Chemical Analysis Report

TLH-ROC-2020-08-27-01

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

Event Description: **Run 4a**
Request ID: **RQ-2020-08-24-42**
Customer: **TLH-ROC**
Project ID: **SMP**

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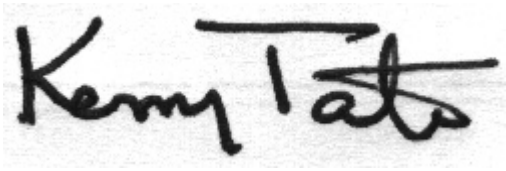
Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 16-SEP-2020 11:49



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: Flat Creek @ Cr269 **Collection Date/Time: 08/27/2020 09:20**

Field ID: G2TLHR0020 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2192841	EPA 180.1 Rev. 2.0	Turbidity	11		NTU	P386641	
	EPA 300.0 Rev. 2.1	Chloride	4.0		mg Cl/L	P387061	
		Sulfate	0.77		mg SO4/L	P387066	
	SM 2120 B-2011	Color (true)	53		PCU	P386654	
	SM 2320 B-2011	Total Alkalinity	18		mg CaCO3/L	P386788	
	SM 2540 C-2011	TDS	44		mg/L	P386808	
	SM 2540 D-2011	TSS	13		mg/L	P386812	
	SM 4500 F-C-2011	Fluoride	0.10		mg F/L	P386792	
2192843	EPA 350.1 Rev. 2.0	Ammonia-N	0.028		mg N/L	P387020	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28		mg N/L	P386863	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.29		mg N/L	P386778	
	EPA 365.1 Rev. 2.0	Total-P	0.22		mg P/L	P386757	MS
	SM 5310 B-2011	Organic Carbon	3.7		mg C/L	P386768	
2192845	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.11		mg P/L	P386651	
2192869	EPA 8321B	2,4-D	0.0020	U	ug/L	P386628	
		Acesulfame K**	0.10	U	ug/L	P386663	
		AMPA**	0.10	U	ug/L	P386663	
		Sucralose**	0.030	I	ug/L	P386663	
		Acetaminophen**	0.0080	U	ug/L	P386628	
		Acetamiprid**	0.0020	U	ug/L	P386628	
		Endothall**	0.25	U	ug/L	P386663	
		Glufosinate**	0.10	U	ug/L	P386663	
		Glyphosate**	0.10	U	ug/L	P386663	
		Afidopyropen**	0.0020	U	ug/L	P386628	
		Bentazon	8.0E-04	U	ug/L	P386628	
		Benzovindiflupyr**	0.0020	U	ug/L	P386628	
		Carbamazepine**	8.0E-04	U	ug/L	P386628	
		Clothianidin**	0.0020	U	ug/L	P386628	
		Dinotefuran**	0.0020	U	ug/L	P386628	
		Diuron	0.0030	I	ug/L	P386628	
		Fenuron	0.016	U	ug/L	P386628	
		Fluridone**	0.0047		ug/L	P386628	
		Imazapyr**	0.0040	U	ug/L	P386628	
		Hydrocodone**	0.0020	U	ug/L	P386628	
		Ibuprofen**	0.020	U	ug/L	P386628	
		Imidacloprid	0.0020	U	ug/L	P386628	
		Linuron	0.0040	U	ug/L	P386628	
		Mandestrobin**	0.0020	U	ug/L	P386628	
		MCPP	0.0020	U	ug/L	P386628	
		Naproxen**	0.0080	U	ug/L	P386628	
		Primidone**	0.0040	U	ug/L	P386628	
		Pyraclostrobin**	0.0020	U	ug/L	P386628	
		Thiamethoxam**	0.0020	U	ug/L	P386628	

Field ID: G2TLHR0020 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2192869	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P386628	
		Triclopyr**	0.0040	U	ug/L	P386628	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Unnamed Branch @ Hardaway Rd 2 **Collection Date/Time: 08/27/2020 10:10**

Field ID: G2TLHR0041 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2192838	EPA 180.1 Rev. 2.0	Turbidity	5.2		NTU	P386641	
	EPA 300.0 Rev. 2.1	Chloride	3.9		mg Cl/L	P387061	
		Sulfate	0.64		mg SO4/L	P387066	
	SM 2120 B-2011	Color (true)	31		PCU	P386654	
	SM 2320 B-2011	Total Alkalinity	3.3		mg CaCO3/L	P386788	
	SM 2540 C-2011	TDS	27		mg/L	P386808	
	SM 2540 D-2011	TSS	9	I	mg/L	P386812	
	SM 4500 F-C-2011	Fluoride	0.056	I	mg F/L	P386792	
2192839	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P387020	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.35		mg N/L	P386863	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.17		mg N/L	P386778	
	EPA 365.1 Rev. 2.0	Total-P	0.14		mg P/L	P386757	MS
	SM 5310 B-2011	Organic Carbon	3.5		mg C/L	P386768	
2192840	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.054		mg P/L	P386651	
2192867	EPA 8321B	Aldicarb	0.020	U	ug/L	P386554	
		Aldicarb Sulfone	0.0020	U	ug/L	P386554	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P386554	MS
		Carbaryl	0.0020	U	ug/L	P386554	
		Carbofuran	0.0020	U	ug/L	P386554	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P386554	
		Methiocarb	0.0020	U	ug/L	P386554	
		Methomyl	0.0020	U	ug/L	P386554	
		Oxamyl	0.0020	U	ug/L	P386554	
		Propoxur	0.0020	U	ug/L	P386554	
2192868		2,4-D	0.0020	U	ug/L	P386628	
		Acesulfame K**	0.10	U	ug/L	P386663	
		AMPA**	0.10	U	ug/L	P386663	
		Sucralose**	0.014	I	ug/L	P386663	
		Acetaminophen**	0.0080	U	ug/L	P386628	
		Acetamiprid**	0.0020	U	ug/L	P386628	
		Endothall**	0.25	U	ug/L	P386663	
		Glufosinate**	0.10	U	ug/L	P386663	
		Glyphosate**	0.10	U	ug/L	P386663	
		Afidopyropen**	0.0020	U	ug/L	P386628	
		Bentazon	8.0E-04	U	ug/L	P386628	
		Benzovindiflupyr**	0.0020	U	ug/L	P386628	
		Carbamazepine**	8.0E-04	U	ug/L	P386628	
		Clothianidin**	0.0020	U	ug/L	P386628	
		Dinotefuran**	0.0020	U	ug/L	P386628	
		Diuron	0.0020	U	ug/L	P386628	
		Fenuron	0.016	U	ug/L	P386628	
		Fluridone**	8.0E-04	U	ug/L	P386628	
		Imazapyr**	0.0040	U	ug/L	P386628	

Field ID: G2TLHR0041 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2192868	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P386628	
		Ibuprofen**	0.020	U	ug/L	P386628	
		Imidacloprid	0.0020	U	ug/L	P386628	
		Linuron	0.0040	U	ug/L	P386628	
		Mandestrobin**	0.0020	U	ug/L	P386628	
		MCPP	0.0020	U	ug/L	P386628	
		Naproxen**	0.0080	U	ug/L	P386628	
		Primidone**	0.0040	U	ug/L	P386628	
		Pyraclostrobin**	0.0020	U	ug/L	P386628	
		Thiamethoxam**	0.0020	U	ug/L	P386628	
		Tolfenpyrad**	0.0020	U	ug/L	P386628	
		Triclopyr**	0.0040	U	ug/L	P386628	
2192871	EPA 8270E	Aldrin	4.4	U	ng/L	P386636	
		Alpha-BHC	2.2	U	ng/L	P386636	
		Alpha-Chlordane	1.1	U	ng/L	P386636	
		Beta-BHC	8.8	U	ng/L	P386636	
		Beta-Cyfluthrin**	17	U	ng/L	P386636	
		Bifenthrin**	4.4	U	ng/L	P386636	
		Delta-BHC	8.8	U	ng/L	P386636	
		Gamma-BHC	8.8	U	ng/L	P386636	
		Chlorothalonil	2.2	U	ng/L	P386636	
		Cis-Nonachlor**	1.1	U	ng/L	P386636	
		Cypermethrin	22	U	ng/L	P386636	
		Dacthal**	1.1	U	ng/L	P386636	
		DDD-p,p'	5.5	U	ng/L	P386636	
		DDE-p,p'	5.5	U	ng/L	P386636	
		DDT-p,p'	6.6	U	ng/L	P386636	
		Deltamethrin**	22	U	ng/L	P386636	
		Dicofol	33	U	ng/L	P386636	
		Dieldrin	4.4	U	ng/L	P386636	
		Endosulfan I	4.4	U	ng/L	P386636	
		Endosulfan II	4.4	U	ng/L	P386636	
		Endosulfan Sulfate	2.2	U	ng/L	P386636	
		Endrin	2.2	U	ng/L	P386636	
		Endrin Aldehyde	2.2	U	ng/L	P386636	
		Endrin Ketone	2.2	U	ng/L	P386636	
		Ethalfluralin**	3.3	U	ng/L	P386636	
		Gamma-Chlordane	1.1	U	ng/L	P386636	
		Heptachlor	1.7	U	ng/L	P386636	
		Heptachlor Epoxide	2.2	U	ng/L	P386636	
		Hexachlorobenzene	2.2	U	ng/L	P386636	
		Lambda-Cyhalothrin**	17	U	ng/L	P386636	
		Methoxychlor	4.4	U	ng/L	P386636	
		Mirex	2.2	U	ng/L	P386636	
		Permethrin	11	U	ng/L	P386636	

Field ID: G2TLHR0041 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2192871	EPA 8270E	Phenothrin**	33	U	ng/L	P386636	
		Prallethrin**	28	U	ng/L	P386636	
		Trans-Nonachlor**	1.1	U	ng/L	P386636	
		Trifluralin	2.8	U	ng/L	P386636	
	EPA 8276	Chlordane	5.5	U	ng/L	P386636	
		Toxaphene	33	U	ng/L	P386636	
2192872	EPA 8270E	Acetochlor	0.26	U	ng/L	P386604	
		Alachlor	0.26	U	ng/L	P386604	MS
		Ametryn	0.62	U	ng/L	P386604	
		Atrazine	0.26	U	ng/L	P386604	
		Atrazine Desethyl	1.6	U	ng/L	P386604	
		Azinphos Methyl	2.1	U	ng/L	P386604	
		Bromacil	0.52	U	ng/L	P386604	
		Butylate	0.42	U	ng/L	P386604	RPD
		Carbophenothion	0.52	U	ng/L	P386604	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P386604	
		Chlorpyrifos Methyl	0.052	U	ng/L	P386604	
		Cyanazine	3.4	U	ng/L	P386604	
		Demeton	1.6	U	ng/L	P386604	
		Diazinon	0.13	U	ng/L	P386604	
		Dimethenamid**	0.10	U	ng/L	P386604	
		Disulfoton	0.52	U	ng/L	P386604	
		Dithiopyr**	0.10	U	ng/L	P386604	
		EPTC	1.3	U	ng/L	P386604	
		Ethion	0.16	U	ng/L	P386604	
		Ethoprop	0.10	U	ng/L	P386604	
		Fenamiphos	0.52	U	ng/L	P386604	
		Fipronil	0.26	U	ng/L	P386604	
		Fipronil Desulfinyl**	0.13	U	ng/L	P386604	
		Fipronil Sulfide	0.16	U	ng/L	P386604	
		Fipronil Sulfone	0.16	U	ng/L	P386604	
		Flumioxazin**	1.8	U	ng/L	P386604	
		Fonofos	0.21	U	ng/L	P386604	
		Hexazinone	0.52	U	ng/L	P386604	
		Imazalil**	0.78	U	ng/L	P386604	
		Malathion	0.36	U	ng/L	P386604	
		Metalaxyl	0.78	U	ng/L	P386604	
		Metolachlor	0.52	U	ng/L	P386604	
		Metribuzin	3.4	U	ng/L	P386604	
		Mevinphos	0.52	U	ng/L	P386604	
		Molinate	0.31	U	ng/L	P386604	
		Naled**	1.6	U	ng/L	P386604	
		Norflurazon	0.52	U	ng/L	P386604	
		Oxadiazon	0.10	U	ng/L	P386604	
		Parathion Ethyl	0.26	U	ng/L	P386604	

Field ID: G2TLHR0041 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2192872	EPA 8270E	Parathion Methyl	0.57	U	ng/L	P386604	
		Pendimethalin	1.0	U	ng/L	P386604	
		Phorate	0.26	U	ng/L	P386604	
		Prodiamine**	0.18	U	ng/L	P386604	RPD
		Prometon	0.94	U	ng/L	P386604	
		Prometryn	0.21	U	ng/L	P386604	
		Pronamide**	0.16	U	ng/L	P386604	
		Propiconazole**	0.52	U	ng/L	P386604	
		Simazine	0.52	U	ng/L	P386604	
		Sulfentrazone**	0.52	U	ng/L	P386604	
		Tebuconazole**	0.52	U	ng/L	P386604	
		Terbufos	0.10	U	ng/L	P386604	
		Terbuthylazine	0.44	U	ng/L	P386604	
2192874	EPA 200.7 Rev. 4.4	Barium	14.5		ug/L	P386749	
		Calcium	1.44		mg/L	P386749	
		Iron	940		ug/L	P386749	
		Magnesium	0.84		mg/L	P386749	
		Potassium	0.40	I	mg/L	P386749	
		Sodium	2.6		mg/L	P386749	
		Zinc	5.0	U	ug/L	P386749	
	EPA 200.8 Rev. 5.4	Aluminum	187		ug/L	P386749	
		Antimony	0.050	U	ug/L	P386749	
		Arsenic	0.80		ug/L	P386749	
		Beryllium	0.032	I	ug/L	P386749	
		Boron**	10.4		ug/L	P386749	
		Cadmium	0.020	U	ug/L	P386749	
		Chromium	0.40	U	ug/L	P386749	
		Copper	0.40	U	ug/L	P386749	
		Lead	0.20	U	ug/L	P386749	
		Nickel	0.50	U	ug/L	P386749	
		Selenium	0.20	U	ug/L	P386749	
		Silver	0.010	U	ug/L	P386749	
		Thallium	0.10	U	ug/L	P386749	
	SM 2340B	Hardness	7.0		mg/L	P386749	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked.

Sample Location: Ocklawaha Creek @ Sr 267 **Collection Date/Time: 08/27/2020 11:05**

Field ID: G1TLHR0053 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2192842	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P386641	
	EPA 300.0 Rev. 2.1	Chloride	2.4		mg Cl/L	P387061	
		Sulfate	0.86		mg SO4/L	P387066	
	SM 2120 B-2011	Color (true)	220		PCU	P386654	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P386788	
	SM 2540 C-2011	TDS	56		mg/L	P386808	
	SM 2540 D-2011	TSS	2	I	mg/L	P386812	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P386792	
2192844	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P387020	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.47		mg N/L	P386863	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.057		mg N/L	P386778	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P386757	MS
	SM 5310 B-2011	Organic Carbon	21		mg C/L	P386768	
2192846	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P386651	
2192870	EPA 8321B	2,4-D	0.0020	U	ug/L	P386628	
		Acesulfame K**	0.10	U	ug/L	P386663	
		AMPA**	0.10	U	ug/L	P386663	
		Sucralose**	0.010	U	ug/L	P386663	
		Acetaminophen**	0.0080	U	ug/L	P386628	
		Acetamiprid**	0.0020	U	ug/L	P386628	
		Endothall**	0.25	U	ug/L	P386663	
		Glufosinate**	0.10	U	ug/L	P386663	
		Glyphosate**	0.10	U	ug/L	P386663	
		Afidopyropen**	0.0020	U	ug/L	P386628	
		Bentazon	8.0E-04	U	ug/L	P386628	
		Benzovindiflupyr**	0.0020	U	ug/L	P386628	
		Carbamazepine**	8.0E-04	U	ug/L	P386628	
		Clothianidin**	0.0020	U	ug/L	P386628	
		Dinotefuran**	0.0020	U	ug/L	P386628	
		Diuron	0.0020	U	ug/L	P386628	
		Fenuron	0.016	U	ug/L	P386628	
		Fluridone**	8.0E-04	U	ug/L	P386628	
		Imazapyr**	0.0057	I	ug/L	P386628	
		Hydrocodone**	0.0020	U	ug/L	P386628	
		Ibuprofen**	0.020	U	ug/L	P386628	
		Imidacloprid	0.0020	U	ug/L	P386628	
		Linuron	0.0040	U	ug/L	P386628	
		Mandestrobin**	0.0020	U	ug/L	P386628	
		MCPP	0.0020	U	ug/L	P386628	
		Naproxen**	0.0080	U	ug/L	P386628	
		Primidone**	0.0040	U	ug/L	P386628	
		Pyraclostrobin**	0.0020	U	ug/L	P386628	
		Thiamethoxam**	0.0020	U	ug/L	P386628	

Field ID: G1TLHR0053 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2192870	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P386628	
		Triclopyr**	0.0040	U	ug/L	P386628	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Unnamed Branch @ Flat Creek Rd **Collection Date/Time: 08/27/2020 09:40**

Field ID: G2TLHR0031 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2192835	EPA 180.1 Rev. 2.0	Turbidity	24		NTU	P386641	
	EPA 300.0 Rev. 2.1	Chloride	4.9		mg Cl/L	P387061	
		Sulfate	1.2		mg SO4/L	P387066	
	SM 2120 B-2011	Color (true)	21		PCU	P386656	
	SM 2320 B-2011	Total Alkalinity	69		mg CaCO3/L	P386788	
	SM 2540 C-2011	TDS	96	A	mg/L	P386809	
	SM 2540 D-2011	TSS	56	A	mg/L	P386813	
	SM 4500 F-C-2011	Fluoride	0.12		mg F/L	P386792	
2192836	EPA 350.1 Rev. 2.0	Ammonia-N	0.043		mg N/L	P387020	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.41		mg N/L	P386863	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.17		mg N/L	P386778	
	EPA 365.1 Rev. 2.0	Total-P	0.13	J	mg P/L	P386757	MS
	SM 5310 B-2011	Organic Carbon	4.0		mg C/L	P386768	
2192837	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.039		mg P/L	P386651	
2192866	EPA 8321B	2,4-D	0.0020	U	ug/L	P386628	
		Acesulfame K**	0.10	U	ug/L	P386663	
		AMPA**	0.10	U	ug/L	P386663	
		Sucralose**	0.077		ug/L	P386663	
		Acetaminophen**	0.0080	U	ug/L	P386628	
		Acetamiprid**	0.0020	U	ug/L	P386628	
		Endothall**	0.25	U	ug/L	P386663	
		Glufosinate**	0.10	U	ug/L	P386663	
		Glyphosate**	0.10	U	ug/L	P386663	
		Afidopyropen**	0.0020	U	ug/L	P386628	
		Bentazon	8.0E-04	U	ug/L	P386628	
		Benzovindiflupyr**	0.0020	U	ug/L	P386628	
		Carbamazepine**	8.0E-04	U	ug/L	P386628	
		Clothianidin**	0.0020	U	ug/L	P386628	
		Dinotefuran**	0.0020	U	ug/L	P386628	
		Diuron	0.0020	U	ug/L	P386628	
		Fenuron	0.016	U	ug/L	P386628	
		Fluridone**	8.0E-04	U	ug/L	P386628	
		Imazapyr**	0.0061	I	ug/L	P386628	
		Hydrocodone**	0.0020	U	ug/L	P386628	
		Ibuprofen**	0.020	U	ug/L	P386628	
		Imidacloprid	0.0020	U	ug/L	P386628	
		Linuron	0.0040	U	ug/L	P386628	
		Mandestrobin**	0.0020	U	ug/L	P386628	
		MCPP	0.0020	U	ug/L	P386628	
		Naproxen**	0.0091	I	ug/L	P386628	
		Primidone**	0.0040	U	ug/L	P386628	
		Pyraclostrobin**	0.0020	U	ug/L	P386628	
		Thiamethoxam**	0.0020	U	ug/L	P386628	

Field ID: G2TLHR0031 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2192866	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P386628	
		Triclopyr**	0.0040	U	ug/L	P386628	
2192873	EPA 200.7 Rev. 4.4	Barium	26.6		ug/L	P386749	
		Calcium	17.5		mg/L	P386749	
		Iron	1.94E+03		ug/L	P386749	
		Magnesium	7.98		mg/L	P386749	
		Potassium	0.54	I	mg/L	P386749	
		Sodium	3.3		mg/L	P386749	
		Zinc	5.0	U	ug/L	P386749	
	EPA 200.8 Rev. 5.4	Aluminum	1.14E+03		ug/L	P386749	
		Antimony	0.050	U	ug/L	P386749	
		Arsenic	1.16		ug/L	P386749	
		Beryllium	0.077		ug/L	P386749	
		Boron**	12.1		ug/L	P386749	
		Cadmium	0.036	I	ug/L	P386749	
		Chromium	2.0		ug/L	P386749	
		Copper	0.46	I	ug/L	P386749	
		Lead	0.78		ug/L	P386749	
		Nickel	0.53	I	ug/L	P386749	
		Selenium	0.20	U	ug/L	P386749	
		Silver	0.010	U	ug/L	P386749	
		Thallium	0.10	U	ug/L	P386749	
	SM 2340B	Hardness	76.4		mg/L	P386749	

Ref. Method and Comment:
EPA 365.1 Rev. 2.0: Total-P: Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P386641

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P386749

Component	Result	Code	Units
Barium	1.0	U	ug/L
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: P386749

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	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
Copper	0.40	U	ug/L
Lead	0.20	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: P387061

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387066

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387020

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386863

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386778

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386757

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386651

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

Reference Method: EPA 8270E
Batch ID: P386604

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Carbophenothion	0.50	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Flumioxazin	1.8	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P386604

Component	Result	Code	Units
Imazalil	0.75	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P386636

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	8.0	U	ng/L
Beta-Cyfluthrin	15	U	ng/L
Bifenthrin	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
Dacthal	1.0	U	ng/L
DDD-p,p'	5.0	U	ng/L
DDE-p,p'	5.0	U	ng/L
DDT-p,p'	6.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Deltamethrin	20	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
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P386636

Component	Result	Code	Units
Ethalfluralin	3.0	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Lambda-Cyhalothrin	15	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Phenothrin	30	U	ng/L
Prallethrin	25	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
Batch ID: P386636

Component	Result	Code	Units
Chlordane	5.0	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8321B
Batch ID: P386554

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
Propoxur	0.0020	U	ug/L

Reference Method: EPA 8321B
Batch ID: P386628

Component	Result	Code	Units
2,4-D	0.0020	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	0.016	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P386628

Component	Result	Code	Units
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	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	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: P386663

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: SM 2120 B-2011
Batch ID: P386654

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B-2011
Batch ID: P386656

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P386788

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

Reference Method: SM 2540 C-2011
Batch ID: P386808

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 C-2011
Batch ID: P386809

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P386812

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P386813

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P386792

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P386768

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: P386749

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	97.9		P	85 - 115
Calcium	103		P	85 - 115
Iron	104		P	85 - 115
Magnesium	104		P	85 - 115
Potassium	101		P	85 - 115
Sodium	100		P	85 - 115
Zinc	99.8		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P386749

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	93.4		P	85 - 115
Antimony	100		P	85 - 115
Arsenic	99.5		P	85 - 115
Beryllium	111		P	85 - 115
Boron	94.3		P	85 - 115
Cadmium	96.1		P	85 - 115
Chromium	103		P	85 - 115
Copper	96.8		P	85 - 115
Lead	98.1		P	85 - 115
Nickel	95.6		P	85 - 115
Selenium	97.6		P	85 - 115
Silver	107		P	85 - 115
Thallium	99.4		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387061

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	99.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387066

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387020

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386863

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	96.1		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386778

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386757

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	107		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386651

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.9		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P386604

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	85.5	94.2	P/P	71 - 122
Alachlor	87.7	93.0	P/P	70 - 121
Ametryn	93.1	116	P/P	49 - 137
Atrazine	94.5	104	P/P	76 - 125
Atrazine Desethyl	89.9	97.7	P/P	31 - 144
Azinphos Methyl	104	109	P/P	67 - 150
Bromacil	91.4	99.9	P/P	36 - 121
Butylate	43.7	49.0	P/P	33 - 88.0
Carbophenothion	100	104	P/P	66 - 116
Chlorpyrifos Ethyl	90.1	95.7	P/P	73 - 117
Chlorpyrifos Methyl	81.0	88.3	P/P	68 - 121
Cyanazine	101	96.6	P/P	20 - 250
Demeton	73.9	73.5	P/P	30 - 123
Diazinon	87.3	93.8	P/P	70 - 128
Dimethenamid	86.4	95.1	P/P	66 - 122
Disulfoton	74.8	72.3	P/P	46 - 124
Dithiopyr	91.3	98.5	P/P	69 - 122
EPTC	44.3	49.1	P/P	31 - 90.0
Ethion	102	106	P/P	45 - 135
Ethoprop	75.3	72.4	P/P	59 - 118
Fenamiphos	96.6	92.9	P/P	30 - 136
Fipronil	95.8	104	P/P	57 - 127
Fipronil Desulfinyl	97.1	106	P/P	51 - 122
Fipronil Sulfide	98.0	102	P/P	57 - 119
Fipronil Sulfone	95.3	102	P/P	51 - 119
Flumioxazin	119	130	P/P	20 - 250
Fonofos	70.4	71.3	P/P	60 - 120
Hexazinone	102	108	P/P	57 - 142
Imazalil	130	106	P/P	30 - 139
Malathion	93.5	91.6	P/P	67 - 128
Metalaxyl	93.6	100	P/P	21 - 148
Metolachlor	90.8	97.8	P/P	70 - 120
Metribuzin	103	110	P/P	20 - 250
Mevinphos	66.4	60.2	P/P	47 - 116

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P386604

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Molinate	51.8	54.6	P/P	41 - 99.0
Naled	53.3	50.0	P/P	38 - 97.0
Norflurazon	93.7	105	P/P	54 - 127
Oxadiazon	92.7	101	P/P	65 - 122
Parathion Ethyl	89.8	90.4	P/P	71 - 113
Parathion Methyl	89.6	97.6	P/P	73 - 129
Pendimethalin	103	101	P/P	63 - 130
Phorate	60.1	62.6	P/P	48 - 118
Prodiamine	141	127	P/P	20 - 144
Prometon	83.3	98.4	P/P	53 - 120
Prometryn	93.3	105	P/P	63 - 119
Pronamide	88.6	114	P/P	81 - 122
Propiconazole	94.0	104	P/P	62 - 124
Simazine	105	121	P/P	77 - 129
Sulfentrazone	65.0	69.5	P/P	20 - 137
Tebuconazole	94.2	102	P/P	20 - 118
Terbufos	75.2	78.5	P/P	61 - 119
Terbuthylazine	92.3	97.1	P/P	75 - 119

Reference Method: EPA 8270E
Batch ID: P386636

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	52.2	52.2	P/P	20 - 87.0
Alpha-BHC	82.2	80.7	P/P	65 - 142
Alpha-Chlordane	86.1	84.0	P/P	58 - 106
Beta-BHC	106	104	P/P	65 - 179
Beta-Cyfluthrin	75.9	74.5	P/P	39 - 153
Bifenthrin	86.1	86.0	P/P	38 - 128
Chlorothalonil	50.8	47.0	P/P	20 - 214
Cis-Nonachlor	91.3	89.4	P/P	56 - 113
Cypermethrin	94.7	91.2	P/P	37 - 130
Dacthal	93.5	92.1	P/P	75 - 109
DDD-p,p'	94.9	93.4	P/P	66 - 119
DDE-p,p'	83.6	83.6	P/P	53 - 108
DDT-p,p'	83.0	82.2	P/P	57 - 133
Delta-BHC	118	112	P/P	68 - 187
Deltamethrin	103	101	P/P	50 - 200
Dicofol	95.6	98.9	P/P	66 - 123
Dieldrin	88.1	89.4	P/P	65 - 111
Endosulfan I	86.3	84.2	P/P	65 - 115
Endosulfan II	103	103	P/P	68 - 133
Endosulfan Sulfate	94.2	89.1	P/P	62 - 127
Endrin	82.7	76.8	P/P	64 - 122
Endrin Aldehyde	114	112	P/P	61 - 132
Endrin Ketone	91.5	91.0	P/P	66 - 120
Ethalfluralin	76.2	76.5	P/P	57 - 127
Gamma-BHC	98.3	95.1	P/P	71 - 158
Gamma-Chlordane	84.3	83.3	P/P	53 - 106
Heptachlor	72.4	70.1	P/P	45 - 96.0
Heptachlor Epoxide	88.4	87.5	P/P	64 - 109
Hexachlorobenzene	71.3	73.2	P/P	46 - 103

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P386636

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Lambda-Cyhalothrin	79.6	77.1	P/P	38 - 145
Methoxychlor	79.9	79.0	P/P	69 - 149
Mirex	68.5	68.8	P/P	31 - 90.0
Permethrin	81.9	82.6	P/P	41 - 108
Phenothrin	60.1	60.4	P/P	22 - 91.0
Prallethrin	57.3	56.1	P/P	32 - 92.0
Trans-Nonachlor	86.1	84.4	P/P	50 - 107
Trifluralin	77.6	78.1	P/P	58 - 119

Reference Method: EPA 8276
Batch ID: P386636

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	92.4	91.2	P/P	47 - 119
Toxaphene	88.3	85.2	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P386554

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	85.3		P	40 - 150
Aldicarb	64.5		P	30 - 150
Aldicarb Sulfone	94.4		P	40 - 150
Aldicarb Sulfoxide	105		P	40 - 150
Carbaryl	67.5		P	40 - 150
Carbofuran	56.2		P	40 - 150
Methiocarb	58.0		P	40 - 150
Methomyl	103		P	40 - 150
Oxamyl	93.5		P	40 - 150
Propoxur	60.7		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P386628

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	120		P	30 - 160
Acetaminophen	79.4		P	30 - 160
Acetamiprid	67.8		P	30 - 160
Afidopyropen	41.3		P	30 - 160
Bentazon	81.7		P	30 - 160
Benzovindiflupyr	66.7		P	30 - 160
Carbamazepine	57.6		P	30 - 160
Clothianidin	75.5		P	30 - 160
Dinotefuran	87.3		P	30 - 160
Diuron	56.0		P	30 - 160
Fenuron	87.4		P	30 - 160
Fluridone	85.9		P	30 - 160
Hydrocodone	78.3		P	30 - 160
Ibuprofen	93.7		P	30 - 160
Imazapyr	115		P	30 - 160
Imidacloprid	88.9		P	30 - 160
Linuron	64.9		P	30 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P386628

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Mandestrobin	70.1		P	30 - 160
MCPP	120		P	30 - 160
Naproxen	68.7		P	30 - 160
Primidone	84.7		P	30 - 160
Pyraclostrobin	59.9		P	30 - 160
Thiamethoxam	91.2		P	30 - 160
Tolfenpyrad	44.4		P	30 - 160
Triclopyr	92.4		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P386663

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	104		P	40 - 150
AMPA	75.5		P	40 - 150
Endothall	101		P	40 - 150
Glufosinate	95.1		P	40 - 150
Glyphosate	116		P	40 - 140
Sucralose	101		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P386654

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.8		P	85 - 115

Reference Method: SM 2120 B-2011
Batch ID: P386656

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.1		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P386788

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P386792

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.7		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P386768

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.6		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P386749

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192874	Barium	104	102	P/P	80 - 120
2192874	Calcium	105	106	P/P	80 - 120
2192874	Iron	108	110	P/P	80 - 120
2192874	Magnesium	109	110	P/P	80 - 120
2192874	Potassium	104	105	P/P	80 - 120
2192874	Sodium	99.9	98.4	P/P	80 - 120
2192874	Zinc	108	106	P/P	80 - 120
2192988	Barium	99.0		P	80 - 120
2192988	Calcium	104		P	80 - 120
2192988	Iron	105		P	80 - 120
2192988	Magnesium	98.9		P	80 - 120
2192988	Potassium	103		P	80 - 120
2192988	Sodium	102		P	80 - 120
2192988	Zinc	103		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P386749

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192874	Aluminum	94.7	93.5	P/P	80 - 120
2192874	Antimony	100	98.9	P/P	80 - 120
2192874	Arsenic	100	97.9	P/P	80 - 120
2192874	Beryllium	109	108	P/P	80 - 120
2192874	Boron	99.0	97.3	P/P	80 - 120
2192874	Cadmium	98.1	97.3	P/P	80 - 120
2192874	Chromium	103	102	P/P	80 - 120
2192874	Copper	97.5	95.7	P/P	80 - 120
2192874	Lead	101	101	P/P	80 - 120
2192874	Nickel	97.2	95.7	P/P	80 - 120
2192874	Selenium	98.0	96.1	P/P	80 - 120
2192874	Silver	106	107	P/P	80 - 120
2192874	Thallium	101	103	P/P	80 - 120
2192988	Aluminum	93.2		P	80 - 120
2192988	Antimony	105		P	80 - 120
2192988	Arsenic	107		P	80 - 120
2192988	Beryllium	112		P	80 - 120
2192988	Boron	97.8		P	80 - 120
2192988	Cadmium	101		P	80 - 120
2192988	Chromium	105		P	80 - 120
2192988	Copper	99.0		P	80 - 120
2192988	Lead	102		P	80 - 120
2192988	Nickel	99.2		P	80 - 120
2192988	Selenium	104		P	80 - 120
2192988	Silver	106		P	80 - 120
2192988	Thallium	107		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387061

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192838	Chloride	99.8		P	90 - 110
2193005	Chloride	99.7		P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387066

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192838	Sulfate	98.8		P	90 - 110
2193005	Sulfate	96.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387020

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192843	Ammonia-N	99.4	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386863

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192836	Kjeldahl Nitrogen	95.0	99.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386778

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192748	NO2NO3-N	96.8		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386757

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192836	Total-P	108	111	P/F	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386651

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192837	O-Phosphate-P	99.4	99.2	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P386604

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192191	Acetochlor	78.3	71.1	P/P	68 - 126
2192191	Alachlor	71.0	63.6	P/F	66 - 125
2192191	Azinphos Methyl	148	130	P/P	54 - 162
2192191	Bromacil	98.3	89.4	P/P	34 - 144
2192191	Butylate	59.5	41.6	P/P	16 - 92.0
2192191	Carbophenothion	89.8	87.1	P/P	30 - 131
2192191	Chlorpyrifos Ethyl	85.3	88.8	P/P	63 - 124
2192191	Chlorpyrifos Methyl	85.8	85.3	P/P	64 - 125
2192191	Cyanazine	98.9	90.7	P/P	13 - 245
2192191	Demeton	86.5	103	P/P	20 - 154
2192191	Diazinon	88.9	82.7	P/P	66 - 141
2192191	Dimethenamid	81.2	75.4	P/P	50 - 130
2192191	Disulfoton	80.0	73.6	P/P	55 - 130
2192191	Dithiopyr	78.6	72.8	P/P	66 - 122
2192191	EPTC	51.6	46.7	P/P	15 - 93.0

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P386604

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192191	Ethion	88.6	79.4	P/P	15 - 148
2192191	Ethoprop	83.5	80.8	P/P	59 - 126
2192191	Fenamiphos	75.0	76.5	P/P	39 - 137
2192191	Fipronil	103	95.4	P/P	47 - 131
2192191	Fipronil Desulfinyl	93.7	86.0	P/P	43 - 121
2192191	Fipronil Sulfide	96.7	97.5	P/P	29 - 134
2192191	Fipronil Sulfone	115	110	P/P	19 - 131
2192191	Flumioxazin	188	187	P/P	10 - 300
2192191	Fonofos	81.8	77.3	P/P	62 - 128
2192191	Hexazinone	89.1	94.2	P/P	58 - 154
2192191	Imazalil	58.0	53.4	P/P	10 - 215
2192191	Malathion	95.2	92.6	P/P	54 - 135
2192191	Metalaxyl	85.0	77.6	P/P	46 - 136
2192191	Metribuzin	118	118	P/P	44 - 277
2192191	Mevinphos	77.4	79.5	P/P	44 - 135
2192191	Molinate	68.4	65.3	P/P	31 - 104
2192191	Naled	64.0	55.9	P/P	33 - 113
2192191	Norflurazon	78.8	74.1	P/P	32 - 134
2192191	Oxadiazon	75.6	66.9	P/P	55 - 123
2192191	Parathion Ethyl	86.8	93.8	P/P	67 - 120
2192191	Parathion Methyl	93.4	92.1	P/P	70 - 140
2192191	Pendimethalin	109	110	P/P	59 - 145
2192191	Phorate	89.6	99.9	P/P	52 - 127
2192191	Prodiamine	134	93.3	P/P	11 - 157
2192191	Prometon	79.6	77.4	P/P	55 - 130
2192191	Prometryn	89.0	81.8	P/P	55 - 127
2192191	Pronamide	81.4	85.3	P/P	66 - 150
2192191	Propiconazole	94.3	81.0	P/P	14 - 178
2192191	Tebuconazole	31.1	41.8	P/P	10 - 122
2192191	Terbufos	90.8	89.1	P/P	65 - 131
2192191	Terbuthylazine	88.9	80.2	P/P	63 - 131

Reference Method: EPA 8270E
Batch ID: P386636

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2193123	Aldrin	52.1	50.9	P/P	32 - 82.0
2193123	Alpha-BHC	78.9	78.1	P/P	68 - 157
2193123	Alpha-Chlordane	80.5	79.2	P/P	54 - 108
2193123	Beta-BHC	88.3	89.1	P/P	54 - 200
2193123	Beta-Cyfluthrin	82.1	79.5	P/P	50 - 154
2193123	Bifenthrin	87.8	87.6	P/P	49 - 124
2193123	Chlorothalonil	58.0	58.3	P/P	10 - 289
2193123	Cis-Nonachlor	85.1	83.4	P/P	53 - 112
2193123	Cypermethrin	89.9	89.8	P/P	43 - 141
2193123	Dacthal	86.2	84.6	P/P	75 - 112
2193123	DDD-p,p'	86.9	86.6	P/P	58 - 125
2193123	DDE-p,p'	80.5	80.1	P/P	50 - 108
2193123	DDT-p,p'	80.2	81.2	P/P	52 - 140
2193123	Delta-BHC	111	111	P/P	61 - 228
2193123	Deltamethrin	104	105	P/P	50 - 200
2193123	Dicofol	94.9	93.7	P/P	59 - 130

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P386636

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2193123	Dieldrin	83.0	83.1	P/P	57 - 121
2193123	Endosulfan I	81.4	82.1	P/P	62 - 123
2193123	Endosulfan II	87.0	93.8	P/P	48 - 163
2193123	Endosulfan Sulfate	86.9	84.4	P/P	63 - 132
2193123	Endrin	81.6	81.7	P/P	58 - 128
2193123	Endrin Aldehyde	92.6	87.5	P/P	44 - 126
2193123	Endrin Ketone	83.9	83.8	P/P	68 - 127
2193123	Ethalfluralin	72.4	75.1	P/P	55 - 131
2193123	Gamma-BHC	87.9	88.0	P/P	54 - 206
2193123	Gamma-Chlordane	78.3	76.8	P/P	52 - 105
2193123	Heptachlor	69.1	67.9	P/P	47 - 94.0
2193123	Heptachlor Epoxide	81.8	80.5	P/P	61 - 113
2193123	Hexachlorobenzene	66.4	67.3	P/P	45 - 100
2193123	Lambda-Cyhalothrin	81.9	81.3	P/P	37 - 165
2193123	Methoxychlor	77.0	76.7	P/P	63 - 153
2193123	Mirex	68.4	68.5	P/P	38 - 90.0
2193123	Permethrin	82.1	82.1	P/P	45 - 112
2193123	Phenothrin	61.7	61.9	P/P	22 - 118
2193123	Prallethrin	55.1	52.1	P/P	21 - 114
2193123	Trans-Nonachlor	80.0	77.8	P/P	50 - 103
2193123	Trifluralin	73.8	74.4	P/P	57 - 122

Reference Method: EPA 8276
Batch ID: P386636

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2193099	Chlordane	90.9	94.9	P/P	34 - 129
2193099	Toxaphene	95.1	103	P/P	26 - 123

Reference Method: EPA 8321B
Batch ID: P386554

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191680	3-Hydroxycarbofuran	52.9	56.1	P/P	40 - 150
2191680	Aldicarb	58.6	50.4	P/P	30 - 150
2191680	Aldicarb Sulfone	65.5	73.1	P/P	40 - 150
2191680	Aldicarb Sulfoxide	36.6	40.7	F/P	40 - 150
2191680	Carbaryl	46.5	47.7	P/P	40 - 150
2191680	Carbofuran	41.9	43.6	P/P	40 - 150
2191680	Methiocarb	50.0	51.6	P/P	40 - 150
2191680	Methomyl	67.4	71.0	P/P	40 - 150
2191680	Oxamyl	65.1	74.7	P/P	40 - 150
2191680	Propoxur	42.0	42.2	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P386628

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192762	2,4-D	109	101	P/P	30 - 160
2192762	Acetaminophen	98.0	97.9	P/P	30 - 160
2192762	Acetamiprid	75.2	76.2	P/P	30 - 160
2192762	Afidopyropen	51.8	50.0	P/P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P386628

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192762	Bentazon	49.0	46.4	P/P	30 - 160
2192762	Benzovindiflupyr	68.0	67.2	P/P	30 - 160
2192762	Carbamazepine	44.4	44.8	P/P	30 - 160
2192762	Clothianidin	77.0	84.7	P/P	30 - 160
2192762	Dinotefuran	103	103	P/P	30 - 160
2192762	Diuron	51.9	51.7	P/P	30 - 160
2192762	Fenuron	85.5	82.7	P/P	30 - 160
2192762	Fluridone	72.5	82.1	P/P	30 - 160
2192762	Hydrocodone	79.0	78.9	P/P	30 - 160
2192762	Ibuprofen	78.2	67.8	P/P	30 - 160
2192762	Imazapyr	72.7	74.5	P/P	30 - 160
2192762	Imidacloprid	123	134	P/P	30 - 160
2192762	Linuron	59.7	65.1	P/P	30 - 160
2192762	Mandestrobin	67.6	67.9	P/P	30 - 160
2192762	MCPP	118	109	P/P	30 - 160
2192762	Naproxen	62.5	43.6	P/P	30 - 160
2192762	Primidone	90.4	89.0	P/P	30 - 160
2192762	Pyraclostrobin	59.4	57.8	P/P	30 - 160
2192762	Thiamethoxam	108	112	P/P	30 - 160
2192762	Tolfenpyrad	50.2	47.4	P/P	30 - 160
2192762	Triclopyr	90.6	95.8	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P386663

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192461	Acesulfame K	106	102	P/P	40 - 150
2192461	AMPA	51.1	53.9	P/P	40 - 150
2192461	Endothall	146	132	P/P	40 - 150
2192461	Glufosinate	100	93.9	P/P	40 - 150
2192461	Glyphosate	84.6	90.2	P/P	40 - 140
2192461	Sucralose	100	107	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P386792

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192663	Fluoride	98.9	97.1	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P386768

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2192839	Organic Carbon	99.0	101	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P386641

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192658	Turbidity	9.25	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P386749

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192874	Barium	1.73	Spike	P	0 - 20
2192874	Calcium	0.712	Spike	P	0 - 20
2192874	Iron	1.61	Spike	P	0 - 20
2192874	Magnesium	0.587	Spike	P	0 - 20
2192874	Potassium	1.16	Spike	P	0 - 20
2192874	Sodium	0.934	Spike	P	0 - 20
2192874	Zinc	1.50	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P386749

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192874	Aluminum	1.03	Spike	P	0 - 20
2192874	Antimony	1.49	Spike	P	0 - 20
2192874	Arsenic	2.51	Spike	P	0 - 20
2192874	Beryllium	0.625	Spike	P	0 - 20
2192874	Boron	1.61	Spike	P	0 - 20
2192874	Cadmium	0.872	Spike	P	0 - 20
2192874	Chromium	0.742	Spike	P	0 - 20
2192874	Copper	1.88	Spike	P	0 - 20
2192874	Lead	0.404	Spike	P	0 - 20
2192874	Nickel	1.48	Spike	P	0 - 20
2192874	Selenium	1.97	Spike	P	0 - 20
2192874	Silver	0.701	Spike	P	0 - 20
2192874	Thallium	2.03	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387061

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2193005	Chloride	0.302	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P387066

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2193005	Sulfate	0.678	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387020

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192843	Ammonia-N	0.804	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386863

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192836	Kjeldahl Nitrogen	3.45	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386778

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192748	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386757

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192836	Total-P	2.36	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386651

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192837	O-Phosphate-P	0.145	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P386604

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192191	Acetochlor	9.55	Spike	P	0 - 30
2192191	Alachlor	11.0	Spike	P	0 - 30
2192191	Ametryn	3.61	Spike	P	0 - 30
2192191	Atrazine	22.0	Spike	P	0 - 30
2192191	Atrazine Desethyl	10.8	Spike	P	0 - 30
2192191	Azinphos Methyl	12.8	Spike	P	0 - 30
2192191	Bromacil	9.47	Spike	P	0 - 30
2192191	Butylate	35.5	Spike	F	0 - 30
2192191	Carbophenothion	3.02	Spike	P	0 - 30
2192191	Chlorpyrifos Ethyl	4.11	Spike	P	0 - 30
2192191	Chlorpyrifos Methyl	0.679	Spike	P	0 - 30
2192191	Cyanazine	8.65	Spike	P	0 - 30
2192191	Demeton	17.0	Spike	P	0 - 30
2192191	Diazinon	7.17	Spike	P	0 - 30
2192191	Dimethenamid	7.49	Spike	P	0 - 30
2192191	Disulfoton	8.24	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P386604

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192191	Dithiopyr	7.25	Spike	P	0 - 30
2192191	EPTC	9.94	Spike	P	0 - 30
2192191	Ethion	11.0	Spike	P	0 - 30
2192191	Ethoprop	3.36	Spike	P	0 - 30
2192191	Fenamiphos	2.03	Spike	P	0 - 30
2192191	Fipronil	7.61	Spike	P	0 - 30
2192191	Fipronil Desulfinyl	6.48	Spike	P	0 - 30
2192191	Fipronil Sulfide	0.656	Spike	P	0 - 30
2192191	Fipronil Sulfone	1.96	Spike	P	0 - 30
2192191	Flumioxazin	0.601	Spike	P	0 - 30
2192191	Fonofos	5.73	Spike	P	0 - 30
2192191	Hexazinone	5.03	Spike	P	0 - 30
2192191	Imazalil	8.20	Spike	P	0 - 30
2192191	Malathion	2.72	Spike	P	0 - 30
2192191	Metalaxyl	9.16	Spike	P	0 - 30
2192191	Metolachlor	8.14	Spike	P	0 - 30
2192191	Metribuzin	0.344	Spike	P	0 - 30
2192191	Mevinphos	2.67	Spike	P	0 - 30
2192191	Molinate	4.73	Spike	P	0 - 30
2192191	Naled	13.4	Spike	P	0 - 30
2192191	Norflurazon	6.09	Spike	P	0 - 30
2192191	Oxadiazon	8.55	Spike	P	0 - 30
2192191	Parathion Ethyl	7.81	Spike	P	0 - 30
2192191	Parathion Methyl	1.40	Spike	P	0 - 30
2192191	Pendimethalin	0.634	Spike	P	0 - 30
2192191	Phorate	11.0	Spike	P	0 - 30
2192191	Prodiamine	36.2	Spike	F	0 - 30
2192191	Prometon	2.78	Spike	P	0 - 30
2192191	Prometryn	8.38	Spike	P	0 - 30
2192191	Pronamide	4.63	Spike	P	0 - 30
2192191	Propiconazole	12.3	Spike	P	0 - 30
2192191	Simazine	7.45	Spike	P	0 - 30
2192191	Sulfentrazone	1.33	Spike	P	0 - 30
2192191	Tebuconazole	29.6	Spike	P	0 - 30
2192191	Terbufos	1.86	Spike	P	0 - 30
2192191	Terbuthylazine	10.3	Spike	P	0 - 30
LFB	Acetochlor	9.71	LCS	P	0 - 30
LFB	Alachlor	5.82	LCS	P	0 - 30
LFB	Ametryn	21.5	LCS	P	0 - 30
LFB	Atrazine	9.48	LCS	P	0 - 30
LFB	Atrazine Desethyl	8.34	LCS	P	0 - 30
LFB	Azinphos Methyl	5.09	LCS	P	0 - 30
LFB	Bromacil	8.87	LCS	P	0 - 30
LFB	Butylate	11.3	LCS	P	0 - 30
LFB	Carbophenothion	4.00	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	6.01	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	8.67	LCS	P	0 - 30
LFB	Cyanazine	3.99	LCS	P	0 - 30
LFB	Demeton	0.558	LCS	P	0 - 30
LFB	Diazinon	7.17	LCS	P	0 - 30
LFB	Dimethenamid	9.60	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P386604

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Disulfoton	3.42	LCS	P	0 - 30
LFB	Dithiopyr	7.58	LCS	P	0 - 30
LFB	EPTC	10.4	LCS	P	0 - 30
LFB	Ethion	3.54	LCS	P	0 - 30
LFB	Ethoprop	3.84	LCS	P	0 - 30
LFB	Fenamiphos	3.90	LCS	P	0 - 30
LFB	Fipronil	8.38	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	8.64	LCS	P	0 - 30
LFB	Fipronil Sulfide	4.17	LCS	P	0 - 30
LFB	Fipronil Sulfone	6.74	LCS	P	0 - 30
LFB	Flumioxazin	9.35	LCS	P	0 - 30
LFB	Fonofos	1.18	LCS	P	0 - 30
LFB	Hexazinone	6.20	LCS	P	0 - 30
LFB	Imazalil	20.3	LCS	P	0 - 30
LFB	Malathion	2.07	LCS	P	0 - 30
LFB	Metalaxyl	6.82	LCS	P	0 - 30
LFB	Metolachlor	7.44	LCS	P	0 - 30
LFB	Metribuzin	6.08	LCS	P	0 - 30
LFB	Mevinphos	9.73	LCS	P	0 - 30
LFB	Molinate	5.31	LCS	P	0 - 30
LFB	Naled	6.41	LCS	P	0 - 30
LFB	Norflurazon	11.6	LCS	P	0 - 30
LFB	Oxadiazon	8.70	LCS	P	0 - 30
LFB	Parathion Ethyl	0.720	LCS	P	0 - 30
LFB	Parathion Methyl	8.51	LCS	P	0 - 30
LFB	Pendimethalin	2.27	LCS	P	0 - 30
LFB	Phorate	4.15	LCS	P	0 - 30
LFB	Prodiamine	10.0	LCS	P	0 - 30
LFB	Prometon	16.6	LCS	P	0 - 30
LFB	Prometryn	11.6	LCS	P	0 - 30
LFB	Pronamide	25.4	LCS	P	0 - 30
LFB	Propiconazole	9.93	LCS	P	0 - 30
LFB	Simazine	14.7	LCS	P	0 - 30
LFB	Sulfentrazone	6.75	LCS	P	0 - 30
LFB	Tebuconazole	7.79	LCS	P	0 - 30
LFB	Terbufos	4.34	LCS	P	0 - 30
LFB	Terbuthylazine	5.03	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P386636

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2193123	Aldrin	2.28	Spike	P	0 - 30
2193123	Alpha-BHC	0.993	Spike	P	0 - 30
2193123	Alpha-Chlordane	1.65	Spike	P	0 - 30
2193123	Beta-BHC	0.855	Spike	P	0 - 30
2193123	Beta-Cyfluthrin	3.29	Spike	P	0 - 30
2193123	Bifenthrin	0.264	Spike	P	0 - 30
2193123	Chlorothalonil	0.572	Spike	P	0 - 30
2193123	Cis-Nonachlor	2.02	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P386636

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2193123	Cypermethrin	0.116	Spike	P	0 - 30
2193123	Dacthal	1.84	Spike	P	0 - 30
2193123	DDD-p,p'	0.405	Spike	P	0 - 30
2193123	DDE-p,p'	0.564	Spike	P	0 - 30
2193123	DDT-p,p'	1.19	Spike	P	0 - 30
2193123	Delta-BHC	0.149	Spike	P	0 - 30
2193123	Deltamethrin	1.12	Spike	P	0 - 30
2193123	Dicofol	1.34	Spike	P	0 - 30
2193123	Dieldrin	0.0275	Spike	P	0 - 30
2193123	Endosulfan I	0.885	Spike	P	0 - 30
2193123	Endosulfan II	7.53	Spike	P	0 - 30
2193123	Endosulfan Sulfate	2.94	Spike	P	0 - 30
2193123	Endrin	0.231	Spike	P	0 - 30
2193123	Endrin Aldehyde	5.62	Spike	P	0 - 30
2193123	Endrin Ketone	0.111	Spike	P	0 - 30
2193123	Ethalfluralin	3.68	Spike	P	0 - 30
2193123	Gamma-BHC	0.183	Spike	P	0 - 30
2193123	Gamma-Chlordane	1.94	Spike	P	0 - 30
2193123	Heptachlor	1.67	Spike	P	0 - 30
2193123	Heptachlor Epoxide	1.54	Spike	P	0 - 30
2193123	Hexachlorobenzene	1.46	Spike	P	0 - 30
2193123	Lambda-Cyhalothrin	0.748	Spike	P	0 - 30
2193123	Methoxychlor	0.505	Spike	P	0 - 30
2193123	Mirex	0.147	Spike	P	0 - 30
2193123	Permethrin	0.0103	Spike	P	0 - 30
2193123	Phenothrin	0.264	Spike	P	0 - 30
2193123	Prallethrin	5.44	Spike	P	0 - 30
2193123	Trans-Nonachlor	2.77	Spike	P	0 - 30
2193123	Trifluralin	0.739	Spike	P	0 - 30
LFB	Aldrin	0.0131	LCS	P	0 - 30
LFB	Alpha-BHC	1.88	LCS	P	0 - 30
LFB	Alpha-Chlordane	2.39	LCS	P	0 - 30
LFB	Beta-BHC	1.68	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	1.88	LCS	P	0 - 30
LFB	Bifenthrin	0.0773	LCS	P	0 - 30
LFB	Chlorothalonil	7.74	LCS	P	0 - 30
LFB	Cis-Nonachlor	2.09	LCS	P	0 - 30
LFB	Cypermethrin	3.76	LCS	P	0 - 30
LFB	Dacthal	1.56	LCS	P	0 - 30
LFB	DDD-p,p'	1.66	LCS	P	0 - 30
LFB	DDE-p,p'	0.0658	LCS	P	0 - 30
LFB	DDT-p,p'	0.853	LCS	P	0 - 30
LFB	Delta-BHC	5.58	LCS	P	0 - 30
LFB	Deltamethrin	1.77	LCS	P	0 - 30
LFB	Dicofol	3.43	LCS	P	0 - 30
LFB	Dieldrin	1.44	LCS	P	0 - 30
LFB	Endosulfan I	2.54	LCS	P	0 - 30
LFB	Endosulfan II	0.0736	LCS	P	0 - 30
LFB	Endosulfan Sulfate	5.57	LCS	P	0 - 30
LFB	Endrin	7.37	LCS	P	0 - 30
LFB	Endrin Aldehyde	1.91	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P386636

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Endrin Ketone	0.487	LCS	P	0 - 30
LFB	Ethalfluralin	0.428	LCS	P	0 - 30
LFB	Gamma-BHC	3.34	LCS	P	0 - 30
LFB	Gamma-Chlordane	1.25	LCS	P	0 - 30
LFB	Heptachlor	3.29	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.00	LCS	P	0 - 30
LFB	Hexachlorobenzene	2.68	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	3.10	LCS	P	0 - 30
LFB	Methoxychlor	1.22	LCS	P	0 - 30
LFB	Mirex	0.493	LCS	P	0 - 30
LFB	Permethrin	0.892	LCS	P	0 - 30
LFB	Phenothrin	0.505	LCS	P	0 - 30
LFB	Prallethrin	2.10	LCS	P	0 - 30
LFB	Trans-Nonachlor	2.06	LCS	P	0 - 30
LFB	Trifluralin	0.681	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P386636

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2193099	Chlordane	4.34	Spike	P	0 - 30
2193099	Toxaphene	7.63	Spike	P	0 - 30
LFB	Chlordane	1.31	LCS	P	0 - 30
LFB	Toxaphene	3.59	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P386554

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191680	3-Hydroxycarbofuran	5.82	Spike	P	0 - 30
2191680	Aldicarb	14.9	Spike	P	0 - 30
2191680	Aldicarb Sulfone	10.9	Spike	P	0 - 30
2191680	Aldicarb Sulfoxide	10.6	Spike	P	0 - 30
2191680	Carbaryl	2.54	Spike	P	0 - 30
2191680	Carbofuran	3.93	Spike	P	0 - 30
2191680	Methiocarb	3.26	Spike	P	0 - 30
2191680	Methomyl	5.23	Spike	P	0 - 30
2191680	Oxamyl	9.93	Spike	P	0 - 30
2191680	Propoxur	0.505	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P386628

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192762	2,4-D	7.20	Spike	P	0 - 30
2192762	Acetaminophen	0.0857	Spike	P	0 - 30
2192762	Acetamiprid	1.33	Spike	P	0 - 30
2192762	Afidopyropen	3.67	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P386628

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192762	Bentazon	1.50	Spike	P	0 - 30
2192762	Benzovindiflupyr	1.18	Spike	P	0 - 30
2192762	Carbamazepine	0.601	Spike	P	0 - 30
2192762	Clothianidin	9.44	Spike	P	0 - 30
2192762	Dinotefuran	0.0268	Spike	P	0 - 30
2192762	Diuron	0.231	Spike	P	0 - 30
2192762	Fenuron	3.35	Spike	P	0 - 30
2192762	Fluridone	10.4	Spike	P	0 - 30
2192762	Hydrocodone	0.0358	Spike	P	0 - 30
2192762	Ibuprofen	14.3	Spike	P	0 - 30
2192762	Imazapyr	1.62	Spike	P	0 - 30
2192762	Imidacloprid	8.34	Spike	P	0 - 30
2192762	Linuron	8.66	Spike	P	0 - 30
2192762	Mandestrobin	0.505	Spike	P	0 - 30
2192762	MCPP	8.29	Spike	P	0 - 30
2192762	Naproxen	28.7	Spike	P	0 - 30
2192762	Primidone	1.55	Spike	P	0 - 30
2192762	Pyraclostrobin	2.58	Spike	P	0 - 30
2192762	Thiamethoxam	3.04	Spike	P	0 - 30
2192762	Tolfenpyrad	5.85	Spike	P	0 - 30
2192762	Triclopyr	5.62	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P386663

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192461	Acesulfame K	3.94	Spike	P	0 - 30
2192461	AMPA	5.38	Spike	P	0 - 30
2192461	Endothall	10.1	Spike	P	0 - 30
2192461	Glufosinate	6.64	Spike	P	0 - 30
2192461	Glyphosate	6.48	Spike	P	0 - 30
2192461	Sucralose	6.56	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P386654

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192663	Color (true)	0.129	Sample	P	0 - 20

Reference Method: SM 2120 B-2011
Batch ID: P386656

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192464	Color (true)	5.56	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2320 B-2011
Batch ID: P386788

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192663	Total Alkalinity	0.197	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P386808

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192663	TDS	0.673	Sample	P	0 - 10

Reference Method: SM 2540 C-2011
Batch ID: P386809

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192835	TDS	1.05	Sample	P	0 - 10

Reference Method: SM 2540 D-2011
Batch ID: P386813

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192835	TSS	2.84	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P386792

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192663	Fluoride	1.43	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P386768

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2192839	Organic Carbon	1.61	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2192866
Field Sample ID: G2TLHR0031

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	106	P	30 - 160
EPA 8321B	Acetaminophen-d4	91.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	53.8	P	30 - 160
EPA 8321B	Diuron-d6	53.2	P	30 - 160
EPA 8321B	Endothall-d6	111	P	30 - 160
EPA 8321B	Endothall-d6	111	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	95.5	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	95.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	100	P	30 - 160
EPA 8321B	Primidone-d5	89.6	P	30 - 160
EPA 8321B	Sucralose-d6	105	P	30 - 160
EPA 8321B	Sucralose-d6	105	P	30 - 160

Lab Sample ID: 2192867
Field Sample ID: G2TLHR0041

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	46.4	P	30 - 160

Lab Sample ID: 2192868
Field Sample ID: G2TLHR0041

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	113	P	30 - 160
EPA 8321B	Acetaminophen-d4	78.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	52.7	P	30 - 160
EPA 8321B	Diuron-d6	58.0	P	30 - 160
EPA 8321B	Endothall-d6	108	P	30 - 160
EPA 8321B	Endothall-d6	108	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	102	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	102	P	30 - 160
EPA 8321B	Ibuprofen-d3	97.8	P	30 - 160
EPA 8321B	Primidone-d5	103	P	30 - 160
EPA 8321B	Sucralose-d6	106	P	30 - 160
EPA 8321B	Sucralose-d6	106	P	30 - 160

Lab Sample ID: 2192869
Field Sample ID: G2TLHR0020

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	114	P	30 - 160
EPA 8321B	Acetaminophen-d4	83.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	52.8	P	30 - 160
EPA 8321B	Diuron-d6	58.8	P	30 - 160
EPA 8321B	Endothall-d6	103	P	30 - 160
EPA 8321B	Endothall-d6	103	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	103	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	103	P	30 - 160
EPA 8321B	Ibuprofen-d3	105	P	30 - 160
EPA 8321B	Primidone-d5	99.8	P	30 - 160
EPA 8321B	Sucralose-d6	95.3	P	30 - 160
EPA 8321B	Sucralose-d6	95.3	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2192870
Field Sample ID: G1TLHR0053

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	104	P	30 - 160
EPA 8321B	Acetaminophen-d4	85.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	53.5	P	30 - 160
EPA 8321B	Diuron-d6	53.3	P	30 - 160
EPA 8321B	Endothall-d6	107	P	30 - 160
EPA 8321B	Endothall-d6	107	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	101	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	101	P	30 - 160
EPA 8321B	Ibuprofen-d3	99.8	P	30 - 160
EPA 8321B	Primidone-d5	89.7	P	30 - 160
EPA 8321B	Sucralose-d6	103	P	30 - 160
EPA 8321B	Sucralose-d6	103	P	30 - 160

Lab Sample ID: 2192871
Field Sample ID: G2TLHR0041

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	85.4	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	81.4	P	34 - 106
EPA 8276	Decachlorobiphenyl	80.7	P	26 - 97.0
EPA 8276	PCNB	82.3	P	38 - 141

Lab Sample ID: 2192872
Field Sample ID: G2TLHR0041

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	102	P	72 - 135
EPA 8270E	Terbufos-d10	88.4	P	57 - 134

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Reference Method: EPA 180.1 Rev. 2.0
Run ID: A100685
Included Lab Sample IDs: 2192835, 2192838, 2192841, 2192842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	101	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A100687
Included Lab Sample IDs: 2192837, 2192840, 2192845, 2192846

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.3	99.3	P/P	90 - 110
O-Phosphate-P	99.3	98.2	P/P	90 - 110
O-Phosphate-P	99.4	98.3	P/P	90 - 110

Reference Method: SM 2120 B-2011
Run ID: A100689
Included Lab Sample IDs: 2192835, 2192838, 2192841, 2192842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	100	P/P	90 - 115
Color (true)	99.2	100	P/P	90 - 115
Color (true)	99.9	101	P/P	90 - 115

Reference Method: EPA 8321B
Run ID: A100723
Included Lab Sample IDs: 2192866, 2192868, 2192869, 2192870

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

Reference Method: SM 5310 B-2011
Run ID: A100736
Included Lab Sample IDs: 2192836, 2192839, 2192843, 2192844

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.5	97.2	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A100738
Included Lab Sample IDs: 2192866, 2192868, 2192869, 2192870

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	68.7	72.6	P/P	60 - 160
Endothall	109	108	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A100742
Included Lab Sample IDs: 2192836, 2192839, 2192843, 2192844

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	102	P/P	90 - 110

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Reference Method: SM 2320 B-2011
Run ID: A100747
Included Lab Sample IDs: 2192835, 2192838, 2192841, 2192842

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

Reference Method: SM 4500 F-C-2011
Run ID: A100747
Included Lab Sample IDs: 2192835, 2192838, 2192841, 2192842

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A100757
Included Lab Sample IDs: 2192836, 2192839, 2192843

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	103	P/P	90 - 110
Total-P	103	104	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A100758
Included Lab Sample IDs: 2192866, 2192868, 2192869, 2192870

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	143	122	P/P	50 - 150
3-Hydroxycarbofuran	108	107	P/P	60 - 150
Acetaminophen	123	118	P/P	60 - 160
Acetamiprid	134	134	P/P	50 - 150
Afidopyropen	85.8	78.0	P/P	50 - 150
Aldicarb	96.8	101	P/P	60 - 150
Aldicarb Sulfone	114	116	P/P	50 - 150
Aldicarb Sulfoxide	115	112	P/P	50 - 150
Benzovindiflupyr	112	120	P/P	50 - 150
Carbamazepine	111	104	P/P	60 - 150
Carbaryl	104	117	P/P	60 - 150
Carbofuran	112	117	P/P	50 - 150
Clothianidin	106	107	P/P	60 - 150
Dinotefuran	108	111	P/P	50 - 150
Diuron	109	107	P/P	60 - 160
Fenuron	131	131	P/P	60 - 150
Hydrocodone	114	113	P/P	60 - 150
Ibuprofen	125	106	P/P	50 - 160
Imidacloprid	101	99.4	P/P	60 - 150
Linuron	127	114	P/P	60 - 150
Mandestrobin	124	123	P/P	50 - 150
MCPP	129	132	P/P	50 - 150
Methiocarb	113	114	P/P	50 - 150
Methomyl	114	119	P/P	50 - 150
Naproxen	109	104	P/P	50 - 160
Oxamyl	118	118	P/P	50 - 150
Primidone	118	118	P/P	60 - 150
Propoxur	111	115	P/P	50 - 150
Pyraclostrobin	119	125	P/P	60 - 150

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Reference Method: EPA 8321B
Run ID: A100758
Included Lab Sample IDs: 2192866, 2192868, 2192869, 2192870

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Thiamethoxam	123	123	P/P	50 - 150
Tolfenpyrad	114	109	P/P	60 - 150
Triclopyr	107	116	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A100778
Included Lab Sample IDs: 2192844

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	98.8	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A100779
Included Lab Sample IDs: 2192866, 2192868, 2192869, 2192870

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	81.6	82.7	P/P	60 - 160
Glufosinate	93.7	91.6	P/P	60 - 160
Glyphosate	107	111	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A100781
Included Lab Sample IDs: 2192866, 2192868, 2192869, 2192870

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bentazon	151	157	P/P	50 - 160
Fluridone	111	124	P/P	60 - 160
Imazapyr	145	155	P/P	50 - 160

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A100789
Included Lab Sample IDs: 2192873, 2192874

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	98.1	101	P/P	90 - 110
Calcium	100	102	P/P	90 - 110
Iron	103	105	P/P	90 - 110
Magnesium	102	104	P/P	90 - 110
Potassium	100	101	P/P	90 - 110
Sodium	100	101	P/P	90 - 110
Zinc	100	102	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A100791
Included Lab Sample IDs: 2192871

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	89.2		P	80 - 120
Toxaphene	107		P	80 - 120

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Reference Method: EPA 8270E
Run ID: A100804
Included Lab Sample IDs: 2192871

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.8		P	80 - 120
Alpha-BHC	99.8		P	80 - 120
Alpha-Chlordane	98.1		P	80 - 120
Beta-BHC	84.2		P	80 - 120
Beta-Cyfluthrin	87.6		P	80 - 120
Bifenthrin	97.9		P	80 - 120
Chlorothalonil	111		P	80 - 120
Cis-Nonachlor	96.2		P	80 - 120
Cypermethrin	93.2		P	80 - 120
Dacthal	98.0		P	80 - 120
DDD-p,p'	97.7		P	80 - 120
DDE-p,p'	102		P	80 - 120
DDT-p,p'	106		P	80 - 120
Delta-BHC	98.5		P	80 - 120
Deltamethrin	103		P	80 - 120
Dicofol	104		P	80 - 120
Dieldrin	104		P	80 - 120
Endosulfan I	98.2		P	80 - 120
Endosulfan II	87.3		P	80 - 120
Endosulfan Sulfate	100		P	80 - 120
Endrin	92.8		P	80 - 120
Endrin Aldehyde	108		P	80 - 120
Endrin Ketone	94.8		P	80 - 120
Ethalfluralin	101		P	80 - 120
Gamma-BHC	93.1		P	80 - 120
Gamma-Chlordane	97.6		P	80 - 120
Heptachlor	98.6		P	80 - 120
Heptachlor Epoxide	98.9		P	80 - 120
Hexachlorobenzene	96.9		P	80 - 120
Lambda-Cyhalothrin	85.8		P	80 - 120
Methoxychlor	99.6		P	80 - 120
Mirex	98.8		P	80 - 120
Permethrin	92.1		P	80 - 120
Phenothrin	90.7		P	80 - 120
Prallethrin	87.8		P	80 - 120
Trans-Nonachlor	98.0		P	80 - 120
Trifluralin	98.2		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A100809
Included Lab Sample IDs: 2192836, 2192839, 2192843, 2192844

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	93.9	97.0	P/P	90 - 110
Kjeldahl Nitrogen	97.0	94.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A100832
Included Lab Sample IDs: 2192836, 2192839, 2192843, 2192844

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits

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Reference Method: EPA 350.1 Rev. 2.0
Run ID: A100832
Included Lab Sample IDs: 2192836, 2192839, 2192843, 2192844

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	99.9	P/P	90 - 110
Ammonia-N	101	100	P/P	90 - 110
Ammonia-N	99.9	101	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A100843
Included Lab Sample IDs: 2192835, 2192838, 2192841, 2192842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	101	P/P	90 - 110
Sulfate	101	100	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A100913
Included Lab Sample IDs: 2192873, 2192874

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	95.8	95.9	P/P	90 - 110
Aluminum	96.0	95.8	P/P	90 - 110
Antimony	103	103	P/P	90 - 110
Antimony	103	103	P/P	90 - 110
Arsenic	97.1	97.3	P/P	90 - 110
Arsenic	98.2	97.1	P/P	90 - 110
Boron	96.0	97.9	P/P	90 - 110
Boron	97.9	97.1	P/P	90 - 110
Cadmium	95.1	96.1	P/P	90 - 110
Cadmium	95.4	95.1	P/P	90 - 110
Chromium	98.8	99.4	P/P	90 - 110
Chromium	99.8	98.8	P/P	90 - 110
Copper	93.6	92.4	P/P	90 - 110
Copper	94.5	93.6	P/P	90 - 110
Lead	95.6	95.8	P/P	90 - 110
Lead	95.8	96.1	P/P	90 - 110
Nickel	94.8	94.3	P/P	90 - 110
Nickel	95.6	94.8	P/P	90 - 110
Selenium	97.6	98.5	P/P	90 - 110
Selenium	99.6	97.6	P/P	90 - 110
Thallium	94.0	95.3	P/P	90 - 110
Thallium	95.3	95.5	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A100919
Included Lab Sample IDs: 2192872

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	97.5		P	80 - 120
Alachlor	101		P	80 - 120
Ametryn	101		P	80 - 120
Atrazine	98.1		P	80 - 120
Atrazine Desethyl	96.1		P	80 - 120
Azinphos Methyl	102		P	80 - 120

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Reference Method: EPA 8270E
Run ID: A100919
Included Lab Sample IDs: 2192872

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromacil	102		P	80 - 120
Butylate	92.9		P	80 - 120
Carbophenothion	100		P	80 - 120
Chlorpyrifos Ethyl	100		P	80 - 120
Chlorpyrifos Methyl	99.4		P	80 - 120
Cyanazine	97.3		P	80 - 120
Demeton	95.1		P	80 - 120
Diazinon	96.8		P	80 - 120
Dimethenamid	98.7		P	80 - 120
Disulfoton	96.3		P	80 - 120
Dithiopyr	99.5		P	80 - 120
EPTC	94.5		P	80 - 120
Ethion	100		P	80 - 120
Ethoprop	99.2		P	80 - 120
Fenamiphos	106		P	80 - 120
Fipronil	99.6		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	101		P	80 - 120
Fipronil Sulfone	97.3		P	80 - 120
Flumioxazin	93.4		P	80 - 120
Fonofos	96.4		P	80 - 120
Hexazinone	107		P	80 - 120
Imazalil	108		P	80 - 120
Malathion	100		P	80 - 120
Metalaxyl	100		P	80 - 120
Metolachlor	96.7		P	80 - 120
Metribuzin	97.0		P	80 - 120
Mevinphos	97.1		P	80 - 120
Molinate	94.2		P	80 - 120
Naled	92.8		P	80 - 120
Norflurazon	98.7		P	80 - 120
Oxadiazon	97.7		P	80 - 120
Parathion Ethyl	92.5		P	80 - 120
Parathion Methyl	103		P	80 - 120
Pendimethalin	92.7		P	80 - 120
Phorate	99.8		P	80 - 120
Prodiamine	90.7		P	80 - 120
Prometon	97.1		P	80 - 120
Prometryn	98.1		P	80 - 120
Pronamide	99.4		P	80 - 120
Propiconazole	99.5		P	80 - 120
Simazine	113		P	80 - 120
Sulfentrazone	101		P	80 - 120
Tebuconazole	99.4		P	80 - 120
Terbufos	98.8		P	80 - 120
Terbuthylazine	99.8		P	80 - 120

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Reference Method: EPA 200.8 Rev. 5.4
Run ID: A100945
Included Lab Sample IDs: 2192873, 2192874

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Silver	104	103	P/P	90 - 110
Silver	105	104	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A100950
Included Lab Sample IDs: 2192873, 2192874

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

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Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			Precision		
							LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							9.25	
EPA 200.7 Rev. 4.4	Barium	97.9		104	102	99.0			1.73
	Calcium	103		105	106	104			0.712
	Iron	104		108	110	105			1.61
	Magnesium	104		109	110	98.9			0.587
	Potassium	101		104	105	103			1.16
	Sodium	100		99.9	98.4	102			0.934
	Zinc	99.8		108	106	103			1.50
EPA 200.8 Rev. 5.4	Aluminum	93.4		93.2	94.7	93.5			1.03
	Antimony	100		105	100	98.9			1.49
	Arsenic	99.5		107	100	97.9			2.51
	Beryllium	111		109	108	112			0.625
	Boron	94.3		97.8	99.0	97.3			1.61
	Cadmium	96.1		101	98.1	97.3			0.872
	Chromium	103		105	103	102			0.742
	Copper	96.8		99.0	97.5	95.7			1.88
	Lead	98.1		101	102	101			0.404
	Nickel	95.6		99.2	97.2	95.7			1.48
	Selenium	97.6		104	98.0	96.1			1.97
	Silver	107		106	106	107			0.701
	Thallium	99.4		107	101	103			2.03
EPA 300.0 Rev. 2.1	Chloride	99.6		99.7	99.8			0.302	
	Sulfate	98.0		96.4	98.8			0.678	
EPA 350.1 Rev. 2.0	Ammonia-N	101		99.4	101				0.804
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.1		95.0	99.5				3.45
EPA 353.2 Rev. 2.0	NO2NO3-N	101		96.8					0.0
EPA 365.1 Rev. 2.0	Total-P	107		108	111				2.36
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.9		99.4	99.2				0.145
EPA 8270E	Acetochlor	85.5	94.2	78.3	71.1		9.71		9.55
	Alachlor	87.7	93.0	71.0	63.6		5.82		11.0
	Aldrin	52.2	52.2	52.1	50.9		0.0131		2.28
	Alpha-BHC	82.2	80.7	78.9	78.1		1.88		0.993
	Alpha-Chlordane	86.1	84.0	80.5	79.2		2.39		1.65
	Ametryn	93.1	116				21.5		3.61
	Atrazine	94.5	104				9.48		22.0
	Atrazine Desethyl	89.9	97.7				8.34		10.8
	Azinphos Methyl	104	109	148	130		5.09		12.8
	Beta-BHC	106	104	88.3	89.1		1.68		0.855
	Beta-Cyfluthrin	75.9	74.5	82.1	79.5		1.88		3.29
	Bifenthrin	86.1	86.0	87.8	87.6		0.0773		0.264
	Bromacil	91.4	99.9	98.3	89.4		8.87		9.47
	Butylate	43.7	49.0	59.5	41.6		11.3		35.5
	Carbophenothion	100	104	89.8	87.1		4.00		3.02
	Chlorothalonil	50.8	47.0	58.0	58.3		7.74		0.572
	Chlorpyrifos Ethyl	90.1	95.7	85.3	88.8		6.01		4.11
	Chlorpyrifos Methyl	81.0	88.3	85.8	85.3		8.67		0.679
	Cis-Nonachlor	91.3	89.4	85.1	83.4		2.09		2.02
	Cyanazine	101	96.6	98.9	90.7		3.99		8.65
	Cypermethrin	94.7	91.2	89.9	89.8		3.76		0.116
	Dacthal	93.5	92.1	86.2	84.6		1.56		1.84
	DDD-p,p'	94.9	93.4	86.9	86.6		1.66		0.405
	DDE-p,p'	83.6	83.6	80.5	80.1		0.0658		0.564
	DDT-p,p'	83.0	82.2	80.2	81.2		0.853		1.19
	Delta-BHC	118	112	111	111		5.58		0.149

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Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Deltamethrin	103	101	104	105	1.77		1.12
	Demeton	73.9	73.5	86.5	103	0.558		17.0
	Diazinon	87.3	93.8	88.9	82.7	7.17		7.17
	Dicofol	95.6	98.9	94.9	93.7	3.43		1.34
	Dieldrin	88.1	89.4	83.0	83.1	1.44		0.0275
	Dimethenamid	86.4	95.1	81.2	75.4	9.60		7.49
	Disulfoton	74.8	72.3	80.0	73.6	3.42		8.24
	Dithiopyr	91.3	98.5	78.6	72.8	7.58		7.25
	Endosulfan I	86.3	84.2	81.4	82.1	2.54		0.885
	Endosulfan II	103	103	87.0	93.8	0.0736		7.53
	Endosulfan Sulfate	94.2	89.1	86.9	84.4	5.57		2.94
	Endrin	82.7	76.8	81.6	81.7	7.37		0.231
	Endrin Aldehyde	114	112	92.6	87.5	1.91		5.62
	Endrin Ketone	91.5	91.0	83.9	83.8	0.487		0.111
	EPTC	44.3	49.1	51.6	46.7	10.4		9.94
	Ethalfluralin	76.2	76.5	72.4	75.1	0.428		3.68
	Ethion	102	106	88.6	79.4	3.54		11.0
	Ethoprop	75.3	72.4	83.5	80.8	3.84		3.36
	Fenamiphos	96.6	92.9	75.0	76.5	3.90		2.03
	Fipronil	95.8	104	103	95.4	8.38		7.61
	Fipronil Desulfinyl	97.1	106	93.7	86.0	8.64		6.48
	Fipronil Sulfide	98.0	102	96.7	97.5	4.17		0.656
	Fipronil Sulfone	95.3	102	115	110	6.74		1.96
	Flumioxazin	119	130	188	187	9.35		0.601
	Fonofos	70.4	71.3	81.8	77.3	1.18		5.73
	Gamma-BHC	98.3	95.1	87.9	88.0	3.34		0.183
	Gamma-Chlordane	84.3	83.3	78.3	76.8	1.25		1.94
	Heptachlor	72.4	70.1	69.1	67.9	3.29		1.67
	Heptachlor Epoxide	88.4	87.5	81.8	80.5	1.00		1.54
	Hexachlorobenzene	71.3	73.2	66.4	67.3	2.68		1.46
	Hexazinone	102	108	89.1	94.2	6.20		5.03
	Imazalil	130	106	58.0	53.4	20.3		8.20
	Lambda-Cyhalothrin	79.6	77.1	81.9	81.3	3.10		0.748
	Malathion	93.5	91.6	95.2	92.6	2.07		2.72
	Metalaxyl	93.6	100	85.0	77.6	6.82		9.16
	Methoxychlor	79.9	79.0	77.0	76.7	1.22		0.505
	Metolachlor	90.8	97.8			7.44		8.14
	Metribuzin	103	110	118	118	6.08		0.344
	Mevinphos	66.4	60.2	77.4	79.5	9.73		2.67
	Mirex	68.5	68.8	68.4	68.5	0.493		0.147
	Molinate	51.8	54.6	68.4	65.3	5.31		4.73
	Naled	53.3	50.0	64.0	55.9	6.41		13.4
	Norflurazon	93.7	105	78.8	74.1	11.6		6.09
	Oxadiazon	92.7	101	75.6	66.9	8.70		8.55
	Parathion Ethyl	89.8	90.4	86.8	93.8	0.720		7.81
	Parathion Methyl	89.6	97.6	93.4	92.1	8.51		1.40
	Pendimethalin	103	101	109	110	2.27		0.634
	Permethrin	81.9	82.6	82.1	82.1	0.892		0.0103
	Phenothrin	60.1	60.4	61.7	61.9	0.505		0.264
	Phorate	60.1	62.6	89.6	99.9	4.15		11.0
	Prallethrin	57.3	56.1	55.1	52.1	2.10		5.44
	Prodiamine	141	127	134	93.3	10.0		36.2
	Prometon	83.3	98.4	79.6	77.4	16.6		2.78
	Prometryn	93.3	105	89.0	81.8	11.6		8.38

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Pronamide	88.6	114	81.4	85.3	25.4		4.63
	Propiconazole	94.0	104	94.3	81.0	9.93		12.3
	Simazine	105	121			14.7		7.45
	Sulfentrazone	65.0	69.5			6.75		1.33
	Tebuconazole	94.2	102	31.1	41.8	7.79		29.6
	Terbufos	75.2	78.5	90.8	89.1	4.34		1.86
	Terbuthylazine	92.3	97.1	88.9	80.2	5.03		10.3
	Trans-Nonachlor	86.1	84.4	80.0	77.8	2.06		2.77
	Trifluralin	77.6	78.1	73.8	74.4	0.681		0.739
EPA 8276	Chlordane	92.4	91.2	90.9	94.9	1.31		4.34
	Toxaphene	88.3	85.2	95.1	103	3.59		7.63
EPA 8321B	2,4-D	120		109	101			7.20
	3-Hydroxycarbofuran	85.3		52.9	56.1			5.82
	Acesulfame K	104		106	102			3.94
	Acetaminophen	79.4		98.0	97.9			0.0857
	Acetamiprid	67.8		75.2	76.2			1.33
	Afidopyropen	41.3		51.8	50.0			3.67
	Aldicarb	64.5		58.6	50.4			14.9
	Aldicarb Sulfone	94.4		65.5	73.1			10.9
	Aldicarb Sulfoxide	105		36.6	40.7			10.6
	AMPA	75.5		51.1	53.9			5.38
	Bentazon	81.7		49.0	46.4			1.50
	Benzovindiflupyr	66.7		68.0	67.2			1.18
	Carbamazepine	57.6		44.4	44.8			0.601
	Carbaryl	67.5		46.5	47.7			2.54
	Carbofuran	56.2		41.9	43.6			3.93
	Clothianidin	75.5		77.0	84.7			9.44
	Dinotefuran	87.3		103	103			0.0268
	Diuron	56.0		51.9	51.7			0.231
	Endothall	101		146	132			10.1
	Fenuron	87.4		85.5	82.7			3.35
	Fluridone	85.9		72.5	82.1			10.4
	Glufosinate	95.1		100	93.9			6.64
	Glyphosate	116		84.6	90.2			6.48
	Hydrocodone	78.3		79.0	78.9			0.0358
	Ibuprofen	93.7		78.2	67.8			14.3
	Imazapyr	115		72.7	74.5			1.62
	Imidacloprid	88.9		123	134			8.34
	Linuron	64.9		59.7	65.1			8.66
	Mandestrobin	70.1		67.6	67.9			0.505
	MCPP	120		118	109			8.29
	Methiocarb	58.0		50.0	51.6			3.26
	Methomyl	103		67.4	71.0			5.23
	Naproxen	68.7		62.5	43.6			28.7
	Oxamyl	93.5		65.1	74.7			9.93
	Primidone	84.7		90.4	89.0			1.55
	Propoxur	60.7		42.0	42.2			0.505
	Pyraclostrobin	59.9		59.4	57.8			2.58
	Sucralose	101		100	107			6.56
	Thiamethoxam	91.2		108	112			3.04
	Tolfenpyrad	44.4		50.2	47.4			5.85
	Triclopyr	92.4		90.6	95.8			5.62
SM 2120 B-2011	Color (true)	98.8					0.129	
	Color (true)	99.1					5.56	

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
SM 2320 B-2011	Total Alkalinity	102				0.197	
SM 2540 C-2011	TDS					0.673	
	TDS					1.05	
SM 2540 D-2011	TSS					2.84	
SM 4500 F-C-2011	Fluoride	98.7	98.9	97.1			1.43
SM 5310 B-2011	Organic Carbon	99.6	99.0	101			1.61

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2192835, 2192838, 2192841, 2192842
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2192873, 2192874
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2192873, 2192874
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2192835, 2192838, 2192841, 2192842
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2192835, 2192838, 2192841, 2192842
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2192836, 2192839, 2192843, 2192844
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2192836, 2192839, 2192843, 2192844
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2192836, 2192839, 2192843, 2192844
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2192836, 2192839, 2192843, 2192844
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2192837, 2192840, 2192845, 2192846
EPA 8270E	Organochlorine pesticides in water matrices by GC/MS-SIM	2192871
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2192872
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2192871
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2192867
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2192866, 2192868, 2192869, 2192870
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2192866, 2192868, 2192869, 2192870
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2192835, 2192838, 2192841, 2192842
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2192835, 2192838, 2192841, 2192842
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2192873, 2192874
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2192835, 2192838, 2192841, 2192842
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2192835, 2192838, 2192841, 2192842
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2192835, 2192838, 2192841, 2192842
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2192836, 2192839, 2192843, 2192844

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	08/27/2020			08/27/2020 15:06	Yen Ta	2192835, 2192838, 2192841, 2192842
EPA 200.7 Rev. 4.4	08/27/2020	08/31/2020 13:30	Elliott D. Healy	09/02/2020 18:25	Betina Topolski	2192873
	08/27/2020	08/31/2020 13:30	Elliott D. Healy	09/02/2020 18:33	Betina Topolski	2192874
EPA 200.8 Rev. 5.4	08/27/2020	08/31/2020 13:30	Elliott D. Healy	09/10/2020 20:12	Alexander Thompson	2192874
	08/27/2020	08/31/2020 13:30	Elliott D. Healy	09/10/2020 21:13	Alexander Thompson	2192873
	08/27/2020	08/31/2020 13:30	Elliott D. Healy	09/11/2020 15:04	Alexander Thompson	2192874
	08/27/2020	08/31/2020 13:30	Elliott D. Healy	09/11/2020 16:03	Alexander Thompson	2192873
	08/27/2020	08/31/2020 13:30	Elliott D. Healy	09/13/2020 17:44	Alexander Thompson	2192874
	08/27/2020	08/31/2020 13:30	Elliott D. Healy	09/13/2020 18:24	Alexander Thompson	2192873
EPA 300.0 Rev. 2.1	08/27/2020			09/05/2020 05:40	Julia Storbeck	2192838
	08/27/2020			09/05/2020 06:40	Julia Storbeck	2192835
	08/27/2020			09/05/2020 06:52	Julia Storbeck	2192841
	08/27/2020			09/05/2020 07:04	Julia Storbeck	2192842
EPA 350.1 Rev. 2.0	08/27/2020			09/05/2020 13:17	Ping Hua	2192843
	08/27/2020			09/05/2020 13:35	Ping Hua	2192836
	08/27/2020			09/05/2020 13:36	Ping Hua	2192844
	08/27/2020			09/05/2020 13:44	Ping Hua	2192839
EPA 351.2 Rev. 2.0	08/27/2020	09/02/2020 12:20	David Boose	09/03/2020 15:33	Virginia P. Brown	2192836
	08/27/2020	09/02/2020 12:20	David Boose	09/03/2020 15:40	Virginia P. Brown	2192839
	08/27/2020	09/02/2020 12:20	David Boose	09/03/2020 15:41	Virginia P. Brown	2192843
	08/27/2020	09/02/2020 12:20	David Boose	09/03/2020 15:46	Virginia P. Brown	2192844
EPA 353.2 Rev. 2.0	08/27/2020			09/01/2020 10:31	Beverly Y. Sanders	2192836
	08/27/2020			09/01/2020 10:32	Beverly Y. Sanders	2192839
	08/27/2020			09/01/2020 10:33	Beverly Y. Sanders	2192843
	08/27/2020			09/01/2020 10:34	Beverly Y. Sanders	2192844
EPA 365.1 Rev. 2.0	08/27/2020	08/31/2020 15:00	Yen Ta	09/01/2020 13:11	Benjamin T. Nordmann	2192836
	08/27/2020	08/31/2020 15:00	Yen Ta	09/01/2020 13:16	Benjamin T. Nordmann	2192839
	08/27/2020	08/31/2020 15:00	Yen Ta	09/01/2020 13:17	Benjamin T. Nordmann	2192843
	08/27/2020	08/31/2020 15:00	Yen Ta	09/02/2020 12:03	Lipi Saha	2192844
EPA 365.1 Rev. 2.0 dissolved	08/27/2020			08/27/2020 16:28	Virginia P. Brown	2192837
	08/27/2020			08/27/2020 16:38	Virginia P. Brown	2192840
	08/27/2020			08/27/2020 16:40	Virginia P. Brown	2192846
	08/27/2020			08/27/2020 16:53	Virginia P. Brown	2192845
EPA 8270E	08/27/2020	08/28/2020 09:00	Fe-Val Siddell	09/02/2020 18:23	Vandana T. Nagar	2192872
	08/27/2020	08/31/2020 10:30	Rasheda Ghaffari	09/03/2020 01:44	Michael Poppell	2192871
EPA 8276	08/27/2020	08/31/2020 10:30	Rasheda Ghaffari	09/02/2020 12:24	Arthur Maknenko	2192871
EPA 8321B	08/27/2020	08/27/2020 14:00	Hoor Shaik	08/29/2020 13:28	Juyoung Kim	2192867
	08/27/2020	08/28/2020 11:00	Rebecca Ware	08/28/2020 15:45	Rebecca Ware	2192866
	08/27/2020	08/28/2020 11:00	Rebecca Ware	08/28/2020 15:57	Rebecca Ware	2192868
	08/27/2020	08/28/2020 11:00	Rebecca Ware	08/28/2020 16:08	Rebecca Ware	2192869

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	08/27/2020	08/28/2020 11:00	Rebecca Ware	08/28/2020 16:20	Rebecca Ware	2192870
	08/27/2020	08/28/2020 11:00	Rebecca Ware	08/31/2020 19:17	Rebecca Ware	2192866
	08/27/2020	08/28/2020 11:00	Rebecca Ware	08/31/2020 19:31	Rebecca Ware	2192868
	08/27/2020	08/28/2020 11:00	Rebecca Ware	08/31/2020 19:45	Rebecca Ware	2192869
	08/27/2020	08/28/2020 11:00	Rebecca Ware	08/31/2020 19:59	Rebecca Ware	2192870
	08/27/2020	08/28/2020 11:00	Rebecca Ware	09/01/2020 16:26	Rebecca Ware	2192866
	08/27/2020	08/28/2020 11:00	Rebecca Ware	09/01/2020 16:36	Rebecca Ware	2192868
	08/27/2020	08/28/2020 11:00	Rebecca Ware	09/01/2020 16:47	Rebecca Ware	2192869
	08/27/2020	08/28/2020 11:00	Rebecca Ware	09/01/2020 16:58	Rebecca Ware	2192870
	08/27/2020	08/28/2020 13:20	Hoor Shaik	08/30/2020 10:50	Juyoung Kim	2192866
	08/27/2020	08/28/2020 13:20	Hoor Shaik	08/30/2020 11:25	Juyoung Kim	2192868
	08/27/2020	08/28/2020 13:20	Hoor Shaik	08/30/2020 12:00	Juyoung Kim	2192869
	08/27/2020	08/28/2020 13:20	Hoor Shaik	08/30/2020 12:35	Juyoung Kim	2192870
	08/27/2020	08/28/2020 13:20	Hoor Shaik	09/02/2020 07:09	Juyoung Kim	2192866
	08/27/2020	08/28/2020 13:20	Hoor Shaik	09/02/2020 07:44	Juyoung Kim	2192868
	08/27/2020	08/28/2020 13:20	Hoor Shaik	09/02/2020 08:19	Juyoung Kim	2192869
	08/27/2020	08/28/2020 13:20	Hoor Shaik	09/02/2020 08:53	Juyoung Kim	2192870
SM 2120 B-2011	08/27/2020			08/27/2020 15:57	Madeline Gruver	2192838
	08/27/2020			08/27/2020 15:58	Madeline Gruver	2192841
	08/27/2020			08/27/2020 16:26	Madeline Gruver	2192835
	08/27/2020			08/27/2020 16:33	Madeline Gruver	2192842
SM 2320 B-2011	08/27/2020			08/28/2020 19:33	Dale L. Simmons	2192835
	08/27/2020			08/28/2020 19:43	Dale L. Simmons	2192838
	08/27/2020			08/28/2020 19:55	Dale L. Simmons	2192841
	08/27/2020			08/28/2020 20:02	Dale L. Simmons	2192842
SM 2340B	08/27/2020			09/02/2020 18:25	Betina Topolski	2192873
	08/27/2020			09/02/2020 18:33	Betina Topolski	2192874
SM 2540 C-2011	08/27/2020			08/28/2020 17:05	Madeline Gruver	2192835, 2192838, 2192841, 2192842
SM 2540 D-2011	08/27/2020			08/28/2020 19:46	Madeline Gruver	2192835, 2192838, 2192841, 2192842
SM 4500 F-C-2011	08/27/2020			08/28/2020 19:33	Dale L. Simmons	2192835
	08/27/2020			08/28/2020 19:43	Dale L. Simmons	2192838
	08/27/2020			08/28/2020 19:55	Dale L. Simmons	2192841
	08/27/2020			08/28/2020 20:02	Dale L. Simmons	2192842
SM 5310 B-2011	08/27/2020			08/31/2020 14:38	David Boose	2192839
	08/27/2020			08/31/2020 15:26	David Boose	2192843
	08/27/2020			08/31/2020 15:51	David Boose	2192836
	08/27/2020			08/31/2020 16:03	David Boose	2192844