

**SDWA TABLE OF SAMPLE PRESERVATION AND HOLDING TIME REQUIREMENTS
ORGANIC ANALYSIS**

Table 6-1

METHOD	PARAMETERS	PRESERVATION	CONTAINER	HOLDING TIME
*504.1	EDB/DBCP	Na ₂ S ₂ O ₃ 3mg/40ml	40ml, G, Cool, 4 °C	Extract and analyze within 14 days
505	Organohalide Pesticides and PCB's	Na ₂ S ₂ O ₃ 3mg/40ml	40ml, G, Cool, 4 °C	Extract within 7 days / Analyze immediately after Extraction
507	Nitrogen / Phosphorus Pesticides	Na ₂ S ₂ O ₃ 80mg/L	1L, G, Cool, 4 °C	Extract within 14 days / Analyze within 14 days of Extraction
508	Chlorinated Pesticides	Na ₂ S ₂ O ₃ 80mg/L	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 14 days of Extraction
515.1	Acid Herbicides	Na ₂ S ₂ O ₃ 80mg/L	1L, G, Cool, 4 °C	Extract within 14 days / Analyze within 28 days of Extraction
531.1	Carbamates	Monochloroacetic Acid Buffer pH-3 1.2ml/40ml	40ml, G, Cool, 4 °C	Analyze within 28 days
547	Glyphosate	Na ₂ S ₂ O ₃ 4mg/40ml	40ml, G, Cool, 4 °C	Analyze within 14 days / 18 months if frozen
548.1	Endothall	Na ₂ S ₂ O ₃ 80mg/L	500ml, G, Cool, 4 °C	Extract within 7 days / Analyze within 14 days of Extraction
549.2	Diquat	Na ₂ S ₂ O ₃ 50mg/0.5L	500ml, P, Amber, Cool, 4 °C	Extract within 7 days / Analyze within 21 days of Extraction
525.2	SVOCs	Na ₂ SO ₃ 50mg/1L**	1L, G, Cool, 4 °C	Extract within 14 days / Analyze within 30 days of Collection
*524.2	VOCs	pH<2, 1:1 HCl + Ascorbic Acid 25mg/40ml	40ml, G, Cool, 4 °C	Analyze within 14 days
*551.1	Disinfectant Byproducts	Na ₂ HPO ₄ 2g + KH ₂ PO ₄ 198g + NH ₄ Cl 1.2g Buffer Salts	40ml, G, Cool, 4 °C	Extract within 14 days / Analyze within 14 days of Extraction / Store Extracts at -10 °C
*551.1	Chloral Hydrate only	Na ₂ HPO ₄ 2g + KH ₂ PO ₄ 198g + Na ₂ SO ₃ 1.2g Buffer Salts	40ml, G, Cool, 4 °C	Extract within 14 days / Analyze within 14 days of Extraction / Store Extracts at -10 °C
552.2	Haloacetic Acids	NH ₄ Cl 100mg/L	40ml, G, Cool, 4 °C	Extract within 14 days / Analyze within 7 days of Extraction when stored at 4 °C / Analyze within 14 days of Extraction when stored at -10 °C

*Note-Zero head space (no air bubbles) is required for these methods.

Na₂S₂O₃ - Sodium Thiosulfate is used for chlorinated source water only.

Na₂SO₃ - Sodium Thiosulfite is used for chlorinated source water only.

G - Glass P - Plastic

** Sample pH is field adjusted <2 HCL if acid compounds like PCP are to be determined.

SDWA SAMPLE PRESERVATION AND HOLDING TIME TABLE
METHOD 524.2
Table 6-2

DECSRIPTION	SAMPLE VOLUME	DECHLORINATION	SAMPLE PRESERVATION	ANALYSIS HOLDING TIME
Full List Compounds	3 x 40mL	25mg ascorbic acid per 40mL sample	pH<2, 2 drops 1:1 HCL Field preserved, cool 4°C	14 days
Full List Compounds sample foams when HCL is added carbonaceous waters	3 x 40mL	25mg ascorbic acid per 40mL sample	No acid	Analyze within 24 hours
THM's only	3 x 40mL	25mg ascorbic acid per 40mL VOA vial	pH<2, 2 drops 1:1 HCL Field preserved, cool 4°C	14 days
THM's only	3 x 40mL	Sodium Thiosulfate 3mg/40mL sample	No acid	14 days
THM's only sample foams when HCL is added carbonaceous waters	3 x 40mL	Sodium Thiosulfate 3mg/40mL sample	No acid	14 days

**SDWA TABLE OF SAMPLE PRESERVATION AND HOLDING TIME REQUIREMENTS
INORGANIC ANALYSIS**

Table 6-3

METHOD	PARAMETERS	PRESERVATION	CONTAINER	HOLDING TIME
SM2320B	Alkalinity	Cool, ≤6 °C, no headspace if possible	250ml, G/P	14 days
SM4500NH3 D	Ammonia	pH <2 H2SO4, Cool, ≤6 °C, no headspace if possible	250ml,G/ P	28 days, 24 hours unpreserved
300.0	Anions	None, if analyzed within 48 hours, for nitrate, nitrite and ortho-phosphate or else pH < 2 H2SO4.	250ml, G/P	48 hours non preserved, 28 days preserved.
120.1/SM2510B	Conductivity	Cool, ≤6 °C	250ml, G/P	28 days
150.2/SM4500H	pH	Cool, ≤6 °C, no headspace if possible	250ml, G/P	15 minutes
SM2540C	TDS	Cool, ≤6 °C	1L, G/P	7 days
180.1	Turbidity	Cool, ≤6 °C	250ml, G/P	48 hours
314.0	Perchlorate	None	250ml, G/P	28 days
SM4500Cl G	Residual Free Chlorine	Cool, ≤6 °C, (no headspace if possible)	0.1-L, amber glass, protect from light	15 minutes
SM3500Cr D	Chromium VI	Cool, ≤6 °C	250ml, G/P	24 hours.
200.8	Metals (total)	1:1 HNO3, 3ml per 1L, pH<2 Sample may be preserved in the laboratory 24 hours prior to analysis.	500mL, G/P	Digest and analyze within 6 months of collection.
SM2340B	Hardness (Calculated)	Same as for 200.8 metals		
200.8	Metals (dissolved)	Field filtered through a 0.45 μm filter. 1:1 HNO3, 3ml per 1L, pH<2	500mL, G/P	Digest and analyze within 6 months of collection.
SM3500-Fe D	Iron (Total)	Cool, ≤6 °C, pH<2 HNO3	250ml,G/ P	Digest and analyze within 6 months of collection.
SM3500-Fe D	Iron (Dissolved)	Cool, ≤6 °C, Field filtered through a 0.45 μm filter. pH<2 HNO3	250ml,G/ P	Digest and analyze within 6 months of collection.
SM3500-Fe D	Iron (Ferrous)	Cool, ≤6 °C, Field filtered through a 0.45 μm filter. pH<2 HCl	250ml,G/ P	Not specified, (as soon as possible). In house criteria will require samples be color developed within 72 hours of sample collection and samples analyzed within 72 hours of color development.
P - Plastic				

**CWA TABLE OF SAMPLE PRESERVATION AND HOLDING TIME REQUIREMENTS
ORGANIC ANALYSIS**

Table 6-4

METHOD	PARAMETERS	PRESERVATION	CONTAINER	HOLDING TIME
*601	Purgeable Hydrocarbons	Na ₂ S ₂ O ₃ 10mg/40ml	40ml, G, Cool, 4 °C	Analyze within 14 days
*602	Purgeable Aromatics	pH<2, 1:1 HCl, Na ₂ S ₂ O ₃ 10mg/40ml	40ml, G, Cool, 4 °C	Analyze within 14 days
*603	Acrolein / Acrylonitrile	Na ₂ S ₂ O ₃ 10mg/40ml, pH 4-5 (HCL/NaOH)	40ml, G, Cool, 4 °C	Analyze within 14 days
604	Phenols	Na ₂ S ₂ O ₃ 80mg/L	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
605	Benzidine	Na ₂ S ₂ O ₃ 80mg/L, pH 2-7 H ₂ SO ₄	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 7 days of Extraction
606	Phthalate Esters	No Preservation	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
607	Nitrosamines	Na ₂ S ₂ O ₃ 80mg/L, pH 7-10 (H ₂ SO ₄ /NaOH)	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
608	Organochlorine Pesticides/PCB's	Na ₂ S ₂ O ₃ 80mg/L, pH 5-9 (H ₂ SO ₄ /NaOH)	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
609	Isophrone	No Preservation	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
610	Polynuclear Aromatic Hydrocarbons	Na ₂ SO ₃ 80mg/1L	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
611	Haloethers	Na ₂ SO ₃ 80mg/1L	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
612	Chlorinated Hydrocarbons	No Preservatives	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
613	Dioxin	Na ₂ SO ₃ 80mg/1L	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
614	Organophosphorus Pesticides	pH 6-8 (H ₂ SO ₄ /NaOH)	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
615	Chlorinated Herbicides	No Preservatives	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
619	Triazine Pesticides	Not Specified	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
622	Nitrogen / Phosphorus Pesticides	pH 6-8 (H ₂ SO ₄ /NaOH)	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
*624	Purgeables	pH<2, 1:1 HCl, Na ₂ S ₂ O ₃ 10mg/40ml	40ml, G, Cool, 4 °C	Analyze within 14 days
625	Base Neutral Acids	Na ₂ S ₂ O ₃ 80mg/L	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
632	Carbamate Pesticides	Na ₂ S ₂ O ₃ 80mg/L	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 28 days of Extraction

no head space (no air bubbles) is required for these methods

Na₂S₂O₃ - Sodium Thiosulfate G - Glass P - Plastic

**CWA/RCRA TABLE OF SAMPLE PRESERVATION AND HOLDING TIME REQUIREMENTS
INORGANIC ANALYSIS**

Table 6-5

METHOD	PARAMETER	PRESERVATION	CONTAINER	HOLDING TIME
EPA 120.1/SM2510B/9050A	Conductivity	Cool, ≤6 °C, no headspace if possible	250 ml, G/P	28 days
EPA 150.2/SM4500H/9040C	pH	Cool, ≤6 °C, no headspace if possible	250 ml, G/P	15 minutes
SM2540C	TDS	Cool, ≤6 °C	1 L, G/P	7 days
SM2540D	TSS	Cool, ≤6 °C	1 L, G/P	7 days
SM2540B	TS	Cool, ≤6 °C	1 L, G/P	7 days
EPA 180.1/SM2130B	Turbidity	Cool, ≤6 °C	250 ml, G/P	48 hours
EPA 300/9056	Anions	None .if analyzed with 48 hrs, for nitrate, nitrite and ortho-phosphate or else pH <2 H2SO4	250 ml, G/P	48 hours non preserved, 28 days preserved
SM2310B	Acidity	Cool, ≤6 °C	250 ml, G/P	14 days
SM2320B	Alkalinity	Cool, ≤6 °C	250 ml, G/P	14 days
EPA 314.0	Perchlorate	None	250 ml, G/P	28 days
SM4500Cl G	Chlorine	Cool, ≤6 °C, no headspace, protect from light	0.1-L, Amber glass	15 minutes
SM4500 NH3 D	Ammonia	Cool, ≤6 °C, pH <2 H2SO4	250 ml, G/P	28 days preserved, 24 hours non preserved
SM4500Norg C/SM4500NH3 D	Total Kjeldahl -N	Cool, ≤6 °C, pH <2 H2SO4	250 ml, G/P	28 days preserved, 24 hours non preserved
EPA 365.3/SM4500P E	Total Phosphorus	Cool, ≤6 °C, pH<2 H2SO4	250 ml, G/P	28 days
SM4500S D	Sulfide	0.2 mL 2N zinc acetate per 0.1-L, 0.2 ml 6 N NaOH, pH >9, no head-space Cool, ≤6 °C	250 ml, G lass	7 days
SM4500SO3	Sulfite	None	500 ml, G/P	15 minutes
EPA 410.4/SM5520D	COD	Cool, ≤6 °C, pH<2 H2SO4	250 ml, G/P	28 days
SM5210B	BOD	Cool, ≤6 °C	2L, Plastic	48 hours
SM5540C	MBAS	Cool, ≤6 °C	2 L, Clear Glass	48 hours
SM5310C	TOC	Cool, ≤6 °C, pH<2 H2SO4, protect from sunlight	125 ml amber glass	28 days
EPA 245.1/7470	Mercury	Cool, ≤6 °C, pH<2 HNO3	250 ml, Plastic	28 days
200.8/6020	Metals, ICP-MS	Cool, ≤6 °C, pH<2 HNO3	250 ml, G/P	6 months
SM3500Cr D/7196A	Cr +6	Cool, ≤6 °C	250 ml, G/P	24 hours
SM3500Fe D	Ferrous Iron	Cool, ≤6 °C, Field filter, then acidify pH <2 HCL	250 mL, G/P	Not specified, as soon as possible
1664A	Oil and Grease	Cool, ≤6 °C, pH<2 HCL or H2SO4	1-L Glass only	28 days

**RCRA TABLE OF WATER / AQUEOUS SAMPLE PRESERVATION AND HOLDING TIME REQUIREMENTS
ORGANIC ANALYSIS**

Table 6-6

METHOD	PARAMETERS	PRESERVATION	CONTAINER	HOLDING TIME
*8010	Halogenated Volatiles	Na ₂ S ₂ O ₃ .008%	40ml, G, Cool, 4 °C	Analyze within 14 days
*8011	EDB/DBCP	Na ₂ S ₂ O ₃ 3mg/40ml	40ml, G, Cool, 4 °C	Analyze within 14 days
*8021B	Aromatic Volatiles	pH<2, 1:1 HCL, Na ₂ S ₂ O ₃ .008%	40ml, G, Cool, 4 °C	Analyze within 14 days
8041	Phenols	Na ₂ S ₂ O ₃ .008%	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
8081A	Organochlorine Pesticides	pH 5-9 (H ₂ SO ₄ /NaOH) Na ₂ S ₂ O ₃ .008%	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
8082	Polychlorinated Biphenyls (PCBs)	pH 5-9 (H ₂ SO ₄ /NaOH) Na ₂ S ₂ O ₃ .008%	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
8141A	Organophosphorus Pesticides	pH 5-9 (H ₂ SO ₄ /NaOH)	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
8151A	Chlorinated Herbicides	Na ₂ S ₂ O ₃ .008%	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
*8260	Volatile Organics	pH<2, 1:1 HCl, Na ₂ S ₂ O ₃ .008%	40ml, G, Cool, 4 °C	Analyze within 14 days
8270	BNAs	Na ₂ S ₂ O ₃ .008%	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
8310	Polynuclear Aromatics	Na ₂ S ₂ O ₃ .008%	1L, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
8318	N-methyl carbamates	Monochloroacetic Acid Buffer pH 4-5; 1.2mL per 40mL	40ml, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
8015B/Purgeable*	TPH/GRO	pH<2, 1:1 HCl	40ml, G, Cool, 4 °C	Analyze within 14 days
8015B/Extractable	TPH/DRO	pH<2, 1:1 HCl	40ml, G, Cool, 4 °C	Extract within 7 days / Analyze within 40 days of Extraction
8015B	Nonhalogenated VOC's	pH<2, 1:1 HCl, Na ₂ S ₂ O ₃ .008%	40mL, G, Cool, 4 °C	Analyze within 14 days
*Note-Zero head space (no air bubbles) is required for these methods Na ₂ S ₂ O ₃ - Sodium Thiosulfate P - Plastic				

**RCRA TABLE OF SOIL / WASTE SAMPLE PRESERVATION AND HOLDING TIME REQUIREMENTS
ORGANIC ANALYSIS**

TABLE 6-7

METHOD	PARAMETERS	PRESERVATION	CONTAINER	HOLDING TIME
8081A	Organochlorine Pesticides and PCBs	Soil - Cool to 4 °C Waste - None	4 to 8 oz., G, Cool, 4 °C	Extract within 14 days / Analyze within 40 days of Extraction
8082	PCB's (Aroclor)	Soil - Cool to 4 °C Waste - None	4 to 8 oz., G, Cool, 4 °C	Extract within 14 days / Analyze within 40 days of Extraction
8141A	Organophosphorus Pesticides	Soil - Cool to 4 °C Waste - None	4 to 8 oz., G, Cool, 4 °C	Extract within 14 days / Analyze within 40 days of Extraction
8151A	Chlorinated Herbicides	Soil - Cool to 4 °C Waste - None	4 to 8 oz., G, Cool, 4 °C	Extract within 14 days / Analyze within 40 days of Extraction
*8260	Volatile Organics	Soil - Cool to 4 °C Waste - None	4 to 8 oz., G, Cool, 4 °C	Analyze within 14 days
8270	BNAs	Soil - Cool to 4 °C Waste - None	4 to 8 oz., G, Cool, 4 °C	Extract within 14 days / Analyze within 40 days of Extraction
6020	Metals	Soil - Cool to 4 °C Waste - None	4 to 8 oz., G, Cool, 4 °C	Digest and analyze within 6 months.
*Note - Zero Headspace is required for these methods P - Plastic				