E3 Laboratories Inc.

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BOTTLE AND PRESERVATION REQUIREMENTS FOR ENVIRONMENTAL SAMPLES

WATER				
Parameter	**Sample Volume**	**Sample Container**	**Preservation**	**Holding Time**
Alkalinity	50 mL	Plastic Bottle	Cool to 4ºC	14 days
Ammonia (Nitrogen)	30 mL	Plastic Bottle	H_2SO_4 to pH<2, Cool to 4ºC	28 days
Anions (Cl, F, SO4)	60 mL each	Plastic Bottle	Cool to 4ºC	28 days
Biochemical Oxygen Demand (BOD)	300 mL	Plastic Bottle	Cool to 4ºC	48 hours/ 14 days
Carbon Dioxide	100 mL	Plastic Bottle, No Headspace	Cool to 4ºC	24 hours
Cations (Ca, Mg, K, Na)	150 mL	Plastic Bottle	Cool to 4ºC	6 months
Chemical Oxygen Demand	20 mL	Plastic Bottle	H_2SO_4 to pH<2, Cool to 4ºC	28 days
Chloride	60 mL	Plastic Bottle	Cool to 4ºC	28 days
Chlorine	60 mL	Plastic Bottle (No Headspace)	Cool to 4ºC	24 hours
Chromium, Hexavalent	100 mL	Plastic Bottle	Cool to 4ºC	24 hours
Coliform, Fecal & Total	200 mL	Sterile Plastic Bottle	Cool to 4ºC	48 hours
Colour	30 mL	Plastic Bottle	Cool to 4ºC	48
Conductivity	30mL	Plastic Bottle	Cool to 4ºC	28 days
Cyanide	60 mL	Plastic Bottle	NaOH to pH>12, Cool to 4ºC	14 days
Dissolved Oxygen	40 mL	Winkler DOB, No Headspace	Sodium Azide	24 hours
E.Coli	200 mL	Sterile Plastic Bottle	Cool to 4ºC	48 hours
Fluoride	60 mL	Plastic Bottle	Cool to 4ºC	28 days
Mercury	100 mL	Plastic Bottle	HNO_3 to pH<2	28 days
Metals - Total Only	150 mL	Plastic Bottle	HNO_3 to pH<2	1 month
Nitrate (NO3) (Nitrogen)	30 mL	Plastic Bottle	Cool to 4ºC	48 hours
Nitrate + Nitrite	30 mL	Plastic Bottle	H_2SO_4 to pH<2	28 days

WATER – Cont.				
Parameter	**Sample Volume**	**Sample Container**	**Preservation**	**Holding Time**
Nitrite (NO2) (Nitrogen)	30 mL	Plastic Bottle	Cool to 4ºC	48 hours
Oil & Grease	500 ml	Amber Glass Bottle	H_2SO_4 / HCl to pH<2, Cool to 4ºC	28 days
PH	10 mL	Plastic Bottle	Cool to 4ºC	1 day
Phenolics (4AAP)	500 mL	Amber Glass Bottle	H_2SO_4 to pH<2, Cool to 4ºC	28 days
Phosphorus, Total	50 mL	Plastic Bottle	H_2SO_4 to pH<2, Cool to 4ºC	28 days
Phosphorus, Ortho	30 mL	Plastic Bottle	Cool to 4ºC	48 hours
Silica, Reactive	100 mL	Plastic Bottle	Cool to 4ºC	28 days
Sulfide	60 mL	Plastic Bottle	NaOH to pH>9 ZnAc, Cool to 4ºC	7 days
Surfactants	500 mL	Plastic Bottle	Cool to 4ºC	48 hours
Total Dissolved Solids (TDS)	250 mL	Plastic Bottle	Cool to 4ºC	7 days
Total Kjeldahl Nitrogen (Tkn)	50 mL	Plastic Bottle	H_2SO_4 to pH<2, Cool to 4ºC	28 days
Total Suspended Solids (TSS)	500 mL	Plastic Bottle	Cool to 4ºC	7 days
Total Organic Carbon (TOC)	50 mL	Amber Glass Bottle, No Headspace	H_2SO_4 / HCl to pH<2, Cool to 4ºC	14 days
Total Inorganic Carbon (TIC)	50 mL	Plastic Bottle, No Headspace	Cool to 4ºC	14 days
Turbidity	50 mL	Plastic Bottle	Cool to 4ºC	48 hours
Volatile Fatty Acids	100 ml	Plastic Bottle	Cool to 4ºC	14 days
Volatile Organic Carbon (VOCs)	3 x 40 ml	Amber 40 ml Glass Bottle, No Headspace	Cool to 4ºC	7 days
Volatile Organic Acids	100 ml	Plastic Bottle	Cool to 4ºC	14 days

Bottles

Plastic:

125 ml (Yellow Top)
500 ml
1 L
300 ml Sterile (Bacti. Bottles)

Glass:

40 ml Amber (VOCs)
100 ml Amber
250 ml Amber
500 ml Amber
1 L Amber

Samples which require more than one test with the same preservation may share the same sample container

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BOTTLE AND PRESERVATION REQUIREMENTS FOR ENVIRONMENTAL SAMPLES

SOIL/SLUDGE/BIOSOLIDS/COMPOST				
Parameter	**Sample Mass**	**Sample Container**	**Preservation**	**Holding Time**
Ammonia (Nitrogen)	25 g	Glass Jar	Cool to 4ºC	28 days
Anions (Cl, F, So_4)	100 g	Glass Jar	Cool to 4ºC	28 days
Cations (Ca, Mg, K, Na)	100 g	Glass Jar	Cool to 4ºC	6 months
Chemical Oxygen Demand	50 g	Glass Jar	Cool to 4ºC	28 days
Chloride	100 g	Glass Jar	Cool to 4ºC	28 days
Chromium, Hexavalent	50 g	Glass Jar	Cool to 4ºC	24 hours
Coliform, Fecal & Total	100 g	Glass Jar	Cool to 4ºC	24 hours
Conductivity	100 g	Glass Jar	Cool to 4ºC	28 days
Cyanide	100 g	Glass Jar	Cool to 4ºC	14 days
Fluoride	100 g	Glass Jar	Cool to 4ºC	28 days
Mercury	25 g	Glass Jar	Cool to 4ºC	28 days
Metals	10 g	Glass Jar	Cool to 4ºC	1 month
Nitrate (Nitrogen)	100 g	Glass Jar	Cool to 4ºC	48 hours
Nitrite (Nitrogen)	100 g	Glass Jar	Cool to 4ºC	48 hours
Oil And Grease	250 g	Glass Jar	Cool to 4ºC	28 days
PH	100 g	Glass Jar	Cool to 4ºC	14 days
Phenolics (4AAp)	100 g	Glass Jar	Cool to 4ºC	28 days
Phosphorus, Total	100 g	Glass Jar	Cool to 4ºC	28 days
Sulfide/Sulphate	100 g	Glass Jar	Cool to 4ºC	7 days
Total Kjeldahl Nitrogen (Tkn)	100 g	Glass Jar	Cool to 4ºC	28 days
Total Organic/Inorganic Carbon (TOC/TIC)	100 g	Glass Jar, No Headspace	Cool to 4ºC	14 days

SOIL/SLUDGE/BIOSOLIDS/COMPOST Cont.				
Parameter	**Sample Mass**	**Sample Container**	**Preservation**	**Holding Time**
BTEX /VOCs	250 g	Amber Glass Jar, Teflon Lined Lid, No Headspace	Cool to 4ºC	14 days
PCBs/OCPesticides	250-500 g	Amber Glass Jar, Teflon Lined Lid, No Headspace	Cool to 4ºC	14 days, analyzed within 40 days of extraction
SEMI VOLATILES (PAH, Phenols)	250-500 g	Amber Glass Jar, Teflon Lined Lid, No Headspace	Cool to 4ºC	14 days, analyzed within 40 days of extraction
Total Petroleum Hydrocarbon	250 g	Amber Glass Jar, Teflon Lined Lid, No Headspace	Cool to 4ºC	14 days

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