

ESS Laboratory's Guide to Sample Handling and Preparation

Analysis	Preservative		Hold Time		Vol ml	pH check
	Aqueous	Soil	Water	Soil		
Chlorine (TRC) Dissolved Oxygen pH Sulfite	4°C		Immediate		50 300 50 N/A	NO
Temperature	N/A				N/A	
Chromium (VI) Coliform Ferrous Iron Iodide Odor Plate Count	4°C		24 hrs	28 d	50 100 100 100 100	NO
BOD – 5 day Color Nitrate Nitrite Orthophosphate Settleable Solids Surfactants (MBAS) Turbidity	4°C		48 hours		200 50 25 25 25 1000 250 50	NO
Sulfide TOX (VOA vial)	Zn Ace/NaOH - 4°C H <sub>2</sub> SO <sub>4</sub> or HCl - 4°C	4°C 4°C	7 days		50 40	NO
Flash/Reactivity	NP - 4°C	NP - 4°C			100	
TDS/TS/TSS/TVS	4°C	4°C				
TOC Lloyd Kahn (VOA vial)	N/A	NP - 4°C	14 days		40	NO
TOC (VOA vial)	H <sub>2</sub> SO <sub>4</sub> or HCl - 4°C	NP - 4°C	28 days		40	NO
Acidity/Alkalinity TX (VOA vial)	4°C	4°C	14 days		100 400	NO
Cyanide (Amenable) Cyanide (Total)	NaOH - 4°C NaOH - 4°C	NP - 4°C NP - 4°C			100 100	***
Metals* (Total/Diss.)- Except Cr(VI) and Mercury Mercury* (Total/Diss.)	HNO <sub>3</sub> - 4°C 4°C HNO <sub>3</sub> - 4°C	NP - 4°C 4°C NP - 4°C	6 months		100	Yes
Ammonia COD Kjeldahl Nitrogen (Total) Nitrate-Nitrite	4°C		28 days		250 25 250 25 1000	Yes
Oil & Grease/TPH <i>Glass only</i> Phenol <i>Glass only</i> Phosphorus (Tot/Hydro)	H <sub>2</sub> SO <sub>4</sub>	NP - 4°C			250 50	
Paint Filter Asbestos	None Required		28 days		N/A N/A	
Bromide Chloride Fluoride	4°C				N/A 25 25 50	NO
Salinity Silica Spec. Conductivity Sulfate	4°C				50 50 50 1000	
Siloxane	NP - 4°C	MeOH - 4°C				
SVOA (625.1/8270/PAH) DRO/TPH-GC (8100M) EPH Herbicides (8151) PCB (608.3, 8082) Pesticide (608.3, 8081)	NP - 4°C HCl - 4°C HCl - 4°C NP - 4°C NP - 4°C 5-9 pH - 4°C	NP - 4°C NP - 4°C NP - 4°C NP - 4°C NP - 4°C	7 d 7 d 14 d 7 d 365 d 7 d	14 d 14 d 14 d 14 d 365 d 14 d	2000 1000 1000 1000 1000 1000	Yes     ***
Volatile Organics (524.1, 601, 624.1, 5035, 8260) EDB & DBCP GRO	4°C Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> - 4°C HCL - 4°C	MeOH** - 4°C NP - 4°C NP - 4°C	14 d	14 d	3 vial	Yes
VPH	HCL - 4°C	MeOH** - 4°C	14 d	28 d	3 vial	

\* Dissolved metals must be field filtered before preservation or brought to lab unpreserved and filtered in lab within 24 hours.

\*\* Samples are to be preserved in the field with methanol.

\*\*\*These parameters must be tested in sample receiving for pH – Cyanide, Pesticide (608.3)