Chemical Analysis Report

NW-DIST-2022-05-25-02

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

Event Description: **Pensacola Run**
Request ID: **RQ-2022-05-23-23**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
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160 W Goverment Street
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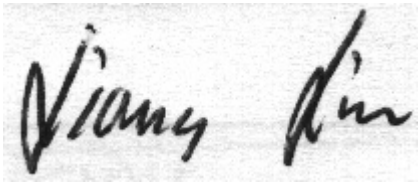
Certified by: Liang Lin, Environmental Administrator

Date Certified: 17-JUN-2022 13:11



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 by the Florida Department of Health Environmental Laboratory Certification Program 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: Jones Creek NW corner of Walmart parking lot **Collection Date/Time: 05/24/2022 10:00**

Field ID: G4NW0130 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329920	EPA 8270E	Aldrin	0.70	U	ng/L	P414484	
		Alpha-BHC	0.11	U	ng/L	P414484	
		Alpha-Chlordane	0.22	U	ng/L	P414484	
		PCB-1016	2.2	U	ng/L	P414484	
		Beta-BHC	0.11	U	ng/L	P414484	
		PCB-1221	2.2	U	ng/L	P414484	
		Beta-Cyfluthrin**	1.3	U	ng/L	P414484	
		PCB-1232	2.2	U	ng/L	P414484	
		Bifenthrin**	0.54	U	ng/L	P414484	
		PCB-1242	2.2	U	ng/L	P414484	
		Carbophenothion	0.97	U	ng/L	P414484	
		PCB-1248	2.2	U	ng/L	P414484	
		Chlorothalonil	1.3	U	ng/L	P414484	
		PCB-1254	2.2	U	ng/L	P414484	
		Cis-Nonachlor**	0.22	U	ng/L	P414484	
		PCB-1260	2.2	U	ng/L	P414484	
		Cypermethrin	1.6	U	ng/L	P414484	
		Dacthal**	0.16	U	ng/L	P414484	
		DDD-p,p'	0.27	U	ng/L	P414484	
		DDE-p,p'	0.22	U	ng/L	P414484	
		DDT-p,p'	0.27	U	ng/L	P414484	
		Delta-BHC	0.43	U	ng/L	P414484	
		Deltamethrin**	1.3	U	ng/L	P414484	
		Dichlobenil**	0.27	U	ng/L	P414484	
		Dicofol	1.3	UJ	ng/L	P414484	LCS, MS
		Dieldrin	0.43	U	ng/L	P414484	
		Endosulfan I	0.43	U	ng/L	P414484	
		Endosulfan II	0.43	U	ng/L	P414484	
		Endosulfan Sulfate	0.32	U	ng/L	P414484	
		Endrin	0.43	U	ng/L	P414484	
		Endrin Aldehyde	0.81	U	ng/L	P414484	
		Endrin Ketone	0.43	U	ng/L	P414484	
		Esfenvalerate**	0.81	U	ng/L	P414484	
		Ethalfluralin**	0.16	U	ng/L	P414484	
		Fenpropathrin**	0.27	U	ng/L	P414484	
		Gamma-BHC	0.13	U	ng/L	P414484	
		Gamma-Chlordane	0.22	U	ng/L	P414484	
		Heptachlor	0.22	U	ng/L	P414484	
		Heptachlor Epoxide	0.27	U	ng/L	P414484	
		Hexachlorobenzene**	1.1	U	ng/L	P414484	
		Kepone**	5.4	U	ng/L	P414484	
		Lambda-Cyhalothrin**	0.81	U	ng/L	P414484	
		Methoprene**	0.81	U	ng/L	P414484	
		Methoxychlor	0.32	U	ng/L	P414484	

Field ID: G4NW0130 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329920	EPA 8270E	MGK-264**	0.22	U	ng/L	P414484	
		Mirex	0.76	U	ng/L	P414484	
		Oxychlordane**	0.32	U	ng/L	P414484	
		Permethrin	1.7	U	ng/L	P414484	
		Phenothrin**	0.97	U	ng/L	P414484	
		Piperonyl Butoxide**	0.16	U	ng/L	P414484	
		Prallethrin**	2.2	U	ng/L	P414484	
		Tau-Fluvalinate**	0.27	U	ng/L	P414484	
		Tetramethrin**	0.81	U	ng/L	P414484	
		Trans-Nonachlor**	0.22	U	ng/L	P414484	
		Triclosan Methyl**	0.16	U	ng/L	P414484	
		Trifluralin	0.22	U	ng/L	P414484	
	EPA 8276	Chlordane	2.7	U	ng/L	P414484	
		Toxaphene	16	U	ng/L	P414484	
2329932	EPA 200.7 Rev. 4.4	Calcium	7.40		mg/L	P414396	
		Iron	520		ug/L	P414396	
		Magnesium	1.11		mg/L	P414396	
		Potassium	0.69	I	mg/L	P414396	
		Sodium	6.1		mg/L	P414396	
		Strontium	17.6		ug/L	P414396	
		Tin	3.0	U	ug/L	P414396	
		Titanium	1.8	I	ug/L	P414396	
		Vanadium	2.0	U	ug/L	P414396	
		Zinc	5.0	U	ug/L	P414396	
	EPA 200.8 Rev. 5.4	Aluminum	301		ug/L	P414396	
		Antimony	0.17	I	ug/L	P414396	
		Arsenic	1.38		ug/L	P414396	
		Barium	8.77		ug/L	P414396	
		Beryllium	0.011	I	ug/L	P414396	
		Boron**	22.5		ug/L	P414396	
		Cadmium	0.020	U	ug/L	P414396	
		Chromium	0.44	I	ug/L	P414396	
		Cobalt	0.116		ug/L	P414396	
		Copper	0.69	I	ug/L	P414396	
		Lead	0.71		ug/L	P414396	
		Manganese	15.5		ug/L	P414396	
		Molybdenum	0.15	U	ug/L	P414396	
		Nickel	0.50	U	ug/L	P414396	
		Selenium	0.20	U	ug/L	P414396	
		Silver	0.010	U	ug/L	P414396	
		Thallium	0.10	U	ug/L	P414396	
	SM 2340 B-2011	Hardness	23.0		mg/L	P414396	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 200.8 Rev. 5.4: The lead result was confirmed in the undigested sample on 06/02/2022.

Sample Location: Jones Creek upstream of N Navy Blvd **Collection Date/Time: 05/24/2022 09:50**

Field ID: G4NW0429 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329921	EPA 8270E	Aldrin	0.72	U	ng/L	P414484	
		Alpha-BHC	0.11	U	ng/L	P414484	
		Alpha-Chlordane	0.22	U	ng/L	P414484	
		PCB-1016	2.2	U	ng/L	P414484	
		Beta-BHC	0.11	U	ng/L	P414484	
		PCB-1221	2.2	U	ng/L	P414484	
		Beta-Cyfluthrin**	1.4	U	ng/L	P414484	
		PCB-1232	2.2	U	ng/L	P414484	
		Bifenthrin**	0.55	U	ng/L	P414484	
		PCB-1242	2.2	U	ng/L	P414484	
		Carbophenothion	0.99	U	ng/L	P414484	
		PCB-1248	2.2	U	ng/L	P414484	
		Chlorothalonil	1.4	U	ng/L	P414484	
		PCB-1254	2.2	U	ng/L	P414484	
		Cis-Nonachlor**	0.22	U	ng/L	P414484	
		PCB-1260	2.2	U	ng/L	P414484	
		Cypermethrin	1.7	U	ng/L	P414484	
		Dacthal**	0.17	U	ng/L	P414484	
		DDD-p,p'	0.28	U	ng/L	P414484	
		DDE-p,p'	0.22	U	ng/L	P414484	
		DDT-p,p'	0.28	U	ng/L	P414484	
		Delta-BHC	0.44	U	ng/L	P414484	
		Deltamethrin**	1.4	U	ng/L	P414484	
		Dichlobenil**	0.28	U	ng/L	P414484	
		Dicofol	1.4	UJ	ng/L	P414484	LCS, MS
		Dieldrin	0.44	U	ng/L	P414484	
		Endosulfan I	0.44	U	ng/L	P414484	
		Endosulfan II	0.44	U	ng/L	P414484	
		Endosulfan Sulfate	0.33	U	ng/L	P414484	
		Endrin	0.44	U	ng/L	P414484	
		Endrin Aldehyde	0.83	U	ng/L	P414484	
		Endrin Ketone	0.44	U	ng/L	P414484	
		Esfenvalerate**	0.83	U	ng/L	P414484	
		Ethalfluralin**	0.17	U	ng/L	P414484	
		Fenpropathrin**	0.28	U	ng/L	P414484	
		Gamma-BHC	0.14	U	ng/L	P414484	
		Gamma-Chlordane	0.22	U	ng/L	P414484	
		Heptachlor	0.22	U	ng/L	P414484	
		Heptachlor Epoxide	0.28	U	ng/L	P414484	
		Hexachlorobenzene**	1.1	U	ng/L	P414484	
		Kepone**	5.5	U	ng/L	P414484	
		Lambda-Cyhalothrin**	0.83	U	ng/L	P414484	
		Methoprene**	0.83	U	ng/L	P414484	
		Methoxychlor	0.33	U	ng/L	P414484	

Field ID: G4NW0429 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329921	EPA 8270E	MGK-264**	0.27	I	ng/L	P414484	
		Mirex	0.77	U	ng/L	P414484	
		Oxychlordane**	0.33	U	ng/L	P414484	
		Permethrin	1.8	U	ng/L	P414484	
		Phenothrin**	0.99	U	ng/L	P414484	
		Piperonyl Butoxide**	0.17	U	ng/L	P414484	
		Prallethrin**	2.2	U	ng/L	P414484	
		Tau-Fluvalinate**	0.28	U	ng/L	P414484	
		Tetramethrin**	0.83	U	ng/L	P414484	
		Trans-Nonachlor**	0.22	U	ng/L	P414484	
		Triclosan Methyl**	0.17	U	ng/L	P414484	
		Trifluralin	0.22	U	ng/L	P414484	
	EPA 8276	Chlordane	2.8	U	ng/L	P414484	
		Toxaphene	17	U	ng/L	P414484	
2329933	EPA 200.7 Rev. 4.4	Calcium	7.57		mg/L	P414396	
		Iron	490		ug/L	P414396	
		Magnesium	1.12		mg/L	P414396	
		Potassium	0.67	I	mg/L	P414396	
		Sodium	6.0		mg/L	P414396	
		Strontium	17.7		ug/L	P414396	
		Tin	3.0	U	ug/L	P414396	
		Titanium	1.9	I	ug/L	P414396	
		Vanadium	2.0	U	ug/L	P414396	
		Zinc	5.0	U	ug/L	P414396	
	EPA 200.8 Rev. 5.4	Aluminum	281		ug/L	P414396	
		Antimony	0.18	I	ug/L	P414396	
		Arsenic	1.28		ug/L	P414396	
		Barium	8.46		ug/L	P414396	
		Beryllium	0.012	I	ug/L	P414396	
		Boron**	22.2		ug/L	P414396	
		Cadmium	0.020	U	ug/L	P414396	
		Chromium	0.43	I	ug/L	P414396	
		Cobalt	0.108		ug/L	P414396	
		Copper	0.64	I	ug/L	P414396	
		Lead	0.65		ug/L	P414396	
		Manganese	13.6		ug/L	P414396	
		Molybdenum	0.15	U	ug/L	P414396	
		Nickel	0.50	U	ug/L	P414396	
		Selenium	0.20	U	ug/L	P414396	
		Silver	0.010	U	ug/L	P414396	
		Thallium	0.10	U	ug/L	P414396	
	SM 2340 B-2011	Hardness	23.5		mg/L	P414396	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 200.8 Rev. 5.4: The lead result was confirmed in the undigested sample on 06/02/2022.

Sample Location: Jackson Creek downstream of Old Corry Rd **Collection Date/Time: 05/24/2022 10:15**

Field ID: G4NW0412 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329923	EPA 8270E	Aldrin	0.70	U	ng/L	P414484	
		Alpha-BHC	0.11	U	ng/L	P414484	
		Alpha-Chlordane	1.7		ng/L	P414484	
		PCB-1016	2.2	U	ng/L	P414484	
		Beta-BHC	0.11	U	ng/L	P414484	
		PCB-1221	2.2	U	ng/L	P414484	
		Beta-Cyfluthrin**	1.3	U	ng/L	P414484	
		PCB-1232	2.2	U	ng/L	P414484	
		Bifenthrin**	0.54	U	ng/L	P414484	
		PCB-1242	2.2	U	ng/L	P414484	
		Carbophenothion	0.97	U	ng/L	P414484	
		PCB-1248	2.2	U	ng/L	P414484	
		Chlorothalonil	1.3	U	ng/L	P414484	
		PCB-1254	2.2	U	ng/L	P414484	
		Cis-Nonachlor**	0.22	U	ng/L	P414484	
		PCB-1260	2.2	U	ng/L	P414484	
		Cypermethrin	1.6	U	ng/L	P414484	
		Dacthal**	0.16	U	ng/L	P414484	
		DDD-p,p'	0.27	U	ng/L	P414484	
		DDE-p,p'	0.22	U	ng/L	P414484	
		DDT-p,p'	0.27	U	ng/L	P414484	
		Delta-BHC	0.43	U	ng/L	P414484	
		Deltamethrin**	1.3	U	ng/L	P414484	
		Dichlobenil**	0.27	U	ng/L	P414484	
		Dicofol	1.3	UJ	ng/L	P414484	LCS, MS
		Dieldrin	22		ng/L	P414484	
		Endosulfan I	0.43	U	ng/L	P414484	
		Endosulfan II	0.43	U	ng/L	P414484	
		Endosulfan Sulfate	0.32	U	ng/L	P414484	
		Endrin	0.43	U	ng/L	P414484	
		Endrin Aldehyde	0.81	U	ng/L	P414484	
		Endrin Ketone	0.57	I	ng/L	P414484	
		Esfenvalerate**	0.81	U	ng/L	P414484	
		Ethalfluralin**	0.16	U	ng/L	P414484	
		Fenpropathrin**	0.27	U	ng/L	P414484	
		Gamma-BHC	0.13	U	ng/L	P414484	
		Gamma-Chlordane	1.1		ng/L	P414484	
		Heptachlor	0.22	U	ng/L	P414484	
		Heptachlor Epoxide	11		ng/L	P414484	
		Hexachlorobenzene**	1.1	U	ng/L	P414484	
		Kepone**	5.4	U	ng/L	P414484	
		Lambda-Cyhalothrin**	0.81	U	ng/L	P414484	
		Methoprene**	0.81	U	ng/L	P414484	
		Methoxychlor	0.32	U	ng/L	P414484	

Field ID: G4NW0412 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329923	EPA 8270E	MGK-264**	0.32	I	ng/L	P414484	
		Mirex	0.75	U	ng/L	P414484	
		Oxychlordane**	0.32	U	ng/L	P414484	
		Permethrin	1.7	U	ng/L	P414484	
		Phenothrin**	0.97	U	ng/L	P414484	
		Piperonyl Butoxide**	0.32	I	ng/L	P414484	
		Prallethrin**	2.2	U	ng/L	P414484	
		Tau-Fluvalinate**	0.27	U	ng/L	P414484	
		Tetramethrin**	0.81	U	ng/L	P414484	
		Trans-Nonachlor**	0.33	I	ng/L	P414484	
		Triclosan Methyl**	0.16	U	ng/L	P414484	
		Trifluralin	0.22	U	ng/L	P414484	
	EPA 8276	Chlordane	14		ng/L	P414484	
		Toxaphene	16	U	ng/L	P414484	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Bayou Marcus Creek upstream of Patricia Drive Collection Date/Time: 05/24/2022 10:45

Field ID: G5NW0155 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329909	EPA 8321B	Aldicarb	0.020	U	ug/L	P414473	
		Aldicarb Sulfone	0.0020	U	ug/L	P414473	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P414473	
		Carbaryl	0.0020	U	ug/L	P414473	
		Carbofuran	0.0020	U	ug/L	P414473	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P414473	
		Methiocarb	0.0020	U	ug/L	P414473	
		Methomyl	0.0020	U	ug/L	P414473	
		Oxamyl	0.0020	U	ug/L	P414473	
		Propoxur	0.0020	U	ug/L	P414473	
2329910		2,4-D	0.25		ug/L	P414365	
		Acesulfame K	0.10	U	ug/L	P414386	
		2,4,5-T	0.0040	U	ug/L	P414365	
		AMPA	0.10	U	ug/L	P414386	
		Acetaminophen	0.0080	U	ug/L	P414365	
		Acetamiprid	0.0020	U	ug/L	P414365	
		Endothall	0.25	U	ug/L	P414386	
		Glufosinate	0.10	U	ug/L	P414386	
		Glyphosate	0.10	U	ug/L	P414386	
		Afidopyropen	0.0020	U	ug/L	P414365	
		Bentazon	0.0029	I	ug/L	P414365	
		Sucralose	0.48		ug/L	P414386	
		Benzovindiflupyr	0.0020	U	ug/L	P414365	
		Carbamazepine	0.0032		ug/L	P414365	
		Clothianidin	0.0020	U	ug/L	P414365	
		Dinotefuran	0.0020	U	ug/L	P414365	
		Diuron	0.13		ug/L	P414365	
		Fenuron	0.032	U	ug/L	P414365	
		Fluridone	8.0E-04	U	ug/L	P414365	
		Imazapyr	0.0088	I	ug/L	P414365	
		Hydrocodone	0.0020	U	ug/L	P414365	
		Ibuprofen	0.020	U	ug/L	P414365	
		Imidacloprid	0.016		ug/L	P414365	
		Linuron	0.0040	U	ug/L	P414365	
		Mandestrobin	0.0020	U	ug/L	P414365	
		MCPP	0.0040	U	ug/L	P414365	
		Naproxen	0.0080	U	ug/L	P414365	
		Primidone	0.0040	U	ug/L	P414365	
		Pyraclostrobin	0.0020	U	ug/L	P414365	
		Silvex	0.0040	U	ug/L	P414365	
		Thiamethoxam	0.0020	U	ug/L	P414365	
		Tolfenpyrad	0.0020	U	ug/L	P414365	
		Triclopyr	0.0040	U	ug/L	P414365	
2329922	EPA 8270E	Aldrin	0.70	U	ng/L	P414484	

Field ID: G5NW0155 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329922	EPA 8270E	Alpha-BHC	0.11	U	ng/L	P414484	
		Alpha-Chlordane	0.22	U	ng/L	P414484	
		PCB-1016	2.2	U	ng/L	P414484	
		Beta-BHC	0.11	U	ng/L	P414484	
		PCB-1221	2.2	U	ng/L	P414484	
		Beta-Cyfluthrin**	1.4	U	ng/L	P414484	
		PCB-1232	2.2	U	ng/L	P414484	
		Bifenthrin**	0.54	U	ng/L	P414484	
		PCB-1242	2.2	U	ng/L	P414484	
		Carbophenothion	0.98	U	ng/L	P414484	
		PCB-1248	2.2	U	ng/L	P414484	
		Chlorothalonil	1.4	U	ng/L	P414484	
		PCB-1254	2.2	U	ng/L	P414484	
		Cis-Nonachlor**	0.22	U	ng/L	P414484	
		PCB-1260	2.2	U	ng/L	P414484	
		Cypermethrin	1.6	U	ng/L	P414484	
		Dacthal**	0.16	U	ng/L	P414484	
		DDD-p,p'	0.27	U	ng/L	P414484	
		DDE-p,p'	0.22	U	ng/L	P414484	
		DDT-p,p'	0.27	U	ng/L	P414484	
		Delta-BHC	0.43	U	ng/L	P414484	
		Deltamethrin**	1.4	U	ng/L	P414484	
		Dichlobenil**	0.27	U	ng/L	P414484	
		Dicofol	1.4	UJ	ng/L	P414484	LCS, MS
		Dieldrin	1.2	I	ng/L	P414484	
		Endosulfan I	0.43	U	ng/L	P414484	
		Endosulfan II	0.43	U	ng/L	P414484	
		Endosulfan Sulfate	0.33	U	ng/L	P414484	
		Endrin	0.43	U	ng/L	P414484	
		Endrin Aldehyde	0.81	U	ng/L	P414484	
		Endrin Ketone	0.43	U	ng/L	P414484	
		Esfenvalerate**	0.81	U	ng/L	P414484	
		Ethalfluralin**	0.16	U	ng/L	P414484	
		Fenpropathrin**	0.27	U	ng/L	P414484	
		Gamma-BHC	0.14	U	ng/L	P414484	
		Gamma-Chlordane	0.27	I	ng/L	P414484	
		Heptachlor	0.22	U	ng/L	P414484	
		Heptachlor Epoxide	1.2	I	ng/L	P414484	
		Hexachlorobenzene**	1.1	U	ng/L	P414484	
		Kepone**	5.4	U	ng/L	P414484	
		Lambda-Cyhalothrin**	0.81	U	ng/L	P414484	
		Methoprene**	0.81	U	ng/L	P414484	
		Methoxychlor	0.33	U	ng/L	P414484	
		MGK-264**	0.24	I	ng/L	P414484	
		Mirex	0.76	U	ng/L	P414484	

Field ID: G5NW0155 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329922	EPA 8270E	Oxychlordane**	0.33	U	ng/L	P414484	
		Permethrin	1.7	U	ng/L	P414484	
		Phenothrin**	0.98	U	ng/L	P414484	
		Piperonyl Butoxide**	0.17	I	ng/L	P414484	
		Prallethrin**	2.2	U	ng/L	P414484	
		Tau-Fluvalinate**	0.27	U	ng/L	P414484	
		Tetramethrin**	0.81	U	ng/L	P414484	
		Trans-Nonachlor**	0.22	U	ng/L	P414484	
		Triclosan Methyl**	0.16	U	ng/L	P414484	
		Trifluralin	0.22	U	ng/L	P414484	
	EPA 8276	Chlordane	2.7	U	ng/L	P414484	
		Toxaphene	16	U	ng/L	P414484	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Marcus Creek upstream of Marcus Pointe Blvd Collection Date/Time: 05/24/2022 11:15

Field ID: G4NW0179 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329903	DEP SOP: NU-094-1	Color (true)**	32		PCU	P414373	
	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P414378	
	EPA 300.0 Rev. 2.1	Chloride	6.8		mg Cl/L	P414632	
		Sulfate	2.1		mg SO4/L	P414635	
	SM 2320 B-2011	Total Alkalinity	51		mg CaCO3/L	P414539	
	SM 2540 C-2011	TDS	75		mg/L	P414670	
	SM 2540 D-2011	TSS	2	I	mg/L	P414674	
	SM 4500-F- C-2011	Fluoride	0.035	UJ	mg F/L	P415142	LCS
2329904	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		mg N/L	P415146	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.23		mg N/L	P414564	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.18		mg N/L	P414641	
	EPA 365.1 Rev. 2.0	Total-P	0.007		mg P/L	P414411	
	SM 5310 B-2011	Organic Carbon	4.0		mg C/L	P414517	
2329931	EPA 200.7 Rev. 4.4	Calcium	15.3		mg/L	P414396	
		Iron	660		ug/L	P414396	
		Magnesium	3.04		mg/L	P414396	
		Potassium	3.2		mg/L	P414396	
		Sodium	5.7		mg/L	P414396	
		Strontium	58.7		ug/L	P414396	
		Tin	3.0	U	ug/L	P414396	
		Titanium	0.75	U	ug/L	P414396	
		Vanadium	2.0	U	ug/L	P414396	
		Zinc	5.0	U	ug/L	P414396	
	EPA 200.8 Rev. 5.4	Aluminum	16	I	ug/L	P414396	
		Antimony	0.050	U	ug/L	P414396	
		Arsenic	0.36		ug/L	P414396	
		Barium	21.1		ug/L	P414396	
		Beryllium	0.010	U	ug/L	P414396	
		Boron**	103		ug/L	P414396	
		Cadmium	0.020	U	ug/L	P414396	
		Chromium	0.40	U	ug/L	P414396	
		Cobalt	0.114		ug/L	P414396	
		Copper	0.40	U	ug/L	P414396	
		Lead	0.20	U	ug/L	P414396	
		Manganese	84.9		ug/L	P414396	
		Molybdenum	0.15	U	ug/L	P414396	
		Nickel	0.50	U	ug/L	P414396	
		Selenium	0.20	U	ug/L	P414396	
		Silver	0.010	U	ug/L	P414396	
		Thallium	0.10	U	ug/L	P414396	
	SM 2340 B-2011	Hardness	50.8		mg/L	P414396	

Ref. Method and Comment:
DEP SOP: NU-094-1: Batch relative percent difference is unavailable because of analytical difficulties.
SM 4500-F- C-2011: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Carpenter Creek below Target Stormwater Pond **Collection Date/Time: 05/24/2022 12:05**

Field ID: G4NW0244 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329907	EPA 8321B	2,4-D	0.0090		ug/L	P414365	
		Acesulfame K	0.10	U	ug/L	P414386	
		2,4,5-T	0.0040	U	ug/L	P414365	
		AMPA	0.10	U	ug/L	P414386	
		Acetaminophen	0.0080	U	ug/L	P414365	
		Acetamiprid	0.0020	U	ug/L	P414365	
		Endothall	0.25	U	ug/L	P414386	
		Glufosinate	0.10	U	ug/L	P414386	
		Glyphosate	0.10	U	ug/L	P414386	
		Afidopyropen	0.0020	U	ug/L	P414365	
		Bentazon	0.0010	I	ug/L	P414365	
		Sucralose	0.26		ug/L	P414386	
		Benzovindiflupyr	0.0020	U	ug/L	P414365	
		Carbamazepine	0.0016	I	ug/L	P414365	
		Clothianidin	0.0026	I	ug/L	P414365	
		Dinotefuran	0.0026	I	ug/L	P414365	
		Diuron	0.017		ug/L	P414365	
		Fenuron	0.032	U	ug/L	P414365	
		Fluridone	8.0E-04	U	ug/L	P414365	
		Imazapyr	0.0053	I	ug/L	P414365	
		Hydrocodone	0.0020	U	ug/L	P414365	
		Ibuprofen	0.020	U	ug/L	P414365	
		Imidacloprid	0.021		ug/L	P414365	
		Linuron	0.0040	U	ug/L	P414365	
		Mandestrobin	0.0020	U	ug/L	P414365	
		MCPP	0.0040	U	ug/L	P414365	
		Naproxen	0.0080	U	ug/L	P414365	
		Primidone	0.0040	U	ug/L	P414365	
		Pyraclostrobin	0.0020	U	ug/L	P414365	
		Silvex	0.0040	U	ug/L	P414365	
		Thiamethoxam	0.0020	U	ug/L	P414365	
		Tolfenpyrad	0.0020	U	ug/L	P414365	
		Triclopyr	0.0040	U	ug/L	P414365	
2329918	EPA 8270E	Aldrin	0.70	U	ng/L	P414484	
		Alpha-BHC	0.11	U	ng/L	P414484	
		Alpha-Chlordane	0.27	I	ng/L	P414484	
		PCB-1016	2.2	U	ng/L	P414484	
		Beta-BHC	0.11	U	ng/L	P414484	
		PCB-1221	2.2	U	ng/L	P414484	
		Beta-Cyfluthrin**	1.3	U	ng/L	P414484	
		PCB-1232	2.2	U	ng/L	P414484	
		Bifenthrin**	0.54	U	ng/L	P414484	
		PCB-1242	2.2	U	ng/L	P414484	

Field ID: G4NW0244 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329918	EPA 8270E	Carbophenothion	0.97	U	ng/L	P414484	
		PCB-1248	2.2	U	ng/L	P414484	
		Chlorothalonil	1.3	U	ng/L	P414484	
		PCB-1254	2.2	U	ng/L	P414484	
		Cis-Nonachlor**	0.22	U	ng/L	P414484	
		PCB-1260	2.2	U	ng/L	P414484	
		Cypermethrin	1.6	U	ng/L	P414484	
		Dacthal**	0.16	U	ng/L	P414484	
		DDD-p,p'	0.27	U	ng/L	P414484	
		DDE-p,p'	0.22	U	ng/L	P414484	
		DDT-p,p'	0.27	U	ng/L	P414484	
		Delta-BHC	0.43	U	ng/L	P414484	
		Deltamethrin**	1.3	U	ng/L	P414484	
		Dichlobenil**	0.27	U	ng/L	P414484	
		Dicofol	1.3	UJ	ng/L	P414484	LCS, MS
		Dieldrin	4.1		ng/L	P414484	
		Endosulfan I	0.43	U	ng/L	P414484	
		Endosulfan II	0.43	U	ng/L	P414484	
		Endosulfan Sulfate	0.32	U	ng/L	P414484	
		Endrin	0.43	U	ng/L	P414484	
		Endrin Aldehyde	0.81	U	ng/L	P414484	
		Endrin Ketone	0.43	U	ng/L	P414484	
		Esfenvalerate**	0.81	U	ng/L	P414484	
		Ethalfluralin**	0.16	U	ng/L	P414484	
		Fenpropathrin**	0.27	U	ng/L	P414484	
		Gamma-BHC	0.13	U	ng/L	P414484	
		Gamma-Chlordane	0.30	I	ng/L	P414484	
		Heptachlor	0.22	U	ng/L	P414484	
		Heptachlor Epoxide	3.1		ng/L	P414484	
		Hexachlorobenzene**	1.1	U	ng/L	P414484	
		Kepone**	5.4	U	ng/L	P414484	
		Lambda-Cyhalothrin**	0.81	U	ng/L	P414484	
		Methoprene**	0.81	U	ng/L	P414484	
		Methoxychlor	0.32	U	ng/L	P414484	
		MGK-264**	0.23	I	ng/L	P414484	
		Mirex	0.75	U	ng/L	P414484	
		Oxychlordane**	0.32	U	ng/L	P414484	
		Permethrin	1.7	U	ng/L	P414484	
		Phenothrin**	0.97	U	ng/L	P414484	
		Piperonyl Butoxide**	0.80	I	ng/L	P414484	
		Prallethrin**	2.2	U	ng/L	P414484	
		Tau-Fluvalinate**	0.27	U	ng/L	P414484	
		Tetramethrin**	0.81	U	ng/L	P414484	
		Trans-Nonachlor**	0.22	U	ng/L	P414484	
		Triclosan Methyl**	0.16	U	ng/L	P414484	

Field ID: G4NW0244

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329918	EPA 8270E	Trifluralin	0.22	U	ng/L	P414484	
	EPA 8276	Chlordane	3.2	I	ng/L	P414484	
		Toxaphene	16	U	ng/L	P414484	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Jackson Creek upstream of Prieto Drive **Collection Date/Time: 05/24/2022 10:25**

Field ID: G4NW0505 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329924	EPA 8270E	Aldrin	0.71	U	ng/L	P414484	
		Alpha-BHC	0.11	U	ng/L	P414484	
		Alpha-Chlordane	1.3		ng/L	P414484	
		PCB-1016	2.2	U	ng/L	P414484	
		Beta-BHC	0.11	U	ng/L	P414484	
		PCB-1221	2.2	U	ng/L	P414484	
		Beta-Cyfluthrin**	1.4	U	ng/L	P414484	
		PCB-1232	2.2	U	ng/L	P414484	
		Bifenthrin**	0.54	U	ng/L	P414484	
		PCB-1242	2.2	U	ng/L	P414484	
		Carbophenothion	0.98	U	ng/L	P414484	
		PCB-1248	2.2	U	ng/L	P414484	
		Chlorothalonil	1.4	U	ng/L	P414484	
		PCB-1254	2.2	U	ng/L	P414484	
		Cis-Nonachlor**	0.22	U	ng/L	P414484	
		PCB-1260	2.2	U	ng/L	P414484	
		Cypermethrin	1.6	U	ng/L	P414484	
		Dacthal**	0.16	U	ng/L	P414484	
		DDD-p,p'	0.27	U	ng/L	P414484	
		DDE-p,p'	0.22	U	ng/L	P414484	
		DDT-p,p'	0.27	U	ng/L	P414484	
		Delta-BHC	0.44	U	ng/L	P414484	
		Deltamethrin**	1.4	U	ng/L	P414484	
		Dichlobenil**	0.27	U	ng/L	P414484	
		Dicofol	1.4	UJ	ng/L	P414484	LCS, MS
		Dieldrin	11		ng/L	P414484	
		Endosulfan I	0.44	U	ng/L	P414484	
		Endosulfan II	0.44	U	ng/L	P414484	
		Endosulfan Sulfate	0.33	U	ng/L	P414484	
		Endrin	0.44	U	ng/L	P414484	
		Endrin Aldehyde	0.82	U	ng/L	P414484	
		Endrin Ketone	0.44	U	ng/L	P414484	
		Esfenvalerate**	0.82	U	ng/L	P414484	
		Ethalfluralin**	0.16	U	ng/L	P414484	
		Fenpropathrin**	0.27	U	ng/L	P414484	
		Gamma-BHC	0.14	U	ng/L	P414484	
		Gamma-Chlordane	1.2		ng/L	P414484	
		Heptachlor	0.22	U	ng/L	P414484	
		Heptachlor Epoxide	11		ng/L	P414484	
		Hexachlorobenzene**	1.1	U	ng/L	P414484	
		Kepone**	5.4	U	ng/L	P414484	
		Lambda-Cyhalothrin**	0.82	U	ng/L	P414484	
		Methoprene**	0.82	U	ng/L	P414484	
		Methoxychlor	0.33	U	ng/L	P414484	

Field ID: G4NW0505 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329924	EPA 8270E	MGK-264**	0.32	I	ng/L	P414484	
		Mirex	0.76	U	ng/L	P414484	
		Oxychlordane**	0.33	U	ng/L	P414484	
		Permethrin	1.7	U	ng/L	P414484	
		Phenothrin**	0.98	U	ng/L	P414484	
		Piperonyl Butoxide**	0.29	I	ng/L	P414484	
		Prallethrin**	2.2	U	ng/L	P414484	
		Tau-Fluvalinate**	0.27	U	ng/L	P414484	
		Tetramethrin**	0.82	U	ng/L	P414484	
		Trans-Nonachlor**	0.26	I	ng/L	P414484	
		Triclosan Methyl**	0.16	U	ng/L	P414484	
		Trifluralin	0.22	U	ng/L	P414484	
	EPA 8276	Chlordane	14	I	ng/L	P414484	
		Toxaphene	16	U	ng/L	P414484	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Carpenter Creek upstream of 9th Avenue **Collection Date/Time: 05/24/2022 11:40**

Field ID: G4NW0415 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329908	EPA 8321B	2,4-D	0.0096		ug/L	P414365	
		Acesulfame K	0.10	U	ug/L	P414386	
		2,4,5-T	0.0040	U	ug/L	P414365	
		AMPA	0.10	U	ug/L	P414386	
		Acetaminophen	0.0080	U	ug/L	P414365	
		Acetamiprid	0.0020	U	ug/L	P414365	
		Endothall	0.25	U	ug/L	P414386	
		Glufosinate	0.10	U	ug/L	P414386	
		Glyphosate	0.10	U	ug/L	P414386	
		Afidopyropen	0.0020	U	ug/L	P414365	
		Bentazon	0.0011	I	ug/L	P414365	
		Sucralose	0.30		ug/L	P414386	
		Benzovindiflupyr	0.0020	U	ug/L	P414365	
		Carbamazepine	0.0016	I	ug/L	P414365	
		Clothianidin	0.0028	I	ug/L	P414365	
		Dinotefuran	0.0020	U	ug/L	P414365	
		Diuron	0.018		ug/L	P414365	
		Fenuron	0.032	U	ug/L	P414365	
		Fluridone	8.0E-04	U	ug/L	P414365	
		Imazapyr	0.0059	I	ug/L	P414365	
		Hydrocodone	0.0020	U	ug/L	P414365	
		Ibuprofen	0.020	U	ug/L	P414365	
		Imidacloprid	0.023		ug/L	P414365	
		Linuron	0.0040	U	ug/L	P414365	
		Mandestrobin	0.0020	U	ug/L	P414365	
		MCPP	0.0040	U	ug/L	P414365	
		Naproxen	0.0080	U	ug/L	P414365	
		Primidone	0.0040	U	ug/L	P414365	
		Pyraclostrobin	0.0020	U	ug/L	P414365	
		Silvex	0.0040	U	ug/L	P414365	
		Thiamethoxam	0.0020	U	ug/L	P414365	
		Tolfenpyrad	0.0020	U	ug/L	P414365	
		Triclopyr	0.0040	U	ug/L	P414365	
2329919	EPA 8270E	Aldrin	0.71	U	ng/L	P414484	
		Alpha-BHC	0.11	U	ng/L	P414484	
		Alpha-Chlordane	0.43	I	ng/L	P414484	
		PCB-1016	2.2	U	ng/L	P414484	
		Beta-BHC	0.11	U	ng/L	P414484	
		PCB-1221	2.2	U	ng/L	P414484	
		Beta-Cyfluthrin**	1.4	U	ng/L	P414484	
		PCB-1232	2.2	U	ng/L	P414484	
		Bifenthrin**	0.55	U	ng/L	P414484	
		PCB-1242	2.2	U	ng/L	P414484	
		Carbophenothion	0.99	U	ng/L	P414484	

Field ID: G4NW0415 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329919	EPA 8270E	PCB-1248	2.2	U	ng/L	P414484	
		Chlorothalonil	1.4	U	ng/L	P414484	
		PCB-1254	2.2	U	ng/L	P414484	
		Cis-Nonachlor**	0.22	U	ng/L	P414484	
		PCB-1260	2.2	U	ng/L	P414484	
		Cypermethrin	1.6	U	ng/L	P414484	
		Dacthal**	0.16	U	ng/L	P414484	
		DDD-p,p'	0.27	U	ng/L	P414484	
		DDE-p,p'	0.22	U	ng/L	P414484	
		DDT-p,p'	0.27	U	ng/L	P414484	
		Delta-BHC	0.44	U	ng/L	P414484	
		Deltamethrin**	1.4	U	ng/L	P414484	
		Dichlobenil**	0.27	U	ng/L	P414484	
		Dicofol	1.4	UJ	ng/L	P414484	LCS, MS
		Dieldrin	4.0		ng/L	P414484	
		Endosulfan I	0.44	U	ng/L	P414484	
		Endosulfan II	0.44	U	ng/L	P414484	
		Endosulfan Sulfate	0.33	U	ng/L	P414484	
		Endrin	0.44	U	ng/L	P414484	
		Endrin Aldehyde	0.82	U	ng/L	P414484	
		Endrin Ketone	0.44	U	ng/L	P414484	
		Esfenvalerate**	0.82	U	ng/L	P414484	
		Ethalfluralin**	0.16	U	ng/L	P414484	
		Fenpropathrin**	0.27	U	ng/L	P414484	
		Gamma-BHC	0.14	U	ng/L	P414484	
		Gamma-Chlordane	0.38	I	ng/L	P414484	
		Heptachlor	0.22	U	ng/L	P414484	
		Heptachlor Epoxide	3.9		ng/L	P414484	
		Hexachlorobenzene**	1.1	U	ng/L	P414484	
		Kepone**	5.5	U	ng/L	P414484	
		Lambda-Cyhalothrin**	0.82	U	ng/L	P414484	
		Methoprene**	0.82	U	ng/L	P414484	
		Methoxychlor	0.33	U	ng/L	P414484	
		MGK-264**	0.28	I	ng/L	P414484	
		Mirex	0.77	U	ng/L	P414484	
		Oxychlordane**	0.33	U	ng/L	P414484	
		Permethrin	1.8	U	ng/L	P414484	
		Phenothrin**	0.99	U	ng/L	P414484	
		Piperonyl Butoxide**	0.26	I	ng/L	P414484	
		Prallethrin**	2.2	U	ng/L	P414484	
		Tau-Fluvalinate**	0.27	U	ng/L	P414484	
		Tetramethrin**	0.82	U	ng/L	P414484	
		Trans-Nonachlor**	0.22	U	ng/L	P414484	
		Triclosan Methyl**	0.16	U	ng/L	P414484	
		Trifluralin	0.22	U	ng/L	P414484	

Field ID: G4NW0415 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2329919	EPA 8276	Chlordane	4.5	I	ng/L	P414484	
		Toxaphene	16	U	ng/L	P414484	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P414373

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414378

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P414396

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
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P414396

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414632

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414635

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415146

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414564

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414641

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414411

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

Reference Method: EPA 8270E
Batch ID: P414484

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Carbophenothion	0.90	U	ng/L
Carbophenothion	0.90	U	ng/L
Chlorothalonil	1.2	U	ng/L
Chlorothalonil	1.2	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P414484

Component	Result	Code	Units
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfluralin	0.15	U	ng/L
Ethalfluralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P414484

Component	Result	Code	Units
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.70	U	ng/L
Mirex	0.70	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276
Batch ID: P414484

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Chlordane	2.5	U	ng/L
Toxaphene	15	U	ng/L
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B
Batch ID: P414365

Component	Result	Code	Units

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P414365

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	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
Mandestrobin	0.0020	U	ug/L
MCPP	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P414386

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P414473

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P414473

Component	Result	Code	Units
Propoxur	0.0020	U	ug/L

Reference Method: SM 2320 B-2011
Batch ID: P414539

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

Reference Method: SM 2540 C-2011
Batch ID: P414670

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P414674

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P415142

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P414517

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P414373

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.8		P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414378

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.9		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P414396

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	85 - 115
Iron	107		P	85 - 115
Magnesium	110		P	85 - 115
Potassium	105		P	85 - 115
Sodium	103		P	85 - 115
Strontium	93.9		P	85 - 115
Tin	102		P	85 - 115
Titanium	102		P	85 - 115
Vanadium	95.2		P	85 - 115
Zinc	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P414396

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	97.9		P	85 - 115
Antimony	96.8		P	85 - 115
Arsenic	97.7		P	85 - 115
Barium	99.4		P	85 - 115
Beryllium	95.3		P	85 - 115
Boron	103		P	85 - 115
Cadmium	94.7		P	85 - 115
Chromium	95.7		P	85 - 115
Cobalt	96.9		P	85 - 115
Copper	96.2		P	85 - 115
Lead	97.8		P	85 - 115
Manganese	96.4		P	85 - 115
Molybdenum	96.2		P	85 - 115
Nickel	97.6		P	85 - 115
Selenium	96.7		P	85 - 115
Silver	97.2		P	85 - 115
Thallium	98.7		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414632

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	95.3		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414635

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415146

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414564

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	94.8		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414641

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	97.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414411

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

Reference Method: EPA 8270E
Batch ID: P414484

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	55.4		P	10 - 93.0
Alpha-BHC	96.3		P	75 - 106
Alpha-Chlordane	88.4		P	50 - 109
Beta-BHC	104		P	36 - 138
Beta-Cyfluthrin	98.6		P	23 - 167
Bifenthrin	84.1		P	11 - 123
Carbophenothion	62.7		P	18 - 96.0
Chlorothalonil	124		P	27 - 190
Cis-Nonachlor	74.8		P	40 - 111
Cypermethrin	97.7		P	25 - 155
Dacthal	96.7		P	72 - 119
DDD-p,p'	80.7		P	47 - 108
DDE-p,p'	83.8		P	48 - 107
DDT-p,p'	83.0		P	49 - 111
Delta-BHC	115		P	54 - 138
Deltamethrin	84.8		P	22 - 189
Dichlobenil	79.7		P	32 - 113
Dicofol	155		F	50 - 108
Dieldrin	85.9		P	56 - 110
Endosulfan I	89.6		P	60 - 105
Endosulfan II	93.7		P	50 - 120
Endosulfan Sulfate	94.5		P	55 - 121

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P414484

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endrin	90.1		P	31 - 119
Endrin Aldehyde	90.1		P	36 - 116
Endrin Ketone	100		P	69 - 177
Esfenvalerate	98.5		P	10 - 179
Ethalfluralin	84.0		P	49 - 99.0
Fenpropathrin	97.3		P	35 - 119
Gamma-BHC	103		P	69 - 120
Gamma-Chlordane	80.4		P	45 - 107
Heptachlor	73.8		P	41 - 100
Heptachlor Epoxide	83.6		P	58 - 106
Hexachlorobenzene	71.1		P	39 - 100
Kepone	186		P	10 - 191
Lambda-Cyhalothrin	88.8		P	21 - 206
Methoprene	75.9		P	10 - 129
Methoxychlor	97.5		P	61 - 111
MGK-264	83.9		P	20 - 123
Mirex	75.3		P	10 - 182
Oxychlordane	77.8		P	39 - 110
PCB-1016	81.1		P	49 - 111
PCB-1260	101		P	42 - 116
Permethrin	95.1		P	26 - 152
Phenothrin	72.6		P	10 - 109
Piperonyl Butoxide	107		P	19 - 147
Prallethrin	78.3		P	14 - 109
Tau-Fluvalinate	94.2		P	16 - 134
Tetramethrin	93.5		P	10 - 125
Trans-Nonachlor	76.8		P	45 - 107
Triclosan Methyl	87.4		P	60 - 110
Trifluralin	84.0		P	44 - 101

Reference Method: EPA 8276
Batch ID: P414484

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	105		P	61 - 118
Toxaphene	98.8		P	51 - 122

Reference Method: EPA 8321B
Batch ID: P414365

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	91.6		P	40 - 150
2,4,5-T	80.7		P	40 - 150
Acetaminophen	66.4		P	30 - 150
Acetamiprid	90.5		P	40 - 150
Afidopyropen	68.7		P	30 - 150
Bentazon	117		P	30 - 150
Benzovindiflupyr	86.7		P	40 - 150
Carbamazepine	105		P	40 - 150
Clothianidin	100		P	40 - 150
Dinotefuran	102		P	40 - 150
Diuron	87.8		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P414365

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fenuron	99.1		P	40 - 150
Fluridone	82.0		P	40 - 150
Hydrocodone	91.2		P	40 - 150
Ibuprofen	70.2		P	40 - 150
Imazapyr	101		P	40 - 150
Imidacloprid	94.6		P	40 - 150
Linuron	71.9		P	40 - 150
Mandestrobin	84.6		P	40 - 150
MCPP	126		P	40 - 150
Naproxen	81.6		P	40 - 150
Primidone	97.3		P	40 - 150
Pyraclostrobin	94.8		P	40 - 150
Silvex	74.0		P	40 - 150
Thiamethoxam	97.6		P	40 - 150
Tolfenpyrad	50.9		P	30 - 150
Triclopyr	87.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P414386

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	129		P	40 - 150
AMPA	97.7		P	40 - 150
Endothall	95.8		P	40 - 150
Glufosinate	97.7		P	40 - 150
Glyphosate	95.2		P	40 - 150
Sucralose	95.3		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P414473

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	95.5		P	40 - 150
Aldicarb	84.3		P	30 - 150
Aldicarb Sulfone	99.9		P	40 - 150
Aldicarb Sulfoxide	97.2		P	40 - 150
Carbaryl	76.9		P	40 - 150
Carbofuran	88.5		P	40 - 150
Methiocarb	70.2		P	40 - 150
Methomyl	93.7		P	40 - 150
Oxamyl	100		P	40 - 150
Propoxur	91.8		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P414539

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	94.5		P	94 - 106

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P415142

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	93.8		F	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P414517

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.6		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P414396

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2329260	Calcium	103		P	80 - 120
2329260	Iron	108	108	P/P	80 - 120
2329260	Magnesium	111	109	P/P	80 - 120
2329260	Potassium	102	102	P/P	80 - 120
2329260	Sodium	102		P	80 - 120
2329260	Strontium	94.1	99.4	P/P	80 - 120
2329260	Tin	101	103	P/P	80 - 120
2329260	Titanium	103	104	P/P	80 - 120
2329260	Vanadium	98.4	99.6	P/P	80 - 120
2329260	Zinc	102	104	P/P	80 - 120
2330030	Calcium	104		P	80 - 120
2330030	Iron	111		P	80 - 120
2330030	Magnesium	114		P	80 - 120
2330030	Potassium	105		P	80 - 120
2330030	Sodium	110		P	80 - 120
2330030	Strontium	111		P	80 - 120
2330030	Tin	104		P	80 - 120
2330030	Titanium	104		P	80 - 120
2330030	Vanadium	99.7		P	80 - 120
2330030	Zinc	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P414396

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2329260	Aluminum	102	102	P/P	80 - 120
2329260	Antimony	101	101	P/P	80 - 120
2329260	Arsenic	100	99.7	P/P	80 - 120
2329260	Barium	103	102	P/P	80 - 120
2329260	Beryllium	86.1	98.1	P/P	80 - 120
2329260	Boron	107	107	P/P	80 - 120
2329260	Cadmium	100	97.9	P/P	80 - 120
2329260	Chromium	100	98.9	P/P	80 - 120
2329260	Cobalt	99.4	97.8	P/P	80 - 120
2329260	Copper	99.6	98.9	P/P	80 - 120
2329260	Lead	102	102	P/P	80 - 120
2329260	Manganese	101	98.5	P/P	80 - 120
2329260	Molybdenum	103	101	P/P	80 - 120
2329260	Nickel	99.1	98.5	P/P	80 - 120
2329260	Selenium	96.4	98.5	P/P	80 - 120
2329260	Silver	99.0	97.4	P/P	80 - 120
2329260	Thallium	104	107	P/P	80 - 120
2330030	Aluminum	103		P	80 - 120
2330030	Antimony	99.4		P	80 - 120
2330030	Arsenic	99.6		P	80 - 120
2330030	Barium	103		P	80 - 120
2330030	Beryllium	93.3		P	80 - 120
2330030	Boron	104		P	80 - 120
2330030	Cadmium	99.5		P	80 - 120
2330030	Chromium	98.0		P	80 - 120
2330030	Cobalt	98.3		P	80 - 120
2330030	Copper	98.6		P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P414396

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330030	Lead	101		P	80 - 120
2330030	Manganese	104		P	80 - 120
2330030	Molybdenum	101		P	80 - 120
2330030	Nickel	99.8		P	80 - 120
2330030	Selenium	96.7		P	80 - 120
2330030	Silver	98.4		P	80 - 120
2330030	Thallium	103		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414632

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2329409	Chloride	95.6		P	90 - 110
2329911	Chloride	94.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414635

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2329409	Sulfate	96.1		P	90 - 110
2329911	Sulfate	94.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415146

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2329886	Ammonia-N	96.0	95.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414564

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2329699	Kjeldahl Nitrogen	103	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414641

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2329857	NO2NO3-N	96.0	96.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414411

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2329939	Total-P	104	101	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P414484

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2329988	Aldrin	69.5	69.8	P/P	10 - 89.0
2329988	Alpha-BHC	94.8	94.9	P/P	71 - 105

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P414484

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2329988	Alpha-Chlordane	82.2	80.1	P/P	43 - 107
2329988	Beta-BHC	127	132	P/P	57 - 152
2329988	Beta-Cyfluthrin	92.7	86.0	P/P	29 - 186
2329988	Bifenthrin	81.2	77.3	P/P	19 - 119
2329988	Carbophenothion	54.5	62.9	P/P	19 - 107
2329988	Chlorothalonil	239	229	P/P	10 - 245
2329988	Cis-Nonachlor	64.0	65.5	P/P	36 - 110
2329988	Cypermethrin	94.0	87.6	P/P	24 - 169
2329988	Dacthal	97.5	97.9	P/P	62 - 115
2329988	DDD-p,p'	73.6	70.8	P/P	36 - 109
2329988	DDE-p,p'	78.5	77.6	P/P	30 - 114
2329988	DDT-p,p'	86.2	81.1	P/P	42 - 108
2329988	Delta-BHC	144	149	P/P	60 - 164
2329988	Deltamethrin	60.7	90.3	P/P	10 - 210
2329988	Dichlobenil	49.2	48.1	P/P	23 - 108
2329988	Dicofol	277	247	F/F	44 - 109
2329988	Dieldrin	82.6	78.9	P/P	37 - 119
2329988	Endosulfan I	87.2	85.7	P/P	52 - 105
2329988	Endosulfan II	84.5	82.2	P/P	35 - 127
2329988	Endosulfan Sulfate	88.3	80.8	P/P	39 - 130
2329988	Endrin	76.2	78.8	P/P	30 - 116
2329988	Endrin Aldehyde	79.6	77.3	P/P	20 - 110
2329988	Endrin Ketone	111	106	P/P	48 - 134
2329988	Esfenvalerate	97.2	90.7	P/P	10 - 199
2329988	Ethalfluralin	88.7	90.6	P/P	48 - 95.0
2329988	Fenpropathrin	105	93.4	P/P	37 - 121
2329988	Gamma-BHC	108	106	P/P	61 - 126
2329988	Gamma-Chlordane	83.7	79.6	P/P	39 - 105
2329988	Heptachlor	83.5	81.4	P/P	38 - 96.0
2329988	Heptachlor Epoxide	109	93.7	P/P	42 - 114
2329988	Hexachlorobenzene	78.1	81.8	P/P	39 - 93.0
2329988	Kepone	137	146	P/P	10 - 215
2329988	Lambda-Cyhalothrin	86.4	81.8	P/P	10 - 204
2329988	Methoprene	85.1	84.4	P/P	17 - 108
2329988	Methoxychlor	115	109	P/P	56 - 115
2329988	MGK-264	88.0	86.4	P/P	35 - 120
2329988	Mirex	70.2	67.1	P/P	10 - 178
2329988	Oxychlordane	82.8	80.2	P/P	47 - 91.0
2329988	Permethrin	97.6	90.6	P/P	27 - 170
2329988	Phenothrin	78.8	79.9	P/P	10 - 133
2329988	Piperonyl Butoxide	113	108	P/P	23 - 150
2329988	Prallethrin	101	92.3	P/P	21 - 113
2329988	Tau-Fluvalinate	87.2	83.1	P/P	16 - 158
2329988	Tetramethrin	122	113	P/P	22 - 132
2329988	Trans-Nonachlor	76.2	72.2	P/P	43 - 102
2329988	Triclosan Methyl	82.9	82.5	P/P	49 - 109
2329988	Trifluralin	86.1	83.6	P/P	48 - 93.0
2330361	PCB-1016	95.3	99.5	P/P	46 - 110
2330361	PCB-1260	90.3	90.2	P/P	42 - 111

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P414484

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330361	Chlordane	92.8	94.6	P/P	55 - 128
2330361	Toxaphene	99.7	102	P/P	57 - 211

Reference Method: EPA 8321B
Batch ID: P414365

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2329830	2,4-D	96.3	109	P/P	40 - 150
2329830	2,4,5-T	87.3	93.5	P/P	40 - 150
2329830	Acetaminophen	97.5	98.2	P/P	30 - 150
2329830	Acetamiprid	91.6	103	P/P	40 - 150
2329830	Afidopyropen	77.2	85.1	P/P	30 - 150
2329830	Bentazon	107	102	P/P	30 - 150
2329830	Benzovindiflupyr	87.1	91.3	P/P	40 - 150
2329830	Carbamazepine	102	106	P/P	40 - 150
2329830	Clothianidin	99.6	103	P/P	40 - 150
2329830	Dinotefuran	119	122	P/P	40 - 150
2329830	Diuron	86.9	89.9	P/P	40 - 150
2329830	Fenuron	91.1	94.7	P/P	40 - 150
2329830	Fluridone	81.4	80.5	P/P	40 - 150
2329830	Hydrocodone	92.3	97.3	P/P	40 - 150
2329830	Ibuprofen	74.3	77.8	P/P	40 - 150
2329830	Imazapyr	111	104	P/P	40 - 150
2329830	Imidacloprid	105	104	P/P	40 - 150
2329830	Linuron	71.5	69.7	P/P	40 - 150
2329830	Mandestrobin	84.1	84.2	P/P	40 - 150
2329830	MCPP	123	133	P/P	40 - 150
2329830	Naproxen	71.7	78.9	P/P	40 - 150
2329830	Primidone	102	101	P/P	40 - 150
2329830	Pyraclostrobin	92.6	92.5	P/P	40 - 150
2329830	Silvex	77.9	84.8	P/P	40 - 150
2329830	Thiamethoxam	102	107	P/P	40 - 150
2329830	Tolfenpyrad	41.4	43.4	P/P	30 - 150
2329830	Triclopyr	90.2	95.2	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P414386

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2329414	Acesulfame K	115	90.8	P/P	40 - 150
2329414	AMPA	95.7	72.3	P/P	40 - 150
2329414	Endothall	93.7	73.5	P/P	40 - 150
2329414	Glufosinate	88.0	68.6	P/P	40 - 150
2329414	Glyphosate	85.1	68.8	P/P	40 - 150
2329414	Sucralose	96.4	73.2	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P414473

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2329909	3-Hydroxycarbofuran	106	112	P/P	40 - 150
2329909	Aldicarb	85.4	90.4	P/P	30 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P414473

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2329909	Aldicarb Sulfone	109	115	P/P	40 - 150
2329909	Aldicarb Sulfoxide	50.5	52.8	P/P	40 - 150
2329909	Carbaryl	71.5	76.9	P/P	40 - 150
2329909	Carbofuran	81.5	91.7	P/P	40 - 150
2329909	Methiocarb	68.2	74.5	P/P	40 - 150
2329909	Methomyl	86.7	93.3	P/P	40 - 150
2329909	Oxamyl	99.1	104	P/P	40 - 150
2329909	Propoxur	86.9	92.3	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P415142

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330089	Fluoride	96.3	97.4	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P414517

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2329782	Organic Carbon	94.0	94.8	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414378

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329884	Turbidity	1.83	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P414396

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329260	Calcium	0.719	Spike	P	0 - 20
2329260	Iron	0.126	Spike	P	0 - 20
2329260	Magnesium	0.675	Spike	P	0 - 20
2329260	Potassium	0.102	Spike	P	0 - 20
2329260	Sodium	1.48	Spike	P	0 - 20
2329260	Strontium	5.41	Spike	P	0 - 20
2329260	Tin	1.34	Spike	P	0 - 20
2329260	Titanium	1.19	Spike	P	0 - 20
2329260	Vanadium	1.22	Spike	P	0 - 20
2329260	Zinc	1.41	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P414396

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329260	Aluminum	0.235	Spike	P	0 - 20
2329260	Antimony	0.545	Spike	P	0 - 20
2329260	Arsenic	0.655	Spike	P	0 - 20
2329260	Barium	0.534	Spike	P	0 - 20
2329260	Beryllium	13.1	Spike	P	0 - 20
2329260	Boron	0.398	Spike	P	0 - 20
2329260	Cadmium	2.64	Spike	P	0 - 20
2329260	Chromium	1.41	Spike	P	0 - 20
2329260	Cobalt	1.67	Spike	P	0 - 20
2329260	Copper	0.632	Spike	P	0 - 20
2329260	Lead	0.258	Spike	P	0 - 20
2329260	Manganese	1.84	Spike	P	0 - 20
2329260	Molybdenum	1.90	Spike	P	0 - 20
2329260	Nickel	0.622	Spike	P	0 - 20
2329260	Selenium	2.06	Spike	P	0 - 20
2329260	Silver	1.60	Spike	P	0 - 20
2329260	Thallium	2.72	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414632

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329409	Chloride	0.438	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414635

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329409	Sulfate	0.403	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415146

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329886	Ammonia-N	0.362	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414564

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329699	Kjeldahl Nitrogen	0.406	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414641

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329857	NO2NO3-N	0.519	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414411

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329939	Total-P	1.42	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P414484

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329988	Aldrin	0.393	Spike	P	0 - 37
2329988	Alpha-BHC	0.0560	Spike	P	0 - 16
2329988	Alpha-Chlordane	2.57	Spike	P	0 - 28
2329988	Beta-BHC	3.52	Spike	P	0 - 32
2329988	Beta-Cyfluthrin	7.48	Spike	P	0 - 41
2329988	Bifenthrin	4.98	Spike	P	0 - 36
2329988	Carbophenothion	14.4	Spike	P	0 - 81
2329988	Chlorothalonil	4.40	Spike	P	0 - 54
2329988	Cis-Nonachlor	2.30	Spike	P	0 - 33
2329988	Cypermethrin	7.02	Spike	P	0 - 38
2329988	Dacthal	0.409	Spike	P	0 - 23
2329988	DDD-p,p'	3.84	Spike	P	0 - 35
2329988	DDE-p,p'	1.17	Spike	P	0 - 27
2329988	DDT-p,p'	6.09	Spike	P	0 - 31
2329988	Delta-BHC	3.15	Spike	P	0 - 30
2329988	Deltamethrin	39.3	Spike	P	0 - 76

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P414484

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329988	Dichlobenil	2.10	Spike	P	0 - 33
2329988	Dicofol	11.6	Spike	P	0 - 24
2329988	Dieldrin	4.53	Spike	P	0 - 35
2329988	Endosulfan I	1.69	Spike	P	0 - 25
2329988	Endosulfan II	2.75	Spike	P	0 - 31
2329988	Endosulfan Sulfate	8.85	Spike	P	0 - 38
2329988	Endrin	3.43	Spike	P	0 - 53
2329988	Endrin Aldehyde	2.85	Spike	P	0 - 81
2329988	Endrin Ketone	5.36	Spike	P	0 - 33
2329988	Esfenvalerate	6.95	Spike	P	0 - 46
2329988	Ethalfluralin	2.21	Spike	P	0 - 22
2329988	Fenpropathrin	11.4	Spike	P	0 - 29
2329988	Gamma-BHC	2.28	Spike	P	0 - 17
2329988	Gamma-Chlordane	4.93	Spike	P	0 - 28
2329988	Heptachlor	2.58	Spike	P	0 - 28
2329988	Heptachlor Epoxide	15.0	Spike	P	0 - 23
2329988	Hexachlorobenzene	4.70	Spike	P	0 - 22
2329988	Kepone	6.23	Spike	P	0 - 61
2329988	Lambda-Cyhalothrin	5.42	Spike	P	0 - 52
2329988	Methoprene	0.724	Spike	P	0 - 38
2329988	Methoxychlor	4.73	Spike	P	0 - 29
2329988	MGK-264	1.66	Spike	P	0 - 41
2329988	Mirex	4.53	Spike	P	0 - 39
2329988	Oxychlordane	3.31	Spike	P	0 - 33
2329988	Permethrin	7.44	Spike	P	0 - 39
2329988	Phenothrin	1.39	Spike	P	0 - 52
2329988	Piperonyl Butoxide	3.69	Spike	P	0 - 91
2329988	Prallethrin	9.35	Spike	P	0 - 34
2329988	Tau-Fluvalinate	4.77	Spike	P	0 - 41
2329988	Tetramethrin	7.41	Spike	P	0 - 43
2329988	Trans-Nonachlor	5.36	Spike	P	0 - 31
2329988	Triclosan Methyl	0.469	Spike	P	0 - 24
2329988	Trifluralin	2.94	Spike	P	0 - 23
2330361	PCB-1016	4.28	Spike	P	0 - 32
2330361	PCB-1260	0.100	Spike	P	0 - 31

Reference Method: EPA 8276
Batch ID: P414484

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330361	Chlordane	1.97	Spike	P	0 - 25
2330361	Toxaphene	2.36	Spike	P	0 - 24

Reference Method: EPA 8321B
Batch ID: P414365

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329830	2,4-D	12.2	Spike	P	0 - 30
2329830	2,4,5-T	6.95	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P414365

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329830	Acetaminophen	0.691	Spike	P	0 - 30
2329830	Acetamiprid	11.9	Spike	P	0 - 30
2329830	Afidopyropen	9.69	Spike	P	0 - 30
2329830	Bentazon	4.80	Spike	P	0 - 30
2329830	Benzovindiflupyr	4.70	Spike	P	0 - 30
2329830	Carbamazepine	3.18	Spike	P	0 - 30
2329830	Clothianidin	3.31	Spike	P	0 - 30
2329830	Dinotefuran	1.79	Spike	P	0 - 30
2329830	Diuron	3.44	Spike	P	0 - 30
2329830	Fenuron	3.95	Spike	P	0 - 30
2329830	Fluridone	1.08	Spike	P	0 - 30
2329830	Hydrocodone	5.32	Spike	P	0 - 30
2329830	Ibuprofen	4.53	Spike	P	0 - 30
2329830	Imazapyr	6.53	Spike	P	0 - 30
2329830	Imidacloprid	1.12	Spike	P	0 - 30
2329830	Linuron	2.58	Spike	P	0 - 30
2329830	Mandestrobin	0.146	Spike	P	0 - 30
2329830	MCPP	7.83	Spike	P	0 - 30
2329830	Naproxen	9.58	Spike	P	0 - 30
2329830	Primidone	1.12	Spike	P	0 - 30
2329830	Pyraclostrobin	0.0307	Spike	P	0 - 30
2329830	Silvex	8.40	Spike	P	0 - 30
2329830	Thiamethoxam	4.95	Spike	P	0 - 30
2329830	Tolfenpyrad	4.60	Spike	P	0 - 30
2329830	Triclopyr	5.46	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P414386

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329414	Acesulfame K	23.5	Spike	P	0 - 30
2329414	AMPA	27.8	Spike	P	0 - 30
2329414	Endothall	24.1	Spike	P	0 - 30
2329414	Glufosinate	24.8	Spike	P	0 - 30
2329414	Glyphosate	19.8	Spike	P	0 - 30
2329414	Sucralose	23.7	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P414473

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329909	3-Hydroxycarbofuran	5.71	Spike	P	0 - 30
2329909	Aldicarb	5.76	Spike	P	0 - 30
2329909	Aldicarb Sulfone	5.61	Spike	P	0 - 30
2329909	Aldicarb Sulfoxide	4.56	Spike	P	0 - 30
2329909	Carbaryl	7.22	Spike	P	0 - 30
2329909	Carbofuran	11.8	Spike	P	0 - 30
2329909	Methiocarb	8.86	Spike	P	0 - 30
2329909	Methomyl	7.37	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P414473

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329909	Oxamyl	4.78	Spike	P	0 - 30
2329909	Propoxur	6.06	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P414539

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330089	Total Alkalinity	0.261	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
Batch ID: P414670

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329935	TDS	5.38	Sample	P	0 - 10

Reference Method: SM 2540 D-2011
Batch ID: P414674

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329935	TSS	3.45	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P415142

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330089	Fluoride	1.03	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P414517

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2329782	Organic Carbon	0.739	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report
Surrogates

Lab Sample ID: 2329907
Field Sample ID: G4NW0244

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	81.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	97.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	110	P	30 - 160
EPA 8321B	Diuron-d6	85.5	P	30 - 160
EPA 8321B	Endothall-d6	81.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	101	P	30 - 160
EPA 8321B	Ibuprofen-d3	80.5	P	30 - 160
EPA 8321B	Primidone-d5	97.4	P	30 - 160
EPA 8321B	Sucralose-d6	127	P	30 - 160

Lab Sample ID: 2329908
Field Sample ID: G4NW0415

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	91.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	94.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	112	P	30 - 160
EPA 8321B	Diuron-d6	76.9	P	30 - 160
EPA 8321B	Endothall-d6	88.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	83.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	80.2	P	30 - 160
EPA 8321B	Primidone-d5	104	P	30 - 160
EPA 8321B	Sucralose-d6	129	P	30 - 160

Lab Sample ID: 2329909
Field Sample ID: G5NW0155

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	65.9	P	30 - 160

Lab Sample ID: 2329910
Field Sample ID: G5NW0155

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	101	P	30 - 160
EPA 8321B	Acetaminophen-d4	98.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	111	P	30 - 160
EPA 8321B	Diuron-d6	85.6	P	30 - 160
EPA 8321B	Endothall-d6	87.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	85.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	78.4	P	30 - 160
EPA 8321B	Primidone-d5	107	P	30 - 160
EPA 8321B	Sucralose-d6	130	P	30 - 160

Lab Sample ID: 2329918
Field Sample ID: G4NW0244

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	84.6	P	38 - 115
EPA 8270E	Decachlorobiphenyl	76.5	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	67.3	P	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	58.9	P	28 - 96.0

Quality Assurance Report
Surrogates

Lab Sample ID: 2329918
Field Sample ID: G4NW0244

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	64.6	P	30 - 97.0
EPA 8276	PCNB	98.0	P	45 - 119

Lab Sample ID: 2329919
Field Sample ID: G4NW0415

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	85.1	P	38 - 115
EPA 8270E	Decachlorobiphenyl	79.8	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	70.2	P	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	63.9	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	62.1	P	30 - 97.0
EPA 8276	PCNB	103	P	45 - 119

Lab Sample ID: 2329920
Field Sample ID: G4NW0130

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	109	P	38 - 115
EPA 8270E	Decachlorobiphenyl	92.5	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	73.0	P	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	60.4	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	74.4	P	30 - 97.0
EPA 8276	PCNB	103	P	45 - 119

Lab Sample ID: 2329921
Field Sample ID: G4NW0429

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	102	P	38 - 115
EPA 8270E	Decachlorobiphenyl	92.9	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	70.1	P	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	62.5	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	77.6	P	30 - 97.0
EPA 8276	PCNB	98.9	P	45 - 119

Lab Sample ID: 2329922
Field Sample ID: G5NW0155

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	103	P	38 - 115
EPA 8270E	Decachlorobiphenyl	87.3	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	71.7	P	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	59.5	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	70.4	P	30 - 97.0
EPA 8276	PCNB	98.7	P	45 - 119

Lab Sample ID: 2329923
Field Sample ID: G4NW0412

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	92.7	P	38 - 115

Quality Assurance Report
Surrogates

Lab Sample ID: 2329923
Field Sample ID: G4NW0412

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	83.3	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	79.3	P	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	67.3	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	69.0	P	30 - 97.0
EPA 8276	PCNB	108	P	45 - 119

Lab Sample ID: 2329924
Field Sample ID: G4NW0505

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	84.8	P	38 - 115
EPA 8270E	Decachlorobiphenyl	79.8	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	77.8	P	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	69.3	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	64.3	P	30 - 97.0
EPA 8276	PCNB	97.7	P	45 - 119

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: NU-094-1
Run ID: A112402
Included Lab Sample IDs: 2329903

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A112403
Included Lab Sample IDs: 2329903

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	100	P/P	95 - 105

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A112457
Included Lab Sample IDs: 2329931, 2329932, 2329933

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	100	99.3	P/P	90 - 110
Antimony	98.6	97.4	P/P	90 - 110
Arsenic	98.4	98.3	P/P	90 - 110
Barium	98.5	97.6	P/P	90 - 110
Beryllium	94.3	92.7	P/P	90 - 110
Boron	102	100	P/P	90 - 110
Cadmium	98.3	98.1	P/P	90 - 110
Chromium	98.4	97.7	P/P	90 - 110
Cobalt	97.0	97.5	P/P	90 - 110
Copper	97.7	97.9	P/P	90 - 110
Lead	98.9	98.4	P/P	90 - 110
Manganese	98.1	97.9	P/P	90 - 110
Molybdenum	98.1	98.4	P/P	90 - 110
Nickel	98.0	98.3	P/P	90 - 110
Selenium	95.7	95.7	P/P	90 - 110
Silver	98.8	99.4	P/P	90 - 110
Thallium	97.8	98.5	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A112492
Included Lab Sample IDs: 2329904

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.6	96.2	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A112498
Included Lab Sample IDs: 2329907, 2329908, 2329910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	91.4	95.7	P/P	60 - 160
Endothall	76.4	91.8	P/P	60 - 160
Glufosinate	104	95.3	P/P	60 - 160
Glyphosate	93.6	98.4	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A112499
Included Lab Sample IDs: 2329907, 2329908, 2329910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	141	106	P/P	60 - 160
Sucralose	103	74.7	P/P	60 - 160

Reference Method: SM 2320 B-2011
Run ID: A112501
Included Lab Sample IDs: 2329903

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	93.6	94.0	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A112515
Included Lab Sample IDs: 2329907, 2329908, 2329910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	98.5	103	P/P	50 - 150
2,4,5-T	104	98.7	P/P	50 - 150
Acetaminophen	108	106	P/P	60 - 160
Acetamiprid	104	104	P/P	50 - 150
Afidopyropen	101	98.5	P/P	50 - 150
Bentazon	108	109	P/P	50 - 160
Benzovindiflupyr	107	107	P/P	50 - 150
Carbamazepine	104	104	P/P	60 - 150
Clothianidin	110	104	P/P	60 - 150
Dinotefuran	102	102	P/P	50 - 150
Diuron	111	107	P/P	60 - 160
Fenuron	102	102	P/P	60 - 150
Fluridone	108	108	P/P	60 - 160
Hydrocodone	96.9	103	P/P	60 - 150
Ibuprofen	102	104	P/P	50 - 160
Imazapyr	100	92.2	P/P	50 - 150
Imidacloprid	99.5	100	P/P	60 - 150
Linuron	100	107	P/P	60 - 150
Mandestrobin	108	107	P/P	50 - 150
MCPP	98.8	102	P/P	50 - 150
Naproxen	93.7	78.1	P/P	50 - 160
Primidone	108	97.2	P/P	60 - 150
Pyraclostrobin	110	113	P/P	60 - 150
Silvex	102	102	P/P	50 - 150
Thiamethoxam	102	102	P/P	50 - 150
Tolfenpyrad	102	101	P/P	60 - 150
Triclopyr	92.2	104	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A112531
Included Lab Sample IDs: 2329904

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.8	96.2	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A112541
Included Lab Sample IDs: 2329931, 2329932, 2329933

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	103	99.6	P/P	90 - 110
Iron	103	99.5	P/P	90 - 110
Magnesium	103	99.7	P/P	90 - 110
Potassium	104	102	P/P	90 - 110
Sodium	104	102	P/P	90 - 110
Tin	99.6	102	P/P	90 - 110
Titanium	101	100	P/P	90 - 110
Vanadium	101	101	P/P	90 - 110
Zinc	100	102	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A112549
Included Lab Sample IDs: 2329909

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	101	103	P/P	60 - 150
Aldicarb	101	98.3	P/P	60 - 150
Aldicarb Sulfone	103	102	P/P	50 - 150
Aldicarb Sulfoxide	99.5	97.2	P/P	50 - 150
Carbaryl	102	103	P/P	60 - 150
Carbofuran	106	102	P/P	50 - 150
Methiocarb	106	106	P/P	50 - 150
Methomyl	98.9	97.4	P/P	50 - 150
Oxamyl	102	101	P/P	50 - 150
Propoxur	103	104	P/P	50 - 150

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A112552
Included Lab Sample IDs: 2329903

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.4	98.3	P/P	90 - 110
Sulfate	99.2	99.1	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A112560
Included Lab Sample IDs: 2329918, 2329919, 2329920, 2329921, 2329922, 2329923, 2329924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	99.4		P	80 - 120
PCB-1260	98.7		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A112565
Included Lab Sample IDs: 2329904

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	98.5	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A112599
Included Lab Sample IDs: 2329931, 2329932, 2329933

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Strontium	91.6	96.9	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A112608
Included Lab Sample IDs: 2329918, 2329919, 2329920, 2329921, 2329922, 2329923, 2329924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	94.6		P	80 - 120
Alpha-BHC	95.6		P	80 - 120
Alpha-Chlordane	99.4		P	80 - 120
Beta-BHC	96.5		P	80 - 120
Beta-Cyfluthrin	97.1		P	80 - 120
Bifenthrin	100		P	80 - 120
Carbophenothion	96.1		P	80 - 120
Chlorothalonil	99.5		P	80 - 120
Cis-Nonachlor	95.3		P	80 - 120
Cypermethrin	98.6		P	80 - 120
Dacthal	99.4		P	80 - 120
DDD-p,p'	99.7		P	80 - 120
DDE-p,p'	99.6		P	80 - 120
DDT-p,p'	100		P	80 - 120
Delta-BHC	96.1		P	80 - 120
Deltamethrin	89.4		P	80 - 120
Dichlobenil	99.1		P	80 - 120
Dicofol	109		P	80 - 120
Dieldrin	98.0		P	80 - 120
Endosulfan I	100		P	80 - 120
Endosulfan II	96.4		P	80 - 120
Endosulfan Sulfate	93.5		P	80 - 120
Endrin	95.9		P	80 - 120
Endrin Aldehyde	95.9		P	80 - 120
Endrin Ketone	103		P	80 - 120
Esfenvalerate	99.9		P	80 - 120
Ethalfluralin	99.1		P	80 - 120
Fenpropathrin	98.0		P	80 - 120
Gamma-BHC	99.5		P	80 - 120
Gamma-Chlordane	101		P	80 - 120
Heptachlor	97.4		P	80 - 120
Heptachlor Epoxide	97.4		P	80 - 120
Hexachlorobenzene	99.1		P	80 - 120
Kepone	92.2		P	80 - 120
Lambda-Cyhalothrin	98.6		P	80 - 120
Methoprene	100		P	80 - 120
Methoxychlor	98.8		P	80 - 120
MGK-264	100		P	80 - 120
Mirex	99.6		P	80 - 120
Oxychlordane	102		P	80 - 120
Permethrin	99.6		P	80 - 120
Phenothrin	99.8		P	80 - 120
Piperonyl Butoxide	96.8		P	80 - 120
Prallethrin	95.8		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112608
Included Lab Sample IDs: 2329918, 2329919, 2329920, 2329921, 2329922, 2329923, 2329924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tau-Fluvalinate	98.6		P	80 - 120
Tetramethrin	98.0		P	80 - 120
Trans-Nonachlor	97.2		P	80 - 120
Triclosan Methyl	98.7		P	80 - 120
Trifluralin	98.7		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A112613
Included Lab Sample IDs: 2329904

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.6	98.3	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A112621
Included Lab Sample IDs: 2329918, 2329919, 2329920, 2329921, 2329922, 2329923, 2329924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	103		P	80 - 120
Chlordane	97.8		P	80 - 120
Toxaphene	107		P	80 - 120
Toxaphene	88.3		P	80 - 120

Reference Method: SM 4500-F- C-2011
Run ID: A112796
Included Lab Sample IDs: 2329903

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	97.6	96.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A112802
Included Lab Sample IDs: 2329904

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.2	97.9	P/P	90 - 110

* 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			Precision		
						LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	99.8						
EPA 180.1 Rev. 2.0	Turbidity	96.9					1.83	
EPA 200.7 Rev. 4.4	Calcium	104	103	104				0.719
	Iron	107	108	108	111			0.126
	Magnesium	110	111	109	114			0.675
	Potassium	105	102	102	105			0.102
	Sodium	103	102	110				1.48
	Strontium	93.9	94.1	99.4	111			5.41
	Tin	102	101	103	104			1.34
	Titanium	102	103	104	104			1.19
	Vanadium	95.2	98.4	99.6	99.7			1.22
	Zinc	100	102	104	102			1.41
EPA 200.8 Rev. 5.4	Aluminum	97.9	102	102	103			0.235
	Antimony	96.8	101	101	99.4			0.545
	Arsenic	97.7	100	99.7	99.6			0.655
	Barium	99.4	103	102	103			0.534
	Beryllium	95.3	86.1	98.1	93.3			13.1
	Boron	103	107	107	104			0.398
	Cadmium	94.7	100	97.9	99.5			2.64
	Chromium	95.7	100	98.9	98.0			1.41
	Cobalt	96.9	99.4	97.8	98.3			1.67
	Copper	96.2	99.6	98.9	98.6			0.632
	Lead	97.8	102	102	101			0.258
	Manganese	96.4	101	98.5	104			1.84
	Molybdenum	96.2	103	101	101			1.90
	Nickel	97.6	99.1	98.5	99.8			0.622
	Selenium	96.7	96.4	98.5	96.7			2.06
	Silver	97.2	99.0	97.4	98.4			1.60
	Thallium	98.7	104	107	103			2.72
EPA 300.0 Rev. 2.1	Chloride	95.3	95.6	94.8			0.438	
	Sulfate	97.1	96.1	94.4			0.403	
EPA 350.1 Rev. 2.0	Ammonia-N	98.2	96.0	95.6				0.362
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	94.8	103	102				0.406
EPA 353.2 Rev. 2.0	NO2NO3-N	97.5	96.0	96.5				0.519
EPA 365.1 Rev. 2.0	Total-P	101	104	101				1.42
EPA 8270E	Aldrin	55.4	69.5	69.8				0.393
	Alpha-BHC	96.3	94.8	94.9				0.0560
	Alpha-Chlordane	88.4	82.2	80.1				2.57
	Beta-BHC	104	127	132				3.52
	Beta-Cyfluthrin	98.6	92.7	86.0				7.48
	Bifenthrin	84.1	81.2	77.3				4.98
	Carbophenothion	62.7	54.5	62.9				14.4
	Chlorothalonil	124	239	229				4.40
	Cis-Nonachlor	74.8	64.0	65.5				2.30
	Cypermethrin	97.7	94.0	87.6				7.02
	Dacthal	96.7	97.5	97.9				0.409
	DDD-p,p'	80.7	73.6	70.8				3.84
	DDE-p,p'	83.8	78.5	77.6				1.17
	DDT-p,p'	83.0	86.2	81.1				6.09
	Delta-BHC	115	144	149				3.15
	Deltamethrin	84.8	60.7	90.3				39.3
	Dichlobenil	79.7	49.2	48.1				2.10
	Dicofol	155	277	247				11.6
	Dieldrin	85.9	82.6	78.9				4.53

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Endosulfan I	89.6	87.2	85.7			1.69
	Endosulfan II	93.7	84.5	82.2			2.75
	Endosulfan Sulfate	94.5	88.3	80.8			8.85
	Endrin	90.1	76.2	78.8			3.43
	Endrin Aldehyde	90.1	79.6	77.3			2.85
	Endrin Ketone	100	111	106			5.36
	Esfenvalerate	98.5	97.2	90.7			6.95
	Ethalfluralin	84.0	88.7	90.6			2.21
	Fenpropathrin	97.3	105	93.4			11.4
	Gamma-BHC	103	108	106			2.28
	Gamma-Chlordane	80.4	83.7	79.6			4.93
	Heptachlor	73.8	83.5	81.4			2.58
	Heptachlor Epoxide	83.6	109	93.7			15.0
	Hexachlorobenzene	71.1	78.1	81.8			4.70
	Kepone	186	137	146			6.23
	Lambda-Cyhalothrin	88.8	86.4	81.8			5.42
	Methoprene	75.9	85.1	84.4			0.724
	Methoxychlor	97.5	115	109			4.73
	MGK-264	83.9	88.0	86.4			1.66
	Mirex	75.3	70.2	67.1			4.53
	Oxychlordane	77.8	82.8	80.2			3.31
	PCB-1016	81.1	95.3	99.5			4.28
	PCB-1260	101	90.3	90.2			0.100
	Permethrin	95.1	97.6	90.6			7.44
	Phenothrin	72.6	78.8	79.9			1.39
	Piperonyl Butoxide	107	113	108			3.69
	Prallethrin	78.3	101	92.3			9.35
	Tau-Fluvalinate	94.2	87.2	83.1			4.77
	Tetramethrin	93.5	122	113			7.41
	Trans-Nonachlor	76.8	76.2	72.2			5.36
	Triclosan Methyl	87.4	82.9	82.5			0.469
	Trifluralin	84.0	86.1	83.6			2.94
EPA 8276	Chlordane	105	92.8	94.6			1.97
	Toxaphene	98.8	99.7	102			2.36
EPA 8321B	2,4-D	91.6	96.3	109			12.2
	2,4,5-T	80.7	87.3	93.5			6.95
	3-Hydroxycarbofuran	95.5	106	112			5.71
	Acesulfame K	129	115	90.8			23.5
	Acetaminophen	66.4	97.5	98.2			0.691
	Acetamiprid	90.5	91.6	103			11.9
	Afidopyropen	68.7	77.2	85.1			9.69
	Aldicarb	84.3	85.4	90.4			5.76
	Aldicarb Sulfone	99.9	109	115			5.61
	Aldicarb Sulfoxide	97.2	50.5	52.8			4.56
	AMPA	97.7	95.7	72.3			27.8
	Bentazon	117	107	102			4.80
	Benzovindiflupyr	86.7	87.1	91.3			4.70
	Carbamazepine	105	102	106			3.18
	Carbaryl	76.9	71.5	76.9			7.22
	Carbofuran	88.5	81.5	91.7			11.8
	Clothianidin	100	99.6	103			3.31
	Dinotefuran	102	119	122			1.79
	Diuron	87.8	86.9	89.9			3.44
	Endothall	95.8	93.7	73.5			24.1

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Fenuron	99.1	91.1	94.7			3.95
	Fluridone	82.0	81.4	80.5			1.08
	Glufosinate	97.7	88.0	68.6			24.8
	Glyphosate	95.2	85.1	68.8			19.8
	Hydrocodone	91.2	92.3	97.3			5.32
	Ibuprofen	70.2	74.3	77.8			4.53
	Imazapyr	101	111	104			6.53
	Imidacloprid	94.6	105	104			1.12
	Linuron	71.9	71.5	69.7			2.58
	Mandestrobin	84.6	84.1	84.2			0.146
	MCPP	126	123	133			7.83
	Methiocarb	70.2	68.2	74.5			8.86
	Methomyl	93.7	86.7	93.3			7.37
	Naproxen	81.6	71.7	78.9			9.58
	Oxamyl	100	99.1	104			4.78
	Primidone	97.3	102	101			1.12
	Propoxur	91.8	86.9	92.3			6.06
	Pyraclostrobin	94.8	92.6	92.5			0.0307
	Silvex	74.0	77.9	84.8			8.40
	Sucralose	95.3	96.4	73.2			23.7
	Thiamethoxam	97.6	102	107			4.95
	Tolfenpyrad	50.9	41.4	43.4			4.60
	Triclopyr	87.6	90.2	95.2			5.46
SM 2320 B-2011	Total Alkalinity	94.5				0.261	
SM 2540 C-2011	TDS					5.38	
SM 2540 D-2011	TSS					3.45	
SM 4500-F- C-2011	Fluoride	93.8	96.3	97.4			1.03
SM 5310 B-2011	Organic Carbon	94.6	94.0	94.8			0.739

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2329903
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2329903
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2329931, 2329932, 2329933
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2329931, 2329932, 2329933
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2329903
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2329903
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2329904
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2329904
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2329904
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2329904
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2329918, 2329919, 2329920, 2329921, 2329922, 2329923, 2329924
EPA 8270E	PCBs in water matrices by GC/MS/MS	2329918, 2329919, 2329920, 2329921, 2329922, 2329923, 2329924
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2329918, 2329919, 2329920, 2329921, 2329922, 2329923, 2329924
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2329909
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2329907, 2329908, 2329910
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2329903
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2329931, 2329932, 2329933

Reference Method Descriptions

Method	Description	Associated Samples
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2329903
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2329903
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2329903
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2329904

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	05/25/2022			05/25/2022 15:25	Samantha L Bates	2329903
EPA 180.1 Rev. 2.0	05/25/2022			05/25/2022 14:58	Khloe J Berg	2329903
EPA 200.7 Rev. 4.4	05/25/2022	05/26/2022 10:15	Megan Whitefoot	05/31/2022 23:00	McKinley C Carter	2329931
	05/25/2022	05/26/2022 10:15	Megan Whitefoot	05/31/2022 23:07	McKinley C Carter	2329932
	05/25/2022	05/26/2022 10:15	Megan Whitefoot	05/31/2022 23:14	McKinley C Carter	2329933
	05/25/2022	05/26/2022 10:15	Megan Whitefoot	06/02/2022 19:48	McKinley C Carter	2329931
	05/25/2022	05/26/2022 10:15	Megan Whitefoot	06/02/2022 19:51	McKinley C Carter	2329932
	05/25/2022	05/26/2022 10:15	Megan Whitefoot	06/02/2022 19:54	McKinley C Carter	2329933
EPA 200.8 Rev. 5.4	05/25/2022	05/26/2022 10:15	Megan Whitefoot	05/26/2022 18:43	Alexander Thompson	2329931
	05/25/2022	05/26/2022 10:15	Megan Whitefoot	05/26/2022 18:53	Alexander Thompson	2329932
	05/25/2022	05/26/2022 10:15	Megan Whitefoot	05/26/2022 19:03	Alexander Thompson	2329933
EPA 300.0 Rev. 2.1	05/25/2022			06/01/2022 21:01	Anna M. Plaviak	2329903
EPA 350.1 Rev. 2.0	05/25/2022			06/14/2022 10:09	Ping Hua	2329904
EPA 351.2 Rev. 2.0	05/25/2022	06/02/2022 15:43	Samantha L Bates	06/03/2022 15:11	Alexandra J Mattheus	2329904
EPA 353.2 Rev. 2.0	05/25/2022			06/01/2022 16:54	Nathaniel J Jones	2329904
EPA 365.1 Rev. 2.0	05/25/2022	05/27/2022 16:17	Adam P Silver	05/31/2022 16:32	James L Waggerby	2329904
EPA 8270E	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/02/2022 02:35	Arthur Maknenko	2329918
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/02/2022 03:05	Arthur Maknenko	2329919
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/02/2022 03:35	Arthur Maknenko	2329920
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/02/2022 04:05	Arthur Maknenko	2329921
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/02/2022 04:35	Arthur Maknenko	2329922
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/02/2022 05:05	Arthur Maknenko	2329923
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/02/2022 05:35	Arthur Maknenko	2329924
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/02/2022 18:24	Michael Poppell	2329918
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/02/2022 18:53	Michael Poppell	2329919
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/02/2022 19:23	Michael Poppell	2329920
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/02/2022 19:52	Michael Poppell	2329921
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/02/2022 20:22	Michael Poppell	2329922
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/02/2022 20:51	Michael Poppell	2329923
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/02/2022 21:21	Michael Poppell	2329924
EPA 8276	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/03/2022 04:57	Julie Wi	2329918
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/03/2022 05:52	Julie Wi	2329919
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/03/2022 06:48	Julie Wi	2329920
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/03/2022 07:43	Julie Wi	2329921
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/03/2022 09:34	Julie Wi	2329922
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/03/2022 10:30	Julie Wi	2329923
	05/25/2022	05/31/2022 08:00	Fe-Val Siddell	06/03/2022 11:25	Julie Wi	2329924
EPA 8321B	05/25/2022	05/26/2022 09:30	June Rhew	05/28/2022 22:19	Juyoung Kim	2329907
	05/25/2022	05/26/2022 09:30	June Rhew	05/28/2022 22:54	Juyoung Kim	2329908
	05/25/2022	05/26/2022 09:30	June Rhew	05/28/2022 23:28	Juyoung Kim	2329910

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	05/25/2022	05/26/2022 10:00	Umesh Chiluwal	05/26/2022 16:18	Umesh Chiluwal	2329907
	05/25/2022	05/26/2022 10:00	Umesh Chiluwal	05/26/2022 16:31	Umesh Chiluwal	2329908
	05/25/2022	05/26/2022 10:00	Umesh Chiluwal	05/26/2022 16:44	Umesh Chiluwal	2329910
	05/25/2022	05/26/2022 10:00	Umesh Chiluwal	05/27/2022 23:13	Umesh Chiluwal	2329907
	05/25/2022	05/26/2022 10:00	Umesh Chiluwal	05/27/2022 23:28	Umesh Chiluwal	2329908
	05/25/2022	05/26/2022 10:00	Umesh Chiluwal	05/27/2022 23:43	Umesh Chiluwal	2329910
	05/25/2022	05/31/2022 09:00	Hoor Shaik	06/01/2022 10:20	Juyoung Kim	2329909
SM 2320 B-2011	05/25/2022			05/27/2022 10:54	Dale L. Simmons	2329903
SM 2340 B-2011	05/25/2022			05/31/2022 23:00	McKinley C Carter	2329931
	05/25/2022			05/31/2022 23:07	McKinley C Carter	2329932
	05/25/2022			05/31/2022 23:14	McKinley C Carter	2329933
SM 2540 C-2011	05/25/2022			05/27/2022 14:56	Yijie Li	2329903
SM 2540 D-2011	05/25/2022			05/27/2022 14:56	Yijie Li	2329903
SM 4500-F- C-2011	05/25/2022			06/14/2022 07:21	Dale L. Simmons	2329903
SM 5310 B-2011	05/25/2022			05/28/2022 04:22	Khloe J Berg	2329904