

# WATER ANALYSIS

## Bacteriologicals:

<b>MATRIX</b>	<b>PARAMETER</b>	<b>METHODS</b>	<b>TECHNIQUE</b>	<b>CONTAINER</b>	<b>VOLUME</b>	<b>PRESERVATION</b>	<b>HOLDING TIME</b>
aqueous	Total Coliorm/E.coli	SM 9223 B	Color Indicator	IDEXX vessel	100 mL	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	30 hours
aqueous	Total Coliorm/E.coli	Colisure Test	Color Indicator	IDEXX vessel	100 mL	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	30 hours
aqueous	Fecal Coliform (CFU)	SM 9222 D	Membrane Filter	plastic	250 mL	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	6 hours

## Primary Inorganics:

<b>MATRIX</b>	<b>PARAMETER</b>	<b>METHODS</b>	<b>TECHNIQUE</b>	<b>CONTAINER</b>	<b>VOLUME</b>	<b>PRESERVATION</b>	<b>HOLDING TIME</b>
aqueous	Arsenic (As)	SM 3113 B	GF AA	plastic	1 Liter	2 ml HNO <sub>3</sub> /Liter	6 months
aqueous	Antimony (Sb)	SM 3113 B	GF AA	plastic	1 Liter	2 ml HNO <sub>3</sub> /Liter	6 months
aqueous	Barium (Ba)	SM 3111 D	Direct AA	plastic	1 Liter	2 ml HNO <sub>3</sub> /Liter	6 months
aqueous	Beryllium (Be)	SM 3113 B	GF AA	plastic	1 Liter	2 ml HNO <sub>3</sub> /Liter	6 months
aqueous	Cadmium (Cd)	SM 3113 B	GF AA	plastic	1 Liter	2 ml HNO <sub>3</sub> /Liter	6 months
aqueous	Chromium (Cr)	SM 3113 B	GF AA	plastic	1 Liter	2 ml HNO <sub>3</sub> /Liter	6 months
aqueous	Copper (Cu)	SM 3111 B	Direct AA	plastic	1 Liter	2 ml HNO <sub>3</sub> /Liter	6 months
aqueous	Iron (Fe)	SM 3111 B	Direct AA	plastic	1 Liter	2 ml HNO <sub>3</sub> /Liter	6 months
aqueous	Lead (Pb)	SM 3113 B	GF AA	plastic	1 Liter	2 ml HNO <sub>3</sub> /Liter	6 months
aqueous	Manganese (Mn)	SM 3111 B	Direct AA	plastic	1 Liter	2 ml HNO <sub>3</sub> /Liter	6 months
aqueous	Mercury (Hg)	SM 3112 B	Cold Vapor	plastic	1 Liter	2 ml HNO <sub>3</sub> /Liter	28 days
aqueous	Nickel (Ni)	SM 3111 B	Direct AA	plastic	1 Liter	2 ml HNO <sub>3</sub> /Liter	6 months
aqueous	Selenium (Se)	SM 3113 B	GF AA	plastic	1 Liter	2 ml HNO <sub>3</sub> /Liter	6 months
aqueous	Thallium (Tl)	EPA 200.9	GF AA, Platform	plastic	1 Liter	2 ml HNO <sub>3</sub> /Liter	6 months
aqueous	Zinc (Zn)	SM 3111 B	Direct AA	plastic	1 Liter	2 ml HNO <sub>3</sub> /Liter	6 months

## Secondary Inorganics:

<b>MATRIX</b>	<b>PARAMETER</b>	<b>METHODS</b>	<b>TECHNIQUE</b>	<b>CONTAINER</b>	<b>VOLUME</b>	<b>PRESERVATION</b>	<b>HOLDING TIME</b>
aqueous	Alkalinity	SM 2320 B	Titrimetric	plastic	1 Liter	Refrigeration, 4C	14 days
aqueous	Calcium	SM 3500-Ca D	Titrimetric	plastic	1 Liter	Refrigeration, 4C	28 days
aqueous	Chloride	SM 4110 B	IC	plastic	1 Liter	Refrigeration, 4C	28 days
aqueous	Corrosivity	Langlier Index	Calculation	plastic	1 Liter	None	28 days
aqueous	Fluoride	SM 4500-F-C	Probe Method	plastic	125 mL	None	28 days
aqueous	Total Hardness	SM 2340-C	Titrimetric	plastic	1 Liter	Refrigeration, 4C	6 months
aqueous	Magnesium	SM 3500-Mg E	Calculation	plastic	1 Liter	Refrigeration, 4C	28 days
aqueous	Nitrite (chlorinated)	SM 4110 B	IC	plastic	1 Liter	Refrigeration, 4C	48 hours
aqueous	Nitrate	SM 4110 B	IC	plastic	1 Liter	Refrigeration, 4C	28 days
aqueous	pH	SM 4500-H <sup>+</sup> -B	Probe Method	plastic	25 mL	none	immediately
aqueous	Potassium	SM 3111B	AA	plastic	1 Liter	Refrigeration, 4C	6 months
aqueous	Sodium	SM 3111B	AA	plastic	1 Liter	Refrigeration, 4C	6 months
aqueous	Sulfate	SM 4110 B	IC	plastic	1 Liter	Refrigeration, 4C	28 days
aqueous	Total Dissolved Solids	SM 2540 C	Gravimetric	plastic	1 Liter	Refrigeration, 4C	7 days
aqueous	Turbidity	SM 2130 B	Nephelometric	plastic	1 Liter	Refrigeration, 4C	48 hours
aqueous	Residual Chlorine	SM 4500-Cl G	DPD Colorimetric	plastic	100 mL	None	immediately
aqueous	Conductivity	SM 2510 B	Probe Method	plastic	1 Liter	Refrigeration, 4C	28 days
aqueous	Temperature	SM 2550 B	Thermometer	plastic	1 Liter	None	immediately
aqueous	Calcium Carbonate Saturation	SM 2320 B	Titrimetric	plastic	1 Liter	Refrigeration, 4C	28 days

## WASTEWATER ANALYSIS

<b>Matrix</b>	<b>Parameter</b>	<b>Methods</b>	<b>Technique</b>	<b>Container</b>	<b>Volume</b>	<b>Preservation</b>	<b>Holding Time</b>
aqueous	Fecal Coliform	SM 9222 D	Membrane Filter	Plastic	250 ml	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	6 hours
aqueous	Biochemical Oxygen Demand	SM 5210 B	DO probe	Plastic	4000 ml	Refrigeration, 4 °C	48 hours
aqueous	Total Dissolved Solids	SM 2540 C	Gravimetric	Plastic	250 ml	Refrigeration, 4 °C	7 days
aqueous	Total Residual Chlorine	SM 4500 Cl B	Titrimetric	Plastic	1000 ml	Refrigeration, 4 °C	Immediately
aqueous	pH	SM 4500-H <sup>+</sup> -B	Probe method	Plastic	100 ml	none	Immediately
aqueous	Temperature	SM 2550	Probe method	Plastic	100 ml	none	Immediately
aqueous	Settable Solids	SM 2540 F	Gravimetric	Plastic	2 Liter	Refrigeration, 4 °C	Immediately
aqueous	Total Suspended Solids	SM 2540 D	Gravimetric	Plastic	4 Liter	Refrigeration, 4 °C	7 days