

## Holding Times / Preservatives for Colorado Analytical Laboratory

### WASTEWATER - Non Drinking Water

Container	Test	Hold Time	Preservative	Method
500 mL CYL	Alkalinity	14 Days	4°C	SM 2320-B
500 mL CYL	BOD / CBOD / SBOD	48 Hours	4°C	SM 5210-B
500 mL CYL	Chloride / Fluoride / Sulfate	28 Days	4°C	EPA 300.0
500 mL CYL	Hexavalent Chromium	24 Hours	4°C	SM 3500-Cr-B
500 mL CYL	Nitrate, Nitrite Or Combined	48 Hours	4°C	EPA 300.0
250 mL CYL	pH	ASAP	4°C	SM 4500-H-B
500 mL CYL	Phosphorus - Ortho	48 Hours	4°C	EPA 300.0
500 mL CYL	Specific Conductance	28 Days	4°C	EPA 120.1
250 mL CYL	TDS - Total Dissolved Solids	7 Days	4°C	SM 2540-C
500 mL CYL	TSS - Total Suspended Solids	7 Days	4°C	SM 2540-D
500 mL CYL (1)	Total Inorganic Nitrogen (TIN)	48 Hours	4°C, See footnote 1	CALC
125 mL Amber	Total Residual Chlorine	ASAP	4°C	SM 4500-Cl-G
500 mL CYL (2)	Trivalent Chromium	24 Hours	4°C, See footnote 2	CALC
500 mL CYL	Metals - Total / Total Recoverable	180 Days	HNO <sub>3</sub>	EPA 200.8/200.7
500 mL CYL	Metals - Potentially Dissolved	96 Hours	HNO <sub>3</sub>	EPA 200.8/200.7
500 mL CYL (3)	Metals - Dissolved		Filter then add HNO <sub>3</sub>	EPA 200.8/200.7
250 mL Glass	Mercury - Low Level Only	28 Days	4°C, Add HCl	EPA 245.7
(3) 40 mL Vials x2 (4)	VOC's - Purgeables By GC/MS	14 Days	3 VOA HCl/ 3 VOA None	EPA 624.1
500 mL Amb Glass	SVOC's - Base/Neutrals & Acids By GC/MS	7 Days	4°C	EPA 625.1
500 mL CYL	Ammonia Nitrogen	28 Days	4°C, H <sub>2</sub> SO <sub>4</sub>	SM 4500-NH3-G
500 mL CYL	COD	28 Days	4°C, H <sub>2</sub> SO <sub>4</sub>	SM 5220-D
1 L Glass	Oil & Grease	28 Days	4°C, H <sub>2</sub> SO <sub>4</sub>	EPA 1664 (A)
125 mL Glass	Phenols	28 Days	4°C, H <sub>2</sub> SO <sub>4</sub>	EPA 420.4
500 mL CYL (1)	Total Inorganic Nitrogen (TIN)	48 Hours	4°C, See footnote 1	CALC
500 mL CYL	Total Kjeldahl Nitrogen (TKN)	28 Days	4°C, H <sub>2</sub> SO <sub>4</sub>	SM 4500-Norg-B
(2) 40 mL Vials	TOC	28 Days	4°C, H <sub>2</sub> SO <sub>4</sub>	EPA
500 mL CYL	Total Phosphorus	28 Days	4°C, H <sub>2</sub> SO <sub>4</sub>	EPA 365.1
500 mL CYL	Cyanide - Total/ WAD/ Free	14 Days	4°C, NaOH	EPA /ASTM
500 mL CYL	Sulfide	7 Days	Zn(O <sub>2</sub> CCH <sub>3</sub> ) <sub>2</sub> + NaOH	SM 4500-S2-G
125 mL Glass	Dissolved Sulfide	48 Hours	4°C	SM 4500-S2-B/G
100 mL Sterile	Coliform - Fecal / Total / E-Coli	6 Hours	4°C, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	SM
100 mL Sterile	HPC - Heterotrophic Plate Count	30 Hours	4°C, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	SM 9215D

### DRINKING WATER INORGANICS

Container	Test	Hold Time	Preservative	Method
1 L CYL	Copper / Lead (Compliance)	14 Days - (HNO <sub>3</sub> Added in Lab)		EPA 200.8
500 mL CYL	Domestic Water Quality	-	4°C	
500 mL CYL	Fluoride	28 Days	4°C	EPA 300.0
500 mL CYL	Langelier Index	-		SM 2330-B
500 mL CYL	Nitrate, Nitrite Or Combined	48 Hours	4°C	EPA 300.0
125 Amber	UV 254 Abs Or UV Transmittance	48 Hours	4°C	SM 5910-B
500 mL CYL	Inorganics Group / Metals	180 Days	HNO <sub>3</sub>	EPA 200.8
100 mL Sterile	Coliform - Total P/A / E-Coli	30 Hours	4°C, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	SM
(2) 40 mL Vials (3)	DOC	28 Days	Filter then add H <sub>2</sub> SO <sub>4</sub>	SM 5310-B
(2) 40 mL Vials	TOC	28 Days	4°C, H <sub>2</sub> SO <sub>4</sub>	SM 5310-B

### DRINKING WATER ORGANICS

Container	Test	Hold Time	Preservative	Method
<b>Disinfection By-Products</b>				
(3) 40 mL Vials	Total Trihalomethanes (TTHM's)	14 Days	4°C, ascorbic acid, add HCl	EPA 524.2
125 mL Amber	Haloacetic Acids (HAA5's)	14 Days	4°C, NH <sub>4</sub> Cl	EPA 552.2
<b>Volatile Organics Group</b>				
(3) 40 mL Vials	Volatile Organics (VOC's)	14 Days	4°C, ascorbic acid, add HCl	EPA 524.2
<b>Synthetic Organics Group</b>				
(2) 40 mL Vials	EDB / DBCP	14 Days	4°C, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	EPA 504.1
(2) 40 mL Vials	Pesticides / PCB's	14 Days	4°C, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	EPA 505
250 mL Amber	Herbicides	14 Days	4°C, Na <sub>2</sub> SO <sub>3</sub>	EPA 515.4
(2) 1 L Amber	SVOC's	14 Days	4°C, Na <sub>2</sub> SO <sub>3</sub> , add HCl	EPA 525.2
(2) 40 mL Vials	Carbamates	28 Days	4°C, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> + MCAA	EPA 531.1
(2) 40 mL Vials	Glyphosate	14 Days	4°C, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	EPA 547
250 mL Amber	Endothall	7 Days	4°C, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	EPA 548.1
500 mL Amber P	Diquat	7 Days	4°C, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> , add H <sub>2</sub> SO <sub>4</sub>	EPA 549.2

#### PRESERVATIVE - COLOR CODE

	- NONE
	- HNO <sub>3</sub> - Nitric Acid
	- HCl - Hydrochloric Acid
	- H <sub>2</sub> SO <sub>4</sub> - Sulfuric Acid
	- NaOH - Sodium Hydroxide
	- Zn(O <sub>2</sub> CCH <sub>3</sub> ) <sub>2</sub> with NaOH

- Footnotes: 1 - Total Inorganic Nitrogen (T.I.N.) requires (1) 500 ml unpreserved container and (1) 500 ml H<sub>2</sub>SO<sub>4</sub> preserved container.  
 2 - Trivalent Chromium requires (1) 500 ml unpreserved and (1) 500 ml HNO<sub>3</sub> preserved container.  
 3 - Dissolved Metals and DOC (Dissolved Organic Carbon) must be filtered prior to acidification  
 4 - 624 VOC List Requires (1) VOA Set Unpreserved AND (1) VOA Set Preserved W/ HCl.