



CALA

Canadian Association for
Laboratory Accreditation Inc.

CALA Directory of Laboratories

Membership Number: 3588
Laboratory Name: AGAT Laboratories (Dartmouth)
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Standard: Conforms with requirements of ISO/IEC 17025
Clients Served: All Interested Parties
Revised On: December 7, 2017
Valid To: April 3, 2019

Scope of Accreditation

Air (Inorganic)

Total Suspended Particulates - Air (128)
INOR-121-6041; EPA 5
GRAVIMETRIC
Total Suspended Particulate (TSP)

Air (Organic)

Polycyclic Aromatic Hydrocarbons (PAH) - Air (145)
ORG-120-5104; modified from NIOSH 5515
GC/MS
1-Methylnaphthalene
2-Methylnaphthalene
Acenaphthene
Naphthalene

Air (Organic)

Total Petroleum Hydrocarbons (TPH) - Air (087)
VOL-120-5027; modified from NIOSH 1500 and ATLANTIC RBCA GUIDELINES FOR LABORATORIES TIER 1/TIER 2
GC/FID
Aliphatic >C10-C12
Aliphatic >C12-C16
Aliphatic >C16-C21
Aliphatic C6-C8
Aliphatic >C8-C10
Aromatic >C10-C12
Aromatic >C12-C16
Aromatic >C8-C10
Benzene

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>C10-C21
>C6-C10
Ethylbenzene
m,p-Xylene
o-Xylene
Toluene

Air Filter

Metals - Filter (121)

MET-121-6105, MET-121-6112; modified from SM 3125/NIOSH 7303

ICP/MS - DIGESTION

Aluminum
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Molybdenum
Nickel
Silver
Strontium
Thallium
Tin
Titanium
Uranium
Vanadium
Zinc

Oil (Organic)

Total Polychlorinated Biphenyls (PCB) - Oil (001)

ORG-120-5107; modified from ALBERTA ENVIRONMENT METHOD M106.0 and ASTM D4059-00

GC/ECD - EXTRACTION

Total PCB

Paint (Inorganic)

Mercury - Paint (108)

MET-121-6101, MET-121-6107; modified from DETERMINATION OF TOTAL MERCURY IN PAINT and APPLIED COATINGS, PRODUCT SAFETY BUREAU REF. MANUAL BOOK 5, HEALTH CANADA

COLD VAPOUR AA - DIGESTION

Mercury

Paint (Inorganic)

Metals - Paint (075)

MET-121-6103, MET 121-6105; modified from SW-846 3050B and EPA SW-846 6020A and SM 3125

ICP/MS

Arsenic
Bismuth
Cadmium
Copper
Lead

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Lithium
Molybdenum
Phosphorus
Rubidium
Selenium
Silver
Sodium
Thallium
Tin
Uranium
Vanadium

Paint (Organic)

Total Polychlorinated Biphenyls (PCB) - Paint (105)
ORG-120-5107; modified from EPA 8082A
GC/ECD - EXTRACTION
Total PCB

Solids (Inorganic)

Grain Size - Soil (095)
INOR-121-6034; ASTM D422-63
SIEVE AND PIPETTE
0 PHI (<1)
1 PHI (<1/2)
-1 PHI (<2)
2 PHI (<1/4)
-2 PHI (<4.75)
3 PHI (<1/8)
-3 PHI (<9.5)
4PHI (<1/16)
-4PHI (<12.5)
5 PHI (<1/32)
6 PHI (<1/64)
7 PHI (<1/128)
8 PHI (<1/256)
9 PHI (<1/512)
% clay
Gravel
% Sand
Silt

Solids (Inorganic)

Hexavalent Chromium - Soil (101)
INOR-121-6029; modified from SSSA BOOK 5, CH 25, P683
AUTO COLOR
Hexavalent chromium

Solids (Inorganic)

Leachable Mercury - Soil, Waste (084)
MET-121-6107, INOR-121-6039; IN-HOUSE LEACHATE and SM 3112 B and EPA 245.1
COLD VAPOUR AA - LEACH
Mercury

Solids (Inorganic)

Leachable Mercury - Soil, Waste (085)
MET-121-6107, INOR-121-6036; modified from EPA SW-846 1312 and SM 3112B and EPA 245.1
COLD VAPOUR AA - SPLP
Mercury

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Solids (Inorganic)

Leachable Mercury - Soil, Waste (086)

MET-121-6107, INOR-121-6040; modified from CGSB and SM 3112B and EPA 245.1

COLD VAPOUR AA - CGSB

Mercury

Solids (Inorganic)

Leachable Metals - Soil, Solid Waste (077)

MET-121-6105, INOR-121-6039; IN-HOUSE LEACHATE and SM 3125 and SM 3030 F and SM 3030 B

ICP/MS - LEACH

Aluminum

Antimony

Beryllium

Bismuth

Calcium

Cobalt

Copper

Iron

Lithium

Magnesium

Manganese

Molybdenum

Nickel

Rubidium

Strontium

Thallium

Tin

Titanium

Vanadium

Zinc

Solids (Inorganic)

Leachable Metals - Soil, Solid Waste (078)

MET-121-6105, INOR-121-6036; modified from EPA SW-846 1312 and SM 3125 and SM 3030 F, B

ICP/MS - SPLP

Aluminum

Antimony

Arsenic

Barium

Beryllium

Bismuth

Boron

Cadmium

Calcium

Chromium

Cobalt

Copper

Iron

Lead

Lithium

Magnesium

Manganese

Molybdenum

Nickel

Rubidium

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Selenium
Silver
Sodium
Strontium
Thallium
Tin
Titanium
Uranium
Vanadium
Zinc

Solids (Inorganic)

Leachable Metals - Soil, Waste (079)

MET-121-6105, INOR-121-6040; modified from CGSB 164-GP-1MP, SM 3125, SM 3030 F, B
ICP/MS - Leachable CGSB

Aluminum
Antimony
Arsenic
Barium
Beryllium
Bismuth
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Lithium
Magnesium
Manganese
Molybdenum
Nickel
Rubidium
Selenium
Silver
Strontium
Thallium
Tin
Titanium
Uranium
Vanadium
Zinc

Solids (Inorganic)

Mercury - Soil (004)

MET-121-6107, MET-121-6101; modified from EPA 245.5 and SM 3112B
COLD VAPOUR AA - DIGESTION

Mercury

Solids (Inorganic)

Metals - Soil (005)

MET-121-6105, MET-121-6103; modified from EPA SW-846 6020A and EPA SW-846 3050B and SM 3125
ICP/MS - DIGESTION

Aluminum

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Antimony
Arsenic
Barium
Beryllium
Bismuth
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Lithium
Magnesium
Manganese
Molybdenum
Nickel
Phosphorus
Potassium
Rubidium
Selenium
Silver
Sodium
Strontium
Tellurium
Thallium
Tin
Uranium
Vanadium
Zinc
Zirconium

Solids (Inorganic)

pH - Soil, Sediment (076)

INOR-121-6006; modified from CANADIAN SOCIETY OF SOIL SCIENCE - P155

METER

Soil pH

Solids (Inorganic)

Phenols - Soil (091)

INOR-121-6010; modified from SW-846 9065

AUTO COLOR

Total Phenolics

Solids (Inorganic)

Total Oil and Grease - Soil, Sediment (073)

VOL-120-5024; IN-HOUSE

GRAVIMETRIC

Total Oil and Grease

Solids (Organic)

BTEX - Solids (175)

VOL-120-5031; ATLANTIC RBCA GUIDELINES FOR LABORATORIES

GC/MS - HEADSPACE

Benzene

Ethylbenzene

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m/p-xylene
o-xylene
Toluene

Solids (Organic)

Extractable Petroleum Hydrocarbons (EPH) Fractionation - Soil (058)

VOL-120-5007; modified from ATLANTIC RBCA GUIDELINES FOR LABORATORIES TIER 1/TIER 2
GC/FID - EXTRACTION

Aliphatic >C10-C12
Aliphatic >C12-C16
Aliphatic >C16-C21
Aliphatic >C21-C32
Aromatic >C10-C12
Aromatic >C12-C16
Aromatic >C16-C21
Aromatic >C21-C32
>C10-C16
>C16-C21
Fuel Oil (>C10-C21)
Lube Oil (>C21-C32)

Solids (Organic)

Organochlorine (OC) Pesticides - Soil (100)

ORG-120-5108; modified from EPA SW-846 3510C and EPA SW-846 8080 and EPA SW-846 8081A
GC/ECD - EXTRACTION

a-BHC
a-Chlordane
Aldrin
b-BHC
d-BHC
Dieldrin
Endosulfan I
Endosulfan II
Endosulfan Sulfate
Endrin
Endrin Aldehyde
Endrin Keytone
g-BHC (Lindane)
g-Chlordane
Heptachlor
Heptachlor epoxide
Hexachlorobenzene
Methoxychlor
Mirex
o,p-DDD
o,p-DDE
o,p-DDT
Oxychlordane
p,p'-DDD
p,p'-DDE
p,p'-DDT
Trifluralin

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Solids (Organic)

Petroleum Hydrocarbons (PHC) - Soil (050)
VOL-120-5024; modified from CCME
GC/FID - SHAKE EXTRACTION
F2: C10-C16
F3: C16-C34
F4: C34-C50

Solids (Organic)

Petroleum Hydrocarbons (PHC) - Soil (059)
VOL-120-5024; CCME
GRAVIMETRIC - SHAKE EXTRACTION
F4: Gravimetric

Solids (Organic)

Petroleum Hydrocarbons (PHC) - Soil (116)
VOL-120-5015; CCME
GC/FID - PURGE AND TRAP
F1: C6-C10

Solids (Organic)

Petroleum Hydrocarbons (PHC) - Solids (174)
VOL-120-5031; ATLANTIC RBCA GUIDELINES FOR LABORATORIES
GC/FID - HEADSPACE
F1: C6-C10

Solids (Organic)

Petroleum Hydrocarbons (PHC) - Solids (176)
VOL-120-5031; CCME
GC/FID - HEADSPACE
F1: C6-C10

Solids (Organic)

Polycyclic Aromatic Hydrocarbons (PAH) - Soil (008)
ORG-120-5104; modified from EPA SW-846 8270C and EPA SW-846 3541 and EPA SW-846 3510
GC/MS - EXTRACTION
1-Chloronaphthalene
1-Methylnaphthalene
2-Chloronaphthalene
2-Methylnaphthalene
Acenaphthene
Acenaphthylene
Acridine
Anthracene
Benzo (a) anthracene
Benzo (a) pyrene
Benzo (b) fluoranthene
Benzo(b,i)fluoranthene
Benzo(e)pyrene
Benzo (g,h,i) perylene
Benzo (k) fluoranthene
Chrysene
Dibenzo(a,h)anthracene
Fluoranthene
Fluorene
Indeno (1,2,3 - cd) pyrene
Naphthalene
Perylene

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Phenanthrene
Pyrene
Quinoline

Solids (Organic)

Total Polychlorinated Biphenyls (PCB) - Soil (009)
ORG-120-5106; modified from EPA 8082 and EPA 3510C
GC/ECD - EXTRACTION
Total PCB

Solids (Organic)

Volatile BTEX, MTBE - Soil (011)
VOL-120-5013; modified from ATLANTIC RBCA GUIDELINES FOR LABORATORIES TIER 1/TIER 2
GC/MS - PURGE AND TRAP
Benzene
Ethylbenzene
m/p-xylene
Methyl t-butyl ether
o-xylene
Toluene

Solids (Organic)

Volatile Organic Compounds (VOC) - Soil (014)
VOL-120-5002; modified from EPA SW-846 5035 and EPA SW-846 8260B
GC/MS - PURGE AND TRAP
1,1-Dichloroethane
1,1-dichloroethylene
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1,2,2-Tetrachloroethane
1,2-dichlorobenzene
1,2-dichloroethane
1,2-Dichloropropane
1,2,4-Trichlorobenzene
1,3-Dichlorobenzene
1,3-Dichloropropane
1,4-dichlorobenzene
2-Chloroethyl vinyl ether
2-Hexanone
Acetone (2-Propanone)
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon Tetrachloride
Chlorobenzene
Chlorodibromomethane
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethylene
cis-1,3-Dichloropropene
Dichloromethane
Ethylbenzene
Ethylene Dibromide

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m/p-xylene
Methyl Ethyl Ketone
Methyl isobutyl Ketone
Methyl t-butyl ether
o-xylene
Styrene
Tetrachloroethylene
Toluene
trans-1,2-Dichloroethylene
trans-1,3-Dichloropropene
Trichloroethylene
Trichlorofluoromethane
Vinyl chloride

Solids (Organic)

Volatile Petroleum Hydrocarbons (VPH) Fractionation - Soil (063)
VOL-120-5013; modified from ATLANTIC RBCA GUIDELINES TIER 1/TIER 2
GC/FID - PURGE AND TRAP
Aliphatic C6-C8
Aliphatic >C8-C10
Aromatic >C8-C10
F1: C6-C10

Swab (Inorganic)

Metals - Swab (129)
MET-121-6105, MET-121-6112; modified from SM 3125 B/NIOSH 9102
ICP/MS - DIGESTION
Aluminum
Barium
Beryllium
Cadmium
Cobalt
Iron
Lead
Manganese
Molybdenum
Nickel
Silver
Thallium
Tin
Titanium
Uranium

Swab (Organic)

Polychlorinated Biphenyls (PCB) - Swab (149)
ORG-120-5107; EPA 8081 and EPA 8082
GC/ECD
Total PCB

Tissue (Inorganic)

Mercury - Tissue (099)
MET-121-6101, MET-121-6107; modified from EPA 245.6 and DETERMINATION OF TOTAL MERCURY IN PAINTS, PRODUCT SAFETY BUREAU REFERENCE MANUAL BOOK 5 - HEALTH CAN
COLD VAPOUR AA
Mercury

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Tissue (Inorganic)

Metals - Tissue (098)

MET-121-6103, MET-121-6105; modified from EPA 200.8 and EPA 3050

ICP/MS - DIGESTION

Aluminum
Antimony
Arsenic
Barium
Beryllium
Bismuth
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Lithium
Magnesium
Manganese
Molybdenum
Nickel
Phosphorus
Potassium
Rubidium
Selenium
Silver
Sodium
Strontium
Tellurium
Thallium
Tin
Titanium
Uranium
Vanadium
Zinc

Tissue (Organic)

Organochlorine (OC) Pesticides - Tissue (183)

ORG-120-5115; modified from EPA SW846 3510 C and EPA SW846 8080 and EPA SW846 8081 A

GC/ECD - EXTRACTION

a-Chlordane
Aldrin
b-BHC
Dieldrin
Endosulfan I
Endosulfan II
Endosulfan Sulfate
Endrin
Endrin Keytone
g-BHC
g-Chlordane
Heptachlor

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Heptachlor epoxide
Hexachlorobenzene
Methoxychlor
Mirex
o,p-DDD
o,p-DDE
o,p-DDT
Oxychlorane
p,p-DDD
p,p-DDT
Trifluralin

Tissue (Organic)

Petroleum Hydrocarbons (PHC) - Tissue (097)

VOL-120-5032; modified from DETERMINATION OF PETROLEUM HYDROCARBONS IN SELECTED MARINE ORGANISMS UNEP 1995

GC/MS

Extractable Petroleum Hydrocarbons

Tissue (Organic)

Polychlorinated Biphenyls (PCB) - Tissue (182)

ORG-120-5117; modified from EPA SW846 8082 A and AGILENT GC/ECD ANALYSIS and CONFIRMATION OF PCBs in FISH TISSUE

GC/ECD - EXTRACTION

Total PCB

Tissue (Organic)

Polycyclic Aromatic Hydrocarbons (PAH) - Tissue (181)

ORG-120-5116; modified from EPA SW846 8270 C and EPA SW846 3541 and EPA SW846 3510 and AGILENT PAH ANALYSIS IN FISH BY GC/MS

GC/MS - EXTRACTION

1-Chloronaphthalene
1-Methylnaphthalene
2-chloronaphthalene
2-Methylnaphthalene
Acenaphthalene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(b,i)fluoranthene
Benzo(e)pyrene
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

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Waste (Leachate)

Volatile Organic Compounds (VOC) - Waste (137)

VOL-120-5001, INOR-121-6039; IN-HOUSE LEACHATE and modified from EPA 624 and EPA SW-846 5030B and EPA SW-846 8260

GC/MS

1,1-Dichloroethane
1,1-Dichloroethylene
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1,2,2-Tetrachloroethane
1,2-Dibromoethane
1,2-Dichlorobenzene
1,2-Dichloroethane
1,2-Dichloropropane
1,2,4-Trichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2-Chloroethyl vinyl ether
2-Hexanone
Acetone (2-Propanone)
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon tetrachloride
Chlorobenzene
Chlorodibromomethane
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethylene
cis-1,3-Dichloropropene
Dichloromethane
Ethylbenzene
Ethylene dibromide
m,p-Xylene
Methyl ethyl ketone
Methyl isobutyl ketone (MIBK)
Methyl t-butyl ether (MTBE)
o-Xylene
Styrene
Tetrachloroethylene
Toluene
trans-1,2-Dichloroethylene
trans-1,3-Dichloropropene
Trichloroethylene
Trichlorofluoromethane
Vinyl chloride

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Waste (Organic)

BTEX and MTBE - Waste (Leachate) (114)

VOL-120-5010, INOR-121-6036; modified from ATLANTIC RBCA GUIDELINES and EPA 1312

GC/MS - PURGE AND TRAP - SPLP

Benzene

Ethylbenzene

m,p-Xylene

o-Xylene

t-Butyl methyl ether (MTBE)

Toluene

Waste (Organic)

Extractable Petroleum Hydrocarbons (EPH) - Waste (CGSB Leachate) (144)

VOL-120-5007, INOR-121-6040; ATLANTIC RBCA GUIDELINES FOR LABORATORIES TIER 1/TIER 2, CGSB

164-GP-IMP

GC/FID

>C10-C16

>C16-C21

>C21-C32

Waste (Organic)

Extractable Petroleum Hydrocarbons (EPH) - Waste (Leachate) (113)

VOL-120-5007, INOR-121-6036; modified from ATLANTIC RBCA GUIDELINES and EPA 1312

GC/FID - SPLP

>C10-C16

>C10-C21

>C16-C21

>C21-C32

Waste (Organic)

Extractable Petroleum Hydrocarbons (EPH) - Waste (Leachate) (143)

VOL-120-5007, INOR-121-6039; IN-HOUSE LEACHATE/ATLANTIC RBCA GUIDELINES FOR LABORATORIES

TIER 1/TIER 2

GC/FID

>C10-C16

>C16-C21

>C21-C32

Waste (Organic)

Polychlorinated Biphenyls (PCB) - Waste (CGSB Leachate) (148)

ORG-120-5106, INOR-121-6040; CGSB 164-GP-IMP and EPA 8082 and EPA 3510C

GC/ECD

Total PCB

Waste (Organic)

Polychlorinated Biphenyls (PCB) - Waste (Leachate) (150)

ORG-120-5106, INOR-121-6039; IN-HOUSE LEACHATE and EPA 8082 and EPA 3510C

GC/ECD

Total PCB

Waste (Organic)

Polycyclic Aromatic Hydrocarbons (PAH) - Leachate - Waste (102)

ORG-120-5104, INOR-121-6036; modified from EPA 1312 and EPA SW-846 8270D and EPA SW-846 3541 and

EPA SW-846 3510

GC/MS - SPLP

1-Methylnaphthalene

2-Methylnaphthalene

Acenaphthene

Acenaphthylene

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Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(e)pyrene
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

Waste (Organic)

Polycyclic Aromatic Hydrocarbons (PAH) - Waste (146)

ORG-120-5104, INOR-121-6040; CGSB 164-GP-IMP/SW-846 8270 D/354/3510

GC/MS

1-Methylnaphthalene
2-Methylnaphthalene
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(b,i)fluoranthene
Benzo(e)pyrene
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

Waste (Organic)

Polycyclic Aromatic Hydrocarbons (PAH) - Waste (147)

ORG-120-5104, INOR-121-6039; IN-HOUSE LEACHATE and EPA SW-846 8270 D and EPA SW-846 3541AND

EPA SW-846 3510

GC/MS

1-Methylnaphthalene
2-Methylnaphthalene
Acenaphthene
Acenaphthylene
Acridine
Anthracene
Benzo(a)anthracene

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Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(b,i)fluoranthene
Benzo(e)pyrene
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

Waste (Organic)

Total Polychlorinated Biphenyls (PCB) - Waste (Leachate) (103)
ORG-120-5106, INOR-121-6036; modified from EPA 8082 and EPA 3510C and EPA 1312
GC/ECD - SPLP
Total PCB

Waste (Organic)

Volatile Petroleum Hydrocarbons (VPH) - Waste (Leachate) (118)
VOL-120-5010, INOR-121-6036; modified from ATLANTIC RBCA GUIDELINES and EPA 1312
GC/FID - PURGE AND TRAP - SPLP
C6-C10

Waste (Organic)

Volatile Petroleum Hydrocarbons (VPH) - Waste (Leachate) (139)
VOL-120-5010, INOR-121-6039; IN-HOUSE LEACHATE/ATLANTIC RBCA GUIDELINES FOR LABORATORIES
GC/FID - PURGE AND TRAP
C6-C10

Waste (Organic)

Volatile Petroleum Hydrocarbons (VPH) - Waste (Leachate) (140)
VOL-120-5010, INOR-121-6039; IN-HOUSE LEACHATE/ATLANTIC RBCA GUIDELINES FOR LABORATORIES
GC/MS - PURGE AND TRAP
Benzene
Ethylbenzene
m,p-Xylene
o-Xylene
Toluene

Water (Inorganic)

Acidity - Water (179)
INOR-121-6044; SM 2310 ACIDITY
TITRATION
Acidity

Water (Inorganic)

Alkalinity - Water (020)
INOR-121-6001; modified from SM 2320 B
TITRATION
Alkalinity (pH 4.5)

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Water (Inorganic)

Ammonia - Water (021)
INOR-121-6003; modified from SM 4500-NH3 G
AUTO COLOR
Ammonia

Water (Inorganic)

Anions - Water (022)
INOR-121-6005; SM 4110 B
ION CHROMATOGRAPHY
Bromate
Bromide
Chlorate
Chloride
Chlorite
Fluoride
Nitrate
Nitrite
Sulfate

Water (Inorganic)

Biochemical Oxygen Demand (BOD) - Water (023)
INOR-121-6023; modified from SM 5210 B
D.O. METER
BOD (5 day)
CBOD (5 day)

Water (Inorganic)

Carbon - Water (056)
INOR-121-6026; SM 5310 B
IR - COMBUSTION
Inorganic Carbon
Organic Carbon
Total Carbon

Water (Inorganic)

Carbon Dioxide - Water (180)
INOR-121-6044; SM 4500-CO2 C
TITRATION
Carbon dioxide (CO2)

Water (Inorganic)

Chemical Oxygen Demand (COD) - Water (024)
INOR-121-6013; SM 5220 D
COLOR - DIGESTION
COD

Water (Inorganic)

Chlorine - Water (112)
INOR-121-6037; modified from SM 4500-CL-F
DPD - TITRIMETRIC
Free Chlorine
Total Chlorine

Water (Inorganic)

Chlorine - Water (188)
INOR-121-6045; EPA 330.5
SPECTROPHOTOMETRIC
Total Chlorine

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Water (Inorganic)

Colour - Water (055)
INOR-121-6014; SM 2120 C
AUTO COLOR
True Colour

Water (Inorganic)

Conductivity - Water (025)
INOR-121-6001; modified from SM 2510 B
CONDUCTIVITY METER
Conductivity (25°C)

Water (Inorganic)

Dissolved and Extractable Metals - Water (029)
MET-121-6104, MET-121-6105; modified from SM 3125 and SM 3030 B, D
ICP/MS
Aluminum
Antimony
Arsenic
Barium
Beryllium
Bismuth
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Lithium
Magnesium
Manganese
Molybdenum
Nickel
Phosphorus
Potassium
Rubidium
Selenium
Silver
Sodium
Strontium
Tellurium
Thallium
Tin
Titanium
Uranium
Vanadium
Zinc
Zirconium

Water (Inorganic)

Hexavalent Chromium - Water (074)
INOR-121-6029; modified from SM 3500 - CRB
AUTO COLOR
Hexavalent Chromium

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Water (Inorganic)

Mercury - Water (032)

MET-121-6100, MET-121-6107; modified from SM 3112B and EPA 245.1

COLD VAPOUR AA - DIGESTION

Mercury

Water (Inorganic)

Oil and Grease - Water (066)

VOL-120-5026; modified from EPA 1664A

GRAVIMETRIC

Mineral Oil and Grease

Total Oil and Grease

Water (Inorganic)

pH - Water (035)

INOR-121-6001; modified from SM 4500 H+ B

pH METER

pH

Water (Inorganic)

Phosphate - Water (034)

INOR-121-6004; modified from EPA 365.1 and SM 4500 P F

AUTO COLOR

Phosphate

Water (Inorganic)

Reactive Silica - Water (057)

INOR-121-6028; EPA 370.1 and SM 4500 SI02E

AUTO COLOR

Reactive Silica

Water (Inorganic)

Redox Potential (ORP) - Water (122)

INOR-121-6042; SM 2580 B

ELECTRODE

Redox Potential

Water (Inorganic)

Solids - Water (036)

INOR-121-6024, INOR-121-6025, INOR-121-6043; modified from SM 2540 C, D, E

GRAVIMETRIC

Fixed Solids

Total Dissolved Solids

Total Solids

Total Suspended Solids

Volatile Solids

Volatile Suspended Solids

Water (Inorganic)

Total Kjeldahl Nitrogen (TKN) - Water (037)

INOR-121-6020; modified from SM 4500 NORG D

AUTO COLOUR

Total Kjeldahl Nitrogen

Water (Inorganic)

Total Metals - Water (030)

MET-121-6104, MET-121-6105; modified from SM 3125 and SM 3030 B, D

ICP/MS

Aluminum

Antimony

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Arsenic
Barium
Beryllium
Bismuth
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Lithium
Magnesium
Manganese
Molybdenum
Nickel
Phosphorus
Potassium
Rubidium
Selenium
Silver
Sodium
Strontium
Tellurium
Thallium
Tin
Titanium
Uranium
Vanadium
Zinc
Zirconium

Water (Inorganic)

Total Phosphorus - Water (038)
INOR-121-6009; modified from EPA 365.4 and SM 4500 PE
AUTO COLOR
Total Phosphorus

Water (Inorganic)

Turbidity - Water (039)
INOR-121-6022; SM 2130 B
NEPHELOMETRY
Turbidity

Water (Microbiology)

Coliforms - Water (081)
MIC-121-7000; modified from SM 9223 B
COLILERT - PRESENCE/ABSENCE
Escherichia coli (E. coli)
Total Coliforms

Water (Microbiology)

Coliforms - Water (115)
MIC-121-7000; modified from SM 9223 B
COLILERT- QUANTI-TRAY (MPN)
Escherichia coli (E. coli)

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Total Coliforms

Water (Microbiology)

Coliforms - Water (166)

MIC-121-7002; SM 9222 H

MEMBRANE FILTRATION (mCOLIBLUE)

Escherichia coli (E. coli)

Total Coliforms

Water (Microbiology)

Fecal (Thermotolerant) Coliforms - Water (160)

MIC-121-7001; modified from SM 9222 D

COLILERT- QUANTI-TRAY

Fecal (Thermotolerant) Coliforms

Water (Microbiology)

Fecal (Thermotolerant) Coliforms - Water (167)

MIC-121-7002; SM 9222 D

MEMBRANE FILTRATION (mFC)

Fecal (Thermotolerant) Coliforms

Water (Microbiology)

Heterotrophic Plate Count (HPC) - Water (168)

MIC-121-7002; SM 9215 D

MEMBRANE FILTRATION (mHPC)

Heterotrophic Plate Count (HPC)

Water (Microbiology)

Pseudomonas - Water (169)

MIC-121-7002; SM 9213 E

MEMBRANE FILTRATION (mPA)

Pseudomonas aeruginosa ((Parameter suspended on 12/5/2017))

Water (Organic)

BTEX - Water (044)

VOL-120-5010; modified from ATLANTIC RBCA GUIDELINES FOR LABORATORIES TIER 1/TIER 2

GC/MS - PURGE AND TRAP

Benzene

Ethylbenzene

m/p-xylene

o-xylene

Toluene

Water (Organic)

Dissolved Gases - Water (178)

VOL-120-5028; modified from EPA RSK-175

GC/FID - HEADSPACE

Butane

Ethane

Methane

Propane

Water (Organic)

Extractable Petroleum Hydrocarbons (EPH) - Water (060)

VOL-120-5026; PREP: IN-HOUSE; QUANT: modified from CCME

GRAVIMETRIC

F4G

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Water (Organic)

Extractable Petroleum Hydrocarbons (EPH) Fractionation - Water (072)
VOL-120-5007; modified from ATLANTIC RBCA GUIDELINES TIER 1/TIER 2
GC/FID - EXTRACTION
Aliphatic >C10-C12
Aliphatic >C12-C16
Aliphatic >C16-C21
Aliphatic >C21-C32
Aromatic >C10-C12
Aromatic >C12-C16
Aromatic >C16-C21
Aromatic >C21-C32
>C10-C16
>C16-C21
Fuel Oil (>C10-C21)
Lube Oil (>C21-C32)

Water (Organic)

Haloacetic Acids (HAA) - Water (061)
ORG-120-5110; modified from EPA 552.3
GC/ECD
Bromoacetic Acid
Bromochloroacetic acid
Chloroacetic acid
Dibromoacetic acid
Dichloroacetic acid
Trichloroacetic acid (TCAA)

Water (Organic)

Herbicides - Water (155)
ORG-120-5111; modified from EPA SW-846 8151A and EPA 515.1
GC/ECD - EXTRACTION
2,3,4,6-Tetrachlorophenol
2,4-D
2,4-Dichlorophenol
2,4,6-Trichlorophenol
Bromoxynil
Dicamba
Diclofop-methyl (as free acid)
Dinoseb
MCPA
Pentachlorophenol
Picloram

Water (Organic)

Organochlorine Pesticides (OC) - Water (071)
ORG-120-5108; modified from EPA SW-846 3510C and EPA SW-846 8080 and EPA SW-846 8081A
GC/ECD - EXTRACTION
A -BHC
a - Chlordane
Aldrin
beta-BHC
delta-BHC
Dieldrin
Endosulfan I
Endosulfan II

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Endosulfan Sulfate
Endrin
Endrin Aldehyde
Endrin Keytone
g - Chlordane
Heptachlor
Heptachlor Epoxide
Hexachlorobenzene
Lindane (gamma-BHC)
Mirex
o,p' - DDT
o,p-DDD
op'-DDE
Oxychlordane
p,p' - DDT
p,p' Methoxychlor
pp'-DDD
pp'-DDE
Total PCB

Water (Organic)

Organophosphorus (OP) Pesticides - Water (156)
ORG-120-5112; modified from EPA SW-846 3510C and EPA SW-846 8141 A and EPA SW-846 8270C
GC/MS - EXTRACTION
Azinphos-methyl
Chlorpyrifos (ethyl)
Diazinon
Dimethoate
Malathion
Parathion (ethyl)
Phorate
Terbufos

Water (Organic)

Petroleum Hydrocarbons (PHC) - Water (080)
VOL-120-5025; PREP: IN-HOUSE; QUANT: modified from CCME
GC/FID - SHAKE EXTRACTION
F2: C10-C16
F3: C16-C34
F4: C34-C50

Water (Organic)

Petroleum Hydrocarbons (PHC) - Water (120)
VOL-120-5014; PREP: IN-HOUSE; QUANT:CCME
GC/FID - PURGE AND TRAP
F1: C6-C10

Water (Organic)

Polycyclic Aromatic Hydrocarbons (PAH) - Water (042)
ORG-120-5104; modified from EPA SW-846 8270D and EPA SW-846 3510C and EPA SW-846 3541
GC/MS - EXTRACTION
1-Chloronaphthalene
1-Methylnaphthalene
2-Chloronaphthalene
2-Methylnaphthalene
Acenaphthene
Acenaphthylene

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Acridine
Anthracene
Benzo (a) anthracene
Benzo (a) pyrene
Benzo (b) fluoranthene
Benzo(b,i)fluoranthene
Benzo(e)pyrene
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

Water (Organic)

Total Polychlorinated Biphenyls (PCB) - Water (043)
ORG-120-5106; modified from EPA SW-846 3510C and EPA SW-846 8082
GC/ECD - EXTRACTION
Total PCB

Water (Organic)

Triazine Pesticides - Water (157)
ORG-120-5113; modified from EPA SW-846 3510C and EPA SW-846 8270C and MOE E3121
GC/MS - EXTRACTION
Atrazine
Cyanazine
De-ethylated atrazine
Metolachlor
Metribuzin
Simazine
Trifluralin

Water (Organic)

Volatile Organic Compounds (VOC) - Water (046)
VOL-120-5001; modified from EPA 624 and EPA SW-846 5030B and EPA SW-846 8260 B
GC/MS - PURGE AND TRAP
1,1-Dichloroethane
1,1-dichloroethylene
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1,2,2-Tetrachloroethane
1,2-Dibromoethane
1,2-dichlorobenzene
1,2-dichloroethane
1,2-Dichloropropane
1,2,4-Trichlorobenzene
1,3-Dichlorobenzene
1,3-dichloropropane
1,4-dichlorobenzene

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2-Chloroethyl vinyl ether
2-Hexanone
Acetone (2-Propanone)
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon Tetrachloride
Chlorobenzene
Chlorodibromomethane
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethylene
cis-1,3-Dichloropropene
Dichloromethane
Ethylbenzene
Ethylene Dibromide
m/p-xylene
Methyl Ethyl Ketone
Methyl isobutyl Ketone
Methyl t-butyl ether
o-xylene
Styrene
Tetrachloroethylene
Toluene
trans-1,2-Dichloroethylene
trans-1,3-Dichloropropene
Trichloroethylene
Trichlorofluoromethane
Vinyl Chloride

Water (Organic)

Volatile Petroleum Hydrocarbons (VPH) Fractionation - Water (062)
VOL-120-5010; modified from ATLANTIC RBCA GUIDELINES TIER 1/TIER 2
GC/FID - PURGE AND TRAP
Aliphatic C6-C8
Aliphatic >C8-C10
Aromatic >C8-C10
F1: C6-C10

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