

Aqueous Sampling Guide

All samples should be delivered to the laboratory in a cooler on ice (< 6 °C).

Laboratory MUST be notified at least 48 hours in advance of receipt for any short hold (48 hours or less) analysis in order to coordinate courier and laboratory staff to meet hold-times.

* If MS/MSD or MS/Dup is required, please provide 3x container(s) listed.

** If MS/MSD is required for Herbicides, please provide 3 x 1000 mL, G.

Parameter	Minimum Sample Volume	Container	Preservative	Hold-Time	Notes
Acidity	250 mL	250 mL, P *	NP	14 days	
Alkalinity	250 mL	250 mL, P *	NP	14 days	NY 24 hour HT
Ammonia	250 mL	250 mL, P *	H ₂ SO ₄	28 days	
Base Neutrals	1000 mL	1000 mL, G *	NP	7 days	
BOD - 5 day	500 mL	1000 mL, P *	NP	48 hours	
Bromide	10 mL	250 mL, P	NP	28 days	
Chloride	10 mL	250 mL, P	NP	28 days	
Chlorine (TRC)	500 mL	500 mL, P *	NP	Immediate	Done in the field. If not done in the field, data will be flagged as out of hold-time.
Chromium (VI)	25 mL	250 mL, P	NP	24 hours	Should be on a separate line on COC from any other metal analysis; Must be in separate bottle
COD	2 mL	250 mL, P	H ₂ SO ₄	28 days	
Coliform	100 mL	S	NP	24 hours	Wastewater - 8 hour hold
Color	50 mL	250 mL, P	NP	48 hours	
Conductance	100 mL	250 mL, P *	NP	28 days	
Cyanide (Amenable)	50 mL	250 mL, P	NaOH	14 days	
Cyanide (Physiologically Available)	50 mL	250 mL, P	NaOH	14 days	
Cyanide (Total)	50 mL	250 mL, P	NaOH	14 days	
1,4-Dioxane	500 mL	2 x 500 mL, G *	NP	7 days	
Dissolved Oxygen	300 mL	BOD bottle *	NP	Immediate	Done in the field. If not done in the field, data will be flagged as out of hold-time. No head space/air bubbles.
EDB & DBCP	40 mL	3 x 40 mL, V *	Na ₂ S ₂ O ₃ /HCL	14 days	No head space/air bubbles
EPH	1000 mL	2 x 1000 mL, G *	HCl	14 days	
ETPH	1000 mL	1000 mL, G *	NP	7 days	
Flash Point	40 mL	40 mL, G	NP	14 days	Must be a separate bottle
Fluoride	10 mL	250 mL, P	NP	28 days	
GRO	40 mL	3 x 40 mL, V	HCl	14 days	
Hardness	50 mL	250 mL, P	HNO ₃	6 months	
Herbicides	500 mL	1000 mL, G **	NP	7 days	
Kjeldahl Nitrogen (Total)	250 mL	250 mL, P *	H ₂ SO ₄	28 days	
Mercury (Dissolved - Field Filtered)	20 mL	250 mL, P	HNO ₃	28 days	
Mercury (Dissolved - Lab Filtered)	20 mL	250 mL, P	NP	24 hours	Samples must be filtered within 24 hours of collection. After filtering and preservation, hold-time is 28 days.
Mercury (Total)	20 mL	250 mL, P	HNO ₃	28 days	
Metals (Dissolved - Field Filtered)	50 mL	250 mL, P	HNO ₃	6 months	
Metals (Dissolved - Lab Filtered)	50 mL	250 mL, P	NP	24 hours	Samples must be filtered within 24 hours of collection. After filtering and preservation, hold-time is 6 months.
Metals (Total)	50 mL	250 mL*, P	HNO ₃	6 months	*500ml for Surface Water
Nitrate	10 mL	250 mL, P	NP	48 hours	
Nitrate-Nitrite	10 mL	250 mL, P	H ₂ SO ₄	28 days	
Nitrite	10 mL	250 mL, P	NP	48 hours	
Odor	1 mL	250 mL, G	NP	24 hours	
Oil & Grease	1000 mL	1000 mL, G *	H ₂ SO ₄	28 days	
Orthophosphate	10 mL	250 mL, P	NP	48 hours	Filter w/in 15 min
PAH	1000 mL	2 x 1000 mL, G *	NP	7 days	
PCB	1000 mL	2 x 1000 mL, G *	NP	7 days	
Pesticides	1000 mL	1000 mL, G *	NP	7 days	
PFAS (537.1)	250 mL	250 mL, P	Trizma	14 days	Lab provides FRB and sample bottles
pH	50 mL	250 mL, P	NP	Immediate	Done in the field. If not done in the field, data will be flagged as out of hold-time.
Phenol	250 mL	250 mL, G *	H ₂ SO ₄	28 days	
Phosphorous (Total)	50 mL	250 mL, P	H ₂ SO ₄	28 days	
Reactivity	10 mL	250 mL, P	NP	14 days	
Salinity	100 mL	250 mL, G *	NP	28 days	
Settleable Solids	1000 mL	1000 mL, P *	NP	48 hours	
Sulfide	50 mL	250 mL, P	Zn Ace*, NaOH	7 days	
Sulfate	50 mL	250 mL, P	NP	28 days	
SVOA	1000 mL	2 x 1000 mL, G *	NP	7 days	
TDS	50 mL	250 mL, P	NP	7 days	
TOC	40 mL	2 x 40 mL, V *	HCL	28 days	
TOX	40 mL	1000 mL, G	H ₂ SO ₄	28 days	
TPH :GC FID (8100)	1000 mL	1000 mL, G *	NP/HCL/H ₂ SO ₄	7 days	
TPH :Grav Method (1664)	1000 mL	1000 mL, G *	HCL/H ₂ SO ₄	28 days	
TS	50 mL	250 mL, P	NP	7 days	
TSS	100 mL	250 mL, P *	NP	7 days	
TVS	100 mL	250 mL, P *	NP	7 days	
Volatile Organics	40 mL	3 x 40 mL, V *	HCl	14 days	No head space/air bubbles
Volatile Organics - WW 624	40 mL	4 x 40 mL, V *	Na ₂ S ₂ O ₃	14 days	No head space/air bubbles
VPH	40 mL	3 x 40 mL, V *	HCl	14 days	No head space/air bubbles

P = Poly

G = Glass

V = Vial

S = Sterile Container

NP = No Preservative

H₂SO₄ = Sulfuric Acid to < 2 pH

HCl = Hydrochloric Acid to < 2 pH

HNO₃ = Nitric Acid to < 2 pH

NaOH = Sodium Hydroxide to > 12 pH

Na₂S₂O₃ = Sodium Thiosulfate

Zn Acetate = 4 drops zinc acetate/100mL

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Solid Sampling Guide

All samples should be delivered to the laboratory in a cooler on ice (< 6 °C).

Laboratory MUST be notified at least 48 hours in advance of receipt for any short hold (48 hours or less) analysis in order to coordinate courier and laboratory staff to meet hold-times.

4 oz jar holds ~150g

8 oz jar holds ~350g

Parameter	Minimum Sample Volume	Container	Preservative	Hold-Time	Notes
Acidity	30 g	4 oz G	NP	14 days	
Alkalinity	30 g	4 oz G	NP	14 days	NY 24 hour HT
Ammonia	15 g	4 oz G	NP	28 days	
Base Neutrals	45 g	4 oz G	NP	14 days	
BOD - 5 day	3 g	4 oz G	NP	48 hours	
Bromide	30 g	4 oz G	NP	28 days	
Chloride	30 g	4 oz G	NP	28 days	
Chlorine (TRC)	30 g	4 oz G	NP	28 days	
Chromium (VI)	10 g	4 oz G	NP	30 days	ph / orp for soil - 24 hours hold-time. Zero headspace - MA MCP must be a separate jar
COD	2 g	4 oz G	NP	28 days	
Conductance	120 g	4 oz G	NP	28 days	
Cyanide (Amenable)	3 g	4 oz G	NP	14 days	
Cyanide (Physiologically Available)	3 g	4 oz G	NP	14 days	
Cyanide (Total)	3 g	4 oz G	NP	14 days	
EPH	75 g	4 oz G	NP	14 days	
ETPH	60 g	4 oz G	NP	14 days	
Flashpoint/Ignitability	30 g	4 oz G	NP	14 days	
Fluoride	30 g	4 oz G	NP	28 days	
GRO	15 g	40 mL V	MeOH	14 days	Collect at 1:1 ratio soil to preservative. Must include a NP % solids VOA. Collect in triplicate if MS/MSD is needed.
Herbicides	30 g	4 oz G	NP	14 days	
Kjeldahl Nitrogen (Total)	3 g	4 oz G	NP	28 days	
Mercury (Total)	5 g	4 oz G	NP	28 days	
Metals (Total)	10 g	4 oz G	NP	6 months	
Nitrate	30 g	4 oz G	NP	48 hours	
Nitrate-Nitrite	30 g	4 oz G	NP	28 days	
Nitrite	30 g	4 oz G	NP	28 days	
Orthophosphate	30 g	4 oz G	NP	48 hours	
PAH	45 g	4 oz G	NP	14 days	
PCB	60 g	4 oz G	NP	None	
Pesticides	60 g	4 oz G	NP	14 days	
pH	120 g	4 oz G	NP	ASAP	
Phenol	15 g	4 oz G	NP	28 days	
Phosphorous (Total)	3 g	4 oz G	NP	28 days	
Reactivity	30 g	4 oz G	NP	14 days	
Salinity	120 g	4 oz G	NP	28 days	
Sulfide	30 g	4 oz G	NP	7 days	
Sulfate	30 g	4 oz G	NP	28 days	
SVOA	45 g	4 oz G	NP	14 days	
TCLP (Full - Metals, SVOC, Pesticides, and Herbicides)	250 g	1 x 8 oz G	NP	14 days	
TCLP VOC	25 g	2 oz G	NP	48 hours	CT: 1 x Encore
TCLP RCRA 8	100 g	8 oz G	NP	28 days	
TPH :GC FID	60 g	4 oz G	NP	14 days	
Volatile Organics (high level)	15 g	40 mL V	MeOH	14 days	Collect at 1:1 ratio soil to preservative. Must include a NP % solids VOA. Collect in triplicate if MS/MSD is needed.
Volatile Organics (low level)	5 g / vial	2 x 40 mL V	DI water	48 hours to freeze or analysis 14days for frozen	Collect at 1:1 ratio soil to preservative. Must include a NP % solids VOA. Collect in triplicate if MS/MSD is needed.
VPH	15 g	40 mL V	MeOH	28 days	Collect at 1:1 ratio soil to preservative. Must include a NP % solids VOA.

G = Glass
V = Vial
NP = No Preservative
MeOH = Methanol

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Solid Sampling "Extras"

Asbestos	4 oz, G	NP
Coal/Ash	4 oz G	NP
Dioxin	4 oz, G	NP
DRO	4 OZ, G	NP
EDB	2 x 40ml V	DI Water
Ethanol	2 oz, G	NP
Paint Filter	4 oz, G	NP
Sieve (Grain Size)	8 oz, D	NP
SPLP VOC	Encore Container	NP
Sulfur	4 oz, G	NP
TCLP TPH	8 oz G	NP
TOC	2 oz G	NP
Total Halogens	4 oz G	NP
Total Halogens Oil	4 oz G	NP
VOC (Oil ONLY)	2 oz G/1 x 40ml V	NP

D = Driller Jar

G = Amber Glass

P = Poly

S = Sterile Cup

V = Vial

NP = No Preservative

HCL = Hydrochloric Acid

H2SO4 = Sulfuric Acid

Na2SO3 = Sodium Thiosulfate

Aqueous Sampling "Extras"

<u>Parameter</u>	<u>Container</u>	<u>Preservative</u>
Carbon Dioxide (Total)	1000ml, P	NP
Carbon Monoxide (Co2)	1000ml, P	NP
Density (Aq only)	1000ml, P	NP
Dissolved Phosphorus (lab filter)	500ml, P	NP
DOC	250ml, G	NP
DW First Draw Lead & Copper	2 x 1000ml, P	NP
Enterococci	500ml, S (obtain from BAL)	NP *(6hr hold)
Fecal Coliform	100ml, S	NP/ Na2S2O3
Ferric Iron	250ml, P	HNO3
Ferrous Iron	250ml, P	NP *(24hr hold)
Formaldehyde	1000ml, G	NP *(72hr hold)
Freon	3 x 40ml, V	HCL
Glycol/ Alcohol/ Methanol/ Ethanol	1000ml, G/2 x 40ml, V	NP/NP
HAA (Halo)	3 x 40ml, V (amber)	NH4Cl
Methane/Ethane/Ethene	2 x 40ml, V	HCL
Silica	250ml, P	NP
Surfactants	1L, AG	NP
TCLP Metals	1000ml, P	NP
TCLP VOC	500ml, G	NP
TTHM	3 x 40ml, V	Na2S2O3
Turbidity (TURB)	250ml, P	NP
UV-254	500ml, G	NP
Viscosity (Aq only)	1000ml, P	NP
VOA (chlorinated DW ONLY)	3 x 40ml, V	Ascorbic Acid w/ HCL dropper
VOA (624)	3 x 40ml, V	Na2SO3
VFA (Volatile Fatty Acids)	2 x 40ml, V	NP