

## Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	LCS RPD
<b>8081 in Liquid (EPA 8081A)</b>								
Preservation: Dechlorinate; Store cool at 4°C								
Container: 1L Amber-Na2S2O3								
Amount Required: 1L/3L								
Hold Time: 7 days								
4,4'-DDD	0.018	0.11 ug/L		40	15 - 160	40	29 - 137	45
4,4'-DDE	0.013	0.040 ug/L		40	34 - 139	40	31 - 130	35
4,4'-DDT	0.018	0.12 ug/L		40	31 - 140	40	27 - 120	40
a-BHC	0.015	0.030 ug/L		40	6 - 150	40	36 - 133	31
Aldrin	0.0096	0.040 ug/L		40	26 - 135	40	39 - 122	32
b-BHC	0.043	0.060 ug/L		40	3 - 164	40	18 - 155	36
Chlordane	0.045	0.10 ug/L		40				
d-BHC	0.038	0.090 ug/L		40	10 - 154	40	26 - 140	35
Dieldrin	0.012	0.020 ug/L		40	12 - 150	40	40 - 127	33
Endosulfan I	0.011	0.14 ug/L		40	19 - 152	40	33 - 130	33
Endosulfan II	0.018	0.040 ug/L		40	24 - 145	40	33 - 135	35
Endosulfan Sulfate	0.23	0.66 ug/L		40	12 - 161	40	37 - 133	36
Endrin	0.013	0.060 ug/L		40	12 - 165	40	29 - 133	33
Endrin Aldehyde	0.056	0.23 ug/L		40	21 - 140	40	44 - 127	60
Heptachlor	0.010	0.010 ug/L		40	29 - 144	40	44 - 126	31
Heptachlor Epoxide	0.010	0.010 ug/L		40	33 - 142	40	43 - 133	31
Lindane	0.021	0.040 ug/L		40	23 - 148	40	34 - 138	32
Methoxychlor	0.23	1.8 ug/L		40		40		40
Toxaphene	0.83	1.0 ug/L		40				
surr: Decachlorobiphenyl				5 - 155				

## Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	RPD	Blank Spike / LCS %R	RPD
<b>8141 in Liquid (EPA 8141B)</b>								
Preservation: Dechlorinate; Store cool at 4°C								
Container: 1L Amber-Na2S2O3								
Amount Required: 1L/3L								
Hold Time: 7 days								
Aspon	0.70	4.0 ug/L		40		40		40
Atrazine	0.87	4.0 ug/L		40	54 - 119	47	54 - 119	47
Azinphos-ethyl	0.66	4.0 ug/L		40	46 - 150	37	46 - 150	37
Azinphos-methyl	0.65	4.0 ug/L		40		40		40
Bolstar	0.44	4.0 ug/L		40		40		40
Carbophenothion	0.40	4.0 ug/L		40		40		40
Chlorfenvinphos	1.4	4.0 ug/L		40		40		40
Chlorpyrifos	0.63	4.0 ug/L		40		40		40
Chlorpyrifos + Ethyl Parathion	0.63	4.0 ug/L		40		40		40
Chlorpyrifos Methyl	0.62	4.0 ug/L		40		40		40
Chlorpyrifos-methyl + Methyl Parathion	0.61	4.0 ug/L		40		40		40
Coumaphos	0.68	4.0 ug/L		40	62 - 108	37	62 - 108	37
Crotoxyphos	0.90	4.0 ug/L		40		40		40
Demeton-O	1.2	4.0 ug/L		40		40		40
Demeton-S	1.2	4.0 ug/L		40		40		40
Diazinon	0.73	4.0 ug/L		40		40		40
Dichlofenthion	0.51	4.0 ug/L		40		40		40
Dichlorvos	0.82	4.0 ug/L		40		40		40
Dichrotophos	0.84	4.0 ug/L		40		40		40
Dimethoate	1.2	4.0 ug/L		40	50 - 128	42	50 - 128	42
Dioxathion	0.32	4.0 ug/L		40		40		40
Disulfoton	0.71	4.0 ug/L		40	69 - 125	32	69 - 125	32
EPN	0.67	4.0 ug/L		40		40		40
Ethion	0.56	4.0 ug/L		40		40		40
Ethoprop	1.0	4.0 ug/L		40		40		40
Ethyl Parathion	0.63	4.0 ug/L		40		40		40
Famphur	0.68	4.0 ug/L		40	50 - 111	20	50 - 111	20
Fenitrothion	0.74	4.0 ug/L		40	56 - 137	36	56 - 137	36
Fensulfothion	0.68	4.0 ug/L		40		40		40
Fenthion	0.66	4.0 ug/L		40	53 - 130	34	53 - 130	34
Fonophos	0.75	4.0 ug/L		40		40		40
Leptophos	0.48	4.0 ug/L		40		40		40
Malathion	0.80	4.0 ug/L		40		40		40
Merphos	1.8	4.0 ug/L		40		40		40
Methyl Parathion	0.61	4.0 ug/L		40		40		40
Mevinphos	1.1	4.0 ug/L		40		40		40
Monocrotophos	0.78	4.0 ug/L		40		40		40
Naled	0.55	4.0 ug/L		40		40		40
Phorate	0.93	4.0 ug/L		40	58 - 136	34	58 - 136	34
Phosphamidon	0.44	4.0 ug/L		40		40		40
Phosphamidon + Dichlorofenthion	0.51	4.0 ug/L		40		40		40
Phosmet	0.65	4.0 ug/L		40	70 - 130	40	70 - 130	40
Ronnel	0.49	4.0 ug/L		40	45 - 137	20	45 - 137	20
Simazine	0.60	4.0 ug/L		40	86 - 164	33	86 - 164	33
Stirofos	0.58	4.0 ug/L		40	47 - 125	32	47 - 125	32
Sulfotepp	0.87	4.0 ug/L		40	34 - 139	38	34 - 139	38

## Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
TEPP	0.49	4.0 ug/L		40		40		40
Terbufos	0.61	4.0 ug/L		40		40		40
Thionazin	0.96	4.0 ug/L		40	74 - 146	32	74 - 146	32
Tokuthion	0.50	4.0 ug/L		40	54 - 124	29	54 - 124	29
Trichlorfon	0.39	4.0 ug/L		40		40		40
Trichloronate	0.61	4.0 ug/L		40		40		40
surr: 1,3-Dimethyl-2-Nitrobenzene				47 - 179				

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>Ammonia-N in Liquid (SM4500NH3H)</b>								
<b>Preservation:</b> Add H2SO4 to pH<2; Store cool at 4°C								
<b>Container:</b> Quart Poly - H2SO4								
<b>Amount Required:</b> 10mL/100m								
<b>Hold Time:</b> 28 days								
Ammonia-Nitrogen	0.059	0.10 mg/L		20	80 - 120	20	90 - 110	

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>AS_ICPMS_WW in Liquid (EPA 200.8)</b>								
<b>Preservation:</b> Add HNO3 to pH<2								
<b>Container:</b> 500 mL Poly HNO3								
<b>Amount Required:</b> 100 mL								
<b>Hold Time:</b> 180 days								
Arsenic	1.6	5.0 ug/L		20	70 - 130	20	85 - 115	

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>BOD in Liquid (SM 5210B)</b>								
Preservation: Store cool at 4°C								
Container: Quart Poly - Unpres			Amount Required: 300mL/1L			Hold Time: 2 days		
Biochemical Oxygen Demand	1.0	2.0 mg/L		20			85 - 115	20



Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>CR_ICPMS_WW in Liquid (EPA 200.8)</b>								
Preservation: Add HNO <sub>3</sub> to pH<2								
Container: 500 mL Poly HNO <sub>3</sub>								
Amount Required: 100 mL								
Hold Time: 180 days								
Total Chromium	0.14	20 ug/L		20	70 - 130	20	85 - 115	

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>COD in Liquid (SM 5220D)</b>								
<b>Preservation:</b> Add H2SO4 to pH<2; Store cool at 4°C								
<b>Container:</b> Quart Poly - H2SO4			<b>Amount Required:</b> 2mL/10mL			<b>Hold Time:</b> 28 days		
Chemical Oxygen Demand	6.5	10 mg/L		20	80 - 120	20	95 - 105	

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>CU_ICPMS_WW in Liquid (EPA 200.8)</b>								
<b>Preservation:</b> Add HNO3 to pH<2								
<b>Container:</b> 500 mL Poly HNO3								
<b>Amount Required:</b> 100 mL								
<b>Hold Time:</b> 180 days								
Copper	1.6	10 ug/L		20	70 - 130	20	85 - 115	

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>DO in Liquid (SM4500 O C)</b>								
<b>Preservation:</b> Flocculate in field.								
<b>Container:</b> BOD Bottle								
<b>Amount Required:</b> 300mL								
<b>Hold Time:</b> 0.33 days								
Dissolved Oxygen	0.10	0.10 mg/L		20				

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>BT-MTF- MD E coli in Liquid (SM 9221E)</b>								
<b>Preservation:</b> Dechlorinate; Store cool at 4°C								
<b>Container:</b> 125 mL Sterile Bacti Bottle -			<b>Amount Required:</b> 100mL/125		<b>Hold Time:</b> 0.25 days			
Na2S2O3				mL				
E. Coli	2.0	MPN/100 mL		161				

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>EC in Liquid (SM 2510)</b>								
Preservation: Store cool at 4°C								
Container: Quart Poly - Unpres			Amount Required: 25mL/100m			Hold Time: 28 days		
L								
Specific Conductance	1.0	1.0 umhos/cm		20			90 - 110	20

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>FE_ICP_WW in Liquid (EPA 200.7)</b>								
Preservation: Add HNO <sub>3</sub> to pH<2								
Container: 500 mL Poly HNO <sub>3</sub>								
Amount Required: 100 mL								
Hold Time: 180 days								
Iron	5.3	50 ug/L		20	70 - 130	20	85 - 115	

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>Nitrogen-Kjeldahl in Liquid (EPA 351.2)</b>								
Preservation: Add H2SO4 to pH<2; Store cool at 4°C								
Container: 500 mL Poly H2SO4			Amount Required: 20mL/200m			Hold Time: 28 days		
L								
Kjeldahl Nitrogen	0.062	0.10 mg/L		20	37 - 153	25	80 - 120	

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>PB_ICPMS_WW in Liquid (EPA 200.8)</b>								
Preservation: Add HNO3 to pH<2								
Container: 500 mL Poly HNO3								
Amount Required: 100 mL								
Hold Time: 180 days								
Lead	0.084	10 ug/L		20	70 - 130	20	85 - 115	

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>MN_ICPMS_WW in Liquid (EPA 200.8)</b>								
<b>Preservation:</b> Add HNO3 to pH<2								
<b>Container:</b> 500 mL Poly HNO3								
<b>Amount Required:</b> 100 mL								
<b>Hold Time:</b> 180 days								
Manganese	0.98	10 ug/L		20	70 - 130	20	85 - 115	



Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>NO3-N in Liquid (EPA 300.0)</b>								
Preservation: Store cool at 4°C								
Container: Quart Poly - Unpres								
Amount Required: 5mL/100 mL								
Hold Time: 2 days								
Nitrate as N	0.11	0.20 mg/L		20	80 - 114	20	90 - 110	

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>Nitrite-N in Liquid (SM 4500NO2 B)</b>								
<b>Preservation:</b> Store cool at 4°C								
<b>Container:</b> Quart Poly - Unpres			<b>Amount Required:</b> 5mL/50 mL			<b>Hold Time:</b> 2 days		
Nitrite as N	0.0017	0.10 mg/L		20	80 - 120		90 - 110	20

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>Phos-Ortho in Liquid (SM 4500P E)</b>								
<b>Preservation:</b> Store cool at 4°C								
<b>Container:</b> Quart Poly - Unpres			<b>Amount Required:</b> 5mL/50mL			<b>Hold Time:</b> 2 days		
Ortho Phosphate Phosphorus	0.0062	0.050 mg/L		20	80 - 120	20	90 - 110	

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>pH in Liquid (SM 4500H+ B)</b>								
Preservation: Store cool at 4°C								
Container: Quart Poly - Unpres			Amount Required: 25mL/100m			Hold Time: 1 day		
L								
pH	1.00	1.00 pH Units		5			97.5 - 102.5	20

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>Solids-Total Diss in Liquid (SM 2540C)</b>								
<b>Preservation:</b> Store cool at 4°C								
<b>Container:</b> Quart Poly - Unpres								
<b>Amount Required:</b> 100mL/500 mL								
<b>Hold Time:</b> 7 days								
Total Dissolved Solids	5.5	10 mg/L		20			90 - 110	

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>TOC in Liquid (SM 5310B)</b>								
<b>Preservation:</b> Add H2SO4 to pH<2; Store cool at 4°C								
<b>Container:</b> 500 mL Amber H2SO4			<b>Amount Required:</b> 5mL/50mL			<b>Hold Time:</b> 28 days		
Total Organic Carbon	0.16	0.70 mg/L		20	80 - 120	10	90 - 115	10



Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>Phos-Total in Liquid (SM 4500P B E)</b>								
<b>Preservation:</b> Add H2SO4 to pH<2; Store cool at 4°C								
<b>Container:</b> Quart Poly - H2SO4								
<b>Amount Required:</b> 50mL/200m								
<b>Hold Time:</b> 28 days								
Total Phosphorus	0.011	0.050 mg/L		20	80 - 120	20	80 - 120	

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>Solids-Total Suspend in Liquid (SM 2540D)</b>								
<b>Preservation:</b> Store cool at 4°C								
<b>Container:</b> Quart Poly - Unpres			<b>Amount Required:</b> 100mL/500 mL			<b>Hold Time:</b> 7 days		
Total Suspended Solids	2.8	5.0 mg/L		25			90 - 110	25

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>Turbidity in Liquid (SM 2130 B)</b>								
Preservation: Store cool at 4°C								
Container: Quart Poly - Unpres			Amount Required: 50mL/200m			Hold Time: 2 days		
L								
Turbidity	0.12	0.20 NTU		20			90 - 110	20

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
<b>ZN_ICPMS_WW in Liquid (EPA 200.8)</b>								
<b>Preservation:</b> Add HNO3 to pH<2								
<b>Container:</b> 500 mL Poly HNO3								
<b>Amount Required:</b> 100 mL								
<b>Hold Time:</b> 180 days								
Zinc	1.4	10 ug/L		20	70 - 130	20	85 - 115	