

Atlantic Canada Sample Procedures & Requirements

Organic - Water

Parameter	Cont. Type	Holding Time	Min. Amount	Pres.
BTEX/PIRI C6 - C10/CCME F1/VOCs	CV / AV, NH	14 days	3 x 40 mL	NaHSO ₄
CCME F2-F4	CG / AG	14 days	2 x 100 mL	HCl
Dissolved Gases	CV / AV, NH	14 days	3 X 40 mL	HCl
HAA	AV, NH	14 days	3 x 40 mL	NH ₄ Cl
PAH	CG / AG	14 days	2 x 100 mL	NaHSO ₄
PAH (Low Level)	CG / AG	14 days	2 x 1L	NaHSO ₄
PCB	CG / AG	None	2 X 250 mL	None
PIRI C10 - C32	CG / AG	14 days	2 x 250 mL	HCl
THM	AV, NH	14 days	3 x 40 mL	Na ₂ S ₂ O ₃
TOG/MOG/F4G/AV	CG / AG	28 days	2 x 1L	H ₂ SO ₄

Inorganic: Water

Parameter	Cont. Type	Holding Time	Min. Amount	Pres.
Ammonia	PB	28 days	120 mL	H ₂ SO ₄
Anions (BrO ₃ ⁻ , Br ⁻ , ClO ₃ ⁻ , Cl ⁻ , ClO ₂ ⁻ , F ⁻ , SO ₄ ²⁻)	PB	28 days	120 mL	None
Anions (Nitrate and Nitrite)	PB	3 days	120 mL	None
Cations	PB	28 days	120 mL	HNO ₃
Chemical Oxygen Demand (COD)	PB, NH	28 days	120 mL	H ₂ SO ₄
Chlorine, Residual (Total or Free), Chloramines	AV	ASAP	2 x 40 mL	None
DO, ORP, pH	PB	ASAP	120 mL	None
Colour	PB	7 days	120 mL	None
Cyanide	PB	7 days	60 mL	NaOH
Dissolved Organic Carbon (DOC)	PB	28 days	120 mL	H ₂ SO ₄ after filtering
Ferrous Iron	CV / AV, NH	7 days	2 x 40 mL	HCl after filtering
Hexavalent Chromium	PB	28 days	60 mL	(NH ₄) ₂ SO ₄ + NaOH
MeHg (Dissolved)	FLPE	48 hours (unless filtered and frozen)	250 mL	Pres and filtration completed at the lab
MeHg (Total)	FLPE	48 hours (unless frozen)	250 mL	Pres completed at the lab
Mercury (Dissolved)	AV	28 days	2 x 40 mL	HCl after filtering
Mercury (Total)	AV	28 days	2 x 40 mL	HCl
Metals (Dissolved)	PB	28 days	120 mL	HNO ₃ after filtering
Metals (Total)	PB	28 days	120 mL	HNO ₃
Phenols	AG	28 days	120 mL	H ₂ SO ₄
Phosphorus (Total)	PB	28 days	120 mL	H ₂ SO ₄
Standard Water Analysis	PB	7 days **	250 mL, 120 mL, 120 mL	None, H ₂ SO ₄ , HNO ₃
Sulfide	PB	28 days	60 mL	NaOH + ZnAc
Total Dissolved Solids (TDS)	PB	7 days	500 mL	None
Total Inorganic Carbon (TIC)	PB, NH	28 days	120 mL	None
Total Kjeldahl Nitrogen (TKN)	PB	28 days	120 mL	H ₂ SO ₄
Total Organic Carbon (TOC)	PB	28 days	120 mL	H ₂ SO ₄
Total Suspended Solids (TSS)	PB	7 days	500 mL	None
Turbidity	PB	3 days	120 mL	None
Ultra Low Level Hg (Total/Dissolved)	FLPE	28 days	250 mL	None
Ultra Low Level TSS	PB	7 days	1 L	None

Organic: Soil

Parameter	Cont. Type	Holding Time	Min. Amount	Pres.
BTEX/PIRI C6 - C10/CCME F1/VOCs	CV	40 days	2 x 40 mL	MeOH
PIRI C10 - C32/CCME F2-F4	CG / AG	14 days	120 mL	None
PAH/OCP	AG	14 days	120 mL	None
PCB	CG / AG	None	120 mL	None

Inorganic: Soil

Parameter	Cont. Type	Holding Time	Min. Amount	Pres.
Ammonia	CG	28 days	120 mL	None
Anions (BrO ₃ ⁻ , Br ⁻ , ClO ₃ ⁻ , Cl ⁻ , ClO ₂ ⁻ , F ⁻ , SO ₄ ²⁻)	CG	28 days	120 mL	None
Anions (Nitrate & Nitrite)	CG	7 days	120 mL	None
Cations	CG	6 months	120 mL	None
Conductivity	CG	28 days	120 mL	None
Cyanide	CG	14 days	120 mL	None
Hexavalent Chromium	CG	28 days	120 mL	None
MeHg	CG	28 days chilled, 180 days if frozen	120 mL	None
Mercury	CG	28 days	120 mL	None
Metals	CG	180 days	120 mL	None
pH	CG	3 months	120 mL	None
Phenols	CG	28 days	120 mL	None
Total Organic Carbon (TOC)	CG	14 days	120 mL	None

Environmental Toxicology

Parameter	Cont. Type	Holding Time	Volume Req.	Temperature Req.
Amphipod (sediment)	NTC, NH	6 weeks (2 preferred)	2 L minimum (5 L preferred)	1.0°C – 7.0°C (dark)
<i>Daphnia</i> effluents	NTC, NH	5 days (3 preferred)	2 x 1 L composite sample	1.0°C – 30.0°C (<2 day transport) or 1.0°C – 8.0°C (>2 day transport)
Microtox (solid)	NTC, NH	6 weeks	250 mL	1.0°C – 7.0°C (dark)
Microtox (liquid)	NTC-R*, NH	24-72 hours (24 preferred)	250 mL	1.0°C – 7.0°C (dark)
Polychaete (sediment)	NTC, NH	6 weeks (2 preferred)	250 mL	1.0°C – 7.0°C (dark)
Rainbow Trout Lethality (LC50)	NTC, NH	5 days (3 preferred)	40 L (2 x 20 L)	1.0°C – 30.0°C (<2 day transport) or 1.0°C – 8.0°C (>2 day transport)
Rainbow Trout Lethality (LT50)	NTC, NH	5 days (3 preferred)	20 L	1.0°C – 30.0°C (<2 day transport) or 1.0°C – 8.0°C (>2 day transport)

Biological: Water (Environmental)

Parameter	Cont. Type	Holding Time	Min. Amount	Pres.
Biological Oxygen Demand (BOD)	PB	48 hours	500 mL	None
Fecal Coliforms MF or MPN	PB	24 hours	250 mL	Na ₂ S ₂ O ₃
<i>Pseudomonas aeruginosa</i> presumptive	PB	24 hours	250 mL	Na ₂ S ₂ O ₃
Heterotrophic Plate Count (HPC)	PB	24 hours	250 mL	Na ₂ S ₂ O ₃
Total Coliforms & <i>E. coli</i> (MPN), (P/A), or (MF)	PB	24 hours	250 mL	Na ₂ S ₂ O ₃

Biological: Soil

Parameter	Cont. Type	Holding Time	Min. Amount	Pres.
Fecal Coliforms	250 mL PET	48 hours	100 g	None
<i>Salmonella</i>	250 mL PET	48 hours	100 g	None
<i>E. coli</i>	250 mL PET	48 hours	100 g	None
Total Coliforms	250 mL PET	48 hours	100 g	None

Biological: Food & Water (In Food Safety)

Parameter	Cont. Type	Holding Time	Min. Amount	Pres.
Frozen food samples	CP / SC	3 weeks	50 g per test	Transport frozen
Fresh food samples	CP / SC	24 hours	200 mL/g	2.0°C – 8.0°C
Shelf stable samples	CP / SC	3 weeks	200 mL/g	None
Food chemistry (Frozen seafood)	CP / SC	3 weeks	50 g per test	Transport frozen
Food chemistry (Fresh seafood)	CP / SC	1 day	50 g per test	2.0°C – 8.0°C
Swabs	N/A	24 hours	N/A	2.0°C – 8.0°C
Ice	CP / SC	48 hours	200 g	Transport frozen
Brine	CP / SC	24 hours	200 mL	2.0°C – 8.0°C
Production Waters (Unchlorinated)	SC	24 hours	200 mL	2.0°C – 8.0°C
Production Waters (Chlorinated)	SC + NaHSO ₄	24 hours	200 mL	2.0°C – 8.0°C
Source Waters, Seawater, Treated Wastewater (Unchlorinated)	SC	24 hours	200 mL	1.0°C – 10°C
Source Waters, Seawater, Treated Wastewater (Chlorinated)	SC + NaHSO ₄	24 hours	200 mL	1.0°C – 10°C
Potable Waters (Unchlorinated)	SC	Max 30 hours	200 mL	1.0°C – 10°C
Potable Waters (Chlorinated)	SC + NaHSO ₄	Max 30 hours	200 mL	1.0°C – 10°C
Air Quality Plates	N/A	Incubate on arrival	N/A	2.0°C – 8.0°C

Please Note: Biological samples will not be accepted after 2 pm on Fridays

Directions

- 1 Locate the desired test. Identify the sample type, container, preservative, and holding times.
- 2 Keep samples cool and ship to the lab as soon as possible. Pre-cleaned containers can be supplied by the lab.
- 3 Please contact your laboratory for more detailed sampling instructions or to notify of incoming RUSH samples.
- 4 This is not an exhaustive list. For parameters not listed, please reach out to your Client Services Representative.

Container Codes

AG/AV – Amber Glass/Vial
 PB – Plastic Bottle
 CG/CV – Clear Glass/Vial
 PET – Polyethylene Terephthalate
 FLPE – Fluorinated High-Density Polyethylene
 CP – Client Packages
 SC – Sterile Containers

NTC – Non-toxic Container
 NH – No Headspace (air in container)
 R* – Container rinsed with sample
 ** Excluding Turbidity, Nitrate + Nitrite, which have 3 day holding times