WATER SAMPLING GUIDE



Parameter	Bottle	Preservative	Hold Time	Special Instructions
Bacteria	100 mL sterile	Sodium thiosulfate	48 hours	Store at 4°C, one container for each bacteria type requested.
Benzo(a)pyrene	1 L amber glass	None	7 days	Teflon lined cap. Store at ≤6°C.
Biochemical Oxygen Demand (BOD)	500 mL plastic	None	24 hrs*	Store at ≤6°C. * If >24 hours, results are flagged. If >48 hours, client is contacted.
BTEX	2 x 40 mL amber glass	10 mg sodium thiosulfate	14 days	No headspace. Store at ≤6°C.
Chemical Oxygen Demand (COD)	100 mL plastic	1 mL of 20% sulfuric acid	28 days	Can be analyzed from Nutrients bottle.
Chemical Health & Toxicity	100 mL plastic	1.5 mL of 17.5% nitric acid		May also need to submit a sample for mercury and cyanide. Refer to requirements for mercury and cyanide.
Chlorine/Chloramine	2 x 40 mL glass	None	24 hours	Fill bottle to overflowing, no headspace. Store at ≤6°C.
Chlorophenolics	1 L amber glass	5 mL of 20% sulfuric acid	7 days	Teflon lined cap. Store at ≤6°C.
Cyanide	100 mL plastic	0.2 g sodium hydroxide, pH>12		
Dissolved Organic Carbon Field filtered	100 mL plastic	1 mL of 20% sulfuric acid		Filter sample before acidification.
Dissolved Organic Carbon Lab filtered	100 mL plastic	None	24 hours	Sample filtered and preserved in the laboratory.
Extractable Hydrocarbons	2 x 40 mL amber glass	None	14 days	Teflon lined cap. Store at ≤6°C.
Haloacetic Acids (HAA)	2 x 40 mL amber glass	4 mg of ammonium chloride	14 days	No headspace. Do not flush out preservative. Store at ≤6°C.
Herbicides	1 L amber glass	5 mL of 20% sulfuric acid	7 days	Teflon lined cap. Store at ≤6°C.
	100 mL	None	28 days	Store at ≤6°C.
Major Ions (or General Chemistry) Package	500 mL	None	4 days	
	100 mL	1 mL 20% sulfuric acid	28 days	Do not flush out preservative. Store at ≤6°C.
Methylene Blue Active Substances (MBAS)	500 mL plastic	None	48 hours	Store at ≤6°C.
Metals	100 mL plastic	1.5 mL of 17.5% nitric acid		
Mercury (Hg)	40 mL glass	2 mL of 9% hydrochloric acid	28 days	
Nitrate	100 mL plastic	1 mL of 20% sulfuric acid	28 days	Store at ≤6°C. Do not flush out preservative.
Nitrite	100 mL plastic	None	48 hours	No headspace. Store at ≤6°C.
Nutrients: Ammonia, TKN, Nitrates	250 mL plastic	2 mL of 20% sulfuric acid	28 days	Store at ≤6°C.
Odour	1 L glass	None	ASAP	Fill bottle to overflowing (no headspace). Store at ≤6°C.
Oil and Grease	1 L glass	5 mL of 20% sulfuric acid		Teflon lined cap. Store at ≤6°C.
Ortho-Phosphate	100 mL plastic	None	48 hours	Store at ≤6°C.
PAHs	1 L amber glass	None	7 days	Teflon lined cap. Store at ≤6°C.
PCBs	1 L amber glass	None	7 days	Teflon lined cap. Store at ≤6°C.
Pentachlorophenol (PCP)	1 L amber glass	5 mL of 20% sulfuric acid	7 days	Teflon lined cap. Store at ≤6°C.
Pesticides	1 L amber glass	None	7 days	Teflon lined cap. Store at ≤6°C.
Phenolics (inorganics)	40 mL amber glass	1 mL of 20% sulfuric acid	28 days	Teflon lined cap.
Radon in water	2 x 40 mL glass	None	8 days	Fill to overflowing, no headspace. Sample date/time required.
Radionuclides (Total)	1 L for each parameter	10 mL of 17.5% nitric acid		
Radionuclides (Dissolved)	1 L for each parameter	10 mL of 17.5% nitric acid		Field filtered (0.45 μm) before acidification.
Total Suspended Solids (TSS)				
Volatile Suspended Solids (VSS)	500 mL	None	6 days	TSS, VSS, and FSS can all be done on the same aliquot.
Fixed Suspended Solids (FSS)				
Total Dissolved Solids(TDS)				
Volatile Dissolved Solids (VDS)	500 mL	None	6 days	TDS, VDS, and FDS can all be done on the same aliquot.
Fixed Dissolved Solids (FDS)				
Sulfide	250 mL plastic	Sodium hydroxide to pH>13	24 hours	Store at ≤6°C.
Sulfide (low levels)	250 mL plastic	10 g sodium hydroxide + 5 g ascorbic acid	24 hours	Store at ≤6°C.
Trihalomethane (THM)	2 x 40 mL amber glass	10 mg sodium thiosulfate	14 days	Fill to overflowing, no headspace. Store at ≤6°C.
Volatile Organic Compounds	2 x 40 mL amber glass	10 mg sodium thiosulfate	14 days	Fill bottle to overflowing, no headspace. Store at ≤6°C.