

Total Metals - Soils, Biosolids (070)

D-ICPMS-01; modified from EPA 6020

ICP/MS - DIGESTION

Antimony
Arsenic
Selenium
Silver
Thallium
Uranium

Solids (Organic)

Extractable Volatile Organic Compounds (VOC) - Leachate [100% SOLID SAMPLES ONLY] (089)

C-VOC-01; EPA SW-846 1311 (LEACH) and modified from EPA SW-846 5030 and EPA SW-846 8260 (ANALYSIS)

GC/MS - PURGE AND TRAP - TCLP

1,1-Dichloroethylene
1,2-Dichlorobenzene
1,2-Dichloroethane
1,4-Dichlorobenzene
Benzene
Carbon tetrachloride
Chlorobenzene
Chloroform
Dichloromethane
Methyl ethyl ketone
Tetrachloroethylene
Trichloroethylene
Vinyl chloride

Solids (Organic)

Volatile Organic Compounds (VOC) - Soil (063)

C-VOC-02; modified from EPA 8260

GC/MS - PURGE AND TRAP

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
1,2-dichlorobenzene

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1,2-dichloroethane
 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
 Acetone (2-Propanone)
 Benzene
 Bromobenzene
 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
 Hexane
 Isopropylbenzene
 Isopropyltoluene
 m/p-xylene
 Methyl Ethyl Ketone
 Methyl isobutyl Ketone
 Methyl t-butyl ether
 n - Butylbenzene
 Naphthalene
 o-xylene
 Propylbenzene
 sec - Butylbenzene
 Styrene
 tert-Butylbenzene
 Tetrachloroethylene
 Toluene
 trans-1,2-Dichloroethylene
 trans-1,3-Dichloropropene
 Trichloroethylene

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Trichlorofluoromethane
Vinyl chloride

Solids (Organic)

Volatile Petroleum Hydrocarbons (VPH) - Soil (073)
C-GRO-01; CCME CWS REF. METHOD and MOE E3398
GC/FID - PURGE AND TRAP
F1: C6-C10

Water (Inorganic)

Alkalinity - Water (088)
A-ALK-03; modified from SM 2320 B
AUTO TITRIMETRIC
Alkalinity (pH 4.5)

OSDWA †

Water (Inorganic)

Ammonia - Water, Wastewater, Liquid Biosolids (055)
A-NH3-01; modified from MOEE RNDNP-E3364, SDNP-E3366
AUTO COLOR
Ammonia
Ammonia-Nitrogen

OSDWA †

Water (Inorganic)

Anions - Water, Wastewater, Liquid Biosolids (002)
A-IC-01; modified from SM 4110 C
ION CHROMATOGRAPHY
Bromide
Chloride
Fluoride
Nitrate
Nitrite
Sulfate

OSDWA †

Water (Inorganic)

Biochemical Oxygen Demand (BOD) - Water (008)
C-BOD-01; modified from SM 5210 B
D.O. METER
BOD (5 day)
CBOD (5 day)

OSDWA †

Water (Inorganic)

Carbon - Water (054)
C-OC-01; modified from SM 5310C and EPA 415.2
IR-UV-PERSULFATE
Organic Carbon

OSDWA †

Water (Inorganic)

Chemical Oxygen Demand (COD) - Water (083)
C-COD-01; modified from SM 5220 D
COLORIMETRIC
COD

OSDWA †

Water (Inorganic)

Colour - Water (027)
A-COL-01; modified from SM 2120 C
SPECTROPHOTOMETRIC
True Colour

OSDWA †

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Water (Inorganic) Conductivity - Water (003) A-COND-01; modified from SM 2510 B CONDUCTIVITY METER Conductivity (25°C)	OSDWA †
Water (Inorganic) Conductivity - Water (087) A-COND-02; modified from SM 2510 B AUTO CONDUCTIVITY METER Conductivity (25°C)	OSDWA †
Water (Inorganic) Dissolved and Extractable Metals - Water (004) D-ICP-01; modified from SM 3120 B ICP Aluminum Barium Beryllium Bismuth Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese Molybdenum Nickel Potassium Silicon Silver Sodium Strontium Tin Titanium Tungsten Vanadium Yttrium Zinc Zirconium	OSDWA †
Water (Inorganic) Dissolved Metals - Water (049) D-ICPMS-01; modified from EPA 200.8 ICP/MS Antimony Arsenic Barium Beryllium Cadmium Chromium	OSDWA †

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Cobalt
Copper
Lead
Molybdenum
Selenium
Silver
Thallium
Uranium
Vanadium

Water (Inorganic)

Hexavalent Chromium - Water (095)
D-CRVI-01; modified from MOE - HEXCR-E3056
COLORIMETRIC - MANUAL
Hexavalent Chromium

Water (Inorganic)

Mercury - Water, Wastewater (025)
D-HG-02; modified from SM 3112 B
COLD VAPOUR AA - DIGESTION
Mercury

OSDWA †

Water (Inorganic)

Nitrogen - Water, Wastewater, Liquid Biosolids (033)
A-TKN-01; modified from MOEE RTNP-E3367
AUTO COLOR - DIGESTION
Total Kjeldahl Nitrogen

OSDWA †

Water (Inorganic)

pH - Water (086)
A-pH-02; modified from SM 4500H+ B
AUTO - pH METER
pH

OSDWA †

Water (Inorganic)

pH - Water, Wastewater, Liquid Biosolids (005)
A-pH-01; modified from SM 4500 H
pH METER
pH

OSDWA †

Water (Inorganic)

Phenols - Water (056)
C-PHEN-01; modified from MOE ROPHEN-E3179
AUTO, 4-AAP
Total Phenolics

OSDWA †

Water (Inorganic)

Phosphate - Water (058)
A-PO4-01; modified from MOEE RNDNP-E3364, SDNP-E3366
AUTO COLOR
Phosphate

OSDWA †

Water (Inorganic)

Total Metals - Water, Wastewater, Liquid Biosolids (067)
D-ICP-01; modified from SM 3120 B
ICP/AES - DIGESTION
Aluminum
Antimony
Arsenic
Barium

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Beryllium
 Bismuth
 Boron
 Cadmium
 Calcium
 Chromium
 Cobalt
 Copper
 Iron
 Lead
 Lithium
 Magnesium
 Manganese
 Molybdenum
 Nickel
 Potassium
 Silver
 Sodium
 Strontium
 Tin
 Titanium
 Tungsten
 Vanadium
 Yttrium
 Zinc
 Zirconium

Water (Inorganic)

Total Metals - Water, Wastewater, Liquid Biosolids (071)

D-ICPMS-01; modified from EPA 6020

ICP/MS - DIGESTION

Antimony
 Arsenic
 Barium
 Beryllium
 Cadmium
 Chromium
 Cobalt
 Copper
 Lead
 Molybdenum
 Selenium
 Silver
 Vanadium

Water (Inorganic)

Total Phosphorus - Water, Wastewater, Liquid Biosolids (057)

A-TP-01; modified from MOEE RTNP-E3367

AUTO COLOR - DIGESTION

Total Phosphorus

OSDWA †

Water (Inorganic)

Total Suspended Solids (TSS) - Water (009)

A-TSS-01; modified from SM 2540 D

GRAVIMETRIC

Total Suspended Solids

OSDWA †

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Water (Inorganic) Turbidity - Water (026) A-TURB-01; modified from SM 2130 B NEPHELOMETRY Turbidity	OSDWA †
Water (Microbiology) Coliforms - Water (050) B-ECTC-01; modified from MICROMFDC-E3407 MEMBRANE FILTRATION (DC) Background Bacteria Escherichia coli (E. coli) Total Coliforms	OSDWA †
Water (Microbiology) Escherichia coli (E. coli) - Water (010) B-MFEC-01; modified from MFMICRO-E3371 MEMBRANE FILTRATION (EC) Escherichia coli (E. coli)	OSDWA †
Water (Microbiology) Fecal (Thermotolerant) Coliforms - Water (065) B-MFFC-01; modified from MFMICRO-E3371 MEMBRANE FILTRATION (mFC) Fecal (Thermotolerant) Coliforms	OSDWA †
Water (Microbiology) Heterotrophic Plate Count (HPC) - Water (021) B-HPC-01; modified from SM 9215 C SPREAD PLATE Heterotrophic Plate Count (HPC)	OSDWA †
Water (Microbiology) Total Coliforms - Water (066) B-MFTC-01; modified from MFMICRO-E3371 MEMBRANE FILTRATION (mENDO) Background Counts Total Coliforms	OSDWA †
Water (Organic) Glycols - Water (085) C-GLYCOL-01; modified from EPA 8015B DIRECT INJECTION GC-FID Diethylene glycol Ethylene glycol Propylene glycol	OSDWA †
Water (Organic) Petroleum Hydrocarbons (PHC) - Water (072) C-GROW-02; modified from MOE E3421 GC/FID - PURGE AND TRAP F1: C6-C10	OSDWA †
Water (Organic) Volatile Organic Compounds (VOC) - Water (041) C-VOC-02; modified from EPA 8260 and 5030 GC/MS - PURGE AND TRAP 1,1-Dichloroethane 1,1-dichloroethylene 1,1-Dichloropropene	OSDWA †

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1,1,1-Trichloroethane
 1,1,1,2-Tetrachloroethane
 1,1,2-Trichloroethane
 1,1,2,2-Tetrachloroethane
 1,2-Dibromo-3-chloropropane
 1,2-dichlorobenzene
 1,2-dichloroethane
 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)
 Benzene
 Bromobenzene
 Bromodichloromethane
 Bromoform
 Bromomethane
 Carbon Tetrachloride
 Chlorobenzene
 Chlorodibromomethane
 Chloroform
 Chloromethane
 cis-1,2-Dichloroethylene
 cis-1,3-Dichloropropene
 Dibromomethane
 Dichlorodifluoromethane
 Dichloromethane
 Ethylbenzene
 Ethylene Dibromide
 Hexachlorobutadiene
 Hexane
 Isopropylbenzene
 m/p-xylene
 Methyl Ethyl Ketone
 Methyl isobutyl Ketone
 Methyl t-butyl ether
 n-Butylbenzene
 n-Propylbenzene
 Naphthalene
 o-xylene
 sec-Butylbenzene
 Styrene
 tert-Butylbenzene

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Tetrachloroethylene
Toluene
trans-1,2-Dichloroethylene
trans-1,3-Dichloropropene
Trichloroethylene
Trichlorofluoromethane
Vinyl Chloride

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CALA

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Laboratory Accreditation Inc.

CALA Directory of Laboratories

Membership Number: 2728

Laboratory Name: Caduceon Environmental Laboratories (Kingston)

Parent Institution: Caduceon Enterprises Inc.

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Standard: Conforms with requirements of ISO/IEC 17025

Clients Served:

Revised On: September 27, 2017

Valid To: June 22, 2019

Scope of Accreditation

Oil (Organic)

Polychlorinated Biphenyls (PCB) - Oil (081)

PCB-002; modified from EPA 8082A

GC/ECD - EXTRACTION

Aroclor 1242

Aroclor 1248

Aroclor 1254

Aroclor 1260

Total PCB

Soil (Organic)

Polychlorinated Biphenyls (PCB) - Soil (080)

PCB-003; modified from EPA 8082A

GC/ECD - EXTRACTION

Aroclor 1242

Aroclor 1248

Aroclor 1254

Aroclor 1260

Total PCB

Solids

Total Ammonia - Soil, Solids, Biosolids (083)

NH3-001; modified from MOEE 3116

AUTO COLOR

Total Ammonia

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Solids (Inorganic)

Conductivity - Solids (077)

COND-003; modified from MOE E3138

CONDUCTIVITY METER

Conductivity

Solids (Inorganic)

Cyanide - Soil (074)

CN-001; modified from EPA 9012B

COLORIMETRIC - WATER EXTRACTION

Cyanide (Total)

Free Cyanide

Solids (Inorganic)

Extractable Cyanide - Solid Waste [100% SOLID MATRICES ONLY] (061)

CN-001; EPA 1311 (LEACH) and modified from SM4500 CN-E (ANALYSIS)

COLORIMETRIC - TCLP

Cyanide (WAD)

Solids (Inorganic)

Extractable Fluoride - Solid Waste [100% SOLID MATRICES ONLY] (062)

F-001; EPA 1311 (LEACH) and modified from SM 4500-F, D (ANALYSIS)

SPADNS-TCLP

Fluoride

Solids (Inorganic)

Oil and Grease - Soil (049)

O & G-001; modified from SM 5520 B, F

GRAVIMETRIC

Animal/Vegetable Oil and Grease

Mineral Oil and Grease

Total Oil and Grease

Solids (Inorganic)

pH - Soil (056)

pH-001/pH-003; modified from MOECC PHSOIL-E3137

pH METER

pH

Solids (Inorganic)

Total Kjeldahl Nitrogen (TKN) - Soil, Solids, Biosolids (078)

TPTKN-001; modified from MOE E3116

AUTO COLOR - DIGESTION

Total Kjeldahl Nitrogen (TKN)

Solids (Inorganic)

Total Phosphorus - Soils, Solid Biosolids (079)

TPTKN-001; modified from MOE E3116

AUTO COLOR - DIGESTION

Total Phosphorus

Solids (Organic)

Base Neutral Acid Extractables (BNA) - Soil (048)

NAB-S-001; modified from EPA 525.2 and EPA 8270D

GC/MS - EXTRACTION

1+2-Methylnaphthalene (Calculation)

1-Methylnaphthalene

1,1-Biphenyl

1,2,4-Trichlorobenzene

2-Chlorophenol

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2-Methylnaphthalene
 2,4+2,6-Dinitrotoluene (Calculation)
 2,4-Dimethylphenol
 2,4-Dinitrophenol
 2,4-Dinitrotoluene
 2,4,5-Trichlorophenol
 2,6-Dinitrotoluene
 3,3'-Dichlorobenzidine
 Acenaphthene
 Acenaphthylene
 Alachlor
 Aldicarb
 Anthracene
 Atrazine
 Atrazine, desethyl
 Azinphos-methyl
 Bendiocarb
 Benzo (a) anthracene
 Benzo (a) pyrene
 Benzo (b) fluoranthene
 Benzo (q,h,i) perylene
 Benzo (k) fluoranthene
 Bis(2-chloroethyl) ether
 Bis(2-chloroisopropyl) ether
 Bis(2-ethylhexyl) phthalate
 Bromoxynil
 Carbaryl
 Carbofuran
 Chlorpyrifos ethyl
 Chrysene
 Cyanazine
 Di-n-butyl phthalate
 Diazinon
 Dibenzo (a,h) anthracene
 Dicamba
 Dichlorophenol, 2,4-
 Dichlorophenoxy acetic acid, 2,4-
 Diclofop-methyl
 Diethyl phthalate
 Dimethoate
 Dimethyl phthalate
 Dinoseb
 Diuron
 Fluoranthene
 Fluorene
 Hexachloroethane
 Indeno (1,2,3 - cd) pyrene
 Malathion
 Metolachlor
 Metribuzin
 Naphthalene
 p-Chloroaniline
 Parathion-ethyl

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Pentachlorophenol
Phenanthrene
Phenol
Phorate
Picloram
Prometryne
Pyrene
Simazine
Temephos
Terbufos
Tetrachlorophenol, 2,4,5,6-
Total PAHs (Calculation)
Triallate
Trichlorophenol, 2,4,6-
Trichlorophenoxy acetic acid, 2,4,5-
Trifluralin

Solids (Organic)

Base Neutral Acid Extractables (BNA) - Solid Waste [100% SOLID MATRICES ONLY] (060)
NAB-W-001; EPA 1311 (LEACH) and modified from EPA 8270D (ANALYSIS)

GC/MS - TCLP

2,3,4,6-Tetrachlorophenol
2,4-Dichlorophenol
2,4-Dinitrotoluene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
3/4-Methylphenol
Benzo(a)pyrene
Cresols (total)
Hexachlorobenzene
Hexachlorobutadiene
Hexachloroethane
Nitrobenzene
Pentachlorophenol
Pyridine

Solids (Organic)

Chlorinated Pesticides - Soil (076)

PESTCL-002; modified from EPA 8081B and EPA 8082A

GC/ECD - EXTRACTION

Aldrin
Aldrin + Dieldrin
alpha-BHC
alpha-Chlordane
beta-BHC
DDT + metabolites
Dieldrin
Endosulfan I
Endosulfan I/II
Endosulfan II
Endosulfan Sulfate
Endrin
gamma-BHC (Lindane)
gamma-Chlordane
Heptachlor

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Heptachlor epoxide
 Hexachlorobenzene
 Hexachlorobutadiene
 Hexachloroethane
 Methoxychlor
 Mirex
 o,p'-DDD
 o,p'-DDE
 o,p'-DDT
 Oxychlordane
 p,p'-DDD
 p,p'-DDE
 pp'-DDT
 Total DDD
 Total DDE
 Total DDT

Solids (Organic)

Petroleum Hydrocarbons (PHC) - Soil (046)
 PHC-S-001; CCME and MOEE TPH E3398
 GC/FID - EXTRACTION
 F2: C10-C16
 F3: C16-C34
 F4: C34-C50

Solids (Organic)

Petroleum Hydrocarbons (PHC) - Soil (058)
 PHC-S-001; CCME CWS REFERENCE METHOD
 GRAVIMETRIC
 F4: Gravimetric

Solids (Organic)

Total Petroleum Hydrocarbons (TPH) - Soil (018)
 TPH EXT - 002; modified from MOEE TPH-E3398
 SONICATION GC/FID - EXTRACTION
 Diesel Range Organics C10-C24
 Heavy Oils: C24-C50
 TPH C10-C50

Water (Inorganic)

Alkalinity - Water (008)
 ALK 001; modified from SM 2320 B
 TITRIMETRIC
 Alkalinity (pH 4.5)
 Bicarbonate
 Carbonate

OSDWA †

Water (Inorganic)

Alkalinity - Water (065)
 ALK-002; modified from SM 2320 B
 AUTO TITRIMETRIC
 Alkalinity (pH 4.5)
 Bicarbonate
 Carbonate

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Water (Inorganic) Ammonia + Ammonium - Water, Wastewater, Liquid Biosolids (025) NH3-001; modified from SM 4500-NH3-H AUTO COLOR Ammonia Unionized Ammonia	OSDWA †
Water (Inorganic) Biochemical Oxygen Demand (BOD) - Water (054) BOD-001; modified from SM 5210 B D.O. METER BOD (5 day) CBOD (5 day)	OSDWA †
Water (Inorganic) Colour - Water (013) COL 001; modified from SM 2120 C COLORIMETRIC True Colour	OSDWA †
Water (Inorganic) Conductivity - Water (010) COND 001; modified from SM 2510 B CONDUCTIVITY METER Conductivity (25°C)	OSDWA †
Water (Inorganic) Conductivity - Water (067) COND-002; modified from SM 2510 B AUTO CONDUCTIVITY METER Conductivity (25°C)	OSDWA †
Water (Inorganic) Cyanide - Water (006) CN 001; modified from SM 4500 CN-E AUTO COLOR - DISTILLATION Cyanide (SAD) Free Cyanide	OSDWA †
Water (Inorganic) Oil and Grease - Water (047) O & G-001; modified from SM 5520 B, F GRAVIMETRIC Animal/Vegetable Oil and Grease Mineral Oil and Grease Total Oil and Grease	OSDWA †
Water (Inorganic) pH - Water (009) PH 001; modified from SM 4500 H+B pH - METER pH	OSDWA †
Water (Inorganic) pH - Water (066) pH-002; modified from SM 4500H+ B AUTO - pH METER pH	OSDWA †

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Water (Inorganic) Phosphate - Water (033) DRP-001; modified from SM 4500-P, E COLOR Phosphate	OSDWA †
Water (Inorganic) Solids - Water, Liquid Sludge (026) TSS-001/TS-001; modified from SM 2540 B, D, E GRAVIMETRIC Total Solids Total Suspended Solids Total Volatile Solids Volatile Suspended Solids	OSDWA †
Water (Inorganic) Sulphide - Water (036) H2S-001; modified from SM 4500-S2-D COLORIMETRIC Sulfide	OSDWA †
Water (Inorganic) Tannin and Lignin - Water (085) TAN-001; SM 5550 AUTO COLOR Tannin and Lignin	OSDWA †
Water (Inorganic) Total Kjeldahl Nitrogen (TKN) - Water, Wastewater, Liquid Biosolids (016) TPTKN 001; modified from MOEE STKNP-E3199A.1 AUTO COLOR - DIGESTION Organic Nitrogen Total Kjeldahl Nitrogen	OSDWA †
Water (Inorganic) Total Phosphorus - Water, Wastewater, Liquid Biosolids (042) TPTKN 001; modified from MOE STKNP-E3199A.1 AUTO COLOR - DIGESTION Total Phosphorus	OSDWA †
Water (Inorganic) Turbidity - Water (014) TURB 001; modified from SM 2130 B TURBIDIMETRIC Turbidity	OSDWA †
Water (Microbiology) Coliforms - Water (035) ECTC-001; modified from MOE DC MEDIUM MICROMFDC-E3407 MEMBRANE FILTRATION (DC) Background Escherichia coli (E. coli) Total Coliforms	OSDWA †
Water (Microbiology) Escherichia coli (E. coli) - Water (002) EC 001; modified from SM 9222 D MEMBRANE FILTRATION (mTEC-XGLUC) Escherichia coli (E. coli)	OSDWA †

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Water (Microbiology) Fecal (Thermotolerant) Coliforms - Water (044) FC-001; modified from SM 9222 D MEMBRANE FILTRATION (mTEC) WITH INDICATOR Fecal (Thermotolerant) Coliforms	OSDWA †
Water (Microbiology) Fecal Streptococci - Water (003) FS 001; modified from SM 9230 C MEMBRANE FILTRATION Fecal streptococci	OSDWA †
Water (Microbiology) Heterotrophic Plate Count (HPC) - Water (001) HPC 001; modified from SM 9215 D MEMBRANE FILTRATION Heterotrophic Plate Count (HPC)	OSDWA †
Water (Microbiology) Total Coliforms - Water (043) TC 001; modified from SM 9222 B MEMBRANE FILTRATION (mENDO) Background Counts Total Coliforms	OSDWA †
Water (Organic) 2-methyl-4-chlorophenoxyacetic acid (MCPA) - Water (084) HERB-001; modified from EPA 515.1 GC/MS MCPA	
Water (Organic) Base Neutral Acid Extractables (BNA) - Water (030) NAB-W-001; modified from EPA 8270D GC/MS 1+2-Methylnaphthalene (Calculation) 1-Methylnaphthalene 1,1-Biphenyl 1,2-Dichlorobenzene 1,2,4-Trichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 2-Chloronaphthalene 2-Chlorophenol 2-Methylnaphthalene 2-Methylphenol 2-Nitrophenol 2,3,4,6-tetrachlorophenol 2,4+2,6-Dinitrotoluene (Calculation) 2,4-dichlorophenol 2,4-dichlorophenoxyacetic acid 2,4-Dimethylphenol 2,4-Dinitrophenol 2,4-Dinitrotoluene 2,4,5-Trichlorophenol 2,4,5-trichlorophenoxyacetic acid 2,4,6-trichlorophenol 2,6-Dinitrotoluene	OSDWA †

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3,3-Dichlorobenzidine
 4-Bromophenyl phenyl ether
 4-Chloro-3-methyl phenol
 4-Chloroaniline
 4-Chlorophenyl phenyl ether
 4-Methylphenol
 4-Nitrophenol
 4,6-Dinitro-2-methylphenol
 Acenaphthene
 Acenaphthylene
 Alachlor
 Aldicarb
 Anthracene
 Atrazine
 Azinphos-methyl
 Azobenzene
 Bendiocarb
 Benzo (a) anthracene
 Benzo (a) pyrene
 Benzo (b) fluoranthene
 Benzo (g,h,i) perylene
 Benzo (k) fluoranthene
 Bis(2-chloroethoxy)methane
 Bis(2-chloroethyl) ether
 Bis(2-chloroisopropyl) ether
 Bis(2-ethylhexyl) phthalate
 Bromoxynil
 Butylbenzyl phthalate
 Carbaryl
 Carbazole
 Carbofuran
 Chlorpyrifos (ethyl)
 Chrysene
 Cyanazine
 Desethyl atrazine
 Di-n-butyl phthalate
 Di-n-octyl phthalate
 Diazinon
 Dibenzo (a,h) anthracene
 Dibenzofuran
 Dicamba
 Diclofop-methyl (as free acid)
 Diethyl phthalate
 Dimethoate
 Dimethyl phthalate
 Dinoseb
 Diuron
 Fluoranthene
 Fluorene
 Hexachlorobenzene
 Hexachlorobutadiene
 Hexachlorocyclopentadiene
 Hexachloroethane

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Indeno (1,2,3 - cd) pyrene
 Isophorone
 Malathion
 Metolachlor
 Metribuzin
 N-Nitrosodi-n-propylamine
 N-Nitrosodiphenylamine
 Naphthalene
 Nitrobenzene
 Parathion (ethyl)
 Pentachlorophenol
 Phenanthrene
 Phenol
 Phorate
 Picloram
 Prometryne
 Pyrene
 Simazine
 Temephos
 Terbufos
 Total PAH
 Triallate
 Trifluralin

Water (Organic)

Diquat and Paraquat - Water (028)
 HPLCDIQ-001; modified from EPA 549.2
 HPLC
 Diquat
 Paraquat

OSDWA †

Water (Organic)

Glyphosate - Water (031)
 GLYPH-002; modified from EPA 547
 DIRECT INJECTION HPLC
 Glyphosate

OSDWA †

Water (Organic)

Pesticides and Polychlorinated Biphenyls (PCB) - Water (027)
 PESTCL-001/PCB-001; modified from EPA 8081 and EPA 8082A
 GC/ECD - EXTRACTION
 A-BHC
 Aldrin
 Aldrin + Dieldrin
 alpha-Chlordane
 beta-BHC
 DDT + metabolites (Calculation)
 delta-BHC
 Dieldrin
 Endosulfan I
 Endosulfan I/II
 Endosulfan II
 Endosulfan Sulfate
 Endrin
 Endrin Aldehyde
 Endrin Ketone

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gamma-Chlordane
 Heptachlor
 Heptachlor Epoxide
 Hexachlorobenzene
 Hexachlorobutadiene
 Hexachlorocyclopentadiene
 Hexachloroethane
 Lindane (gamma-BHC)
 Methoxychlor
 Mirex
 o,p' - DDT
 o,p'-DDD
 o,p'-DDE
 Oxychlordane
 p,p' - DDT
 p,p'-DDD
 p,p'-DDE
 Total DDD (Calculation)
 Total DDE (Calculation)
 Total DDT (Calculation)
 Total PCB

Water (Organic)

Petroleum Hydrocarbons (PHC) - Water (050)
 PHC-W-001; modified from MOEE TPM E3397A, E 3398
 GC/FID - EXTRACTION
 F2: C10-C16
 F3: C16-C34
 F4: C34-C50

OSDWA †

Water (Organic)

Petroleum Hydrocarbons (PHC) - Water (059)
 PHC-W-001; MOE E3421
 GRAVIMETRIC
 F4: Gravimetric

OSDWA †

Water (Organic)

Polychlorinated Biphenyls (PCB) - Water (082)
 PCB-001, PESTCL-001; modified from EPA 8081 AND EPAS 8082 A
 GC/ECD - EXTRACTION
 Aroclor 1242
 Aroclor 1248
 Aroclor 1254
 Aroclor 1260
 Total PCB

Water (Organic)

Total Petroleum Hydrocarbons (TPH) - Water (019)
 TPH EXT - 002; modified from MOEE E 3421
 GC/FID - LIQUID EXTRACTION
 Diesel Range Organics C10-C24
 Heavy Oils: C24-C50
 TPH C10-C50

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