

# Container Requirements



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## CONTAINER REQUIREMENTS

**NOTICE: DoD/ELAP and TNI require most samples to be received at 4°C +/- 2°C.** Samples delivered to the lab the same day as collection may not have chilled completely, but must be maintained on ice during transit. Exceptions to the thermal preservation requirement include air samples, metals in soil, or metals in water appropriately preserved. Some samples additionally require chemical preservation as noted below. The holding times referenced assume proper preservation.

### SOIL

Parameter	Method	Container/Preservatives	Holding Time
Anions - Br, Cl, F, SO <sub>4</sub>	EPA 300.0	4 oz Glass Jar	Analyze within 28 Days
Anions - NO <sub>2</sub> , NO <sub>3</sub> , PO <sub>4</sub>	EPA 300.0	4 oz Glass Jar	Analyze within 28 Days
BTEX / Gasoline Range Hydrocarbons	EPA 8260	4 oz Glass Jar + (2) x 40 mL Glass VOA Vial w/ MeOH <sup>1</sup>	Analyze within 14 Days
Cation Exchange Capacity (CEC)	EPA 9081	4 oz Glass Jar	Analyze within 28 Days
Cyanide	SM 4500-CN C,E	4 oz Glass Jar	Extract within 28 Days / Analyze within 14 Days of Extraction
Diesel / Heavy Oil Range Organics	NWTPH-Dx/EPA 8015/AK102-103	4 oz Glass Jar	Extract within 14 Days / Analyze within 40 Days of Extraction
Extractable Petroleum Hydrocarbons (EPH)	NWTPH-EPH	4 oz Glass Jar	Extract within 14 Days / Analyze within 40 Days of Extraction
Grain Size	ASTM D422	32 oz Glass Jar	Unlimited
Herbicides	EPA 8151A/8270	4 oz Glass Jar	Extract within 14 Days / Analyze within 40 Days of Extraction
Hexavalent Chromium	EPA 7196	4 oz Glass Jar	Analyze within 28 Days
Ignitability / Flashpoint	ASTM D93/SW 1010	4 oz Glass Jar	Analyze within 28 Days
Langelier Index / Corrosivity	SM 2330B	4 oz Glass Jar	Analyze within 7 Days
Mercury (Hg)	EPA 6020/7471	4 oz Glass Jar	Analyze within 28 Days
Metals (Except Mercury)	EPA 6020	4 oz Glass Jar	Analyze within 6 Months
Organic Material	ASTM D2974	4 oz Glass Jar	Analyze within 28 Days
Polyaromatic Hydrocarbons (PAHs)	EPA 8270D SIM	4 oz Glass Jar	Extract within 14 Days / Analyze within 40 Days of Extraction
Pentachlorophenol	EPA 8151/8270D	4 oz Glass Jar	Analyze within 14 Days
Pesticides	EPA 8081/8270D	4 oz Glass Jar	Extract within 7 Days / Analyze within 40 Days of Extraction
pH	EPA 9045D	4 oz Glass Jar	Analyze within 7 Days
Phosphorus, Total	EPA 6020	4 oz Glass Jar	Analyze within 28 Days
Polychlorinated Biphenyls (PCBs/Aroclor)	EPA 8082	4 oz Glass Jar	Unlimited
Semi Volatile Organic Compounds (sVOC)	EPA 8270D	4 oz Glass Jar	Extract within 14 Days / Analyze within 40 Days of Extraction
Salinity	EPA 2520B	4 oz Glass Jar	Analyze within 28 Days
TCLP/SPLP - Metals	EPA 1311/1312	4 oz Glass Jar	Analyze within 180 Days (Hg = 28 Days)
TCLP/SPLP - ZHE	EPA 1311/1312	4 oz Glass Jar	Analyze within 14 Days
Total Organic Carbon	EPA 9060A	4 oz Glass Jar	Analyze within 28 Days
Volatile Organic Compounds (VOC)	EPA 8260C	4 oz Glass Jar + (2) x 40 mL Glass VOA Vial w/ MeOH <sup>1</sup>	Analyze within 14 Days
Volatile Petroleum Hydrocarbons (VPH)	NWTPH-VPH + EPA 8021B	4 oz Glass Jar + (2) x 40 mL Glass VOA Vial w/ MeOH <sup>1</sup>	Analyze within 14 Days

<sup>1</sup> A field preservation kit is required for sample collection. Contact laboratory for more information.

**WATER**

**\*Contact the laboratory for low level analysis volume requirements\***

Parameter	Method	Container/Preservatives	Holding Time
1,2-Dibromoethane (EDB)	EPA 8011	(3) x 40 mL Glass VOA Vial / HCl	Analyze within 14 Days
Alkalinity	SM 2320B	500 mL Polyethylene	Analyze within 28 Days
Anions - Br, Cl, F, SO <sub>4</sub>	EPA 300.0	250 mL Polyethylene	Analyze within 28 Days
Anions - NO <sub>2</sub> , NO <sub>3</sub> , PO <sub>4</sub>	EPA 300.0	250 mL Polyethylene	Analyze within 48 Hours
Biological Oxygen Demand (BOD)	SM 5210B	1 L Polyethylene	Analyze within 48 Hours
BTEX / Gasoline Range Hydrocarbons	EPA 8021B/8260	(3) x 40 mL Glass VOA Vial / HCl	Analyze within 14 Days
Chemical Oxygen Demand (COD)	SM 5220D	250 mL Polyethylene / H <sub>2</sub> SO <sub>4</sub>	Analyze within 28 Days
Coliform: Fecal or Total	SM 9222D / EPA 1604	110 mL Sterile / Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Analyze within 6 Hours
Total Bacteria (Fecal+E. Coli)	EPA 1604	(2) x 110 mL Sterile / Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Analyze within 6 Hours
Cyanide, Total	SM 4500-CN C,E	500 mL Polyethylene / NaOH	Analyze within 14 Days
Diesel Range Organics	NWTPH-Dx / EPA 8015/AK102-103	500 mL Amber Glass / HCl	Extract within 14 Days / Analyze within 40 Days of Extraction
Dissolved Organic Carbon	SM 5310B/C	250 mL Amber Glass	Analyze within 28 Days
Dissolved Oxygen	EPA 360.1	500 mL Polyethylene (No Headspace)	Analyze Immediately
Extractable Petroleum Hydrocarbons (EPH)	NWTPH-EPH	1 L Amber Glass / HCl	Extract within 14 Days / Analyze within 40 Days of Extraction
Ferrous Iron	SM3500-Fe B	500 mL Amber Glass / HCl / Protect from Sunlight / No Headspace	Analyze within 24 Hours
Herbicides	EPA 8151A 8270D	1 L Amber Glass	Extract within 7 Days / Analyze within 40 Days of Extraction
Hexavalent Chromium	SM3500 / SM 7196	500 mL Polyethylene	Analyze within 24 Hours
Ignitability / Flashpoint	ASTM D93/EPA 1010A	250 mL Amber Glass	Analyze within 28 Days
Langelier Index / Corrosivity (Alk, Ca, pH, TDS)	SM 2330B	1 L Polyethylene	Analyze Immediately
Mercury (Hg)	EPA 200.8/245.1/7470	500 mL Polyethylene / HNO <sub>3</sub>	Analyze within 28 Days
Mercury (Hg), Low Level	EPA 1631	500 mL Amber Glass / BrCl	Analyze within 28 Days / Preserve within 48hrs if unpreserved
Metals, Dissolved (Except Mercury)	EPA 6020/200.8	500 mL Polyethylene / HNO <sub>3</sub> (Field Filtered) <b>or</b> 500 mL Polyethylene (request Lab Filtration)	Analyze within 6 Months <b>or</b> Filter and Preserve within 14 Days
Metals, Total (Except Mercury)	EPA 6020/200.8	250 mL Polyethylene / HNO <sub>3</sub>	Analyze within 6 Months
Methane, Ethane, and Ethene	RSK-175	(3) x 40 mL Glass VOA Vial / HCl	Analyze within 14 Days
<b>Nitrogen</b>			
Ammonia	SM 4500 NH <sub>3</sub> D	1 L Polyethylene / H <sub>2</sub> SO <sub>4</sub>	Analyze within 28 Days
Kjeldahl	SM 4500N	500 mL Polyethylene / H <sub>2</sub> SO <sub>4</sub>	Analyze within 28 Days
Nitrate	EPA 300.0	250 mL Polyethylene	Analyze within 48 Hours
Nitrite	EPA 300.0	250 mL Polyethylene	Analyze within 48 Hours
Nitrate+Nitrite	EPA 300.0	250 mL Polyethylene	Analyze within 28 Days
Oil & Grease	EPA 1664	1 L Amber Glass / HCl	Analyze within 28 Days
Polyaromatic Hydrocarbons (PAHs)	EPA 8270D SIM	1 L Amber Glass	Extract within 7 Days / Analyze within 40 Days of Extraction
Pentachlorophenol	EPA 8151/8270D	1 L Amber Glass	Extract within 7 Days / Analyze within 40 Days of Extraction
Pesticides	EPA 8081/8270D	1 L Amber Glass	Extract within 7 Days / Analyze within 40 Days of Extraction
pH	SM 4500H+B	250 mL Polyethylene	Analyze Immediately
Phosphorus, Total	EPA 365.3	500 mL Polyethylene / H <sub>2</sub> SO <sub>4</sub>	Analyze within 28 Days
Polychlorinated Biphenyls (PCBs/Aroclor)	EPA 8082 / EPA 608	1 L Amber Glass	Unlimited
Residual Chlorine	SM 4500Cl	250 mL Amber Glass / Protect from Sunlight	Analyze Immediately
Salinity	EPA 2520B	250 mL Polyethylene	Analyze within 28 Days
Semi Volatile Organic Compounds	EPA 8270D / EPA 625	1 L Amber Glass	Extract within 7 Days / Analyze within 40 Days of Extraction

<b>WATER - Continued</b>			
<b>Parameter</b>	<b>Method</b>	<b>Container/Preservatives</b>	<b>Holding Time</b>
<b>Solids</b>			
Settleable	SM 2540F	1 L Polyethylene	Analyze within 48 Hours
Dissolved: TDS, FDS, VDS	SM 2540C/E	500 mL Polyethylene	Analyze within 7 Days
Suspended: TSS, FSS, VSS	SM 2540D/E	500 mL Polyethylene	Analyze within 7 Days
Total: TS, TFS, TVS	SM 2540B/E	500 mL Polyethylene	Analyze within 7 Days
Specific Conductance (Conductivity)	SM 2510B	250 mL Polyethylene	Analyze within 28 Days
Sulfide	SM 4500-S <sup>2</sup> -F	500 mL Polyethylene / Zn Acetate + NaOH	Analyze within 7 Days
Total Inorganic Carbon (TIC)	SM 5310C	(1) x 250 mL Amber Glass (1) x 250 mL Amber Glass / H <sub>2</sub> SO <sub>4</sub>	Analyze within 28 Days
Total Organic Carbon (TOC)	SM 5310C	250 mL Amber Glass / H <sub>2</sub> SO <sub>4</sub>	Analyze within 28 Days
Turbidity	EPA 180.1	250 mL Polyethylene	Analyze within 48 Hours
Volatile Organic Compounds (VOC)	EPA 8260C / EPA 624	(3) x 40 mL Glass VOA Vial / HCl	Analyze within 14 Days
Volatile Petroleum Hydrocarbons (VPH)	NWTPH-VPH	(3) x 40 mL Glass VOA Vial / HCl	Analyze within 14 Days

## **DRINKING WATER**

<b>Parameter</b>	<b>Method</b>	<b>Container/Preservatives</b>	<b>Holding Time</b>
Alkalinity	SM 2320B	250 mL Polyethylene	Analyze within 28 Days
<b>Anions</b>			
Chloride (Cl)	EPA 300.0	250 mL Polyethylene	Analyze within 28 Days
Fluoride (F)	EPA 300.0	250 mL Polyethylene	Analyze within 28 Days
Nitrate (NO <sub>3</sub> )	EPA 300.0	250 mL Polyethylene	Analyze within 48 Hours
Nitrite (NO <sub>2</sub> )	EPA 300.0	250 mL Polyethylene	Analyze within 48 Hours
Nitrate + Nitrite	EPA 300.0	250 mL Polyethylene	Analyze within 28 Days
Phosphate, Ortho (PO <sub>4</sub> )	EPA 300.0	250 mL Polyethylene	Analyze within 48 Hours
Sulfate (SO <sub>4</sub> )	EPA 300.0	250 mL Polyethylene	Analyze within 28 Days
Cyanide, Total	SM 4500-CN E	500 mL Polyethylene / NaOH	Analyze within 14 Days
Hardness (as CaCO <sub>3</sub> )	EPA 200.8	500 mL Polyethylene / HNO <sub>3</sub>	Analyze within 180 Days
Langelier Index/Corrosivity (Alk, Ca, pH, TDS)	SM 2330 B	1 L Polyethylene	Analyze Immediately
Metals	EPA 200.8/245.1	1 L Polyethylene	Analyze within 180 Days (Hg = 28 Days) after lab preservation
Total Coliform (Coliform + E.Coli)	EPA 1604	110 mL Sterile / Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Analyze within 30 Hours
Total Dissolved Solids	SM 2540C	500 mL Polyethylene	Analyze within 7 Days
Total Organic Carbon (TOC)	SM 5310C	250 mL Amber Glass / H <sub>2</sub> SO <sub>4</sub>	Analyze within 28 Days
Turbidity	EPA 180.1	250 mL Polyethylene	Analyze within 48 Hours

## AIR

Parameter	Method	Container/Preservatives	Holding Time
Volatile Organic Compounds	EPA TO-15	Tedlar® Bag	Analyze within 72 Hours
		Canister / High Pressure Cylinder	Analyze within 30 Days
Petroleum Fractionation (APH)	EPA TO-15	Tedlar® Bag	Analyze within 72 Hours
		Canister / High Pressure Cylinder	Analyze within 30 Days
Siloxanes	EPA TO-15	Tedlar® Bag	Analyze within 72 Hours
		Canister / High Pressure Cylinder	Analyze within 30 Days
Sulfur Compounds	EPA TO-15 / ASTM D554	Tedlar® Bag	Analyze within 24 Hours (7 days for ASTM Method)
		Canister / High Pressure Cylinder	Analyze within 24 Hours
Major Gases	EPA Method 3C	Tedlar® Bag	Analyze within 72 Hours
		Canister / High Pressure Cylinder	Analyze within 30 Days
Helium	EPA Method 3C (MOD)	Tedlar® Bag	Analyze within 72 Hours
		Canister / High Pressure Cylinder	Analyze within 30 Days
Metals	EPA 6020/NIOSH	Cassette	Analyze within 7 days
Hydrocarbons C2-C6	EPA 8015	Tedlar® Bag	Analyze within 72 Hours
Particulates	Gravimetric (OSHA 215)	PVC Cassette	Analyze within 7 days
Ammonia	SM 4500 NH3E (MOD)	Cassette	Analyze within 7 days

## CONTACT



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