

Chemical Analysis Report

SO-DIST-2018-09-05-01

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Peace River Streams**
Request ID: **RQ-2018-08-20-11**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901
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Certified by: Colin Wright, Program Administrator

Date Certified: 03-OCT-2018 16:11

A handwritten signature in black ink, appearing to read "Colin Wright", is shown on a light-colored background.

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals, Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: PrairieCreek@WshngtnLp

Collection Date/Time: 09/04/2018 09:50

Field ID: G3SD0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2022124	EPA 180.1 Rev. 2.0	Turbidity	6.3		NTU	P351161	
	EPA 300.0 Rev. 2.1	Chloride	38		mg Cl/L	P351786	
		Sulfate	33		mg SO4/L	P351788	
	SM 2120 B	Color (true)	220		PCU	P351177	
	SM 2320 B-97	Total Alkalinity	60		mg CaCO3/L	P351405	
	SM 2540 C-97	TDS	221		mg/L	P351550	
	SM 2540 D-97	TSS	9	I	mg/L	P351723	
	SM 4500 F-C-97	Fluoride	0.17		mg F/L	P351412	
2022126	EPA 350.1 Rev. 2.0	Ammonia-N	0.068		mg N/L	P351294	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P351245	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.18		mg N/L	P351424	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P351278	
	SM 5310 B-00	Organic Carbon	22		mg C/L	P351440	
2022128	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.10		mg P/L	P351136	
2022147	EPA 8321B	Aldicarb	0.020	UJ	ug/L	P351097	MS, RPD
		Aldicarb Sulfone	0.0020	U	ug/L	P351097	
		Aldicarb Sulfoxide	0.0020	UJ	ug/L	P351097	MS
		Carbaryl	0.012		ug/L	P351097	
		Carbofuran	0.0020	U	ug/L	P351097	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P351097	
		Methiocarb	0.0020	U	ug/L	P351097	
		Methomyl	0.0020	UJ	ug/L	P351097	MS
		Oxamyl	0.0020	U	ug/L	P351097	
		Propoxur	0.0020	U	ug/L	P351097	
2022149		2,4-D	0.021	J	ug/L	P351097	MS
		Sucralose**	0.010	U	ug/L	P351113	
		Bentazon	0.0083		ug/L	P351097	
		MCP	0.0020	UJ	ug/L	P351097	MS
		Triclopyr**	0.0040	UJ	ug/L	P351097	MS
		Imidacloprid	0.21		ug/L	P351097	
		Diuron	0.15		ug/L	P351097	
		Pyraclostrobin**	0.0020	U	ug/L	P351097	
		Primidone**	0.0040	U	ug/L	P351097	
		Linuron	0.0040	U	ug/L	P351097	
		Acetaminophen**	0.0080	U	ug/L	P351097	
		Fenuron	0.016	UJ	ug/L	P351097	MS
		Imazapyr**	0.0048	I	ug/L	P351097	
		Carbamazepine**	8.0E-04	U	ug/L	P351097	
		Fluridone**	0.0037		ug/L	P351097	
		Hydrocodone**	8.0E-04	U	ug/L	P351097	
		Naproxen**	0.0080	U	ug/L	P351097	
		Ibuprofen**	0.020	U	ug/L	P351097	
		Glyphosate**	1.4		ug/L	P351113	

Field ID: G3SD0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2022149	EPA 8321B	AMPA**	0.90		ug/L	P351113	
		Endothall**	0.10	UJ	ug/L	P351113	MS
		Glufosinate**	0.10	U	ug/L	P351113	
		Acesulfame K**	0.10	UJ	ug/L	P351113	MS
2022154	EPA 8270D	Aldrin	4.2	U	ng/L	P351179	
		Alpha-BHC	2.1	U	ng/L	P351179	
		Beta-BHC	4.2	U	ng/L	P351179	RPD
		Delta-BHC	4.2	U	ng/L	P351179	
		Gamma-BHC	4.2	U	ng/L	P351179	
		Carbophenothion	4.2	U	ng/L	P351179	MS, RPD
		Chlorothalonil	2.1	U	ng/L	P351179	
		Cypermethrin	21	U	ng/L	P351179	
		DDD-p,p'	3.2	U	ng/L	P351179	
		DDE-p,p'	3.2	U	ng/L	P351179	
		DDT-p,p'	3.2	U	ng/L	P351179	
		Dieldrin	4.2	U	ng/L	P351179	
		Endosulfan I	4.2	U	ng/L	P351179	
		Endosulfan II	4.2	U	ng/L	P351179	
		Endosulfan Sulfate	2.1	U	ng/L	P351179	
		Endrin	2.1	U	ng/L	P351179	
		Endrin Aldehyde	2.1	U	ng/L	P351179	RPD
		Heptachlor	1.6	U	ng/L	P351179	
		Heptachlor Epoxide	2.1	U	ng/L	P351179	
		Methoxychlor	4.2	U	ng/L	P351179	
		Mirex	2.1	U	ng/L	P351179	
		Permethrin	11	U	ng/L	P351179	
		Trifluralin	1.1	U	ng/L	P351179	
		Alpha-Chlordane	1.1	U	ng/L	P351179	
		Gamma-Chlordane	1.1	U	ng/L	P351179	
		Endrin Ketone	2.1	U	ng/L	P351179	
		Dicofol	32	U	ng/L	P351179	
		Chlordane	2.6	U	ng/L	P351179	
		Toxaphene	32	U	ng/L	P351179	
2022156	EPA 8270D	Alachlor	0.24	U	ng/L	P351254	
		Ametryn	0.31	U	ng/L	P351254	
		Atrazine	1.5		ng/L	P351254	
		Atrazine Desethyl	1.4	U	ng/L	P351254	MS
		Azinphos Methyl	2.1	U	ng/L	P351254	
		Bromacil	470		ng/L	P351254	
		Butylate	0.38	UJ	ng/L	P351254	RPD
		Chlorpyrifos Ethyl	0.24	U	ng/L	P351254	
		Chlorpyrifos Methyl	0.095	U	ng/L	P351254	
		Demeton	1.9	U	ng/L	P351254	
		Diazinon	0.12	U	ng/L	P351254	
		Disulfoton	0.48	U	ng/L	P351254	
	EPA 8276						

Field ID: G3SD0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2022156	EPA 8270D	EPTC	1.2	U	ng/L	P351254	RPD
		Ethion	0.14	U	ng/L	P351254	MS, RPD
		Ethoprop	0.095	U	ng/L	P351254	
		Fenamiphos	0.24	U	ng/L	P351254	
		Fipronil	0.24	U	ng/L	P351254	RPD
		Fipronil Sulfide	0.14	U	ng/L	P351254	
		Fipronil Sulfone	0.14	U	ng/L	P351254	RPD
		Hexazinone	75		ng/L	P351254	
		Malathion	41		ng/L	P351254	
		Metribuzin	0.19	U	ng/L	P351254	MS
		Mevinphos	0.48	U	ng/L	P351254	
		Molinate	0.29	U	ng/L	P351254	
		Norflurazon	310		ng/L	P351254	MS, RPD
		Pendimethalin	0.95	U	ng/L	P351254	
		Phorate	0.24	U	ng/L	P351254	
		Prometon	0.86	U	ng/L	P351254	
		Prometryn	0.19	U	ng/L	P351254	
		Simazine	0.48	U	ng/L	P351254	
		Terbufos	0.095	U	ng/L	P351254	
		Terbutylazine	0.40	U	ng/L	P351254	
		Fonofos	0.19	U	ng/L	P351254	
		Metalaxyl	380		ng/L	P351254	
		Metolachlor	7.4		ng/L	P351254	
		Acetochlor	0.24	U	ng/L	P351254	
		Cyanazine	0.48	U	ng/L	P351254	
		Parathion Ethyl	0.24	U	ng/L	P351254	
		Parathion Methyl	0.24	U	ng/L	P351254	
2022160	EPA 200.7 Rev. 4.4	Calcium	33.4		mg/L	P351199	
		Iron	1.06E+03		ug/L	P351199	
		Magnesium	8.53		mg/L	P351199	
		Potassium	5.6		mg/L	P351199	
		Sodium	20.4		mg/L	P351199	
		Zinc	5.0	U	ug/L	P351199	
	EPA 200.8 Rev. 5.4	Arsenic	1.33		ug/L	P351199	
		Cadmium	0.020	U	ug/L	P351199	
		Chromium	0.91	I	ug/L	P351199	
		Copper	1.38		ug/L	P351199	
		Lead	0.24		ug/L	P351199	
		Nickel	0.57	I	ug/L	P351199	
		Silver	0.010	U	ug/L	P351199	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 8321B: Results confirmed in re-extraction. Refer to the narrative for an explanation of QC Codes.

EPA 8321B: Refer to the narrative for an explanation of QC Codes.

EPA 8270D: Refer to the narrative for an explanation of QC Codes. MS accuracies for Atrazine and Hexazinone not assessed due to high content of these parameters in the sample spiked.

Sample Location: MyrtleSlough@PinelIsland

Collection Date/Time: 09/04/2018 11:15

Field ID: G3SD0095

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2022130	EPA 180.1 Rev. 2.0	Turbidity	2.9		NTU	P351161	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P351786	
		Sulfate	2.8		mg SO4/L	P351788	
	SM 2120 B	Color (true)	270		PCU	P351177	
	SM 2320 B-97	Total Alkalinity	51		mg CaCO3/L	P351405	
	SM 2540 C-97	TDS	150	A	mg/L	P351551	
	SM 2540 D-97	TSS	5	IA	mg/L	P351724	
	SM 4500 F-C-97	Fluoride	0.13		mg F/L	P351412	
2022131	EPA 350.1 Rev. 2.0	Ammonia-N	0.046		mg N/L	P351295	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P351245	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.009	I	mg N/L	P351424	
	EPA 365.1 Rev. 2.0	Total-P	0.040		mg P/L	P351278	
	SM 5310 B-00	Organic Carbon	28		mg C/L	P351441	
2022132	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.007	I	mg P/L	P351137	
2022162	EPA 200.7 Rev. 4.4	Calcium	21.1		mg/L	P351199	
		Iron	810		ug/L	P351199	
		Magnesium	5.02		mg/L	P351199	
		Potassium	1.8		mg/L	P351199	
		Sodium	10.9		mg/L	P351199	
		Zinc	6.0	I	ug/L	P351199	
	EPA 200.8 Rev. 5.4	Arsenic	1.01		ug/L	P351199	
		Cadmium	0.020	U	ug/L	P351199	
		Chromium	0.47	I	ug/L	P351199	
		Copper	0.34	I	ug/L	P351199	
		Lead	0.20	I	ug/L	P351199	
		Nickel	0.20	U	ug/L	P351199	
		Silver	0.010	U	ug/L	P351199	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Myrtle Slough @ SR 31

Collection Date/Time: 09/04/2018 11:45

Field ID: G3SD0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2022125	EPA 180.1 Rev. 2.0	Turbidity	5.8		NTU	P351161	
	EPA 300.0 Rev. 2.1	Chloride	84		mg Cl/L	P351786	
		Sulfate	53		mg SO4/L	P351788	
	SM 2120 B	Color (true)	96	A	PCU	P351177	
	SM 2320 B-97	Total Alkalinity	146		mg CaCO3/L	P351405	
	SM 2540 C-97	TDS	413	A	mg/L	P351550	
	SM 2540 D-97	TSS	6	IA	mg/L	P351723	
	SM 4500 F-C-97	Fluoride	0.19		mg F/L	P351412	
2022127	EPA 350.1 Rev. 2.0	Ammonia-N	0.069		mg N/L	P351294	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P351245	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.20		mg N/L	P351424	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P351278	
	SM 5310 B-00	Organic Carbon	16		mg C/L	P351440	
2022129	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.13		mg P/L	P351136	
2022148	EPA 8321B	Aldicarb	0.020	U	ug/L	P351097	MS, RPD
		Aldicarb Sulfone	0.0020	U	ug/L	P351097	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P351097	MS
		Carbaryl	0.0020	U	ug/L	P351097	
		Carbofuran	0.0020	U	ug/L	P351097	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P351097	
		Methiocarb	0.0020	U	ug/L	P351097	
		Methomyl	0.0020	U	ug/L	P351097	MS
		Oxamyl	0.0020	U	ug/L	P351097	
		Propoxur	0.0020	U	ug/L	P351097	
2022150		2,4-D	0.068		ug/L	P351097	MS
		Sucralose**	0.010	U	ug/L	P351113	
		Bentazon	8.0E-04	U	ug/L	P351097	
		MCP	0.0020	U	ug/L	P351097	MS
		Triclopyr**	0.0040	U	ug/L	P351097	MS
		Imidacloprid	0.38		ug/L	P351097	
		Diuron	0.75		ug/L	P351097	
		Pyraclostrobin**	0.0020	U	ug/L	P351097	
		Primidone**	0.0040	U	ug/L	P351097	
		Linuron	0.0040	U	ug/L	P351097	
		Acetaminophen**	0.0080	U	ug/L	P351097	
		Fenuron	0.016	U	ug/L	P351097	MS
		Imazapyr**	0.0042	I	ug/L	P351097	
		Carbamazepine**	8.0E-04	U	ug/L	P351097	
		Fluridone**	0.015		ug/L	P351097	
		Hydrocodone**	8.0E-04	U	ug/L	P351097	
		Naproxen**	0.0080	U	ug/L	P351097	
		Ibuprofen**	0.020	U	ug/L	P351097	
		Glyphosate**	2.6		ug/L	P351113	

Field ID: G3SD0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2022150	EPA 8321B	AMPA**	1.6		ug/L	P351113	
		Endothall**	0.10	U	ug/L	P351113	MS
		Glufosinate**	0.10	U	ug/L	P351113	
		Acesulfame K**	0.10	U	ug/L	P351113	MS
2022155	EPA 8270D	Aldrin	4.1	U	ng/L	P351179	
		Alpha-BHC	2.0	U	ng/L	P351179	
		Beta-BHC	4.1	U	ng/L	P351179	RPD
		Delta-BHC	4.1	U	ng/L	P351179	
		Gamma-BHC	4.1	U	ng/L	P351179	
		Carbophenothion	4.1	U	ng/L	P351179	MS, RPD
		Chlorothalonil	2.0	U	ng/L	P351179	
		Cypermethrin	20	U	ng/L	P351179	
		DDD-p,p'	3.1	U	ng/L	P351179	
		DDE-p,p'	3.1	U	ng/L	P351179	
		DDT-p,p'	3.1	U	ng/L	P351179	
		Dieldrin	4.1	U	ng/L	P351179	
		Endosulfan I	4.1	U	ng/L	P351179	
		Endosulfan II	4.1	U	ng/L	P351179	
		Endosulfan Sulfate	2.0	U	ng/L	P351179	
		Endrin	2.0	U	ng/L	P351179	
		Endrin Aldehyde	2.0	U	ng/L	P351179	RPD
		Heptachlor	1.5	U	ng/L	P351179	
		Heptachlor Epoxide	2.0	U	ng/L	P351179	
		Methoxychlor	4.1	U	ng/L	P351179	
		Mirex	2.0	U	ng/L	P351179	
		Permethrin	10	U	ng/L	P351179	
		Trifluralin	1.0	U	ng/L	P351179	
		Alpha-Chlordane	1.0	U	ng/L	P351179	
		Gamma-Chlordane	1.0	U	ng/L	P351179	
		Endrin Ketone	2.0	U	ng/L	P351179	
		Dicofol	31	U	ng/L	P351179	
		Chlordane	3.1	I	ng/L	P351179	
		Toxaphene	31	U	ng/L	P351179	
2022157	EPA 8270D	Alachlor	0.24	U	ng/L	P351254	
		Ametryn	0.31	U	ng/L	P351254	
		Atrazine	4.7		ng/L	P351254	
		Atrazine Desethyl	3.0	I	ng/L	P351254	MS
		Azinphos Methyl	2.2	U	ng/L	P351254	
		Bromacil	130		ng/L	P351254	
		Butylate	0.39	UJ	ng/L	P351254	RPD
		Chlorpyrifos Ethyl	0.24	U	ng/L	P351254	
		Chlorpyrifos Methyl	0.096	U	ng/L	P351254	
		Demeton	1.9	U	ng/L	P351254	
		Diazinon	0.12	U	ng/L	P351254	
		Disulfoton	0.48	U	ng/L	P351254	
	EPA 8276						

Field ID: G3SD0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2022157	EPA 8270D	EPTC	1.2	U	ng/L	P351254	RPD
		Ethion	0.14	U	ng/L	P351254	MS, RPD
		Ethoprop	0.096	U	ng/L	P351254	
		Fenamiphos	0.24	U	ng/L	P351254	
		Fipronil	0.24	U	ng/L	P351254	RPD
		Fipronil Sulfide	0.14	U	ng/L	P351254	
		Fipronil Sulfone	0.14	U	ng/L	P351254	RPD
		Hexazinone	3.7		ng/L	P351254	
		Malathion	0.34	U	ng/L	P351254	
		Metribuzin	0.19	U	ng/L	P351254	MS
		Mevinphos	0.48	U	ng/L	P351254	
		Molinate	0.29	U	ng/L	P351254	
		Norflurazon	370		ng/L	P351254	MS, RPD
		Pendimethalin	0.96	U	ng/L	P351254	
		Phorate	0.24	U	ng/L	P351254	
		Prometon	0.87	U	ng/L	P351254	
		Prometryn	0.19	U	ng/L	P351254	
		Simazine	0.48	U	ng/L	P351254	
		Terbufos	0.096	U	ng/L	P351254	
		Terbutylazine	0.41	U	ng/L	P351254	
		Fonofos	0.19	U	ng/L	P351254	
		Metalaxyl	48		ng/L	P351254	
		Metolachlor	6.1		ng/L	P351254	
		Acetochlor	0.24	U	ng/L	P351254	
		Cyanazine	0.48	U	ng/L	P351254	
		Parathion Ethyl	0.24	U	ng/L	P351254	
		Parathion Methyl	0.24	U	ng/L	P351254	
2022161	EPA 200.7 Rev. 4.4	Calcium	83.3		mg/L	P351199	
		Iron	450		ug/L	P351199	
		Magnesium	9.65		mg/L	P351199	
		Potassium	8.7		mg/L	P351199	
		Sodium	43.8		mg/L	P351199	
		Zinc	5.0	U	ug/L	P351199	
	EPA 200.8 Rev. 5.4	Arsenic	1.29		ug/L	P351199	
		Cadmium	0.020	U	ug/L	P351199	
		Chromium	0.73	I	ug/L	P351199	
		Copper	0.94		ug/L	P351199	
		Lead	0.16	I	ug/L	P351199	
		Nickel	1.16		ug/L	P351199	
		Silver	0.010	U	ug/L	P351199	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 8270D: Refer to the narrative for an explanation of QC Codes. MS accuracies for Atrazine and Hexazinone not assessed due to high content of these parameters in the sample spiked.

Sample Location: Myrtle Slough @ SR 31

Collection Date/Time: 09/04/2018 11:50

Field ID: G3SD0097_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2022152	EPA 8321B	Aldicarb	0.020	U	ug/L	P351097	MS, RPD
		Aldicarb Sulfone	0.0020	U	ug/L	P351097	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P351097	MS
		Carbaryl	0.0020	U	ug/L	P351097	
		Carbofuran	0.0020	U	ug/L	P351097	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P351097	
		Methiocarb	0.0020	U	ug/L	P351097	
		Methomyl	0.0020	U	ug/L	P351097	MS
		Oxamyl	0.0020	U	ug/L	P351097	
		Propoxur	0.0020	U	ug/L	P351097	
2022153		2,4-D	0.057		ug/L	P351097	MS
		Sucralose**	0.010	U	ug/L	P351113	
		Bentazon	8.0E-04	U	ug/L	P351097	
		MCP	0.0020	U	ug/L	P351097	MS
		Triclopyr**	0.0040	U	ug/L	P351097	MS
		Imidacloprid	0.36		ug/L	P351097	
		Diuron	0.66		ug/L	P351097	
		Pyraclostrobin**	0.0020	U	ug/L	P351097	
		Primidone**	0.0040	U	ug/L	P351097	
		Linuron	0.0040	U	ug/L	P351097	
		Acetaminophen**	0.0080	U	ug/L	P351097	
		Fenuron	0.016	U	ug/L	P351097	MS
		Imazapyr**	0.0030	T	ug/L	P351097	
		Carbamazepine**	8.0E-04	U	ug/L	P351097	
		Fluridone**	0.014		ug/L	P351097	
		Hydrocodone**	8.0E-04	U	ug/L	P351097	
		Naproxen**	0.0080	U	ug/L	P351097	
		Ibuprofen**	0.020	U	ug/L	P351097	
		Glyphosate**	2.5		ug/L	P351113	
		AMPA**	1.6		ug/L	P351113	
2022158	EPA 8270D	Endothall**	0.10	U	ug/L	P351113	MS
		Glufosinate**	0.10	U	ug/L	P351113	
		Acesulfame K**	0.10	U	ug/L	P351113	MS
		Aldrin	4.1	U	ng/L	P351179	
		Alpha-BHC	2.1	U	ng/L	P351179	
		Beta-BHC	4.1	U	ng/L	P351179	RPD
		Delta-BHC	4.1	U	ng/L	P351179	
		Gamma-BHC	4.1	U	ng/L	P351179	
		Carbophenothion	4.1	U	ng/L	P351179	MS, RPD
		Chlorothalonil	2.1	U	ng/L	P351179	
		Cypermethrin	21	U	ng/L	P351179	
		DDD-p,p'	3.1	U	ng/L	P351179	
		DDE-p,p'	3.1	U	ng/L	P351179	
		DDT-p,p'	3.1	U	ng/L	P351179	

Field ID: G3SD0097_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2022158	EPA 8270D	Dieldrin	4.1	U	ng/L	P351179	
		Endosulfan I	4.1	U	ng/L	P351179	
		Endosulfan II	4.1	U	ng/L	P351179	
		Endosulfan Sulfate	2.1	U	ng/L	P351179	
		Endrin	2.1	U	ng/L	P351179	
		Endrin Aldehyde	2.1	U	ng/L	P351179	RPD
		Heptachlor	1.5	U	ng/L	P351179	
		Heptachlor Epoxide	2.1	U	ng/L	P351179	
		Methoxychlor	4.1	U	ng/L	P351179	
		Mirex	2.1	U	ng/L	P351179	
		Permethrin	10	U	ng/L	P351179	
		Trifluralin	1.0	U	ng/L	P351179	
		Alpha-Chlordane	1.0	U	ng/L	P351179	
		Gamma-Chlordane	1.0	U	ng/L	P351179	
		Endrin Ketone	2.1	U	ng/L	P351179	
		Dicofol	31	U	ng/L	P351179	
		Chlordane	2.6	U	ng/L	P351179	
		Toxaphene	31	U	ng/L	P351179	
	EPA 8276						
2022159	EPA 8270D	Alachlor	0.24	U	ng/L	P351254	
		Ametryn	0.31	U	ng/L	P351254	
		Atrazine	5.9		ng/L	P351254	
		Atrazine Desethyl	3.2	I	ng/L	P351254	MS
		Azinphos Methyl	2.1	U	ng/L	P351254	
		Bromacil	120		ng/L	P351254	
		Butylate	0.38	UJ	ng/L	P351254	RPD
		Chlorpyrifos Ethyl	0.24	U	ng/L	P351254	
		Chlorpyrifos Methyl	0.095	U	ng/L	P351254	
		Demeton	1.9	U	ng/L	P351254	
		Diazinon	0.12	U	ng/L	P351254	
		Disulfoton	0.47	U	ng/L	P351254	
		EPTC	1.2	U	ng/L	P351254	RPD
		Ethion	0.14	U	ng/L	P351254	MS, RPD
		Ethoprop	0.095	U	ng/L	P351254	
		Fenamiphos	0.24	U	ng/L	P351254	
		Fipronil	0.24	U	ng/L	P351254	RPD
		Fipronil Sulfide	0.14	U	ng/L	P351254	
		Fipronil Sulfone	0.14	U	ng/L	P351254	RPD
		Hexazinone	3.7		ng/L	P351254	
		Malathion	0.33	U	ng/L	P351254	
		Metribuzin	0.19	U	ng/L	P351254	MS
		Mevinphos	0.47	U	ng/L	P351254	
		Molinate	0.28	U	ng/L	P351254	
		Norflurazon	400		ng/L	P351254	MS, RPD
		Pendimethalin	0.95	U	ng/L	P351254	
		Phorate	0.24	U	ng/L	P351254	

Field ID: G3SD0097_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2022159	EPA 8270D	Prometon	0.85	U	ng/L	P351254	
		Prometryn	0.19	U	ng/L	P351254	
		Simazine	0.47	U	ng/L	P351254	
		Terbufos	0.095	U	ng/L	P351254	
		Terbutylazine	0.40	U	ng/L	P351254	
		Fonofos	0.19	U	ng/L	P351254	
		Metalaxyl	63		ng/L	P351254	
		Metolachlor	6.6		ng/L	P351254	
		Acetochlor	0.24	U	ng/L	P351254	
		Cyanazine	0.47	U	ng/L	P351254	
		Parathion Ethyl	0.24	U	ng/L	P351254	
		Parathion Methyl	0.24	U	ng/L	P351254	

Ref. Method and Comment:

EPA 8270D: Refer to the narrative for an explanation of QC Codes. MS accuracies for Atrazine and Hexazinone not assessed due to high content of these parameters in the sample spiked.

Sample Location: Hog Bay @ CR 763

Collection Date/Time: 09/04/2018 12:35

Field ID: G3SD0096

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2022115	EPA 180.1 Rev. 2.0	Turbidity	3.7		NTU	P351160	
	EPA 300.0 Rev. 2.1	Chloride	47		mg Cl/L	P351786	
		Sulfate	45		mg SO4/L	P351788	
	SM 2120 B	Color (true)	220		PCU	P351177	
	SM 2320 B-97	Total Alkalinity	85		mg CaCO3/L	P351405	
	SM 2540 C-97	TDS	288		mg/L	P351550	
	SM 2540 D-97	TSS	5	I	mg/L	P351723	
	SM 4500 F-C-97	Fluoride	0.24		mg F/L	P351412	
2022118	EPA 350.1 Rev. 2.0	Ammonia-N	0.046		mg N/L	P351294	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P351245	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.31		mg N/L	P351424	
	EPA 365.1 Rev. 2.0	Total-P	0.25		mg P/L	P351278	
	SM 5310 B-00	Organic Carbon	25		mg C/L	P351440	
2022121	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.19		mg P/L	P351136	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: HawthorneCrk@ReynoldsSt

Collection Date/Time: 09/04/2018 13:05

Field ID: G3SD0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2022151	EPA 8321B	2,4-D	0.015		ug/L	P351097	MS
		Sucralose**	0.064		ug/L	P351113	
		Bentazon	8.0E-04	U	ug/L	P351097	
		MCP	0.0020	U	ug/L	P351097	MS
		Triclopyr**	0.0040	U	ug/L	P351097	MS
		Imidacloprid	0.36		ug/L	P351097	
		Diuron	0.063		ug/L	P351097	
		Pyraclostrobin**	0.0020	U	ug/L	P351097	
		Primidone**	0.0040	U	ug/L	P351097	
		Linuron	0.0040	U	ug/L	P351097	
		Acetaminophen**	0.0080	U	ug/L	P351097	
		Fenuron	0.016	U	ug/L	P351097	MS
		Imazapyr**	0.0075	I	ug/L	P351097	
		Carbamazepine**	0.0014	I	ug/L	P351097	
		Fluridone**	4.0E-04	U	ug/L	P351097	
		Hydrocodone**	8.0E-04	U	ug/L	P351097	
		Naproxen**	0.0080	U	ug/L	P351097	
		Ibuprofen**	0.020	U	ug/L	P351097	

Sample Location: RunoffPeace River Site3

Collection Date/Time: 09/04/2018 13:40

Field ID: G3SD0132

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2022116	EPA 180.1 Rev. 2.0	Turbidity	21	A	NTU	P351161	
	EPA 300.0 Rev. 2.1	Chloride	26		mg Cl/L	P351786	
		Sulfate	13		mg SO4/L	P351788	
		Color (true)	330	A	PCU	P351178	
	SM 2320 B-97	Total Alkalinity	36		mg CaCO3/L	P351405	
	SM 2540 C-97	TDS	158		mg/L	P351550	
	SM 2540 D-97	TSS	38		mg/L	P351723	
	SM 4500 F-C-97	Fluoride	0.30		mg F/L	P351412	
2022119	EPA 350.1 Rev. 2.0	Ammonia-N	0.046		mg N/L	P351294	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P351245	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.023		mg N/L	P351424	
	EPA 365.1 Rev. 2.0	Total-P	0.33		mg P/L	P351278	
	SM 5310 B-00	Organic Carbon	31		mg C/L	P351440	
2022122	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.27		mg P/L	P351136	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: BobcatCreek in Preserve

Collection Date/Time: 09/04/2018 14:10

Field ID: G3SD0131

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2022117	EPA 180.1 Rev. 2.0	Turbidity	3.9		NTU	P351161	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P351786	
		Sulfate	2.2		mg SO4/L	P351788	
		Color (true)	330		PCU	P351177	
	SM 2320 B-97	Total Alkalinity	23		mg CaCO3/L	P351405	
	SM 2540 C-97	TDS	96		mg/L	P351550	
	SM 2540 D-97	TSS	6	I	mg/L	P351723	
	SM 4500 F-C-97	Fluoride	0.15		mg F/L	P351412	
2022120	EPA 350.1 Rev. 2.0	Ammonia-N	0.030		mg N/L	P351294	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P351245	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.023		mg N/L	P351424	
	EPA 365.1 Rev. 2.0	Total-P	0.19		mg P/L	P351278	
	SM 5310 B-00	Organic Carbon	25		mg C/L	P351440	
2022123	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.13		mg P/L	P351136	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P351160

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P351161

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P351199

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P351199

Component	Result	Code	Units
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.20	U	ug/L
Lead	0.050	U	ug/L
Nickel	0.20	U	ug/L
Silver	0.010	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351786

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351788

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351294

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351295

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351245

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351424

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P351278

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351136

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351137

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Reference Method: EPA 8270D
Batch ID: P351179

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	4.0	U	ng/L
Carbophenothion	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	3.0	U	ng/L
DDE-p,p'	3.0	U	ng/L
DDT-p,p'	3.0	U	ng/L
Delta-BHC	4.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D
Batch ID: P351179

Component	Result	Code	Units
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Gamma-BHC	4.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trifluralin	1.0	U	ng/L

Reference Method: EPA 8270D
Batch ID: P351254

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.32	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.2	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	0.50	U	ng/L
Demeton	2.0	U	ng/L
Diazinon	0.12	U	ng/L
Disulfoton	0.50	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.25	U	ng/L
Metolachlor	0.25	U	ng/L
Metribuzin	0.20	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.25	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D
Batch ID: P351254

Component	Result	Code	Units
Simazine	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8276
Batch ID: P351179

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8321B
Batch ID: P351097

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
3-Hydroxycarbofuran	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	4.0E-04	U	ug/L
Hydrocodone	8.0E-04	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Oxamyl	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Propoxur	0.0020	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P351113

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.10	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P351113

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P351177

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P351178

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P351405

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 C-97
Batch ID: P351550

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P351551

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P351723

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P351724

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P351412

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 5310 B-00
Batch ID: P351440

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Reference Method: SM 5310 B-00
Batch ID: P351441

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P351199

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	111		P	85 - 115
Iron	109		P	85 - 115
Magnesium	114		P	85 - 115
Potassium	111		P	85 - 115
Sodium	112		P	85 - 115
Zinc	104		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P351199

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	101		P	85 - 115
Cadmium	103		P	85 - 115
Chromium	106		P	85 - 115
Copper	96.7		P	85 - 115
Lead	104		P	85 - 115
Nickel	98.7		P	85 - 115
Silver	104		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351786

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351788

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351294

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351295

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	102		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351245

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	105		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P351424

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P351278

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	101		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P351136

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	102		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P351137

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.6		P	90 - 110

Reference Method: EPA 8270D
 Batch ID: P351179

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	50.8	50.8	P/P	24 - 89.0
Alpha-BHC	90.0	85.3	P/P	58 - 117
Alpha-Chlordane	83.2	75.0	P/P	56 - 115
Beta-BHC	101	95.5	P/P	55 - 137
Carbophenothion	76.7	74.1	P/P	37 - 145
Chlorothalonil	67.1	73.7	P/P	26 - 163
Cypermethrin	80.0	84.6	P/P	42 - 156
DDD-p,p'	89.5	81.9	P/P	59 - 129
DDE-p,p'	80.0	73.5	P/P	52 - 117
DDT-p,p'	88.9	77.4	P/P	48 - 128
Delta-BHC	119	100	P/P	59 - 158
Dicofol	90.6	89.0	P/P	19 - 124
Dieldrin	91.4	82.8	P/P	57 - 126
Endosulfan I	88.9	87.5	P/P	59 - 133
Endosulfan II	87.7	79.3	P/P	58 - 148
Endosulfan Sulfate	95.2	86.3	P/P	56 - 135
Endrin	95.0	86.5	P/P	50 - 140
Endrin Aldehyde	87.1	78.4	P/P	47 - 141
Endrin Ketone	97.2	87.7	P/P	63 - 123
Gamma-BHC	105	91.9	P/P	59 - 132
Gamma-Chlordane	78.4	70.9	P/P	55 - 112
Heptachlor	67.6	65.2	P/P	45 - 102
Heptachlor Epoxide	88.7	81.0	P/P	61 - 116
Methoxychlor	97.9	90.7	P/P	60 - 133
Mirex	64.5	61.3	P/P	40 - 98.0
Permethrin	78.6	75.1	P/P	45 - 131
Trifluralin	78.1	72.3	P/P	38 - 179

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P351254

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	98.8	102	P/P	74 - 119
Alachlor	97.5	100	P/P	75 - 118
Ametryn	99.7	99.0	P/P	59 - 137
Atrazine	106	106	P/P	73 - 120
Atrazine Desethyl	71.5	88.9	P/P	19 - 129
Azinphos Methyl	125	129	P/P	65 - 181
Bromacil	87.4	94.8	P/P	43 - 123
Butylate	54.8	38.9	P/P	28 - 85.0
Chlorpyrifos Ethyl	98.0	98.6	P/P	55 - 112
Chlorpyrifos Methyl	94.3	93.5	P/P	35 - 124
Cyanazine	136	155	P/P	26 - 262
Demeton	85.7	74.2	P/P	43 - 122
Diazinon	115	109	P/P	72 - 120
Disulfoton	98.2	91.7	P/P	45 - 137
EPTC	57.8	45.3	P/P	28 - 95.0
Ethion	88.5	93.1	P/P	63 - 127
Ethoprop	89.5	77.0	P/P	63 - 109
Fenamiphos	91.4	101	P/P	66 - 136
Fipronil	99.4	106	P/P	63 - 126
Fipronil Sulfide	84.3	88.8	P/P	59 - 123
Fipronil Sulfone	82.3	85.8	P/P	56 - 122
Fonofos	97.2	89.4	P/P	64 - 114
Hexazinone	103	98.2	P/P	49 - 144
Malathion	99.5	105	P/P	68 - 131
Metaxyl	100	103	P/P	57 - 126
Metolachlor	94.6	99.6	P/P	75 - 118
Metribuzin	125	144	P/P	46 - 169
Mevinphos	84.7	73.2	P/P	34 - 126
Molinate	56.8	48.4	P/P	37 - 101
Norflurazon	91.8	96.7	P/P	63 - 127
Parathion Ethyl	96.9	95.7	P/P	78 - 109
Parathion Methyl	113	103	P/P	74 - 123
Pendimethalin	120	116	P/P	51 - 130
Phorate	65.5	69.7	P/P	53 - 116
Prometon	115	109	P/P	66 - 124
Prometryn	98.2	105	P/P	66 - 124
Simazine	97.7	96.6	P/P	62 - 134
Terbufos	100	91.9	P/P	59 - 115
Terbutylazine	95.0	104	P/P	76 - 113

Reference Method: EPA 8276
Batch ID: P351179

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	91.3	81.9	P/P	47 - 125
Toxaphene	70.6	68.0	P/P	46 - 147

Reference Method: EPA 8321B
Batch ID: P351097

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	110		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P351097

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	103		P	40 - 150
Acetaminophen	83.2		P	30 - 150
Aldicarb	98.6		P	30 - 150
Aldicarb Sulfone	92.0		P	40 - 150
Aldicarb Sulfoxide	106		P	40 - 150
Bentazon	105		P	30 - 150
Carbamazepine	122		P	40 - 150
Carbaryl	77.0		P	40 - 150
Carbofuran	98.3		P	40 - 150
Diuron	100		P	40 - 150
Fenuron	97.0		P	40 - 150
Fluridone	97.4		P	40 - 150
Hydrocodone	78.7		P	40 - 150
Ibuprofen	84.7		P	40 - 150
Imazapyr	120		P	40 - 150
Imidacloprid	115		P	40 - 160
Linuron	75.9		P	40 - 150
MCPP	111		P	40 - 150
Methiocarb	62.1		P	40 - 150
Methomyl	80.8		P	40 - 150
Naproxen	103		P	40 - 150
Oxamyl	95.4		P	40 - 150
Primidone	101		P	40 - 150
Propoxur	87.5		P	40 - 150
Pyraclostrobin	81.7		P	40 - 150
Triclopyr	103		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P351113

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	87.1		P	40 - 150
AMPA	107		P	40 - 150
Endothall	96.6		P	40 - 150
Glufosinate	94.5		P	40 - 150
Glyphosate	82.8		P	40 - 140
Sucralose	93.8		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P351177

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.7		P	85 - 115

Reference Method: SM 2120 B
Batch ID: P351178

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.5		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P351405

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P351412

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.7		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P351440

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.0		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P351441

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	92.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P351199

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2021575	Calcium	113		P	80 - 120
2021575	Iron	111		P	80 - 120
2021575	Magnesium	117		P	80 - 120
2021575	Potassium	108		P	80 - 120
2021575	Sodium	111		P	80 - 120
2021575	Zinc	105		P	80 - 120
2022031	Calcium	112	111	P/P	80 - 120
2022031	Iron	111	110	P/P	80 - 120
2022031	Magnesium	114	114	P/P	80 - 120
2022031	Potassium	109	107	P/P	80 - 120
2022031	Sodium	108	107	P/P	80 - 120
2022031	Zinc	106	103	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P351199

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2021575	Arsenic	104		P	80 - 120
2021575	Cadmium	106		P	80 - 120
2021575	Chromium	111		P	80 - 120
2021575	Copper	99.7		P	80 - 120
2021575	Lead	106		P	80 - 120
2021575	Nickel	102		P	80 - 120
2021575	Silver	105		P	80 - 120
2022031	Arsenic	99.9	100	P/P	80 - 120
2022031	Cadmium	103	105	P/P	80 - 120
2022031	Chromium	111	107	P/P	80 - 120
2022031	Copper	96.4	96.6	P/P	80 - 120
2022031	Lead	105	104	P/P	80 - 120
2022031	Nickel	100	97.8	P/P	80 - 120
2022031	Silver	104	104	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351786

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2021815	Chloride	97.8		P	90 - 110
2022077	Chloride	97.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351788

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2021815	Sulfate	98.2		P	90 - 110
2022077	Sulfate	99.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351294

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022080	Ammonia-N	104	103	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351295

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022183	Ammonia-N	101	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351245

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022080	Kjeldahl Nitrogen	105	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351424

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022080	NO2NO3-N	103	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P351278

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022127	Total-P	102	96.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351136

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022082	O-Phosphate-P	97.0	96.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351137

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022132	O-Phosphate-P	94.6	95.6	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P351179

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022113	Aldrin	62.1	61.3	P/P	26 - 96.0
2022113	Alpha-BHC	91.5	104	P/P	51 - 123
2022113	Alpha-Chlordane	83.3	73.5	P/P	45 - 120
2022113	Beta-BHC	78.1	54.6	P/P	43 - 146
2022113	Carbophenothion	84.5	23.2	P/F	26 - 179
2022113	Chlorothalonil	72.4	90.6	P/P	10 - 215
2022113	Cypermethrin	73.1	56.2	P/P	35 - 169
2022113	DDD-p,p'	89.4	68.5	P/P	49 - 131
2022113	DDE-p,p'	85.6	80.7	P/P	39 - 127
2022113	DDT-p,p'	92.9	108	P/P	49 - 120
2022113	Delta-BHC	98.1	100	P/P	49 - 187
2022113	Dicofol	110	113	P/P	10 - 129
2022113	Dieldrin	88.3	79.3	P/P	46 - 132
2022113	Endosulfan I	91.6	88.3	P/P	57 - 130
2022113	Endosulfan II	91.6	69.2	P/P	52 - 148
2022113	Endosulfan Sulfate	89.5	71.4	P/P	55 - 129

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P351179

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022113	Endrin	99.2	81.1	P/P	45 - 133
2022113	Endrin Aldehyde	86.0	62.2	P/P	26 - 140
2022113	Endrin Ketone	96.2	80.0	P/P	60 - 125
2022113	Gamma-BHC	102	101	P/P	50 - 145
2022113	Gamma-Chlordane	80.6	74.2	P/P	44 - 118
2022113	Heptachlor	74.1	75.1	P/P	35 - 106
2022113	Heptachlor Epoxide	85.6	80.3	P/P	52 - 123
2022113	Methoxychlor	98.6	112	P/P	54 - 132
2022113	Mirex	77.2	76.3	P/P	36 - 107
2022113	Permethrin	82.9	67.8	P/P	47 - 135
2022113	Trifluralin	84.0	90.2	P/P	32 - 228

Reference Method: EPA 8270D
Batch ID: P351254

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022302	Acetochlor	97.1	104	P/P	67 - 125
2022302	Alachlor	91.1	106	P/P	69 - 123
2022302	Ametryn	78.3	100	P/P	52 - 151
2022302	Atrazine Desethyl	116	148	P/F	10 - 129
2022302	Azinphos Methyl	135	127	P/P	48 - 200
2022302	Bromacil	83.3	109	P/P	46 - 130
2022302	Butylate	46.2	37.6	P/P	10 - 85.0
2022302	Chlorpyrifos Ethyl	96.4	93.4	P/P	54 - 115
2022302	Chlorpyrifos Methyl	100	98.3	P/P	44 - 117
2022302	Cyanazine	142	191	P/P	10 - 262
2022302	Demeton	86.6	83.8	P/P	24 - 145
2022302	Diazinon	117	123	P/P	66 - 129
2022302	Disulfoton	102	103	P/P	45 - 139
2022302	EPTC	47.9	32.9	P/P	10 - 86.0
2022302	Ethion	54.7	93.3	F/P	59 - 133
2022302	Ethoprop	104	96.8	P/P	54 - 116
2022302	Fenamiphos	79.7	92.5	P/P	55 - 140
2022302	Fipronil	71.2	103	P/P	37 - 142
2022302	Fipronil Sulfide	65.5	86.2	P/P	37 - 130
2022302	Fipronil Sulfone	44.2	85.5	P/P	18 - 143
2022302	Fonofos	103	96.7	P/P	55 - 118
2022302	Malathion	104	97.9	P/P	64 - 132
2022302	Metalaxyl	82.8	104	P/P	55 - 129
2022302	Metolachlor	86.6	95.2	P/P	56 - 137
2022302	Metribuzin	215	220	P/F	16 - 218
2022302	Mevinphos	94.2	96.4	P/P	34 - 129
2022302	Molinate	50.9	41.6	P/P	16 - 99.0
2022302	Norflurazon	23.7	80.6	F/P	43 - 135
2022302	Parathion Ethyl	104	107	P/P	71 - 112
2022302	Parathion Methyl	116	122	P/P	65 - 127
2022302	Pendimethalin	127	126	P/P	35 - 159
2022302	Phorate	79.9	76.4	P/P	41 - 129
2022302	Prometon	106	120	P/P	56 - 140
2022302	Prometryn	95.1	105	P/P	65 - 130
2022302	Simazine	110	113	P/P	54 - 148
2022302	Terbufos	113	107	P/P	53 - 126

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P351254

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022302	Terbutylazine	102	112	P/P	73 - 114

Reference Method: EPA 8276
Batch ID: P351179

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022301	Chlordane	79.7	92.1	P/P	41 - 134
2022301	Toxaphene	60.1	60.4	P/P	39 - 158

Reference Method: EPA 8321B
Batch ID: P351097

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022147	3-Hydroxycarbofuran	45.4	48.7	P/P	40 - 150
2022147	Aldicarb	25.7	37.0	F/P	30 - 150
2022147	Aldicarb Sulfone	40.1	42.4	P/P	40 - 150
2022147	Aldicarb Sulfoxide	19.3	22.8	F/F	40 - 150
2022147	Carbaryl	61.3	51.9	P/P	40 - 150
2022147	Carbofuran	98.8	94.3	P/P	40 - 150
2022147	Methiocarb	51.3	46.0	P/P	40 - 150
2022147	Methomyl	28.8	26.7	F/F	40 - 150
2022147	Oxamyl	47.1	49.6	P/P	40 - 150
2022147	Propoxur	48.9	47.1	P/P	40 - 150
2022149	2,4-D	185	187	F/F	40 - 150
2022149	Acetaminophen	81.7	89.4	P/P	30 - 150
2022149	Bentazon	80.0	83.8	P/P	30 - 150
2022149	Carbamazepine	67.6	75.7	P/P	40 - 150
2022149	Diuron	49.7	58.5	P/P	40 - 150
2022149	Fenuron	31.5	35.0	F/F	40 - 150
2022149	Fluridone	90.3	83.9	P/P	40 - 150
2022149	Hydrocodone	61.5	58.8	P/P	40 - 150
2022149	Ibuprofen	87.4	75.4	P/P	40 - 150
2022149	Imazapyr	86.0	91.1	P/P	40 - 150
2022149	Imidacloprid	51.2	92.5	P/P	40 - 160
2022149	Linuron	57.0	64.4	P/P	40 - 150
2022149	MCPP	181	186	F/F	40 - 150
2022149	Naproxen	149	149	P/P	40 - 150
2022149	Primidone	42.0	44.0	P/P	40 - 150
2022149	Pyraclostrobin	82.3	91.2	P/P	40 - 150
2022149	Triclopyr	221	235	F/F	40 - 150

Reference Method: EPA 8321B
Batch ID: P351113

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022149	Acesulfame K	23.2	27.8	F/F	40 - 150
2022149	AMPA	81.7	81.9	P/P	40 - 150
2022149	Endothall	131	154	P/F	40 - 150
2022149	Glufosinate	70.2	78.7	P/P	40 - 150
2022149	Glyphosate	61.5	59.2	P/P	40 - 140
2022149	Sucralose	102	97.4	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P351412

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022280	Fluoride	97.5	98.2	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P351440

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2021734	Organic Carbon	98.8		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P351441

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2022131	Organic Carbon	98.2		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P351160

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022043	Turbidity	5.50	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P351161

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022116	Turbidity	4.81	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P351199

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022031	Calcium	0.437	Spike	P	0 - 20
2022031	Iron	0.815	Spike	P	0 - 20
2022031	Magnesium	0.155	Spike	P	0 - 20
2022031	Potassium	1.75	Spike	P	0 - 20
2022031	Sodium	0.873	Spike	P	0 - 20
2022031	Zinc	3.54	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P351199

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022031	Arsenic	0.356	Spike	P	0 - 20
2022031	Cadmium	2.33	Spike	P	0 - 20
2022031	Chromium	3.66	Spike	P	0 - 20
2022031	Copper	0.165	Spike	P	0 - 20
2022031	Lead	0.626	Spike	P	0 - 20
2022031	Nickel	2.19	Spike	P	0 - 20
2022031	Silver	0.0735	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351786

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021815	Chloride	0.143	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351788

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021815	Sulfate	0.167	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351294

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022080	Ammonia-N	1.11	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351295

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022183	Ammonia-N	0.676	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351245

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022080	Kjeldahl Nitrogen	0.987	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351424

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022080	NO2NO3-N	0.475	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P351278

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022127	Total-P	3.64	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351136

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022082	O-Phosphate-P	0.561	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351137

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022132	O-Phosphate-P	0.977	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P351179

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022113	Aldrin	1.31	Spike	P	0 - 30
2022113	Alpha-BHC	12.4	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P351179

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022113	Alpha-Chlordane	12.5	Spike	P	0 - 30
2022113	Beta-BHC	35.5	Spike	F	0 - 30
2022113	Carbophenothion	114	Spike	F	0 - 30
2022113	Chlorothalonil	22.3	Spike	P	0 - 30
2022113	Cypermethrin	26.2	Spike	P	0 - 30
2022113	DDD-p,p'	26.4	Spike	P	0 - 30
2022113	DDE-p,p'	5.84	Spike	P	0 - 30
2022113	DDT-p,p'	15.0	Spike	P	0 - 30
2022113	Delta-BHC	2.29	Spike	P	0 - 30
2022113	Dicofol	2.66	Spike	P	0 - 30
2022113	Dieldrin	10.7	Spike	P	0 - 30
2022113	Endosulfan I	3.66	Spike	P	0 - 30
2022113	Endosulfan II	27.8	Spike	P	0 - 30
2022113	Endosulfan Sulfate	22.5	Spike	P	0 - 30
2022113	Endrin	20.1	Spike	P	0 - 30
2022113	Endrin Aldehyde	32.0	Spike	F	0 - 30
2022113	Endrin Ketone	18.4	Spike	P	0 - 30
2022113	Gamma-BHC	1.00	Spike	P	0 - 30
2022113	Gamma-Chlordane	8.25	Spike	P	0 - 30
2022113	Heptachlor	1.43	Spike	P	0 - 30
2022113	Heptachlor Epoxide	6.40	Spike	P	0 - 30
2022113	Methoxychlor	13.1	Spike	P	0 - 30
2022113	Mirex	1.12	Spike	P	0 - 30
2022113	Permethrin	20.1	Spike	P	0 - 30
2022113	Trifluralin	7.15	Spike	P	0 - 30
LFB	Aldrin	0.0896	LCS	P	0 - 30
LFB	Alpha-BHC	5.40	LCS	P	0 - 30
LFB	Alpha-Chlordane	10.3	LCS	P	0 - 30
LFB	Beta-BHC	5.42	LCS	P	0 - 30
LFB	Carbophenothion	3.46	LCS	P	0 - 30
LFB	Chlorothalonil	9.39	LCS	P	0 - 30
LFB	Cypermethrin	5.55	LCS	P	0 - 30
LFB	DDD-p,p'	8.77	LCS	P	0 - 30
LFB	DDE-p,p'	8.57	LCS	P	0 - 30
LFB	DDT-p,p'	13.8	LCS	P	0 - 30
LFB	Delta-BHC	16.9	LCS	P	0 - 30
LFB	Dicofol	1.80	LCS	P	0 - 30
LFB	Dieldrin	9.81	LCS	P	0 - 30
LFB	Endosulfan I	1.56	LCS	P	0 - 30
LFB	Endosulfan II	10.0	LCS	P	0 - 30
LFB	Endosulfan Sulfate	9.82	LCS	P	0 - 30
LFB	Endrin	9.33	LCS	P	0 - 30
LFB	Endrin Aldehyde	10.5	LCS	P	0 - 30
LFB	Endrin Ketone	10.3	LCS	P	0 - 30
LFB	Gamma-BHC	12.9	LCS	P	0 - 30
LFB	Gamma-Chlordane	10.1	LCS	P	0 - 30
LFB	Heptachlor	3.62	LCS	P	0 - 30
LFB	Heptachlor Epoxide	9.06	LCS	P	0 - 30
LFB	Methoxychlor	7.66	LCS	P	0 - 30
LFB	Mirex	5.16	LCS	P	0 - 30
LFB	Permethrin	4.59	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
 Batch ID: P351179

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Trifluralin	7.76	LCS	P	0 - 30

Reference Method: EPA 8270D
 Batch ID: P351254

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022302	Acetochlor	6.64	Spike	P	0 - 30
2022302	Alachlor	15.1	Spike	P	0 - 30
2022302	Ametryn	12.4	Spike	P	0 - 30
2022302	Atrazine	4.05	Spike	P	0 - 30
2022302	Atrazine Desethyl	24.2	Spike	P	0 - 30
2022302	Azinphos Methyl	6.31	Spike	P	0 - 30
2022302	Bromacil	26.7	Spike	P	0 - 30
2022302	Butylate	20.4	Spike	P	0 - 30
2022302	Chlorpyrifos Ethyl	3.17	Spike	P	0 - 30
2022302	Chlorpyrifos Methyl	1.94	Spike	P	0 - 30
2022302	Cyanazine	29.6	Spike	P	0 - 30
2022302	Demeton	3.28	Spike	P	0 - 30
2022302	Diazinon	5.28	Spike	P	0 - 30
2022302	Disulfoton	0.925	Spike	P	0 - 30
2022302	EPTC	37.0	Spike	F	0 - 30
2022302	Ethion	52.2	Spike	F	0 - 30
2022302	Ethoprop	6.73	Spike	P	0 - 30
2022302	Fenamiphos	14.9	Spike	P	0 - 30
2022302	Fipronil	32.7	Spike	F	0 - 30
2022302	Fipronil Sulfide	23.3	Spike	P	0 - 30
2022302	Fipronil Sulfone	42.6	Spike	F	0 - 30
2022302	Fonofos	5.89	Spike	P	0 - 30
2022302	Hexazinone	13.3	Spike	P	0 - 30
2022302	Malathion	6.15	Spike	P	0 - 30
2022302	Metalaxyl	16.1	Spike	P	0 - 30
2022302	Metolachlor	7.33	Spike	P	0 - 30
2022302	Metribuzin	1.76	Spike	P	0 - 30
2022302	Mevinphos	2.30	Spike	P	0 - 30
2022302	Molinate	19.9	Spike	P	0 - 30
2022302	Norflurazon	46.2	Spike	F	0 - 30
2022302	Parathion Ethyl	2.75	Spike	P	0 - 30
2022302	Parathion Methyl	4.49	Spike	P	0 - 30
2022302	Pendimethalin	0.553	Spike	P	0 - 30
2022302	Phorate	4.52	Spike	P	0 - 30
2022302	Prometon	12.2	Spike	P	0 - 30
2022302	Prometryn	10.2	Spike	P	0 - 30
2022302	Simazine	2.83	Spike	P	0 - 30
2022302	Terbufos	5.06	Spike	P	0 - 30
2022302	Terbutylazine	8.99	Spike	P	0 - 30
LFB	Acetochlor	3.27	LCS	P	0 - 30
LFB	Alachlor	2.93	LCS	P	0 - 30
LFB	Ametryn	0.690	LCS	P	0 - 30
LFB	Atrazine	0.150	LCS	P	0 - 30
LFB	Atrazine Desethyl	21.7	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P351254

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Azinphos Methyl	2.94	LCS	P	0 - 30
LFB	Bromacil	8.18	LCS	P	0 - 30
LFB	Butylate	33.9	LCS	F	0 - 30
LFB	Chlorpyrifos Ethyl	0.646	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	0.921	LCS	P	0 - 30
LFB	Cyanazine	13.2	LCS	P	0 - 30
LFB	Demeton	14.4	LCS	P	0 - 30
LFB	Diazinon	4.88	LCS	P	0 - 30
LFB	Disulfoton	6.82	LCS	P	0 - 30
LFB	EPTC	24.3	LCS	P	0 - 30
LFB	Ethion	5.04	LCS	P	0 - 30
LFB	Ethoprop	15.0	LCS	P	0 - 30
LFB	Fenamiphos	10.4	LCS	P	0 - 30
LFB	Fipronil	6.50	LCS	P	0 - 30
LFB	Fipronil Sulfide	5.24	LCS	P	0 - 30
LFB	Fipronil Sulfone	4.22	LCS	P	0 - 30
LFB	Fonofos	8.36	LCS	P	0 - 30
LFB	Hexazinone	4.43	LCS	P	0 - 30
LFB	Malathion	5.64	LCS	P	0 - 30
LFB	Metalaxyl	3.01	LCS	P	0 - 30
LFB	Metolachlor	5.11	LCS	P	0 - 30
LFB	Metribuzin	14.0	LCS	P	0 - 30
LFB	Mevinphos	14.6	LCS	P	0 - 30
LFB	Molinate	16.0	LCS	P	0 - 30
LFB	Norflurazon	5.23	LCS	P	0 - 30
LFB	Parathion Ethyl	1.22	LCS	P	0 - 30
LFB	Parathion Methyl	9.54	LCS	P	0 - 30
LFB	Pendimethalin	3.88	LCS	P	0 - 30
LFB	Phorate	6.21	LCS	P	0 - 30
LFB	Prometon	5.76	LCS	P	0 - 30
LFB	Prometryn	6.37	LCS	P	0 - 30
LFB	Simazine	1.09	LCS	P	0 - 30
LFB	Terbufos	8.59	LCS	P	0 - 30
LFB	Terbutylazine	8.70	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P351179

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022301	Chlordane	14.4	Spike	P	0 - 30
2022301	Toxaphene	0.487	Spike	P	0 - 30
LFB	Chlordane	10.8	LCS	P	0 - 30
LFB	Toxaphene	3.81	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P351097

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022147	3-Hydroxycarbofuran	7.04	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P351097

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022147	Aldicarb	36.2	Spike	F	0 - 30
2022147	Aldicarb Sulfone	5.65	Spike	P	0 - 30
2022147	Aldicarb Sulfoxide	16.4	Spike	P	0 - 30
2022147	Carbaryl	13.2	Spike	P	0 - 30
2022147	Carbofuran	4.72	Spike	P	0 - 30
2022147	Methiocarb	10.9	Spike	P	0 - 30
2022147	Methomyl	7.63	Spike	P	0 - 30
2022147	Oxamyl	5.17	Spike	P	0 - 30
2022147	Propoxur	3.77	Spike	P	0 - 30
2022149	2,4-D	0.753	Spike	P	0 - 30
2022149	Acetaminophen	8.99	Spike	P	0 - 30
2022149	Bentazon	4.22	Spike	P	0 - 30
2022149	Carbamazepine	11.3	Spike	P	0 - 30
2022149	Diuron	3.60	Spike	P	0 - 30
2022149	Fenuron	10.4	Spike	P	0 - 30
2022149	Fluridone	6.89	Spike	P	0 - 30
2022149	Hydrocodone	4.40	Spike	P	0 - 30
2022149	Ibuprofen	14.8	Spike	P	0 - 30
2022149	Imazapyr	5.40	Spike	P	0 - 30
2022149	Imidacloprid	12.4	Spike	P	0 - 30
2022149	Linuron	12.2	Spike	P	0 - 30
2022149	MCPP	2.54	Spike	P	0 - 30
2022149	Naproxen	0.467	Spike	P	0 - 30
2022149	Primidone	4.63	Spike	P	0 - 30
2022149	Pyraclostrobin	10.3	Spike	P	0 - 30
2022149	Triclopyr	6.23	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P351113

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022149	Acesulfame K	18.3	Spike	P	0 - 30
2022149	AMPA	0.127	Spike	P	0 - 30
2022149	Endothall	16.3	Spike	P	0 - 30
2022149	Glufosinate	11.4	Spike	P	0 - 30
2022149	Glyphosate	1.12	Spike	P	0 - 30
2022149	Sucralose	4.29	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P351177

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022125	Color (true)	7.01	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P351178

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P351178

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022116	Color (true)	6.31	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P351405

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022280	Total Alkalinity	0.869	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P351550

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022125	TDS	5.33	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P351551

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022130	TDS	2.67	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P351412

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022280	Fluoride	0.473	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P351440

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021734	Organic Carbon	0.298	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P351441

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2022131	Organic Carbon	0.652	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report Surrogates

Lab Sample ID: 2022147
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	55.5	P	30 - 160

Lab Sample ID: 2022148
Field Sample ID: G3SD0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	68.1	P	30 - 160

Lab Sample ID: 2022149
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	151	P	30 - 160
EPA 8321B	Acetaminophen-d4	95.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	64.6	P	30 - 160
EPA 8321B	Diuron-d6	51.2	P	30 - 160
EPA 8321B	Endothall-d6	140	P	40 - 160
EPA 8321B	Endothall-d6	140	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	81.5	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	81.5	P	40 - 160
EPA 8321B	Ibuprofen-d3	85.4	P	30 - 160
EPA 8321B	Primidone-d5	43.0	P	30 - 160
EPA 8321B	Sucralose-d6	125	P	40 - 160
EPA 8321B	Sucralose-d6	125	P	40 - 160

Lab Sample ID: 2022150
Field Sample ID: G3SD0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	118	P	30 - 160
EPA 8321B	Acetaminophen-d4	95.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	81.1	P	30 - 160
EPA 8321B	Diuron-d6	75.1	P	30 - 160
EPA 8321B	Endothall-d6	145	P	40 - 160
EPA 8321B	Endothall-d6	145	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	74.1	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	74.1	P	40 - 160
EPA 8321B	Ibuprofen-d3	83.1	P	30 - 160
EPA 8321B	Primidone-d5	48.7	P	30 - 160
EPA 8321B	Sucralose-d6	116	P	40 - 160
EPA 8321B	Sucralose-d6	116	P	40 - 160

Lab Sample ID: 2022151
Field Sample ID: G3SD0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	145	P	30 - 160
EPA 8321B	Acetaminophen-d4	99.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	78.5	P	30 - 160
EPA 8321B	Diuron-d6	72.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	91.7	P	30 - 160
EPA 8321B	Primidone-d5	40.7	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2022151
Field Sample ID: G3SD0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	115	P	40 - 160

Lab Sample ID: 2022152
Field Sample ID: G3SD0097_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	63.9	P	30 - 160

Lab Sample ID: 2022153
Field Sample ID: G3SD0097_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	153	P	30 - 160
EPA 8321B	Acetaminophen-d4	95.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	79.2	P	30 - 160
EPA 8321B	Diuron-d6	86.6	P	30 - 160
EPA 8321B	Endothall-d6	144	P	40 - 160
EPA 8321B	Endothall-d6	144	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	71.9	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	71.9	P	40 - 160
EPA 8321B	Ibuprofen-d3	105	P	30 - 160
EPA 8321B	Primidone-d5	46.8	P	30 - 160
EPA 8321B	Sucralose-d6	117	P	40 - 160
EPA 8321B	Sucralose-d6	117	P	40 - 160

Lab Sample ID: 2022154
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	56.5	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	34.2	P	34 - 101
EPA 8276	Decachlorobiphenyl	41.0	P	31 - 108
EPA 8276	PCNB	65.6	P	62 - 142

Lab Sample ID: 2022155
Field Sample ID: G3SD0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	71.7	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	42.5	P	34 - 101
EPA 8276	Decachlorobiphenyl	54.8	P	31 - 108
EPA 8276	PCNB	76.6	P	62 - 142

Lab Sample ID: 2022156
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	103	P	71 - 126
EPA 8270D	Terbufos-d10	107	P	59 - 149

Quality Assurance Report Surrogates

Lab Sample ID: 2022157
Field Sample ID: G3SD0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	91.0	P	71 - 126
EPA 8270D	Terbufos-d10	106	P	59 - 149

Lab Sample ID: 2022158
Field Sample ID: G3SD0097_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	66.1	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	37.3	P	34 - 101
EPA 8276	Decachlorobiphenyl	48.1	P	31 - 108
EPA 8276	PCNB	78.2	P	62 - 142

Lab Sample ID: 2022159
Field Sample ID: G3SD0097_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	116	P	71 - 126
EPA 8270D	Terbufos-d10	112	P	59 - 149

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A86300

Included Lab Sample IDs: 2022121, 2022122, 2022123, 2022128, 2022129, 2022132

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	100	P/P	90 - 110
O-Phosphate-P	100	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A86309

Included Lab Sample IDs: 2022115, 2022116, 2022117, 2022124, 2022125, 2022130

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	102	102	P/P	95 - 105
Turbidity	102	102	P/P	95 - 105

Reference Method: SM 2120 B

Run ID: A86311

Included Lab Sample IDs: 2022115, 2022116, 2022117, 2022124, 2022125, 2022130

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	96.6	98.9	P/P	90 - 115
Color (true)	98.9	99.5	P/P	90 - 115

Reference Method: EPA 8321B

Run ID: A86335

Included Lab Sample IDs: 2022147, 2022148, 2022152

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	103	109	P/P	50 - 150
Aldicarb	108	111	P/P	60 - 150
Aldicarb Sulfone	102	98.1	P/P	50 - 150
Aldicarb Sulfoxide	106	119	P/P	50 - 150
Carbaryl	101	127	P/P	60 - 150
Carbofuran	104	129	P/P	50 - 150
Methiocarb	89.5	89.5	P/P	50 - 150
Methomyl	101	98.8	P/P	50 - 150
Oxamyl	107	111	P/P	50 - 150
Propoxur	119	130	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A86338

Included Lab Sample IDs: 2022149, 2022150, 2022153

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	114	147	P/P	60 - 160
Glufosinate	96.1	103	P/P	60 - 160
Glyphosate	86.5	105	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A86350

Included Lab Sample IDs: 2022118, 2022119, 2022120, 2022126, 2022127, 2022131

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	101	P/P	90 - 110
Ammonia-N	101	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A86357

Included Lab Sample IDs: 2022149, 2022150, 2022153

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	102	84.6	P/P	60 - 150
Acesulfame K	95.3	102	P/P	60 - 150
Endothall	92.4	102	P/P	60 - 150
Endothall	93.7	92.4	P/P	60 - 150

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A86361

Included Lab Sample IDs: 2022160, 2022161, 2022162

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	104	102	P/P	90 - 110
Iron	103	105	P/P	90 - 110
Magnesium	104	105	P/P	90 - 110
Potassium	107	107	P/P	90 - 110
Sodium	105	106	P/P	90 - 110
Zinc	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A86365

Included Lab Sample IDs: 2022118, 2022119, 2022120, 2022126, 2022127

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A86368

Included Lab Sample IDs: 2022118, 2022119, 2022120, 2022126, 2022127, 2022131

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.4	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A86370

Included Lab Sample IDs: 2022131

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	101	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A86372

Included Lab Sample IDs: 2022149, 2022150, 2022151, 2022153

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	106	113	P/P	50 - 150
2,4-D	93.1	106	P/P	50 - 150
Acetaminophen	112	88.6	P/P	60 - 160
Acetaminophen	88.6	79.6	P/P	60 - 160
Bentazon	108	127	P/P	50 - 160
Bentazon	127	114	P/P	50 - 160
Carbamazepine	87.0	98.0	P/P	60 - 160
Carbamazepine	92.4	87.0	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A86372

Included Lab Sample IDs: 2022149, 2022150, 2022151, 2022153

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diuron	110	122	P/P	60 - 150
Diuron	113	110	P/P	60 - 150
Fenuron	96.9	98.8	P/P	60 - 150
Fenuron	98.8	106	P/P	60 - 150
Fluridone	114	122	P/P	60 - 160
Fluridone	117	114	P/P	60 - 160
Hydrocodone	96.4	97.6	P/P	60 - 150
Hydrocodone	98.2	96.4	P/P	60 - 150
Ibuprofen	89.7	107	P/P	50 - 160
Ibuprofen	92.6	89.7	P/P	50 - 160
Imazapyr	127	99.7	P/P	50 - 150
Imazapyr	99.7	117	P/P	50 - 150
Imidacloprid	89.4	91.9	P/P	60 - 150
Imidacloprid	91.9	83.5	P/P	60 - 150
Linuron	104	109	P/P	60 - 150
Linuron	109	110	P/P	60 - 150
MCPP	94.4	94.9	P/P	50 - 150
MCPP	94.9	94.5	P/P	50 - 150
Naproxen	109	138	P/P	50 - 160
Naproxen	138	122	P/P	50 - 160
Primidone	91.4	101	P/P	60 - 150
Primidone	96.9	91.4	P/P	60 - 150
Pyraclostrobin	92.1	95.4	P/P	60 - 150
Pyraclostrobin	95.4	89.9	P/P	60 - 150
Triclopyr	105	88.4	P/P	50 - 160
Triclopyr	98.7	105	P/P	50 - 160

Reference Method: SM 2320 B-97

Run ID: A86400

Included Lab Sample IDs: 2022115, 2022116, 2022117, 2022124, 2022125, 2022130

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	104	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A86400

Included Lab Sample IDs: 2022115, 2022116, 2022117, 2022124, 2022125, 2022130

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A86403

Included Lab Sample IDs: 2022118, 2022119, 2022120, 2022126, 2022127, 2022131

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00

Run ID: A86406

Included Lab Sample IDs: 2022118, 2022119, 2022120, 2022126, 2022127, 2022131

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	91.4	92.4	P/P	90 - 110
Organic Carbon	92.4	93.2	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A86410

Included Lab Sample IDs: 2022149, 2022150, 2022151, 2022153

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	103	105	P/P	60 - 160
Sucralose	105	81.2	P/P	60 - 160

Reference Method: EPA 8276

Run ID: A86517

Included Lab Sample IDs: 2022154, 2022155, 2022158

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	92.5		P	80 - 120
Toxaphene	101		P	80 - 120

Reference Method: EPA 8270D

Run ID: A86518

Included Lab Sample IDs: 2022154, 2022155, 2022158

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	100		P	80 - 120
Alpha-BHC	98.9		P	80 - 120
Alpha-Chlordane	98.6		P	80 - 120
Beta-BHC	94.7		P	80 - 120
Carbophenothion	104		P	80 - 120
Chlorothalonil	95.9		P	80 - 120
Cypermethrin	92.3		P	80 - 120
DDD-p,p'	101		P	80 - 120
DDE-p,p'	99.8		P	80 - 120
DDT-p,p'	106		P	80 - 120
Delta-BHC	89.7		P	80 - 120
Dicofol	109		P	80 - 120
Dieldrin	98.6		P	80 - 120
Endosulfan I	98.4		P	80 - 120
Endosulfan II	102		P	80 - 120
Endosulfan Sulfate	97.5		P	80 - 120
Endrin	110		P	80 - 120
Endrin Aldehyde	89.3		P	80 - 120
Endrin Ketone	98.1		P	80 - 120
Gamma-BHC	100		P	80 - 120
Gamma-Chlordane	99.7		P	80 - 120
Heptachlor	103		P	80 - 120
Heptachlor Epoxide	98.9		P	80 - 120
Methoxychlor	110		P	80 - 120
Mirex	101		P	80 - 120
Permethrin	102		P	80 - 120
Trifluralin	97.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A86537

Included Lab Sample IDs: 2022160, 2022161, 2022162

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	94.9	95.4	P/P	90 - 110
Cadmium	97.2	97.3	P/P	90 - 110
Chromium	101	100	P/P	90 - 110
Copper	93.3	92.8	P/P	90 - 110
Lead	104	104	P/P	90 - 110
Nickel	93.8	93.3	P/P	90 - 110
Silver	100	99.3	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A86543

Included Lab Sample IDs: 2022115, 2022116, 2022117, 2022124, 2022125, 2022130

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	102	P/P	90 - 110
Chloride	102	102	P/P	90 - 110
Sulfate	101	101	P/P	90 - 110
Sulfate	101	101	P/P	90 - 110

Reference Method: EPA 8270D

Run ID: A86662

Included Lab Sample IDs: 2022156, 2022157, 2022159

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	97.2		P	80 - 120
Alachlor	99.8		P	80 - 120
Ametryn	93.1		P	80 - 120
Atrazine	93.4		P	80 - 120
Atrazine Desethyl	87.7		P	80 - 120
Azinphos Methyl	94.3		P	80 - 120
Butylate	93.1		P	80 - 120
Chlorpyrifos Ethyl	94.2		P	80 - 120
Chlorpyrifos Methyl	97.9		P	80 - 120
Cyanazine	82.1		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	97.4		P	80 - 120
Disulfoton	99.1		P	80 - 120
EPTC	94.5		P	80 - 120
Ethion	94.0		P	80 - 120
Ethoprop	100		P	80 - 120
Fenamiphos	88.6		P	80 - 120
Fipronil	96.2		P	80 - 120
Fipronil Sulfide	96.4		P	80 - 120
Fipronil Sulfone	95.1		P	80 - 120
Fonofos	98.6		P	80 - 120
Hexazinone	95.7		P	80 - 120
Malathion	101		P	80 - 120
Metalaxyl	97.1		P	80 - 120
Metolachlor	100		P	80 - 120
Metribuzin	90.3		P	80 - 120
Mevinphos	95.6		P	80 - 120
Molinate	91.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A86662

Included Lab Sample IDs: 2022156, 2022157, 2022159

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Parathion Ethyl	94.1		P	80 - 120
Parathion Methyl	95.3		P	80 - 120
Pendimethalin	96.1		P	80 - 120
Phorate	97.5		P	80 - 120
Prometon	99.1		P	80 - 120
Prometryn	96.5		P	80 - 120
Simazine	94.7		P	80 - 120
Terbufos	96.2		P	80 - 120
Terbuthylazine	96.6		P	80 - 120

Reference Method: EPA 8270D

Run ID: A86671

Included Lab Sample IDs: 2022156, 2022157, 2022159

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromacil	101		P	80 - 120
Metalaxyl	94.8		P	80 - 120
Norflurazon	90.5		P	80 - 120

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 180.1 Rev. 2.0	Turbidity						5.50	
	Turbidity						4.81	
EPA 200.7 Rev. 4.4	Calcium	111		113	112	111		0.437
	Iron	109		111	110	111		0.815
	Magnesium	114		117	114	114		0.155
	Potassium	111		108	109	107		1.75
	Sodium	112		111	108	107		0.873
	Zinc	104		105	106	103		3.54
EPA 200.8 Rev. 5.4	Arsenic	101		104	99.9	100		0.356
	Cadmium	103		106	103	105		2.33
	Chromium	106		111	111	107		3.66
	Copper	96.7		99.7	96.4	96.6		0.165
	Lead	104		106	105	104		0.626
	Nickel	98.7		102	100	97.8		2.19
	Silver	104		105	104	104		0.0735
EPA 300.0 Rev. 2.1	Chloride	100		97.8	97.7		0.143	
	Sulfate	99.2		98.2	99.1		0.167	
EPA 350.1 Rev. 2.0	Ammonia-N	101		104	103			1.11
	Ammonia-N	102		101	102			0.676
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105		105	103			0.987
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5		103	103			0.475
EPA 365.1 Rev. 2.0	Total-P	101		102	96.4			3.64
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102		97.0	96.4			0.561
	O-Phosphate-P	97.6		94.6	95.6			0.977
EPA 8270D	Acetochlor	98.8	102	97.1	104	3.27		6.64
	Alachlor	97.5	100	91.1	106	2.93		15.1
	Aldrin	50.8	50.8	61.3	62.1	0.0896		1.31
	Alpha-BHC	90.0	85.3	104	91.5	5.40		12.4
	Alpha-Chlordane	83.2	75.0	73.5	83.3	10.3		12.5
	Ametryn	99.7	99.0	78.3	100	0.690		12.4
	Atrazine	106	106			0.150		4.05
	Atrazine Desethyl	71.5	88.9	116	148	21.7		24.2
	Azinphos Methyl	125	129	135	127	2.94		6.31
	Beta-BHC	101	95.5	54.6	78.1	5.42		35.5
	Bromacil	87.4	94.8	83.3	109	8.18		26.7
	Butylate	54.8	38.9	46.2	37.6	33.9		20.4
	Carbophenothion	76.7	74.1	84.5	23.2	3.46		114
	Chlorothalonil	67.1	73.7	72.4	90.6	9.39		22.3
	Chlorpyrifos Ethyl	98.0	98.6	96.4	93.4	0.646		3.17
	Chlorpyrifos Methyl	94.3	93.5	100	98.3	0.921		1.94
	Cyanazine	136	155	142	191	13.2		29.6
	Cypermethrin	80.0	84.6	73.1	56.2	5.55		26.2
	DDD-p,p'	89.5	81.9	89.4	68.5	8.77		26.4
	DDE-p,p'	80.0	73.5	80.7	85.6	8.57		5.84
	DDT-p,p'	88.9	77.4	108	92.9	13.8		15.0
	Delta-BHC	119	100	100	98.1	16.9		2.29
	Demeton	85.7	74.2	86.6	83.8	14.4		3.28
	Diazinon	115	109	117	123	4.88		5.28
	Dicofol	90.6	89.0	113	110	1.80		2.66
	Dieldrin	91.4	82.8	79.3	88.3	9.81		10.7
	Disulfoton	98.2	91.7	102	103	6.82		0.925
	Endosulfan I	88.9	87.5	88.3	91.6	1.56		3.66
	Endosulfan II	87.7	79.3	69.2	91.6	10.0		27.8
	Endosulfan Sulfate	95.2	86.3	71.4	89.5	9.82		22.5

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	Endrin	95.0	86.5	81.1	99.2	9.33	20.1
	Endrin Aldehyde	87.1	78.4	62.2	86.0	10.5	32.0
	Endrin Ketone	97.2	87.7	80.0	96.2	10.3	18.4
	EPTC	57.8	45.3	47.9	32.9	24.3	37.0
	Ethion	88.5	93.1	54.7	93.3	5.04	52.2
	Ethoprop	89.5	77.0	104	96.8	15.0	6.73
	Fenamiphos	91.4	101	79.7	92.5	10.4	14.9
	Fipronil	99.4	106	71.2	103	6.50	32.7
	Fipronil Sulfide	84.3	88.8	65.5	86.2	5.24	23.3
	Fipronil Sulfone	82.3	85.8	44.2	85.5	4.22	42.6
	Fonofos	97.2	89.4	103	96.7	8.36	5.89
	Gamma-BHC	105	91.9	101	102	12.9	1.00
	Gamma-Chlordane	78.4	70.9	74.2	80.6	10.1	8.25
	Heptachlor	67.6	65.2	75.1	74.1	3.62	1.43
	Heptachlor Epoxide	88.7	81.0	80.3	85.6	9.06	6.40
	Hexazinone	103	98.2			4.43	13.3
	Malathion	99.5	105	104	97.9	5.64	6.15
	Metalaxyl	100	103	82.8	104	3.01	16.1
	Methoxychlor	97.9	90.7	112	98.6	7.66	13.1
	Metolachlor	94.6	99.6	86.6	95.2	5.11	7.33
	Metribuzin	125	144	215	220	14.0	1.76
	Mevinphos	84.7	73.2	94.2	96.4	14.6	2.30
	Mirex	64.5	61.3	76.3	77.2	5.16	1.12
	Molinate	56.8	48.4	50.9	41.6	16.0	19.9
	Norflurazon	91.8	96.7	23.7	80.6	5.23	46.2
	Parathion Ethyl	96.9	95.7	104	107	1.22	2.75
	Parathion Methyl	113	103	116	122	9.54	4.49
	Pendimethalin	120	116	127	126	3.88	0.553
	Permethrin	78.6	75.1	67.8	82.9	4.59	20.1
	Phorate	65.5	69.7	79.9	76.4	6.21	4.52
	Prometon	115	109	106	120	5.76	12.2
	Prometryn	98.2	105	95.1	105	6.37	10.2
	Simazine	97.7	96.6	110	113	1.09	2.83
	Terbufos	100	91.9	113	107	8.59	5.06
	Terbutylazine	95.0	104	102	112	8.70	8.99
	Trifluralin	78.1	72.3	90.2	84.0	7.76	7.15
EPA 8276	Chlordane	91.3	81.9	79.7	92.1	10.8	14.4
	Toxaphene	70.6	68.0	60.1	60.4	3.81	0.487
EPA 8321B	2,4-D	110		185	187		0.753
	3-Hydroxycarbofuran	103		45.4	48.7		7.04
	Acesulfame K	87.1		23.2	27.8		18.3
	Acetaminophen	83.2		81.7	89.4		8.99
	Aldicarb	98.6		25.7	37.0		36.2
	Aldicarb Sulfone	92.0		40.1	42.4		5.65
	Aldicarb Sulfoxide	106		19.3	22.8		16.4
	AMPA	107		81.7	81.9		0.127
	Bentazon	105		80.0	83.8		4.22
	Carbamazepine	122		67.6	75.7		11.3
	Carbaryl	77.0		61.3	51.9		13.2
	Carbofuran	98.3		98.8	94.3		4.72
	Diuron	100		49.7	58.5		3.60
	Endothall	96.6		131	154		16.3
	Fenuron	97.0		31.5	35.0		10.4
	Fluridone	97.4		90.3	83.9		6.89

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Glufosinate	94.5	70.2	78.7		11.4
	Glyphosate	82.8	61.5	59.2		1.12
	Hydrocodone	78.7	61.5	58.8		4.40
	Ibuprofen	84.7	87.4	75.4		14.8
	Imazapyr	120	86.0	91.1		5.40
	Imidacloprid	115	51.2	92.5		12.4
	Linuron	75.9	57.0	64.4		12.2
	MCPP	111	181	186		2.54
	Methiocarb	62.1	51.3	46.0		10.9
	Methomyl	80.8	28.8	26.7		7.63
	Naproxen	103	149	149		0.467
	Oxamyl	95.4	47.1	49.6		5.17
	Primidone	101	42.0	44.0		4.63
	Propoxur	87.5	48.9	47.1		3.77
	Pyraclostrobin	81.7	82.3	91.2		10.3
	Sucralose	93.8	102	97.4		4.29
	Triclopyr	103	221	235		6.23
SM 2120 B	Color (true)	98.7			7.01	
	Color (true)	97.5			6.31	
SM 2320 B-97	Total Alkalinity	103			0.869	
SM 2540 C-97	TDS				5.33	
	TDS				2.67	
SM 4500 F-C-97	Fluoride	98.7	97.5	98.2		0.473
SM 5310 B-00	Organic Carbon	94.0		98.8		0.298
	Organic Carbon	92.6		98.2		0.652

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2022115, 2022116, 2022117, 2022124, 2022125, 2022130
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2022160, 2022161, 2022162
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2022160, 2022161, 2022162
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2022115, 2022116, 2022117, 2022124, 2022125, 2022130
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2022115, 2022116, 2022117, 2022124, 2022125, 2022130
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2022118, 2022119, 2022120, 2022126, 2022127, 2022131
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2022118, 2022119, 2022120, 2022126, 2022127, 2022131
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2022118, 2022119, 2022120, 2022126, 2022127, 2022131
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2022118, 2022119, 2022120, 2022126, 2022127, 2022131
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2022121, 2022122, 2022123, 2022128, 2022129, 2022132
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2022154, 2022155, 2022158
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2022156, 2022157, 2022159
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2022154, 2022155, 2022158
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2022147, 2022148, 2022152
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2022149, 2022150, 2022151, 2022153

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2022149, 2022150, 2022153
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2022149, 2022150, 2022151, 2022153
SM 2120 B / E31780	True Color measured at 450 nm	2022115, 2022116, 2022117, 2022124, 2022125, 2022130
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2022115, 2022116, 2022117, 2022124, 2022125, 2022130
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2022115, 2022116, 2022117, 2022124, 2022125, 2022130
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2022115, 2022116, 2022117, 2022124, 2022125, 2022130
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2022115, 2022116, 2022117, 2022124, 2022125, 2022130
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2022118, 2022119, 2022120, 2022126, 2022127, 2022131

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	09/05/2018			09/05/2018 16:03	Megan Treadwell	2022115, 2022116, 2022117, 2022124, 2022125, 2022130
EPA 200.7 Rev. 4.4	09/05/2018	09/06/2018 17:15	Elliott D. Healy	09/07/2018 22:46	Martin Acosta	2022160
	09/05/2018	09/06/2018 17:15	Elliott D. Healy	09/07/2018 22:52	Martin Acosta	2022161
	09/05/2018	09/06/2018 17:15	Elliott D. Healy	09/07/2018 22:59	Martin Acosta	2022162
EPA 200.8 Rev. 5.4	09/05/2018	09/06/2018 17:15	Elliott D. Healy	09/14/2018 22:29	Allison Taylor	2022160
	09/05/2018	09/06/2018 17:15	Elliott D. Healy	09/14/2018 22:38	Allison Taylor	2022161
	09/05/2018	09/06/2018 17:15	Elliott D. Healy	09/14/2018 22:48	Allison Taylor	2022162
EPA 300.0 Rev. 2.1	09/05/2018			09/13/2018 18:00	Lipi Saha	2022115
	09/05/2018			09/13/2018 18:12	Lipi Saha	2022116
	09/05/2018			09/13/2018 18:48	Lipi Saha	2022117
	09/05/2018			09/13/2018 19:00	Lipi Saha	2022124
	09/05/2018			09/13/2018 19:12	Lipi Saha	2022125
	09/05/2018			09/13/2018 19:24	Lipi Saha	2022130
EPA 350.1 Rev. 2.0	09/05/2018			09/07/2018 11:30	Ping Hua	2022118
	09/05/2018			09/07/2018 11:32	Ping Hua	2022119
	09/05/2018			09/07/2018 11:33	Ping Hua	2022120
	09/05/2018			09/07/2018 11:42	Ping Hua	2022126
	09/05/2018			09/07/2018 11:44	Ping Hua	2022127
	09/05/2018			09/07/2018 11:54	Ping Hua	2022131
EPA 351.2 Rev. 2.0	09/05/2018	09/07/2018 09:40	Adrian Shelby	09/10/2018 10:38	Joseph Suarez	2022118
	09/05/2018	09/07/2018 09:40	Adrian Shelby	09/10/2018 10:39	Joseph Suarez	2022119
	09/05/2018	09/07/2018 09:40	Adrian Shelby	09/10/2018 10:41	Joseph Suarez	2022120
	09/05/2018	09/07/2018 09:40	Adrian Shelby	09/10/2018 10:42	Joseph Suarez	2022126
	09/05/2018	09/07/2018 09:40	Adrian Shelby	09/10/2018 10:44	Joseph Suarez	2022127
	09/05/2018	09/07/2018 09:40	Adrian Shelby	09/10/2018 10:45	Joseph Suarez	2022131
EPA 353.2 Rev. 2.0	09/05/2018			09/11/2018 12:27	Lauren Bottorf	2022118
	09/05/2018			09/11/2018 12:28	Lauren Bottorf	2022119
	09/05/2018			09/11/2018 12:30	Lauren Bottorf	2022120
	09/05/2018			09/11/2018 12:31	Lauren Bottorf	2022126
	09/05/2018			09/11/2018 12:32	Lauren Bottorf	2022127
EPA 365.1 Rev. 2.0	09/05/2018			09/11/2018 12:33	Lauren Bottorf	2022131
	09/05/2018	09/07/2018 11:52	Sima Feizi	09/10/2018 09:36	Beverly Y. Sanders	2022127
	09/05/2018	09/07/2018 11:52	Sima Feizi	09/10/2018 09:42	Beverly Y. Sanders	2022118
	09/05/2018	09/07/2018 11:52	Sima Feizi	09/10/2018 09:43	Beverly Y. Sanders	2022119
	09/05/2018	09/07/2018 11:52	Sima Feizi	09/10/2018 09:45	Beverly Y. Sanders	2022120
	09/05/2018	09/07/2018 11:52	Sima Feizi	09/10/2018 09:46	Beverly Y. Sanders	2022126
EPA 365.1 Rev. 2.0 dissolved	09/05/2018	09/07/2018 11:52	Sima Feizi	09/10/2018 12:55	Beverly Y. Sanders	2022131
	09/05/2018			09/05/2018 16:58	Julia Storbeck	2022132
	09/05/2018			09/05/2018 17:24	Julia Storbeck	2022121

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 365.1 Rev. 2.0 dissolved	09/05/2018			09/05/2018 17:25	Julia Storbeck	2022122
	09/05/2018			09/05/2018 17:26	Julia Storbeck	2022123
	09/05/2018			09/05/2018 17:27	Julia Storbeck	2022128
	09/05/2018			09/05/2018 17:28	Julia Storbeck	2022129
EPA 8270D	09/05/2018	09/07/2018 08:00	Fe-Val Siddell	09/12/2018 20:06	Dinesh Mishra	2022154
	09/05/2018	09/07/2018 08:00	Fe-Val Siddell	09/12/2018 20:38	Dinesh Mishra	2022155
	09/05/2018	09/07/2018 08:00	Fe-Val Siddell	09/12/2018 21:09	Dinesh Mishra	2022158
	09/05/2018	09/07/2018 14:30	Rasheda Ghaffari	09/13/2018 15:46	Marek Topolski	2022156
	09/05/2018	09/07/2018 14:30	Rasheda Ghaffari	09/13/2018 16:10	Marek Topolski	2022157
	09/05/2018	09/07/2018 14:30	Rasheda Ghaffari	09/13/2018 16:34	Marek Topolski	2022159
	09/05/2018	09/07/2018 14:30	Rasheda Ghaffari	09/14/2018 15:14	Marek Topolski	2022156
	09/05/2018	09/07/2018 14:30	Rasheda Ghaffari	09/14/2018 15:38	Marek Topolski	2022157
EPA 8276	09/05/2018	09/07/2018 14:30	Rasheda Ghaffari	09/14/2018 16:25	Marek Topolski	2022159
	09/05/2018	09/07/2018 08:00	Fe-Val Siddell	09/12/2018 04:36	Arthur Maknenko	2022154
	09/05/2018	09/07/2018 08:00	Fe-Val Siddell	09/12/2018 05:31	Arthur Maknenko	2022155
EPA 8321B	09/05/2018	09/07/2018 08:00	Fe-Val Siddell	09/12/2018 06:26	Arthur Maknenko	2022158
	09/05/2018	09/06/2018 09:00	Hoor Shaik	09/07/2018 05:31	Juyoung Kim	2022147
	09/05/2018	09/06/2018 09:00	Hoor Shaik	09/07/2018 06:06	Juyoung Kim	2022148
	09/05/2018	09/06/2018 09:00	Hoor Shaik	09/07/2018 06:40	Juyoung Kim	2022152
	09/05/2018	09/06/2018 09:00	Hoor Shaik	09/07/2018 17:13	Juyoung Kim	2022149
	09/05/2018	09/06/2018 09:00	Hoor Shaik	09/08/2018 00:08	Juyoung Kim	2022150
	09/05/2018	09/06/2018 09:00	Hoor Shaik	09/08/2018 00:43	Juyoung Kim	2022151
	09/05/2018	09/06/2018 09:00	Hoor Shaik	09/08/2018 01:18	Juyoung Kim	2022153
	09/05/2018	09/06/2018 09:00	Hoor Shaik	09/08/2018 16:17	Juyoung Kim	2022149
	09/05/2018	09/06/2018 09:00	Hoor Shaik	09/08/2018 23:12	Juyoung Kim	2022150
	09/05/2018	09/06/2018 09:00	Hoor Shaik	09/08/2018 23:46	Juyoung Kim	2022151
	09/05/2018	09/06/2018 09:00	Hoor Shaik	09/09/2018 00:21	Juyoung Kim	2022153
	09/05/2018	09/06/2018 15:00	Mohammad Ghaffari	09/07/2018 09:22	Mohammad Ghaffari	2022149
	09/05/2018	09/06/2018 15:00	Mohammad Ghaffari	09/07/2018 09:54	Mohammad Ghaffari	2022150
	09/05/2018	09/06/2018 15:00	Mohammad Ghaffari	09/07/2018 10:20	Mohammad Ghaffari	2022153
	09/05/2018	09/06/2018 15:00	Mohammad Ghaffari	09/09/2018 19:31	Mohammad Ghaffari	2022149
	09/05/2018	09/06/2018 15:00	Mohammad Ghaffari	09/09/2018 20:15	Mohammad Ghaffari	2022150
	09/05/2018	09/06/2018 15:00	Mohammad Ghaffari	09/09/2018 20:30	Mohammad Ghaffari	2022153
	09/05/2018	09/06/2018 15:00	Mohammad Ghaffari	09/10/2018 20:49	Mohammad Ghaffari	2022149
	09/05/2018	09/06/2018 15:00	Mohammad Ghaffari	09/10/2018 21:18	Mohammad Ghaffari	2022150
SM 2120 B	09/05/2018	09/06/2018 15:00	Mohammad Ghaffari	09/10/2018 21:33	Mohammad Ghaffari	2022153
	09/05/2018	09/06/2018 15:00	Mohammad Ghaffari	09/10/2018 22:02	Mohammad Ghaffari	2022151
	09/05/2018			09/05/2018 16:31	DeAsia Armster	2022125
	09/05/2018			09/05/2018 16:38	DeAsia Armster	2022115
	09/05/2018			09/05/2018 16:40	DeAsia Armster	2022117

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2120 B	09/05/2018			09/05/2018 16:41	DeAsia Armster	2022124, 2022130
	09/05/2018			09/05/2018 16:44	DeAsia Armster	2022116
SM 2320 B-97	09/05/2018			09/11/2018 05:40	Dale L. Simmons	2022115
	09/05/2018			09/11/2018 05:50	Dale L. Simmons	2022116
	09/05/2018			09/11/2018 06:00	Dale L. Simmons	2022117
	09/05/2018			09/11/2018 06:10	Dale L. Simmons	2022124
	09/05/2018			09/11/2018 06:21	Dale L. Simmons	2022125
	09/05/2018			09/11/2018 06:31	Dale L. Simmons	2022130
SM 2540 C-97	09/05/2018			09/07/2018 15:06	Yijie Li	2022115, 2022116, 2022117, 2022124, 2022125, 2022130
SM 2540 D-97	09/05/2018			09/07/2018 15:06	Yijie Li	2022115, 2022116, 2022117, 2022124, 2022125, 2022130
SM 4500 F-C-97	09/05/2018			09/11/2018 05:40	Dale L. Simmons	2022115
	09/05/2018			09/11/2018 05:50	Dale L. Simmons	2022116
	09/05/2018			09/11/2018 06:00	Dale L. Simmons	2022117
	09/05/2018			09/11/2018 06:10	Dale L. Simmons	2022124
	09/05/2018			09/11/2018 06:21	Dale L. Simmons	2022125
	09/05/2018			09/11/2018 06:31	Dale L. Simmons	2022130
SM 5310 B-00	09/05/2018			09/11/2018 07:29	Megan Treadwell	2022118
	09/05/2018			09/11/2018 07:43	Megan Treadwell	2022119
	09/05/2018			09/11/2018 07:57	Megan Treadwell	2022120
	09/05/2018			09/11/2018 08:10	Megan Treadwell	2022126
	09/05/2018			09/11/2018 08:51	Megan Treadwell	2022127
	09/05/2018			09/11/2018 09:33	Megan Treadwell	2022131