

Chemical Analysis Report

SW-DIST-2020-10-15-01

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

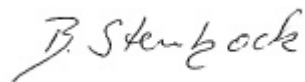
Event Description: **Run 15**
Request ID: **RQ-2020-10-12-03**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
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13051 N. Telecom Parkway
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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 04-NOV-2020 13:40



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: 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: St. Joe Tidal @ 54th Ave

Collection Date/Time: 10/14/2020 12:45

Field ID: G5SW0170

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2202265	EPA 180.1 Rev. 2.0	Turbidity	2.9		NTU	P388741	
	EPA 300.0 Rev. 2.1	Bromide	2.4		mg Br/L	P389482	
	SM 2320 B-2011	Total Alkalinity	140		mg CaCO3/L	P388942	
	SM 2540 D-2011	TSS	2	I	mg/L	P388973	
	SM 4500 F-C-2011	Fluoride	0.30		mg F/L	P388956	
2202267	EPA 350.1 Rev. 2.0	Ammonia-N	0.024		mg N/L	P388844	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.71		mg N/L	P389044	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.082		mg N/L	P388886	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P388790	
	SM 5310 B-2011	Organic Carbon	9.9		mg C/L	P388946	
2202268	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.052		mg P/L	P388745	

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: PP Ditch 1

Collection Date/Time: 10/14/2020 12:15

Field ID: G5SW0134

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2202261	EPA 180.1 Rev. 2.0	Turbidity	5.7		NTU	P388741	
	EPA 300.0 Rev. 2.1	Bromide	7.6		mg Br/L	P389481	
	SM 2320 B-2011	Total Alkalinity	173		mg CaCO3/L	P388942	
	SM 2540 D-2011	TSS	4	I	mg/L	P388973	
	SM 4500 F-C-2011	Fluoride	0.39		mg F/L	P388956	
2202262	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.079		mg P/L	P388746	
2202302	EPA 8321B	Aldicarb	0.020	UJ	ug/L	P388916	MS
		Aldicarb Sulfone	0.0020	U	ug/L	P388916	
		Aldicarb Sulfoxide	0.0020	UJ	ug/L	P388916	MS
		Carbaryl	0.0045	IJ	ug/L	P388916	MS
		Carbofuran	0.0020	UJ	ug/L	P388916	MS
		3-Hydroxycarbofuran	0.0020	U	ug/L	P388916	
		Methiocarb	0.0020	U	ug/L	P388916	
		Methomyl	0.0020	U	ug/L	P388916	
		Oxamyl	0.0020	U	ug/L	P388916	
		Propoxur	0.0020	UJ	ug/L	P388916	MS
2202304	EPA 8270E	Aldrin	4.3	U	ng/L	P388782	
		Alpha-BHC	2.1	U	ng/L	P388782	
		Alpha-Chlordane	1.1	U	ng/L	P388782	
		Beta-BHC	8.6	U	ng/L	P388782	
		Beta-Cyfluthrin**	16	U	ng/L	P388782	
		Bifenthrin**	4.3	U	ng/L	P388782	
		Delta-BHC	8.6	U	ng/L	P388782	
		Gamma-BHC	8.6	U	ng/L	P388782	
		Chlorothalonil	2.1	U	ng/L	P388782	
		Cis-Nonachlor**	1.1	U	ng/L	P388782	
		Cypermethrin	21	U	ng/L	P388782	
		Dacthal**	1.1	U	ng/L	P388782	
		DDD-p,p'	5.4	U	ng/L	P388782	
		DDE-p,p'	5.4	U	ng/L	P388782	
		DDT-p,p'	6.4	U	ng/L	P388782	
		Deltamethrin**	21	U	ng/L	P388782	
		Dicofol	32	U	ng/L	P388782	MS, RPD
		Dieldrin	4.3	U	ng/L	P388782	
		Endosulfan I	4.3	U	ng/L	P388782	
		Endosulfan II	4.3	UJ	ng/L	P388782	CCV
		Endosulfan Sulfate	2.1	U	ng/L	P388782	
		Endrin	2.1	U	ng/L	P388782	
		Endrin Aldehyde	2.1	U	ng/L	P388782	
		Endrin Ketone	2.1	U	ng/L	P388782	
		Ethalfuralin**	3.2	U	ng/L	P388782	MS
		Gamma-Chlordane	1.1	U	ng/L	P388782	
		Dichlobenil**	2.1	U	ng/L	P388782	

Field ID: G5SW0134

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2202304	EPA 8270E	Esfenvalerate**	21	U	ng/L	P388782	
		Fenpropathrin**	11	U	ng/L	P388782	
		Heptachlor	1.6	U	ng/L	P388782	
		Heptachlor Epoxide	2.1	U	ng/L	P388782	
		Hexachlorobenzene	2.1	U	ng/L	P388782	MS
		Lambda-Cyhalothrin**	16	U	ng/L	P388782	
		Methoxychlor	4.3	U	ng/L	P388782	
		Mirex	2.1	U	ng/L	P388782	
		MGK-264**	3.2	U	ng/L	P388782	
		Permethrin	11	U	ng/L	P388782	
		Phenothrin**	32	U	ng/L	P388782	
		Piperonyl Butoxide**	1.6	U	ng/L	P388782	RPD
		Prallethrin**	27	U	ng/L	P388782	
		Tau-Fluvalinate**	3.8	U	ng/L	P388782	
		Tetramethrin**	8.6	U	ng/L	P388782	
		Trans-Nonachlor**	1.1	U	ng/L	P388782	
		Triclosan Methyl**	1.1	U	ng/L	P388782	
		Trifluralin	2.7	U	ng/L	P388782	MS
	EPA 8276	Chlordane	6.2	I	ng/L	P388782	
	Toxaphene	32	U	ng/L	P388782		
2202305	EPA 8270E	Acetochlor	0.24	U	ng/L	P388720	
		Alachlor	0.24	U	ng/L	P388720	
		Ametryn	5.4		ng/L	P388720	
		Atrazine	51		ng/L	P388720	
		Atrazine Desethyl	5.4	I	ng/L	P388720	
		Azinphos Methyl	1.9	U	ng/L	P388720	
		Bromacil	0.49	U	ng/L	P388720	
		Butylate	0.39	U	ng/L	P388720	
		Carbophenothion	0.49	U	ng/L	P388720	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P388720	
		Chlorpyrifos Methyl	0.049	U	ng/L	P388720	
		Cyanazine	3.2	U	ng/L	P388720	
		Demeton	1.5	U	ng/L	P388720	
		Diazinon	0.12	U	ng/L	P388720	
		Dimethenamid**	0.097	U	ng/L	P388720	
		Disulfoton	0.49	U	ng/L	P388720	
		Dithiopyr**	0.15	I	ng/L	P388720	
		EPTC	1.2	U	ng/L	P388720	
		Ethion	0.15	U	ng/L	P388720	
		Ethoprop	0.097	U	ng/L	P388720	
		Fenamiphos	0.49	U	ng/L	P388720	
		Fipronil	2.2		ng/L	P388720	
		Fipronil Desulfinyl**	2.2		ng/L	P388720	
		Fipronil Sulfide	0.47	I	ng/L	P388720	
		Fipronil Sulfone	3.2		ng/L	P388720	

Field ID: G5SW0134

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2202305	EPA 8270E	Flumioxazin**	1.7	U	ng/L	P388720	
		Fonofos	0.19	U	ng/L	P388720	
		Hexazinone	0.73	I	ng/L	P388720	
		Imazalil**	0.73	U	ng/L	P388720	
		Malathion	0.34	U	ng/L	P388720	
		Metalaxyl	0.73	U	ng/L	P388720	
		Metolachlor	0.49	U	ng/L	P388720	
		Metribuzin	3.2	U	ng/L	P388720	
		Mevinphos	0.49	U	ng/L	P388720	
		Molinate	0.29	U	ng/L	P388720	
		Naled**	1.5	U	ng/L	P388720	
		Norflurazon	0.49	U	ng/L	P388720	
		Oxadiazon	1.9		ng/L	P388720	
		Parathion Ethyl	0.24	U	ng/L	P388720	
		Parathion Methyl	0.54	U	ng/L	P388720	
		Pendimethalin	0.97	U	ng/L	P388720	
		Phorate	0.24	U	ng/L	P388720	
		Prodiamine**	0.17	UJ	ng/L	P388720	RPD
		Prometon	0.88	U	ng/L	P388720	
		Prometryn	0.19	U	ng/L	P388720	
		Pronamide**	14		ng/L	P388720	
		Propiconazole**	5.0		ng/L	P388720	
		Simazine	0.49	UJ	ng/L	P388720	LCS
		Sulfentrazone**	12		ng/L	P388720	
		Tebuconazole**	2.7		ng/L	P388720	
		Terbufos	0.097	U	ng/L	P388720	
		Terbuthylazine	0.41	U	ng/L	P388720	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Bromide: Batch relative percent difference and matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.

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

EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.

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

EPA 8270E: MS accuracy for ametryn and atrazine not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: McKay Tidal South of Harbor Cir

Collection Date/Time: 10/14/2020 11:40

Field ID: G5SW0152

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2202266	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P388741	
	EPA 300.0 Rev. 2.1	Bromide	26		mg Br/L	P389482	
	SM 2320 B-2011	Total Alkalinity	131		mg CaCO3/L	P388943	
	SM 2540 D-2011	TSS	3	U	mg/L	P388975	
	SM 4500 F-C-2011	Fluoride	0.66		mg F/L	P388957	
2202269	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.064		mg P/L	P388746	

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: Snug Harbor - Tp428

Collection Date/Time: 10/14/2020 10:30

Field ID: G1SW0099

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2202263	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P388741	
	EPA 300.0 Rev. 2.1	Bromide	44		mg Br/L	P389481	
	SM 2320 B-2011	Total Alkalinity	114		mg CaCO3/L	P388943	
	SM 2540 D-2011	TSS	3	U	mg/L	P388975	
	SM 4500 F-C-2011	Fluoride	1.0		mg F/L	P388957	
2202264	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.091		mg P/L	P388746	
2202303	EPA 8321B	2,4-D	0.0020	U	ug/L	P388705	RPD
		Acesulfame K**	0.10	UJ	ug/L	P388857	SUR
		AMPA**	1.0	U	ug/L	P388857	
		Sucralose**	0.57		ug/L	P388857	
		Acetaminophen**	0.0080	U	ug/L	P388705	
		Acetamiprid**	0.0020	U	ug/L	P388705	
		Endothal**	0.25	UJ	ug/L	P388857	SUR
		Glufosinate**	1.0	U	ug/L	P388857	
		Glyphosate**	1.0	U	ug/L	P388857	
		Afidopyropen**	0.0020	U	ug/L	P388705	MS, RPD
		Bentazon	0.0035		ug/L	P388705	MS
		Benzovindiflupyr**	0.0020	U	ug/L	P388705	
		Carbamazepine**	8.0E-04	U	ug/L	P388705	
		Clothianidin**	0.0020	U	ug/L	P388705	
		Dinotefuran**	0.0020	U	ug/L	P388705	
		Diuron	0.0020	U	ug/L	P388705	MS, RPD
		Fenuron	0.016	U	ug/L	P388705	
		Fluridone**	0.0038		ug/L	P388705	
		Imazapyr**	0.0079	I	ug/L	P388705	
		Hydrocodone**	0.0020	U	ug/L	P388705	
		Ibuprofen**	0.020	U	ug/L	P388705	
		Imidacloprid	0.0022	I	ug/L	P388705	
		Linuron	0.0040	U	ug/L	P388705	
		Mandestrobin**	0.0020	U	ug/L	P388705	
		MCP	0.0020	U	ug/L	P388705	
		Naproxen**	0.0080	U	ug/L	P388705	
		Primidone**	0.0044	I	ug/L	P388705	
		Pyraclostrobin**	0.0020	U	ug/L	P388705	
		Thiamethoxam**	0.0020	U	ug/L	P388705	
		Tolfenpyrad**	0.0020	U	ug/L	P388705	
		Triclopyr**	0.0040	U	ug/L	P388705	MS, RPD

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Bromide: Batch relative percent difference and matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.

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

EPA 8321B: MDL for some parameters elevated due to matrix interference. Results confirmed in sample duplicate. 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: P388741

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389481

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389482

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P388844

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389044

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P388886

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P388790

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388745

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388746

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
 Batch ID: P388720

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
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
Terbutylazine	0.42	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P388782

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
Dichlobenil	2.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Esfenvalerate	20	U	ng/L
Ethalfuralin	3.0	U	ng/L
Fenpropathrin	10	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
MGK-264	3.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Phenothrin	30	U	ng/L
Piperonyl Butoxide	1.5	U	ng/L
Prallethrin	25	U	ng/L
Tau-Fluvalinate	3.5	U	ng/L
Tetramethrin	8.0	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Triclosan Methyl	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
Batch ID: P388782

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
 Batch ID: P388705

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
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: P388857

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: P388916

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P388942

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2320 B-2011
Batch ID: P388943

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 D-2011
Batch ID: P388973

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P388975

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P388956

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-2011
Batch ID: P388957

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P388946

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389481

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389482

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Bromide	106		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P388844

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389044

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P388886

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P388790

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388745

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.7		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388746

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.6		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P388720

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	87.4	78.9	P/P	71 - 122
Alachlor	87.0	83.7	P/P	70 - 121
Ametryn	91.4	83.4	P/P	49 - 137
Atrazine	90.6	82.3	P/P	76 - 125

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P388720

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Atrazine Desethyl	71.8	69.5	P/P	31 - 144
Azinphos Methyl	97.9	82.2	P/P	67 - 150
Bromacil	56.5	50.0	P/P	36 - 121
Butylate	63.9	54.8	P/P	33 - 88.0
Carbophenothion	79.8	73.6	P/P	66 - 116
Chlorpyrifos Ethyl	84.1	74.6	P/P	73 - 117
Chlorpyrifos Methyl	90.0	81.7	P/P	68 - 121
Cyanazine	100	99.1	P/P	20 - 250
Demeton	81.1	71.5	P/P	30 - 123
Diazinon	83.8	77.3	P/P	70 - 128
Dimethenamid	81.9	77.6	P/P	66 - 122
Disulfoton	70.4	72.7	P/P	46 - 124
Dithiopyr	78.6	73.2	P/P	69 - 122
EPTC	60.6	53.8	P/P	31 - 90.0
Ethion	73.5	73.6	P/P	45 - 135
Ethoprop	82.6	73.2	P/P	59 - 118
Fenamiphos	75.6	80.5	P/P	30 - 136
Fipronil	84.0	80.6	P/P	57 - 127
Fipronil Desulfinyl	84.6	79.4	P/P	51 - 122
Fipronil Sulfide	76.6	66.6	P/P	57 - 119
Fipronil Sulfone	85.4	69.6	P/P	51 - 119
Flumioxazin	131	116	P/P	20 - 250
Fonofos	82.8	73.0	P/P	60 - 120
Hexazinone	79.1	72.8	P/P	57 - 142
Imazalil	79.3	71.2	P/P	30 - 139
Malathion	90.7	86.2	P/P	67 - 128
Metalaxyl	87.8	81.5	P/P	21 - 148
Metolachlor	88.2	82.4	P/P	70 - 120
Metribuzin	92.1	82.3	P/P	20 - 250
Mevinphos	70.0	67.5	P/P	47 - 116
Molinate	74.2	63.2	P/P	41 - 99.0
Naled	50.3	45.2	P/P	38 - 97.0
Norflurazon	76.4	67.0	P/P	54 - 127
Oxadiazon	74.8	69.2	P/P	65 - 122
Parathion Ethyl	85.1	80.2	P/P	71 - 113
Parathion Methyl	91.6	79.9	P/P	73 - 129
Pendimethalin	72.8	66.0	P/P	63 - 130
Phorate	101	103	P/P	48 - 118
Prodiamine	76.8	36.8	P/P	20 - 144
Prometon	83.5	76.2	P/P	53 - 120
Prometryn	83.2	79.1	P/P	63 - 119
Pronamide	92.3	82.6	P/P	81 - 122
Propiconazole	71.0	66.5	P/P	62 - 124
Simazine	92.2	76.1	P/F	77 - 129
Sulfentrazone	62.7	59.1	P/P	20 - 137
Tebuconazole	41.4	44.0	P/P	20 - 118
Terbufos	80.1	72.6	P/P	61 - 119
Terbuthylazine	90.2	84.7	P/P	75 - 119

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P388782

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	44.6	41.2	P/P	20 - 87.0
Alpha-BHC	80.9	81.0	P/P	65 - 142
Alpha-Chlordane	80.7	84.7	P/P	58 - 106
Beta-BHC	80.6	89.2	P/P	65 - 179
Beta-Cyfluthrin	83.9	82.6	P/P	39 - 153
Bifenthrin	84.0	81.8	P/P	38 - 128
Chlorothalonil	70.6	54.3	P/P	20 - 214
Cis-Nonachlor	83.9	87.0	P/P	56 - 113
Cypermethrin	92.5	85.5	P/P	37 - 130
Dacthal	92.2	96.6	P/P	75 - 109
DDD-p,p'	86.8	91.0	P/P	66 - 119
DDE-p,p'	76.6	81.4	P/P	53 - 108
DDT-p,p'	89.3	87.6	P/P	57 - 133
Delta-BHC	113	114	P/P	68 - 187
Deltamethrin	90.9	117	P/P	50 - 200
Dichlobenil	37.5	36.0	P/P	25 - 140
Dicofol	92.6	96.7	P/P	66 - 123
Dieldrin	87.1	87.7	P/P	65 - 111
Endosulfan I	99.4	95.8	P/P	65 - 115
Endosulfan II	107	116	P/P	68 - 133
Endosulfan Sulfate	89.4	86.4	P/P	62 - 127
Endrin	98.4	95.2	P/P	64 - 122
Endrin Aldehyde	85.7	97.4	P/P	61 - 132
Endrin Ketone	89.2	87.4	P/P	66 - 120
Esfenvalerate	75.7	72.5	P/P	50 - 150
Ethalfuralin	74.1	72.0	P/P	57 - 127
Fenpropathrin	88.8	82.3	P/P	60 - 160
Gamma-BHC	83.6	93.2	P/P	71 - 158
Gamma-Chlordane	77.9	80.3	P/P	53 - 106
Heptachlor	73.5	74.6	P/P	45 - 96.0
Heptachlor Epoxide	84.4	86.7	P/P	64 - 109
Hexachlorobenzene	70.9	69.2	P/P	46 - 103
Lambda-Cyhalothrin	94.1	91.0	P/P	38 - 145
Methoxychlor	91.2	91.2	P/P	69 - 149
MGK-264	53.2	53.0	P/P	50 - 150
Mirex	77.0	75.7	P/P	31 - 90.0
Permethrin	77.3	83.5	P/P	41 - 108
Phenothrin	50.9	46.9	P/P	22 - 91.0
Piperonyl Butoxide	99.6	107	P/P	50 - 150
Prallethrin	55.8	58.2	P/P	32 - 92.0
Tau-Fluvalinate	92.1	89.6	P/P	50 - 150
Tetramethrin	156	149	P/P	60 - 160
Trans-Nonachlor	80.5	82.4	P/P	50 - 107
Triclosan Methyl	89.6	95.8	P/P	50 - 150
Trifluralin	74.4	70.7	P/P	58 - 119

Reference Method: EPA 8276
 Batch ID: P388782

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	92.9	93.0	P/P	47 - 119
Toxaphene	91.9	86.7	P/P	41 - 112

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P388705

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	99.2		P	30 - 160
Acetaminophen	80.4		P	30 - 160
Acetamiprid	68.8		P	30 - 160
Afidopyropen	30.5		P	30 - 160
Bentazon	45.8		P	30 - 160
Benzovindiflupyr	63.9		P	30 - 160
Carbamazepine	49.6		P	30 - 160
Clothianidin	63.9		P	30 - 160
Dinotefuran	74.9		P	30 - 160
Diuron	37.2		P	30 - 160
Fenuron	89.8		P	30 - 160
Fluridone	65.1		P	30 - 160
Hydrocodone	92.8		P	30 - 160
Ibuprofen	60.4		P	30 - 160
Imazapyr	90.9		P	30 - 160
Imidacloprid	87.8		P	30 - 160
Linuron	42.7		P	30 - 160
Mandestrobin	67.3		P	30 - 160
MCPP	61.3		P	30 - 160
Naproxen	51.6		P	30 - 160
Primidone	70.3		P	30 - 160
Pyraclostrobin	58.5		P	30 - 160
Thiamethoxam	89.3		P	30 - 160
Tolfenpyrad	40.9		P	30 - 160
Triclopyr	55.6		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P388857

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	69.4		P	40 - 150
AMPA	114		P	40 - 150
Endothall	109		P	40 - 150
Glufosinate	100		P	40 - 150
Glyphosate	104		P	40 - 140
Sucralose	116		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P388916

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	79.7		P	30 - 160
Aldicarb	48.4		P	30 - 160
Aldicarb Sulfone	83.1		P	30 - 160
Aldicarb Sulfoxide	89.1		P	30 - 160
Carbaryl	63.1		P	30 - 160
Carbofuran	53.5		P	30 - 160
Methiocarb	80.9		P	30 - 160
Methomyl	89.2		P	30 - 160
Oxamyl	88.7		P	30 - 160
Propoxur	50.7		P	30 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P388942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.4		P	93 - 104

Reference Method: SM 2320 B-2011
Batch ID: P388943

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P388956

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.1		P	90 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P388957

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.0		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P388946

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389481

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202118	Bromide	94.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389482

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202265	Bromide	101	106	P/P	90 - 110
2202645	Bromide	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P388844

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202309	Ammonia-N	101	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389044

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202400	Kjeldahl Nitrogen	106	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P388886

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2201833	NO2NO3-N	96.5	97.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P388790

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202005	Total-P	107	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388745

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202128	O-Phosphate-P	97.5	98.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388746

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202274	O-Phosphate-P	99.5	98.9	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P388720

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202161	Acetochlor	88.0	73.8	P/P	68 - 126
2202161	Alachlor	83.8	72.4	P/P	66 - 125
2202161	Atrazine Desethyl	64.2	48.3	P/P	13 - 161

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P388720

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202161	Azinphos Methyl	88.2	76.1	P/P	54 - 162
2202161	Bromacil	61.0	48.0	P/P	34 - 144
2202161	Butylate	47.3	37.9	P/P	16 - 92.0
2202161	Carbophenothion	73.3	66.4	P/P	30 - 131
2202161	Chlorpyrifos Ethyl	87.9	72.5	P/P	63 - 124
2202161	Chlorpyrifos Methyl	87.6	75.3	P/P	64 - 125
2202161	Cyanazine	100	84.9	P/P	13 - 245
2202161	Demeton	83.4	74.3	P/P	20 - 154
2202161	Diazinon	86.5	74.6	P/P	66 - 141
2202161	Dimethenamid	80.6	70.7	P/P	50 - 130
2202161	Disulfoton	70.1	62.6	P/P	55 - 130
2202161	Dithiopyr	78.8	68.6	P/P	66 - 122
2202161	EPTC	45.8	34.0	P/P	15 - 93.0
2202161	Ethion	72.6	71.8	P/P	15 - 148
2202161	Ethoprop	83.6	69.5	P/P	59 - 126
2202161	Fenamiphos	43.4	44.7	P/P	39 - 137
2202161	Fipronil	84.2	72.9	P/P	47 - 131
2202161	Fipronil Desulfinyl	84.2	72.5	P/P	43 - 121
2202161	Fipronil Sulfide	72.6	58.7	P/P	29 - 134
2202161	Fipronil Sulfone	79.0	70.8	P/P	19 - 131
2202161	Flumioxazin	144	130	P/P	10 - 300
2202161	Fonofos	81.6	76.0	P/P	62 - 128
2202161	Hexazinone	86.4	70.7	P/P	58 - 154
2202161	Imazalil	70.5	66.3	P/P	10 - 215
2202161	Malathion	90.1	78.2	P/P	54 - 135
2202161	Metalaxyl	88.7	73.6	P/P	46 - 136
2202161	Metolachlor	86.8	72.6	P/P	62 - 126
2202161	Metribuzin	103	89.3	P/P	44 - 277
2202161	Mevinphos	75.3	62.5	P/P	44 - 135
2202161	Molinate	67.9	51.0	P/P	31 - 104
2202161	Naled	48.7	37.7	P/P	33 - 113
2202161	Norflurazon	71.6	60.7	P/P	32 - 134
2202161	Oxadiazon	72.4	64.3	P/P	55 - 123
2202161	Parathion Ethyl	89.0	76.3	P/P	67 - 120
2202161	Parathion Methyl	90.6	75.6	P/P	70 - 140
2202161	Pendimethalin	79.7	70.3	P/P	59 - 145
2202161	Phorate	87.2	79.3	P/P	52 - 127
2202161	Prodiamine	47.4	56.8	P/P	11 - 157
2202161	Prometon	82.6	71.0	P/P	55 - 130
2202161	Prometryn	82.3	70.8	P/P	55 - 127
2202161	Pronamide	94.9	79.6	P/P	66 - 150
2202161	Propiconazole	67.5	51.8	P/P	14 - 178
2202161	Simazine	89.5	76.5	P/P	58 - 159
2202161	Sulfentrazone	68.9	59.1	P/P	21 - 144
2202161	Tebuconazole	37.3	35.9	P/P	10 - 122
2202161	Terbufos	84.1	72.5	P/P	65 - 131
2202161	Terbutylazine	91.5	78.6	P/P	63 - 131

Reference Method: EPA 8270E
Batch ID: P388782

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P388782

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2201857	Aldrin	40.6	39.6	P/P	32 - 82.0
2201857	Alpha-BHC	74.3	78.3	P/P	68 - 157
2201857	Alpha-Chlordane	58.4	58.6	P/P	54 - 108
2201857	Beta-BHC	87.7	92.3	P/P	54 - 200
2201857	Beta-Cyfluthrin	82.9	77.0	P/P	50 - 154
2201857	Bifenthrin	69.6	74.8	P/P	49 - 124
2201857	Chlorothalonil	188	192	P/P	10 - 289
2201857	Cis-Nonachlor	63.7	65.6	P/P	53 - 112
2201857	Cypermethrin	84.0	85.3	P/P	43 - 141
2201857	Dacthal	78.3	80.0	P/P	75 - 112
2201857	DDD-p,p'	61.7	62.2	P/P	58 - 125
2201857	DDE-p,p'	51.1	52.0	P/P	50 - 108
2201857	DDT-p,p'	61.8	59.9	P/P	52 - 140
2201857	Delta-BHC	121	138	P/P	61 - 228
2201857	Deltamethrin	95.0	105	P/P	50 - 200
2201857	Dichlobenil	51.6	57.6	P/P	25 - 140
2201857	Dicofol	50.0	67.7	F/P	59 - 130
2201857	Dieldrin	61.8	62.0	P/P	57 - 121
2201857	Endosulfan I	72.9	76.1	P/P	62 - 123
2201857	Endosulfan II	83.6	107	P/P	48 - 163
2201857	Endosulfan Sulfate	79.9	86.4	P/P	63 - 132
2201857	Endrin	69.1	71.8	P/P	58 - 128
2201857	Endrin Aldehyde	113	114	P/P	44 - 126
2201857	Endrin Ketone	79.9	85.0	P/P	68 - 127
2201857	Esfenvalerate	64.0	67.3	P/P	50 - 150
2201857	Ethalfuralin	54.1	52.6	F/F	55 - 131
2201857	Fenpropathrin	117	110	P/P	60 - 160
2201857	Gamma-BHC	95.6	95.5	P/P	54 - 206
2201857	Gamma-Chlordane	56.9	56.7	P/P	52 - 105
2201857	Heptachlor	53.8	48.3	P/P	47 - 94.0
2201857	Heptachlor Epoxide	62.0	62.7	P/P	61 - 113
2201857	Hexachlorobenzene	44.5	46.0	F/P	45 - 100
2201857	Lambda-Cyhalothrin	93.4	99.2	P/P	37 - 165
2201857	Methoxychlor	84.0	80.7	P/P	63 - 153
2201857	MGK-264	63.5	65.5	P/P	50 - 150
2201857	Mirex	60.6	60.7	P/P	38 - 90.0
2201857	Permethrin	60.1	70.8	P/P	45 - 112
2201857	Phenothrin	48.2	49.8	P/P	22 - 118
2201857	Piperonyl Butoxide	81.9	54.9	P/P	50 - 150
2201857	Prallethrin	46.2	55.2	P/P	21 - 114
2201857	Tau-Fluvalinate	92.6	95.5	P/P	50 - 150
2201857	Tetramethrin	144	159	P/P	60 - 160
2201857	Trans-Nonachlor	57.8	58.4	P/P	50 - 103
2201857	Triclosan Methyl	59.3	61.9	P/P	50 - 150
2201857	Trifluralin	50.8	49.7	F/F	57 - 122

Reference Method: EPA 8276
Batch ID: P388782

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202152	Chlordane	90.1	96.6	P/P	34 - 129
2202152	Toxaphene	144	133	P/P	16 - 148

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P388705

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2201953	2,4-D	60.7	85.5	P/P	30 - 160
2201953	Acetaminophen	91.1	96.9	P/P	30 - 160
2201953	Acetamiprid	67.6	74.3	P/P	30 - 160
2201953	Afidopyropen	22.4	30.5	F/P	30 - 160
2201953	Bentazon	25.0	36.1	F/P	30 - 160
2201953	Benzovindiflupyr	52.9	63.2	P/P	30 - 160
2201953	Carbamazepine	38.9	50.0	P/P	30 - 160
2201953	Clothianidin	52.6	65.8	P/P	30 - 160
2201953	Dinotefuran	75.6	90.6	P/P	30 - 160
2201953	Diuron	26.4	36.4	F/P	30 - 160
2201953	Fenuron	76.0	83.3	P/P	30 - 160
2201953	Fluridone	59.9	66.2	P/P	30 - 160
2201953	Hydrocodone	70.5	90.5	P/P	30 - 160
2201953	Ibuprofen	57.1	65.6	P/P	30 - 160
2201953	Imazapyr	75.7	75.5	P/P	30 - 160
2201953	Imidacloprid	103	107	P/P	30 - 160
2201953	Linuron	40.6	45.3	P/P	30 - 160
2201953	Mandestrobin	65.0	74.6	P/P	30 - 160
2201953	MCP	48.3	65.3	P/P	30 - 160
2201953	Naproxen	36.3	32.2	P/P	30 - 160
2201953	Primidone	64.3	71.1	P/P	30 - 160
2201953	Pyraclostrobin	53.0	57.8	P/P	30 - 160
2201953	Thiamethoxam	85.2	112	P/P	30 - 160
2201953	Tolfenpyrad	32.2	38.4	P/P	30 - 160
2201953	Triclopyr	28.8	54.2	F/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P388857

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202760	Acesulfame K	89.4	90.0	P/P	40 - 150
2202760	AMPA	120	122	P/P	40 - 150
2202760	Endothall	108	109	P/P	40 - 150
2202760	Glufosinate	97.4	92.7	P/P	40 - 150
2202760	Glyphosate	85.1	86.0	P/P	40 - 140
2202760	Sucralose	122	119	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P388916

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202302	3-Hydroxycarbofuran	48.7	39.3	P/P	30 - 160
2202302	Aldicarb	27.9	24.6	F/F	30 - 160
2202302	Aldicarb Sulfone	36.6	32.8	P/P	30 - 160
2202302	Aldicarb Sulfoxide	11.4	10.6	F/F	30 - 160
2202302	Carbaryl	24.8	22.1	F/F	30 - 160
2202302	Carbofuran	22.0	24.1	F/F	30 - 160
2202302	Methiocarb	49.4	40.9	P/P	30 - 160
2202302	Methomyl	44.5	41.7	P/P	30 - 160
2202302	Oxamyl	38.4	41.3	P/P	30 - 160
2202302	Propoxur	24.7	23.2	F/F	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P388956

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202126	Fluoride	103	104	P/P	94 - 107

Reference Method: SM 4500 F-C-2011
Batch ID: P388957

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2201372	Fluoride	101	101	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P388946

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202003	Organic Carbon	101		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P388741

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202234	Turbidity	0.498	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389482

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202265	Bromide	3.22	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P388844

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202309	Ammonia-N	0.0671	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389044

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202400	Kjeldahl Nitrogen	0.658	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P388886

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2201833	NO2NO3-N	0.517	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P388790

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202005	Total-P	0.492	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388745

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202128	O-Phosphate-P	0.637	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388746

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202274	O-Phosphate-P	0.605	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P388720

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202161	Acetochlor	17.4	Spike	P	0 - 30
2202161	Alachlor	14.6	Spike	P	0 - 30
2202161	Ametryn	17.6	Spike	P	0 - 30
2202161	Atrazine	15.0	Spike	P	0 - 30
2202161	Atrazine Desethyl	18.4	Spike	P	0 - 30
2202161	Azinphos Methyl	14.7	Spike	P	0 - 30
2202161	Bromacil	23.8	Spike	P	0 - 30
2202161	Butylate	22.1	Spike	P	0 - 30
2202161	Carbophenothion	9.89	Spike	P	0 - 30
2202161	Chlorpyrifos Ethyl	19.2	Spike	P	0 - 30
2202161	Chlorpyrifos Methyl	15.0	Spike	P	0 - 30
2202161	Cyanazine	16.4	Spike	P	0 - 30
2202161	Demeton	11.6	Spike	P	0 - 30
2202161	Diazinon	14.8	Spike	P	0 - 30
2202161	Dimethenamid	13.0	Spike	P	0 - 30
2202161	Disulfoton	11.3	Spike	P	0 - 30
2202161	Dithiopyr	13.8	Spike	P	0 - 30
2202161	EPTC	29.5	Spike	P	0 - 30
2202161	Ethion	1.12	Spike	P	0 - 30
2202161	Ethoprop	18.5	Spike	P	0 - 30
2202161	Fenamiphos	2.95	Spike	P	0 - 30
2202161	Fipronil	14.4	Spike	P	0 - 30
2202161	Fipronil Desulfinyl	15.0	Spike	P	0 - 30
2202161	Fipronil Sulfide	21.3	Spike	P	0 - 30
2202161	Fipronil Sulfone	11.0	Spike	P	0 - 30
2202161	Flumioxazin	10.2	Spike	P	0 - 30
2202161	Fonofos	7.04	Spike	P	0 - 30
2202161	Hexazinone	12.4	Spike	P	0 - 30
2202161	Imazalil	6.25	Spike	P	0 - 30
2202161	Malathion	14.2	Spike	P	0 - 30
2202161	Metalaxyl	18.6	Spike	P	0 - 30
2202161	Metolachlor	15.4	Spike	P	0 - 30
2202161	Metribuzin	13.9	Spike	P	0 - 30
2202161	Mevinphos	18.5	Spike	P	0 - 30
2202161	Molinate	28.3	Spike	P	0 - 30
2202161	Naled	25.5	Spike	P	0 - 30
2202161	Norflurazon	16.5	Spike	P	0 - 30
2202161	Oxadiazon	11.9	Spike	P	0 - 30
2202161	Parathion Ethyl	15.4	Spike	P	0 - 30
2202161	Parathion Methyl	18.0	Spike	P	0 - 30
2202161	Pendimethalin	12.6	Spike	P	0 - 30
2202161	Phorate	9.45	Spike	P	0 - 30
2202161	Prodiamine	18.1	Spike	P	0 - 30
2202161	Prometon	15.1	Spike	P	0 - 30
2202161	Prometryn	13.4	Spike	P	0 - 30
2202161	Pronamide	17.6	Spike	P	0 - 30
2202161	Propiconazole	11.3	Spike	P	0 - 30
2202161	Simazine	15.6	Spike	P	0 - 30
2202161	Sulfentrazone	15.4	Spike	P	0 - 30
2202161	Tebuconazole	3.88	Spike	P	0 - 30
2202161	Terbufos	14.8	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P388720

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202161	Terbutylazine	15.2	Spike	P	0 - 30
LFB	Acetochlor	10.3	LCS	P	0 - 30
LFB	Alachlor	3.94	LCS	P	0 - 30
LFB	Ametryn	9.23	LCS	P	0 - 30
LFB	Atrazine	9.68	LCS	P	0 - 30
LFB	Atrazine Desethyl	3.21	LCS	P	0 - 30
LFB	Azinphos Methyl	17.4	LCS	P	0 - 30
LFB	Bromacil	12.2	LCS	P	0 - 30
LFB	Butylate	15.2	LCS	P	0 - 30
LFB	Carbophenothion	8.14	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	11.9	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	9.68	LCS	P	0 - 30
LFB	Cyanazine	0.899	LCS	P	0 - 30
LFB	Demeton	12.6	LCS	P	0 - 30
LFB	Diazinon	8.05	LCS	P	0 - 30
LFB	Dimethenamid	5.41	LCS	P	0 - 30
LFB	Disulfoton	3.21	LCS	P	0 - 30
LFB	Dithiopyr	7.08	LCS	P	0 - 30
LFB	EPTC	11.8	LCS	P	0 - 30
LFB	Ethion	0.150	LCS	P	0 - 30
LFB	Ethoprop	12.1	LCS	P	0 - 30
LFB	Fenamiphos	6.31	LCS	P	0 - 30
LFB	Fipronil	4.17	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	6.32	LCS	P	0 - 30
LFB	Fipronil Sulfide	13.9	LCS	P	0 - 30
LFB	Fipronil Sulfone	20.5	LCS	P	0 - 30
LFB	Flumioxazin	12.4	LCS	P	0 - 30
LFB	Fonofos	12.7	LCS	P	0 - 30
LFB	Hexazinone	8.35	LCS	P	0 - 30
LFB	Imazalil	10.8	LCS	P	0 - 30
LFB	Malathion	5.09	LCS	P	0 - 30
LFB	Metalaxyl	7.46	LCS	P	0 - 30
LFB	Metolachlor	6.77	LCS	P	0 - 30
LFB	Metribuzin	11.2	LCS	P	0 - 30
LFB	Mevinphos	3.72	LCS	P	0 - 30
LFB	Molinate	15.9	LCS	P	0 - 30
LFB	Naled	10.8	LCS	P	0 - 30
LFB	Norflurazon	13.1	LCS	P	0 - 30
LFB	Oxadiazon	7.80	LCS	P	0 - 30
LFB	Parathion Ethyl	5.96	LCS	P	0 - 30
LFB	Parathion Methyl	13.7	LCS	P	0 - 30
LFB	Pendimethalin	9.71	LCS	P	0 - 30
LFB	Phorate	1.63	LCS	P	0 - 30
LFB	Prodiamine	70.4	LCS	F	0 - 30
LFB	Prometon	9.09	LCS	P	0 - 30
LFB	Prometryn	5.03	LCS	P	0 - 30
LFB	Pronamide	11.1	LCS	P	0 - 30
LFB	Propiconazole	6.56	LCS	P	0 - 30
LFB	Simazine	19.1	LCS	P	0 - 30
LFB	Sulfentrazone	5.88	LCS	P	0 - 30
LFB	Tebuconazole	6.23	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P388720

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Terbufos	9.74	LCS	P	0 - 30
LFB	Terbutylazine	6.31	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P388782

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2201857	Aldrin	2.31	Spike	P	0 - 30
2201857	Alpha-BHC	5.35	Spike	P	0 - 30
2201857	Alpha-Chlordane	0.317	Spike	P	0 - 30
2201857	Beta-BHC	5.12	Spike	P	0 - 30
2201857	Beta-Cyfluthrin	7.40	Spike	P	0 - 30
2201857	Bifenthrin	7.16	Spike	P	0 - 30
2201857	Chlorothalonil	2.43	Spike	P	0 - 30
2201857	Cis-Nonachlor	2.95	Spike	P	0 - 30
2201857	Cypermethrin	1.62	Spike	P	0 - 30
2201857	Dacthal	2.16	Spike	P	0 - 30
2201857	DDD-p,p'	0.869	Spike	P	0 - 30
2201857	DDE-p,p'	1.74	Spike	P	0 - 30
2201857	DDT-p,p'	3.08	Spike	P	0 - 30
2201857	Delta-BHC	13.1	Spike	P	0 - 30
2201857	Deltamethrin	9.89	Spike	P	0 - 30
2201857	Dichlobenil	11.0	Spike	P	0 - 30
2201857	Dicofol	30.1	Spike	F	0 - 30
2201857	Dieldrin	0.179	Spike	P	0 - 30
2201857	Endosulfan I	4.28	Spike	P	0 - 30
2201857	Endosulfan II	24.7	Spike	P	0 - 30
2201857	Endosulfan Sulfate	7.91	Spike	P	0 - 30
2201857	Endrin	3.78	Spike	P	0 - 30
2201857	Endrin Aldehyde	0.709	Spike	P	0 - 30
2201857	Endrin Ketone	6.21	Spike	P	0 - 30
2201857	Esfenvalerate	5.13	Spike	P	0 - 30
2201857	Ethalfuralin	2.73	Spike	P	0 - 30
2201857	Fenpropathrin	5.79	Spike	P	0 - 30
2201857	Gamma-BHC	0.108	Spike	P	0 - 30
2201857	Gamma-Chlordane	0.232	Spike	P	0 - 30
2201857	Heptachlor	10.7	Spike	P	0 - 30
2201857	Heptachlor Epoxide	1.02	Spike	P	0 - 30
2201857	Hexachlorobenzene	3.39	Spike	P	0 - 30
2201857	Lambda-Cyhalothrin	5.97	Spike	P	0 - 30
2201857	Methoxychlor	4.07	Spike	P	0 - 30
2201857	MGK-264	3.14	Spike	P	0 - 30
2201857	Mirex	0.0836	Spike	P	0 - 30
2201857	Permethrin	16.4	Spike	P	0 - 30
2201857	Phenothrin	3.26	Spike	P	0 - 30
2201857	Piperonyl Butoxide	39.5	Spike	F	0 - 30
2201857	Prallethrin	17.7	Spike	P	0 - 30
2201857	Tau-Fluvalinate	3.04	Spike	P	0 - 30
2201857	Tetramethrin	9.46	Spike	P	0 - 30
2201857	Trans-Nonachlor	1.10	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P388782

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2201857	Triclosan Methyl	4.32	Spike	P	0 - 30
2201857	Trifluralin	2.22	Spike	P	0 - 30
LFB	Aldrin	7.90	LCS	P	0 - 30
LFB	Alpha-BHC	0.154	LCS	P	0 - 30
LFB	Alpha-Chlordane	4.77	LCS	P	0 - 30
LFB	Beta-BHC	10.1	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	1.57	LCS	P	0 - 30
LFB	Bifenthrin	2.64	LCS	P	0 - 30
LFB	Chlorothalonil	26.1	LCS	P	0 - 30
LFB	Cis-Nonachlor	3.61	LCS	P	0 - 30
LFB	Cypermethrin	7.96	LCS	P	0 - 30
LFB	Dacthal	4.67	LCS	P	0 - 30
LFB	DDD-p,p'	4.73	LCS	P	0 - 30
LFB	DDE-p,p'	6.09	LCS	P	0 - 30
LFB	DDT-p,p'	1.87	LCS	P	0 - 30
LFB	Delta-BHC	0.502	LCS	P	0 - 30
LFB	Deltamethrin	25.4	LCS	P	0 - 30
LFB	Dichlobenil	3.96	LCS	P	0 - 30
LFB	Dicofol	4.26	LCS	P	0 - 30
LFB	Dieldrin	0.694	LCS	P	0 - 30
LFB	Endosulfan I	3.68	LCS	P	0 - 30
LFB	Endosulfan II	7.83	LCS	P	0 - 30
LFB	Endosulfan Sulfate	3.44	LCS	P	0 - 30
LFB	Endrin	3.33	LCS	P	0 - 30
LFB	Endrin Aldehyde	12.7	LCS	P	0 - 30
LFB	Endrin Ketone	2.08	LCS	P	0 - 30
LFB	Esfenvalerate	4.28	LCS	P	0 - 30
LFB	Ethalfuralin	2.86	LCS	P	0 - 30
LFB	Fenpropathrin	7.63	LCS	P	0 - 30
LFB	Gamma-BHC	10.9	LCS	P	0 - 30
LFB	Gamma-Chlordane	2.96	LCS	P	0 - 30
LFB	Heptachlor	1.42	LCS	P	0 - 30
LFB	Heptachlor Epoxide	2.69	LCS	P	0 - 30
LFB	Hexachlorobenzene	2.45	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	3.35	LCS	P	0 - 30
LFB	Methoxychlor	0.0230	LCS	P	0 - 30
LFB	MGK-264	0.238	LCS	P	0 - 30
LFB	Mirex	1.69	LCS	P	0 - 30
LFB	Permethrin	7.73	LCS	P	0 - 30
LFB	Phenothrin	8.22	LCS	P	0 - 30
LFB	Piperonyl Butoxide	7.46	LCS	P	0 - 30
LFB	Prallethrin	4.10	LCS	P	0 - 30
LFB	Tau-Fluvalinate	2.74	LCS	P	0 - 30
LFB	Tetramethrin	4.07	LCS	P	0 - 30
LFB	Trans-Nonachlor	2.44	LCS	P	0 - 30
LFB	Triclosan Methyl	6.74	LCS	P	0 - 30
LFB	Trifluralin	5.06	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276
Batch ID: P388782

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202152	Chlordane	6.94	Spike	P	0 - 30
2202152	Toxaphene	7.43	Spike	P	0 - 30
LFB	Chlordane	0.105	LCS	P	0 - 30
LFB	Toxaphene	5.79	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P388705

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2201953	2,4-D	30.9	Spike	F	0 - 30
2201953	Acetaminophen	6.09	Spike	P	0 - 30
2201953	Acetamiprid	9.32	Spike	P	0 - 30
2201953	Afidopyropen	30.6	Spike	F	0 - 30
2201953	Bentazon	15.7	Spike	P	0 - 30
2201953	Benzovindiflupyr	17.7	Spike	P	0 - 30
2201953	Carbamazepine	24.9	Spike	P	0 - 30
2201953	Clothianidin	22.3	Spike	P	0 - 30
2201953	Dinotefuran	18.1	Spike	P	0 - 30
2201953	Diuron	32.0	Spike	F	0 - 30
2201953	Fenuron	9.21	Spike	P	0 - 30
2201953	Fluridone	8.95	Spike	P	0 - 30
2201953	Hydrocodone	24.8	Spike	P	0 - 30
2201953	Ibuprofen	13.8	Spike	P	0 - 30
2201953	Imazapyr	0.194	Spike	P	0 - 30
2201953	Imidacloprid	3.33	Spike	P	0 - 30
2201953	Linuron	10.8	Spike	P	0 - 30
2201953	Mandestrobin	13.7	Spike	P	0 - 30
2201953	MCP	29.9	Spike	P	0 - 30
2201953	Naproxen	12.0	Spike	P	0 - 30
2201953	Primidone	10.0	Spike	P	0 - 30
2201953	Pyraclostrobin	8.72	Spike	P	0 - 30
2201953	Thiamethoxam	27.0	Spike	P	0 - 30
2201953	Tolfenpyrad	17.7	Spike	P	0 - 30
2201953	Triclopyr	61.2	Spike	F	0 - 30

Reference Method: EPA 8321B
Batch ID: P388857

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202760	Acesulfame K	0.707	Spike	P	0 - 30
2202760	AMPA	0.939	Spike	P	0 - 30
2202760	Endothall	0.924	Spike	P	0 - 30
2202760	Glufosinate	4.95	Spike	P	0 - 30
2202760	Glyphosate	1.02	Spike	P	0 - 30
2202760	Sucralose	2.67	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P388916

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202302	3-Hydroxycarbofuran	21.6	Spike	P	0 - 30
2202302	Aldicarb	12.5	Spike	P	0 - 30
2202302	Aldicarb Sulfone	10.8	Spike	P	0 - 30
2202302	Aldicarb Sulfoxide	7.67	Spike	P	0 - 30
2202302	Carbaryl	9.17	Spike	P	0 - 30
2202302	Carbofuran	8.92	Spike	P	0 - 30
2202302	Methiocarb	18.9	Spike	P	0 - 30
2202302	Methomyl	6.36	Spike	P	0 - 30
2202302	Oxamyl	7.26	Spike	P	0 - 30
2202302	Propoxur	5.92	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P388942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202126	Total Alkalinity	7.08	Sample	P	0 - 8.1

Reference Method: SM 2320 B-2011
Batch ID: P388943

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2201372	Total Alkalinity	0.245	Sample	P	0 - 8.1

Reference Method: SM 4500 F-C-2011
Batch ID: P388956

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202126	Fluoride	0.479	Spike	P	0 - 2.8

Reference Method: SM 4500 F-C-2011
Batch ID: P388957

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2201372	Fluoride	0.477	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P388946

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202003	Organic Carbon	0.0998	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2202302
Field Sample ID: G5SW0134

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	30.3	P	30 - 160

Lab Sample ID: 2202303
Field Sample ID: G1SW0099

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	84.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	85.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	40.9	P	30 - 160
EPA 8321B	Diuron-d6	41.7	P	30 - 160
EPA 8321B	Endothall-d6	456	F	30 - 160
EPA 8321B	Endothall-d6	456	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	58.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	58.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	64.1	P	30 - 160
EPA 8321B	Primidone-d5	55.8	P	30 - 160
EPA 8321B	Sucralose-d6	50.1	P	30 - 160
EPA 8321B	Sucralose-d6	50.1	P	30 - 160

Lab Sample ID: 2202304
Field Sample ID: G5SW0134

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	82.4	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	46.0	P	34 - 106
EPA 8276	Decachlorobiphenyl	51.6	P	26 - 97.0
EPA 8276	PCNB	66.6	P	38 - 141

Lab Sample ID: 2202305
Field Sample ID: G5SW0134

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	105	P	72 - 135
EPA 8270E	Terbufos-d10	86.5	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: 101840
Included Lab Sample IDs: 2202305

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine Desethyl	96.2		P	80 - 120

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A101544
Included Lab Sample IDs: 2202261, 2202263, 2202265, 2202266

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	100	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A101545
Included Lab Sample IDs: 2202262, 2202264, 2202268, 2202269

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.2	99.1	P/P	90 - 110
O-Phosphate-P	99.2	99.4	P/P	90 - 110
O-Phosphate-P	99.4	99.2	P/P	90 - 110
O-Phosphate-P	99.5	99.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A101575
Included Lab Sample IDs: 2202267

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A101590
Included Lab Sample IDs: 2202267

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A101602
Included Lab Sample IDs: 2202267

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	103	101	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A101618
Included Lab Sample IDs: 2202303

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	69.4	69.1	P/P	50 - 160
Endothall	123	125	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A101630

Included Lab Sample IDs: 2202261, 2202263, 2202265, 2202266

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	96.4	P/P	90 - 110
Total Alkalinity	99.1	98.9	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A101630

Included Lab Sample IDs: 2202261, 2202263, 2202265, 2202266

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	101	102	P/P	90 - 110
Fluoride	97.6	101	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A101631

Included Lab Sample IDs: 2202267

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.8	97.4	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A101643

Included Lab Sample IDs: 2202303

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	117	113	P/P	50 - 160
Glufosinate	111	98.7	P/P	50 - 160
Glyphosate	105	104	P/P	50 - 160

Reference Method: EPA 8321B

Run ID: A101652

Included Lab Sample IDs: 2202303

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	125	94.5	P/P	50 - 150
3-Hydroxycarbofuran	107	88.8	P/P	60 - 150
Acetaminophen	114	113	P/P	60 - 160
Acetamiprid	109	116	P/P	50 - 150
Afidopyropen	93.0	78.2	P/P	50 - 150
Aldicarb	99.8	83.0	P/P	60 - 150
Aldicarb Sulfone	94.6	82.3	P/P	50 - 150
Aldicarb Sulfoxide	90.2	96.0	P/P	50 - 150
Bentazon	130	106	P/P	50 - 160
Benzovindiflupyr	108	92.8	P/P	50 - 150
Carbamazepine	113	97.6	P/P	60 - 150
Carbaryl	108	78.4	P/P	60 - 150
Carbofuran	91.9	67.3	P/P	50 - 150
Clothianidin	96.2	88.4	P/P	60 - 150
Dinotefuran	104	95.5	P/P	50 - 150
Diuron	119	108	P/P	60 - 160
Fenuron	104	104	P/P	60 - 150
Fluridone	94.3	96.0	P/P	60 - 160
Hydrocodone	114	112	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A101652

Included Lab Sample IDs: 2202303

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ibuprofen	123	88.0	P/P	50 - 160
Imazapyr	94.8	78.7	P/P	50 - 160
Imidacloprid	95.7	97.9	P/P	60 - 150
Linuron	85.9	78.6	P/P	60 - 150
Mandestrobin	111	101	P/P	50 - 150
MCPP	98.7	92.3	P/P	50 - 150
Methiocarb	89.0	77.5	P/P	50 - 150
Methomyl	96.9	91.8	P/P	50 - 150
Naproxen	81.6	64.1	P/P	50 - 160
Oxamyl	100	99.5	P/P	50 - 150
Primidone	99.2	90.0	P/P	60 - 150
Propoxur	101	72.4	P/P	50 - 150
Pyraclostrobin	106	97.9	P/P	60 - 150
Thiamethoxam	108	112	P/P	50 - 150
Tolfenpyrad	95.8	90.9	P/P	60 - 150
Triclopyr	115	95.0	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A101686

Included Lab Sample IDs: 2202303

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	114	123	P/P	50 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A101691

Included Lab Sample IDs: 2202267

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	104	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A101757

Included Lab Sample IDs: 2202304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	95.6		P	80 - 120
Alpha-BHC	98.0		P	80 - 120
Alpha-Chlordane	98.2		P	80 - 120
Beta-BHC	95.0		P	80 - 120
Beta-Cyfluthrin	93.3		P	80 - 120
Bifenthrin	106		P	80 - 120
Chlorothalonil	119		P	80 - 120
Cis-Nonachlor	95.1		P	80 - 120
Cypermethrin	94.4		P	80 - 120
Dacthal	103		P	80 - 120
DDD-p,p'	99.0		P	80 - 120
DDE-p,p'	103		P	80 - 120
DDT-p,p'	106		P	80 - 120
Delta-BHC	105		P	80 - 120
Deltamethrin	95.3		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A101757
Included Lab Sample IDs: 2202304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dichlobenil	89.4		P	80 - 120
Dicofol	93.1		P	80 - 120
Dieldrin	104		P	80 - 120
Endosulfan I	101		P	80 - 120
Endosulfan II	132*		F	80 - 120
Endosulfan Sulfate	92.3		P	80 - 120
Endrin	96.0		P	80 - 120
Endrin Aldehyde	98.2		P	80 - 120
Endrin Ketone	89.7		P	80 - 120
Esfenvalerate	89.6		P	80 - 120
Ethalfuralin	98.2		P	80 - 120
Fenpropathrin	97.0		P	80 - 120
Gamma-BHC	101		P	80 - 120
Gamma-Chlordane	96.4		P	80 - 120
Heptachlor	97.7		P	80 - 120
Heptachlor Epoxide	96.0		P	80 - 120
Hexachlorobenzene	105		P	80 - 120
Lambda-Cyhalothrin	95.7		P	80 - 120
Methoxychlor	106		P	80 - 120
MGK-264	96.9		P	80 - 120
Mirex	95.8		P	80 - 120
Permethrin	90.6		P	80 - 120
Phenothrin	90.3		P	80 - 120
Piperonyl Butoxide	103		P	80 - 120
Prallethrin	89.9		P	80 - 120
Tau-Fluvalinate	97.7		P	80 - 120
Tetramethrin	104		P	80 - 120
Trans-Nonachlor	96.4		P	80 - 120
Triclosan Methyl	101		P	80 - 120
Trifluralin	99.6		P	80 - 120

Reference Method: EPA 8276
Run ID: A101762
Included Lab Sample IDs: 2202304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	106		P	80 - 120
Toxaphene	106		P	80 - 120

Reference Method: EPA 8270E
Run ID: A101840
Included Lab Sample IDs: 2202305

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	95.5		P	80 - 120
Alachlor	97.6		P	80 - 120
Ametryn	91.3		P	80 - 120
Azinphos Methyl	91.3		P	80 - 120
Bromacil	92.0		P	80 - 120
Butylate	100		P	80 - 120
Carbophenothion	94.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A101840
Included Lab Sample IDs: 2202305

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlorpyrifos Ethyl	94.9		P	80 - 120
Chlorpyrifos Methyl	100		P	80 - 120
Cyanazine	95.0		P	80 - 120
Demeton	96.8		P	80 - 120
Diazinon	98.2		P	80 - 120
Dimethenamid	97.0		P	80 - 120
Disulfoton	97.2		P	80 - 120
Dithiopyr	96.9		P	80 - 120
EPTC	99.1		P	80 - 120
Ethion	90.3		P	80 - 120
Ethoprop	98.3		P	80 - 120
Fenamiphos	91.1		P	80 - 120
Fipronil	95.1		P	80 - 120
Fipronil Desulfinyl	98.9		P	80 - 120
Fipronil Sulfide	93.7		P	80 - 120
Fipronil Sulfone	94.4		P	80 - 120
Flumioxazin	86.0		P	80 - 120
Fonofos	97.9		P	80 - 120
Hexazinone	94.9		P	80 - 120
Imazalil	94.8		P	80 - 120
Malathion	92.0		P	80 - 120
Metaxyl	97.7		P	80 - 120
Metolachlor	97.4		P	80 - 120
Metribuzin	92.7		P	80 - 120
Mevinphos	96.3		P	80 - 120
Molinate	97.4		P	80 - 120
Naled	103		P	80 - 120
Norflurazon	92.6		P	80 - 120
Oxadiazon	95.9		P	80 - 120
Parathion Ethyl	94.0		P	80 - 120
Parathion Methyl	95.2		P	80 - 120
Pendimethalin	100		P	80 - 120
Phorate	96.5		P	80 - 120
Prodiamine	95.1		P	80 - 120
Prometon	94.1		P	80 - 120
Prometryn	94.8		P	80 - 120
Pronamide	93.6		P	80 - 120
Propiconazole	89.9		P	80 - 120
Simazine	99.9		P	80 - 120
Sulfentrazone	91.8		P	80 - 120
Tebuconazole	93.2		P	80 - 120
Terbufos	99.0		P	80 - 120
Terbutylazine	98.2		P	80 - 120

Reference Method: EPA 8270E
Run ID: A101850
Included Lab Sample IDs: 2202305

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	100		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A101855

Included Lab Sample IDs: 2202261, 2202263, 2202265, 2202266

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	91.6	97.1	P/P	90 - 110
Bromide	97.1	97.8	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			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							0.498	
EPA 300.0 Rev. 2.1	Bromide	103		94.3					
	Bromide	106		101	106	102			3.22
EPA 350.1 Rev. 2.0	Ammonia-N	99.9		101	101				0.0671
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105		106	107				0.658
EPA 353.2 Rev. 2.0	NO2NO3-N	100		96.5	97.0				0.517
EPA 365.1 Rev. 2.0	Total-P	110		107	108				0.492
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.7		97.5	98.2				0.637
	O-Phosphate-P	98.6		99.5	98.9				0.605
EPA 8270E	Acetochlor	87.4	78.9	73.8	88.0		10.3		17.4
	Alachlor	87.0	83.7	72.4	83.8		3.94		14.6
	Aldrin	44.6	41.2	40.6	39.6		7.90		2.31
	Alpha-BHC	80.9	81.0	74.3	78.3		0.154		5.35
	Alpha-Chlordane	80.7	84.7	58.4	58.6		4.77		0.317
	Ametryn	91.4	83.4				9.23		17.6
	Atrazine	90.6	82.3				9.68		15.0
	Atrazine Desethyl	71.8	69.5	48.3	64.2		3.21		18.4
	Azinphos Methyl	97.9	82.2	76.1	88.2		17.4		14.7
	Beta-BHC	80.6	89.2	87.7	92.3		10.1		5.12
	Beta-Cyfluthrin	83.9	82.6	82.9	77.0		1.57		7.40
	Bifenthrin	84.0	81.8	69.6	74.8		2.64		7.16
	Bromacil	56.5	50.0	61.0	48.0		12.2		23.8
	Butylate	63.9	54.8	47.3	37.9		15.2		22.1
	Carbophenothion	79.8	73.6	66.4	73.3		8.14		9.89
	Chlorothalonil	70.6	54.3	188	192		26.1		2.43
	Chlorpyrifos Ethyl	84.1	74.6	72.5	87.9		11.9		19.2
	Chlorpyrifos Methyl	90.0	81.7	75.3	87.6		9.68		15.0
	Cis-Nonachlor	83.9	87.0	63.7	65.6		3.61		2.95
	Cyanazine	100	99.1	84.9	100		0.899		16.4
	Cypermethrin	92.5	85.5	84.0	85.3		7.96		1.62
	Dacthal	92.2	96.6	78.3	80.0		4.67		2.16
	DDD-p,p'	86.8	91.0	61.7	62.2		4.73		0.869
	DDE-p,p'	76.6	81.4	51.1	52.0		6.09		1.74
	DDT-p,p'	89.3	87.6	61.8	59.9		1.87		3.08
	Delta-BHC	113	114	121	138		0.502		13.1
	Deltamethrin	90.9	117	95.0	105		25.4		9.89
	Demeton	81.1	71.5	74.3	83.4		12.6		11.6
	Diazinon	83.8	77.3	74.6	86.5		8.05		14.8
	Dichlobenil	37.5	36.0	51.6	57.6		3.96		11.0
	Dicofol	92.6	96.7	50.0	67.7		4.26		30.1
	Dieldrin	87.1	87.7	61.8	62.0		0.694		0.179
	Dimethenamid	81.9	77.6	70.7	80.6		5.41		13.0
	Disulfoton	70.4	72.7	62.6	70.1		3.21		11.3
	Dithiopyr	78.6	73.2	68.6	78.8		7.08		13.8
	Endosulfan I	99.4	95.8	72.9	76.1		3.68		4.28
	Endosulfan II	107	116	83.6	107		7.83		24.7
	Endosulfan Sulfate	89.4	86.4	79.9	86.4		3.44		7.91
	Endrin	98.4	95.2	69.1	71.8		3.33		3.78
	Endrin Aldehyde	85.7	97.4	113	114		12.7		0.709
	Endrin Ketone	89.2	87.4	79.9	85.0		2.08		6.21
	EPTC	60.6	53.8	34.0	45.8		11.8		29.5
	Esfenvalerate	75.7	72.5	64.0	67.3		4.28		5.13
	Ethalfuralin	74.1	72.0	54.1	52.6		2.86		2.73
	Ethion	73.5	73.6	71.8	72.6		0.150		1.12

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Ethoprop	82.6	73.2	69.5	83.6	12.1	18.5
	Fenamiphos	75.6	80.5	44.7	43.4	6.31	2.95
	Fenpropathrin	88.8	82.3	117	110	7.63	5.79
	Fipronil	84.0	80.6	72.9	84.2	4.17	14.4
	Fipronil Desulfinyl	84.6	79.4	72.5	84.2	6.32	15.0
	Fipronil Sulfide	76.6	66.6	58.7	72.6	13.9	21.3
	Fipronil Sulfone	85.4	69.6	70.8	79.0	20.5	11.0
	Flumioxazin	131	116	130	144	12.4	10.2
	Fonofos	82.8	73.0	76.0	81.6	12.7	7.04
	Gamma-BHC	83.6	93.2	95.6	95.5	10.9	0.108
	Gamma-Chlordane	77.9	80.3	56.9	56.7	2.96	0.232
	Heptachlor	73.5	74.6	53.8	48.3	1.42	10.7
	Heptachlor Epoxide	84.4	86.7	62.0	62.7	2.69	1.02
	Hexachlorobenzene	70.9	69.2	44.5	46.0	2.45	3.39
	Hexazinone	79.1	72.8	70.7	86.4	8.35	12.4
	Imazalil	79.3	71.2	66.3	70.5	10.8	6.25
	Lambda-Cyhalothrin	94.1	91.0	93.4	99.2	3.35	5.97
	Malathion	90.7	86.2	78.2	90.1	5.09	14.2
	Metalaxyl	87.8	81.5	73.6	88.7	7.46	18.6
	Methoxychlor	91.2	91.2	84.0	80.7	0.0230	4.07
	Metolachlor	88.2	82.4	72.6	86.8	6.77	15.4
	Metribuzin	92.1	82.3	89.3	103	11.2	13.9
	Mevinphos	70.0	67.5	62.5	75.3	3.72	18.5
	MGK-264	53.2	53.0	63.5	65.5	0.238	3.14
	Mirex	77.0	75.7	60.6	60.7	1.69	0.0836
	Molinate	74.2	63.2	51.0	67.9	15.9	28.3
	Naled	50.3	45.2	37.7	48.7	10.8	25.5
	Norflurazon	76.4	67.0	60.7	71.6	13.1	16.5
	Oxadiazon	74.8	69.2	64.3	72.4	7.80	11.9
	Parathion Ethyl	85.1	80.2	76.3	89.0	5.96	15.4
	Parathion Methyl	91.6	79.9	75.6	90.6	13.7	18.0
	Pendimethalin	72.8	66.0	70.3	79.7	9.71	12.6
	Permethrin	77.3	83.5	60.1	70.8	7.73	16.4
	Phenothrin	50.9	46.9	48.2	49.8	8.22	3.26
	Phorate	101	103	79.3	87.2	1.63	9.45
	Piperonyl Butoxide	99.6	107	81.9	54.9	7.46	39.5
	Prallethrin	55.8	58.2	46.2	55.2	4.10	17.7
	Prodiamine	76.8	36.8	56.8	47.4	70.4	18.1
	Prometon	83.5	76.2	71.0	82.6	9.09	15.1
	Prometryn	83.2	79.1	70.8	82.3	5.03	13.4
	Pronamide	92.3	82.6	79.6	94.9	11.1	17.6
	Propiconazole	71.0	66.5	51.8	67.5	6.56	11.3
	Simazine	92.2	76.1	76.5	89.5	19.1	15.6
	Sulfentrazone	62.7	59.1	59.1	68.9	5.88	15.4
	Tau-Fluvalinate	92.1	89.6	92.6	95.5	2.74	3.04
	Tebuconazole	41.4	44.0	35.9	37.3	6.23	3.88
	Terbufos	80.1	72.6	72.5	84.1	9.74	14.8
	Terbuthylazine	90.2	84.7	91.5	78.6	6.31	15.2
	Tetramethrin	156	149	144	159	4.07	9.46
	Trans-Nonachlor	80.5	82.4	57.8	58.4	2.44	1.10
	Triclosan Methyl	89.6	95.8	59.3	61.9	6.74	4.32
	Trifluralin	74.4	70.7	50.8	49.7	5.06	2.22
EPA 8276	Chlordane	93.0	92.9	90.1	96.6	0.105	6.94
	Toxaphene	91.9	86.7	144	133	5.79	7.43

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8321B	2,4-D	99.2	60.7	85.5		30.9
	3-Hydroxycarbofuran	79.7	48.7	39.3		21.6
	Acesulfame K	69.4	89.4	90.0		0.707
	Acetaminophen	80.4	91.1	96.9		6.09
	Acetamiprid	68.8	67.6	74.3		9.32
	Afidopyropen	30.5	22.4	30.5		30.6
	Aldicarb	48.4	27.9	24.6		12.5
	Aldicarb Sulfone	83.1	36.6	32.8		10.8
	Aldicarb Sulfoxide	89.1	11.4	10.6		7.67
	AMPA	114	120	122		0.939
	Bentazon	45.8	25.0	36.1		15.7
	Benzovindiflupyr	63.9	52.9	63.2		17.7
	Carbamazepine	49.6	38.9	50.0		24.9
	Carbaryl	63.1	24.8	22.1		9.17
	Carbofuran	53.5	22.0	24.1		8.92
	Clothianidin	63.9	52.6	65.8		22.3
	Dinotefuran	74.9	75.6	90.6		18.1
	Diuron	37.2	26.4	36.4		32.0
	Endothall	109	108	109		0.924
	Fenuron	89.8	76.0	83.3		9.21
	Fluridone	65.1	59.9	66.2		8.95
	Glufosinate	100	97.4	92.7		4.95
	Glyphosate	104	85.1	86.0		1.02
	Hydrocodone	92.8	70.5	90.5		24.8
	Ibuprofen	60.4	57.1	65.6		13.8
	Imazapyr	90.9	75.7	75.5		0.194
	Imidacloprid	87.8	103	107		3.33
	Linuron	42.7	40.6	45.3		10.8
	Mandestrobin	67.3	65.0	74.6		13.7
	MCPP	61.3	48.3	65.3		29.9
	Methiocarb	80.9	49.4	40.9		18.9
	Methomyl	89.2	44.5	41.7		6.36
	Naproxen	51.6	36.3	32.2		12.0
	Oxamyl	88.7	38.4	41.3		7.26
	Primidone	70.3	64.3	71.1		10.0
	Propoxur	50.7	24.7	23.2		5.92
	Pyraclostrobin	58.5	53.0	57.8		8.72
	Sucralose	116	122	119		2.67
	Thiamethoxam	89.3	85.2	112		27.0
	Tolfenpyrad	40.9	32.2	38.4		17.7
	Triclopyr	55.6	28.8	54.2		61.2
SM 2320 B-2011	Total Alkalinity	99.4			7.08	
	Total Alkalinity	101			0.245	
SM 4500 F-C-2011	Fluoride	96.1	103	104		0.479
	Fluoride	97.0	101	101		0.477
SM 5310 B-2011	Organic Carbon	95.6	101			0.0998

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2202261, 2202263, 2202265, 2202266
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2202261, 2202263, 2202265, 2202266
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2202267

Reference Method Descriptions

Method	Description	Associated Samples
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2202267
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2202267
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2202267
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2202262, 2202264, 2202268, 2202269
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2202304
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2202305
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2202304
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2202302
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2202303
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2202303
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2202261, 2202263, 2202265, 2202266
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2202261, 2202263, 2202265, 2202266
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2202261, 2202263, 2202265, 2202266
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2202267

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	10/15/2020			10/15/2020 15:36	Yen Ta	2202261, 2202263, 2202265, 2202266
EPA 300.0 Rev. 2.1	10/15/2020			10/28/2020 23:24	Lipi Saha	2202261
	10/15/2020			10/28/2020 23:42	Lipi Saha	2202263
	10/15/2020			10/29/2020 01:13	Lipi Saha	2202265
	10/15/2020			10/29/2020 02:44	Lipi Saha	2202266
EPA 350.1 Rev. 2.0	10/15/2020			10/18/2020 11:29	Ping Hua	2202267
EPA 351.2 Rev. 2.0	10/15/2020	10/21/2020 13:55	David Boose	10/22/2020 13:14	Elliott Rodriguez	2202267
EPA 353.2 Rev. 2.0	10/15/2020			10/19/2020 11:17	Beverly Y. Sanders	2202267
EPA 365.1 Rev. 2.0	10/15/2020	10/16/2020 14:57	Yen Ta	10/19/2020 15:08	Lipi Saha	2202267
EPA 365.1 Rev. 2.0 dissolved	10/15/2020			10/15/2020 15:37	Virginia P. Brown	2202268
	10/15/2020			10/15/2020 15:51	Virginia P. Brown	2202262
	10/15/2020			10/15/2020 15:57	Virginia P. Brown	2202269
	10/15/2020			10/15/2020 16:16	Virginia P. Brown	2202264
EPA 8270E	10/15/2020	10/16/2020 08:00	Fe-Val Siddell	10/19/2020 18:36	Vandana T. Nagar	2202305
	10/15/2020	10/16/2020 08:00	Fe-Val Siddell	10/21/2020 21:57	Vandana T. Nagar	2202305
	10/15/2020	10/19/2020 08:00	Fe-Val Siddell	10/22/2020 22:34	Arthur Maknenko	2202304
EPA 8276	10/15/2020	10/19/2020 08:00	Fe-Val Siddell	10/22/2020 10:34	Michael Poppell	2202304
EPA 8321B	10/15/2020	10/19/2020 09:00	Hoor Shaik	10/20/2020 13:43	Juyoung Kim	2202303
	10/15/2020	10/19/2020 10:15	Rebecca Ware	10/19/2020 13:59	Rebecca Ware	2202303
	10/15/2020	10/19/2020 10:15	Rebecca Ware	10/20/2020 14:42	Rebecca Ware	2202303
	10/15/2020	10/19/2020 10:15	Rebecca Ware	10/22/2020 03:14	Rebecca Ware	2202303
	10/15/2020	10/20/2020 13:30	Hoor Shaik	10/20/2020 21:14	Juyoung Kim	2202302
SM 2320 B-2011	10/15/2020			10/20/2020 06:12	Samantha Davila	2202265
	10/15/2020			10/20/2020 06:50	Samantha Davila	2202261
	10/15/2020			10/20/2020 11:37	Samantha Davila	2202263
	10/15/2020			10/20/2020 12:02	Samantha Davila	2202266
SM 2540 D-2011	10/15/2020			10/16/2020 20:07	Madeline Gruver	2202261, 2202263, 2202265, 2202266
SM 4500 F-C-2011	10/15/2020			10/20/2020 06:12	Samantha Davila	2202265
	10/15/2020			10/20/2020 06:50	Samantha Davila	2202261
	10/15/2020			10/20/2020 08:55	Samantha Davila	2202263
	10/15/2020			10/20/2020 09:05	Samantha Davila	2202266
SM 5310 B-2011	10/15/2020			10/19/2020 20:11	Lauren Lees	2202267