

SAMPLE CONTAINERS, PRESERVATION, AND HOLDING TIMES

Parameter	Method	Matrix	Minimum Sample Volume	Container	Preservation	Maximum Holding Time
Organic Analysis						
Diesel Range Organics	NWTPH-Dx	Water	500 mL	500 mL amber glass	Cool, $\leq 6^{\circ}\text{C}$	7 days to extract, 14 days if HCl, 40 days to analyze
	NWTPH-Dx	Soil	50 grams	4 oz glass	Cool, $\leq 6^{\circ}\text{C}$	14 days to extract, 40 days to analyze
Gasoline Range Organics	NWTPH-Gx	Water	43 mL	43 mL VOA	Cool, $\leq 6^{\circ}\text{C}$, HCl to pH<2, headspace free	14 days
	NWTPH-Gx	Soil	5 grams	5035 Kit	Cool, $\leq 6^{\circ}\text{C}$ Freeze $\leq -12^{\circ}\text{C}$ or MeOH $\leq 6^{\circ}\text{C}$	48 hours to freeze, 14 days to analyze
BTEX	8021B	Water	43 mL	43 mL VOA	Cool, $\leq 6^{\circ}\text{C}$, HCl to pH<2, headspace free	14 days
	8021B	Soil	5 grams	5035 Kit	Cool, $\leq 6^{\circ}\text{C}$ Freeze $\leq -12^{\circ}\text{C}$ or MeOH $\leq 6^{\circ}\text{C}$	48 hours to freeze, 14 days to analyze
HCID	NWTPH-HCID	Water	500 mL	500 mL amber glass	Cool, $\leq 6^{\circ}\text{C}$	7 days to extract, 14 days with HCl 40 days to analyze
	NWTPH-HCID	Soil	50 grams	4 oz glass	Cool, $\leq 6^{\circ}\text{C}$	14 days
Oil and Grease	1664	Water	1 Liter	1 L amber glass	Cool, $\leq 6^{\circ}\text{C}$, H ₂ SO ₄ to pH<2	28 days
PCBs	8082	Water	1 Liter	1 L amber glass	Cool, $\leq 6^{\circ}\text{C}$	none
	8082	Soil	50 grams	4 oz glass	Cool, $\leq 6^{\circ}\text{C}$	none
PAHs	8270E	Water	500 mL	500 mL amber glass	Cool, $\leq 6^{\circ}\text{C}$	7 days to extract, 40 days to analysis
	8270E	Soil	50 grams	4 oz glass	Cool, $\leq 6^{\circ}\text{C}$	14 days to extract, 40 days to analysis
Semivolatile Organic Compounds	8270E	Water	1 Liter	1 L amber glass	Cool, $\leq 6^{\circ}\text{C}$	7 days to extract, 40 days to analysis
	8270E	Soil	50 grams	4 oz glass	Cool, $\leq 6^{\circ}\text{C}$	14 days to extract, 40 days to analysis
Volatile Organic Compounds	8260D	Water	40 mL	40 mL VOA	Cool, $\leq 6^{\circ}\text{C}$, HCl to pH<2, headspace free	14 days
	8260D	Soil	5 grams	5035 Kit	Cool, $\leq 6^{\circ}\text{C}$ Freeze $\leq -12^{\circ}\text{C}$ or MeOH $\leq 6^{\circ}\text{C}$	48 hours to freeze, 14 days to analyze

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Inorganic Analysis						
Alkalinity	SM2320B	Water	100 mL	250 ml poly	Cool, $\leq 6^{\circ}\text{C}$	14 days
BOD	405.1/SM5210B	Water	1 Liter	1 L amber glass	Cool, $\leq 6^{\circ}\text{C}$	48 hours
Chloride	300.0	Water	100 mL	250 ml poly	Cool, $\leq 6^{\circ}\text{C}$	28 days
COD	410.4/SM5220	Water	100 mL	250 ml poly	H_2SO_4 to $\text{pH} < 2$	28 days
Conductivity	120.1	Water	100 mL	250 ml poly	Cool, $\leq 6^{\circ}\text{C}$	28 days
Cyanide, total	335.2/SM4500	Water	1 Liter	1 L amber glass	NaOH to $\text{pH} > 12$, Cool, $\leq 6^{\circ}\text{C}$	14 days
Ferrous Iron	SM3500-Fe B	Water	100 mL	500 ml amber glass	HCl , Cool, $\leq 6^{\circ}\text{C}$	24 hours
Fluoride	300.0/SM4500	Water	100 mL	250 ml poly	Cool, $\leq 6^{\circ}\text{C}$	28 days
Hardness	SM2340B	Water	100 mL	250 ml poly	HNO_3 to $\text{pH} < 2$	6 months
Nitrate	300.0	Water	100 mL	250 ml poly	Cool, $\leq 6^{\circ}\text{C}$	48 hours
Nitrite	300.0	Water	100 mL	250 ml poly	Cool, $\leq 6^{\circ}\text{C}$	48 hours
Nitrate+Nitrite	300.0 or 353.2	Water	100 mL	250 ml poly	Cool, $\leq 6^{\circ}\text{C}$, H_2SO_4 to $\text{pH} < 2$	28 days
TKN	SM4500	Water	100 mL	250 ml poly	Cool, $\leq 6^{\circ}\text{C}$, H_2SO_4 to $\text{pH} < 2$	28 days
pH	150.1	Water	20 mL	250 ml poly	None	24 hours
	9045	Soil	20 grams	4 oz glass	None	28 days
Phosphorus, total	365.2	Water	100 mL	250 ml poly	Cool, $\leq 6^{\circ}\text{C}$, H_2SO_4 to $\text{pH} < 2$	28 days
Sulfate	300.0	Water	100 mL	250 ml poly	Cool, $\leq 6^{\circ}\text{C}$	28 days
Sulfide	376.2	Water	500 mL	250 ml poly	Cool, $\leq 6^{\circ}\text{C}$ ZnAcetate plus NaOH to $\text{pH} > 9$	7 days
Total Dissolved Solids (TDS)	SM2540C/160.1	Water	500 mL	250 ml poly	Cool, $\leq 6^{\circ}\text{C}$	7 days
Total Organic Carbon (TOC)	SM5310B	Water	100 mL	250 ml poly	H_2SO_4 to $\text{pH} < 2$ Cool, $\leq 6^{\circ}\text{C}$	28 days
	9060A	Soil	50 grams	4 oz glass	Cool, $\leq 6^{\circ}\text{C}$	28 days
Total Suspended Solids (TSS)	SM2540D	Water	250 mL	250 ml poly	Cool, $\leq 6^{\circ}\text{C}$	7 days
Turbidity	SM2130B	Water	20 mL	250 ml poly	Cool, $\leq 6^{\circ}\text{C}$	48 hours

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Metals Analysis						
Metals (dissolved) (except Cr VI and Mercury)	200.8/6020	Water	200 mL	250 ml poly	Field filter into HNO ₃ to pH<2 or unpreserved	6 months (2 weeks if not preserved)
Metals (total) (except Cr VI and Mercury)	200.8/6020	Water	200 mL	250 ml poly	HNO ₃ to pH<2	6 months (2 weeks if not preserved)
	200.8/6020	Soil	20 grams	4 oz glass	Cool, ≤6°C	6 months
Chromium VI	7196A	Water	100 mL	250 ml poly	Cool, ≤6°C	24 hours
	7195	Soil	20 grams	4 oz glass	Cool, ≤6°C	28 days
Mercury	6020B 1631E	Water	125 mL	250 mL poly or glass	HNO ₃ to pH<2 (6020) BrCl, Cool, ≤6° (1631)	28 days (48 hours if not preserved)
	6020B 1631E	Soil	50 grams	4 oz glass	Cool, ≤6°C	28 days
Air Analysis						
VOCs	TO-15	Air	1 Liter or 6 Liter	Silonized canister	None	30 days
APH	MA-APH	Air	1 liter or 6 liter	Silonized canister	None	30 days
Helium	ASTM D1946	Air	100 ml	Silonized canister	None	30 days
VOCs	TO-17	Air	variable	1 sorbent tube	Cool, ≤6°C	28 days
Major Gases	3C	Air	100 ml	Silonized canister or tedlar bag	None	30 days (canister) or 3 days (tedlar)
VOCs	8260D	Air	100 ml	tedlar bag	None	3 days
Gasoline	NWTPH-Gx	Air	100 ml	tedlar bag	None	3 days
BTEX	8021B	Air	100 ml	tedlar bag	None	3 days
Trace Level Organic Contaminant						
Dioxins/Furans	1613B/8290A	Soil	50 grams	4 oz amber glass	Cool, ≤6°C	1 year
Dioxins/Furans	1613B/8290A	Water	1000 ml	1 L amber glass	Cool, ≤6°C	1 year
PCB Congeners	1668	Soil	50 grams	4 oz glass	Cool, ≤6°C	1 year
PCB Congeners	1668	Water	1000 ml	1 L amber glass	Cool, ≤6°C	1 year
PFAs	537.1/1633	Soil	50 grams	250 ml HDPE poly	Cool, ≤6°C	90 days
PFAs	537.1/1633	Water	250 ml	250 ml HDPE poly	Cool, ≤6°C	28 days