

Chemical Analysis Report

SE-DIST-2020-03-18-02

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

Event Description: **North Boat + Deploy**

Request ID: **RQ-2020-03-02-56**

Customer: **SE-DIST**

Project ID: **SMP**

Send Reports to:

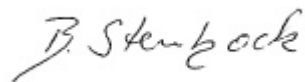
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Drew Liddick

For additional information please contact

Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 13-APR-2020 17:32



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: Sebastian @ Dale Wimbrown

Collection Date/Time: 03/17/2020 11:30

Field ID: G5SE0073

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2166363	EPA 180.1 Rev. 2.0	Turbidity	2.5		NTU	P380991	
	EPA 300.0 Rev. 2.1	Bromide	12		mg Br/L	P381201	
	SM 2320 B-2011	Total Alkalinity	169		mg CaCO3/L	P381064	
	SM 2540 D-2011	TSS	3	I	mg/L	P381576	
	SM 4500 F-C-2011	Fluoride	0.58		mg F/L	P381351	MS
2166365	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P381050	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.47		mg N/L	P381164	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P381250	
	EPA 365.1 Rev. 2.0	Total-P	0.077		mg P/L	P381286	
	SM 5310 B-2011	Organic Carbon	7.9		mg C/L	P381024	
2166367	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.039		mg P/L	P380891	
2166405	EPA 8321B	Aldicarb	0.020	U	ug/L	P380944	RPD
		Aldicarb Sulfone	0.0020	U	ug/L	P380944	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P380944	
		Carbaryl	0.0020	U	ug/L	P380944	
		Carbofuran	0.0020	U	ug/L	P380944	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P380944	
		Methiocarb	0.0020	U	ug/L	P380944	
		Methomyl	0.0020	U	ug/L	P380944	
		Oxamyl	0.0020	U	ug/L	P380944	
		Propoxur	0.0020	U	ug/L	P380944	
		2,4-D	0.0020	U	ug/L	P380944	
		Acesulfame K**	0.10	U	ug/L	P380873	MS
		AMPA**	1.0	U	ug/L	P380873	
2166407		Acetaminophen**	0.0080	U	ug/L	P380944	
		Endothall**	0.25	U	ug/L	P380873	
		Acetamiprid**	0.0020	U	ug/L	P380944	
		Glufosinate**	1.0	U	ug/L	P380873	
		Glyphosate**	1.0	U	ug/L	P380873	
		Afidopyropen**	0.0020	UJ	ug/L	P380944	
		Sucralose**	0.17		ug/L	P380873	
		Bentazon	0.012		ug/L	P380944	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P380944	
		Carbamazepine**	0.0012	I	ug/L	P380944	
		Clothianidin**	0.0020	U	ug/L	P380944	
		Dinotefuran**	0.0020	U	ug/L	P380944	
		Diuron	0.0020	U	ug/L	P380944	
		Fenuron	0.016	U	ug/L	P380944	
		Fluridone**	8.0E-04	U	ug/L	P380944	
		Imazapyr**	0.021		ug/L	P380944	
		Hydrocodone**	0.0020	U	ug/L	P380944	RPD
		Ibuprofen**	0.020	U	ug/L	P380944	
		Imidacloprid	0.0020	U	ug/L	P380944	MS

Field ID: G5SE0073

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2166407	EPA 8321B	Linuron	0.0040	U	ug/L	P380944	
		Mandestrobin**	0.0020	UJ	ug/L	P380944	
		MCPP	0.0020	U	ug/L	P380944	
		Naproxen**	0.0080	U	ug/L	P380944	RPD
		Primidone**	0.0040	U	ug/L	P380944	
		Pyraclostrobin**	0.0020	U	ug/L	P380944	
		Thiamethoxam**	0.0020	U	ug/L	P380944	
		Tolfenpyrad**	0.0020	U	ug/L	P380944	
		Triclopyr**	0.0040	U	ug/L	P380944	
2166411	EPA 8270E	Aldrin	4.3	U	ng/L	P381159	
		Alpha-BHC	2.1	U	ng/L	P381159	
		Alpha-Chlordane	1.1	U	ng/L	P381159	
		Beta-BHC	11	U	ng/L	P381159	
		Beta-Cyfluthrin**	16	U	ng/L	P381159	
		Bifenthrin**	4.3	U	ng/L	P381159	
		Delta-BHC	8.5	U	ng/L	P381159	
		Gamma-BHC	8.5	U	ng/L	P381159	
		Chlorothalonil	2.1	U	ng/L	P381159	
		Cis-Nonachlor**	1.1	U	ng/L	P381159	
		Cypermethrin	21	U	ng/L	P381159	
		Dacthal**	1.1	U	ng/L	P381159	
		DDD-p,p'	6.4	U	ng/L	P381159	
		DDE-p,p'	6.4	U	ng/L	P381159	
		DDT-p,p'	7.5	U	ng/L	P381159	
		Dicofol	32	U	ng/L	P381159	
		Dieldrin	4.3	U	ng/L	P381159	
		Endosulfan I	4.3	U	ng/L	P381159	
		Endosulfan II	4.3	U	ng/L	P381159	
		Endosulfan Sulfate	2.1	U	ng/L	P381159	
		Endrin	2.1	U	ng/L	P381159	
		Endrin Aldehyde	2.1	U	ng/L	P381159	
		Endrin Ketone	2.1	U	ng/L	P381159	
		Ethalfuralin**	3.2	U	ng/L	P381159	
		Gamma-Chlordane	1.1	U	ng/L	P381159	
		Heptachlor	1.6	U	ng/L	P381159	
		Heptachlor Epoxide	2.1	U	ng/L	P381159	
		Hexachlorobenzene	2.1	U	ng/L	P381159	
		Lambda-Cyhalothrin**	16	U	ng/L	P381159	
		Methoxychlor	4.3	U	ng/L	P381159	
		Mirex	2.1	U	ng/L	P381159	
		Permethrin	11	U	ng/L	P381159	
		Phenothrin**	32	U	ng/L	P381159	
		Prallethrin**	32	U	ng/L	P381159	
		Trans-Nonachlor**	1.1	U	ng/L	P381159	
		Trifluralin	2.7	U	ng/L	P381159	

Field ID: G5SE0073

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2166411	EPA 8276	Chlordane	5.3	U	ng/L	P381159	MS, RPD
		Toxaphene	32	U	ng/L	P381159	
2166413	EPA 8270E	Acetochlor	0.25	U	ng/L	P381063	RPD
		Alachlor	0.25	U	ng/L	P381063	
		Ametryn	0.59	U	ng/L	P381063	
		Atrazine	8.3		ng/L	P381063	
		Atrazine Desethyl	1.5	U	ng/L	P381063	
		Azinphos Methyl	4.9	U	ng/L	P381063	
		Bromacil	2.8		ng/L	P381063	
		Butylate	0.39	U	ng/L	P381063	
		Carbophenothion	0.49	U	ng/L	P381063	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P381063	
		Chlorpyrifos Methyl	0.049	U	ng/L	P381063	
		Cyanazine	3.2	U	ng/L	P381063	
		Demeton	6.9	U	ng/L	P381063	
		Diazinon	0.12	U	ng/L	P381063	
		Dimethenamid**	0.098	U	ng/L	P381063	
		Disulfoton	0.49	U	ng/L	P381063	
		Dithiopyr**	0.098	U	ng/L	P381063	
		EPTC	1.2	U	ng/L	P381063	
		Ethion	0.15	U	ng/L	P381063	
		Ethoprop	0.098	U	ng/L	P381063	
		Fenamiphos	0.49	U	ng/L	P381063	
		Fipronil	0.25	U	ng/L	P381063	
		Fipronil Desulfinyl**	0.12	U	ng/L	P381063	
		Fipronil Sulfide	0.15	U	ng/L	P381063	
		Fipronil Sulfone	0.16	I	ng/L	P381063	
		Flumioxazin**	1.7	U	ng/L	P381063	
		Fonofos	0.20	U	ng/L	P381063	
		Hexazinone	0.49	U	ng/L	P381063	
		Imazalil**	0.74	U	ng/L	P381063	
		Malathion	0.34	U	ng/L	P381063	
		Metaxyl	0.74	U	ng/L	P381063	
		Metolachlor	0.49	U	ng/L	P381063	
		Metribuzin	3.2	U	ng/L	P381063	
		Mevinphos	0.49	U	ng/L	P381063	
		Molinate	0.30	U	ng/L	P381063	
		Naled**	1.5	U	ng/L	P381063	
		Norflurazon	16		ng/L	P381063	
		Oxadiazon**	1.8		ng/L	P381063	
		Parathion Ethyl	0.25	U	ng/L	P381063	
		Parathion Methyl	0.54	U	ng/L	P381063	
		Pendimethalin	0.98	U	ng/L	P381063	
		Phorate	0.25	U	ng/L	P381063	
		Prodiamine**	0.17	U	ng/L	P381063	

Field ID: G5SE0073

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2166413	EPA 8270E	Prometon	0.89	U	ng/L	P381063	
		Prometryn	0.20	U	ng/L	P381063	
		Pronamide**	0.15	U	ng/L	P381063	
		Propiconazole**	0.49	U	ng/L	P381063	
		Simazine	0.49	U	ng/L	P381063	
		Sulfentrazone**	0.58	I	ng/L	P381063	RPD
		Tebuconazole**	0.49	U	ng/L	P381063	
		Terbufos	0.098	U	ng/L	P381063	
		Terbuthylazine	0.42	U	ng/L	P381063	
2166417	EPA 200.7 Rev. 4.4	Iron	130	I	ug/L	P380962	
		Manganese	11	I	ug/L	P380962	
		Zinc	15	U	ug/L	P380962	
	EPA 200.8 Rev. 5.4	Aluminum	42	I	ug/L	P380962	
		Antimony	0.50	U	ug/L	P380962	
		Arsenic	0.63	I	ug/L	P380962	
		Cadmium	0.20	U	ug/L	P380962	
		Chromium	1.6	U	ug/L	P380962	
		Copper	1.6	U	ug/L	P380962	
		Lead	2.0	U	ug/L	P380962	
		Nickel	2.0	U	ug/L	P380962	
		Selenium	2.0	U	ug/L	P380962	
		Silver	0.10	U	ug/L	P380962	
		Thallium	1.0	U	ug/L	P380962	

Ref. Method and Comment:

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

EPA 8321B: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample. J - second source check standards for some analytes were not available for analysis.

EPA 8321B: MDL elevated due to matrix interference.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked.

Sample Location: Sebastian @ Dale Wimbrow

Collection Date/Time: 03/17/2020 11:35

Field ID: G5SE0073_DUP

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2166364	EPA 180.1 Rev. 2.0	Turbidity	2.7		NTU	P380991	
	EPA 300.0 Rev. 2.1	Bromide	13		mg Br/L	P381201	
	SM 2320 B-2011	Total Alkalinity	168		mg CaCO3/L	P381064	
	SM 2540 D-2011	TSS	4	I	mg/L	P381576	
	SM 4500 F-C-2011	Fluoride	0.59		mg F/L	P381351	MS
2166366	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P381050	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.50		mg N/L	P381164	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I	mg N/L	P381251	
	EPA 365.1 Rev. 2.0	Total-P	0.080		mg P/L	P381286	
	SM 5310 B-2011	Organic Carbon	8.1		mg C/L	P381024	
2166368	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.044		mg P/L	P380891	
2166406	EPA 8321B	Aldicarb	0.020	U	ug/L	P380944	RPD
		Aldicarb Sulfone	0.0020	U	ug/L	P380944	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P380944	
		Carbaryl	0.0020	U	ug/L	P380944	
		Carbofuran	0.0020	U	ug/L	P380944	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P380944	
		Methiocarb	0.0020	U	ug/L	P380944	
		Methomyl	0.0020	U	ug/L	P380944	
		Oxamyl	0.0020	U	ug/L	P380944	
		Propoxur	0.0020	U	ug/L	P380944	
		2,4-D	0.0020	U	ug/L	P380944	
		Acesulfame K**	0.10	U	ug/L	P380873	MS
		AMPA**	1.0	U	ug/L	P380873	
2166408		Acetaminophen**	0.0080	U	ug/L	P380944	
		Endothall**	0.25	U	ug/L	P380873	
		Acetamiprid**	0.0020	U	ug/L	P380944	
		Glufosinate**	1.0	U	ug/L	P380873	
		Glyphosate**	1.0	U	ug/L	P380873	
		Afidopyropen**	0.0020	UJ	ug/L	P380944	
		Sucralose**	0.17		ug/L	P380873	
		Bentazon	0.011		ug/L	P380944	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P380944	
		Carbamazepine**	0.0012	I	ug/L	P380944	
		Clothianidin**	0.0020	U	ug/L	P380944	
		Dinotefuran**	0.0020	U	ug/L	P380944	
		Diuron	0.0020	U	ug/L	P380944	
		Fenuron	0.016	U	ug/L	P380944	
		Fluridone**	8.0E-04	U	ug/L	P380944	
		Imazapyr**	0.021		ug/L	P380944	
		Hydrocodone**	0.0020	U	ug/L	P380944	RPD
		Ibuprofen**	0.020	U	ug/L	P380944	
		Imidacloprid	0.0020	U	ug/L	P380944	MS

Field ID: G5SE0073_DUP

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2166408	EPA 8321B	Linuron	0.0040	U	ug/L	P380944	
		Mandestrobin**	0.0020	UJ	ug/L	P380944	
		MCPP	0.0020	U	ug/L	P380944	
		Naproxen**	0.0080	U	ug/L	P380944	RPD
		Primidone**	0.0040	U	ug/L	P380944	
		Pyraclostrobin**	0.0020	U	ug/L	P380944	
		Thiamethoxam**	0.0020	U	ug/L	P380944	
		Tolfenpyrad**	0.0020	U	ug/L	P380944	
		Triclopyr**	0.0040	U	ug/L	P380944	
2166412	EPA 8270E	Aldrin	4.3	U	ng/L	P381159	
		Alpha-BHC	2.2	U	ng/L	P381159	
		Alpha-Chlordane	1.1	U	ng/L	P381159	
		Beta-BHC	11	U	ng/L	P381159	
		Beta-Cyfluthrin**	16	U	ng/L	P381159	
		Bifenthrin**	4.3	U	ng/L	P381159	
		Delta-BHC	8.6	U	ng/L	P381159	
		Gamma-BHC	8.6	U	ng/L	P381159	
		Chlorothalonil	2.2	U	ng/L	P381159	
		Cis-Nonachlor**	1.1	U	ng/L	P381159	
		Cypermethrin	22	U	ng/L	P381159	
		Dacthal**	1.1	U	ng/L	P381159	
		DDD-p,p'	6.5	U	ng/L	P381159	
		DDE-p,p'	6.5	U	ng/L	P381159	
		DDT-p,p'	7.5	U	ng/L	P381159	
		Dicofol	32	U	ng/L	P381159	
		Dieldrin	4.3	U	ng/L	P381159	
		Endosulfan I	4.3	U	ng/L	P381159	
		Endosulfan II	4.3	U	ng/L	P381159	
		Endosulfan Sulfate	2.2	U	ng/L	P381159	
		Endrin	2.2	U	ng/L	P381159	
		Endrin Aldehyde	2.2	U	ng/L	P381159	
		Endrin Ketone	2.2	U	ng/L	P381159	
		Ethalfuralin**	3.2	U	ng/L	P381159	
		Gamma-Chlordane	1.1	U	ng/L	P381159	
		Heptachlor	1.6	U	ng/L	P381159	
		Heptachlor Epoxide	2.2	U	ng/L	P381159	
		Hexachlorobenzene	2.2	U	ng/L	P381159	
		Lambda-Cyhalothrin**	16	U	ng/L	P381159	
		Methoxychlor	4.3	U	ng/L	P381159	
		Mirex	2.2	U	ng/L	P381159	
		Permethrin	11	U	ng/L	P381159	
		Phenothrin**	32	U	ng/L	P381159	
		Prallethrin**	32	U	ng/L	P381159	
		Trans-Nonachlor**	1.1	U	ng/L	P381159	
		Trifluralin	2.7	U	ng/L	P381159	

Field ID: G5SE0073_DUP

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2166412	EPA 8276	Chlordane	5.4	U	ng/L	P381159	MS, RPD
		Toxaphene	32	U	ng/L	P381159	
2166414	EPA 8270E	Acetochlor	0.25	U	ng/L	P381063	RPD
		Alachlor	0.25	U	ng/L	P381063	
		Ametryn	0.59	U	ng/L	P381063	
		Atrazine	9.0		ng/L	P381063	
		Atrazine Desethyl	1.5	U	ng/L	P381063	
		Azinphos Methyl	4.9	U	ng/L	P381063	
		Bromacil	3.2		ng/L	P381063	
		Butylate	0.39	U	ng/L	P381063	
		Carbophenothion	0.49	U	ng/L	P381063	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P381063	
		Chlorpyrifos Methyl	0.049	U	ng/L	P381063	
		Cyanazine	3.2	U	ng/L	P381063	
		Demeton	6.9	U	ng/L	P381063	
		Diazinon	0.12	U	ng/L	P381063	
		Dimethenamid**	0.098	U	ng/L	P381063	
		Disulfoton	0.49	U	ng/L	P381063	
		Dithiopyr**	0.098	U	ng/L	P381063	
		EPTC	1.2	U	ng/L	P381063	
		Ethion	0.15	U	ng/L	P381063	
		Ethoprop	0.098	U	ng/L	P381063	
		Fenamiphos	0.49	U	ng/L	P381063	
		Fipronil	0.25	U	ng/L	P381063	
		Fipronil Desulfinyl**	0.12	U	ng/L	P381063	
		Fipronil Sulfide	0.15	U	ng/L	P381063	
		Fipronil Sulfone	0.16	I	ng/L	P381063	
		Flumioxazin**	1.7	U	ng/L	P381063	
		Fonofos	0.20	U	ng/L	P381063	
		Hexazinone	0.49	U	ng/L	P381063	
		Imazalil**	0.74	U	ng/L	P381063	
		Malathion	0.34	U	ng/L	P381063	
		Metaxyl	0.74	U	ng/L	P381063	
		Metolachlor	0.49	U	ng/L	P381063	
		Metribuzin	3.2	U	ng/L	P381063	
		Mevinphos	0.49	U	ng/L	P381063	
		Molinate	0.29	U	ng/L	P381063	
		Naled**	1.5	U	ng/L	P381063	
		Norflurazon	17		ng/L	P381063	
		Oxadiazon**	2.3		ng/L	P381063	
		Parathion Ethyl	0.25	U	ng/L	P381063	
		Parathion Methyl	0.54	U	ng/L	P381063	
		Pendimethalin	0.98	U	ng/L	P381063	
		Phorate	0.25	U	ng/L	P381063	
		Prodiamine**	0.17	U	ng/L	P381063	

Field ID: G5SE0073_DUP

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2166414	EPA 8270E	Prometon	0.88	U	ng/L	P381063	
		Prometryn	0.20	U	ng/L	P381063	
		Pronamide**	0.15	U	ng/L	P381063	
		Propiconazole**	0.49	U	ng/L	P381063	
		Simazine	0.49	U	ng/L	P381063	
		Sulfentrazone**	0.61	I	ng/L	P381063	RPD
		Tebuconazole**	0.49	U	ng/L	P381063	
		Terbufos	0.098	U	ng/L	P381063	
		Terbuthylazine	0.42	U	ng/L	P381063	
2166418	EPA 200.7 Rev. 4.4	Iron	140	I	ug/L	P380962	
		Manganese	11	I	ug/L	P380962	
		Zinc	15	U	ug/L	P380962	
	EPA 200.8 Rev. 5.4	Aluminum	52	I	ug/L	P380962	
		Antimony	0.50	U	ug/L	P380962	
		Arsenic	0.73	I	ug/L	P380962	
		Cadmium	0.20	U	ug/L	P380962	
		Chromium	1.6	U	ug/L	P380962	
		Copper	1.6	U	ug/L	P380962	
		Lead	2.0	U	ug/L	P380962	
		Nickel	2.0	U	ug/L	P380962	
		Selenium	2.0	U	ug/L	P380962	
		Silver	0.10	U	ug/L	P380962	
		Thallium	1.0	U	ug/L	P380962	

Ref. Method and Comment:

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

EPA 8321B: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample. J - second source check standards for some analytes were not available for analysis.

EPA 8321B: MDL elevated due to matrix interference.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked.

Sample Location: Sebastian @ Dale Wimbrow

Collection Date/Time: 03/17/2020 11:40

Field ID: FB_03172020

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2166369	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P380991	
	EPA 300.0 Rev. 2.1	Bromide	0.013	U	mg Br/L	P381201	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P381412	
	SM 2540 D-2011	TSS	2	U	mg/L	P381574	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P381455	
2166370	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P381235	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P381178	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P381542	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P381280	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P381023	
2166371	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P380890	
2166409	EPA 8321B	Aldicarb	0.020	U	ug/L	P380944	RPD
		Aldicarb Sulfone	0.0020	U	ug/L	P380944	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P380944	
		Carbaryl	0.0020	U	ug/L	P380944	
		Carbofuran	0.0020	U	ug/L	P380944	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P380944	
		Methiocarb	0.0020	U	ug/L	P380944	
		Methomyl	0.0020	U	ug/L	P380944	
		Oxamyl	0.0020	U	ug/L	P380944	
		Propoxur	0.0020	U	ug/L	P380944	
		2,4-D	0.0020	U	ug/L	P380867	
		Acesulfame K**	0.10	U	ug/L	P380873	MS
		AMPA**	0.10	U	ug/L	P380873	
2166410		Acetaminophen**	0.0080	U	ug/L	P380867	
		Acetamiprid**	0.0020	U	ug/L	P380867	
		Endothall**	0.25	U	ug/L	P380873	
		Glufosinate**	0.10	U	ug/L	P380873	
		Glyphosate**	0.10	U	ug/L	P380873	
		Afidopyropen**	0.0020	UJ	ug/L	P380867	
		Bentazon	8.0E-04	U	ug/L	P380867	
		Sucralose**	0.010	U	ug/L	P380873	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P380867	
		Carbamazepine**	8.0E-04	U	ug/L	P380867	
		Clothianidin**	0.0020	U	ug/L	P380867	
		Dinotefuran**	0.0020	U	ug/L	P380867	
		Diuron	0.0020	U	ug/L	P380867	
		Fenuron	0.016	U	ug/L	P380867	
		Fluridone**	8.0E-04	U	ug/L	P380867	
		Imazapyr**	0.0040	U	ug/L	P380867	
		Hydrocodone**	0.0020	U	ug/L	P380867	
		Ibuprofen**	0.020	U	ug/L	P380867	
		Imidacloprid	0.0020	U	ug/L	P380867	

Field ID: FB_03172020

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2166410	EPA 8321B	Linuron	0.0040	U	ug/L	P380867	
		Mandestrobin**	0.0020	UJ	ug/L	P380867	
		MCPP	0.0020	U	ug/L	P380867	
		Naproxen**	0.0080	U	ug/L	P380867	
		Primidone**	0.0040	U	ug/L	P380867	
		Pyraclostrobin**	0.0020	U	ug/L	P380867	
		Thiamethoxam**	0.0020	U	ug/L	P380867	
		Tolfenpyrad**	0.0020	U	ug/L	P380867	
		Triclopyr**	0.0040	U	ug/L	P380867	
2166415	EPA 8270E	Aldrin	4.4	U	ng/L	P381159	
		Alpha-BHC	2.2	U	ng/L	P381159	
		Alpha-Chlordane	1.1	U	ng/L	P381159	
		Beta-BHC	11	U	ng/L	P381159	
		Beta-Cyfluthrin**	16	U	ng/L	P381159	
		Bifenthrin**	4.4	U	ng/L	P381159	
		Delta-BHC	8.7	U	ng/L	P381159	
		Gamma-BHC	8.7	U	ng/L	P381159	
		Chlorothalonil	2.2	U	ng/L	P381159	
		Cis-Nonachlor**	1.1	U	ng/L	P381159	
		Cypermethrin	22	U	ng/L	P381159	
		Dacthal**	1.1	U	ng/L	P381159	
		DDD-p,p'	6.6	U	ng/L	P381159	
		DDE-p,p'	6.6	U	ng/L	P381159	
		DDT-p,p'	7.6	U	ng/L	P381159	
		Dicofol	33	U	ng/L	P381159	
		Dieldrin	4.4	U	ng/L	P381159	
		Endosulfan I	4.4	U	ng/L	P381159	
		Endosulfan II	4.4	U	ng/L	P381159	
		Endosulfan Sulfate	2.2	U	ng/L	P381159	
		Endrin	2.2	U	ng/L	P381159	
		Endrin Aldehyde	2.2	U	ng/L	P381159	
		Endrin Ketone	2.2	U	ng/L	P381159	
		Ethalfuralin**	3.3	U	ng/L	P381159	
		Gamma-Chlordane	1.1	U	ng/L	P381159	
		Heptachlor	1.6	U	ng/L	P381159	
		Heptachlor Epoxide	2.2	U	ng/L	P381159	
		Hexachlorobenzene	2.2	U	ng/L	P381159	
		Lambda-Cyhalothrin**	16	U	ng/L	P381159	
		Methoxychlor	4.4	U	ng/L	P381159	
		Mirex	2.2	U	ng/L	P381159	
		Permethrin	11	U	ng/L	P381159	
		Phenothrin**	33	U	ng/L	P381159	
		Prallethrin**	33	U	ng/L	P381159	
		Trans-Nonachlor**	1.1	U	ng/L	P381159	
		Trifluralin	2.7	U	ng/L	P381159	

Field ID: FB_03172020

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2166415	EPA 8276	Chlordane	5.5	U	ng/L	P381159	MS, RPD
		Toxaphene	33	U	ng/L	P381159	
2166416	EPA 8270E	Acetochlor	0.25	U	ng/L	P381063	RPD
		Alachlor	0.25	U	ng/L	P381063	
		Ametryn	0.59	U	ng/L	P381063	
		Atrazine	0.25	U	ng/L	P381063	
		Atrazine Desethyl	1.5	U	ng/L	P381063	
		Azinphos Methyl	4.9	U	ng/L	P381063	
		Bromacil	0.49	U	ng/L	P381063	
		Butylate	0.39	U	ng/L	P381063	
		Carbophenothion	0.49	U	ng/L	P381063	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P381063	
		Chlorpyrifos Methyl	0.049	U	ng/L	P381063	
		Cyanazine	3.2	U	ng/L	P381063	
		Demeton	6.9	U	ng/L	P381063	
		Diazinon	0.12	U	ng/L	P381063	
		Dimethenamid**	0.098	U	ng/L	P381063	
		Disulfoton	0.49	U	ng/L	P381063	
		Dithiopyr**	0.098	U	ng/L	P381063	
		EPTC	1.2	U	ng/L	P381063	
		Ethion	0.15	U	ng/L	P381063	
		Ethoprop	0.098	U	ng/L	P381063	
		Fenamiphos	0.49	U	ng/L	P381063	
		Fipronil	0.25	U	ng/L	P381063	
		Fipronil Desulfinyl**	0.12	U	ng/L	P381063	
		Fipronil Sulfide	0.15	U	ng/L	P381063	
		Fipronil Sulfone	0.15	U	ng/L	P381063	
		Flumioxazin**	1.7	U	ng/L	P381063	
		Fonofos	0.20	U	ng/L	P381063	
		Hexazinone	0.49	U	ng/L	P381063	
		Imazalil**	0.74	U	ng/L	P381063	
		Malathion	0.34	U	ng/L	P381063	
		Metaxyl	0.74	U	ng/L	P381063	
		Metolachlor	0.49	U	ng/L	P381063	
		Metribuzin	3.2	U	ng/L	P381063	
		Mevinphos	0.49	U	ng/L	P381063	
		Molinate	0.29	U	ng/L	P381063	
		Naled**	1.5	U	ng/L	P381063	
		Norflurazon	0.49	U	ng/L	P381063	
		Oxadiazon**	0.38	IV	ng/L	P381063	
		Parathion Ethyl	0.25	U	ng/L	P381063	
		Parathion Methyl	0.54	U	ng/L	P381063	
		Pendimethalin	0.98	U	ng/L	P381063	
		Phorate	0.25	U	ng/L	P381063	
		Prodiamine**	0.17	U	ng/L	P381063	

Field ID: FB_03172020

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2166416	EPA 8270E	Prometon	0.88	U	ng/L	P381063	
		Prometryn	0.20	U	ng/L	P381063	
		Pronamide**	0.15	U	ng/L	P381063	
		Propiconazole**	0.49	U	ng/L	P381063	
		Simazine	0.49	U	ng/L	P381063	
		Sulfentrazone**	0.49	U	ng/L	P381063	RPD
		Tebuconazole**	0.49	U	ng/L	P381063	
		Terbufos	0.098	U	ng/L	P381063	
		Terbuthylazine	0.42	U	ng/L	P381063	
2166419	EPA 200.7 Rev. 4.4	Iron	30	U	ug/L	P381219	
		Manganese	1.0	U	ug/L	P381219	
		Zinc	5.0	U	ug/L	P381219	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P381219	
		Antimony	0.050	U	ug/L	P381219	
		Arsenic	0.050	U	ug/L	P381219	
		Cadmium	0.020	U	ug/L	P381219	
		Chromium	0.40	U	ug/L	P381219	
		Copper	0.40	U	ug/L	P381219	
		Lead	0.20	U	ug/L	P381219	
		Nickel	0.50	U	ug/L	P381219	
		Selenium	0.20	U	ug/L	P381219	
		Silver	0.010	U	ug/L	P381219	
		Thallium	0.10	U	ug/L	P381219	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8321B: J - second source check standards for some analytes were not available for analysis.

EPA 8270E: V - Due to the presence of oxadiazon both in the Method Blank and the sample. MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Re-extraction and re-analysis for oxadiazon was inconclusive due to persistent Method Blank contamination.

Sample Location: North Prong Sebastian downstream of C-54

Collection Date/Time: 03/17/2020 13:30

Field ID: G5SE0081

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2166372	EPA 180.1 Rev. 2.0	Turbidity	2.9	A	NTU	P380991	
	EPA 300.0 Rev. 2.1	Bromide	26		mg Br/L	P381201	
	SM 2320 B-2011	Total Alkalinity	175		mg CaCO3/L	P381065	
	SM 2540 D-2011	TSS	3	IA	mg/L	P381576	
	SM 4500 F-C-2011	Fluoride	0.67		mg F/L	P381452	
2166373	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P381234	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.62		mg N/L	P381164	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P381251	
	EPA 365.1 Rev. 2.0	Total-P	0.059		mg P/L	P381286	
	SM 5310 B-2011	Organic Carbon	8.2		mg C/L	P381024	
2166374	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.022		mg P/L	P380891	

Ref. Method and Comment:

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P380991

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P380962

Component	Result	Code	Units
Iron	30	U	ug/L
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P381219

Component	Result	Code	Units
Iron	30	U	ug/L
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P380962

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	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 200.8 Rev. 5.4
Batch ID: P381219

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	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

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381201

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381050

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381234

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381235

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381164

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381178

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381250

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381251

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381542

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381280

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381286

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P380890

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P380891

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

Reference Method: EPA 8270E
Batch ID: P381063

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	5.0	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	7.0	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: P381063

Component	Result	Code	Units
Imazalil	0.75	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	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	0.14	I	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

Reference Method: EPA 8270E
Batch ID: P381159

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	10	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'	6.0	U	ng/L
DDE-p,p'	6.0	U	ng/L
DDT-p,p'	7.0	U	ng/L
Delta-BHC	8.0	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
Ethalfuralin	3.0	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P381159

Component	Result	Code	Units
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	30	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
Batch ID: P381159

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

Reference Method: EPA 8321B
Batch ID: P380867

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P380873

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: P380944

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
3-Hydroxycarbofuran	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	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
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	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
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Oxamyl	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Propoxur	0.0020	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011
Batch ID: P381064

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

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P381065

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

Reference Method: SM 2320 B-2011
Batch ID: P381412

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

Reference Method: SM 2540 D-2011
Batch ID: P381574

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P381576

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P381351

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-2011
Batch ID: P381452

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-2011
Batch ID: P381455

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P381023

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

Reference Method: SM 5310 B-2011
Batch ID: P381024

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: P380962

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	98.6		P	85 - 115
Manganese	103		P	85 - 115
Zinc	104		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P381219

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	104		P	85 - 115
Manganese	100		P	85 - 115
Zinc	99.9		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P380962

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	97.3		P	85 - 115
Arsenic	99.4		P	85 - 115
Cadmium	106		P	85 - 115
Chromium	101		P	85 - 115
Copper	93.3		P	85 - 115
Lead	103		P	85 - 115
Nickel	98.3		P	85 - 115
Selenium	93.5		P	85 - 115
Silver	98.2		P	85 - 115
Thallium	107		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P381219

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	95.2		P	85 - 115
Antimony	93.3		P	85 - 115
Arsenic	101		P	85 - 115
Cadmium	97.1		P	85 - 115
Chromium	96.5		P	85 - 115
Copper	96.2		P	85 - 115
Lead	99.9		P	85 - 115
Nickel	101		P	85 - 115
Selenium	95.5		P	85 - 115
Silver	102		P	85 - 115
Thallium	104		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381201

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Bromide	104		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381050

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381234

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381235

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.9		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381164

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381178

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.7		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381250

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381251

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381542

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381280

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P381286

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P380890

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P380891

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	96.7		P	90 - 110

Reference Method: EPA 8270E

Batch ID: P381063

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	103	91.1	P/P	71 - 122
Alachlor	103	89.4	P/P	70 - 121
Ametryn	107	94.0	P/P	49 - 137
Atrazine	99.5	94.8	P/P	76 - 125
Atrazine Desethyl	98.4	82.8	P/P	31 - 144
Azinphos Methyl	107	92.6	P/P	67 - 150
Bromacil	84.6	76.5	P/P	36 - 121
Butylate	56.3	53.8	P/P	33 - 88.0
Carbophenothion	96.5	83.0	P/P	50 - 150
Chlorpyrifos Ethyl	102	92.2	P/P	73 - 117
Chlorpyrifos Methyl	103	92.4	P/P	68 - 121
Cyanazine	108	92.4	P/P	20 - 250
Demeton	99.6	91.6	P/P	30 - 123
Diazinon	98.5	89.0	P/P	70 - 128
Dimethenamid	102	89.5	P/P	66 - 122
Disulfoton	102	89.2	P/P	46 - 124
Dithiopyr	97.8	86.6	P/P	69 - 122
EPTC	56.4	52.3	P/P	31 - 90.0
Ethion	73.8	66.2	P/P	45 - 135
Ethoprop	100	92.0	P/P	59 - 118
Fenamiphos	97.9	83.4	P/P	30 - 136
Fipronil	96.5	82.3	P/P	57 - 127
Fipronil Desulfinyl	101	87.4	P/P	51 - 122
Fipronil Sulfide	92.8	81.7	P/P	57 - 119
Fipronil Sulfone	88.2	76.5	P/P	51 - 119
Flumioxazin	151	127	P/P	70 - 200
Fonofos	104	91.9	P/P	60 - 120
Hexazinone	113	97.4	P/P	57 - 142
Imazalil	97.0	95.6	P/P	50 - 150
Malathion	110	98.4	P/P	67 - 128
Metaxyl	107	92.7	P/P	21 - 148
Metolachlor	97.3	85.8	P/P	70 - 120
Metribuzin	137	123	P/P	20 - 253
Mevinphos	98.5	89.0	P/P	47 - 116

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P381063

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Molinate	74.2	69.8	P/P	41 - 99.0
Naled	83.4	75.6	P/P	40 - 130
Norflurazon	99.5	80.9	P/P	54 - 127
Oxadiazon	97.1	84.1	P/P	65 - 122
Parathion Ethyl	96.6	88.3	P/P	71 - 113
Parathion Methyl	109	100	P/P	73 - 129
Pendimethalin	98.6	87.2	P/P	63 - 130
Phorate	103	90.4	P/P	48 - 118
Prodiamine	57.6	52.9	P/P	20 - 144
Prometon	98.3	85.1	P/P	53 - 120
Prometryn	97.5	85.4	P/P	63 - 119
Pronamide	110	99.4	P/P	50 - 150
Propiconazole	90.5	76.6	P/P	50 - 150
Simazine	116	102	P/P	77 - 129
Sulfentrazone	90.7	76.7	P/P	50 - 150
Tebuconazole	57.8	47.9	P/P	20 - 118
Terbufos	104	93.8	P/P	61 - 119
Terbutylazine	108	95.6	P/P	75 - 119

Reference Method: EPA 8270E
Batch ID: P381159

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	55.7	51.1	P/P	20 - 87.0
Alpha-BHC	80.7	84.6	P/P	65 - 142
Alpha-Chlordane	80.8	77.9	P/P	58 - 106
Beta-BHC	92.5	98.2	P/P	65 - 179
Beta-Cyfluthrin	71.6	80.2	P/P	50 - 150
Bifenthrin	86.3	85.1	P/P	38 - 128
Chlorothalonil	43.7	36.4	P/P	20 - 214
Cis-Nonachlor	92.7	77.4	P/P	56 - 113
Cypermethrin	94.2	87.0	P/P	37 - 130
Dacthal	93.3	86.9	P/P	50 - 150
DDD-p,p'	101	83.6	P/P	66 - 119
DDE-p,p'	78.2	66.7	P/P	53 - 108
DDT-p,p'	78.4	79.9	P/P	57 - 133
Delta-BHC	136	159	P/P	61 - 228
Dicofol	76.3	76.8	P/P	66 - 123
Dieldrin	92.3	85.6	P/P	65 - 111
Endosulfan I	91.5	96.7	P/P	65 - 115
Endosulfan II	114	94.0	P/P	68 - 133
Endosulfan Sulfate	89.6	87.5	P/P	62 - 127
Endrin	90.8	79.8	P/P	64 - 122
Endrin Aldehyde	119	101	P/P	61 - 132
Endrin Ketone	90.3	94.1	P/P	66 - 120
Ethalfuralin	73.5	73.4	P/P	57 - 127
Gamma-BHC	94.4	100	P/P	71 - 158
Gamma-Chlordane	76.2	71.0	P/P	53 - 106
Heptachlor	65.7	63.0	P/P	45 - 96.0
Heptachlor Epoxide	89.9	89.7	P/P	64 - 109
Hexachlorobenzene	66.5	65.2	P/P	46 - 103
Lambda-Cyhalothrin	79.7	75.6	P/P	50 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P381159

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Methoxychlor	87.1	89.7	P/P	69 - 149
Mirex	59.6	55.9	P/P	31 - 90.0
Permethrin	78.8	76.8	P/P	41 - 108
Phenothrin	66.3	57.8	P/P	50 - 150
Prallethrin	71.4	63.8	P/P	40 - 140
Trans-Nonachlor	75.7	76.1	P/P	50 - 107
Trifluralin	72.6	73.6	P/P	58 - 119

Reference Method: EPA 8276
Batch ID: P381159

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	91.5	92.4	P/P	47 - 119
Toxaphene	93.1	98.8	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P380867

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	133		P	30 - 160
Acetaminophen	89.8		P	30 - 160
Acetamiprid	90.8		P	30 - 160
Afidopyropen	92.0		P	30 - 160
Bentazon	94.0		P	30 - 160
Benzovindiflupyr	78.5		P	30 - 160
Carbamazepine	107		P	30 - 160
Clothianidin	88.1		P	30 - 160
Dinotefuran	91.8		P	30 - 160
Diuron	64.2		P	30 - 160
Fenuron	94.6		P	30 - 160
Fluridone	97.0		P	30 - 160
Hydrocodone	98.8		P	30 - 160
Ibuprofen	86.4		P	30 - 160
Imazapyr	92.4		P	30 - 160
Imidacloprid	114		P	30 - 160
Linuron	80.9		P	30 - 160
Mandestrobin	91.9		P	30 - 160
MCPP	145		P	30 - 160
Naproxen	65.4		P	30 - 160
Primidone	91.8		P	30 - 160
Pyraclostrobin	85.9		P	30 - 160
Thiamethoxam	106		P	30 - 160
Tolfenpyrad	54.1		P	30 - 160
Triclopyr	96.4		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P380873

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	88.7		P	40 - 150
AMPA	126		P	40 - 150
Endothall	124		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P380873

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glufosinate	127		P	40 - 150
Glyphosate	110		P	40 - 140
Sucralose	110		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P380944

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	116		P	30 - 160
3-Hydroxycarbofuran	87.9		P	30 - 160
Acetaminophen	77.4		P	30 - 160
Acetamiprid	76.1		P	30 - 160
Afidopyropen	89.8		P	30 - 160
Aldicarb	49.5		P	30 - 160
Aldicarb Sulfone	85.7		P	30 - 160
Aldicarb Sulfoxide	73.6		P	30 - 160
Bentazon	85.8		P	30 - 160
Benzovindiflupyr	81.8		P	30 - 160
Carbamazepine	103		P	30 - 160
Carbaryl	70.1		P	30 - 160
Carbofuran	62.6		P	30 - 160
Clothianidin	72.1		P	30 - 160
Dinotefuran	81.3		P	30 - 160
Diuron	75.3		P	30 - 160
Fenuron	81.8		P	30 - 160
Fluridone	85.1		P	30 - 160
Hydrocodone	86.0		P	30 - 160
Ibuprofen	70.3		P	30 - 160
Imazapyr	92.2		P	30 - 160
Imidacloprid	105		P	30 - 160
Linuron	69.5		P	30 - 160
Mandestrobin	86.6		P	30 - 160
MCPP	129		P	30 - 160
Methiocarb	60.0		P	30 - 160
Methomyl	78.4		P	30 - 160
Naproxen	86.7		P	30 - 160
Oxamyl	72.8		P	30 - 160
Primidone	82.2		P	30 - 160
Propoxur	69.0		P	30 - 160
Pyraclostrobin	80.4		P	30 - 160
Thiamethoxam	85.5		P	30 - 160
Tolfenpyrad	48.8		P	30 - 160
Triclopyr	95.0		P	30 - 160

Reference Method: SM 2320 B-2011
Batch ID: P381064

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	98 - 106

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P381065

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	98 - 106

Reference Method: SM 2320 B-2011
Batch ID: P381412

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

Reference Method: SM 4500 F-C-2011
Batch ID: P381351

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.7		P	92 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P381452

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.3		P	92 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P381455

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.8		P	92 - 104

Reference Method: SM 5310 B-2011
Batch ID: P381023

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	102		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P381024

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P380962

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166312	Iron	99.9	101	P/P	70 - 130
2166312	Manganese	105	104	P/P	70 - 130
2166312	Zinc	104	103	P/P	70 - 130

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P381219

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166729	Iron	104		P	80 - 120
2166729	Manganese	98.6		P	80 - 120
2166729	Zinc	100		P	80 - 120
2167130	Iron	104	102	P/P	80 - 120
2167130	Manganese	99.5	99.5	P/P	80 - 120
2167130	Zinc	100	101	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P380962

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166312	Aluminum	97.1	98.9	P/P	70 - 130
2166312	Antimony	99.5	105	P/P	70 - 130
2166312	Arsenic	103	105	P/P	70 - 130
2166312	Cadmium	93.1	111	P/P	70 - 130
2166312	Chromium	101	102	P/P	70 - 130
2166312	Copper	88.9	89.3	P/P	70 - 130
2166312	Lead	103	103	P/P	70 - 130
2166312	Nickel	98.5	99.1	P/P	70 - 130
2166312	Selenium	95.5	101	P/P	70 - 130
2166312	Silver	98.5	98.8	P/P	70 - 130
2166312	Thallium	105	106	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P381219

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166729	Aluminum	92.1		P	80 - 120
2166729	Antimony	94.2		P	80 - 120
2166729	Arsenic	100		P	80 - 120
2166729	Cadmium	98.3		P	80 - 120
2166729	Chromium	97.6		P	80 - 120
2166729	Copper	95.0		P	80 - 120
2166729	Lead	98.4		P	80 - 120
2166729	Nickel	98.1		P	80 - 120
2166729	Selenium	92.0		P	80 - 120
2166729	Silver	101		P	80 - 120
2166729	Thallium	103		P	80 - 120
2167130	Aluminum	93.6	93.0	P/P	80 - 120
2167130	Antimony	95.3	97.0	P/P	80 - 120
2167130	Arsenic	99.9	104	P/P	80 - 120
2167130	Cadmium	98.9	102	P/P	80 - 120
2167130	Chromium	99.1	99.5	P/P	80 - 120
2167130	Copper	95.3	97.5	P/P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P381219

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2167130	Lead	99.9	99.9	P/P	80 - 120
2167130	Nickel	97.7	99.7	P/P	80 - 120
2167130	Selenium	93.5	99.3	P/P	80 - 120
2167130	Silver	102	101	P/P	80 - 120
2167130	Thallium	104	98.8	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381201

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166933	Bromide	103	101	P/P	90 - 110
2166937	Bromide	99.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381050

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166365	Ammonia-N	98.7	98.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381234

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166887	Ammonia-N	103	106	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381235

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166278	Ammonia-N	98.9	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381164

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166275	Kjeldahl Nitrogen	95.8	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381178

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166266	Kjeldahl Nitrogen	97.8	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381250

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166017	NO2NO3-N	102	102	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381251

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166366	NO2NO3-N	96.6	96.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381542

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166260	NO2NO3-N	97.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381286

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166365	Total-P	105	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P380890

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166262	O-Phosphate-P	93.3	95.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P380891

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166367	O-Phosphate-P	93.3	95.8	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P381063

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166585	Acetochlor	83.6	110	P/P	68 - 126
2166585	Alachlor	79.8	98.4	P/P	66 - 125
2166585	Ametryn	87.8	98.1	P/P	31 - 182
2166585	Atrazine Desethyl	49.1	84.4	P/P	13 - 161
2166585	Azinphos Methyl	77.4	106	P/P	54 - 162
2166585	Bromacil	65.1	85.0	P/P	34 - 144
2166585	Butylate	66.2	77.2	P/P	16 - 92.0
2166585	Carbophenothion	60.2	72.1	P/P	50 - 150
2166585	Chlorpyrifos Ethyl	76.0	83.6	P/P	63 - 124
2166585	Chlorpyrifos Methyl	76.8	99.8	P/P	64 - 125
2166585	Cyanazine	73.5	94.0	P/P	13 - 245
2166585	Demeton	83.3	119	P/P	20 - 154
2166585	Diazinon	86.2	119	P/P	66 - 141
2166585	Dimethenamid	79.9	105	P/P	50 - 130
2166585	Disulfoton	78.2	95.3	P/P	55 - 130
2166585	Dithiopyr	77.9	103	P/P	66 - 122
2166585	EPTC	55.2	61.6	P/P	15 - 93.0
2166585	Ethion	38.4	42.7	P/P	15 - 148
2166585	Ethoprop	86.5	115	P/P	59 - 126
2166585	Fenamiphos	79.2	96.4	P/P	39 - 137
2166585	Fipronil	69.5	91.1	P/P	47 - 131
2166585	Fipronil Desulfynil	71.4	96.2	P/P	43 - 121

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P381063

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166585	Fipronil Sulfide	62.9	78.7	P/P	29 - 134
2166585	Fipronil Sulfone	63.0	82.0	P/P	19 - 131
2166585	Flumioxazin	105	135	P/P	70 - 200
2166585	Fonofos	84.1	102	P/P	62 - 128
2166585	Hexazinone	92.8	125	P/P	58 - 154
2166585	Imazalil	61.6	85.7	P/P	50 - 150
2166585	Malathion	79.3	95.0	P/P	54 - 135
2166585	Metalaxyl	82.7	108	P/P	46 - 136
2166585	Metolachlor	75.5	91.3	P/P	62 - 126
2166585	Metribuzin	107	141	P/P	44 - 277
2166585	Mevinphos	80.7	104	P/P	44 - 135
2166585	Molinate	73.5	87.5	P/P	31 - 104
2166585	Naled	75.6	93.5	P/P	40 - 130
2166585	Norflurazon	67.9	91.8	P/P	32 - 134
2166585	Oxadiazon	55.7	73.2	P/P	55 - 123
2166585	Parathion Ethyl	79.2	105	P/P	67 - 120
2166585	Parathion Methyl	91.7	130	P/P	70 - 140
2166585	Pendimethalin	82.7	108	P/P	59 - 145
2166585	Phorate	93.1	122	P/P	52 - 127
2166585	Prodiamine	41.1	49.2	P/P	11 - 157
2166585	Prometon	74.2	96.8	P/P	55 - 130
2166585	Prometryn	72.5	92.9	P/P	55 - 127
2166585	Pronamide	98.7	129	P/P	50 - 150
2166585	Propiconazole	65.3	83.7	P/P	50 - 150
2166585	Simazine	84.9	115	P/P	58 - 159
2166585	Sulfentrazone	61.3	85.7	P/P	50 - 150
2166585	Tebuconazole	34.5	40.2	P/P	10 - 122
2166585	Terbufos	84.9	109	P/P	65 - 131
2166585	Terbutylazine	85.0	111	P/P	63 - 131

Reference Method: EPA 8270E
Batch ID: P381159

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166283	Aldrin	66.2	61.8	P/P	32 - 82.0
2166283	Alpha-BHC	94.1	81.3	P/P	68 - 157
2166283	Alpha-Chlordane	90.1	82.5	P/P	54 - 108
2166283	Beta-BHC	134	104	P/P	54 - 200
2166283	Beta-Cyfluthrin	88.8	84.6	P/P	50 - 150
2166283	Bifenthrin	93.9	88.4	P/P	49 - 124
2166283	Chlorothalonil	127	144	P/P	10 - 289
2166283	Cis-Nonachlor	97.2	81.9	P/P	53 - 112
2166283	Cypermethrin	112	110	P/P	43 - 141
2166283	Dacthal	104	91.7	P/P	50 - 150
2166283	DDD-p,p'	107	90.5	P/P	58 - 125
2166283	DDE-p,p'	89.9	84.0	P/P	50 - 108
2166283	DDT-p,p'	86.3	78.3	P/P	52 - 140
2166283	Delta-BHC	149	190	P/P	61 - 228
2166283	Dicofol	84.8	73.3	P/P	59 - 130
2166283	Dieldrin	99.7	93.8	P/P	57 - 121
2166283	Endosulfan I	107	99.8	P/P	62 - 123
2166283	Endosulfan II	111	104	P/P	48 - 163

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P381159

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166283	Endosulfan Sulfate	119	94.8	P/P	63 - 132
2166283	Endrin	104	78.8	P/P	58 - 128
2166283	Endrin Aldehyde	64.3	74.6	P/P	44 - 126
2166283	Endrin Ketone	114	99.2	P/P	68 - 127
2166283	Ethalfuralin	78.7	71.2	P/P	55 - 131
2166283	Gamma-BHC	135	109	P/P	54 - 206
2166283	Gamma-Chlordane	90.7	76.1	P/P	52 - 105
2166283	Heptachlor	70.5	67.4	P/P	47 - 94.0
2166283	Heptachlor Epoxide	100	81.5	P/P	61 - 113
2166283	Hexachlorobenzene	74.3	64.1	P/P	45 - 100
2166283	Lambda-Cyhalothrin	91.7	74.9	P/P	50 - 150
2166283	Methoxychlor	84.9	75.8	P/P	63 - 153
2166283	Mirex	67.4	63.7	P/P	38 - 90.0
2166283	Permethrin	88.2	71.4	P/P	45 - 112
2166283	Phenothrin	81.6	73.3	P/P	50 - 150
2166283	Prallethrin	77.7	69.6	P/P	40 - 140
2166283	Trans-Nonachlor	90.3	78.3	P/P	50 - 103
2166283	Trifluralin	81.2	73.2	P/P	57 - 122

Reference Method: EPA 8276
Batch ID: P381159

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166074	Chlordane	148	89.9	F/P	34 - 129
2166074	Toxaphene	103	103	P/P	26 - 123

Reference Method: EPA 8321B
Batch ID: P380867

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2165908	2,4-D	121	91.7	P/P	30 - 160
2165908	Acetaminophen	92.2	76.3	P/P	30 - 160
2165908	Acetamiprid	75.6	84.8	P/P	30 - 160
2165908	Afidopyropen	98.3	92.5	P/P	30 - 160
2165908	Bentazon	48.7	46.5	P/P	30 - 160
2165908	Benzovindiflupyr	69.0	63.8	P/P	30 - 160
2165908	Carbamazepine	85.6	75.2	P/P	30 - 160
2165908	Clothianidin	97.2	81.1	P/P	30 - 160
2165908	Dinotefuran	104	96.5	P/P	30 - 160
2165908	Diuron	64.8	60.3	P/P	30 - 160
2165908	Fenuron	74.1	73.8	P/P	30 - 160
2165908	Fluridone	87.8	82.5	P/P	30 - 160
2165908	Hydrocodone	97.1	87.1	P/P	30 - 160
2165908	Ibuprofen	72.7	72.1	P/P	30 - 160
2165908	Imazapyr	106	88.9	P/P	30 - 160
2165908	Imidacloprid	154	141	P/P	30 - 160
2165908	Linuron	55.6	48.7	P/P	30 - 160
2165908	Mandestrobin	74.8	77.9	P/P	30 - 160
2165908	MCP	140	146	P/P	30 - 160
2165908	Naproxen	81.4	78.6	P/P	30 - 160
2165908	Primidone	81.3	84.0	P/P	30 - 160
2165908	Pyraclostrobin	78.5	73.8	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P380867

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2165908	Thiamethoxam	110	122	P/P	30 - 160
2165908	Tolfenpyrad	53.4	51.2	P/P	30 - 160
2165908	Triclopyr	135	137	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P380873

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2165999	Acesulfame K	16.2	17.0	F/F	40 - 150
2165999	AMPA	98.1	101	P/P	40 - 150
2165999	Endothall	130	128	P/P	40 - 150
2165999	Glufosinate	100	115	P/P	40 - 150
2165999	Glyphosate	112	120	P/P	40 - 140
2165999	Sucralose	95.9	94.3	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P380944

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2165513	3-Hydroxycarbofuran	91.6	81.4	P/P	30 - 160
2165513	Aldicarb	89.3	65.2	P/P	30 - 160
2165513	Aldicarb Sulfone	94.7	93.9	P/P	30 - 160
2165513	Aldicarb Sulfoxide	37.0	38.8	P/P	30 - 160
2165513	Carbaryl	73.7	66.7	P/P	30 - 160
2165513	Carbofuran	67.1	63.0	P/P	30 - 160
2165513	Methiocarb	66.1	57.6	P/P	30 - 160
2165513	Methomyl	91.1	83.7	P/P	30 - 160
2165513	Oxamyl	90.1	89.9	P/P	30 - 160
2165513	Propoxur	73.9	60.2	P/P	30 - 160
2166588	2,4-D	101	128	P/P	30 - 160
2166588	Acetaminophen	88.0	81.2	P/P	30 - 160
2166588	Acetamiprid	83.4	89.9	P/P	30 - 160
2166588	Afidopyropen	105	94.1	P/P	30 - 160
2166588	Benzovindiflupyr	80.6	70.4	P/P	30 - 160
2166588	Carbamazepine	89.6	84.2	P/P	30 - 160
2166588	Clothianidin	82.8	82.7	P/P	30 - 160
2166588	Dinotefuran	105	108	P/P	30 - 160
2166588	Diuron	75.0	70.2	P/P	30 - 160
2166588	Fenuron	80.3	73.3	P/P	30 - 160
2166588	Fluridone	94.7	94.1	P/P	30 - 160
2166588	Hydrocodone	105	61.4	P/P	30 - 160
2166588	Ibuprofen	80.4	76.7	P/P	30 - 160
2166588	Imidacloprid	167	148	F/P	30 - 160
2166588	Linuron	68.7	68.1	P/P	30 - 160
2166588	Mandestrobin	90.6	82.7	P/P	30 - 160
2166588	MCP	139	129	P/P	30 - 160
2166588	Naproxen	102	59.8	P/P	30 - 160
2166588	Primidone	87.1	81.9	P/P	30 - 160
2166588	Pyraclostrobin	87.5	81.4	P/P	30 - 160
2166588	Thiamethoxam	125	122	P/P	30 - 160
2166588	Tolfenpyrad	62.1	54.6	P/P	30 - 160
2166588	Triclopyr	123	117	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P381351

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166025	Fluoride	102	105	P/F	91 - 105

Reference Method: SM 4500 F-C-2011
Batch ID: P381452

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2165407	Fluoride	98.4	101	P/P	91 - 105

Reference Method: SM 4500 F-C-2011
Batch ID: P381455

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2165984	Fluoride	103	103	P/P	91 - 105

Reference Method: SM 5310 B-2011
Batch ID: P381023

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166033	Organic Carbon	98.5	99.6	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P381024

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2166017	Organic Carbon	95.7	96.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P380991

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166372	Turbidity	2.06	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P380962

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166312	Iron	0.659	Spike	P	0 - 20
2166312	Manganese	0.872	Spike	P	0 - 20
2166312	Zinc	0.657	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P381219

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2167130	Iron	1.91	Spike	P	0 - 20
2167130	Manganese	0.0297	Spike	P	0 - 20
2167130	Zinc	0.424	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P380962

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166312	Aluminum	1.73	Spike	P	0 - 20
2166312	Antimony	4.93	Spike	P	0 - 20
2166312	Arsenic	2.21	Spike	P	0 - 20
2166312	Cadmium	17.4	Spike	P	0 - 20
2166312	Chromium	1.37	Spike	P	0 - 20
2166312	Copper	0.410	Spike	P	0 - 20
2166312	Lead	0.0818	Spike	P	0 - 20
2166312	Nickel	0.664	Spike	P	0 - 20
2166312	Selenium	5.26	Spike	P	0 - 20
2166312	Silver	0.275	Spike	P	0 - 20
2166312	Thallium	0.878	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P381219

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2167130	Aluminum	0.550	Spike	P	0 - 20
2167130	Antimony	1.78	Spike	P	0 - 20
2167130	Arsenic	3.94	Spike	P	0 - 20
2167130	Cadmium	3.57	Spike	P	0 - 20
2167130	Chromium	0.341	Spike	P	0 - 20
2167130	Copper	2.23	Spike	P	0 - 20
2167130	Lead	0.0336	Spike	P	0 - 20
2167130	Nickel	2.00	Spike	P	0 - 20
2167130	Selenium	6.02	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P381219

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2167130	Silver	0.556	Spike	P	0 - 20
2167130	Thallium	4.91	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381201

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166933	Bromide	0.919	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381050

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166365	Ammonia-N	0.0435	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381234

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166887	Ammonia-N	2.27	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381235

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166278	Ammonia-N	0.768	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381164

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166275	Kjeldahl Nitrogen	5.62	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381178

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166266	Kjeldahl Nitrogen	5.59	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381250

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166017	NO2NO3-N	0.489	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381251

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166366	NO2NO3-N	0.499	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381542

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166260	NO2NO3-N	0.360	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381280

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166077	Total-P	0.530	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381286

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166365	Total-P	2.30	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P380890

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166262	O-Phosphate-P	2.14	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P380891

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166367	O-Phosphate-P	1.87	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P381063

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166585	Acetochlor	27.6	Spike	P	0 - 30
2166585	Alachlor	20.9	Spike	P	0 - 30
2166585	Ametryn	11.1	Spike	P	0 - 30
2166585	Atrazine	30.5	Spike	F	0 - 30
2166585	Atrazine Desethyl	40.4	Spike	F	0 - 30
2166585	Azinphos Methyl	30.7	Spike	F	0 - 30
2166585	Bromacil	26.5	Spike	P	0 - 30
2166585	Butylate	15.3	Spike	P	0 - 30
2166585	Carbophenothion	18.0	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P381063

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166585	Chlorpyrifos Ethyl	9.49	Spike	P	0 - 30
2166585	Chlorpyrifos Methyl	26.1	Spike	P	0 - 30
2166585	Cyanazine	24.5	Spike	P	0 - 30
2166585	Demeton	35.1	Spike	F	0 - 30
2166585	Diazinon	32.1	Spike	F	0 - 30
2166585	Dimethenamid	26.9	Spike	P	0 - 30
2166585	Disulfoton	19.7	Spike	P	0 - 30
2166585	Dithiopyr	28.1	Spike	P	0 - 30
2166585	EPTC	11.0	Spike	P	0 - 30
2166585	Ethion	10.7	Spike	P	0 - 30
2166585	Ethoprop	28.0	Spike	P	0 - 30
2166585	Fenamiphos	19.6	Spike	P	0 - 30
2166585	Fipronil	26.9	Spike	P	0 - 30
2166585	Fipronil Desulfinyl	29.6	Spike	P	0 - 30
2166585	Fipronil Sulfide	22.3	Spike	P	0 - 30
2166585	Fipronil Sulfone	26.3	Spike	P	0 - 30
2166585	Flumioxazin	25.5	Spike	P	0 - 30
2166585	Fonofos	19.3	Spike	P	0 - 30
2166585	Hexazinone	29.8	Spike	P	0 - 30
2166585	Imazalil	32.6	Spike	F	0 - 30
2166585	Malathion	18.0	Spike	P	0 - 30
2166585	Metalaxyl	26.5	Spike	P	0 - 30
2166585	Metolachlor	19.0	Spike	P	0 - 30
2166585	Metribuzin	26.7	Spike	P	0 - 30
2166585	Mevinphos	25.6	Spike	P	0 - 30
2166585	Molinate	17.4	Spike	P	0 - 30
2166585	Naled	21.3	Spike	P	0 - 30
2166585	Norflurazon	29.9	Spike	P	0 - 30
2166585	Oxadiazon	23.2	Spike	P	0 - 30
2166585	Parathion Ethyl	27.9	Spike	P	0 - 30
2166585	Parathion Methyl	34.3	Spike	F	0 - 30
2166585	Pendimethalin	26.5	Spike	P	0 - 30
2166585	Phorate	26.8	Spike	P	0 - 30
2166585	Prodiamine	18.0	Spike	P	0 - 30
2166585	Prometon	26.5	Spike	P	0 - 30
2166585	Prometryn	24.7	Spike	P	0 - 30
2166585	Pronamide	26.5	Spike	P	0 - 30
2166585	Propiconazole	24.7	Spike	P	0 - 30
2166585	Simazine	30.0	Spike	P	0 - 30
2166585	Sulfentrazone	33.2	Spike	F	0 - 30
2166585	Tebuconazole	15.0	Spike	P	0 - 30
2166585	Terbufos	25.1	Spike	P	0 - 30
2166585	Terbutylazine	26.6	Spike	P	0 - 30
LFB	Acetochlor	12.4	LCS	P	0 - 30
LFB	Alachlor	13.6	LCS	P	0 - 30
LFB	Ametryn	13.0	LCS	P	0 - 30
LFB	Atrazine	4.79	LCS	P	0 - 30
LFB	Atrazine Desethyl	17.3	LCS	P	0 - 30
LFB	Azinphos Methyl	14.8	LCS	P	0 - 30
LFB	Bromacil	10.0	LCS	P	0 - 30
LFB	Butylate	4.52	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P381063

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Carbophenothion	15.1	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	10.1	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	11.2	LCS	P	0 - 30
LFB	Cyanazine	16.0	LCS	P	0 - 30
LFB	Demeton	8.33	LCS	P	0 - 30
LFB	Diazinon	10.2	LCS	P	0 - 30
LFB	Dimethenamid	13.3	LCS	P	0 - 30
LFB	Disulfoton	13.4	LCS	P	0 - 30
LFB	Dithiopyr	12.2	LCS	P	0 - 30
LFB	EPTC	7.46	LCS	P	0 - 30
LFB	Ethion	10.9	LCS	P	0 - 30
LFB	Ethoprop	8.55	LCS	P	0 - 30
LFB	Fenamiphos	16.0	LCS	P	0 - 30
LFB	Fipronil	15.8	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	14.0	LCS	P	0 - 30
LFB	Fipronil Sulfide	12.7	LCS	P	0 - 30
LFB	Fipronil Sulfone	14.2	LCS	P	0 - 30
LFB	Flumioxazin	16.6	LCS	P	0 - 30
LFB	Fonofos	12.0	LCS	P	0 - 30
LFB	Hexazinone	15.1	LCS	P	0 - 30
LFB	Imazalil	1.51	LCS	P	0 - 30
LFB	Malathion	10.8	LCS	P	0 - 30
LFB	Metalaxyl	14.1	LCS	P	0 - 30
LFB	Metolachlor	12.5	LCS	P	0 - 30
LFB	Metribuzin	10.7	LCS	P	0 - 30
LFB	Mevinphos	10.1	LCS	P	0 - 30
LFB	Molinate	6.10	LCS	P	0 - 30
LFB	Naled	9.81	LCS	P	0 - 30
LFB	Norflurazon	20.6	LCS	P	0 - 30
LFB	Oxadiazon	14.4	LCS	P	0 - 30
LFB	Parathion Ethyl	9.01	LCS	P	0 - 30
LFB	Parathion Methyl	8.45	LCS	P	0 - 30
LFB	Pendimethalin	12.3	LCS	P	0 - 30
LFB	Phorate	13.0	LCS	P	0 - 30
LFB	Prodiamine	8.64	LCS	P	0 - 30
LFB	Prometon	14.4	LCS	P	0 - 30
LFB	Prometryn	13.2	LCS	P	0 - 30
LFB	Pronamide	9.72	LCS	P	0 - 30
LFB	Propiconazole	16.5	LCS	P	0 - 30
LFB	Simazine	12.2	LCS	P	0 - 30
LFB	Sulfentrazone	16.7	LCS	P	0 - 30
LFB	Tebuconazole	18.6	LCS	P	0 - 30
LFB	Terbufos	10.1	LCS	P	0 - 30
LFB	Terbutylazine	12.5	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P381159

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166283	Aldrin	6.88	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P381159

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166283	Alpha-BHC	14.6	Spike	P	0 - 30
2166283	Alpha-Chlordane	8.77	Spike	P	0 - 30
2166283	Beta-BHC	25.2	Spike	P	0 - 30
2166283	Beta-Cyfluthrin	4.78	Spike	P	0 - 30
2166283	Bifenthrin	6.00	Spike	P	0 - 30
2166283	Chlorothalonil	12.6	Spike	P	0 - 30
2166283	Cis-Nonachlor	17.1	Spike	P	0 - 30
2166283	Cypermethrin	2.45	Spike	P	0 - 30
2166283	Dacthal	12.2	Spike	P	0 - 30
2166283	DDD-p,p'	16.4	Spike	P	0 - 30
2166283	DDE-p,p'	6.73	Spike	P	0 - 30
2166283	DDT-p,p'	9.65	Spike	P	0 - 30
2166283	Delta-BHC	24.4	Spike	P	0 - 30
2166283	Dicofol	14.5	Spike	P	0 - 30
2166283	Dieldrin	6.04	Spike	P	0 - 30
2166283	Endosulfan I	6.56	Spike	P	0 - 30
2166283	Endosulfan II	6.47	Spike	P	0 - 30
2166283	Endosulfan Sulfate	22.4	Spike	P	0 - 30
2166283	Endrin	27.4	Spike	P	0 - 30
2166283	Endrin Aldehyde	14.8	Spike	P	0 - 30
2166283	Endrin Ketone	13.8	Spike	P	0 - 30
2166283	Ethalfuralin	9.97	Spike	P	0 - 30
2166283	Gamma-BHC	21.0	Spike	P	0 - 30
2166283	Gamma-Chlordane	17.5	Spike	P	0 - 30
2166283	Heptachlor	4.40	Spike	P	0 - 30
2166283	Heptachlor Epoxide	20.4	Spike	P	0 - 30
2166283	Hexachlorobenzene	14.8	Spike	P	0 - 30
2166283	Lambda-Cyhalothrin	20.1	Spike	P	0 - 30
2166283	Methoxychlor	11.3	Spike	P	0 - 30
2166283	Mirex	5.62	Spike	P	0 - 30
2166283	Permethrin	19.5	Spike	P	0 - 30
2166283	Phenothrin	10.7	Spike	P	0 - 30
2166283	Prallethrin	11.0	Spike	P	0 - 30
2166283	Trans-Nonachlor	14.3	Spike	P	0 - 30
2166283	Trifluralin	10.3	Spike	P	0 - 30
LFB	Aldrin	8.64	LCS	P	0 - 30
LFB	Alpha-BHC	4.72	LCS	P	0 - 30
LFB	Alpha-Chlordane	3.76	LCS	P	0 - 30
LFB	Beta-BHC	6.02	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	11.3	LCS	P	0 - 30
LFB	Bifenthrin	1.40	LCS	P	0 - 30
LFB	Chlorothalonil	18.2	LCS	P	0 - 30
LFB	Cis-Nonachlor	18.0	LCS	P	0 - 30
LFB	Cypermethrin	7.91	LCS	P	0 - 30
LFB	Dacthal	7.09	LCS	P	0 - 30
LFB	DDD-p,p'	18.8	LCS	P	0 - 30
LFB	DDE-p,p'	15.9	LCS	P	0 - 30
LFB	DDT-p,p'	1.93	LCS	P	0 - 30
LFB	Delta-BHC	15.7	LCS	P	0 - 30
LFB	Dicofol	0.617	LCS	P	0 - 30
LFB	Dieldrin	7.53	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P381159

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Endosulfan I	5.45	LCS	P	0 - 30
LFB	Endosulfan II	18.8	LCS	P	0 - 30
LFB	Endosulfan Sulfate	2.44	LCS	P	0 - 30
LFB	Endrin	12.8	LCS	P	0 - 30
LFB	Endrin Aldehyde	16.1	LCS	P	0 - 30
LFB	Endrin Ketone	4.18	LCS	P	0 - 30
LFB	Ethalfuralin	0.0204	LCS	P	0 - 30
LFB	Gamma-BHC	5.85	LCS	P	0 - 30
LFB	Gamma-Chlordane	7.15	LCS	P	0 - 30
LFB	Heptachlor	4.27	LCS	P	0 - 30
LFB	Heptachlor Epoxide	0.292	LCS	P	0 - 30
LFB	Hexachlorobenzene	2.05	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	5.29	LCS	P	0 - 30
LFB	Methoxychlor	2.94	LCS	P	0 - 30
LFB	Mirex	6.41	LCS	P	0 - 30
LFB	Permethrin	2.65	LCS	P	0 - 30
LFB	Phenothrin	13.8	LCS	P	0 - 30
LFB	Prallethrin	11.2	LCS	P	0 - 30
LFB	Trans-Nonachlor	0.512	LCS	P	0 - 30
LFB	Trifluralin	1.29	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P381159

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166074	Chlordane	48.6	Spike	F	0 - 30
2166074	Toxaphene	0.214	Spike	P	0 - 30
LFB	Chlordane	1.00	LCS	P	0 - 30
LFB	Toxaphene	5.85	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P380867

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2165908	2,4-D	26.2	Spike	P	0 - 30
2165908	Acetaminophen	18.8	Spike	P	0 - 30
2165908	Acetamiprid	11.6	Spike	P	0 - 30
2165908	Afidopyropen	6.13	Spike	P	0 - 30
2165908	Bentazon	4.66	Spike	P	0 - 30
2165908	Benzovindiflupyr	7.50	Spike	P	0 - 30
2165908	Carbamazepine	13.0	Spike	P	0 - 30
2165908	Clothianidin	18.0	Spike	P	0 - 30
2165908	Dinotefuran	7.10	Spike	P	0 - 30
2165908	Diuron	7.21	Spike	P	0 - 30
2165908	Fenuron	0.257	Spike	P	0 - 30
2165908	Fluridone	6.18	Spike	P	0 - 30
2165908	Hydrocodone	10.8	Spike	P	0 - 30
2165908	Ibuprofen	0.811	Spike	P	0 - 30
2165908	Imazapyr	17.3	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P380867

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2165908	Imidacloprid	8.49	Spike	P	0 - 30
2165908	Linuron	13.3	Spike	P	0 - 30
2165908	Mandestrobin	4.07	Spike	P	0 - 30
2165908	MCP	4.33	Spike	P	0 - 30
2165908	Naproxen	3.49	Spike	P	0 - 30
2165908	Primidone	3.33	Spike	P	0 - 30
2165908	Pyraclostrobin	6.20	Spike	P	0 - 30
2165908	Thiamethoxam	9.96	Spike	P	0 - 30
2165908	Tolfenpyrad	4.25	Spike	P	0 - 30
2165908	Triclopyr	1.22	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P380873

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2165999	Acesulfame K	4.94	Spike	P	0 - 30
2165999	AMPA	2.70	Spike	P	0 - 30
2165999	Endothall	1.59	Spike	P	0 - 30
2165999	Glufosinate	13.6	Spike	P	0 - 30
2165999	Glyphosate	7.14	Spike	P	0 - 30
2165999	Sucralose	1.77	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P380944

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2165513	3-Hydroxycarbofuran	11.7	Spike	P	0 - 30
2165513	Aldicarb	31.2	Spike	F	0 - 30
2165513	Aldicarb Sulfone	0.811	Spike	P	0 - 30
2165513	Aldicarb Sulfoxide	4.95	Spike	P	0 - 30
2165513	Carbaryl	10.0	Spike	P	0 - 30
2165513	Carbofuran	6.35	Spike	P	0 - 30
2165513	Methiocarb	13.7	Spike	P	0 - 30
2165513	Methomyl	8.52	Spike	P	0 - 30
2165513	Oxamyl	0.255	Spike	P	0 - 30
2165513	Propoxur	20.5	Spike	P	0 - 30
2166588	2,4-D	23.6	Spike	P	0 - 30
2166588	Acetaminophen	8.07	Spike	P	0 - 30
2166588	Acetamiprid	7.56	Spike	P	0 - 30
2166588	Afidopyropen	11.4	Spike	P	0 - 30
2166588	Bentazon	6.20	Spike	P	0 - 30
2166588	Benzovindiflupyr	13.4	Spike	P	0 - 30
2166588	Carbamazepine	6.18	Spike	P	0 - 30
2166588	Clothianidin	0.134	Spike	P	0 - 30
2166588	Dinotefuran	2.85	Spike	P	0 - 30
2166588	Diuron	6.58	Spike	P	0 - 30
2166588	Fenuron	9.14	Spike	P	0 - 30
2166588	Fluridone	0.614	Spike	P	0 - 30
2166588	Hydrocodone	52.8	Spike	F	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P380944

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166588	Ibuprofen	4.63	Spike	P	0 - 30
2166588	Imazapyr	23.7	Spike	P	0 - 30
2166588	Imidacloprid	12.1	Spike	P	0 - 30
2166588	Linuron	0.837	Spike	P	0 - 30
2166588	Mandestrobin	9.08	Spike	P	0 - 30
2166588	MCPP	7.26	Spike	P	0 - 30
2166588	Naproxen	51.7	Spike	F	0 - 30
2166588	Primidone	6.14	Spike	P	0 - 30
2166588	Pyraclostrobin	7.25	Spike	P	0 - 30
2166588	Thiamethoxam	2.89	Spike	P	0 - 30
2166588	Tolfenpyrad	12.8	Spike	P	0 - 30
2166588	Triclopyr	5.73	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P381064

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166025	Total Alkalinity	0.535	Sample	P	0 - 2.8

Reference Method: SM 2320 B-2011
Batch ID: P381065

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2165407	Total Alkalinity	0.325	Sample	P	0 - 2.8

Reference Method: SM 2320 B-2011
Batch ID: P381412

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166472	Total Alkalinity	0.575	Sample	P	0 - 3.3

Reference Method: SM 4500 F-C-2011
Batch ID: P381351

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166025	Fluoride	1.92	Spike	P	0 - 2.0

Reference Method: SM 4500 F-C-2011
Batch ID: P381452

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2165407	Fluoride	1.47	Spike	P	0 - 2.0

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-2011
Batch ID: P381455

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2165984	Fluoride	0.477	Spike	P	0 - 2.0

Reference Method: SM 5310 B-2011
Batch ID: P381023

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166033	Organic Carbon	0.698	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P381024

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2166017	Organic Carbon	0.638	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2166405
Field Sample ID: G5SE0073

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	78.9	P	30 - 160

Lab Sample ID: 2166406
Field Sample ID: G5SE0073_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	67.2	P	30 - 160

Lab Sample ID: 2166407
Field Sample ID: G5SE0073

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	118	P	30 - 160
EPA 8321B	Acetaminophen-d4	82.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	96.3	P	30 - 160
EPA 8321B	Diuron-d6	80.8	P	30 - 160
EPA 8321B	Endothall-d6	84.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	36.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	68.5	P	30 - 160
EPA 8321B	Primidone-d5	79.2	P	30 - 160
EPA 8321B	Sucralose-d6	87.8	P	30 - 160

Lab Sample ID: 2166408
Field Sample ID: G5SE0073_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	117	P	30 - 160
EPA 8321B	Acetaminophen-d4	83.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	85.4	P	30 - 160
EPA 8321B	Diuron-d6	79.3	P	30 - 160
EPA 8321B	Endothall-d6	91.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	42.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	73.4	P	30 - 160
EPA 8321B	Primidone-d5	91.6	P	30 - 160
EPA 8321B	Sucralose-d6	81.5	P	30 - 160

Lab Sample ID: 2166409
Field Sample ID: FB_03172020

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	84.7	P	30 - 160

Lab Sample ID: 2166410
Field Sample ID: FB_03172020

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	118	P	30 - 160
EPA 8321B	Acetaminophen-d4	95.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	109	P	30 - 160
EPA 8321B	Diuron-d6	105	P	30 - 160
EPA 8321B	Endothall-d6	130	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	130	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2166410
Field Sample ID: FB_03172020

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Ibuprofen-d3	94.5	P	30 - 160
EPA 8321B	Primidone-d5	98.5	P	30 - 160
EPA 8321B	Sucralose-d6	96.4	P	30 - 160

Lab Sample ID: 2166411
Field Sample ID: G5SE0073

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	85.3	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	65.6	P	34 - 106
EPA 8276	Decachlorobiphenyl	75.2	P	26 - 97.0
EPA 8276	PCNB	106	P	38 - 141

Lab Sample ID: 2166412
Field Sample ID: G5SE0073_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	81.5	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	57.2	P	34 - 106
EPA 8276	Decachlorobiphenyl	67.0	P	26 - 97.0
EPA 8276	PCNB	98.8	P	38 - 141

Lab Sample ID: 2166413
Field Sample ID: G5SE0073

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	103	P	72 - 135
EPA 8270E	Terbufos-d10	97.8	P	57 - 134

Lab Sample ID: 2166414
Field Sample ID: G5SE0073_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	123	P	72 - 135
EPA 8270E	Terbufos-d10	105	P	57 - 134

Lab Sample ID: 2166415
Field Sample ID: FB_03172020

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	83.2	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	69.4	P	34 - 106
EPA 8276	Decachlorobiphenyl	68.5	P	26 - 97.0
EPA 8276	PCNB	91.5	P	38 - 141

Lab Sample ID: 2166416
Field Sample ID: FB_03172020

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	100	P	72 - 135
EPA 8270E	Terbufos-d10	87.1	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A98278

Included Lab Sample IDs: 2166367, 2166368, 2166371, 2166374

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.0	96.2	P/P	90 - 110
O-Phosphate-P	97.4	97.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A98286

Included Lab Sample IDs: 2166407, 2166408, 2166410

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	95.7	101	P/P	60 - 160

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A98314

Included Lab Sample IDs: 2166363, 2166364, 2166369, 2166372

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	98.5	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A98321

Included Lab Sample IDs: 2166410

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	80.7	87.0	P/P	60 - 160
Endothall	126	136	P/P	60 - 160

Reference Method: SM 5310 B-2011

Run ID: A98330

Included Lab Sample IDs: 2166365, 2166366, 2166370, 2166373

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	101	P/P	90 - 110
Organic Carbon	91.4	97.8	P/P	90 - 110
Organic Carbon	97.8	98.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A98342

Included Lab Sample IDs: 2166365, 2166366

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

Reference Method: SM 2320 B-2011

Run ID: A98350

Included Lab Sample IDs: 2166363, 2166364, 2166372

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	103	P/P	90 - 110
Total Alkalinity	101	104	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A98352

Included Lab Sample IDs: 2166407, 2166408

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	109	78.3	P/P	60 - 160
Endothall	102	98.4	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A98353

Included Lab Sample IDs: 2166417, 2166418

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	102	101	P/P	90 - 110
Antimony	103	100	P/P	90 - 110
Arsenic	101	100	P/P	90 - 110
Cadmium	106	106	P/P	90 - 110
Chromium	99.3	99.2	P/P	90 - 110
Copper	90.3	90.4	P/P	90 - 110
Lead	102	102	P/P	90 - 110
Nickel	99.7	97.6	P/P	90 - 110
Selenium	100	97.8	P/P	90 - 110
Silver	96.8	97.0	P/P	90 - 110
Thallium	98.1	96.8	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A98362

Included Lab Sample IDs: 2166407, 2166408, 2166410

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	103	119	P/P	40 - 200
AMPA	105	115	P/P	40 - 200
Glufosinate	119	126	P/P	40 - 200
Glufosinate	120	126	P/P	40 - 200
Glyphosate	125	140	P/P	40 - 200
Glyphosate	135	122	P/P	40 - 200

Reference Method: EPA 8321B

Run ID: A98394

Included Lab Sample IDs: 2166407, 2166408, 2166410

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	105	106	P/P	50 - 150
2,4-D	99.6	90.0	P/P	50 - 150
3-Hydroxycarbofuran	90.4	99.3	P/P	60 - 150
Acetaminophen	102	97.5	P/P	60 - 160
Acetaminophen	96.0	104	P/P	60 - 160
Acetamiprid	102	101	P/P	50 - 150
Acetamiprid	90.7	78.5	P/P	50 - 150
Afidopyropen	106	89.2	P/P	50 - 150
Afidopyropen	83.6	86.4	P/P	50 - 150
Aldicarb	89.7	109	P/P	60 - 150
Aldicarb Sulfone	93.0	105	P/P	50 - 150
Aldicarb Sulfoxide	72.9	81.8	P/P	50 - 150
Bentazon	114	110	P/P	50 - 160
Bentazon	118	104	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A98394

Included Lab Sample IDs: 2166407, 2166408, 2166410

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Benzovindiflupyr	101	105	P/P	50 - 150
Benzovindiflupyr	103	104	P/P	50 - 150
Carbamazepine	105	115	P/P	60 - 150
Carbamazepine	109	107	P/P	60 - 150
Carbaryl	102	105	P/P	60 - 150
Carbofuran	84.8	109	P/P	50 - 150
Clothianidin	106	104	P/P	60 - 150
Clothianidin	110	98.0	P/P	60 - 150
Dinotefuran	89.5	92.2	P/P	50 - 150
Dinotefuran	89.8	99.4	P/P	50 - 150
Diuron	103	106	P/P	60 - 150
Diuron	104	99.1	P/P	60 - 150
Fenuron	101	92.9	P/P	60 - 150
Fenuron	88.1	98.9	P/P	60 - 150
Fluridone	106	104	P/P	60 - 160
Fluridone	110	102	P/P	60 - 160
Hydrocodone	82.3	111	P/P	60 - 150
Hydrocodone	97.0	94.0	P/P	60 - 150
Ibuprofen	104	106	P/P	50 - 160
Ibuprofen	96.8	98.3	P/P	50 - 160
Imazapyr	102	98.3	P/P	50 - 150
Imazapyr	92.0	81.0	P/P	50 - 150
Imidacloprid	107	106	P/P	60 - 150
Imidacloprid	94.3	97.8	P/P	60 - 150
Linuron	91.0	104	P/P	60 - 150
Linuron	99.4	107	P/P	60 - 150
Mandestrobin	107	106	P/P	50 - 150
Mandestrobin	108	107	P/P	50 - 150
MCPP	91.7	87.2	P/P	50 - 150
MCPP	94.9	99.0	P/P	50 - 150
Methiocarb	104	98.4	P/P	50 - 150
Methomyl	90.9	97.4	P/P	50 - 150
Naproxen	103	57.9	P/P	50 - 160
Naproxen	114	62.4	P/P	50 - 160
Oxamyl	96.2	90.8	P/P	50 - 150
Primidone	104	100	P/P	60 - 150
Primidone	92.6	102	P/P	60 - 150
Propoxur	98.7	97.1	P/P	50 - 150
Pyraclostrobin	107	108	P/P	60 - 150
Pyraclostrobin	111	105	P/P	60 - 150
Thiamethoxam	90.5	93.7	P/P	50 - 150
Thiamethoxam	98.7	99.5	P/P	50 - 150
Tolfenpyrad	102	106	P/P	60 - 150
Tolfenpyrad	107	106	P/P	60 - 150
Triclopyr	89.5	81.4	P/P	50 - 150
Triclopyr	91.5	93.4	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A98406

Included Lab Sample IDs: 2166363, 2166364, 2166369, 2166372

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A98413

Included Lab Sample IDs: 2166370, 2166373

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A98422

Included Lab Sample IDs: 2166365, 2166366, 2166370, 2166373

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	100	P/P	90 - 110
Kjeldahl Nitrogen	104	99.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A98425

Included Lab Sample IDs: 2166365, 2166366, 2166373

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

Reference Method: SM 4500 F-C-2011

Run ID: A98463

Included Lab Sample IDs: 2166363, 2166364

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A98467

Included Lab Sample IDs: 2166417, 2166418

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	94.8	95.2	P/P	90 - 110
Iron	95.8	94.8	P/P	90 - 110
Manganese	96.9	96.4	P/P	90 - 110
Manganese	97.2	96.9	P/P	90 - 110
Zinc	94.9	95.0	P/P	90 - 110
Zinc	95.0	95.0	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A98484

Included Lab Sample IDs: 2166413, 2166414, 2166416

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	103		P	80 - 120
Alachlor	108		P	80 - 120

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8270E

Run ID: A98484

Included Lab Sample IDs: 2166413, 2166414, 2166416

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ametryn	102		P	80 - 120
Atrazine	100		P	80 - 120
Atrazine Desethyl	92.1		P	80 - 120
Azinphos Methyl	87.6		P	80 - 120
Bromacil	101		P	80 - 120
Butylate	99.6		P	80 - 120
Carbophenothion	97.5		P	80 - 120
Chlorpyrifos Ethyl	100		P	80 - 120
Chlorpyrifos Methyl	101		P	80 - 120
Cyanazine	92.6		P	80 - 120
Demeton	98.3		P	80 - 120
Diazinon	101		P	80 - 120
Dimethenamid	102		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	104		P	80 - 120
EPTC	99.2		P	80 - 120
Ethion	95.3		P	80 - 120
Ethoprop	99.9		P	80 - 120
Fenamiphos	95.4		P	80 - 120
Fipronil	98.0		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	97.7		P	80 - 120
Fipronil Sulfone	96.7		P	80 - 120
Flumioxazin	86.7		P	80 - 120
Fonofos	98.9		P	80 - 120
Hexazinone	100		P	80 - 120
Imazalil	98.9		P	80 - 120
Malathion	93.8		P	80 - 120
Metalaxyl	98.3		P	80 - 120
Metolachlor	100		P	80 - 120
Metribuzin	89.9		P	80 - 120
Mevinphos	98.0		P	80 - 120
Molinate	98.5		P	80 - 120
Naled	98.4		P	80 - 120
Norflurazon	97.6		P	80 - 120
Oxadiazon	106		P	80 - 120
Parathion Ethyl	94.6		P	80 - 120
Parathion Methyl	95.4		P	80 - 120
Pendimethalin	100		P	80 - 120
Phorate	101		P	80 - 120
Prodiamine	101		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	102		P	80 - 120
Pronamide	102		P	80 - 120
Propiconazole	93.8		P	80 - 120
Simazine	99.8		P	80 - 120
Sulfentrazone	94.8		P	80 - 120
Tebuconazole	98.7		P	80 - 120
Terbufos	99.1		P	80 - 120
Terbutylazine	100		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A98490

Included Lab Sample IDs: 2166369

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	104	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A98493

Included Lab Sample IDs: 2166419

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	95.6	95.5	P/P	90 - 110
Antimony	94.5	92.7	P/P	90 - 110
Arsenic	102	100	P/P	90 - 110
Cadmium	97.9	97.5	P/P	90 - 110
Chromium	95.3	95.3	P/P	90 - 110
Copper	98.0	94.9	P/P	90 - 110
Lead	98.7	99.3	P/P	90 - 110
Nickel	102	102	P/P	90 - 110
Selenium	97.3	97.5	P/P	90 - 110
Silver	98.4	97.7	P/P	90 - 110
Thallium	96.5	96.9	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A98495

Included Lab Sample IDs: 2166369, 2166372

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	99.5	P/P	90 - 110
Fluoride	99.5	99.1	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A98509

Included Lab Sample IDs: 2166411, 2166412, 2166415

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	96.4		P	80 - 120
Toxaphene	94.9		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A98517

Included Lab Sample IDs: 2166370

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	99.0	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A98530

Included Lab Sample IDs: 2166419

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	101	102	P/P	90 - 110
Manganese	103	104	P/P	90 - 110
Zinc	100	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A98531

Included Lab Sample IDs: 2166411, 2166412, 2166415

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.0		P	80 - 120
Alpha-BHC	94.8		P	80 - 120
Alpha-Chlordane	99.6		P	80 - 120
Beta-BHC	102		P	80 - 120
Beta-Cyfluthrin	86.7		P	80 - 120
Bifenthrin	99.6		P	80 - 120
Chlorothalonil	84.2		P	80 - 120
Cis-Nonachlor	97.0		P	80 - 120
Cypermethrin	98.3		P	80 - 120
Dacthal	103		P	80 - 120
DDD-p,p'	97.6		P	80 - 120
DDE-p,p'	95.5		P	80 - 120
DDT-p,p'	98.7		P	80 - 120
Delta-BHC	99.6		P	80 - 120
Dicofol	94.6		P	80 - 120
Dieldrin	101		P	80 - 120
Endosulfan I	95.7		P	80 - 120
Endosulfan II	95.5		P	80 - 120
Endosulfan Sulfate	99.8		P	80 - 120
Endrin	94.4		P	80 - 120
Endrin Aldehyde	102		P	80 - 120
Endrin Ketone	105		P	80 - 120
Ethalfuralin	98.8		P	80 - 120
Gamma-BHC	102		P	80 - 120
Gamma-Chlordane	98.7		P	80 - 120
Heptachlor	96.2		P	80 - 120
Heptachlor Epoxide	103		P	80 - 120
Hexachlorobenzene	96.4		P	80 - 120
Lambda-Cyhalothrin	83.1		P	80 - 120
Methoxychlor	96.5		P	80 - 120
Mirex	97.9		P	80 - 120
Permethrin	97.7		P	80 - 120
Phenothrin	95.8		P	80 - 120
Prallethrin	96.0		P	80 - 120
Trans-Nonachlor	97.9		P	80 - 120
Trifluralin	97.5		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A98544

Included Lab Sample IDs: 2166365, 2166366, 2166370, 2166373

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.2	98.8	P/P	90 - 110
Total-P	98.8	98.5	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A98617

Included Lab Sample IDs: 2166413, 2166414

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromacil	99.3		P	80 - 120

Quality Assurance Report

Calibration Verification

* 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							2.06	
EPA 200.7 Rev. 4.4	Iron	98.6		99.9	101				0.659
	Iron	104		104	104	102			1.91
	Manganese	103		105	104				0.872
	Manganese	100		98.6	99.5	99.5			0.0297
	Zinc	104		104	103				0.657
	Zinc	99.9		100	100	101			0.424
EPA 200.8 Rev. 5.4	Aluminum	100		97.1	98.9				1.73
	Aluminum	95.2		92.1	93.6	93.0			0.550
	Antimony	97.3		99.5	105				4.93
	Antimony	93.3		94.2	95.3	97.0			1.78
	Arsenic	99.4		103	105				2.21
	Arsenic	101		100	99.9	104			3.94
	Cadmium	106		93.1	111				17.4
	Cadmium	97.1		98.3	98.9	102			3.57
	Chromium	101		101	102				1.37
	Chromium	96.5		97.6	99.1	99.5			0.341
	Copper	93.3		88.9	89.3				0.410
	Copper	96.2		95.0	95.3	97.5			2.23
	Lead	103		103	103				0.0818
	Lead	99.9		98.4	99.9	99.9			0.0336
	Nickel	98.3		98.5	99.1				0.664
	Nickel	101		98.1	97.7	99.7			2.00
	Selenium	93.5		95.5	101				5.26
	Selenium	95.5		92.0	93.5	99.3			6.02
	Silver	98.2		98.5	98.8				0.275
	Silver	102		101	102	101			0.556
	Thallium	107		105	106				0.878
	Thallium	104		103	104	98.8			4.91
EPA 300.0 Rev. 2.1	Bromide	104		103	101	99.9			0.919
EPA 350.1 Rev. 2.0	Ammonia-N	100		98.7	98.6				0.0435
	Ammonia-N	97.7		103	106				2.27
	Ammonia-N	98.9		98.9	100				0.768
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101		95.8	103				5.62
	Kjeldahl Nitrogen	99.7		97.8	105				5.59
EPA 353.2 Rev. 2.0	NO2NO3-N	100		102	102				0.489
	NO2NO3-N	100		96.6	96.1				0.499
	NO2NO3-N	97.5		97.2					0.360
EPA 365.1 Rev. 2.0	Total-P	101							0.530
	Total-P	105		105	107				2.30
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.0		93.3	95.4				2.14
	O-Phosphate-P	96.7		93.3	95.8				1.87
EPA 8270E	Acetochlor	103	91.1	83.6	110		12.4		27.6
	Alachlor	103	89.4	79.8	98.4		13.6		20.9
	Aldrin	55.7	51.1	61.8	66.2		8.64		6.88
	Alpha-BHC	80.7	84.6	94.1	81.3		4.72		14.6
	Alpha-Chlordane	80.8	77.9	90.1	82.5		3.76		8.77
	Ametryn	107	94.0	87.8	98.1		13.0		11.1
	Atrazine	99.5	94.8				4.79		30.5
	Atrazine Desethyl	98.4	82.8	49.1	84.4		17.3		40.4
	Azinphos Methyl	107	92.6	77.4	106		14.8		30.7
	Beta-BHC	92.5	98.2	134	104		6.02		25.2
	Beta-Cyfluthrin	71.6	80.2	88.8	84.6		11.3		4.78
	Bifenthrin	86.3	85.1	93.9	88.4		1.40		6.00

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Bromacil	84.6	76.5	65.1	85.0	10.0	26.5
	Butylate	56.3	53.8	66.2	77.2	4.52	15.3
	Carbophenothion	96.5	83.0	60.2	72.1	15.1	18.0
	Chlorothalonil	43.7	36.4	144	127	18.2	12.6
	Chlorpyrifos Ethyl	102	92.2	76.0	83.6	10.1	9.49
	Chlorpyrifos Methyl	103	92.4	76.8	99.8	11.2	26.1
	Cis-Nonachlor	92.7	77.4	81.9	97.2	18.0	17.1
	Cyanazine	108	92.4	73.5	94.0	16.0	24.5
	Cypermethrin	94.2	87.0	110	112	7.91	2.45
	Dacthal	93.3	86.9	91.7	104	7.09	12.2
	DDD-p,p'	101	83.6	90.5	107	18.8	16.4
	DDE-p,p'	78.2	66.7	84.0	89.9	15.9	6.73
	DDT-p,p'	78.4	79.9	78.3	86.3	1.93	9.65
	Delta-BHC	136	159	149	190	15.7	24.4
	Demeton	99.6	91.6	83.3	119	8.33	35.1
	Diazinon	98.5	89.0	86.2	119	10.2	32.1
	Dicofol	76.3	76.8	73.3	84.8	0.617	14.5
	Dieldrin	92.3	85.6	99.7	93.8	7.53	6.04
	Dimethenamid	102	89.5	79.9	105	13.3	26.9
	Disulfoton	102	89.2	78.2	95.3	13.4	19.7
	Dithiopyr	97.8	86.6	77.9	103	12.2	28.1
	Endosulfan I	91.5	96.7	107	99.8	5.45	6.56
	Endosulfan II	114	94.0	111	104	18.8	6.47
	Endosulfan Sulfate	89.6	87.5	119	94.8	2.44	22.4
	Endrin	90.8	79.8	104	78.8	12.8	27.4
	Endrin Aldehyde	119	101	64.3	74.6	16.1	14.8
	Endrin Ketone	90.3	94.1	114	99.2	4.18	13.8
	EPTC	56.4	52.3	55.2	61.6	7.46	11.0
	Ethalfuralin	73.5	73.4	78.7	71.2	0.0204	9.97
	Ethion	73.8	66.2	38.4	42.7	10.9	10.7
	Ethoprop	100	92.0	86.5	115	8.55	28.0
	Fenamiphos	97.9	83.4	79.2	96.4	16.0	19.6
	Fipronil	96.5	82.3	69.5	91.1	15.8	26.9
	Fipronil Desulfinyl	101	87.4	71.4	96.2	14.0	29.6
	Fipronil Sulfide	92.8	81.7	62.9	78.7	12.7	22.3
	Fipronil Sulfone	88.2	76.5	63.0	82.0	14.2	26.3
	Flumioxazin	151	127	105	135	16.6	25.5
	Fonofos	104	91.9	84.1	102	12.0	19.3
	Gamma-BHC	94.4	100	135	109	5.85	21.0
	Gamma-Chlordane	76.2	71.0	90.7	76.1	7.15	17.5
	Heptachlor	65.7	63.0	70.5	67.4	4.27	4.40
	Heptachlor Epoxide	89.9	89.7	100	81.5	0.292	20.4
	Hexachlorobenzene	66.5	65.2	74.3	64.1	2.05	14.8
	Hexazinone	113	97.4	92.8	125	15.1	29.8
	Imazalil	97.0	95.6	61.6	85.7	1.51	32.6
	Lambda-Cyhalothrin	79.7	75.6	91.7	74.9	5.29	20.1
	Malathion	110	98.4	79.3	95.0	10.8	18.0
	Metalaxyl	107	92.7	82.7	108	14.1	26.5
	Methoxychlor	87.1	89.7	84.9	75.8	2.94	11.3
	Metolachlor	97.3	85.8	75.5	91.3	12.5	19.0
	Metribuzin	137	123	107	141	10.7	26.7
	Mevinphos	98.5	89.0	80.7	104	10.1	25.6
	Mirex	59.6	55.9	67.4	63.7	6.41	5.62
	Molinate	74.2	69.8	73.5	87.5	6.10	17.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Naled	83.4	75.6	75.6	93.5	9.81		21.3
	Norflurazon	99.5	80.9	67.9	91.8	20.6		29.9
	Oxadiazon	97.1	84.1	55.7	73.2	14.4		23.2
	Parathion Ethyl	96.6	88.3	79.2	105	9.01		27.9
	Parathion Methyl	109	100	91.7	130	8.45		34.3
	Pendimethalin	98.6	87.2	82.7	108	12.3		26.5
	Permethrin	78.8	76.8	88.2	71.4	2.65		19.5
	Phenothrin	66.3	57.8	81.6	73.3	13.8		10.7
	Phorate	103	90.4	93.1	122	13.0		26.8
	Prallethrin	71.4	63.8	77.7	69.6	11.2		11.0
	Prodiamine	57.6	52.9	41.1	49.2	8.64		18.0
	Prometon	98.3	85.1	74.2	96.8	14.4		26.5
	Prometryn	97.5	85.4	72.5	92.9	13.2		24.7
	Pronamide	110	99.4	98.7	129	9.72		26.5
	Propiconazole	90.5	76.6	65.3	83.7	16.5		24.7
	Simazine	116	102	84.9	115	12.2		30.0
	Sulfentrazone	90.7	76.7	61.3	85.7	16.7		33.2
	Tebuconazole	57.8	47.9	34.5	40.2	18.6		15.0
	Terbufos	104	93.8	84.9	109	10.1		25.1
	Terbuthylazine	108	95.6	85.0	111	12.5		26.6
	Trans-Nonachlor	75.7	76.1	90.3	78.3	0.512		14.3
	Trifluralin	72.6	73.6	81.2	73.2	1.29		10.3
EPA 8276	Chlordane	91.5	92.4	148	89.9	1.00		48.6
	Toxaphene	93.1	98.8	103	103	5.85		0.214
EPA 8321B	2,4-D	133		91.7	121			26.2
	2,4-D	116		101	128			23.6
	3-Hydroxycarbofuran	87.9		91.6	81.4			11.7
	Acesulfame K	88.7		16.2	17.0			4.94
	Acetaminophen	89.8		92.2	76.3			18.8
	Acetaminophen	77.4		88.0	81.2			8.07
	Acetamiprid	90.8		84.8	75.6			11.6
	Acetamiprid	76.1		83.4	89.9			7.56
	Afidopyropen	92.0		92.5	98.3			6.13
	Afidopyropen	89.8		105	94.1			11.4
	Aldicarb	49.5		89.3	65.2			31.2
	Aldicarb Sulfone	85.7		94.7	93.9			0.811
	Aldicarb Sulfoxide	73.6		37.0	38.8			4.95
	AMPA	126		98.1	101			2.70
	Bentazon	94.0		46.5	48.7			4.66
	Bentazon	85.8						6.20
	Benzovindiflupyr	78.5		63.8	69.0			7.50
	Benzovindiflupyr	81.8		80.6	70.4			13.4
	Carbamazepine	107		75.2	85.6			13.0
	Carbamazepine	103		89.6	84.2			6.18
	Carbaryl	70.1		73.7	66.7			10.0
	Carbofuran	62.6		67.1	63.0			6.35
	Clothianidin	88.1		81.1	97.2			18.0
	Clothianidin	72.1		82.8	82.7			0.134
	Dinotefuran	91.8		104	96.5			7.10
	Dinotefuran	81.3		105	108			2.85
	Diuron	64.2		60.3	64.8			7.21
	Diuron	75.3		75.0	70.2			6.58
	Endothall	124		130	128			1.59
	Fenuron	94.6		73.8	74.1			0.257

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	Fenuron	81.8	80.3	73.3			9.14
	Fluridone	97.0	82.5	87.8			6.18
	Fluridone	85.1	94.7	94.1			0.614
	Glufosinate	127	100	115			13.6
	Glyphosate	110	112	120			7.14
	Hydrocodone	98.8	97.1	87.1			10.8
	Hydrocodone	86.0	105	61.4			52.8
	Ibuprofen	86.4	72.1	72.7			0.811
	Ibuprofen	70.3	80.4	76.7			4.63
	Imazapyr	92.4	88.9	106			17.3
	Imazapyr	92.2					23.7
	Imidacloprid	114	141	154			8.49
	Imidacloprid	105	167	148			12.1
	Linuron	80.9	48.7	55.6			13.3
	Linuron	69.5	68.7	68.1			0.837
	Mandestrobin	91.9	77.9	74.8			4.07
	Mandestrobin	86.6	90.6	82.7			9.08
	MCPP	145	146	140			4.33
	MCPP	129	139	129			7.26
	Methiocarb	60.0	66.1	57.6			13.7
	Methomyl	78.4	91.1	83.7			8.52
	Naproxen	65.4	78.6	81.4			3.49
	Naproxen	86.7	102	59.8			51.7
	Oxamyl	72.8	90.1	89.9			0.255
	Primidone	91.8	81.3	84.0			3.33
	Primidone	82.2	87.1	81.9			6.14
	Propoxur	69.0	73.9	60.2			20.5
	Pyraclostrobin	85.9	73.8	78.5			6.20
	Pyraclostrobin	80.4	87.5	81.4			7.25
	Sucralose	110	95.9	94.3			1.77
	Thiamethoxam	106	110	122			9.96
	Thiamethoxam	85.5	125	122			2.89
	Tolfenpyrad	54.1	51.2	53.4			4.25
	Tolfenpyrad	48.8	62.1	54.6			12.8
	Triclopyr	96.4	137	135			1.22
	Triclopyr	95.0	123	117			5.73
SM 2320 B-2011	Total Alkalinity	102				0.535	
	Total Alkalinity	104				0.325	
	Total Alkalinity	103				0.575	
SM 4500 F-C-2011	Fluoride	96.7	102	105			1.92
	Fluoride	98.3	98.4	101			1.47
	Fluoride	98.8	103	103			0.477
SM 5310 B-2011	Organic Carbon	102	98.5	99.6			0.698
	Organic Carbon	98.8	95.7	96.4			0.638

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2166363, 2166364, 2166369, 2166372
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2166417, 2166418, 2166419
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2166417, 2166418, 2166419

Reference Method Descriptions

Method	Description	Associated Samples
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2166363, 2166364, 2166369, 2166372
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2166365, 2166366, 2166370, 2166373
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2166365, 2166366, 2166370, 2166373
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2166365, 2166366, 2166370, 2166373
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2166365, 2166366, 2166370, 2166373
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2166367, 2166368, 2166371, 2166374
EPA 8270E	Organochlorine pesticides in water matrices by GC/MS-SIM	2166411, 2166412, 2166415
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2166413, 2166414, 2166416
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2166411, 2166412, 2166415
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2166405, 2166406, 2166409
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2166407, 2166408, 2166410
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2166363, 2166364, 2166369, 2166372
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2166363, 2166364, 2166369, 2166372
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2166363, 2166364, 2166369, 2166372
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2166365, 2166366, 2166370, 2166373

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	03/18/2020			03/18/2020 16:33	Yen Ta	2166363, 2166364, 2166369, 2166372
EPA 200.7 Rev. 4.4	03/18/2020	03/19/2020 15:20	Elliott D. Healy	03/26/2020 23:22	Vijayalakshmi Reddy	2166417
	03/18/2020	03/19/2020 15:20	Elliott D. Healy	03/26/2020 23:57	Vijayalakshmi Reddy	2166418
	03/18/2020	03/24/2020 15:25	Elliott D. Healy	03/30/2020 13:59	Betina Topolski	2166419
EPA 200.8 Rev. 5.4	03/18/2020	03/19/2020 15:20	Elliott D. Healy	03/20/2020 18:58	Alexander Thompson	2166417
	03/18/2020	03/19/2020 15:20	Elliott D. Healy	03/20/2020 19:08	Alexander Thompson	2166418
	03/18/2020	03/19/2020 15:20	Elliott D. Healy	03/20/2020 21:05	Alexander Thompson	2166417
	03/18/2020	03/19/2020 15:20	Elliott D. Healy	03/20/2020 21:15	Alexander Thompson	2166418
	03/18/2020	03/24/2020 15:25	Elliott D. Healy	03/27/2020 14:37	Alexander Thompson	2166419
EPA 300.0 Rev. 2.1	03/18/2020			03/24/2020 07:10	Elliott Rodriguez	2166363
	03/18/2020			03/24/2020 07:27	Elliott Rodriguez	2166364
	03/18/2020			03/24/2020 07:44	Elliott Rodriguez	2166369
	03/18/2020			03/24/2020 08:01	Elliott Rodriguez	2166372
EPA 350.1 Rev. 2.0	03/18/2020			03/21/2020 12:43	Ping Hua	2166365
	03/18/2020			03/21/2020 12:47	Ping Hua	2166366
	03/18/2020			03/24/2020 16:25	Ping Hua	2166373
	03/18/2020			03/24/2020 17:06	Ping Hua	2166370
EPA 351.2 Rev. 2.0	03/18/2020	03/24/2020 08:00	Sima Feizi	03/25/2020 08:16	Jhamieka S. Greenwood	2166365
	03/18/2020	03/24/2020 08:00	Sima Feizi	03/25/2020 08:18	Jhamieka S. Greenwood	2166366
	03/18/2020	03/24/2020 08:00	Sima Feizi	03/25/2020 08:20	Jhamieka S. Greenwood	2166373
	03/18/2020	03/24/2020 08:00	Sima Feizi	03/25/2020 09:16	Jhamieka S. Greenwood	2166370
EPA 353.2 Rev. 2.0	03/18/2020			03/25/2020 10:56	Beverly Y. Sanders	2166365
	03/18/2020			03/25/2020 11:04	Beverly Y. Sanders	2166366
	03/18/2020			03/25/2020 11:09	Beverly Y. Sanders	2166373
	03/18/2020			03/30/2020 15:53	Lauren Lees	2166370
EPA 365.1 Rev. 2.0	03/18/2020	03/25/2020 14:20	Lipi Saha	03/30/2020 18:04	Benjamin T. Nordmann	2166370
	03/18/2020	03/25/2020 14:20	Lipi Saha	03/30/2020 18:12	Benjamin T. Nordmann	2166365
	03/18/2020	03/25/2020 14:20	Lipi Saha	03/30/2020 18:13	Benjamin T. Nordmann	2166366
	03/18/2020	03/25/2020 14:20	Lipi Saha	03/30/2020 18:21	Benjamin T. Nordmann	2166373
EPA 365.1 Rev. 2.0 dissolved	03/18/2020			03/18/2020 15:04	Carlos Miranda	2166371
	03/18/2020			03/18/2020 15:06	Carlos Miranda	2166367
	03/18/2020			03/18/2020 15:09	Carlos Miranda	2166368
	03/18/2020			03/18/2020 15:14	Carlos Miranda	2166374
EPA 8270E	03/18/2020	03/20/2020 08:30	Rasheda Ghaffari	03/24/2020 18:33	Vandana T. Nagar	2166413
	03/18/2020	03/20/2020 08:30	Rasheda Ghaffari	03/24/2020 18:58	Vandana T. Nagar	2166414
	03/18/2020	03/20/2020 08:30	Rasheda Ghaffari	03/24/2020 19:23	Vandana T. Nagar	2166416
	03/18/2020	03/20/2020 08:30	Rasheda Ghaffari	03/27/2020 14:01	Vandana T. Nagar	2166413
	03/18/2020	03/20/2020 08:30	Rasheda Ghaffari	03/27/2020 14:26	Vandana T. Nagar	2166414
	03/18/2020	03/23/2020 08:00	Fe-Val Siddell	03/28/2020 01:04	Arthur Maknenko	2166411
	03/18/2020	03/23/2020 08:00	Fe-Val Siddell	03/28/2020 01:35	Arthur Maknenko	2166412

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	03/18/2020	03/23/2020 08:00	Fe-Val Siddell	03/28/2020 02:06	Arthur Maknenko	2166415
EPA 8276	03/18/2020	03/23/2020 08:00	Fe-Val Siddell	03/27/2020 12:12	Arthur Maknenko	2166411
	03/18/2020	03/23/2020 08:00	Fe-Val Siddell	03/27/2020 13:07	Arthur Maknenko	2166412
	03/18/2020	03/23/2020 08:00	Fe-Val Siddell	03/27/2020 14:03	Arthur Maknenko	2166415
	03/18/2020	03/23/2020 08:00	Fe-Val Siddell	03/27/2020 14:03	Arthur Maknenko	2166415
EPA 8321B	03/18/2020	03/18/2020 14:00	Mohammad Ghaffari	03/18/2020 20:33	Mohammad Ghaffari	2166407
	03/18/2020	03/18/2020 14:00	Mohammad Ghaffari	03/18/2020 20:45	Mohammad Ghaffari	2166408
	03/18/2020	03/18/2020 14:00	Mohammad Ghaffari	03/18/2020 20:57	Mohammad Ghaffari	2166410
	03/18/2020	03/18/2020 14:00	Mohammad Ghaffari	03/19/2020 20:22	Mohammad Ghaffari	2166410
	03/18/2020	03/18/2020 14:00	Mohammad Ghaffari	03/20/2020 17:21	Mohammad Ghaffari	2166410
	03/18/2020	03/18/2020 14:00	Mohammad Ghaffari	03/20/2020 22:00	Mohammad Ghaffari	2166407
	03/18/2020	03/18/2020 14:00	Mohammad Ghaffari	03/20/2020 22:11	Mohammad Ghaffari	2166408
	03/18/2020	03/18/2020 14:00	Mohammad Ghaffari	03/22/2020 22:07	Mohammad Ghaffari	2166407
	03/18/2020	03/18/2020 14:00	Mohammad Ghaffari	03/22/2020 22:21	Mohammad Ghaffari	2166408
	03/18/2020	03/19/2020 10:00	Hoor Shaik	03/21/2020 21:20	Juyoung Kim	2166410
	03/18/2020	03/20/2020 09:00	Hoor Shaik	03/22/2020 05:26	Juyoung Kim	2166405
	03/18/2020	03/20/2020 09:00	Hoor Shaik	03/22/2020 06:01	Juyoung Kim	2166406
	03/18/2020	03/20/2020 09:00	Hoor Shaik	03/22/2020 06:35	Juyoung Kim	2166409
	03/18/2020	03/20/2020 11:50	Hoor Shaik	03/22/2020 10:03	Juyoung Kim	2166407
	03/18/2020	03/20/2020 11:50	Hoor Shaik	03/22/2020 10:38	Juyoung Kim	2166408
SM 2320 B-2011	03/18/2020			03/20/2020 15:06	Dale L. Simmons	2166363
	03/18/2020			03/20/2020 15:17	Dale L. Simmons	2166364
	03/18/2020			03/20/2020 20:40	Dale L. Simmons	2166372
	03/18/2020			03/27/2020 09:41	Dale L. Simmons	2166369
SM 2540 D-2011	03/18/2020			03/20/2020 15:21	Yijie Li	2166363, 2166364, 2166369, 2166372
SM 4500 F-C-2011	03/18/2020			03/25/2020 14:41	Dale L. Simmons	2166363
	03/18/2020			03/25/2020 14:46	Dale L. Simmons	2166364
	03/18/2020			03/27/2020 16:11	Dale L. Simmons	2166372
	03/18/2020			03/28/2020 00:13	Dale L. Simmons	2166369
SM 5310 B-2011	03/18/2020			03/20/2020 01:22	Lauren Lees	2166370
	03/18/2020			03/20/2020 06:41	Lauren Lees	2166365
	03/18/2020			03/20/2020 06:54	Lauren Lees	2166366
	03/18/2020			03/20/2020 07:48	Lauren Lees	2166373