

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 ₃ | EPA 200.8/200.7 |
| 500 mL CYL | Metals - Potentially Dissolved | 96 Hours | HNO ₃ | EPA 200.8/200.7 |
| 500 mL CYL | (3) Metals - Dissolved | | Filter then add HNO ₃ | 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 |
| 1L Glass Amber | 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 ₂ SO ₄ | SM 4500-NH3-G |
| 500 mL CYL | COD | 28 Days | 4°C, H ₂ SO ₄ | SM 5220-D |
| 1 L Glass | Oil & Grease | 28 Days | 4°C, H ₂ SO ₄ | EPA 1664 (A) |
| 125 mL Glass | Phenols | 28 Days | 4°C, H ₂ SO ₄ | 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 ₂ SO ₄ | SM 4500-Norg-B |
| (2) 40 mL Vials | TOC | 28 Days | 4°C, H ₂ SO ₄ | EPA |
| 500 mL CYL | Total Phosphorus | 28 Days | 4°C, H ₂ SO ₄ | 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 ₂ CCH ₃) ₂ + 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 ₂ S ₂ O ₃ | SM |
| 100 mL Sterile | HPC - Heterotrophic Plate Count | 30 Hours | 4°C, Na ₂ S ₂ O ₃ | SM 9215D |

DRINKING WATER INORGANICS

| Container | Test | Hold Time | Preservative | Method |
|-----------------|--------------------------------|---|--|-----------|
| 1 L CYL | Copper / Lead (Compliance) | 14 Days - (HNO ₃ 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 mL Amber | UV 254 Abs Or UV Transmittance | 48 Hours | 4°C | SM 5910-B |
| 500 mL CYL | Inorganics Group / Metals | 180 Days | HNO ₃ | EPA 200.8 |
| 100 mL Sterile | Coliform - Total P/A / E-Coli | 30 Hours | 4°C, Na ₂ S ₂ O ₃ | SM |
| (2) 40 mL Vials | (3) DOC | 28 Days | Filter then add H ₂ SO ₄ | SM 5310-B |
| (2) 40 mL Vials | TOC | 28 Days | 4°C, H ₂ SO ₄ | SM 5310-B |

DRINKING WATER ORGANICS

| Container | Test | Hold Time | Preservative | Method |
|-----------------|---------------------------------|-----------|---|-----------|
| (3) 40 mL Vials | Disinfection By-Products | | | |
| 125 mL Amber | Total Trihalomethanes (TTHM's) | 14 Days | 4°C, ascorbic acid, add HCl | EPA 524.2 |
| | Haloacetic Acids (HAA5's) | 14 Days | 4°C, NH4Cl | EPA 552.2 |
| (3) 40 mL Vials | Volatile Organics Group | | | |
| | Volatile Organics (VOC's) | 14 Days | 4°C, ascorbic acid, add HCl | EPA 524.2 |
| (2) 40 mL Vials | Synthetic Organics Group | | | |
| (2) 40 mL Vials | EDB / DBCP | 14 Days | 4°C, Na ₂ S ₂ O ₃ | EPA 504.1 |
| (2) 40 mL Vials | Pesticides / PCB's | 14 Days | 4°C, Na ₂ S ₂ O ₃ | EPA 505 |
| 250 mL Amber | Herbicides | 14 Days | 4°C, Na ₂ SO ₃ | EPA 515.4 |
| (2) 1 L Amber | SVOC's | 14 Days | 4°C, Na ₂ SO ₃ , add HCl | EPA 525.2 |
| (2) 40 mL Vials | Carbamates | 28 Days | 4°C, Na ₂ S ₂ O ₃ + MCAA | EPA 531.1 |
| (2) 40 mL Vials | Glyphosate | 14 Days | 4°C, Na ₂ S ₂ O ₃ | EPA 547 |
| 250 mL Amber P | Endothall | 7 Days | 4°C, Na ₂ S ₂ O ₃ | EPA 548.1 |
| 500 mL Amber P | Diquat | 7 Days | 4°C, Na ₂ S ₂ O ₃ , add H ₂ SO ₄ | EPA 549.2 |

PRESERVATIVE - COLOR CODE

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

- Footnotes: 1 - Total Inorganic Nitrogen (T.I.N.) requires (1) 500 ml unpreserved container and (1) 500 ml H₂SO₄ preserved container.
 2 - Trivalent Chromium requires (1) 500 ml unpreserved and (1) 500 ml HNO₃ 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.